Lancaster

TREE CITY USA

NOTICE OF WORK SESSION AND REGULAR MEETING AGENDA

LANCASTER CITY COUNCIL

MUNICIPAL CENTER
CITY COUNCIL CHAMBERS
211 N. HENRY STREET, LANCASTER, TEXAS

Monday, July 23, 2012 – 5:00 P.M.

5:00 p.m. WORK SESSION AGENDA

DEFINITIONS:

Written Briefing: Items that generally do not require a presentation or discussion by the staff or Council. On these items, the staff is seeking consent from the Council or providing information in a written format.

Verbal Briefing: These items do not require extensive written background information or are an update on items previously discussed by the Council.

Regular Item: These items generally require discussion between the Council and staff, boards, commissions, or consultants. These items may be accompanied by a formal presentation followed by discussion and direction to the staff.

[Public comment will not be accepted during Work Session unless Council determines otherwise.]

Item	Key Person

Regular Work Session Items:

A. Receive a presentation and discuss the annual implementation of the Phase II Storm Water Quality MS4 Permit; discuss proposed amendments to the current Storm Water Management Ordinance to adopt new provisions prohibiting illicit discharge into the City's Storm Water System and providing post-construction Storm Water Guidelines. **Pandurangi**

B. Receive and discuss a presentation on the proposed Master Thoroughfare Plan and Roadway Impact Fee Update. **Barnett**

C. Receive and discuss a presentation on the proposed Water and Wastewater Master Plans and Water and Wastewater Impact Fee Report. **Barnett**

D. Discuss proposed changes to the City of Lancaster Master Fee Schedule. **Staff**

Adjournment

7:00 p.m. REGULAR MEETING AGENDA

CALL TO ORDER

INVOCATION: MINISTERIAL ALLIANCE

PLEDGE OF ALLEGIANCE: DEPUTY MAYOR PRO TEM JAMES DANIELS

CITIZENS' COMMENTS: (At this time citizens who have pre-registered before the call to order will be allowed to speak on any matter other than personnel matters or matters under litigation, for a length of time not to exceed three minutes. No Council action or discussion may take place on a matter until such matter has been placed on an agenda and posted in accordance with law.)

CONSENT AGENDA: (Items listed under the consent agenda are considered routine and are generally enacted in one motion. The exception to this rule is that a Council Member may request one or more items to be removed from the consent agenda for separate discussion and action.)

1C. Consider approval of minutes from the City Council Regular Meeting held July 9, 2012.

2C. Consider Resolution 2012-07-51 approving the terms and conditions of an Interlocal Agreement by and between the City of Lewisville, Texas, and the City of Lancaster for the cooperative purchase of goods and services.

3C. Consider Resolution 2012-07-52 approving the terms and conditions of a professional services agreement with Dal-Tech Engineering, Inc. to perform services in connection with the project known as Danieldale Road Project for the reconstruction of Danieldale Road from IH-35E to Houston School Road; water and wastewater improvements on Danieldale Road from IH-35E to Houston School Road; and traffic signals and intersection improvements at Danieldale Road and Houston School Road in an amount not to exceed $637,770.

4C. Consider an ordinance repealing in part Ordinance No. 2003-12-42 concerning the land use assumptions and capital improvement plan for roadway impact fees, as set in said ordinance; providing for repeal, in part, of Ordinance No. 2007-11-54 concerning water and wastewater land use assumptions and capital improvement plans for water and wastewater, as set forth in said ordinance; and providing for an adoption of new land use assumptions and capital improvement plans.

PUBLIC HEARINGS

5. Conduct a public hearing on updates to the Master Thoroughfare Plan and consider Resolution 2012-07-53 amending Land Use Assumptions and amending the Capital Improvement Plan [thoroughfare impact fee improvement program] for roadway impact fees; and providing for establishing a Public Hearing and date to consider amendments to the Roadway Impact Fees.

6. Conduct a public hearing on updates to the Water and Wastewater Master Plans and consider Resolution 2012-07-54 amending Land Use Assumptions and amending the Capital Improvement Plan for Water and Wastewater; and providing for establishing a Public Hearing and date to consider amendments to the Water and Wastewater Impact Fees

ACTION

7. Discuss and consider an ordinance amending the Lancaster Code of Ordinances by repealing Chapter 14, Article 14.1700 "Storm Water Management" of the Lancaster Development Code in its entirety; amending Chapter 24, "Utilities," of the Lancaster Code of Ordinances by adopting Article 24.08, "Storm Water Management,"; renumbering the City of Lancaster's Storm Water Management Ordinance and adopting new provisions prohibiting illicit discharge into the City's Storm Water System and adopting new provisions providing post-construction Storm Water Guidelines.

8. Discuss and consider Resolution 2012-07-55 adopting City Council Goals and Objectives contained in the June 2012 City Council Retreat Report.

Adjournment

EXECUTIVE SESSION: The Council reserves the right to convene into executive session on any posted agenda item pursuant to Section 551.071(2) of the TEXAS GOVERNMENT CODE to seek legal advice concerning such subject.

ACCESSIBILITY STATEMENT: The Municipal Center is wheelchair-accessible. For sign interpretive services, call the City Secretary's office, 972-218-1311, or TDD 1-800-735-2989, at least 72 hours prior to the meeting. Reasonable accommodation will be made to assist your needs.

Certificate

I hereby certify the above Notice of Meeting was posted at the Lancaster City Hall on July 20 **, 2012 @** 11:00 a.m. **and copies thereof were hand delivered to the Mayor, Mayor Pro-Tempore, Deputy Mayor Pro-Tempore and Council members.**

Dolle K. Downe

Dolle K. Downe, TRMC
City Secretary

LANCASTER CITY COUNCIL
Work Session Agenda Communication for July 23, 2012

A

WS12-A

Receive a presentation and discuss the annual implementation of the Phase II Storm Water Quality MS4 Permit; discuss proposed amendments to the current Storm Water Management Ordinance to adopt new provisions prohibiting illicit discharge into the City's storm water system and providing post-construction storm water guidelines.

This request supports the City Council 2011-2012 Policy Agenda.

Goal: Sound Infrastructure

Background

The Texas Commission on Environmental Quality (TCEQ) regulates public entities like the City of Lancaster with the Texas Pollutant Discharge Elimination System (TPDES) General Permit. As per the permit, the City was required to develop and submit to TCEQ a plan for a storm water quality management program, which includes best management practices (BMPs) to be implemented by the City to reduce storm water pollution to the "maximum extent practicable" as regulations require.

As a part of the implementation schedule for the BMPs for the current year, the City needs to update the current ordinance to prohibit and eliminate illicit discharges of pollutants to the storm sewer system. The ordinance must include appropriate actions and establish enforcement procedures for removing the source of an illicit discharge.

Additionally, the permit also requires the City to address post-construction runoff from new development and redevelopment projects. The updated ordinance must ensure that controls are in place that would prevent or minimize water quality impacts to the municipal separate storm sewer system.

The City's storm water ordinance in its current form will not be sufficient to ensure compliance with the state requirements and thereby some updates are warranted.

The section on illicit discharge includes/requires revisions to update definitions and provide better enforcement measures. With the assistance of Teague, Nall and Perkins, Inc. (TNP), the City has updated the storm water ordinance to include two new sections: Illicit Discharge Detection and Elimination; and Post Construction Controls and Measures.

This agenda item brings forward the proposed changes to the existing storm water ordinance to include the two new sections for the completion and implementation of the BMPs in order to be in compliance with TCEQ under the current permit requirements.

Staff will provide a brief presentation on the MS4 annual report and proposed ordinance changes.

Considerations

- **Operational** - Phase II of the MS4 program and the Storm Water Management Ordinance update will be managed by the Engineering Division.

  The proposed ordinance repeals the current Storm Water Management ordinance from the Lancaster Development Code (LDC) in its entirety and places it in the Code of Ordinances with amendments as follows:

  - Deletion of Illicit Discharge Prohibition section in the current ordinance and addition of a new Illicit Discharge Section 24.08.011, Illicit Discharge Prohibition and Elimination
  - Addition of Section 24.08.012, Post-Construction Controls and Guidelines
  - Addition of definitions applicable to the new ordinance sections

- **Legal** – The City is required to make updates to the storm water management ordinance to comply with TCEQ requirements.

  The City Attorney has prepared the draft ordinance.

- **Financial** – This program is funded by the City's Storm Water Utility Fund.

- **Public Information** – There are no public information requirements.

Options/Alternatives

1. City Council may approve the proposed ordinance update as presented at its regular meeting following this work session.
2. City Council may direct staff regarding changes to the ordinance.

Recommendation

Staff recommends adoption of the updated ordinance as presented.

Attachments

- Draft Ordinance

Prepared and submitted by:
Shwetha Pandurangi, PE, CFM, City Engineer

Date: July 11, 2012

AN ORDINANCE OF THE CITY OF LANCASTER, TEXAS

ORDINANCE NO._____

AN ORDINANCE OF THE CITY OF LANCASTER, TEXAS, AMENDING THE LANCASTER CODE OF ORDINANCES BY REPEALING CHAPTER 14, ARTICLE 14.1700 OF THE LANCASTER DEVELOPMENT CODE IN ITS ENTIRETY; AMENDING CHAPTER 24, "UTILITIES," OF THE LANCASTER CODE OF ORDINANCES BY ADOPTING ARTICLE 24.08, "STORM WATER MANAGEMENT," SECTIONS 24.08.001, ET SEQ.; RENUMBERING THE CITY OF LANCASTER'S STORM WATER MANAGEMENT ORDINANCE AND ADOPTING NEW PROVISIONS PROHIBITING ILLICIT DISCHARGE INTO THE CITY'S STORM WATER SYSTEM; ADOPTING NEW PROVISIONS PROVIDING POST-CONSTRUCTION STORM WATER GUIDELINES; PROVIDING FOR SEVERABILITY; PROVIDING A REPEALING CLAUSE; PROVIDING A SAVINGS CLAUSE; PROVIDING A PENALTY NOT TO EXCEED TWO THOUSAND DOLLARS ($2,000.00) FOR EACH OFFENSE; AND PROVIDING FOR AN EFFECTIVE DATE.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LANCASTER, TEXAS:

SECTION 1. That Chapter 14, Article 14.1700 of the Lancaster Development Code is hereby repealed in its entirety.

SECTION 2. That Chapter 24, Article 24.08 of the Lancaster Code of Ordinances is hereby amended by adopting the Lancaster Stormwater Ordinance, Sections 24.08.001 et. seq., which shall read as follows:

ARTICLE 24.08 STORM WATER MANAGEMENT ORDINANCE

SECTION 24.08.001 GENERAL PROVISIONS

A. Statutory Authorization

The Legislature of the State of Texas has delegated the responsibility to local governments to adopt regulations designed to minimize flood losses and manage the floodplains in areas under their jurisdiction.

B. Findings of Fact

The drainage ways, creeks and flood hazard areas of the City of Lancaster, Texas are subject to periodic inundation which may result in the loss of life

and property, health and safety hazards, disruption of commerce and governmental services and extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety and general welfare.

These flood losses could be created by the cumulative effect of obstructions in floodplains that increase flood heights and velocities and by placing structures and other improvements vulnerable to floods in flood hazard areas.

The development of land causes large quantities of soil to be displaced and transported to downstream locations. This soil displacement can create significant soil erosion and sedimentation problems. Although erosion is a natural process, excessive levels of erosion may result in potentially destructive consequences. A buildup of sediment degrades water quality, destroys valuable environmental resources and obstructs watercourses and storm drains which can cause flooding, thereby damaging public and private lands and property. These problems result in a serious threat to the health, safety and general welfare of the City of Lancaster. Streams and floodplain areas in the City of Lancaster are valuable resources to the citizens of Lancaster in that they provide recreational opportunities, improve the aesthetics of the community, convey storm water runoff and filter out water quality pollutants.

C. Statement of Purpose

Storm water management policies shall govern the planning, design, construction, operation and maintenance of storm drainage and erosion control facilities within the City of Lancaster. This Ordinance sets forth the minimum requirements necessary to provide and maintain a safe, efficient and effective drainage system within the City of Lancaster and to establish the various public and private responsibilities for the provision thereof. Further, the purpose of this Ordinance is the following:

1. Protect human life, health and property.
2. Minimize the expenditure of public money for building and maintaining flood control and storm drainage projects and cleaning sediment out of storm drains, streets, sidewalks and watercourses.
3. Minimize damage to public facilities and utilities, such as water and gas mains, electric service, telephone and sewer lines, streets, bridges and drainage ways due to storm water runoff and erosion.
4. Help maintain a stable tax base and preserve land values.
5. Provide assistance upon request to potential buyers if property is in an area of special flood hazard.
6. Manage storm water runoff and the sediment load in that runoff from points and surfaces within new and existing developments.

7. Establish a reasonable standard of design for development which prevents potential flood and erosion damage.
8. Reduce the pollutant loading to streams, ponds and other watercourses.
9. Minimize prolonged interruption of business and the need for rescue and relief efforts associated with flooding.
10. Preserve the natural beauty and aesthetics of the community.
11. Obligate those who occupy the areas of special flood hazard to assume responsibility for their actions.

D. Methods of Reducing Flood Loss

In order to accomplish its purposes, this Section uses the following methods:

1. Restrict or prohibit uses that are dangerous to health, safety or property in times of flood, or cause excessive increases in flood heights or velocities.
2. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.
3. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters.
4. Control filling, grading, dredging and other development which may increase flood damage.
5. Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

E. Scope of Authority

Except as exempted by Section 3.1710, any person, firm, utility, corporation or business proposing to develop land or improve property within the jurisdiction of the City of Lancaster is subject to the provisions of this Ordinance. This Ordinance also applies to individual building structures, subdivisions, excavation and fill operations and similar activities.

F. Lands to Which This Ordinance Applies

This Ordinance shall apply to all areas of land located within the incorporated and extraterritorial jurisdiction limits of the City of Lancaster, Texas. Certain provisions of this ordinance apply only to special flood hazard areas within the jurisdiction of the City of Lancaster, while other provisions exempt certain other tracts. These limited areas of application are explained in Section 3.1708 and Section 3.1709. The erosion control provisions of this Ordinance do not apply to land under active agricultural use. As soon as construction or modification to the lands under active agricultural use is proposed so that the use of land will change from agriculture to any other use, then the provisions of

this Ordinance shall be applicable to the once-exempted land. Section 3.1710 explains this exemption in greater detail.

G. Lancaster Storm Water Management Ordinance and Storm Water Design Manual

The Lancaster Storm Water Management Ordinance and the most current version of the Storm Water Design Manual shall become part of the official storm water management plan for streams, channels, detention/retention facilities and pipe drainage systems. Deviations shall not be permitted unless the following criteria are met: (1) it can be clearly shown by approved procedures that the deviation will not adversely affect conditions either upstream or downstream of the point of deviation, and (2) the owners directly affected by the deviation are in written agreement, and (3) the deviation is not in conflict with any other regulations adopted by the City, the state or federal agencies. Requests for deviation are subject to approval by the City Public Works Director. The Public Works Director will have the authority to update the Storm Water Design Manual as needed in response to changing conditions, design methodologies, regulations, etc.

H. Basis for Establishing the Areas of Special Flood Hazard

The areas of special flood hazard, identified by the Federal Emergency Management Agency in the most current "Flood Insurance Study" with the accompanying "Flood Insurance Rate Maps" and any revisions thereto, are hereby adopted by reference and declared to be a part of this Ordinance. The flood insurance study is on file with the City.

I. Abrogation and Greater Restrictions

This Ordinance is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this Ordinance and another municipal ordinance, easement, covenant or deed restriction conflict or overlap, whichever ordinance imposes the more stringent restrictions shall prevail.

J. Interpretation

In the interpretation and application of this Ordinance, all provisions shall be:

1. considered as minimum requirements,
2. liberally construed in favor of the governing body, and
3. deemed neither to limit nor repeal any other powers granted under state or federal statutes.

K. Warning and Disclaimer of Liability

The degrees of flood, storm drainage, and erosion protection required by this Ordinance are considered reasonable for regulatory purposes and are based on

scientific and engineering considerations. Larger floods can and will occur. Flood heights may be increased by manmade or natural causes. This Ordinance does not imply that land outside the areas of flood hazard or uses permitted within such areas shall be free from flooding or flood damages. In addition, this Ordinance does not imply that erosion controls will survive inundation by runoff from storms greater than the design flood for erosion controls. This Ordinance shall not create liability on the part of the City of Lancaster, any officer or employee thereof for any flood damages that result from reliance on this Ordinance or any administrative decision lawfully made thereunder.

L. Severability

If any section, paragraph, clause, phrase, or provision of this Ordinance shall be judged invalid or held unconstitutional, the same shall not affect the validity of this Ordinance as a whole or any part or provision thereof, other than the part so decided to be invalid or unconstitutional; nor shall such unconstitutionality or invalidity have an effect on any other ordinances or provisions of ordinances of the City of Lancaster.

M. Regulatory Permits

It shall be the Developer's responsibility to secure all regulatory permits associated with development of drainage improvements. These include but are not limited to U.S. Corps of Engineer 404 Permits, Texas Commission on Environmental Quality Section 401 permits, Federal Emergency Management Agency floodplain revision permits, Texas Commission on Environmental Quality Texas Pollutant Discharge Elimination System permits and any City of Lancaster permits.

N. Appeal

Any person aggrieved by a decision of the Public Works Director may appeal from any order, requirement, decision or determination of the Public Works Director to the City Manager. The aggrieved person shall file an appeal in writing with the City Manager within seven (7) days from the date of the decision. If no resolution of the appeal can be reached with the City Manager within twenty-eight (28) days, the aggrieved person may appeal in writing to an appropriate court of competent jurisdiction.

O. Variance

Deviations from the provisions of this Ordinance shall not be permitted unless the following criteria are met:

1. It can be clearly shown by approved procedures that the deviation will not adversely affect conditions either upstream or downstream of the point of deviation.
2. The owners directly affected by the deviation are in written agreement.
3. The deviation is not in conflict with any other regulations adopted by the City, the state or federal agencies.

4. A showing of good and sufficient cause.
5. A determination that failure to grant the variance would result in exceptional hardship to the applicant.
6. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety or extraordinary public expense, create nuisances, cause fraud on or victimization of the public or conflict with existing local, state, or federal laws or regulations.

Requests for deviation shall be approved by the Public Works Director. Variances for any type of permit or storm drainage facilities shall be issued only upon a determination that the variance is the minimum necessary to afford relief considering the flood hazard, drainage problems and soil loss. Variances concerning development permits may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the state inventory of historic places, without regard to the procedures set forth in the remainder of this section provided the proposed work shall not preclude the structure's continued designation as a historic structure.

Any applicant to whom a variance for building or renovating in a floodplain is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation, and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

P. Penalty Clause

Any person, firm or corporation violating any of the provisions of this Ordinance may be deemed guilty of a misdemeanor and, upon conviction, may be punished by a penalty or fine. Each and every day such an offense is continued shall constitute a new and separate offense. In addition, the violator shall pay all costs and expenses involved in the case. Nothing herein contained shall prevent the City of Lancaster from taking such other lawful action as is necessary to prevent or remedy any violation.

Any developer, owner or builder who fails to obtain a Development Permit before beginning the subject project is in violation of this Ordinance. No building permit, plat, site plan, Certificate of Occupancy or other use permit may be issued for any construction, reconstruction or development upon any land where such construction, reconstruction or development is not in conformity with the requirements of this Ordinance. It shall be an offense for a responsible party or a third party performing work on a project to violate any of the requirements of this Ordinance.

Q. Maintenance

Public drainage improvements dedicated (in right-of-way or by fee simple dedication to the public) and accepted by the City shall be maintained and

operated by the City or by the property owner if a separate private maintenance agreement is executed.

R. Compliance

No structure or land shall hereafter be located, altered, or have its use changed without full compliance with the terms of this ordinance and other applicable regulations.

SECTION 24.08.002 STORM WATER MANAGEMENT POLICY

A. General

1. Storm water management policies shall govern the planning, design, construction, operation and maintenance of storm water management facilities within the City's jurisdiction.
2. It is the policy of the City of Lancaster to adopt and maintain design standards that protect and provide for the safety and general welfare of the community.
3. It is the policy of the City of Lancaster to implement drainage and erosion control standards to minimize flood damage and soil erosion to private and public facilities within the community.
4. It is the policy of the City of Lancaster to implement storm water control standards to be used during design, construction and post-construction that provide for water quality pollution prevention.
5. These storm water management policies are defined by Storm Water Management Ordinance 2004-07-21, adopted on July 26, 2004 and amendments thereto. All amendments, additions or modifications to this Ordinance are considered effective upon the date of acceptance, in whole or in part by the City of Lancaster. These storm water management policies shall apply to any storm water management system improvement not having plans released for construction on or before the date of City Council approval of revised ordinance provisions.

B. Lancaster Storm Water Management Ordinance and Storm Water Design Manual

The Lancaster Storm Water Management Ordinance and the most current version of the Storm Water Design Manual shall become part of the official Storm Water Management Plan for streams, channels, regional detention/retention facilities and pipe drainage systems. Deviations shall not be permitted unless the criteria in Subsection O (Variance) of Section 3.1701 are met. The City Manager or designee will have the authority to update the Storm Water Design Manual as needed in response to changing conditions, design methodologies, regulations, and other relevant factors.

C. Planning

1. Storm Water Management Site Planning

The following principles of Storm Water Management Site Planning shall be encouraged within the City of Lancaster:

a. Preserve the natural features of the site which can be used to help manage storm water runoff from new development.

b. Fit the new development to the terrain and minimize land disturbance.

c. Reduce the impervious surface areas as much as possible.

d. Preserve and utilize the natural drainage systems wherever possible.

e. Design structural controls, if required, as low maintenance, multi-purpose and aesthetically pleasing facilities.

f. Conduct downstream assessments to demonstrate the impact of new development on downstream drainage systems.

2. Utilization of Natural Floodplains

Utilization of natural floodplains shall be the preferred consideration in providing storm water management control within the City of Lancaster. Natural floodplains for major streams as defined in this Section 3.1703 of this article shall be maintained to provide regional flood control measures, enhance water quality and mitigate regional erosion. Where maintaining natural floodplains is deemed impractical by the City, structural improvements and drainage systems shall be designed and constructed to minimize adverse impacts on the floodplain.

3. Review and Permit Process

The review and permit process established in the Storm Water Management Ordinance shall be utilized by the City of Lancaster to provide control of development activities related to erosion control and storm water runoff through natural and constructed facilities.

4. Relocation and Reclamation

To implement storm water control measures in existing areas of private ownership, the City of Lancaster may consider the acquisition of private land, the relocation of property owners and the reclamation of existing developed areas to their natural condition.

5. Development around Regional Detention/Retention Facilities

The City of Lancaster shall control future development upstream, downstream and in the watershed of all regional detention/retention

facilities. A detailed engineering study shall be performed on all future development that impacts or is impacted by regional detention/retention facilities. This study will provide a technical basis for future development and meet either of the following requirements, as appropriate:

a. Dam and spillway will be designed to meet Texas Commission on Environmental Quality (TCEQ) dam safety requirements.

b. Development and improvements will be restricted within the floodplain as established by a dam breach analysis from the dam to the downstream limit of the dam breach impact.

6. Drainage of Lots

Existing drainage between developed lots shall remain the responsibility of the affected property owners. Future developments less than one acre in area may drain surface runoff from an individual lot to no more than one additional lot before entering a public right-of-way or drainage system contained in a public drainage easement. Surface runoff from future developments of lots one acre or larger must immediately enter a public right- of-way or drainage system contained in a public drainage easement.

7. Dedication of Drainage Easements

Public drainage systems designed to convey the design storm runoff shall be contained within a drainage easement or a floodplain/floodway easement. Developed flows from the site must be contained in a drainage easement to a point of entry into the public drainage system.

8. Platting of Property Along Drainage Channels

Future platting along streams and drainage channels within the 100-year floodplain, based on fully developed watershed conditions, shall require compliance with one of the following:

a. Dedication of a floodplain easement

b. Dedication of a floodway easement if floodplain reclamation is approved

c. Dedication of the floodplain for use as a park, common open space or environmental preservation area as mutually agreed upon by the developer and the City

9. Erosion Hazard Setbacks

Erosion hazard setback determinations shall be made for every stream in which natural channels are to be preserved. Erosion hazard setbacks shall be required to protect structures and lot improvements from erosion hazards.

D. Engineering/Design

1. Design of Drainage Systems

Storm water runoff determinations for drainage systems shall be based on the designated design storm frequency. The design storm frequencies for drainage systems for the City of Lancaster are provided in the Storm Water Design Manual.

2. Fully Developed Watershed Conditions

All drainage systems, whether upstream, downstream or on-site, shall be designed for fully developed watershed conditions based on the City's most recent Land Use Map.

3. Limitation of Runoff / Downstream Assessment

Storm water runoff, based on fully developed watershed conditions, shall be allowed from all future developments provided that the receiving drainage systems and/or natural channels can adequately convey the design storm runoff so that there are no adverse impacts to structures, property or receiving water quality and there is no significant increase in shear stress or erosion potential. Calculations to verify downstream adequacy shall be performed:

a. to the nearest major receiving stream; or

b. downstream to the point where the developed property is no more than ten percent (10%) of the total drainage area for each proposed development (the Ten Percent Rule). The Storm Water Design Manual provides detailed instructions for conducting a downstream assessment using the Ten Percent Rule.

If the receiving drainage systems and/or natural channels cannot adequately convey storm water runoff based on fully developed conditions, runoff from the site shall be limited to the flow that can adequately be conveyed in downstream drainage systems and/or natural channels. All downstream improvements must be in accordance with the City's Storm Water Master Plan and/or with the approval of the Public Works Director in order to avoid increasing downstream flooding or erosion problems.

4. Erosion and Sediment Control During Construction

Guidelines for controlling erosion resulting from development or construction activities shall be identified in the Storm Water Management Ordinance and Storm Water Design Manual. Developers and/or builders must provide a detailed erosion control plan for approval prior to the start of construction activities for entire developments and for individual lots.

5. Stream Bank Erosion

Erosion control methods identified in the Storm Water Design Manual shall be utilized for erosion control along streams and drainage channels. On-site, upstream and downstream erosion control impacts shall be evaluated during design.

6. Regional Detention/Retention Facilities

The regional detention/retention facilities shall maintain their original design to collect sediment from storm water runoff and to provide regional flood control. Detailed engineering and technical analysis shall be performed for each watershed containing an existing regional detention/retention facility prior to development activities. If the dam and spillway(s) do not meet Texas Commission on Environmental Quality (TCEQ) dam safety requirements, the following restrictions shall apply:

a. No construction shall be allowed within the downstream flood area of a dam determined by a breach flow analysis.

b. Development upstream shall not be allowed that adversely impacts the integrity of the dam and/or spillway structure.

c. Development upstream shall not be allowed that would increase the downstream flood area of a dam determined by a breach flow analysis.

Design for upgrading dams shall comply with TCEQ dam safety requirements, this Ordinance, and the Storm Water Design Manual.

7. Structural and Non-Structural Improvements

Storm water control may be achieved by structural (physical) improvements, non-structural (natural/regulatory) means or a combination of both. Design of improvements shall comply with the Storm Water Design Manual guidelines.

8. Regional Detention/Retention of Storm Water Runoff

Existing regional detention/retention facilities provide storm water retention. This retention volume was considered in establishment of the design flood and shall be maintained.

9. Reclamation of Floodplains

Portions of the 100-year floodplain, based on fully developed conditions, may be reclaimed provided there is no increase in the water surface elevation and acceptable velocities are maintained. In addition, for major streams an equivalent volume of valley storage must be provided within the floodplain.

E. Financing

Financing of improvements is possible through various mechanisms depending on the circumstances of the improvements. The Developer shall be responsible for financing on-site and off-site improvements when the existing system is inadequate as a result of the development activities. Cost-sharing opportunities between Developers and between the City and Developers, City contributions

derived from storm water utility fees, drainage impact fees and erosion deposit accounts per this Ordinance are also potential funding sources.

F. Construction

1. Erosion Control

Development activities shall comply with state and federal erosion control permit requirements for construction activity and regulated industrial facilities, erosion control guidelines in the Ordinance and with methods and procedures in the North Central Texas Council of Governments (NCTCOG) Design Manual for Construction or revisions thereof. The City must be provided access to inspect the adequacy and maintenance of erosion control measures on the site.

2. Stream Bank Erosion

Stream bank erosion shall be minimized by utilizing procedures, guidelines and mitigation measures provided in the Storm Water Design Manual and NCTCOG Design Manual for Construction or revisions thereof.

3. Protection/Replacement of Trees

The protection of trees and vegetation shall be maximized to the extent practicable without adverse impacts to drainage improvements during all development activities. Replacement of trees along natural channels destroyed by storm water improvements is encouraged. All protection and mitigation of trees shall comply with other city tree requirements.

4. Water Quality Pollution Prevention

All construction activities shall comply with the Texas Pollutant Discharge Elimination System (TPDES) storm water permit program for construction activities as administered by the Texas Commission on Environmental Quality (TCEQ).

G. Operation and Maintenance

Public drainage improvements dedicated to and accepted by the City shall be maintained and operated by the City as required to maintain flow in the system.

1. Floodplain and drainage easements shall be maintained by the City or a private maintenance agreement shall be executed defining maintenance responsibility.
2. Operation and maintenance of regional detention/retention facilities shall have a maintenance agreement executed defining responsibility for each entity. The City shall coordinate and cooperate with these entities to provide maximum protection for the citizens of Lancaster.

SECTION 24.08.003 DEFINITIONS

Unless specifically defined below, words or phrases used in this Ordinance shall be interpreted to give them the meaning they have in common usage and to give this Ordinance it's most reasonable application:

Active agricultural use: The presently ongoing use of land for cropping or livestock.

Angle of flare: The angle between the direction of a wingwall and the centerline of a culvert or storm drainage outlet or inlet.

Appeal: A request for review or interpretation of any provision of this Ordinance or a request for a variance.

Applicant: Any firm, entity, partnership, company, public utility company or individuals, who plan to clear, grub, fill, excavate, grade or otherwise remove the vegetative cover of land, or who plan to either subdivide land and install the appropriate infrastructure or renovate existing structures, shall become applicants for a development permit upon submission of the appropriate application materials.

Apron: A floor or lining to protect a surface from erosion, for example, the pavement below chutes or spillways or at the toes of dams.

Area of shallow flooding: A designated AO or AH zone on the flood insurance rate map. The base flood depths range from one to three feet, a clearly defined channel does not exist, and the path of flooding is unpredictable and indeterminate.

Area of special flood hazard: The land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year.

Base flood: The flood having a one percent chance of being equaled or exceeded in any given year, determined based upon the FEMA guidelines and as shown in the current effective flood insurance study. This 100-year mean recurrence interval storm event is based on existing watershed conditions (also see "design flood").

Base flood elevation: The water surface elevation resulting from the base flood.

Best Management Practices (BMPs): schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to stormwater, receiving waters, or storm water conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

Builder: A person, partnership or corporation engaged in clearing, grubbing, filling, excavating, grading, constructing a pad, installing service utility lines and/or constructing or placing a building(s) or other structure(s) on a lot or other type of tract of land that is owned by the person, partnership or corporation, and that will not be further subdivided into other lots.

City: The City of Lancaster, Texas, or any authorized person acting on its behalf.

Channel: A natural or artificial stream that conveys water. Channels are often further classified by their size and purpose. For example, there are primary and secondary channels based on size, but diversions, waterways and chutes are also channels.

Channel improvement: The improvement of the flow characteristics of a channel by clearing, excavating, realigning, lining or other means in order to increase its capacity. The term is sometimes used to mean channel stabilization.

Channel stabilization: Erosion prevention and stabilization of velocity distribution in a channel using jetties, drops, revetments, vegetation and other measures.

Check dam: A small dam constructed in a gulley or other small watercourse to decrease the streamflow velocity, minimize channel scour and promote deposition of sediment.

City-maintained land: Any land in actual ownership of the City of Lancaster; it does not include any type of easements that remain in private ownership.

Common Plan of Development or Sale: A construction activity that is completed in separate stages, separate phases, or in combination with other construction activities. A common plan of development or sale is identified by the documentation for the construction project that identifies the scope of the project, and may include plats, blueprints, marketing plans, contracts, building permits, a public notice or hearing, zoning requests, or other similar documentation and activities.

Conduit: Any closed device for conveying flowing water.

Construction Activity: Activities including clearing, grading, and excavation that are subject to TPDES General Construction Permits. It does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, and original purpose of a ditch, channel, or other similar storm water conveyance. Additionally, it does not include the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities.

1. Small Construction Activity: Construction activities including clearing, grading, and excavating that result in land disturbances of equal to or greater than one acres but less than five acres. Small construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one acre of land.

2. Large Construction Activity: Construction activities including clearing, grading, and excavating that result in land disturbances of equal to or greater than five acres. Large construction activity also includes the disturbance of less than five acres of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than five acres of land.

Cover, vegetative: All plants of all sizes and species found on an area, irrespective of whether they have forage or other value, but especially used to refer to vegetation producing a mat on or immediately above the soil surface. Temporary vegetative

cover refers to the use of annual plants for the cover, while permanent vegetative cover refers to the use of perennial plants.

Crest: The top of a dam, dike, spillway or weir, frequently restricted to the overflow portion.

Critical feature: An integral and readily identifiable part of a flood-protection system, without which the flood protection provided by the entire system would be compromised.

Design basin: A dry basin or depression constructed for the purpose of temporarily storing storm water runoff and discharging all of that water over time at a rate reduced from the rate that would have otherwise occurred.

Design flood: When in the context of floods, floodplains or flood hazards, the design flood is that flood having a one percent chance of being equaled or exceeded in any given year, based upon fully developed watershed conditions (also see "base flood").

Developer: A person, partnership or corporation who owns a tract of land and who is engaged in clearing, grubbing, filling, mining, excavating, grading, installing streets and utilities to be dedicated to or accepted by the City of Lancaster and/or otherwise preparing that tract of land for the eventual division of the tract into one or more lots on which building(s) or other structure(s) will be constructed or placed.

Development: Any manmade change to improved or unimproved real estate, including, but not limited to, adding buildings or other structures, mining, dredging, filling, grading, paving, excavation, drilling operations, grading, clearing or removing the vegetative cover.

Discharge (hydraulics):

1. Rate of flow; specifically, fluid flow
2. A volume of fluid passing a point per unit time, commonly expressed as cubic feet per second

Disturbance: Any operation or activity, such as clearing, grubbing, filling, excavating, mining, cutting and grading, or removing channel linings, which results in the removal or destruction of the protective cover of soil, including vegetative cover, channel linings, retaining walls, and slope protection.

Disturbed areas: Any area or tract of land in which a disturbance is occurring or has occurred but that has not been stabilized.

Drainage area: The land area from which water drains to a given point.

Elevated building: In the case of FEMA-designated zones A1-30, AE, A, A99, AO, AH, B, C, X and D, "elevated building" includes a building elevated by means of fill, so that the lowest finished floor of the building is at least two feet above the water surface elevation of the design flood.

Emergency spillway: A spillway built to carry runoff in excess of that carried by the principal spillway.

Entrance head: The head required to cause flow into a conduit or other structure; it includes both entrance loss and velocity head.

Entrance loss: The head lost in eddies or friction at the inlet to a conduit, headwall or structure.

Equal conveyance: The principle of reducing stream conveyance for a proposed alteration with a corresponding reduction in conveyance to the opposite bank of the stream. The right of equal conveyance applies to all owners and uses and may be relinquished only by written agreement.

Erosion: The wearing away of land by action of wind and water.

Existing construction: For the purposes of determining rates, structures for which the "start of construction" commenced before the effective date (January 31, 1978) of Ordinance No. 1046. "Existing construction" may also be referred to as "existing structures."

Federal Emergency Management Agency (FEMA): The federal agency which administers the National
Flood Insurance Program.

Flood or flooding: A general and temporary condition of partial or complete inundation of normally dry land areas from:

1. the overflow of inland waters and/or
2. the unusual and rapid accumulation or runoff of surface waters from any source

Flood Insurance Rate Map (FIRM): The official map on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

Flood Insurance Study: The official report in which the Federal Emergency Management Agency has provided flood profiles, as well as the flood boundary/floodway map and the water surface elevation of the base flood.

Flood protection system: Those physical structural works for which funds have been authorized, appropriated and expended and which have been constructed specifically to modify flooding in order to reduce the extent of the areas within a community subject to a "special flood hazard" and the extent of the depths of associated flooding. Such a system typically includes dams, reservoirs, levees or dikes. These specialized flood-modifying works are those constructed in conformance with sound engineering standards.

Floodplain or flood-prone area: Any land area susceptible to being inundated by water from any source (see definition of "flooding").

Floodway: The channel of the river or other water course and adjacent land areas that must be reserved in order to pass the base flood discharge without increasing flood depth.

Flume: Any open conduit on a prepared grade, trestle or bridge.

Freeboard: The distance between the design flood elevation and the top of an open channel, dam, levee or detention basin to allow for wave action, floating debris or any other condition or emergency without overflowing the structure.

Functionally dependent use: A use which cannot perform its intended purpose unless it is located or carried out in proximity to water. The term includes only docking facilities.

Gabion: A galvanized wire basket filled with stone for structural purposes. When fastened together, they may be used as retaining walls, revetments, slope protection and similar structures.

Grading: Any stripping, cutting, filling, stockpiling or combination thereof which modifies the existing land surface contour.

Grass: Any member of the botanical family Gramineae; herbaceous plants with bladelike leaves arranged in two ranks on a round to flattened stem. Common examples are fescue, Bermuda grass and Bahia grass. The term "grass" is sometimes used to indicate a combination of grass and legumes grown for forage or turf purposes.

Hazardous Materials: Any substance identified or listed as a hazardous waste by the EPA pursuant to 40 CFR Part 261, and also includes any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Highest adjacent grade: The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

Hydraulic gradient: A line representing the pressure head available at any given point within the drainage system.

Hydrograph: A graph showing, for a given point on a stream or drainage system, the discharge, stage, velocity or other property of water with respect to time.

Illicit Connection: Any manmade conveyance connecting an illicit discharge directly to a municipal separate storm sewer.

Illicit Discharge: Any discharge to a municipal separate storm sewer that is not entirely composed of storm water, except discharges authorized under an NPDES or TPDES permit and discharges resulting from emergency firefighting activities.

Inlet (hydraulics):

1. A surface connection to a closed drain
2. A structure at the diversion end of a conduit
3. The upstream end of any structure through which water may flow

Levee: A manmade structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control or divert the flow of water so as to provide protection from temporary flooding.

Levee system: A flood protection system which consists of a levee or levees and associated structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.

Letters of Map Change:

1. CLOMA: A Conditional Letter of Map Amendment (CLOMA) is FEMA's comment on whether a proposed project would be excluded from the Special Flood Hazard Area (SFHA) shown on the effective National Flood Insurance Program (NFIP) map. There is no appeal period. The letter becomes effective on the date sent. This letter does not revise an effective NFIP map, it indicates whether the project, if built as proposed, would or would not be removed from the SFHA by FEMA if later submitted as a request for a Letter of Map Amendment.

2. CLOMR: A Conditional Letter of Map Revision (CLOMR) is FEMA's comment on a proposed project that would affect the hydrologic and/or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway or effective Base Flood Elevations. There is no appeal period. The letter becomes effective on the date sent. This letter does not revise an effective National Flood Insurance Program map, it indicates whether the project, if built as proposed, would or would not be removed from the Special Flood Hazard Area by FEMA if later submitted as a request for a Letter of Map Revision.

3. CLOMR-F: A Conditional Letter of Map Revision based on Fill (CLOMR-F) is FEMA's comment on whether a proposed project involving the placement of fill would exclude an area from the Special Flood Hazard Area (SFHA) shown on the National Flood Insurance Program (NFIP) map. There is no appeal period. The letter becomes effective on the date sent. This letter does not revise an effective NFIP map, it indicates whether the project, if built as proposed, would or would not be removed from the SFHA by FEMA if later submitted as a request for a Letter of Map Revision based on Fill.

4. LOMA: A Letter of Map Amendment (LOMA) is an official amendment, by letter, to an effective National Flood Insurance Program map. A LOMA establishes a property's location in relation to the Special Flood Hazard Area. There is no appeal period. The letter becomes effective on the date sent.

5. LOMR: A Letter of Map Revision (LOMR) is an official revision, by letter, to an effective National Flood Insurance Program map. A LOMR may change flood insurance risk zones, floodplain and/or floodway boundary delineations, planimetric features, and/or Base Flood Elevations. See the LOMR Effective Chart to determine when a LOMR becomes effective.

6. LOMR-F: A Letter of Map Revision Based on Fill (LOMR-F) is an official revision, by letter, to an effective National Flood Insurance Program map. A LOMR-F provides FEMA's determination concerning whether a structure or

parcel has been elevated on fill above the Base Flood Elevation and excluded from the Special Flood Hazard Area. The letter becomes effective on the date sent.

Lowest floor: The lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for the parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design requirements of FEMA 60.3.

Major streams: The major streams in the City of Lancaster, as defined in the Ordinance, are Bear Branch, Deep Branch, Halls Branch, Floyd Branch, Keller Branch, Keller Tributary, Mills Branch, Newton, Branch, Runyon Springs, Ten Mile Creek, and any other stream within the City limits with a FEMA- defined floodplain.

Manning equation: The uniform flow equation used to relate velocity, hydraulic radius and energy gradient slope and roughness characteristics of the flow path.

Manufactured home: A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes, the term "manufactured home" also includes park trailers, travel trailers and other similar vehicles placed on a site for greater than 180 consecutive days. For insurance purposes, the term "manufactured home" does not include park trailers, travel trailers and other similar vehicles.

Manufactured home park or subdivision: A parcel or contiguous parcels of land divided into two or more manufactured home lots for rent or sale.

Mean sea level: For the purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum to which base flood elevations shown on a community's flood insurance rate map are referenced.

Mulching: The application of plant or other suitable materials on the soil surface to conserve moisture, reduce erosion and aid in establishing plant cover.

Municipal Separate Storm Sewer System or MS4: The system of conveyances (including roads with drainage systems, municipal streets, alleys, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) owned and operated by the City of Lancaster and designed or used for collecting or conveying stormwater, and which is not used for collecting or conveying sewage.

National Pollutant Discharge Elimination System or NPDES: A national permitting program for the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general basis. In the State of Texas, the EPA retains authority for permitting oil and gas exploration activities and Indian Country land through the NPDES program.

Natural drainage: The dispersal of surface waters through ground absorption and by drainage channels formed by the existing surface topography which exists at the

time of adoption of this Ordinance or formed by any manmade change in the surface topography.

Natural floodway: The effective area of a channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the "design flood" without cumulatively increasing the water surface elevation. This floodway differs from the "regulatory floodway."

New construction: Structures for which the "start of construction" commenced on or after the adoptive date of this Ordinance.

Open channel: A channel in which water flows with a free surface.

Other municipal ordinances: Ordinances such as, but not limited to, zoning, subdivision and construction specifications.

Outfall: A point source at the point where a municipal separate storm sewer discharges to water in the state and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances that connect segments of the same stream or other waters of the U.S. and are used to convey waters of the U.S.

Peak discharge: The maximum instantaneous flow from a given storm condition at a specific location.

Permanent erosion controls: Stabilization of erosive or sediment-producing areas by the use of means or techniques that will provide protection against erosion losses for an indefinite time period.

Permissible velocity (hydraulics): The highest velocity at which water may be carried safely in a channel or other conduit (see the Storm Water Design Manual).

Pollutant: Anything which causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordinances, and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

Pollution: (from Texas Water Code §26.001(14) The alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any water in the state that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property, or to the public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose.

Principal spillway: Generally, is constructed of permanent material and designed to regulate the normal water level, provide flood protection and reduce the frequency of operation of the emergency spillway.

Probable maximum flood: The upper limit of a flood likely to occur as determined by the Corps of Engineers' criteria.

Public erosion nuisance: A situation in which erosion of or sediment from one location is causing a bothersome or unsightly condition on another property owned by a different individual or entity. A bothersome or unsightly condition or burden includes sediment, mud or similar debris originating from one property but being deposited onto a second off-site property in which that off-site owner may have to remove or clean up the deposit due to liability, statutory, aesthetic, drainage or property damage concerns. The adversely affected off-site property owner could be a private citizen, corporation, government or other entity.

Rainfall intensity: The rate at which rain is falling at any given instant, usually expressed in inches per hour.

Rational formula: The means of relating runoff with the area being drained, the characteristics of the land use and the intensity of the storm rainfall.

Redevelopment: Alterations of a property that changed the "footprint" of a site or building in such a way that there is a disturbance of equal to or greater than one (1) acre of land. This term does not include such activities as exterior remodeling.

Regulatory floodway: The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the "base flood," as calculated by the Federal Emergency Management Agency, without cumulatively increasing the water surface elevation more than a designated height. This floodway is used by FEMA to determine compliance with its regulations.

Retention basins: A pond or other water body which has been designed to have both a conservation pool for holding some water indefinitely and a flood storage pool for storing storm water runoff on a temporary basis for the purpose of reducing the peak discharge from the basin.

Riprap: Broken rock, cobbles, boulders, or concrete placed on earth surfaces, such as the face of a dam or the bank of a stream, for protection against the action of water.

Runoff: That portion of the precipitation that makes its way toward stream channels or lakes as surface or subsurface flow. When the term "runoff' is used alone, surface runoff usually is implied.

Sediment: Solid soil material, both mineral and organic, that is being moved or has been moved from its original site by wind, gravity, flowing water or ice. Also sometimes referred to as "silt" or "sand."

Sheet flow: Water, usually storm runoff, flowing in a thin layer over the ground surface. Synonymous with "overland flow."

Significant rise: Any rise in the design flood water surface elevation at a particular stream location.

Soil: The unconsolidated mineral and organic material on the immediate surface of the earth that serves as a natural medium for the growth of plants.

Special flood hazard area: Areas inundated by the design flood and/or floodplain areas designated on the current flood insurance rate maps.

Stabilized: To be protected from possible erosion losses, usually by the use of vegetative cover.

Standard project flood: A flood that has a magnitude of approximately one-half of the probable maximum flood, as determined on a case-by-case basis using the Corps of Engineers' current criteria.

Start of construction: For a structure, "start of construction" includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of a slab or footings, the installation of piles, the construction of columns or any work beyond the stage of excavation or the placement of a manufactured home on a foundation. Permanent construction of a structure does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.

Storm frequency: An expression or measure of how often a hydrologic event of given size or magnitude should, on an average, be equaled or exceeded.

Storm water: Any flow occurring during or after any form of natural precipitation, including rainfall runoff, snowmelt runoff, and surface runoff and drainage.

Structural Control (or practice): A pollution prevention practice that requires the construction of a device, or the use of a device, to capture or prevent pollution in storm water runoff. Structural controls and practices may include but are not limited to: wet ponds, infiltration basins, storm water wetlands, silt fences, earthen dikes, drainage swales, sediment traps, check dams, stabilized construction entrances, subsurface drains, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins.

Structure: A walled and roofed building, a manufactured home, a substation or a gas or liquid storage tank that is principally above ground. When used in the context of storm water, the term means a drainage improvement, such as dams, levees, bridges, culverts, headwalls, flumes, etc.

Substantial improvement: Any combination of repairs, reconstruction or improvements of a structure, the cumulative cost of which equals or exceeds 50 percent of the initial market value of the structure either:

1. before the first improvement or repair is started, or
2. if the structure has been damaged and is being restored, before the damage occurred.

For the purposes of this definition, substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. Incremental improvements over a period of time, the

cumulative cost of which equals or exceeds 50 percent of the market value at the time of the first improvement, shall be considered a substantial improvement. The term does not, however, include either of the following:

1. Any project for the improvement of a structure to comply with existing state or local health, sanitary or safety code specifications which are solely necessary to assure safe living conditions
2. Any alteration of a structure listed on the National Register of Historic Places or a state inventory of historic places

Temporary erosion protection: The stabilization of erosive or sediment-producing areas for a specific time period, usually during a construction job.

Texas Commission on Environmental Quality or TCEQ: The state commission on environmental quality, any duly authorized official of said agency, or any successor agency. The permitting authority for storm water discharges to the State including industrial, construction and MS4 permits.

Texas Pollutant Discharge Elimination System or TPDES: The State permitting program enforced by the Texas Commission on Environmental Quality (TCEQ) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group, or general area-wide basis.

Time of concentration: The estimated time in minutes or hours required for a drop of water to flow from the most remote point in the drainage area to the point at which the discharge is to be determined.

Use: Any purpose for which a building or other structure or a tract of land may be designed, arranged, intended, maintained or occupied; or any activity, occupation, business or operation carried on, or intended to be carried on, in a building or other structure or on a tract of land.

Use permit: The permit required before any use may be commenced.

Variance: A grant of relief to a person from the requirements of this Ordinance. A variance, therefore, permits construction or development in a manner otherwise prohibited by this Ordinance.

Violation: The failure of a structure or other development to be fully compliant with this Ordinance. A structure or other development without the elevation certificate, other certifications or other evidence, as required by the Public Works Director, is presumed to be in violation until such time as that documentation is provided.

Water surface elevation: The height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of riverine areas.

Watershed: The area drained by a stream or drainage system.

SECTION 24.08.004 ADMINISTRATION

A. Duties of City Officials

The Floodplain Administrator shall administer and implement the provisions of this section and other appropriate sections of 44 CFR (National Flood Insurance Program Regulations) pertaining to floodplain management. The duties of the Floodplain Administrator shall include, but not be limited to the following:

1. Review and approve or disapprove all Development Permits to determine that the requirements of this Ordinance have been met.
2. Maintain for public inspection all records pertaining to the provisions of this Ordinance, including flood-proofing certifications.
3. Notify, in riverine situations, adjacent communities and the Texas Commission on Environmental Quality prior to any alteration or relocation of a watercourse and submitting evidence of such notification to the Federal Emergency Management Agency, as mandated by state and federal requirements.
4. Make interpretations, where needed, as to the exact location of the boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions).
5. Inspect sites to determine compliance with the erosion control guidelines.
6. Review permit applications to determine whether proposed building sites, including the placement of manufactured homes shall be reasonably safe from flooding.
7. Review permits for proposed development to see what permits have been obtained from those federal, state, or local governmental agencies (including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C 1334) from which prior approval is required.
8. Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.
9. When base flood elevation data has not been provided in accordance with this Ordinance, the Floodplain Administrator shall obtain, review and reasonably utilize any base flood elevation data and floodway data available form a federal, state, or other source, in order to administer the provisions of this Ordinance.
10. When a regulatory floodway has not been designated, the Floodplain Administrator must require that no new construction, substantial improvements, or other developments (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, shall not increase the water surface elevation on the base flood more than one foot at any point within the community.
11. Under provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Program regulations, the Floodplain Administrator may

approve certain development in Zones A1-30, AE, AH, on the community's FIRM which increases the water surface elevation of the base flood by more than one foot, provided that an application and approval for a conditional FIRM revision is made and received from FEMA.

12. For structures built on fill in or near the flood plain, require a minimum setback distance of 20 feet from the flood plain in accordance with guidelines in FIA-TB-10 issued by FEMA.

B. Responsibilities of Property Owners

1. The owner or developer of a property to be developed shall be responsible for managing all storm drainage flowing through or abutting such property. This responsibility also includes drainage directed to that property by ultimate development as well as the drainage naturally flowing through the property by reason of topography. The owner, builder or developer of a property shall be responsible for any silt or soils from his property transported downstream from the property by drainage. It is the intent of this Ordinance that provisions be made for managing storm drainage and preventing erosion and sedimentation problems.
2. Where the improvement or construction of a storm drainage facility is required along a property line common to two or more owners, the owner hereafter proposing the development of the property shall be responsible for obtaining the necessary City permits, making the required improvements at the time of development and acquiring or dedicating the necessary rights-of-way or easements to accommodate the improvements. The initial developer may recover a portion of the cost from the adjacent developer in accordance with a Developers' Agreement. Also, the cost of oversized drainage structures may be participated in by the City in accordance with Provisions of this Ordinance, or any subsequent amendment thereto.
3. Where an applicant proposes development or use of only a portion of the property, provisions for storm drainage and erosion control shall only be required in that portion of the property proposed for immediate development, except as construction or improvements of a drainage facility or erosion controls outside that designated portion of the property are deemed essential to the development of that designated portion.
4. The owner or developer of a property must provide sufficient evidence that all necessary, local, state and federal permits have been obtained.

C. Plat Review and Approval Process

The City of Lancaster has several approval processes and permits in place which relate to storm water drainage and floodplains. These processes and permits include but are not limited to:

1. Platting Process

In accordance with the City's subdivision regulations, a construction plan and profile sheets for all public improvements, including drainage facilities, shall be submitted with the final plat. All on- site and off-site drainage easements to be utilized by the development must be submitted with the construction plans. Requirements for preliminary and final plat submission are outlined in the Storm Water Design Manual of the City of Lancaster.

2. Dedication of Drainage Easement

Public drainage systems designed to convey the design storm runoff shall be contained within a drainage easement or a floodplain/floodway easement or property dedicated to the Public. In addition to completely containing the design storm runoff, these easements shall be widened ten (10) feet on either side for maintenance access.

3. Platting of Property Along Drainage Channels

Platting along streams and drainage channels within the 100-year storm event floodplain, based on fully developed watershed conditions, shall require compliance with one of the following conditions:

a. Dedication of a floodplain easement

b. Dedication of a floodway easement if floodplain reclamation is approved

c. Dedication of floodplain land for use as a park, common open space or environmental preservation area.

4. Erosion Hazard Setbacks

Erosion hazard setbacks shall be utilized to provide stream bank protection for the major streams, as defined in this Ordinance, within the City which are to be maintained as natural floodplains. Erosion setbacks may also be required for other streams within the City where a future determination is made that the stream shall be maintained as a natural floodplain.

Natural channel banks shall be protected by use of the determined setbacks unless a plan to stabilize and protect streambanks is approved. Where setbacks are established, no building, fence, wall, deck, swimming pool or other structure shall be located, constructed or maintained within the area encompassing the setback.

The setback requirement for each stream shall be determined as described in Section 2.12 of the Storm Water Design Manual and shown on the final plat.

5. Development Permits (Flood-Prone Areas)

All developers, owners or builders shall obtain a building permit before beginning any projects in floodplain areas, including but not limited to: constructing new buildings and infrastructure, filling land, altering waterways, substantially improving existing structures located in flood hazard areas or channelizing, impounding, realigning, deepening or other altering of a natural drainage way. A construction or renovation project cannot begin until the City has issued a building permit for the project. Approval or denial of a building permit by the City shall be based on the applicant's adherence to provisions of this Ordinance, including each of the following relevant factors:

a. The danger to life and property due to flooding or erosion damage

b. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner

c. The danger that materials may be swept onto other lands to the injury of others

d. The compatibility of the proposed use with existing and anticipated development

e. The safety of access to the property in times of flood for ordinary and emergency vehicles

f. The cost of providing governmental services during and after flood conditions including maintenance and repair of streets and bridges, and public utilities and facilities such as sewer, gas, electrical, and water systems

g. The expected heights, velocity, duration, rate of rise and sediment transportation of the flood waters and the effects of wave action, if applicable, expected at the site

h. The necessity for the facility to have a waterfront location, where applicable

i. The availability of an alternative location, not subject to flooding or erosion damage, for the proposed use

j. The relationship of the proposed use to the comprehensive plan for that area.

6. Proceeding Without Approval

Any developer, owner or builder who fails to obtain a building permit before beginning the subject project is in violation of this ordinance. In addition to the penalties outlined in Section 3.1701, subsection P, no building permit, plat, site plan, certificate of occupancy or other use permit shall be issued for any construction, reconstruction or development upon any land where such construction, reconstruction or development is not in

conformity with the requirements and intent of this Ordinance. Anyone who violates any of the terms and provisions of this Ordinance shall be denied the use permit until the violation is corrected. The city shall also not forward application materials for altering the federal flood insurance maps to the Federal Emergency Management Agency until the application materials are in compliance with the terms of this Ordinance.

D. Deviations from Permit Terms

Permits may be revoked by the City if, upon periodic inspection, it is determined that the work is not progressing in accordance with specifications of the approved plan and permit, or if it is determined that erosion from a building or construction site is not being controlled in a satisfactory manner.

Field changes to drainage system plans can be made upon approval by the City. Record drawings of the drainage system shall be submitted to the City at the completion of the project.

E. Plan Requirements

Application materials and plan requirements for drainage systems or floodplain alterations are listed below. All engineering plans for storm drainage and floodplain alteration projects shall be sealed by a Professional Engineer (P.E.) who is licensed in the State of Texas and experienced in civil engineering work. The total cost for preparing the engineering plans and implementing the plans shall be borne by the applicant.

1. Storm Drainage Plans

As part of the development process, storm drainage reports and plans shall be prepared and submitted with construction plans. These reports and plans shall include drainage systems and easements for both off-site and on-site drainage, so that the proper transition between the two can be maintained. Criteria for on-site development shall also apply to off-site improvements. The construction of all improvements shall be in accordance with the current specifications and regulations adopted by the City of Lancaster. Storm drainage plans shall be prepared in accordance with the Storm Water Design Manual.

2. Application Materials

Owners or builders who are planning to renovate existing structures or construct new structures shall apply for a building permit. If it is determined during the permit review that the proposed project is located in a flood-prone area, then the building permit applicant shall also be required to submit to the Floodplain Administrator for review copies of the appropriate materials listed below.

Owners or developers who are proposing to build or expand subdivisions shall submit a building permit application form. If the city staff determines the proposed work to be in flood hazard areas, then the applicant shall

submit duplicate copies of the additional appropriate materials outlined below.

It is recommended that applicants coordinate the application materials listed below with those needed with other City of Lancaster permits and with the data requirements of the Federal Emergency Management Agency. Such coordination will facilitate staff review, and drawings could be combined to save the applicant from making multiple drawings.

a. Projects involving an existing structure located in flood-prone areas:

   i. Plan view to scale, showing existing and proposed locations, dimensions, lowest finished floor elevations (FFE) (including basements) and extent or elevation of the base flood and the design storm event

   ii. A cost estimate of the proposed improvements or a copy of the contract amount for making the improvements

   iii. One of the following:

      (a) Plans, sealed by a licensed professional engineer in the State of Texas, of any floodproofing techniques and elevation in relation to mean sea level to which any nonresidential structure shall be floodproofed

      (b) A certificate from a licensed professional engineer or architect, stating that the floodproofing techniques used on nonresidential structures meet the requirements of this Ordinance

      (c) Elevation Certificate tied to City benchmark.

b. All subdivisions and new construction in flood-prone areas:

   i. An engineering report with the following recommended format, as applicable:

      (a) Project description

      (b) Description of the hydrologic and hydraulic analyses used, including the method used to determine historic rainfall and stream data, soils reports used to determine erosive velocity values and discharges and water surface elevations for both the base flood and the design flood

      (c) Vicinity map

      (d) Table of values for existing and proposed water surface elevations and velocities

      (e) Documentation that the principle of equal conveyance has been achieved

(f) Engineering calculations for existing and proposed conditions for both the design flood and 100-year storm event discharges

(g) Evaluation of the natural floodway and floodplain limits for the design flood. The natural floodway differs from the FEMA regulatory floodway. The natural floodway is established to allow the City of Lancaster to effectively manage floodplain areas. FEMA requirements for the regulatory floodway must also be met by applicants.

ii. Engineering drawings consisting of the following recommended elements, as applicable:

(a) Water surface profile, including channel flow line, existing and proposed water surface elevations and location and number designation of cross sections

(b) Delineation of the Base Flood Elevations (BFE) as shown in the latest FEMA flood insurance study, if available

(c) Plan view on 24-inch by 36-inch paper,

including:

(i) Scale and north arrow

(ii) Title block

(iii) Boundary lines and nearest street intersections

(iv) Existing and proposed contours

(v) Existing and proposed floodplain limits, and limits of the natural floodway and the regulatory floodway

(vi) Area to be removed from the floodplain or area to be altered

(vii) Top and toe of fill and/or side slopes and the numerical slope of the fill and/or side slopes labeled

(viii) Location, dimensions, etc., of all other associated improvements or alterations to the creek and/or floodplain, such as check dams, swales, channel modifications, existing structures, etc.

(ix) Location of cross sections

(x) Location of all existing and proposed easements and dedications

(xi) Site vicinity map

(d) Plots of cross sections, including:

(i) Scale

(ii) Title block

(iii) Existing and proposed ground elevations

(iv) Cut and/or fill areas labeled

(v) Limits of and numerical values for existing and proposed "n" values

(vi) Equal conveyance removed from both sides

SECTION 24.08.005 DRAINAGE STUDIES

A. General

It is the policy of the City of Lancaster to require a drainage study on industrial, commercial, or multiple lot residential developments to be developed in the City. If a Final Drainage Study was not completed on an area that was previously platted, a Final Drainage Study may be required at the time of permitting for improvements.

B. Preliminary Drainage Study

When Required: It is the policy of the City of Lancaster to discuss and conceptually resolve drainage issues of a development at the Preliminary Plat stage. The applicant shall submit a Preliminary Drainage Study with the submittal of any preliminary plat of a proposed development. A Preliminary Drainage Study may also be required by the City when reviewing the merits of a change in zoning, especially when the proposed use is more intense than the current land use. Approval of the preliminary plat or zoning change may be contingent on the acceptability of the solutions proposed by the Preliminary Drainage Study.

Qualification to Prepare the Study: The Preliminary Drainage Study shall be prepared by a Professional Engineer licensed in the State of Texas, experienced in Civil Engineering, and having a thorough knowledge of the study of drainage issues. The Preliminary Drainage Study shall be signed, sealed, and dated by the person preparing the study.

Requirements: The requirements for a Preliminary Drainage Study shall be established and periodically updated. These requirements are found in the Storm Water Design Manual.

Exemptions: The City may waive the requirement of the Preliminary Drainage Study or may limit certain requirements where the Public Works Director determines that such requirements are not necessary for a proper review of the development.

C. Final Drainage Study

When Required: It is the policy of the City of Lancaster to resolve drainage issues of a development at the Final Plat stage. The applicant may be required to submit a Final Drainage Study with the submittal of the Final Plat, Replat or construction permitting phase, if a Final Drainage Study has not been previously completed for the proposed development or conditions have been modified. Approval of the above mentioned plats or construction may be contingent on the acceptability of the solutions proposed by the Final Drainage Study.

Qualification to Prepare the Study: The Final Drainage Study shall be prepared by a Professional Engineer licensed in the State of Texas, experienced in Civil Engineering, and having a thorough knowledge of the study of drainage issues. The Final Drainage Study shall be signed, sealed, and dated by the person preparing the study.

Requirements: The requirements for a Final Drainage Study shall be established and periodically updated by the City. These requirements are found in the Storm Water Design Manual.

Exemptions: The City may waive the requirement of the Final Drainage Study or may limit certain requirements where the Public Works Director determines that such requirements are not necessary for a proper review of the development.

SECTION 24.08.006 RUNOFF CALCULATIONS AND LIMITATIONS

A. General

The selection of an appropriate method for calculating runoff depends upon the size of the drainage area contributing runoff at a most downstream point of a project. The Rational Method is acceptable for situations in which the drainage area is generally less than 160 acres. A unit hydrograph method is required for situations with larger drainage areas. These methods are described in the Storm Water Design Manual.

Runoff computations shall be based upon fully developed watershed conditions in accordance with the City's latest land use projections.

B. Drainage Improvements Required for Development

All developments shall provide for any new drainage systems, the improvement of any existing drainage systems, channel improvements or grading, driveway adjustments, culvert improvements or any other improvement, drainage facility, or work which is necessary to provide for the storm water drainage needs of the development and the downstream areas impacted. Sheet flow into drainage channels or creeks shall be limited to non-erosive velocities as determined in the Storm Water Design Manual.

No proposed development shall be constructed which impedes or constricts runoff from an upstream watershed based on fully developed conditions.

It shall be the developer's responsibility to determine the type, sizes, grades and capacities of all downstream drainage systems that convey runoff from the proposed development. The developer shall verify that the capacities of these systems are not exceeded as a result of the proposed development, and if off-site improvements are required as a result of the proposed development, the developer shall be responsible for constructing the needed improvements.

If no Storm Water Master Plan for a given watershed addressing downstream drainage systems has been prepared or the factors upon which a previous Storm Water Master Plan was based have been substantially changed, as determined by the Public Works Director, the developer shall, at the developer's sole cost and expense, have a downstream analysis prepared in accordance with the Storm Water Design Manual Criteria by a Licensed Professional Engineer. The downstream analysis shall be performed to the point where the developed property is no more than 10% of the total drainage area. The downstream analysis shall determine:

1. The necessary future capacities of the drainage systems to adequately convey the 100-year design flows from the watershed at full development,

2. The existing 100-year flows and runoff coefficients within the watershed prior to the proposed development,

3. The 100-year flows and runoff coefficients generated by each undeveloped tract within the watershed at full development based on current zoning or proposed zoning,

4. The existing 100-year flows in excess of the existing system's capacities within the watershed, if any,

5. The various facilities and total cost of construction to provide downstream drainage systems with adequate capacities for the 100-year full development flows within the watershed, and

6. The proportionate share of increased runoff attributable to the development of each undeveloped tract within the watershed. This will be based upon the incremental increase in storm water runoff from each undeveloped tract at full development compared to the total increase from full development in the entire watershed above the existing 100-year flows.

Portions of the watershed which lie outside the city limits of Lancaster shall be analyzed and accommodated as if fully developed.

Financing of on-site and off-site drainage facilities shall be in accordance with Section 3.1711 (Funding of Improvements) of this Ordinance.

C. Limitation of Runoff

Calculations to verify downstream adequacy shall be performed to the nearest major receiving stream or downstream to the point where the developed property is no more than 10% of the total drainage area for each proposed development. The Storm Water Design Manual details the procedure to identify the downstream point for the 10% drainage area analysis (Ten Percent Rule). The City may also require additional downstream analysis if, in the opinion of the Public Works Director, other downstream areas are prone to flooding or erosion. Runoff from that development shall be limited as follows:

1. If the downstream analysis demonstrates that there is adequate capacity for the fully developed watershed conditions the developer may proceed with site discharge equivalent to the maximum developed for the site in the drainage analysis.
2. If the downstream analysis demonstrates there is not adequate capacity for fully developed watershed condition, the developer shall be required to either:
    a. Limit discharge to predevelopment conditions or less, or
    b. Improve downstream structures to handle the entire fully developed watershed conditions and proceed with site discharge equivalent to the maximum developed for the site in the drainage analysis.

D. Procedure for Drainage Areas Less Than 160 Acres

Computation of storm water runoff for drainage areas less than 160 acres shall be by the Rational Method, which is based on the principle that the maximum rate of runoff from a given drainage area for an assumed rainfall intensity occurs when all parts of the area are contributing to the flow at the point of discharge. The Rational Method formula and design parameters for utilizing the formula for runoff calculation are contained in the Storm Water Design Manual.

E. Procedure for Drainage Areas Greater than 160 Acres

For drainage areas in excess of 160 acres where the use of the Rational Method does not provide reliable results, a unit hydrograph method shall be used. The use of a unit hydrograph calculation shall be based upon standard and accepted engineering principles normally used in the profession, subject to the approval of the Public Works Director. Acceptable methods and parameters for the Unit Hydrograph Method are contained in the Storm Water Design Manual.

The unit hydrograph method shall be based upon fully developed watershed conditions. The detention effects of large regional detention facilities can be taken into account in unit hydrograph methods.

Circumstances that may require the use of a unit hydrograph method include sizing open channels, reclaiming floodplains, creating lakes or building other

types of drainage-related facilities on major drainage courses. Design engineers of these types of facilities should be aware that the requirement of designing for fully developed watershed conditions will mean that they will have to calculate these fully developed flows, instead of using the flows calculated in the Federal Emergency Management Agency's (FEMA) flood insurance studies. FEMA's flows shall not be used, because the flows are based upon existing watershed conditions. (For more information, see Section 3.1708 (Special Drainage Facilities) on the sizing of channels and other major drainage facilities, and Section 3.1709 (Floodplain Guidelines) for floodplain alteration procedures.)

SECTION 24.08.007 DESIGN OF LOCAL DRAINAGE SYSTEMS

A. Design Storm Frequencies

The calculations of runoff quantities that must be accommodated in drainage systems require the selection of the design storm frequency. The design flood levels for various drainage facilities are found in the Storm Water Design Manual.

Drainage Facility	Design Recurrence Interval
Roadway ditches	25-year with 100-year spread of water not to extend beyond 1 open lane of traffic in residential estates type subdivisions.
Closed storm drain systems	25-year with 100-year positive overflow for inlets on grade in streets, such that the depth of flow in the street does not exceed the top of the curb. Inlet bypass flows shall be in accordance with the Storm Water Design Manual.
Closed storm drain systems and inlets at street low point, sag or sump	100-year
Culverts and bridges	100-year
Concrete-lined channels	100-years
Earthen channels	100-years

Levees	Standard project flood
Dams above natural ground/spillways	Spillway design flood varies with the class of structure (see Storm Water Design Manual) 100-year

The approved drainage system shall provide for positive overflow at all low points. The term "positive overflow" means that, when the inlets do not function properly or when the design capacity of the conduit or roadway ditch is exceeded, the excess flow can be conveyed overland along an open course. Normally, this would mean along a street or alley, but it can be constructed on private property within the dedication of a special drainage easement.

B. Storm Drain Design Standards

Storm drain design standards are found in the Storm Water Design Manual, including street and alley capacity, inlets and manholes capacity and placement, pipe and culvert design, and other standard methods and formulas for calculation of flow and depth.

C. Drainage Easements for Enclosed Storm Drains

All storm drain conduits to be dedicated to the City of Lancaster shall be located in the Right-Of-Way (R.O.W.) or in a drainage easement dedicated to the City of Lancaster at the time of final recording of a plat. Easement widths shall be determined in accordance with the Storm Water Design Manual.

SECTION 24.08.008 SPECIAL DRAINAGE FACILITIES

A. Channels

1. Channel Design

If the drainage area is less than 160 acres, runoff shall be contained within an underground closed system, unless otherwise approved by the Public Works Director. Open channels may be approved by the Public Works Director for water quality protection purposes or to protect the environmental and aesthetic benefits of trees, springs, exposed channels and other significant natural features. Criteria for the design of open channels are found in the Storm Water Design Manual.

2. Starting Water Surface Condition

When performing hydraulic analyses for channel or drainageway design, the starting water surface shall be based on the criteria found in the Storm Water Design Manual.

B. Lakes and Dams

1. General

In the event that a property owner or developer desires to create or modify an existing pond or lake or desires to impound storm water by filling or constructing an above ground dam, thereby creating a lake, pond, lagoon or basin as part of the development of that property, the criteria listed in the Storm Water Design Manual shall be met before City

approval of the impoundment can be given. Ponds or lakes created by excavation of a channel area without erecting a dam above natural ground elevation or instream low water check dams are also subject to the criteria. The dam safety requirements of the State of Texas must also be met for the construction of dams, lakes and other impoundments.

2. Maintenance and Liability

a. The owner or developer shall retain their private ownership of the constructed lake, pond or lagoon or basin and shall assume full responsibility for the protection of the general public from any health or safety hazards related to the lake, pond or lagoon constructed.

b. The owner or developer shall assume full responsibility for the maintenance of the lake, pond or lagoon or basin constructed. The owner or developer shall keep the Public Works Director advised, in writing, of the currently responsible agent for this maintenance.

C. Levees

In the event that developers or owners wish to build levees to protect an area from flooding, applicable FEMA guidelines, State of Texas dam safety guidelines and the criteria listed in the Storm Water Design Manual shall apply.

D. Detention and Retention Facilities

Detention/retention facilities to reduce runoff rates may be required due to inadequate storm drainage systems or a change in land use resulting in a significant increase in runoff. Inadequate storm drainage systems to be considered include downstream structures, channels, and identifiable flood prone areas.

Detention/retention facilities shall be in compliance with all applicable design requirements of all Local, State or Federal ordinances, laws or regulations, including the regulations for dam safety of the Texas Commission on Environmental Quality. Detention/retention pond design criteria is outlined in the Storm Water Design Manual.

E. Flumes

Flumes are not recommended for widespread use. Flumes shall not be permitted when the purpose of a permanent flume is to carry runoff down the sides of earthen channels. A flume may be used to direct overflow runoff along property lines until the runoff can be intercepted by streets or conduit flows. Flumes crossing sidewalks shall be covered or bridged, so as to minimize danger to pedestrians. Applicants shall dedicate drainage easements for flumes. Those easements shall have sufficient width to allow future

maintenance accessibility, and in no case shall the easement be less than 15 feet wide.

F. Connections from Buildings to Storm Drains

Drainage from areas such as roof tops should be allowed to flow overland before joining the storm drain system. Seepage into basements that is pumped to ground level, seepage from springs and runoff from roof drains on nonresidential buildings that would flow onto or across driveways, sidewalks or other areas commonly crossed by pedestrians or vehicles that create a public hazard or nuisance shall be tied directly to the nearest storm drain. Pumped lines from basements shall have backflow prevention devices.

SECTION 24.08.009 FLOODPLAIN GUIDELINES

A. Lands to Which This Section Applies

Applicants shall comply with the requirements of this Section and the Storm Water Design Manual for special flood hazard areas before making substantial improvements to or increasing the outside dimensions of an existing structure or developing land within the design flood line of a creek or stream, whether or not the land has been formally designated as a special flood hazard area. Special flood hazard areas shall also include all areas inundated by the design flood and the floodplain areas shown in the latest Flood Insurance Study and on the Flood Insurance Rate Maps and subsequent amendments thereto.

B. General Floodplain Regulations

1. Regional Detention/Retention of Storm Water Runoff

Existing regional detention/retention facilities provide storm water retention as a design feature. This retention volume was considered in establishment of the design flood and shall be maintained. Natural floodplains for major streams shall be maintained to provide regional flood control measures, enhance water quality and mitigate regional erosion. Major streams for the City of Lancaster are defined in Section 3.1703.

2. Reclamation of Floodplains

Portions of the 100-year floodplain, based on fully developed conditions, may be reclaimed provided there is no increase in the water surface elevation and acceptable velocities are maintained. In addition, for major streams, an equivalent volume of valley storage must be provided within the floodplain.

3. Permitted uses of floodplain areas

To minimize possible losses of life and property, the following uses are permitted in a floodplain area, provided they are also permitted in the underlying zoning district:

a. Farm or ranch

b. Local utilities, electrical substation, water reservoir or pumping station and water treatment plant

c. Public park or playground, private recreation club or area, private community center and golf course

d. Parking lots in accordance with this Ordinance

e. Outside commercial amusement, approved by a specific use permit

f. Helistop, approved by a specific use permit

g. Radio, television or microwave tower and amateur communications tower with a special permit

Structures customarily associated with the above uses may be constructed within a floodplain area only if the proposed structure meets the same engineering requirements applicable to filling in a floodplain.

Open private recreation clubs or areas and private community centers without exterior walls are permitted in floodplain areas. Private facilities listed above, with enclosed walls that would incur damage, are not permitted in floodplain areas.

Uses and structures other than those mentioned above shall not be permitted in floodplain areas.

C. General Standards

In all areas of special flood hazards the following provisions are required for all new construction and substantial improvements:

1. All new construction or substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

2. All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage.

3. All new construction or substantial improvements shall be constructed with materials resistant to flood damage.

4. All new construction or substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating

within the components during conditions of flooding according to established design flood elevations.

5. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the systems into the flood waters.

6. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

D. Specific Standards

In all areas of special flood hazards, the following provisions are required:

1. Residential Construction

New construction and substantial improvement of any residential structure shall have the lowest floor (including basement) elevated to a minimum of one foot (1') above the design flood (i.e., fully developed conditions 100-year) elevation. A registered professional engineer, architect, or registered professional land surveyor (RPLS) shall submit a certification to the floodplain administrator that the standard of this subsection is satisfied.

2. Nonresidential Construction

New construction and substantial improvements of any commercial, industrial, or other nonresidential structure shall either have the lowest floor (including basement) elevated to at a minimum of one foot (1') above the design flood level or, together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are flood proofed shall be maintained by the floodplain administrator.

3. Enclosures

New construction and substantial improvements, with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must

either be certified by a licensed professional engineer or architect or meet or exceed the following minimum criteria:

a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.

b. The bottom of all openings shall be not higher than one foot above grade.

c. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

4. Manufactured Homes

a. All manufactured homes to be placed within a special flood hazard area shall be installed using methods and practices which minimize flood damage. For the purpose of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.

b. Manufactured homes that are placed or substantially improved within a special flood hazard area must be located in one of the following:

i. outside of a manufactured home park or subdivision,

ii. in a new manufactured home park or subdivision,

iii. in an expansion to an existing manufactured home park or subdivision, or

iv. in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as a result of a flood, be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to one foot (1') above the design flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

5. Recreational Vehicles

Require that recreational vehicles placed on sites within special flood hazard areas either:

a. be on the site for fewer than 180 consecutive days, or

b. be full licensed and ready for highway use, or

c. meet the permit requirements of this Ordinance and the elevation and anchoring requirements for manufactured homes.

A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions.

6. Streets, Parking Lots and Bridges

The top of the curb or street crown of all new streets to be built in reclaimed floodplain areas shall be at least one foot (1') above the design flood elevation. The low beam of all new bridges to be constructed across floodplains shall be a minimum of one foot (1') above the design flood elevation. All new private bridges to individual homes shall have their low beams at one foot above the design flood elevation. Parking lots associated with residential uses in reclaimed floodplain areas shall be at least at the design flood elevation. Parking lots for commercial and industrial uses may be built at one foot below the design flood elevation. Parking lots for public parks or playgrounds, private recreation clubs or areas, private community centers and golf courses may be located below the design flood elevation if approved by the Public Works Director.

7. Utilities

All new and replacement water supply systems, sanitary sewer facilities and other public utilities shall be designed to minimize or eliminate infiltration of floodwaters into the system. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

8. Fences

In any floodplain or positive overflow areas, fences (private and public screening) shall be constructed such that blockage of surface water flow does not occur.

9. Trees

The planting of trees in existing drainage channels, designated floodways, floodplain or floodway easements, hazard setback zones, or positive overflow areas shall not be allowed if it will impede the natural flow of the drainage channels designated floodway, floodplain or floodway easement, hazard setback zone or positive overflow area.

10. Fill Areas

Where fill is proposed for placement to raise the ground surface to at least one foot (1') above the design flood elevation, design engineers proposing

the reclamation shall demonstrate that the fill will not settle below the design elevation of the fill; and that the fill will be adequately protected from erosion, scour or differential settlement. Fill slopes shall be permanently protected from erosion losses by grassing, establishing vegetative cover approved by the Public Works Director or installing channel linings when allowed by the other provisions of this ordinance. A qualified geotechnical analysis certifying compaction of the fill to no less than 95 percent of the standard proctor densities is required. For structures built on fill in or near the flood plain, a minimum setback distance of 20 feet from the flood plain will be required in accordance with guidelines in FIA-TB-10 issued by FEMA.

11. Additional Construction Standards for Structures

All substantial improvements and new construction permitted in a floodplain area must comply with the following requirements:

a. Structures must be securely anchored to the foundation to prevent flotation and collapse during inundation and designed to prevent damage to nonstructural elements during inundation.

b. Thermal insulation used below the first floor elevation must be of a type that does not absorb water.

c. Adhesives must have a bonding strength that is unaffected by inundation.

d. Doors and all wood trim must be sealed with a waterproof paint or similar product.

e. Mechanical, electrical and utility equipment shall be located a minimum of one foot (1') above the design flood elevation.

f. Water heaters, furnaces, electrical distribution panels and other critical mechanical or electrical installations must not be placed in basements. Electrical circuits for basements shall be separate from circuits serving floors above the basement, and circuits for basements shall be installed lowered from above.

g. Basements are permitted for nonresidential structures only if they are designed to preclude inundation by the design flood elevation, either by:

i. the elimination of exterior openings below the design flood elevation, or

ii. the use of watertight closures, such as bulkheads and flood shields.

However, no basements are permitted in soil whose permeability meets or exceeds the minimum local standards of permeability established for the installation of individual sewer disposal systems.

h. Plywood used at or below the lowest floor elevation must be of an "exterior" or "marine" grade and of a water-resistant or waterproof variety.

i. Wood flooring used at or below the lowest floor elevation must be installed to accommodate a lateral expansion of the flooring, perpendicular to the flooring grain, without incurring structural damage to the building.

j. Basement ceilings for nonresidential structures must be of sufficient wet strength and be so installed as to survive inundation.

k. Paints or other finishes used at or below the lowest floor elevation must be capable of surviving inundation.

l. All air ducts, large pipes and storage tanks located at or below the lowest floor elevation must be firmly anchored to prevent flotation.

m. Tanks must be vented at a location above the design flood elevation.

E. Standards for Subdivision Proposals

1. All proposals for the development of subdivisions including manufactured home parks and subdivisions shall meet development permit requirements of this Ordinance.

2. Design flood elevation data shall be generated for subdivision proposals and other proposed development including manufactured home parks and subdivisions which are greater than either 50 lots or 5 acres, if not otherwise provided pursuant to this Ordinance.

3. All subdivision proposals including manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.

4. All subdivision proposals including manufactured home parks and subdivisions shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.

F. Standards for Areas of Shallow Flooding (AO/AH Zones)

Located within the areas of special flood hazard are areas designated as shallow flooding. These areas have special flood hazard associated with base flood depths of 1 to 3 feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and where flow may be evident. Such flooding is characterized by ponding or sheet flow. The following provisions apply:

1. All new construction and substantial improvements of residential structures shall have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least two feet if no depth number is specified).
2. All new construction and substantial improvements of nonresidential structures shall:

    a. have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least two (2') feet if no depth number is specified), or

    b. together with attendant utility and sanitary facilities be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads of effects of buoyancy.

3. A registered professional engineer or architect shall submit a certification to the Floodplain Administrator that the standards of this section are satisfied.
4. Within Zones AH or AO adequate drainage paths around structures on slopes, to guide flood waters around and away from proposed structures, are required.

G. Floodways

Floodways - Located within areas of special flood hazard are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles and erosion potential, the following provisions shall apply:

1. Encroachments are prohibited, including fill, new construction, substantial improvements and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses preformed in accordance with standard engineering practice by a licensed professional engineer or architect that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence

of the design and base flood discharges, and approval of the Public Works Director is obtained.

2. All new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this Ordinance.

H. Verification of Floodplain Alterations

1. Certified Minimum Proposed Finished Floor Elevations (FFEs)

Prior to final acceptance by the city of utilities, street or other public construction for projects involving floodplain alterations or adjacent to defined floodplains, creeks, channels and drainage ways, a certified statement shall be prepared by a registered professional land surveyor or licensed professional engineer, showing that all lot elevations, as developed within the subject project, meet or exceed the required minimum finished floor elevations (FFEs) shown on the plans and plat. This certification shall be filed with the City.

2. Certified Elevations of Constructed Finished Floor

In addition, at any time in the future when a building permit is desired for existing platted property which is subject to flooding or carries a specified or recorded minimum finished flood elevation, a registered professional land surveyor or a licensed professional engineer shall prepare a certified statement that sites are built to the design elevations. The certified survey data showing the property to be at or above the specified elevation shall be furnished to the Floodplain Administrator for approval. A certificate of compliance with the provisions of this Ordinance, pertaining to specified finished floor elevations, shall be required.

3. Issuance of Development Permits

The applicants shall furnish, at their expense, to the Floodplain Administrator the above certifications and any other certified engineering and surveying information requested by the Floodplain Administrator to confirm that the required minimum floor and pad elevations have been achieved. Development permits shall not be issued until a conditional letter of map revision or amendment has been issued by FEMA.

SECTION 24.08.010 EROSION CONTROL GUIDELINES

A. Lands to Which This Section Applies

Private property owners, developers or builders shall be accountable for any erosion of their property or construction site which results in accumulation of sediment in dedicated streets, alleys, any waterway or other private properties. Any accumulation or deposit of soil material beyond the limits of the property or in City streets, alleys or drainage facilities in an amount sufficient to

constitute a threat to public safety and comfort as determined by the City shall constitute a violation of this Ordinance. The only exceptions to this provision are lands under active agricultural use. As soon as construction or modification to the exempted land is to begin so that the use of the land will change from agriculture to any other use, then the land shall lose its exemption and become subject to the provisions of this Ordinance.

B. General Guidelines

1. Maximum use shall be made of vegetation to minimize soil loss.

2. Natural vegetation should be retained wherever possible.

3. Where inadequate natural vegetation exists or where it becomes necessary to remove existing natural vegetation, temporary controls shall be installed promptly to minimize soil loss and reduce erosion and sedimentation to the greatest degree practicable.

4. Wherever possible during construction, erosion controls and Best Management Practices shall be used on hillsides to slow drainage flow rate.

5. Erosion control elements and Best Management Practices must be installed prior to the start of construction activity in accordance with applicable TCEQ storm water general permit requirements.

6. Waste or disposal areas and construction roads should be located and constructed in a manner that shall minimize the amount of sediment entering streams.

7. Frequent fording of live streams shall not be permitted; therefore, temporary bridges or other structures shall be used wherever an appreciable number of stream crossings are necessary.

8. When work areas or material sources are located in or adjacent to live streams, such areas shall be separated from the stream by a dike or other barrier to keep sediment from entering a flowing stream. Care shall be taken during the construction and removal of such barriers to minimize the sediment transport into a stream.

9. Should preventative measures fail to function effectively, the applicant shall act immediately to bring the erosion and/or siltation under control by whatever additional means are necessary.

10. Erosion control devices shall be placed to trap any losses from stockpiled topsoil.

11. The selection and timing of the installation of erosion controls shall be based upon weather and seasonal conditions that could make certain controls not practicable.

12. Vegetation used for vegetative cover shall be suitable for local soil and weather conditions. Ground cover plants shall comply

with listings from the Texas Agricultural Extension Service for North Central Texas.

13. Runoff shall be diverted away from construction areas as much as possible.

14. Stripping of vegetation from project sites shall be phased to the degree practicable so as to expose the minimum amount of area to soil erosion for the shortest possible period of time. Phasing shall also consider the varying requirements of an erosion control plan at different stages of construction.

15. Final acceptance shall also be contingent upon having all necessary erosion control measures installed to minimize off-site sediment. A site may be accepted without erosion control measures if perennial vegetative cover is actively growing.

C. Erosion Control Required

1. State Requirements

The Texas Commission on Environmental Quality (TCEQ) regulates storm water discharges from construction sites. Prior to initiating any construction project, the state requirements should be reviewed to determine the current requirements. TCEQ requirements for storm water protection from construction activity must be followed. For construction activity that disturbs one or more acres, a storm water pollution prevention plan must be developed and erosion control measures must be implemented throughout construction activity. To obtain coverage under the general permit for construction activities which disturb more than five acres, a Notice of Intent (NOI) must be prepared and submitted to the TCEQ. The NO1 must include certification that a Storm Water Pollution Prevention Plan (SWP3) has prepared in accordance with the requirements of the general permit.

For storm water discharges from construction sites five acres or larger into the City's storm sewer system, a copy of the completed NOI must be submitted to the City Engineer. For storm water discharges from construction sites between one and five acres into the City's storm sewer system, a copy of the construction site notice must be submitted to City Engineer.

2. Application of Section

A Responsible Party engaging in any land disturbing activity or any construction activities shall prepare an Erosion Control Plan and submit that Plan to the City Engineer for approval. This Ordinance shall apply regardless of whether a Responsible Party is required to obtain a permit from the City in order to conduct such land disturbing or construction activity. The Responsible Party shall also be held liable for violations

of this Ordinance committed by third parties engaging in activities related to the Responsible Party's project.

3. Erosion Control Plan Implementation and Compliance

Each Responsible Party shall implement and maintain the erosion control measures shown on its approved Erosion Control Plan in order to minimize the erosion and the transport of silt, earth, topsoil, etc., by water runoff or construction activities, beyond the limits of the Responsible Party's site onto City streets, drainage easements, drainage facilities, storm drains of other City property prior to beginning any land disturbing activity.

4. Off-Site Borrow, Spoil and Staging Areas

Where applicable, off-site borrow areas, spoil areas and construction staging areas shall be considered as part of the project site and shall be governed by this Ordinance.

5. Related Land Areas

The erosion control requirements of this Ordinance shall apply to all related land areas. Additionally, when land disturbing activity occurs on a project, all disturbed land areas related to the project shall have permanent erosion control established before final occupancy of structures located thereon or final acceptance of the subdivision may be obtained. This section applies whether or not a building permit is required.

6. Below Ground Installations

All discharges resulting from below ground installations shall be passed through City approved erosion control devices or removed from the site for proper disposal.

D. Erosion Control Plans

Each Erosion Control Plan required by this Ordinance shall clearly identify all erosion and sediment control measures to be installed and maintained throughout the duration of the project for which that Plan is submitted. The Responsible Party shall install and maintain erosion control devices in accordance with the City-approved Erosion Control Plan as required by this Ordinance.

E. Development Compliance

When construction or land disturbing activities are conducted as part of a construction project, permanent erosion control shall be established prior to the occupancy of any structure. Phased occupancy shall be allowed only when there are no outstanding erosion control violations for the project for which the request is made.

In addition to the other requirements of this Ordinance, when construction or land disturbing activities are conducted as part of a project, the following shall apply:

1. Erosion Control Deposit Account

Prior to the Pre-construction Meeting, the Developer shall submit an Erosion Control Plan for approval by the City and shall pay an erosion control deposit to the City in the amount of $500.00 per acre with a maximum of $20,000.00 and a minimum of $1,000.00. If a Developer has more than one subdivision under construction, a deposit account shall be established for each development. The deposit(s) shall be posted to compel the Developer to implement and maintain the City approved Erosion Control Plan. At no time shall a deposit balance fall below $5,000.00, or the initial deposit amount, whichever is less. If the fund has less than $5,000.00, work on the project shall stop until additional funds are deposited to bring the balance above $5,000.00. No inspection of any type may be performed on a project or portion thereof until a City approved Erosion Control Plan is implemented by the Responsible Party.

2. Final Acceptance

Permanent erosion control devices and when applicable, temporary erosion control devices, as specified in the approved Erosion Control Plan shall be installed and maintained prior to final acceptance of a subdivision. The Developer for such subdivision shall continue to maintain all temporary erosion control devices until permanent erosion control has been established on all those lots within the subdivision for which a building permit has not been issued.

3. Transfer of Property by Developer

If the Developer sells all of the lots in a subdivision to one purchaser, that purchaser:

a. becomes the Responsible Party for the subdivision,

b. is liable for violation of this Ordinance, and

c. shall post an erosion control deposit as required by this Ordinance.

The balance remaining in the original Developer's account shall be released as provided herein upon the submission of written proof of transfer of lots and a new erosion control deposit by the purchaser. As required by this Ordinance, the purchaser shall post an erosion control deposit with the City.

4. Deductions from Erosion Control Deposit Account/Stop Work Orders/Citation

The City shall inspect the erosion control devices located at a site for compliance with the approved Erosion Control plan submitted by a Developer. If a Developer fails to implement or maintain erosion control devices as specified in his approved Erosion Control Plan, the City shall provide such party with written notice of noncompliance identifying the nature of the noncompliance. Such notice shall also inform the Developer of the circumstances under which a deduction from his deposit account will be made and the time frame for the filing of an appeal of such action by the City. The Developer shall have twenty-four (24) hours to bring his erosion control devices into compliance with the approved Erosion Control Plan for the site to which notice of noncompliance was issued. Correction shall include sediment clean-up, erosion control device repair, erosion control device maintenance and/or installation of additional erosion control devices to prevent re-occurrence of the violation. The twenty-four (24) hour cure period, may be extended for inclement weather or other factors at the discretion of the City.

At the end of twenty-four (24) hour cure period, the City shall re-inspect the site and shall deduct a re-inspection fee of $75.00 from the Developer's erosion control deposit account. If at the time of such re-inspection, the erosion control devices at the site have not been brought into compliance with the approved Erosion Control Plan, the City may issue a stop work order and issue a citation for each violation of this Ordinance.

If a violation is not resolved within the twenty-four (24) hour cure period, the City may, at its sole discretion, cause erosion control devices to be installed or repaired, sediment to be removed, or take other actions necessary to correct the problem. Costs for such work, an administration fee, and re-inspection fees shall be charged against the Erosion Control Deposit Account. Stop work orders shall be issued until the total amount of charges is refunded by the Developer into the Erosion Control Deposit Account. A citation shall also be issued for each violation in which the City acts to cure the violation. The Responsible Party shall have the right of appeal as set forth in this Ordinance.

5. Erosion Control Deposit Account Balance-Deposit Refund

After building permits have been issued for ninety percent (90%) of the lots within the development, the Developer may request the return of the remainder of his deposit by submitting a written request to the City Engineer. However, the Developer shall continue to maintain temporary erosion control devices on those remaining lots for which building permits have not been issued and for any other areas upon which permanent erosion control has not been established. The balance of the deposit remaining in an account after deductions for all violations have been made shall be refunded within thirty (30) days of receipt of the written request for refund along with a list of all deductions made from the

deposit account. The Responsible Party shall have the right of appeal as set forth in this Ordinance.

6. Erosion Control Deposits

Erosion control deposits posted pursuant to the requirements of this Ordinance shall not accrue interest.

F. Residential Lots with a Building Permit

When land disturbing activities are conducted on a residential lot for which a building permit must be issued, the Responsible Party shall comply with the following:

1. Erosion Control Plan

Prior to approval of a building permit for a residential lot by the City, the Builder/Contractor of other Responsible Party obtaining the building permit shall submit an Erosion Control Plan for approval by the City. No construction may be performed on a project until a City-approved Erosion Control Plan is implemented.

2. Stop Work Order/Citation

The City shall inspect the erosion control devices located at a site for compliance with the approved Erosion Control Plan submitted for such site. If a Responsible Party fails to implement or maintain erosion control devices as specified in the approved Erosion Control Plan, the City shall provide such party with written notice of noncompliance identifying the nature of such noncompliance. The Responsible Party shall have twenty-four (24) hours to bring the erosion control devices into compliance with the intent of the approved Erosion Control Plan for the site where the violation occurred. Modifications to the approved erosion control plan may be required to maintain all sediment on-site. Correction shall include sediment clean-up, erosion control device repair, erosion control device maintenance, and/or installation of additional erosion control devices to prevent re-occurrence of the violation. The twenty-four (24) hour cure period may be extended for inclement weather or other factors at the discretion of the Building Official. If the intent of the approved control plan (maintaining sediment on-site) is not met, then the Responsible Party shall take action within twenty-four (24) hours to control soil eroding from the site and clean up any sediment and shall have one week to submit a new erosion control plan. Work may continue during the review period. Implementation of this plan shall be required within twenty-four (24) hours of plan approval by the City. If no plan is submitted within one week, then construction activities shall be halted until a new plan is submitted and approved.

At the end of the twenty-four (24) hour cure period, the City shall re-inspect the site and may assess a re-inspection fee. If at the time of such

re-inspection, the erosion control devices at the site have not been brought into compliance with the approved Erosion Control Plan, the City may issue a stop work order and issue a citation for each violation of the City's erosion control requirements. When a stop work order has been issued, a re-inspection fee shall be assessed. To obtain a re-inspection for removal of the stop work order, a request must be submitted therefore and a re-inspection fee of $75.00 shall be paid.

3. Removal of Erosion Control Devices

Upon issuance of a Certificate of Occupancy or upon establishing permanent ground cover on a lot, all temporary erosion control devices shall be removed.

G. Enforcement

1. Violations

It shall be an offense for a Responsible Party or a third party performing work on a project to violate any of the requirements of this Ordinance, including, but not limited to, the following:

a. Conducting any land disturbing or construction activity without an approved Erosion Control Plan for the location where the violation occurred

b. Failing to install erosion control devices or to maintain erosion control devices throughout the duration of land disturbing activities, in compliance with the approved Erosion Control Plan for the location where the violation occurred

c. Failing to remove off-site sedimentation that is a direct result of land disturbing activities where such off-site sedimentation results from the failure to implement or maintain erosion control devices as specified in an approved Erosion Control Plan for the location where the violation occurred

d. Allowing sediment laden water resulting from below ground installations to flow from a site without being treated through an erosion control device

e. Failing to repair damage to existing erosion control devices, including replacement of existing grass or sod

2. Notice of Violation

Written notice of violation shall be given to the Responsible Party or his job site representative as identified in the Erosion Control Plan for a site. Such notice shall identify the nature of the alleged violation and the action required to obtain compliance with the intent of the approved Erosion Control Plan.

3. Class C Misdemeanor

Any person, firm, or corporation performing land disturbing activities and violating any of the provisions or terms of this Ordinance and not complying within the time periods stated in this document shall be deemed guilty of a Class C misdemeanor and, upon conviction thereof, be subject to a fine not exceeding $2,000 for each offense, and each and every day such violation shall continue shall be deemed to constitute a separate offense.

H. Appeals

1. Appeal to Public Works Director

Upon notice of noncompliance, a Responsible Party may appeal the City's decision to take deductions from his erosion control deposit pursuant to Section 3.1711, subsection A of this Ordinance, by filing a written appeal to the Public Works Director within seven (7) days of the City's written notice of its intent to make such deduction for costs as allowed herein. An Appeal filed pursuant to this section shall specifically state the basis for the aggrieved party's challenge to the City's authority to take deductions under this Ordinance.

2. Standard for Appeals

When reviewing an appeal filed pursuant to this Section, the Public Works Director shall evaluate all evidence submitted. The burden of proving that a violation of this Ordinance occurred shall be on the City. The City shall provide evidence sufficient to reasonably support a determination that the Responsible Party failed to comply with the requirements of this Ordinance as alleged by the City.

3. Issuance of Opinion by Director

Decisions of the Public Works Director shall be issued within twenty (20) days of the City's receipt of the written appeal. Decisions of the Public Works Director shall be final.

I. Stream Bank Erosion

Erosion control shall be provided along streams and drainage channels. This Ordinance provides for erosion hazard setback zones along streams for which natural channels are to be preserved. Where bank stabilization or other erosion protection measures are required to protect streams and channels, the practices provided in the Storm Water Design Manual for the City of Lancaster shall be utilized as approved by the City.

SECTION 24.08.011 ILLICT DISCHARGE PROHIBITION & ELIMINATION

A. General

The purpose of this ordinance is to provide for the health, safety, and general welfare of the citizens of the City of Lancaster through the regulation of non-storm water discharges to the storm drainage system to the maximum extent practicable as required by federal and state law. This ordinance establishes methods for controlling the introduction of pollutants into the municipal separate storm sewer system (MS4) in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) and Texas Pollutant Discharge Elimination System (TPDES) permit process. The objectives of this ordinance are:

1. To regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) by stormwater discharges by any user;

2. To prohibit Illicit Discharges and Illicit Connections to the municipal separate storm sewer system;

3. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this ordinance;

4. To provide appropriate enforcement procedures and actions for ordinance violations.

B. Prohibition of Illicit Discharges

No person shall discharge or cause to be discharged into the MS4 or watercourses any material that is not composed entirely of storm water, including but not limited to pollutants or waters containing any pollutants that cause or contribute to a violation of applicable water quality standards, other. Illicit connections to the storm sewer system are prohibited, including but not limited to the following:

1. The construction, use, maintenance or continued existence of illicit connections to the storm drain system is prohibited.

2. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

3. A person is considered to be in violation of this ordinance if the person connects a line conveying sewage to the MS4, or allows such a connection to continue.

C. Allowable Non-Stormwater Discharges

The commencement, conduct or continuance of any illegal discharge to the storm drain system is prohibited except as described as follows:

1. The following allowable non-stormwater discharges are exempt from discharge prohibitions established by this ordinance, unless it is determined that the discharges adversely impact storm water quality:

a. water line flushing that contains no harmful quantity of total residue chlorine (TRC) or any other chemical used in line disinfection,

b. runoff or return flow from landscape irrigation, lawn irrigation, and other irrigation using potable water groundwater, or surface water sources,

c. discharges from potable water sources not containing any harmful substance or material from the cleaning or draining of a storage tank or container,

d. diverted stream flows, rising groundwater and springs,

e. uncontaminated groundwater infiltration (as defined at 40 C.F.R. § 35.2005(20)),

f. uncontaminated pumped groundwater,

g. foundation or footing drains,

h. air conditioning condensation,

i. water from crawl space pumps,

j. non-commercial washing of vehicles,

k. natural riparian habitat or wetland flows,

l. dechlorinated swimming pool discharges, not including drainage from swimming pool filter backwash

m. cold water used for pavement and exterior building washing conducted without the use of detergents or other chemicals, and

n. discharges or flows from firefighting activities.

2. Discharges specified by the City as being necessary to protect public health and safety.

3. Dye testing is an allowable discharge with authorization from the City prior to the time of the test.

4. The prohibition shall not apply to any non-storm water discharge permitted under an NPDES or TPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the U.S. Environmental Protection Agency or Texas Commission on Environmental Quality, provided that the discharger is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations.

D. Prohibition of Illicit Connections

1. The construction, use, maintenance or continued existence of illicit connections to the storm drain system is prohibited.

2. This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.

3. A person is considered to be in violation of this ordinance if the person connects a line conveying sewage to the MS4, or allows such a connection to continue.

4. Improper connections in violation of this ordinance must be disconnected and redirected, if necessary, to an approved onsite wastewater management system or the sanitary sewer system upon approval of the City of Lancaster.

5. Any drain or conveyance that has not been documented in plans, maps or equivalent, and which may be connected to the storm sewer system, shall be located by the owner or occupant of that property upon receipt of written notice of violation from the City of Lancaster requiring that such locating be completed. Such notice will specify a reasonable time period within which the location of the drain or conveyance is to be determined, that the drain or conveyance be identified as storm sewer, sanitary sewer or other, and that the outfall location or point of connection to the storm sewer system, sanitary sewer system or other discharge point be identified. Results of these investigations are to be documented and provided to the City of Lancaster.

E. Sampling, Inspections, and Investigations

1. The control authority may randomly sample and analyze the stormwater runoff from any facility within the city and conduct surveillance activities in order to identify, independent of information supplied by the person or persons, occasional and continuing noncompliance with stormwater requirements of the state or this article.

2. The control authority shall investigate instances of noncompliance with stormwater requirements, as indicated in required reports, analytical results, and surveillance activities. Noncompliance investigations may require that the control authority conduct an inspection of the person or facility in noncompliance.

3. Collection of information by the control authority shall be performed with sufficient care to produce evidence admissible in enforcement proceedings or in judicial actions.

4. All sampling and analysis shall be performed in accordance with procedures established by the EPA administrator pursuant to section 304 (h) of the Clean Water Act and 40 CFR, Part 136 and amendments thereto.

5. The control authority may select an independent firm or laboratory to determine stormwater or non-stormwater constituents. Chain of custody procedures shall be followed.

F. Suspension of MS4 Access

1. Suspension due to Illicit Discharges in Emergency Situations

The City of Lancaster may, without prior notice, suspend water service, sanitary sewer service and/or MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the MS4 or Waters of the United States. If the violator fails to comply with a suspension order issued in an emergency, the authorized enforcement agency may take such steps as deemed necessary to prevent or minimize damage to the MS4 or Waters of the United States, or to minimize danger to the environment or to the health or welfare of persons.

2. Suspension due to the Detection of Illicit Discharge

Any person discharging to the MS4 in violation of this ordinance may have their MS4 access terminated if such termination would abate or reduce an illicit discharge. The authorized enforcement personnel will notify a violator of the proposed termination of its MS4 access. The violator may petition the authorized enforcement agency for a reconsideration and hearing.

3. Reinstatement of Suspended Service

The City shall not reinstate suspended services or MS4 access to the violator until:

a. The violator provides proof, satisfactory to the Director, that the noncomplying discharge has been eliminated and its cause determined and corrected;

b. The violator pays the City for all the costs the City incurred in responding to, abating and remediating the discharge or threatened discharge; and

c. The violator pays the City for all the costs the City will incur in reinstating service or access.

A person commits an offense if the person reinstates water service, sanitary sewer service, and/or MS4 access to premises terminated pursuant to this Section without the prior approval of the Director.

4. The remedies provided by this Section are in addition to any other remedies set out in this Chapter. Exercise of this remedy shall not be a bar against, nor a prerequisite for, taking other action against a violator.

G. Submission of Documents

All persons required by federal or state regulations or this article to submit documents, pertaining to discharges of storm water or accidental discharges into the local MS4, shall submit all applicable documents to the following mailing address:

City of Lancaster
Department of Public Works
1425 N. Dallas Avenue
Lancaster, Texas 75134

H. Spill Containment and Accidental Discharges

1. Spill containment.

The City may require any person to implement spill containment measures for storage and use of any substance it deems a potential threat to the MS4 or the environment should such substance be accidentally discharged. Such spill containment measures shall be provided and maintained at the person's own expense. Upon notification from the City that containment measures are required, the person shall develop and submit detailed plans to the City for review and approval prior to installation or implementation.

2. Notification of spills.

In the event of any accidental or unavoidable discharge into the MS4 or water in the state, it is the responsibility of the responsible party to notify the City within 24 hours of the incident, in addition to the appropriate federal and state agencies and emergency response agencies. The notification shall include location of the discharge, type of material discharged, concentration and volume, and corrective action. Within five days following an accidental discharge, the person shall submit to the control authority a detailed written report describing the cause of the discharge and measures to be taken to prevent similar future occurrences. Such notification shall not relieve the person of any expense, loss, damage or other liability which may be incurred as a result of damage to the MS4, fish kills, or any other damage to persons or property, nor shall such notification relieve the person of any fines, civil penalties, or other liability which may be imposed by this article or other applicable law. The initial notification shall be made using the following contact information:

Public Works (during normal business hours)
(972) 218-1200

After Hours Reporting
(972) 780- 4900

3. Notice to employees.

A notice shall be permanently posted on the person's bulletin board or other prominent place advising employees whom to call in the event of an accidental discharge. Employers shall ensure that all employees who may cause or suffer such an accidental discharge to occur are advised of the emergency notification procedure.

I. Industrial Facilities and Monitoring of Discharges

1. Applicability

This section applies to all facilities that have storm water discharges associated with industrial activity, including construction activity. Any person subject to an industrial or construction activity NPDES or TPDES storm water discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the City of Lancaster prior to the allowing of discharges to the MS4.

2. Notice of Intent

The operator of a facility, including construction sites, required to have a NPDES or TPDES storm water discharge permit to discharge storm water associated with industrial activity shall submit a copy of the Notice of Intent (NOI) to the City at the same time the operator submits the original Notice of Intent to the EPA or the TNRCC, as applicable. The copy of the Notice of Intent may be delivered either in person or by mailing it to:

City of Lancaster
Department of Public Works
1425 N. Dallas Avenue
Lancaster, TX 75134

3. Compliance with Permit

A facility shall be operated in strict compliance with the requirements of its NPDES or TPDES permit to discharge storm water associated with industrial activity.

4. Offense

A person commits an offense if the person operates a facility in violation of a condition of the facility's NPDES or TPDES permit or if the person operates a facility that is discharging storm water associated with industrial activity without having submitted a copy of the Notice of Intent to do so to the City.

5. Access to Facilities

a. The City shall be permitted to enter and inspect facilities subject to regulation under this ordinance as often as may be necessary to determine compliance with this ordinance. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access.

b. Facility operators shall allow the City personnel ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of records that must be kept under the conditions of an NPDES or TPDES permit to discharge storm water, and the performance of any additional duties as defined by state and federal law.

c. The City personnel shall have the right to set up on any permitted facility such devices as are necessary in the opinion of the authorized enforcement agency to conduct monitoring and/or sampling of the facility's storm water discharge.

d. The City has the right to require the discharger to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure storm water flow and quality shall be calibrated to ensure their accuracy.

e. Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the operator at the written or oral request of the City of Lancaster and shall not be replaced. The costs of clearing such access shall be borne by the operator.

f. Unreasonable delays in allowing the City access to a permitted facility is a violation of a storm water discharge permit and of this ordinance. A person who is the operator of a facility with a NPDES or TPDES permit to discharge storm water associated with industrial activity commits an offense if the person denies the authorized enforcement agency reasonable access to the permitted facility for the purpose of conducting any activity authorized or required by this ordinance.

g. If the City has been refused access to any part of the premises from which storm water is discharged, and he/she is able to demonstrate probable cause to believe that there may be a violation of this ordinance, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this ordinance or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the authorized enforcement agency may seek issuance of a search warrant from any court of competent jurisdiction.

6. Access to Records

The City shall have access to, and the right to inspect and copy, any and all persons records which pertain to that person's discharge to the MS4, disposal and/or generation of hazardous waste and discharges into the environment. The person shall be required to retain records of all information resulting from any monitoring or reporting activity required by these regulations for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding the person or MS4 or when requested by the permitting authority or control authority

J. Best Management Practices to Reduce Storm Water Pollutants

City of Lancaster will adopt requirements identifying Best Management Practices (BMPs) for any activity, operation, or facility which may cause or contribute to pollution or contamination of storm water, the storm drain system, or waters of the U.S. The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal storm drain system or watercourses through the use of these structural and non-structural BMPs. Further, any person responsible for a property or premise, which is, or may be, the source of an illicit discharge, may be required to implement, at said person's expense, additional structural and non-structural BMPs to prevent the further discharge of pollutants to the municipal separate storm sewer system. Compliance with all terms and conditions of a valid NPDES or TPDES permit authorizing the discharge of storm water associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this section. These BMPs shall be part of a storm water pollution prevention plan (SWPPP) as necessary for compliance with requirements of the NPDES or TPDES permit.

K. Watercourse Protection

Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse within the property free of trash, debris, excessive vegetation, and other obstacles that would pollute, contaminate, or significantly retard the flow of water through the watercourse. In addition, the owner or lessee shall maintain existing privately owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse.

L. Enforcement and Appeals

1. Notice of Violation

Whenever the City of Lancaster finds that a person has violated a prohibition or failed to meet a requirement of this Ordinance, the authorized enforcement personnel may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

a. The performance of monitoring, analyses, and reporting;

b. The elimination of illicit connections or discharges;

c. That violating discharges, practices, or operations shall cease and desist;

d. The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property; and

e. Payment of a fine to cover administrative and remediation costs; and

f. The implementation of source control or treatment BMPs.

If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work will be done by a designated governmental agency or a contractor and the expense thereof shall be charged to the violator.

2. Appeal of Notice of Violation

Any person receiving a Notice of Violation may appeal the determination of the authorized enforcement agency. The notice of appeal must be received within 10 days from the date of the Notice of Violation. Hearing on the appeal before the appropriate authority or his/her designee shall take place within 15 days from the date of receipt of the notice of appeal. The decision of the municipal authority or their designee shall be final.

3. Enforcement Measures after Appeal

If the violation has not been corrected pursuant to the requirements set forth in the Notice of Violation, or, in the event of an appeal, within 30 days of the decision of the municipal authority upholding the decision of the authorized enforcement personnel, then authorized enforcement personnel shall enter upon the subject private property and are authorized to take any and all measures necessary to abate the violation and/or restore the property. It shall be unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the government agency or designated contractor to enter upon the premises for the purposes set forth above.

4. Cost of Abatement of the Violation

Within 30 days after abatement of the violation, the owner of the property will be notified of the cost of abatement, including administrative costs. The property owner may file a written protest objecting to the amount of the assessment within 15 days. If the amount due is not paid within a timely manner as determined by the decision of the municipal authority or by the expiration of the time in which to file an appeal, the charges shall

become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment.

Any person violating any of the provisions of this article shall become liable to the city by reason of such violation. The liability shall be paid in not more than 12 equal payments. Interest at the rate of percent per annum shall be assessed on the balance beginning on the 31st day following discovery of the violation.

5. Class C Misdemeanor

Any person, firm, or corporation that has violated or continues to violate the terms of this Ordinance and not complying within the time periods stated in this document shall be deemed guilty of a Class C misdemeanor and, upon conviction thereof, be subject to a fine not exceeding $2,000 for each offense, and each and every day such violation shall continue shall be deemed to constitute a separate offense.

SECTION 24.08.012 POST-CONSTRUCTION CONTROLS & GUIDELINES

A. General

Land development projects and associated increases in impervious cover alter the hydrologic response of local watersheds and increase storm water runoff rates and volumes, flooding, stream channel erosion, and sediment transport and deposition. Post-construction storm water runoff also contributes to increased quantities of water borne pollutants. Storm water rates and pollution from developments can be controlled and minimized through the proper planning, design, implementation and long term operation and maintenance of post-construction storm water best management practices (BMPs).

The City of Lancaster establishes this set of water quality and quantity policies to provide reasonable guidance for the regulation of storm water runoff from new development and re-development projects for the purpose of protecting the MS4 and local water resources.

B. Lands to Which This Section Applies

This division shall be applicable to all land development or redevelopment applications for both small and large construction activities, as defined by the TCEQ, unless eligible for an exemption or granted a waiver by the Director of Public Works/Development Services or his/her appointee. Development that cumulatively disturbs less than one acre and is not part of a larger common plan of development or sale is exempt.

C. Storm Water Design Manual Development

1. The City may provide additional policy, criteria and information including specifications and standards, for the proper implementation of

the requirements of this division and may provide such information in the form of a storm water design manual.

2. The storm water design manual may be amended from time to time based on improvements in engineering, science, monitoring and local maintenance experience. Storm water treatment practices that are designed and constructed in accordance with these design criteria will be presumed to meet the minimum water quality performance standards.

D. Withholding of Permits

No Owner, Developer, or other applicant subject to these requirements shall be issued any building, grading or other land development permits for land disturbance activities without first satisfying the requirements of this division prior to commencement of the proposed activity.

E. Planning and Design for Post Construction Runoff Control

1. All applicable land development sites shall be designed according to the specific performance criteria outlined in the City storm water design manual or in conformance with the regional integrated Storm Water Management (iSWM) manual. The site design shall be performed by a Professional Engineer licensed by the state of Texas.

2. The owner, developer, and/or design engineer shall be required to consult with the Public Works Department during the planning stages, prior to design of any post-construction BMPs, in order to evaluate the intended BMP performance criteria and related long-term maintenance requirements.

3. Post-construction storm water runoff control BMPs and the long term operation and maintenance agreements shall be submitted for review and approved by the Public Works Department with the construction documents for any new development or re-development project.

4. All storm water management practices shall be designed so that the specific storm water design criteria (design storm conveyance, channel protection, runoff volume reduction, etc.) as identified in the current storm water design manual are met. If pre-development hydrologic or topographic conditions warrant greater control than that provided, the Director of Public Works/Development Services or his/her appointee may impose any additional requirements deemed necessary to control the post-construction discharge volume, timing, and rate of runoff.

5. Site Planning and Feasibility

Storm water management site planning techniques are strongly encouraged. Post-construction storm water practices for a site shall be

selected giving consideration to the natural features and drainage characteristics of the site. Among the factors that should be considered:

a. Topography;
b. Natural resources (streams, ponds, tree locations, etc.);
c. Drainage areas and drainage patterns;
d. Depth to water table;
e. Soils;
f. Slopes; and
g. Terrain.

Applicants shall consult the storm water design manual for guidance on the factors that determine site design feasibility when selecting a storm water management practice.

6. Conveyance Issues

All storm water management practices shall be designed to convey storm water and allow for maximum removal of pollutants and reduction in flow velocities, which shall include, but are not be limited to:

a. Use of structural and nonstructural best management practices (BMPs) and controls;
b. Maximizing of path flow distance from inflow points to outflow points;
c. Protection of inlet and outfall structures; and
d. Elimination of erosive flow velocities.

7. Post-Construction BMPs

Owners and Developers are required by the City to implement post-construction BMPs to reduce the discharge of pollutants to the City's MS4 and to reduce runoff volumes, channel erosion and sediment transport. The following structural and non-structural controls shall be considered for post-construction BMPs:

a. Grassed swales and channels;
b. Floodplain and channel buffers;
c. Low impact development site planning;
d. Storm water treatment ponds and wetlands;
e. Detention and retention facilities;
f. Energy dissipaters;
g. Infiltration trenches;
h. Rain gardens;
i. Open space and parkland dedication;
j. Native and drought tolerant landscaping;
k. Tree preservation and tree planting;
l. Porous surfaces; and
m. Rainwater reuse (rain harvesting, etc.)

8. Post-Construction Landscaping and Stabilization Requirements

Any area of land from which the natural vegetative cover has been either partially or wholly cleared or removed by development activities shall be revegetated within ten (10) calendar days from substantial completion of such clearing and construction. The following criteria shall apply to revegetation efforts:

a. Reseeding must be done with a perennial, non-winter season cover crop accompanied by placement of matting or its equivalent of sufficient coverage to control erosion until such time as the cover crop is established over ninety (90) percent of the seeded area.

b. Replanting with native woody and herbaceous vegetation must be accompanied by placement of matting, mulch or an equivalent of sufficient coverage to control erosion until the plantings are established and are capable of controlling erosion.

c. Any area of revegetation must exhibit survival of a minimum of seventy (70) percent of the cover crop throughout the year immediately following revegetation. Revegetation must be repeated in successive years until the minimum seventy (70) percent survival for one (1) year is achieved.

It is the responsibility of the of the design engineer to verify the adequacy of the post-construction BMP for mitigation the runoff effects from the proposed project. The design of post-construction BMPs shall be per the City's current storm water design manual. Additional guidelines for the selection and design of post-construction BMPs may be found in the North Central Texas Council of Government's iSWM Technical Manual, Site Development Controls.

9. Use of Other or New Storm Water Controls

a. New and innovative technologies shall be evaluated and are encouraged for use providing that there is sufficient documentation as to their effectiveness and reliability.

b. Alternately, new structural storm water practices will not be accepted for inclusion in the City until independent performance data shows that the structural control conforms to local and/or state criteria for treatment, conveyance, maintenance and environmental impact.

F. Operation and Maintenance Agreements

All storm water management and/or treatment practices shall have an enforceable long term operation and maintenance agreement to ensure the

system functions as designed for the lifetime of the structure. This agreement will include any and all maintenance easements required to access and inspect the storm water practices, and to perform routine maintenance as necessary to ensure proper functioning of the storm water practice. Maintenance agreements shall be provided to the City Public Works Department for review and approval prior to approval of the construction plans.

G. Privately Owned Control Requirements

1. Storm water system responsible party.

   a. For privately-owned storm water controls including drainage systems and/or water quality devices used for residential, commercial or other areas, the developer shall be responsible for all of the maintenance and repair of such storm water drainage systems and/or water quality devices serving that residential or commercial area until the developer or owner no longer has an ownership interest in any property served by the storm water drainage system and/or water quality device.

   b. Once a homeowners' association (HOA) is organized and becomes active for a residential area served by a storm water drainage system and/or water quality device, the HOA shall be responsible for the maintenance and repair of the storm water drainage system and/or water quality device.

   c. Maintenance of a storm drainage system and or water quality device shall include such items but not be limited to:

      i. Mowing of tall weeds and grass;
      ii. Regular and routine removal of floatables and debris;
      iii. Dredging of silt and removal off-site;
      iv. Correcting failures of inlet or outlet control structures;
      v. Implementation of erosion mitigation measures;
      vi. Repair and maintenance of aeration equipment; and
      vii. Maintaining optimal operation of underground and above ground detention.

2. Disclosure of HOA information to the MS4.

   a. Upon the organization and formation of a homeowners' association, the HOA should provide updated contact information to the City for compliance and reporting communications. The minimum information to be provided by the HOA to the City includes:
      i. Name of subdivision and homeowners' association;

ii. Name, address, telephone number and email address of any management company involved with activities related to the HOA (if applicable);
iii. Name, address, telephone number and email address of a direct contact person representing or authorized to act on behalf of the HOA;
iv. Date of formation of the HOA;
v. Current listing of storm water drainage structures and/or water quality devices over which the homeowner's association has control; and
vi. Dates when any changes were made to the HOA board, structure or the storm drainage system and/or water quality device over which the HOA has control.

b. Any changes to the contact information regarding the HOA must be reported immediately to the City planning department.

c. The HOA is required to annually contact the City planning department to ensure that all information is up to date.

3. Authorization to inspect, adopt and impose BMPs.

a. The City has the authority to conduct storm water inspections to require implementation of BMPs where appropriate.

b. The selection, application and maintenance of BMPs must be sufficient to prevent or reduce the likelihood of pollutants entering the receiving storm drainage system.

c. The City may adopt and impose requirements identifying specific BMPs for any activity, operation or facility, which may cause a discharge of pollutants to the storm drainage system. Where specific BMPs are required, every person undertaking such activity or operation or owning or operating such facility shall implement and maintain BMPs at the person's own expense.

H. Inspection

Inspections and inspection programs by the City may be conducted or established on any reasonable basis, including but not limited to routine inspections, random inspections, inspections based upon complaints or other notice of possible violations, and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include, but are not limited to, reviewing maintenance and repair records, sampling discharges, surface water, groundwater, and material or water in BMPs, and evaluating the condition and operational performance of BMPs.

I. Failure to Maintain Practices

In the event that a storm water management facility, storm water drainage system and/or water quality device is deemed by the City to be in need of maintenance or repair or is determined a danger to public safety or public health, the City shall notify the responsible party in writing for maintenance of the storm water management facility. The responsible person shall have thirty (30) days after receipt of notice to affect maintenance and repair of the facility in an approved manner.

If a responsible party fails or refuses to meet the storm water facility maintenance requirements of this article, the Director of Public Works/Development Services or his/her appointee, after reasonable notice, may cause the necessary work to be done to correct a violation of the design standards or maintenance and assess the responsible party for all incurred costs and expenses.

SECTION 24.08.013 FUNDING OF IMPROVEMENTS

A. Developer Responsibilities

1. On-Site Improvements

   a. The on-site drainage system improvements required by a proposed development shall be identified in the Preliminary Drainage Study and Final Drainage Study for that development and located completely within the limits of the proposed development, unless otherwise authorized by the City as part of an executed agreement.

   b. The cost of any on-site drainage system improvements required by this Ordinance or proposed by the Developer shall be financed entirely by the Developer.

   c. If the City determines that enlargement of the on-site drainage improvements beyond the requirements of this Ordinance is beneficial to the City, the City shall fund the difference between the enlarged drainage improvements and the on-site drainage improvements required by this Ordinance, if adequate funds are available.

2. Off-Site Improvements

   a. If the Preliminary Drainage Study or Final Drainage Study demonstrates that off-site drainage improvements are not required due to adequate downstream capacity for the fully developed watershed conditions, the Developer may proceed with site discharge equivalent to or less than the maximum developed for the site in the Preliminary or Final Drainage Study.

b. If the Preliminary or Final Drainage Study identifies necessary off-site drainage system improvements due to only partially adequate downstream capacity for the fully developed conditions, the Developer must conduct the following with the approval of the City and the affected downstream property Owners:

i. Improve downstream structures to handle the development's impact at the fully developed watershed condition and proceed with site discharge equivalent to or less than the maximum developed for the site in the Drainage Study, or

ii. Improve downstream structures to handle the flow of fully developed discharge of the site under development and the discharge for existing conditions on other areas in the watershed, or

iii. Limit the post-development discharge to pre-development discharge or less.

c. The Developer shall be responsible for financing the Developer's equitable share of improvements to off-site drainage systems that are not adequate to convey the design runoff from the proposed development.

3. Developer-Proposed Improvements that Exceed Ordinance Requirements

If the Developer proposes drainage system improvements that exceed the requirements of this Ordinance, the Developer shall be responsible for financing the entirety of the improvements.

4. Regional Detention/Retention Facilities

For regional detention/retention facilities proposed by a Developer, the engineering analysis to evaluate the upstream and downstream impacts shall be financed by the Developer and approved by the City.

B. City Participation

1. If enlargement of off-site drainage improvements beyond the requirements of this Ordinance is determined to be beneficial to theCity, the City may fund the difference between the enlarged drainage improvements and the off-site drainage improvements required by this Ordinance, if adequate funds are available.

2. Where the City is requested to participate in the construction of drainage improvements, the City may participate in the cost of such drainage improvements in an amount not to exceed the difference in the

total cost of the drainage improvements and the cost of the drainage improvements required for the Developer as specified in the Storm Water Ordinance.

3. Where the City agrees to participate in the construction of drainage improvements, and adequate City funds are not available, the Developer may elect to provide for financing of improvements.

a. Upon prior execution of an agreement with the City for reimbursement, the Developer is entitled to recover from the City the portion of the improvements attributable to the City once City funds become available.

b. Where City funds are not available, the Developer may elect to finance the entire improvements.

4. City Financing Mechanisms

a. The City may establish a storm water utility fee to provide funding for drainage- related activities, including but not limited to the construction, operations, and maintenance of drainage facilities.

b. The City may establish a drainage impact fee for an entire watershed or sub- watershed(s) to finance the cost of drainage improvements.

c. The City may require Developers and/or Builders to establish and maintain an Erosion Control Deposit Account to implement and provide for continued maintenance of the Site Erosion Control Plan submitted to and approved by the City.

SECTION 24.08.014 ADOPTION

WHEREAS, the present Storm Water Management Ordinance of the City of Lancaster does not provide for adequate storm drainage facilities, flood control, erosion control and water quality pollution prevention in the developed and developing areas within the jurisdiction of the City, and that the inadequacy constitutes an urgency in the interest of public health, safety, and welfare, this ordinance shall become effective on July 26, 2004, except that documents meeting at least one of the following conditions shall be exempted from provisions of this ordinance exceeding requirements of the previously adopted Storm Water Management Ordinance:

1. Buildings or subdivision phases for which a complete preliminary plat has been accepted but not recorded prior to the effective date of the ordinance and for which construction of such subdivision phase or building is underway within one year of the effective date of the ordinance.

2. Buildings for which a complete site plan has been accepted prior to the effective date of the ordinance and for which construction is underway within one year of the effective date of the ordinance.

3. Buildings for which a plat has been recorded prior to the effective date of the ordinance but for which a complete site plan has not been accepted prior to the effective date of the ordinance, and for which construction is underway within one year of the date of recording of the final plat.

4. Subdivisions recorded prior to the effective date of the ordinance for which a replat is filed.

5. Subdivisions recorded prior to the effective date of the ordinance for which a replat is being filed, provided that the number of lots is not being increased through the replat and provided that no other substantive changes to the subdivision design are proposed; except that it is expressly provided that no developments shall be exempted from provisions of Sections 14.1709 and 14.1710 of this ordinance relating to Floodplain Guidelines and Erosion Control Guidelines, respectively.

SECTION 3. That all provisions of the Ordinances of the City of Lancaster, Texas, in conflict with the provisions of this ordinance be, and the same are hereby, repealed, and all other provisions of the Ordinances of the City not in conflict with the provisions of this ordinance shall remain in full force and effect.

SECTION 4. That should any word, sentence, paragraph, subdivision, clause, phrase or section of this ordinance, or of the Code of Ordinances, as amended hereby, be adjudged or held to be void or unconstitutional, the same shall not affect the validity of the remaining portions of said ordinance or the Code of Ordinances, as amended hereby, which shall remain in full force and effect.

SECTION 5. An offense committed before the effective date of this ordinance is governed by prior law and the provisions of the Comprehensive Zoning Ordinance, as amended, in effect when the offense was committed and the former law is continued in effect for this purpose.

SECTION 6. That any person, firm or corporation violating any of the provisions or terms of this ordinance shall be subject to the same penalty as provided for in the Comprehensive Zoning Ordinance of the City of Red Oak, as heretofore amended, and upon conviction shall be punished by

a fine not to exceed the sum of Two Thousand Dollars ($2,000.00) for each offense; and each and every day such violation shall continue shall be deemed to constitute a separate offense.

SECTION 7. That this ordinance shall take effect immediately from and after its passage and the publication of its caption, as the law and charter in such cases provide.

DULY PASSED by the City Council of the City of Lancaster, Texas, this the 23rd day of July, 2012.

APPROVED:

_____
MARCUS E. KNIGHT, MAYOR

ATTEST:

_____
DOLLE K. DOWNE, CITY SECRETARY

APPROVED AS TO FORM:

_____
ROBERT E. HAGER, CITY ATTORNEY
(REH.aga)

LANCASTER CITY COUNCIL
Work Session Agenda Communication for July 23, 2012

B

WS12-B

Receive and discuss a presentation on the proposed Master Thoroughfare Plan and Roadway Impact Fee Update.

This request supports the City Council 2011-2012 Policy Agenda.

Goal: Sound Infrastructure

Background

Over the past year, the consulting firm of Kimley Horn & Associates (KHA), with guidance and information from City staff, has prepared updates for the city-wide Master Thoroughfare and Roadway Impact Fee Report. There are multiple purposes of this study which include reviewing the population forecasts and land use assumptions to reflect the planned growth of the City and determining the maximum allowable fee the City may charge developers for new developments, in accordance with Chapter 395 of the Local Government Code. Roadway impact fees help to fund new roadway infrastructure that is needed to support the growth of the community's new residential and commercial developments. The consultant also reviewed the City's Master Thoroughfare Plan to ensure the projects listed would appropriately address growth in the City of Lancaster as well as encompass the newly annexed area.

In developing land use assumptions, it is necessary to determine how the land is anticipated to be used. Some of the questions that must be answered are: where will new single family homes be built and how many based on the total acreage available and minimum lot sizes required; where will new businesses locate; and how much square footage will be built for warehouses or other commercial developments. The amount of vacant land and its current zoning is reviewed to determine what the maximum build-out potential is for any type of land use. Additionally, the future land use plan is examined when looking at the vision for what vacant land currently zoned as open space will potentially be developed as. In depth review of these factors helped the consultants derive calculations of the land use assumptions for the City.

With regards to population projections, several variables are used which include the historical growth rate of the City, growth trends in the metropolitan region, availability of land, and residential areas identified in the future land use plan. The population forecasts help to show the number of people that will potentially use the roadway system and the

impact they will have on it. Population is a key factor when determining the types and amount of developments that could eventually locate in the City.

Roadway impact fees may only be assessed in the City limits. Service areas are established for roadway impact fees due to travel patterns and the perceived impact on the roadway system caused by new growth. A service area refers to an area that will be served by the roadway built for new growth. Thus, roadways built in a particular service area are perceived to primarily serve those in the service area. Impact fees collected for roadway can only be used for projects in that service area. Chapter 395 of the Local Government Code states a service area cannot exceed six (6) miles. The consultant determined for a city the size of Lancaster, five (5) mile limits per service area is most appropriate. Three service areas were initially established for Lancaster in 2003 and have been adjusted with this report to include the newly annexed area. After the maximum allowable fee has been determined, the City Council has the ability to establish impact fees developers will be charged, if any.

Impact fees do not pay for the entire cost of the infrastructure development. In fact, Chapter 395 of the Local Government Code only allows a maximum of 50% of these costs to be charged to new development. That means new development could only contribute up to half of what it costs the City to build new infrastructure that will benefit the developments as well as the citizens. When shared amongst a multitude of new developments, impact fees become small compared to what it would cost for these developments to build the infrastructure themselves.

When determining impact fees, Chapter 395 of the Local Government Code requires municipalities to have a Capital Improvements Advisory Committee (CIAC), hold a public hearing, and adopt fees, if any, within 30 days after the public hearing. The Planning and Zoning Commission has served as the (CIAC). The CIAC has received briefings from the consultants and staff in preparation for providing a recommendation to the City Council. Using data from the North Central Texas Council of Governments, KHA worked with City staff to determine land use assumptions and population forecasts to ascertain the most accurate data possible. The consultant will present to Council an overview of the Land Use Assumptions and Population Forecasts, the Capital Improvement Program (CIP) projects proposed for the next 10 years, and the calculated maximum allowable fees for roadway projects in Lancaster.

Considerations

- **Operational** – This study is to update the current Master Plan and Impact Fee Report for the City regarding roadways and provide information for developers potentially sharing the cost of new infrastructure construction.

- **Legal** – Once the Master Plan and Impact Fee study are approved by the City Council, the City Attorney will draft an ordinance regarding the impact fees to be considered following the public hearing on August 27, 2012.

- **Financial** – No financial considerations will be required at this time, but options for determining impact fees will be presented.

- **Public Information** – A newspaper notice will be published in the Focus Daily News stating that a public hearing to consider Impact Fees, as required by the Local Government Code, will be held on August 27, 2012 by the City Council. A resolution has been drafted by the City Attorney which repeals current land use assumptions and the capital improvement plan and sets the public hearing of August 27, 2012 to consider the impact fees. [Action on this resolution may be taken during the regular meeting.]

Attachments

- Roadway Impact Fee Update July 2012
- Master Thoroughfare Plan update

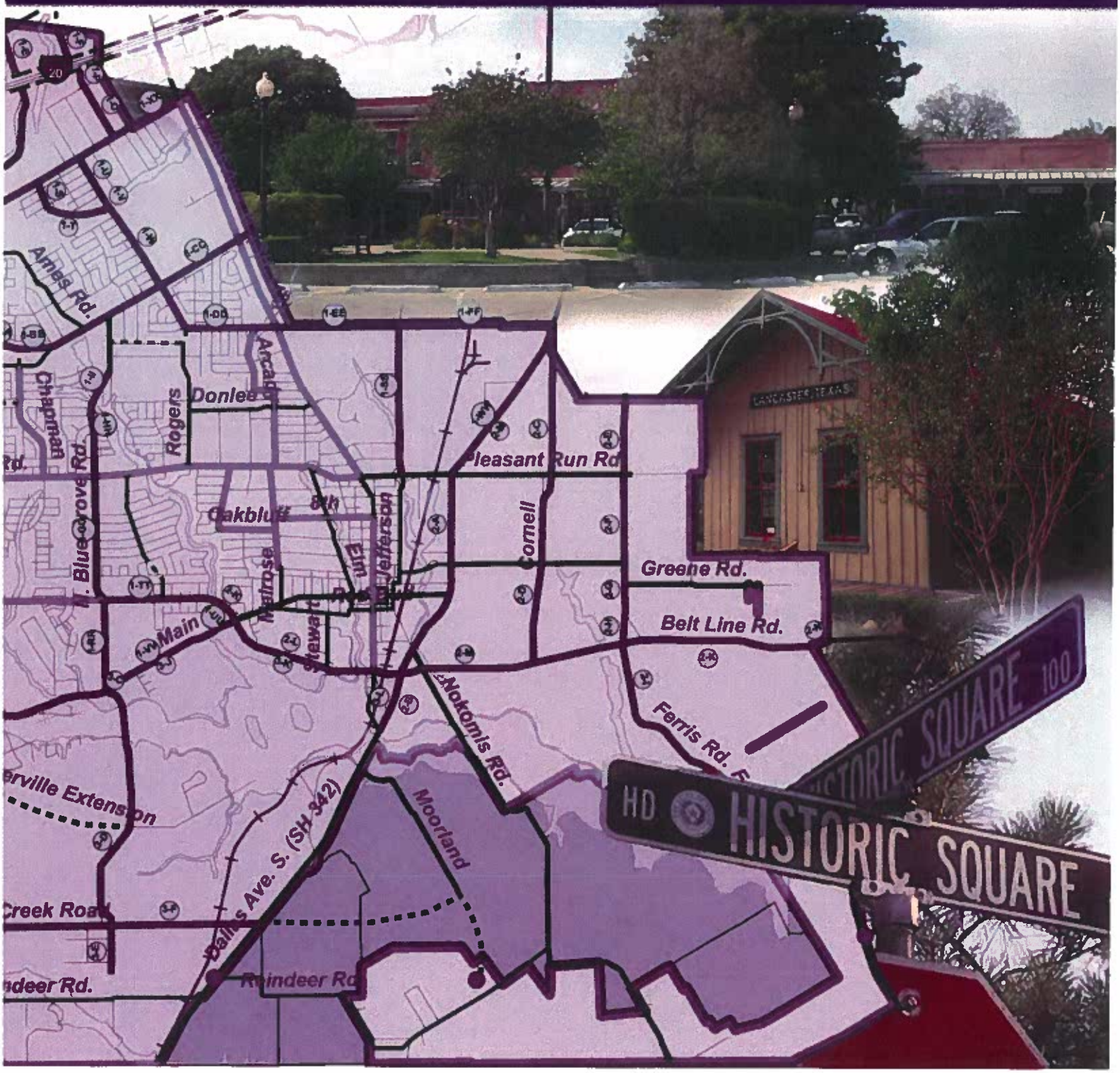
Prepared and submitted by:
Nathaniel Barnett, Senior Planner

Date: July 19, 2012

City of Lancaster
Roadway Impact Fee Update
July 2012

Lancaster

Kimley-Horn and Associates, Inc.



2012 Roadway Impact Fee Update

Lancaster

City of Lancaster, TX

Prepared by:

Kimley-Horn and Associates, Inc.

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July 2012

STATE OF TEXAS
JEFFREY A. WHITACRE
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LICENSED PROFESSIONAL ENGINEER
7-19-2012

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063592010

Kimley-Horn and Associates, Inc.

Lancaster

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I. EXECUTIVE SUMMARY

This study was performed to update the City of Lancaster's Roadway Impact Fees. Transportation system analysis is an important tool for facilitating orderly growth of the transportation system and for providing adequate facilities that promote economic development in the City of Lancaster. The implementation of an impact fee is a way to shift a portion of the burden of paying for new facilities onto new development.

Roadway improvements necessary to serve 10-year (2022) and ultimate system needs were evaluated. Typically, infrastructure improvements are sized beyond the 10-year requirements; however, Texas' impact fee law (Chapter 395) only allows recovery of costs to serve the 10-year planning period. The projected cost to construct the roadway infrastructure attributed to growth through 2022 is as follows:

Service Area 1: **$51,177,311**
Service Area 2: **$31,974,992**
Service Area 3: **$14,663,086**

A portion of the remainder can be assessed as the planning window extends beyond 2022 and as the impact fees are updated in the future. According to Chapter 395 of the Texas Local Government Code a 50% credit is applied to the projected cost to construct the roadway infrastructure attributed to growth through 2022. As a result, the recoverable cost of the roadway infrastructure attributed to growth through 2022 is:

Service Area 1: **$25,588,656**
Service Area 2: **$15,987,496**
Service Area 3: **$7,331,543**

The impact fee law defines a service unit as follows: "Service Unit means a standardized measure of consumption attributable to an individual unit of development calculated in accordance with generally accepted engineering or planning standards and based on historical data and trends applicable to the political subdivision in which the individual unit of development is located during the previous 10 years."

Therefore, the City of Lancaster defines a *service unit* as the number of vehicle-mile of travel during the afternoon peak-hour. For each type of development the City utilizes the Land Use/Vehicle-Mile Equivalency Table (LUVMET), presented in **Table 8** to determine the number of service units.

Based on the City's 10-year growth projections and the associated demand (consumption) values the following is the vehicle-mile demand per Service Area through 2022:

Service Area 1: **27,957 vehicle-miles**
Service Area 2: **18,243 vehicle-miles**
Service Area 3: **8,028 vehicle-miles**

Based on the projected cost to construct the roadway infrastructure attributed to growth through 2022 and the additional service units of demand, the City may assess a maximum fee (recoverable cost/vehicle-miles) per service unit of:

Service Area 1: **$915**
Service Area 2: **$876**
Service Area 3: **$913**

II. INTRODUCTION

Chapter 395 of the Texas Local Government Code describes the procedure Texas cities must follow in order to create and implement impact fees. Senate Bill 243 (SB 243) amended Chapter 395 in September 2001 to define an Impact Fee as "a charge or assessment imposed by a political subdivision against new development in order to generate revenue for funding or recouping the costs of Roadway improvements or facility expansions necessitated by and attributable to the new development."

Chapter 395 mandates that impact fees be reviewed and updated at least every five (5) years. Accordingly, the City of Lancaster has developed its Land Use Assumptions and Thoroughfare Impact Fee Improvement Program (TIFIP) with which to update the City's Roadway Impact Fees. The City has retained Kimley-Horn and Associates, Inc. to provide professional transportation engineering services for the development of the roadway impact fee policy. This report includes details of the impact fee calculation methodology in accordance with Chapter 395, the applicable Land Use Assumptions, development of the TIFIP, and the refinement of the Land Use Equivalency Table.

This report introduces and references two of the basic inputs to the Roadway Impact Fee: the **Land Use Assumptions** and the **Thoroughfare Impact Fee Improvement Program (TIFIP)**. Information from these two components is used extensively in the remainder of the report. This report consists of a detailed discussion of the methodology for the computation of impact fees. This discussion - **Methodology for Roadway Impact Fees** and **Impact Fee Calculation** addresses each of the components of the computation and modifications required for the study. The components include:

- Service Areas;
- Service Units;
- Cost Per Service Unit;
- Cost of the TIFIP;
- Service Unit Calculation;
- Maximum Assessable Impact Fee Per Service Unit; and
- Service Unit Demand Per Unit of Development.

The report also includes a section concerning the **Plan for Awarding the Roadway Impact Fee Credit**. In the case of the City of Lancaster, the credit calculation was based on awarding a 50 percent credit.

III. ROADWAY IMPACT FEE CALCULATION INPUTS

A. LAND USE ASSUMPTIONS

In order to assess an impact fee, Land Use Assumptions must be developed to provide the basis for population and employment growth projections within a political subdivision. As defined by Chapter 395 of the Texas Local Government Code, these assumptions include a description of changes in land uses, densities, and population in the service area. In addition, these assumptions are useful in assisting the City of Lancaster in determining the need and timing of capital improvements to serve future development. The land use assumptions base data was provided by the North Central Texas Council of Governments (NCTCOG). Each Service Area is comprised of traffic survey zones (TSZs), which are planning areas used for traveling modeling and demographic estimates and projections. The data contained in each of the TSZs was converted to the necessary demographic information need for Land Use Assumptions. The data was reviewed and modified by guidance from City of Lancaster staff.

The residential and non-residential estimates and projections were all compiled in accordance with the following categories:

Units: Number of dwelling units, both single and multi-family.

Population: Number of people, based on person per dwelling unit factors.

Employment: Square feet of building area based on retail, service, and basic land uses. Each classification has unique trip making characteristics.

Retail: Land use activities which provide for the retail sale of goods that primarily serve households and whose location choice is oriented toward the household sector, such as grocery stores and restaurants.

Service: Land use activities which provide personal and professional services such as government and other professional administrative offices.

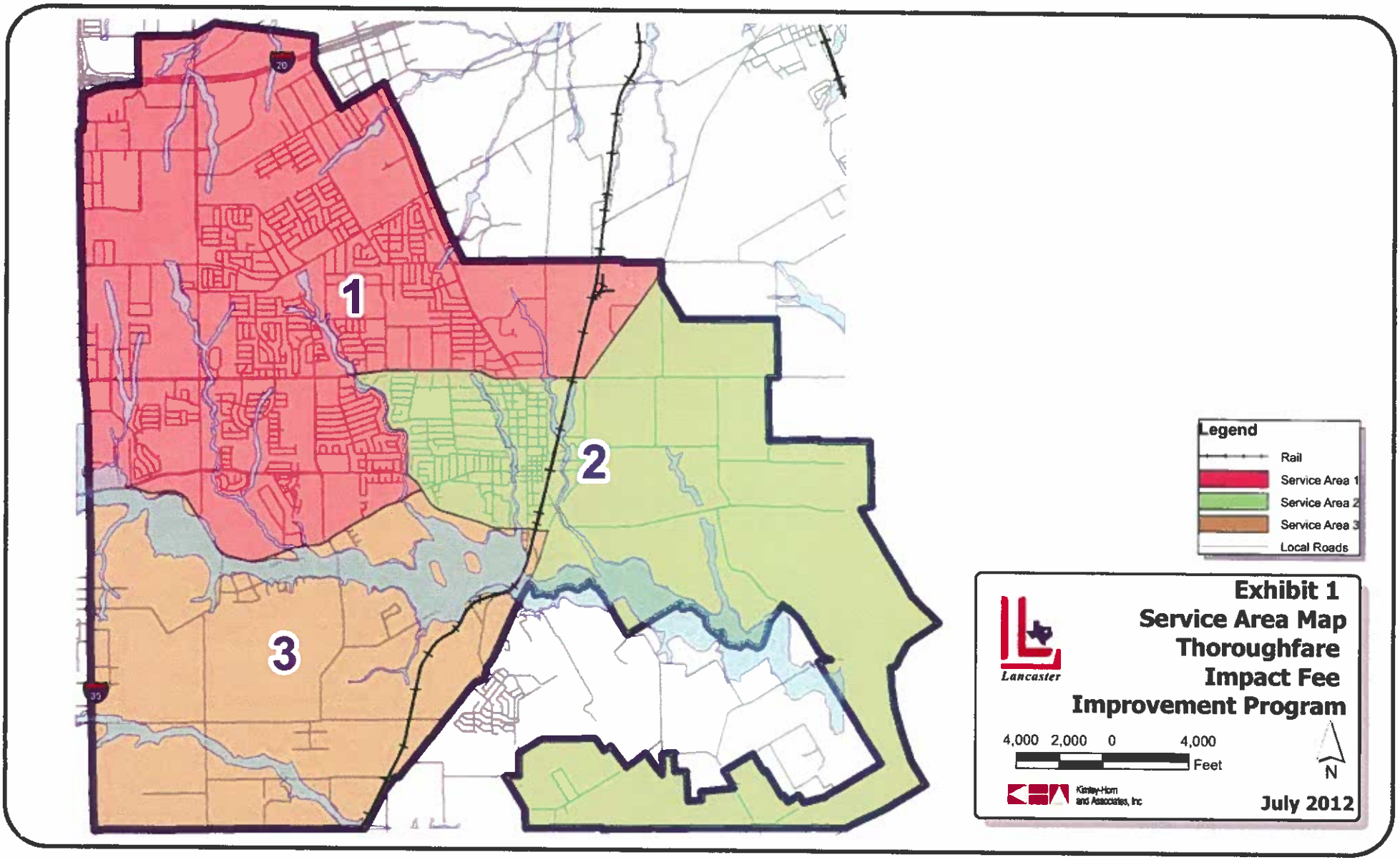
Basic: Land use activities that produce goods and services such as those that are exported outside of the local economy, such as manufacturing, construction, transportation, wholesale, trade, warehousing, and other industrial uses.

The geographic boundaries of the impact fee service areas for roadway facilities are shown in **Exhibit 1**. The City of Lancaster is divided into three (3) service areas. The Service Areas reflect those from the 2006 Roadway Impact Fee Update with modifications based upon recent annexations. These annexations primarily modified Roadway Service Area 2. For roadway facilities, the service areas are limited to those areas within the current corporate limits. Therefore, areas within the extraterritorial jurisdiction (ETJ) are excluded from this study. It should be noted that at locations where service area boundaries follow a thoroughfare facility, the proposed boundary is intended to follow the centerline of the roadway. In cases where a service area boundary follows the City Limits, only those portions of the facility within the City Limits are included in the service area.

Table 1 summarizes the residential and non-residential projections by service area within the City of Lancaster for 2012, as well as the residential and non-residential projections by service area within the City of Lancaster for 2022. In addition, a summary of the growth projections for both population and employment is included in **Appendix D**.

Table 1. Residential and Non-Residential Projections for the City of Lancaster (Derived from NCTCOG Projections)

SA	Year	Units	Population	Employment (square foot)			
				Basic	Retail	Service	Total
1	2012	8,352	25,056	2,746,800	1,758,100	1,945,900	6,450,800
	2022	10,441	31,324	4,287,100	2,076,100	2,941,500	9,304,700
	2035	13,355	40,064	5,868,000	3,049,200	4,149,100	13,066,300
2	2012	2,778	8,334	1,252,300	387,100	604,600	2,244,000
	2022	3,666	10,997	2,804,200	520,000	1,300,100	4,624,300
	2035	6,127	18,381	5,166,500	837,800	2,263,100	8,267,400
3	2012	1,054	3,163	400,000	253,400	295,800	949,200
	2022	1,965	5,895	647,800	334,000	509,300	1,491,100
	2035	3,380	10,141	1,007,200	540,900	811,300	2,359,400
Total 2012		12,184	36,553	4,399,100	2,398,600	2,846,300	9,644,000
Total 2022		16,072	48,215	7,739,100	2,930,100	4,750,900	15,420,100
Total 2035		22,862	68,586	12,041,700	4,427,900	7,223,500	23,693,100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Service Area 2
Service Area 3
Local Roads
Lancaster
Exhibit 1
Service Area Map
Thoroughfare
Impact Fee
Improvement Program
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B. THOROUGHFARE IMPACT FEE IMPROVEMENT PROGRAM

The City has identified the City-funded transportation projects needed to accommodate the projected growth within the City. The Thoroughfare Impact Fee Improvement Program (TIFIP) for Roadway Impact Fees is made up of:

- Recently completed projects with excess capacity available to serve new growth;
- Projects currently under construction; and
- Remaining projects needed to complete the City's Master Thoroughfare Plan (MTP).

The TIFIP includes arterial and collector class roadway facilities as well as intersection improvements. All of the arterial facilities are part of the currently adopted Master Thoroughfare Plan.

The TIFIP for Roadway Impact Fees for the 2012 Impact Fee Update is listed in **Tables 2A, 2B** and **2C** and mapped in **Exhibits 2A, 2B** and **2C.** A citywide exhibit is provided in **Appendix A**. The tables show the length of each project as well as the facility's Master Thoroughfare Plan classification. The TIFIP was developed in conjunction with input from City of Lancaster staff and represents those projects that will be needed to accommodate the growth projected in **Table 1**.

Table 2.A. Thoroughfare Impact Fee Improvement Program – Service Area 1

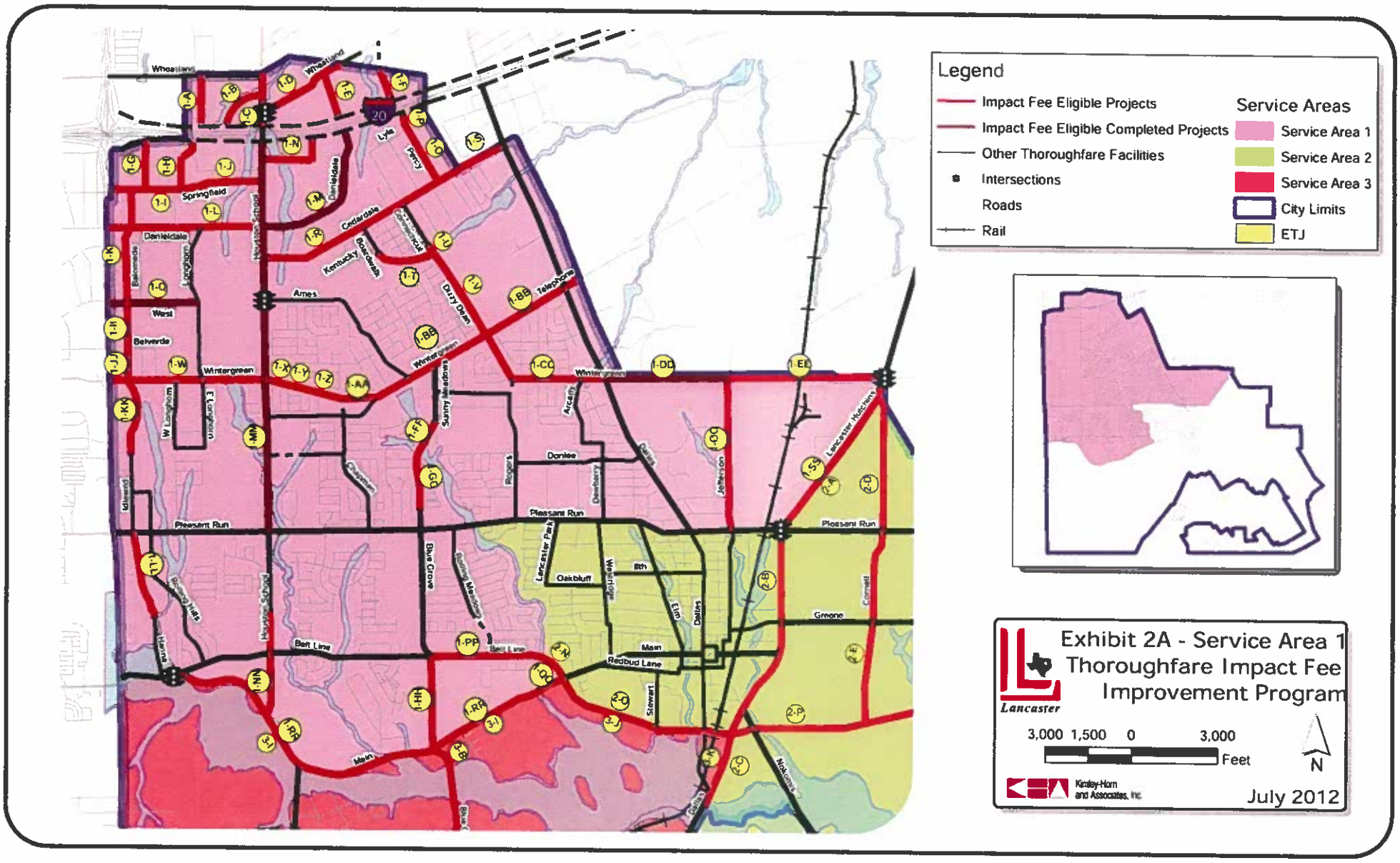
Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
1	1-A	C2U	Proposed Collector "A"	Wheatland Rd. to IH-20	0.32	100%
	1-B	C2U	Proposed Collector "B"	University Hills Blvd. to IH-20	0.30	100%
	1-C	P6D	University Hills Blvd. (1)	Wheatland Rd. to IH-20 WBFR	0.35	100%
	1-D	C2U	Wheatland Rd.	University Hills Blvd. to N. City Limits	0.60	100%
	1-E	C2U	Proposed Collector "C"	Wheatland Rd. to IH-20	0.29	100%
	1-F	C2U	Proposed Collector "D"	N. City Limits to IH-20	0.22	100%
	1-G	C2U	Proposed Collector "E"	IH-20 to Springfield Ave.	0.34	100%
	1-H	C2U	Proposed Collector "F"	IH-20 to Springfield Ave.	0.34	100%
	1-I	C2U	Springfield St. (1)	IH-35E to Proposed Collector "F" (1-H)	0.44	100%
	1-J	C2U	Springfield St. (2)	Proposed Collector "F" (1-H) to Houston School Rd.	0.49	100%
	1-K	C2U	Balomeade Ave./Cumberland St. (1)	Springfield St. to West Dr.	0.75	100%
	1-L	S4D	Danieldale Rd. (1)	IH-35E to Houston School Rd.	1.03	100%
	1-M	S4D	Danieldale Rd. (2)	Houston School Rd. to IH-20	1.02	100%
	1-N	C2U	Proposed Collector "G"	Houston School Rd. to IH-20	0.45	100%
	1-O	C2U	Percy St. (1)	Cedardale Rd. to Lyle St.	0.38	100%
	1-P	C2U	Percy St. (2)	Lyle St. to IH-20	0.11	100%
	1-Q	C2U	West Dr.	IH-35E to Longhorn Dr.	0.58	100%
	1-R	S4D	Cedardale Rd. (1)	Houston School Rd. to E. City Limits	1.43	100%
	1-S	S4D	Cedardale Rd. (2)	E. City Limits to Dallas Ave.	0.32	50%
	1-T	C2U	Proposed Collector "H"	150' S. of Kentucky Ave. to Dizzy Dean Dr.	0.39	100%
	1-U	C2U	Proposed Collector "I" (Wintergreen Extension)	Pennsylvania Ave. to Dizzy Dean Dr.	0.07	100%
	1-V	S4D(1/2)	Dizzy Dean Dr. (Wintergreen Extension)	Proposed Collector "I"(1-U) to Telephone Rd.	0.63	100%
	1-W	M4D	Wintergreen Rd. (1)	IH-35E to Houston School Rd.	1.01	100%
	1-X	M4D(1/2)	Wintergreen Rd. (2)	Houston School Rd. to 830' E. of Houston School Rd.	0.16	100%
	1-Y	M4D	Wingergreen Rd. (3)	830' E. of Houston School Rd. to 1,385' E. of Houston	0.11	100%
	1-Z	M4D(1/2)	Wintergreen Rd. (4)	1,385' E. of Houston School Rd. to 2,770' E. of Houston	0.26	100%
	1-AA	M4D	Wingergreen Rd. (5)	2,770' E. of Houston School Rd. to Baskin Dr.	0.23	100%
	1-BB	M4D	Wintergreen Rd./Telephone Rd.	Baskin Dr. to E. City Limits	1.52	100%
	1-CC	M4D	Wintergreen Rd. (6)	Telephone Rd. to Dallas Ave.	0.94	100%
	1-DD	M4D	Wintergreen Rd. (7)	Dallas Ave. to Jefferrson St.	0.82	100%
	1-EE	M4D	Wintergreen Rd. (8)	Jefferson St. to Lancaster-Hutchins Rd.	1.04	50%
	1-FF	M4D	Blue Grove Rd. (1)	Sunny Meadow Rd. to Kings Cross Dr.	0.18	100%
	1-GG	M4D	Blue Grove Rd. (2)	Kings Cross to Dr. Brook Meadow Cir.	0.43	100%
	1-HH	M4D	Blue Grove Rd. (3)	Belt Line Rd. to Main St.	0.61	100%
	1-II	C2U	Balomeade Ave. (2)	West Dr. to Belverde Dr.	0.29	100%
	1-JJ	C2U	Balomeade Ave. (3)	Belverde Dr. to Wintergreen Rd.	0.21	100%
	1-KK	C2U	Proposed Collector "J"	Wintergreen Rd. to Idlewild Ln.	0.52	100%
	1-LL	C2U	Proposed Collector "K"	Pleasant Run Rd. to Hanna Ln.	0.63	100%
	1-MM	M4D	Houston School Rd. (2)	IH-20 EBFR to Pleasant Run Road	2.56	100%
	1-NN	M4D	Houston School Rd. (3)	1,500' N. of Belt Line Rd. to Main St.	0.70	100%
	1-OO	S4D	Jefferson St.	Wintergreen Rd. to Pleasant Run Rd.	0.98	100%
	1-PP	P6D	Belt Line Rd. (1)	Blue Grove Rd. to 1,005' W. of Main St.	0.75	100%
	1-QQ, 2-N	P6D	Belt Line Rd. (2)	1,005' W. of Main St. to Main St.	0.19	50%
	1-RR, 3-I	C2U	Main St. (1)	Belt Line Rd. to Belt Line Rd.	3.02	50%
	1-SS, 2-A	P6D	Lancaster Hutchins Rd. (1)	Wintergreen Rd. to Pleasant Run Rd.	1.19	50%
	1-1		Signal Installation	Houston School Rd. & Wheatland Rd.		100%
	1-2		Signal Installation	Houston School Rd. & Ames Rd.		100%
	1-3		Signal Installation	Belt Line Rd. & Chester Rd. / Main St.		50%
	1-4		Signal Installation	Lancaster-Hutchins Rd. & Wintergreen Rd.		50%
	1-5		Signal Installation	Lancaster-Hutchins Rd. & Pleasant Run Rd.		25%

Table 2.B. Thoroughfare Impact Fee Improvement Program – Service Area 2

Service	Proj. #	Class	Roadway	Limits	Length	% In
2	1-SS, 2-A	P6D	Lancaster Hutchins Rd. (1)	Wintergreen Rd. to Pleasant Run Rd.	1.19	50%
	2-B	M4D	Lancaster-Hutchins Rd. (2)	Pleasant Run Rd. to Belt Line Rd.	1.42	100%
	2-C, 3-K	P6D	Lancaster-Hutchins Rd. (3)	Belt Line Rd. to Dallas Ave.	0.53	50%
	2-D	M4D	Cornell Rd. (1)	Lancaster Hutchins Rd. to Greene Rd.	1.52	100%
	2-E	M4D	Cornell Rd. (2)	Greene Rd. to Belt Line Rd.	0.66	100%
	2-F	M4D	Alba Rd. (1)	N. City Limits to Greene Rd. (N)	1.09	100%
	2-G	M4D	Alba Rd. (2)	Greene Rd. (N) to 935' S. of Greene Rd. (S)	0.32	100%
	2-H	M4D	Alba Rd. (3)	935' S. of Greene Rd. (S) to Belt Line Rd.	0.22	100%
	2-I	C2U	Ferris Rd. (1)	Belt Line Rd. to S. City Limits	1.19	100%
	2-J	C2U	Ferris Rd. (2)	S. City Limits to S. City Limits	0.56	50%
	2-K	C2U	Ferris Rd. (3)	S. City Limits to E. City Limits	0.59	100%
	2-L	C2U	Ferris Rd. (4)	E. City Limits to S. City Limits	1.12	50%
	2-M	M4D	Airport Rd. East	Greene Rd. to Ferris Rd.	2.04	100%
	1-QQ, 2-N	P6D	Belt Line Rd. (2)	1,005' W. of Main St. to Main St.	0.19	50%
	2-O, 3-J	M4D	Belt Line Rd. (4)	Main St. to Lancaster-Hutchins Rd.	1.23	50%
	2-P	M4D	Belt Line Rd. (5)	Lancaster-Hutchins Rd. to E. City Limits	2.77	100%
	2-Q	M4D	Belt Line Rd. (6)	E. City Limits to 640' E. of E. City Limits	0.12	50%
	1-4		Signal Installation	Lancaster-Hutchins Rd. & Wintergreen Rd.		50%
	1-5		Signal Installation	Lancaster-Hutchins Rd. & Pleasant Run Rd.		75%

Table 2.C. Thoroughfare Impact Fee Improvement Program – Service Area 3

Service	Proj. #	Class	Roadway	Limits	Length	% In
3	3-A	M4D	Houston School Rd. (4)	2,720' N. of Bear Creek Rd. to S. City Limits	1.44	100%
	3-B	M4D	Blue Grove Rd. (4)	Main St. to 385' S. of Main St.	0.07	100%
	3-C	M4D	Blue Grove Rd. (5)	385' S. of Main St. to 765' N. of Bear Creek Rd.	1.52	100%
	3-D	M4D	Blue Grove Rd. (6)	765' N. of Bear Creek Rd. to 1,700' S. of Bear Creek Rd.	0.47	100%
	3-E	S4D	Bear Creek Rd.	IH I-35E to Dallas Ave.	3.06	100%
	3-F	M4D	Meadowlark Ln. (1)	Parkerville Rd. to 980' S. of Parkerville Rd.	0.19	100%
	3-G	M4D	Meadowlark Ln. (2)	980' S. of Parkerville Rd. to Meadowlark Ct.	0.52	100%
	3-H	M4D	Meadowlark Ln. (3)	Meadowlark Ct. to S. City Limits	1.24	100%
	1-RR, 3-I	C2U	Main St. (1)	Belt Line Rd. to Belt Line Rd.	3.02	50%
	2-O, 3-J	M4D	Belt Line Rd. (4)	Main St. to Lancaster-Hutchins Rd.	1.23	50%
	2-C, 3-K	P6D	Lancaster-Hutchins Rd. (3)	Lancaster-Hutchins Rd. (3)	0.53	50%
	1-3		Signal Installation	Belt Line Rd. & Chesier Rd. / Main St.		50%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Impact Fee Eligible Projects
Impact Fee Eligible Completed Projects
Other Thoroughfare Facilities
Intersections
Roads
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Service Areas
Service Area 1
Service Area 2
Service Area 3
City Limits
ETJ
Exhibit 2A - Service Area 1
Thoroughfare Impact Fee
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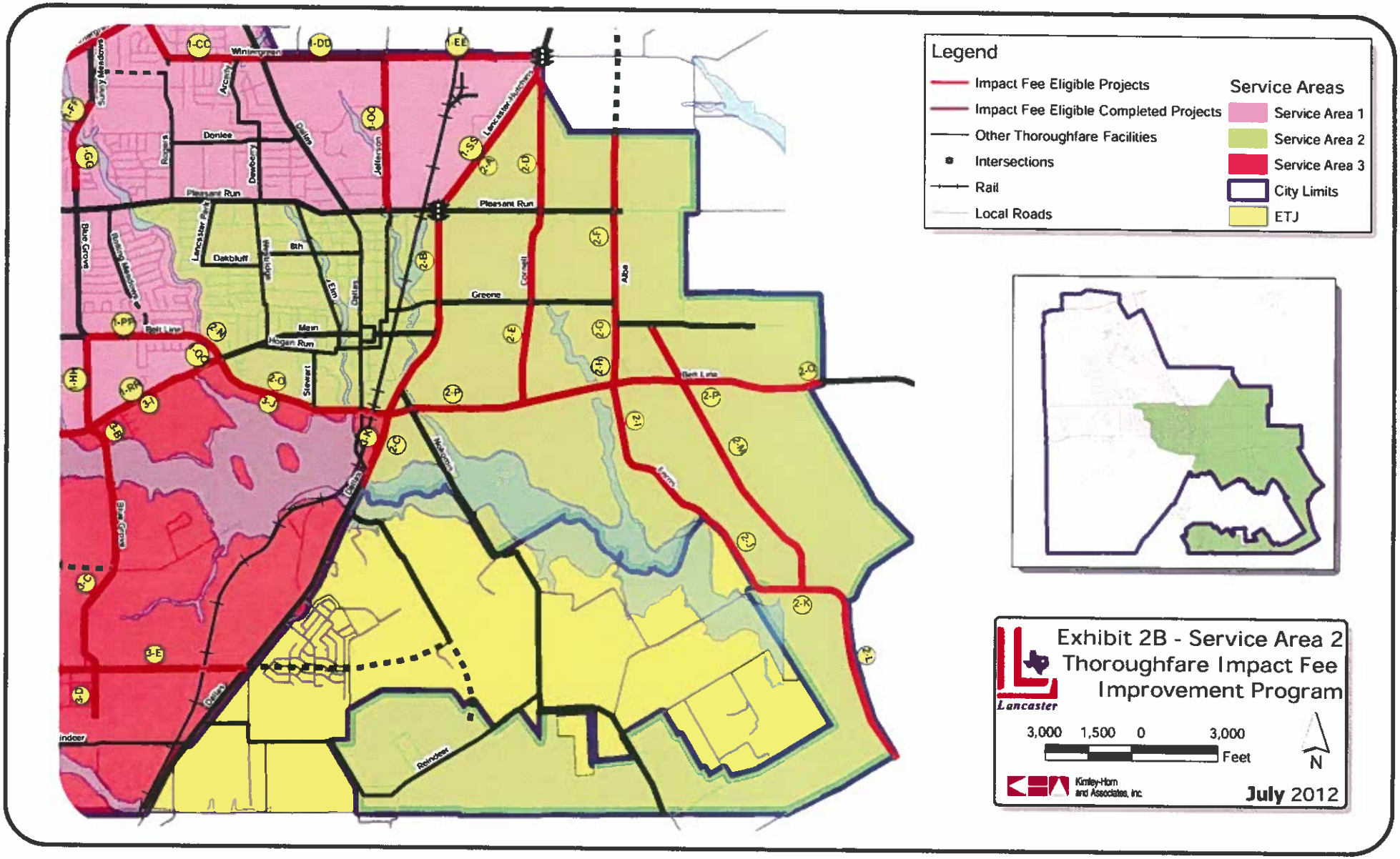
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Local Roads
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Service Area 2
Service Area 3
City Limits
ETJ
Exhibit 2B - Service Area 2
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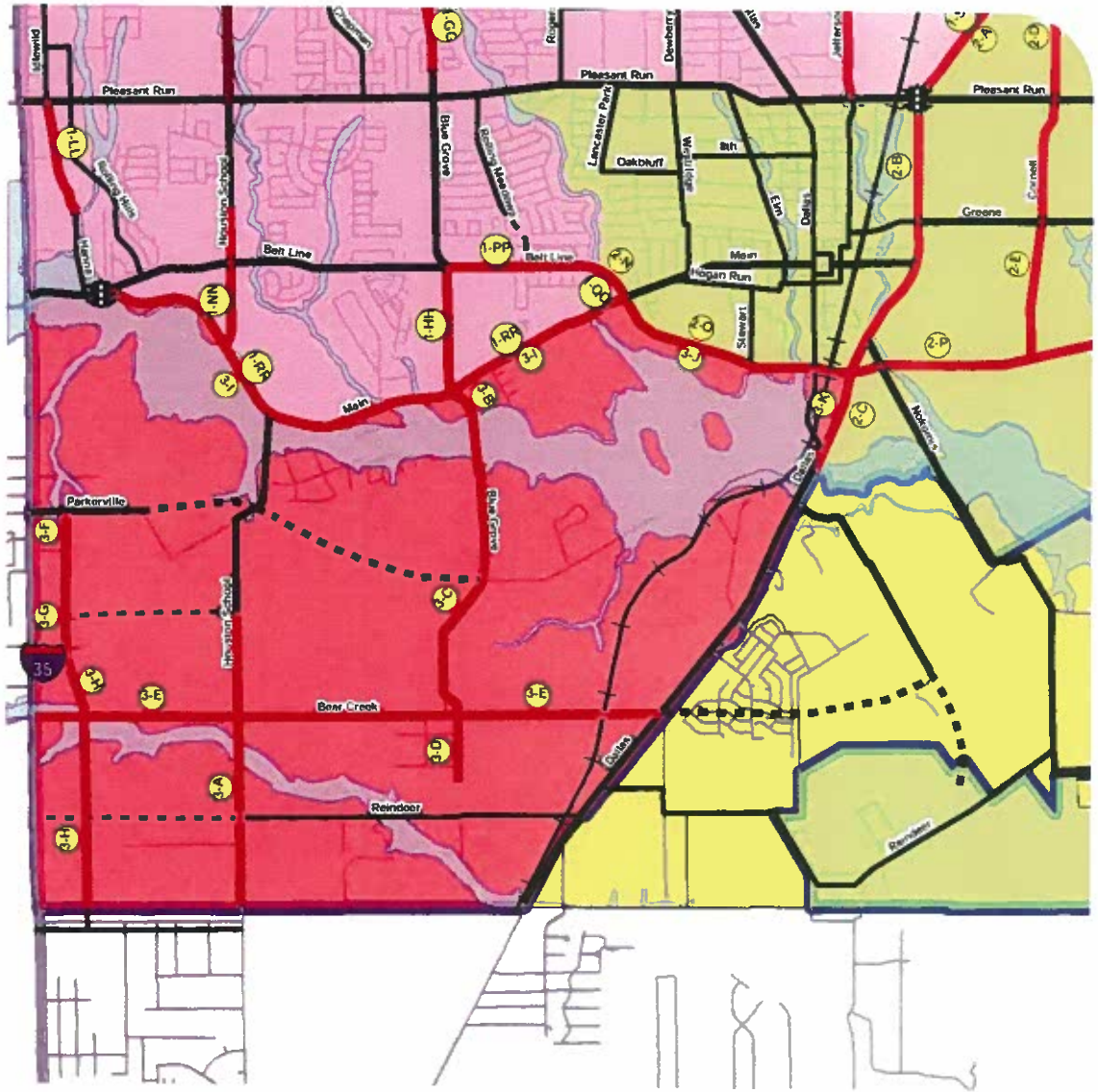

Legend

- Impact Fee Eligible Projects
- Impact Fee Eligible Completed Projects
- Other Thoroughfare Facilities
- Intersections
- Rail
- Local Roads

Service Areas

- Service Area 1
- Service Area 2
- Service Area 3
- City Limits
- ETJ

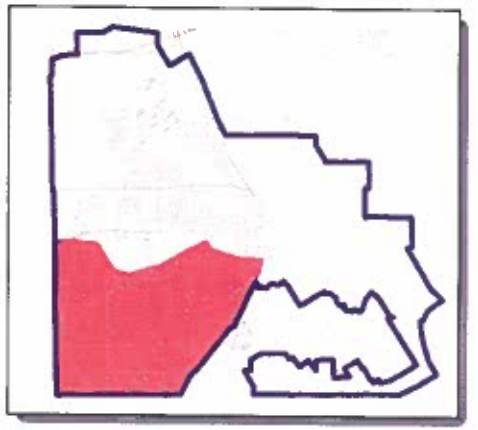

Exhibit 2C - Service Area 3
Thoroughfare Impact Fee
Improvement Program

Lancaster

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IV. METHODOLOGY FOR ROADWAY IMPACT FEES

A. SERVICE AREAS

The three (3) service areas used in the 2012 Roadway Impact Fee Update are shown in the previously referenced **Exhibit 1**. These service areas cover the entire corporate boundary of the City of Lancaster. Chapter 395 of the Texas Local Government Code specifies that "the service area is limited to an area within the corporate boundaries of the political subdivision and shall not exceed six (6) miles."

B. SERVICE UNITS

The "service unit" is a measure of consumption or use of the roadway facilities by new development. In other words, it is the measure of supply and demand for roads in the City. For transportation purposes, the service unit is defined as a vehicle-mile. On the supply side, this is a lane-mile of an arterial street. On the demand side, this is a vehicle-trip of one-mile in length. The application of this unit as an estimate of either supply or demand is based on travel during the afternoon peak hour of traffic. This time period is commonly used as the basis for transportation planning and the estimation of trips created by new development.

Another aspect of the service unit is the service volume that is provided (supplied) by a lane-mile of roadway facility. This number, also referred to as capacity, is a function of the facility type, facility configuration, number of lanes, and level of service.

The hourly service volumes used in the Roadway Impact Fee Study are based upon generally accepted thoroughfare capacity criteria. **Tables 3A and 3B** show the service volumes as a function of the facility type.

Table 3A. Level of Use for Proposed Facilities
(used in Appendix B – TIFIP Service Units of Supply)

Roadway Type (MTP Classifications)	Median Configuration	Hourly Vehicle-Mile Capacity per Lane-Mile of Roadway Facility
P6D – Principal Arterial	Divided	750
M4D – Major Arterial	Divided	650
S4D – Minor Arterial	Divided	625
C2U – Collector	Undivided	450

Table 3B. Level of Use for Existing Facilities
(used in Appendix C – Existing Roadway Facilities Inventory)

Roadway Type	Description	Hourly Vehicle-Mile Capacity per Lane-Mile of Roadway Facility
2U-R	Rural Cross-Section (i.e. gravel, dirt, etc.)	150
2U-H	Two lane undivided – Arterial Type	750
2U	Two lane undivided	450
3U	Three lane undivided (TWLTL)	500
4U	Four lane undivided (TWLTL)	525
4D	Four lane divided	650
5U	Five lane undivided (TWLTL)	625
6D	Six lane divided	750

C. Cost Per Service Unit

A fundamental step in the impact fee process is to establish the cost for each service unit. In the case of the roadway impact fee, this is the cost for each vehicle-mile of travel. This cost per service unit is the cost to construct a roadway (lane-mile) needed to accommodate a vehicle-mile of travel at a level of service corresponding to the City's standards. The cost per service unit is calculated for each service area based on a specific list of projects within that service area.

The second component of the cost per service unit is the number of service units in each service area. This number is the measure of the growth in transportation demand that is projected to occur in the ten-year period. Chapter 395 requires that Impact Fees be assessed only to pay for growth projected to occur in the city limits within the next ten-years, a concept that will be covered in a later section of this report (**see Section III.E**). As noted earlier, the units of demand are vehicle-miles of travel.

D. Cost of the TIFIP

The costs that may be included in the cost per service unit are all of the implementation costs for the Impact Fee Study, as well as project costs for arterial system elements within the Thoroughfare Impact Fee Improvement Program. Chapter 395 of the Texas Local Government Code specifies that the allowable costs are "...including and limited to the:

1. Construction contract price;
2. Surveying and engineering fees;
3. Land acquisition costs, including land purchases, court awards and costs, attorney's fees, and expert witness fees; and
4. Fees actually paid or contracted to be paid to an independent qualified engineer or financial consultant preparing or updating the Capital Improvement Plan who is not an employee of the political subdivision."

The engineer's opinion of the probable costs of the projects in the TIFIP is based, in part, on the calculation of a unit cost of construction. This means that a cost per linear foot of roadway is calculated based on an average price for the various components of roadway construction. This allows the probable cost to be determined by the type of facility being constructed, the number of lanes, and the length of the project. The costs for location-specific items such as bridges, highway ramps, drainage structures, and any other special components are added to each project as appropriate. In addition, based upon discussions with City of Lancaster staff, State, Dallas County, and developer driven projects in which the City has contributed a portion of the total project cost have been included in the TIFIP as lump sum costs.

A typical roadway project consists of a number of costs, including the following: construction, design engineering, survey, and right-of way acquisition. While the construction cost component of a project may actually consist of approximately 100 various pay items, a simplified approach was used for developing the conceptual level project costs. Each new project's construction cost was divided into two cost components: roadway construction cost and major construction component allowances. The roadway construction components consist of the following pay items: (1) street excavation, (2) lime stabilization, (3) concrete pavement, (4) topsoil, (5) concrete driveway approach, and (6) sidewalk.

Based on the paving construction cost subtotal, a percentage of this total is calculated to allot for major construction component allowances. These allowances include preparation of ROW, traffic control, pavement markings/markers, roadway drainage, illumination, special drainage structures, water improvements, sewer improvements, establishing turf/erosion control and basic landscaping. These allowance percentages are also based on historical data. The paving and allowance subtotal is given a ten percent (10%) contingency to determine the construction cost total. To determine the total Impact Fee Project Cost, a percentage of the construction cost total is added for engineering, surveying, testing, mobilization, and right-of-way/easement acquisition.

The construction costs are variable based on the proposed Master Thoroughfare Plan classification of the roadway. Additional classifications are utilized in cases where a portion of the facility currently exists. The following indication is used for these projects: (1/2) for facilities where half the facility still needs to be constructed.

Tables 4A, 4B and **4C** are the TIFIP project list for each service area with conceptual level project cost projections. Detailed cost projections and methodology used for each individual project can be seen in **Appendix A, Opinion of Probable Cost Worksheets.** It should be noted that these tables reflect only conceptual-level opinions or assumptions regarding the portions of future project costs that are potentially recoverable through impact fees. Actual costs of construction are likely to change with time and are dependent on market and economic conditions that cannot be precisely predicted at this time.

This TIFIP establishes the list of projects for which Impact Fees may be utilized. Essentially, it establishes a list of projects for which an impact fee funding program can be established. This is different from a City's construction TIFIP, which provides a broad list of capital projects for which the City is committed to building. The cost projections utilized in this study should not be utilized for the City's building program or construction TIFIP.

Kimley-Horn and Associates, Inc.

Lancaster

Table 4.A – 10-Year Thoroughfare Impact Fee Improvement Program with Conceptual Level Project Cost Projections – Service Area 1

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
1	I-A	C2U	Proposed Collector "A"	Wheatland Rd. to IH-20	0.32	100%	$ 1,099,000	$ 1,099,000
	I-B	C2U	Proposed Collector "B"	University Hills Blvd. to IH-20	0.30	100%	$ 1,447,000	$ 1,447,000
	I-C	P6D	University Hills Blvd. (1)	Wheatland Rd. to IH-20 WBFR	0.35	100%	$ 1,020,000	$ 1,020,000
	I-D	C2U	Wheatland Rd.	University Hills Blvd. to N. City Limits	0.60	100%	$ 1,983,000	$ 1,983,000
	I-E	C2U	Proposed Collector "C"	Wheatland Rd. to IH-20	0.29	100%	$ 984,000	$ 984,000
	I-F	C2U	Proposed Collector "D"	N. City Limits to IH-20	0.22	100%	$ 755,000	$ 755,000
	I-G	C2U	Proposed Collector "E"	IH-20 to Springfield Ave.	0.34	100%	$ 1,187,000	$ 1,187,000
	I-H	C2U	Proposed Collector "F"	IH-20 to Springfield Ave.	0.34	100%	$ 1,168,000	$ 1,168,000
	I-I	C2U	Springfield St. (1)	IH-35E to Proposed Collector "F" (I-H)	0.44	100%	$ 1,459,000	$ 1,459,000
	I-J	C2U	Springfield St. (2)	Proposed Collector "F" (I-H) to Houston School Rd.	0.49	100%	$ 2,098,000	$ 2,098,000
	I-K	C2U	Balcomeade Ave./Cumberland St. (1)	Springfield St. to West Dr.	0.75	100%	$ 2,471,000	$ 2,471,000
	I-L	S4D	Danieldale Rd. (1)	IH-35E to Houston School Rd.	1.03	100%	$ 3,600,000	$ 3,600,000
	I-M	S4D	Danieldale Rd. (2)	Houston School Rd. to IH-20	1.02	100%	$ 1,500,000	$ 1,500,000
	I-N	C2U	Proposed Collector "G"	Houston School Rd. to IH-20	0.45	100%	$ 1,943,000	$ 1,943,000
	I-O	C2U	Percy St. (1)	Cedardale Rd. to Lyle St.	0.38	100%	$ 1,270,000	$ 1,270,000
	I-P	C2U	Percy St. (2)	Lyle St. to IH-20	0.11	100%	$ 371,000	$ 371,000
	I-Q	C3U	West Dr.	IH-35E to Longhorn Dr.	0.58	100%	$ 2,523,027	$ 2,523,027
	I-R	S4D	Cedardale Rd. (1)	Houston School Rd. to E. City Limits	1.43	100%	$ 6,034,000	$ 6,034,000
	I-S	S4D	Cedardale Rd. (2)	E. City Limits to Dallas Ave.	0.32	50%	$ 1,352,000	$ 676,000
	I-T	C2U	Proposed Collector "H"	150' S. of Kentucky Ave. to Dizzy Dean Dr.	0.39	100%	$ 1,355,000	$ 1,355,000
	I-U	C2U	Proposed Collector "I" (Wintergreen Extension)	Pennsylvania Ave. to Dizzy Dean Dr.	0.07	100%	$ 239,000	$ 239,000
	I-V	S4D(1/2)	Dizzy Dean Dr. (Wintergreen Extension)	Proposed Collector "I"(I-U) to Telephone Rd.	0.63	100%	$ 1,374,000	$ 1,374,000
	I-W	M4D	Wintergreen Rd. (1)	IH-35E to Houston School Rd.	1.01	100%	$ 4,702,536	$ 4,702,536
	I-X	M4D(1/2)	Wintergreen Rd. (2)	Houston School Rd. to 830' E. of Houston School Rd.	0.16	100%	$ 345,000	$ 345,000
	I-Y	M4D	Wintergreen Rd. (3)	830' E. of Houston School Rd. to 1,385' E. of Houston School Rd.	0.11	100%	$ 458,000	$ 458,000
	I-Z	M4D(1/2)	Wintergreen Rd. (4)	1,385' E. of Houston School Rd. to 2,770' E. of Houston School Rd.	0.26	100%	$ 571,000	$ 571,000
	I-AA	M4D	Wintergreen Rd. (5)	2,770' E. of Houston School Rd. to Baskin Dr.	0.23	100%	$ 974,000	$ 974,000
	I-BB	M4D	Wintergreen Rd./Telephone Rd.	Baskin Dr. to E. City Limits	1.52	100%	$ 6,334,000	$ 6,334,000
	I-CC	M4D	Wintergreen Rd. (6)	Telephone Rd. to Dallas Ave.	0.94	100%	$ 4,296,000	$ 4,296,000
	I-DD	M4D	Wintergreen Rd. (7)	Dallas Ave. to Jefferson St.	0.82	100%	$ 2,404,934	$ 2,404,934
	I-EE	M4D	Wintergreen Rd. (8)	Jefferson St. to Lancaster-Hutchins Rd.	1.04	50%	$ 5,061,000	$ 2,530,500
	I-FF	M4D	Blue Grove Rd. (1)	Sunny Meadow Rd. to Kings Cross Dr.	0.18	100%	$ 1,603,000	$ 1,603,000
	I-GG	M4D	Blue Grove Rd. (2)	Kings Cross to Dr. Brook Meadow Cir.	0.43	100%	$ 1,805,000	$ 1,805,000
	I-HH	M4D	Blue Grove Rd. (3)	Belt Line Rd. to Main St.	0.61	100%	$ 2,553,000	$ 2,553,000
	I-II	C2U	Balcomeade Ave. (2)	West Dr. to Belverde Dr.	0.29	100%	$ 1,003,000	$ 1,003,000
	I-JJ	C2U	Balcomeade Ave. (3)	Belverde Dr. to Wintergreen Rd.	0.21	100%	$ 679,000	$ 679,000
	I-KK	C3U	Proposed Collector "J"	Wintergreen Rd. to Idlewild Ln.	0.52	100%	$ 1,774,000	$ 1,774,000
	I-LL	C3U	Proposed Collector "K"	Pleasant Run Rd. to Hanna Ln.	0.63	100%	$ 2,151,000	$ 2,151,000
	I-MM	M4D	Houston School Rd. (2)	IH-20 EBFR to Pleasant Run Road	2.56	100%	$ 7,480,000	$ 7,480,000
	I-NN	M4D	Houston School Rd. (3)	1,500' N. of Belt Line Rd. to Main St.	0.70	100%	$ 2,909,000	$ 2,909,000
	I-OO	S4D	Jefferson St.	Wintergreen Rd. to Pleasant Run Rd.	0.98	100%	$ 4,525,000	$ 4,525,000
	I-PP	P6D	Belt Line Rd. (1)	Blue Grove Rd. to 1,005' W. of Main St.	0.75	100%	$ 4,334,000	$ 4,334,000
	I-QQ, 2-N	P6D	Belt Line Rd. (2)	1,005' W. of Main St. to Main St.	0.19	50%	$ 1,107,000	$ 553,500
	I-RR, 3-I	C2U	Main St. (1)	Belt Line Rd. to Belt Line Rd.	3.02	50%	$ 9,972,000	$ 4,986,000
	I-SS, 3-A	P6D	Lancaster Hutchins Rd. (1)	Wintergreen Rd. to Pleasant Run Rd.	1.19	50%	$ 6,902,000	$ 3,451,000
	I-1		Signal Installation	Houston School Rd. & Wheatland Rd.		100%	$ 140,000	$ 140,000
	I-2		Signal Installation	Houston School Rd. & Ames Rd.		100%	$ 140,000	$ 140,000
	I-3		Signal Installation	Belt Line Rd. & Chester Rd. / Main St.		50%	$ 140,000	$ 70,000
	I-4		Signal Installation	Lancaster-Hutchins Rd. & Wintergreen Rd.		50%	$ 140,000	$ 70,000
	I-5		Signal Installation	Lancaster-Hutchins Rd. & Pleasant Run Rd.		25%	$ 140,000	$ 35,000
							Service Area Project Cost Subtotal	$ 99,433,497
							2012 Roadway Impact Fee Update Cost Per Service Area	$ 15,333
							Total Cost in SERVICE AREA 1	$ 99,448,830

Table 4.B – 10-Year Thoroughfare Impact Fee Improvement Program with Conceptual Level Project Cost Projections – Service Area 2

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
2	1-SS, 2-A	P6D	Lancaster Hutchins Rd. (1)	Wintergreen Rd. to Pleasant Run Rd.	1.19	50%	$ 6,902,000	$ 3,451,000
	2-B	M4D	Lancaster-Hutchins Rd. (2)	Pleasant Run Rd. to Belt Line Rd.	1.42	100%	$ 6,264,000	$ 6,264,000
	2-C, 3-K	P6D	Lancaster-Hutchins Rd. (3)	Belt Line Rd. to Dallas Ave.	0.53	50%	$ 3,074,000	$ 1,537,000
	2-D	M4D	Cornell Rd. (1)	Lancaster Hutchins Rd. to Greene Rd.	1.52	100%	$ 6,302,000	$ 6,302,000
	2-E	M4D	Cornell Rd. (2)	Greene Rd. to Belt Line Rd.	0.66	100%	$ 2,875,000	$ 2,875,000
	2-F	M4D	Alba Rd. (1)	N. City Limits to Greene Rd. (N)	1.09	100%	$ 4,732,000	$ 4,732,000
	2-G	M4D	Alba Rd. (2)	Greene Rd. (N) to 935' S. of Greene Rd. (S)	0.32	100%	$ 1,325,000	$ 1,325,000
	2-H	M4D	Alba Rd. (3)	935' S. of Greene Rd. (S) to Belt Line Rd.	0.22	100%	$ 949,000	$ 949,000
	2-I	C2U	Ferris Rd. (1)	Belt Line Rd. to S. City Limits	1.10	100%	$ 3,933,000	$ 3,933,000
	2-J	C2U	Ferris Rd. (2)	S. City Limits to S. City Limits	0.56	50%	$ 1,865,000	$ 932,500
	2-K	C2U	Ferris Rd. (3)	S. City Limits to E. City Limits	0.59	100%	$ 1,954,000	$ 1,954,000
	2-L	C2U	Ferris Rd. (4)	E. City Limits to S. City Limits	1.12	50%	$ 3,713,000	$ 1,856,500
	2-M	M4D	Airport Rd. East	Greene Rd. to Ferris Rd.	2.04	100%	$ 8,814,000	$ 8,814,000
	1-QQ, 2-N	P6D	Belt Line Rd. (2)	1,005' W. of Main St. to Main St.	0.19	50%	$ 1,107,000	$ 553,500
	2-O, 3-J	M4D	Belt Line Rd. (4)	Main St. to Lancaster-Hutchins Rd.	1.23	50%	$ 5,470,000	$ 2,735,000
	2-P	M4D	Belt Line Rd. (5)	Lancaster-Hutchins Rd. to E. City Limits	2.77	100%	$ 11,863,000	$ 11,863,000
	2-Q	M4D	Belt Line Rd. (6)	E. City Limits to 640' E. of E. City Limits	0.12	50%	$ 506,000	$ 253,000
	1-4		Signal Installation	Lancaster-Hutchins Rd. & Wintergreen Rd.		50%	$ 140,000	$ 70,000
	1-5		Signal Installation	Lancaster-Hutchins Rd. & Pleasant Run Rd.		75%	$ 140,000	$ 105,000
							Service Area Project Cost Subtotal	$ 60,504,500
							2012 Roadway Impact Fee Update Cost Per Service Area	$ 15,333
							Total Cost in SERVICE AREA 2	$ 60,519,833

Table 4.C – 10-Year Thoroughfare Impact Fee Improvement Program with Conceptual Level Project Cost Projections – Service Area 3

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
3	3-A	M4D	Houston School Rd. (4)	2,720' N. of Bear Creek Rd. to S. City Limits	1.44	100%	$ 6,361,000	$ 6,361,000
	3-B	M4D	Blue Grove Rd. (4)	Main St. to 385' S. of Main St.	0.07	100%	$ 314,000	$ 314,000
	3-C	M4D	Blue Grove Rd. (5)	385' S. of Main St. to 765' N. of Bear Creek Rd.	1.52	100%	$ 7,067,000	$ 7,067,000
	3-D	M4D	Blue Grove Rd. (6)	765' N. of Bear Creek Rd. to 1,700' S. of Bear Creek Rd.	0.47	100%	$ 2,016,000	$ 2,016,000
	3-E	5-4D	Bear Creek Rd.	IH-35E to Dallas Ave.	3.06	100%	$ 13,278,000	$ 13,278,000
	3-F	M4D	Meadowlark Ln. (1)	Parkerville Rd. to 980' S. of Parkerville Rd.	0.19	100%	$ 803,000	$ 803,000
	3-G	M4D	Meadowlark Ln. (2)	980' S. of Parkerville Rd. to Meadowlark Ct.	0.52	100%	$ 2,150,000	$ 2,150,000
	3-H	M4D	Meadowlark Ln. (3)	Meadowlark Ct. to S. City Limits	1.24	100%	$ 6,151,000	$ 6,151,000
	1-RR, 3-I	C2U	Main St. (1)	Belt Line Rd. to Belt Line Rd.	3.02	50%	$ 9,972,000	$ 4,986,000
	2-Q, 3-J	M4D	Belt Line Rd. (4)	Main St. to Lancaster-Hutchins Rd.	1.23	50%	$ 5,470,000	$ 2,735,000
	2-C, 3-K	P6D	Lancaster-Hutchins Rd. (3)	Lancaster-Hutchins Rd. (3)	0.53	50%	$ 3,074,000	$ 1,537,000
	1-3		Signal Installation	Belt Line Rd. & Chesser Rd. / Main St		50%	$ 140,000	$ 70,000
							Service Area Project Cost Subtotal	$ 47,468,000
							2012 Roadway Impact Fee Update Cost Per Service Area	$ 15,333
							Total Cost in SERVICE AREA 3	$ 47,483,333

Notes:

a. The planning level cost projections have been developed for Impact Fee calculations only and should not be used for any future Thoroughfare Impact Fee Improvement Programs within the City of Lancaster.

b. The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

c. The project cost total within each Service Area may differ from the total shown in the Summary sheets provided to the City due to some projects that are split between multiple service areas.

E. SERVICE UNIT CALCULATION

The basic service unit for the computation of Lancaster's roadway impact fees is the vehicle-mile of travel during the afternoon peak-hour. To determine the cost per service unit, it is necessary to project the growth in vehicle-miles of travel for the service area for the ten-year period.

The growth in vehicle-miles from 2012 to 2022 is based upon projected changes in residential and non-residential growth for the period. In order to determine this growth, baseline estimates of population, basic square feet, service square feet, and retail square feet for 2012 were made by the City, along with projections for each of these demographic statistics through 2022. **Table 1** details the growth estimates used for impact fee determination.

The residential and non-residential statistics in the Land Use Assumptions provide the "independent variables" that are used to calculate the existing (2012) and projected (2022) transportation service units used to establish the roadway impact fee maximum rates within each service area. The roadway demand service units (vehicle-miles) for each service area are the sum of the vehicle-miles "generated" by each category of land use in the service area.

For the purpose of impact fees, all developed and developable land is categorized as either residential or non-residential. For residential land uses, the existing and projected population is converted to dwelling units. The number of dwelling units in each service area is multiplied by a *transportation demand factor* to compute the vehicle-miles of travel that occur during the afternoon peak hour. This factor computes the average amount of demand caused by the residential land uses in the service area. The *transportation demand factor* is discussed in more detail below.

For non-residential land uses, the process is similar. The Land Use Assumptions provide existing and projected number of building square footages for three (3) categories of non-residential land uses– basic, service, and retail. These categories correspond to an aggregation of other specific land use categories based on the NAICS (North American Industrial Classification System).

Building square footage is the most common independent variable for the estimation of non-residential trips in the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 8th Edition*. This statistic is more appropriate than the number of employees because building square footage is tied more closely to trip generation and is known at the time of application for any development or development modification that would require the assessment of an impact fee.

The existing and projected Land Use Assumptions for the dwelling units and the square footage of basic, service, and retail land uses provide the basis for the projected increase in vehicle-miles of travel. As noted earlier, a *transportation demand factor* is applied to these values and then summed to calculate the total peak hour vehicle-miles of demand for each service area.

The *transportation demand factors* are aggregate rates derived from two sources – the *ITE Trip Generation Manual, 8th Edition* and the regional Origin-Destination Travel Survey performed by North Central Texas Council of Governments (NCTCOG) and the National Household Travel Survey (NHTS). The *ITE Trip Generation Manual, 8th Edition* provides the number of trips that are produced or attracted to the land use for each dwelling unit, square foot of building, or other

corresponding unit. For the retail category of land uses, the rate is adjusted to account for the fact that a percentage of retail trips are made by people who would otherwise be traveling past that particular establishment anyway, such as a trip between work and home. These trips are called pass-by trips, and since the travel demand is accounted for in the land use calculations relative to the primary trip, it is necessary to discount the retail rate to avoid double counting trips.

The next component of the *transportation demand factor* accounts for the length of each trip. The average trip length for each category is based on the region-wide travel characteristics survey conducted by the NCTCOG and the National Household Travel Survey (NHTS).

The computation of the *transportation demand factor* is detailed in the following equation:

$$TDF = T * (1 - P_b) * L_{max}$$

where... $L_{max} = \min(L * OD \text{ or } SA_L)$

Variables:

TDF = Transportation Demand Factor,
T = Trip Rate (peak hour trips / unit),
P_b = Pass-By Discount (% of trips),
L_{max} = Maximum Trip Length (miles),
L = Average Trip Length (miles), and
OD = Origin-Destination Reduction (50%)
SA_L = Max Service Area Trip Length (see **Table 5**)

For land uses which are characterized by longer average trip lengths (primarily residential uses), the maximum trip length has been limited to a length based on the nature of the roadway network within the service area, along with consideration of the existing City boundaries. Although Chapter 395 of the Texas Local Government Code allows for a service area diameter of six (6) miles, the City of Lancaster service area boundaries were set using approximately a five (5) mile limit. Therefore, the maximum trip length was assumed to be five (5) miles.

The adjustment made to the average trip length statistic in the computation of the maximum trip length is the origin-destination reduction. This adjustment is made because the roadway impact fee is charged to both the origin and destination end of the trip. For example, impact fee methodology will account for a trip from home to work within Lancaster to both residential and non-residential land uses. To avoid counting these trips as both residential and non-residential trips, a 50% origin-destination (OD) reduction factor is applied. Therefore, only half of the trip length is assessed to each land use.

Table 5 shows the derivation of the *Transportation Demand Factor* for the residential land uses and the three (3) non-residential land uses. The values utilized for all variables shown in the *transportation demand factor* equation are also shown in the table.

Table 5. Transportation Demand Factor Calculations

Variable	Residential	Basic	Service	Retail
T	1.01	0.97	1.49	3.73
P_b	0%	0%	0%	34%
L	17.21	10.02	10.92	6.43
L_{max} *	5.00	5.00	5.00	3.22
TDF	**5.05**	**4.85**	**7.45**	**7.92**

* L_{max} is less than 5 miles for retail land uses; therefore this lower trip length is used for calculating the TDF for non-residential land uses; SA_L = 5.0 miles

The application of the demographic projections and the *transportation demand factors* are presented in the 10-Year Growth Projections in **Table 6**. This table shows the total vehicle-miles by service area for the years 2012 and 2022. These estimates and projections lead to the vehicle-miles of travel for both 2012 and 2022.

Table 6. 10-Year Growth Projections

Year 2012

SERVICE AREA	RESIDENTIAL VEHICLE-MILES			SQUARE FEET[4]			TRANS. DEMAND FACTOR[5]			NON-RESIDENTIAL VEHICLE-MILES[9]				TOTAL VEHICLE MILES[10]
	DWELLING UNITS[1]	TDF[2]	VEHICLE MILES[3]	BASIC	SERVICE	RETAIL	BASIC[6]	SERVICE[7]	RETAIL[8]	BASIC	SERVICE	RETAIL	TOTAL	
		1.01					*0.97*	*1.49*	3.73					
1	8,352	5.05	42,178	2,746,800	1,945,900	1,758,100	4.85	7.45	7.92	13,322	14,497	13,924	41,743	83,921
2	2,778	5.05	14,028	1,252,300	604,600	387,100	4.85	7.45	7.92	6,074	4,504	3,066	13,644	27,672
3	1,054	5.05	5,325	400,000	295,800	253,400	4.85	7.45	7.92	1,940	2,204	2,007	6,151	11,476
Totals	**12,184**		**61,531**	**4,399,100**	**2,846,300**	**2,398,600**				**21,336**	**21,205**	**18,997**	**61,538**	**123,069**

Year 2022

SERVICE AREA	RESIDENTIAL VEHICLE-MILES			SQUARE FEET[4]			TRANS. DEMAND FACTOR[5]			NON-RESIDENTIAL VEHICLE-MILES[9]				TOTAL VEHICLE MILES[10]
	DWELLING UNITS[1]	TDF[2]	VEHICLE MILES[3]	BASIC	SERVICE	RETAIL	BASIC[6]	SERVICE[7]	RETAIL[8]	BASIC	SERVICE	RETAIL	TOTAL	
		1.01					*0.97*	*1.49*	3.73					
1	10,441	5.05	52,729	4,287,100	2,941,500	2,076,100	4.85	7.45	7.92	20,792	21,914	16,443	59,149	111,878
2	3,666	5.05	18,511	2,804,200	1,300,100	520,000	4.85	7.45	7.92	13,600	9,686	4,118	27,404	45,915
3	1,965	5.05	9,923	647,800	509,300	334,000	4.85	7.45	7.92	3,142	3,794	2,645	9,581	19,504
Totals	**16,072**		**81,162**	**7,739,100**	**4,750,900**	**2,930,100**				**37,534**	**35,394**	**23,206**	**96,134**	**177,296**

VEHICLE-MILES OF INCREASE[11] (2012 - 2022)

SERVICE AREA	VEH-MILES
1	27,957
2	18,243
3	8,028

Notes:

[1] From Land Use Assumptions (included in 2012 Roadway Impact Fee Update Report)

[2] Transportation Demand Factor for each Service Area (from LUVMET) using Single Family Detached Housing land use and *trip generation rate*

[3] Calculated by multiplying TDF by the number of dwelling units

[4] From Land Use Assumptions included in 2012 Roadway *Impact Fee Update Report*

[5] *Trip generation rate* and Transportation Demand Factors from LUVMET for each land use

[6] 'Basic' corresponds to General Light Industrial land use and *trip generation rate*

[7] 'Service' corresponds to General Office land use and *trip generation rate*

[8] 'Retail' corresponds to Shopping Center land use and *trip generation rate*

[9] Calculated by multiplying Transportation Demand Factor by the number of thousand square feet for each land use

[10] Residential plus non-residential vehicle-mile totals for each Service Area

[11] Total Vehicle-Miles (2012) subtracted from Total Vehicle-Miles (2022)

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V. IMPACT FEE CALCULATIONS

A. MAXIMUM ASSESSABLE IMPACT FEE PER SERVICE UNIT

This section presents the maximum assessable impact fee rate calculated for each service area. The maximum assessable impact fee is the sum of the eligible Impact Fee TIFIP costs for the service area divided by the growth in travel attributable to new development projected to occur within the 10-year period. A majority of the components of this calculation have been described and presented in previous sections of this report. The purpose of this section is to document the computation for each service area and to demonstrate that the guidelines provided by Chapter 395 of the Texas Local Government Code have been addressed. **Table 7** illustrates the computation of the maximum assessable impact fee computed for each service area. Each row in the table is numbered to simplify explanation of the calculation.

Line	Title	Description
1	*Total Vehicle-Miles of Capacity Added by the TIFIP*	The total number of vehicle-miles added to the service area based on the capacity, length, and number of lanes in each project (from **Appendix B** – TIFIP Service Units of Supply)

Each project identified in the Impact Fee TIFIP will add a certain amount of capacity to the City's roadway network based on its length and classification. This line displays the total amount added within each service area.

2	*Total Vehicle-Miles of Existing Demand*	A measure of the amount of traffic currently using the roadway facilities upon which capacity is being added. (from **Appendix B** – TIFIP Service Units of Supply)

A number of facilities identified in the Impact Fee TIFIP have traffic currently utilizing a portion of their existing capacity. This line displays the total amount of capacity along these facilities currently be used by existing traffic.

3	*Total Vehicle-Miles of Existing Deficiencies*	Number of vehicle-miles of travel that are not accommodated by the existing roadway system (from **Appendix C** – Existing Roadway Facilities Inventory)

In order to ensure that existing deficiencies on the City's roadway network are not recoverable through impact fees, this line is based on the entire roadway network within the service area. Any roadway within the service area that is deficient – even those not identified on the Impact Fee TIFIP – will have these additional trips removed from the calculation.

4	*Net Amount of Vehicle-Miles of Capacity Added*	A measurement of the amount of vehicle-miles added by the TIFIP that will not be utilized by existing demand **(Line 1 – Line 2 – Line 3)**

This calculation identifies the portion of the Impact Fee TIFIP (in vehicle-miles) that may be recoverable through the collection of impact fees.

5	*Total Cost of the TIFIP within the Service Area*	The total cost of the projects within each service area (from **Tables 4A, 4b,** and **4C**: 10-Year Roadway Improvements Plan with Conceptual Level Cost Opinions)

This line simply identifies the total cost of all of the projects identified in each service area.

6	*Cost of Net Capacity Supplied*	The total TIFIP cost (**Line 5**) prorated by the ratio of Net Capacity Added (**Line 4**) to Total Capacity Added (**Line 1**). **[(Line 4 / Line 1) * (Line 5)]**

Using the ratio of vehicle-miles added by the Impact Fee TIFIP available to serve future growth to the total vehicle-miles added, the total cost of the Impact Fee TIFIP is reduced to the amount available for future growth (i.e. excluding existing usage and deficiencies).

7	*Cost to Meet Existing Needs and Usage*	The difference between the Total Cost of the TIFIP (**Line 5**) and the Cost of the Net Capacity supplied (**Line 6**). **(Line 5 – Line 6)**

This line is provided for information purposes only – it is to present the portion of the total cost of the Impact Fee TIFIP that is required to meet existing demand.

8	*Total Vehicle-Miles of New Demand over Ten Years*	Based upon the growth projection provided in the **Land Use Assumptions**, an estimate of the number of new vehicle-miles within the service area over the next ten years. (from **Table 6**)

This line presents the amount of growth (in vehicle-miles) projected to occur within each service area over the next ten years.

9	*Percent of Capacity Added Attributable to New Growth*	The result of dividing Total Vehicle-Miles of New Demand (**Line 8**) by the Net Amount of Capacity Added (**Line 4**), limited to 100% (**Line 10**). This calculation is required by Chapter 395 to ensure capacity added is attributable to new growth.
10	*Chapter 395 Check*	

In order to ensure that the vehicle-miles added by the Impact Fee TIFIP do not exceed the amount needed to accommodate growth beyond the ten-year window, a comparison of the two values is performed. If the amount of vehicle-miles added by the Impact Fee TIFIP exceeds the growth projected to occur in the next ten years, the Impact Fee TIFIP cost is reduced accordingly.

11	*Cost of Capacity Added Attributable to New Growth*	The result of multiplying the Cost of Net Capacity Added (**Line 6**) by the Percent of Capacity Added Attributable to New Growth, limited to 100% (**Line 9**).

The value of the total Roadway Impact Fee TIFIP project costs (excluding financial costs) that may be recovered through impact fees. This line is determined considering the limitations to impact fees required by the Texas legislature.

B. Plan For Awarding the Roadway Impact Fee Credit

Chapter 395 of the Texas Local Government Code requires the Thoroughfare Impact Fee Improvement Program for Roadway Impact Fees contain specific enumeration of a plan for awarding the impact fee credit. Section 395.014 of the Code states:

> "(7) A plan for awarding:
> (A) a credit for the portion of ad valorem tax and utility service revenues generated by new service units during the program period that is used for the payment of improvements, including the payment of debt, that are included in the Thoroughfare Impact Fee Improvement Program; or
> (B) In the alternative, a credit equal to 50 percent of the total projected cost of implementing the Thoroughfare Impact Fee Improvement Program..."

The following table summarizes the portions of **Table 7** that utilize this credit calculation, based on awarding a 50 percent credit.

Line	Title	Description
12	*Cost of Capacity Added Attributable to New Growth After Credit is Applied*	A credit equal to 50% of the total projected cost, as per section 395.014 of the Texas Local Government Code.
13	*Maximum Assessable Fee Per Service Unit*	Found by dividing the Recoverable Cost of the TIFIP attributable to growth (**Line 11**) by the Total Vehicle-Miles of New Demand Over Ten Years (**Line 8**). (**Line 11 / Line 8**)

Table 7. Maximum Assessable Fee Per Service Unit by Service Area

	SERVICE AREA:	1	2	3
1	TOTAL VEH-MI OF CAPACITY ADDED BY THE TIFIP (FROM TIFIP SERVICE UNITS OF SUPPLY, APPENDIX B)	54,284	34,515	25,971
2	TOTAL VEH-MI OF EXISTING DEMAND (FROM TIFIP SERVICE UNITS OF SUPPLY, APPENDIX B)	6,203	1,776	1,887
3	TOTAL VEH-MI OF EXISTING DEFICIENCIES (FROM EXISTING ROADWAY FACILITIES INVENTORY, APPENDIX C)	0	0	0
4	NET AMOUNT OF VEH-MI OF CAPACITY ADDED (LINE 1 - LINE 2 - LINE 3)	48,081	32,739	24,084
5	TOTAL COST OF THE TIFIP WITHIN SERVICE AREA (FROM TABLES 4A, 4B, and 4C)	$ 99,448,830	$ 60,519,833	$ 47,483,333
6	COST OF NET CAPACITY SUPPLIED (LINE 4 / LINE 1) * (LINE 5)	$ 88,084,872	$ 57,405,731	$ 44,033,291
7	COST TO MEET EXISTING NEEDS AND USAGE (LINE 5 - LINE 6)	$ 11,363,958	$ 3,114,102	$ 3,450,042
8	TOTAL VEH-MI OF NEW DEMAND OVER TEN YEARS (FROM TABLE 6 and Land Use Assumptions)	27,957	18,243	8,028
9	PERCENT OF CAPACITY ADDED ATTRIBUTABLE TO NEW GROWTH (LINE 8 / LINE 4)	58.1%	55.7%	33.3%
10	IF LINE 8 > LINE 4, REDUCE LINE 9 TO 100%, OTHERWISE NO CHANGE	58.1%	55.7%	33.3%
11	COST OF CAPACITY ADDED ATTRIBUTABLE TO NEW GROWTH (LINE 6 * LINE 10)	$ 51,177,311	$ 31,974,992	$ 14,663,086
12	MAXIMUM COST OF CAPACITY ADDED ATTRIBUTABLE TO NEW GROWTH AFTER CREDIT IS APPLIED (50% OF LINE 11)	$ 25,588,656	$ 15,987,496	$ 7,331,543
13	MAX ASSESSABLE FEE PER SERVICE UNIT ($ PER VEH-MI) (LINE 12 / LINE 8)	**$ 915**	**$ 876**	**$ 913**

C. Service Unit Demand Per Unit of Development

The roadway impact fee is determined by multiplying the impact fee rate by the number of service units projected for the proposed development. For this purpose, the City utilizes the Land Use/Vehicle-Mile Equivalency Table (LUVMET), presented in **Table 8**. This table lists the predominant land uses that may occur within the City of Lancaster. For each land use, the development unit that defines the development's magnitude with respect to transportation demand is shown. Although every possible use cannot be anticipated, the majority of uses are found in this table. If the exact use is not listed, one similar in trip-making characteristics can serve as a reasonable proxy. The individual land uses are grouped into categories, such as residential, office, commercial, industrial, and institutional.

The trip rates presented for each land use is a fundamental component of the LUVMET. The trip rate is the average number of trips generated during the afternoon peak hour by each land use per development unit. The next column, if applicable to the land use, presents the number of trips to and from certain land uses reduced by pass-by trips, as previously discussed.

The source of the trip generation and pass-by statistics is the *ITE Trip Generation Manual, 8th Edition*, the latest edition of the definitive source for trip generation data. This manual utilizes trip generation studies for a variety of land uses throughout the United States, and is the standard used by traffic engineers and transportation planners for traffic impact analysis, site design, and transportation planning.

To convert vehicle trips to vehicle-miles, it is necessary to multiply trips by trip length. The adjusted trip length values are based on the *Regional Origin-Destination Travel Survey* regional Origin-Destination Travel Survey performed by the NCTCOG and the NHTS. The other adjustment to trip length is the 50% origin-destination reduction to avoid double counting of trips. At this stage, another important aspect of the state law is applied – the limit on transportation service unit demand. If the adjusted trip length is above the maximum trip length within the service area, the maximum trip length used for calculation is reduced to the corresponding value. This reduction, as discussed previously, limits the maximum trip length to the approximate size of the service areas.

The remaining column in the LUVMET shows the vehicle-miles per development unit. This number is the product of the trip rate and the maximum trip length. This number, previously referred to as the *Transportation Demand Factor*, is used in the impact fee estimate to compute the number of service units consumed by each land use application. The number of service units is multiplied by the impact fee rate (established by City ordinance) in order to determine the impact fee for a development.

Table 8. Land Use / Vehicle-Mile Equivalency Table

Land Use Category	ITE Land Use Code	Development Unit	Trip Gen Rate (PM)	Pass-by Rate	Pass-by Source	Trip Rate	NCTCOG Trip Length (mi)	Adj. For O-D	Adj. Trip Length (mi)	Max Trip Length (mi)	Veh-Mi Per Dev. Unit
PORT AND TERMINAL											
Truck Terminal	030	Acre	6.55			6.55	10.02	50%	5.01	5.00	32.75
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.97			0.97	10.02	50%	5.01	5.00	4.85
General Heavy Industrial	120	1,000 SF GFA	0.68			0.68	10.02	50%	5.01	5.00	3.40
Industrial Park	130	1,000 SF GFA	0.86			0.86	10.02	50%	5.01	5.00	4.30
Warehousing	150	1,000 SF GFA	0.32			0.32	10.83	50%	5.42	5.00	1.60
Mini-Warehouse	151	1,000 SF GFA	0.26			0.26	10.83	50%	5.42	5.00	1.30
RESIDENTIAL											
Single-Family Detached Housing	210	Dwelling Unit	1.01			1.01	17.21	50%	8.61	5.00	5.05
Apartment/Multi-family	220	Dwelling Unit	0.62			0.62	17.21	50%	8.61	5.00	3.10
Residential Condominium/Townhome	230	Dwelling Unit	0.52			0.52	17.21	50%	8.61	5.00	2.60
Mobile Home Park / Manufactured Housing	240	Dwelling Unit	0.59			0.59	17.21	50%	8.61	5.00	2.95
Senior Adult Housing-Detached	251	Dwelling Unit	0.27			0.27	17.21	50%	8.61	5.00	1.35
Senior Adult Housing-Attached	252	Dwelling Unit	0.16			0.16	17.21	50%	8.61	5.00	0.80
Assisted Living	254	Beds	0.22			0.22	17.21	50%	8.61	5.00	1.10
LODGING											
Hotel	310	Room	0.59			0.59	6.43	50%	3.22	3.22	1.90
Motel / Other Lodging Facilities	320	Room	0.47			0.47	6.43	50%	3.22	3.22	1.51
RECREATIONAL						0.00			0.00		
Golf Driving Range	432	Tee	1.25			1.25	6.43	50%	3.22	3.22	4.03
Golf Course	430	Acre	0.30			0.30	6.43	50%	3.22	3.22	0.97
Recreational Community Center	495	1,000 SF GFA	1.45			1.45	6.43	50%	3.22	3.22	4.67
Ice Skating Rink	465	1,000 SF GFA	2.36			2.36	6.43	50%	3.22	3.22	7.60
Miniature Golf Course	431	Hole	0.33			0.33	6.43	50%	3.22	3.22	1.06
Multiplex Movie Theater	445	Screens	13.64			13.64	6.43	50%	3.22	3.22	43.92
Racquet / Tennis Club	491	Court	3.35			3.35	6.43	50%	3.22	3.22	10.79
INSTITUTIONAL											
Church	560	1,000 SF GFA	0.55			0.55	4.20	50%	2.10	2.10	1.16
Day Care Center	565	1,000 SF GFA	12.46	44%	B	6.98	4.20	50%	2.10	2.10	14.66
Primary/Middle School (1-8)	522	Students	0.16			0.16	4.20	50%	2.10	2.10	0.34
High School	530	Students	0.13			0.13	4.20	50%	2.10	2.10	0.27
Junior / Community College	540	Students	0.12			0.12	4.20	50%	2.10	2.10	0.25
University / College	550	Students	0.21			0.21	4.20	50%	2.10	2.10	0.44
MEDICAL						0.00			0.00		
Clinic	630	1,000 SF GFA	5.18			5.18	7.55	50%	3.78	3.78	19.58
Hospital	610	Beds	1.31			1.31	7.55	50%	3.78	3.78	4.95
Nursing Home	620	Beds	0.22			0.22	7.55	50%	3.78	3.78	0.83
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	4.72	30%	B	3.30	7.55	50%	3.78	3.78	12.47
OFFICE											
Corporate Headquarters Building	714	1,000 SF GFA	1.40			1.40	10.92	50%	5.46	5.00	7.00
General Office Building	710	1,000 SF GFA	1.49			1.49	10.92	50%	5.46	5.00	7.45
Medical-Dental Office Building	720	1,000 SF GFA	3.46			3.46	10.92	50%	5.46	5.00	17.30
Single Tenant Office Building	715	1,000 SF GFA	1.73			1.73	10.92	50%	5.46	5.00	8.65
Office Park	750	1,000 SF GFA	1.48			1.48	10.92	50%	5.46	5.00	7.40
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF Occ. GLA	3.38	40%	B	2.03	6.43	50%	3.22	3.22	6.54
Automobile Parts Sales	843	1,000 SF GFA	5.98	43%	A	3.41	6.43	50%	3.22	3.22	10.98
Gasoline/Service Station	944	Vehicle Fueling Position	13.87	42%	A	8.04	1.20	50%	0.60	0.60	4.82
Gasoline/Service Station w/ Conv Market	945	Vehicle Fueling Position	13.38	56%	B	5.89	1.20	50%	0.60	0.60	3.53
Gasoline/Service Station w/ Conv Market and Car Wash	946	Vehicle Fueling Position	13.94	56%	A	6.13	1.20	50%	0.60	0.60	3.68
New Car Sales	841	1,000 SF GFA	2.59	20%	B	2.07	6.43	50%	3.22	3.22	6.67
Quick Lubrication Vehicle Shop	941	Servicing Positions	5.19	40%	B	3.11	6.43	50%	3.22	3.22	10.01
Self-Service Car Wash	947	Stall	5.54	40%	B	3.32	1.20	50%	0.60	0.60	1.99
Tire Store	848	1,000 SF GFA	4.15	28%	A	2.99	6.43	50%	3.22	3.22	9.63
Dining											
Fast Food Restaurant with Drive-Thru Window	934	1,000 SF GFA	33.84	50%	A	16.92	4.79	50%	2.40	2.40	40.61
Fast Food Restaurant without Drive-Thru Window	933	1,000 SF GFA	26.15	50%	B	13.08	4.79	50%	2.40	2.40	31.39
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	11.15	43%	A	6.36	4.79	50%	2.40	2.40	15.26
Quality Restaurant	931	1,000 SF GFA	7.49	44%	A	4.19	4.79	50%	2.40	2.40	10.06
Coffee/Donut Shop with Drive-Thru Window	937	1,000 SF GFA	42.93	70%	A	12.88	4.79	50%	2.40	2.40	30.91
Other Retail											
Free-Standing Discount Store	815	1,000 SF GFA	5.00	30%	C	3.50	6.43	50%	3.22	3.22	11.27
Nursery (Garden Center)	817	1,000 SF GFA	3.80	30%	B	2.66	6.43	50%	3.22	3.22	8.57
Home Improvement Superstore	862	1,000 SF GFA	2.37	48%	A	1.23	6.43	50%	3.22	3.22	3.96
Pharmacy/Drugstore w/o Drive-Thru Window	880	1,000 SF GFA	8.42	53%	A	3.96	6.43	50%	3.22	3.22	12.75
Pharmacy/Drugstore w/ Drive-Thru Window	881	1,000 SF GFA	10.35	49%	A	5.28	6.43	50%	3.22	3.22	17.00
Shopping Center	820	1,000 SF GLA	3.73	34%	A	2.46	6.43	50%	3.22	3.22	7.92
Supermarket	850	1,000 SF GFA	10.50	36%	A	6.72	6.43	50%	3.22	3.22	21.64
Toy/Children's Superstore	864	1,000 SF GFA	4.99	30%	B	3.49	6.43	50%	3.22	3.22	11.24
Department Store	875	1,000 SF GFA	1.78	30%	B	1.25	6.43	50%	3.22	3.22	4.03
Video Rental Store	896	1,000 SF GFA	13.60	50%	B	6.80	6.43	50%	3.22	3.22	21.90
SERVICES											
Walk-In Bank	911	1,000 SF GFA	12.13	40%	B	7.28	3.39	50%	1.70	1.70	12.38
Drive-In Bank	912	Drive-in Lanes	27.41	47%	A	14.53	3.39	50%	1.70	1.70	24.70
Hair Salon	918	1,000 SF GFA	1.45	30%	B	1.02	3.39	50%	1.70	1.70	1.73

Key to Sources of Pass-by Rates:

A: ITE Trip Generation Handbook 2nd Edition (June 2004)

B: Estimated by Kimley-Horn based on ITE rates for similar categories

C: ITE rate adjusted upward by KHA based on logical relationship to other categories

VI. SAMPLE CALCULATIONS

The following section details two (2) examples of maximum assessable roadway impact fee calculations.

Example 1:

- **Development Type - One (1) Unit of Single-Family Housing in Service Area 1**

Roadway Impact Fee Calculation Steps – Example 1	
Step 1	**Determine Development Unit and Vehicle-Miles Per Development Unit**
	From Table 8 [Land Use – Vehicle-mile Equivalency Table] Development Type: 1 Dwelling Unit of Single-Family Detached Housing Number of Development Units: 1 Dwelling Unit Veh-Mi Per Development Unit: 5.05
Step 2	**Determine Maximum Assessable Impact Fee Per Service Unit**
	From Table 7, Line 13 [Maximum Assessable Fee Per Service Unit] Service Area 1: $915
Step 3	**Determine Maximum Assessable Impact Fee**
	Impact Fee = # of Development Units * Veh-Mi Per Dev Unit * Max. Fee Per Service Unit Impact Fee = 1 * 5.05 * $915 Maximum Assessable Impact Fee = $4,620.75

Example 2:

- **Development Type – 125,000 square foot Home Improvement Superstore in Service Area 2**

Roadway Impact Fee Calculation Steps – Example 2	
Step 1	**Determine Development Unit and Vehicle-Miles Per Development Unit**
	From Table 8 [Land Use – Vehicle-mile Equivalency Table] Development Type: 125,000 square feet of Home Improvement Superstore Development Unit: 1,000 square feet of Gross Floor Area Veh-Mi Per Development Unit: 3.96
Step 2	**Determine Maximum Assessable Impact Fee Per Service Unit**
	From Table 7, Line 13[Maximum Assessable Fee Per Service Unit] Service Area 2: $876
Step 3	**Determine Maximum Assessable Impact Fee**
	Impact Fee = # of Development Units * Veh-Mi Per Dev Unit * Max. Fee Per Service Unit Impact Fee = 125 * 3.96 * $876 Maximum Assessable Impact Fee = $433,620.00

VII. CONCLUSION

The City of Lancaster has established a process to implement the assessment and collection of roadway impact fees through the adoption of an impact fee ordinance that is consistent with Chapter 395 of the Texas Local Government Code.

This report establishes the maximum allowable roadway impact fee that could be assessed by the City of Lancaster within three (3) service areas. The maximum assessable roadway impact fees calculated in this report are presented below:

	SERVICE AREA:	1	2	3
13	MAX ASSESSABLE FEE PER SERVICE UNIT ($ PER VEH-MI) (LINE 12 / LINE 8)	$ 915	$ 876	$ 913

This document serves as a guide to the assessment of roadway impact fees pertaining to future development and the City's need for roadway improvements to accommodate that growth. Following the public hearing process, the City Council may establish an amount to be assessed (if any) up to the maximum established within this report and update the Roadway Impact Fee Ordinance accordingly.

In conclusion, it is our opinion that the data and methodology used in this study are appropriate and consistent with Chapter 395 of the Texas Local Government Code. Furthermore, the Land Use Assumptions and the proposed Roadway Improvements Plan are appropriately incorporated into the process.

APPENDICES

A. Opinion of Probable Cost Worksheets

B. TIFIP Service Units of Supply

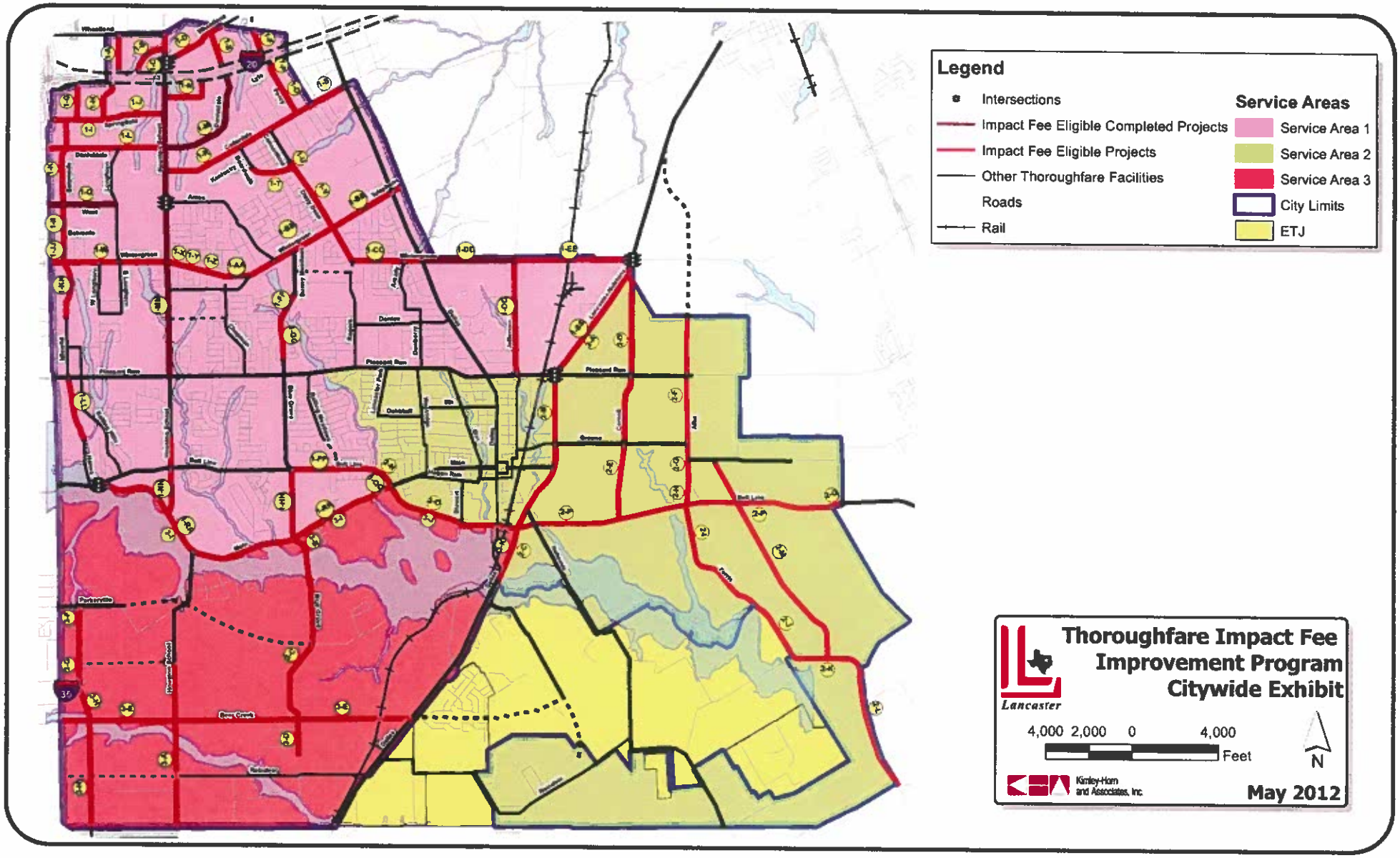
C. Existing Roadway Facilities Inventory

D. Land Use Assumptions

Kimley-Horn and Associates, Inc.

Lancaster

Appendix A – Opinion of Probable Cost Worksheets


Legend
Intersections
Impact Fee Eligible Completed Projects
Impact Fee Eligible Projects
Other Thoroughfare Facilities
Roads
Rail
Service Areas
Service Area 1
Service Area 2
Service Area 3
City Limits
ETJ
Lancaster
Thoroughfare Impact Fee Improvement Program Citywide Exhibit
4,000 2,000 0 4,000
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Kimley-Horn and Associates, Inc.
May 2012

City of Lancaster - 2012 Roadway Impact Fee Update

Summary of Conceptual Level Project Cost Projections

Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area 1

#	Class	Project	Limits	Project Cost
1-A	C2U	Proposed Collector "A"	Wheatland Rd. to IH-20	$ 1,099,000
1-B	C2U	Proposed Collector "B"	University Hills Blvd. to IH-20	$ 1,447,000
1-C	P6D	University Hills Blvd. (1)	Wheatland Rd. to IH-20 WBFR	$ 1,020,000
1-D	C2U	Wheatland Rd.	University Hills Blvd. to N. City Limits	$ 1,983,000
1-E	C2U	Proposed Collector "C"	Wheatland Rd. to IH-20	$ 984,000
1-F	C2U	Proposed Collector "D"	N. City Limits to IH-20	$ 755,000
1-G	C2U	Proposed Collector "E"	IH-20 to Springfield Ave.	$ 1,187,000
1-H	C2U	Proposed Collector "F"	IH-20 to Springfield Ave.	$ 1,186,000
1-I	C2U	Springfield St. (1)	IH-35E to Proposed Collector "F" (1-H)	$ 1,459,000
1-J	C2U	Springfield St. (2)	Proposed Collector "F" (1-H) to Houston School Rd.	$ 2,098,000
1-K	C2U	Belomeade Ave./Cumberlend St. (1)	Springfield St. to West Dr.	$ 2,471,000
1-L	S4D	Danieldale Rd. (1)	IH-35E to Houston School Rd.	$ 3,600,000
1-M	S4D	Danieldele Rd. (2)	Houston School Rd. to IH-20	$ 1,500,000
1-N	C2U	Proposed Collector "G"	Houston School Rd. to IH-20	$ 1,943,000
1-O	C2U	Percy St. (1)	Cedardale Rd. to Lyle SL	$ 1,270,000
1-P	C2U	Percy St. (2)	Lyle St. to IH-20	$ 371,000
1-Q	C2U	West Dr.	IH-35E to Longhorn Dr.	$ 2,523,027
1-R	S4D	Cedardale Rd. (1)	Houston School Rd. to E. City Limits	$ 6,034,000
1-S	S4D	Cedardale Rd. (2)	E. City Limits to Dallas Ave.	$ 1,352,000
1-T	C2U	Proposed Collector "H"	150' S. of Kantucky Ave. to Dizzy Dean Dr.	$ 1,355,000
1-U	C2U	Proposed Collector "I" (Wintergreen Extensic	Pennsylvania Ave. to Dizzy Dean Dr.	$ 239,000
1-V	S4D(1/2)	Dizzy Dean Dr. (Wintergreen Extension)	Proposed Collector "I"(1-U) to Telephone Rd.	$ 1,374,000
1-W	M4D	Wintergreen Rd. (1)	IH-35E to Houston School Rd.	$ 4,702,536
1-X	M4D(1/2)	Wintergreen Rd. (2)	Houston School Rd. to 830' E. of Houston School Rd.	$ 345,000
1-Y	M4D	Wingergreen Rd. (3)	830' E. of Houston School Rd. to 1,385' E. of Houston School Rd.	$ 458,000
1-Z	M4D(1/2)	Wintergreen Rd. (4)	1,385' E. of Houston School Rd. to 2,770' E. of Houston School Rd.	$ 571,000
1-AA	M4D	Wingergreen Rd. (5)	2,770' E. of Houston School Rd. to Baskin Dr.	$ 974,000
1-BB	M4D	Wintergreen Rd./Telephone Rd.	Baskin Dr. to E. City Limits	$ 8,334,000
1-CC	M4D	Wintergreen Rd. (6)	Telephone Rd. to Dallas Ave.	$ 4,298,000
1-DD	M4D	Wintergreen Rd. (7)	Dallas Ave. to Jefferrson SL	$ 2,404,934
1-EE	M4D	Wintergreen Rd. (8)	Jefferson St. to Lancaster-Hutchins Rd.	$ 5,061,000
1-FF	M4D	Blue Grove Rd. (1)	Sunny Meadow Rd. to Kings Cross Dr.	$ 1,803,000
1-GG	M4D	Blue Grove Rd. (2)	Kings Cross to Dr. Brook Meadow Cir.	$ 1,805,000
1-HH	M4D	Blue Grove Rd. (3)	Belt Line Rd. to Mein St.	$ 2,553,000
1-II	C2U	Belomeade Ave. (2)	West Dr. to Belverde Dr.	$ 1,003,000
1-JJ	C2U	Balomeade Ave. (3)	Belverde Dr. to Wintergreen Rd.	$ 679,000
1-KK	C2U	Proposed Collector "J"	Wintergreen Rd. to Idlewild Ln.	$ 1,774,000
1-LL	C2U	Proposed Collector "K"	Pleasant Run Rd. to Hanna Ln.	$ 2,151,000
1-MM	M4D	Houston School Rd. (2)	IH-20 EBFR to Pleasant Run Road	$ 7,480,000
1-NN	M4D	Houston School Rd. (3)	1,500' N. of Belt Line Rd. to Main St.	$ 2,909,000
1-OO	S4D	Jefferson St.	Wintergreen Rd. to Pleasant Run Rd.	$ 4,525,000
1-PP	P6D	Belt Line Rd. (1)	Blua Grove Rd. to 1,005' W. of Main SL	$ 4,334,000
1-QQ, 2-N	P6D	Belt Line Rd. (2)	1,005' W. of Main SL to Main St.	$ 1,107,000
1-RR, 3-I	C2U	Main St. (1)	Belt Line Rd. to Belt Line Rd.	$ 9,972,000
1-SS, 2-A	P6D	Lancaster Hutchins Rd. (1)	Wintergreen Rd. to Pleasant Run Rd.	$ 8,902,000

Signal Installation

I-1		Signal Installation	Houston School Rd. & Wheetlend Rd.	$ 140,000
I-2		Signal Installation	Houston School Rd. & Ames Rd.	$ 140,000
I-3		Signal Installation	Belt Line Rd. & Chesier Rd. / Main St.	$ 140,000
I-4		Signal Installetion	Lancaster-Hutchins Rd. & Wintergreen Rd.	$ 140,000
I-5		Signal Installation	Lancaster-Hutchins Rd. & Pleasant Run Rd.	$ 140,000
			TOTAL	**$ 111,875,497**

*Total may be higher than presented in Tables 2.A, 2.B and 2.C (Thoroughfare Impact Fee Improvement Program) because the cost of some projects are shared between service areas.

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-A
Name:	Proposed Collector "A"	**This project consists of the construction of a new two-lane undivided collector facility.**		
Limits:	Wheatland Rd. to IH-20			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	1,685			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	4,025	cy	$ 8.00	$ 32,202
201	8" Lime Stabilization (with Lime @ 32#/sy)	7,863	sy	$ 3.00	$ 23,590
301	8" Concrete Pavement w/ 6" Curb	7,489	sy	$ 38.00	$ 284,578
401	4" Topsoil	3,744	sy	$ 4.00	$ 14,978
501	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
601	5' Concrete Sidewalk	16,850	sf	$ 4.00	$ 67,400
				Paving Construction Cost Subtotal:	**$ 427,748**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 25,665
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 12,832
√	Roadway Drainage	Standard Internal System	30%	$ 128,324
√	Illumination		6%	$ 25,665
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 25,665
√	Sewer	Minor Adjustments	4%	$ 17,110
√	Establish Turf / Erosion Control		3%	$ 12,832
√	Basic Landscaping		2%	$ 8,555
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 256,649**
			Paving and Allowance Subtotal:	**$ 684,396**
			Construction Contingency: 10%	$ 68,440
			Construction Cost TOTAL:	**$ 753,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 753,000**
Engineering/Survey/Testing:		20%	$ 150,600
Mobilization		6%	$ 45,180
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 150,600
		Impact Fee Project Cost TOTAL:	**$ 1,099,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-B
Name:	Proposed Collector "B"	**This project consists of the construction of a new two-lane undivided collector facility.**		
Limits:	University Hills Blvd. to IH-20			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	1,600			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	3,822	cy	$ 8.00	$ 30,578
201	8" Lime Stabilization (with Lime @ 32#/sy)	7,467	sy	$ 3.00	$ 22,400
301	8" Concrete Pavement w/ 6" Curb	7,111	sy	$ 38.00	$ 270,222
401	4" Topsoil	3,556	sy	$ 4.00	$ 14,222
501	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
601	5' Concrete Sidewalk	16,000	sf	$ 4.00	$ 64,000
				Paving Construction Cost Subtotal:	**$ 406,422**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 24,385
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 12,193
√	Roadway Drainage	Standard Internal System	30%	$ 121,927
√	Illumination		6%	$ 24,385
√	Special Drainage Structures	Minor Stream Crossing	0%	$ 250,000
√	Water	Minor Adjustments	6%	$ 24,385
√	Sewer	Minor Adjustments	4%	$ 16,257
√	Establish Turf / Erosion Control		3%	$ 12,193
√	Basic Landscaping		2%	$ 8,128
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 493,853**
			Paving and Allowance Subtotal:	**$ 900,276**
			Construction Contingency: 10%	$ 90,028
			Construction Cost TOTAL:	**$ 991,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 991,000**
Engineering/Survey/Testing:		20%	$ 198,200
Mobilization		6%	$ 59,460
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 198,200
		Impact Fee Project Cost TOTAL:	**$ 1,447,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	1-C
Name:	University Hills Blvd. (1)	**This project consists of the reconstruction of an existing two-lane facility to a six-lane divided arterial facility. The City contributed $8.5 million towards the construction of Houston School Road from Wheatland Road to Pleasant Run Road (see Project 1-MM). The City is anticipated to contribute 12% or $1,020,000 to the construction of this section**		
Limits:	Wheatland Rd. to IH-20 WBFR			
Impact Fee Class:	P6D			
Ultimate Class:	Major Arterial			
Length (lf):	1,865			
Service Area(s):	1			

Impact Fee Project Cost Summary			
Item Description	**Notes:**	**Allowance**	**Item Cost**
City Contribution to Construction Cost:	$ 8,500,000	12%	$ **1,020,000**
Engineering/Survey/Testing			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included		
	Impact Fee Project Cost TOTAL:		$ **1,020,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-D
Name:	Wheatland Rd.	**This project consists of the reconstruction of an existing two-lane facility to a two-lane undivided collector facility.**		
Limits:	University Hills Blvd. to N. City Limits			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	3,170			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	7,573	cy	$ 8.00	$ 60,582
201	8" Lime Stabilization (with Lime @ 32#/sy)	14,793	sy	$ 3.00	$ 44,380
301	8" Concrete Pavement w/ 6" Curb	14,089	sy	$ 38.00	$ 535,378
401	4" Topsoil	7,044	sy	$ 4.00	$ 28,178
501	Concrete Driveway Approach	3	ea	$ 2,500.00	$ 7,500
601	5' Concrete Sidewalk	31,700	sf	$ 4.00	$ 126,800
				Paving Construction Cost Subtotal:	**$ 802,818**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 48,169
√	Traffic Control	Construction Phase Traffic Control	5%	$ 40,141
√	Pavement Markings/Markers		3%	$ 24,085
√	Roadway Drainage	Standard Internal System	30%	$ 240,845
√	Illumination		6%	$ 48,169
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 48,169
√	Sewer	Minor Adjustments	4%	$ 32,113
√	Establish Turf / Erosion Control		3%	$ 24,085
√	Basic Landscaping		2%	$ 16,056
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 521,832**
			Paving and Allowance Subtotal:	**$ 1,324,649**
			Construction Contingency: 10%	$ 132,465
			Construction Cost TOTAL:	**$ 1,458,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,458,000**
Engineering/Survey/Testing:		20%	$ 291,600
Mobilization		6%	$ 87,480
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 145,800
		Impact Fee Project Cost TOTAL:	**$ 1,983,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	1-E
Name:	Proposed Collector "C"	**This project consists of the construction of a new two-lane undivided collector facility.**		
Limits:	Wheatland Rd. to IH-20			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	1,505			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	3,595	cy	$ 8.00	$ 28,762
201	8" Lime Stabilization (with Lime @ 32#/sy)	7,023	sy	$ 3.00	$ 21,070
301	8" Concrete Pavement w/ 6" Curb	6,689	sy	$ 38.00	$ 254,178
401	4" Topsoil	3,344	sy	$ 4.00	$ 13,378
501	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
601	5' Concrete Sidewalk	15,050	sf	$ 4.00	$ 60,200
				Paving Construction Cost Subtotal:	**$ 382,588**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 22,955
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 11,478
√	Roadway Drainage	Standard Internal System	30%	$ 114,776
√	Illumination		6%	$ 22,955
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 22,955
√	Sewer	Minor Adjustments	4%	$ 15,304
√	Establish Turf / Erosion Control		3%	$ 11,478
√	Basic Landscaping		2%	$ 7,652
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 229,553**
			Paving and Allowance Subtotal:	**$ 612,140**
			Construction Contingency: 10%	$ 61,214
			Construction Cost TOTAL:	**$ 674,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 674,000**
Engineering/Survey/Testing:		20%	$ 134,800
Mobilization		6%	$ 40,440
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 134,800
		Impact Fee Project Cost TOTAL:	**$ 984,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No. 1-F
Name:	Proposed Collector "D"	**This project consists of the construction of a new two-lane undivided collector facility.**	
Limits:	N. City Limits to IH-20		
Impact Fee Class:	C2U		
Ultimate Class:	Collector		
Length (lf):	1,160		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	2,771	cy	$ 8.00	$ 22,169
201	8" Lime Stabilization (with Lime @ 32#/sy)	5,413	sy	$ 3.00	$ 16,240
301	8" Concrete Pavement w/ 6" Curb	5,156	sy	$ 38.00	$ 195,911
401	4" Topsoil	2,578	sy	$ 4.00	$ 10,311
501	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
601	5' Concrete Sidewalk	11,600	sf	$ 4.00	$ 46,400
				Paving Construction Cost Subtotal:	**$ 293,531**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 17,612
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 8,806
√	Roadway Drainage	Standard Internal System	30%	$ 88,059
√	Illumination		6%	$ 17,612
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 17,612
√	Sewer	Minor Adjustments	4%	$ 11,741
√	Establish Turf / Erosion Control		3%	$ 8,806
√	Basic Landscaping		2%	$ 5,871
	Other:		$0	$ -
****Allowances based on % of Paving Construction Cost Subtotal**			**Allowance Subtotal:**	**$ 176,119**
			Paving and Allowance Subtotal:	**$ 469,650**
			Construction Contingency: 10%	$ 46,965
			Construction Cost TOTAL:	**$ 517,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 517,000**
Engineering/Survey/Testing:		20%	$ 103,400
Mobilization		6%	$ 31,020
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 103,400
		Impact Fee Project Cost TOTAL:	**$ 755,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-G
Name:	Proposed Collector "E"	**This project consists of the construction of a new two-lane undivided collector facility.**		
Limits:	IH-20 to Springfield Ave.			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	1,820			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	4,348	cy	$ 8.00	$ 34,782
201	8" Lime Stabilization (with Lime @ 32#/sy)	8,493	sy	$ 3.00	$ 25,480
301	8" Concrete Pavement w/ 6" Curb	8,089	sy	$ 38.00	$ 307,378
401	4" Topsoil	4,044	sy	$ 4.00	$ 16,178
501	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
601	5' Concrete Sidewalk	18,200	sf	$ 4.00	$ 72,800
				Paving Construction Cost Subtotal:	**$ 461,618**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 27,697
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 13,849
√	Roadway Drainage	Standard Internal System	30%	$ 138,485
√	Illumination		6%	$ 27,697
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 27,697
√	Sewer	Minor Adjustments	4%	$ 18,465
√	Establish Turf / Erosion Control		3%	$ 13,849
√	Basic Landscaping		2%	$ 9,232
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 276,971**
			Paving and Allowance Subtotal:	**$ 738,588**
			Construction Contingency: 10%	$ 73,859
			Construction Cost TOTAL:	**$ 813,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 813,000**
Engineering/Survey/Testing:		20%	$ 162,600
Mobilization		6%	$ 48,780
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 162,600
		Impact Fee Project Cost TOTAL:	**$ 1,187,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-H
Name:	Proposed Collector "F"	**This project consists of the construction of a new two-lane undivided collector facility.**		
Limits:	IH-20 to Springfield Ave.			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	1,790			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	4,276	cy	$ 8.00	$ 34,209
201	8" Lime Stabilization (with Lime @ 32#/sy)	8,353	sy	$ 3.00	$ 25,060
301	8" Concrete Pavement w/ 6" Curb	7,956	sy	$ 38.00	$ 302,311
401	4" Topsoil	3,978	sy	$ 4.00	$ 15,911
501	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
601	5' Concrete Sidewalk	17,900	sf	$ 4.00	$ 71,600
				Paving Construction Cost Subtotal:	**$ 454,091**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 27,245
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 13,623
√	Roadway Drainage	Standard Internal System	30%	$ 136,227
√	Illumination		6%	$ 27,245
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 27,245
√	Sewer	Minor Adjustments	4%	$ 18,164
√	Establish Turf / Erosion Control		3%	$ 13,623
√	Basic Landscaping		2%	$ 9,082
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 272,455**
			Paving and Allowance Subtotal:	**$ 726,546**
			Construction Contingency: 10%	$ 72,655
			Construction Cost TOTAL:	**$ 800,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 800,000**
Engineering/Survey/Testing:		20%	$ 160,000
Mobilization		6%	$ 48,000
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 160,000
		Impact Fee Project Cost TOTAL:	**$ 1,168,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	1-I
Name:	Springfield St. (1)	**This project consists of the reconstruction of an existing two-lane facility to a two-lane undivided collector facility.**		
Limits:	IH-35E to Proposed Collector "F" (1-H)			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	2,335			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	5,578	cy	$ 8.00	$ 44,624
201	8" Lime Stabilization (with Lime @ 32#/sy)	10,897	sy	$ 3.00	$ 32,690
301	8" Concrete Pavement w/ 6" Curb	10,378	sy	$ 38.00	$ 394,356
401	4" Topsoil	5,189	sy	$ 4.00	$ 20,756
501	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
601	5' Concrete Sidewalk	23,350	sf	$ 4.00	$ 93,400
				Paving Construction Cost Subtotal:	**$ 590,826**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 35,450
√	Traffic Control	Construction Phase Traffic Control	5%	$ 29,541
√	Pavement Markings/Markers		3%	$ 17,725
√	Roadway Drainage	Standard Internal System	30%	$ 177,248
√	Illumination		6%	$ 35,450
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 35,450
√	Sewer	Minor Adjustments	4%	$ 23,633
√	Establish Turf / Erosion Control		3%	$ 17,725
√	Basic Landscaping		2%	$ 11,817
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 384,037**
			Paving and Allowance Subtotal:	**$ 974,862**
			Construction Contingency: 10%	$ 97,486
			Construction Cost TOTAL:	**$ 1,073,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,073,000**
Engineering/Survey/Testing:		20%	$ 214,600
Mobilization		6%	$ 64,380
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 107,300
		Impact Fee Project Cost TOTAL:	**$ 1,459,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:	Description:	Project No.	1-J
Name:	Springfield St. (2)	**This project consists of the construction of a new two-lane undivided collector facility.**	
Limits:	Proposed Collector "F" (1-H) to Houston School Rd		
Impact Fee Class:	C2U		
Ultimate Class:	Collector		
Length (lf):	2,600		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	6,211	cy	$ 8.00	$ 49,689
201	8" Lime Stabilization (with Lime @ 32#/sy)	12,133	sy	$ 3.00	$ 36,400
301	8" Concrete Pavement w/ 6" Curb	11,556	sy	$ 38.00	$ 439,111
401	4" Topsoil	5,778	sy	$ 4.00	$ 23,111
501	Concrete Driveway Approach	3	ea	$ 2,500.00	$ 7,500
601	5' Concrete Sidewalk	26,000	sf	$ 4.00	$ 104,000
				Paving Construction Cost Subtotal:	**$ 659,811**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 39,589
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 19,794
√	Roadway Drainage	Standard Internal System	30%	$ 197,943
√	Illumination		6%	$ 39,589
√	Special Drainage Structures	Minor Streem Crossing	0%	$ 250,000
√	Water	Minor Adjustments	6%	$ 39,589
√	Sewer	Minor Adjustments	4%	$ 26,392
√	Establish Turf / Erosion Control		3%	$ 19,794
√	Basic Landscaping		2%	$ 13,196
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 645,887**
			Paving and Allowance Subtotal:	**$ 1,305,698**
			Construction Contingency: 10%	$ 130,570
			Construction Cost TOTAL:	**$ 1,437,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,437,000**
Engineering/Survey/Testing:		20%	$ 287,400
Mobilization		6%	$ 86,220
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 287,400
		Impact Fee Project Cost TOTAL:	**$ 2,098,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-K
Name:	Balomeade Ave./Cumberland St. (1)	**This project consists of the reconstruction of an existing two-lane facility to a two-lane undivided collector facility. This project will include Balomeade Ave. to align with Cumberland Street at Danieldale Rd.**		
Limits:	Springfield St. to West Dr.			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	3,950			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	9,436	cy	$ 8.00	$ 75,489
201	8" Lime Stabilization (with Lime @ 32#/sy)	18,433	sy	$ 3.00	$ 55,300
301	8" Concrete Pavement w/ 6" Curb	17,556	sy	$ 38.00	$ 667,111
401	4" Topsoil	8,778	sy	$ 4.00	$ 35,111
501	Concrete Driveway Approach	4	ea	$ 2,500.00	$ 10,000
601	5' Concrete Sidewalk	39,500	sf	$ 4.00	$ 158,000
				Paving Construction Cost Subtotal:	**$ 1,001,011**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 60,061
√	Traffic Control	Construction Phase Traffic Control	5%	$ 50,051
√	Pavement Markings/Markers		3%	$ 30,030
√	Roadway Drainage	Standard Internal System	30%	$ 300,303
√	Illumination		6%	$ 60,061
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 60,061
√	Sewer	Minor Adjustments	4%	$ 40,040
√	Establish Turf / Erosion Control		3%	$ 30,030
√	Basic Landscaping		2%	$ 20,020
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 650,657**
			Paving and Allowance Subtotal:	**$ 1,651,668**
			Construction Contingency: 10%	$ 165,167
			Construction Cost TOTAL:	**$ 1,817,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,817,000**
Engineering/Survey/Testing:		20%	$ 363,400
Mobilization		6%	$ 109,020
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 181,700
		Impact Fee Project Cost TOTAL:	**$ 2,471,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	1-L
Name:	Danieldale Rd. (1)	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided minor arterial facility. This project is currently under design and is estimated to have a total cost of $3,600,000.**		
Limits:	IH-35E to Houston School Rd.			
Impact Fee Class:	S4D			
Ultimate Class:	Minor Arterial			
Length (lf):	5,415			
Service Area(s):	1			

Impact Fee Project Cost Summary			
Item Description	**Notes:**	**Allowance**	**Item Cost**
Construction:			
Engineering/Survey/Testing:			$ -
Mobilization			$ -
Previous City contribution			
Other			
ROW/Easement Acquisition:			$ -
		Impact Fee Project Cost TOTAL:	**$ 3,600,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-M
Name:	Danieldale Rd. (2)	**This completed project consisted of the construction of a four-lane undivided minor arterial facility. The City of Lancaster contributed $1,500,000 to the construction of this facility.**		
Limits:	Houston School Rd. to IH-20			
Impact Fee Class:	S4D			
Ultimate Class:	Minor Arterial			
Length (lf):	5,360			
Service Area(s):	1			

Impact Fee Project Cost Summary			
Item Description	**Notes:**	**Allowance**	**Item Cost**
City Contribution to Construction Cost:		-	$ 1,500,000
Engineering/Survey/Testing			
Other			
ROW/Easement Acquisition:			
	Impact Fee Project Cost TOTAL:		**$ 1,500,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	1-N
Name:	Proposed Collector "G"	**This project consists of the construction of a new two-lane undivided collector facility.**		
Limits:	Houston School Rd. to IH-20			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	2,370			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	5,662	cy	$ 8.00	$ 45,293
201	8" Lime Stabilization (with Lime @ 32#/sy)	11,060	sy	$ 3.00	$ 33,180
301	8" Concrete Pavement w/ 6" Curb	10,533	sy	$ 38.00	$ 400,267
401	4" Topsoil	5,267	sy	$ 4.00	$ 21,067
501	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
601	5' Concrete Sidewalk	23,700	sf	$ 4.00	$ 94,800
				Paving Construction Cost Subtotal:	**$ 599,607**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 35,976
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 17,988
√	Roadway Drainage	Standard Internal System	30%	$ 179,882
√	Illumination		6%	$ 35,976
√	Special Drainage Structures	Minor Stream Crossing	0%	$ 250,000
√	Water	Minor Adjustments	6%	$ 35,976
√	Sewer	Minor Adjustments	4%	$ 23,984
√	Establish Turf / Erosion Control		3%	$ 17,988
√	Basic Landscaping		2%	$ 11,992
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 609,764**
			Paving and Allowance Subtotal:	**$ 1,209,371**
			Construction Contingency: 10%	$ 120,937
			Construction Cost TOTAL:	**$ 1,331,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,331,000**
Engineering/Survey/Testing:		20%	$ 266,200
Mobilization		6%	$ 79,860
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 266,200
		Impact Fee Project Cost TOTAL:	**$ 1,943,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	1-O
Name:	Percy St. (1)	**This project consists of the reconstruction of an existing two-lane facility to a two-lane undivided collector facility.**		
Limits:	Cedardale Rd. to Lyle St.			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	2,030			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	4,849	cy	$ 8.00	$ 38,796
201	8" Lime Stabilization (with Lime @ 32#/sy)	9,473	sy	$ 3.00	$ 28,420
301	8" Concrete Pavement w/ 6" Curb	9,022	sy	$ 38.00	$ 342,844
401	4" Topsoil	4,511	sy	$ 4.00	$ 18,044
501	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
601	5' Concrete Sidewalk	20,300	sf	$ 4.00	$ 81,200
				Paving Construction Cost Subtotal:	**$ 514,304**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 30,858
√	Traffic Control	Construction Phase Traffic Control	5%	$ 25,715
√	Pavement Markings/Markers		3%	$ 15,429
√	Roadway Drainage	Standard Internal System	30%	$ 154,291
√	Illumination		6%	$ 30,858
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 30,858
√	Sewer	Minor Adjustments	4%	$ 20,572
√	Establish Turf / Erosion Control		3%	$ 15,429
√	Basic Landscaping		2%	$ 10,286
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 334,298**
			Paving and Allowance Subtotal:	**$ 848,602**
			Construction Contingency: 10%	$ 84,860
			Construction Cost TOTAL:	**$ 934,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 934,000**
Engineering/Survey/Testing:		20%	$ 186,800
Mobilization		6%	$ 56,040
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 93,400
		Impact Fee Project Cost TOTAL:	**$ 1,270,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No. 1-P
Name:	Percy St. (2)	**This project consists of the construction of a new two-lane undivided collector facility.**	
Limits:	Lyle St. to IH-20		
Impact Fee Class:	C2U		
Ultimate Class:	Collector		
Length (lf):	565		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	1,350	cy	$ 8.00	$ 10,798
201	8" Lime Stabilization (with Lime @ 32#/sy)	2,637	sy	$ 3.00	$ 7,910
301	8" Concrete Pavement w/ 6" Curb	2,511	sy	$ 38.00	$ 95,422
401	4" Topsoil	1,256	sy	$ 4.00	$ 5,022
501	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
601	5' Concrete Sidewalk	5,650	sf	$ 4.00	$ 22,600
				Paving Construction Cost Subtotal:	**$ 144,252**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 8,655
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 4,328
√	Roadway Drainage	Standard Internal System	30%	$ 43,276
√	Illumination		6%	$ 8,655
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 8,655
√	Sewer	Minor Adjustments	4%	$ 5,770
√	Establish Turf / Erosion Control		3%	$ 4,328
√	Basic Landscaping		2%	$ 2,885
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 86,551**
			Paving and Allowance Subtotal:	**$ 230,804**
			Construction Contingency: 10%	$ 23,080
			Construction Cost TOTAL:	**$ 254,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 254,000**
Engineering/Survey/Testing:		20%	$ 50,800
Mobilization		6%	$ 15,240
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 50,800
		Impact Fee Project Cost TOTAL:	**$ 371,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-Q
Name:	West Dr.	**This completed project consisted of the construction of a two-lane undivided collector facility. The City of Lancaster contributed $2,523,027 to the construction of this facility.**		
Limits:	IH-35E to Longhorn Dr.			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	3,065			
Service Area(s):	1			

Impact Fee Project Cost Summary			
Item Description	**Notes:**	**Allowance**	**Item Cost**
City Contribution to Construction Cost:		-	$ 2,523,027
Engineering/Survey/Testing			
Other			
ROW/Easement Acquisition:			
	Impact Fee Project Cost TOTAL:		**$ 2,523,027**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	1-R
Name:	Cedardale Rd. (1)	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided minor arterial facility.**		
Limits:	Houston School Rd. to E. City Limits			
Impact Fee Class:	S4D			
Ultimate Class:	Minor Arterial			
Length (lf):	7,555			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	24,344	cy	$ 8.00	$ 194,751
202	8" Lime Stabilization (with Lime @ 32#/sy)	47,009	sy	$ 3.00	$ 141,027
302	8" Concrete Pavement w/ 6" Curb	43,651	sy	$ 38.00	$ 1,658,742
402	4" Topsoil	31,899	sy	$ 4.00	$ 127,596
502	Concrete Driveway Approach	8	ea	$ 2,500.00	$ 20,000
602	5' Concrete Sidewalk	75,550	sf	$ 4.00	$ 302,200
				Paving Construction Cost Subtotal:	**$ 2,444,316**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 146,659
√	Traffic Control	Construction Phase Traffic Control	5%	$ 122,216
√	Pavement Markings/Markers		3%	$ 73,329
√	Roadway Drainage	Standard Internal System	30%	$ 733,295
√	Illumination		6%	$ 146,659
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 146,659
√	Sewer	Minor Adjustments	4%	$ 97,773
√	Establish Turf / Erosion Control		3%	$ 73,329
√	Basic Landscaping		2%	$ 48,886
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,588,805**
			Paving and Allowance Subtotal:	**$ 4,033,121**
			Construction Contingency: 10%	$ 403,312
			Construction Cost TOTAL:	**$ 4,437,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 4,437,000**
Engineering/Survey/Testing:		20%	$ 887,400
Mobilization		6%	$ 266,220
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 443,700
		Impact Fee Project Cost TOTAL:	**$ 6,034,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-S
Name:	Cedardale Rd. (2)	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided minor arterial facility. The boundary between Lancaster and the City of Dallas is on the centerline of Cedardale Rd.**		
Limits:	E. City Limits to Dallas Ave.			
Impact Fee Class:	S4D			
Ultimate Class:	Minor Arterial			
Length (lf):	1,690			
Service Area(s):	1 (Half)			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	5,446	cy	$ 8.00	$ 43,564
202	8" Lime Stabilization (with Lime @ 32#/sy)	10,516	sy	$ 3.00	$ 31,547
302	8" Concrete Pavement w/ 6" Curb	9,764	sy	$ 38.00	$ 371,049
402	4" Topsoil	7,136	sy	$ 4.00	$ 28,542
502	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
602	5' Concrete Sidewalk	16,900	sf	$ 4.00	$ 67,600
				Paving Construction Cost Subtotal:	**$ 547,302**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 32,838
√	Traffic Control	Construction Phase Traffic Control	5%	$ 27,365
√	Pavement Markings/Markers		3%	$ 16,419
√	Roadway Drainage	Standard Internal System	30%	$ 164,191
√	Illumination		6%	$ 32,838
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 32,838
√	Sewer	Minor Adjustments	4%	$ 21,892
√	Establish Turf / Erosion Control		3%	$ 16,419
√	Basic Landscaping		2%	$ 10,946
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 355,746**
			Paving and Allowance Subtotal:	**$ 903,049**
			Construction Contingency: 10%	$ 90,305
			Construction Cost TOTAL:	**$ 994,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 994,000**
Engineering/Survey/Testing:		20%	$ 198,800
Mobilization		6%	$ 59,640
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 99,400
		Impact Fee Project Cost TOTAL:	**$ 1,352,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:	Description:	Project No.	1-T
Name:	Proposed Collector "H"	**This project consists of the construction of a new two-lane undivided collector facility.**	
Limits:	150' S. of Kentucky Ave. to Dizzy Dean Dr.		
Impact Fee Class:	C2U		
Ultimate Class:	Collector		
Length (lf):	2,080		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	4,969	cy	$ 8.00	$ 39,751
201	8" Lime Stabilization (with Lime @ 32#/sy)	9,707	sy	$ 3.00	$ 29,120
301	8" Concrete Pavement w/ 6" Curb	9,244	sy	$ 38.00	$ 351,289
401	4" Topsoil	4,622	sy	$ 4.00	$ 18,489
501	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
601	5' Concrete Sidewalk	20,800	sf	$ 4.00	$ 83,200
				Paving Construction Cost Subtotal:	**$ 526,849**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 31,611
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 15,805
√	Roadway Drainage	Standard Internal System	30%	$ 158,055
√	Illumination		6%	$ 31,611
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 31,611
√	Sewer	Minor Adjustments	4%	$ 21,074
√	Establish Turf / Erosion Control		3%	$ 15,805
√	Basic Landscaping		2%	$ 10,537
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 316,109**
			Paving and Allowance Subtotal:	**$ 842,958**
			Construction Contingency: 10%	$ 84,296
			Construction Cost TOTAL:	**$ 928,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 928,000**
Engineering/Survey/Testing:		20%	$ 185,600
Mobilization		6%	$ 55,680
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 185,600
		Impact Fee Project Cost TOTAL:	**$ 1,355,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:	Description:	Project No.	1-U
Name:	Proposed Collector "I" (Wintergreen Extension)	**This project consists of the construction of a new two-lane undivided collector facility.**	
Limits:	Pennsylvania Ave. to Dizzy Dean Dr.		
Impact Fee Class:	C2U		
Ultimate Class:	Collector		
Length (lf):	370		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	884	cy	$ 8.00	$ 7,071
201	8" Lime Stabilization (with Lime @ 32#/sy)	1,727	sy	$ 3.00	$ 5,180
301	8" Concrete Pavement w/ 6" Curb	1,644	sy	$ 38.00	$ 62,489
401	4" Topsoil	822	sy	$ 4.00	$ 3,289
501	Concrete Driveway Approach	0	ea	$ 2,500.00	$ -
601	5' Concrete Sidewalk	3,700	sf	$ 4.00	$ 14,800
				Paving Construction Cost Subtotal:	**$ 92,829**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 5,570
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 2,785
√	Roadway Drainage	Standard Internal System	30%	$ 27,849
√	Illumination		6%	$ 5,570
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 5,570
√	Sewer	Minor Adjustments	4%	$ 3,713
√	Establish Turf / Erosion Control		3%	$ 2,785
√	Basic Landscaping		2%	$ 1,857
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 55,697**

Paving and Allowance Subtotal:		**$ 148,526**
Construction Contingency:	10%	$ 14,853
Construction Cost TOTAL:		**$ 164,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 164,000**
Engineering/Survey/Testing:		20%	$ 32,800
Mobilization		6%	$ 9,840
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 32,800
		Impact Fee Project Cost TOTAL:	**$ 239,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:	Description:	Project No.	1-V
Name:	Dizzy Dean Dr. (Wintergreen Extension)	**This project consists of the widening of an existing two-lane concrete facility ino a four-lane divided minor arterial facility. The existing two-lanes were constructed by development and are not included in the cost.**	
Limits:	Proposed Collector "I"(1-U) to Telephone Rd.		
Impact Fee Class:	S4D(1/2)		
Ultimate Class:	Minor Arterial		
Length (lf):	3,345		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	5,389	cy	$ 8.00	$ 43,113
205	8" Lime Stabilization (with Lime @ 32#/sy)	10,407	sy	$ 3.00	$ 31,220
305	8" Concrete Pavement w/ 6" Curb	9,663	sy	$ 38.00	$ 367,207
405	4" Topsoil	10,035	sy	$ 4.00	$ 40,140
505	Concrete Driveway Approach	3	ea	$ 2,500.00	$ 7,500
605	5' Concrete Sidewalk	16,725	sf	$ 4.00	$ 66,900
				Paving Construction Cost Subtotal:	**$ 556,080**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 33,365
√	Traffic Control	Construction Phase Traffic Control	5%	$ 27,804
√	Pavement Markings/Markers		3%	$ 16,682
√	Roadway Drainage	Standard Internal System	30%	$ 166,824
√	Illumination		6%	$ 33,365
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 33,365
√	Sewer	Minor Adjustments	4%	$ 22,243
√	Establish Turf / Erosion Control		3%	$ 16,682
√	Basic Landscaping		2%	$ 11,122
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 361,452**
			Paving and Allowance Subtotal:	**$ 917,532**
			Construction Contingency: 10%	$ 91,753
			Construction Cost TOTAL:	**$ 1,010,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,010,000**
Engineering/Survey/Testing:		20%	$ 202,000
Mobilization		6%	$ 60,600
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 101,000
		Impact Fee Project Cost TOTAL:	**$ 1,374,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	1-W
Name:	Wintergreen Rd. (1)	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility. This is a Dallas County Bond Project with an estimated cost of $9,405,072. The City and County had a 50/50 participation agreement. The City of Lancaster is estimated to contribute $4,702,536 to the construction of this facility.**		
Limits:	IH-35E to Houston School Rd.			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	5,320			
Service Area(s):	1			

Impact Fee Project Cost Summary			
Item Description	**Notes:**	**Allowance**	**Item Cost**
City Contribution to Construction Cost:			$ 4,702,536
Engineering/Survey/Testing:			$ -
Mobilization			$ -
Previous City contribution			
Other			
ROW/Easement Acquisition:			$ -
		Impact Fee Project Cost TOTAL:	**$ 4,702,536**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	1-X
Name:	Wintergreen Rd. (2)	**This project consists of the widening of an existing two-lane concrete facility ino a four-lane divided major arterial facility. The existing two-lanes were constructed by development and are not included in the cost.**		
Limits:	Houston School Rd. to 830' E. of Houston School Rd.			
Impact Fee Class:	M4D(1/2)			
Ultimate Class:	Major Arterial			
Length (lf):	830			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
106	Unclassified Street Excavation	1,291	cy	$ 8.00	$ 10,329
206	8" Lime Stabilization (with Lime @ 32#/sy)	2,490	sy	$ 3.00	$ 7,470
306	8" Concrete Pavement w/ 6" Curb	2,306	sy	$ 38.00	$ 87,611
406	4" Topsoil	3,781	sy	$ 4.00	$ 15,124
506	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
606	5' Concrete Sidewalk	4,150	sf	$ 4.00	$ 16,600
				Paving Construction Cost Subtotal:	**$ 139,634**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 8,378
√	Traffic Control	Construction Phase Traffic Control	5%	$ 6,982
√	Pavement Markings/Markers		3%	$ 4,189
√	Roadway Drainage	Standard Internal System	30%	$ 41,890
√	Illumination		6%	$ 8,378
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 8,378
√	Sewer	Minor Adjustments	4%	$ 5,585
√	Establish Turf / Erosion Control		3%	$ 4,189
√	Basic Landscaping		2%	$ 2,793
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 90,762**
			Paving and Allowance Subtotal:	**$ 230,397**
			Construction Contingency: 10%	$ 23,040
			Construction Cost TOTAL:	**$ 254,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 254,000**
Engineering/Survey/Testing:		20%	$ 50,800
Mobilization		6%	$ 15,240
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 25,400
		Impact Fee Project Cost TOTAL:	**$ 345,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-Y
Name:	Wingergreen Rd. (3)	**This project consists of the construction of a new four-lane divided major arterial facility.**		
Limits:	830' E. of Houston School Rd. to 1,385' E. of Houston School Rd.			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	555			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	1,727	cy	$ 8.00	$ 13,813
203	8" Lime Stabilization (with Lime @ 32#/sy)	3,330	sy	$ 3.00	$ 9,990
303	8" Concrete Pavement w/ 6" Curb	3,083	sy	$ 38.00	$ 117,167
403	4" Topsoil	3,083	sy	$ 4.00	$ 12,333
503	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
603	5' Concrete Sidewalk	5,550	sf	$ 4.00	$ 22,200
				Paving Construction Cost Subtotal:	**$ 178,003**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 10,680
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 5,340
√	Roadway Drainage	Standard Internal System	30%	$ 53,401
√	Illumination		6%	$ 10,680
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 10,680
√	Sewer	Minor Adjustments	4%	$ 7,120
√	Establish Turf / Erosion Control		3%	$ 5,340
√	Basic Landscaping		2%	$ 3,560
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 106,802**
			Paving and Allowance Subtotal:	**$ 284,805**
			Construction Contingency: 10%	$ 28,481
			Construction Cost TOTAL:	**$ 314,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 314,000**
Engineering/Survey/Testing:		20%	$ 62,800
Mobilization		6%	$ 18,840
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 62,800
		Impact Fee Project Cost TOTAL:	**$ 458,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	1-Z
Name:	Wintergreen Rd. (4)	**This project consists of the widening of an existing two-lane concrete facility ino a four-lane divided major arterial facility. The existing two-lanes were constructed by development and are not included in the cost.**		
Limits:	1,385' E. of Houston School Rd. to 2,770' E. of Houston School Rd.			
Impact Fee Class:	M4D(1/2)			
Ultimate Class:	Major Arterial			
Length (lf):	1,385			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
106	Unclassified Street Excavation	2,154	cy	$ 8.00	$ 17,236
206	8" Lime Stabilization (with Lime @ 32#/sy)	4,155	sy	$ 3.00	$ 12,465
306	8" Concrete Pavement w/ 6" Curb	3,847	sy	$ 38.00	$ 146,194
406	4" Topsoil	6,309	sy	$ 4.00	$ 25,238
506	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
606	5' Concrete Sidewalk	6,925	sf	$ 4.00	$ 27,700
				Paving Construction Cost Subtotal:	**$ 231,333**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 13,880
√	Traffic Control	Construction Phase Traffic Control	5%	$ 11,567
√	Pavement Markings/Markers		3%	$ 6,940
√	Roadway Drainage	Standard Internal System	30%	$ 69,400
√	Illumination		6%	$ 13,880
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 13,880
√	Sewer	Minor Adjustments	4%	$ 9,253
√	Establish Turf / Erosion Control		3%	$ 6,940
√	Basic Landscaping		2%	$ 4,627
	Other:		$0	$ -
****Allowances based on % of Paving Construction Cost Subtotal**			**Allowance Subtotal:**	**$ 150,366**
			Paving and Allowance Subtotal:	**$ 381,699**
			Construction Contingency: 10%	$ 38,170
			Construction Cost TOTAL:	**$ 420,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 420,000**
Engineering/Survey/Testing:		20%	$ 84,000
Mobilization		6%	$ 25,200
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 42,000
		Impact Fee Project Cost TOTAL:	**$ 571,000**

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Lancaster.

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:	Description:	Project No.	1-AA
Name:	Wingergreen Rd. (5)	**This project consists of the construction of a new four-lane divided major arterial facility.**	
Limits:	2,770' E. of Houston School Rd. to Baskin Dr.		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	1,190		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	3,702	cy	$ 8.00	$ 29,618
203	8" Lime Stabilization (with Lime @ 32#/sy)	7,140	sy	$ 3.00	$ 21,420
303	8" Concrete Pavement w/ 6" Curb	6,611	sy	$ 38.00	$ 251,222
403	4" Topsoil	6,611	sy	$ 4.00	$ 26,444
503	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
603	5' Concrete Sidewalk	11,900	sf	$ 4.00	$ 47,600
				Paving Construction Cost Subtotal:	**$ 378,804**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 22,728
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 11,364
√	Roadway Drainage	Standard Internal System	30%	$ 113,641
√	Illumination		6%	$ 22,728
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 22,728
√	Sewer	Minor Adjustments	4%	$ 15,152
√	Establish Turf / Erosion Control		3%	$ 11,364
√	Basic Landscaping		2%	$ 7,576
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 227,283**
			Paving and Allowance Subtotal:	**$ 606,087**
			Construction Contingency: 10%	$ 60,609
			Construction Cost TOTAL:	**$ 667,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 667,000**
Engineering/Survey/Testing:		20%	$ 133,400
Mobilization		6%	$ 40,020
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 133,400
		Impact Fee Project Cost TOTAL:	**$ 974,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-BB
Name:	Wintergreen Rd./Telephone Rd.	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility.**		
Limits:	Baskin Dr. to E. City Limits			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	8,050			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	25,044	cy	$ 8.00	$ 200,356
203	8" Lime Stabilization (with Lime @ 32#/sy)	48,300	sy	$ 3.00	$ 144,900
303	8" Concrete Pavement w/ 6" Curb	44,722	sy	$ 38.00	$ 1,699,444
403	4" Topsoil	44,722	sy	$ 4.00	$ 178,889
503	Concrete Driveway Approach	8	ea	$ 2,500.00	$ 20,000
603	5' Concrete Sidewalk	80,500	sf	$ 4.00	$ 322,000
				Paving Construction Cost Subtotal:	**$ 2,565,589**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 153,935
√	Traffic Control	Construction Phase Traffic Control	5%	$ 128,279
√	Pavement Markings/Markers		3%	$ 76,968
√	Roadway Drainage	Standard Internal System	30%	$ 769,677
√	Illumination		6%	$ 153,935
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 153,935
√	Sewer	Minor Adjustments	4%	$ 102,624
√	Establish Turf / Erosion Control		3%	$ 76,968
√	Basic Landscaping		2%	$ 51,312
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,667,633**
			Paving and Allowance Subtotal:	**$ 4,233,222**
			Construction Contingency: 10%	$ 423,322
			Construction Cost TOTAL:	**$ 4,657,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 4,657,000**
Engineering/Survey/Testing:		20%	$ 931,400
Mobilization		6%	$ 279,420
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 465,700
		Impact Fee Project Cost TOTAL:	**$ 6,334,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	1-CC
Name:	Wintergreen Rd. (6)	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility.**		
Limits:	Telephone Rd. to Dallas Ave.			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	4,985			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	15,509	cy	$ 8.00	$ 124,071
203	8" Lime Stabilization (with Lime @ 32#/sy)	29,910	sy	$ 3.00	$ 89,730
303	8" Concrete Pavement w/ 6" Curb	27,694	sy	$ 38.00	$ 1,052,389
403	4" Topsoil	27,694	sy	$ 4.00	$ 110,778
503	Concrete Driveway Approach	5	ea	$ 2,500.00	$ 12,500
603	5' Concrete Sidewalk	49,850	sf	$ 4.00	$ 199,400
				Paving Construction Cost Subtotal:	**$ 1,588,868**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 95,332
√	Traffic Control	Construction Phase Traffic Control	5%	$ 79,443
√	Pavement Markings/Markers		3%	$ 47,666
√	Roadway Drainage	Standard Internal System	30%	$ 476,660
√	Illumination		6%	$ 95,332
√	Special Drainage Structures	Minon Stream Crossing	0%	$ 250,000
√	Water	Minor Adjustments	6%	$ 95,332
√	Sewer	Minor Adjustments	4%	$ 63,555
√	Establish Turf / Erosion Control		3%	$ 47,666
√	Basic Landscaping		2%	$ 31,777
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,282,764**
			Paving and Allowance Subtotal:	**$ 2,871,632**
			Construction Contingency: 10%	$ 287,163
			Construction Cost TOTAL:	**$ 3,159,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 3,159,000**
Engineering/Survey/Testing:		20%	$ 631,800
Mobilization		6%	$ 189,540
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 315,900
		Impact Fee Project Cost TOTAL:	**$ 4,296,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No. 1-DD
Name:	Wintergreen Rd. (7)	**This completed project consisted of the construction of a four-lane divided major arterial facility. This is a Dallas County Bond Project with a cost of $4,238,582. Dallas County contributed $1,833,648 to the construction of this facility. The City of Lancaster contributed $2,404,934 to the construction of this facility.**	
Limits:	Dallas Ave. to Jefferrson St.		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (if):	4,310		
Service Area(s):	1		

Impact Fee Project Cost Summary			
Item Description	**Notes:**	**Allowance**	**Item Cost**
City Contribution to Construction Cost:		-	$ 2,404,934
Engineering/Survey/Testing			
Other			
ROW/Easement Acquisition:			
	Impact Fee Project Cost TOTAL:		**$ 2,404,934**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-EE
Name:	Wintergreen Rd. (8)	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility. The boundary between Lancaster and the City of Dallas is on the centerline of Wintergreen Rd.**		
Limits:	Jefferson St. to Lancaster-Hutchins Rd.			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	5,485			
Service Area(s):	1 (Half)			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	17,064	cy	$ 8.00	$ 136,516
203	8" Lime Stabilization (with Lime @ 32#/sy)	32,910	sy	$ 3.00	$ 98,730
303	8" Concrete Pavement w/ 6" Curb	30,472	sy	$ 38.00	$ 1,157,944
403	4" Topsoil	30,472	sy	$ 4.00	$ 121,889
503	Concrete Driveway Approach	5	ea	$ 2,500.00	$ 12,500
603	5' Concrete Sidewalk	54,850	sf	$ 4.00	$ 219,400
				Paving Construction Cost Subtotal:	**$ 1,746,979**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 104,819
√	Traffic Control	Construction Phase Traffic Control	5%	$ 87,349
√	Pavement Markings/Markers		3%	$ 52,409
√	Roadway Drainage	Standard Internal System	30%	$ 524,094
√	Illumination		6%	$ 104,819
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 104,819
√	Sewer	Minor Adjustments	4%	$ 69,879
√	Establish Turf / Erosion Control		3%	$ 52,409
√	Basic Landscaping		2%	$ 34,940
√	Other:	Railroad Crossing	$0	$ 500,000
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,635,536**
			Paving and Allowance Subtotal:	**$ 3,382,515**
			Construction Contingency: 10%	$ 338,252
			Construction Cost TOTAL:	**$ 3,721,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 3,721,000**
Engineering/Survey/Testing:		20%	$ 744,200
Mobilization		6%	$ 223,260
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 372,100
		Impact Fee Project Cost TOTAL:	**$ 5,061,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:	Description:	Project No.	1-FF
Name:	Blue Grove Rd. (1)	**This project consists of the construction of a new four-lane divided major arterial facility.**	
Limits:	Sunny Meadow Rd. to Kings Cross Dr.		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	975		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	3,033	cy	$ 8.00	$ 24,267
203	8" Lime Stabilization (with Lime @ 32#/sy)	5,850	sy	$ 3.00	$ 17,550
303	8" Concrete Pavement w/ 6" Curb	5,417	sy	$ 38.00	$ 205,833
403	4" Topsoil	5,417	sy	$ 4.00	$ 21,667
503	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
603	5' Concrete Sidewalk	9,750	sf	$ 4.00	$ 39,000
				Paving Construction Cost Subtotal:	**$ 310,817**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 18,649
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 9,325
√	Roadway Drainage	Standard Internal System	30%	$ 93,245
√	Illumination		6%	$ 18,649
√	Special Drainage Structures	Two Minor Stream Crossings	0%	$ 500,000
√	Water	Minor Adjustments	6%	$ 18,649
√	Sewer	Minor Adjustments	4%	$ 12,433
√	Establish Turf / Erosion Control		3%	$ 9,325
√	Basic Landscaping		2%	$ 6,216
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 686,490**
			Paving and Allowance Subtotal:	**$ 997,307**
			Construction Contingency: 10%	$ 99,731
			Construction Cost TOTAL:	**$ 1,098,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,098,000**
Engineering/Survey/Testing:		20%	$ 219,600
Mobilization		6%	$ 65,880
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 219,600
		Impact Fee Project Cost TOTAL:	**$ 1,603,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No. 1-GG
Name:	Blue Grove Rd. (2)	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility.**	
Limits:	Kings Cross to Dr. Brook Meadow Cir.		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	2,295		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	7,140	cy	$ 8.00	$ 57,120
203	8" Lime Stabilization (with Lime @ 32#/sy)	13,770	sy	$ 3.00	$ 41,310
303	8" Concrete Pavement w/ 6" Curb	12,750	sy	$ 38.00	$ 484,500
403	4" Topsoil	12,750	sy	$ 4.00	$ 51,000
503	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
603	5' Concrete Sidewalk	22,950	sf	$ 4.00	$ 91,800
				Paving Construction Cost Subtotal:	**$ 730,730**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 43,844
√	Traffic Control	Construction Phase Traffic Control	5%	$ 36,537
√	Pavement Markings/Markers		3%	$ 21,922
√	Roadway Drainage	Standard Internal System	30%	$ 219,219
√	Illumination		6%	$ 43,844
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 43,844
√	Sewer	Minor Adjustments	4%	$ 29,229
√	Establish Turf / Erosion Control		3%	$ 21,922
√	Basic Landscaping		2%	$ 14,615
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 474,975**
			Paving and Allowance Subtotal:	**$ 1,205,705**
			Construction Contingency: 10%	$ 120,570
			Construction Cost TOTAL:	**$ 1,327,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,327,000**
Engineering/Survey/Testing:		20%	$ 265,400
Mobilization		6%	$ 79,620
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 132,700
		Impact Fee Project Cost TOTAL:	**$ 1,805,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-HH
Name:	Blue Grove Rd. (3)	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility.**		
Limits:	Belt Line Rd. to Main St.			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	3,245			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	10,096	cy	$ 8.00	$ 80,764
203	8" Lime Stabilization (with Lime @ 32#/sy)	19,470	sy	$ 3.00	$ 58,410
303	8" Concrete Pavement w/ 6" Curb	18,028	sy	$ 38.00	$ 685,056
403	4" Topsoil	18,028	sy	$ 4.00	$ 72,111
503	Concrete Driveway Approach	3	ea	$ 2,500.00	$ 7,500
603	5' Concrete Sidewalk	32,450	sf	$ 4.00	$ 129,800
				Paving Construction Cost Subtotal:	**$ 1,033,641**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 62,018
√	Traffic Control	Construction Phase Traffic Control	5%	$ 51,682
√	Pavement Markings/Markers		3%	$ 31,009
√	Roadway Drainage	Standard Internal System	30%	$ 310,092
√	Illumination		6%	$ 62,018
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 62,018
√	Sewer	Minor Adjustments	4%	$ 41,346
√	Establish Turf / Erosion Control		3%	$ 31,009
√	Basic Landscaping		2%	$ 20,673
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 671,867**
			Paving and Allowance Subtotal:	**$ 1,705,508**
			Construction Contingency: 10%	$ 170,551
			Construction Cost TOTAL:	**$ 1,877,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,877,000**
Engineering/Survey/Testing:		20%	$ 375,400
Mobilization		6%	$ 112,620
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 187,700
		Impact Fee Project Cost TOTAL:	**$ 2,553,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-II
Name:	Balomeade Ave. (2)	**This project consists of the construction of a new two-lane undivided collector facility.**		
Limits:	West Dr. to Belverde Dr.			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	1,535			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	3,667	cy	$ 8.00	$ 29,336
201	8" Lime Stabilization (with Lime @ 32#/sy)	7,163	sy	$ 3.00	$ 21,490
301	8" Concrete Pavement w/ 6" Curb	6,822	sy	$ 38.00	$ 259,244
401	4" Topsoil	3,411	sy	$ 4.00	$ 13,644
501	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
601	5' Concrete Sidewalk	15,350	sf	$ 4.00	$ 61,400
				Paving Construction Cost Subtotal:	**$ 390,114**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 23,407
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 11,703
√	Roadway Drainage	Standard Internal System	30%	$ 117,034
√	Illumination		6%	$ 23,407
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 23,407
√	Sewer	Minor Adjustments	4%	$ 15,605
√	Establish Turf / Erosion Control		3%	$ 11,703
√	Basic Landscaping		2%	$ 7,802
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 234,069**
			Paving and Allowance Subtotal:	**$ 624,183**
			Construction Contingency: 10%	$ 62,418
			Construction Cost TOTAL:	**$ 687,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 687,000**
Engineering/Survey/Testing:		20%	$ 137,400
Mobilization		6%	$ 41,220
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 137,400
		Impact Fee Project Cost TOTAL:	**$ 1,003,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	1-JJ
Name:	Balomeade Ave. (3)	**This project consists of the reconstruction of an existing two-lane facility to a two-lane undivided collector facility.**		
Limits:	Belverde Dr. to Wintergreen Rd.			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	1,085			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	2,592	cy	$ 8.00	$ 20,736
201	8" Lime Stabilization (with Lime @ 32#/sy)	5,063	sy	$ 3.00	$ 15,190
301	8" Concrete Pavement w/ 6" Curb	4,822	sy	$ 38.00	$ 183,244
401	4" Topsoil	2,411	sy	$ 4.00	$ 9,644
501	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
601	5' Concrete Sidewalk	10,850	sf	$ 4.00	$ 43,400
				Paving Construction Cost Subtotal:	**$ 274,714**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 16,483
√	Traffic Control	Construction Phase Traffic Control	5%	$ 13,736
√	Pavement Markings/Markers		3%	$ 8,241
√	Roadway Drainage	Standard Internal System	30%	$ 82,414
√	Illumination		6%	$ 16,483
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 16,483
√	Sewer	Minor Adjustments	4%	$ 10,989
√	Establish Turf / Erosion Control		3%	$ 8,241
√	Basic Landscaping		2%	$ 5,494
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 178,564**
			Paving and Allowance Subtotal:	**$ 453,279**
			Construction Contingency: 10%	$ 45,328
			Construction Cost TOTAL:	**$ 499,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 499,000**
Engineering/Survey/Testing:		20%	$ 99,800
Mobilization		6%	$ 29,940
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 49,900
		Impact Fee Project Cost TOTAL:	**$ 679,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-KK
Name:	Proposed Collector "J"	**This project consists of the construction of a new two-lane undivided collector facility.**		
Limits:	Wintergreen Rd. to Idlewild Ln.			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	2,720			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	6,498	cy	$ 8.00	$ 51,982
201	8" Lime Stabilization (with Lime @ 32#/sy)	12,693	sy	$ 3.00	$ 38,080
301	8" Concrete Pavement w/ 6" Curb	12,089	sy	$ 38.00	$ 459,378
401	4" Topsoil	6,044	sy	$ 4.00	$ 24,178
501	Concrete Driveway Approach	3	ea	$ 2,500.00	$ 7,500
601	5' Concrete Sidewalk	27,200	sf	$ 4.00	$ 108,800
				Paving Construction Cost Subtotal:	**$ 689,918**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 41,395
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 20,698
√	Roadway Drainage	Standard Internal System	30%	$ 206,975
√	Illumination		6%	$ 41,395
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 41,395
√	Sewer	Minor Adjustments	4%	$ 27,597
√	Establish Turf / Erosion Control		3%	$ 20,698
√	Basic Landscaping		2%	$ 13,798
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 413,951**
			Paving and Allowance Subtotal:	**$ 1,103,868**
			Construction Contingency: 10%	$ 110,387
			Construction Cost TOTAL:	**$ 1,215,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,215,000**
Engineering/Survey/Testing:		20%	$ 243,000
Mobilization		6%	$ 72,900
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 243,000
		Impact Fee Project Cost TOTAL:	**$ 1,774,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No. 1-LL
Name:	Proposed Collector "K"	**This project consists of the construction of a new two-lane undivided collector facility.**	
Limits:	Pleasant Run Rd. to Hanna Ln.		
Impact Fee Class:	C2U		
Ultimate Class:	Collector		
Length (lf):	3,305		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	7,895	cy	$ 8.00	$ 63,162
201	8" Lime Stabilization (with Lime @ 32#/sy)	15,423	sy	$ 3.00	$ 46,270
301	8" Concrete Pavement w/ 6" Curb	14,689	sy	$ 38.00	$ 558,178
401	4" Topsoil	7,344	sy	$ 4.00	$ 29,378
501	Concrete Driveway Approach	3	ea	$ 2,500.00	$ 7,500
601	5' Concrete Sidewalk	33,050	sf	$ 4.00	$ 132,200
				Paving Construction Cost Subtotal:	**$ 836,688**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 50,201
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 25,101
√	Roadway Drainage	Standard Internal System	30%	$ 251,006
√	Illumination		6%	$ 50,201
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 50,201
√	Sewer	Minor Adjustments	4%	$ 33,468
√	Establish Turf / Erosion Control		3%	$ 25,101
√	Basic Landscaping		2%	$ 16,734
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 502,013**
			Paving and Allowance Subtotal:	**$ 1,338,700**
			Construction Contingency: 10%	$ 133,870
			Construction Cost TOTAL:	**$ 1,473,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,473,000**
Engineering/Survey/Testing:		20%	$ 294,600
Mobilization		6%	$ 88,380
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 294,600
		Impact Fee Project Cost TOTAL:	**$ 2,151,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	1-MM
Name:	Houston School Rd. (2)	**This completed project consisted of the construction of a four-lane divided major arterial facility. The City contributed $8.5 million towards the construction of Houston School Road from Wheatland Road (see Project 1-C) to Pleasant Run Road. The City is anticipated to contribute 88% or $7,480,000 to the construction of this section.**		
Limits:	IH-20 EBFR to Pleasant Run Road			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	13,500			
Service Area(s):	1			

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
City Contribution to Construction Cost:	$ 8,500,000	88%	**$ 7,480,000**
Engineering/Survey/Testing			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included		
	Impact Fee Project Cost TOTAL:		**$ 7,480,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No. 1-NN
Name:	Houston School Rd. (3)	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility.**	
Limits:	1,500' N. of Belt Line Rd. to Main St.		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	3,695		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	11,496	cy	$ 8.00	$ 91,964
203	8" Lime Stabilization (with Lime @ 32#/sy)	22,170	sy	$ 3.00	$ 66,510
303	8" Concrete Pavement w/ 6" Curb	20,528	sy	$ 38.00	$ 780,056
403	4" Topsoil	20,528	sy	$ 4.00	$ 82,111
503	Concrete Driveway Approach	4	ea	$ 2,500.00	$ 10,000
603	5' Concrete Sidewalk	36,950	sf	$ 4.00	$ 147,800
				Paving Construction Cost Subtotal:	**$ 1,178,441**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 70,706
√	Traffic Control	Construction Phase Traffic Control	5%	$ 58,922
√	Pavement Markings/Markers		3%	$ 35,353
√	Roadway Drainage	Standard Internal System	30%	$ 353,532
√	Illumination		6%	$ 70,706
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 70,706
√	Sewer	Minor Adjustments	4%	$ 47,138
√	Establish Turf / Erosion Control		3%	$ 35,353
√	Basic Landscaping		2%	$ 23,569
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 765,987**
			Paving and Allowance Subtotal:	**$ 1,944,428**
			Construction Contingency: 10%	$ 194,443
			Construction Cost TOTAL:	**$ 2,139,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 2,139,000**
Engineering/Survey/Testing:		20%	$ 427,800
Mobilization		6%	$ 128,340
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 213,900
		Impact Fee Project Cost TOTAL:	**$ 2,909,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	1-00
Name:	Jefferson St.	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided minor arterial facility.**		
Limits:	Wintergreen Rd. to Pleasant Run Rd.			
Impact Fee Class:	S4D			
Ultimate Class:	Minor Arterial			
Length (lf):	5,200			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	16,756	cy	$ 8.00	$ 134,044
202	8" Lime Stabilization (with Lime @ 32#/sy)	32,356	sy	$ 3.00	$ 97,067
302	8" Concrete Pavement w/ 6" Curb	30,044	sy	$ 38.00	$ 1,141,689
402	4" Topsoil	21,956	sy	$ 4.00	$ 87,822
502	Concrete Driveway Approach	5	ea	$ 2,500.00	$ 12,500
602	5' Concrete Sidewalk	52,000	sf	$ 4.00	$ 208,000
				Paving Construction Cost Subtotal:	**$ 1,681,122**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 100,867
√	Traffic Control	Construction Phase Traffic Control	5%	$ 84,056
√	Pavement Markings/Markers		3%	$ 50,434
√	Roadway Drainage	Standard Internal System	30%	$ 504,337
√	Illumination		6%	$ 100,867
√	Special Drainage Structures	Minor Stream Crossing	0%	$ 250,000
√	Water	Minor Adjustments	6%	$ 100,867
√	Sewer	Minor Adjustments	4%	$ 67,245
√	Establish Turf / Erosion Control		3%	$ 50,434
√	Basic Landscaping		2%	$ 33,622
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,342,729**
			Paving and Allowance Subtotal:	**$ 3,023,852**
			Construction Contingency: 10%	$ 302,385
			Construction Cost TOTAL:	**$ 3,327,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 3,327,000**
Engineering/Survey/Testing:		20%	$ 665,400
Mobilization		6%	$ 199,620
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 332,700
		Impact Fee Project Cost TOTAL:	**$ 4,525,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No. 1-PP
Name:	Belt Line Rd. (1)	**This project consists of the reconstruction of an existing two-lane facility to a six-lane divided major arterial facility.**	
Limits:	Blue Grove Rd. to 1,005' W. of Main St.		
Impact Fee Class:	P6D		
Ultimate Class:	Major Arterial		
Length (lf):	3,935		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	17,926	cy	$ 8.00	$ 143,409
204	8" Lime Stabilization (with Lime @ 32#/sy)	34,978	sy	$ 3.00	$ 104,933
304	8" Concrete Pavement w/ 6" Curb	33,229	sy	$ 38.00	$ 1,262,698
404	4" Topsoil	19,238	sy	$ 4.00	$ 76,951
504	Concrete Driveway Approach	4	ea	$ 2,500.00	$ 10,000
604	5' Concrete Sidewalk	39,350	sf	$ 4.00	$ 157,400
				Paving Construction Cost Subtotal:	**$ 1,755,391**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 105,323
√	Traffic Control	Construction Phase Traffic Control	5%	$ 87,770
√	Pavement Markings/Markers		3%	$ 52,662
√	Roadway Drainage	Standard Internal System	30%	$ 526,617
√	Illumination		6%	$ 105,323
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 105,323
√	Sewer	Minor Adjustments	4%	$ 70,216
√	Establish Turf / Erosion Control		3%	$ 52,662
√	Basic Landscaping		2%	$ 35,108
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,141,004**
			Paving and Allowance Subtotal:	**$ 2,896,395**
			Construction Contingency: 10%	$ 289,640
			Construction Cost TOTAL:	**$ 3,187,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 3,187,000**
Engineering/Survey/Testing:		20%	$ 637,400
Mobilization		6%	$ 191,220
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 318,700
		Impact Fee Project Cost TOTAL:	**$ 4,334,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No. 1-QQ, 2-N
Name:	Belt Line Rd. (2)	**This project consists of the reconstruction of an existing two-lane facility to a six-lane divided major arterial facility. The boundary between SA 1 and SA 2 is on the centerline of Belt Line Rd.**	
Limits:	1,005' W. of Main St. to Main St.		
Impact Fee Class:	P6D		
Ultimate Class:	Major Arterial		
Length (lf):	1,005		
Service Area(s):	1,2		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	4,578	cy	$ 8.00	$ 36,627
204	8" Lime Stabilization (with Lime @ 32#/sy)	8,933	sy	$ 3.00	$ 26,800
304	8" Concrete Pavement w/ 6" Curb	8,487	sy	$ 38.00	$ 322,493
404	4" Topsoil	4,913	sy	$ 4.00	$ 19,653
504	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
604	5' Concrete Sidewalk	10,050	sf	$ 4.00	$ 40,200
				Paving Construction Cost Subtotal:	**$ 448,273**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 26,896
√	Traffic Control	Construction Phase Traffic Control	5%	$ 22,414
√	Pavement Markings/Markers		3%	$ 13,448
√	Roadway Drainage	Standard Internal System	30%	$ 134,482
√	Illumination		6%	$ 26,896
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 26,896
√	Sewer	Minor Adjustments	4%	$ 17,931
√	Establish Turf / Erosion Control		3%	$ 13,448
√	Basic Landscaping		2%	$ 8,965
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 291,378**
			Paving and Allowance Subtotal:	**$ 739,651**
			Construction Contingency: 10%	$ 73,965
			Construction Cost TOTAL:	**$ 814,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 814,000**
Engineering/Survey/Testing:		20%	$ 162,800
Mobilization		6%	$ 48,840
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 81,400
		Impact Fee Project Cost TOTAL:	**$ 1,107,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No. 1-RR, 3-I
Name:	Main St. (1)	**This project consists of the reconstruction of an existing two-lane facility to a two-lane undivided collector facility. The boundary between SA 1 and SA 3 is on the centerline of Main St.**	
Limits:	Belt Line Rd. to Belt Line Rd.		
Impact Fee Class:	C2U		
Ultimate Class:	Collector		
Length (lf):	15,940		
Service Area(s):	1,3		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	38,079	cy	$ 8.00	$ 304,631
201	8" Lime Stabilization (with Lime @ 32#/sy)	74,387	sy	$ 3.00	$ 223,160
301	8" Concrete Pavement w/ 6" Curb	70,844	sy	$ 38.00	$ 2,692,089
401	4" Topsoil	35,422	sy	$ 4.00	$ 141,689
501	Concrete Driveway Approach	16	ea	$ 2,500.00	$ 40,000
601	5' Concrete Sidewalk	159,400	sf	$ 4.00	$ 637,600
				Paving Construction Cost Subtotal:	**$ 4,039,169**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 242,350
√	Traffic Control	Construction Phase Traffic Control	5%	$ 201,958
√	Pavement Markings/Markers		3%	$ 121,175
√	Roadway Drainage	Standard Internal System	30%	$ 1,211,751
√	Illumination		6%	$ 242,350
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 242,350
√	Sewer	Minor Adjustments	4%	$ 161,567
√	Establish Turf / Erosion Control		3%	$ 121,175
√	Basic Landscaping		2%	$ 80,783
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 2,625,460**
			Paving and Allowance Subtotal:	**$ 6,664,629**
			Construction Contingency: 10%	$ 666,463
			Construction Cost TOTAL:	**$ 7,332,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 7,332,000**
Engineering/Survey/Testing:		20%	$ 1,466,400
Mobilization		6%	$ 439,920
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 733,200
		Impact Fee Project Cost TOTAL:	**$ 9,972,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	1-SS, 2-A
Name:	Lancaster Hutchins Rd. (1)	**This project consists of the reconstruction of an existing two-lane facility to a six-lane divided major arterial facility. The boundary between SA 1 and SA 2 is on the centerline of Main St.**		
Limits:	Wintergreen Rd. to Pleasant Run Rd.			
Impact Fee Class:	P6D			
Ultimate Class:	Major Arterial			
Length (lf):	6,270			
Service Area(s):	1,2			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	28,563	cy	$ 8.00	$ 228,507
204	8" Lime Stabilization (with Lime @ 32#/sy)	55,733	sy	$ 3.00	$ 167,200
304	8" Concrete Pavement w/ 6" Curb	52,947	sy	$ 38.00	$ 2,011,973
404	4" Topsoil	30,653	sy	$ 4.00	$ 122,613
504	Concrete Driveway Approach	6	ea	$ 2,500.00	$ 15,000
604	5' Concrete Sidewalk	62,700	sf	$ 4.00	$ 250,800
				Paving Construction Cost Subtotal:	**$ 2,796,093**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 167,766
√	Traffic Control	Construction Phase Traffic Control	5%	$ 139,805
√	Pavement Markings/Markers		3%	$ 83,883
√	Roadway Drainage	Standard Internal System	30%	$ 838,828
√	Illumination		6%	$ 167,766
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 167,766
√	Sewer	Minor Adjustments	4%	$ 111,844
√	Establish Turf / Erosion Control		3%	$ 83,883
√	Basic Landscaping		2%	$ 55,922
	Other:		$0	$ -
****Allowances based on % of Paving Construction Cost Subtotal**			**Allowance Subtotal:**	**$ 1,817,461**
			Paving and Allowance Subtotal:	**$ 4,613,554**
			Construction Contingency: 10%	$ 461,355
			Construction Cost TOTAL:	**$ 5,075,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 5,075,000**
Engineering/Survey/Testing:		20%	$ 1,015,000
Mobilization		6%	$ 304,500
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 507,500
		Impact Fee Project Cost TOTAL:	**$ 6,902,000**

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City of Lancaster - 2012 Roadway Impact Fee Update

Thoroughfare Impact Fee Improvement Projects for Roadway Impact Fees

Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area 2

#	Class	Project	Limits	Project Cost
1-SS, 2-A	P6D	Lancaster Hutchins Rd. (1)	Wintergreen Rd. to Pleasant Run Rd.	$ 6,902,000
2-B	M4D	Lancaster-Hutchins Rd. (2)	Pleasant Run Rd. to Belt Line Rd.	$ 6,264,000
2-C, 3-K	P6D	Lancaster-Hutchins Rd. (3)	Belt Line Rd. to Dallas Ave.	$ 3,074,000
2-D	M4D	Cornell Rd. (1)	Lancaster Hutchins Rd. to Greene Rd.	$ 6,302,000
2-E	M4D	Cornell Rd. (2)	Greene Rd. to Belt Line Rd.	$ 2,875,000
2-F	M4D	Alba Rd. (1)	N. City Limits to Greene Rd. (N)	$ 4,732,000
2-G	M4D	Alba Rd. (2)	Greene Rd. (N) to 935' S. of Greene Rd. (S)	$ 1,325,000
2-H	M4D	Alba Rd. (3)	935' S. of Greene Rd. (S) to Belt Line Rd.	$ 949,000
2-I	C2U	Ferris Rd. (1)	Belt Line Rd. to S. City Limits	$ 3,933,000
2-J	C2U	Ferris Rd. (2)	S. City Limits to S. City Limits	$ 1,865,000
2-K	C2U	Ferris Rd. (3)	S. City Limits to E. City Limits	$ 1,954,000
2-L	C2U	Ferris Rd. (4)	E. City Limits to S. City Limits	$ 3,713,000
2-M	M4D	Airport Rd. East	Greene Rd. to Ferris Rd.	$ 8,814,000
1-QQ, 2-N	P6D	Belt Line Rd. (2)	1,005' W. of Main St. to Main St.	$ 1,107,000
2-O, 3-J	M4D	Belt Line Rd. (4)	Main St. to Lancaster-Hutchins Rd.	$ 5,470,000
2-P	M4D	Belt Line Rd. (5)	Lancaster-Hutchins Rd. to E. City Limits	$ 11,863,000
2-Q	M4D	Belt Line Rd. (6)	E. City Limits to 640' E. of E. City Limits	$ 506,000

Signal Installation

I-4		Signal Installation	Lancaster-Hutchins Rd. & Wintergreen Rd.	$ 140,000
I-5		Signal Installation	Lancaster-Hutchins Rd. & Pleasant Run Rd.	$ 140,000
			TOTAL	**$ 71,928,000**

*Total may be higher than presented in Tables 2.A, 2.B and 2.C (Thoroughfare Impact Fee Improvement Program) because the cost of some projects are shared between service areas.

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No. 1-SS, 2-A
Name:	Lancaster Hutchins Rd. (1)	**This project consists of the reconstruction of an existing two-lane facility to a six-lane divided major arterial facility. The boundary between SA 1 and SA 2 is on the centerline of Main St.**	
Limits:	Wintergreen Rd. to Pleasant Run Rd.		
Impact Fee Class:	P6D		
Ultimate Class:	Major Arterial		
Length (lf):	6,270		
Service Area(s):	1,2		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	28,563	cy	$ 8.00	$ 228,507
204	8" Lime Stabilization (with Lime @ 32#/sy)	55,733	sy	$ 3.00	$ 167,200
304	8" Concrete Pavement w/ 6" Curb	52,947	sy	$ 38.00	$ 2,011,973
404	4" Topsoil	30,653	sy	$ 4.00	$ 122,613
504	Concrete Driveway Approach	6	ea	$ 2,500.00	$ 15,000
604	5' Concrete Sidewalk	62,700	sf	$ 4.00	$ 250,800
				Paving Construction Cost Subtotal:	**$ 2,796,093**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 167,766
√	Traffic Control	Construction Phase Traffic Control	5%	$ 139,805
√	Pavement Markings/Markers		3%	$ 83,883
√	Roadway Drainage	Standard Internal System	30%	$ 838,828
√	Illumination		6%	$ 167,766
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 167,766
√	Sewer	Minor Adjustments	4%	$ 111,844
√	Establish Turf / Erosion Control		3%	$ 83,883
√	Basic Landscaping		2%	$ 55,922
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,817,461**
			Paving and Allowance Subtotal:	**$ 4,613,554**
			Construction Contingency: 10%	$ 461,355
			Construction Cost TOTAL:	**$ 5,075,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 5,075,000**
Engineering/Survey/Testing:		20%	$ 1,015,000
Mobilization		6%	$ 304,500
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 507,500
		Impact Fee Project Cost TOTAL:	**$ 6,902,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	2-B
Name:	Lancaster-Hutchins Rd. (2)	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility.**		
Limits:	Pleasant Run Rd. to Belt Line Rd.			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	7,490			
Service Area(s):	2			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	23,302	cy	$ 8.00	$ 186,418
203	8" Lime Stabilization (with Lime @ 32#/sy)	44,940	sy	$ 3.00	$ 134,820
303	8" Concrete Pavement w/ 6" Curb	41,611	sy	$ 38.00	$ 1,581,222
403	4" Topsoil	41,611	sy	$ 4.00	$ 166,444
503	Concrete Driveway Approach	7	ea	$ 2,500.00	$ 17,500
603	5' Concrete Sidewalk	74,900	sf	$ 4.00	$ 299,600
				Paving Construction Cost Subtotal:	**$ 2,386,004**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 143,160
√	Traffic Control	Construction Phase Traffic Control	5%	$ 119,300
√	Pavement Markings/Markers		3%	$ 71,580
√	Roadway Drainage	Standard Internal System	30%	$ 715,801
√	Illumination		6%	$ 143,160
√	Special Drainage Structures	Minor Stream Crossing	0%	$ 250,000
√	Water	Minor Adjustments	6%	$ 143,160
√	Sewer	Minor Adjustments	4%	$ 95,440
√	Establish Turf / Erosion Control		3%	$ 71,580
√	Basic Landscaping		2%	$ 47,720
	Other:		$0	$ -
****Allowances based on % of Paving Construction Cost Subtotal**			**Allowance Subtotal:**	**$ 1,800,903**
			Paving and Allowance Subtotal:	**$ 4,186,907**
			Construction Contingency: 10%	$ 418,691
			#N/A	**$ 4,606,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 4,606,000**
Engineering/Survey/Testing:		20%	$ 921,200
Mobilization		6%	$ 276,360
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 460,600
		Impact Fee Project Cost TOTAL:	**$ 6,264,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	2-C, 3-K
Name:	Lancaster-Hutchins Rd. (3)	**This project consists of the reconstruction of an existing two-lane facility to a six-lane divided major arterial facility. The boundary between SA 2 and SA 3 is on the centerline of Lancaster-Hutchins Road.**		
Limits:	Belt Line Rd. to Dallas Ave.			
Impact Fee Class:	P6D			
Ultimate Class:	Major Arterial			
Length (lf):	2,790			
Service Area(s):	2,3			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	12,710	cy	$ 8.00	$ 101,680
204	8" Lime Stabilization (with Lime @ 32#/sy)	24,800	sy	$ 3.00	$ 74,400
304	8" Concrete Pavement w/ 6" Curb	23,560	sy	$ 38.00	$ 895,280
404	4" Topsoil	13,640	sy	$ 4.00	$ 54,560
504	Concrete Driveway Approach	3	ea	$ 2,500.00	$ 7,500
604	5' Concrete Sidewalk	27,900	sf	$ 4.00	$ 111,600
				Paving Construction Cost Subtotal:	**$ 1,245,020**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 74,701
√	Traffic Control	Construction Phase Traffic Control	5%	$ 62,251
√	Pavement Markings/Markers		3%	$ 37,351
√	Roadway Drainage	Standard Internal System	30%	$ 373,506
√	Illumination		6%	$ 74,701
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 74,701
√	Sewer	Minor Adjustments	4%	$ 49,801
√	Establish Turf / Erosion Control		3%	$ 37,351
√	Basic Landscaping		2%	$ 24,900
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 809,263**
			Paving and Allowance Subtotal:	**$ 2,054,283**
			Construction Contingency: 10%	$ 205,428
			Construction Cost TOTAL:	**$ 2,260,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 2,260,000**
Engineering/Survey/Testing:		20%	$ 452,000
Mobilization		6%	$ 135,600
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 226,000
		Impact Fee Project Cost TOTAL:	**$ 3,074,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	2-D
Name:	Cornell Rd. (1)	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility.**		
Limits:	Lancaster Hutchins Rd. to Greene Rd.			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	8,010			
Service Area(s):	2			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	24,920	cy	$ 8.00	$ 199,360
203	8" Lime Stabilization (with Lime @ 32#/sy)	48,060	sy	$ 3.00	$ 144,180
303	8" Concrete Pavement w/ 6" Curb	44,500	sy	$ 38.00	$ 1,691,000
403	4" Topsoil	44,500	sy	$ 4.00	$ 178,000
503	Concrete Driveway Approach	8	ea	$ 2,500.00	$ 20,000
603	5' Concrete Sidewalk	80,100	sf	$ 4.00	$ 320,400
				Paving Construction Cost Subtotal:	**$ 2,552,940**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 153,176
√	Traffic Control	Construction Phase Traffic Control	5%	$ 127,647
√	Pavement Markings/Markers		3%	$ 76,588
√	Roadway Drainage	Standard Internal System	30%	$ 765,882
√	Illumination		6%	$ 153,176
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 153,176
√	Sewer	Minor Adjustments	4%	$ 102,118
√	Establish Turf / Erosion Control		3%	$ 76,588
√	Basic Landscaping		2%	$ 51,059
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,659,411**
			Paving and Allowance Subtotal:	**$ 4,212,351**
			Construction Contingency: 10%	$ 421,235
			Construction Cost TOTAL:	**$ 4,634,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 4,634,000**
Engineering/Survey/Testing:		20%	$ 926,800
Mobilization		6%	$ 278,040
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 463,400
		Impact Fee Project Cost TOTAL:	**$ 6,302,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	2-E
Name:	Cornell Rd. (2)	**This project consists of the construction of a new four-lane divided major arterial facility.**		
Limits:	Greene Rd. to Belt Line Rd.			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	3,505			
Service Area(s):	2			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	10,904	cy	$ 8.00	$ 87,236
203	8" Lime Stabilization (with Lime @ 32#/sy)	21,030	sy	$ 3.00	$ 63,090
303	8" Concrete Pavement w/ 6" Curb	19,472	sy	$ 38.00	$ 739,944
403	4" Topsoil	19,472	sy	$ 4.00	$ 77,889
503	Concrete Driveway Approach	4	ea	$ 2,500.00	$ 10,000
603	5' Concrete Sidewalk	35,050	sf	$ 4.00	$ 140,200
				Paving Construction Cost Subtotal:	**$ 1,118,359**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 67,102
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 33,551
√	Roadway Drainage	Standard Internal System	30%	$ 335,508
√	Illumination		6%	$ 67,102
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 67,102
√	Sewer	Minor Adjustments	4%	$ 44,734
√	Establish Turf / Erosion Control		3%	$ 33,551
√	Basic Landscaping		2%	$ 22,367
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 671,015**
			Paving and Allowance Subtotal:	**$ 1,789,374**
			Construction Contingency: 10%	$ 178,937
			Construction Cost TOTAL:	**$ 1,969,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,969,000**
Engineering/Survey/Testing:		20%	$ 393,800
Mobilization		6%	$ 118,140
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 393,800
		Impact Fee Project Cost TOTAL:	**$ 2,875,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	2-F
Name:	Alba Rd. (1)	**This project consists of the construction of a new four-lane divided major arterial facility.**		
Limits:	N. City Limits to Greene Rd. (N)			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	5,775			
Service Area(s):	2			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	17,967	cy	$ 8.00	$ 143,733
203	8" Lime Stabilization (with Lime @ 32#/sy)	34,650	sy	$ 3.00	$ 103,950
303	8" Concrete Pavement w/ 6" Curb	32,083	sy	$ 38.00	$ 1,219,167
403	4" Topsoil	32,083	sy	$ 4.00	$ 128,333
503	Concrete Driveway Approach	6	ea	$ 2,500.00	$ 15,000
603	5' Concrete Sidewalk	57,750	sf	$ 4.00	$ 231,000
				Paving Construction Cost Subtotal:	**$ 1,841,183**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 110,471
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 55,236
√	Roadway Drainage	Standard Internal System	30%	$ 552,355
√	Illumination		6%	$ 110,471
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 110,471
√	Sewer	Minor Adjustments	4%	$ 73,647
√	Establish Turf / Erosion Control		3%	$ 55,236
√	Basic Landscaping		2%	$ 36,824
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,104,710**
			Paving and Allowance Subtotal:	**$ 2,945,893**
			Construction Contingency: 10%	$ 294,589
			Construction Cost TOTAL:	**$ 3,241,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 3,241,000**
Engineering/Survey/Testing:		20%	$ 648,200
Mobilization		6%	$ 194,460
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 648,200
		Impact Fee Project Cost TOTAL:	**$ 4,732,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:	Description:	Project No.	2-G
Name:	Alba Rd. (2)	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility.**	
Limits:	Greene Rd. (N) to 935' S. of Greene Rd. (S)		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	1,680		
Service Area(s):	2		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	5,227	cy	$ 8.00	$ 41,813
203	8" Lime Stabilization (with Lime @ 32#/sy)	10,080	sy	$ 3.00	$ 30,240
303	8" Concrete Pavement w/ 6" Curb	9,333	sy	$ 38.00	$ 354,667
403	4" Topsoil	9,333	sy	$ 4.00	$ 37,333
503	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
603	5' Concrete Sidewalk	16,800	sf	$ 4.00	$ 67,200
				Paving Construction Cost Subtotal:	**$ 536,253**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 32,175
√	Traffic Control	Construction Phase Traffic Control	5%	$ 26,813
√	Pavement Markings/Markers		3%	$ 16,088
√	Roadway Drainage	Standard Internal System	30%	$ 160,876
√	Illumination		6%	$ 32,175
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 32,175
√	Sewer	Minor Adjustments	4%	$ 21,450
√	Establish Turf / Erosion Control		3%	$ 16,088
√	Basic Landscaping		2%	$ 10,725
	Other:		$0	$ -
			Allowance Subtotal:	**$ 348,565**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 884,818**
Construction Contingency:	10%	$ 88,482
Construction Cost TOTAL:		**$ 974,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 974,000**
Engineering/Survey/Testing:		20%	$ 194,800
Mobilization		6%	$ 58,440
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 97,400
		Impact Fee Project Cost TOTAL:	**$ 1,325,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:	Description:	Project No.	2-H
Name:	Alba Rd. (3)	**This project consists of the construction of a new four-lane divided major arterial facility.**	
Limits:	935' S. of Greene Rd. (S) to Belt Line Rd.		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	1,160		
Service Area(s):	2		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	3,609	cy	$ 8.00	$ 28,871
203	8" Lime Stabilization (with Lime @ 32#/sy)	6,960	sy	$ 3.00	$ 20,880
303	8" Concrete Pavement w/ 6" Curb	6,444	sy	$ 38.00	$ 244,889
403	4" Topsoil	6,444	sy	$ 4.00	$ 25,778
503	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
603	5' Concrete Sidewalk	11,600	sf	$ 4.00	$ 46,400
				Paving Construction Cost Subtotal:	**$ 369,318**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 22,159
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 11,080
√	Roadway Drainage	Standard Internal System	30%	$ 110,795
√	Illumination		6%	$ 22,159
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 22,159
√	Sewer	Minor Adjustments	4%	$ 14,773
√	Establish Turf / Erosion Control		3%	$ 11,080
√	Basic Landscaping		2%	$ 7,386
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 221,591**
			Paving and Allowance Subtotal:	**$ 590,908**
			Construction Contingency: 10%	$ 59,091
			Construction Cost TOTAL:	**$ 650,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 650,000**
Engineering/Survey/Testing:		20%	$ 130,000
Mobilization		6%	$ 39,000
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 130,000
		Impact Fee Project Cost TOTAL:	**$ 949,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	2-I
Name:	Ferris Rd. (1)	**This project consists of the reconstruction of an existing two-lane facility to a two-lane undivided collector facility.**		
Limits:	Belt Line Rd. to S. City Limits			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	6,290			
Service Area(s):	2			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	15,026	cy	$ 8.00	$ 120,209
201	8" Lime Stabilization (with Lime @ 32#/sy)	29,353	sy	$ 3.00	$ 88,060
301	8" Concrete Pavement w/ 6" Curb	27,956	sy	$ 38.00	$ 1,062,311
401	4" Topsoil	13,978	sy	$ 4.00	$ 55,911
501	Concrete Driveway Approach	6	ea	$ 2,500.00	$ 15,000
601	5' Concrete Sidewalk	62,900	sf	$ 4.00	$ 251,600
				Paving Construction Cost Subtotal:	**$ 1,593,091**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 95,585
√	Traffic Control	Construction Phase Traffic Control	5%	$ 79,655
√	Pavement Markings/Markers		3%	$ 47,793
√	Roadway Drainage	Standard Internal System	30%	$ 477,927
√	Illumination		6%	$ 95,585
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 95,585
√	Sewer	Minor Adjustments	4%	$ 63,724
√	Establish Turf / Erosion Control		3%	$ 47,793
√	Basic Landscaping		2%	$ 31,862
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,035,509**
			Paving and Allowance Subtotal:	**$ 2,628,600**
			Construction Contingency: 10%	$ 262,860
			Construction Cost TOTAL:	**$ 2,892,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 2,892,000**
Engineering/Survey/Testing:		20%	$ 578,400
Mobilization		6%	$ 173,520
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 289,200
		Impact Fee Project Cost TOTAL:	**$ 3,933,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	2-J
Name:	Ferris Rd. (2)	**This project consists of the reconstruction of an existing two-lane facility to a two-lane undivided collector facility. The boundary between Lancaster and the ETJ is on the centerline of Ferris Road.**		
Limits:	S. City Limits to S. City Limits			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	2,980			
Service Area(s):	2 (Half)			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	7,119	cy	$ 8.00	$ 56,951
201	8" Lime Stabilization (with Lime @ 32#/sy)	13,907	sy	$ 3.00	$ 41,720
301	8" Concrete Pavement w/ 6" Curb	13,244	sy	$ 38.00	$ 503,289
401	4" Topsoil	6,622	sy	$ 4.00	$ 26,489
501	Concrete Driveway Approach	3	ea	$ 2,500.00	$ 7,500
601	5' Concrete Sidewalk	29,800	sf	$ 4.00	$ 119,200
				Paving Construction Cost Subtotal:	**$ 755,149**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 45,309
√	Traffic Control	Construction Phase Traffic Control	5%	$ 37,757
√	Pavement Markings/Markers		3%	$ 22,654
√	Roadway Drainage	Standard Internal System	30%	$ 226,545
√	Illumination		6%	$ 45,309
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 45,309
√	Sewer	Minor Adjustments	4%	$ 30,206
√	Establish Turf / Erosion Control		3%	$ 22,654
√	Basic Landscaping		2%	$ 15,103
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 490,847**

Paving and Allowance Subtotal:		**$ 1,245,996**
Construction Contingency:	10%	$ 124,600
Construction Cost TOTAL:		**$ 1,371,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,371,000**
Engineering/Survey/Testing:		20%	$ 274,200
Mobilization		6%	$ 82,260
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 137,100
		Impact Fee Project Cost TOTAL:	**$ 1,865,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	2-K
Name:	Ferris Rd. (3)	**This project consists of the reconstruction of an existing two-lane facility to a two-lane undivided collector facility.**		
Limits:	S. City Limits to E. City Limits			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	3,125			
Service Area(s):	2			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	7,465	cy	$ 8.00	$ 59,722
201	8" Lime Stabilization (with Lime @ 32#/sy)	14,583	sy	$ 3.00	$ 43,750
301	8" Concrete Pavement w/ 6" Curb	13,889	sy	$ 38.00	$ 527,778
401	4" Topsoil	6,944	sy	$ 4.00	$ 27,778
501	Concrete Driveway Approach	3	ea	$ 2,500.00	$ 7,500
601	5' Concrete Sidewalk	31,250	sf	$ 4.00	$ 125,000
				Paving Construction Cost Subtotal:	**$ 791,528**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 47,492
√	Traffic Control	Construction Phase Traffic Control	5%	$ 39,576
√	Pavement Markings/Markers		3%	$ 23,746
√	Roadway Drainage	Standard Internal System	30%	$ 237,458
√	Illumination		6%	$ 47,492
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 47,492
√	Sewer	Minor Adjustments	4%	$ 31,661
√	Establish Turf / Erosion Control		3%	$ 23,746
√	Basic Landscaping		2%	$ 15,831
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 514,493**
			Paving and Allowance Subtotal:	**$ 1,306,021**
			Construction Contingency: 10%	$ 130,602
			Construction Cost TOTAL:	**$ 1,437,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,437,000**
Engineering/Survey/Testing:		20%	$ 287,400
Mobilization		6%	$ 86,220
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 143,700
		Impact Fee Project Cost TOTAL:	**$ 1,954,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	2-L
Name:	Ferris Rd. (4)	**This project consists of the reconstruction of an existing two-lane facility to a two-lane undivided collector facility. The boundary between Lancaster and the City of Dallas is on the centerline of Ferris Road.**		
Limits:	E. City Limits to S. City Limits			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	5,935			
Service Area(s):	2 (Half)			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	14,178	cy	$ 8.00	$ 113,424
201	8" Lime Stabilization (with Lime @ 32#/sy)	27,697	sy	$ 3.00	$ 83,090
301	8" Concrete Pavement w/ 6" Curb	26,378	sy	$ 38.00	$ 1,002,356
401	4" Topsoil	13,189	sy	$ 4.00	$ 52,756
501	Concrete Driveway Approach	6	ea	$ 2,500.00	$ 15,000
601	5' Concrete Sidewalk	59,350	sf	$ 4.00	$ 237,400
				Paving Construction Cost Subtotal:	**$ 1,504,026**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 90,242
√	Traffic Control	Construction Phase Traffic Control	5%	$ 75,201
√	Pavement Markings/Markers		3%	$ 45,121
√	Roadway Drainage	Standard Internal System	30%	$ 451,208
√	Illumination		6%	$ 90,242
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 90,242
√	Sewer	Minor Adjustments	4%	$ 60,161
√	Establish Turf / Erosion Control		3%	$ 45,121
√	Basic Landscaping		2%	$ 30,081
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 977,617**
			Paving and Allowance Subtotal:	**$ 2,481,642**
			Construction Contingency: 10%	$ 248,164
			Construction Cost TOTAL:	**$ 2,730,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 2,730,000**
Engineering/Survey/Testing:		20%	$ 546,000
Mobilization		6%	$ 163,800
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 273,000
		Impact Fee Project Cost TOTAL:	**$ 3,713,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	2-M
Name:	Airport Rd. East	**This project consists of the construction of a new four-lane divided major arterial facility.**		
Limits:	Greene Rd. to Ferris Rd.			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	10,760			
Service Area(s):	2			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	33,476	cy	$ 8.00	$ 267,804
203	8" Lime Stabilization (with Lime @ 32#/sy)	64,560	sy	$ 3.00	$ 193,680
303	8" Concrete Pavement w/ 6" Curb	59,778	sy	$ 38.00	$ 2,271,556
403	4" Topsoil	59,778	sy	$ 4.00	$ 239,111
503	Concrete Driveway Approach	11	ea	$ 2,500.00	$ 27,500
603	5' Concrete Sidewalk	107,600	sf	$ 4.00	$ 430,400
				Paving Construction Cost Subtotal:	**$ 3,430,051**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 205,803
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 102,902
√	Roadway Drainage	Standard Internal System	30%	$ 1,029,015
√	Illumination		6%	$ 205,803
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 205,803
√	Sewer	Minor Adjustments	4%	$ 137,202
√	Establish Turf / Erosion Control		3%	$ 102,902
√	Basic Landscaping		2%	$ 68,601
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 2,058,031**
			Paving and Allowance Subtotal:	**$ 5,488,082**
			Construction Contingency: 10%	$ 548,808
			Construction Cost TOTAL:	**$ 6,037,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 6,037,000**
Engineering/Survey/Testing:		20%	$ 1,207,400
Mobilization		6%	$ 362,220
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 1,207,400
		Impact Fee Project Cost TOTAL:	**$ 8,814,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No. 1-QQ, 2-N
Name:	Belt Line Rd. (2)	**This project consists of the reconstruction of an existing two-lane facility to a six-lane divided major arterial facility. The boundary between SA 1 and SA 2 is on the centerline of Belt Line Rd.**	
Limits:	1,005' W. of Main St. to Main St.		
Impact Fee Class:	P6D		
Ultimate Class:	Major Arterial		
Length (lf):	1,005		
Service Area(s):	1,2		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	4,578	cy	$ 8.00	$ 36,627
204	8" Lime Stabilization (with Lime @ 32#/sy)	8,933	sy	$ 3.00	$ 26,800
304	8" Concrete Pavement w/ 6" Curb	8,487	sy	$ 38.00	$ 322,493
404	4" Topsoil	4,913	sy	$ 4.00	$ 19,653
504	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
604	5' Concrete Sidewalk	10,050	sf	$ 4.00	$ 40,200
				Paving Construction Cost Subtotal:	**$ 448,273**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 26,896
√	Traffic Control	Construction Phase Traffic Control	5%	$ 22,414
√	Pavement Markings/Markers		3%	$ 13,448
√	Roadway Drainage	Standard Internal System	30%	$ 134,482
√	Illumination		6%	$ 26,896
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 26,896
√	Sewer	Minor Adjustments	4%	$ 17,931
√	Establish Turf / Erosion Control		3%	$ 13,448
√	Basic Landscaping		2%	$ 8,965
	Other:		$0	$ -
****Allowances based on % of Paving Construction Cost Subtotal**			**Allowance Subtotal:**	**$ 291,378**
			Paving and Allowance Subtotal:	**$ 739,651**
			Construction Contingency: 10%	$ 73,965
			Construction Cost TOTAL:	**$ 814,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 814,000**
Engineering/Survey/Testing:		20%	$ 162,800
Mobilization		6%	$ 48,840
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 81,400
		Impact Fee Project Cost TOTAL:	**$ 1,107,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	2-O, 3-J
Name:	Belt Line Rd. (4)	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility. The boundary between SA 2 and SA 3 is on the centerline of Belt Line Rd.**		
Limits:	Main St. to Lancaster-Hutchins Rd.			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	6,480			
Service Area(s):	2,3			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	20,160	cy	$ 8.00	$ 161,280
203	8" Lime Stabilization (with Lime @ 32#/sy)	38,880	sy	$ 3.00	$ 116,640
303	8" Concrete Pavement w/ 6" Curb	36,000	sy	$ 38.00	$ 1,368,000
403	4" Topsoil	36,000	sy	$ 4.00	$ 144,000
503	Concrete Driveway Approach	6	ea	$ 2,500.00	$ 15,000
603	5' Concrete Sidewalk	64,800	sf	$ 4.00	$ 259,200
				Paving Construction Cost Subtotal:	**$ 2,064,120**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 123,847
√	Traffic Control	Construction Phase Traffic Control	5%	$ 103,206
√	Pavement Markings/Markers		3%	$ 61,924
√	Roadway Drainage	Standard Internal System	30%	$ 619,236
√	Illumination		6%	$ 123,847
√	Special Drainage Structures	Minor Stream Crossing	0%	$ 250,000
√	Water	Minor Adjustments	6%	$ 123,847
√	Sewer	Minor Adjustments	4%	$ 82,565
√	Establish Turf / Erosion Control		3%	$ 61,924
√	Basic Landscaping		2%	$ 41,282
	Other:		$0	$ -
****Allowances based on % of Paving Construction Cost Subtotal**			**Allowance Subtotal:**	**$ 1,591,678**
			Paving and Allowance Subtotal:	**$ 3,655,798**
			Construction Contingency: 10%	$ 365,580
			Construction Cost TOTAL:	**$ 4,022,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 4,022,000**
Engineering/Survey/Testing:		20%	$ 804,400
Mobilization		6%	$ 241,320
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 402,200
		Impact Fee Project Cost TOTAL:	**$ 5,470,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:	Description:	Project No.	2-P
Name:	Belt Line Rd. (5)	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility.**	
Limits:	Lancaster-Hutchins Rd. to E. City Limits		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	14,600		
Service Area(s):	2		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	45,422	cy	$ 8.00	$ 363,378
203	8" Lime Stabilization (with Lime @ 32#/sy)	87,600	sy	$ 3.00	$ 262,800
303	8" Concrete Pavement w/ 6" Curb	81,111	sy	$ 38.00	$ 3,082,222
403	4" Topsoil	81,111	sy	$ 4.00	$ 324,444
503	Concrete Driveway Approach	15	ea	$ 2,500.00	$ 37,500
603	5' Concrete Sidewalk	146,000	sf	$ 4.00	$ 584,000
				Paving Construction Cost Subtotal:	**$ 4,654,344**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 279,261
√	Traffic Control	Construction Phase Traffic Control	5%	$ 232,717
√	Pavement Markings/Markers		3%	$ 139,630
√	Roadway Drainage	Standard Internal System	30%	$ 1,396,303
√	Illumination		6%	$ 279,261
√	Special Drainage Structures	Minor Stream Crossing	0%	$ 250,000
√	Water	Minor Adjustments	6%	$ 279,261
√	Sewer	Minor Adjustments	4%	$ 186,174
√	Establish Turf / Erosion Control		3%	$ 139,630
√	Basic Landscaping		2%	$ 93,087
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 3,275,324**
			Paving and Allowance Subtotal:	**$ 7,929,668**
			Construction Contingency: 10%	$ 792,967
			Construction Cost TOTAL:	**$ 8,723,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 8,723,000**
Engineering/Survey/Testing:		20%	$ 1,744,600
Mobilization		6%	$ 523,380
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 872,300
		Impact Fee Project Cost TOTAL:	**$ 11,863,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No. 2-Q
Name:	Belt Line Rd. (6)	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility. The boundary between Lancaster and the City of Dallas is on the centerline of Belt Line Road.**	
Limits:	E. City Limits to 640' E. of E. City Limit		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	640		
Service Area(s):	2 (Half)		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	1,991	cy	$ 8.00	$ 15,929
203	8" Lime Stabilization (with Lime @ 32#/sy)	3,840	sy	$ 3.00	$ 11,520
303	8" Concrete Pavement w/ 6" Curb	3,556	sy	$ 38.00	$ 135,111
403	4" Topsoil	3,556	sy	$ 4.00	$ 14,222
503	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
603	5' Concrete Sidewalk	6,400	sf	$ 4.00	$ 25,600
				Paving Construction Cost Subtotal:	**$ 204,882**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 12,293
√	Traffic Control	Construction Phase Traffic Control	5%	$ 10,244
√	Pavement Markings/Markers		3%	$ 6,146
√	Roadway Drainage	Standard Internal System	30%	$ 61,465
√	Illumination		6%	$ 12,293
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 12,293
√	Sewer	Minor Adjustments	4%	$ 8,195
√	Establish Turf / Erosion Control		3%	$ 6,146
√	Basic Landscaping		2%	$ 4,098
	Other:		$0	$ -
****Allowances based on % of Paving Construction Cost Subtotal**			**Allowance Subtotal:**	**$ 133,173**
			Paving and Allowance Subtotal:	**$ 338,056**
			Construction Contingency: 10%	$ 33,806
			Construction Cost TOTAL:	**$ 372,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 372,000**
Engineering/Survey/Testing:		20%	$ 74,400
Mobilization		6%	$ 22,320
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 37,200
		Impact Fee Project Cost TOTAL:	**$ 506,000**

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City of Lancaster - 2012 Roadway Impact Fee Update

Thoroughfare Impact Fee Improvement Projects for Roadway Impact Fees

Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area 3

#	Class	Project	Limits	Project Cost
3-A	M4D	Houston School Rd. (4)	2,720' N. of Bear Creek Rd. to S. City Limits	$ 6,361,000
3-B	M4D	Blue Grove Rd. (4)	Main St. to 385' S. of Main St.	$ 314,000
3-C	M4D	Blue Grove Rd. (5)	385' S. of Main St. to 765' N. of Bear Creek Rd.	$ 7,067,000
3-D	M4D	Blue Grove Rd. (6)	765' N. of Bear Creek Rd. to 1,700' S. of Bear Creek Rd.	$ 2,016,000
3-E	S4D	Bear Creek Rd.	IH-35E to Dallas Ave.	$ 13,278,000
3-F	M4D	Meadowlark Ln. (1)	Parkerville Rd. to 980' S. of Parkerville Rd.	$ 803,000
3-G	M4D	Meadowlark Ln. (2)	980' S. of Parkerville Rd. to Meadowlark Ct.	$ 2,150,000
3-H	M4D	Meadowlark Ln. (3)	Meadowlark Ct. to S. City Limits	$ 6,151,000
1-RR, 3-I	C2U	Main St. (1)	Belt Line Rd. to Belt Line Rd.	$ 9,972,000
2-O, 3-J	M4D	Belt Line Rd. (4)	Main St. to Lancaster-Hutchins Rd.	$ 5,470,000
2-C, 3-K	P6D	Lancaster-Hutchins Rd. (3)	Lancaster-Hutchins Rd. (3)	$ 3,074,000
Signal Installation				
I-3		Signal Installation	Belt Line Rd. & Chesier Rd. / Main St.	$ 140,000
			TOTAL	$ 56,796,000

*Total may be higher than presented in Tables 2.A, 2.B and 2.C (Thoroughfare Impact Fee Improvement Program) because the cost of some projects are shared between service areas.

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:	Description:	Project No.	3-A
Name:	Houston School Rd. (4)	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility.**	
Limits:	2,720' N. of Bear Creek Rd. to S. City Limits		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	7,605		
Service Area(s):	3		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	23,660	cy	$ 8.00	$ 189,280
203	8" Lime Stabilization (with Lime @ 32#/sy)	45,630	sy	$ 3.00	$ 136,890
303	8" Concrete Pavement w/ 6" Curb	42,250	sy	$ 38.00	$ 1,605,500
403	4" Topsoil	42,250	sy	$ 4.00	$ 169,000
503	Concrete Driveway Approach	8	ea	$ 2,500.00	$ 20,000
603	5' Concrete Sidewalk	76,050	sf	$ 4.00	$ 304,200
				Paving Construction Cost Subtotal:	**$ 2,424,870**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 145,492
√	Traffic Control	Construction Phase Traffic Control	5%	$ 121,244
√	Pavement Markings/Markers		3%	$ 72,746
√	Roadway Drainage	Standard Internal System	30%	$ 727,461
√	Illumination		6%	$ 145,492
√	Special Drainage Structures	None Anticipated	0%	$ 250,000
√	Water	Minor Adjustments	6%	$ 145,492
√	Sewer	Minor Adjustments	4%	$ 96,995
√	Establish Turf / Erosion Control		3%	$ 72,746
√	Basic Landscaping		2%	$ 48,497
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,826,166**
			Paving and Allowance Subtotal:	**$ 4,251,036**
			Construction Contingency: 10%	$ 425,104
			Construction Cost TOTAL:	**$ 4,677,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 4,677,000**
Engineering/Survey/Testing:		20%	$ 935,400
Mobilization		6%	$ 280,620
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 467,700
		Impact Fee Project Cost TOTAL:	**$ 6,361,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	3-B
Name:	Blue Grove Rd. (4)	**This project consists of the construction of a new four-lane divided major arterial facility.**		
Limits:	Main St. to 385' S. of Main St.			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	385			
Service Area(s):	3			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	1,198	cy	$ 8.00	$ 9,582
203	8" Lime Stabilization (with Lime @ 32#/sy)	2,310	sy	$ 3.00	$ 6,930
303	8" Concrete Pavement w/ 6" Curb	2,139	sy	$ 38.00	$ 81,278
403	4" Topsoil	2,139	sy	$ 4.00	$ 8,556
503	Concrete Driveway Approach	0	ea	$ 2,500.00	$ -
603	5' Concrete Sidewalk	3,850	sf	$ 4.00	$ 15,400
				Paving Construction Cost Subtotal:	**$ 121,746**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 7,305
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 3,652
√	Roadway Drainage	Standard Internal System	30%	$ 36,524
√	Illumination		6%	$ 7,305
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 7,305
√	Sewer	Minor Adjustments	4%	$ 4,870
√	Establish Turf / Erosion Control		3%	$ 3,652
√	Basic Landscaping		2%	$ 2,435
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 73,047**
			Paving and Allowance Subtotal:	**$ 194,793**
			Construction Contingency: 10%	$ 19,479
			Construction Cost TOTAL:	**$ 215,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 215,000**
Engineering/Survey/Testing:		20%	$ 43,000
Mobilization		6%	$ 12,900
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 43,000
		Impact Fee Project Cost TOTAL:	**$ 314,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No. 3-C
Name:	Blue Grove Rd. (5)	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility.**	
Limits:	385' S. of Main St. to 765' N. of Bear Creek Rd.		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	8,030		
Service Area(s):	3		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	24,982	cy	$ 8.00	$ 199,858
203	8" Lime Stabilization (with Lime @ 32#/sy)	48,180	sy	$ 3.00	$ 144,540
303	8" Concrete Pavement w/ 6" Curb	44,611	sy	$ 38.00	$ 1,695,222
403	4" Topsoil	44,611	sy	$ 4.00	$ 178,444
503	Concrete Driveway Approach	8	ea	$ 2,500.00	$ 20,000
603	5' Concrete Sidewalk	80,300	sf	$ 4.00	$ 321,200
				Paving Construction Cost Subtotal:	**$ 2,559,264**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 153,556
√	Traffic Control	Construction Phase Traffic Control	5%	$ 127,963
√	Pavement Markings/Markers		3%	$ 76,778
√	Roadway Drainage	Standard Internal System	30%	$ 767,779
√	Illumination		6%	$ 153,556
√	Special Drainage Structures	Major Stream Crossing	0%	$ 500,000
√	Water	Minor Adjustments	6%	$ 153,556
√	Sewer	Minor Adjustments	4%	$ 102,371
√	Establish Turf / Erosion Control		3%	$ 76,778
√	Basic Landscaping		2%	$ 51,185
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 2,163,522**
			Paving and Allowance Subtotal:	**$ 4,722,786**
			Construction Contingency: 10%	$ 472,279
			Construction Cost TOTAL:	**$ 5,196,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 5,196,000**
Engineering/Survey/Testing:		20%	$ 1,039,200
Mobilization		6%	$ 311,760
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 519,600
		Impact Fee Project Cost TOTAL:	**$ 7,067,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:	Description:	Project No.	3-D
Name:	Blue Grove Rd. (6)	**This project consists of the construction of a new four-lane divided major arterial facility.**	
Limits:	765' N. of Bear Creek Rd. to 1,700' S. of Bear Creek Rd.		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	2,465		
Service Area(s):	3		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	7,669	cy	$ 8.00	$ 61,351
203	8" Lime Stabilization (with Lime @ 32#/sy)	14,790	sy	$ 3.00	$ 44,370
303	8" Concrete Pavement w/ 6" Curb	13,694	sy	$ 38.00	$ 520,389
403	4" Topsoil	13,694	sy	$ 4.00	$ 54,778
503	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
603	5' Concrete Sidewalk	24,650	sf	$ 4.00	$ 98,600
				Paving Construction Cost Subtotal:	**$ 784,488**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 47,069
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 23,535
√	Roadway Drainage	Standard Internal System	30%	$ 235,346
√	Illumination		6%	$ 47,069
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 47,069
√	Sewer	Minor Adjustments	4%	$ 31,380
√	Establish Turf / Erosion Control		3%	$ 23,535
√	Basic Landscaping		2%	$ 15,690
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 470,693**
			Paving and Allowance Subtotal:	**$ 1,255,180**
			Construction Contingency: 10%	$ 125,518
			Construction Cost TOTAL:	**$ 1,381,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,381,000**
Engineering/Survey/Testing:		20%	$ 276,200
Mobilization		6%	$ 82,860
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 276,200
		Impact Fee Project Cost TOTAL:	**$ 2,016,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	3-E
Name:	Bear Creek Rd.	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided minor arterial facility.**		
Limits:	IH-35E to Dallas Ave.			
Impact Fee Class:	S4D			
Ultimate Class:	Minor Arterial			
Length (lf):	16,165			
Service Area(s):	3			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	52,087	cy	$ 8.00	$ 416,698
202	8" Lime Stabilization (with Lime @ 32#/sy)	100,582	sy	$ 3.00	$ 301,747
302	8" Concrete Pavement w/ 6" Curb	93,398	sy	$ 38.00	$ 3,549,116
402	4" Topsoil	68,252	sy	$ 4.00	$ 273,009
502	Concrete Driveway Approach	16	ea	$ 2,500.00	$ 40,000
602	5' Concrete Sidewalk	161,650	sf	$ 4.00	$ 646,600
				Paving Construction Cost Subtotal:	**$ 5,227,169**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 313,630
√	Traffic Control	Construction Phase Traffic Control	5%	$ 261,358
√	Pavement Markings/Markers		3%	$ 156,815
√	Roadway Drainage	Standard Internal System	30%	$ 1,568,151
√	Illumination		6%	$ 313,630
√	Special Drainage Structures	Minor Stream Crossing	0%	$ 250,000
√	Water	Minor Adjustments	6%	$ 313,630
√	Sewer	Minor Adjustments	4%	$ 209,087
√	Establish Turf / Erosion Control		3%	$ 156,815
√	Basic Landscaping		2%	$ 104,543
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 3,647,660**
			Paving and Allowance Subtotal:	**$ 8,874,829**
			Construction Contingency: 10%	$ 887,483
			Construction Cost TOTAL:	**$ 9,763,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 9,763,000**
Engineering/Survey/Testing:		20%	$ 1,952,600
Mobilization		6%	$ 585,780
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 976,300
		Impact Fee Project Cost TOTAL:	**$ 13,278,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:	Description:	Project No.	3-F
Name:	Meadowlark Ln. (1)	**This project consists of the construction of a new four-lane divided major arterial facility.**	
Limits:	Parkerville Rd. to 980' S. of Parkerville Rd.		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	980		
Service Area(s):	3		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	3,049	cy	$ 8.00	$ 24,391
203	8" Lime Stabilization (with Lime @ 32#/sy)	5,880	sy	$ 3.00	$ 17,640
303	8" Concrete Pavement w/ 6" Curb	5,444	sy	$ 38.00	$ 206,889
403	4" Topsoil	5,444	sy	$ 4.00	$ 21,778
503	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
603	5' Concrete Sidewalk	9,800	sf	$ 4.00	$ 39,200
				Paving Construction Cost Subtotal:	**$ 312,398**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 18,744
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 9,372
√	Roadway Drainage	Standard Internal System	30%	$ 93,719
√	Illumination		6%	$ 18,744
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 18,744
√	Sewer	Minor Adjustments	4%	$ 12,496
√	Establish Turf / Erosion Control		3%	$ 9,372
√	Basic Landscaping		2%	$ 6,248
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 187,439**
			Paving and Allowance Subtotal:	**$ 499,836**
			Construction Contingency: 10%	$ 49,984
			Construction Cost TOTAL:	**$ 550,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 550,000**
Engineering/Survey/Testing:		20%	$ 110,000
Mobilization		6%	$ 33,000
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 110,000
		Impact Fee Project Cost TOTAL:	**$ 803,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:	Description:	Project No.	3-G
Name:	Meadowlark Ln. (2)	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility.**	
Limits:	980' S. of Parkerville Rd. to Meadowlark Ct.		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	2,730		
Service Area(s):	3		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	8,493	cy	$ 8.00	$ 67,947
203	8" Lime Stabilization (with Lime @ 32#/sy)	16,380	sy	$ 3.00	$ 49,140
303	8" Concrete Pavement w/ 6" Curb	15,167	sy	$ 38.00	$ 576,333
403	4" Topsoil	15,167	sy	$ 4.00	$ 60,667
503	Concrete Driveway Approach	3	ea	$ 2,500.00	$ 7,500
603	5' Concrete Sidewalk	27,300	sf	$ 4.00	$ 109,200
				Paving Construction Cost Subtotal:	**$ 870,787**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 52,247
√	Traffic Control	Construction Phase Traffic Control	5%	$ 43,539
√	Pavement Markings/Markers		3%	$ 26,124
√	Roadway Drainage	Standard Internal System	30%	$ 261,236
√	Illumination		6%	$ 52,247
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 52,247
√	Sewer	Minor Adjustments	4%	$ 34,831
√	Establish Turf / Erosion Control		3%	$ 26,124
√	Basic Landscaping		2%	$ 17,416
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 566,011**
			Paving and Allowance Subtotal:	**$ 1,436,798**
			Construction Contingency: 10%	$ 143,680
			Construction Cost TOTAL:	**$ 1,581,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,581,000**
Engineering/Survey/Testing:		20%	$ 316,200
Mobilization		6%	$ 94,860
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 158,100
		Impact Fee Project Cost TOTAL:	**$ 2,150,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	3-H
Name:	Meadowlark Ln. (3)	**This project consists of the construction of a new four-lane divided major arterial facility.**		
Limits:	Meadowlark Ct. to S. City Limits			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	6,525			
Service Area(s):	3			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	20,300	cy	$ 8.00	$ 162,400
203	8" Lime Stabilization (with Lime @ 32#/sy)	39,150	sy	$ 3.00	$ 117,450
303	8" Concrete Pavement w/ 6" Curb	36,250	sy	$ 38.00	$ 1,377,500
403	4" Topsoil	36,250	sy	$ 4.00	$ 145,000
503	Concrete Driveway Approach	7	ea	$ 2,500.00	$ 17,500
603	5' Concrete Sidewalk	65,250	sf	$ 4.00	$ 261,000
				Paving Construction Cost Subtotal:	**$ 2,080,850**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 124,851
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 62,426
√	Roadway Drainage	Standard Internal System	30%	$ 624,255
√	Illumination		6%	$ 124,851
√	Special Drainage Structures	Major Stream Crossing	0%	$ 500,000
√	Water	Minor Adjustments	6%	$ 124,851
√	Sewer	Minor Adjustments	4%	$ 83,234
√	Establish Turf / Erosion Control		3%	$ 62,426
√	Basic Landscaping		2%	$ 41,617
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,748,510**
			Paving and Allowance Subtotal:	**$ 3,829,360**
			Construction Contingency: 10%	$ 382,936
			Construction Cost TOTAL:	**$ 4,213,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 4,213,000**
Engineering/Survey/Testing:		20%	$ 842,600
Mobilization		6%	$ 252,780
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 842,600
		Impact Fee Project Cost TOTAL:	**$ 6,151,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No. 1-RR, 3-I
Name:	Main St. (1)	**This project consists of the reconstruction of an existing two-lane facility to a two-lane undivided collector facility. The boundary between SA 1 and SA 3 is on the centerline of Main St.**	
Limits:	Belt Line Rd. to Belt Line Rd.		
Impact Fee Class:	C2U		
Ultimate Class:	Collector		
Length (lf):	15,940		
Service Area(s):	1,3		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	38,079	cy	$ 8.00	$ 304,631
201	8" Lime Stabilization (with Lime @ 32#/sy)	74,387	sy	$ 3.00	$ 223,160
301	8" Concrete Pavement w/ 6" Curb	70,844	sy	$ 38.00	$ 2,692,089
401	4" Topsoil	35,422	sy	$ 4.00	$ 141,689
501	Concrete Driveway Approach	16	ea	$ 2,500.00	$ 40,000
601	5' Concrete Sidewalk	159,400	sf	$ 4.00	$ 637,600
				Paving Construction Cost Subtotal:	**$ 4,039,169**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 242,350
√	Traffic Control	Construction Phase Traffic Control	5%	$ 201,958
√	Pavement Markings/Markers		3%	$ 121,175
√	Roadway Drainage	Standard Internal System	30%	$ 1,211,751
√	Illumination		6%	$ 242,350
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 242,350
√	Sewer	Minor Adjustments	4%	$ 161,567
√	Establish Turf / Erosion Control		3%	$ 121,175
√	Basic Landscaping		2%	$ 80,783
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 2,625,460**
			Paving and Allowance Subtotal:	**$ 6,664,629**
			Construction Contingency: 10%	$ 666,463
			Construction Cost TOTAL:	**$ 7,332,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 7,332,000**
Engineering/Survey/Testing:		20%	$ 1,466,400
Mobilization		6%	$ 439,920
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 733,200
		Impact Fee Project Cost TOTAL:	**$ 9,972,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	2-O, 3-J
Name:	Belt Line Rd. (4)	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility. The boundary between SA 2 and SA 3 is on the centerline of Belt Line Rd.**		
Limits:	Main St. to Lancaster-Hutchins Rd.			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	6,480			
Service Area(s):	2,3			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	20,160	cy	$ 8.00	$ 161,280
203	8" Lime Stabilization (with Lime @ 32#/sy)	38,880	sy	$ 3.00	$ 116,640
303	8" Concrete Pavement w/ 6" Curb	36,000	sy	$ 38.00	$ 1,368,000
403	4" Topsoil	36,000	sy	$ 4.00	$ 144,000
503	Concrete Driveway Approach	6	ea	$ 2,500.00	$ 15,000
603	5' Concrete Sidewalk	64,800	sf	$ 4.00	$ 259,200
				Paving Construction Cost Subtotal:	**$ 2,064,120**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 123,847
√	Traffic Control	Construction Phase Traffic Control	5%	$ 103,206
√	Pavement Markings/Markers		3%	$ 61,924
√	Roadway Drainage	Standard Internal System	30%	$ 619,236
√	Illumination		6%	$ 123,847
√	Special Drainage Structures	Minor Stream Crossing	0%	$ 250,000
√	Water	Minor Adjustments	6%	$ 123,847
√	Sewer	Minor Adjustments	4%	$ 82,565
√	Establish Turf / Erosion Control		3%	$ 61,924
√	Basic Landscaping		2%	$ 41,282
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,591,678**
			Paving and Allowance Subtotal:	**$ 3,655,798**
			Construction Contingency: 10%	$ 365,580
			Construction Cost TOTAL:	**$ 4,022,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 4,022,000**
Engineering/Survey/Testing:		20%	$ 804,400
Mobilization		6%	$ 241,320
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 402,200
		Impact Fee Project Cost TOTAL:	**$ 5,470,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	2-C, 3-K
Name:	Lancaster-Hutchins Rd. (3)	**This project consists of the reconstruction of an existing two-lane facility to a six-lane divided major arterial facility. The boundary between SA 2 and SA 3 is on the centerline of Lancaster-Hutchins Road.**		
Limits:	Belt Line Rd. to Dallas Ave.			
Impact Fee Class:	P6D			
Ultimate Class:	Major Arterial			
Length (lf):	2,790			
Service Area(s):	2,3			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	12,710	cy	$ 8.00	$ 101,680
204	8" Lime Stabilization (with Lime @ 32#/sy)	24,800	sy	$ 3.00	$ 74,400
304	8" Concrete Pavement w/ 6" Curb	23,560	sy	$ 38.00	$ 895,280
404	4" Topsoil	13,640	sy	$ 4.00	$ 54,560
504	Concrete Driveway Approach	3	ea	$ 2,500.00	$ 7,500
604	5' Concrete Sidewalk	27,900	sf	$ 4.00	$ 111,600
				Paving Construction Cost Subtotal:	**$ 1,245,020**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 74,701
√	Traffic Control	Construction Phase Traffic Control	5%	$ 62,251
√	Pavement Markings/Markers		3%	$ 37,351
√	Roadway Drainage	Standard Internal System	30%	$ 373,506
√	Illumination		6%	$ 74,701
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 74,701
√	Sewer	Minor Adjustments	4%	$ 49,801
√	Establish Turf / Erosion Control		3%	$ 37,351
√	Basic Landscaping		2%	$ 24,900
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 809,263**
			Paving and Allowance Subtotal:	**$ 2,054,283**
			Construction Contingency: 10%	$ 205,428
			Construction Cost TOTAL:	**$ 2,260,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 2,260,000**
Engineering/Survey/Testing:		20%	$ 452,000
Mobilization		6%	$ 135,600
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 226,000
		Impact Fee Project Cost TOTAL:	**$ 3,074,000**

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Kimley-Horn and Associates, Inc.

Lancaster

Appendix B – TIFIP Service Units of Supply

City of Lancaster - 2012 Roadway Impact Fee Update

TIFIP Service Units of Supply

Service Area 1

5/8/2012

Project ID #	ROADWAY	LIMITS	LENGTH (Mi)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR	EXCESS CAPACITY PK-HR VEH-MI	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
1-A	Proposed Collector "A"	Wheatland Rd. to IH-20	0.32	2	C2U	0	100%	450	288	0	288	$ 1,099,000	$ 1,099,000
1-B	Proposed Collector "B"	University Hills Blvd. to IH-20	0.30	2	C2U	0	100%	450	270	0	270	$ 1,447,000	$ 1,447,000
1-C	University Hills Blvd. (1)	Wheatland Rd. to IH-20 WBFR	0.35	6	P6D	652	100%	750	1,575	228	1,347	$ 1,020,000	$ 1,020,000
1-D	Wheatland Rd.	University Hills Blvd. to N. City Limits	0.60	2	C2U	41	100%	450	540	25	515	$ 1,983,000	$ 1,983,000
1-E	Proposed Collector "C"	Wheatland Rd. to IH-20	0.29	2	C2U	0	100%	450	261	0	261	$ 984,000	$ 984,000
1-F	Proposed Collector "D"	N. City Limits to IH-20	0.22	2	C2U	0	100%	450	198	0	198	$ 755,000	$ 755,000
1-G	Proposed Collector "E"	IH-20 to Springfield Ave.	0.34	2	C2U	0	100%	450	306	0	306	$ 1,187,000	$ 1,167,000
1-H	Proposed Collector "F"	IH-20 to Springfield Ave.	0.34	2	C2U	0	100%	450	306	0	306	$ 1,168,000	$ 1,168,000
1-I	Springfield St. (1)	IH-35E to Proposed Collector "F" (1-H)	0.44	2	C2U	50	100%	450	396	22	374	$ 1,459,000	$ 1,459,000
1-J	Springfield St. (2)	Proposed Collector "F" (1-H) to Houston School Rd.	0.49	2	C2U	0	100%	450	441	0	441	$ 2,098,000	$ 2,098,000
1-K	Balomeade Ave./Cumberland St. (1)	Springfield St. to West Dr.	0.75	2	C2U	20	100%	450	675	15	660	$ 2,471,000	$ 2,471,000
1-L	Danieldale Rd. (1)	IH-35E to Houston School Rd.	1.03	4	S4D	226	100%	625	2,575	233	2,342	$ 3,600,000	$ 3,600,000
1-M	Danieldale Rd. (2)	Houston School Rd. to IH-20	1.02	4	S4D	101	100%	625	2,550	103	2,447	$ 1,500,000	$ 1,500,000
1-N	Proposed Collector "G"	Houston School Rd. to IH-20	0.45	2	C2U	0	100%	450	405	0	405	$ 1,943,000	$ 1,943,000
1-O	Percy St. (1)	Cedardale Rd. to Lyle St.	0.38	2	C2U	20	100%	450	342	6	334	$ 1,270,000	$ 1,270,000
1-P	Percy St. (2)	Lyle St. to IH-20	0.11	2	C2U	0	100%	450	99	0	99	$ 371,000	$ 371,000
1-Q	West Dr.	IH-35E to Longhorn Dr.	0.58	2	C2U	50	100%	450	522	29	493	$ 2,523,027	$ 2,523,027
1-R	Cedardale Rd. (1)	Houston School Rd. to E. City Limits	1.43	4	S4D	321	100%	625	3,575	458	3,117	$ 6,034,000	$ 6,034,000
1-S	Cedardale Rd. (2)	E. City Limits to Dallas Ave.	0.32	4	S4D	321	50%	625	400	51	349	$ 1,352,000	$ 676,000
1-T	Proposed Collector "H"	150' S. of Kentucky Ave. to Dizzy Dean Dr.	0.39	2	C2U	0	100%	450	351	0	351	$ 1,355,000	$ 1,355,000
1-U	Proposed Collector "I" (Wintergreen Extension)	Pennsylvania Ave. to Dizzy Dean Dr.	0.07	2	C2U	0	100%	450	63	0	63	$ 239,000	$ 239,000
1-V	Dizzy Dean Dr. (Wintergreen Extension)	Proposed Collector "I"(1-U) to Telephone Rd.	0.63	2	S4D(1/2)	112	100%	625	T88	71	717	$ 1,374,000	$ 1,374,000
1-W	Wintergreen Rd. (1)	IH-35E to Houston School Rd.	1.01	4	M4D	364	100%	650	2,626	368	2,258	$ 4,702,536	$ 4,702,536
1-X	Wintergreen Rd. (2)	Houston School Rd. to 830' E. of Houston School Rd.	0.16	2	M4D(1/2)	20	100%	650	208	3	205	$ 345,000	$ 345,000
1-Y	Wingergreen Rd. (3)	830' E. of Houston School Rd. to 1,385' E. of Houston School Rd.	0.11	4	M4D	0	100%	650	286	0	286	$ 458,000	$ 458,000
1-Z	Wintergreen Rd. (4)	1,385' E. of Houston School Rd. to 2,770' E. of Houston School Rd.	0.26	2	M4D(1/2)	20	100%	650	338	5	333	$ 571,000	$ 571,000
1-AA	Wingergreen Rd. (5)	2,770' E. of Houston School Rd. to Baskin Dr.	0.23	4	M4D	0	100%	650	598	0	598	$ 974,000	$ 974,000
1-BB	Wintergreen Rd./Telephone Rd.	Baskin Dr. to E. City Limits	1.52	4	M4D	459	100%	650	3,952	698	3,254	$ 6,334,000	$ 6,334,000
1-CC	Wintergreen Rd. (6)	Telephone Rd. to Dallas Ave.	0.94	4	M4D	214	100%	650	2,444	201	2,243	$ 4,296,000	$ 4,298,000
1-DD	Wintergreen Rd. (7)	Dallas Ave. to Jefferson St.	0.82	4	M4D	214	100%	650	2,132	175	1,957	$ 2,404,934	$ 2,404,934
1-EE	Wintergreen Rd. (8)	Jefferson St. to Lancaster-Hutchins Rd.	1.04	4	M4D	214	50%	650	1,352	111	1,241	$ 5,061,000	$ 2,530,500
1-FF	Blue Grove Rd. (1)	Sunny Meadow Rd. to Kings Cross Dr.	0.18	4	M4D	0	100%	650	468	0	468	$ 1,603,000	$ 1,603,000
1-GG	Blue Grove Rd. (2)	Kings Cross to Dr. Brook Meadow Cir.	0.43	4	M4D	438	100%	650	1,118	188	930	$ 1,805,000	$ 1,805,000
1-HH	Blue Grove Rd. (3)	Belt Line Rd. to Main St.	0.61	4	M4D	120	100%	650	1,586	73	1,513	$ 2,553,000	$ 2,553,000
1-II	Balomeade Ave. (2)	West Dr. to Belverde Dr.	0.29	2	C2U	0	100%	450	261	0	261	$ 1,003,000	$ 1,003,000
1-JJ	Balomeade Ave. (3)	Belverde Dr. to Wintergreen Rd.	0.21	2	C2U	20	100%	450	189	4	185	$ 679,000	$ 679,000
1-KK	Proposed Collector "J"	Wintergreen Rd. to Idlewild Ln.	0.52	2	C2U	0	100%	450	468	0	468	$ 1,774,000	$ 1,774,000
1-LL	Proposed Collector "K"	Pleasant Run Rd. to Hanna Ln.	0.63	2	C2U	0	100%	450	567	0	567	$ 2,151,000	$ 2,151,000
1-MM	Houston School Rd. (2)	IH-20 EBFR to Pleasant Run Road	2.56	4	M4D	600	100%	650	6,656	1,536	5,120	$ 7,480,000	$ 7,480,000
1-NN	Houston School Rd. (3)	1,500' N. of Belt Line Rd. to Main St.	0.70	4	M4D	94	100%	650	1,820	65	1,T55	$ 2,909,000	$ 2,909,000
1-OO	Jefferson St.	Wintergreen Rd. to Pleasant Run Rd.	0.98	4	S4D	252	100%	625	2,450	24T	2,203	$ 4,525,000	$ 4,525,000
1-PP	Belt Line Rd. (1)	Blue Grove Rd. to 1,005' W. of Main St.	0.75	6	P6D	556	100%	750	3,375	417	2,958	$ 4,334,000	$ 4,334,000
1-QQ, 2-N	Belt Line Rd. (2)	1,005' W. of Main St. to Main St.	0.19	6	P6D	556	50%	750	426	53	375	$ 1,107,000	$ 553,500
1-RR, 3-I	Main St. (1)	Belt Line Rd. to Belt Line Rd.	3.02	2	C2U	367	50%	450	1,359	554	805	$ 9,972,000	$ 4,986,000
1-SS, 2-A	Lancaster Hutchins Rd. (1)	Wintergreen Rd. to Pleasant Run Rd.	1.19	6	P6D	440	50%	750	2,676	262	2,418	$ 6,902,000	$ 3,451,000
I-1	Signal Installation	Houston School Rd. & Wheatland Rd.					100%					$ 140,000	$ 140,000
I-2	Signal Installation	Houston School Rd. & Ames Rd.					100%					$ 140,000	$ 140,000
I-3	Signal Installation	Belt Line Rd. & Chesier Rd. / Main St.					50%					$ 140,000	$ 70,000
I-4	Signal Installation	Lancaster-Hutchins Rd. & Wintergreen Rd.					50%					$ 140,000	$ 70,000
I-5	Signal Installation	Lancaster-Hutchins Rd. & Pleasant Run Rd.					25%					$ 140,000	$ 35,000
SUBTOTAL									54,284	5,203	48,080	$ 111,875,497	$ 99,433,497

2012 Roadway Impact Fee Update Cost Per Service Area $ 15,333

TOTAL COST IN SERVICE AREA 1 $ 99,448,830

City of Lancaster - 2012 Roadway Impact Fee Update

TIFIP Service Units of Supply

Service Area 2

5/8/2012

Project ID #	ROADWAY	LIMITS	LENGTH (MI)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR	EXCESS CAPACITY PK-HR VEH-MI	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
1-SS, 2-A	Lancaster Hutchins Rd. (1)	Wintergreen Rd. to Pleasant Run Rd.	1.19	6	P6D	440	50%	750	2,678	262	2,416	$ 6,902,000	$ 3,451,000
2-B	Lancaster-Hutchins Rd. (2)	Pleasant Run Rd. to Belt Line Rd.	1.42	4	M4D	213	100%	650	3,892	302	3,390	$ 8,264,000	$ 6,264,000
2-C, 3-K	Lancaster-Hutchins Rd. (3)	Belt Line Rd. to Dallas Ave.	0.53	6	P6D	263	50%	750	1,193	70	1,123	$ 3,074,000	$ 1,537,000
2-D	Cornell Rd. (1)	Lancaster Hutchins Rd. to Greene Rd.	1.52	4	M4D	20	100%	650	3,952	30	3,922	$ 8,302,000	$ 6,302,000
2-E	Cornell Rd. (2)	Greene Rd. to Belt Line Rd.	0.66	4	M4D	0	100%	650	1,716	0	1,716	$ 2,875,000	$ 2,875,000
2-F	Alba Rd. (1)	N. City Limits to Greene Rd. (N)	1.09	4	M4D	0	100%	650	2,834	0	2,834	$ 4,732,000	$ 4,732,000
2-G	Alba Rd. (2)	Greene Rd. (N) to 935' S. of Greene Rd. (S)	0.32	4	M4D	50	100%	650	832	18	818	$ 1,325,000	$ 1,325,000
2-H	Alba Rd. (3)	935' S. of Greene Rd. (S) to Belt Line Rd.	0.22	4	M4D	0	100%	650	572	0	572	$ 949,000	$ 949,000
2-I	Ferris Rd. (1)	Belt Line Rd. to S. City Limits	1.19	2	C2U	86	100%	450	1,071	102	969	$ 3,933,000	$ 3,933,000
2-J	Ferris Rd. (2)	S. City Limits to S. City Limits	0.56	2	C2U	86	50%	450	252	24	228	$ 1,865,000	$ 932,500
2-K	Ferris Rd. (3)	S. City Limits to E. City Limits	0.59	2	C2U	86	100%	450	531	51	480	$ 1,954,000	$ 1,954,000
2-L	Ferris Rd. (4)	E. City Limits to S. City Limits	1.12	2	C2U	86	50%	450	504	48	456	$ 3,713,000	$ 1,856,500
2-M	Airport Rd. East	Greene Rd. to Ferris Rd.	2.04	4	M4D	0	100%	650	5,304	0	5,304	$ 8,814,000	$ 8,814,000
1-QQ, 2-N	Belt Line Rd. (2)	1,005' W. of Main St. to Main St.	0.19	6	P6D	556	50%	750	428	53	375	$ 1,107,000	$ 553,500
2-O, 3-J	Belt Line Rd. (4)	Main St. to Lancaster-Hutchins Rd.	1.23	4	M4D	221	50%	650	1,599	136	1,463	$ 5,470,000	$ 2,735,000
2-P	Belt Line Rd. (5)	Lancaster-Hutchins Rd. to E. City Limits	2.77	4	M4D	241	100%	650	7,202	668	6,534	$ 11,863,000	$ 11,863,000
2-Q	Belt Line Rd. (6)	E. City Limits to 640' E. of E. City Limits	0.12	4	M4D	241	50%	650	156	14	142	$ 506,000	$ 253,000
I-4	Signal Installation	Lancaster-Hutchins Rd. & Wintergreen Rd.					50%					$ 140,000	$ 70,000
I-5	Signal Installation	Lancaster-Hutchins Rd. & Pleasant Run Rd.					75%					$ 140,000	$ 105,000
SUBTOTAL									34,515	1,776	32,738	$ 71,928,000	$ 60,504,500

2012 Roadway Impact Fee Update Cost Per Service Area $ 23,000

TOTAL COST IN SERVICE AREA 2 $ 60,527,500

City of Lancaster - 2012 Roadway Impact Fee Update

TIFIP Service Units of Supply

Service Area 3

5/8/20 r2

Project ID #	ROADWAY	LIMITS	LENGTH (MI)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR	EXCESS CAPACITY PK-HR VEH-MI	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
3-A	Houston School Rd. (4)	2,720' N. of Bear Creek Rd. to S. City Limits	1.44	4	M4D	139	100%	650	3,744	200	3,544	$ 6,361,000	$ 6,361,000
3-B	Blue Grove Rd. (4)	Main St. to 385' S. of Main St.	0.07	4	M4D	64	100%	650	182	4	178	$ 314,000	$ 314,000
3-C	Blue Grove Rd. (5)	385' S. of Main St. to 765' N. of Bear Creek Rd.	1.52	4	M4D	64	100%	650	3,952	97	3,855	$ 7,067,000	$ 7,067,000
3-D	Blue Grove Rd. (6)	765' N. of Bear Creek Rd. to 1,700' S. of Bear Creek Rd.	0.47	4	M4D	64	100%	650	1,222	30	1,192	$ 2,016,000	$ 2,016,000
3-E	Bear Creek Rd.	IH-35E to Dallas Ave.	3.06	4	S4D	256	100%	625	7,650	783	6,867	$ 13,278,000	$ 13,278,000
3-F	Meadowlark Ln. (1)	Parkerville Rd. to 980' S. of Parkerville Rd.	0.19	4	M4D	8	100%	650	494	1	493	$ 803,000	$ 803,000
3-G	Meadowlark Ln. (2)	980' S. of Parkerville Rd. to Meadowlark Ct.	0.52	4	M4D	6	100%	650	1,352	3	1,349	$ 2,150,000	$ 2,150,000
3-H	Meadowlark Ln. (3)	Meadowlark Ct. to S. City Limits	1.24	4	M4D	6	100%	650	3,224	7	3,217	$ 6,151,000	$ 6,151,000
1-RR, 3-I	Main St. (1)	Belt Line Rd. to Belt Line Rd.	3.02	2	C2U	367	50%	450	1,359	554	805	$ 9,972,000	$ 4,986,000
2-O, 3-J	Belt Line Rd. (4)	Main St. to Lancaster-Hutchins Rd.	1.23	4	M4D	221	50%	650	1,599	136	1,463	$ 5,470,000	$ 2,735,000
2-C, 3-K	Lancaster-Hutchins Rd. (3)	Lancaster-Hutchins Rd. (3)	0.53	6	P6D	263	50%	750	1,193	70	1,123	$ 3,074,000	$ 1,537,000
I-3	Signal Installation	Belt Line Rd. & Chesier Rd. / Main St.					50%					$ 140,000	$ 70,000
SUBTOTAL									25,971	1,887	24,083	$ 56,796,000	$ 47,468,000

2012 Roadway Impact Fee Update Cost Per Service Area $ 23,000

TOTAL COST IN SERVICE AREA 3 $ 47,491,000

Kimley-Horn and Associates, Inc.

Lancaster

Appendix C – Existing Roadway Facilities Inventory

City of Lancaster - 2012 Roadway Impact Fee Update
Existing Roadway Facilities Inventory

Service Area 1

5/8/2012

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		EXIST SECT	TYPE	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI	
					NB/EB	SB/WB			NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Ames Rd.	Houston School Rd.	Wintergreen Rd.	6360	1.20	1	1	2U	COL	299	299	100%	450	450	542	542	361	361	181	181		
Arcady	Wintergreen Rd.	Colgate	2,330	0.44	1	1	2U	COL	40	40	100%	450	450	199	199	18	18	181	181		
Balkin	Sunny Meadow	Rogers	2,500	0.47	1	1	2U	COL	41	41	100%	450	450	213	213	19	19	194	194		
Balomeade	Danieldale Rd.	West	2,695	0.51	1	1	2U-R	COL	10	10	100%	150	150	77	77	5	5	71	71		
Balomeade	Belvedere	Wintergreen Rd.	1,085	0.21	1	1	2U-R	COL	10	10	100%	150	150	31	31	2	2	29	29		
Beltline Rd.	IH 35	Main St.	1,425	0.27	2	2	4D	MAJ_6A	479	479	50%	650	650	175	175	65	65	111	111		
Beltline Rd.	Main St.	Blue Grove Rd.	9,510	1.80	2	2	4D	MAJ_6A	285	271	100%	650	650	2,341	2,341	513	488	1,828	1,853		
Beltline Rd.	Blue Grove Rd.	1,005' W. of Main St.	3,935	0.75	2	2	4D	MAJ_6A	285	271	100%	650	650	969	969	212	202	756	767		
Beltline Rd.	1,005' W. of Main St.	Main St.	1,005	0.19	2	2	4D	MAJ_6A	285	271	50%	650	650	124	124	27	26	97	98		
Sunny Meadow	Wintergreen Rd.	1,980' S. of Wintergreen Rd.	1,980	0.38	1	1	2U	MAJ_4B	100	100	100%	450	450	169	169	38	38	131	131		
Blue Grove Rd.	Kings Cross	Pleasant Run Rd.	2,965	0.56	1	1	2U	MAJ_4B	230	208	100%	450	450	253	253	129	117	124	136		
Blue Grove Rd.	Pleasant Run Rd.	Beltline Rd.	4,435	0.84	2	2	4D	MAJ_4B	301	257	100%	650	650	1,092	1,092	253	216	839	876		
Blue Grove Rd.	Beltline Rd.	Main St.	3,245	0.61	1	1	2U	MAJ_4B	60	60	100%	450	450	277	277	37	37	240	240		
Boardwalk	Cedardale Rd.	X' S. of Cedardale Rd.	1,040	0.20	1	1	2U	COL	25	25	100%	450	450	89	89	5	5	84	84		
Branchwood	Long Branch	Beltline Rd.	730	0.14	1	1	2U	COL	25	25	100%	450	450	62	62	3	3	59	59		
Cedardale Rd.	Houston School Rd.	Dallas Ave.	3,245	0.61	1	1	2U	MIN_4	155	166	100%	450	450	277	277	95	102	181	175		
Chapman	Wintergreen Rd.	Pleasant Run Rd.	4,295	0.81	1	1	2U	COL	50	50	100%	450	450	366	366	41	41	325	325		
Colgate	Arcady	Dewberry	710	0.13	1	1	2U	COL	65	65	100%	450	450	61	61	9	9	52	52		
Connecticut	Cedardale Rd.	1,695' S. of Cedardale Rd.	1,695	0.32	1	1	2U	C2U	25	25	100%	450	450	144	144	8	8	136	136		
Cumberland	Springfield	Danieldale Rd.	1,255	0.24	1	1	2U-R	C2U	10	10	100%	150	150	36	36	2	2	33	33		
Dallas Ave.	Cedardale Rd.	Pleasant Run Rd.	14,940	2.83	3	3	6D	P6D	520	754	100%	750	750	6,366	6,366	1,471	2,133	4,895	4,233		
Danieldale Rd.	IH 35	Houston School Rd.	5,415	1.03	1	1	2U	S4D	84	142	100%	450	450	462	462	86	146	375	316		
Danieldale Rd.	Houston School Rd.	IH 20	5,360	1.02	2	2	4D	S4D	55	46	100%	650	650	1,320	1,320	56	47	1,264	1,273		
Dewberry	Colgate	Pleasant Run Rd.	2,710	0.51	1	1	2U	C2U	50	50	100%	450	450	231	231	26	26	205	205		
Dizzy Dean	Wintergreen Rd.	X' N. of Dizzy Dean	3,105	0.59	1	1	2U	S4D	64	48	100%	450	450	265	265	38	28	227	236		
Donlee	Rogers	Dallas Ave.	4,400	0.83	1	1	2U	C2U	58	95	100%	450	450	375	375	48	79	327	296		
Hana	2,075' N. of Beltline Rd.	Beltline Rd.	2,075	0.39	1	1	3U	C2U	75	75	100%	500	500	196	196	29	29	167	167		
Houston School Rd.	Wheatland Rd.	IH 20	2,410	0.46	1	1	2U	P6D	310	342	100%	450	450	205	205	141	156	64	49		
Houston School Rd.	IH 20	Danieldale Rd.	2,840	0.54	2	2	4D	P6D	310	342	100%	650	650	699	699	167	184	533	515		
Houston School Rd.	Danieldale Rd.	Ames Rd.	2,530	0.48	2	2	4D	M4D	235	365	100%	850	650	823	623	113	175	510	448		
Houston School Rd.	Ames Rd.	1,620' S. of Ames Rd.	1,620	0.31	2	2	4D	M4D	235	365	100%	650	650	399	399	72	112	327	287		
Houston School Rd.	1,620' S. of Ames Rd.	Pleasant Run Rd.	6,520	1.23	1	1	2U	M4D	235	365	100%	450	450	556	556	290	451	265	105		
Houston School Rd.	Pleasant Run Rd.	Main Street	6,390	1.21	1	1	2U	M4D	47	47	100%	450	450	545	545	58	57	488	488		
Idlewild	Pleasant Run Rd.	2,675' N. of Pleasant Run Rd	2,675	0.51	1	1	2U	C2U	50	50	100%	450	450	228	228	25	25	203	203		
Jefferson	Wintergreen Rd.	Pleasant Run Rd.	5,200	0.98	1	1	2U	S4D	126	126	100%	450	450	443	443	124	124	319	319		
Lancaster-Hutchins Rd.	Wintergreen Rd.	Pleasant Run Rd.	6,270	1.19	1	1	2U	P6D	220	220	50%	450	450	267	267	131	131	137	137		
Longhorn	Wintergreen Rd.	Wintergreen Rd.	5,780	1.09	1	1	2U	C2U	50	50	100%	450	450	493	493	55	55	438	438		
Longhorn N.	Danieldale Rd.	West	2,820	0.53	2	2	4D	C2U	50	81	100%	650	650	894	694	27	43	668	651		
Main Street	Beltline Rd. (West)	Blue Grove Rd.	10,765	2.04	1	1	2U	C2U	94	81	50%	450	450	459	459	96	83	363	376		
Main Street	Blue Grove Rd.	Beltline Rd. (East)	5,180	0.98	1	1	2U	C2U	171	196	50%	450	450	221	221	84	96	137	125		
Percy	Cedardale Rd.	Lyle	2,030	0.38	1	1	2U-R	C2U	10	10	100%	150	150	58	58	4	4	54	54		
Pleasant Run Rd.	IH 35	Houston School Rd.	5,285	1.00	2	2	4D	M4D	724	685	100%	650	650	1,301	1,301	725	686	577	616		
Pleasant Run Rd.	Houston School Rd.	Rolling Meadows	6,425	1.22	2	2	4D	M4D	724	743	100%	850	650	1,582	1,582	881	904	701	678		
Pleasant Run Rd.	Rolling Meadows	River	800	0.15	2	2	4D	P6D	724	743	100%	850	650	197	197	110	113	87	84		
Pleasant Run Rd.	River	Rogers	1,385	0.26	2	2	4D	P6D	724	743	50%	650	650	171	171	95	97	76	73		
Pleasant Run Rd.	Rogers	Dallas Ave.	6,180	1.17	3	3	6D	P6D	489	469	50%	750	750	1,317	1,317	286	288	1,030	1,030		
Pleasant Run Rd.	Dallas Ave.	Lancaster-Hutchins Rd.	3,150	0.60	1	1	2U	P6D	273	273	50%	450	450	134	134	81	81	53	53		
Reynolds	Katrina	Chapman	1,320	0.25	1	1	2U	C2U	25	25	100%	450	450	113	113	6	8	106	106		
Rogers	Pleasant Run Rd.	Donlee (W of Rogers)	4,420	0.84	1	1	2U	C2U	199	199	100%	450	450	377	377	167	167	210	210		
Rolling Hills Rd.	Pleasant Run Rd.	Beltline Rd.	5,230	0.99	1	1	2U	C2U	292	292	100%	450	450	446	446	289	289	157	157		
Rolling Meadows	Pleasant Run Rd.	Ransom	3,015	0.57	1	1	2U	C2U	149	149	100%	450	450	257	257	85	85	172	172		
Springfield Ave.	IH 35	Criswell	2,340	0.44	1	1	2U-R	C2U	25	25	100%	150	150	66	66	11	11	55	55		
Telephone Rd.	Wintergreen Rd.	Dallas Ave.	3,240	0.61	1	1	2U	M4D	181	278	100%	450	450	276	278	111	171	165	106		
West	IH 35	Longhorn N.	3,065	0.58	1	1	2U	C2U	25	25	100%	450	450	281	261	15	15	247	247		
Wheatland Rd.	IH 35	Houston School Rd.	5,170	0.98	1	1	2U	C2U	217	217	50%	450	450	220	220	106	106	114	114		
Wheatland Rd.	Houston School Rd.	N. Limits of SA 1	4,020	0.76	1	1	2U	C2U	14	27	100%	450	450	343	343	11	21	332	322		
Wintergreen Rd.	IH 35	Houston School Rd.	5,320	1.01	1	1	2U	M4D	204	160	100%	450	450	453	453	206	181	248	292		
Wintergreen Rd.	Baskin	Telephone Rd.	4,360	0.83	1	1	2U	M4D	236	287	100%	450	450	372	372	195	237	177	135		
Wintergreen Rd. (South)	Houston School Rd.	Baskin	4,135	0.78	1	1	2U	C2U	310	310	100%	450	450	352	352	242	242	110	110		
Wintergreen Rd.	Telephone Rd.	Verona	1,775	0.34	1	1	2U	M4D	92	122	100%	450	450	151	151	31	41	120	110		
Wintergreen Rd.	Verona	Dallas Ave.	3,215	0.61	1	1	2U	M4D	92	122	100%	450	450	274	274	56	74	218	200		
Wintergreen Rd.	Dallas Ave.	Jefferson St.	4,315	0.82	2	2	4D	M4D	92	122	50%	650	650	531	531	38	50	494	481		
Wintergreen Rd.	Jefferson St.	Lancaster-Hutchins Rd.	5,485	1.04	1	1	2U	M4D	92	122	50%	450	450	234	234	48	83	186	170		
SUBTOTAL			241,125	46										32,028	32,028	8,774	9,852	23,252	22,174	0	0
														64,053		18,626		45,427		0	

City of Lancaster - 2012 Roadway Impact Fee Update
Existing Roadway Facilities Inventory

Service Area 2

5/8/2012

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		EXIST SECT	TYPE	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI	
					NB/EB	SB/WB			NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
1st	Jefferson	State Street	220	0.04	1	1	2U	C2U	50	50	100%	450	450	19	19	2	2	17	17		
3rd	Jefferson	Lancaster-Hutchins Rd.	1,775	0.34	1	1	2U	C2U	25	25	100%	450	450	151	151	8	8	143	143		
8th	Westridge	Dallas Ave.	3,540	0.67	1	1	2U	C2U	43	43	100%	450	450	302	302	29	29	273	273		
Alba	Pleasant Run Rd.	Greene	3,900	0.74	1	1	2U	M4D	25	25	100%	450	450	332	332	19	18	314	314		
Alba	Greene	935' S. of Greene Rd.	935	0.18	1	1	2U-R	M4D	10	10	100%	150	150	27	27	2	2	25	25		
Beltline Rd.	Main St.	Lancaster-Hutchins Rd.	6,480	1.23	1	1	2U	M4D	112	109	50%	450	450	276	276	69	67	207	209		
Beltline Rd.	Lancaster-Hutchins Rd.	E. Limits of SA 2	13,885	2.63	1	1	2U-H	M4D	132	109	100%	750	750	1,972	1,972	347	287	1,625	1,686		
Cornell	Lancaster-Hutchins Rd.	Greene	9,010	1.52	1	1	2U-R	M4D	10	10	100%	150	150	228	228	15	15	212	212		
Dallas Ave.	Pleasant Run Rd.	W. Alexander St. / E. Oak St.	810	0.47	2	2	6D	C2U	395	395	100%	750	750	705	705	186	186	519	519		
Dallas Ave.	W. Alexander St. / E. Oak St.	7th St.	1,035	0.38	1	1	4U	COL	200	200	100%	525	525	201	201	77	77	124	124		
Dallas Ave.	Main Street	Beltline Rd.	5,155	0.50	1	1	2U	C2U	200	200	100%	450	450	224	224	100	100	125	125		
Elm	Pleasant Run Rd.	6th	4,870	0.50	1	1	2U	C2U	60	60	100%	450	450	224	224	30	30	194	194		
Elm	6th	Hogan Run	760	0.50	1	1	2U	C2U	60	60	100%	450	450	224	224	30	30	194	194		
Ferris Rd.	Belt Line Rd.	S. Limits of SA 2	6,290	1.19	1	1	2U	C2U	40	48	100%	450	450	536	536	49	55	488	481		
Greene	Lancaster-Hutchins Rd.	Alba	6,170	1.17	1	1	2U-R	S4D	10	10	100%	150	150	175	175	12	12	164	164		
Greene	Alba	E. Limits of SA 2	4,850	0.92	1	1	2U-R	S4D	10	10	100%	150	150	138	138	9	9	129	129		
Hogan Run	Main St.	Elm	2,790	0.53	1	1	2U	C2U	16	16	100%	450	450	238	238	8	8	229	229		
Jefferson	Pleasant Run Rd.	1st	3,850	0.73	1	1	2U	C2U	51	51	100%	450	450	328	328	37	37	291	291		
Lancaster Park	Pleasant Run Rd.	Oakbluff	2,290	0.43	1	1	2U-H	C2U	220	220	100%	750	750	325	325	95	95	230	230		
Lancaster-Hutchins Rd.	Wintergreen Rd.	Pleasant Run Rd.	6,270	1.19	1	1	2U	P6D	220	220	50%	450	450	267	267	131	131	137	137		
Lancaster-Hutchins Rd.	Pleasant Run Rd.	Beltline Rd.	7,495	1.42	1	1	2U	M4D	37	178	100%	450	450	639	639	53	250	586	389		
Lancaster-Hutchins Rd.	Belt Line Rd.	Dallas Ave.	2,270	0.43	1	1	2U	P6D	59	204	50%	450	450	97	97	13	44	84	53		
Main St.	Belt Line Rd.	Historic Town Square	5,030	0.95	1	1	2U	S4D	135	152	100%	450	450	429	429	129	145	300	284		
Main St.	Historic Town Square	Lancaster-Hutchins Rd.	2,170	0.41	1	1	2U	S4D	37	37	100%	450	450	185	185	15	15	170	170		
Melrose	Westridge	Main St.	1,290	0.24	1	1	2U	C2U	60	60	100%	450	450	110	110	15	15	95	95		
Nokomis Rd.	Beltline Rd.	City Limit	6,560	0.62	1	1	2U	R2U	47	47	100%	450	450	279	279	29	29	250	250		
Nokomis Rd.	City Limit	Ten Mile Creek		0.47	1	1	2U	R2U	47	47	50%	450	450	106	106	11	11	95	95		
Oakbluff	Lancaster Park	Westridge	2,025	0.38	1	1	2U	C2U	53	53	100%	450	450	173	173	20	20	152	152		
Pleasant Run Rd.	River	Rogers	1,385	0.26	2	2	4D	P6D	724	743	50%	650	850	171	171	95	97	76	73		
Pleasant Run Rd.	Rogers	Dallas Ave.	6,180	1.17	3	3	6D	P6D	724	743	50%	750	750	1,317	1,317	424	435	893	882		
Pleasant Run Rd.	Dallas Ave.	Lancaster-Hutchins Rd.	3,150	0.60	1	1	2U	P6D	340	340	50%	450	450	134	134	102	102	33	33		
Pleasant Run Rd.	Lancaster-Hutchins	E. Limits of SA 2	6,340	1.20	1	1	2U	M4D	100	100	100%	450	450	540	540	119	119	421	421		
Red Bud	Elm	State Street	1,465	0.28	1	1	2U	C2U	16	16	100%	450	450	125	125	4	4	120	120		
State Street	Red Bud	1st	920	0.17	1	1	2U-R	C2U	10	10	100%	150	150	26	26	2	2	24	24		
Stewart	Hogan Run	Belt Line Rd.	1,965	0.37	1	1	2U	C2U	60	60	100%	450	450	165	165	22	22	143	143		
Westridge	Pleasant Run Rd.	Melrose	3,705	0.70	1	1	2U	C2U	118	118	100%	450	450	316	316	83	83	233	233		
SUBTOTAL			135,835	28										11,702	11,702	2,386	2,590	9,316	9,113	0	0
														23,405		4,976		18,429		0	

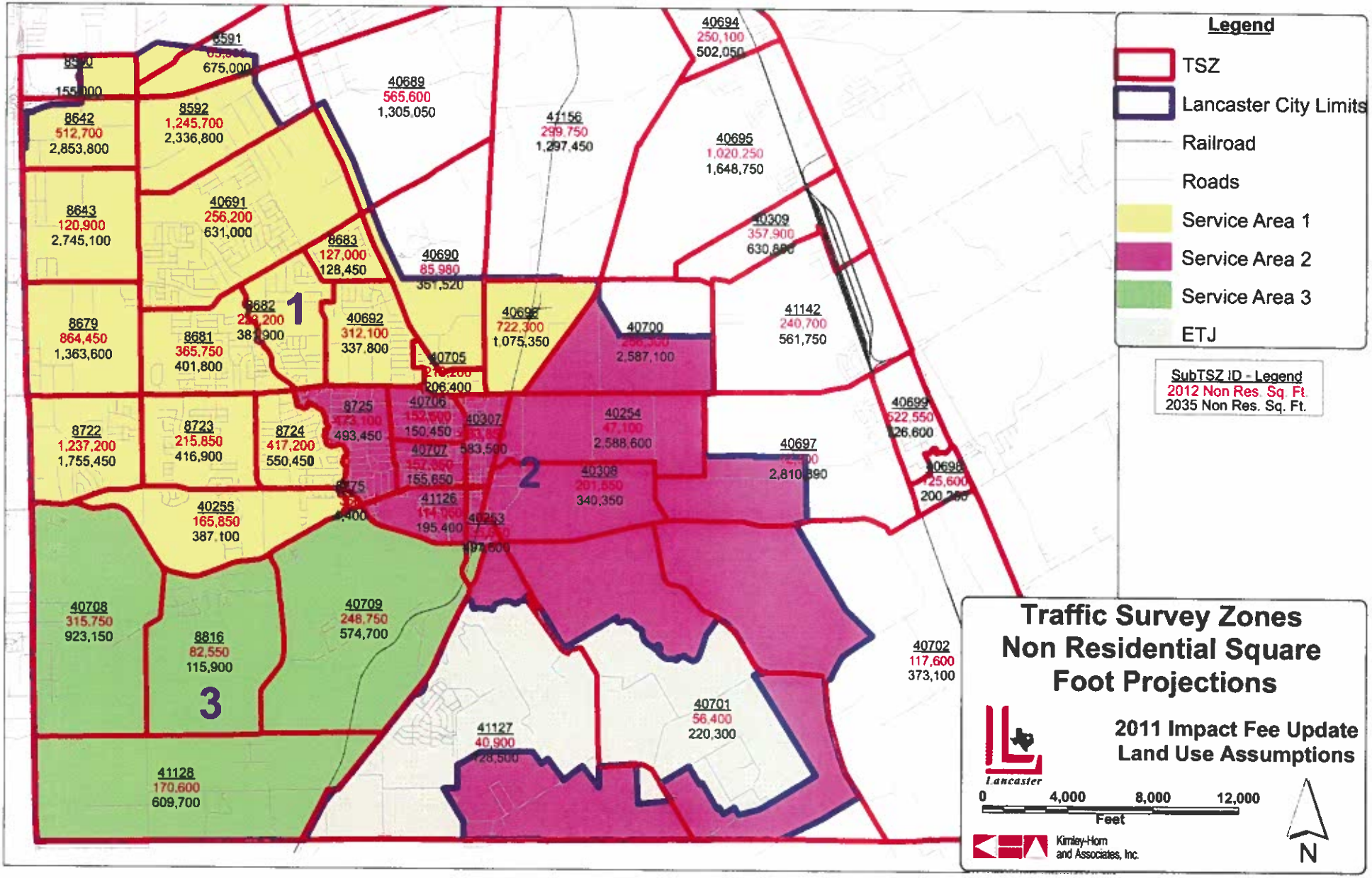
City of Lancaster - 2012 Roadway Impact Fee Update
Existing Roadway Facilities Inventory

Service Area 3

5/8/2012

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		EXIST SECT	TYPE	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PH-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI	
					NB/EB	SB/WB			NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Bear Creek	IH 35	Dallas Ave.	16,185	3.06	1	1	2U	S4D	177	79	100%	450	450	1,378	1,378	542	242	836	1,136		
Beltline Rd.	IH 35	Main St.	1,425	0.27	2	2	4D	P6D	479	479	50%	650	650	175	175	65	65	111	111		
Beltline Rd.	Main St.	Lancaster-Hutchins Rd.	6,480	1.23	1	1	2U	M4D	112	109	50%	450	450	276	276	69	67	207	209		
Blue Grove Rd.	Main St.	Bear Creek Rd.	8,815	1.67	1	1	2U	M4D	30	35	100%	450	450	751	751	49	58	702	694		
Dallas Ave	Bear Creek	Reindeer	2,670	0.51	1	1	2U-H	P6D	285	285	50%	750	750	190	190	72	72	118	118		
Dallas Ave	Reindeer	Red Oak	11,390	2.16	1	1	2U-H	P6D	285	285	50%	750	750	809	809	307	307	502	502		
Dallas Ave.	Red Oak	Beltline Rd.	2,280	0.43	1	1	2U-H	P6D	285	285	100%	750	750	324	324	123	123	201	201		
Houston School Rd.	Main Street	2,720' N. of Bear Creek Rd.	5,555	1.05	1	1	2U	R2U	27	41	100%	450	450	473	473	28	43	445	430		
Houston School Rd.	2,720' N. of Bear Creek Rd.	Bear Creek Rd.	2,720	0.52	1	1	2U	M4D	27	41	100%	450	450	232	232	14	21	218	211		
Houston School Rd.	Bear Creek	S. Limits of SA 3	4,885	0.93	1	1	2U	M4D	39	100	100%	450	450	416	416	36	93	380	324		
Lancaster-Hutchins Rd.	Beltline Rd.	Dallas Ave.	2,270	0.43	1	1	2U	P6D	59	204	50%	450	450	97	97	13	44	84	53		
Main Street	Beltline Rd.	Blue Grove Rd.	10,785	2.04	1	1	2U	C2U	94	61	50%	450	450	459	459	96	83	363	378		
Main Street	Blue Grove Rd.	Beltline Rd.	5,180	0.98	1	1	2U	C2U	285	271	50%	450	450	221	221	140	133	81	88		
Meadowlark	Kirkwood	2,500' S. of Kirkwood	250	0.05	1	1	2U	M4D	3	3	100%	450	450	21	21	0	0	21	21		
Meadowlark	2,500' S. of Kirkwood	Meadowlark Ct.	2,600	0.49	1	1	2U	M4D	3	3	100%	450	450	222	222	1	1	220	220		
Parkerville Rd.	IH 35	2,920' E. of IH 35	2,920	0.55	1	1	2U	S4D	46	46	100%	450	450	249	249	25	25	223	223		
Reindeer	Houston School Rd.	Dallas Ave	8,780	1.66	1	1	2U-R	C2U	3	3	100%	150	150	249	249	5	5	245	245		
SUBTOTAL			95,150	18										6,542	6,542	1,586	1,381	4,956	5,161	0	0
														13,084		2,967		10,117		0	

Appendix D – Land Use Assumptions


Legend
TSZ
Lancaster City Limits
Railroad
Roads
Service Area 1
Service Area 2
Service Area 3
ETJ
SubTSZ ID - Legend
2012 Non Res. Sq. Ft.
2035 Non Res. Sq. Ft.
8591
675,000
8642
512,700
2,853,800
8592
1,245,700
2,336,800
40689
565,600
1,305,050
40694
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502,050
41156
299,750
1,297,450
40695
1,020,250
1,648,750
8643
120,900
2,745,100
40691
256,200
631,000
8683
127,000
128,450
40690
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351,520
40309
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8682
8679
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40696
722,300
1,075,350
40700
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41142
240,700
561,750
8725
493,450
40706
150,450
40307
583,500
40254
47,100
2,588,600
40699
522,550
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8724
417,200
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40308
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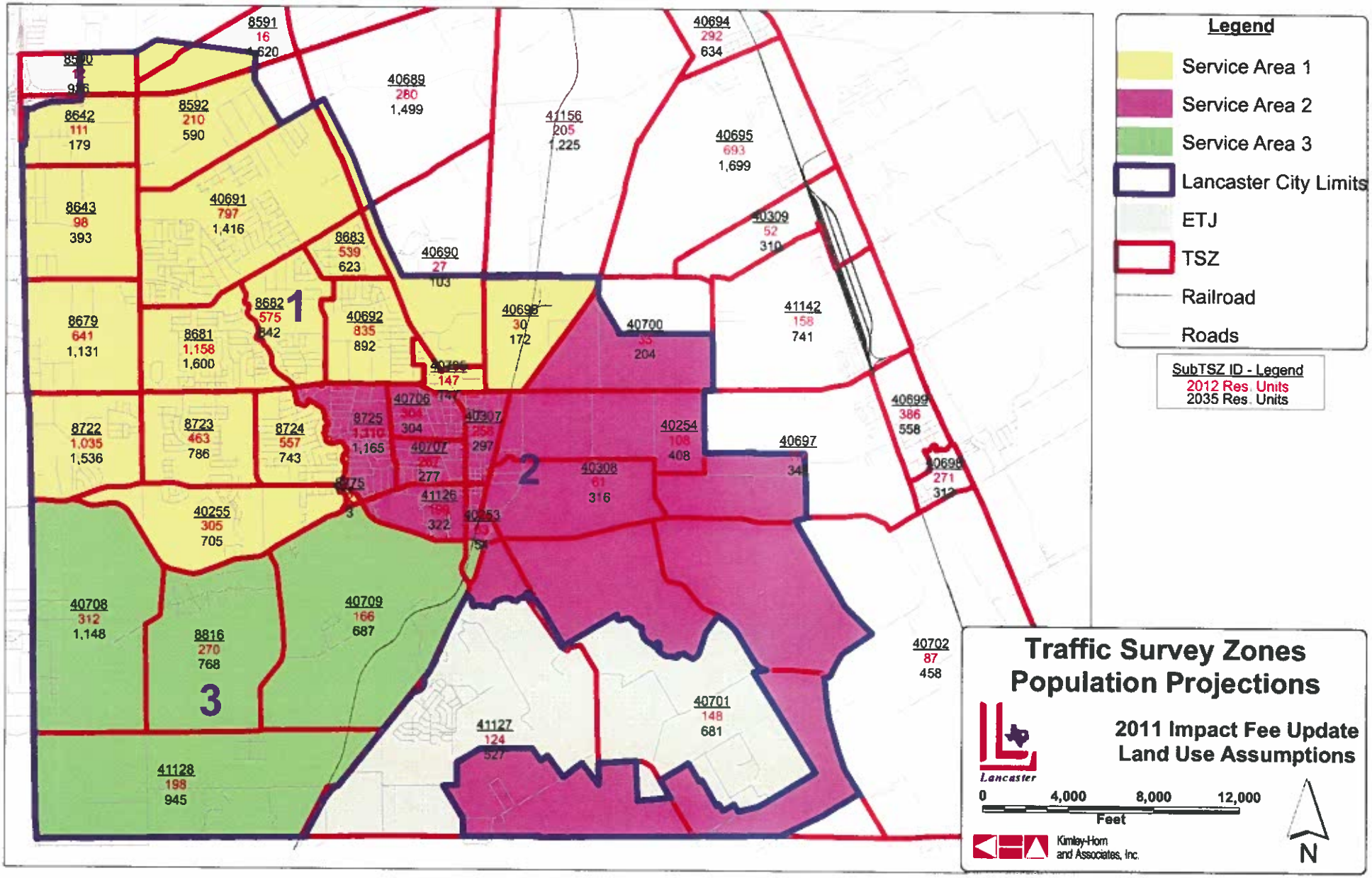
387,100
41126
195,400
40253
40708
315,750
923,150
8816
82,550
115,900
40709
248,750
574,700
40702
117,600
373,100
40701
56,400
220,300
41127
40,900
41128
170,600
609,700
1
2
3
Traffic Survey Zones
Non Residential Square
Foot Projections
2011 Impact Fee Update
Land Use Assumptions
Lancaster
0
4,000
8,000
12,000
Feet
Kimley-Horn
and Associates, Inc.
N


8591
16
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40695
693
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8642
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8592
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8643
98
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40691
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8683
539
623
40690
27
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52
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705
40708
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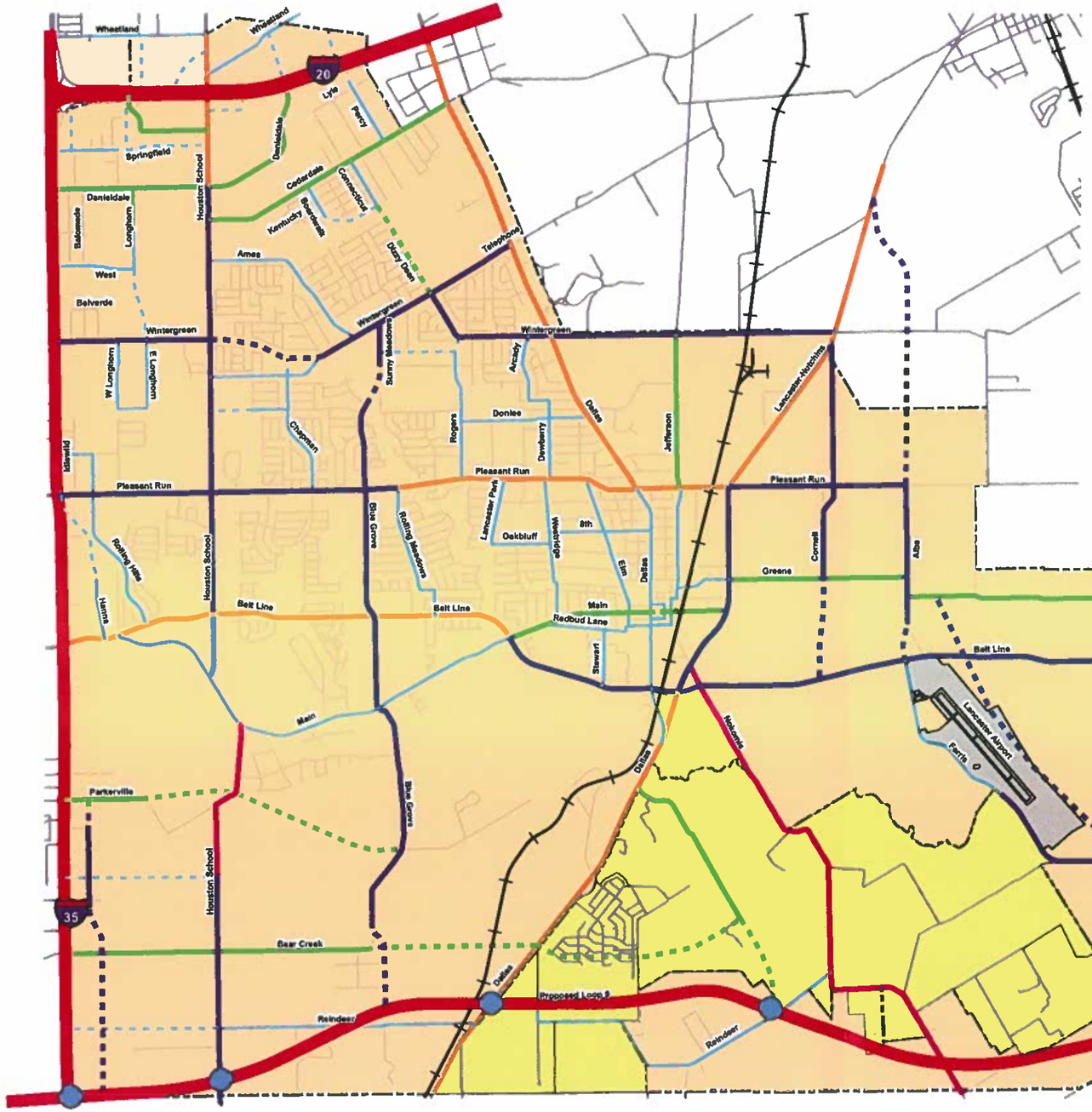
270
768
3
40709
166
687
40702
87
458
40701
148
681
41127
124
527
41128
198
945
Legend
Service Area 1
Service Area 2
Service Area 3
Lancaster City Limits
ETJ
TSZ
Railroad
Roads
SubTSZ ID - Legend
2012 Res. Units
2035 Res. Units
Traffic Survey Zones
Population Projections
2011 Impact Fee Update
Land Use Assumptions
Lancaster
0
4,000
8,000
12,000
Feet
Kimley-Horn
and Associates, Inc.
N

City of Lancaster
Master Thoroughfare Plan



Legend

- Future Interchange
- Proposed / Existing Interstate Freeways
- Major Arterial Type A (6 Lanes)
- Major Arterial Type B (4 Lanes)
- Proposed Major Arterial (4 Lanes)
- Minor Arterial (4 Lanes)
- Proposed Minor Arterial (4 Lanes)
- Rural Minor Arterial (2 Lanes)
- Collector (2 Lanes)
- Proposed Collector (2 Lanes)
- Proposed Frontage Roads
- Local Roads

Lancaster

Kimley-Horn and Associates, Inc.

1 0.5 0 1 Miles

July 2012

LANCASTER CITY COUNCIL
Work Session Agenda Communication for July 23, 2012

C

WS12-C

Receive and discuss a presentation on the proposed Water and Wastewater Master Plans and Water and Wastewater Impact Fee Report.

This request supports the City Council 2011-2012 Policy Agenda.

Goal: Sound Infrastructure

Background

Over the past year, the consulting firm of Freese & Nichols, Inc. (FNI), with guidance and information from City staff, has been preparing updates for the city-wide Water/Wastewater Master Plans and Water/Wastewater Impact Fee Reports. Multiple purposes for this study include reviewing population forecasts and land use assumptions to reflect the planned growth of the City as well as determining the maximum allowable fee the City may charge developers for new developments affecting the City's infrastructure, in accordance with Chapter 395 of the Local Government Code. The consultant also reviewed the City's Water/Wastewater Master Plan to ensure the projects listed would appropriately address growth in the City of Lancaster as well as encompass the newly annexed area.

In developing land use assumptions, it is necessary to determine how the land is anticipated to be used. Some of the questions that must be answered are: where will new single family homes be built and how many based on the total acreage available and minimum lot sizes required; where will new businesses locate; and how much square footage will be built for warehouses or other commercial developments. The amount of vacant land and its current zoning is reviewed to determine what the maximum build-out potential is for any type of land use. Additionally, the future land use plan is examined when looking at the vision for what vacant land currently zoned as open space will potentially be developed as. In depth review of these factors helped the consultants derive calculations of the land use assumptions for the City.

With regards to population projections, several variables are used which include the historical growth rate of the City, growth trends in the metropolitan region, availability of land, and residential areas identified in the future land use plan. The population forecasts help to show the number of people that will potentially use the water and wastewater systems and the impact they will have on it. Population is a key factor when determining the types and amount of developments that could eventually locate in the City.

Water and wastewater has a service area which can include the City's extraterritorial jurisdiction (ETJ) as well as properties within the City limits. However, the service area would not include any area serviced by the Rockett Certificate of Convenience and Necessity (CCN) area. For this reason, the population in the service area may be smaller than the total City's population. Impact fees for water and wastewater are based on meter size with a ¾" meter being the standard size for one unit. An impact fee for the entire service area is assessed for water and wastewater as opposed to roadway impact fees which are assessed in multiple service areas. These fees are used to help the City pay for the cost of new infrastructure development that will benefit the developments served as well as the citizens.

When determining impact fees, Chapter 395 of the Local Government Code requires municipalities to have a Capital Improvements Advisory Committee (CIAC), hold a public hearing, and adopt fees, if any, within 30 days after the public hearing. The Planning and Zoning Commission has served as the (CIAC). The CIAC has received briefings from the consultant and staff in preparation of providing a recommendation to the City Council. Using data from the North Central Texas Council of Governments, FNI worked with City staff to determine land use assumptions and population forecasts to ascertain the most accurate data possible. The consultant will present to Council an overview of the Land Use Assumptions and Population Forecasts, the Capital Improvement Program (CIP) projects proposed for the next 10 years, and the calculated maximum allowable fees for water/wastewater projects in Lancaster.

Water and wastewater impact fees are assessed where service is provided by the City, which could include the extraterritorial jurisdiction (ETJ). The same fee is assessed for water/wastewater throughout the entire City however. The service area was initially established for Lancaster in 2003 and has been adjusted with this report to include the newly annexed area. After the maximum allowable fee has been determined, the City Council has the ability to establish impact fees developers will be charged, if any.

Considerations

- **Operational** -This study is to update the current Master Plan and Impact Fee Report for the City regarding water/wastewater and provide information for developers potentially sharing the cost of new infrastructure construction.

- **Legal** - Once the Master Plan and Impact Fee study are approved by the City Council, the City Attorney will draft an ordinance regarding the impact fees to be considered after the public hearing on August 27, 2012.

- **Financial** - No financial considerations will be required at this time, but options for determining impact fees will be presented.

- **Public Information** - A newspaper notice will be published in the Focus Daily News stating that a public hearing to consider Impact Fees, as required by the Local Government Code, will be held on August 27, 2012 by the City Council. A resolution has been drafted by the City Attorney which repeals current land use assumptions and the capital improvement plan and sets the public hearing of August 27, 2012 to consider the impact fees. [Action on this resolution may be taken during the regular meeting.]

Attachments

- Water/Wastewater Impact Fee Report July 2012
- Water Capital Improvement Plan (Map)
- Wastewater Capital Improvement Plan (Map)

Prepared and submitted by:
Nathaniel Barnett, Senior Planner

Date: July 19, 2012

FREESE AND NICHOLS

Innovative approaches
Practical results
Outstanding service

Water & Wastewater Impact Fee Report

July 2012

Prepared for:

City of Lancaster

Lancaster

Prepared by:

FREESE AND NICHOLS, INC.
4055 International Plaza, Suite 200
Fort Worth, Texas 76109
(817) 735-7300

Water & Wastewater Impact Fee Report
July 2012

7/18/2012

FREESE AND NICHOLS, INC.
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ES EXECUTIVE SUMMARY

1.0 Background

Chapter 395 of the Texas Local Government Code requires an impact fee analysis before impact fees can be created and assessed. Chapter 395 defines an impact fee as "a charge or assessment imposed by a political subdivision against new development in order to generate revenue for funding or recouping the costs of capital improvements or facility expansions necessitated by and attributable to the new development." In September 2001, Senate Bill 243 amended Chapter 395 thus creating the current procedure for implementing impact fees. Chapter 395 identifies the following items as impact fee eligible costs:

- Construction contract price
- Surveying and engineering fees
- Land acquisition costs
- Fees paid to the consultant preparing or updating the capital improvements plan (CIP)
- Projected interest charges and other finance costs for projects identified in the CIP

Chapter 395 also identifies items that impact fees cannot used to pay for, such as:

- Construction, acquisition, or expansion of public facilities or assets other than those identified on the capital improvements plan
- Repair, operation, or maintenance of existing or new capital improvements
- Upgrading, updating, expanding, or replacing existing capital improvements to serve existing development in order to meet stricter safety, efficiency, environmental, or regulatory standards
- Upgrading, updating, expanding, or replacing existing capital improvements to provide better service to existing development
- Administrative and operating costs of the political subdivision

- Principal payments and interest or other finance charges on bonds or other indebtedness, except as allowed above

In June 2011, the City of Lancaster, Texas, authorized Freese and Nichols, Inc. (FNI) to perform an impact fee analysis of the City's water and wastewater systems. The purpose of this report is to address the methodology used in the development and calculation of water and wastewater impact fees for the City of Lancaster. The methodology used herein satisfies the requirements of the Texas Local Government Code Section 395 for the establishment of water and wastewater impact fees.

2.0 Land Use Assumptions

Population and land use are important elements in the analysis of water and wastewater systems. Water demands and wastewater flows depend on the residential population and commercial development served by the systems and determines the sizing and location of system infrastructure. A thorough analysis of historical and projected populations, along with land use, provides the basis for projecting future water demands and wastewater flows. **Tables ES-1 and ES-2** present service area population and employment for each planning year.

Table ES-1 Water and Wastewater Population Projections

Year	Service Population	Average Annual Population Growth	Average Annual Growth Rate
2012	35,959	-	-
2022	46,949	1,099	2.7%
2035	65,751	1,446	2.6%

Table ES-2 Water and Wastewater Employment Projections

Year	Number of Employees in Service Area	Average Annual Employee Growth	Average Annual Growth Rate
2012	14,848	-	-
2022	23,773	893	4.8%
2035	36,100	948	3.3%

3.0 Capital Improvement Plan

A capital improvements plan (CIP) was developed for the City of Lancaster to ensure high quality water and wastewater service that promotes residential and commercial development. The recommended improvements will provide capacity and reliability to meet projected water demands and wastewater flows through year 2035.

Water demands and wastewater flows were developed based on historical data provided by the City. The projected average day, maximum day, and peak hour water demand by pressure plane are presented in **Table ES-3**. The projected average annual daily and peak wet weather wastewater flows are presented in **Table ES-4**.

Table ES-3 Projected Water Demands

Pressure Plane	Year	Average Day Demand (MGD)	Maximum Day Demand (MGD)	Peak Hour Demand (MGD)
Upper (792')	2012	3.38	6.76	12.17
	2022	4.60	9.20	16.56
	2035	5.77	11.66	20.99
Lower (705')	2012	1.40	2.80	5.04
	2022	2.00	4.00	7.20
	2035	3.50	6.91	12.43
Total	2012	**4.78**	**9.56**	**17.21**
	2022	**6.60**	**13.20**	**23.76**
	2035	**9.27**	**18.57**	**33.42**

Table ES-4 Projected Wastewater Flows

Year	Average Annual Daily Flow (MGD)	Peak Wet Weather Flow (MGD)
2012	5.17	31.05
2022	7.06	42.38
2035	10.09	60.53

Proposed water and wastewater system projects to serve the system through 2035 were developed as part of this project based on load projections and design criteria. **Table ES-5**

summarizes the costs of the water CIP, and **Table ES-6** summarizes the costs of the wastewater CIP.

Table ES-5 Summary of Water System Project Costs

Planning Period	Capital Costs
2012-2016	$17,161,710
2017-2021	$19,122,990
2022-2035	$18,120,210
Total	**$54,404,910**

Table ES-6 Summary of Wastewater System Project Costs

Planning Period	Capital Costs
2012-2016	$15,536,670
2017-2021	$11,242,640
2022-2035	$19,179,490
Total	**$45,958,800**

4.0 Impact Fee Analysis

The total projected costs include the projected capital improvement costs to serve 10-year development, the projected finance cost for the capital improvements, and the consultant cost for preparing and updating the Capital Improvements Plan. A 4.0% interest rate was used to calculate financing costs.

Water Impact Fee:

Total Capital Improvement Costs		$11,892,365
Financing Costs		$3,955,774
Total Eligible Costs		$15,848,139
Growth in Service Units		5,173
Base Maximum Calculated Water Impact Fee Per Service Unit Without Credit Analysis	= Total Eligible Costs/Growth in Service Units	
	= $15,848,139/5,173	
	= $3,064 per Service Unit	

Maximum Allowable Water Impact Fee	= Maximum Impact Fee – Credit
	= $3,064 - $1,532
	= **$1,532 per Service Unit**

Wastewater Impact Fee:

Total Capital Improvement Costs	$9,043,142
Financing Costs	$3,008,033
Total Eligible Costs	$12,051,175
Growth in Service Units	5,173

Base Maximum Calculated Wastewater Impact Fee Per Service Unit Without Credit Analysis	= Total Eligible Costs/Growth in Service Units
	= $12,051,175/5,173
	= $2,330 per Service Unit
Maximum Allowable Wastewater Impact Fee	= Maximum Impact Fee – Credit
	= $2,330 - $1,165
	= **$1,165 per Service Unit**

1.0 BACKGROUND

Chapter 395 of the Texas Local Government Code requires an impact fee analysis before impact fees can be created and assessed. Chapter 395 defines an impact fee as "a charge or assessment imposed by a political subdivision against new development in order to generate revenue for funding or recouping the costs of capital improvements or facility expansions necessitated by and attributable to the new development." In September 2001, Senate Bill 243 amended Chapter 395 thus creating the current procedure for implementing impact fees. Chapter 395 identifies the following items as impact fee eligible costs:

- Construction contract price
- Surveying and engineering fees
- Land acquisition costs
- Fees paid to the consultant preparing or updating the capital improvements plan (CIP)
- Projected interest charges and other finance costs for projects identified in the CIP

Chapter 395 also identifies items that impact fees cannot used to pay for, such as:

- Construction, acquisition, or expansion of public facilities or assets other than those identified on the capital improvements plan
- Repair, operation, or maintenance of existing or new capital improvements
- Upgrading, updating, expanding, or replacing existing capital improvements to serve existing development in order to meet stricter safety, efficiency, environmental, or regulatory standards
- Upgrading, updating, expanding, or replacing existing capital improvements to provide better service to existing development
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In June 2011, the City of Lancaster, Texas, authorized Freese and Nichols, Inc. (FNI) to perform an impact fee analysis of the City's water and wastewater systems. The purpose of this report is to address the methodology used in the development and calculation of water and wastewater impact fees for the City of Lancaster. The methodology used herein satisfies the requirements of the Texas Local Government Code Section 395 for the establishment of water and wastewater impact fees.

Table 1-1 provides a list of abbreviations used in this report.

Table 1-1 List of Abbreviations

Abbreviation	Full Nomenclature
AWWA	American Water Works Association
CCN	Certificate of Convenience and Necessity
CIP	Capital Improvements Plan
ETJ	Extra-territorial Jurisdiction
GPCD	Gallons Per Capita per Day
GPED	Gallons Per Employee per Day
FNI	Freese and Nichols, Inc.
NCTCOG	North Central Texas Council of Government
SUD	Special Utility District
TCEQ	Texas Commission on Environmental Quality
TSZ	Traffic Survey Zone

2.0 LAND USE ASSUMPTIONS

Population and land use are important elements in the analysis of water and wastewater systems. Water demands and wastewater flows depend on the residential population and commercial development served by the systems and determines the sizing and location of system infrastructure. A thorough analysis of historical and projected populations, along with land use, provides the basis for projecting future water demands and wastewater flows.

2.1 Service Area

The service area for impact fee analysis for Lancaster's water and wastewater systems is defined as the current city limits with the exception of areas that fall within Rockett Special Utility District (SUD)'s Certificate of Convenience and Necessity (CCN). The current city limits include recently annexed areas in the southeastern portion of the service area. Areas in the City's extra-territorial jurisdiction (ETJ) were included in the 2035 service area, but Rockett's CCN was excluded in this service area as well. **Figure 2-1** illustrates the impact fee (2022) service area and 203S service area for both water and wastewater.

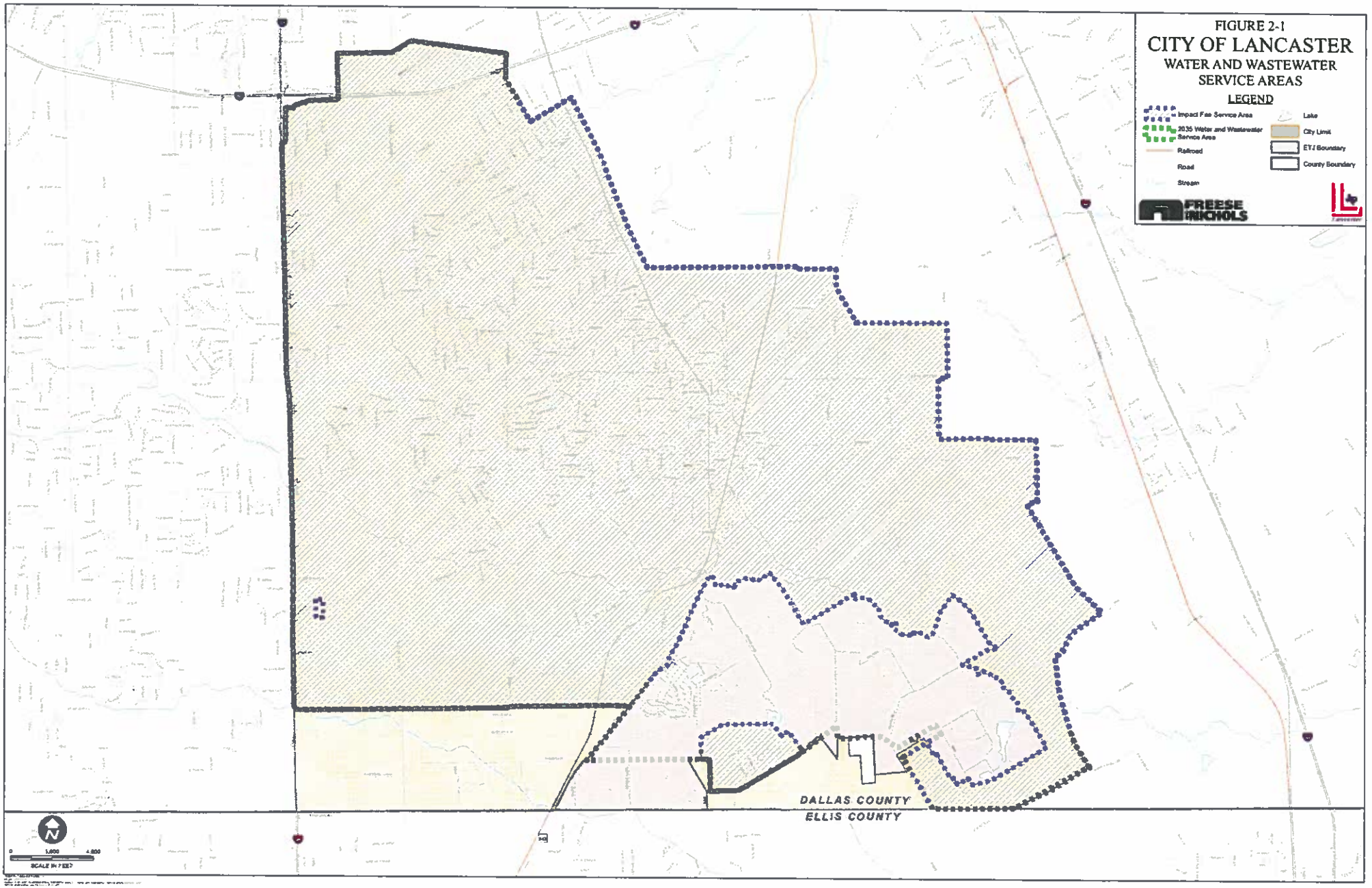


FIGURE 2-1
CITY OF LANCASTER
WATER AND WASTEWATER
SERVICE AREAS
LEGEND
Impact Fee Service Area
2035 Water and Wastewater Service Area
Railroad
Road
Stream
Lake
City Limit
ETJ Boundary
County Boundary
FREESE NICHOLS
DALLAS COUNTY
ELLIS COUNTY

2.2 Historical Population

The City of Lancaster provided yearly population data from 2000 through 2011. The data indicated an average growth rate of about 3% annual growth over the last 11 years. **Table 2-1** presents the historical populations for the entire City of Lancaster.

Table 2-1 Historical Population

Year	City Population	Population Growth	Growth Rate
2000	25,894	-	-
2001	26,350	456	1.8%
2002	27,550	1,200	4.6%
2003	28,700	1,150	4.2%
2004	29,850	1,150	4.0%
2005	31,700	1,850	6.2%
2006	33,550	1,850	5.8%
2007	33,213	-337	-1.0%
2008	35,800	2,587	7.8%
2009	36,200	400	1.1%
2010	36,361	161	0.4%
2011	36,390	29	0.1%
Average	-	954	3.2%

2.3 Projected Population and Employment

Population and employment projections were developed based on traffic survey zone (TSZ) data provided by North Central Texas Council of Government (NCTOCG) and the City of Lancaster Planning Department. The City provided comments on the location of planned development and additional detail about the existing land use. The TSZs were clipped to match the existing and future service areas. **Tables 2-2 and 2-3** present the population and employment projections for the City of Lancaster water and wastewater service area for 2012, 2022, and 2035. Since a portion of the City falls within the Rockett Special Utility District SUD's CCN, the service area population is less than the total population within the City limits. **Figure 2-2** shows the population projections by TSZ, and **Figure 2-3** displays the employment projections by TSZ. **Figure 2-4** displays the impact fee land use assumptions for 2022.

Table 2-2 Water and Wastewater Population Projections

Year	Service Population	Average Annual Population Growth	Average Annual Growth Rate
2012	35,959	-	-
2022	46,949	1,099	2.7%
2035	65,751	1,446	2.6%

Table 2-3 Water and Wastewater Employment Projections

Year	Number of Employees in Service Area	Average Annual Employee Growth	Average Annual Growth Rate
2012	14,848	-	-
2022	23,773	893	4.8%
2035	36,100	948	3.3%

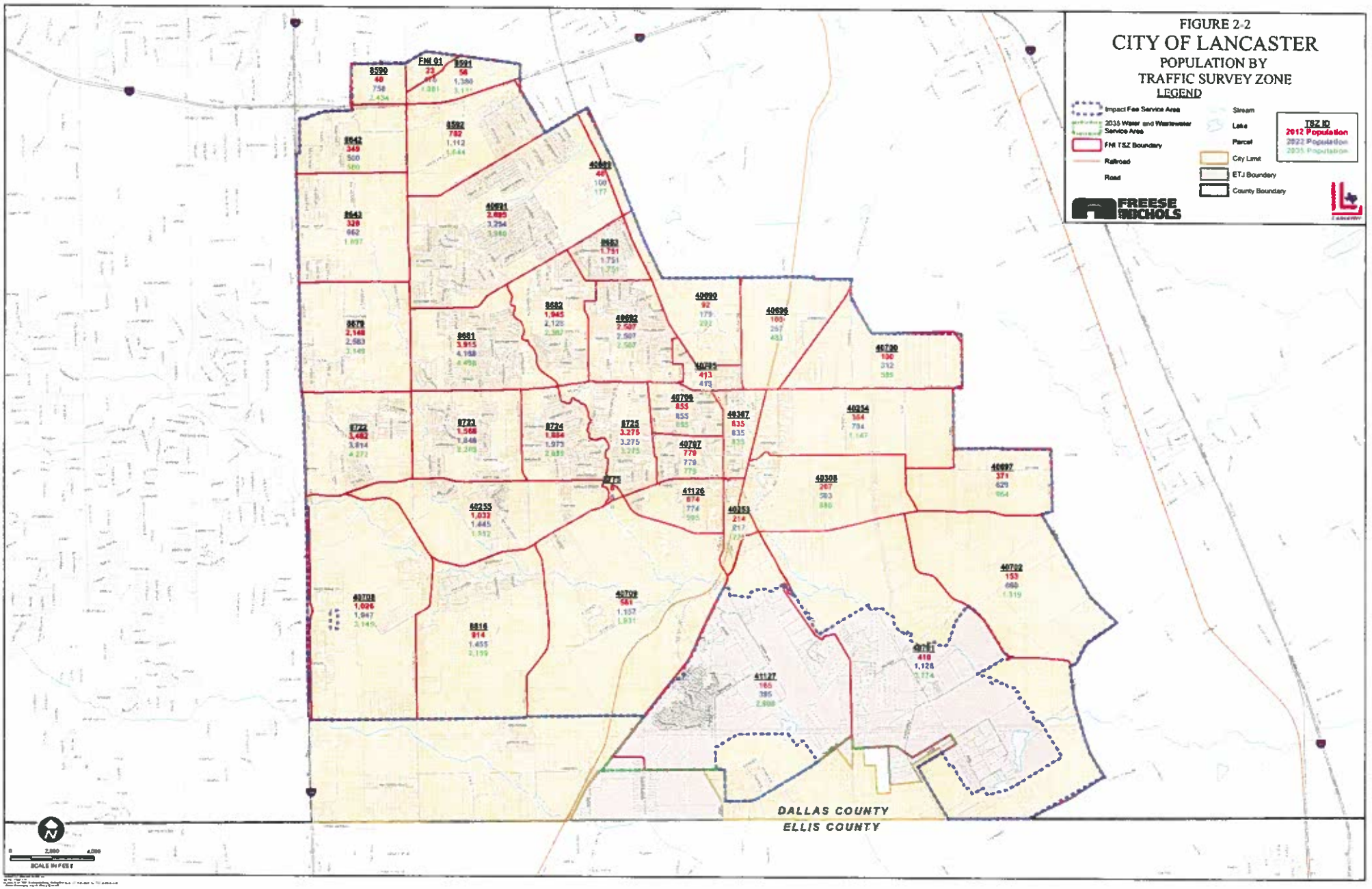


FIGURE 2-2
CITY OF LANCASTER
POPULATION BY
TRAFFIC SURVEY ZONE
LEGEND
Impact Fee Service Area
2035 Water and Wastewater Service Area
FMI TSZ Boundary
Railroad
Road
Stream
Lake
Parcel
City Limit
ETJ Boundary
County Boundary
TSZ ID
2012 Population
2022 Population
2035 Population
FREESE NICHOLS
FM 01
DALLAS COUNTY
ELLIS COUNTY
SCALE IN FEET

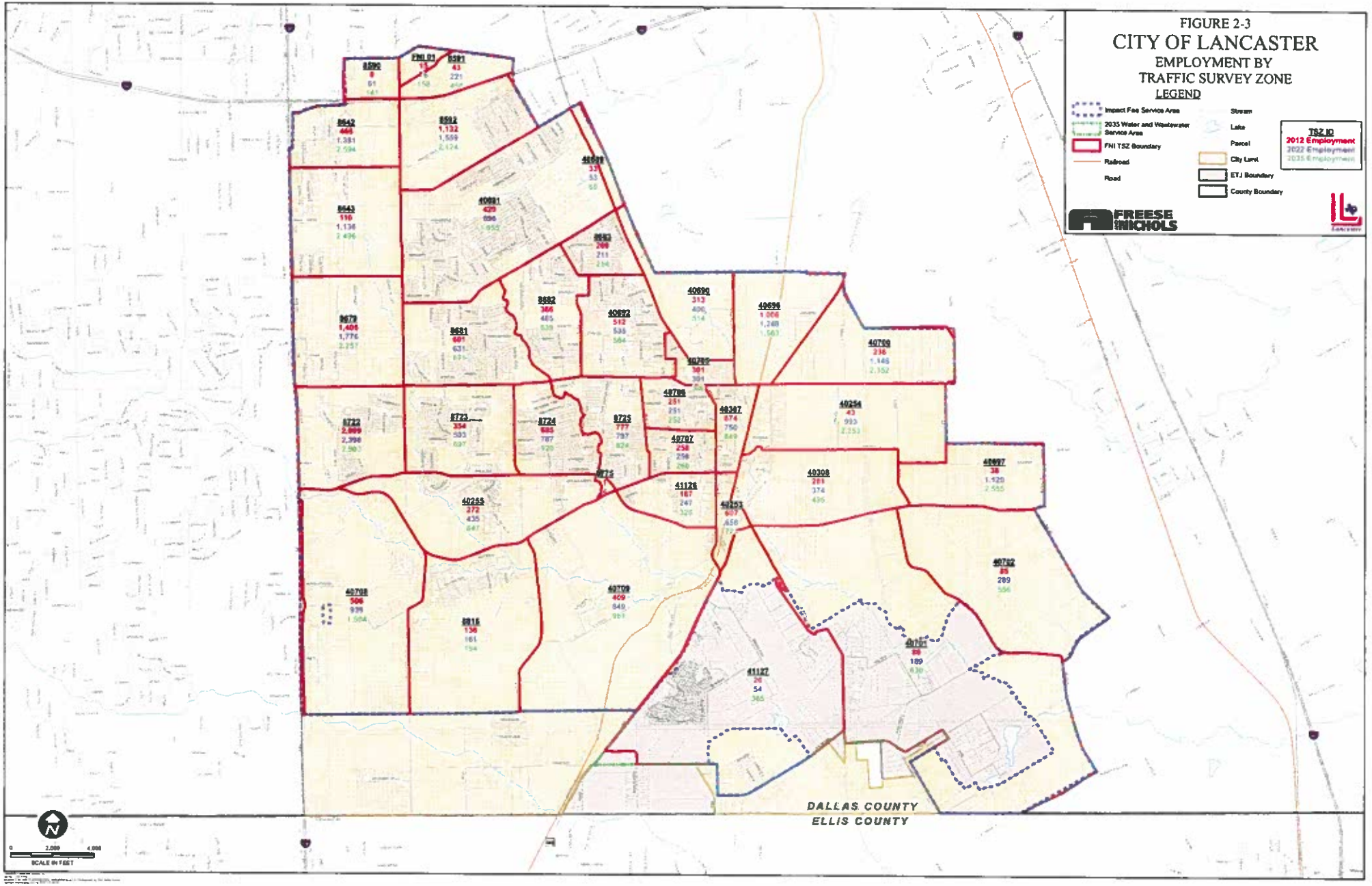


FIGURE 2-3
CITY OF LANCASTER
EMPLOYMENT BY
TRAFFIC SURVEY ZONE
LEGEND
Impact Fee Service Area
2035 Water and Wastewater Service Area
FNI TSZ Boundary
Railroad
Road
Stream
Lake
Parcel
City Limit
ETJ Boundary
County Boundary
TSZ ID
2012 Employment
2022 Employment
2035 Employment
FREESE NICHOLS
DALLAS COUNTY
ELLIS COUNTY
SCALE IN FEET

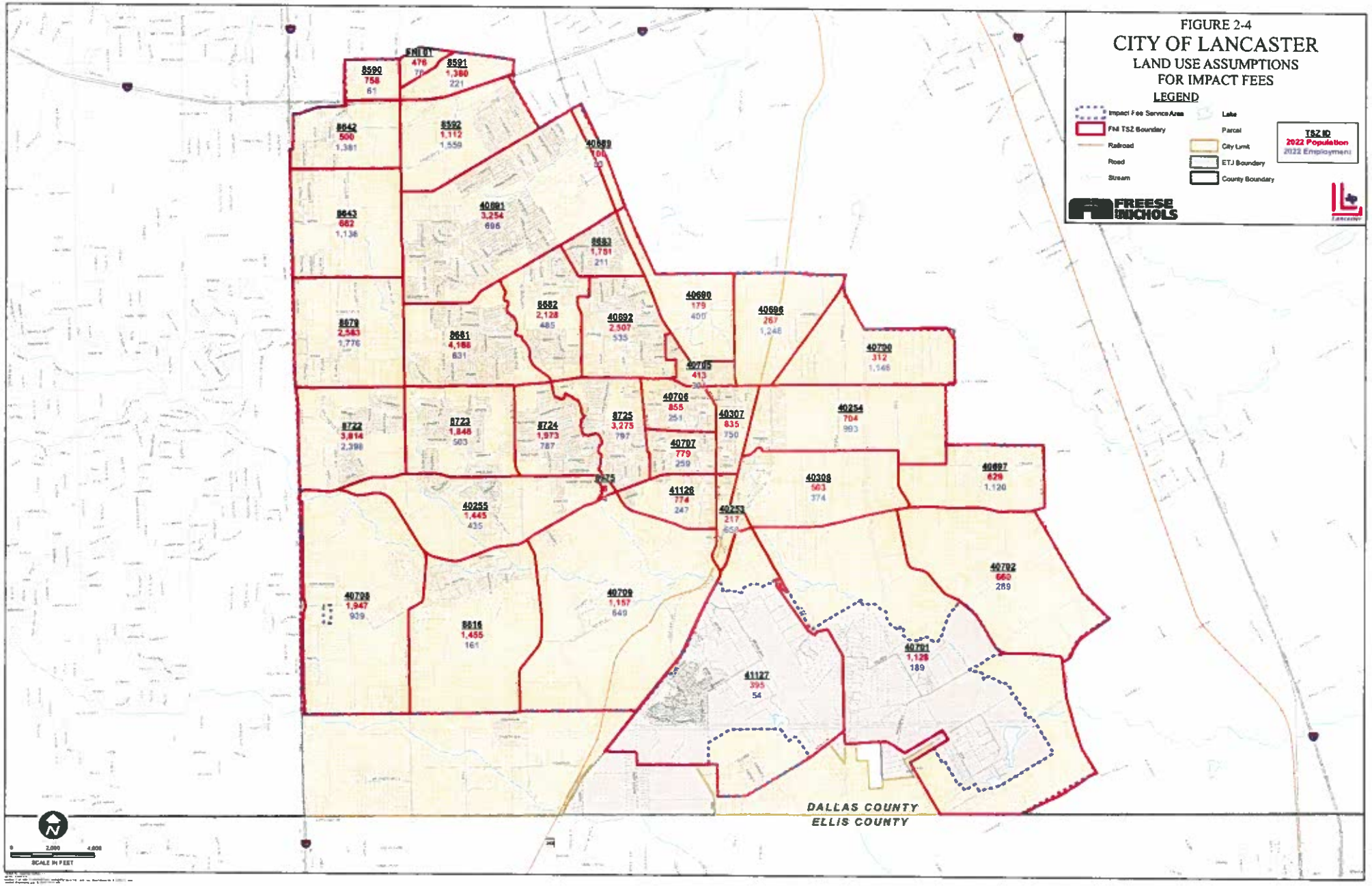


FIGURE 2-4
CITY OF LANCASTER
LAND USE ASSUMPTIONS
FOR IMPACT FEES
LEGEND
Impact Fee Service Area
FNI TSZ Boundary
Railroad
Road
Stream
Lake
Parcel
City Limit
ETJ Boundary
County Boundary
TSZ ID
2022 Population
2022 Employment
FREESE NICHOLS
8590 758 61
8591 1,380 221
8592 1,112 1,559
8642 500 1,381
8643 662 1,136
40691 3,254 696
8683 1,781 211
8679 2,543 1,776
8681 4,186 831
8682 2,128 485
40692 2,507 535
40690 179 400
40696 267 1,246
40705 413
40706 855 251
40707 779 259
40307 835 750
40254 704 993
40720 312 1,148
8722 3,814 2,398
8723 1,848 503
8724 1,973 787
8725 3,275 787
40308 503 374
40697 629 1,120
41126 774 247
40253 217
40255 1,445 435
40792 660 289
40708 1,947 939
40709 1,157 649
8616 1,455 161
40791 1,128 189
41127 395 54
DALLAS COUNTY
ELLIS COUNTY
SCALE IN FEET

3.0 CAPITAL IMPROVEMENTS PLAN

A capital improvements plan (CIP) was developed for the City of Lancaster to ensure high quality water and wastewater service that promotes residential and commercial development. The recommended improvements will provide the required capacity and reliability to meet projected water demands and wastewater flows through year 2035.

3.1 Existing Water and Wastewater Systems

The existing water distribution system currently consists of a network of lines ranging in size from 1.25-inches to 36-inches, two pump stations, three ground storage tanks, and three elevated storage tanks. The City receives water from DWU at two delivery points: the James R. Williams pump station and the Ames pump station. The City of Lancaster currently operates the distribution system with two pressure planes, the Upper Pressure Plane (UPP) and the Lower Pressure Plane (LPP). The UPP generally includes the western portion of the city while the LPP consists of the eastern portion. Water is supplied to the UPP through two pump stations located at the intersections of Ames Road and Houston School Road and Wintergreen Road and Bonnie View Road, respectively. During low demand periods, the City utilizes the Ames PS to serve the LPP through valves from the UPP. One elevated storage tank serves the UPP with an overflow of 792 feet, which sets the static hydraulic gradient. The pump station at Wintergreen Road and Bonnie View Road also serves the LPP which has a static hydraulic gradient of 705 feet established by two elevated storage tanks.

The existing wastewater system has 15 major basins, 4 lift stations, and a network of lines ranging from 4-inches to 24-inches. The majority of the existing wastewater collection system is located north of Ten Mile Creek, and west of Keller Branch. Because of existing topography, the wastewater collection system generally flows from north to south until reaching Ten Mile Creek. The Trinity River Authority (TRA) owns and operates two interceptors (36" and 54") that parallel Ten Mile Creek and terminate at the TRA Ten Mile Wastewater Treatment Plant (WWTP). A third interceptor parallels Red Oak Creek and terminates at TRA's Red Oak WWTP. The City currently has two small sewer lines connected to the Red Oak system.

3.2 Water Model Update and Validation

The hydraulic model developed for the *2007 Water Master Plan*, performed by FNI, was updated to include recently constructed water lines, updated pressure plane boundaries, and changes in system operations. Recent pumping improvements at the Ames Pump Station were added to the model based on schematic drawings and pump test curves. In order to verify that the hydraulic model is an accurate representation of the actual distribution system, a model validation analysis was performed. Field pressure testing was conducted at eight locations throughout the distribution system in August 2011 to assist in model validation. SCADA readings for tank levels and pump status were collected on an hourly basis during this time and were used to create diurnal demand curves. In order to create the curves, a mass balance of the system demand was calculated using the sum of water pumped into the distribution system from the Ames and James R. Williams Pump Stations and adding or subtracting the demand or supply provided by the elevated storage tanks.

The model validation time was chosen by analyzing the diurnal demand curves and finding a peak hour on a week day with no irregularities; therefore, August 25th at 9:00 PM was chosen. A peak hour demand condition was selected because it represents the system at its most stressed hydraulic state and gives a more accurate measure of headloss in the system. Operational data was used to determine system inputs such as tank levels and pump status. Since the model results closely matched the field pressure testing data, it was assumed to be an accurate representation of field conditions. Field pressure testing data, the diurnal demand curves, and a map showing the validation results can be found in **Appendix A**.

3.3 Water and Wastewater Load Projections

Historical water demands from 2000 through July 2011 were provided to FNI by the City for the development of projected water usage rates and peaking factors. **Table 3-1** illustrates the average and maximum day water demands for these years. Design criteria for water demand projections were developed based on historical water usage and are shown in **Table 3-2**. The population and land use data and design criteria were used to develop the future water demands for 2012, 2022 and 2035 that are shown in **Table 3-3**.

Table 3-1 Historical Water Demands

Year	Population	Average Day Demand (mgd)	Average Day Overall Per Capita (gpcd)	Maximum Day Demand (mgd)	Maximum Day/Average Day Peaking Factor
2000	25,894	2.99	115	-	-
2001	26,350	3.63	138	-	-
2002	27,550	3.44	125	-	-
2003	28,700	3.55	124	-	-
2004	29,850	3.52	118	-	-
2005	31,700	4.28	135	6.87	1.61
2006	33,550	4.63	138	10.00	2.16
2007	33,213	3.65	110	6.80	1.86
2008	35,800	4.67	130	11.10	2.38
2009	36,200	4.35	120	7.25	1.67
2010	36,361	4.28	118	6.83	1.60
2011[1]	36,390	4.37	120	8.10	1.85
Average	-	**3.95**	**124**	**8.14**	**1.87**

[1] Average daily usage is estimated based on data through July.

Table 3-2 Water Design Criteria

Average Day Residential Per Capita Usage (gpcd)	Average Day Employment Per Capita Usage (gped)	Maximum Day to Average Day Peaking Factor	Peak Hour to Maximum Day Peaking Factor
100	75	2.0	1.8

Table 3-3 Projected Water Demands

Pressure Plane	Year	Average Day Demand (MGD)	Maximum Day Demand (MGD)	Peak Hour Demand (MGD)
Upper (792')	**2012**	3.38	6.76	12.17
	2022	4.60	9.20	16.56
	2035	5.77	11.66	20.99
Lower (705')	**2012**	1.40	2.80	5.04
	2022	2.00	4.00	7.20
	2035	3.50	6.91	12.43
Total	**2012**	**4.78**	**9.56**	**17.21**
	2022	**6.60**	**13.20**	**23.76**
	2035	**9.27**	**18.57**	**33.42**

Historical wastewater flows from 2003 through July 2011 were provided to FNI by the City for the development of projected wastewater flows and peaking factors. **Table 3-4** illustrates the average annual daily flows and peak flows for these years. Design criteria for wastewater flow projections were developed based on historical wastewater flows and are shown in **Table 3-5**. The population and land use data and design criteria were used to develop the future wastewater flows for 2012, 2022 and 2035 that are shown in **Table 3-6**.

Table 3-4 Historical Wastewater Flows

Year	Population	Average Annual Daily Flow (MGD)	Average Annual Daily Flow Per Capita (gpcd)
2003	28,700	3.86	135
2004	29,850	4.83	162
2005	31,700	4.00	126
2006	33,550	3.67	110
2007	33,213	5.03	151
2008	35,800	4.44	124
2009	36,200	4.87	134
2010	36,361	5.16	142
2011[1]	36,390	3.92	108
Average	-	**4.42**	**132**

[1] Average daily usage is estimated based on data through August.

Table 3-5 Wastewater Design Criteria

Average Day Residential Per Capita Usage (gpcd)	Average Day Employment Per Capita Usage (gped)	Peak Wet Weather to Average Daily Peaking Factor
115	70	6.0

Table 3-6 Projected Wastewater Flows

Year	Average Annual Daily Flow (MGD)	Peak Wet Weather Flow (MGD)
2012	5.17	31.05
2022	7.06	42.38
2035	10.09	60.53

3.4 TCEQ Requirements

The City is required to meet all rules and regulations for public water systems established by the Texas Commission on Environmental Quality (TCEQ) in Title 30 Texas Administrative Code (30 TAC), Chapter 290. These requirements are based on number of connections in each pressure plane. Existing connections were provided by City staff, and there are currently 11,782 connections in the Upper Pressure Plane and 2,000 connections in the Lower Pressure Plane.

A. Elevated Storage

The City is required to meet the TCEQ elevated storage capacity requirement of 100 gallons per connection in each pressure plane. The Lower Pressure Plane (705') currently has 2.0 MG of elevated storage which can serve a total of 20,000 connections. Since the existing number of connections in the Lower Pressure Plane is 2,000, the existing elevated storage can serve an additional 18,000 connections.

A letter to the City of Lancaster from TCEQ, dated January 18, 2011, indicated that the City has exceeded the allowable number of connections in the Upper (792') Pressure Plane based on existing elevated storage capacity. The existing elevated storage capacity of 1.0 MG in the Upper Pressure Plane can serve 10,000, and there are 11,782 connections. A 2.0 MG elevated storage tank in the Upper Pressure Plane is under design and will be constructed in 2013. After the second elevated storage tank is in service, the existing elevated storage tank at the Ames Pump Station will be abandoned based on age, condition, and system operations. The proposed 2.0 MG EST in the Upper Pressure Plane will be able to serve 20,000 connections or an additional 8,218 connections.

B. Total Storage

The City is required to meet the TCEQ total storage capacity requirement of 200 gallons per connection in each pressure plane. The City currently has 4.5 MG of ground storage in the Upper Pressure Plane and can serve a total of 22,500

connections or 10,718 connections in addition to current connections. There is currently 8 MG of storage in the Lower Pressure Plane and can serve a total of 40,000 connections or 38,000 connections in addition to current connections.

C. Pumping

The City is required to meet the TCEQ service pumping capacity requirements established in 30 TAC §290.45(b)(2)(F) and summarized in **Table 3-7. Table 3-8** summarizes the existing pumping facilities. Since the City currently has 1,000 gallons/connection of elevated storage in the Lower Pressure Plane, 0.6 gpm/connection or 1,200 gpm of pumping capacity is required. The City exceeds the required pumping capacity with 3,700 gpm of pumping capacity to the Lower Pressure Plane. Lancaster can add up to 8,000 connections in the Lower Pressure Plane and maintain 200 gallons of elevated storage per connection.

Table 3-7 Service Pumping Capacity Requirements [1]

Elevated Storage Capacity	Service Pumping Capacity Requirement
> 200 gallons per connection	Two service pumps with a minimum combined capacity of 0.6 gpm per connection at each pressure plane
< 200 gallons per connection	The lesser of (a) or (b):
	(a) Total pumping capacity of 2.0 gpm per connection
	(b) Total pumping capacity of at least 1,000 gpm and the ability to meet peak hourly demands with the largest pump out of service

[1] According to 30 TAC §290.45(b)(2)(F)

Table 3-8 Pumping Facilities Summary

Pump Station Name	Pump No.	Rated Capacity (gpm)	Rated Capacity (MGD)	Rated Head (feet)	Pressure Plane
Ames Rd. Pump Station	1	1,250	1.80	168	Upper
	2	1,250	1.80	168	Upper
	3	2,300	3.31	168	Upper
	4	2,600	3.74	168	Upper
	5	5,500	7.92	185	Upper
	6	5,500	7.92	185	Upper
James R. Williams Pump Station	1	500	0.72	125	Lower
	2	700	1.01	125	Lower
	3	1,250	1.80	125	Lower
	5	1,250	1.80	125	Lower
	11	700	1.01	175	Upper
Total	**Upper**	**19,100**	**27.50**	-	-
	Lower	**3,700**	**5.33**	-	-

The City currently has less than 200 gallons per connections of elevated storage capacity in the Upper Pressure Plane, which requires the lesser of a service pumping capacity of 2.0 gpm per connection or the ability to meet peak hourly demands with the largest pump out of service, also known as the firm pumping capacity. The estimated peak hourly demand in 2012 for the Upper Pressure Plane is 12.2 MGD. Since this is significantly less than 2 gpm/connection of pumping capacity, the ability to meet peak hourly demands with the firm pumping capacity will be used as the pumping requirements for the Upper Pressure Plane. The firm pumping capacity to the Upper Pressure Plane is 19.6 MGD, so the City meets this pumping requirement. The peak hourly demand for the Upper Pressure Plane in 2035 is 21.0 MGD. The proposed firm pumping capacity including the pump at in 2035 is 25.6 MGD based on recommended expansions at Ames Pump Station and James R. Williams Pump Station to the Upper Pressure Plane. **Table 3-9** presents a summary of the TCEQ minimum requirements for the existing system.

Table 3-9 TCEQ Checklist

		Requirement	Actual	Meets TCEQ?
Upper Pressure Plane (792')	Elevated Storage	100 gallons per connection	85 gallons per connection	**No**
	Total Storage	200 gallons per connection	382 gallons per connection	Yes
	Pump Station	Peak Hour Demand (12.2 MGD)	19.6 MGD Firm Pumping Capacity	Yes
Lower Pressure Plane (702')	Elevated Storage	100 gallons per connection	1,000 gallons per connection	Yes
	Total Storage	200 gallons per connection	4,000 gallons per connection	Yes
	Pump Station	0.6 gpm per connection	1.85 gallons per connection	Yes

3.5 FNI Design Criteria for CIP Sizing

Freese and Nichols, Inc. worked with the City of Lancaster to establish design criteria for sizing future water and wastewater facilities. Criteria were developed for sizing water transmission lines, elevated storage tanks, ground storage tanks and pump stations for the water system and for sizing sewer trunk lines and lift stations for the wastewater system. These criteria are typically more stringent than TCEQ requirements and take into consideration many additional factors including operational flexibility, fire protection, and energy efficiency.

A. Water System Design Criteria

Hydraulic modeling analysis was performed for the existing and future systems for four operating conditions: average day, maximum day, peak hour, and maximum day with fire flow. The TCEQ required minimum pressure within a distribution system is 35 psi under normal operating conditions. Headloss and velocity in the pipelines are additional criteria used to analyze the water system. Typically, headlosses in water lines should not exceed 4 feet/1000 feet, and velocities should not exceed 7 feet/second.

Freese and Nichols, Inc. developed criteria for sizing of storage and pumping capacity improvements for the City. The design criteria recommended to size ground storage tank capacity is to provide adequate storage volume to meet 12 hours of maximum day demand. This criterion is standard industry practice and allows the City to endure a supply outage for at least 12 hours. **Figures 3-1 and 3-2** summarize the recommended ground storage capacity and associated improvements based on the design criteria for the Upper and Lower Pressure Planes, respectively.

Figure 3-1 Recommended Upper Pressure Plane (792') Ground Storage Capacity

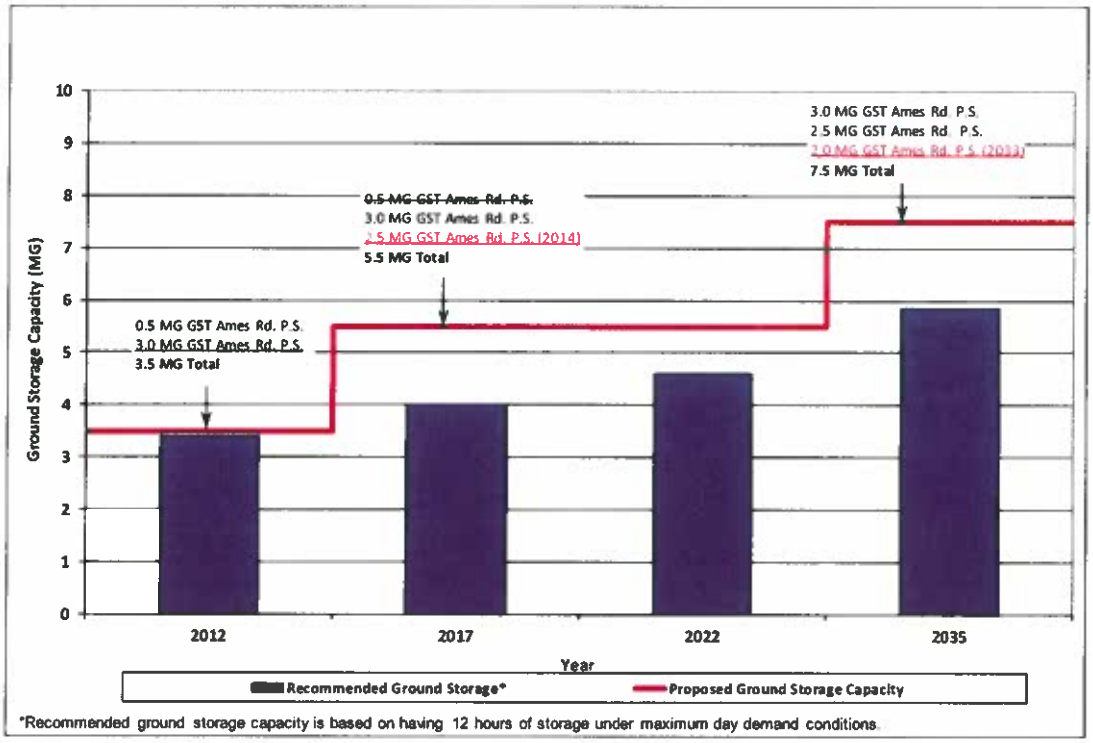
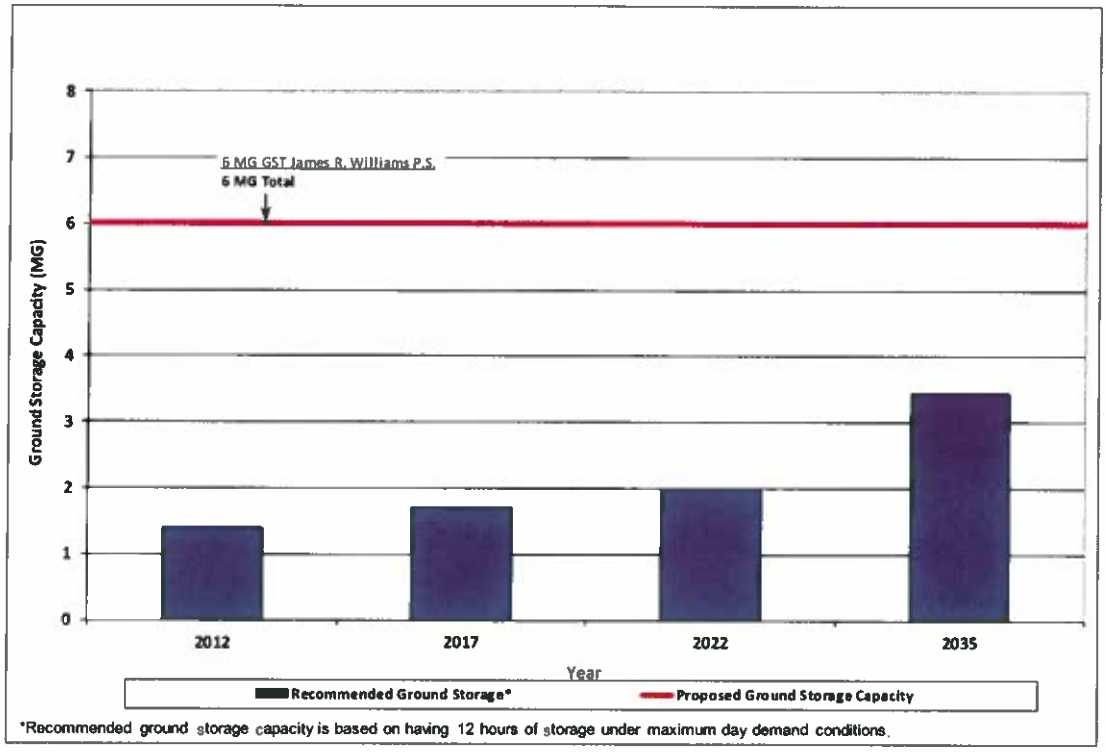
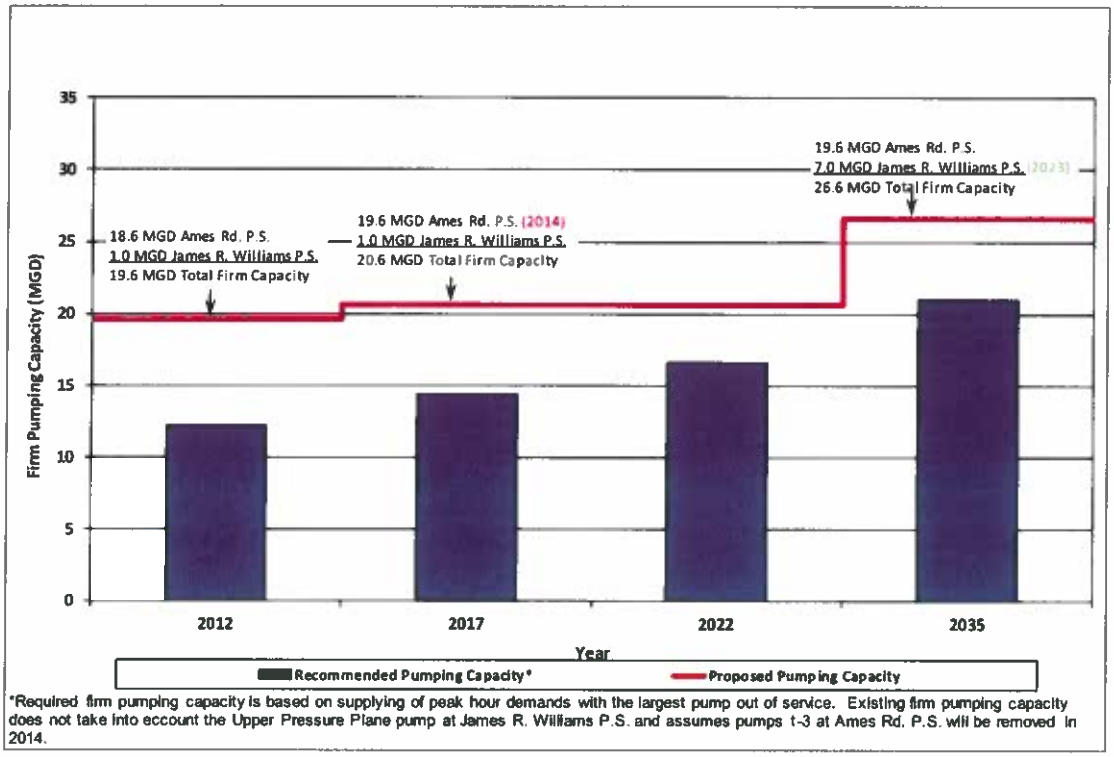


Figure 3-2 Recommended Lower Pressure Plane (705') Ground Storage Capacity



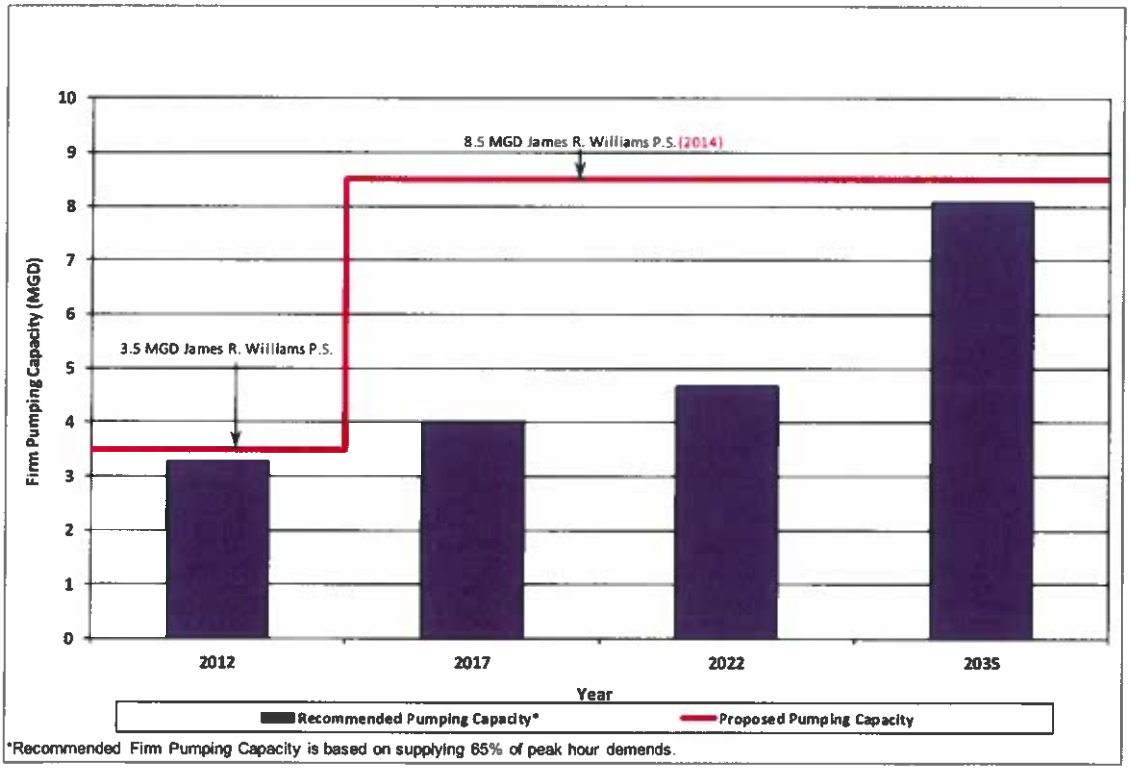
FNI design criteria recommended for pump station capacity is providing a firm pumping capacity to meet 65% of the peak hour demand. The firm pumping capacity is defined as the total available pumping capacity with the largest pump out of service to each pressure plane. However, based on the amount of elevated storage in the UPP, TCEQ requires the City to provide a firm pumping capacity to meet 100% of peak hour demands in the UPP. **Figures 3-3 and 3-4** display the recommended firm pumping capacity to the Upper and Lower Pressure Planes, respectively. The design criteria recommended for elevated storage capacity is based on the greater of twice the peaking volume or the peaking volume plus fire volume of 3,500 gpm for 3 hour duration. The peaking volume is defined as 35% of peak hour demands for a 3 hour duration. **Table 3-10** displays the recommended elevated storage capacity by pressure plane. **Figures 3-5** and **3-6** display the recommended elevated storage capacity and related improvements based on the design criteria.

Figure 3-3 Recommended Upper Pressure Plane (792') Firm Pumping Capacity



*Required firm pumping capacity is based on supplying of peak hour demands with the largest pump out of service. Existing firm pumping capacity does not take into account the Upper Pressure Plane pump at James R. Williams P.S. and assumes pumps 1-3 at Ames Rd. P.S. will be removed in 2014.

Figure 3-4 Recommended Lower Pressure Plane (705') Firm Pumping Capacity



*Recommended Firm Pumping Capacity is based on supplying 85% of peak hour demands.

Table 3-10 Recommended Elevated Storage Capacity

Pressure Plane	Year	Peak Demand[1] (mgd)	Peak Volume[2] (MG)	Fire Volume[3] (MG)	Total[4]
Upper (792')	2012	4.26	0.53	0.63	**1.16**
	2022	5.80	0.72	0.63	**1.45**
	2035	7.35	0.92	0.63	**1.84**
Lower (705')	2012	1.76	0.22	0.63	**0.80**
	2022	2.52	0.32	0.63	**0.95**
	2035	4.35	0.54	0.63	**1.17**

[1] Equals 35% of the peak hour demand

[2] Required volume to supply the peak demand for a duration of 3 hours

[3] Assuming highest fire flow required is 3,500 gpm for 3 hour duration

[4] The greater of twice the peaking volume or the peaking volume plus fire volume

Figure 3-5 Recommended Upper Pressure Plane (792') Elevated Storage Capacity

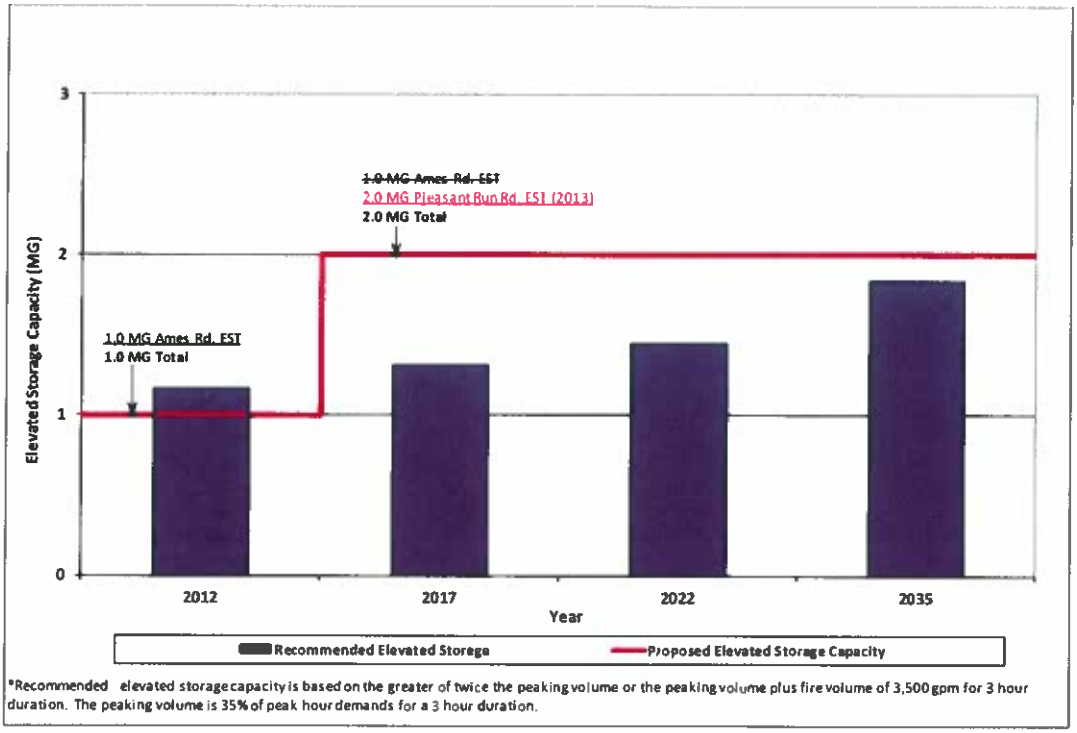
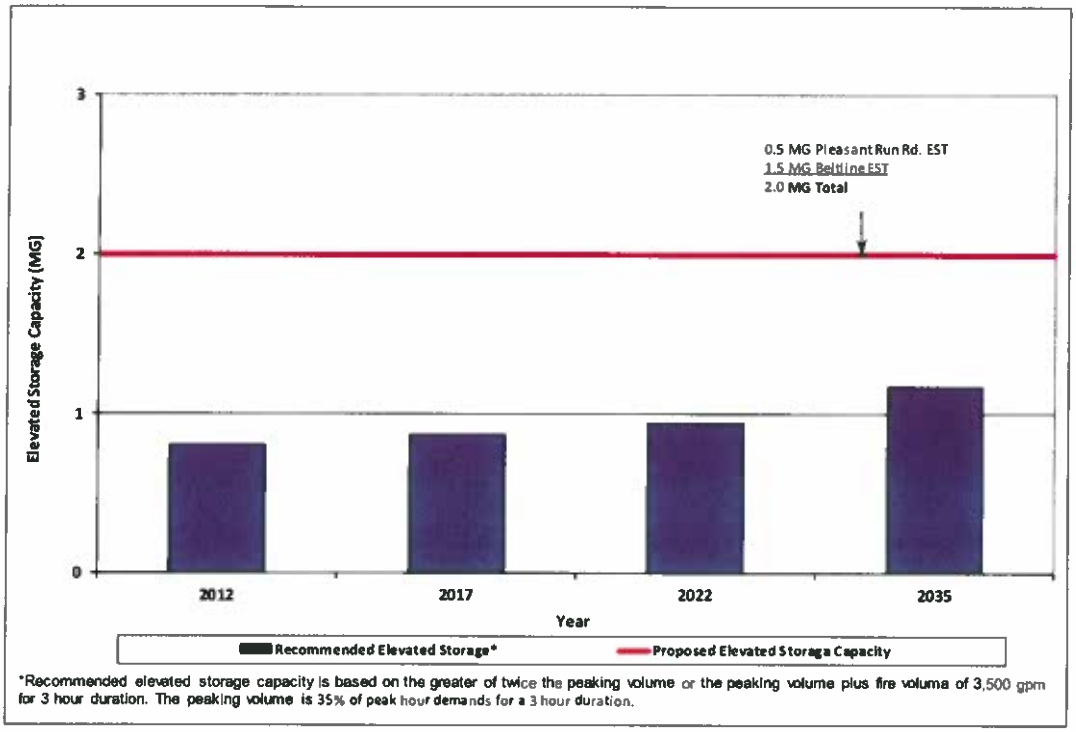


Figure 3-6 Recommended Lower Pressure Plane (705') Elevated Storage Capacity



B. Wastewater Design Criteria

Freese and Nichols established design criteria for future wastewater facilities. Criteria were developed for sizing gravity lines and lift station pumping capacities for the wastewater system.

Gravity lines were recommended for replacement when the ratio of actual flow depth to the diameter of the pipe (d/D) was 0.85 or greater. Slopes for new lines are based on the minimum slope requirement set forth by the TCEQ. Proposed lines are sized for replacement of the existing line.

The design criteria for lift station pumping is to provide firm pumping capacity to meet 125% of the peak wet weather design flows. TCEQ requires that the lift station be capable of pumping the expected peak flow; however, it is recommended to design for 125% of the peak wet weather design flow. The firm pumping capacity is defined by the TCEQ on page 129 of Chapter 217/317 as the total available lift station pumping capacity with the largest pump out of service. **Figure 3-7** through

Figure 3-9 display the recommend lift station firm capacity by planning year. A graph for the IH 635 lift station is not included because it is recommended to be decommissioned.

Figure 3-7 Recommended Wheatland Lift Station Capacity

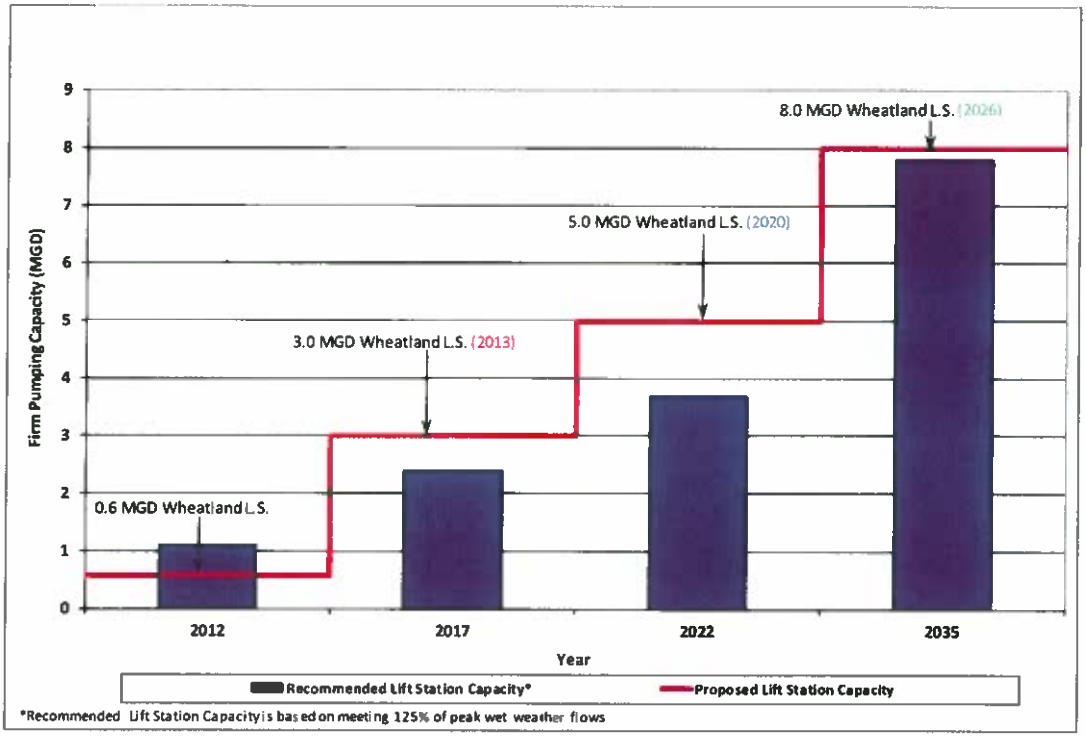


Figure 3-8 Recommended Lift Station #1 Capacity

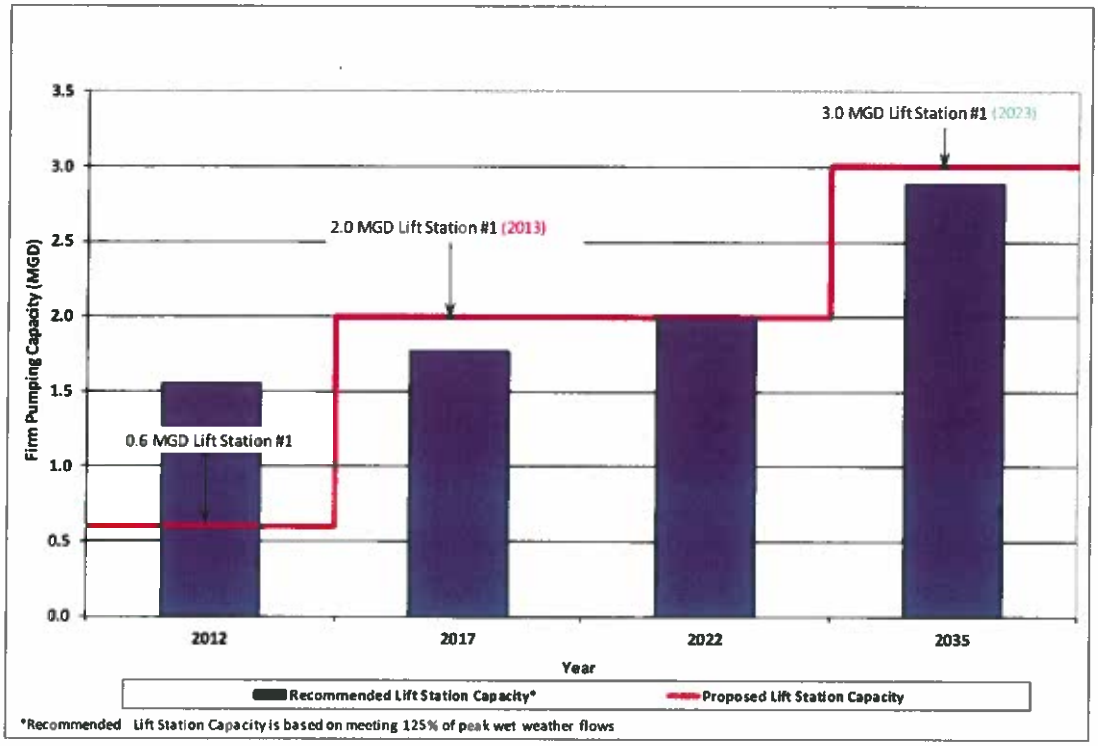
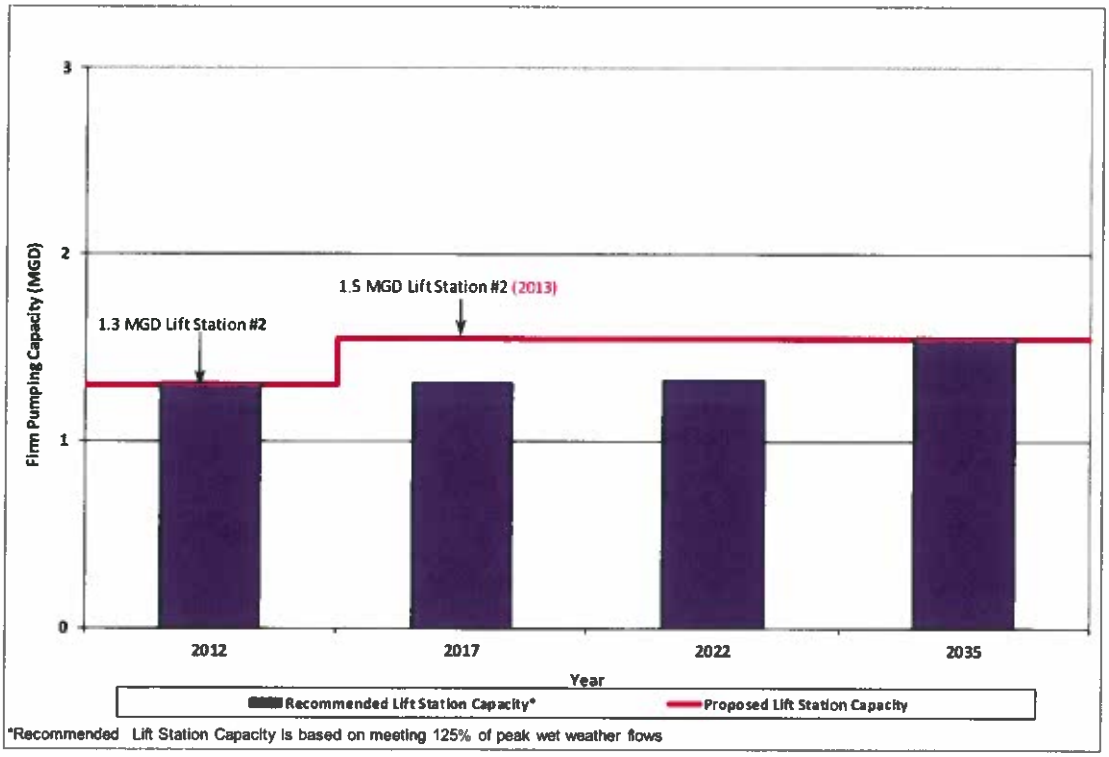


Figure 3-9 Recommended Lift Station #2 Capacity



3.6 Model Results

A. Water Model Results

Using the calibrated hydraulic model, system configurations were evaluated to determine the most appropriate layout for meeting projected water demands. Hydraulic analyses were performed for years 2012, 2022, and 2035. In general, analyses were performed for three basic demand conditions:

- Average day, which determines the ability of the system to replenish storage facilities during average day demands.
- Maximum day, which determines the ability of the system to maintain full storage facilities during maximum day demands.
- Peak hour, which determines the ability of the system to maintain minimum residual pressure during periods of peak demand.

The model was also used to analyze the available fire flow under existing system maximum day demand conditions. A map of the available fire flow is presented in **Appendix B**. Improvements were developed by assessing the transmission and reliability needs of the system as well as future growth considerations.

B. Wastewater Model Results

The wastewater hydraulic model was updated to include recently completed projects, and lines were assumed to be at TCEQ minimum slopes where invert data was not available. Ten-foot contours were used to assign rim elevations in the model. Wastewater system analysis was performed for peak wet weather flow for 2012, 2017, 2022 and 2035. The 2012 peak flow model run indicated that the system had some deficient areas and overflows in areas that city staff had indicated as historical problem areas. The modeling results were used to size proposed improvements and address deficiencies in the existing system.

3.7 Water and Wastewater System Improvements

Proposed water and wastewater system projects to serve the system through 2035 were developed as part of this project based on load projections and design criteria. The proposed

water and wastewater lines were sized for replacement of the existing lines. The proposed water system improvements recommended to serve the City through 2035 are shown on **Figure 3-10**. Proposed wastewater system improvements to serve the City through 2035 are shown on **Figure 3-11**. Detailed cost estimates for the proposed water and wastewater system projects are included in **Appendix C** and **Appendix D**, respectively.

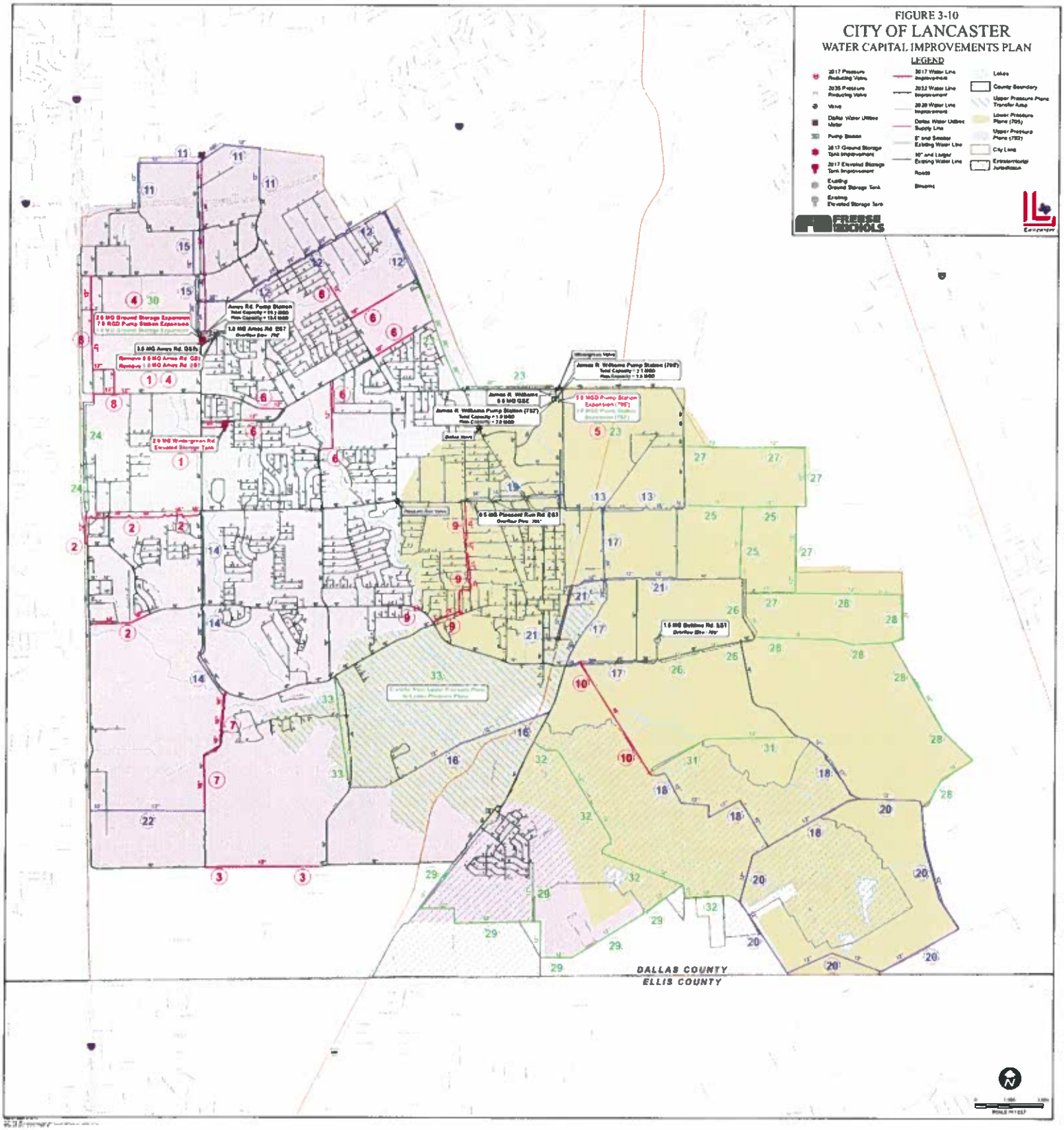
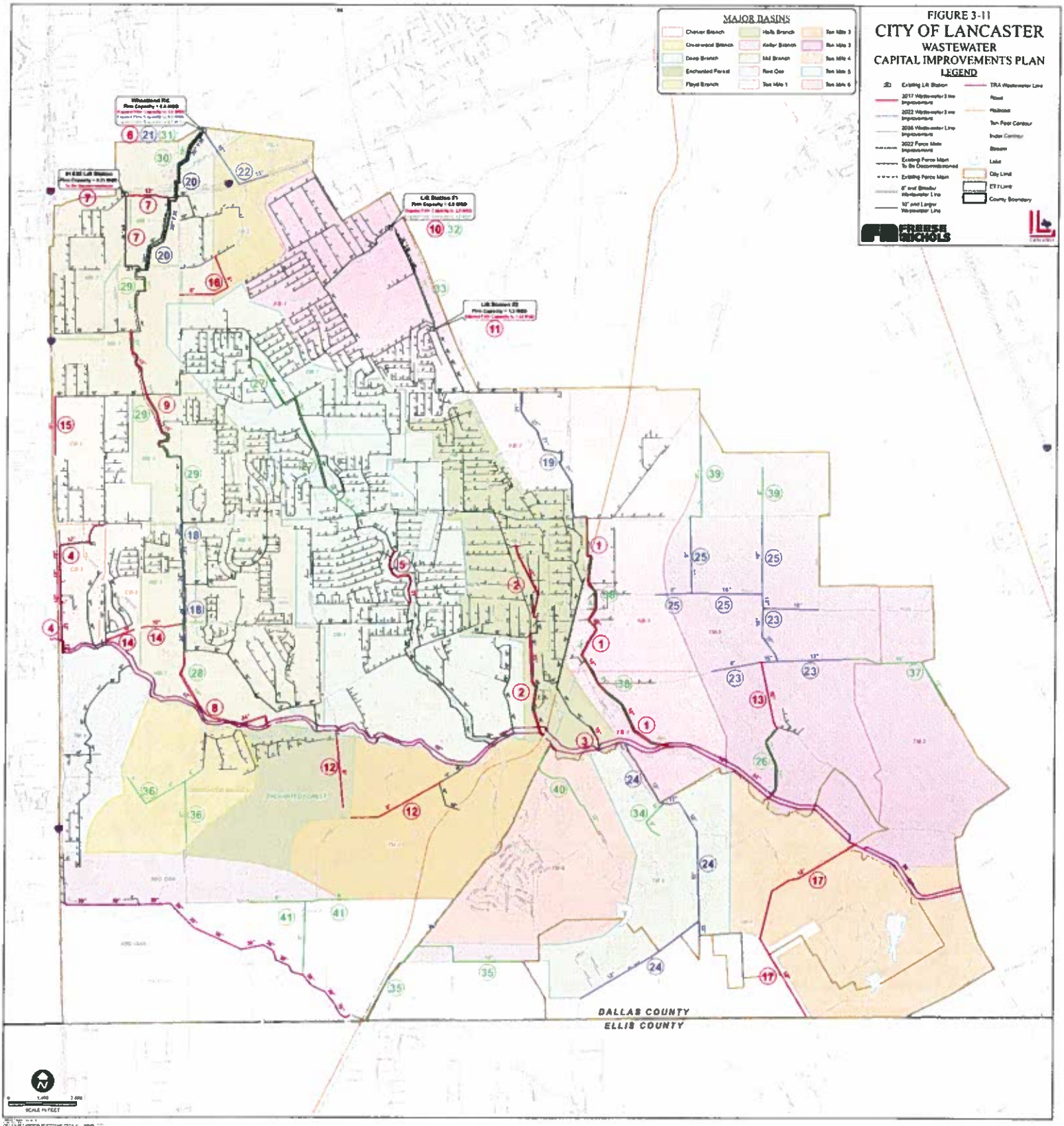


FIGURE 3-10
CITY OF LANCASTER
WATER CAPITAL IMPROVEMENTS PLAN
LEGEND
2017 Pressure Reducing Valve
2035 Pressure Reducing Valve
Valve
Dallas Water Utilities Meter
Pump Station
2017 Ground Storage Tank Improvement
2017 Elevated Storage Tank Improvement
Existing Ground Storage Tank
Existing Elevated Storage Tank
2017 Water Line Improvement
2032 Water Line Improvement
2038 Water Line Improvement
Dallas Water Utilities Supply Line
8" and Smaller Existing Water Line
10" and Larger Existing Water Line
Roads
Streams
Lakes
County Boundary
Upper Pressure Plane Transfer Area
Lower Pressure Plane (705)
Upper Pressure Plane (782)
City Limit
Extraterritorial Jurisdiction
FREESE NICHOLS
Lancaster
DALLAS COUNTY
ELLIS COUNTY


MAJOR BASINS
Chelyer Branch
Crestwood Branch
Deep Branch
Enchanted Forest
Floyd Branch
Halls Branch
Keller Branch
Mid Branch
Red Oak
Ten Mile 1
Ten Mile 3
Ten Mile 4
Ten Mile 5
Ten Mile 6
FIGURE 3-11
CITY OF LANCASTER
WASTEWATER
CAPITAL IMPROVEMENTS PLAN
LEGEND
Existing Lift Station
2017 Wastewater Line Improvements
2022 Wastewater Line Improvements
2035 Wastewater Line Improvements
2022 Force Main Improvements
Existing Force Main To Be Decommissioned
Existing Force Main
8" and Smaller Wastewater Line
10" and Larger Wastewater Line
TRA Wastewater Line
Road
Railroad
Ten Foot Contour
Index Contour
Stream
Lake
City Limit
ETJ Limit
County Boundary
FREESE NICHOLS
DALLAS COUNTY
ELLIS COUNTY
SCALE IN FEET

4.0 IMPACT FEE ANALYSIS

The impact fee analysis involves determining the utilization of existing and proposed projects required as defined by the capital improvement plan to serve new development over the next 10-year time period. For existing or proposed projects, the impact fee is calculated as a percentage of the project cost, based upon the percentage of the project's capacity required to serve development projected to occur between 2012 and 2022. Capacity serving existing development and development projected for more than 10 years in the future cannot be charged to impact fees.

4.1 Eligible CIP Costs

A summary of the costs for each of the projects required for the 10-year growth period used in the impact fee analysis for both the water and wastewater systems is shown in **Table 4-1** and **Table 4-2**. Costs listed for the existing projects are based on actual design and construction costs provided by the City. **Table 4-1** and **Table 4-2** show 2012 percent utilization as the portion of a project's capacity required to serve existing development. It is not included in the impact fee analysis. The 2022 percent utilization is the portion of the project's capacity that will be required to serve the City of Lancaster in 2022. The 2012-2022 percent utilization is the portion of the project's capacity required to serve development from 2012 to 2022. The water and wastewater hydraulic models were used to assist in the calculation of project utilization percentages. The portion of a project's total cost that is used to serve development projected to occur from 2012 through 2022 is calculated as the total actual cost multiplied by the 2012-2022 percent utilization. Only this portion of the cost is used in the impact fee analysis. The proposed 10-year water system impact fee CIP is shown on **Figure 4-1.** Proposed 10-year wastewater impact fee CIP is shown on **Figure 4-2**.

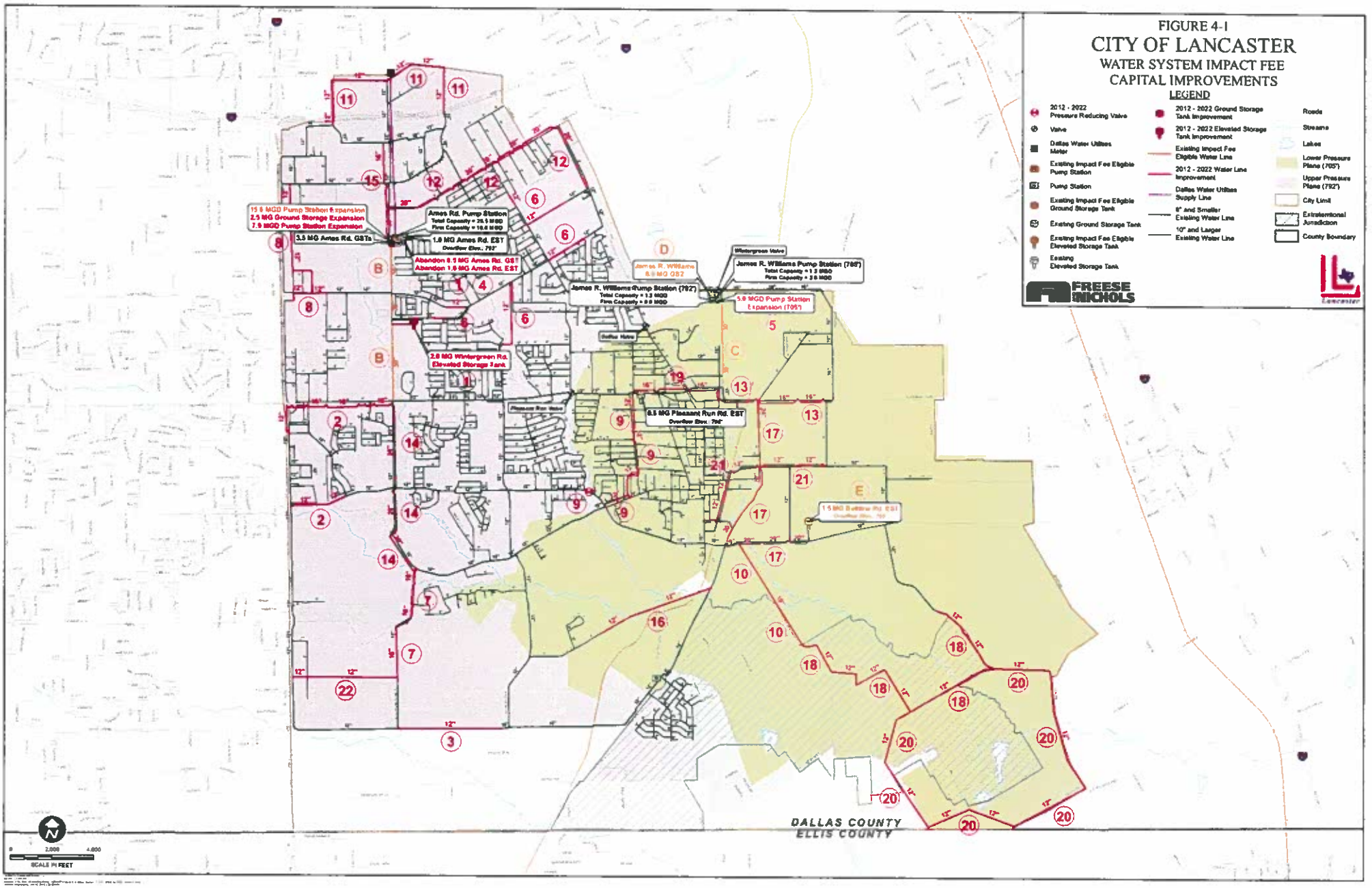


FIGURE 4-1
CITY OF LANCASTER
WATER SYSTEM IMPACT FEE
CAPITAL IMPROVEMENTS
LEGEND
2012 - 2022 Pressure Reducing Valve
Valve
Dallas Water Utilities Meter
Existing Impact Fee Eligible Pump Station
Pump Station
Existing Impact Fee Eligible Ground Storage Tank
Existing Ground Storage Tank
Existing Impact Fee Eligible Elevated Storage Tank
Existing Elevated Storage Tank
2012 - 2022 Ground Storage Tank Improvement
2012 - 2022 Elevated Storage Tank Improvement
Existing Impact Fee Eligible Water Line
2012 - 2022 Water Line Improvement
Dallas Water Utilities Supply Line
8" and Smaller Existing Water Line
10" and Larger Existing Water Line
Roads
Streams
Lakes
Lower Pressure Plane (705')
Upper Pressure Plane (792')
City Limit
Extraterritorial Jurisdiction
County Boundary
FREESE NICHOLS
Lancaster
15.6 MGD Pump Station Expansion
2.5 MG Ground Storage Expansion
7.9 MGD Pump Station Expansion
3.5 MG Ames Rd. GSTs
Ames Rd. Pump Station
Total Capacity = 26.5 MGD
Firm Capacity = 18.6 MGD
1.8 MG Ames Rd. EST
Overflow Elev.: 793'
Abandon 0.1 MG Ames Rd. GST
Abandon 1.8 MG Ames Rd. EST
James R. Williams Pump Station (792')
Total Capacity = 13 MGD
Firm Capacity = 9.6 MGD
James R. Williams 6.0 MG GST
Wintergreen Valve
James R. Williams Pump Station (705')
Total Capacity = 12 MGD
Firm Capacity = 9.6 MGD
5.0 MGD Pump Station Expansion (705')
Dallas Valve
2.0 MG Wintergreen Rd. Elevated Storage Tank
Pleasant Run Valve
6.5 MG Pleasant Run Rd. EST
Overflow Elev.: 792'
1.5 MG Bluebird Rd. EST
DALLAS COUNTY
ELLIS COUNTY
SCALE IN FEET
0
2,000
4,000

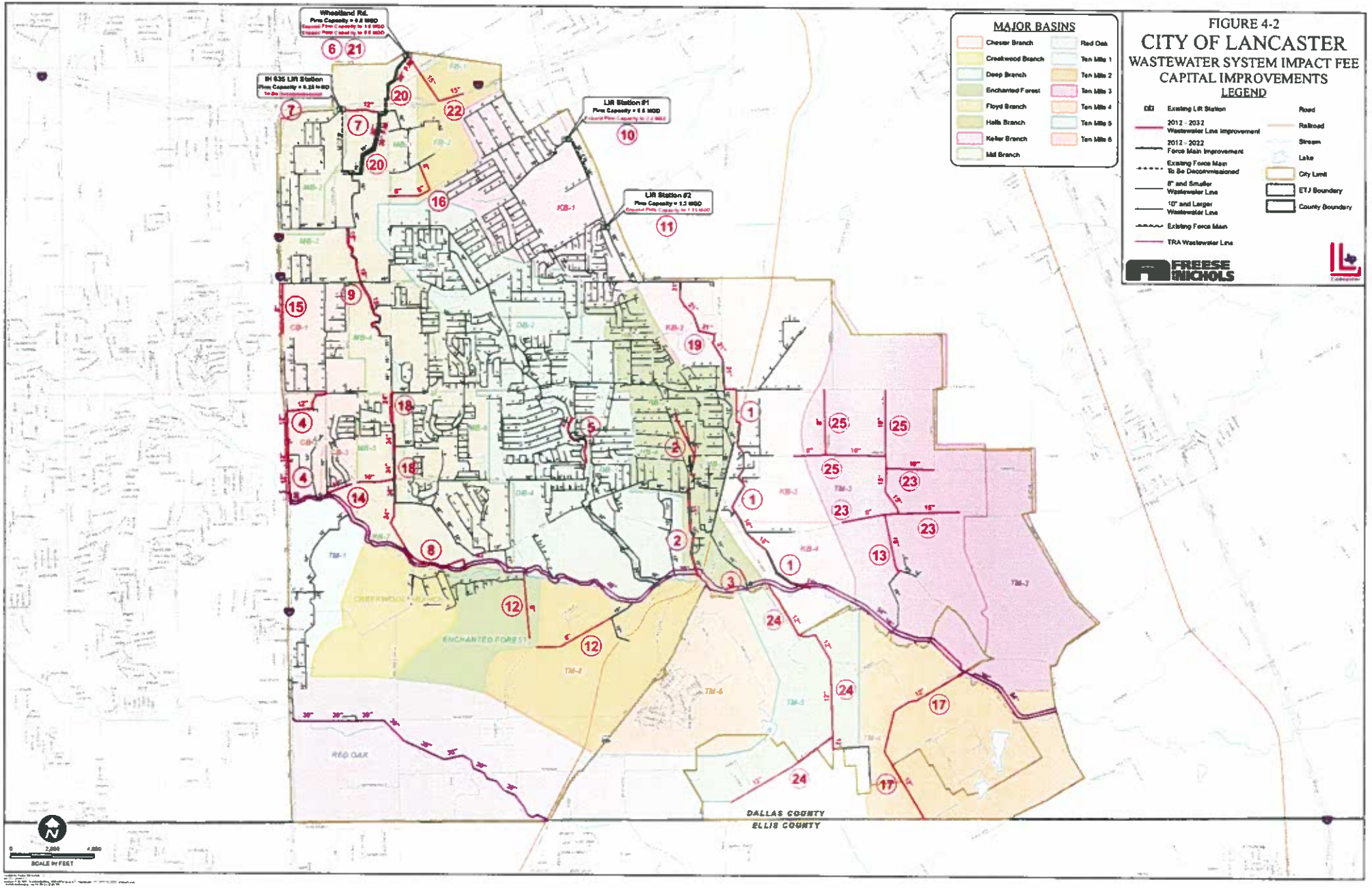


FIGURE 4-2
CITY OF LANCASTER
WASTEWATER SYSTEM IMPACT FEE
CAPITAL IMPROVEMENTS
LEGEND
MAJOR BASINS
Chester Branch
Creekwood Branch
Deep Branch
Enchanted Forest
Floyd Branch
Hallis Branch
Keller Branch
Mill Branch
Red Oak
Ten Mile 1
Ten Mile 2
Ten Mile 3
Ten Mile 4
Ten Mile 5
Ten Mile 6
Existing Lift Station
2012 - 2032 Wastewater Line Improvement
2012 - 2022 Force Main Improvement
Existing Force Main To Be Decommissioned
8" and Smaller Wastewater Line
10" and Larger Wastewater Line
Existing Force Main
TRA Wastewater Line
Road
Railroad
Stream
Lake
City Limit
ETJ Boundary
County Boundary
FREESE NICHOLS
Wheatland Rd.
IH 635 Lift Station
LIft Station #1
LIft Station #2
ENCHANTED FOREST
RED OAK
DALLAS COUNTY
ELLIS COUNTY
SCALE IN FEET

Table 4-1 Water System Impact Fee Eligible Projects

No.	Description of Project	Percent Utilization			Costs Based on 2012 Dollars			
		2012*	2022	2012-2022	Capital Cost	Current Development	10-Year (2012-2022)	Beyond 2022
	EXISTING							
A	Ames Pump Station Expansion	6%	25%	19%	$3,766,376	$225,983	$715,611	$2,824,782
B	30-inch water line along Houston School Road	35%	60%	25%	$819,508	$286,828	$204,877	$327,803
C	30-inch water line along Jefferson Road	20%	25%	5%	$859,527	$171,905	$42,976	$644,645
D	James R. Williams Pump Station 6.0 MG GST	23%	33%	10%	$1,666,918	$388,948	$166,692	$1,111,279
E	Beltline Road 1.5 MG EST	20%	27%	7%	$2,779,869	$555,974	$185,325	$2,038,570
F	2012 Water and Wastewater Impact Fee Study (50%)	0%	100%	100%	$66,000	$0	$66,000	$0
Existing Project Sub-total					$9,958,197	$1,642,033	$1,357,166	$6,958,998
	PROPOSED							
1	Abandon 1.0 MG Ames EST and construct new 2.0 MG EST	60%	80%	20%	$5,545,500	$3,327,300	$1,109,100	$1,109,100
2	Connect small diameter lines in the Upper Pressure Plane near the Pleasant Run Elevated Storage Tank	10%	65%	55%	$1,371,490	$137,149	$754,320	$480,022
3	12-inch waterline along Bear Creek	0%	60%	60%	$609,670	$0	$365,802	$243,868
4	Ames Pump Station 2.5 MG Ground Storage Tank, 7.9 MGD Pump Station Expansion, Remove 0.5 MG Ames Rd. GST and Pumps 1-3	50%	65%	15%	$3,760,500	$1,880,250	$564,075	$1,316,175
5	James R. Williams 5.0 MGD Pump Station Expansion	0%	24%	24%	$828,000	$0	$195,408	$632,592
6	Connect small diameter lines in the Upper Pressure Plane	30%	50%	20%	$1,491,210	$447,363	$298,242	$745,605
7	16-inch waterline along Houston School Road	25%	40%	15%	$932,940	$233,235	$139,941	$559,764
8	12-inch waterline along Sunnymeadow Road	0%	50%	50%	$551,900	$0	$275,950	$275,950
9	12-inch waterline south of Pleasant Run EST and new transfer valve	10%	50%	40%	$1,017,500	$101,750	$407,000	$508,750
10	16-inch waterline along Nokomis Road	0%	40%	40%	$1,053,000	$0	$421,200	$631,800
11	12-inch waterlines north of Interstate 20	0%	44%	44%	$1,283,430	$0	$566,219	$717,211

Table 4-1 Water System Impact Fee Eligible Projects (Continued)

		Percent Utilization			Costs Based on 2012 Dollars			
No.	Description of Project	2012*	2022	2012-2022	Capital Cost	Current Development	10-Year (2012-2022)	Beyond 2022
12	20-inch waterline from Ames Pump Station along Cedardale Road	10%	45%	35%	$3,008,030	$300,803	$1,052,811	$1,654,417
13	30-inch waterline along Pleasant Run Road between River Oaks Circle and Lancaster Hutchins. 16-inch waterline along Pleasant Run between Lancaster Hutchins and Cornell Road	5%	30%	25%	$1,560,000	$78,000	$390,000	$1,092,000
14	24- and 20-inch waterline along Houston School Road south of Pleasant Run.	20%	50%	30%	$1,862,920	$372,584	$558,876	$931,460
15	20- and 16-inch waterline along Houston School Road	25%	65%	40%	$582,840	$145,710	$233,136	$203,994
16	12-inch waterline along Ten Mile Road west of Lancaster Hutchins	0%	30%	30%	$967,170	$0	$290,151	$677,019
17	24- and 20-inch waterlines along Lancaster Hutchins south of Pleasant Run Road and east along Beltline to the Beltline Road EST	10%	55%	45%	$2,503,670	$250,367	$1,126,652	$1,126,652
18	12-inch loop along Wilson Road, Watermill Road, and Ferris Road.	0%	20%	20%	$1,983,960	$0	$396,792	$1,587,168
19	16-inch waterline along Pleasant Run east of the Pleasant Run EST	25%	45%	20%	$723,220	$180,805	$144,644	$397,771
20	12-inch loop along Wilson Road, Nokomis Road, Stainback Road, and Ferris Road.	0%	20%	20%	$2,886,310	$0	$577,262	$2,309,048
21	12-inch waterline along Greene Road and Railroad between Greene Road and Pecan Street	10%	50%	40%	$1,148,720	$114,872	$459,488	$574,360
22	12-inch waterline along Parkerville Road between Interstate 35 and Houston School Road	0%	30%	30%	$612,720	$0	$183,816	$428,904
Proposed Project Sub-total					$36,284,700	$7,570,188	$10,510,884	$18,203,628
Total Capital Improvements Cost					**$46,242,897**	**$9,199,825**	**$11,892,365**	**$25,150,707**
	* Utilization in 2012 on Proposed Projects indicates a portion of the project that will be used to address deficiencies within the existing system, and therefore are not eligible for impact fee cost recovery for future growth.							

Table 4-2 Wastewater System Impact Fee Eligible Projects

		Percent Utilization			Costs Based on 2012 Dollars			
No.	Description of Project	2012*	2022	2012-2022	Capital Cost	Current Development	10-Year (2012-2022)	Beyond 2022
	EXISTING							
A	Impact Fee Study	0%	100%	100%	$66,000	$0	$66,000	$0
	PROPOSED							
1	18-inch gravity line in the Keller Branch Basin	90%	95%	5%	$2,797,170	$2,517,453	$139,859	$139,859
2	15- and 12-inch gravity lines in the Halls Branch Basin	90%	95%	5%	$1,252,720	$1,127,448	$62,636	$62,636
3	15-inch gravity line in the Halls Branch Basin north of TRA interceptor	85%	90%	5%	$188,640	$160,344	$9,432	$18,864
4	12-inch gravity line in Chesier Branch Basin	80%	90%	10%	$978,220	$782,576	$97,822	$97,822
5	21-inch gravity line in the Deep Branch Basin	75%	80%	5%	$826,350	$619,763	$41,318	$165,270
6	Wheatland Lift Station expansion to 3.0 MGD firm capacity	21%	100%	79%	$1,380,000	$289,800	$1,090,200	$0
7	Decommission IH 635 Lift Station and construct new 12-inch gravity line	40%	80%	40%	$508,330	$203,332	$203,332	$101,666
8	Construct 24-inch relief line in Mills Branch Basin	80%	95%	15%	$1,538,070	$1,230,456	$230,711	$76,904
9	15-inch gravity line in the Mills Branch Basin	60%	85%	25%	$1,359,170	$815,502	$339,793	$203,876
10	Lift Station #1 expansion to 2.0 MGD Firm Capacity	68%	95%	27%	$828,000	$563,040	$223,560	$41,400
11	Lift Station #2 expansion to 1.55 MGD Firm Capacity	0%	15%	15%	$345,000	$0	$51,750	$293,250
12	8-inch gravity lines in Ten Mile-2 and Enchanted Forest Basin	0%	50%	50%	$710,120	$0	$355,060	$355,060
13	18-inch gravity line in Ten Mile-3	0%	50%	50%	$595,840	$0	$297,920	$297,920
14	10-inch gravity lines in Chesier Branch Basin and Mills Branch Basin	0%	85%	85%	$343,920	$0	$292,332	$51,588
15	8-inch gravity line in Chesier Branch	0%	80%	80%	$233,220	$0	$186,576	$46,644

Table 4-1 Wastewater System Impact Fee Eligible Projects (Continued)

		Percent Utilization			Costs Based on 2012 Dollars			
No.	Description of Project	2012*	2022	2012-2022	Capital Cost	Current Development	10-Year (2012-2022)	Beyond 2022
16	8-inch gravity line in Floyd Branch Basin	0%	70%	70%	$331,830	$0	$232,281	$99,549
17	12-inch gravity line in Ten Mile-4	0%	30%	30%	$1,320,070	$0	$396,021	$924,049
18	24-inch gravity line in Mills Branch Basin	30%	70%	40%	$1,408,290	$422,487	$563,316	$422,487
19	21-inch gravity line in the Keller Branch Basin	20%	70%	50%	$1,872,220	$374,444	$936,110	$561,666
20	Wheatland Lift Station new 20-inch force main	20%	70%	50%	$1,599,360	$319,872	$799,680	$479,808
21	Wheatland Lift Station expansion to 5.0 MGD firm capacity	0%	50%	50%	$552,000	$0	$276,000	$276,000
22	15-inch gravity line in Floyd Branch Basin	0%	50%	50%	$655,710	$0	$327,855	$327,855
23	18-, 15-, 10-, and 8-inch gravity lines in the Ten Mile-3 Basin	0%	60%	60%	$1,920,940	$0	$1,152,564	$768,376
24	12-inch gravity line in Ten Mile-5	0%	10%	10%	$2,075,440	$0	$207,544	$1,867,896
25	10- and 8-inch gravity lines in Ten Mile-3 Basin	0%	40%	40%	$1,158,680	$0	$463,472	$695,208
Proposed Project Sub-total					$26,779,310	$9,426,517	$8,977,142	$8,375,652
Total Capital Improvements Cost					**$26,845,310**	**$9,426,517**	**$9,043,142**	**$8,375,652**
	* Utilization in 2012 on Proposed Projects indicates a portion of the project that will be used to address deficiencies within the existing system, and therefore are not eligible for impact fee cost recovery for future growth.							

4.2 Service Units

The maximum impact fee may not exceed the amount determined by dividing the cost of capital improvements required by the total number of service units attributed to new development during the impact fee eligibility period. A water service unit is defined as the service equivalent to a water connection for a single-family residence. The City of Lancaster does not directly meter wastewater flows and bills for wastewater services based on the customer's water consumption. Therefore, a wastewater service unit is defined as the wastewater service provided to a customer with a water connection for a single-family residence.

The service associated with public, commercial, and industrial connections is converted into service units based upon the capacity of the meter used to provide service. The number of service units required to represent each meter size is based on the safe maximum operating capacity of the appropriate meter type. American Water Works Association (AWWA) standards C708 (Cold Water Meters – Multi-jet Type), C701 (Cold Water Meters – Class I Turbine Type), and C702 (Cold Water Meters – Compound Type) were used to determine the safe maximum operating capacity. The service unit equivalent for each meter size used by the City is listed in **Table 4-3**.

Table 4-3 Service Unit Equivalencies

Meter Size	Meter Type	Safe Maximum Operating Capacity (gpm)	Service Unit Equivalent
3/4"	Multi-jet	25	1.0
1"	Multi-jet	35	1.4
1 1/2"	Multi-jet	70	2.8
2"	Compound	160	6.4
3"	Compound	320	12.8
4"	Compound	500	20.0
6"	Compound	1,000	40.0
8"	Compound	1,600	64.0
10"	Compound	2,300	92.0
10"	Turbine	2,900	116.0
12"	Turbine	4,300	172.0

Typically, in Lancaster, single-family residences are served with 3/4-inch water meters. Larger meters represent public, commercial, and industrial water use. The City provided data that included the meter size of each active water meter as of February 2012. **Table 4-4** shows the water and wastewater service units for 2012 and the projected service units for 2022.

Table 4-4 Water and Wastewater Service Units

Meter Size	2012 Connections	2012 Service Units	2022 Connections	2022 Service Units	Growth in Service Units
3/4"	10,440	10,440	13,572	13,572	3,132
1"	139	195	181	253	58
1 1/2"	57	160	74	207	47
2" [1]	391	2,502	587	3,757	1,255
3"	19	243	30	384	141
4"	12	240	19	380	140
6"	4	160	6	240	80
8"	9	576	14	896	320
Total	**11,071**	**14,516**	**14,483**	**19,689**	**5,173**

[1] Includes Multi-Family Meters

4.3 Maximum Impact Fee Calculations

Texas Government Code Section 395 outlines the procedures and requirements for calculating maximum allowable impact fees to recover costs associated with capital improvement projects needed due to growth over a 10-year period. Section 395 also requires a plan that addresses possible duplication of payments for capital improvements. This plan can either provide a credit for the portion of revenues generated by new development that is used for the payment of eligible improvements, including payment of debt, or reduce the total eligible project costs by 50 percent. The City of Lancaster has selected to utilize the reduction of the total eligible project costs by 50 percent to determine the maximum allowable impact fees.

Chapter 395 of the Texas Local Government Code states that the maximum impact fee may not exceed the amount determined by dividing the cost of capital improvements required by the total number of service units attributed to new development during the impact fee eligibility period less the credit to account for water and wastewater revenues used to finance capital improvement plans.

The total projected costs include the projected capital improvement costs to serve 10-year development, the projected finance cost for the capital improvements, and the consultant cost for preparing and updating the Capital Improvements Plan. A 4.0% interest rate was used to calculate financing costs. A comparison graph showing water and wastewater impact fees in other cities throughout the Metroplex are presented on **Figure 4-3**.

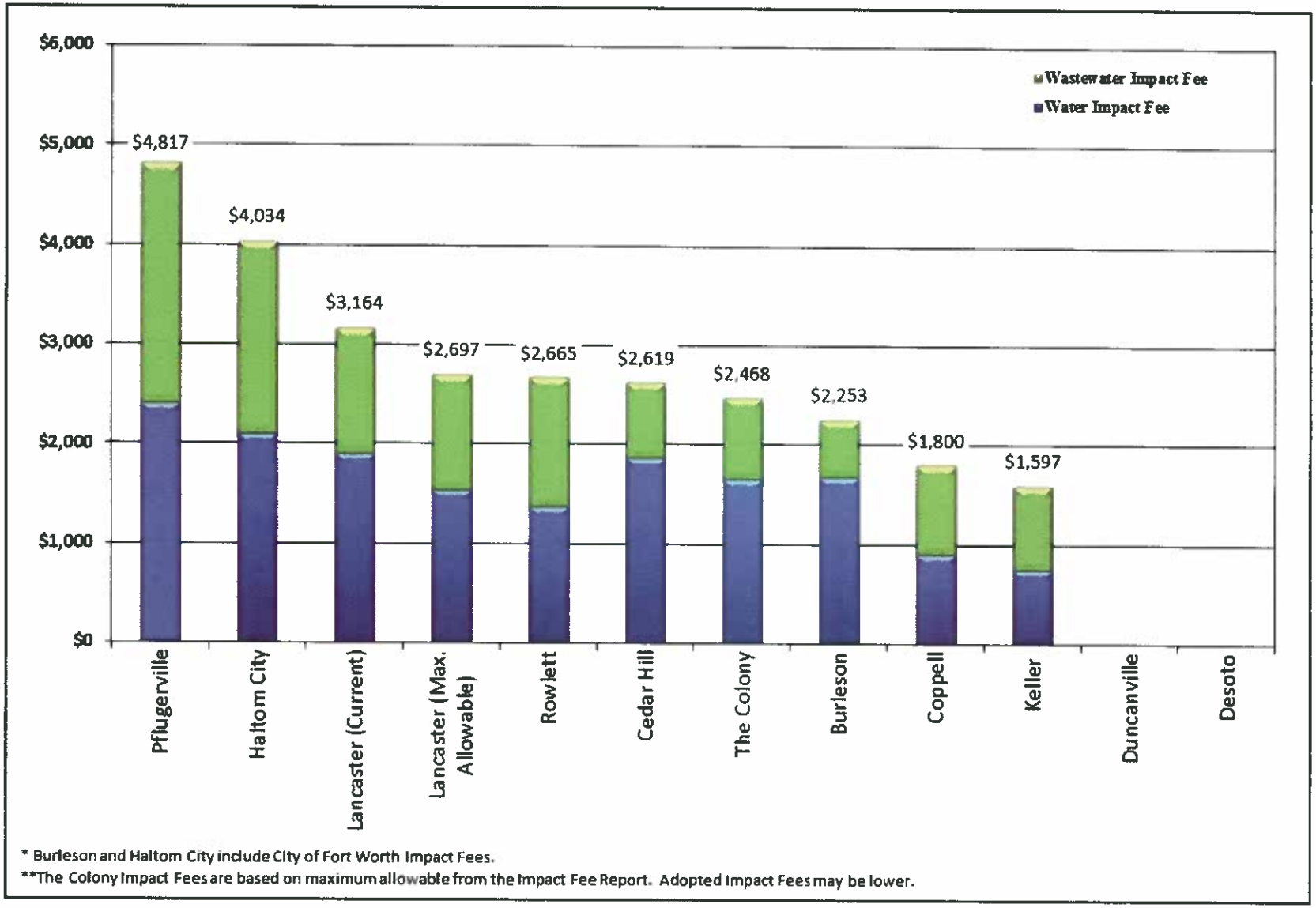
Water Impact Fee:		
Total Capital Improvement Costs		$11,892,365
Financing Costs		$3,955,774
Total Eligible Costs		$15,848,139
Growth in Service Units		5,173
Base Maximum Calculated Water Impact Fee Per Service Unit Without Credit Analysis	= Total Eligible Costs/Growth in Service Units	
	= $15,848,139/5,173	

	= $3,064 per Service Unit
Maximum Allowable Water Impact Fee	= Maximum Impact Fee – Credit
	= $3,064 - $1,532
	= $1,532 per Service Unit

Wastewater Impact Fee:

Total Capital Improvement Costs		$9,043,142
Financing Costs		$3,008,033
Total Eligible Costs		$12,051,175
Growth in Service Units		5,173
Base Maximum Calculated Wastewater Impact Fee Per Service Unit Without Credit Analysis	= Total Eligible Costs/Growth in Service Units	
	= $12,051,175/5,173	
	= $2,330 per Service Unit	
Maximum Allowable Wastewater Impact Fee	= Maximum Impact Fee – Credit	
	= $2,330 - $1,165	
	= $1,165 per Service Unit	

Figure 4-3 Water and Wastewater Impact Fee per Service Unit Comparison



* Burleson and Haltom City include City of Fort Worth Impact Fees.
**The Colony Impact Fees are based on maximum allowable from the Impact Fee Report. Adopted Impact Fees may be lower.

Appendix A

Water Model Validation Data

Figure A-1
Pressure Recorder Summary

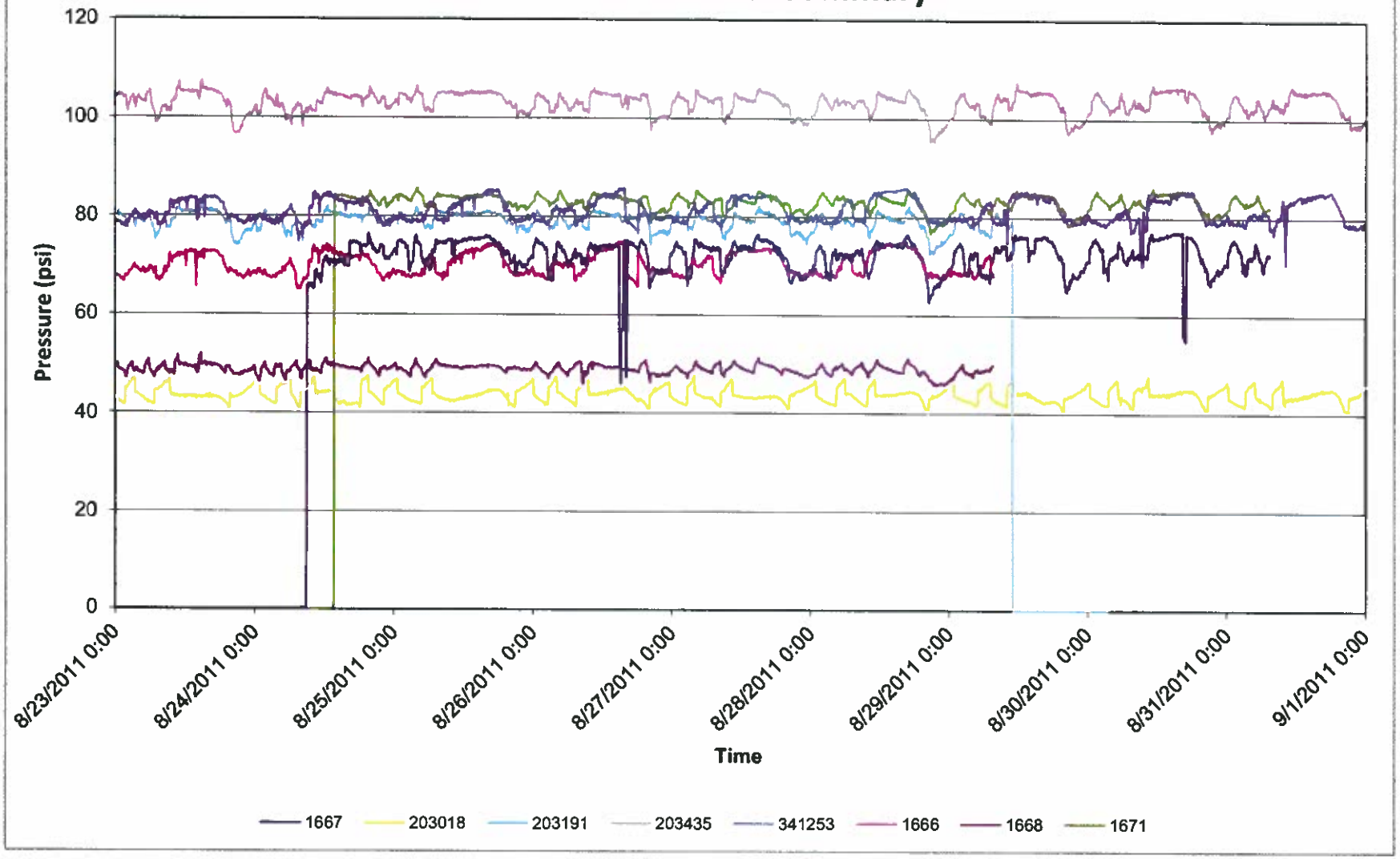
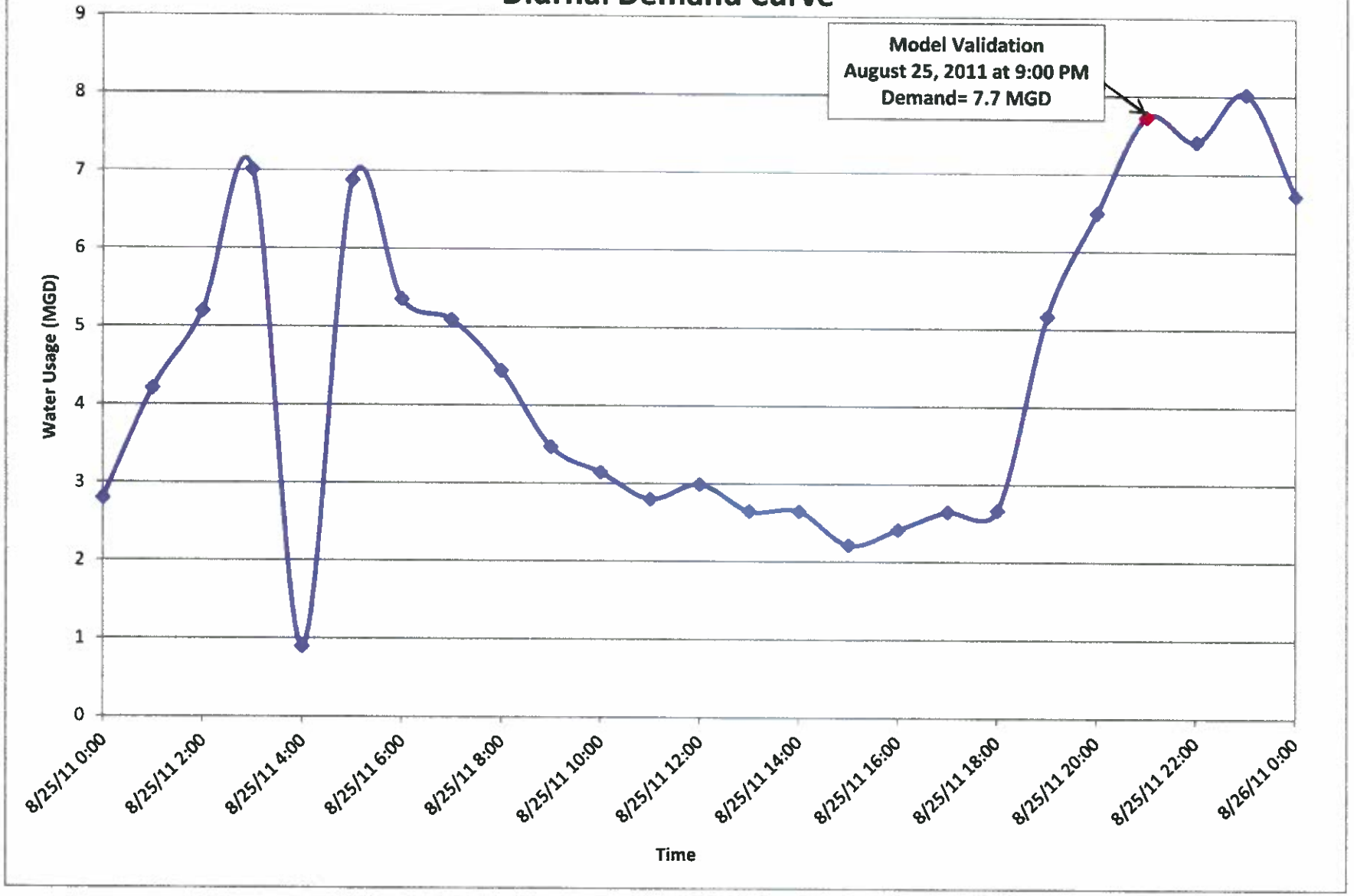


Figure A-2
Diurnal Demand Curve



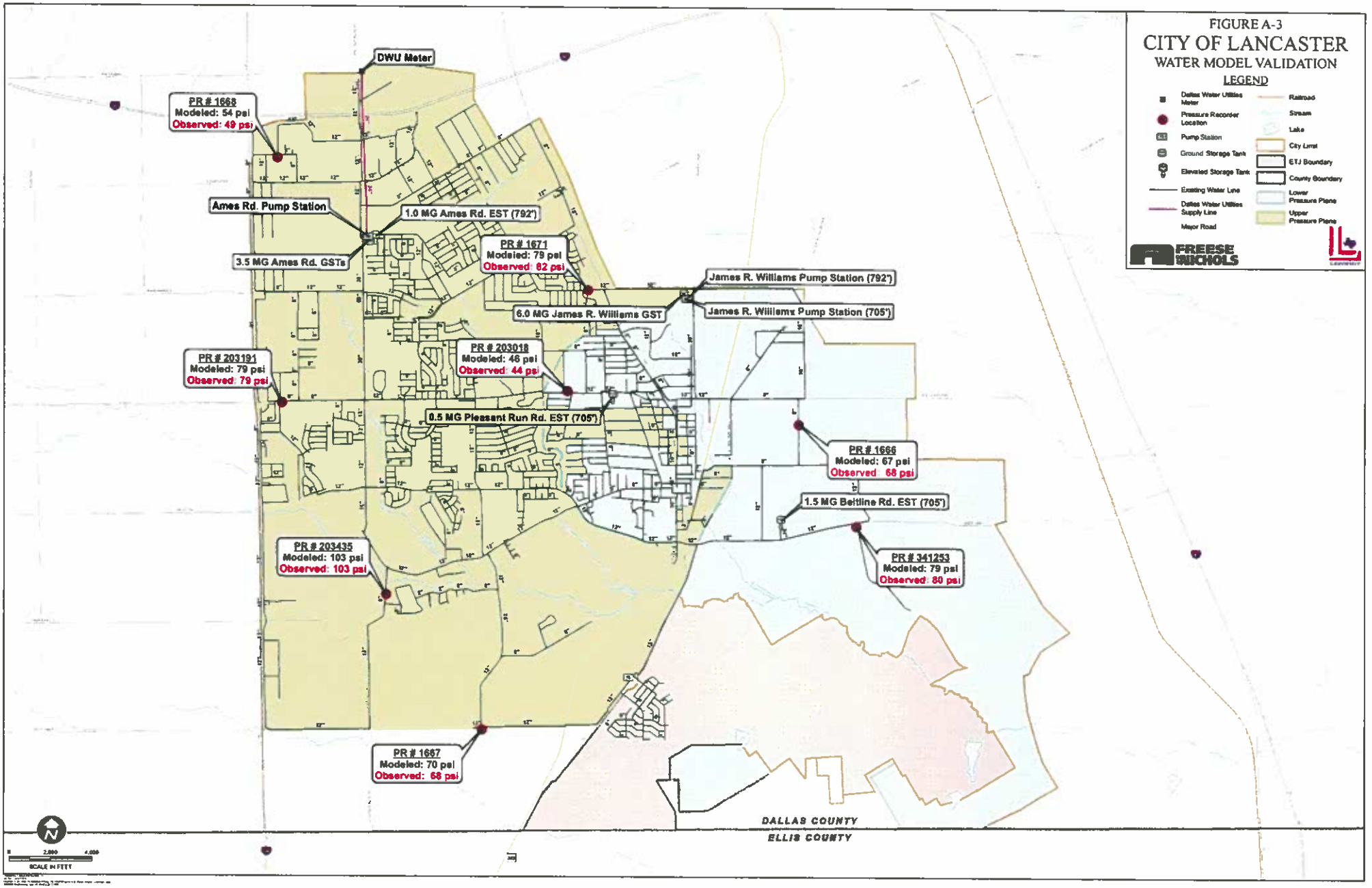


FIGURE A-3
CITY OF LANCASTER
WATER MODEL VALIDATION
LEGEND
Dallas Water Utilities Meter
Pressure Recorder Location
Pump Station
Ground Storage Tank
Elevated Storage Tank
Existing Water Line
Dallas Water Utilities Supply Line
Major Road
Railroad
Stream
Lake
City Limit
ETJ Boundary
County Boundary
Lower Pressure Plane
Upper Pressure Plane
FREESE NICHOLS
DWU Meter
PR # 1668
Modeled: 54 psi
Observed: 49 psi
Ames Rd. Pump Station
1.0 MG Ames Rd. EST (792')
3.5 MG Ames Rd. GSTs
PR # 1671
Modeled: 79 psi
Observed: 82 psi
James R. Williams Pump Station (792')
James R. Williams Pump Station (705')
6.0 MG James R. Williams GST
PR # 203018
Modeled: 46 psi
Observed: 44 psi
PR # 203191
Modeled: 79 psi
Observed: 79 psi
0.5 MG Pleasant Run Rd. EST (705')
PR # 1666
Modeled: 67 psi
Observed: 68 psi
1.5 MG Beltline Rd. EST (705')
PR # 341253
Modeled: 79 psi
Observed: 80 psi
PR # 203435
Modeled: 103 psi
Observed: 103 psi
PR # 1667
Modeled: 70 psi
Observed: 68 psi
DALLAS COUNTY
ELLIS COUNTY
SCALE IN FEET

Appendix B

Available Fire Flow Map

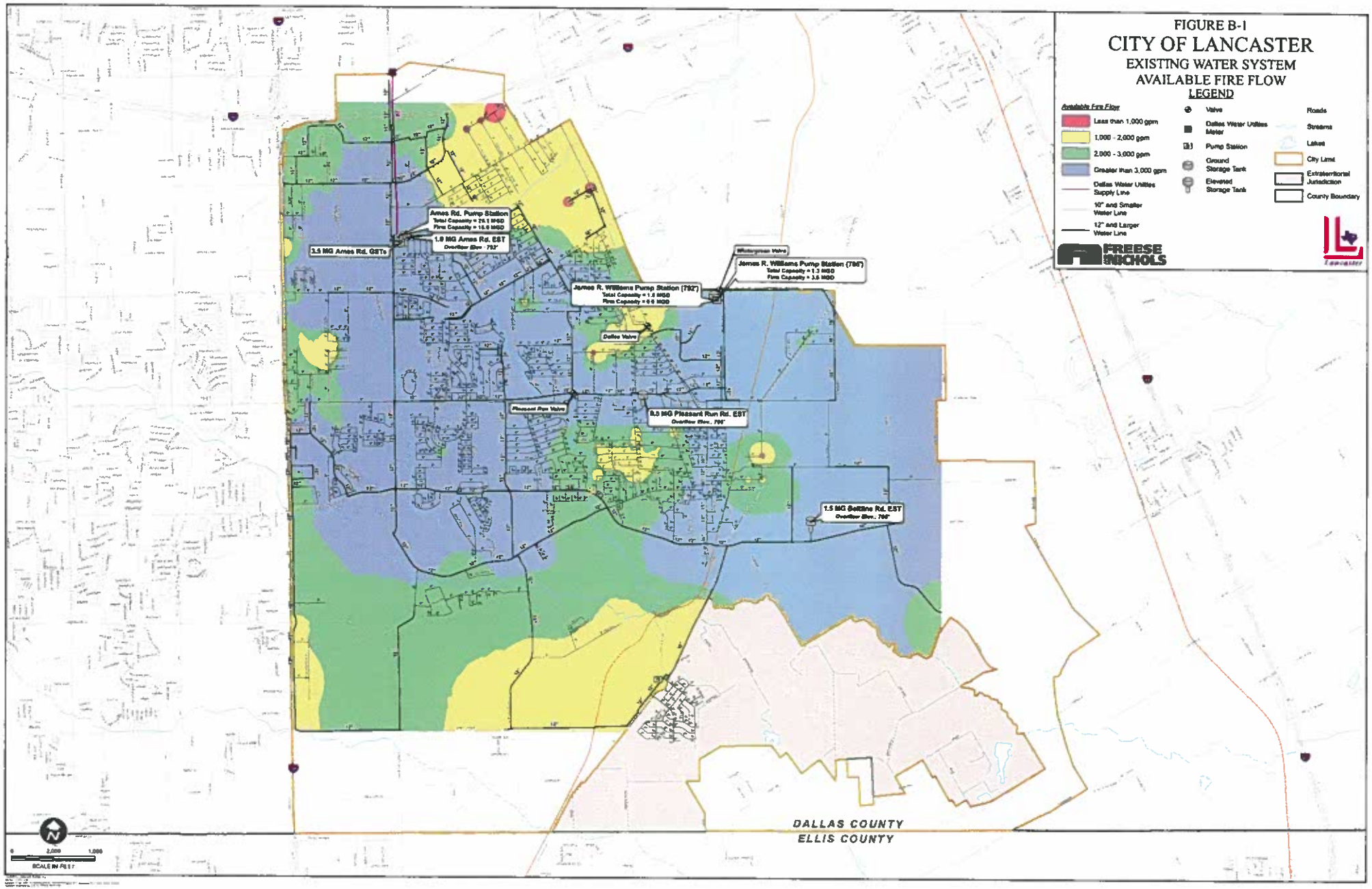


FIGURE B-1
CITY OF LANCASTER
EXISTING WATER SYSTEM
AVAILABLE FIRE FLOW
LEGEND
Available Fire Flow
Less than 1,000 gpm
1,000 - 2,000 gpm
2,000 - 3,000 gpm
Greater than 3,000 gpm
Dallas Water Utilities Supply Line
10" and Smaller Water Line
12" and Larger Water Line
Valve
Dallas Water Utilities Meter
Pump Station
Ground Storage Tank
Elevated Storage Tank
Roads
Streams
Lakes
City Limit
Extraterritorial Jurisdiction
County Boundary
FREESE NICHOLS
Lancaster
Ames Rd. Pump Station
Total Capacity = 26.1 MGD
Firm Capacity = 15.6 MGD
1.0 MG Ames Rd. EST
Overflow Elev. - 793'
3.5 MG Ames Rd. GSTs
Whitegrass Valve
James R. Williams Pump Station (786')
Total Capacity = 1.3 MGD
Firm Capacity = 3.6 MGD
James R. Williams Pump Station (792')
Total Capacity = 1.8 MGD
Firm Capacity = 0.0 MGD
Dallas Valve
Pleasant Run Valve
0.5 MG Pleasant Run Rd. EST
Overflow Elev. - 786'
1.5 MG Beltline Rd. EST
Overflow Elev. - 766'
DALLAS COUNTY
ELLIS COUNTY
N
0
2,000
1,000
SCALE IN FEET

Appendix C

Water System Project Cost Estimates

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 1

Project Description

Abandon 1.0 MG Ames EST and construct new 2.0 MG EST. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	Remove EST	1	EA	$50,000	50,000
2	2.0 MG Elevated Storage Tank*	1	EA	$4,100,000	4,100,000
3	24" Line*	1	EA	$180,000	180,000

*Preliminary cost estimates from the EST design team, but the project is still in the site selection process.

SUBTOTAL:			$4,330,000
CONTINGENCY	20%		$866,000
SUBTOTAL:			$5,196,000
ENG/SURVEY	Actual		$349,500
SUBTOTAL:			$5,545,500

PROJECT TOTAL $5,545,500

Construction Project Number 2

Project Description

Connect small diameter lines in the Upper Pressure Plane near the Pleasant Run Elevated Storage Tank. This project will address existing system deficiencies and improve system operation. This project also allows for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	16" Pipe	6,174	LF	$96	592,740
2	12" Pipe	5,015	LF	$72	361,090
3	Pavement Repair	400	LF	$100	40,000

SUBTOTAL:			$993,830
CONTINGENCY	20%		$198,770
SUBTOTAL:			$1,192,600
ENG/SURVEY	15%		$178,890
SUBTOTAL:			$1,371,490

PROJECT TOTAL $1,371,490

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 3

Project Description

12-inch waterline a long Bear Creek. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	5,858	LF	$72	421,780
2	Pavement Repair	200	LF	$100	20,000
	SUBTOTAL:				$441,780
	CONTINGENCY			20%	$88,360
	SUBTOTAL:				$530,140
	ENG/SURVEY			15%	$79,530
	SUBTOTAL:				$609,670
PROJECT TOTAL					$609,670

Construction Project Number 4

Project Description

Ames Pump Station 2.5 MG Ground Storage Tank, 7.9 MGD Pump Station Expansion, Remove 0.5 MG Ames Rd. GST and Pumps 1-3. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	2.5 MG Ground Storage Tank	1	EA	$1,875,000	1,875,000
2	7.9 MGD Pump Station Expansion	1	EA	$600,000	600,000
3	Remove GST	1	EA	$50,000	50,000
4	Yard Piping	1	EA	$200,000	200,000
	SUBTOTAL:				$2,725,000
	CONTINGENCY			20%	$545,000
	SUBTOTAL:				$3,270,000
	ENG/SURVEY			15%	$490,500
	SUBTOTAL:				$3,760,500
PROJECT TOTAL					$3,760,500

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 5

Project Description

James R. Williams 5.0 MGD Pump Station Expansion to serve the Lower Pressure Plane. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	5.0 MGD Pump Station Expansion	1	EA	$600,000	600,000
				SUBTOTAL:	$600,000
				CONTINGENCY 20%	$120,000
				SUBTOTAL:	$720,000
				ENG/SURVEY 15%	$108,000
				SUBTOTAL:	$828,000
PROJECT TOTAL					$828,000

Construction Project Number 6

Project Description

Connect small diameter lines in the Upper Pressure Plane. This project will address existing system deficienices and improve system operations. This project also allows for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	12,230	LF	$72	880,580
2	20" Boring and Casing	400	LF	$300	120,000
3	Pavement Repair	800	LF	$100	80,000
				SUBTOTAL:	$1,080,580
				CONTINGENCY 20%	$216,120
				SUBTOTAL:	$1,296,700
				ENG/SURVEY 15%	$194,510
				SUBTOTAL:	$1,491,210
PROJECT TOTAL					$1,491,210

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 7

Project Description

16-inch waterline along Houston School Road. This project will adress an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	16" Pipe	5,865	LF	$96	563,040
2	30" Boring and Casing	200	LF	$465	93,000
3	Pavement Repair	200	LF	$100	20,000
				SUBTOTAL:	$676,040
				CONTINGENCY 20%	$135,210
				SUBTOTAL:	$811,250
				ENG/SURVEY 15%	$121,690
				SUBTOTAL:	$932,940
				PROJECT TOTAL	$932,940

Construction Project Number 8

Project Description

12-inch waterline along Wintergreen Road and between Wintergreen and Danieldale Road. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	4,304	LF	$72	309,920
2	20" Boring and Casing	200	LF	$300	60,000
3	Pavement Repair	300	LF	$100	30,000
				SUBTOTAL:	$399,920
				CONTINGENCY 20%	$79,990
				SUBTOTAL:	$479,910
				ENG/SURVEY 15%	$71,990
				SUBTOTAL:	$551,900
				PROJECT TOTAL	$551,900

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 9

Project Description

12-inch waterline south of Pleasant Run EST and new transfer valve. This project will improve system operations and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	7,602	LF	$72	547,310
2	Pavement Repair	1,100	LF	$100	110,000
3	Pressure Reducing Valve	1	EA	$80,000	80,000
	SUBTOTAL:				$737,310
	CONTINGENCY			20%	$147,470
	SUBTOTAL:				$884,780
	ENG/SURVEY			15%	$132,720
	SUBTOTAL:				$1,017,500

PROJECT TOTAL $1,017,500

Construction Project Number 10

Project Description

16-inch waterline along Nokomis Road. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	16" Pipe	6,771	LF	$96	650,040
2	30" Boring and Casing	200	LF	$465	93,000
3	Pavement Repair	200	LF	$100	20,000
	SUBTOTAL:				$763,040
	CONTINGENCY			20%	$152,610
	SUBTOTAL:				$915,650
	ENG/SURVEY			15%	$137,350
	SUBTOTAL:				$1,053,000

PROJECT TOTAL $1,053,000

2012-2017 TOTAL $17,161,710

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 11

Project Description

12-inch waterlines north of Interstate 20. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	11,667	LF	$72	840,010
2	20" Boring and Casing	200	LF	$300	60,000
3	Pavement Repair	300	LF	$100	30,000

SUBTOTAL:		$930,010
CONTINGENCY	20%	$186,010
SUBTOTAL:		$1,116,020
ENG/SURVEY	15%	$167,410
SUBTOTAL:		$1,283,430

PROJECT TOTAL $1,283,430

Construction Project Number 12

Project Description

20-inch waterline from Ames Pump Station and along Cedardale Road. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	20" Pipe	16,606	LF	$120	1,992,720
2	34" Boring and Casing	200	LF	$535	107,000
3	Pavement Repair	800	LF	$100	80,000

SUBTOTAL:		$2,179,720
CONTINGENCY	20%	$435,950
SUBTOTAL:		$2,615,670
ENG/SURVEY	15%	$392,360
SUBTOTAL:		$3,008,030

PROJECT TOTAL $3,008,030

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 13

Project Description

30-inch waterline along Pleasant Run Road between River Oaks Circle and Lancaster Hutchins. 16-inch waterline along Pleasant Run between Lancaster Hutchins and Cornell Road. This project will improve system operation and allow for growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	30" Pipe	2,847	LF	$180	512,530
2	16" Pipe	4,291	LF	$96	411,900
3	48" Boring and Casing	200	LF	$880	176,000
4	Pavement Repair	300	LF	$100	30,000

SUBTOTAL:		$1,130,430
CONTINGENCY	20%	$226,090
SUBTOTAL:		$1,356,520
ENG/SURVEY	15%	$203,480
SUBTOTAL:		$1,560,000

PROJECT TOTAL $1,560,000

Construction Project Number 14

Project Description

24- and 20-inch waterline along Houston School Road south of Pleasant Run. This project will improve system operations and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	24" Pipe	4,683	LF	$144	674,320
2	20" Pipe	5,130	LF	$120	615,620
3	Pavement Repair	600	LF	$100	60,000

SUBTOTAL:		$1,349,940
CONTINGENCY	20%	$269,990
SUBTOTAL:		$1,619,930
ENG/SURVEY	15%	$242,990
SUBTOTAL:		$1,862,920

PROJECT TOTAL $1,862,920

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 15

Project Description

20- and 16-inch waterline along Houston School Road. This project will improve system operations and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	20" Pipe	1,365	LF	$120	163,810
2	16" Pipe	2,381	LF	$96	228,530
3	Pavement Repair	300	LF	$100	30,000

SUBTOTAL:		$422,340
CONTINGENCY	20%	$84,470
SUBTOTAL:		$506,810
ENG/SURVEY	15%	$76,030
SUBTOTAL:		$582,840

PROJECT TOTAL $582,840

Construction Project Number 16

Project Description

12-inch waterline along Ten Mile Road west of Lancaster Hutchins. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	6,817	LF	$72	490,840
2	20" Boring and Casing	600	LF	$300	180,000
3	Pavement Repair	300	LF	$100	30,000

SUBTOTAL:		$700,840
CONTINGENCY	20%	$140,170
SUBTOTAL:		$841,010
ENG/SURVEY	15%	$126,160
SUBTOTAL:		$967,170

PROJECT TOTAL $967,170

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 17

Project Description

24- and 20-inch waterlines along Lancaster Hutchins south of Pleasant Run Road and east along Beltline to the Beltline Road EST. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	24" Pipe	3,694	LF	$144	531,910
2	20" Pipe	9,628	LF	$120	1,155,340
3	34" Boring and Casing	200	LF	$535	107,000
4	Pavement Repair	400	LF	$50	20,000

SUBTOTAL:		$1,814,250
CONTINGENCY	20%	$362,850
SUBTOTAL:		$2,177,100
ENG/SURVEY	15%	$326,570
SUBTOTAL:		$2,503,670

PROJECT TOTAL $2,503,670

Construction Project Number 18

Project Description

12-inch loop along Wilson Road, Watermill Road, and Ferris Road. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	18,717	LF	$72	1,347,650
2	20" Boring and Casing	200	LF	$300	60,000
3	Pavement Repair	300	LF	$100	30,000

SUBTOTAL:		$1,437,650
CONTINGENCY	20%	$287,530
SUBTOTAL:		$1,725,180
ENG/SURVEY	15%	$258,780
SUBTOTAL:		$1,983,960

PROJECT TOTAL $1,983,960

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 19

Project Description

16-inch waterline along Pleasant Run east of the Pleasant Run EST. This project will improve system operations and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	16" Pipe	4,938	LF	$96	474,060
2	Pavement Repair	500	LF	$100	50,000
	SUBTOTAL:				$524,060
	CONTINGENCY			20%	$104,820
	SUBTOTAL:				$628,880
	ENG/SURVEY			15%	$94,340
	SUBTOTAL:				$723,220
PROJECT TOTAL					$723,220

Construction Project Number 20

Project Description

12-inch loop along Watermill Road, Nokomis Road, Stainback Road, and Ferris Road. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	27,799	LF	$72	2,001,520
2	20" Boring and Casing	200	LF	$300	60,000
3	Pavement Repair	300	LF	$100	30,000
	SUBTOTAL:				$2,091,520
	CONTINGENCY			20%	$418,310
	SUBTOTAL:				$2,509,830
	ENG/SURVEY			15%	$376,480
	SUBTOTAL:				$2,886,310
PROJECT TOTAL					$2,886,310

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 21

Project Description

12-inch waterline along Greene Road and Railroad between Greene Road and Pecan Street. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	9,200	LF	$72	662,400
2	20" Boring and Casing	400	LF	$300	120,000
3	Pavement Repair	500	LF	$100	50,000

SUBTOTAL:			$832,400
CONTINGENCY	20%		$166,480
SUBTOTAL:			$998,880
ENG/SURVEY	15%		$149,840
SUBTOTAL:			$1,148,720

PROJECT TOTAL $1,148,720

Construction Project Number 22

Project Description

12-inch waterline south of Parkerville Road between Interstate 35 and Houston School Road. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	5,750	LF	$72	414,000
2	Pavement Repair	300	LF	$100	30,000

SUBTOTAL:			$444,000
CONTINGENCY	20%		$88,800
SUBTOTAL:			$532,800
ENG/SURVEY	15%		$79,920
SUBTOTAL:			$612,720

PROJECT TOTAL $612,720

2017-2022 TOTAL $19,122,990

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 23

Project Description

20-inch waterline along State Highway 342 to the James R. Williams Pump Station. James R. Williams 6.0 MGD Pump Station Expansion to serve the Upper Pressure Plane. This project will allow for future growth and provide redundancy to the Upper Pressure Plane.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	20" Pipe	8,719	LF	$120	1,046,320
2	Pavement Repair	600	LF	$100	60,000
3	6.0 MGD Pump Station Expansion	1	EA	$600,000	600,000
				SUBTOTAL:	$1,706,320
				CONTINGENCY 20%	$341,270
				SUBTOTAL:	$2,047,590
				ENG/SURVEY 15%	$307,140
				SUBTOTAL:	$2,354,730
				PROJECT TOTAL	$2,354,730

Construction Project Number 24

Project Description

12-inch waterline along Interstate 35 between Wintergreen and Pleasant Run. This project will improve system operation.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	6,186	LF	$72	445,380
2	Pavement Repair	500	LF	$100	50,000
				SUBTOTAL:	$495,380
				CONTINGENCY 20%	$99,080
				SUBTOTAL:	$594,460
				ENG/SURVEY 15%	$89,170
				SUBTOTAL:	$683,630
				PROJECT TOTAL	$683,630

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 25

Project Description

16- and 12-inch waterline along Pleasant Run between Cornell Road and Rinto Road. 16-inch waterline along Alba Road between Pleasant Run and Green Road. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	16" Pipe	6,649	LF	$96	638,330
2	12" Pipe	2,813	LF	$72	202,530
3	Pavement Repair	300	LF	$100	30,000
	SUBTOTAL:				$870,860
	CONTINGENCY			20%	$174,180
	SUBTOTAL:				$1,045,040
	ENG/SURVEY			15%	$156,760
	SUBTOTAL:				$1,201,800
PROJECT TOTAL					$1,201,800

Construction Project Number 26

Project Description

16-inch waterline east of Beltline Road EST along Belt Line Road and north along Alba Road to Greene Road. This project will improve system operations and allow for growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	16" Pipe	8,717	LF	$96	836,830
2	Pavement Repair	400	LF	$100	40,000
	SUBTOTAL:				$876,830
	CONTINGENCY			20%	$175,370
	SUBTOTAL:				$1,052,200
	ENG/SURVEY			15%	$157,830
	SUBTOTAL:				$1,210,030
PROJECT TOTAL					$1,210,030

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 27

Project Description

12-inch waterline east of Cornell Road along the City Limits, south along Pinto to Greene Road. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	16,716	LF	$72	1,203,580
2	Pavement Repair	500	LF	$100	50,000
				SUBTOTAL:	$1,253,580
				CONTINGENCY 20%	$250,720
				SUBTOTAL:	$1,504,300
				ENG/SURVEY 15%	$225,650
				SUBTOTAL:	$1,729,950
				PROJECT TOTAL	$1,729,950

Construction Project Number 28

Project Description

16- and 12-inch waterline along the easter City Limit between Greene and Van Road and along Belt Line Road. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	16" Pipe	18,068	LF	$96	1,734,490
2	12" Pipe	7,718	LF	$72	555,670
3	Pavement Repair	500	LF	$100	50,000
				SUBTOTAL:	$2,340,160
				CONTINGENCY 20%	$468,040
				SUBTOTAL:	$2,808,200
				ENG/SURVEY 15%	$421,230
				SUBTOTAL:	$3,229,430
				PROJECT TOTAL	$3,229,430

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 29

Project Description

12-inch waterline along State Highway 342 and Reindeer Road on southern City boundary and transfer valve. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	21,092	LF	$72	1,518,630
2	Pavement Repair	500	LF	$100	50,000
3	Pressure Reducing Valve	1	EA	$80,000	80,000
	SUBTOTAL:				$1,648,630
	CONTINGENCY			20%	$329,730
	SUBTOTAL:				$1,978,360
	ENG/SURVEY			15%	$296,760
	SUBTOTAL:				$2,275,120
PROJECT TOTAL					$2,275,120

Construction Project Number 30

Project Description

Ames Pump Station 2.0 MG Ground Storage Tank. This project will improve system operations.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	2.0 MG Ground Storage Tank	1	EA	$1,500,000	1,500,000
2	Yard Piping	1	EA	$200,000	200,000
	SUBTOTAL:				$1,700,000
	CONTINGENCY			20%	$340,000
	SUBTOTAL:				$2,040,000
	ENG/SURVEY			15%	$306,000
	SUBTOTAL:				$2,346,000
PROJECT TOTAL					$2,346,000

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 31

Project Description

12-inch waterlines along Watermill Road and east of Ferris Road. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	13,688	LF	$72	985,570
2	20" Boring and Casing	200	LF	$300	60,000
3	Pavement Repair	200	LF	$100	20,000
				SUBTOTAL:	$1,065,570
				CONTINGENCY 20%	$213,120
				SUBTOTAL:	$1,278,690
				ENG/SURVEY 15%	$191,810
				SUBTOTAL:	$1,470,500
PROJECT TOTAL					$1,470,500

Construction Project Number 32

Project Description

12-inch waterline along Moreland Road between State Highway 342 and Nokomis Road. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	15,739	LF	$72	1,133,200
2	Pavement Repair	400	LF	$100	40,000
				SUBTOTAL:	$1,173,200
				CONTINGENCY 20%	$234,640
				SUBTOTAL:	$1,407,840
				ENG/SURVEY 15%	$211,180
				SUBTOTAL:	$1,619,020
PROJECT TOTAL					$1,619,020

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 33

Project Description

12-inch waterline along Bluegrove between Main Street and Ten Mile Road. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	5,881	LF	$72	423,440
2	20" Boring and Casing	200	LF	$300	60,000
3	Pavement Repair	300	LF	$100	30,000

SUBTOTAL:		$513,440
CONTINGENCY	20%	$102,690
SUBTOTAL:		$616,130
ENG/SURVEY	15%	$92,420
SUBTOTAL:		$708,550

PROJECT TOTAL	$708,550
2022-2035 TOTAL	$18,120,210

Appendix D

Wastewater System Project Cost Estimates

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 1

Project Description

18-inch gravity line in the Keller Branch Basin between Pleasant Run Road and TRA interceptor. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	18" Pipe	13,898	LF	$108	1,500,960
2	60" Diameter Manhole	35	EA	$6,000	208,470
3	32" Boring and Casing	500	LF	$495	247,500
4	Pavement Repair	700	LF	$100	70,000

SUBTOTAL:		$2,026,930
CONTINGENCY	20%	$405,390
SUBTOTAL:		$2,432,320
ENG/SURVEY	15%	$364,850
SUBTOTAL:		$2,797,170

PROJECT TOTAL $2,797,170

Construction Project Number 2

Project Description

15- and 12-inch gravity lines in the Halls Branch Basin. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	15" Pipe	5,058	LF	$90	455,190
2	12" Pipe	3,866	LF	$72	278,370
3	60" Diameter Manhole	13	EA	$6,000	75,870
4	48" Diameter Manhole	10	EA	$5,000	48,330
5	Pavement Repair	500	LF	$100	50,000

SUBTOTAL:		$907,760
CONTINGENCY	20%	$181,560
SUBTOTAL:		$1,089,320
ENG/SURVEY	15%	$163,400
SUBTOTAL:		$1,252,720

PROJECT TOTAL $1,252,720

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 3

Project Description

15-inch gravity line in the Halls Branch Basin north of TRA interceptor. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	15" Pipe	1,302	LF	$90	117,160
2	60" Diameter Manhole	3	EA	$6,000	19,530
				SUBTOTAL:	$136,690
				CONTINGENCY 20%	$27,340
				SUBTOTAL:	$164,030
				ENG/SURVEY 15%	$24,610
				SUBTOTAL:	$188,640
				PROJECT TOTAL	$188,640

Construction Project Number 4

Project Description

12-inch gravity line in Chesier Branch Basin. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	7,915	LF	$72	569,910
2	48" Diameter Manhole	20	EA	$5,000	98,940
3	Pavement Repair	400	LF	$100	40,000
				SUBTOTAL:	$708,850
				CONTINGENCY 20%	$141,770
				SUBTOTAL:	$850,620
				ENG/SURVEY 15%	$127,600
				SUBTOTAL:	$978,220
				PROJECT TOTAL	$978,220

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 5

Project Description

21-inch gravity line in the Deep Branch Basin. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	21" Pipe	3,488	LF	$126	439,480
2	60" Diameter Manhole	9	EA	$6,000	52,320
3	34" Boring and Casing	200	LF	$535	107,000
	SUBTOTAL:				$598,800
	CONTINGENCY			20%	$119,760
	SUBTOTAL:				$718,560
	ENG/SURVEY			15%	$107,790
	SUBTOTAL:				$826,350
PROJECT TOTAL					$826,350

Construction Project Number 6

Project Description

Wheatland Lift Station expansion to 3.0 MGD firm capacity. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	2.4 MGD Lift Station Expansion	1	EA	$1,000,000	1,000,000
	SUBTOTAL:				$1,000,000
	CONTINGENCY			20%	$200,000
	SUBTOTAL:				$1,200,000
	ENG/SURVEY			15%	$180,000
	SUBTOTAL:				$1,380,000
PROJECT TOTAL					$1,380,000

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 7

Project Description

Decommission IH 635 Lift Station and construct new 12-inch gravity line. This project will allow for easier system operation and future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	Lift Station - Decomm	1	EA	$200,000	200,000
2	12" Pipe	2,130	LF	$72	153,350
3	48" Diameter Manhole	3	EA	$5,000	15,000

SUBTOTAL:		$368,350
CONTINGENCY	20%	$73,670
SUBTOTAL:		$442,020
ENG/SURVEY	15%	$66,310
SUBTOTAL:		$508,330

PROJECT TOTAL $508,330

Construction Project Number 8

Project Description

Construct 24-inch relief line in Mills Branch Basin. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	24" Pipe	6,884	LF	$144	991,280
2	72" Diameter Manhole	17	EA	$6,000	103,260
3	Pavement Repair	200	LF	$100	20,000

SUBTOTAL:		$1,114,540
CONTINGENCY	20%	$222,910
SUBTOTAL:		$1,337,450
ENG/SURVEY	15%	$200,620
SUBTOTAL:		$1,538,070

PROJECT TOTAL $1,538,070

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 9

Project Description

15-inch gravity line in the Mills Branch Basin. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	15" Pipe	7,570	LF	$90	681,340
2	60" Diameter Manhole	19	EA	$6,000	113,560
3	26" Boring and Casing	400	LF	$400	160,000
4	Pavement Repair	300	LF	$100	30,000

SUBTOTAL:		$984,900
CONTINGENCY	20%	$196,980
SUBTOTAL:		$1,181,880
ENG/SURVEY	15%	$177,290
SUBTOTAL:		$1,359,170

PROJECT TOTAL $1,359,170

Construction Project Number 10

Project Description

Lift Station #1 expansion to 2.0 MGD Firm Capacity. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	1.4 MGD Lift Station Expansion	1	EA	$600,000	600,000

SUBTOTAL:		$600,000
CONTINGENCY	20%	$120,000
SUBTOTAL:		$720,000
ENG/SURVEY	15%	$108,000
SUBTOTAL:		$828,000

PROJECT TOTAL $828,000

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 11

Project Description

Lift Station #2 expansion to 1.55 MGD Firm Capacity. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	0.25 MGD Lift Station Expansion	1	EA	$250,000	250,000
	SUBTOTAL:				$250,000
	CONTINGENCY			20%	$50,000
	SUBTOTAL:				$300,000
	ENG/SURVEY			15%	$45,000
	SUBTOTAL:				$345,000
PROJECT TOTAL					$345,000

Construction Project Number 12

Project Description

8-inch gravity lines in Ten Mile-2 and Enchanted Forest Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	8" Pipe	7,844	LF	$48	376,520
2	48" Diameter Manhole	20	EA	$5,000	98,050
3	Pavement Repair	400	LF	$100	40,000
	SUBTOTAL:				$514,570
	CONTINGENCY			20%	$102,920
	SUBTOTAL:				$617,490
	ENG/SURVEY			15%	$92,630
	SUBTOTAL:				$710,120
PROJECT TOTAL					$710,120

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 13

Project Description

18-inch gravity line in Ten Mile-3. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	18" Pipe	3,348	LF	$108	361,550
2	60" Diameter Manhole	8	EA	$6,000	50,210
3	Pavement Repair	200	LF	$100	20,000
				SUBTOTAL:	$431,760
				CONTINGENCY 20%	$86,360
				SUBTOTAL:	$518,120
				ENG/SURVEY 15%	$77,720
				SUBTOTAL:	$595,840
				PROJECT TOTAL	$595,840

Construction Project Number 14

Project Description

10-inch gravity lines in Chesier Branch Basin and Mills Branch Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	10" Pipe	3,437	LF	$60	206,240
2	48" Diameter Manhole	9	EA	$5,000	42,970
				SUBTOTAL:	$249,210
				CONTINGENCY 20%	$49,850
				SUBTOTAL:	$299,060
				ENG/SURVEY 15%	$44,860
				SUBTOTAL:	$343,920
				PROJECT TOTAL	$343,920

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 15

Project Description

8-inch gravity line in Chesier Branch. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	8" Pipe	2,793	LF	$48	134,080
2	48" Diameter Manhole	7	EA	$5,000	34,920
	SUBTOTAL:				$169,000
	CONTINGENCY			20%	$33,800
	SUBTOTAL:				$202,800
	ENG/SURVEY			15%	$30,420
	SUBTOTAL:				$233,220
PROJECT TOTAL					$233,220

Construction Project Number 16

Project Description

8-inch gravity line in Floyd Branch Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	8" Pipe	3,974	LF	$48	190,770
2	48" Diameter Manhole	10	EA	$5,000	49,680
	SUBTOTAL:				$240,450
	CONTINGENCY			20%	$48,090
	SUBTOTAL:				$288,540
	ENG/SURVEY			15%	$43,290
	SUBTOTAL:				$331,830
PROJECT TOTAL					$331,830

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 17

Project Description

12-inch gravity line in Ten Mile-4. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	10,847	LF	$72	780,970
2	48" Diameter Manhole	27	EA	$5,000	135,590
3	Pavement Repair	400	LF	$100	40,000

SUBTOTAL:		$956,560
CONTINGENCY	20%	$191,320
SUBTOTAL:		$1,147,880
ENG/SURVEY	15%	$172,190
SUBTOTAL:		$1,320,070

PROJECT TOTAL	$1,320,070
2012-2017 TOTAL	$15,536,670

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 18

Project Description

24-inch gravity line in Mills Branch Basin. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	24" Pipe	6,230	LF	$144	897,060
2	72" Diameter Manhole	16	EA	$6,000	93,440
3	Pavement Repair	300	LF	$100	30,000
	SUBTOTAL:				$1,020,500
	CONTINGENCY			20%	$204,100
	SUBTOTAL:				$1,224,600
	ENG/SURVEY			15%	$183,690
	SUBTOTAL:				$1,408,290
PROJECT TOTAL					$1,408,290

Construction Project Number 19

Project Description

21-inch gravity line in the Keller Branch Basin. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	21" Pipe	7,891	LF	$126	994,300
2	60" Diameter Manhole	20	EA	$6,000	118,370
3	34" Boring and Casing	400	LF	$535	214,000
4	Pavement Repair	300	LF	$100	30,000
	SUBTOTAL:				$1,356,670
	CONTINGENCY			20%	$271,340
	SUBTOTAL:				$1,628,010
	ENG/SURVEY			15%	$244,210
	SUBTOTAL:				$1,872,220
PROJECT TOTAL					$1,872,220

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 20

Project Description

Wheatland Lift Station new 20-inch forcemain. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	20" Force Main	8,433	LF	$120	1,011,950
2	34" Boring and Casing	200	LF	$535	107,000
3	Pavement Repair	400	LF	$100	40,000

SUBTOTAL:		$1,158,950
CONTINGENCY	20%	$231,790
SUBTOTAL:		$1,390,740
ENG/SURVEY	15%	$208,620
SUBTOTAL:		$1,599,360

PROJECT TOTAL $1,599,360

Construction Project Number 21

Project Description

Wheatland Lift Station expansion to 5.0 MGD firm capacity. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	2.0 MGD Lift Station Expansion	1	EA	$400,000	400,000

SUBTOTAL:		$400,000
CONTINGENCY	20%	$80,000
SUBTOTAL:		$480,000
ENG/SURVEY	15%	$72,000
SUBTOTAL:		$552,000

PROJECT TOTAL $552,000

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 22

Project Description

15-inch gravity line in Floyd Branch Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	15" Pipe	4,525	LF	$90	407,270
2	60" Diameter Manhole	11	EA	$6,000	67,880
	SUBTOTAL:				$475,150
	CONTINGENCY			20%	$95,030
	SUBTOTAL:				$570,180
	ENG/SURVEY			15%	$85,530
	SUBTOTAL:				$655,710
PROJECT TOTAL					$655,710

Construction Project Number 23

Project Description

18-, 15-, 10-, and 8-inch gravity lines in the Ten Mile-3 Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	18" Pipe	785	LF	$108	84,830
2	15" Pipe	6,843	LF	$90	615,830
3	10" Pipe	2,654	LF	$60	159,250
4	8" Pipe	2,395	LF	$48	114,980
5	60" Diameter Manhole	19	EA	$6,000	114,420
6	48" Diameter Manhole	13	LF	$5,000	63,120
7	Pavement Repair	2,395	LF	$100	239,550
	SUBTOTAL:				$1,391,980
	CONTINGENCY			20%	$278,400
	SUBTOTAL:				$1,670,380
	ENG/SURVEY			15%	$250,560
	SUBTOTAL:				$1,920,940
PROJECT TOTAL					$1,920,940

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 24

Project Description

12-inch gravity line in Ten Mile-5. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	17,325	LF	$72	1,247,380
2	48" Diameter Manhole	43	EA	$5,000	216,560
3	Pavement Repair	400	LF	$100	40,000
	SUBTOTAL:				$1,503,940
	CONTINGENCY			20%	$300,790
	SUBTOTAL:				$1,804,730
	ENG/SURVEY			15%	$270,710
	SUBTOTAL:				$2,075,440
PROJECT TOTAL					$2,075,440

Construction Project Number 25

Project Description

10- and 8-inch gravity lines in Ten Mile-3 Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	10" Pipe	7,043	LF	$60	422,560
2	8" Pipe	5,438	LF	$48	261,040
3	48" Diameter Manhole	31	EA	$5,000	156,010
	SUBTOTAL:				$839,610
	CONTINGENCY			20%	$167,930
	SUBTOTAL:				$1,007,540
	ENG/SURVEY			15%	$151,140
	SUBTOTAL:				$1,158,680
PROJECT TOTAL					$1,158,680

2017-2022 TOTAL $11,242,640

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 26

Project Description

21-inch gravity line in Ten Mile-3 Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	21" Pipe	3,857	LF	$126	485,990
2	60" Diameter Manhole	10	EA	$6,000	57,860
3	Pavement Repair	200	LF	$100	20,000

SUBTOTAL:			$563,850
CONTINGENCY	20%		$112,770
SUBTOTAL:			$676,620
ENG/SURVEY	15%		$101,500
SUBTOTAL:			$778,120

PROJECT TOTAL $778,120

Construction Project Number 27

Project Description

18-inch gravity line in the Deep Branch Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	18" Pipe	10,117	LF	$108	1,092,590
2	60" Diameter Manhole	25	EA	$6,000	151,750
3	32" Boring and Casing	500	LF	$495	247,500
4	Pavement Repair	600	LF	$100	

SUBTOTAL:			$1,491,840
CONTINGENCY	20%		$298,370
SUBTOTAL:			$1,790,210
ENG/SURVEY	15%		$268,540
SUBTOTAL:			$2,058,750

PROJECT TOTAL $2,058,750

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 28

Project Description

Construct 18-inch relief line in Mills Branch Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	18" Pipe	6,851	LF	$108	739,860
2	60" Diameter Manhole	17	EA	$6,000	102,760
3	Pavement Repair	200	LF	$100	20,000
	SUBTOTAL:				$862,620
	CONTINGENCY			20%	$172,530
	SUBTOTAL:				$1,035,150
	ENG/SURVEY			15%	$155,280
	SUBTOTAL:				$1,190,430
PROJECT TOTAL					$1,190,430

Construction Project Number 29

Project Description

Construct 21-inch line in the Mills Branch Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	21" Pipe	15,154	LF	$126	1,909,350
2	60" Diameter Manhole	38	EA	$6,000	227,300
3	34" Boring and Casing	600	LF	$535	321,000
4	Pavement Repair	500	LF	$100	50,000
	SUBTOTAL:				$2,507,650
	CONTINGENCY			20%	$501,530
	SUBTOTAL:				$3,009,180
	ENG/SURVEY			15%	$451,380
	SUBTOTAL:				$3,460,560
PROJECT TOTAL					$3,460,560

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 30

Project Description

18-inch gravity line in Mill Branch. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	18" Pipe	3,789	LF	$108	409,240
2	60" Diameter Manhole	9	EA	$6,000	56,840
3	Pavement Repair	400	LF	$100	40,000

SUBTOTAL:		$506,080
CONTINGENCY	20%	$101,220
SUBTOTAL:		$607,300
ENG/SURVEY	15%	$91,100
SUBTOTAL:		$698,400

PROJECT TOTAL $698,400

Construction Project Number 31

Project Description

Wheatland Lift Station expansion to 8.0 MGD firm capacity. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	3.0 MGD Lift Station Expansion	1	EA	$600,000	600,000

SUBTOTAL:		$600,000
CONTINGENCY	20%	$120,000
SUBTOTAL:		$720,000
ENG/SURVEY	15%	$108,000
SUBTOTAL:		$828,000

PROJECT TOTAL $828,000

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 32

Project Description

Lift Station #1 Expansion to 3.0 MGD Firm Capacity. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	1.0 MGD Lift Station Expansion	1	EA	$400,000	400,000
	SUBTOTAL:				$400,000
	CONTINGENCY			20%	$80,000
	SUBTOTAL:				$480,000
	ENG/SURVEY			15%	$72,000
	SUBTOTAL:				$552,000
PROJECT TOTAL					$552,000

Construction Project Number 33

Project Description

15-inch gravity line in Keller Branch. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	15" Pipe	2,726	LF	$90	245,300
2	60" Diameter Manhole	7	EA	$6,000	40,880
3	Pavement Repair	200	LF	$100	20,000
	SUBTOTAL:				$306,180
	CONTINGENCY			20%	$61,240
	SUBTOTAL:				$367,420
	ENG/SURVEY			15%	$55,120
	SUBTOTAL:				$422,540
PROJECT TOTAL					$422,540

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 34

Project Description

8-inch gravity line in Ten Mile-5. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	8" Pipe	2,169	LF	$48	104,110
2	48" Diameter Manhole	5	EA	$5,000	27,110
3	Pavement Repair	200	LF	$100	20,000
	SUBTOTAL:				$151,220
	CONTINGENCY			20%	$30,250
	SUBTOTAL:				$181,470
	ENG/SURVEY			15%	$27,230
	SUBTOTAL:				$208,700

PROJECT TOTAL $208,700

Construction Project Number 35

Project Description

12-inch gravity line in Red Oak Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	10,956	LF	$72	788,840
2	48" Diameter Manhole	27	EA	$5,000	136,950
3	20" Boring and Casing	200	LF	$300	60,000
4	Pavement Repair	200	LF	$100	20,000
	SUBTOTAL:				$1,005,790
	CONTINGENCY			20%	$201,160
	SUBTOTAL:				$1,206,950
	ENG/SURVEY			15%	$181,050
	SUBTOTAL:				$1,388,000

PROJECT TOTAL $1,388,000

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 36

Project Description

6-inch gravity line in Creekwood Branch. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	6" Pipe	7,704	LF	$36	277,340
2	48" Diameter Manhole	19	EA	$5,000	96,300
3	Pavement Repair	100	LF	$100	10,000
				SUBTOTAL:	$383,640
				CONTINGENCY 20%	$76,730
				SUBTOTAL:	$460,370
				ENG/SURVEY 15%	$69,060
				SUBTOTAL:	$529,430
				PROJECT TOTAL	$529,430

Construction Project Number 37

Project Description

15-inch gravity line in Ten Mile-3. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	15" Pipe	5,933	LF	$90	533,960
2	60" Diameter Manhole	15	EA	$6,000	88,990
3	Pavement Repair	200	LF	$100	20,000
				SUBTOTAL:	$642,950
				CONTINGENCY 20%	$128,590
				SUBTOTAL:	$771,540
				ENG/SURVEY 15%	$115,740
				SUBTOTAL:	$887,280
				PROJECT TOTAL	$887,280

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 38

Project Description

24-inch gravity line in the Keller Branch Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	24" Pipe	16,591	LF	$144	2,389,110
2	72" Diameter Manhole	41	EA	$6,000	248,870
3	32" Boring and Casing	500	LF	$495	247,500
4	Pavement Repair	700	LF	$100	70,000
				SUBTOTAL:	$2,955,480
				CONTINGENCY 20%	$591,100
				SUBTOTAL:	$3,546,580
				ENG/SURVEY 15%	$531,990
				SUBTOTAL:	$4,078,570
				PROJECT TOTAL	$4,078,570

Construction Project Number 39

Project Description

8-inch gravity lines in Ten Mile-3. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	8" Pipe	6,877	LF	$48	330,100
2	48" Diameter Manhole	17	EA	$5,000	85,960
3	Pavement Repair	200	LF	$100	20,000
				SUBTOTAL:	$436,060
				CONTINGENCY 20%	$87,220
				SUBTOTAL:	$523,280
				ENG/SURVEY 15%	$78,500
				SUBTOTAL:	$601,780
				PROJECT TOTAL	$601,780

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 40

Project Description

12-inch gravity line in Ten Mile-6. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	6,098	LF	$72	439,090
2	48" Diameter Manhole	15	EA	$5,000	76,230
3	Pavement Repair	200	LF	$100	20,000

SUBTOTAL:		$535,320
CONTINGENCY	20%	$107,070
SUBTOTAL:		$642,390
ENG/SURVEY	15%	$96,360
SUBTOTAL:		$738,750

PROJECT TOTAL $738,750

Construction Project Number 41

Project Description

8-inch gravity line in the Red Oak Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	8" Pipe	8,750	LF	$48	420,020
2	48" Diameter Manhole	22	EA	$5,000	109,380
3	Pavement Repair	200	LF	$100	20,000

SUBTOTAL:		$549,400
CONTINGENCY	20%	$109,880
SUBTOTAL:		$659,280
ENG/SURVEY	15%	$98,900
SUBTOTAL:		$758,180

PROJECT TOTAL $758,180

2022-2035 TOTAL $19,179,490

FIGURE 3-10

CITY OF LANCASTER

WATER CAPITAL IMPROVEMENTS PLAN

LEGEND

- 2017 Pressure Reducing Valve
- 2035 Pressure Reducing Valve
- Valve
- Dallas Water Utilities Meter
- Pump Station
- 2017 Ground Storage Tank Improvement
- 2017 Elevated Storage Tank Improvement
- Existing Ground Storage Tank
- Existing Elevated Storage Tank
- 2017 Water Line Improvement
- 2022 Water Line Improvement
- 2035 Water Line Improvement
- Dallas Water Utilities Supply Line
- 8" and Smaller Existing Water Line
- 10" and Larger Existing Water Line
- Roads
- Streams
- Lakes
- Upper Pressure Plane Transfer Area
- Lower Pressure Plane (705)
- Upper Pressure Plane (792)
- City Limit
- Extraterritorial Jurisdiction
- County Boundary

FREESE NICHOLS

Lancaster

2.5 MG Ground Storage Expansion
7.9 MGD Pump Station Expansion
2.0 MG Ground Storage Expansion

Ames Rd. Pump Station
Total Capacity = 26.5 MGD
Firm Capacity = 18.6 MGD

3.5 MG Ames Rd. GSTs

1.0 MG Ames Rd. EST
Overflow Elev.: 792'

Remove 0.5 MG Ames Rd. GST
Remove 1.0 MG Ames Rd. EST

2.0 MG Wintergreen Rd. Elevated Storage Tank

James R. Williams 6.0 MG GST

Wintergreen Valve

James R. Williams Pump Station (705')
Total Capacity = 5.3 MGD
Firm Capacity = 3.5 MGD

James R. Williams Pump Station (792')
Total Capacity = 1.0 MGD
Firm Capacity = 0.0 MGD

5.0 MGD Pump Station Expansion (705')
6.0 MGD Pump Station Expansion (792')

Dallas Valve

Pleasant Run Valve

0.5 MG Pleasant Run Rd. EST
Overflow Elev.: 705'

1.5 MG Beltline Rd. EST
Overflow Elev.: 705'

Transfer from Upper Pressure Plane to Lower Pressure Plane

DALLAS COUNTY
ELLIS COUNTY

0 2,000 4,000
SCALE IN FEET

FIGURE 3-11
CITY OF LANCASTER
WASTEWATER
CAPITAL IMPROVEMENTS PLAN

MAJOR BASINS

- Chesier Branch
- Creekwood Branch
- Deep Branch
- Enchanted Forest
- Floyd Branch
- Halls Branch
- Keller Branch
- Mill Branch
- Red Oak
- Ten Mile 1
- Ten Mile 2
- Ten Mile 3
- Ten Mile 4
- Ten Mile 5
- Ten Mile 6

LEGEND

- Existing Lift Station
- 2017 Wastewater Line Improvement
- 2022 Wastewater Line Improvement
- 2035 Wastewater Line Improvement
- 2022 Force Main Improvement
- Existing Force Main To Be Decommissioned
- Existing Force Main
- 6" and Smaller Wastewater Line
- 10" and Larger Wastewater Line
- TRA Wastewater Line
- Road
- Railroad
- Ten-Foot Contour
- Index Contour
- Stream
- Lake
- City Limit
- ETJ Limit
- County Boundary

FREESE NICHOLS

Wheatland Rd.
Firm Capacity = 0.6 MGD
Expand Firm Capacity to 3.0 MGD
Expand Firm Capacity to 5.0 MGD
Expand Firm Capacity to 6.8 MGD

IH 635 Lift Station
Firm Capacity = 0.25 MGD
To Be Decommissioned

Lift Station #1
Firm Capacity = 0.6 MGD
Expand Firm Capacity to 2.0 MGD
Expand Firm Capacity to 3.8 MGD

Lift Station #2
Firm Capacity = 1.3 MGD
Expand Firm Capacity to 1.55 MGD

ENCHANTED FOREST
RED OAK
RED OAK
CREEKWOOD BRANCH

DALLAS COUNTY
ELLIS COUNTY

0 2,000 4,000
SCALE IN FEET

LANCASTER CITY COUNCIL
Work Session Agenda Communication for July 23, 2012

D

WS12-D

Discuss proposed changes to the City of Lancaster Master Fee Schedule.

This request supports the City Council 2011-2012 Policy Agenda.

Goal: Financially Sound City Government

Background

Each year as part of the budgeting process, City Council reviews proposed changes to the City's Master Fee Schedule. The Master Fee Schedule is adopted by resolution. Changes to the fee schedule may be made throughout the year, as needed, by resolution.

The Master Fee Schedule is comprehensive. In efforts to make it easier for individuals to find specific fees, departments are adding a "Fees" section on their departmental page of website which outlines department related fees only. For example, on the City website under Airport in the "Fees" section, you could view hangar rental rates.

This agenda item seeks Council's input regarding proposed changes in fees. Attached is the redlined fee schedule showing proposed changes.

Considerations

Below is information supplied by the various departments regarding proposed fee revisions.

Article 5.000 Fire Services Fees (reference page 13)

Sec. 5.100 Copy Fees – struck in its entirety; copy fees are contained in Article 13.000 Administrative Fees.

Added:

Sec. 5.100 Burn Permit Fee

(a)	Burn Permit Fee	$25.00

With the updates to the Fire Code, some types of burns are now allowed. The Lancaster Fire Department surveyed area departments to determine burn permit fees. Area

departments charge a wide range of fees, generally higher than what is proposed. The $25 was calculated so that the Fire Department recovers administrative costs only.

Article 10.000 Utility Related Fees

Sec. 10.200 Water Meter (f) Meter Testing by manufacturer (reference page 21)
Adds a $50 fee for the manufacturer to test a water meter when requested by the customer. This cost has previously been absorbed by the City. The fee will not be charged if the manufacturer finds the water meter is defective.

Sec. 10.400 Charges for Private Sewer Laterals (reference page 22)
This section struck in its entirety after review of existing ordinance. Section reserved for future use.

Sec. 10.600 Deposits for Water and/or Sewer (reference page 22)

Added: (2) Residential Bore, Tap and Relocate fees. See attached staff report from Water/Wastewater Division outlining fees currently charged by survey cities.

(9) Fire Hydrant Meter Deposit (reference page 23)
Increases the deposit for a fire hydrant meter from $1,000 to $1,500 to cover cost of replacement, if not returned, or damage. The current replacement cost is $1,500.

Sec. 10.1700 Garbage Collection Fees (g) Industrial Containers (reference page 28)
Strikes item (g) in its entirety. For non-residential customers, the ordinance provides for collection by a solid waste collection company with a valid franchise agreement with the City.

Article 15.000 Parks and Recreation (reference page 39)

Added:
(g) Senior Life Center

Kitchen	$30.00/hour – Resident or non-resident

A fee has been added for use of the kitchen at the Senior Life Center. Currently a fee is not charged for use of the Life Center kitchen. Adding a fee is consistent with fees charged for use of the kitchen in conjunction with the use of other City meeting space, such as at the Recreation Center and Library.

Article 16.000 Airport Fees (reference page 40)

A small increase was made to improved ground lease rates (from $0.25 to $0.30 per square foot per year) and to unimproved ground lease rates (from $0.15 from $0.20 per square foot per year). The fuel flowage fee was increased from $0.10 to $0.20 per delivered gallon. Increases are based on survey of similar type airports within a 50 mile radius of the Lancaster Regional Airport. These airports include: Arlington, Addison, Fort Worth Alliance, Fort Worth Meacham, Fort Worth Spinks, Grand Prairie and McKinney.

Options/Alternatives

Staff requests Council's input on proposed changes to the Master Fee Schedule.

The Master Fee Schedule is scheduled for adoption as a part of the FY 2012-2013 budget adoption process. The effective date of the Master Fee Schedule will be October 1, 2012.

Attachment

- Water/Wastewater Division Fee Survey
- Draft Master Fee Schedule (redlined)

Prepared and submitted by:
Dolle K. Downe, City Secretary

Date: July 9, 2012

Master Fee Schedule Proposed Revisions

The Water/Wastewater Division proposes the following fees or fee increases to the fee schedule. These services may or may not be being performed, but should be charged a fee if performed by the City.

1. Meter Testing - $50
2. Road bore - 3 ½% of the cost of the job
3. Water tap fee - $300
4. Sewer tap fee - $400
5. Relocate meter costs - same cost as installation
6. Fire hydrant deposits - $1,500 which would cover cost of damages or replacements

Staff received the following information from the benchmark cities for reference:

City of Cedar Hill

- Meter test $15
- ¾" water tap $192 plus meter $300
- 1" water tap $252 plus meter $480
- 2" water tap $620 plus meter $1072
- Fire hydrant meter deposit $1200 (new budget proposal to $1,500)

City of Duncanville

- 1" water taps $400 plus pavement
- Sewer taps $425 plus pavement

City of Burleson

- ¾ " tap, meter and box $1,061
- 1" tap, meter and box $1,142
- 4" sewer tap in pavement $866

City of Coppell

- NO tap for water or sewer
- Fire hydrant deposits $1000

City of Desoto

- Fire hydrant $750
- No tap fee for water and sewer
- Road bore 3 ½ % of the cost of the job

City of Pflugerville

- Water and sewer taps $250

City of the Colony

- Fire hydrant meter $1500
- Water & Sewer taps $1500 all size and street & road repair
- Road Bore $500

City of Keller

- meter testing $50
- road bore-per linear foot
- 4" taps $350

City of Rowlett

- water tap actual cost of parts and labor plus 25%
- sewer tap 4" fee $243.68
- sewer tap more than six feet deep $10 for each extra foot
- fire hydrant deposit $750

Haltom City

- street bore $1000
- tap fee $300
- relocate meter cost – actual cost per meter

CITY OF LANCASTER FEE SCHEDULE

		Page
ARTICLE 1.000	911 EMERGENCY TELEPHONE SERVICE FEE	2
ARTICLE 2.000	ANIMAL CONTROL FEES	2
ARTICLE 3.000	BUILDING RELATED FEES	3
ARTICLE 4.000	BUSINESS RELATED FEES	11
ARTICLE 5.000	FIRE SERVICES FEES	13
ARTICLE 6.000	ABATEMENT OF PROPERTY MAINTENANCE NUISANCE	18
ARTICLE 7.000	LIQUID WASTE TRANSPORT PERMIT	19
ARTICLE 8.000	LIBRARY FINES AND FEES	19
ARTICLE 9.000	MUNICIPAL DRAINAGE UTILITY SYSTEM FEES	20
ARTICLE 10.000	UTILITY RELATED FEES	21
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Effective October 1, 2011
Resolution 2011-09-81

Effective October 10, 2011
Resolution 2011-10-86

Effective February 27, 2012
Resolution 2012-02-17

CITY OF LANCASTER FEE SCHEDULE

ARTICLE 1.000 911 EMERGENCY TELEPHONE SERVICE FEE

There is hereby imposed on each telephone subscriber's local exchange access line, or its equivalent, in the City of Lancaster, a 911 emergency service fee of eighty-two cents ($0.82) per month for each residential line, and one dollar and fifty-two cents ($1.52) per month for each business line, or two dollars and fifty cents ($2.50) per month for each business trunk line. Such fees shall be used only to provide for the purchase, installation, operating and maintenance expenses of 911 emergency services, including required personnel. (Ordinance 2007-08-38, adopted 8/13/07)

ARTICLE 2.000 ANIMAL CONTROL FEES

Sec. 2.100 General

(a)	Animal Impound Fee	
	(1) 1st Offense	$45.00
	(2) 2nd Offense	$55.00
	(3) 3rd Offense	$85.00
	(4) 4th Offense	$110.00
	(5) Each subsequent offense is increased by	$50.00
(b)	Boarding While Impounded	$10.00 per day
(c)	Rabies and Quarantine Observation Fee	$15.00 per day
(d)	Adoption Fees	
	(1) Small Dogs and Puppies	$15.00
	(2) Large Dogs	$25.00
	(3) Cats	$15.00
(e)	Surrender of Animal	
	(1) Residential Surrender Fee	$20.00 per animal or litter
	(2) Nonresidential Surrender Fee	$25.00
(f)	Euthanization/Dogs & Cats Only	
	(1) At Owner's Request	$30.00
(g)	Pick Up Deceased Animal for Owner	$30.00
(h)	Microchip and/or Registration Fee	$15.00 if spayed/neutered
		$25.00 not spayed/neutered

Sec. 2.200 Dangerous Dog Registration Fee

The required annual fee for the registration of a dangerous dog shall be fifty dollars ($50.00). (1994 Code of Ordinances, Chapter 2, Article 2.600, Section 2.604)

ARTICLE 3.000 BUILDING RELATED FEES

Sec. 3.100 Fees Adopted

(a)	Moving Permit Fees		
	(1)	Base Fee (structures 200 sq. ft. and over)	Per Table 1-A
	(2)	Inspection Fee (plus .35 cents per mile to building location)	Per Table 1-A
(b)	Residential Portable/Storage Building Permit Fees		
	(1)	Under 200 sq. ft. base fees	Per Table 1-A
	(2)	Over 200 sq. ft.	Per Table 1-A
(c)	Fence Permit Fees		
	(1)	Residential Zoning (New/Replacement)	Per Table 1-A
	(2)	Nonresidential	Per Table 1-A
	(3)	A-O Zoning (Agricultural Fencing)	$25.00
		Accessory Structures less than 400 sq. ft.	$50.00
		Accessory Structures greater than 400 sq. ft.	$100.00
		All other construction and related additions or remodeling work will be permitted and charged in accordance with Table 1-A	
(d)	Driveway, Drive Approach, Curb, Gutter and Sidewalk Permit Fees(Bond Required)		
	(1)	Residential zones, new/repair/replacement	Per Table 1-A
	(2)	Nonresidential zones, per approach	$25.00 + per Table 1-A
(e)	Paving Private/Commercial Property Permit Fees		

(1)	Residential zones, new construction	Per Table 1-A
(2)	Nonresidential zones, per approach	Per Table 1-A
(3)	Commercial Parking Lots	Per Table 1-A

(f) Permit Fees

(1) Residential zones, new/repair/replacement Per Table 1-A

(2) Single family residence, duplex, multi-family, apartment, condominium townhouse, commercial and remodels per Table 1-A. Fee assessed per address.

TABLE 1-A

Total Valuation	Fee
$1.00 to $500.00	$25.00 (minimum permit fee)
$501.00 to $2,000.00	$25.00 for the first $500.00 plus $3.05 for each additional $100.00 or fraction thereof, to and including $2,000.00
$2,001.00 to $25,000.00	$69.25 for the first $2,000.00 plus $14.00 for each additional $1,000.00 or fraction thereof, to and including $25,000.00
$25,001.00 to $50,000.00	$391.25 for the first $25,000.00 plus $10.10 for each additional $1,000.00 or fraction thereof, to and including $50,000.00
$50,001.00 to $100,000.00	$643.75 for the first $50,000.00 plus $7.00 for each additional $1,000.00 or fraction thereof, to and including $100,000.00
$100,001.00 to $500,000.00	$993.75 for the first $100,000.00 plus $5.60 for each additional $1,000.00 or fraction thereof, to and including $500,000.00
$500,001.00 to $1,000,000.00	$3,233.75 for the first $500,000.00 plus $4.75 for each additional $1,000.00 or fraction thereof, to and including $1,000,000.00
$1,000,001.00 and up	$5,608.75 for the first $1,000,000.00 plus $3.15 for each additional $1,000.00 or fraction thereof

(g) Sewer/Water/Gas Lines & Replacements

(1)	Sewer line repair/install	Per Table 1-A
(2)	Sewer line replacement	Per Table 1-A
(3)	Water line repair/install	Per Table 1-A
(4)	Water line replacement	Per Table 1-A
(5)	Gas line repair/install Additional charge per outlet	Per Table 1-A
(6)	Gas line Replacement Additional charge per outlet (this fee will be included in the total fee)	Per Table 1-A
(7)	Drainage, vent system repair/replacement	Per Table 1-A
(8)	Water heater replacement	Per Table 1-A
(9)	Fixtures, addition/replacement	Per Table 1-A
(10)	Grease trap, sand trap, grit trap and other Approved catch basins	Per Table 1-A
(11)	Water treatment/water softener	Per Table 1-A
(12)	Solar heater	Per Table 1-A
(13)	Others as may be required	Per Table 1-A

(h) Electrical Fees

(1)	Temporary service pole (not related to construction permit)	Per Table 1-A / $25.00
	To and including 200 amp	Per Table 1-A
	Over 200 amp to 1,000 amp	Per Table 1-A
	Over 1,000 amp and up	Per Table 1-A
(2)	Receptacle, switch and lighting circuits	Per Table 1-A / $25.00 min.
(3)	Lighting fixture and lamp holding device	Per Table 1-A
(4)	Residential use appliances (fixed appliances or outlets for same)	Per Table 1-A
(5)	Building Rewire	Per Table 1-A

(6)	Nonresidential Use Appliances	Per Table 1-A
	[Nonresidential use appliances not exceeding 2 horsepower (hp), kilowatt (kw) or kilowatt ampere(kva)]	
(7)	Power Apparatus (Base Fee)	Per Table 1-A
	Motor over 1 hp, transformer, generator, heating/air conditioning units, heat pumps, cooking/baking	
(8)	Equipment – Rated in hp, kw, kva, kvar	
	Up to and including 1	Per Table 1-A
	Over 1-10	Per Table 1-A
	Over 10-50	Per Table 1-A
	Over 50-100	Per Table 1-A
	Over 100	Per Table 1-A
	Minimum fee	Per Table 1-A
(9)	Signs	
	Initial CKT	Per Table 1-A
	Each additional CKT	Per Table 1-A
(10)	Busways	
	Initial 100 feet	Per Table 1-A
	Each additional 100 feet or fraction thereof	Per Table 1-A
(11)	Subpanels	
	Initial panel	Per Table 1-A
	Each subsequent panel	Per Table 1-A
	Service change charge does not include additional circuits required.	

(i) <u>HVAC Installation Fees</u>

(1)	Installing/replacing HVAC system (condensing unit, evaporator, coil, furnace and piping) up to and including 5 tons of air conditioning, and/or 200,000 Btu input of heating per system	Per Table 1-A
(2)	Installing/replacing HVAC system over 5 tons of air conditioning and/or over 200,000 Btu input of heating per system	Per Table 1-A

(3)	Component Installation/Replacement.	
	Condensing unit up to 5 tons	Per Table 1-A
	Over 5 tons, $10.00, plus per ton	Per Table 1-A
	Furnace up to 200,000 Btu input	Per Table 1-A
	Over 200,000 Btu input, $10.00 plus per 100,000	Per Table 1-A
(4)	Unit heater/suspended heater/duct heater	Per Table 1-A
(5)	Ventilation/exhaust fans/hoods – Type I, Type II, Hoods, Exhaust Fans, each	Per Table 1-A
(6)	Boilers	Per Table 1-A
(7)	Other as may be required by mechanical code	Per Table 1-A

(j)	Swimming Pool/Spa/Hot Tub Permit Fees.	Per Table 1-A
(1)	In ground pool	Per Table 1-A
(2)	Above ground pool	Per Table 1-A
(3)	Spa/hot tub	Per Table 1-A

(Above permits include electric and plumbing work, trades must validate)

(k)	Mobile/HUD Manufactured Home Permit Fees	
(1)	Pre-June 1976	Per Table 1-A
(2)	June 1976 to present	Per Table 1-A
(l)	Industrialized Home Permit Fee	Per Table 1-A
(m)	Apartment Registration and Inspection Fee	$15.00 per apartment unit
(n)	Satellite Dish Permit Fees	
	Pole style or roof mount	Per Table 1-A
(o)	Installation or Removal of Underground Fuel Storage Tank and/or Hazardous Chemicals	
(1)	Storage tank permit fees	Per Table 1-A
(p)	Repair of Underground Fuel Storage Tank and/or Lines Permit Fees	

(1)	Contractor's Registration (per year)	$100.00
(2)	Repairs of underground fuel storage tanks (base fee)	Per Table 1-A

(q) Above Ground LPG Storage Tank System Permit Fees

(1)	Contractor's Registration (per year)	$100.00
(2)	Base fee (per tank)	Per Table 1-A

(r) Fire Sprinkler and/or Standpipe System Permit Fees

(1)	Contractor's Registration (per year)	$100.00
(2)	Base Fee	Per Table 1-A

(s) Fire Alarm Fees

(1)	Base Fees	Per Table 1-A

(t) Fixed Fire-Extinguishing System Permit Fees

(1)	Contractor's Registration (per year)	$100.00
(2)	Base Fee	Per Table 1 A

(u) Tents and/or Air Support System Permit Fees

(1)	200 sq. ft. or larger	Per Table 1-A

(v) Grading Filling and Excavating Permit Fees

(1)	Base Fee	Per Table 1-A

(w) Fee Assessment for Traffic Signals. There shall be an assessment of thirty-five dollars $35.00 per acre for each acre of development so as to provide for future traffic signalization.

(1)	New Construction	$75.00
(2)	Existing Structure	$75.00

(x) Certificate of Occupancy Fees

(1)	New Construction	$75.00
(2)	Existing Structure	$75.00

(y) Concrete Permit

(1) All contractors' must submit $300,000.00 liability insurance made out with the City of Lancaster as a certificate holder.

(z)	Irrigation Permit Fee	$125.00
(aa)	Administrative Plan Review-Residential	$250.00
(bb)	Administrative Plan Review-Commercial	65% of permit fee
(cc)	Utility Verification Permit	$50.00
(dd)	After Hours Inspections	$47.00 per hour, minimum 2 hours
(ee)	Sign Permit Fees	Per Table 1-A
(ff)	Wind Energy System Permit Fee* *Resolution 2010-06-59, adopted 06/28/10	Per Table 1-A

Contractor Registration Fees

(1) Building Contractor Registration	$100.00 Annually
(2) Plumbing Business Registration	$100.00 Annually
(3) Electrical Contractor Registration	$100.00 Annually
(a) Master License Registration	$30.00 Annually
(b) Journeyman License Registration	$20.00 Annually
(c) House Wireman License Registration	$10.00 Annually
(4) HVAC Contractor Registration	$100.00 Annually
(a) Type A License Registration	$30.00 Annually
(b) Type B License Registration	$30.00 Annually
(5) General Contractor Registration	$100.00 Annually
(6) Fence Contractor Registration	$100.00 Annually

(7) Sign Contractor Registration	$100.00 Annually
(8) Concrete Contractor Registration	$100.00 Annually

Sec. 3.200 When Fees Doubled

Where work for which a permit is required is started or proceeded prior to obtaining said permit, the fees above shall be doubled. The payment of a double fee shall not relieve any persons from fully complying with the regulations prescribed in this article in the execution of the work or from any other penalties prescribed herein.

Sec. 3.300 Second Inspections

Where work for which a permit is required and has been issued is inspected by the Inspection Department's Inspector and failed for noncompliance with city codes, and a second inspection is required, an additional fee of fifty dollars ($50.00) shall be charged for re-inspection and will increase by $25.00 for each subsequent re-inspection.

Sec. 3.400 Public Schools Exempt From Fee Requirements

Any public school within the City of Lancaster shall be exempt from payment of the fees provided by this article, provided that such public schools shall not be excused from the necessary permit approval process enumerated in this code or in any other code or ordinance of the City of Lancaster.

(Ordinance 13-00 adopted 4/24/00)

Sec. 3.500 Excavation Fees

Permit Fees. Permit fees shall be fifty dollars ($50.00) minimum with a maximum of 2.5% of the construction contract cost. Such fee if paid by check, money order, bank draft or other negotiable instrument, shall be made payable to the city treasurer. If paid by cash, such cash shall be remitted daily to the city treasurer, who shall deposit it to the credit of the general fund. Construction bond for work in a city right-of-way shall be $10,000.00 bond amount; $2,000.00 bond amount where work not to exceed $2,000.00 in value for any one permit that may be acquired for that work within the right-of-way.

(Ordinance 38-99 adopted 11/8/99)

Sec. 3.600 Backflow Prevention Assembly Testers Fees

An annual registration fee of one hundred dollars ($100.00) shall be paid by each contractor or business for the first certified tester/employee prior to any work commencing with the city. Each additional employee (who is a certified tester) working for a contractor that is registered in the city shall pay an additional fifty dollars ($50.00) registration fee per tester.

(Ordinance 29-00 adopted 7/24/00)

ARTICLE 4.000 BUSINESS RELATED FEES

Sec. 4.100 Peddlers, Solicitors and Itinerant Vendors

(a) Investigation Fee Each and every person seeking a permit under the provisions of the Lancaster Code of Ordinances, Chapter 4, Article 4.100 "Peddlers, Solicitors and Itinerant Vendors" shall pay a fee of twenty-five dollar ($25.00) per year for investigation of such application. Such fee shall be prorated, shall be paid in case at the time such application is made and shall not be returned to the applicant regardless of whether or not such permit is issued or denied. Persons representing firms or corporations shall be required to obtain separate permits, but shall pay only a single investigation fee. Persons involved in interstate commerce shall be exempt from payment of the investigation fee, but shall be required to obtain a permit and otherwise fully comply with all provisions of Chapter 4, Article 4.100.

(b) The permit fee for itinerant vendors on private property is twenty dollars ($20.00). The City will not require payment of this permit fee by locally-based charitable organizations or organizations engaged in activities such as bake sales or car washes. The permit is issued for a minimum of five (5) days, but not to exceed forty-five (45) days. Each eligible property may only allow use of the property for a temporary business for a maximum of forty-five (45) days per calendar year in accordance with Chapter 4, Article 4.100, Section 4.114.

(c) Replacement Permits. Should a permittee lose his permit or otherwise need to obtain a replacement permit from the city, the cost of such replacement permit shall be fifteen dollars ($15.00).

(Ordinance 2008-06-24; adopted June 23, 2008)

Sec. 4.200 Coin-Operated Machine Fees

(a) Every owner or operator who owns, controls, possesses, exhibits, displays or permits to be exhibited or displayed in this city any coin-operated machine shall pay and there is hereby levied on each coin-operated machine an annual occupation tax in the amount of twenty-five dollars ($25.00).

(Ordinance 2002-10-38 adopted 10/14/02)

Sec. 4.300 Reserved for Future Use

Sec. 4.400 Food Service Establishments

The City of Lancaster shall issue a food service permit to the applicant if its inspection reveals that the proposed food service establishment complies with the requirements of Texas Health and Safety Code Chapters 437, Food and Drug Health Regulations, and 121, Local Regulation of Public Health. The

permit shall be issued upon payment of a one hundred fifty dollar ($150.00) annual inspection fee (includes two (2) inspections) set by the Dallas County Department of Health and Human Services plus an administrative fee of fifty dollars ($50.00), which shall be due and payable on or before October 1 of each year. Such permit shall expire on September 30 of the succeeding year. Such permit shall be payable in full if the permit is issued at the beginning of the fiscal year or prorated as deemed appropriate by staff depending upon when it is issued within the year. All food service establishment permits shall expire on September 30 of each year and be issued upon inspection and payment of the required fee, to be effective on October 1.

Beginning with the third food establishment inspection or any other food inspection outside of the two yearly inspections, a seventy-five dollar ($75.00) fee will be assessed for each additional inspection.

Sec. 4.500 Reserved for Future Use

Sec. 4.600 Reserved for Future Use

Sec. 4.700 Temporary Building Use Fees

The permit fees for administering temporary uses within the city shall be as follows:

(1)	Real estate sales office	$100.00
(2)	Construction office	$100.00
(3)	Asphalt batching plant	$100.00
(4)	Cement hatching plant	$100.00
(5)	Portable church building	$100.00
(6)	Portable school building	$100.00
(7)	Other temporary use as determined by City Manager (or his/her designated representative)	$100.00
(8)	Cargo container for construction purposes	$150.00

Sec. 4.800 Taxicab Permits

Each applicant for a license to operate a vehicle for transporting of passengers for hire within the city shall pay a non-refundable fee in the sum of one hundred dollars ($100.00) to cover the cost of processing the application.

Sec. 4.900 Emergency Ambulance Service Permit

Each applicant shall pay to the City of Lancaster upon submission of his application a non-refundable two hundred dollar ($200.00) permit fee. Such fee shall be for a permit for the period of January 1 through December 31 of each year, provided that any permit secured during the year shall be valid through December 31 of that year, and such fee shall not be prorated.

Sec. 4.1000 Limousine Operator Permit

Each limousine service operator shall be subject to a one hundred dollar ($100.00) non-refundable permit application fee to cover the cost of processing the application.

(Ordinance 13-00 adopted 4/24/00)

Sec. 4.1100 Alcoholic Beverage Permit

The City shall assess a local permit fee for each Alcoholic Beverage Permit not to exceed one-half the amount of the state fee in accordance with the Texas Alcoholic Beverage Code. Said fee shall be non-refundable.
(Ordinance No. 2010-11-26, adopted 11/08/10; Resolution 2010-11-93, adopted 11/08/10)

ARTICLE 5.000 FIRE SERVICES FEES

~~**Sec. 5.100 Copy Fees**~~ **(copy fees are contained in Administrative Section)**

~~(a) Copy Fees $.10 per page~~

Sec. 5.100 Burn Permit Fee

(a) Burn Permit Fee $25.00

Sec. 5.200 Ambulance Fees

(1)	ALS Emergency Mileage	$12.00
(2)	ALS Non-Emergency Mileage	$12.00
(3)	ALS Supplies – IV Therapy	$100.00
(4)	ALS1 Emergency Base Rate, Non-Resident	$700.00
(5)	ALS1 Emergency Base Rate, Resident	$650.00

(6)	ALS1 Non-Emergency Base Rate, Non-Resident	$700.00
(7)	ALS1 Non-Emergency Base Rate, Resident	$650.00
(8)	ALS2 Base Rate, Non-Resident	$825.00
(9)	ALS2 Base Rate, Resident	$800.00
(10)	BLS Emergency Base Rate, Non-Resident	$650.00
(11)	BLS Emergency Base Rate, Resident	$600.00
(12)	BLS Emergency Mileage	$12.00
(13)	BLS Non-Emergency Base Rate, Non-Resident	$650.00
(14)	BLS Non-Emergency Base Rate Resident	$600.00
(15)	BLS Non-Emergency Mileage	$12.00
(16)	Oxygen, Administration & Supplies / hr.	$65.00
(17)	Treatment / No-Transport, Non-Resident	$150.00
(18)	Treatment / No-Transport, Resident	$150.00
(19)	Ambulance (In-County Calls)	$375.00 Contract with Dallas County for providing ambulance service in the County plus patient is billed by the City for call as noted above.
(20)	Dallas County Assisted Fire Run	$395.00 per fire run
	Add Additional	
(21)	Specialty Care Transport Rate (not in your current Chargemaster)	$950.00
(22)	ALS Routine Disposable Supplies	$65.00
(23)	BLS Routine Disposable Supplies	$50.00
(24)	Extra Attendant	$100.00

Any resident or non-resident delivered by helicopter transportation shall be charged fees accumulated as if delivered to a medical facility. This is in addition to the fee from the helicopter company.

Sec. 5.300 **Fire Department Response Fees**

(1)	Absorbent Boom	$8.00 per each used on-scene
(2)	Hazardous Mat Dike Sock	$131.00 per each used on-scene
(3)	Absorbent for Cleanup	$40.00 per 20 lb. bag
(4)	Absorbent Pads	$10.00 per each used on-scene
(5)	Absorbent Pads (Bale)	$65.00 per 50 used
(6)	Acid Neutralizer	$20.00 per bag

(7)	Acid Pillow	$25.00 per pillow
(8)	Acid Socks	$20.00 per sock used
(9)	Aerial Ladder Truck	$600.00 per hour on-scene
(10)	Air Bags for Securing Vehicle	$50.00 per hour
(11)	Air Lift - to lift heavy objects	$50.00 per hour
(12)	Air Bottle fill by Cascade	$10.00 per each fill
(13)	Air Packs	$50.00 per hour
(14)	Miscellaneous Air Tool	$35.00 per hour
(15)	Air Truck with Cascades System	$300.00 per hour used
(16)	Attack Truck	$350.00 per hour on-scene
(17)	Back Board	$10.00 per each used
(18)	Bandages	$2.00 per each used
(19)	Banner Type	$12.00 per roll used
(20)	Blanket to cover injured	$10.00 per each used
(21)	Boat Rescue – 100 HP and up	$100.00 per hour
(22)	Boat Rescue - 50 to 99.9 HP	$75.00 per hour
(23)	Boat Rescue - 10 to 49.9 HP	$50.00 per hour
(24)	Blood Pressure Cuff	$20.00 per each used
(25)	Brooms	$15.00 per each used
(26)	Brush Truck	$300.00 per hour
(27)	Bunker Boots	$128.00 per person responding
(28)	Bunker Coats	$561.00 per person responding
(29)	Bunker Pants	$368.00 per person responding
(30)	Carbon Monoxide Detector	$100.00 per each used on-scene
(31)	Air Cascade System	$100.00 per hour
(32)	Do Not Cross Fire Line Tape	$9.99 per roll
(33)	C-Collar	$20.00 per each used
(34)	Cell Phone Calls	$3.00 per call
(35)	Chainsaw	$35.00 per hour
(36)	Chemical Truck	$300.00 per hour on-scene
(37)	Chimney Bomb	$25.00 per each
(38)	Clay used to Absorb Fluids	$9.00 per bag
(39)	Cold Fire	$23.00 per gallon

(40) Cold/Arctic Fire Extinguisher	$30.00 per gallon
(41) Cribbing for Blocking Vehicle	$25.00 per item used
(42) Disposable Bag for Cleanup	$5.00 per bag
(43) Decon Pond/Spill Containment	$100.00 per each used
(44) Depowering Tool Kit	$5.00 per use
(45) Drip Pan/Hazardous Fluids	$15.00 per each used
(46) 55 Gal. Drums to Catch Hazardous Materials	$45.00 per each used
(47) Fire Extinguisher	$65.00 per each used on-scene
(48) Extrication Tool	$100.00 per each used
(49) False Alarm	$250.00 per call fire alarm activated
(50) Flare	$8.00 per each used
(51) Hand Held Flashlight	$23.00 per each used
(52) Floor Jack	$25.00 per each used on-scene
(53) Foam	$50.00 per gallon
(54) Forcible Entry Tool	$10.00 per each used on-scene
(55) Generator	$50.00 per hour
(56) Generator #2	$50.00 per hour
(57) Glass Breaking Device	$50.00 per each used
(58) Hand Tools	$15.00 per hour
(59) Haz Mat Kit	$250.00 per each used
(60) Boom for Absorbing Hazmat	$25.00 per each used
(61) Hazmat Pad	$4.45 per each used
(62) Hazmat Roll	$5.10 per each used
(63) Hazmat Sock	$15.57 per each used
(64) Hazmat Wedge/Plug	$30.00 per bag
(65) Infrared Heat Detector	$75.00 per hour
(66) Helmet	$337.00
(67) Highlift to lift heavy objects	$30.00 per each used
(68) Indian Tank	$25.00 per hour
(69) Jet Ski	$30.00 per hour
(70) Ground Ladders	$15.00 per hour
(71) Landing Zone	$250.00 flat rate
(72) Leak Kit	$20.00 per each used

(73)	Portable Lighting	$25.00 per hour
(74)	Lite Dry	$10.00 per bag
(75)	Man Hours	$31.64 per person responding
(76)	On-Scene Labor	$32.00 per hour
(77)	Microblaze	$15.00 per each used
(78)	Pumper	$300.00 per hour
	Miscellaneous Expendables	
(1)	2 pc. 7" Strap w/Speed Clamps	$11.00 per each used
(2)	4 x 4 Dressing	$1.05 per each used
(3)	4 x 6 Dressing	$1.15 per each used
(4)	4 x 9 Dressing	$1.45 per each used
	Airway	
(1)	Backboard	$14.00 per each used
(2)	Bag Valve Mask	$15.00 per each used
(3)	Band-Aid	$0.15 per each used
(4)	Burn Sheet	$4.50 per each used
(5)	Cloth Tape	$1.00 per each used
(6)	Stiffneck X-Trical Collar	$7.00 per each used
(7)	Defib Kit	$30.00 per each used
(8)	Disposable Blanket	$3.50 per each
(9)	Duct Tape	$1.00 per roll
(10)	Rubber Gloves	$2.00 per pair
(11)	Goggles	$1.50 per each used
(12)	Head on Blocks	$4.50 per each used
(13)	Kerlex	$2.25 per each used
(14)	Non Rebreather Mask	$1.50 per each used
(15)	OB Kit	$5.25 per each used
(16)	Saline Solution	$4.00 per each used
(17)	Surgical Face Mask	$0.50 per each used
(18)	Trauma Dressing	$2.25 per each used
(19)	Oil Dry	$30.00 per 5 gallon bucket
(20)	Oil Mat Roll	$5.00 per foot
(21)	Oil Sock	$60.00 per box used

(22) Peat Moss Absorbent	$8.00 per bag
(23) Pig Absorbent	$20.00 per each used
(24) Plug Dike Stabilizes Fuel in Tank	$40.00 per each used
(25) Pneumatic Vacuum Device	$10.00 per hour
(26) Port-a-tank 2500 - 4000 Gallons	$50.00 per hour
(27) Positive Pressure Fan	$75.00 per hour
(28) Miscellaneous Power Tool	$25.00 per hour
(29) Engine/Pumper	$500.00 per hour
(30) Engine/Pumper #2	$500.00 per hour
(31) Engine/Pumper #3	$500.00 per hour
(32) Rescue Truck	$400.00 per hour
(33) Sand	$20.00 per 5 gallon bucket
(34) Sand	$10.00 per 10 lb. bag
(35) Reciprocating Saw	$25.00 per hour
(36) Self-Contained Breathing Apparatus	$25.00 per hour
(37) Shovel	$5.00 per each used
(38) Smoke Ejector	$50.00 per hour
(39) Spill Bag - Hazmat	$15.00 per unit used
(40) Squirt/Small Aerial Pumper	$550.00 per hour
(41) Step Chalks	$25.00 per use
(42) Water Pump/Basement Flooding	$25.00 per hour
(43) Suspenders	$37.00 per person responding
(44) Tanker Truck	$500.00 per hour
(45) Tarp	$35.00 per each used
(46) Utility Truck	$150.00 per hour
(47) Windshield Kit to pull windshield	$40.00 per each used
(48) Hydro Carbon	$60.00 per 20 lb. bag

ARTICLE 6.000 ABATEMENT OF PROPERTY MAINTENANCE NUISANCE

The expenses incurred for abatement of the nuisance may be assessed against the real estate on which the work is done or improvements made. To obtain a lien against the property, the mayor, municipal health authority or code enforcement officer must file a statement of expenses with the county clerk of Dallas County, including the name of the property owner, if known, and the legal description of the property. The actual cost of abatement shall include an administrative fee of one hundred fifty dollars ($150.00). In the event there are obstructions such as trees, shrubs, bushes, excavations, foundations,

demolished structures or any similar obstructions, an additional charge shall be levied, assessed and collected against such premises. The lien obtained is security for the expenses and interest accrued thereon at the rate of ten percent (10%) annually on the total amount from the date of payment by the city. The lien is inferior only to tax liens and liens for street improvements. The city may bring a suit for foreclosure of the lien to recover the expenses and interest due. The state of expenses or certified copy of the statement is prima facie proof of the expenses incurred by the city in doing the work or making the improvements. This remedy is cumulative of the fine authorized for violation hereof by Section 1.109 of the code of ordinances.
(Ordinance 13-00 adopted 4/24/00)

ARTICLE 7.000 LIQUID WASTE TRANSPORT PERMIT

The city shall not issue a permit to an applicant until the appropriate fee is paid. Initially, a person shall pay a fee of one hundred dollars ($100.00) for the first vehicle and fifty dollars ($50.00) for each additional vehicle operated by the person. Each permit must be renewed annually at a rate of seventy-five dollars ($75.00) for the first vehicle and fifty dollars ($50.00) for each additional vehicle.
(Ordinance 13-00 adopted 4/24/00)

ARTICLE 8.000 LIBRARY FINES AND FEES

(a)	Charges for overdue materials		
	(1)	Books/Magazines	$0.10 per day up to cost
	(2)	Audio Tapes/CDs	$0.10 per day up to cost
	(3)	Interlibrary Loans	$1.00 per day up to cost
	(4)	Special Reference	$1.00 per day up to cost
	(5)	Video Tapes/DVDs	$1.00 per day up to cost
(b)	Lost or Damaged Beyond Repair		$5.00 + replacement cost
(c)	Copies		
	(1)	Single	$0.10 per page
	(2)	Microfilm	$0.25 per page
	(3)	Computer Printout	$0.10 per page
	(4)	Color Copies	$1.00 per page
(d)	Nonresident Library Card		$20.00 Picture id required
(e)	Lost Card		$1.00 replacement

(f)	Recovery Fee	$10.00 - if account is sent to third party for collection (value of material + $10.00)
(g)	Non-cardholder one (1) Hour Internet Access	$3.00 per hour
(h)	Blank Disk – floppy or CD	$1.00 each
(i)	Blank DVD	$2.00 each
(j)	Headphones or earbuds	$2.50 each set
(k)	Microfilm / microfiche rental	Actual cost, plus shipping and $1.00 handling fee per order
(l)	Battery (AAA or AA)	$ 1.00 each
(m)	Interlibrary loan service	$1.00 per item
(n)	Flash drive, USB port, thumb drive, (2gb)	$12.00 each
(o)	Flash drive, USB port, thumb drive (4gb)	$16.00 each
(p)	Library meeting room (900 square feet)	$35/hour, resident $250 deposit $55/hour, non-resident $250 deposit
	Kitchen use per hour	$25/hour
	Set up Fee	$50
	Projector with screen	$65/hour, resident; $75/hour, non resident

ARTICLE 9.000 MUNICIPAL DRAINAGE UTILITY SYSTEM FEES

Account Classification	Rate/SFLUE per Month	Minimum Fee per month	Maximum Fee per Month
Single Family Residential	$7.97	$7.97	$7.97
Multi-Family Residential	$7.97	$7.97	$7.97
Residents Age 65 and Over	$3.98	$3.98	$3.98
Permanently Disabled Residents	$3.98	$3.98	$3.98

Commercial	$7.97 $6.09 $5.42 $4.73 $4.62	(≤3) (>3-5) (>5-10) (>10-32) (>32)	$7.97	N/A
City and Other Political Subdivision of the State	$7.97		$7.97	$100.00
Fire Hydrant	$0		$0	$0
Religious Institutions	$7.97		$7.97	$100.00
Lancaster Independent School Dist.	$7.97		$7.97	$100.00 Per each school property

(Ordinance No. 2002-10-41, adopted 10/14/02)
(Resolution No. 2010-02-11, corrected fees per ordinance)
(Resolution No. 2010-03-27, adopted 03/22/10)

ARTICLE 10.000 UTILITY RELATED FEES

Sec. 10.100 Water and Sewer Extensions

Water and sewer extensions shall be installed by the property owner/developer per city specifications; with approved plans and after paying required permits and fees, all at owner/developer's cost.

Sec. 10.200 Water Meter

(a)	Tampering and Criminal Mischief Damages	
	(1) Damaged meter only	$200.00 plus cost of meter
	(2) Damaged service line	$250.00 plus cost of meter
(b)	Broken Lock on Meter	$25.00
(c)	Pulled Meter	$200.00
(d)	Reread Meter	$20.00
(e)	Check for Leaks	$20.00
(f)	Meter Testing by manufacturer if requested by customer; no charge if meter is found defective	$50.00

Sec. 10.300 Extension of Mains into New Areas

Water and sewer extensions shall be installed by the property owner/developer per city specifications; with approved plans and after paying required permits and fees, all at owner/developer's cost.

~~**Sec. 10.400 Charges for Private Sewer Laterals**~~

~~The property owner shall install and maintain all private laterals from the sewer mains to the structure. A property owner may request, by signature, the city to perform a private service line inspection, in lieu of hiring a private plumbing contractor, for a fee. If it is determined by video that the private service line is crushed under the roadway the city will make the repairs, under the roadway only, at the city's expense.~~

Sec. 10.400 Reserved for Future Use

Sec. 10.500 Charges for Water Service Connections

The city shall maintain all water service connections in streets, alleys, or easements within the city limits. The property owner or developer shall install the approved meter, per city materials and specifications, after paying the required permits and fees, all at owner's expense.

Sec. 10.600 Deposits for Water and/or Sewer

After the application for water and/or sewer service is received, the applicant shall pay to the city a deposit in the amount indicated below:

		New Fees with Activation Fee
(1)	Residential Owners – ¾ inch	$90.00 + $10.00 = $100.00
	Residential Renter – ¾ inch	$150.00 + $10.00 = $160.00
	*Temporary (30 day) clean up	$40.00 + $10.00 = $50.00

* (For owners of properties and/or realtors that need the water for a short period of time.)

Guidelines in order for customers to receive a refund/credit to their accounts prior to terminating utility service:

(a) The customer will have to make the request in writing.
(b) The account will have to be in good standing for a period of two consecutive years before a refund is granted. (The account will have no arrears, penalties or retuned checks posted during that time.)
(c) The refund will be made to the person listed on the account.

(2) Residential – Bore, Tap and Relocate Fees

Road bore	3½% of the cost of the job
Water tap fee (3/4" up to 2")	$300
Sewer tap fee (4" up to 8")	$400
Relocate meter costs	same cost as installation

(3) Commercial – 3/4 inch $125.00 + $10.00 = $135.00

(4) 1 inch $150.00 + $10.00 = $160.00
(5) 1 ½ inch $200.00 + $10.00 = $210.00
(6) 2 inch $300.00 + $10.00 = $310.00
(7) 3 inch to compound meter $300.00 + $10.00 = $310.00
(8) Public schools and county community colleges are subject to commercial rates, but shall not be required to make a water and/or sewer deposit as required by this section.
(9) Fire Hydrant Meter
(A) Deposit ~~$1,000.00~~ $1,500.00
(B) Monthly $25.00
(C) Usage $2.75/1,000 gallons

(1994 Code of Ordinances, Chapter 11, Article 11.500, Section 11.504)

Sec. 10.700 Water Rates - Within City

The following schedule of water charges for residential, commercial, industrial, and multi-family complex customers shall be effective with the first billing of October 2011:

Minimum monthly water charge (no gallons) for residential, commercial, and industrial customers:

Meter Size:	Equivalent Units	Minimum Monthly Meter Charge:
⅝ or ¾ inch water	1	$19.60
1-inch water meter	2.5	$49.00
1 ½ inch water meter	5	$98.00
2-inch water meter	8	$156.80
3-inch water meter	16	$313.60
4-inch water meter	25	$490.00
6-inch water meter	50	$980.00
8-inch water meter	80	$ 1,568.00
10-inch water meter	125	$2,450.00

(1) Multi-family complexes shall be charged a minimum monthly water charge equal to the greater of
(a) the minimum bill for a ⅝ inch meter, multiplied by the number of units, or
(b) the minimum monthly meter charge for the size meter(s) serving the account.

(2) A variable rate volume charge of two dollars and fifty cents ($2.50) shall be charged per each one thousand (1,000) gallons usage. No gallons are included with the monthly minimum charge.

(3) Example of the calculation of a multi-family complex monthly water bill:
Two hundred apartment units with an 8" meter and 600,000 gallons of usage.

	Min. charge for 8" meter	$1,568.00	
	200 units @ $19.60 each	0.00	$3,920.00
	600,000 gallons @ $2.50/1000	$1,500.00	$1,500.00
		$3,068.00	$5,420.00

Therefore $5,420.00 would be billed. ($5,420.00 ÷ 200 = $27.10)

(4) For the purpose of encouraging water conservation, there shall be a 25% increase in the water volume rate for monthly usage in excess of 15,000 gallons by residential and commercial accounts. Usage in excess of 30,000 shall be subject to an additional 25% increase. These increases will not be assessed to industrial or multi-family accounts.

For example:

0 to 14,999 gallons	$2.50 per 1,000
15,000 to 29,999 gallons	$3.10 per 1,000
30,000 gallons or more	$3.90 per 1,000

(5) A discount for senior citizens (age 65 or over) of $1.74 per month shall be applied to each qualified residential account.

(Resolution 2011-09-80 adopted 9/12/11, effective October 1, 2011)

Sec. 10.800 Water Rates-Outside City

Effective with the first billing cycle of October 1992, the rates or sales of water to customers outside the city limits of Lancaster, Texas, will be determined by multiplication of the rates set out in Chapter 13, Article 13.500, Section 13.504 by one hundred fifteen (115) percent. (1994 Code of Ordinances, Chapter 11, Article 11.500, Section 11.505).

Sec. 10.900 Imposition of Lien for Water Service Charges

In the event that payment of charges for water and/or sewer services furnished by the city is not made by the date specified for cutoff in accordance with the notice sent pursuant to Chapter 13, Article 13.500, Section 13.508, service shall be discontinued. Any customer whose water and/or sewer services are discontinued due to nonpayment may have services resumed by paying all accrued and overdue charges, including the late charge penalty and a reconnection charge as follows: (1994 Code of Ordinances, Chapter 11, Article 11.500, Section 11.509).

(1)	Reconnect Fee (Cutoff)	$45.00
(2)	Reconnect Fee (Cutoff) After 5 p.m.	$55.00
(3)	Late Fee	7% of balance due
(4)	NSF Check	$35.00
(5)	Extra Trip Charge (New Connects and Reconnects)	$25.00

(Ordinance No. 2007-01-01 adopted 01/22/07)

Sec. 10.1000 Wastewater Treatment Services User Charges

The following schedule of charges for residential, commercial, industrial and multi-family complex customers shall be effective with the first billing cycle of October 2011:

(1) Minimum monthly sewer charge (no gallons of usage) for residential, commercial, and industrial is fourteen dollars and ten cents ($14.10) per connection.

(2) Minimum monthly sewer charge for each dwelling unit of a multi-family complex (no gallons) is seven dollars and twenty-five cents ($7.25) per unit.

(3) Variable rate per one thousand (1,000) gallons of water usage for residential, commercial, industrial, and multi-family complexes is seven dollars and twenty-five cents ($7.25).

(4) The total monthly amount due for "all" sewer accounts shall be the sum of the minimum monthly sewer charge plus the variable rate times the user's water usage for the month. The maximum monthly "residential customer" volume charges shall be based on the average of the three lowest monthly bills in the last twelve. Normally these will be the reading cycles ending in January, February, and March. However, the utility billing department may adjust this forwards or backwards one month.

Industrial and commercial users that install a separate sewer metering system shall be charged for volume according to that meter, plus the minimum rate.

(5) The practice of discounting the computed sewer usage to 95% and 90% as detailed in the Lancaster Code of Ordinances Section 11.608(b) and 11.609(b); was discontinued in 2008.

(6) A discount for senior citizens (age 65 or over) of $0.76 per month shall be applied to each qualified residential account.

(Resolution 2011-09-80 adopted 9/12/11, effective October 1, 2011)

Sec. 10.1100 Water Impact Fee

(Reference Tables 1, 2, 3 and 11 of Ordinance)
(Ordinance 2004-09-27 adopted 9/27/04)

Water Impact Fees are imposed upon any new development (which includes expansion of existing facilities) to generate revenue for funding or recouping the costs of capital improvements or facility expansions to these systems necessitated by or attributable to the new developments' demand on these systems. The Water Impact Fees are calculated using Service Units, which are a standardized measure of consumption, use, generation or discharge attributable to an individual living unit equivalent (LUE) of development calculated in accordance with generally accepted engineering or planning standards for water systems' capital improvements or facility expansion. The total impact fee due is based on the meter size(s) used by the development. The meter size is determined by the City of Lancaster within the meter manufacturers optimum flow range based on flows required by the development.

Sec. 10.1200 Sewer Impact Fee

(Reference Table 3.5 of Ordinance)
(Ordinance 2006-07-22 adopted 7/10/06)

Sewer (Wastewater) Impact Fees are imposed upon any new development (which includes expansion of existing facilities) to generate revenue for funding or recouping the costs of capital improvements or facility expansions to these systems necessitated by or attributable to the new developments' demand on these systems. The Sewer Impact Fees are calculated using Service Units, which are a standardized measure of consumption, use, generation or discharge attributable to an individual living unit equivalent (LUE) of development calculated in accordance with generally accepted engineering or planning standards for sewer systems' capital improvements or facility expansion. The total impact fee due is based on the meter size(s) used by the development. The meter size is determined by the City of Lancaster within the meter manufacturers optimum flow range based on flows required by the development.

Sec. 10.1300 Roadway Impact Fee

(Reference Exhibit B of Ordinance)
(Ordinance 2003-12-42 adopted 12/8/03)

Roadway Impact Fees are imposed upon any new development (which includes expansion of existing facilities) to generate revenue for funding or recouping the costs of capital improvements or facility expansions to these systems necessitated by or attributable to the new developments' demand on these systems. The Roadway Impact Fees are calculated using Service Units, which are a standardized measure of consumption or use (supply and demand) of the roads in the city by new development and are calculated in accordance with generally accepted engineering or planning standards for Roadway Systems' capital improvements or facility expansion. The total impact fee due is determined by the land use, the location of the development, and the square footage of the building.

Sec. 10.1400 Inspections

(a)	Backflow	$ 25.00	
(b)	Sewer	$150.00	
(c)	Final Televised lateral inspection	$ 50.00	

Sec. 10.1500 Calibrations

(a)	Pipe < 1 inch	$ 50.00	
(b)	Pipe < 1 inch and < 3 inches	$ 50.00	
(c)	Pipe > = 3 inches	$100.00	Contracted price plus 25%

(Ordinance 2002-10-38 adopted 10/14/02)

Sec. 10.1600 Reserved for future use.

CITY OF LANCASTER FEE SCHEDULE

Sec. 10.1700 Garbage Collection Fees

(a) Residential $13.84

Once weekly refuse collection/disposal
Every other month brush/bulk item collection
Bi-weekly recycling collection/processing

(b) Administrative Processing Fee $ 2.50

(c) Extra cart *Effective 01/01/2010*

2nd cart	$10.00
3rd cart	$15.00
4th cart	$20.00

(d) Commercial Hand Collect $17.96

Once weekly refuse collection/disposal

(e) Special Pick Up $65.00 minimum

(f) Commercial Containers

Size	1 X WK	2 X WK	3 X WK	4 X WK	5 X WK	6 X WK	EXTRA
2YD	$64.04	$118.50	$164.83	$204.20	$237.66	$266.17	$27.44
3YD	$73.24	$135.51	$188.49	$233.55	$271.83	$304.47	$41.17
4YD	$91.56	$169.46	$235.65	$292.00	$339.91	$380.66	$54.89
6YD	$109.96	$203.47	$283.01	$350.71	$408.27	$457.29	$68.60
8YD	$137.48	$254.39	$353.89	$438.51	$510.49	$571.77	$82.32

(Resolution 2011-09-79 adopted 09/12/11, effective 10/01/11)

~~(g) Industrial Containers~~

~~(1) Open top roll-off container rates, per customer:~~

~~(A) Delivery Charge~~	~~$ 75.00~~
~~(B) Daily rental (all sizes)~~	~~$ 2.00~~
~~(C) Twenty (20) Cubic Yard Container (Disposal per haul)~~	~~$250.00~~
~~(D) Thirty (30) Cubic Yard Container (Disposal per haul)~~	~~$250.00~~
~~(E) Forty (40) Cubic Yard Container (Disposal per haul)~~	~~$250.00~~

~~(2) Portable Packing Unit and Detachable Container~~

~~(A) Delivery Charge~~	~~N/A~~
~~(B) Daily rental after first day Equipment Specific~~	
~~(C) 42 Cubic Yard Container~~ (Disposal per haul)	~~$284.00~~

~~(1994 Code of Ordinances, Chapter 11, Article 11.1200, Section 11.1210)~~

Sec. 10.1800 Wastewater Discharge

There is hereby established a wastewater discharge permit fee of $450.00 for a three year term by the Water/Wastewater Superintendent of the City of Lancaster. (1994 Code of Ordinances, Chapter 1, Article 11.1300, Section 11.1300)

Sec. 10.1900 Fees for Cuts to Streets, Alleys, Sidewalks and Drainage Structures

In the event any street, highway or roadway must have an open cut and is approved by the City Engineer in writing for the purpose of installing water or wastewater laterals, or utility repair by a Franchise Utility Company or their subcontractor, a fee of four dollars and fifty cents ($4.50 sq. ft.) per square foot, with a minimum one hundred dollar ($100.00) fee will be charged in advance for replacement of such open cut by the city. This fee will be reimbursed if the excavation is restored to like or better condition.

ARTICLE 11.000 PLANNING AND ZONING RELATED FEES

Sec. 11.100 Reserved for Future Use

Sec. 11.200 Reserved for Future Use

Sec. 11.300 Zoning Board of Adjustment

(a)	Variance Request	$250.00

Sec. 11.400 Plats

(a)	Preliminary Plat	
	50 acres or less	$500.00 + $50.00 per acre
	More than 50 acres	$1000.00 + $100.00 per acre
(b)	Final Plat	$500.00 + $10.00 per lot
(c)	Re Plat	
	With property owner notification	$575.00 + $35.00 per acre
	Without property owner notification	$450.00 + $35.00 per acre
(d)	Amended Plat	$200.00 + $10.00 per acre
(e)	Minor Plat	$400.00
(f)	Plat Vacations	$500.00

Sec. 11.500 Zoning

(a)	General Zoning Change	$500.00 + $10.00 per acre
(b)	Specific Use Permit	$500.00 + $10.00 per acre
(c)	Private Club Permit	$350.00

(d)	Amendment to SUP	$500.00 + $10.00 per acre
(e)	Planned Development	$1500.00 + $10.00 per acre
(f)	Amendment to Planned Development	$1,500.00 + 10.00 per acre
(g)	Exceptions	$250.00

Sec. 11.600 Other Planning & Zoning Fees

(a)	Site Plan Review	$250.00 + $10.00 per acre
(b)	Tree Survey Review	$25.00
(c)	Illegal Tree Cutting Fine	$125.00 per diameter inch
(d)	Dedication/Abandonment of Right-of-Way or Easements	$150.00 per development for first 5 + $25.00 for each additional document
(e)	Consultant Fees	Hourly Rate of Consultant
(f)	Zoning Verification Letter	$50.00
(h)	Subsequent Legal Notices after 1st	$15.00 per additional notice

Sec. 11.700 Maps, Publications and Miscellaneous Fees

(a)	Comprehensive Plan	$48.00
(b)	Copying – 8½" x 11", or 8½" x 14"	$0.10 per page. Any request for more than 20 pages may be sent to an outside duplicating facility at requestor expense.
(c)	Lancaster Development Code (Zoning Ordinance and Subdivision Regulations)	$45.00
(d)	Zoning Map (24" x 36")	$20.00

ARTICLE 12.000 MUNICIPAL COURT

Sec. 12.100 Municipal Court Building Security Fund

Any defendant convicted in the municipal court of the City of Lancaster of a misdemeanor offense that occurs after September, 1997 or the passage of this article, shall pay a $3.00 security fee as a cost of court. The term "convicted" includes any convictions obtained by way of a plea of guilty, a trial and any cases, deferred adjudication, probation or pretrial diversion in order for the defendant to take advantage of one of the alternative programs offered by the municipal court including, but not limited to a driving safety course, deferred adjudication, alcohol awareness and shoplifters alternative. (1994 Code of Ordinances, Chapter 8, Article 8.100, Section 8.1600)

Sec. 12.200 Municipal Court Technology Fund

A defendant convicted of a misdemeanor offense in the municipal court in the City of Lancaster shall pay a technology fee not to exceed four dollars for each conviction as a cost of court. The Municipal Court Clerk shall collect the costs and pay the funds to the Finance Director for deposit in a fund to be known as the "Municipal Court Technology Fund".
(Ordinance 2002-03-12 adopted 3/2/02)

ARTICLE 13.000 ADMINISTRATIVE FEES

Public Information Charges

(a) copies, standard paper copy — $0.10 per page
For standard paper copies reproduced by means of an office machine copier or a computer printer. Each side that has recorded information is considered a page.

(b) copies, nonstandard copy. The charges in this section are to cover the materials onto which information is copied and do not reflect any additional charges, including labor, that may be associated with a particular request. The charges for nonstandard copies are:

(A) Diskette	$1.00
(B) Magnetic tape	actual cost
(C) Data cartridge	actual cost
(D) Tape cartridge	actual cost
(E) Rewritable CD (CD-RW)	$1.00
(F) Non-rewritable CD (CD-R)	$1.00
(G) Digital video disc (DVD)	$3.00
(H) JAZ drive	actual cost
(I) Other electronic media	actual cost
(J) VHS video cassette	$2.50
(K) Audio cassette	$1.00
(L) Oversize paper copy (11 inches by 17 inches, greenbar, bluebar, not including maps and photographs using specialty paper)	$0.50
(M) Specialty paper (Mylar, blueprint, blueline, map, photographic)	actual cost

(c) Microfiche and Microfilm	actual cost of reproduction
From Master copy of Microfilm	$0.10 per page

(d) Computer Resource Charge	
Mainframe	$10 per CPU minute
Midsize	$1.50 per CPU minute
Client/Server	$2.20 per clock hour
PC or LAN	$1.00 per clock hour

(e) Other Public Information Charges

(A) Computer Programmer	$28.50 per hour
(B) Personnel Charge (50 or more pages)	$15.00 per hour
(C) Overhead Charge (50 or more pages)	20% of personnel charge
(D) Remote Document Retrieval Charge	actual cost
(E) Miscellaneous Supplies (labels, boxes)	actual cost
(F) Postage and Shipping Charge	actual cost
(G) Miscellaneous (credit card transaction fee)	actual cost

(f) Certified or Attestation under City Seal $2.50

(g) Finance

(1) Return Check Fee	$35.00 per check
(2) Budget Book	$106.00 per book
(3) CAFR	$50.00 per book
(4) Copies – printouts (computer generated)	$0.25 per page

(h) Special Events

(1)	Application Fee	$25.00 (applications submitted 31 days prior to event)
(2)	Expedited Review Fee	$25.00 (expedited fee for applications received within 30 days of the event)
(3)	Street Barricade Rental Fee	1 to 25 barricades $15.00 25 to 50 barricades $30.00 50+ barricades; will require contract services
(4)	Street Cones Rental Fee	1 to 25 cones $10.00 25 to 50 cones $20.00 50+ cones; will require contract services
(5)	Barricade Replacement Fee	$62.00 per barricade
(6)	Cone Replacement Fee	$39.00 per cone

(7) Reimbursable Costs: Fees associated with City of Lancaster service provision at the request of the applicant will be calculated by the applicable department based on the associated reimbursable cost, the service/equipment requested, and the length of time the service is needed.

(Ordinance 2004-06-18 adopted 6/14/04)

ARTICLE 14.000 POLICE DEPARTMENT

(a) Alarm System Permit Fees

Alarm System Permit Fees

Registration Fee – Residential	$ 50.00
Registration Fee – Commercial	$100.00

CITY OF LANCASTER FEE SCHEDULE

Senior Rate (65 or older) – Residential only	Exempt*
Renewal Fee – Residential	$ 50.00
Renewal Fee – Commercial	$100.00
Senior Rate (65 or older) – Residential only	Exempt*
Late Fee after 30 days notice for registration	$ 25.00
Late Fee After 30 days notice for renewal	$ 25.00
False Alarms with Permit within 12 month period:	
1-3	No Charge
4-5	$ 50.00
6-7	$ 75.00
8 or more	$100.00 each
False Alarms without Permit within 12 month period:	
1-3 Residential	$100.00 each
1-3 Commercial	$200.00 each
4-5 Commercial	$250.00 each
6-7 Residential	$175.00 each
6-7 Commercial	$275.00 each
8 or more – Residential	$200.00 each
8 or more – Commercial	$300.00 each
Late Payment for Non-payment within 30 days after notification	$25.00
False Robbery Alarms within 12 month period:	
1-3	$100.00
4 or more	$200.00
Late Fee for Each False Robbery Alarm not paid within 30 days after notification	$25.00
Appeal:	
Appeal Hearing Fee*	$25.00
*(Fee shall be refunded, in its entirety, if appeal is upheld)	
Reinstatement:	
Reinstatement Fee	$50.00

(Resolution 2007-02-22 adopted 2/26/07)

(b) Accident Reports

(1) Regular Copy	$6.00 per report
(2) Certificate of Regular Copy	Addl. $2.00 per report
(3) Certificate with no information or report on file	$6.00 per report
(c) Offense Reports	$0.10 per page
(d) Fingerprinting	
(1) First two (2) fingerprint cards	$10.00
(2) Per fingerprint card thereafter	$ 5.00

(Resolution 2004-12-102 adopted 12/13/04)

ARTICLE 15.000 PARKS AND RECREATION

Sec. 15.100 Memberships

(a) Annual Membership Fees (Valid for 1 year from date of purchase)

1. Recreation (JR) ID Card – (Under 5 yrs)	Free w/ purchase of adult rec ID card	Must be accompanied by an adult over 18 years of age
2. Recreation ID Card - Youth (5-16 yrs)	$10/yr Resident $20/yr Non Resident	Provides access to use of gymnasium and walking track during designated hours.
3. Recreation ID Card - Adult (17-49 yrs)	$20/yr Resident $30/yr Non Resident	Provides access to use of gymnasium and walking track during designated hours.
4. Seniors (50 + years)	$15/yr Resident $20/yr Non Resident	Provides access to use of gymnasium and walking track during designated hours.
5. Daily Fitness Atrium Admission (17 years and older)	$5/day	Provides access to fitness atrium during designated hours. Must have current recreation ID card.
6. Monthly Fitness Atrium Membership (17 years and older)	$20 Resident $25 Non Resident	Provides access to the fitness atrium during designated hours. Must have current recreation ID card to purchase a fitness membership.

7. Annual Fitness Atrium Membership (17 years and older)	$160 Resident $200 Non Resident	Provides access to use the gymnasium, walking track and the fitness atrium during designated hours. Annual Fitness Atrium membership includes recreation ID card.
8. Open Swim Admission	$5/ day	Provides access to use of pool during designated hours
9. Daily Fitness Swim Admission (17 years and older)	$3/ day	Provides access to use of pool during designated hours (Must have current recreation ID card).
10. Monthly Fitness Swim Membership (17 yrs and older)	$15 Resident $20 Non Resident	Provides access to use of pool during designated hours (Must have current recreation ID card).
11. Annual Fitness Swim Membership (17 years and older)	$120 Resident $160 Non Resident	Provides access to use of pool during designated hours. Annual Fitness Swim membership includes recreation ID card.
12. Annual Senior Center Membership (50 + years)	$3 Resident $5 Non Resident	Provides access to the Senior Center facility and programming.

(b) Corporate Membership Rates

	Agency	Individual
(1) Corporate A (5-9)	$125.00	$100.00
(2) Corporate B (10+)	$225.00	$100.00

Sec. 15.200 Rental Facilities

(a) Athletic Fields

Deposit	$50.00
(1) Cedardale Field Rental/ hour	$20.00 2 hr minimum Resident $30.00 2 hr minimum Non Resident
(2) City Park Field Rental/ hour	$20.00 2 hr minimum Resident $30.00 2 hr minimum Non Resident
(3) Royce Clayton Ballpark/ hour	$20.00 2 hr minimum Resident $30.00 2 hr minimum Non Resident
(4) Youth Football/ hour	$20.00 2 hr minimum Resident

		$30.00 2 hr minimum Non Resident
(5)	Soccer Field/ hour	$20.00 2 hr minimum Resident
		$30.00 2 hr minimum Non Resident

Additional fees for field rentals (i.e. lights, lining fields, concessions, etc.) will be determined by the Parks and Recreation Director, based on cost incurred by the City.

(b) Community House

Deposit	Resident	$150.00	Non Resident	$150.00

(1) 4 hour rental Resident	$175.00
(2) 4 hour rental Non Resident	$250.00
(3) 6 hour rental Resident	$225.00
(4) 6 hour rental Non Resident	$300.00

(c) Gymnasium

Deposit	Resident	$100.00	Non Resident	$100.00

(1) ½ Gym	$50/hour Resident $65/ hour Non Resident	4 hours min. after operating hours.
(2) Full Gym	$75/hour Resident $90/ hour Non Resident	4 hours min. after operating hours.
(3) Full Gym Tournament Fee	$100/hour Resident $125/ hour Non Resident	4 hours minimum after operating hours. Allows gate fees charged by renter. Must reserve entire gymnasium.

(d) Outdoor Facility

Deposit	Resident	$75.00	Nonresident	$100.00

(1) City Park Pavilion 1

8 am - 12 noon or 1 pm - 5 pm

(A) Resident $75.00

(B) Non Resident $100.00

(2) City Park Pavilion 2

8 am – 12 noon or 1 pm - 5 pm

(A) Resident $75.00

(B) Non Resident $100.00

(3) Community Park Pavilion

8 am – 12 noon or 1 pm - 5 pm

(A) Resident $75.00

(B) Non Resident $100.00

(4) Heritage Park Gazebo

8 am – 12 noon or 1 pm - 5 pm

(A) Resident $50.00

(B) Non Resident $75.00

(5) Kid Square Park Pavilion

8 am – 12 noon or 1 pm - 5 pm

(A) Resident $75.00

(B) Non Resident $100.00

(6) Bear Creek Park Pavilion

(A) Resident $75.00

(B) Non Resident $100.00

(7) Rocky Crest Park Pavilion

(A) Resident $50.00

(B) Non Resident $75.00

(8) Meadowcreek Park Pavilion

(A) Resident $50.00

(B) Non Resident	$75.00

(8) JA Dewberry Park Pavilion

(A) Resident	$50.00
(B) Non Resident	$75.00

(e) Pool

(1) Indoor Pool Reservations	Resident	Non Resident
Deposit	$75.00	$75.00
(A) Party Room (Semi-Private) 2 hr	$100.00	$125.00
(B) Private Party A (1-50) 2 hr	$200.00	$250.00
(C) Private Party B (51-100) 2 hr	$250.00	$300.00
(D) Private Party C (101-150) 2 hr	$300.00	$350.00
(E) Private Party D (151 +) 2 hr	$350.00	$400.00

(f) Recreation Center

(1) Grand Banquet Hall	Resident	Non Resident
Deposit	$250.00	$250.00
Set-up Fee	$ 50.00	$ 50.00
Kitchen	$ 30.00/hour	$ 30.00/hour
1,100 sq. ft.	$50.00/hour	$75.00/hour
2,200 sq. ft	$75.00/hour	$100.00/hour
3,300 sq. ft	$100.00/hour	$125.00/hour

(2)	Aerobic Dance Room/hour	$40.00/hr Resident	$60.00/hr Non Resident
(3)	Classroom/hour	$30.00/hr Resident	$50.00/hr Non Resident
(4)	Conference Room/hour	$20.00/hr Resident	$40.00/hr Non Resident

(g) Senior Life Center

~~The kitchen is included in the rental price.~~

Kitchen	$30.00/hour Resident	$30.00/hour Non Resident

Deposit	Resident	$250.00	Nonresident	$250.00

(1)	4 Hour Rental	$400 Resident $500 Non Resident
(2)	6 Hour Rental	$600 Resident $750 Non Resident

(h) Non-Profit - For meetings only

(1)	Deposit	$75.00/hour
(2)	Classroom/Youth Room	$20.00/hour
(5)	3,300 square feet (Grand Hall)	$50.00/hour
(6)	Conference Room	$10.00/hour

(i) Lancaster Youth and Adult Sports Association Fee

(All Participants must purchase recreation ID card)

Player participation fee per season $ 15.00

(j) Programs

Individual Recreation Classes	Range from $5 - $25	per class/ per day
Recreation Programs	Range from $15 - $100	Programs vary by week or by month.

ARTICLE 16.000 AIRPORT FEES

(a) Hangar Rental

(1)	956 sq. ft. (small T-hangar)	$170.00
(2)	1,018.25 sq. ft. (medium T-hangar)	$192.00
(3)	1,624.33 sq. ft. (large T-hangar)	$280.00

(b) Community Hangar Rental (formatting changes only)

(1)	956 sq. ft. (small T-hangar)	$85.00
(2)	1,018.25 sq. ft. (medium T-hangar)	$96.00
(3)	1,624.33 sq. ft. (large T-hangar)	$140.00

(c) Other Airport Fees

(1) Ground Lease (Improved)	~~$0.25 per square foot per year~~ $0.30 per square foot per year
(2) Ground Lease (Unimproved)	~~$0.15 per square foot per year~~ $0.20 per square foot per year
(3) Tenant Lease	$12 per square foot per year
(4) Fuel Flowage Fee	~~$.10 per delivered gallon~~ $0.20 per delivered gallon
(5) Sales	5% of Gross Sales

(Ordinance 2003-10-32 adopted 10/27/03)
(Resolution 2009-04-41 adopted April 13, 2009)

CITY OF LANCASTER FEE SCHEDULE
ARTICLE 17.000 DEVELOPMENT FEES

	Building Fee	Engineering Fee	Planning Fee
(a) Abandonment			
Driveway, Drive Approach, Curb, Gutter and Sidewalk Permit Fees (bond required)			
(1) Residential Zones Repair/Replacement	$25.00	N/A	N/A
(2) Residential Zones, New Construction	$35.00	N/A	N/A
(3) Nonresidential Zones, per Approach	$35.00	N/A	N/A
(b) Annexations	N/A	N/A	$1,000.00 plus filing fee
(c) Appeals to Zoning Board of Adjustments	N/A	N/A	N/A
(d) Building Permits (Single-Family Residence, Duplex, Multi-Family, Apartment, Condominium & Townhouse, Commercial and remodels) Fees Assessed Per Address			
(e) Consultant Fee-Supplemental	N/A	N/A	N/A

CITY OF LANCASTER FEE SCHEDULE

	Building Fee	Engineering Fee	Planning Fee
(f) Design/Plan Review			
Commercial and Industrial Projects Amendments (Commercial & Industrial) Residential Projects, Amendments (Residential), Minor Design Review	65% of the building permit fee. Section titled "Building Permit" in this schedule	N/A	N/A
(g) Plats			
(1) Preliminary Plat			
Fifty (50) acres or less			$500.00 + $50.00/acre
More than fifty (50) acres			$1,000.00 + $100.00/acre

	Building Fee	Engineering Fee	Planning Fee
(2) Final Plat			$500.00 + $10.00/lot
(3) Re-Plats			
Plat revision with property owner notification			$575.00 + $35.00/acre
Plat revision without property owner notification			$450.00 + $35.00/acre
(4) Amended Plats			
Amended Plats Correcting Errors			$400.00

(5) Plat Vacations

Plat Vacation increasing lots	$200.00 + $10.00/acre
All other plat vacations	$500.00

(6) Miscellaneous Plat Items

Dallas County Clerk's Recording Fee	$33.00 1st page $10.00 subsequent page

(7) Re-Plats $400.00

(1994 Code of Ordinance, Chapter 9, Article 9.100, Section 9.106)

(h) Development Inspection Fees

	Building Fee	Engineering Fee	Planning Fee
(1)	Special Inspection $47.00 per hour, minimum 2 hours	1.5%-3.5% estimated cost of improvements intended for dedication to the city for water, sewer and streets. Effectively Immediately = 1.5% Effective January 1, 2004 = 3.5% Each additional hour $47.00 per hour	N/A
1.	Inspection 2 hours - Travel time of job site and return time to be included outside of normal business hours (min. charge) $47.00 per hour	N/A	N/A
2.	Re-inspection fees assessed under provisions of Section 305.8 $47.00 per hour	N/A	N/A

3. Inspection for which no fee is specifically indicated (min. charge – one half hour) $47.00 per hour		N/A	N/A
4. Additional plan review required by changes, additions or revisions to plans (min. charge- one-half hour) $47.00 per hour		N/A	N/A
(2) Miscellaneous Case	N/A	N/A	$100.00
(3) Planned Development Review	N/A	N/A	$1,500.00 plus $10.00 per acre
	Building Fee	Engineering Fee	Planning Fee
(4) Park Fee in Lieu of	N/A	N/A	$1,400.00 per dwelling unit
Dedication (including single-family, dual family, and multi-family residential areas)			(Ord. 2006-10-41 adopted 10/23/06)
(h) Signs (Sec. 3.100 Fee Adopted – Lancaster City Code)			
(1) Permanent Signs, Per Face Based on Sign Area	Table A	N/A	N/A
(2) Temporary Portable Signs, Flags, banners, etc. (good for two weeks)	$25.00	N/A	N/A

(3) Sign contractor registration	$100.00	N/A	N/A
(i) Site Plan Review	N/A	N/A	$250.00 plus $10 per acre
(l) Subdivision Name Change	N/A	N/A	$200.00
(m) Street Lighting Escrow	N/A	N/A	N/A
(n) Tree Survey/Preservation Plan	N/A	N/A	$25.00 administration processing fee with $125.00 per inch mitigation fee

CITY OF LANCASTER FEE SCHEDULE
Revision References

Effective October 1, 2007 (annual update)
Resolution 2007-09-108

Revised January 14, 2008 (revised water/waste water services rate)
Resolution 2008-01-07

Revised June 23, 2008 (revised garbage collection fees)
Resolution 2008-06-54

Revised September 8, 2008 (revised water service rate)
Resolution 2008-09-82

Revised September 8, 2008 (revised waste water service rate)
Resolution 2008-09-83

Effective October 1, 2008 (annual update)
Resolution 2008-09-84

Revised October 27, 2008 (Multi-Family Rental Property Registration and Inspection Fee)
Resolution 2008-10-91

Revised November 10, 2008 (Food Inspections & Administrative Fee)
Resolution 2008-11-100

Revised December 8, 2008 (Irrigation Permit Fee)
Resolution 2008-12-105

Revised April 13, 2009
Resolution 2009-04-41 (Municipal Airport Fees)

Revised April 27, 2009
Resolution 2009-04-51 (Cargo Container Fees)

Effective October 1, 2009 (annual update)
Resolution 2009-08-84

Revised October 26, 2009
Resolution 2009-10-102 (revised park land dedication fee per ordinance 2006-10-41)

Revised December 14, 2009
Resolution 2009-12-125 (revised Sec. 10.1700 Garbage Collection Fees)

Amended February 8, 2010
Resolution 2010-02-11 (amended Article 9.000 Drainage Utility Systems Fees to reflect Rates as adopted 10/14/02 Ordinance No. 2002-10-41)

Revised March 22, 2010
Resolution 2010-03-27 (revised Article 9.000 Drainage Utility System Fees)

Revised June 28, 2010
Resolution 2010-06-58 (repealed cargo container fee for agricultural purposes)

Revised June 28, 2010
Resolution 2010-06-59 (established Wind Energy System Permit Fee; Ordinance No. 2010-04-09)

~~*Resolution 2010-09-75; (repealed in its entirety)*~~

Effective October 1, 2010 (annual update)
Resolution 2010-09-82 (corrected Section 10.700 Water Rates – Within City)

Revised November 8, 2010
Resolution 2010-11-93 (adds fee for Local Alcohol Permit)

Revised September 12, 2011
Resolution 2011-09-79 (revised Sec. 10.1700 Garbage Collection Rates)

Revised September 12, 2011
Resolution 2011-09-80 (revised Sec. 10.700 Water Rates –Within City and Sec. 10.1000 Wastewater Treatment Services User Charges)

Effective October 1, 2011 (annual update)
Resolution 2011-09-81

Effective October 10, 2011 (revised Sec. 4.400 Food Service Establishments fees)
Resolution 2011-10-86

CITY OF LANCASTER FEE SCHEDULE

Effective February 27, 2012
Resolution 2012-02-17 (revised Article 16.000 Airport Fees to add rental rates for community hangars)

LANCASTER CITY COUNCIL
Agenda Communication for
July 23, 2012

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AG12-001

Consider approval of minutes from the City Council Regular Meeting held July 9, 2012.

Background

Attached for your review and consideration are minutes from the:

- City Council Regular Meeting held July 9, 2012

Prepared and submitted by:

Dolle K. Downe, City Secretary
July 11, 2012

MINUTES

LANCASTER CITY COUNCIL MEETING OF JULY 9, 2012

The City Council of the City of Lancaster, Texas, met in Regular session in the Council Chambers of City Hall on July 9, 2012 at 7:00 p.m. with a quorum present to-wit:

Councilmembers Present:
Mayor Marcus E. Knight
Walter Weaver
Stanley Jaglowski
Mayor Pro Tem Marco Mejia
LaShonjia Harris
Nina Morris

Councilmembers Absent:
Deputy Mayor Pro Tem James Daniels

City Staff Present:
Opal Mauldin Robertson, City Manager
Breanna Colvin, Community Relations Coordinator
Sean Johnson, Parks and Recreation Director
Dori Lee, Human Resources Director
Rona Stringfellow Govan, Managing Director Public Works / Development Services
Jim Brewer, Assistant Director Public Works / Development Services
Donald McKinney, Water/Waste Water Superintendent
Shwetha Pandurangi, City Engineer
Dolle Downe, City Secretary
Robert E. Hager, City Attorney

Call to Order:
Mayor Knight called the meeting to order at 7:00 p.m. on July 9, 2012.

Invocation:
Parks and Recreation Director Sean Johnson gave the invocation.

Pledge of Allegiance:
Mayor Knight led the pledge of allegiance.

Citizens Comments:
Joe Smith, 2609 Princeton, congratulated Mayor on re-election; offered a suggestion that the City place a locked suggestion box near the Utility Billing Department so that citizens can provide input.

James Lewis, 818 Katy Street, commented that when he ran for mayor he learned a lot regarding the election process; commented that 25 signatures are required on a petition form to be placed on the ballot in Lancaster, saying that discriminates against individuals with reading difficulties; stated he has talked to the state about this process and how it relates to those that cannot read and those with other disabilities; stated he promised some things when running for mayor and he intends to achieve those goals without being elected; stated some things should be changed in the City Charter.

Bill Mahone, 1026 Tracy Lane, stated he had received a check from the Recycle Bank program commenting that the program was sold to the City based on the Recycle Bank program in Carrollton; stated that he had reviewed the audio tape from that meeting and the program may sound great, but if participation is low then the rebate is low; commented that the City Manager could request information on the participation rate; asked Council to carefully review future contracts, stating that a check for $10 over two years was not sufficient when compared to the increase in costs.

Consent Agenda:
City Secretary Downe read the consent agenda.

1C. Consider approval of minutes from the City Council Special Meeting held June 22 & 23, 2012 and Regular Meeting held June 25, 2012.

2C. Consider Resolution 2012-07-49 adopting the Lancaster City Council Rules and Procedures, as amended.

3C. Consider Resolution 2012-07-50 authorizing the filing and agreement to accept the terms and conditions of a grant with the United States Department of Commerce, Economic Development Administration for investment assistance under the Economic Development Assistance Program Grant; authorizing the City Manager to act on behalf of the City of Lancaster in all matters related thereto; and agreeing the City of Lancaster will comply with the grant requirements of the United States Department of Commerce, Economic Development Administration, the Texas Commission on Environmental Quality, and the State of Texas.

MOTION: Councilmember Morris made a motion, seconded by Mayor Pro Tem Mejia, to approve consent items 1C - 3C. The vote was cast 6 for, 0 against [Daniels absent].

Councilmember Morris thanked Parks and Recreation Director Sean Johnson for the outstanding 4th of July event, commenting that it was an excellent celebration and commending Director Johnson for his and his staff's hard work.

At 7:10 p.m. Council recessed to go into Executive Session. At 7:14 p.m. the City Council convened into closed Executive Session pursuant to:

EXECUTIVE SESSION:

4. The City Council shall convene into closed executive session pursuant to:

(A) Section § 551.071 (2) of the TEXAS GOVERNMENT CODE to seek legal advice from the City Attorney and deliberate whether to retain special legal counsel concerning proposed Permit No. 42D, Texas Commission on Environmental Quality, Skyline Landfill, Ferris, Texas, expansion request; and

(B) Section § 551.071 (1) of the TEXAS GOVERNMENT CODE to consult with the City Attorney concerning Cause Number 3:12-cv-00064-B, styled J.S. Haren Company *v.* City of Lancaster.

5. Reconvene into open session. Consider and take appropriate action(s), if any, on closed/executive session matters.

The City Council recessed from Executive Session at 7:35 p.m. and reconvened into open session at 7:37 p.m.

With regard to Executive Session item 4(A):

MOTION: Mayor Pro Tem Mejia made a motion, seconded by Councilmember Harris, to authorize the City Manager to enter into a legal representation agreement with Lloyd Gosselink Rochelle & Townsend, PC in reference to expansion of Skyline Landfill located in Ferris, Texas, Permit MSW 42-D; and, to seek party status as read into the record by the City Attorney. The vote was cast 6 for, 0 against [Daniels absent].

With regard to Executive Session item 4(B):

MOTION: Councilmember Weaver made a motion, seconded by Councilmember Jaglowski, to authorize the City Manager to enter into a legal representation agreement with Fee, Smith, Sharp & Vitullo, LLP in Cause Number 3:12-cv-00064-B, J.S. Haren Company *v.* City of Lancaster, as read into the record by the City Attorney. The vote was cast 6 for, 0 against [Daniels absent].

MOTION: Councilmember Morris made a motion, seconded by Mayor Pro Tem Mejia, to adjourn. The vote was cast 6 for, 0 against [Daniels absent].

The meeting was adjourned at 7:39 p.m.

ATTEST: **APPROVED:**

Dolle K. Downe, City Secretary

Marcus E. Knight, Mayor

LANCASTER CITY COUNCIL
Agenda Communication for
July 23, 2012

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AG12-002

Consider a resolution approving the terms and conditions of an Interlocal Agreement by and between the City of Lewisville, Texas, and the City of Lancaster for the cooperative purchase of goods and services.

This request supports the City Council 2011-2012 Policy Agenda.

Goal: Financially Sound City Government

Background

Staff requests approval of an Interlocal Agreement with the City of Lewisville for the purpose of purchasing items in a cost effective and expeditious manner. Each product or service has been bid and awarded based on Texas statutes.

Considerations

- **Operational** – An Interlocal Agreement allows staff to utilize other agencies' formally bid contracts. Each entity's formal bid process meets the requirements set forth in the statutes, including advertising, M/WBE participation, reference checks, verification of insurance and bonding, if required by specifications, and any other requirement.

  All legal requirements are verified by the Purchasing Agent prior to recommendation or use of a contract.

  Use of cooperative contracts allows Purchasing to meet the needs of City departments on a timely basis through the use of contracts that are in place. These contracts save time associated with issuing bids or in obtaining quotes. Additionally, savings is achieved through aggregate volumes either through joint bidding opportunities or by addressing the cooperative language within the specifications to the vendors.

- **Legal** – The use of cooperative agreements is in accordance with Section 791.001 of the Texas Government Code and 271.101 of the Texas Local Government Code.

- **Financial** – The use of cooperative bids through Interlocal Agreements provides a savings to the City, both in funding and time by allowing staff to use contracts that have already been bid by another entity.

- **Public Information** - There are no public information requirements.

Options/Alternatives

1. City Council may approve the resolution as presented.
2. City Council may reject the resolution and direct staff.

Recommendation

Staff recommends approval of the resolution as presented.

Attachments

- Resolution
- Interlocal Agreement

Prepared and submitted by:
Dawn Berry, Purchasing Agent

Date: July 9, 2012

RESOLUTION NO. 2012-07-51

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LANCASTER, TEXAS, APPROVING THE TERMS AND CONDITIONS OF AN INTERLOCAL AGREEMENT BY AND BETWEEN THE CITY OF LEWISVILLE AND THE CITY OF LANCASTER FOR THE COOPERATIVE PURCHASE OF GOODS AND SERVICES; AUTHORIZING THE CITY MANAGER TO EXECUTE THE AGREEMENT; DESIGNATING THE CITY MANAGER OR DESIGNEE AS THE OFFICIAL REPRESENTATIVE; REPEALING ALL RESOLUTIONS IN CONFLICT; PROVIDING A SEVERABILITY CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of Lancaster, Texas, pursuant to the authority granted under Section 791 of the Texas Government Code and Section 271 of the Texas Local Government Code, desires to participate in the cooperative agreement; and

WHEREAS, the City Council of the City of Lancaster, Texas, is of the opinion that participation in the agreement will be highly beneficial to the taxpayers through the efficiencies and potential savings to be realized;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LANCASTER, TEXAS:

SECTION I. That the terms and conditions of the Interlocal Agreement, attached hereto and incorporated herein by reference as Exhibit "A", having been reviewed by the City Council of the City of Lancaster and found to be acceptable and in the best interests of the City of Lancaster and its citizens are hereby in all things approved.

SECTION 2. That the City Council of the City of Lancaster, Texas hereby authorizes the City Manager to execute said agreement.

SECTION 3. That the City Council of the City of Lancaster, Texas hereby designates the City Manager or designee as the official representative.

SECTION 4. That any prior Resolution of the City Council in conflict with the provisions contained in this Resolution are hereby repealed and revoked.

SECTION 5. That should any part of this Resolution be held to be invalid for any reason, the remainder shall not be affected thereby, and such remaining portions are hereby declared to be severable.

SECTION 6. That this Resolution shall take effect immediately from and after its passage, and it is duly resolved.

DULY PASSED AND APPROVED by the City Council of the City of Lancaster, Texas, on this the 23rd day of July 2012.

ATTEST:

Dolle K. Downe, City Secretary

APPROVED:

Marcus E. Knight, Mayor

APPROVED AS TO FORM:

Robert E. Hager, City Attorney

INTERLOCAL AGREEMENT

This Interlocal Agreement ("the Agreement") is made and entered into by and between the CITY OF LEWISVILLE, TEXAS, a municipal corporation ("the CITY") and the CITY OF LANCASTER, TEXAS ("the CO-OP ENTITY"), each organized and existing under the laws of the State of Texas, and acting by, through and under the authority of their respective governing bodies and officials in accordance with the "Interlocal Cooperation Act," Chapter 791 of the Texas Government Code (the "Act").

WHEREAS, the CITY and the CO-OP ENTITY are both governmental entities engaged in the purchase of goods and services, which is a recognized governmental function; and

WHEREAS, the CITY and the CO-OP ENTITY wish to enter into this Agreement to set forth the terms and conditions upon which they may purchase various goods and services commonly utilized by each entity; and

WHEREAS, participation in this Agreement will be highly beneficial to the taxpayers of the CITY and the CO-OP ENTITY through the anticipated savings to be realized and is of mutual concern to the parties; and

WHEREAS, the CITY and the CO-OP ENTITY have current funds available to satisfy any fees owed pursuant to this Agreement.

NOW THEREFORE, the CITY and the CO-OP ENTITY, for and in consideration of the premises and the mutual covenants set forth in this Agreement, and pursuant to the authority granted by the governing bodies of each of the parties hereto, do hereby agree as follows:

1. The CITY and the CO-OP ENTITY may cooperate in the purchase of various goods and services commonly utilized by the parties, where available and applicable, and may purchase goods and services from vendors under present and future contracts;

2. The CITY and the CO-OP ENTITY shall each be individually responsible for payments directly to the vendor and for the vendor's compliance with all conditions of delivery and quality of the purchased items under such contracts. The CITY and the CO-OP ENTITY shall each make their respective payments from current revenues available to the paying party;

3. The Agreement shall be in full force and effect until terminated by either party;

4. Notwithstanding anything herein to the contrary, participation in this Agreement may be terminated by either party upon thirty (30) days written notice to the other party;

5. The undersigned officer and/or agents of the party(ies) hereto are duly authorized officials and possess the requisite authority to execute this Agreement on behalf of the parties;

6. This Agreement may be executed separately by the parties, each of which shall be deemed an original and all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement to be effective upon execution and dating by each party. This Agreement shall be effective from the last date signed and marked on this Agreement by a participating party.

APPROVED BY THE CITY OF LEWISVILLE, TEXAS:

BY: _____ DATE: 4-16-12

Claude King (or His Designee), CITY MANAGER

APPROVED AS TO FORM:

_____

Lizbeth Plaster, CITY ATTORNEY

APPROVED BY _____

BY:

_____ DATE: _____

ATTEST:

_____

LANCASTER CITY COUNCIL
Agenda Communication for
July 23, 2012

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AG12-003

Consider a resolution approving the terms and conditions of a professional services agreement with Dal-Tech Engineering, Inc. (Dal-Tech) to perform services in connection with the project known as the Danieldale Road Project for the reconstruction of Danieldale Road from IH 35E to Houston School Road; water and wastewater improvements on Danieldale Road from IH 35E to Houston School Road; and traffic signals and intersection improvements at Danieldale Road and Houston School Road; in an amount not to exceed $637,770.

This request supports the City Council 2011-2012 Policy Agenda.

Goal: Sound Infrastructure

Background

The City received federal grant funds in the year 2005, administered by the Texas Department of Transportation (TxDOT) and the North Central Texas Council of Governments (NCTCOG) totaling $1,876,600. The anticipated time frame for the completion of this project is as follows:

Design and Engineering services: July 2012 – June 2013
Right of Way acquisitions: August 2013 – October 2013
Construction: October 2013 – December 2014

The City of Lancaster is reviewing the project status with TxDOT to make sure that all City actions necessary on this project are being taken to proceed with the project in a timely manner. The City of Lancaster has also partnered with Dallas County who has agreed to participate in funding the project to aid in timely completion of the project.

The total project cost is estimated at approximately $5,200,000 and the City's participation is $3,200,000. The City currently has a total of $2,300,000 budgeted from the 2010 G.O. Bonds. Dallas County has partnered with the City of Lancaster to participate in funding the remainder of the City's costs on the project estimated at $1,000,000. Federal participation through grant amounts totaling at $1,900,000 will account for the remainder of the project costs.

A Request for Qualifications (RFQ) was issued in January-February 2011 to select an Engineering company to provide design on the Danieldale Road project. Dal-Tech Engineering, Inc. was selected to perform Engineering design on the project. Dal-Tech met with City staff and provided numerous cost saving options and provided a contract for professional services. Upon completion of design, Dal-Tech will assist the City in bidding of the project for contractor selection. In order to proceed with the project, Dal-Tech requires execution of the attached contract. The Scope of Work per the contract includes the reconstruction of Danieldale Road from IH 35E to Houston School Road, water and wastewater improvements, and a traffic signal at the intersection of Danieldale at Houston School Road.

Considerations

- **Operational** - The project will be managed by the Engineering Division. The design engineers, Dal-Tech Engineering, Inc. have a wide range of experience in street improvements projects. The project scope includes the reconstruction of Danieldale Road from IH 35E to Houston School Road, water and wastewater improvements, and a traffic signal at the intersection of Danieldale Road at Houston School Road. The project will be designed by the consultants and reviewed by Engineering Staff. The overall schedule is for design and right-of-way acquisition to be completed in the next year and for construction to follow.

- **Legal** – Following final review by the City Attorney, the professional services agreement with Dal-Tech will be executed by the City Manager.

- **Financial** – The City's funding is budgeted in the 2010 GO Bonds proceeds. The total fee for engineering services for Dal-Tech Engineering, Inc is estimated at a total of $637,770, which includes Basic Services, Special Services and Additional Services (if needed). The breakdown of these costs is included below and also in Attachment 1.

  Contract Fee Breakdown:

$ 329,690	Basic Services
$ 210,164	Special Services
$ 539,854	Total (Basic Plus Special Services)
$ 97,916	Additional Services (if needed)
$ 637,770	Total Engineering Design (Total Plus Additional Services)

- **Public Information** - There are no public information requirements.

Options/Alternatives

1. City Council may approve the resolution as presented.
2. City Council may reject the resolution and direct staff.

Recommendation

Staff recommends approval of the resolution as presented.

Attachments

- Resolution
- Dal-Tech Professional Services Agreement
- Map of project area

Prepared and submitted by:
Shwetha Pandurangi, P.E, CFM, City Engineer

Date: July 11, 2012

RESOLUTION NO. 2012-07-52

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LANCASTER, TEXAS, APPROVING THE TERMS AND CONDITIONS OF A PROFESSIONAL SERVICES AGREEMENT WITH DAL-TECH ENGINEERING, INC. (DAL-TECH) TO PERFORM SERVICES IN CONNECTION WITH THE PROJECT KNOWN AS THE DANIELDALE ROAD PROJECT FOR THE RECONSTRUCTION OF DANIELDALE ROAD FROM IH 35E TO HOUSTON SCHOOL ROAD; WATER AND WASTEWATER IMPROVEMENTS ON DANIELDALE ROAD FROM IH 35E TO HOUSTON SCHOOL ROAD; AND TRAFFIC SIGNALS AND INTERSECTION IMPROVEMENTS AT DANIELDALE ROAD AND HOUSTON SCHOOL ROAD IN AN AMOUNT NOT TO EXCEED $637,770; AUTHORIZING THE CITY MANAGER TO EXECUTE SAID AGREEMENT; PROVIDING A REPEALING CLAUSE; PROVIDING A SEVERABILITY CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, Dal-Tech Engineering, Inc. (Dal-Tech) will provide professional services to the City of Lancaster in connection with the Danieldale Road Project;

WHEREAS, the City Council of Lancaster desires to contract with Dal-Tech for the above referenced services;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LANCASTER, TEXAS:

SECTION 1. That the professional services agreement for a total amount not to exceed six hundred thirty seven thousand seven hundred seventy dollars ($637,770) by and between the City of Lancaster and Dal-Tech Engineering, Inc. (Dal-Tech), which is attached hereto and incorporated herein by reference as Exhibit "A", having been reviewed by the City Council of the City of Lancaster, Texas and found to be acceptable and in the best interest of the City and its citizens, be, and the same is hereby, in all things approved.

SECTION 2. That the City Manager is hereby authorized to execute said agreement as depicted in Exhibit "A".

SECTION 3. Any prior resolution of the City Council in conflict with the provisions contained in this resolution are hereby repealed and revoked.

SECTION 4. Should any part of this resolution be held invalid for any reason, the remainder shall not be affected thereby, and such remaining portions are hereby declared severable.

SECTION 5. That this resolution shall take effect immediately from and after its passage and it is so duly resolved.

DULY PASSED and approved by the City Council of the City of Lancaster, Texas, on this the 23rd day of July 2012.

APPROVED:

_____
Marcus E. Knight, Mayor

ATTEST:

_____
Dolle K. Downe, City Secretary

APPROVED AS TO FORM:

_____
Robert E. Hager, City Attorney

City of Lancaster, Texas
Standard Professional Services Agreement

This Agreement is made by and between the City of Lancaster, Texas, a home-rule municipality (hereinafter referred to as the "Owner") and Dal-Tech Engineering, Inc., (hereinafter referred to as the "Consultant") for Danieldale Road Expansion Engineering Services (Bid 2011-32), (hereinafter referred to as the "Project"), the Owner and the Consultant hereby agree as follows:

ARTICLE I: CONTRACT & CONTRACT DOCUMENTS

1.1 THE CONTRACT

The Contract between the Owner and the Consultant, of which this Agreement is a part, consists of the Contract Documents. It shall be effective on the date this Agreement is executed by the last party to execute it.

1.2. THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, the Invitation to Bid, Requirements and Instructions to Bidders, the Specifications, terms and conditions, Attachments, Maps, Drawings, Scope of Service, Time Line, all Change Orders issued hereafter, any other amendments hereto executed by the parties hereafter, together with the following (if any): None

Documents not enumerated in Paragraph 1.2 are not Contract Documents and do not form part of this Contract.

ARTICLE 2: RECITALS

2.1 The City desires to have the Consultant develop the Preliminary and Final Design for the Danieldale Road Expansion ("PLAN") and provide necessary services to develop the same ("PROJECT"); and

2.2 The Consultant has the knowledge, ability and expertise to provide such services; and

2.3 The City desires to engage the services of Consultant, as an independent Consultant and not as an employee, to provide services as set forth in Article 4.1.

ARTICLE 3: TERM / TERMINATION

3.1 TERM

The term of this Agreement shall begin on the date of its execution by all Parties. This Agreement shall continue until Consultant completes the services required herein to the satisfaction of the City, unless sooner terminated as provided herein.

3.2 TERMINATION

This Agreement may be suspended or terminated by either Party with or without cause at any time by giving written notice to the other party. In the event suspension or termination is without cause, payment to the Consultant, in accordance with the terms of this Agreement, will be made on the basis of services reasonably determined by City to be satisfactorily performed to date of suspension or termination. Such payment will be due upon delivery of all instruments of service to City.

In the event that City requires a modification of the Agreement with Consultant, and in the event the parties fail to agree upon a modification of this Agreement, the Parties shall have the option of terminating this Agreement. Payment to Consultant shall be made by the City in accordance with the terms of this Agreement, for the services mutually agreed upon by the Parties to be properly performed by the Consultant prior to such termination date.

ARTICLE 4: SCOPE OF SERVICES

4.1 SCOPE

The following services, when authorized in writing by a Notice to Proceed from the City, shall be performed by Consultant in accordance with the City's requirements and as set detailed below. Scope of Services and Schedule, which may generally include the following:

Danieldale Road Expansion Design from IH 35E to Houston School Road
Dal-Tech Job # 1108
Bid # 2011-32

Professional Services for the design of the Danieldale Road Expansion from IH-35E to Houston School Road. The Preliminary opinion of probable construction cost is $4,501,832.09. The project is approximately 5,200 linear foot (LF) long and will include 2,100 LF of 2-lane (12-foot lanes) roadway section with curb and gutter from IH-35E to Waters Street and will then increase to a 3-lane (12-footlanes) roadway section with curb and gutter for approximately 2,600 LF where it then transitions for 500 LF of paving to an intersection design at Houston School Road. The proposed Danieldale Road pavement on the west side of Houston School Road will consist of one 12-foot west bound lane, one 12-foot east bound left turn lane, one 12-foot east bound through lane, and one 12-foot east bound right turn lane. The proposed Preliminary and Final Design services will include the following items:

The Basic Services will include the following tasks:

1. Preparation of preliminary and final roadway paving and drainage plans using TXDOT format, standards, specifications and contract documents
2. Preparation of Traffic Signal Plans for the Danieldale Road and Houston School Road intersection
3. Preparation of Sequence of Construction and Traffic Control Sheets
4. Preparation of preliminary and final 12-inch water main plans from IH-35E to Longhorn Drive, and wastewater adjustment plans along entire project limits.
5. Preparation of cross section sheets.
6. Preparation of Horizontal an d Vertical Control sheets

The Special Services will include the following tasks:

1. Coordinate public information
2. Conduct adjacent business communication
3. Perform Topographic survey of project site
4. Perform Tree Survey of project site.
5. Determine the location of the existing Right-of-Way, and adjoining property lines
6. Prepare Right-of-Way Parcel Plats with Metes and Bounds Descriptions
7. Prepare Right-of-Way map
8. Property Acquisition Services
9. Update Hydrology and Hydraulic Runs, and Prepare request for CLOMR and request for LOMR
10. Prepare application for Nationwide 404 Permit.
11, Geotechnical Services for pavement design and box culvert design at the tributary to Runyun Springs Branch.
12. Traffic Count Services for truck percentage for pavement design
13. Provide Tree Mitigation Plans
14. Perform Periodic Construction Observation Services

In addition to the above Special Services, Additional Services may be needed. These include the following tasks:

1. Perform Additional Design
2. Conduct Subsurface Utility Engineering (Three Holes)
3. Conduct Three Public Meetings
4. Perform Hydrology and Hydraulic Study
5. Provide Property Acquisition Services (if Federal requirements apply)
6. Preparation of preliminary and final 12-inch water main plans from Longhorn Drive to Houston School Road.

Providing and acquiring any drainage easement(s) services are excluded in this proposal. It is also understood that the City of Lancaster will handle construction management of the project.

In addition, an existing Dallas Water Utilities (DWU) 66-inch diameter water main is located in Danieldale Road along the project limits. A DWU 6O-inch diameter water main connecting a future 96-inch water main in Wintergreen Road to this existing 66-inch water main is planned. This connection is proposed at Longhorn Drive. Coordination of the DWU water main design and paving and drainage design will be required. It is critical that the DWU connection occur before completion of Daniel dale Road construction.

The design of this project is anticipated to take no more than two years to complete. In the event that the project is delayed, due to no fault of DAL-TECH Engineering, Inc., so that the design is not completed by July 31, 2014, the proposed fee is subject to adjustment.

4.2 AUTHORIZED AGENT

All work performed by the Consultant will be performed under this Agreement, signed by a duly authorized agent of the City as approved by resolution of the City Council of the City of Lancaster, Texas and the designated authorized agent for the Consultant.

ARTICLE 5: TIME FOR COMPLETION

6.1 The Consultant's services and compensation under this Agreement have been agreed to in anticipation of orderly and continuous progress of the Assigned Project(s) through completion of the project(s). Specific periods of time for rendering services are set forth in Exhibit A to this Agreement, by which times defined services are to be completed.

6.2 If the City fails to give prompt written authorization to proceed with any phase of services after completion of the immediately preceding phase, the Consultant shall be entitled to equitable adjustment of rates and amounts of compensations to reflect reasonable costs incurred by Consultant as a result of the delay or changes in the various elements that comprise such rates of compensation, but in no event shall such compensation exceed the scope of services schedule of maximum payment unless a written amendment to this Agreement is consummated between the parties.

ARTICLE 6: COMPENSATION / PAYMENT TERMS AND CONDITIONS

5.1 Compensation for the performance of Professional Services described herein shall be paid to Consultant by the City in a total amount not to exceed five hundred thirty-nine thousand eight hundred fifty-four dollars ($637,770.00) which shall accrue and be payable as provided in Sections 5.01 and 5.02 hereof.

5.2 Work will be performed at the rates set forth below.

Basic Services	Fee
Prepare Preliminary and Final Plans, Assist in Bidding Project, Revise Plans as needed during construction	$329,690.00
Special Services	
MEETINGS	
Attend Kick-off Meeting	$2,204.00
Conduct Coordination Meetings with the City, TxDOT, and DWU (Five total)	$2,980.00
Utility Coordination Meetings (Three total)	$3,024.00
Submit Monthly Status Reports (20 total)	$2,600.00
SURVEY SERVICES	
Perform Topographic surveys of project site	$19,870.00
Prepare Basemap	$5,470.00
Perform Tree Survey	$1,125.00
Determine Location of Existing Right-of-Way	$11,470.00
Set Horizontal and Vertical Control	$3,130.00
Prepare 10 Parcel Plats and Legal Descriptions	$25,420.00
Prepare ROW Map	$8,100.00
SPECIAL APPROVALS	
Update Hydrology and Hydraulic Runs, CLOMR and LOMR (Excludes FEMA fees)	$19,920.00
Prepare Storm Water Pollution Prevention Plan	$9,900.00
Application for Corps 404 Permit (Excludes Corps fees)	$6,696.00
Provide Drawings for Environmental Clearance	$1,560.00
Submit Plans to Texas Department of Licensing and Regulation (TDLR) for Plan Review and Construction Inspection (Excludes TDLR fees)	$640.00
CONSTRUCTION	
Perform Periodic Construction Observation	$12,000.00
Prepare Record Drawings	$2,450.00
SUBCONSULTANTS	
Property Acquisition Services (10 Parcels)	$30,250.00
Conduct Geotechnical Investigation	$24,330.00
Prepare Tree Mitigation Plan	$2,200.00
Perform Traffic Counts	$550.00
Reimbursables	$4,000.00
Governmental Fees (Corps, FEMA, TDLR, etc.)	$10,275.00

Total Special Services	**$210,164.00**
Total Basic plus Special Services	**$539,854.00**
Additional Services	
Perform Additional Design Services	$6,000.00
Perform Subsurface Utility Engineering	$3,760.00
Conduct Three Public Meetings	$11,886.00
Perform Hydrology and Hydraulic Study	$30,920.00
Property Acquisition Services (If Federal Requirements Apply)	$18,150.00
12-Inch Water Main Plan and Profile Design from Longhorn Drive to Houston School Road	$27,200.00
Total Additional Services	**$97,916.00**
Total Engineering Design	**$637,770.00**

5.3 Consultant payment for work under this Agreement shall be made in installments billed not more frequently than once each month upon receipt of invoices from the Consultant. If the City fails to make any payment due the Consultant within thirty (30) days after receipt of Consultant's invoice, the amounts due the Consultant will be increased at the rate of 1.5% per month from said thirtieth

day, unless there is a good faith refusal by the City to pay. Payment shall be remitted to Consultant by City as instructed on invoices.

ARTICLE 7: INDEMNIFICATION

7.1 THE CONSULTANT AGREES, TO THE FULLEST EXTENT PERMITTED BY LAW, TO INDEMNIFY AND HOLD HARMLESS THE CITY, ITS OFFICERS, AGENTS, SERVANTS AND EMPLOYEES (HEREINAFTER COLLECTIVELY REFERRED TO AS "INDEMNITIES") FROM AND AGAINST SUITS, ACTIONS, CLAIMS, LOSSES, ANY DAMAGE, LIABILITY, AND FROM AND AGAINST ANY COSTS AND EXPENSES, INCLUDING, IN PART, ATTORNEY FEES INCIDENTAL TO THE DEFENSE OF SUCH SUITS, ACTIONS CLAIMS, LOSSES, DAMAGES OR LIABILITY ON ACCOUNT OF INJURY, DISEASE, SICKNESS, INCLUDING DEATH, TO ANY PERSON OR DAMAGE TO PROPERTY INCLUDING, IN PART, THE LOSS OF USE RESULTING THEREFROM, ARISING FROM ANY NEGLIGENT ACT, ERROR OR OMISSION OF THE CONSULTANT, ITS OFFICERS, EMPLOYEES, SERVANTS, AGENTS OR SUBCONTRACTORS, OR ANYONE ELSE UNDER THE CONSULTANT'S DIRECTION AND CONTROL, AND ARISING OUT OF, RESULTING FROM, OR CAUSED BY THE PERFORMANCE OR FAILURE OF PERFORMANCE OF ANY WORK OR SERVICES UNDER THIS AGREEMENT, OR FROM CONDITIONS CREATED BY THE PERFORMANCE OR NON-PERFORMANCE OF SAID WORK OR SERVICES. IN THE EVENT ONE OR MORE OF THE INDEMNITIES IS DETERMINED BY A COURT OF LAW TO BE JOINTLY OR DERIVATIVELY NEGLIGENT OR LIABLE FOR SUCH DAMAGE OR INJURY, THE CONSULTANT SHALL BE OBLIGATED TO INDEMNIFY INDEMNITIES AS PROVIDED HEREIN ON A PROPORTIONATE BASIS IN ACCORDANCE WITH THE FINAL JUDGMENT, AFTER ALL APPEALS ARE EXHAUSTED, DETERMINING SUCH JOINT OR DERIVATIVE NEGLIGENCE OR LIABILITY.

7.02 THE CITY AGREES, TO THE FULLEST EXTENT PERMITTED BY LAW, TO INDEMNIFY AND HOLD THE CONSULTANT, ITS OFFICERS, AGENTS, SERVANTS AND EMPLOYEES (HEREINAFTER COLLECTIVELY REFERRED TO AS "INDEMNITIES") FROM AND AGAINST SUITS, ACTIONS, CLAIMS, LOSSES, ANY DAMAGE, LIABILITY, AND FROM AND AGAINST ANY COSTS AND EXPENSES, INCLUDING, IN PART, ATTORNEY FEES INCIDENTAL TO THE DEFENSE OF SUCH SUITS, ACTIONS CLAIMS, LOSSES, DAMAGES OR LIABILITY ON ACCOUNT OF INJURY, DISEASE, SICKNESS, INCLUDING DEATH, TO ANY PERSON OR DAMAGE TO PROPERTY INCLUDING, IN PART, THE LOSS OF USE RESULTING THEREFROM, ARISING FROM ANY NEGLIGENT ACT, ERROR OR OMISSION OF THE CITY, ITS OFFICERS, EMPLOYEES, SERVANTS, AGENTS OR SUBCONTRACTORS, OR ANYONE ELSE UNDER THE CITY'S DIRECTION AND CONTROL, AND ARISING OUT OF, RESULTING FROM, OR CAUSED BY THE PERFORMANCE OR FAILURE OF PERFORMANCE OF ANY WORK OR SERVICES UNDER THIS AGREEMENT, OR FROM CONDITIONS CREATED BY THE PERFORMANCE OR NON-PERFORMANCE OF SAID WORK OR SERVICES. IN THE EVENT ONE OR MORE OF THE INDEMNITIES IS DETERMINED BY A COURT OF LAW TO BE JOINTLY OR DERIVATIVELY NEGLIGENT OR LIABLE FOR SUCH DAMAGE OR INJURY, THE CITY SHALL BE OBLIGATED TO INDEMNIFY INDEMNITIES AS PROVIDED HEREIN ON A PROPORTIONATE BASIS IN ACCORDANCE WITH THE FINAL JUDGMENT, AFTER ALL APPEALS ARE EXHAUSTED, DETERMINING SUCH JOINT OR DERIVATIVE NEGLIGENCE OR LIABILITY.

7.03 THE CONSULTANT IS NOT OBLIGATED TO INDEMNIFY THE CITY IN ANY MANNER WHATSOEVER FOR THE CITY'S OWN NEGLIGENCE.

7.04 NOTHING CONTAINED HEREIN SHALL CONSTITUTE A WAIVER OF GOVERNMENTAL IMMUNITY IN FAVOR OF ANY THIRD PARTY.

7.05 CONSULTANT AGREES THAT IT IS AN INDEPENDENT CONTRACTOR AND NOT AN AGENT OF THE CITY, AND THAT CONSULTANT IS SUBJECT, AS AN EMPLOYER, TO ALL APPLICABLE UNEMPLOYMENT COMPENSATION STATUTES, SO FAR AS TO RELIEVE THE CITY OF ANY RESPONSIBILITY OR LIABILITY FROM TREATING CONSULTANT'S EMPLOYEES AS EMPLOYEES OF CITY FOR THE PURPOSE OF KEEPING RECORDS, MAKING REPORTS OR PAYMENTS OF UNEMPLOYMENT COMPENSATION TAXES OR CONTRIBUTIONS. CONSULTANT FURTHER AGREES TO INDEMNIFY AND HOLD CITY HARMLESS AND REIMBURSE IT FOR ANY EXPENSES OR LIABILITY INCURRED UNDER SAID STATUTES IN CONNECTION WITH EMPLOYEES OF CONSULTANT.

7.06 CONSULTANT SHALL DEFEND AND INDEMNIFY INDEMNITIES AGAINST AND HOLD CITY AND THE PREMISES HARMLESS FROM ANY AND ALL CLAIMS, SUITS OR LIENS BASED UPON OR ALLEGED TO BE BASED UPON THE NON-PAYMENT OF LABOR, TOOLS, MATERIALS, EQUIPMENT, SUPPLIES, TRANSPORTATION AND MANAGEMENT COSTS INCURRED BY CONSULTANT IN PERFORMING THIS AGREEMENT.

ARTICLE 8: INSURANCE

8.1 Workers Compensation Insurance

The Consultant shall provide and maintain Workers' Compensation with statutory limits.

8.2 Automotive Insurance

Consultant shall provide and maintain in full force and effect during the time of this Agreement, auto insurance (including, but not limited to, insurance covering the operation of owned and non-owned automobiles, trucks and other vehicles) protecting Consultant and City as an additional insured with limits not less than 250/500/100,000 or as amended by statute.

8.3 General Liability Insurance

Consultant shall provide general liability insurance. Such insurance covering personal and bodily injuries or death shall be in the sum of not less than two hundred fifty thousand dollars ($250,000.00) per occurrence and five hundred thousand dollars ($500,000.00) aggregate. Insurance covering damages to property shall be in the sum of not less than one hundred thousand dollars ($100,000.00). The general liability insurance must name the City as an additional insured.

8.4 Professional Liability Errors and Omissions Insurance

Consultant shall also provide and maintain Professional Liability Errors and Omissions Insurance coverage to protect Consultant and City from any liability arising out of the performance of professional services, if any, under this Agreement. Such coverage shall be in the sum of not less than three hundred thousand dollars ($300,000.00) per occurrence and five hundred thousand dollars ($500,000.00) aggregate.

8.5 Certificate of Insurance

A signed Certificate of Insurance, satisfactory to City, showing compliance with the requirements of this Article shall be furnished to City before any services are performed. Such Certificate shall provide thirty (30) days written notice to City prior to the cancellation or modification of any insurance referred to therein.

The project name and bid/contract number shall be listed on the certificate.

ARTICLE 9: DEFAULT

In the event Consultant fails to comply or becomes disabled and unable to comply with the provisions of this Agreement as to the quality or character of the service or time of performance, and the failure is not corrected within thirty (30) days after written notice by City to Consultant, City may, at its sole discretion without prejudice to any other right or remedy.

(a) Terminate this Agreement and be relieved of the payment of any further consideration to Consultant except for all work determined by City to be satisfactorily completed prior to termination. Payment for work satisfactorily completed shall be for actual costs, including reasonable salaries and travel expenses of Consultant to and from meetings called by City at which Consultant is required to attend, but shall not include and loss of profit of Consultant. In the event such termination, City may proceed to complete the services in any manner deemed proper by the City, either by the use of its own forces or by resubmitting to others. Consultant agrees that any costs incurred to complete the services herein provided for may be deducted and paid by the owner out of such monies as may be due or that may thereafter become due to Consultant under and by virtue of this Agreement.

(b) City may, without terminating this Agreement or taking over the services, furnish the necessary materials, equipment, supplies and/or help necessary to remedy the situation, at the expense of Consultant.

ARTICLE 10: MISCELLANEOUS

10.1 Reuse of Documents:

All documents including Maps, Plans and Specifications provided or furnished by the Consultant pursuant to this Agreement are instruments of service; and Consultant shall retain ownership and property interest therein whether or not the work is completed. The City may make and retain copies of any plans or specifications provided under this Agreement for the use by City and others; such documents are not intended or suitable for reuse by City or others on extension of the Project or on any other Project. Any such reuse without written approval or adaptation by the Consultant for the specific purpose intended will be at the City's sole risk and without liability to the Consultant.

10.2 Entire Agreement.

This Agreement constitutes the sole and only Agreement of the parties and supersedes any prior understandings or written or oral agreements between the parties with respect to this subject matter.

10.3 Assignment.

Neither this Agreement nor any duties or obligations under it shall be assignable by CONSULTANT without the prior written consent of City. In the event of an assignment by Consultant to which the City has consented, the assignee or the assignee's legal representative shall agree in writing with the City to personally assume, perform, and be bound by all the covenants, obligations, and agreements contained in this Agreement.

10.4 Adjustments in Services/Amendment.

This Agreement may be amended by the mutual written agreement of the parties. Consultant shall not make any claims for extra services, additional services or changes in the services without a written agreement with City prior to the performance of such services.

10.5 Governing law.

The validity of this Agreement and any of its terms or provisions, as well as the rights and duties of the parties, shall be governed by the laws of the State of Texas; and venue for any action concerning this Agreement shall be in Dallas County, Texas.

10.6 Notices.

All notices required by the Agreement shall be in writing and addressed to the following, or such other party or address as either party designates in writing, by certified mail, postage prepaid or by hand delivery:

City of Lancaster	**Dal-Tech Engineering, Inc.**
Opal Mauldin Robertson, City Manager	Sedi. Toumani, P.E.
PO Box 940	17400 Dallas Pkwy, Suite 110
Lancaster, TX 75146	Dallas, TX 75287
972-218-1300	972-250-2727
orobertson@lancaster-tx.com	stoumani@dal-tech.com

10.7 Legal construction.

In the event any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not effect any other provisions and the Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained in this Agreement.

10.8 Successors and Assigns.

(a) The City and Consultant each is hereby bound and the partners, successors, executors, administrators, legal representatives and assigns of City and Consultant are hereby bound to the other party to this Agreement and to the partners, successors, executors, administrators, legal representatives and assigns of such other party in respect of all covenants and obligations of this Agreement.

(b) Neither the City nor the Consultant may assign, sublet, or transfer any rights under or interest (including, but without limitation, moneys that are due or may become due) in this Agreement without the written consent of the other, except to the extent that any assignment, subletting or transfer is mandated by law or the effect of this limitation may be restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement.

(c) Nothing in this Agreement shall be construed to create, impose or give rise to any duty owed by the Consultant to any Consultant, subcontractor, supplier, other person or entity, or to any surety for or employee of any of them, or give any rights in or benefits under this Agreement to anyone other than the City and the Consultant.

10.9 Conflict.

If a conflict exists between this Agreement, the Request for Qualification ("RFQ"), and/or the Response, then such conflicts shall be resolved as follows:

(a) If a conflict exists between this Agreement, the RFQ, or the Response, then this Agreement shall control.

(c) If a conflict exists between the Response and the RFQ, the RFQ shall control.

10.10 Severability

Any provision or part of the Agreement held to be void or unenforceable under any law or regulation shall be deemed stricken and all remaining provisions shall continue to be valid and binding upon the City and the Consultant, who agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

10.11 Captions

The captions used in this Agreement are for convenience only and shall not affect in any way the meaning or interpretations of the provisions set forth herein.

10.12 Counterparts

This Agreement may be executed in any number of counterparts, each of which shall be deemed an original and constitute one and the same instrument.

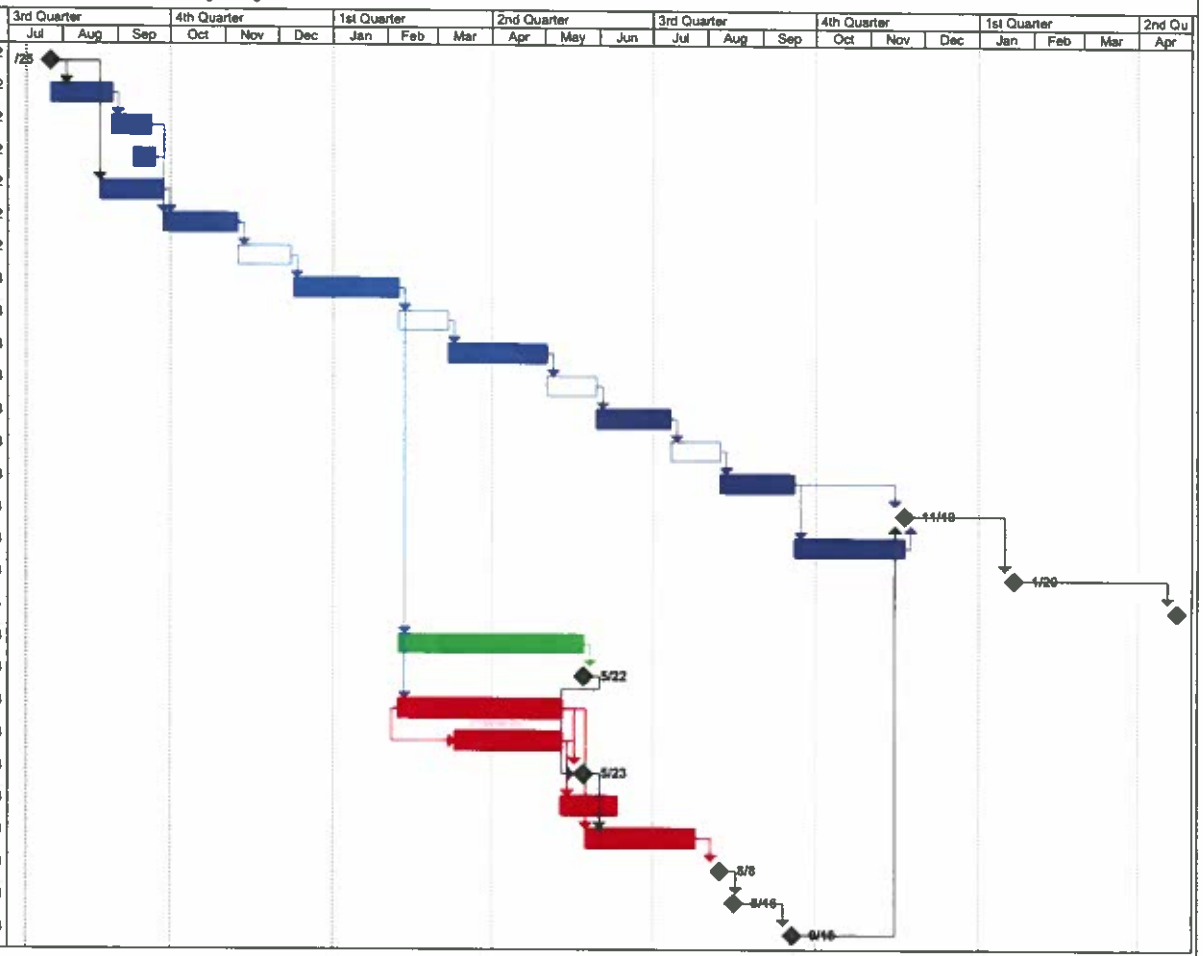
IN WITNESS WHEREOF, the parties hereto have executed this Agreement on this the ___ day of _____, 2012.

CITY OF LANCASTER	**DAL-TECH ENGINEERING, INC.**
_____	_____
Opal Mauldin Robertson, City Manager	Sedi A. Toumani, PE, President
ATTEST:	**ATTEST:**
_____	_____
Dolle K. Downe, City Secretary	

Exhibit A

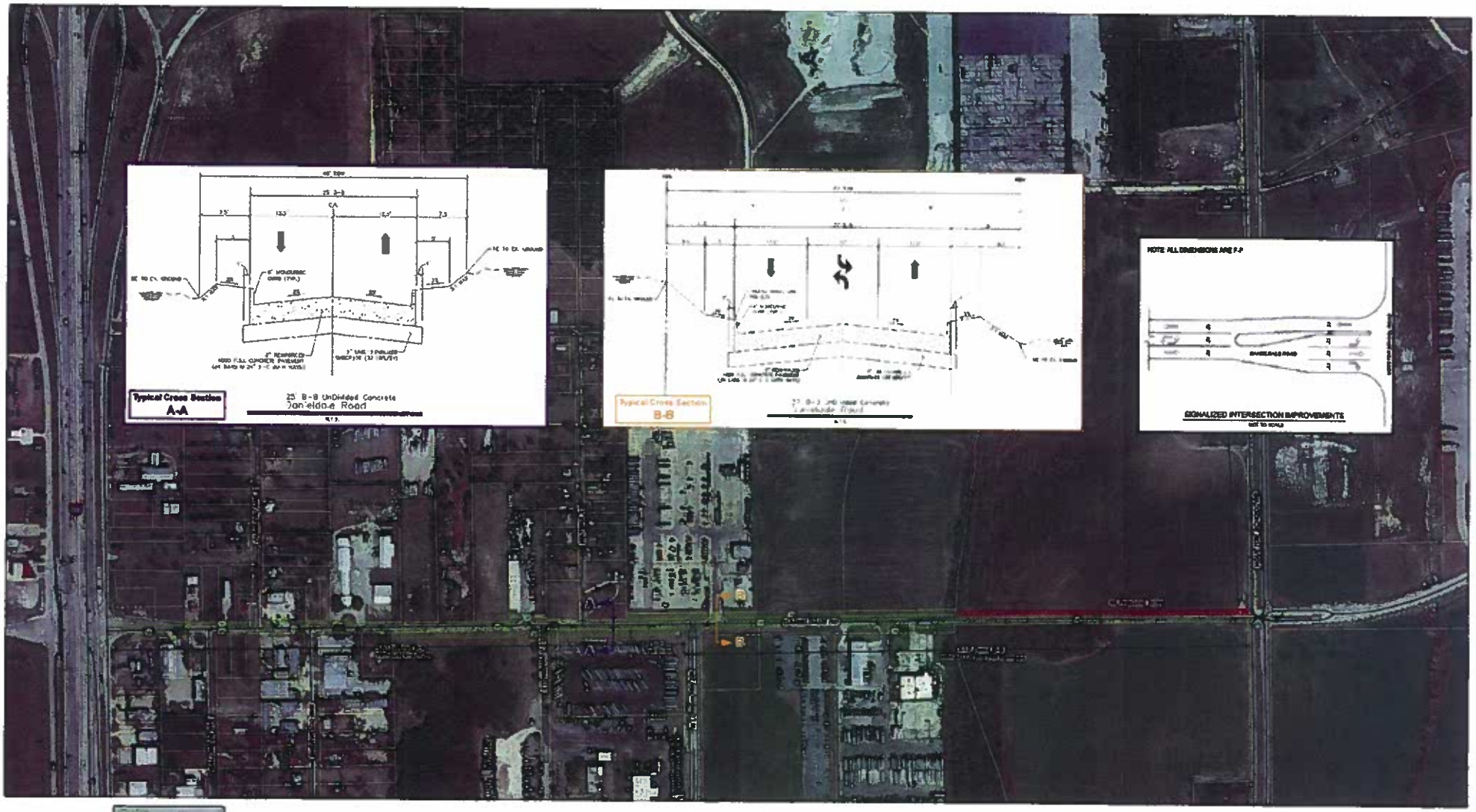
Daniesdale Road
I-35E to Houston School Road
TxDOT CSJ # 0918-45-853
DAL-TECH Engineering, Inc. No. 1108

ID	Task Name	Duration	Start	Finish
1	Notice to Proceed	0 days	Wed 7/25/12	Wed 7/25/12
2	Perform Topographic Survey Work	25 days	Wed 7/25/12	Tue 8/28/12
3	Prepare Basemap	15 days	Wed 8/29/12	Wed 9/19/12
4	Perform Traffic Count Study - 2 Weeks after School Starts	10 days	Mon 9/10/12	Fri 9/21/12
5	Perform Geotechnical Investigation	25 days	Wed 8/22/12	Wed 9/26/12
6	Prepare 30% Engineering Plans	30 days	Thu 9/27/12	Wed 11/7/12
7	Lancaster and TxDOT Plan Review	20 days	Thu 11/8/12	Fri 12/7/12
8	Prepare 60% Engineering Plans	40 days	Mon 12/10/12	Wed 2/6/13
9	Lancaster and TxDOT Plan Review	20 days	Thu 2/7/13	Wed 3/6/13
10	Prepare 90% Engineering Plans	40 days	Thu 3/7/13	Wed 5/1/13
11	Lancaster and TxDOT Plan Review	20 days	Thu 5/2/13	Wed 5/29/13
12	Prepare Final PS&E Documents	30 days	Thu 5/30/13	Wed 7/10/13
13	Lancaster and TxDOT PS&E Review	20 days	Thu 7/11/13	Wed 8/7/13
14	Revise PS&E Documents	30 days	Thu 8/8/13	Wed 9/18/13
15	Complete PS&E Documents	0 days	Tue 11/19/13	Tue 11/19/13
16	Submit Plans to TDLR	44 days	Thu 9/19/13	Tue 11/19/13
17	Bid Project	0 days	Mon 1/20/14	Mon 1/20/14
18	Award Construction Contract	0 days	Tue 4/22/14	Tue 4/22/14
19	Perform Environmental Process (TxDOT)	75 days	Thu 2/7/13	Wed 5/22/13
20	Obtain Environmental Clearance	0 days	Wed 5/22/13	Wed 5/22/13
21	Prepare Plats and Legal Descriptions	68 days	Thu 2/7/13	Thu 5/9/13
22	Prepare ROW Map	44 days	Mon 3/11/13	Thu 5/9/13
23	Preliminary Property Owner Meeting	1 day	Thu 5/23/13	Thu 5/23/13
24	Obtain Title Commitments	22 days	Fri 5/10/13	Mon 6/10/13
25	Prepare Property Appraisals	44 days	Fri 5/24/13	Wed 7/24/13
26	Property Offer Documents to City Council For Approval	1 day	Thu 8/8/13	Thu 8/8/13
27	First Property Offer	1 day	Fri 8/16/13	Fri 8/16/13
28	Final Property Offer	1 day	Wed 9/18/13	Wed 9/18/13



Project: Schedule 4-17-04
Date: Wed 7/11/12

Task | Split | Progress | Milestone | Summary | Rolled Up Task | Rolled Up Split | Rolled Up Milestone | Rolled Up Progress | External Tasks | Project Summary



City of Lancaster

Danieldale Road

From I-35E to Houston School Rd.

LANCASTER CITY COUNCIL
Agenda Communication for
July 23, 2012

4

AG12-004

Consider an ordinance repealing in part Ordinance No. 2003-12-42 concerning the land use assumptions and capital improvement plan for roadway impact fees, as set forth in said ordinance; providing for repeal, in part, of Ordinance No. 2007-11-54 concerning water and wastewater land use assumptions and capital improvement plans for water and wastewater, as set forth in said ordinance; and providing for an adoption of new land use assumptions and capital improvements plans.

This request supports the City Council 2011-2012 Policy Agenda.

Goal: Sound Infrastructure

Background

This item is to repeal previously set land use assumptions and capital improvement plans Roadway and Water/Wastewater Impact Fee ordinances were originally adopted in December 2003. Since that time, changes have occurred with regards to the projected growth patterns of the City. This ordinance repeals sections of the current roadway and wastewater ordinances related to land use assumptions and capital improvement plans in preparation for adoption of updated land use assumptions and capital improvement plans following the respective public hearing in agenda items 5 and 6.

Considerations

- **Operational** - Land use assumptions and the capital improvement plans for roadway and water/wastewater need to be repealed. Following the public hearings, the land use assumption and capital improvement plans will be considered for adoption by resolution (agenda items 5 and 6).
- **Legal** - The City Attorney has prepared the attached ordinance.
- **Financial** - No financial considerations occur with this item
- **Public Information** - There are no public information requirements.

Options/Alternatives

1. City Council may adopt the ordinance as presented.
2. City Council may deny the ordinance and direct staff.

Recommendation

Staff recommends approval of the ordinance as presented

Attachments

- Ordinance

Prepared and submitted by:
Nathaniel Barnett, Senior Planner

Date: July 19, 2012

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY OF LANCASTER, TEXAS, REPEALING IN PART ORDINANCE NO. 2003-12-42 CONCERNING THE LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENT PLAN FOR ROADWAY IMPACT FEES, AS SET FORTH IN SAID ORDINANCE; PROVIDING FOR REPEAL, IN PART, OF ORDINANCE NO. 2007-11-54 CONCERNING WATER AND WASTEWATER LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENT PLANS FOR WATER AND WASTEWATER AS SET FORTH IN SAID ORDINANCE; PROVIDING FOR AN ADOPTION OF NEW LAND USE ASSUMPTIONS AND CAPITAL IMPROVEMENT PLANS; PROVIDING A REPEALING CLAUSE; PROVIDING A SAVINGS CLAUSE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City Council has currently undertaken a new impact fee study to amend its impact fees; and

WHEREAS, as a result of those studies new land use assumptions and capital improvement plans will be adopted in accordance with Chapter 395 of the Texas Local Government Code; and

WHEREAS, the City Council has received a report from the consulting engineers and will hold the required public hearings to adopt new land use assumptions and capital improvement plans for roadway impact fees; and

WHEREAS, the City has previously adopted land use assumptions and capital improvement plans for the imposition of such fees and such are now out of date and should be replaced, as provided herein.

NOW, THEREFORE BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LANCASTER, TEXAS:

SECTION 1. That Section 1 of Ordinance No. 2003-12-42 concerning the adoption of certain land use assumptions, thoroughfare plans and capital improvements plan, as set forth in a report prepared by Kimley Horn and Associates, dated December 2003, and the same is hereby in all respects repealed;

SECTION 2. That Sections 10.1102 and 10.1104 of Ordinance No. 2007-11-54 concerning the adoption of certain land use assumptions and capital improvements plan, as set forth in a report prepared by Freese and Nichols, Inc, dated July 2006, and the same is hereby in all respects repealed;

SECTION 3. That the City Council shall, hereinafter, upon the adoption of this ordinance shall by order, resolution, or ordinance adopt new land use assumptions and capital improvement plans to amend its imposition of water/wastewater and roadway impact fees in accordance with Chapter 395 of the Texas Local Government Code.

SECTION 4. That all provisions of the ordinances of the City of Lancaster, Texas, in conflict with the provisions of this ordinance be, and the same are hereby, repealed, and all other provisions of the Ordinances of the City not in conflict with the provisions of this ordinance shall remain in full force and effect.

SECTION 5. That should any sentence, paragraph, subdivision, clause, phrase or section of this ordinance be adjudged or held to be unconstitutional, illegal or invalid, the same shall not affect the validity of this ordinance as a whole, or any part or provision thereof other than the part so decided to be invalid, illegal or unconstitutional, and shall not affect the validity of the Code of Ordinances as a whole.

SECTION 6. This Ordinance shall take effect immediately from and after its passage as the law and charter in such cases provide.

DULY PASSED by the City Council of the City of Lancaster, Texas this 23rd day of July, 2012.

APPROVED:

_____

MARCUS E. KNIGHT., MAYOR

ATTEST:

_____

DOLLE K. DOWNE, CITY SECRETARY

APPROVED AS TO FORM:

_____

ROBERT HAGER, CITY ATTORNEY

LANCASTER CITY COUNCIL
Agenda Communication for
July 23, 2012

5

AG12-005

Conduct a Public Hearing on updates to the Master Thoroughfare Plan and consider a resolution amending Land Use Assumptions, and amending the Capital Improvement Plan [thoroughfare impact fee improvement program] for roadway impact fees; and providing for establishing a Public Hearing and date to consider amendments to the Roadway Impact Fees.

This request supports the City Council 2011-2012 Policy Agenda.

Goal: Sound Infrastructure

Background

During the earlier work session the consultant presented to Council an overview of the Land Use Assumptions and Population Forecasts, TIFIP projects proposed for the next ten (10) years, and the calculated maximum allowable fees for roadway projects in Lancaster.

The Master Thoroughfare Plan and Roadway Impact Fee ordinance were adopted by Council on March 27, 2006. They are being updated to ascertain projected new growth for and added capacity to the City of Lancaster's roadways for the next ten (10) years. It will also include the additional land area added as a result of the most recent annexation in November 2011. At this time, no additional roadway projects are being added to the Master Thoroughfare Plan.

Over the past year, the consulting firm of Kimley Horn & Associates (KHA), with guidance and information from City Staff, has been reviewing and preparing updates for the city-wide Master Thoroughfare Plan and Roadway Impact Fee Report. There are multiple purposes of this update which includes reviewing the city's population data and produce population forecasts for the next ten (10) years, determining land use assumptions for the city's non-residential areas to estimate the amount of growth anticipated in the same timeframe, and update maps for the Master Thoroughfare Plan with new projects and/or land areas as well as determining the maximum allowable fee the city may charge developers for new developments affecting the city's infrastructure, in accordance with Chapter 395 of the Local Government Code. The consultant also reviewed the City's Master Thoroughfare Plan Capital Improvement Projects to ensure the projects listed would appropriately address growth in the City of Lancaster as well as encompass the newly annexed area.

Chapter 395 of the Local Government Code requires municipalities to have a Capital Improvements Advisory Committee (CIAC), hold a public hearing, and adopt fees, if any, within 30 days after the public hearing. The Planning and Zoning Commission has served as the CIAC. The CIAC has received briefings through a series of public hearings from the consultants and Staff in preparation of providing a recommendation to the City Council. Using data from the North Central Texas Council of Governments, the consultant worked with City Staff to determine land use assumptions and population forecasts to ascertain the most accurate data possible. On June 26, 2012, Kimley Horn and Associates, Inc. (KHA) and City staff presented to the CIAC an overview of the update to the Master Thoroughfare Plan and impact fee process. The CIAC opened the public hearing to receive comments from interested parties. No comments were received from the public. The CIAC moved to close the public hearing and recommended adoption of the Land Use Assumptions, the Thoroughfare Impact Fee Improvement Program (TIFIP), and Roadway Impact Fees.

Considerations

- **Operational** - This study is to update the Thoroughfare Master Plan Land Use Assumptions, Thoroughfare Impact Fee Improvement Program (TIFIP) and Roadway Impact Fees. Fees will be assessed and collected with other development fees.

  Roadway impact fees may only be assessed in the city limits. Multiple service areas must be established for roadway impact fees due to travel patterns and the perceived impact on the system. Chapter 395 allows a maximum length of six (6) mile limits for roadway service areas, but the consultant believes five (5) mile limits is more appropriate for Lancaster.

  Three service areas were initially established for Lancaster in 2003 and have been adjusted with this report to include the newly annexed area

- **Legal** - The City Attorney has prepared the draft resolution.

- **Financial** - The amounts charged for roadway impact fees will remain the same with this update. Fees collected are deposited in a separate fund allocated to roadway improvements as designated on the Thoroughfare Impact Fee Improvement Program (TIFIP).

- **Public Information** - A newspaper notice will be published in the Focus Daily News stating that a public hearing on Impact Fees will be held on August 27, 2012 by the City Council. This notice meets the Local Government Code required 30-day notice to set Impact Fees.

Options/Alternatives

1. City Council may conduct the public hearing and consider the resolution as presented.
2. City Council may conduct the public hearing, deny the resolution and direct staff.

Recommendation

At the meeting on June 26, 2012, the Planning and Zoning Commission, serving as the Capital Improvements Advisory Committee (CIAC) recommended to approve the report as presented by the consultants and to assess the maximum allowable fee for water/wastewater and maintain the current roadway impact fees.

Staff concurs with this recommendation.

Attachments

- Resolution
- Excerpt from Minutes of P&Z/CIAC meeting on June 26, 2012
- See work session item B for July 2012 Roadway Impact Fee Update and Master Thoroughfare Plan

Prepared and submitted by:
Nathaniel Barnett, Senior Planner

Date: July 19, 2012

RESOLUTION NO. 2012-07-53

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LANCASTER; AMENDING LAND USE ASSUMPTIONS, AND AMENDING THE CAPITAL IMPROVEMENT PLAN [thoroughfare impact fee improvement program] FOR ROADWAY IMPACT FEES; PROVIDING FOR ESTABLISHING A PUBLIC HEARING AND DATE TO CONSIDER AMENDMENTS TO THE ROADWAY IMPACT FEES; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A REPEALING CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City Council of the City of Lancaster, Texas imposes Impact Fees for Roadway Impact Fees for the financing of Capital Improvements required for new development in the City; and,

WHEREAS, based on amendments to the Land Use Assumptions, amendments to the Roadway Impact Fees Impact Fee Report have been prepared by Kimley-Horn and Associates, in a document entitled "Roadway Impact Fee Update" dated July 2012; and

WHEREAS, the Capital Improvement Advisory Committee has filed written comments to amend the Land Use Assumptions and the Capital Improvement Plan for Roadway Impact Fees and the City Council has received and reviewed those comments; and

WHEREAS, the City Council of the City of Lancaster has given notice and held a public hearing required by Chapter 395 of the Texas Local Government Code for the amendments to the Land Use Assumptions, the Capital Improvement Plan for Roadway Impact Fees for possible and modification of impact fees for the financing of capital improvements required by new development within the city; and

WHEREAS, the City Council find it is in the best interest of the City of Lancaster and its citizens to approve and adopt the amendments to the Land Use Assumptions and the Capital Improvement Plan for Roadway Impact Fees.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LANCASTER, TEXAS:

SECTION 1. The City of Lancaster, Texas hereby adopts the Land Use Assumptions for Roadway Impact Fees, as set forth in Chapter III. A, including the tables, maps, figures, exhibits and appendices thereto, of the Roadway Impact Fees Update Report, dated July 2012, prepared by Kimley-Horn and Associates, as the Land Use Assumptions for Roadway Impact Fees of the City, a copy of which is attached hereto and incorporated herein as Exhibit A.

SECTION 2. The City of Lancaster, Texas hereby adopts and approves the Capital Improvement Plan, as set forth in Chapter III. B. and IV, including its subparts and the tables, maps, figures, exhibits and appendices thereto, of the Roadway Impact Fee Update Report, dated July 2012, prepared by Kimley-Horn and Associates, as the Capital Improvement Plan [Thoroughfare Impact Fee Improvement Program] for Roadway Impact Fees, a copy of which is attached hereto and incorporated herein as Exhibit "B".

SECTION 3. That the City Council hereby sets a Public Hearing for August 27, 2012, for the purpose of taking public comments and to present any evidence for or against amending Roadway Impact Fees; and therefore the City Council shall consider whether to amend such fees.

SECTION 4. Any prior Resolution of the City Council in conflict with the provisions contained in this Resolution are hereby repealed and revoked.

SECTION 5. Should any part of this Resolution be held to be invalid for any reason, the remainder shall not be affected thereby, and such remaining portions are hereby declared to be severable.

SECTION 6. That this Resolution shall take effect immediately from and after its adoption and execution.

DULY PASSED by the City Council of the City of Lancaster, Texas, this the 23rd day of July 2012.

APPROVED:

_____

MARCUS E. KNIGHT, MAYOR

ATTEST:

_____
DOLLE K. DOWNE, CITY SECRETARY

APPROVED AS TO FORM:

_____
ROBERT E. HAGER, CITY ATTORNEY

Resolution No. 2012-07-53

Exhibit A

III. ROADWAY IMPACT FEE CALCULATION INPUTS

A. LAND USE ASSUMPTIONS

In order to assess an impact fee, Land Use Assumptions must be developed to provide the basis for population and employment growth projections within a political subdivision. As defined by Chapter 395 of the Texas Local Government Code, these assumptions include a description of changes in land uses, densities, and population in the service area. In addition, these assumptions are useful in assisting the City of Lancaster in determining the need and timing of capital improvements to serve future development. The land use assumptions base data was provided by the North Central Texas Council of Governments (NCTCOG). Each Service Area is comprised of traffic survey zones (TSZs), which are planning areas used for traveling modeling and demographic estimates and projections. The data contained in each of the TSZs was converted to the necessary demographic information need for Land Use Assumptions. The data was reviewed and modified by guidance from City of Lancaster staff.

The residential and non-residential estimates and projections were all compiled in accordance with the following categories:

Units: Number of dwelling units, both single and multi-family.

Population: Number of people, based on person per dwelling unit factors.

Employment: Square feet of building area based on retail, service, and basic land uses. Each classification has unique trip making charaeteristics.

Retail: Land use activities whieh provide for the retail sale of goods that primarily serve households and whose location choice is oriented toward the household sector, such as grocery stores and restaurants.

Service: Land use activities which provide personal and professional services such as government and other professional administrative offices.

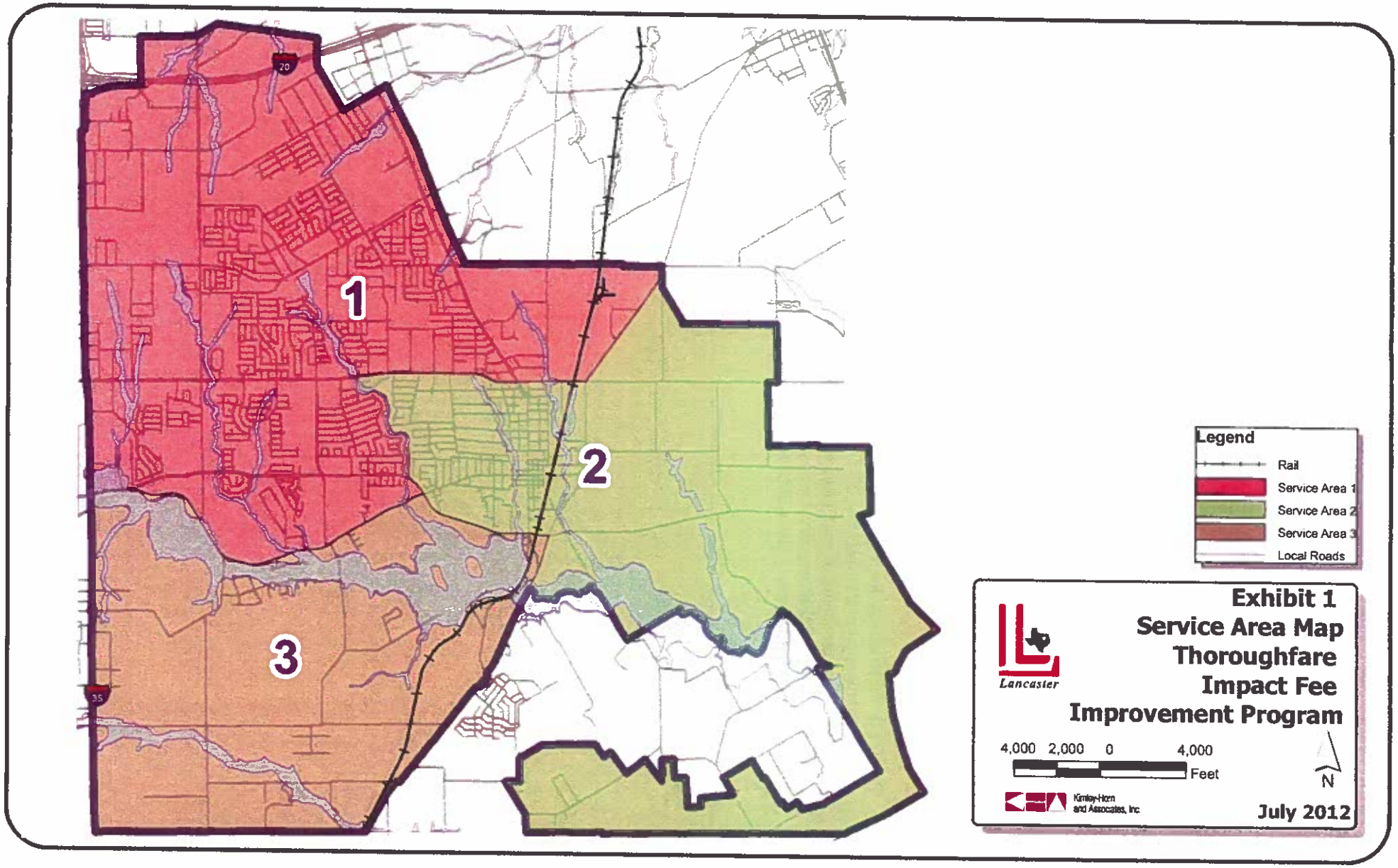
Basic: Land use activities that produce goods and services such as those that are exported outside of the local economy, such as manufacturing, construction, transportation, wholesale, trade, warehousing, and other industrial uses.

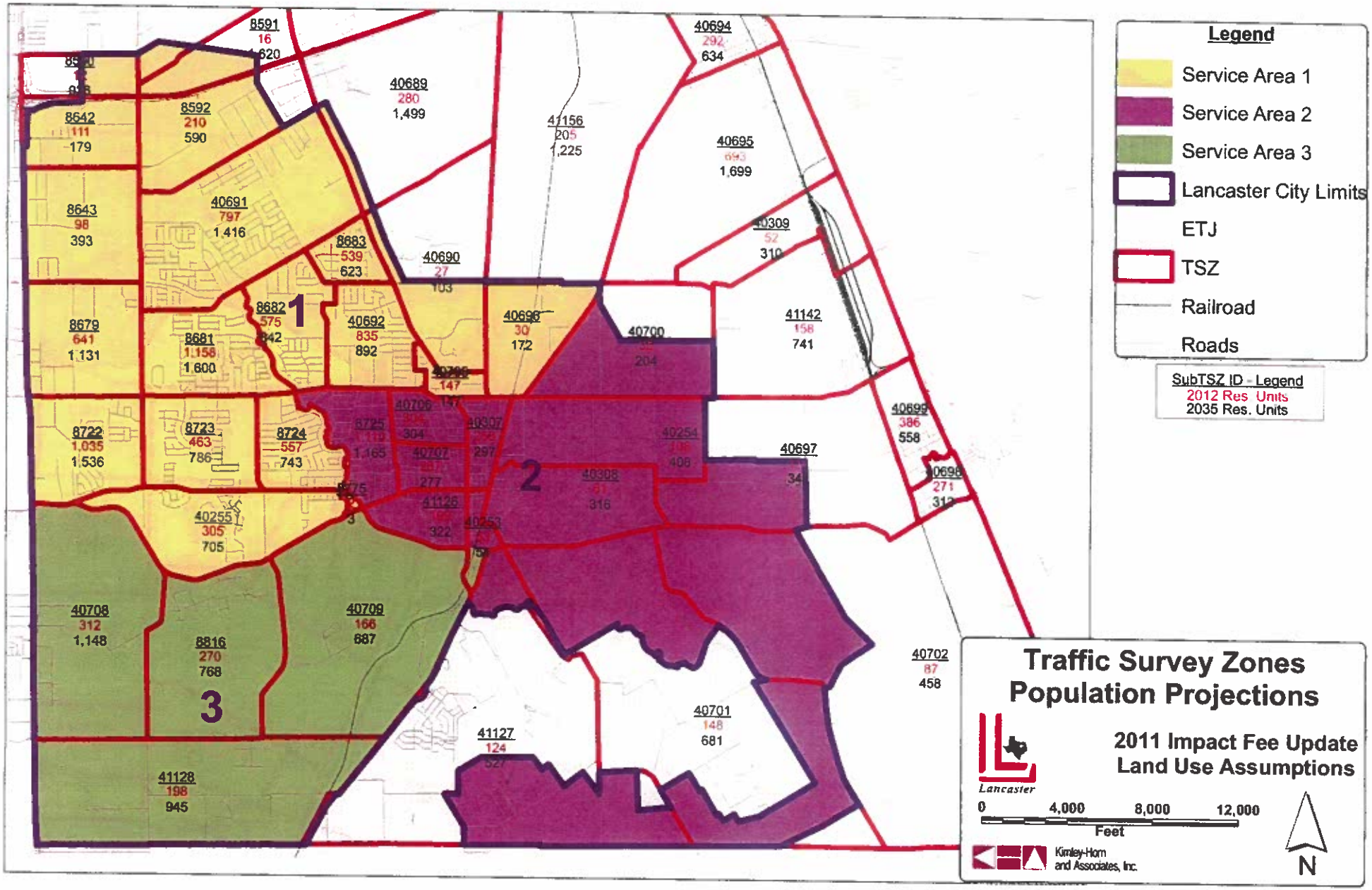
The geographic boundaries of the impact fee service areas for roadway facilities are shown in **Exhibit 1**. The City of Lancaster is divided into three (3) service areas. The Service Areas reflect those from the 2006 Roadway Impact Fee Update with modifications based upon recent annexations. These annexations primarily modified Roadway Service Area 2. For roadway facilities, the service areas are limited to those areas within the current corporate limits. Therefore, areas within the extraterritorial jurisdiction (ETJ) are excluded from this study. It should be noted that at locations where service area boundaries follow a thoroughfare facility, the proposed boundary is intended to follow the centerline of the roadway. In cases where a service area boundary follows the City Limits, only those portions of the facility within the City Limits are included in the service area.

Table 1 summarizes the residential and non-residential projections by service area within the City of Lancaster for 2012, as well as the residential and non-residential projections by service area within the City of Lancaster for 2022. In addition, a summary of the growth projections for both population and employment is included in **Appendix D**.

Table 1. Residential and Non-Residential Projections for the City of Lancaster (Derived from NCTCOG Projections)

SA	Year	Units	Population	Employment (square foot)			
				Basic	Retail	Service	Total
1	2012	8,352	25,056	2,746,800	1,758,100	1,945,900	6,450,800
	2022	10,441	31,324	4,287,100	2,076,100	2,941,500	9,304,700
	2035	13,355	40,064	5,868,000	3,049,200	4,149,100	13,066,300
2	2012	2,778	8,334	1,252,300	387,100	604,600	2,244,000
	2022	3,666	10,997	2,804,200	520,000	1,300,100	4,624,300
	2035	6,127	18,381	5,166,500	837,800	2,263,100	8,267,400
3	2012	1,054	3,163	400,000	253,400	295,800	949,200
	2022	1,965	5,895	647,800	334,000	509,300	1,491,100
	2035	3,380	10,141	1,007,200	540,900	811,300	2,359,400
Total 2012		12,184	36,553	4,399,100	2,398,600	2,846,300	9,644,000
Total 2022		16,072	48,215	7,739,100	2,930,100	4,750,900	15,420,100
Total 2035		22,862	68,586	12,041,700	4,427,900	7,223,500	23,693,100


1
2
3
20
35
Legend
Rail
Service Area 1
Service Area 2
Service Area 3
Local Roads
Lancaster
Exhibit 1
Service Area Map
Thoroughfare
Impact Fee
Improvement Program
4,000 2,000 0 4,000
Feet
N
Kimley-Horn and Associates, Inc
July 2012


Legend
Service Area 1
Service Area 2
Service Area 3
Lancaster City Limits
ETJ
TSZ
Railroad
Roads
SubTSZ ID - Legend
2012 Res Units
2035 Res. Units
Traffic Survey Zones
Population Projections
2011 Impact Fee Update
Land Use Assumptions
Lancaster
0
4,000
8,000
12,000
Feet
Kimley-Horn and Associates, Inc.
N
1
2
3
8591
16
1,620
8642
111
179
8592
210
590
40689
280
1,499
41156
205
1,225
40694
292
634
40695
693
1,699
8643
98
393
40691
797
1,416
8683
539
623
40690
27
103
40309
52
310
8682
575
842
40692
835
892
40696
30
172
41142
158
741
8679
641
1,131
8681
1,158
1,600
40700
204
40699
386
558
8722
1,035
1,536
8723
463
786
8724
557
743
40706
304
40707
277
40697
34
40698
271
312
40255
305
705
40708
312
1,148
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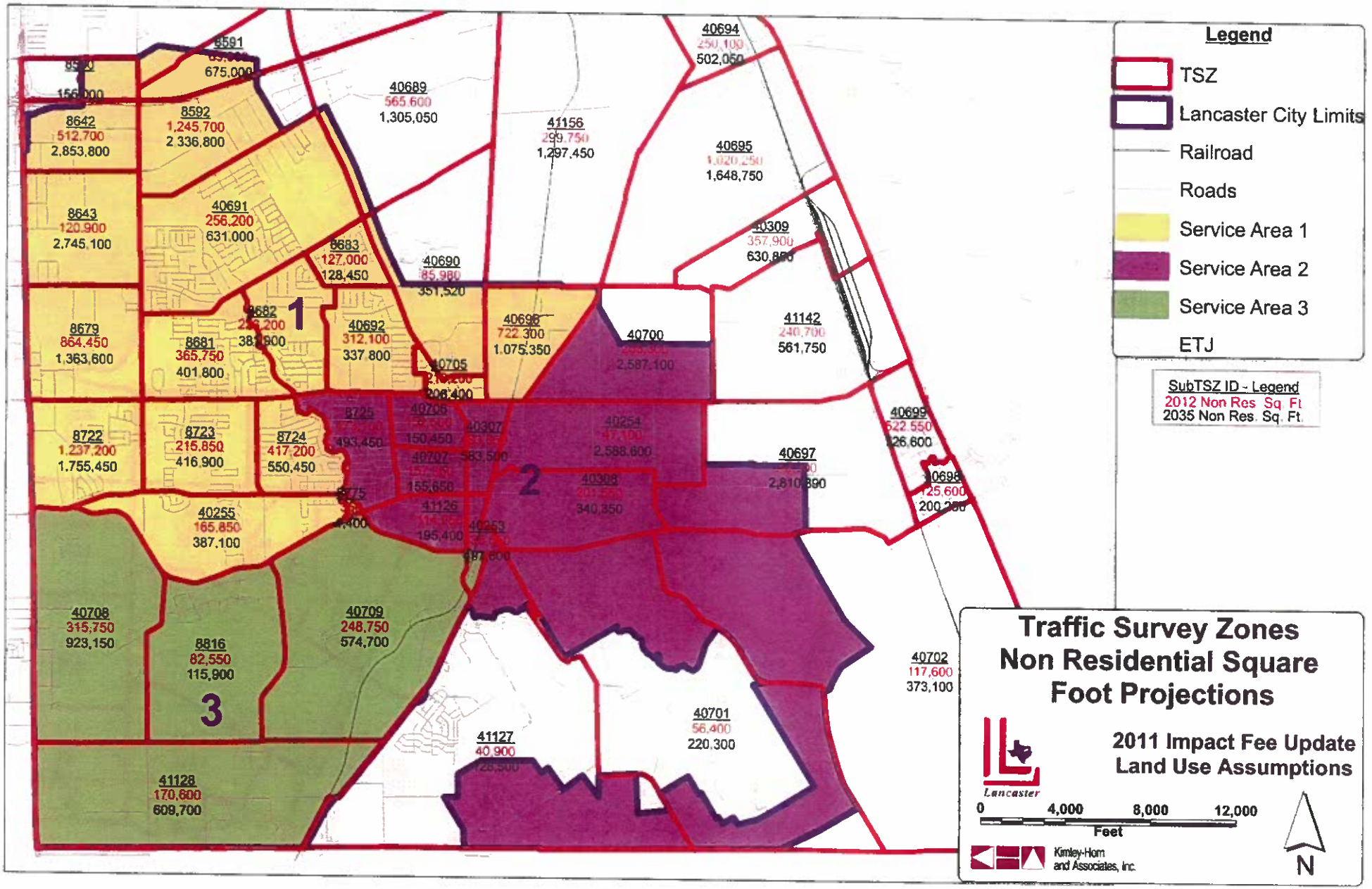
124
527
41128
198
945


Legend
TSZ
Lancaster City Limits
Railroad
Roads
Service Area 1
Service Area 2
Service Area 3
ETJ
SubTSZ ID - Legend
2012 Non Res. Sq. Ft.
2035 Non Res. Sq. Ft.
8591
675,000
8642
512,700
2,853,800
8592
1,245,700
2,336,800
40689
565,600
1,305,050
40694
502,050
41156
1,297,450
40695
1,648,750
8643
120,900
2,745,100
40691
256,200
631,000
8683
127,000
128,450
40690
351,520
40309
630,800
8679
864,450
1,363,600
8682
381,900
1
40692
312,100
337,800
40698
722,300
1,075,350
40700
2,587,100
41142
561,750
8681
365,750
401,800
40705
206,400
8722
1,237,200
1,755,450
8723
215,850
416,900
8725
493,450
8724
417,200
550,450
40706
150,450
40307
583,500
40707
155,650
40254
2,588,600
40699
26,600
40697
2,810,390
40698
200,
2
40308
340,350
8775
40255
165,850
387,100
41126
195,400
40253
40708
315,750
923,150
40709
248,750
574,700
8816
82,550
115,900
3
40702
117,600
373,100
40701
56,400
220,300
41127
40,900
41128
170,600
609,700
Traffic Survey Zones
Non Residential Square
Foot Projections
2011 Impact Fee Update
Land Use Assumptions
Lancaster
0
4,000
8,000
12,000
Feet
Kimley-Horn
and Associates, Inc.
N

Resolution No. 2012-07-53

Exhibit B

Table 2.A. Thoroughfare Impact Fee Improvement Program – Service Area 1

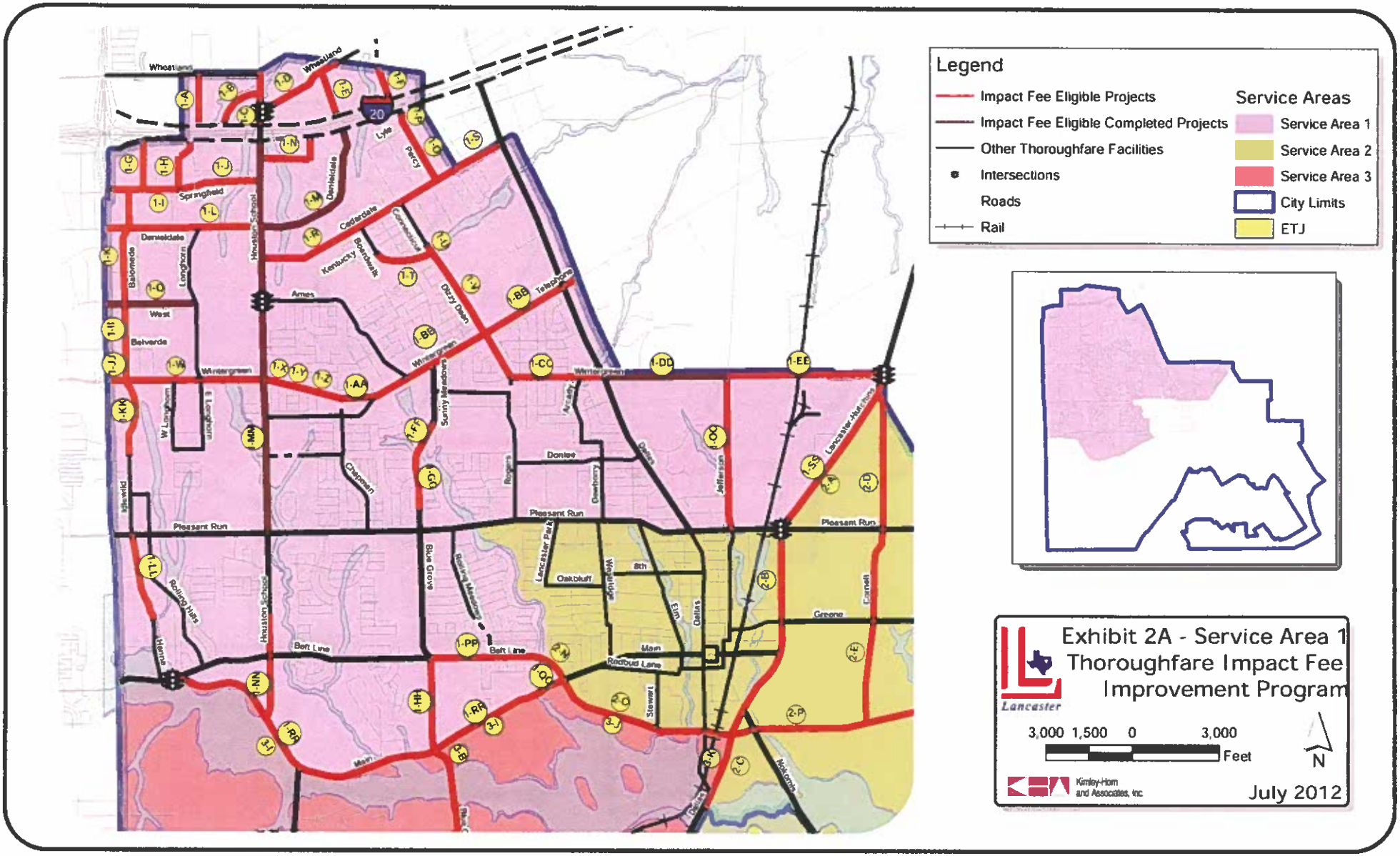
Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area
1	1-A	C2U	Proposed Collector "A"	Wheatland Rd. to IH-20	0.32	100%
	1-B	C2U	Proposed Collector "B"	University Hills Blvd. to IH-20	0.30	100%
	1-C	P6D	University Hills Blvd. (1)	Wheatland Rd. to IH-20 WBFR	0.35	100%
	1-D	C2U	Wheatland Rd.	University Hills Blvd. to N. City Limits	0.60	100%
	1-E	C2U	Proposed Collector "C"	Wheatland Rd. to IH-20	0.29	100%
	1-F	C2U	Proposed Collector "D"	N. City Limits to IH-20	0.22	100%
	1-G	C2U	Proposed Collector "E"	IH-20 to Springfield Ave.	0.34	100%
	1-H	C2U	Proposed Collector "F"	IH-20 to Springfield Ave.	0.34	100%
	1-I	C2U	Springfield St. (1)	IH-35E to Proposed Collector "F" (1-H)	0.44	100%
	1-J	C2U	Springfield St. (2)	Proposed Collector "F" (1-H) to Houston School Rd.	0.49	100%
	1-K	C2U	Balomeade Ave./Cumberland St. (1)	Springfield St. to West Dr.	0.75	100%
	1-L	S4D	Danieldale Rd. (1)	IH-35E to Houston School Rd.	1.03	100%
	1-M	S4D	Danieldale Rd. (2)	Houston School Rd. to IH-20	1.02	100%
	1-N	C2U	Proposed Collector "G"	Houston School Rd. to IH-20	0.45	100%
	1-O	C2U	Percy St. (1)	Cedardale Rd. to Lyle St.	0.38	100%
	1-P	C2U	Percy St. (2)	Lyle St. to IH-20	0.11	100%
	1-Q	C2U	West Dr.	IH-35E to Longhorn Dr.	0.58	100%
	1-R	S4D	Cedardale Rd. (1)	Houston School Rd. to E. City Limits	1.43	100%
	1-S	S4D	Cedardale Rd. (2)	E. City Limits to Dallas Ave.	0.32	50%
	1-T	C2U	Proposed Collector "H"	150' S. of Kentucky Ave. to Dizzy Dean Dr.	0.39	100%
	1-U	C2U	Proposed Collector "I" (Wintergreen Extension)	Pennsylvania Ave. to Dizzy Dean Dr.	0.07	100%
	1-V	S4D(1/2)	Dizzy Dean Dr. (Wintergreen Extension)	Proposed Collector "I"(1-U) to Telephone Rd.	0.63	100%
	1-W	M4D	Wintergreen Rd. (1)	IH-35E to Houston School Rd.	1.01	100%
	1-X	M4D(1/2)	Wintergreen Rd. (2)	Houston School Rd. to 830' E. of Houston School Rd.	0.16	100%
	1-Y	M4D	Wingergreen Rd. (3)	830' E. of Houston School Rd. to 1,385' E. of Houston	0.11	100%
	1-Z	M4D(1/2)	Wintergreen Rd. (4)	1,385' E. of Houston School Rd. to 2,770' E. of Houston	0.26	100%
	1-AA	M4D	Wingergreen Rd. (5)	2,770' E. of Houston School Rd. to Baskin Dr.	0.23	100%
	1-BB	M4D	Wintergreen Rd./Telephone Rd.	Baskin Dr. to E. City Limits	1.52	100%
	1-CC	M4D	Wintergreen Rd. (6)	Telephone Rd. to Dallas Ave.	0.94	100%
	1-DD	M4D	Wintergreen Rd. (7)	Dallas Ave. to Jefferrson St.	0.82	100%
	1-EE	M4D	Wintergreen Rd. (8)	Jefferson St. to Lancaster-Hutchins Rd.	1.04	50%
	1-FF	M4D	Blue Grove Rd. (1)	Sunny Meadow Rd. to Kings Cross Dr.	0.18	100%
	1-GG	M4D	Blue Grove Rd. (2)	Kings Cross to Dr. Brook Meadow Cir.	0.43	100%
	1-HH	M4D	Blue Grove Rd. (3)	Belt Line Rd. to Main St.	0.61	100%
	1-II	C2U	Balomeade Ave. (2)	West Dr. to Belverde Dr.	0.29	100%
	1-JJ	C2U	Balomeade Ave. (3)	Belverde Dr. to Wintergreen Rd.	0.21	100%
	1-KK	C2U	Proposed Collector "J"	Wintergreen Rd. to Idlewild Ln.	0.52	100%
	1-LL	C2U	Proposed Collector "K"	Pleasant Run Rd. to Hanna Ln.	0.63	100%
	1-MM	M4D	Houston School Rd. (2)	IH-20 EBFR to Pleasant Run Road	2.56	100%
	1-NN	M4D	Houston School Rd. (3)	1,500' N. of Belt Line Rd. to Main St.	0.70	100%
	1-OO	S4D	Jefferson St.	Wintergreen Rd. to Pleasant Run Rd.	0.98	100%
	1-PP	P6D	Belt Line Rd. (1)	Blue Grove Rd. to 1,005' W. of Main St.	0.75	100%
	1-QQ, 2-N	P6D	Belt Line Rd. (2)	1,005' W. of Main St. to Main St.	0.19	50%
	1-RR, 3-I	C2U	Main St. (1)	Belt Line Rd. to Belt Line Rd.	3.02	50%
	1-SS, 2-A	P6D	Lancaster Hutchins Rd. (1)	Wintergreen Rd. to Pleasant Run Rd.	1.19	50%
	1-1		Signal Installation	Houston School Rd. & Wheatland Rd.		100%
	1-2		Signal Installation	Houston School Rd. & Ames Rd.		100%
	1-3		Signal Installation	Belt Line Rd. & Chesier Rd. / Main St.		50%
	1-4		Signal Installation	Lancaster-Hutchins Rd. & Wintergreen Rd.		50%
	1-5		Signal Installation	Lancaster-Hutchins Rd. & Pleasant Run Rd.		25%

Table 2.B. Thoroughfare Impact Fee Improvement Program – Service Area 2

Service	Proj. #	Class	Roadway	Limits	Length	% In
2	1-SS, 2-A	P6D	Lancaster Hutchins Rd. (1)	Wintergreen Rd. to Pleasant Run Rd.	1.19	50%
	2-B	M4D	Lancaster-Hutchins Rd. (2)	Pleasant Run Rd. to Belt Line Rd.	1.42	100%
	2-C, 3-K	P6D	Lancaster-Hutchins Rd. (3)	Belt Line Rd. to Dallas Ave.	0.53	50%
	2-D	M4D	Cornell Rd. (1)	Lancaster Hutchins Rd. to Greene Rd.	1.52	100%
	2-E	M4D	Cornell Rd. (2)	Greene Rd. to Belt Line Rd.	0.66	100%
	2-F	M4D	Alba Rd. (1)	N. City Limits to Greene Rd. (N)	1.09	100%
	2-G	M4D	Alba Rd. (2)	Greene Rd. (N) to 935' S. of Greene Rd. (S)	0.32	100%
	2-H	M4D	Alba Rd. (3)	935' S. of Greene Rd. (S) to Belt Line Rd.	0.22	100%
	2-I	C2U	Ferris Rd. (1)	Belt Line Rd. to S. City Limits	1.19	100%
	2-J	C2U	Ferris Rd. (2)	S. City Limits to S. City Limits	0.56	50%
	2-K	C2U	Ferris Rd. (3)	S. City Limits to E. City Limits	0.59	100%
	2-L	C2U	Ferris Rd. (4)	E. City Limits to S. City Limits	1.12	50%
	2-M	M4D	Airport Rd. East	Greene Rd. to Ferris Rd.	2.04	100%
	1-QQ, 2-N	P6D	Belt Line Rd. (2)	1,005' W. of Main St. to Main St.	0.19	50%
	2-O, 3-J	M4D	Belt Line Rd. (4)	Main St. to Lancaster-Hutchins Rd.	1.23	50%
	2-P	M4D	Belt Line Rd. (5)	Lancaster-Hutchins Rd. to E. City Limits	2.77	100%
	2-Q	M4D	Belt Line Rd. (6)	E. City Limits to 640' E. of E. City Limits	0.12	50%
	1-4		Signal Installation	Lancaster-Hutchins Rd. & Wintergreen Rd.		50%
	1-5		Signal Installation	Lancaster-Hutchins Rd. & Pleasant Run Rd.		75%

Table 2.C. Thoroughfare Impact Fee Improvement Program – Service Area 3

Service	Proj. #	Class	Roadway	Limits	Length	% In
3	3-A	M4D	Houston School Rd. (4)	2,720' N. of Bear Creek Rd. to S. City Limits	1.44	100%
	3-B	M4D	Blue Grove Rd. (4)	Main St. to 385' S. of Main St.	0.07	100%
	3-C	M4D	Blue Grove Rd. (5)	385' S. of Main St. to 765' N. of Bear Creek Rd.	1.52	100%
	3-D	M4D	Blue Grove Rd. (6)	765' N. of Bear Creek Rd. to 1,700' S. of Bear Creek Rd.	0.47	100%
	3-E	S4D	Bear Creek Rd.	IH-35E to Dallas Ave.	3.06	100%
	3-F	M4D	Meadowlark Ln. (1)	Parkerville Rd. to 980' S. of Parkerville Rd.	0.19	100%
	3-G	M4D	Meadowlark Ln. (2)	980' S. of Parkerville Rd. to Meadowlark Ct.	0.52	100%
	3-H	M4D	Meadowlark Ln. (3)	Meadowlark Ct. to S. City Limits	1.24	100%
	1-RR, 3-I	C2U	Main St. (1)	Belt Line Rd. to Belt Line Rd.	3.02	50%
	2-O, 3-J	M4D	Belt Line Rd. (4)	Main St. to Lancaster-Hutchins Rd.	1.23	50%
	2-C, 3-K	P6D	Lancaster-Hutchins Rd. (3)	Lancaster-Hutchins Rd. (3)	0.53	50%
	1-3		Signal Installation	Belt Line Rd. & Chesier Rd. / Main St.		50%


Legend
Impact Fee Eligible Projects
Impact Fee Eligible Completed Projects
Other Thoroughfare Facilities
Intersections
Roads
Rail
Service Areas
Service Area 1
Service Area 2
Service Area 3
City Limits
ETJ
Exhibit 2A - Service Area 1
Thoroughfare Impact Fee
Improvement Program
Lancaster
3,000 1,500 0 3,000
Feet
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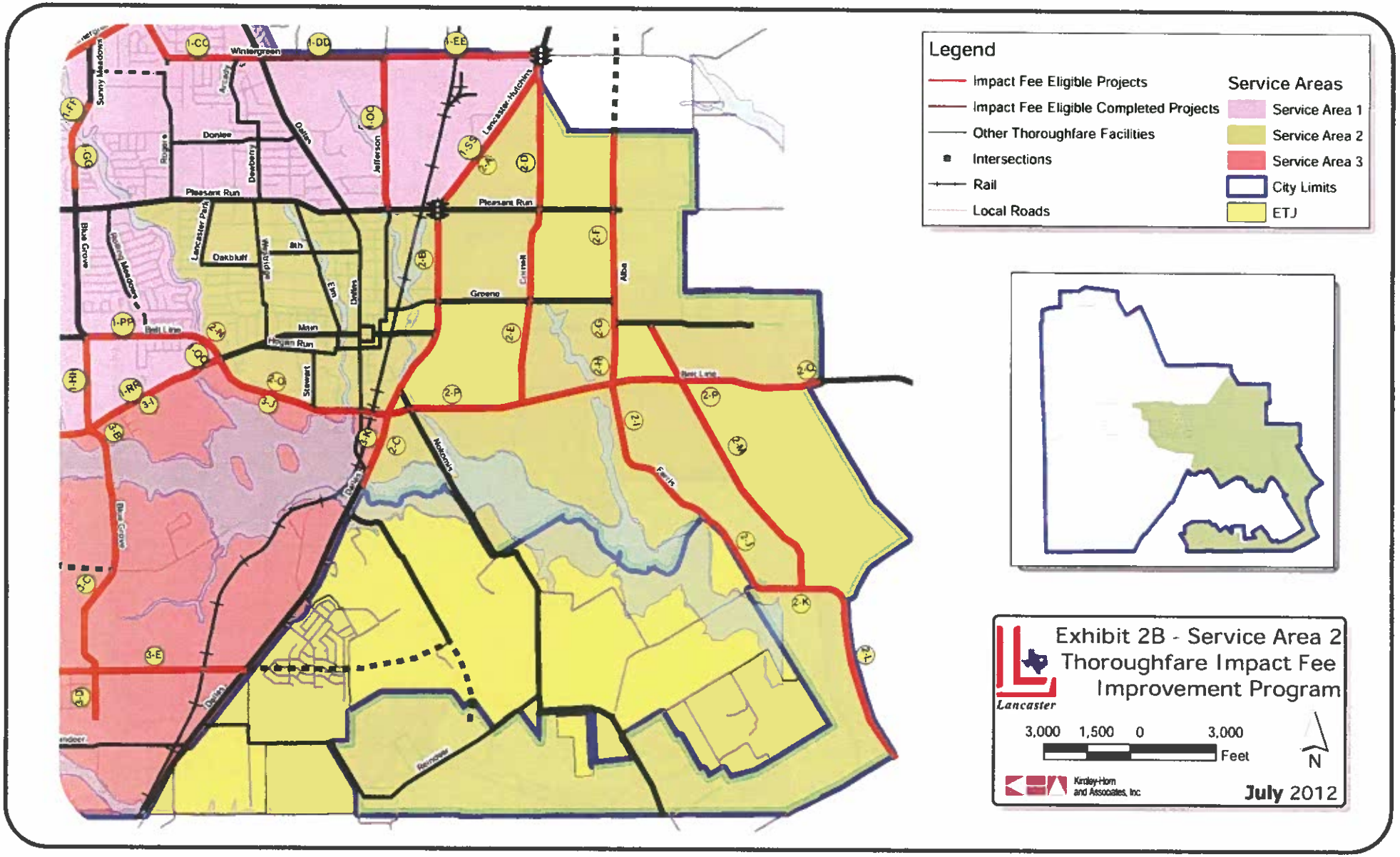
Kimley-Horn and Associates, Inc.
July 2012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Other Thoroughfare Facilities
Intersections
Rail
Local Roads
Service Areas
Service Area 1
Service Area 2
Service Area 3
City Limits
ETJ
Exhibit 2B - Service Area 2
Thoroughfare Impact Fee
Improvement Program
Lancaster
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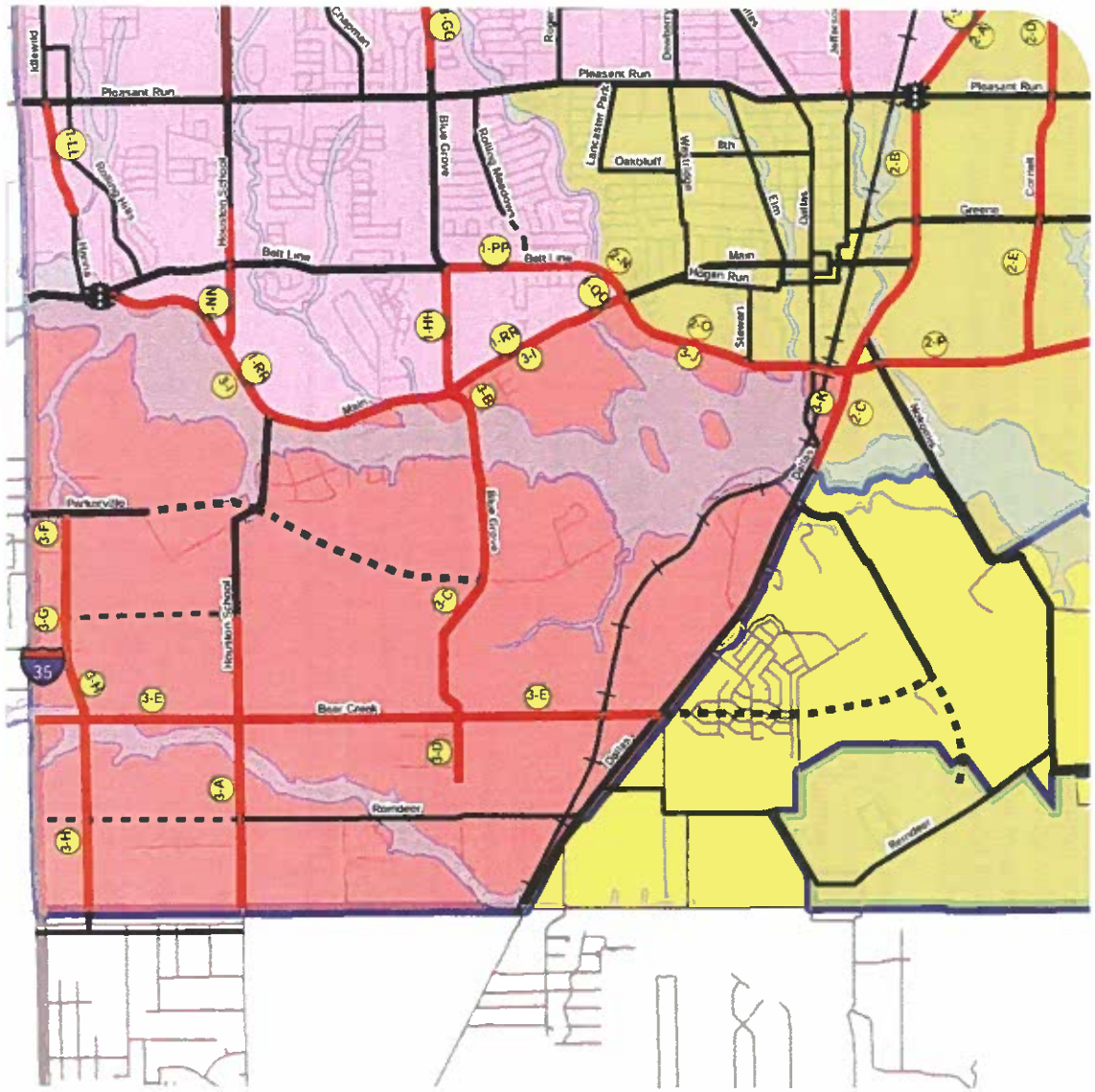
Kimley-Horn and Associates, Inc
July 2012



Legend

- Impact Fee Eligible Projects
- Impact Fee Eligible Completed Projects
- Other Thoroughfare Facilities
- Intersections
- Rail
- Local Roads

Service Areas

- Service Area 1
- Service Area 2
- Service Area 3
- City Limits
- ETJ

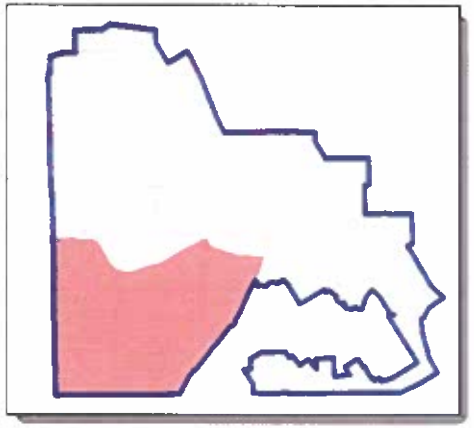


Exhibit 2C - Service Area 3 Thoroughfare Impact Fee Improvement Program

Lancaster

3,000 1,500 0 3,000

Feet

N

Kimley-Horn and Associates, Inc.

July 2012

IV. METHODOLOGY FOR ROADWAY IMPACT FEES

A. SERVICE AREAS

The three (3) service areas used in the 2012 Roadway Impact Fee Update are shown in the previously referenced **Exhibit 1**. These service areas cover the entire corporate boundary of the City of Lancaster. Chapter 395 of the Texas Local Government Code specifies that "the service area is limited to an area within the corporate boundaries of the political subdivision and shall not exceed six (6) miles."

B. SERVICE UNITS

The "service unit" is a measure of consumption or use of the roadway facilities by new development. In other words, it is the measure of supply and demand for roads in the City. For transportation purposes, the service unit is defined as a vehicle-mile. On the supply side, this is a lane-mile of an arterial street. On the demand side, this is a vehicle-trip of one-mile in length. The application of this unit as an estimate of either supply or demand is based on travel during the afternoon peak hour of traffic. This time period is commonly used as the basis for transportation planning and the estimation of trips created by new development.

Another aspect of the service unit is the service volume that is provided (supplied) by a lane-mile of roadway facility. This number, also referred to as capacity, is a function of the facility type, facility configuration, number of lanes, and level of service.

The hourly service volumes used in the Roadway Impact Fee Study are based upon generally accepted thoroughfare capacity criteria. **Tables 3A** and **3B** show the service volumes as a function of the facility type.

Table 3A. Level of Use for Proposed Facilities
(used in Appendix B – TIFIP Service Units of Supply)

Roadway Type (MTP Classifications)	Median Configuration	Hourly Vehicle-Mile Capacity per Lane-Mile of Roadway Facility
P6D – Principal Arterial	Divided	750
M4D – Major Arterial	Divided	650
S4D – Minor Arterial	Divided	625
C2U – Collector	Undivided	450

Table 3B. Level of Use for Existing Facilities
(used in Appendix C – Existing Roadway Facilities Inventory)

Roadway Type	Description	Hourly Vehicle-Mile Capacity per Lane-Mile of Roadway Facility
2U-R	Rural Cross-Section (i.e. gravel, dirt, etc.)	150
2U-H	Two lane undivided – Arterial Type	750
2U	Two lane undivided	450
3U	Three lane undivided (TWLTL)	500
4U	Four lane undivided (TWLTL)	525
4D	Four lane divided	650
5U	Five lane undivided (TWLTL)	625
6D	Six lane divided	750

C. Cost Per Service Unit

A fundamental step in the impact fee process is to establish the cost for each service unit. In the case of the roadway impact fee, this is the cost for each vehicle-mile of travel. This cost per service unit is the cost to construct a roadway (lane-mile) needed to accommodate a vehicle-mile of travel at a level of service corresponding to the City's standards. The cost per service unit is calculated for each service area based on a specific list of projects within that service area.

The second component of the cost per service unit is the number of service units in each service area. This number is the measure of the growth in transportation demand that is projected to occur in the ten-year period. Chapter 395 requires that Impact Fees be assessed only to pay for growth projected to occur in the city limits within the next ten-years, a concept that will be covered in a later section of this report (**see Section III.E**). As noted earlier, the units of demand are vehicle-miles of travel.

D. Cost of the TIFIP

The costs that may be included in the cost per service unit are all of the implementation costs for the Impact Fee Study, as well as project costs for arterial system elements within the Thoroughfare Impact Fee Improvement Program. Chapter 395 of the Texas Local Government Code specifies that the allowable costs are "...including and limited to the:

1. Construction contract price;
2. Surveying and engineering fees;
3. Land acquisition costs, including land purchases, court awards and costs, attorney's fees, and expert witness fees; and
4. Fees actually paid or contracted to be paid to an independent qualified engineer or financial consultant preparing or updating the Capital Improvement Plan who is not an employee of the political subdivision."

The engineer's opinion of the probable costs of the projects in the TIFIP is based, in part, on the calculation of a unit cost of construction. This means that a cost per linear foot of roadway is calculated based on an average price for the various components of roadway construction. This allows the probable cost to be determined by the type of facility being constructed, the number of lanes, and the length of the project. The costs for location-specific items such as bridges, highway ramps, drainage structures, and any other special components are added to each project as appropriate. In addition, based upon discussions with City of Lancaster staff, State, Dallas County, and developer driven projects in which the City has contributed a portion of the total project cost have been included in the TIFIP as lump sum costs.

A typical roadway project consists of a number of costs, including the following: construction, design engineering, survey, and right-of way acquisition. While the construction cost component of a project may actually consist of approximately 100 various pay items, a simplified approach was used for developing the conceptual level project costs. Each new project's construction cost was divided into two cost components: roadway construction cost and major construction component allowances. The roadway construction components consist of the following pay items: (1) street excavation, (2) lime stabilization, (3) concrete pavement, (4) topsoil, (5) concrete driveway approach, and (6) sidewalk.

Based on the paving construction cost subtotal, a percentage of this total is calculated to allot for major construction component allowances. These allowances include preparation of ROW, traffic control, pavement markings/markers, roadway drainage, illumination, special drainage structures, water improvements, sewer improvements, establishing turf/erosion control and basic landscaping. These allowance percentages are also based on historical data. The paving and allowance subtotal is given a ten percent (10%) contingency to determine the construction cost total. To determine the total Impact Fee Project Cost, a percentage of the construction cost total is added for engineering, surveying, testing, mobilization, and right-of-way/easement acquisition.

The construction costs are variable based on the proposed Master Thoroughfare Plan classification of the roadway. Additional classifications are utilized in cases where a portion of the facility currently exists. The following indication is used for these projects: (1/2) for facilities where half the facility still needs to be constructed.

Tables 4A, **4B** and **4C** are the TIFIP project list for each service area with conceptual level project cost projections. Detailed cost projections and methodology used for each individual project can be seen in **Appendix A, Opinion of Probable Cost Worksheets.** It should be noted that these tables reflect only conceptual-level opinions or assumptions regarding the portions of future project costs that are potentially recoverable through impact fees. Actual costs of construction are likely to change with time and are dependent on market and economic conditions that cannot be precisely predicted at this time.

This TIFIP establishes the list of projects for which Impact Fees may be utilized. Essentially, it establishes a list of projects for which an impact fee funding program can be established. This is different from a City's construction TIFIP, which provides a broad list of capital projects for which the City is committed to building. The cost projections utilized in this study should not be utilized for the City's building program or construction TIFIP.

Table 4.A – 10-Year Thoroughfare Impact Fee Improvement Program with Conceptual Level Project Cost Projections – Service Area 1

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
1	1-A	C2U	Proposed Collector "A"	Wheatland Rd. to IH-20	0.32	100%	$ 1,099,000	$ 1,099,000
	1-B	C2U	Proposed Collector "B"	University Hills Blvd. to IH-20	0.30	100%	$ 1,447,000	$ 1,447,000
	1-C	P6D	University Hills Blvd. (1)	Wheatland Rd. to IH-20 WBFR	0.35	100%	$ 1,029,000	$ 1,029,000
	1-D	C2U	Wheatland Rd.	University Hills Blvd. to N. City Limits	0.60	100%	$ 1,983,000	$ 1,983,000
	1-E	C2U	Proposed Collector "C"	Wheatland Rd. to IH-20	0.29	100%	$ 984,000	$ 984,000
	1-F	C2U	Proposed Collector "D"	N. City Limits to IH-20	0.22	100%	$ 755,000	$ 755,000
	1-G	C2U	Proposed Collector "E"	IH-20 to Springfield Ave.	0.34	100%	$ 1,187,000	$ 1,187,000
	1-H	C2U	Proposed Collector "F"	IH-20 to Springfield Ave.	0.34	100%	$ 1,168,000	$ 1,168,000
	1-I	C2U	Springfield St. (1)	IH-35E to Proposed Collector "F" (1-H)	0.44	100%	$ 1,459,000	$ 1,459,000
	1-J	C2U	Springfield St. (2)	Proposed Collector "E" (1-H) to Houston School Rd.	0.49	100%	$ 2,098,000	$ 2,098,000
	1-K	C2U	Balmeade Ave./Cumberland St. (1)	Springfield St. to West Dr.	0.75	100%	$ 2,471,000	$ 2,471,000
	1-L	S4D	Danieldale Rd. (1)	IH-35E to Houston School Rd.	1.03	100%	$ 3,600,000	$ 3,600,000
	1-M	S4D	Danieldale Rd. (2)	Houston School Rd. to IH-20	1.02	100%	$ 1,500,000	$ 1,500,000
	1-N	C2U	Proposed Collector "G"	Houston School Rd. to IH-20	0.45	100%	$ 1,943,000	$ 1,943,000
	1-O	C2U	Percy St. (1)	Cedardale Rd. to Lyle St.	0.38	100%	$ 1,270,000	$ 1,270,000
	1-P	C2U	Percy St. (2)	Lyle St. to IH-20	0.11	100%	$ 371,000	$ 371,000
	1-Q	C2U	West Dr.	IH-35E to Longhorn Dr.	0.58	100%	$ 2,523,027	$ 2,523,027
	1-R	S4D	Cedardale Rd. (1)	Houston School Rd. to E. City Limits	1.43	100%	$ 6,034,000	$ 6,034,000
	1-S	S4D	Cedardale Rd. (2)	E. City Limits to Dallas Ave.	0.32	50%	$ 1,352,000	$ 676,000
	1-T	C2U	Proposed Collector "H"	350' S. of Kentucky Ave. to Dizzy Dean Dr.	0.19	100%	$ 1,355,000	$ 1,355,000
	1-U	C2U	Proposed Collector "I" (Wintergreen Extension)	Pennsylvania Ave. to Dizzy Dean Dr.	0.07	100%	$ 239,000	$ 239,000
	1-V	S4D(1/2)	Dizzy Dean Dr. (Wintergreen Extension)	Proposed Collector "I"(1-U) to Telephone Rd.	0.63	100%	$ 1,374,000	$ 1,374,000
	1-W	M4D	Wintergreen Rd. (1)	IH-35E to Houston School Rd.	1.01	100%	$ 4,702,536	$ 4,702,536
	1-X	M4D(1/2)	Wintergreen Rd. (2)	Houston School Rd. to 830' E. of Houston School Rd.	0.16	100%	$ 345,000	$ 345,000
	1-Y	M4D	Wintergreen Rd. (3)	830' E. of Houston School Rd. to 1,385' E. of Houston School Rd.	0.11	100%	$ 458,000	$ 458,000
	1-Z	M4D(1/2)	Wintergreen Rd. (4)	1,385' E. of Houston School Rd. to 2,270' E. of Houston School Rd.	0.26	100%	$ 571,000	$ 571,000
	1-AA	M4D	Wintergreen Rd. (5)	2,270' E. of Houston School Rd. to Baskin Dr.	0.23	100%	$ 974,000	$ 974,000
	1-BB	M4D	Wintergreen Rd./Telephone Rd.	Baskin Dr. to E. City Limits	1.52	100%	$ 6,334,000	$ 6,334,000
	1-CC	M4D	Wintergreen Rd. (6)	Telephone Rd. to Dallas Ave.	0.94	100%	$ 4,296,000	$ 4,296,000
	1-DD	M4D	Wintergreen Rd. (7)	Dallas Ave. to Jefferson St.	0.82	100%	$ 2,404,934	$ 2,404,934
	1-EE	M4D	Wintergreen Rd. (8)	Jefferson St. to Lancaster-Hutchins Rd.	1.04	50%	$ 5,061,000	$ 2,530,500
	1-FF	M4D	Blue Grove Rd. (1)	Sunny Meadow Rd. to Kings Cross Dr.	0.18	100%	$ 1,603,000	$ 1,603,000
	1-GG	M4D	Blue Grove Rd. (2)	Kings Cross to Dr. Brook Meadow Cir.	0.43	100%	$ 1,805,000	$ 1,805,000
	1-HH	M4D	Blue Grove Rd. (3)	Belt Line Rd. to Main St.	0.61	100%	$ 2,553,000	$ 2,553,000
	1-II	C2U	Balmeade Ave. (2)	West Dr. to Belverde Dr.	0.29	100%	$ 1,003,000	$ 1,003,000
	1-JJ	C2U	Balmeade Ave. (3)	Belverde Dr. to Wintergreen Rd.	0.21	100%	$ 679,000	$ 679,000
	1-KK	C2U	Proposed Collector "J"	Wintergreen Rd. to Idlewild Ln.	0.52	100%	$ 1,774,000	$ 1,774,000
	1-LL	C2U	Proposed Collector "K"	Pleasant Run Rd. to Hanna Ln.	0.63	100%	$ 2,151,000	$ 2,151,000
	1-MM	M4D	Houston School Rd. (2)	IH-20 EBFR to Pleasant Run Road	2.56	100%	$ 7,480,000	$ 7,480,000
	1-NN	M4D	Houston School Rd. (3)	1,500' N. of Belt Line Rd. to Main St.	0.70	100%	$ 3,909,000	$ 3,909,000
	1-OO	S4D	Jefferson St.	Wintergreen Rd. to Pleasant Run Rd.	0.98	100%	$ 4,525,000	$ 4,525,000
	1-PP	P6D	Belt Line Rd. (1)	Blue Grove Rd. to 1,005' W. of Main St.	0.75	100%	$ 4,334,000	$ 4,334,000
	1-QQ, 2-N	P4D	Belt Line Rd. (2)	1,005' W. of Main St. to Main St.	0.19	50%	$ 1,107,000	$ 553,500
	1-RR, 3-I	C2U	Main St. (1)	Belt Line Rd. to Belt Line Rd.	3.02	50%	$ 9,973,000	$ 4,986,000
	1-SS, 2-A	P6D	Lancaster Hutchins Rd. (1)	Wintergreen Rd. to Pleasant Run Rd.	1.19	50%	$ 6,902,000	$ 3,451,000
	1-1		Signal Installation	Houston School Rd. & Wheatland Rd.		100%	$ 140,000	$ 140,000
	1-2		Signal Installation	Houston School Rd. & Ames Rd.		100%	$ 140,000	$ 140,000
	1-3		Signal Installation	Belt Line Rd. & Chester Rd. / Main St.		50%	$ 140,000	$ 70,000
	1-4		Signal Installation	Lancaster-Hutchins Rd. & Wintergreen Rd.		50%	$ 140,000	$ 70,000
	1-5		Signal Installation	Lancaster-Hutchins Rd. & Pleasant Run Rd.		25%	$ 140,000	$ 35,000
							Service Area Project Cost Subtotal	**$ 99,433,497**
							2012 Roadway Impact Fee Update Cost Per Service Area	**$ 15,333**
							Total Cost in SERVICE AREA 1	**$ 99,448,830**

Table 4.B – 10-Year Thoroughfare Impact Fee Improvement Program with Conceptual Level Project Cost Projections – Service Area 2

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
2	1-SS, 2-A	P6D	Lancaster Hutchins Rd. (1)	Wintergreen Rd. to Pleasant Run Rd.	1.19	50%	$ 6,902,000	$ 3,451,000
	2-B	M4D	Lancaster-Hutchins Rd. (2)	Pleasant Run Rd. to Belt Line Rd.	1.42	100%	$ 6,264,000	$ 6,264,000
	2-C, 3-K	P6D	Lancaster-Hutchins Rd. (3)	Belt Line Rd. to Dallas Ave	0.53	50%	$ 3,074,000	$ 1,537,000
	2-D	M4D	Cornell Rd. (1)	Lancaster Hutchins Rd. to Greene Rd.	1.52	100%	$ 6,302,000	$ 6,302,000
	2-E	M4D	Cornell Rd. (2)	Greene Rd. to Belt Line Rd.	0.66	100%	$ 2,875,000	$ 2,875,000
	2-F	M4D	Alba Rd. (1)	N. City Limits to Greene Rd. (N)	1.09	100%	$ 4,732,000	$ 4,732,000
	2-G	M4D	Alba Rd. (2)	Greene Rd. (N) to 935' S. of Greene Rd. (S)	0.32	100%	$ 1,325,000	$ 1,325,000
	2-H	M4D	Alba Rd. (3)	935' S. of Greene Rd. (S) to Belt Line Rd.	0.22	100%	$ 940,000	$ 940,000
	2-I	C2U	Ferris Rd. (1)	Belt Line Rd. to S. City Limits	1.19	100%	$ 3,933,000	$ 3,933,000
	2-J	C2U	Ferris Rd. (2)	S. City Limits to S. City Limits	0.56	50%	$ 1,865,000	$ 932,500
	2-K	C2U	Ferris Rd. (3)	S. City Limits to E. City Limits	0.59	100%	$ 1,954,000	$ 1,954,000
	2-L	C2U	Ferris Rd. (4)	E. City Limits to S. City Limits	1.12	50%	$ 3,713,000	$ 1,856,500
	2-M	M4D	Airport Rd. East	Greene Rd. to Ferris Rd.	2.04	100%	$ 8,814,000	$ 8,814,000
	1-QQ, 2-N	P6D	Belt Line Rd. (2)	1,005' W. of Main St. to Main St.	0.19	50%	$ 1,107,000	$ 553,500
	2-O, 3-J	M4D	Belt Line Rd. (4)	Main St. to Lancaster-Hutchins Rd.	1.23	50%	$ 5,470,000	$ 2,735,000
	2-P	M4D	Belt Line Rd. (5)	Lancaster-Hutchins Rd. to E. City Limits	2.77	100%	$ 11,863,000	$ 11,863,000
	2-Q	M4D	Belt Line Rd. (6)	E. City Limits to 640' E. of E. City Limits	0.12	50%	$ 506,000	$ 253,000
	1-4		Signal Installation	Lancaster-Hutchins Rd. & Wintergreen Rd.		50%	$ 140,000	$ 70,000
	1-5		Signal Installation	Lancaster-Hutchins Rd. & Pleasant Run Rd.		75%	$ 140,000	$ 105,000
							Service Area Project Cost Subtotal	**$ 60,504,500**
							2012 Roadway Impact Fee Update Cost Per Service Area	**$ 15,333**
							Total Cost in SERVICE AREA 2	**$ 60,519,833**

Table 4.C – 10-Year Thoroughfare Impact Fee Improvement Program with Conceptual Level Project Cost Projections – Service Area 3

Service Area	Proj. #	Class	Roadway	Limits	Length (mi)	% In Service Area	Total Project Cost	Cost in Service Area
3	3-A	M4D	Houston School Rd. (4)	2,720' N. of Bear Creek Rd. to S. City Limits	1.44	100%	$ 6,361,000	$ 6,361,000
	3-B	M4D	Blue Grove Rd. (4)	Main St. to 385' S. of Main St.	0.07	100%	$ 314,000	$ 314,000
	3-C	M4D	Blue Grove Rd. (5)	385' S. of Main St. to 765' N. of Bear Creek Rd.	1.52	100%	$ 7,067,000	$ 7,067,000
	3-D	M4D	Blue Grove Rd. (6)	765' N. of Bear Creek Rd. to 1,700' S. of Bear Creek Rd.	0.47	100%	$ 2,036,000	$ 2,036,000
	3-E	S4D	Bear Creek Rd.	IH-35E to Dallas Ave	3.06	100%	$ 13,278,000	$ 13,278,000
	3-F	M4D	Meadowlark Ln. (1)	Parkerville Rd. to 980' S. of Parkerville Rd.	0.19	100%	$ 803,000	$ 803,000
	3-G	M4D	Meadowlark Ln. (2)	980' S. of Parkerville Rd. to Meadowlark Ct.	0.52	100%	$ 2,150,000	$ 2,150,000
	3-H	M4D	Meadowlark Ln. (3)	Meadowlark Ct. to S. City Limits	1.24	100%	$ 6,151,000	$ 6,151,000
	1-RR, 3-I	C2U	Main St. (1)	Belt Line Rd. to Belt Line Rd.	3.02	50%	$ 9,972,000	$ 4,986,000
	2-O, 3-J	M4D	Belt Line Rd. (4)	Main St. to Lancaster-Hutchins Rd.	1.23	50%	$ 5,470,000	$ 2,735,000
	2-C, 3-K	P4D	Lancaster-Hutchins Rd. (3)	Lancaster-Hutchins Rd. (3)	0.53	50%	$ 3,074,000	$ 1,537,000
	1-3		Signal Installation	Belt Line Rd. & Chesire Rd. / Main St.		50%	$ 140,000	$ 70,000
							Service Area Project Cost Subtotal	**$ 47,468,000**
							2012 Roadway Impact Fee Update Cost Per Service Area	**$ 15,333**
							Total Cost in SERVICE AREA 3	**$ 47,483,333**

Notes:

a. The planning level cost projections have been developed for Impact Fee calculations only and should not be used for any future Thoroughfare Impact Fee Improvement Programs within the City of Lancaster.

b. The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

c. The project cost total within each Service Area may differ from the total shown in the Summary sheets provided to the City due to some projects that are split between multiple service areas.

E. SERVICE UNIT CALCULATION

The basic service unit for the computation of Lancaster's roadway impact fees is the vehicle-mile of travel during the afternoon peak-hour. To determine the cost per service unit, it is necessary to project the growth in vehicle-miles of travel for the service area for the ten-year period.

The growth in vehicle-miles from 2012 to 2022 is based upon projected changes in residential and non-residential growth for the period. In order to determine this growth, baseline estimates of population, basic square feet, service square feet, and retail square feet for 2012 were made by the City, along with projections for each of these demographic statistics through 2022. **Table I** details the growth estimates used for impact fee determination.

The residential and non-residential statistics in the Land Use Assumptions provide the "independent variables" that are used to calculate the existing (2012) and projected (2022) transportation service units used to establish the roadway impact fee maximum rates within each service area. The roadway demand service units (vehicle-miles) for each service area are the sum of the vehicle-miles "generated" by each category of land use in the service area.

For the purpose of impact fees, all developed and developable land is categorized as either residential or non-residential. For residential land uses, the existing and projected population is converted to dwelling units. The number of dwelling units in each service area is multiplied by a *transportation demand factor* to compute the vehicle-miles of travel that occur during the afternoon peak hour. This factor computes the average amount of demand caused by the residential land uses in the service area. The *transportation demand factor* is discussed in more detail below.

For non-residential land uses, the process is similar. The Land Use Assumptions provide existing and projected number of building square footages for three (3) categories of non-residential land uses– basic, service, and retail. These categories correspond to an aggregation of other specific land use categories based on the NAICS (North American Industrial Classification System).

Building square footage is the most common independent variable for the estimation of non-residential trips in the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 8th Edition*. This statistic is more appropriate than the number of employees because building square footage is tied more closely to trip generation and is known at the time of application for any development or development modification that would require the assessment of an impact fee.

The existing and projected Land Use Assumptions for the dwelling units and the square footage of basic, service, and retail land uses provide the basis for the projected increase in vehicle-miles of travel. As noted earlier, a *transportation demand factor* is applied to these values and then summed to calculate the total peak hour vehicle-miles of demand for each service area.

The *transportation demand factors* are aggregate rates derived from two sources – the *ITE Trip Generation Manual, 8th Edition* and the regional Origin-Destination Travel Survey performed by North Central Texas Council of Governments (NCTCOG) and the National Household Travel Survey (NHTS). The *ITE Trip Generation Manual, 8th Edition* provides the number of trips that are produced or attracted to the land use for each dwelling unit, square foot of building, or other

corresponding unit. For the retail category of land uses, the rate is adjusted to account for the fact that a percentage of retail trips are made by people who would otherwise be traveling past that particular establishment anyway, such as a trip between work and home. These trips are called pass-by trips, and since the travel demand is accounted for in the land use calculations relative to the primary trip, it is necessary to discount the retail rate to avoid double counting trips.

The next component of the *transportation demand factor* accounts for the length of each trip. The average trip length for each category is based on the region-wide travel characteristics survey conducted by the NCTCOG and the National Household Travel Survey (NHTS).

The computation of the *transportation demand factor* is detailed in the following equation:

$$TDF = T * (1 - P_b) * L_{max}$$

$$\text{where...}\ L_{max} = \min(L * OD \ \text{ or } SA_L)$$

Variables:

TDF = Transportation Demand Factor,
T = Trip Rate (peak hour trips / unit),
P_b = Pass-By Discount (% of trips),
L_{max} = Maximum Trip Length (miles),
L = Average Trip Length (miles), and
OD = Origin-Destination Reduction (50%)
SA_L = Max Service Area Trip Length (see **Table 5**)

For land uses which are characterized by longer average trip lengths (primarily residential uses), the maximum trip length has been limited to a length based on the nature of the roadway network within the service area, along with consideration of the existing City boundaries. Although Chapter 395 of the Texas Local Government Code allows for a service area diameter of six (6) miles, the City of Lancaster service area boundaries were set using approximately a five (5) mile limit. Therefore, the maximum trip length was assumed to be five (5) miles.

The adjustment made to the average trip length statistic in the computation of the maximum trip length is the origin-destination reduction. This adjustment is made because the roadway impact fee is charged to both the origin and destination end of the trip. For example, impact fee methodology will account for a trip from home to work within Lancaster to both residential and non-residential land uses. To avoid counting these trips as both residential and non-residential trips, a 50% origin-destination (OD) reduction factor is applied. Therefore, only half of the trip length is assessed to each land use.

Table 5 shows the derivation of the *Transportation Demand Factor* for the residential land uses and the three (3) non-residential land uses. The values utilized for all variables shown in the *transportation demand factor* equation are also shown in the table.

Table 5. Transportation Demand Factor Calculations

Variable	Residential	Basic	Service	Retail
T	1.01	0.97	1.49	3.73
P_b	0%	0%	0%	34%
L	17.21	10.02	10.92	6.43
L_{max} *	5.00	5.00	5.00	3.22
TDF	**5.05**	**4.85**	**7.45**	**7.92**

* L_{max} is less than 5 miles for retail land uses; therefore this lower trip length is used for calculating the TDF for non-residential land uses; SA_L = 5.0 miles

The application of the demographic projections and the *transportation demand factors* are presented in the 10-Year Growth Projections in **Table 6**. This table shows the total vehicle-miles by service area for the years 2012 and 2022. These estimates and projections lead to the vehicle-miles of travel for both 2012 and 2022.

Table 6. 10-Year Growth Projections

Year 2012

SERVICE AREA	RESIDENTIAL VEHICLE-MILES			SQUARE FEET[4]			TRANS. DEMAND FACTOR[5]			NON-RESIDENTIAL VEHICLE-MILES[9]				TOTAL VEHICLE MILES[10]
	DWELLING UNITS[1]	TDF[2]	VEHICLE MILES[3]	BASIC	SERVICE	RETAIL	BASIC[6]	SERVICE[7]	RETAIL[8]	BASIC	SERVICE	RETAIL	TOTAL	
		1.01					*0.97*	*1.49*	*3.73*					
1	8,352	5.05	42,178	2,746,800	1,945,900	1,758,100	4.85	7.45	7.92	13,322	14,497	13,924	41,743	83,921
2	2,778	5.05	14,028	1,252,300	604,600	387,100	4.85	7.45	7.92	6,074	4,504	3,066	13,644	27,672
3	1,054	5.05	5,325	400,000	295,800	253,400	4.85	7.45	7.92	1,940	2,204	2,007	6,151	11,476
Totals	12,184		61,531	4,399,100	2,846,300	2,398,600				21,336	21,205	18,997	61,538	123,069

Year 2022

SERVICE AREA	RESIDENTIAL VEHICLE-MILES			SQUARE FEET[4]			TRANS. DEMAND FACTOR[5]			NON-RESIDENTIAL VEHICLE-MILES[9]				TOTAL VEHICLE MILES[10]
	DWELLING UNITS[1]	TDF[2]	VEHICLE MILES[3]	BASIC	SERVICE	RETAIL	BASIC[6]	SERVICE[7]	RETAIL[8]	BASIC	SERVICE	RETAIL	TOTAL	
		1.01					*0.97*	*1.49*	*3.73*					
1	10,441	5.05	52,729	4,287,100	2,941,500	2,076,100	4.85	7.45	7.92	20,792	21,914	16,443	59,149	111,878
2	3,666	5.05	18,511	2,804,200	1,300,100	520,000	4.85	7.45	7.92	13,600	9,686	4,118	27,404	45,915
3	1,965	5.05	9,923	647,800	509,300	334,000	4.85	7.45	7.92	3,142	3,794	2,645	9,581	19,504
Totals	16,072		81,162	7,739,100	4,750,900	2,930,100				37,534	35,394	23,206	96,134	177,296

VEHICLE-MILES OF INCREASE[11] (2012 - 2022)

SERVICE AREA	VEH-MILES
1	27,957
2	18,243
3	8,028

Notes:

[1] From Land Use Assumptions (included in 2012 Roadway Impact Fee Update Report)

[2] Transportation Demand Factor for each Service Area (from LUVMET) using Single Family Detached Housing land use and *trip generation rate*

[3] Calculated by multiplying TDF by the number of dwelling units

[4] From Land Use Assumptions included in 2012 Roadway *Impact Fee Update Report*

[5] *Trip generation rate* and Transportation Demand Factors from LUVMET for each land use

[6] 'Basic' corresponds to General Light Industrial land use and *trip generation rate*

[7] 'Service' corresponds to General Office land use and *trip generation rate*

[8] 'Retail' corresponds to Shopping Center land use and *trip generation rate*

[9] Calculated by multiplying Transportation Demand Factor by the number of thousand square feet for each land use

[10] Residential plus non-residential vehicle-mile totals for each Service Area

[11] Total Vehicle-Miles (2012) subtracted from Total Vehicle-Miles (2022)

V. IMPACT FEE CALCULATIONS

A. MAXIMUM ASSESSABLE IMPACT FEE PER SERVICE UNIT

This section presents the maximum assessable impact fee rate calculated for each service area. The maximum assessable impact fee is the sum of the eligible Impact Fee TIFIP costs for the service area divided by the growth in travel attributable to new development projected to occur within the 10-year period. A majority of the components of this calculation have been described and presented in previous sections of this report. The purpose of this section is to document the computation for each service area and to demonstrate that the guidelines provided by Chapter 395 of the Texas Local Government Code have been addressed. **Table 7** illustrates the computation of the maximum assessable impact fee computed for each service area. Each row in the table is numbered to simplify explanation of the calculation.

Line	Title	Description
1	*Total Vehicle-Miles of Capacity Added by the TIFIP*	The total number of vehicle-miles added to the service area based on the capacity, length, and number of lanes in each project (from **Appendix B** – TIFIP Service Units of Supply)

Each project identified in the Impact Fee TIFIP will add a certain amount of capacity to the City's roadway network based on its length and classification. This line displays the total amount added within each service area.

2	*Total Vehicle-Miles of Existing Demand*	A measure of the amount of traffic currently using the roadway facilities upon which capacity is being added. (from **Appendix B** – TIFIP Service Units of Supply)

A number of facilities identified in the Impact Fee TIFIP have traffic currently utilizing a portion of their existing capacity. This line displays the total amount of capacity along these facilities currently be used by existing traffic.

3	*Total Vehicle-Miles of Existing Deficiencies*	Number of vehicle-miles of travel that are not accommodated by the existing roadway system (from **Appendix C** – Existing Roadway Facilities Inventory)

In order to ensure that existing deficiencies on the City's roadway network are not recoverable through impact fees, this line is based on the entire roadway network within the service area. Any roadway within the service area that is deficient – even those not identified on the Impact Fee TIFIP – will have these additional trips removed from the calculation.

4	*Net Amount of Vehicle-Miles of Capacity Added*	A measurement of the amount of vehicle-miles added by the TIFIP that will not be utilized by existing demand **(Line 1 – Line 2 – Line 3)**

This calculation identifies the portion of the Impact Fee TIFIP (in vehicle-miles) that may be recoverable through the collection of impact fees.

5	*Total Cost of the TIFIP within the Service Area*	The total cost of the projects within each service area (from **Tables 4A, 4b,** and **4C: 10-Year Roadway Improvements Plan with Conceptual Level Cost Opinions**)

This line simply identifies the total cost of all of the projects identified in each service area.

6	*Cost of Net Capacity Supplied*	The total TIFIP cost (**Line 5**) prorated by the ratio of Net Capacity Added (**Line 4**) to Total Capacity Added (Line 1). **[(Line 4 / Line 1) * (Line 5)]**

Using the ratio of vehicle-miles added by the Impact Fee TIFIP available to serve future growth to the total vehicle-miles added, the total cost of the Impact Fee TIFIP is reduced to the amount available for future growth (i.e. excluding existing usage and deficiencies).

7	*Cost to Meet Existing Needs and Usage*	The difference between the Total Cost of the TIFIP (**Line 5**) and the Cost of the Net Capacity supplied (**Line 6**). **(Line 5 – Line 6)**

This line is provided for information purposes only – it is to present the portion of the total cost of the Impact Fee TIFIP that is required to meet existing demand.

8	*Total Vehicle-Miles of New Demand over Ten Years*	Based upon the growth projection provided in the **Land Use Assumptions**, an estimate of the number of new vehicle-miles within the service area over the next ten years. (from **Table 6**)

This line presents the amount of growth (in vehicle-miles) projected to occur within each service area over the next ten years.

9	*Percent of Capacity Added Attributable to New Growth*	The result of dividing Total Vehicle-Miles of New Demand (**Line 8**) by the Net Amount of Capacity Added (**Line 4**), limited to 100% (**Line 10**). This calculation is required by Chapter 395 to ensure capacity added is attributable to new growth.
10	*Chapter 395 Check*	

In order to ensure that the vehicle-miles added by the Impact Fee TIFIP do not exceed the amount needed to accommodate growth beyond the ten-year window, a comparison of the two values is performed. If the amount of vehicle-miles added by the Impact Fee TIFIP exceeds the growth projected to occur in the next ten years, the Impact Fee TIFIP cost is reduced accordingly.

11	*Cost of Capacity Added Attributable to New Growth*	The result of multiplying the Cost of Net Capacity Added (**Line 6**) by the Percent of Capacity Added Attributable to New Growth, limited to 100% (**Line 9**).

The value of the total Roadway Impact Fee TIFIP project costs (excluding financial costs) that may be recovered through impact fees. This line is determined considering the limitations to impact fees required by the Texas legislature.

B. Plan For Awarding the Roadway Impact Fee Credit

Chapter 395 of the Texas Local Government Code requires the Thoroughfare Impact Fee Improvement Program for Roadway Impact Fees contain specific enumeration of a plan for awarding the impact fee credit. Section 395.014 of the Code states:

> "(7) A plan for awarding:
> (A) a credit for the portion of ad valorem tax and utility service revenues generated by new service units during the program period that is used for the payment of improvements, including the payment of debt, that are included in the Thoroughfare Impact Fee Improvement Program; or
> (B) In the alternative, a credit equal to 50 percent of the total projected cost of implementing the Thoroughfare Impact Fee Improvement Program..."

The following table summarizes the portions of **Table 7** that utilize this credit calculation, based on awarding a 50 percent credit.

Line	Title	Description
12	*Cost of Capacity Added Attributable to New Growth After Credit is Applied*	A credit equal to 50% of the total projected cost, as per section 395.014 of the Texas Local Government Code.
13	*Maximum Assessable Fee Per Service Unit*	Found by dividing the Recoverable Cost of the TIFIP attributable to growth (**Line 11**) by the Total Vehicle-Miles of New Demand Over Ten Years (**Line 8**). (**Line 11 / Line 8**)

Table 7. Maximum Assessable Fee Per Service Unit by Service Area

	SERVICE AREA:	1	2	3
1	TOTAL VEH-MI OF CAPACITY ADDED BY THE TIFIP (FROM TIFIP SERVICE UNITS OF SUPPLY, **APPENDIX B**)	54,284	34,515	25,971
2	TOTAL VEH-MI OF EXISTING DEMAND (FROM TIFIP SERVICE UNITS OF SUPPLY, **APPENDIX B**)	6,203	1,776	1,887
3	TOTAL VEH-MI OF EXISTING DEFICIENCIES (FROM EXISTING ROADWAY FACILITIES INVENTORY, **APPENDIX C**)	0	0	0
4	NET AMOUNT OF VEH-MI OF CAPACITY ADDED (LINE 1 - LINE 2 - LINE 3)	48,081	32,739	24,084
5	TOTAL COST OF THE TIFIP WITHIN SERVICE AREA (FROM **TABLES 4A, 4B, and 4C**)	$ 99,448,830	$ 60,519,833	$ 47,483,333
6	COST OF NET CAPACITY SUPPLIED (LINE 4 / LINE 1) * (LINE 5)	$ 88,084,872	$ 57,405,731	$ 44,033,291
7	COST TO MEET EXISTING NEEDS AND USAGE (LINE 5 - LINE 6)	$ 11,363,958	$ 3,114,102	$ 3,450,042
8	TOTAL VEH-MI OF NEW DEMAND OVER TEN YEARS (FROM **TABLE 6** and **Land Use Assumptions**)	27,957	18,243	8,028
9	PERCENT OF CAPACITY ADDED ATTRIBUTABLE TO NEW GROWTH (LINE 8 / LINE 4)	58.1%	55.7%	33.3%
10	IF LINE 8 > LINE 4, REDUCE LINE 9 TO 100%, OTHERWISE NO CHANGE	58.1%	55.7%	33.3%
11	COST OF CAPACITY ADDED ATTRIBUTABLE TO NEW GROWTH (LINE 6 * LINE 10)	$ 51,177,311	$ 31,974,992	$ 14,663,086
12	MAXIMUM COST OF CAPACITY ADDED ATTRIBUTABLE TO NEW GROWTH AFTER CREDIT IS APPLIED (50% OF LINE 11)	$ 25,588,656	$ 15,987,496	$ 7,331,543
13	MAX ASSESSABLE FEE PER SERVICE UNIT ($ PER VEH-MI) (LINE 12 / LINE 8)	**$ 915**	**$ 876**	**$ 913**

C. SERVICE UNIT DEMAND PER UNIT OF DEVELOPMENT

The roadway impact fee is determined by multiplying the impact fee rate by the number of service units projected for the proposed development. For this purpose, the City utilizes the Land Use/Vehicle-Mile Equivalency Table (LUVMET), presented in **Table 8**. This table lists the predominant land uses that may occur within the City of Lancaster. For each land use, the development unit that defines the development's magnitude with respect to transportation demand is shown. Although every possible use cannot be anticipated, the majority of uses are found in this table. If the exact use is not listed, one similar in trip-making characteristics can serve as a reasonable proxy. The individual land uses are grouped into categories, such as residential, office, commercial, industrial, and institutional.

The trip rates presented for each land use is a fundamental component of the LUVMET. The trip rate is the average number of trips generated during the afternoon peak hour by each land use per development unit. The next column, if applicable to the land use, presents the number of trips to and from certain land uses reduced by pass-by trips, as previously discussed.

The source of the trip generation and pass-by statistics is the *ITE Trip Generation Manual, 8th Edition*, the latest edition of the definitive source for trip generation data. This manual utilizes trip generation studies for a variety of land uses throughout the United States, and is the standard used by traffic engineers and transportation planners for traffic impact analysis, site design, and transportation planning.

To convert vehicle trips to vehicle-miles, it is necessary to multiply trips by trip length. The adjusted trip length values are based on the *Regional Origin-Destination Travel Survey* regional Origin-Destination Travel Survey performed by the NCTCOG and the NHTS. The other adjustment to trip length is the 50% origin-destination reduction to avoid double counting of trips. At this stage, another important aspect of the state law is applied – the limit on transportation service unit demand. If the adjusted trip length is above the maximum trip length within the service area, the maximum trip length used for calculation is reduced to the corresponding value. This reduction, as discussed previously, limits the maximum trip length to the approximate size of the service areas.

The remaining column in the LUVMET shows the vehicle-miles per development unit. This number is the product of the trip rate and the maximum trip length. This number, previously referred to as the *Transportation Demand Factor*, is used in the impact fee estimate to compute the number of service units consumed by each land use application. The number of service units is multiplied by the impact fee rate (established by City ordinance) in order to determine the impact fee for a development.

Table 8. Land Use / Vehicle-Mile Equivalency Table

Land Use Category	ITE Land Use Code	Development Unit	Trip Gen Rate (PM)	Pass-by Rate	Pass-by Source	Trip Rate	NCTCOG Trip Length (mi)	Adj. For O-D	Adj. Trip Length (mi)	Max Trip Length (mi)	Veh-Mi Per Dev Unit
PORT AND TERMINAL											
Truck Terminal	030	Acre	6.55			6.55	10.02	50%	5.01	5.00	32.75
INDUSTRIAL											
General Light Industrial	110	1,000 SF GFA	0.97			0.97	10.02	50%	5.01	5.00	4.85
General Heavy Industrial	120	1,000 SF GFA	0.68			0.68	10.02	50%	5.01	5.00	3.40
Industrial Park	130	1,000 SF GFA	0.86			0.86	10.02	50%	5.01	5.00	4.30
Warehousing	150	1,000 SF GFA	0.32			0.32	10.83	50%	5.42	5.00	1.60
Mini-Warehouse	151	1,000 SF GFA	0.26			0.26	10.83	50%	5.42	5.00	1.30
RESIDENTIAL											
Single Family Detached Housing	210	Dwelling Unit	1.01			1.01	17.21	50%	8.61	5.00	5.05
Apartment/Multi-family	220	Dwelling Unit	0.62			0.62	17.21	50%	8.61	5.00	3.10
Residential Condominium/Townhome	230	Dwelling Unit	0.52			0.52	17.21	50%	8.61	5.00	2.60
Mobile Home Park / Manufactured Housing	240	Dwelling Unit	0.59			0.59	17.21	50%	8.61	5.00	2.95
Senior Adult Housing-Detached	251	Dwelling Unit	0.27			0.27	17.21	50%	8.61	5.00	1.35
Senior Adult Housing-Attached	252	Dwelling Unit	0.16			0.16	17.21	50%	8.61	5.00	0.80
Assisted Living	254	Beds	0.22			0.22	17.21	50%	8.61	5.00	1.10
LODGING											
Hotel	310	Room	0.59			0.59	6.43	50%	3.22	3.22	1.90
Motel / Other Lodging Facilities	320	Room	0.47			0.47	6.43	50%	3.22	3.22	1.51
RECREATIONAL						0.00			0.00		
Golf Driving Range	432	Tee	1.25			1.25	6.43	50%	3.22	3.22	4.03
Golf Course	430	Acre	0.30			0.30	6.43	50%	3.22	3.22	0.97
Recreational Community Center	495	1,000 SF GFA	1.45			1.45	6.43	50%	3.22	3.22	4.67
Ice Skating Rink	465	1,000 SF GFA	2.36			2.36	6.43	50%	3.22	3.22	7.60
Miniature Golf Course	431	Hole	0.33			0.33	6.43	50%	3.22	3.22	1.06
Multiplex Movie Theater	445	Screens	13.64			13.64	6.43	50%	3.22	3.22	43.92
Racquet / Tennis Club	491	Court	3.35			3.35	6.43	50%	3.22	3.22	10.79
INSTITUTIONAL											
Church	560	1,000 SF GFA	0.55			0.55	4.20	50%	2.10	2.10	1.16
Day Care Center	565	1,000 SF GFA	12.46	44%	B	6.98	4.20	50%	2.10	2.10	14.66
Primary/Middle School(1-8)	522	Students	0.16			0.16	4.20	50%	2.10	2.10	0.34
High School	530	Students	0.13			0.13	4.20	50%	2.10	2.10	0.27
Junior / Community College	540	Students	0.12			0.12	4.20	50%	2.10	2.10	0.25
University / College	550	Students	0.21			0.21	4.20	50%	2.10	2.10	0.44
MEDICAL						0.00			0.00		
Clinic	630	1,000 SF GFA	5.18			5.18	7.55	50%	3.78	3.78	19.58
Hospital	610	Beds	1.31			1.31	7.55	50%	3.78	3.78	4.95
Nursing Home	620	Beds	0.22			0.22	7.55	50%	3.78	3.78	0.83
Animal Hospital/Veterinary Clinic	640	1,000 SF GFA	4.72	30%	B	3.30	7.55	50%	3.78	3.78	12.47
OFFICE											
Corporate Headquarters Building	714	1,000 SF GFA	1.40			1.40	10.92	50%	5.46	5.00	7.00
General Office Building	710	1,000 SF GFA	1.49			1.49	10.92	50%	5.46	5.00	7.45
Medical-Dental Office Building	720	1,000 SF GFA	3.46			3.46	10.92	50%	5.46	5.00	17.30
Single Tenant Office Building	715	1,000 SF GFA	1.73			1.73	10.92	50%	5.46	5.00	8.65
Office Park	750	1,000 SF GFA	1.48			1.48	10.92	50%	5.46	5.00	7.40
COMMERCIAL											
Automobile Related											
Automobile Care Center	942	1,000 SF Occ. GLA	3.38	40%	B	2.03	6.43	50%	3.22	3.22	6.54
Automobile Parts Sales	843	1,000 SF GFA	5.98	43%	A	3.41	6.43	50%	3.22	3.22	10.98
Gasoline/Service Station	944	Vehicle Fueling Position	13.87	42%	A	8.04	1.20	50%	0.60	0.60	4.82
Gasoline/Service Station w/ Conv. Market	945	Vehicle Fueling Position	13.38	56%	B	5.89	1.20	50%	0.60	0.60	3.53
Gasoline/Service Station w/ Conv. Market and Car Wash	946	Vehicle Fueling Position	13.94	56%	A	6.13	1.20	50%	0.60	0.60	3.68
New Car Sales	841	1,000 SF GFA	2.59	20%	B	2.07	6.43	50%	3.22	3.22	6.67
Quick Lubrication Vehicle Shop	941	Servicing Positions	5.19	40%	B	3.11	6.43	50%	3.22	3.22	10.01
Self-Service Car Wash	947	Stall	5.54	40%	B	3.32	1.20	50%	0.60	0.60	1.99
Tire Store	848	1,000 SF GFA	4.15	28%	A	2.99	6.43	50%	3.22	3.22	9.63
Dining											
Fast Food Restaurant with Drive-Thru Window	934	1,000 SF GFA	33.84	50%	A	16.92	4.79	50%	2.40	2.40	40.61
Fast Food Restaurant without Drive-Thru Window	933	1,000 SF GFA	26.15	50%	B	13.08	4.79	50%	2.40	2.40	31.39
High Turnover (Sit-Down) Restaurant	932	1,000 SF GFA	11.15	43%	A	6.36	4.79	50%	2.40	2.40	15.26
Quality Restaurant	931	1,000 SF GFA	7.49	44%	A	4.19	4.79	50%	2.40	2.40	10.06
Coffee/Donut Shop with Drive-Thru Window	937	1,000 SF GFA	42.93	30%	A	12.88	4.79	50%	2.40	2.40	30.91
Other Retail											
Free-Standing Discount Store	815	1,000 SF GFA	5.00	30%	C	3.50	6.43	50%	3.22	3.22	11.27
Nursery (Garden Center)	817	1,000 SF GFA	3.80	30%	B	2.66	6.43	50%	3.22	3.22	8.57
Home Improvement Superstore	862	1,000 SF GFA	2.37	48%	A	1.23	6.43	50%	3.22	3.22	3.96
Pharmacy/Drugstore w/o Drive-Thru Window	880	1,000 SF GFA	8.42	53%	A	3.96	6.43	50%	3.22	3.22	12.75
Pharmacy/Drugstore w/ Drive-Thru Window	881	1,000 SF GFA	10.35	49%	A	5.28	6.43	50%	3.22	3.22	17.00
Shopping Center	820	1,000 SF GLA	3.73	34%	A	2.46	6.43	50%	3.22	3.22	7.92
Supermarket	850	1,000 SF GFA	10.50	36%	A	6.72	6.43	50%	3.22	3.22	21.64
Toy/Children's Superstore	864	1,000 SF GFA	4.99	30%	B	3.49	6.43	50%	3.22	3.22	11.24
Department Store	875	1,000 SF GFA	1.78	30%	B	1.25	6.43	50%	3.22	3.22	4.03
Video Rental Store	896	1,000 SF GFA	13.60	50%	B	6.80	6.43	50%	3.22	3.22	21.90
SERVICES											
Walk-In Bank	911	1,000 SF GFA	12.13	40%	B	7.28	3.39	50%	1.70	1.70	12.38
Drive-In Bank	912	Drive-in Lanes	27.41	47%	A	14.53	3.39	50%	1.70	1.70	24.70
Hair Salon	918	1,000 SF GFA	1.45	30%	B	1.02	3.39	50%	1.70	1.70	1.73

Key to Sources of Pass-by Rates:

A: ITE Trip Generation Handbook 2nd Edition (June 2004)

B: Estimated by Kimley-Horn based on ITE rates for similar categories

C: ITE rate adjusted upward by KHA based on logical relationship to other categories

VI. SAMPLE CALCULATIONS

The following section details two (2) examples of maximum assessable roadway impact fee calculations.

Example 1:

- **Development Type - One (1) Unit of Single-Family Housing in Service Area 1**

Roadway Impact Fee Calculation Steps – Example 1	
Step 1	**Determine Development Unit and Vehicle-Miles Per Development Unit**
	From Table 8 [Land Use – Vehicle-mile Equivalency Table] Development Type: 1 Dwelling Unit of Single-Family Detached Housing Number of Development Units: 1 Dwelling Unit Veh-Mi Per Development Unit: 5.05
Step 2	**Determine Maximum Assessable Impact Fee Per Service Unit**
	From Table 7, Line 13 [Maximum Assessable Fee Per Service Unit] Service Area 1: $915
Step 3	**Determine Maximum Assessable Impact Fee**
	Impact Fee = # of Development Units * Veh-Mi Per Dev Unit * Max. Fee Per Service Unit Impact Fee = 1 * 5.05 * $915 Maximum Assessable Impact Fee = $4,620.75

Example 2:

- **Development Type – 125,000 square foot Home Improvement Superstore in Service Area 2**

Roadway Impact Fee Calculation Steps – Example 2	
Step 1	**Determine Development Unit and Vehicle-Miles Per Development Unit**
	From Table 8 [Land Use – Vehicle-mile Equivalency Table] Development Type: 125,000 square feet of Home Improvement Superstore Development Unit: 1,000 square feet of Gross Floor Area Veh-Mi Per Development Unit: 3.96
Step 2	**Determine Maximum Assessable Impact Fee Per Service Unit**
	From Table 7, Line 13[Maximum Assessable Fee Per Service Unit] Service Area 2: $876
Step 3	**Determine Maximum Assessable Impact Fee**
	Impact Fee = # of Development Units * Veh-Mi Per Dev Unit * Max. Fee Per Service Unit Impact Fee = 125 * 3.96 * $876 Maximum Assessable Impact Fee = $433,620.00

VII. CONCLUSION

The City of Lancaster has established a process to implement the assessment and collection of roadway impact fees through the adoption of an impact fee ordinance that is consistent with Chapter 395 of the Texas Local Government Code.

This report establishes the maximum allowable roadway impact fee that could be assessed by the City of Lancaster within three (3) service areas. The maximum assessable roadway impact fees calculated in this report are presented below:

	SERVICE AREA:	1	2	3
13	MAX ASSESSABLE FEE PER SERVICE UNIT ($ PER VEH-MI) (LINE 12 / LINE 8)	$ 915	$ 876	$ 913

This document serves as a guide to the assessment of roadway impact fees pertaining to future development and the City's need for roadway improvements to accommodate that growth. Following the public hearing process, the City Council may establish an amount to be assessed (if any) up to the maximum established within this report and update the Roadway Impact Fee Ordinance accordingly.

In conclusion, it is our opinion that the data and methodology used in this study are appropriate and consistent with Chapter 395 of the Texas Local Government Code. Furthermore, the Land Use Assumptions and the proposed Roadway Improvements Plan are appropriately incorporated into the process.

APPENDICES

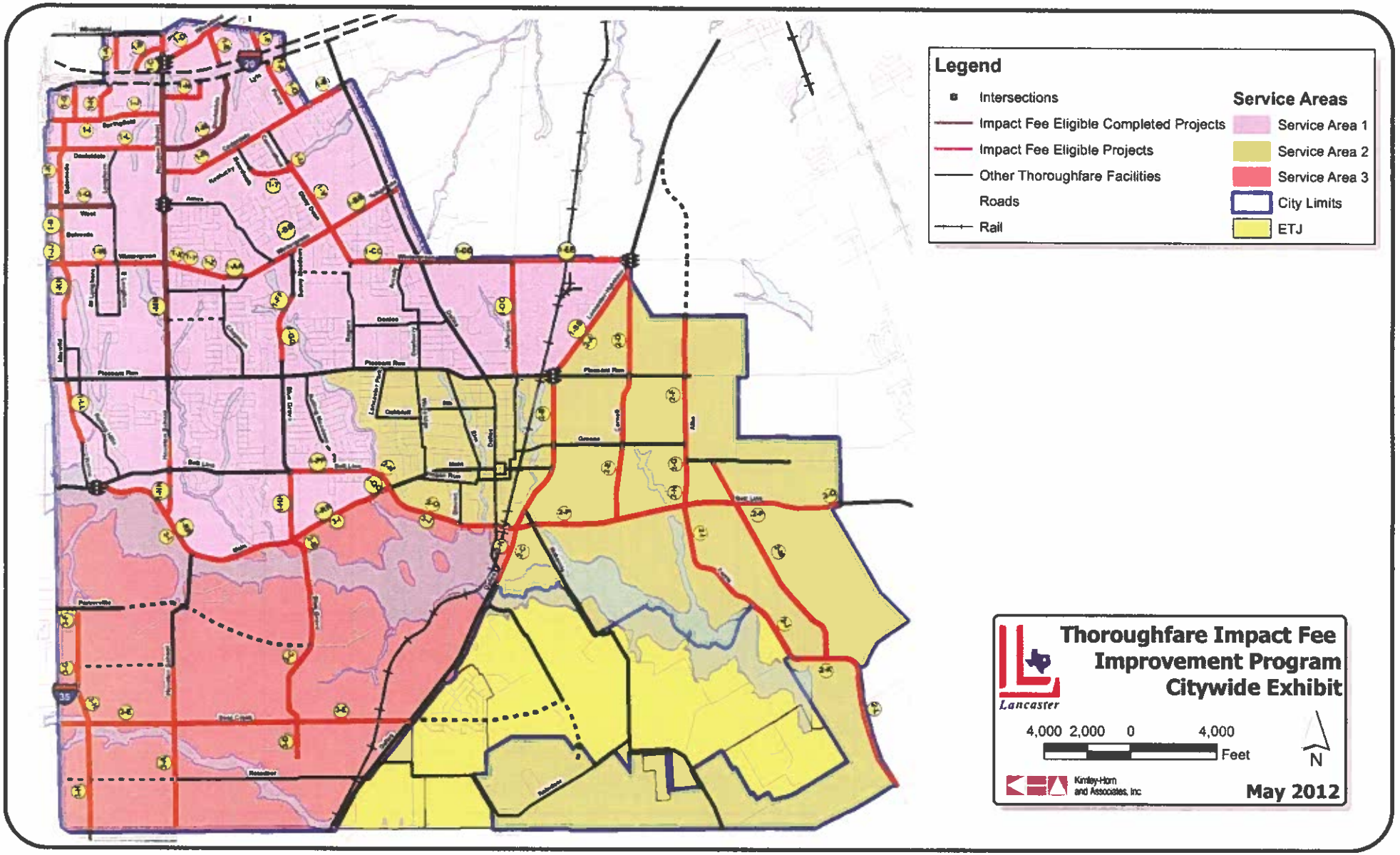
A. Opinion of Probable Cost Worksheets

B. TIFIP Service Units of Supply

C. Existing Roadway Facilities Inventory

D. Land Use Assumptions

Appendix A – Opinion of Probable Cost Worksheets


Legend
Intersections
Impact Fee Eligible Completed Projects
Impact Fee Eligible Projects
Other Thoroughfare Facilities
Roads
Rail
Service Areas
Service Area 1
Service Area 2
Service Area 3
City Limits
ETJ
Thoroughfare Impact Fee Improvement Program Citywide Exhibit
Lancaster
4,000 2,000 0 4,000
Feet
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Kimley-Horn and Associates, Inc
May 2012

City of Lancaster - 2012 Roadway Impact Fee Update

Summary of Conceptual Level Project Cost Projections

Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area 1

#	Class	Project	Limits	Project Cost
1-A	C2U	Proposed Collector "A"	Wheatland Rd. to IH-20	$ 1,099,000
1-B	C2U	Proposed Collector "B"	University Hills Blvd. to IH-20	$ 1,447,000
1-C	P6D	University Hills Blvd. (1)	Wheetland Rd. to IH-20 WBFR	$ 1,020,000
1-D	C2U	Wheatland Rd.	University Hills Blvd. to N. City Limits	$ 1,983,000
1-E	C2U	Proposed Collector "C"	Wheatland Rd. to IH-20	$ 984,000
1-F	C2U	Proposed Collector "D"	N. City Limits to IH-20	$ 755,000
1-G	C2U	Proposed Collector "E"	IH-20 to Springfield Ave.	$ 1,187,000
1-H	C2U	Proposed Collector "F"	IH-20 to Springfield Ave.	$ 1,168,000
1-I	C2U	Springfield St. (1)	IH-35E to Proposed Collector "F" (1-H)	$ 1,459,000
1-J	C2U	Springfield St. (2)	Proposed Collector "F" (1-H) to Houston School Rd.	$ 2,098,000
1-K	C2U	Balomeade Ave./Cumberland St. (1)	Springfield St. to Wesl Dr.	$ 2,471,000
1-L	S4D	Danieldale Rd. (1)	IH-35E to Houston School Rd.	$ 3,600,000
1-M	S4D	Danieldale Rd. (2)	Houston School Rd. to IH-20	$ 1,500,000
1-N	C2U	Proposed Collector "G"	Houston School Rd. to IH-20	$ 1,943,000
1-O	C2U	Percy St. (1)	Cedardale Rd. to Lyle St.	$ 1,270,000
1-P	C2U	Percy St. (2)	Lyle St. to IH-20	$ 371,000
1-Q	C2U	West Dr.	IH-35E to Longhorn Dr.	$ 2,523,027
1-R	S4D	Cedardale Rd. (1)	Houston School Rd. to E. City Limits	$ 6,034,000
1-S	S4D	Cederdale Rd. (2)	E. City Limits to Dallas Ave.	$ 1,352,000
1-T	C2U	Proposed Collector "H"	150' S. of Kentucky Ave. to Dizzy Dean Dr.	$ 1,355,000
1-U	C2U	Proposed Collector "I" (Winlergreen Extensio	Pennsylvania Ave. to Dizzy Dean Dr.	$ 239,000
1-V	S4D(1/2)	Dizzy Dean Dr. (Winlergreen Extension)	Proposed Collector "I"(1-U) to Telephone Rd.	$ 1,374,000
1-W	M4D	Wintergreen Rd. (1)	IH-35E to Houston School Rd.	$ 4,702,536
1-X	M4D(1/2)	Wintergreen Rd. (2)	Houston School Rd. to 830' E. of Houston School Rd.	$ 345,000
1-Y	M4D	Wingergreen Rd. (3)	830' E. of Houston School Rd. to 1,385' E. of Houslon School Rd.	$ 458,000
1-Z	M4D(1/2)	Winlergreen Rd. (4)	1,385' E. of Houston School Rd. to 2,770' E. of Houslon School Rd.	$ 571,000
1-AA	M4D	Wingergreen Rd. (5)	2,770' E. of Houston School Rd. to Beskin Dr.	$ 974,000
1-BB	M4D	Wintergreen Rd./Telephone Rd.	Baskin Dr. to E. City Limits	$ 6,334,000
1-CC	M4D	Winlergreen Rd. (6)	Telephone Rd. to Dallas Ave.	$ 4,296,000
1-DD	M4D	Winlergreen Rd. (7)	Dallas Ave. to Jefferrson St.	$ 2,404,934
1-EE	M4D	Wintergreen Rd. (8)	Jefferson St. to Lancaster-Hutchins Rd.	$ 5,061,000
1-FF	M4D	Blue Grove Rd. (1)	Sunny Meadow Rd. to Kings Cross Dr.	$ 1,603,000
1-GG	M4D	Blue Grove Rd. (2)	Kings Cross to Dr. Brook Meadow Cir.	$ 1,805,000
1-HH	M4D	Blue Grove Rd. (3)	Belt Line Rd. to Main St.	$ 2,553,000
1-II	C2U	Balomeade Ave. (2)	West Dr. to Belverde Dr.	$ 1,003,000
1-JJ	C2U	Balomeade Ave. (3)	Belverde Dr. to Wintergreen Rd.	$ 879,000
1-KK	C2U	Proposed Collector "J"	Wintergreen Rd. to Idlewild Ln.	$ 1,774,000
1-LL	C2U	Proposed Collector "K"	Pleasanl Run Rd. to Hanna Ln.	$ 2,151,000
1-MM	M4D	Houston School Rd. (2)	IH-20 EBFR to Pleasant Run Road	$ 7,480,000
1-NN	M4D	Houston School Rd. (3)	1,500' N. of Bell Line Rd. to Main St.	$ 2,909,000
1-OO	S4D	Jefferson St.	Wintergreen Rd. to Pleasant Run Rd.	$ 4,525,000
1-PP	P6D	Belt Line Rd. (1)	Blue Grove Rd. to 1,005' W. of Main St.	$ 4,334,000
1-QQ, 2-N	P6D	Belt Line Rd. (2)	1,005' W. of Main St. to Main St.	$ 1,107,000
1-RR, 3-I	C2U	Mein St. (1)	Bell Line Rd. to Bell Line Rd.	$ 9,972,000
1-SS, 2-A	P6D	Lancaster Hutchins Rd. (1)	Winlergreen Rd. to Pleasenl Run Rd.	$ 6,902,000

Signal Installation

I-1		Signal Installetion	Houston School Rd. & Wheatland Rd.	$ 140,000
I-2		Signal Installation	Houston School Rd. & Ames Rd.	$ 140,000
I-3		Signal Installation	Bell Line Rd. & Chesier Rd. / Main St.	$ 140,000
I-4		Signal Installation	Lancaster-Hutchins Rd. & Wintergreen Rd.	$ 140,000
I-5		Signal Installetion	Lancaster-Hutchins Rd. & Pleasant Run Rd.	$ 140,000
			TOTAL	$ 111,875,497

*Total may be higher than presented in Tables 2.A, 2.B and 2.C (Thoroughfare Impact Fee Improvement Program) because the cost of some projects are shared between service areas.

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Lancaster.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-A
Name:	Proposed Collector "A"	**This project consists of the construction of a new two-lane undivided collector facility.**		
Limits:	Wheatland Rd. to IH-20			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	1,685			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	4,025	cy	$ 8.00	$ 32,202
201	8" Lime Stabilization (with Lime @ 32#/sy)	7,863	sy	$ 3.00	$ 23,590
301	8" Concrete Pavement w/ 6" Curb	7,489	sy	$ 38.00	$ 284,578
401	4" Topsoil	3,744	sy	$ 4.00	$ 14,978
501	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
601	5' Concrete Sidewalk	16,850	sf	$ 4.00	$ 67,400
				Paving Construction Cost Subtotal:	**$ 427,748**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 25,665
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 12,832
√	Roadway Drainage	Standard Internal System	30%	$ 128,324
√	Illumination		6%	$ 25,665
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 25,665
√	Sewer	Minor Adjustments	4%	$ 17,110
√	Establish Turf / Erosion Control		3%	$ 12,832
√	Basic Landscaping		2%	$ 8,555
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 256,649**

Paving and Allowance Subtotal:		**$ 684,396**
Construction Contingency:	10%	$ 68,440
Construction Cost TOTAL:		**$ 753,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 753,000**
Engineering/Survey/Testing:		20%	$ 150,600
Mobilization		6%	$ 45,180
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 150,600
		Impact Fee Project Cost TOTAL:	**$ 1,099,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	1-B
Name:	Proposed Collector "B"	This project consists of the construction of a new two-lane undivided collector facility.		
Limits:	University Hills Blvd. to IH-20			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	1,600			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	3,822	cy	$ 8.00	$ 30,578
201	8" Lime Stabilization (with Lime @ 32#/sy)	7,467	sy	$ 3.00	$ 22,400
301	8" Concrete Pavement w/ 6" Curb	7,111	sy	$ 38.00	$ 270,222
401	4" Topsoil	3,556	sy	$ 4.00	$ 14,222
501	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
601	5' Concrete Sidewalk	16,000	sf	$ 4.00	$ 64,000
				Paving Construction Cost Subtotal:	**$ 406,422**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 24,385
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 12,193
√	Roadway Drainage	Standard Internal System	30%	$ 121,927
√	Illumination		6%	$ 24,385
√	Special Drainage Structures	Minor Stream Crossing	0%	$ 250,000
√	Water	Minor Adjustments	6%	$ 24,385
√	Sewer	Minor Adjustments	4%	$ 16,257
√	Establish Turf / Erosion Control		3%	$ 12,193
√	Basic Landscaping		2%	$ 8,128
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 493,853**
			Paving and Allowance Subtotal:	**$ 900,276**
			Construction Contingency: 10%	$ 90,028
			Construction Cost TOTAL:	**$ 991,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 991,000**
Engineering/Survey/Testing:		20%	$ 198,200
Mobilization		6%	$ 59,460
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 198,200
		Impact Fee Project Cost TOTAL:	**$ 1,447,000**

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Lancaster.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-C
Name:	University Hills Blvd. (1)	**This project consists of the reconstruction of an existing two-lane facility to a six-lane divided arterial facility. The City contributed $8.5 million towards the construction of Houston School Road from Wheatland Road to Pleasant Run Road (see Project 1-MM). The City is anticipated to contribute 12% or $1,020,000 to the construction of this section**		
Limits:	Wheatland Rd. to IH-20 WBFR			
Impact Fee Class:	P6D			
Ultimate Class:	Major Arterial			
Length (lf):	1,865			
Service Area(s):	1			

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
City Contribution to Construction Cost:	$ 8,500,000	12%	$ 1,020,000
Engineering/Survey/Testing			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included		
	Impact Fee Project Cost TOTAL:		**$ 1,020,000**

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Lancaster.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No. 1-D
Name:	Wheatland Rd.	This project consists of the reconstruction of an existing two-lane facility to a two-lane undivided collector facility.	
Limits:	University Hills Blvd. to N. City Limits		
Impact Fee Class:	C2U		
Ultimate Class:	Collector		
Length (lf):	3,170		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	7,573	cy	$ 8.00	$ 60,582
201	8" Lime Stabilization (with Lime @ 32#/sy)	14,793	sy	$ 3.00	$ 44,380
301	8" Concrete Pavement w/ 6" Curb	14,089	sy	$ 38.00	$ 535,378
401	4" Topsoil	7,044	sy	$ 4.00	$ 28,178
501	Concrete Driveway Approach	3	ea	$ 2,500.00	$ 7,500
601	5' Concrete Sidewalk	31,700	sf	$ 4.00	$ 126,800
				Paving Construction Cost Subtotal:	**$ 802,818**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 48,169
√	Traffic Control	Construction Phase Traffic Control	5%	$ 40,141
√	Pavement Markings/Markers		3%	$ 24,085
√	Roadway Drainage	Standard Internal System	30%	$ 240,845
√	Illumination		6%	$ 48,169
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 48,169
√	Sewer	Minor Adjustments	4%	$ 32,113
√	Establish Turf / Erosion Control		3%	$ 24,085
√	Basic Landscaping		2%	$ 16,056
	Other:		$0	$ -
****Allowances based on % of Paving Construction Cost Subtotal**			**Allowance Subtotal:**	**$ 521,832**
			Paving and Allowance Subtotal:	**$ 1,324,649**
			Construction Contingency: 10%	$ 132,465
			Construction Cost TOTAL:	**$ 1,458,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,458,000**
Engineering/Survey/Testing:		20%	$ 291,600
Mobilization		6%	$ 87,480
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 145,800
		Impact Fee Project Cost TOTAL:	**$ 1,983,000**

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Lancaster.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No. 1-E
Name:	Proposed Collector "C"	This project consists of the construction of a new two-lane undivided collector facility.	
Limits:	Wheatland Rd. to iH-20		
Impact Fee Class:	C2U		
Ultimate Class:	Collector		
Length (lf):	1,505		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	3,595	cy	$ 8.00	$ 28,762
201	8" Lime Stabilization (with Lime @ 32#/sy)	7,023	sy	$ 3.00	$ 21,070
301	8" Concrete Pavement w/ 6" Curb	6,689	sy	$ 38.00	$ 254,178
401	4" Topsoil	3,344	sy	$ 4.00	$ 13,378
501	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
601	5' Concrete Sidewalk	15,050	sf	$ 4.00	$ 60,200
				Paving Construction Cost Subtotal:	**$ 382,588**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 22,955
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 11,478
√	Roadway Drainage	Standard Internal System	30%	$ 114,776
√	Illumination		6%	$ 22,955
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 22,955
√	Sewer	Minor Adjustments	4%	$ 15,304
√	Establish Turf / Erosion Control		3%	$ 11,478
√	Basic Landscaping		2%	$ 7,652
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 229,553**
			Paving and Allowance Subtotal:	**$ 612,140**
			Construction Contingency: 10%	$ 61,214
			Construction Cost TOTAL:	**$ 674,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 674,000**
Engineering/Survey/Testing:		20%	$ 134,800
Mobilization		6%	$ 40,440
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 134,800
		Impact Fee Project Cost TOTAL:	**$ 984,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No. 1-F
Name:	Proposed Collector "D"	This project consists of the construction of a new two-lane undivided collector facility.	
Limits:	N. City Limits to IH-20		
Impact Fee Class:	C2U		
Ultimate Class:	Collector		
Length (lf):	1,160		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	2,771	cy	$ 8.00	$ 22,169
201	8" Lime Stabilization (with Lime @ 32#/sy)	5,413	sy	$ 3.00	$ 16,240
301	8" Concrete Pavement w/ 6" Curb	5,156	sy	$ 38.00	$ 195,911
401	4" Topsoil	2,578	sy	$ 4.00	$ 10,311
501	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
601	5' Concrete Sidewalk	11,600	sf	$ 4.00	$ 46,400
				Paving Construction Cost Subtotal:	**$ 293,531**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 17,612
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 8,806
√	Roadway Drainage	Standard Internal System	30%	$ 88,059
√	Illumination		6%	$ 17,612
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 17,612
√	Sewer	Minor Adjustments	4%	$ 11,741
√	Establish Turf / Erosion Control		3%	$ 8,806
√	Basic Landscaping		2%	$ 5,871
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 176,119**
			Paving and Allowance Subtotal:	**$ 469,650**
			Construction Contingency: 10%	$ 46,965
			Construction Cost TOTAL:	**$ 517,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 517,000**
Engineering/Survey/Testing:		20%	$ 103,400
Mobilization		6%	$ 31,020
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 103,400
		Impact Fee Project Cost TOTAL:	**$ 755,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-G
Name:	Proposed Collector "E"	This project consists of the construction of a new two-lane undivided collector facility.		
Limits:	IH-20 to Springfield Ave.			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	1,820			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	4,348	cy	$ 8.00	$ 34,782
201	8" Lime Stabilization (with Lime @ 32#/sy)	8,493	sy	$ 3.00	$ 25,480
301	8" Concrete Pavement w/ 6" Curb	8,089	sy	$ 38.00	$ 307,378
401	4" Topsoil	4,044	sy	$ 4.00	$ 16,178
501	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
601	5' Concrete Sidewalk	18,200	sf	$ 4.00	$ 72,800
				Paving Construction Cost Subtotal:	**$ 461,618**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 27,697
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 13,849
√	Roadway Drainage	Standard Internal System	30%	$ 138,485
√	Illumination		6%	$ 27,697
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 27,697
√	Sewer	Minor Adjustments	4%	$ 18,465
√	Establish Turf / Erosion Control		3%	$ 13,849
√	Basic Landscaping		2%	$ 9,232
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 276,971**

Paving and Allowance Subtotal:		**$ 738,588**
Construction Contingency:	10%	$ 73,859
Construction Cost TOTAL:		**$ 813,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 813,000**
Engineering/Survey/Testing:		20%	$ 162,600
Mobilization		6%	$ 48,780
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 162,600
		Impact Fee Project Cost TOTAL:	**$ 1,187,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	1-H
Name:	Proposed Collector "F"	This project consists of the construction of a new two-lane undivided collector facility.		
Limits:	IH-20 to Springfield Ave.			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	1,790			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	4,276	cy	$ 8.00	$ 34,209
201	8" Lime Stabilization (with Lime @ 32#/sy)	8,353	sy	$ 3.00	$ 25,060
301	8" Concrete Pavement w/ 6" Curb	7,956	sy	$ 38.00	$ 302,311
401	4" Topsoil	3,978	sy	$ 4.00	$ 15,911
501	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
601	5' Concrete Sidewalk	17,900	sf	$ 4.00	$ 71,600
				Paving Construction Cost Subtotal:	**$ 454,091**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 27,245
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 13,623
√	Roadway Drainage	Standard Internal System	30%	$ 136,227
√	Illumination		6%	$ 27,245
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 27,245
√	Sewer	Minor Adjustments	4%	$ 18,164
√	Establish Turf / Erosion Control		3%	$ 13,623
√	Basic Landscaping		2%	$ 9,082
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 272,455**
			Paving and Allowance Subtotal:	**$ 726,546**
			Construction Contingency: 10%	$ 72,655
			Construction Cost TOTAL:	**$ 800,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 800,000**
Engineering/Survey/Testing:		20%	$ 160,000
Mobilization		6%	$ 48,000
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 160,000
		Impact Fee Project Cost TOTAL:	**$ 1,168,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-I
Name:	Springfield St. (1)	This project consists of the reconstruction of an existing two-lane facility to a two-lane undivided collector facility.		
Limits:	IH-35E to Proposed Collector "F" (1-H)			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	2,335			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	5,578	cy	$ 8.00	$ 44,624
201	8" Lime Stabilization (with Lime @ 32#/sy)	10,897	sy	$ 3.00	$ 32,690
301	8" Concrete Pavement w/ 6" Curb	10,378	sy	$ 38.00	$ 394,356
401	4" Topsoil	5,189	sy	$ 4.00	$ 20,756
501	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
601	5' Concrete Sidewalk	23,350	sf	$ 4.00	$ 93,400
				Paving Construction Cost Subtotal:	**$ 590,826**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 35,450
√	Traffic Control	Construction Phase Traffic Control	5%	$ 29,541
√	Pavement Markings/Markers		3%	$ 17,725
√	Roadway Drainage	Standard Internal System	30%	$ 177,248
√	Illumination		6%	$ 35,450
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 35,450
√	Sewer	Minor Adjustments	4%	$ 23,633
√	Establish Turf / Erosion Control		3%	$ 17,725
√	Basic Landscaping		2%	$ 11,817
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 384,037**
			Paving and Allowance Subtotal:	**$ 974,862**
			Construction Contingency: 10%	$ 97,486
			Construction Cost TOTAL:	**$ 1,073,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,073,000**
Engineering/Survey/Testing:		20%	$ 214,600
Mobilization		6%	$ 64,380
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 107,300
		Impact Fee Project Cost TOTAL:	**$ 1,459,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:	Description:	Project No.	1-J
Name:	Springfield St. (2)	This project consists of the construction of a new two-lane undivided collector facility.	
Limits:	Proposed Collector "F" (1-H) to Houston School Rd		
Impact Fee Class:	C2U		
Ultimate Class:	Collector		
Length (lf):	2,600		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	6,211	cy	$ 8.00	$ 49,689
201	8" Lime Stabilization (with Lime @ 32#/sy)	12,133	sy	$ 3.00	$ 36,400
301	8" Concrete Pavement w/ 6" Curb	11,556	sy	$ 38.00	$ 439,111
401	4" Topsoil	5,778	sy	$ 4.00	$ 23,111
501	Concrete Driveway Approach	3	ea	$ 2,500.00	$ 7,500
601	5' Concrete Sidewalk	26,000	sf	$ 4.00	$ 104,000
				Paving Construction Cost Subtotal:	**$ 659,811**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 39,589
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 19,794
√	Roadway Drainage	Standard Internal System	30%	$ 197,943
√	Illumination		6%	$ 39,589
√	Special Drainage Structures	Minor Streem Crossing	0%	$ 250,000
√	Water	Minor Adjustments	6%	$ 39,589
√	Sewer	Minor Adjustments	4%	$ 26,392
√	Establish Turf / Erosion Control		3%	$ 19,794
√	Basic Landscaping		2%	$ 13,196
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 645,887**
			Paving and Allowance Subtotal:	**$ 1,305,698**
			Construction Contingency: 10%	$ 130,570
			Construction Cost TOTAL:	**$ 1,437,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	$ 1,437,000
Engineering/Survey/Testing:		20%	$ 287,400
Mobilization		6%	$ 86,220
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 287,400
		Impact Fee Project Cost TOTAL:	**$ 2,098,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-K
Name:	Balomeade Ave./Cumberland St. (1)	This project consists of the reconstruction of an existing two-lane facility to a two-lane undivided collector facility. This project will include Balomeade Ave. to align with Cumberland Street at Danieldale Rd.		
Limits:	Springfield St. to West Dr.			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	3,950			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	9,436	cy	$ 8.00	$ 75,489
201	8" Lime Stabilization (with Lime @ 32#/sy)	18,433	sy	$ 3.00	$ 55,300
301	8" Concrete Pavement w/ 6" Curb	17,556	sy	$ 38.00	$ 667,111
401	4" Topsoil	8,778	sy	$ 4.00	$ 35,111
501	Concrete Driveway Approach	4	ea	$ 2,500.00	$ 10,000
601	5' Concrete Sidewalk	39,500	sf	$ 4.00	$ 158,000
				Paving Construction Cost Subtotal:	**$ 1,001,011**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 60,061
√	Traffic Control	Construction Phase Traffic Control	5%	$ 50,051
√	Pavement Markings/Markers		3%	$ 30,030
√	Roadway Drainage	Standard Internal System	30%	$ 300,303
√	Illumination		6%	$ 60,061
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 60,061
√	Sewer	Minor Adjustments	4%	$ 40,040
√	Establish Turf / Erosion Control		3%	$ 30,030
√	Basic Landscaping		2%	$ 20,020
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 650,657**

Paving and Allowance Subtotal:		**$ 1,651,668**
Construction Contingency:	10%	$ 165,167
Construction Cost TOTAL:		**$ 1,817,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,817,000**
Engineering/Survey/Testing:		20%	$ 363,400
Mobilization		6%	$ 109,020
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 181,700
		Impact Fee Project Cost TOTAL:	**$ 2,471,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No. 1-L
Name:	Danieldale Rd. (1)	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided minor arterial facility. This project is currently under design and is estimated to have a total cost of $3,600,000.**	
Limits:	IH-35E to Houston School Rd.		
Impact Fee Class:	S4D		
Ultimate Class:	Minor Arterial		
Length (lf):	5,415		
Service Area(s):	1		

Impact Fee Project Cost Summary			
Item Description	**Notes:**	**Allowance**	**Item Cost**
Construction:			
Engineering/Survey/Testing:			$ -
Mobilization			$ -
Previous City contribution			
Other			
ROW/Easement Acquisition:			$ -
		Impact Fee Project Cost TOTAL:	**$ 3,600,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	1-M
Name:	Danieldale Rd. (2)	**This completed project consisted of the construction of a four-lane undivided minor arterial facility. The City of Lancaster contributed $1,500,000 to the construction of this facility.**		
Limits:	Houston School Rd. to IH-20			
Impact Fee Class:	S4D			
Ultimate Class:	Minor Arterial			
Length (lf):	5,360			
Service Area(s):	1			

Impact Fee Project Cost Summary			
Item Description	**Notes:**	**Allowance**	**Item Cost**
City Contribution to Construction Cost:		-	**$ 1,500,000**
Engineering/Survey/Testing			
Other			
ROW/Easement Acquisition:			
	Impact Fee Project Cost TOTAL:		**$ 1,500,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	1-N
Name:	Proposed Collector "G"	This project consists of the construction of a new two-lane undivided collector facility.		
Limits:	Houston School Rd. to IH-20			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	2,370			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	5,662	cy	$ 8.00	$ 45,293
201	8" Lime Stabilization (with Lime @ 32#/sy)	11,060	sy	$ 3.00	$ 33,180
301	8" Concrete Pavement w/ 6" Curb	10,533	sy	$ 38.00	$ 400,267
401	4" Topsoil	5,267	sy	$ 4.00	$ 21,067
501	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
601	5' Concrete Sidewalk	23,700	sf	$ 4.00	$ 94,800
				Paving Construction Cost Subtotal:	**$ 599,607**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 35,976
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 17,988
√	Roadway Drainage	Standard Internal System	30%	$ 179,882
√	Illumination		6%	$ 35,976
√	Special Drainage Structures	Minor Stream Crossing	0%	$ 250,000
√	Water	Minor Adjustments	6%	$ 35,976
√	Sewer	Minor Adjustments	4%	$ 23,984
√	Establish Turf / Erosion Control		3%	$ 17,988
√	Basic Landscaping		2%	$ 11,992
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 609,764**
			Paving and Allowance Subtotal:	**$ 1,209,371**
			Construction Contingency: 10%	$ 120,937
			Construction Cost TOTAL:	**$ 1,331,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	$ 1,331,000
Engineering/Survey/Testing:		20%	$ 266,200
Mobilization		6%	$ 79,860
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 266,200
		Impact Fee Project Cost TOTAL:	**$ 1,943,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/20 t2

Project Information:		Description:	Project No. 1-O
Name:	Percy St. (1)	**This project consists of the reconstruction of an existing two-lane facility to a two-lane undivided collector facility.**	
Limits:	Cedardale Rd. to Lyle St.		
Impact Fee Class:	C2U		
Ultimate Class:	Collector		
Length (lf):	2,030		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	4,849	cy	$ 8.00	$ 38,796
201	8" Lime Stabilization (with Lime @ 32#/sy)	9,473	sy	$ 3.00	$ 28,420
301	8" Concrete Pavement w/ 6" Curb	9,022	sy	$ 38.00	$ 342,844
401	4" Topsoil	4,511	sy	$ 4.00	$ 18,044
501	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
601	5' Concrete Sidewalk	20,300	sf	$ 4.00	$ 81,200
				Paving Construction Cost Subtotal:	**$ 514,304**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 30,858
√	Traffic Control	Construction Phase Traffic Control	5%	$ 25,715
√	Pavement Markings/Markers		3%	$ 15,429
√	Roadway Drainage	Standard Internal System	30%	$ 154,291
√	Illumination		6%	$ 30,858
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 30,858
√	Sewer	Minor Adjustments	4%	$ 20,572
√	Establish Turf / Erosion Control		3%	$ 15,429
√	Basic Landscaping		2%	$ 10,286
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 334,298**
			Paving and Allowance Subtotal:	**$ 848,602**
			Construction Contingency: 10%	$ 84,860
			Construction Cost TOTAL:	**$ 934,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 934,000**
Engineering/Survey/Testing:		20%	$ 186,800
Mobilization		6%	$ 56,040
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 93,400
		Impact Fee Project Cost TOTAL:	**$ 1,270,000**

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The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	1-P
Name:	Percy St. (2)	This project consists of the construction of a new two-lane undivided collector facility.		
Limits:	Lyle St. to IH-20			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	565			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	1,350	cy	$ 8.00	$ 10,798
201	8" Lime Stabilization (with Lime @ 32#/sy)	2,637	sy	$ 3.00	$ 7,910
301	8" Concrete Pavement w/ 6" Curb	2,511	sy	$ 38.00	$ 95,422
401	4" Topsoil	1,256	sy	$ 4.00	$ 5,022
501	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
601	5' Concrete Sidewalk	5,650	sf	$ 4.00	$ 22,600
				Paving Construction Cost Subtotal:	**$ 144,252**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 8,655
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 4,328
√	Roadway Drainage	Standard Internal System	30%	$ 43,276
√	Illumination		6%	$ 8,655
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 8,655
√	Sewer	Minor Adjustments	4%	$ 5,770
√	Establish Turf / Erosion Control		3%	$ 4,328
√	Basic Landscaping		2%	$ 2,885
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 86,551**
			Paving and Allowance Subtotal:	**$ 230,804**
			Construction Contingency: 10%	$ 23,080
			Construction Cost TOTAL:	**$ 254,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 254,000**
Engineering/Survey/Testing:		20%	$ 50,800
Mobilization		6%	$ 15,240
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 50,800
		Impact Fee Project Cost TOTAL:	**$ 371,000**

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Lancaster.

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-Q
Name:	West Dr.	**This completed project consisted of the construction of a two-lane undivided collector facility. The City of Lancaster contributed $2,523,027 to the construction of this facility.**		
Limits:	IH-35E to Longhorn Dr.			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	3,065			
Service Area(s):	1			

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
City Contribution to Construction Cost:		-	$ 2,523,027
Engineering/Survey/Testing			
Other			
ROW/Easement Acquisition:			
		Impact Fee Project Cost TOTAL:	**$ 2,523,027**

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The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-R
Name:	Cedardale Rd. (1)	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided minor arterial facility.**		
Limits:	Houston School Rd. to E. City Limits			
Impact Fee Class:	S4D			
Ultimate Class:	Minor Arterial			
Length (lf):	7,555			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	24,344	cy	$ 8.00	$ 194,751
202	8" Lime Stabilization (with Lime @ 32#/sy)	47,009	sy	$ 3.00	$ 141,027
302	8" Concrete Pavement w/ 6" Curb	43,651	sy	$ 38.00	$ 1,658,742
402	4" Topsoil	31,899	sy	$ 4.00	$ 127,596
502	Concrete Driveway Approach	8	ea	$ 2,500.00	$ 20,000
602	5' Concrete Sidewalk	75,550	sf	$ 4.00	$ 302,200
				Paving Construction Cost Subtotal:	**$ 2,444,316**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 146,659
√	Traffic Control	Construction Phase Traffic Control	5%	$ 122,216
√	Pavement Markings/Markers		3%	$ 73,329
√	Roadway Drainage	Standard Internal System	30%	$ 733,295
√	Illumination		6%	$ 146,659
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 146,659
√	Sewer	Minor Adjustments	4%	$ 97,773
√	Establish Turf / Erosion Control		3%	$ 73,329
√	Basic Landscaping		2%	$ 48,886
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,588,805**
			Paving and Allowance Subtotal:	**$ 4,033,121**
			Construction Contingency: 10%	$ 403,312
			Construction Cost TOTAL:	**$ 4,437,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 4,437,000**
Engineering/Survey/Testing:		20%	$ 887,400
Mobilization		6%	$ 266,220
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 443,700
		Impact Fee Project Cost TOTAL:	**$ 6,034,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated 5/8/2012

Project Information:		Description:	Project No.	1-S
Name:	Cedardale Rd. (2)	This project consists of the reconstruction of an existing two-lane facility to a four-lane divided minor arterial facility. The boundary between Lancaster and the City of Dallas is on the centerline of Cedardale Rd.		
Limits:	E. City Limits to Dallas Ave.			
Impact Fee Class:	S4D			
Ultimate Class:	Minor Arterial			
Length (lf):	1,690			
Service Area(s):	1 (Half)			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	5,446	cy	$ 8.00	$ 43,564
202	8" Lime Stabilization (with Lime @ 32#/sy)	10,516	sy	$ 3.00	$ 31,547
302	8" Concrete Pavement w/ 6" Curb	9,764	sy	$ 38.00	$ 371,049
402	4" Topsoil	7,136	sy	$ 4.00	$ 28,542
502	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
602	5' Concrete Sidewalk	16,900	sf	$ 4.00	$ 67,600
				Paving Construction Cost Subtotal:	**$ 547,302**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 32,838
√	Traffic Control	Construction Phase Traffic Control	5%	$ 27,365
√	Pavement Markings/Markers		3%	$ 16,419
√	Roadway Drainage	Standard Internal System	30%	$ 164,191
√	Illumination		6%	$ 32,838
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 32,838
√	Sewer	Minor Adjustments	4%	$ 21,892
√	Establish Turf / Erosion Control		3%	$ 16,419
√	Basic Landscaping		2%	$ 10,946
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 355,746**

Paving and Allowance Subtotal:		**$ 903,049**
Construction Contingency:	10%	$ 90,305
Construction Cost TOTAL:		**$ 994,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 994,000**
Engineering/Survey/Testing:		20%	$ 198,800
Mobilization		6%	$ 59,640
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 99,400
		Impact Fee Project Cost TOTAL:	**$ 1,352,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No. 1-T
Name:	Proposed Collector "H"	This project consists of the construction of a new two-lane undivided collector facility.	
Limits:	150' S. of Kentucky Ave. to Dizzy Dean Dr.		
Impact Fee Class:	C2U		
Ultimate Class:	Collector		
Length (lf):	2,080		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	4,969	cy	$ 8.00	$ 39,751
201	8" Lime Stabilization (with Lime @ 32#/sy)	9,707	sy	$ 3.00	$ 29,120
301	8" Concrete Pavement w/ 6" Curb	9,244	sy	$ 38.00	$ 351,289
401	4" Topsoil	4,622	sy	$ 4.00	$ 18,489
501	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
601	5' Concrete Sidewalk	20,800	sf	$ 4.00	$ 83,200
				Paving Construction Cost Subtotal:	**$ 526,849**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 31,611
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 15,805
√	Roadway Drainage	Standard Internal System	30%	$ 158,055
√	Illumination		6%	$ 31,611
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 31,611
√	Sewer	Minor Adjustments	4%	$ 21,074
√	Establish Turf / Erosion Control		3%	$ 15,805
√	Basic Landscaping		2%	$ 10,537
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 316,109**
			Paving and Allowance Subtotal:	**$ 842,958**
			Construction Contingency: 10%	$ 84,296
			Construction Cost TOTAL:	**$ 928,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 928,000**
Engineering/Survey/Testing:		20%	$ 185,600
Mobilization		6%	$ 55,680
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 185,600
		Impact Fee Project Cost TOTAL:	**$ 1,355,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:	Description:	Project No.	1-U
Name:	Proposed Collector "I" (Wintergreen Extension)	**This project consists of the construction of a new two-lane undivided collector facility.**	
Limits:	Pennsylvania Ave. to Dizzy Dean Dr.		
Impact Fee Class:	C2U		
Ultimate Class:	Collector		
Length (lf):	370		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	884	cy	$ 8.00	$ 7,071
201	8" Lime Stabilization (with Lime @ 32#/sy)	1,727	sy	$ 3.00	$ 5,180
301	8" Concrete Pavement w/ 6" Curb	1,644	sy	$ 38.00	$ 62,489
401	4" Topsoil	822	sy	$ 4.00	$ 3,289
501	Concrete Driveway Approach	0	ea	$ 2,500.00	$ -
601	5' Concrete Sidewalk	3,700	sf	$ 4.00	$ 14,800
				Paving Construction Cost Subtotal:	**$ 92,829**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 5,570
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 2,785
√	Roadway Drainage	Standard Internal System	30%	$ 27,849
√	Illumination		6%	$ 5,570
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 5,570
√	Sewer	Minor Adjustments	4%	$ 3,713
√	Establish Turf / Erosion Control		3%	$ 2,785
√	Basic Landscaping		2%	$ 1,857
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 55,697**
			Paving and Allowance Subtotal:	**$ 148,526**
			Construction Contingency: 10%	$ 14,853
			Construction Cost TOTAL:	**$ 164,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 164,000**
Engineering/Survey/Testing:		20%	$ 32,800
Mobilization		6%	$ 9,840
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 32,800
		Impact Fee Project Cost TOTAL:	**$ 239,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:	Description:	Project No.	1-V
Name:	Dizzy Dean Dr. (Wintergreen Extension)	This project consists of the widening of an existing two-lane concrete facility ino a four-lane divided minor arterial facility. The existing two-lanes were constructed by development and are not included in the cost.	
Limits:	Proposed Collector "I"(1-U) to Telephone Rd.		
Impact Fee Class:	S4D(1/2)		
Ultimate Class:	Minor Arterial		
Length (lf):	3,345		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
105	Unclassified Street Excavation	5,389	cy	$ 8.00	$ 43,113
205	8" Lime Stabilization (with Lime @ 32#/sy)	10,407	sy	$ 3.00	$ 31,220
305	8" Concrete Pavement w/ 6" Curb	9,663	sy	$ 38.00	$ 367,207
405	4" Topsoil	10,035	sy	$ 4.00	$ 40,140
505	Concrete Driveway Approach	3	ea	$ 2,500.00	$ 7,500
605	5' Concrete Sidewalk	16,725	sf	$ 4.00	$ 66,900
				Paving Construction Cost Subtotal:	**$ 556,080**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 33,365
√	Traffic Control	Construction Phase Traffic Control	5%	$ 27,804
√	Pavement Markings/Markers		3%	$ 16,682
√	Roadway Drainage	Standard Internal System	30%	$ 166,824
√	Illumination		6%	$ 33,365
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 33,365
√	Sewer	Minor Adjustments	4%	$ 22,243
√	Establish Turf / Erosion Control		3%	$ 16,682
√	Basic Landscaping		2%	$ 11,122
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 361,452**
			Paving and Allowance Subtotal:	**$ 917,532**
			Construction Contingency: 10%	$ 91,753
			Construction Cost TOTAL:	**$ 1,010,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,010,000**
Engineering/Survey/Testing:		20%	$ 202,000
Mobilization		6%	$ 60,600
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 101,000
		Impact Fee Project Cost TOTAL:	**$ 1,374,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-W
Name:	Wintergreen Rd. (1)	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility. This is a Dallas County Bond Project with an estimated cost of $9,405,072. The City and County had a 50/50 participation agreement. The City of Lancaster is estimated to contribute $4,702,536 to the construction of this facility.**		
Limits:	IH-35E to Houston School Rd.			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	5,320			
Service Area(s):	1			

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
City Contribution to Construction Cost:			$ 4,702,536
Engineering/Survey/Testing:			$ -
Mobilization			$ -
Previous City contribution			
Other			
ROW/Easement Acquisition:			$ -
		Impact Fee Project Cost TOTAL:	**$ 4,702,536**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-X
Name:	Wintergreen Rd. (2)	This project consists of the widening of an existing two-lane concrete facility ino a four-lane divided major arterial facility. The existing two-lanes were constructed by development and are not included in the cost.		
Limits:	Houston School Rd. to 830' E. of Houston School Rd.			
Impact Fee Class:	M4D(1/2)			
Ultimate Class:	Major Arterial			
Length (lf):	830			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
106	Unclassified Street Excavation	1,291	cy	$ 8.00	$ 10,329
206	8" Lime Stabilization (with Lime @ 32#/sy)	2,490	sy	$ 3.00	$ 7,470
306	8" Concrete Pavement w/ 6" Curb	2,306	sy	$ 38.00	$ 87,611
406	4" Topsoil	3,781	sy	$ 4.00	$ 15,124
506	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
606	5' Concrete Sidewalk	4,150	sf	$ 4.00	$ 16,600
				Paving Construction Cost Subtotal:	**$ 139,634**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 8,378
√	Traffic Control	Construction Phase Traffic Control	5%	$ 6,982
√	Pavement Markings/Markers		3%	$ 4,189
√	Roadway Drainage	Standard Internal System	30%	$ 41,890
√	Illumination		6%	$ 8,378
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 8,378
√	Sewer	Minor Adjustments	4%	$ 5,585
√	Establish Turf / Erosion Control		3%	$ 4,189
√	Basic Landscaping		2%	$ 2,793
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 90,762**

Paving and Allowance Subtotal:		**$ 230,397**
Construction Contingency:	10%	$ 23,040
Construction Cost TOTAL:		**$ 254,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 254,000**
Engineering/Survey/Testing:		20%	$ 50,800
Mobilization		6%	$ 15,240
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 25,400
		Impact Fee Project Cost TOTAL:	**$ 345,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-Y
Name:	Wingergreen Rd. (3)	This project consists of the construction of a new four-lane divided major arterial facility.		
Limits:	830' E. of Houston School Rd. to 1,385' E. of Houston School Rd.			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	555			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	1,727	cy	$ 8.00	$ 13,813
203	8" Lime Stabilization (with Lime @ 32#/sy)	3,330	sy	$ 3.00	$ 9,990
303	8" Concrete Pavement w/ 6" Curb	3,083	sy	$ 38.00	$ 117,167
403	4" Topsoil	3,083	sy	$ 4.00	$ 12,333
503	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
603	5' Concrete Sidewalk	5,550	sf	$ 4.00	$ 22,200
				Paving Construction Cost Subtotal:	**$ 178,003**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 10,680
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 5,340
√	Roadway Drainage	Standard Internal System	30%	$ 53,401
√	Illumination		6%	$ 10,680
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 10,680
√	Sewer	Minor Adjustments	4%	$ 7,120
√	Establish Turf / Erosion Control		3%	$ 5,340
√	Basic Landscaping		2%	$ 3,560
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 106,802**
			Paving and Allowance Subtotal:	**$ 284,805**
			Construction Contingency: 10%	$ 28,481
			Construction Cost TOTAL:	**$ 314,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 314,000**
Engineering/Survey/Testing:		20%	$ 62,800
Mobilization		6%	$ 18,840
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 62,800
		Impact Fee Project Cost TOTAL:	**$ 458,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-Z
Name:	Wintergreen Rd. (4)	This project consists of the widening of an existing two-lane concrete facility ino a four-lane divided major arterial facility. The existing two-lanes were constructed by development and are not included in the cost.		
Limits:	1,385' E. of Houston School Rd. to 2,770' E. of Houston School Rd.			
Impact Fee Class:	M4D(1/2)			
Ultimate Class:	Major Arterial			
Length (lf):	1,385			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
106	Unclassified Street Excavation	2,154	cy	$ 8.00	$ 17,236
206	8" Lime Stabilization (with Lime @ 32#/sy)	4,155	sy	$ 3.00	$ 12,465
306	8" Concrete Pavement w/ 6" Curb	3,847	sy	$ 38.00	$ 146,194
406	4" Topsoil	6,309	sy	$ 4.00	$ 25,238
506	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
606	5' Concrete Sidewalk	6,925	sf	$ 4.00	$ 27,700
				Paving Construction Cost Subtotal:	**$ 231,333**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 13,880
√	Traffic Control	Construction Phase Traffic Control	5%	$ 11,567
√	Pavement Markings/Markers		3%	$ 6,940
√	Roadway Drainage	Standard Internal System	30%	$ 69,400
√	Illumination		6%	$ 13,880
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 13,880
√	Sewer	Minor Adjustments	4%	$ 9,253
√	Establish Turf / Erosion Control		3%	$ 6,940
√	Basic Landscaping		2%	$ 4,627
	Other:		$0	$ -
****Allowances based on % of Paving Construction Cost Subtotal**			**Allowance Subtotal:**	**$ 150,366**
			Paving and Allowance Subtotal:	**$ 381,699**
			Construction Contingency: 10%	$ 38,170
			Construction Cost TOTAL:	**$ 420,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 420,000**
Engineering/Survey/Testing:		20%	$ 84,000
Mobilization		6%	$ 25,200
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 42,000
		Impact Fee Project Cost TOTAL:	**$ 571,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:	Description:	Project No.	1-AA
Name:	Wingergreen Rd. (5)	This project consists of the construction of a new four-lane divided major arterial facility.	
Limits:	2,770' E. of Houston School Rd. to Baskin Dr.		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	1,190		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	3,702	cy	$ 8.00	$ 29,618
203	8" Lime Stabilization (with Lime @ 32#/sy)	7,140	sy	$ 3.00	$ 21,420
303	8" Concrete Pavement w/ 6" Curb	6,611	sy	$ 38.00	$ 251,222
403	4" Topsoil	6,611	sy	$ 4.00	$ 26,444
503	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
603	5' Concrete Sidewalk	11,900	sf	$ 4.00	$ 47,600
				Paving Construction Cost Subtotal:	**$ 378,804**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 22,728
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 11,364
√	Roadway Drainage	Standard Internal System	30%	$ 113,641
√	Illumination		6%	$ 22,728
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 22,728
√	Sewer	Minor Adjustments	4%	$ 15,152
√	Establish Turf / Erosion Control		3%	$ 11,364
√	Basic Landscaping		2%	$ 7,576
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 227,283**
			Paving and Allowance Subtotal:	**$ 606,087**
			Construction Contingency: 10%	$ 60,609
			Construction Cost TOTAL:	**$ 667,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 667,000**
Engineering/Survey/Testing:		20%	$ 133,400
Mobilization		6%	$ 40,020
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 133,400
		Impact Fee Project Cost TOTAL:	**$ 974,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No. 1-BB
Name:	Wintergreen Rd./Telephone Rd.	This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility.	
Limits:	Baskin Dr. to E. City Limits		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	8,050		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	25,044	cy	$ 8.00	$ 200,356
203	8" Lime Stabilization (with Lime @ 32#/sy)	48,300	sy	$ 3.00	$ 144,900
303	8" Concrete Pavement w/ 6" Curb	44,722	sy	$ 38.00	$ 1,699,444
403	4" Topsoil	44,722	sy	$ 4.00	$ 178,889
503	Concrete Driveway Approach	8	ea	$ 2,500.00	$ 20,000
603	5' Concrete Sidewalk	80,500	sf	$ 4.00	$ 322,000
				Paving Construction Cost Subtotal:	**$ 2,565,589**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 153,935
√	Traffic Control	Construction Phase Traffic Control	5%	$ 128,279
√	Pavement Markings/Markers		3%	$ 76,968
√	Roadway Drainage	Standard Internal System	30%	$ 769,677
√	Illumination		6%	$ 153,935
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 153,935
√	Sewer	Minor Adjustments	4%	$ 102,624
√	Establish Turf / Erosion Control		3%	$ 76,968
√	Basic Landscaping		2%	$ 51,312
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,667,633**
			Paving and Allowance Subtotal:	**$ 4,233,222**
			Construction Contingency: 10%	$ 423,322
			Construction Cost TOTAL:	**$ 4,657,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 4,657,000**
Engineering/Survey/Testing:		20%	$ 931,400
Mobilization		6%	$ 279,420
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 465,700
		Impact Fee Project Cost TOTAL:	**$ 6,334,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-CC
Name:	Wintergreen Rd. (6)	**This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility.**		
Limits:	Telephone Rd. to Dallas Ave.			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	4,985			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	15,509	cy	$ 8.00	$ 124,071
203	8" Lime Stabilization (with Lime @ 32#/sy)	29,910	sy	$ 3.00	$ 89,730
303	8" Concrete Pavement w/ 6" Curb	27,694	sy	$ 38.00	$ 1,052,389
403	4" Topsoil	27,694	sy	$ 4.00	$ 110,778
503	Concrete Driveway Approach	5	ea	$ 2,500.00	$ 12,500
603	5' Concrete Sidewalk	49,850	sf	$ 4.00	$ 199,400
				Paving Construction Cost Subtotal:	**$ 1,588,868**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 95,332
√	Traffic Control	Construction Phase Traffic Control	5%	$ 79,443
√	Pavement Markings/Markers		3%	$ 47,666
√	Roadway Drainage	Standard Internal System	30%	$ 476,660
√	Illumination		6%	$ 95,332
√	Special Drainage Structures	Minon Stream Crossing	0%	$ 250,000
√	Water	Minor Adjustments	6%	$ 95,332
√	Sewer	Minor Adjustments	4%	$ 63,555
√	Establish Turf / Erosion Control		3%	$ 47,666
√	Basic Landscaping		2%	$ 31,777
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,282,764**
			Paving and Allowance Subtotal:	**$ 2,871,632**
			Construction Contingency: 10%	$ 287,163
			Construction Cost TOTAL:	**$ 3,159,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 3,159,000**
Engineering/Survey/Testing:		20%	$ 631,800
Mobilization		6%	$ 189,540
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 315,900
		Impact Fee Project Cost TOTAL:	**$ 4,296,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	1-DD
Name:	Wintergreen Rd. (7)	**This completed project consisted of the construction of a four-lane divided major arterial facility. This is a Dallas County Bond Project with a cost of $4,238,582. Dallas County contributed $1,833,648 to the construction of this facility. The City of Lancaster contributed $2,404,934 to the construction of this facility.**		
Limits:	Dallas Ave. to Jefferrson St.			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	4,310			
Service Area(s):	1			

Impact Fee Project Cost Summary			
Item Description	**Notes:**	**Allowance**	**Item Cost**
City Contribution to Construction Cost:		-	**$ 2,404,934**
Engineering/Survey/Testing			
Other			
ROW/Easement Acquisition:			
	Impact Fee Project Cost TOTAL:		**$ 2,404,934**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-EE
Name:	Wintergreen Rd. (8)	This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility. The boundary between Lancaster and the City of Dallas is on the centerline of Wintergreen Rd.		
Limits:	Jefferson St. to Lancaster-Hutchins Rd.			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	5,485			
Service Area(s):	1 (Half)			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	17,064	cy	$ 8.00	$ 136,516
203	8" Lime Stabilization (with Lime @ 32#/sy)	32,910	sy	$ 3.00	$ 98,730
303	8" Concrete Pavement w/ 6" Curb	30,472	sy	$ 38.00	$ 1,157,944
403	4" Topsoil	30,472	sy	$ 4.00	$ 121,889
503	Concrete Driveway Approach	5	ea	$ 2,500.00	$ 12,500
603	5' Concrete Sidewalk	54,850	sf	$ 4.00	$ 219,400
				Paving Construction Cost Subtotal:	**$ 1,746,979**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 104,819
√	Traffic Control	Construction Phase Traffic Control	5%	$ 87,349
√	Pavement Markings/Markers		3%	$ 52,409
√	Roadway Drainage	Standard Internal System	30%	$ 524,094
√	Illumination		6%	$ 104,819
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 104,819
√	Sewer	Minor Adjustments	4%	$ 69,879
√	Establish Turf / Erosion Control		3%	$ 52,409
√	Basic Landscaping		2%	$ 34,940
√	Other:	Railroad Crossing	$0	$ 500,000
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,635,536**
			Paving and Allowance Subtotal:	**$ 3,382,515**
			Construction Contingency: 10%	$ 338,252
			Construction Cost TOTAL:	**$ 3,721,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 3,721,000**
Engineering/Survey/Testing:		20%	$ 744,200
Mobilization		6%	$ 223,260
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 372,100
		Impact Fee Project Cost TOTAL:	**$ 5,061,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No. 1-FF
Name:	Blue Grove Rd. (1)	This project consists of the construction of a new four-lane divided major arterial facility.	
Limits:	Sunny Meadow Rd. to Kings Cross Dr.		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	975		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	3,033	cy	$ 8.00	$ 24,267
203	8" Lime Stabilization (with Lime @ 32#/sy)	5,850	sy	$ 3.00	$ 17,550
303	8" Concrete Pavement w/ 6" Curb	5,417	sy	$ 38.00	$ 205,833
403	4" Topsoil	5,417	sy	$ 4.00	$ 21,667
503	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
603	5' Concrete Sidewalk	9,750	sf	$ 4.00	$ 39,000
				Paving Construction Cost Subtotal:	**$ 310,817**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 18,649
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 9,325
√	Roadway Drainage	Standard Internal System	30%	$ 93,245
√	Illumination		6%	$ 18,649
√	Special Drainage Structures	Two Minor Stream Crossings	0%	$ 500,000
√	Water	Minor Adjustments	6%	$ 18,649
√	Sewer	Minor Adjustments	4%	$ 12,433
√	Establish Turf / Erosion Control		3%	$ 9,325
√	Basic Landscaping		2%	$ 6,216
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 686,490**

Paving and Allowance Subtotal:		**$ 997,307**
Construction Contingency:	10%	$ 99,731
Construction Cost TOTAL:		**$ 1,098,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	$ 1,098,000
Engineering/Survey/Testing:		20%	$ 219,600
Mobilization		6%	$ 65,880
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 219,600
		Impact Fee Project Cost TOTAL:	**$ 1,603,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:	Description:	Project No.	1-GG
Name:	Blue Grove Rd. (2)	This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility.	
Limits:	Kings Cross to Dr. Brook Meadow Cir.		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	2,295		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	7,140	cy	$ 8.00	$ 57,120
203	8" Lime Stabilization (with Lime @ 32#/sy)	13,770	sy	$ 3.00	$ 41,310
303	8" Concrete Pavement w/ 6" Curb	12,750	sy	$ 38.00	$ 484,500
403	4" Topsoil	12,750	sy	$ 4.00	$ 51,000
503	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
603	5' Concrete Sidewalk	22,950	sf	$ 4.00	$ 91,800
				Paving Construction Cost Subtotal:	**$ 730,730**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 43,844
√	Traffic Control	Construction Phase Traffic Control	5%	$ 36,537
√	Pavement Markings/Markers		3%	$ 21,922
√	Roadway Drainage	Standard Internal System	30%	$ 219,219
√	Illumination		6%	$ 43,844
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 43,844
√	Sewer	Minor Adjustments	4%	$ 29,229
√	Establish Turf / Erosion Control		3%	$ 21,922
√	Basic Landscaping		2%	$ 14,615
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 474,975**

Paving and Allowance Subtotal:		**$ 1,205,705**
Construction Contingency:	10%	$ 120,570
Construction Cost TOTAL:		**$ 1,327,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	$ 1,327,000
Engineering/Survey/Testing:		20%	$ 265,400
Mobilization		6%	$ 79,620
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 132,700
		Impact Fee Project Cost TOTAL:	**$ 1,805,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-HH
Name:	Blue Grove Rd. (3)	This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility.		
Limits:	Belt Line Rd. to Main St.			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	3,245			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	10,096	cy	$ 8.00	$ 80,764
203	8" Lime Stabilization (with Lime @ 32#/sy)	19,470	sy	$ 3.00	$ 58,410
303	8" Concrete Pavement w/ 6" Curb	18,028	sy	$ 38.00	$ 685,056
403	4" Topsoil	18,028	sy	$ 4.00	$ 72,111
503	Concrete Driveway Approach	3	ea	$ 2,500.00	$ 7,500
603	5' Concrete Sidewalk	32,450	sf	$ 4.00	$ 129,800
				Paving Construction Cost Subtotal:	**$ 1,033,641**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 62,018
√	Traffic Control	Construction Phase Traffic Control	5%	$ 51,682
√	Pavement Markings/Markers		3%	$ 31,009
√	Roadway Drainage	Standard Internal System	30%	$ 310,092
√	Illumination		6%	$ 62,018
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 62,018
√	Sewer	Minor Adjustments	4%	$ 41,346
√	Establish Turf / Erosion Control		3%	$ 31,009
√	Basic Landscaping		2%	$ 20,673
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 671,867**
			Paving and Allowance Subtotal:	**$ 1,705,508**
			Construction Contingency: 10%	$ 170,551
			Construction Cost TOTAL:	**$ 1,877,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	$ 1,877,000
Engineering/Survey/Testing:		20%	$ 375,400
Mobilization		6%	$ 112,620
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 187,700
		Impact Fee Project Cost TOTAL:	**$ 2,553,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-II
Name:	Balomeade Ave. (2)	This project consists of the construction of a new two-lane undivided collector facility.		
Limits:	West Dr. to Belverde Dr.			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	1,535			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	3,667	cy	$ 8.00	$ 29,336
201	8" Lime Stabilization (with Lime @ 32#/sy)	7,163	sy	$ 3.00	$ 21,490
301	8" Concrete Pavement w/ 6" Curb	6,822	sy	$ 38.00	$ 259,244
401	4" Topsoil	3,411	sy	$ 4.00	$ 13,644
501	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
601	5' Concrete Sidewalk	15,350	sf	$ 4.00	$ 61,400
				Paving Construction Cost Subtotal:	**$ 390,114**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 23,407
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 11,703
√	Roadway Drainage	Standard Internal System	30%	$ 117,034
√	Illumination		6%	$ 23,407
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 23,407
√	Sewer	Minor Adjustments	4%	$ 15,605
√	Establish Turf / Erosion Control		3%	$ 11,703
√	Basic Landscaping		2%	$ 7,802
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 234,069**
			Paving and Allowance Subtotal:	**$ 624,183**
			Construction Contingency: 10%	$ 62,418
			Construction Cost TOTAL:	**$ 687,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 687,000**
Engineering/Survey/Testing:		20%	$ 137,400
Mobilization		6%	$ 41,220
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 137,400
		Impact Fee Project Cost TOTAL:	**$ 1,003,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-JJ
Name:	Balomeade Ave. (3)	This project consists of the reconstruction of an existing two-lane facility to a two-lane undivided collector facility.		
Limits:	Belverde Dr. to Wintergreen Rd.			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	1,085			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	2,592	cy	$ 8.00	$ 20,736
201	8" Lime Stabilization (with Lime @ 32#/sy)	5,063	sy	$ 3.00	$ 15,190
301	8" Concrete Pavement w/ 6" Curb	4,822	sy	$ 38.00	$ 183,244
401	4" Topsoil	2,411	sy	$ 4.00	$ 9,644
501	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
601	5' Concrete Sidewalk	10,850	sf	$ 4.00	$ 43,400
				Paving Construction Cost Subtotal:	**$ 274,714**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 16,483
√	Traffic Control	Construction Phase Traffic Control	5%	$ 13,736
√	Pavement Markings/Markers		3%	$ 8,241
√	Roadway Drainage	Standard Internal System	30%	$ 82,414
√	Illumination		6%	$ 16,483
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 16,483
√	Sewer	Minor Adjustments	4%	$ 10,989
√	Establish Turf / Erosion Control		3%	$ 8,241
√	Basic Landscaping		2%	$ 5,494
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 178,564**
			Paving and Allowance Subtotal:	**$ 453,279**
			Construction Contingency: 10%	$ 45,328
			Construction Cost TOTAL:	**$ 499,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 499,000**
Engineering/Survey/Testing:		20%	$ 99,800
Mobilization		6%	$ 29,940
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 49,900
		Impact Fee Project Cost TOTAL:	**$ 679,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-KK
Name:	Proposed Collector "J"	This project consists of the construction of a new two-lane undivided collector facility.		
Limits:	Wintergreen Rd. to Idlewild Ln.			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	2,720			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	6,498	cy	$ 8.00	$ 51,982
201	8" Lime Stabilization (with Lime @ 32#/sy)	12,693	sy	$ 3.00	$ 38,080
301	8" Concrete Pavement w/ 6" Curb	12,089	sy	$ 38.00	$ 459,378
401	4" Topsoil	6,044	sy	$ 4.00	$ 24,178
501	Concrete Driveway Approach	3	ea	$ 2,500.00	$ 7,500
601	5' Concrete Sidewalk	27,200	sf	$ 4.00	$ 108,800
				Paving Construction Cost Subtotal:	**$ 689,918**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 41,395
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 20,698
√	Roadway Drainage	Standard Internal System	30%	$ 206,975
√	Illumination		6%	$ 41,395
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 41,395
√	Sewer	Minor Adjustments	4%	$ 27,597
√	Establish Turf / Erosion Control		3%	$ 20,698
√	Basic Landscaping		2%	$ 13,798
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 413,951**
			Paving and Allowance Subtotal:	**$ 1,103,868**
			Construction Contingency: 10%	$ 110,387
			Construction Cost TOTAL:	**$ 1,215,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	$ 1,215,000
Engineering/Survey/Testing:		20%	$ 243,000
Mobilization		6%	$ 72,900
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 243,000
		Impact Fee Project Cost TOTAL:	**$ 1,774,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	1-LL
Name:	Proposed Collector "K"	This project consists of the construction of a new two-lane undivided collector facility.		
Limits:	Pleasant Run Rd. to Hanna Ln.			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	3,305			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	7,895	cy	$ 8.00	$ 63,162
201	8" Lime Stabilization (with Lime @ 32#/sy)	15,423	sy	$ 3.00	$ 46,270
301	8" Concrete Pavement w/ 6" Curb	14,689	sy	$ 38.00	$ 558,178
401	4" Topsoil	7,344	sy	$ 4.00	$ 29,378
501	Concrete Driveway Approach	3	ea	$ 2,500.00	$ 7,500
601	5' Concrete Sidewalk	33,050	sf	$ 4.00	$ 132,200
				Paving Construction Cost Subtotal:	**$ 836,688**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 50,201
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 25,101
√	Roadway Drainage	Standard Internal System	30%	$ 251,006
√	Illumination		6%	$ 50,201
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 50,201
√	Sewer	Minor Adjustments	4%	$ 33,468
√	Establish Turf / Erosion Control		3%	$ 25,101
√	Basic Landscaping		2%	$ 16,734
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 502,013**
			Paving and Allowance Subtotal:	**$ 1,338,700**
			Construction Contingency: 10%	$ 133,870
			Construction Cost TOTAL:	**$ 1,473,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,473,000**
Engineering/Survey/Testing:		20%	$ 294,600
Mobilization		6%	$ 88,380
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 294,600
		Impact Fee Project Cost TOTAL:	**$ 2,151,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	1-MM
Name:	Houston School Rd. (2)	**This completed project consisted of the construction of a four-lane divided major arterial facility. The City contributed $8.5 million towards the construction of Houston School Road from Wheatland Road (see Project 1-C) to Pleasant Run Road. The City is anticipated to contribute 88% or $7,480,000 to the construction of this section.**		
Limits:	IH-20 EBFR to Pleasant Run Road			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	13,500			
Service Area(s):	1			

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
City Contribution to Construction Cost:	$ 8,500,000	88%	$ 7,480,000
Engineering/Survey/Testing			
Other			
ROW/Easement Acquisition:	No ROW Acquisition Costs included		
		Impact Fee Project Cost TOTAL:	**$ 7,480,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	1-NN
Name:	Houston School Rd. (3)	This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility.		
Limits:	1,500' N. of Belt Line Rd. to Main St.			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	3,695			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	11,496	cy	$ 8.00	$ 91,964
203	8" Lime Stabilization (with Lime @ 32#/sy)	22,170	sy	$ 3.00	$ 66,510
303	8" Concrete Pavement w/ 6" Curb	20,528	sy	$ 38.00	$ 780,056
403	4" Topsoil	20,528	sy	$ 4.00	$ 82,111
503	Concrete Driveway Approach	4	ea	$ 2,500.00	$ 10,000
603	5' Concrete Sidewalk	36,950	sf	$ 4.00	$ 147,800
				Paving Construction Cost Subtotal:	**$ 1,178,441**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 70,706
√	Traffic Control	Construction Phase Traffic Control	5%	$ 58,922
√	Pavement Markings/Markers		3%	$ 35,353
√	Roadway Drainage	Standard Internal System	30%	$ 353,532
√	Illumination		6%	$ 70,706
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 70,706
√	Sewer	Minor Adjustments	4%	$ 47,138
√	Establish Turf / Erosion Control		3%	$ 35,353
√	Basic Landscaping		2%	$ 23,569
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 765,987**
			Paving and Allowance Subtotal:	**$ 1,944,428**
			Construction Contingency: 10%	$ 194,443
			Construction Cost TOTAL:	**$ 2,139,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 2,139,000**
Engineering/Survey/Testing:		20%	$ 427,800
Mobilization		6%	$ 128,340
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 213,900
		Impact Fee Project Cost TOTAL:	**$ 2,909,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-OO
Name:	Jefferson St.	This project consists of the reconstruction of an existing two-lane facility to a four-lane divided minor arterial facility.		
Limits:	Wintergreen Rd. to Pleasant Run Rd.			
Impact Fee Class:	S4D			
Ultimate Class:	Minor Arterial			
Length (lf):	5,200			
Service Area(s):	1			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	16,756	cy	$ 8.00	$ 134,044
202	8" Lime Stabilization (with Lime @ 32#/sy)	32,356	sy	$ 3.00	$ 97,067
302	8" Concrete Pavement w/ 6" Curb	30,044	sy	$ 38.00	$ 1,141,689
402	4" Topsoil	21,956	sy	$ 4.00	$ 87,822
502	Concrete Driveway Approach	5	ea	$ 2,500.00	$ 12,500
602	5' Concrete Sidewalk	52,000	sf	$ 4.00	$ 208,000
				Paving Construction Cost Subtotal:	**$ 1,681,122**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 100,867
√	Traffic Control	Construction Phase Traffic Control	5%	$ 84,056
√	Pavement Markings/Markers		3%	$ 50,434
√	Roadway Drainage	Standard Internal System	30%	$ 504,337
√	Illumination		6%	$ 100,867
√	Special Drainage Structures	Minor Stream Crossing	0%	$ 250,000
√	Water	Minor Adjustments	6%	$ 100,867
√	Sewer	Minor Adjustments	4%	$ 67,245
√	Establish Turf / Erosion Control		3%	$ 50,434
√	Basic Landscaping		2%	$ 33,622
	Other:		$0	$ -
			Allowance Subtotal:	**$ 1,342,729**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 3,023,852**
Construction Contingency:	10%	$ 302,385
Construction Cost TOTAL:		**$ 3,327,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 3,327,000**
Engineering/Survey/Testing:		20%	$ 665,400
Mobilization		6%	$ 199,620
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 332,700
		Impact Fee Project Cost TOTAL:	**$ 4,525,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No. 1-PP
Name:	Belt Line Rd. (1)	This project consists of the reconstruction of an existing two-lane facility to a six-lane divided major arterial facility.	
Limits:	Blue Grove Rd. to 1,005' W. of Main St.		
Impact Fee Class:	P6D		
Ultimate Class:	Major Arterial		
Length (lf):	3,935		
Service Area(s):	1		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	17,926	cy	$ 8.00	$ 143,409
204	8" Lime Stabilization (with Lime @ 32#/sy)	34,978	sy	$ 3.00	$ 104,933
304	8" Concrete Pavement w/ 6" Curb	33,229	sy	$ 38.00	$ 1,262,698
404	4" Topsoil	19,238	sy	$ 4.00	$ 76,951
504	Concrete Driveway Approach	4	ea	$ 2,500.00	$ 10,000
604	5' Concrete Sidewalk	39,350	sf	$ 4.00	$ 157,400
				Paving Construction Cost Subtotal:	**$ t,755,39t**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 105,323
√	Traffic Control	Construction Phase Traffic Control	5%	$ 87,770
√	Pavement Markings/Markers		3%	$ 52,662
√	Roadway Drainage	Standard Internal System	30%	$ 526,617
√	Illumination		6%	$ 105,323
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 105,323
√	Sewer	Minor Adjustments	4%	$ 70,216
√	Establish Turf / Erosion Control		3%	$ 52,662
√	Basic Landscaping		2%	$ 35,108
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,141,004**
			Paving and Allowance Subtotal:	**$ 2,896,395**
			Construction Contingency: 10%	$ 289,640
			Construction Cost TOTAL:	**$ 3,187,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	$ 3,187,000
Engineering/Survey/Testing:		20%	$ 637,400
Mobilization		6%	$ 191,220
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 318,700
		Impact Fee Project Cost TOTAL:	**$ 4,334,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No. 1-QQ, 2-N
Name:	Belt Line Rd. (2)	This project consists of the reconstruction of an existing two-lane facility to a six-lane divided major arterial facility. The boundary between SA 1 and SA 2 is on the centerline of Belt Line Rd.	
Limits:	1,005' W. of Main St. to Main St.		
Impact Fee Class:	P6D		
Ultimate Class:	Major Arterial		
Length (lf):	1,005		
Service Area(s):	1,2		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	4,578	cy	$ 8.00	$ 36,627
204	8" Lime Stabilization (with Lime @ 32#/sy)	8,933	sy	$ 3.00	$ 26,800
304	8" Concrete Pavement w/ 6" Curb	8,487	sy	$ 38.00	$ 322,493
404	4" Topsoil	4,913	sy	$ 4.00	$ 19,653
504	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
604	5' Concrete Sidewalk	10,050	sf	$ 4.00	$ 40,200
				Paving Construction Cost Subtotal:	**$ 448,273**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 26,896
√	Traffic Control	Construction Phase Traffic Control	5%	$ 22,414
√	Pavement Markings/Markers		3%	$ 13,448
√	Roadway Drainage	Standard Internal System	30%	$ 134,482
√	Illumination		6%	$ 26,896
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 26,896
√	Sewer	Minor Adjustments	4%	$ 17,931
√	Establish Turf / Erosion Control		3%	$ 13,448
√	Basic Landscaping		2%	$ 8,965
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 291,378**
			Paving and Allowance Subtotal:	**$ 739,651**
			Construction Contingency: 10%	$ 73,965
			Construction Cost TOTAL:	**$ 814,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 814,000**
Engineering/Survey/Testing:		20%	$ 162,800
Mobilization		6%	$ 48,840
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 81,400
		Impact Fee Project Cost TOTAL:	**$ 1,107,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No. 1-RR, 3-I
Name:	Main St. (1)	This project consists of the reconstruction of an existing two-lane facility to a two-lane undivided collector facility. The boundary between SA 1 and SA 3 is on the centerline of Main St.	
Limits:	Belt Line Rd. to Belt Line Rd.		
Impact Fee Class:	C2U		
Ultimate Class:	Collector		
Length (lf):	15,940		
Service Area(s):	1,3		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	38,079	cy	$ 8.00	$ 304,631
201	8" Lime Stabilization (with Lime @ 32#/sy)	74,387	sy	$ 3.00	$ 223,160
301	8" Concrete Pavement w/ 6" Curb	70,844	sy	$ 38.00	$ 2,692,089
401	4" Topsoil	35,422	sy	$ 4.00	$ 141,689
501	Concrete Driveway Approach	16	ea	$ 2,500.00	$ 40,000
601	5' Concrete Sidewalk	159,400	sf	$ 4.00	$ 637,600
				Paving Construction Cost Subtotal:	**$ 4,039,169**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 242,350
√	Traffic Control	Construction Phase Traffic Control	5%	$ 201,958
√	Pavement Markings/Markers		3%	$ 121,175
√	Roadway Drainage	Standard Internal System	30%	$ 1,211,751
√	Illumination		6%	$ 242,350
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 242,350
√	Sewer	Minor Adjustments	4%	$ 161,567
√	Establish Turf / Erosion Control		3%	$ 121,175
√	Basic Landscaping		2%	$ 80,783
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 2,625,460**
			Paving and Allowance Subtotal:	**$ 6,664,629**
			Construction Contingency: 10%	$ 666,463
			Construction Cost TOTAL:	**$ 7,332,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	$ 7,332,000
Engineering/Survey/Testing:		20%	$ 1,466,400
Mobilization		6%	$ 439,920
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 733,200
		Impact Fee Project Cost TOTAL:	**$ 9,972,000**

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The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	1-SS, 2-A
Name:	Lancaster Hutchins Rd. (1)	**This project consists of the reconstruction of an existing two-lane facility to a six-lane divided major arterial facility. The boundary between SA 1 and SA 2 is on the centerline of Main St.**		
Limits:	Wintergreen Rd. to Pleasant Run Rd.			
Impact Fee Class:	P6D			
Ultimate Class:	Major Arterial			
Length (lf):	6,270			
Service Area(s):	1,2			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	28,563	cy	$ 8.00	$ 228,507
204	8" Lime Stabilization (with Lime @ 32#/sy)	55,733	sy	$ 3.00	$ 167,200
304	8" Concrete Pavement w/ 6" Curb	52,947	sy	$ 38.00	$ 2,011,973
404	4" Topsoil	30,653	sy	$ 4.00	$ 122,613
504	Concrete Driveway Approach	6	ea	$ 2,500.00	$ 15,000
604	5' Concrete Sidewalk	62,700	sf	$ 4.00	$ 250,800
				Paving Construction Cost Subtotal:	**$ 2,796,093**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 167,766
√	Traffic Control	Construction Phase Traffic Control	5%	$ 139,805
√	Pavement Markings/Markers		3%	$ 83,883
√	Roadway Drainage	Standard Internal System	30%	$ 838,828
√	Illumination		6%	$ 167,766
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 167,766
√	Sewer	Minor Adjustments	4%	$ 111,844
√	Establish Turf / Erosion Control		3%	$ 83,883
√	Basic Landscaping		2%	$ 55,922
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,817,461**

Paving and Allowance Subtotal:		**$ 4,613,554**
Construction Contingency:	10%	$ 461,355
Construction Cost TOTAL:		**$ 5,075,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	item Cost
Construction:		0%	**$ 5,075,000**
Engineering/Survey/Testing:		20%	$ 1,015,000
Mobilization		6%	$ 304,500
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 507,500
		Impact Fee Project Cost TOTAL:	**$ 6,902,000**

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Lancaster.

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City of Lancaster - 2012 Roadway Impact Fee Update

Thoroughfare Impact Fee Improvement Projects for Roadway Impact Fees

Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area 2

#	Class	Project	Limits	Project Cost
1-SS, 2-A	P6D	Lancaster Hutchins Rd. (1)	Wintergreen Rd. to Pleasant Run Rd.	$ 6,902,000
2-B	M4D	Lancaster-Hutchins Rd. (2)	Pleasant Run Rd. to Belt Line Rd.	$ 6,264,000
2-C, 3-K	P6D	Lancaster-Hutchins Rd. (3)	Belt Line Rd. to Dallas Ave.	$ 3,074,000
2-D	M4D	Comell Rd. (1)	Lancaster Hutchins Rd. to Greene Rd.	$ 6,302,000
2-E	M4D	Comell Rd. (2)	Greene Rd. to Belt Line Rd.	$ 2,875,000
2-F	M4D	Alba Rd. (1)	N. City Limits to Greena Rd. (N)	$ 4,732,000
2-G	M4D	Albe Rd. (2)	Greene Rd. (N) to 935' S. of Greene Rd. (S)	$ 1,325,000
2-H	M4D	Alba Rd. (3)	935' S. of Greene Rd. (S) to Belt Line Rd.	$ 949,000
2-I	C2U	Ferris Rd. (1)	Belt Line Rd. to S. City Limits	$ 3,933,000
2-J	C2U	Ferris Rd. (2)	S. City Limits to S. City Limits	$ 1,665,000
2-K	C2U	Ferris Rd. (3)	S. City Limits to E. City Limits	$ 1,954,000
2-L	C2U	Ferris Rd. (4)	E. City Limits to S. City Limits	$ 3,713,000
2-M	M4D	Airport Rd. East	Greene Rd. to Ferris Rd.	$ 6,614,000
1-QQ, 2-N	P6D	Belt Line Rd. (2)	1,005' W. of Main St. to Main St.	$ 1,107,000
2-O, 3-J	M4D	Belt Line Rd. (4)	Main St. to Lancaster-Hutchins Rd.	$ 5,470,000
2-P	M4D	Belt Line Rd. (5)	Lancaster-Hutchins Rd. to E. City Limits	$ 11,863,000
2-Q	M4D	Belt Line Rd. (6)	E. City Limits to 640' E. of E. City Limits	$ 506,000

Signal Installation

I-4		Signal Installation	Lancaster-Hutchins Rd. & Wintergreen Rd.	$ 140,000
I-5		Signal Installation	Lancaster-Hutchins Rd. & Pleasant Run Rd.	$ 140,000
			TOTAL	$ 71,928,000

*Total may be higher than presented in Tables 2.A, 2.B and 2.C (Thoroughfare Impact Fee Improvement Program) because the cost of some projects are shared between service areas.

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No. 1-SS, 2-A
Name:	Lancaster Hutchins Rd. (1)	**This project consists of the reconstruction of an existing two-lane facility to a six-lane divided major arterial facility. The boundary between SA 1 and SA 2 is on the centerline of Main St.**	
Limits:	Wintergreen Rd. to Pleasant Run Rd.		
Impact Fee Class:	P6D		
Ultimate Class:	Major Arterial		
Length (lf):	6,270		
Service Area(s):	1,2		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	28,563	cy	$ 8.00	$ 228,507
204	8" Lime Stabilization (with Lime @ 32#/sy)	55,733	sy	$ 3.00	$ 167,200
304	8" Concrete Pavement w/ 6" Curb	52,947	sy	$ 38.00	$ 2,011,973
404	4" Topsoil	30,653	sy	$ 4.00	$ 122,613
504	Concrete Driveway Approach	6	ea	$ 2,500.00	$ 15,000
604	5' Concrete Sidewalk	62,700	sf	$ 4.00	$ 250,800
				Paving Construction Cost Subtotal:	**$ 2,796,093**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 167,766
√	Traffic Control	Construction Phase Traffic Control	5%	$ 139,805
√	Pavement Markings/Markers		3%	$ 83,883
√	Roadway Drainage	Standard Internal System	30%	$ 838,828
√	Illumination		6%	$ 167,766
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 167,766
√	Sewer	Minor Adjustments	4%	$ 111,844
√	Establish Turf / Erosion Control		3%	$ 83,883
√	Basic Landscaping		2%	$ 55,922
	Other:		$0	$ -
****Allowances based on % of Paving Construction Cost Subtotal**			**Allowance Subtotal:**	**$ 1,817,461**
			Paving and Allowance Subtotal:	**$ 4,613,554**
			Construction Contingency: 10%	$ 461,355
			Construction Cost TOTAL:	**$ 5,075,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 5,075,000**
Engineering/Survey/Testing:		20%	$ 1,015,000
Mobilization		6%	$ 304,500
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 507,500
		Impact Fee Project Cost TOTAL:	**$ 6,902,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	2-B
Name:	Lancaster-Hutchins Rd. (2)	This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility.		
Limits:	Pleasant Run Rd. to Belt Line Rd.			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	7,490			
Service Area(s):	2			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	23,302	cy	$ 8.00	$ 186,418
203	8" Lime Stabilization (with Lime @ 32#/sy)	44,940	sy	$ 3.00	$ 134,820
303	8" Concrete Pavement w/ 6" Curb	41,611	sy	$ 38.00	$ 1,581,222
403	4" Topsoil	41,611	sy	$ 4.00	$ 166,444
503	Concrete Driveway Approach	7	ea	$ 2,500.00	$ 17,500
603	5' Concrete Sidewalk	74,900	sf	$ 4.00	$ 299,600
				Paving Construction Cost Subtotal:	**$ 2,386,004**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 143,160
√	Traffic Control	Construction Phase Traffic Control	5%	$ 119,300
√	Pavement Markings/Markers		3%	$ 71,580
√	Roadway Drainage	Standard Internal System	30%	$ 715,801
√	Illumination		6%	$ 143,160
√	Special Drainage Structures	Minor Stream Crossing	0%	$ 250,000
√	Water	Minor Adjustments	6%	$ 143,160
√	Sewer	Minor Adjustments	4%	$ 95,440
√	Establish Turf / Erosion Control		3%	$ 71,580
√	Basic Landscaping		2%	$ 47,720
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,800,903**
			Paving and Allowance Subtotal:	**$ 4,186,907**
			Construction Contingency: 10%	$ 418,691
			#N/A	**$ 4,606,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 4,606,000**
Engineering/Survey/Testing:		20%	$ 921,200
Mobilization		6%	$ 276,360
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 460,600
		Impact Fee Project Cost TOTAL:	**$ 6,264,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No. 2-C, 3-K
Name:	Lancaster-Hutchins Rd. (3)	This project consists of the reconstruction of an existing two-lane facility to a six-lane divided major arterial facility. The boundary between SA 2 and SA 3 is on the centerline of Lancaster-Hutchins Road.	
Limits:	Belt Line Rd. to Dallas Ave.		
Impact Fee Class:	P6D		
Ultimate Class:	Major Arterial		
Length (lf):	2,790		
Service Area(s):	2,3		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	12,710	cy	$ 8.00	$ 101,680
204	8" Lime Stabilization (with Lime @ 32#/sy)	24,800	sy	$ 3.00	$ 74,400
304	8" Concrete Pavement w/ 6" Curb	23,560	sy	$ 38.00	$ 895,280
404	4" Topsoil	13,640	sy	$ 4.00	$ 54,560
504	Concrete Driveway Approach	3	ea	$ 2,500.00	$ 7,500
604	5' Concrete Sidewalk	27,900	sf	$ 4.00	$ 111,600
				Paving Construction Cost Subtotal:	**$ 1,245,020**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 74,701
√	Traffic Control	Construction Phase Traffic Control	5%	$ 62,251
√	Pavement Markings/Markers		3%	$ 37,351
√	Roadway Drainage	Standard Internal System	30%	$ 373,506
√	Illumination		6%	$ 74,701
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 74,701
√	Sewer	Minor Adjustments	4%	$ 49,801
√	Establish Turf / Erosion Control		3%	$ 37,351
√	Basic Landscaping		2%	$ 24,900
	Other:		$0	$ -
****Allowances based on % of Paving Construction Cost Subtotal**			**Allowance Subtotal:**	**$ 809,263**
			Paving and Allowance Subtotal:	**$ 2,054,283**
			Construction Contingency: 10%	$ 205,428
			Construction Cost TOTAL:	**$ 2,260,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 2,260,000**
Engineering/Survey/Testing:		20%	$ 452,000
Mobilization		6%	$ 135,600
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 226,000
		Impact Fee Project Cost TOTAL:	**$ 3,074,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	2-D
Name:	Cornell Rd. (1)	This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility.		
Limits:	Lancaster Hutchins Rd. to Greene Rd.			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	8,010			
Service Area(s):	2			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	24,920	cy	$ 8.00	$ 199,360
203	8" Lime Stabilization (with Lime @ 32#/sy)	48,060	sy	$ 3.00	$ 144,180
303	8" Concrete Pavement w/ 6" Curb	44,500	sy	$ 38.00	$ 1,691,000
403	4" Topsoil	44,500	sy	$ 4.00	$ 178,000
503	Concrete Driveway Approach	8	ea	$ 2,500.00	$ 20,000
603	5' Concrete Sidewalk	80,100	sf	$ 4.00	$ 320,400
				Paving Construction Cost Subtotal:	**$ 2,552,940**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 153,176
√	Traffic Control	Construction Phase Traffic Control	5%	$ 127,647
√	Pavement Markings/Markers		3%	$ 76,588
√	Roadway Drainage	Standard Internal System	30%	$ 765,882
√	Illumination		6%	$ 153,176
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 153,176
√	Sewer	Minor Adjustments	4%	$ 102,118
√	Establish Turf / Erosion Control		3%	$ 76,588
√	Basic Landscaping		2%	$ 51,059
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,659,411**
			Paving and Allowance Subtotal:	**$ 4,212,351**
			Construction Contingency: 10%	$ 421,235
			Construction Cost TOTAL:	**$ 4,634,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 4,634,000**
Engineering/Survey/Testing:		20%	$ 926,800
Mobilization		6%	$ 278,040
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 463,400
		Impact Fee Project Cost TOTAL:	**$ 6,302,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No. 2-E
Name:	Cornell Rd. (2)	This project consists of the construction of a new four-lane divided major arterial facility.	
Limits:	Greene Rd. to Belt Line Rd.		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	3,505		
Service Area(s):	2		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	10,904	cy	$ 8.00	$ 87,236
203	8" Lime Stabilization (with Lime @ 32#/sy)	21,030	sy	$ 3.00	$ 63,090
303	8" Concrete Pavement w/ 6" Curb	19,472	sy	$ 38.00	$ 739,944
403	4" Topsoil	19,472	sy	$ 4.00	$ 77,889
503	Concrete Driveway Approach	4	ea	$ 2,500.00	$ 10,000
603	5' Concrete Sidewalk	35,050	sf	$ 4.00	$ 140,200
				Paving Construction Cost Subtotal:	**$ 1,118,359**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 67,102
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 33,551
√	Roadway Drainage	Standard Internal System	30%	$ 335,508
√	Illumination		6%	$ 67,102
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 67,102
√	Sewer	Minor Adjustments	4%	$ 44,734
√	Establish Turf / Erosion Control		3%	$ 33,551
√	Basic Landscaping		2%	$ 22,367
	Other:		$0	$ -
****Allowances based on % of Paving Construction Cost Subtotal**			**Allowance Subtotal:**	**$ 671,015**
			Paving and Allowance Subtotal:	**$ 1,789,374**
			Construction Contingency: 10%	$ 178,937
			Construction Cost TOTAL:	**$ 1,969,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,969,000**
Engineering/Survey/Testing:		20%	$ 393,800
Mobilization		6%	$ 118,140
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 393,800
		Impact Fee Project Cost TOTAL:	**$ 2,875,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	2-F
Name:	Alba Rd. (1)	This project consists of the construction of a new four-lane divided major arterial facility.		
Limits:	N. City Limits to Greene Rd. (N)			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	5,775			
Service Area(s):	2			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	17,967	cy	$ 8.00	$ 143,733
203	8" Lime Stabilization (with Lime @ 32#/sy)	34,650	sy	$ 3.00	$ 103,950
303	8" Concrete Pavement w/ 6" Curb	32,083	sy	$ 38.00	$ 1,219,167
403	4" Topsoil	32,083	sy	$ 4.00	$ 128,333
503	Concrete Driveway Approach	6	ea	$ 2,500.00	$ 15,000
603	5' Concrete Sidewalk	57,750	sf	$ 4.00	$ 231,000
				Paving Construction Cost Subtotal:	**$ 1,841,183**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 110,471
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 55,236
√	Roadway Drainage	Standard Internal System	30%	$ 552,355
√	Illumination		6%	$ 110,471
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 110,471
√	Sewer	Minor Adjustments	4%	$ 73,647
√	Establish Turf / Erosion Control		3%	$ 55,236
√	Basic Landscaping		2%	$ 36,824
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,104,710**
			Paving and Allowance Subtotal:	**$ 2,945,893**
			Construction Contingency: 10%	$ 294,589
			Construction Cost TOTAL:	**$ 3,241,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 3,241,000**
Engineering/Survey/Testing:		20%	$ 648,200
Mobillzation		6%	$ 194,460
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 648,200
		Impact Fee Project Cost TOTAL:	**$ 4,732,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:	Description:	Project No.	2-G
Name:	Alba Rd. (2)	This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility.	
Limits:	Greene Rd. (N) to 935' S. of Greene Rd. (S)		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	1,680		
Service Area(s):	2		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	5,227	cy	$ 8.00	$ 41,813
203	8" Lime Stabilization (with Lime @ 32#/sy)	10,080	sy	$ 3.00	$ 30,240
303	8" Concrete Pavement w/ 6" Curb	9,333	sy	$ 38.00	$ 354,667
403	4" Topsoil	9,333	sy	$ 4.00	$ 37,333
503	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
603	5' Concrete Sidewalk	16,800	sf	$ 4.00	$ 67,200
				Paving Construction Cost Subtotal:	**$ 536,253**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 32,175
√	Traffic Control	Construction Phase Traffic Control	5%	$ 26,813
√	Pavement Markings/Markers		3%	$ 16,088
√	Roadway Drainage	Standard Internal System	30%	$ 160,876
√	Illumination		6%	$ 32,175
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 32,175
√	Sewer	Minor Adjustments	4%	$ 21,450
√	Establish Turf / Erosion Control		3%	$ 16,088
√	Basic Landscaping		2%	$ 10,725
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 348,565**
			Paving and Allowance Subtotal:	**$ 884,818**
			Construction Contingency: 10%	$ 88,482
			Construction Cost TOTAL:	**$ 974,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 974,000**
Engineering/Survey/Testing:		20%	$ 194,800
Mobilization		6%	$ 58,440
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 97,400
		Impact Fee Project Cost TOTAL:	**$ 1,325,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No. 2-H
Name:	Alba Rd. (3)	This project consists of the construction of a new four-lane divided major arterial facility.	
Limits:	935' S. of Greene Rd. (S) to Belt Line Rd.		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	1,160		
Service Area(s):	2		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	3,609	cy	$ 8.00	$ 28,871
203	8" Lime Stabilization (with Lime @ 32#/sy)	6,960	sy	$ 3.00	$ 20,880
303	8" Concrete Pavement w/ 6" Curb	6,444	sy	$ 38.00	$ 244,889
403	4" Topsoil	6,444	sy	$ 4.00	$ 25,778
503	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
603	5' Concrete Sidewalk	11,600	sf	$ 4.00	$ 46,400
				Paving Construction Cost Subtotal:	**$ 369,318**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 22,159
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 11,080
√	Roadway Drainage	Standard Internal System	30%	$ 110,795
√	Illumination		6%	$ 22,159
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 22,159
√	Sewer	Minor Adjustments	4%	$ 14,773
√	Establish Turf / Erosion Control		3%	$ 11,080
√	Basic Landscaping		2%	$ 7,386
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 221,591**
			Paving and Allowance Subtotal:	**$ 590,908**
			Construction Contingency: 10%	$ 59,091
			Construction Cost TOTAL:	**$ 650,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 650,000**
Engineering/Survey/Testing:		20%	$ 130,000
Mobilization		6%	$ 39,000
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 130,000
		Impact Fee Project Cost TOTAL:	**$ 949,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	2-I
Name:	Ferris Rd. (1)	This project consists of the reconstruction of an existing two-lane facility to a two-lane undivided collector facility.		
Limits:	Belt Line Rd. to S. City Limits			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	6,290			
Service Area(s):	2			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	15,026	cy	$ 8.00	$ 120,209
201	8" Lime Stabilization (with Lime @ 32#/sy)	29,353	sy	$ 3.00	$ 88,060
301	8" Concrete Pavement w/ 6" Curb	27,956	sy	$ 38.00	$ 1,062,311
401	4" Topsoil	13,978	sy	$ 4.00	$ 55,911
501	Concrete Driveway Approach	6	ea	$ 2,500.00	$ 15,000
601	5' Concrete Sidewalk	62,900	sf	$ 4.00	$ 251,600
				Paving Construction Cost Subtotal:	**$ 1,593,091**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 95,585
√	Traffic Control	Construction Phase Traffic Control	5%	$ 79,655
√	Pavement Markings/Markers		3%	$ 47,793
√	Roadway Drainage	Standard Internal System	30%	$ 477,927
√	Illumination		6%	$ 95,585
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 95,585
√	Sewer	Minor Adjustments	4%	$ 63,724
√	Establish Turf / Erosion Control		3%	$ 47,793
√	Basic Landscaping		2%	$ 31,862
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,035,509**

Paving and Allowance Subtotal:		**$ 2,628,600**
Construction Contingency:	10%	$ 262,860
Construction Cost TOTAL:		**$ 2,892,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 2,892,000**
Engineering/Survey/Testing:		20%	$ 578,400
Mobilization		6%	$ 173,520
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 289,200
		Impact Fee Project Cost TOTAL:	**$ 3,933,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	2-J
Name:	Ferris Rd. (2)	This project consists of the reconstruction of an existing two-lane facility to a two-lane undivided collector facility. The boundary between Lancaster and the ETJ is on the centerline of Ferris Road.		
Limits:	S. City Limits to S. City Limits			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	2,980			
Service Area(s):	2 (Half)			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	7,119	cy	$ 8.00	$ 56,951
201	8" Lime Stabilization (with Lime @ 32#/sy)	13,907	sy	$ 3.00	$ 41,720
301	8" Concrete Pavement w/ 6" Curb	13,244	sy	$ 38.00	$ 503,289
401	4" Topsoil	6,622	sy	$ 4.00	$ 26,489
501	Concrete Driveway Approach	3	ea	$ 2,500.00	$ 7,500
601	5' Concrete Sidewalk	29,800	sf	$ 4.00	$ 119,200
				Paving Construction Cost Subtotal:	**$ 755,149**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 45,309
√	Traffic Control	Construction Phase Traffic Control	5%	$ 37,757
√	Pavement Markings/Markers		3%	$ 22,654
√	Roadway Drainage	Standard Internal System	30%	$ 226,545
√	Illumination		6%	$ 45,309
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 45,309
√	Sewer	Minor Adjustments	4%	$ 30,206
√	Establish Turf / Erosion Control		3%	$ 22,654
√	Basic Landscaping		2%	$ 15,103
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 490,847**
			Paving and Allowance Subtotal:	**$ 1,245,996**
			Construction Contingency: 10%	$ 124,600
			Construction Cost TOTAL:	**$ 1,371,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,371,000**
Engineering/Survey/Testing:		20%	$ 274,200
Mobilization		6%	$ 82,260
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 137,100
		Impact Fee Project Cost TOTAL:	**$ 1,865,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	2-K
Name:	Ferris Rd. (3)	This project consists of the reconstruction of an existing two-lane facility to a two-lane undivided collector facility.		
Limits:	S. City Limits to E. City Limits			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	3,125			
Service Area(s):	2			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	7,465	cy	$ 8.00	$ 59,722
201	8" Lime Stabilization (with Lime @ 32#/sy)	14,583	sy	$ 3.00	$ 43,750
301	8" Concrete Pavement w/ 6" Curb	13,889	sy	$ 38.00	$ 527,778
401	4" Topsoil	6,944	sy	$ 4.00	$ 27,778
501	Concrete Driveway Approach	3	ea	$ 2,500.00	$ 7,500
601	5' Concrete Sidewalk	31,250	sf	$ 4.00	$ 125,000
				Paving Construction Cost Subtotal:	**$ 791,528**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 47,492
√	Traffic Control	Construction Phase Traffic Control	5%	$ 39,576
√	Pavement Markings/Markers		3%	$ 23,746
√	Roadway Drainage	Standard Internal System	30%	$ 237,458
√	Illumination		6%	$ 47,492
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 47,492
√	Sewer	Minor Adjustments	4%	$ 31,661
√	Establish Turf / Erosion Control		3%	$ 23,746
√	Basic Landscaping		2%	$ 15,831
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 514,493**
			Paving and Allowance Subtotal:	**$ 1,306,021**
			Construction Contingency: 10%	$ 130,602
			Construction Cost TOTAL:	**$ 1,437,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,437,000**
Engineering/Survey/Testing:		20%	$ 287,400
Mobilization		6%	$ 86,220
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 143,700
		Impact Fee Project Cost TOTAL:	**$ 1,954,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	2-L
Name:	Ferris Rd. (4)	**This project consists of the reconstruction of an existing two-lane facility to a two-lane undivided collector facility. The boundary between Lancaster and the City of Dallas is on the centerline of Ferris Road.**		
Limits:	E. City Limits to S. City Limits			
Impact Fee Class:	C2U			
Ultimate Class:	Collector			
Length (lf):	5,935			
Service Area(s):	2 (Half)			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	14,178	cy	$ 8.00	$ 113,424
201	8" Lime Stabilization (with Lime @ 32#/sy)	27,697	sy	$ 3.00	$ 83,090
301	8" Concrete Pavement w/ 6" Curb	26,378	sy	$ 38.00	$ 1,002,356
401	4" Topsoil	13,189	sy	$ 4.00	$ 52,756
501	Concrete Driveway Approach	6	ea	$ 2,500.00	$ 15,000
601	5' Concrete Sidewalk	59,350	sf	$ 4.00	$ 237,400
				Paving Construction Cost Subtotal:	**$ 1,504,026**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 90,242
√	Traffic Control	Construction Phase Traffic Control	5%	$ 75,201
√	Pavement Markings/Markers		3%	$ 45,121
√	Roadway Drainage	Standard Internal System	30%	$ 451,208
√	Illumination		6%	$ 90,242
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 90,242
√	Sewer	Minor Adjustments	4%	$ 60,161
√	Establish Turf / Erosion Control		3%	$ 45,121
√	Basic Landscaping		2%	$ 30,081
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 977,617**
			Paving and Allowance Subtotal:	**$ 2,481,642**
			Construction Contingency: 10%	$ 248,164
			Construction Cost TOTAL:	**$ 2,730,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	$ 2,730,000
Engineering/Survey/Testing:		20%	$ 546,000
Mobilization		6%	$ 163,800
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 273,000
		Impact Fee Project Cost TOTAL:	**$ 3,713,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	2-M
Name:	Airport Rd. East	This project consists of the construction of a new four-lane divided major arterial facility.		
Limits:	Greene Rd. to Ferris Rd.			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	10,760			
Service Area(s):	2			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	33,476	cy	$ 8.00	$ 267,804
203	8" Lime Stabilization (with Lime @ 32#/sy)	64,560	sy	$ 3.00	$ 193,680
303	8" Concrete Pavement w/ 6" Curb	59,778	sy	$ 38.00	$ 2,271,556
403	4" Topsoil	59,778	sy	$ 4.00	$ 239,111
503	Concrete Driveway Approach	11	ea	$ 2,500.00	$ 27,500
603	5' Concrete Sidewalk	107,600	sf	$ 4.00	$ 430,400
				Paving Construction Cost Subtotal:	**$ 3,430,051**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 205,803
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 102,902
√	Roadway Drainage	Standard Internal System	30%	$ 1,029,015
√	Illumination		6%	$ 205,803
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 205,803
√	Sewer	Minor Adjustments	4%	$ 137,202
√	Establish Turf / Erosion Control		3%	$ 102,902
√	Basic Landscaping		2%	$ 68,601
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 2,058,031**
			Paving and Allowance Subtotal:	**$ 5,488,082**
			Construction Contingency: 10%	$ 548,808
			Construction Cost TOTAL:	**$ 6,037,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 6,037,000**
Engineering/Survey/Testing:		20%	$ 1,207,400
Mobilization		6%	$ 362,220
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 1,207,400
		Impact Fee Project Cost TOTAL:	**$ 8,814,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No. 1-QQ, 2-N
Name:	Belt Line Rd. (2)	This project consists of the reconstruction of an existing two-lane facility to a six-lane divided major arterial facility. The boundary between SA 1 and SA 2 is on the centerline of Belt Line Rd.	
Limits:	1,005' W. of Main St. to Main St.		
Impact Fee Class:	P6D		
Ultimate Class:	Major Arterial		
Length (lf):	1,005		
Service Area(s):	1,2		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	4,578	cy	$ 8.00	$ 36,627
204	8" Lime Stabilization (with Lime @ 32#/sy)	8,933	sy	$ 3.00	$ 26,800
304	8" Concrete Pavement w/ 6" Curb	8,487	sy	$ 38.00	$ 322,493
404	4" Topsoil	4,913	sy	$ 4.00	$ 19,653
504	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
604	5' Concrete Sidewalk	10,050	sf	$ 4.00	$ 40,200
				Paving Construction Cost Subtotal:	**$ 448,273**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 26,896
√	Traffic Control	Construction Phase Traffic Control	5%	$ 22,414
√	Pavement Markings/Markers		3%	$ 13,448
√	Roadway Drainage	Standard Internal System	30%	$ 134,482
√	Illumination		6%	$ 26,896
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 26,896
√	Sewer	Minor Adjustments	4%	$ 17,931
√	Establish Turf / Erosion Control		3%	$ 13,448
√	Basic Landscaping		2%	$ 8,965
	Other:		$0	$ -
****Allowances based on % of Paving Construction Cost Subtotal**			**Allowance Subtotal:**	**$ 291,378**

Paving and Allowance Subtotal:		**$ 739,651**
Construction Contingency:	10%	$ 73,965
Construction Cost TOTAL:		**$ 814,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 814,000**
Engineering/Survey/Testing:		20%	$ 162,800
Mobilization		6%	$ 48,840
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 81,400
		Impact Fee Project Cost TOTAL:	**$ 1,107,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No. 2-O, 3-J
Name:	Belt Line Rd. (4)	This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility. The boundary between SA 2 and SA 3 is on the centerline of Belt Line Rd.	
Limits:	Main St. to Lancaster-Hutchins Rd.		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	6,480		
Service Area(s):	2,3		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	20,160	cy	$ 8.00	$ 161,280
203	8" Lime Stabilization (with Lime @ 32#/sy)	38,880	sy	$ 3.00	$ 116,640
303	8" Concrete Pavement w/ 6" Curb	36,000	sy	$ 38.00	$ 1,368,000
403	4" Topsoil	36,000	sy	$ 4.00	$ 144,000
503	Concrete Driveway Approach	6	ea	$ 2,500.00	$ 15,000
603	5' Concrete Sidewalk	64,800	sf	$ 4.00	$ 259,200
				Paving Construction Cost Subtotal:	**$ 2,064,120**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 123,847
√	Traffic Control	Construction Phase Traffic Control	5%	$ 103,206
√	Pavement Markings/Markers		3%	$ 61,924
√	Roadway Drainage	Standard Internal System	30%	$ 619,236
√	Illumination		6%	$ 123,847
√	Special Drainage Structures	Minor Stream Crossing	0%	$ 250,000
√	Water	Minor Adjustments	6%	$ 123,847
√	Sewer	Minor Adjustments	4%	$ 82,565
√	Establish Turf / Erosion Control		3%	$ 61,924
√	Basic Landscaping		2%	$ 41,282
	Other:		$0	$ -
****Allowances based on % of Paving Construction Cost Subtotal**			**Allowance Subtotal:**	**$ 1,591,678**
			Paving and Allowance Subtotal:	**$ 3,655,798**
			Construction Contingency: 10%	$ 365,580
			Construction Cost TOTAL:	**$ 4,022,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 4,022,000**
Engineering/Survey/Testing:		20%	$ 804,400
Mobilization		6%	$ 241,320
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 402,200
		Impact Fee Project Cost TOTAL:	**$ 5,470,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:	Description:	Project No.	2-P
Name:	Belt Line Rd. (5)	This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility.	
Limits:	Lancaster-Hutchins Rd. to E. City Limits		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	14,600		
Service Area(s):	2		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	45,422	cy	$ 8.00	$ 363,378
203	8" Lime Stabilization (with Lime @ 32#/sy)	87,600	sy	$ 3.00	$ 262,800
303	8" Concrete Pavement w/ 6" Curb	81,111	sy	$ 38.00	$ 3,082,222
403	4" Topsoil	81,111	sy	$ 4.00	$ 324,444
503	Concrete Driveway Approach	15	ea	$ 2,500.00	$ 37,500
603	5' Concrete Sidewalk	146,000	sf	$ 4.00	$ 584,000
				Paving Construction Cost Subtotal:	**$ 4,654,344**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 279,261
√	Traffic Control	Construction Phase Traffic Control	5%	$ 232,717
√	Pavement Markings/Markers		3%	$ 139,630
√	Roadway Drainage	Standard Internal System	30%	$ 1,396,303
√	Illumination		6%	$ 279,261
√	Special Drainage Structures	Minor Stream Crossing	0%	$ 250,000
√	Water	Minor Adjustments	6%	$ 279,261
√	Sewer	Minor Adjustments	4%	$ 186,174
√	Establish Turf / Erosion Control		3%	$ 139,630
√	Basic Landscaping		2%	$ 93,087
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 3,275,324**
			Paving and Allowance Subtotal:	**$ 7,929,668**
			Construction Contingency: 10%	$ 792,967
			Construction Cost TOTAL:	**$ 8,723,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 8,723,000**
Engineering/Survey/Testing:		20%	$ 1,744,600
Mobilization		6%	$ 523,380
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 872,300
		Impact Fee Project Cost TOTAL:	**$ 11,863,000**

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Lancaster.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	2-Q
Name:	Belt Line Rd. (6)	This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility. The boundary between Lancaster and the City of Dallas is on the centerline of Belt Line Road.		
Limits:	E. City Limits to 640' E. of E. City Limit			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	640			
Service Area(s):	2 (Half)			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	1,991	cy	$ 8.00	$ 15,929
203	8" Lime Stabilization (with Lime @ 32#/sy)	3,840	sy	$ 3.00	$ 11,520
303	8" Concrete Pavement w/ 6" Curb	3,556	sy	$ 38.00	$ 135,111
403	4" Topsoil	3,556	sy	$ 4.00	$ 14,222
503	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
603	5' Concrete Sidewalk	6,400	sf	$ 4.00	$ 25,600
				Paving Construction Cost Subtotal:	**$ 204,882**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 12,293
√	Traffic Control	Construction Phase Traffic Control	5%	$ 10,244
√	Pavement Markings/Markers		3%	$ 6,146
√	Roadway Drainage	Standard Internal System	30%	$ 61,465
√	Illumination		6%	$ 12,293
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 12,293
√	Sewer	Minor Adjustments	4%	$ 8,195
√	Establish Turf / Erosion Control		3%	$ 6,146
√	Basic Landscaping		2%	$ 4,098
	Other:		$0	$ -
****Allowances based on % of Paving Construction Cost Subtotal**			**Allowance Subtotal:**	**$ 133,173**
			Paving and Allowance Subtotal:	**$ 338,056**
			Construction Contingency: 10%	$ 33,806
			Construction Cost TOTAL:	**$ 372,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 372,000**
Engineering/Survey/Testing:		20%	$ 74,400
Mobilization		6%	$ 22,320
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 37,200
		Impact Fee Project Cost TOTAL:	**$ 506,000**

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City of Lancaster - 2012 Roadway Impact Fee Update

Thoroughfare Impact Fee Improvement Projects for Roadway Impact Fees

Summary of Conceptual Level Project Cost Projections

Roadway Improvements - Service Area 3

#	Class	Project	Limits	Project Cost
3-A	M4D	Houston School Rd. (4)	2,720' N. of Bear Creek Rd. to S. City Limits	$ 6,381,000
3-B	M4D	Blue Grove Rd. (4)	Main St. to 385' S. of Main St.	$ 314,000
3-C	M4D	Blue Grove Rd. (5)	385' S. of Main St. to 765' N. of Beer Creek Rd.	$ 7,067,000
3-D	M4D	Blue Grove Rd. (6)	765' N. of Bear Creek Rd. to 1,700' S. of Bear Creek Rd.	$ 2,016,000
3-E	S4D	Bear Creek Rd.	IH-35E to Dallas Ave.	$ 13,278,000
3-F	M4D	Meadowlark Ln. (1)	Parkerville Rd. to 980' S. of Parkerville Rd.	$ 803,000
3-G	M4D	Meadowlark Ln. (2)	980' S. of Parkerville Rd. to Meadowlark Ct.	$ 2,150,000
3-H	M4D	Meadowlark Ln. (3)	Meadowlark Ct. to S. City Limits	$ 6,151,000
1-RR, 3-I	C2U	Main St. (1)	Belt Line Rd. to Belt Line Rd.	$ 9,972,000
2-O, 3-J	M4D	Belt Line Rd. (4)	Main St. to Lancaster-Hutchins Rd.	$ 5,470,000
2-C, 3-K	P6D	Lancaster-Hutchins Rd. (3)	Lancaster-Hutchins Rd. (3)	$ 3,074,000
Signal Installation				
I-3		Signal Installation	Belt Line Rd. & Chesier Rd. / Main St.	$ 140,000
			TOTAL	**$ 56,796,000**

*Total may be higher than presented in Tables 2.A, 2.B and 2.C (Thoroughfare Impact Fee Improvement Program) because the cost of some projects are shared between service areas.

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:	Description:	Project No.	3-A
Name:	Houston School Rd. (4)	This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility.	
Limits:	2,720' N. of Bear Creek Rd. to S. City Limits		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	7,605		
Service Area(s):	3		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	23,660	cy	$ 8.00	$ 189,280
203	8" Lime Stabilization (with Lime @ 32#/sy)	45,630	sy	$ 3.00	$ 136,890
303	8" Concrete Pavement w/ 6" Curb	42,250	sy	$ 38.00	$ 1,605,500
403	4" Topsoil	42,250	sy	$ 4.00	$ 169,000
503	Concrete Driveway Approach	8	ea	$ 2,500.00	$ 20,000
603	5' Concrete Sidewalk	76,050	sf	$ 4.00	$ 304,200
				Paving Construction Cost Subtotal:	**$ 2,424,870**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 145,492
√	Traffic Control	Construction Phase Traffic Control	5%	$ 121,244
√	Pavement Markings/Markers		3%	$ 72,746
√	Roadway Drainage	Standard Internal System	30%	$ 727,461
√	Illumination		6%	$ 145,492
√	Special Drainage Structures	None Anticipated	0%	$ 250,000
√	Water	Minor Adjustments	6%	$ 145,492
√	Sewer	Minor Adjustments	4%	$ 96,995
√	Establish Turf / Erosion Control		3%	$ 72,746
√	Basic Landscaping		2%	$ 48,497
	Other:		$0	$ -
			Allowance Subtotal:	**$ 1,826,166**

**Allowances based on % of Paving Construction Cost Subtotal

Paving and Allowance Subtotal:		**$ 4,251,036**
Construction Contingency:	10%	$ 425,104
Construction Cost TOTAL:		**$ 4,677,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 4,677,000**
Engineering/Survey/Testing:		20%	$ 935,400
Mobilization		6%	$ 280,620
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 467,700
		Impact Fee Project Cost TOTAL:	**$ 6,361,000**

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Lancaster.

The planning level cost projections shall not supersede the City's design standards or the determination of the City Engineer for a specific project.

City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	3-B
Name:	Blue Grove Rd. (4)	This project consists of the construction of a new four-lane divided major arterial facility.		
Limits:	Main St. to 385' S. of Main St.			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	385			
Service Area(s):	3			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	1,198	cy	$ 8.00	$ 9,582
203	8" Lime Stabilization (with Lime @ 32#/sy)	2,310	sy	$ 3.00	$ 6,930
303	8" Concrete Pavement w/ 6" Curb	2,139	sy	$ 38.00	$ 81,278
403	4" Topsoil	2,139	sy	$ 4.00	$ 8,556
503	Concrete Driveway Approach	0	ea	$ 2,500.00	$ -
603	5' Concrete Sidewalk	3,850	sf	$ 4.00	$ 15,400
				Paving Construction Cost Subtotal:	**$ 121,746**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 7,305
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 3,652
√	Roadway Drainage	Standard Internal System	30%	$ 36,524
√	Illumination		6%	$ 7,305
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 7,305
√	Sewer	Minor Adjustments	4%	$ 4,870
√	Establish Turf / Erosion Control		3%	$ 3,652
√	Basic Landscaping		2%	$ 2,435
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 73,047**
			Paving and Allowance Subtotal:	**$ 194,793**
			Construction Contingency: 10%	$ 19,479
			Construction Cost TOTAL:	**$ 215,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 215,000**
Engineering/Survey/Testing:		20%	$ 43,000
Mobilization		6%	$ 12,900
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 43,000
		Impact Fee Project Cost TOTAL:	**$ 314,000**

NOTE: The planning level cost projections listed in this appendix have been developed for Impact Fee calculations only and should not be used for any future Capital Improvement Planning within the City of Lancaster.

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:	Description:	Project No.	3-C
Name:	Blue Grove Rd. (5)	This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility.	
Limits:	385' S. of Main St. to 765' N. of Bear Creek Rd.		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	8,030		
Service Area(s):	3		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	24,982	cy	$ 8.00	$ 199,858
203	8" Lime Stabilization (with Lime @ 32#/sy)	48,180	sy	$ 3.00	$ 144,540
303	8" Concrete Pavement w/ 6" Curb	44,611	sy	$ 38.00	$ 1,695,222
403	4" Topsoil	44,611	sy	$ 4.00	$ 178,444
503	Concrete Driveway Approach	8	ea	$ 2,500.00	$ 20,000
603	5' Concrete Sidewalk	80,300	sf	$ 4.00	$ 321,200
				Paving Construction Cost Subtotal:	**$ 2,559,264**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 153,556
√	Traffic Control	Construction Phase Traffic Control	5%	$ 127,963
√	Pavement Markings/Markers		3%	$ 76,778
√	Roadway Drainage	Standard Internal System	30%	$ 767,779
√	Illumination		6%	$ 153,556
√	Special Drainage Structures	Major Stream Crossing	0%	$ 500,000
√	Water	Minor Adjustments	6%	$ 153,556
√	Sewer	Minor Adjustments	4%	$ 102,371
√	Establish Turf / Erosion Control		3%	$ 76,778
√	Basic Landscaping		2%	$ 51,185
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 2,163,522**

Paving and Allowance Subtotal:		**$ 4,722,786**
Construction Contingency:	10%	$ 472,279
Construction Cost TOTAL:		**$ 5,196,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 5,196,000**
Engineering/Survey/Testing:		20%	$ 1,039,200
Mobilization		6%	$ 311,760
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 519,600
		Impact Fee Project Cost TOTAL:	**$ 7,067,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:	Description:	Project No.	3-D
Name:	Blue Grove Rd. (6)	This project consists of the construction of a new four-lane divided major arterial facility.	
Limits:	765' N. of Bear Creek Rd. to 1,700' S. of Bear Creek Rd.		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	2,465		
Service Area(s):	3		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	7,669	cy	$ 8.00	$ 61,351
203	8" Lime Stabilization (with Lime @ 32#/sy)	14,790	sy	$ 3.00	$ 44,370
303	8" Concrete Pavement w/ 6" Curb	13,694	sy	$ 38.00	$ 520,389
403	4" Topsoil	13,694	sy	$ 4.00	$ 54,778
503	Concrete Driveway Approach	2	ea	$ 2,500.00	$ 5,000
603	5' Concrete Sidewalk	24,650	sf	$ 4.00	$ 98,600
				Paving Construction Cost Subtotal:	**$ 784,488**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 47,069
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 23,535
√	Roadway Drainage	Standard Internal System	30%	$ 235,346
√	Illumination		6%	$ 47,069
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 47,069
√	Sewer	Minor Adjustments	4%	$ 31,380
√	Establish Turf / Erosion Control		3%	$ 23,535
√	Basic Landscaping		2%	$ 15,690
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 470,693**
			Paving and Allowance Subtotal:	**$ 1,255,180**
			Construction Contingency: 10%	$ 125,518
			Construction Cost TOTAL:	**$ 1,381,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,381,000**
Engineering/Survey/Testing:		20%	$ 276,200
Mobilization		6%	$ 82,860
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 276,200
		Impact Fee Project Cost TOTAL:	**$ 2,016,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No.	3-E
Name:	Bear Creek Rd.	This project consists of the reconstruction of an existing two-lane facility to a four-lane divided minor arterial facility.		
Limits:	IH-35E to Dallas Ave.			
Impact Fee Class:	S4D			
Ultimate Class:	Minor Arterial			
Length (lf):	16,165			
Service Area(s):	3			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
102	Unclassified Street Excavation	52,087	cy	$ 8.00	$ 416,698
202	8" Lime Stabilization (with Lime @ 32#/sy)	100,582	sy	$ 3.00	$ 301,747
302	8" Concrete Pavement w/ 6" Curb	93,398	sy	$ 38.00	$ 3,549,116
402	4" Topsoil	68,252	sy	$ 4.00	$ 273,009
502	Concrete Driveway Approach	16	ea	$ 2,500.00	$ 40,000
602	5' Concrete Sidewalk	161,650	sf	$ 4.00	$ 646,600
				Paving Construction Cost Subtotal:	**$ 5,227,169**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 313,630
√	Traffic Control	Construction Phase Traffic Control	5%	$ 261,358
√	Pavement Markings/Markers		3%	$ 156,815
√	Roadway Drainage	Standard Internal System	30%	$ 1,568,151
√	Illumination		6%	$ 313,630
√	Special Drainage Structures	Minor Stream Crossing	0%	$ 250,000
√	Water	Minor Adjustments	6%	$ 313,630
√	Sewer	Minor Adjustments	4%	$ 209,087
√	Establish Turf / Erosion Control		3%	$ 156,815
√	Basic Landscaping		2%	$ 104,543
	Other:		$0	$ -
****Allowances based on % of Paving Construction Cost Subtotal**			**Allowance Subtotal:**	**$ 3,647,660**
			Paving and Allowance Subtotal:	**$ 8,874,829**
			Construction Contingency: 10%	$ 887,483
			Construction Cost TOTAL:	**$ 9,763,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 9,763,000**
Engineering/Survey/Testing:		20%	$ 1,952,600
Mobilization		6%	$ 585,780
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 976,300
		Impact Fee Project Cost TOTAL:	**$ 13,278,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:	Description:	Project No.	3-F
Name:	Meadowlark Ln. (1)	This project consists of the construction of a new four-lane divided major arterial facility.	
Limits:	Parkerville Rd. to 980' S. of Parkerville Rd.		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	980		
Service Area(s):	3		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	3,049	cy	$ 8.00	$ 24,391
203	8" Lime Stabilization (with Lime @ 32#/sy)	5,880	sy	$ 3.00	$ 17,640
303	8" Concrete Pavement w/ 6" Curb	5,444	sy	$ 38.00	$ 206,889
403	4" Topsoil	5,444	sy	$ 4.00	$ 21,778
503	Concrete Driveway Approach	1	ea	$ 2,500.00	$ 2,500
603	5' Concrete Sidewalk	9,800	sf	$ 4.00	$ 39,200
				Paving Construction Cost Subtotal:	**$ 312,398**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 18,744
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 9,372
√	Roadway Drainage	Standard Internal System	30%	$ 93,719
√	Illumination		6%	$ 18,744
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 18,744
√	Sewer	Minor Adjustments	4%	$ 12,496
√	Establish Turf / Erosion Control		3%	$ 9,372
√	Basic Landscaping		2%	$ 6,248
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 187,439**
			Paving and Allowance Subtotal:	**$ 499,836**
			Construction Contingency: 10%	$ 49,984
			Construction Cost TOTAL:	**$ 550,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 550,000**
Engineering/Survey/Testing:		20%	$ 110,000
Mobilization		6%	$ 33,000
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 110,000
		Impact Fee Project Cost TOTAL:	**$ 803,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:	Description:	Project No.	3-G
Name:	Meadowlark Ln. (2)	This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility.	
Limits:	980' S. of Parkerville Rd. to Meadowlark Ct.		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	2,730		
Service Area(s):	3		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	8,493	cy	$ 8.00	$ 67,947
203	8" Lime Stabilization (with Lime @ 32#/sy)	16,380	sy	$ 3.00	$ 49,140
303	8" Concrete Pavement w/ 6" Curb	15,167	sy	$ 38.00	$ 576,333
403	4" Topsoil	15,167	sy	$ 4.00	$ 60,667
503	Concrete Driveway Approach	3	ea	$ 2,500.00	$ 7,500
603	5' Concrete Sidewalk	27,300	sf	$ 4.00	$ 109,200
				Paving Construction Cost Subtotal:	**$ 870,787**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 52,247
√	Traffic Control	Construction Phase Traffic Control	5%	$ 43,539
√	Pavement Markings/Markers		3%	$ 26,124
√	Roadway Drainage	Standard Internal System	30%	$ 261,236
√	Illumination		6%	$ 52,247
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 52,247
√	Sewer	Minor Adjustments	4%	$ 34,831
√	Establish Turf / Erosion Control		3%	$ 26,124
√	Basic Landscaping		2%	$ 17,416
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 566,011**

Paving and Allowance Subtotal:		**$ 1,436,798**
Construction Contingency:	10%	$ 143,680
Construction Cost TOTAL:		**$ 1,581,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 1,581,000**
Engineering/Survey/Testing:		20%	$ 316,200
Mobilization		6%	$ 94,860
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 158,100
		Impact Fee Project Cost TOTAL:	**$ 2,150,000**

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City of Lancaster
2012 Roadway Impact Fee Update
Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.
updated: 5/8/2012

Project Information:		Description:	Project No.	3-H
Name:	Meadowlark Ln. (3)	This project consists of the construction of a new four-lane divided major arterial facility.		
Limits:	Meadowlark Ct. to S. City Limits			
Impact Fee Class:	M4D			
Ultimate Class:	Major Arterial			
Length (lf):	6,525			
Service Area(s):	3			

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	20,300	cy	$ 8.00	$ 162,400
203	8" Lime Stabilization (with Lime @ 32#/sy)	39,150	sy	$ 3.00	$ 117,450
303	8" Concrete Pavement w/ 6" Curb	36,250	sy	$ 38.00	$ 1,377,500
403	4" Topsoil	36,250	sy	$ 4.00	$ 145,000
503	Concrete Driveway Approach	7	ea	$ 2,500.00	$ 17,500
603	5' Concrete Sidewalk	65,250	sf	$ 4.00	$ 261,000
				Paving Construction Cost Subtotal:	**$ 2,080,850**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 124,851
	Traffic Control	None Anticipated	0%	$ -
√	Pavement Markings/Markers		3%	$ 62,426
√	Roadway Drainage	Standard Internal System	30%	$ 624,255
√	Illumination		6%	$ 124,851
√	Special Drainage Structures	Major Stream Crossing	0%	$ 500,000
√	Water	Minor Adjustments	6%	$ 124,851
√	Sewer	Minor Adjustments	4%	$ 83,234
√	Establish Turf / Erosion Control		3%	$ 62,426
√	Basic Landscaping		2%	$ 41,617
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,748,510**
			Paving and Allowance Subtotal:	**$ 3,829,360**
			Construction Contingency: 10%	$ 382,936
			Construction Cost TOTAL:	**$ 4,213,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 4,213,000**
Engineering/Survey/Testing:		20%	$ 842,600
Mobilization		6%	$ 252,780
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	New Roadway Alignment	20%	$ 842,600
		Impact Fee Project Cost TOTAL:	**$ 6,151,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No. 1-RR, 3-I
Name:	Main St. (1)	This project consists of the reconstruction of an existing two-lane facility to a two-lane undivided collector facility. The boundary between SA 1 and SA 3 is on the centerline of Main St.	
Limits:	Belt Line Rd. to Belt Line Rd.		
Impact Fee Class:	C2U		
Ultimate Class:	Collector		
Length (lf):	15,940		
Service Area(s):	1,3		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
101	Unclassified Street Excavation	38,079	cy	$ 8.00	$ 304,631
201	8" Lime Stabilization (with Lime @ 32#/sy)	74,387	sy	$ 3.00	$ 223,160
301	8" Concrete Pavement w/ 6" Curb	70,844	sy	$ 38.00	$ 2,692,089
401	4" Topsoil	35,422	sy	$ 4.00	$ 141,689
501	Concrete Driveway Approach	16	ea	$ 2,500.00	$ 40,000
601	5' Concrete Sidewalk	159,400	sf	$ 4.00	$ 637,600
				Paving Construction Cost Subtotal:	**$ 4,039,169**

Major Construction Component Allowances**:

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 242,350
√	Traffic Control	Construction Phase Traffic Control	5%	$ 201,958
√	Pavement Markings/Markers		3%	$ 121,175
√	Roadway Drainage	Standard Internal System	30%	$ 1,211,751
√	Illumination		6%	$ 242,350
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 242,350
√	Sewer	Minor Adjustments	4%	$ 161,567
√	Establish Turf / Erosion Control		3%	$ 121,175
√	Basic Landscaping		2%	$ 80,783
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 2,625,460**

Paving and Allowance Subtotal:		**$ 6,664,629**
Construction Contingency:	10%	$ 666,463
Construction Cost TOTAL:		**$ 7,332,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 7,332,000**
Engineering/Survey/Testing:		20%	$ 1,466,400
Mobilization		6%	$ 439,920
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 733,200
		Impact Fee Project Cost TOTAL:	**$ 9,972,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No. 2-O, 3-J
Name:	Belt Line Rd. (4)	This project consists of the reconstruction of an existing two-lane facility to a four-lane divided major arterial facility. The boundary between SA 2 and SA 3 is on the centerline of Belt Line Rd.	
Limits:	Main St. to Lancaster-Hutchins Rd.		
Impact Fee Class:	M4D		
Ultimate Class:	Major Arterial		
Length (lf):	6,480		
Service Area(s):	2,3		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
103	Unclassified Street Excavation	20,160	cy	$ 8.00	$ 161,280
203	8" Lime Stabilization (with Lime @ 32#/sy)	38,880	sy	$ 3.00	$ 116,640
303	8" Concrete Pavement w/ 6" Curb	36,000	sy	$ 38.00	$ 1,368,000
403	4" Topsoil	36,000	sy	$ 4.00	$ 144,000
503	Concrete Driveway Approach	6	ea	$ 2,500.00	$ 15,000
603	5' Concrete Sidewalk	64,800	sf	$ 4.00	$ 259,200
				Paving Construction Cost Subtotal:	**$ 2,064,120**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 123,847
√	Traffic Control	Construction Phase Traffic Control	5%	$ 103,206
√	Pavement Markings/Markers		3%	$ 61,924
√	Roadway Drainage	Standard Internal System	30%	$ 619,236
√	Illumination		6%	$ 123,847
√	Special Drainage Structures	Minor Stream Crossing	0%	$ 250,000
√	Water	Minor Adjustments	6%	$ 123,847
√	Sewer	Minor Adjustments	4%	$ 82,565
√	Establish Turf / Erosion Control		3%	$ 61,924
√	Basic Landscaping		2%	$ 41,282
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 1,591,678**
			Paving and Allowance Subtotal:	**$ 3,655,798**
			Construction Contingency: 10%	$ 365,580
			Construction Cost TOTAL:	**$ 4,022,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 4,022,000**
Engineering/Survey/Testing:		20%	$ 804,400
Mobilization		6%	$ 241,320
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 402,200
		Impact Fee Project Cost TOTAL:	**$ 5,470,000**

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City of Lancaster

2012 Roadway Impact Fee Update

Conceptual Level Project Cost Projection

Kimley-Horn and Associates, Inc.

updated: 5/8/2012

Project Information:		Description:	Project No. 2-C, 3-K
Name:	Lancaster-Hutchins Rd. (3)	This project consists of the reconstruction of an existing two-lane facility to a six-lane divided major arterial facility. The boundary between SA 2 and SA 3 is on the centerline of Lancaster-Hutchins Road.	
Limits:	Belt Line Rd. to Dallas Ave.		
Impact Fee Class:	P6D		
Ultimate Class:	Major Arterial		
Length (lf):	2,790		
Service Area(s):	2,3		

Roadway Construction Cost Projection

No.	Item Description	Quantity	Unit	Unit Price	Item Cost
104	Unclassified Street Excavation	12,710	cy	$ 8.00	$ 101,680
204	8" Lime Stabilization (with Lime @ 32#/sy)	24,800	sy	$ 3.00	$ 74,400
304	8" Concrete Pavement w/ 6" Curb	23,560	sy	$ 38.00	$ 895,280
404	4" Topsoil	13,640	sy	$ 4.00	$ 54,560
504	Concrete Driveway Approach	3	ea	$ 2,500.00	$ 7,500
604	5' Concrete Sidewalk	27,900	sf	$ 4.00	$ 111,600
				Paving Construction Cost Subtotal:	**$ 1,245,020**

Major Construction Component Allowances:**

	Item Description	Notes	Allowance	Item Cost
√	Prep ROW		6%	$ 74,701
√	Traffic Control	Construction Phase Traffic Control	5%	$ 62,251
√	Pavement Markings/Markers		3%	$ 37,351
√	Roadway Drainage	Standard Internal System	30%	$ 373,506
√	Illumination		6%	$ 74,701
	Special Drainage Structures	None Anticipated	0%	$ -
√	Water	Minor Adjustments	6%	$ 74,701
√	Sewer	Minor Adjustments	4%	$ 49,801
√	Establish Turf / Erosion Control		3%	$ 37,351
√	Basic Landscaping		2%	$ 24,900
	Other:		$0	$ -
**Allowances based on % of Paving Construction Cost Subtotal			**Allowance Subtotal:**	**$ 809,263**
			Paving and Allowance Subtotal:	**$ 2,054,283**
			Construction Contingency: 10%	$ 205,428
			Construction Cost TOTAL:	**$ 2,260,000**

Impact Fee Project Cost Summary

Item Description	Notes:	Allowance	Item Cost
Construction:		0%	**$ 2,260,000**
Engineering/Survey/Testing:		20%	$ 452,000
Mobilization		6%	$ 135,600
Previous City contribution		0%	
Other		0%	
ROW/Easement Acquisition:	Existing Alignment	10%	$ 226,000
		Impact Fee Project Cost TOTAL:	**$ 3,074,000**

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Appendix B – TIFIP Service Units of Supply

City of Lancaster - 2012 Roadway Impact Fee Update

TIFIP Service Units of Supply

Service Area 1

5/8/2012

Project ID #	ROADWAY	LIMITS	LENGTH (MI)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR	EXCESS CAPACITY PK-HR VEH-MI	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
1-A	Proposed Collector "A"	Wheatland Rd. to IH-20	0.32	2	C2U	0	100%	450	288	0	288	$ 1,099,000	$ 1,099,000
1-B	Proposed Collector "B"	University Hills Blvd. to IH-20	0.30	2	C2U	0	100%	450	270	0	270	$ 1,447,000	$ 1,447,000
1-C	University Hills Blvd. (1)	Wheatland Rd. to IH-20 WBFR	0.35	6	P6D	652	100%	750	1,575	228	1,347	$ 1,020,000	$ 1,020,000
1-D	Wheatland Rd.	University Hills Blvd. to N. City Limits	0.60	2	C2U	41	100%	450	540	25	515	$ 1,983,000	$ 1,983,000
1-E	Proposed Collector "C"	Wheatland Rd. to IH-20	0.29	2	C2U	0	100%	450	261	0	261	$ 984,000	$ 984,000
1-F	Proposed Collector "D"	N. City Limits to IH-20	0.22	2	C2U	0	100%	450	198	0	198	$ 755,000	$ 755,000
1-G	Proposed Collector "E"	IH-20 to Springfield Ave.	0.34	2	C2U	0	100%	450	306	0	306	$ 1,167,000	$ 1,167,000
1-H	Proposed Collector "F"	IH-20 to Springfield Ave.	0.34	2	C2U	0	100%	450	306	0	306	$ 1,168,000	$ 1,168,000
1-I	Springfield St. (1)	IH-35E to Proposed Collector "F" (1-H)	0.44	2	C2U	50	100%	450	396	22	374	$ 1,459,000	$ 1,459,000
1-J	Springfield St. (2)	Proposed Collector "F" (1-H) to Houston School Rd.	0.49	2	C2U	0	100%	450	441	0	441	$ 2,098,000	$ 2,098,000
1-K	Balomeade Ave./Cumberland St. (1)	Springfield St. to West Dr.	0.75	2	C2U	20	100%	450	675	15	660	$ 2,471,000	$ 2,471,000
1-L	Danieldale Rd. (1)	IH-35E to Houston School Rd.	1.03	4	S4D	226	100%	625	2,575	233	2,342	$ 3,600,000	$ 3,600,000
1-M	Danieldale Rd. (2)	Houston School Rd. to IH-20	1.02	4	S4D	101	100%	625	2,550	103	2,447	$ 1,500,000	$ 1,500,000
1-N	Proposed Collector "G"	Houston School Rd. to IH-20	0.45	2	C2U	0	100%	450	405	0	405	$ 1,943,000	$ 1,943,000
1-O	Percy St. (1)	Cedardale Rd. to Lyle St.	0.38	2	C2U	20	100%	450	342	8	334	$ 1,270,000	$ 1,270,000
1-P	Percy St. (2)	Lyle St. to IH-20	0.11	2	C2U	0	100%	450	99	0	99	$ 371,000	$ 371,000
1-Q	West Dr.	IH-35E to Longhorn Dr.	0.58	2	C2U	50	100%	450	522	29	493	$ 2,523,027	$ 2,523,027
1-R	Cedardale Rd. (1)	Houston School Rd. to E. City Limits	1.43	4	S4D	321	100%	625	3,575	458	3,117	$ 6,034,000	$ 6,034,000
1-S	Cedardale Rd. (2)	E. City Limits to Dallas Ave.	0.32	4	S4D	321	50%	625	400	51	349	$ 1,352,000	$ 678,000
1-T	Proposed Collector "H"	150' S. of Kentucky Ave. to Dizzy Dean Dr.	0.39	2	C2U	0	100%	450	351	d	351	$ 1,355,000	$ 1,355,000
1-U	Proposed Collector "I" (Wintergreen Extension)	Pennsylvania Ave. to Dizzy Dean Dr.	0.07	2	C2U	0	100%	450	63	d	63	$ 239,000	$ 239,000
1-V	Dizzy Dean Dr. (Wintergreen Extension)	Proposed Collector "I"(1-U) to Telephone Rd.	0.63	2	S4D(1/2)	112	100%	625	788	71	717	$ 1,374,000	$ 1,374,000
1-W	Wintergreen Rd. (1)	IH-35E to Houston School Rd.	1.01	4	M4D	364	100%	650	2,626	368	2,258	$ 4,702,536	$ 4,702,536
1-X	Wintergreen Rd. (2)	Houston School Rd. to 830' E. of Houston School Rd.	0.16	2	M4D(1/2)	20	100%	650	208	3	205	$ 345,000	$ 345,000
1-Y	Wingergreen Rd. (3)	830' E. of Houston School Rd. to 1,385' E. of Houston School Rd.	0.11	4	M4D	0	100%	650	286	0	286	$ 458,000	$ 458,000
1-Z	Wintergreen Rd. (4)	1,385' E. of Houston School Rd. to 2,770' E. of Houston School Rd.	0.26	2	M4D(1/2)	20	100%	650	338	5	333	$ 571,000	$ 571,000
1-AA	Wingergreen Rd. (5)	2,770' E. of Houston School Rd. to Baskin Dr.	0.23	4	M4D	0	100%	650	598	0	598	$ 974,000	$ 974,000
1-BB	Wintergreen Rd./Telephone Rd.	Baskin Dr. to E. City Limits	1.52	4	M4D	459	100%	650	3,952	698	3,254	$ 6,334,000	$ 6,334,000
1-CC	Wintergreen Rd. (6)	Telephone Rd. to Dallas Ave.	0.94	4	M4D	214	100%	650	2,444	201	2,243	$ 4,296,000	$ 4,296,000
1-DD	Wintergreen Rd. (7)	Dallas Ave. to Jefferrson St.	0.82	4	M4D	214	100%	650	2,132	175	1,957	$ 2,404,934	$ 2,404,934
1-EE	Wintergreen Rd. (8)	Jefferson St. to Lancaster-Hutchins Rd	1.04	4	M4D	214	50%	650	1,352	111	1,241	$ 5,061,000	$ 2,530,500
1-FF	Blue Grove Rd. (1)	Sunny Meadow Rd. to Kings Cross Dr	0.18	4	M4D	0	100%	650	468	0	468	$ 1,603,000	$ 1,603,000
1-GG	Blue Grove Rd. (2)	Kings Cross to Dr. Brook Meadow Cir.	0.43	4	M4D	438	100%	650	1,118	188	930	$ 1,805,000	$ 1,805,000
1-HH	Blue Grove Rd. (3)	Belt Line Rd. to Main St.	0.61	4	M4D	120	100%	650	1,586	73	1,513	$ 2,553,000	$ 2,553,000
1-II	Balomeade Ave. (2)	West Dr. to Belverde Dr.	0.29	2	C2U	0	100%	450	261	0	261	$ 1,003,000	$ 1,003,000
1-JJ	Balomeade Ave. (3)	Belverde Dr. to Wintergreen Rd.	0.21	2	C2U	20	100%	450	189	4	185	$ 679,000	$ 679,000
1-KK	Proposed Collector "J"	Wintergreen Rd. to Idlewild Ln.	0.52	2	C2U	0	100%	450	468	0	468	$ 1,774,000	$ 1,774,000
1-LL	Proposed Collector "K"	Pleasant Run Rd. to Hanna Ln.	0.63	2	C2U	0	100%	450	567	0	567	$ 2,151,000	$ 2,151,000
1-MM	Houston School Rd. (2)	IH-20 EBFR to Pleasant Run Road	2.56	4	M4D	600	100%	650	6,656	1,536	5,120	$ 7,480,000	$ 7,480,000
1-NN	Houston School Rd. (3)	1,500' N. of Belt Line Rd. to Main St.	0.70	4	M4D	94	100%	650	1,820	65	1,755	$ 2,909,000	$ 2,909,000
1-OO	Jefferson St.	Wintergreen Rd. to Pleasant Run Rd.	0.98	4	S4D	252	100%	625	2,450	247	2,203	$ 4,525,000	$ 4,525,000
1-PP	Belt Line Rd. (1)	Blue Grove Rd. to 1,005' W. of Main St.	0.75	6	P6D	556	100%	750	3,375	417	2,958	$ 4,334,000	$ 4,334,000
1-QQ, 2-N	Belt Line Rd. (2)	1,005' W. of Main St. to Main St.	0.19	6	P6D	556	50%	750	428	53	375	$ 1,107,000	$ 553,500
1-RR, 3-I	Main St. (1)	Belt Line Rd. to Belt Line Rd.	3.02	2	C2U	367	50%	450	1,359	554	805	$ 9,972,000	$ 4,986,000
1-SS, 2-A	Lancaster Hutchins Rd. (1)	Wintergreen Rd. to Pleasant Run Rd.	1.19	6	P6D	440	50%	750	2,678	262	2,416	$ 6,902,000	$ 3,451,000
I-1	Signal Installation	Houston School Rd. & Wheatland Rd.					100%					$ 140,000	$ 140,000
I-2	Signal Installation	Houston School Rd. & Ames Rd.					100%					$ 140,000	$ 140,000
I-3	Signal Installation	Belt Line Rd. & Chesier Rd. / Main St.					50%					$ 140,000	$ 70,000
I-4	Signal Installation	Lancaster-Hutchins Rd. & Wintergreen Rd.					50%					$ 140,000	$ 70,000
I-5	Signal Installation	Lancaster-Hutchins Rd. & Pleasant Run Rd.					25%					$ 140,000	$ 35,000
SUBTOTAL									54,284	6,203	48,080	$ 111,875,497	$ 99,433,497

2012 Roadway Impact Fee Update Cost Per Service Area $ 15,333

TOTAL COST IN SERVICE AREA 1 $ 99,448,830

City of Lancaster - 2012 Roadway Impact Fee Update

TIFIP Service Units of Supply

Service Area 2

5/8/2012

Project ID #	ROADWAY	LIMITS	LENGTH (MI)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR	EXCESS CAPACITY PK-HR VEH-MI	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
I-SS, 2-A	Lancaster Hutchins Rd. (1)	Wintergreen Rd. to Pleasant Run Rd.	1.19	6	P6D	440	50%	750	2,676	282	2,416	$ 6,902,000	$ 3,451,000
2-B	Lancaster-Hutchins Rd. (2)	Pleasant Run Rd. to Belt Line Rd.	1.42	4	M4D	213	100%	850	3,692	302	3,390	$ 6,264,000	$ 6,264,000
2-C, 3-K	Lancaster-Hutchins Rd. (3)	Belt Line Rd. to Dallas Ave.	0.53	6	P6D	263	50%	750	1,193	70	1,123	$ 3,074,000	$ 1,537,000
2-D	Cornell Rd. (1)	Lancaster Hutchins Rd. to Greene Rd.	1.52	4	M4D	20	100%	850	3,952	30	3,922	$ 6,302,000	$ 6,302,000
2-E	Cornell Rd. (2)	Greene Rd. to Belt Line Rd.	0.66	4	M4D	0	100%	850	1,716	0	1,716	$ 2,875,000	$ 2,875,000
2-F	Alba Rd. (1)	N. City Limits to Greene Rd. (N)	1.09	4	M4D	0	100%	850	2,834	0	2,834	$ 4,732,000	$ 4,732,000
2-G	Alba Rd. (2)	Greene Rd. (N) to 935' S. of Greene Rd. (S)	0.32	4	M4D	50	100%	850	832	16	816	$ 1,325,000	$ 1,325,000
2-H	Alba Rd. (3)	935' S. of Greene Rd. (S) to Belt Line Rd.	0.22	4	M4D	0	100%	850	572	0	572	$ 949,000	$ 949,000
2-I	Ferris Rd. (1)	Belt Line Rd. to S. City Limits	1.19	2	C2U	86	100%	450	1,071	102	969	$ 3,933,000	$ 3,933,000
2-J	Ferris Rd. (2)	S. City Limits to S. City Limits	0.56	2	C2U	86	50%	450	252	24	228	$ 1,865,000	$ 932,500
2-K	Ferris Rd. (3)	S. City Limits to E. City Limits	0.59	2	C2U	86	100%	450	531	51	480	$ 1,954,000	$ 1,954,000
2-L	Ferris Rd. (4)	E. City Limits to S. City Limits	1.12	2	C2U	86	50%	450	504	48	456	$ 3,713,000	$ 1,856,500
2-M	Airport Rd. East	Greene Rd. to Ferris Rd.	2.04	4	M4D	0	100%	850	5,304	0	5,304	$ 6,814,000	$ 6,814,000
1-QQ, 2-N	Belt Line Rd. (2)	1,005' W. of Main St. to Main St.	0.19	6	P6D	556	50%	750	428	53	375	$ 1,107,000	$ 553,500
2-O, 3-J	Belt Line Rd. (4)	Main St. to Lancaster-Hutchins Rd.	1.23	4	M4D	221	50%	850	1,599	136	1,463	$ 5,470,000	$ 2,735,000
2-P	Belt Line Rd. (5)	Lancaster-Hutchins Rd. to E. City Limits	2.77	4	M4D	241	100%	850	7,202	668	6,534	$ 11,863,000	$ 11,863,000
2-Q	Belt Line Rd. (6)	E. City Limits to 640' E. of E. City Limits	0.12	4	M4D	241	50%	850	156	14	142	$ 506,000	$ 253,000
I-4	Signal Installation	Lancaster-Hutchins Rd. & Wintergreen Rd.					50%					$ 140,000	$ 70,000
I-5	Signal Installation	Lancaster-Hutchins Rd. & Pleasant Run Rd.					75%					$ 140,000	$ 105,000
SUBTOTAL									34,515	1,776	32,738	$ 71,928,000	$ 60,504,500

2012 Roadway Impact Fee Update Cost Per Service Area $ 23,000

TOTAL COST IN SERVICE AREA 2 $ 60,527,500

City of Lancaster - 2012 Roadway Impact Fee Update

TIFIP Service Units of Supply

Service Area 3

5/8/2012

Project ID #	ROADWAY	LIMITS	LENGTH (MI)	LANES	IMPACT FEE CLASSIFICATION	PEAK HOUR VOLUME	% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN	VEH-MI SUPPLY PK-HR TOTAL	VEH-MI TOTAL DEMAND PK-HR	EXCESS CAPACITY PK-HR VEH-MI	TOTAL PROJECT COST	TOTAL PROJECT COST IN SERVICE AREA
3-A	Houston School Rd. (4)	2,720' N. of Bear Creek Rd. to S. City Limits	1.44	4	M4D	139	100%	650	3,744	200	3,544	$ 6,361,000	$ 6,361,000
3-B	Blue Grove Rd. (4)	Main St. to 385' S. of Main St.	0.07	4	M4D	64	100%	650	182	4	178	$ 314,000	$ 314,000
3-C	Blue Grove Rd. (5)	385' S. of Main St. to 765' N. of Bear Creek Rd.	1.52	4	M4D	64	100%	650	3,952	97	3,855	$ 7,067,000	$ 7,067,000
3-D	Blue Grove Rd. (6)	765' N. of Bear Creek Rd. to 1,700' S. of Bear Creek Rd.	0.47	4	M4D	64	100%	650	1,222	30	1,192	$ 2,018,000	$ 2,018,000
3-E	Bear Creek Rd.	IH-35E to Dallas Ave.	3.06	4	S4D	256	100%	625	7,650	783	6,867	$ 13,278,000	$ 13,278,000
3-F	Meadowlark Ln. (1)	Parkerville Rd. to 980' S. of Parkerville Rd.	0.19	4	M4D	6	100%	650	494	1	493	$ 803,000	$ 803,000
3-G	Meadowlark Ln. (2)	980' S. of Parkerville Rd. to Meadowlark Ct.	0.52	4	M4D	6	100%	650	1,352	3	1,349	$ 2,150,000	$ 2,150,000
3-H	Meadowlark Ln. (3)	Meadowlark Ct. to S. City Limits	1.24	4	M4D	6	100%	650	3,224	7	3,217	$ 6,151,000	$ 6,151,000
1-RR, 3-I	Main St. (1)	Belt Line Rd. to Belt Line Rd.	3.02	2	C2U	367	50%	450	1,359	554	805	$ 9,972,000	$ 4,986,000
2-O, 3-J	Belt Line Rd. (4)	Main St. to Lancaster-Hutchins Rd.	1.23	4	M4D	221	50%	650	1,599	136	1,463	$ 5,470,000	$ 2,735,000
2-C, 3-K	Lancaster-Hutchins Rd. (3)	Lancaster-Hutchins Rd. (3)	0.53	6	P6D	263	50%	750	1,193	70	1,123	$ 3,074,000	$ 1,537,000
I-3	Signal Installation	Belt Line Rd. & Chesier Rd. / Main St.					50%					$ 140,000	$ 70,000
SUBTOTAL									25,971	1,887	24,083	$ 56,796,000	$ 47,468,000

2012 Roadway Impact Fee Update Cost Per Service Area $ 23,000

TOTAL COST IN SERVICE AREA 3 $ 47,491,000

Appendix C – Existing Roadway Facilities Inventory

City of Lancaster - 2012 Roadway Impact Fee Update
Existing Roadway Facilities Inventory

Service Area 1

5/8/2012

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		EXIST SECT	TYPE	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI	
					NB/EB	SB/WB			NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Ames Rd.	Houston School Rd.	Wintergreen Rd.	6360	1.20	1	1	2U	COL	299	299	100%	450	450	542	542	361	361	181	181		
Arcady	Wintergreen Rd.	Colgate	2,330	0.44	1	1	2U	COL	40	40	100%	450	450	199	199	18	18	181	181		
Balkin	Sunny Meadow	Rogers	2,500	0.47	1	1	2U	COL	41	41	100%	450	450	213	213	19	19	194	194		
Balomeade	Danieldale Rd.	West	2,695	0.51	1	1	2U-R	COL	10	10	100%	150	150	77	77	5	5	71	71		
Balomeade	Belvedere	Wintergreen Rd.	1,085	0.21	1	1	2U-R	COL	10	10	100%	150	150	31	31	2	2	29	29		
Beltline Rd.	IH 35	Main St.	1,425	0.27	2	2	4D	MAJ_6A	479	479	50%	650	650	175	175	65	65	111	111		
Beltline Rd.	Main St.	Blue Grove Rd.	9,510	1.80	2	2	4D	MAJ_6A	285	271	100%	650	650	2,341	2,341	513	488	1,828	1,853		
Beltline Rd.	Blue Grove Rd.	1,005' W. of Main St.	3,935	0.75	2	2	4D	MAJ_6A	285	271	100%	650	650	969	969	212	202	756	767		
Beltline Rd.	1,005' W. of Main St.	Main St.	1,005	0.18	2	2	4D	MAJ_6A	285	271	50%	650	650	124	124	27	26	97	98		
Sunny Meadow	Wintergreen Rd.	1,980' S. of Wintergreen Rd.	1,980	0.38	1	1	2U	MAJ_4B	100	100	100%	450	450	169	169	38	38	131	131		
Blue Grove Rd.	Kings Cross	Pleasant Run Rd.	2,965	0.56	1	1	2U	MAJ_4B	230	208	100%	450	450	253	253	129	117	124	136		
Blue Grove Rd	Pleasant Run Rd	Beltline Rd.	4,435	0.84	2	2	4D	MAJ_4B	301	257	100%	650	650	1,092	1,092	253	216	839	876		
Blue Grove Rd.	Beltline Rd.	Main St.	3,245	0.61	1	1	2U	MAJ_4B	60	60	100%	450	450	277	277	37	37	240	240		
Boardwalk	Cedardale Rd.	X' S. of Cedardale Rd.	1,040	0.20	1	1	2U	COL	25	25	100%	450	450	89	89	5	5	84	84		
Branchwood	Long Branch	Beltline Rd.	730	0.14	1	1	2U	COL	25	25	100%	450	450	62	62	3	3	59	59		
Cedardale Rd.	Houston School Rd.	Dallas Ave.	3,245	0.61	1	1	2U	MIN_4	155	166	100%	450	450	277	277	95	102	181	175		
Chapman	Wintergreen Rd.	Pleasant Run Rd.	4,295	0.81	1	1	2U	COL	50	50	100%	450	450	366	366	41	41	325	325		
Colgate	Arcady	Dewberry	710	0.13	1	1	2U	COL	65	65	100%	450	450	61	61	9	9	52	52		
Connecticut	Cedardale Rd.	1,695' S. of Cedardale Rd.	1,695	0.32	1	1	2U	C2U	25	25	100%	450	450	144	144	8	8	136	136		
Cumberland	Springfield	Danieldale Rd.	1,255	0.24	1	1	2U-R	C2U	10	10	100%	150	150	36	36	2	2	33	33		
Dallas Ave.	Cedardale Rd.	Pleasant Run Rd.	14,940	2.83	3	3	6D	P6D	520	754	100%	750	750	6,366	6,366	1,471	2,133	4,895	4,233		
Danieldale Rd.	IH 35	Houston School Rd.	5,415	1.03	1	1	2U	S4D	84	142	100%	450	450	462	462	86	146	375	316		
Danieldale Rd.	Houston School Rd.	IH 20	5,360	1.02	2	2	4D	S4D	55	46	100%	650	650	1,320	1,320	56	47	1,264	1,273		
Dewberry	Colgate	Pleasant Run Rd.	2,710	0.51	1	1	2U	C2U	50	50	100%	450	450	231	231	26	26	205	205		
Dizzy Dean	Wintergreen Rd.	X' N. of Dizzy Dean	3,105	0.59	1	1	2U	S4D	64	48	100%	450	450	285	285	38	28	227	236		
Donlee	Rogers	Dallas Ave.	4,400	0.83	1	1	2U	C2U	58	95	100%	450	450	375	375	48	79	327	296		
Hana	2,075' N. of Beltline Rd.	Beltline Rd.	2,075	0.39	1	1	3U	C2U	75	75	100%	500	500	196	196	29	29	167	167		
Houston School Rd.	Wheatland Rd.	IH 20	2,410	0.46	1	1	2U	P6D	310	342	100%	450	450	205	205	141	156	64	49		
Houston School Rd.	IH 20	Danieldale Rd.	2,840	0.54	2	2	4D	P6D	310	342	100%	650	650	699	699	167	184	533	515		
Houston School Rd.	Danieldale Rd.	Ames Rd.	2,530	0.48	2	2	4D	M4D	235	365	100%	650	650	823	823	113	175	510	448		
Houston School Rd.	Ames Rd.	1,620' S. of Ames Rd.	1,620	0.31	2	2	4D	M4D	235	365	100%	650	650	399	399	72	112	327	287		
Houston School Rd.	1,620' S. of Ames Rd.	Pleasant Run Rd.	6,520	1.23	1	1	2U	M4D	235	365	100%	450	450	556	556	290	451	265	105		
Houston School Rd.	Pleasant Run Rd.	Main Street	6,390	1.21	1	1	2U	M4D	47	47	100%	450	450	545	545	56	57	488	488		
Idlewild	Pleasant Run Rd.	2,675' N. of Pleasant Run Rd	2,675	0.51	1	1	2U	C2U	50	50	100%	450	450	228	228	25	25	203	203		
Jefferson	Wintergreen Rd.	Pleasant Run Rd.	5,200	0.98	1	1	2U	S4D	126	126	100%	450	450	443	443	124	124	319	319		
Lancaster-Hutchins Rd.	Wintergreen Rd.	Pleasant Run Rd.	6,270	1.19	1	1	2U	P6D	220	220	50%	450	450	267	267	131	131	137	137		
Longhorn	Wintergreen Rd.	Wintergreen Rd.	5,780	1.09	1	1	2U	C2U	50	50	100%	450	450	493	493	55	55	438	438		
Longhorn N	Danieldale Rd.	West	2,820	0.53	2	2	4D	C2U	50	81	100%	650	650	694	694	27	43	668	651		
Main Street	Beltline Rd. (West)	Blue Grove Rd.	10,765	2.04	1	1	2U	C2U	94	61	50%	450	450	459	459	96	83	363	378		
Main Street	Blue Grove Rd.	Beltline Rd. (East)	5,180	0.98	1	1	2U	C2U	171	196	50%	450	450	221	221	84	96	137	125		
Percy	Cedardale Rd.	Lyle	2,030	0.38	1	1	2U-R	C2U	10	10	100%	150	150	58	58	4	4	54	54		
Pleasant Run Rd.	IH 35	Houston School Rd.	5,285	1.00	2	2	4D	M4D	724	685	100%	650	650	1,301	1,301	725	686	577	616		
Pleasant Run Rd.	Houston School Rd.	Rolling Meadows	6,425	1.22	2	2	4D	M4D	724	743	100%	650	650	1,582	1,582	881	904	701	678		
Pleasant Run Rd.	Rolling Meadows	River	800	0.15	2	2	4D	P6D	724	743	100%	650	650	197	197	110	113	87	84		
Pleasant Run Rd.	River	Rogers	1,385	0.26	2	2	4D	P6D	724	743	50%	650	650	171	171	95	97	76	73		
Pleasant Run Rd.	Rogers	Dallas Ave.	6,180	1.17	3	3	6D	P6D	489	489	50%	750	750	1,317	1,317	286	286	1,030	1,030		
Pleasant Run Rd.	Dallas Ave.	Lancaster-Hutchins Rd.	3,150	0.60	1	1	2U	P6D	273	273	50%	450	450	134	134	81	81	53	53		
Reynolds	Katrina	Chapman	1,320	0.25	1	1	2U	C2U	25	25	100%	450	450	113	113	6	6	106	106		
Rogers	Pleasant Run Rd.	Donlee (W of Rogers)	4,420	0.84	1	1	2U	C2U	199	199	100%	450	450	377	377	167	167	210	210		
Rolling Hills Rd.	Pleasant Run Rd.	Beltline Rd.	5,230	0.99	1	1	2U	C2U	292	292	100%	450	450	448	446	289	289	157	157		
Rolling Meadows	Pleasant Run Rd.	Ransom	3,015	0.57	1	1	2U	C2U	149	149	100%	450	450	257	257	85	85	172	172		
Springfield Ave.	IH 35	Criswell	2,340	0.44	1	1	2U-R	C2U	25	25	100%	150	150	66	66	11	11	55	55		
Telephone Rd.	Wintergreen Rd.	Dallas Ave.	3,240	0.61	1	1	2U	M4D	181	278	100%	450	450	278	278	111	171	165	106		
West	IH 35	Longhorn N.	3,065	0.58	1	1	2U	C2U	25	25	100%	450	450	261	261	15	15	247	247		
Wheatland Rd.	IH 35	Houston School Rd.	5,170	0.98	1	1	2U	C2U	217	217	50%	450	450	220	220	106	106	114	114		
Wheatland Rd.	Houston School Rd.	N. Limits of SA 1	4,020	0.76	1	1	2U	C2U	14	27	100%	450	450	343	343	11	21	332	322		
Wintergreen Rd.	IH 35	Houston School Rd.	5,320	1.01	1	1	2U	M4D	204	160	100%	450	450	453	453	206	161	248	292		
Wintergreen Rd.	Baskin	Telephone Rd.	4,360	0.83	1	1	2U	M4D	236	287	100%	450	450	372	372	195	237	177	135		
Wintergreen Rd. (South)	Houston School Rd.	Baskin	4,135	0.78	1	1	2U	C2U	310	310	100%	450	450	352	352	242	242	110	110		
Wintergreen Rd.	Telephone Rd.	Verona	1,775	0.34	1	1	2U	M4D	92	122	100%	450	450	151	151	31	41	120	110		
Wintergreen Rd.	Verona	Dallas Ave.	3,215	0.61	1	1	2U	M4D	92	122	100%	450	450	274	274	56	74	218	200		
Wintergreen Rd.	Dallas Ave.	Jefferson St.	4,315	0.82	2	2	4D	M4D	92	122	50%	650	650	531	531	38	50	494	481		
Wintergreen Rd.	Jefferson St.	Lancaster-Hutchins Rd.	5,485	1.04	1	1	2U	M4D	92	122	50%	450	450	234	234	48	63	186	170		
SUBTOTAL			241,125	46										32,026	32,026	6,774	9,852	23,252	22,174	0	0
														64,053		16,626		45,427		0	

City of Lancaster - 2012 Roadway Impact Fee Update
Existing Roadway Facilities Inventory

Service Area 2

5/8/2012

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		EXIST SECT	TYPE	PM PEAK NOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI	
					NB/EB	SB/WB			NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
1st	Jefferson	State Street	220	0.04	1	1	2U	C2U	50	50	100%	450	450	19	19	2	2	17	17		
3rd	Jefferson	Lancaster-Hutchins Rd.	1,775	0.34	1	1	2U	C2U	25	25	100%	450	450	151	151	8	8	143	143		
9th	Westridge	Dallas Ave.	3,540	0.67	1	1	2U	C2U	43	43	100%	450	450	302	302	29	29	273	273		
Alba	Pleasant Run Rd.	Greene	3,900	0.74	1	1	2U	M4D	25	25	100%	450	450	332	332	18	18	314	314		
Alba	Greene	935' S. of Greene Rd.	935	0.18	1	1	2U-R	M4D	10	10	100%	150	150	27	27	2	2	25	25		
Beltline Rd.	Main St.	Lancaster-Hutchins Rd	6,480	1.23	1	1	2U	M4D	112	109	50%	450	450	276	276	69	67	207	209		
Beltline Rd.	Lancaster-Hutchins Rd.	E. Limits of SA 2	13,885	2.63	1	1	2U-H	M4D	132	109	100%	750	750	1,972	1,972	347	287	1,625	1,686		
Cornell	Lancaster-Hutchins Rd.	Greene	8,010	1.52	1	1	2U-R	M4D	10	10	100%	150	150	228	228	15	15	212	212		
Dallas Ave.	Pleasant Run Rd.	W. Alexander St. / E. Oak St.	810	0.47	2	2	6D	C2U	395	395	100%	750	750	705	705	186	186	519	519		
Dallas Ave.	W. Alexander St. / E. Oak St.	7th St.	1,035	0.38	1	1	4U	COL	200	200	100%	525	525	201	201	77	77	124	124		
Dallas Ave.	Main Street	Beltline Rd.	5,155	0.50	1	1	2U	C2U	200	200	100%	450	450	224	224	100	100	125	125		
Elm	Pleasant Run Rd.	6th	4,670	0.50	1	1	2U	C2U	60	60	100%	450	450	224	224	30	30	194	194		
Elm	6th	Hogan Run	760	0.50	1	1	2U	C2U	60	60	100%	450	450	224	224	30	30	194	194		
Ferris Rd.	Belt Line Rd.	S. Limits of SA 2	8,290	1.19	1	1	2U	C2U	40	46	100%	450	450	536	536	48	55	488	481		
Greene	Lancaster-Hutchins Rd.	Alba	8,170	1.17	1	1	2U-R	S4D	10	10	100%	150	150	175	175	12	12	164	164		
Greene	Alba	E. Limits of SA 2	4,850	0.92	1	1	2U-R	S4D	10	10	100%	150	150	138	138	9	9	129	129		
Hogan Run	Main St.	Elm	2,790	0.53	1	1	2U	C2U	16	16	100%	450	450	238	238	8	8	229	229		
Jefferson	Pleasant Run Rd.	1st	3,850	0.73	1	1	2U	C2U	51	51	100%	450	450	328	328	37	37	291	291		
Lancaster Park	Pleasant Run Rd.	Oakbluff	2,290	0.43	1	1	2U-H	C2U	220	220	100%	750	750	325	325	95	95	230	230		
Lancaster-Hutchins Rd.	Wintergreen Rd.	Pleasant Run Rd.	8,270	1.19	1	1	2U	P6D	220	220	50%	450	450	267	267	131	131	137	137		
Lancaster-Hutchins Rd.	Pleasant Run Rd.	Beltline Rd.	7,495	1.42	1	1	2U	M4D	37	176	100%	450	450	639	639	53	250	586	389		
Lancaster-Hutchins Rd.	Belt Line Rd.	Dallas Ave.	2,270	0.43	1	1	2U	P6D	59	204	50%	450	450	97	97	13	44	84	53		
Main St.	Belt Line Rd.	Historic Town Square	5,030	0.95	1	1	2U	S4D	135	152	100%	450	450	429	429	129	145	300	284		
Main St.	Historic Town Square	Lancaster-Hutchins Rd.	2,170	0.41	1	1	2U	S4D	37	37	100%	450	450	185	185	15	15	170	170		
Melrose	Westridge	Main St.	1,290	0.24	1	1	2U	C2U	60	60	100%	450	450	110	110	15	15	95	95		
Nokomis Rd.	Beltline Rd.	City Limit	6,560	0.62	1	1	2U	R2U	47	47	100%	450	450	279	279	29	29	250	250		
Nokomis Rd.	City Limit	Ten Mile Creek		0.47	1	1	2U	R2U	47	47	50%	450	450	106	106	11	11	95	95		
OakBluff	Lancaster Park	Westridge	2,025	0.38	1	1	2U	C2U	53	53	100%	450	450	173	173	20	20	152	152		
Pleasant Run Rd.	River	Rogers	1,385	0.26	2	2	4D	P6D	724	743	50%	650	650	171	171	95	97	76	73		
Pleasant Run Rd.	Rogers	Dallas Ave.	6,180	1.17	3	3	6D	P6D	724	743	50%	750	750	1,317	1,317	424	435	893	882		
Pleasant Run Rd.	Dallas Ave.	Lancaster-Hutchins Rd.	3,150	0.60	1	1	2U	P6D	340	340	50%	450	450	134	134	102	102	33	33		
Pleasant Run Rd.	Lancaster-Hutchins	E. Limits of SA 2	6,340	1.20	1	1	2U	M4D	100	100	100%	450	450	540	540	119	119	421	421		
Red Bud	Elm	State Street	1,465	0.28	1	1	2U	C2U	16	16	100%	450	450	125	125	4	4	120	120		
State Stroet	Red Bud	1st	920	0.17	1	1	2U-R	C2U	10	10	100%	150	150	26	26	2	2	24	24		
Stewart	Hogan Run	Belt Line Rd.	1,965	0.37	1	1	2U	C2U	60	60	100%	450	450	165	165	22	22	143	143		
Westridge	Pleasant Run Rd.	Melrose	3,705	0.70	1	1	2U	C2U	118	118	100%	450	450	316	316	83	83	233	233		
SUBTOTAL			135,835	26										11,702	11,702	2,386	2,590	9,316	9,113	0	0
														23,405		4,976		18,429		0	

City of Lancaster - 2012 Roadway Impact Fee Update

Existing Roadway Facilities Inventory

Service Area 3

5/8/2012

ROADWAY	FROM	TO	LENGTH (ft)	LENGTH (mi)	EXIST LANES		EXIST SECT	TYPE	PM PEAK HOUR VOL		% IN SERVICE AREA	VEH-MI CAPACITY PK-HR PER LN		VEH-MI SUPPLY PK-HR TOTAL		VEH-MI DEMAND PK-HR TOTAL		EXCESS CAPACITY PK-HR VEH-MI		EXISTING DEFICIENCIES PK-HR VEH-MI	
					NB/EB	SB/WB			NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Bear Creek	IH 35	Dallas Ave.	16,165	3.06	1	1	2U	S4D	177	79	100%	450	450	1,378	1,378	542	242	836	1,136		
Beltline Rd.	IH 35	Main St.	1,425	0.27	2	2	4D	P6D	479	479	50%	650	650	175	175	65	65	111	111		
Beltline Rd.	Main St.	Lancaster-Hutchins Rd.	6,480	1.23	1	1	2U	M4D	112	109	50%	450	450	276	276	69	67	207	209		
Blue Grove Rd.	Main St.	Bear Creek Rd.	8,815	1.67	1	1	2U	M4D	30	35	100%	450	450	751	751	49	58	702	694		
Dallas Ave	Bear Creek	Reindeer	2,670	0.51	1	1	2U-H	P6D	285	285	50%	750	750	190	190	72	72	118	118		
Dallas Ave	Reindeer	Red Oak	11,390	2.16	1	1	2U-H	P6D	285	285	50%	750	750	809	809	307	307	502	502		
Dallas Ave.	Red Oak	Beltline Rd.	2,280	0.43	1	1	2U-H	P6D	285	285	100%	750	750	324	324	123	123	201	201		
Houston School Rd.	Main Street	2,720' N. of Bear Creek Rd.	5,555	1.05	1	1	2U	R2U	27	41	100%	450	450	473	473	28	43	445	430		
Houston School Rd.	2,720' N. of Bear Creek Rd.	Bear Creek Rd.	2,720	0.52	1	1	2U	M4D	27	41	100%	450	450	232	232	14	21	218	211		
Houston School Rd.	Bear Creek	S. Limits of SA 3	4,885	0.93	1	1	2U	M4D	38	100	100%	450	450	416	416	36	93	380	324		
Lancaster-Hutchins Rd.	Beltline Rd.	Dallas Ave.	2,270	0.43	1	1	2U	P6D	59	204	50%	450	450	97	97	13	44	84	53		
Main Street	Beltline Rd.	Blue Grove Rd.	10,765	2.04	1	1	2U	C2U	94	81	50%	450	450	459	459	96	83	363	376		
Main Street	Blue Grove Rd.	Beltline Rd.	5,180	0.98	1	1	2U	C2U	265	271	50%	450	450	221	221	140	133	81	88		
Meadowlark	Kirkwood	2,500' S. of Kirkwood	250	0.05	1	1	2U	M4D	3	3	100%	450	450	21	21	0	0	21	21		
Meadowlark	2,500' S. of Kirkwood	Meadowlark Ct.	2,600	0.49	1	1	2U	M4D	3	3	100%	450	450	222	222	1	1	220	220		
Parkerville Rd.	IH 35	2,920' E. of IH 35	2,920	0.55	1	1	2U	S4D	48	48	100%	450	450	249	249	25	25	223	223		
Reindeer	Houston School Rd.	Dallas Ave	8,760	1.66	1	1	2U-R	C2U	3	3	100%	150	150	249	249	5	5	245	245		
SUBTOTAL			95,150	18										6,542	6,542	1,586	1,381	4,956	5,161	0	0
														13,084		2,967		10,117		0	

Appendix D – Land Use Assumptions

REGULAR MEETING MINUTES
PLANNING & ZONING COMMISSION
AND ACTING AS THE
CAPITAL IMPROVEMENTS ADVISORY COMMITTEE
CITY OF LANCASTER, TEXAS
TUESDAY, JUNE 26, 2012

PUBLIC HEARING

3. **M12-05** Conduct a Public Hearing and consider the Proposed Roadway and Water/Wastewater Impact Fee Reports.

Senior Planner Nathaniel Barnett presented information regarding the study of impact fees for Roadway and Water/Wastewater. He acknowledged the presence of representatives from the consulting firms of Kimley-Horn & Associates (Roadway) and Freese & Nichols, Inc. (Water/Wastewater). Senior Planner Barnett briefed the commission on the sessions that had taken place and the documents that had been supplied to them regarding the studies. He mentioned that impact fees were allowed to be charged by municipalities in accordance with Chapter 395 of the Local Government Code. The purpose of this meeting was for the commission to ask any further questions with regards to the draft studies that had been presented and make a recommendation to the City Council in regards to the information. The primary information that the commission was to look at were the population projections and the land use assumptions. This information would be utilized in the calculations for projected growth and usage of the infrastructure when determining the impact this growth would have and the cost associated with it. Based on those calculations, the impact fees could thus be determined. Senior Planner Barnett stated that a recommendation from Staff would not be made at this time but that the recommendation obtained from the commission along with their written comments, if any, would be used when making a recommendation to the City Council.

Chair Colton asked if the answer had been provided with regards to whether or not Red Oak charged impact fees for Water/Wastewater. Senior Planner Barnett stated that the consultants had informed him that they do not. Chair Colton asked if Red Oak was totally built out. It was stated that they are not. Chair Colton then asked whether impact fees had driven away any potential development. Senior Planner Barnett stated that he had not experienced a situation where impact fees had derailed any development project in the city. He also explained that impact fees are typically a nominal cost of development but not the major factor as developers usually have other measures to determine where to locate their projects.

Chair Colton opened the public hearing.

There were no speakers in favor of or opposed to the impact fee draft report.

James Fairchild, 1338 Cedar Oaks Blvd, Dallas, Texas, a student of at the University of Texas at Arlington, asked if a semi-annual report for the impact fees was available to the public. Senior Planner Barnett stated that the information for the report would be provided soon.

Chair Colton entertained a motion to close the public hearing.

VICE CHAIR WRIGHT MADE THE MOTION TO CLOSE THE PUBLIC HEARING, SECONDED BY COMMISSIONER MITCHELL.

AYES: COLTON, ELKINS, MITCHELL, PROTHRO, WRIGHT
NAYES: NONE

THE MOTION CARRIED 5-0.

Discussion of the Item:
The Commissioners expressed concerned that developers should pay their fare-share of the infrastructure growth of the city. Senior Planner Barnett stated that the maximum assessed fees that could be collected had decreased from the 2006/2007 Impact Fee Reports and that the Water/Wastewater impact fee would definitely have to decrease since the maximum assessable fee is lower than what is charged today.

Chair Colton asked the commissioners their thoughts on what their action should be. Everyone believed that an impact fee should be charged. It was determined that fees should not be raised and that the maximum for water/wastewater should be charged since it would be lower than what is being charged currently. The commissioners stated that they agreed with the report by the consultants and their findings and believed it should be adopted.

Chair Colton entertained a motion for the public hearing item.

A MOTION WAS MADE BY COMMISSIONER PROTHRO TO RECOMMEND APPROVAL OF THE REPORT AS PRESENTED BY THE CONSULTANTS AND ASSESS THE MAXIMUM ASSESSABLE FEE BUT NOT INCREASE ANY IMPACT FEE, AND SECONDED BY VICE CHAIR WRIGHT.

AYES: COLTON, ELKINS, MITCHELL, PROTHRO, WRIGHT
NAYES: NONE

THE MOTION CARRIED 5-0.

DRAFT

LANCASTER CITY COUNCIL
Agenda Communication for
July 23, 2012

6

AG12-006

Conduct a Public Hearing on updates to the Water and Wastewater Master Plans and consider a resolution amending Land Use Assumptions, and amending the Capital Improvement Plan for Water and Wastewater; and providing for establishing a Public Hearing and date to consider amendments to the Water and Wastewater Impact Fees.

This request supports the City Council 2011-2012 Policy Agenda.

Goal: Sound Infrastructure

Background

During the earlier work session the consultant presented to Council an overview of the Land Use Assumptions and Population Forecasts, the Capital Improvement Program (CIP) projects proposed for the next ten (10) years, and the calculated maximum allowable fees for water/wastewater projects in Lancaster.

The Water Master Plan and Water Impact Fee ordinance were adopted by Council on November 12, 2007. The Wastewater Master Plan and Wastewater Impact Fee ordinance were adopted by Council on July 10, 2006. They are being updated to ascertain projected new growth for and added capacity to the City of Lancaster's Water and Wastewater system for the next ten (10) years. They will also include additional land area and projects as a result of the most recent annexation in November 2011.

Over the past year, the consulting firm of Freese & Nichols, Inc. (FNI), with guidance and information from City Staff, has been reviewing and preparing updates for the city-wide Master Water and Wastewater Plans and Water/Wastewater Impact Fee Reports. Multiple purposes for this update include determining the land use assumptions and population projections in relation to new growth as it pertains to water and wastewater consumption and usage, respectively, as well as to determine the maximum allowable fee the city may charge developers for new developments affecting the city's infrastructure, in accordance with Chapter 395 of the Local Government Code. This data reflects the planned growth of the City of Lancaster based on research, analysis, and common trends. The consultant also reviewed the City's Master Water/Wastewater Plan capital improvement projects to ensure the projects listed would appropriately address growth in

the City of Lancaster as well as encompass the newly annexed area. Each project was enumerated as to the order it should be constructed as new growth occurs.

Chapter 395 of the Local Government Code requires municipalities to appoint a Capital Improvements Advisory Committee (CIAC), hold a public hearing, and adopt fees, if any, within 30 days after the public hearing. The Planning and Zoning Commission has served as the CIAC. The CIAC has received briefings through a series of public hearings from the consultants and Staff in preparation of providing a recommendation to the City Council. Using data from the North Central Texas Council of Governments, the consultant worked with City Staff to determine land use assumptions and population forecasts to ascertain the most accurate data possible. On June 26, 2012, FNI and City staff presented to the CIAC an overview of the update to the Water/Wastewater Master Plan and impact fee process. The CIAC opened the public hearing to receive comments from interested parties. No comments were received from the public. The CIAC moved to close the public hearing and recommended adoption of the Land Use Assumptions, CIP, and Water/Wastewater Impact Fees.

Considerations

- **Operational** - This study is to update the Water/Wastewater Master Plan Land Use Assumptions, Water/Wastewater Capital Improvement Program and Water/Wastewater Impact Fees. Fees will be assessed and collected with other development fees.

  Water/Wastewater impact fees are assessed in the service area that consists of properties in the city limits and extraterritorial jurisdiction (ETJ), with the exception of areas in the Rockett Certificate of Convenience and Necessity (CCN) area. This service area was initially established for Lancaster in 2003 and has been adjusted with this report to include the newly annexed area.

- **Legal** - The City Attorney has prepared the draft resolution.

- **Financial** - The amounts charged for water/wastewater impact fees will be reduced to the maximum allowable fee established by this report. Fees collected are deposited in a separate fund allocated to water/wastewater improvements as designated on the Water/Wastewater Capital Improvement Program.

- **Public Information** – A newspaper notice will be published in the Focus Daily News stating that a public hearing on Impact Fees will be held on August 27, 2012 by the City Council. This notice meets the Local Government Code required 30-day notice to set Impact Fees.

Options/Alternatives

1. City Council may conduct the public hearing and consider the resolution as presented.
2. City Council may conduct the public hearing, deny the resolution and direct staff.

Recommendation

At the meeting on June 26, 2012, the Planning and Zoning Commission, serving as the Capital Improvements Advisory Committee (CIAC) recommended to approve the report as presented by the consultants and to assess the maximum allowable fee for water/wastewater and maintain the current roadway impact fees.

Staff concurs with this recommendation.

Attachments

- Resolution
- Excerpt from Minutes of P&Z/CIAC meeting on June 26, 2012
- See work session item C for July 2012 Water & Wastewater Impact Fee Update and Maps

Prepared and submitted by:
Nathaniel Barnett, Senior Planner

Date: July 19, 2012

RESOLUTION NO. 2012-07-54

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LANCASTER; AMENDING LAND USE ASSUMPTIONS, AND AMENDING THE CAPITAL IMPROVEMENT PLAN FOR WATER AND WASTEWATER; PROVIDING FOR ESTABLISHING A PUBLIC HEARING AND DATE TO CONSIDER AMENDMENTS TO THE WATER AND WASTEWATER IMPACT FEES; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A REPEALING CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City Council of the City of Lancaster, Texas imposes Impact Fees for Water, Wastewater for the financing of Capital Improvements required for new development in the City; and,

WHEREAS, based on amendments to the Land Use Assumptions, amendments to the Water and Wastewater Impact Fee Report have been prepared by Freese and Nichols, Inc., in a document entitled "Water & Wastewater Impact Fee Report," dated July 2012; and

WHEREAS, the Capital Improvement Advisory Committee has filed written comments on the amendments to the Land Use Assumptions and the Capital Improvement Plan for Water, Wastewater and the City Council has received and reviewed those comments; and

WHEREAS, the City Council of the City of Lancaster has given notice and held a public hearing required by Chapter 395 of the Texas Local Government Code for the amendments to the Land Use Assumptions and the Capital Improvement Plan for Water and Wastewater for possible modification of impact fees for the financing of capital improvements required by new development within the city; and

WHEREAS, the City Council find it is in the best interest of the City of Lancaster and its citizens to approve and adopt the amendments to the Land Use Assumptions and the Capital Improvement Plan for Water and Wastewater.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LANCASTER, TEXAS:

SECTION 1. The City of Lancaster, Texas hereby adopts the Land Use Assumptions for Water and Wastewater, as set forth in Chapter 2, including the tables, maps, figures and appendices thereto, of the Water and Wastewater Impact Fee Report, dated July 2012, prepared by Freese and Nichols, Inc., as the Land Use Assumptions for Water and Wastewater of the City, a copy of which is attached hereto and incorporated herein as Exhibit A.

SECTION 2. The City of Lancaster, Texas hereby adopts and approves the Capital Improvement Plan, as set forth in Chapter 3, including the tables, maps, figures and appendices thereto, the Water and Wastewater Impact Fee Report, dated April 2012, prepared by Freese and Nichols, Inc., as the Capital Improvement Plan for Water and Wastewater of the City, a copy of which is attached hereto and incorporated herein as Exhibit "B".

SECTION 3. That the City Council hereby sets a Public Hearing for August 27, 2012, for the purpose of taking public comments and to present any evidence for or against amending Water and Wastewater Impact Fees; and thereafter the City Council shall consider whether to amend such fees.

SECTION 4. Any prior Resolution of the City Council in conflict with the provisions contained in this Resolution are hereby repealed and revoked.

SECTION 5. Should any part of this Resolution be held to be invalid for any reason, the remainder shall not be affected thereby, and such remaining portions are hereby declared to be severable.

SECTION 6. That this Resolution shall take effect immediately from and after its adoption and execution.

DULY PASSED by the City Council of the City of Lancaster, Texas, this the 23rd day of July 2012.

APPROVED:

_____

MARCUS E. KNIGHT, MAYOR

ATTEST:

_____

DOLLE K. DOWNE, CITY SECRETARY

APPROVED AS TO FORM:

_____

ROBERT E. HAGER, CITY ATTORNEY

Resolution No. 2012-07-54

Exhibit A

2.0 LAND USE ASSUMPTIONS

Population and land use are important elements in the analysis of water and wastewater systems. Water demands and wastewater flows depend on the residential population and commercial development served by the systems and determines the sizing and location of system infrastructure. A thorough analysis of historical and projected populations, along with land use, provides the basis for projecting future water demands and wastewater flows.

2.1 Service Area

The service area for impact fee analysis for Lancaster's water and wastewater systems is defined as the current city limits with the exception of areas that fall within Rockett Special Utility District (SUD)'s Certificate of Convenience and Necessity (CCN). The current city limits include recently annexed areas in the southeastern portion of the service area. Areas in the City's extra-territorial jurisdiction (ETJ) were included in the 2035 service area, but Rockett's CCN was excluded in this service area as well. **Figure 2-1** illustrates the impact fee (2022) service area and 2035 service area for both water and wastewater.

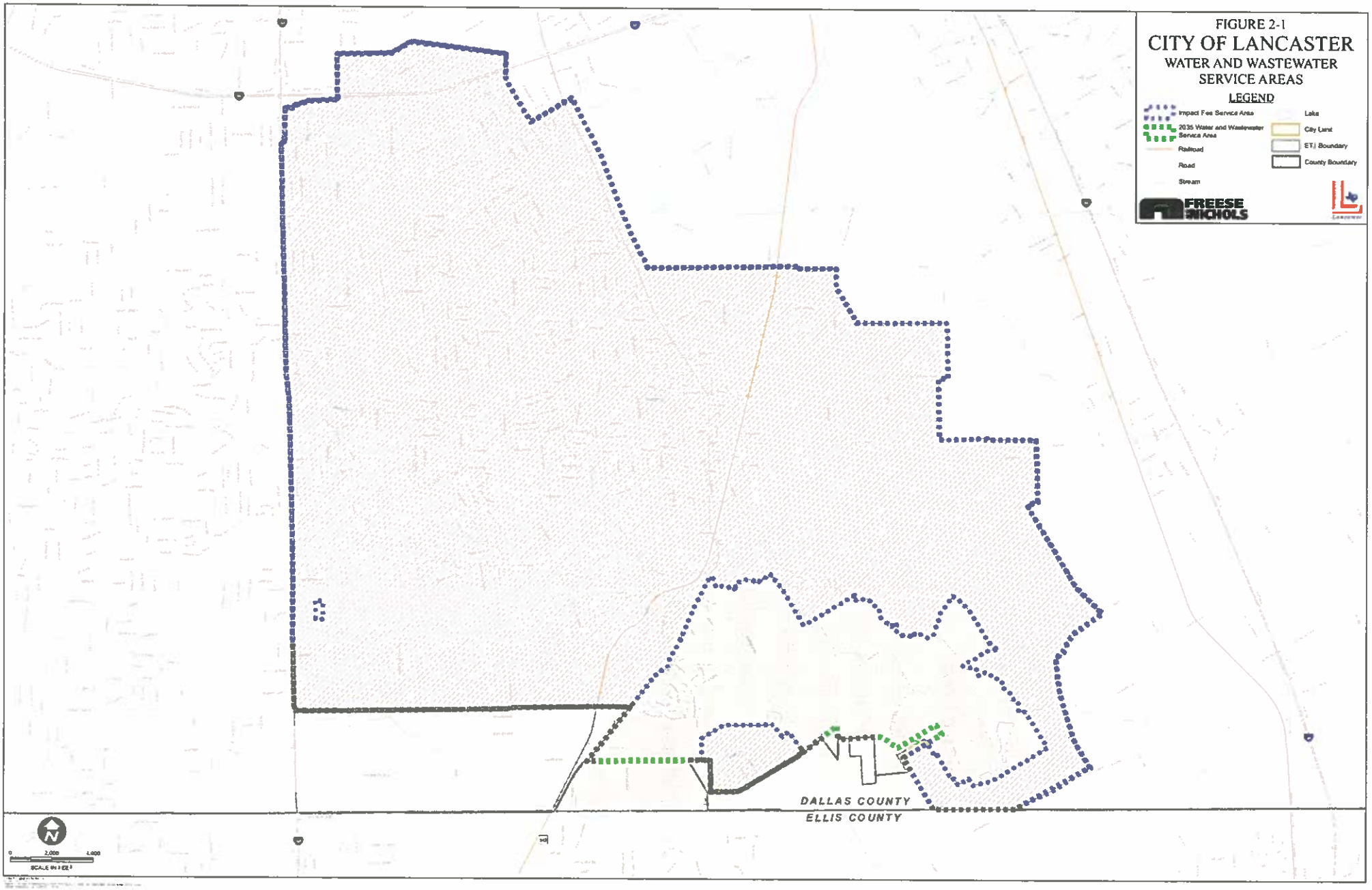


FIGURE 2-1
CITY OF LANCASTER
WATER AND WASTEWATER
SERVICE AREAS
LEGEND
Impact Fee Service Area
2035 Water and Wastewater Service Area
Railroad
Road
Stream
Lake
City Limit
ETJ Boundary
County Boundary
FREESE NICHOLS
DALLAS COUNTY
ELLIS COUNTY

2.2 Historical Population

The City of Lancaster provided yearly population data from 2000 through 2011. The data indicated an average growth rate of about 3% annual growth over the last 11 years. **Table 2-1** presents the historical populations for the entire City of Lancaster.

Table 2-1 Historical Population

Year	City Population	Population Growth	Growth Rate
2000	25,894	-	-
2001	26,350	456	1.8%
2002	27,550	1,200	4.6%
2003	28,700	1,150	4.2%
2004	29,850	1,150	4.0%
2005	31,700	1,850	6.2%
2006	33,550	1,850	5.8%
2007	33,213	-337	-1.0%
2008	35,800	2,587	7.8%
2009	36,200	400	1.1%
2010	36,361	161	0.4%
2011	36,390	29	0.1%
Average	-	954	3.2%

2.3 Projected Population and Employment

Population and employment projections were developed based on traffic survey zone (TSZ) data provided by North Central Texas Council of Government (NCTOCG) and the City of Lancaster Planning Department. The City provided comments on the location of planned development and additional detail about the existing land use. The TSZs were clipped to match the existing and future service areas. **Tables 2-2 and 2-3** present the population and employment projections for the City of Lancaster water and wastewater service area for 2012, 2022, and 2035. Since a portion of the City falls within the Rockett Special Utility District SUD's CCN, the service area population is less than the total population within the City limits. **Figure 2-2** shows the population projections by TSZ, and **Figure 2-3** displays the employment projections by TSZ. **Figure 2-4** displays the impact fee land use assumptions for 2022.

Table 2-2 Water and Wastewater Population Projections

Year	Service Population	Average Annual Population Growth	Average Annual Growth Rate
2012	35,959	-	-
2022	46,949	1,099	2.7%
2035	65,751	1,446	2.6%

Table 2-3 Water and Wastewater Employment Projections

Year	Number of Employees in Service Area	Average Annual Employee Growth	Average Annual Growth Rate
2012	14,848	-	-
2022	23,773	893	4.8%
2035	36,100	948	3.3%

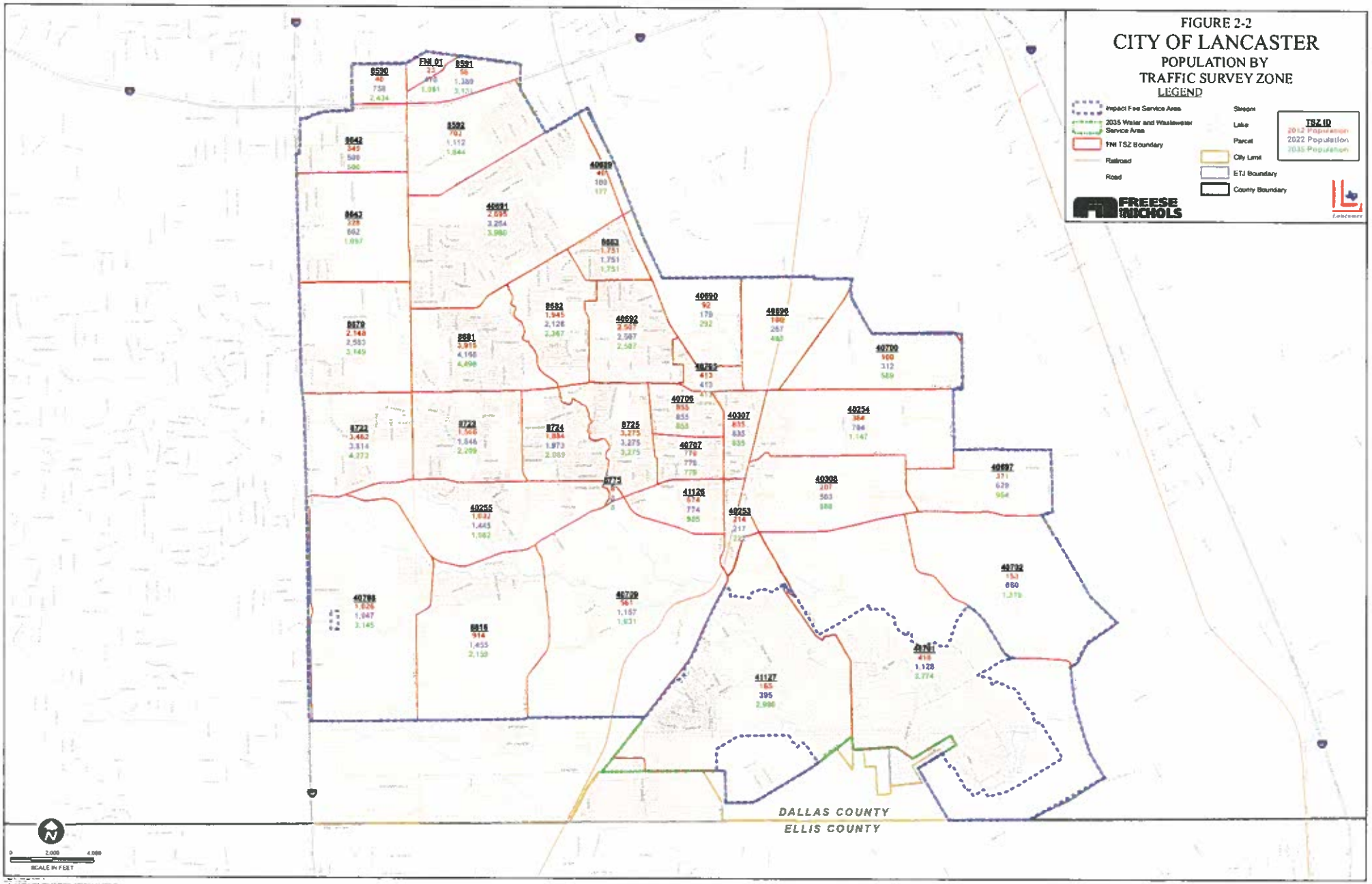


FIGURE 2-2
CITY OF LANCASTER
POPULATION BY
TRAFFIC SURVEY ZONE
LEGEND
Impact Fee Service Area
2035 Water and Wastewater Service Area
FNI TSZ Boundary
Railroad
Road
Stream
Lake
Parcel
City Limit
ETJ Boundary
County Boundary
TSZ ID
2012 Population
2022 Population
2035 Population
FREESE NICHOLS
Lancaster
DALLAS COUNTY
ELLIS COUNTY
SCALE IN FEET

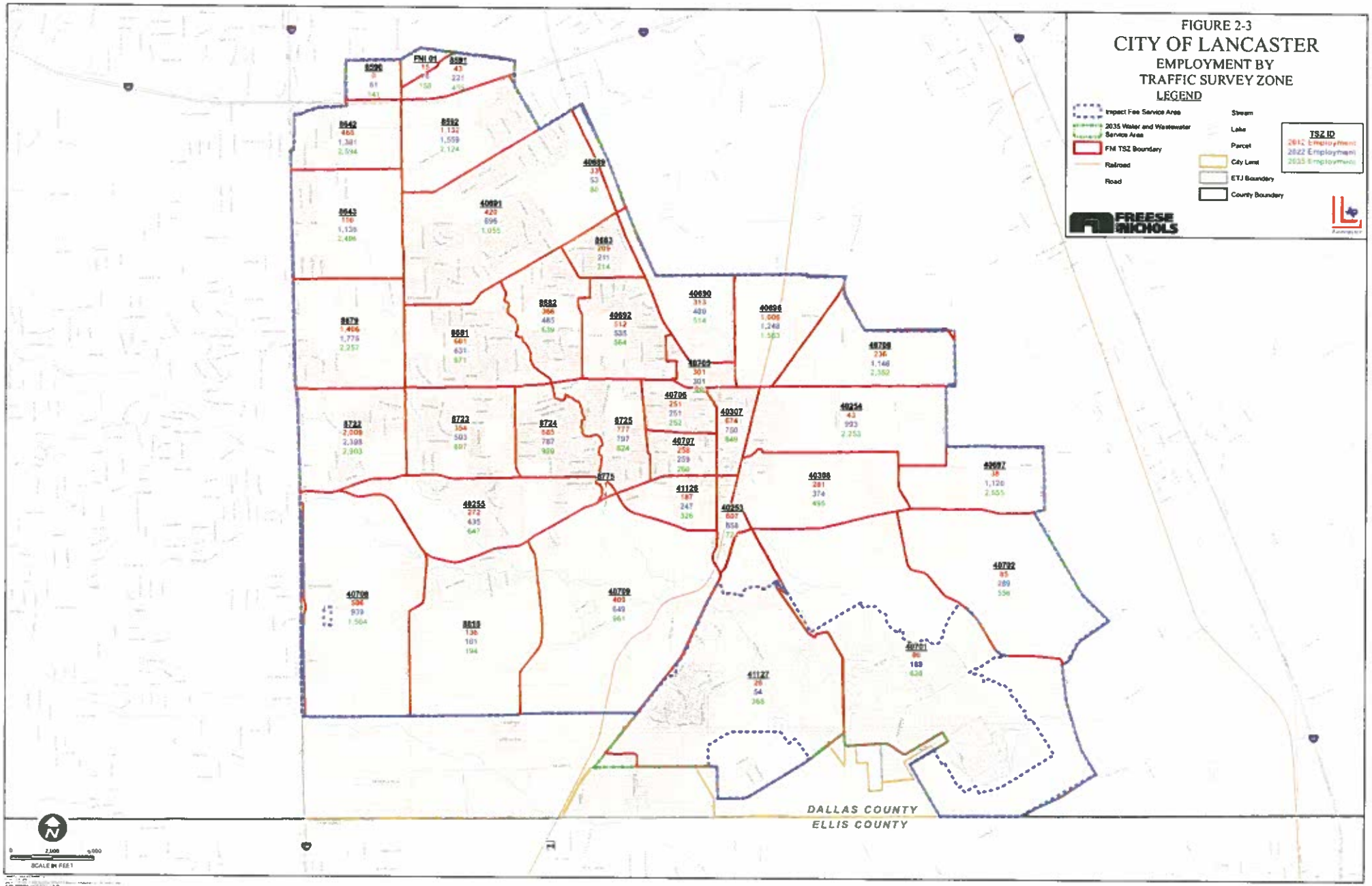


FIGURE 2-3
CITY OF LANCASTER
EMPLOYMENT BY
TRAFFIC SURVEY ZONE
LEGEND
Impact Fee Service Area
2035 Water and Wastewater Service Area
FM TSZ Boundary
Railroad
Road
Stream
Lake
Parcel
City Limit
ETJ Boundary
County Boundary
TSZ ID
2012 Employment
2022 Employment
2035 Employment
FREESE NICHOLS
DALLAS COUNTY
ELLIS COUNTY
SCALE IN FEET

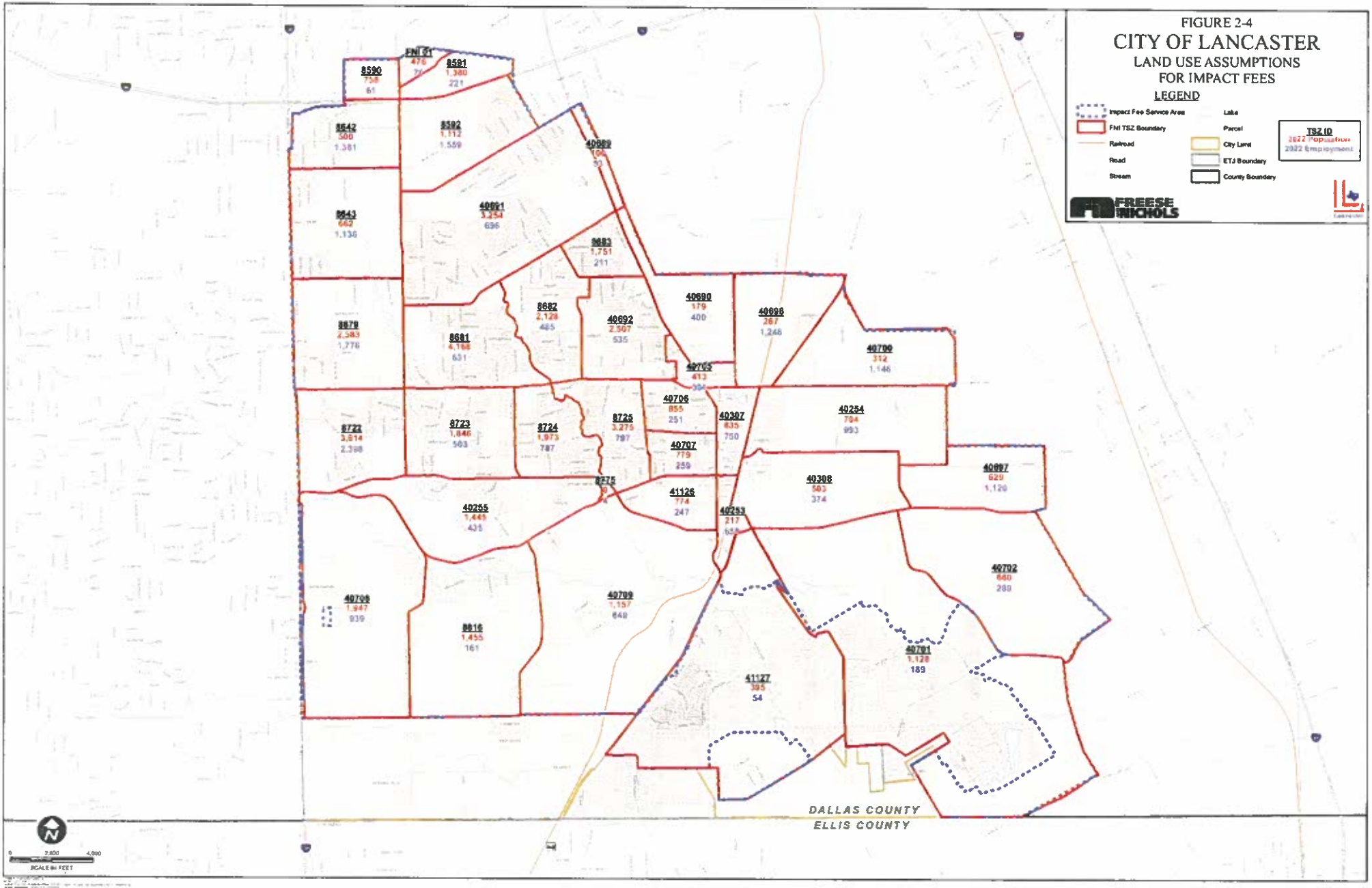


FIGURE 2-4
CITY OF LANCASTER
LAND USE ASSUMPTIONS
FOR IMPACT FEES
LEGEND
Impact Fee Service Area
FNI TSZ Boundary
Railroad
Road
Stream
Lake
Parcel
City Limit
ETJ Boundary
County Boundary
TSZ ID
2022 Population
2022 Employment
FREESE NICHOLS
FNI 21
8590
8591
8642
8592
40689
8643
40691
8683
8682
40690
40698
8679
8681
40692
40705
40700
40706
40307
40254
8722
8723
8724
8725
40707
8675
40308
40697
41126
40255
40253
40702
40709
40710
8816
40701
41127
DALLAS COUNTY
ELLIS COUNTY
SCALE IN FEET

3.0 CAPITAL IMPROVEMENTS PLAN

A capital improvements plan (CIP) was developed for the City of Lancaster to ensure high quality water and wastewater service that promotes residential and commercial development. The recommended improvements will provide the required capacity and reliability to meet projected water demands and wastewater flows through year 2035.

3.1 Existing Water and Wastewater Systems

The existing water distribution system currently consists of a network of lines ranging in size from 1.25-inches to 36-inches, two pump stations, three ground storage tanks, and three elevated storage tanks. The City receives water from DWU at two delivery points: the James R. Williams pump station and the Ames pump station. The City of Lancaster currently operates the distribution system with two pressure planes, the Upper Pressure Plane (UPP) and the Lower Pressure Plane (LPP). The UPP generally includes the western portion of the city while the LPP consists of the eastern portion. Water is supplied to the UPP through two pump stations located at the intersections of Ames Road and Houston School Road and Wintergreen Road and Bonnie View Road, respectively. During low demand periods, the City utilizes the Ames PS to serve the LPP through valves from the UPP. One elevated storage tank serves the UPP with an overflow of 792 feet, which sets the static hydraulic gradient. The pump station at Wintergreen Road and Bonnie View Road also serves the LPP which has a static hydraulic gradient of 705 feet established by two elevated storage tanks.

The existing wastewater system has 15 major basins, 4 lift stations, and a network of lines ranging from 4-inches to 24-inches. The majority of the existing wastewater collection system is located north of Ten Mile Creek, and west of Keller Branch. Because of existing topography, the wastewater collection system generally flows from north to south until reaching Ten Mile Creek. The Trinity River Authority (TRA) owns and operates two interceptors (36" and 54") that parallel Ten Mile Creek and terminate at the TRA Ten Mile Wastewater Treatment Plant (WWTP). A third interceptor parallels Red Oak Creek and terminates at TRA's Red Oak WWTP. The City currently has two small sewer lines connected to the Red Oak system.

Resolution No. 2012-07-54

Exhibit B

3.2 Water Model Update and Validation

The hydraulic model developed for the *2007 Water Master Plan*, performed by FNI, was updated to include recently constructed water lines, updated pressure plane boundaries, and changes in system operations. Recent pumping improvements at the Ames Pump Station were added to the model based on schematic drawings and pump test curves. In order to verify that the hydraulic model is an accurate representation of the actual distribution system, a model validation analysis was performed. Field pressure testing was conducted at eight locations throughout the distribution system in August 2011 to assist in model validation. SCADA readings for tank levels and pump status were collected on an hourly basis during this time and were used to create diurnal demand curves. In order to create the curves, a mass balance of the system demand was calculated using the sum of water pumped into the distribution system from the Ames and James R. Williams Pump Stations and adding or subtracting the demand or supply provided by the elevated storage tanks.

The model validation time was chosen by analyzing the diurnal demand curves and finding a peak hour on a week day with no irregularities; therefore, August 25th at 9:00 PM was chosen. A peak hour demand condition was selected because it represents the system at its most stressed hydraulic state and gives a more accurate measure of headloss in the system. Operational data was used to determine system inputs such as tank levels and pump status. Since the model results closely matched the field pressure testing data, it was assumed to be an accurate representation of field conditions. Field pressure testing data, the diurnal demand curves, and a map showing the validation results can be found in **Appendix A**.

3.3 Water and Wastewater Load Projections

Historical water demands from 2000 through July 2011 were provided to FNI by the City for the development of projected water usage rates and peaking factors. **Table 3-1** illustrates the average and maximum day water demands for these years. Design criteria for water demand projections were developed based on historical water usage and are shown in **Table 3-2**. The population and land use data and design criteria were used to develop the future water demands for 2012, 2022 and 2035 that are shown in **Table 3-3**.

Table 3-1 Historical Water Demands

Year	Population	Average Day Demand (mgd)	Average Day Overall Per Capita (gpcd)	Maximum Day Demand (mgd)	Maximum Day/Average Day Peaking Factor
2000	25,894	2.99	115	-	-
2001	26,350	3.63	138	-	-
2002	27,550	3.44	125	-	-
2003	28,700	3.55	124	-	-
2004	29,850	3.52	118	-	-
2005	31,700	4.28	135	6.87	1.61
2006	33,550	4.63	138	10.00	2.16
2007	33,213	3.65	110	6.80	1.86
2008	35,800	4.67	130	11.10	2.38
2009	36,200	4.35	120	7.25	1.67
2010	36,361	4.28	118	6.83	1.60
2011[1]	36,390	4.37	120	8.10	1.85
Average	-	**3.95**	**124**	**8.14**	**1.87**

[1] Average daily usage is estimated based on data through July.

Table 3-2 Water Design Criteria

Average Day Residential Per Capita Usage (gpcd)	Average Day Employment Per Capita Usage (gped)	Maximum Day to Average Day Peaking Factor	Peak Hour to Maximum Day Peaking Factor
100	75	2.0	1.8

Table 3-3 Projected Water Demands

Pressure Plane	Year	Average Day Demand (MGD)	Maximum Day Demand (MGD)	Peak Hour Demand (MGD)
Upper (792')	**2012**	3.38	6.76	12.17
	2022	4.60	9.20	16.56
	2035	5.77	11.66	20.99
Lower (705')	**2012**	1.40	2.80	5.04
	2022	2.00	4.00	7.20
	2035	3.50	6.91	12.43
Total	**2012**	**4.78**	**9.56**	**17.21**
	2022	**6.60**	**13.20**	**23.76**
	2035	**9.27**	**18.57**	**33.42**

Historical wastewater flows from 2003 through July 2011 were provided to FNI by the City for the development of projected wastewater flows and peaking factors. **Table 3-4** illustrates the average annual daily flows and peak flows for these years. Design criteria for wastewater flow projections were developed based on historical wastewater flows and are shown in **Table 3-5**. The population and land use data and design criteria were used to develop the future wastewater flows for 2012, 2022 and 2035 that are shown in **Table 3-6**.

Table 3-4 Historical Wastewater Flows

Year	Population	Average Annual Daily Flow (MGD)	Average Annual Daily Flow Per Capita (gpcd)
2003	28,700	3.86	135
2004	29,850	4.83	162
2005	31,700	4.00	126
2006	33,550	3.67	110
2007	33,213	5.03	151
2008	35,800	4.44	124
2009	36,200	4.87	134
2010	36,361	5.16	142
2011[1]	36,390	3.92	108
Average	-	**4.42**	**132**

[1] Average daily usage is estimated based on data through August.

Table 3-5 Wastewater Design Criteria

Average Day Residential Per Capita Usage (gpcd)	Average Day Employment Per Capita Usage (gped)	Peak Wet Weather to Average Daily Peaking Factor
115	70	6.0

Table 3-6 Projected Wastewater Flows

Year	Average Annual Daily Flow (MGD)	Peak Wet Weather Flow (MGD)
2012	5.17	31.05
2022	7.06	42.38
2035	10.09	60.53

3.4 TCEQ Requirements

The City is required to meet all rules and regulations for public water systems established by the Texas Commission on Environmental Quality (TCEQ) in Title 30 Texas Administrative Code (30 TAC), Chapter 290. These requirements are based on number of connections in each pressure plane. Existing connections were provided by City staff, and there are currently 11,782 connections in the Upper Pressure Plane and 2,000 connections in the Lower Pressure Plane.

A. Elevated Storage

The City is required to meet the TCEQ elevated storage capacity requirement of 100 gallons per connection in each pressure plane. The Lower Pressure Plane (705') currently has 2.0 MG of elevated storage which can serve a total of 20,000 connections. Since the existing number of connections in the Lower Pressure Plane is 2,000, the existing elevated storage can serve an additional 18,000 connections.

A letter to the City of Lancaster from TCEQ, dated January 18, 2011, indicated that the City has exceeded the allowable number of connections in the Upper (792') Pressure Plane based on existing elevated storage capacity. The existing elevated storage capacity of 1.0 MG in the Upper Pressure Plane can serve 10,000, and there are 11,782 connections. A 2.0 MG elevated storage tank in the Upper Pressure Plane is under design and will be constructed in 2013. After the second elevated storage tank is in service, the existing elevated storage tank at the Ames Pump Station will be abandoned based on age, condition, and system operations. The proposed 2.0 MG EST in the Upper Pressure Plane will be able to serve 20,000 connections or an additional 8,218 connections.

B. Total Storage

The City is required to meet the TCEQ total storage capacity requirement of 200 gallons per connection in each pressure plane. The City currently has 4.5 MG of ground storage in the Upper Pressure Plane and can serve a total of 22,500

connections or 10,718 connections in addition to current connections. There is currently 8 MG of storage in the Lower Pressure Plane and can serve a total of 40,000 connections or 38,000 connections in addition to current connections.

C. Pumping

The City is required to meet the TCEQ service pumping capacity requirements established in 30 TAC §290.45(b)(2)(F) and summarized in **Table 3-7.** Table 3-8 summarizes the existing pumping facilities. Since the City currently has 1,000 gallons/connection of elevated storage in the Lower Pressure Plane, 0.6 gpm/connection or 1,200 gpm of pumping capacity is required. The City exceeds the required pumping capacity with 3,700 gpm of pumping capacity to the Lower Pressure Plane. Lancaster can add up to 8,000 connections in the Lower Pressure Plane and maintain 200 gallons of elevated storage per connection.

Table 3-7 Service Pumping Capacity Requirements [1]

Elevated Storage Capacity	Service Pumping Capacity Requirement
> 200 gallons per connection	Two service pumps with a minimum combined capacity of 0.6 gpm per connection at each pressure plane
< 200 gallons per connection	The lesser of (a) or (b):
	(a) Total pumping capacity of 2.0 gpm per connection
	(b) Total pumping capacity of at least 1,000 gpm and the ability to meet peak hourly demands with the largest pump out of service

[1] According to 30 TAC §290.45(b)(2)(F)

Table 3-8 Pumping Facilities Summary

Pump Station Name	Pump No.	Rated Capacity (gpm)	Rated Capacity (MGD)	Rated Head (feet)	Pressure Plane
Ames Rd. Pump Station	1	1,250	1.80	168	Upper
	2	1,250	1.80	168	Upper
	3	2,300	3.31	168	Upper
	4	2,600	3.74	168	Upper
	5	5,500	7.92	185	Upper
	6	5,500	7.92	185	Upper
James R. Williams Pump Station	1	500	0.72	125	Lower
	2	700	1.01	125	Lower
	3	1,250	1.80	125	Lower
	5	1,250	1.80	125	Lower
	11	700	1.01	175	Upper
Total	**Upper**	**19,100**	**27.50**	-	-
	Lower	**3,700**	**5.33**	-	-

The City currently has less than 200 gallons per connections of elevated storage capacity in the Upper Pressure Plane, which requires the lesser of a service pumping capacity of 2.0 gpm per connection or the ability to meet peak hourly demands with the largest pump out of service, also known as the firm pumping capacity. The estimated peak hourly demand in 2012 for the Upper Pressure Plane is 12.2 MGD. Since this is significantly less than 2 gpm/connection of pumping capacity, the ability to meet peak hourly demands with the firm pumping capacity will be used as the pumping requirements for the Upper Pressure Plane. The firm pumping capacity to the Upper Pressure Plane is 19.6 MGD, so the City meets this pumping requirement. The peak hourly demand for the Upper Pressure Plane in 2035 is 21.0 MGD. The proposed firm pumping capacity including the pump at in 2035 is 25.6 MGD based on recommended expansions at Ames Pump Station and James R. Williams Pump Station to the Upper Pressure Plane. **Table 3-9** presents a summary of the TCEQ minimum requirements for the existing system.

Table 3-9 TCEQ Checklist

		Requirement	Actual	Meets TCEQ?
Upper Pressure Plane (792')	Elevated Storage	100 gallons per connection	85 gallons per connection	**No**
	Total Storage	200 gallons per connection	382 gallons per connection	Yes
	Pump Station	Peak Hour Demand (12.2 MGD)	19.6 MGD Firm Pumping Capacity	Yes
Lower Pressure Plane (702')	Elevated Storage	100 gallons per connection	1,000 gallons per connection	Yes
	Total Storage	200 gallons per connection	4,000 gallons per connection	Yes
	Pump Station	0.6 gpm per connection	1.85 gallons per connection	Yes

3.5 FNI Design Criteria for CIP Sizing

Freese and Nichols, Inc. worked with the City of Lancaster to establish design criteria for sizing future water and wastewater facilities. Criteria were developed for sizing water transmission lines, elevated storage tanks, ground storage tanks and pump stations for the water system and for sizing sewer trunk lines and lift stations for the wastewater system. These criteria are typically more stringent than TCEQ requirements and take into consideration many additional factors including operational flexibility, fire protection, and energy efficiency.

A. Water System Design Criteria

Hydraulic modeling analysis was performed for the existing and future systems for four operating conditions: average day, maximum day, peak hour, and maximum day with fire flow. The TCEQ required minimum pressure within a distribution system is 35 psi under normal operating conditions. Headloss and velocity in the pipelines are additional criteria used to analyze the water system. Typically, headlosses in water lines should not exceed 4 feet/1000 feet, and velocities should not exceed 7 feet/second.

Freese and Nichols, Inc. developed criteria for sizing of storage and pumping capacity improvements for the City. The design criteria recommended to size ground storage tank capacity is to provide adequate storage volume to meet 12 hours of maximum day demand. This criterion is standard industry practice and allows the City to endure a supply outage for at least 12 hours. **Figures 3-1 and 3-2** summarize the recommended ground storage capacity and associated improvements based on the design criteria for the Upper and Lower Pressure Planes, respectively.

Figure 3-1 Recommended Upper Pressure Plane (792') Ground Storage Capacity

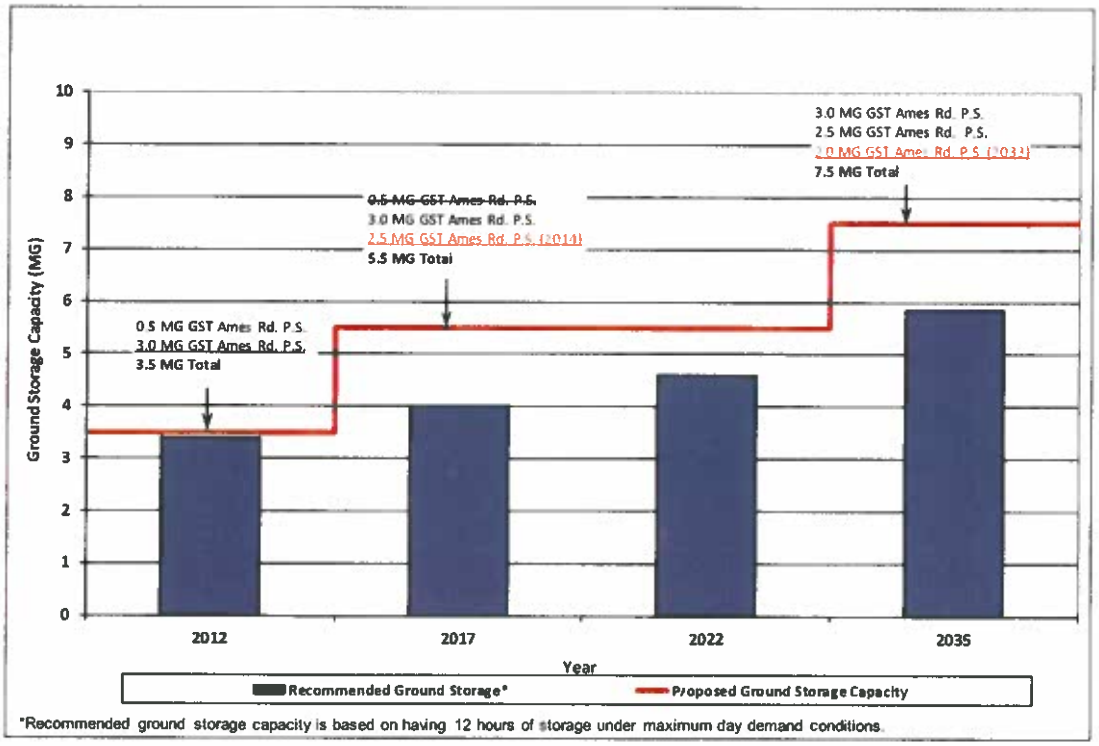
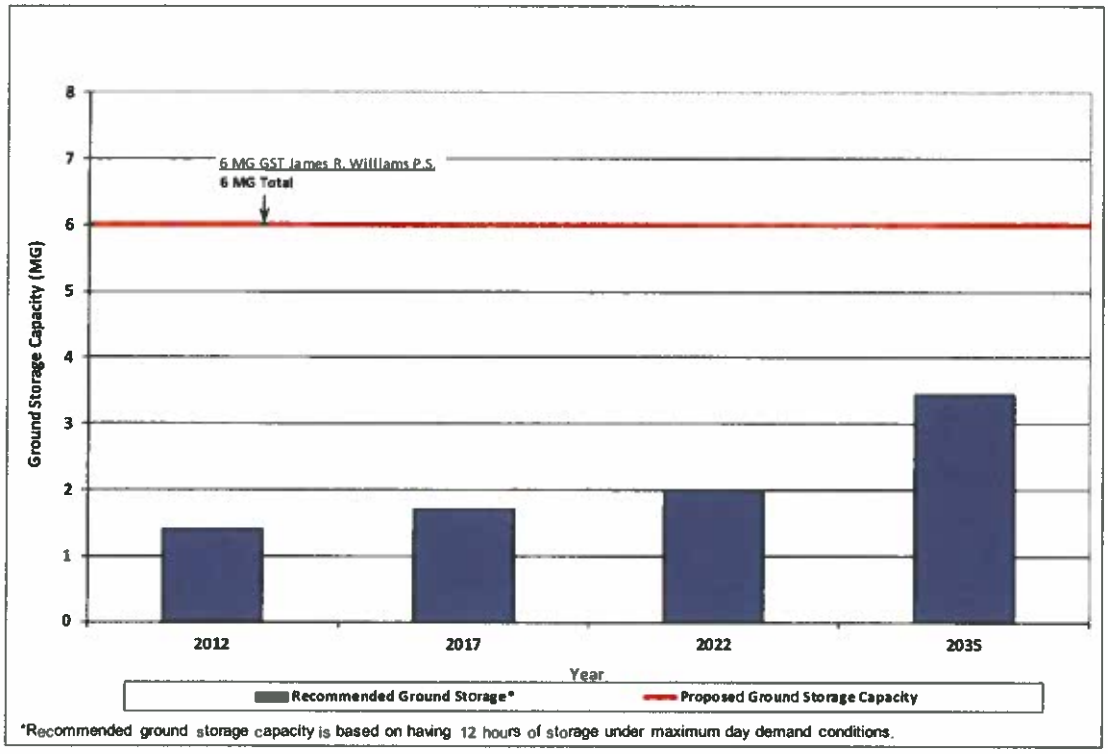
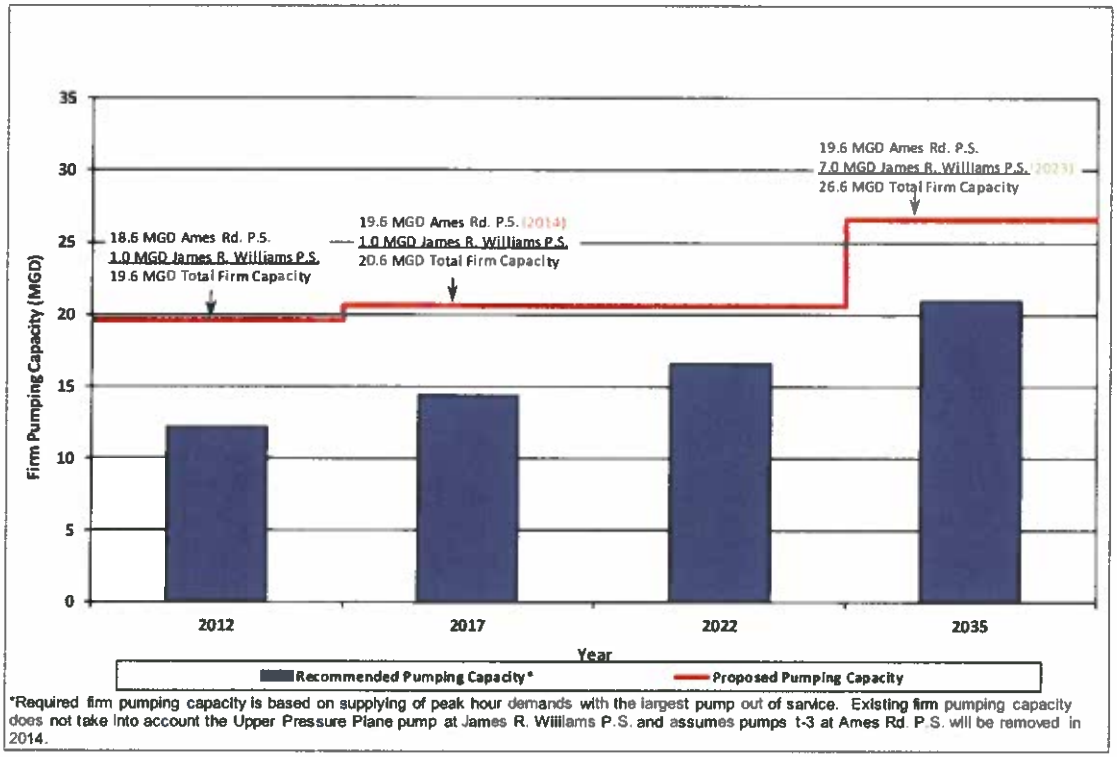


Figure 3-2 Recommended Lower Pressure Plane (705') Ground Storage Capacity



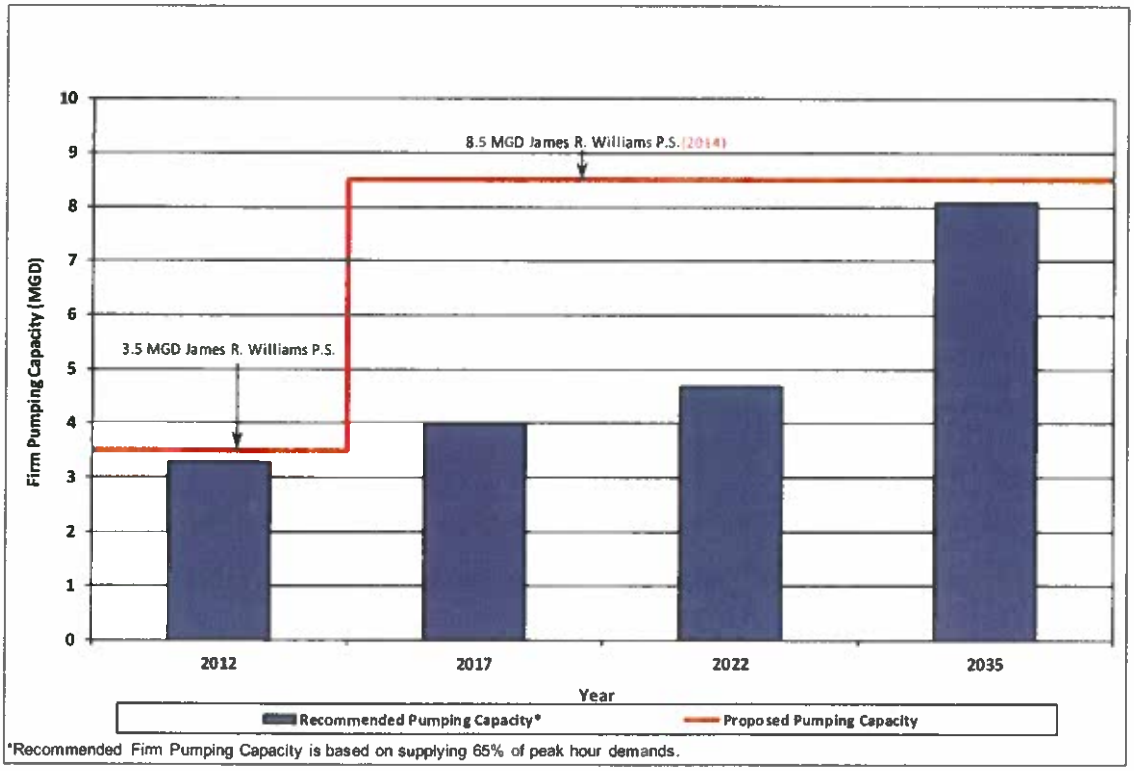
FNI design criteria recommended for pump station capacity is providing a firm pumping capacity to meet 65% of the peak hour demand. The firm pumping capacity is defined as the total available pumping capacity with the largest pump out of service to each pressure plane. However, based on the amount of elevated storage in the UPP, TCEQ requires the City to provide a firm pumping capacity to meet 100% of peak hour demands in the UPP. **Figures 3-3 and 3-4** display the recommended firm pumping capacity to the Upper and Lower Pressure Planes, respectively. The design criteria recommended for elevated storage capacity is based on the greater of twice the peaking volume or the peaking volume plus fire volume of 3,500 gpm for 3 hour duration. The peaking volume is defined as 35% of peak hour demands for a 3 hour duration. **Table 3-10** displays the recommended elevated storage capacity by pressure plane. **Figures 3-5** and **3-6** display the recommended elevated storage capacity and related improvements based on the design criteria.

Figure 3-3 Recommended Upper Pressure Plane (792') Firm Pumping Capacity



*Required firm pumping capacity is based on supplying of peak hour demands with the largest pump out of service. Existing firm pumping capacity does not take into account the Upper Pressure Plane pump at James R. Williams P.S. and assumes pumps t-3 at Ames Rd. P.S. will be removed in 2014.

Figure 3-4 Recommended Lower Pressure Plane (705') Firm Pumping Capacity



*Recommended Firm Pumping Capacity is based on supplying 65% of peak hour demands.

Table 3-10 Recommended Elevated Storage Capacity

Pressure Plane	Year	Peak Demand[1] (mgd)	Peak Volume[2] (MG)	Fire Volume[3] (MG)	Total[4]
Upper (792')	**2012**	4.26	0.53	0.63	**1.16**
	2022	5.80	0.72	0.63	**1.45**
	2035	7.35	0.92	0.63	**1.84**
Lower (705')	**2012**	1.76	0.22	0.63	**0.80**
	2022	2.52	0.32	0.63	**0.95**
	2035	4.35	0.54	0.63	**1.17**

[1] Equals 35% of the peak hour demand

[2] Required volume to supply the peak demand for a duration of 3 hours

[3] Assuming highest fire flow required is 3,500 gpm for 3 hour duration

[4] The greater of twice the peaking volume or the peaking volume plus fire volume

Figure 3-5 Recommended Upper Pressure Plane (792') Elevated Storage Capacity

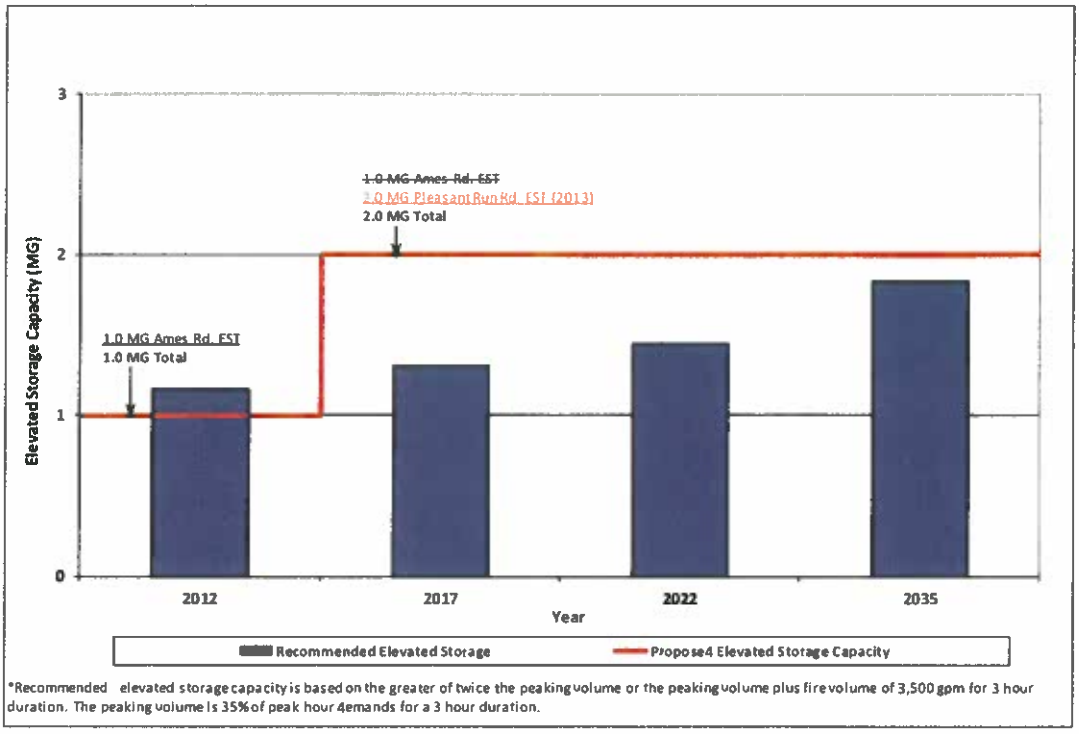
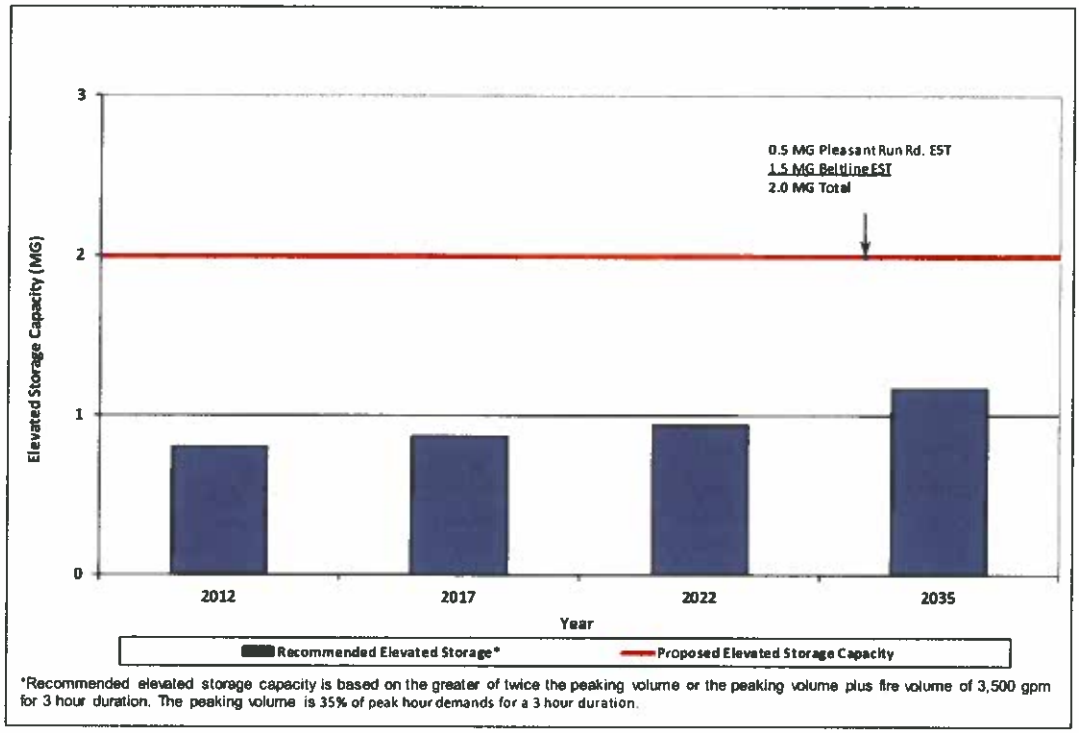


Figure 3-6 Recommended Lower Pressure Plane (705') Elevated Storage Capacity



B. Wastewater Design Criteria

Freese and Nichols established design criteria for future wastewater facilities. Criteria were developed for sizing gravity lines and lift station pumping capacities for the wastewater system.

Gravity lines were recommended for replacement when the ratio of actual flow depth to the diameter of the pipe (d/D) was 0.85 or greater. Slopes for new lines are based on the minimum slope requirement set forth by the TCEQ. Proposed lines are sized for replacement of the existing line.

The design criteria for lift station pumping is to provide firm pumping capacity to meet 125% of the peak wet weather design flows. TCEQ requires that the lift station be capable of pumping the expected peak flow; however, it is recommended to design for 125% of the peak wet weather design flow. The firm pumping capacity is defined by the TCEQ on page 129 of Chapter 217/317 as the total available lift station pumping capacity with the largest pump out of service. **Figure 3-7** through

Figure 3-9 display the recommend lift station firm capacity by planning year. A graph for the IH 635 lift station is not included because it is recommended to be decommissioned.

Figure 3-7 Recommended Wheatland Lift Station Capacity

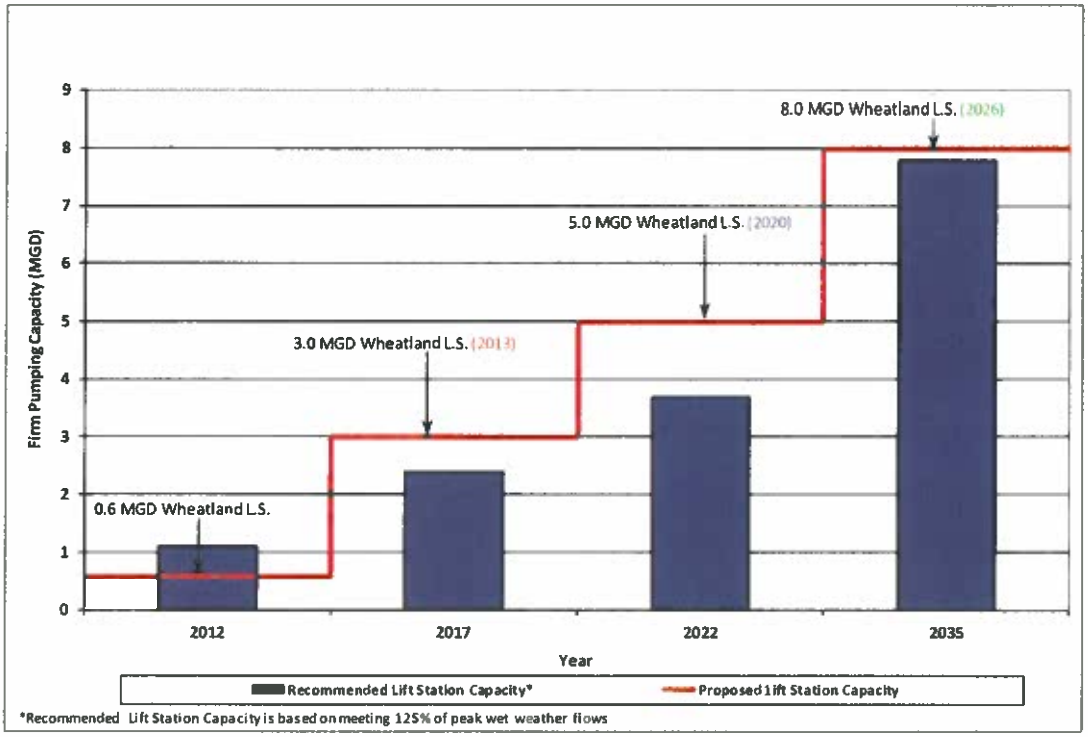


Figure 3-8 Recommended Lift Station #1 Capacity

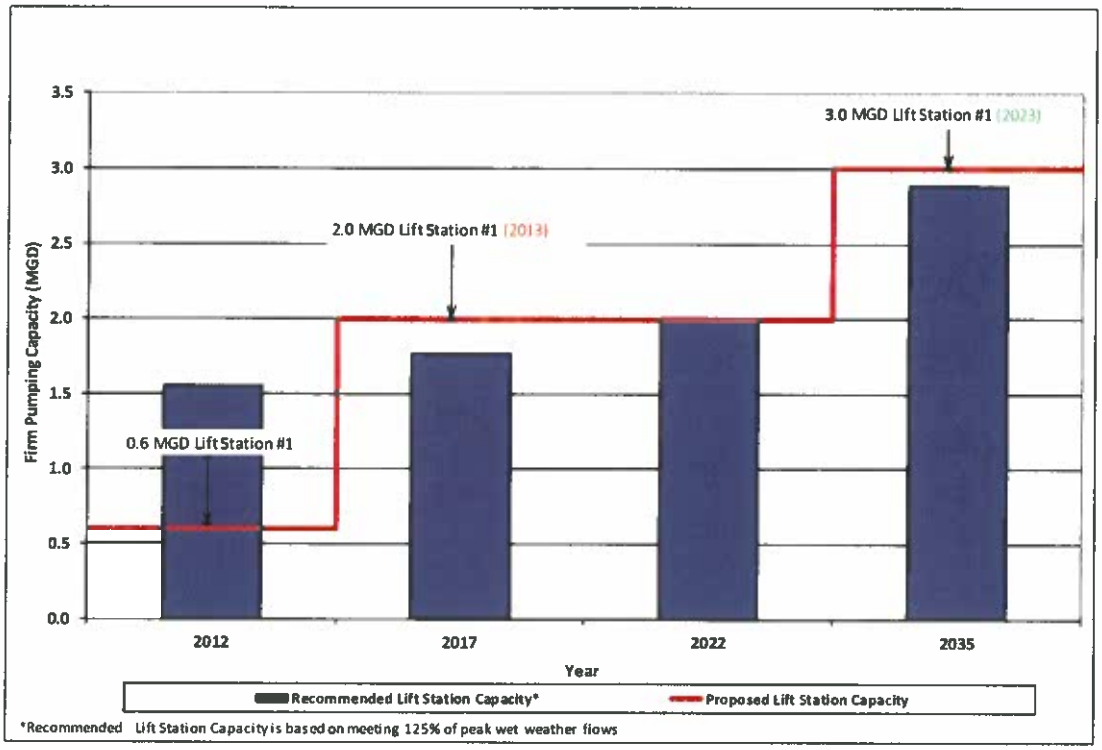
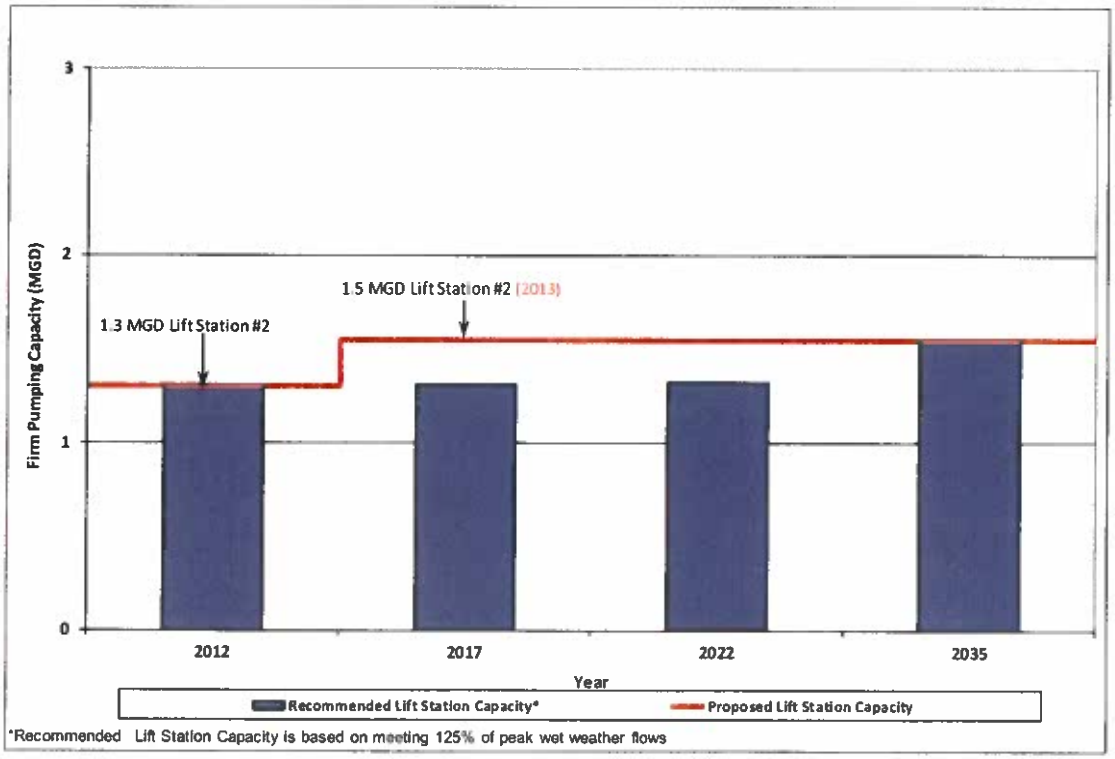


Figure 3-9 Recommended Lift Station #2 Capacity



3.6 Model Results

A. Water Model Results

Using the calibrated hydraulic model, system configurations were evaluated to determine the most appropriate layout for meeting projected water demands. Hydraulic analyses were performed for years 2012, 2022, and 2035. In general, analyses were performed for three basic demand conditions:

- Average day, which determines the ability of the system to replenish storage facilities during average day demands.
- Maximum day, which determines the ability of the system to maintain full storage facilities during maximum day demands.
- Peak hour, which determines the ability of the system to maintain minimum residual pressure during periods of peak demand.

The model was also used to analyze the available fire flow under existing system maximum day demand conditions. A map of the available fire flow is presented in **Appendix B**. Improvements were developed by assessing the transmission and reliability needs of the system as well as future growth considerations.

B. Wastewater Model Results

The wastewater hydraulic model was updated to include recently completed projects, and lines were assumed to be at TCEQ minimum slopes where invert data was not available. Ten-foot contours were used to assign rim elevations in the model. Wastewater system analysis was performed for peak wet weather flow for 2012, 2017, 2022 and 2035. The 2012 peak flow model run indicated that the system had some deficient areas and overflows in areas that city staff had indicated as historical problem areas. The modeling results were used to size proposed improvements and address deficiencies in the existing system.

3.7 Water and Wastewater System Improvements

Proposed water and wastewater system projects to serve the system through 2035 were developed as part of this project based on load projections and design criteria. The proposed

water and wastewater lines were sized for replacement of the existing lines. The proposed water system improvements recommended to serve the City through 2035 are shown on **Figure 3-10**. Proposed wastewater system improvements to serve the City through 2035 are shown on **Figure 3-11**. Detailed cost estimates for the proposed water and wastewater system projects are included in **Appendix C** and **Appendix D**, respectively.

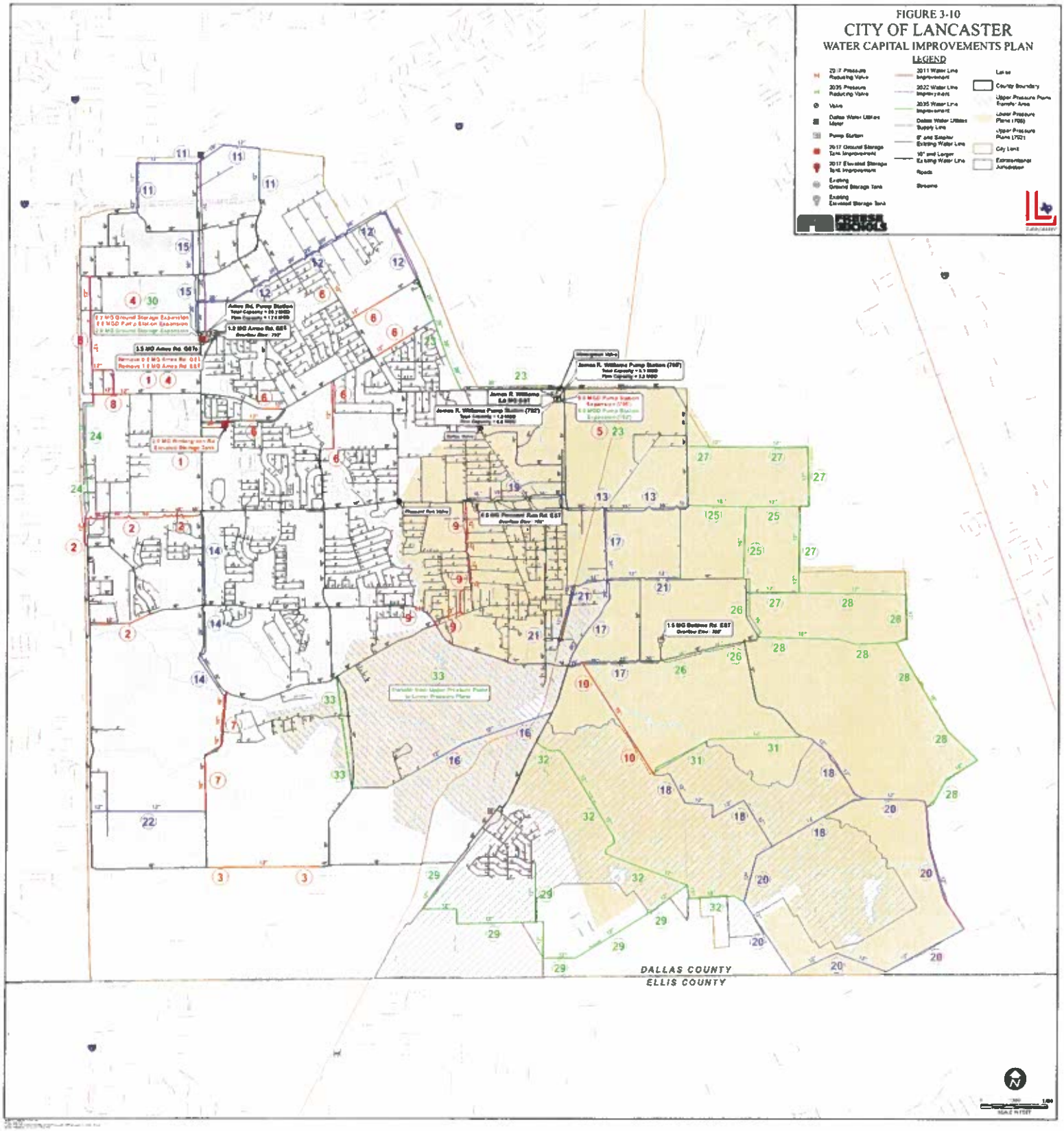
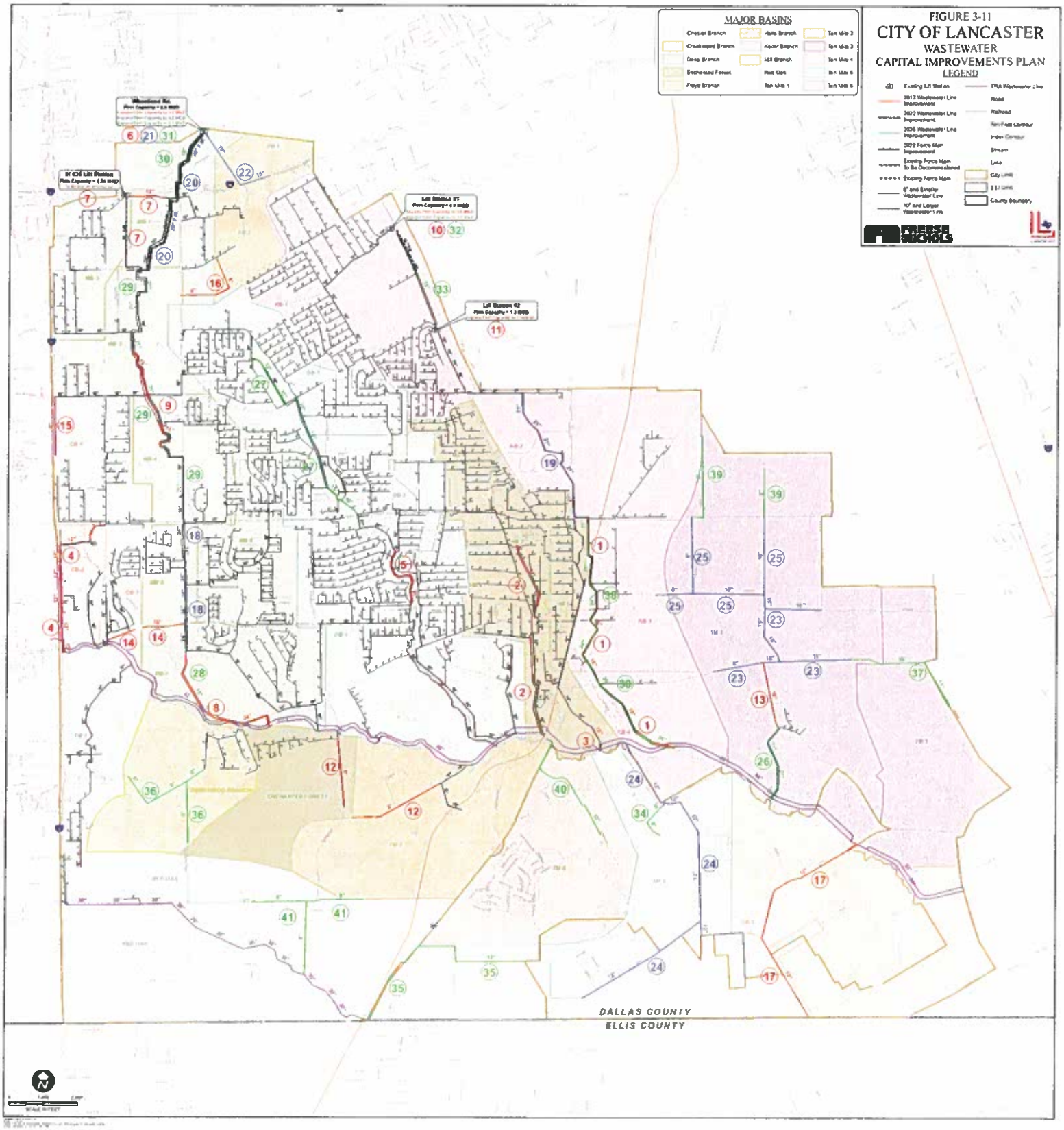


FIGURE 3-10
CITY OF LANCASTER
WATER CAPITAL IMPROVEMENTS PLAN
LEGEND
2017 Pressure Reducing Valve
2035 Pressure Reducing Valve
Valve
Dallas Water Utilities Meter
Pump Station
2017 Ground Storage Tank Improvement
2017 Elevated Storage Tank Improvement
Existing Ground Storage Tank
Existing Elevated Storage Tank
2011 Water Line Improvement
2022 Water Line Improvement
2035 Water Line Improvement
Dallas Water Utilities Supply Line
8" and Smaller Existing Water Line
10" and Larger Existing Water Line
Roads
Streams
Lake
County Boundary
Upper Pressure Plane Transfer Area
Lower Pressure Plane (705ft)
Upper Pressure Plane (792ft)
City Limit
Extraterritorial Jurisdiction
Arthur Rd. Pump Station
Total Capacity = 55.2 MGD
Firm Capacity = 17.6 MGD
1.0 MG Arthur Rd. GST
Overflow Elev. 750'
1.5 MG Arthur Rd. GST
Remove 0.5 MG Arthur Rd. GST
Remove 1.0 MG Arthur Rd. GST
James R. Williams Pump Station (705')
Total Capacity = 5.3 MGD
Firm Capacity = 5.3 MGD
James R. Williams 5.0 MG GST
James R. Williams Pump Station (792')
Total Capacity = 11.2 MGD
Firm Capacity = 6.6 MGD
5.0 MG Pleasant Run Rd. GST
Overflow Elev. 705'
1.5 MG Beltline Rd. GST
Overflow Elev. 705'
Transfer from Upper Pressure Plane to Lower Pressure Plane
DALLAS COUNTY
ELLIS COUNTY


MAJOR BASINS
Chesser Branch
Crosswood Branch
Deep Branch
Enchanted Forest
Floyd Branch
Kelly Branch
Kesler Branch
Mill Branch
Red Oak
Ten Mile 1
Ten Mile 2
Ten Mile 3
Ten Mile 4
Ten Mile 5
Ten Mile 6
FIGURE 3-11
CITY OF LANCASTER
WASTEWATER
CAPITAL IMPROVEMENTS PLAN
LEGEND
Existing Lift Station
2012 Wastewater Line Improvement
3022 Wastewater Line Improvement
2035 Wastewater Line Improvement
2022 Force Main Improvement
Existing Force Main To Be Decommissioned
Existing Force Main
8" and Smaller Wastewater Line
10" and Larger Wastewater Line
18in Wastewater Line
Roads
Railroad
Ten Foot Contour
Index Contour
Stream
Lake
City Limit
ETJ Limit
County Boundary
FREESE NICHOLS
Lift Station #1
Lift Station #2
DALLAS COUNTY
ELLIS COUNTY

Appendix A

Water Model Validation Data

Figure A-1
Pressure Recorder Summary

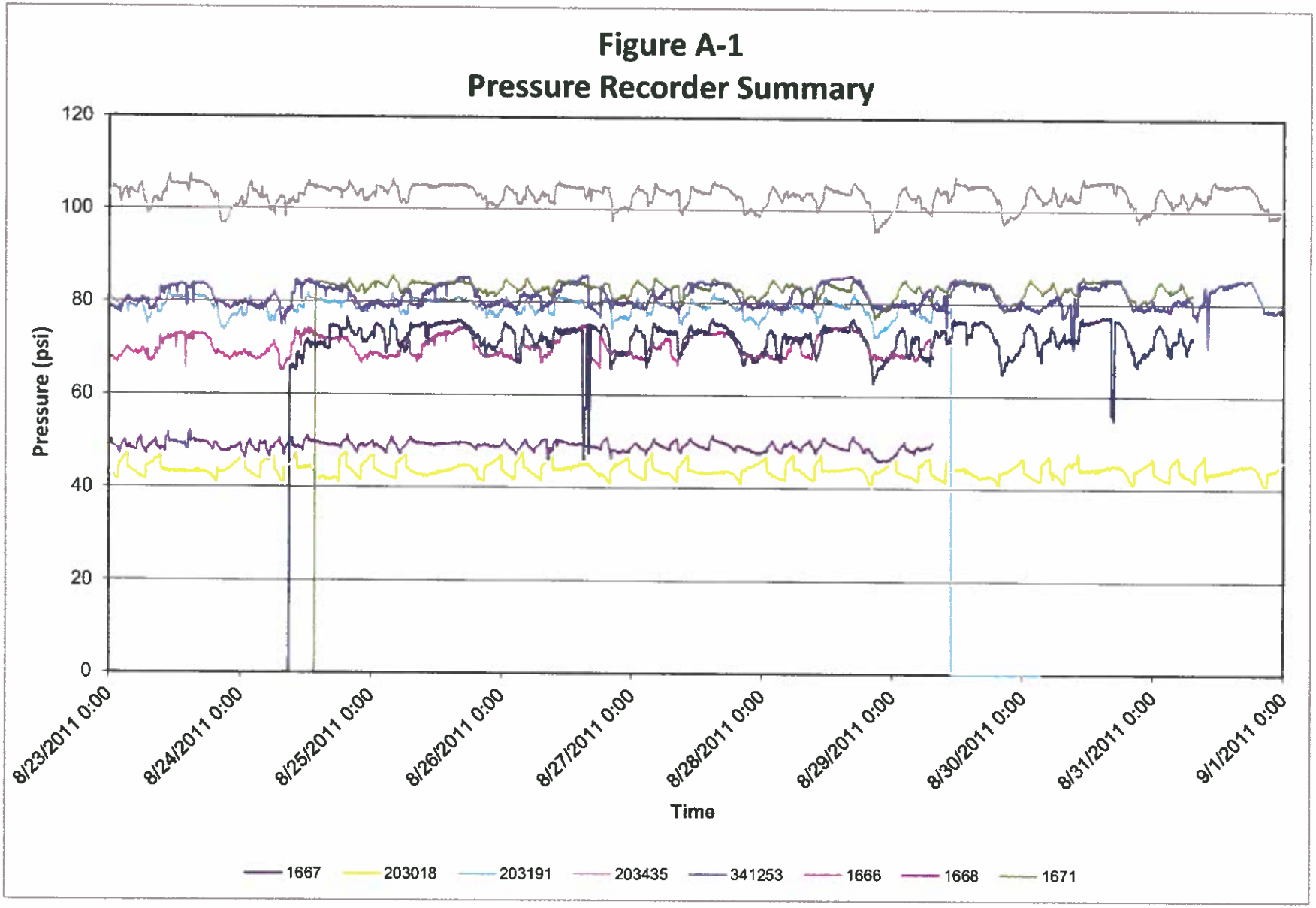
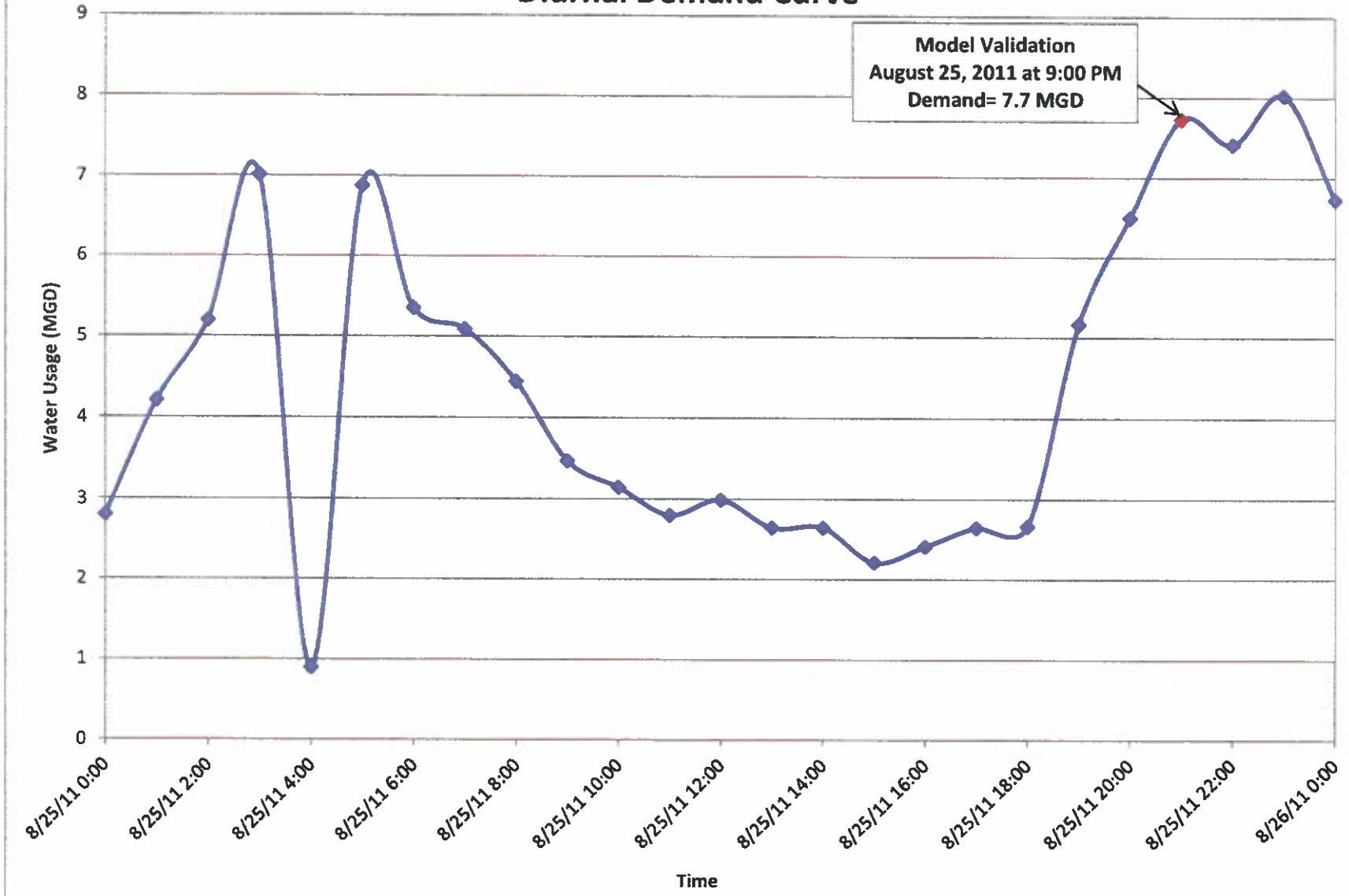


Figure A-2
Diurnal Demand Curve



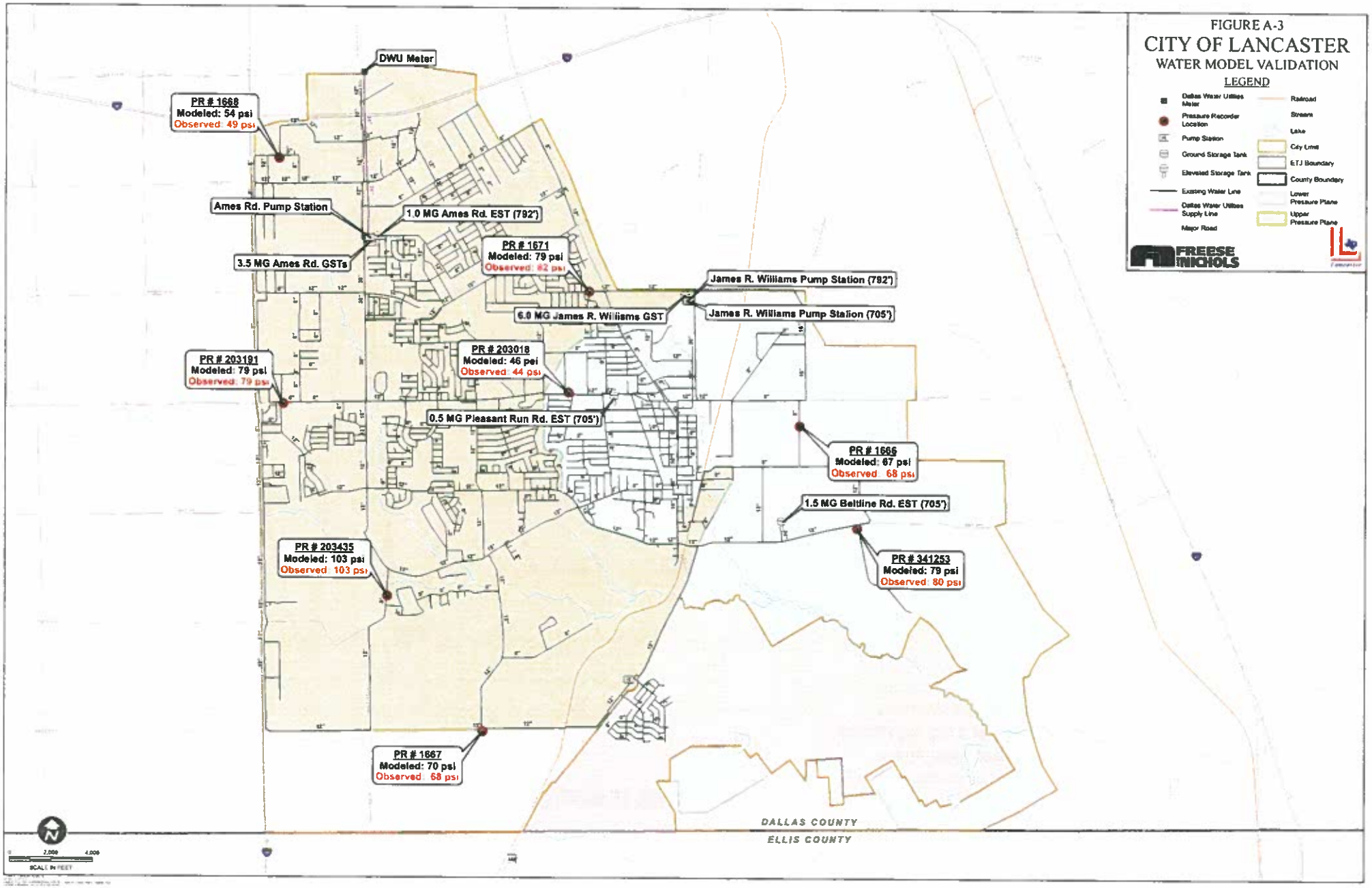


FIGURE A-3
CITY OF LANCASTER
WATER MODEL VALIDATION
LEGEND
Dallas Water Utilities Meter
Pressure Recorder Location
Pump Station
Ground Storage Tank
Elevated Storage Tank
Existing Water Line
Dallas Water Utilities Supply Line
Major Road
Railroad
Streams
Lake
City Limit
ETJ Boundary
County Boundary
Lower Pressure Plane
Upper Pressure Plane
FREESE NICHOLS
DWU Meter
PR # 1668
Modeled: 54 psi
Observed: 49 psi
Ames Rd. Pump Station
1.0 MG Ames Rd. EST (792')
3.5 MG Ames Rd. GSTs
PR # 1671
Modeled: 79 psi
Observed: 82 psi
James R. Williams Pump Station (792')
James R. Williams Pump Station (705')
6.0 MG James R. Williams GST
PR # 203191
Modeled: 79 psi
Observed: 79 psi
PR # 203018
Modeled: 46 psi
Observed: 44 psi
0.5 MG Pleasant Run Rd. EST (705')
PR # 1666
Modeled: 67 psi
Observed: 68 psi
1.5 MG Beltline Rd. EST (705')
PR # 203435
Modeled: 103 psi
Observed: 103 psi
PR # 341253
Modeled: 79 psi
Observed: 80 psi
PR # 1667
Modeled: 70 psi
Observed: 68 psi
DALLAS COUNTY
ELLIS COUNTY
SCALE IN FEET

Appendix B

Available Fire Flow Map

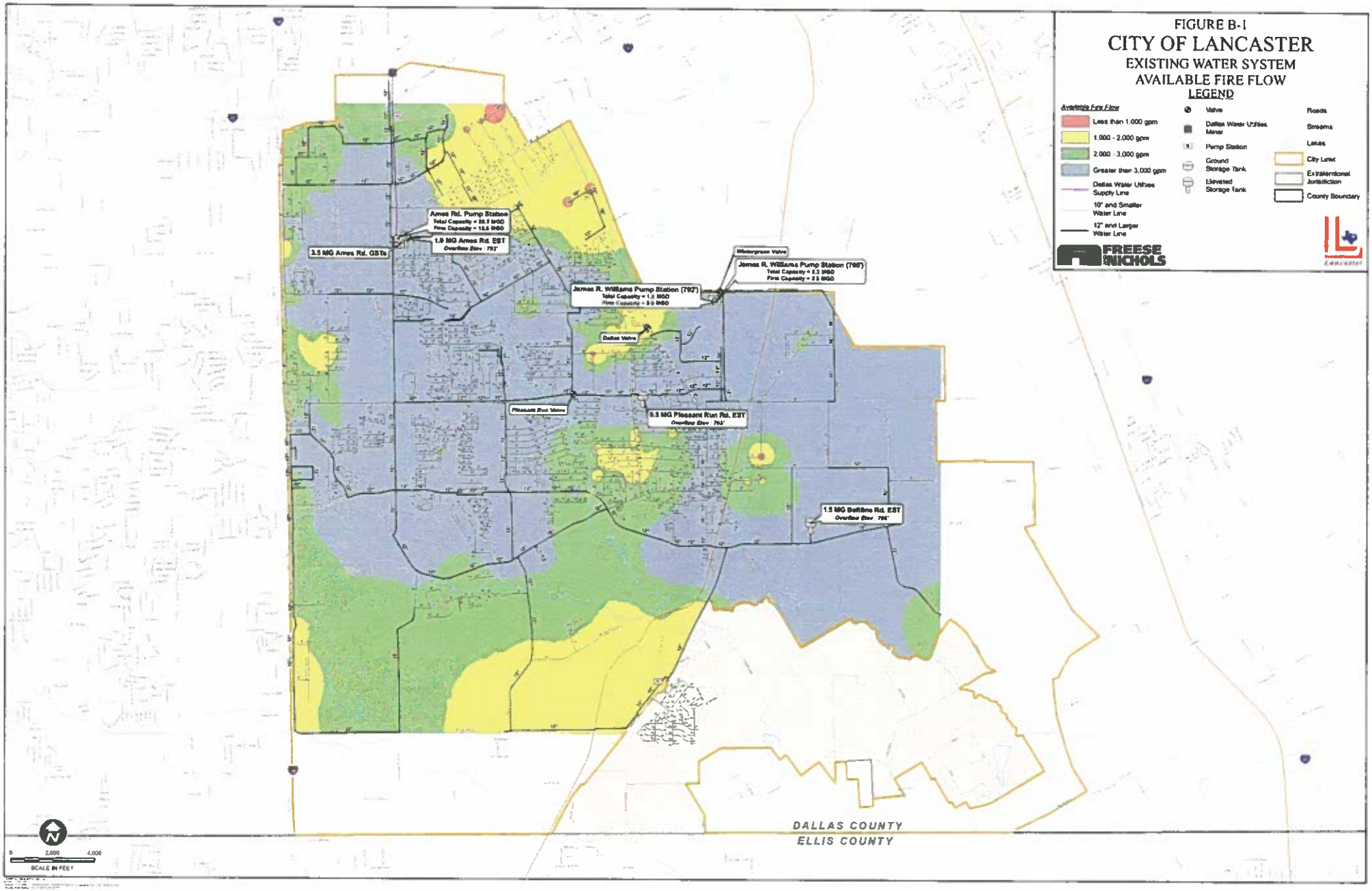


FIGURE B-1
CITY OF LANCASTER
EXISTING WATER SYSTEM
AVAILABLE FIRE FLOW
LEGEND
Available Fire Flow
Less than 1,000 gpm
1,000 - 2,000 gpm
2,000 - 3,000 gpm
Greater than 3,000 gpm
Dallas Water Utilities Supply Line
10" and Smaller Water Line
12" and Larger Water Line
Valve
Dallas Water Utilities Meter
Pump Station
Ground Storage Tank
Elevated Storage Tank
Roads
Streams
Lakes
City Limit
Extraterritorial Jurisdiction
County Boundary
FREESE NICHOLS
Lancaster
Ames Rd. Pump Station
Total Capacity = 26.5 MGD
Fire Capacity = 18.5 MGD
1.0 MG Ames Rd. EST
Overflow Elev. 793'
2.5 MG Ames Rd. GSTs
Watergrass Valve
James R. Williams Pump Station (793')
Total Capacity = 8.3 MGD
Fire Capacity = 8.3 MGD
James R. Williams Pump Station (792')
Dallas Valve
Pleasant Run Valve
3.5 MG Pleasant Run Rd. EST
Overflow Elev. 793'
1.5 MG Bellline Rd. EST
Overflow Elev. 786'
DALLAS COUNTY
ELLIS COUNTY
0
2,000
4,000
SCALE IN FEET

Appendix C

Water System Project Cost Estimates

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 1

Project Description

Abandon 1.0 MG Ames EST and construct new 2.0 MG EST. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	Remove EST	1	EA	$50,000	50,000
2	2.0 MG Elevated Storage Tank*	1	EA	$4,100,000	4,100,000
3	24" Line*	1	EA	$180,000	180,000

*Preliminary cost estimates from the EST design team, but the project is still in the site selection process.

SUBTOTAL:			$4,330,000
CONTINGENCY	20%		$866,000
SUBTOTAL:			$5,196,000
ENG/SURVEY	Actual		$349,500
SUBTOTAL:			$5,545,500

PROJECT TOTAL $5,545,500

Construction Project Number 2

Project Description

Connect small diameter lines in the Upper Pressure Plane near the Pleasant Run Elevated Storage Tank. This project will address existing system deficiencies and improve system operation. This project also allows for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	16" Pipe	6,174	LF	$96	592,740
2	12" Pipe	5,015	LF	$72	361,090
3	Pavement Repair	400	LF	$100	40,000

SUBTOTAL:			$993,830
CONTINGENCY	20%		$198,770
SUBTOTAL:			$1,192,600
ENG/SURVEY	15%		$178,890
SUBTOTAL:			$1,371,490

PROJECT TOTAL $1,371,490

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 3

Project Description

12-inch waterline a long Bear Creek. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	5,858	LF	$72	421,780
2	Pavement Repair	200	LF	$100	20,000

SUBTOTAL:			$441,780
CONTINGENCY	20%		$88,360
SUBTOTAL:			$530,140
ENG/SURVEY	15%		$79,530
SUBTOTAL:			$609,670

PROJECT TOTAL $609,670

Construction Project Number 4

Project Description

Ames Pump Station 2.5 MG Ground Storage Tank, 7.9 MGD Pump Station Expansion, Remove 0.5 MG Ames Rd. GST and Pumps 1-3. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	2.5 MG Ground Storage Tank	1	EA	$1,875,000	1,875,000
2	7.9 MGD Pump Station Expansion	1	EA	$600,000	600,000
3	Remove GST	1	EA	$50,000	50,000
4	Yard Piping	1	EA	$200,000	200,000

SUBTOTAL:			$2,725,000
CONTINGENCY	20%		$545,000
SUBTOTAL:			$3,270,000
ENG/SURVEY	15%		$490,500
SUBTOTAL:			$3,760,500

PROJECT TOTAL $3,760,500

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 5

Project Description

James R. Williams 5.0 MGD Pump Station Expansion to serve the Lower Pressure Plane. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	5.0 MGD Pump Station Expansion	1	EA	$600,000	600,000

SUBTOTAL:		$600,000
CONTINGENCY	20%	$120,000
SUBTOTAL:		$720,000
ENG/SURVEY	15%	$108,000
SUBTOTAL:		$828,000

PROJECT TOTAL $828,000

Construction Project Number 6

Project Description

Connect small diameter lines in the Upper Pressure Plane. This project will address existing system deficienices and improve system operations. This project also allows for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	12,230	LF	$72	880,580
2	20" Boring and Casing	400	LF	$300	120,000
3	Pavement Repair	800	LF	$100	80,000

SUBTOTAL:		$1,080,580
CONTINGENCY	20%	$216,120
SUBTOTAL:		$1,296,700
ENG/SURVEY	15%	$194,510
SUBTOTAL:		$1,491,210

PROJECT TOTAL $1,491,210

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 7

Project Description

16-inch waterline along Houston School Road. This project will adress an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	16" Pipe	5,865	LF	$96	563,040
2	30" Boring and Casing	200	LF	$465	93,000
3	Pavement Repair	200	LF	$100	20,000
	SUBTOTAL:				$676,040
	CONTINGENCY			20%	$135,210
	SUBTOTAL:				$811,250
	ENG/SURVEY			15%	$121,690
	SUBTOTAL:				$932,940
	PROJECT TOTAL				$932,940

Construction Project Number 8

Project Description

12-inch waterline along Wintergreen Road and between Wintergreen and Danieldale Road. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	4,304	LF	$72	309,920
2	20" Boring and Casing	200	LF	$300	60,000
3	Pavement Repair	300	LF	$100	30,000
	SUBTOTAL:				$399,920
	CONTINGENCY			20%	$79,990
	SUBTOTAL:				$479,910
	ENG/SURVEY			15%	$71,990
	SUBTOTAL:				$551,900
	PROJECT TOTAL				$551,900

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 9

Project Description

12-inch waterline south of Pleasant Run EST and new transfer valve. This project will improve system operations and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	7,602	LF	$72	547,310
2	Pavement Repair	1,100	LF	$100	110,000
3	Pressure Reducing Valve	1	EA	$80,000	80,000

SUBTOTAL:		$737,310
CONTINGENCY	20%	$147,470
SUBTOTAL:		$884,780
ENG/SURVEY	15%	$132,720
SUBTOTAL:		$1,017,500

PROJECT TOTAL $1,017,500

Construction Project Number 10

Project Description

16-inch waterline along Nokomis Road. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	16" Pipe	6,771	LF	$96	650,040
2	30" Boring and Casing	200	LF	$465	93,000
3	Pavement Repair	200	LF	$100	20,000

SUBTOTAL:		$763,040
CONTINGENCY	20%	$152,610
SUBTOTAL:		$915,650
ENG/SURVEY	15%	$137,350
SUBTOTAL:		$1,053,000

PROJECT TOTAL $1,053,000

2012-2017 TOTAL $17,161,710

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 11

Project Description

12-inch waterlines north of Interstate 20. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	11,667	LF	$72	840,010
2	20" Boring and Casing	200	LF	$300	60,000
3	Pavement Repair	300	LF	$100	30,000

SUBTOTAL:		$930,010
CONTINGENCY	20%	$186,010
SUBTOTAL:		$1,116,020
ENG/SURVEY	15%	$167,410
SUBTOTAL:		$1,283,430

PROJECT TOTAL $1,283,430

Construction Project Number 12

Project Description

20-inch waterline from Ames Pump Station and along Cedardale Road. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	20" Pipe	16,606	LF	$120	1,992,720
2	34" Boring and Casing	200	LF	$535	107,000
3	Pavement Repair	800	LF	$100	80,000

SUBTOTAL:		$2,179,720
CONTINGENCY	20%	$435,950
SUBTOTAL:		$2,615,670
ENG/SURVEY	15%	$392,360
SUBTOTAL:		$3,008,030

PROJECT TOTAL $3,008,030

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 13

Project Description

30-inch waterline along Pleasant Run Road between River Oaks Circle and Lancaster Hutchins. 16-inch waterline along Pleasant Run between Lancaster Hutchins and Cornell Road. This project will improve system operation and allow for growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	30" Pipe	2,847	LF	$180	512,530
2	16" Pipe	4,291	LF	$96	411,900
3	48" Boring and Casing	200	LF	$880	176,000
4	Pavement Repair	300	LF	$100	30,000
				SUBTOTAL:	$1,130,430
				CONTINGENCY 20%	$226,090
				SUBTOTAL:	$1,356,520
				ENG/SURVEY 15%	$203,480
				SUBTOTAL:	$1,560,000
				PROJECT TOTAL	$1,560,000

Construction Project Number 14

Project Description

24- and 20-inch waterline along Houston School Road south of Pleasant Run. This project will improve system operations and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	24" Pipe	4,683	LF	$144	674,320
2	20" Pipe	5,130	LF	$120	615,620
3	Pavement Repair	600	LF	$100	60,000
				SUBTOTAL:	$1,349,940
				CONTINGENCY 20%	$269,990
				SUBTOTAL:	$1,619,930
				ENG/SURVEY 15%	$242,990
				SUBTOTAL:	$1,862,920
				PROJECT TOTAL	$1,862,920

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 15

Project Description

20- and 16-inch waterline along Houston School Road. This project will improve system operations and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	20" Pipe	1,365	LF	$120	163,810
2	16" Pipe	2,381	LF	$96	228,530
3	Pavement Repair	300	LF	$100	30,000
	SUBTOTAL:				$422,340
	CONTINGENCY			20%	$84,470
	SUBTOTAL:				$506,810
	ENG/SURVEY			15%	$76,030
	SUBTOTAL:				$582,840
PROJECT TOTAL					$582,840

Construction Project Number 16

Project Description

12-inch waterline along Ten Mile Road west of Lancaster Hutchins. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	6,817	LF	$72	490,840
2	20" Boring and Casing	600	LF	$300	180,000
3	Pavement Repair	300	LF	$100	30,000
	SUBTOTAL:				$700,840
	CONTINGENCY			20%	$140,170
	SUBTOTAL:				$841,010
	ENG/SURVEY			15%	$126,160
	SUBTOTAL:				$967,170
PROJECT TOTAL					$967,170

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 17

Project Description

24- and 20-inch waterlines along Lancaster Hutchins south of Pleasant Run Road and east along Beltline to the Beltline Road EST. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	24" Pipe	3,694	LF	$144	531,910
2	20" Pipe	9,628	LF	$120	1,155,340
3	34" Boring and Casing	200	LF	$535	107,000
4	Pavement Repair	400	LF	$50	20,000

SUBTOTAL:		$1,814,250
CONTINGENCY	20%	$362,850
SUBTOTAL:		$2,177,100
ENG/SURVEY	15%	$326,570
SUBTOTAL:		$2,503,670

PROJECT TOTAL $2,503,670

Construction Project Number 18

Project Description

12-inch loop along Wilson Road, Watermill Road, and Ferris Road. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	18,717	LF	$72	1,347,650
2	20" Boring and Casing	200	LF	$300	60,000
3	Pavement Repair	300	LF	$100	30,000

SUBTOTAL:		$1,437,650
CONTINGENCY	20%	$287,530
SUBTOTAL:		$1,725,180
ENG/SURVEY	15%	$258,780
SUBTOTAL:		$1,983,960

PROJECT TOTAL $1,983,960

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 19

Project Description

16-inch waterline along Pleasant Run east of the Pleasant Run EST. This project will improve system operations and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	16" Pipe	4,938	LF	$96	474,060
2	Pavement Repair	500	LF	$100	50,000

SUBTOTAL:			$524,060
CONTINGENCY	20%		$104,820
SUBTOTAL:			$628,880
ENG/SURVEY	15%		$94,340
SUBTOTAL:			$723,220

PROJECT TOTAL $723,220

Construction Project Number 20

Project Description

12-inch loop along Watermill Road, Nokomis Road, Stainback Road, and Ferris Road. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	27,799	LF	$72	2,001,520
2	20" Boring and Casing	200	LF	$300	60,000
3	Pavement Repair	300	LF	$100	30,000

SUBTOTAL:			$2,091,520
CONTINGENCY	20%		$418,310
SUBTOTAL:			$2,509,830
ENG/SURVEY	15%		$376,480
SUBTOTAL:			$2,886,310

PROJECT TOTAL $2,886,310

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 21

Project Description

12-inch waterline along Greene Road and Railroad between Greene Road and Pecan Street. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	9,200	LF	$72	662,400
2	20" Boring and Casing	400	LF	$300	120,000
3	Pavement Repair	500	LF	$100	50,000

SUBTOTAL:		$832,400
CONTINGENCY	20%	$166,480
SUBTOTAL:		$998,880
ENG/SURVEY	15%	$149,840
SUBTOTAL:		$1,148,720

PROJECT TOTAL $1,148,720

Construction Project Number 22

Project Description

12-inch waterline south of Parkerville Road between Interstate 35 and Houston School Road. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	5,750	LF	$72	414,000
2	Pavement Repair	300	LF	$100	30,000

SUBTOTAL:		$444,000
CONTINGENCY	20%	$88,800
SUBTOTAL:		$532,800
ENG/SURVEY	15%	$79,920
SUBTOTAL:		$612,720

PROJECT TOTAL $612,720

2017-2022 TOTAL $19,122,990

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 23

Project Description

20-inch waterline along State Highway 342 to the James R. Williams Pump Station. James R. Williams 6.0 MGD Pump Station Expansion to serve the Upper Pressure Plane. This project will allow for future growth and provide redundancy to the Upper Pressure Plane.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	20" Pipe	8,719	LF	$120	1,046,320
2	Pavement Repair	600	LF	$100	60,000
3	6.0 MGD Pump Station Expansion	1	EA	$600,000	600,000
	SUBTOTAL:				$1,706,320
	CONTINGENCY			20%	$341,270
	SUBTOTAL:				$2,047,590
	ENG/SURVEY			15%	$307,140
	SUBTOTAL:				$2,354,730
PROJECT TOTAL					$2,354,730

Construction Project Number 24

Project Description

12-inch waterline along Interstate 35 between Wintergreen and Pleasant Run. This project will improve system operation.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	6,186	LF	$72	445,380
2	Pavement Repair	500	LF	$100	50,000
	SUBTOTAL:				$495,380
	CONTINGENCY			20%	$99,080
	SUBTOTAL:				$594,460
	ENG/SURVEY			15%	$89,170
	SUBTOTAL:				$683,630
PROJECT TOTAL					$683,630

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 25

Project Description

16- and 12-inch waterline along Pleasant Run between Cornell Road and Rinto Road. 16-inch waterline along Alba Road between Pleasant Run and Green Road. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	16" Pipe	6,649	LF	$96	638,330
2	12" Pipe	2,813	LF	$72	202,530
3	Pavement Repair	300	LF	$100	30,000
	SUBTOTAL:				$870,860
	CONTINGENCY			20%	$174,180
	SUBTOTAL:				$1,045,040
	ENG/SURVEY			15%	$156,760
	SUBTOTAL:				$1,201,800
PROJECT TOTAL					$1,201,800

Construction Project Number 26

Project Description

16-inch waterline east of Beltline Road EST along Belt Line Road and north along Alba Road to Greene Road. This project will improve system operations and allow for growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	16" Pipe	8,717	LF	$96	836,830
2	Pavement Repair	400	LF	$100	40,000
	SUBTOTAL:				$876,830
	CONTINGENCY			20%	$175,370
	SUBTOTAL:				$1,052,200
	ENG/SURVEY			15%	$157,830
	SUBTOTAL:				$1,210,030
PROJECT TOTAL					$1,210,030

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 27

Project Description

12-inch waterline east of Cornell Road along the City Limits, south along Pinto to Greene Road. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	16,716	LF	$72	1,203,580
2	Pavement Repair	500	LF	$100	50,000
				SUBTOTAL:	$1,253,580
				CONTINGENCY 20%	$250,720
				SUBTOTAL:	$1,504,300
				ENG/SURVEY 15%	$225,650
				SUBTOTAL:	$1,729,950
				PROJECT TOTAL	$1,729,950

Construction Project Number 28

Project Description

16- and 12-inch waterline along the easter City Limit between Greene and Van Road and along Belt Line Road. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	16" Pipe	18,068	LF	$96	1,734,490
2	12" Pipe	7,718	LF	$72	555,670
3	Pavement Repair	500	LF	$100	50,000
				SUBTOTAL:	$2,340,160
				CONTINGENCY 20%	$468,040
				SUBTOTAL:	$2,808,200
				ENG/SURVEY 15%	$421,230
				SUBTOTAL:	$3,229,430
				PROJECT TOTAL	$3,229,430

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 29

Project Description

12-inch waterline along State Highway 342 and Reindeer Road on southern City boundary and transfer valve. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	21,092	LF	$72	1,518,630
2	Pavement Repair	500	LF	$100	50,000
3	Pressure Reducing Valve	1	EA	$80,000	80,000
	SUBTOTAL:				$1,648,630
	CONTINGENCY			20%	$329,730
	SUBTOTAL:				$1,978,360
	ENG/SURVEY			15%	$296,760
	SUBTOTAL:				$2,275,120

PROJECT TOTAL $2,275,120

Construction Project Number 30

Project Description

Ames Pump Station 2.0 MG Ground Storage Tank. This project will improve system operations.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	2.0 MG Ground Storage Tank	1	EA	$1,500,000	1,500,000
2	Yard Piping	1	EA	$200,000	200,000
	SUBTOTAL:				$1,700,000
	CONTINGENCY			20%	$340,000
	SUBTOTAL:				$2,040,000
	ENG/SURVEY			15%	$306,000
	SUBTOTAL:				$2,346,000

PROJECT TOTAL $2,346,000

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 31

Project Description

12-inch waterlines along Watermill Road and east of Ferris Road. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	13,688	LF	$72	985,570
2	20" Boring and Casing	200	LF	$300	60,000
3	Pavement Repair	200	LF	$100	20,000

SUBTOTAL:		$1,065,570
CONTINGENCY	20%	$213,120
SUBTOTAL:		$1,278,690
ENG/SURVEY	15%	$191,810
SUBTOTAL:		$1,470,500

PROJECT TOTAL $1,470,500

Construction Project Number 32

Project Description

12-inch waterline along Moreland Road between State Highway 342 and Nokomis Road. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	15,739	LF	$72	1,133,200
2	Pavement Repair	400	LF	$100	40,000

SUBTOTAL:		$1,173,200
CONTINGENCY	20%	$234,640
SUBTOTAL:		$1,407,840
ENG/SURVEY	15%	$211,180
SUBTOTAL:		$1,619,020

PROJECT TOTAL $1,619,020

City of Lancaster
Water CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 33

Project Description

12-inch waterline along Bluegrove between Main Street and Ten Mile Road. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	5,881	LF	$72	423,440
2	20" Boring and Casing	200	LF	$300	60,000
3	Pavement Repair	300	LF	$100	30,000

SUBTOTAL:		$513,440
CONTINGENCY	20%	$102,690
SUBTOTAL:		$616,130
ENG/SURVEY	15%	$92,420
SUBTOTAL:		$708,550

PROJECT TOTAL	$708,550
2022-2035 TOTAL	$18,120,210

Appendix D

Wastewater System Project Cost Estimates

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 1

Project Description

18-inch gravity line in the Keller Branch Basin between Pleasant Run Road and TRA interceptor. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	18" Pipe	13,898	LF	$108	1,500,960
2	60" Diameter Manhole	35	EA	$6,000	208,470
3	32" Boring and Casing	500	LF	$495	247,500
4	Pavement Repair	700	LF	$100	70,000

SUBTOTAL:		$2,026,930
CONTINGENCY	20%	$405,390
SUBTOTAL:		$2,432,320
ENG/SURVEY	15%	$364,850
SUBTOTAL:		$2,797,170

PROJECT TOTAL $2,797,170

Construction Project Number 2

Project Description

15- and 12-inch gravity lines in the Halls Branch Basin. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	15" Pipe	5,058	LF	$90	455,190
2	12" Pipe	3,866	LF	$72	278,370
3	60" Diameter Manhole	13	EA	$6,000	75,870
4	48" Diameter Manhole	10	EA	$5,000	48,330
5	Pavement Repair	500	LF	$100	50,000

SUBTOTAL:		$907,760
CONTINGENCY	20%	$181,560
SUBTOTAL:		$1,089,320
ENG/SURVEY	15%	$163,400
SUBTOTAL:		$1,252,720

PROJECT TOTAL $1,252,720

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 3

Project Description

15-inch gravity line in the Halls Branch Basin north of TRA interceptor. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	15" Pipe	1,302	LF	$90	117,160
2	60" Diameter Manhole	3	EA	$6,000	19,530
				SUBTOTAL:	$136,690
				CONTINGENCY 20%	$27,340
				SUBTOTAL:	$164,030
				ENG/SURVEY 15%	$24,610
				SUBTOTAL:	$188,640
PROJECT TOTAL					$188,640

Construction Project Number 4

Project Description

12-inch gravity line in Chesier Branch Basin. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	7,915	LF	$72	569,910
2	48" Diameter Manhole	20	EA	$5,000	98,940
3	Pavement Repair	400	LF	$100	40,000
				SUBTOTAL:	$708,850
				CONTINGENCY 20%	$141,770
				SUBTOTAL:	$850,620
				ENG/SURVEY 15%	$127,600
				SUBTOTAL:	$978,220
PROJECT TOTAL					$978,220

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 5

Project Description

21-inch gravity line in the Deep Branch Basin. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	21" Pipe	3,488	LF	$126	439,480
2	60" Diameter Manhole	9	EA	$6,000	52,320
3	34" Boring and Casing	200	LF	$535	107,000

SUBTOTAL:		$598,800
CONTINGENCY	20%	$119,760
SUBTOTAL:		$718,560
ENG/SURVEY	15%	$107,790
SUBTOTAL:		$826,350

PROJECT TOTAL $826,350

Construction Project Number 6

Project Description

Wheatland Lift Station expansion to 3.0 MGD firm capacity. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	2.4 MGD Lift Station Expansion	1	EA	$1,000,000	1,000,000

SUBTOTAL:		$1,000,000
CONTINGENCY	20%	$200,000
SUBTOTAL:		$1,200,000
ENG/SURVEY	15%	$180,000
SUBTOTAL:		$1,380,000

PROJECT TOTAL $1,380,000

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 7

Project Description

Decommission IH 635 Lift Station and construct new 12-inch gravity line. This project will allow for easier system operation and future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	Lift Station - Decomm	1	EA	$200,000	200,000
2	t2" Pipe	2,130	LF	$72	153,350
3	48" Diameter Manhole	3	EA	$5,000	15,000
				SUBTOTAL:	$368,350
				CONTINGENCY 20%	$73,670
				SUBTOTAL:	$442,020
				ENG/SURVEY 15%	$66,310
				SUBTOTAL:	$508,330

PROJECT TOTAL $508,330

Construction Project Number 8

Project Description

Construct 24-inch relief line in Mills Branch Basin. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	24" Pipe	6,884	LF	$144	991,280
2	72" Diameter Manhole	17	EA	$6,000	103,260
3	Pavement Repair	200	LF	$100	20,000
				SUBTOTAL:	$1,114,540
				CONTINGENCY 20%	$222,910
				SUBTOTAL:	$1,337,450
				ENG/SURVEY 15%	$200,620
				SUBTOTAL:	$1,538,070

PROJECT TOTAL $1,538,070

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 9

Project Description

15-inch gravity line in the Mills Branch Basin. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	15" Pipe	7,570	LF	$90	681,340
2	60" Diameter Manhole	19	EA	$6,000	113,560
3	26" Boring and Casing	400	LF	$400	160,000
4	Pavement Repair	300	LF	$100	30,000

SUBTOTAL:		$984,900
CONTINGENCY	20%	$196,980
SUBTOTAL:		$1,181,880
ENG/SURVEY	15%	$177,290
SUBTOTAL:		$1,359,170

PROJECT TOTAL $1,359,170

Construction Project Number 10

Project Description

Lift Station #1 expansion to 2.0 MGD Firm Capacity. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	1.4 MGD Lift Station Expansion	1	EA	$600,000	600,000

SUBTOTAL:		$600,000
CONTINGENCY	20%	$120,000
SUBTOTAL:		$720,000
ENG/SURVEY	15%	$108,000
SUBTOTAL:		$828,000

PROJECT TOTAL $828,000

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 11

Project Description

Lift Station #2 expansion to 1.55 MGD Firm Capacity. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	0.25 MGD Lift Station Expansion	1	EA	$250,000	250,000
	SUBTOTAL:				$250,000
	CONTINGENCY			20%	$50,000
	SUBTOTAL:				$300,000
	ENG/SURVEY			15%	$45,000
	SUBTOTAL:				$345,000
PROJECT TOTAL					$345,000

Construction Project Number 12

Project Description

8-inch gravity lines in Ten Mile-2 and Enchanted Forest Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	8" Pipe	7,844	LF	$48	376,520
2	48" Diameter Manhole	20	EA	$5,000	98,050
3	Pavement Repair	400	LF	$100	40,000
	SUBTOTAL:				$514,570
	CONTINGENCY			20%	$102,920
	SUBTOTAL:				$617,490
	ENG/SURVEY			15%	$92,630
	SUBTOTAL:				$710,120
PROJECT TOTAL					$710,120

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 13

Project Description

18-inch gravity line in Ten Mile-3. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	18" Pipe	3,348	LF	$108	361,550
2	60" Diameter Manhole	8	EA	$6,000	50,210
3	Pavement Repair	200	LF	$100	20,000
				SUBTOTAL:	$431,760
				CONTINGENCY 20%	$86,360
				SUBTOTAL:	$518,120
				ENG/SURVEY 15%	$77,720
				SUBTOTAL:	$595,840

PROJECT TOTAL $595,840

Construction Project Number 14

Project Description

10-inch gravity lines in Chesier Branch Basin and Mills Branch Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	10" Pipe	3,437	LF	$60	206,240
2	48" Diameter Manhole	9	EA	$5,000	42,970
				SUBTOTAL:	$249,210
				CONTINGENCY 20%	$49,850
				SUBTOTAL:	$299,060
				ENG/SURVEY 15%	$44,860
				SUBTOTAL:	$343,920

PROJECT TOTAL $343,920

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 15

Project Description

8-inch gravity line in Chesier Branch. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	8" Pipe	2,793	LF	$48	134,080
2	48" Diameter Manhole	7	EA	$5,000	34,920
	SUBTOTAL:				$169,000
	CONTINGENCY			20%	$33,800
	SUBTOTAL:				$202,800
	ENG/SURVEY			15%	$30,420
	SUBTOTAL:				$233,220
	PROJECT TOTAL				$233,220

Construction Project Number 16

Project Description

8-inch gravity line in Floyd Branch Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	8" Pipe	3,974	LF	$48	190,770
2	48" Diameter Manhole	10	EA	$5,000	49,680
	SUBTOTAL:				$240,450
	CONTINGENCY			20%	$48,090
	SUBTOTAL:				$288,540
	ENG/SURVEY			15%	$43,290
	SUBTOTAL:				$331,830
	PROJECT TOTAL				$331,830

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 17

Project Description

12-inch gravity line in Ten Mile-4. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	10,847	LF	$72	780,970
2	48" Diameter Manhole	27	EA	$5,000	135,590
3	Pavement Repair	400	LF	$100	40,000

SUBTOTAL:		$956,560
CONTINGENCY	20%	$191,320
SUBTOTAL:		$1,147,880
ENG/SURVEY	15%	$172,190
SUBTOTAL:		$1,320,070

PROJECT TOTAL	$1,320,070
2012-2017 TOTAL	$15,536,670

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 18

Project Description

24-inch gravity line in Mills Branch Basin. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	24" Pipe	6,230	LF	$144	897,060
2	72" Diameter Manhole	16	EA	$6,000	93,440
3	Pavement Repair	300	LF	$100	30,000
	SUBTOTAL:				$1,020,500
	CONTINGENCY			20%	$204,100
	SUBTOTAL:				$1,224,600
	ENG/SURVEY			15%	$183,690
	SUBTOTAL:				$1,408,290
PROJECT TOTAL					$1,408,290

Construction Project Number 19

Project Description

21-inch gravity line in the Keller Branch Basin. This project will address an existing system deficiency and allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	21" Pipe	7,891	LF	$126	994,300
2	60" Diameter Manhole	20	EA	$6,000	118,370
3	34" Boring and Casing	400	LF	$535	214,000
4	Pavement Repair	300	LF	$100	30,000
	SUBTOTAL:				$1,356,670
	CONTINGENCY			20%	$271,340
	SUBTOTAL:				$1,628,010
	ENG/SURVEY			15%	$244,210
	SUBTOTAL:				$1,872,220
PROJECT TOTAL					$1,872,220

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 20

Project Description

Wheatland Lift Station new 20-inch forcemain. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	20" Force Main	8,433	LF	$120	1,011,950
2	34" Boring and Casing	200	LF	$535	107,000
3	Pavement Repair	400	LF	$100	40,000

SUBTOTAL:		$1,158,950
CONTINGENCY	20%	$231,790
SUBTOTAL:		$1,390,740
ENG/SURVEY	15%	$208,620
SUBTOTAL:		$1,599,360

PROJECT TOTAL $1,599,360

Construction Project Number 21

Project Description

Wheatland Lift Station expansion to 5.0 MGD firm capacity. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	2.0 MGD Lift Station Expansion	1	EA	$400,000	400,000

SUBTOTAL:		$400,000
CONTINGENCY	20%	$80,000
SUBTOTAL:		$480,000
ENG/SURVEY	15%	$72,000
SUBTOTAL:		$552,000

PROJECT TOTAL $552,000

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 22

Project Description

15-inch gravity line in Floyd Branch Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	15" Pipe	4,525	LF	$90	407,270
2	60" Diameter Manhole	11	EA	$6,000	67,880
	SUBTOTAL:				$475,150
	CONTINGENCY			20%	$95,030
	SUBTOTAL:				$570,180
	ENG/SURVEY			15%	$85,530
	SUBTOTAL:				$655,710

PROJECT TOTAL $655,710

Construction Project Number 23

Project Description

18-, 15-, 10-, and 8-inch gravity lines in the Ten Mile-3 Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	18" Pipe	785	LF	$108	84,830
2	15" Pipe	6,843	LF	$90	615,830
3	10" Pipe	2,654	LF	$60	159,250
4	8" Pipe	2,395	LF	$48	114,980
5	60" Diameter Manhole	19	EA	$6,000	114,420
6	48" Diameter Manhole	13	LF	$5,000	63,120
7	Pavement Repair	2,395	LF	$100	239,550
	SUBTOTAL:				$1,391,980
	CONTINGENCY			20%	$278,400
	SUBTOTAL:				$1,670,380
	ENG/SURVEY			15%	$250,560
	SUBTOTAL:				$1,920,940

PROJECT TOTAL $1,920,940

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 24

Project Description

12-inch gravity line in Ten Mile-5. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	17,325	LF	$72	1,247,380
2	48" Diameter Manhole	43	EA	$5,000	216,560
3	Pavement Repair	400	LF	$100	40,000

SUBTOTAL:		$1,503,940
CONTINGENCY	20%	$300,790
SUBTOTAL:		$1,804,730
ENG/SURVEY	15%	$270,710
SUBTOTAL:		$2,075,440

PROJECT TOTAL $2,075,440

Construction Project Number 25

Project Description

10- and 8-inch gravity lines in Ten Mile-3 Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	10" Pipe	7,043	LF	$60	422,560
2	8" Pipe	5,438	LF	$48	261,040
3	48" Diameter Manhole	31	EA	$5,000	156,010

SUBTOTAL:		$839,610
CONTINGENCY	20%	$167,930
SUBTOTAL:		$1,007,540
ENG/SURVEY	15%	$151,140
SUBTOTAL:		$1,158,680

PROJECT TOTAL $1,158,680

2017-2022 TOTAL $11,242,640

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 26

Project Description

21-inch gravity line in Ten Mile-3 Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	21" Pipe	3,857	LF	$126	485,990
2	60" Diameter Manhole	10	EA	$6,000	57,860
3	Pavement Repair	200	LF	$100	20,000

SUBTOTAL:		$563,850
CONTINGENCY	20%	$112,770
SUBTOTAL:		$676,620
ENG/SURVEY	15%	$101,500
SUBTOTAL:		$778,120

PROJECT TOTAL $778,120

Construction Project Number 27

Project Description

18-inch gravity line in the Deep Branch Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	18" Pipe	10,117	LF	$108	1,092,590
2	60" Diameter Manhole	25	EA	$6,000	151,750
3	32" Boring and Casing	500	LF	$495	247,500
4	Pavement Repair	600	LF	$100	

SUBTOTAL:		$1,491,840
CONTINGENCY	20%	$298,370
SUBTOTAL:		$1,790,210
ENG/SURVEY	15%	$268,540
SUBTOTAL:		$2,058,750

PROJECT TOTAL $2,058,750

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 28

Project Description

Construct 18-inch relief line in Mills Branch Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	18" Pipe	6,851	LF	$108	739,860
2	60" Diameter Manhole	17	EA	$6,000	102,760
3	Pavement Repair	200	LF	$100	20,000

SUBTOTAL:			$862,620
CONTINGENCY	20%		$172,530
SUBTOTAL:			$1,035,150
ENG/SURVEY	15%		$155,280
SUBTOTAL:			$1,190,430

PROJECT TOTAL $1,190,430

Construction Project Number 29

Project Description

Construct 21-inch line in the Mills Branch Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	21" Pipe	15,154	LF	$126	1,909,350
2	60" Diameter Manhole	38	EA	$6,000	227,300
3	34" Boring and Casing	600	LF	$535	321,000
4	Pavement Repair	500	LF	$100	50,000

SUBTOTAL:			$2,507,650
CONTINGENCY	20%		$501,530
SUBTOTAL:			$3,009,180
ENG/SURVEY	15%		$451,380
SUBTOTAL:			$3,460,560

PROJECT TOTAL $3,460,560

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 30

Project Description

18-inch gravity line in Mill Branch. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	18" Pipe	3,789	LF	$108	409,240
2	60" Diameter Manhole	9	EA	$6,000	56,840
3	Pavement Repair	400	LF	$100	40,000

SUBTOTAL:		$506,080
CONTINGENCY	20%	$101,220
SUBTOTAL:		$607,300
ENG/SURVEY	15%	$91,100
SUBTOTAL:		$698,400

PROJECT TOTAL $698,400

Construction Project Number 31

Project Description

Wheatland Lift Station expansion to 8.0 MGD firm capacity. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	3.0 MGD Lift Station Expansion	1	EA	$600,000	600,000

SUBTOTAL:		$600,000
CONTINGENCY	20%	$120,000
SUBTOTAL:		$720,000
ENG/SURVEY	15%	$108,000
SUBTOTAL:		$828,000

PROJECT TOTAL $828,000

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 32

Project Description

Lift Station #1 Expansion to 3.0 MGD Firm Capacity. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	1.0 MGD Lift Station Expansion	1	EA	$400,000	400,000

SUBTOTAL:		$400,000
CONTINGENCY	20%	$80,000
SUBTOTAL:		$480,000
ENG/SURVEY	15%	$72,000
SUBTOTAL:		$552,000

PROJECT TOTAL $552,000

Construction Project Number 33

Project Description

15-inch gravity line in Keller Branch. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	15" Pipe	2,726	LF	$90	245,300
2	60" Diameter Manhole	7	EA	$6,000	40,880
3	Pavement Repair	200	LF	$100	20,000

SUBTOTAL:		$306,180
CONTINGENCY	20%	$61,240
SUBTOTAL:		$367,420
ENG/SURVEY	15%	$55,120
SUBTOTAL:		$422,540

PROJECT TOTAL $422,540

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 34

Project Description

8-inch gravity line in Ten Mile-5. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	8" Pipe	2,169	LF	$48	104,110
2	48" Diameter Manhole	5	EA	$5,000	27,110
3	Pavement Repair	200	LF	$100	20,000
	SUBTOTAL:				$151,220
	CONTINGENCY			20%	$30,250
	SUBTOTAL:				$181,470
	ENG/SURVEY			15%	$27,230
	SUBTOTAL:				$208,700
	PROJECT TOTAL				$208,700

Construction Project Number 35

Project Description

12-inch gravity line in Red Oak Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	10,956	LF	$72	788,840
2	48" Diameter Manhole	27	EA	$5,000	136,950
3	20" Boring and Casing	200	LF	$300	60,000
4	Pavement Repair	200	LF	$100	20,000
	SUBTOTAL:				$1,005,790
	CONTINGENCY			20%	$201,160
	SUBTOTAL:				$1,206,950
	ENG/SURVEY			15%	$181,050
	SUBTOTAL:				$1,388,000
	PROJECT TOTAL				$1,388,000

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 36

Project Description

6-inch gravity line in Creekwood Branch. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	6" Pipe	7,704	LF	$36	277,340
2	48" Diameter Manhole	19	EA	$5,000	96,300
3	Pavement Repair	100	LF	$100	10,000
				SUBTOTAL:	$383,640
				CONTINGENCY 20%	$76,730
				SUBTOTAL:	$460,370
				ENG/SURVEY 15%	$69,060
				SUBTOTAL:	$529,430

PROJECT TOTAL $529,430

Construction Project Number 37

Project Description

15-inch gravity line in Ten Mile-3. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	15" Pipe	5,933	LF	$90	533,960
2	60" Diameter Manhole	15	EA	$6,000	88,990
3	Pavement Repair	200	LF	$100	20,000
				SUBTOTAL:	$642,950
				CONTINGENCY 20%	$128,590
				SUBTOTAL:	$771,540
				ENG/SURVEY 15%	$115,740
				SUBTOTAL:	$887,280

PROJECT TOTAL $887,280

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 38

Project Description

24-inch gravity line in the Keller Branch Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	24" Pipe	16,591	LF	$144	2,389,110
2	72" Diameter Manhole	41	EA	$6,000	248,870
3	32" Boring and Casing	500	LF	$495	247,500
4	Pavement Repair	700	LF	$100	70,000

SUBTOTAL:		$2,955,480
CONTINGENCY	20%	$591,100
SUBTOTAL:		$3,546,580
ENG/SURVEY	15%	$531,990
SUBTOTAL:		$4,078,570

PROJECT TOTAL $4,078,570

Construction Project Number 39

Project Description

8-inch gravity lines in Ten Mile-3. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
t	8" Pipe	6,877	LF	$48	330,100
2	48" Diameter Manhole	17	EA	$5,000	85,960
3	Pavement Repair	200	LF	$100	20,000

SUBTOTAL:		$436,060
CONTINGENCY	20%	$87,220
SUBTOTAL:		$523,280
ENG/SURVEY	15%	$78,500
SUBTOTAL:		$601,780

PROJECT TOTAL $601,780

City of Lancaster
Wastewater CIP

Freese and Nichols

OPINION OF PROBABLE COST — UPDATE

Construction Project Number 40

Project Description

12-inch gravity line in Ten Mile-6. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	12" Pipe	6,098	LF	$72	439,090
2	48" Diamater Manhole	15	EA	$5,000	76,230
3	Pavement Repair	200	LF	$100	20,000

SUBTOTAL:		$535,320
CONTINGENCY	20%	$107,070
SUBTOTAL:		$642,390
ENG/SURVEY	15%	$96,360
SUBTOTAL:		$738,750

PROJECT TOTAL $738,750

Construction Project Number 41

Project Description

8-inch gravity line in the Red Oak Basin. This project will allow for future growth.

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
1	8" Pipe	8,750	LF	$48	420,020
2	48" Diameter Manhole	22	EA	$5,000	109,380
3	Pavement Repair	200	LF	$100	20,000

SUBTOTAL:		$549,400
CONTINGENCY	20%	$109,880
SUBTOTAL:		$659,280
ENG/SURVEY	15%	$98,900
SUBTOTAL:		$758,180

PROJECT TOTAL $758,180

2022-2035 TOTAL $19,179,490

REGULAR MEETING MINUTES
PLANNING & ZONING COMMISSION
AND ACTING AS THE
CAPITAL IMPROVEMENTS ADVISORY COMMITTEE
CITY OF LANCASTER, TEXAS
TUESDAY, JUNE 26, 2012

PUBLIC HEARING

3. **M12-05** Conduct a Public Hearing and consider the Proposed Roadway and Water/Wastewater Impact Fee Reports.

Senior Planner Nathaniel Barnett presented information regarding the study of impact fees for Roadway and Water/Wastewater. He acknowledged the presence of representatives from the consulting firms of Kimley-Horn & Associates (Roadway) and Freese & Nichols, Inc. (Water/Wastewater). Senior Planner Barnett briefed the commission on the sessions that had taken place and the documents that had been supplied to them regarding the studies. He mentioned that impact fees were allowed to be charged by municipalities in accordance with Chapter 395 of the Local Government Code. The purpose of this meeting was for the commission to ask any further questions with regards to the draft studies that had been presented and make a recommendation to the City Council in regards to the information. The primary information that the commission was to look at were the population projections and the land use assumptions. This information would be utilized in the calculations for projected growth and usage of the infrastructure when determining the impact this growth would have and the cost associated with it. Based on those calculations, the impact fees could thus be determined. Senior Planner Barnett stated that a recommendation from Staff would not be made at this time but that the recommendation obtained from the commission along with their written comments, if any, would be used when making a recommendation to the City Council.

Chair Colton asked if the answer had been provided with regards to whether or not Red Oak charged impact fees for Water/Wastewater. Senior Planner Barnett stated that the consultants had informed him that they do not. Chair Colton asked if Red Oak was totally built out. It was stated that they are not. Chair Colton then asked whether impact fees had driven away any potential development. Senior Planner Barnett stated that he had not experienced a situation where impact fees had derailed any development project in the city. He also explained that impact fees are typically a nominal cost of development but not the major factor as developers usually have other measures to determine where to locate their projects.

Chair Colton opened the public hearing.

There were no speakers in favor of or opposed to the impact fee draft report.

James Fairchild, 1338 Cedar Oaks Blvd, Dallas, Texas, a student of at the University of Texas at Arlington, asked if a semi-annual report for the impact fees was available to the public. Senior Planner Barnett stated that the information for the report would be provided soon.

Chair Colton entertained a motion to close the public hearing.

VICE CHAIR WRIGHT MADE THE MOTION TO CLOSE THE PUBLIC HEARING, SECONDED BY COMMISSIONER MITCHELL.

AYES: COLTON, ELKINS, MITCHELL, PROTHRO, WRIGHT
NAYES: NONE

THE MOTION CARRIED 5-0.

Discussion of the Item:
The Commissioners expressed concerned that developers should pay their fare-share of the infrastructure growth of the city. Senior Planner Barnett stated that the maximum assessed fees that could be collected had decreased from the 2006/2007 Impact Fee Reports and that the Water/Wastewater impact fee would definitely have to decrease since the maximum assessable fee is lower than what is charged today.

Chair Colton asked the commissioners their thoughts on what their action should be. Everyone believed that an impact fee should be charged. It was determined that fees should not be raised and that the maximum for water/wastewater should be charged since it would be lower than what is being charged currently. The commissioners stated that they agreed with the report by the consultants and their findings and believed it should be adopted.

Chair Colton entertained a motion for the public hearing item.

A MOTION WAS MADE BY COMMISSIONER PROTHRO TO RECOMMEND APPROVAL OF THE REPORT AS PRESENTED BY THE CONSULTANTS AND ASSESS THE MAXIMUM ASSESSABLE FEE BUT NOT INCREASE ANY IMPACT FEE, AND SECONDED BY VICE CHAIR WRIGHT.

AYES: COLTON, ELKINS, MITCHELL, PROTHRO, WRIGHT
NAYES: NONE

THE MOTION CARRIED 5-0.

DRAFT

LANCASTER CITY COUNCIL
Agenda Communication for
July 23, 2012

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AG12-007

Discuss and consider an ordinance amending the Lancaster Code of Ordinances by repealing Chapter 14, Article 14.1700, Storm Water Management of the Lancaster Development Code in its entirety; amending Chapter 24, "Utilities," of the Lancaster Code of Ordinances by adopting Article 24.08 "Storm Water Management"; renumbering the City of Lancaster's Storm Water Management Ordinance and adopting new provisions prohibiting illicit discharge into the City's Storm Water System and adopting new provisions providing post-construction Storm Water Guidelines.

This request supports the City Council 2011-2012 Policy Agenda.

Goal: Sound Infrastructure

Background

As discussed during the work session, the City has updated the storm water ordinance to include two new sections regarding illicit discharge and post-construction runoff. The work session presentation provided an update on the MS4 Permit and outlined the proposed amendment to the current storm water management ordinance.

The Texas Commission on Environmental Quality (TCEQ) regulates public entities like the City of Lancaster with the Texas Pollutant Discharge Elimination System (TPDES) General Permit. As per the permit, the City was required to develop and submit to TCEQ a plan for a storm water quality management program, which includes best management practices (BMPs) to be implemented by the City to reduce storm water pollution to the "maximum extent practicable," as regulations require.

As a part of the implementation schedule for the BMPs for the current year, the City needs to update the current ordinance to prohibit and eliminate illicit discharges of pollutants to the storm sewer system. The ordinance must include appropriate actions and establish enforcement procedures for removing the source of an illicit discharge.

Additionally, the permit also requires the City to address post-construction runoff from new development and redevelopment projects. The updated ordinance must ensure that controls are in place that would prevent or minimize water quality impacts to the municipal separate storm sewer system.

The City's storm water ordinance in its current form will not be sufficient to ensure compliance with the state requirements and thereby some updates are warranted.

The section on illicit discharge includes/requires revisions to update definitions and provide better enforcement measures. With the assistance of Teague, Nall and Perkins, Inc. (TNP), the City has updated the storm water ordinance to include two new sections: Illicit Discharge Detection and Elimination; and Post Construction Controls and Measures.

This agenda item brings forward the proposed changes to the existing storm water ordinance to include the two new sections for the completion and implementation of the BMPs in order to be in compliance with TCEQ under the current permit requirements.

Considerations

- **Operational** - Phase II of the MS4 program and the Storm Water Management Ordinance update will be managed by the Engineering Division.

  The proposed ordinance repeals the current Storm Water Management ordinance from the Lancaster Development Code (LDC) in its entirety and places it in the Code of Ordinances with amendments as follows:

  - Deletion of Illicit Discharge Prohibition section in the current ordinance and addition of a new Illicit Discharge Section 24.08.011, Illicit Discharge Prohibition and Elimination
  - Addition of Section 24.08.012, Post-Construction Controls and Guidelines
  - Addition of definitions applicable to the new ordinance sections.

- **Legal** – The City is required to make updates to the storm water management ordinance to comply with TCEQ requirements.

  The City Attorney has prepared the draft ordinance.

- **Financial** – This program is funded by the City's storm water utility fund.

- **Public Information** – There are no public information requirements.

Recommendation

Staff recommends adoption of the proposed ordinance update as presented.

Attachments

Please refer to work session item A for the draft ordinance.

Prepared and submitted by:
Shwetha Pandurangi, PE, CFM, City Engineer

Date: July 11, 2012

LANCASTER CITY COUNCIL
Agenda Communication for
July 23, 2012

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AG12-008

Discuss and consider adopting City Council Goals and Objectives contained in the June 2012 City Council Retreat Report.

This request supports the City Council's 2012-2013 Policy Agenda.

Background

City Council conducted its annual strategic planning session June 22-23, 2012. Council's diligent efforts during the planning session produced updated goals and objectives. Julia Novak (The Novak Consulting Group), the facilitator, has compiled information from Council's discussions during the planning session into a report that defines the five year goals, strategies, Mission Statement and Vision 2026 for the City.

Considerations

- **Operational** – Council goals and strategies provide the foundation to match City resources with priorities and help provide efficient services to citizens. Formal adoption of the goals and strategies is a "best practice" that establishes a clear, unified message for staff and the community.

- **Legal** – The City Attorney has reviewed and approved as to form the adopting resolution.

- **Financial** – There is no financial impact in adopting the goals and strategies document.

- **Public Information** – There are no public information requirements.

Options/Alternatives

1. Approve the resolution as presented.
2. Deny the resolution and direct staff.

Recommendation

Staff recommends the adoption of the report as presented.

Attachments

- Resolution
- City Council Retreat Report

Prepared and submitted by:
Opal Mauldin Robertson, City Manager

Date: July 11, 2012

RESOLUTION NO. 2012-07-55

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LANCASTER, TEXAS, ADOPTING CITY COUNCIL GOALS AND OBJECTIVES CONTAINED IN THE JUNE 2012 CITY COUNCIL RETREAT REPORT, AS ATTACHED HERETO AND INCORPORATED HEREIN FOR ALL PURPOSES AS EXHIBIT "A"; PROVIDING A REPEALING CLAUSE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City Council met in a strategic planning session June 22-23, 2012 to review, discuss and refine City Council's vision and mission for the City of Lancaster; and

WHEREAS, after discussion and consideration, the City Council updated the five year goals and strategies for the City of Lancaster which identifies a foundation of principles upon which the community will continue to prosper; and

WHEREAS, the City Council desires to adopt the City Council Retreat Report prepared by The Novak Consulting Group following the strategic planning session and the goals, strategies, Mission Statement and Vision 2026 contained in said report;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LANCASTER, TEXAS:

Section 1. That the City Council Goals and Objective contained in the June 2012 City Council Retreat Report, attached hereto and incorporated herein by reference as Exhibit "A", having been reviewed by the City Council of the City of Lancaster, Texas, and found to be acceptable and in the best interest of the City and its citizens, be, and the same is hereby, in all things approved and adopted.

Section 2. That any prior resolutions of the City of Lancaster, Texas, in conflict with the provisions of this resolution, except as noted herein, be, and the same are hereby, repealed and revoked.

Section 3. That this resolution shall take effect immediately from and after its adoption and it is accordingly so resolved.

DULY PASSED and approved by the City Council of the City of Lancaster, Texas, on this the 23rd day of July 2012.

APPROVED:

Marcus E. Knight, Mayor

ATTEST:

Dolle K. Downe, City Secretary

APPROVED AS TO FORM:

Robert E. Hager, City Attorney

Lancaster City Council Retreat

June 2012

210 Glenmary Ave. | Cincinnati, Ohio 45220 | 513-221-0500 | thenovakconsultinggroup.com

Lancaster Vision, Mission, Focus Areas and Council Goals 2012-2013

Vision

Lancaster is a proud, vibrant city. We celebrate our diversity and history, preserve our natural beauty, and are the economic hub of the south DFW metroplex. Our citizens take pride in our city. The Lancaster community is the best place to live, with excellent schools and educational opportunities, and attractive corridors and neighborhoods. Our citizens enjoy convenient living.

Mission

Lancaster city government is financially sustainable and provides efficient customer-friendly services. Our citizens have trust and confidence in city government and leaders.

Key Performance Areas

Financially Sound City Government

The City has a long-range financial plan and has prudent fiscal policies and processes in place. It has met or exceeded its general fund reserve goals, has funds available to address the needs of community, and responsibly manages its debt. The community continues to move toward a more competitive tax rate.

Civic Engagement

The City provides opportunities for involvement through special events, boards and commissions, youth and parent volunteer opportunities in recreation, sports teams, City elections, civic leadership academy, and City-wide celebrations.

Healthy, Safe and Vibrant Neighborhoods

Lancaster is a safe place where neighbors know each other. The community unites at citywide events that keep neighborhoods strong. Compassionate code enforcement maintains our residential neighborhoods, and all residents have access to parks near where they live.

Professional and Committed City Workforce

Lancaster city government is an employer of choice with competitive pay that attracts an engaged, responsive, customer-oriented, innovative, and effective workforce. Some employees live in the City and all have a sense of ownership of the community. City employees feel needed and appreciated by elected officials, residents and businesses and are respectful to and appreciative of their customers and the City's governing body. The City's executive staff is engaged with residents and attends community events, uphold strong customer service, and use technology to aid them in working smarter.

Quality Development

The City encourages high quality construction in its housing, commercial buildings and public facilities. The City employs sustainable building practices and encourages conservation and the use of alternative energy sources. The City has a diverse housing stock with walkable neighborhoods and other high-quality

neighborhood amenities. A diversity of commercial businesses includes corporate business parks and distribution facilities, which make use of the expanded airport, rail, and highway system. Retail areas have grown because of growth in industrial, commercial and residential development.

Sound Infrastructure

The City has well-maintained streets and well-planned preventative maintenance programs for infrastructure and assets.

Retreat Summary

On June 22 and 23, 2012, the Lancaster City Council held a facilitated retreat at the Lancaster Veterans Memorial Library. The Mayor and all Council members attended the retreat. In addition, the City Manager, City Secretary and City Department Directors attended for various portions of the meeting. The retreat was facilitated by Julia Novak of The Novak Consulting Group. This report summarizes the conversations held at the retreat.

Expectations

Each person was asked to share "3-words" that describe them at their best and state their expectations for the 2012 Retreat.

3-Words

- Marco: Charismatic - Hard Working – Fun
- Walter: Loyal – Committed – Quiet
- LaShonjia: Relational – Knowledgeable – Fun(ny)
- Opal: Dedicated – Hardworking – Listener
- Marcus: Patient – Conscientious – Compassionate
- James: Working together – Understanding
- Dolle: Relaxed – Focused – Open-minded
- Nina: Reliable – Determined - Passionate

Expectations

- Communications (with one another and staff) x4
- Better understanding of the body x2
- Setting goals
- Clearly defined goals/vision – collectively
- Learning about each other personally
- Get 2012-2013 workplan x2
- Feedback – are we on the right track in supporting Council
- Re-energize about our roles and how we execute
- Mark hard decisions and stand by them
- Working for all the City, not just our district
- Any feedback on how we can better support Council
- Know new people better
- Redefine roles – sticking with our goals

Leaving a Legacy

Each Councilmember was asked to share with the group the legacy they want to leave as a member of this governing body. The statement considered the following questions:

- What do I want to accomplish together with my colleagues?
- How do I want my friends and allies to remember me?
- How do I want my opponents to remember me?
- What do I want to be "known for" after I have left office?
- What difference will I make?

James

- Working hard for all the City of Lancaster – doing what is right
- Make hard decisions and stick by them
- God fearing man – love country and family
- Bring diversity to the City by finding the correct people

Nina

- Being elected is how I can give back to a City that "raised me"
- Do what I do without looking for something in return
- Time, energy, commitment and a vested interest in the City of Lancaster
- Remember me as a good and just leader who never compromised to get a vote and get a position
- What we do in office is what makes a leader
- Make a difference and serve unselfishly
- Do what is right – team player of not just any team, but the right team
- My votes make a difference
- Care for constituents

Marco

- Don't want to leave a legacy – just want to leave it better then I received it
- Don't care about a title or pats on back – just here for a better Lancaster
- Want a better community – want all citizens to be happy and proud of living in Lancaster
- Want to create jobs – job rich environment where you can live, work and shop – too many people leave the City to go to work, buy their clothes
- Don't want to be remembered, just want the City to be better off – but if I am remembered it is for listening, for being hardworking, for working for the citizens
- Want to be remembered as a winner, strong, driven and disciplined and extremely hard working
- Want to be known, if at all, for passing the City on in better condition
- What difference – not sure – will have to wait for time to tell
- Heart is for the City of Lancaster

LaShonjia

- Didn't grow up here – stumbled upon it – chose Lancaster – hope people will choose to stay in Lancaster – don't want people to look to leave in 5 years because their needs are not being met
- Too many people have to leave the City to spend money – want Lancaster to look like DeSoto
- Want to make good collective decisions with my colleagues

- Want to understand nonviolent crime – enforcing laws, code compliance, etc. – want Lancaster to be a good place to live when I come home at the end of a long day; want a clean City – when you enter Lancaster from I35 – want to see a difference – make a positive impression; pick up trash in my own neighborhood – see my neighbors doing the same thing – more volunteers cleaning up – holding business owners accountable for cleaning up
- Create a way for people to spend their money here
- Want friends and allies to see someone who sets their mind to do it, and gets it done – person of integrity, doing the right thing
- Opponents – may not agree, but know where I stand – we may not agree but there is mutual respect
- Difference – the goals that are accomplished – want to contribute to overall growth of the City - been here 3 years, want to be here 30
- We need to retain, businesses and residents

Stanley

- Still learning about group and the structure of government in Lancaster; see things in other communities that I am jealous of...crossing the bridge (to DeSoto) and see things I'd like to have in Lancaster – may be reasons why we don't have what others have; want people to be proud to live in Lancaster
- During the past year, have listened to staff and the community; learned how the City works – want to build and promote a better Lancaster
- Always trying to move things in a positive direction; those who don't agree with me, hope they know I tried, he stuck with his decisions even when it was hard to do
- After I leave office I hope people remember that Stanley's heart was in the right place, he tried and stuck by his actions
- What difference will I make – time will tell...hopefully I made the community better for the future

Marcus

- Legacy is progress and prosperity; service was marked by overcoming challenges and developing positive outcomes in manner that is fair and respectful
- Opponents will recognize my character and respect my integrity
- Positive and professional leadership that will maximize the community in the future
- Results will speak for themselves – having the opportunity to serve is something I enjoy...as we take this journey together as a group, recognize that it's about the greater good; we will not always see eye to eye, but we can be agreeable in how we disagree
- Life is too short – we need to have some enjoyment in how we do this!
- People will judge us, have to be comfortable with who we are and who we are about – at the end of the day I want my family to appreciate what I have done in trying to serve others; and I will know when it is my time to move on

Walter

- Wherever you work, leave things better than what you found them; that is how I've always tried to leave them
- Hopefully I can do that in Lancaster for this City

- Don't really care about what my opponents say about me, wherever you are in life there will be people that disagree...you just have to hope they don't, but you know they do; as long as you are trying to do what is right I cannot care about what others think
- After 32 years of coaching, get tough skin...don't sugar coat the truth...
- Want to be remembered for being honest – that I didn't do things that were dishonest

Reflection

- No one in this room is my opponent...opponent is the obstacles we face as we try to accomplish things together
- People talked about where they are at their best – like the 3 words; what we said came from our heart – what we want to be, what we want people to see – but we may not always be able to do that – have to remember we can't always be at our best, remember what our intentions are
- We have to be the biggest cheerleaders for this community – even being truthful can be said in a positive way...our community has had and will have challenges; we have done a tremendous job working through our challenges – let's be positive in how we convey that and demonstrate that – we need to focus on being positive and being truthful
- Have a sense that everyone is compassionate and wants a better community and City, and that is a good thing
- We can resolve problems and issues – promote for the betterment of this City – some issues won't be resolved easily, but we have to stick with it, listen and let people know that their concerns are taken into consideration – to see what the City can do to improve and correct things

Assessing the Council Working Relationship

Council discussed things that went well this past year, and any disappointments they had/changes they would like to make moving forward

Things that went well

- Came together in challenging times – i.e. tornado and dealing with tough budget issues
- Held up my own commitment to call Council colleagues to seek clarification on issues, etc.

Disappointments/Things that could go better

- Give people a heads up if they intend to give a presentation or elaborate on information – when enough information is shared it should be stopped/not allowed to continue
    - Council should be allowed to share information completely
    - If you want something stopped use Roberts Rules of Order and ask for a Point of Personal Privilege – do not rely on Mayor to stop things
        - *This issue was discussed and Council agreed that Councilmembers should be permitted to make presentations on agenda items if they are interested in doing so*
- When constituents express concerns to a Councilmember about another Councilmember some would like for that issue to be addressed between 2 councilmembers before engaging others
    - Need to provide professional courtesy to our colleagues

  - Don't be open to triangulation
  - Engage Mayor as a 3rd party to have a conversation about the issue
  - Apologize if you overreach
- Council needs to be more strategic in how we address constituent concerns
  - Get both sides of the story
  - Keep the global perspective
  - Be empathetic without committing
    - *If someone does not do this we should address them privately, and point this out with respect*
    - *Engage the Mayor in the conversation if that is helpful*
- When items are before Council – and views are expressed on one side of the issue, but not the other side, the expectation is for the vote to be unanimous. If the vote is split – both views are in the room, but only 1 perspective has been shared – this keeps people from learning and does not promote understanding
  - Are we willing to debate? To influence our colleagues?
  - Be careful to how we say "opposition" so as not to jeopardize legal issues
    - *There is not consensus that all perspectives need to be voice prior to a vote – if Councilmember does not wish to share their perspective that is their individual prerogative*

Council Expectations

Council reviewed the expectations articulated in 2010, refined in 2011, and made additional comments

- Notes added in 2012
- Notes added in 2011

What do Council members expect from their colleagues on the Council?	What are Council members willing to give their colleagues on the Council?
• Full commitment to City of Lancaster (represent what's best for the whole City - not just your district - first and foremost) –*work on not attributing things as being good for an individual district vs. good for the City as a whole* • Work hard (read our packets, ask questions of staff is we have them, be prepared for meetings) - ***Council noted that there is room for improvement in this area*** *– overall doing better, but credit the Manager with following-up with Council to get questions on the table* • Be a team player (if decision is made and we disagree, don't criticize other Council members about it) - ***Council noted the need to be professional and courteous in disagreements*** *– continues to be an area for us to work on* • Respect and understanding (common courtesy of returning phone calls) *– don't make yourself look good at anyone else's expense*	• Do what I say I will do • If I have an issue I will tell you – *need to work on this* • Continue to work hard on Council work • My full commitment to the City of Lancaster • Honesty • Cooperation • Attention • Being the eyes and ears of my district to bring opinions from constituents • Willing to support and donate resources • Give life experiences • Be prepared • Give my perspective - when asked and even when not asked, sometimes • Start with blank slate, including trust and respect until a colleague loses it • Work with everyone

• Professionalism and appropriate decorum • Be committed to the position and all it entails (norms) • Be open minded, use all resources before making a decision – *could use work being or appearing to be open minded* • Honesty • Give colleagues the benefit of the doubt - ***Council members discussed the importance of preserving their right to change their minds, but also explaining to their colleagues why they have had a change of heart if/when that occurs*** – *understand that when you choose not to explain your vote, either before or after, you are shutting down understanding* • Abide by our rules, especially our charter • Uphold ethical standards inside and outside the Council chambers • Support each other – allow colleagues to be "first in their own district" for constituent services (when a constituent reaches out to you with an issue in one of your colleague's districts, bring the issue to your colleague and allow them to take over, resolve, and follow-up with the constituent) • Advice, if they want it • Go to the source of an issue or problem and try to resolve it directly (with one another or with appropriate staff) – *doing a good job letting staff know when there is a concern; Council can improve on holding one another accountable throughout the year* • For Mayor: Schedule regular (2x/year) meetings with each Councilmember to solicit ideas and feedback • Identify a fun/recreational activity to do 1x/year (bowling, ropes course) • Give appropriate credit to whoever brings up an idea • Encourage one another – be quick to praise and careful to criticize	• Concern and compassion • Willing to help if asked, and if I can • Understanding • Prayer • Benefit of the doubt

Rules and Procedures

- Council Duties and Responsibilities – page 4 – no changes
- Section I Mayor-City Council Relations
  - A – Mayoral Responsibilities
  - B – Councilmember Responsibilities
    - Discussion on the best way to share information as liaisons with regard to B.4.: – Board and Commission meeting minutes are available online

- C – House Rules: Code of Conduct
  - 7 – Come prepared to discuss issues
  - NEW - When possible ask questions of staff prior to the meeting so they can prepare
  - 9 – Need to be mindful that sidebar conversations are disruptive
- D – City Council Agenda Processes
  - 4 – Minutes b – Strike the existing language and replace with: The City Secretary will maintain records in accordance with the City's records management ordinance
- E – Councilmember Training and Professional Development

- Section II – Council –Staff Relations
  - 4 a – add Tablet
- Section III – Media Relations
  - Add his/her where appropriate
- Section IV – Boards and Commissions
- Code of Ethics
  - G – note reference to Texas Open Meeting Acts
- Censure Policy

Accountability

- If a Councilmember is not meeting expectations…
  - Go to the colleague and share the concern, if this is not comfortable or if the situation persists
  - Ask the Mayor (or another member of the body) to join and have a 3-way conversation; if the problem persists
  - The body will have to carefully consider how to pursue the matter

Closing Comments for Day One

- Air is cleared, ready to move on
- No intention to hurt anyone's feelings
- Plan to use PowerPoint presentations in the future if that will be effective
- Feel the conversation was good – no intention to raise voice – in a good place right now
- Ready to start the goal setting

Revisiting the Council Staff Relationship

- The City Council was universally positive about the Council- Staff Relationship – great progress has been made and the Council is feeling supported by the City Staff
- The City Manager shared a few new items for Staff expectations of Council that the Council agreed to
- Added in 2012

What does Council expect from staff?	What is staff willing to give Council?
• Responsiveness to requests • Ambitious • To do what is right • To take care of problems in a reasonable time • Cooperation • Complete and accurate information	• Timely and accurate and best professional advice and recommendations • Look for ways to say "yes" – problem-solving, creativity, expertise • Staff is the council's ally – staff is on council's side • Be consistent

• Effective and hard-working during work hours • Customer Service mentality – how can we help you, not "no" • Respectful and professional • Treat people the same no matter what their status • A Can-Do attitude • Step up to plate on issues - if you have information, don't hold it back • Anticipate all views • To actually care about the City – participate in events and listen to community concerns • Provide expert opinions – "airtight", not influenced by CM, unbiased and un-influenced (because they never hear staff and CM disagree...can be a concern) • Give me information and answers to council requests – answer the question asked • For manager and department heads to be more visible in the community • CM speak up on important issues • CM be engaged in meetings and work sessions (but respect role of council in conducting meetings) • Be prepared to answer questions at council meetings • Be knowledgeable of issues • No...but here are options things you can do	• Tell the truth (acknowledge mistakes) • Improve performance by learning from mistakes • Give credit to council for tough decisions, time given, hard work – to staff and to community • Full commitment of staff to give best work/effort to City of Lancaster • Give individual councilmember's credit when dealing with constituent services • Prioritize work based on vision/council goals and objectives • Communicate when projects are delayed

What does staff expect from Council?	What is Council willing to give staff?
• Clearly articulating what they need – don't always know when you're asking/requesting something • Adopt a vision/goals and objectives/work plan and stay focused – don't add or change mid-year • Get both sides of story before forming judgment • Use staff's expertise to help solve/resolve problems • See staff as resource – part of the same team • Recognize the answer "no" is sometimes a legal or policy constraint (not	• Listen • My perspective on their recommendations and response • Respect • Benefit of the doubt...until proven otherwise • Cooperation • Ability to do job without interference • Appreciation for work they do

obstructionist) • Don't shop for an answer – Opal/Dolle all operate with the same rules and will provide the same answer • Respect the charter and Rules of Procedure – directives go to CM/ACM, not staff; department heads for information (not lower) • Respond to staff on RSVP's for events and invitations • Let staff implement vision – no micromanagement, no directing staff, act as a body not individuals • Help engage the community – meetings, events, city services, elections; foster civic pride • Understand and be realistic about the city's fiscal condition – be prepared to make tough decision; take a longer view than three years/election cycle • Be positive about the community • Participation at City sponsored or co-sponsored events and Best Southwest Initiatives • Staff would like to bring policy related issues identified at Boards and Commission meetings to the full body for consideration	

Debriefing Progress and Anticipating the Future

The City Manager provided an update on the Goals and Objectives identified in 2011

Financially Sound City Government

- Budget was adopted by timely, tax rate remained the same, but residents had less financial impact because of declining property values
- Reserves increased significantly over the past year – fund is now above the Council's minimal goal

Quality Development

- Opened new warehouses and filled existing vacant space - Total square footage occupied was over 750,000 square feet
- Annexation began in February 2012; Regional Transportation Council committed $50M to Loop 9, part of which comes through Lancaster
- Joint TIF with Desoto was discussed in March 2012 and the Council decided to only pursue the TIF on the Lancaster side of I-35

Civic Engagement

- Throughout the year positive press releases were issued; using social media and reaching out to local merchants
- Joint meeting with LISD was held - the City Manager and Superintendent made updates and attempt to meet monthly to discuss common issues; school has a representative on the development review committee
- Most local merchants allow this – also use electronic kiosks

Healthy Safe, and Vibrant Neighborhoods

- 8 Public Improvement Districts (PID) formed and active; June 14 had an All-PID meeting to ensure they are obligated to comply with local codes, etc.; a subcommittee is working on developing a policy for Council consideration that will translate the code into common language – initial direction has been addressed but there may be additional policy items for Council consideration

Sound Infrastructure

- 10% match funds were identified – several projects underway at the airport
- Request to expand the landfill would infringe on the airport may need to engage our attorneys – if the landfill is expanded the FAA will not allow the runway to extend to 8,000 feet as called for in the Airport Master Plan
- Equipment replacement schedule was presented to the City Council – will come to Council for funding the first year

Professional and Committed City Workforce

- No specific strategies, but the City Manager has kept the Council up to date on internal initiatives to ensure professionalism

Day Two

Check-in/Agenda Review

The Executive Staff was welcomed to the retreat – participants were asked to give "one-word" to describe where they are as today begins:

- Curious (x2)
- Budget-focused
- Anxious
- Excited (x2)
- Ready to work
- Energized
- At-peace
- Surprisingly good
- Re-focused
- Driven
- Thankful – it's almost over, and for staff and their work to meet our goals
- Eager

- Here to participate
- A sponge

Focus on the Future of Lancaster

The Council reviewed the existing Key Performance Areas and determined that the existing six Key Performance Areas were still critical to achieving the Lancaster vision:

> Lancaster is a proud, vibrant city. We celebrate our diversity and history, preserve our natural beauty, and are the economic hub of the south DFW metroplex. Our citizens take pride in our city. The Lancaster community is the best place to live, with excellent schools and educational opportunities, and attractive corridors and neighborhoods. Our citizens enjoy convenient living.

- Financially Sound City Government
- Civic Engagement
- Healthy, Safe and Vibrant Neighborhoods
- Professional & Committed City Workforce
- Sound Infrastructure
- Quality Development

Refine and Define Priorities

Council then brainstormed potential initiatives and prioritized them

Quality Development

- Update the comprehensive plan (4)
- Recruit commercial, industrial and retail jobs (5)
- Targeted marketing to the brokerage community (4)
- Recruit a Target (4)
- Continue Airport Expansion Plans(3)
- Revitalize historic downtown and build a new City Hall (1)
- Relax the Tree Ordinance (1)
- Retention of businesses contributing to Lancaster (2)
- Revise the City development incentive program
- Sustainability/ICC Codes

Sound Infrastructure

- Street Maintenance Program (7)
- New Fleet Maintenance Facility (5)
- Public Safety Mobile Radios – FCC Compliance (3)
- Improve the golf course (3)
- 50/50 Sidewalk maintenance program (2)
- Water Quality (1)
- Implement vehicle replacement schedule)1)

Healthy Safe and Vibrant Neighborhoods

- Increase police presence (4)
- PID (3)
- Partnership with SPCA
- Police program to reduce break-ins
- Adopt a street in Council district

Professional & Committed City Workforce

- Customer Service (2)
- Expand the PRIDE program (1)
- Increase Salaries (1)
- Give staff credit for work (1)

Civic Engagement

- Quarterly PID/HOA Meetings (1)
- Adopt a street through Council (1)
- End of year certificates for youth council (1)
- Friendly available services to residents from Council members

Financially Sound City Government

- Revise SW Policy to include LISD (3)
- Revise Financial Policies to fund CIP and Equipment Replacement (4)
- Senior Discount for Utility Bills (1)
- Continue regular budget updates (1)

Finalize 2012-2013 Workplan

Council agreed to the following initiatives for 2012-2013

Financially Sound City Government

- Revise and amend Storm Water Ordinance
- Amend Financial Policies to maintain a minimum 12% fund balance and designate any excess to the Capital Improvement Projects (CIP) and Equipment Reimbursement Funds and amend Storm Water Ordinance
- Review Senior Citizen discount policy

Healthy, Safe and Vibrant Neighborhoods

- Expand Police visibility and involvement in the community through community watch programs, and teen/youth activities and education
- Support Lancaster neighborhoods in the creation of Public Improvement Districts (PID'S) throughout the City to strengthen and connect neighborhoods

Sound Infrastructure

- FCC Compliance with Narrowband requirements
- Street Maintenance Program

- Plan for New Fleet Maintenance Facility

Quality Development

- Update the Comprehensive Plan
- Recruit quality commercial, industrial and retail Jobs
- Target marketing to commercial, industrial and retail brokerage community
- Continue to implement the Airport Master Plan

Initial Workplans

Fleet Maintenance

- Provide ample facilities for preventative maintenance.
- Success: LEED Certified Facility that employees will be proud to work in; consider opportunities to co-locate/share services with LISD
- Construct within 5 years, define the timeline by identifying funding, secure the design and location and have facility operational in 5 years

Storm water Drainage Fee Policy

- Update and enforce the ordinance for storm water management as it relates to LISD
    - Ensure that the school district pays the appropriate amount for storm water
    - Phase implementation
- Review the cap for Churches (increase it)

Financial Policies

- Current policy goal is to have 10% minimum fund balance and increase 1% per year up to 15%
- Update financial policies to have the minimum fund balance be 12%; then allow fund balance in excess of 12% be used 80% for CIP and 20% for Equipment – update annually

Street Maintenance

- Use existing program that prioritizes street maintenance – ideally we need approximately $1M/year for street maintenance; current spending is only about $200K
- Identify projects for the CIP – break out funding for street maintenance in the CIP
- Prioritize projects to allocate money

Comprehensive Plan Update

- Provide a vision of what we want to be when we grow up
- Develop a phased approach
    - Staff to outline a process with cost and develop a process for phasing the update
- Brief City Council on existing plan
- Establish timeline/benchmarks and funding

Expand the Airport

- Airport is critical for economic development – Implement/Follow Airport Master Plan
- Protect future expansion needs from landfill expansion
- Success:

  - No landfill expansion
  - Expanded runway
  - Tower
  - More airport usage/hangers, etc.
- Measures:
  - No increase in land fill
  - Runway is 8,000 ft. long
  - Get started on control tower
  - Measureable increased revenues

Expand Police Visibility

- Increase police awareness
- More engaged teens – parental involvement
- Involve utility companies to assist with neighborhood watch
- Educate on policy regarding pro-active practices
- Look at previous statistics during peak hours – i.e. summer, holiday, breaks, spring break
- Review crime statistics annually

Public Safety Radios

- Federal Mandate in January 2012 – must comply or risk losing license

Increase Commercial, Industrial and Retail

- Need to increase the tax base, grow our daytime population, anchor stores create "synergy" - need more destination businesses, attraction of primary payrolls
- Success:
  - Grow jobs and daytime population
  - Grow sales tax and property tax base
  - Availability of a variety of products and services
  - More occupied big boxes
- Measures:
  - 5% increase in jobs in the next 1-2 years (base is 1,800 jobs)
  - 5% increase in sales tax in the next 1-2 years
  - 3% property tax revenue increase in the next 3-5 years
  - 1,000,000 sq. ft. increase in industrial space
  - 500,000 sq. ft. of existing or new occupied space

Targeted Marketing to Commercial Brokers

- Promote Lancaster by marketing
- Build trust
- Deliver business friendly message
- What does success look like:
  - sales calls and attend broker events;
  - development forums;
  - trade shows;
  - international sales missions

- Measures:
  - Survey- how did City treat you during development
  - Action/new development as a result of awareness
- Timeframe: 1 year

Issues not addressed- that the City Council has encouraged the City Manager pursues:

- Bring forward a new policy to provide a discount for senior citizens on utility bill
- Include City Hall as a long-term community project in the CIP (in addition to the Fleet Maintenance Facility)

Adjourn/Next Steps

Council and staff were asked to reflect on this year's retreat experience and share a parting thought or comment:

- Sheree: Thank you for the opportunity to have an open discussion – very pleased the senior citizen discount made the list – needed in this community!
- Ed: Done
- Thomas: Good to have everyone involved; appreciate Council allowing the staff to be involved to hear your vision; good list of items for the next year, good thing this City Council does every year
- Larry: Informative, appreciate the opportunity to sit in on this retreat and bring things to the table for everyone to hear issues in every area – want everyone to have a safe community and experience in this community
- LaShonjia: As a new member of the group, didn't really know what to anticipate; agree that the issues developed in the goals are things that we can really strive to work on; got to know each person a little better; important for me to have good working relationships with colleagues, Mayor, and working with Executive Staff through Opal; this is an opportunity to air conflicts, concerns and issues; this was done in a tactful way – when you have done it, left it, leave it in the room and move on to growing the City
- Walter: Today was real productive this is the day I look forward to of the time we spend together; first day was a froo-froo day – today we put teeth in to what we are trying to do as a City and a Council – look forward to staff accomplishing these things for us.
- Marco: Thanks to staff and Council colleagues for the time put into this; we are moving the City forward – it is a process, it is time consuming – huge difference in last two years, citizens are happier, starting to see fruits of our work – long way to go, but we are making the right moves; could be last session as a councilmember in strategic planning – hope everyone knows I lead with my heart and everything I did was for the City of Lancaster. Do what we do because we care about our City.
- Nina: I love this City – been here since 1985, still choose staying here; appreciate City staff for doing what they do – this is a job, but you do it selflessly. Staff is encouragers, motivators to Council and others in the community. Will make a conscious effort to say thank you more.
- Dolle: Goal setting is always my favorite – get clear direction for staff. Glad we have this interaction with staff – still surprisingly good.
- James: Been in these goal setting sessions for 7 or 8 years – this is one of the best and most productive that I have had the opportunity to participate in. Reason is the colleagues and good facilitation.

- Dori: Really enjoyed goal setting the past two years – and also with the interaction through the tornado – enjoyed working more closely with the Council. Appreciate the kindness and compliments of the Council. Saw a lot of hard work together this year.
- Rona: Thank you for the Comp Plan Update item! Planning is my passion...when I came in 2004 we were growing fast, refreshing to be able to plan things out for the future. Look forward to what is in our future...we are the sleeping giant of southern Dallas County – we will be in the future how people see Cedar Hill today.
- Stanley: Thanks to staff for being with us – appreciate also citizens attending our sessions; good to see staff and council work together on setting attainable goals. Look forward to accomplishing them. Enjoyed yesterday, enjoyed today more. Look forward to next year.
- Sean: This is 3rd strategic planning session – eye opener in 2010 to see how the groups work together. We keep improving on our working relationships – staff and council; staff and staff; council and council. Appreciate candid conversations. We can really turn this into a world-class City.
- Opal: To Executive Team – you make me look good – to this group it is more than a job. Appreciate Council willing to deal with these major policy issues – you guys are stretching beyond – and appreciate your work on these. Really making progress in our working relationships and that helps productivity. Front line employees are working for you every day on the front line. We will get where you want us to be in time – we are moving in the right direction. Need and welcome your continued support as well as your patience as we address the opportunities that are before us.
- Marcus: See a parallel with being a parent – see your children grow and mature and you sacrifice to give them the things you think they need and I'm blessed to see that in my own children, but I parallel that to this group because I see growth and development in this group – leaving with a sense of being energized. This has been a tough year for our community, and personally, but in the end we rallied around each other – pushed each other to ensure that we are doing what is best for the community. Proud to work with an organization I think is first class. People are amazed at our professionalism and capability in dealing with an event like a tornado. At the end of the day, we have a significant responsibility as a governing body and staff to always do what is best for this community. Encourage everyone to ponder that – what is my role, why I am here, am I making a difference in making this community better. Hope we will continue to support each other moving forward. Look forward to next year...where will we go next.