



Dallas Area Rapid Transit  
P.O. Box 660163  
Dallas, Texas 75266-0163  
214/749-3278

September 8, 2009

Ms. Lynn Hayes  
Federal Transit Administration  
819 Taylor Street, Room 8A36  
Fort Worth, TX 76102

Dear Lynn:

In response to your emails dated June 19, 2009 and July 28, 2009, Dallas Area Rapid Transit (DART) has completed an amended version of the Categorical Exclusion (CE) for the Lake Highlands Station project, originally approved September 18, 2008 in accordance with the National Environmental Policy Act (NEPA) and FTA policies and procedures.

The Lake Highlands Station project is an infill station to be constructed with \$10M in CMAQ funds on the DART Blue Line at Walnut Hill. The original project description included the station platform and supporting pedestrian access and walkways to and from the west side of the station, all contained within the DART ROW. A private, Transit Oriented Development is being developed by Prescott Realty Group on 70 acres to the west of the station, and the City and County of Dallas are also participating in public infrastructure improvements for the TOD.

The amendment includes the two scope changes described in previous emails are outlined below:

1. A parking lot planned to be constructed in two phases, with the first phase to be completed upon the opening of the station (December 2010), and the second phase to be completed as warranted, should additional parking be required. DART will monitor the lot usage upon opening day. The auto access from the public street to the parking lot will cross over the Prescott property. Most of the first phase of the lot will be contained within the DART ROW. Most of the second phase, if needed, will be contained within, what is currently, Prescott property. We are currently working with Prescott towards an agreement for utilization of the private property needed to accommodate this parking lot.
2. A pedestrian/bicycle access from the east side of the station platform that would go south of the platform along the DART ROW, underneath the Walnut Hill overpass, then turn east on the south side of Walnut Hill, run parallel to Walnut

Ms. Lynn Hayes  
September 8, 2009  
Page 2 of 2

Hill to White Rock Trail Road. The path way would run along DART ROW and along the City of Dallas ROW. No private property would be affected.

The attached document amends the previously approved CE with strike-through format for deleted text and additional text in red. One figure was added to depict all project components included in this amended environmental documentation.

DART is requesting approval from FTA Region VI of the amended CE document at the earliest convenience in order to proceed with construction procurement for this project. If you have any questions, please contact me at 214-749-2764.

Sincerely,

A handwritten signature in cursive script that reads "Barbara Weigel".

Barbara Weigel, AICP  
Project Manager  
Rail Planning

C: PMFR  
Reza Shirmanesh



# Lake Highlands LRT Station

Categorical Exclusion

Presented to Dallas Area Rapid Transit by URS Corporation

August 2008

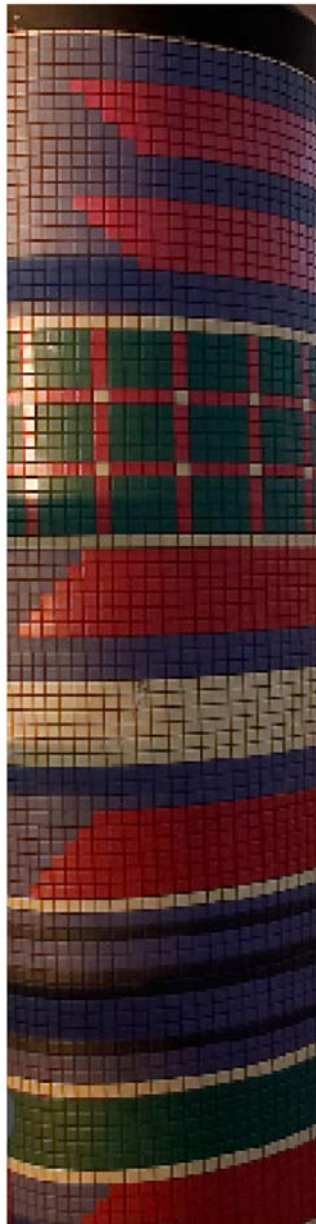
**Amended September 2009**



General Planning Consultant (C-1008975-01)



Bus • Commuter Rail • HOV • Light Rail • Paratransit



DART Lake Highlands LRT Station  
CATEGORICAL EXCLUSION



# LAKE HIGHLANDS LRT STATION CATEGORICAL EXCLUSION

August 2008

**Amended September 2009**



DART Lake Highlands LRT Station  
CATEGORICAL EXCLUSION





## Table of Contents

INTRODUCTION.....	1
A. DETAILED PROJECT DESCRIPTION.....	1
<i>General</i> .....	1
<i>Site Description</i> .....	2
<i>LRT Station</i> .....	2
<i>Trackway Modifications</i> .....	3
<i>Structural Modifications</i> .....	4
<i>Site Work and Utilities</i> .....	4
<i>Survey and Geotechnical</i> .....	4
B. LOCATION (INCLUDING ADDRESS).....	5
C. METROPOLITAN PLANNING AND AIR QUALITY CONFORMITY.....	6
D. ZONING.....	6
E. TRAFFIC IMPACTS.....	6
F. CARBON MONOXIDE (CO) HOT SPOTS.....	7
G. CULTURAL RESOURCES.....	8
<i>Historic Resources</i> .....	8
<i>Archeology</i> .....	8
H. & I. NOISE AND VIBRATION.....	9
J. ACQUISITIONS AND RELOCATIONS REQUIRED.....	9
K. HAZARDOUS MATERIALS.....	10
L. COMMUNITY COHESION AND ENVIRONMENTAL JUSTICE.....	10
<i>Community Cohesion</i> .....	10



*Environmental Justice*..... 11

M. USE OF PUBLIC PARKLAND AND RECREATION AREAS..... 13

N. IMPACTS ON WETLANDS ..... 14

O. FLOODPLAIN IMPACTS..... 14

P. IMPACTS ON WATER QUALITY, NAVIGABLE WATERWAYS, & COASTAL ZONES..... 14

Q. IMPACTS ON ECOLOGICALLY-SENSITIVE AREAS AND ENDANGERED SPECIES..... 15

R. IMPACTS ON SAFETY AND SECURITY..... 16

S. IMPACTS CAUSED BY CONSTRUCTION ..... 16

References ..... 18

**List of Tables**

Table 1 Land Uses by Category ..... 5

Table 2 Population and Economic Information ..... 12

Table 3 Population by Race..... 12

Table 4 Population by Ethnicity ..... 13

**Appendices**

Appendix A Agency Coordination Letters..... A-1

Appendix B Figures..... B-1

Appendix C 2008-2011 TIP Reference..... C-1

Appendix D Noise and Vibration Analysis Memo ..... D-1

Appendix E Federal and State Listed Threatened and Endangered Species for Dallas County ..... E-1



### Acronyms and Abbreviations

APE	Area of Potential Effects
CE	Categorical Exclusion
CFR	Code of Federal Regulations
CMAQ	Congestion Mitigation and Air Quality
CO	Carbon Monoxide
DART	Dallas Area Rapid Transit
FTA	Federal Transit Administration
GPC	General Planning Consultants
LEA	Local Environmental Assessment
LRT	Light Rail Transit
MTP	Metropolitan Transportation Plan
NCTCOG	North Central Texas Council of Governments
NEPA	National Environmental Policy Act
NRHP	National Register of Historic Places
PVI	Point of Vertical Intersection
ROW	Right-of-Way
RTHL	Recorded Texas Historic Landmarks
SAL	State Archeological Landmarks
SHPO	State Historic Preservation Officer
SLRV	Super Light Rail Vehicle
SWPPP	Stormwater Pollution Prevention Plan
TASA	Texas Archeological Sites Atlas
TCEQ	Texas Commission on Environmental Quality
THC	Texas Historical Commission
THSA	Texas Historic Sites Atlas
TIP	Transportation Improvement Program
TPDES	Texas Pollutant Discharge Elimination System
TPWD	Texas Parks and Wildlife District
USFWS	United States Fish and Wildlife Services

DART Lake Highlands LRT Station  
CATEGORICAL EXCLUSION





Date \_\_\_\_\_

Grant No. \_\_\_\_\_

Grant Applicant Dallas Area Rapid Transit

**INFORMATION REQUIRED FOR PROBABLE  
CATEGORICAL EXCLUSION  
(SECTION 771.117(d))**

**INTRODUCTION**

Dallas Area Rapid Transit (DART) is currently planning the construction of the proposed Lake Highlands Light Rail Transit (LRT) Station along the existing and operational DART Blue Line. **Figure 1 (See Appendix B)** depicts the proposed station area. To satisfy the requirements of the National Environmental Policy Act (NEPA) and 23 Code of Federal Regulations (CFR) 771.115 and 771.117 Final Rule of the Federal Register, Part II, Department of Transportation Environmental and Related Procedures, August 28, 1987, DART initiated coordination with the Federal Transit Administration (FTA) Region VI on April 9, 2008. FTA Region VI concurred that a categorical exclusion (CE) was the appropriate level of environmental documentation for the proposed Lake Highlands LRT Station in a letter dated on May 14, 2008. A copy of this letter is included in **Appendix A**.

Since this CE was completed in early August 2008, DART has conducted five community meetings as well as meetings with the Prescott Realty and City of Dallas. Due to requests from the community representatives regarding parking and eastside access to the station, additional design modifications to the proposed station have been made. The updated design now includes parking north of the platform and pedestrian access from the south and east via Walnut Hill Lane. Modifications to this CE are shown in red.

**A. DETAILED PROJECT DESCRIPTION**

***General***

The proposed DART Lake Highlands LRT Station would be an in-fill station located north of Walnut Hill Lane on the existing DART Blue Line. The station is located slightly north of but in the same general location of the deferred Kingsley Road Station identified in the Northeast Corridor Major Investment Study (MIS),



(1995) and Local Environmental Assessment (LEA), (1997). This station was included in the Final LEA but deferred until Blue Line ridership warranted expansion. A major funding source for this proposed station is \$10.75 million in Congestion Mitigation and Air Quality (CMAQ) funds plus the local match.

This CE is limited to the evaluation of the impacts and benefits of the proposed station, **Phase I and Phase II parking areas, and eastside access pedestrian walkway** located within DART-owned Right-of-Way (ROW), **the Walnut Hill Lane ROW, and a portion of the Prescott Realty property.** ~~Plans for o-~~Other elements outside of the DART ROW include a bus circulation facility to be served by Route 583 and Kiss-and-Ride spaces that would be provided by the Lake Highlands Town Center development. These elements are being designed and funded by the developer with coordination and review by DART.

### ***Site Description***

The proposed station's limits would extend approximately 750 feet north and 250 feet south of Walnut Hill Lane. Walnut Hill Lane is grade separated approximately 21 feet above the existing DART Blue LRT line. Because of track modifications required to accommodate the vertical curve described in the "Trackway Modifications" section, the proposed 365-foot platform would be 20 feet shorter than the current DART criterion of a 385-foot platform that would accommodate three standard LRT vehicles or may accommodate three Super Light Rail Vehicles (SLRV). A design exception to DART Design Criteria would be required for this element. The surrounding grade outside of the ROW and proposed platform is steep. The grade slopes up 16 feet to White Rock Trail on the east and down 39 feet to White Rock Creek on the west.

**In addition to the above improvements, DART would construct a parking lot to the north and west of the station platform. This parking area would be constructed in two phases. Phase I would included .45 acres of parking with approximately 62 general use parking spaces and five handicap parking spaces. Phase II would include approximately an additional .45 acres of parking area and approximately 62 general use parking spaces. Phase II would be constructed on property owned by Prescott Realty Group (or its successor) at a later date. Phase II will only be implemented if parking demand warrants the additional spaces.**

**South of the proposed station platform, a walkway would be constructed to allow pedestrians to access the station from Walnut Hill Lane and White Rock Trail Road. Pedestrian crossing facilities and ADA ramps would be constructed at the intersection of White Rock Trail and Walnut Hill Lane. The pedestrian walkway would begin at this intersection and continue west within the City of Dallas ROW for approximately 360 feet. The walkway would then turn north beneath the Walnut Hill bridge, within DART-owned ROW, for approximately 160 feet to the southern edge of the station platform.**



### ***LRT Station***

The proposed Lake Highlands LRT Station would be an at-grade side platform station with a gull-wing canopy. Gull-wing canopy platforms are more feasible and economical because the station could be built next to active track operations without interruption of rail service. The platforms would be set at 15.5 inches above the rail top to accommodate level boarding. Station finishes would be selected through DART's Community based Art and Design program.

The construction of the proposed station would require modification to the existing drainage system. Runoff from the proposed bus facility and the proposed station grading would be collected in a new on-site storm sewer system. Storm water would run through a 30-inch storm drain into a new 30-inch stubout to be provided by the Lake Highlands Town Center development on the west side of the proposed station. This storm water would discharge into the lakes proposed by the Lake Highlands Town Center development.

Landscaping in the station area would comply with City of Dallas and DART requirements for transit-oriented development. The landscape design would include trees, various species of shrubs, ground cover and perennial plants.

### ***Bus Transfer Area***

A bus boarding area for the proposed Lake Highlands LRT Station would be provided by the Lake Highlands Town Center development. Access would consist of four bus bays for local buses and para-transit vehicles through a one-way 30-foot wide bus lane. The location is adjacent to but outside the station ROW, though a small section of the circular bus drop off would lie within the station ROW. The developer would also provide three Kiss-and-Ride parking spaces, landscaping and bus shelters. The bus transfer area is not considered in this CE.

### ***Trackway Modifications***

The alignment through the proposed Lake Highlands LRT Station is on a horizontal tangent between Station 603+35 and Station 607+00. The existing 300-foot vertical curve with the point of vertical intersection (PVI) at Station 607+00 would require modification to eliminate the vertical curve in the limits of the proposed platform. To achieve this, the vertical curve length would be reduced to 100 feet with the PVI at Station 607+50, which satisfies the minimum vertical curve length for speeds less than 50 mph and would meet DART Design Criteria requirements. An additional 100-foot vertical curve would be introduced in the profile with PVI at Station 612+00. **Figure 2 (Appendix B)** depicts the plan and profile drawing for the Lake Highlands LRT Station.



These modifications would increase the profile from zero inches at the existing point of vertical curve to crown at a maximum of six inches. A profile revision of 700 feet would require additional ballast and track occupancy time by track equipment. DART's maintenance group would perform the track adjustment prior to the station platforms construction.

### ***Structural Modifications***

The location of the proposed Lake Highlands LRT Station platforms would require retaining walls. The north Walnut Hill Lane bridge abutment would require additional retaining walls to accommodate the platforms. The platform construction would require removal and modification to existing ballast walls near the bridge and modification of an existing sound wall within the limits of the platform.

### ***Site Work and Utilities***

Because the proposed Lake Highlands LRT Station is located on an existing double-track LRT ROW and is built on fill developed during construction of the Northeast LRT Corridor, existing grading would be modified to accommodate station platforms, access walkways, and handicap ramp. A large amount of fill in the developer-proposed bus transfer area would ease the grade transition between the proposed Lake Highlands LRT Station and the Lake Highlands Town Center development. DART is coordinating its grading requirements in this area with the grading plans for the Town Center Development.

Composite utility plans of the proposed station are available from the existing "As-Built" plans. Due to the revised grading requirement, potential conflicts and relocations have been evaluated. Identified utility conflicts within the proposed station area include an existing 12-inch water line near the Walnut Hill Bridge and an existing 30-inch storm drain that cross the existing alignment at approximately Station 604+20. Additional utility conflicts such as franchise utilities arising from site modification would be addressed and resolved utilizing DART and Dallas Water Utilities Design Guidelines. No existing franchise utility crossings have been identified. Underground utilities crossing DART tracks would be protected with metallic encasement. Further coordination with the utility owner/operator would be conducted to minimize potential impacts to utilities. Utilities would be relocated before general construction to avoid delays in the installation of the station elements.

### ***Survey and Geotechnical***

A field survey of the existing DART LRT tracks was conducted within the limits of the proposed Lake Highlands LRT Station to verify track elevations and other critical elements related to the preliminary design. Coordination efforts also





included meetings with the City of Dallas, Dallas County, and the Lake Highlands Town Center developer, Prescott Realty.

Geotechnical investigations conducted during the engineering of the Northeast LRT Corridor provided data along the alignment and in the vicinity of the Walnut Hill Lane Bridge relevant to the proposed Lake Highlands LRT Station. Additional investigations and data collection for proposed station structures would be conducted as needed during final design before construction.

**B. LOCATION (INCLUDING ADDRESS)**

The proposed station would be located entirely generally within existing DART-owned ROW with boundaries approximately 750 feet north and 250 feet south of Walnut Hill Lane. Phase 2 of the additional parking and portions of the pedestrian walkway are outside of this original boundary. Figure 1 illustrates the proposed Lake Highlands LRT Station location. Figure 3 depicts the previously proposed station layout. Figure 3a depicts the site layout with added features for parking and pedestrian access, and Figure 4 illustrates surrounding land uses and community facilities. These figures are included in Appendix B.

Table 1 represents the land use categories and associated percentages within a one-half mile buffer surrounding the proposed Lake Highlands LRT Station location. Single-family residential and multi-family residential comprise the majority of the land uses within the one-half mile buffer.

**Table 1: Land Uses by Category**

Land Use Category	Acreage	Percentage
Single-family	273.45	51%
Multi-family	123.42	23%
Industrial	8.26	2%
Parks	34.88	6%
Flood Control	0.72	1%
Commercial	30.13	6%
Government/Educational	39.64	7%
Infrastructure	12.94	2%



Land Use Category	Acreage	Percentage
Undeveloped	13.19	2%
<b>Total Acreage</b>	<b>536.61</b>	<b>100%</b>

Source: NCTCOG, 2005.

The adjacent Town Center development would modify the existing land uses. Some of the existing multi-family would be replaced with a new multi-use development. This development would include approximately 50,000 square feet of office use, 315,000 square feet of retail use, and 1,700 multi-family units.

**C. METROPOLITAN PLANNING AND AIR QUALITY CONFORMITY**

The proposed Lake Highlands LRT Station is included in the North Central Texas Council of Governments' (NCTCOG) Metropolitan Transportation Plan (MTP) known as *Mobility 2030: The Metropolitan Transportation Plan for the Dallas-Fort Worth Metropolitan Area*. This proposed station is included as part of the 2008-2011 Transportation Improvement Program (TIP) by modifications in November 2007, February 2008, and May 2008. **Appendix C** includes the official modification forms. The regional TIP and Mobility 2030 are in conformity with National Air Quality Standards.

**Finding: The proposed Lake Highlands LRT Station is consistent with the Regional TIP and Air Quality Conformity.**

**D. ZONING**

The proposed Lake Highlands LRT Station would be constructed ~~completely~~ **generally** within the DART-owned ROW **and City of Dallas roadway ROW** that is currently used for LRT operations **and open space**. The proposed LRT station would be consistent with the existing transportation use and would not require any zoning changes. **A Special Use Permit is required for construction within the DART ROW. The small portion of the Prescott property that may be used for Phase II parking would be consistent with the existing multi-use zoning.**

**Finding: The proposed Lake Highlands LRT Station is consistent with existing zoning.**

**E. TRAFFIC IMPACTS**

**The majority of the** traffic impacts would be ~~exclusively~~ associated with the adjacent Lake Highlands Town Center project. ~~The proposed Lake Highlands LRT Station would not include any station-associated parking.~~ **Based on community input, DART conducted a parking demand analysis to ascertain**



probable parking demand at the station. This effort was based on: 1) application of the regional travel demand model, and 2) an assessment of the actual usage of parking spaces within the Northeast Corridor (Blue Line). The analysis resulted in the proposed Phase I parking proposal of 62 general use spaces and five handicap spaces on opening day December 2010. DART is including a Phase II parking area, which would include another 62 general use spaces that would be constructed, if ridership demands, at a later date.

The developer of the Lake Highlands Town Center project has coordinated with DART to ensure that the roadway network within the development can accommodate bus operations. Route 583 would be rerouted from Skillman to serve the station. Additional system-wide bus changes will occur in December 2010. At this time, it is planned that potentially two additional routes would serve the Lake Highlands station. These two routes would run less frequently than Route 583 and would not stop at the Lake Highlands station simultaneously. Thus, there are sufficient bus bays to serve the additional routes. Final details on new routes will be determined in the summer of 2010.

As a part of the Lake Highlands Town Center project, Prescott Realty Group completed a Traffic Impact Analysis March 7, 2007 to develop mitigation measures and ensure compliance with City of Dallas traffic requirements. Additional retail, residential and office uses within the development would be mitigated based on the recommendations from this study. Additional bus movements would be minimal and are being accommodated through design coordination between the City of Dallas, Dallas County, Prescott Realty Group, and DART.

**Finding: The proposed Lake Highlands LRT Station would not negatively impact existing traffic patterns.**

#### **F. CARBON MONOXIDE (CO) HOT SPOTS**

According to 40 CFR 93 part 93.116, a FHWA/FTA project must not cause or contribute to any new localized CO violation or increase the frequency or severity of any existing CO violation in CO nonattainment or maintenance areas. The Dallas/Fort Worth region is in attainment for CO. In addition, a CO Hot Spot analysis is not required since the proposed station has already been approved by NCTCOG in the TIP and the MTP and the proposed station would not result in a decrease in the level of service on adjoining roadways as ~~no new~~ limited parking, only 67 spaces in Phase I, would be constructed. Appendix C includes the 2008-2011 TIP references for the proposed station.

**Finding: A CO Hot Spot Analysis is not required.**



## G. CULTURAL RESOURCES

### *Historic Resources*

A review of the National Register of Historic Places (NRHP), the list of State Archeological Landmarks (SAL), and the list of Recorded Texas Historic Landmarks (RTHL) indicated that no historically significant resources have been previously documented within the proposed Area of Potential Effects (APE), a 100-foot wide corridor established in the Northeast LRT Corridor LEA. Coordination with the State Historic Preservation Officer (SHPO) for the proposed APE was initiated with a letter dated May 30, 2008 (**See Appendix A**). **THC concurred that no further analysis would be required regarding historic structures on August 1, 2008.**

### *Archeology*

The Texas Archeological Sites Atlas (TASA) and the Texas Historic Sites Atlas (THSA) were consulted for listings of archeological sites, historic structures, or historic-age structures that have the potential to be adversely affected by the proposed Lake Highlands LRT Station. No archeological sites, SAL, historic markers, or NRHP properties are listed within or in close proximity to the proposed station area or the proposed archaeological APE.

In 1996, the entire proposed station corridor was surveyed by DART for the proposed 12-mile Northeast Corridor under Antiquities Permit 1697 (Green et al. 1996). During the previous study, a 100-foot wide corridor was established as the archeological APE and subjected to intensive survey for the entire proposed station length. No archeological sites were recorded during the survey. Green et al. (1996) indicated that much of the APE had been destroyed due to urban development of the area. The current proposed station footprint is within the Green et al. (1996) archeological APE.

Coordination with the Texas Historical Commission (THC) is under way in order to determine whether further archeological investigations would be warranted. **Appendix A** includes the THC coordination letter for both historic resources and archeology. THC concurred with the recommendation to proceed with no additional archeological survey on August 1, 2008.

**Finding: ~~Coordination with the THC, the SHPO is under way in order to determine whether further investigations would be warranted.~~ No further investigations are required and it is anticipated that no historic or archeological resources in association with the proposed Lake Highlands LRT Station.**



## H. & I. NOISE AND VIBRATION

A complete noise and vibration assessment was conducted for the proposed Lake Highlands LRT Station. This assessment is detailed in **Appendix D**. The following is a summary of the findings:

The major source of noise and vibration along the Northeast Corridor and at the proposed Lake Highlands LRT Station is the operation of the LRT vehicle. Both noise and vibration levels are dependent on the speed of the vehicle. As the speed of the vehicle increases, the noise and vibration levels increase and as the speed decreases, the noise and vibration levels decrease. The current Blue Line LRT speeds in the area are 50-55 mph. The effective speed for the proposed station would only be 20 mph. Based on this lower speed, both the noise and vibration levels generated by the LRT are projected to drop significantly with the addition of the proposed station.

Potential noise impacts resulting from construction activities are expected to be minimal. Noise associated with the construction of the proposed station would result from heavy machinery. Construction normally occurs during daylight hours when occasional load noises are tolerable. No extended disruption of normal activities is expected. Provisions would be included in the proposed station plans and specifications that require the contractor to make every reasonable effort to minimize construction noise through abatement measures such as work-hour controls and proper maintenance of muffler systems.

**Finding: Based on the modeled reduction, there are no noise or vibration impacts projected in association with the proposed Lake Highlands LRT Station.**

## J. ACQUISITIONS AND RELOCATIONS REQUIRED

The proposed Lake Highlands LRT Station is ~~completely~~ contained within an existing DART owned LRT ROW that is 16.7 miles in length. **The additional Phase II parking area would be located on Prescott Realty property and would be used with an agreement with the private land owner. The pedestrian walkway would be constructed partly within the City of Dallas-owned Walnut Hill Lane ROW and would be utilized with an agreement with the City of Dallas.**

**Finding: DART currently owns this parcel, or is developing agreements for the use of the necessary land; therefore, no land acquisitions or property displacements would be required for the proposed Lake Highlands LRT Station.**

## K. HAZARDOUS MATERIALS

An environmental site assessment was conducted in March 1996 in conjunction with the LEA for the Northeast Corridor LRT. The study concluded that there are no hazardous materials concerns within or adjacent to the proposed station and the changes in surrounding land uses would not warrant additional study.

During site reconnaissance, no sites were identified as containing a risk for hazardous materials contamination. A manufacturer of wood doors was noted approximately five hundred feet south of the proposed station along the existing DART LRT Corridor. However, all manufacturing activities appear to be conducted inside the facility and any facility runoff would enter the corridor south of the proposed station and flow towards the south. This manufacturer, therefore, poses no environmental risk to construction activities.

The proposed station would not require any deep excavation, so no disturbance of unknown hazardous materials is likely. Construction activities associated with the proposed station would include provisions for monitoring shallow excavation activities. While not anticipated, in the event that hazardous materials are identified during construction, construction activities would cease and the area in question would be further investigated. If required, hazardous materials management would be conducted in accordance with State of Texas protocol.

**Finding: The proposed Lake Highlands LRT Station would not involve the management of known hazardous materials.**

## L. COMMUNITY COHESION AND ENVIRONMENTAL JUSTICE

### *Community Cohesion*

Community cohesion is a term that refers to an aggregate quality of a residential area. Cohesion is a social attribute that indicates a sense of community, common responsibility, and social interaction within a limited geographic area. Since the proposed Lake Highlands LRT Station is completely contained within DART-owned ROW, community cohesion within the area would be unchanged. However, the Lake Highlands Town Center project would modify the neighborhood adding new multi-family residential as well as retail opportunities for residents.

The White Rock North School, located adjacent to the proposed station, serves children from the age of six weeks to sixth grade. Approximately 300 students are currently enrolled. The proposed Lake Highlands LRT Station would not hinder access to this school.

DART conducted five community meetings between August 2008 and August 2009. The community requested eastside pedestrian access to the station along



the south side of Walnut Hill and parking available to deter transit patrons from parking within the neighborhood. In response to these comments, DART added a Phase I parking facility and a potential Phase II parking area to the design of the station. In addition, to respond to the comment regarding eastside access, DART added a pedestrian walkway within the Walnut Hill Lane ROW to provide pedestrian access to the station from Walnut Hill Lane and White Rock Trail.

### ***Environmental Justice***

Executive Order 12898 – Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations – provides guidance for addressing minority and low income populations in association with NEPA. Population groups defined as minorities include: Black or African American, American Indian or Alaskan Native, Asian, Pacific Islander; and two or more races (United States Census Bureau, 2000). In the 2000 U.S. Census, Hispanic is classified as an ethnicity, rather than a distinct race, and is presented as such in this document. Minority populations are identified where either:

- a) The minority or Hispanic population of the proposed Lake Highlands LRT Station area exceeds 50 percent of the total population or,
- b) The minority or Hispanic population percentage of the proposed Lake Highlands LRT Station area is meaningfully greater than the minority population percentage in the general population.

Low-income populations are those communities or sets of individuals whose median income is below the current poverty threshold determined during the 2000 Census. Low-income populations should be identified where either:

- a) The low-income population of the proposed Lake Highlands LRT Station area exceeds 50 percent of the total population or,
- b) The low-income population percentage of the proposed Lake Highlands LRT Station area is meaningfully greater than the low-income population percentage in the general population.

Disproportionate impacts to minority or low-income populations would be characterized as significant and adverse to these populations if those impacts were higher than the impacts to the general population and/or significant when combined with other environmental impacts. The proposed Lake Highlands LRT Station has been evaluated to ensure that there are no denial, reduction, or delay in the provisions of benefits to the minority, Hispanic and/or low-income population. Guidance states that the use of national decennial census data in depicting the low-income/poverty and minority/Hispanic statistics is one of the most prevalent methods used to define affected communities.

For the purpose of this environmental analysis, the study area is defined as one-half mile surrounding the proposed Lake Highlands LRT Station location. The

demographic characteristics from the 2000 U.S. Census are outlined in **Tables 2-4**. These characteristics are compared to Dallas County as a whole.

**Table 2: Population and Economic Information**

Comparison Areas	Total Population	Total Households	Median Household Income	Percent Below Poverty
Study Area	4,480	2,054	\$46,951	7.9%
Dallas County	2,218,899	807,621	\$43,324	13.4%

Source: United States Census Bureau and NCTCOG 2000

**Table 3: Population by Race**

Race	Study Area		Dallas County	
	Total	Percentage	Total	Percentage
White	2,834	63.2%	1,294,761	58.4%
Black or African American	1,196	26.7%	447,715	20.3%
American Indian and Alaska Native	12	0.3%	11,757	0.5%
Asian	135	3.0%	87,446	4.0%
Native Hawaiian and Other Pacific Islander	0	0.0%	987	0.1%
Some other race	204	4.6%	314,982	14.0%
Two or more races	99	2.2%	61,251	2.7%
Total	4,480	100%	2,218,899	100%

Source: United States Census Bureau and NCTCOG 2000

**Table 4: Population by Ethnicity**

Comparison Areas		Hispanic or Latino	Total Population
Study Area	Number	444	4,480
	Percentage	9.9%	100%
Dallas County	Number	663,125	2,218,899
	Percentage	29.9%	100%

Source: United States Census Bureau and NCTCOG 2000

The proposed Lake Highlands LRT Station study area has a slightly lower percentage (36.7%) of total minority than Dallas County as a whole (41.6%). Low-income populations consist of 7.9% and Hispanic populations include 9.9% of the population within the proposed study area. Common practice defines Environmental Justice sensitive populations as those with populations of 50% or greater minority, low-income, or Hispanic populations. Accordingly the proposed Lake Highlands LRT Station study area would not be considered an Environmental Justice sensitive population and therefore, there would be no disproportionate impacts to a sensitive population.

**Finding: The proposed Lake Highlands LRT Station would not result in community disruption, or disproportionate impacts to minority, Hispanic or low-income populations.**

**M. USE OF PUBLIC PARKLAND AND RECREATION AREAS**

As shown on **Figure 4**, two public parks are located within one-half mile of the proposed Lake Highlands LRT Station. These parks are Lake Highlands North Park and White Rock Trail Park.

Lake Highlands North Park is a 28-acre community park located approximately 0.37 miles from the proposed station. Community facilities at this park include a recreation center, a water park, tennis courts and a playground.

White Rock Trail Park is a four-acre neighborhood park that is mostly open space and a playground area. This park is located approximately 0.44 miles from the proposed Lake Highlands LRT Station.

Neither of these parks would be directly impacted by the proposed station. However, patrons of these facilities could benefit from increased transportation options from the new station location. **Additional pedestrian improvements at**



White Rock Trail and Walnut Hill Lane intersection and enhanced pedestrian/bicycle access to the station would improve access to and from these recreational locations.

**Finding: No public parkland and/or recreation areas would be directly impacted by the proposed Lake Highlands LRT Station.**

#### **N. IMPACTS ON WETLANDS**

There are no waters of the U.S., including wetlands, within the proposed Lake Highlands LRT Station. White Rock Creek is the closest jurisdictional water located approximately 1.15 miles southwest of the proposed station. Hydrophytic vegetation has grown inside the ordinary high water mark of an existing storm drainage ditch within the rail ROW at the south end of the proposed station. Soil disturbing work would not be conducted on this end of the proposed station. Therefore, no further analysis concerning impacts to waters of the U.S. is required.

**Finding: The proposed Lake Highlands LRT Station would not result in impacts to waters of the U.S., including wetlands.**

#### **O. FLOODPLAIN IMPACTS**

There are no floodplains within the proposed Lake Highlands LRT Station. The 100-year floodplain of White Rock Creek is located west and south of the proposed rail station facility. Construction limits of the proposed Lake Highlands LRT Station are outside of the floodplain.

**Finding: The proposed Lake Highlands LRT Station would not impact floodplain areas.**

#### **P. IMPACTS ON WATER QUALITY, NAVIGABLE WATERWAYS, & COASTAL ZONES**

No impaired or threatened segments listed in the 2008 Texas Water Quality Inventory and 303(d) List, as required by Sections 305(b) and 303(d) of the Federal Clean Water Act are located within the proposed Lake Highlands LRT Station. The water quality of wetlands and waters in the state shall be maintained in accordance with all applicable provisions of the Texas Surface Water Quality Standards including the general, narrative, and numerical criteria.

Since the proposed Lake Highlands LRT Station would disturb less than five acres of land, a Notice of Intent as a part of a Texas Commission on Environmental Quality (TCEQ) Texas Pollutant Discharge Elimination System (TPDES) construction general permit would not be required. A Stormwater Pollution Prevention Plan (SWPPP) would be included in the proposed station



plans and specifications. Under this plan, measures would be taken to prevent or correct erosion that may develop during construction. All temporary erosion controls would comply with the TPDES. Prior to commencement of construction activities, erosion control measures would be in place. All erosion control measures would be inspected on a regular basis.

The proposed Lake Highlands LRT Station would have no effect on navigable waterways or coastal zones. The nearest surface water to the proposed station is White Rock Creek and this waterway is not navigable. Dallas County lies outside the Texas Coastal Management Zone.

**Finding: The proposed Lake Highlands LRT Station would not result in an adverse impact to water quality, navigable waterways, or coastal zones.**

**Q. IMPACTS ON ECOLOGICALLY-SENSITIVE AREAS AND ENDANGERED SPECIES**

Ecologically sensitive areas are defined as natural resources that contain diversity and interdependence of living habitat endangered by physical changes. The proposed Lake Highlands LRT Station is located in the northeastern portion of the City of Dallas within DART-owned rail ROW. The surrounding area consists of mainly urban development. The habitat contains typical wildlife that has adapted to urban habitat found throughout the Dallas-Fort Worth Metroplex. No ecologically sensitive areas are located within or immediately adjacent to the proposed Lake Highlands LRT Station. Federal- and state-protected species within the proposed station area, in accordance with the current threatened and endangered species lists for Dallas County from the United States Fish and Wildlife Services (USFWS) and Texas Parks and Wildlife Department (TPWD), are listed in **Appendix E** along with a description of their preferred habitat. Coordination was conducted with TPWD to determine if known occurrences were identified in the proposed station area.

A habitat survey for these species was performed and it was found that no habitat elements for the above listed species are located within or adjacent to the proposed Lake Highlands LRT Station area. The mentioned bird species listed in **Appendix E** are potential migrants through Dallas County. The proposed Lake Highlands LRT Station does not provide suitable habitat for these species due to minimal tree vegetation limited by fenced ROW along the railroad ROW to the east and west of the proposed station and a small wooded area southwest of the proposed station.

The Texas Garter snake is listed in **Appendix E**. Coordination with the TPWD natural diversity database indicates known occurrences in Dallas County, but observations were not noted and the preferred habitat does not exist within the proposed station limits. The limited size and scope of the proposed station,





proves that the proposed station would have no significant impact on any of the listed threatened and endangered species, their habitat or migratory patterns.

**Finding: The proposed Lake Highlands LRT Station would not result in impacts to ecological sensitive areas or endangered species.**

## **R. IMPACTS ON SAFETY AND SECURITY**

Design specifications for the proposed Lake Highlands LRT Station would include provisions for safety. Compliance with the design requirements for Americans with Disabilities Act 1990, the proposed station would also include, but would not be limited to, proper lighting, signage, non-slip surfaces and fire protection. Crime Prevention through Environmental Design principles would be provided in the design in accordance with DART Development Guidelines, such as lighting and open view sheds to eliminate secluded areas. **In addition, pedestrian crossing improvements, ADA ramps, and a proposed walkway would be constructed to allow safe eastside pedestrian access to the station from White Rock Trail and Walnut Hill Lane. The walkway would include all DART Design criteria specifications which include, but are not limited to, safety lighting.**

**Finding: The proposed Lake Highlands LRT Station would not result in impacts to safety or security.**

## **S. IMPACTS CAUSED BY CONSTRUCTION**

All construction activities would take place ~~within~~ **generally within** the existing DART-owned **or City of Dallas** ROW. ~~with one exception: †~~ The proposed storm drainage system for the proposed Lake Highlands Station would connect to the proposed storm drainage system for the Lake Highlands Town Center just outside of the west boundary of the DART-owned ROW. All construction activities would be undertaken in accordance with applicable building codes for the City of Dallas as well as other applicable city and state codes. These specifications provide for the mitigation of potential impacts arising from construction: including noise, utilities disruption, debris and spoil disposal, water quality and runoff, traffic access and management, air quality and dust control, as well as safety and security.

Because the proposed Lake Highlands LRT Station would be located on an active rail section, special considerations and construction methods would be implemented to construct the station platforms safely. To enhance construction safety and minimize impact on existing operations, a cantilevered section would be considered for the platforms. With a cantilevered platform, a construction fence could be constructed eight feet from the center of the existing rail. With the fence in place, the station and structural support systems access could be constructed. It is anticipated that service would be interrupted over a long weekend so that the fence could be relocated and the precast panels for the



platform surface could be placed. A bus bridge would be implemented for rail traffic between the existing White Rock LRT Station and the existing LBJ/Skillman LRT Station. This construction method would provide for a minimum operational downtime while also reducing the cost of flagging for construction.

**Finding: Impacts resulting from construction are expected to be minor and temporary. Proper construction mitigation would be included in design and construction specifications.**

The action described above meets the criteria for a NEPA categorical exclusion (CE) in accordance with 23 CFR Part 771.117.

---

Applicant's Environmental Reviewer

---

Date

---

FTA Grant Representative

---

Date



DART Lake Highlands LRT Station  
CATEGORICAL EXCLUSION

---



## REFERENCES

*Americans with Disabilities Act.* 1990.

City of Dallas. *International Building Code with Dallas Amendments* April 1, 2008

Dallas Area Rapid Transit (DART).

*Development Guidelines* 2007.

*Northeast Corridor Major Investment Study (MIS 1995).*

*Northeast LRT Corridor Final Local Environmental Assessment (Final LEA) 1997.*

Federal Register. *Executive Order 12898 Title 3 Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations.* February 11, 1994.

Frank, Myra L. and Associates. *Determination of Eligibility Report, Northeast Corridor (Mockingbird Lane to Garland Transportation Center)* Prepared for Dallas Area Rapid Transit, Dallas County, Texas 1996.

*Geomarine Miscellaneous Report of Investigations*, Number 137. Plano, Texas.

Green, Melissa, Frances M. James, Steven M. Hunt, Kellie A. Krapf, and Duane E. Peter. *Archeological Survey of the Northeast Corridor.* Dallas Area Rapid Transit (DART) Light Rail System, Dallas County, Texas. 2003.

*National Environmental Policy Act (NEPA)* 1969.

North Central Texas Council of Governments (NCTCOG).

*Mobility 2030.* <http://www.nctcog.org/trans/mtp/2030/>  
*2008-2011 Transportation Improvement Program (TIP).*  
<http://www.nctcog.org/trans/tip/> 2005.

State of Texas. *International Energy Conservation Code (IECC) 2000.*



Texas Commission on Environmental Quality.

*Chapter 307 Texas Surface Water Quality Standards* 1997.

*Texas Pollutant Discharge Elimination System (TPDES)* 1998.

*Texas Water Quality Inventory and 303(d) List* 2008.

Texas Parks and Wildlife Department (TPWP). 2005. *Annotated County Lists of Rare Species*. (Last revised August 8, 2007).

US Census Bureau. *US Census* 2000.

US Environmental Protection Agency.

*Federal Clean Water Act, National Ambient Air Quality Standards (40 CFR part 50)*. Amended 1990. 1972.

*Title 42, Chapter 85 of the U.S. Code Clean Air Act* 1990.

US Fish & Wildlife Services (USFWS). *Endangered Species List for Dallas County*, <http://www.fws.gov/endangered/listing/index.html>, accessed on December 14, 2007.

**Appendix A**  
**Agency Coordination Letters**



DART Lake Highlands LRT Station  
CATEGORICAL EXCLUSION





Dallas Area Rapid Transit  
P.O. Box 660163  
Dallas, Texas 75266-0163  
214/749-3278

April 9, 2008

Ms. Laura Wallace  
Federal Transit Administration  
819 Taylor Street  
Room 8A36  
Fort Worth, TX 76102

Dear Ms. Wallace:

Dallas Area Rapid Transit (DART) is currently planning the construction of the Lake Highlands Station, a new platform along the existing and operating Blue Line light rail transit. The proposed project would be located entirely within existing DART ROW with boundaries approximately 750 feet north and 250 feet south of Walnut Hill Lane.

In accordance with the National Environmental Policy Act (NEPA), DART intends to complete documentation for a Categorical Exclusion (CE) for this project.

According to **23 CFR Part 771.117**:

**“categorical exclusions** are actions which meet the definition contained in 40 CFR 1508.4, and, based on past experience with similar actions, do not involve significant environmental impacts. They are actions which: do not induce significant impacts to planned growth or land use for the area; do not require the relocation of significant numbers of people; do not have a significant impact on any natural, cultural, recreational, historic or other resource; do not involve significant air, noise, or water quality impacts; do not have significant impacts on travel patterns; or do not otherwise, either individually or cumulatively, have any significant environmental impacts.”

The environmental impacts of the LRT alignment were documented with the Local Environmental Assessment (LEA) of the Northeast Corridor LRT completed in January 1997. The LEA anticipated a deferred station in this general location along the alignment near Walnut Hill Road. The Lake Highlands Station construction would include a platform constructed on existing ROW, canopies, and pedestrian access to the Lake Highlands Town Center that is being developed by the Prescott Realty Group.



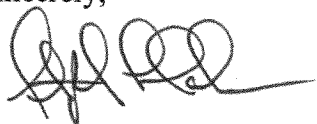
Ms. Laura Wallace  
April 9, 2008  
2 of 2

The attached location map indicates the project area and surrounding existing environmental conditions, as well as the project boundary of the adjacent Lake Highlands Town Center development.

Potential impacts would be minimal, as the project would be constructed entirely within the existing DART owned ROW. No acquisitions would be required for the project. A sound wall is currently located between the DART LRT alignment and the White Rock North School located at 9727 White Rock Trail. Approximately 100 feet of this sound wall would be relocated and reconstructed as a part of the proposed project. The wall is anticipated to retain its function providing mitigation for noise impacts to the White Rock North School that were identified in the January 1997 document.

We believe that this project as described above meets the conditions presented in 23 CFR Part 771.117, although it is not specifically mentioned as a qualified project. Before proceeding with the CE documentation, DART is requesting written approval from FTA Region VI to continue in this direction.

Sincerely,

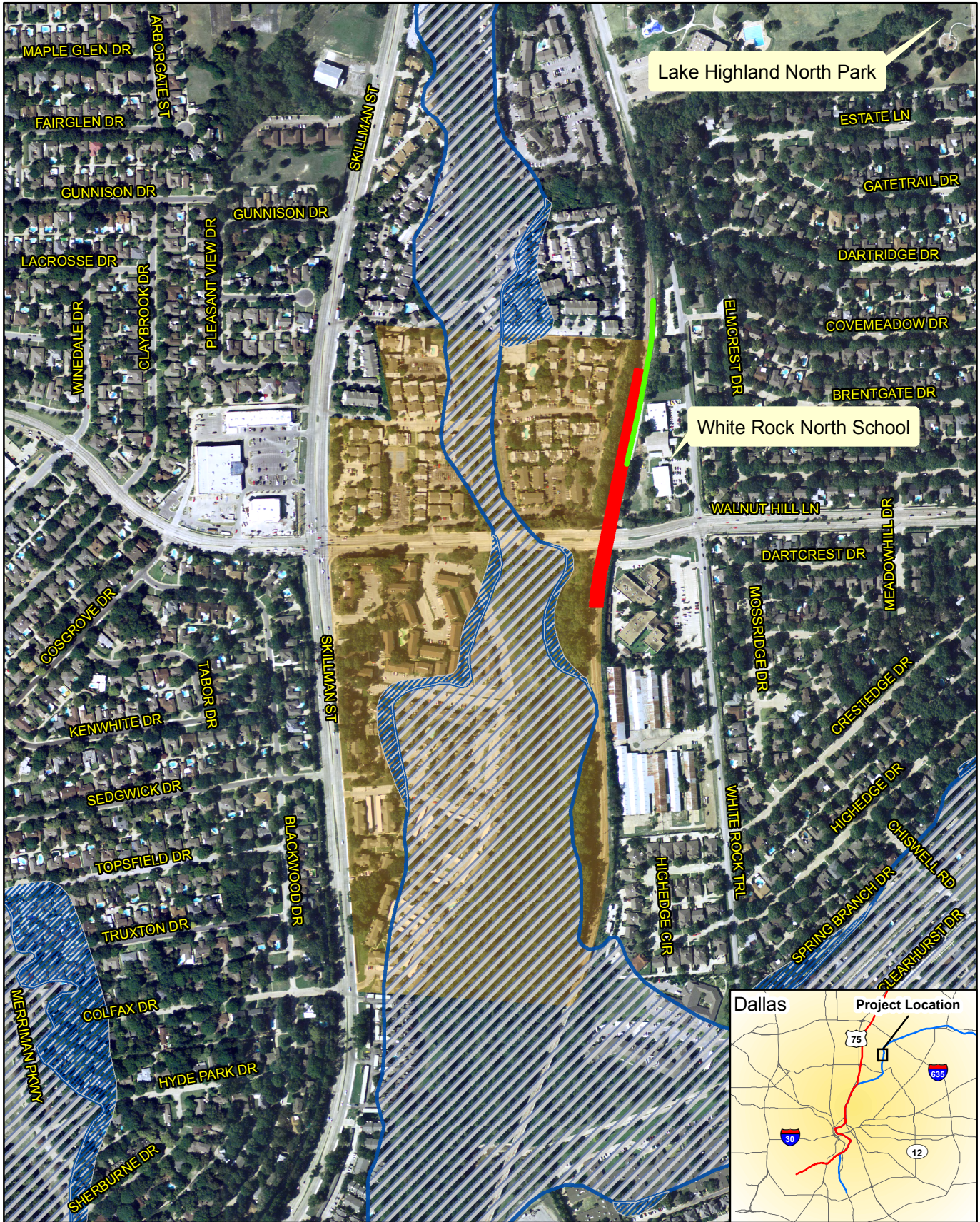
A handwritten signature in black ink, appearing to read 'S. Salin', with a long horizontal flourish extending to the right.

Stephen L. Salin, AICP  
Assistant Vice President  
Rail Program Development

Attachment




C: Reza Shirmanesh







**DART** Lake Highlands Station  
Location Map

0 312.5 625  
Feet

-  Existing Sound Barrier
-  Dart Project Boundary
-  Lake Highlands Town Center Project

-  100 Year Floodplain
-  500 Year Floodplain

N

Sources: Aerials Express 2006, NCTCOG, FEMA





U.S. Department  
of Transportation  
**Federal Transit  
Administration**

REGION VI  
Arkansas, Louisiana,  
New Mexico, Oklahoma,  
Texas

819 Taylor St. Suite 8A36  
Fort Worth, TX 76102  
817-978-0550  
817-978-0575 (fax)

May 14, 2008

**DALLAS AREA RAPID TRANSIT  
CAPITAL PLANNING & DEVELOPMENT**

Mr. Stephen L. Salin, Assistant Vice President  
Capital Planning and Development  
Dallas Area Rapid Transit  
P.O. Box 660163  
Dallas, Texas 75266-0163

MAY 19 2008  
**RECEIVED**

Re: Request to Proceed with documentation for a Class II (d) Lake Highlands Station

Dear Mr. Salin:

The Federal Transit Administration (FTA) has reviewed your request for written approval to proceed with CE documentation for the Lake Highlands Station project. The proposed project will be located approximately 750 feet north and 250 feet south of Walnut Hill Lane.

In the request letter, you state that "A sound wall is currently located between the DART LRT alignment and the White Rock North School located at 9727 White Rock Trail. Approximately 100 feet of this sound wall would need to be relocated and reconstructed as a part of the proposed project." The Local Environmental Assessment (LEA) of the Northeast Corridor LRT is over 11 years old; therefore the noise and vibration impacts need to be reevaluated.

Should you have any questions during the environmental review process, please contact Laura Wallace, Community Planner, at (817) 978-0561.

Sincerely,

Robert C. Patrick  
Regional Administrator

Enclosure

cc. Barbara Weigel, DART  
Reza Shirmanesh, DART



Dallas Area Rapid Transit  
P.O. Box 660163  
Dallas, Texas 75266-0163  
214/749-3278

May 30, 2008

F. Lawrence Oaks  
Executive Director  
Texas Historical Commission  
1511 Colorado Street  
P.O. Box 12276  
Austin, TX 78711-2276

**Re: Initial cultural resources coordination and request for comment under the Texas Antiquities Code and Section 106 of the National Historic Preservation Act of 1966, as amended for the proposed DART Lake Highlands Station, Dallas County, Texas.**

Dear Mr. Oaks:

Dallas Area Rapid Transit (DART) has contracted LOPEZGARCIA GROUP (LGGROUP) to assist in the preparation of a Categorical Exclusion and compliance of Section 106 of the National Historic Preservation Act of 1966 and the Antiquities Code of Texas for the proposed Lake Highlands Station along the existing and operating Blue Line light rail transit in Dallas County, Texas. The project is being initiated by DART, a political subdivision of the State of Texas and federal funds are anticipated for the project. The project is contained within DART-owned and maintained right-of-way (ROW).

The following presents a description of the proposed undertaking and an assessment by LGGROUP of the potential for archeological and historic-age resources along this corridor. In addition, LGGROUP presents recommendations for appropriate future archeological resources studies and archeological and historic resources APES based on background research and a request for Texas Historical Commission (THC) comment on these recommendations.

### **Description of Undertaking**

DART is currently planning the construction of the Lake Highlands Station, a new platform along the existing and operating Blue Line light rail transit (illustrated in red in the attached exhibit). The proposed project would be located entirely within existing DART ROW. Lake Highlands Light Rail Transit (LRT) Station would be located north of the Walnut Hill Lane/Kingsley Road Bridge on Dallas Area Rapid Transit (DART)

Blue Line (northeast LRT corridor). This location for the LRT Station was selected in coordination with DART staff and the Lake Highlands Town Center developer. It is anticipated that DART would benefit with increased ridership from the adjacent proposed development and the neighborhood in the vicinity.

DART LRT Station project area would be located approximately 750 feet north of and 250 feet south of the Walnut Hill Lane/Kingsley Road Bridge. The proposed DART LRT Station would have two side platforms of 310 ft. length, which would accommodate two Super Light Rail vehicles or three standard vehicles. This location poses design and construction challenges and would require extensive coordination with LRT operations. The station would be a prototypical at-grade side platforms station. The canopy for the station would be gull wing type. Because the station would be built next to the active track operations, gull wing type platform are more feasible and economical. The platforms would be set at 15.50" above top of rail to accommodate level boarding. Station finishes would be selected through DART's Community based Art and Design program.

### **Background Information**

Cultural resources specialists from LGGROUP have conducted background research using existing information regarding the potential for archeological resources within the proposed APE. The Texas Archeological Sites Atlas (TASA) and the Texas Historic Sites Atlas (THSA) were consulted for listings of archaeological sites, historic structures, or historic-age structures that have the potential to be adversely affected by the proposed project.

In 1996, the entire project corridor, which includes the area of the current undertaking, was surveyed by DART for the proposed 12-mile-long Northeast Corridor Project under Antiquities Permit 1697 (Green et al. 1996). During this study, a 100-foot wide corridor was subjected to intensive survey for the entire project length. The five proposed stations were inspected within a 200-foot corridor area. No archeological sites were recorded during the survey and attempts made to re-locate two previously recorded sites, 41DL39 and 41DL346, were unsuccessful. Green et al. (1996) indicated that much of the archeological APE, including 41DL39 and 41DL346 had been destroyed due to urban development of the area. Much of the project corridor has also been surveyed for archeological resources in June 1991 by the Federal Highways Administration (FHWA). In addition, the corridor was surveyed for historic-age structures by Myra L. Franks and Associates, Inc. The report entitled "*Determination of Eligibility Report, Northeast Corridor (Mockingbird Lane to Garland Transportation Center)*" found no historic-age resources within the APE. No archaeological sites, State Archaeological Landmarks, historic markers, or National Register of Historic Places properties are listed within or in close proximity to the project area or the proposed archaeological APE.

## Recommendations

Based on the background research and the design of the current project, it is anticipated that there is a low probability of archeological resources and historic resources within the APE as defined herein. The current project occurs within existing ROW, which has been subjected to prior survey.

DART hereby respectfully requests that the THC review and comment on the information presented in order for DART to timely submit the Categorical Exclusion documentation for this project.

## References Cited

Green, Melissa, Frances M. James, Steven M. Hunt, Kellie A. Krapf, and Duane E. Peter  
2003 Archeological survey of the northeast corridor, Dallas Area Rapid Transit Light Rail System, Dallas County, Texas. Geomarine Miscellaneous Report of Investigations Number 137, Plano, Texas.

Frank, Myra L. and Associates.  
1996 *Determination of Eligibility Report, Northeast Corridor (Mockingbird Lane to Garland Transportation Center)*” Prepared for Dallas Area Rapid Transit (DART), Dallas County, Texas.

Sincerely,

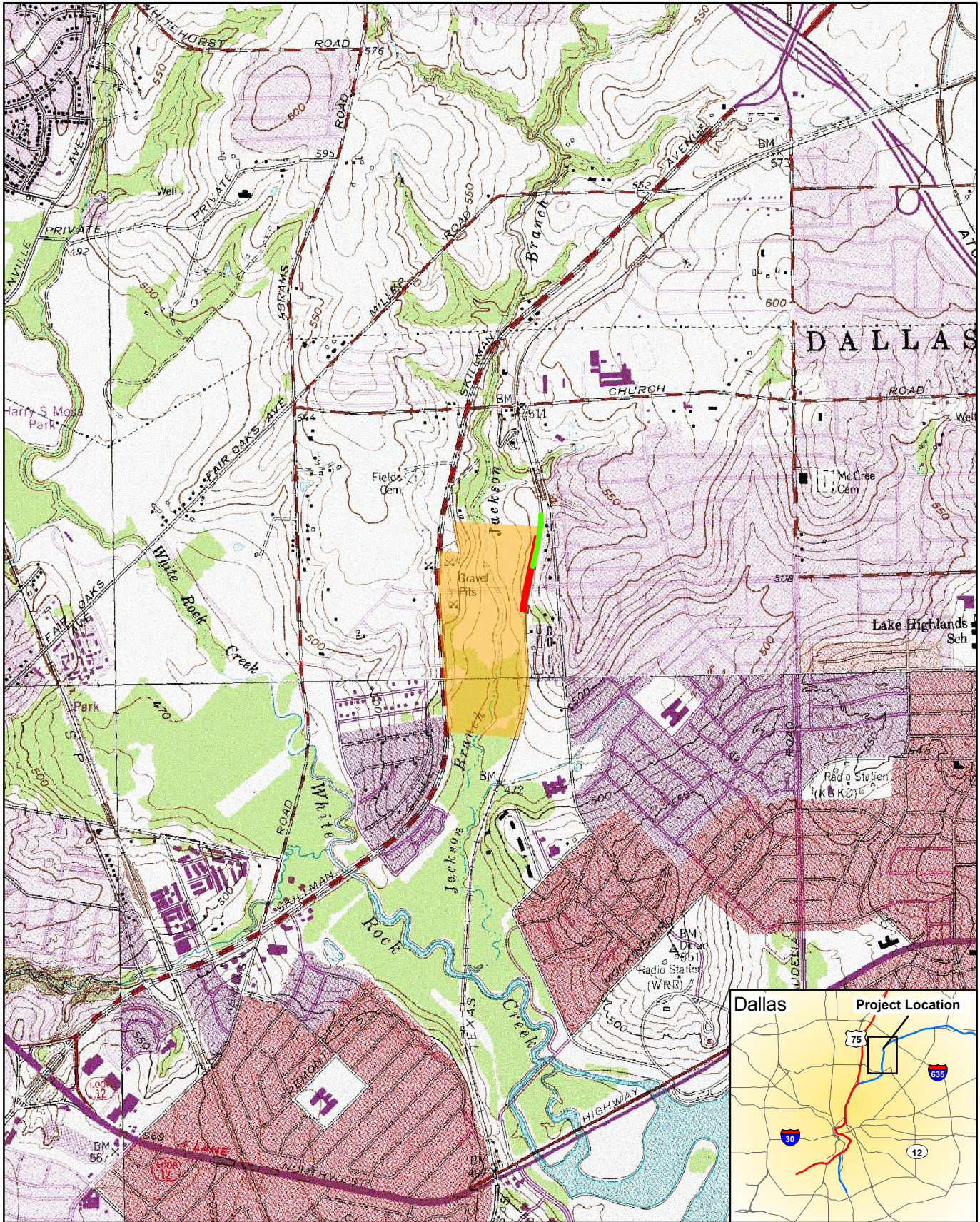


Stephen L. Salin, AICP  
Assistant Vice President  
Rail Program Development

Attachments (3)

cc: Barb Weigel, DART  
Jerry Smiley, Lopez Garcia Group





**DART** Lake Highlands Station Location Map

0 1,000 2,000 Feet

- Existing Sound Barrier
- DART Project Boundary
- Lake Highlands Town Center Project



Sources: USGS 24K Quads





TEXAS  
HISTORICAL  
COMMISSION

The State Agency for Historic Preservation

RICK PERRY, GOVERNOR

JOHN L. NAU, III, CHAIRMAN

F. LAWRENCE OAKS, EXECUTIVE DIRECTOR

DALLAS AREA RAPID TRANSIT  
CAPITAL PLANNING & DEVELOPMENT

June 24, 2008

JUL 1 2008

RECEIVED

Stephen L. Salin  
Rail Program Development  
Dallas Area Rapid Transit  
P. O. Box 660163  
Dallas, TX 75266-0163

Re: Project review under the Antiquities Code of Texas and National Historic Preservation Act, Proposed Lake Highlands Station, Survey Needed (DART/FTA)

Dear Mr. Salin:

Thank you for your correspondence concerning the above referenced project. This letter presents the comments of the Executive Director of the Texas Historical Commission, the state agency responsible for administering the Antiquities Code of Texas. We have recently reviewed your letter concerning the above referenced development project in Dallas County. We do not object to the area being developed, but the proposed project area must be surveyed by a professional archeologist prior to site development.

This cultural resource survey should include a 100% pedestrian survey of the proposed station tract, except those areas already surveyed. This survey must conform to the "Archeological Survey Standards for Texas" (available online at: [www.thc.state.tx.us/rulesregs/](http://www.thc.state.tx.us/rulesregs/)), and your principal investigator must contact us to obtain an Antiquities Permit for these investigations. Additionally, a report on the investigations will have to be produced in conformance with the report standards under the Chapter 26 Rules of the Antiquities Code of Texas. You can obtain lists of most professional archeologists in Texas (many of which perform contract archeological investigations), on-line at: <http://www.counciloftexasarcheologists.org/> or [www.rpanet.org](http://www.rpanet.org) or [www.archaeologyfieldwork.com](http://www.archaeologyfieldwork.com). Please note that other potentially qualified archeologists not included on these lists may be used.

Thank you for your cooperation in this state review process, and for your efforts to preserve the irreplaceable heritage of Texas. **If you have any questions, please contact Mark H. Denton, of our staff at (512) 463-5711.**

Sincerely,

for  
F. Lawrence Oaks  
Executive Director

LO/MHD



Dallas Area Rapid Transit  
P.O. Box 660163  
Dallas, Texas 75266-0163  
214/749-3278

July 28, 2008

F. Lawrence Oaks  
Executive Director  
Texas Historical Commission  
1511 Colorado Street  
P.O. Box 12276  
Austin, TX 78711-2276

Attn: Mark Denton

**re: Response to Texas Historical Commission project review for the proposed DART Lake Highlands Station, Dallas County, Texas**

Dear Mr. Oaks:

Dallas Area Rapid Transit (DART) has contracted LOPEZGARCIA GROUP (LGGROUP) to assist in the preparation of a Categorical Exclusion and compliance of Section 106 of the National Historic Preservation Act of 1966 and the Antiquities Code of Texas for construction of the Lake Highlands in-fill station, located in Dallas County, Texas. On May 30, 2008 DART submitted a request for a comment letter from your office. On June 24, 2008 DART received a response letter from the Texas Historical Commission (THC) requesting an archeological survey of "...the proposed station tract, except those areas already surveyed" for the proposed construction of the Lake Highland's Station.

The project entails construction of an in-fill station platform fully contained within DART-owned and maintained right-of-way (ROW). This has been previously surveyed for the DART Northeast Corridor project (Green et al. 1996), which is now fully operational as the DART Blue Line. Enclosed are detailed graphics including plan and profile drawings that clearly illustrate the proposed project and the DART ROW. Please note that private development occurring adjacent to the Lake Highlands Station lies entirely outside of the DART ROW and is not within the scope of the Lake Highlands Station project.

DART hereby respectfully requests that the THC concur with our position that additional archeological survey will not be required for this project given that the DART ROW has already been surveyed.

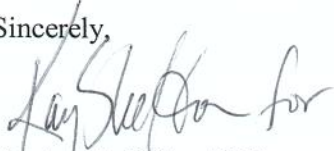
Thank you for your continued cooperation. If you need any further clarification on the proposed project, please do not hesitate to contact me at 214-749-2828 or [ssalin@dart.org](mailto:ssalin@dart.org).

Mr. F. Lawrence Oaks  
July 28, 2008  
2/2

**References Cited**

Green, Melissa, Frances M. James, Steven M. Hunt, Kellie A. Krapf, and Duane E. Peter  
1996 Archeological Survey of the Northeast Corridor, Dallas Area Rapid Transit Light  
Rail System, Dallas County, Texas. Geomarine Miscellaneous Report of  
Investigations Number 137, Plano, Texas.

Sincerely,

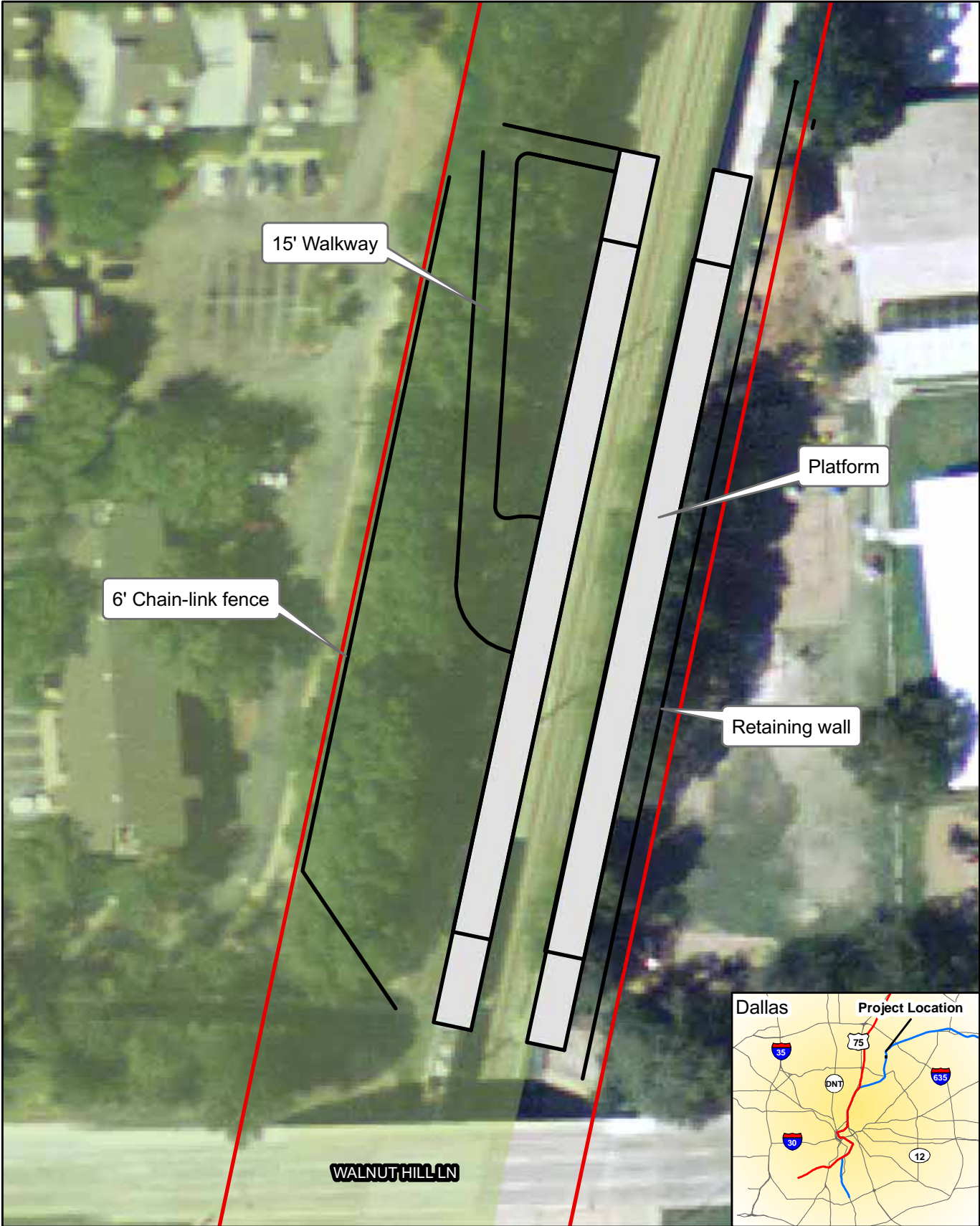
A handwritten signature in cursive script, appearing to read "Stephen L. Salin for".

Stephen L. Salin, AICP  
Vice President  
Rail Program Development

attachments (2)

cc:

Reza Shirmanesh, Project Manager  
Barbara Weigel, Project Manager  
Jerry Smiley, Lopez Garcia Group



**DART**

**Lake Highlands Station**  
Site Layout

0 25 50 100  
Feet

- Lake Highlands Town Center Project
- Lake Highlands Station
- DART-owned Right-of-Way

N  
▲

Sources: FEMA, Aerials Express 2006, NCTCOG 2005

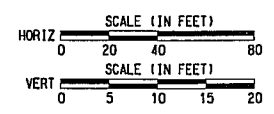
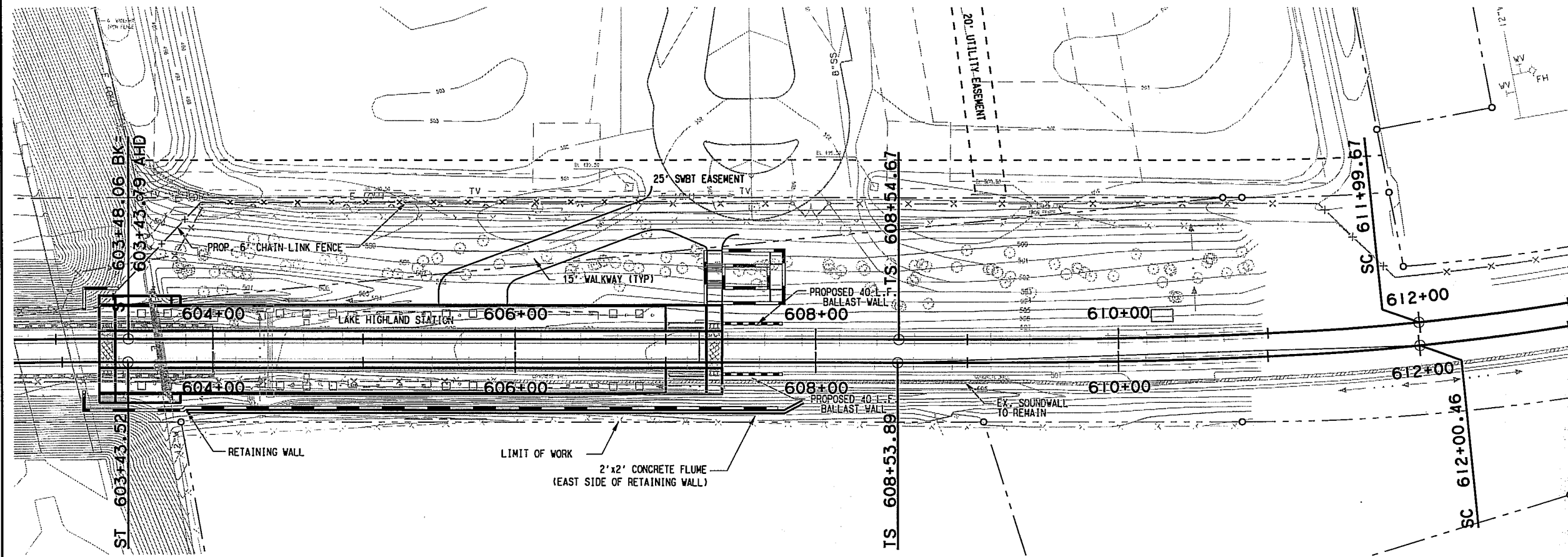


6/17/2008  
 \$FILENAME (PRL\_PLT.DWG)  
 cur.kst110

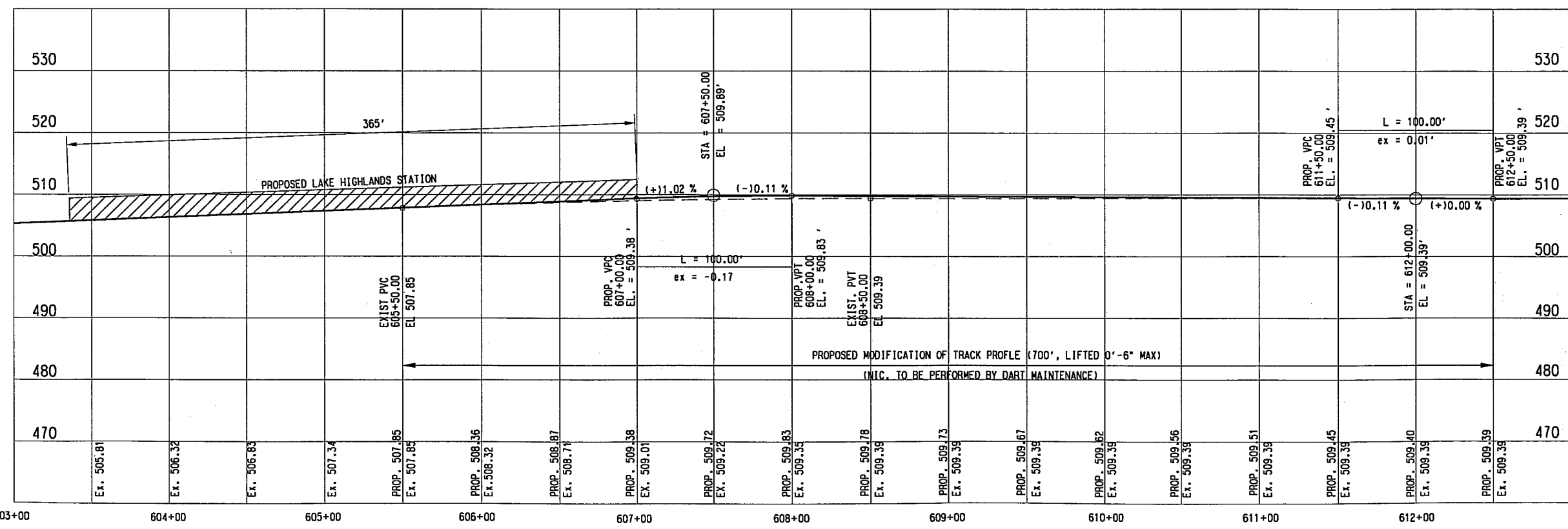
\$FILENAME (NS\_PENTABLE)

\$FILE755  
 \$FILE855  
 \$FILE955  
 \$FILE1055

\$FILE255  
 \$FILE355  
 \$FILE455  
 \$FILE555



- NOTES:
- EXISTING TRACK ELEVATIONS, VERTICAL AND HORIZONTAL CURVE DATA IS BASED ON DART G-2 LINE AS-BUILT PLANS.
  - TRACK AND TIE ADJUSTMENT WILL BE LIMITED TO VERTICAL ALIGNMENT ONLY AND WILL BE PERFORMED BY DART MAINTENANCE PRIOR TO CONSTRUCTION OF STATION PLATFORM.



NOT AN APPROVED DRAWING  
 PRELIMINARY ENGINEERING 30% DESIGN

REV	AMEND	CR	DATE	DESCRIPTION	BY	ENG	CHK	APP

**IN-PROGRESS**

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER THE AUTHORITY OF:  
 PENG ZHAO, P.E. NO. 80333  
 ON 13 JUNE 08  
 IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.

**LOPEZ GARCIA GROUP**  
 1800 STEMMONS FREEWAY, SUITE 8000  
 DALLAS TX 75207  
 TEL 214-741-7777, FAX 214-741-8413

**DART PROJECT**

SCALE AS SHOWN  
 DRAWN LGG  
 DESIGNED E. GU  
 CHECKED G. BRADLEY  
 IN CHARGE P. ZHAO  
 DATE 13 JUNE 08

**LIGHT RAIL TRANSIT SYSTEM  
 LINE SECTION G-2**

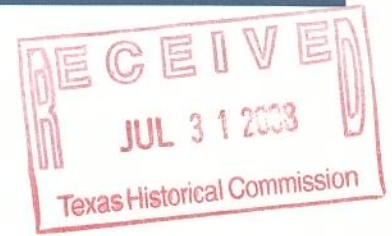
**LAKE HIGHLANDS STATION  
 PLAN AND PROFILE  
 FIGURE 2**







Dallas Area Rapid Transit  
P.O. Box 660163  
Dallas, Texas 75266-0163  
214/749-3278



DALLAS AREA RAPID TRANSIT  
CAPITAL PLANNING & DEVELOPMENT

July 28, 2008

AUG 13 2008

RECEIVED

F. Lawrence Oaks  
Executive Director  
Texas Historical Commission  
1511 Colorado Street  
P.O. Box 12276  
Austin, TX 78711-2276

Attn: Mark Denton

**re: Response to Texas Historical Commission project review for the proposed DART  
Lake Highlands Station, Dallas County, Texas**

Dear Mr. Oaks:

Dallas Area Rapid Transit (DART) has contracted LOPEZGARCIA GROUP (LGGROUP) to assist in the preparation of a Categorical Exclusion and compliance of Section 106 of the National Historic Preservation Act of 1966 and the Antiquities Code of Texas for construction of the Lake Highlands in-fill station, located in Dallas County, Texas. On May 30, 2008 DART submitted a request for a comment letter from your office. On June 24, 2008 DART received a response letter from the Texas Historical Commission (THC) requesting an archeological survey of "...the proposed station tract, except those areas already surveyed" for the proposed construction of the Lake Highland's Station.

The project entails construction of an in-fill station platform fully contained within DART-owned and maintained right-of-way (ROW). This has been previously surveyed for the DART Northeast Corridor project (Green et al. 1996), which is now fully operational as the DART Blue Line. Enclosed are detailed graphics including plan and profile drawings that clearly illustrate the proposed project and the DART ROW. Please note that private development occurring adjacent to the Lake Highlands Station lies entirely outside of the DART ROW and is not within the scope of the Lake Highlands Station project.

DART hereby respectfully requests that the THC concur with our position that additional archeological survey will not be required for this project given that the DART ROW has already been surveyed.

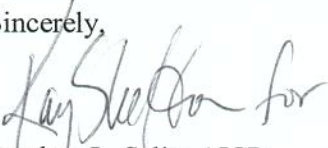
Thank you for your continued cooperation. If you need any further clarification on the proposed project, please do not hesitate to contact me at 214-749-2828 or [ssalin@dart.org](mailto:ssalin@dart.org).

Mr. F. Lawrence Oaks  
July 28, 2008  
2/2

**References Cited**

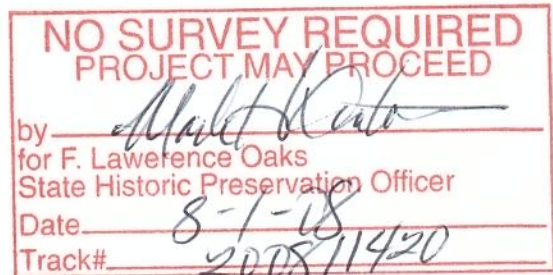
Green, Melissa, Frances M. James, Steven M. Hunt, Kellie A. Krapf, and Duane E. Peter  
1996 Archeological Survey of the Northeast Corridor, Dallas Area Rapid Transit Light  
Rail System, Dallas County, Texas. Geomarine Miscellaneous Report of  
Investigations Number 137, Plano, Texas.

Sincerely,

  
Stephen L. Salin, AICP  
Vice President  
Rail Program Development

attachments (2)  
cc:

Reza Shirmanesh, Project Manager  
Barbara Weigel, Project Manager  
Jerry Smiley, Lopez Garcia Group



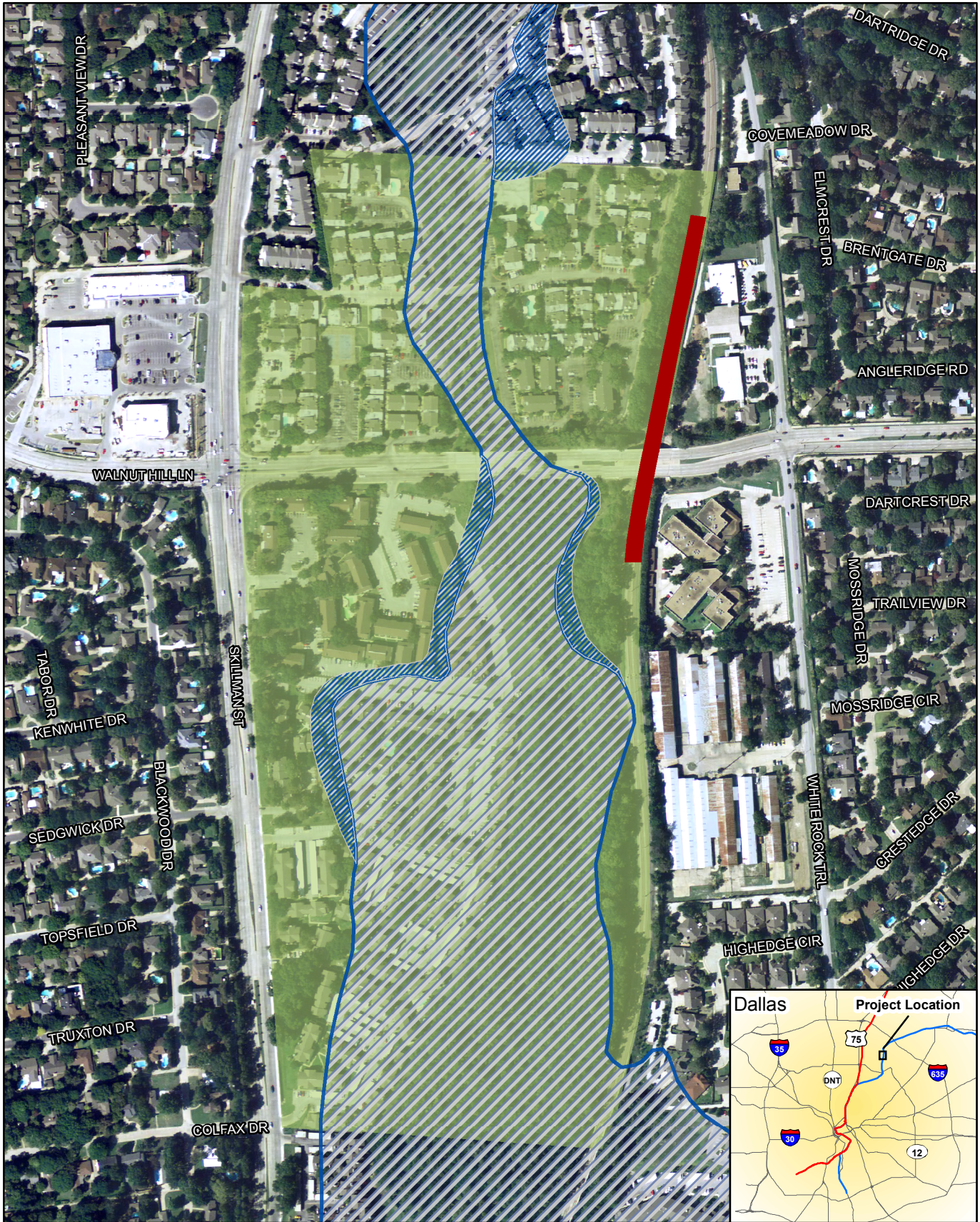
**Appendix B**  
**Figures**



DART Lake Highlands LRT Station  
CATEGORICAL EXCLUSION







**DART**

**Lake Highlands Station**  
Figure 1: Location Map

0      312.5      625  
Feet

- DART Project Boundary
- Lake Highlands Town Center Project
- 100 Year Floodplain
- 500 Year Floodplain

N  
▲

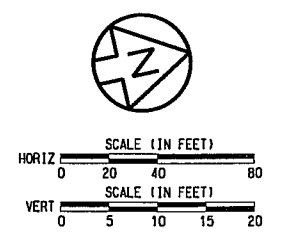
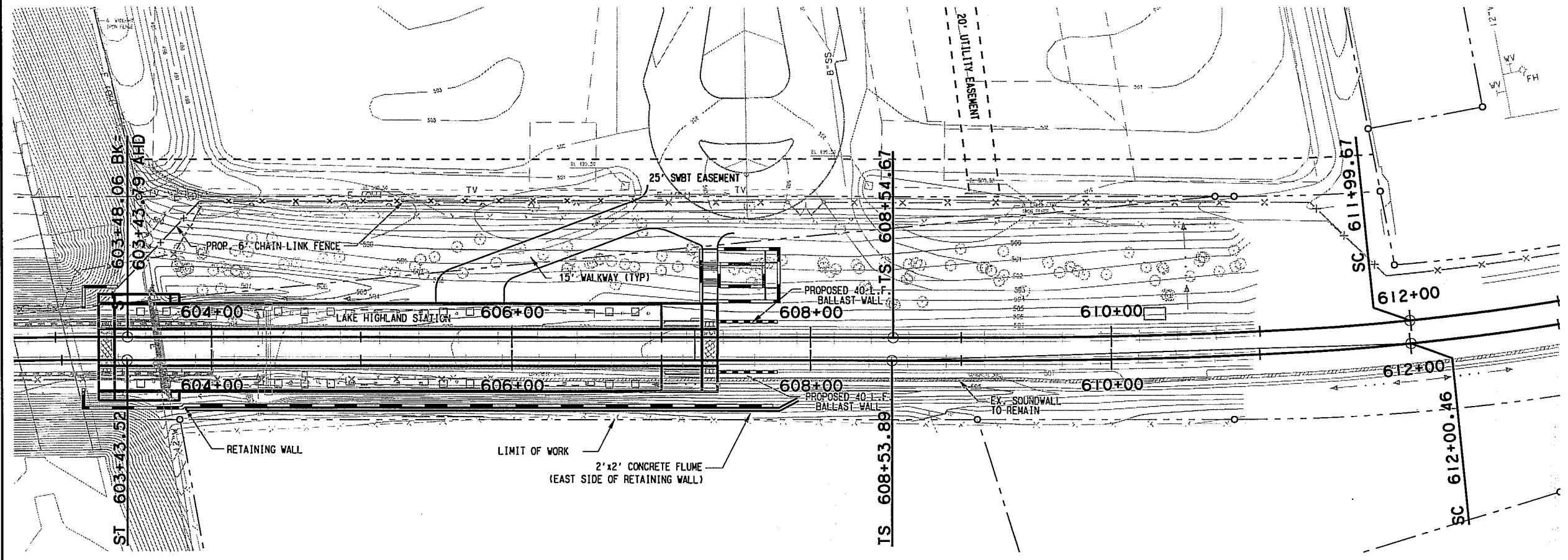
Sources: FEMA, Aerials Express 2006, NCTCOG 2005



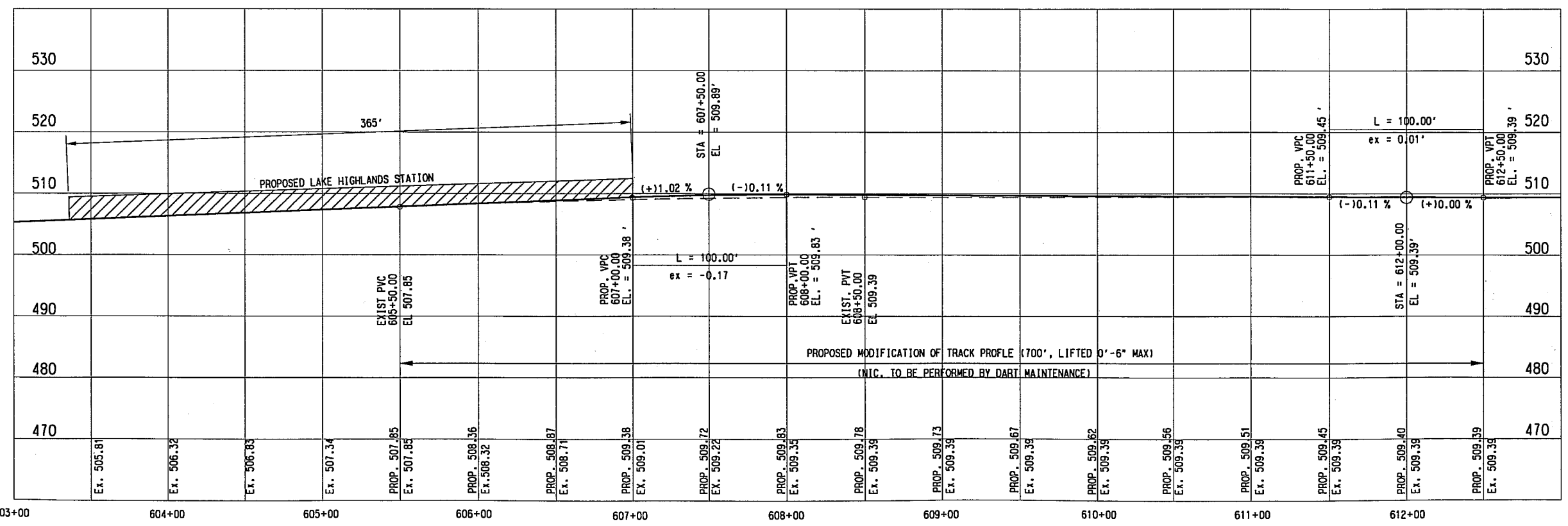
DART Lake Highlands LRT Station  
CATEGORICAL EXCLUSION



6/17/2008  
 \$FILENAME (PRL\_PLT.DWG)  
 \$FILENAME (NS\_PENTABLE)  
 \$FILE755  
 \$FILE855  
 \$FILE955  
 \$FILE1055  
 \$FILE255  
 \$FILE355  
 \$FILE455  
 \$FILE555



- NOTES:
- EXISTING TRACK ELEVATIONS, VERTICAL AND HORIZONTAL CURVE DATA IS BASED ON DART G-2 LINE AS-BUILT PLANS.
  - TRACK AND TIE ADJUSTMENT WILL BE LIMITED TO VERTICAL ALIGNMENT ONLY AND WILL BE PERFORMED BY DART MAINTENANCE PRIOR TO CONSTRUCTION OF STATION PLATFORM.



NOT AN APPROVED DRAWING  
 PRELIMINARY ENGINEERING 30% DESIGN

REV	AMEND	CR	DATE	DESCRIPTION	BY	ENG	CHK	APP

**IN-PROGRESS**

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW UNDER THE AUTHORITY OF:  
 PENG ZHAO, P.E. NO. 80333  
 ON 13 JUNE 08  
 IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING, OR PERMIT PURPOSES.

LOPEZ GARCIA GROUP  
 1800 STEMMONS FREEWAY, SUITE 8000  
 DALLAS TX 75207  
 TEL 214-741-7777, FAX 214-741-8413

**DART PROJECT**

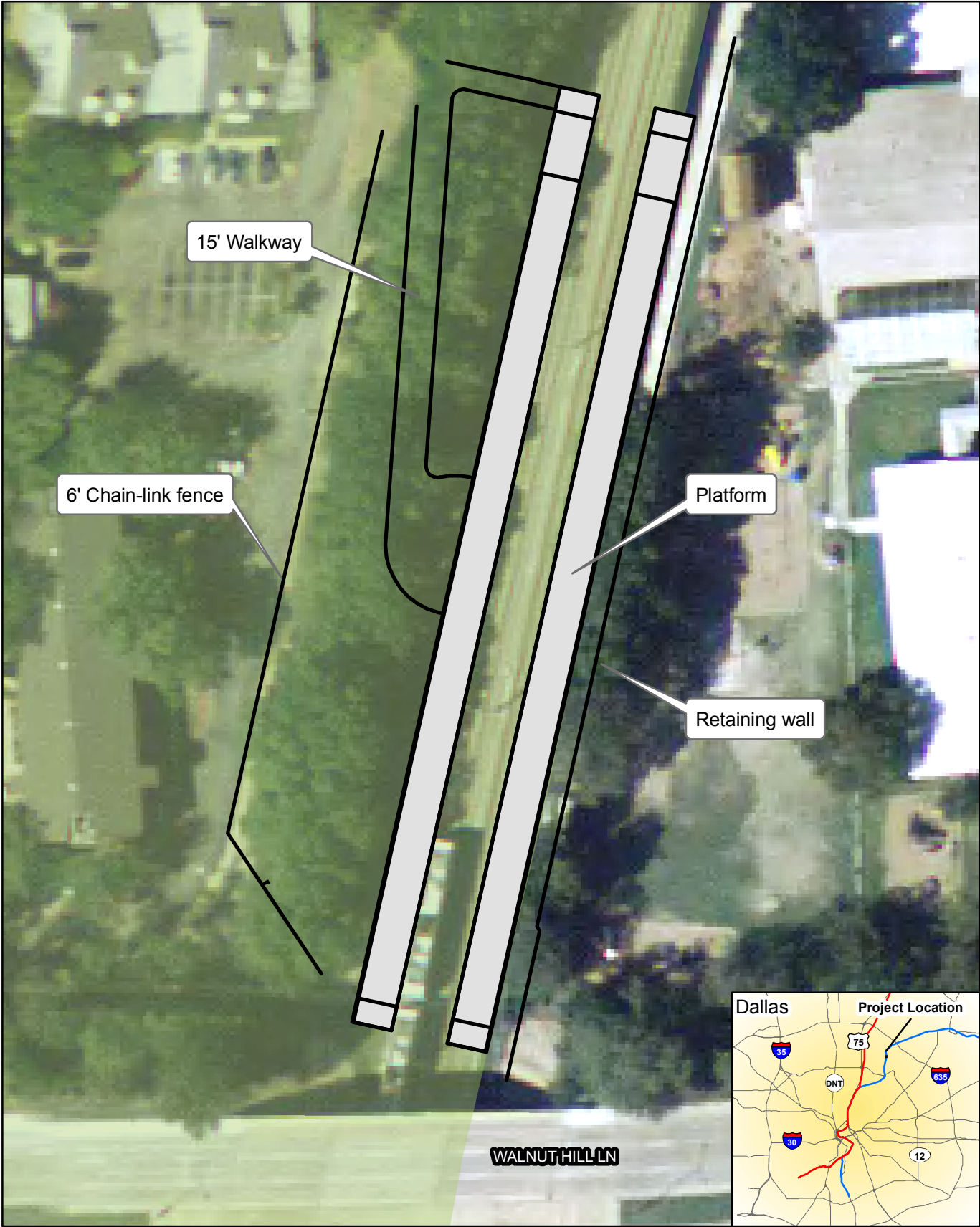
SCALE AS SHOWN  
 DRAWN LGG  
 DESIGNED E. GU  
 CHECKED G. BRADLEY  
 IN CHARGE P. ZHAO  
 DATE 13 JUNE 08

**LIGHT RAIL TRANSIT SYSTEM  
 LINE SECTION G-2**

**LAKE HIGHLANDS STATION  
 PLAN AND PROFILE  
 FIGURE 2**







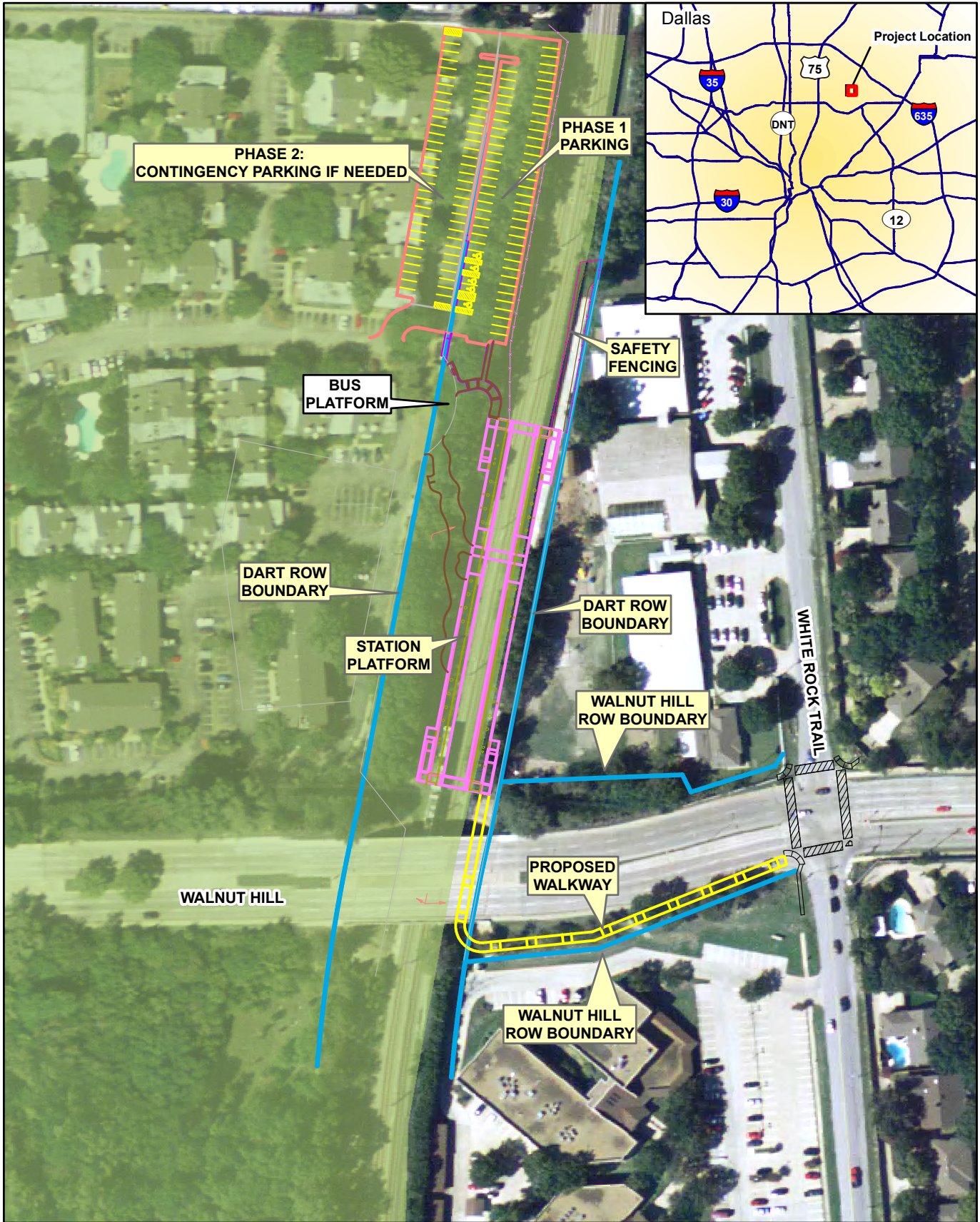
**DART** **Lake Highlands Station**  
 Figure 3: Site Layout

0 25 50 100  
 Feet

Lake Highlands Town Center Project  
 Lake Highlands Station

N

Sources: FEMA, Aerials Express 2006, NCTCOG 2005



**Lake Highlands Station**  
Figure 3a: Site Layout

**DART**

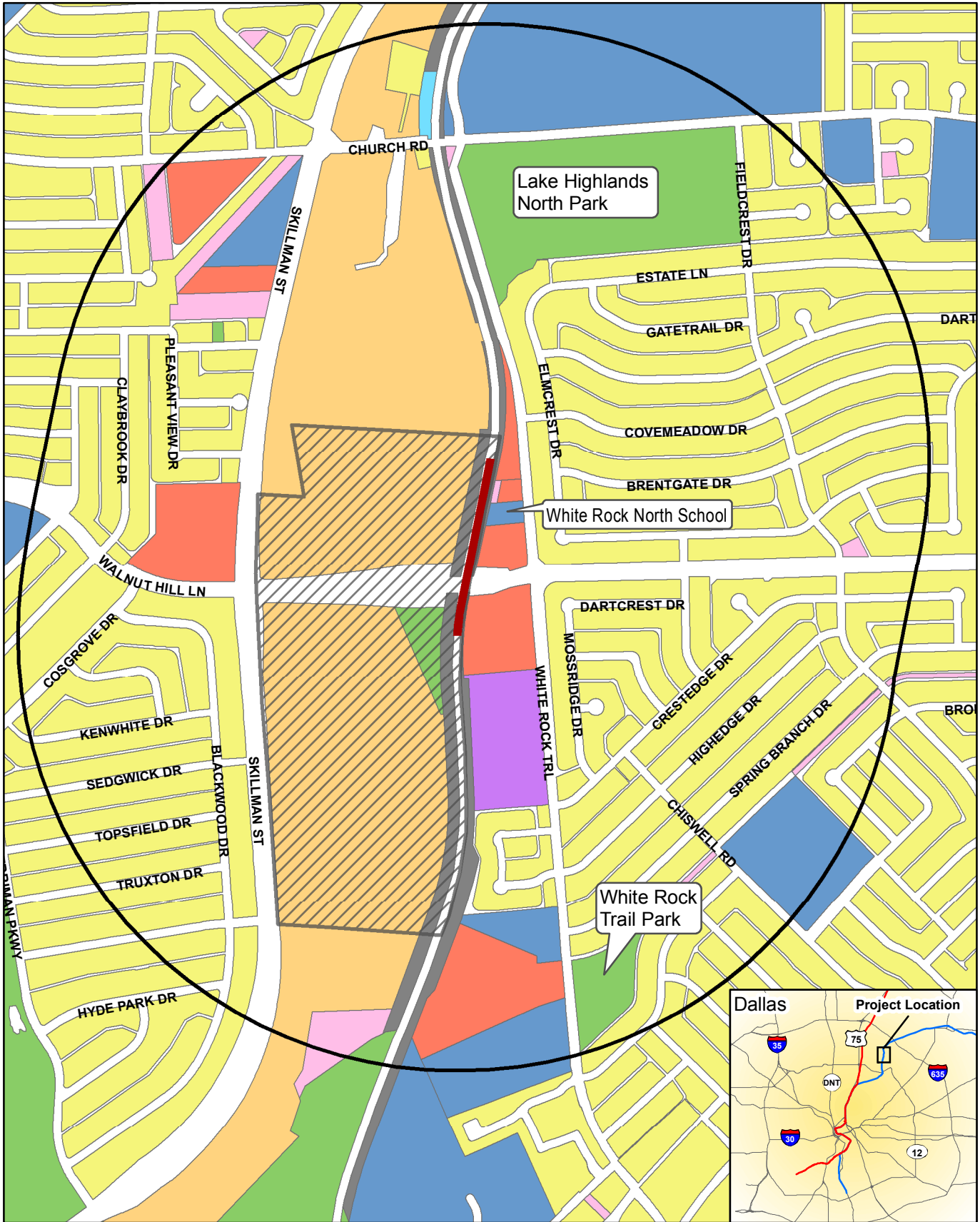
Source: Aerials Express 2006

Lake Highlands Town Center Project

0 100 200 Feet

N





**DART**

### Lake Highlands Station

#### Figure 4: Land Use Map

0 312.5 625  
Feet

DART Project Boundary	Single-Family Residential	Commercial
Lake Highlands Town Center Project	Multi-Family Residential	Government/Educational
1/2 Mile Project Buffer	Industrial	Infrastructure
	Parks	Undeveloped
	Flood Control	

N

Sources: Aerials Express 2006, NCTCOG 2005, LOPEZGARCIA GROUP 2008

DART Lake Highlands LRT Station  
CATEGORICAL EXCLUSION



**Appendix C**  
**2008-2011 TIP Reference**



DART Lake Highlands LRT Station  
CATEGORICAL EXCLUSION

---





# TRANSPORTATION IMPROVEMENT PROGRAM MODIFICATION

Subregion: EASTERN

Program(s):  CMAQ     STP-MM     Transit     Other

Type of Modification:     Administrative     Current RTC Action     Previous RTC Action

Modification Number: 2008-126

STIP Revision Required?:  YES

NCTCOG Project Code(s): 11579

NCTCOG TIP Page Number(s): N/A

MTP Reference(s): TDM 2300

TXDOT Control Section Job Number(s): 0918-45-956

Original Project Scope and Location: DART (DALLAS COUNTY, DALLAS)--LAKE HIGHLANDS TOWN CENTER TRANSIT-ORIENTED DEVELOPMENT PROJECT; CONSTRUCT NEW LAKE HIGHLANDS RAIL STATION ON DART RED LINE; RAIL TRANSIT

Original Funded Amount: FY09--\$10,000,000 TOTAL (\$5,150,000 FEDERAL AND \$4,850,000 LOCAL)

Estimated Construction Cost: N/A

Percent: N/A

Construction Bid Price: N/A

Percent: N/A

Request: ADD PROJECT TO THE 2008-2011 TRANSPORTATION IMPROVEMENT PROGRAM (TIP) AND STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM (STIP)

### Financial Constraint Statement:

DOES NOT VIOLATE FINANCIAL CONSTRAINT AS SUFFICIENT APPORTIONMENT AVAILABLE TO PROGRAM THE REQUESTED FUNDING AMOUNT

### Air Quality Conformity Statement:


THIS PROJECT IS CONSISTENT WITH MOBILITY 2030 AND THE RESULTING AIR QUALITY CONFORMITY ANALYSIS

### Other:

Contingent on TxDOT approval? NO

ESTIMATED EMISSION REDUCTION BENEFITS FOR THE ASSOCIATED CMAQ PROJECT ARE 6.96 POUNDS/DAY OF VOC AND 2.11 POUNDS/DAY OF NO<sub>x</sub>

### Certified by:

  
Michael Morris, P.E.  
Director of Transportation  
NCTCOG

10-31-07  
Date

The following signature authorizes:

- additional Metropolitan Planning Organization (MPO) allocated funds to be moved into Year One.
- modification to a project funded through a TxDOT-selected program.

### Certified by:

N/A  
William Hale, P.E.  
District Engineer  
TXDOT, Dallas District

N/A  
Date

TRANSPORTATION IMPROVEMENT PROGRAM MODIFICATION

Subregion: EASTERN

Program(s):  CMAQ  STP-MM  Transit  Other

Type of Modification:  Administrative  Current RTC Action  Previous RTC Action

Modification Number: 2008-253 STIP Revision Required?: NO

NCTCOG Project Code(s): 11579

NCTCOG TIP Page Number(s): N/A MTP Reference(s): TR 10303.1

TXDOT Control Section Job Number(s): 0918-45-956

Original Project Scope and Location: DART (DALLAS COUNTY/DALLAS)--LAKE HIGHLANDS TOWN CENTER TRANSIT-ORIENTED DEVELOPMENT PROJECT; CONSTRUCT NEW LAKE HIGHLANDS RAIL STATION ON DART RED LINE; RAIL TRANSIT

Original Funded Amount: FY09--\$10,000,000 TOTAL (\$5,150,000 FEDERAL AND \$4,850,000 LOCAL)

Estimated Construction Cost: Percent:

Construction Bid Price: N/A Percent: N/A

Request: MOVE PROJECT FROM FY09 TO FY08

Financial Constraint Statement:

DOES NOT VIOLATE FINANCIAL CONSTRAINT AS SUFFICIENT APPORTIONMENT AVAILABLE TO PROGRAM THE REQUESTED FUNDING AMOUNT

Air Quality Conformity Statement:


THIS PROJECT IS CONSISTENT WITH MOBILITY 2030 AND THE RESULTING AIR QUALITY CONFORMITY ANALYSIS

Other:

Contingent on TxDOT approval? YES

ESTIMATED EMISSION REDUCTION BENEFITS FOR THE ASSOCIATED CMAQ PROJECT ARE 6.96 POUNDS/DAY OF VOC AND 2.11 POUNDS/DAY OF NOx

Certified by:

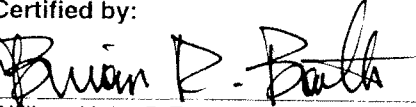
  
Michael Morris, P.E.  
Director of Transportation  
NCTCOG

2/1/08  
Date

The following signature authorizes:

- additional Metropolitan Planning Organization (MPO) allocated funds to be moved into Year One.
- modification to a project funded through a TxDOT-selected program.

Certified by:

*Foz*  
  
William Hale, P.E.  
District Engineer  
TXDOT, Dallas District

2-01-08  
Date

# TRANSPORTATION IMPROVEMENT PROGRAM MODIFICATION

Subregion: EASTERN

Program(s):  CMAQ     STP-MM     Transit     Other

Type of Modification:     Administrative     Current RTC Action     Previous RTC Action

Modification Number: 2008-285

STIP Revision Required?: YES

NCTCOG Project Code(s): 11579

NCTCOG TIP Page Number(s): VII-53 (YOE)

MTP Reference(s): TR 10303.1

TXDOT Control Section Job Number(s): 0918-45-956

Original Project Scope and Location: DART (DALLAS COUNTY/DALLAS)--LAKE HIGHLANDS TOWN CENTER TRANSIT-ORIENTED DEVELOPMENT PROJECT; CONSTRUCT NEW LAKE HIGHLANDS RAIL STATION ON DART RED LINE; RAIL TRANSIT

Original Funded Amount: FY08--\$10,000,000 TOTAL (\$5,150,000 FEDERAL AND \$4,850,000 LOCAL)

Estimated Construction Cost: \$17,000,000

Percent: 70%

Construction Bid Price: N/A

Percent: N/A

Request: INCREASE AUTHORIZED FUNDING AMOUNT BY \$7,000,000 TOTAL (\$5,600,000 CMAQ AND \$1,400,000 LOCAL) FOR A REVISED FUNDING AMOUNT OF \$17,000,000 TOTAL (\$10,750,000 FEDERAL, \$6,250,000 LOCAL) AS APPROVED BY THE RTC ON APRIL 10, 2008

### Financial Constraint Statement:

DOES NOT VIOLATE FINANCIAL CONSTRAINT AS SUFFICIENT APPORTIONMENT AVAILABLE TO PROGRAM THE REQUESTED FUNDING AMOUNT

### Air Quality Conformity Statement:

THIS PROJECT IS CONSISTENT WITH MOBILITY 2030 AND THE RESULTING AIR QUALITY CONFORMITY ANALYSIS

### Other:

Contingent on TxDOT approval? YES

ESTIMATED EMISSION REDUCTION BENEFITS FOR THE ASSOCIATED CMAQ PROJECT ARE 6.96 POUNDS/DAY OF VOC AND 2.11 POUNDS/DAY OF NOx

### Certified by:



Michael Morris, P.E.  
Director of Transportation  
NCTCOG

Date

4/24/08

The following signature authorizes:

- additional Metropolitan Planning Organization (MPO) allocated funds to be moved into Year One.
- modification to a project funded through a TxDOT-selected program.

### Certified by:



William Hale, P.E.  
District Engineer  
TXDOT, Dallas District

Date

4-25-08

FOR

DART Lake Highlands LRT Station  
CATEGORICAL EXCLUSION



**Appendix D**  
**Noise and Vibration Analysis Memo**



DART Lake Highlands LRT Station  
CATEGORICAL EXCLUSION

---



# HARRIS MILLER MILLER & HANSON INC.

77 South Bedford Street  
Burlington, MA 01803  
T 781.229.0707  
F 781.229.7939  
W www.hmmh.com

## TECHNICAL MEMORANDUM

---

**To:** Linda Lockhart, LOPEZGARCIA GROUP  
**From:** Lance Meister, Harris Miller Miller & Hanson Inc.  
**Date:** May 13, 2008  
**Subject:** Lake Highlands Station Noise and Vibration Impact Assessment  
**Reference:** HMMH Job # 301640

---

This technical memorandum summarizes the noise and vibration impact assessment related to the proposed Lake Highlands Station on the DART Northeast Corridor. The project entails constructing a deferred station that was proposed, but not built, during earlier stages of the original DART Northeast Corridor project.

DART is concerned about the possible noise and vibration impacts related to the new station. The entire project is contained within the DART right-of-way; however, there are still concerns that noise and vibration could be an issue, and a noise and vibration impact assessment was conducted to determine the effects of the new station.

The major source of noise and vibration along the corridor and at the proposed station is the operation of the LRT vehicle. Both noise and vibration levels are dependent on the speed of the vehicle. As the speed of the vehicle increases, the noise and vibration levels increase and as the speed decreases, the noise and vibration levels decrease. The current LRT speeds in the proposed Lake Highlands Station area are 50-55 mph, and the effective speed in the proposed station would be 20 mph. Based on this change in the speed, both the noise and vibration levels generated by the LRT are projected to drop significantly with the station. Based on this reduction in both levels, there are no noise or vibration impacts projected in association with the Lake Highlands Station.

### Background

The noise and vibration impact analysis during the environmental stage of the project identified noise impacts at the White Rock School and a doctor's office on the east side of the ROW in the area of the proposed station. There was no noise impact identified at the apartments to the west of the corridor, and no vibration impacts at any of the locations. In order to mitigate the noise impacts, a noise barrier was constructed on the east side of the alignment.

The proposed project includes only the construction of a station within the ROW. At this point, no other project components are included in the project, such as parking or bus bays at the station. Therefore, the only noise and vibration sources are the LRT operations at the station.

The only change in LRT operations due to the station will be a reduction in the speed through the area. Current operations are between 50 and 55 mph in this area. For modeling purposes, the speed in the station would be 20 mph. (While the trains do stop at the station, there is some movement as the trains enter or exit the station. 20 mph is a conservative estimate of the speed at a station.)

### Noise Impact Assessment

The FTA's noise impact assessment method is based on the change in noise level from the existing to the future. Impact occurs when the future noise levels with the project would increase by some amount over the existing noise.



# HARRIS MILLER MILLER & HANSON INC.

Lake Highlands Station Noise and Vibration Impact Assessment  
May 13, 2008  
Page 2

---

The primary source of noise from LRT operations is the steel wheels running on the steel rails. As speed increases, noise levels increase, and as speed decreases, noise levels decrease. The relationship between speed and noise level is:

$$\text{Change in noise level} = 20 * \text{Log} (\text{current speed/proposed speed})$$

Based on this relationship between the current speed in the area (50-55 mph) and the proposed speed with the station (20 mph), the noise levels from LRT operations would drop by approximately 8 dB. While there are other noise sources associated with a station, such as the PA system and bells as the LRT enters or exits the station, these are minor sources, and contribute a very small amount to the overall noise level.

Based on this assessment, and using the current existing noise, the future noise levels with the project would be significantly lower, and there would be no impact. Using the pre-project existing noise, as measured during the environmental stage of the project, there would be no noise impact due to the proposed Lake Highlands Station, as the future noise levels would be well below the impact criteria.

## **Vibration Impact Assessment**

The FTA's vibration impact assessment is based on the maximum vibration levels generated by the project. The only source of vibration at the station is the LRT vehicle. Just like noise, vibration levels change with changes in speed. The relationship between speed and vibration level is:

$$\text{Change in vibration level} = 30 * \text{Log} (\text{current speed/proposed speed})$$

Based on this relationship between the current speed in the area (50-55 mph) and the proposed speed with the station (20 mph), the vibration levels from LRT operations would drop by approximately 13 VdB. Since the vibration levels in the area were just at or below the vibration impact criteria in the environmental stage of the project and the vibration levels with the station would drop by 13 VdB, there is no vibration impact projected due to the Lake Highlands Station.

## Appendix E

### FEDERAL AND STATE LISTED THREATENED AND ENDANGERED SPECIES FOR DALLAS COUNTY



DART Lake Highlands LRT Station  
CATEGORICAL EXCLUSION



**FEDERAL AND STATE LISTED THREATENED AND ENDANGERED SPECIES FOR DALLAS COUNTY**

Species	Federal Status	State Status	Habitat Preference	Habitat Present	Species Effect	Pertinent Project Information
<b>Birds</b>						
American Peregrine Falcon  (Falco peregrinus anatum)	DL*	E	Year round resident and local breeder in west Texas. Nests in tall cliff eyries. Also, migrant across state from more northern breeding areas in the US and Canada. Winters along coast and farther south. Occupies wide range of habitats during migration, including urban, with concentrations along coast and barrier islands. Low-altitude migrant with stopovers at leading landscape edges such as lake shores, coastlines, and barrier islands.	No	No	High cliffs are absent from the proposed station area. No individuals identified within the proposed station area.
Arctic Peregrine Falcon  (Falco peregrinus tundrius)	DL*	T	Migrant throughout state from subspecies' far northern breeding rang. Winters along coast and farther south. Occupies wide range of habitats during migration, including urban, with concentrations along coast and barrier islands. Low altitude migrant with stopovers at leading landscape edges such as	No	No	High cliffs are absent from the proposed station area. No individuals identified within the proposed station area.



DART Lake Highlands LRT Station  
CATEGORICAL EXCLUSION

Species	Federal Status	State Status	Habitat Preference	Habitat Present	Species Effect	Pertinent Project Information
			lake shores, coastlines, and barrier islands.			
Bald Eagle ( <i>Haliaeetus leucocephalus</i> )	DM	T	Found primarily near rivers and large lakes. Nests in tall trees or on cliffs near water. Communally roosts, especially in winter. Hunts live prey, scavenges, and pirates food from other birds.	No	No	Tall trees and cliffs are absent within the proposed station area. No individuals identified within the proposed station area.
Black-capped Vireo ( <i>Vireo atricapilla</i> )	LE	E	Oak-juniper woodlands with distinctive patchy, two-layered aspect. Shrub and tree layer with open, grassy spaces. Requires foliage reaching to ground level for nesting cover. Returns to same territory, or one nearby, year after year. Deciduous and board-leaved shrubs and trees provide insects for feeding. Species composition less important than presence of adequate broad-leaved shrubs, foliage to ground level, and required structure. Nesting season March to late summer.	No	No	Oak-Juniper woodlands habitat not present. No individuals identified within the proposed station area.





DART Lake Highlands LRT Station  
CATEGORICAL EXCLUSION

Species	Federal Status	State Status	Habitat Preference	Habitat Present	Species Effect	Pertinent Project Information
Golden-cheeked Warbler (Dendroica chrysoparia)	LE	E	Juniper-oak woodlands. Dependent upon Ashe juniper (also known as cedar) for long fine bark strips, only available from mature trees, as used in nest construction. Nests are placed in various trees other than Ashe juniper. Only a few mature junipers or nearby cedar brakes can provide the necessary nest material. Forages for insects in broad-leaved trees and shrubs. Nesting in late March to early summer.	No	No	Juniper-Oak woodlands habitat not present. No individuals identified within the proposed station area.
Interior Least Tern (Sterna antillarum athalassos)	LE	E	This subspecies is listed only when inland (more than 50 miles from a coastline). Nests along sand and gravel bars within braided streams, rivers. Also known to nest on man-made structures (inland beaches, wastewater treatment plants, gravel mines, etc.). Eats small fish & crustaceans. When breeding forages within a few hundred feet of colony.	No	No	Sand and gravel bars absent within the proposed station area. Inland beaches, wastewater treatment plants, gravel mines, etc. no present. No individuals identified within the proposed station area.
Peregrine Falcon (Falco)	DL*	ET	Subspecies (F. p. tundrinus) a potential migrant throughout state,	No	No	See subspecies for proposed station-specific comments.



DART Lake Highlands LRT Station  
CATEGORICAL EXCLUSION

Species	Federal Status	State Status	Habitat Preference	Habitat Present	Species Effect	Pertinent Project Information
peregrinus)			winters along coast. Subspecies (F .p. anatum) resident, nests in west Texas. Subspecies are not easily distinguishable at a distance. See subspecies for habitat.			
Piping Plover (Charadrius melodus)	LE	T	Wintering migrant along the Texas Gulf Coast, beaches and bayside mud or salt flats.	No	No	No individuals identified within the proposed station area. No beaches or bayside mud or salt flats present.
White-faced Ibis (Plegadis chihi)		T	Prefers freshwater marshes, sloughs, and irrigated rice fields, but will attend brackish and saltwater habitats. Nests in marshes, in low trees, on the ground in bulrushes or reeds, or on floating mats.	No	No	No individuals identified within the proposed station area. No marshes, sloughs, rice fields, brackish or saltwater habitats etc. present.
Whooping Crane (Grus americana)	LE*	E	Potential migrant via plains throughout most of state to coast. Winters in coastal marshes of Aransas, Calhoun, and Refugio counties.	No	No	Estuaries, prairie marshes savannah, croplands pastures absent within the proposed station area. No individuals identified within the proposed station area.



Species	Federal Status	State Status	Habitat Preference	Habitat Present	Species Effect	Pertinent Project Information
Wood Stork ( <i>Mycteria americana</i> )		T	Forages in prairie ponds, flooded pastures or fields, ditches, and other shallow standing water, including salt-water. Usually roosts communally in tall snags, sometimes in association with other wading birds (i.e. active heronries). Breeds in Mexico. Birds move into Gulf States in search of mud flats and other wetlands, even those associated with forested areas. Formerly nested in Texas, but no breeding records since 1960.	No	No	Prairie ponds, flooded pastures or fields, ditches, and other shallow standing water, and tall snags absent within proposed station area.  No individuals identified within the proposed station area.
Mammals: None Listed.						
Reptiles						
Alligator Snapping Turtle ( <i>Macrochelys temminckii</i> )		T	Perennial water bodies. Deep water of rivers, canals, lakes, and oxbows. Also swamps, bayous, and ponds near deep running water. Sometimes enters brackish coastal waters. Usually in water with mud bottom and abundant aquatic vegetation. May migrate several miles along rivers. Active March through October. Breeds April	No	No	No individuals identified within the proposed station area. Deep waters not present. Aquatic vegetation not present within proposed station area.



DART Lake Highlands LRT Station  
CATEGORICAL EXCLUSION

Species	Federal Status	State Status	Habitat Preference	Habitat Present	Species Effect	Pertinent Project Information
			through October.			
Texas Horned Lizard (Phrynosoma cornutum)		T	Open, arid and semi-arid regions with sparse vegetation, including grass, cactus, scattered brush or scrubby trees. Burrows into soil, enters rodent burrows, or hides under rock when inactive. Breeds March through September.	No	No	No individuals identified within the proposed station area. Semi-arid region with sparse vegetation not present.
Timber/ Canebrake Rattlesnake (Crotalus horridus)		T	Swamps, floodplains, upland pine and deciduous woodlands, riparian zones, abandoned farmland, limestone bluffs, sandy soil or black clay. Prefers dense ground cover, i.e. grapevines or palmetto.	No	No	No individuals identified within the proposed station area. Riparian zone and dense groundcover not present.
Texas Garter Snake (Thamnophis sirtalis annectens)		T	Wet or moist microhabitats are conducive to the species occurrence, but is not necessarily restricted to them; hibernates underground or in or under surface cover; breeds March – August.	No	No	No individuals were identified and moist microhabitats are not present within the proposed station area.
<b>Status Key:</b>						



DART Lake Highlands LRT Station  
 CATEGORICAL EXCLUSION

Species	Federal Status	State Status	Habitat Preference	Habitat Present	Species Effect	Pertinent Project Information
LE, LT	Federally Listed Endangered/ Threatened					
PE, PT	Federally Proposed Endangered/ Threatened					
DL, PDL	Federally Delisted/ Proposed for Delisting					
DM	Federally Delisted/ Being Monitored First Five Years					
E, T	State Listed Endangered/ Threatened					
"blank"	Rare, but with no regulatory listing status					
*	USFWS does not include this species in its list for Dallas County					

**Source:** Texas Parks and Wildlife Department 2005. Annotated County Lists of Rare Species (Last revised August 8, 2007); U.S. Fish and Wildlife Service Endangered Species List for Dallas County (accessed on December 14, 2007).

