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16. Abstract <p>The Motor Carrier Division (MCD) of the Texas Department of Transportation (TxDOT) typically issues more than 32,000 permits each month for oversize and/or overweight vehicles. The procedure for attending these requests is time consuming and costly. It consists of (a) establishing a tentative route with adequate clearances (b) an identification of all the bridges on the route, (c) the retrieval of the files (or drawings) of each bridge, (d) an analysis of each bridge, performed in the Design Division, to evaluate the adequacy of each structure for the vehicle, and (e) if a structure is not adequate, an alternate route is investigated.</p> <p>This project reports the efforts to implement an automatic procedure for the routing of overweight/oversize vehicles for the Houston District. The procedure uses a network representation of the On-system roads which was built using official TxDOT base maps identifying the bridges on the vehicle's route. The bridges on the route are evaluated to determine their adequacy for the incoming vehicle by means of Texas Administrative Code rules and by evaluating formulae developed in Study 0-1443, accessing bridge ratings stored in BRINSAP. Route optimization procedures are included to minimize travel distances avoiding vertical clearance constraints underneath overpasses and insufficient bridges. The efforts of this project have focused on implementing an operational system for TxDOT's Houston District.</p>			
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ABSTRACT

The Motor Carrier Division (MCD) of the Texas Department of Transportation (TxDOT) typically issues more than 32,000 permits each month for oversize and/or overweight vehicles. The procedure for attending these requests is time consuming and costly. It consists of (a) establishing a tentative route with adequate clearances (b) an identification of all the bridges on the route, (c) the retrieval of the files (or drawings) of each bridge, (d) an analysis of each bridge, performed in the Design Division, to evaluate the adequacy of each structure for the vehicle, and (e) if a structure is not adequate, an alternate route is investigated.

This project reports the efforts to implement an automatic procedure for the routing of overweight/oversize vehicles for the Houston District. The procedure uses a network representation of the On-system roads which was built using official TxDOT base maps identifying the bridges on the vehicle's route. The bridges on the route are evaluated to determine their adequacy for the incoming vehicle by means of Texas Administrative Code rules and by evaluating formulae developed in Study 0-1443, accessing bridge ratings stored in BRINSAP. Route optimization procedures are included to minimize travel distances avoiding vertical clearance constraints underneath overpasses and insufficient bridges. The efforts of this project have focused on implementing an operational system for TxDOT's Houston District.

EXECUTIVE SUMMARY

A survey was performed on the available information to gather GIS information to build an automated routing system. The survey focused on (a) available digitized maps, (b) available road databases, (c) bridge databases and (d) available software systems. After completion of the survey, several decisions were made on the direction of the work, which included: a) the use of TxDOT's official base maps available from the Graphic Office of the Transportation Planning Division, b) use of GIS software designed for transportation applications, c) use of TxDOT's road database currently under development, and d) the use of BRINSAP database.

The identification of the correct location for the On-system bridges was accomplished in four steps: a) the creation of a GIS database of bridge locations based on the BRINSAP longitude and latitude coordinates of the bridges; b) the import of TxDOT's urban base files; c) the integration of the on-system roads layer, bridges symbols layer and BRINSAP bridge locations layer into one GIS database; then the integrated GIS database was displayed on the computer screen with all three layers for comparison and evaluation; and d) the comparison of the BRINSAP bridge locations with the bridge symbols.

All incorrect BRINSAP bridge locations were corrected based on the location information in the BRINSAP database, on the bridge symbol locations of the urban files, and on bridge locations indicated in printed maps for the corresponding county. We found that 32% of the Brazoria County bridges have some sort of error either on the BRINSAP records and/or on the digitized TxDOT maps. The statistics for the other Counties were as follows: Fort Bend – 29%, Galveston – 41.5%, Harris – 37.9%, Montgomery – 16% and Waller – 20%.

For the development of the GIS roads network, a process was developed to convert TxDOT drawings to GIS maps. This was achieved by: a) converting the base Urban files and road database to a format compatible with the GIS software selected, b) importing these files into the GIS Software, c) developing and applying several macros to clean and fix the maps, d) deleting the centerlines of the drawings, e) merging all GIS maps into one file, and f) applying the "Overweight Vehicle Routing Analysis" macro.

An overweight vehicle routing model was programmed to consider vertical clearance requirements and the feasibility of the bridges. The procedure automatically identifies all bridges on a specified route and evaluates the adequacy of the bridge structure and vertical clearance requirements for a given vehicle.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

The Motor Carrier Division (MCD) of the Texas Department of Transportation (TxDOT) is currently in charge of issuing permits for overload and overweight vehicles for the On-system highways of the State of Texas. This office typically issues more than 32,000 permits each month for oversize and/or overweight vehicles. Some of these permits are requests for the transport of superheavy loads. The current procedure for processing these requests is time consuming and very costly. The process consists of (a) the establishment of a tentative route with adequate width and height clearances, (b) a manual identification of all the bridges along the route, (c) the retrieval of the files (or drawings) of each bridge, (d) an analysis of each bridge, performed in the Design Division of TxDOT, to evaluate the adequacy of each structure for the vehicle, and (e) if a structure is not adequate, an alternate route is investigated. It is also customary, in order to reduce the processing time, to re-use portions of routes already analyzed for greater loads. This approach, however, may create future problems because the same bridges are subjected to repeated overloads.

1.2 Background

1.2.1 Current Permitting Procedure

In May 1991, the Texas Legislature adopted into the Texas Administrative Code [1] the method currently used by the MCD to analyze most overweight permit requests. These regulations limit the axle weights by two methods. The first method imposes a gross weight limit on axle groups which depends on the number of axles in each group, as well as imposing a limit on the tire loads; this limit is 850 lb/in. of tire width. If either the axle group weight or the tire load are exceeded, a permit may still be issued under the second method, the Equivalent Distributed Load (EDL) method.

The EDL method allows consideration of factors that provide greater distribution of the axle group's weight. These factors are the number of tires, gage distance and longitudinal distribution of the load by the deck. In essence, the EDL method converts the axle group weights to an equivalent distributed load which is then compared to the maximum allowed for the corresponding wheelbase. If the EDL of the axle group is less than the maximum allowed, then the MCD will issue the permit. However, if the permit is denied, TxDOT's Design Division performs an analysis of the bridges along the vehicle's route to determine if a permit may still be issued.

On one hand, the major drawback of the procedure adopted into the Texas Administration Code [I] is that it does not consider the fact that the resulting forces in a bridge are not only dependent on axle weights, wheel base and gage but also on the geometry and the material properties of the

bridge. On the other hand, the significant drawback of analyzing each bridge on the vehicle's route is that the procedure is time consuming and costly.

1.2.2 Previous TxDOT Projects

To address the problems mentioned above, TxDOT initiated and completed Projects 1266 and 1443 to develop general formulae and procedures for issuing the permits passing over Texas' On-system bridges and to demonstrate the feasibility of an automatic routing procedure. The procedural direction of these projects were dictated in part by the information contained in BRINSAP, the bridge inventory and appraisal database. In project 1266 [2], the Texas Transportation Institute (TTI) developed formulae for limiting group weights passing over H15, H20 and HS20 simple span bridges. Two types of bridge formulae were developed for each bridge type, a general formula and a bridge-specific formula.

The first formula was a function of the vehicle dimensions and was similar to the current Texas permit rules. However, it was significantly more restrictive than that currently used by TxDOT. The second formula was based not only on the vehicle's dimensions but also on the span length of the particular bridge to be crossed. The use of the bridge-specific formula allows for the safe crossing of higher permit weights without additional engineering analysis. In addition, several critical reinforced continuous span slab bridges were checked to ensure that formulae, developed for simple spans, do not exceed the allowable stresses [2].

Additionally, in Project 1266, the University of Texas at El Paso (UTEP) demonstrated the feasibility of an automatic routing procedure through the use of a network flow model of the On-system roads of TxDOT's Houston District that identifies all bridges along a route [3,4]. The network model was developed from digitized geographic drawings available in TxDOT's Transportation Planning and Management Division (TPP). The drawings were used to define nodes (intersections) and arcs or links (segments of roads). For the purpose of routing vehicles, the nodes and links were given attributes such as intersecting highways, highway types and numbers, lengths, coordinates, etc. However, for the purpose of identifying the bridges to be crossed, the bridges and their identifications were also attributed to the nodes and links. UTEP's part of Project 1266 concluded with a computer program that identifies all the bridges along a given route within TxDOT's Houston District. After identifying the bridges along a route, the program accesses the BRINSAP database to retrieve the available information on the bridges. It was found, however, that the bridge-specific formula developed by TTI could not be implemented into the program because BRINSAP lacks the individual span lengths of multiple span bridges.

As a continuation of the previous work, Project 1443 defined permit bridge load formulae applicable to bridges designed for the AASHTO H-type and HS-type axle configurations [5]. These efforts not only included formulae for the four design types (H15, H20, HS 15 and HS20) but also formulae for bridges which may have been designed by or reduced to another HX or HSX designation. Two types of formulae were derived for the HX and HSX axle configurations, a general formula, function of the vehicle configuration, and a bridge-specific formula that is also a function of the span length [5]. The first formula has two important uses: (1) given the

vehicle's axle configuration and the bridge design type, it can calculate the maximum allowable load for any HX or HSX bridge, and (2) given the axle group and the total load, the formula can convert the vehicle's load to an equivalent load of a HX or HSX AASHTO truck. The first use offers the advantage that the differences between the allowable load (resistance) and the actual load (load) (always positive) can be used as a margin of safety parameter to determine an optimal route. This optimal route may be defined as a short route (not necessarily the shortest) that may minimize not only the number of bridges to be crossed but also may maximize the margin of safety. These problems are normally solved using network optimization techniques. In the second use, by converting the actual vehicle to an equivalent HX or HSX status, the BRINSAP records of the operating and inventory rating of the bridges along a route can be accessed to quickly assess the adequacy of the bridge structure for the given truck. Furthermore, the route optimization problem can now be defined by maximizing the ratio of the operating or inventory rating to the equivalent HX or HSX status.

The two types of uses previously described can be implemented in an automated routing system since all non-posted bridges in BRINSAP have inventory and operating ratings based on H- or HS-type vehicles.

The bridge-specific formula developed by TTI under Project 1443 is again a function of the span length and still cannot be fully implemented due to the lack of complete span lengths in BRINSAP. However, this formula is more accurate and will permit the greatest allowable loads. Although, at the present this formula cannot be implemented for all the On-system bridges, it can certainly be applied to all single-span and two-span bridges. BRINSAP records currently include the total length of the bridge as well as the largest span length. Thus, the bridge-specific formula can be partially implemented in an automatic routing process.

1.2.3 PONTIS

TxDOT is in the process of implementing PONTIS, a federally-funded Bridge Management System that was designed to aid DOT agencies in the more sophisticated procedures for managing bridges. By using state-of-the-art modeling techniques and optimization procedures and a detailed bridge database, PONTIS can predict bridge deterioration, find cost effective actions to correct problems, select appropriate bridges for improvement and replacement and help in the scheduling of work. PONTIS also utilizes a new bridge description and condition rating system that is more detailed than the existing system which is based on bridge inspections. It is clear that the PONTIS bridge database will be more detailed than BRINSAP. The role of the PONTIS database, including its bridge description and condition ratings, in the routing of overweight vehicles still needs to be investigated.

This future database may offer the advantage that the evaluation of an individual bridge for a given overweight vehicle could be performed directly, considering the vehicle characteristics and the bridge's geometric and materials properties included in the database, without the use of any empirical formula. Instead, AASHTO analysis procedures or even finite element analysis could be performed automatically. This would permit a more accurate and less conservative approach for the issuing of overload permits.

1.2.4 Handling of up-to-date information

Another important aspect is that the MCD currently has a procedure in place to handle up-to-date information such as obstacles in the roadways and day-to-day maintenance and construction activities. This information is currently used for issuing oversized permits. The obstacles on the roads such as width and height clearances are maintained in printed maps and routinely updated. Furthermore, day-to-day activities on the roadways are reported to the MCD by the individual TxDOT's district offices. Since all the information is centralized in the MCD, then the implementation of this information in the routing process, in combination with the bridge evaluations, can be accomplished.

1.2.5 Geographic Information Systems and Digitized maps

Several Geographic Information Systems (GIS) are now available for all types of computer systems. Powerful GIS systems can now be implemented in the PC environment at relatively low costs. GIS are programmable software packages that assist in the management of geographic information. All GIS packages employ digitized drawings (maps) and relational databases associated with the drawings. They typically include different modules to make the GIS perform desired actions, as well as programmable features that allow users to customize the GIS for a given application. These features make the GIS attractive for the purpose of routing overweight vehicles. First, the basis of the GIS would be the digitized maps of the On-system roadways. The network-flow models can be built into the GIS by defining the nodes and arcs (links) and their corresponding attributes (highway identifications, directions, highway types, length, etc.). By using the geographic coordinates of the bridges in the BRINSAP records, or GPS data that may become available, the On-system bridges could be correctly located and incorporated in the GIS along with their identifications. The bridge identifications can then be used to make the GIS access the available bridge database (BRINSAP, or possibly PONTIS), or more specifically, the inventory or operational ratings needed for evaluating bridge load formulae. These ratings, along with the overweight vehicle description, can be included in a module to evaluate the adequacy of the bridge structure or to compute a margin of safety for a given vehicle. Furthermore, network optimization procedures can be implemented to provide optimal routes maximizing the margin of safety of the route. In addition, the day-to-day information on obstacles and maintenance activities could be added as a module to be used in the routing process.

1.3 Objective

The objective of this project is to develop an automatic procedure for the routing of overweight vehicles. The procedure will use a network representation of the On-system roads to identify critical bridges in the overweight vehicle's route. The use of the network model within a Geographic Information System operating in the PC environment will be explored. The model will be based on the On-system roadways and will simulate the travel of an overweight vehicle from an origin to a destination. The system will automatically identify all bridges on a route and evaluate the adequacy of the bridge structure for the given vehicle. The evaluation process will be performed using the formulae developed by TTI in Projects 1266 and 1443 and, initially, the bridge rating parameters included in BRINSAP. The possibility of the future use of PONTIS

will also be investigated. In addition, route optimization procedures will also be incorporated to minimize travel costs, that is, minimize the travel distance, maximize margins of safety of the bridge structures, as well as avoid constraint locations (deficient bridges, obstacles, inadequate clearances, or maintenance activities). The efforts of this project have focused on implementing an operational system that addresses all aspects of the routing process. The system has been initially developed for TxDOT's Houston District and will be gradually expanded to include other districts within the State.

CHAPTER 2

SURVEY OF AVAILABLE INFORMATION

2.1 General

This chapter reports on the results of a survey on the available information to build an automated routing system. The survey focused on (a) available digitized maps, (b) available road databases, c) bridge databases and d) available software systems. This chapter also documents the rationale used in selecting the information and software packages for developing the automated routing system.

2.2 Basic Requirements

In order to implement an automated routing system considering the bridge and the overweight vehicles, the following information is needed: a) a network model of the Texas highways, b) a database containing the identification and geometric characteristics of the highways, c) a database containing the characteristics of the bridges, and d) a system that is capable of identifying and evaluating routes linking the network with the road and bridge databases.

2.3 Available Digitized Maps

Despite the rapid expanding popularity and use of GIS systems, and the vast number of digitized maps that can be obtained from several sources, the digitized maps for the Texas' highways have originated from two sources: 1) the US Geological Survey and from 2) the Texas Department of Transportation. These digitized maps have become available in the public domain and have been modified by organizations and private companies to satisfy particular needs. The USGS maps were digitized at a scale of 1: 100,000, while the TxDOT maps were digitized at a scale of 1:25,000. The TxDOT geographic maps are more accurate than the USGS maps. In addition, the TxDOT maps were developed to keep an accurate record of the actual roads in Texas. For this reason, the TxDOT base maps contain greater road details such as interchanges, divided roads, frontage roads, exit ramps, etc. than the USGS files. The USGS files do not contain this level of details. For example, complicated interchanges are modeled by a simple intersection. Since the routing is focused on identifying all potential bridges to be crossed by overweight vehicles, bridge locations at interchanges need to be accurate as a function of the path within the interchange.

The USGS files have the main advantage that databases do exist for them. However, these database typically include very limited information. For example, some databases include functional classification of the roads but using definitions inconsistent with TxDOT's road classification. The USGS files have the following disadvantages:

- 1) Scale is 1: 100,000
- 2) Divided highways may not include two separate roads
- 3) Actual details of interchanges and intersections are lacking or inaccurate

- 4) No details on the frontage roads
- 5) No exit ramps
- 6) No indication of bridge locations

The TxDOT files obviously do not have the limitations mentioned above, but they have other types of problems that require attention. First, the TxDOT base map files were originally developed as digitized maps and only consist of drawing elements. These maps were drawn through the years at TxDOT's Transportation Planning and Management Division using the Intergraph CAD Software. These files are continuously updated as roads evolve or become modified. The files only contain drawing elements of all the road details and do not consist of network models. There are several problems associated with the connectivity of the highways, duplication of lines, and lines not connected at intersections (undershoots, overshoots and crossover). In addition, the TxDOT files excessive information. For divided highways, for example, the files include the center line and the two bound roadways. Furthermore, the TxDOT base map files are the only files that we know of that have bridge symbols; although some of the bridge symbols are missing.

2.4 Road Databases

There are several road databases currently available. Most of the available ones consist of attributes to digitized maps based on the USGS maps. Literally every company that sells GIS software provides digitized maps with a limited road database. Typically these databases include the names of the road or highway and some sort of highway/urban/rural classification.

In an attempt to start building a GIS system, TxDOT has taken charge of building a database for the roads. This is being done using a software called MGE, marketed by Intergraph, to attribute information to the center lines of the On-system highways. The TxDOT road database contains the following information: a) highway identification, b) road type (IH, FM, US, etc.), c) the county number that the road is on, d) a unique number that links the TxDOT map feature to the database, and e) the identification number of the county map. Other information such as the number of lanes, roadway width, width of right of way, traffic volumes, etc. are not included. It is expected, however, that as the GIS applications for TxDOT grow, more highway data will become part of the roads database. For this reason, it is important that any work developed in this or future projects be compatible with plans for the future expansion of the TxDOT roads database.

2.5 BRINSAP and PONTIS

As part of this project an investigation of the records in BRINSAP and in the proposed PONTIS database was performed. The main purpose of the evaluation of the BRINSAP records was to examine the completeness of the records. The evaluation focused on determining whether all On-system bridges are included in BRINSAP, the adequacy of BRINSAP's bridge longitude and latitude coordinates, the adequacy of span lengths, and the completeness of the bridge design ratings. Results of these evaluations are included in Chapter 3 of this report.

The PONTIS database, currently under development, was also examined to evaluate the expanded bridge details that will be included. PONTIS will certainly include more details that will allow better and more accurate evaluation of routes for overweight vehicles. However, the implementation of PONTIS in TxDOT is about 2 years away. Therefore, efforts of this project have focused on BRINSAP only.

2.6 Available software

One major activity in this project was the evaluation of software packages that could eventually be used for the implementation of this project. The survey of the packages included CAD software and GIS Software. The CAD software evaluated included AutoCAD and Microstation PC, fully compatible with Intergraph software. The following GIS software was evaluated: ArcInfo PC, ArcView, TransCAD, MGE (from Intergraph), and MapInfo.

2.6.1 Microstation

Microstation is the PC version of the Intergraph CAD Software. This software is capable of reading the TxDOT digitized maps. There are no problems in compatibility in accessing the drawings. In addition, the software is also capable of reading the attributes of the drawing elements. Microstation drawings use files with extension "dgn" with a proprietary file format. However, the software is capable of exporting the drawings to other formats. For example, as explained later in Chapter 4, the drawings were exported to a format compatible with AutoCAD.

2.6.2 AutoCAD

AutoCAD is probably the most popular CAD software currently available. Although the software was not directly used to modify drawings, almost all CAD and GIS software read files in the AutoCAD format. Essentially, the software was only used as a transition stage to convert the files to desired GIS formats.

2.6.3 ArcInfo

ArcInfo PC is the PC version one of the most popular GIS software packages available in the US. This is a spatial GIS software originally developed for environmental applications. This is a command-based software consisting of two programs, one called Arc and the other Info. It is capable of displaying database information as a function of geographical elements. The software is not menu driven and requires the user to extensively learn and memorize hundreds of commands for the manipulation of the databases. In addition, users need to learn a proprietary macro programming language called SML (Simple Macro Language). The software includes a total of more than 5000 commands. For a person to become proficient in ArcInfo, extensive training is needed. Although, the software is extremely powerful for the implementation of almost any type of application. For the specific routing application involving this project, the software presented the following limitations: a) limited capabilities to accommodate customized programs (such as a routing program) outside the ArcInfo environment, b) does not have the capabilities of recognizing overpasses and underpasses and directions of travel, c) the drawings

created by ArcInfo are not compatible with the PC version, which limits the choices of creating the GIS maps, and d) the software was not user-friendly to be learned in a short period of time.

2.6.4 ArcView

ArcView is a product of the same company that manufactures ArcInfo that allows the user to view or browse GIS systems created by ArcInfo. The software runs in the Windows environment; it is menu driven and easy to use. However, its capabilities on the creation of specific applications or customization are very limited. Applications are normally created through programming macros using its accompanying macro language.

2.6.5 TransCAD

TransCAD is a GIS software package specifically designed for Transportation applications. It is a menu driven software that is easy to learn and operates in the Windows environment. The software is capable of handling highway network models and includes a routing module based on shortest distance and shortest time algorithms. One significant advantage of TransCAD over the other packages evaluated is that it is capable of handling overpasses, underpasses, intersections, turn tables, as well as directions of travel. Although that information is part of the road database, we determined that it is relatively simple to assign that information to the digitized maps under TransCAD. In addition, TransCAD's macro language utilizes a similar logic as the C-language. Macros are easy to create and incorporate. Further discussions on the macros are included in Chapter 4 of the report. Another advantage was its flexibility in importing and exporting GIS databases and files from one format to another. For example, TransCAD is capable of building a GIS point coverage based on the geographic longitude and latitude coordinates included in the BRINSAP database.

2.6.6 MapInfo

MapInfo is GIS software similar to Arcview that operates in the PC environment. It is a menu-driven software that utilizes Micro Basic language for building customized applications. However, it does not recognize rectilinear distances of the geographic elements. For that reason, routing models based on shortest paths can not be implemented with this software. However, the software is flexible in exporting and importing of geographic drawings and elements from different types of formats.

2.6.7 MGE

MGE is the GIS version of Intergraph. TxDOT is currently using it to assign attributes to the center lines of the On-system highways of the State of Texas. The software is extremely efficient in accessing relational databases for the drawing elements. However, the software has very limited applications related to routing and network models. This project has made extensive use of this software for the purpose of cleaning TxDOT's geographic files. This will be explained in Chapter 4.

2.7 Selections and Decisions

In the early stages of this project, the investigators were faced with tough decisions on selecting the avenues to pursue to fulfill the objectives of this project. The following critical decisions were made:

- 1) Use TxDOT official digitized maps available from the Graphic Office of the Transportation Planning Division. The main reason for this decision was that TxDOT's base maps are the most complete drawings currently available, containing the geometric characteristics of overpasses, underpasses, interchanges and exit ramps needed to perform a comprehensive routing through the On-system roads. Although the USGS drawings were considered at some point, they were not accurate enough for our particular application.
- 2) Use the TransCAD GIS software. This decision was primarily made because this particular software is specifically designed for transportation applications. In addition, we found that the software is easy to use and extremely flexible for its customization to peculiar applications.
- 3) Use TxDOT's roads database being developed. This decision was made because it is expected that this will become the official road database. In addition, the database is expected to grow with time.
- 4) Use BRINSAP database. BRINSAP is the only bridge database currently available. Although, PONTIS is currently under development, decisions on the critical elements of the database have not been finalized. In the event PONTIS is implemented in the near future, steps will be taken to ensure that the future database be integrated in the routing system being developed.

CHAPTER 3

DETERMINATION OF ACCURATE BRIDGE LOCATION

3.1 Summary of Procedure

The process of developing and evaluating bridge location was achieved in four steps. First, a GIS database or point coverage of bridge locations was created based on the bridge longitude and latitude coordinates as indicated in BRINSAP. Second, TxDOT's base maps containing the On-system roads and the bridge symbols were exported to GIS files. Third, the On-system roads layer, bridge symbols layer and BRINSAP bridge locations layer were incorporated into one GIS database; the integrated system was displayed on the computer screen with all three layers for comparison and evaluation. Last, the BRINSAP bridge coordinates were compared against the locations indicated by the bridge symbols. All incorrect BRINSAP bridge locations were corrected based on the location information in BRINSAP database, bridge symbol locations according to the base maps, and bridge locations as indicated in printed maps of the corresponding county. The printed maps were made available by TxDOT.

In the following sections, a detailed description of the procedure used to develop the bridge GIS database is presented.

3.2 Building the Bridge GIS System

One of the major tasks was to build a correct GIS System for the all bridges in the Houston District. An extensive literature search was conducted to locate any existing and reliable GIS database of bridges for the State of Texas without success.

The solution to this problem was to build the bridge GIS system based on TxDOT's official base maps and BRINSAP. In the following sections, a detailed description of the procedure undertaken to achieve this goal is presented.

3.2.1 Building BRINSAP GIS Database

BRINSAP was selected because it is the most comprehensive and available database for the bridges in Texas. BRINSAP has three fields which provide information about the bridge locations. The first is the location (item 9), which consists of a description of the bridge location with respect to a feature found on official maps. The other two are the latitude and longitude (items 16 and 17), coded in degrees, minutes, and tenths of minutes (i.e., 65° 35.7' is coded as 65357).

The procedure for building the bridge GIS system started by selecting all corresponding bridge records for each county, one at a time, and then exporting them to a new file named after each county. The coded longitude and latitude data was converted to decimal degrees (i.e., 65357 was converted to 65.595 degrees). The resulting file was exported to a database and then imported

into the GIS Software. The GIS software automatically converted the database files into GIS files and created a point at the longitude/latitude coordinates according to BRINSAP.

3.2.2 Converting TxDOT's Base Maps to GIS Maps

TxDOT's base maps of the On-system roads and the bridge symbols were converted to GIS maps. The objective of this process was to obtain geographically accurate roads and bridge locations as indicated by the bridge symbols. This way, the bridge locations from BRINSAP (with inaccurate longitude/latitude coordinates) can be positioned on the bridge symbols provided in the base maps (geographically accurate). To achieve this goal, the base maps in Microstation drawing format were converted to GIS maps. This was done for each county within the Houston District. Since the TxDOT's base maps have the drawing elements stored in layers, the following layers were selected and isolated from the other layers:

- a) On-system roads and boulevards layers
- b) Centerlines layer
- c) Bridge symbols layers
- d) Railroads layers
- e) County line layer.

The On-system layer basically contained all of the On-system roads. The centerlines layer is necessary because TxDOT's highway attributes are linked to the centerlines. The railroads layers were exported to provide the locations where railroad bridges cross the On-system highways.

The following tasks were performed to create a GIS map for each county:

- 1) Open the TxDOT base map files in the Microstation software. These files are identified with the name "xxxurban.dgn", where xxx takes the three digit number of the county.
- 2) The layers of interest of each county base map were selected and the rest of the layers were deleted. This process consisted of deleting all layers except those of interest. The layers that remained are:
 - a) Layers 2, 3, 4, 5, 6, 8, 15 and 16, containing On-system roads, exit and entrance ramps, frontage roads, boulevards, road centerlines and divided highways.
 - b) Layers 9, 11, 12, 20 and 31, containing the bridge symbols associated with the On-system roads. And
 - c) layers 27, 28, 29, and 30 containing the railroads.

This task was achieved by performing the following specific steps:

- First, select all levels or layers and use the commands UNLOCK and UNGROUP for all elements:

- a) From the Microstation menu, select VIEW/LEVELS, and choose "All" LAYERS ACTIVE.
 - b) Go to EDIT and Select ALL.
 - c) Select EDIT and choose UNLOCK.
 - d) Select EDIT and choose UNGROUP.
- Select the layers to keep (e.g., 2-6, 8-9, 11-12, 15, 16, 20, 27-31):
 - a) EDIT/ Select By:
 - LEVELS: Choose the levels that you are interested in keeping.
 - MODE: Choose Inclusive, Selection, On.
 - SYMBOLGY: --blank--.
 - PROPERTIES AND TAGS: --leave alone--.
 - Click on EXECUTE.
 - b) ALERT: select Cancel.
 - c) EDIT/ LOCK.
 - Select the layers to delete (e.g., 1, 7, 10, 13,14,17-19, 21-26, 32-64). Choose EDIT/ Select by LEVELS, and choose the levels that are not needed. Then click on EXECUTE. It is highly recommended to delete a maximum of two layers each time.
- 3) After cleaning all the layers, the files are exported from Microstation format to AutoCAD DXF format.
- 4) The AutoCAD DXF files are imported into TransCAD using the IMPORT command and the following specifications: a) Coordinate system: NAD27, b) Zone: Texas DOT Statewide Mapping Coordinate System, and c) Units: International foot.

The TxDOT drawings follow Lambert Conformal Conic projection and have local coordinate system (i.e., x and y). Following the above three steps, TransCAD converts TxDOT maps from the (x,y) Lambert coordinates into longitude/latitude coordinates.

This procedure is repeated several times, each time with a different set of layers. The final output are four geographic databases:

- a) Boulevards GIS database, consisting of layers 2, 3, 5, 6, 8, and 15.
- b) Centerlines GIS database, composed of layers 4 and 16.
- c) Bridge symbols GIS database, containing layers 9, 11, 12, 20, and 31. And
- d) Railroads GIS database: include layers 27, 28, 29, and 30.

3.2.3 Integrating TxDOT Files and BRINSAP GIS Database

Using TransCAD, a new GIS map file is created containing all GIS databases that were developed in the first two sections. Opening the new map file will display all layers as shown in Figure 3.1. In addition, the county boundaries were added from USGIS TIGER files.

ID	104
Longitude	-95405000
Latitude	29478000
ID_2	104
F_0000_STR	20200059802034
F_1_FILE_N	0
F_2_DISTRI	12
F_3_COUNTY	20
F_8_4_CONT	598
F_8_5_SECT	2
F_11_MILEP	8504
F_8_6_STR	34
F_8_3_DUPR	0
F_5_1_RTST	1
BLANKS	
F_5_3_RT_D	1
F_5_6_RTBU	0
F_5_2_RT_S	13
F_5_4_RT_N	288
F_5_5_RT_D	0
F_11_1B_RE	490
F_11_2B_RE	
F_11_3B_RF	+
F_11_4B_RF	1547
F_4_PLACE_	26520

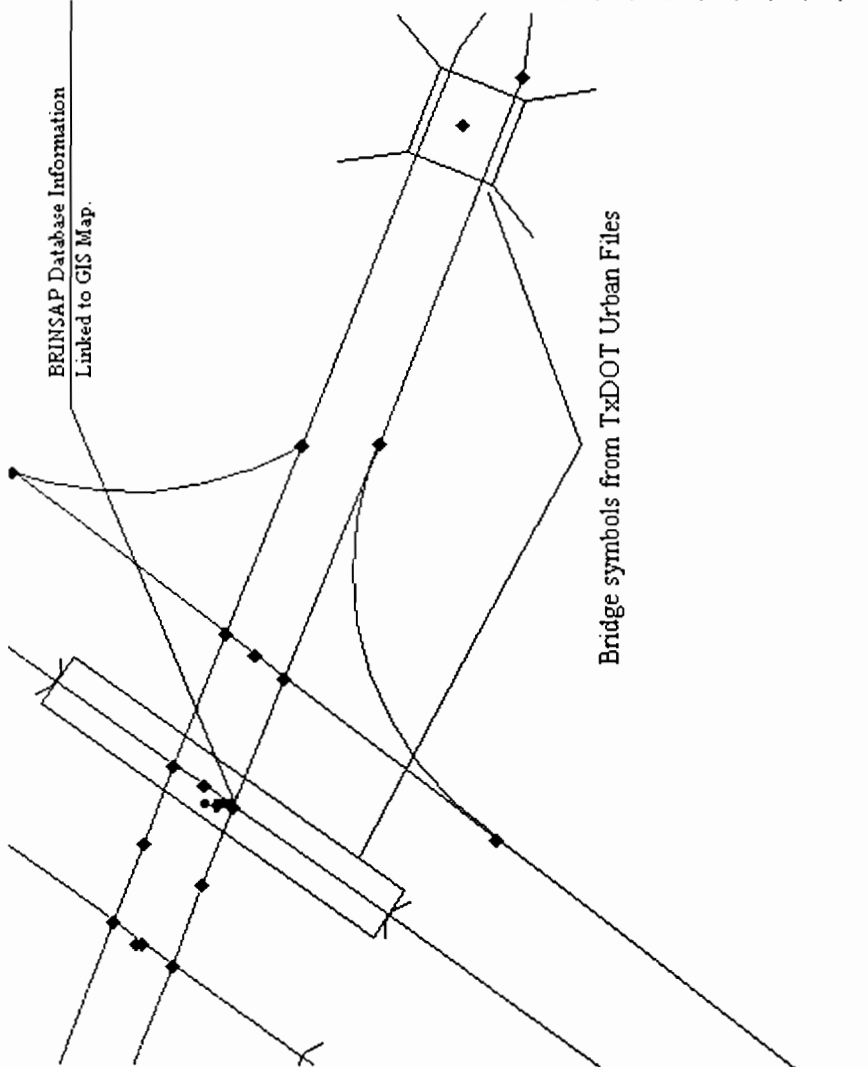


Figure 3-1
Integration of Urban Files and BRINSAP

3.3 Comparison and Evaluation of Bridge Locations

The major task at this point was to compare and evaluate the BRINSAP GIS coordinates with the bridge symbols. Most of the original coordinates given by BRINSAP did not match the locations description in BRINSAP (item 9), nor the bridge symbol locations on the TxDOT base maps. Each BRINSAP bridge location was checked and manually moved to its corresponding location using the information provided in the BRINSAP database and other aids.

In general, there were five possibilities:

1. Some BRINSAP bridge locations matched or were very close to the bridge symbol locations. For this possibility, the bridges were compared manually by confirming the locations from the location description in item 9 of BRINSAP. Only a few BRINSAP bridges were close to their actual locations and near the correct bridge symbols. All these bridges were flagged.
2. Some BRINSAP bridge locations did not match the symbol locations. We discovered that most of the longitude/latitude data in BRINSAP were incorrect. The locations of these bridges were corrected based on the location description in item 9 of BRINSAP and TxDOT printed maps that contain the bridge locations and bridge identifications. Each bridge under this category was moved to its correct place and flagged. Detailed information about these bridges are recorded in Appendices A through F.
3. For some bridges, there were missing bridge symbols in the base maps. Based on BRINSAP's bridge location descriptions, these bridges were moved to correct places, regardless of the missing symbols. These bridges were flagged and all the information was recorded as shown in Appendices A through F.
4. There are some missing bridges in BRINSAP. Some bridge symbols exist in the drawing files but did not have matching bridge records in BRINSAP. This might be due to some missing information in BRINSAP. No action was taken regarding these bridges.
5. For some bridges, there were missing or incorrect geographical coordinates and information in BRINSAP. In this case, the bridges in BRINSAP either have errors in the longitude/latitude information or in the location description. These bridges were located using BRINSAP's location information (whenever possible) and flagged accordingly. A list was compiled as shown in Appendices A through F.

3.4 BRINSAP Correction Procedure

When the TxDOT's base maps and BRINSAP records were integrated in one GIS system, some BRINSAP points were located nearby their corresponding On-system roads and/or bridge symbols. Few points coincided but the majority did not. Part of the points in the last category

are extremely separated from the correct location. Few of the points were even outside the county boundaries. The following section describes in detail the correction process.

To appropriately locate a BRINSAP record, the following steps were followed:

- 1) In TransCAD select (INFO DATAVIEW TOOL) and click on a point to retrieve information from BRINSAP's database and cross-reference it, mainly using the following fields (Figure 3.1):

ID	Identification number of each structure assigned by TransCAD.
FOOOO_STRU	Structure number assigned by TxDOT.
F6_1_FEAT_X	The feature crossed by the bridge (highway, railroad, ditch, etc.)
F7_FAC_CAR	The name of the facility carried over by the bridge.
F9_LOCATION	The location of the bridge from an important facility taken as a reference point.
F102_DIR_0	The number of directions of the carried facility.

In some cases, the information in these fields was confusing or incongruent, so additional fields were used to aid in locating these records such as the information on the number of spans and/or span length.

- 2) Quadsheet maps containing the on-system roads and bridges for each county, were also used. These maps have the bridge symbol location and BRINSAP's bridge structure number (FOOOO-STRU) printed along with it. Nevertheless, these maps are only used as aids, since BRINSAP's information was the main source of information for relocating bridges.
- 3) Finally, the original Microstation files were also utilized to assist in the search for street names and other geographic features that are carried or crossed by the structures and listed in item 9 of BRINSAP.

To keep a record of all the changes to BRINSAP's coordinates, a new field was added to BRINSAP's database to record all changes. Examples of field comments are: "done", "uncertain location", "pending" and "unable to locate". These were used to describe the bridge location status. TransCAD allows map tagging of any pertinent field information. Therefore, the user can visually identify the overall status of the bridges in each county.

Furthermore, all comments and observations were also recorded in error report files by county. The error reports are shown in Appendices A through F. These files were created from an excerpt of each county's BRINSAP file, and saved in Excel format.

3.5 Error Reports

The error file consists of information pertaining to the identification and location of each bridge. The spreadsheet fields included were: ID (in ascending order), BRINSAP Structure ID number, check status (C for "checked" or E for "error"), observations or comments regarding its location status, feature carried over, location description, original (old) longitude and latitude coordinates

(in both Degrees-Minutes and Decimal-Degrees formats) and finally the updated or modified longitude and latitude coordinates (in Decimal-Degrees format).

At the end of each error file, the corresponding error statistics were computed. A classification of the most common errors or observations encountered was made and the frequency of each case and their relative occurrence per county was also determined.

Tables 3.1 through 3.6 present a summary of the statistics of the errors found in determining the correct location of the bridges. Note that 32% of the On-system bridges for Brazoria County have some sort of error in RINSAP or in the digitized TxDOT files. The other five counties have similar statistics.

Table 3.1
Summary of Bridge Errors For BRAZORIA

Observations	ERROR	CHECKED
Moved to DGN position		157
Symbol missing in DGN	32	
Road with direction missing, (2 directions - SB only) (BRINSAP)	8	
Symbol missing in DGN and missing street	15	
Two or more bridges using the same symbol in DGN		31
Moved to DGN position (originally on Fort Bend-Brazoria C/L)	17	
Moved to DGN position (DGN symbol may be flipped)	1	
Moved to DGN position (one structure ID, two DGN symbols)	3	
Unable to locate	0	
Symbol might be misplaced in DGN	1	
Originally near an incorrect location and moved to DGN position	14	
Correct location and missing symbol		5
TOTAL	91	193
SUM	284	
BRG TOTAL (DGN)	262	
% ERROR	32%	

Table 3.2

Summary of Bridge Errors For FORT BEND

Observations	ERROR	CHECKED
Moved to DGN position		170
DGN symbol missing (e.g. missing brg symbol)	24	
Same structure (DGN) symbol as for ##### - ## - ###		4
Originally no coordinates	34	
Missing bridge & road symbols, originally no coordinates	10	
Unable to locate	0	
Originally near an incorrect location and moved to DGN position	4	
TOTAL	72	174
SUM	246	
BRG TOTAL (DGN)	245	
% ERROR	29%	

Table 3.3

Summary of Bridge Errors For GALVESTON

Observations	ERROR	CHECKED
Moved to DGN position		121
DGN symbol missing (e.g. missing symbol not complete)	47	
Moved to DGN position (Same info as ####-##-####)		2
Missing DGN symbol & same location as ### - ## - ###	6	
Originally no coordinates (originally north of county line)	16	
Unable to locate	1	
Originally near an incorrect location and moved to DGN position	8	
Missing street or boulevard in DGN	9	
TOTAL	87	123
SUM	210	
BRG TOTAL (DGN)	190	
% ERROR	41.5	

Table 3.4

Summary of Bridge Errors For HARRIS

Observations	ERROR	CHECKED
Moved to DGN position		1062
Symbols missing in DGN (e.g., missing bridge symbols)	283	
Point with no coordinates (e.g., originally no coordinates)	66	
DGN symbol misplaced (e.g., DGN symbol may be flipped)	5	
Missing DGN symbols and no coordinates Specified (no bridge symbols & boulevard, Originally no coordinates)	164	
Originally placed near another feature (e.g.. originally near 0409- 03-011)	80	
Placement unsure (e.g., missing boulevard, bayou not in position, missing BRN, misplaced...)	36	
Same structure (DGN) symbol as for ##### - ## - ###	10	91
Uncertain direction (e.g. SB Should be NB....)	18	
Missing BRN and boulevard symbols	41	
Missing boulevards	1	
TOTAL	704	1153
SUM	1857	
DGN	1848	
% ERROR	37.9%	

Table 3.5

Summary of Bridge Errors For MONTGOMERY

Observations	ERROR	CHECKED
Moved to DGN position		142
Symbol missing in DGN	12	
Moved to DGN position (originally on Fort Bend-Brazoria C/L)	16	
When same structure DGN symbol for ##### - ### - ###	4	38
Originally near an incorrect location and moved to DGN position	8	23
TOTAL	40	203
SUM	243	
BRG TOTAL (DGN)	241	
% ERROR	16%	

Table 3.6
Summary of Bridge Errors For WALLER

Observations	ERROR	CHECKED
Moved to DGN position		84
Missing DGN symbol (e.g., missing bridge symbols)	7	
Point with no coordinates (e.g., originally no coordinates)	8	
DGN symbol misplaced (e.g., DGN symbol may be flipped)	1	
Missing DGN symbol and no coordinates originally specified (no Bridge symbols & originals have no coordinates)	4	
Originally placed near another feature (e.g., originally near 0409-03-011)	1	
TOTAL	21	84
SUM	105	
BRG TOTAL (DGN)	105	
% ERROR	20%	

CHAPTER 4

PREPARATION OF ROADS NETWORK

4.1 Summary

The most important and challenging task in this project is the development of the GIS roads network. Extensive efforts were conducted to evaluate all possible sources of GIS highway maps for the State of Texas. The results were either unreliable GIS maps or expensive set of maps. Thus, we decided to build the GIS maps for the State of Texas highways based on TxDOT official base map drawings. In summary, a process was developed to convert TxDOT base maps drawings (i.e., Urban Files) to GIS maps. This chapter describes in detail the process of converting the drawings into GIS databases and the process of creating a feasible network for routing oversize and/or overweight vehicles.

4.2 Problems Associated with TxDOT Drawings

The TxDOT base maps were selected for the GIS maps because of several advantages. The maps have a good level of accuracy with a scale of 1:24,000; they have complete details of all the streets, bridge symbols, intersections and interchanges and additional information on other geographic features, all included in the 63 layers of drawing. Moreover, these drawings are frequently updated by TxDOT. Recently a database of road information has been developed and is attached to the centerlines of the highways.

TxDOT maps have some problems and limitations. These maps are only drawings and not GIS maps. This means that the maps recognize only a line and a point but do not recognize intersections, overpasses, underpasses, nor traffic flow directions. In addition, the roads database is limited to the centerlines of On-system highways. Moreover, the drawings have some errors in the contents of layers. For example, there were missing bridge symbols specially at the frontage roads.

4.2.1 Connectivity Problems

There are four major problems related to connectivity in the TxDOT drawings as shown in Figure 4.1:

1. **Undershoots:** this problem occurs most of the time at "T" intersections. At these locations, an intersection does not exist because one leg is short and does not intersect with the other leg as shown in Figure 4.1. The short link should be extended to the other leg to create a point intersection.
2. **Overshoots:** this problem is the opposite to the undershoot problem. The road which is supposed to end at the "T" intersection link is extended beyond the intersection point. In this case, the extra leg should be deleted from the drawings.

3. **Crossovers without connection:** GIS recognize intersections by having all road ends meeting at a point. If a link crosses another link without an intersection point, the GIS software recognize these roads as overpass and/or underpass. To solve this problem, all lines must be disconnected at the crossing point and snapped to the intersection point.
4. **Disconnectivity:** Several highways appear to be connected in the drawings, but in fact they are not. The end points of adjacent roads should be connected to allow creation of true network.

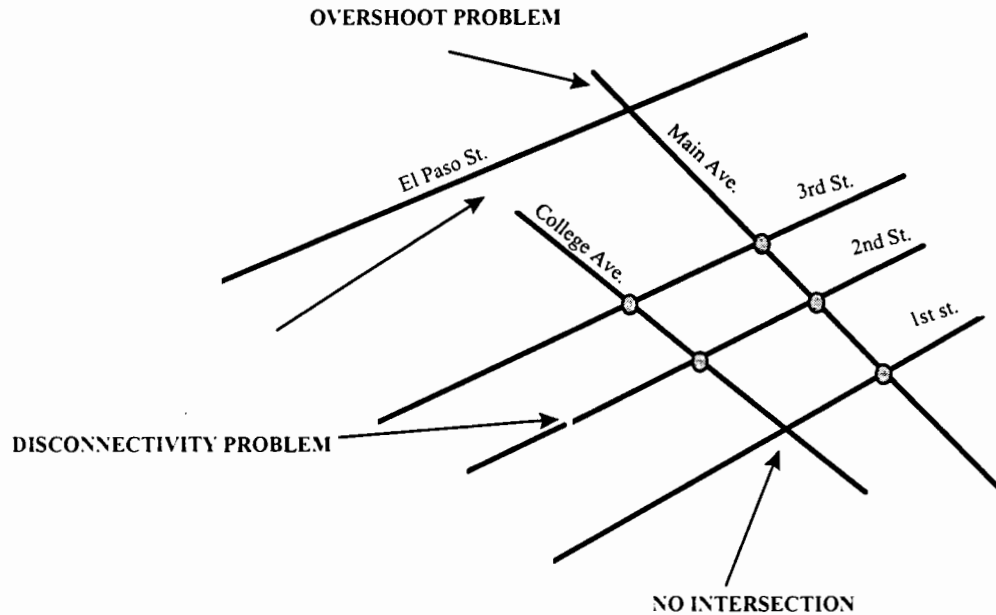


Figure 4.1 Schematic Presentation of the Connectivity Problem

4.2.2 Extra Lines Problem

When zooming in closely to the highway drawings, it was noticed that extra elements were present in the map. These elements are classified into two categories:

1. **Duplicate Lines:** several highway segments were duplicated and drawn closely to the original lines. Duplicate lines create connectivity problems and must be eliminated.
2. **Small Length Elements:** many short length elements (i.e., elements with lengths equal or less than one foot in map units) exist in the drawings. Because it is very difficult to observe these elements, an MGE automated procedure was used to delete them.

These problems were solved through semi-automated procedures during preparation of the roads network. In the following sections, a detailed description of building the GIS maps from the base maps and the automation procedure developed to solve the drawing problems are presented.

4.3 Preparation of TxDOT GIS Maps and Network

The process of converting TxDOT base maps to GIS maps is complicated and requires time consuming efforts. A flow chart summarizing the process is shown in Figure 4.2. In addition, several software packages were used to simplify the process. These included MapInfo, MGE, TransCAD and AutoCAD.

4.4 Road Network Preparation Procedure

The objective of this procedure was to convert the drawings and the database connected to the centerlines of the highways into a GIS map. To achieve this objective and to prepare an integrated GIS road network map for the On-system highways, several steps were taken following the flow chart shown in Figure 4.2. These included:

- a) Use MGE to open a county file (i.e., Drawing). Select all unwanted layers and erase them. Leave only layers with On-System highways and bridge symbols. Save the file under a new name (xxxxclean.dgn).
- b) Open the cleaned file with MGE and run the line cleaning module incorporated in the software. This module provides two processors:
 1. The Intersection Processor: this processor creates an intersection point at every location where two roads cross. A new file is saved as xxxint.dgn.
 2. The Short Segment Processor: this processor cleans the xxxint.dgn files from short segments with lengths equal or less than a user defined length (i.e., 1-2 ft.). Another new file is saved as xxshs.dgn
- c) At this point, the xxxshs.dgn file is processed under two set of procedures:
 - 1) Export the file to AutoCAD's DXF format, open the file in AutoCAD and then export the file again into AutoCAD DXF format. The reason behind this dummy process is that MapInfo, for unknown reason, does not read the DXF files exported from MGE directly. The next step is to import this file into MapInfo and then export it into MapInfo Interchange Format (MIF). This file is then imported into TransCAD to generate the GIS files.
 - 2) Select the center line layers and use the MGE to MapInfo processor to translate the road database attributes to MapInfo format. This process generates four files required by MapInfo for each highway feature (i.e., State highways, interstate highways, etc.). A total of 13 features exists in each map. Thus, a total of 52 files are generated, of which 13 are tables. All table files are opened in MapInfo and appended into a single table. This final table is then exported into MapInfo MIF format to be imported into TransCAD later.
- d) Import the two MIF files into TransCAD and create two separate sets of GIS files and two map files (Countydxf.map and Countytab.map).

e) At this stage, five TransCAD customized macros are run to prepare the maps for network generation. A Macro is a program that runs a set of commands. The following is a list with a brief description of the customized Macros used in the cleaning process:

1. **COMPARE:** Since MGE only exports centerlines with database features, this drawing map must be completed. This Macro compares the complete drawing files exported as AutoCAD DXF (i.e., Countydxf.map) with the center line drawings with the database exported to TransCAD through MapInfo (i.e., Countytab.map). All missing lines in the center line drawing (i.e., frontage roads, ramps, etc.) are copied from the complete drawing files.
2. **FIXEND:** this Macro corrects and enhances the connectivity of the road network.
3. **ASSIGN:** assigns traffic flow directions and copies the attributes from the center lines to the boulevards of divided highways.
4. **INTERSEC:** is used to automatically scroll over all intersections and allows user interaction to define underpasses and overpasses.
5. **BRN2RDS:** crates a relational database between BRINSAP database and the roads database.

The first macro to run is **COMPARE**. It compares the Countytab files, with the Countydxf files and copies the missing lines in the Countytab files from the Countydxf files. The macro also identifies duplicated lines in both files and semi-automatically avoids repetitions of these lines. Therefore, the Countytab files have less lines than the Countydxf files. Afterwards the changes are saved in a new map named Countycmp.map.

f) The next step is to process the Countycmp files to solve the line connectivity problems using the **FIXEND** macro. The macro scrolls through each free endpoint in the map and gives options to the user to connect the free end nodes. The options are to connect two free endpoints between each other and/or divide a nearby line to create a node in the division point (which is selected automatically by the macro) to which the free endpoint should connect.

This step is required to correct and enhance the connectivity of the road network, enabling it for routing operations. The processed files are saved under a new name "Countyfix".

g) Once the On-system roads network is completed and connected, traffic flow directions and attributes are assigned using the macro **ASSIGN**. Using this macro, two major tasks are performed:

1. Database attributes are copied from centerlines to boulevards of divided highways, and
2. Traffic directions are assigned to ramps, frontage roads and highway boulevards.

The processed files are saved as Countyass files.

- h) The next step is to define the underpasses and overpasses at intersections where bridges are present. This goal is achieved by the macro **INTERSEC**. The macro scrolls over each intersection. And then, default for the user to define or assign the underpass or overpass based on the bridge symbol. The bridge symbols layer is included to identify intersections where overpasses and underpasses are needed. The manual process consists of the following steps:
 - 1) Split the lines at the selected intersection,
 - 2) Join the lines that represent the underpass, offsetting the joining node from the original location of the intersection node,
 - 3) Join the lines that represent the overpass, also offsetting the joining node from the original location of the intersection node, and
 - 4) Save the processed files under a new name "Countyopup"
- i) The final step in the cleaning process is the assignment or attribution of BRINSAP points to road links that represent bridges. This procedure is accomplished by running the user customized macro **BRN2RDS**, which scrolls through all the BRINSAP records and requests assignment of the link as either "underpass" or "overpass".
- j) The center lines of the highways are deleted from the maps. This process is repeated for all counties in district 12. The next step is to merge the roads networks and the BRINSAP points of each county to create a larger network (district-wide or statewide). To achieve this goal, two customized macros are used:
 - 1. **MERGEL**: this macro merges the GIS files that contain a line database, and
 - 2. **MERGP**: merges the point GIS files.

The objective of these macros is to merge the roads and the BRINSAP points respectively. Then the resulting map is complete and ready for "Overweight Vehicle Routing Analysis" using the **OVR** customized macro to find the feasible route for a given shipment.

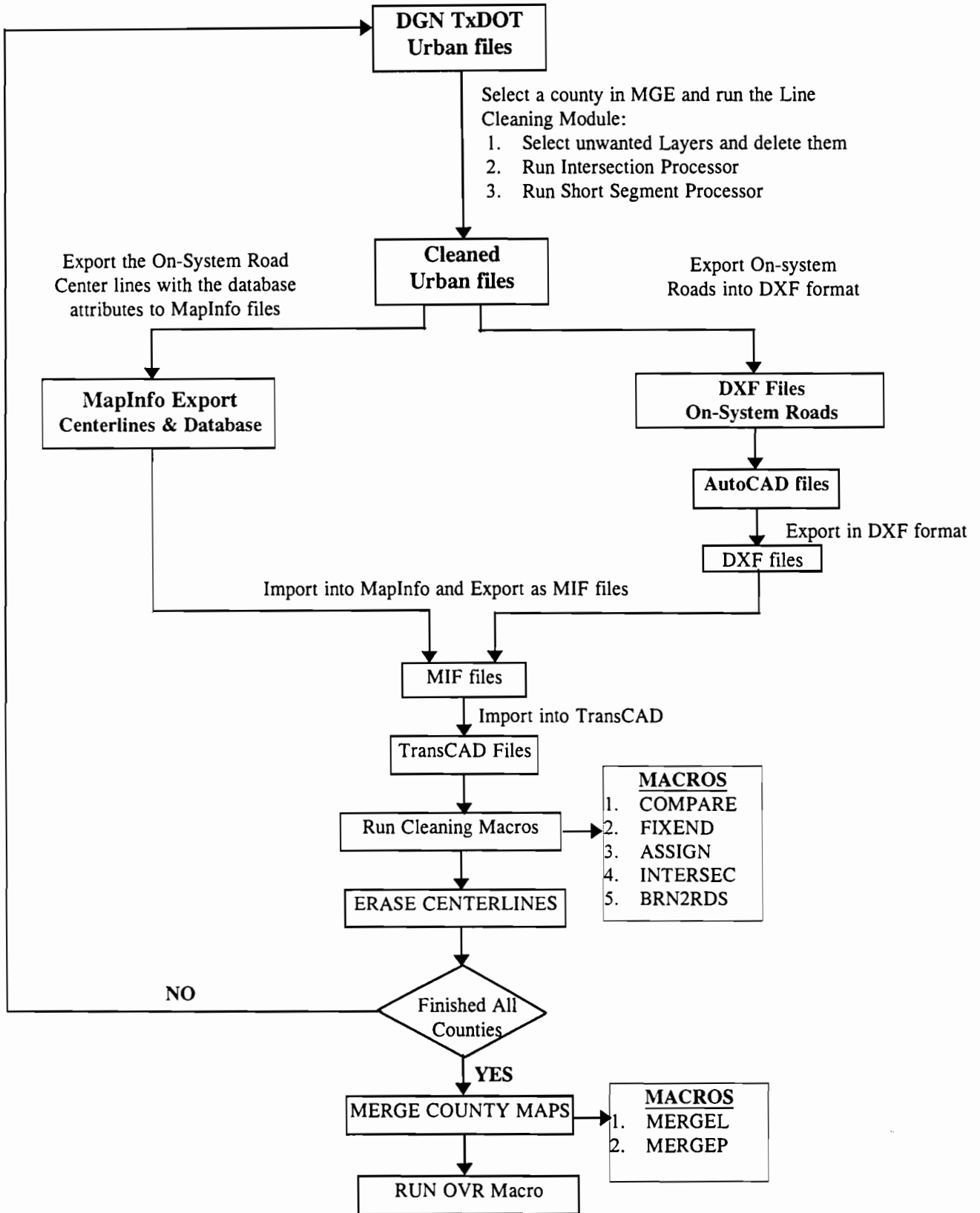


Figure 4.2 Procedure for Building the GIS and Network Maps

CHAPTER 5

OVERWEIGHT VEHICLE ROUTING MODEL

5.1 Introduction

The objective of this chapter is to document the development of an overweight vehicle routing macro with vertical clearance requirements. The procedure uses a network representation of a system of roads and bridges to identify feasible routes. The use of a network routing procedure within a GIS operating in a PC-environment is one of the distinctive features of the approach. The procedure automatically identifies all bridges on a specified route and evaluates the adequacy of the bridge structure and vertical clearance requirements for a given vehicle.

Specifically, this chapter provides a TransCAD-based computerized support methodology, consistent with the Texas Administrative code [1], for automated routing of overweight vehicles with vertical clearance requirements. Section 5.2 summarizes the bridge load formulae (BLF) developed by Keating, Litchfield and Zhou [5]. Section 5.3 presents a detailed procedure for evaluating the bridge formulae. Section 5.4 outlines the TransCAD macro for the GIS-based routing procedure. Section 5.5 shows an example using a prototype network extracted from the map of Brazoria county in Texas. Finally, Section 6 describes Dijkstra's algorithm, which is the procedure used by TransCAD to determine the shortest route from a given source node to a given terminal node.

5.2 Summary of Bridge Formulae

Bridge formulae have been formulated by Keating et al.[5] to determine the maximum allowable loads for the axles groups associated with a given vehicle. A general formula limits the weight of any group of axles by the bridge design type and the group wheelbase, while a bridge-specific formula also takes into account the span length of the bridge. Equation (5. 1) defines the revised axle group weight:

$$GW_{rev} = \frac{GW}{n} \sum_{i=1}^n \frac{1}{R_i * S_i} \quad (5.1)$$

where

- GW_{rev} = revised axle group weight, kN (k),
- S_i = reduction factor for each axle with more than four tires per axle;
 - = 1.0 for axles with four tires or fewer,
 - = 0.96 for axles with eight or more tires.
- n = number of axles
- R_i = reduction factor accounting for gages wider than 1.8 m (6 ft.) (or RF)
- GW = axle group weight, kN (k), calculated from either equations (5.2) or (5.3) and (5.4) as:

$$GW = (a + b WB_{rev}) X \quad (5.2)$$

$$GW = w * WB_{rev} \quad (5.3)$$

$$w = \left(\frac{aL^2 + bL + \frac{c}{L} + d}{WBL(2L - WBL)} \right) X \quad (5.4)$$

where

w	=	allowable distributed load, kN/m (k/ft.)
L	=	span length, m (ft.)
WBL	=	WB _{rev} , revised wheelbase, m (ft.) when WB < L, = L, span length, m (ft.) when WB > L.
X	=	design rating of the bridge
a, b, c, d	=	constants defined in Tables 5.1 and 5.2.
Wb _{rev}	=	revised wheelbase, m (ft.).

The revised wheelbase is defined in equation (5.5) as:

$$WB_{rev} = \frac{WB}{\beta} \quad (5.5)$$

where

WB	=	vehicle wheelbase, m (ft.),
β	=	correction factor for concentrated loadings; = 1.0 for continuous span bridges, = defined by Equations (5.6) or (5.7) for simple span bridges as:

$$\beta = 0.97 - \frac{D}{12.2} \leq 0.92 \quad (\beta = 0.97 - \frac{D}{40} \leq 0.92) \quad (5.6)$$

$$\beta = 1 - \frac{GD}{21.3} \leq 0.92 \quad (\beta = 1 - \frac{GD}{70} \leq 0.92) \quad (5.7)$$

where

D	=	distance between the center of gravity and nearest axle, m (ft.),
GD	=	greatest distance between any of two axles, m (ft.).

Table 5.1 Constants for General Formula

Bridge	Impact	a	b
HX	0%	17.83 - 0.034X (4.009 - 0.0077X)	1.973 - 0.0119X (0.1265 - 0.0012X)
	10%	16.21 - 0.031X (3.645 - 0.007X)	1.804 - 0.0172X (0.1157 - 0.0011X)
	30%	12.81 - 0.027X (2.88 - 0.006X)	1.684 - 0.016X (0.108 - 0.001X)
HSX	0%	0.0 0.0	3.103 - 0.016X (0.199 - 0.001X)
WB < 11.6 m (WB < 38 ft.)	10%	14.45 + 0.0013X (3.249 + 0.0003X)	2.791 - 0.013X (0.179 - 0.0008X)
	30%	13.08 - 0.0623X (2.94 - 0.014X)	2.136 + 0.0062X (0.137 + 0.0004X)
	HSX	0%	35.52 - 0.0342X (7.985 - 0.0077X)
WB < 11.6 m (WB < 38 ft.)	10%	32.27 - 0.0756X (7.255 - 0.017X)	1.258 - 0.014X (0.0807 - 0.0009X)
	30%	24.64 + 0.0356X (5.54 + 0.008X)	1.325 - 0.016X (0.085 - 0.001X)

Table 5.2 Constants for Bridge-Specific Formula

Formula	Impact	a	b	c	d
HX	0%	2.262 - 0.0204X (0.155 - 0.0014X)	0.0 0.0	459.1 - 1.376X (-1111 - 3.33X)	225.5 + 0.994X (166.3 + 0.733X)
	10%	2.320 - 0.0350X (0.159 - 0.0024X)	0.0 0.0	442.5 + 0.4835X (-1071 + 1.17X)	202.7 - 0.949X (149.5 + 0.7X)
	30%	1.883 - 0.0175X (0.129 - 0.0012X)	0.0 0.0	281.8 - 1.405X (-682 - 3.4X)	143.4 - 1.36X (105 + X)
HSX	0%	0.7588 - 0.0623X (0.052 - 0.0043X)	126.3 - 2.85X (28.4 - 0.64X)	1771 - 52.89X (4287 - 128X)	835.1 + 24.63X (-616 + 18.17X)
	10%	0.861 - 0.0204X (0.059 - 0.0014X)	59.16 + 0.22X (13.3 + 0.05X)	556.1 + 4.13X (1370 + 10X)	264.4 - 2.350X (-195 - 1.733X)
	30%	0.730 0.05	56.49 - 0.5916X (12.7 - 0.133X)	633.1 - 10.99X (1532 - 26.6X)	295.6 + 4.61X (-218 + 3.4X)

5.3 Procedure to Evaluate Bridge Load Formulae

The following information is necessary for the application of the bridge formulae: (a) number of axles; (b) impact factor (0%, 10%, 30%); (c) truck clearance (XX feet and XX inches); and (d) axle description. Axle description includes location of the axle in feet (first axle is located at 0), gage in feet, weight in kips, number of tires, and width of tires in inches. The following steps are then executed to determine maximum allowable weight [5]:

Step 1. Determine the center of gravity (COG) of the truck using the expression given below:

$$COG = \frac{\sum_{i=1}^n weight(i) * location(i)}{\sum_{i=1}^n weight(i)}$$

where, weight(i) and location(i) denote the weight and location of axle i, and n represents total number of axles.

Step 2. Compute the reduction factors $R(i)$ and $S(i)$ for each axle i as follows:

$S(i) = 1$, if the number of tires is less than or equal to 4
 $= 0.96$, otherwise.

$R(i) = \frac{6 + gage(i)}{2 * gage(i)}$, if $gage(i) > 6$ feet
 $= 1$, otherwise.

Step 3. The following steps are executed for each record in the BRINSAP database:

Step 3.1. Retrieve these data:

- (a) number of spans (F_46_TOTAL),
- (b) total bridge length (F_49_STR_L),
- (c) length of the largest span (F_48_MAX_S),
- (d) operating rating (F_64_OPER_), and
- (e) bridge type (F_43_1_MN_).

Here field names are given in parentheses. Only those useful parts of the fields are extracted to serve as input to the bridge formulae. For example, although the bridge type field in BRINSAP has four digits, only the first digit is necessary to apply the formulae.

Step 3.2. Determine the design rating (X) of the bridge. The operating rating field (F_64_OPER_) includes a 3-digit integer code referred to as *Rate*. Moreover, the first digit of the code is known as the operating rating. If the operating rating is equal to 1, then the design rating is given by $X = Rate - 100$, which is the value represented by the last two digits of the code. If, on the other hand, the operating rating is 2,

$X = \frac{2(Rate - 200)}{3}$, which is two-thirds of the value represented by the last two digits

of the code. Alternatively, if the operating rating is neither 1 or 2, go back to Step 3, i.e., consider the next bridge).

Step 3.3. If the bridge is of continuous-span type or other type (i.e., the first digit of field F_43_1_MN is not equal to 1), then set $\beta=1$.

Step 3.4. Each axle group represents a possible combination of adjacent axles. For example, if the number of axles is equal to 4, labeled 1, 2, 3, and 4 from beginning to end of the vehicle, the following groups of adjacent axles are possible: 12, 23, 34, 123, 234, and 1234. For each axle group the sequence of steps given below is executed:

Step 3.4.1. Determine the distance D (in feet) between the center of gravity (COG) and the nearest axle in the group under consideration.

Step 3.4.2. If the bridge type is single-span (i.e., if the first digit of field F_43_1_MN is equal to 1), then set $\beta = \min\{0.92, \frac{D}{40}\}$.

Step 3.4.3. Calculate the actual weight for an axle group by adding the weight of each individual axle in the group.

Step 3.4.4. If the number of spans is greater than 2, then the general-bridge load formula Eq. 5.2 developed by Keating et al. [5] is used. Constants a and b are derived using Table 5.1.

Step 3.4.5. If the number of spans is equal to 1 or 2, then bridge-specific formula Eq. 5.3 is used along with Eq. 5.4. If the number of spans is equal to 1, Eq. 5.4 is evaluated once using the total bridge span (i.e., field F_49_STR_L) as constant L . Alternatively, if the number of spans is equal to 2, the formula is evaluated twice; the first time using the largest bridge span (i.e., F_48_MAX_S), and the second time using the total bridge span minus the largest bridge span. Table 5.2 is used for constants a , b , c , and d .

Step 4. Go to the next bridge record.

After the above steps are executed, allowable axle group weights are determined. All of these values are compared with the actual weights of axle groups to identify the feasibility of each bridge for the given truck.

5.4 Implementation of Vehicle Routing Macro in TransCAD

A flowchart outlining a TransCAD-based network optimization macro is given in Figure 5.1. First, truck configurations are entered along with a specification of the algorithm to be used and the desired impact factor [5]. Truck configurations include clearance and number of axles. Location of axles, axle weights, number and width of tires, and gage of each axle are additional required data. The user has an option of activating either a shortest path or a maximum-capacity (maximum allowed weight) path algorithm [6] to find the optimal path. The maximum-capacity option will be programmed during the second year of this project's period. Additionally, it is indicated at this time whether the routing report and the list of disabled roads and bridges from the network is needed. Following this, the program asks the user to draw small rectangles around the general locations of the origin and destination points of the route to be determined. There is also an option of zooming in/out and changing the center of the map (panning) to precisely determine the intended origin or destination point.

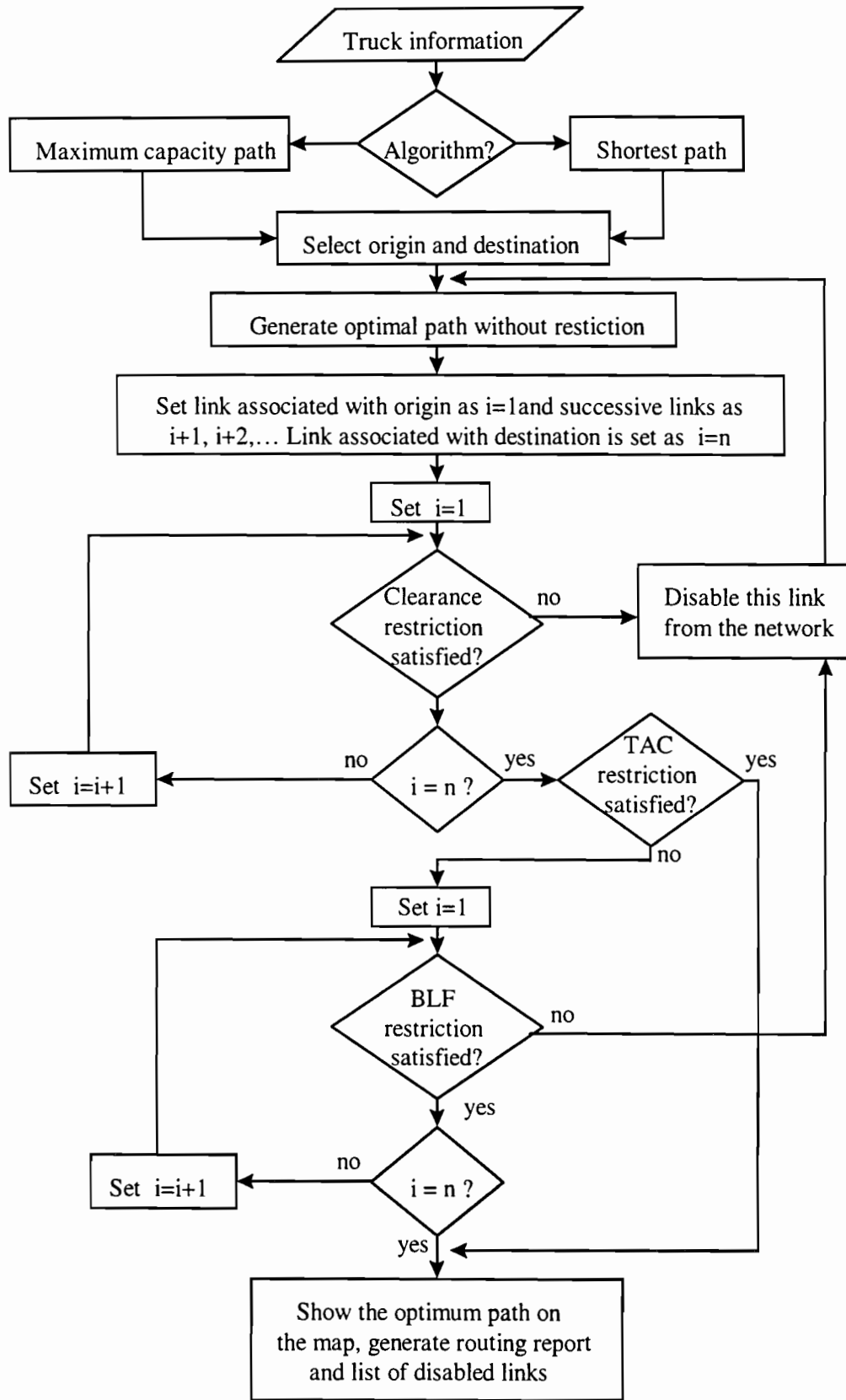


Figure 5.1 TransCAD-Based Network Optimization

After the user has entered the above information, the routing macro uses built-in TransCAD functions to find an optimal path without constraints on clearance and load weight of the truck. A path tracing procedure is now followed to verify if all links are feasible for a given truck clearance. As soon a link is found to be unfeasible, the tracing of the current path is terminated. The macro now removes the link and determines a new path. This procedure is repeated until all links in the path satisfy the vertical clearance requirement. After the clearance restriction has been satisfied by all links in the path, the Texas Administrative Code (TAC) restriction is considered. The restrictions imposed by the TAC are considered to verify if each axle group satisfies the maximum load weight requirements given in Table 5.3, and if the tire surface force is within 850 pounds per inch of tire width. If TAC restrictions are met, the truck load weight is considered to be safe for all bridges and can be routed without removing additional links associated with bridges from the network.

Table 5.3 TAC Axle Group Weight Restrictions

Number of Axles in Group	Maximum Allowable Axle Group Weight (kips)
1	25.0
2	45.0
3	60.0
4	70.0
5	81.4

If TAC restrictions are not satisfied for any axle group of a specified vehicle, then appropriate Bridge Load Formulae (BLF) are used to determine those links in the network that need to be removed. A general-type formula and a bridge-specific formula are available to examine weights associated with axle groups. If the formula selected for the analysis yields any of the axle group unfeasible for a particular vehicle, the routing macro disables the corresponding link, and repeats the procedure of generating another optimal path without any constraints. This process continues until all links in the path satisfy all restrictions or no path can be determined.

To generate a network on which a route is desired for a particular vehicle, the corresponding geographic map file must be loaded and then the road line layer capability of GIS must be selected from the drop-down list on the toolbar. The following steps are then applied to create a network file:

- a. *Networks/Path-Create* is chosen to display the Create Network dialog box.
- b. From the Create links drop-down list, choose **Entire line layer**.
- c. From the Optional Fields-Other Link Fields scrolling list, select everything by using the **Shift-Click** combination.
- d. Click OK to display the Save Network As dialog box.

- e. Select the *ovr.net* as the file name. Click OK. TransCAD creates the network on the selection set of links and displays the network filename on the status bar at the right bottom of the screen.

GISDK stores compiled resource files in a special database called **user interface (UI) database**. The resource file containing overweight vehicle routing macro is named *ovrrsc* (.*rsc* extension is required) and should be saved in standard product folder (i.e., *c:\tcw*). The resource file *ovrrsc* must be compiled into a separate, stand-alone UI database with the name *ovrOOO1.dbd*, which *must* also be stored in the standard product folder. The following steps are conducted for one-time only to install the add-in:

1. Choose **Tools-Add Inns** to display the Add-Ins dialog box and click Setup to display the Add-Ins dialog box.
2. Click Add to create a new add-inn.
3. Type "*Overweight Vehicle Routing*" in the Description box.
4. Type "OVR" in the Name box.
5. Type "*ovrOOO1*" in the UI Database box.
6. Click OK to install the add-in and return to the Add-Ins dialog box.
7. Click Cancel to exit the Add-Ins dialog box.

It is noted that "OVR" and "ovrOOO1" are case-sensitive. To run the "Overweight Vehicle Routing" add-inn, choose **Tools-Add Inns** and then Overweight Vehicle Routing from the list, and click OK. The macro would run as expected.

5.5 An Illustrative Example

The purpose of this section is to summarize the results of an application of the GIS-based network routing methodology. The application consists of four scenarios described in Tables 5.4 and 5.5 for a four-axle truck. Table 5.4 contains the following information for each axle: (a) distance (in feet) from previous axle; (b) weight in kips; (c) number of tires; (d) gage in feet; (e) tire width in inches. A 5-foot truck clearance in Table 5.5 actually implies that each link corresponding to any underpass is feasible; alternatively, a 99-foot truck clearance implies that it is unfeasible. Additionally, a "Yes" entry in Table 5.5 indicates that the TAC restriction is satisfied and that the truck load weight is considered to be safe for all links associated with bridges; alternatively, a "No" entry implies that the Bridge Load Formulae must be applied to determine the feasibility of the link. The impact factor of 10% were considered for all four cases.

Table 5.4 Axle Information for Illustrative Example

Axle info.	Case 1				Case 2				Case 3				Case 4			
Axle number	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Distance	0	6	10	4	0	6	10	4	0	6	10	4	0	6	10	4
Weight	10	10	20	25	50	50	65	65	10	10	20	25	50	50	65	65
Tires	2	4	4	4	2	4	4	4	2	4	4	4	2	4	4	4
Gage	6	6	7	7	6	6	7	7	6	6	7	7	6	6	7	7
Width	18	18	12	12	18	18	12	12	18	18	12	12	18	18	12	12

Table 5.5 Restrictions for Illustrative Example

Restriction	Case 1	Case 2	Case 3	Case 4
Clearance	5 feet	5 feet	99 feet	99 feet
TAC	Yes	No	Yes	No

Figure 5.2 shows a prototype network along with the unconstrained shortest path for Case 1. According to the GIS routing report, the direction is north on SH 288. The length of this path is equal to 1.17 miles. The prototype network represents a geographic region around the intersection of two major highways, 288 and 332, extracted from the map of Brazoria county in Texas. There are 20 bridges, 138 nodes and 185 links in this prototype network. It can be seen that the shortest path for Case 1 is a straight-line path without any links being removed.

Figure 5.3 shows the shortest path for Case 2. According to the disabled links list report, one overpass link associated with bridge structure number 12000011108043 was removed due to the BLF restriction. From the GIS routing report, this path can be traced as follows: start from northbound SH 288, take an exit on eastbound SH 332 frontage road, continue in this direction until making a U-turn from east bound SH332 frontage road to westbound SH332 frontage road, continue on SH322 frontage road, and exit on SH 288 north. The total length of this path is equal to 2.46 miles.

Figure 5.4 shows the shortest path for Case 3. According to the disabled links list report, the following links were removed from the network due to the clearance restriction: two underpass links associated with bridge structure number 120200152401057; one underpass link associated with bridge structure number 120200058601010. From the GIS routing report, the path is traced as follows: start from northbound SH 288, take an exit on eastbound SH 332 frontage road, continue in this direction, take an exit to SH332 southbound, continue to SH332 east bound until making a U-turn from east bound SH332 to SH332 westbound, continue on SH332 westbound and exit on SH288 north. The length of the shortest path is equal to 1.99 miles. As can be seen in Figure 5.4, there is a U-turn in the shortest route generated by the routing macro. Depending on the dimensions of the vehicle, U-turns may not be allowed. In order to address this particular limitation, TransCAD offers a routing option that avoids unacceptable turns. This option will be programmed during the second year of this project's period.

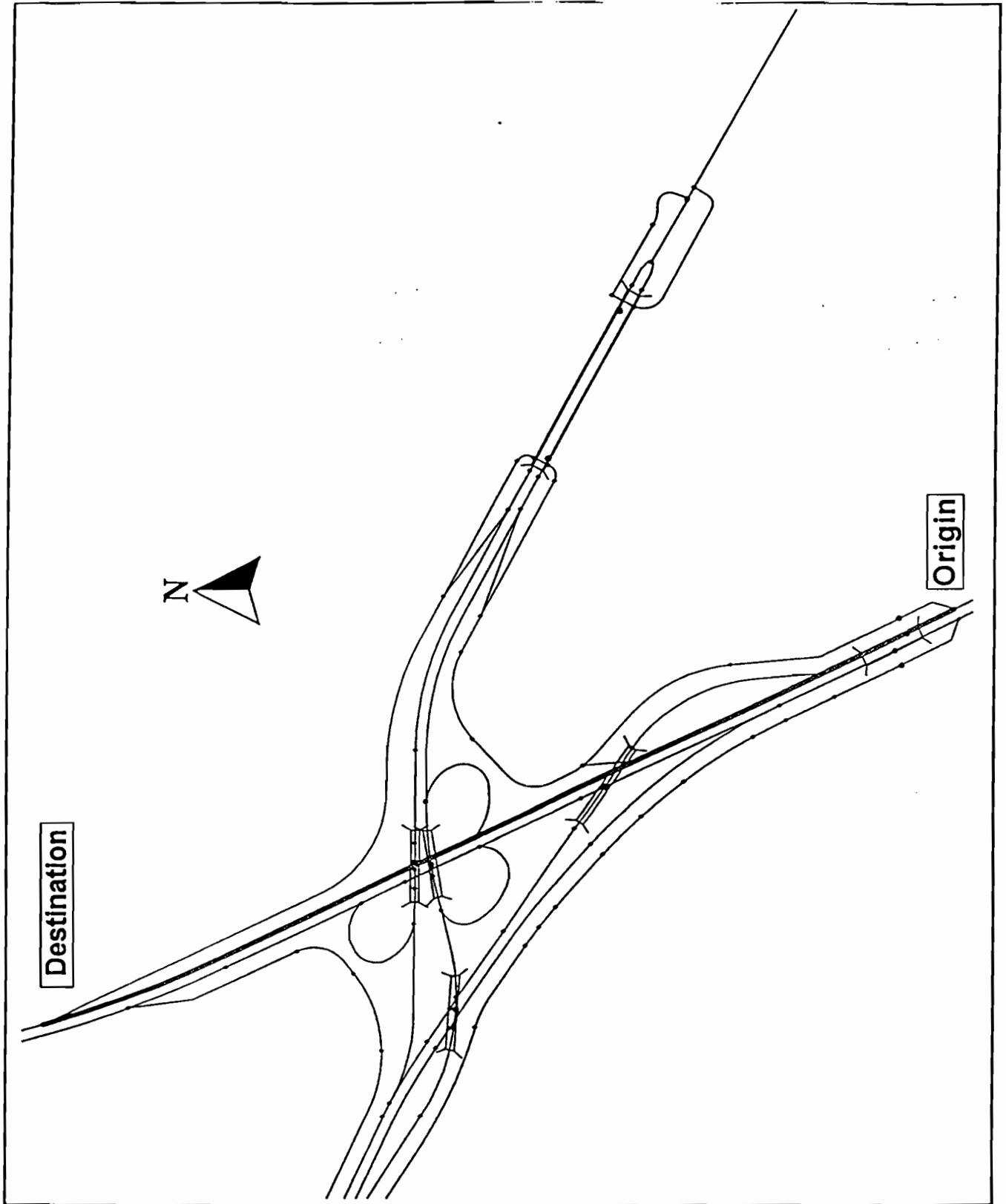


Figure 5.2 Optimal Shortest Path for Case 1

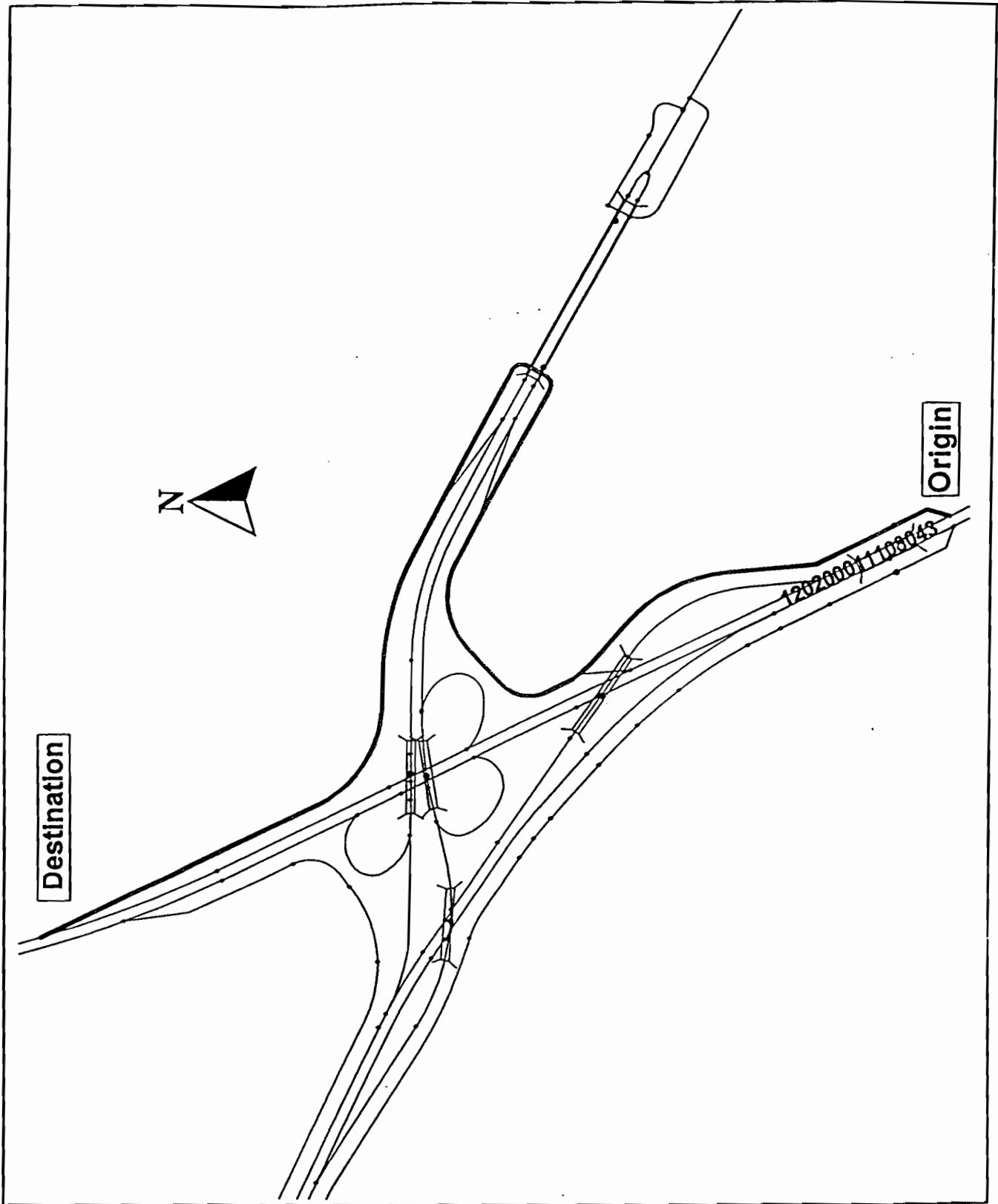


Figure 5.3 Optimal Shortest Path for Case 2

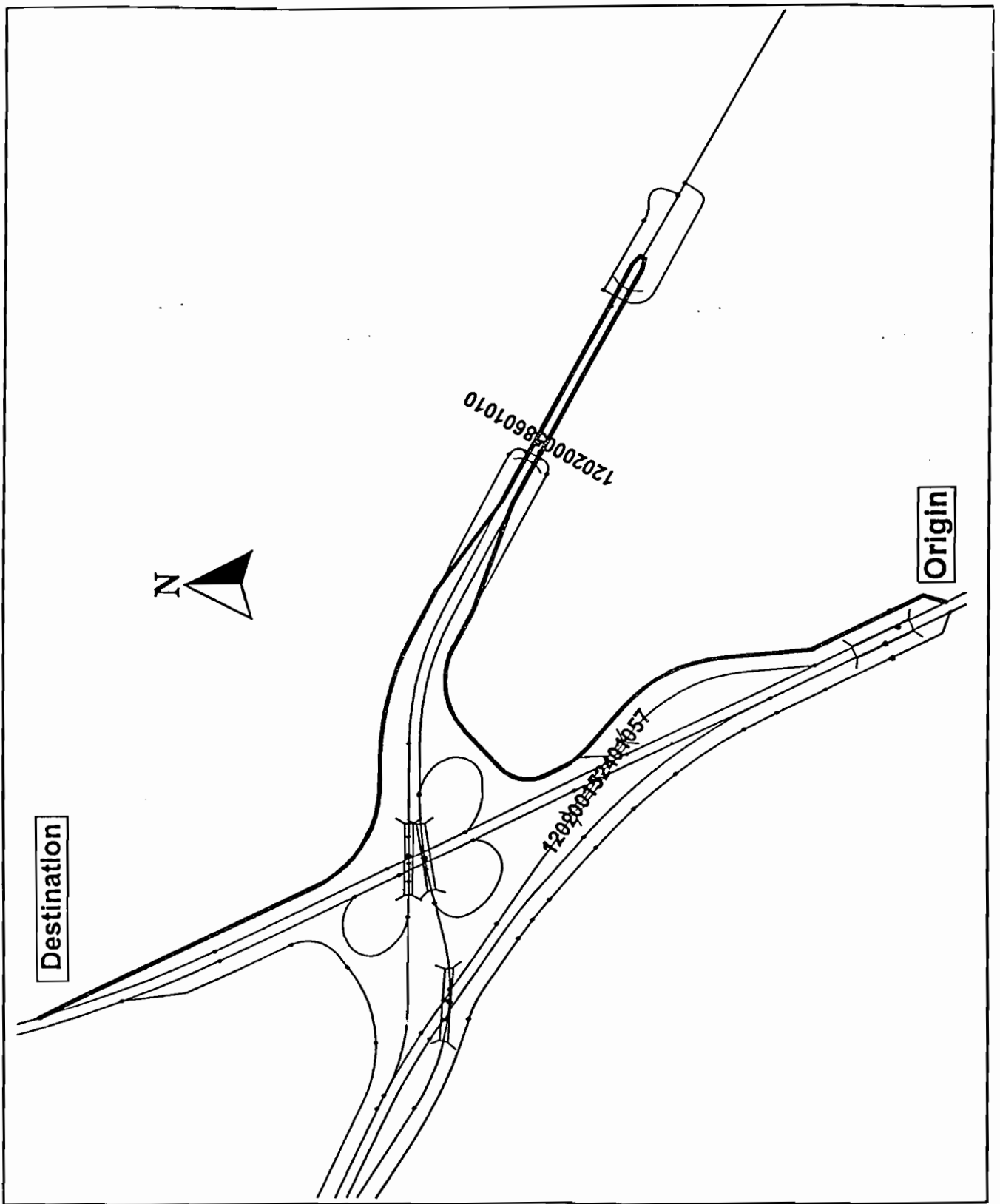


Figure 5.4 Optimal Shortest Path for Case 3

Figure 5.5 indicates that the routing macro could not find a feasible shortest path for Case 4. According to the disabled links list report, the same underpass links removed for Case 3 were removed from the network for Case 4. Additionally, the following two overpass links were removed due to BLF restriction: overpass link associated with bridge structure numbers 12000011108043 and 120200058601010.

5.6 Dijkstra's Algorithm

A special method, known as Dijkstra's algorithm [6], is used to generate a route in a given network. Let $c_{ij} \geq 0$ be the length of arc (ij). It is desired to find the shortest route from a source node s to a terminal node t through the arcs of the network.

Let us define a label for node j as the estimate (temporary or permanent) of the length of the shortest path from the source to node j . If the node label is temporary, it will be represented by δ_j ; if it is permanent, by $[\delta_j]$. Permanent labels represent actual shortest paths. Dijkstra's method can be now described as follows:

Step 0: $[\delta_s] = 0$; $\delta_i = c_{si}$

Step 1: $[\delta_j] = \min_{i \in T} \delta_i$

j: last node to get a permanent label

T: set of nodes with temporary label

Step 2: If $[\delta_t]$ found, stop. Otherwise, go to Step 3.

Step 3: new $\delta_i = \min \{ \text{old } \delta_i; [\delta_j] + c_{ji} \}$ for $i \in L$

L: set of unlabeled nodes reached from last permanently labeled node

Step 4: Go to Step 1.

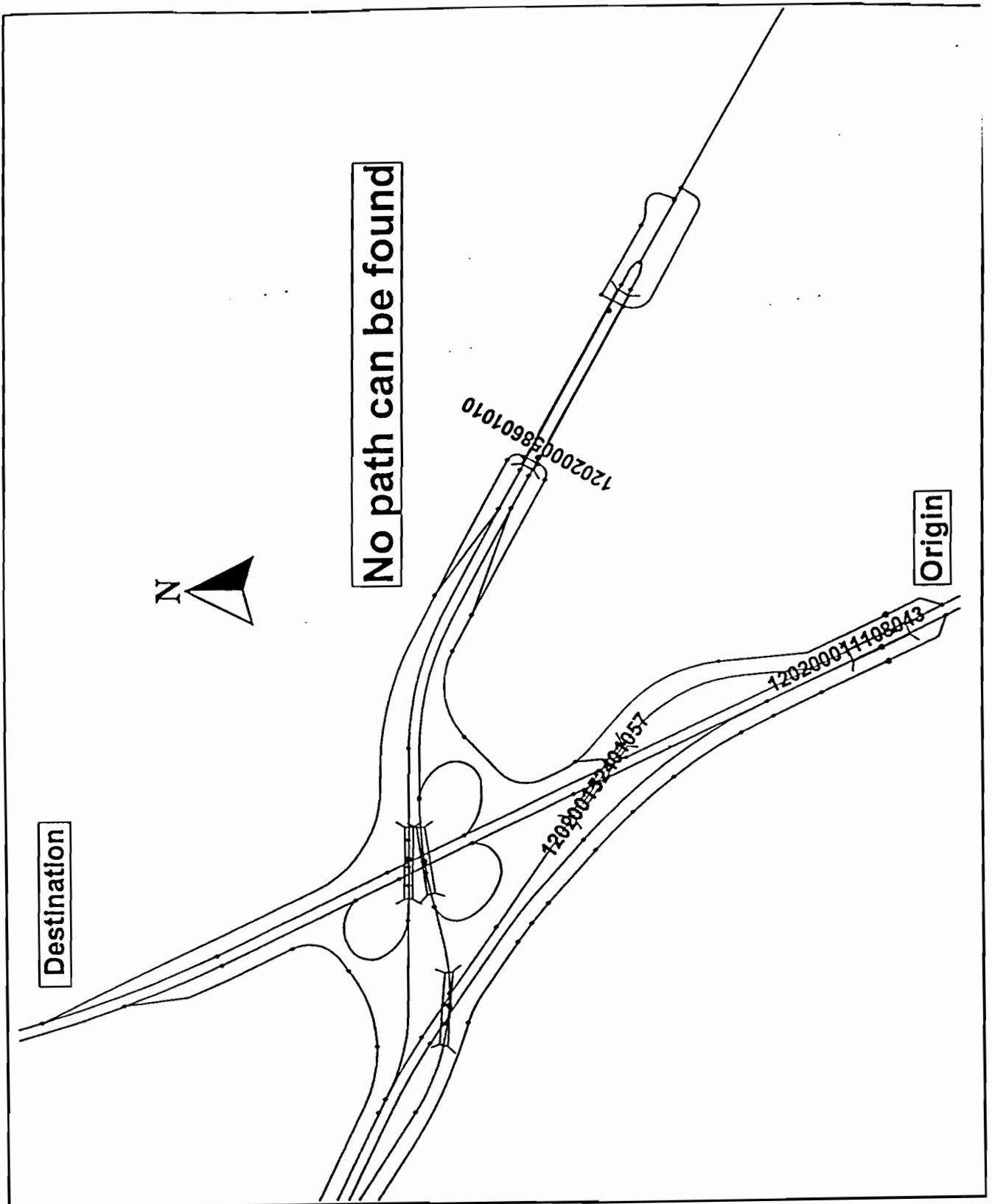


Figure 5.5 Optimal Shortest Path for Case 4

CHAPTER 6

SUMMARY

6.1 Summary

The objective of this report was to present a summary of the work accomplished during the first year of the project titled "Automated Routing of Overweight Vehicles" performed for the Texas Highway Department of Transportation. So far the work has focused on building a complete routing system for the On-system highways of the Houston District.

A survey was performed on the available information to gather GIS information to build an automated routing system. The survey focused on (a) available digitized maps, (b) available road databases, c) bridge databases and d) available software systems. After completion of the survey, the following decisions were made on the direction of the work:

The following critical decisions were made:

- 1) Use the TxDOT official digitized maps available from the Graphic Office of the Planning Division. The main reason for this selection was because these drawings are the most complete drawings currently available, containing the geometric characteristics of overpasses, underpasses, interchanges and exit ramps, needed to perform a comprehensive routing through the On-system roads.
- 2) Use the TransCAD GIS software. This decision was primarily made because this particular software is specifically designed for Transportation applications. In addition, we found that the software is easy to use and extremely flexible for its customization to peculiar applications.
- 3) Use TxDOT's roads database being developed. This decision was made because it is expected that this will become the official roads database available for the TxDOT's "dgn" files. In addition, the database is expected to grow with time.
- 4) Use BRINSAP database. BRINSAP is the only bridge database currently available. Although, PONTIS is currently under development, decisions on the critical elements of the database have not been finalized.

One of the critical elements for the success of the project was to devise a process to accurately account for the correct bridge at its correct location. This was accomplished in four steps: a) the creation of a GIS database of bridge location based on the BRINSAP longitude and latitude coordinates of bridges; b) the importation of TxDOT's base maps (i.e., On-system roads and bridge symbols) into GIS maps; c) the integration of the on-system roads layer, bridges symbols layer and BRINSAP bridge locations layer into one GIS database; then the integrated GIS database was displayed on the computer screen with all three layers for comparison and evaluation; and d) the comparison of the BRINSAP bridge locations with the bridge symbols.

All incorrect BRINSAP bridge locations were corrected based on the location information in the BRINSAP database, on the bridge symbol locations of the urban files, on bridge locations indicated in printed maps for the corresponding county.

A list of the errors associated with the location of the bridges are listed in the Appendices of this report. We found that 32% of the Brazoria County bridges have some sort of error either on the BRINSAP records and/or on the digitized TxDOT maps. The statistics for the other Counties were as follows: Fort Bend - 29%, Galveston - 41.5%, Harris - 37.9%, Montgomery - 16% and Waller - 20%.

One of the most challenging tasks in this project was the development of the GIS roads network. A process was developed to convert TxDOT drawings (i.e., Urban Files) to GIS maps. Chapter 4 describes in details the process of converting the drawings into GIS database and the process of creating a feasible network for routing oversize and/or overweight vehicles. This objective was achieved by: a) converting the Urban files and database to MapInfo files, b) importing these files to TransCAD, c) developing and applying several macros to clean and fix the maps, d) deleting the centerlines of the drawings, e) merging all GIS maps into one file, and f) applying the "Overweight Vehicle Routing Analysis" macro.

Chapter 5 documented the development of an overweight vehicle routing macro with vertical clearance requirements. The procedure uses a network representation of a system of roads and bridges to identify feasible routes. The use of a network routing procedure within a Geographic Information System (GIS) operating in a PC-environment is one of the distinctive features of the approach. The procedure automatically identifies all bridges on a specified route and evaluates the adequacy of the bridge structure and vertical clearance requirements for a given vehicle. Specifically, a TransCAD-based computerized support methodology, consistent with the Texas Administrative code [1], for automated routing of overweight vehicles with vertical clearance requirements. In addition, the approach uses bridge load formulae (BLF) developed by Keating, Litchfield and Zhou [5]. Chapter 5 also outlines the TransCAD macro for the GIS-based routing procedure and shows an example using a prototype network extracted from the map of Brazoria county in Texas. Furthermore, Dijkstra's algorithm is also discussed, which is the procedure used by TransCAD to determine the shortest route from a given source node to a given terminal node.

The automated routing of overweight vehicles has been completed for the Houston District. The network will be expanded gradually to adjacent districts.

REFERENCES

- [1] Texas Administrative Code, 1992 Supplement, West Publishing Co., St. Paul, MN, (1992).
- [2] P.B. Keating, et al., "Overweight Permit Procedures." FHWA-TX-93-1266-4F, Texas A&M University, College Station, Tx., (1993).
- [3] R.A. Osegueda, et al. "Towards the implementation of a Bridge Load Formula using BRINSAP", FHWA-TX- 1266-2, The University of Texas at El Paso, Tx., (1992).
- [4] R.A. Osegueda, et al., "Heavy Load Vehicle Routing using Highway Network Models and Bridge Load Formula", FHWA-TX- 1266-3, The University of Texas at El Paso, Tx., (1993).
- [5] P.B. Keating, "Overweight Permit Rules," Research Report 1433-IF, Texas Transportation Institute, Texas A&M University, College Station, Tx., (1994).
- [6] D. T. Phillips and A. Garcia-Diaz, Fundamentals of Network Analysis, Prentice-Hall, (1981).

APPENDIX A

BRAZORIA OBSERVATIONS REPORT

BRAZORIA Observations Report

ID	StructureID	checked	Observations
1	120200011107033	c	moved to DGN position
2	120200011107034	c	moved to DGN position
3	120200011107035	c	moved to DGN position (same DGN symbol for 0111-07-049)
4	120200011107036	c	moved to DGN position (same DGN symbol for 0111-07-050)
5	120200011107049	c	moved to DGN position (same DGN symbol for 0111-07-035)
6	120200011107050	c	moved to DGN position (same DGN symbol for 0111-07-036)
7	120200011108030	c	moved to DGN position (same DGN symbol for 0111-08-043)
8	120200011108031	c	moved to DGN position (same DGN symbol for 0111-08-042)
9	120200011108037	c	moved to DGN position (same DGN symbol for 0111-08-051)
10	120200011108038	c	moved to DGN position (same DGN symbol for 0111-08-044)
11	120200011108042	c	moved to DGN position (same DGN symbol for 0111-08-031)
12	120200011108043	c	moved to DGN position (same DGN symbol for 0111-08-030)
13	120200011108044	c	moved to DGN position (same DGN symbol for 0111-08-038)
14	120200011108051	c	moved to DGN position (same DGN symbol for 0111-08-037)
15	120200011108054	E	moved to DGN position (symbol missing in DGN) flagged
16	120200011108055	E	moved to DGN position (symbol missing in DGN) flagged
17	120200011108056	c	moved to DGN position
18	120200011108061	E	moved to DGN position (symbol missing in DGN) flagged
19	120200011108062	E	moved to DGN position (symbol missing in DGN) flagged
20	120200011108067	c	moved to DGN position (same DGN symbol for 0111-08-068)
21	120200011108068	c	moved to DGN position (same DGN symbol for 0111-08-067)
22	120200011109063	E	moved to DGN position (symbol missing in DGN) flagged
23	120200017802004	c	moved to DGN position
24	120200017802005	c	moved to DGN position
25	120200017802006	c	moved to DGN position
26	120200017802035	c	moved to DGN position
27	120200017802036	E	moved to DGN position (symbol missing in DGN and missing street) flagged (originally near FM528 @ SH 35)
28	120200017803023	c	moved to DGN position
29	120200017803024	c	moved to DGN position
30	120200017803025	c	moved to DGN position
31	120200017803026	c	moved to DGN position
32	120200017803027	c	moved to DGN position
33	120200017803029	c	moved to DGN position
34	120200017803030	E	moved to DGN position (symbol missing in DGN) flagged
35	120200017803039	E	moved to DGN position (originally near 178-08-008)
36	120200017803040	c	moved to DGN position

BRAZORIA Observations Report

ID	StructureID	checked	Observations
37	120200017803041	c	moved to DGN position
38	120200017803044	c	moved to DGN position (One structure ID, additional DGN symbol adjacent)
39	120200017803046	c	moved to DGN position
40	120200017803048	c	moved to DGN position
41	120200017803051	c	moved to DGN position
42	120200017803054	E	moved to DGN position (symbol missing in DGN) flagged
43	120200017804050	c	moved to DGN position
44	120200017808007	E	moved to DGN position (originally near intersection SH35 and PR409)
45	120200017808008	c	moved to DGN position
46	120200017811058	E	# moved to DGN position, DGN symbol missing, flagged
47	120200017901044	c	moved to DGN position
48	120200017901045	c	moved to DGN position
49	120200017901046	c	moved to DGN position
50	120200017901048	c	moved to DGN position
51	120200017901075	c	moved to DGN position
52	120200017901108	E	moved to DGN position (originally near intersection SH288 nd SH227)
53	120200017901109	E	moved to DGN position (originally near intersection SH288 nd SH227)
54	120200017902003	c	moved to DGN position
55	120200017902005	c	moved to DGN position
56	120200017902010	c	moved to DGN position
57	120200017902011	c	moved to DGN position
58	120200017902049	c	moved to DGN position
59	120200017902050	c	moved to DGN position
60	120200017902051	c	moved to DGN position
61	120200017902052	E	moved to DGN position (symbol missing in DGN) flagged
62	120200017902077	c	moved to DGN position
63	120200017902078	c	moved to DGN position
64	120200017903015	E	moved to DGN position (symbol missing in DGN) flagged
65	120200017903016	c	moved to DGN position
66	120200017903017	c	moved to DGN position
67	120200018803009	E	moved to DGN position (symbol missing in DGN) flagged
68	120200018803022	c	moved to DGN position
69	120200018804010	E	moved to DGN position (originally near Brazos river) flagged
70	120200018805011	c	moved to DGN position
71	120200018805012	c	moved to DGN position
72	120200018806013	E	moved to DGN position (symbol might be misslocated in DGN) flagged

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ID	StructureID	checked	Observations
73	120200018806014	E	moved to DGN position (symbol missing in DGN) flagged
74	120200018806031	c	moved to DGN position
75	120200018806032	c	moved to DGN position
76	120200018806033	c	moved to DGN position
77	120200018806034	E	moved to DGN position (originally near gulf of mexico and Brazos river)(symbol missing in DGN) flagged ****
78	120200018806035	E	moved to DGN position (DGN symbol may be flipped)
79	120200018806036	c	moved to DGN position (same DGN symbol for 0188-06-037)
80	120200018806037	c	moved to DGN position (same DGN symbol for 0188-06-036)
81	120200019202006	c	moved to DGN position
82	120200019202028	c	moved to DGN position
83	120200019202029	E	moved to DGN position (originally near intersection SH288 and SH6 near gal.-brazoria c/l)
84	120200019202032	c	moved to DGN position
85	120200019202033	c	moved to DGN position
86	120200019202071	c	moved to DGN position
87	120200019203037	c	moved to DGN position (same DGN symbol for 0192-03-038)
88	120200019203038	c	moved to DGN position (same DGN symbol for 0192-03-037)
89	120200058601005	E	moved to DGN position (originally near 192-02-006)
90	120200058601009	c	moved to DGN position
91	120200058601010	c	moved to DGN position
92	120200058601011	c	moved to DGN position
93	120200058701002	c	moved to DGN position
94	120200058701003	c	moved to DGN position
95	120200059802008	E	moved to DGN position (symbol missing in DGN and missing street) flagged
96	120200059802009	c	moved to DGN position
97	120200059802010	c	moved to DGN position
98	120200059802011	c	moved to DGN position
99	120200059802012	c	moved to DGN position
100	120200059802013	c	moved to DGN position
101	120200059802015	E	moved to DGN position (originally near 598-02-009)
102	120200059802016	E	moved to DGN position (originally near 598-02-009)
103	120200059802017	E	moved to DGN position (symbol missing in DGN) flagged
104	120200059802034	c	moved to DGN position
105	120200059802035	c	moved to DGN position (symbol missing in DGN) flagged
106	120200059802036	c	moved to DGN position (same DGN symbol for 0598-02-037)
107	120200059802037	c	moved to DGN position (same DGN symbol for 0598-02-036)
108	120200059802038	c	moved to DGN position (symbol missing in DGN) flagged

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ID	StructureID	checked	Observations
109	120200059802039	E	moved to DGN position (originally near 598-02-050)
110	120200059802043	c	moved to DGN position
111	120200059802044	c	moved to DGN position
112	120200059802045	c	moved to DGN position
113	120200059802046	c	moved to DGN position
114	120200059802047	c	moved to DGN position (symbol missing in DGN) flagged
115	120200059802048	c	moved to DGN position (same DGN symbol for 0598-02-077)
116	120200059802049	c	moved to DGN position (symbol missing in DGN) flagged
117	120200059802050	c	moved to DGN position
118	120200059802051	c	moved to DGN position
119	120200059802053	c	moved to DGN position (one structure ID, two DGN symbols)
120	120200059802072	c	moved to DGN position
121	120200059802073	E	moved to DGN position (symbol missing in DGN) flagged
122	120200059802074	E	moved to DGN position (symbol missing in DGN) flagged
123	120200059802075	c	moved to DGN position
124	120200059802076	c	moved to DGN position
125	120200059802077	c	moved to DGN position (same DGN symbol for 0598-02-048)
126	120200059802078	c	moved to DGN position
127	120200059802189	c	moved to DGN position (same DGN symbol for 0598-02-190)
128	120200059802190	c	moved to DGN position (same DGN symbol for 0598-02-189)
129	120200059802193	c	moved to DGN position
130	120200059802194	c	moved to DGN position
131	120200059803054	c	moved to DGN position (one structure ID, two DGN symbols)
132	120200059803055	c	moved to DGN position (2 directions- SB only)
133	120200059803056	c	moved to DGN position
134	120200059803057	c	moved to DGN position (one structure ID, two DGN symbols)
135	120200059803058	E	moved to DGN position (symbol missing in DGN) flagged
136	120200059803059	c	moved to DGN position (one structure ID, two DGN symbols)
137	120200059803061	c	moved to DGN position (one structure ID, two DGN symbols)
138	120200059803062	c	moved to DGN position
139	120200059803063	c	moved to DGN position (one structure ID, two DGN symbols)
140	120200059803086	c	moved to DGN position
141	120200059803087	c	moved to DGN position
142	120200059803099	c	moved to DGN position
143	120200059803100	c	moved to DGN position
144	120200059803101	c	moved to DGN position (same DGN symbol for 0598-03-102)

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ID	StructureID	checked	Observations
145	120200059803102	c	moved to DGN position (same DGN symbol for 0598-03-101)
146	120200059803103	c	moved to DGN position
147	120200059803104	c	moved to DGN position
148	120200059803105	c	moved to DGN position (2 directions- NB only) ?
149	120200059803106	c	moved to DGN position
150	120200059803107	c	moved to DGN position
151	120200059803113	E	moved to DGN position (DGN symbol missing or mislocated)(originally near intersection SH35 and SH227)
152	120200059803114	E	moved to DGN position (DGN symbol missing or mislocated)(originally near intersection SH35 and SH227)
153	120200059804116	c	moved to DGN position
154	120200059804117	c	moved to DGN position
155	120200059804118	c	moved to DGN position
156	120200059804119	c	moved to DGN position
157	120200059804120	c	moved to DGN position
158	120200059804121	c	moved to DGN position
159	120200059804122	c	moved to DGN position
160	120200059804123	c	moved to DGN position
161	120200059804179	c	moved to DGN position
162	120200059804180	c	moved to DGN position
163	120200059804181	c	moved to DGN position
164	120200059804182	c	moved to DGN position
165	120200059804187	c	moved to DGN position
166	120200059804188	c	moved to DGN position
167	120200059804191	c	moved to DGN position (same DGN symbol for 0598-04-192)
168	120200059804192	c	moved to DGN position (same DGN symbol for 0598-04-191)
169	120200084703011	c	moved to DGN position
170	120200084703017	c	moved to DGN position
171	120200084706015	c	moved to DGN position
172	120200097602010	c	moved to DGN position
173	120200097602024	c	moved to DGN position
174	120200097602030	E	moved to DGN position (symbol missing in DGN) flagged
175	120200097701001	E	moved to DGN position (symbol missing in DGN) flagged
176	120200100301007	c	moved to DGN position
177	120200100301008	c	moved to DGN position
178	120200100301011	E	moved to DGN position (symbol missing in DGN) flagged
179	120200100301012	c	moved to DGN position
180	120200100301013	c	moved to DGN position

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ID	StructureID	checked	Observations
181	120200100301014	c	moved to DGN position
182	120200100301015	E	moved to DGN position (DGN symbol missing or mislocated)(originally 1.2 M. from intersection FM332 and FM523)
183	120200100301016	c	moved to DGN position
184	120200100301017	c	moved to DGN position
185	120200100401006	c	moved to DGN position
186	120200100401007	E	moved to DGN position (symbol missing in DGN) flagged
187	120200104301009	c	moved to DGN position
188	120200104301010	c	moved to DGN position
189	120200141202010	c	moved to DGN position
190	120200141202013	c	moved to DGN position
191	120200141202014	c	moved to DGN position
192	120200141202015	c	moved to DGN position
193	120200141202025	c	moved to DGN position
194	120200141202026	c	moved to DGN position
195	120200141301002	E	moved to DGN position (symbol missing in DGN) flagged
196	120200141301003	E	moved to DGN position (symbol missing in DGN) flagged
197	120200141301004	E	moved to DGN position (symbol missing in DGN) flagged
198	120200141301005	E	moved to DGN position (symbol missing in DGN) flagged
199	120200141402026	c	moved to DGN position
200	120200141402027	c	moved to DGN position
201	120200141403010	c	moved to DGN position
202	120200141403016	c	moved to DGN position
203	120200141403017	E	moved to DGN position (symbol missing in DGN) flagged
204	120200141403018	c	moved to DGN position
205	120200141403019	c	moved to DGN position
206	120200141403020	c	moved to DGN position
207	120200141403021	c	moved to DGN position
208	120200141403052	c	moved to DGN position
209	120200141404013	E	moved to DGN position (originally on Fbend-Brazoria C/L)
210	120200141404015	E	moved to DGN position (originally 3.8 M. E. of Fbend-Brazoria C/L)
211	120200141404022	c	moved to DGN position
212	120200152401004	c	moved to DGN position
213	120200152401005	c	moved to DGN position
214	120200152401057	c	moved to DGN position
215	120200152401058	E	moved to DGN position (originally near 111-08-044)
216	120200152401059	E	moved to DGN position (originally near 111-08-044)

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ID	StructureID	checked	Observations
217	120200152401060	c	moved to DGN position
218	120200168401001	c	moved to DGN position
219	120200168401004	c	moved to DGN position
220	120200168401005	c	moved to DGN position
221	120200210502003	c	moved to DGN position
222	120200210502005	c	moved to DGN position
223	120200210502006	c	moved to DGN position
224	120200252302003	c	moved to DGN position
225	120200252302004	E	moved to DGN position (symbol missing in DGN) flagged
226	120200252302005	c	moved to DGN position
227	120200252302006	c	moved to DGN position
228	120200252302007	E	moved to DGN position (symbol missing in DGN) flagged
229	120200252302008	c	moved to DGN position
230	120200252302009	c	moved to DGN position
231	120200252302010	c	moved to DGN position
232	120200252302011	c	moved to DGN position
233	120200252302013	c	moved to DGN position
234	120200252302014	c	moved to DGN position
235	120200252302016	c	moved to DGN position
236	120200252302017	c	moved to DGN position
237	120200252302018	c	moved to DGN position
238	120200252402001	c	moved to DGN position
239	120200252402002	c	moved to DGN position
240	120200252402003	c	moved to DGN position
241	120200289501001	E	moved to DGN position (symbol missing in DGN) flagged
242	120200293802001	c	moved to DGN position
243	120200293802002	c	moved to DGN position
244	120200293802003	c	moved to DGN position
245	120200293802004	c	moved to DGN position
246	120200293802006	c	moved to DGN position
247	120200295001001	c	moved to DGN position
248	120200295001002	c	moved to DGN position
249	120200816012009	E *	moved to DGN position (symbol missing in DGN and missing street) flagged (originally out of Brazoria ct.)
250	120200816012011	E *	moved to DGN position (symbol missing in DGN and missing street) flagged (originally out of Brazoria ct.)
251	120200816012012	E *	moved to DGN position (symbol missing in DGN and missing street) flagged (originally out of Brazoria ct.)
252	120200846312001	E *	moved to DGN position (symbol missing in DGN and missing street) flagged (originally out of Brazoria ct.)

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ID	StructureID	checked	Observations
253	120200846812001	E *	moved to DGN position (symbol missing in DGN and missing street) flagged (originally out of Brazoria cty.)
254	120200846812003	E *	moved to DGN position (symbol missing in DGN and missing street) flagged (originally out of Brazoria cty.)
255	120200847312001	E *	moved to DGN position (symbol missing in DGN and missing street) flagged (originally out of Brazoria cty.)
256	120200870512005	E *	moved to DGN position (symbol missing in DGN and missing street) flagged (originally out of Brazoria cty.)
257	120200870512006	E *	moved to DGN position (symbol missing in DGN and missing street) flagged (originally out of Brazoria cty.)
258	120200870512009	E *	moved to DGN position (symbol missing in DGN and missing street) flagged (originally out of Brazoria cty.)
259	120200870712001	E *	moved to DGN position (symbol missing in DGN and missing street) flagged (originally out of Brazoria cty.)
260	120200875112001	E *	moved to DGN position (symbol missing in DGN) flagged (originally near SH288 and 2004 jct)
261	120200875312001	E *	moved to DGN position (symbol missing in DGN) flagged (originally out of Brazoria cty.)

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Lat_dec	New Long_dec	New Lat.	New Long.
1	SH 288B	1MI.S.OF ANGLETON,TX.	29067	95252	29.11167	-95.42000	29.106498	-95.419113	29064	95651
2	SH 288B	4 MI.S.OF ANGLETON,TX.	29063	95251	29.10500	-95.41833	29.096591	-95.416286	29058	95650
3	SH 288B SB	4.5MI.S.OF ANGLETON,TEXA	29055	95249	29.09167	-95.41500	29.09155	-95.414831	29055	95649
4	SH 288B SB	1MI.N.JCT. SH-227 & FM-521	29053	95248	29.08833	-95.41333	29.089101	-95.414138	29053	95648
5	SH 288B NB	4.5MI.S.OF ANGLETON,TX.	29055	95249	29.09167	-95.41500	29.091118	-95.414709	29055	95649
6	SH 288B NB	1MI.N.JCT.SH227 & FM2004	29053	95248	29.08833	-95.41333	29.088698	-95.414032	29053	95648
7	SH 288 SB	2MI. N OF FREEPORT,TX.	28598	95231	28.99667	-95.38500	28.996676	-95.384524	28598	95631
8	SH 288 SB	1.5MI. N. OF FREEPORT, TX	28595	95229	28.99167	-95.38167	28.993436	-95.382786	28596	95630
9	SH 288B NB	5 MI. S.OF ANGLETON,TX.	29051	95247	29.08500	-95.41167	29.086513	-95.413406	29052	95648
10	SH 288B SB	3MI.S.JCT.SH-227&FM-2004	29021	95239	29.03500	-95.39833	29.034634	-95.398733	29021	95639
11	SH 288 NB	1.5 MI. N. OF FREEPORT, TX	28595	95229	28.99167	-95.38167	28.993496	-95.382588	28596	95630
12	SH 288 NB	2 MI.N. OF FREEPORT, TX.	28598	95231	28.99667	-95.38500	28.996734	-95.384334	28598	95631
13	SH 288B NB	3MI.S.JCT.SH-288 & FM2004	29021	95239	29.03500	-95.39833	29.034692	-95.398479	29021	95639
14	SH 288B NB	5 MI. S. OF ANGLETON,TX.	29051	95247	29.08500	-95.41167	29.085904	-95.413223	29052	95648
15	SH 288 SB FR	2MI.N.OF FREEPORT TX.	28598	95231	28.99667	-95.38500	28.996573	-95.384815	28598	95631
16	SH 288 NB FR	2.MI.N. OF FREEPORT	28598	95231	28.99667	-95.38500	28.996817	-95.384043	28598	95630
17	SH 288	.5 MI. S. OF SH-36&SH-288	28568	95226	28.94667	-95.37667	28.946623	-95.377108	28568	95626
18	SH 288 SB	INT. OF SH-36 @ SHH-288	28567	95221	28.94500	-95.36833	28.943275	-95.368453	28566	95621
19	SH 288 NB	INT. OF SH-36 @ SHH-288	28567	95221	28.94500	-95.36833	28.943459	-95.368409	28566	95621
20	SH 288 SB	.2MI S OF VICTORIA ST	28590	95226	28.98333	-95.37667	28.983606	-95.377452	28590	95626
21	SH 288 NB	.2MI S OF VICTORIA ST	28590	95226	28.98333	-95.37667	28.983661	-95.377263	28590	95626
22	SH 227	BRUSHY BAYOU	29113	95260	29.18833	-95.43333	29.187995	-95.433074	29113	95660
23	SH 35	1 MI S HAR/BRAZ C/L	29351	95171	29.58500	-95.28500	29.584129	-95.286235	29350	95572
24	SH 35	3 MI S HAR/BRAZ C/L	29332	95168	29.55333	-95.28000	29.552804	-95.281117	29332	95569
25	SH 35	4 MI N JCT SH35&SH6	29292	95147	29.48667	-95.24500	29.48775	-95.246223	29293	95548
26	SH 35	AT HAR/BRA C/L	29358	95171	29.59667	-95.28500	29.597444	-95.286325	29358	95572
27	SH 35 FR	1 MI NE OF ALVIN	29270	95147	29.45000	-95.24500	29.408695	-95.23255	29245	95540
28	SH 35	6 MI S OF ALVIN	29201	95171	29.33500	-95.28500	29.335663	-95.28431	29201	95571
29	SH 35	1 MI S JCT SH35&FM2917	29195	95174	29.32500	-95.29000	29.326766	-95.289674	29196	95574
30	SH 35	3 MI.N.JCT.SH35&SPUR 28	29168	95199	29.28000	-95.33167	29.28096	-95.331368	29169	95599
31	SH 35	.5 MI S JCT SH35&SPUR 28	29147	95217	29.24500	-95.36167	29.244963	-95.361483	29147	95617
32	SH 35	1.5 MI S JCT SH35&SPUR28	29131	95230	29.21833	-95.38333	29.217509	-95.383168	29131	95630
33	SH 35	3.5 MI S JCT SH35&FM2917	29180	95187	29.30000	-95.31167	29.300975	-95.312844	29181	95588
34	SH 35	2.5 MI S JCT SH35&SPUR 28	29136	95225	29.22667	-95.37500	29.227338	-95.375083	29136	95625
35	GCASF RR	.5 MI S JCT SH35 & SH6	29256	95147	29.42667	-95.24500	29.41942	-95.227855	29252	95537
36	SH 35 NB	1.5 MI S JCT SH35 & SH6	29245	95146	29.40833	-95.24333	29.408549	-95.232207	29245	95539

BRAZORIA Observations Report

ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Lat_dec	New Long_dec	New Lat.	New Long
37	SH 35 SB	1.5 MI S JCT SH35 & SH6	29245	95146	29.40833	-95.24333	29.408856	-95.232944	29245	95540
38	SH 35	.5MI.S.OF FM-2917	29225	95156	29.37500	-95.26000	29.374612	-95.260835	29225	95557
39	SH 35	1.7MI NE OF FM523	29113	95243	29.18833	-95.40500	29.189293	-95.404993	29114	95643
40	SH 35	3MI.S.OF ALVIN	29234	95151	29.39000	-95.25167	29.39015	-95.251525	29234	95551
41	SH 35	.33 MI N OF LOOP 558	29124	95235	29.20667	-95.39167	29.206678	-95.391724	29124	95635
42	SH 35	.05MI N OF WILDCAT ST	29105	95248	29.17500	-95.41333	29.175804	-95.413626	29105	95648
43	FM 523	.75MI E OF SH288	29119	95264	29.19833	-95.44000	29.197925	-95.440535	29119	95664
44	SH 35C BUSINESS	1 MI IN DOWNTOWN ALVIN	29240	95147	29.40000	-95.24500	29.449493	-95.244832	29270	95547
45	SH 35C BUSINESS	DOWNTOWN ALVIN	29255	95148	29.42500	-95.24667	29.426793	-95.244014	29256	95546
46	FM 523	1.7M E OF FM521	29113	95274	29.18833	-95.45667	29.197522	-95.459657	29119	95676
47	SH 35	4 MI. S.OF ANGLETON TX.	29094	95285	29.15667	-95.47500	29.158345	-95.475437	29095	95685
48	SH 35	1.0MI W OF SHSH288	29095	95281	29.15833	-95.46833	29.159324	-95.468679	29096	95681
49	SH 35	1.5 MI S JCT SH35 & SH288	29096	95277	29.16000	-95.46167	29.161197	-95.461262	29097	95677
50	SH 35	4.5 MI S ANGLETON	29093	95295	29.15500	-95.49167	29.156726	-95.492351	29094	95695
51	SH 35	1.5MI.S.JCT.SH-35&SH-288	29097	95274	29.16167	-95.45667	29.16224	-95.457133	29097	95674
52	SH 288 SB	2.3MI. W. OF ANGLETON,TX.	29149	95272	29.24833	-95.45333	29.163235	-95.4532	29098	95672
53	SH 288 NB	2.3MI. W. OF ANGLETON	29149	95272	29.24833	-95.45333	29.163342	-95.452724	29098	95672
54	SH 35	5.5 MI S OF ANGLETON	29087	95316	29.14500	-95.52667	29.145926	-95.526886	29088	95716
55	SH 35	5 MI N W.COLUMBIA	29086	95341	29.14333	-95.56833	29.142711	-95.568822	29086	95741
56	SH 35	1 MI N OF W.COLUMBIA	29085	95375	29.14167	-95.62500	29.142545	-95.62448	29086	95775
57	SH 35	100' S C/L W COLUMBIA	29081	95393	29.13500	-95.65500	29.135486	-95.655907	29081	95794
58	SH 35	1.4MI W OF SH288	29088	95310	29.14667	-95.51667	29.147579	-95.515236	29089	95709
59	SH 35	2 1/2 MI N W COLUMBIA	29086	95363	29.14333	-95.60500	29.14419	-95.605707	29087	95763
60	SH 35	1.5 MI N OF W.COLUMBIA	29087	95366	29.14500	-95.61000	29.145645	-95.611684	29087	95767
61	SH 35	1.5 MI S OF W.COLUMBIA	29067	95406	29.11167	-95.67667	29.112902	-95.676217	29068	95806
62	SH 35	6 MI SW OF ANGLETON	29085	95336	29.14167	-95.56000	29.142222	-95.559842	29085	95736
63	SH 35	3.5 MI NE OF W COLUMBIA	29084	95357	29.14000	-95.59500	29.139968	-95.594985	29084	95757
64	SH 35	1.5 MI N OF OLD OCEAN	29052	95437	29.08667	-95.72833	29.085878	-95.727942	29052	95837
65	SH 35	1.5 MI S OF OLD OCEAN	29043	95467	29.07167	-95.77833	29.071781	-95.77722	29043	95866
66	SH 35	1.5 MI S OF OLD OCEAN	29042	95473	29.07000	-95.78833	29.06973	-95.789131	29042	95873
67	SH 36	4 MI N OF W.COLUMBIA	29125	95413	29.20833	-95.68833	29.208	-95.688	29125	95813
68	SH 36	5 MI N OF W.COLUMBIA	29132	95417	29.22000	-95.69500	29.220246	-95.694385	29132	95817
69	SH 36	2.5 MI S OF W.COLUMBIA	29061	95350	29.10167	-95.58333	29.101226	-95.633647	29061	95780
70	SH 36	4 MI N OF FREEPORT	28582	95265	28.97000	-95.44167	28.968889	-95.441956	28581	95665
71	SH 36	3.5MI.N. OF FREEPORT,TEX.	28582	95259	28.97000	-95.43167	28.969111	-95.43062	28581	95658
72	SH 36	2.5 MI N OF FREEPORT	28582	95253	28.97000	-95.42167	28.968908	-95.42276	28581	95654

BRAZORIA Observations Report

ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Lat_dec	New Long_dec	New Lat.	New Long
73	SH 36	2.25 MI N OF FREEPORT	28581	95249	28.96833	-95.41500	28.966616	-95.410705	28580	95646
74	SH 36	2.5MI W.OF SH288	28578	95243	28.96333	-95.40500	28.964101	-95.405049	28578	95643
75	SH 36	2.1 MI W OF SH288	28576	95240	28.96000	-95.40000	28.960161	-95.400727	28576	95640
76	SH 36	1.8 MO W OF SH288	28576	95238	28.96000	-95.39667	28.956579	-95.396879	28574	95638
77	SH 36	1.2 MI W OF SH288	28520	95233	28.86667	-95.38833	28.94962	-95.389107	28570	95633
78	SH 36	.25 MI W OF SH288	28568	95231	28.94667	-95.38500	28.947807	-95.385163	28569	95631
79	SH 36 WB	SH-36 @ BRAZOS RIVER	28568	95228	28.94667	-95.38000	28.946703	-95.380997	28568	95629
80	SH 36 EB	SH-36 @ BRAZOS RIVER	28568	95228	28.94667	-95.38000	28.946946	-95.381911	28568	95629
81	SH 6	2 MI. W. OF SH-35 & SH-6	29265	95169	29.44167	-95.28167	29.442169	-95.283149	29265	95570
82	GC & SF RR	.25MI W OF SH35/SH6	29258	95147	29.43000	-95.24500	29.429939	-95.247304	29258	95548
83	SH 6	1.3 MI. W. OF 35 & 6	29263	95360	29.43833	-95.60000	29.43636	-95.266086	29262	95560
84	SH 6	AT SH288 & SH6	29289	95239	29.48167	-95.39833	29.481462	-95.39856	29289	95639
85	SH 288 SB	9MI.W. OF ALVIN	29290	95241	29.48333	-95.40167	29.482288	-95.400982	29289	95641
86	SH 288 NB	9MI. W.OF ALVIN	29290	95241	29.48333	-95.40167	29.48213	-95.400518	29289	95640
87	SH 35 NB	IN CITY OF ALVIN	29254	95139	29.42333	-95.23167	29.422938	-95.22702	29254	95536
88	SH 35 SB	IN CITY LIMITS OF ALVIN	29254	95139	29.42333	-95.23167	29.423022	-95.227213	29254	95536
89	SH 332	4MI.E.JCT.FMP523 & SH-332	29265	95169	29.44167	-95.28167	28.955877	-95.292984	28574	95576
90	SH 332 WB	INT. SH-332 & MPRR	29001	95227	29.00167	-95.37833	29.001267	-95.377905	29001	95627
91	SH 332 EB	INT. OF SH-332 & MPRR	29001	95227	29.00167	-95.37833	29.002392	-95.380265	29001	95628
92	SH 332	SH332 AT VELASCO DRAIN.	28592	95210	28.98667	-95.35000	28.988457	-95.351525	28593	95611
93	FM 1495	3MI.S.OF FREEPORT,TEXAS	28553	95204	28.92167	-95.34000	28.921475	-95.340783	28553	95604
94	FM 1495	DTWN. FREEPORT ON 1495	28571	95206	28.95167	-95.34333	28.951183	-95.343476	28571	95606
95	COUNTY ROAD 403	1 MI S OF HAR/BRA C/L	29342	95230	29.57000	-95.38333	29.570443	-95.382861	29342	95630
96	SH 288	1.1 MI S OF HAR/BRA C/L	29341	95231	29.56833	-95.38500	29.568717	-95.386426	29341	95632
97	SH 288 SB	1.5 MI S OF HAR/BRA C/L	29337	95231	29.56167	-95.38500	29.562499	-95.387316	29337	95632
98	SH 288 NB	1.5 MI S OF HAR/BRA C/L	29337	95231	29.56167	-95.38500	29.562504	-95.386831	29338	95632
99	SH 288 SB	3.8 MI S OF HAR/BRA C/L	29318	95232	29.53000	-95.38667	29.529564	-95.386928	29318	95632
100	SH 288 NB	3.8 MI S OF HAR/BRA C/L	29318	95232	29.53000	-95.38667	29.529475	-95.386442	29318	95632
101	SH 288 SB	4.2MI. S. OF HARRIS/BR.CL	29315	95232	29.52500	-95.38667	29.525177	-95.386792	29315	95632
102	SH 288 NB	4.2 MI S OF HAR/BRAZ C/L	29341	95232	29.56833	-95.38667	29.525177	-95.386319	29315	95632
103	SH 288	7 MI S OF HAR/BRA C/L	29341	95231	29.56833	-95.38500	29.485894	-95.397795	29292	95639
104	SH 288 SB	.3 MI S OF SH6 & SH288	29287	95243	29.47833	-95.40500	29.479187	-95.403433	29288	95642
105	SH 288 SB FR	.4 MI S OF CR60	29232	95255	29.38667	-95.42500	29.386535	-95.42733	29232	95656
106	SH 288 SB	.4 MI S OF CR60	29232	95255	29.38667	-95.42500	29.386542	-95.42703	29232	95656
107	SH 288 NB	.3 MI S OF CR60	29232	95255	29.38667	-95.42500	29.386535	-95.42666	29232	95656
108	SH 288 NB FR	.3 MI S OF CR60	29232	95255	29.38667	-95.42500	29.386535	-95.426375	29232	95656

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Lat_dec	New Long_dec	New Lat.	New Long.
109	OLD SCHOOL ROAD	500' E OF SH288	29224	95253	29.37333	-95.42167	29.380942	-95.422526	29229	95654
110	SH 288 SB	500' S OF CR57	29272	95254	29.45333	-95.42333	29.453103	-95.423815	29272	95654
111	SH 288 NB FR	.1 MI S OF CO RD 56	29263	95255	29.43833	-95.42500	29.437642	-95.424971	29263	95655
112	SH 288 SB	300' S OF CR57	29264	95256	29.44000	-95.42667	29.440266	-95.4272	29264	95656
113	SH 288	.4 MI S OF CR64	29251	95256	29.41833	-95.42667	29.417893	-95.426916	29251	95656
114	SH 288 SB FR	1 MI S OF CR63	29236	95256	29.39333	-95.42667	29.393451	-95.427476	29236	95656
115	SH 288 SB	1 MI S OF CR63	29236	95256	29.39333	-95.42667	29.393451	-95.427117	29236	95656
116	SH 288 NB FR	1 MI S OF CR63	29236	95256	29.39333	-95.42667	29.393443	-95.426273	29236	95656
117	SH 288	.5 MI S OF CR60	29225	95255	29.37500	-95.42500	29.375092	-95.426742	29225	95656
118	SH 288 SB	.4 MI N OF FM1462	29216	95255	29.36000	-95.42500	29.360396	-95.427237	29216	95656
119	SH 288	.3 MI S OF FM1462	29209	95255	29.34833	-95.42500	29.34827	-95.426373	29209	95656
120	SH 288 NB	0.3 MI S OF SH6 & SH288	29287	95243	29.47833	-95.40500	29.478946	-95.403061	29287	95642
121	SH 288 NB RAMP	.3 MI S OF SH6	29287	95243	29.47833	-95.40500	29.478852	-95.402858	29287	95642
122	SH 288 SB RAMP	.3 MI S OF SH6	29287	95243	29.47833	-95.40500	29.479305	-95.403662	29288	95642
123	SH 288 NB	500 FT S OF CR 57	29272	95254	29.45333	-95.42333	29.452911	-95.423381	29272	95654
124	SH 288 NB	300 FT N OF CR 48	29264	95256	29.44000	-95.42667	29.439451	-95.426722	29264	95656
125	SH 288 NB	1 MI S OF CR 63	29236	95256	29.39333	-95.42667	29.393443	-95.42656	29236	95656
126	SH 288 NB	.5 MI N OF FM1462	29216	95255	29.79900	-96.08000	29.360394	-95.426762	29216	95656
127	SH 288 NB	SH 288 & MCHARD	29348	95231	29.58000	-95.38500	29.580232	-95.385607	29348	95631
128	SH 288 SB	SH 288 & MCHARD	29348	95231	29.58000	-95.38500	29.580217	-95.386088	29348	95632
129	SH 288 NB	SH 288 & FM 518	29333	95232	29.55500	-95.38667	29.5557	-95.387189	29333	95632
130	SH 288 SB	SH 288 & FM 518 (A)	29333	95232	29.55500	-95.38667	29.555687	-95.38767	29333	95633
131	SH 288	.5 MI S OF FM 1462	29204	95251	29.34000	-95.41833	29.341092	-95.42608	29205	95656
132	SH 288 SB FR	.7 MI N OF CR 51	29195	95255	29.32500	-95.42500	29.326448	-95.426231	29196	95656
133	SH 288 SB	.7 MI. N. OF CR-51	29195	95255	29.32500	-95.42500	29.326396	-95.425986	29196	95656
134	SH 288	.4 MI S OF CR 51	29186	95254	29.31000	-95.42333	29.309865	-95.425377	29186	95655
135	SH 288	.2 MI S OF CR 55	29182	95254	29.30333	-95.42333	29.306688	-95.425417	29184	95655
136	SH 288	.6 MI N OF CR 48	29177	95256	29.29500	-95.42667	29.302755	-95.425623	29182	95655
137	SH 288	SH 288 & CR 48	29170	95260	29.28333	-95.43333	29.29554	-95.427742	29177	95657
138	SH 288 SB	.5 MI S OF CR 48	29164	95264	29.27333	-95.44000	29.27331	-95.441934	29164	95665
139	SH 288	.2 MI S OF CR 49	29160	95266	29.26667	-95.44333	29.26714	-95.44564	29160	95667
140	SH 288 NB	1.7 MI SO FM 1462	29195	95255	29.32500	-95.42500	29.326403	-95.425505	29196	95655
141	SH 288 NB	.5 MI S OF CR 48	29164	95264	29.27333	-95.44000	29.273338	-95.44138	29164	95665
142	SH 288 NB	.4 MI NW OF SPUR558	29156	95269	29.26000	-95.44833	29.260822	-95.44941	29156	95670
143	SH 288 SB	.4 MI NW OF SPUR558	29156	95269	29.26000	-95.44833	29.261012	-95.44981	29157	95670
144	SH 288 NB	4.1MI.N.OF SH-35	29134	95271	29.22333	-95.45167	29.223848	-95.452621	29134	95672

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Lat_dec	New Long_dec	New Lat.	New Long
145	SH 288 SB	4.1 MI. N. OF SH-35	29134	95271	29.22333	-95.45167	29.223796	-95.453164	29134	95672
146	SH 288 FR	4.1 MI. N. OF SH-35	29134	95271	29.22333	-95.45167	29.223875	-95.452229	29134	95671
147	SH 288 NB	3.3 MI. N. OF SH-35	29127	95271	29.21167	-95.45167	29.212076	-95.45179	29127	95671
148	SH 288 SB	3.3 MI. N. OF SH-35	29127	95271	29.21167	-95.45167	29.211209	-95.452287	29127	95671
149	SH 288 FR	3.3 MI. S. OF SH-35	29127	95271	29.21167	-95.45167	29.212277	-95.451657	29127	95671
150	FM 523	AT SH288/FM558	29118	95271	29.19667	-95.45167	29.197411	-95.452591	29118	95672
151	SH 288 NB	.4 MI. N. OF SH-35	29098	95262	29.16333	-95.43667	29.168657	-95.452767	29101	95672
152	SH 288 SB	.4 MI. N. SHH-35	29098	95262	29.16333	-95.43667	29.168649	-95.453239	29101	95672
153	SH 288 SB	3.0MI. S.OF SH-35	29081	95271	29.13500	-95.45167	29.118362	-95.45157	29071	95671
154	SH 288 NB	3.0 MI. S. OF SH-35	29081	95271	29.13500	-95.45167	29.118362	-95.451101	29071	95671
155	SH 288 SB	3.5 MI. S..OF SH-35	29077	95272	29.12833	-95.45333	29.111776	-95.451994	29067	95671
156	SH 288 NB	3.5 MI. S. OF SH-35	29077	95272	29.12833	-95.45333	29.111744	-95.451514	29067	95671
157	SH 288 SB	4.3 MI. S. OF SH-35	29059	95272	29.09833	-95.45333	29.098522	-95.453054	29059	95672
158	SH 288 NB	4.3 MI. S. OF SH-35	29059	95272	29.09833	-95.45333	29.098386	-95.452568	29059	95672
159	SH 288 SB	4.7MI. S. OF SH-35	29056	95272	29.09333	-95.45333	29.09369	-95.452903	29056	95672
160	SH 288 NB	4.7 MI. S. OF SH-35	29056	95272	29.09333	-95.45333	29.09369	-95.452413	29056	95671
161	SH 288 NB	3.9MI.FROM START OF SECT.	29046	95271	29.07667	-95.45167	29.080487	-95.452006	29048	95671
162	SH 288 SB	3.9MI.FRM START OF SECT.	29046	95271	29.07667	-95.45167	29.080473	-95.452485	29048	95671
163	SH 288 NB	4MI.FROM START OF CONST	29045	95271	29.07500	-95.45167	29.072999	-95.451769	29044	95671
164	SH 288 SB	4.4M FRM START OF CONST.	29045	95271	29.07500	-95.45167	29.072986	-95.452223	29044	95671
165	SH 288 NB	1.2 MI.S.INT.SH-288&SH-35	29087	95271	29.14500	-95.45167	29.14508	-95.451653	29087	95671
166	SH 288 SB	1.2MI.S.INT.SH-288&SH-35	29087	95271	29.14500	-95.45167	29.145063	-95.452145	29087	95671
167	SH 288 NB	SH288 AT OYSTER CREEK	29035	95270	29.05833	-95.45000	29.054713	-95.455357	29033	95673
168	SH 288 SB	SH288 AT OYSTER CREEK	29035	95270	29.05833	-95.45000	29.054875	-95.455543	29033	95673
169	FM 521	2 MI N OF BRAZORIA TEXAS	29046	95332	29.07667	-95.55333	29.076942	-95.553723	29046	95732
170	SH 332	1MI.N.BRAZORIA TX.	29032	95334	29.05333	-95.55667	29.054101	-95.556974	29032	95734
171	FM 521	2MI N OF FM521 & SH35	29111	95296	29.18500	-95.49333	29.186011	-95.491565	29112	95695
172	FM 518	2.8MI E OF SH35	29328	95145	29.54667	-95.24167	29.547559	-95.243351	29329	95546
173	FM 865	2MIS.OF HARRIS/BRAZ.LINE	29340	95210	29.56667	-95.35000	29.566129	-95.350388	29340	95610
174	FM 518	.12MI W OF GALVESTON CO.	29325	95131	29.54167	-95.21833	29.540715	-95.220034	29324	95532
175	FM 522	0.5 MI EAST OF FM1459	29046	95409	29.07667	-95.68167	29.078765	-95.681284	29047	95809
176	FM 523	.5MI.S.OF FM523 &FM2004	29068	95225	29.11333	-95.37500	29.112701	-95.374407	29068	95625
177	FM 523	.75MI.S.OF FM523 & FM2004	29065	95223	29.10833	-95.37167	29.109951	-95.372049	29066	95623
178	FM 523	8MI.S. OF FM523 & FM2004	29006	95197	29.01000	-95.32833	29.010281	-95.328171	29006	95597
179	FM 523	1.5MI.N. OF FREEPORT TX.	28587	95203	28.97833	-95.33833	28.970519	-95.347612	28582	95609
180	FM 523	1.5MI. N. OF FREEPORT TX.	28582	95208	28.97000	-95.34667	28.969219	-95.348585	28582	95609

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Lat_dec	New Long_dec	New Lat.	New Long.
181	FM 523	.3MLS.OF SH-332	28596	95197	28.99333	-95.32833	28.979403	-95.338311	28588	95603
182	FM 523	1 MI.N.FM-332 @ FM-523	29007	95196	29.01167	-95.32667	28.994767	-95.329159	28597	95597
183	FM 523	FM-523 @ MPRR	29112	95232	29.18667	-95.38667	29.187337	-95.387137	29112	95632
184	FM 523	FM-523 @ BRUSHY CK.	29108	95232	29.18000	-95.38667	29.180151	-95.387415	29108	95632
185	FM 521	3 MI S OF SH 36 & FM 521	29007	95353	29.01167	-95.58833	29.010649	-95.588039	29006	95753
186	PEDESTRIAN BRIDC	.1 MI EAST OF SH 35	29047	95449	29.07833	-95.74833	29.078473	-95.747915	29047	95849
187	FM 655	35MI W OF SH288	29181	95303	29.30167	-95.50500	29.301171	-95.510023	29181	95706
188	FM 655	4 MI W OF SH288	29181	95301	29.30167	-95.50167	29.300992	-95.520777	29181	95712
189	FM 1301	10 MI W OF W COLUMBIA TX	29105	95498	29.17500	-95.83000	29.174058	-95.830169	29104	95898
190	FM 1301	1 MI W OF W COLUMBIA TX	29088	95403	29.14667	-95.67167	29.146632	-95.670941	29088	95803
191	FM 1301	.5 MI W OF W COLUMBIA TX	29089	95398	29.14833	-95.66333	29.147568	-95.663958	29089	95798
192	FM 1301	.25 MI FROM FM1459	29095	95464	29.15833	-95.77333	29.158398	-95.774037	29095	95864
193	FM 1301	4 MI W OF W COLUMBIA TX	29090	95429	29.15000	-95.71500	29.151271	-95.715493	29091	95829
194	FM 1301	7 MI W OF W COLUMBIA TX	29096	95459	29.16000	-95.76500	29.160188	-95.765532	29096	95859
195	FM 1459	1.9 MI S. SH-35 & FM-1459	29043	95413	29.07167	-95.68833	29.069387	-95.687413	29042	95812
196	FM 1459	2 MI NW OF SH35 & FM 1459	29066	95423	29.11000	-95.70500	29.118253	-95.714507	29071	95829
197	FM 1459	500 FT NW SH35 & FM1459	29059	95415	29.09833	-95.69167	29.09871	-95.691045	29059	95815
198	FM 1459	.9 MI S OF FM522	29048	95410	29.08000	-95.68333	29.065692	-95.68675	29039	95812
199	FM 528	FM 528 @ SH 35	29269	95142	29.44833	-95.23667	29.448376	-95.238986	29269	95543
200	FM 528	0.75 MI NE OF SH 35	29274	95139	29.45667	-95.23167	29.448541	-95.237692	29269	95543
201	FM 1462	5MI W OF SH35	29223	95194	29.37167	-95.32333	29.370816	-95.322949	29222	95594
202	FM 1462	1.0MI W OF SH35	29238	95161	29.39667	-95.26833	29.39658	-95.268675	29238	95561
203	FM 1462	3.7MI NE OF CHOCOLATE BY	29239	95162	29.39833	-95.27000	29.398343	-95.261474	29239	95557
204	FM 1462	1.2MI NE OF SH288	29211	95253	29.35167	-95.42167	29.351595	-95.423111	29211	95654
205	FM 1462	2 MI E OF SH288	29211	95244	29.35167	-95.40667	29.351591	-95.406898	29211	95644
206	FM 1462	3.7MI E OF SH288	29211	95228	29.35167	-95.38000	29.352035	-95.379869	29211	95628
207	FM 1462	2.9MI NE OF CHOC.BAYOU	29234	95169	29.39000	-95.28167	29.390686	-95.281097	29234	95569
208	FM 1462	JUST E. OF SH-288	29211	95255	29.35167	-95.42500	29.351814	-95.425378	29211	95655
209	FM 1462	3.5MI W OF SH288/FM1462	29210	95349	29.35000	-95.58167	29.352339	-95.519004	29211	95711
210	FM 1462	6MI W OF SH288/FM1462	29211	95311	29.35167	-95.51833	29.349566	-95.58238	29210	95749
211	FM 1462	5.5 MI W OF SH288&FM1462	29210	95332	29.35000	-95.55333	29.351395	-95.550479	29211	95730
212	SH 332	6MI.E.OF JCT.SH332&FM521	29030	95287	29.05000	-95.47833	29.048961	-95.477329	29029	95686
213	SH 332	6.25MI.E.JCT.SH332&FM521	29029	95284	29.04833	-95.47333	29.048194	-95.473329	29029	95684
214	SH 332 WB	12 MI. S.OF ANGLETON TX.	29000	95232	29.00000	-95.38667	29.001453	-95.386991	29001	95632
215	SH 332 EB	AT INTER SH 332 & SH227	29025	95233	29.04167	-95.38833	29.004521	-95.388663	29003	95633
216	SH 332 WB	INTER. SH 332 & SH 227	29025	95233	29.04167	-95.38833	29.004799	-95.388807	29003	95633

BRAZORIA Observations Report

ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Lat_dec	New Long_dec	New Lat.	New Long.
217	SH 332 EB	12MI. S. OF ANGLETON,TX.	29002	95235	29.00333	-95.39167	29.004089	-95.391506	29002	95635
218	FM 1128	1MI.N.JCT.SH6 & FM1128	29286	95212	29.47667	-95.35333	29.476951	-95.352896	29286	95612
219	FM 1128	3.2MI. N. JCT.FM1128&SH-6	29298	95207	29.49667	-95.34500	29.495852	-95.345896	29298	95608
220	FM 1128	1MI.S.JCT.FM-518&FM-1128	29325	95198	29.54167	-95.33000	29.541081	-95.33052	29325	95598
221	FM 2234	1.4 MI WEST OF SH 288	29347	95245	29.57833	-95.40833	29.576943	-95.409417	29346	95646
222	FM 2234	0.9 MI WEST OF SH 288	29346	95239	29.57667	-95.39833	29.578259	-95.401128	29347	95641
223	FM 2234	0.4 MI WEST OF SH 288	29349	95234	29.58167	-95.39000	29.579696	-95.392765	29348	95636
224	FM 2004	5MI.W.OF JCT.FM523&FM2004	29068	95231	29.11333	-95.38500	29.112954	-95.384136	29068	95630
225	FM 2004	.75MI.E.JCT.FM523&FM2004	29076	95221	29.12667	-95.36833	29.126711	-95.369006	29076	95621
226	FM 2004	1.5MI.E.JCT.FM523&FM2004	29077	95218	29.12833	-95.36333	29.129794	-95.362498	29078	95617
227	FM 2004	2.75MI.E.JCT.FM523&FM2004	29081	95210	29.13500	-95.35000	29.136068	-95.349028	29082	95609
228	FM 2004	4.25MI.E.JCT.FM523&FM2004	29088	95188	29.14667	-95.31333	29.147567	-95.313314	29089	95588
229	FM 2004	1MI.W.JCT. FM2917&FM2004	29145	95104	29.24167	-95.17333	29.243967	-95.173531	29146	95504
230	FM 2004	3MI.W. OF BRAZ/GALV. C/L	29156	95092	29.26000	-95.15333	29.261113	-95.15369	29157	95492
231	FM 2004	W.BRAZ./GALV. CO. LINE	29171	95080	29.28500	-95.13333	29.286165	-95.131116	29172	95479
232	FM 2004	3.25MI.W.JCT.FM2004&2917	29127	95125	29.21167	-95.20833	29.21235	-95.207351	29127	95524
233	FM 2004	2.5 MI E SH332 & FM2004	29038	95257	29.06333	-95.42833	29.063888	-95.430666	29038	95658
234	FM 2004	.5MI.E.JCT.SH332&FM2004	29032	95276	29.05333	-95.46000	29.053276	-95.462366	29032	95677
235	FM 2004	@DOW FRESH WTR.CANAL	29025	95285	29.04167	-95.47500	29.037293	-95.471097	29022	95683
236	FM 2004	1.35MI.S. OF SH-332	29016	95286	29.02667	-95.47667	29.026635	-95.476861	29016	95686
237	FM 2004	2.55MI.S. OF SHH-332	29006	95291	29.01000	-95.48500	29.011062	-95.485396	29007	95691
238	FM 2611	4MI.W.JCT.SH-36&FM-2611	28570	95333	28.95000	-95.55500	28.949532	-95.55533	28570	95733
239	FM 2611	MATAGORDO & BRAZORIA C	28541	95382	28.90167	-95.63667	28.901641	-95.635927	28541	95782
240	FM 2611	6MI. W. JCT.SH-36 &FM2611	28571	95351	28.95167	-95.58500	28.949643	-95.587065	28570	95752
241	PARK ROAD 51	IN VARNER-HOGG STATE PA	29098	95383	29.16333	-95.63833	29.163405	-95.638937	29098	95783
242	FM 2917	8.25 MI SE SH35 & FM2917	29158	95110	29.26333	-95.18333	29.261721	-95.181962	29157	95509
243	FM 2917	1.25MI.SE.SH-35 & SH-2917	29197	95158	29.32833	-95.26333	29.329023	-95.263805	29197	95558
244	FM 2917	3.5 MI SE SH35 & FM2917	29184	95144	29.30667	-95.24000	29.307119	-95.240487	29184	95544
245	FM 2917	5.25MI SE SH35 & FM2917	29173	95131	29.28833	-95.21833	29.289177	-95.21743	29174	95530
246	FM 2917	6.5 MI SE OF SH35& FM2917	29166	95121	29.27667	-95.20167	29.277471	-95.202335	29166	95521
247	FM 2403	2 MI S OF FM2403 & SH35	29220	95153	29.36667	-95.25500	29.366878	-95.254822	29220	95553
248	FM 2403	4MIS.OF SH-35 & SH-2403	29199	95155	29.33167	-95.25833	29.333032	-95.258316	29200	95555
249	DIXIE FARM RD	2.60 MI NE OF SH 35	30000	100000	29.80000	-96.08000	29.54135	-95.23389	29325	95540
250	DIXIE FARM RD	0.90 MI NE OF SH 35	30000	100000	29.80100	-96.08000	29.522309	-95.246786	29313	95548
251	DIXIE FARM RD	1.85 MI NE OF SH 35	30000	100000	29.80200	-96.08000	29.53353	-95.239043	29320	95543
252	MUSTANG RD	2.30 MI S OF SH 35	30000	100000	29.80300	-96.08000	29.368458	-95.231041	29221	95539

BRAZORIA Observations Report

ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Lat_dec	New Long_dec	New Lat.	New Long.
253	SOUTH ST	0.10 MI W OF SH 35	30000	100000	29.80400	-96.08000	29.409435	-95.234567	29246	95541
254	W SOUTH ST	0.20 MI W OF JOHNSON ST	30000	100000	29.80500	-96.08000	29.410141	-95.248979	29246	95549
255	2ND ST	0.40 MI N OF SEALY PRK ST	30000	100000	29.80600	-96.08000	29.427081	-95.254996	29256	95553
256	VELASCO BLVD SB	0.20 MI N OF 2ND ST	30000	100000	29.80700	-96.08000	28.955139	-95.358844	28573	95615
257	S VELASCO BLVD	0.10 MI N OF SH 36	30000	100000	29.80800	-96.08000	28.943141	-95.36474	28566	95619
258	VELASCO BLVD NB	0.20 MI N OF 2ND ST	30000	100000	29.80900	-96.08000	28.954788	-95.358142	28573	95615
259	MPRR	0.35 MI E OF FM 523	30000	100000	29.81000	-96.08000	28.952342	-95.354175	28571	95613
260	YAUPON ST	0.10 MI N OF OYSTER CR DR	29033	95274	29.05500	-95.45667	29.041489	-95.436433	29025	95662
261	ANGLETON DR	0.20 MI NW OF COLLEGE BL	30000	100000	29.81100	-96.08000	29.042028	-95.413367	29025	95648

APPENDIX B

FORT BEND OBSERVATIONS REPORT

FORT BEND Observations Report

ID	StructureID	checked	Observations
1	120800002706007	c	moved to DGN position
2	120800002706009	c	moved to DGN position
3	120800002706010	c	moved to DGN position
4	120800002706011	c	moved to DGN position
5	120800002706012	c	moved to DGN position
6	120800002707013	c	moved to DGN position
7	120800002707041	c	moved to DGN position
8	120800002708022	c	moved to DGN position
9	120800002708027	c	moved to DGN position
10	120800002708028	c	moved to DGN position
11	120800002708029	c	moved to DGN position
12	120800002708030	c	moved to DGN position
13	120800002708053	c	moved to DGN position
14	120800002708056	c	moved to DGN position
15	120800002708057	c	moved to DGN position
16	120800002708058	c	moved to DGN position
17	120800002708059	c	moved to DGN position
18	120800002708060	c	moved to DGN position
19	120800002708092	c	moved to DGN position
20	120800002708271	c	moved to DGN position
21	120800002708436	c	moved to DGN position
22	120800002712067	c	moved to DGN position
23	120800002712125	c	moved to DGN position
24	120800002712126	c	moved to DGN position
25	120800002712127	c	moved to DGN position
26	120800002712131	c	moved to DGN position
27	120800002712132	c	moved to DGN position
28	120800002712133	c	moved to DGN position
29	120800002712134	c	moved to DGN position
30	120800002712135	c	moved to DGN position
31	120800002712136	c	moved to DGN position
32	120800002712137	c	moved to DGN position
33	120800002712138	c	moved to DGN position
34	120800002712139	c	moved to DGN position
35	120800002712140	c	moved to DGN position
36	120800002712141	c	moved to DGN position

FORT BEND Observations Report

ID	StructureID	checked	Observations
37	120800002712142	c	moved to DGN position
38	120800002712143	c	moved to DGN position
39	120800002712144	c	moved to DGN position
40	120800002712145	c	moved to DGN position
41	120800002712146	c	moved to DGN position
42	120800002712147	c	moved to DGN position
43	120800002712148	c	moved to DGN position
44	120800002712149	c	moved to DGN position
45	120800002712150	c	moved to DGN position
46	120800002712151	c	moved to DGN position
47	120800002712152	c	moved to DGN position
48	120800002712153	c	moved to DGN position
49	120800002712154	c	moved to DGN position
50	120800002712155	c	moved to DGN position
51	120800002712156	c	moved to DGN position
52	120800002712157	c	moved to DGN position
53	120800002712158	c	moved to DGN position
54	120800002712159	E	moved to DGN position (originally near 271-21-58) flagged, (missing brg symbol)
55	120800002712160	c	moved to DGN position
56	120800002712162	E	moved to DGN position (originally no coordinates) flagged
57	120800002712163	c	moved to DGN position
58	120800002712164	c	moved to DGN position
59	120800002712165	c	moved to DGN position
60	120800002712166	c	moved to DGN position
61	120800002712167	c	moved to DGN position
62	120800002712168	c	moved to DGN position
63	120800002712169	c	moved to DGN position
64	120800002712188	c	moved to DGN position
65	120800002712189	c	moved to DGN position
66	120800002712190	c	moved to DGN position
67	120800002712191	c	moved to DGN position
68	120800002712192	c	moved to DGN position
69	120800002712193	c	moved to DGN position
70	120800002712219	E	moved to DGN position (originally no coordinates) flagged
71	120800002712220	c	moved to DGN position
72	120800008909047	c	moved to DGN position

FORT BEND Observations Report

ID	StructureID	checked	Observations
73	120800008909048	c	moved to DGN position
74	120800008909049	c	moved to DGN position
75	120800008909050	c	moved to DGN position
76	120800008909053	c	moved to DGN position
77	120800008909054	c	moved to DGN position
78	120800008909057	c	moved to DGN position
79	120800008909078	c	moved to DGN position
80	120800008909184	E	moved to DGN position (missing brg symbol) flagged
81	120800008909185	E	moved to DGN position (missing brg symbol) flagged
82	120800008909186	E	moved to DGN position (missing brg symbol) flagged
83	120800008909187	c	moved to DGN position
84	120800008909188	c	moved to DGN position
85	120800008909189	c	moved to DGN position
86	120800008909190	c	moved to DGN position
87	120800008909196	c	moved to DGN position
88	120800008909197	c	moved to DGN position
89	120800008909198	c	moved to DGN position
90	120800008909199	c	moved to DGN position
91	120800008909200	c	moved to DGN position
92	120800008909201	E	moved to DGN position (missing brg symbol) flagged
93	120800008917046	c	moved to DGN position
94	120800011103024	c	moved to DGN position
95	120800011103025	c	moved to DGN position
96	120800011103026	c	moved to DGN position
97	120800011103027	c	moved to DGN position
98	120800011103028	c	moved to DGN position
99	120800011103069	E	moved to DGN position (missing brg symbol) flagged
100	120800018705014	c	moved to DGN position
101	120800018705028	c	moved to DGN position
102	120800018705029	c	moved to DGN position
103	120800018705030	c	moved to DGN position
104	120800018705031	c	moved to DGN position
105	120800018705032	c	moved to DGN position
106	120800018705033	c	moved to DGN position
107	120800018801001	c	moved to DGN position
108	120800018801002	E	moved to DGN position (missing brg symbol) flagged

FORT BEND Observations Report

ID	StructureID	checked	Observations
109	120800018801038	c	moved to DGN position
110	120800018802003	c	moved to DGN position
111	120800018802004	c	moved to DGN position
112	120800018802005	c	moved to DGN position
113	120800018802006	c	moved to DGN position
114	120800018802007	c	moved to DGN position
115	120800018802008	c	moved to DGN position
116	120800018802023	c	moved to DGN position
117	120800018809024	c	moved to DGN position
118	120800018809027	c	moved to DGN position
119	120800018809029	c	moved to DGN position
120	120800018810030	E	moved to DGN position (missing brg symbol) flagged
121	120800019201002	c	moved to DGN position
122	120800019201003	c	moved to DGN position
123	120800019201004	c	moved to DGN position
124	120800019201005	c	moved to DGN position
125	120800019201030	E	moved to DGN position (missing brg symbol) flagged
126	120800019201034	E	moved to DGN position (missing brg symbol) flagged
127	120800019201052	E	moved to DGN position (missing brg symbol) flagged
128	120800027105286	E	moved to DGN position (missing brg symbol) flagged
129	120800027105287	E	moved to DGN position (missing brg symbol) flagged
130	120800027105289	E	moved to DGN position (missing brg symbol) flagged
131	120800027105290	c	moved to DGN position
132	120800027105292	c	moved to DGN position (same structure symbol as for 0271-05-293, 4, 5)
133	120800027105293	c	moved to DGN position (same structure symbol as for 0271-05-292, 4, 5)
134	120800027105294	c	moved to DGN position (same structure symbol as for 0271-05-292, 3, 5)
135	120800027105295	c	moved to DGN position (same structure symbol as for 0271-05-292, 3, 4)
136	120800027105296	c	moved to DGN position
137	120800027110023	E	moved to DGN position (missing brg symbol) flagged
138	120800052705008	c	moved to DGN position
139	120800052706002	c	moved to DGN position
140	120800052706003	c	moved to DGN position
141	120800052706004	c	moved to DGN position
142	120800052706005	c	moved to DGN position
143	120800052708010	E	moved to DGN position (missing brg symbol) flagged
144	120800052708011	E	moved to DGN position (missing brg symbol) flagged

FORT BEND Observations Report

ID	StructureID	checked	Observations
145	120800052708012	c	moved to DGN position
146	120800052709013	c	moved to DGN position
147	120800054302018	c	moved to DGN position
148	120800054302019	E	moved to DGN position (originally near 0.64 SW US 90 A)
149	120800054302024	c	moved to DGN position
150	120800054302031	c	moved to DGN position
151	120800054303002	c	moved to DGN position
152	120800054303013	c	moved to DGN position
153	120800054303020	E	moved to DGN position (missing brg symbol) flagged
154	120800054303022	c	moved to DGN position
155	120800054303023	E	moved to DGN position (missing brg symbol) flagged
156	120800083802005	c	moved to DGN position
157	120800083802006	c	moved to DGN position
158	120800083802020	c	moved to DGN position
159	120800083803014	c	moved to DGN position
160	120800083803015	c	moved to DGN position
161	120800125701003	c	moved to DGN position
162	120800125701006	c	moved to DGN position
163	120800125701007	E	moved to DGN position (originally near 111-03-028)
164	120800125701008	c	moved to DGN position
165	120800125802010	c	moved to DGN position
166	120800125802012	c	moved to DGN position
167	120800125802013	c	moved to DGN position
168	120800125802015	c	moved to DGN position
169	120800125803009	c	moved to DGN position
170	120800141405014	c	moved to DGN position
171	120800141502005	c	moved to DGN position
172	120800141502006	c	moved to DGN position
173	120800141502007	c	moved to DGN position
174	120800141502008	c	moved to DGN position
175	120800141502009	c	moved to DGN position
176	120800141502012	c	moved to DGN position
177	120800141503010	c	moved to DGN position
178	120800141503011	c	moved to DGN position
179	120800141802002	c	moved to DGN position
180	120800141802003	c	moved to DGN position

FORT BEND Observations Report

ID	StructureID	checked	Observations
181	120800141803005	c	moved to DGN position
182	120800141803007	c	moved to DGN position
183	120800141803008	c	moved to DGN position
184	120800168506018	c	moved to DGN position
185	120800168506032	c	moved to DGN position
186	120800174302002	E	moved to DGN position (missing brg symbol) flagged
187	120800174302005	E	moved to DGN position (missing brg symbol) flagged
188	120800196501001	c	moved to DGN position
189	120800196502002	c	moved to DGN position
190	120800209301002	c	moved to DGN position
191	120800210501001	c	moved to DGN position
192	120800210501002	E	moved to DGN position (originally no coordinates) flagged
193	120800210501004	c	moved to DGN position
194	120800281701001	c	moved to DGN position
195	120800281701002	c	moved to DGN position
196	120800281701003	c	moved to DGN position
197	120800294002002	E	moved to DGN position (missing brg symbol) flagged
198	120800304801001	c	moved to DGN position
199	120800304801002	c	moved to DGN position
200	120800304801003	c	moved to DGN position
201	120800304801004	c	moved to DGN position
202	120800342001001	E	moved to DGN position (missing brg symbol) flagged
203	120800342201001	E	moved to DGN position (missing brg symbol) flagged
204	120800351004003	E	moved to DGN position (originally no coordinates) flagged
205	120800351004004	E	moved to DGN position (originally no coordinates) flagged
206	120800351004005	E	moved to DGN position (originally no coordinates) flagged
207	120800351004006	E	moved to DGN position (originally no coordinates) flagged
208	120800351004007	E	moved to DGN position (originally no coordinates) flagged
209	120800351004008	E	moved to DGN position (originally no coordinates) flagged
210	120800351004009	E	moved to DGN position (originally no coordinates) flagged
211	120800351004010	E	moved to DGN position (originally no coordinates) flagged
212	120800351004011	E	moved to DGN position (originally no coordinates) flagged
213	120800351004012	E	moved to DGN position (originally no coordinates) flagged
214	120800351004013	E	moved to DGN position (originally no coordinates) flagged
215	120800351004014	E	moved to DGN position (originally no coordinates) flagged
216	120800351004015	E	moved to DGN position (originally no coordinates) flagged

FORT BEND Observations Report

ID	StructureID	checked	Observations
217	120800351004016	E	moved to DGN position (originally no coordinates) flagged
218	120800351004017	E	moved to DGN position (originally no coordinates) flagged
219	120800351004018	E	moved to DGN position (originally no coordinates) flagged
220	120800351004019	E	moved to DGN position (originally no coordinates) flagged
221	120800351004020	E	moved to DGN position (originally no coordinates) flagged
222	120800351004021	E	moved to DGN position (originally no coordinates) flagged
223	120800351004022	E	moved to DGN position (originally no coordinates) flagged
224	120800351004023	E	moved to DGN position (originally no coordinates) flagged
225	120800351004024	E	moved to DGN position (originally no coordinates) flagged
226	120800351004025	E	moved to DGN position (originally no coordinates) flagged
227	120800351004026	E	moved to DGN position (originally no coordinates) flagged
228	120800351004027	E	moved to DGN position (originally no coordinates) flagged
229	120800351004028	E	moved to DGN position (msg brg & rd symbols, originally no coordinates) flagged
230	120800351004029	E	moved to DGN position (originally no coordinates) flagged
231	120800351004030	E	moved to DGN position, near FM1464, either at location in TRANSCAD or 0.5 mi west of location
232	120800813212001	E	moved to DGN position (originally no coordinates) flagged
233	120800813212002	E	moved to DGN position (originally no coordinates) flagged
234	120800813212003	E	moved to DGN position (originally no coordinates) flagged
235	120800813712007	E	moved to DGN position (msg brg & rd symbols, originally no coordinates) flagged
236	120800815312006	E	moved to DGN position (msg brg & rd symbols, originally no coordinates) flagged
237	120800816812001	E	moved to DGN position (msg brg & rd symbols, originally no coordinates) flagged
238	120800817212003	E	moved to DGN position (originally no coordinates) flagged
239	120800817212004	E	moved to DGN position (originally no coordinates) flagged
240	120800880612001	E	moved to DGN position (msg brg & rd symbols, originally no coordinates) flagged
241	120800885512001	E	moved to DGN position (msg brg & rd symbols, originally no coordinates) flagged
242	120800886112001	E	moved to DGN position (msg brg & rd symbols, originally no coordinates) flagged
243	120800886412001	E	moved to DGN position (msg brg & rd symbols, originally no coordinates) flagged
244	120800886612001	E	moved to DGN position (msg brg & rd symbols, originally no coordinates) flagged
245	120800886812001	E	moved to DGN position (msg brg & rd symbols, originally no coordinates) flagged

FORT BEND Observations Report

ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Lat_dec	New Long_dec	New Lat.	New Long.
1	US 90A	3.90 MI W OF FM 1952	29320	096032	29.53333	-96.05333	29.532662	-96.054984	29320	96433
2	US 90A	0.75 MI E OF FM 1875	29326	095575	29.54333	-95.95833	29.543565	-95.957593	29326	95975
3	US 90A	7.25 MI W OF SH 36	29327	095563	29.54500	-95.93833	29.545767	-95.938303	29327	95963
4	US 90A	3.75 MI W OF SH 36	29331	095528	29.55167	-95.88000	29.552346	-95.880211	29331	95928
5	SP RR	0.10 MI NW OF LP 529	29335	095491	29.55833	-95.81833	29.558612	-95.818669	29335	95891
6	AT & SF RAILROAD	0.25 MI SW OF FM 3155	29345	095465	29.57500	-95.77500	29.575002	-95.772735	29345	95864
7	US 90A	AT RADIO LANE	29338	095470	29.56333	-95.78333	29.56361	-95.783762	29338	95870
8	US 90A WB	1.50 MI W OF SH 99	29360	095425	29.60000	-95.70833	29.59911	-95.70835	29359	95825
9	US 90A WB	0.95 MI W OF SH 6	29364	095399	29.60667	-95.66500	29.60693	-95.663623	29364	95798
10	US 90A WB	0.20 MI SW OF SH 6	29367	095392	29.61167	-95.65333	29.612087	-95.651968	29367	95791
11	US 90A WB	0.15 MI E OF SH 6	29369	095388	29.61500	-95.64667	29.615098	-95.645782	29369	95787
12	US 90A WB	1.05 MI E OF SH 6	29372	095380	29.62000	-95.63333	29.620088	-95.633715	29372	95780
13	US 90A EB	1.50 MI W OF SH 99	29360	095425	29.60000	-95.70833	29.59888	-95.708306	29359	95825
14	US-90A(W.B.)	2.9 MI. SW OF SH6	29361	095410	29.60167	-95.68333	29.599664	-95.703048	29360	95822
15	US 90A EB	0.95 MI W OF SH 6	29364	095399	29.60667	-95.66500	29.606753	-95.663532	29364	95798
16	US 90A EB	0.20 MI SW OF SH 6	29367	095392	29.61167	-95.65333	29.611913	-95.651823	29367	95791
17	US 90A EB	0.15 MI E OF SH 6	29369	095388	29.61500	-95.64667	29.614929	-95.645691	29369	95787
18	US 90A EB	1.05 MI E OF SH 6	29372	095380	29.62000	-95.63333	29.619902	-95.633658	29372	95780
19	US 90A WB	0.60 MI NE OF FM 762	29350	095454	29.58333	-95.75667	29.583521	-95.757746	29350	95855
20	US 90A	0.10 MI SW OF FM 359	29356	095446	29.59333	-95.74333	29.593272	-95.742974	29356	95846
21	US 90A EB	0.60 MI NE OF FM 762	29350	095454	29.58333	-95.75667	29.582815	-95.757118	29350	95854
22	US 59	2.65 MI NE OF SH 6	29378	095356	29.63000	-95.59333	29.628321	-95.592613	29377	95756
23	US 59 SB	2.00 MI NE OF SH 6	29364	095358	29.60667	-95.59667	29.62133	-95.601355	29373	95761
24	US 59 NB	2.00 MI NE OF SH 6	29364	095358	29.60667	-95.59667	29.621179	-95.601227	29373	95761
25	US 59	0.60 MI SW OF US 90A	29364	095358	29.60667	-95.59667	29.622328	-95.599882	29373	95760
26	US 59	0.95 MI E OF FM 2759	29339	095405	29.56500	-95.67500	29.564049	-95.675822	29338	95805
27	US 59 SB	3.50 MI SW OF SH 6	29341	095401	29.56833	-95.66833	29.568075	-95.667907	29341	95801
28	US 59 NB	3.50 MI SW OF SH 6	29341	095401	29.56833	-95.66833	29.567888	-95.667739	29341	95801
29	US 59 SB FR	2.00 MI SW OF SH 6	29348	095390	29.58000	-95.65000	29.580325	-95.649248	29348	95790
30	US 59	2.00 MI SW OF SH 6	29348	095390	29.58000	-95.65000	29.579995	-95.648845	29348	95789
31	US 59 NB FR	2.00 MI SW OF SH 6	29348	095390	29.58000	-95.65000	29.578723	-95.648085	29347	95789
32	US 59 SB	1.35 MI SW OF SH 6	29352	095383	29.58667	-95.63833	29.585748	-95.639949	29351	95784
33	US 59 NB	1.35 MI SW OF SH 6	29352	095383	29.58667	-95.63833	29.585551	-95.639799	29351	95784
34	US 59 SB	0.35 MI NE OF FM 762	29330	095444	29.55000	-95.74000	29.548823	-95.740779	29329	95844
35	US 59 NB	0.35 MI NE OF FM 762	29330	095444	29.55000	-95.74000	29.548661	-95.740696	29329	95844
36	US 59	1.60 MI NE OF FM 762	29333	095436	29.55500	-95.72667	29.554538	-95.721869	29333	95833

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Lat_dec	New Long_dec	New Lat.	New Long.
37	US 59	0.60 MI SW OF SH 6	29356	095377	29.59333	-95.62833	29.592238	-95.629436	29355	95778
38	US 59 SB	4.95 MI NE OF SH 99	29359	095374	29.59833	-95.62333	29.598187	-95.622474	29359	95773
39	US 59 NB	4.95 MI NE OF SH 99	29359	095374	29.59833	-95.62333	29.598117	-95.622271	29359	95773
40	US 59 SB	0.30 MI NE OF SH 6	29361	095371	29.60167	-95.61833	29.601749	-95.618807	29361	95771
41	US 59 NB	0.30 MI NE OF SH 6	29361	095371	29.60167	-95.61833	29.601652	-95.618653	29361	95771
42	US 59 SB	0.80 MI NE OF SH 6	29364	095368	29.60667	-95.61333	29.606843	-95.613635	29364	95768
43	US 59 NB	0.80 MI NE OF SH 6	29364	095368	29.60667	-95.61333	29.606685	-95.613429	29364	95768
44	US 59	2.30 MI W OF SH 36	29321	095528	29.53500	-95.88000	29.53425	-95.84597	29321	95908
45	US 59 SB ML & FR	0.70 MI W OF SH 36	29319	095493	29.53167	-95.82167	29.531905	-95.820148	29319	95892
46	US 59 NB ML & FR	0.70 MI W OF SH 36	29319	095493	29.53167	-95.82167	29.531259	-95.820113	29319	95892
47	US 59 SB	0.30 MI E OF SH 36	29318	095482	29.53000	-95.80333	29.532182	-95.802317	29319	95881
48	US 59 NB ML & ONRP	0.30 MI E OF SH 36	29318	095482	29.53000	-95.80333	29.532008	-95.802308	29319	95881
49	US 59 SB EX RP	0.30 MI E OF SH 36	29318	095482	29.53000	-95.80333	29.532385	-95.802325	29319	95881
50	US 59 E FR	0.30 MI NE OF FM 2218	29321	095464	29.53500	-95.77333	29.535138	-95.771925	29321	95863
51	US 59 NB	0.30 MI NE OF FM 2218	29321	095464	29.53500	-95.77333	29.535285	-95.772004	29321	95863
52	US 59 SB	0.30 MI NE OF FM 2218	29321	095464	29.53500	-95.77333	29.535634	-95.772181	29321	95863
53	US 59 SB EX RP	0.30 MI NE OF FM 2218	29321	095464	29.53500	-95.77333	29.535796	-95.772259	29321	95863
54	A.T. & S.F. RR	2.00 MI NE OF FM 2218	29320	095466	29.53333	-95.77667	29.546289	-95.746804	29328	95848
55	FM 762	2.00 MI NE OF FM 2218	29320	095466	29.53333	-95.77667	29.546413	-95.746494	29328	95848
56	US 59 SB	1.00 MI NE OF US 90A	29384	095309	29.64000	-95.51500	29.639025	-95.58132	29383	95749
57	US 59 SB	1.50 MI NE OF US 90A	29387	095396	29.64500	-95.66000	29.649665	-95.650838	29390	95791
58	US 59 SB	1.10 MI W OF SH 36	29318	095496	29.53000	-95.82667	29.531893	-95.825876	29319	95896
59	US 59 NB	1.10 MI W OF SH 36	29318	095496	29.53000	-95.82667	29.531659	-95.82594	29319	95896
60	US 59 SB	1.90 MI W OF FM 2218	29318	095485	29.53000	-95.80833	29.532034	-95.808004	29319	95885
61	US 59 NB	1.90 MI W OF FM 2218	29318	095485	29.53000	-95.80833	29.531789	-95.807993	29319	95885
62	US 59 SB	2.00 MI SW OF FM 762	29320	095466	29.53333	-95.77667	29.534196	-95.77632	29321	95866
63	US 59 NB	2.00 MI SW OF FM 762	29320	095466	29.53333	-95.77667	29.533983	-95.776233	29320	95866
64	KROESCHE RD	2.25 MI W OF SH 36	29321	095528	29.53500	-95.88000	29.534186	-95.845466	29321	95907
65	READING RD	1.35 MI NE OF FM 2218	29325	095453	29.54167	-95.75500	29.542177	-95.756505	29325	95854
66	FUTURE COUNTY RD	1.90 MI NE OF FM 762	29333	095430	29.55500	-95.71667	29.555617	-95.716702	29333	95830
67	FM 2759 AND SH 99	3.55 MI NE OF FM 762	29336	095414	29.56000	-95.69000	29.561054	-95.690317	29337	95814
68	FLANIGAN RD	1.50 MI NE OF BRAZOS RI	29348	095388	29.58000	-95.64667	29.580656	-95.647647	29348	95789
69	SWEETWATER BLVD	0.95 MI SW OF SH 6	29353	095381	29.58833	-95.63500	29.588959	-95.634513	29353	95781
70	US 59 NB	1.00 MI NE OF US 90A	29384	095309	29.64000	-95.51500	29.638816	-95.581187	29383	95749
71	US 59 NB	1.50 MI NE OF US 90A	29387	095396	29.64500	-95.66000	29.649641	-95.65073	29390	95790
72	US 59 SB	2.70 MI NE OF FM 2919	29282	095578	29.47000	-95.96333	29.469481	-95.963209	29282	95978

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Lat_dec	New Long_dec	New Lat.	New Long.
73	US 59 SB	0.45 MI SW OF FM 360	29288	095566	29.48000	-95.94333	29.480456	-95.945085	29288	95967
74	US 59 W FR RD	3.30 MI NE OF FM 360	29306	095538	29.51000	-95.89667	29.509646	-95.89765	29306	95939
75	US 59 SB	4.00 MI W OF SH 36	29315	095523	29.52500	-95.87167	29.525939	-95.87127	29316	95923
76	LP 529	1.30 MI NE OF US 59	29326	095504	29.54333	-95.84000	29.545162	-95.839997	29327	95904
77	LP 529	1.40 MI NE OF US 59	29328	095503	29.54667	-95.83833	29.544561	-95.840969	29327	95905
78	US 59 SB	0.60 MI SW OF FM 2919	29262	096010	29.43667	-96.01667	29.437097	-96.01677	29262	96410
79	US 59 NB	0.60 MI SW OF FM 2919	29262	096010	29.43667	-96.01667	29.437079	-96.016405	29262	96410
80	US 59 NB	0.40 MI NE OF FM 2919	29269	095595	29.44833	-95.99167	29.450818	-95.990103	29270	95994
81	US 59 SB	0.40 MI NE OF FM 2919	29269	095595	29.44833	-95.99167	29.450546	-95.991145	29270	95995
82	US 59	2.40 MI NE OF FM 2919	29279	095580	29.46500	-95.96667	29.459548	-95.978609	29276	95987
83	US 59 NB	2.70 MI NE OF FM 2919	29280	095579	29.46667	-95.96500	29.468938	-95.962772	29281	95978
84	US 59 NB	0.45 MI SW OF FM 360	29285	095568	29.47500	-95.94667	29.47999	-95.944698	29288	95967
85	US 59 NB	3.30 MI NE OF FM 360	29305	095538	29.50833	-95.89667	29.50914	-95.897244	29305	95938
86	US 59 NB	4.00 MI W OF SH 36	29314	095522	29.52333	-95.87000	29.524553	-95.871011	29315	95923
87	US 59 E FR	2.70 MI NE OF FM 2919	29280	095579	29.46667	-95.96500	29.46872	-95.962585	29281	95978
88	US 59 E FR RD	0.45 MI SW OF FM 360	29285	095568	29.47500	-95.94667	29.479766	-95.944509	29288	95967
89	US 59 E FR RD	3.30 MI NE OF FM 360	29305	095538	29.50833	-95.89667	29.508915	-95.897062	29305	95938
90	US 59 SB	3.30 MI NE OF FM 360	29305	095538	29.50833	-95.89667	29.509433	-95.897475	29306	95938
91	US 59 E FR	4.00 MI W OF SH 36	29314	095522	29.52333	-95.87000	29.524256	-95.870916	29315	95923
92	US 59 E FR	0.40 MI NE OF FM 2919	29269	095595	29.44833	-95.99167	29.450225	-95.990714	29270	95994
93	LP 541	0.50 MI NE OF FM 2919	29271	095595	29.45167	-95.99167	29.451503	-95.992856	29271	95996
94	FM 521	0.15 MI S OF FM 2234	29348	095259	29.58000	-95.43167	29.579192	-95.432273	29348	95659
95	FM 521	2.70 MI S OF FM 2234	29327	095267	29.54500	-95.44500	29.544476	-95.446122	29327	95668
96	FM 521	3.85 MI S OF FM 2234	29317	095271	29.52833	-95.45167	29.529637	-95.452034	29318	95671
97	FM 521	0.70 MI S OF SH 6	29299	095279	29.49833	-95.46500	29.497533	-95.464836	29299	95679
98	FM 521	4.00 MI S OF SH 6	29270	095285	29.45000	-95.47500	29.451325	-95.475262	29271	95685
99	FM 521	1.15 MI S OF FM 2234	29340	095262	29.56667	-95.43667	29.56587	-95.438026	29340	95663
100	SP RAILROAD	0.03 MI N OF US 90A	29336	095492	29.56000	-95.82000	29.559517	-95.819607	29336	95892
101	SH 36	0.90 MI NW OF US 90A	29339	095500	29.56500	-95.83333	29.564737	-95.831964	29339	95899
102	SH 36	2.35 MI E OF FM 1489	29356	095565	29.59333	-95.94167	29.593073	-95.940588	29356	95964
103	SH 36	5.20 MI NW OF US 90A	29349	095540	29.58167	-95.90000	29.581738	-95.901606	29349	95941
104	SH 36	7.00 MI NW OF US 90A	29353	095558	29.58833	-95.93000	29.589885	-95.929622	29354	95958
105	SH 36	0.01 MI E OF FM 1489	29362	095586	29.60333	-95.97667	29.603668	-95.977044	29362	95986
106	SH 36	0.40 MI W OF FM 1489	29363	095591	29.60500	-95.98500	29.605688	-95.984017	29363	95990
107	SH 36	0.55 MI S OF US 59	29314	095485	29.52333	-95.80833	29.524032	-95.807817	29314	95885
108	SH 36	2.75 MI S OF US 59	29295	095485	29.49167	-95.80833	29.49249	-95.807106	29295	95884

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Lat_dec	New Long_dec	New Lat.	New Long.
109	SH 36	1.05 MI N OF US 59	29328	095485	29.54667	-95.80833	29.546897	-95.808337	29328	95885
110	SH 36	0.40 MI N OF FM 361	29280	095491	29.46667	-95.81833	29.468198	-95.816246	29281	95890
111	SH 36	0.05 MI N OF FM 361	29278	095492	29.46333	-95.82000	29.462947	-95.818511	29278	95891
112	SH 36	2.95 MI S OF FM 361	29252	095500	29.42000	-95.83333	29.419208	-95.834609	29252	95901
113	SH 36	3.45 MI S OF FM 361	29246	095500	29.41000	-95.83333	29.411225	-95.834875	29247	95901
114	SH 36	0.20 MI SE OF FM 1994	29208	095464	29.34667	-95.77333	29.346861	-95.774747	29208	95865
115	SH 36	1.75 MI SE OF FM 1994	29199	095453	29.33167	-95.75500	29.331296	-95.756002	29199	95854
116	SH 36	3.90 MI S OF US 59	29285	095488	29.47500	-95.81333	29.476175	-95.812819	29286	95888
117	FM 723	0.80 MI N OF US 90A	29342	095486	29.57000	-95.81000	29.569581	-95.810497	29342	95886
118	FM 723	0.60 MI N OF US 90A	29340	095486	29.56667	-95.81000	29.566884	-95.810102	29340	95886
119	FM 723	0.40 MI N OF FM 359	29382	095487	29.63667	-95.81167	29.637438	-95.81173	29382	95887
120	FM 1463	0.20 MI SW OF IH 10	29463	095501	29.77167	-95.83500	29.775993	-95.833301	29466	95900
121	SH 6	5.75 MI SE OF US 59	29327	095329	29.54500	-95.54833	29.545673	-95.548513	29327	95729
122	SH 6	5.30 MI NW OF FM 521	29324	095324	29.54000	-95.54000	29.539891	-95.540555	29324	95724
123	SH 6	4.55 MI NW OF FM 521	29322	095318	29.53667	-95.53000	29.536944	-95.528262	29322	95717
124	SH 6	1.90 MI NW OF FM 521	29313	095293	29.52167	-95.48833	29.521659	-95.488495	29313	95693
125	SH 6	0.75 MI SE OF US 90A	29365	095385	29.60833	-95.64167	29.606215	-95.639048	29364	95783
126	SH 6	0.50 MI SE OF US 59	00000	000000	29.79900	-96.08000	29.59535	-95.614609	29357	95769
127	SH 6	0.85 MI SE OF US 90A	29363	095382	29.60500	-95.63667	29.605358	-95.637789	29363	95783
128	IH 10 N FR	0.30 MI W OF FM 1463	29466	095502	29.77667	-95.83667	29.77678	-95.834069	29466	95900
129	IH 10	0.30 MI W OF FM 1463	29466	095502	29.77667	-95.83667	29.777018	-95.83408	29466	95900
130	IH 10 S FR	0.30 MI W OF FM 1463	29466	095502	29.77667	-95.83667	29.777256	-95.834091	29466	95900
131	IH 10	1.40 MI E OF WALLER C/L	29466	095499	29.77667	-95.83167	29.777042	-95.83214	29466	95899
132	IH 10 WB FR	0.35 MI E OF FM 1463	29466	095495	29.77667	-95.82500	29.777358	-95.826755	29466	95896
133	IH 10 WB	0.35 MI E OF FM 1463	29466	095495	29.77667	-95.82500	29.777165	-95.826751	29466	95896
134	IH 10 EB	0.35 MI E OF FM 1463	29466	095495	29.77667	-95.82500	29.777003	-95.826751	29466	95896
135	IH 10 EB FR	0.35 MI E OF FM 1463	29466	095495	29.77667	-95.82500	29.776826	-95.826744	29466	95896
136	PIN OAK RD	0.80 MI E OF FM 1463	29467	095491	29.77833	-95.81833	29.776956	-95.819411	29466	95892
137	US 90	0.20 MI E OF FM 1463	29452	095494	29.75333	-95.82333	29.785456	-95.827004	29471	95896
138	FM 1875	4.35 MI SE OF US 90A	29302	095566	29.50333	-95.94333	29.502781	-95.943391	29302	95966
139	FM 360	5.40 MI SE OF US 59	29257	095524	29.42833	-95.87333	29.429098	-95.873869	29257	95924
140	FM 360	4.00 MI SE OF US 59	29266	095535	29.44333	-95.89167	29.443708	-95.891442	29266	95935
141	FM 360	2.30 MI SE OF US 59	29277	095547	29.46167	-95.91167	29.460853	-95.912058	29277	95947
142	FM 360	0.80 MI SE OF US 59	29285	095558	29.47500	-95.93000	29.475983	-95.930252	29286	95958
143	FM 1952	5.30 MI NW OF US 90A	29345	096023	29.57500	-96.03833	29.575835	-96.039891	29346	96424
144	FM 1952	3.05 MI N OF US 90A	29343	096001	29.57167	-96.00167	29.572645	-96.000106	29344	96400

FORT BEND Observations Report

ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Lat_dec	New Long_dec	New Lat.	New Long.
145	FM 1952	1.40 MI N OF US 90A	29336	095594	29.56000	-95.99000	29.559624	-95.989354	29336	95994
146	FM 1236	0.80 MI NW OF FM 442	29209	095518	29.34833	-95.86333	29.348998	-95.861378	29209	95917
147	FM 359	1.50 MI N OF US 90A	29372	095446	29.62000	-95.74333	29.615795	-95.74314	29369	95846
148	FM 359	0.70 MI NW OF FM 723	29331	095494	29.55167	-95.82333	29.635233	-95.822746	29381	95894
149	FM 359	0.25 MI W OF FM 1463	29416	095510	29.69333	-95.85000	29.694019	-95.850789	29416	95910
150	FM 359	3.50 MI E OF FM 723	29377	095453	29.62833	-95.75500	29.626487	-95.754871	29376	95853
151	FM 762	1.10 MI S OF FM 2759	29313	095418	29.52167	-95.69667	29.52148	-95.696309	29313	95818
152	FM 762	3.30 MI S OF FM 2759	29297	095408	29.49500	-95.68000	29.494453	-95.680836	29297	95809
153	FM 1462	2.80 MI NE OF SH 36	29196	095421	29.32667	-95.70167	29.325579	-95.703032	29195	95822
154	FM 762	2.05 MI E OF FM 1994	29245	095398	29.40833	-95.66333	29.40906	-95.665293	29245	95799
155	FM 762	4.40 MI SE OF FM 1994	29251	095405	29.41833	-95.67500	29.387996	-95.64734	29233	95788
156	FM 442	1.30 MI NE OF WHARTON C/L	29193	095525	29.32167	-95.87500	29.321276	-95.875246	29193	95925
157	FM 442	0.10 MI SW OF FM 1236	29204	095513	29.34000	-95.85500	29.340338	-95.853999	29204	95912
158	FM 442	3.20 MI SW OF FM 1236	29188	095536	29.31333	-95.89333	29.313165	-95.893252	29188	95936
159	FM 361	0.20 MI SE OF FM 2977	29238	095445	29.39667	-95.74167	29.443047	-95.794341	29266	95877
160	FM 361	6.40 MI SE OF SH 36	29266	095472	29.44333	-95.78667	29.398019	-95.74179	29239	95845
161	FM 1092	0.25 MI S OF HARRIS C/L	29385	095339	29.64167	-95.56500	29.642081	-95.565091	29385	95739
162	FM 1092(MURPHY RD)	0.50 MI N OF SH 6	29343	095338	29.57167	-95.56333	29.573244	-95.563703	29344	95738
163	FM 1092(MURPHY RD)	0.90 MI S OF US 90A	29268	095339	29.44667	-95.56500	29.60514	-95.564146	29363	95738
164	FM 1092(MURPHY RD)	2.80 MI N OF SH 6	29366	095338	29.61000	-95.56333	29.610016	-95.564233	29366	95739
165	FM 1093	2.60 MI SW OF FM 1489	29403	096013	29.67167	-96.02167	29.671425	-96.020797	29403	96412
166	FM 1093	1.50 MI W OF FM 359	29401	095555	29.66833	-95.92500	29.6848	-95.924442	29411	95955
167	FM 1093	1.35 MI W OF FM 359	29401	095553	29.66833	-95.92167	29.685126	-95.921552	29411	95953
168	FM 1093	0.40 MI W OF FM 359	29412	095543	29.68667	-95.90500	29.687953	-95.906155	29413	95944
169	FM 1093	1.30 MI W OF FM 1464	29424	095426	29.70667	-95.71000	29.705686	-95.708915	29423	95825
170	FM 1462	3.20 MI E OF FM 762	29210	095358	29.35000	-95.59667	29.34957	-95.582346	29210	95749
171	FM 1464	6.75 MI N OF SH 99	29415	095413	29.69167	-95.68833	29.693012	-95.687775	29416	95813
172	FM 1464	5.50 MI N OF SH 99	29408	095408	29.68000	-95.68000	29.680146	-95.679836	29408	95808
173	FM 1464	4.20 MI N OF SH 99	29397	095408	29.66167	-95.68000	29.661585	-95.679151	29397	95807
174	FM 1464	1.70 MI N OF SH 99	29377	095411	29.62833	-95.68500	29.627454	-95.683135	29376	95810
175	FM 1464	0.20 MI N OF SH 99	29371	095411	29.61833	-95.68500	29.605808	-95.683363	29363	95810
176	FM 1464	1.10 MI N OF SH 99	29372	095411	29.62000	-95.68500	29.618974	-95.68361	29371	95810
177	FM 2759	0.30 MI SW OF US 59	29330	095412	29.55000	-95.68667	29.557744	-95.691926	29335	95815
178	FM 2759	0.95 MI SW OF US 59	29323	095414	29.53833	-95.69000	29.548382	-95.696745	29329	95818
179	FM 1489	1.90 MI N OF FM 1093	29422	095592	29.70333	-95.98667	29.70365	-95.987304	29422	95992
180	FM 1489	0.75 MI N OF FM 1093	29414	095587	29.69000	-95.97833	29.689288	-95.978109	29414	95987

FORT BEND Observations Report

ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Lat_dec	New Long_dec	New Lat.	New Long.
181	FM 1489	2.50 MI N OF SH 36	29383	095585	29.63833	-95.97500	29.639201	-95.97565	29384	95985
182	FM 1489	1.10 MI S OF SH 36	29354	095592	29.59000	-95.98667	29.590793	-95.986022	29354	95992
183	FM 1489	0.02 MI S OF SH 36	29361	095588	29.60167	-95.98000	29.603461	-95.977764	29362	95987
184	SH 6	1.50 MI N OF US 90A	29330	095391	29.55000	-95.65167	29.63408	-95.651306	29380	95791
185	SH 6	4.50 MI N OF US 90A	29407	095386	29.67833	-95.64333	29.674265	-95.643226	29405	95786
186	FM 1876	0.10 MI N OF US 90A	29375	095372	29.62500	-95.62000	29.623114	-95.618615	29374	95771
187	FM 1876	0.70 MI N OF US 90A	29397	095372	29.66167	-95.62000	29.632634	-95.618497	29380	95771
188	FM 1994	0.30 MI NE OF SH 36	29211	095464	29.35167	-95.77333	29.352833	-95.77328	29212	95864
189	FM 1994	1.70 MI SW OF FM 762	29248	095426	29.41333	-95.71000	29.412551	-95.709875	29248	95826
190	FM 2218	0.30 MI NE OF US 59	29323	095464	29.53833	-95.77333	29.538474	-95.773775	29323	95864
191	FM 2234	0.60 MI W OF FM 521	29349	095265	29.58167	-95.44167	29.58126	-95.441427	29349	95665
192	FM 2234	0.95 MI SE OF US 90A	29396	095316	29.66000	-95.52667	29.605503	-95.527123	29363	95716
193	FM 2234	0.20 MI E OF FM 521	29348	095258	29.58000	-95.43000	29.581008	-95.427988	29349	95657
194	FM 2759	0.10 MI E OF FM 762	29323	095420	29.53833	-95.70000	29.537121	-95.701132	29322	95821
195	FM 2759	3.30 MI E OF FM 762	29318	095388	29.53000	-95.64667	29.529259	-95.649043	29318	95789
196	FM 2759	4.50 MI E OF FM 762	29312	095377	29.52000	-95.62833	29.520703	-95.630885	29312	95779
197	FM 2919	3.85 MI NW OF US 59	29298	096018	29.49667	-96.03000	29.494567	-96.028489	29297	96417
198	FM 2977	2.70 MI NE OF FM 361	29306	095454	29.51000	-95.75667	29.473679	-95.766184	29284	95860
199	FM 2977	2.25 MI NE OF FM 361	29281	095464	29.46833	-95.77333	29.468758	-95.771584	29281	95863
200	FM 2977	1.00 MI NE OF FM 361	29273	095478	29.45500	-95.79667	29.455689	-95.785925	29273	95872
201	FM 2977	5.45 MI NE OF FM 361	29306	095453	29.51000	-95.75500	29.510747	-95.755567	29306	95853
202	FM 3345	0.75 MI E OF FM 1092	29350	095320	29.58333	-95.53333	29.582627	-95.550338	29350	95730
203	PR 72	IN BRAZOS BEND STATE PARK	29226	095359	29.37667	-95.59833	29.376824	-95.597859	29226	95759
204	SP RAILROAD	0.05 MI S OF FM 1093	00000	000000	29.80000	-96.08000	29.699994	-95.775505	29420	95865
205	SH 99 NB	0.95 MI N OF FM 1093	00000	000000	29.80100	-96.08000	29.713884	-95.773206	29428	95864
206	SH 99 SB	0.95 MI N OF FM 1093	00000	000000	29.80200	-96.08000	29.713933	-95.773475	29428	95864
207	SH 99 NB	1.55 MI N OF FM 1093	00000	000000	29.80300	-96.08000	29.721661	-95.772471	29433	95863
208	SH 99 SB	1.55 MI N OF FM 1093	00000	000000	29.80400	-96.08000	29.721657	-95.77274	29433	95864
209	SH 99 NB	1.65 MI N OF FM 1093	00000	000000	29.80500	-96.08000	29.724159	-95.772488	29434	95863
210	SH 99 SB	1.65 MI N OF FM 1093	00000	000000	29.80600	-96.08000	29.724159	-95.772754	29434	95864
211	SH 99 NB	2.30 MI N OF FM 1093	00000	000000	29.80700	-96.08000	29.733152	-95.772544	29440	95864
212	SH 99 SB	2.30 MI N OF FM 1093	00000	000000	29.80800	-96.08000	29.733162	-95.772814	29440	95864
213	SH 99 NB	3.00 MI N OF FM 1093	00000	000000	29.80900	-96.08000	29.743984	-95.772613	29446	95864
214	SH 99 SB	3.00 MI N OF FM 1093	00000	000000	29.81000	-96.08000	29.743984	-95.772871	29446	95864
215	SH 99	0.25 MI S OF FM 1093	00000	000000	29.81100	-96.08000	29.696814	-95.774676	29418	95865
216	SH 99	3.60 MI N OF FM 1093	00000	000000	29.81200	-96.08000	29.751441	-95.775623	29451	95865

FORT BEND Observations Report

ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Lat_dec	New Long_dec	New Lat.	New Long.
217	SH 99	0.95 MI N OF US 59	00000	000000	29.81300	-96.08000	29.574658	-95.680685	29345	95808
218	SH 99	1.65 MI NE OF US 59	00000	000000	29.81400	-96.08000	29.581106	-95.678222	29349	95807
219	SH 99 SB	1.95 MI N OF US 59	00000	000000	29.81500	-96.08000	29.586938	-95.677605	29352	95807
220	SH 99 NB	1.95 MI N OF US 59	00000	000000	29.81600	-96.08000	29.587023	-95.676911	29352	95806
221	SP RAILROAD	0.03 MI N OF US 90A	00000	000000	29.81700	-96.08000	29.601934	-95.684364	29361	95811
222	SH 99 NB	3.70 MI N OF US 59	00000	000000	29.81800	-96.08000	29.606798	-95.687019	29364	95812
223	SH 99 SB	3.70 MI N OF US 59	00000	000000	29.81900	-96.08000	29.606835	-95.68751	29364	95813
224	SH 99	4.50 MI N OF US 59	00000	000000	29.82000	-96.08000	29.617776	-95.696082	29371	95818
225	SH 99	4.65 MI N OF US 59	00000	000000	29.82100	-96.08000	29.622638	-95.698322	29374	95819
226	SH 99	5.25 MI N OF US 59	00000	000000	29.82200	-96.08000	29.629294	-95.701301	29378	95821
227	SH 99	5.85 MI N OF US 59	00000	000000	29.82300	-96.08000	29.637057	-95.704691	29382	95823
228	SH 99	6.95 MI N OF US 59	00000	000000	29.82400	-96.08000	29.660572	-95.7361	29396	95842
229	HARLEM RD	0.60 MI S OF SH 99	00000	000000	29.82500	-96.08000	29.646279	-95.72406	29388	95834
230	SH 99	7.85 MI N OF US 59	00000	000000	29.82600	-96.08000	29.679787	-95.764661	29408	95859
231	FUTURE RD	0.10 MI S OF FM 1093	00000	000000	29.82700	-96.08000	29.704959	-95.700579	29423	95820
232	DULLES AVE	1.50 MI S OF US 90A	30000	100000	29.82800	-96.08000	29.611755	-95.582381	29367	95749
233	DULLES RD NB	2.40 MI S OF US 90A	30000	100000	29.82900	-96.08000	29.592752	-95.581761	29356	95749
234	DULLES RD SB	2.40 MI S OF US 90A	30000	100000	29.83000	-96.08000	29.592755	-95.581931	29356	95749
235	S POST OAK RD	0.20 MI S OF COURT RD	30000	100000	29.83100	-96.08000	29.590268	-95.469354	29354	95682
236	FONDREN RD	1.20 MI S OF CO LINE	30000	100000	29.83200	-96.08000	29.596245	-95.504742	29358	95703
237	BELKNAP RD	0.05 MI S OF CO LINE	30000	100000	29.83300	-96.08000	29.664582	-95.611358	29399	95767
238	W AIRPORT BLVD WB	0.75 MI E OF US 59	30000	100000	29.83400	-96.08000	29.6531	-95.662711	29392	95798
239	W AIRPORT BLVD EB	0.75 MI E OF US 59	30000	100000	29.83500	-96.08000	29.650329	-95.663418	29390	95798
240	GOLFVIEW DR	0.30 MI NE OF THOMPSON	30000	100000	29.83600	-96.08000	29.571584	-95.752291	29343	95851
241	AIRPORT AVE	0.30 MI E OF LOUISE	30000	100000	29.83700	-96.08000	29.55662	-95.786418	29334	95872
242	BLUME RD	1.30 MI S OF US LP 529	30000	100000	29.83800	-96.08000	29.535462	-95.826986	29321	95896
243	4TH ST	0.65 MI SOUTH OF FM 1640	30000	100000	29.83900	-96.08000	29.555076	-95.79797	29333	95879
244	KLAUKE RD	.1M W OF BAMORE RD	00000	000000	29.84000	-96.08000	29.536195	-95.831849	29322	95899
245	LOUISE RD	0.10 MI N OF AIRPORT AVE	30000	100000	29.84100	-96.08000	29.555833	-95.789273	29333	95874

APPENDIX C

GALVESTON OBSERVATIONS REPORT

GALVESTON Observations Reprot

ID	StructureID	checked	Observations
1	120850005103039	c	moved to DGN location
2	120850005103040	E	moved to DGN position,(symbol missing in DGN) (flagged)
3	120850005103041	c	moved to DGN location
4	120850005103042	c	moved to DGN position
5	120850005103043	c	moved to DGN position
6	120850005103044	c	moved to DGN location
7	120850005103047	c	moved to DGN location
8	120850005103048	E	moved to DGN location,same info as 005103049
9	120850005103049	E	moved to DGN location,same info as 005103048
10	120850005103051	E	moved to DGN position,(symbol missing in DGN) (flagged)
11	120850005103054	E	moved to DGN position, (originally North of Cnty Line)
12	120850005103071	c	moved to DGN position
13	120850005108034	c	moved to DGN location
14	120850005108050	c	moved to DGN location
15	120850019204007	c	moved to DGN location
16	120850019204008	c	moved to DGN location
17	120850019204009	c	moved to DGN location
18	120850019204010	c	moved to DGN location
19	120850019204011	c	moved to DGN location
20	120850019204013	c	moved to DGN location
21	120850019204014	c	moved to DGN position
22	120850019204015	c	moved to DGN location
23	120850019204016	c	moved to DGN location
24	120850019204017	c	moved to DGN location
25	120850019204018	E	moved to DGN position, (originally near 0192-04-017)
26	120850019204019	c	moved to DGN location
27	120850019204020	c	moved to DGN location
28	120850019204021	c	moved to DGN location
29	120850019204022	c	moved to DGN location
30	120850019204026	c	moved to DGN location
31	120850019204031	c	moved to DGN location
32	120850019204070	c	moved to DGN location
33	120850019204141	c	moved to DGN location
34	120850036702023	c	moved to DGN location
35	120850036703029	c	moved to DGN location
36	120850036704024	E	moved to DGN position,(symbol missing in DGN),(Same location as 120850036704025,26,27,28,30)flagged

GALVESTON Observations Reprot

ID	StructureID	checked	Observations
37	120850036704025	E	moved to DGN position,(symbol missing in DGN),(Same location as 120850036704024,26,27,28,30) flagged
38	120850036706026	E	moved to DGN position,(symbol missing in DGN),(Same location as 120850036704024,25,27,28,30) flagged
39	120850036706027	E	moved to DGN position,(symbol missing in DGN),(Same location as 120850036704024,25,26,28,30)flagged
40	120850036706028	E	moved to DGN position,(symbol missing in DGN),(Same location as 120850036704024,25,26,27,30) flagged
41	120850036706030	E	moved to DGN position,(symbol missing in DGN),(Same location as 120850036704024,25,26,27,28)flagged
42	120850036707022	c	moved to DGN location
43	120850038906033	c	moved to DGN location
44	120850038906065	c	moved to DGN location
45	120850038906068	c	moved to DGN location
46	120850038906077	c	moved to DGN location
47	120850038906078	c	moved to DGN location
48	120850038906079	c	moved to DGN location
49	120850038906080	c	moved to DGN location
50	120850038906095	c	moved to DGN location
51	120850038911041	c	moved to DGN location
52	120850038911045	c	moved to DGN location
53	120850038911046	c	moved to DGN location
54	120850038911047	c	moved to DGN location
55	120850038911084	E	moved to DGN position, (originally North of Cnty Line)
56	120850038911085	c	moved to DGN position
57	120850038911086	c	moved to DGN position
58	120850050001001	c	moved to DGN location
59	120850050001110	c	moved to DGN location
60	120850050001123	c	moved to DGN location
61	120850050001124	c	moved to DGN location
62	120850050001132	c	moved to DGN location
63	120850050001194	c	moved to DGN location
64	120850050001204	E	moved to DGN position, (originally near 0500-01-194)
65	120850050001205	E	moved to DGN position, (originally near 0500-01-194)
66	120850050001206	c	moved to DGN location
67	120850050001243	c	moved to DGN location
68	120850050001244	E	moved to DGN location,bridge sym not complete
69	120850050001286	E	moved to DGN location,bridge sym not complete
70	120850050001323	E	moved to DGN location,bridge sym not complete
71	120850050004027	c	moved to DGN location
72	120850050004028	c	moved to DGN location

GALVESTON Observations Reprot

ID	StructureID	checked	Observations
73	120850050004029	c	moved to DGN location
74	120850050004030	c	moved to DGN location
75	120850050004033	E	moved to DGN location,bridge sym not complete
76	120850050004034	E	moved to DGN location,bridge sym not complete
77	120850050004052	c	moved to DGN location
78	120850050004053	c	moved to DGN location
79	120850050004122	c	moved to DGN location
80	120850050004134	c	moved to DGN location
81	120850050004167	E	moved to DGN position,(symbol missing in DGN) (flagged)
82	120850050004168	E	moved to DGN position,(symbol missing in DGN) (flagged)
83	120850050004169	E	moved to DGN position,(symbol missing in DGN) (flagged)
84	120850050004170	E	moved to DGN position,(symbol missing in DGN) (flagged)
85	120850050004171	E	moved to DGN position,(symbol missing in DGN) (flagged)
86	120850050004172	c	moved to DGN location
87	120850050004173	E	moved to DGN position,(symbol missing in DGN) (flagged)
88	120850050004174	c	moved to DGN location
89	120850050004187	c	moved to DGN location
90	120850050004188	c	moved to DGN location
91	120850050004189	E	moved to DGN location,bridge sym not complete
92	120850050004190	E	moved to DGN location,bridge sym not complete
93	120850050004191	c	moved to DGN location
94	120850050004193	c	moved to DGN location
95	120850050004202	E	moved to DGN position, (originally near 0500-04-122)
96	120850050004219	c	moved to DGN location
97	120850050004220	c	moved to DGN location
98	120850050004221	c	moved to DGN location
99	120850050004231	c	moved to DGN location
100	120850050004232	E	moved to DGN location,bridge sym not complete
101	120850050004237	c	moved to DGN location
102	120850050004238	E	moved to DGN location,bridge sym not complete
103	120850050004246	c	moved to DGN location
104	120850050004247	E	moved to DGN location,bridge sym not complete
105	120850050004248	E	moved to DGN location,bridge sym not complete
106	120850050004249	E	moved to DGN location,bridge sym not complete
107	120850050004250	E	moved to DGN location,bridge sym not complete
108	120850050004251	E	moved to DGN location,bridge sym not complete

GALVESTON Observations Reprot

ID	StructureID	checked	Observations
109	120850050004252	E	moved to DGN location,bridge sym not complete
110	120850050004253	E	moved to DGN location,bridge sym not complete
111	120850050004254	E	moved to DGN location,bridge sym not complete
112	120850050004255	c	moved to DGN location
113	120850050004256	c	moved to DGN location
114	120850050004290	c	moved to DGN location
115	120850050004322	E	moved to DGN position, (originally near 0500-04-034)
116	120850050004341	c	moved to DGN location
117	120850062801001	E	moved to DGN position, (originally near 0389-11-084)
118	120850068601001	c	moved to DGN location
119	120850068602003	c	moved to DGN location
120	120850068602239	c	moved to DGN location
121	120850097603023	c	moved to DGN location
122	120850097603025	c	moved to DGN location
123	120850097603031	c	moved to DGN location
124	120850097603032	E	moved to DGN position,(symbol missing in DGN) (flagged)
125	120850097603033	c	moved to DGN location
126	120850097603034	c	moved to DGN location
127	120850097603035	c	moved to DGN location
128	120850097603036	E	moved to DGN position,(symbol missing in DGN) (flagged)
129	120850097603037	E	moved to DGN position,(symbol missing in DGN) (flagged)
130	120850097603038	E	moved to DGN position, (originally North of Cnty Line)(symbol missing in DGN)
131	120850097604009	c	moved to DGN location
132	120850097604021	c	moved to DGN location
133	120850097604022	c	moved to DGN location
134	120850097801002	c	moved to DGN location
135	120850097801003	c	moved to DGN location
136	120850097801004	c	moved to DGN location
137	120850097801005	c	moved to DGN location
138	120850097802006	c	moved to DGN location
139	120850097802007	c	moved to DGN location
140	120850097802008	E	moved to DGN position, (originally North of Cnty Line)
141	120850097802011	E	moved to DGN position, (originally North of Cnty Line)(symbol missing in DGN) (flagged)
142	120850097901003	c	moved to DGN location
143	120850097901004	c	moved to DGN location
144	120850097901007	c	moved to DGN location

GALVESTON Observations Reprot

ID	StructureID	checked	Observations
145	120850097901008	c	moved to DGN location
146	120850100202001	c	moved to DGN location
147	120850100202002	c	moved to DGN location
148	120850141401023	c	moved to DGN position
149	120850141401024	E	moved to DGN position, (symbol missing in DGN) (flagged)
150	120850141401025	E	moved to DGN position, (symbol missing in DGN) (flagged)
151	120850160701003	E	moved to DGN position, (originally near 0389-06-065)
152	120850160701004	E	moved to DGN position, (originally near 1607-01-011)
153	120850160701005	c	moved to DGN position
154	120850160701006	c	moved to DGN position
155	120850160701008	E	moved to DGN location,bridge sym not complete
156	120850160701009	E	moved to DGN location,bridge sym not complete
157	120850160701010	E	moved to DGN location,bridge sym not complete
158	120850160701011	c	moved to DGN position
159	120850160701012	c	moved to DGN location
160	120850160701013	c	moved to DGN location
161	120850160701014	c	moved to DGN location
162	120850160701015	E	moved to DGN location,bridge sym not complete
163	120850160701016	E	moved to DGN location,bridge sym not complete
164	120850160701017	c	moved to DGN position
165	120850184402003	c	moved to DGN location
166	120850191101001	c	moved to DGN location
167	120850191101002	c	moved to DGN location
168	120850191101003	c	moved to DGN location
169	120850191101004	E	moved to DGN position,(symbol missing in DGN) (flagged)
170	120850252301002	c	moved to DGN location
171	120850252301015	c	moved to DGN location
172	120850252303012	c	moved to DGN location
173	120850304901001	c	moved to DGN location
174	120850304901002	c	moved to DGN location
175	120850304901004	E	moved to DGN location,sym was located North of Galveston cnty line
176	120850304901005	E	moved to DGN location,sym was located North of Galveston cnty line
177	120850304901006	c	moved to DGN location
178	120850304901007	c	moved to DGN location
179	120850331202002	c	moved to DGN location
180	120850331202003	c	moved to DGN location

GALVESTON Observations Reprot

ID	StructureID	checked	Observations
181	120850359501001	E	moved to DGN location, sym missing in DGN, no SH 275, originally located out of Galveston Cnty (flagged)
182	120850359501002	E	moved to DGN location, sym missing in DGN, no SH 275, originally located out of Galveston Cnty (flagged)
183	120850811512002	E	# moved to a possible location but a positive identification of the point is still uncertain
184	120850832512001	E	moved to DGN location, sym missing in DGN, no Jones RD., originally located out of Galveston Cnty Flagged
185	120850832512002	E	moved to DGN location, sym missing in DGN, no Jones RD., originally located out of Galveston Cnty (Flagged)
186	120850832612001	E	moved to DGN location, sym missing in DGN, no Seawolf Pkwy, originally located out of Galveston Cnty (Flagged)
187	120850832612004	E	moved to DGN location, sym missing in DGN, no Seawolf Pkwy, originally located out of Galveston Cnty (Flagged)
188	120850832712002	E	moved to DGN location, sym missing in DGN, no Pabst or Stewart, originally located out of Galveston Cnty (Flagged)
189	120850839812002	E	moved to DGN location, sym missing in DGN, no 4th or Cemetery Rd, originally located out of Galveston Cnty (Flagged)
190	120850839912001	E	moved to DGN location, sym missing in DGN, no 28th or Moore, originally located out of Galveston Cnty (Flagged)

GALVESTON Observations Reprot

ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Lat_dec	New Long_dec	New Lat.	New Long.
1	SH 3	1.6 MI SE SH3 & FM 518	29294	095048	29.49000	-95.08000	29.49026	-95.079078	29294	95447
2	SH 3	.2MI.N.OF FM-1764	29239	094593	29.39833	-94.98833	29.397897	-94.987671	29239	94993
3	SH 3	.25MI.NW.OF SH-3&FM-1765	29227	094588	29.37833	-94.98000	29.381846	-94.972711	29229	94984
4	SH146/SH3 INTER.	@INTLOF SH-146 & SH-3	29209	094565	29.34833	-94.94167	29.348861	-94.941706	29209	94965
5	FM 1764 (EB)	@INT. OF SH-3 & FM 1764	29237	094591	29.39500	-94.98500	29.395932	-94.985847	29238	94992
6	SH 3	0.4 MI S. OF FM 517	29274	095021	29.45667	-95.03500	29.456427	-95.046695	29274	95428
7	SH 3 NB	.8MI W OF FM518/SH3	29312	095062	29.52000	-95.10333	29.518325	-95.100977	29311	95461
8	SH3 NB	1.5 MI NW OF FM1764	29248	095001	29.41333	-95.00167	29.41306	-95.001742	29248	95401
9	SH3 NB	1.5 MI NW OF FM1764	29248	095001	29.41333	-95.00167	29.412955	-95.001803	29248	95401
10	SH-3	.336MI. N. FO FM-519	29217	094572	29.36167	-94.95333	29.361944	-94.954199	29217	94973
11	FM 1764 (WB)	@INT. OF SH-3 & FM 1764	00001	000001	29.60000	-95.30000	29.396107	-94.985981	29238	94992
12	SH 3	.2MI.SE.SH-146	29208	094565	29.34667	-94.94167	29.343988	-94.938217	29206	94963
13	SPUR 342 SB	.3MI.S.OF IH-45	29170	094501	29.28333	-94.83500	29.284212	-94.835691	29171	94901
14	SPUR 342 NB	.3MI.S. OF IH-45	29170	094501	29.28333	-94.83500	29.284306	-94.835514	29171	94901
15	SH 6	2.5 MI SE SH6 & SH35	29244	095113	29.40667	-95.18833	29.406208	-95.187531	29244	95513
16	SH 6	3.8MI SE SH6/SH35	29240	095101	29.40000	-95.16833	29.399573	-95.168121	29240	95501
17	SH 6	4.2MI NW SH6 & FM646N	29237	095092	29.39500	-95.15333	29.394324	-95.152812	29237	95492
18	SH 6	3.8 MI NW SH6 & FM646N	29235	095089	29.39167	-95.14833	29.392344	-95.147031	29235	95488
19	SH 6	2.6 MI NW SH6 & FM646 N	29232	095078	29.38667	-95.13000	29.386293	-95.12936	29232	95478
20	SH 6	.5MI NW SH6 & FM646 N.	29225	095058	29.37500	-95.09667	29.375406	-95.097602	29225	95459
21	SH 6	.4 MI E. ALTA LOMA ON SH6	29223	095053	29.37167	-95.08833	29.367032	-95.073062	29220	95444
22	SH 6	1.7MI W OF FM2004 & SH6	29220	095043	29.36667	-95.07167	29.361849	-95.057879	29217	95435
23	SH 6	.9MI.W.OF FM-2004	29217	095035	29.36167	-95.05833	29.357554	-95.045304	29215	95427
24	SH 6	.2MI.W.OF FM-2004	29215	095027	29.35833	-95.04500	29.353905	-95.034578	29212	95421
25	SH 6	.4MI.E.OF FM-2004	29212	095020	29.35333	-95.03333	29.350958	-95.025099	29211	95415
26	SH 6	2.3MI.E.OF COW GULLEY	29204	094593	29.34000	-94.98833	29.340106	-94.989207	29204	94994
27	SH 6	1.9MI.NW.OF HIGHLAND BAYU	29202	094586	29.33667	-94.97667	29.336533	-94.977261	29202	94986
28	SH 6	1.7MI.NW.OF HIGHLAND BAYU	29199	094583	29.33167	-94.97167	29.334991	-94.972112	29201	94983
29	SH 6	.2MI.NW.OF HIHGLAND BAYO	29199	094570	29.33167	-94.95000	29.331623	-94.949366	29199	94970
30	SH 6	SH-6& HIGHLAND BAYOU	29198	094567	29.33000	-94.94500	29.331541	-94.945322	29199	94967
31	SH6	.2MI.W.OF FM-2004	29212	095021	29.35333	-95.03500	29.355405	-95.039003	29213	95423
32	SH 6 NB	@ TEXAS CITY-Y INTER.	29197	094562	29.32833	-94.93667	29.330034	-94.935425	29198	94961
33	SH 6 CONN SH 146	N.OF TEX.CITY-Y INTER.	29197	094562	29.32833	-94.93667	29.332948	-94.931449	29200	94959
34	SH124	1.0MI N OF HIGHISLAND TEX	29356	094233	29.59333	-94.38833	29.591531	-94.389946	29355	94634
35	SH-87	7.3MI SW OF SH124/SH87	29305	094300	29.50833	-94.50000	29.508234	-94.500115	29305	94700
36	SH-87	GALVESTON FERRY	29247	094428	29.41167	-94.71333	29.362334	-94.77855	29217	94867

GALVESTON Observations Reprot

ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Lat_dec	New Long_dec	New Lat.	New Long.
37	SH-87	GALVESTON FERRY	29247	094428	29.41167	-94.71333	29.327228	-94.772826	29196	94864
38	SH 87	GALVESTON FERRY	29247	094428	29.41167	-94.71333	29.327202	-94.772781	29196	94864
39	SH 87	GALVESTON FERRY	29247	094428	29.41167	-94.71333	29.327181	-94.772749	29196	94864
40	SH-87	GALVESTON FERRY	29247	094428	29.41167	-94.71333	29.362577	-94.779262	29218	94868
41	SH-87	GALVESTON FERRY	29247	094428	29.41167	-94.71333	29.362626	-94.779196	29218	94868
42	LOOP 108	.5MI.NW OF SH-87	29223	094460	29.37167	-94.76667	29.372074	-94.768311	29223	94861
43	SH 146 NB	2.6MIS.OF MOSES BAYOU	29231	094570	29.38500	-94.95000	29.385383	-94.950819	29231	94970
44	SH 146 NB	@ INT.FM-1764 & SH-146	29237	094570	29.39500	-94.95000	29.395096	-94.950768	29237	94970
45	SH 146	6 MI S OF SH146 & FM517	29274	094582	29.45667	-94.97000	29.461303	-94.97233	29277	94983
46	SH 146 SB	@ MOSES BAYOU & SH-146	29253	094576	29.42167	-94.96000	29.421105	-94.961113	29253	94977
47	SH 146 NB	@ MOSES BAYOU & SH-146	29253	094576	29.42167	-94.96000	29.421804	-94.960459	29253	94976
48	SH 146 SB	1.1MIS.OF MOSES BAYOU	29243	094573	29.40500	-94.95500	29.405717	-94.955551	29243	94973
49	SH 146 NB	1.1MIS.OF MOSES BAYOU	29243	094573	29.40500	-94.95500	29.406253	-94.954633	29244	94973
50	SH 146 SB	FM-1764 @ SH-146	29237	094570	29.39500	-94.95000	29.39507	-94.950972	29237	94971
51	LOOP 197	2.5MIE.OF SH-146	29245	094548	29.40833	-94.91333	29.407997	-94.913955	29245	94948
52	LOOP 197	.3MIE.OF SH-146	29245	094571	29.40833	-94.95167	29.407888	-94.951448	29245	94971
53	LOOP 197	.5MIE.OF SH-146	29245	094568	29.40833	-94.94667	29.407914	-94.947574	29245	94969
54	LOOP 197	2.2MIE.OF SH-146	29245	094552	29.40833	-94.92000	29.407985	-94.919417	29245	94952
55	LOOP 197	1.6MIS.W.OF SH-341	30205	094557	30.34167	-94.92833	29.34207	-94.928565	29205	94957
56	LOOP 197	.9MIS.W.OF SH-341	29211	094555	29.35167	-94.92500	29.350665	-94.924846	29210	94955
57	LOOP 197	.5MIS.W.OF SH-341	29216	094552	29.36000	-94.92000	29.355922	-94.922573	29214	94954
58	IH 45 NB	2MI N OF GAL.CAUSEWAY	29184	094544	29.30667	-94.90667	29.306811	-94.90556	29184	94943
59	IH 45 SB	@ W GALVESTON CITY LIMITS	29178	094532	29.29667	-94.88667	29.295969	-94.887408	29178	94932
60	IH 45 NB	1MIS.OF GAL. CAUSEWAY	29172	094520	29.28667	-94.86667	29.285193	-94.862693	29171	94918
61	IH 45 SB	1MIS.OF GAL.CAUSEWAY	29172	094520	29.28667	-94.86667	29.285013	-94.862689	29171	94918
62	IH 45 SB	2MI N OF GAL.CAUSEWAY	29184	094544	29.30667	-94.90667	29.306761	-94.905761	29184	94943
63	IH 45 SB	@ IH-45 & 61ST.	29181	094473	29.30167	-94.78833	29.28808	-94.837617	29173	94903
64	IH 45 NB	8MIS.OF SH-188	29174	094496	29.29000	-94.82667	29.288378	-94.850152	29173	94910
65	IH 45 SB	.8MIS.OF FM-188	29174	094496	29.29000	-94.82667	29.288204	-94.850121	29173	94910
66	IH 45 NB	AT OH45/61ST ST.	29181	094473	29.30167	-94.78833	29.288253	-94.837702	29173	94903
67	NB IH 45	AT GALVESTON CITY LIMIT	29178	094532	29.29667	-94.88667	29.296158	-94.88737	29178	94932
68	IH 45 SB FR	1.4MINW.OF GC & SF R.R.	29193	094553	29.32167	-94.92167	29.321957	-94.923085	29193	94954
69	IH45	1.4MI NW OF GC & SF RR	29193	094553	29.32167	-94.92167	29.322221	-94.922795	29193	94954
70	IH 45 NB FR	1.4MI NW OF GC+SF RR	29193	094553	29.32167	-94.92167	29.322486	-94.922534	29193	94954
71	IH 45 NB	.3 MI. S. OF CLEAR CR.	29305	095070	29.50833	-95.11667	29.502842	-95.113751	29302	95468
72	IH 45 SB	.3MIS.OF CLEAR CR.& IH45	29305	095070	29.50833	-95.11667	29.502757	-95.113922	29302	95468

GALVESTON Observations Reprot

ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Lat_dec	New Long_dec	New Lat.	New Long.
73	IH 45 NB	.3MI.S.OF FM-517 & IH-45	29267	095044	29.44500	-95.07333	29.44513	-95.073635	29267	95444
74	IH 45 SB	.3 MI S OF FM517 & IH45	29267	095044	29.44500	-95.07333	29.44502	-95.073809	29267	95444
75	IH 45	.4MI.S.OF FM-519	29213	094584	29.35500	-94.97333	29.35466	-94.972928	29213	94984
76	IH 45	1.5MI.S.OF FM-519	29208	094574	29.34667	-94.95667	29.347583	-94.956989	29209	94974
77	IH 45 NB	.3MI N. OF DICKINSON BYU.	29270	095046	29.45000	-95.07667	29.44891	-95.076713	29269	95446
78	IH 45 SB	.3MI DICKINSON BAYOU	29270	095046	29.45000	-95.07667	29.448808	-95.076883	29269	95446
79	VAUTHIER RD	1MI.NW.OF FM-519	29220	094595	29.36667	-94.99167	29.365865	-94.992372	29220	94995
80	IH-45 NB	1.3MI.NW OF TX.CITY-Y INT	29205	094570	29.34167	-94.95000	29.343157	-94.949149	29206	94969
81	IH 45 NB FR	.2MI S OF FM518	29300	095065	29.50000	-95.10833	29.500523	-95.112009	29300	95467
82	IH 45 NB	0.2 MI S FM 518	29300	095065	29.50000	-95.10833	29.500346	-95.112253	29300	95467
83	IH 45 SB	.2 MI. S. OF FM518	29300	095065	29.50000	-95.10833	29.500246	-95.112432	29300	95467
84	IH 45 SB FR	.2 MI. S OF FM518	29300	095065	29.50000	-95.10833	29.50009	-95.112689	29300	95468
85	IH45	AT CALDER ROAD	29293	095063	29.48833	-95.10500	29.491617	-95.10717	29295	95464
86	IH 45 NB ON RP	& IH45 & CALDER ROAD	29293	095063	29.48833	-95.10500	29.491313	-95.106511	29295	95464
87	IH-45 SB EXIT RAMP	.15 MI. W. IH45 & CALDER	29293	095063	29.48833	-95.10500	29.488828	-95.108039	29293	95465
88	CALDER DRIVE	IH45 & CALDER DRIVE	29293	095063	29.48833	-95.10500	29.490862	-95.106725	29295	95464
89	IH 45	1.5 MI S OF FM517	29260	095038	29.43333	-95.06333	29.433681	-95.063507	29260	95438
90	HOLLAND RD	1.8 MI SE FM 517	29258	095036	29.43000	-95.06000	29.430172	-95.060047	29258	95436
91	IH 45	1.2MI.S.OF FM-517	29255	095033	29.42500	-95.05500	29.425944	-95.055918	29256	95434
92	JOHNNY PALMER RD	1MI.S.OF FM-1764	29234	095012	29.39000	-95.02000	29.389957	-95.020528	29234	95412
93	HUGHES ROAD	0.7 MIA A OD FM 517	29264	095042	29.44000	-95.07000	29.440825	-95.070284	29264	95442
94	IH 45	IH-45 & FM-1764	29241	095019	29.40167	-95.03167	29.402394	-95.032753	29241	95420
95	IH 45	.25MI.N OF FM-1765	29220	094595	29.36667	-94.99167	29.37838	-95.00805	29227	95405
96	IH 45 NB	@TEX. CITY Y-INTERSECTION	29198	094560	29.33000	-94.93333	29.328847	-94.931034	29197	94959
97	IH 45 SB	@TEX.CITY INERSECTION	29199	094560	29.33167	-94.93333	29.330314	-94.933915	29198	94960
98	IH 45 NB	@TEX.CITY Y-INTERSECTION	29199	094560	29.33167	-94.93333	29.330514	-94.933131	29198	94960
99	IH 45	@ FM-519	29215	094588	29.35833	-94.98000	29.35747	-94.979318	29214	94988
100	IH 45	.8MI.S.OF FMM-519	29211	094580	29.35167	-94.96667	29.352143	-94.96727	29211	94980
101	IH 45	INTER. OF IH-45 & FM-1765	29226	095003	29.37667	-95.00500	29.376409	-95.005614	29226	95403
102	IH 45	1.4MI.NW.OFIH-45 &FM-518	29222	094598	29.37000	-94.99667	29.370149	-94.997761	29222	94999
103	FM-646	2 MI. S. OF FM 518	29280	095053	29.46667	-95.08833	29.465719	-95.090497	29279	95454
104	IH 45 NB FR	3 MI S. OF FM 518	29278	095052	29.46333	-95.08667	29.462481	-95.087365	29277	95452
105	IH 45 NB	3 MI S. OF FM 518	29278	095052	29.46333	-95.08667	29.462324	-95.08762	29277	95453
106	IH 45 SB	3 MI S. OF FM 518	29278	095052	29.46333	-95.08667	29.462226	-95.087791	29277	95453
107	IH 45 SB FR	3.2MI S OF FM518	29278	095052	29.46333	-95.08667	29.462075	-95.088049	29277	95453
108	IH 45 NB FR	.3 MI N OF FM517	29272	095047	29.45333	-95.07833	29.452809	-95.079501	29272	95448

GALVESTON Observations Reprot

ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Lat_dec	New Long_dec	New Lat.	New Long.
109	IH 45 NB	4.1MI S OF FM518	29272	095047	29.45333	-95.07833	29.452657	-95.07976	29272	95448
110	IH 45 SB	4.1MI S OF FM518	29272	095047	29.45333	-95.07833	29.452546	-95.079923	29272	95448
111	IH 45 SB FR	4.1MI S OF FM518	29272	095047	29.45333	-95.07833	29.452397	-95.080182	29271	95448
112	IH 45 NBFR	.3MI.S.OF FM-517	29267	095044	29.44500	-95.07333	29.4453	-95.073392	29267	95444
113	IH 45 SBFR	.3MI S OF FM517	29267	095044	29.44500	-95.07333	29.444869	-95.074058	29267	95444
114	FM 1764 CONN	.2 MI SW OF FM-2004	29241	095019	29.40167	-95.03167	29.406307	-95.036611	29244	95422
115	IH 45	1.2MI.S.OF FM-519	29208	094574	29.34667	-94.95667	29.350349	-94.96322	29210	94978
116	IH 45 SB	1.3MI.NW OF TX.CITY-Y INT	29205	094570	29.34167	-94.95000	29.343021	-94.949281	29206	94970
117	SH-341	LOOP 197 INT.@ FM-519	29206	094555	29.34333	-94.92500	29.364035	-94.919509	29218	94952
118	FM 1765	.5MI.E.OF SH-146	29228	094566	29.38000	-94.94333	29.381409	-94.942517	29229	94966
119	FM 1765	.3MI.E.OF FM-2004	29226	095016	29.37667	-95.02667	29.377709	-95.025674	29227	95415
120	FM-1765	FM 1765	29227	095007	29.37833	-95.01167	29.375365	-95.008122	29225	95405
121	FM 518	3MI.E.OF FM528 & FM518	29302	095067	29.50333	-95.11167	29.503544	-95.111244	29302	95467
122	FM 518	.2MI SW FM2094 & FM518	29312	095046	29.52000	-95.07667	29.520474	-95.077871	29312	95447
123	FM518	.65MI NW OF FM528	29311	095114	29.51833	-95.19000	29.517836	-95.190123	29311	95514
124	FM518	.4MI SE OF FM528	29303	095110	29.50500	-95.18333	29.504399	-95.183836	29303	95510
125	FM518	.86MI SE OF FM528	29303	095123	29.50500	-95.20500	29.498104	-95.180093	29299	95508
126	FM518	2.7MI W OF IH45	29303	095082	29.79900	-96.08000	29.489066	-95.155184	29293	95493
127	FM518	1.25MI E OF IH45	29304	095100	29.50667	-95.16667	29.497453	-95.133872	29298	95480
128	FM518	.65MI E OF IH45	29303	095084	29.50500	-95.14000	29.500379	-95.124504	29300	95475
129	FM518	.4MI W OF IH45	29303	095060	29.50500	-95.10000	29.501207	-95.120289	29301	95472
130	FM518	.8MI E OF IH45	00001	000001	29.61000	-95.30000	29.505919	-95.10124	29304	95461
131	FM 2094	.5MI SW OF FM2094/SH146	29324	095017	29.54000	-95.02833	29.540512	-95.027857	29324	95417
132	FM 2094	.6MI.NE.FM2094 & FM518	29318	095043	29.53000	-95.07167	29.53085	-95.071276	29319	95443
133	FM 2094	.1MI SW SH146/FM2094	29325	095032	29.54167	-95.05333	29.541935	-95.054284	29325	95433
134	FM 646	.4MI S OF FM646/FM517	29262	095055	29.43667	-95.09167	29.436527	-95.091963	29262	95455
135	FM 517	.3MI N OF FM517/IH45	29270	095043	29.45000	-95.07167	29.451829	-95.072065	29271	95443
136	FM 517	.7MI N OF FM517/IH45	29275	095040	29.45833	-95.06667	29.45488	-95.067585	29273	95441
137	FM 517	.5MI S OF FM517/SH3	29275	095030	29.45833	-95.05000	29.459423	-95.059964	29276	95436
138	FM 517	2.1MI.W.OF SH-146&FM-517	29282	095008	29.47000	-95.01333	29.469325	-95.01315	29282	95408
139	FM 517	3.9MI NE FM517/SH146	29291	094560	29.48500	-94.93333	29.485109	-94.932166	29291	94959
140	FM 517	9.2MI E OF SH146/FM517	29389	094584	29.64833	-94.97333	29.485377	-94.968334	29291	94981
141	FM 517	2.6 MI E OF SH146/FM517	29389	094560	29.64833	-94.93333	29.487881	-94.953089	29293	94972
142	FM 519	.2MI.N.OF SH-6	29211	095008	29.35167	-95.01333	29.351167	-95.014932	29211	95409
143	FM 519	1.1MI.NE.OF FM-519& SH-6	29215	095001	29.35833	-95.00167	29.357183	-95.003582	29214	95402
144	FM-519	.4MI.E.OF IH-45 & FM-519	29215	094584	29.35833	-94.97333	29.357878	-94.973294	29215	94984

GALVESTON Observations Reprot

ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Lat_dec	New Long_dec	New Lat.	New Long.
145	FM-519	1.4MI.E.OF IS45 & FM519	29215	094574	29.35833	-94.95667	29.358014	-94.956908	29215	94974
146	FM 517	3.6MI NE OF FM517/SH35	29261	095102	29.43500	-95.17000	29.435765	-95.169771	29261	95502
147	FM 517	5.6MI NE FM517/SH35	29263	095081	29.43833	-95.13500	29.438518	-95.135683	29263	95481
148	FM 528	3.9 MI SW OF FM 518	29280	095135	29.46667	-95.22500	29.466409	-95.225344	29280	95535
149	FM 528	0.5 MI SW OF FM 518	29302	095116	29.50333	-95.19333	29.503206	-95.194496	29302	95517
150	FM 528	0.19 MI NE OF COUNTY LINE	29278	095137	29.46333	-95.22833	29.463047	-95.227667	29278	95537
151	FM 1764	1.9MI.E.OF FM-1764	29237	094570	29.39500	-94.95000	29.393089	-94.918912	29236	94951
152	FM 1764	.4MI E OF FM1764/SH146	29237	094573	29.39500	-94.95500	29.395079	-94.944227	29237	94967
153	FM 1764	.2MI.W.OF SH-3	29237	094594	29.39500	-94.99000	29.395967	-94.990526	29238	94994
154	FM 1764 ON&OFF RPS	.2MI.W.OF SH-3	29238	094594	29.39667	-94.99000	29.397061	-94.988766	29238	94993
155	FM 1764	1.2MI.W.OF FM-1764&SH-146	29237	094582	29.39500	-94.97000	29.395321	-94.97118	29237	94983
156	FM 1764 EBFR	.7MI.W.OF FM-1764& SH-146	29237	094577	29.39500	-94.96167	29.394949	-94.962928	29237	94978
157	FM 1764 WBFR	.7MI.W.OF FM-1764&SH-146	29237	094577	29.39500	-94.96167	29.395695	-94.962902	29237	94978
158	FM 1764 WB	.3MI.W.OF FM-1764 & SH146	29237	094573	29.39500	-94.95500	29.395162	-94.955585	29237	94973
159	FM 1764	.2MI NE OF IH45	29243	095018	29.40500	-95.03000	29.404859	-95.030914	29243	95419
160	FM 1764	.8MI E OF IH45	29241	095012	29.40167	-95.02000	29.401113	-95.019977	29241	95412
161	FM 1764	1MI W OF SH3	29237	094608	29.39500	-95.01333	29.39751	-95.003281	29239	95402
162	FM-1764 WB	.348 MI. W. OF SH-3	29237	094577	29.39500	-94.96167	29.395407	-94.962914	29237	94978
163	FM-1764 EB	.348 MI. W. OF SH-3	29237	094577	29.39500	-94.96167	29.395225	-94.962916	29237	94978
164	FM-1764 EB	.3 MI W OF FM1764 & SH146	29237	094573	29.39500	-94.95500	29.394978	-94.955595	29237	94973
165	FM 2351	.2MI. NE OF FM518 & FM2351	29325	095118	29.54167	-95.19667	29.535531	-95.203386	29321	95522
166	FM 2004	1.2MI.D.OF FM-2004 & SH-3	29254	095018	29.42333	-95.03000	29.424616	-95.030956	29255	95419
167	FM 2004	.7MI.N.OF FM-1765 & FM2004	29232	095018	29.38667	-95.03000	29.385714	-95.030699	29231	95418
168	FM 2004	.1MI.N.OF SH-6	29212	095018	29.35333	-95.03000	29.353306	-95.030109	29212	95418
169	FM2004	.8MI N OF FM1764	29244	095018	29.40667	-95.03000	29.416331	-95.030832	29250	95418
170	FM 2004	1MI SW OF FM2004/FM646	29186	095058	29.31000	-95.09667	29.311075	-95.097509	29187	95459
171	FM2004	.9MI S OF SH6	29207	095020	29.34500	-95.03333	29.341946	-95.036807	29205	95422
172	FM 646	.4MI N OF FM646.FM2004	29192	095048	29.32000	-95.08000	29.320287	-95.080493	29192	95448
173	FM 646	.3MI SW OF SH3	29286	095044	29.47667	-95.07333	29.477407	-95.073478	29286	95444
174	FM 646	1.2MI.NE.FM-3002 & SH-3	29294	095034	29.49000	-95.05667	29.490697	-95.054891	29294	95433
175	FM 646	.3MI SW OF IH45	29328	095057	29.54667	-95.09500	29.462662	-95.0948	29278	95457
176	FM 646	.8MI N OF FM517	29322	095057	29.53667	-95.09500	29.452339	-95.095535	29271	95457
177	FM 646	1.6MI E OF FM1266	29295	095012	29.49167	-95.02000	29.492216	-95.02156	29295	95413
178	FM 646	1.9MI E OF FM1266	29295	095009	29.49167	-95.01500	29.492343	-95.015126	29295	95409
179	FM-270	.9 MI. W. OF FM-518	29317	095053	29.52833	-95.08833	29.528055	-95.089219	29317	95454
180	FM-270	0.1 MI. W. OF FM-518	29314	095047	29.52333	-95.07833	29.52227	-95.078665	29313	95447

GALVESTON Observations Reprot

ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Lat_dec	New Long_dec	New Lat.	New Long.
181	SH 275	AT 51st STREET & SH 275	30000	100000	29.62000	-95.30000	29.297079	-94.82672	29178	94896
182	SH 275	AT 51st STREET AND SH 275	30000	100000	29.63000	-95.30000	29.296311	-94.826292	29178	94896
183	WHISPERING PINES	0.35 MI NE OF FM 518	30000	100000	29.64000	-95.30000	29.523153	-95.186138	29314	95512
184	JONES DR EB	1.00 MI W OF FM 342	30000	100000	29.65000	-95.30000	29.268636	-94.84483	29161	94907
185	JONES DR WB	1.00 MI W OF FM 342	30000	100000	29.66000	-95.30000	29.269094	-94.845092	29161	94907
186	SEAWOLF PKWY	1.20 MI N OF BROADWAY AVE	30000	100000	29.67000	-95.30000	29.306599	-94.821743	29184	94893
187	SEAWOLF PARKWAY	AT PORT INDUSTRIAL BLVD	30000	100000	29.68000	-95.30000	29.297965	-94.827082	29179	94896
188	STEWART RD	0.30 MI E OF PABST RD	30000	100000	29.69000	-95.30000	29.222167	-94.912281	29133	94947
189	CEMETERY RD	1.20 MI N OF 4TH ST	30000	100000	29.70000	-95.30000	29.495828	-95.088963	29297	95453
190	28TH ST	1.10 MI E OF MOORE RD	30000	100000	29.71000	-95.30000	29.33844	-95.128044	29203	95477

APPENDIX D

HARRIS OBSERVATIONS REPORT

HARRIS Observations Report

ID	StructureID	Checked	Observations
1	121020002709032	c	moved to DGN position
2	121020002709033	c	moved to DGN position
3	121020002709051	c	moved to DGN position
4	121020002709090	c	moved to DGN position
5	121020002709091	E	moved to DGN position, possible brigde sym miss flagged
6	121020002709183	c	moved to DGN position
7	121020002709222	c	moved to DGN position
8	121020002709223	c	moved to DGN position
9	121020002710036	c	moved to DGN position
10	121020002710037	c	moved to DGN position
11	121020002710042	c	moved to DGN position
12	121020002710062	c	moved to DGN position
13	121020002710063	c	moved to DGN position
14	121020002710064	c	moved to DGN position
15	121020002710065	c	moved to DGN position
16	121020002710074	c	moved to DGN position
17	121020002710084	c	moved to DGN position
18	121020002710173	c	moved to DGN position
19	121020002710186	c	moved to DGN position
20	121020002710257	c	moved to DGN position
21	121020002710258	c	moved to DGN position
22	121020002710270	c	moved to DGN position
23	121020002713071	E	moved to DGN position [misplaced brg] flagged
24	121020002713075	c	moved to DGN position
25	121020002713076	c	moved to DGN position
26	121020002713077	c	moved to DGN position
27	121020002713078	c	moved to DGN position
28	121020002713079	c	moved to DGN position
29	121020002713080	c	moved to DGN position
30	121020002713081	E	moved to DGN position, original near 0027-13-180 flagged
31	121020002713088	c	moved to DGN position
32	121020002713093	c	moved to DGN position
33	121020002713094	c	moved to DGN position
34	121020002713095	c	moved to DGN position
35	121020002713096	c	moved to DGN position
36	121020002713097	c	moved to DGN position
37	121020002713110	c	moved to DGN position
38	121020002713111	c	moved to DGN position
39	121020002713112	c	moved to DGN position
40	121020002713113	c	moved to DGN position

HARRIS Observations Report

ID	StructureID	Checked	Observations
41	121020002713114	c	moved to DGN position
42	121020002713117	c	moved to DGN position
43	121020002713118	c	moved to DGN position
44	121020002713119	c	moved to DGN position
45	121020002713120	c	moved to DGN position
46	121020002713121	c	moved to DGN position
47	121020002713122	c	moved to DGN position
48	121020002713123	c	moved to DGN position
49	121020002713124	E	moved to DGN position [missing brg symbol] flagged
50	121020002713128	c	moved to DGN position
51	121020002713129	c	moved to DGN position
52	121020002713130	c	moved to DGN position (same DGN symbol as 0027-13-265)
53	121020002713161	E	moved to DGN position, originally located west of the county line
54	121020002713170	c	moved to DGN position
55	121020002713171	c	moved to DGN position
56	121020002713172	E	moved to DGN position, original near 0027-13-180 flagged
57	121020002713174	c	moved to DGN position
58	121020002713175	c	moved to DGN position
59	121020002713176	c	moved to DGN position
60	121020002713177	c	moved to DGN position
61	121020002713178	c	moved to DGN position
62	121020002713179	c	moved to DGN position
63	121020002713180	E	moved to DGN position, originally near 0027-13-170
64	121020002713181	E	moved to DGN position, originally near 0027-13-170
65	121020002713182	c	moved to DGN position
66	121020002713184	c	moved to DGN position
67	121020002713185	c	moved to DGN position
68	121020002713195	c	moved to DGN position
69	121020002713196	c	moved to DGN position
70	121020002713198	c	moved to DGN position
71	121020002713199	c	moved to DGN position
72	121020002713200	c	moved to DGN position
73	121020002713205	c	moved to DGN position
74	121020002713206	c	moved to DGN position
75	121020002713207	c	moved to DGN position
76	121020002713208	c	moved to DGN position
77	121020002713209	c	moved to DGN position
78	121020002713210	c	moved to DGN position
79	121020002713211	c	moved to DGN position
80	121020002713212	c	moved to DGN position

HARRIS Observations Report

ID	StructureID	Checked	Observations
81	121020002713213	c	moved to DGN position
82	121020002713214	c	moved to DGN position
83	121020002713215	c	moved to DGN position
84	121020002713217	c	moved to DGN position
85	121020002713218	c	moved to DGN position
86	121020002713225	c	moved to DGN position
87	121020002713228	c	moved to DGN position
88	121020002713230	E	moved to DGN position [missing brg symbol] flagged
89	121020002713231	E	moved to DGN position [missing brg symbol] flagged
90	121020002713232	c	moved to DGN position
91	121020002713233	c	moved to DGN position
92	121020002713235	c	moved to DGN position
93	121020002713237	c	moved to DGN position
94	121020002713238	c	moved to DGN position
95	121020002713239	c	moved to DGN position
96	121020002713240	c	moved to DGN position
97	121020002713241	c	moved to DGN position
98	121020002713242	c	moved to DGN position
99	121020002713243	c	moved to DGN position
100	121020002713244	c	moved to DGN position
101	121020002713245	c	moved to DGN position
102	121020002713246	c	moved to DGN position
103	121020002713247	c	moved to DGN position
104	121020002713248	c	moved to DGN position
105	121020002713249	c	moved to DGN position
106	121020002713250	c	moved to DGN position
107	121020002713251	c	moved to DGN position
108	121020002713252	c	moved to DGN position
109	121020002713255	c	moved to DGN position
110	121020002713256	c	moved to DGN position
111	121020002713259	c	moved to DGN position
112	121020002713260	c	moved to DGN position
113	121020002713261	c	moved to DGN position
114	121020002713262	c	moved to DGN position
115	121020002713263	c	moved to DGN position
116	121020002713264	c	moved to DGN position
117	121020002713265	c	moved to DGN position (same DGN symbol as 0027-13-130)
118	121020002713272	c	moved to DGN position
119	121020002713273	c	moved to DGN position
120	121020002713274	c	moved to DGN position

HARRIS Observations Report

ID	StructureID	Checked	Observations
121	121020002713275	c	moved to DGN position
122	121020002713276	E	moved to DGN position, originally located East of the County Line
123	121020002713412	E	moved to DGN position, originally near 0027-07-297
124	121020002713427	E	moved to DGN position, originally near 0027-07-297
125	121020002713428	E	moved to DGN position, originally near 0027-07-297
126	121020002715082	c	moved to DGN position
127	121020002715083	c	moved to DGN position
128	121020002715277	c	moved to DGN position
129	121020002715278	c	moved to DGN position
130	121020002801001	c	moved to DGN position
131	121020002801002	c	moved to DGN position
132	121020002801003	E	moved to DGN position, placement uncertain, flagged
133	121020002801004	c	moved to DGN position
134	121020002801005	c	moved to DGN position
135	121020002801007	c	moved to DGN position
136	121020002801008	c	moved to DGN position
137	121020002801157	c	moved to DGN position
138	121020002801168	c	moved to DGN position
139	121020002801197	E	moved to DGN position (DGN symbol missing) (flagged)
140	121020002801198	E	moved to DGN position (DGN symbol missing) (flagged)
141	121020002801199	E	moved to DGN position (DGN symbol missing) (flagged)
142	121020002802171	E	moved to DGN position (originally located near 0028-01-004)
143	121020002802172	E	moved to DGN position (originally located near 0028-01-004)
144	121020002802173	E	moved to DGN position (originally located near 0028-01-004)
145	121020002802174	E	moved to DGN position (originally located near 0028-01-004)
146	121020002802175	E	moved to DGN position, DGN symbol missing (flagged)
147	121020002802177	E	moved to DGN position, DGN symbol missing (flagged)
148	121020002802178	c	moved to DGN position
149	121020002802179	c	moved to DGN position
150	121020002802180	E	moved to DGN position, DGN symbol missing (flagged)
151	121020002802181	c	moved to DGN position
152	121020002802182	c	moved to DGN position
153	121020002802183	c	moved to DGN position
154	121020002802184	c	moved to DGN position
155	121020002802185	E	moved to DGN position (originally located near 0028-02-181)
156	121020002802186	E	moved to DGN position (originally located near 0028-02-181)
157	121020002802187	c	moved to DGN position
158	121020002802188	c	moved to DGN position
159	121020002802189	c	moved to DGN position
160	121020002802190	c	moved to DGN position

HARRIS Observations Report

ID	StructureID	Checked	Observations
161	121020002802191	E	moved to DGN position (location unsure)
162	121020002802192	c	moved to DGN position
163	121020002802193	c	moved to DGN position
164	121020002802195	c	moved to DGN position
165	121020002802196	E	moved to DGN position, originally located South of Harris Cnty line
166	121020002802203	c	moved to DGN position
167	121020002802204	c	moved to DGN position
168	121020002802205	c	moved to DGN position
169	121020002802206	c	moved to DGN position
170	121020002802207	E	moved to DGN position, DGN symbol missing (flagged)
171	121020002802208	c	moved to DGN position
172	121020002802209	c	moved to DGN position
173	121020002802210	c	moved to DGN position
174	121020002802211	E	moved to DGN position, DGN symbol missing (flagged)
175	121020002802212	c	moved to DGN position (same DGN position as 0028-02-213)
176	121020002802213	c	moved to DGN position (same DGN position as 0028-02-212)
177	121020002802214	E	moved to DGN position (other direction missing)
178	121020002802215	c	moved to DGN position
179	121020002802216	c	moved to DGN position
180	121020005006026	c	moved to DGN position
181	121020005006101	c	moved to DGN position
182	121020005006102	c	moved to DGN position
183	121020005006105	c	moved to DGN position
184	121020005006121	c	moved to DGN position
185	121020005006122	c	moved to DGN position
186	121020005006127	c	moved to DGN position
187	121020005006128	c	moved to DGN position
188	121020005006148	E	moved DGN position, originally located South of the county line.
189	121020005006149	E	moved DGN position, originally located South of the county line.
190	121020005006150	E	moved DGN position, originally located South of the county line.
191	121020005008091	c	moved to DGN position
192	121020005008092	c	moved to DGN position
193	121020005008093	c	moved to DGN position
194	121020005008094	c	moved to DGN position
195	121020005008107	c	moved to DGN position
196	121020005008108	c	moved to DGN position
197	121020005008109	c	moved to DGN position
198	121020005008110	c	moved to DGN position
199	121020005008111	c	moved to DGN position
200	121020005008112	c	moved to DGN position

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ID	StructureID	Checked	Observations
201	121020005008113	c	moved to DGN position
202	121020005008114	c	moved to DGN position
203	121020005008115	c	moved to DGN position
204	121020005008129	c	moved to DGN position
205	121020005008130	c	moved to DGN position
206	121020005008131	c	moved to DGN position
207	121020005009045	c	moved to DGN position
208	121020005009046	c	moved to DGN position
209	121020005009063	c	moved to DGN position
210	121020005009065	c	moved to DGN position
211	121020005009067	c	moved to DGN position
212	121020005009068	c	moved to DGN position
213	121020005009069	c	moved to DGN position
214	121020005009070	c	moved to DGN position
215	121020005009071	c	moved to DGN position
216	121020005009072	c	moved to DGN position
217	121020005009073	c	moved to DGN position
218	121020005009076	c	moved to DGN position
219	121020005009077	c	moved to DGN position
220	121020005009078	c	moved to DGN position
221	121020005009080	c	moved to DGN position
222	121020005009081	c	moved to DGN position
223	121020005009082	c	moved to DGN position
224	121020005009083	c	moved to DGN position
225	121020005009085	c	moved to DGN position
226	121020005009088	c	moved to DGN position
227	121020005009089	c	moved to DGN position
228	121020005009116	c	moved to DGN position
229	121020005009117	c	moved to DGN position
230	121020005009118	c	moved to DGN position
231	121020005009119	c	moved to DGN position
232	121020005009120	E	moved to DGN position [missing brg symbol] flagged
233	121020005009141	c	moved to DGN position
234	121020005009142	c	moved to DGN position
235	121020005009143	c	moved to DGN position
236	121020005009144	c	moved to DGN position
237	121020005009145	c	moved to DGN position
238	121020005009146	c	moved to DGN position
239	121020005009147	c	moved to DGN position
240	121020005009151	c	moved to DGN position

HARRIS Observations Report

ID	StructureID	Checked	Observations
241	121020005009152	c	moved to DGN position
242	121020005009160	E	moved to DGN position [missing brg symbol] flagged
243	121020005009161	E	moved to DGN position [missing brg symbol] flagged
244	121020005009162	E	moved to DGN position [missing brg symbol] flagged
245	121020005009163	E	moved to DGN position [missing brg symbol] flagged
246	121020005009164	E	moved to DGN position [missing brg symbol] flagged
247	121020005009176	E	moved to DGN position [missing brg symbol] flagged
248	121020005009177	E	moved to DGN position [missing brg symbol] flagged
249	121020005009178	E	moved to DGN position [missing brg symbol] flagged
250	121020005009179	E	moved to DGN position [missing brg symbol] flagged
251	121020005009180	E	moved to DGN position [missing brg symbol] flagged
252	121020005102007	c	moved to DGN position
253	121020005102008	c	moved to DGN position
254	121020005102009	c	moved to DGN position
255	121020005102027	c	moved to DGN position
256	121020005102037	c	moved to DGN position (same DGN symbol as 0051-02-046)
257	121020005102046	E	moved to DGN position (same DGN symbol as 0051-02-037) (originally outside of Harris County)
258	121020005102052	E	moved to DGN position (DGN symbol missing) flagged
259	121020005102072	c	moved to DGN position
260	121020005102080	c	moved to DGN position
261	121020005102081	c	moved to DGN position
262	121020005106029	E	moved to DGN position (DGN symbol missing) flagged
263	121020005106032	c	moved to DGN position (same DGN symbol as 0051-06-033)
264	121020005106033	c	moved to DGN position (same DGN symbol as 0051-06-032)
265	121020011005020	E	moved to DGN position [missing brg symbol] flagged
266	121020011005021	c	moved to DGN position
267	121020011005029	c	moved to DGN position
268	121020011005041	E	moved to DGN position [missing brg symbol] flagged
269	121020011005044	c	moved to DGN position
270	121020011005053	c	moved to DGN position
271	121020011005055	c	moved to DGN position
272	121020011005056	c	moved to DGN position
273	121020011005082	c	moved to DGN position
274	121020011005083	c	moved to DGN position
275	121020011005089	c	moved to DGN position
276	121020011005090	c	moved to DGN position
277	121020011005094	c	moved to DGN position
278	121020011005130	c	moved to DGN position
279	121020011005131	c	moved to DGN position
280	121020011005137	c	moved to DGN position

HARRIS Observations Report

ID	StructureID	Checked	Observations
281	121020011005153	E	moved to DGN position, DGN sym missing, flagged originally South of Cty line
282	121020011006054	c	moved to DGN position
283	121020011006075	c	moved to DGN position
284	121020011006086	c	moved to DGN position
285	121020011006092	E	moved to DGN position, #of dir ??? flagged
286	121020011006093	c	moved to DGN position
287	121020011006095	c	moved to DGN position
288	121020011006098	c	moved to DGN position
289	121020011006100	c	moved to DGN position
290	121020011006101	c	moved to DGN position
291	121020011006102	c	moved to DGN position
292	121020011006103	c	moved to DGN position
293	121020011006104	c	moved to DGN position
294	121020011006105	c	moved to DGN position
295	121020011006106	c	moved to DGN position
296	121020011006107	c	moved to DGN position
297	121020011006108	c	moved to DGN position
298	121020011006109	c	moved to DGN position
299	121020011006110	c	moved to DGN position
300	121020011006111	c	moved to DGN position
301	121020011006112	c	moved to DGN position
302	121020011006113	c	moved to DGN position
303	121020011006114	c	moved to DGN position
304	121020011006115	c	moved to DGN position
305	121020011006122	E	moved to DGN position [missing brg symbol] flagged
306	121020011006127	c	moved to DGN position
307	121020011006151	c	moved to DGN position
308	121020011006152	c	moved to DGN position
309	121020011006283	c	moved to DGN position
310	121020011006284	c	moved to DGN position
311	121020011006287	c	moved to DGN position
312	121020011006288	c	moved to DGN position
313	121020011006289	c	moved to DGN position
314	121020011006290	c	moved to DGN position
315	121020011007136	c	moved to DGN position
316	121020011101002	c	moved to DGN position
317	121020011101023	E	moved to DGN position [missing brg symbol] flagged
318	121020011101060	c	moved to DGN position
319	121020011101064	c	moved to DGN position
320	121020017706027	c	moved to DGN position

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ID	StructureID	Checked	Observations
321	121020017706028	c	moved to DGN position
322	121020017706075	c	moved to DGN position
323	121020017706076	c	moved to DGN position
324	121020017706080	c	moved to DGN position
325	121020017706081	c	moved to DGN position
326	121020017706126	c	moved to DGN position
327	121020017706131	c	moved to DGN position
328	121020017706132	c	moved to DGN position
329	121020017706133	c	moved to DGN position
330	121020017706134	c	moved to DGN position
331	121020017706138	c	moved to DGN position
332	121020017706148	c	moved to DGN position
333	121020017706149	c	moved to DGN position
334	121020017707029	c	moved to DGN position
335	121020017707030	E	moved to DGN position [missing direction] flagged
336	121020017707031	E	moved to DGN position, same structure as 0177-07-185
337	121020017707067	c	moved to DGN position
338	121020017707068	c	moved to DGN position
339	121020017707069	c	moved to DGN position
340	121020017707070	c	moved to DGN position
341	121020017707073	c	moved to DGN position
342	121020017707074	c	moved to DGN position
343	121020017707077	c	moved to DGN position
344	121020017707078	E	moved to DGN position [missing direction] flagged
345	121020017707097	c	moved to DGN position
346	121020017707098	c	moved to DGN position
347	121020017707099	c	moved to DGN position
348	121020017707100	c	moved to DGN position
349	121020017707101	c	moved to DGN position
350	121020017707102	E	moved to DGN position [missing direction] flagged
351	121020017707103	E	moved to DGN position [missing direction] flagged
352	121020017707117	c	moved to DGN position
353	121020017707118	c	moved to DGN position
354	121020017707176	E	moved to DGN position, originally located South of Harris Cnty line
355	121020017707177	c	moved to DGN position
356	121020017707183	E	moved to DGN position (same brg symbol as 0177-07-074, originally located South of Harris Cnty line)
357	121020017707184	E	moved to DGN position (same brg symbol as 0177-07-073, located South of cnty line)
358	121020017707185	E	moved to DGN position, originally located South of Harris Cnty line
359	121020017707191	E	moved to DGN position (same brg symbol as 0177-07-070)
360	121020017707193	E	moved to DGN position, originally located South of Harris Cnty line

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ID	StructureID	Checked	Observations
361	121020017707241	c	moved to DGN position
362	121020017707243	c	moved to DGN position
363	121020017707273	E	moved to DGN position, originally located South of Harris Cnty line
364	121020017707274	E	moved to DGN position, originally located South of Harris Cnty line
365	121020017711048	c	moved to DGN position
366	121020017711049	c	moved to DGN position
367	121020017711050	c	moved to DGN position
368	121020017711051	c	moved to DGN position
369	121020017711052	c	moved to DGN position
370	121020017711057	E	moved to DGN position [missing brg symbol, ped ov] flagged
371	121020017711091	c	moved to DGN position
372	121020017711135	c	moved to DGN position
373	121020017711137	E	moved to DGN position [missing brg symbol] flagged
374	121020017711144	E	moved to DGN position [missing brg symbol] flagged
375	121020017711162	E	moved to DGN position, originally located near 3256-01-047
376	121020017711163	E	moved to DGN position, originally located South of Harris Cnty line
377	121020017711164	E	moved to DGN position, originally located South of Harris Cnty line
378	121020017711165	E	moved to DGN position, originally located South of Harris Cnty line
379	121020017711166	E	moved to DGN position, originally located South of Harris Cnty line
380	121020017711168	E	moved to DGN position (same location as 0177-11-390)
381	121020017711169	E	moved to DGN position, other direction missing (flagged)
382	121020017711170	E	moved to DGN position, other direction missing (flagged)
383	121020017711171	E	moved to DGN position (originally loc S of CL)
384	121020017711172	E	moved to DGN position, originally located South of Harris Cnty line
385	121020017711173	E	moved to DGN position, originally located South of Harris Cnty line
386	121020017711178	E	moved to DGN position, originally located South of Harris Cnty line
387	121020017711179	E	moved to DGN position, originally located South of Harris Cnty line
388	121020017711180	E	moved to DGN position, originally located South of Harris Cnty line
389	121020017711181	E	moved to DGN position, originally located South of Harris Cnty line
390	121020017711182	E	moved to DGN position, originally located South of Harris Cnty line
391	121020017711244	c	moved to DGN position
392	121020017711245	c	moved to DGN position
393	121020017711249	c	moved to DGN position
394	121020017711250	c	moved to DGN position
395	121020017711251	E	moved to DGN position [missing brg symbol, ped ov] flagged
396	121020017711252	c	moved to DGN position
397	121020017711390	c	moved to DGN position
398	121020017711392	c	moved to DGN position
399	121020017711407	c	moved to DGN position
400	121020017711410	c	moved to DGN position

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ID	StructureID	Checked	Observations
401	121020017801059	c	moved to DGN position (same DGN symbol as 0178-01-060)
402	121020017801060	e	moved to DGN position (same DGN symbol as 0178-01-059)
403	121020017809268	c	moved to DGN position
404	121020017809287	c	moved to DGN position
405	121020027106159	c	moved to DGN position
406	121020027106160	c	moved to DGN position
407	121020027106161	c	moved to DGN position
408	121020027106162	c	moved to DGN position
409	121020027106163	c	moved to DGN position
410	121020027106166	c	moved to DGN position
411	121020027106167	c	moved to DGN position
412	121020027106192	c	moved to DGN position
413	121020027106438	c	moved to DGN position
414	121020027106439	c	moved to DGN position
415	121020027106440	c	moved to DGN position
416	121020027106441	c	moved to DGN position
417	121020027106442	c	moved to DGN position
418	121020027106454	e	moved to DGN position
419	121020027107062	c	moved to DGN position
420	121020027107066	c	moved to DGN position
421	121020027107067	c	moved to DGN position
422	121020027107078	c	moved to DGN position
423	121020027107079	c	moved to DGN position
424	121020027107080	c	moved to DGN position
425	121020027107081	c	moved to DGN position
426	121020027107082	c	moved to DGN position
427	121020027107083	c	moved to DGN position
428	121020027107084	c	moved to DGN position
429	121020027107085	c	moved to DGN position
430	121020027107087	c	moved to DGN position
431	121020027107132	c	moved to DGN position
432	121020027107133	c	moved to DGN position
433	121020027107134	c	moved to DGN position
434	121020027107135	c	moved to DGN position
435	121020027107136	c	moved to DGN position
436	121020027107137	e	moved to DGN position
437	121020027107144	c	moved to DGN position
438	121020027107145	E	moved to DGN position [missing brg symbol] flagged
439	121020027107146	E	moved to DGN position [missing brg symbol] flagged
440	121020027107147	E	moved to DGN position [missing brg symbol] flagged

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ID	StructureID	Checked	Observations
441	121020027107191	c	moved to DGN position
442	121020027107194	c	moved to DGN position
443	121020027107195	c	moved to DGN position
444	121020027107196	c	moved to DGN position
445	121020027107197	c	moved to DGN position
446	121020027107198	c	moved to DGN position
447	121020027107199	c	moved to DGN position
448	121020027107200	c	moved to DGN position
449	121020027107226	c	moved to DGN position
450	121020027107227	c	moved to DGN position
451	121020027107228	c	moved to DGN position
452	121020027107229	c	moved to DGN position
453	121020027107231	E	moved to DGN position [missing brg symbol] flagged
454	121020027107232	E	moved to DGN position [missing brg symbol] flagged
455	121020027107240	c	moved to DGN position
456	121020027107272	c	moved to DGN position
457	121020027107273	E	moved to DGN position [missing brg symbol] flagged
458	121020027107274	E	moved to DGN position [missing brg symbol, near 0271-07-082] flagged
459	121020027107297	c	moved to DGN position
460	121020027107298	c	moved to DGN position
461	121020027107299	c	moved to DGN position
462	121020027107300	c	moved to DGN position
463	121020027107306	c	moved to DGN position
464	121020027107307	c	moved to DGN position
465	121020027107308	E	moved to DGN position [originally near 0271-07-082]
466	121020027107309	c	moved to DGN position
467	121020027107310	c	moved to DGN position
468	121020027107311	c	moved to DGN position
469	121020027107312	c	moved to DGN position
470	121020027107313	c	moved to DGN position
471	121020027107315	c	moved to DGN position
472	121020027107316	c	moved to DGN position
473	121020027107317	c	moved to DGN position
474	121020027107318	c	moved to DGN position
475	121020027107355	c	moved to DGN position
476	121020027107357	c	moved to DGN position
477	121020027107358	c	moved to DGN position
478	121020027107392	c	moved to DGN position
479	121020027107393	c	moved to DGN position
480	121020027107394	c	moved to DGN position

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ID	StructureID	Checked	Observations
481	121020027107411	c	moved to DGN position
482	121020027107413	c	moved to DGN position
483	121020027107424	c	moved to DGN position
484	121020027107425	c	moved to DGN position
485	121020027107445	c	moved to DGN position
486	121020027107447	c	moved to DGN position
487	121020027107457	c	moved to DGN position
488	121020027107458	c	moved to DGN position
489	121020027107461	c	moved to DGN position
490	121020027107463	c	moved to DGN position
491	121020027107464	E	moved to DGN position [misplaced brg symbol] flagged
492	121020027107465	E	moved to DGN position [misplaced brg symbol] flagged
493	121020027107467	E	moved to DGN position [misplaced brg symbol] flagged
494	121020027107468	E	moved to DGN position [misplaced brg symbol] flagged
495	121020027107476	c	moved to DGN position
496	121020027107477	c	moved to DGN position
497	121020027107504	c	moved to DGN position
498	121020027114055	c	moved to DGN position
499	121020027114056	c	moved to DGN position
500	121020027114061	c	moved to DGN position
501	121020027114064	c	moved to DGN position
502	121020027114065	c	moved to DGN position
503	121020027114071	c	moved to DGN position
504	121020027114072	c	moved to DGN position
505	121020027114073	c	moved to DGN position
506	121020027114074	c	moved to DGN position
507	121020027114075	c	moved to DGN position
508	121020027114096	c	moved to DGN position
509	121020027114097	c	moved to DGN position
510	121020027114098	c	moved to DGN position
511	121020027114099	c	moved to DGN position
512	121020027114100	c	moved to DGN position
513	121020027114112	c	moved to DGN position
514	121020027114113	c	moved to DGN position
515	121020027114114	c	moved to DGN position
516	121020027114115	c	moved to DGN position
517	121020027114116	c	moved to DGN position
518	121020027114117	c	moved to DGN position
519	121020027114118	c	moved to DGN position
520	121020027114119	c	moved to DGN position

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ID	StructureID	Checked	Observations
521	121020027114120	c	moved to DGN position
522	121020027114123	c	moved to DGN position
523	121020027114124	c	moved to DGN position
524	121020027114126	c	moved to DGN position
525	121020027114127	c	moved to DGN position
526	121020027114128	c	moved to DGN position
527	121020027114129	c	moved to DGN position
528	121020027114140	c	moved to DGN position
529	121020027114148	c	moved to DGN position
530	121020027114149	c	moved to DGN position
531	121020027114304	c	moved to DGN position
532	121020027114305	c	moved to DGN position
533	121020027114385	c	moved to DGN position
534	121020027114386	c	moved to DGN position
535	121020027114387	c	moved to DGN position
536	121020027114388	c	moved to DGN position
537	121020027114389	c	moved to DGN position
538	121020027114390	c	moved to DGN position
539	121020027114391	c	moved to DGN position
540	121020027114403	c	moved to DGN position
541	121020027114404	c	moved to DGN position
542	121020027114405	c	moved to DGN position
543	121020027114406	c	moved to DGN position
544	121020027114408	c	moved to DGN position
545	121020027114409	c	moved to DGN position
546	121020027114449	c	moved to DGN position
547	121020027114450	c	moved to DGN position
548	121020027114455	E	moved to DGN position [missing brg symbol]
549	121020027114469	c	moved to DGN position
550	121020027114470	c	moved to DGN position
551	121020027114471	c	moved to DGN position
552	121020027114472	c	moved to DGN position
553	121020027114473	c	moved to DGN position
554	121020027114474	c	moved to DGN position
555	121020027114475	c	moved to DGN position
556	121020027114499	c	moved to DGN position
557	121020027114500	c	moved to DGN position
558	121020027115009	c	moved to DGN position
559	121020027115177	c	moved to DGN position
560	121020027115325	c	moved to DGN position

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ID	StructureID	Checked	Observations
561	121020027115326	c	moved to DGN position
562	121020027115327	c	moved to DGN position
563	121020027115328	c	moved to DGN position
564	121020027115329	c	moved to DGN position
565	121020027115330	c	moved to DGN position
566	121020027115331	E	moved to DGN position, missing BRN symbol
567	121020027115332	c	moved to DGN position
568	121020027115333	c	moved to DGN position
569	121020027115334	c	moved to DGN position
570	121020027115344	c	moved to DGN position
571	121020027115346	c	moved to DGN position
572	121020027115347	c	moved to DGN position
573	121020027115348	c	moved to DGN position
574	121020027115350	c	moved to DGN position
575	121020027115352	c	moved to DGN position
576	121020027115353	c	moved to DGN position
577	121020027115354	c	moved to DGN position
578	121020027115360	c	moved to DGN position
579	121020027115377	c	moved to DGN position
580	121020027115378	E	moved to DGN position, originally located near 0271-15-330
581	121020027115379	E	moved to DGN position, originally located near 0271-15-330
582	121020027115381	c	moved to DGN position
583	121020027115435	c	moved to DGN position
584	121020027115436	c	moved to DGN position
585	121020027115437	c	moved to DGN position
586	121020027115497	c	moved to DGN position
587	121020027115498	c	moved to DGN position
588	121020027116151	c	moved to DGN position
589	121020027116152	c	moved to DGN position
590	121020027116153	E	moved to DGN position, believe it is EB Frontage Road not EB
591	121020027116154	E	moved to DGN position, believe it is WB Frontage Road not WB
592	121020027116155	E	moved to DGN position, DGN sym missing flagged
593	121020027116156	E	moved to DGN position, DGN sym missing flagged
594	121020027116233	c	moved to DGN position (same DGN symbol as 0271-16-494)
595	121020027116234	c	moved to DGN position (same DGN symbol as 0271-16-483)
596	121020027116235	c	moved to DGN position (same DGN symbol as 0271-16-482)
597	121020027116236	c	moved to DGN position
598	121020027116237	c	moved to DGN position
599	121020027116238	c	moved to DGN position
600	121020027116239	c	moved to DGN position

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ID	StructureID	Checked	Observations
601	121020027116248	c	moved to DGN position (same DGN symbol as 0271-16-493)
602	121020027116249	c	moved to DGN position
603	121020027116250	c	moved to DGN position
604	121020027116251	E	moved to DGN position, originally located near 0598-01-003
605	121020027116277	E	moved to DGN position, originally located near 0598-01-003
606	121020027116278	c	moved to DGN position
607	121020027116338	c	moved to DGN position
608	121020027116339	c	moved to DGN position
609	121020027116340	c	moved to DGN position
610	121020027116341	c	moved to DGN position
611	121020027116342	c	moved to DGN position
612	121020027116361	c	moved to DGN position
613	121020027116362	c	moved to DGN position (same DGN symbol as 0271-16-480)
614	121020027116363	c	moved to DGN position (same DGN symbol as 0271-16-489)
615	121020027116364	c	moved to DGN position (same DGN symbol as 0271-16-481)
616	121020027116365	c	moved to DGN position
617	121020027116366	c	moved to DGN position
618	121020027116367	c	moved to DGN position
619	121020027116368	c	moved to DGN position
620	121020027116369	c	moved to DGN position
621	121020027116373	c	moved to DGN position
622	121020027116374	c	moved to DGN position
623	121020027116375	c	moved to DGN position
624	121020027116376	c	moved to DGN position
625	121020027116384	c	moved to DGN position
626	121020027116401	E	moved to DGN position, DGN sym missing flagged, originally located near 0027-13-117
627	121020027116443	c	moved to DGN position
628	121020027116448	c	moved to DGN position
629	121020027116452	c	moved to DGN position
630	121020027116453	c	moved to DGN position
631	121020027116478	c	moved to DGN position
632	121020027116479	c	moved to DGN position
633	121020027116480	c	moved to DGN position (same DGN symbol as 0271-16-362)
634	121020027116481	c	moved to DGN position (same DGN symbol as 0271-16-364)
635	121020027116482	c	moved to DGN position (same DGN symbol as 0271-16-235)
636	121020027116483	c	moved to DGN position (same DGN symbol as 0271-16-234)
637	121020027116484	c	moved to DGN position
638	121020027116485	c	moved to DGN position
639	121020027116486	c	moved to DGN position
640	121020027116489	c	moved to DGN position (same DGN symbol as 0271-16-363)

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ID	StructureID	Checked	Observations
641	121020027116493	c	moved to DGN position (same DGN symbol as 0271-16-248)
642	121020027116494	c	moved to DGN position (same DGN symbol as 0271-16-233)
643	121020027116495	c	moved to DGN position
644	121020027116496	c	moved to DGN position
645	121020027117103	c	moved to DGN position
646	121020027117104	c	moved to DGN position
647	121020027117105	E	moved to DGN position, originally near 0027-07-297
648	121020027117110	c	moved to DGN position
649	121020027117130	c	moved to DGN position
650	121020027117131	c	moved to DGN position
651	121020027117138	c	moved to DGN position
652	121020027117139	c	moved to DGN position
653	121020027117157	E	moved to DGN position, originally located near 0027-09-222
654	121020027117158	c	moved to DGN position
655	121020027117301	e	moved to DGN position
656	121020027117302	c	moved to DGN position
657	121020027117303	c	moved to DGN position
658	121020027117320	e	moved to DGN position
659	121020027117321	c	moved to DGN position
660	121020027117322	c	moved to DGN position
661	121020027117323	c	moved to DGN position
662	121020027117324	c	moved to DGN position
663	121020027117415	c	moved to DGN position
664	121020027117416	E	moved to DGN position, originally near 0027-07-297
665	121020027117417	E	moved to DGN position, originally near 0027-07-297
666	121020027117487	c	moved to DGN position
667	121020027117488	E	moved to DGN position, SB should be NB, flagged
668	121020027117490	c	moved to DGN position
669	121020027117491	c	moved to DGN position
670	121020027117492	c	moved to DGN position
671	121020037601001	E	moved to DGN position (DGN symbol missing) flagged
672	121020037602065	c	moved to DGN position (same DGN symbol as 0376-02-066)
673	121020037602066	c	moved to DGN position (same DGN symbol as 0376-02-065)
674	121020038903087	E	moved to DGN position (originally located near 1685-05-015)
675	121020038905051	c	moved to DGN position (same DGN symbol as 0389-05-100)
676	121020038905052	e	moved to DGN position (same DGN symbol as 0389-05-055)
677	121020038905053	c	moved to DGN position (same DGN symbol as 0389-05-055)
678	121020038905054	c	moved to DGN position (same DGN symbol as 0389-05-055)
679	121020038905055	c	moved to DGN position (same location as 0389-05-103)
680	121020038905056	E	moved to DGN position (same DGN symbol as 0389-05-057) (Frontage Road missing)

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ID	StructureID	Checked	Observations
681	121020038905057	E	moved to DGN position (same DGN symbol as 0389-05-056) (Frontage Road missing)
682	121020038905058	c	moved to DGN position (same DGN symbol as 0389-05-102)
683	121020038905059	c	moved to DGN position (same DGN symbol as 0389-05-101)
684	121020038905081	c	moved to DGN position
685	121020038905082	c	moved to DGN position
686	121020038905083	c	moved to DGN position
687	121020038905088	c	moved to DGN position
688	121020038905100	c	moved to DGN position (same DGN symbol as 0389-05-051)
689	121020038905101	c	moved to DGN position (same DGN symbol as 0389-05-059)
690	121020038905102	c	moved to DGN position (same DGN symbol as 0389-05-058)
691	121020038905103	E	uncertain (same location as 0389-05-055)
692	121020038905104	c	moved to DGN position
693	121020038905105	c	moved to DGN position
694	121020038912034	c	moved to DGN position
695	121020038912035	c	moved to DGN position
696	121020038912036	c	moved to DGN position
697	121020038912037	c	moved to DGN position
698	121020038912038	c	moved to DGN position
699	121020038912039	c	moved to DGN position
700	121020038912048	c	moved to DGN position
701	121020038912049	c	moved to DGN position
702	121020038912064	c	moved to DGN position
703	121020038912066	c	moved to DGN position
704	121020038912098	c	moved to DGN position
705	121020038912099	c	moved to DGN position
706	121020038913062	c	moved to DGN position
707	121020038913063	c	moved to DGN position
708	121020038913067	c	moved to DGN position
709	121020038913073	E	moved to DGN position (originally located near 1258-04-014)
710	121020038913074	E	moved to DGN position (originally located near 1258-04-014)
711	121020038913075	E	moved to DGN position (same DGN symbol as 0389-13- 075, originally located near 1685-05-015)
712	121020038913076	E	moved to DGN position (same DGN symbol as 0389-13- 076, originally located near 1685-05-015)
713	121020038913096	c	moved to DGN position
714	121020038913097	c	moved to DGN position
715	121020038913268	E	moved to DGN position (originally located near 1258-04-014)
716	121020038913269	E	moved to DGN position (originally located near 1258-04-014)
717	121020038915018	c	moved to DGN position
718	121020050003002	c	moved to DGN position
719	121020050003003	c	moved to DGN position
720	121020050003004	c	moved to DGN position

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ID	StructureID	Checked	Observations
721	121020050003005	c	moved to DGN position
722	121020050003006	c	moved to DGN position
723	121020050003007	c	moved to DGN position
724	121020050003009	c	moved to DGN position (same DGN symbol as 0050-03-342)
725	121020050003010	c	moved to DGN position
726	121020050003011	c	moved to DGN position
727	121020050003012	c	moved to DGN position
728	121020050003014	c	moved to DGN position
729	121020050003022	c	moved to DGN position
730	121020050003023	c	moved to DGN position
731	121020050003026	c	moved to DGN position
732	121020050003027	c	moved to DGN position (same DGN symbol as 0500-03-338)
733	121020050003037	c	moved to DGN position
734	121020050003039	c	moved to DGN position
735	121020050003061	c	moved to DGN position
736	121020050003062	c	moved to DGN position
737	121020050003067	c	moved to DGN position
738	121020050003068	c	moved to DGN position
739	121020050003069	c	moved to DGN position
740	121020050003076	c	moved to DGN position (same DGN symbol as 0500-03-146)
741	121020050003078	c	moved to DGN position
742	121020050003079	c	moved to DGN position
743	121020050003080	c	moved to DGN position
744	121020050003081	E	moved to DGN position (missing brg, confising information)
745	121020050003082	c	moved to DGN position
746	121020050003086	c	moved to DGN position (same DGN symbol as 0050-03-009)
747	121020050003087	c	moved to DGN position
748	121020050003088	c	moved to DGN position
749	121020050003089	c	moved to DGN position
750	121020050003093	c	moved to DGN position
751	121020050003094	c	moved to DGN position
752	121020050003096	c	moved to DGN position
753	121020050003106	c	moved to DGN position
754	121020050003107	c	moved to DGN position
755	121020050003108	c	moved to DGN position
756	121020050003109	c	moved to DGN position
757	121020050003111	c	moved to DGN position
758	121020050003112	c	moved to DGN position
759	121020050003114	c	moved to DGN position
760	121020050003115	c	moved to DGN position

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ID	StructureID	Checked	Observations
761	121020050003116	c	moved to DGN position
762	121020050003117	c	moved to DGN position
763	121020050003118	c	moved to DGN position
764	121020050003119	c	moved to DGN position
765	121020050003126	c	moved to DGN position
766	121020050003142	c	moved to DGN position
767	121020050003143	c	moved to DGN position (same DGN symbol as 0500-03-339)
768	121020050003144	c	moved to DGN position
769	121020050003145	c	moved to DGN position (same DGN symbol as 0500-03-198)
770	121020050003146	c	moved to DGN position (same DGN symbol as 0500-03-076)
771	121020050003147	c	moved to DGN position (same DGN symbol as 0500-03-338)
772	121020050003148	c	moved to DGN position (same DGN symbol as 0500-03-027)
773	121020050003166	c	moved to DGN position
774	121020050003175	c	moved to DGN position
775	121020050003176	c	moved to DGN position
776	121020050003177	c	moved to DGN position
777	121020050003178	c	moved to DGN position
778	121020050003179	c	moved to DGN position
779	121020050003180	c	moved to DGN position
780	121020050003181	c	moved to DGN position
781	121020050003182	c	moved to DGN position
782	121020050003183	c	moved to DGN position (same DGN symbol as 0500-03-185)
783	121020050003184	E	moved to DGN position (same DGN symbol as 0500-03-186, information confusing)
784	121020050003185	E	moved to DGN position (same DGN symbol as 0500-03-183, information confusing)
785	121020050003186	E	moved to DGN position (same DGN symbol as 0500-03-184, information confusing)
786	121020050003192	c	moved to DGN position (same DGN symbol as 0050-03-342)
787	121020050003198	c	moved to DGN position (same DGN symbol as 0500-03-145)
788	121020050003199	E	moved to DGN position [originally near 0271-06-439] flagged
789	121020050003200	E	moved to DGN position [originally near 0271-07-394] flagged
790	121020050003201	E	moved to DGN position, msg brg & blv
791	121020050003207	c	moved to DGN position
792	121020050003208	c	moved to DGN position
793	121020050003209	c	moved to DGN position
794	121020050003210	c	moved to DGN position
795	121020050003211	c	moved to DGN position
796	121020050003212	c	moved to DGN position
797	121020050003213	c	moved to DGN position
798	121020050003214	c	moved to DGN position
799	121020050003215	c	moved to DGN position
800	121020050003216	c	moved to DGN position

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ID	StructureID	Checked	Observations
801	121020050003217	c	moved to DGN position
802	121020050003218	c	moved to DGN position
803	121020050003222	c	moved to DGN position
804	121020050003223	c	moved to DGN position
805	121020050003224	c	moved to DGN position
806	121020050003226	c	moved to DGN position
807	121020050003227	c	moved to DGN position
808	121020050003229	c	moved to DGN position
809	121020050003234	c	moved to DGN position
810	121020050003236	c	moved to DGN position
811	121020050003240	c	moved to DGN position
812	121020050003241	c	moved to DGN position
813	121020050003242	c	moved to DGN position
814	121020050003245	c	moved to DGN position
815	121020050003257	c	moved to DGN position
816	121020050003260	c	moved to DGN position
817	121020050003261	E	moved to DGN position (originally at IH-610 and SH-225)
818	121020050003262	E	moved to DGN position (originally at IH-610 and SH-225)
819	121020050003263	E	moved to DGN position (originally at IH-610 and SH-225)
820	121020050003264	c	moved to DGN position
821	121020050003265	c	moved to DGN position
822	121020050003266	c	moved to DGN position
823	121020050003267	c	moved to DGN position
824	121020050003269	c	moved to DGN position
825	121020050003270	c	moved to DGN position
826	121020050003271	c	moved to DGN position
827	121020050003272	c	moved to DGN position
828	121020050003273	E	moved to DGN position (DGN symbol missing, location unsure)
829	121020050003274	c	moved to DGN position
830	121020050003278	c	moved to DGN position
831	121020050003281	E	moved to DGN position [missing brg symbol] flagged
832	121020050003282	E	moved to DGN position [missing boulevard, location unsure] flagged
833	121020050003283	c	moved to DGN position (same DGN symbol as 0500-03-301)
834	121020050003284	c	moved to DGN position (same DGN symbol as 0500-03-283)
835	121020050003285	c	moved to DGN position (same DGN symbol as 0500-03-301)
836	121020050003288	c	moved to DGN position
837	121020050003289	c	moved to DGN position
838	121020050003291	E	moved to DGN position (same DGN symbol as 0500-03-340) (road missing)
839	121020050003292	c	moved to DGN position
840	121020050003293	c	moved to DGN position (same DGN symbol as 0500-03-296)

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ID	StructureID	Checked	Observations
841	121020050003294	c	moved to DGN position (same DGN symbol as 0500-03-295)
842	121020050003295	c	moved to DGN position (same DGN symbol as 0500-03-296)
843	121020050003296	c	moved to DGN position (same DGN symbol as 0500-03-295)
844	121020050003297	c	moved to DGN position (same DGN symbol as 0500-03-298)
845	121020050003298	c	moved to DGN position (same DGN symbol as 0500-03-297)
846	121020050003299	c	moved to DGN position (same DGN symbol as 0500-03-300)
847	121020050003300	c	moved to DGN position (same DGN symbol as 0500-03-299)
848	121020050003301	c	moved to DGN position (same DGN symbol as 0500-03-283)
849	121020050003302	E	moved to DGN position [missing boulevard] flagged
850	121020050003303	E	moved to DGN position (facility carried over does not correspond to the bridge location)
851	121020050003304	c	moved to DGN position
852	121020050003314	c	moved to DGN position
853	121020050003318	E	moved to DGN position (no southbound direction found)
854	121020050003319	c	moved to DGN position
855	121020050003320	c	moved to DGN position
856	121020050003326	c	moved to DGN position
857	121020050003329	c	moved to DGN position
858	121020050003331	c	moved to DGN position
859	121020050003333	c	moved to DGN position
860	121020050003334	E	moved to DGN position (originally with no coordinates)
861	121020050003335	c	moved to DGN position
862	121020050003336	c	moved to DGN position
863	121020050003337	c	moved to DGN position
864	121020050003338	c	moved to DGN position (same DGN symbol as 0500-03-027)
865	121020050003339	c	moved to DGN position (same DGN symbol as 0500-03-143)
866	121020050003340	E	moved to DGN position (same DGN symbol as 0500-03-291) (road missing)
867	121020050003342	c	moved to DGN position (same DGN symbol as 0050-03-009)
868	121020050003418	c	moved to DGN position
869	121020050003420	E	moved to DGN position (originally near FM 528 and IH 45)
870	121020050003421	E	moved to DGN position (originally near FM 528 and IH 45)
871	121020050003422	E	moved to DGN position (originally near FM 528 and IH 45)
872	121020050003423	E	moved to DGN position (originally near FM 528 and IH 45)
873	121020050201005	E	moved to DGN position, originally near 0502-01-029, no bridge sym, flagged
874	121020050201007	c	moved to DGN position
875	121020050201008	c	moved to DGN position (same DGN symbol as 0502-01-075)
876	121020050201011	c	moved to DGN position (same DGN symbol as 0502-01-076)
877	121020050201012	c	moved to DGN position (same DGN symbol as 0502-01-077)
878	121020050201013	c	moved to DGN position (same DGN symbol as 0502-01-079)
879	121020050201015	c	moved to DGN position
880	121020050201016	c	moved to DGN position

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ID	StructureID	Checked	Observations
881	121020050201017	c	moved to DGN position (same DGN symbol as 0502-01-028)
882	121020050201018	c	moved to DGN position
883	121020050201020	c	moved to DGN position (same DGN symbol as 0502-01-078)
884	121020050201023	c	moved to DGN position (same DGN symbol as 0502-01-067)
885	121020050201024	c	moved to DGN position
886	121020050201025	c	moved to DGN position
887	121020050201026	c	moved to DGN position (same DGN symbol as 0502-01-068)
888	121020050201027	c	moved to DGN position (same DGN symbol as 0502-01-068)
889	121020050201028	c	moved to DGN position (same DGN symbol as 0502-01-068)
890	121020050201029	c	moved to DGN position
891	121020050201030	c	moved to DGN position
892	121020050201031	c	moved to DGN position
893	121020050201032	c	moved to DGN position
894	121020050201033	c	moved to DGN position
895	121020050201044	c	moved to DGN position
896	121020050201049	c	moved to DGN position (same DGN location as 0502-01-053)
897	121020050201053	c	moved to DGN position (same DGN location as 0502-01-049)
898	121020050201054	c	moved to DGN position
899	121020050201055	c	moved to DGN position
900	121020050201056	c	moved to DGN position
901	121020050201057	c	moved to DGN position
902	121020050201058	c	moved to DGN position
903	121020050201059	E	moved to DGN position (location unsure)
904	121020050201060	E	moved to DGN position (DGN symbol missing) flagged
905	121020050201061	c	moved to DGN position
906	121020050201062	E	moved to DGN position (DGN symbol missing) flagged
907	121020050201063	E	moved to DGN position,DGN symbol missing flagged,placed 1.2 mi E of SH134
908	121020050201064	c	moved to DGN position
909	121020050201067	c	moved to DGN position (same DGN location as 0502-01-023)
910	121020050201068	c	moved to DGN position (same DGN location as 0502-01-028)
911	121020050201069	c	moved to DGN position
912	121020050201070	c	moved to DGN position
913	121020050201071	c	moved to DGN position
914	121020050201072	c	moved to DGN position
915	121020050201073	c	moved to DGN position
916	121020050201074	c	moved to DGN position (same DGN location as 0502-01-007)
917	121020050201075	c	moved to DGN position (same DGN location as 0502-01-008)
918	121020050201076	c	moved to DGN position (same DGN location as 0502-01-011)
919	121020050201077	c	moved to DGN position (same DGN location as 0502-01-012)
920	121020050201078	c	moved to DGN position (same DGN location as 0502-01-020)

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ID	StructureID	Checked	Observations
921	121020050201079	c	moved to DGN position (same DGN location as 0502-01-013)
922	121020050201084	E	moved to DGN position, DGN symbol missing (flagged) orig South of cnty line
923	121020050201258	E	moved to DGN position (originally at IH-610 and SH-225)
924	121020050201259	E	moved to DGN position (originally at IH-610 and SH-225)
925	121020050201266	c	moved to DGN position
926	121020050201268	c	moved to DGN position
927	121020050201269	c	moved to DGN position
928	121020050201270	c	moved to DGN position
929	121020050201271	c	moved to DGN position
930	121020050202047	E	moved to DGN position, DGN symbol missing (flagged)
931	121020050202050	c	moved to DGN position
932	121020050202051	E	moved to DGN position
933	121020050202345	c	moved to DGN position
934	121020050202351	c	moved to DGN position
935	121020050801023	c	moved to DGN position
936	121020050801027	c	moved to DGN position
937	121020050801047	c	moved to DGN position
938	121020050801065	c	moved to DGN position
939	121020050801067	c	moved to DGN position
940	121020050801073	c	moved to DGN position
941	121020050801074	c	moved to DGN position
942	121020050801075	c	moved to DGN position
943	121020050801076	c	moved to DGN position
944	121020050801077	c	moved to DGN position (same DGN position as 0508-01-078)
945	121020050801078	c	moved to DGN position (same DGN position as 0508-01-077)
946	121020050801079	E	moved to DGN position (DGN symbol missing)
947	121020050801080	c	moved to DGN position
948	121020050801096	c	moved to DGN position
949	121020050801098	c	moved to DGN position
950	121020050801099	c	moved to DGN position
951	121020050801100	c	moved to DGN position
952	121020050801101	E	moved to DGN position (originally near IH 10 & BW8)
953	121020050801102	c	moved to DGN position
954	121020050801103	c	moved to DGN position
955	121020050801104	c	moved to DGN position (same DGN position as 0508-01-105)
956	121020050801105	c	moved to DGN position (same DGN position as 0508-01-104)
957	121020050801106	c	moved to DGN position (same DGN position as 0508-01-107)
958	121020050801107	c	moved to DGN position (same DGN position as 0508-01-106)
959	121020050801108	c	moved to DGN position (same DGN position as 0508-01-109)
960	121020050801109	c	moved to DGN position (same DGN position as 0508-01-108)

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ID	StructureID	Checked	Observations
961	121020050801110	c	moved to DGN position (same DGN position as 0508-01-080)
962	121020050801111	c	moved to DGN position (same DGN position as 0508-01-080)
963	121020050801148	c	moved to DGN position
964	121020050801150	c	moved to DGN position
965	121020050801151	c	moved to DGN position
966	121020050801152	c	moved to DGN position
967	121020050801153	E	moved to DGN position, originally located near 0508-01-027
968	121020050801154	c	moved to DGN position (same DGN symbol as 0508-01-465)
969	121020050801174	c	moved to DGN position
970	121020050801176	c	moved to DGN position
971	121020050801178	c	moved to DGN position
972	121020050801182	c	moved to DGN position
973	121020050801183	c	moved to DGN position
974	121020050801184	c	moved to DGN position
975	121020050801185	c	moved to DGN position
976	121020050801186	E	moved to DGN position (DGN symbol missing) flagged
977	121020050801187	E	moved to DGN position (DGN symbol missing) flagged
978	121020050801188	c	moved to DGN position
979	121020050801189	c	moved to DGN position
980	121020050801190	c	moved to DGN position
981	121020050801191	E	moved to DGN position (DGN symbol missing) flagged
982	121020050801192	c	moved to DGN position
983	121020050801193	c	moved to DGN position
984	121020050801194	c	moved to DGN position
985	121020050801197	E	moved to DGN position, originally located @BW8 & Wood Forest
986	121020050801205	E	moved to DGN position (DGN symbol missing) flagged
987	121020050801206	c	moved to DGN position
988	121020050801207	c	moved to DGN position
989	121020050801208	c	moved to DGN position
990	121020050801209	c	moved to DGN position
991	121020050801210	E	moved to DGN position [missing brg symbols] flagged
992	121020050801211	c	moved to DGN position
993	121020050801212	c	moved to DGN position
994	121020050801213	E	moved to DGN position [missing brg symbols] flagged
995	121020050801214	c	moved to DGN position
996	121020050801215	c	moved to DGN position
997	121020050801216	c	moved to DGN position
998	121020050801217	c	moved to DGN position
999	121020050801218	c	moved to DGN position
1000	121020050801219	c	moved to DGN position

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ID	StructureID	Checked	Observations
1001	121020050801221	E	moved to DGN position (DGN symbol missing) flagged
1002	121020050801222	c	moved to DGN position
1003	121020050801223	c	moved to DGN position
1004	121020050801224	E	moved to DGN position, originally located @BW8 &Wood Forest
1005	121020050801233	c	moved to DGN position
1006	121020050801234	c	moved to DGN position
1007	121020050801239	c	moved to DGN position
1008	121020050801240	c	moved to DGN position
1009	121020050801241	c	moved to DGN position
1010	121020050801242	c	moved to DGN position
1011	121020050801245	c	moved to DGN position
1012	121020050801246	c	moved to DGN position
1013	121020050801247	c	moved to DGN position
1014	121020050801248	c	moved to DGN position
1015	121020050801249	c	moved to DGN position
1016	121020050801251	c	moved to DGN position
1017	121020050801252	c	moved to DGN position
1018	121020050801253	c	moved to DGN position
1019	121020050801254	c	moved to DGN position
1020	121020050801255	c	moved to DGN position
1021	121020050801256	E	moved to DGN position, DGN symbol missing (flagged)
1022	121020050801257	E	moved to DGN position, DGN symbol missing (flagged)
1023	121020050801258	c	moved to DGN position
1024	121020050801259	E	moved to DGN position, DGN symbol missing (flagged)
1025	121020050801260	c	moved to DGN position
1026	121020050801261	E	moved to DGN position (DGN symbol missing)
1027	121020050801262	c	moved to DGN position
1028	121020050801263	c	moved to DGN position
1029	121020050801264	c	moved to DGN position
1030	121020050801265	c	moved to DGN position
1031	121020050801266	c	moved to DGN position
1032	121020050801267	c	moved to DGN position
1033	121020050801270	c	moved to DGN position
1034	121020050801272	c	moved to DGN position
1035	121020050801273	c	moved to DGN position
1036	121020050801274	c	moved to DGN position
1037	121020050801285	E	moved to DGN position, location unsure, flagged
1038	121020050801314	c	moved to DGN position
1039	121020050801315	c	moved to DGN position
1040	121020050801316	c	moved to DGN position

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ID	StructureID	Checked	Observations
1041	121020050801361	c	moved to DGN position
1042	121020050801362	c	moved to DGN position
1043	121020050801363	c	moved to DGN position
1044	121020050801364	c	moved to DGN position
1045	121020050801365	c	moved to DGN position
1046	121020050801380	c	moved to DGN position
1047	121020050801382	c	moved to DGN position, choose as EB
1048	121020050801383	c	moved to DGN position, choose as WB
1049	121020050801384	c	moved to DGN position
1050	121020050801385	c	moved to DGN position
1051	121020050801426	c	moved to DGN position
1052	121020050801427	c	moved to DGN position
1053	121020050801445	E	moved to DGN position, originally located South of Harris Cnty line
1054	121020050801446	E	moved to DGN position, originally located South of Harris Cnty line
1055	121020050801447	E	moved to DGN position, originally located South of Harris Cnty line
1056	121020050801448	E	moved to DGN position, originally located South of Harris Cnty line
1057	121020050801450	E	moved to DGN position, originally located South of Harris Cnty line
1058	121020050801451	E	moved to DGN position, originally located South of Harris Cnty line
1059	121020050801452	E	moved to DGN position, originally located South of Harris Cnty line
1060	121020050801453	E	moved to DGN position, originally located South of Harris Cnty line
1061	121020050801454	c	moved to DGN position
1062	121020050801455	c	moved to DGN position
1063	121020050801456	c	moved to DGN position
1064	121020050801457	c	moved to DGN position
1065	121020050801462	E	moved to DGN position, originally located near 0508-01-027
1066	121020050801463	c	moved to DGN position
1067	121020050801464	c	moved to DGN position
1068	121020050801465	c	moved to DGN position (same DGN symbol as 0508-01-154)
1069	121020050801469	c	moved to DGN position
1070	121020050807198	c	moved to DGN position
1071	121020050807220	c	moved to DGN position
1072	121020050807250	E	moved to DGN position, DGN symbol missing
1073	121020059801001	E	moved to DGN position, originally located near 0598-01-029
1074	121020059801002	E	moved to DGN position, originally located near 0598-01-029
1075	121020059801003	E	moved to DGN position, originally located near 0598-01-029
1076	121020059801004	E	moved to DGN position, originally located near 0598-01-029
1077	121020059801005	E	moved to DGN position, originally located near 0598-01-029
1078	121020059801006	E	moved to DGN position, originally located near 0598-01-029
1079	121020059801007	c	moved to DGN position
1080	121020059801018	c	moved to DGN position

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ID	StructureID	Checked	Observations
1081	121020059801021	E	moved to DGN position, DGN sym missing, flagged
1082	121020059801022	c	moved to DGN position
1083	121020059801023	c	moved to DGN position
1084	121020059801024	E	moved to DGN position, DGN sym missing, flagged
1085	121020059801025	c	moved to DGN position
1086	121020059801026	c	moved to DGN position
1087	121020059801027	c	moved to DGN position
1088	121020059801028	c	moved to DGN position
1089	121020059801029	c	moved to DGN position
1090	121020059801030	E	moved to DGN position (DGN symbol missing)
1091	121020059801031	E	moved to DGN position (DGN symbol missing)
1092	121020059801064	c	moved to DGN position
1093	121020059801065	c	moved to DGN position
1094	121020059801066	c	moved to DGN position
1095	121020059801067	c	moved to DGN position
1096	121020059801068	c	moved to DGN position
1097	121020059801069	c	moved to DGN position
1098	121020059801070	c	moved to DGN position
1099	121020059801079	E	moved to DGN position, originally located near 0598-01-029
1100	121020059801080	c	moved to DGN position
1101	121020059801081	c	moved to DGN position
1102	121020059801084	c	moved to DGN position
1103	121020059801085	c	moved to DGN position
1104	121020059801088	c	moved to DGN position
1105	121020059801091	c	moved to DGN position
1106	121020059801094	c	moved to DGN position
1107	121020059801097	c	moved to DGN position
1108	121020059801098	c	moved to DGN position
1109	121020059801115	E	moved to DGN position, DGN sym missing, flagged
1110	121020059801185	c	moved to DGN position
1111	121020059801186	c	moved to DGN position
1112	121020059801197	c	moved to DGN position
1113	121020059801198	c	moved to DGN position
1114	121020059801199	c	moved to DGN position
1115	121020059801200	c	moved to DGN position
1116	121020059801201	c	moved to DGN position
1117	121020059801202	c	moved to DGN position
1118	121020059801275	E	moved to DGN position, originally located near 0027-13-250
1119	121020059801276	E	moved to DGN position, originally located near 0027-13-250
1120	121020059801395	E	moved to DGN position, missing direction, flagged

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ID	StructureID	Checked	Observations
1121	121020059801396	E	moved to DGN position, missing direction, flagged
1122	121020059801397	E	moved to DGN position, missing direction, flagged
1123	121020072003036	c	moved to DGN position
1124	121020072003044	c	moved to DGN position
1125	121020072003045	c	moved to DGN position
1126	121020072003046	c	moved to DGN position
1127	121020072003050	E	moved to DGN position [missing brg symbol] flagged
1128	121020072003054	c	moved to DGN position
1129	121020072003058	E	moved to DGN position [missing boulevard] flagged
1130	121020072003061	E	moved to DGN position [missing boulevard] flagged
1131	121020072003203	c	moved to DGN position
1132	121020072003204	c	moved to DGN position
1133	121020072003205	c	moved to DGN position
1134	121020072003206	c	moved to DGN position
1135	121020072003215	c	moved to DGN position
1136	121020072003216	c	moved to DGN position
1137	121020072003217	c	moved to DGN position
1138	121020072003218	c	moved to DGN position
1139	121020097601013	c	moved to DGN position (same DGN symbol as 0976-01-020)
1140	121020097601020	c	moved to DGN position (same DGN symbol as 0976-01-013)
1141	121020097601026	c	moved to DGN position
1142	121020098101007	E	moved to DGN position (originally outside of Harris County)
1143	121020098101009	c	moved to DGN position
1144	121020098101010	c	moved to DGN position
1145	121020098101011	c	moved to DGN position
1146	121020098101014	c	moved to DGN position
1147	121020098101015	c	moved to DGN position
1148	121020098101016	c	moved to DGN position
1149	121020098101018	c	moved to DGN position
1150	121020098101019	E	moved to DGN position (apparently same location as 0981-01-014)
1151	121020100501003	E	moved to DGN position, DGN sym missing, flagged
1152	121020100501004	E	moved to DGN position, originally located at FM 525 and Vickery Road)
1153	121020100501005	c	moved to DGN position
1154	121020100501026	c	moved to DGN position
1155	121020100501033	c	moved to DGN position
1156	121020100601002	c	moved to DGN position
1157	121020100601003	c	moved to DGN position
1158	121020100601004	c	moved to DGN position
1159	121020100601005	E	moved to DGN position [missing brg symbol] flagged
1160	121020100601006	c	moved to DGN position

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ID	StructureID	Checked	Observations
1161	121020100601007	c	moved to DGN position
1162	121020100601008	c	moved to DGN position
1163	121020100601009	c	moved to DGN position
1164	121020106202013	c	moved to DGN position
1165	121020106202014	c	moved to DGN position
1166	121020106204007	c	moved to DGN position
1167	121020106204009	c	moved to DGN position
1168	121020106204018	E	moved to DGN position, originally located SW of Lake Houston
1169	121020125804002	c	moved to DGN position
1170	121020125804011	c	moved to DGN position
1171	121020125804014	c	moved to DGN position
1172	121020168501026	c	moved to DGN position
1173	121020168501027	c	moved to DGN position
1174	121020168501028	c	moved to DGN position
1175	121020168501033	c	moved to DGN position
1176	121020168502031	c	moved to DGN position
1177	121020168502040	E	moved to DGN position [unsure, doubtful position] flagged
1178	121020168502056	E	moved to DGN position [missing brg symbol] flagged
1179	121020168502057	c	moved to DGN position
1180	121020168502058	c	moved to DGN position
1181	121020168503004	c	moved to DGN position
1182	121020168503022	c	moved to DGN position
1183	121020168503024	c	moved to DGN position
1184	121020168503025	E	moved to DGN position [missing brg symbol] flagged
1185	121020168503034	c	moved to DGN position
1186	121020168503035	E	moved to DGN position [missing brg symbol] flagged
1187	121020168503036	c	moved to DGN position
1188	121020168503037	c	moved to DGN position
1189	121020168503038	c	moved to DGN position
1190	121020168503039	c	moved to DGN position
1191	121020168505008	E	moved to DGN position [missing brg symbol] flagged
1192	121020168505009	c	moved to DGN position
1193	121020168505015	c	moved to DGN position
1194	121020168505016	E	moved to DGN position [missing brg symbol] flagged
1195	121020168505019	c	moved to DGN position
1196	121020168505029	c	moved to DGN position
1197	121020168505030	c	moved to DGN position
1198	121020168505041	E	moved to DGN position [missing brg symbol] flagged
1199	121020168505042	E	moved to DGN position [missing brg symbol] flagged
1200	121020168507021	c	moved to DGN

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ID	StructureID	Checked	Observations
1201	121020168507023	c	moved to DGN
1202	121020174301003	c	moved to DGN
1203	121020174301004	E	moved to DGN position [missing brg symbol] flagged
1204	121020181201001	c	moved to DGN position
1205	121020181201002	c	moved to DGN position
1206	121020181201005	c	moved to DGN position
1207	121020184401004	c	moved to DGN position
1208	121020184401005	E	moved to DGN position [missing brg symbol] flagged
1209	121020248301001	c	moved to DGN position
1210	121020248301002	c	moved to DGN position
1211	121020248301006	c	moved to DGN position
1212	121020248301007	c	moved to DGN position
1213	121020248301008	c	moved to DGN position
1214	121020248301009	c	moved to DGN position
1215	121020248301010	c	moved to DGN position
1216	121020248301011	c	moved to DGN position
1217	121020248301012	c	moved to DGN position
1218	121020248301013	c	moved to DGN position
1219	121020248301014	c	moved to DGN position
1220	121020248301017	c	moved to DGN position
1221	121020248301018	E	moved to DGN position (originally located near 2483-01-021)
1222	121020248301019	c	moved to DGN position
1223	121020248301021	c	moved to DGN position
1224	121020248301022	c	moved to DGN position
1225	121020248301023	c	moved to DGN position
1226	121020248301032	c	moved to DGN position
1227	121020248301034	c	moved to DGN position
1228	121020248301036	E	moved to DGN position, originally located near Chilsom and Rankin
1229	121020248301037	c	moved to DGN position
1230	121020248301039	E	moved to DGN position (originally located near 1005-01-033)
1231	121020248301042	c	moved to DGN position
1232	121020248301043	c	moved to DGN position
1233	121020248301046	c	moved to DGN position
1234	121020248301047	c	moved to DGN position
1235	121020248301049	c	moved to DGN position
1236	121020248301050	E	moved to DGN position (missing brg symbol; originally located near 1005-01-033)
1237	121020248301051	c	moved to DGN position
1238	121020248301052	c	moved to DGN position
1239	121020248301053	c	moved to DGN position
1240	121020248301054	c	moved to DGN position

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ID	StructureID	Checked	Observations
1241	121020248301055	c	moved to DGN position
1242	121020248301056	c	moved to DGN position
1243	121020248301059	c	moved to DGN position
1244	121020248301062	c	moved to DGN position
1245	121020248301063	E	moved to DGN position, originally located North of the county line
1246	121020248301064	E	moved to DGN position, originally located North of the county line
1247	121020248301065	E	moved to DGN position, originally located North of the county line
1248	121020248301066	E	moved to DGN position, originally located North of the county line
1249	121020248301073	E	moved to DGN position [missing brg symbol] flagged
1250	121020248301074	E	moved to DGN position (DGN symbol missing) flagged
1251	121020248301096	E	moved to DGN position (DGN symbol missing) flagged
1252	121020248301451	c	moved to DGN position
1253	121020263301002	c	moved to DGN position
1254	121020263301003	c	moved to DGN position
1255	121020263301202	E	moved to DGN position, originally near 0028-01-002
1256	121020294101005	E	moved to DGN position [missing brg symbol] flagged
1257	121020294101006	E	moved to DGN position [missing brg symbol] flagged
1258	121020294102001	c	moved to DGN position
1259	121020294102004	c	moved to DGN position
1260	121020305801078	E	moved to DGN position (DGN symbol missing)
1261	121020325601042	c	moved to DGN position
1262	121020325601043	c	moved to DGN position
1263	121020325601044	c	moved to DGN position
1264	121020325601045	c	moved to DGN position
1265	121020325601046	c	moved to DGN position
1266	121020325601047	c	moved to DGN position
1267	121020325601048	c	moved to DGN position
1268	121020325601049	c	moved to DGN position
1269	121020325601064	c	moved to DGN position
1270	121020325601065	c	moved to DGN position
1271	121020325601066	c	moved to DGN position
1272	121020325601067	c	moved to DGN position
1273	121020325601068	E	moved to DGN position [missing brg & blv symbols] flagged
1274	121020325601069	E	moved to DGN position [missing brg symbol] flagged
1275	121020325601070	c	moved to DGN position
1276	121020325601073	E	moved to DGN position [uncertain direction] flagged
1277	121020325601074	E	moved to DGN position [uncertain direction] flagged
1278	121020325601089	E	moved to DGN position [originally near 3256-02-082] flagged
1279	121020325601090	E	moved to DGN position [originally near 3256-02-082] flagged
1280	121020325601091	E	moved to DGN position [originally near 3256-02-082] flagged

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ID	StructureID	Checked	Observations
1281	121020325601093	E	moved to DGN position [originally near 3256-02-082] flagged
1282	121020325601109	c	moved to DGN position
1283	121020325601111	E	moved to DGN position [originally no coordinates]
1284	121020325601113	c	moved to DGN position
1285	121020325601114	c	moved to DGN position
1286	121020325601123	c	moved to DGN position
1287	121020325601124	c	moved to DGN position
1288	121020325601125	E	moved to DGN position (originally South of Cnty line)
1289	121020325601126	c	moved to DGN position
1290	121020325601127	c	moved to DGN position
1291	121020325601128	E	moved to DGN position [uncertain direction] flagged
1292	121020325601129	E	moved to DGN position [uncertain direction] flagged
1293	121020325601130	E	moved to DGN position [uncertain direction] flagged
1294	121020325601131	E	moved to DGN position [uncertain direction] flagged
1295	121020325601132	E	moved to DGN position [uncertain direction] flagged
1296	121020325601133	E	moved to DGN position [uncertain direction] flagged
1297	121020325601134	E	moved to DGN position [uncertain direction] flagged
1298	121020325601135	E	moved to DGN position [uncertain direction] flagged
1299	121020325601136	E	moved to DGN position [uncertain direction] flagged
1300	121020325601137	E	moved to DGN position [uncertain direction] flagged
1301	121020325601138	c	moved to DGN position
1302	121020325601139	c	moved to DGN position
1303	121020325601140	c	moved to DGN position
1304	121020325601143	c	moved to DGN position
1305	121020325601144	c	moved to DGN position
1306	121020325601153	c	moved to DGN position
1307	121020325601154	c	moved to DGN position
1308	121020325601155	c	moved to DGN position
1309	121020325601156	c	moved to DGN position
1310	121020325601157	c	moved to DGN position
1311	121020325601164	E	moved to DGN position, DGN sym missing, flagged
1312	121020325601165	E	moved to DGN position, DGN sym missing, flagged
1313	121020325601166	c	moved to DGN position
1314	121020325601167	c	moved to DGN position
1315	121020325601168	c	moved to DGN position
1316	121020325601169	c	moved to DGN position
1317	121020325601170	c	moved to DGN position
1318	121020325601171	c	moved to DGN position
1319	121020325601172	c	moved to DGN position
1320	121020325601173	c	moved to DGN position

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ID	StructureID	Checked	Observations
1321	121020325601174	c	moved to DGN position
1322	121020325601175	c	moved to DGN position
1323	121020325601182	c	moved to DGN position
1324	121020325601183	E	moved to DGN position [originally near 3256-02-082] flagged
1325	121020325601184	E	moved to DGN position [originally near 3256-02-082] flagged
1326	121020325601187	c	moved to DGN position
1327	121020325601188	c	moved to DGN position
1328	121020325601189	E	moved to DGN position [originally near 3256-03-059] flagged
1329	121020325601190	E	moved to DGN position [originally near 3256-03-059] flagged
1330	121020325601191	c	moved to DGN position
1331	121020325601192	c	moved to DGN position
1332	121020325601193	c	moved to DGN position
1333	121020325601194	c	moved to DGN position
1334	121020325601211	c	moved to DGN position
1335	121020325601212	c	moved to DGN position
1336	121020325601213	c	moved to DGN position
1337	121020325601214	c	moved to DGN position
1338	121020325601251	E	moved to DGN position [missing brg symbol, feature crossed does not correspond to bridge location] flagged
1339	121020325601252	E	moved to DGN position [missing brg symbol, feature crossed does not correspond to bridge location] flagged
1340	121020325601267	c	moved to DGN position
1341	121020325601462	E	moved to DGN position [misplaced brg symbol] flagged
1342	121020325601466	c	moved to DGN position
1343	121020325602002	E	moved to DGN position, originally located near 3256-02-243
1344	121020325602003	E	moved to DGN position, originally located near 3256-02-243
1345	121020325602004	E	moved to DGN position (originally located near 3256-02-099)
1346	121020325602005	c	moved to DGN position
1347	121020325602006	E	moved to DGN position, originally located near 3256-02-243
1348	121020325602007	E	moved to DGN position, originally located near 3256-02-243
1349	121020325602025	c	moved to DGN position
1350	121020325602026	c	moved to DGN position
1351	121020325602027	E	moved to DGN position, originally located near 3256-02-243
1352	121020325602028	E	moved to DGN position, originally located near 3256-02-243
1353	121020325602029	E	moved to DGN position, originally located near 3256-02-243
1354	121020325602082	E	moved to DGN position (originally located South of Cnty line)
1355	121020325602083	E	moved to DGN position (originally located South of Cnty line)
1356	121020325602087	E	moved to DGN position (originally located South of Cnty line)
1357	121020325602088	E	moved to DGN position (originally located South of Cnty line)
1358	121020325602094	E	moved to DGN position, originally located near 3256-02-243
1359	121020325602099	c	moved to DGN position
1360	121020325602100	c	moved to DGN position

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ID	StructureID	Checked	Observations
1361	121020325602101	c	moved to DGN position
1362	121020325602102	c	moved to DGN position
1363	121020325602103	c	moved to DGN position
1364	121020325602104	c	moved to DGN position
1365	121020325602105	E	moved to DGN position, originally located near 3256-02-235
1366	121020325602106	E	moved to DGN position, originally located near 3256-02-235
1367	121020325602107	c	moved to DGN position
1368	121020325602108	c	moved to DGN position
1369	121020325602112	c	moved to DGN position
1370	121020325602115	c	moved to DGN position
1371	121020325602116	c	moved to DGN position
1372	121020325602117	E	moved to DGN position, DGN sym missing flagged, orig. South of Cnty line
1373	121020325602141	E	moved to DGN position, flagged, DGN symbol missing
1374	121020325602142	E	moved to DGN position, flagged, DGN symbol missing
1375	121020325602145	c	moved to DGN position
1376	121020325602146	c	moved to DGN position
1377	121020325602147	c	moved to DGN position
1378	121020325602148	c	moved to DGN position
1379	121020325602149	c	moved to DGN position
1380	121020325602150	c	moved to DGN position
1381	121020325602221	c	moved to DGN position
1382	121020325602222	c	moved to DGN position
1383	121020325602223	c	moved to DGN position
1384	121020325602224	c	moved to DGN position
1385	121020325602225	c	moved to DGN position
1386	121020325602226	c	moved to DGN position
1387	121020325602227	c	moved to DGN position
1388	121020325602228	c	moved to DGN position
1389	121020325602233	c	moved to DGN position
1390	121020325602234	c	moved to DGN position
1391	121020325602235	c	moved to DGN position
1392	121020325602236	c	moved to DGN position
1393	121020325602237	c	moved to DGN position
1394	121020325602238	c	moved to DGN position
1395	121020325602243	c	moved to DGN position
1396	121020325602244	c	moved to DGN position
1397	121020325602261	E	moved to DGN position (DGN symbol missing) flagged
1398	121020325602262	E	moved to DGN position (DGN symbol missing) flagged
1399	121020325603010	E	moved to DGN position (DGN symbol missing) flagged
1400	121020325603011	E	moved to DGN position (DGN symbol missing) flagged

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ID	StructureID	Checked	Observations
1401	121020325603016	E	moved to DGN position (DGN symbol missing) flagged
1402	121020325603017	E	moved to DGN position (DGN symbol missing) flagged
1403	121020325603018	E	moved to DGN position (DGN symbol missing) flagged
1404	121020325603019	E	moved to DGN position (DGN symbol missing) flagged
1405	121020325603020	E	moved to DGN position (DGN symbol missing) flagged
1406	121020325603021	E	moved to DGN position (DGN symbol missing) flagged
1407	121020325603030	E	moved to DGN position (DGN symbol missing) flagged
1408	121020325603031	E	moved to DGN position (DGN symbol missing) flagged
1409	121020325603032	E	moved to DGN position (DGN symbol missing) flagged
1410	121020325603033	E	moved to DGN position (DGN symbol missing) flagged
1411	121020325603051	c	moved to DGN position
1412	121020325603052	c	moved to DGN position
1413	121020325603053	c	moved to DGN position (same DGN location as 3256-03-054)
1414	121020325603054	c	moved to DGN position (same DGN location as 3256-03-053)
1415	121020325603055	E	moved to DGN position
1416	121020325603056	E	moved to DGN position
1417	121020325603057	E	moved to DGN position
1418	121020325603058	E	moved to DGN position
1419	121020325603059	E	moved to DGN position, originally located near 2633-01-002
1420	121020325603060	c	moved to DGN position
1421	121020325603061	E	moved to DGN position (DGN symbol missing) (flagged)
1422	121020325603062	E	moved to DGN position (DGN symbol missing) (flagged)
1423	121020325603063	E	moved to DGN position (DGN symbol missing) (flagged)
1424	121020325603071	E	moved to DGN position (DGN symbol missing) (flagged)
1425	121020325603075	c	moved to DGN position
1426	121020325603076	c	moved to DGN position
1427	121020325603077	E	moved to DGN position (DGN symbol missing) flagged
1428	121020325603084	E	moved to DGN position direction unsure orig located near I10&BW8 flagged
1429	121020325603085	E	moved to DGN position (orig. located near I10 & BW8) flagged
1430	121020325603086	E	moved to DGN position (DGN symbol missing, originally S of Cnty line)
1431	121020325603158	c	moved to DGN position
1432	121020325603159	c	moved to DGN position
1433	121020325603255	E	moved to DGN position, DGN sym missing flagged orig. South of Cnty line
1434	121020325603256	E	moved to DGN position, originally located South of Harris Cnty line
1435	121020325603257	E	moved to DGN position, DGN sym missing flagged orig. South of Cnty line
1436	121020325603258	E	moved to DGN position, originally located South of Harris Cnty line
1437	121020325603449	E	moved to DGN position, originally located South of Harris Cnty line
1438	121020325604263	c	moved to DGN position
1439	121020325604264	c	moved to DGN position
1440	121020325604265	c	moved to DGN position

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ID	StructureID	Checked	Observations
1441	121020325604266	c	moved to DGN position
1442	121020331201001	c	moved to DGN position
1443	121020351005001	c	moved to DGN position
1444	121020351005002	c	moved to DGN position
1445	121020800212009	E	moved to DGN position (DGN symbol & Blv missing, orig S of Cnty line)
1446	121020800212010	E	moved to DGN position (DGN symbol & Blv missing, orig S of Cnty line)
1447	121020800212015	E	moved to DGN position (DGN symbol & Blv missing, orig S of Cnty line)
1448	121020800212016	E	moved to DGN position (DGN symbol & Blv missing, orig S of Cnty line)
1449	121020800212017	E	moved to DGN position (uncertain location, facility carried over not found)
1450	121020800212018	E	moved to DGN position,DGN sym & Blv missing, flagged, orig S of Cnty line
1451	121020800212019	E	moved to DGN position,DGN sym & Blv missing, flagged, orig S of Cnty line
1452	121020800212024	E	moved to DGN position,DGN sym & Blv missing, flagged, orig S of Cnty line
1453	121020800212025	E	moved to DGN position,DGN sym missing, flagged, orig S of Cnty line
1454	121020800212026	E	moved to DGN position,DGN sym missing, flagged, orig S of Cnty line
1455	121020800212031	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1456	121020800212032	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1457	121020800212033	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1458	121020800212034	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1459	121020800212035	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1460	121020800212037	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1461	121020800212040	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1462	121020800212044	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1463	121020800212045	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1464	121020800212046	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1465	121020800212047	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1466	121020800312010	E	moved to DGN position [missing blv, orig no coordinates] flagged
1467	121020800312016	E	moved to DGN position [missing brg & blv symbol, orig. no coordinates] flagged
1468	121020800312018	E	moved to DGN position [orig no coordinates] flagged
1469	121020800312019	E	moved to DGN position [orig no coordinates] flagged
1470	121020800312020	E	moved to DGN position DGN missing orig South of Cnty line flagged
1471	121020800312021	E	moved to DGN position DGN sym missing, orig South of Cnty line flagged
1472	121020800312022	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1473	121020800312023	E	moved to DGN position,DGN sym missing, orig South of Cnty line flagged
1474	121020800412001	E	moved to DGN position,DGN sym missing, orig South of Cnty line flagged
1475	121020800412009	E	moved to DGN position DGN sym missing & blv orig West of Cnty line flagged
1476	121020800412017	E	moved to DGN position,DGN sym missing, orig South of Cnty line flagged
1477	121020800412018	E	moved to DGN position,DGN sym missing, orig South of Cnty line flagged
1478	121020800412019	E	moved to DGN position,DGN sym missing, orig South of Cnty line flagged
1479	121020800512004	E	moved to DGN position,DGN sym missing, orig South of Cnty line flagged
1480	121020800512005	E	moved to DGN position,DGN sym missing, orig South of Cnty line flagged

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ID	StructureID	Checked	Observations
1481	121020800512015	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1482	121020800512016	E	moved to DGN position Blv missing orig South of Cnty line flagged
1483	121020800512017	E	moved to DGN position,DGN sym missing, orig South of Cnty line flagged
1484	121020800512020	E	moved to DGN position,DGN sym missing, orig South of Cnty line flagged
1485	121020800512021	E	moved to DGN position,DGN sym missing, orig South of Cnty line flagged
1486	121020800512022	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1487	121020800512023	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1488	121020800512024	E	moved to DGN position,DGN sym missing, orig South of Cnty line flagged
1489	121020800512025	E	moved to DGN position,DGN sym missing, orig South of Cnty line flagged
1490	121020800612002	E	moved to DGN position,DGN sym missing, orig South of Cnty line flagged
1491	121020800612006	E	moved to DGN position,DGN sym missing, orig South of Cnty line flagged
1492	121020800612007	E	moved to DGN position,DGN sym missing, orig South of Cnty line flagged
1493	121020800612016	E	moved to DGN position, orig South of Cnty line
1494	121020800612017	E	moved to DGN position,DGN sym missing, orig South of Cnty line flagged
1495	121020800612018	E	moved to DGN position,DGN sym missing, orig South of Cnty line flagged
1496	121020800612019	E	moved to DGN position,DGN sym missing, orig South of Cnty line flagged
1497	121020800612020	E	moved to DGN position,DGN sym missing, orig South of Cnty line flagged
1498	121020800612021	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1499	121020800612023	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1500	121020800612025	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1501	121020800612026	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1502	121020800712054	c	moved to DGN position
1503	121020800712060	E	moved to DGN position, DGN symbol missing (flagged)
1504	121020800712070	E	moved to DGN position, DGN sym missing originally located near 0271-14-385 flagged
1505	121020800912011	E	moved to DGN position (same DGN position as 8009-12-012, originally no coordinates)
1506	121020800912012	E	moved to DGN position (same DGN position as 8009-12-011, originally no coordinates)
1507	121020800912013	E	moved to DGN position [missing blv, originally no coordinates] flagged
1508	121020800912014	E	moved to DGN position [missing blv, originally no coordinates] flagged
1509	121020800912015	E	moved to DGN position [missing blv, originally no coordinates] flagged
1510	121020800912016	E	moved to DGN position [missing brg & blv, originally no coordinates] flagged
1511	121020801012001	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1512	121020801112004	E	moved to DGN position blv missing orig South of Cnty line flagged
1513	121020801112005	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1514	121020801112013	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1515	121020801112014	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1516	121020801612008	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1517	121020801612009	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1518	121020801612010	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1519	121020801612011	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1520	121020801612012	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged

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ID	StructureID	Checked	Observations
1521	121020801612013	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1522	121020801612014	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1523	121020801612015	E	moved to DGN position (originally with no coordinates)
1524	121020801612016	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1525	121020801612017	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1526	121020801912006	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1527	121020801912007	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1528	121020801912008	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1529	121020801912011	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1530	121020801912012	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1531	121020801912013	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1532	121020801912014	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1533	121020801912015	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1534	121020801912016	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1535	121020801912017	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1536	121020801912018	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1537	121020801912019	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1538	121020801912020	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1539	121020801912021	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1540	121020801912022	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1541	121020801912023	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1542	121020801912027	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1543	121020802012004	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1544	121020802012005	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1545	121020802012006	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1546	121020802012007	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1547	121020802012008	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1548	121020802012009	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1549	121020802012010	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1550	121020802012011	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1551	121020802012012	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1552	121020802012018	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1553	121020802112006	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1554	121020802212080	c	moved to DGN position
1555	121020802512009	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1556	121020802512010	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1557	121020802712006	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1558	121020802812005	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1559	121020802812006	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1560	121020802912003	E	moved to DGN position [missing blv,originally no coordinates] flagged

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ID	StructureID	Checked	Observations
1561	121020802912005	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1562	121020802912006	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1563	121020802912007	E	moved to DGN position [missing blv,originally no coordinates] flagged
1564	121020802912008	E	moved to DGN position [missing blv,originally no coordinates] flagged
1565	121020802912010	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1566	121020802912011	E	moved to DGN position DGN sym missing, South of Cnty line flagged
1567	121020802912014	E	moved to DGN position DGN sym missing, South of Cnty line flagged
1568	121020802912026	E	moved to DGN position blv missing orig South of Cnty line flagged
1569	121020803012003	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1570	121020803112005	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1571	121020803312001	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1572	121020803312003	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1573	121020803312004	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1574	121020803312006	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1575	121020803312007	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1576	121020803512004	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1577	121020803512006	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1578	121020803512007	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1579	121020803512008	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1580	121020803612002	E	moved to DGN position [missing brg,originally no coordinates] flagged
1581	121020803612003	E	moved to DGN position [missing brg,originally no coordinates] flagged
1582	121020803612004	E	moved to DGN position [missing brg,originally no coordinates] flagged
1583	121020803612005	E	moved to DGN position [missing brg,originally no coordinates] flagged
1584	121020803812001	E	moved to DGN position [missing brg,originally no coordinates] flagged
1585	121020803812002	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1586	121020804112001	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1587	121020804112002	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1588	121020804112003	E	moved to DGN position [missing brg,originally no coordinates] flagged
1589	121020804112004	E	moved to DGN position DGN sym missing orig North of Cnty line flagged
1590	121020804112005	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1591	121020804112006	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1592	121020804112033	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1593	121020804112034	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1594	121020804112035	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1595	121020804112036	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1596	121020804112039	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1597	121020804112040	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1598	121020804112041	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1599	121020804112042	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1600	121020804612012	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged

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ID	StructureID	Checked	Observations
1601	121020804712007	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1602	121020804712008	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1603	121020804712009	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1604	121020804712012	E	moved DGN position, originally located South of the county line.
1605	121020804712015	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1606	121020804712016	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1607	121020804712017	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1608	121020804712444	c	moved to DGN position
1609	121020804812001	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1610	121020804812002	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1611	121020804912002	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1612	121020804912003	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1613	121020804912011	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1614	121020804912012	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1615	121020805012021	E	moved to DGN position DGN sym missing & blv & RR orig South of Cnty line flagged
1616	121020805012023	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1617	121020805012024	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1618	121020805012025	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1619	121020805012062	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1620	121020805012067	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1621	121020805112002	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1622	121020805312002	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1623	121020805312003	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1624	121020805312004	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1625	121020805312005	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1626	121020805312007	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1627	121020805312008	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1628	121020805312009	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1629	121020805312012	E	moved to DGN position DGN sym missing & no U-turn blv orig South of Cnty line flagged
1630	121020805312013	E	moved to DGN position DGN sym missing & no U-turn blv orig South of Cnty line flagged
1631	121020805312014	E	moved to DGN position DGN sym missing & no FR orig South of Cnty line flagged
1632	121020805312015	E	moved to DGN position DGN sym missing & no FR orig South of Cnty line flagged
1633	121020805312021	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1634	121020805412001	E	moved to DGN position [missing brg,originally no coordinates] flagged
1635	121020805412002	E	moved to DGN position [missing brg,originally no coordinates] flagged
1636	121020805412003	E	moved to DGN position [missing brg,originally no coordinates] flagged
1637	121020805412004	E	moved to DGN position [missing brg,originally no coordinates] flagged
1638	121020805412005	E	moved to DGN position [missing brg,originally no coordinates] flagged
1639	121020805412007	E	moved to DGN position [missing brg,originally no coordinates] flagged
1640	121020805412008	E	moved to DGN position [missing brg,originally no coordinates] flagged

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ID	StructureID	Checked	Observations
1641	121020805512002	E	moved to DGN position [missing brg,originally no coordinates] flagged
1642	121020805512003	E	moved to DGN position [missing brg,originally no coordinates] flagged
1643	121020805512004	E	moved to DGN position [missing brg,originally no coordinates] flagged
1644	121020805512006	E	moved to DGN position [missing brg,originally no coordinates] flagged
1645	121020805512007	E	moved to DGN position [missing brg,originally no coordinates] flagged
1646	121020805512008	E	moved to DGN position [missing brg,originally no coordinates] flagged
1647	121020805512009	E	moved to DGN position [missing brg, location unsure, originally no coordinates] flagged
1648	121020805512010	E	moved to DGN position [missing brg,originally no coordinates] flagged
1649	121020805512011	E	moved to DGN position [missing brg,originally no coordinates] flagged
1650	121020805512012	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1651	121020805512013	E	moved to DGN position [missing brg,originally no coordinates] flagged
1652	121020805512014	E	moved to DGN position [missing brg,originally no coordinates] flagged
1653	121020805512015	E	moved to DGN position [missing brg,originally no coordinates] flagged
1654	121020805512017	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1655	121020805512018	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1656	121020805512019	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1657	121020805512025	E	moved to DGN position [missing brg,originally no coordinates] flagged
1658	121020805512026	E	moved to DGN position [missing brg & FR, originally no coordinates] flagged
1659	121020805512027	E	moved to DGN position [missing brg & FR, originally no coordinates] flagged
1660	121020805712003	E	moved to DGN position [missing brg & blv,originally no coordinates] flagged
1661	121020805712006	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1662	121020805712007	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1663	121020805812001	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1664	121020805812004	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1665	121020805812005	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1666	121020805812006	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1667	121020805812007	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1668	121020805812008	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1669	121020805912002	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1670	121020805912004	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1671	121020805912005	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1672	121020805912006	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1673	121020805912007	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1674	121020806012001	E	moved to DGN position DGN sym missing flagged
1675	121020806012002	E	moved to DGN position DGN sym missing flagged
1676	121020806012003	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1677	121020806012005	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1678	121020806012006	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1679	121020806012007	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1680	121020806112003	E	moved to DGN position DGN sym missing orig South of Cnty line flagged

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ID	StructureID	Checked	Observations
1681	121020806112004	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1682	121020806112005	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1683	121020806112006	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1684	121020806112009	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1685	121020806112010	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1686	121020806112011	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1687	121020806112012	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1688	121020806112013	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1689	121020806112014	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1690	121020806212003	E	moved to DGN position, originally located South of Cnty line
1691	121020806412004	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1692	121020806612008	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1693	121020806612009	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1694	121020806812004	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1695	121020806812005	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1696	121020806812006	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1697	121020806912001	E	moved to DGN position [msg brg, originally near 0271-07-039] flagged
1698	121020806912002	E	moved to DGN position DGN sym missing & blv placement unsure orig South of Cnty line flagged
1699	121020807012001	E	moved to DGN position DGN sym missing & blv placement unsure orig South of Cnty line flagged
1700	121020807812006	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1701	121020808512005	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1702	121020808512006	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1703	121020810212003	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1704	121020810312007	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1705	121020810312009	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1706	121020810312010	E	moved to DGN position DGN sym missing & blv flagged
1707	121020810312012	c	moved to DGN position
1708	121020810312014	c	moved to DGN position
1709	121020810312015	c	moved to DGN position
1710	121020810312016	c	moved to DGN position
1711	121020810712002	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1712	121020810712003	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1713	121020810812005	E	moved to DGN position, orig South of Cnty line flagged
1714	121020810812006	E	moved to DGN position, orig South of Cnty line flagged
1715	121020810812007	E	moved to DGN position (originally with no coordinates)
1716	121020810812008	E	moved to DGN position (originally with no coordinates)
1717	121020810812012	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1718	121020810812013	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1719	121020810812014	E	moved to DGN position DGN sym missing & blv, orig South of Cnty line flagged
1720	121020810812015	E	moved to DGN position DGN sym missing & blv, orig South of Cnty line flagged

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ID	StructureID	Checked	Observations
1721	121020810812016	E	moved to DGN position [missing brg & blv, originally no coordinates] flagged
1722	121020810812017	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1723	121020810812018	E	moved to DGN position [missing brg, originally no coordinates] flagged
1724	121020810812019	E	moved to DGN position [missing brg, originally no coordinates] flagged
1725	121020810812020	E	moved to DGN position [missing brg, originally no coordinates] flagged
1726	121020810812021	E	moved to DGN position [missing brg, originally no coordinates] flagged
1727	121020811412009	E	moved to DGN position (DGN symbol missing, originally S of Cnty line)
1728	121020811412010	E	moved to DGN position (DGN symbol missing, originally S of Cnty line)
1729	121020811412011	E	moved to DGN position blv missing location unsure orig South of Cnty line flagged
1730	121020811412012	E	moved to DGN position DGN sym missing & blv location unsure orig South of Cnty line flagged
1731	121020811912001	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1732	121020811912002	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1733	121020812012002	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1734	121020812012007	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1735	121020812012008	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1736	121020812012009	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1737	121020812012010	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1738	121020812012011	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1739	121020812112001	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1740	121020812112002	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1741	121020812112005	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1742	121020812112007	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1743	121020812112008	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1744	121020812212001	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1745	121020812212002	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1746	121020813812005	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1747	121020813812006	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1748	121020813812007	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1749	121020813812008	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1750	121020813912001	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1751	121020813912002	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1752	121020813912003	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1753	121020813912004	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1754	121020813912005	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1755	121020813912006	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1756	121020814112006	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1757	121020814112007	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1758	121020814112011	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1759	121020814112012	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1760	121020814112013	E	moved to DGN position DGN sym missing orig South of Cnty line flagged

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ID	StructureID	Checked	Observations
1761	121020814112014	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1762	121020814412002	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1763	121020814412003	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1764	121020814412004	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1765	121020814612012	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1766	121020814612013	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1767	121020814612014	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1768	121020814612015	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1769	121020814612016	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1770	121020814612017	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1771	121020814612018	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1772	121020814712004	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1773	121020814712005	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1774	121020814712007	E	moved to DGN (DGN symbol missing, orig South of Cnty line)
1775	121020814712008	E	moved to DGN (DGN symbol missing, location same as 8147-12-007, originally South of Cnty line)
1776	121020814712009	E	moved to DGN (DGN symbol missing, location same as 8147-12-010, originally South of Cnty line)
1777	121020814712010	E	moved to DGN (DGN symbol missing, orig South of Cnty line)
1778	121020814712011	E	moved to DGN position blv missing orig South of Cnty line flagged
1779	121020815012001	E	moved to DGN position blv missing orig South of Cnty line flagged
1780	121020815012002	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1781	121020815012005	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1782	121020815012006	E	moved to DGN position blv missing orig South of Cnty line flagged
1783	121020815012009	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1784	121020815012010	E	moved to DGN position blv missing orig South of Cnty line flagged
1785	121020815012011	E	moved to DGN position, DGN sym missing & blv, believe E of 249 should be W of 249, flagged orig S of cnty.
1786	121020815012012	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1787	121020815012013	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1788	121020815012014	E	moved to DGN position, originally South of Cnty line flagged
1789	121020815012015	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1790	121020815012016	E	moved to DGN position, originally South of Cnty line
1791	121020815112001	E	moved to DGN position, originally South of Cnty line
1792	121020815112004	E	moved to DGN position blv missing orig South of Cnty line flagged
1793	121020815112005	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1794	121020815112009	E	moved to DGN position blv missing orig South of Cnty line flagged
1795	121020815112010	c	moved to DGN position
1796	121020815112011	E	moved to DGN position DGN sym missing , flagged orig South of Cnty line
1797	121020815112012	E	moved to DGN position DGN sym missing & blv , flagged orig South of Cnty line
1798	121020815112013	c	moved to DGN position
1799	121020815112014	c	moved to DGN position
1800	121020815112015	E	moved to DGN position DGN sym missing ,flagged orig South of Cnty line

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ID	StructureID	Checked	Observations
1801	121020815112016	E	moved to DGN position DGN sym missing & blv, flagged orig South of Cnty line
1802	121020815112017	c	moved to DGN position
1803	121020815112018	c	moved to DGN position
1804	121020815112019	E	moved to DGN position blv missing orig South of Cnty line flagged
1805	121020815112020	c	moved to DGN position
1806	121020815112021	c	moved to DGN position
1807	121020815112022	c	moved to DGN position
1808	121020815112025	E	moved to DGN position (missing brg symbol)
1809	121020815112026	c	moved to DGN position
1810	121020815112027	c	moved to DGN position
1811	121020815712005	E	moved to DGN position, DGN sym missing, flagged orig South of Cnty line
1812	121020815712006	E	moved to DGN position, DGN sym missing, flagged orig South of Cnty line
1813	121020815712007	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1814	121020815712008	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1815	121020815812002	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1816	121020815812003	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1817	121020815812004	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1818	121020815912005	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1819	121020815912006	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1820	121020816612002	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1821	121020816612003	E	moved to DGN position, originally South of Cnty line
1822	121020816612004	E	moved to DGN position, originally South of Cnty line
1823	121020816612005	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1824	121020816612006	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1825	121020816712005	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1826	121020816712006	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1827	121020816712007	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1828	121020816712008	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1829	121020816712009	E	moved to DGN position, originally South of Cnty line
1830	121020816712010	E	moved to DGN position, originally South of Cnty line
1831	121020816912003	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1832	121020817012004	E	moved to DGN position DGN sym missing & blv and same structure as 1833-4, flagged, S. of cnty line
1833	121020817012005	E	moved to DGN position DGN sym missing & blv and same structure as 1832,4, flagged, S. of cnty line
1834	121020817012006	E	moved to DGN position DGN sym missing & blv and same structure as 1832-3, flagged, S. of cnty line
1835	121020817112004	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1836	121020817112005	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1837	121020817112006	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1838	121020817112007	E	moved to DGN position DGN sym missing & blv orig South of Cnty line flagged
1839	121020817112008	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1840	121020817112009	E	moved to DGN position DGN sym missing & blv & placement unsure, flagged orig South of Cnty line

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ID	StructureID	Checked	Observations
1841	121020817112010	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1842	121020817512004	E	moved to DGN position, blv missing, placement unsure, flagged orig South of Cnty line
1843	121020817712008	E	moved to DGN position DGN sym missing & blv, flagged orig South of Cnty line
1844	121020817712009	E	moved to DGN position (originally with no coordinates, DGN symbol missing, Road missing)
1845	121020817812002	E	moved to DGN position, originally South of Cnty line
1846	121020817812003	E	moved to DGN position, originally South of Cnty line
1847	121020817812004	E	moved to DGN position DGN sym missing orig South of Cnty line flagged
1848	121020817812005	E	moved to DGN position DGN sym missing orig South of Cnty line flagged

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1	LT LN US90A	.5MI.E.HARRIS-FT BEND CL.	29376	095310	29.62667	-95.51667	29.62842	-95.5125	29377	95708
2	T & NO RR	5M.E.OF HARRIS/FT.BND.C/L	29395	095266	29.65833	-95.44333	29.65605	-95.44117	29394	95665
3	EAST BOUND US90A	.5MI.W.OF HARRIS C/L.	29376	095310	29.62667	-95.51667	29.62822	-95.5125	29377	95707
4	US90A SB	5M.E.OF HARRIS/FT.BND.C/L	29392	095267	29.65333	-95.44500	29.65596	-95.44184	29394	95665
5	HOLMES RD	5M.E.OF HARRIS/FT.BND C/L	29394	095266	29.65667	-95.44333	29.65353	-95.4429	29392	95666
6	US-90A (O.S.T.)	1.5MI.N.OF IH-610	29421	095224	29.70167	-95.37333	29.70062	-95.37516	29420	95625
7	S.POST OAK N.B.	AT US59/S.POST OAK	29388	095277	29.64667	-95.46167	29.64747	-95.46354	29388	95678
8	S.POST OAK S.B.	US-90A & SOUTH POST OAK	29388	095277	29.64667	-95.46167	29.64748	-95.46367	29388	95678
9	GH & H RR	1.5 MI N OF IH 45	29441	095184	29.73500	-95.30667	29.73477	-95.30683	29441	95584
10	US 90A	1.25 MI N OF IH 45	29440	095185	29.73333	-95.30833	29.73243	-95.30778	29439	95585
11	CG & SF RR	1.5 MI S OF IH 45	29426	095199	29.71000	-95.33167	29.70992	-95.33131	29426	95599
12	US 90A NB	3.0 MI N OF IH 45	29452	095179	29.75333	-95.29833	29.75312	-95.29642	29452	95578
13	US 90A SB	3.0 MI N OF IH 45	29452	095179	29.75333	-95.29833	29.75358	-95.29723	29452	95578
14	US90A SB	5 MI N OF IH 45	29454	095177	29.75667	-95.29500	29.7569	-95.29478	29454	95577
15	US 90A SB	6 MI N OF IH 45	29459	095177	29.76500	-95.29500	29.76583	-95.29447	29459	95577
16	GRIGGS RD	2MI.S.OF IH-45	29422	095210	29.70333	-95.35000	29.70229	-95.35261	29421	95612
17	PRODUCE TERMINAL	1.5 MI S OF IH 45	29426	095199	29.71000	-95.33167	29.71	-95.33099	29426	95599
18	GH & H RAILROAD	1.5 MI N OF IH 45	29441	095184	29.73500	-95.30667	29.73429	-95.30527	29441	95583
19	LAWNDALE AVE	0.6 MI N OF IH 45	29433	095185	29.72167	-95.30833	29.72455	-95.31106	29435	95587
20	US 90A NB	6.0 MI N OF IH 45	29459	095177	29.76500	-95.29500	29.76584	-95.29425	29460	95577
21	US 90A NB	5 MI N OF IH 45	29454	095177	29.75667	-95.29500	29.7569	-95.29457	29454	95577
22	US 90A	0.5 MI S OF IH 45	29426	095192	29.71000	-95.32000	29.71032	-95.31925	29426	95592
23	ROARK RD.	.5MI.N.OF FT.BEND C/L.	29394	095339	29.65667	-95.56500	29.65559	-95.56231	29393	95737
24	US 59	4 MI S. OF HOUSTON	29439	095249	29.73167	-95.41500	29.73053	-95.4126	29438	95648
25	US 59	3.5MI S. OF HOUSTON	29439	095248	29.73167	-95.41333	29.73059	-95.41047	29438	95646
26	HAZZARD ST	2.5 MI FROM HOUSTON	29439	095246	29.73167	-95.41000	29.73059	-95.40683	29438	95644
27	WOODHEAD ST	1.25MI FROM DWTWN HOU.	29439	095244	29.73167	-95.40667	29.73072	-95.4042	29438	95643
28	DUNLAVY ST	1.5MI FROM DTWN HOUSTON	29439	095242	29.73167	-95.40333	29.73084	-95.40184	29439	95641
29	MANDELL ST	2 MI FRM DTWN HOUSTON	29439	095241	29.73167	-95.40167	29.73095	-95.39929	29439	95640
30	US 59 NB	0.10 MI W OF SH 288	29439	095235	29.73167	-95.39167	29.73252	-95.37507	29440	95625
31	US59 NB MN LN	7MI.SW.OF HOUSTON	29437	095281	29.72833	-95.46833	29.72582	-95.46803	29435	95681
32	US 59	6 MI SW. OF HOUSTON	29438	095272	29.73000	-95.45333	29.7299	-95.45128	29438	95671
33	US 59	6 MI SW. OF HOUSTON	29438	095270	29.73000	-95.45000	29.72961	-95.44771	29438	95669
34	US 59	5.5 MI SW. OF HOUSTON	29438	095266	29.73000	-95.44333	29.7286	-95.44125	29437	95665
35	US 59	5MI.S.OF HOUSTON	29438	095259	29.73000	-95.43167	29.72966	-95.42807	29438	95657
36	US 59	4.5MI.S.OF HOUSTON	29439	095253	29.73167	-95.42167	29.73032	-95.41837	29438	95651
37	ELGIN ST.	10BLKS.S.OF IH-45 & US-59	29442	095221	29.73667	-95.36833	29.73639	-95.36851	29442	95621
38	TUAM ST	9 BLKS.S.OF IH-45	29442	095220	29.73667	-95.36667	29.73828	-95.36707	29443	95620
39	MCGOWEN ST	4BLKS.S.IH-45	29444	095219	29.74000	-95.36500	29.74016	-95.36562	29444	95619
40	US59 NB ON RAMP	3 BLKS.S.OF IH-45	29445	095218	29.74167	-95.36333	29.74147	-95.36399	29445	95618

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
41	ON-RAMP L S.B.	2BLS.S.OF IH-45	29445	095218	29.74167	-95.36333	29.74249	-95.36431	29445	95619
42	GRAY ST	1BLK.S.OF IH-45	29447	095217	29.74500	-95.36167	29.74354	-95.36311	29446	95618
43	PIERCE ST UTILITY	1BLK.S.OF IH-45	29447	095217	29.74500	-95.36167	29.74404	-95.36252	29446	95618
44	PIERCE ST	@IH-45 & 59 INTERSECTION	29447	095217	29.74500	-95.36167	29.74425	-95.36234	29447	95617
45	CALHOUN ST	1BLK.N.OF IH-45 & US-59	29447	095217	29.74500	-95.36167	29.74489	-95.36166	29447	95617
46	JEFFERSON ST	2BLS.N.OF IH-45 & US-59	29448	095216	29.74667	-95.36000	29.74768	-95.35995	29449	95616
47	PEASE ST	3BLKS.N.OF IH-45 & US-59	29448	095216	29.74667	-95.36000	29.7463	-95.36038	29448	95616
48	LEELAND ST	4BLK.N.OF IH-45 & US-59	29450	095215	29.75000	-95.35833	29.74726	-95.36019	29448	95616
49	LEELAND-BELL ST CO	5BLK.N.OF IH-45 & US-59	29450	095215	29.75000	-95.35833	29.74809	-95.3593	29449	95616
50	US 59 SB ML	.75MI.N.OF FORT-BEND C/L	29391	095342	29.65167	-95.57000	29.65123	-95.56819	29391	95741
51	US 59 SB ML	.25MI.N.OF FORT BEND C/L	29392	095340	29.65333	-95.56667	29.65377	-95.56546	29392	95739
52	US 59 SB ML	0.5MI S OF BELTWAY 8	29394	095339	29.65667	-95.56500	29.65542	-95.56371	29393	95738
53	ALABAMA ST EB	@US-59&SH-288 INTERCHANGE	29443	099223	29.73833	-99.37167	29.73313	-95.37225	29440	95623
54	SOUTH BOUND US59	.5MIS.DTWN HOUSTON	29439	095235	29.73167	-95.39167	29.73169	-95.39153	29439	95635
55	US59 OFF RAMP @ TR	AVIS	29440	095231	29.73333	-95.38500	29.73216	-95.38746	29439	95632
56	US 59 SB	0.10 MIS OF SH 288	29439	095235	29.73167	-95.39167	29.73267	-95.37507	29440	95625
57	SH288 CONN.	@ US-59 & SH-288	29440	095223	29.73333	-95.37167	29.73481	-95.37119	29441	95623
58	US59 WB CONN.	@ SH-288 & US-59	29440	095223	29.73333	-95.37167	29.73272	-95.37178	29440	95623
59	SH288 SB	@ SH-288 & US-59	29440	095223	29.73333	-95.37167	29.7329	-95.37137	29440	95623
60	SH288NB CONN"D"	@ US-59 & SH-288	29440	095223	29.73333	-95.37167	29.73477	-95.37057	29441	95622
61	SH288NB-F TO 59SB	@ SH-288 & US-59	29440	095223	29.73333	-95.37167	29.73052	-95.37139	29438	95623
62	US59 WB RAMP TO IH	610	29440	095276	29.73333	-95.46000	29.73172	-95.4595	29439	95676
63	ENT RAMP FROM SAN	US-59 @ WHEELER ST.	29439	095235	29.73167	-95.39167	29.73191	-95.38144	29439	95629
64	EXIT RAMP TO FANNI	US-59 & SAN JACINTO ST.	29439	095235	29.73167	-95.39167	29.73247	-95.38118	29439	95629
65	EDLOE STREET	3MI.N.OF IH-610 & US-59	29441	095259	29.73500	-95.43167	29.72908	-95.43323	29437	95660
66	US-59 EB FR RD.	.5MI.E.OF IH-610	29438	095270	29.73000	-95.45000	29.72929	-95.44786	29438	95669
67	US-59 WB FR. RD.	.5MI.E.OF IH-610	29438	095270	29.73000	-95.45000	29.73004	-95.44781	29438	95669
68	SH288 ON-RAMP	SH-288 & US-59	29440	095223	29.73333	-95.37167	29.73358	-95.37151	29440	95623
69	SH-288 N.B.	SH-288 & US-59	29440	095223	29.73333	-95.37167	29.73413	-95.37013	29440	95622
70	US-59 S.B.FR. RD.	.5MIS.OF BLTWY 8	29394	095339	29.65667	-95.56500	29.65509	-95.56447	29393	95739
71	US-59	.5MIS.OF BLTWY 8	29394	095339	29.65667	-95.56500	29.65534	-95.56305	29393	95738
72	US-59 N.B.	AT US59/ BW8	29396	095334	29.66000	-95.55667	29.66095	-95.55748	29397	95734
73	BW 8 DIR CONNECT	INTER US 59 & BELTWAY 8	29396	095334	29.66000	-95.55667	29.66308	-95.55747	29398	95734
74	US59 DIR CONNECT	INTER US 59 & BELTWAY 8	29396	095334	29.66000	-95.55667	29.66265	-95.55829	29398	95735
75	US59 DIR CONNECT	INTER US 59 & BELTWAY 8	29396	095334	29.66000	-95.55667	29.66331	-95.55611	29398	95734
76	US-59 NB MN LN	8.5MISW OF HOUSTON	29434	095298	29.72333	-95.49667	29.72165	-95.49309	29433	95696
77	US-59 SB MN LN	8.5MISW.OF HOUSTON	29434	095298	29.72333	-95.49667	29.72165	-95.49336	29433	95696
78	US-59 NB MN LN	.44MI. S. OF SP.RR.	29435	095290	29.72500	-95.48333	29.72541	-95.484	29435	95690
79	US-59 SB MN LN	.44MI. S. OF SP.RR.	29435	095290	29.72500	-95.48333	29.72559	-95.484	29435	95690
80	US59 EB EX.RAMP"D"	US-59 @ FOUNTAINVIEW	29435	095290	29.72500	-95.48333	29.72526	-95.48171	29435	95689

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
81	US59 WB EX.RAMP"C"	US-59 @ CHIMNEY ROCK	29436	095287	29.72667	-95.47833	29.72581	-95.47736	29435	95686
82	US-59 NB MN LN	7.5MI.SW.OF HOUSTON	29436	095287	29.72667	-95.47833	29.72549	-95.47622	29435	95686
83	US59 SB MN LN	7.5MI.SW.OF HOUSTON	29436	095287	29.72667	-95.47833	29.72567	-95.47623	29435	95686
84	US59 S.RICE AVL	US59 AT RICE AVE.	29437	095281	29.72833	-95.46833	29.72662	-95.46522	29436	95679
85	US59 AVL @ IH610W	SW FWY AT IH610W	29436	095287	29.72667	-95.47833	29.72955	-95.45689	29438	95674
86	US59 SB TO IH45 SB	IH45/US59 INTERCHANGE	29447	095218	29.74500	-95.36333	29.74373	-95.3621	29446	95617
87	US59SB TO IH45NB	US59/IH45 INTERCHANGE	29445	095216	29.74167	-95.36000	29.74544	-95.362	29447	95617
88	EXIT RAMP A	AT US59/ BW8	29396	095334	29.66000	-95.55667	29.66248	-95.5567	29397	95734
89	US 59 ENTR. RP B	AT US59/ BW8	29396	095334	29.66000	-95.55667	29.66193	-95.55582	29397	95733
90	US-59 S.B.	AT US59/ BW8	29396	095334	29.66000	-95.55667	29.6611	-95.55759	29397	95735
91	US59NB CONND I45SB	US59/IH45 INTERCHANGE	29449	095223	29.74833	-95.37167	29.74324	-95.36157	29446	95617
92	US59NB CONNA I45NB	US59/IH45 INTERCHANGE	29449	095223	29.74833	-95.37167	29.74422	-95.36349	29447	95618
93	US 59 SB ML	1.9MI SW OF WESTPARK	29421	095311	29.70167	-95.51833	29.70023	-95.51758	29420	95711
94	US 59 NB ML	1.9MI SW OF WESTPARK	29421	095311	29.70167	-95.51833	29.70006	-95.51739	29420	95710
95	US 59 SB ML	1.6MI SW OF WESTPARK	29433	095308	29.72167	-95.51333	29.70425	-95.51301	29423	95708
96	US 59 NB ML	1.6MI SW OF WESTPARK	29433	095308	29.72167	-95.51333	29.70412	-95.51284	29422	95708
97	US 59 SB ML	0.6MI SW OF WESTPARK	29430	095300	29.71667	-95.50000	29.71659	-95.49909	29430	95699
98	US 59 NB ML	0.6MI SW OF WESTPARK	29430	095300	29.71667	-95.50000	29.71647	-95.49894	29430	95699
99	US59 AVL/HILLCROFT	2.25MI WEST OF IH610&US59	29430	095300	29.71667	-95.50000	29.7205	-95.49453	29432	95697
100	HILLCROFT T-RP	2.25MI. SW OF IH610 & 59	29430	095300	29.71667	-95.50000	29.72098	-95.49551	29433	95697
101	T-RP@WESTWOOD P&R	.5MI S OF BISSONNET	29406	095327	29.67667	-95.54500	29.67126	-95.54838	29403	95729
102	US59 AVL@W.WOODP&	.5MI S OF BISSONNET	29406	095327	29.67667	-95.54500	29.6702	-95.5477	29402	95729
103	US 59 ML SB	1.1MI NE OF BWY 8	29406	095327	29.67667	-95.54500	29.67574	-95.54185	29405	95725
104	US 59 SB ML	0.45 MI. NE OF BISSONNET	29409	095323	29.68167	-95.53833	29.68067	-95.53656	29408	95722
105	US59 SB FR	0.45MI. NE OF BISSONNET	29409	095323	29.68167	-95.53833	29.68085	-95.53681	29409	95722
106	US 59 NB FR	0.45 MI. NE OF BISSONNET	29409	095323	29.68167	-95.53833	29.68036	-95.53621	29408	95722
107	US 59 SB ML	2.0 MI NE OF BWY 8	29413	095320	29.68833	-95.53333	29.68784	-95.53052	29413	95718
108	US 59 SB ML	2.3 MI NE OF BWY 8	29415	095317	29.69167	-95.52833	29.69193	-95.52695	29415	95716
109	US 59 EXIT RAMP S	3.0MI EAST OF IH610W	29439	095249	29.73167	-95.41500	29.73064	-95.41478	29438	95649
110	US 59 ENT RAMP	3.0MI EAST OF IH610W	29439	095249	29.73167	-95.41500	29.7301	-95.41464	29438	95649
111	US59 SB MN LN	7MI.SW.OF HOUSTON	29437	095281	29.72833	-95.46833	29.72599	-95.46799	29436	95681
112	BW8 DIR CONNECT	INTER US 59 & BELTWAY 8	29396	095334	29.66000	-95.55667	29.66241	-95.55884	29397	95735
113	US59 AVL/W.BELFORT	SW FWY AT BW8	29392	095340	29.65333	-95.56667	29.6574	-95.56142	29394	95737
114	T-RAMP/W.BELFORT	SW FWY AT BW8	29392	095340	29.65333	-95.56667	29.65574	-95.56174	29393	95737
115	US 59 NB ML	0.25MI N OF FORT BEND C/L	29391	095342	29.65167	-95.57000	29.65111	-95.56804	29391	95741
116	US 59 NB ML	0.50MI N OF FORT BEND C/L	29392	095340	29.65333	-95.56667	29.65369	-95.56526	29392	95739
117	US 59 NB ML	0.12MI N OF W BELLFORT	29394	095339	29.65667	-95.56500	29.65527	-95.56356	29393	95738
118	US 59 NB ML	1.1 MI. NE OF BWY 8	29406	095327	29.67667	-95.54500	29.67562	-95.54171	29405	95725
119	US 59 NB ML	2.0 MI NE OF BWY 8	29413	095320	29.68833	-95.53333	29.68774	-95.53035	29413	95718
120	US 59 NB ML	2.3 MI NE OF BWY 8	29415	095317	29.69167	-95.52833	29.6918	-95.52679	29415	95716

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
121	US 59 NB ML	0.45 MI. NE OF BISSONNET	29409	095323	29.68167	-95.53833	29.68057	-95.5364	29408	95722
122	ALABAMA ST WB	@US59 & SH288 INTERCHANGE	29443	099223	29.73833	-99.37167	29.73314	-95.37216	29440	95623
123	CONN. RAMP F, NB U	AT US59 & IH610W	29468	095263	29.78000	-95.43833	29.7262	-95.46122	29436	95677
124	US 59 EB TO 610 NB	@ IH-610 & US-59	29468	095263	29.78000	-95.43833	29.72812	-95.46079	29437	95676
125	US59WB TO I610W SB	S.W.FWY/IH610W INTERCHGE.	29468	095263	29.78000	-95.43833	29.72928	-95.45894	29438	95675
126	SPUR 527 NB	1MI.SW.OF HOUSTON	29441	095232	29.73500	-95.38667	29.73418	-95.38515	29441	95631
127	SPUR 527 NB	.5MI.SW.OF HOUSTON	29443	095231	29.73833	-95.38500	29.73815	-95.38216	29443	95629
128	SPUR 527 SB	0.5 MI. SW OF HOUSTON	29441	095232	29.73500	-95.38667	29.73425	-95.3854	29441	95631
129	SPUR 527 SB	0.5 MI. SW OF HOUSTON	29443	095231	29.73833	-95.38500	29.73826	-95.38235	29443	95629
130	US 90A	0.1 MI W OF IH 610	29477	095164	29.79500	-95.27333	29.79546	-95.27246	29477	95563
131	US 90	3 MI NE OF IH 610	29494	095138	29.82333	-95.23000	29.82421	-95.22931	29495	95538
132	US 90	2.8 MI NE OF IH 610	29500	095125	29.83333	-95.20833	29.83368	-95.20728	29500	95524
133	US 90	7.5MI E OF IH610/US90	29510	095099	29.85000	-95.16500	29.85155	-95.16583	29511	95499
134	US 90	9.5MI E OF IH610/US90	29519	095080	29.86500	-95.13333	29.86567	-95.13311	29519	95480
135	US 90	12.5MI E IH610 & US90	29526	095053	29.87667	-95.08833	29.87717	-95.0891	29526	95453
136	OLD US90	0.75 MI SW OF FM2100	29528	095045	29.88000	-95.07500	29.88158	-95.074	29529	95444
137	US 90	12MI E OF IH610	29525	095056	29.87500	-95.09333	29.87594	-95.09437	29526	95457
138	S.P.T.C. RR	US-90 @ S.P.T.C. RR.	29524	095066	29.87333	-95.11000	29.87415	-95.11005	29524	95466
139	BELTWAY 8 SB FR	1.7 MI NE OF FM 526	29050	095111	29.08333	-95.18500	29.8428	-95.18597	29506	95512
140	BELTWAY 8 NB FR	1.7 MI NE OF FM 526	29506	095110	29.84333	-95.18333	29.84352	-95.18433	29506	95511
141	US 90	0.2 MI SW OF BELTWAY 8	29505	095113	29.84167	-95.18833	29.84188	-95.18827	29505	95513
142	US-90 WB FTG	1 MI NE OF BW8	29510	095099	29.85000	-95.16500	29.83961	-95.16062	29504	95496
143	US-90 EB FTG	1 MI NE OF BW8	29510	095099	29.85000	-95.16500	29.83844	-95.16022	29503	95496
144	US-90 WB	1 MI NE OF BW8	29510	095099	29.85000	-95.16500	29.83905	-95.1604	29503	95496
145	US-90 EB	1 MI NE OF BW8	29510	095099	29.85000	-95.16500	29.83895	-95.16035	29503	95496
146	US-90	1.8MI NE OF BW8	29514	095092	29.85667	-95.15333	29.84375	-95.14934	29506	95490
147	US90 (ACCESS RD)	.4MI SW OF SHELDON	29520	095077	29.86667	-95.12833	29.85137	-95.13159	29511	95479
148	US-90 WB	3.2MI NE OF BW8	29520	095077	29.86667	-95.12833	29.85267	-95.12768	29512	95477
149	US090 EB	3.2MI NE OF BW8	29520	095077	29.86667	-95.12833	29.85249	-95.1276	29511	95477
150	US90 (WB) ACCESS R	100YDS N OF US90	29520	095077	29.86667	-95.12833	29.85234	-95.12998	29511	95478
151	US-90 WB	.4 MI NE OF BW8	29521	095075	29.86833	-95.12500	29.85474	-95.1223	29513	95473
152	US-90 EB	.4 MI NE OF BW8	29521	095075	29.86833	-95.12500	29.85458	-95.12222	29513	95473
153	US-90 WB	1 MI E OF SHELDON RD	29509	095072	29.84833	-95.12000	29.85845	-95.11253	29515	95468
154	US-90 EB	1 MI E OF SHELDON RD	29509	095072	29.84833	-95.12000	29.85828	-95.11243	29515	95467
155	US-90 WB	.4MI W OF SAN JAC RIV.	29512	095068	29.85333	-95.11333	29.86255	-95.10168	29518	95461
156	US-90 EB	.4MI W OF SAN JAC RIV.	29512	095068	29.85333	-95.11333	29.86239	-95.10158	29517	95461
157	US-90 WB	AT SAN JAC RIVER	29520	095056	29.86667	-95.09333	29.86556	-95.09365	29519	95456
158	US-90 EB	AT SAN JACINTO RIVER	29520	095056	29.86667	-95.09333	29.86536	-95.0936	29519	95456
159	US-90 WB	.1 MI E OF SAN JAC.RIVER	29527	095042	29.87833	-95.07000	29.86684	-95.09031	29520	95454
160	US-90 EB	US90 AT FM1942	29527	095042	29.87833	-95.07000	29.86664	-95.09021	29520	95454

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
161	US-90	US90 AT FM1942	29528	095037	29.88000	-95.06167	29.87951	-95.06813	29528	95441
162	US-90 WB	US90 AT FM1942	29530	095037	29.88333	-95.06167	29.88434	-95.06297	29531	95438
163	US-90 EB	US90 AT FM1942	29530	095037	29.88333	-95.06167	29.88423	-95.06281	29531	95438
164	US 90 WB FR	0.3 MI SW OF BELTWAY 8	29496	095112	29.82667	-95.18667	29.83157	-95.17971	29499	95508
165	US 90 EB FR	0.3 MI SW OF BELTWAY 8	29446	095112	29.74333	-95.18667	29.83014	-95.17922	29498	95508
166	US90 EB	1.3 MI E OF BW8	29505	095093	29.84167	-95.15500	29.84081	-95.15592	29504	95494
167	US90 WB	1.3 MI E OF BW8	29505	095093	29.84167	-95.15500	29.84098	-95.15601	29505	95494
168	US90 EB	2.2 MI E OF BW8	29508	095086	29.84667	-95.14333	29.8463	-95.14318	29508	95486
169	US90 WB	2.2 MI E OF BW8	29508	095086	29.84667	-95.14333	29.84646	-95.14327	29508	95486
170	SHELDON RD.	N. OF US90	29513	095076	29.85500	-95.12667	29.8532	-95.12804	29512	95477
171	US 90	0.5 MI SW OF BELTWAY 8	29497	095109	29.82833	-95.18167	29.82943	-95.18251	29498	95510
172	US 90 EB	US 90 AT BELTWAY 8	29499	095105	29.83167	-95.17500	29.83229	-95.17568	29499	95505
173	US 90 WB	US 90 AT BELTWAY 8	29499	095105	29.83167	-95.17500	29.83244	-95.17581	29499	95505
174	US 90	0.5 MI NE OF BELTWAY 8	29514	095092	29.85667	-95.15333	29.83558	-95.16826	29501	95501
175	US-90 WB MN LN	.5 MI N OF ADLONG JOHNSON	29565	095014	29.94167	-95.02333	29.94141	-95.02505	29565	95415
176	US-90 EB MN LN	.5 MI N OF ADLONG JOHNSON	29565	095014	29.94167	-95.02333	29.94127	-95.02492	29565	95415
177	US-90 WB	.7 MI N OF ADLONG JOHNSON	29582	094593	29.97000	-94.98833	29.94196	-95.02542	29565	95415
178	US-90 WB ML LN	.5 MI N OF LORD	29576	095000	29.96000	-95.00000	29.96099	-94.99959	29577	95000
179	US-90 EB ML LN	.5 MI N OF LORD	29576	095000	29.96000	-95.00000	29.96083	-94.99948	29577	95000
180	US 290	3.00 MI E OF WALLER C/L	30025	095532	30.04167	-95.88667	30.04246	-95.8862	30025	95932
181	US290 ML	04M N OF BARKER CYPRESS	29569	095400	29.94833	-95.66667	29.95597	-95.6781	29574	95807
182	US290 WBFR	04M N OF BARKER CYPRESS	29569	095400	29.94833	-95.66667	29.95621	-95.67794	29574	95807
183	US290 EBFR	17MI W OF US290 & IH610	29569	095400	29.94833	-95.66667	29.95577	-95.6783	29573	95807
184	US290 (EB)	.8MI NW OF NUESCHKE RD	29988	095432	30.64667	-95.72000	29.98235	-95.72715	29589	95836
185	US290 (WB)	.8MI NW OF MUESCHKE RD	29988	095432	30.64667	-95.72000	29.98289	-95.72674	29590	95836
186	BAKER CYPRESS RD	4.5 MI NW OF FM1960	29571	095404	29.95167	-95.67333	29.95263	-95.6733	29572	95804
187	BARKER CYPRESS RD	1MI N OF CYPRESS N HOU.	29571	095404	29.95167	-95.67333	29.952	-95.6736	29571	95804
188	US290	.2MI W OF SPRING CYPRESS	00000	000000	0.00000	0.00000	29.97337	-95.69951	29584	95820
189	US290	.7MI W OF SKINNER RD	00000	000000	0.00000	0.00000	29.97137	-95.69431	29583	95817
190	US290	.7MI E OF SPRING CYPRESS	00000	000000	0.00000	0.00000	29.96268	-95.68767	29578	95813
191	US-290 WB	11MI.W.OF US-290 & IH-610	29548	095372	29.91333	-95.62000	29.91648	-95.61558	29550	95769
192	US-290 WEST BOUND	5.75 MI NW OF BW8	29552	095376	29.92000	-95.62667	29.92327	-95.62829	29554	95777
193	US-290 EB	11MI.W.US-290 & IH-610	29548	095372	29.91333	-95.62000	29.9164	-95.61576	29550	95769
194	US-290 EAST BOUND	13MI.W.US-290 & IH-610	29552	095376	29.92000	-95.62667	29.9231	-95.62829	29554	95777
195	US-290	1.3MI SE OFFM1960	29536	095353	29.89333	-95.58833	29.90192	-95.60072	29541	95760
196	US-290 WB ML	1.9MI SE OF FM1960	29532	095348	29.88667	-95.58000	29.89724	-95.59393	29538	95756
197	US-290 WB ML	2.7MI SE OF FM1960	29529	095344	29.88167	-95.57333	29.89037	-95.58435	29534	95751
198	US-290	2.9MI SE OF FM1960	29527	095340	29.87833	-95.56667	29.88785	-95.58076	29533	95748
199	US-290 EB FNG	1.9MI SE OF FM1960	29532	095348	29.88667	-95.58000	29.89826	-95.59488	29539	95757
200	US 290 EB FTG RD	1.9MI SE OF FM1960	29532	095348	29.88667	-95.58000	29.8977	-95.59541	29539	95757

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
201	US-290 WB FTG	.3MI SE OF JONES RD.	29527	095340	29.87833	-95.56667	29.88813	-95.58051	29533	95748
202	US-290 EB FTG	.3MI SE OF JONES RD.	29952	095347	30.58667	-95.57833	29.88757	-95.58104	29533	95749
203	US-290 EB ML	1.9MI SE OF FM1960	29532	095348	29.88667	-95.58000	29.8971	-95.59406	29538	95756
204	US290 ML	1.6MI N OF HUFFMEISTER	29562	095389	29.93667	-95.64833	29.93625	-95.64978	29562	95790
205	US 290 AVL RAMP	1.9MI. SE OF FM-1960	29532	096348	29.88667	-96.58000	29.89864	-95.59541	29539	95757
206	US 290 AVL	1.9MI. SE OF FM-1960	29532	095348	29.88667	-95.58000	29.89881	-95.59526	29539	95757
207	US290 WB	3 MI W OF US290 & IH610	29496	095287	29.82667	-95.47833	29.82676	-95.47613	29496	95686
208	US290 EB FR	3MI.W.US-290 & IH-610	29496	095287	29.82667	-95.47833	29.82625	-95.47671	29496	95686
209	US290 ML	BETWEEN 34ST & 43 RD.ST.	29495	095286	29.82500	-95.47667	29.82647	-95.47641	29496	95686
210	US290 ML	.75 MI W OF I 610 & US290	29493	095282	29.82167	-95.47000	29.82333	-95.47301	29494	95684
211	US290 ML	@ US-290 & W. 43 RD. ST.	29491	095280	29.81833	-95.46667	29.8192	-95.46858	29492	95681
212	US290 ML	7MI.W.OF IH-610 & US-290	29486	095275	29.81000	-95.45833	29.81004	-95.45872	29486	95675
213	US290 ML	4MI.W.IH-610 & US-290	29484	095274	29.80667	-95.45667	29.80724	-95.4557	29484	95673
214	US290 EB FR	AT W CITY LIMITS OF HOU	29523	095326	29.87167	-95.54333	29.86714	-95.54241	29520	95725
215	US290 WB FR	AT W CITY LIMITS OF HOU.	29523	095326	29.87167	-95.54333	29.8678	-95.54204	29521	95725
216	US290 EB FR	3 MI W.OF HOU CITY LIMITS	29520	095321	29.86667	-95.53500	29.86319	-95.53351	29518	95720
217	US290 WB FR	3 MI W.OF HOU CITY LIMITS	29520	095321	29.86667	-95.53500	29.86384	-95.53312	29518	95720
218	PINEMONT	PINEMONT @ US-290	29505	095296	29.84167	-95.49333	29.84122	-95.4924	29505	95695
219	US-290	3.7MI.W.OF IS-610 & US290	29354	095294	29.59000	-95.49000	29.8379	-95.4887	29503	95693
220	US290 ML	US-290 @ W.43RD.ST.	29351	095290	29.58500	-95.48333	29.83282	-95.48323	29500	95690
221	US290 ML	4.5 MI W OF I-610 & US290	29511	095307	29.85167	-95.51167	29.85096	-95.50928	29511	95706
222	US290 ML	4.5 MI W OF I-610 & US290	29509	095304	29.84833	-95.50667	29.84855	-95.50505	29509	95703
223	LITTLE YORK RD.	LITTLE YORK RD.@ US-290	29522	095329	29.87000	-95.54833	29.87032	-95.54772	29522	95729
224	US290 ML	7.5MI.W.OF IH-610	29523	095326	29.87167	-95.54333	29.8674	-95.54227	29520	95725
225	US290 ML	7.5MI.W.OF IH-610	29520	095325	29.86667	-95.54167	29.86677	-95.54066	29520	95724
226	US290 ML	7.5MI.W.OF IH610 & US290	29520	095321	29.86667	-95.53500	29.86352	-95.53331	29518	95720
227	US290 ML	6.5MI.W.OF IH-610	29515	095344	29.85833	-95.57333	29.85934	-95.52414	29516	95714
228	US 290 WB ML	US-290 @ FM-529	29528	095342	29.88000	-95.57000	29.87922	-95.56832	29528	95741
229	US 290 EB ML	0.4MI WEST OF BELTWAY 8	29526	095337	29.87667	-95.56167	29.87654	-95.56289	29526	95738
230	US 290 EB ML	0.9MI WEST OF LITTLE YORK	29524	095333	29.87333	-95.55500	29.87307	-95.55504	29524	95733
231	US 290 WB ML	0.9MI WEST OF LITTLE YORK	29524	095333	29.87333	-95.55500	29.87318	-95.55487	29524	95733
232	US 290 AVL	0.9MI WEST OF LITTLE YORK	29524	095333	29.87333	-95.55500	29.87222	-95.55291	29523	95732
233	US290	INT.IH-610 & US-290	29483	095273	29.80500	-95.45500	29.80126	-95.45032	29481	95670
234	DACOMA AVL EXT RMP	INTER.IH610 & US290	29484	095274	29.80667	-95.45667	29.80449	-95.4523	29483	95671
235	DACOMA AVL ENT RMP	INTER.IH-610 & US-290	29484	095274	29.80667	-95.45667	29.80429	-95.45315	29483	95672
236	PINEMONT AVL TRAN.	.2MI.E.OF PINEMONT	29505	095296	29.84167	-95.49333	29.83557	-95.48605	29501	95692
237	PINEMONT AVL RMP	.3MI.E.OF PINEMONT	29505	095296	29.84167	-95.49333	29.8358	-95.48577	29501	95691
238	LITTLE YORK AVL	US-290 & W.LITTLE YORK	29522	095329	29.87000	-95.54833	29.87008	-95.54807	29522	95729
239	LITTLE YORK AVL RM	US-290 7 LITTLE YORK	29522	095329	29.87000	-95.54833	29.86983	-95.54843	29522	95729
240	US 290 WB ML	0.4MI WEST OF BELTWAY 8	29526	095337	29.87667	-95.56167	29.87671	-95.5628	29526	95738

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
241	US 290 EB ML	US-290 @ FM-529	29528	095342	29.88000	-95.57000	29.87921	-95.56867	29528	95741
242	BWNB CONNG US290EB	INTER US 290 & BELTWAY 8	29524	095333	29.87333	-95.55500	29.87244	-95.55588	29523	95734
243	US290WB CONNE BWNB	US 290 & BELTWAY 8	29524	095333	29.87333	-95.55500	29.87312	-95.55238	29524	95731
244	BWY 8 SB ML	at BELTWAY 8 & US 290	29524	095333	29.87333	-95.55500	29.87378	-95.55471	29524	95733
245	BELTWAY 8 NB ML	at BELTWAY 8 & US 290	29524	095333	29.87333	-95.55500	29.87364	-95.55455	29524	95733
246	US290EB CONNF BWSB	INTER US 290 & BELTWAY 8	29524	095333	29.87333	-95.55500	29.87336	-95.55589	29524	95735
247	BWSB CONNH US290WB	INTER US 290 & BELTWAY	29524	095333	29.87333	-95.55500	29.87426	-95.55404	29525	95732
248	US290WB CONNC BWSB	INTER US 290 & BELTWAY 8	29524	095333	29.87333	-95.55500	29.87273	-95.55804	29524	95735
249	US290EB CONND BWNB	INTER US 290 & BELTWAY 8	29524	095333	29.87333	-95.55500	29.87378	-95.55343	29524	95732
250	BWSB CONNA US290EB	INTER US 290 & BELTWAY 8	29524	095333	29.87333	-95.55500	29.87311	-95.55393	29524	95732
251	BWNB CONNB US290WB	INTER US 290 & BELTWAY 8	29524	095333	29.87333	-95.55500	29.87331	-95.55734	29524	95734
252	SH 3	1.5MI E OF SH3/FM1959	29354	095101	29.59000	-95.16833	29.59092	-95.16785	29355	95501
253	SH3 MAINLANES	.1MI N OF SH3+FM2351	29348	095096	29.58000	-95.16000	29.58165	-95.15917	29349	95496
254	SH 3	1MI W OF SH3 AND NASA1	29324	095073	29.54000	-95.12167	29.54655	-95.1263	29328	95476
255	SH 3	0.4 MI NE OF EDGEBROOK	29391	095136	29.65167	-95.22667	29.65384	-95.22702	29392	95536
256	SH3 SB	AT HARRIS/GALV. C/L	29311	095061	29.51833	-95.10167	29.52093	-95.10253	29313	95462
257	SH-3 NB	HARRIS / GALV.CO.LN	29311	095631	29.51833	-96.05167	29.52106	-95.10239	29313	95461
258	SH 3	0.4 MI NE OF EDGEBROOK	29390	095134	29.65000	-95.22333	29.65177	-95.22507	29391	95535
259	SH 3	.2MI NW OF FM2553	29370	095115	29.61667	-95.19167	29.61131	-95.18698	29367	95512
260	BW 8 NB FR	.55MI NW OF FM2553	29368	095113	29.61333	-95.18833	29.61592	-95.19107	29370	95515
261	BW 8 SB FR	.55MI NW OF FM2553	29369	095114	29.61500	-95.19000	29.61649	-95.19159	29370	95515
262	SH 3	2 MI E OF IH 45	29401	095146	29.66833	-95.24333	29.66989	-95.2446	29402	95547
263	SH 3 WB	0.5 MI E OF IH 45	29401	095158	29.66833	-95.26333	29.66999	-95.25899	29402	95555
264	SH 3 EB	0.5 MI E OF IH 45	29401	095157	29.66833	-95.26167	29.66981	-95.259	29402	95555
265	IH 45	4.0 MI N OF FM 1960	30048	095262	30.08000	-95.43667	30.07959	-95.43649	30048	95662
266	IH45 NB FR	1.0 MI N OF FM 1960	30022	095257	30.03667	-95.42833	30.03544	-95.42876	30021	95657
267	IH 45 SB	0.7 MI N OF FM 2920	30051	095262	30.08500	-95.43667	30.08384	-95.43633	30050	95662
268	IH 45	1.85 MI N OF FM 1960	30029	095258	30.04833	-95.43000	30.0466	-95.43028	30028	95658
269	IH45 NB	1.0 MI N OF FM 1960	30022	095257	30.03667	-95.42833	30.03542	-95.42904	30021	95657
270	IH 45 NB	0.7 MI N OF FM 2920	30051	095262	30.08500	-95.43667	30.08384	-95.43612	30050	95662
271	IH 45	15.0 MI N OF IH 610	30013	095257	30.02167	-95.42833	30.0209	-95.42881	30013	95657
272	IH 45	.6MI S OF SPRING STUEBNER	30044	095261	30.07333	-95.43500	30.07471	-95.43564	30045	95661
273	RICHEY RD	2MI S OF IH45 AND FM1960	29597	095255	29.99500	-95.42500	29.99755	-95.42548	29599	95655
274	AIRTEX DR	4MI S OF IH45 & FM1960	29589	095254	29.98167	-95.42333	29.98174	-95.4224	29589	95653
275	CYPRESSWOOD	2MI N OF IH45 & FM1960	30032	095259	30.05333	-95.43167	30.05226	-95.43146	30031	95659
276	IH 45 SB	1.0 MI N OF FM 1960	30022	095257	30.03667	-95.42833	30.03542	-95.42927	30021	95658
277	IH 45 SBFR	1.0 MI N OF FM 1960	30022	095257	30.03667	-95.42833	30.03542	-95.42952	30021	95658
278	HARDY TOLL RD(SB)	0.3 MI S MONTGOMERY C/L	30063	095261	30.10500	-95.43500	30.10612	-95.43539	30064	95661
279	IH-45 NB FR	0.3 MI S MONTGOMERY C/L	30063	095261	30.10500	-95.43500	30.10637	-95.43482	30064	95661
280	GRAND BLVD	2.1 MI N OF FM 2920	30063	095261	30.10500	-95.43500	30.10527	-95.4354	30063	95661

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
281	LOUETTA RD	0.5 MI S OF FM 2920	00000	000000	0.00000	0.00000	30.06665	-95.43423	30040	95661
282	IH 45	1MI N OF IH45 AND IH610	29579	095253	29.96500	-95.42167	29.96563	-95.41899	29579	95651
283	IH-45 SB & NB FTG	IH-45 @ WEST ROAD	29549	095249	29.91500	-95.41500	29.91523	-95.41269	29549	95648
284	IH45 NB ML	10MI N OF IH45+IH610	29569	095252	29.94833	-95.42000	29.94088	-95.41484	29565	95649
285	IH 45	.5MI N OF FM525/IH45	29565	095248	29.94167	-95.41333	29.94022	-95.41365	29564	95648
286	LT< LN & FRONTAG	8.5MI N OF IH45 & IH610	29563	095247	29.93833	-95.41167	29.93655	-95.41208	29562	95647
287	BW8WB-A TO IH45SB	.5MI N OF IH45/FM525	29563	095248	29.93833	-95.41333	29.93951	-95.41256	29564	95648
288	IH45/BW8 CONN.	.1MI S OF BW8	29563	095248	29.93833	-95.41333	29.93935	-95.41175	29564	95647
289	IH 45 NB ML	1 MI S OF WEST ROAD	29540	095249	29.90000	-95.41500	29.89924	-95.41195	29540	95647
290	IH 45 NB FRTG RD	1 MI S OF WEST ROAD	29540	095249	29.90000	-95.41500	29.89924	-95.41164	29540	95647
291	IH 45 SB FRTG RD	1 MI S OF WEST ROAD	29540	095249	29.90000	-95.41500	29.89927	-95.41249	29540	95647
292	IH 45 SB AVL RAMP	0.5MI N OF WEST ROAD	29550	095249	29.91667	-95.41500	29.92025	-95.41244	29552	95647
293	IH 45 AVL	0.5MI N OF WEST ROAD	29550	095249	29.91667	-95.41500	29.92023	-95.41192	29552	95647
294	IH 45 AVL RAMP	0.75MI S OF ALDINE-BENDER	29550	095249	29.91667	-95.41500	29.91843	-95.41232	29551	95647
295	IH 45 SB ML	6 MI N OF IH 45 & IH 610	29533	095249	29.88833	-95.41500	29.88887	-95.41197	29533	95647
296	IH 45 NB ML	6 MI N OF IH 45 & IH 610	29533	095249	29.88833	-95.41500	29.88886	-95.41118	29533	95647
297	IH 45 SB ML	2MI N OF IH 45 & SPUR 261	29539	095249	29.89833	-95.41500	29.89799	-95.41215	29539	95647
298	IH 45 NB ML	2MI N OF IH 45 & SPUR 261	29539	095249	29.89833	-95.41500	29.89799	-95.41194	29539	95647
299	IH 45 SB ML	8MI N OF IH 45 & IH 610	29549	095249	29.91500	-95.41500	29.91509	-95.41253	29549	95648
300	IH 45 NB ML	8MI N OF IH 45 & IH 610	29549	095249	29.91500	-95.41500	29.91511	-95.41232	29549	95647
301	IH 45 SB ML	8MI N OF IH 45 & IH 610	29559	095249	29.93167	-95.41500	29.93159	-95.41158	29559	95647
302	IH 45 NB ML	8MI N OF IH 45 & IH 610N	29559	095249	29.93167	-95.41500	29.93159	-95.41137	29559	95647
303	IH 45 EXIT RAMP	8MI N OF IH 45 & IH 610N	29559	095249	29.93167	-95.41500	29.93159	-95.41105	29559	95647
304	IH 45 SB ML	1 MI S OF WEST ROAD	29540	095249	29.90000	-95.41500	29.89925	-95.41217	29540	95647
305	SPUR 261	150 FT S. OF LEAGO ST.	29513	095247	29.85500	-95.41167	29.85508	-95.41199	29513	95647
306	IH45 SB ML	10 MI N OF IH45&IH610	29569	095252	29.94833	-95.42000	29.94122	-95.41565	29565	95649
307	BELTWAY 8 EB ML	.7 MI E OF GREENS CROSSIN	29565	095248	29.94167	-95.41333	29.94027	-95.41414	29564	95648
308	BELTWAY 8 WB ML	.7 MI E OF GREENS CROSSIN	29565	095248	29.94167	-95.41333	29.94046	-95.41414	29564	95648
309	IH45 NB EXT TO FTG	IH45	29565	095248	29.94167	-95.41333	29.94011	-95.41322	29564	95648
310	IH45 MAINLANES	0.6 MI N. OF BW8	00001	000001	0.00167	-0.00167	29.94896	-95.41665	29569	95650
311	IH 45 SB ML	1.15 MI N OF BW8	29574	095252	29.95667	-95.42000	29.95663	-95.41805	29574	95651
312	IH 45 NB ML	1.15 MI N OF BW8	29574	095252	29.95667	-95.42000	29.95663	-95.41783	29574	95651
313	IH 45 NB FTG RD	1.15 MI N OF BW8	29574	095252	29.95667	-95.42000	29.95665	-95.41732	29574	95650
314	IH 45 SB FTG RD	1.15 MI N OF BW8	29574	095252	29.95667	-95.42000	29.95666	-95.41855	29574	95651
315	CRI & P R.R.	3.5MI.S.OF IH-45	29492	095246	29.82000	-95.41000	29.81885	-95.41018	29491	95646
316	FM521	3M S OF IH610	29380	095248	29.63333	-95.41333	29.63384	-95.41127	29380	95647
317	FM 521	@HARRIS-BRAZORIA C/L	29352	095259	29.58667	-95.43167	29.58363	-95.43082	29350	95658
318	FM 521	4.5MI.S.OF IH-610 & FM521	29372	095251	29.62000	-95.41833	29.61878	-95.41727	29371	95650
319	FM 521	.7MI.S.OF IH-610	29403	095238	29.67167	-95.39667	29.67051	-95.39677	29402	95638
320	US 59 NBFR	1.7 MI N OF FM 1960	30016	095155	30.02667	-95.25833	30.02615	-95.25799	30016	95555

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
321	US 59 NBFR	1.0 MI N OF FM 1960	30012	095157	30.02000	-95.26167	30.0203	-95.26046	30012	95556
322	US 59 SB	0.3 MI S OF FM 1960	30001	095162	30.00167	-95.27000	30.00109	-95.26957	30001	95562
323	US 59 NB	0.3 MI S OF FM 1960	30001	095162	30.00167	-95.27000	30.00103	-95.26938	30001	95562
324	US 59 SB	1.0 MI N OF FM 1960	30012	095157	30.02000	-95.26167	30.02046	-95.26113	30012	95557
325	US 59 (SB)	1.7 MI N OF FM 1960	30016	095155	30.02667	-95.25833	30.02619	-95.25876	30016	95555
326	MCCLELLAN RD	2.2 MI N OF FM 1960	30020	095154	30.03333	-95.25667	30.03456	-95.25583	30021	95554
327	FM 1960 WB	1.6 MI S. MONTGOMERY C/L	30003	095160	30.00500	-95.26667	30.00499	-95.26773	30003	95561
328	US 59 NB	1.0 MI N OF FM 1960	30012	095157	30.02000	-95.26167	30.0204	-95.2609	30012	95557
329	US 59 SBFR	1.0 MI N OF FM 1960	30012	095157	30.02000	-95.26167	30.02048	-95.26158	30012	95557
330	US 59 (NB)	1.7 MI N OF FM 1960	30012	095157	30.02000	-95.26167	30.02617	-95.25855	30016	95555
331	FM 1960 EB	1.6 MI S. MONTGOMERY C/L	30003	095160	30.00500	-95.26667	30.0048	-95.26782	30003	95561
332	TOWNSEND BLVD	0.9 MI N OF FM 1960	30012	095157	30.02000	-95.26167	30.01805	-95.26198	30011	95557
333	TOWNSEN BLVD	0.25 MI W OF US 59	30012	095157	30.02000	-95.26167	30.01905	-95.26524	30011	95559
334	US59 SB	12MI N US59 \$ LOOP137	29589	095166	29.98167	-95.27667	29.97926	-95.27835	29588	95567
335	US59 NB	10.5MI.N.OF US-59&LOOP137	29575	095173	29.95833	-95.28833	29.95826	-95.28718	29575	95572
336	US59 SB	.5MIL.S.OF SH-525	29551	095184	29.91833	-95.30667	29.91829	-95.30685	29551	95584
337	US 59	4MI.N.OF KELLY STREET	29527	095195	29.87833	-95.32500	29.87944	-95.3246	29528	95595
338	US 59	4.5MI.N.OF KELLY ST.	29534	095191	29.89000	-95.31833	29.89082	-95.318	29534	95591
339	SB US 59	1.3MI.N.OF ALDINE BENDER	29555	095182	29.92500	-95.30333	29.92482	-95.3025	29555	95581
340	NB US 59	1.4MI.N.OF ALDINE MAIL RD	29555	095182	29.92500	-95.30333	29.92455	-95.30245	29555	95581
341	US 59	1.5MIL.S.OF FM-525	29546	095186	29.91000	-95.31000	29.91026	-95.30961	29546	95586
342	US 59	1.4MIL.S.OF FM-525	29542	095187	29.90333	-95.31167	29.90232	-95.31152	29541	95587
343	US59 NB	12MI.N.OF US-59&LOOP 137	29589	095166	29.98167	-95.27667	29.97833	-95.27759	29587	95567
344	US59 SB	10.5MI.N.OF US-59&LOOP137	29575	095173	29.95833	-95.28833	29.95843	-95.28774	29575	95573
345	US59 SB MAINLANES	10MI N OF US59 & LPI37	29588	095166	29.98000	-95.27667	29.9822	-95.27706	29589	95566
346	US59 NB MAINLANES	10MI N OF US59 & LPI37	29588	095166	29.98000	-95.27667	29.98215	-95.27685	29589	95566
347	US59 SB	12MI N OF US59 & LOOP137	29589	095166	29.98167	-95.27667	29.97917	-95.27817	29588	95567
348	US59 NB	12.MI.N.OF US59&LOOP-137	29587	095168	29.97833	-95.28000	29.97906	-95.27798	29587	95567
349	RANKIN RD	2MI S OF US59 & FM1960	29578	095169	29.96333	-95.28167	29.96547	-95.2843	29579	95571
350	US59 NB	10.5MI N OF US59 & LP137	29575	095173	29.95833	-95.28833	29.95831	-95.28737	29575	95572
351	US59 SB	10.5MI N OF US59 & LP137	29575	095173	29.95833	-95.28833	29.95838	-95.28756	29575	95573
352	US59 S.B.	1.5MI S OF US59 & FM1960	29564	095177	29.94000	-95.29500	29.9398	-95.29579	29564	95577
353	GREENS RD	1MI N OF BW8	29572	095174	29.95333	-95.29000	29.95207	-95.29033	29571	95574
354	US 59 NB ON RP #8	4.1 MI N OF IH 610	00001	000001	0.00167	-0.00167	29.86876	-95.33047	29521	95598
355	US 59	4.3 MI N OF IH 610	29522	095199	29.87000	-95.33167	29.87023	-95.32995	29522	95598
356	US59 MAINLANES	2.75 MI S. OF BW8	00001	000001	0.00167	-0.00167	29.90274	-95.31137	29542	95587
357	US59 MAINLANES	2.25 MI S. OF BW8	00001	000001	0.00167	-0.00167	29.91067	-95.3095	29546	95586
358	US59 MAINLANES	1.6 MI S. OF BW8	00001	000001	0.00167	-0.00167	29.91822	-95.30674	29551	95584
359	US59 NB MAINLANES	3.0 MI S. OF BW8	29555	095182	29.92500	-95.30333	29.92498	-95.30216	29555	95581
360	US59 NB ML	0.7 MI S. OF BW8	00001	000001	0.00167	-0.00167	29.93033	-95.29976	29558	95580

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
361	US59 SBFR	1.7MI S OF BW8	29551	095184	29.91833	-95.30667	29.91836	-95.30705	29551	95584
362	US59 NBFR	1.7MI S OF BW8	29551	095184	29.91833	-95.30667	29.91809	-95.30651	29551	95584
363	US59 ML & FTG RD	0.3 MI S. OF BW8	00001	000001	0.00167	-0.00167	29.93578	-95.29746	29561	95578
364	US59 NB ML	AT BW8 NORTH	00001	000001	0.00167	-0.00167	29.9398	-95.29556	29564	95577
365	US 59	5MI FROM DWN'TWN HOUSTON	29483	095203	29.80500	-95.33833	29.80604	-95.3376	29484	95603
366	US 59 SBML	2.25MIS.OF KELLY ST.	29480	095204	29.80000	-95.34000	29.80139	-95.33999	29481	95604
367	US 59 SB ML	2M1.S.OF KELLY ST.	29476	095204	29.79333	-95.34000	29.79362	-95.33986	29476	95604
368	US 59 SB ML	1.5M1.S.OF KELLY ST	29470	095204	29.78333	-95.34000	29.78343	-95.33994	29470	95604
369	US 59	.6MI.FROM IH-10 EAST	29466	095204	29.77667	-95.34000	29.777	-95.33975	29466	95604
370	US 59 SB	1.75M1.S.OF KELLY	29474	095204	29.79000	-95.34000	29.78988	-95.33986	29474	95604
371	US 59	DOWNTOWN HOSTON	29453	095214	29.75500	-95.35667	29.7614	-95.34965	29457	95610
372	RAMP E, US59 NB TO	@US-59&IH-10 INTERSECTION	29461	095206	29.76833	-95.34333	29.76726	-95.34544	29460	95607
373	US59SB CONN F	US59SB & TEXAS AVE	29454	095212	29.75667	-95.35333	29.75703	-95.35211	29454	95611
374	RAMP TO US-59 N.B.	.1M1.S.OF CAPITAL AVE.	29453	095214	29.75500	-95.35667	29.75465	-95.35472	29453	95613
375	US 59 ML & FR	3.0 MI N OF IH 610	33341	096287	33.56833	-96.47833	29.8514	-95.33353	29511	95600
376	US59ML	1MI N OF KING&US59 9	00001	000001	0.00167	-0.00167	29.82014	-95.33524	29492	95601
377	US59ML	1MI N OF KING&US59 9	00001	000001	0.00167	-0.00167	29.82014	-95.33505	29492	95601
378	US59 SB FTG RD	.1MI N OF KING&US59	00001	000001	0.00167	-0.00167	29.81885	-95.33554	29491	95601
379	US59 NB FTG RD	1MI N OF KING&US59 9	00001	000001	0.00167	-0.00167	29.82007	-95.33473	29492	95601
380	US59ML	5MI N OF KELLY&US59 9	00001	000001	0.00167	-0.00167	29.829	-95.33477	29497	95601
381	US 59 SB	2.3 MI N OF IH 610	29504	095201	29.84000	-95.33500	29.84056	-95.33311	29504	95600
382	US 59 SB	2.8 MI N OF IH 610	29509	095201	29.84833	-95.33500	29.84851	-95.33317	29509	95600
383	TIDWELL HOV	3.0 MI N OF IH 610	00001	000001	0.00167	-0.00167	29.85195	-95.33319	29511	95600
384	TIDWELL HOV T-RAMP	3.0 MI N OF IH 610	00001	000001	0.00167	-0.00167	29.8512	-95.33342	29511	95600
385	US 59 SB ON RP #3	3.2 MI N OF IH 610	00001	000001	0.00167	-0.00167	29.85493	-95.33354	29513	95600
386	US 59 NB ON RP #4	3.1 MI N OF IH 610	00001	000001	0.00167	-0.00167	29.85523	-95.33296	29513	95600
387	US 59 NB ML	3.5 MI N OF IH 610	00001	000001	0.00167	-0.00167	29.85967	-95.33289	29516	95600
388	US 59 SB ML	3.5 MI N OF IH 610	00001	000001	0.00167	-0.00167	29.8599	-95.33309	29516	95600
389	ELEV US 59 SB FR	3.8 MI N OF IH 610	00001	000001	0.00167	-0.00167	29.8656	-95.33286	29519	95600
390	US 59 SB ON RP #7	3.8 MI N OF IH 610	00001	000001	0.00167	-0.00167	29.86204	-95.33312	29517	95600
391	US 59 NB FR	3.6 MI N OF IH 610	29517	095200	29.86167	-95.33333	29.86063	-95.33244	29516	95599
392	US 59 SB FR	3.6 MI N OF IH 610	29517	095200	29.86167	-95.33333	29.8611	-95.33345	29517	95600
393	US 59 NB ML	2.25MIS.OF KELLY ST.	29480	095204	29.80000	-95.34000	29.80139	-95.33977	29481	95604
394	US 59 NB ML	2 MI S OF KELLY ST	29476	095204	29.79333	-95.34000	29.79361	-95.33964	29476	95604
395	US 59 NB	1.75 MI S OF KELLY ST	29474	095204	29.79000	-95.34000	29.78988	-95.33965	29474	95604
396	US 59 NB ML	1.5 MI S OF KELLY ST	29470	095204	29.78333	-95.34000	29.78344	-95.33973	29470	95604
397	US 59 NB ML	0.75 MI S OF LAURA KOPPE	29498	095202	29.83000	-95.33667	29.82872	-95.33473	29497	95601
398	US 59 NB ML	0.5 MI N OF KELLY RD	29493	095200	29.82167	-95.33333	29.82207	-95.33508	29493	95601
399	US-59 N.B. RAMP	US-59 & IH-610 INTERSECT.	29485	095202	29.80833	-95.33667	29.8074	-95.33565	29484	95601
400	KELLY ST.	.5M1.N.OF 610 LOOP	29488	095202	29.81333	-95.33667	29.81316	-95.33505	29488	95601

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
401	SH 35 SB	2 MI S OF IH 45	29404	095174	29.67333	-95.29000	29.67363	-95.28904	29404	95573
402	SH 35 NB	2 MI S OF IH 45	29404	095174	29.67333	-95.29000	29.67363	-95.28884	29404	95573
403	SH35 WB OFF RAMP	SH35/IH45 SCOTT EXIT	29439	095206	29.73167	-95.34333	29.73729	-95.34963	29442	95610
404	SH-35 RAMP "Q"	3.5MI N OF IH610	29441	095209	29.73500	-95.34833	29.73795	-95.35176	29443	95611
405	BARKER-CYPRESS RD	2.6 MI INTER IH 10 + SH 6	29470	095413	29.78333	-95.68833	29.78441	-95.6881	29471	95813
406	BARKER-CYPRESS RD	2.6 MI N INTER IH10 & SH6	29471	095415	29.78500	-95.69167	29.78523	-95.68813	29471	95813
407	EAST BOUND FRTG RD	2.9 MI W INTER IH45+SH6	29469	095415	29.78167	-95.69167	29.78427	-95.69287	29471	95816
408	FRY RD	4.5 MI W INTER IH10+SH6	29470	095432	29.78333	-95.72000	29.78454	-95.71872	29471	95831
409	FRY RD (IH10 SR)	4.5 MI W INTER IH10+SH6	29467	095413	29.77833	-95.68833	29.78534	-95.71872	29471	95831
410	MASON RD	6.4 MI W INTER IH10+SH6	29470	095451	29.78333	-95.75167	29.78466	-95.75159	29471	95851
411	MASON RD (IH10 SR)	6.4 MI W INTER IH10+SH6	29472	095451	29.78667	-95.75167	29.78541	-95.75159	29471	95851
412	IH 10	INTER IH10+SH6	29470	095387	29.78333	-95.64500	29.78456	-95.64467	29471	95787
413	PEEK ROAD	8MI.WOF HWY6 & IH-10	29471	095466	29.78500	-95.77667	29.78567	-95.77659	29471	95866
414	IH-10 CONNECTOR	8.5MI.W.OF IH-10 & SH-6	29471	095466	29.78500	-95.77667	29.78533	-95.77748	29471	95866
415	IH10 EB FRTG RD	6.1MI.W.OF SH-6	29470	095498	29.78333	-95.83000	29.7845	-95.74679	29471	95848
416	IH10	6.1MI.W.OF SH-6	29470	095498	29.78333	-95.83000	29.78467	-95.74681	29471	95848
417	IH10 WB FRTG RD	6.1MI.W.OF SH-6	29470	095498	29.78333	-95.83000	29.78517	-95.74684	29471	95848
418	IH 10	9.4MI WEST INTER IH10&SH6	29470	095481	29.78333	-95.80167	29.7851	-95.80155	29471	95881
419	IH 10	1.4 MI E INTER IH10+SH6	29470	095374	29.78333	-95.62333	29.7845	-95.62359	29471	95774
420	IH 10	7.8 MI E INTER IH10+SH6	29470	095319	29.78333	-95.53167	29.78392	-95.5138	29470	95708
421	IH 10	7.4 MI E INTER IH10+SH6	29470	095326	29.78333	-95.54333	29.78383	-95.52096	29470	95713
422	IH 10 ML & FR	8.8MI.E.INT.IH-10 & SH-6	29470	095299	29.78333	-95.49833	29.78371	-95.49922	29470	95700
423	IH 10 ML	8.8MI.E.INT.IH-10 & SH-6	29470	095292	29.78333	-95.48667	29.78371	-95.49844	29470	95699
424	IH 10 EB FR	9.5MI.E.INT.IH-10 & SH-6	29470	095286	29.78333	-95.47667	29.78332	-95.48605	29470	95692
425	IH 10	9.5MI.E.INT.IH-10 & SH-6	29470	095286	29.78333	-95.47667	29.7836	-95.48607	29470	95692
426	IH 10 WB FR	9.5MI.E.INT.IH-10 & SH-6	29470	095286	29.78333	-95.47667	29.78395	-95.48605	29470	95692
427	IH 10 ML	9.6MI.E.INT.IH-10 & SH-6	29470	095285	29.78333	-95.47500	29.78358	-95.48472	29470	95691
428	IH 10 ML	10.2MI.E.INT.IH-10 & SH-6	29470	095281	29.78333	-95.46833	29.78353	-95.47536	29470	95685
429	IH 10 ML	10.6MI.E.INT.IH-10 & SH-6	29470	095277	29.78333	-95.46167	29.7837	-95.46786	29470	95681
430	IH 10 ML & FR	11MI.E.INT.IH-10 & SH-6	29470	095275	29.78333	-95.45833	29.7836	-95.46164	29470	95677
431	POST OAK SB	11.3MI.E.INT.IH-10 & SH-6	29469	095274	29.78167	-95.45667	29.78146	-95.45666	29469	95674
432	POST OAK NB	11.3MI.E.INT.IH-10&SH-6	29469	095274	29.78167	-95.45667	29.78145	-95.45651	29469	95674
433	RAMPC I-10EB TO I6	AT IH10/IH610W	29469	095273	29.78167	-95.45500	29.7806	-95.4545	29468	95673
434	610NB CONND.IH10WB	@IH-10 & LOOP 610 W.	29470	095273	29.78333	-95.45500	29.78104	-95.45409	29469	95672
435	I610SB CONNE I10EB	INTER. OF IH-10 & LOOP610	29469	095275	29.78167	-95.45833	29.77896	-95.45234	29467	95671
436	CONN F, I10 WB TO	INTER IH-10& LOOP 610 W	29468	095273	29.78000	-95.45500	29.77998	-95.45228	29468	95671
437	CONN K, I10 WB TO	@ IH-45 & IH-10	29465	095220	29.77500	-95.36667	29.77225	-95.36551	29463	95619
438	SP RAILROAD	DOWNTOWN HOUSTON	29464	095220	29.77333	-95.36667	29.76557	-95.36228	29459	95617
439	LOUISIANA ST (IH 1	DOWNTOWN HOUSTON	29467	095223	29.77833	-95.37167	29.76413	-95.36255	29458	95618
440	SMITH ST (IH 10 CO	DOWNTOWN HOUSTON	29467	095223	29.77833	-95.37167	29.76413	-95.36364	29458	95618

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
441	TAYLOR ST	4.4MI E OF IH10/IH610W	29467	095229	29.77833	-95.38167	29.77718	-95.3809	29466	95629
442	IH 10 EB FR	1.4 E INTER IH10+SH6	29470	095374	29.78333	-95.62333	29.78423	-95.6236	29471	95774
443	IH 10 WB FR	1.4 MI E INTER IH10+SH6	29470	095374	29.78333	-95.62333	29.78476	-95.6236	29471	95774
444	MKT RR	1.6 MI E INTER IH10+SH6	29471	095363	29.78500	-95.60500	29.78494	-95.61752	29471	95771
445	IH 10 ML	1.6 MI E INTER IH10+SH6	29470	095370	29.78333	-95.61667	29.78445	-95.61753	29471	95771
446	IH 10 ML	2.3 MI E INTER IH10+SH6	29470	095363	29.78333	-95.60500	29.78436	-95.60628	29471	95764
447	IH 10	3.3 MI E INTER	29470	095354	29.78333	-95.59000	29.78424	-95.59006	29471	95754
448	IH 10 ML	4.2 MI E INTER IH10+SH6	29470	095345	29.78333	-95.57500	29.78415	-95.57544	29470	95745
449	IH10 EB EXIT RAMP	7.8MI.E.INT.IH-10 & SH-6	29470	095319	29.78333	-95.53167	29.78374	-95.5138	29470	95708
450	IH 10 ML	6.8 MI E INTER IH10+SH6	29470	095319	29.78333	-95.53167	29.78388	-95.5316	29470	95719
451	IH 10	6.1 MI E INTER IH10+SH6	29470	095326	29.78333	-95.54333	29.78394	-95.54376	29470	95726
452	IH10 EB & WB	5.1 MI E INTER IH10+SH6	29470	095335	29.78333	-95.55833	29.78404	-95.56034	29470	95736
453	MKT RR	4.9MI E OF IH10/SH6	29471	095298	29.78500	-95.49667	29.78464	-95.5624	29471	95737
454	MKT RR	4.9MI E OF IH10/SH6	29471	095298	29.78500	-95.49667	29.78465	-95.56337	29471	95738
455	HOUSTON AVE	5MI.E.INT.IH-10& 610LOOP	29467	095222	29.77833	-95.37000	29.77781	-95.37225	29467	95623
456	PEDESTRIAN XING +	1.8MI.E.OF LOOP 610 WEST	29467	095252	29.77833	-95.42000	29.77712	-95.42158	29466	95653
457	PEDESTRIAN + UTILI	2.4MI.E.OF LOOP 610 WEST	29468	095247	29.78000	-95.41167	29.77724	-95.41053	29466	95646
458	UTILITY XING	2.7MI.E.OF LOOP 610 WEST	29467	095295	29.77833	-95.49167	29.77724	-95.40936	29466	95646
459	SP RR	.8MI.E.LOOP 610 WEST	29468	095264	29.78000	-95.44000	29.77851	-95.4413	29467	95665
460	WESTCOTT SB	1.5MI.E.OF LOOP 610 WEST	29467	095257	29.77833	-95.42833	29.77726	-95.42917	29466	95658
461	WASHINGTON NB	1.5MI.E.OF LOOP 610 WEST	29467	095256	29.77833	-95.42667	29.77722	-95.42871	29466	95657
462	SP RR	1.8MI.E.OF LOOP 610 WEST	29467	095255	29.77833	-95.42500	29.77707	-95.42491	29466	95655
463	T C JESTER BLVD	2.2MI.E.OF LOOP 610 WEST	29467	095251	29.77833	-95.41833	29.77716	-95.41783	29466	95651
464	DURHAM SB	2.6MI.E.OF LOOP 610 WEST	29467	095246	29.77833	-95.41000	29.77725	-95.41036	29466	95646
465	SHEPHERD NB	2.7MI.E.OF LOOP 610 WEST	29467	095296	29.77833	-95.49333	29.77725	-95.4092	29466	95646
466	NB PATTERSON	2.9MI.E.OF LOOP 610 WEST	29467	095244	29.77833	-95.40667	29.77697	-95.40601	29466	95644
467	IH 10	3.1MI.E.OF LOOP 610 WEST	29466	095239	29.77667	-95.39833	29.77628	-95.39872	29466	95639
468	IH 10 WB FR	3.9MI.E.OF LOOP 610 WEST	29466	095234	29.77667	-95.39000	29.77695	-95.38925	29466	95634
469	IH 10 EB	3.8MI.E.OF LOOP 610 WEST	29467	095232	29.77833	-95.38667	29.77652	-95.38752	29466	95633
470	IH 10 EB FR	3.9MI.E.OF LOOP 610 WEST	29466	095234	29.77667	-95.39000	29.77605	-95.39007	29466	95634
471	CONN RAMP IH 45 +	@ IH-10 & IH-45	29466	095223	29.77667	-95.37167	29.77772	-95.36872	29467	95621
472	E BOUND IH 10	@ IH-45 & IH-10	29465	095221	29.77500	-95.36833	29.77757	-95.36937	29465	95622
473	W BOUND IH 10	@ IH-45 & IH-10	29465	095221	29.77500	-95.36833	29.77549	-95.36818	29465	95621
474	CONN RAMP "B" IH 4	.2MI N LOUISIANA&FRANKLIN	29462	095218	29.77000	-95.36333	29.76758	-95.36275	29461	95618
475	CONN RAMP E	@ IH-10 & IH-45	29462	095220	29.77000	-95.36667	29.76887	-95.36403	29461	95618
476	EB LN IH 10	@IH-10 & IH-45	29461	095217	29.76833	-95.36167	29.76799	-95.363	29461	95618
477	IH10 EB	BETWEEN 45 & 59	29461	095217	29.76833	-95.36167	29.76691	-95.36026	29460	95616
478	HOGAN-CROCKETT ST	.5MI.S.OF IH-45 & IH-10	29464	095222	29.77333	-95.37000	29.77397	-95.36615	29464	95620
479	T & NO RR	.5MI.S.OF IH-45 & IH-10	29463	095221	29.77167	-95.36833	29.77199	-95.36485	29463	95619
480	IH 10 ML & FR	2.1 MI E OF IH10+SH6	29470	095367	29.78333	-95.61167	29.78439	-95.60974	29471	95766

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
481	IH10 WB	.4MI E OF IH45	29461	095217	29.76833	-95.36167	29.76725	-95.36084	29460	95617
482	RAMP H, ENTR RAMP	INTER.610 LOOP(W)&IH-10	29470	095273	29.78333	-95.45500	29.78384	-95.45163	29470	95671
483	SOUTH BOUND I45	@I-10&I-45 INTERCHANGE	29459	095222	29.76500	-95.37000	29.77107	-95.36605	29463	95620
484	NORTH BOUND I45	@IH-10 & IH-45 INTERSECT	29488	095224	29.81333	-95.37333	29.77153	-95.36538	29463	95619
485	KATY AVL POST OAK	@ KATY ROAD	29469	095274	29.78167	-95.45667	29.78346	-95.45854	29470	95675
486	AVL	JUST EAST OF SH-6	29470	095379	29.78333	-95.63167	29.78508	-95.63727	29471	95782
487	IH 10	4.9MI E OF IH10/SH6	29470	095338	29.78333	-95.56333	29.78407	-95.56323	29470	95738
488	AVL RAMP CONN.	1/2 MI. EAST OF SH6	29470	095379	29.78333	-95.63167	29.78453	-95.63771	29471	95783
489	IH-10 RAMP"F"	AT IH10W & BW8 INTER.	29470	095338	29.78333	-95.56333	29.7831	-95.56357	29470	95738
490	IH-10 RAMP-"C"	AT IH10W & BW8 INTER.	29470	095338	29.78333	-95.56333	29.78345	-95.56212	29470	95737
491	IH-10 RAMP"G"	AT IH10W & BW8 INTER.	29470	095338	29.78333	-95.56333	29.78333	-95.56181	29470	95737
492	IH-10 RAMP"E"	AT IH10W & BW8 INTER.	29470	095338	29.78333	-95.56333	29.78499	-95.56213	29471	95737
493	IH-10 RAMP"D"	AT IH10W & BW8 INTER.	29470	095338	29.78333	-95.56333	29.78492	-95.5633	29471	95738
494	BELT WAY 8 RAMP"H"	AT IH10W & BW8 INTER.	29470	095338	29.78333	-95.56333	29.78509	-95.56356	29471	95738
495	BELTWAY 8 SB ML	1.25MI WEST OF GESSNER RD	29470	095338	29.78333	-95.56333	29.78391	-95.563	29470	95738
496	BWY 8 NB ML	1.25MI WEST OF GESSNER RD	29470	095338	29.78333	-95.56333	29.78388	-95.56279	29470	95738
497	IH 10 WB	3.8MI.E.OF LOOP 610 WEST	29467	095232	29.77833	-95.38667	29.77671	-95.38753	29466	95633
498	IH 610 WB ML	0.5 MI E OF HOMESTEAD RD	29482	095176	29.80333	-95.29333	29.80417	-95.29254	29483	95576
499	IH 610 NB FR	1.3 MI N OF IH 10	29476	095161	29.79333	-95.26833	29.79311	-95.26797	29476	95561
500	IH 610 NB	0.5 MI NW OF US 90	29481	095169	29.80167	-95.28167	29.80241	-95.27988	29481	95568
501	IH 610 EB ML	0.5 MI W OF WAYSIDE DR	29482	095176	29.80333	-95.29333	29.80398	-95.29254	29482	95576
502	IH 610 WB	1.9 MI E OF LOCKWOOD DR	29482	095173	29.80333	-95.28833	29.80419	-95.2883	29483	95573
503	IH 610	.3MI.E.OF IH-45	29488	095224	29.81333	-95.37333	29.8136	-95.36961	29488	95622
504	IH 610	.8MI.E.OF IH-45	29488	095218	29.81333	-95.36333	29.81366	-95.36102	29488	95617
505	IH610	3.3MI.E.INT.US-290&IH-610	29488	095242	29.81333	-95.40333	29.81274	-95.3991	29488	95639
506	IH610	3.8MI.E.OF US-290 & 610	29488	095237	29.81333	-95.39500	29.8137	-95.39139	29488	95635
507	IH610	MI.E.OF US-290 & 610	29488	095231	29.81333	-95.38500	29.8138	-95.38226	29488	95629
508	W TO S IH610 RAMP	INT.US-290 & IH-610	29481	095272	29.80167	-95.45333	29.80081	-95.451	29480	95671
509	N TO E IH610 RAMP	INT.US-290 & IH-610	29481	095272	29.80167	-95.45333	29.80123	-95.44871	29481	95669
510	WEST BOUND FRTG RD	4.1MI.W.OF IH-45 & LOOP610	29485	095264	29.80833	-95.44000	29.80896	-95.44115	29485	95665
511	EAST BOUND FRTG RD	4MI.W.IH-45 & LOOP 610 N	29484	095263	29.80667	-95.43833	29.80841	-95.44047	29485	95664
512	IH610	3.1MI.W.INT.IH-45&LOOP610	29487	095257	29.81167	-95.42833	29.81246	-95.42626	29487	95656
513	LOOP 137	LP 137/IH 610 INTERCHANGE	29485	095184	29.80833	-95.30667	29.80927	-95.30701	29486	95584
514	IH 610 WB	0.9 MI E OF LOCKWOOD DR	29484	095181	29.80667	-95.30167	29.80737	-95.30167	29484	95581
515	IH610 EB	0.9 MI E OF LOCKWOOD DR	29484	095181	29.80667	-95.30167	29.80717	-95.30169	29484	95581
516	IH 610 WB FR	1.5 MI E OF LOCKWOOD DR	29483	095175	29.80500	-95.29167	29.80448	-95.29254	29483	95576
517	IH 610 EB FR	1.5 MI E OF LOCKWOOD DR	29483	095175	29.80500	-95.29167	29.80371	-95.29254	29482	95576
518	IH 610 EB	1.9 MI E OF LOCKWOOD DR	29482	095173	29.80333	-95.28833	29.804	-95.28829	29482	95573
519	IH 610 WB	0.9 MI NW OF US 90A	29482	095171	29.80333	-95.28500	29.8042	-95.28421	29483	95571
520	IH 610 EB	0.9 MI NW OF US 90A	29482	095171	29.80333	-95.28500	29.80402	-95.28421	29482	95571

HARRIS Observations Report

ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
521	IH 610 SB	0.5 MI NW OF US 90	29481	095169	29.80167	-95.28167	29.80224	-95.27999	29481	95568
522	IH 610 SB FR	1.3 MI N OF IH 10	29476	095161	29.79333	-95.26833	29.79283	-95.26875	29476	95561
523	IH 610 ML	1.3 MI N OF IH 10	29476	095161	29.79333	-95.26833	29.79296	-95.26836	29476	95561
524	IH 610 SB	1.2 MI N OF IH 10	29475	095161	29.79167	-95.26833	29.79153	-95.26776	29475	95561
525	IH 610 NB	1.2 MI N OF IH 10	29475	095161	29.79167	-95.26833	29.79158	-95.26756	29475	95561
526	IH 610 SB	0.6 MI N OF IH 10	29470	095159	29.78333	-95.26500	29.78425	-95.26468	29471	95559
527	IH 610 NB	0.6 MI N OF IH 10	29470	095159	29.78333	-95.26500	29.78433	-95.26448	29471	95559
528	IH610	.6MI.S.INT NW.FR WY&I-610	29476	095272	29.79333	-95.45333	29.79336	-95.45075	29476	95670
529	IH610	2.6MI.E.US-290&IH-610	29488	095250	29.81333	-95.41667	29.81263	-95.41146	29488	95647
530	IH610	2.6MI.E.INT US-290	29488	095248	29.81333	-95.41333	29.81263	-95.41004	29488	95646
531	IH610	4.1MI.W.OF IH-45 & 610	29485	095266	29.80833	-95.44333	29.80872	-95.4406	29485	95664
532	IH610	3.3MI.W.OF IH-45&610 LOOP	29487	095260	29.81167	-95.43333	29.81242	-95.42915	29487	95657
533	IH-610 EBL	1MI W OF IH610/US59	29487	095210	29.81167	-95.35000	29.81272	-95.35199	29488	95611
534	IH-610 EBL	.4MI.W.OF IH-610 & US-59	29485	095205	29.80833	-95.34167	29.80963	-95.3422	29486	95605
535	IH-610 EBL	.2MI.W.OF IH-610 & US-59	29484	095204	29.80667	-95.34000	29.80888	-95.33978	29485	95604
536	IH-610 EBL	@ I-610 & US-59	29485	095202	29.80833	-95.33667	29.80808	-95.33603	29485	95602
537	IH 610 EB	0.6 MI W OF LOCKWOOD DR	29485	095197	29.80833	-95.32833	29.80822	-95.32834	29485	95597
538	IH 610 EB	1.0 MI E OF US 59	29485	095190	29.80833	-95.31667	29.80907	-95.31704	29485	95590
539	IH 610 EB	1.4 MI E OF IH 610	29485	095185	29.80833	-95.30833	29.80918	-95.30801	29486	95585
540	IH610/IH45 CONN	AT IH45/IH610N	29488	095229	29.81333	-95.38167	29.81433	-95.37697	29489	95626
541	IH610EB-B TO 59NB	@ IH-610 & US-59	29484	095204	29.80667	-95.34000	29.80837	-95.33927	29485	95604
542	US59NB-D TO 610WB	IH-610 & US-59	29484	095204	29.80667	-95.34000	29.80895	-95.33748	29485	95602
543	IH610WB-E TO 59SB	@ IH-610 & US-59	29484	095204	29.80667	-95.34000	29.80836	-95.33337	29485	95600
544	US59SB-G TO IH610E	IH-610 & US-59	29485	095201	29.80833	-95.33500	29.8084	-95.33478	29485	95601
545	CONN "H"	@ IH-610 & US-59	29484	095204	29.80667	-95.34000	29.80871	-95.33474	29485	95601
546	IH-610 CONN "B"	AT IH610/HARDY TOLL RD.	29488	095208	29.81333	-95.34667	29.8137	-95.35247	29488	95611
547	IH-610 CONN"D"	AT IH610/HARDY TOLL RD.	29488	095208	29.81333	-95.34667	29.81416	-95.35192	29488	95611
548	US-290 AVL @ IH610	IS-610 & US-290	29481	095272	29.80167	-95.45333	29.79049	-95.4515	29474	95671
549	IH-610 WBL	1 MI W OF IH610/US59	29487	095210	29.81167	-95.35000	29.81289	-95.35194	29488	95611
550	IH-610 WBL	.4MI W OF IH610/US59	29485	095205	29.80833	-95.34167	29.80981	-95.34213	29486	95605
551	IH-610 WBL	.2MI W.OF IH610/US59	29484	095204	29.80667	-95.34000	29.80903	-95.33972	29485	95604
552	IH-610 WBL	US59 & IH610 INTER.	29485	095202	29.80833	-95.33667	29.80823	-95.33594	29485	95602
553	IH 610 WB	0.6 MI W OF LOCKWOOD DR	29485	095197	29.80833	-95.32833	29.8084	-95.32836	29485	95597
554	IH 610 WB	0.9 MI W OF HOMESTEAD	29485	095190	29.80833	-95.31667	29.80922	-95.31699	29486	95590
555	IH 610 WB	1.4 MI E OF IH 610	29485	095185	29.80833	-95.30833	29.80936	-95.30804	29486	95585
556	IH 610 SB	1.6 MI N OF IH 10	29478	095163	29.79667	-95.27167	29.79663	-95.2715	29478	95563
557	IH 610 NB	1.6 MI N OF IH 10	29478	095163	29.79667	-95.27167	29.79678	-95.27139	29478	95563
558	IH 610 CONN	AT IH 610/SH 225 INTER	29425	095160	29.70833	-95.26667	29.71041	-95.26464	29426	95559
559	IH 610 ML, RP, FR	AT IH610/IH10 INTER.	29468	095158	29.78000	-95.26333	29.77735	-95.26331	29466	95558
560	MARKET ST.	0.4 MI S OF IH 10	29462	095159	29.77000	-95.26500	29.76933	-95.26489	29462	95559

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
561	MARKET ST UTILITY	0.4 MI S OF IH 10	29462	095159	29.77000	-95.26500	29.76936	-95.2651	29462	95559
562	HNS RR	0.5 MI S OF IH 10	29461	095159	29.76833	-95.26500	29.76802	-95.26516	29461	95559
563	IH 610 SB ML	0.4 MI N OF SHIP CHANNEL	29448	095159	29.74667	-95.26500	29.74586	-95.26478	29448	95559
564	IH 610 SB	0.2 MI N OF SHIP CHANNEL	29446	095159	29.74333	-95.26500	29.74322	-95.26466	29446	95559
565	CLINTON DR	0.8 MI N OF SHIP CHANNEL	29443	095159	29.73833	-95.26500	29.73794	-95.26506	29443	95559
566	UTILITY	IH 610 AT CLINTON DR	29443	095159	29.73833	-95.26500	29.73786	-95.26499	29443	95559
567	SPRR	0.8 MI N OF SHIP CHANNEL	29443	095159	29.73833	-95.26500	29.73765	-95.26512	29443	95559
568	PTRA RR	0.8 MI N OF SHIP CHANNEL	29442	095159	29.73667	-95.26500	29.73733	-95.26515	29442	95559
569	OLD CLINTON DR	0.7 MI N OF SHIP CHANNEL	29441	095159	29.73500	-95.26500	29.73657	-95.26525	29442	95559
570	SH 225 EB	AT IH 610/SH 225 INTER	29425	095160	29.70833	-95.26667	29.70898	-95.2702	29425	95562
571	IH 610 CONN C	AT IH 610/SH 225 INTERCH	29425	095160	29.70833	-95.26667	29.7094	-95.26774	29426	95561
572	SH 225 EB	AT IH 610/SH 225 INTERCH	29425	095160	29.70833	-95.26667	29.70931	-95.26661	29426	95560
573	SH 225 WB	AT IH 610/SH 225 INTERCH	29425	095160	29.70833	-95.26667	29.70947	-95.26653	29426	95560
574	IH 610 CONN B	AT IH 610/SH 225 INTERCH	29425	095160	29.70833	-95.26667	29.71138	-95.26652	29427	95560
575	CONN K	AT IH 610/SH 225 INTERCH	29425	095160	29.70833	-95.26667	29.7088	-95.26837	29425	95561
576	IH 610	AT IH 610/SH 225 INTERCH	29425	095160	29.70833	-95.26667	29.71081	-95.26618	29426	95560
577	SH 225 CONN F	AT IH 610/SH 225 INTERCH	29425	095160	29.70833	-95.26667	29.70974	-95.26696	29426	95560
578	IH610SB TO IH10EB	AT IH 610/IH 10 INTER	29466	095157	29.77667	-95.26167	29.7764	-95.26413	29466	95558
579	IH 610	1 MI N OF IH610E & SH225	29439	095159	29.73167	-95.26500	29.72476	-95.26602	29435	95560
580	IH 610 SB OFF RAMP	0.5 MI N OF IH 10-SH 225	29444	095159	29.74000	-95.26500	29.71894	-95.26624	29431	95560
581	IH 610 ON RAMP	.5 MI N OF IH610+SH225	29444	095159	29.74000	-95.26500	29.71876	-95.2656	29431	95559
582	IH610NB TO IH10WB	AT IH 610/IH 10 INTER	29465	095158	29.77500	-95.26333	29.77604	-95.26543	29466	95559
583	IH 610 SB ON RP	N OF SHIP CHANNEL BRIDGE	29440	095159	29.73333	-95.26500	29.73363	-95.26624	29440	95560
584	IH 610 NB OFF RP	0.3 MI S OF CLINTON DR	29440	095159	29.73333	-95.26500	29.73282	-95.26534	29440	95559
585	SH 225 CONN N	AT IH 610/SH 225 INTERCH	29425	095161	29.70833	-95.26833	29.70927	-95.26569	29426	95559
586	IH 610 NB	0.2 MI N OF SHIP CHANNEL	29446	095159	29.74333	-95.26500	29.74322	-95.26446	29446	95559
587	IH 610 NB ML	0.4 MI N OF SHIP CHANNEL	29448	095159	29.74667	-95.26500	29.74592	-95.26457	29448	95559
588	IH610	1.1MI.WOUS-90A&LOOP 610 S	29407	095268	29.67833	-95.44667	29.67905	-95.44637	29407	95668
589	IH 610S EB ML	1.3MI.W.OF US-90A&610 S	29407	095269	29.67833	-95.44833	29.67893	-95.44899	29407	95669
590	IH610 EB	1.6MI W US90A/IH610S	29409	095272	29.68167	-95.45333	29.6786	-95.45322	29407	95672
591	IH610 WB	1.6MI W US90A/IH610S	29409	095272	29.68167	-95.45333	29.67933	-95.45325	29408	95672
592	IH610 SBFR	1.9MI.W.OF US-90A	29410	095275	29.68333	-95.45833	29.68139	-95.45928	29409	95676
593	IH610	1.9MI.W.OF-90A&610 LOOP S	29410	095275	29.68333	-95.45833	29.68111	-95.45822	29409	95675
594	IH 610 EB	1.4 MI E OF MLK BLVD	29418	095188	29.69667	-95.31333	29.69452	-95.31907	29417	95591
595	IH 610 EB	0.15 MI W OF WAYSIDE DR	29416	095194	29.69333	-95.32333	29.69312	-95.3221	29416	95593
596	IH 610 EB	0.5 MI W OF WAYSIDE DR	29415	095196	29.69167	-95.32667	29.69161	-95.32524	29415	95595
597	IH-610 EB ML	.5MI.E.OF SCOTT STREET	29409	095213	29.68167	-95.35500	29.68056	-95.35547	29408	95613
598	IH 610S EB ML	.5MI.W.OF CULLEN BLVD.	29408	095220	29.68000	-95.36667	29.68029	-95.36302	29408	95618
599	IH 610S EB ML	.5MI.W.OF CULLEN BLVD.	29408	095224	29.68000	-95.37333	29.68058	-95.36667	29408	95620
600	IH610	.5MI.W.OF SH-288	29408	095236	29.68000	-95.39333	29.68017	-95.39245	29408	95635

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
601	IH 610 EB	0.5 MI E OF MLK BLVD	29413	095199	29.68833	-95.33167	29.6886	-95.33177	29413	95599
602	IH-610 EB MN LN	1MI.E.OF CULLEN BLVD.	29412	095205	29.68667	-95.34167	29.6853	-95.3407	29411	95604
603	IH-610 EB MN LN	.4MI.E.OF CULLEN BLVD.	29410	095210	29.68333	-95.35000	29.68286	-95.3488	29410	95609
604	IH-610 E.B.	IH-610 & SH-288	29408	095235	29.68000	-95.39167	29.68032	-95.38112	29408	95629
605	CONN "D"	SH-288 & IH-610	29426	095229	29.71000	-95.38167	29.68017	-95.38102	29408	95629
606	IH-610E TO SH-288N	SH-288 & IH-610	29426	095229	29.71000	-95.38167	29.68061	-95.38105	29408	95629
607	IH610	1.5MI.E.OF US-90A	29407	095241	29.67833	-95.40167	29.67862	-95.403	29407	95642
608	IH610	.9MI.E.OF US-90A	29407	095247	29.67833	-95.41167	29.67769	-95.41195	29407	95647
609	IH610	.2MI.E.OF US-90A	29407	095254	29.67833	-95.42333	29.67723	-95.42446	29406	95655
610	IH610	1MI.E.OF STELLA LINK RD.	29406	095256	29.67667	-95.42667	29.67734	-95.42737	29406	95656
611	IH610	1MI.W.OF S. MAIN STREET	29407	095263	29.67833	-95.43833	29.67913	-95.4398	29407	95664
612	CROSSWALK	1.4 MI W OF SH 35	29418	095188	29.69667	-95.31333	29.69666	-95.31389	29418	95588
613	IH 610 EB	1.2 MI W OF SH 35	29418	095186	29.69667	-95.31000	29.69675	-95.31068	29418	95586
614	IH 610 EB ML	0.6 MI W OF SH 35	29417	095180	29.69500	-95.30000	29.69553	-95.30013	29417	95580
615	IH 610 EB	0.4 MI W OF SH 35	29417	095178	29.69500	-95.29667	29.69529	-95.29797	29417	95579
616	IH610 EB OFF RP	0.6 MI W OF IH 45	29417	095178	29.69500	-95.29667	29.69499	-95.29826	29417	95579
617	PEDESTRIAN BRIDGE	0.35 MI SW OF IH 45	29417	095177	29.69500	-95.29500	29.69551	-95.29404	29417	95576
618	IH 610S EB ML	1.6MI W OF US90A	29408	095272	29.68000	-95.45333	29.67886	-95.45323	29407	95672
619	IH 610S WB RAMP	INTER.S.&W.LOOP IH-610	29408	095274	29.68000	-95.45667	29.67973	-95.45689	29408	95674
620	SB TO EB IH610	INTER.S&W LOOP IH-610	29408	095273	29.68000	-95.45500	29.67924	-95.45579	29408	95673
621	IH610WB-A TO 610NB	INTER.LOOP 610 S. & W.	29409	095275	29.68167	-95.45833	29.68161	-95.45832	29409	95675
622	IH610SB-B TO 610EB	INTER.LOOP IH-610 S.& W.	29409	095275	29.68167	-95.45833	29.6811	-95.45844	29409	95675
623	S POST OAKNB-M TO	INTER.LOOP IH-610 S.&W.	29408	095275	29.68000	-95.45833	29.68036	-95.45874	29408	95675
624	S BND IH610 XIT RA	INTER.LOOP 610 S & W	29408	095275	29.68000	-95.45833	29.68036	-95.45895	29408	95675
625	ASTROWORLD PED BR	1.3 MI. E. OF US-90A	29404	095244	29.67333	-95.40667	29.67786	-95.40757	29407	95645
626	IH610S CONN 'M'	AT IH610/SH288	29446	095217	29.74333	-95.36167	29.68159	-95.3797	29409	95628
627	IH610 CONNC	W.B.TO S.POST OAK SB	29408	095273	29.68000	-95.45500	29.67845	-95.45698	29407	95674
628	IH-610 W.B.	AT IH610/SH288	29408	095235	29.68000	-95.39167	29.6805	-95.38085	29408	95629
629	SH 288 OFF RAMP	OFF RAMP OVER ON RAMP	29402	095229	29.67000	-95.38167	29.67024	-95.38226	29402	95629
630	SH 288 ON RAMP	0.10 MI S OF IH610	29402	095229	29.67000	-95.38167	29.67006	-95.38123	29402	95629
631	IH 610S WB ML	1.3MI W OF US 90A & 610S	29407	095269	29.67833	-95.44833	29.67911	-95.44899	29407	95669
632	IH 610S WB ML	1.6MI W OF US 90A	29408	095272	29.68000	-95.45333	29.67905	-95.45325	29407	95672
633	IH 610 WB	1.2 MI W OF SH 35	29418	095186	29.69667	-95.31000	29.69694	-95.31067	29418	95586
634	IH 610 WB	0.4 MI W OF SH 35	29417	095178	29.69500	-95.29667	29.69547	-95.29795	29417	95579
635	IH 610 WB	0.5 MI E OF WAYSIDE DR	29415	095196	29.69167	-95.32667	29.69183	-95.32529	29415	95595
636	IH 610 WB	0.15 MI W OF WAYSIDE DR	29416	095194	29.69333	-95.32333	29.69326	-95.3222	29416	95593
637	IH 610S WB ML	0.5MI W OF CULLEN BLVD.	29408	095224	29.68000	-95.37333	29.68073	-95.36667	29408	95620
638	IH 610S WB ML	0.5MI W OF CULLEN BLVD.	29408	095220	29.68000	-95.36667	29.68045	-95.36269	29408	95618
639	IH 610S WB ML	0.5MI W OF SCOTT STREET	29409	095213	29.68167	-95.35500	29.68074	-95.35548	29408	95613
640	IH 610 WB	0.6 MI W OF SH 35	29417	095180	29.69500	-95.30000	29.69571	-95.30019	29417	95580

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
641	IH 610 WB	0.5 MI E OF MLK BLVD	29413	095199	29.68833	-95.33167	29.68874	-95.3319	29413	95599
642	IH 610 WB	1.4 MI E OF MLK BLVD	29418	095188	29.69667	-95.31333	29.69468	-95.31917	29417	95592
643	IH 610S WB ML	1 MI E OF CULLEN BLVD.	29412	095205	29.68667	-95.34167	29.68546	-95.34079	29411	95604
644	IH 610S WB ML	0.4 MI E OF CULLEN BLVD	29410	095210	29.68333	-95.35000	29.68303	-95.34887	29410	95609
645	LOOP610 SB	@ INT.US-59 & IH-610(W)	29439	095276	29.73167	-95.46000	29.73086	-95.4601	29439	95676
646	NB IH610	@INT. OF US-59 & IH-610	29439	095276	29.73167	-95.46000	29.73086	-95.45991	29439	95676
647	610 NB TO US59 (E,	INT.OF 610(W) & US-59	29468	095263	29.78000	-95.43833	29.72586	-95.45982	29436	95676
648	LOOP610 TO US59	@INT.IH-610 & US-58(W)	29440	095276	29.73333	-95.46000	29.73172	-95.46029	29439	95676
649	IH610	2.3MI.N.INT.US-59&IH-610	29455	095274	29.75833	-95.45667	29.75934	-95.45542	29456	95673
650	IH610	3.1MI.N.INT.IH-610& US-59	29463	095274	29.77167	-95.45667	29.77306	-95.4558	29464	95673
651	RAMP IH610	@IH-10 & LOOP 610 WEST	29471	095273	29.78500	-95.45500	29.78318	-95.45222	29470	95671
652	IH 610	@IH-10 & LOOP 610 WEST	29470	095273	29.78333	-95.45500	29.77936	-95.45421	29468	95673
653	IH610	.9MI.N.INT.IH-610 & US-59	29395	095276	29.65833	-95.46000	29.74083	-95.45796	29444	95675
654	IH610 NB F.R.	2.3MI.N.OF US-59 & IH-610	29455	095274	29.75833	-95.45667	29.75934	-95.45501	29456	95673
655	IH610	1.3MI.N.INT.IH-610 & US59	29449	095274	29.74833	-95.45667	29.74697	-95.45645	29448	95674
656	IH610	1.8MI.N.INT IH-610 &US-59	29452	095273	29.75333	-95.45500	29.75361	-95.4554	29452	95673
657	IH610	2.6MI.N.INT IH-610 &US-59	29459	095274	29.76500	-95.45667	29.76573	-95.45581	29459	95673
658	IH610W SB ML	2.5MI.S.OF US-59	29414	095275	29.69000	-95.45833	29.68894	-95.45899	29413	95675
659	IH610W SB ML	1.9MI.S.OF US-59	29420	095275	29.70000	-95.45833	29.69836	-95.45904	29419	95675
660	IH 610 SB ML	1.4MI.S.OF US-59	29424	095275	29.70667	-95.45833	29.70558	-95.45932	29423	95676
661	IH 610 SB ML	1MI.S.OF US-59	29428	095275	29.71333	-95.45833	29.71138	-95.46009	29427	95676
662	IH 610 SB ML	.6MI.S.OF US-59	29431	095275	29.71833	-95.45833	29.71647	-95.46012	29430	95676
663	S.B.FRONTAGE RD. &	BETWEEN WOODWAY &POST O	29456	095273	29.76000	-95.45500	29.75935	-95.45583	29456	95673
664	IH610SB TO US59NB	IH610(W LP)/US59 INTERCHG	29468	095263	29.78000	-95.43833	29.72852	-95.45932	29437	95676
665	IH610 NB TO 59 WB	INT.LOOP610 & US-59(W)	29468	095263	29.78000	-95.43833	29.7281	-95.45989	29437	95676
666	IH610W NB ML	1.9 MI S OF US 59	29420	095275	29.70000	-95.45833	29.69837	-95.45881	29419	95675
667	IH610W SB ML	2.5 MI S OF US 59	29414	095275	29.69000	-95.45833	29.68894	-95.45877	29413	95675
668	IH 610 NB ML	1.4 MI S OF US 59	29424	095275	29.70667	-95.45833	29.70561	-95.45909	29423	95675
669	IH 610 NB ML	1.0 MI S OF US 59	29428	095275	29.71333	-95.45833	29.71138	-95.4599	29427	95676
670	IH 610 NB ML	0.6 MI S OF US 59	29431	095275	29.71833	-95.45833	29.71645	-95.45993	29430	95676
671	PR 1836	INTER OF SH134 & P1836	29447	095050	29.74500	-95.08333	29.73233	-95.08965	29439	95454
672	SH134	SH-134 @ SH-225	29422	095055	29.70333	-95.09167	29.70449	-95.09271	29423	95456
673	SH-134	SH-134 @ SH-225	29422	095055	29.70333	-95.09167	29.70378	-95.09302	29422	95456
674	LOOP 201	AT 201 & 146 INTERCHANGE	29450	094967	29.75000	-95.61167	29.75501	-94.94279	29453	94966
675	SH 146 NB ML	.9MI N OF FAIRMONT	29400	095019	29.66667	-95.03167	29.66499	-95.02899	29399	95417
676	SH 146 NB FR	3.6MI.N.OF SP RR SPUR 0-P	29393	095018	29.65500	-95.03000	29.65498	-95.02932	29393	95418
677	SH 146 NB ON RAMP	3.6MI N OF SP RR SPUR ETC	29393	095018	29.65500	-95.03000	29.65506	-95.02941	29393	95418
678	SH 146 SB FR	.3MI N OF FAIRMONT	29393	095018	29.65500	-95.03000	29.65561	-95.03006	29393	95418
679	SH 146 NB ML	3.6MI N OF SP RR SPUR ETC	29393	095018	29.65500	-95.03000	29.65538	-95.02978	29393	95418
680	SH 146 NB	2.1MI N OF SP RR SPUR ETC	29376	095021	29.62667	-95.03500	29.63336	-95.03043	29380	95418

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
681	SH 146 SB	2.1MI N OF SPRR SPUR ETC	29376	095021	29.62667	-95.03500	29.63342	-95.0307	29380	95418
682	SH 146 NB	.4MI N OF SPUR SPRR ETC	29367	095021	29.61167	-95.03500	29.61018	-95.03275	29366	95420
683	SH 146 NB ML	4.3MI S OF SPENCER HWY OP	29368	095021	29.61333	-95.03500	29.60365	-95.03167	29362	95419
684	SH 146	1.2MI S OF NASA 1/SH146	29329	095014	29.54833	-95.02333	29.55136	-95.0232	29331	95414
685	CLEAR CREEK	.7MI S OF FM146/NASA 1	29329	095014	29.54833	-95.02333	29.5545	-95.02369	29333	95414
686	CLEAR CREEK	.7MI S OF FM146/NASA-1	29329	095014	29.54833	-95.02333	29.55445	-95.02416	29333	95414
687	SH146	FAIRMONT PKWY AT SH146	29341	095017	29.56833	-95.02833	29.65208	-95.02987	29391	95418
688	SH 146 SB ML	.9MI N OF FAIRMONT	29400	095019	29.66667	-95.03167	29.66499	-95.0292	29399	95418
689	SH146 SB	4.3MI S OF SPENCER HWY OP	29368	095021	29.61333	-95.03500	29.60363	-95.03187	29362	95419
690	SH146 SB	.4MI N OF SPUR SP RR	29367	095021	29.61167	-95.03500	29.61016	-95.03294	29366	95420
691	SH 146 NB ML	3.6MI N OF SP RR SPUR	29393	095018	29.65500	-95.03000	29.65521	-95.0296	29393	95418
692	SH 146 E CONN RD	.7MI S OF SH 146/NASA 1	29336	095015	29.56000	-95.02500	29.55379	-95.02332	29332	95414
693	SH 146 W CONN RD	.7MI S OF SH 146/NASA 1	29336	095015	29.56000	-95.02500	29.55354	-95.02406	29332	95414
694	BAYTOWN TUNNEL	SH 146	29423	095010	29.70500	-95.01667	29.70408	-95.01809	29422	95411
695	SH 146 SB	1MI N OF BAYTOWN TUNNEL	29429	094594	29.71500	-94.99000	29.71351	-94.99125	29428	94995
696	SH 146 WB	1MI.NE.OF BAYTOWN TUNNEL	29429	094599	29.71500	-94.99833	29.71371	-95.00019	29428	95400
697	SH146 EB ML	.5MI.N.OF BAYTOWN TUNNEL	29427	095003	29.71167	-95.00500	29.7114	-95.00583	29427	95404
698	SH146 WB ML	.4MI SW OF BAYTOWN TUNNEL	29419	095014	29.69833	-95.02333	29.69887	-95.02419	29419	95415
699	SH 146 SB	AT SH146 & SH225(TOP LVL)	29413	095018	29.68833	-95.03000	29.68795	-95.03059	29413	95418
700	SP RR	1MI S OF SH146 & SH225	29410	095018	29.68333	-95.03000	29.6846	-95.03005	29411	95418
701	SH146	.5MI E OF SH146/SH225	29408	095018	29.68000	-95.03000	29.6807	-95.03	29408	95418
702	MP RR.	3MI N OF BAYTOWN TUNNEL	29434	094580	29.72333	-94.96667	29.71905	-94.96735	29431	94980
703	SH 146 NB	.6MI W.OF CAUSEWAY L.DR.	29429	094594	29.71500	-94.99000	29.71333	-94.99124	29428	94995
704	SH146 EB ML	.4MI SW OF BAYTOWN TUNNEL	29419	095014	29.69833	-95.02333	29.69882	-95.02406	29419	95414
705	SH146 WB ML	.5MI N OF BAYTOWN TUNNEL	29427	095003	29.71167	-95.00500	29.71148	-95.00592	29427	95404
706	LOOP 201 NB ML	1MI N OF SH146 AND LP201	29434	094595	29.72333	-94.99167	29.72335	-94.99144	29434	94995
707	LOOP 201 NB	1.5MI N OF SH146 & LP201	29437	094596	29.72833	-94.99333	29.72947	-94.99281	29438	94996
708	LOOP 201 ML	1MI N OF W. MAIN ST.	29442	094596	29.73667	-94.99333	29.74051	-94.99039	29444	94994
709	SPUR 201 W.B.	SPUR 201 AT GOOSE CREEK	29449	094988	29.74833	-95.64667	29.75008	-94.97932	29450	94988
710	LOOP 201 EB	SPUR 201 AT GOOSE CREEK	29449	094988	29.74833	-95.64667	29.74911	-94.98087	29449	94989
711	LOOP 201 WB	1.9MI E OF SPUR 330	29452	094973	29.75333	-95.62167	29.75173	-94.95497	29451	94973
712	LOOP 201	1.9MI E OF 330 & 201	29452	094973	29.75333	-95.62167	29.75155	-94.95492	29451	94973
713	LOOP 201 SB ML	1MI N OF SH146/LOOP201(T)	29434	094595	29.72333	-94.99167	29.72342	-94.99162	29434	94995
714	LOOP 201 SB ML	105MI N OF SH146/LOOP201	29437	094596	29.72833	-94.99333	29.72944	-94.99299	29438	94996
715	LOOP 201 SB	LOOP 201 AT SPUR 330	29447	094991	29.74500	-95.65167	29.74647	-94.98617	29448	94992
716	LOOP 201 NB	LOOP 201 AT SPUR 330	29447	094991	29.74500	-95.65167	29.74634	-94.98606	29448	94992
717	BS146-D	.5MI.S.OF FAIRMONT PKWY	29387	095011	29.64500	-95.01833	29.6456	-95.01873	29387	95411
718	IH45	3.5MI N OF IH610	29443	095212	29.73833	-95.35333	29.73835	-95.35187	29443	95611
719	IH45	3.5MI.N.OF IH-610	29441	095209	29.73500	-95.34833	29.7354	-95.34713	29441	95608
720	IH45	3.25MI.N.OF IH-610	29439	095206	29.73167	-95.34333	29.73156	-95.34197	29439	95605

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
721	IH45	3MI.N.OF IH-610	29437	095203	29.72833	-95.33833	29.7287	-95.33814	29437	95603
722	IH 45	2.75 MI N OF IH 610	29433	095197	29.72167	-95.32833	29.72233	-95.32785	29433	95597
723	IH 45	2.75 MI N OF IH 610	29431	095194	29.71833	-95.32333	29.71827	-95.32061	29431	95592
724	IH 45 SB ML	1.5 MI N OF IH 610	29427	095187	29.71167	-95.31167	29.71181	-95.31068	29427	95586
725	IH 45	1.0 MI N OF IH 610	29425	095184	29.70833	-95.30667	29.70817	-95.30495	29425	95583
726	IH 45	0.5 MI NW OF IH 610	29421	095178	29.70167	-95.29667	29.70181	-95.29524	29421	95577
727	IH 45 SB	AT IH 45/SH 35 INTER	29418	095175	29.69667	-95.29167	29.69946	-95.29207	29420	95575
728	IH 45	1 MI S OF IH 610	29411	095167	29.68500	-95.27833	29.68539	-95.2772	29411	95566
729	IH 45	5.8 MI N OF FM 1959	29388	095149	29.64667	-95.24833	29.64755	-95.24812	29389	95549
730	IH 45	500' N OF ALMEDA GENOA	29377	095138	29.62833	-95.23000	29.62837	-95.22952	29377	95538
731	IH45	.25MI N OF HARRIS/GALV CO	29307	095072	29.51167	-95.12000	29.51231	-95.11956	29307	95472
732	IH 45 SBML	AT HARRIS/GALV. C/L	29305	095070	29.50833	-95.11667	29.50781	-95.11697	29305	95470
733	IH45	2.5 MI N OF IH45 & IH610	29505	095236	29.84167	-95.39333	29.8431	-95.39103	29506	95635
734	RT & LT MN LN & LT	2 MI N OF IH45 & IH610	29502	095233	29.83667	-95.38833	29.83567	-95.38619	29501	95632
735	FM 1959	18MI S OF DWNTWN HOU.	29351	095111	29.58500	-95.18500	29.58645	-95.18408	29352	95510
736	MAIN ON RAMP J OVE	AT IH45/US59	29444	095215	29.74000	-95.35833	29.74188	-95.35654	29445	95614
737	DALLAS ST	AT IH45/N.END PIERCE ST	29455	095226	29.75833	-95.37667	29.75749	-95.37429	29454	95625
738	JEFFERSON ST	IH45 & JEFFERSON ST	29460	095220	29.76667	-95.36667	29.75363	-95.37421	29452	95625
739	IH 45 NB ML	AT IH45/N.END PIERCE ST	29459	095222	29.76500	-95.37000	29.75928	-95.37373	29456	95624
740	FM 528 & NASA I EB	1.5MI.N. OF I-45&CLEAR CR	29317	095078	29.52833	-95.13000	29.52835	-95.13035	29317	95478
741	IH45	4.75 MI N OF IH45 & IH610	29522	095247	29.87000	-95.41167	29.86958	-95.40747	29522	95644
742	IH 45 ML & FR	.25MI N OF IH45&PARKER RD	29517	095242	29.86167	-95.40333	29.86213	-95.40331	29517	95642
743	IH45	4 MI N OF IH45&IH610	29516	095244	29.86000	-95.40667	29.85925	-95.40225	29516	95641
744	IH45 ML & SBFR	800' N OF IH45&PARKER RD	29512	095238	29.85333	-95.39667	29.86126	-95.40366	29517	95642
745	IH45	2.5 MI N OF IH45&IH610	29507	095237	29.84500	-95.39500	29.84527	-95.39254	29507	95636
746	IH 45 SB FR	1.5 MI N OF IH 610	29427	095187	29.71167	-95.31167	29.71157	-95.31084	29427	95587
747	IH 45 NB ML	1.75MI.N.IH-45 & IH-610	29500	095232	29.83333	-95.38667	29.83317	-95.38404	29500	95630
748	IH 45 NB ML	1.25MI.N.IH-45 & IH-610	29497	095230	29.82833	-95.38333	29.82847	-95.3807	29497	95628
749	IH 45 NB ML	.5MI.N.OF IH-45 & IHH-610	29491	095229	29.81833	-95.38167	29.81922	-95.37756	29492	95627
750	LT & RT LANES IH45	AT IH10/IH45 INTER	29469	095222	29.78167	-95.37000	29.78336	-95.36849	29470	95621
751	IH45	1MI.S.OF LOOP 610 NORTH	29479	095225	29.79833	-95.37500	29.79896	-95.37157	29479	95623
752	QUITMAN RD	.5MI N OF IH45/IH10	29468	095222	29.78000	-95.37000	29.77909	-95.3676	29467	95621
753	IH45NB OFFRP HOUST	IH45NB & ALLEN PKWY	29459	095222	29.76500	-95.37000	29.75913	-95.37342	29455	95624
754	IH45 NB	IH45NB & HOUSTON AVE.	29457	095225	29.76167	-95.37500	29.76204	-95.37231	29457	95623
755	IH45 SB	IH45 & DALLAS ST	29455	095226	29.75833	-95.37667	29.75716	-95.37481	29454	95625
756	IH45NB OFF RP	AT N. OF PIERCE ELV.SECT.	29455	095226	29.75833	-95.37667	29.7569	-95.37415	29454	95624
757	IH45 SB	@ IH-10 & IH-45	29466	095222	29.77667	-95.37000	29.77699	-95.36926	29466	95622
758	IH45 NB	.5MI S OF IH45/IH10	29466	095222	29.77667	-95.37000	29.77725	-95.36795	29466	95621
759	NORTH ST	.75MI.N.OF IH-45 & IH-10	29471	095223	29.78500	-95.37167	29.78523	-95.36943	29471	95622
760	IH45	.5MI.OF IH-45 & 610 LOOP	29484	095226	29.80667	-95.37667	29.80728	-95.37305	29484	95624

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
761	IH45	.6MI.S.OF LOOP 610 NORTH	29482	095225	29.80333	-95.37500	29.80358	-95.37233	29482	95623
762	IH45	2MI.N.OF IH-45 & IH-10	29479	095225	29.79833	-95.37500	29.79776	-95.37155	29479	95623
763	COTTAGE ST	1.25MI.N.OF IH-45 & IH-10	29475	095224	29.79167	-95.37333	29.7919	-95.37159	29475	95623
764	NORTH MAIN	1MI.N.OF IH-45 & IH-10	29474	095224	29.79000	-95.37333	29.7897	-95.37161	29474	95623
765	IH 45 SB	16MI.S. OF DTWN. HOUSTON	29363	095123	29.60500	-95.20500	29.60621	-95.2052	29364	95523
766	IH45 SB ENT.	1/8 MI. N. OF AIRLINE/I45	29495	095229	29.82500	-95.38167	29.82986	-95.38178	29498	95629
767	IH 45 SB ML	3MI.N.OF IH-45 & FM-528	29341	095101	29.56833	-95.16833	29.56938	-95.16879	29342	95501
768	EL DORADO BLVD.	1MI N OF IH45 & FM628	29332	095092	29.55333	-95.15333	29.55323	-95.15393	29332	95492
769	BAY AREA BLVD EB	2 MI N OF IH45 & FM528	29328	095070	29.54667	-95.11667	29.54011	-95.14143	29324	95485
770	NASA RDI (WB)	1.75MI.W.HARRIS-GAL C/L	29317	095078	29.52833	-95.13000	29.52849	-95.13048	29317	95478
771	IH45 NB FRONT.	AT HARRIS GALV. C/L	29305	095070	29.50833	-95.11667	29.50803	-95.11651	29305	95470
772	IH45 SB FRONT.RD	AT HARRIS GALV. C/L	29305	095070	29.50833	-95.11667	29.50768	-95.11724	29305	95470
773	N & S BOUND MAIN L	.1 MI N OF IH45& AIRLINE	29501	095234	29.83500	-95.39000	29.83648	-95.38677	29502	95632
774	SH-35 CONN-K	@IH-45 & CALHOUN STREET	29437	095203	29.72833	-95.33833	29.72991	-95.3382	29438	95603
775	HB&T RAILROAD	AT IH45/CALHOUN ST.	29437	095203	29.72833	-95.33833	29.72967	-95.33779	29438	95603
776	LOMBARDY ST	2.5 MI S OF US 90A	29435	095198	29.72500	-95.33000	29.72304	-95.32825	29434	95597
777	LOMBARDY ST	1 MI NW OF US 90A	29435	095198	29.72500	-95.33000	29.72249	-95.32879	29433	95597
778	HB&T RR	0.75 MI SE OF US 90A	29435	095198	29.72500	-95.33000	29.72285	-95.32793	29434	95597
779	HB&T RR	0.75 MI SE OF US 90A	29435	095198	29.72500	-95.33000	29.7223	-95.32847	29433	95597
780	TELLEPSON RD	2.3 MI N OF US 90A	29434	095197	29.72333	-95.32833	29.72233	-95.32711	29433	95596
781	TELLEPSON RD	2.3 MI N OF US 90A	29434	095197	29.72333	-95.32833	29.72177	-95.32764	29433	95597
782	GRIGGS RD	1.5 MI S OF US 90A	29426	095184	29.71000	-95.30667	29.70836	-95.30472	29425	95583
783	GRIGGS ROAD	1.5 MI S OF US 90A	29426	095184	29.71000	-95.30667	29.70807	-95.30476	29425	95583
784	GH&SA RR	0.75 MI SE OF US 90A	29425	095184	29.70833	-95.30667	29.70819	-95.30448	29425	95583
785	GH&SA RR	0.9 MI SE OF US 90A	29425	095184	29.70833	-95.30667	29.70795	-95.30512	29425	95583
786	IH 45 NB FR	1.0 MI SE OF US 90A	29427	095187	29.71167	-95.31167	29.7122	-95.31041	29427	95586
787	WEST BAY AREA BLVD	2MI N OF IH45 & FM 528	29328	095070	29.54667	-95.11667	29.54024	-95.14152	29324	95485
788	IH45 NB TO IH10 EB	.2MI N LOUISIANA&FRANKLIN	29462	095461	29.77000	-95.76833	29.76749	-95.3631	29460	95618
789	SP RR	1 BLK.N.OF CONGRESS	29459	095367	29.76500	-95.61167	29.76561	-95.36039	29459	95616
790	CONN FROM TRAVIS S	2 BLK N.OF CONGRESS	29459	095367	29.76500	-95.61167	29.76369	-95.36038	29458	95616
791	RAMP G FROM I45S T	AT IH45/US59	29447	095214	29.74500	-95.35667	29.74877	-95.3585	29449	95615
792	PEDESTRIAN WALKWA	AT IH 610/IH 45 INTER	29415	095170	29.69167	-95.28333	29.69254	-95.28412	29416	95570
793	IH45 SB F.R.	@I-45 & CALHOUN ST.	29437	095203	29.72833	-95.33833	29.72763	-95.3374	29437	95602
794	IH45SB MCKINNEY EX	IH45SB & MCKINNEY	29457	095224	29.76167	-95.37333	29.76016	-95.37071	29456	95622
795	IH45SB OFF RP	IH45 AT ALLEN PKWY	29457	095224	29.76167	-95.37333	29.76099	-95.37421	29457	95625
796	ENTRANCE RAMP,HOUS	DOWNTOWN HOU.	29456	095224	29.76000	-95.37333	29.76181	-95.37315	29457	95624
797	IH45SB OFF RP	N. OF IH45SB & ALLEN PKWY	29456	095224	29.76000	-95.37333	29.76028	-95.37485	29456	95625
798	COLLECTING RAMP TO	DOWNTOWN HOU.	29457	095224	29.76167	-95.37333	29.76048	-95.37276	29456	95624
799	IH45NB ON RP	IH45NB & WALKER ST	29457	095224	29.76167	-95.37333	29.76171	-95.37153	29457	95623
800	IH45NB PIERCE ELEV	SW OF DOWNTOWN HOUSTON	29449	095223	29.74833	-95.37167	29.74639	-95.36665	29448	95620

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
801	CONN RAMP, I45 NB	IH45NB OFF RP ALLEN PKWY	29459	095222	29.76500	-95.37000	29.76014	-95.37368	29456	95624
802	IH 45 SB CONN	AT IH 610/IH 45 INTER	29418	095174	29.69667	-95.29000	29.69706	-95.28976	29418	95574
803	IH 45 NB	AT IH 610/IH 45 INTER	29418	095174	29.69667	-95.29000	29.69745	-95.28864	29418	95573
804	IH 45 NB	AT IH 610/IH 45 INTER	29418	095173	29.69667	-95.28833	29.69635	-95.28736	29418	95572
805	IH 45	2 MI N OF IH 610	29429	095190	29.71500	-95.31667	29.71488	-95.31525	29429	95589
806	I45NB CONNF US59NB	IH45/US59 INTERCHANGE	29445	095214	29.74167	-95.35667	29.74502	-95.36112	29447	95617
807	IH45SN-G TO 59NB	AT IH45/US59	29445	095217	29.74167	-95.36167	29.74552	-95.36163	29447	95617
808	IH45SB PIERCE ELEV	SW OF DOWNTOWN HOUSTON	29449	095223	29.74833	-95.37167	29.74918	-95.37108	29450	95623
809	I45NB CONNB US59SB	IH45/US59 INTERCHANGE	29449	095223	29.74833	-95.37167	29.74283	-95.36298	29446	95618
810	IH45 SB TO US59 SB	AT IH45/US59	29449	095223	29.74833	-95.37167	29.74426	-95.36377	29447	95618
811	I45NB WOODRIDGE EX	AT IH 610/IH 45 INTER	29418	095174	29.69667	-95.29000	29.69825	-95.28891	29419	95573
812	IH 45 CONN C	AT IH 610/IH 45 INTERCH	29418	095175	29.69667	-95.29167	29.69619	-95.28659	29418	95572
813	IH 45 NB CONN	AT IH 610/IH 45 INTER	29418	095173	29.69667	-95.28833	29.69654	-95.28599	29418	95572
814	IH 45 SB OFF RP	1.5 MI S OF US 90A	29425	095185	29.70833	-95.30833	29.70702	-95.30378	29424	95582
815	I45S.B.FRT.RD.RAMP	DUMBLE ST.@ IH-45	29437	095203	29.72833	-95.33833	29.72743	-95.33649	29436	95602
816	IH 45 SB	0.3 MI N OF IH 610	29419	095176	29.69833	-95.29333	29.69854	-95.29162	29419	95575
817	IH 45 SB	0.3 MI N OF IH 610	29425	095160	29.70833	-95.26667	29.69725	-95.28916	29418	95573
818	IH 45 SB	0.3 MI N OF IH 610	29425	095160	29.70833	-95.26667	29.69619	-95.28806	29418	95573
819	IH610EB TO IH45SB	0.3 MI N OF IH 610	29425	095160	29.70833	-95.26667	29.69614	-95.28942	29418	95574
820	IH45NB TO IH610WB	AT IH45/IH610 INTER	29418	095175	29.69667	-95.29167	29.69614	-95.28751	29418	95573
821	IH 610 EB CONN G	0.3 MI N OF IH 610	29418	095175	29.69667	-95.29167	29.69744	-95.28485	29418	95571
822	IH45	S OF CULLEN	29437	095203	29.72833	-95.33833	29.72867	-95.33685	29437	95602
823	IH 45	AT IH 610/IH 45 INTER	29419	095176	29.69833	-95.29333	29.69895	-95.29181	29419	95575
824	AVL T INTERSECTION	AT IH45/DUMBLE ST	29433	095197	29.72167	-95.32833	29.72555	-95.33292	29435	95600
825	SH35 NB RAMP	IH45 RAMP TO SCOTT ST	29441	095209	29.73500	-95.34833	29.73534	-95.34641	29441	95608
826	IH 45 HOV	AT IH 610/IH 45 INTER	29419	095176	29.69833	-95.29333	29.69943	-95.2917	29420	95575
827	IH 45 HOV	AT IH 610/IH 45 INTER	29428	095174	29.71333	-95.29000	29.69733	-95.28887	29418	95573
828	IH 45 HOV	AT IH 610/IH 45 INTER	29425	095116	29.70833	-95.19333	29.69672	-95.28859	29418	95573
829	IH 45 NB ML	3MI. N. OF IH 610	29437	095203	29.72833	-95.33833	29.72886	-95.33801	29437	95603
830	LOCKWOOD P&R RP	IH 45 & DUMBLE ST	29433	095197	29.72167	-95.32833	29.72619	-95.33332	29436	95600
831	IH45 AVL	IH45 AVL AT IH45/US59	29443	095212	29.73833	-95.35333	29.74196	-95.35744	29445	95614
832	RAMP B IH-45 AVL	IH45 AVL AT IH45/IH10	29467	095223	29.77833	-95.37167	29.77857	-95.36927	29467	95622
833	IH 45 SB ML	2.5 MI S OF IH 610	29400	095157	29.66667	-95.26167	29.66677	-95.26084	29400	95557
834	IH 45 SB FR	2.5 MI S OF IH 610	29400	095157	29.66667	-95.26167	29.66664	-95.26111	29400	95557
835	IH 45 NB FR	2.5 MI S OF IH 610	29400	095157	29.66667	-95.26167	29.667	-95.26039	29400	95556
836	SH 35 SB ON RAMP	3.5MI N OF IH610	29441	095209	29.73500	-95.34833	29.73556	-95.34838	29441	95609
837	IH45 CONN.C	3.25MI N OF IH610	29439	095206	29.73167	-95.34333	29.72904	-95.33945	29437	95604
838	FUQUA ST SB	1.1MI SE OF ALMEDA GENOA	29369	095130	29.61500	-95.21667	29.616	-95.21589	29370	95530
839	SCARSDALE BLVD	1.2MI NW OF FM1959	29359	095119	29.59833	-95.19833	29.59875	-95.1975	29359	95518
840	IH 45 NB FR	1.5 MI S OF IH 610	29408	095164	29.68000	-95.27333	29.68047	-95.27192	29408	95563

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
841	IH 45 SB FR	1.5 MI S OF IH 610	29408	095164	29.68000	-95.27333	29.68005	-95.27258	29408	95564
842	IH 45 SB ML	1.5 MI S OF IH 610	29408	095164	29.68000	-95.27333	29.68019	-95.2723	29408	95563
843	IH 45 NB ML	1.5 MI S OF IH 610	29408	095164	29.68000	-95.27333	29.68028	-95.27213	29408	95563
844	IH 45 SB	2.2 MI S OF IH 610	29405	095160	29.67500	-95.26667	29.6754	-95.26768	29405	95561
845	IH 45 NB	2.2 MI S OF IH 610	29405	095160	29.67500	-95.26667	29.6755	-95.26752	29405	95561
846	IH 45 SB	2.3 MI S OF IH 610	29401	095158	29.66833	-95.26333	29.66892	-95.26225	29401	95557
847	IH 45 NB	2.3 MI S OF IH 610	29401	095158	29.66833	-95.26333	29.66901	-95.26208	29401	95557
848	IH 45 NB ML	2.5 MI S OF IH 610	29400	095157	29.66667	-95.26167	29.66687	-95.26066	29400	95556
849	IH45 AVL CONN. A	T WHITE OAK BAYOU	29467	095223	29.77833	-95.37167	29.78018	-95.36827	29468	95621
850	IH45 AVL CONN.	0.7 MI S OF IH 10 WB	29449	095223	29.74833	-95.37167	29.77028	-95.36545	29462	95619
851	IH45 NB	.5 MI N OF HOU.CITY LIMIT	29526	095249	29.87667	-95.41500	29.87569	-95.41127	29525	95647
852	IH 45 NB	IH 45 @ BELTWAY 8	29363	095123	29.60500	-95.20500	29.60633	-95.20504	29364	95523
853	IH 45 NB	4 MI S OF IH 610	29391	095151	29.65167	-95.25167	29.65215	-95.25111	29391	95551
854	IH 45	5 MI S OF IH 610	29384	095146	29.64000	-95.24333	29.64064	-95.24309	29384	95546
855	ALMEDA GENOA RD	3 MI N OF FM 1959	29376	095137	29.62667	-95.22833	29.62735	-95.22847	29376	95537
856	IH-45 RAMP "L"	AT IH10/IH45 INTER.	29467	095223	29.77833	-95.37167	29.77902	-95.36931	29467	95622
857	IH 45 SB FR	.5MI W OF SCARSDALE	29363	095121	29.60500	-95.20167	29.60071	-95.20003	29360	95520
858	IH 45 SB FR	0.13 MI. NW OF BWY 8	29368	095128	29.61333	-95.21333	29.60782	-95.20824	29365	95525
859	IH 45	1.5MI N OF IH45/FM1959	29360	095118	29.60000	-95.19667	29.60131	-95.20003	29361	95520
860	IH 45	0.5MI N OF FM 1959	00001	000001	0.00167	-0.00167	29.58997	-95.188	29354	95513
861	IH 45 SB ML	1.75 MI N IH45 & IH610	29500	095232	29.83333	-95.38667	29.83305	-95.38418	29500	95631
862	IH 45 SB ML	1.25 MI N IH45 & IH610	29497	095230	29.82833	-95.38333	29.82841	-95.3809	29497	95629
863	IH 45 SB ML	0.5 MI N IH45 & IH610	29491	095229	29.81833	-95.38167	29.8192	-95.37776	29492	95627
864	IH 45 NBML	AT HARRIS/GALV. C/L	29305	095070	29.50833	-95.11667	29.50789	-95.11678	29305	95470
865	IH 45 NB ML	3.0 MI N OF IH45/FM528	29341	095101	29.56833	-95.16833	29.56952	-95.16865	29342	95501
866	FUQUA ST NB	1.1MI SE OF ALMEDA GENOA	29369	095130	29.61500	-95.21667	29.61591	-95.21576	29370	95529
867	IH 45 NB ML	1.5 MI N OF IH 610	29427	095187	29.71167	-95.31167	29.71196	-95.31053	29427	95586
868	IH45	AT IH45/IH610 TOP LV.	29488	095227	29.81333	-95.37833	29.81454	-95.3756	29489	95625
869	RP C/IH610WBTO145S	AT IH45/IH610 2ND LV.	29341	095101	29.56833	-95.16833	29.8143	-95.37515	29489	95625
870	IH610WB	AT IH45/IH610	29340	095101	29.56667	-95.16833	29.81457	-95.37631	29489	95626
871	RP"E"/I610EBTO45NB	AT IH45/IH610 2ND LV.	29340	095101	29.56667	-95.16833	29.81314	-95.37544	29488	95625
872	IH610EB	AT IH45/IH610 2ND LV.	29341	095101	29.56833	-95.16833	29.81299	-95.37384	29488	95624
873	IH 610 SB FR	0.5 MI N OF IH 45	29427	095128	29.71167	-95.21333	29.69973	-95.28222	29420	95569
874	IH 610 EB	0.75 MI NE OF IH 45	29412	095167	29.68667	-95.27833	29.70228	-95.27773	29421	95567
875	IH 610 EB	1.25 MI N OF IH 45	29423	095165	29.70500	-95.27500	29.70468	-95.27438	29423	95565
876	SH 225 EB	1.5 MI E OF IH 610	29423	095147	29.70500	-95.24500	29.70587	-95.24515	29424	95547
877	SH 225 EB	2.5 MI E OF IH 610	29426	095137	29.71000	-95.22833	29.70755	-95.22807	29425	95537
878	SH 225 EB	1.25 MI E OF IH 610	29424	095152	29.70667	-95.25333	29.70681	-95.25277	29424	95552
879	SH225 & S RDS	PASADENA DEER PK CITY LIM	29426	095087	29.71000	-95.14500	29.7117	-95.14461	29427	95487
880	SH 225 EB	@ PASADENA DEEP PARK C/R	29426	095084	29.71000	-95.14000	29.71145	-95.13996	29427	95484

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
881	SH 225 EB FR	3.3 MI E OF IH 610	29426	095130	29.71000	-95.21667	29.70992	-95.21649	29426	95530
882	SH 225 EB FR	4.0 MI E OF IH 610	29427	095122	29.71167	-95.20333	29.71145	-95.20304	29427	95522
883	SH 225 EB	0.6 MI E OF IH 610	29424	095155	29.70667	-95.25833	29.70752	-95.25677	29425	95554
884	RICHEY ST SB	2.8 MI E OF IH 610	29426	095132	29.71000	-95.22000	29.71015	-95.2199	29426	95532
885	SH 225 EB ON RAMP	2.8 MI E OF IH 610	29425	095131	29.70833	-95.21833	29.70993	-95.21849	29426	95531
886	SH 225 WB OFF RAMP	2.8 MI E OF IH 610	29426	095131	29.71000	-95.21833	29.71062	-95.21841	29426	95531
887	SH 225 WB FR	3.2 MI E OF IH 610	29426	095130	29.71000	-95.21667	29.71113	-95.21667	29427	95530
888	SH 225 WB OFF RAMP	3.2 MI E OF IH 610	29426	095130	29.71000	-95.21667	29.71062	-95.21676	29426	95530
889	SH 225 EB ML	3.2 MI E OF IH 610	29426	095130	29.71000	-95.21667	29.71039	-95.21658	29426	95530
890	SH 225 EB	3.2 MI E OF IH 610	29427	095125	29.71167	-95.20833	29.71098	-95.21039	29427	95526
891	SH 225 WB FR	4 MI E OF IH 610	29427	095122	29.71167	-95.20333	29.71214	-95.2034	29427	95522
892	SH 225 EB ML	4 MI E OF IH 610	29427	095122	29.71167	-95.20333	29.7117	-95.20317	29427	95522
893	SH 225 EB	4.5 MI E OF IH 610	29427	095121	29.71167	-95.20167	29.71189	-95.20113	29427	95521
894	SH 225 EB	5.0 MI E OF IH 610	29427	095118	29.71167	-95.19667	29.71228	-95.19724	29427	95518
895	SH 225	0.2 MI W OF BEARLE ST	29427	095112	29.71167	-95.18667	29.7129	-95.18736	29428	95512
896	SH 35 SB	AT IH 45/SH 35 INTER	29415	095175	29.69167	-95.29167	29.69646	-95.29164	29418	95575
897	SH 35 NB	AT IH 45/SH 35 INTER	29415	095175	29.69167	-95.29167	29.6965	-95.29143	29418	95575
898	SH 225 EB	4.8 MI E OF IH 610	29427	095110	29.71167	-95.18333	29.71271	-95.18392	29428	95510
899	SH 225 EB	5.6 MI E OF IH 610	29427	095103	29.71167	-95.17167	29.71233	-95.17127	29427	95503
900	SH 225 WB	4.8 MI E OF IH 610	29427	095110	29.71167	-95.18333	29.71288	-95.18393	29428	95510
901	SH 225 WB	5.6 MI E OF IH 610	29427	095103	29.71167	-95.17167	29.7125	-95.17131	29428	95503
902	SH 225 WB	SH 225 @ T & N.O. R.R.	29426	095084	29.71000	-95.14000	29.71162	-95.14	29427	95484
903	SH-225	SH-225 @ SHELL ENT.	29427	095077	29.71167	-95.12833	29.71147	-95.12721	29427	95476
904	SH-225	SH225 @ CENTER ST	29427	095074	29.71167	-95.12333	29.71132	-95.12377	29427	95474
905	SH225 NB & SB	500 FT W OF TIDAL RD	29426	095069	29.71000	-95.11500	29.71063	-95.11459	29426	95469
906	SH-225	SH225 @ TIDAL RD	29426	095067	29.71000	-95.11167	29.71026	-95.11291	29426	95468
907	SH 225	1.2 MI E OF SH 134	29419	095044	29.69833	-95.07333	29.69833	-95.07333	29419	95444
908	CENTRAL/EAST BLVD	SH 225 @ EAST BLVD	29404	095060	29.67333	-95.10000	29.70745	-95.10256	29424	95462
909	RICHEY ST NB	2.8 MI E OF IH 610	29426	095132	29.71000	-95.22000	29.71017	-95.21973	29426	95532
910	SH 225 WB ML	3.2 MI E OF IH 610	29426	095130	29.71000	-95.21667	29.71056	-95.21659	29426	95530
911	SH 225 WB	3.2 MI E OF IH 610	29427	095125	29.71167	-95.20833	29.71119	-95.21043	29427	95526
912	SH 225 WB	4.0 MI E OF IH 610	29427	095122	29.71167	-95.20333	29.71186	-95.20326	29427	95522
913	SH 225 WB	4.5 MI E OF IH 610	29427	095121	29.71167	-95.20167	29.71206	-95.20114	29427	95521
914	SH225 CON TO SH146	1 MI S. OF BAYTOWN TUNNEL	29412	095019	29.68667	-95.03167	29.68845	-95.03033	29413	95418
915	SH 225 WB	5.0 MI E OF IH 610	29427	095118	29.71167	-95.19667	29.71244	-95.1973	29427	95518
916	IH 610 WB	0.75 MI NE OF IH 45	29412	095167	29.68667	-95.27833	29.70239	-95.27788	29421	95567
917	IH 610 WB	0.6 MI SW OF IH 610	29423	095165	29.70500	-95.27500	29.70479	-95.2745	29423	95565
918	SH 225 WB	1.5 MI E OF IH 610	29423	095147	29.70500	-95.24500	29.70606	-95.24515	29424	95547
919	SH 225 WB	2.5 MI E OF IH 610	29426	095137	29.71000	-95.22833	29.70773	-95.22812	29425	95537
920	SH 225 WB	0.6 MI E OF IH 610	29424	095155	29.70667	-95.25833	29.7077	-95.25673	29425	95554

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
921	SH 225 WB	1.25 MI E OF IH 610	29424	095152	29.70667	-95.25333	29.70698	-95.25269	29424	95552
922	SH 225 MAIN AND FR	3 MI WEST OF SH225/SH146	00001	000001	0.00167	-0.00167	29.69992	-95.07876	29420	95447
923	IH 610 EB	AT IH 45/IH 610 INTERCH	29425	095160	29.70833	-95.26667	29.6967	-95.29005	29418	95574
924	IH 610 WB	AT IH610/IH45/SH35	29425	095160	29.70833	-95.26667	29.69679	-95.29013	29418	95574
925	IH 610 CONN I	0.1 MI E OF IH 610/IH 45	29418	095175	29.69667	-95.29167	29.69785	-95.28687	29419	95572
926	SH225 W.B.	.6 MI E OF SOUTH ST	29427	095096	29.71167	-95.16000	29.71222	-95.16105	29427	95497
927	SH 225 EB	6.7MI E OF IH610 & SH225	29427	095092	29.71167	-95.15333	29.71182	-95.15341	29427	95492
928	SH-225 (EB)	.6MI.E.OF SOUTH STREET	29427	095096	29.71167	-95.16000	29.71204	-95.16104	29427	95497
929	SH225 WB	AT SH225 AND BW8	29427	095092	29.71167	-95.15333	29.71202	-95.15359	29427	95492
930	PED CROSSING	0.1 MI W OF IH 610	29429	095164	29.71500	-95.27333	29.71169	-95.27431	29427	95565
931	SH 225 CONN M	AT IH 610/SH 225 INTER	29425	095160	29.70833	-95.26667	29.71034	-95.27167	29426	95563
932	SH 225 CONN L	AT IH 610/SH 225 INTERCH	29425	095160	29.70833	-95.26667	29.71049	-95.27091	29426	95563
933	SH 225 CONN E & F	AT IH 610/SH 225 INTER	29425	095160	29.70833	-95.26667	29.70952	-95.26999	29426	95562
934	SH 225 CONN A	AT IH 610/SH 225 INTERCH	29425	095160	29.70833	-95.26667	29.711	-95.26563	29427	95559
935	IH 10 ML	2.0 MI E OF IH 610	29463	095137	29.77167	-95.22833	29.77184	-95.22785	29463	95537
936	IH 10 ML & FR	4.0 MI E OF IH 610	29463	095121	29.77167	-95.20167	29.77121	-95.20374	29463	95522
937	IH10 RT LANE	12MI E OF IH10+IH610	29476	095044	29.79333	-95.07333	29.79315	-95.06314	29476	95438
938	IH-10 MAINLANES	9.75MI E OF IH10E+IH610	29471	095062	29.78500	-95.10333	29.78532	-95.10495	29471	95463
939	IH10 EB FRONT.	9.75MI E OF IH10E & IH610	29471	095062	29.78500	-95.10333	29.78501	-95.10483	29471	95463
940	IH10 WB	2.3MI E OF IH10/SPUR 330	29480	095010	29.80000	-95.01667	29.79985	-95.01682	29480	95410
941	IH10 EB	2.3MI E OF IH10/SPUR 330	29480	095010	29.80000	-95.01667	29.79967	-95.01682	29480	95410
942	IH10 WB	.7MI E.OF WADE RD. .	29480	095003	29.80000	-95.00500	29.80099	-95.00449	29481	95403
943	IH10 EB	.7MI E.OF WADE RD.	29480	095003	29.80000	-95.00500	29.80082	-95.00446	29480	95403
944	IH 10 WB	8.5MI E OF IH10&SPUR330	29493	094550	29.82167	-94.91667	29.8211	-94.91446	29493	94949
945	IH 10 EB	8.5MI E OF IH10 & IH610	29493	094550	29.82167	-94.91667	29.82092	-94.9145	29493	94949
946	IH 10 EB & WB FR	AT JOHN MARTIN RD.	29463	095092	29.77167	-95.15333	29.80195	-94.99777	29481	94999
947	IH 10 ML	.3MI E OF SJOLANDER RD	29488	094561	29.81333	-94.93500	29.81394	-94.93483	29488	94961
948	HB & T RR	1.25 MI W OF IH 610	29466	095173	29.77667	-95.28833	29.7777	-95.28802	29467	95573
949	IH10 (WB)	3MI E OF IH10/SAN JAC.RIV	29478	095019	29.79667	-95.03167	29.79735	-95.0318	29478	95419
950	IH10 EB	3MI N OF IH45/SAN JAC.RIV	29478	095019	29.79667	-95.03167	29.79718	-95.03167	29478	95419
951	IH10 WB	3.8MI E IH10/SAN JAC.RIV.	29480	095003	29.80000	-95.00500	29.80127	-95.00453	29481	95403
952	IH 10 FRONTAGE (EB	3.8MI E IH10/SAN JAC.RIV.	29462	095107	29.77000	-95.17833	29.80056	-95.00438	29480	95403
953	IH 10 WB	4.3MI E IH10.SAN JAC.RIV.	29481	094598	29.80167	-94.99667	29.80204	-94.9978	29481	94999
954	IH 10 EB	4.3MI E IH10/SAN JAC.RIV.	29481	094598	29.80167	-94.99667	29.80187	-94.99774	29481	94999
955	IH 10 WB	5.3MI E IH10/SAN JAC.RIV.	29483	094589	29.80500	-94.98167	29.8045	-94.98156	29483	94989
956	IH 10 EB	5.3MI E IH10/SAN JAC.RIV.	29483	094589	29.80500	-94.98167	29.80433	-94.98151	29483	94989
957	IH 10 WB	7MI E IH10/SAN JAC.RIV.	29485	094579	29.80833	-94.96500	29.80773	-94.96517	29485	94979
958	IH 10 EB	7MI E IH10/SAN JAC.RIV.	29485	094579	29.80833	-94.96500	29.80755	-94.96514	29485	94979
959	IH 10 WB	8MI E IH10/SAN JAC.RIV.	29487	094564	29.81167	-94.94000	29.81245	-94.93844	29487	94963
960	IH 10 EB	8MI E IH10/SAN JAC.RIV.	29487	094564	29.81167	-94.94000	29.81228	-94.93836	29487	94963

HARRIS Observations Report

ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
961	IH 10 WB FR	8.5MI E IH10/SAN JAC.RIV.	29488	094561	29.81333	-94.93500	29.81427	-94.935	29489	94961
962	IH 10 EB FR	8.5MI E IH10/SAN JAC.RIV.	29488	094561	29.81333	-94.93500	29.81362	-94.93463	29488	94961
963	IH 10 EB	0.8 MI E OF IH 610	29464	095148	29.77333	-95.24667	29.77337	-95.24712	29464	95548
964	IH 10 EB	1.7 MI E OF IH 610	29464	095140	29.77333	-95.23333	29.77283	-95.23278	29464	95540
965	IH 10 WB FR	2.0 MI E OF IH 610	29463	095137	29.77167	-95.22833	29.77219	-95.22774	29463	95537
966	IH 10 EB FR	2.0 MI E OF IH 610	29463	095137	29.77167	-95.22833	29.77151	-95.22796	29463	95537
967	IH 10 EB	0.4 MI E OF FM 526	29462	095123	29.77000	-95.20500	29.77103	-95.20609	29463	95524
968	IH 10 EB	2.3 MI E OF FM 526	29462	095107	29.77000	-95.17833	29.77041	-95.17757	29462	95507
969	IH 10 EB	1.7 MI E OF FM 526	29462	095112	29.77000	-95.18667	29.77057	-95.18637	29462	95512
970	IH 10 EB	0.5 MI W OF IH 610	29466	095163	29.77667	-95.27167	29.7766	-95.27184	29466	95563
971	IH10EB TO IH610NB	AT IH 10/IH 610 INTERCH	29465	095158	29.77500	-95.26333	29.77602	-95.26312	29466	95558
972	IH 10	.5MI E OF IH10/US59	29462	095202	29.77000	-95.33667	29.76897	-95.3355	29461	95601
973	SPRR	4 MI W OF IH 610	29463	095197	29.77167	-95.32833	29.77189	-95.3284	29463	95597
974	UTILITIES	4 MI W OF IH 610	29463	095196	29.77167	-95.32667	29.77133	-95.3284	29463	95597
975	WACO ST	1 MI E OF US 59	29464	095195	29.77333	-95.32500	29.77248	-95.32625	29463	95596
976	PED CROSSING	3.75 MI E OF IH 610	29464	095193	29.77333	-95.32167	29.77375	-95.3227	29464	95594
977	PED CROSSING	3.5 MI W OF IH 610	29464	095191	29.77333	-95.31833	29.77399	-95.31757	29464	95591
978	LOCKWOOD ST SB	2 MI E OF US 59	29464	095189	29.77333	-95.31500	29.774	-95.31537	29464	95589
979	LOCKWOOD ST NB	2 MI E OF US 59	29464	095189	29.77333	-95.31500	29.77397	-95.31495	29464	95589
980	SPRR	3 MI W OF IH 610	29464	095187	29.77333	-95.31167	29.774	-95.31229	29464	95587
981	CROSSWALK	3 MI W OF IH 610	29464	095186	29.77333	-95.31000	29.77397	-95.31036	29464	95586
982	IH 10	2.8 MI W OF IH 610	29464	095184	29.77333	-95.30667	29.77388	-95.30724	29464	95584
983	IH 10 EB	2.5 MI W OF IH 610	29464	095181	29.77333	-95.30167	29.77392	-95.30101	29464	95581
984	IH10 EB	1.75 MI W OF IH 610	29467	095175	29.77833	-95.29167	29.77742	-95.29125	29466	95575
985	SPUR 330 (WB)	13.5MI E OF IH10E/IH610	29474	095079	29.79000	-95.13167	29.79076	-95.04925	29474	95430
986	IH10 WB ON RP	0.40 MI W OF COPELAND	29461	095213	29.76833	-95.35500	29.77116	-95.33088	29463	95599
987	IH10 EB OFF RP	.5MI E OF IH45/IH10 INTER	29461	095213	29.76833	-95.35500	29.76811	-95.35407	29461	95612
988	MCKEE ST	AT IH10/MCKEE	29462	095211	29.77000	-95.35167	29.76955	-95.35193	29462	95611
989	HARDY ST	.05MI W OF ELYSIAN ST	29462	095210	29.77000	-95.35000	29.76969	-95.35109	29462	95611
990	ELYSIAN STREET	BETWEEN IH45/US59	29462	095210	29.77000	-95.35000	29.76939	-95.35035	29462	95610
991	UTIL-PED	AT IH10/ELYSIAN ST	29462	095210	29.77000	-95.35000	29.76975	-95.34976	29462	95610
992	SP RR	.15MI E OF ELYSIAN	29462	095209	29.77000	-95.34833	29.76953	-95.34851	29462	95609
993	HB & T RR	AT IH10/MARY ST	29462	095208	29.77000	-95.34667	29.76957	-95.34647	29462	95608
994	UTILITIES	AT IH10/WEST ST	29462	095207	29.77000	-95.34500	29.76941	-95.34557	29462	95607
995	HB & T RR	AT CARR ST	29462	095207	29.77000	-95.34500	29.76929	-95.3447	29462	95607
996	NANCE ST	IH10/NANCE ST	29461	095206	29.76833	-95.34333	29.76854	-95.34384	29461	95606
997	UTILITIES	AT IH10/US59 INTER	29462	095206	29.77000	-95.34333	29.76889	-95.34374	29461	95606
998	000305000	089000181	29462	095206	29.77000	-95.34333	29.76946	-95.34369	29462	95606
999	JENSEN DR	AT IH10/US59/JENSEN	29462	095206	29.77000	-95.34333	29.76944	-95.34312	29462	95606
1000	JENSEN DR	IH10/US59 AT JENSEN	29462	095206	29.77000	-95.34333	29.76887	-95.34315	29461	95606

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1001	CROSSWALK	0.5 MI W OF US 90A	29465	095178	29.77500	-95.29667	29.77605	-95.29541	29466	95577
1002	IH10 WB	5.8 MI. E OF BW8 E	29476	095044	29.79333	-95.07333	29.79333	-95.06301	29476	95438
1003	CROSBY NB	2.5MI W OF WADE RD.	29474	095034	29.79000	-95.05667	29.79057	-95.05716	29474	95434
1004	IH 10 RAMP	13MI E OF IH10/IH610	29474	095080	29.79000	-95.13333	29.78993	-95.04991	29474	95430
1005	MEADOW STREET	AT IH10/US59	29462	095204	29.77000	-95.34000	29.76846	-95.33932	29461	95604
1006	UTILITY STRUCTURE	AT IH10/US59	29461	095204	29.76833	-95.34000	29.76884	-95.33882	29461	95603
1007	US 59	AT IH10/US59	29460	095207	29.76667	-95.34500	29.7678	-95.34292	29461	95606
1008	CROSBY-LYNCHBURG S	2.5MI W OF WADE RD.	29474	095034	29.79000	-95.05667	29.7906	-95.05725	29474	95434
1009	RAMP D	AT IH10/US59	29461	095206	29.76833	-95.34333	29.76855	-95.34272	29461	95606
1010	RAMP C	AT IH10/US59	29462	095203	29.77000	-95.33833	29.76956	-95.33989	29462	95604
1011	MAGNOLIA AVE.	I10E @ MAGNOLIA AVE	29474	095053	29.79000	-95.08833	29.79027	-95.08942	29474	95454
1012	RAMP B OVER RAMP A	AT IH10/US59	29462	095204	29.77000	-95.34000	29.76974	-95.34025	29462	95604
1013	RAMP D OVER RAMP A	AT IH10/US59	29462	095204	29.77000	-95.34000	29.76872	-95.34128	29461	95605
1014	CONN RAMP A	AT IH10/US59	29462	095205	29.77000	-95.34167	29.76956	-95.34134	29462	95605
1015	IH 10 EB	1.25 MI W OF IH 610	29467	095170	29.77833	-95.28333	29.77769	-95.28376	29467	95570
1016	RAMP 'Y' I10EB TO	AT IH10/US59	29461	095205	29.76833	-95.34167	29.76795	-95.34391	29461	95606
1017	PEDESTRIAN WLKWY	0.4 MI W OF FM 526	29462	095132	29.77000	-95.22000	29.77035	-95.22109	29462	95533
1018	IH 10 WB FR	1.0 MI E OF FEDERAL RD	29468	095118	29.78000	-95.19667	29.77163	-95.19719	29463	95518
1019	IH 10 EB ML	1.0 MI E OF FEDERAL RD	29462	095118	29.77000	-95.19667	29.77136	-95.1972	29463	95518
1020	IH 10 EB FR	1.0 MI E OF FEDERAL RD	29468	095118	29.78000	-95.19667	29.77092	-95.19728	29463	95518
1021	PEDESTRIAN WLKWY	J110E @ CROCKET	29469	095070	29.78167	-95.11667	29.78041	-95.11741	29468	95470
1022	I10 ML & FR.RD.	1.2 MI W. OF SHELDON	29464	095086	29.77333	-95.14333	29.77355	-95.14257	29464	95486
1023	I-10 MAINLANES(EB)	I10 @ DELL DALE AVE	29464	095083	29.77333	-95.13833	29.77458	-95.13829	29465	95483
1024	I10E MAINLANES	.3MI.W.OF I10 & SHELDON	29465	095081	29.77500	-95.13500	29.77696	-95.12853	29466	95477
1025	IH10 MAINLANES	IH10E AND SHELDON RD	29467	095075	29.77833	-95.12500	29.77802	-95.12428	29467	95475
1026	IH10 MAINLANE	.5MI.E. OF MAGNOLIA	29474	095050	29.79000	-95.08333	29.79086	-95.08371	29475	95450
1027	CEDAR LANE	1.2MI E OF SHELDON RD	29471	095064	29.78500	-95.10667	29.78481	-95.10646	29471	95464
1028	BAYOU ST	IH10 AT BAYOU ST	29472	095060	29.78667	-95.10000	29.78589	-95.10348	29472	95462
1029	IH10 MAINLANES	1.4MI W OF LYNCHBURG RD	29475	095047	29.79167	-95.07833	29.7921	-95.07952	29475	95448
1030	IH10 MAINLANES	1MI W OF LYNCHBURG RD	29476	095044	29.79333	-95.07333	29.79413	-95.07378	29476	95444
1031	PEDESTRIAN WLKWY	0.3 MI E OF MERCURY DR	29464	095145	29.77333	-95.24167	29.77348	-95.24199	29464	95545
1032	IH 10	1.2 MI E OF HOLLAND	29462	095128	29.77000	-95.21333	29.7704	-95.2135	29462	95528
1033	IH 10 ML & FR	1.3 MI E OF FM 526	29462	095115	29.77000	-95.19167	29.77084	-95.19122	29463	95515
1034	IH10 EB MAINLANES	.8MI E OF DELLDALE	29462	095091	29.77000	-95.15167	29.77105	-95.15301	29463	95492
1035	IH10 WB MAINLANES	.8MI E OF DELLDALE	29462	095091	29.77000	-95.15167	29.77122	-95.1531	29463	95492
1036	IH10 WB FRONTAGE	1.5MI W OF UVLADE	29462	095096	29.77000	-95.16000	29.77123	-95.16057	29463	95496
1037	HB & T RR	500' W OF JENSEN	29462	095207	29.77000	-95.34500	29.77006	-95.34472	29462	95607
1038	IH 10 WB	2.75 MI W OF IH 610	29464	095184	29.77333	-95.30667	29.77406	-95.30721	29464	95584
1039	IH 10 WB	2.5 MI W OF IH 610	29464	095181	29.77333	-95.30167	29.77412	-95.301	29464	95581
1040	IH 10 WB	1.75 MI W OF IH 610	29467	095175	29.77833	-95.29167	29.7776	-95.29126	29467	95575

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1041	WB IH10	.6MI E OF DELLEDALE	29463	095089	29.77167	-95.14833	29.77202	-95.14919	29463	95490
1042	EB IH10	.6MI E OF DELLEDALE	29463	095089	29.77167	-95.14833	29.77185	-95.14915	29463	95489
1043	EB FTG IH10	.6MI E OF DELLEDALE	29463	095089	29.77167	-95.14833	29.77148	-95.14871	29463	95489
1044	WB FTG IH10	.6MI E OF DELLEDALE	29463	095089	29.77167	-95.14833	29.77244	-95.14962	29463	95490
1045	IH 10 WB	1.7 MI E OF FM 526	29462	095112	29.77000	-95.18667	29.77042	-95.18618	29462	95512
1046	IH10NB TO IH610SB	IH 10/IH 610 INTERCHANGE	29465	095158	29.77500	-95.26333	29.77521	-95.26355	29465	95558
1047	IH 10 LT MN LN	0.6 MI. W OF BW8 @ IH-10E	29462	095096	29.77000	-95.16000	29.771	-95.16076	29463	95496
1048	IH 10 RT MN LN	6MI E OF IH10E & IH610	29462	095096	29.77000	-95.16000	29.77081	-95.16093	29462	95497
1049	IH10 FRONT.RD E.B.	1.5MI E OF UVALDE	29462	095096	29.77000	-95.16000	29.77037	-95.16129	29462	95497
1050	BROOKVIEW OFF RAMP	%>%MI E OF IH610 & IH10E	29460	095096	29.76667	-95.16000	29.77237	-95.15676	29463	95494
1051	IH 10 EB	IH 10/IH 610 INTERCHANGE	29465	095158	29.77500	-95.26333	29.77517	-95.26303	29465	95558
1052	IH10 LT FT RD	.1MI E OF BAYOU DR	29471	095062	29.78500	-95.10333	29.78566	-95.10512	29471	95463
1053	BW8E E-S CONN.	AT IH10E & BW8E INTER.	00000	000000	0.00000	0.00000	29.7705	-95.15586	29462	95494
1054	IH10E E-N CONN.	AT IH10E & BW8E INTER.	00000	000000	0.00000	0.00000	29.77064	-95.15789	29462	95495
1055	BW8E W-S CONN.	AT IH10E & BW8E INTER.	00000	000000	0.00000	0.00000	29.77158	-95.15072	29463	95490
1056	BW8E W-N CONN.	AT IH10E & BW8E INTER.	00000	000000	0.00000	0.00000	29.77182	-95.15115	29463	95491
1057	BW8E N-E CONN	AT IH10E & BW8E INTER.	00000	000000	0.00000	0.00000	29.76836	-95.15036	29461	95490
1058	BW8E S-E CONN.	AT IH10E & BW8E INTER.	00000	000000	0.00000	0.00000	29.77237	-95.15535	29463	95493
1059	BW8 SBML	AT IH10E & BW8E INTER.	00000	000000	0.00000	0.00000	29.77077	-95.15338	29462	95492
1060	BW8 NBML	AT IH10E & BW8E INTER.	00000	000000	0.00000	0.00000	29.7708	-95.15315	29462	95492
1061	IH 10 WB	1.25 MI W OF IH 610	29467	095170	29.77833	-95.28333	29.77787	-95.28377	29467	95570
1062	IH 10 WB	0.5 MI W OF IH 610	29466	095163	29.77667	-95.27167	29.77676	-95.27182	29466	95563
1063	IH 10 WB	IH 10/IH 610 INTERCHANGE	29465	095158	29.77500	-95.26333	29.77557	-95.26432	29465	95559
1064	IH 10 WB ML	1.0 MI E OF FEDERAL RD	29462	095118	29.77000	-95.19667	29.77121	-95.19724	29463	95518
1065	IH 10 WB	0.4 MI E OF FM 526	29462	095123	29.77000	-95.20500	29.77119	-95.20608	29463	95524
1066	IH 10 WB	0.8 MI E OF IH 610	29464	095148	29.77333	-95.24667	29.77353	-95.24723	29464	95548
1067	IH 10 WB	0.9 MI W OF MAXEY RD	29464	095140	29.77333	-95.23333	29.77302	-95.23274	29464	95540
1068	IH 10 WB	2.3 MI E OF FM 526	29462	095107	29.77000	-95.17833	29.77059	-95.17758	29462	95507
1069	BW8E N-W CONN.	AT IH10E & BW8E INTER.	00000	000000	0.00000	0.00000	29.76786	-95.15017	29461	95490
1070	LT LANES SPUR 330	.5MI.SE.OF IH-10E&SPUR330	29464	095034	29.77333	-95.05667	29.78785	-95.04299	29473	95426
1071	SPUR 330 RT LANE	.5MI.SEOF IH10E&SPUR330	29464	095034	29.77333	-95.05667	29.78711	-95.0431	29472	95426
1072	SPUR 330/DECKER DR	.2MI SE OF FM201	29446	094590	29.74333	-94.98333	29.74402	-94.98443	29446	94991
1073	MAINER STREET	.25MI.N.OF IH-610	29423	095231	29.70500	-95.38500	29.68661	-95.37909	29412	95627
1074	NORTH MACGREGOR	AT SHH-288 AND MACGREGOR	29424	095224	29.70667	-95.37333	29.7128	-95.37825	29428	95627
1075	SOUTH MACGREGOR	@SH-288 & MACGREGOR	29424	095224	29.70667	-95.37333	29.7113	-95.37777	29427	95627
1076	SH288 SBFR	@SH-288 & BRAYS BAYOU	29424	095224	29.70667	-95.37333	29.71191	-95.37891	29427	95627
1077	SH288 SB	@SHH-288 & BRAYS BAYOU	29424	095224	29.70667	-95.37333	29.71194	-95.37822	29427	95627
1078	SH288 NBFR	@SH-288 7 BRAYS BAYOU	29424	095224	29.70667	-95.37333	29.71209	-95.37739	29427	95626
1079	HB & T.R.R.	.25MI.S.OF N.MACGREGOR	29424	095226	29.70667	-95.37667	29.70729	-95.376	29424	95626
1080	YELLOWSTONE ST	1MI. N. OF. IH-610	29419	095225	29.69833	-95.37500	29.69777	-95.3759	29419	95626

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1081	SH-288	2.2MIS.OF IH-610	29387	095232	29.64500	-95.38667	29.65007	-95.3871	29390	95632
1082	SH-288 (SB)	3.5MIS.OF IH-610&SHH-288	29379	095232	29.63167	-95.38667	29.63184	-95.3871	29379	95632
1083	SH-288 (NB)	3.5MIS.OF IHH-610&SH-288	29379	095232	29.63167	-95.38667	29.63185	-95.38659	29379	95632
1084	SH-288	3.7MIS.OF IH-610&SH-288	29376	095232	29.62667	-95.38667	29.6257	-95.38673	29375	95632
1085	SH 288	5.1MIS.OF IH-610 & SH288	29364	095232	29.60667	-95.38667	29.60706	-95.38654	29364	95632
1086	SH 288	.5MIS.OF FELLOWS RD.	29360	095232	29.60000	-95.38667	29.59101	-95.38614	29355	95632
1087	SH 288 SB	.8MIS.OF FELLOWS RD.	29352	095232	29.58667	-95.38667	29.58544	-95.38622	29351	95632
1088	SH 288 NB	.8MIS.OF FELLOWS RD.	29352	095232	29.58667	-95.38667	29.58548	-95.38574	29351	95631
1089	DIXIE DR	2MI.N.OF IH-610 SOUTH	29423	095225	29.70500	-95.37500	29.70579	-95.3755	29423	95625
1090	UTILITY	200'S.OF DIXIE DRIVE	29423	095225	29.70500	-95.37500	29.70496	-95.37519	29423	95625
1091	UTILITY	200'S.OF YELLOWSTONE	29419	095226	29.69833	-95.37667	29.69676	-95.37621	29418	95626
1092	SH 288 NB	US-59 & SH-288	29440	095223	29.73333	-95.37167	29.73243	-95.37109	29439	95623
1093	SH-288 S.B.	SH-288 & US59 INTERCHANGE	29438	095224	29.73000	-95.37333	29.73045	-95.37238	29438	95623
1094	SH-288 S.B.	.4MIS.OF US-59	29437	095225	29.72833	-95.37500	29.72829	-95.3734	29437	95624
1095	SH-288 S.B.	.6MIS.OF US-59	29436	095226	29.72667	-95.37667	29.72636	-95.3748	29436	95625
1096	SOUTHMORE ST.	.75MIS.OF US-59	29433	095225	29.72167	-95.37500	29.72199	-95.37683	29433	95626
1097	BINZ - CALUMENT ST	1.0MIS.OF US-59	29432	095226	29.72000	-95.37667	29.71898	-95.37769	29431	95627
1098	HOLCOMBE BLVD.	1.5MI.N.OF IH-610	29421	095224	29.70167	-95.37333	29.70158	-95.37497	29421	95625
1099	SH288 NB	1.7MIS.OF US-59& SH-288	29424	095224	29.70667	-95.37333	29.71199	-95.37757	29427	95627
1100	SH 288 NB	1.1MI N OF BW8	29368	095232	29.61333	-95.38667	29.61335	-95.38641	29368	95632
1101	SH 288 SB	1.1MI N OF BW8	29368	095232	29.61333	-95.38667	29.61335	-95.38689	29368	95632
1102	SH288 SB	1MIS.OF IH-610	29400	095229	29.66667	-95.38167	29.66741	-95.38317	29400	95630
1103	SH-288 N.B.	1MIS.OF IH-610	29400	095229	29.66667	-95.38167	29.66741	-95.38274	29400	95630
1104	SH-288 N.B.	SH-288 & US-59INTERCHANGE	29438	095224	29.73000	-95.37333	29.73022	-95.37181	29438	95623
1105	SH 288 N.B.	.4MIS.OF US-59	29437	095225	29.72833	-95.37500	29.72802	-95.37282	29437	95624
1106	SHH-288 N.B.	.6MIS.OF US-59	29436	095226	29.72667	-95.37667	29.72603	-95.37428	29436	95625
1107	SH 288SB ENTR RAMP	1.25MIS.OF US-59	29429	095226	29.71500	-95.37667	29.71469	-95.37929	29429	95628
1108	SH 288NB EXIT RAMP	1.25MIS.OF US-59	29429	095226	29.71500	-95.37667	29.71496	-95.37805	29429	95627
1109	SH 288	1MI S OF IH610	29401	095228	29.66833	-95.38000	29.66637	-95.38346	29400	95630
1110	SH 288 NB ML	@SH-288 & BELTWAY 8	29358	095231	29.59667	-95.38500	29.59694	-95.38604	29358	95632
1111	SH 288 SB ML	@SH-288 & BELTWAY 8	29358	095231	29.59667	-95.38500	29.59694	-95.38651	29358	95632
1112	SH288 (SB)	.9MI N OF ALMEDA GENOA	29376	095232	29.62667	-95.38667	29.62745	-95.38701	29376	95632
1113	SH288 (NB)	.9MI N OF ALMEDA GENOA	29376	095232	29.62667	-95.38667	29.62743	-95.38653	29376	95632
1114	SH288 (NB)	1.0MI N OF AIRPORT BLVD	29394	095232	29.65667	-95.38667	29.65742	-95.38668	29394	95632
1115	SH-288 (SB)	1.0MI N OF AIRPORT BLVD	29394	095232	29.65667	-95.38667	29.65741	-95.38728	29394	95632
1116	SH288 (NB)	2MI N OF ALMEDA GENOA	29385	095232	29.64167	-95.38667	29.64321	-95.38677	29386	95632
1117	SH288 (SB)	2MI N OF ALMEDA GENOA	29385	095232	29.64167	-95.38667	29.64326	-95.38726	29386	95632
1118	CONN B	@SH-288 & IH-610	29408	095323	29.68000	-95.53833	29.68021	-95.38131	29408	95629
1119	CONN C	@ SH-288 & IH610	29408	095323	29.68000	-95.53833	29.68063	-95.38059	29408	95628
1120	SH288 CONN."D"	.4MI S OF IH610	29405	095229	29.67500	-95.38167	29.67477	-95.38183	29405	95629

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1121	SH288	.4MI.S.OF IH-610	29405	095229	29.67500	-95.38167	29.67491	-95.38148	29405	95629
1122	CONN A	.4MI S OF IH610	29405	095229	29.67500	-95.38167	29.67501	-95.38106	29405	95629
1123	SH249	5 MI N OF IH45	29539	095258	29.89833	-95.43000	29.89769	-95.43126	29539	95659
1124	SH 249 ML	1.4 MI NW OF BW8	29570	095321	29.95000	-95.53500	29.95038	-95.53397	29570	95720
1125	SH 249	2.2 MI. NW OF 1960	29590	095342	29.98333	-95.57000	29.98559	-95.5703	29591	95742
1126	SH 249	2.0 MI S OF FM 2920	30037	095372	30.06167	-95.62000	30.06291	-95.62043	30038	95772
1127	SH 249	0.6 MI N OF FM 2920	30058	095381	30.09667	-95.63500	30.09736	-95.63584	30058	95782
1128	SH249	0.8 MI. N. OF BW8	29566	095316	29.94333	-95.52667	29.94429	-95.52595	29567	95716
1129	SH249 SB FR	2.2 MI NW OF FM 1960	29590	095342	29.98333	-95.57000	29.98549	-95.57032	29591	95742
1130	SH249 NB FR	2.2 MI NW OF FM 1960	29590	095342	29.98333	-95.57000	29.98555	-95.57018	29591	95742
1131	SH 249 SB FTG RD	1.4 MI NW OF BW8	29570	095321	29.95000	-95.53500	29.95033	-95.53403	29570	95720
1132	SH 249 NB FTG RD	1.4 MI NW OF BW8	29570	095321	29.95000	-95.53500	29.95043	-95.53392	29570	95720
1133	SH 249 SB ENT RAMP	1.4 MI NW OF BW8	29570	095321	29.95000	-95.53500	29.95046	-95.53633	29570	95722
1134	SH249 NB EXIT RAMP	1.4 MI NW OF BW8	29570	095321	29.95000	-95.53500	29.95033	-95.53639	29570	95722
1135	BELTWAY 8 EB ML	.25MI E OF FAIRBANKS NHOU	29562	095309	29.93667	-95.51500	29.93647	-95.51885	29562	95711
1136	BELTWAY 8 WB ML	.25MI E OF FAIRBANKS NHOU	29562	095309	29.93667	-95.51500	29.93665	-95.51887	29562	95711
1137	SH 249 SB	1.0MI W Bammel N HOUSTON	29562	095309	29.93667	-95.51500	29.93683	-95.51624	29562	95710
1138	SH 249 NB	1.0MI W Bammel N HOUSTON	29562	095309	29.93667	-95.51500	29.93681	-95.51652	29562	95710
1139	FM865 NB	5MI.N.OF HARRIS/BRAZ. C/L	29389	095213	29.64833	-95.35500	29.64832	-95.35589	29389	95614
1140	FM865 SB	5MI.N.OF HARRIS/BRAZ.C/L	29389	095214	29.64833	-95.35667	29.6483	-95.3561	29389	95614
1141	FM 865	.6MI S OF FELLOW RD	29351	095212	29.58500	-95.35333	29.58523	-95.35182	29351	95611
1142	FM 528	500' W OF IH45 & FM 528	29066	095079	29.11000	-95.13167	29.52666	-95.13287	29316	95480
1143	FM 528	HARRIS/GALVESTON C/L	29310	095107	29.51667	-95.17833	29.51791	-95.17852	29311	95507
1144	NASA RD I WB	2MI E OF IH45 AND NASA I	29328	095063	29.54667	-95.10500	29.54617	-95.10477	29328	95463
1145	NASA RD I EB	2MI E OF IH45 AND NASA I	29328	095064	29.54667	-95.10667	29.54601	-95.10468	29328	95463
1146	NASA RD I	4.25 MI E OF I45 & NASA I	29337	095044	29.56167	-95.07333	29.56256	-95.07184	29338	95443
1147	NASA RD I	5MI E OF IH45/NASA-1	29339	095033	29.56500	-95.05500	29.56522	-95.05406	29339	95432
1148	NASA RD.1	6.5M.E.OF IH-45&NASA RD.1	29337	095020	29.56167	-95.03333	29.5604	-95.03275	29336	95420
1149	NASA RD I	4MI E OF IH45 AND NASA I	29334	095049	29.55667	-95.08167	29.5572	-95.07531	29334	95445
1150	NASA RD I	.5MI NE OF AVE 8	29334	095049	29.55667	-95.08167	29.5629	-95.07153	29338	95443
1151	FM 525	1MI.E.OF IH-45 & FM-525	29560	095235	29.93333	-95.39167	29.93167	-95.39471	29559	95637
1152	FM525	0.08 MI W OF JFK	29558	095190	29.93000	-95.31667	29.92987	-95.33272	29558	95600
1153	FM 525	6 MI E OF IH45	29559	095208	29.93167	-95.34667	29.93019	-95.34686	29558	95608
1154	FM-525	2MI N OF ALDINE MAIL RD	29559	095228	29.93167	-95.38000	29.93263	-95.37958	29560	95628
1155	SWEENEY	S OF FM525	29557	095228	29.92833	-95.38000	29.93204	-95.38149	29559	95629
1156	FM 529	10 MI E OF HARR-WAL C/L	29528	095412	29.88000	-95.68667	29.87963	-95.6865	29528	95812
1157	FM 529	8.5 MI E OF HAR/WAL C/L	29527	095429	29.87833	-95.71500	29.87946	-95.71505	29528	95829
1158	FM 529	5 MI E OF HAR/WAL C/L	29525	095462	29.87500	-95.77000	29.87483	-95.76951	29525	95862
1159	FM 529	2.5 MI E OF HAR/WAL C/L	29525	095489	29.87500	-95.81500	29.87418	-95.83207	29525	95899
1160	FM529	BETW.SH6 & PARKER/CYPRESS	29527	095401	29.87833	-95.66833	29.87874	-95.66824	29527	95801

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1161	FM 529	1.1 MI E OF FM529&SH6	29527	095375	29.87833	-95.62500	29.87913	-95.62541	29527	95775
1162	SPRR	0.25MI S OF FM 529	29527	095342	29.87833	-95.57000	29.87918	-95.56969	29528	95742
1163	UTILITY BRIDGE	0.25MI S OF FM 529	29527	095342	29.87833	-95.57000	29.87919	-95.56936	29528	95742
1164	FM 2100	3.20 MI N OF FM 1960	30040	095058	30.06667	-95.09667	30.06643	-95.09726	30040	95458
1165	FM 2100	4.00 MI N OF FM 1960	30044	095064	30.07333	-95.10667	30.07318	-95.10832	30044	95465
1166	FM 2100	4.5MI S OF FM1960/FM2100	29577	095051	29.96167	-95.08500	29.96074	-95.0842	29576	95451
1167	FM 2100	5.5MI S OF FM1960/FM2100	29566	095095	29.94333	-95.15833	29.94301	-95.07504	29566	95445
1168	FM-2100	JUST N.OF LIVE OAK STREET	29547	095091	29.91167	-95.15167	29.91063	-95.06858	29546	95441
1169	FM1093	4MI.W.OF IH-610 & FM-1093	29547	095091	29.91167	-95.15167	29.73708	-95.52525	29442	95715
1170	FM 1093	4MI.W.OF IH-610 & FM-1093	29442	095297	29.73667	-95.49500	29.73746	-95.49555	29442	95697
1171	FM 1093	.5MI.E.OF SH-6	29441	095381	29.73500	-95.63500	29.73553	-95.63536	29441	95781
1172	FM-1960	1.5 MI N.OF S.PACIFIC RR	29555	095359	29.92500	-95.59833	29.92495	-95.59752	29555	95759
1173	FM1960	1.56MI FROM US 290	29557	095355	29.92833	-95.59167	29.92756	-95.59314	29557	95756
1174	FM1960	1.6MI SW OF SH249	29567	095338	29.94500	-95.56333	29.94524	-95.5648	29567	95739
1175	FM-1960 MAINLANES	0.7MI W. OF SH249	29579	095327	29.96500	-95.54500	29.95496	-95.55381	29573	95732
1176	FM 1960	4.0 MI E OF IH 45	30010	095217	30.01667	-95.36167	30.01688	-95.36132	30010	95617
1177	FM 1960	1.5 MI E OF IH 45	30016	095242	30.02667	-95.40333	30.0309	-95.40576	30019	95643
1178	MRR	1.6 MI E OF IH 45	30016	095242	30.02667	-95.40333	30.02657	-95.40371	30016	95642
1179	HARDY TOLL (SB)	AT FM1960	30016	095242	30.02667	-95.40333	30.02638	-95.40448	30016	95643
1180	HARDY TOLL (NB)	AT FM1960	30016	095242	30.02667	-95.40333	30.02642	-95.40428	30016	95643
1181	FM 1960	2.30 MI NE OF FM 2100	30020	095086	30.03333	-95.14333	30.03611	-95.05402	30022	95432
1182	FM 1960	2.0 MI W OF US 59	30003	095184	30.00500	-95.30667	30.0048	-95.29246	30003	95575
1183	FM 1960 WB	0.2 MI E OF US 59	30003	095158	30.00500	-95.26333	30.00501	-95.26291	30003	95558
1184	OLD FM 1960	0.2 MI N OF FM 1960	30006	095156	30.01000	-95.26000	30.00881	-95.25635	30005	95554
1185	FM 1960	2MI E OF US59 & FM1960	29599	095144	29.99833	-95.24000	29.99898	-95.24018	29599	95544
1186	FM 1960	4MI E OF FM1960/US59	29999	095121	30.66500	-95.20167	29.99891	-95.20135	29599	95521
1187	FM 1960	2.00 MI S OF US 59	30006	095085	30.01000	-95.14167	30.00025	-95.15786	30000	95495
1188	FM 1960 EB	0.2 MI E OF US 59	30003	095158	30.00500	-95.26333	30.00483	-95.26297	30003	95558
1189	FM 1960	3.00 MI W OF CROSBY-HMAN	30007	095081	30.01167	-95.13500	30.01088	-95.13686	30007	95482
1190	FM 1960	3.00 MI W OF CROSBY-HMAN	30010	095072	30.01667	-95.12000	30.01602	-95.12145	30010	95473
1191	SH 6	2.75MI N OF IH 10 & SH 6	29494	095387	29.82333	-95.64500	29.82441	-95.64527	29495	95787
1192	SH 6	1 MI N OF IH10/SH6	29477	095387	29.79500	-95.64500	29.79588	-95.64479	29478	95787
1193	SH 6	2 MI N OF FM1093 & SH6	29461	095385	29.76833	-95.64167	29.76921	-95.64323	29462	95786
1194	SH6 NB	1.4MI S OF FM1093	29427	095385	29.71167	-95.64167	29.71523	-95.64392	29429	95786
1195	MKT RR	1 MI N OF IH10	29470	095387	29.78333	-95.64500	29.78508	-95.64467	29471	95787
1196	SH 6	1MI N OF FM 529 & SH 6	29535	095383	29.89167	-95.63833	29.89216	-95.64024	29535	95784
1197	SH 6	0.8MI SOUTH OF FM 529	29519	095387	29.86500	-95.64500	29.86586	-95.64492	29520	95787
1198	SH 6 SB FR RD	1.4 MI S FM 1093 & SH 6	29427	095385	29.71167	-95.64167	29.71525	-95.64415	29429	95786
1199	SH6 ML	1.7MI S OF FM1093	29426	095385	29.71000	-95.64167	29.71074	-95.64388	29426	95786
1200	FM1960A BUSINESS	2.1 MI W OF US 59	30001	095183	30.00167	-95.30500	30.0021	-95.30572	30001	95583

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1201	FM1960A BUSINESS	1.4 MI W OF US 59	30001	095175	30.00167	-95.29167	30.00122	-95.29266	30001	95576
1202	FM-1876	KEEGANS BAYOU	29402	095369	29.67000	-95.61500	29.67115	-95.61553	29403	95769
1203	FM1876	100' N OF APPLE GLEN RD	29408	095368	29.68000	-95.61333	29.68351	-95.61413	29410	95768
1204	FM 1942	.7MI SE OF HOLY RD	29518	095006	29.86333	-95.01000	29.86403	-95.00929	29518	95406
1205	FM 1942	1.4MI SE OF HOLY RD	29514	095001	29.85667	-95.00167	29.85601	-95.00022	29514	95400
1206	FM-1942	4MI.E.CROSBY/LYNCH&FM1942	29527	095085	29.87833	-95.14167	29.84355	-94.9829	29506	94990
1207	FM 2351	2.5MI. W. OF IH 45	29325	095118	29.54167	-95.19667	29.54183	-95.19696	29325	95518
1208	FM 2351	1.1MI.W OF IH45 & FM2351	29357	095109	29.59500	-95.18167	29.55701	-95.17981	29334	95508
1209	SP548	.8MI S OF CROSS TIMBERS	29491	095211	29.81833	-95.35167	29.81903	-95.35506	29491	95613
1210	SP548	.5MI N OF 610 N	29491	095211	29.81833	-95.35167	29.81913	-95.3549	29491	95613
1211	SP548	1MI N OF IH610	29497	095210	29.82833	-95.35000	29.82544	-95.35333	29495	95612
1212	SP-548 CONN "C"	AT IH610/HARDY TOLL RD.	29488	095208	29.81333	-95.34667	29.81313	-95.35114	29488	95611
1213	SPUR_548 CONN"E"	AT IH610/HARDY TOLL RD.	29488	095209	29.81333	-95.34833	29.81507	-95.35134	29489	95611
1214	SP548	1MI.N.OF IH-610	29497	095210	29.82833	-95.35000	29.82898	-95.35472	29497	95613
1215	SP548	1MI.N.OF IH-610	29497	095210	29.82833	-95.35000	29.82859	-95.35444	29497	95613
1216	BERRY ROAD	1.5MI.N.OF IH-610	29502	095214	29.83667	-95.35667	29.83746	-95.35665	29502	95614
1217	PARKER	.7MI.N.OF TIDWELL	29515	095217	29.85833	-95.36167	29.85902	-95.36204	29515	95617
1218	EB LITTLE YORK RD	.7MI.N.OF PARKER ROAD	29522	095219	29.87000	-95.36500	29.87042	-95.36483	29522	95619
1219	WB LITTLE YORK RD	.7MI.N.PARKER ROAD	29522	095219	29.87000	-95.36500	29.87056	-95.36488	29522	95619
1220	COLLINS-GULF BANK	.7MI S OF ALDIN MAIL RD	29535	095221	29.89167	-95.36833	29.88989	-95.36958	29534	95622
1221	SB HARDY TOLL ROAD	1.1MIS.OF FM-525	29527	095220	29.87833	-95.36667	29.91637	-95.37585	29550	95626
1222	TIDWELL E.B.	2.2MI.N.OF IH-610	29507	095215	29.84500	-95.35833	29.84614	-95.35869	29508	95615
1223	HARDY TOLL RD.S.B.	.2MI.N.OF COLLINS RD.	29535	095222	29.89167	-95.37000	29.89229	-95.37023	29535	95622
1224	HARDY TOLL N.B.&FR	.2MI.N.OF COLLINS RD	29535	095222	29.89167	-95.37000	29.89235	-95.36975	29535	95622
1225	ALDINE MAIL RD.	2MIS.OF ALDINE BENDER	29541	095223	29.90167	-95.37167	29.90194	-95.37247	29541	95623
1226	TIDWELL W.B.	2.2MI.N.OF IH-610	29507	095215	29.84500	-95.35833	29.84623	-95.35872	29508	95615
1227	HARDY TOLL RD MN L	.6MI N OF BW8/HARDY TOLL	29569	095231	29.94833	-95.38500	29.94913	-95.38375	29569	95630
1228	HARDY TOLL RD	HARDY TOLL AT RICHEY RD	29572	095238	29.95333	-95.39667	29.99602	-95.39666	29598	95638
1229	HARDY TOLL RD ML	1.6 MI S OF FM 1960	29577	095239	29.96167	-95.39833	30.00375	-95.3988	30002	95639
1230	HARDY TOLL ROAD	HARDY TOLL AT RANKIN	29554	095228	29.92333	-95.38000	29.96512	-95.37965	29579	95628
1231	HARDY TOLL RD SBML	0.3 MI N OF FM 1960	30018	095242	30.03000	-95.40333	30.0309	-95.40557	30019	95643
1232	HARDY TOLL RD NBML	0.3 MI N OF FM 1960	30018	095242	30.03000	-95.40333	30.03095	-95.40531	30019	95643
1233	HARDY TR ML SB	0.4 MI N OF FM 1960	30020	095242	30.03333	-95.40333	30.03312	-95.40622	30020	95644
1234	HARDY TR ML NB	0.4 MI N OF FM 1960	30020	095242	30.03333	-95.40333	30.03317	-95.40591	30020	95644
1235	HARDY TOLL ROAD	1.0 MI N OF FM 1960	30025	095244	30.04167	-95.40667	30.04216	-95.40734	30025	95644
1236	HARDY TR FTG RDS	HARDY TOLL AT RANKIN	29554	095228	29.92333	-95.38000	29.96564	-95.37965	29579	95628
1237	HARDY TOLL RD	3.6 MI N OF FM 1960	30044	095246	30.07333	-95.41000	30.07429	-95.41113	30045	95647
1238	HARDY TOLL RD	3.7 MI N OF FM 1960	30045	095246	30.07500	-95.41000	30.07592	-95.41078	30046	95646
1239	HARDY TOLL ROAD	4.5 MI N OF FM 1960	30052	095247	30.08667	-95.41167	30.08729	-95.41248	30052	95647
1240	HARDY TOLL ROAD	0.9 MI SE OF IH 45	30059	095252	30.09833	-95.42000	30.09921	-95.42123	30060	95653

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1241	NORTHGATE CROSSING	0.6 MI SE OF IH 45	30061	095256	30.10167	-95.42667	30.10156	-95.42654	30061	95656
1242	HARDY TOLL ROAD	0.2 MI S OF FM 1960	30013	095242	30.02167	-95.40333	30.02235	-95.40441	30013	95643
1243	NB HARDY TOLL RD	1.1MI S OF FM525	29549	095225	29.91500	-95.37500	29.91636	-95.37565	29550	95625
1244	SPRING CROSSING BL	0.1 MI E OF IH 45	30063	095261	30.10500	-95.43500	30.10539	-95.43397	30063	95660
1245	HARDY TOLL RD ML	0.6MI NORTH OF RANKIN RD9	29984	095233	30.64000	-95.38833	29.97393	-95.39045	29584	95634
1246	HARDY TOLL RD ML	0.7MI NORTH OF BELTWAY 8	29700	095227	30.16667	-95.37833	29.95109	-95.38404	29571	95630
1247	HARDY TOLL RD ML	0.7MI NORTH OF FARNELL RD	29990	095236	30.65000	-95.39333	29.98443	-95.39377	29591	95636
1248	GREENS ROAD	HTR AT GREENS RD	29970	095230	30.61667	-95.38333	29.95135	-95.38463	29571	95631
1249	HARDY TOLL ROAD	0.2 MI E OF IH 45	30062	095259	30.10333	-95.43167	30.1042	-95.43239	30063	95659
1250	PEDESTRIAN BRIDGE	1.8M S OF ALDINE MAIL RD	29531	095221	29.88500	-95.36833	29.87757	-95.36663	29527	95620
1251	HARDY TOLL RD ML	0.25MI NORTH OF BLACKWOOD	29561	095228	29.93500	-95.38000	29.93843	-95.38117	29563	95629
1252	SP548 CONN A	AT IH610N AND SP548	29488	095208	29.81333	-95.34667	29.81388	-95.35379	29488	95612
1253	FM 526	1.5 MI S OF US 90	29486	095128	29.81000	-95.21333	29.81069	-95.21278	29486	95528
1254	FM 526	0.15 MI S OF OLD US 90	29498	095126	29.83000	-95.21000	29.83021	-95.20931	29498	95526
1255	FM 526 NB	0.7 MI NE OF WALLISVILLE	29494	095138	29.82333	-95.23000	29.80954	-95.21259	29486	95528
1256	FM 2920	0.75 MI W OF SH 249	30053	095386	30.08833	-95.64333	30.08909	-95.6435	30053	95786
1257	FM 2920	1.25 MI W OF SH 249	30052	095390	30.08667	-95.65000	30.08848	-95.65035	30053	95790
1258	FM 2920	9.0 MI W OF IH 45	30049	095345	30.08167	-95.57500	30.08227	-95.56493	30049	95739
1259	FM 2920	2.0 MI W OF IH 45	30042	095280	30.07000	-95.46667	30.07041	-95.46746	30042	95680
1260	FM 2553	.2MI. SW. SH-3	29364	095113	29.60667	-95.18833	29.60711	-95.18756	29364	95513
1261	BELTWAY 8 S.B.F.R.	1.7MI.N.OF BW8 & US-59	29410	095335	29.68333	-95.55833	29.68459	-95.55853	29411	95735
1262	BELTWAY 8 NB F.R.	1.7MI.N.OF BW8 & US-59	29410	095335	29.68333	-95.55833	29.68445	-95.55774	29411	95735
1263	BELTWAY 8 S.B.F.R.	@ BRAYS BAYOU	29417	095334	29.69500	-95.55667	29.69504	-95.55728	29417	95734
1264	BELTWAY 8 N.B.F.R.	@ BRAYS BAYOU	29417	095334	29.69500	-95.55667	29.695	-95.55638	29417	95734
1265	HARWIN WESTBOUND	.9MI.N.OF BELLAIRE BLVD	29430	095334	29.71667	-95.55667	29.71654	-95.55666	29430	95734
1266	HARWIN UTIL BR.	AT HARWIN /BW8	29430	095334	29.71667	-95.55667	29.7164	-95.55735	29430	95734
1267	SP RR	.15MI N OF HARWIN	29430	095334	29.71667	-95.55667	29.7179	-95.55711	29431	95734
1268	HARWIN EASTBOUND	.9MI.N.OF BELLAIRE BLVD	29430	095334	29.71667	-95.55667	29.7164	-95.55664	29430	95734
1269	BW8 FRT. RD.	1.1MI.N.OF BRIAR FRST.	29457	095335	29.76167	-95.55833	29.7617	-95.55742	29457	95734
1270	BOHEME DR	1.45MI N OF BRIAR FRST	29460	095335	29.76667	-95.55833	29.76701	-95.56167	29460	95737
1271	MEMORIL DR	MEMORIAL AT SAM HOUSTON	29463	095335	29.77167	-95.55833	29.77254	-95.56258	29464	95738
1272	KIMBERLY LANE	KIMBERLY AT SAM HOUSTON	29465	095335	29.77500	-95.55833	29.77581	-95.56268	29465	95738
1273	HEMPSTEAD ROAD	0.5MI SE OF FM 529	29524	095338	29.87333	-95.56333	29.87246	-95.55973	29523	95736
1274	SPRR	0.1 MI S OF US290	29524	095338	29.87333	-95.56333	29.87188	-95.5593	29523	95736
1275	SAM HOU. TOLL ROAD	.8MI N OF TANNER RD	29524	095338	29.87333	-95.56333	29.86123	-95.56361	29517	95738
1276	SAM HOU TWY	.8MI.N.OF US-59	29404	095336	29.67333	-95.56000	29.67434	-95.56037	29405	95736
1277	SAM HOU TWY	.8MI.N.OF US-59	29404	095336	29.67333	-95.56000	29.67435	-95.56016	29405	95736
1278	BELTWAY 8 NB FRTG	0.3MI NORTH OF GULF BANK	29494	095101	29.82333	-95.16833	29.88393	-95.54827	29530	95729
1279	BELTWAY 8 SB FRTG	0.3MI NORTH OF GULF BANK	29494	095101	29.82333	-95.16833	29.88391	-95.54908	29530	95729
1280	BELTWAY 8 NB FRTG	0.4MI NORTH OF PHILIPPINE	29496	095102	29.82667	-95.17000	29.89597	-95.54907	29538	95729

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1281	BELTWAY 8 SB FRTG	0.4MI NORTH OF PHILIPPINE	29496	095102	29.82667	-95.17000	29.89598	-95.5499	29538	95730
1282	BELTWAY 8 WB FRTG	0.2 MI S OF SH 249	29562	095313	29.93667	-95.52167	29.93684	-95.52153	29562	95713
1283	BW8 EB FRTG RD	0.3 MI E. OF SH 249	30000	100000	30.00000	-100.00000	29.93612	-95.52112	29562	95713
1284	BELTWAY 8 WB FRTG	0.42 MI. EAST OF GESSNER	29559	095322	29.93167	-95.53667	29.93214	-95.53765	29559	95723
1285	BELTWAY 8 EB FRTG	0.42 MI. EAST OF GESSNER	29559	095322	29.93167	-95.53667	29.93198	-95.53757	29559	95723
1286	SAM HOUSTON TOLLW	SAM HOUSTON AT WESTHEIME	29442	095335	29.73667	-95.55833	29.73659	-95.55768	29442	95735
1287	SAM HOUSTON TOLLW	SAM HOUSTON AT WESTHEIME	29442	095335	29.73667	-95.55833	29.73659	-95.55748	29442	95734
1288	BW8 SBFR	1MI W OF KEMPWD&BW8 9	00000	000000	0.00000	0.00000	29.81729	-95.56397	29490	95738
1289	SAM HSTN TOLLRD SB	SAM HOUSTON AT BUFFALO B.	29457	095335	29.76167	-95.55833	29.76104	-95.55789	29457	95735
1290	SAM HSTN TOLLRD NB	SAM HOUSTON AT BUFFALO B.	29510	095337	29.85000	-95.56167	29.76104	-95.55767	29457	95735
1291	SAM HOUSTON TOLLW	SAM HOUSTON AT BRIAR FRST	29448	095335	29.74667	-95.55833	29.74732	-95.55766	29448	95735
1292	SAM HOUSTON TOLLW	SAM HOUSTON AT BRIAR FRST	29448	095335	29.74667	-95.55833	29.7473	-95.55745	29448	95734
1293	SAM HOU TWY	SAM HOUSTON AT RICHMOND	29436	095334	29.72667	-95.55667	29.72728	-95.55734	29436	95734
1294	SAM HOU TWY	SAM HOUSTON AT RICHMOND	29436	095334	29.72667	-95.55667	29.7273	-95.55713	29436	95734
1295	SAM HOU TWY	.6MI.S.OF HARWIN	29422	095334	29.70333	-95.55667	29.70437	-95.55707	29423	95734
1296	SAM HOU TWY	.6MI.S.OF HARWIN	29422	095334	29.70333	-95.55667	29.70437	-95.55686	29423	95734
1297	SAM HOU TWY	.5MI.N.OF BEECHNUT ST.	29417	095334	29.69500	-95.55667	29.69503	-95.5569	29417	95734
1298	SAM HOU TWY	.6MI.N.OF BISSONNET	29417	095334	29.69500	-95.55667	29.69502	-95.5567	29417	95734
1299	SAM HOU TWY	.5MI.S.OF BEECH NUT	29410	095335	29.68333	-95.55833	29.68453	-95.55823	29411	95735
1300	SAM HOU TWY	.5MI.SO.OF BEECHNUT	29410	095335	29.68333	-95.55833	29.6845	-95.55803	29411	95735
1301	SAM HOU TWY	1MI.N.OF BISSONNET STREET	29413	095334	29.68833	-95.55667	29.68915	-95.55723	29413	95734
1302	SAM HOU TWY	1MI.N.OF BISSONNET STREET	29413	095334	29.68833	-95.55667	29.68911	-95.557	29413	95734
1303	SAM HOU.TOL.RAMP D	1.1MI N OF BRIAR FROEST	29458	095334	29.76333	-95.55667	29.76136	-95.5582	29457	95735
1304	WEST PARK DR.	WESTPARK @ SAM HOU TOLL	29433	095334	29.72167	-95.55667	29.72189	-95.55715	29433	95734
1305	WEST PARK EBL	WESTPARK AT SAM HOU TOLL	29433	095334	29.72167	-95.55667	29.72175	-95.55713	29433	95734
1306	BW8 NBFR	S OF BEDFORD RD	29394	095331	29.65667	-95.55167	29.65624	-95.55291	29394	95732
1307	BW8 SBFR	S OF BEDFORD RD	29393	095331	29.65500	-95.55167	29.65486	-95.55276	29393	95732
1308	BW8 NBFR	S OF BW8 & SWF INTER.	29394	095333	29.65667	-95.55500	29.65848	-95.55532	29395	95733
1309	BW8 SBFR	S OF BW8 & SWF INTER.	29395	095332	29.65833	-95.55333	29.6579	-95.55607	29395	95734
1310	BW8	S OF S.GESSNER RD.	29381	095317	29.63500	-95.52833	29.63558	-95.52932	29381	95718
1311	UTILITY BRIDGE	50' S OF HEMPSTEAD	29523	095336	29.87167	-95.56000	29.87182	-95.56041	29523	95736
1312	WATER PIPELINE BR.	100 FT S OF HEMPSTEAD	29523	095336	29.87167	-95.56000	29.8719	-95.55785	29523	95735
1313	BWY8 SB ML	1.8MI SOUTH OF US 290	29510	095337	29.85000	-95.56167	29.84989	-95.56366	29510	95738
1314	BWY 8 NB ML	1.8MI SOUTH OF US 290	29510	095337	29.85000	-95.56167	29.84989	-95.56345	29510	95738
1315	BWY 8 SB ML	1.7MI SOUTH OF US 290	29499	095338	29.83167	-95.56333	29.83172	-95.56373	29499	95738
1316	BELTWAY 8 NB ML	1.7MI SOUTH OF US 290	29499	095338	29.83167	-95.56333	29.83172	-95.56352	29499	95738
1317	BELTWAY 8 SB ML	2.5MI SOUTH OF US 290	29493	095338	29.82167	-95.56333	29.82243	-95.56369	29493	95738
1318	BWY 8 NB ML	2.5MI SOUTH OF US 290	29493	095338	29.82167	-95.56333	29.82243	-95.56348	29493	95738
1319	BELTWAY 8 SB ML	1.9MI NORTH OF IH 10	29487	095338	29.81167	-95.56333	29.81247	-95.56355	29487	95738
1320	BELTWAY 8 NB ML	1.9MI NORTH OF IH 10	29487	095338	29.81167	-95.56333	29.81247	-95.56335	29487	95738

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1321	BELTWAY 8 SB ML	0.4MI NORTH OF IH 10	29474	095337	29.79000	-95.56167	29.79061	-95.56316	29474	95738
1322	BWY 8 NB ML	0.4MI NORTH OF IH 10	29474	095337	29.79000	-95.56167	29.79061	-95.56294	29474	95738
1323	BELTWAY 8 NB ML	.3 MI S OF WHITE OAK BAYOU	29527	095329	29.87833	-95.54833	29.87878	-95.5486	29527	95729
1324	BELTWAY 8 SB ML	.3 MI N OF GULFBANK	29494	095101	29.82333	-95.16833	29.88391	-95.54879	29530	95729
1325	BWY 8 NB ML	0.75MI N OF US 290	29494	095101	29.82333	-95.16833	29.88392	-95.54858	29530	95729
1326	BELTWAY 8 SB ML	1.2MI N OF US 290	29532	095329	29.88667	-95.54833	29.88655	-95.54905	29532	95729
1327	BELTWAY 8 NB ML	1.2MI N OF US 290	29532	095329	29.88667	-95.54833	29.88656	-95.54884	29532	95729
1328	BELTWAY 8 SB ML	0.25MI S OF PHILIPPINE RD	29496	095102	29.82667	-95.17000	29.89597	-95.5495	29538	95730
1329	BWY 8NB ML	0.25MI S OF PHILIPPINE RD	29496	095102	29.82667	-95.17000	29.89597	-95.54937	29538	95730
1330	BWY 8 SB ML	1.2MI N OF PHILIPPINE	29541	095330	29.90167	-95.55000	29.90258	-95.5519	29542	95731
1331	BWY 8 NB ML	1.2MI N OF PHILIPPINE	29541	095330	29.90167	-95.55000	29.90259	-95.55161	29542	95731
1332	BWY 8 SB ML	1.75MI W OF ANTOINE	29554	095333	29.92333	-95.55500	29.92343	-95.55511	29554	95733
1333	BWY 8 NB ML	1.75MI W OF ANTOINE	29554	095333	29.92333	-95.55500	29.92336	-95.55492	29554	95733
1334	BW8 WB ML	1.8 MI. W. OF SH 249	29556	095328	29.92667	-95.54667	29.9295	-95.54411	29558	95726
1335	BW8 EB ML	1.8 MI. W. OF SH 249	29556	095328	29.92667	-95.54667	29.92934	-95.54402	29558	95726
1336	BWY 8 EB ML	0.4MI N OF PHILIPPINE RD	29559	095322	29.93167	-95.53667	29.93174	-95.53741	29559	95722
1337	BWY 8 WB ML	0.4 MI N OF PHILIPPINE RD	29559	095322	29.93167	-95.53667	29.93238	-95.5378	29559	95723
1338	BELTWAY 8 EB ML	0.8 MI. W. OF SH 249	29556	095317	29.92667	-95.52833	29.93543	-95.52901	29561	95717
1339	BELTWAY 8 WB ML	0.8 MI. W. OF SH 249	29556	095317	29.92667	-95.52833	29.9356	-95.52908	29561	95717
1340	BELTWAY 8 SB ML	.3 MI S OF WHITE OAK BAYOU	29527	095329	29.87833	-95.54833	29.87881	-95.54881	29527	95729
1341	BELT WAY 8 RAMP"B"	AT IH10W & BW8 INTER.	29470	095338	29.78333	-95.56333	29.78332	-95.56322	29470	95738
1342	BELT WAY 8 RAMP"A"	AT IH10W & BW8 INTER.	29470	095338	29.78333	-95.56333	29.78439	-95.5619	29471	95737
1343	BW8 E. B. FRT. RD	.5MI E IMPERIAL VALLEY	29563	095263	29.93833	-95.43833	29.93814	-95.39003	29563	95634
1344	BW8 W.B. FRONT RD	.5MI E IMPERIAL VALLEY	29563	095263	29.93833	-95.43833	29.93885	-95.39001	29563	95634
1345	BELTWAY 8	NORTH BELT AT HARDY RD	29564	095272	29.94000	-95.45333	29.93859	-95.38179	29563	95629
1346	BELTWAY 8	1.5 MI WEST OF JFK BLVD	29563	095278	29.93833	-95.46333	29.93883	-95.35597	29563	95614
1347	BW-8 (EB)	1MI. W. OF JFK BLVD	29563	095285	29.93833	-95.47500	29.93849	-95.34931	29563	95610
1348	BLTWY 8 WB FR RD	1MI W OF JFK BLVD	29563	095285	29.93833	-95.47500	29.93923	-95.34934	29564	95610
1349	BW8 EB ENT. RAMP	.3 MI E OF BELT.8 & IH45	29568	095248	29.94667	-95.41333	29.94033	-95.40726	29564	95644
1350	BW8 WB EXIT RAMP	.3 MI E INT.BLTWY 8&IH45	29568	095248	29.94667	-95.41333	29.94077	-95.40727	29564	95644
1351	BELTWAY 8	.6MI E BW8 & GRMS^POMT	29555	095263	29.92500	-95.43833	29.93907	-95.3971	29563	95638
1352	BW8 WB	.6MI E OF GREENSPOINT	29555	095263	29.92500	-95.43833	29.93924	-95.39703	29564	95638
1353	BW8 EB ML	.5MI E OF IMPERIAL VALLEY	29563	095263	29.93833	-95.43833	29.93843	-95.39001	29563	95634
1354	BW8 (WB)	3.8MI E OF US59	30000	100000	30.00000	-100.00000	29.9341	-95.23395	29560	95540
1355	BW8 (EB)	3.8MI E OF US59	30000	100000	30.00000	-100.00000	29.93334	-95.23378	29560	95540
1356	BW8 (EB)	0.5MI E OF US59	30000	100000	30.00000	-100.00000	29.93949	-95.28767	29564	95573
1357	BW 8 (WB)	0.5MI E OF US59	30000	100000	30.00000	-100.00000	29.94025	-95.28756	29564	95573
1358	BELTWAY 8 WB	.5MI E OF IMPERIAL VALLEY	29563	095263	29.93833	-95.43833	29.93861	-95.39001	29563	95634
1359	BELTWAY 8 WB FRTG	1.5 MI E OF ANTOINE	29562	095275	29.93667	-95.45833	29.93771	-95.45811	29563	95675
1360	BELTWAY 8 EB FRTG	1.5 MI E OF ANTOINE	29562	095275	29.93667	-95.45833	29.93699	-95.457	29562	95674

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1361	BELTWAY 8 EB FRTG	1.9 MI E OF ANTOINE	29562	095270	29.93667	-95.45000	29.93711	-95.45153	29562	95671
1362	BW8 WB FR	1.9 MI E OF ANTOINE	29562	095270	29.93667	-95.45000	29.93791	-95.45048	29563	95670
1363	BW8 (WB)	1.2 MI W OF US59	29563	095190	29.93833	-95.31667	29.93922	-95.3155	29564	95589
1364	BW8 (EB)	1.2 MI W OF US59	29563	095190	29.93833	-95.31667	29.93905	-95.31557	29563	95589
1365	BW8 WB ML	.5 MI E OF ALDINE W FIELD	29563	095209	29.93833	-95.34833	29.93762	-95.45093	29563	95671
1366	BWY8 EB ML	.5 MI E OF ALDINE W FIELD	29563	095209	29.93833	-95.34833	29.93743	-95.45092	29562	95671
1367	BW8 EB TO JFK NB	BW-8 @ JOHN F.KENNEDY	29568	095199	29.94667	-95.33167	29.93925	-95.33191	29564	95599
1368	JFK SB TO BW8 EB	BW-8 @ JOHN F.KENNEDY	29568	095198	29.94667	-95.33000	29.93929	-95.33076	29564	95598
1369	BW8	1.4MI W OF US59	29563	095190	29.93833	-95.31667	29.93912	-95.31798	29563	95591
1370	NB JOHN F.KENNEDY	BW-8 @ JOHN F.KENNEDY	29563	095199	29.93833	-95.33167	29.93901	-95.3311	29563	95599
1371	SB JOHN F.KENNEDY	BW-8 @ JOHN F.KENNEDY	29563	095199	29.93833	-95.33167	29.93901	-95.3315	29563	95599
1372	BW 8 EB FR	0.51 MI. EAST OF VICKERY	00000	000000	0.00000	0.00000	29.93965	-95.30706	29564	95584
1373	MPRR	NORTH BELT AT HARDY TOLL	29564	095272	29.94000	-95.45333	29.93823	-95.38153	29563	95629
1374	MPRR	NORTH BELT AT HARDY TOLL	29564	095272	29.94000	-95.45333	29.93895	-95.38171	29563	95629
1375	BELTWAY 8 EB ML	0.7 MI W OF IH 45	29563	095254	29.93833	-95.42333	29.93935	-95.4242	29564	95655
1376	BELTWAY 8 WB ML	0.7 MI W OF IH 45	29563	095254	29.93833	-95.42333	29.93952	-95.42426	29564	95655
1377	BW8 EB EXIT RAMP	AT IH 45	29565	095248	29.94167	-95.41333	29.94014	-95.41219	29564	95647
1378	BELTWAY 8 EB ML	0.4 MI. EAST OF IH 45	29568	095248	29.94667	-95.41333	29.94044	-95.40727	29564	95644
1379	BELTWAY 8 WB ML	0.4 MI. EAST OF IH 45	29568	095248	29.94667	-95.41333	29.94062	-95.40727	29564	95644
1380	BW8 ON RAMP D2	.7MI E OF GREENS CROSSIN	29565	095248	29.94167	-95.41333	29.94066	-95.41288	29564	95648
1381	BELTWAY 8 EB ML	0.6 MI E. OF SH 249	29562	095304	29.93667	-95.50667	29.93673	-95.50693	29562	95704
1382	BELTWAY 8 WB ML	0.6 MI E OF SH 249	29562	095304	29.93667	-95.50667	29.93691	-95.50693	29562	95704
1383	BELTWAY 8 EB ML	1 MI E OF SH. 249	29562	095298	29.93667	-95.49667	29.93683	-95.49779	29562	95699
1384	BELTWAY 8 WB ML	1 MI E OF SH. 249	29562	095298	29.93667	-95.49667	29.93701	-95.4978	29562	95699
1385	BELTWAY 8 EB ML	0.8MI E OF BAMMEL N HOU.	29562	095290	29.93667	-95.48333	29.93706	-95.48293	29562	95690
1386	BELTWAY 8 WB ML	0.8MI E OF BAMMEL N HOU.	29562	095290	29.93667	-95.48333	29.93724	-95.48293	29562	95690
1387	BELTWAY 8 EB ML	1.4 MI E OF ANTOINE	29562	095276	29.93667	-95.46000	29.93722	-95.45972	29562	95676
1388	BELTWAY 8 WB ML	1.4 MI E OF ANTOINE	29562	095276	29.93667	-95.46000	29.9374	-95.45979	29562	95676
1389	BW8 EB ML	1.5MI E OF ANTOINE	29562	095274	29.93667	-95.45667	29.93726	-95.45767	29562	95675
1390	BW8 WB ML	1.5MI E OF ANTOINE	29562	095274	29.93667	-95.45667	29.93743	-95.45764	29562	95675
1391	BW8 EB ML	.4MI E /ALDINE-WESTFIELD	29563	095209	29.93833	-95.34833	29.93878	-95.3493	29563	95610
1392	BW8 WB ML	.4MI E /ALDINE-WESTFIELD	29563	095209	29.93833	-95.34833	29.93892	-95.3493	29563	95610
1393	BELTWAY 8 EB ML	1.9MI W OF IH45	29562	095273	29.93667	-95.45500	29.9373	-95.45459	29562	95673
1394	BELTWAY 8 WB ML	1.9MI W OF IH45	29562	095273	29.93667	-95.45500	29.93749	-95.45456	29562	95673
1395	BELTWAY 8 EB ML	1.1 MI W OF IH 45	29562	095259	29.93667	-95.43167	29.93734	-95.43232	29562	95659
1396	BELTWAY 8 WB ML	1.1 MI W OF IH 45	29562	095259	29.93667	-95.43167	29.93753	-95.43231	29563	95659
1397	BWY8 (WB FR)	0.3 MI. EAST OF LEE RD	29563	095179	29.93833	-95.29833	29.93998	-95.30706	29564	95584
1398	BWY8 (EB FR)	0.3 MI. EAST OF LEE RD	29564	095179	29.94000	-95.29833	29.93927	-95.30705	29564	95584
1399	BELTWAY 8 SB	.2MI N OF PASADENA BLVD	29410	095093	29.68333	-95.15500	29.68382	-95.15481	29410	95493
1400	BELTWAY 8 NB	.2MI N OF PASADENA BLVD	29410	095093	29.68333	-95.15500	29.68376	-95.1546	29410	95493

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1401	BELTWAY 8 SB	BW8 AT PASADENA BLVD	30000	100000	30.00000	-100.00000	29.68135	-95.15553	29409	95493
1402	BW8 (NB)	BW8 AT PASADENA BLVD	30000	100000	30.00000	-100.00000	29.6813	-95.15534	29409	95493
1403	BELTWAY 8 SB	.25MI N OF SPENCER HWY	29401	095093	29.66833	-95.15500	29.66843	-95.15608	29401	95494
1404	BELTWAY 8 NB	.25MI N OF SPENCER HWY	29401	095093	29.66833	-95.15500	29.66845	-95.15575	29401	95493
1405	BELTWAY 8 NB	INTER OF SPEN HWY/BW8	29399	095093	29.66500	-95.15500	29.66544	-95.15571	29399	95493
1406	BELTWAY 8 SB	INTER OF SPEN HWY/BW8	29399	095093	29.66500	-95.15500	29.66544	-95.15592	29399	95494
1407	BELTWAY 8 SB	.3MI N OF FAIRMONT PKWY	29391	095093	29.65167	-95.15500	29.65347	-95.15642	29392	95494
1408	BELTWAY 8 NB	.3MI N OF FAIRMONT PKWY	29391	095093	29.65167	-95.15500	29.65349	-95.15594	29392	95494
1409	BW8 (SB)	.4MI S OF SPENCER HWY	29395	095093	29.65833	-95.15500	29.6596	-95.15638	29396	95494
1410	BELTWAY 8 NB	.4MI S OF SPENCER HWY	29395	095093	29.65833	-95.15500	29.65963	-95.15602	29396	95494
1411	BW8 NB FTG	.6 MI N OF IH10	29464	095093	29.77333	-95.15500	29.7737	-95.15506	29464	95493
1412	BW8 SB FTG	.1 MI N OF IH10	29464	095093	29.77333	-95.15500	29.77335	-95.15655	29464	95494
1413	BW8 NB	.1 MI N OF IH10	29465	095094	29.77500	-95.15667	29.77862	-95.15812	29467	95495
1414	BW8 SB	.5 MI N OF IH10	29460	095094	29.76667	-95.15667	29.77885	-95.15836	29467	95495
1415	BW8 NB	1.3MI N OF IH10	29473	095096	29.78833	-95.16000	29.78921	-95.16001	29474	95496
1416	BW8 SB	1.3MI N OF IH10	29473	095096	29.78833	-95.16000	29.78921	-95.16088	29474	95497
1417	BW 8 NB ML	1.8MI N OF IH10	29477	095098	29.79500	-95.16333	29.79629	-95.16243	29478	95497
1418	BW 8 SB ML	1.8MI N OF IH10	29477	095098	29.79500	-95.16333	29.79618	-95.16324	29478	95498
1419	BELTWAY 8 ML	0.5 MI S OF NEW US 90	29442	095112	29.73667	-95.18667	29.82751	-95.17088	29497	95503
1420	BELTWAY 8	.2MI N OF GENOA RED BLUFF	29380	095099	29.63333	-95.16500	29.63419	-95.16587	29381	95500
1421	BWY 8 SB FR	0.4 MI S OF OLD US 90	29503	095109	29.83833	-95.18167	29.83819	-95.18218	29503	95509
1422	BELTWAY 8 SB FR	AT BWY 8/OLD US 90 INTER	29506	095111	29.84333	-95.18500	29.84297	-95.18607	29506	95512
1423	TIDWELL RD	0.6 MI N OF OLD US 90	29511	095112	29.85167	-95.18667	29.85202	-95.18666	29511	95512
1424	BW 8	.35MI NE OF IH45	29365	095120	29.60833	-95.20000	29.60951	-95.20061	29366	95520
1425	BELTWAY 8	BLTWY 8 @ SHIP CHANNEL	29440	095087	29.73333	-95.14500	29.73127	-95.14648	29439	95488
1426	BELTWAY 8	1MI.S.OF IH-10	29453	095087	29.75500	-95.14500	29.75456	-95.14566	29453	95487
1427	BW 8	.3MI NE OF SH3	29369	095113	29.61500	-95.18833	29.62001	-95.1843	29372	95511
1428	BW8	.3MI SE OF LOCKWOOD RD	29464	095093	29.77333	-95.15500	29.93154	-95.20634	29559	95524
1429	BW8	.3MI SE OF LOCKWOOD RD	29464	095093	29.77333	-95.15500	29.93208	-95.20576	29559	95523
1430	BW8	.26MI SE OF MPRR	29460	095094	29.76667	-95.15667	29.92924	-95.20269	29558	95522
1431	BW 8 FR	.3MI W OF IH45 SBFR	29362	095126	29.60333	-95.21000	29.60323	-95.2094	29362	95526
1432	BW 8 FR	.9MI W OF IH45 SBFR	29360	095129	29.60000	-95.21500	29.60077	-95.21917	29360	95532
1433	BW 8 ML	1.43 MI. N. OF I-10 EAST	00000	000000	0.00000	0.00000	29.78923	-95.16044	29474	95496
1434	BW 8 ML	1.43 MI. NORTH OF IH-10 E	00000	000000	0.00000	0.00000	29.79049	-95.16094	29474	95497
1435	BW 8 ML	0.4 MI N.OF WOODFOREST B.	00000	000000	0.00000	0.00000	29.79623	-95.16282	29478	95498
1436	BW 8 ML	1.9 MI. NORTH OF I-10 E.	00000	000000	0.00000	0.00000	29.80857	-95.1631	29485	95498
1437	BW8E S-W CONN.	AT IH10E & BW8E INTER.	00000	000000	0.00000	0.00000	29.76929	-95.15129	29462	95491
1438	BELTWAY 8 WB FR	0.3M W OF BEAMER RD	29360	095139	29.60000	-95.23167	29.60095	-95.23329	29361	95540
1439	BELTWAY 8 EB FR	0.3M W OF BEAMER RD	29360	095139	29.60000	-95.23167	29.60023	-95.2325	29360	95539
1440	BELTWAY 8 WB FR	0.5M E OF SH35	29359	095167	29.59833	-95.27833	29.60026	-95.27798	29360	95567

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1441	BELTWAY 8 EB FR	0.5MI E OF SH35	29359	095167	29.59833	-95.27833	29.59957	-95.27789	29360	95567
1442	FM-270	1.0 MI S FM270 & NASA1	29321	095057	29.53500	-95.09500	29.53479	-95.09593	29321	95458
1443	SH99 NB	0.5MI N OF COLONIAL PKWY	29476	095474	29.79333	-95.79000	29.79874	-95.77526	29479	95865
1444	SH99 SB	0.5MI N OF COLONIAL PKWY	29476	095474	29.79333	-95.79000	29.79874	-95.77609	29479	95866
1445	W CLAYTON PKWY EB	4.50 MI W OF US 59	30000	100000	30.00000	-100.00000	29.99726	-95.33365	29598	95600
1446	W CLAYTON PKWY EB	4.50 MI W OF US 59	30000	100000	30.00000	-100.00000	29.99705	-95.33598	29598	95602
1447	W CLAYTON PKWY WB	1.90 MI W OF US 59	30000	100000	30.00000	-100.00000	29.98545	-95.30951	29591	95586
1448	W CLAYTON CROSSOVER	0.20 MI W OF LEE	30000	100000	30.00000	-100.00000	29.98552	-95.30759	29591	95585
1449	COLONEL FISCHER RD	1.00 MI E OF JFK BLVD	30000	100000	30.00000	-100.00000	29.98626	-95.32051	29592	95592
1450	W CLAYTON PKWY WB	0.75 MI W OF US 59	30000	100000	30.00000	-100.00000	29.98489	-95.29176	29591	95575
1451	W CLAYTON PKWY EB	0.75 MI W OF US 59	30000	100000	30.00000	-100.00000	29.98422	-95.29095	29591	95575
1452	W CLAYTON PKWY	0.30 MI E OF US 59	30000	100000	30.00000	-100.00000	29.98105	-95.27228	29589	95563
1453	JFK BLVD NB	4.40 MI S OF W CLAYTON	30000	100000	30.00000	-100.00000	29.94616	-95.32557	29568	95595
1454	JFK BLVD SB	4.40 MI S OF W CLAYTON	30000	100000	30.00000	-100.00000	29.94616	-95.32528	29568	95595
1455	SOUTH TERMINAL RD	0.50 MI E OF JFK BLVD	30000	100000	30.00000	-100.00000	29.9861	-95.33475	29592	95601
1456	NORTH TERMINAL RD	0.70 MI E OF JFK BLVD	30000	100000	30.00000	-100.00000	29.9861	-95.33011	29592	95598
1457	AIRPLANE TAXIWAY	0.40 MI E OF JFK BLVD	30000	100000	30.00000	-100.00000	29.9861	-95.33836	29592	95603
1458	AIRPLANE TAXIWAY	0.50 MI E OF JFK BLVD	30000	100000	30.00000	-100.00000	29.9861	-95.33664	29592	95602
1459	W CLAYTON PKWY	0.50 MI E OF JFK BLVD	30000	100000	30.00000	-100.00000	29.99042	-95.33544	29594	95601
1460	SOUTH TERMINAL RD	0.80 MI E OF JFK BLVD	30000	100000	30.00000	-100.00000	29.98625	-95.32753	29592	95597
1461	JFK BLVD SB FR	1.30 MI N OF GREENS RD	30000	100000	30.00000	-100.00000	29.97007	-95.34142	29582	95605
1462	JFK BLVD NB FR	1.30 MI N OF GREENS RD	30000	100000	30.00000	-100.00000	29.97007	-95.3401	29582	95604
1463	JFK BLVD	1.30 MI N OF GREENS RD	30000	100000	30.00000	-100.00000	29.97004	-95.34077	29582	95604
1464	JFK BLVD NB	1.25 MI N OF GREENS RD	30000	100000	30.00000	-100.00000	29.96449	-95.33887	29579	95603
1465	JFK BLVD SB	1.25 MI N OF GREENS RD	30000	100000	30.00000	-100.00000	29.96449	-95.34008	29579	95604
1466	GULF BANK RD	0.20 MI W OF HARDY RD	30000	100000	30.00000	-100.00000	29.88933	-95.37327	29534	95624
1467	MT HOUSTON RD	0.50 MI W OF LOCKWOOD	30000	100000	30.00000	-100.00000	29.89614	-95.21882	29538	95531
1468	W GULF BANK RD WB	0.20 MI W OF N H ROSSLYN	30000	100000	30.00000	-100.00000	29.878	-95.49762	29527	95699
1469	W GULF BANK RD EB	0.20 MI W OF N H ROSSLYN	30000	100000	30.00000	-100.00000	29.87785	-95.49762	29527	95699
1470	W GULF BANK RD EB	0.01 MI E OF ELLA BLVD	30000	102020	30.00000	-102.03333	29.88593	-95.43142	29532	95659
1471	W GULF BANK RD	0.4 MI E OF ANTOINE	30000	100000	30.00000	-100.00000	29.8831	-95.46756	29530	95681
1472	W GULF BANK RD	0.40 MI W OF ANTOINE	30000	100000	30.00000	-100.00000	29.88451	-95.47999	29531	95688
1473	W GULF BANK RD WB	1.20 MI W OF IH 45	30000	100000	30.00000	-100.00000	29.88608	-95.43142	29532	95659
1474	VICTORY DR	0.25 MI E OF ANTOINE DR	30000	100000	30.00000	-100.00000	29.86813	-95.46902	29521	95681
1475	LITTLE YORK RD	0.70 MI W OF US 59	30000	102020	30.00000	-102.03333	29.87159	-95.34079	29523	95604
1476	VICTORY DR WB	0.10 MI W OF ANTOINE	30000	100000	30.00000	-100.00000	29.86613	-95.47461	29520	95685
1477	VICTORY DR EB	0.10 MI W OF ANTOINE	30000	100000	30.00000	-100.00000	29.86578	-95.47461	29519	95685
1478	VICTORY DR	1.30 MI E OF ANTOINE	30000	100000	30.00000	-100.00000	29.8704	-95.45206	29522	95671
1479	TIDWELL RD WB	0.30 MI E OF BINGLE	30000	100000	30.00000	-100.00000	29.85049	-95.48403	29510	95690
1480	W TIDWELL RD	0.40 MI W OF IH 45	30000	100000	30.00000	-100.00000	29.84505	-95.39925	29507	95640

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1481	TIDWELL RD	1.80 MI W OF JOHN RALSTON	30000	100000	30.00000	-100.00000	29.84959	-95.25341	29510	95552
1482	TIDWELL RD	0.25 MI W OF RALSTON RD	30000	100000	30.00000	-100.00000	29.84982	-95.22835	29510	95537
1483	TIDWELL RD EB	0.30 MI E OF BINGLE	30000	100000	30.00000	-100.00000	29.85008	-95.48403	29510	95690
1484	TIDWELL RD EB	0.50 MI E OF ANTOINE	30000	100000	30.00000	-100.00000	29.84784	-95.46377	29509	95678
1485	TIDWELL RD WB	0.50 MI E OF ANTOINE	30000	100000	30.00000	-100.00000	29.84804	-95.46377	29509	95678
1486	TIDWELL RD EB	2.90 MI E OF US 59	00001	000001	0.00167	-0.00167	29.84955	-95.28455	29510	95571
1487	TIDWELL RD WB	2.90 MI E OF US 59	00001	000001	0.00167	-0.00167	29.84974	-95.28452	29510	95571
1488	TIDWELL RD EB	2.30 MI E OF US 59	00001	000001	0.00167	-0.00167	29.84827	-95.29241	29509	95575
1489	TIDWELL RD WB	2.30 MI E OF US 59	00001	000001	0.00167	-0.00167	29.84846	-95.29244	29509	95575
1490	W 43RD ST WB	0.05 MI W OF T C JESTER	30000	100000	30.00000	-100.00000	29.83246	-95.45288	29499	95672
1491	W 43RD ST EB	0.05 MI W OF T C JESTER	30000	100000	30.00000	-100.00000	29.8323	-95.45288	29499	95672
1492	CROSSTIMBERS ST	0.15 MI W OF JCT IH 45	30000	100000	30.00000	-100.00000	29.82831	-95.38348	29497	95630
1493	HB & T RR	0.05 MI E OF HARDY TOLL R	30000	100000	30.00000	-100.00000	29.82847	-95.35419	29497	95613
1494	CLAY RD	1.25 MI W OF ADDICKS-FAIR	30000	100000	30.00000	-100.00000	29.83382	-95.62199	29500	95773
1495	CLAY RD	0.7 MI E OF GESSNER RD	30000	100000	30.00000	-100.00000	29.83217	-95.53396	29499	95720
1496	CLAY RD	0.3 MI W OF BRITTMOORE RD	30000	100000	30.00000	-100.00000	29.83105	-95.57453	29499	95745
1497	W 43RD ST	0.06 MI E OF LANG RD	30000	100000	30.00000	-100.00000	29.83284	-95.48786	29500	95693
1498	GREEN RIVER DR	0.15 MI W OF C E KING	30000	100000	30.00000	-100.00000	29.83754	-95.21566	29503	95529
1499	GREEN RIVER DR	0.40 MI W OF J RALSTON RD	30000	100000	30.00000	-100.00000	29.83747	-95.22736	29502	95536
1500	HB & T RR	0.80 MI E OF HOMESTD RD	30000	100000	30.00000	-100.00000	29.84157	-95.28826	29505	95573
1501	CLAY RD	0.05 MI E OF BLALOCK RD	30000	100000	30.00000	-100.00000	29.83239	-95.52249	29499	95713
1502	KELLEY ST	0.10 MI NW OF IH 610	29485	095184	29.80833	-95.30667	29.80977	-95.30729	29486	95584
1503	T & N O RR	0.15 MI W OF US 59	29488	095204	29.81333	-95.34000	29.81306	-95.33803	29488	95603
1504	H B & T RR	0.90 MI W OF JCT US 59	29488	095212	29.81333	-95.35333	29.81356	-95.35033	29488	95610
1505	WALLISVILLE RD EB	1.50 MI E OF IH 610	30000	100000	30.00000	-100.00000	29.79465	-95.24512	29477	95547
1506	WALLISVILLE RD WB	1.50 MI E OF IH 610	30000	100000	30.00000	-100.00000	29.79475	-95.24512	29477	95547
1507	WALLISVILLE RD	0.25 MI E OF BELTWAY 8	30000	100000	30.00000	-100.00000	29.80978	-95.15847	29486	95495
1508	WALLISVILLE RD	0.50 MI W OF UVALDE RD	30000	100000	30.00000	-100.00000	29.80573	-95.18918	29483	95514
1509	WALLISVILLE RD	2.00 MI W OF UVALDE RD	30000	100000	30.00000	-100.00000	29.8052	-95.21242	29483	95527
1510	WALLISVILLE RD	0.20 MI E OF UVALDE RD	30000	100000	30.00000	-100.00000	29.80613	-95.17829	29484	95507
1511	SHELDON RD	0.10 MI N OF US 90	30000	100000	30.00000	-100.00000	29.85415	-95.12839	29512	95477
1512	CROSBY-LYNCHBURG	0.10 MI N OF IH 10	30000	100000	30.00000	-100.00000	29.79251	-95.05638	29476	95434
1513	CROSBY LYNCHBURG	2.90 MI N OF IH 10	30000	100000	30.00000	-100.00000	29.83245	-95.05814	29499	95435
1514	CROSBY LYNCHBURG	1.30 MI S OF US 90	30000	100000	30.00000	-100.00000	29.86462	-95.06148	29519	95437
1515	CROSBY LYNCHBURG	2.40 MI SW OF IH 10	30000	100000	30.00000	-100.00000	29.76158	-95.0771	29457	95446
1516	PORT TERMINAL RR	0.40 MI E OF SHAVER ST	30000	100000	30.00000	-100.00000	29.7168	-95.20655	29430	95524
1517	RED BLUFF RD NB	0.80 MI S OF FAIRMONT PKW	30000	100000	30.00000	-100.00000	29.64136	-95.11412	29385	95468
1518	RED BLUFF RD SB	0.80 MI S OF FAIRMONT PKW	30000	100000	30.00000	-100.00000	29.64026	-95.11514	29384	95469
1519	RED BLUFF RD NB	1.50 MI S OF RED BLUFF	30000	100000	30.00000	-100.00000	29.61947	-95.09029	29372	95454
1520	RED BLUFF RD SB	1.50 MI S OF RED BLUFF GE	30000	100000	30.00000	-100.00000	29.61837	-95.09105	29371	95455

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1521	RED BLUFF RD NB	0.20 MI SE OF UNDERWOOD R	30000	100000	30.00000	-100.00000	29.61573	-95.08447	29369	95451
1522	RED BLUFF RD SB	0.20 MI SE OF UNDERWOOD R	30000	100000	30.00000	-100.00000	29.61491	-95.08499	29369	95451
1523	RED BLUFF RD	0.80 MI W OF FM 146	30000	100000	30.00000	-100.00000	29.59103	-95.04235	29355	95425
1524	RED BLUFF RD	0.50 MI S OF OASADENA BLV	30000	100000	30.00000	-100.00000	29.6573	-95.12482	29394	95475
1525	UTILITY BRIDGE	0.40 MI E OF SHAVER ST	30000	100000	30.00000	-100.00000	29.71684	-95.20654	29430	95524
1526	EDGEBROOK DR	0.50 MI E OF THETA	30000	100000	30.00000	-100.00000	29.645	-95.23013	29387	95538
1527	EDGEBROOK DR WB	0.10 MI E OF SH 3	30000	100000	30.00000	-100.00000	29.64697	-95.22199	29388	95533
1528	EDGEBROOK DR EB	0.10 MI E OF SH 3	30000	100000	30.00000	-100.00000	29.64671	-95.22165	29388	95533
1529	W FAIRMONT PKWY WI	50 FT W OF SP RR TRACKS	30000	100000	30.00000	-100.00000	29.64822	-95.22023	29389	95532
1530	W FAIRMONT PKWY EB	50 FT W OF SP RR TRACKS	30000	100000	30.00000	-100.00000	29.64786	-95.22003	29389	95532
1531	FAIRMONT PKWY EB	0.70 MI E OF UNDERWOOD	30000	100000	30.00000	-100.00000	29.65123	-95.07775	29391	95447
1532	FAIRMONT PKWY WB	0.70 MI E OF UNDERWOOD	30000	100000	30.00000	-100.00000	29.65165	-95.07775	29391	95447
1533	FAIRMONT PKWY EB	0.30 MI W OF UNDERWOOD	30000	100000	30.00000	-100.00000	29.65088	-95.08542	29391	95451
1534	FAIRMONT PKWY WB	0.30 MI W OF UNDERWOOD	30000	100000	30.00000	-100.00000	29.65118	-95.08542	29391	95451
1535	FAIRMONT PKWY EB	0.70 MI E OF RED BLUFF RD	30000	100000	30.00000	-100.00000	29.65029	-95.10878	29390	95465
1536	FAIRMONT PKWY WB	0.70 MI E RED BLUFF RD	30000	100000	30.00000	-100.00000	29.6507	-95.10871	29390	95465
1537	FAIRMONT PKWY WB	0.40 MI W OF RED BLUFF RD	30000	100000	30.00000	-100.00000	29.65059	-95.11475	29390	95469
1538	FAIRMONT PKWY EB	0.40 MI W OF RED BLUFF RD	30000	100000	30.00000	-100.00000	29.65029	-95.11475	29390	95469
1539	FAIRMONT PKWY	2.60 MI E OF SHAVER	30000	100000	30.00000	-100.00000	29.64941	-95.16232	29390	95497
1540	FAIRMONT PKWY WB	0.90 MI E OF S SHAVER	30000	100000	30.00000	-100.00000	29.65125	-95.19368	29391	95516
1541	FAIRMONT PKWY EB	0.90 MI E OF SHAVER	30000	100000	30.00000	-100.00000	29.65098	-95.19368	29391	95516
1542	FAIRMONT PKWY	2.20 MI E OF SHAVER	30000	100000	30.00000	-100.00000	29.64931	-95.1722	29390	95503
1543	SPENCER HWY	100 FT W OF 3RD ST	30000	100000	30.00000	-100.00000	29.66317	-95.22849	29398	95537
1544	SPENCER HWY	0.60 MI E OF SHAVER	30000	100000	30.00000	-100.00000	29.66515	-95.19988	29399	95520
1545	SPENCER HWY	3.40 MI E OF S SHAVER	30000	100000	30.00000	-100.00000	29.66515	-95.16021	29399	95496
1546	SPENCER HWY	0.40 MI W OF RED BLUFF RD	30000	100000	30.00000	-100.00000	29.66347	-95.13651	29398	95482
1547	SPENCER HWY	E OF FERN ROCK	30000	100000	30.00000	-100.00000	29.66408	-95.11229	29398	95467
1548	SPENCER HWY	E OF CANADA	30000	100000	30.00000	-100.00000	29.66393	-95.10615	29398	95464
1549	SPENCER HWY	0.50 MI E OF UNDERWOOD DR	30000	100000	30.00000	-100.00000	29.66385	-95.09439	29398	95457
1550	SPENCER HWY	2.80 MI E OF UNDERWOOD DR	30000	100000	30.00000	-100.00000	29.665	-95.08474	29399	95451
1551	SPENCER HWY	3.10 MI E OF UNDERWOOD DR	30000	100000	30.00000	-100.00000	29.665	-95.07377	29399	95444
1552	COLLEGE AVE	0.30 MI NE OF IH 45	30000	100000	30.00000	-100.00000	29.65537	-95.24557	29393	95547
1553	PASADENA BLVD	1.70 MI W OF RED BLUFF	30000	100000	30.00000	-100.00000	29.6868	-95.17875	29412	95507
1554	EAST BLVD	0.02 MI S OF JCT SH 225	29424	095060	29.70667	-95.10000	29.70626	-95.1025	29424	95462
1555	W SOUTHMORE AVE	1.00 MI E OF ALLEN GENOA	30000	100000	30.00000	-100.00000	29.69693	-95.21813	29418	95531
1556	E SOUTHMORE AVE	1.20 MI E OF S SHAVER	30000	100000	30.00000	-100.00000	29.69728	-95.19095	29418	95515
1557	S TATAR ST	0.35 MI S OF JCT SH 225	30000	100000	30.00000	-100.00000	29.70674	-95.20069	29424	95520
1558	W SHAW AVE	0.50 MI E OF SHAVER ST	30000	100000	30.00000	-100.00000	29.71495	-95.20403	29429	95522
1559	SHAW AVE	0.15 MI W OF TATAR STREET	30000	100000	30.00000	-100.00000	29.71507	-95.20214	29429	95521
1560	FEDERAL RD	1.25 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.75236	-95.21257	29451	95528

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1561	N SHAVER ST	0.50 MI N OF JCT SH 225	30000	100000	30.00000	-100.00000	29.71853	-95.21101	29431	95527
1562	S SHAVER ST	2.55 MI S OF SH 225	30000	100000	30.00000	-100.00000	29.67648	-95.20921	29406	95526
1563	PORT TERMINAL RR	0.40 MI N OF SH 225	30000	100000	30.00000	-100.00000	29.71592	-95.21061	29430	95526
1564	PORT TERMINAL RR	0.40 MI N OF SH 225	30000	100000	30.00000	-100.00000	29.71592	-95.21241	29430	95527
1565	C E KING PKWY E FR	0.60 MI N OF GREEN RIVER	30000	100000	30.00000	-100.00000	29.84588	-95.2136	29508	95528
1566	C E KING PKWY	0.60 MI N OF GREEN RIVER	30000	100000	30.00000	-100.00000	29.84587	-95.21391	29508	95528
1567	FEDERAL RD	0.50 MI N OF CLINTON DR	30000	100000	30.00000	-100.00000	29.74112	-95.21215	29445	95527
1568	WASHBURN TUNNEL	FEDERAL RD S OF IH 10	30000	100000	30.00000	-100.00000	29.72597	-95.21167	29436	95527
1569	N MAIN ST	0.30 MI N OF SH 225	30000	100000	30.00000	-100.00000	29.71473	-95.20825	29429	95525
1570	QUEENS RD	0.10 MI W OF S SHAVER	30000	100000	30.00000	-100.00000	29.68371	-95.21102	29410	95527
1571	SOUTH RICHEY	0.40 MI NE OF OLD GALV RD	30000	100000	30.00000	-100.00000	29.67349	-95.23561	29404	95541
1572	N RICHEY ST	0.10 MI SW OF SHAVER ST	30000	100000	30.00000	-100.00000	29.71461	-95.21836	29429	95531
1573	N RICHEY ST	0.20 MI NE OF SHAW AVE	30000	100000	30.00000	-100.00000	29.71553	-95.21462	29429	95529
1574	PORT TERMINAL RR	0.15 MI SW OF SHAVER ST	30000	100000	30.00000	-100.00000	29.71595	-95.21373	29430	95528
1575	UTILITY BRIDGE	0.15 MI SW OF SHAVER ST	30000	100000	30.00000	-100.00000	29.71595	-95.21422	29430	95529
1576	CLINTON DR	0.70 MILE W OF MAIN ST	30000	100000	30.00000	-100.00000	29.7302	-95.22853	29438	95537
1577	CLINTON DR	0.20 MI W OF WAYSIDE DR	30000	100000	30.00000	-100.00000	29.75873	-95.29717	29455	95578
1578	S P RR	0.10 MI E OF WAYSIDE DR	30000	100000	30.00000	-100.00000	29.75787	-95.29611	29455	95578
1579	S P RR	0.20 MI W OF N WAYSIDE DR	30000	100000	30.00000	-100.00000	29.75854	-95.29727	29455	95578
1580	N WAYSIDE DR	0.60 MI S OF IH 610	30000	100000	30.00000	-100.00000	29.79733	-95.28868	29478	95573
1581	N WAYSIDE DR	0.20 MI S OF IH 610	30000	100000	30.00000	-100.00000	29.798	-95.28869	29479	95573
1582	S P RR	0.20 MI S OF IH 610	30000	100000	30.00000	-100.00000	29.79904	-95.28862	29479	95573
1583	S P RR	0.20 MI S OF IH 610	30000	100000	30.00000	-100.00000	29.79885	-95.28862	29479	95573
1584	HIRSCH RD/YORK ST	1.00 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.75933	-95.32878	29456	95597
1585	SCOTT ST	0.60 MI N OF JCT US 90A	30000	100000	30.00000	-100.00000	29.70996	-95.35661	29426	95614
1586	AIRPORT BLVD WB	0.70 MI W OF CULLEN BLVD	30000	100000	30.00000	-100.00000	29.64747	-95.346	29388	95608
1587	AIRPORT BLVD EB	0.70 MI W OF CULLEN BLVD	29387	100000	29.64500	-100.00000	29.64695	-95.346	29388	95608
1588	AIRPORT BLVD EB	0.25 MI E OF SCOTT	29387	100000	29.64500	-100.00000	29.64543	-95.36416	29387	95618
1589	AIRPORT BLVD WB	E OF SOUTHVIEW	29387	100000	29.64500	-100.00000	29.64523	-95.36413	29387	95618
1590	AIRPORT BLVD EB	E OF MONROE	29394	095158	29.65667	-95.26333	29.65321	-95.26126	29392	95557
1591	AIRPORT BLVD WB	0.20 MI E OF MONROE	29394	095158	29.65667	-95.26333	29.65331	-95.2611	29392	95557
1592	AIRPORT BLVD	0.50 MI E OF SH288	30000	100000	30.00000	-100.00000	29.6434	-95.37857	29386	95627
1593	AIRPORT BLVD	0.50 MI W OF MLK BLVD	30000	100000	30.00000	-100.00000	29.64732	-95.34459	29388	95607
1594	AIRPORT BLVD EB	0.20 MI E OF FONDREN	30000	100000	30.00000	-100.00000	29.64396	-95.50481	29386	95703
1595	AIRPORT BLVD WB	0.20 MI E OF FONDREN	30000	100000	30.00000	-100.00000	29.64416	-95.50481	29386	95703
1596	AIRPORT BLVD EB	0.20 MI E OF MLK	30000	100000	30.00000	-100.00000	29.64754	-95.33378	29389	95600
1597	AIRPORT BLVD WB	0.20 MI E OF MLK	30000	100000	30.00000	-100.00000	29.64784	-95.33386	29389	95600
1598	AIRPORT BLVD EB	0.25 MI W OF MYKAWA	30000	100000	30.00000	-100.00000	29.64677	-95.3165	29388	95590
1599	AIRPORT BLVD WB	0.25 MI W OF MYKAWA	30000	100000	30.00000	-100.00000	29.64714	-95.3165	29388	95590
1600	ALMEDA RD	0.20 MI W OF SH288	30000	100000	30.00000	-100.00000	29.61325	-95.38987	29368	95634

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1601	S POST OAK RD SB	0.40 MI S OF W FUQUA	30000	100000	30.00000	-100.00000	29.61162	-95.46489	29367	95679
1602	S POST OAK RD SB	JUST S OF SIMSBROOK DR	30000	100000	30.00000	-100.00000	29.61972	-95.46493	29372	95679
1603	S POST OAK RD NB	JUST W OF SIMSBROOK DR	30000	100000	30.00000	-100.00000	29.6197	-95.46467	29372	95679
1604	S POST OAK RD	0.30 MI S OF IH610	30000	100000	30.00000	-100.00000	29.67696	-95.45897	29406	95675
1605	S POST OAK RD NB	0.40 MI S OF W FUQUA	30000	100000	30.00000	-100.00000	29.61162	-95.46472	29367	95679
1606	S POST OAK RD NB	0.90 MI N OF US90A	30000	100000	30.00000	-100.00000	29.66039	-95.464	29396	95678
1607	S POST OAK RD SB	0.90 MI N OF US90A	30000	100000	30.00000	-100.00000	29.66039	-95.4644	29396	95679
1608	NB RAMP TO S LOOP	JCT OF IH610W & IH610S	29408	095273	29.68000	-95.45500	29.67802	-95.45724	29407	95674
1609	STELLA LINK NB	0.75 MI N OF IH610	30000	100000	30.00000	-100.00000	29.69003	-95.4397	29414	95664
1610	STELLA LINK SB	0.75 MI N OF IH610	30000	100000	30.00000	-100.00000	29.68999	-95.43998	29414	95664
1611	BUFFALO SPWY	0.25 MI N OF BRAYS BYU	30000	100000	30.00000	-100.00000	29.699	-95.42714	29419	95656
1612	BUFFALO SPWY	BUFFALO SPWY @ BRAYS BYU	30000	100000	30.00000	-100.00000	29.69563	-95.42678	29417	95656
1613	BUFFALO SPWY SB	1.60 MI N OF BWY8	30000	100000	30.00000	-100.00000	29.61842	-95.43064	29371	95658
1614	BUFFALO SPWY	1.60 MI N OF BWY8	30000	100000	30.00000	-100.00000	29.61842	-95.43019	29371	95658
1615	N SHEPHERD DR	0.50 MI N OF IH 10	30000	100000	30.00000	-100.00000	29.72328	-95.41022	29434	95646
1616	SHEPHERD DR FR RD	1.20 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.71306	-95.41048	29428	95646
1617	SHEPHERD DR	1.20 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.71306	-95.41016	29428	95646
1618	GREENBRIAR	BRAYS BYU	30000	100000	30.00000	-100.00000	29.6967	-95.41064	29418	95646
1619	N SHEPHERD DR	0.20 MI N OF IH 10	30000	100000	30.00000	-100.00000	29.73347	-95.4105	29440	95646
1620	SHEPHERD DR FR	1.20 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.71306	-95.40977	29428	95646
1621	DURHAM ST	0.40 MI N OF IH 10	30000	100000	30.00000	-100.00000	29.73628	-95.41271	29442	95648
1622	BELLAIRE BLVD (WB)	0.3 MI E OF WILCREST	30000	100000	30.00000	-100.00000	29.70395	-95.56582	29422	95739
1623	BELLAIRE BLVD EB	0.3 MI E OF WILCREST	30000	100000	30.00000	-100.00000	29.70361	-95.56582	29422	95739
1624	BELLAIRE BLVD	0.20 MI W OF GESSNER	30000	100000	30.00000	-100.00000	29.70471	-95.54113	29423	95725
1625	BELLAIRE BLVD	0.50 MI E OF JCT US 59	30000	100000	30.00000	-100.00000	29.70488	-95.521	29423	95713
1626	HOLCOMBE BLVD	HOLCOLMBE BLVD AT MAIN ST	30000	100000	30.00000	-100.00000	29.70584	-95.40472	29424	95643
1627	HOLCOMBE BLVD	0.15 MI E OF MAIN ST	30000	100000	30.00000	-100.00000	29.70591	-95.40278	29424	95642
1628	HOLCOMBE BLVD	0.60 MI E OF FANNIN ST	30000	100000	30.00000	-100.00000	29.70576	-95.3932	29423	95636
1629	N U-TURN/HOLCOMBE	0.15 MI E OF MAIN ST	30000	100000	30.00000	-100.00000	29.70617	-95.40277	29424	95642
1630	S U-TURN/HOLCOMBE	0.15 MI E OF MAIN ST	30000	100000	30.00000	-100.00000	29.70564	-95.40275	29423	95642
1631	MAIN FR NB TO SB	HOLCOMBE S. U-TURN	30000	100000	30.00000	-100.00000	29.70538	-95.40476	29423	95643
1632	MAIN FR SB TO NB	HOLCOMBE N. U-TURN	30000	100000	30.00000	-100.00000	29.70618	-95.40502	29424	95643
1633	BELLAIRE BLVD	0.10 MI E OF VIRGINIA ST	30000	100000	30.00000	-100.00000	29.70572	-95.43032	29423	95658
1634	W U-TURN/MONTROSE	0.10 MI W OF MONTROSE	30000	100000	30.00000	-100.00000	29.76097	-95.39403	29457	95636
1635	MONTROSE BLVD	1.30 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.7613	-95.39212	29457	95635
1636	E U-TURN/MONTROSE	0.01 MI E OF MONTROSE	30000	100000	30.00000	-100.00000	29.76117	-95.39036	29457	95634
1637	S P RR	0.10 MI E OF STUDEMONT	30000	100000	30.00000	-100.00000	29.76123	-95.39103	29457	95635
1638	PEDESTRIAN X-ING	0.40 MI W OF IH 45	30000	100000	30.00000	-100.00000	29.76103	-95.38097	29457	95629
1639	WAUGH DR	0.07 MI E OF SHEPHERD DR	30000	100000	30.00000	-100.00000	29.7608	-95.39791	29456	95639
1640	E U-TURN AT WAUGH	0.07 MI E OF SHEPHERD DR	30000	100000	30.00000	-100.00000	29.76093	-95.3981	29457	95639

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1641	WOODWAY DR WB	0.50 MI W OF IH 610	30000	100000	30.00000	-100.00000	29.76256	-95.4622	29458	95677
1642	S P RR	5.50 MI E OF IH 610	30000	100000	30.00000	-100.00000	29.76265	-95.39107	29458	95635
1643	S P RR	5.50 MI E OF IH 610	30000	100000	30.00000	-100.00000	29.76313	-95.39091	29458	95635
1644	WAUGH DR	0.75 MI E OF SHEPHERD DR	30000	100000	30.00000	-100.00000	29.76095	-95.39787	29457	95639
1645	STUDEMONT ST NB	0.10 MI N OF ALLEN PARKWA	30000	100000	30.00000	-100.00000	29.76294	-95.39205	29458	95635
1646	STUDEMONT ST SB	0.40 MI E OF WAUGH DR	30000	100000	30.00000	-100.00000	29.76293	-95.39224	29458	95635
1647	S P RR	0.10 MI E OF STUDEMONT	30000	100000	30.00000	-100.00000	29.7627	-95.39071	29458	95634
1648	MEMORIAL DR	0.45 MI E OF STUDEMONT	30000	100000	30.00000	-100.00000	29.76173	-95.38478	29457	95631
1649	MEMORIAL DR	0.70 MI E OF STUDEMONT	30000	100000	30.00000	-100.00000	29.76233	-95.3815	29457	95629
1650	SAWYER ST	0.75 MI W OF IH 45	30000	100000	30.00000	-100.00000	29.76268	-95.38156	29458	95629
1651	PEDESTRIAN X-ING	0.50 MI W OF IH 45	30000	100000	30.00000	-100.00000	29.76327	-95.37754	29458	95627
1652	MEMORIAL DR WB	AT IH45 AND BUFFALO BYU	30000	100000	30.00000	-100.00000	29.76345	-95.36998	29458	95622
1653	MEMORIAL DR EB	AT IH 45 & BUFFALO BYU	30000	100000	30.00000	-100.00000	29.7633	-95.37009	29458	95622
1654	BAGBY ST	AT MEMORIAL/BUFFALO BYU	30000	100000	30.00000	-100.00000	29.76278	-95.36765	29458	95621
1655	BAGBY ST	AT MEMORIAL DRIVE	30000	100000	30.00000	-100.00000	29.76253	-95.368	29458	95621
1656	BAGBY ST	0.20 MI S OF WASHINGTON	30000	100000	30.00000	-100.00000	29.76341	-95.3672	29458	95620
1657	PEDESTRIAN X-ING	8.30 MI E OF IH 610	30000	100000	30.00000	-100.00000	29.76369	-95.37155	29458	95623
1658	MEMORIAL DR FR EB	0.10 MI W OF IH 45	30000	100000	30.00000	-100.00000	29.76315	-95.37216	29458	95623
1659	MEMORIAL DR FR WB	0.10 MI W OF IH 45	30000	100000	30.00000	-100.00000	29.76365	-95.37217	29458	95623
1660	BISSONNET ST	0.20 MI E OF FONDREN	30000	100000	30.00000	-100.00000	29.68728	-95.5051	29412	95703
1661	BISSONNET ST EB	0.80 MI E OF SW FREEWAY	30000	100000	30.00000	-100.00000	29.67717	-95.53157	29406	95719
1662	BISSONNET ST WB	0.80 MI E OF SW FREEWAY	30000	100000	30.00000	-100.00000	29.67728	-95.53163	29406	95719
1663	FONDREN RD	0.03 MI N OF S BRAESWOOD	29407	095295	29.67833	-95.49167	29.67547	-95.50855	29405	95705
1664	FONDREN RD SB	0.20 MI S OF BEECHNUT	30000	100000	30.00000	-100.00000	29.68858	-95.50957	29413	95706
1665	FONDREN RD	0.20 MI S OF W AIRPORT	30000	100000	30.00000	-100.00000	29.64102	-95.50806	29385	95705
1666	FONDREN RD SB	0.40 MI S OF US 90A	30000	100000	30.00000	-100.00000	29.62454	-95.50721	29375	95704
1667	FONDREN RD NB	0.40 MI S OF US 90A	30000	100000	30.00000	-100.00000	29.62455	-95.50701	29375	95704
1668	FONDREN RD NB	0.20 MI S OF BEECHNUT	30000	100000	30.00000	-100.00000	29.68875	-95.50917	29413	95706
1669	BLALOCK RD NB	0.20 MI N OF KEMPWOOD DR	30000	100000	30.00000	-100.00000	29.82471	-95.52236	29495	95713
1670	BLALOCK RD SB	0.20 MI N OF KEMPWOOD DR	30000	100000	30.00000	-100.00000	29.82471	-95.52252	29495	95714
1671	BLALOCK RD	0.30 MI N OF JCT IH 10	30000	100000	30.00000	-100.00000	29.78847	-95.52153	29473	95713
1672	FAIRBANKS N HOU NB	0.06 MI N OF JCT US 290	30000	100000	30.00000	-100.00000	29.86018	-95.52414	29516	95714
1673	FAIRBANKS N HOU SB	0.06 MI N OF JCT US 290	30000	100000	30.00000	-100.00000	29.86018	-95.52431	29516	95715
1674	GESSNER RD NB	0.50 MI S OF CLAY RD	29495	095327	29.82500	-95.54500	29.82764	-95.54498	29497	95727
1675	GESSNER RD SB	0.50 MI S OF CLAY RD	29495	095327	29.82500	-95.54500	29.82764	-95.54516	29497	95727
1676	GESSNER RD	0.20 MI N OF CLAY RD	30000	100000	30.00000	-100.00000	29.83489	-95.54447	29501	95727
1677	GESSNER RD SB	2.35 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.75126	-95.53925	29451	95724
1678	GESSNER RD NB	2.35 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.75135	-95.53911	29451	95723
1679	S GESSNER RD	0.20 MI N OF RICHMOND	30000	100000	30.00000	-100.00000	29.73054	-95.53893	29438	95723
1680	DAIRY ASHFORD NB	1.50 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.7606	-95.60555	29456	95763

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1681	DAIRY ASHFORD SB	8.20 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.66747	-95.60152	29400	95761
1682	DAIRY ASHFORD NB	8.20 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.66747	-95.60128	29400	95761
1683	DAIRY ASHFORD SB	1.50 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.76057	-95.60606	29456	95764
1684	DAIRY ASHFORD NB	4.30 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.72026	-95.6045	29432	95763
1685	DAIRY ASHFORD SB	4.30 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.72023	-95.60475	29432	95763
1686	DAIRY ASHFORD NB	5.40 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.70441	-95.60424	29423	95763
1687	DAIRY ASHFORD SB	5.40 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.70444	-95.60446	29423	95763
1688	DAIRY ASHFORD	6.00 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.69598	-95.60422	29418	95763
1689	DAIRY ASHFORD	6.90 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.68299	-95.60393	29410	95762
1690	BRAZOS ST	1.00 MI N OF JCT US 59	30000	100000	30.00000	-100.00000	29.74196	-95.38155	29445	95629
1691	SMITH ST	0.40 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.76412	-95.3636	29458	95618
1692	S P RR	0.10 MI N OF FRANKLIN ST	30000	100000	30.00000	-100.00000	29.76567	-95.36068	29459	95616
1693	MILAM ST	0.15 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.76498	-95.36081	29459	95616
1694	N MAIN ST	0.50 MI SE OF IH 45	30000	100000	30.00000	-100.00000	29.78585	-95.36482	29472	95619
1695	BURNETT ST & SP RR	0.20 MI N OF IH 10	30000	100000	30.00000	-100.00000	29.77186	-95.36044	29463	95616
1696	MAIN ST	0.20 MI S OF JCT IH 10	30000	100000	30.00000	-100.00000	29.76471	-95.35868	29459	95615
1697	FANNIN ST	0.20 MI S OF IH 10	29459	095214	29.76500	-95.35667	29.76412	-95.36031	29458	95616
1698	ALLENS LANDING RP	AT COMMERCE AND FANNIN	29459	095214	29.76500	-95.35667	29.76363	-95.35823	29458	95615
1699	SAN JACINTO ST	AT COMMERCE ST	30000	100000	30.00000	-100.00000	29.7636	-95.35791	29458	95615
1700	MCKEE ST	0.35 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.7646	-95.3517	29459	95611
1701	FRANKLIN ST	0.30 MI W OF MAIN ST	30000	100000	30.00000	-100.00000	29.76396	-95.36226	29458	95617
1702	FRANKLIN ST	0.35 MI W OF MAIN ST	30000	100000	30.00000	-100.00000	29.76427	-95.36294	29459	95618
1703	RANKIN RD	0.80 MI E OF US 59	30000	100000	30.00000	-100.00000	29.96241	-95.27207	29577	95563
1704	WILSON RD	0.20 MI S OF FM 1960	30000	100000	30.00000	-100.00000	29.99577	-95.25103	29597	95551
1705	WILSON RD	0.90 MI N OF BWY 8	30000	100000	30.00000	-100.00000	29.94954	-95.24926	29570	95550
1706	MESA DR	0.15 MI S OF TIDWELL RD	29509	095157	29.84833	-95.26167	29.84677	-95.26179	29508	95557
1707	MESA DR NB	0.90 MI N OF US 90	29493	095157	29.82167	-95.26167	29.82248	-95.26146	29493	95557
1708	MESA DR SB	0.90 MI N OF US 90	29493	095157	29.82167	-95.26167	29.82248	-95.2616	29493	95557
1709	SP RR	0.10 MI N OF US 90	29486	095157	29.81000	-95.26167	29.81072	-95.26112	29486	95557
1710	LIBERTY RD	0.10 MI N OF US 90	29486	095157	29.81000	-95.26167	29.81063	-95.26133	29486	95557
1711	FAIRMONT PKWY EB	0.10 MI E OF FAIRMONT PKW	30000	100000	30.00000	-100.00000	29.65201	-95.02837	29391	95417
1712	FAIRMONT PKWY WB	0.10 MI E OF SH 146	30000	100000	30.00000	-100.00000	29.65215	-95.02834	29391	95417
1713	BAY AREA BLVD WB	3.00 MI E OF MIDDLEBROOK	30000	100000	30.00000	-100.00000	29.60671	-95.05844	29364	95435
1714	BAY AREA BLVD EB	3.00 MI E OF MIDDLEBROOK	30000	100000	30.00000	-100.00000	29.60659	-95.05832	29364	95435
1715	BAY AREA BLVD EB	1.35 MI NE RED BLUFF BLVD	30000	100000	30.00000	-100.00000	29.61102	-95.04783	29367	95429
1716	BAY AREA BLVD WB	0.10 MI NE OF CHEMICAL RD	30000	100000	30.00000	-100.00000	29.61114	-95.04791	29367	95429
1717	SENS RD	0.50 MI W OF SPRR	30000	100000	30.00000	-100.00000	29.68023	-95.04748	29408	95428
1718	SENS RD	0.10 MI N OF SPENCER HWY	30000	100000	30.00000	-100.00000	29.66632	-95.04668	29400	95428
1719	BAY AREA BLVD EB	0.90 MI E OF MIDDLEBROOK	30000	100000	30.00000	-100.00000	29.59499	-95.08588	29357	95452
1720	BAY AREA BLVD WB	0.90 MI E OF MIDDLEBROOK	30000	100000	30.00000	-100.00000	29.5952	-95.08636	29357	95452

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1721	BAY AREA BLVD EB	E OF BAY AREA PARK	30000	100000	30.00000	-100.00000	29.5974	-95.08059	29358	95448
1722	BAY AREA BLVD	0.70 MI W OF GULF	30000	100000	30.00000	-100.00000	29.53738	-95.15292	29322	95492
1723	BAY AREA BLVD EB	W OF EL CAMINO REAL	30000	100000	30.00000	-100.00000	29.55206	-95.12352	29331	95474
1724	BAY AREA BLVD WB	W OF EL CAMINO REAL	30000	100000	30.00000	-100.00000	29.5523	-95.12375	29331	95474
1725	BAY AREA BLVD EB	NE SPACE CTR BLVD	30000	100000	30.00000	-100.00000	29.58372	-95.10299	29350	95462
1726	BAY AREA BLVD WB	NE SPACE CTR BLVD	30000	100000	30.00000	-100.00000	29.58378	-95.10314	29350	95462
1727	DIXIE FARM RD WB	0.10 MI W OF IH 45	30000	100000	30.00000	-100.00000	29.58366	-95.18736	29350	95512
1728	DIXIE FARM RD EB	0.10 MI SW OF GULF FWY	30000	100000	30.00000	-100.00000	29.58356	-95.18713	29350	95512
1729	DIXIE FARM RD	0.30 MI SW OF BEAMER	30000	100000	30.00000	-100.00000	29.56906	-95.20306	29341	95522
1730	DIXIE FARM RD.	1.5MI SW OF BEAMER RD	30000	100000	30.00000	-100.00000	29.55735	-95.21553	29334	95529
1731	HOLLAND AVE	1.00 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.75848	-95.23375	29455	95540
1732	HOLLAND AVE	0.05 MI S OF 6TH ST	30000	100000	30.00000	-100.00000	29.73841	-95.23285	29443	95540
1733	MERCURY DR	0.95 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.75987	-95.2471	29456	95548
1734	MERCURY DR	1.80 MI S OF JCT IH 10	30000	100000	30.00000	-100.00000	29.74716	-95.24726	29448	95548
1735	MERCURY DR	1.60 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.74966	-95.2471	29450	95548
1736	MERCURY DR	1.40 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.75278	-95.24702	29452	95548
1737	MERCURY DR	1.00 MI S OF IH 10	30000	100000	30.00000	-100.00000	29.75876	-95.24718	29455	95548
1738	MAIN ST	0.75 MI N OF CLINTON DR	30000	100000	30.00000	-100.00000	29.74049	-95.24693	29444	95548
1739	MARKET ST EB	2.50 MI W OF FEDERAL RD	30000	100000	30.00000	-100.00000	29.76767	-95.22295	29461	95534
1740	MARKET ST WB	2.50 MI W OF FEDERAL RD	30000	100000	30.00000	-100.00000	29.76778	-95.22285	29461	95534
1741	MARKET ST	0.20 MI E OF NORMANDY	30000	100000	30.00000	-100.00000	29.76749	-95.20262	29460	95522
1742	MARKET ST WB	0.25 MI W OF IH 610	30000	100000	30.00000	-100.00000	29.7693	-95.18965	29462	95514
1743	MARKET ST EB	4.50 MI E OF JCT IH 610	30000	100000	30.00000	-100.00000	29.7691	-95.18955	29461	95514
1744	HEMPSTEAD RD	0.20 MI S OF BINGLE	30000	100000	30.00000	-100.00000	29.82375	-95.49069	29494	95694
1745	HEMPSTEAD RD	0.2 MI S OF LITTLE YORK	30000	100000	30.00000	-100.00000	29.86613	-95.55016	29520	95730
1746	WATONGA BLVD NB	0.10 MI S OF T C JESTER	30000	100000	30.00000	-100.00000	29.83757	-95.45618	29503	95674
1747	WATONGA BLVD SB	0.10 MI S OF T C JESTER	30000	100000	30.00000	-100.00000	29.83756	-95.45636	29503	95674
1748	WATONGA BLVD SB	0.90 MI S OF T C JESTER	30000	100000	30.00000	-100.00000	29.8266	-95.45826	29496	95675
1749	WATONGA BLVD NB	0.90 MI S OF T C JESTER	30000	100000	30.00000	-100.00000	29.82654	-95.4581	29496	95675
1750	T C JESTER BLVD NB	0.40 MI N OF W 43RD ST	30000	100000	30.00000	-100.00000	29.83742	-95.45447	29502	95673
1751	T C JESTER BLVD SB	0.40 MI N OF W 43RD ST	30000	100000	30.00000	-100.00000	29.83736	-95.45465	29502	95673
1752	W T C JESTER NB	0.10 MI NW OF JCT IH 610	30000	100000	30.00000	-100.00000	29.80944	-95.44281	29486	95666
1753	W T C JESTER SB	0.10 MI NW OF JCT IH 610	30000	100000	30.00000	-100.00000	29.80924	-95.44311	29486	95666
1754	W T C JESTER NB	0.10 MI N OF W 34TH ST	30000	100000	30.00000	-100.00000	29.81844	-95.44688	29491	95668
1755	W T C JESTER SB	0.10 MI N OF W 34TH ST	30000	100000	30.00000	-100.00000	29.81813	-95.44717	29491	95668
1756	SAN FELIPE RD EB	0.20 MI E OF JCT VOSS RD	30000	100000	30.00000	-100.00000	29.74962	-95.49627	29450	95698
1757	SAN FELIPE RD WB	0.20 MI E OF JCT VOSS RD	30000	100000	30.00000	-100.00000	29.74978	-95.49624	29450	95698
1758	BRIAR FOREST DR WB	0.50 MI E OF GESSNER RD	30000	100000	30.00000	-100.00000	29.74831	-95.53014	29449	95718
1759	BRIAR FOREST DR EB	0.50 MI E OF GESSNER RD	30000	100000	30.00000	-100.00000	29.74814	-95.53004	29449	95718
1760	SAN FELIPE RD WB	0.40 MI W OF JCT VOSS RD	30000	100000	30.00000	-100.00000	29.75142	-95.50735	29451	95704

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1761	SAN FELIPE RD EB	0.40 MI W OF JCT VOSS RD	30000	100000	30.00000	-100.00000	29.75123	-95.50738	29451	95704
1762	S WAYSIDE DR SB	0.10 MI S OF JCT US 90A	30000	100000	30.00000	-100.00000	29.71023	-95.31671	29426	95590
1763	S WAYSIDE DR NB	0.10 MI S OF JCT US 90A	30000	100000	30.00000	-100.00000	29.71023	-95.31655	29426	95590
1764	MYKAWA RD	0.70 MI S OF BELLFORT DR	30000	100000	30.00000	-100.00000	29.65558	-95.31345	29393	95588
1765	WACP ST	0.70 MI N OF IH 10	30000	100000	30.00000	-100.00000	29.78244	-95.32685	29469	95596
1766	HIRSCH RD NB	1.00 MI N OF TIDWELL RD	30000	100000	30.00000	-100.00000	29.85872	-95.27941	29515	95568
1767	HIRSCH RD	0.50 MI N OF TIDWELL RD	30000	100000	30.00000	-100.00000	29.85356	-95.28636	29512	95572
1768	HIRSCH RD SB	1.00 MI N OF TIDWELL RD	30000	100000	30.00000	-100.00000	29.85901	-95.27974	29515	95568
1769	HIRSCH RD SB	0.10 MI S OF IH 610	30000	100000	30.00000	-100.00000	29.80688	-95.32832	29484	95597
1770	HIRSCH RD NB	0.10 MI S OF IH 610	30000	100000	30.00000	-100.00000	29.80691	-95.32808	29484	95597
1771	HIRSCH RD	0.10 MI S OF CRESTON ST	00000	000000	0.00000	0.00000	29.818	-95.32975	29491	95598
1772	HOMESTEAD RD SB	0.3 MI N OF TIDWELL RD	30000	100000	30.00000	-100.00000	29.85235	-95.30041	29511	95580
1773	HOMESTEAD RD NB	0.3 MI N OF TIDWELL RD	30000	100000	30.00000	-100.00000	29.85239	-95.30021	29511	95580
1774	HOMESTEAD RD NB	0.20 MI N OF IH 610	30000	100000	30.00000	-100.00000	29.81012	-95.30159	29486	95581
1775	HOMESTEAD TUROUND	0.20 MI N OF IH 610	30000	100000	30.00000	-100.00000	29.81001	-95.30159	29486	95581
1776	HOMESTEAD TUROUND	0.20 MI N OF IH 610	30000	100000	30.00000	-100.00000	29.81001	-95.30176	29486	95581
1777	HOMESTEAD RD SB	0.20 MI N OF IH 610	30000	100000	30.00000	-100.00000	29.81012	-95.30176	29486	95581
1778	HOMESTEAD RD	0.45 MI S OF US 59	30000	100000	30.00000	-100.00000	29.91893	-95.30157	29551	95581
1779	LOUETTA RD	3.1 MI E OF KUYKENDAHL	30000	100000	30.00000	-100.00000	30.06235	-95.44824	30037	95669
1780	LOUETTA RD	1.7 MI E OF KUYKENDAHL	30000	100000	30.00000	-100.00000	30.05196	-95.46781	30031	95681
1781	LOUETTA RD	0.06 MI E OF STUEBNER AIR	30000	100000	30.00000	-100.00000	30.02148	-95.52177	30013	95713
1782	LOUETTA RD	0.15 MI W OF CHAMP FOREST	30000	100000	30.00000	-100.00000	30.01142	-95.54053	30007	95724
1783	LOUETTA RD	1.3 MI E OF KUYKENDAHL	30000	100000	30.00000	-100.00000	30.04887	-95.47383	30029	95684
1784	LOUETTA RD	1.20 MI E OF STUEBNER AIR	30000	100000	30.00000	-100.00000	30.03031	-95.50637	30018	95704
1785	LOUETTA RD	0.70 MI E OF SH 249	30000	100000	30.00000	-100.00000	29.99654	-95.59285	29598	95756
1786	LOUETTA RD	1.40 MI W OF SH 249	30000	100000	30.00000	-100.00000	29.99632	-95.60204	29598	95761
1787	LOUETTA RD EB	0.70 MI E OF SH 249	30000	100000	30.00000	-100.00000	29.9975	-95.56786	29599	95741
1788	LOUETTA RD EB	1.20 MI W OF CHAMP FOREST	30000	100000	30.00000	-100.00000	30.00312	-95.55544	30002	95733
1789	LOUETTA RD WB	0.70 MI E OF SH 249	30000	100000	30.00000	-100.00000	29.99766	-95.56792	29599	95741
1790	LOUETTA RD WB	1.20 MI W OF CHAMP FOREST	30000	100000	30.00000	-100.00000	30.00324	-95.55553	30002	95733
1791	W HARDY RD	0.75 MI N OF BWY 89	30000	100000	30.00000	-100.00000	29.94909	-95.38406	29569	95630
1792	E HARDY RD	0.20 MI S OF THORNE BLVD	30000	100000	30.00000	-100.00000	29.99758	-95.39618	29599	95638
1793	E HARDY RD	1.0 MI S OF FM 1960	30000	100000	30.00000	-100.00000	30.0115	-95.40387	30007	95642
1794	W HARDY RD	1.00 MI N OF ALDINE MAIL	30000	100000	30.00000	-100.00000	29.91639	-95.37652	29550	95626
1795	E HARDY RD	0.85 MI N OF BWY 8	29569	095231	29.94833	-95.38500	29.94926	-95.38333	29570	95630
1796	E HARDY N APPROACH	AT LITTLE YORK RD	29522	095219	29.87000	-95.36500	29.87083	-95.36432	29522	95619
1797	W HARDY S APPROACH	AT LITTLE YORK RD	29522	095219	29.87000	-95.36500	29.87019	-95.36507	29522	95619
1798	W HARDY N APPROACH	AT ALDINE MAIL ROUTE RD	29541	095223	29.90167	-95.37167	29.90218	-95.373	29541	95624
1799	E HARDY N APPROACH	AT ALDINE MAIL ROUTE RD	29541	095223	29.90167	-95.37167	29.90215	-95.37196	29541	95623
1800	E HARDY S APPROACH	AT LITTLE YORK RD	29522	095219	29.87000	-95.36500	29.87019	-95.36419	29522	95619

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1801	W HARDY N APPROACH	AT LITTLE YORK RD	29522	095219	29.87000	-95.36500	29.87081	-95.36521	29522	95619
1802	W HARDY S APPROACH	AT ALDINE MAIL ROUTE RD	29541	095223	29.90167	-95.37167	29.90178	-95.37294	29541	95624
1803	E HARDY S APPROACH	AT ALDINE MAIL ROUTE RD	29541	095223	29.90167	-95.37167	29.90177	-95.37194	29541	95623
1804	E HARDY RD	1.60 MI S OF FM 1960	29577	095239	29.96167	-95.39833	30.00444	-95.39791	30003	95639
1805	E HARDY N APPROACH	AT FM 525	29559	095228	29.93167	-95.38000	29.93307	-95.37895	29560	95627
1806	W HARDY N APPROACH	AT FM 525	29559	095228	29.93167	-95.38000	29.9329	-95.38058	29560	95628
1807	E HARDY RD	1.10 MI S OF FM 525	29550	095226	29.91667	-95.37667	29.91634	-95.37544	29550	95625
1808	W HARDY S APPROACH	AT FM 525	29559	095228	29.93167	-95.38000	29.93213	-95.38041	29559	95628
1809	E HARDY S APPROACH	AT FM 525	29559	095228	29.93167	-95.38000	29.93239	-95.37879	29559	95627
1810	W HARDY RD	0.20 MI N OF COLLINS RD	29535	095222	29.89167	-95.37000	29.89215	-95.37083	29535	95622
1811	KINGWOOD DR WB	4.50 MI E OF US59	30000	100000	30.00000	-100.00000	30.05091	-95.22669	30031	95536
1812	KINGWOOD DR EB	4.50 MI E OF US59	30000	100000	30.00000	-100.00000	30.05076	-95.22668	30030	95536
1813	KINGWOOD DR EB	0.20 MI W OF LAKE HOU PK	30000	100000	30.00000	-100.00000	30.04882	-95.18698	30029	95512
1814	KINGWOOD DR WB	0.20 MI W OF LAKE HOU PK	30000	100000	30.00000	-100.00000	30.04895	-95.18705	30029	95512
1815	ROLLINGBROOK DR	0.85 MI W OF GARTH RD	30000	100000	30.00000	-100.00000	29.75949	-94.9901	29456	94994
1816	ROLLINGBROOK DR WB	0.40 MI E OF GARTH RD	30000	100000	30.00000	-100.00000	29.7612	-94.97046	29457	94982
1817	ROLLINGBROOK DR EB	0.40 MI E OF GARTH RD	30000	100000	30.00000	-100.00000	29.76103	-94.97046	29457	94982
1818	W HARRIS AVE	0.20 MI EAST OF S RICHEY	30000	100000	30.00000	-100.00000	29.70002	-95.21708	29420	95530
1819	W HARRIS AVE	0.30 MI E OF S RICHEY RD	30000	100000	30.00000	-100.00000	29.70002	-95.21478	29420	95529
1820	E RICHEY RD	0.50 MI SE OF FM 1960	30000	100000	30.00000	-100.00000	30.01042	-95.36126	30006	95617
1821	RICHEY RD WB	0.40 MI W OF HARDY TOLL	30000	100000	30.00000	-100.00000	29.99564	-95.40204	29597	95641
1822	RICHEY RD EB	0.40 MI W OF HARDY TOLL	30000	100000	30.00000	-100.00000	29.99555	-95.40204	29597	95641
1823	W RICHEY RD WB	.5 MI SW/STUEBNER AIRLINE	30000	100000	30.00000	-100.00000	29.96523	-95.49127	29579	95695
1824	W RICHEY RD EB	.5 MI SW/STUEBNER AIRLINE	30000	100000	30.00000	-100.00000	29.96508	-95.49117	29579	95695
1825	ELDRIDGE RD NB	0.80 MI S OF WESTHEIMER	30000	100000	30.00000	-100.00000	29.72411	-95.62306	29434	95774
1826	ELDRIDGE RD SB	0.80 MI S OF WESTHEIMER	30000	100000	30.00000	-100.00000	29.72411	-95.62323	29434	95774
1827	ELDRIDGE RD NB	1.40 MI S OF WESTHEIMER	30000	100000	30.00000	-100.00000	29.71556	-95.62386	29429	95774
1828	ELDRIDGE RD SB	1.40 MI S OF WESTHEIMER	30000	100000	30.00000	-100.00000	29.71553	-95.62403	29429	95774
1829	ELDRIDGE PKWY NB	3.10 MI S OF WESTHEIMER	30000	100000	30.00000	-100.00000	29.69176	-95.62218	29415	95773
1830	ELDRIDGE PKWY SB	3.10 MI S OF WESTHEIMER	30000	100000	30.00000	-100.00000	29.69174	-95.6223	29415	95773
1831	LAWNDALE ST	0.50 MI SE OF WAYSIDE DR	30000	100000	30.00000	-100.00000	29.72114	-95.30325	29433	95582
1832	MKT RR	0.10 MI N OF WASHINGTON	30000	100000	30.00000	-100.00000	29.7833	-95.43585	29470	95662
1833	S P RR	0.10 MI N OF WASHINGTON	30000	100000	30.00000	-100.00000	29.78359	-95.43593	29470	95662
1834	S P RR	0.10 MI N OF WASHINGTON	30000	100000	30.00000	-100.00000	29.78337	-95.43626	29470	95662
1835	GALVESTON RD	0.05 MI NW OF JCT IH 610	30000	100000	30.00000	-100.00000	29.70568	-95.27421	29423	95565
1836	GALVESTON RD	0.80 MI SE OF IH610E	30000	100000	30.00000	-100.00000	29.69612	-95.26539	29418	95559
1837	GALVESTON RD	1.10 MI SE OF IH610E	30000	100000	30.00000	-100.00000	29.69289	-95.26223	29416	95557
1838	OLD GALVESTON RD	1.35 MI SE OF IH610	30000	100000	30.00000	-100.00000	29.69124	-95.26094	29415	95557
1839	GALVESTON RD	0.20 MI SE OF HOWARD DR	30000	100000	30.00000	-100.00000	29.68248	-95.25278	29409	95552
1840	GALVESTON RD	N OF RICHEY ST	30000	100000	30.00000	-100.00000	29.67038	-95.24268	29402	95546

HARRIS Observations Report

ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1841	S PACIFIC RR	0.20 MI S OF HOWARD DR	30000	100000	30.00000	-100.00000	29.68129	-95.25219	29409	95551
1842	CUTTEN RD	2.4MI N. OF FM1960	00001	000001	0.00167	-0.00167	30.00436	-95.56955	30003	95742
1843	GRANT RD	1.00 MI NW OF JONES RD	30000	100000	30.00000	-100.00000	29.9736	-95.59878	29584	95759
1844	GRANT RD	0.90 MI NW OF JONES RD	30000	100000	30.00000	-100.00000	29.97251	-95.59958	29584	95760
1845	CHAMPION FOREST SB	0.30 MI S OF CYPRESSWOOD	30000	100000	30.00000	-100.00000	29.9977	-95.5305	29599	95718
1846	CHAMPION FOREST NB	0.30 MI S OF CYPRESSWOOD	30000	100000	30.00000	-100.00000	29.99782	-95.53033	29599	95718
1847	CHAMPION FOREST NB	0.25 MI N OF CYPRESSWOOD	30000	100000	30.00000	-100.00000	30.00406	-95.53325	30002	95720
1848	CHAMPION FOREST SB	0.25 MI N OF CYPRESSWOOD	30000	100000	30.00000	-100.00000	30.00406	-95.53345	30002	95720

APPENDIX E

MONTGOMERY OBSERVATIONS REPORT

MONTGOMERY Observations Report

ID	StructureID	Checked	Observations
1	121700011002001	E	moved to DGN location, DGN symbol missing, (flagged)
2	121700011002002	c	moved to DGN location
3	121700011002003	c	moved to DGN location
4	121700011002004	c	moved to DGN location
5	121700011002042	c	moved to DGN location
6	121700011003006	c	moved to DGN location, originally located near 0675-08-062
7	121700011003007	c	moved to DGN location, originally located near 0675-08-064
8	121700011003008	c	moved to DGN location, originally located near 0338-11-093
9	121700011003034	c	moved to DGN location, originally located near 0675-08-061
10	121700011004014	c	moved to DGN location
11	121700011004015	E	moved to DGN location, originally located near 0110-04-047
12	121700011004016	E	moved to DGN location, originally located near 3538-01-008
13	121700011004017	E	moved to DGN location, DGN symbol missing, (flagged)
14	121700011004027	c	moved to DGN location
15	121700011004028	c	moved to DGN location, originally located near 0110-04-045
16	121700011004045	c	moved to DGN location (same DGN symbol as 0110-04-046)
17	121700011004046	c	moved to DGN location (same DGN symbol as 0110-04-045)
18	121700011004047	c	moved to DGN location (same DGN symbol as 0110-04-091)
19	121700011004048	c	moved to DGN location (same DGN symbol as 0110-04-049)
20	121700011004049	c	moved to DGN location (same DGN symbol as 0110-04-048)
21	121700011004058	c	moved to DGN location (same DGN symbol as 0110-04-059)
22	121700011004059	c	moved to DGN location (same DGN symbol as 0110-04-058)
23	121700011004091	c	moved to DGN location (same DGN symbol as 0110-04-047)
24	121700011004116	E	moved to DGN location (originally located near 0110-04-138 on M.P.P. RR, same DGN position as 0110-04-117)
25	121700011004117	E	moved to DGN location (originally located near 0110-04-138 on M.P.P. RR, same DGN position as 0110-04-116)
26	121700011004118	c	moved to DGN location
27	121700011004119	c	moved to DGN location (same DGN position as 0110-04-120)
28	121700011004120	c	moved to DGN location (same DGN position as 0110-04-119)
29	121700011004121	E	moved to DGN location (originally located South of Montgomery cnty line)
30	121700011004122	E	moved to DGN location (originally located South of Montgomery cnty line)
31	121700011004123	E	moved to DGN location (originally located South of Montgomery cnty line, same DGN symbol as 0110-04-124)
32	121700011004124	E	moved to DGN location (originally located South of Montgomery cnty line, same DGN symbol as 0110-04-123)
33	121700011004125	E	moved to DGN location (originally located South of Montgomery cnty line)
34	121700011004126	c	moved to DGN location
35	121700011004132	c	moved to DGN location (same DGN symbol as 0110-04-133)
36	121700011004133	c	moved to DGN location (same DGN symbol as 0110-04-132)

MONTGOMERY Observations Report

ID	StructureID	Checked	Observations
37	121700011004134	E	moved to DGN location (originally located near 0110-04-171, same DGN symbol as 0110-04-135)
38	121700011004135	E	moved to DGN location (originally located near 0110-04-171, same DGN symbol as 0110-04-134)
39	121700011004138	c	moved to DGN location (same DGN symbol as 0110-04-139)
40	121700011004139	c	moved to DGN location (same DGN symbol as 0110-04-138)
41	121700011004140	c	moved to DGN location
42	121700011004171	c	moved to DGN location
43	121700017705020	c	moved to DGN location
44	121700017705022	c	moved to DGN location
45	121700017705042	E	moved to DGN location, DGN symbol missing, (flagged)
46	121700017705104	c	moved to DGN location (same DGN symbol as 0177-05-105)
47	121700017705105	c	moved to DGN location (same DGN symbol as 0177-05-104)
48	121700017705106	c	moved to DGN location (same DGN symbol as 0177-05-107)
49	121700017705107	c	moved to DGN location (same DGN symbol as 0177-05-108)
50	121700017705108	c	moved to DGN location (same DGN symbol as 0177-05-107)
51	121700017705109	c	moved to DGN location (same DGN symbol as 0177-05-108)
52	121700017705110	E	moved to DGN location, DGN symbol missing, (flagged)
53	121700017705111	c	moved to DGN location (same DGN symbol as 0177-05-112)
54	121700017705112	c	moved to DGN location (same DGN symbol as 0177-05-113)
55	121700017705113	c	moved to DGN location (same DGN symbol as 0177-05-112)
56	121700017705114	c	moved to DGN location (same DGN symbol as 0177-05-113)
57	121700017705115	E	moved to DGN location, DGN symbol missing, (flagged)
58	121700017705119	E	moved to DGN location, road missing in DGN, (flagged)
59	121700017705120	c	moved to DGN location (same DGN symbol as 0177-05-150)
60	121700017705122	c	moved to DGN location (same DGN symbol as 0177-05-123)
61	121700017705123	c	moved to DGN location (same DGN symbol as 0177-05-122)
62	121700017705124	c	moved to DGN location (same DGN symbol as 0177-05-125)
63	121700017705125	c	moved to DGN location (same DGN symbol as 0177-05-124)
64	121700017705128	c	moved to DGN location (same DGN symbol as 0177-05-129)
65	121700017705129	c	moved to DGN location (same DGN symbol as 0177-05-128)
66	121700017705145	c	moved to DGN location
67	121700017705146	E	moved to DGN location, originally located near 0117-05-5147
68	121700017705147	E	moved to DGN location, originally located near 0117-05-5146
69	121700017705150	c	moved to DGN location (same DGN symbol as 0177-05-120)
70	121700017714043	c	moved to DGN location
71	121700017714044	c	moved to DGN location
72	121700017714045	c	moved to DGN location

MONTGOMERY Observations Report

ID	StructureID	Checked	Observations
73	121700033802078	c	moved to DGN location
74	121700033802079	c	moved to DGN location
75	121700033802083	c	moved to DGN location
76	121700033803075	c	moved to DGN location
77	121700033803084	c	moved to DGN location
78	121700033803090	c	moved to DGN location
79	121700033803097	c	moved to DGN location
80	121700033803098	c	moved to DGN location
81	121700033803099	c	moved to DGN location
82	121700033803100	c	moved to DGN location
83	121700033803197	c	moved to DGN location
84	121700033803200	c	moved to DGN location
85	121700033803201	c	moved to DGN location
86	121700033803202	c	moved to DGN location
87	121700033803203	c	moved to DGN location
88	121700033804054	c	moved to DGN location
89	121700033804055	c	moved to DGN location
90	121700033804056	c	moved to DGN location
91	121700033804057	c	moved to DGN location
92	121700033804058	c	moved to DGN location
93	121700033804059	c	moved to DGN location
94	121700033804065	c	moved to DGN location
95	121700033804066	c	moved to DGN location
96	121700033804067	c	moved to DGN location
97	121700033804068	c	moved to DGN location
98	121700033804122	E	moved to DGN location, DGN symbol missing (flagged), originally located near 0338-04-056
99	121700033807070	c	moved to DGN location
100	121700033807129	c	moved to DGN location
101	121700033811093	c	moved to DGN location
102	121700033811094	c	moved to DGN location
103	121700033811095	c	moved to DGN location (same DGN symbol as 0338-11-128)
104	121700033811096	c	moved to DGN location
105	121700033811110	E	moved to DGN location, originally located west of Montgomery county line.
106	121700033811111	c	moved to DGN location
107	121700033811112	c	moved to DGN location
108	121700033811113	c	moved to DGN location

MONTGOMERY Observations Report

ID	StructureID	Checked	Observations
109	121700033811114	c	moved to DGN location
110	121700033811115	c	moved to DGN location
111	121700033811116	c	moved to DGN location
112	121700033811117	c	moved to DGN location
113	121700033811118	c	moved to DGN location
114	121700033811119	c	moved to DGN location
115	121700033811120	c	moved to DGN location
116	121700033811121	c	moved to DGN location
117	121700033811123	c	moved to DGN location
118	121700033811124	c	moved to DGN location
119	121700033811125	c	moved to DGN location
120	121700033811126	c	moved to DGN location
121	121700033811127	c	moved to DGN location
122	121700033811128	c	moved to DGN location (same DGN symbol as 0338-11-095)
123	121700052308013	c	moved to DGN location
124	121700052308025	E	moved to DGN location, DGN symbol missing (flagged)
125	121700052309019	c	moved to DGN location
126	121700052310007	E	moved to DGN location, DGN symbol missing (flagged)
127	121700052310008	c	moved to DGN location
128	121700052310009	c	moved to DGN location
129	121700067508036	c	moved to DGN location
130	121700067508058	c	moved to DGN location
131	121700067508059	c	moved to DGN location
132	121700067508060	c	moved to DGN location
133	121700067508061	c	moved to DGN location
134	121700067508062	c	moved to DGN location
135	121700067508063	c	moved to DGN location
136	121700067508064	c	moved to DGN location
137	121700067508065	c	moved to DGN location
138	121700067508066	c	moved to DGN location
139	121700067508067	c	moved to DGN location
140	121700067508069	c	moved to DGN location
141	121700067508070	c	moved to DGN location
142	121700067508071	c	moved to DGN location
143	121700067508074	c	moved to DGN location
144	121700067508075	c	moved to DGN location (same DGN symbol as 0675-08-076)

MONTGOMERY Observations Report

ID	StructureID	Checked	Observations
145	121700067508076	c	moved to DGN location (same DGN symbol as 0675-08-075)
146	121700067508077	c	moved to DGN location
147	121700067508080	E	moved to DGN location, originally located near 0675-08-077
148	121700067508195	c	moved to DGN location (same DGN symbol as 0675-08-196)
149	121700067508196	c	moved to DGN location (same DGN symbol as 0675-08-195)
150	121700067508206	c	moved to DGN location
151	121700067508207	c	moved to DGN location (same DGN symbol as 0675-08-211)
152	121700067508208	c	moved to DGN location (same DGN symbol as 0675-08-209)
153	121700067508209	c	moved to DGN location (same DGN symbol as 0675-08-208)
154	121700067508211	c	moved to DGN location (same DGN symbol as 0675-08-207)
155	121700072002033	c	moved to DGN location (same DGN symbol as 0675-02-049)
156	121700072002038	c	moved to DGN location
157	121700072002039	c	moved to DGN location
158	121700072002040	c	moved to DGN location
159	121700072002041	c	moved to DGN location
160	121700072002042	c	moved to DGN location
161	121700072002043	c	moved to DGN location
162	121700072002049	c	moved to DGN location (same DGN symbol as 0675-02-033)
163	121700072002080	E	moved to DGN location (originally located south of Montgomery county line)
164	121700072002081	E	moved to DGN location (originally located south of Montgomery county line, DGN symbol missing)
165	121700072002082	E	moved to DGN location (originally located south of Montgomery county line)
166	121700106201011	c	moved to DGN location
167	121700106201015	c	moved to DGN location
168	121700106201016	c	moved to DGN location
169	121700106203003	c	moved to DGN location, originally located near 3158-01-003
170	121700106203012	c	moved to DGN location
171	121700106203017	c	moved to DGN location, originally located near 3158-01-005
172	121700125901010	c	moved to DGN location
173	121700125901011	E	moved to DGN location, originally located north of Montgomery county line.
174	121700125901012	c	moved to DGN location
175	121700125902007	c	moved to DGN location
176	121700125902008	c	moved to DGN location
177	121700140203005	c	moved to DGN location
178	121700140203006	c	moved to DGN location
179	121700141602016	c	moved to DGN location
180	121700141602017	c	moved to DGN location

MONTGOMERY Observations Report

ID	StructureID	Checked	Observations
181	121700141602018	c	moved to DGN location
182	121700141603006	E	moved to DGN location, originally located .6 miles SW of 105 & 1486
183	121700141603007	c	moved to DGN location
184	121700141603008	c	moved to DGN location
185	121700141603010	c	moved to DGN location
186	121700141701004	c	moved to DGN location
187	121700141701006	c	moved to DGN location
188	121700141701007	c	moved to DGN location
189	121700141701008	E	moved to DGN location, originally located @ inter of FM3084 & FM 1484
190	121700141701009	c	moved to DGN location
191	121700141701010	E	moved to DGN location, originally located near 1417-01-004
192	121700141701011	c	moved to DGN location
193	121700170602004	c	moved to DGN location
194	121700170602005	c	moved to DGN location
195	121700170602006	c	moved to DGN location
196	121700191201001	c	moved to DGN location
197	121700191201002	c	moved to DGN location
198	121700191201003	c	moved to DGN location
199	121700191201006	c	moved to DGN location
200	121700198601002	c	moved to DGN location
201	121700198601004	c	moved to DGN location
202	121700198601005	E	moved to DGN location, DGN symbol missing (flagged)
203	121700198601006	c	moved to DGN location
204	121700198601007	c	moved to DGN location
205	121700274401001	c	moved to DGN location
206	121700274401002	c	moved to DGN location
207	121700274401003	E	moved to DGN location, originally located near 0338-11-121
208	121700274401005	E	moved to DGN location, originally located near 2744-01-008
209	121700274401006	c	moved to DGN location
210	121700274401008	c	moved to DGN location
211	121700289701001	c	moved to DGN location
212	121700289701002	c	moved to DGN location
213	121700289701003	c	moved to DGN location
214	121700289701004	c	moved to DGN location
215	121700305002001	c	moved to DGN location
216	121700305002002	E	moved to DGN location, DGN symbol missing (flagged)

MONTGOMERY Observations Report

ID	StructureID	Checked	Observations
217	121700305002003	c	moved to DGN location
218	121700315801003	c	moved to DGN location
219	121700315801004	c	moved to DGN location
220	121700315801005	c	moved to DGN location
221	121700315801006	E	moved to DGN location, originally located near 0675-08-067
222	121700315801007	E	moved to DGN location, originally located near 0675-08-067
223	121700353801001	c	moved to DGN location
224	121700353801002	c	moved to DGN location
225	121700353801003	c	moved to DGN location
226	121700353801004	c	moved to DGN location
227	121700353801005	c	moved to DGN location
228	121700353801006	c	moved to DGN location
229	121700353801007	c	moved to DGN location
230	121700353801008	c	moved to DGN location
231	121700353801009	c	moved to DGN location
232	121700353801010	c	moved to DGN location
233	121700353801011	E	moved to DGN location, originally located near 3538-01-009
234	121700353801012	E	moved to DGN location, DGN symbol missing (flagged)
235	121700353801013	E	moved to DGN location, originally located south of Montgomery county line.
236	121700353801014	E	moved to DGN location, originally located south of Montgomery county line.
237	121700353801015	E	moved to DGN location, originally located south of Montgomery county line.
238	121700353801016	E	moved to DGN location, originally located south of Montgomery county line.
239	121700866112001	E	moved to DGN location, originally located south of Montgomery county line, DGN symbol missing, no road (flagged)
240	121700866312002	E	moved to DGN location, originally located south of Montgomery county line, no road (flagged)

MONTGOMERY Observations Report

ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1	SH 75	6.10 MI N OF FM 1097	30303	095294	30.50500	-95.49000	30.505774	-95.484447	30303	95691
2	SH 75	5.50 MI N OF FM 1097	30299	095293	30.49833	-95.48833	30.498295	-95.489423	30299	95694
3	SH 75	3.55 MI N OF FM 1097	30283	095297	30.47167	-95.49500	30.471623	-95.495288	30283	95697
4	SH 75	2.40 MI N OF FM 1097	30274	095295	30.45667	-95.49167	30.456402	-95.492169	30274	95695
5	SH 75	1.00 MI N OF FM 1097	30262	095291	30.43667	-95.48500	30.437237	-95.484388	30262	95691
6	SH 75	2.90 MI N OF FM 1097	30230	095291	30.38333	-95.48500	30.383733	-95.477995	30230	95687
7	SH 75	5.20 MI S OF FM 1097	30224	095291	30.37333	-95.48500	30.351745	-95.471891	30211	95683
8	SH 75	1.15 MI S OF LP 336	30200	095291	30.33333	-95.48500	30.320079	-95.464217	30192	95679
9	SH 75	1.90 MI S OF FM 1097	30234	095291	30.39000	-95.48500	30.396816	-95.473871	30238	95684
10	IH 45	5.7 MI N OF HARRIS C/L	30115	095272	30.19167	-95.45333	30.190637	-95.453095	30114	95672
11	IH 45	3.6 MI N OF HARRIS C/L	30146	095270	30.24333	-95.45000	30.159780	-95.449641	30096	95670
12	IH 45	1.9 MI N OF HARRIS C/L	30131	095266	30.21833	-95.44333	30.136378	-95.444936	30082	95667
13	IH 45	1.1 MI N OF HARRIS C/L	30075	095265	30.12500	-95.44167	30.124492	-95.442543	30075	95666
14	IH 45	2.00 MI N OF FM 1488	30160	095273	30.26667	-95.45500	30.266005	-95.456544	30160	95674
15	AT AND SF RAILROAD	0.50 MI E OF IH 45	30155	095273	30.25833	-95.45500	30.307473	-95.460113	30184	95676
16	IH 45 SB	0.90 MI N OF FM 1488	30150	095273	30.25000	-95.45500	30.250275	-95.456730	30150	95674
17	IH 45 NB	0.90 MI N OF FM 1488	30150	095273	30.25000	-95.45500	30.250287	-95.456521	30150	95674
18	IH 45 SB	8.44 MI N OF FM 1488	30146	095274	30.24333	-95.45667	30.244312	-95.457390	30147	95674
19	IH 45 SB	0.15 MI N OF FM 1488	30143	095275	30.23833	-95.45833	30.238744	-95.458512	30143	95675
20	IH 45 NB	0.15 MI N OF FM 1488	30143	095275	30.23833	-95.45833	30.238728	-95.458304	30143	95675
21	IH 45 SB	2.00 MI N OF FM 1488	30159	095273	30.26500	-95.45500	30.265193	-95.456662	30159	95674
22	IH 45 NB	2.00 MI N OF FM 1488	30159	095273	30.26500	-95.45500	30.265188	-95.456453	30159	95674
23	IH 45 NB	8.44 MI N OF FM 1488	30146	095274	30.24333	-95.45667	30.244253	-95.457194	30147	95674
24	LAKE WOODLANDS(EB)	4.1 MI N OF HARRIS C/L	30107	095265	30.17833	-95.44167	30.167204	-95.450572	30100	95670
25	LAKE WOODLANDS(WB)	4.1 MI N OF HARRIS C/L	30107	095265	30.17833	-95.44167	30.167351	-95.450584	30100	95670
26	IH45 SBFR	AT HARRIS C/L	30067	095262	30.11167	-95.43667	30.110674	-95.436905	30066	95662
27	IH45 SBML	AT HARRIS C/L	30067	095262	30.11167	-95.43667	30.110769	-95.436526	30066	95662
28	IH45 NBML	AT HARRIS C/L	30067	095262	30.11167	-95.43667	30.110824	-95.436320	30066	95662
29	IH45 NBFR	AT HARRIS C/L	30062	095262	30.10333	-95.43667	30.110947	-95.435962	30067	95662
30	IH45 SBFR	0.2 MI N OF HARRIS C/L	30062	095262	30.10333	-95.43667	30.113614	-95.437940	30068	95663
31	IH45 SBML	0.2 MI N OF HARRIS C/L	30062	095262	30.10333	-95.43667	30.113715	-95.437644	30068	95663
32	IH45 NBML	0.2 MI N OF HARRIS C/L	30062	095262	30.10333	-95.43667	30.113797	-95.437462	30068	95662
33	IH45 NBFR	0.2 MI N OF HARRIS C/L	30062	095262	30.10333	-95.43667	30.113937	-95.437185	30068	95662
34	ROBINSON ROAD	3.4 MI N OF HARRIS C/L	30094	095269	30.15667	-95.44833	30.156824	-95.449068	30094	95669
35	IH45 NB	1.2 MI N OF HARRIS C/L	30076	095265	30.12667	-95.44167	30.126589	-95.442859	30076	95666
36	IH45 SB	1.2 MI N OF HARRIS C/L	30076	095265	30.12667	-95.44167	30.126567	-95.443067	30076	95666

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
37	IH45 NB	2.1 MI S OF FM 1488	30121	095273	30.20167	-95.45500	30.206946	-95.455895	30124	95674
38	IH45 SB	2.1 MI S OF FM 1488	30121	095273	30.20167	-95.45500	30.206929	-95.456100	30124	95674
39	IH-45 NB	4.8 MI N OF HARRIS C/L	30107	095279	30.17833	-95.46500	30.178131	-95.451562	30107	95671
40	IH-45 SB	4.8 MI N OF HARRIS C/L	30107	095279	30.17833	-95.46500	30.178117	-95.451769	30107	95671
41	FM 1488	0.00 MI N OF FM 1488	30142	095275	30.23667	-95.45833	30.236404	-95.458572	30142	95675
42	IH 45	6.7 MI N OF HARRIS C/L	30123	095273	30.20500	-95.45500	30.204515	-95.455750	30123	95673
43	US 59	0.8 MI S OF LIBERTY C/L	30158	095084	30.26333	-95.14000	30.261903	-95.143300	30157	95486
44	US 59	1.4 MI N OF FM 1485	30103	095123	30.17167	-95.20500	30.171365	-95.204577	30103	95523
45	US 59 NBFR	2.3 MI S OF FM 2090	30121	095110	30.20167	-95.18333	30.201817	-95.183640	30121	95510
46	US 59 (NB)	0.8 MI N OF FM 1485	30097	095127	30.16167	-95.21167	30.161160	-95.211208	30097	95527
47	US 59 (SB)	0.8 MI N OF FM 1485	30097	095127	30.16167	-95.21167	30.161251	-95.211397	30097	95527
48	US 59 NBFR	1.3 MI N OF FM 1314	30074	095145	30.12333	-95.24167	30.122558	-95.230249	30074	95538
49	US 59 NB	1.3 MI N OF FM 1314	30074	095145	30.12333	-95.24167	30.122611	-95.230561	30074	95538
50	US 59 SB	1.3 MI N OF FM 1314	30074	095145	30.12333	-95.24167	30.122652	-95.230765	30074	95538
51	US 59 (SBFR)	1.3 MI N OF FM 1314	30074	095145	30.12333	-95.24167	30.122736	-95.231065	30074	95539
52	US 59	1.0 MI S OF FM 1314	30055	095145	30.09167	-95.24167	30.090868	-95.240224	30055	95544
53	US 59 NBFR	2.4 MI N OF HARRIS C/L	30044	095148	30.07333	-95.24667	30.074008	-95.244867	30044	95547
54	US 59 NB	2.4 MI N OF HARRIS C/L	30044	095148	30.07333	-95.24667	30.074078	-95.245173	30044	95547
55	US 59 SB	2.4 MI N OF HARRIS C/L	30044	095148	30.07333	-95.24667	30.074122	-95.245371	30044	95547
56	US 59 SBFR	2.4 MI N OF HARRIS C/L	30044	095148	30.07333	-95.24667	30.074191	-95.245674	30045	95547
57	US 59	1.1 MI N OF HARRIS C/L	30031	095152	30.05167	-95.25333	30.054815	-95.251061	30033	95551
58	US59 @ CREEKWOOD L	0.1 MI W OF US 59	30125	095109	30.20833	-95.18167	30.208120	-95.181474	30125	95509
59	US 59 SB	2.3 MI S OF FM 2090	30121	095111	30.20167	-95.18500	30.202034	-95.184107	30121	95510
60	US 59 (NB)	3.7 MI N OF FM 1314	30092	095130	30.15333	-95.21667	30.154767	-95.215405	30093	95529
61	US 59 (SB)	3.7 MI N OF FM 1314	30092	095130	30.15333	-95.21667	30.154771	-95.215644	30093	95529
62	US 59 (NB)	3.7 MI S OF FM 1485	30062	095142	30.10333	-95.23667	30.104298	-95.236074	30063	95542
63	US 59 (SB)	3.7 MI S OF FM 1485	30062	095142	30.10333	-95.23667	30.104327	-95.236279	30063	95542
64	US 59 NB	3.2 MI S OF LIBERTY C/L	30139	095099	30.23167	-95.16500	30.232244	-95.164615	30139	95499
65	US 59 SB	3.2 MI S OF LIBERTY C/L	30139	095099	30.23167	-95.16500	30.232248	-95.164838	30139	95499
66	COMMUNITY DRIVE	1.7 MI N OF FM 1314	30078	095137	30.13000	-95.22833	30.129307	-95.228687	30078	95537
67	NORTH PARK DRIVE	2.4 MI S OF FM 1314	30032	095152	30.05333	-95.25333	30.069668	-95.246593	30042	95548
68	KINGWOOD DRIVE	0.9 MI N OF HARRIS C/L	30042	095148	30.07000	-95.24667	30.052425	-95.251733	30031	95551
69	US 59 NB	2.3 MI S OF FM 2090	30121	095110	30.20167	-95.18333	30.201945	-95.183914	30121	95510
70	LP 494	0.3 MI N OF FM 1485	30098	095126	30.16333	-95.21000	30.159613	-95.209680	30096	95526
71	LP 494	1.2 MI N OF FM 1314	30071	095135	30.11833	-95.22500	30.117830	-95.224295	30071	95535
72	LP 494	2.2 MI N OF HARRIS C/L	30044	095144	30.07333	-95.24000	30.073353	-95.239480	30044	95544

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
73	SH 105	0.1 MI W OF FM 1486	30219	095467	30.36500	-95.77833	30.364819	-95.777058	30219	95866
74	SH 105	0.6 MI E OF FM 1486	30224	095461	30.37333	-95.76833	30.371173	-95.769202	30223	95862
75	SH 105	0.3 MI E OF FM 1486	30221	095465	30.36833	-95.77500	30.368006	-95.773123	30221	95864
76	SH 105	8.20 MI E OF IH 45	30188	095281	30.31333	-95.46833	30.313685	-95.468766	30188	95681
77	SH 105	0.30 MI E OF FM 149	30232	095403	30.38667	-95.67167	30.386203	-95.671469	30232	95803
78	SH 105	0.25 MI SE OF LP 336	30194	095295	30.32333	-95.49167	30.323647	-95.492165	30194	95695
79	SH 105	3.70 MI E OF FM 149	30225	095383	30.37500	-95.63833	30.373849	-95.636076	30224	95782
80	SH 105	4.40 MI SE OF FM 149	30223	095378	30.37167	-95.63000	30.370439	-95.628720	30222	95777
81	SH 105	6.10 MI E OF FM 149	30216	095360	30.36000	-95.60000	30.359308	-95.598554	30216	95759
82	SH 105	6.50 MI SE OF FM 149	30215	095358	30.35833	-95.59667	30.358462	-95.596189	30215	95758
83	SH 105	8.70 MI W OF SAN JAC F	30232	095406	30.38667	-95.67667	30.387406	-95.677749	30232	95807
84	SH 105	3.80 MI NW OF LP 336	30206	095332	30.34333	-95.55333	30.343490	-95.553992	30206	95732
85	SH 105	3.10 MI NW OF LP 336	30205	095325	30.34167	-95.54167	30.342204	-95.541039	30205	95725
86	SH 105	0.20 MI NW OF LP 336	30197	095301	30.32833	-95.50167	30.327595	-95.501086	30197	95701
87	SH 105	4.00 MI W OF IH 45	30205	095318	30.34167	-95.53000	30.342362	-95.531614	30205	95719
88	SH 105	2.00 MI E OF IH 45	30189	095267	30.31500	-95.44500	30.316034	-95.439949	30190	95664
89	SH 105	2.64 MI W OF LP 336	30191	095260	30.31833	-95.43333	30.319177	-95.429608	30192	95658
90	SH 105	0.04 MI W OF FM 1485	30194	095239	30.32333	-95.39833	30.324186	-95.397578	30195	95639
91	SH 105	0.50 MI E OF FM 1985	30196	095233	30.32667	-95.38833	30.325989	-95.388666	30196	95633
92	SH 105	2.60 MI E OF LP 336	30198	095218	30.33000	-95.36333	30.331424	-95.361639	30199	95617
93	SH 105	3.00 MI E OF LP 336	30199	095214	30.33167	-95.35667	30.332550	-95.355049	30200	95613
94	SH 105	0.3 MI W OF FM 1484	30200	095201	30.33333	-95.33500	30.332808	-95.332901	30200	95600
95	SH 105	0.2 MI E OF FM 1484	30199	095194	30.33167	-95.32333	30.332582	-95.324747	30200	95595
96	SH 105	2.2 MI E OF FM 1484	30198	095176	30.33000	-95.29333	30.330309	-95.290793	30198	95574
97	SH 105	5.2 MI E OF FM 1484	30197	095146	30.32833	-95.24333	30.327898	-95.240844	30197	95545
98	SH 105	1.70 MI E OF IH 45	30189	095237	30.31500	-95.39500	30.314719	-95.445658	30189	95667
99	SH 105	1.6 MI W OF LIBERTY C	30190	095108	30.31667	-95.18000	30.317036	-95.182499	30190	95509
100	SH 105	12.5 MI E OF FM 1485	30191	095115	30.31833	-95.19167	30.318730	-95.192243	30191	95515
101	LOOP 336	0.40 MI W OF IH 45	30198	095292	30.33000	-95.48667	30.331272	-95.486163	30199	95692
102	LP 336	0.80 MI E OF IH 45	30202	095278	30.33667	-95.46333	30.336898	-95.463184	30202	95678
103	LP 336 EB	0.65 MI E OF SH 75	30203	095274	30.33833	-95.45667	30.338038	-95.456866	30203	95674
104	LOOP 336	1.60 MI E OF US 75	30205	095265	30.34167	-95.44167	30.339811	-95.441535	30204	95665
105	LP 336	0.80 MI W OF IH 45	30169	095528	30.28167	-95.88000	30.280540	-95.470234	30168	95682
106	LP 336	1.10 MI W OF IH 45	30169	095285	30.28167	-95.47500	30.282530	-95.476503	30170	95686
107	LP 336	0.40 MI W OF IH 45	30169	095277	30.28167	-95.46167	30.278531	-95.463355	30167	95678
108	LOOP-336	2.5 MI N OF FM 2854	30168	095300	30.28000	-95.50000	30.285923	-95.488820	30172	95693

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
109	LOOP-336	1.4MI N OF FM 2854	30173	095303	30.28833	-95.50500	30.294797	-95.504079	30177	95702
110	LOOP-336	1.6MI N OF FM 2854	30170	095302	30.28333	-95.50333	30.293279	-95.501042	30176	95701
111	LOOP-336	2.7MI N OF FM 2854	30168	095300	30.28000	-95.50000	30.284719	-95.486122	30171	95692
112	LP 336	0.20 MI E OF IH 45	30169	095272	30.28167	-95.45333	30.281369	-95.453237	30169	95672
113	LP 336	0.55 MI E OF FM 1314	30170	095264	30.28333	-95.44000	30.282715	-95.438957	30170	95663
114	LP 336	0.30 MI S OF FM 1314	30174	095252	30.29000	-95.42000	30.289243	-95.420354	30174	95652
115	LP 336	1.80 MI NE OF FM 1314	30178	095252	30.29667	-95.42000	30.300058	-95.402099	30180	95641
116	LP336	1.1MI S OF SH105	30187	095303	30.31167	-95.50500	30.312483	-95.505479	30187	95703
117	MP RR	0.10 MI E OF IH 45	30168	095274	30.28000	-95.45667	30.279962	-95.455777	30168	95673
118	MP RR	0.10 MI E OF IH 45	30168	095274	30.28000	-95.45667	30.280670	-95.455772	30168	95673
119	LP 336	0.20 MI S OF SH 105	30190	095240	30.31667	-95.40000	30.317640	-95.400568	30191	95640
120	LP 336	0.50 MI S OF SH 105	30193	095240	30.32167	-95.40000	30.313515	-95.399286	30188	95640
121	LP 336	0.20 MI S OF SH 105	30188	095239	30.31333	-95.39833	30.320683	-95.401680	30192	95641
122	LP 336 WB	0.65 MI E OF SH 75	30203	095274	30.33833	-95.45667	30.338182	-95.456883	30203	95674
123	FM 1488	1.8 MI W OF FM 1774	30119	095467	30.19833	-95.77833	30.196907	-95.777599	30118	95867
124	FM 1488	0.1 MI E OF WALLER C/	30113	095477	30.18833	-95.79500	30.189251	-95.803355	30114	95882
125	FM 1488	0.9 MI W OF FM 149	30136	095425	30.22667	-95.70833	30.227769	-95.708991	30137	95825
126	FM 1488	0.4 MI W OF FM 2978	30132	095345	29.79900	-96.08000	30.220511	-95.573319	30132	95744
127	FM 1488	0.25 MI W OF SH 242	30137	095311	30.22833	-95.51833	30.228555	-95.516189	30137	95710
128	FM 1488	0.2 MI W OF SH 242	30137	095309	30.22833	-95.51500	30.228754	-95.515144	30137	95709
129	SHEPHERD HILL RD	3.95 MI N OF FM 1097	30286	095297	30.47667	-95.49500	30.477853	-95.495251	30287	95697
130	CALVARY RD	2.45 MI N OF FM 1097	30274	095298	30.45667	-95.49667	30.455474	-95.495388	30273	95697
131	LONGSTREET RD	1.10 MI N OF FM 1097	30262	095297	30.43667	-95.49500	30.435739	-95.495052	30261	95697
132	FM 1097	0.00 MI N OF FM 1097	30253	095295	30.42167	-95.49167	30.420858	-95.491615	30253	95695
133	FM 830	0.00 MI N OF FM 830	30234	095292	30.39000	-95.48667	30.391151	-95.486024	30235	95692
134	IH 45 NB	2.60 MI S OF FM 1097	30230	095292	30.38333	-95.48667	30.384320	-95.485405	30231	95691
135	IH 45 SB	2.60 MI S OF FM 1097	30230	095292	30.38333	-95.48667	30.384324	-95.486226	30231	95692
136	IH 45 NB	1.20 MI S OF FM 830	30224	095292	30.37333	-95.48667	30.374198	-95.485000	30225	95691
137	IH 45 SB	1.90 MI S OF FM 830	30220	095291	30.36667	-95.48500	30.366542	-95.484986	30220	95691
138	IH 45 NB	1.90 MI S OF FM 830	30220	095291	30.36667	-95.48500	30.366457	-95.484640	30220	95691
139	FM 3083	0.00 MI N OF FM 3083	30211	095291	30.35167	-95.48500	30.351006	-95.483924	30211	95690
140	WILSON RD	0.80 MI N OF SH 105	30195	095285	30.32500	-95.47500	30.325178	-95.474683	30195	95685
141	IH 45	0.40 MI N OF SH 105	30191	095284	30.31833	-95.47333	30.319202	-95.472699	30192	95684
142	IH 45	0.20 MI N OF SH 105	30190	095284	30.31667	-95.47333	30.316935	-95.471934	30190	95683
143	IH 45	0.30 MI N OF SH 105	30188	095282	30.31333	-95.47000	30.309882	-95.469362	30186	95682
144	IH 45 SB	0.50 MI S OF SH 105	30184	095281	30.30667	-95.46833	30.307497	-95.468930	30184	95681

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ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
145	IH 45 NB	0.50 MI S OF SH 105	30184	095281	30.30667	-95.46833	30.307537	-95.468725	30185	95681
146	GLADSTELL ST	1.60 MI S OF SH 105	30176	095277	30.29333	-95.46167	30.292816	-95.463959	30176	95678
147	IH 45	2.90 MI S OF SH 105	30175	095274	30.29167	-95.45667	30.275280	-95.456521	30165	95674
148	IH 45 SB	0.00 MI N OF SH 105	30189	095285	30.31500	-95.47500	30.314611	-95.471284	30189	95683
149	IH 45 NB	0.00 MI N OF SH 105	30189	095285	30.31500	-95.47500	30.314642	-95.471078	30189	95683
150	IH 45 SB	1.10 MI S OF FM 830	30224	095292	30.37333	-95.48667	30.374316	-95.485790	30225	95691
151	LOOP 336 (WB)	1.40 MI N OF SH 105	30200	095285	30.33333	-95.47500	30.333584	-95.477930	30200	95687
152	IH 45 NB	1.00 MI N OF CREIGHTN	30168	095274	30.28000	-95.45667	30.279690	-95.457232	30168	95674
153	IH 45 SB	1.00 MI N OF CREIGHTN	30168	095274	30.28000	-95.45667	30.279623	-95.457429	30168	95674
154	LOOP 336 (EB)	1.40 MI N OF SH 105	30200	095285	30.33333	-95.47500	30.333410	-95.477869	30200	95687
155	SH 249 SB	JCT HARRIS C/L	30070	095387	30.11667	-95.64500	30.118986	-95.645862	30071	95788
156	FM 149	0.70 MI N OF SH 105	30239	095419	30.39833	-95.69833	30.398674	-95.698882	30239	95819
157	FM-149	4.00 MI N OF SH 105	30268	095418	30.44667	-95.69667	30.446798	-95.697015	30268	95818
158	FM 149	1.0 MI N OF FM 1774	30112	095409	30.18667	-95.68167	30.185979	-95.681400	30112	95809
159	FM 149	1.2 MI N OF FM 1774	30113	095409	30.18833	-95.68167	30.188246	-95.680852	30113	95809
160	FM-149	.6MI N OF BN RR	30168	095423	30.28000	-95.70500	30.280235	-95.705026	30168	95823
161	FM-149	.4MI N OF BNRR	30167	095424	30.27833	-95.70667	30.279042	-95.706356	30167	95824
162	SH 249 NB	JCT HARRIS C/L	30070	095387	30.11667	-95.64500	30.119060	-95.645726	30071	95787
163	SH 249 (SB)	2MI.N.OF SPRING CREEK	00000	000000	0.00000	0.00000	30.144442	-95.660959	30087	95797
164	SH 249 (NB)	2MI.N.OF SPRING CREEK	00000	000000	0.00000	0.00000	30.144755	-95.660218	30087	95796
165	SH 249	.8MI N OF DECKER BR.	00000	000000	0.00000	0.00000	30.155303	-95.667189	30093	95800
166	FM 1485	5.4 MI E OF LP 494	30087	095073	30.14500	-95.12167	30.145139	-95.124382	30087	95475
167	FM 1485	1.3 MI E OF LP 494	30089	095116	30.14833	-95.19333	30.148602	-95.191925	30089	95515
168	FM 1485	2.5 MI E OF LP 494	30089	095103	30.14833	-95.17167	30.146694	-95.171462	30088	95503
169	FM 1485	10.4 MI SE OF SH 105	30151	095197	30.25167	-95.32833	30.221834	-95.285936	30133	95572
170	FM 1485	3.0 MI NW OF US 59	30107	095146	30.17833	-95.24333	30.177755	-95.243515	30107	95546
171	FM 1485	3.7 MI S OF SH 105	30164	095213	30.27333	-95.35500	30.294683	-95.351884	30177	95611
172	FM 1097	10.8 MI W OF IH 45	30257	095401	30.42833	-95.66833	30.424795	-95.669725	30255	95802
173	FM 1097	6.00 MI NE OF FM 149	32263	095360	32.43833	-95.60000	30.436912	-95.599328	30262	95760
174	FM 1097	4.10 MI W OF IH 45	30258	095337	30.43000	-95.56167	30.431149	-95.561677	30259	95737
175	FM 1097	1.10 MI E OF SH 75	30259	095273	30.43167	-95.45500	30.431319	-95.463829	30259	95678
176	FM 1097	4.10 MI NE OF SH 75	30272	095255	30.45333	-95.42500	30.454834	-95.422946	30273	95654
177	FM 1375	3.10 MI E OF FM 149	30317	095407	30.52833	-95.67833	30.528151	-95.679220	30317	95808
178	FM 1375	3.35 MI E OF FM 149	30318	095405	30.53000	-95.67500	30.529262	-95.675655	30318	95805
179	FM 1486	1.7 MI N OF SH 105	30232	095469	30.38667	-95.78167	30.389540	-95.782439	30234	95869
180	FM 1486	1.5 MI N OF SH 105	30231	095469	30.38500	-95.78167	30.387285	-95.781947	30232	95869

MONTGOMERY Observations Report

ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
181	FM 1486	0.5 MI N OF SH 105	30224	095468	30.37333	-95.78000	30.371778	-95.778614	30223	95867
182	FM 1486	0.01 MI S OF SH 105	30215	095466	30.35833	-95.77667	30.364645	-95.776164	30219	95866
183	FM 1486	1.8 MI S OF SH 105	30205	095461	30.34167	-95.76833	30.341571	-95.768963	30205	95861
184	FM 1486	4.4 MI S OF SH 105	30183	095462	30.30500	-95.77000	30.304880	-95.770812	30183	95862
185	FM 1486	9.1 MI S OF SH 105	30143	095462	30.23833	-95.77000	30.238439	-95.770247	30143	95862
186	FM 1484	0.85 MI NE OF FM 2432	30238	095238	30.39667	-95.39667	30.395876	-95.397289	30238	95638
187	FM 1484	1.90 MI NE OF FM 2432	30244	095229	30.40667	-95.38167	30.403894	-95.382743	30242	95630
188	FM 1484	2.80 MI NE OF FM 2432	30238	095204	30.39667	-95.34000	30.396116	-95.341199	30238	95605
189	FM 1484	0.95 MI NE OF FM 3083	30205	095258	30.34167	-95.43000	30.355660	-95.423404	30213	95654
190	FM 1484	1.70 MI N OF FM 3083	30220	095250	30.36667	-95.41667	30.364490	-95.416476	30219	95650
191	FM 1484	1.80 MI SW OF LP 336	30238	095238	30.39667	-95.39667	30.320643	-95.444467	30192	95667
192	FM 1484	1.50 MI NE OF FM 2432	30241	95232	30.40167	-95.38667	30.400176	-95.387916	30240	95633
193	FM 1791	1.65 MI N OF FM 149	30335	095447	30.55833	-95.74500	30.557646	-95.747235	30335	95848
194	FM 1791	1.20 MI N OF FM 149	30331	095447	30.55167	-95.74500	30.551378	-95.748454	30331	95849
195	FM 1791	0.30 MI N OF FM 149	30324	095447	30.54000	-95.74500	30.539257	-95.748665	30324	95849
196	FM 2090	0.5 MI E OF FM 1485	30155	095182	30.25833	-95.30333	30.258987	-95.304165	30155	95582
197	FM 2090	0.6 MI E OF FM 1485	30155	095181	30.25833	-95.30167	30.259417	-95.302461	30156	95581
198	FM 2090	0.2 MI W OF US 59	30140	095102	30.23333	-95.17000	30.232510	-95.168317	30140	95501
199	FM 2090	3.2 MI E OF FM 1485	30152	095156	30.25333	-95.26000	30.254463	-95.260178	30153	95556
200	FM 1314	0.50 MI N OF STRIDHEM	30155	095239	30.25833	-95.39833	30.257969	-95.399691	30155	95640
201	FM 1314	7.3 MI N OF US 59	30105	095192	30.17500	-95.32000	30.173853	-95.320445	30104	95592
202	FM 1314	4.1 MI N OF US 59	30082	095174	30.13667	-95.29000	30.136961	-95.289868	30082	95574
203	FM 1314	0.70 MI S OF LP 336	30168	095252	29.80000	-96.08000	30.279764	-95.420209	30168	95652
204	FM 1314	2.8 MI NW OF SH 242	30145	095230	29.80100	-96.08000	30.241331	-95.382874	30145	95630
205	FM 2854	3.2 MI W OF IH 45	30190	095312	29.80200	-96.08000	30.315249	-95.522190	30189	95713
206	FM 2854	2.6 MI W OF IH 45	30190	095308	29.80300	-96.08000	30.314323	-95.511223	30189	95707
207	FM 2854	0.20 MI E OF IH 45	30189	095301	29.80400	-96.08000	30.307974	-95.471815	30185	95683
208	FM 2854	0.70 MI W OF DEER LK	30203	095391	29.80500	-96.08000	30.318636	-95.643381	30191	95786
209	FM 2854	2.50 MI W OF IH 45	30191	095375	29.80600	-96.08000	30.318193	-95.624167	30191	95775
210	FM 2854	3.90 MI SE OF SH 105	30205	095394	29.80700	-96.08000	30.340592	-95.652115	30204	95791
211	FM 830	0.30 MI W OF IH 45	30234	095295	29.80800	-96.08000	30.390974	-95.492288	30235	95695
212	FM 830	5.00 MI W OF IH 45	30248	095339	29.80900	-96.08000	30.410959	-95.561942	30247	95737
213	FM 830	3.90 MI W OF IH 45	30246	095332	29.81000	-96.08000	30.406814	-95.544118	30244	95726
214	FM 830	3.70 MI W OF IH 45	30244	095326	29.81100	-96.08000	30.406361	-95.542120	30244	95725
215	FM 2978	JCT HARRIS C/L	30081	095358	29.81200	-96.08000	30.134436	-95.596646	30081	95758
216	FM 2978	1.3 MI S OF FM 1488	30123	095348	29.81300	-96.08000	30.205779	-95.577965	30123	95747

MONTGOMERY Observations Report

ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
217	FM 2978	3.9 MI S OF FM 1488	30103	095359	29.81400	-96.08000	30.175356	-95.600695	30105	95760
218	FM 3083	0.01 MI NW OF FM 2090	30151	095198	29.81500	-96.08000	30.252180	-95.330123	30151	95598
219	FM 3083	3.2 MI SE OF SH 336	30167	095216	29.81600	-96.08000	30.276499	-95.358315	30166	95615
220	FM 3083	3.4 MI SE OF SH 336	30165	095213	29.81700	-96.08000	30.275319	-95.356677	30165	95614
221	FM 3083	1.30 MI E OF US 75	30209	095297	29.81800	-96.08000	30.349789	-95.453472	30210	95672
222	FM 3083	1.70 MI E OF US 75	30209	095292	29.81900	-96.08000	30.350006	-95.445648	30210	95667
223	SH-242	0.11 MI E OF FM 1485	30126	095162	29.82000	-96.08000	30.215981	-95.278050	30130	95567
224	SH-242	0.57 MI E OF FM 1485	30126	095155	29.82100	-96.08000	30.217131	-95.270913	30130	95563
225	SH-242	0.66 MI E OF FM 1485	30126	095154	29.82200	-96.08000	30.217141	-95.269337	30130	95562
226	SH-242	0.76 MI E OF FM 1485	30126	095152	29.82300	-96.08000	30.217147	-95.267763	30130	95561
227	SH-242	0.85 MI E OF FM 1485	30126	095150	29.82400	-96.08000	30.217176	-95.266254	30130	95560
228	SH-242	1.88 MI E OF FM 1485	30126	095148	29.82500	-96.08000	30.219592	-95.248989	30132	95549
229	SH-242	2.39 MI E OF FM 1485	30120	095125	29.82600	-96.08000	30.219904	-95.240797	30132	95544
230	SH 242	0.7 MI E OF IH 45	30124	095269	29.82700	-96.08000	30.207696	-95.449550	30125	95670
231	SH 242	3.4 MI E OF IH 45	30125	095235	29.82800	-96.08000	30.208480	-95.406077	30125	95644
232	SH 242	3.6 MI E OF IH 45	30126	095236	29.82900	-96.08000	30.211248	-95.396167	30127	95638
233	SH 242	4.3 MI E OF IH 45	30125	095245	29.83000	-96.08000	30.214856	-95.387066	30129	95632
234	SH 242	4.8 MI E OF IH 45	30121	095220	29.83100	-96.08000	30.216104	-95.378939	30130	95627
235	SH 242	3.0 MI E OF FM 1314	00000	000000	29.83200	-96.08000	30.213953	-95.308595	30128	95585
236	SH 242	0.8 MI S OF FM 1488	00000	000000	29.83300	-96.08000	30.218018	-95.505694	30131	95703
237	SH 242	2.3 MI S OF FM 1488	00000	000000	29.83400	-96.08000	30.202921	-95.491274	30122	95695
238	SH 242	1.3 MI S OF FM 1488	00000	000000	29.83500	-96.08000	30.211852	-95.501973	30127	95701
239	SILVERDALE RD	0.40 MI W OF FM 1314	30000	100000	29.83600	-96.08000	30.300807	-95.438715	30180	95663
240	FOSTER RD	1.40 MI E OF SH 75	30000	100000	29.83700	-96.08000	30.295045	-95.433487	30177	95660

APPENDIX F

WALLER OBSERVATIONS REPORT

WALLER Observations Report

ID	StructureID	Checked	Observations
1	122370005004020	c	*moved to DGN position
2	122370005004021	c	*moved to DGN position
3	122370005004099	c	*moved to DGN position
4	122370005004100	c	*moved to DGN position
5	122370005004153	E	#*moved to DGN position [originally no coordinates] flagged location a good probability
6	122370005005022	c	*moved to DGN position
7	122370005005023	c	*moved to DGN position
8	122370005005024	c	*moved to DGN position
9	122370005005025	c	*moved to DGN position
10	122370011411050	c	*moved to DGN position
11	122370011411092	c	*moved to DGN position
12	122370011411093	c	*moved to DGN position
13	122370011411094	c	*moved to DGN position
14	122370011411116	c	*moved to DGN position
15	122370011411117	c	*moved to DGN position
16	122370011411126	c	*moved to DGN position
17	122370011411127	c	*moved to DGN position
18	122370011411128	c	*moved to DGN position
19	122370011411129	c	*moved to DGN position (DGN symbol may be flipped)
20	122370011411154	E	*moved to DGN position [originally no coordinates] flagged
21	122370011411155	E	*moved to DGN position [originally no coordinates] flagged
22	122370011411156	E	*moved to DGN position [originally no coordinates] flagged brg symbol missing
23	122370011411157	E	*moved to DGN position [originally no coordinates] flagged
24	122370011411158	E	*moved to DGN position [originally no coordinates] flagged
25	122370011411159	E	*moved to DGN position [originally no coordinates] flagged
26	122370011411160	E	*moved to DGN position [originally no coordinates] flagged
27	122370011411161	E	*moved to DGN position [no brg symbol & orig no coor] flagged
28	122370027104034	c	*moved to DGN position
29	122370027104035	c	*moved to DGN position
30	122370027104036	c	*moved to DGN position
31	122370027104037	c	*moved to DGN position
32	122370027104038	c	*moved to DGN position
33	122370027104039	c	*moved to DGN position
34	122370027104040	c	*moved to DGN position
35	122370027104041	c	*moved to DGN position
36	122370027104042	c	*moved to DGN position

WALLER Observations Report

ID	StructureID	Checked	Observations
37	122370027104043	c	*moved to DGN position
38	122370027104252	c	*moved to DGN position
39	122370027104253	c	*moved to DGN position
40	122370027104254	c	*moved to DGN position
41	122370027104255	c	*moved to DGN position
42	122370027104256	c	*moved to DGN position
43	122370027104257	c	*moved to DGN position
44	122370027104258	c	*moved to DGN position
45	122370027104259	c	*moved to DGN position
46	122370027104260	c	*moved to DGN position
47	122370027104261	c	*moved to DGN position
48	122370027104262	c	*moved to DGN position
49	122370027104263	c	*moved to DGN position
50	122370027104264	c	*moved to DGN position
51	122370027104265	c	*moved to DGN position
52	122370027104266	c	*moved to DGN position
53	122370027104267	c	*moved to DGN position
54	122370027104268	c	*moved to DGN position
55	122370027104269	c	*moved to DGN position
56	122370027104270	c	*moved to DGN position
57	122370027104271	c	*moved to DGN position
58	122370027104279	c	*moved to DGN position
59	122370027104280	c	*moved to DGN position
60	122370027104281	c	*moved to DGN position
61	122370027104282	c	*moved to DGN position
62	122370027104283	c	*moved to DGN position
63	122370027104284	c	*moved to DGN position
64	122370027104285	c	*moved to DGN position
65	122370027104434	c	*moved to DGN position
66	122370027109033	c	*moved to DGN position
67	122370027109501	c	*moved to DGN position
68	122370027109502	c	*moved to DGN position
69	122370027109503	E	*moved to DGN position [missing brg symbol] flagged
70	122370040902009	c	*moved to DGN position
71	122370040903011	c	*moved to DGN position
72	122370052301021	c	*moved to DGN position

WALLER Observations Report

ID	StructureID	Checked	Observations
73	122370052302001	E	*moved to DGN position [missing brg symbol] flagged
74	122370052302004	c	*moved to DGN position
75	122370052302017	c	*moved to DGN position
76	122370052302018	E	*moved to DGN position [missing brg symbol] flagged
77	122370052304010	E	*moved to DGN position [missing brg symbol] flagged
78	122370052304022	E	*moved to DGN position [missing brg symbol] flagged
79	122370052304023	c	*moved to DGN position
80	122370052304024	c	*moved to DGN position
81	122370052304026	c	*moved to DGN position
82	122370052702017	c	*moved to DGN position
83	122370052702018	c	*moved to DGN position
84	122370052702021	c	*moved to DGN position
85	122370052702022	c	*moved to DGN position
86	122370054301016	c	*moved to DGN position
87	122370054301021	c	*moved to DGN position
88	122370054301025	E	*moved to DGN position [missing brg symbol] flagged
89	122370054301026	c	*moved to DGN position
90	122370054301027	c	*moved to DGN position
91	122370054301028	E	#*moved to DGN position [no brg & blv symbol & orig no coor] flagged moved to location in column 9-location
92	122370054301029	E	#*moved to DGN position [no brg & blv symbol & orig no coor] flagged moved to location in column 9-location
93	122370054301030	c	*moved to DGN position
94	122370094402009	c	*moved to DGN position
95	122370141801009	c	*moved to DGN position
96	122370168701001	E	*moved to DGN position [originally near 0409-03-011] flagged
97	122370168702002	c	*moved to DGN position
98	122370174501001	c	*moved to DGN position
99	122370174501003	c	*moved to DGN position
100	122370304702001	c	*moved to DGN position
101	122370304702002	c	*moved to DGN position [missing brg symbol] flagged
102	122370304702003	c	*moved to DGN position
103	122370344501001	c	*moved to DGN position
104	122370344501002	c	*moved to DGN position
105	122370344501003	E	*moved to DGN position [originally no coordinates] flagged

WALLER Observations Report

ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
1	SH 6 SB	7.20 MI N OF US 290	30131	096034	30.21833	-96.05667	30.218239	-96.05672	30131	96434
2	SH 6 NB	5.00 MI N OF US 290	30112	096037	30.18667	-96.06167	30.186716	-96.062538	30112	96438
3	SH 6 NB	7.20 MI N OF US 290	30131	096034	30.21833	-96.05667	30.2182	-96.056607	30131	96434
4	SH 6 SB	5.00 MI N OF US 290	30112	096037	30.18667	-96.06167	30.186728	-96.062665	30112	96438
5	SH 6 CONNECTOR	1.80 MI W OF FM 1488	00001	000001	29.74000	-95.30000	30.114433	-96.076255	30069	96446
6	US 290 BU	0.50 MI W OF FM 359	30053	096028	30.08833	-96.04667	30.086406	-96.046757	30052	96428
7	US 290	2.40 MI W OF FM 362	30041	095585	30.06833	-95.97500	30.067624	-95.973102	30041	95984
8	US 290	1.00 MI W OF FM 362	30038	095572	30.06333	-95.95333	30.062288	-95.950867	30037	95971
9	US 290	0.01 MI E OF FM 362	30035	095559	30.05833	-95.93167	30.058027	-95.933268	30035	95960
10	US 290	4.00 MI E OF BRAZOS RI	30076	096073	30.12667	-96.12167	30.125687	-96.122361	30075	96473
11	US 290 WB	0.65 MI E OF BRAZOS RI	30078	096105	30.13000	-96.17500	30.12962	-96.176724	30078	96506
12	US 290 WB	1.60 MI E OF BRAZOS RI	30078	096096	30.13000	-96.16000	30.129861	-96.161346	30078	96497
13	US 290 WB	1.90 MI E OF BRAZOS RI	30078	096093	30.13000	-96.15500	30.12992	-96.155046	30078	96493
14	US 290 WB	6.70 MI W OF SH 6	30078	096113	30.13000	-96.18833	30.129351	-96.185486	30078	96511
15	US 290 EB	6.70 MI W OF SH 6	30078	096113	30.13000	-96.18833	30.129148	-96.185946	30077	96512
16	US 290 EB	0.65 MI E OF BRAZOS RI	30078	096105	30.13000	-96.17500	30.1295	-96.176776	30078	96506
17	US 290 EB	1.60 MI E OF BRAZOS RI	30078	096096	30.13000	-96.16000	30.12971	-96.161351	30078	96497
18	US 290 EB	1.90 MI E OF BRAZOS RI	30078	096093	30.13000	-96.15500	30.1298	-96.155035	30078	96493
19	SOUTHERN PACIFIC	0.40 MI W OF SH 6	30069	096048	30.11500	-96.08000	30.115279	-96.081153	30069	96449
20	US 290 WB	1.80 MI W OF FM 1488	00001	000001	29.74100	-95.30000	30.114009	-96.075564	30068	96445
21	US 290 EB	1.80 MI W OF FM 1488	00001	000001	29.74200	-95.30000	30.113904	-96.075908	30068	96446
22	US 290	0.60 MI E OF SH 6	00001	000001	29.74300	-95.30000	30.112368	-96.064367	30067	96439
23	US 290 WB	0.45 MI W OF FM 1488	00001	000001	29.74400	-95.30000	30.111031	-96.053689	30067	96432
24	US 290 EB	0.45 MI W OF FM 1488	00001	000001	29.74500	-95.30000	30.110919	-96.053742	30067	96432
25	US 290 WB	1.80 MI E OF SH 6	00001	000001	29.74600	-95.30000	30.10656	-96.047586	30064	96429
26	US 290 EB	1.80 MI E OF SH 6	00001	000001	29.74700	-95.30000	30.106431	-96.047735	30064	96429
27	US 290	0.10 MI E OF FM 1488	00001	000001	29.74800	-95.30000	30.105091	-96.04654	30063	96428
28	US 90 WB	1.00 MI W OF FM 1489	29469	095592	29.78167	-95.98667	29.78288	-95.986959	29470	95992
29	IH 10 WB	2.10 MI E OF BRAZOS RI	29469	095593	29.78167	-95.98833	29.778709	-96.004279	29467	96403
30	IH 10 WB	1.85 MI E OF BRAZOS RI	29467	096003	29.77833	-96.00500	29.777889	-96.007716	29467	96405
31	IH 10 WB	1.60 MI E OF BRAZOS RI	29466	096004	29.77667	-96.00667	29.77706	-96.011146	29466	96407
32	IH 10 WB	1.30 MI E OF BRAZOS RI	29466	096006	29.77667	-96.01000	29.775876	-96.016028	29466	96410
33	IH 10 WB	1.10 MI E OF BRAZOS RI	29465	096012	29.77500	-96.02000	29.774836	-96.020344	29465	96412
34	IH 10 WB	0.70 MI E OF BRAZOS RI	29464	096015	29.77333	-96.02500	29.773427	-96.026288	29464	96416
35	IH 10 WB	0.50 MI E OF BRAZOS RI	29464	096017	29.77333	-96.02833	29.77296	-96.028128	29464	96417
36	IH 10 WB	0.40 MI E OF BRAZOS RI	29463	096018	29.77167	-96.03000	29.77235	-96.030601	29463	96418

WALLER Observations Report

ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
37	IH 10 WB	0.30 MI E OF BRAZOS RI	29463	096019	29.77167	-96.03167	29.771906	-96.032539	29463	96420
38	IH 10 WB	5.30 MI E OF BRAZOS RI	29475	095587	29.79167	-95.97833	29.778798	-95.950985	29467	95971
39	IH 10 EB	5.30 MI E OF BRAZOS RI	29475	095587	29.79167	-95.97833	29.778619	-95.951115	29467	95971
40	FM 1489	4.30 MI E OF BRAZOS RI	29472	095580	29.78667	-95.96667	29.778619	-95.967313	29467	95980
41	IH 10 EB	0.70 MI W OF FM 1489	29471	095583	29.78500	-95.97167	29.780101	-95.978885	29468	95987
42	IH 10 EB FR RD	0.75 MI W OF FM 1489	29471	095583	29.78500	-95.97167	29.780432	-95.978848	29468	95987
43	IH 10 WB FR	3.50 MI E OF BRAZOS RI	29471	095585	29.78500	-95.97500	29.782074	-95.980505	29469	95988
44	IH 10 WB	3.50 MI E OF BRAZOS RI	29471	095585	29.78500	-95.97500	29.782282	-95.980394	29469	95988
45	DONIGAN RD	3.30 MI E OF BRAZOS RI	29470	095587	29.78333	-95.97833	29.782011	-95.984179	29469	95991
46	IH 10 WB	1.30 MI W OF FM 1489	29470	095588	29.78333	-95.98000	29.782097	-95.986545	29469	95992
47	IH 10 EB	2.10 MI E OF BRAZOS RI	29469	095593	29.78167	-95.98833	29.778587	-96.004242	29467	96403
48	IH 10 EB	1.85 MI E OF BRAZOS RI	29467	096003	29.77833	-96.00500	29.777761	-96.007642	29467	96405
49	IH 10 EB	1.60 MI E OF BRAZOS RI	29466	096004	29.77667	-96.00667	29.776925	-96.011117	29466	96407
50	IH 10 EB FR	1.40 MI E OF BRAZOS RI	29465	096010	29.77500	-96.01667	29.775491	-96.015892	29465	96410
51	IH 10 EB	1.30 MI E OF BRAZOS RI	29466	096006	29.77667	-96.01000	29.775745	-96.01599	29465	96410
52	IH 10 EB	1.10 MI E OF BRAZOS RI	29465	096012	29.77500	-96.02000	29.774698	-96.020322	29465	96412
53	IH 10 EB	0.70 MI E OF BRAZOS RI	29464	096015	29.77333	-96.02500	29.773274	-96.026241	29464	96416
54	IH 10 EB	0.60 MI E OF BRAZOS RI	29464	096017	29.77333	-96.02833	29.77282	-96.028113	29464	96417
55	IH 10 EB	0.40 MI E OF BRAZOS RI	29463	096018	29.77167	-96.03000	29.772236	-96.030571	29463	96418
56	IH 10 EB	0.30 MI E OF BRAZOS RI	29463	096019	29.77167	-96.03167	29.771773	-96.032517	29463	96420
57	IH 10 EB	5.30 MI W OF FM 359	29462	096022	29.77000	-96.03667	29.771108	-96.035132	29463	96421
58	IH 10 WB	1.00 MI E OF FM 359	29470	095572	29.78333	-95.95333	29.778664	-95.935539	29467	95961
59	IH 10 EB	1.00 MI E OF FM 359	29470	095572	29.78333	-95.95333	29.778549	-95.935556	29467	95961
60	WOODS RD	1.90 MI E OF FM 359	29466	095568	29.77667	-95.94667	29.777007	-95.920264	29466	95952
61	IGLOO RD	3.00 MI E OF FM 359	29468	095544	29.78000	-95.90667	29.776984	-95.901104	29466	95941
62	IH 10 WB	3.50 MI E OF FM 359	29470	095539	29.78333	-95.89833	29.777107	-95.893455	29466	95936
63	IH 10 EB	3.50 MI E OF FM 359	29470	095539	29.78333	-95.89833	29.776949	-95.893394	29466	95936
64	PEDERSON RD.	4.20 MI E OF FM 359	29475	095533	29.79167	-95.88833	29.777029	-95.880942	29466	95929
65	IH 10 WB	5.30 MI W OF FM 359	29462	096022	29.77000	-96.03667	29.771282	-96.035198	29463	96421
66	US 90	1.80 MI W OF JCT FM 359	29470	095588	29.78333	-95.98000	29.78466	-95.979033	29471	95987
67	US 90	0.87 MI E OF FM 359	29471	095561	29.78500	-95.93500	29.786007	-95.936402	29472	95962
68	US 90	3.00 MI E OF FM 359	29471	095540	29.78500	-95.90000	29.785836	-95.899748	29472	95940
69	US 90	6.20 MI E OF FM 359	29471	095507	29.78500	-95.84500	29.785578	-95.846951	29471	95908
70	SH 159	4.40 MI SW OF US 290 BUS	30026	096065	30.04333	-96.10833	30.044329	-96.109374	30027	96466
71	FM 1488	0.25 MI SW OF US 290	30062	096030	30.10333	-96.05000	30.102448	-96.051975	30061	96431
72	FM 1098	2.30 MI N OF US 290	30060	095598	30.10000	-95.99667	30.09666	-95.998011	30058	95999

WALLER Observations Report

ID	7 Fac Carried	9 Location	16 Lat.	17 Long.	Latitude	Longitude	New Long.	New Lat.	New Lat.	New Long.
73	FM 362	0.10 MI S OF US 290	30033	095561	30.05500	-95.93500	30.055789	-95.933662	30033	95960
74	FM 362	2.95 MI N OF FM 329	29575	095575	29.95833	-95.95833	29.959372	-95.958487	29576	95975
75	FM 362	1.10 MI S OF US 290	30025	095562	30.04167	-95.93667	30.042916	-95.936087	30026	95962
76	FM 362	4.00 MI S OF US 290	30002	095565	30.00333	-95.94167	30.001846	-95.942381	30001	95965
77	FM 1488	2.60 MI E OF FM 362	30100	095530	30.16667	-95.88333	30.167987	-95.881184	30101	95929
78	FM 1488	3.95 MI E OF FM 362	30106	095519	30.17667	-95.86500	30.179383	-95.86079	30108	95916
79	FM 1488	6.45 MI E OF FM 362	30113	095496	30.18833	-95.82667	30.188497	-95.825867	30113	95896
80	FM 1488	6.80 MI E OF FM 362	30113	095492	30.18833	-95.82000	30.18931	-95.820903	30114	95893
81	FM 1488	0.80 MI E OF FM 362	30089	095567	30.14833	-95.94500	30.148122	-95.944366	30089	95967
82	FM 1458	2.60 MI N OF IH 10	29484	096058	29.80667	-96.09667	29.809559	-96.09481	29486	96457
83	FM 1458	2.00 MI W OF FM 359	29520	096014	29.86667	-96.02333	29.835788	-96.023403	29501	96414
84	FM 1458	0.90 MI NW OF FM 359	29499	096004	29.83167	-96.00667	29.830476	-96.008136	29498	96405
85	FM 1458	3.20 MI W OF FM 359	29495	096022	29.82500	-96.03667	29.826743	-96.036431	29496	96422
86	FM 359	1.90 MI NW OF FM 362	29485	095586	29.80833	-95.97667	29.808533	-95.977801	29485	95987
87	FM 359	1.90 MI S OF IH 10	30113	095496	30.18833	-95.82667	29.752503	-95.945618	29452	95967
88	FM 359	0.25 MI NW OF FM 529	29552	096015	29.92000	-96.02500	29.921072	-96.024568	29553	96415
89	FM 359	3.20 MI N OF FM 1458	29520	096001	29.86667	-96.00167	29.86875	-96.001376	29521	96401
90	FM 359	2.95 MI N OF FM 529	29575	096024	29.95833	-96.04000	29.95708	-96.039867	29574	96424
91	FM 359 SB	1.00 MI NW OF SH 6	00000	000000	29.74800	-95.30000	30.110741	-96.032336	30066	96419
92	FM 359 NB	1.00 MI NW OF SH 6	00000	000000	29.74900	-95.30000	30.110668	-96.032252	30066	96419
93	FM 359	2.00 MI S OF FM 3346	30015	096021	30.02500	-96.03500	30.025531	-96.035987	30015	96422
94	FM 362	1.90 MI S OF FM 2979	30115	095560	30.19167	-95.93333	30.193313	-95.933468	30116	95960
95	FM 1489	3.50 MI S OF IH 10	29445	095587	29.74167	-95.97833	29.741042	-95.978267	29445	95987
96	FM 1736	1.70 MI N OF US 290	30061	096031	30.10167	-96.05167	30.145679	-96.117269	30087	96470
97	FM 1736	3.80 MI E OF SH 6	30098	096003	30.16333	-96.00500	30.164929	-96.00569	30099	96403
98	FM 1887	4.40 MI S OF FM 3346	29595	096052	29.99167	-96.08667	29.992937	-96.086297	29596	96452
99	FM 1887	7.30 MI S OF FM 3346	29570	096049	29.95000	-96.08167	29.950441	-96.081165	29570	96449
100	FM 529	3.70 MI W OF FM 359	29548	096050	29.91333	-96.08333	29.913012	-96.082875	29548	96450
101	FM 529	1.30 MI E OF FM 359	29550	096001	29.91667	-96.00167	29.917868	-96.00228	29551	96401
102	FM 529	5.50 MI W OF FM 359	29550	096070	29.91667	-96.11667	29.914982	-96.112712	29549	96468
103	FM 3346	0.04 MI E OF SH 159	30031	096062	30.05167	-96.10333	30.052521	-96.104501	30032	96463
104	FM 3346	1.10 MI E OF FM 1887	30032	096038	30.05333	-96.06333	30.054245	-96.064223	30033	96439
105	FM 3346	1.40 MI E OF FM 1887	32096	095200	32.16000	-95.33333	30.054412	-96.058569	30033	96435