

SAN JACINTO RIVER AUTHORITY

Groundwater Reduction Plan Program

SURVEY MONUMENTATION SYSTEM



LANDTECH CONSULTANTS, INC.

Civil Engineering • Land Surveying

1. Introduction

San Jacinto River Authority (SJRA) will be implementing a wholesale treated surface water supply system that will include a new water intake and pump station, surface water treatment plant, finished water storage and pumping facilities, and an extensive transmission system to deliver potable surface water within portions of Montgomery County. This program will include various design/construction packages and SJRA will engage engineering consultants to provide design for those packages. SJRA authorized Landtech Consultants, Inc., as Program Survey Consultant, to establish a system of primary survey control monuments throughout the area for property acquisition and design phase services of facilities and a transmission system. These primary control monuments will enable the various Groundwater Reduction Plan (GRP) Program design projects to utilize the same survey datum.

This work was completed by Landtech Consultants, Inc. under SJRA Contract No. 11-080, Work Order No. 1. The following is a report describing how the work was accomplished, and also provides documentation needed by users to best utilize the primary control network for their surveying projects.

1.1 Purpose and Intent

This report is designed to be a guide to provide information to land surveyors, engineers, and others who use survey data in conjunction with the survey work required to support property acquisition, facilities and transmission system design phase services. This system of monuments forms a network of benchmarks which are distributed over the entire facilities and transmission system area. They will also be useful after construction is completed as an aid to facility maintenance and future expansion.

The intent of this report is to ensure that consistent controls, procedures and formats are used by all parties performing survey related work for San Jacinto River Authority (SJRA). This will help ensure proper control and tie-ins of adjacent

projects and enable the data to be assembled into a single comprehensive survey database. Unless otherwise instructed by SJRA, **all surveys to be performed for the Groundwater Reduction Plan Program shall be made directly referenced to the primary survey control monumentation described herein as well as the Project Horizontal and Vertical Control Datum which it is referenced to.**

2. Survey Datum

The primary survey control monuments are referenced to a specific horizontal and vertical control datum which will be referred to herein as the Project Datum.

2.1 Project Horizontal Control Datum

The Project Horizontal Control Datum is referenced to the Texas Coordinate System of 1983, Central Zone (NAD83, CORS). The unit of measure is the U. S. Survey Foot. Coordinates for all control monuments are published herein as Latitude and Longitude values, as well as Northing and Easting values.

Northings and Eastings are provided in two formats: Grid and Surface. Grid coordinates are the State Plane Coordinate values which correspond directly to the published Latitude and Longitude. Grid coordinates are located “on the plane”, and the calculated distance between any two grid coordinates will typically be less than the actual measured distance between the two benchmarks which are located “on the surface”. For this reason, surface coordinates are also provided.

Surface coordinates are calculated by scaling the grid coordinates by a constant referred to herein as the Combined Factor, using the formula:

$$\text{Surface} = \text{Grid} / \text{Combined Factor.}$$

For the SJRA Groundwater Reduction Plan Program, the Combined Factor = 0.9999627395. Surface distances may also be converted to grid distances using the same Combined Factor.

Unless otherwise instructed by SJRA, **all surveys will be delivered and all mapping will be plotted referenced to the project Surface Coordinates.**

2.2 Project Vertical Control Datum

The Project Vertical Control Datum is referenced to the design elevation of the top of the Lake Conroe Dam as shown in Conroe Dam As-Built Drawing 6804-35 dated 5/1/1973 as provided by SJRA. The design elevation of the top of dam was 212.00 feet. An existing benchmark disk set flush in the top of concrete deck at the gauging station pier was found and held at an elevation of 212.00 feet, and all other primary survey control monument elevations are referenced to that benchmark and elevation.

2.3 Project Datum Statements

Unless otherwise instructed by SJRA, all surveys performed for the GRP Program should include on the face of the survey map(s) a Datum Statements which complies with the following:

1. All coordinates shown hereon are referenced to the Texas Coordinate System of 1983, Central Zone (NAD83, CORS), and the SJRA Groundwater Reduction Plan Project Horizontal Datum. All coordinates and distances have been scaled from their grid values to surface using a Combined Factor of 0.9999627395 and the formula: $\text{Surface} = \text{Grid} / \text{Combined Factor}$.
2. All elevations are referenced to the SJRA Groundwater Reduction Plan Project Vertical Control Datum. Project Benchmark: SJRA Benchmark No. 5, Elevation = 212.00 feet.

2.4 Relationship to Other Vertical Reference Datums

The Project Vertical Control Datum was also tied to other vertical reference datums which are being used by various entities within the project area. Those entities include the Texas Department of Transportation, the City of Conroe, FEMA, and The Woodlands. A table showing those relationships is included.

3. Survey of Primary Control Monuments

3.1 Setting of Survey Monuments

Primary Control Monuments were established in proximity to the proposed routes for transmission lines. Pairs of monuments, consisting of a control monument and an azimuth mark, were established at roughly two mile intervals. Single control monuments were also set between pairs for additional control. The control monuments were established far enough away from the proposed route to most likely survive construction, but close enough to be easily accessible.

Where existing control monuments were found near a preferred location, in good condition, and constructed in a manner likely to satisfy project requirements, they were surveyed and used as a part of the control monument system. Agencies whose monuments were utilized for primary control include SJRA, the City of Conroe, The Woodlands, and FEMA. If an existing control monument was not found at a location where a monument was needed, then a new monument was set.

Two types of control monuments were set. In developed areas, a 3-inch bronze disk with shank was anchored and cemented into a drilled hole in a substantial and solid concrete structure such as a storm sewer inlet or a headwall. In areas where no such structures were available, a 3-inch bronze disk was set on top of a 3-foot long by 8-inch diameter concrete with steel rebar reinforcement for added stability, and countersunk below natural ground surface to protect the mark from mowers.

An overall index map showing the entire system of primary control monuments is

provided in this report.

3.2 Horizontal Control Survey

All control monuments and their azimuth marks were surveyed using GPS. The GPS surveys were carried out in two steps.

First, ten monuments were selected and surveyed using Static GPS Procedures to obtain good positions relative to the National Geodetic Survey's GPS Continuously Operating Reference Stations (CORS). These CORS are the foundation for all survey control in the United States. This network of CORS and Static control stations was checked and a Least Squares Adjustment was performed. The results showed that all points had relative error ellipses of 2 centimeters or less at the 95% confidence level.

Second, those ten points were used as reference points for either additional Static GPS surveying or as GPS RTK Base Stations. Then RTK surveys were performed to establish the positions of the remaining points relative to the Base Stations with the use of a GPS RTK Rover Unit. All Static and RTK observations were done at least two times, using time separations that provided differing satellite geometry, and the positions were averaged. Any differences in repeat observations that exceeded 0.07 feet were rejected and re-observed. Final horizontal positions were calculated based on the means of the Static and RTK positions.

3.3 Vertical Control Survey

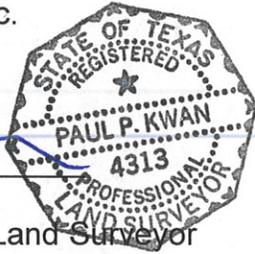
All control monuments and their azimuth marks were surveyed using closed level loops with a digital level/ barcode level rod electronic leveling system. SJRA Benchmark No. 5, which is located in the top of concrete deck of the gauging station, was held, and all other benchmark elevations are provided relative to it.

All level loops were checked and raw misclosures did not exceed 0.02 feet x the square root of miles leveled. All leveling data was then input into a Least Squares Adjustment and a final adjustment was performed.

This report is respectfully submitted in the 29th of April, 2011.

Landtech Consultants, Inc.

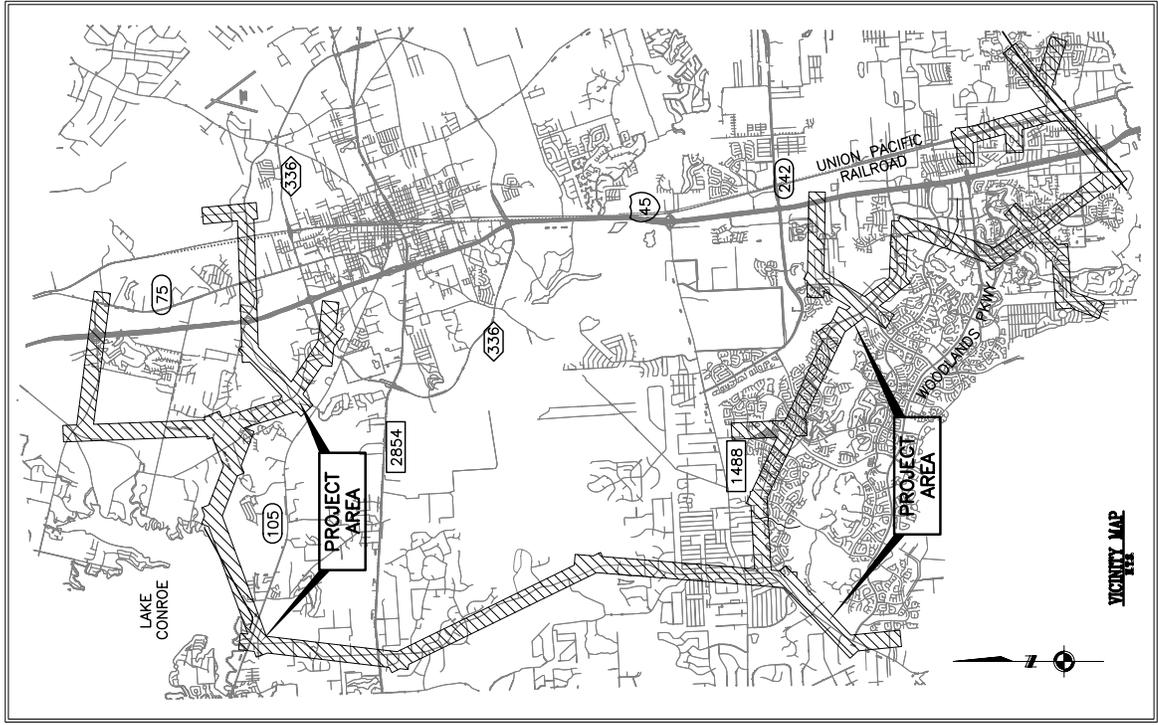
Paul P. Kwan



Paul P. Kwan
Registered Professional Land Surveyor
No. 4313

LCI Project No. 11-1-0009
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SAN JACINTO RIVER AUTHORITY GROUNDWATER REDUCTION PLAN PROGRAM SURVEY MONUMENTATION SYSTEM



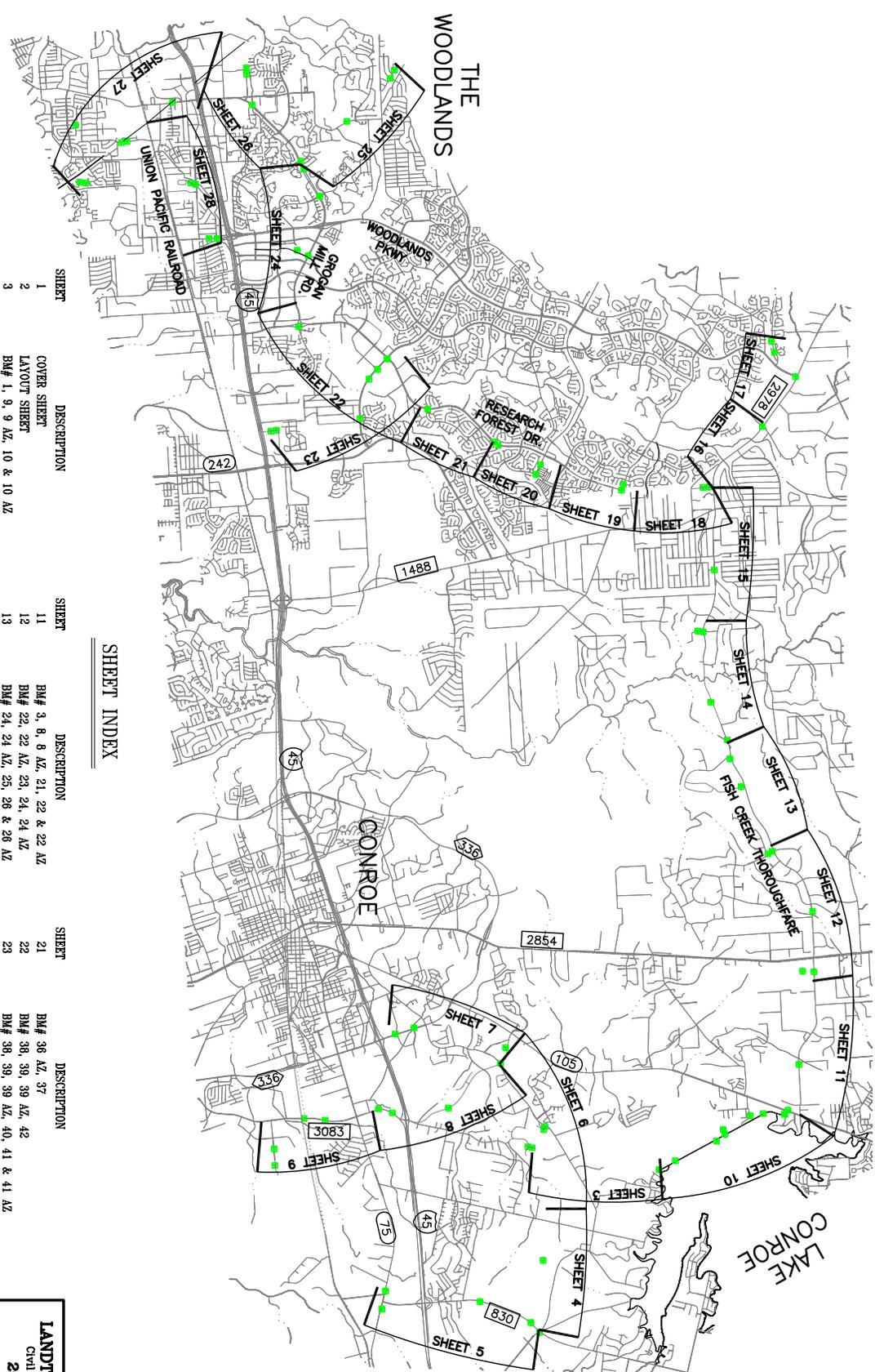
VICINITY MAP

INDEX OF DRAWINGS

SHEET	DESCRIPTION
1	COVER SHEET
2	LAYOUT SHEET
3	BM# 1, 9 AZ, 10 & 10 AZ
4	BM# 11, 12, 12 AZ
5	BM# 12, 12 AZ, 13, 14 & 14 AZ
6	BM# 10, 10 AZ, 15, 15 AZ
7	BM# 15, 15 AZ, 16, 16 AZ
8	BM# 15, 15 AZ, 17, 18 & 18 AZ
9	BM# 19, 19 AZ, 20 & 20 AZ
10	BM# 1, 1 AZ, 2, 3, 4, 5, 6, 7, 8, 8 AZ
11	BM# 3, 6, 8 AZ, 21, 22 & 22 AZ
12	BM# 22, 22 AZ, 23, 24, 24 AZ
13	BM# 24, 24 AZ, 25, 26 & 26 AZ
14	BM# 26, 26 AZ, 27, 28, 28 AZ
15	BM# 29, 30 & 30 AZ
16	BM# 31
17	BM# 32, 33, 33 AZ,
18	BM# 30, 30 AZ, 34, 34 AZ
19	BM# 34, 34 AZ
20	BM# 35, 35 AZ, 36 & 36 AZ
21	BM# 36 AZ, 37
22	BM# 38, 39, 39 AZ, 42
23	BM# 38, 39, 39 AZ, 40, 41 & 41 AZ
24	BM# 43, 43 AZ, 44, 45, 45 AZ
25	BM# 45, 45 AZ, 46, 47, 47 AZ
26	BM# 45, 46, 49, 49 AZ
27	BM# 50, 51, 51 AZ, 52, 53, 53 AZ
28	BM# 54, 54 AZ, 55 & 55 AZ

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APRIL, 2011



SHEET INDEX

SHEET	DESCRIPTION	SHEET	DESCRIPTION	SHEET	DESCRIPTION
1	COVER SHEET	11	BM# 3, 8, 8 AZ, 21, 22 & 22 AZ	21	BM# 36 AZ, 37
2	LAYOUT SHEET	12	BM# 22, 22 AZ, 23, 24, 24 AZ	22	BM# 38, 39, 39 AZ, 42
3	BM# 1, 9, 9 AZ, 10 & 10 AZ	13	BM# 24, 24 AZ, 25, 26 & 26 AZ	23	BM# 38, 39, 39 AZ, 40, 41 & 41 AZ
4	BM# 11, 12, 12 AZ	14	BM# 26, 26 AZ, 27, 28, 28 AZ	24	BM# 43, 43 AZ, 44, 45, 45 AZ
5	BM# 12, 12 AZ, 13, 14 & 14 AZ	15	BM# 29, 30 & 30 AZ	25	BM# 45, 45 AZ, 46, 47, 47 AZ
6	BM# 10, 10 AZ, 15, 15 AZ	16	BM# 31	26	BM# 45, 46, 49, 49 AZ
7	BM# 15, 15 AZ, 16, 16 AZ	17	BM# 32, 33, 33 AZ	27	BM# 50, 51, 51 AZ, 52, 53, 53 AZ
8	BM# 15, 15 AZ, 17, 18 & 18 AZ	18	BM# 30, 30 AZ, 34, 34 AZ	28	BM# 54, 54 AZ, 55 & 55 AZ
9	BM# 19, 19 AZ, 20 & 20 AZ	19	BM# 34, 34 AZ		
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- ESMT.
- RAILROAD
- INT. STATE HWY.
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- FARM TO MARKET RD.

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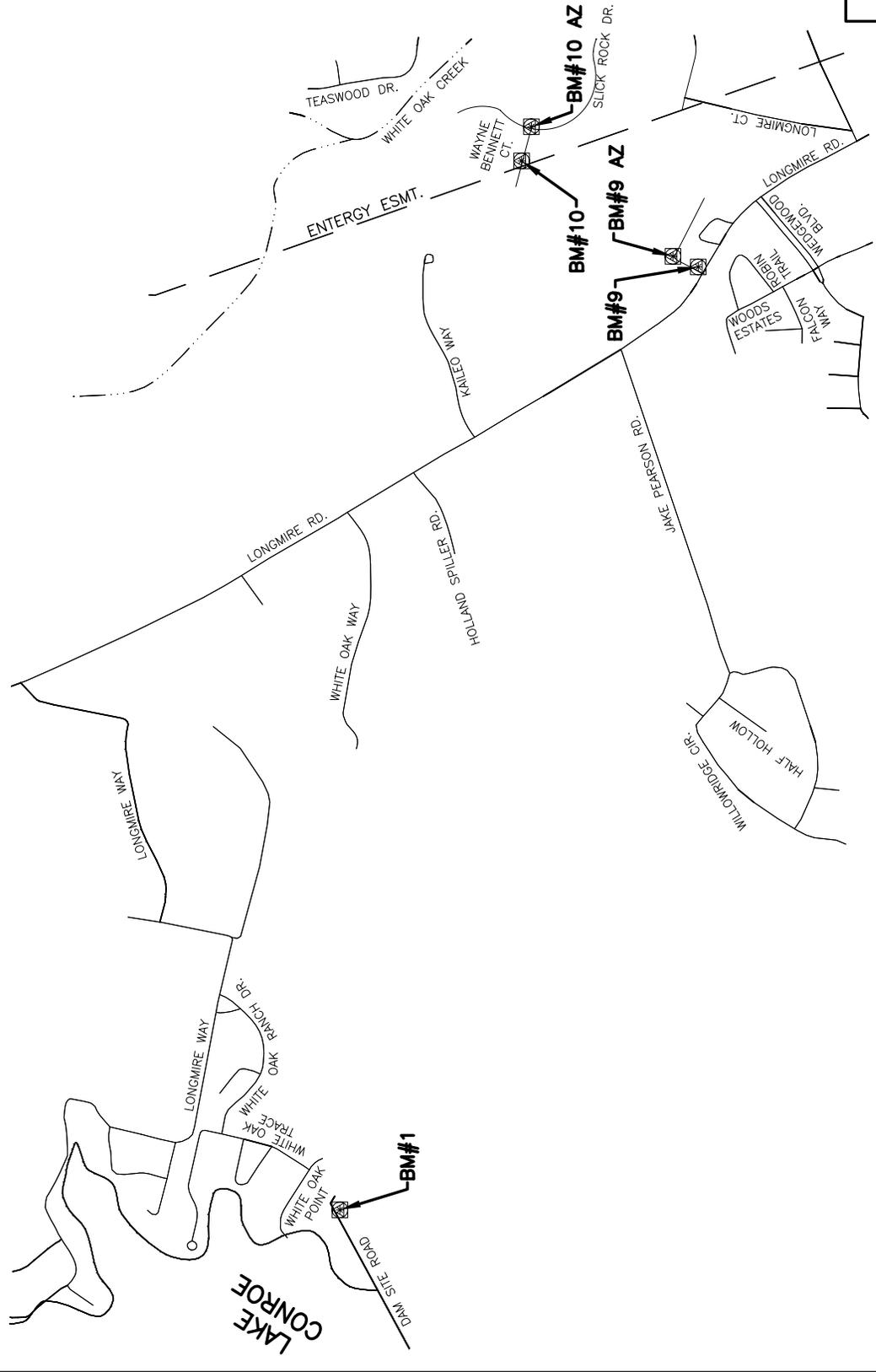
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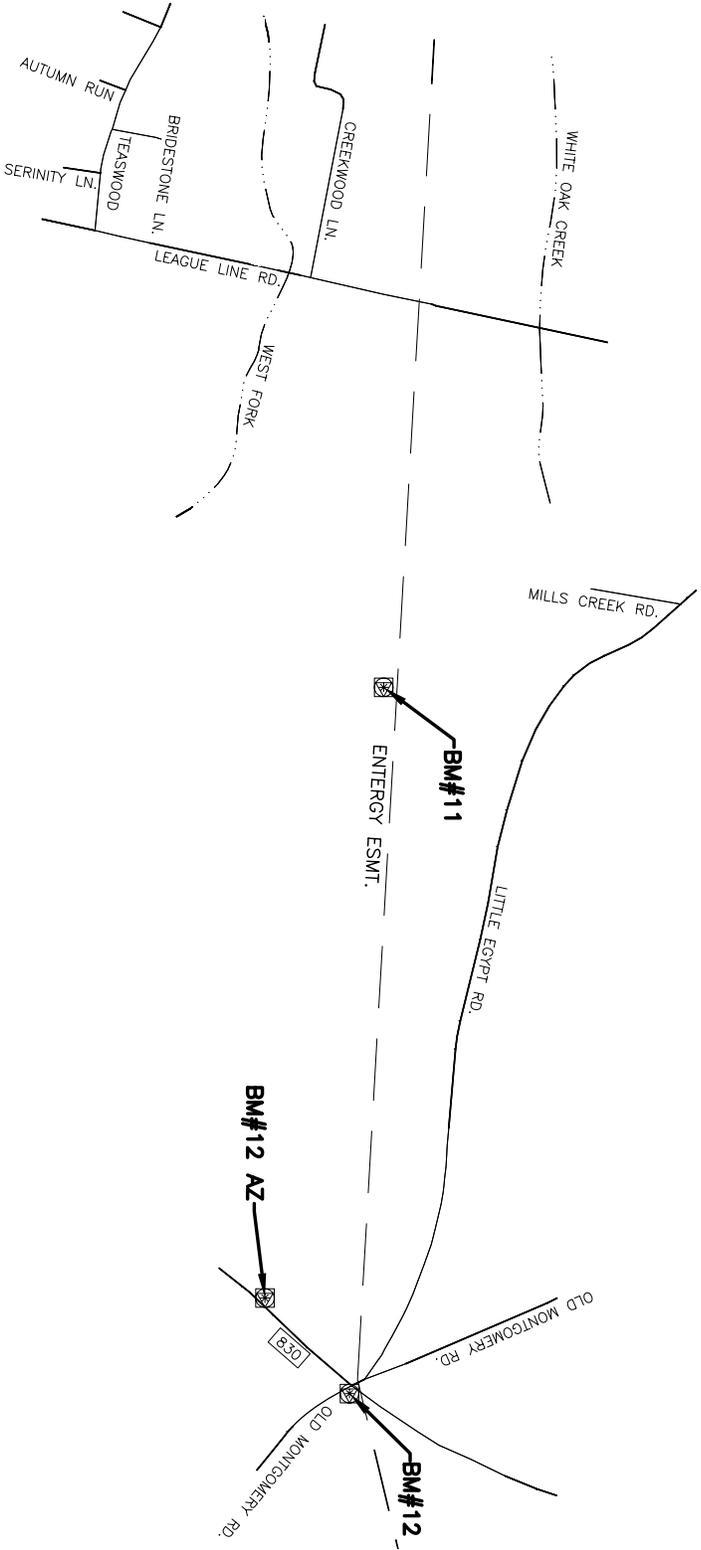
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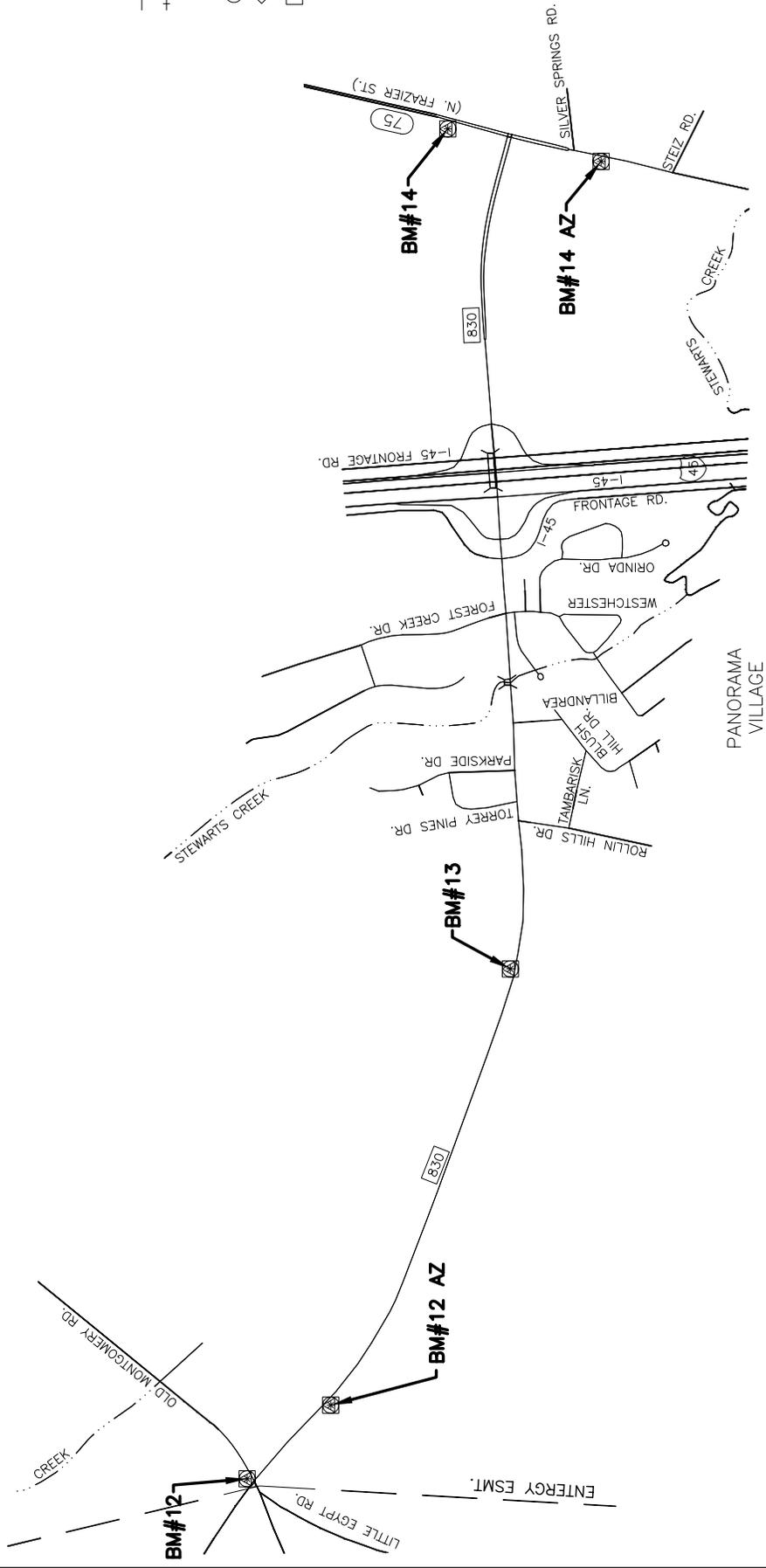
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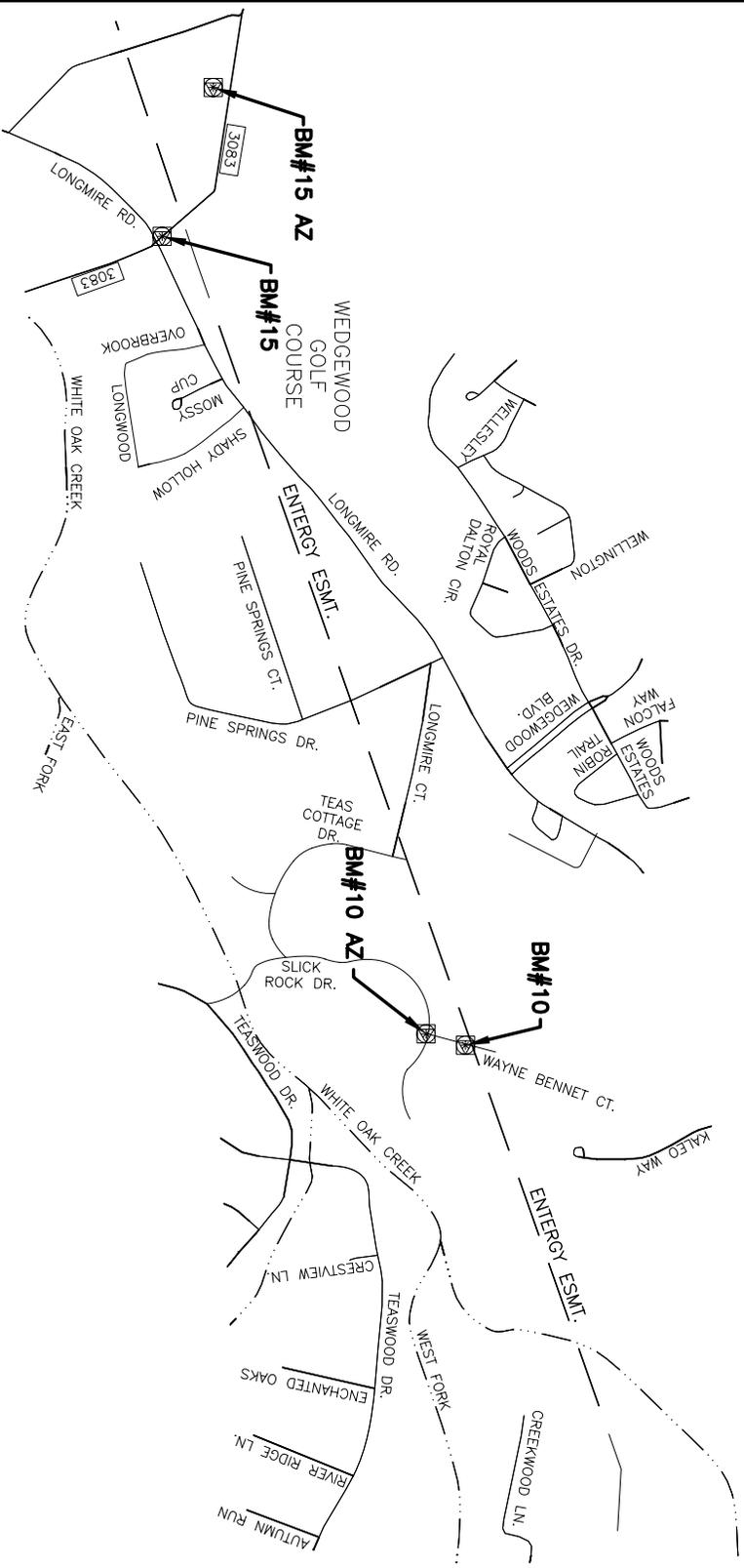
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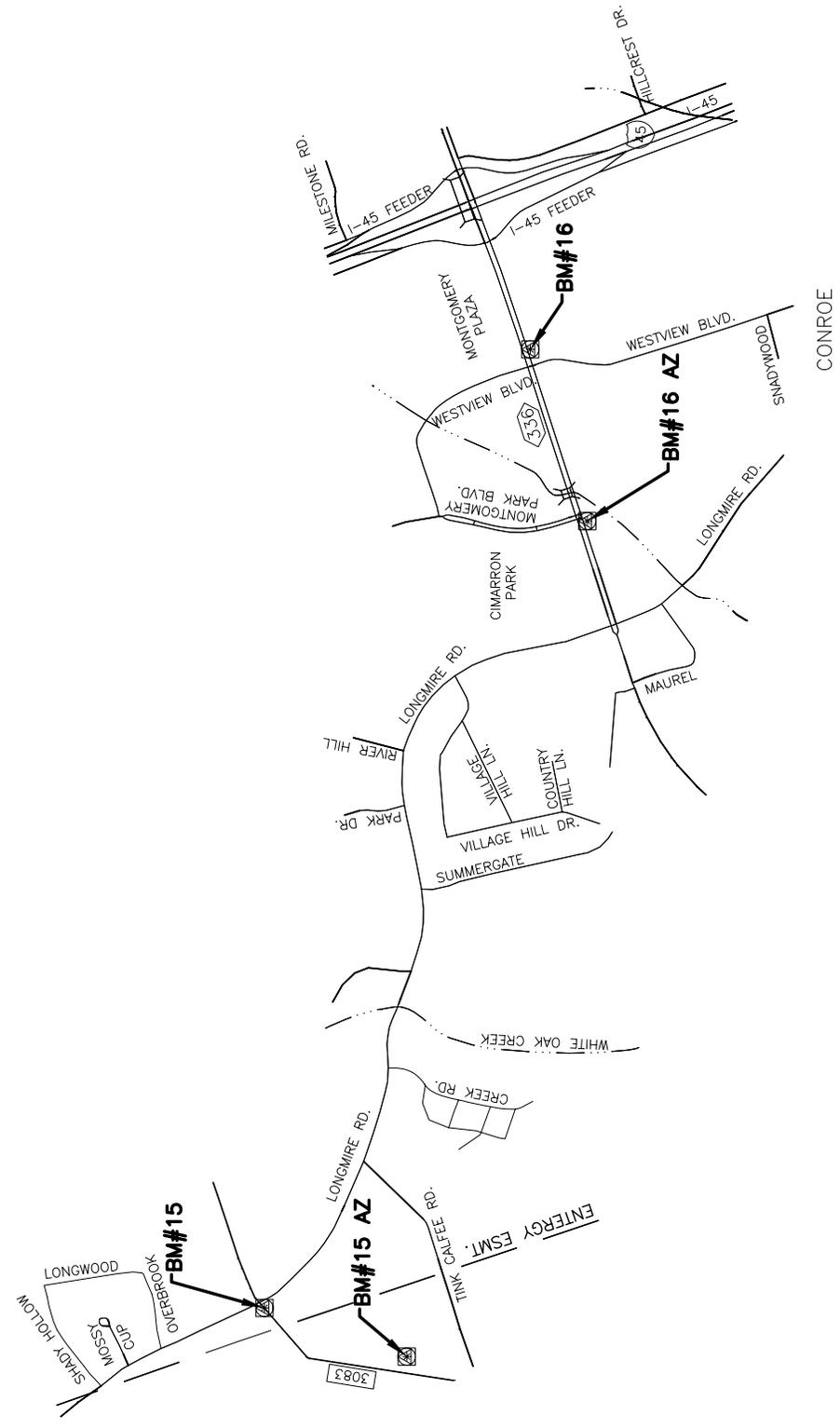
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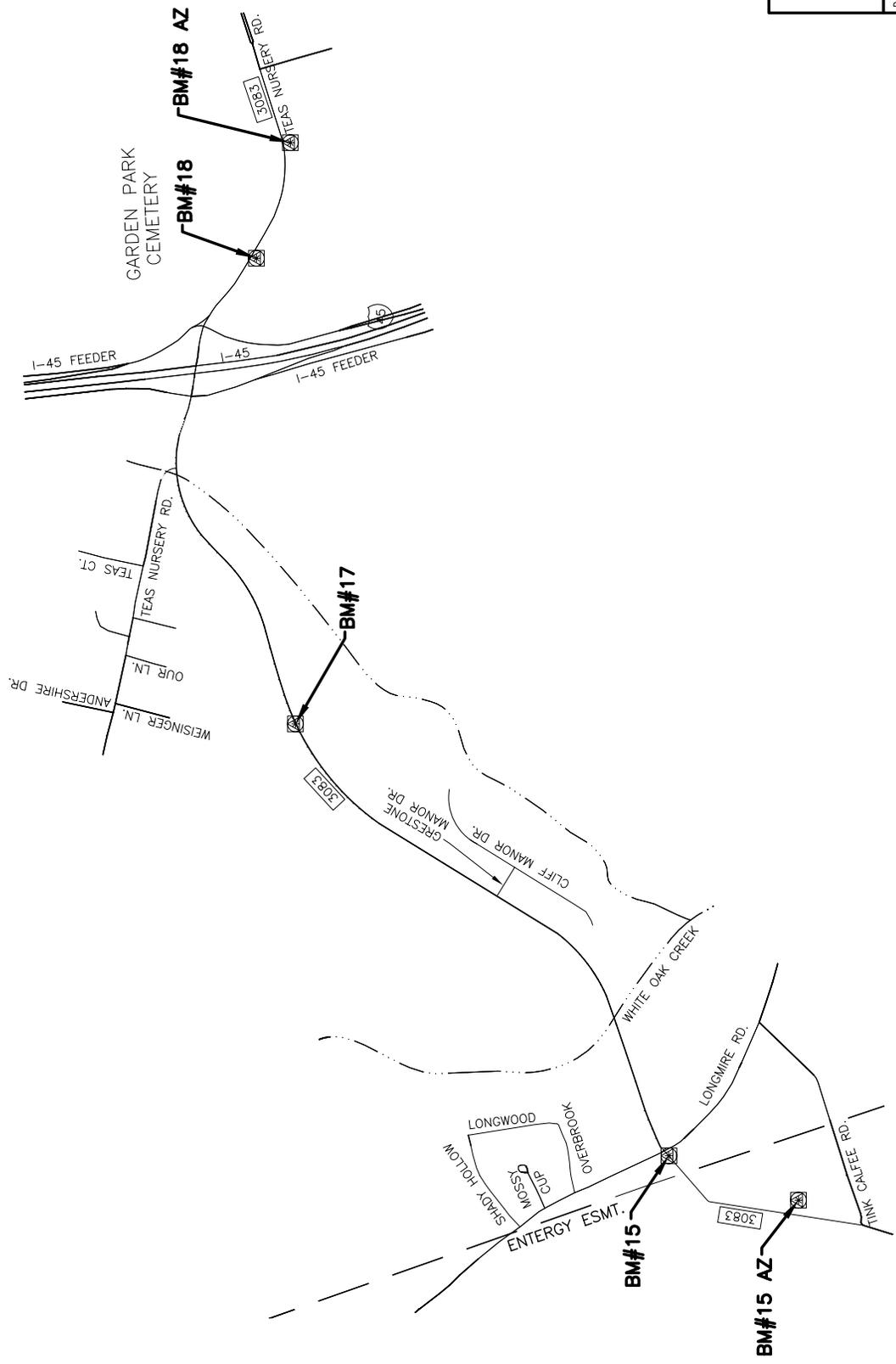
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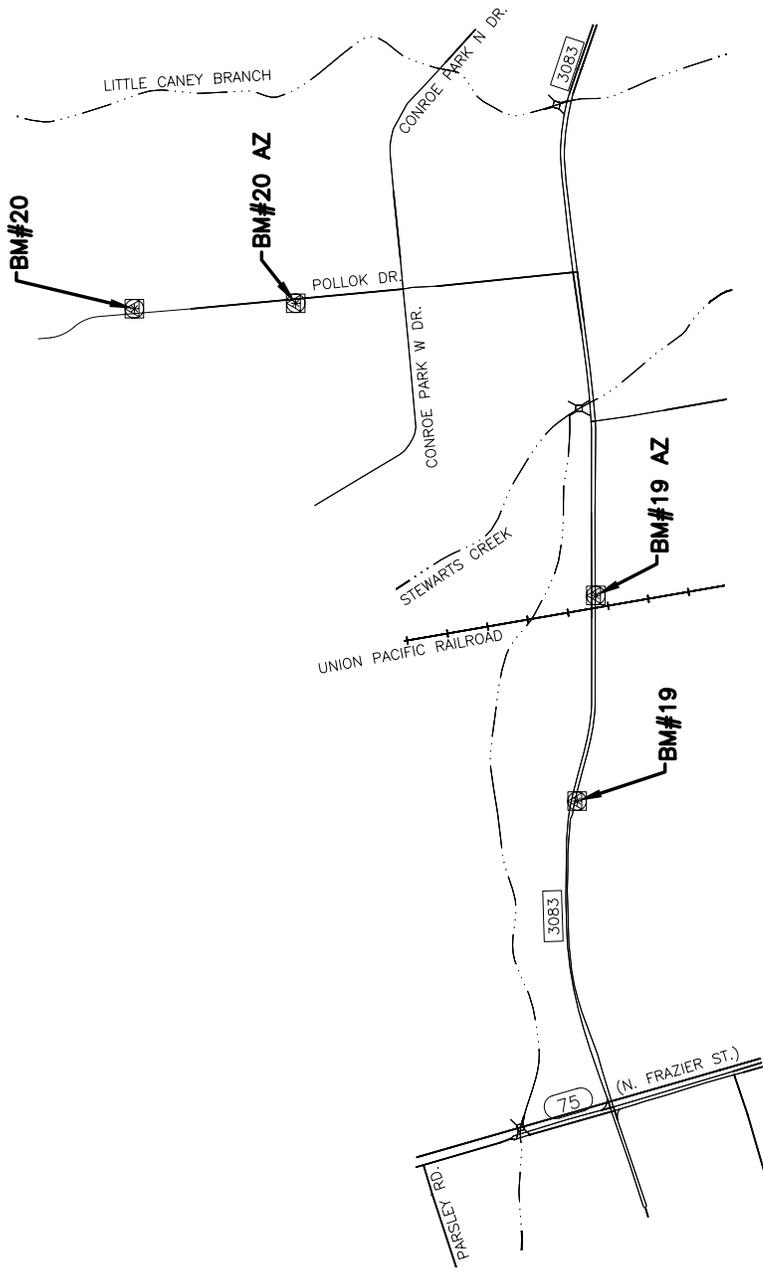
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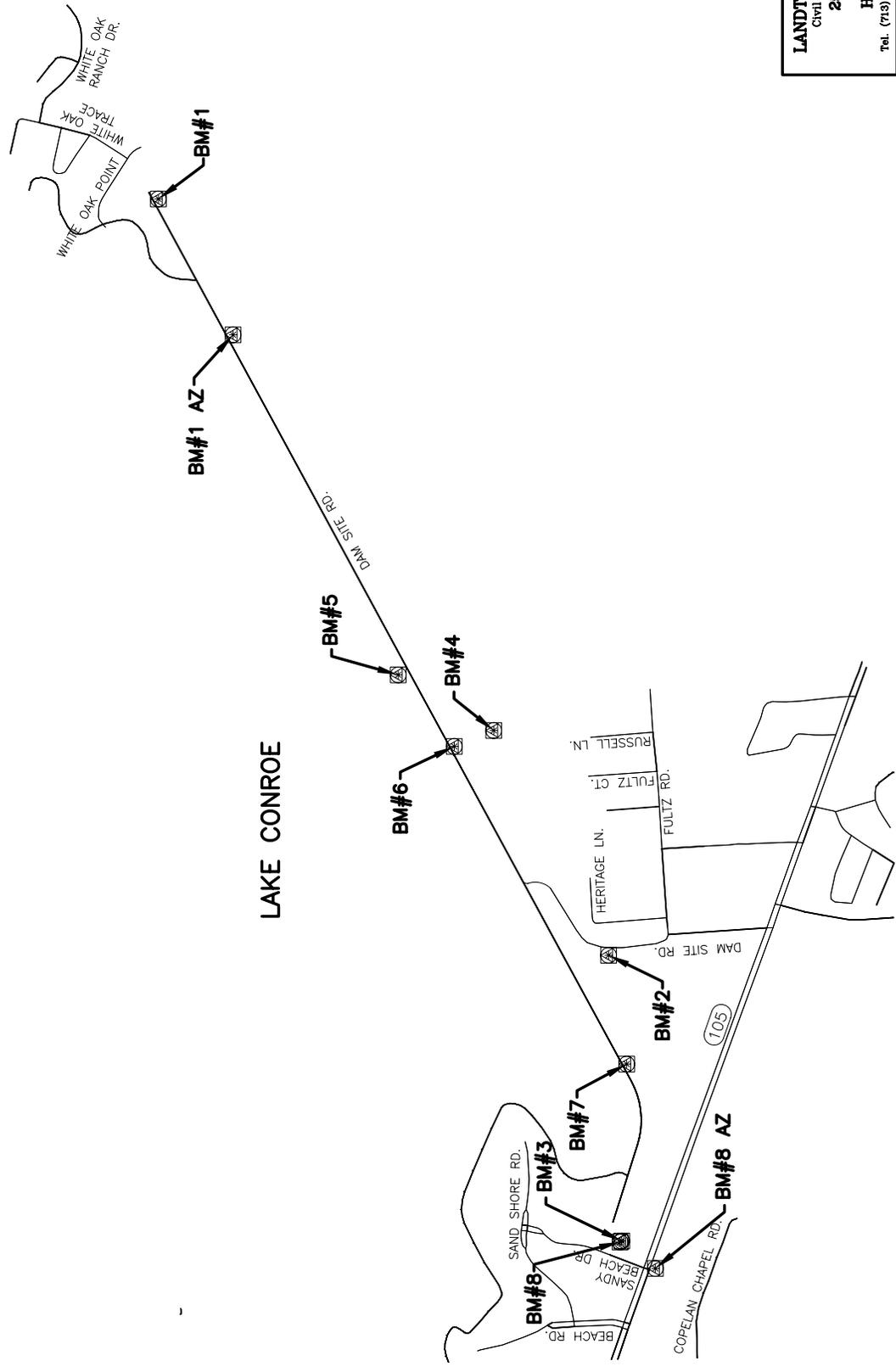
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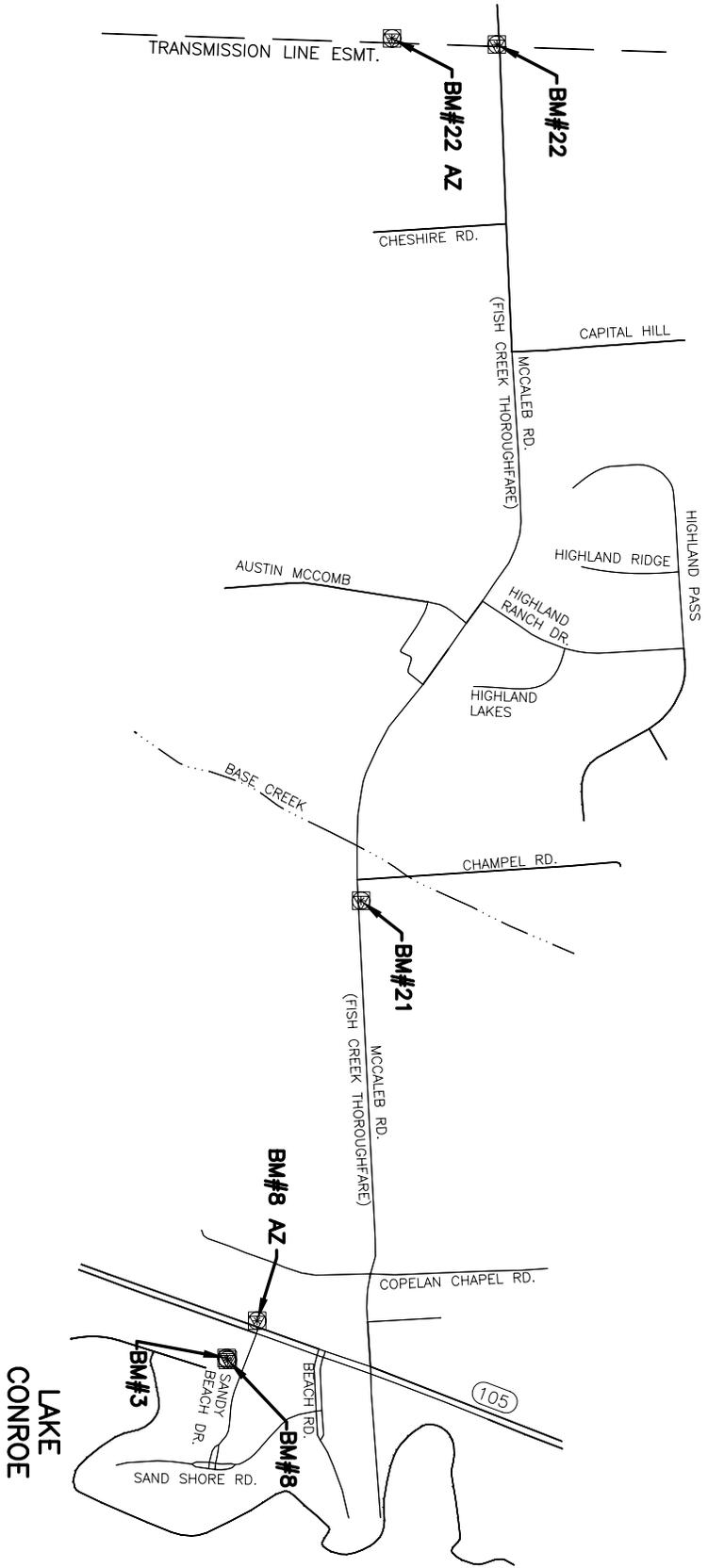
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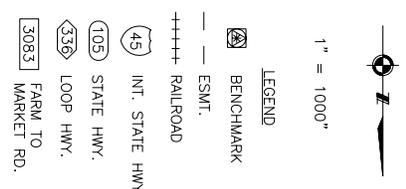
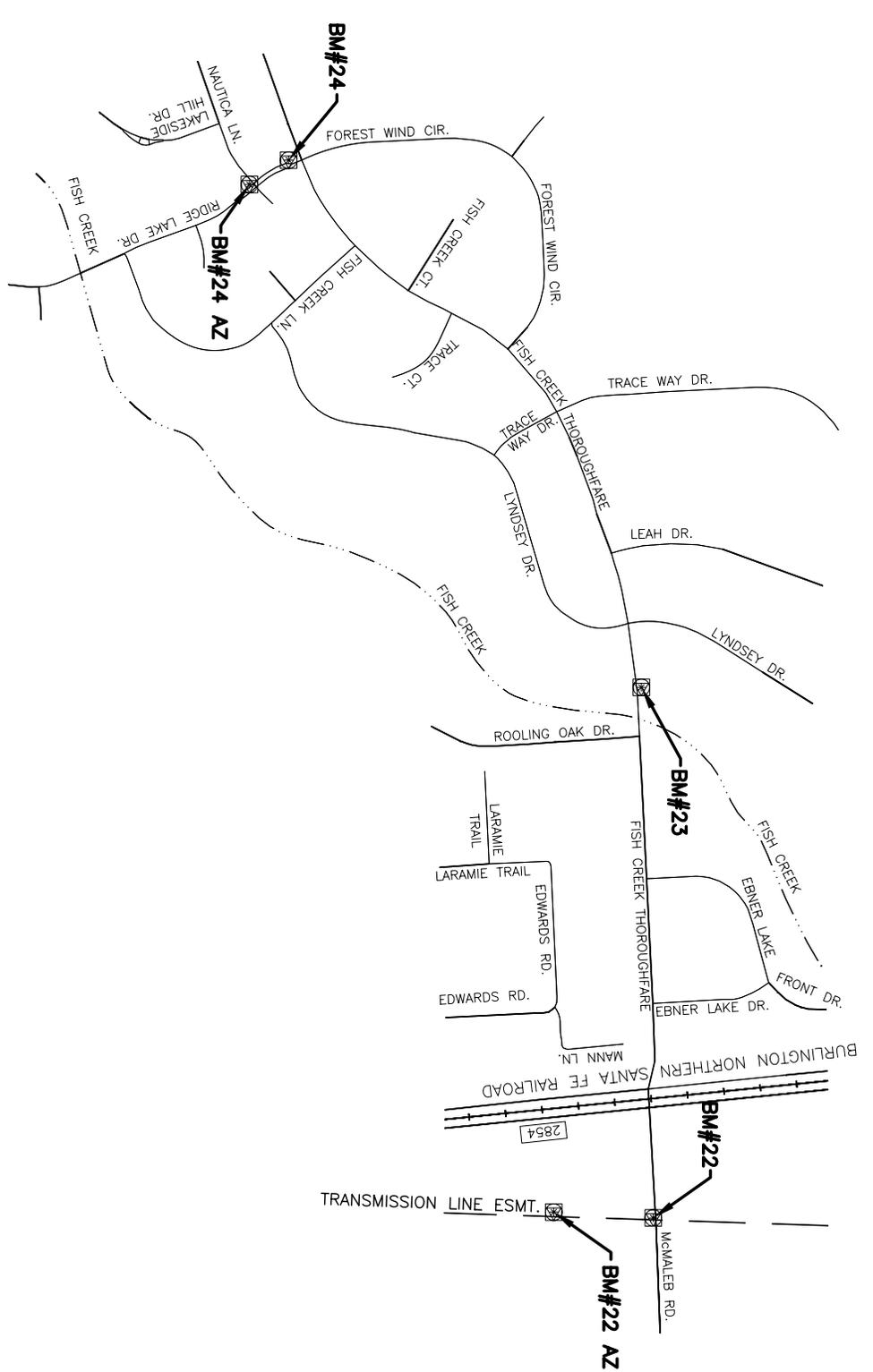
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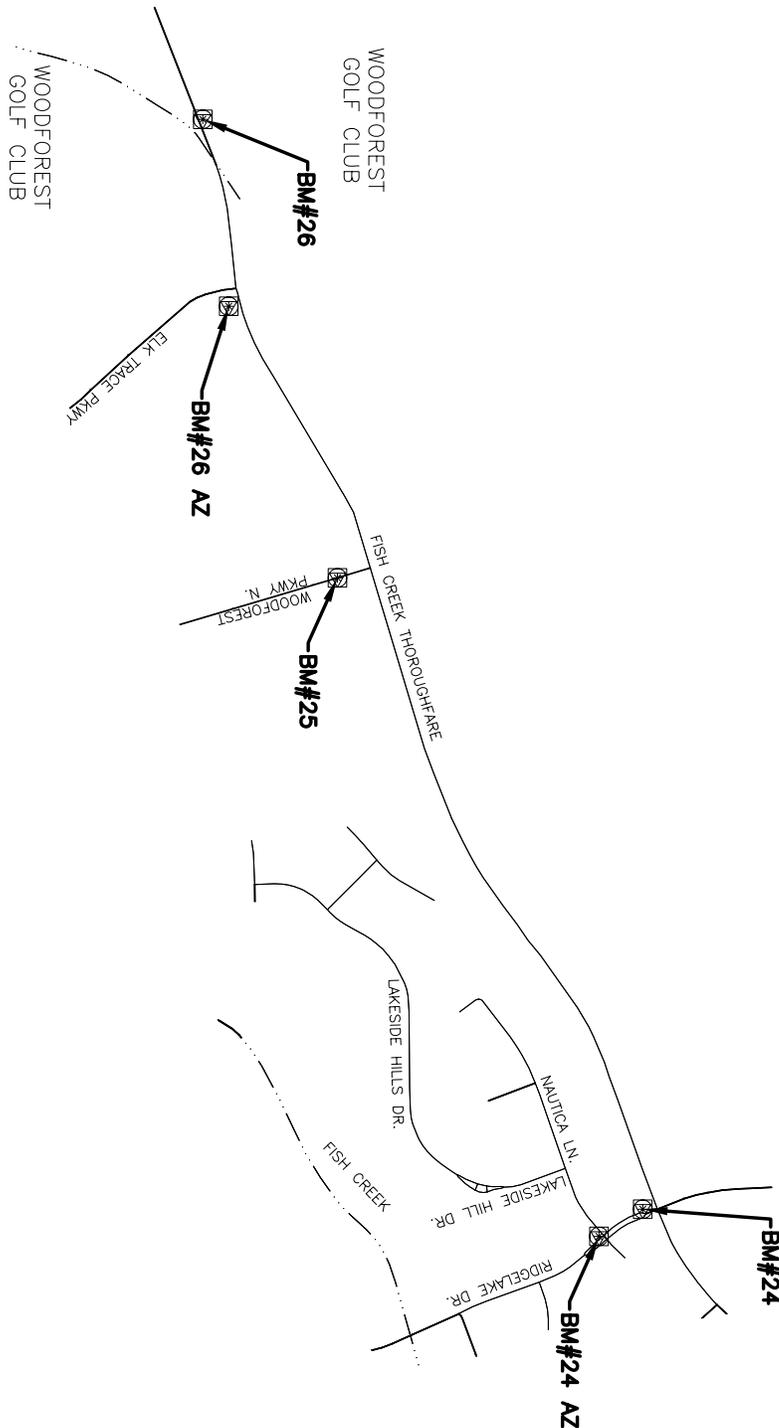
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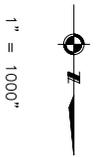
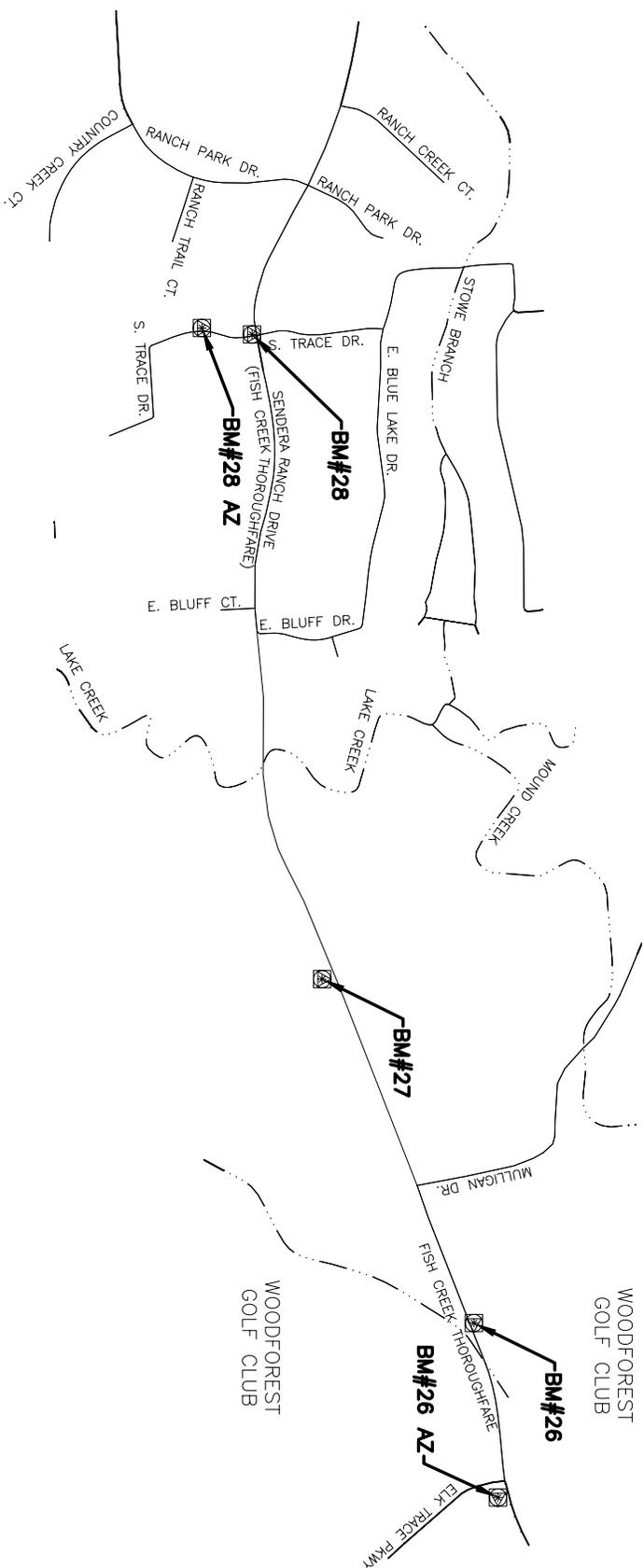


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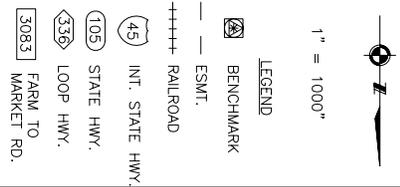
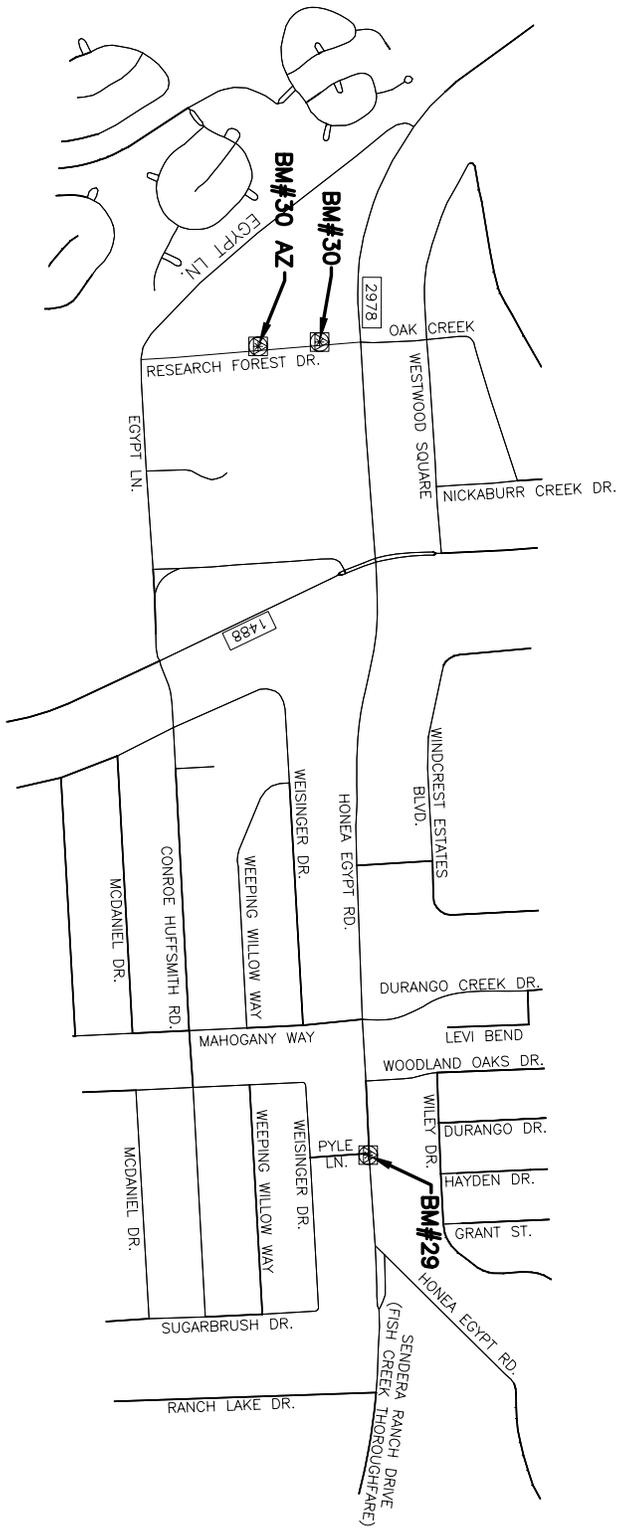
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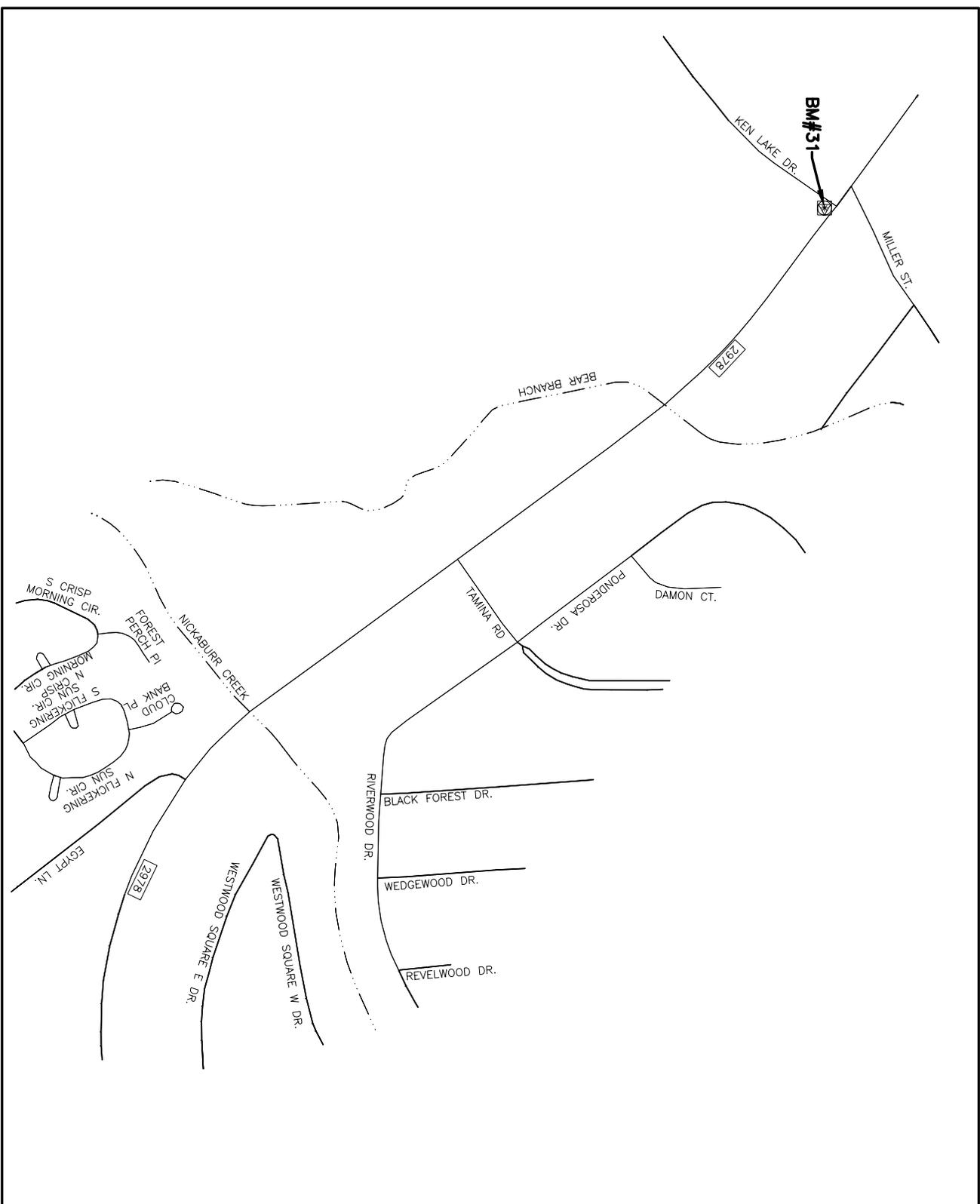
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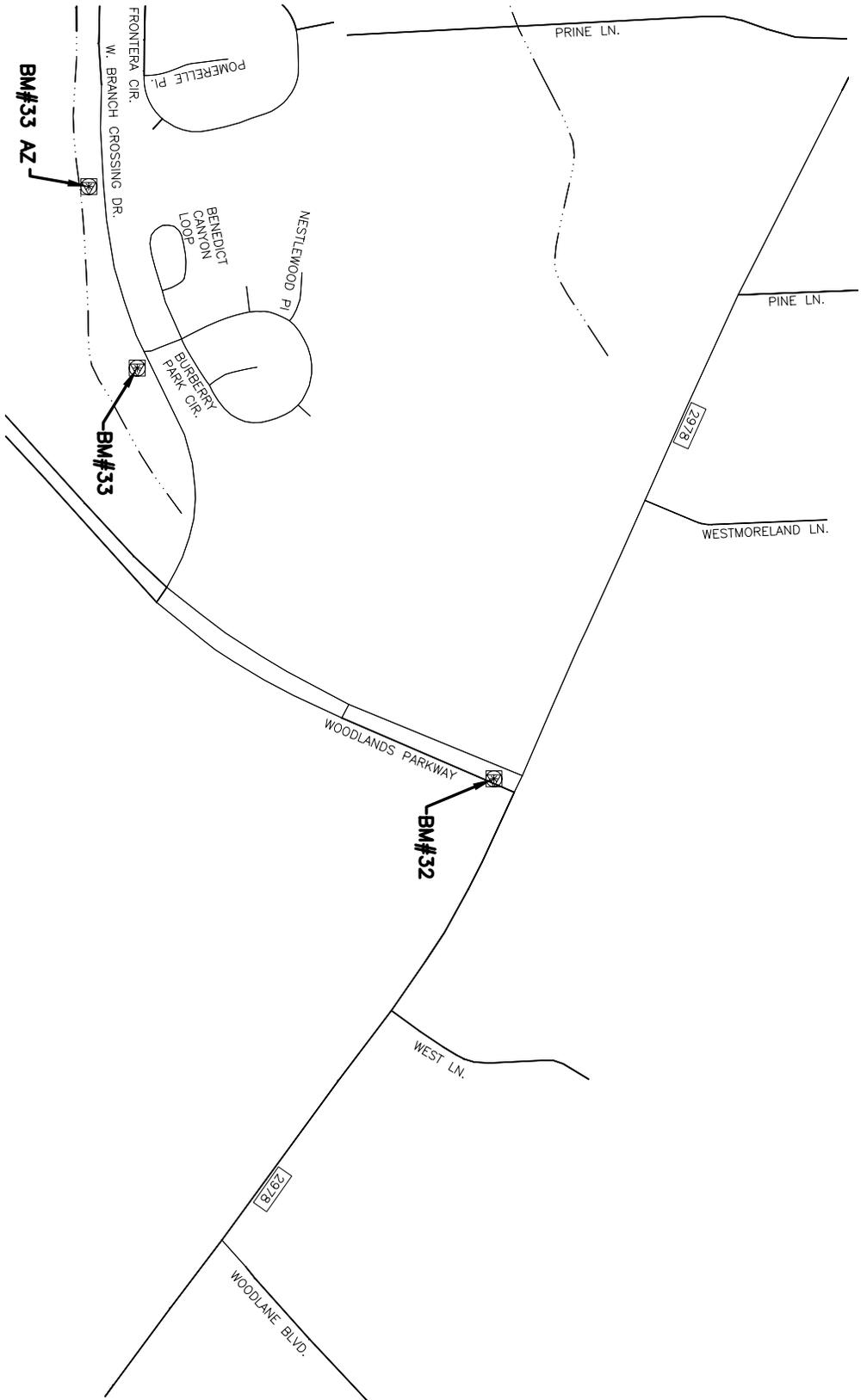
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DATE: Apr 2011
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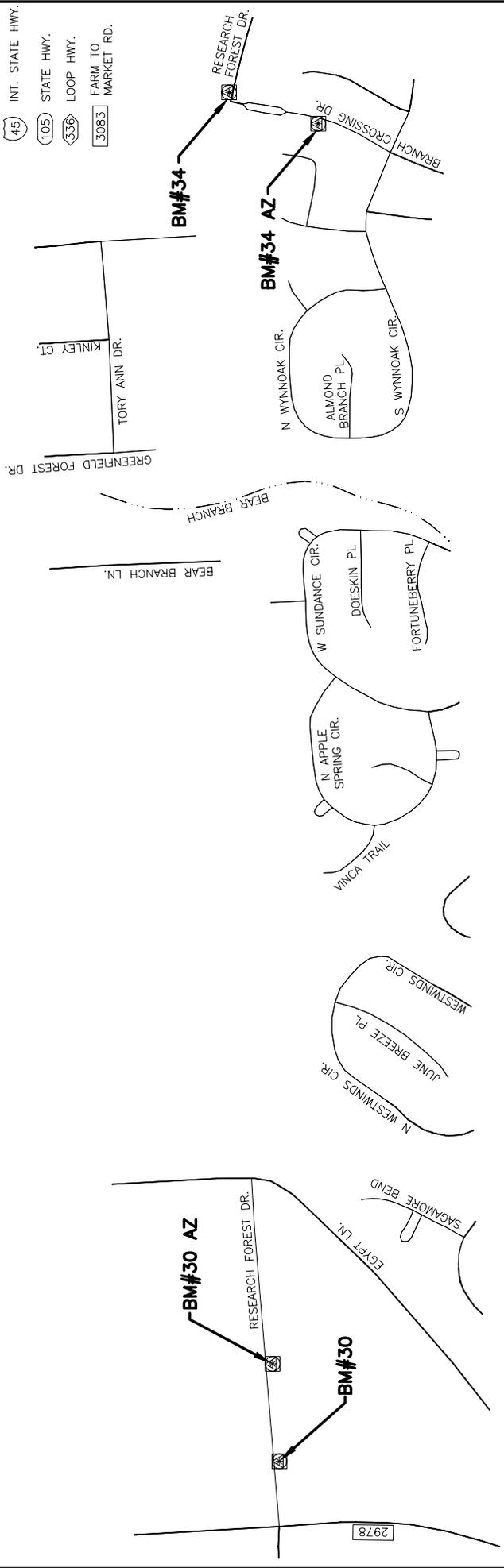
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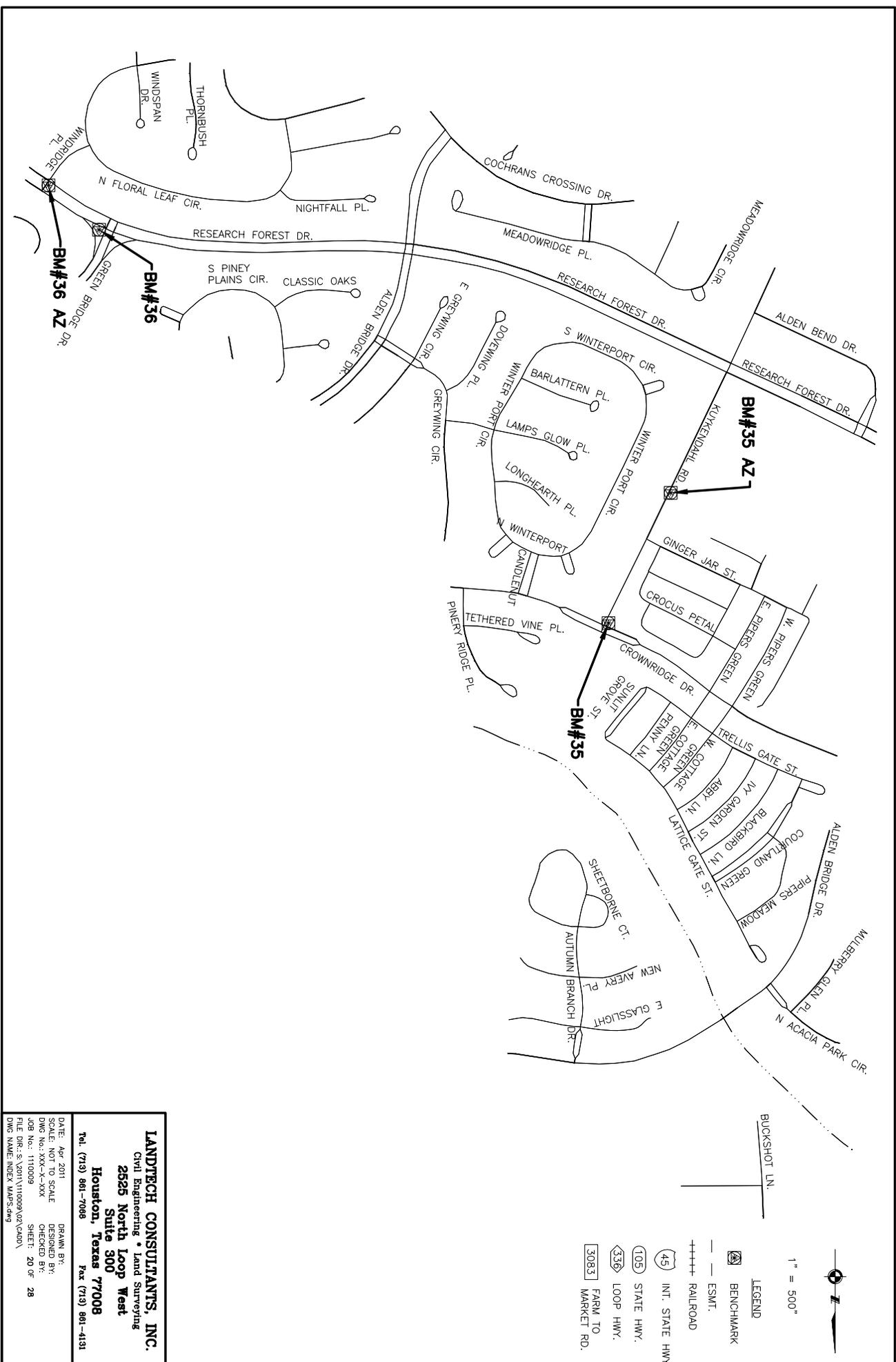
LEGEND

-  BENCHMARK
-  ESMT.
-  RAILROAD
-  (45) INT. STATE HWY.
-  (105) STATE HWY.
-  (336) LOOP HWY.
-  3083 FARM TO MARKET RD.



LANDTECH CONSULTANTS, INC.
 Civil Engineering • Land Surveying
2525 North Loop West
Suite 300
Houston, Texas 77008
 Tel. (713) 961-7068 Fax (713) 961-4131

DATE: Apr 2011 DRAWN BY:
 SCALE: NOT TO SCALE DESIGNED BY:
 DWG No.: 110038-00-XXX CHECKED BY:
 JOB No.: 110038 SHEET: 18 OF 28
 FILE: S:\110038\110038.dwg
 DWG NAME: INDEX MAPS.dwg



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 Suite 300
 Houston, Texas 77008
 Tel: (713) 861-7068 Fax: (713) 861-4131

DATE: Apr 2011
 SCALE: NOT TO SCALE
 DWS No. XX-XX-XX
 JOB No. 110808
 SHEET 20 OF 28

DRAWN BY:
 DESIGNED BY:
 CHECKED BY:
 SHEET 20 OF 28

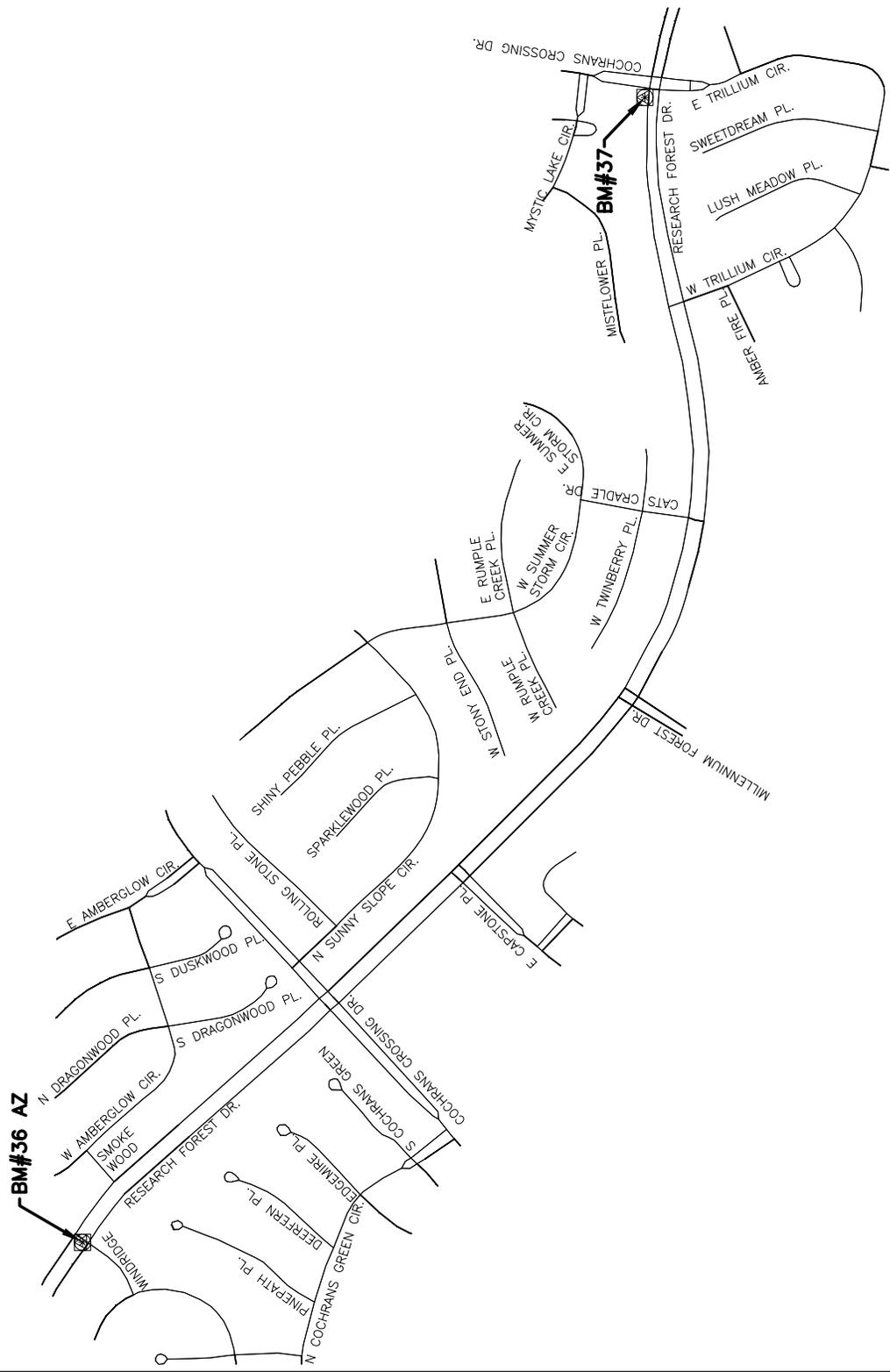
DATE PLOTTED: 11/08/09
 FILE NAME: NCSA\110808\20.cad



1" = 500'

LEGEND

-  BENCHMARK
-  ESMT.
-  RAILROAD
-  INT. STATE HWY.
-  STATE HWY.
-  LOOP HWY.
-  FARM TO MARKET RD.



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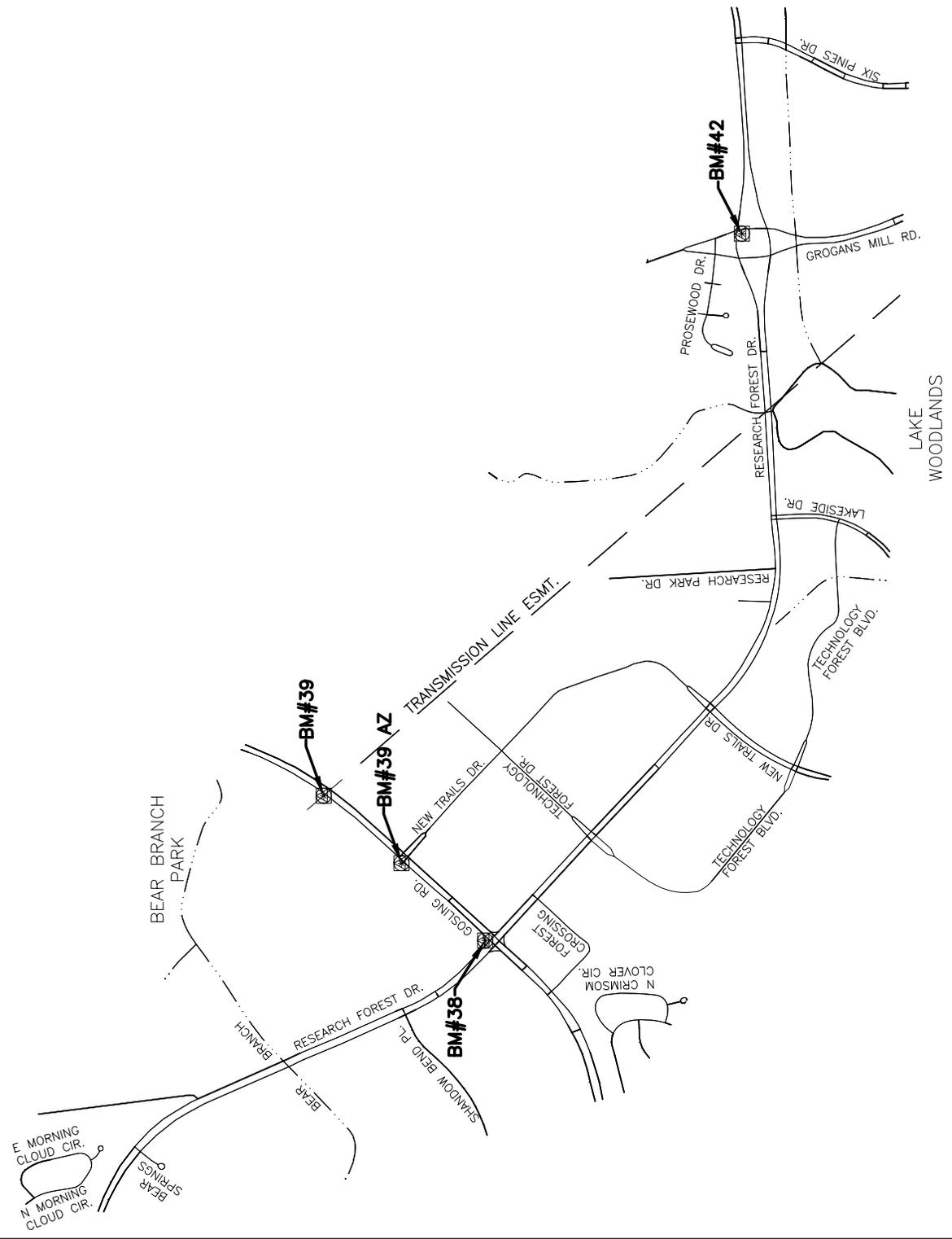
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 DESIGNED BY:
 CHECKED BY:
 SHEET: 21 OF 28



1" = 1000'

LEGEND

-  BENCHMARK
-  ESMT.
-  RAILROAD
-  INT. STATE HWY.
-  STATE HWY.
-  LOOP HWY.
-  FARM TO MARKET RD.



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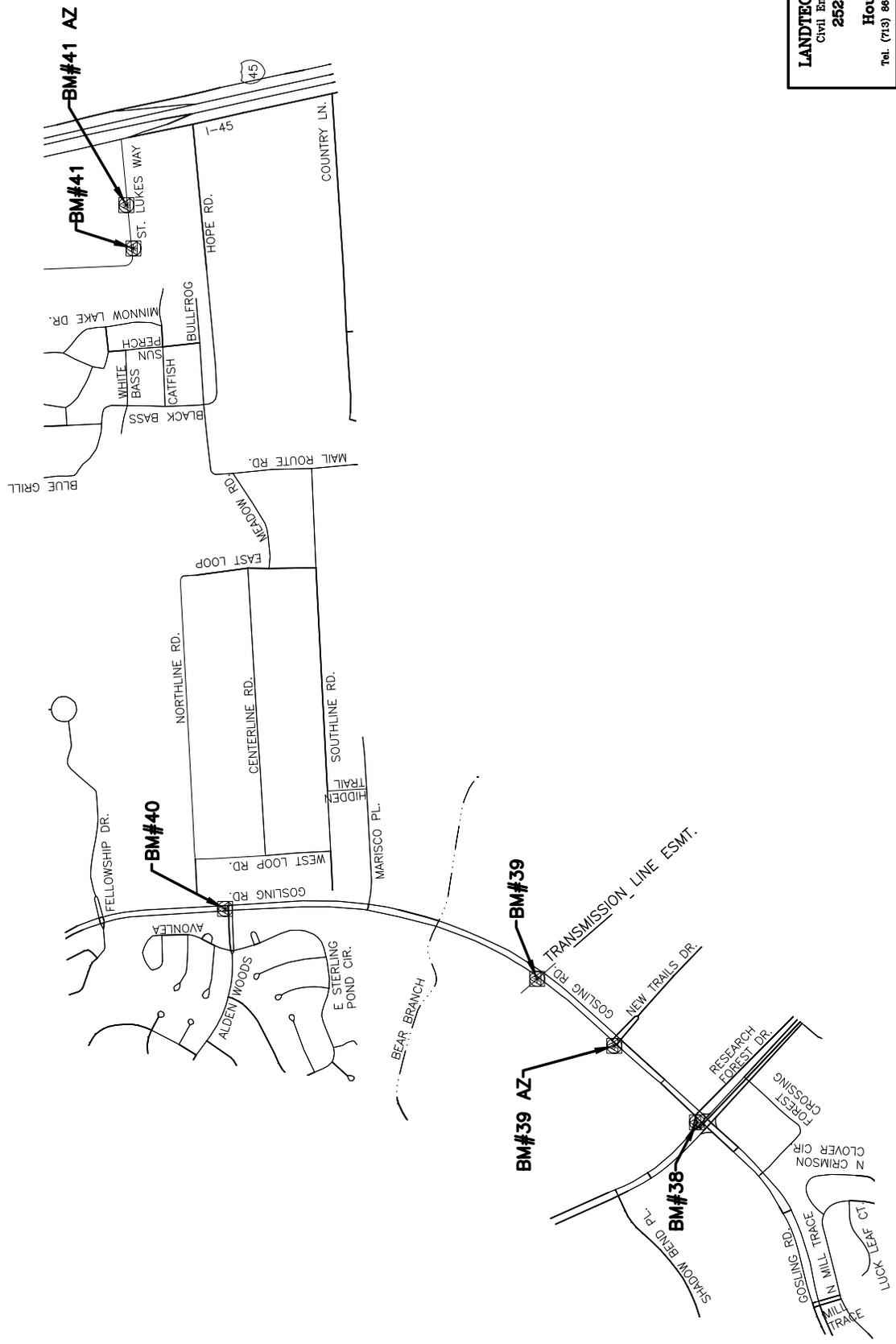
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 CHECKED BY:
 SHEET: 22 OF 28



1" = 1000'

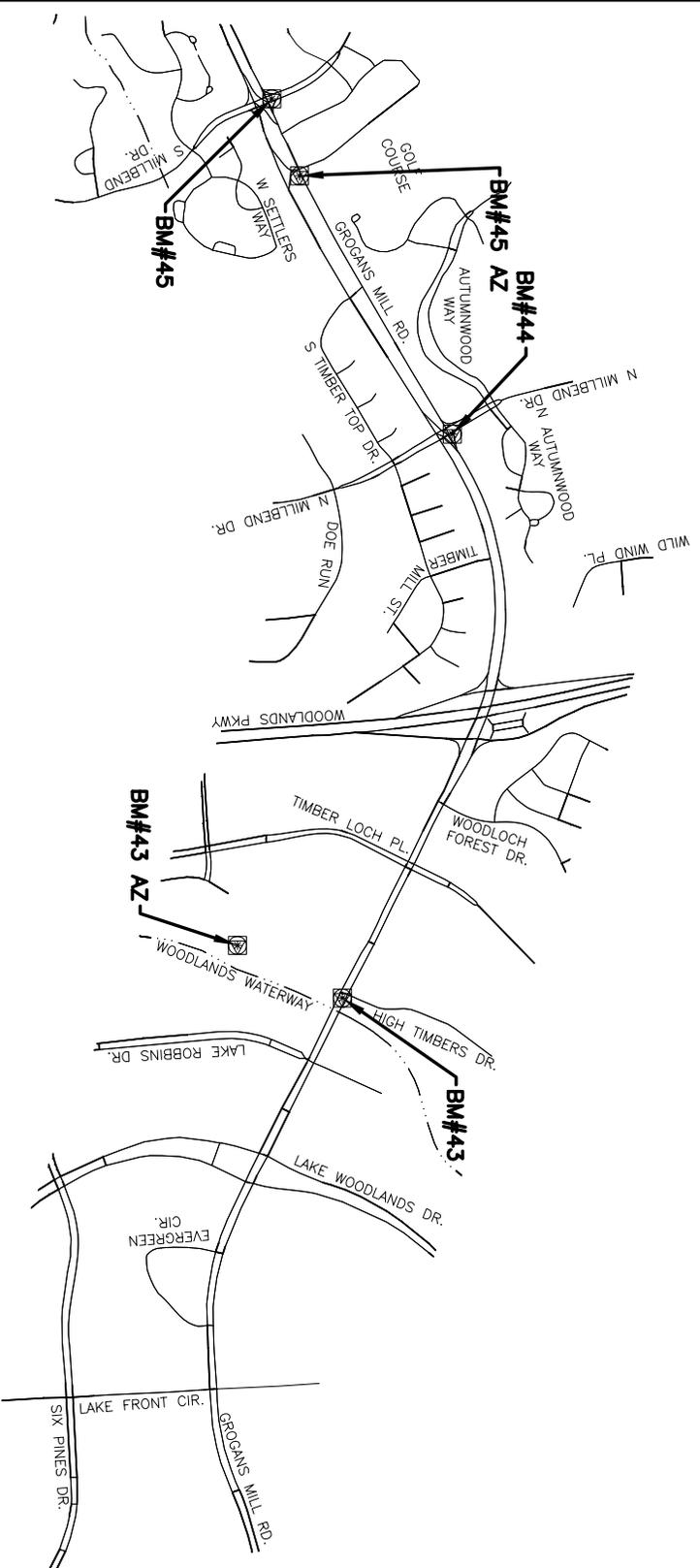
- LEGEND**
- BENCHMARK
 - ESMT.
 - RAILROAD
 - INT. STATE HWY.
 - STATE HWY.
 - LOOP HWY.
 - FARM TO MARKET RD.



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DATE: Apr 2011
 SCALE: NOT TO SCALE
 DWS No.: 741000-XXX
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DRAWN BY:
 DESIGNED BY:
 CHECKED BY:
 SHEET: 23 OF 28



1" = 1000'

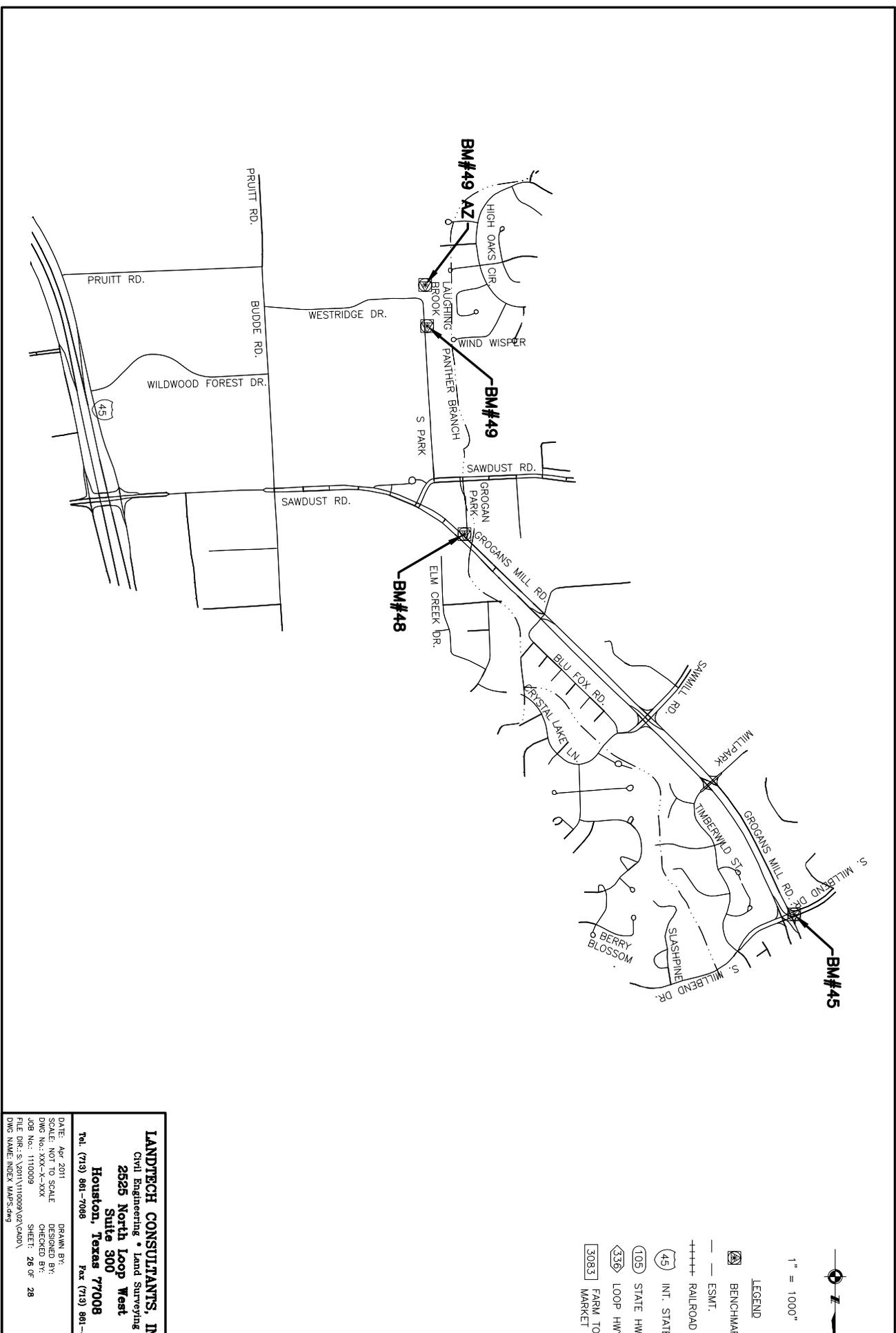
LEGEND

-  BENCHMARK
-  E.S.M.T.
-  RAILROAD
-  INT. STATE HWY.
-  STATE HWY.
-  LOOP HWY.
-  FARM TO MARKET RD.

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 Suite 300
 Houston, Texas 77008

Tel: (713) 861-7068 Fax: (713) 861-4131

DATE: Apr 2011 DRAWN BY:
 SCALE: NOT TO SCALE DESIGNED BY:
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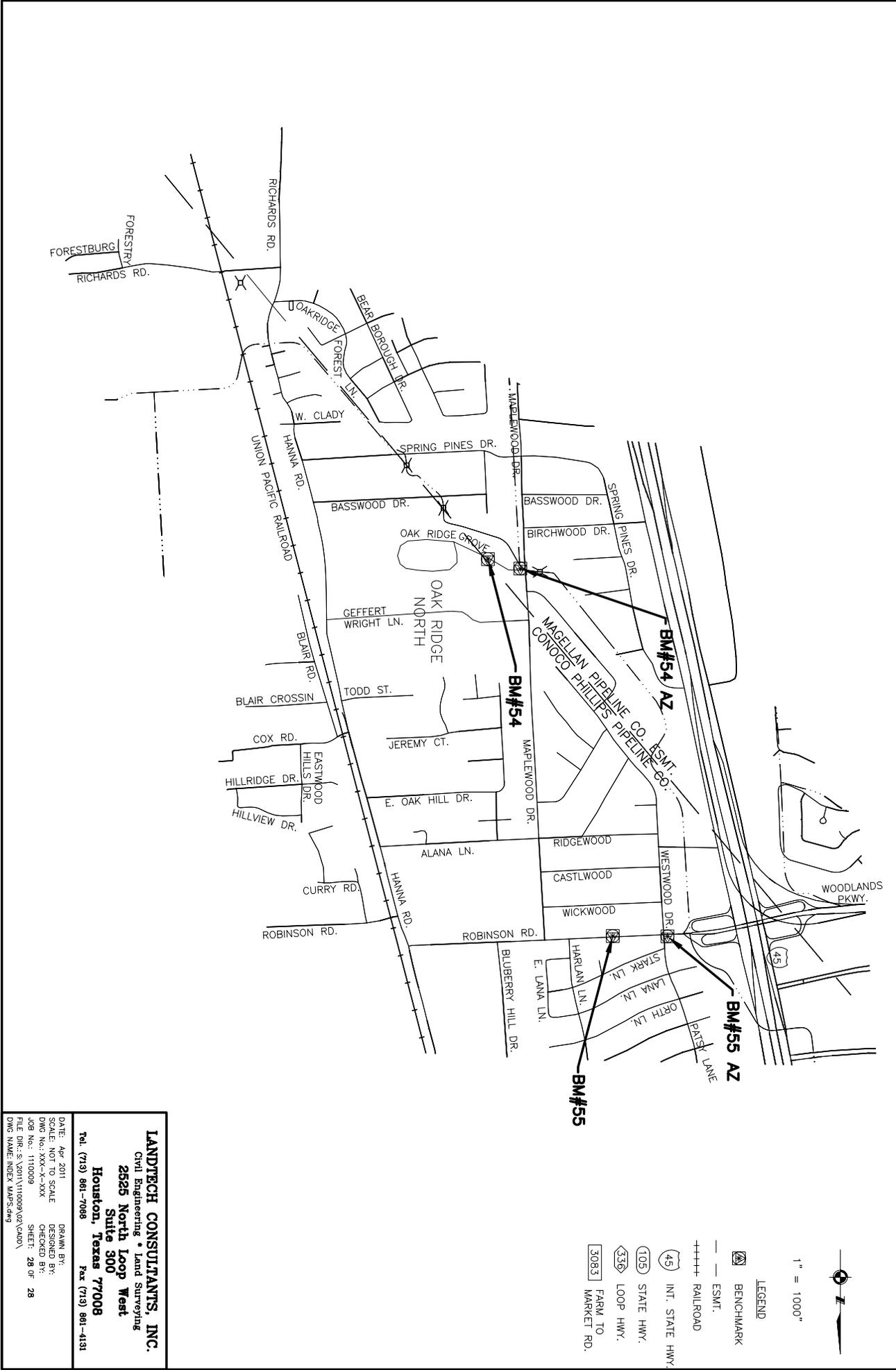
- 1" = 1000'
- LEGEND**
- BENCHMARK
 - ESMT.
 - RAILROAD
 - INT. STATE HWY.
 - STATE HWY.
 - LOOP HWY.
 - FARM TO MARKET RD.

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DATE: Apr 2011
 SCALE: NOT TO SCALE
 DWS No. XX-XX-XX
 JOB No. 110808
 SHEET 28 OF 28

DRAWN BY:
 DESIGNED BY:
 CHECKED BY:
 SHEET 28 OF 28

FILE: C:\ENR\110808\110808\02\CADD\110808\ENR\110808.dwg



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 Suite 300
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 Tel: (713) 861-7068 Fax: (713) 861-4131
 Date: Apr 2011
 Scale: NOT TO SCALE
 DWS No. XX-XX-XX
 JOB No. 110809
 SHEET 28 OF 28
 DWS:VINCE/02/CA00\
 DWG:VINCE/02/08/28

1" = 1000"

LEGEND
 BENCHMARK
 ESMT.
 RAILROAD
 INT. STATE HWY.
 STATE HWY.
 LOOP HWY.
 FARM TO MARKET RD.



Benchmark No. 1

General Location: 1.2 miles northeast of Lake Conroe Dam Spillway at the end of Dam Site Road cul-de-sac

Latitude: 30° 21' 51.78303"
Longitude: 95° 32' 49.31841"
Grid Northing: 10,128,729.78
Grid Easting: 3,805,595.17
Surface Northing: 10,129,107.19
Surface Easting: 3,805,736.98

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 213.73 Project Datum

Mark Logo: None
Designation: SJRA1
Fnd 3" Aluminum Disk in Conc. Stamped "SJRA-1"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

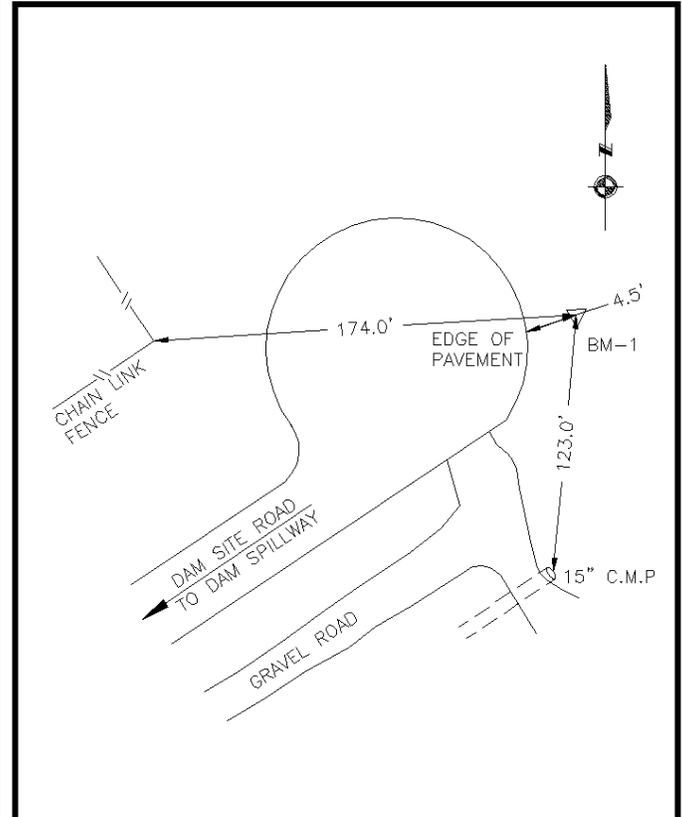


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 1 Azimuth

General Location: ±4,700 feet northeast of Lake Conroe Dam Spillway on the south side of Dam Site Road

Latitude: 30° 21' 45.27414"
Longitude: 95° 33' 04.45524"
Grid Northing: 10,128,015.82
Grid Easting: 3,804,298.61
Surface Northing: 10,128,393.21
Surface Easting: 3,804,440.36

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 212.69 Project Datum

Mark Logo: Conroe 99
Designation: SJRA 1 AZ
Fnd 2" Brass Disk in Conc. Stamped "SJRA 1 AZ"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

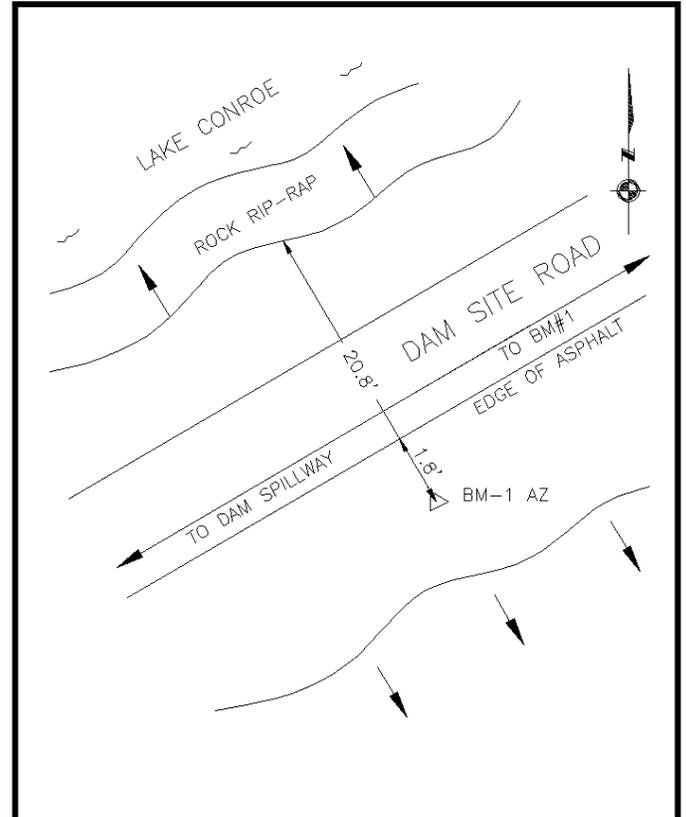


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 2

General Location: ±600 feet north from the intersection of Dam Site Road and Fultz Road

Latitude: 30° 21' 12.37339"
Longitude: 95° 34' 13.75843"
Grid Northing: 10,124,434.69
Grid Easting: 3,798,375.11
Surface Northing: 10,124,811.95
Surface Easting: 3,798,516.64

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 183.70 Project Datum

Mark Logo: None
Designation: SJRA 2
Fnd 3" Aluminum Disk in Conc. Stamped "SJRA 2"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

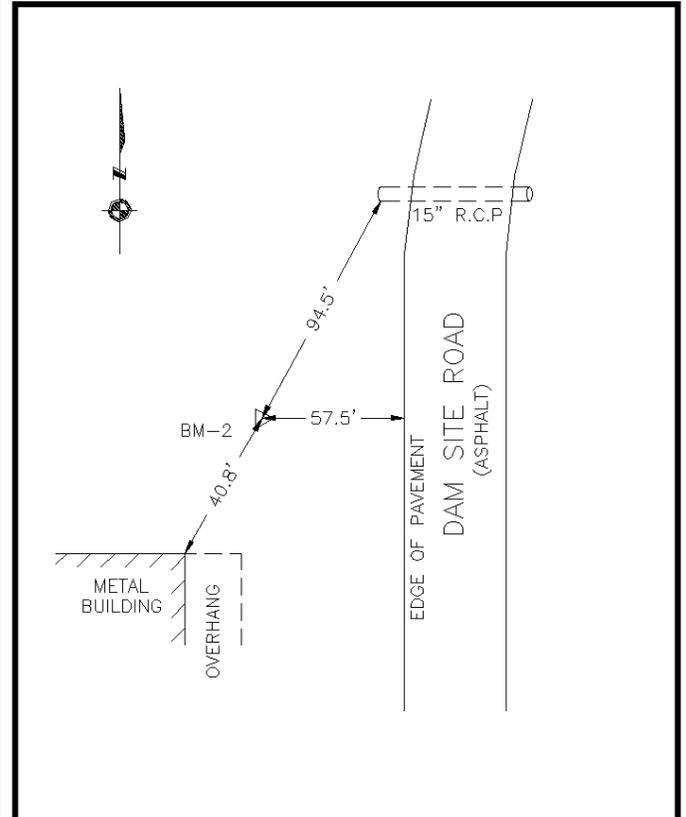


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 3

General Location: ±5,050 feet southwest of Lake Conroe Dam Spillway at the end of Dam Site Road

Latitude: 30° 21' 12.29084"
Longitude: 95° 34' 44.92194"
Grid Northing: 10,124,309.60
Grid Easting: 3,795,647.60
Surface Northing: 10,124,686.85
Surface Easting: 3,795,789.03

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 214.35 Project Datum

Mark Logo: None
Designation: SJRA 3
Fnd 3" Aluminum Disk in Conc. Stamped "SJRA3"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

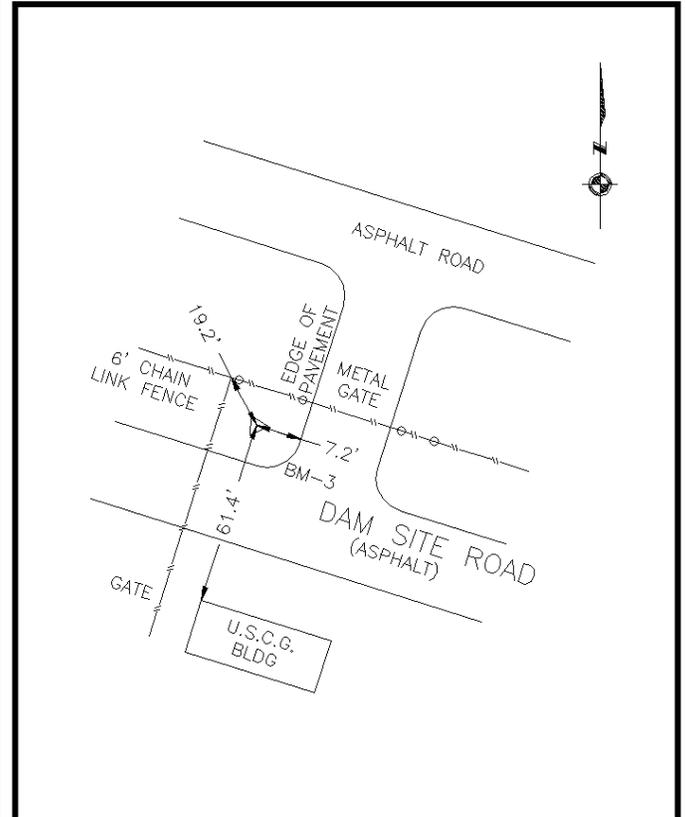


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 4

General Location: ±150 feet northeast of Lake Conroe Dam Spillway on the south side of Dam Site Road

Latitude: 30° 21' 22.29989"
Longitude: 95° 33' 48.75376"
Grid Northing: 10,125,530.43
Grid Easting: 3,800,520.87
Surface Northing: 10,125,907.72
Surface Easting: 3,800,662.48

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 163.84 Project Datum

Mark Logo: None

Designation: SJRA 4

Fnd 5/8" Iron Rod in Conc.

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395

Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

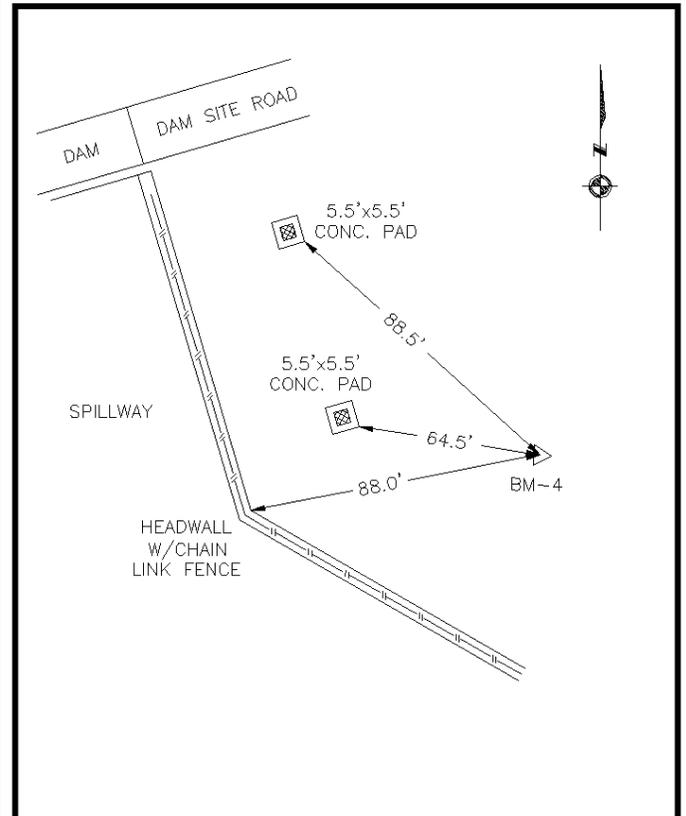


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 5

Controlling Project Benchmark

General Location: ±1,100 feet northeast of Lake Conroe Dam Spillway on the north side of Dam Site Road

Latitude: 30° 21' 31.07699"
Longitude: 95° 33' 42.25339"
Grid Northing: 10,126,440.73
Grid Easting: 3,801,051.83
Surface Northing: 10,126,818.06
Surface Easting: 3,801,193.47

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 212.00 Project Datum

Mark Logo: City of Houston SJRA 1972
Designation: SJRA 5
Fnd 3" Brass Disk in Conc. Stamped "D-1 D-3"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

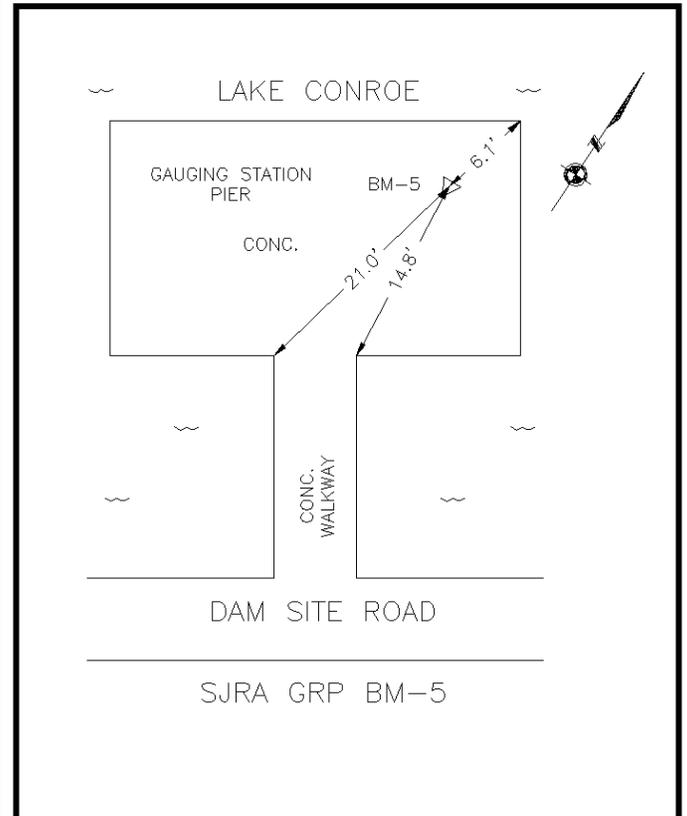


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 6

General Location: ±150 feet northeast of Lake Conroe Dam Spillway on the north side of Dam Site Road

Latitude: 30° 21' 26.08936"
Longitude: 95° 33' 50.29980"
Grid Northing: 10,125,907.10
Grid Easting: 3,800,369.14
Surface Northing: 10,126,284.41
Surface Easting: 3,800,510.74

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 211.58 Project Datum

Mark Logo: None
Designation: SJRA 6
Fnd 3" Brass Disk in Conc. Stamped "61+50"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

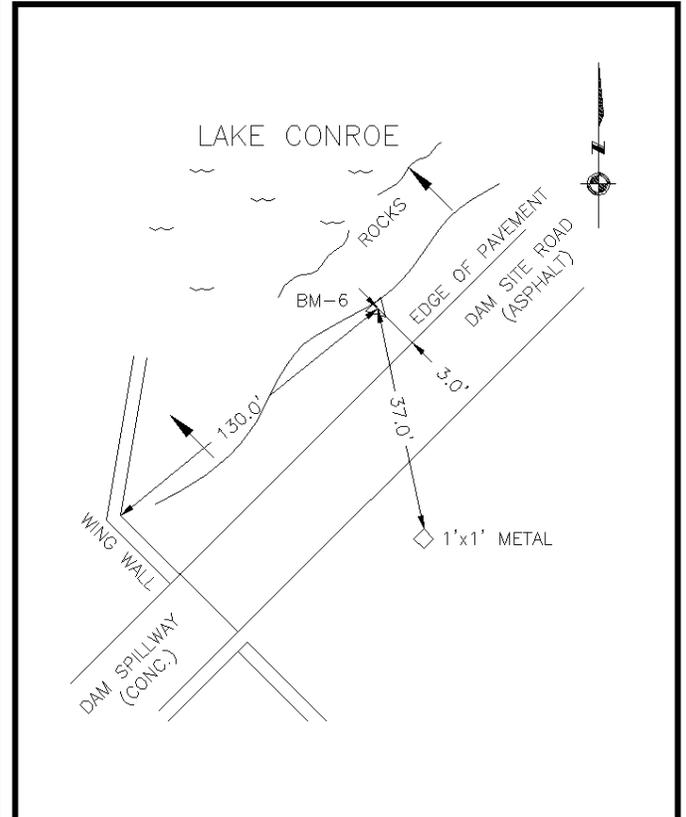


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 7

General Location: ±3,200 feet southwest of Lake Conroe Dam Spillway on the north side of Dam Site Road

Latitude: 30° 21' 11.10569"
Longitude: 95° 34' 25.69066"
Grid Northing: 10,124,262.01
Grid Easting: 3,797,336.11
Surface Northing: 10,124,639.26
Surface Easting: 3,797,477.61

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 212.67 Project Datum

Mark Logo: None
Designation: SJRA 7
Fnd 3" Brass Disk in Conc. Stamped "27+00"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

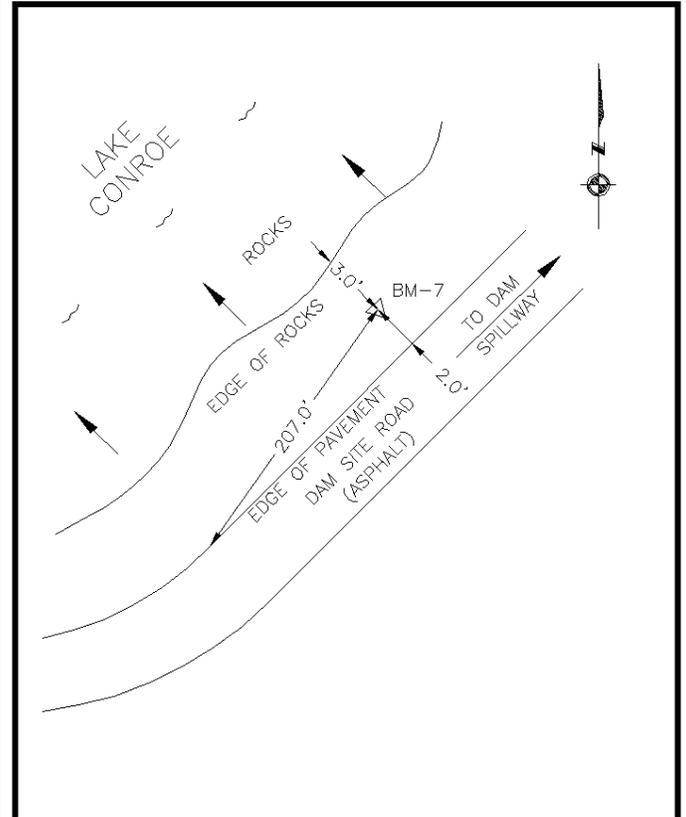


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 8

General Location: ±1,150 feet east of McCaleb Road on the north side of SH-105 across from address 14567 SH-105 at United States Coast Guard Facility

Latitude: 30° 21' 12.45329"
Longitude: 95° 34' 45.02542"
Grid Northing: 10,124,325.61
Grid Easting: 3,795,637.84
Surface Northing: 10,124,702.86
Surface Easting: 3,795,779.28

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 214.02 Project Datum

Mark Logo: HGCS D
Designation: HGCS D 81 – PID AJ6405
End Stainless Steel Rod in Sleeve

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

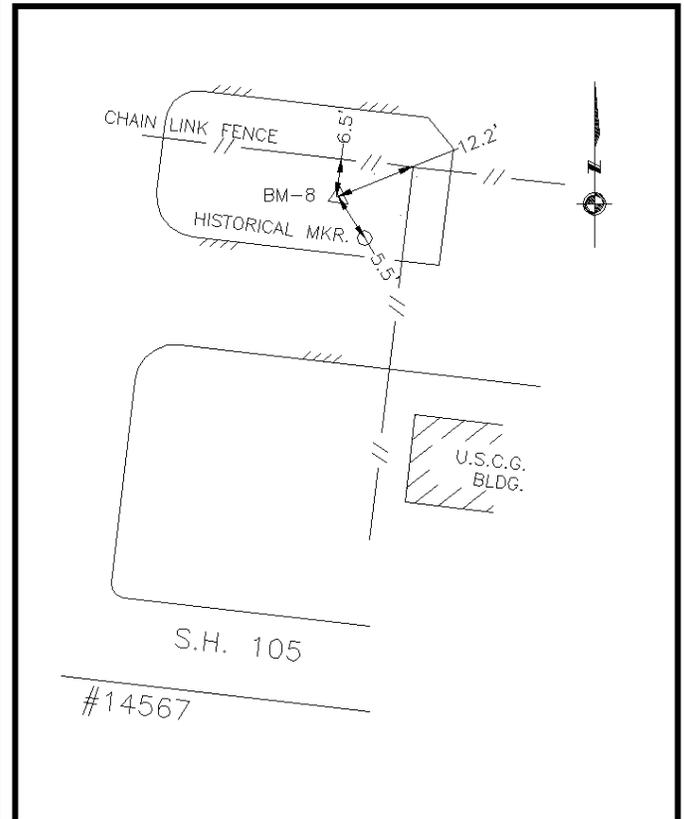


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 8 Azimuth

General Location: ±1,000 feet east of McCaleb Road on the south side of SH-105, at address 14567 SH-105 across from United States Coast Guard Facility

Latitude: 30° 21' 09.23242"
Longitude: 95° 34' 48.06616"
Grid Northing: 10,123,989.14
Grid Easting: 3,795,385.57
Surface Northing: 10,124,366.38
Surface Easting: 3,795,527.00

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 209.49 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#8 AZ"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

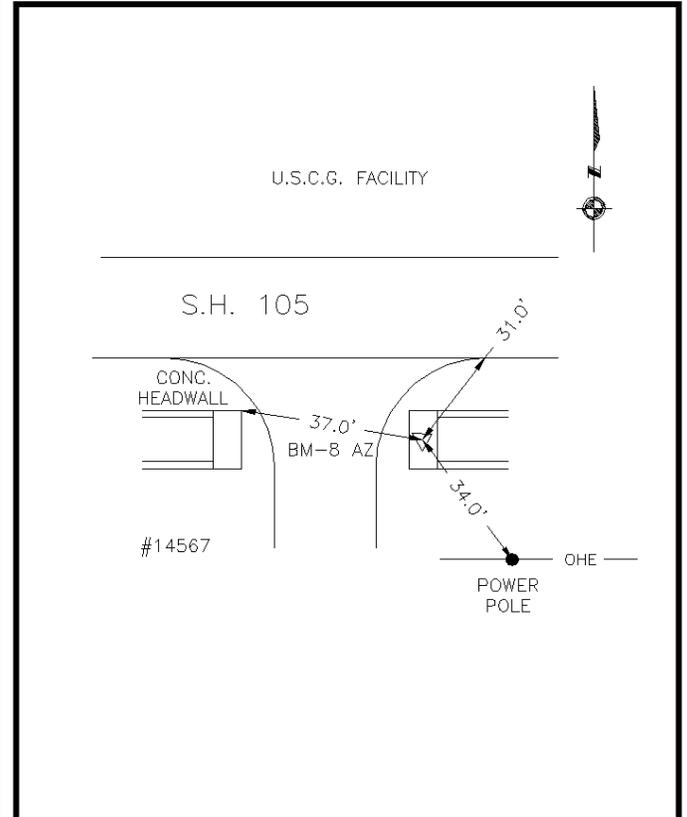


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 9

General Location: ±800 feet northwest of the intersection of Wedgewood Boulevard and Longmire Road, located at the northwest corner of Longmire Road and gravel road to water tower

Latitude: 30° 21' 13.89659"
Longitude: 95° 31' 07.72148"
Grid Northing: 10,125,289.86
Grid Easting: 3,814,652.79
Surface Northing: 10,125,667.15
Surface Easting: 3,814,794.93

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 288.49 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#9"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

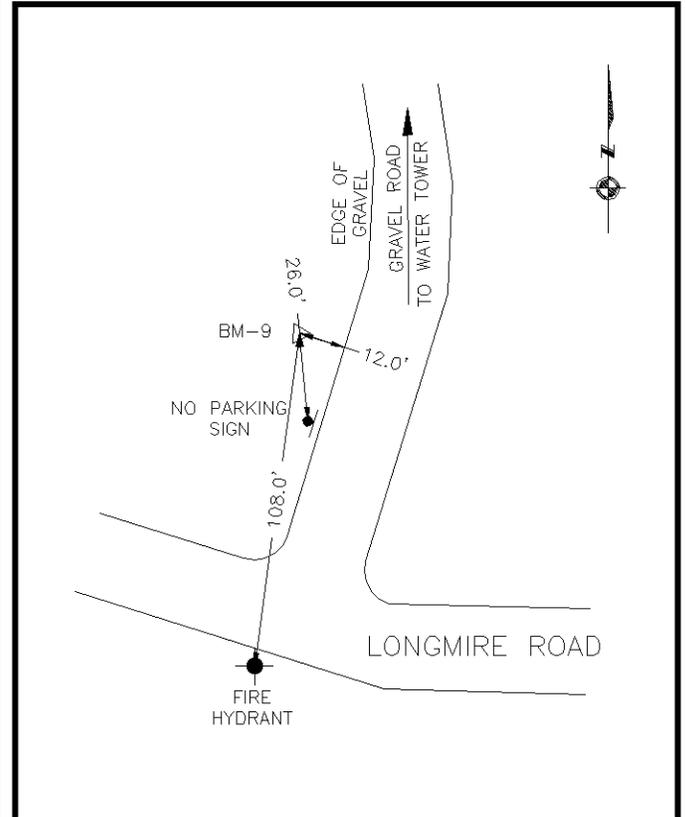


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 9 Azimuth

General Location: ±800 feet northwest of the intersection of Wedgewood Boulevard and Longmire Road, located ±350 feet north of Longmire Road on gravel road to water tower

Latitude: 30° 21' 16.25407"
Longitude: 95° 31' 06.44782"
Grid Northing: 10,125,532.63
Grid Easting: 3,814,753.97
Surface Northing: 10,125,909.93
Surface Easting: 3,814,896.11

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 291.57 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#9 AZ"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

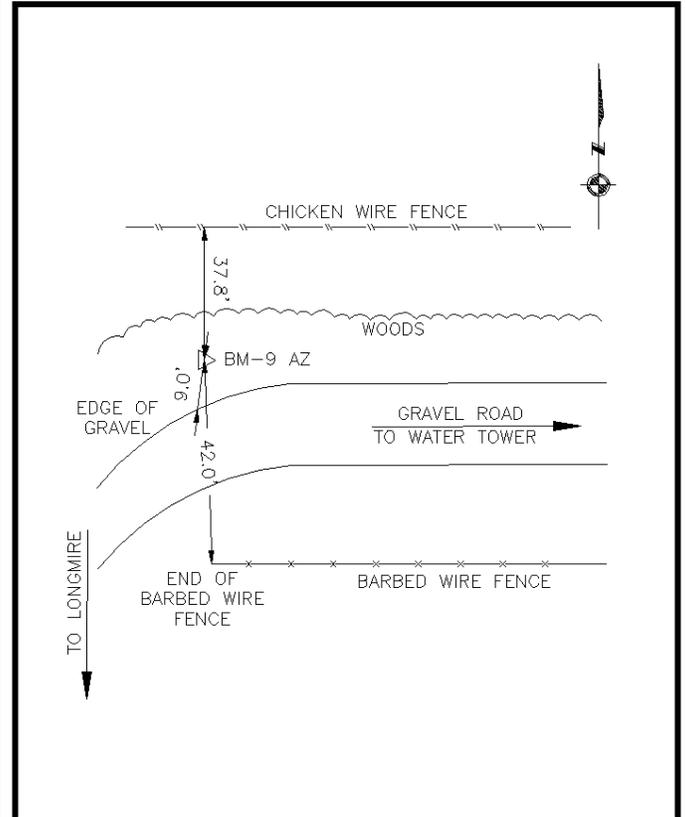


Photo 1-Station Detail:

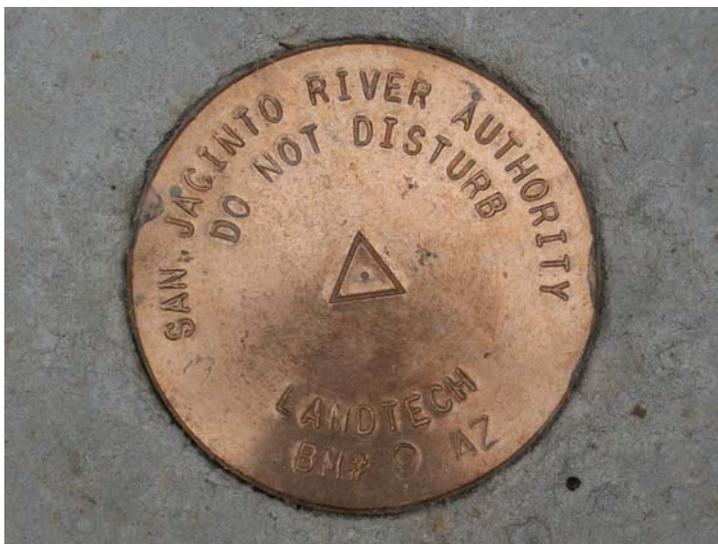


Photo 2-Station Area Picture:





Benchmark No. 10

General Location: ±350 feet west of the intersection of Slick Rock Drive and Wayne Bennett Court, on the North side of Wayne Bennett Court and in an Entergy Easement

Latitude: 30° 21' 30.22993"
Longitude: 95° 30' 55.26201"
Grid Northing: 10,126,985.63
Grid Easting: 3,815,671.94
Surface Northing: 10,127,362.98
Surface Easting: 3,815,814.12

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 236.22 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#10"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

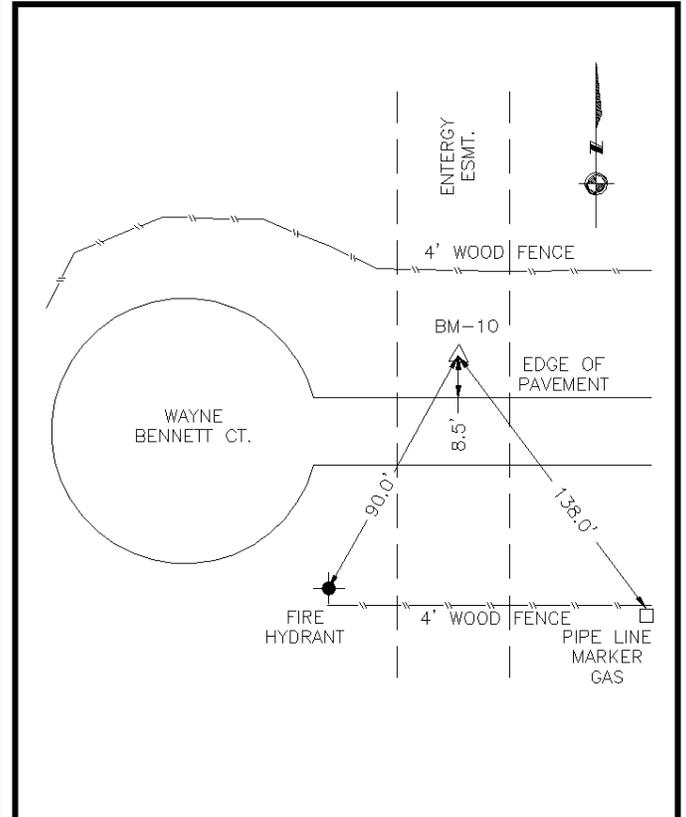


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 10 Azimuth

General Location: On the east side of Slick Rock Drive at the intersection of Slick Rock Drive and Wayne Bennett Court

Latitude: 30° 21' 29.15762"
Longitude: 95° 30' 51.57362"
Grid Northing: 10,126,891.40
Grid Easting: 3,815,999.47
Surface Northing: 10,127,268.74
Surface Easting: 3,816,141.66

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 225.50 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#10 AZ"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

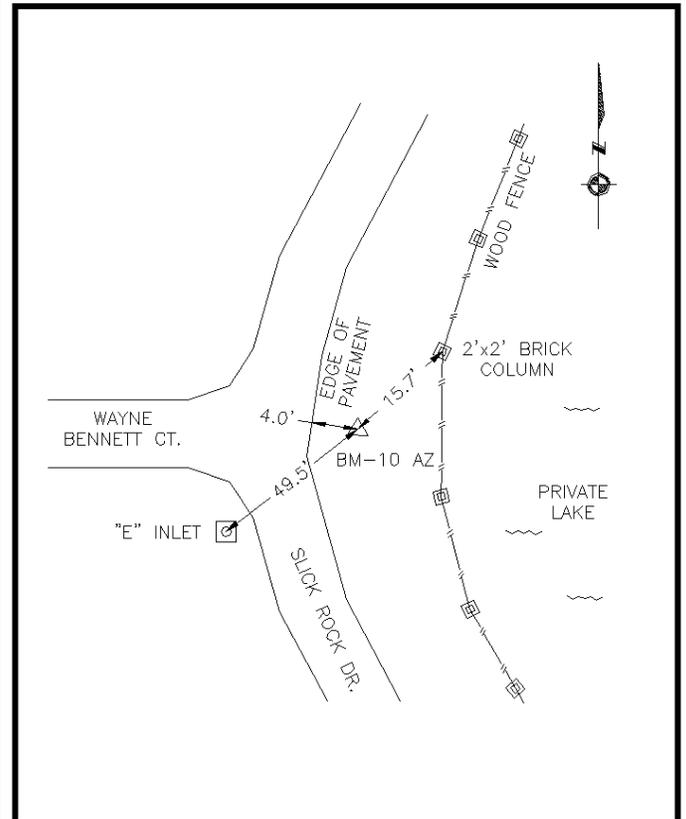


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 11

General Location: ±2 miles west of the intersection of IH-45 and League Line Road, at address 10340 League Line Road ±3,200 feet north along transmission line easement, between the 3rd and 4th transmission towers

Latitude: 30° 22' 58.83109"
Longitude: 95° 31' 00.81239"
Grid Northing: 10,135,907.07
Grid Easting: 3,814,798.70
Surface Northing: 10,136,284.75
Surface Easting: 3,814,940.85

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 288.43 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#11"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

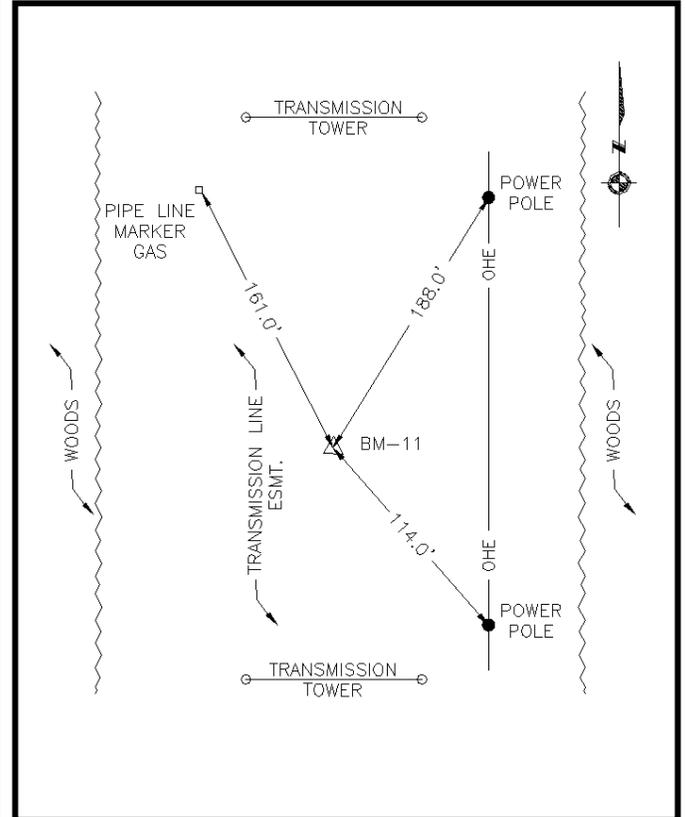


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 12

General Location: At the north corner of the intersection of Old Montgomery Road and FM 830

Latitude: 30° 23' 55.28976"
 Longitude: 95° 30' 54.82947"
 Grid Northing: 10,141,628.11
 Grid Easting: 3,815,075.28
 Surface Northing: 10,142,006.00
 Surface Easting: 3,815,217.43

Texas Coordinate System of 1983 (NAD83, CORS)
 Central Zone (4203)

Elevation: 365.28 Project Datum

Mark Logo: City of Conroe Capital Projects
 Designation: CC-26
 Fnd 3" Aluminum Disk in Conc. Stamped "CC 26"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
 Surface = Grid / Combined Factor
 Units of Measure: U.S. Survey Foot

Detail Sketch:

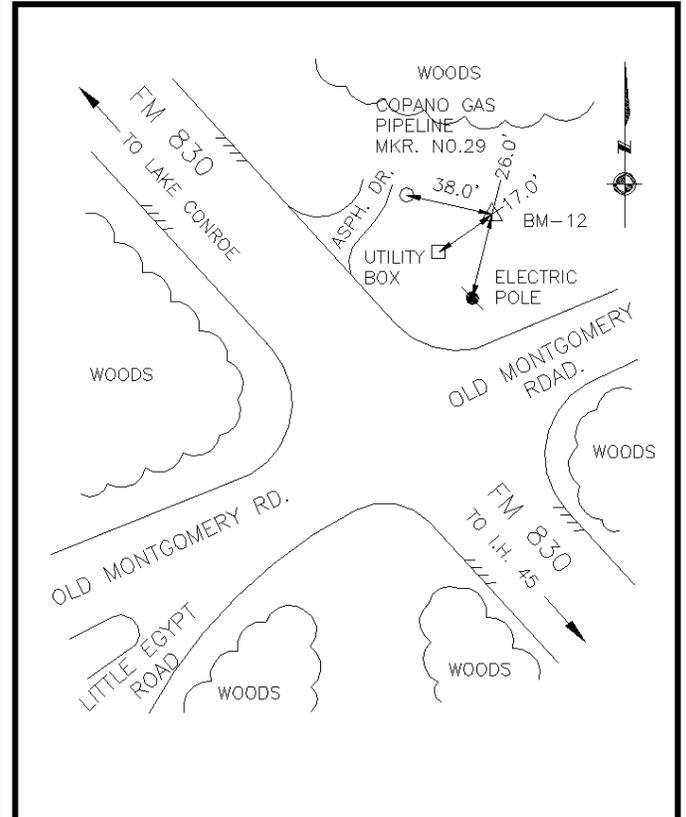


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 12 Azimuth

General Location: ±1,000 feet southeast of the intersection of Old Montgomery Road and FM 830 on the southwest side of FM 830

Latitude: 30° 23' 47.33932"
Longitude: 95° 30' 47.41044"
Grid Northing: 10,140,853.81
Grid Easting: 3,815,759.17
Surface Northing: 10,141,231.68
Surface Easting: 3,815,901.35

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 371.90 Project Datum

Mark Logo: City of Conroe Capital Projects
Designation: CC-26_AZ
Fnd 3" Aluminum Disk in Conc. Stamped "CC-26_AZ"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

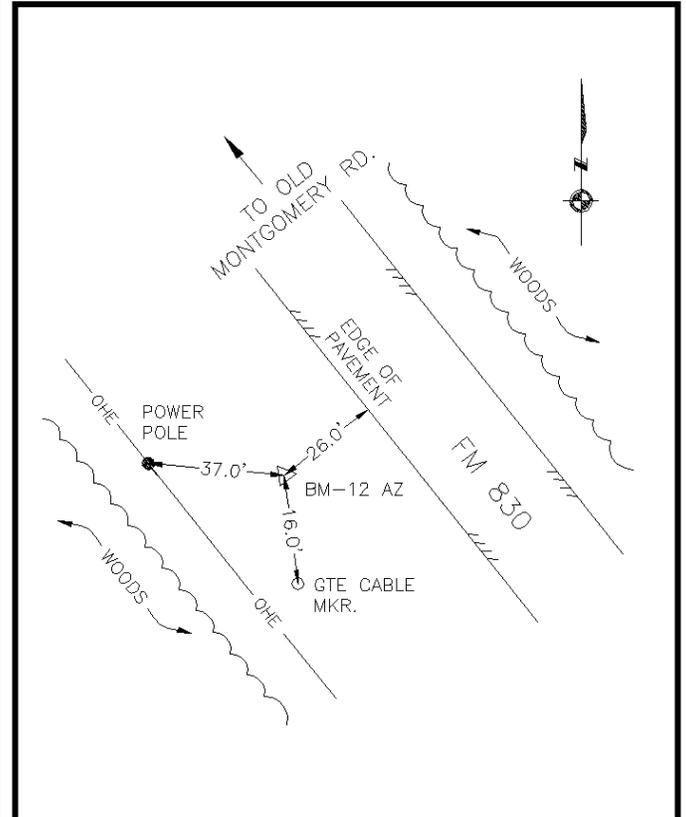


Photo 1-Station Detail:

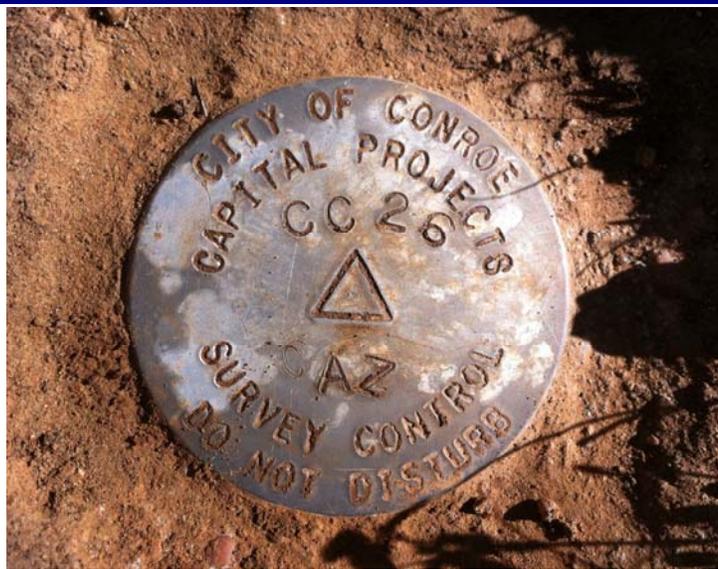


Photo 2-Station Area Picture:





Benchmark No. 13

General Location: ±1,400 feet west of Rolling Hills Drive on north side of FM 830, ±250 feet east of entrance to Meador Elementary School

Latitude: 30° 23' 29.13709"
Longitude: 95° 30' 02.09226"
Grid Northing: 10,139,188.82
Grid Easting: 3,819,804.03
Surface Northing: 10,139,566.62
Surface Easting: 3,819,946.36

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 340.91 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#13"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

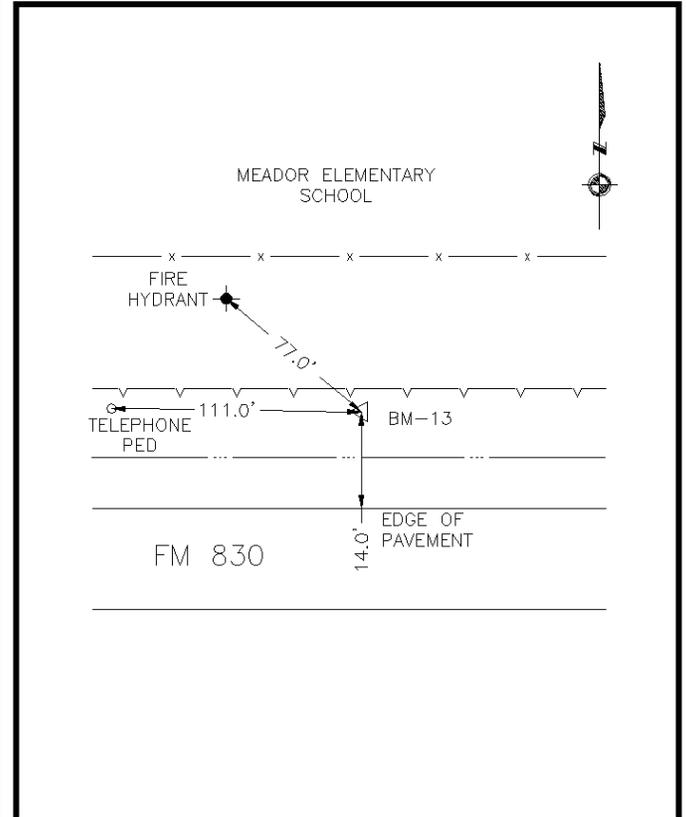


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 14

General Location: ±500 feet north of the intersection of FM 830 and SH 75 (N. Frazier Street) on the west side of SH 75 at Willis High School

Latitude: 30° 23' 31.51495"
Longitude: 95° 28' 32.94023"
Grid Northing: 10,139,768.77
Grid Easting: 3,827,594.03
Surface Northing: 10,140,146.60
Surface Easting: 3,827,736.65

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 310.55 Project Datum

Marker Logo: Conroe 99
Designation: CC-01
Fnd 2" Brass Disk in Conc. Stamped "CC-1"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

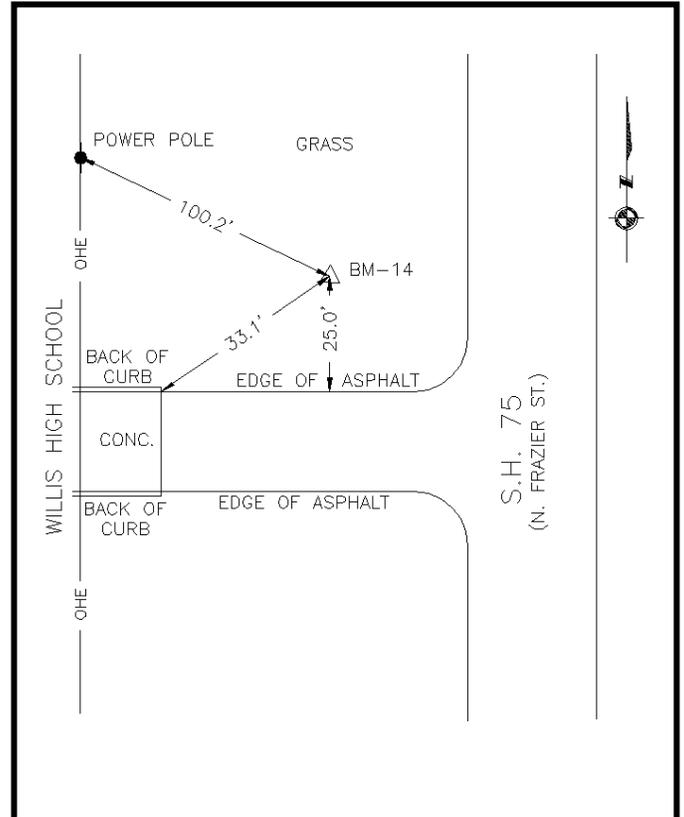


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 14 Azimuth

General Location: ±275 feet south of the intersection of SH 75 (N. Frazier Street) and Silver Springs Road on the west side of SH 75

Latitude: 30° 23' 17.59490"
 Longitude: 95° 28' 37.09553"
 Grid Northing: 10,138,347.97
 Grid Easting: 3,827,291.83
 Surface Northing: 10,138,725.74
 Surface Easting: 3,827,434.44

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 297.85 Project Datum

Mark Logo: Conroe 99
 Designation: CC-01_AZ
 Fnd 2" Brass Disk in Conc. Stamped "CC-1_AZ"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
 Surface = Grid / Combined Factor
 Units of Measure: U.S. Survey Foot

Detail Sketch:

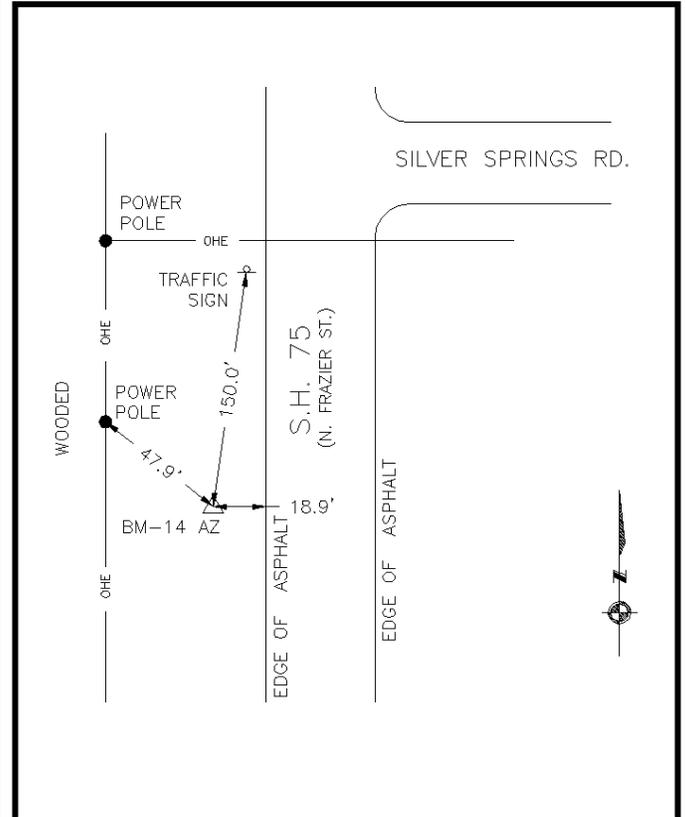


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 15

General Location: At the west corner of the intersection of FM 3083 and Longmire Road

Latitude: 30° 20' 22.74498"
Longitude: 95° 30' 29.87136"
Grid Northing: 10,120,270.79
Grid Easting: 3,818,189.93
Surface Northing: 10,120,647.89
Surface Easting: 3,818,332.21

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 267.49 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#15"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

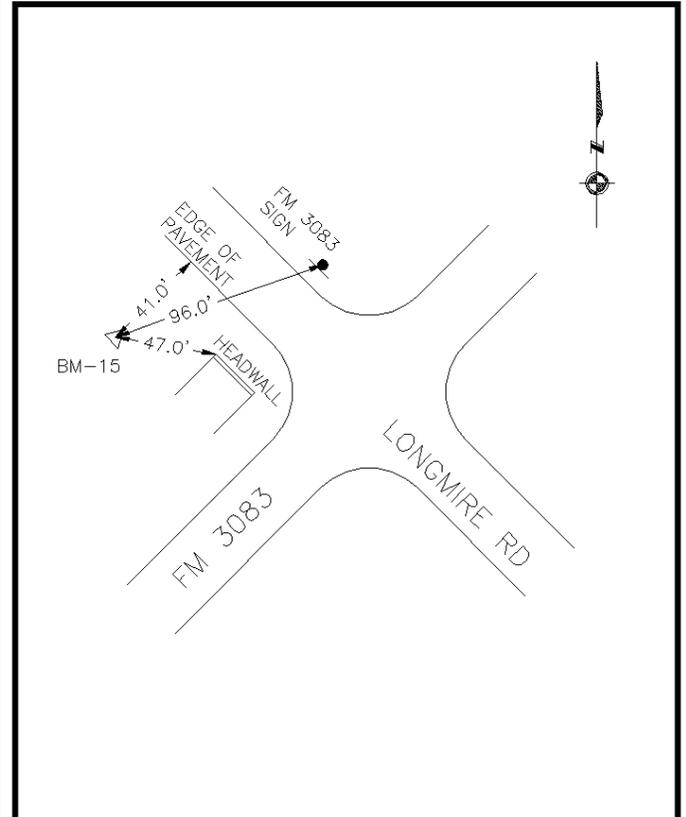


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 15 Azimuth

General Location: ±1,400 feet south of the intersection of FM 3083 and Longmire Road on the east side of FM 3083.

Latitude: 30° 20' 10.69892"
Longitude: 95° 30' 35.31347"
Grid Northing: 10,119,034.32
Grid Easting: 3,817,766.26
Surface Northing: 10,119,411.37
Surface Easting: 3,817,908.52

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 226.21 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#15 AZ"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

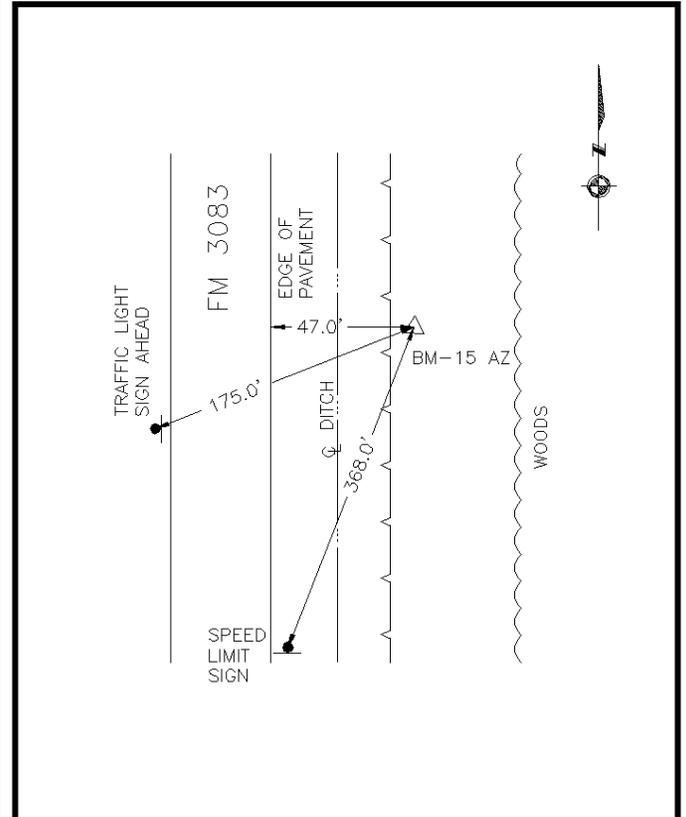


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 16

General Location: ±150 feet east of the intersection of Westview Boulevard and North Loop 336, at address 1413 N. Loop 336 West

Latitude: 30° 19' 56.30893"
Longitude: 95° 28' 55.98990"
Grid Northing: 10,117,960.32
Grid Easting: 3,826,525.09
Surface Northing: 10,118,337.33
Surface Easting: 3,826,667.67

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 232.76 Project Datum

Mark Logo: Conroe 99
Designation: CC-10
Fnd 2" Brass Disk in Conc. Stamped "CC10"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

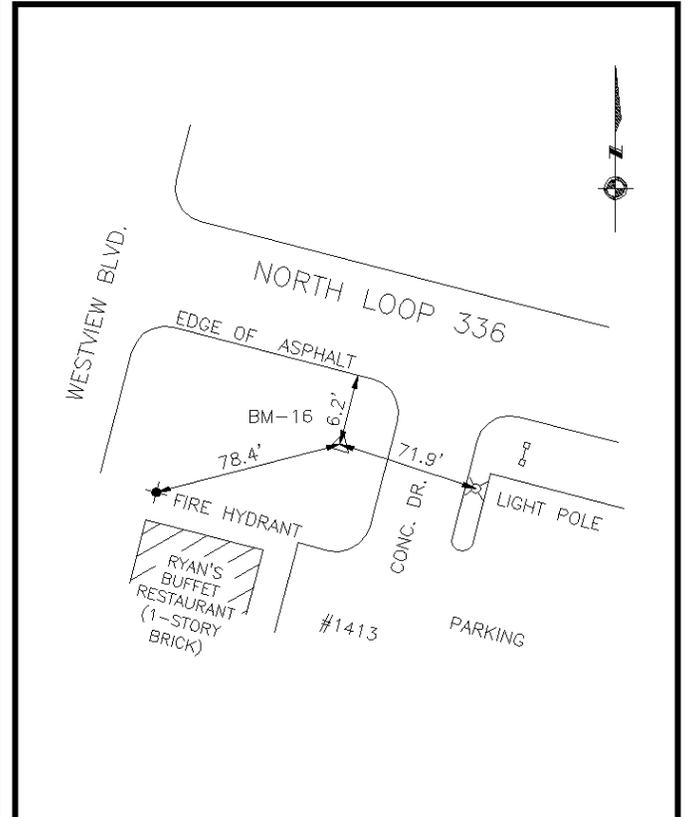


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 16 Azimuth

General Location: At the intersection of Montgomery Park Boulevard and North Loop 336 on the south side of North Loop 336, at address 1801 N. Loop 336 West

Latitude: 30° 19' 52.04504"
Longitude: 95° 29' 13.26125"
Grid Northing: 10,117,464.02
Grid Easting: 3,825,031.74
Surface Northing: 10,117,841.01
Surface Easting: 3,825,174.27

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 202.80 Project Datum

Mark Logo: Conroe 99
Designation: CC-10 AZ
Fnd 2" Brass Disk in Conc. Stamped "CC10 AZ"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

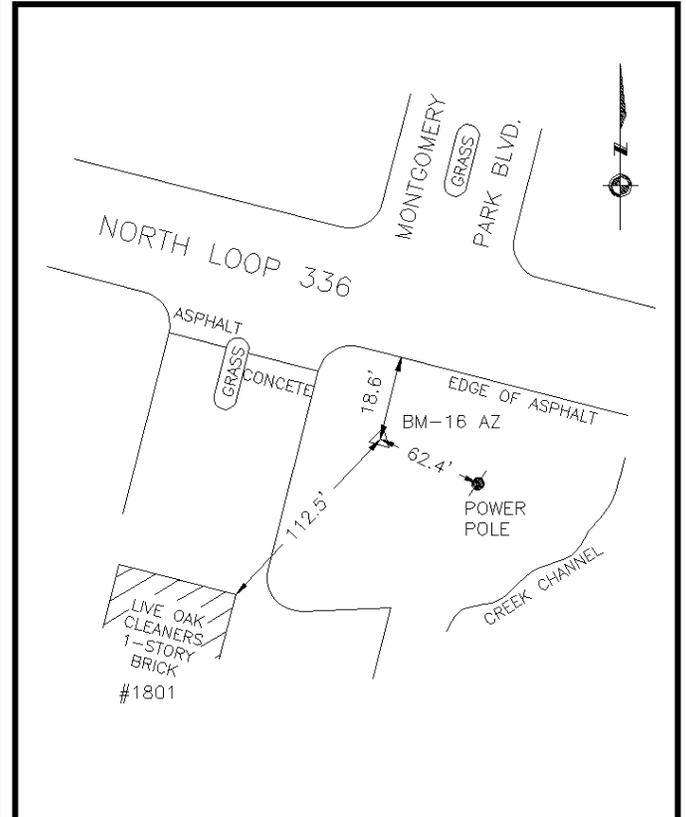


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 17

General Location: ±2,400 feet west of Teas Nursery Road on north side of FM 3083

Latitude: 30° 20' 56.20724"
Longitude: 95° 29' 41.10377"
Grid Northing: 10,123,833.66
Grid Easting: 3,822,312.24
Surface Northing: 10,124,210.89
Surface Easting: 3,822,454.67

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 242.64 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#17"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

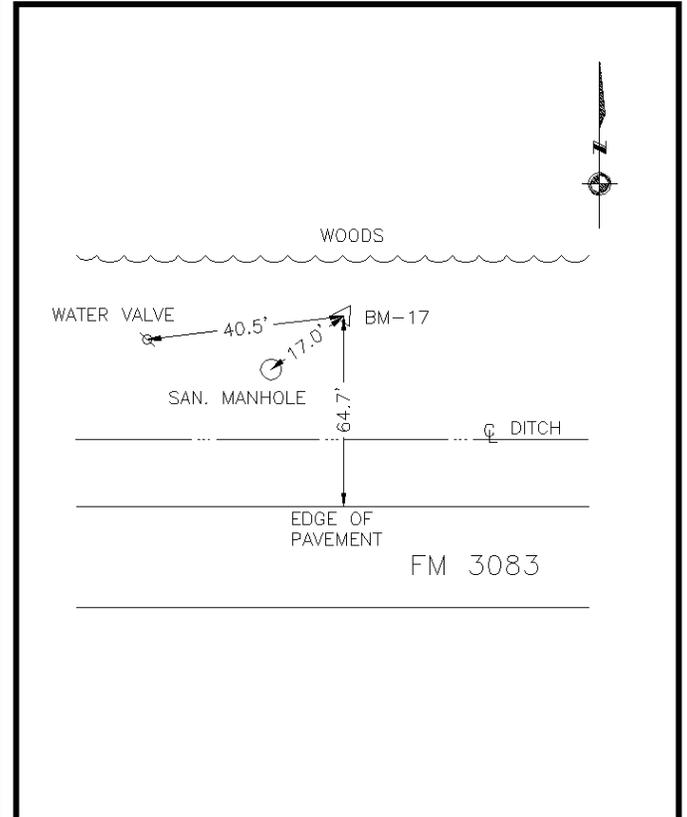


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 18

General Location: ±900 feet east of the intersection of IH-45 and FM 3083/Teas Nursery Road across from Garden Park Cemetery

Latitude: 30° 20' 57.96803"
Longitude: 95° 28' 50.25695"
Grid Northing: 10,124,205.38
Grid Easting: 3,826,755.36
Surface Northing: 10,124,582.62
Surface Easting: 3,826,897.95

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 275.90 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#18"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

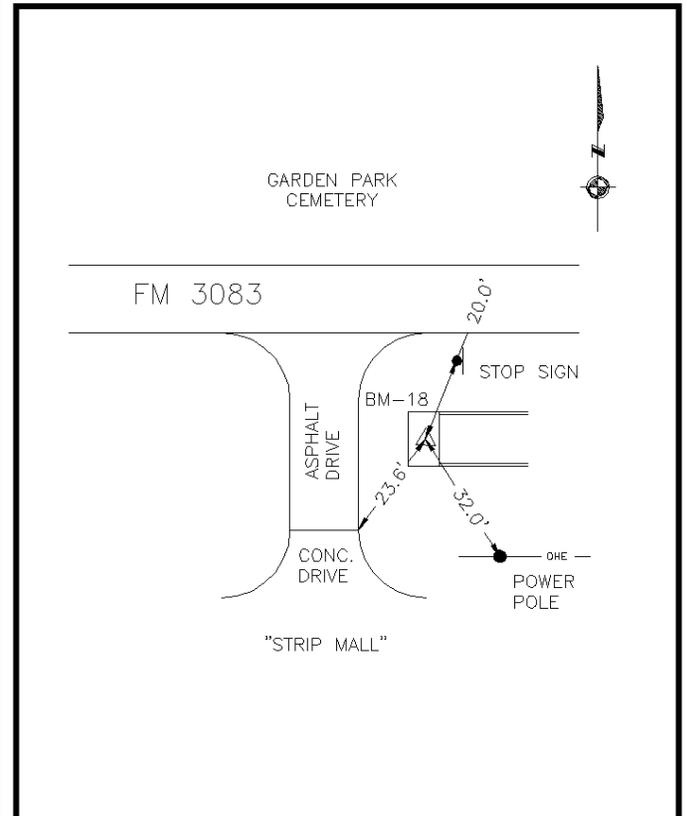


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 18 Azimuth

General Location: ±2,000 feet east of the intersection of IH-45 and FM 3083/Teas Nursery Road on the south side of FM 3083

Latitude: 30° 20' 54.29257"
 Longitude: 95° 28' 37.83803"
 Grid Northing: 10,123,881.89
 Grid Easting: 3,827,858.65
 Surface Northing: 10,124,259.12
 Surface Easting: 3,828,001.28

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 256.23 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#18 AZ"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

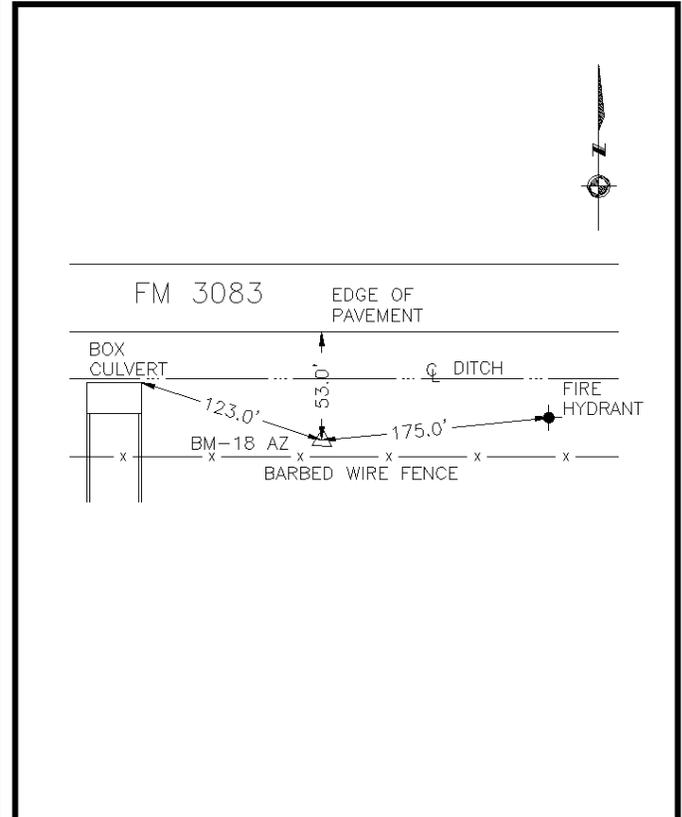


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 19

General Location: ±2,550 feet east of the intersection of FM 3083 and SH 75 (N. Frazier Street) on the south side of FM 3083, at “Entergy equipment yard”

Latitude: 30° 21' 01.50150"
Longitude: 95° 27' 49.03326"
Grid Northing: 10,124,796.34
Grid Easting: 3,832,098.89
Surface Northing: 10,125,173.61
Surface Easting: 3,832,241.68

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 241.40 Project Datum

Mark Logo: Conroe 99
Designation: CC-11
Fnd 2" Brass Disk in Conc. Stamped "CC-11"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo “City of Houston SJRA 1972” stamped “D-1 D-3” located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

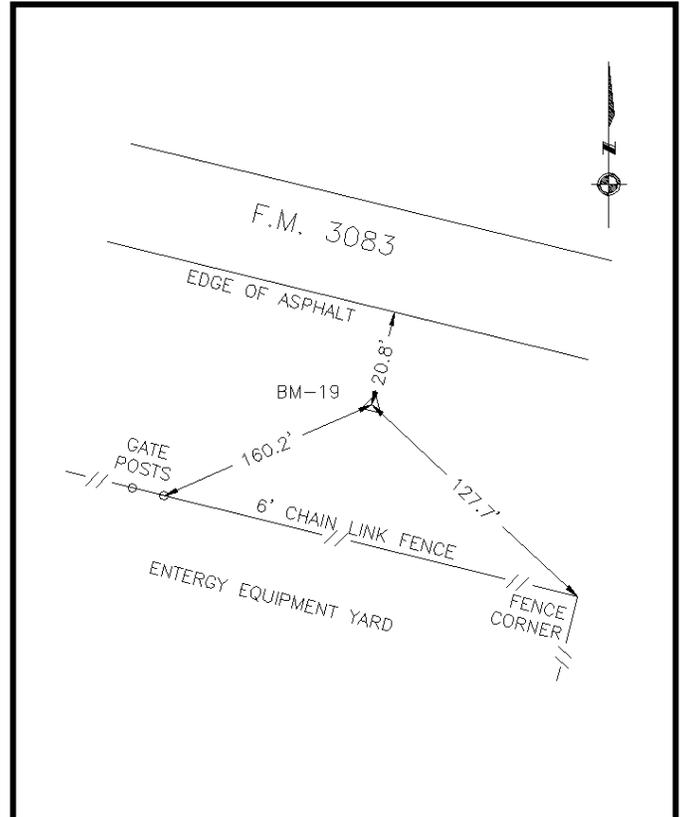


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 19 Azimuth

General Location: At the southeast corner of the intersection of Union Pacific Railroad and FM 3083, at address 100 FM 3083 "Bauer Manufacturing, Inc."

Latitude: 30° 20' 59.28170"
Longitude: 95° 27' 30.11855"
Grid Northing: 10,124,644.87
Grid Easting: 3,833,764.37
Surface Northing: 10,125,022.13
Surface Easting: 3,833,907.23

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 229.21 Project Datum

Mark Logo: Conroe 99
Designation: CC-11 AZ
Fnd 2" Brass Disk in Conc. Stamped "CC11 AZ"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

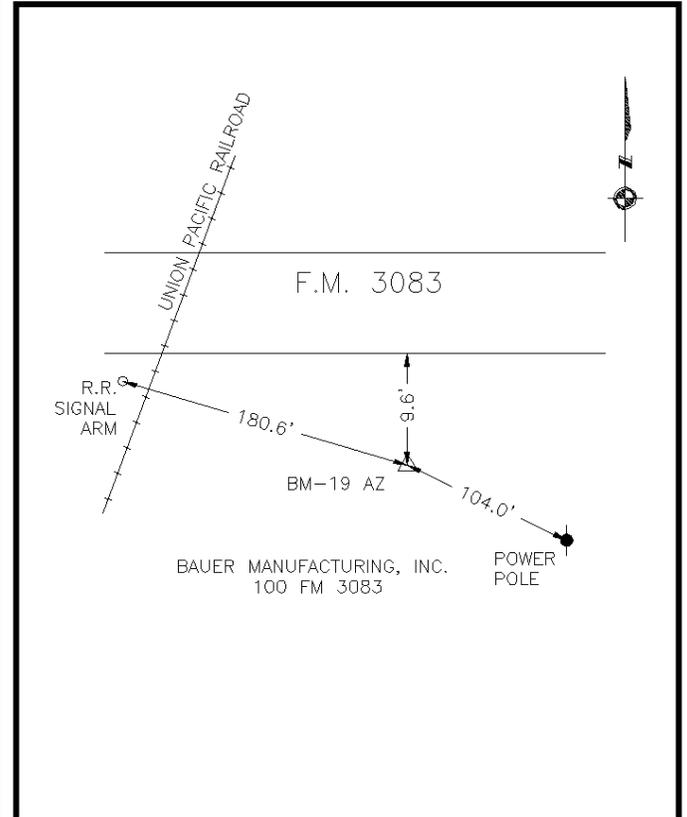


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 20

General Location: ±3,500 feet north of the intersection of Pollok Drive and FM 3083 at the northwest corner of the water plant

Latitude: 30° 21' 35.21890"
Longitude: 95° 27' 01.75877"
Grid Northing: 10,128,380.85
Grid Easting: 3,836,087.48
Surface Northing: 10,128,758.26
Surface Easting: 3,836,230.42

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 245.57 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#20"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

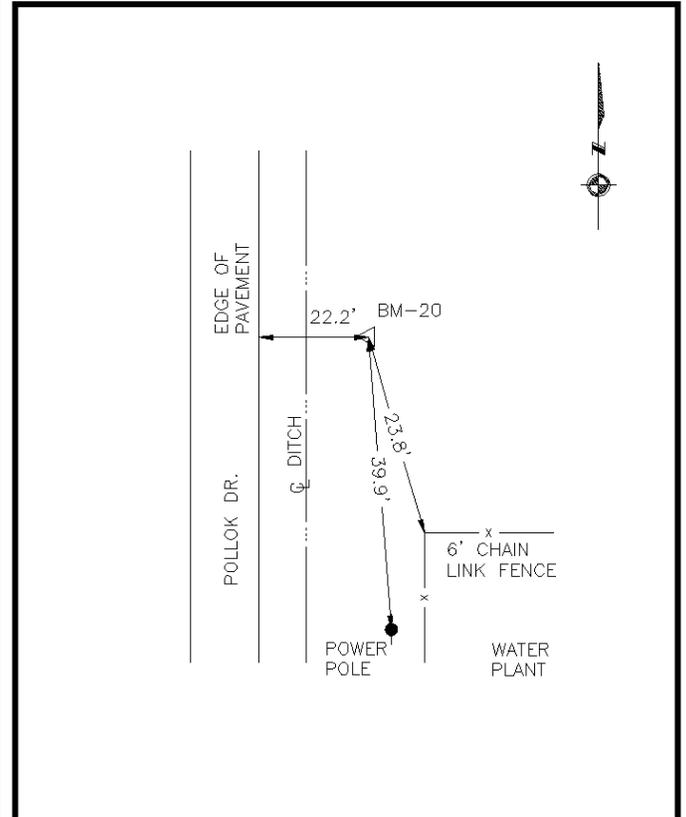


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 20 Azimuth

General Location: ±2,200 feet north of the intersection of FM 3083 and Pollok Drive at address 3301 Pollok Drive McKesson Corporation

Latitude: 30° 21' 22.28388"
Longitude: 95° 27' 01.90231"
Grid Northing: 10,127,074.81
Grid Easting: 3,836,132.26
Surface Northing: 10,127,452.16
Surface Easting: 3,836,275.20

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 232.76 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#20 AZ"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

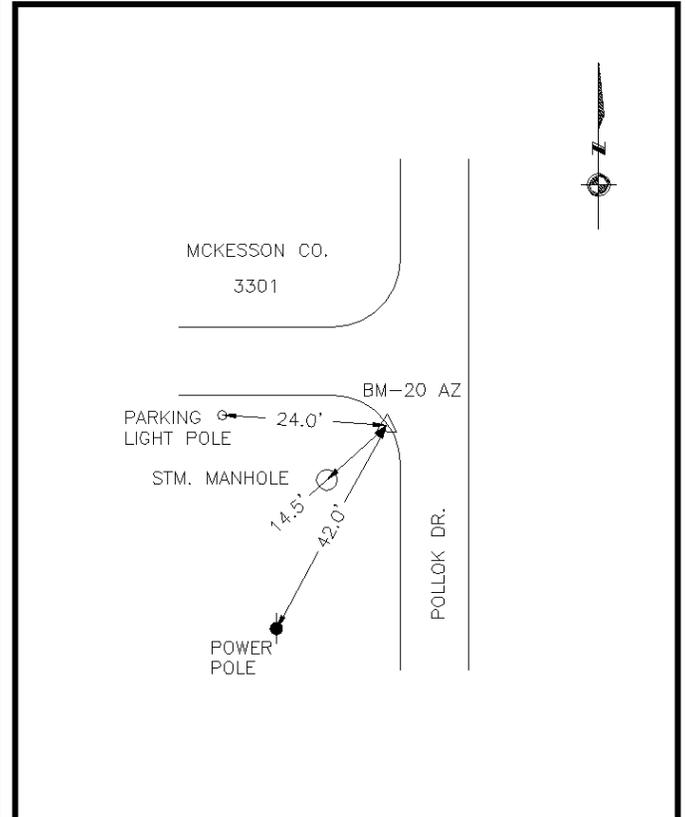


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 21

General Location: ±4,000 feet south of the intersection of SH-105 and McCaleb Road (Fish Creek Thoroughfare) at address 820 McCaleb Road

Latitude: 30° 20' 33.79829"
Longitude: 95° 34' 59.89911"
Grid Northing: 10,120,368.41
Grid Easting: 3,794,502.59
Surface Northing: 10,120,745.52
Surface Easting: 3,794,643.98

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 230.34 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#21"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

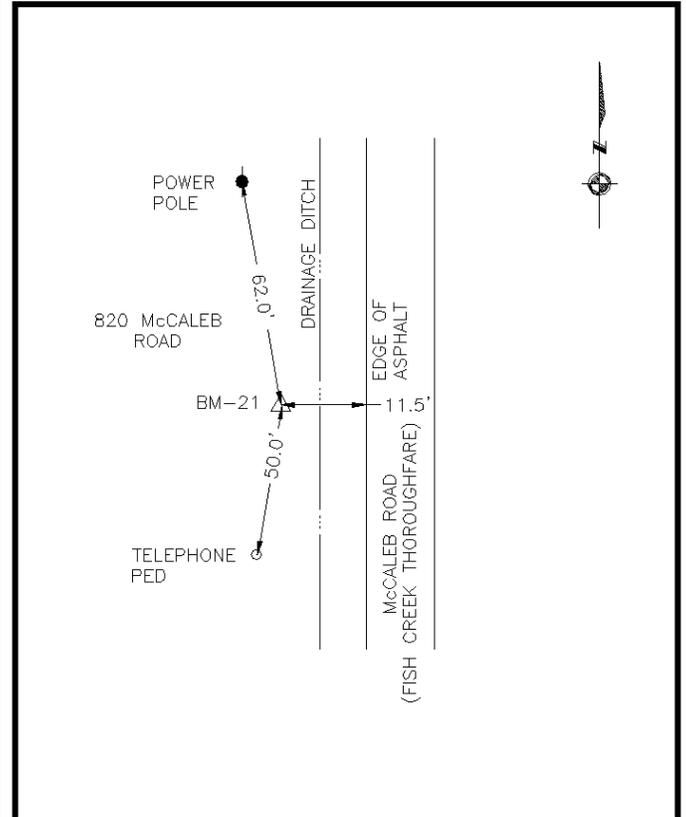


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 22

General Location: ±1,100 feet north from the intersection of FM 2854 and McCaleb Road (Fish Creek Thoroughfare) at a transmission line easement

Latitude: 30° 19' 21.60230"
Longitude: 95° 35' 16.87388"
Grid Northing: 10,113,018.02
Grid Easting: 3,793,327.58
Surface Northing: 10,113,394.85
Surface Easting: 3,793,468.93

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 271.16 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#22"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

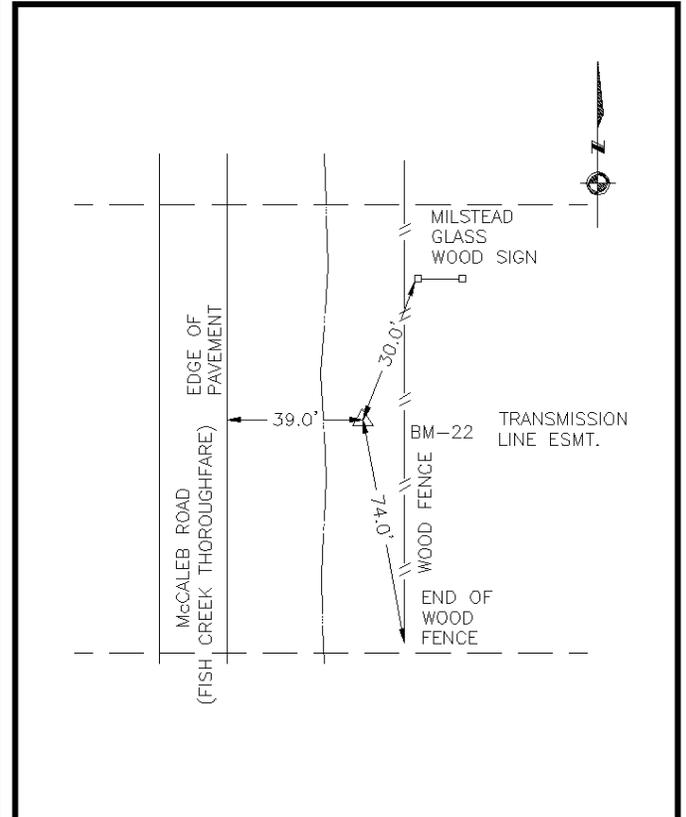


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 22 Azimuth

General Location: ±1,100 feet north from the intersection of FM 2854 and McCaleb Road (Fish Creek Thoroughfare) along McCaleb Road, then ±900 feet east of McCaleb Road, along a transmission line easement

Latitude: 30° 19' 20.70548"
Longitude: 95° 35' 06.64025"
Grid Northing: 10,112,965.76
Grid Easting: 3,794,227.53
Surface Northing: 10,113,342.59
Surface Easting: 3,794,368.91

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 274.06 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#22 AZ"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

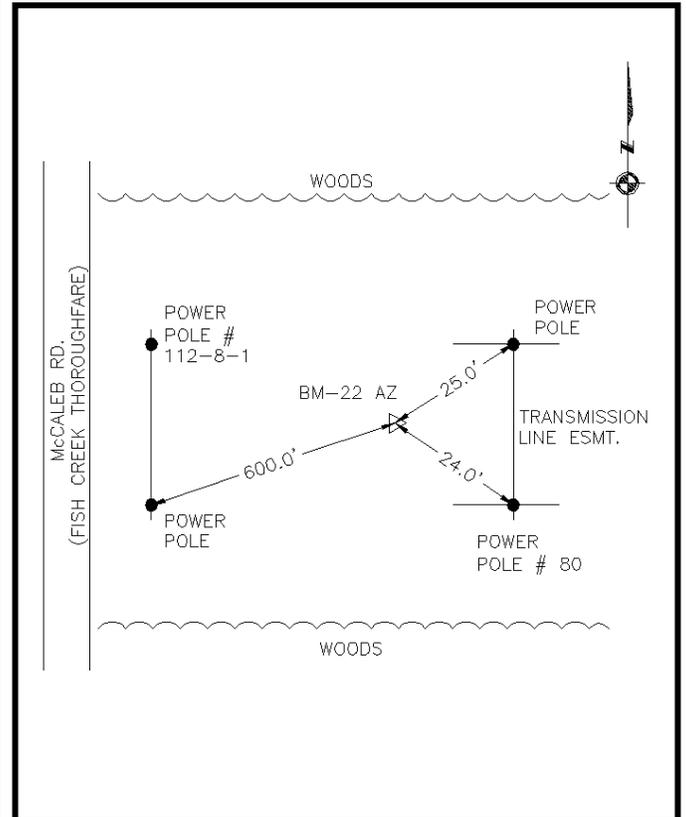


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 23

General Location: ±400 feet south of the intersection of Rolling Oak Drive and Fish Creek Thoroughfare, on drainage structure at Fish Creek on the west side of Fish Creek Thoroughfare

Latitude: 30° 18' 34.07043"
Longitude: 95° 35' 17.98900"
Grid Northing: 10,108,216.33
Grid Easting: 3,793,434.70
Surface Northing: 10,108,592.98
Surface Easting: 3,793,576.05

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 217.57 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#23"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

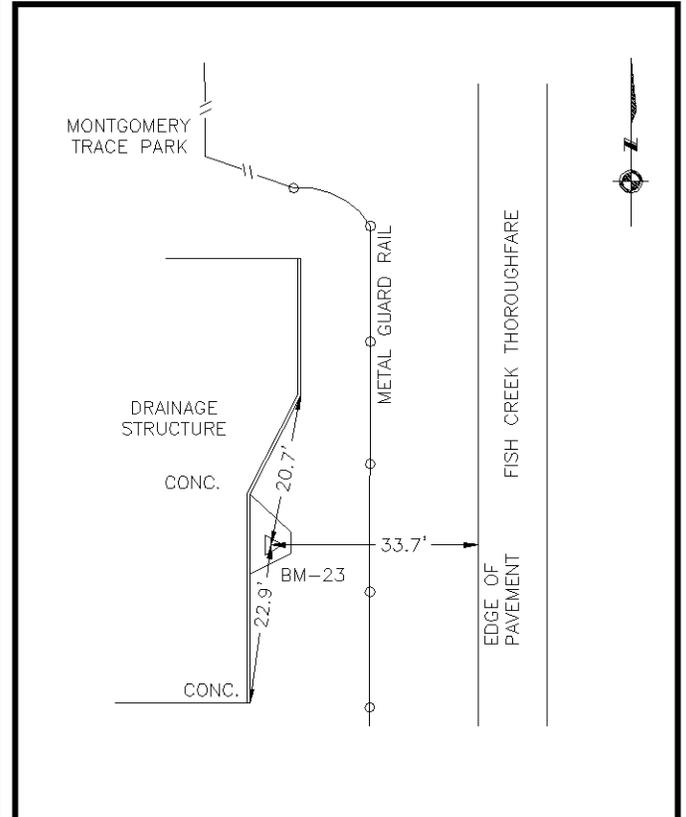


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 24

General Location: At the southeast corner of the intersection of Ridge Lake Drive and Fish Creek Thoroughfare

Latitude: 30° 17' 45.53870"
Longitude: 95° 34' 43.96596"
Grid Northing: 10,103,445.20
Grid Easting: 3,796,623.72
Surface Northing: 10,103,821.67
Surface Easting: 3,796,765.19

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 242.44 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#24"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

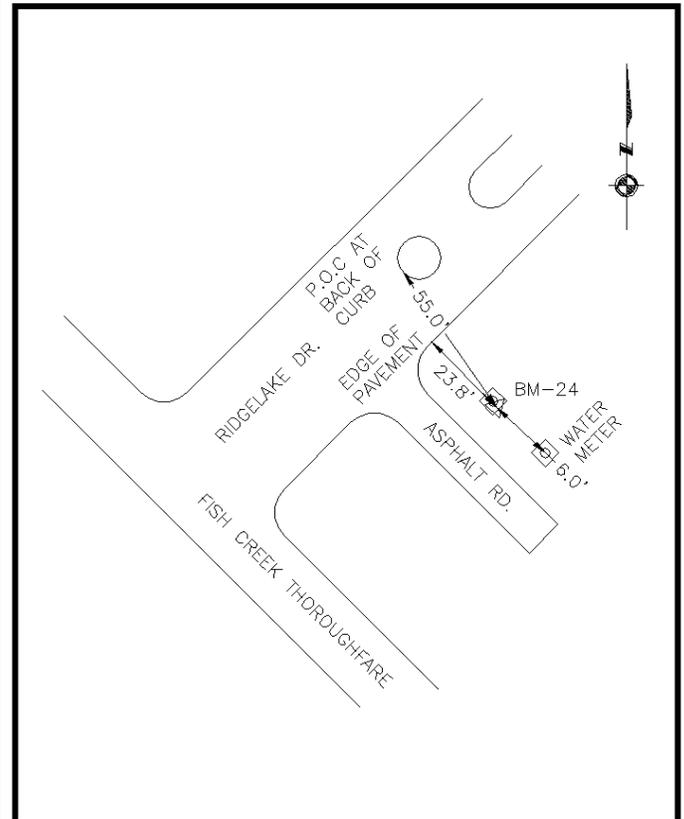


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 24 Azimuth

General Location: ±500 feet east of Fish Creek Thoroughfare at the southeast corner of the intersection of Ridge Lake Drive and Nautica Lane

Latitude: 30° 17' 47.56261"
Longitude: 95° 34' 39.81603"
Grid Northing: 10,103,665.02
Grid Easting: 3,796,978.46
Surface Northing: 10,104,041.50
Surface Easting: 3,797,119.95

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 230.68 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#24 AZ"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

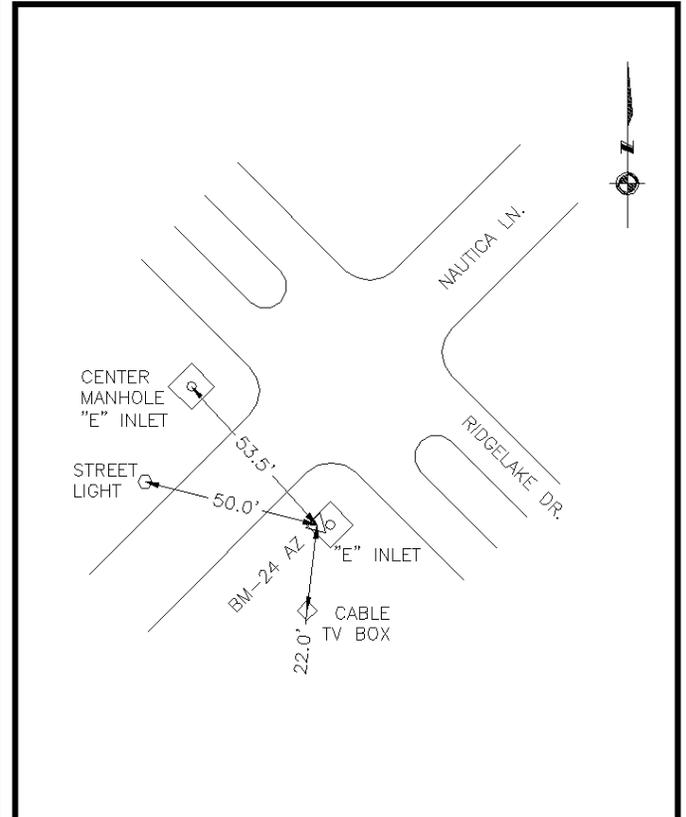


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 25

General Location: On the north side of Woodforest Parkway N. ±250 feet east of Fish Creek Thoroughfare

Latitude: 30° 16' 53.91562"
Longitude: 95° 34' 18.30365"
Grid Northing: 10,098,330.96
Grid Easting: 3,799,094.55
Surface Northing: 10,098,707.24
Surface Easting: 3,799,236.11

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 189.02 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#25"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

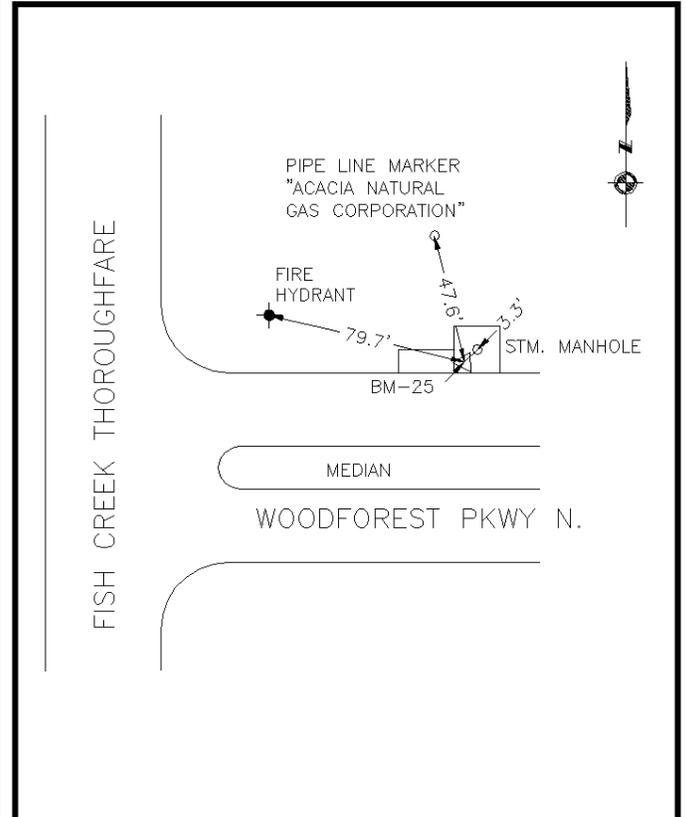


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 26

General Location: ±1,400 feet south of Elk Trace Parkway and ±1,300 feet north of Mulligan Drive on west side of Fish Creek Thoroughfare

Latitude: 30° 16' 16.71840"
Longitude: 95° 34' 07.69597"
Grid Northing: 10,094,616.37
Grid Easting: 3,800,184.67
Surface Northing: 10,094,992.52
Surface Easting: 3,800,326.27

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 160.94 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#26"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

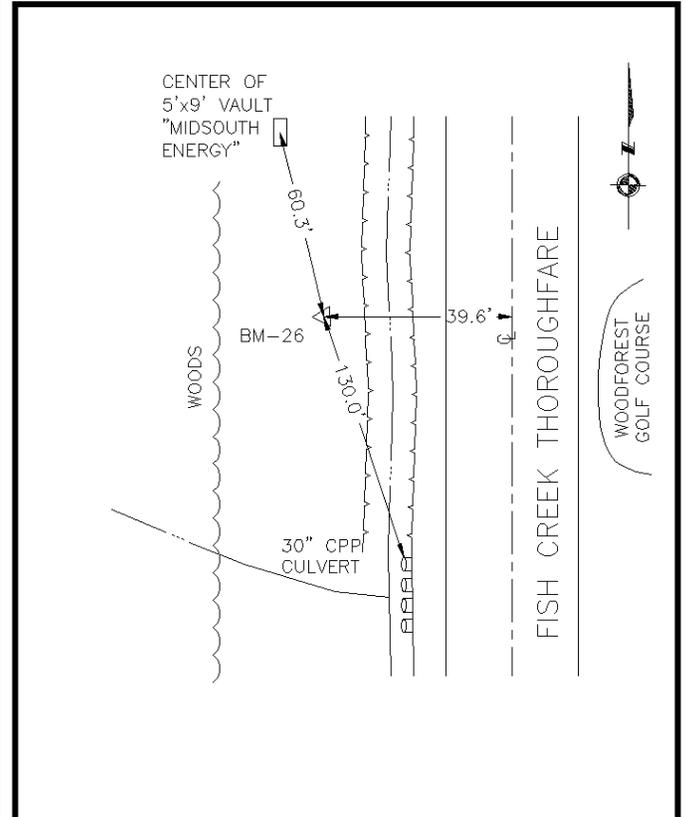


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 26 Azimuth

General Location: At the northeast corner of the intersection of Elk Trace Parkway and Fish Creek Thoroughfare

Latitude: 30° 16' 31.78620"
Longitude: 95° 34' 09.34531"
Grid Northing: 10,096,131.01
Grid Easting: 3,799,975.00
Surface Northing: 10,096,507.21
Surface Easting: 3,800,116.60

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 168.30 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#26 AZ"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

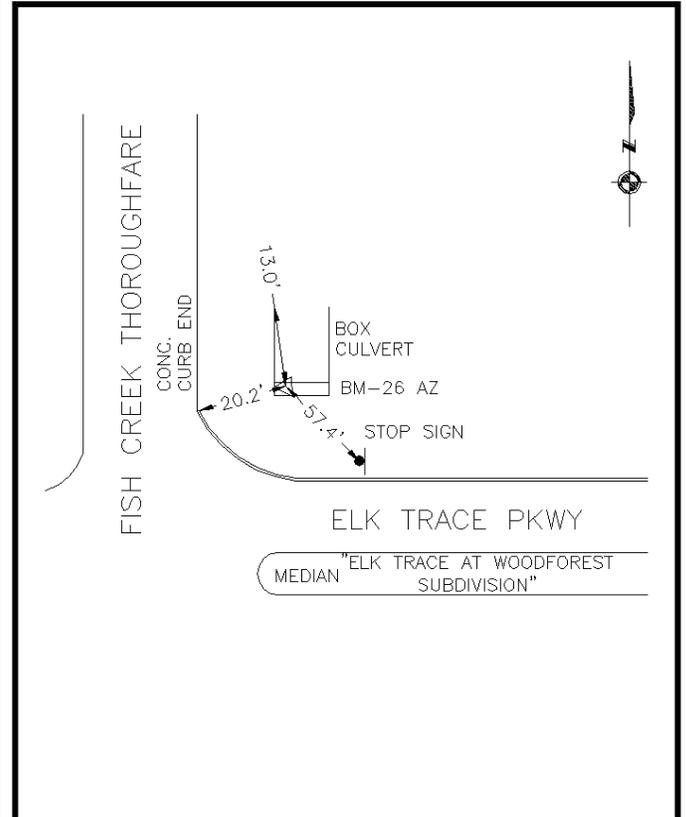


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 27

General Location: ±1,200 feet north of Lake Creek Bridge on east side of Fish Creek Thoroughfare

Latitude: 30° 15' 46.64286"
Longitude: 95° 33' 54.16626"
Grid Northing: 10,091,631.60
Grid Easting: 3,801,500.18
Surface Northing: 10,092,007.63
Surface Easting: 3,801,641.83

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 148.62 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#27"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

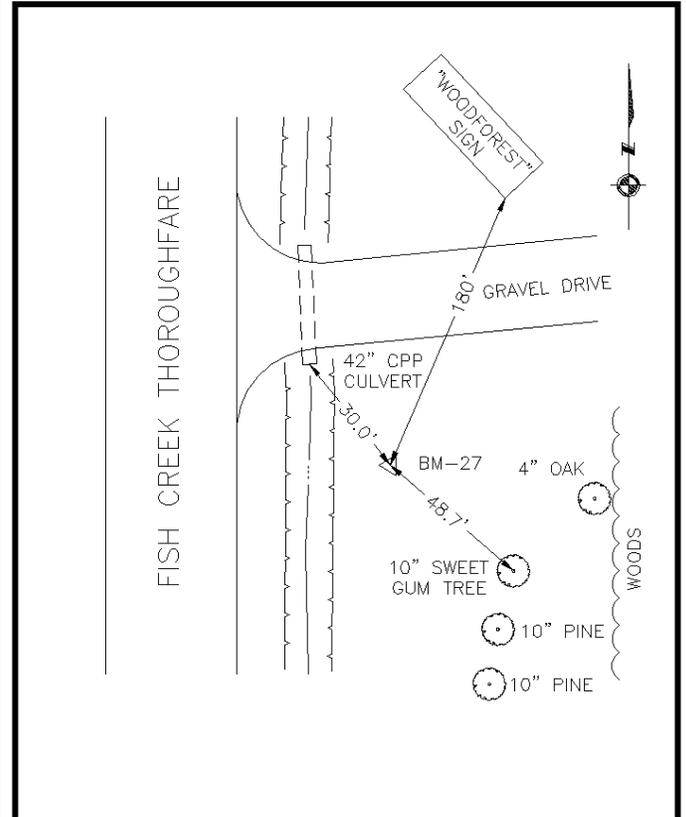


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 28

General Location: At the southeast corner of the intersection of Sendera Ranch Drive (Fish Creek Thoroughfare) and South Trace Drive

Latitude: 30° 14' 51.05245"
Longitude: 95° 33' 49.97572"
Grid Northing: 10,086,036.49
Grid Easting: 3,802,108.05
Surface Northing: 10,086,412.31
Surface Easting: 3,802,249.72

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 200.48 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#28"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

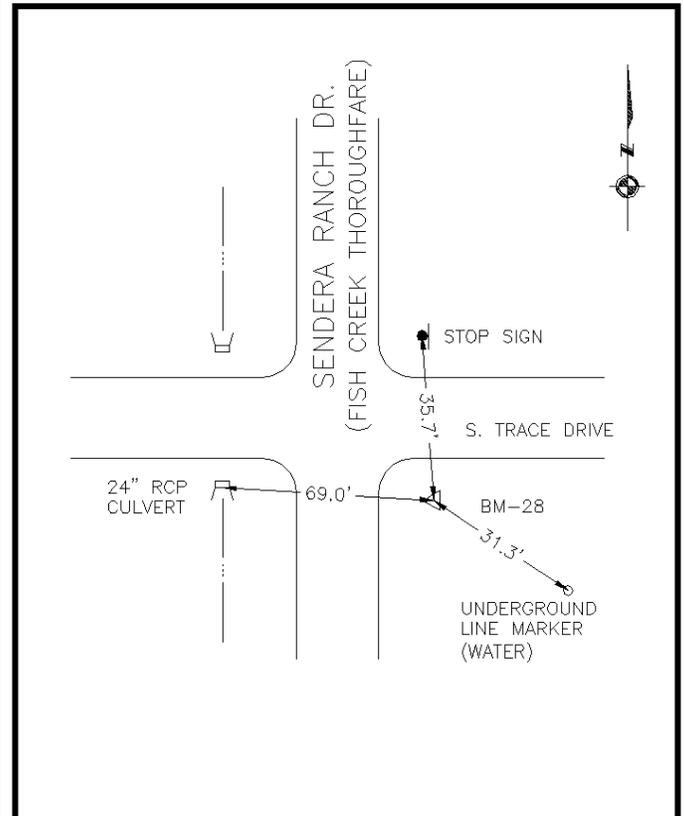


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 28 Azimuth

General Location: ±400 feet east of Sendera Ranch Drive (Fish Creek Thoroughfare) on the south side of South Trace Drive, at address 6223 South Trace Drive

Latitude: 30° 14' 50.31669"
Longitude: 95° 33' 45.05032"
Grid Northing: 10,085,980.74
Grid Easting: 3,802,542.85
Surface Northing: 10,086,356.57
Surface Easting: 3,802,684.54

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 194.43 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#28 AZ"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

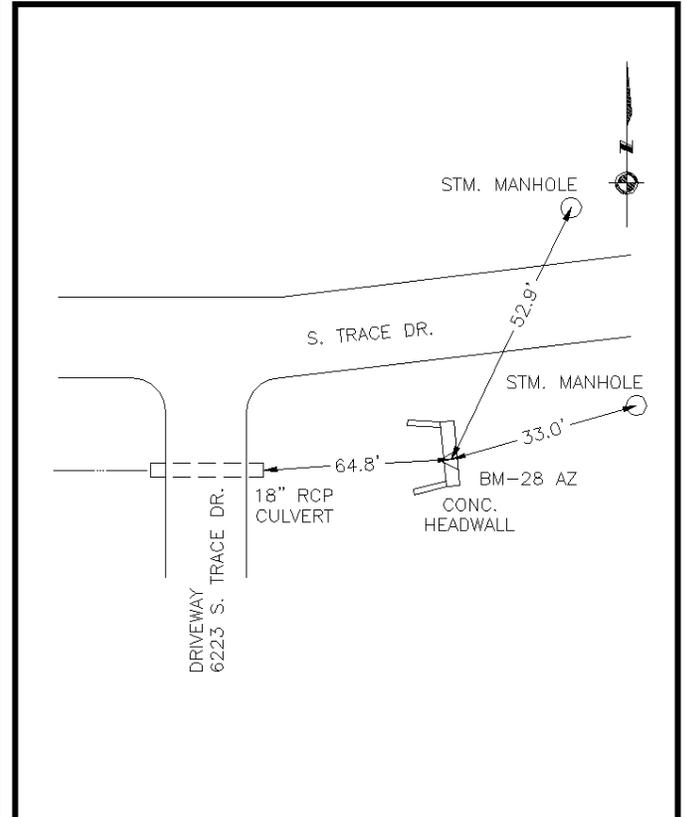


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 29

General Location: At the northeast corner of the intersection of Honea Egypt Road (Fish Creek Thoroughfare) and Pyle Lane

Latitude: 30° 14' 02.98060"
Longitude: 95° 34' 02.49785"
Grid Northing: 10,081,137.42
Grid Easting: 3,801,218.74
Surface Northing: 10,081,513.06
Surface Easting: 3,801,360.39

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 216.22 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#29"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

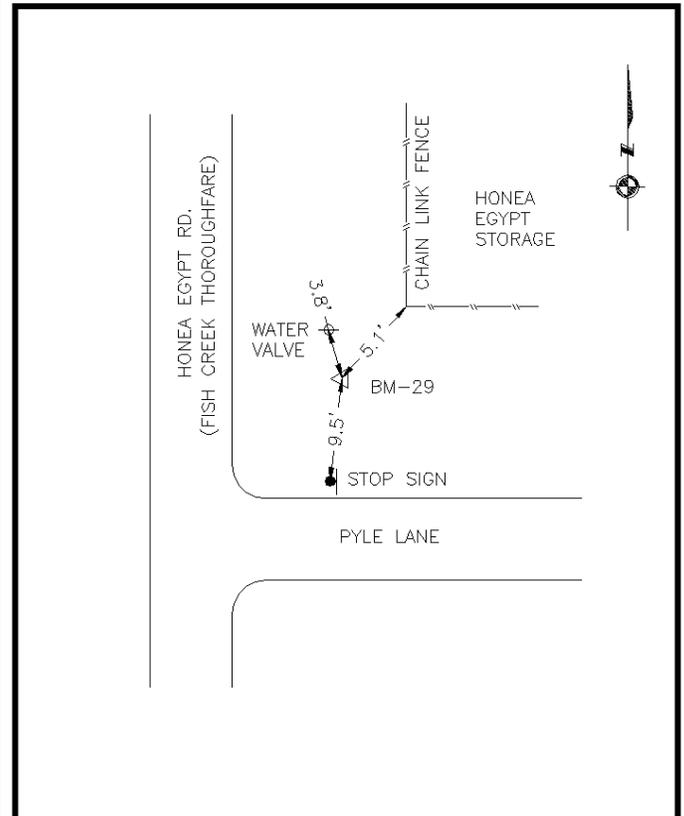


Photo 1-Station Detail:

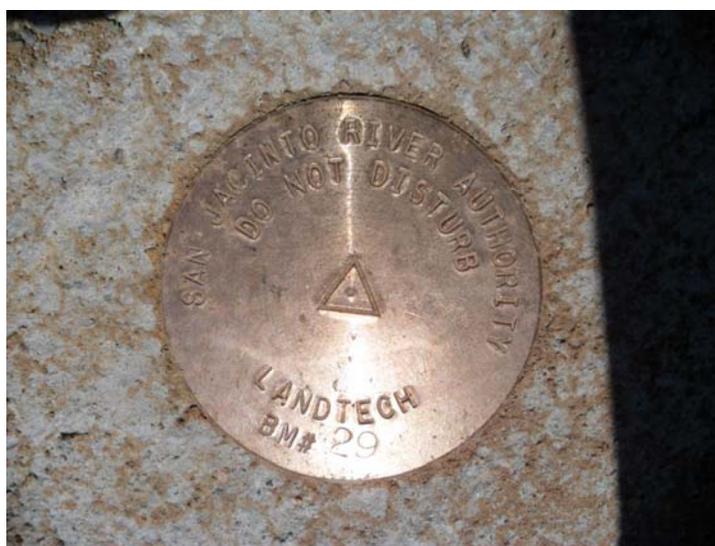


Photo 2-Station Area Picture:





Benchmark No. 30

General Location: ±250 feet east of FM 2978 on the south side of east bound Research Forest Drive

Latitude: 30° 12' 57.68299"
Longitude: 95° 34' 01.23088"
Grid Northing: 10,074,551.53
Grid Easting: 3,801,612.34
Surface Northing: 10,074,926.92
Surface Easting: 3,801,754.00

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 188.61 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#30"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

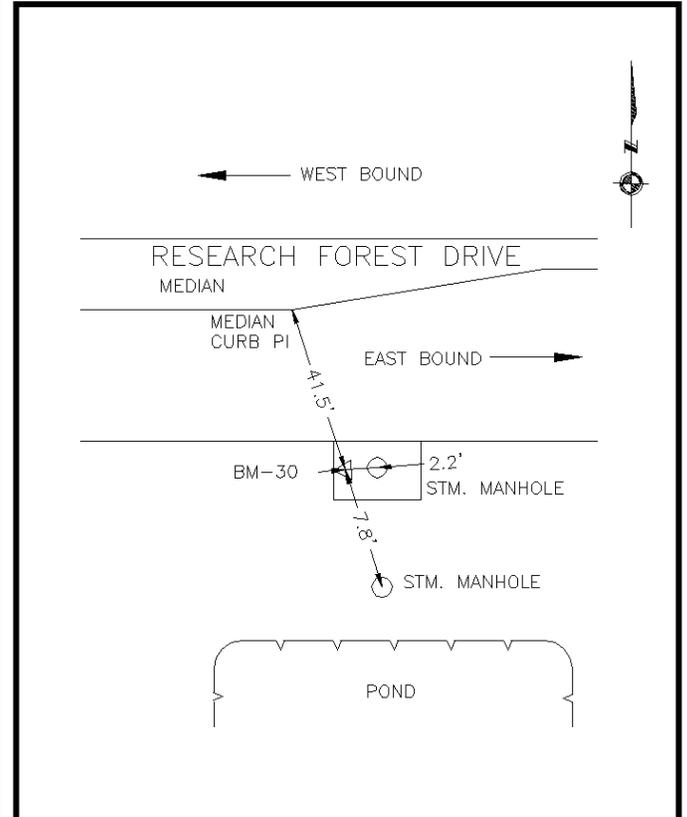


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 30 Azimuth

General Location: ±800 feet east of FM 2978 on the south side of Research Forest Drive, at address 10333 Research Forest Drive “Laurelwoode Apartments”

Latitude: 30° 12' 57.81663"
Longitude: 95° 33' 55.55180"
Grid Northing: 10,074,586.36
Grid Easting: 3,802,109.58
Surface Northing: 10,074,961.76
Surface Easting: 3,802,251.26

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 191.88 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#30 AZ"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo “City of Houston SJRA 1972” stamped “D-1 D-3” located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

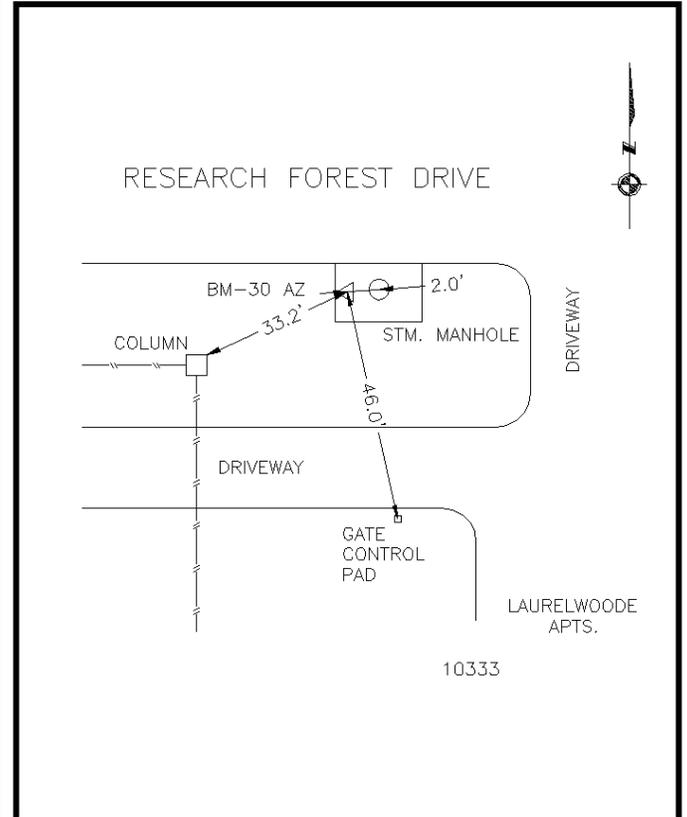


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 31

General Location: At the east corner of the intersection of FM 2978 and Ken Lake Drive

Latitude: 30° 12' 11.86652"
Longitude: 95° 34' 51.28578"
Grid Northing: 10,069,739.28
Grid Easting: 3,797,422.29
Surface Northing: 10,070,114.50
Surface Easting: 3,797,563.79

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 192.82 Project Datum

Mark Logo: The Woodlands Survey Control
Designation: SR49
Fnd 3" Aluminum Disk in Conc. Stamped "SR-49"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

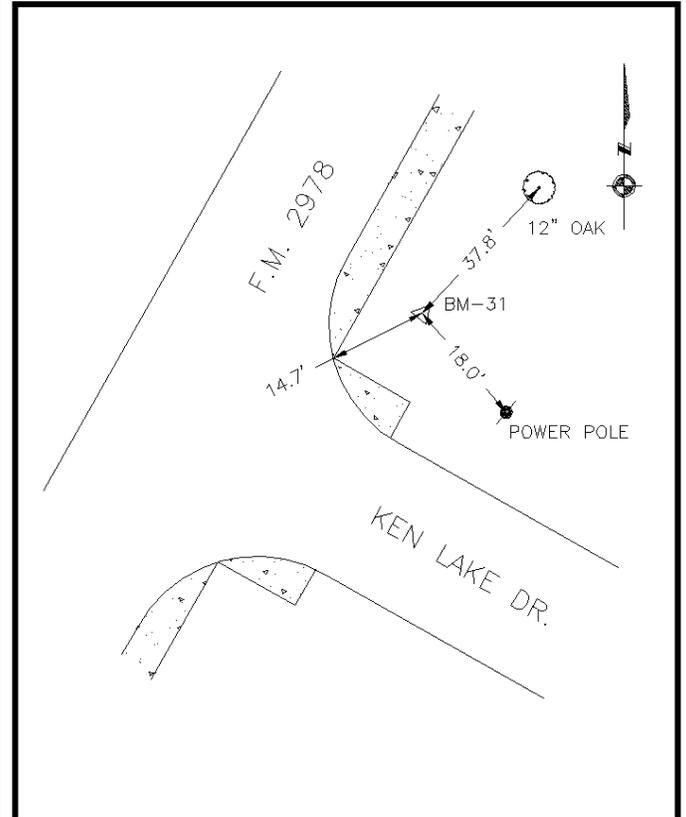


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 32

General Location: In the grass median east of the intersection of FM 2978 and Woodlands Parkway

Latitude: 30° 11' 33.97475"
Longitude: 95° 35' 23.26485"
Grid Northing: 10,065,794.99
Grid Easting: 3,794,781.86
Surface Northing: 10,066,170.06
Surface Easting: 3,794,923.26

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 202.45 Project Datum

Mark Logo: None
Designation: WP4
Fnd 3" Brass Disk in Conc. Stamped "WP4"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

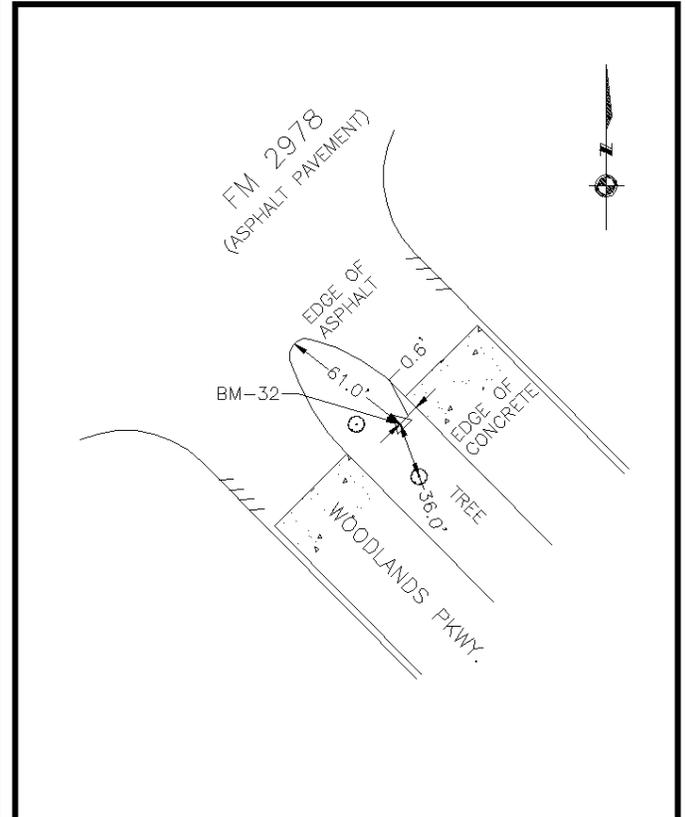


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 33

General Location: On the east side of West Branch Crossing Drive at the intersection of Burberry Park Circle and West Branch Crossing Drive

Latitude: 30° 11' 14.14944"
Longitude: 95° 35' 05.11939"
Grid Northing: 10,063,861.87
Grid Easting: 3,796,458.32
Surface Northing: 10,064,236.87
Surface Easting: 3,796,599.79

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 181.45 Project Datum

Mark Logo: The Woodlands Survey Control
Designation: SR53
Fnd 3" Aluminum Disk in Conc. Not Stamped

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

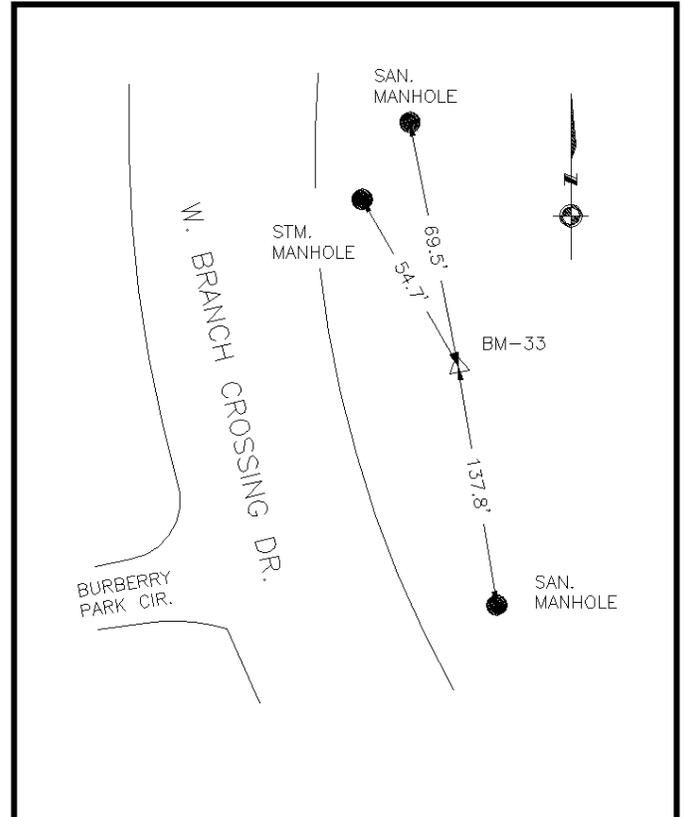


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 33 Azimuth

General Location: ±900 feet south of Burberry Park Circle on the east side of West Branch Crossing Drive across from the entrance to water plant

Latitude: 30° 11' 05.60452"
Longitude: 95° 35' 02.94528"
Grid Northing: 10,063,007.54
Grid Easting: 3,796,685.80
Surface Northing: 10,063,382.51
Surface Easting: 3,796,827.27

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 175.40 Project Datum

Mark Logo: The Woodlands Survey Control
Designation: SR54
Fnd 3" Aluminum Disk in Conc. Not Stamped

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

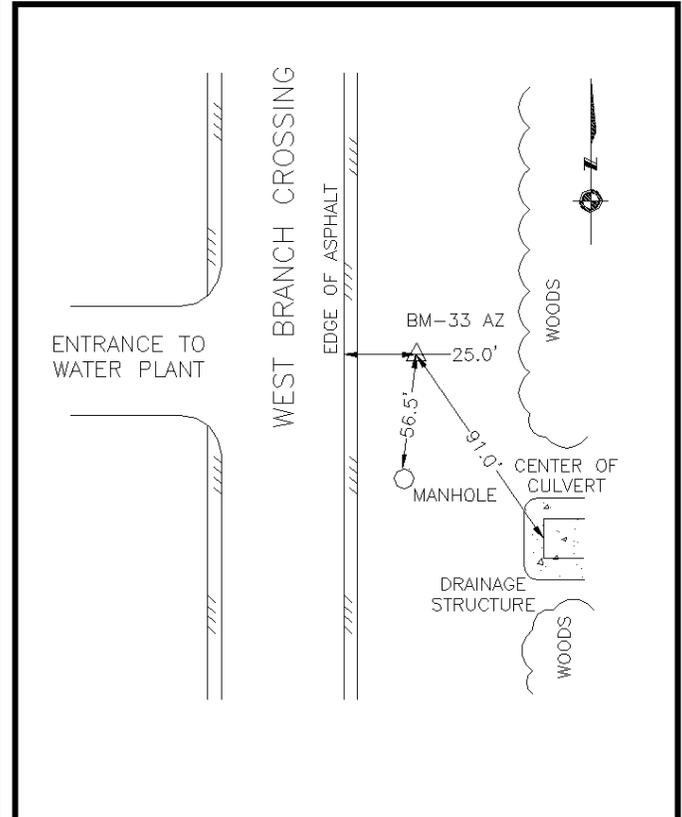


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 34

General Location: On the north side of Research Forest Drive at the intersection Branch Crossing Drive and Research Forest Drive

Latitude: 30° 12' 57.25120"
Longitude: 95° 32' 41.62680"
Grid Northing: 10,074,807.80
Grid Easting: 3,808,592.15
Surface Northing: 10,075,183.21
Surface Easting: 3,808,734.06

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 190.51 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#34"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

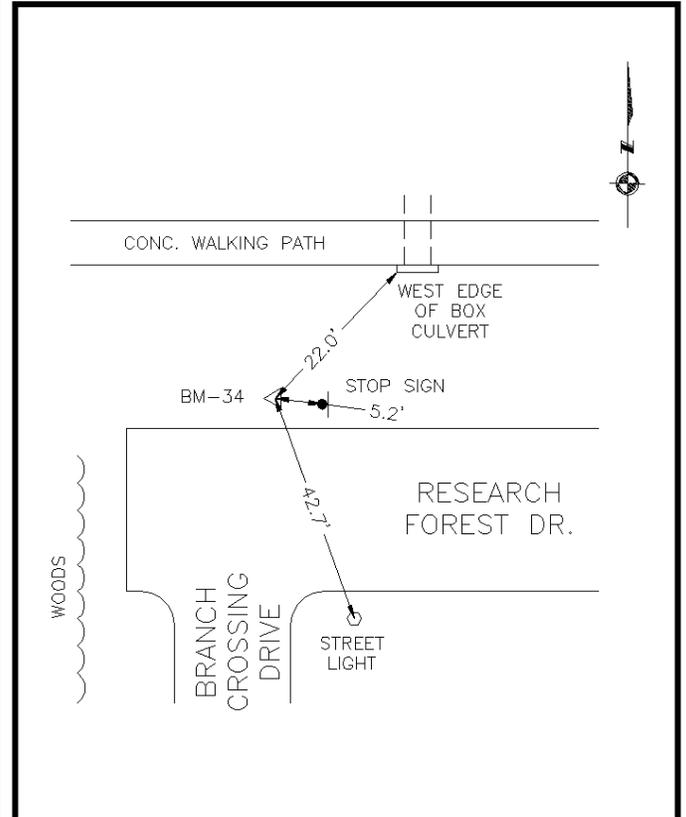


Photo 1-Station Detail:

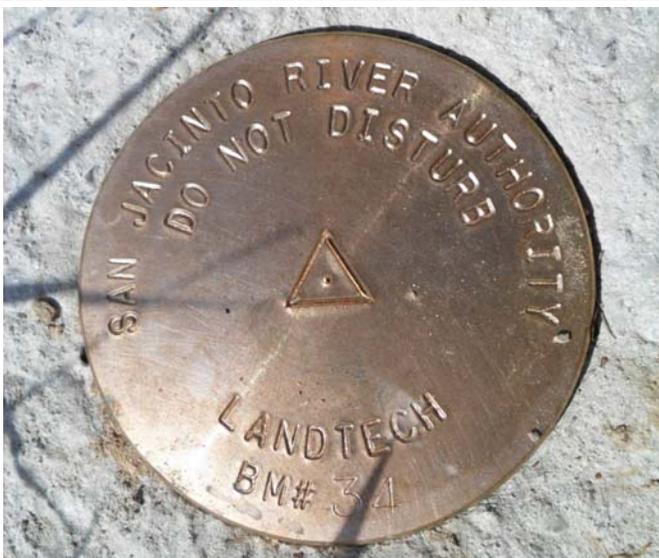


Photo 2-Station Area Picture:





Benchmark No. 34 Azimuth

General Location: ±475 feet south of Research Forest Drive on the west side of Branch Crossing Drive

Latitude: 30° 12' 52.82887"
Longitude: 95° 32' 43.66160"
Grid Northing: 10,074,353.77
Grid Easting: 3,808,433.00
Surface Northing: 10,074,729.16
Surface Easting: 3,808,574.91

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 193.98 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#34 AZ"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

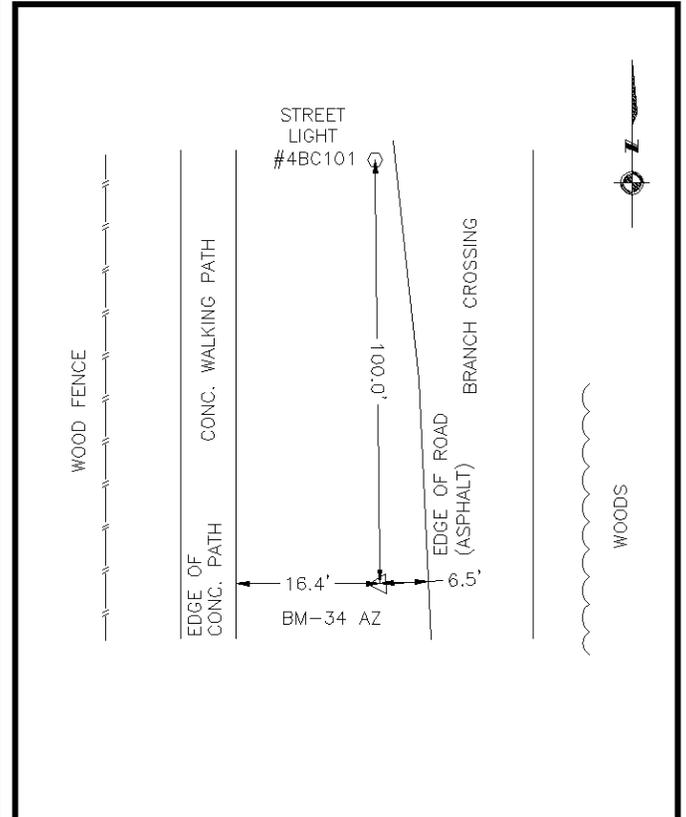


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 35

General Location: At the west corner of the intersection of Crownridge Drive and Kuykendahl Road

Latitude: 30° 12' 41.81238"
Longitude: 95° 31' 25.04194"
Grid Northing: 10,073,539.34
Grid Easting: 3,815,372.78
Surface Northing: 10,073,914.70
Surface Easting: 3,815,514.95

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 177.68 Project Datum

Mark Logo: The Woodlands Survey Control
Designation: KR11
Fnd 3" Aluminum Disk in Conc. Stamped "KR11"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

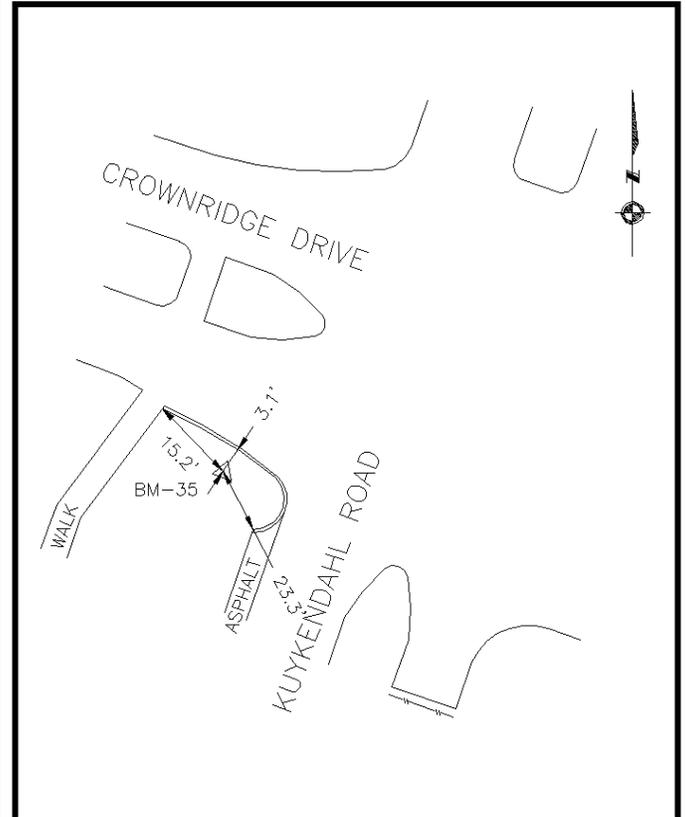


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 35 Azimuth

General Location: ±900 feet southwest of the intersection of Crownridge Drive and Kuykendahl Road, on the west side of Kuykendahl Road

Latitude: 30° 12' 34.42783"
Longitude: 95° 31' 29.56661"
Grid Northing: 10,072,776.86
Grid Easting: 3,815,008.38
Surface Northing: 10,073,152.19
Surface Easting: 3,815,150.54

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 183.50 Project Datum

Mark Logo: The Woodlands Survey Control
Designation: KR10
Fnd 3" Aluminum Disk in Conc. Stamped "KR10"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

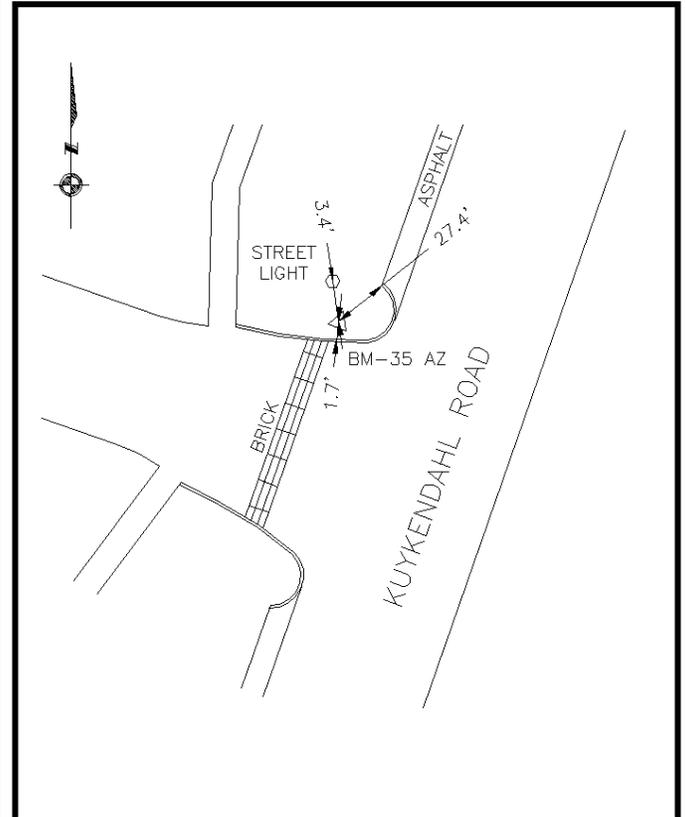


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 36

General Location: At the northeast corner of the intersection of Green Bridge Drive and Research Forest Drive in grass median

Latitude: 30° 12' 17.71692"
Longitude: 95° 30' 52.14270"
Grid Northing: 10,071,232.26
Grid Easting: 3,818,362.17
Surface Northing: 10,071,607.54
Surface Easting: 3,818,504.45

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 189.35 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#36"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

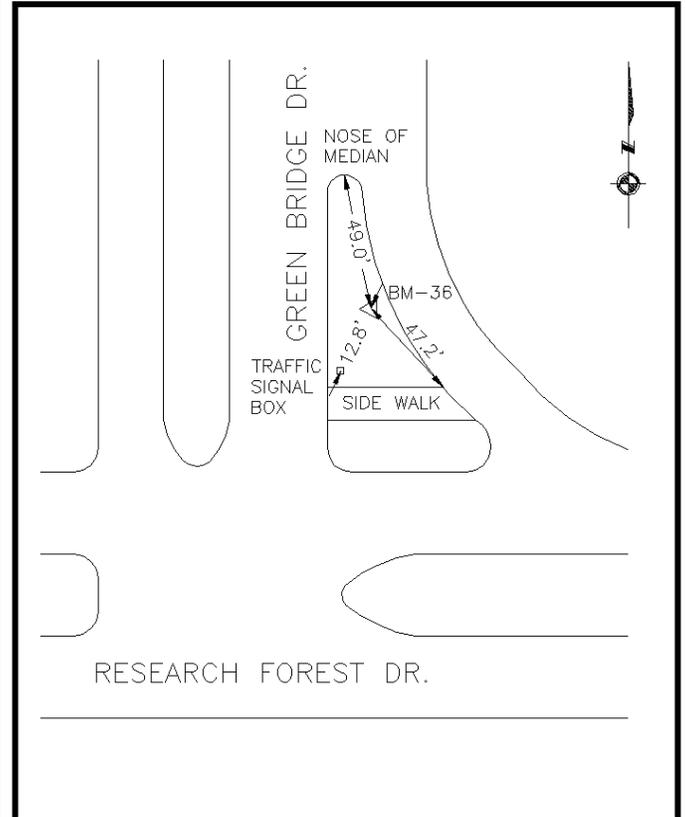


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 36 Azimuth

General Location: At the intersection of Windridge Place and Research Forest Drive on the top of curb at nose of median

Latitude: 30° 12' 15.00997"
Longitude: 95° 30' 48.89125"
Grid Northing: 10,070,971.41
Grid Easting: 3,818,659.06
Surface Northing: 10,071,346.67
Surface Easting: 3,818,801.35

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 184.25 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#36 AZ"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

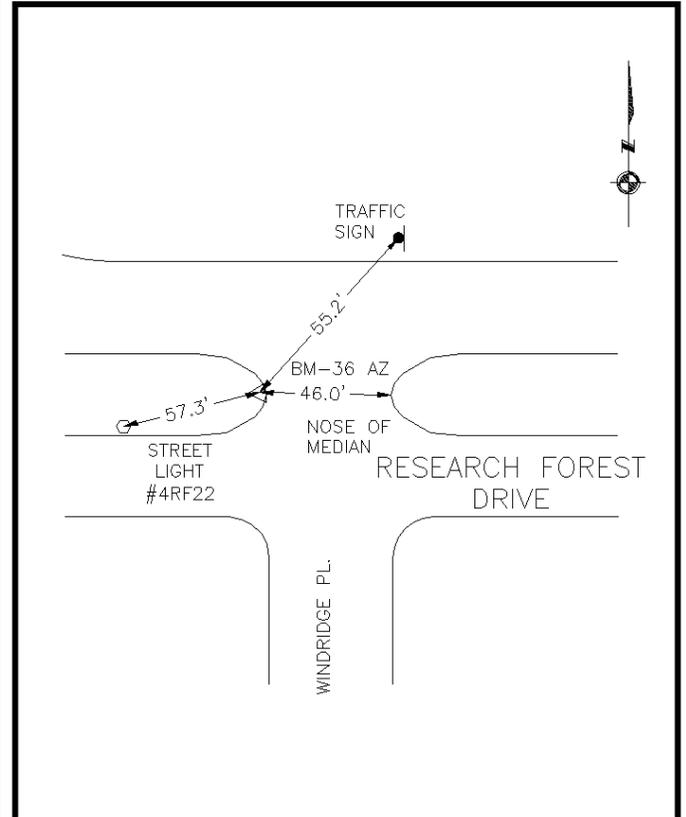


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 37

General Location: At the northwest corner of the intersection of Research Forest Drive and Cochrans Crossing Drive/East Trillium Drive

Latitude: 30° 11' 47.07504"
Longitude: 95° 29' 49.99034"
Grid Northing: 10,068,376.18
Grid Easting: 3,823,945.37
Surface Northing: 10,068,751.35
Surface Easting: 3,824,087.86

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 148.42 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#37"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

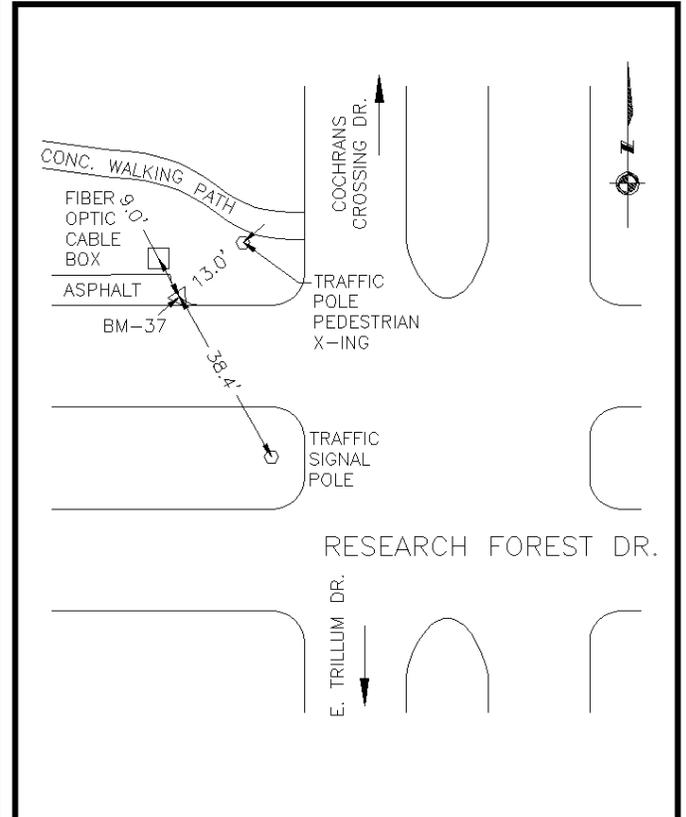


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 38

General Location: At the north corner of the intersection of Gosling Road and Research Forest Drive in grass median

Latitude: 30° 11' 06.24878"
Longitude: 95° 29' 15.36067"
Grid Northing: 10,064,387.80
Grid Easting: 3,827,161.08
Surface Northing: 10,064,762.82
Surface Easting: 3,827,303.69

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 162.55 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#38"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

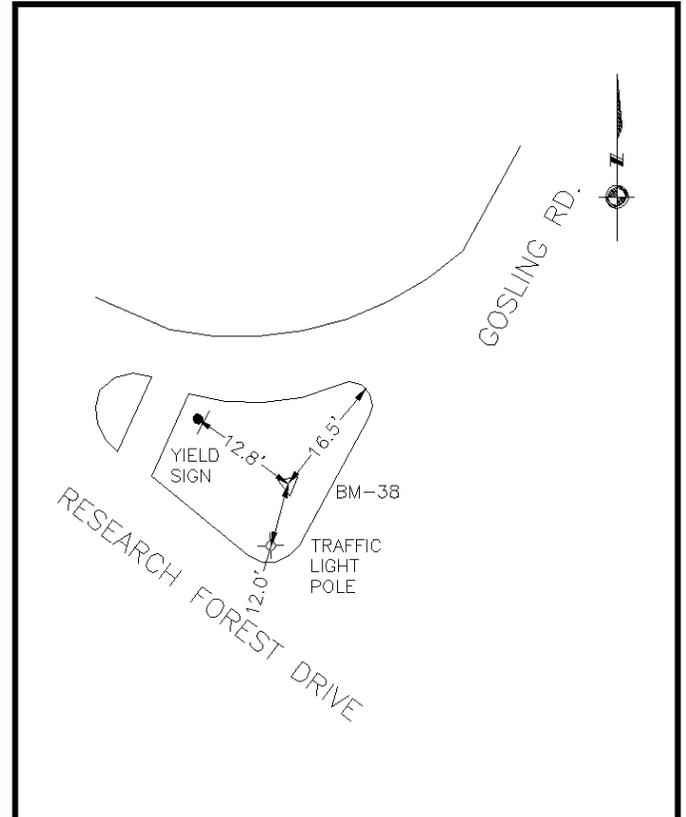


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 39

General Location: ±1,025 feet northeast of New Trails Drive on the west side of Gosling Road at the transmission line easement

Latitude: 30° 11' 21.50676"
Longitude: 95° 28' 58.15960"
Grid Northing: 10,065,993.56
Grid Easting: 3,828,602.14
Surface Northing: 10,066,368.64
Surface Easting: 3,828,744.80

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 140.34 Project Datum

Mark Logo: The Woodlands Survey Control
Designation: RF24
Fnd 3" Aluminum Disk in Conc. Stamped "RF-24"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

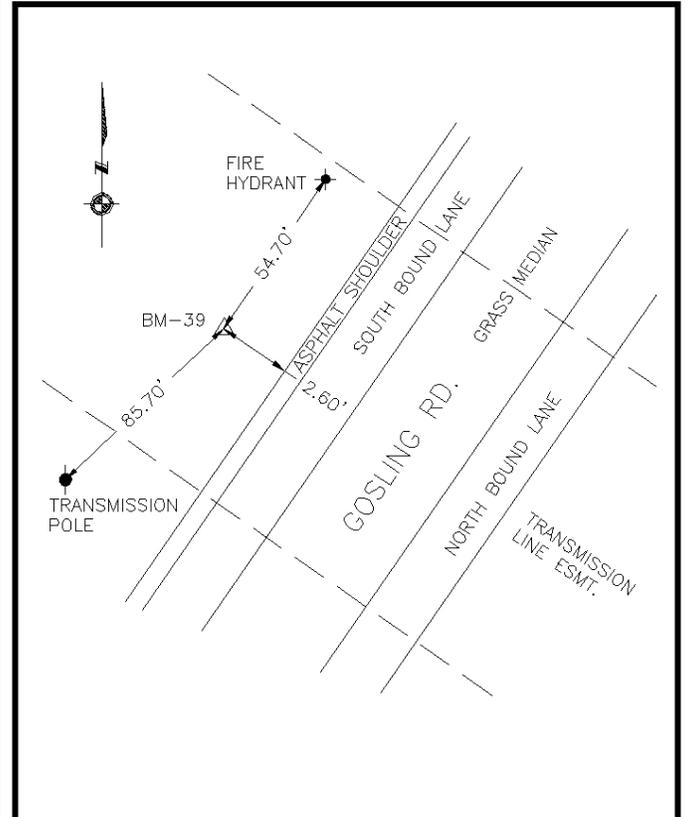


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 39 Azimuth

General Location: At the intersection of New Trails Drive and Gosling Road on the west side of Gosling Road

Latitude: 30° 11' 14.14311"
Longitude: 95° 29' 06.18850"
Grid Northing: 10,065,219.64
Grid Easting: 3,827,930.58
Surface Northing: 10,065,594.69
Surface Easting: 3,828,073.22

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 151.30 Project Datum

Mark Logo: The Woodlands Survey Control
Designation: RF19
Fnd 3" Aluminum Disk in Conc. Not Stamped

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

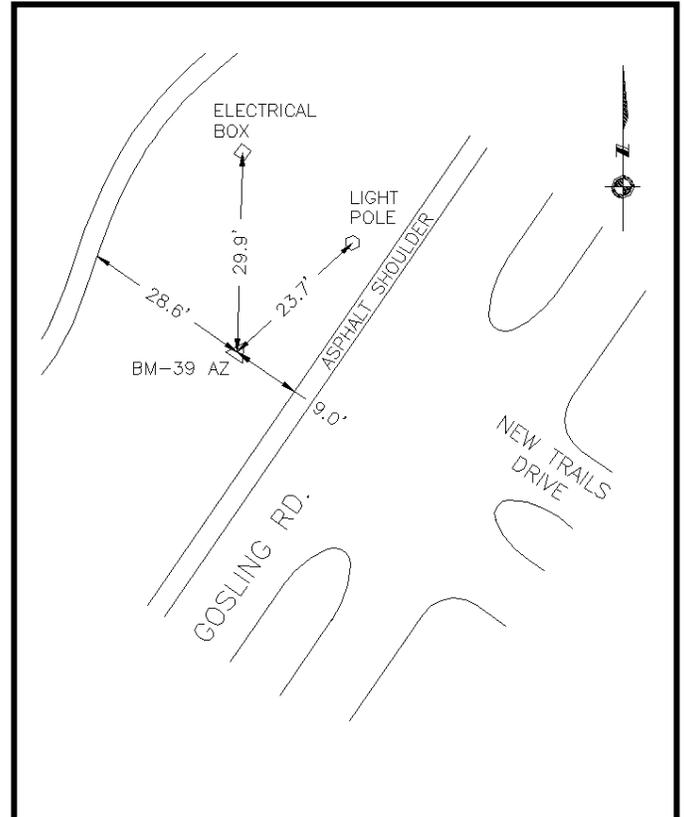


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 40

General Location: At the intersection of Gosling Road and Alden Woods Drive on the north median

Latitude: 30° 11' 52.24250"
Longitude: 95° 28' 48.56364"
Grid Northing: 10,069,132.42
Grid Easting: 3,829,308.09
Surface Northing: 10,069,507.61
Surface Easting: 3,829,450.77

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 148.52 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#40"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

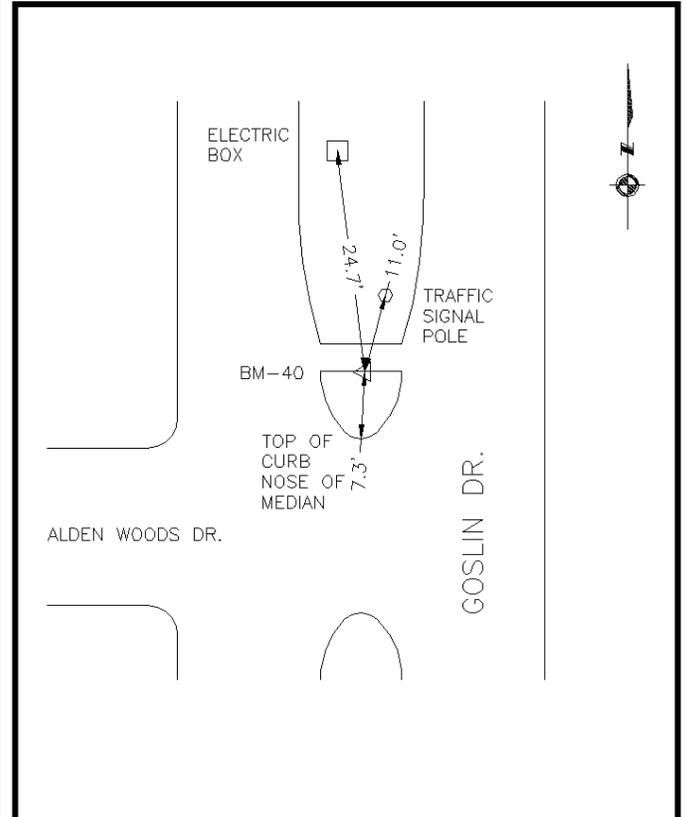


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 41

General Location: ±1,050 feet west of south bound IH-45 Frontage Road on the south side of St. Lukes Way in front of S.J.R.A. Water Plant No. 5

Latitude: 30° 11' 58.48539"
Longitude: 95° 27' 32.46902"
Grid Northing: 10,070,054.38
Grid Easting: 3,835,951.78
Surface Northing: 10,070,429.61
Surface Easting: 3,836,094.72

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 128.55 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#41"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

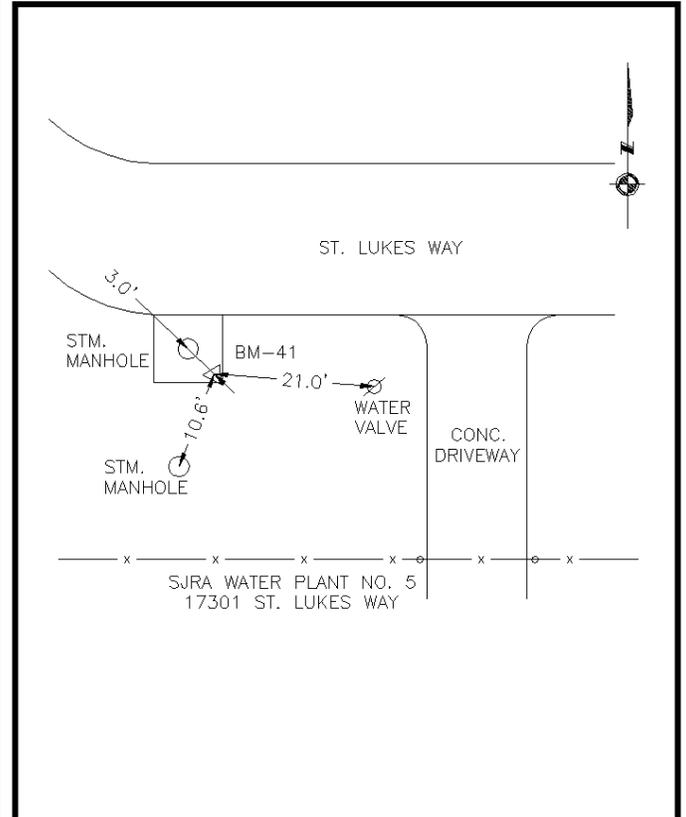


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 41 Azimuth

General Location: ±600 feet west of south bound IH-45 Frontage Road on the north side of St. Lukes Way across from Candlewood Suites 17525 St. Lukes Way

Latitude: 30° 11' 59.00207"
Longitude: 95° 27' 27.47273"
Grid Northing: 10,070,125.73
Grid Easting: 3,836,387.52
Surface Northing: 10,070,500.97
Surface Easting: 3,836,530.47

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 128.86 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#41 AZ"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

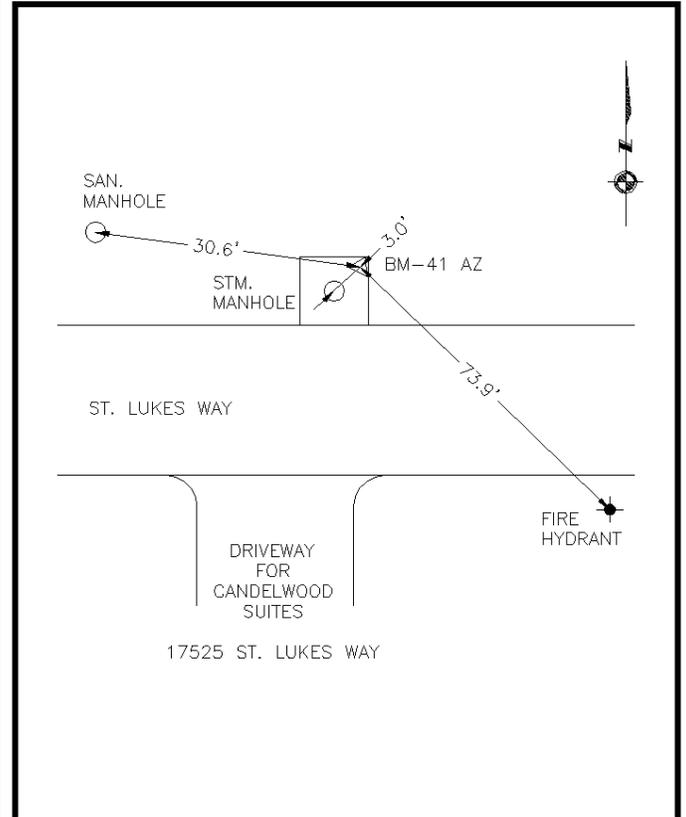


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 42

General Location: At the southwest corner of west bound Research Forest Drive and north bound Grogans Mill Road

Latitude: 30° 10' 37.95546"
Longitude: 95° 27' 56.56970"
Grid Northing: 10,061,834.00
Grid Easting: 3,834,194.77
Surface Northing: 10,062,208.93
Surface Easting: 3,834,337.64

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 141.69 Project Datum

Mark Logo: The Woodlands Survey Control
Designation: RF12
Fnd 3" Aluminum Disk in Conc. Not Stamped

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

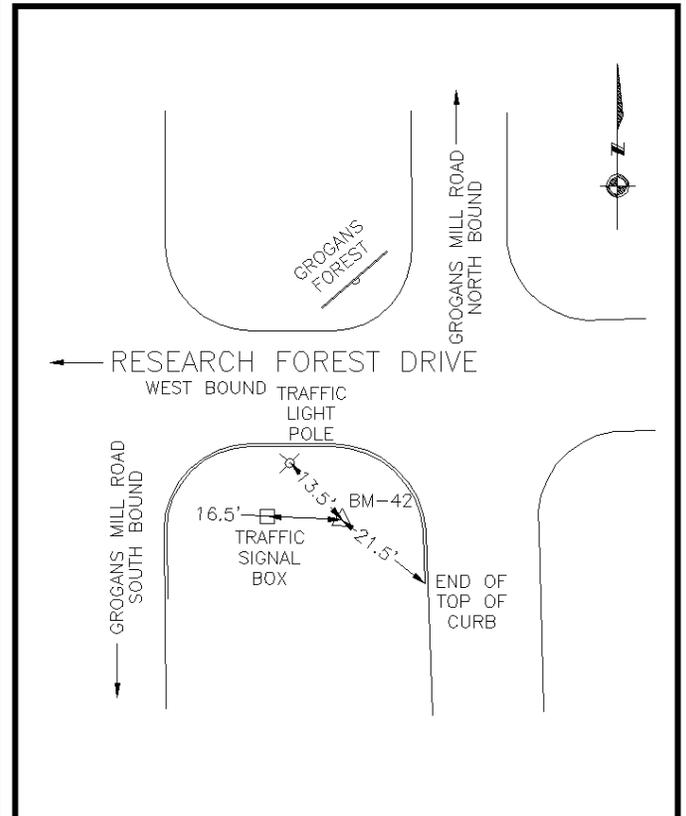


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 43

General Location: ±50 feet north of the intersection of High Timbers Drive and Grogans Mill Road in concrete median on the south side of Woodlands Waterway

Latitude: 30° 09' 42.59872"
Longitude: 95° 28' 08.13947"
Grid Northing: 10,056,202.48
Grid Easting: 3,833,424.68
Surface Northing: 10,056,577.20
Surface Easting: 3,833,567.52

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 142.01 Project Datum

Mark Logo: The Woodlands Survey Control
Designation: TC12
Fnd 3" Aluminum Disk in Conc. Stamped "TC12"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

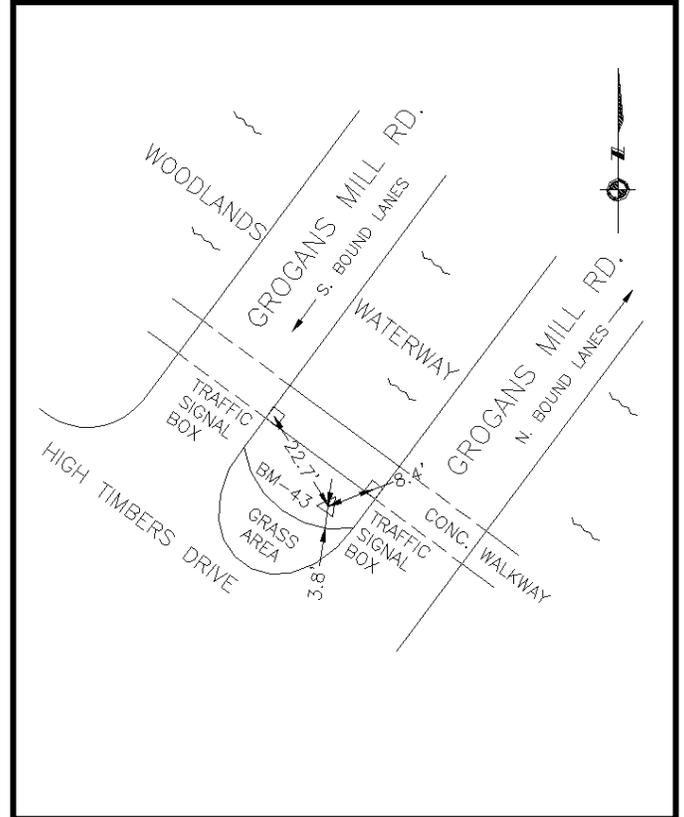


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 43 Azimuth

General Location: ±1,000 feet east of Grogans Mill Road bridge at Woodlands Waterway in grass bank between lower waterway and upper waterway

Latitude: 30° 09' 37.86228"
Longitude: 95° 27' 58.37811"
Grid Northing: 10,055,761.91
Grid Easting: 3,834,301.72
Surface Northing: 10,056,136.61
Surface Easting: 3,834,444.60

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 133.71 Project Datum

Mark Logo: The Woodlands Survey Control
Designation: TC42
Fnd 3" Aluminum Disk in Conc. Stamped "TC42"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

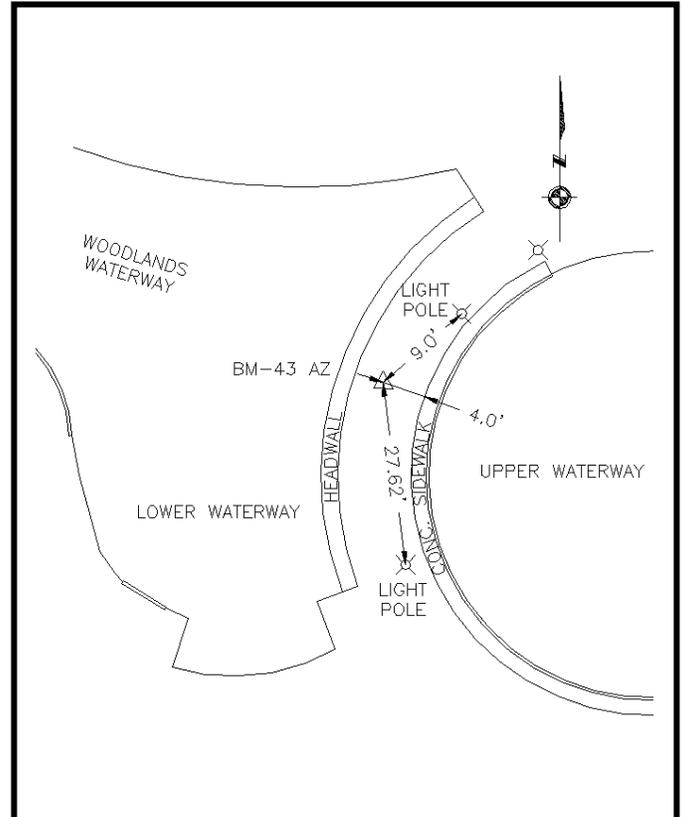


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 44

General Location: On the tip of island at the intersection of south bound Grogans Mill Road and North Millbend Drive

Latitude: 30° 08' 56.39347"
Longitude: 95° 28' 20.92079"
Grid Northing: 10,051,489.98
Grid Easting: 3,832,507.62
Surface Northing: 10,051,864.52
Surface Easting: 3,832,650.42

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 144.86 Project Datum

Mark Logo: TWDC 1974

Designation: GMC6

Fnd 3" Aluminum Disk in Conc. Stamped "GMC-6"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

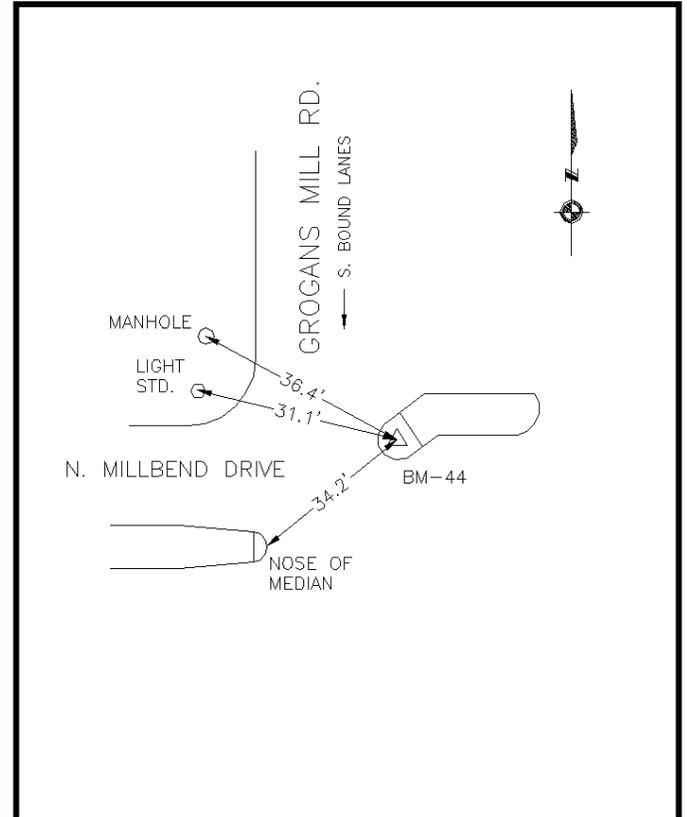


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 45

General Location: At of the intersection of Grogans Mill Road and South Millbend Drive, in the center of South Millbend Drive grass median

Latitude: 30° 08' 28.05559"
Longitude: 95° 28' 05.16372"
Grid Northing: 10,048,690.31
Grid Easting: 3,834,014.93
Surface Northing: 10,049,064.75
Surface Easting: 3,834,157.79

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 142.30 Project Datum

Mark Logo: The Woodlands Survey Control
Designation: GM10
Fnd 3" Aluminum Disk in Conc. Not Stamped

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

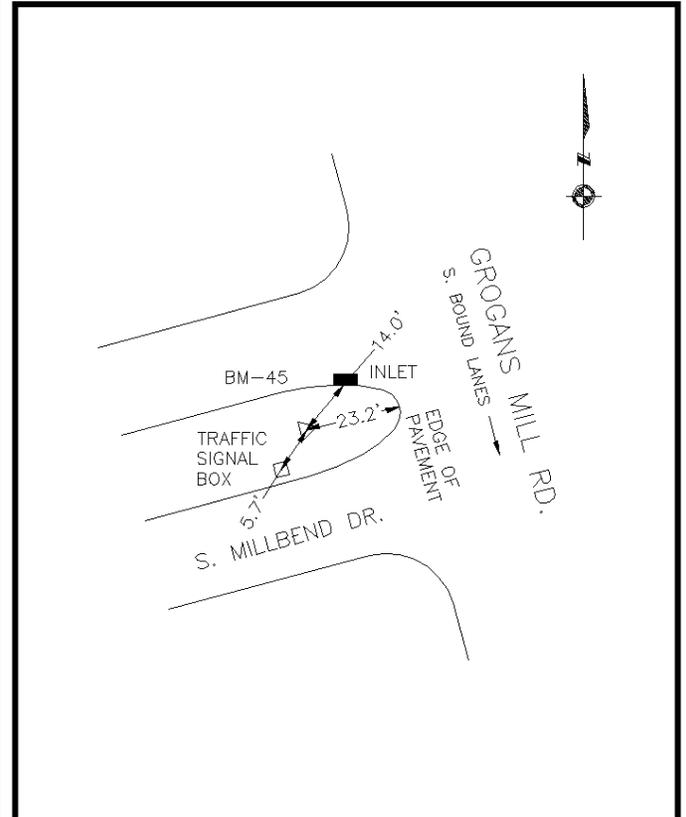


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 45 Azimuth

General Location: ±700 feet north of South Millbend Drive on the east side of south bound Grogans Mill Road north of entrance to Grogans Mill Village Center

Latitude: 30° 08' 34.52083"
 Longitude: 95° 28' 07.48279"
 Grid Northing: 10,049,333.95
 Grid Easting: 3,833,782.94
 Surface Northing: 10,049,708.40
 Surface Easting: 3,833,925.79

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 137.21 Project Datum

Mark Logo: The Woodlands Survey Control
Designation: GM16
Fnd 3" Aluminum Disk in Conc. Stamped "GM16"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

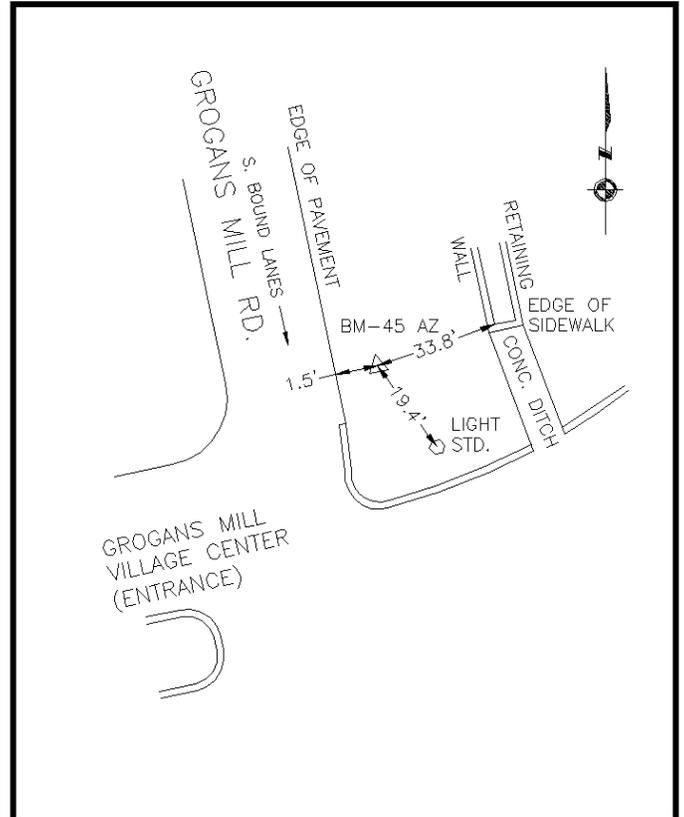


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 46

General Location: ±700 feet east of Grogans Point Road on the south side of Sawdust Road west of golf cart bridge

Latitude: 30° 07' 58.54860"
 Longitude: 95° 28' 48.19220"
 Grid Northing: 10,045,547.19
 Grid Easting: 3,830,370.35
 Surface Northing: 10,045,921.50
 Surface Easting: 3,830,513.08

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 116.10 Project Datum

Mark Logo: The Woodlands Survey Control
Designation: GM30
Fnd 3" Aluminum Disk in Conc. Not Stamped

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

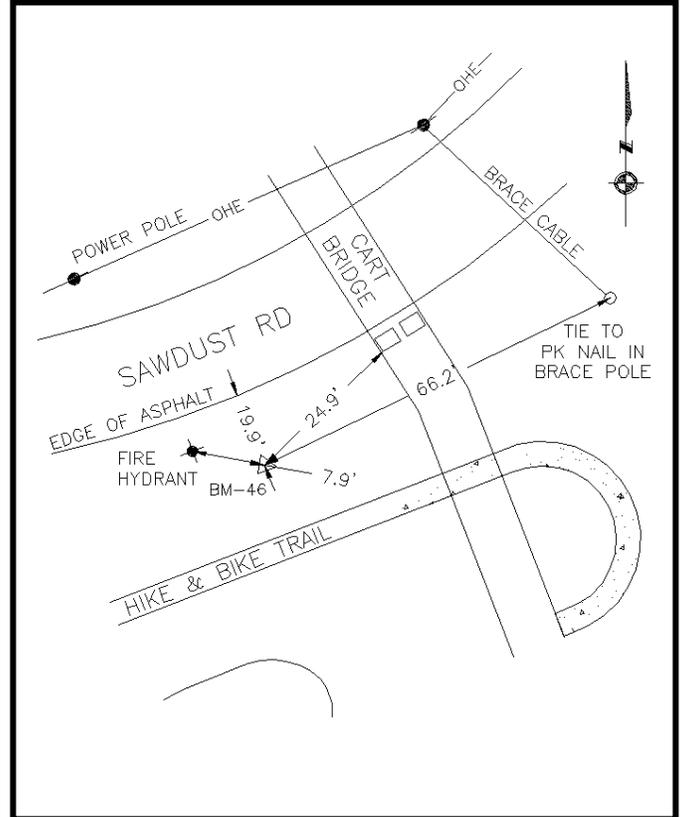


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 47

General Location: At the north corner of the intersection of Timberline Drive and Pine Canyon Drive

Latitude: 30° 07' 26.08971"
Longitude: 95° 29' 28.97530"
Grid Northing: 10,042,115.08
Grid Easting: 3,826,935.10
Surface Northing: 10,042,489.27
Surface Easting: 3,827,077.70

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 116.89 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#47"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

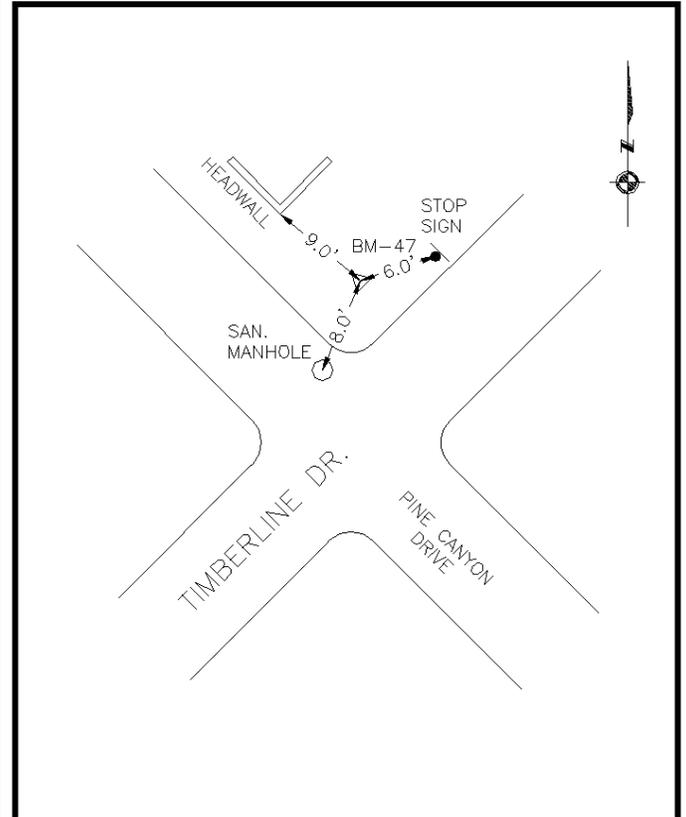


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 47 Azimuth

General Location: At the east corner of the intersection of Timberline Drive and Rogue Creek Street

Latitude: 30° 07' 19.88474"
Longitude: 95° 29' 33.03557"
Grid Northing: 10,041,473.29
Grid Easting: 3,826,606.13
Surface Northing: 10,041,847.46
Surface Easting: 3,826,748.72

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 112.42 Project Datum

Mark Logo: Floodplain Reference Mark
Designation: TSARP 100095
Fnd 3" Brass Disk in Conc. Stamped "RM 100095"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor
Units of Measure: U.S. Survey Foot

Detail Sketch:

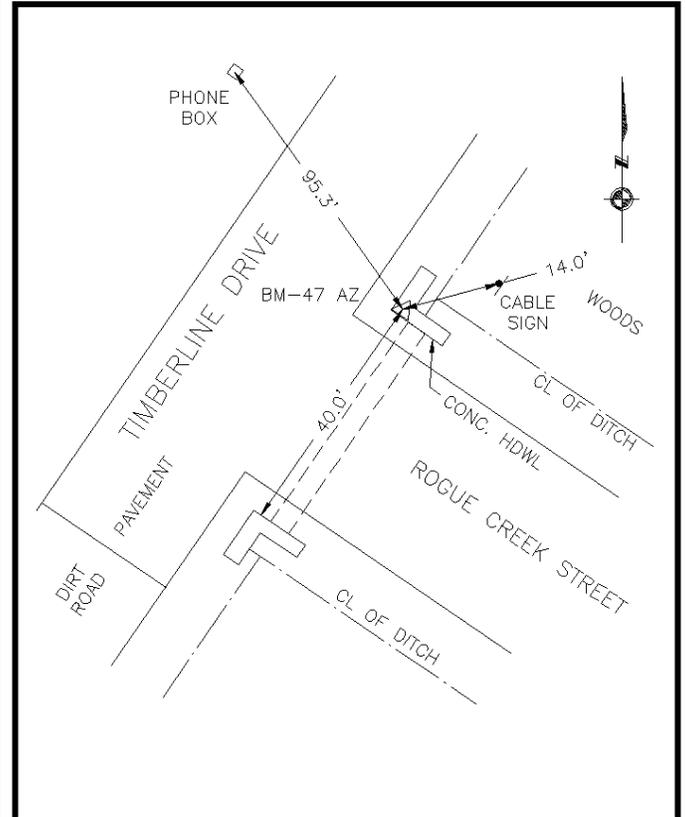


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 48

General Location: ±600 feet west of Sawdust Road on the south side of southeast bound Grogans Mill Road on the west end of a concrete walk on Panther Branch Bridge

Latitude: 30° 07' 42.22776"
Longitude: 95° 27' 23.37396"
Grid Northing: 10,044,225.58
Grid Easting: 3,837,883.74
Surface Northing: 10,044,599.85
Surface Easting: 3,838,026.75

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 128.40 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#48"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

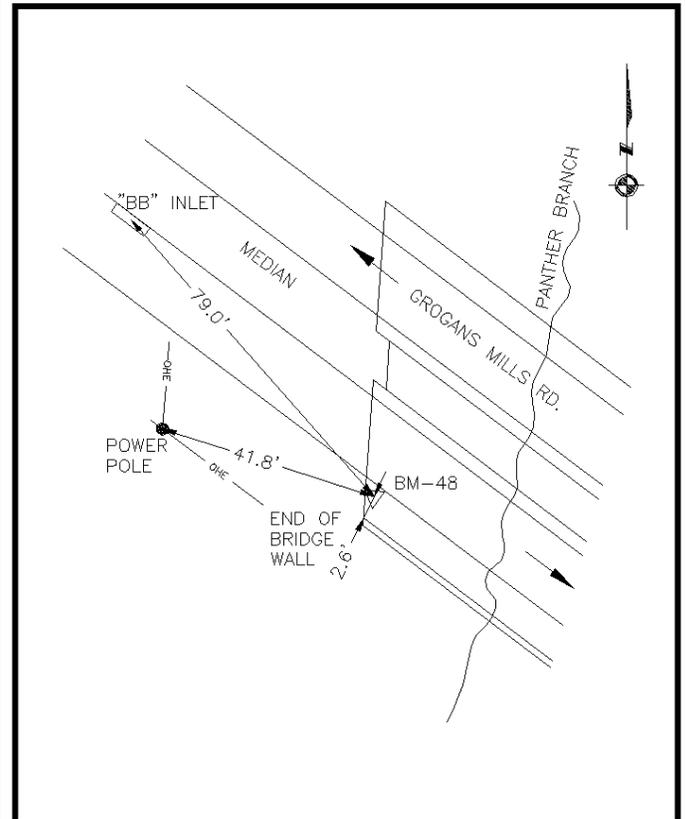


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 49

General Location: ±325 feet north of the intersection of Westridge Drive and South Park

Latitude: 30° 07' 17.87058"
Longitude: 95° 27' 19.61687"
Grid Northing: 10,041,781.69
Grid Easting: 3,838,321.24
Surface Northing: 10,042,155.87
Surface Easting: 3,838,464.26

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 112.58 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Brass Disk in Conc. Stamped "BM#49"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

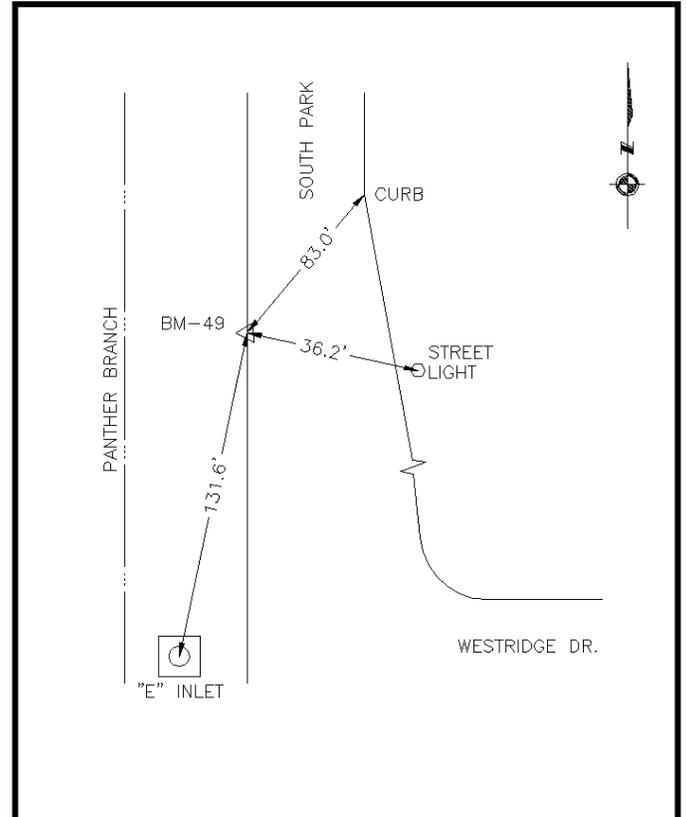


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 49 Azimuth

General Location: ±150 feet south of the intersection of Westridge Drive and South Park

Latitude: 30° 07' 13.09981"
 Longitude: 95° 27' 19.59545"
 Grid Northing: 10,041,300.26
 Grid Easting: 3,838,344.24
 Surface Northing: 10,041,674.42
 Surface Easting: 3,838,487.27

Texas Coordinate System of 1983 (NAD83, CORS)
 Central Zone (4203)

Elevation: 112.27 Project Datum

Mark Logo: Floodplain Reference Mark
 Designation: TSARP 100080
 Fnd 3" Brass Disk in Conc. Stamped "RM 100080"

Project Datum is based on a call elevation of 212.00 at
 S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with
 a mark logo "City of Houston SJRA 1972" stamped "D-1
 D-3" located at the Lake Conroe gauging station pier on
 the dam structure.

Combined Factor: 0.9999627395
 Surface = Grid / Combined Factor
 Units of Measure: U.S. Survey Foot

Detail Sketch:

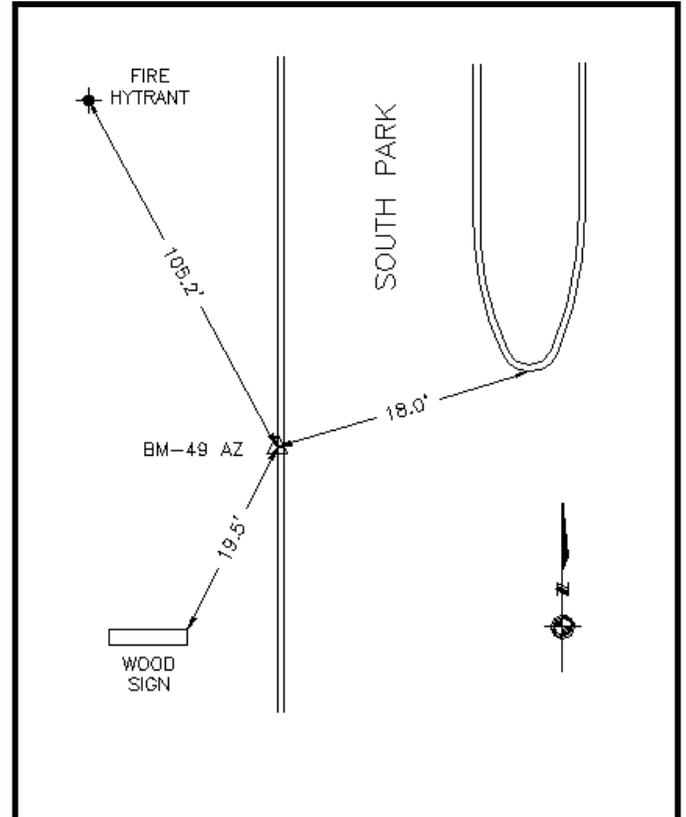


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 50

General Location: ±150 feet west of Rayford Crest Drive on the south side of Rayford Road at address 440 Rayford Road

Latitude: 30° 07' 37.46630"
Longitude: 95° 26' 11.51105"
Grid Northing: 10,044,022.16
Grid Easting: 3,844,209.71
Surface Northing: 10,044,396.42
Surface Easting: 3,844,352.95

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 108.53 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#50"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

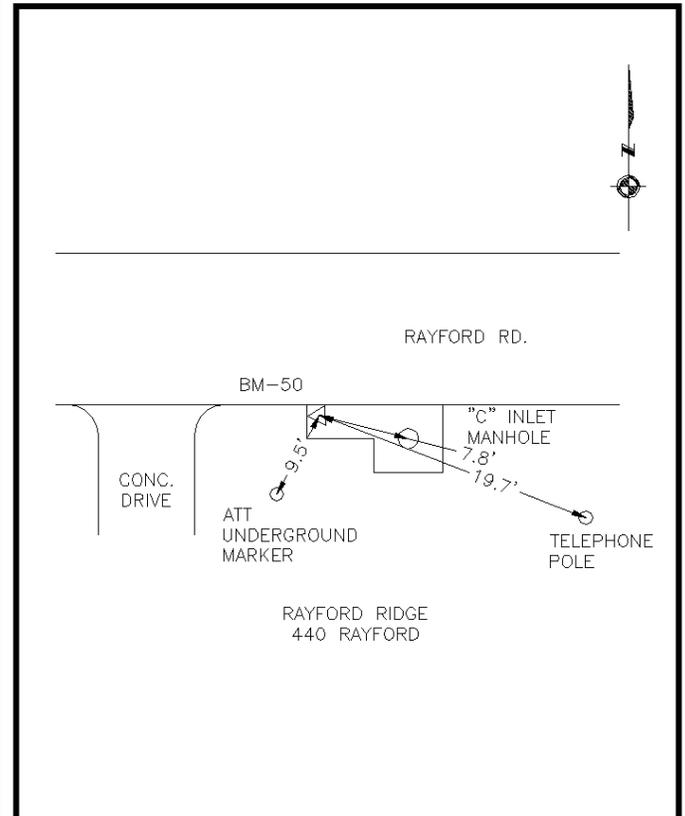


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 51

General Location: ±450 feet east of Forestburg Drive on the north side of Richards Road, at address 25623 Richards Road “The Church of Jesus Christ of Latter-day Saints”

Latitude: 30° 08' 07.38795"
Longitude: 95° 25' 23.79334"
Grid Northing: 10,047,226.74
Grid Easting: 3,848,262.80
Surface Northing: 10,047,601.12
Surface Easting: 3,848,406.20

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 115.55 Project Datum

Mark Logo: San Jacinto River Authority
Set 3” Bronze Disk in Conc. Stamped “BM#51”

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3” brass disk in conc. with a mark logo “City of Houston SJRA 1972” stamped “D-1 D-3” located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

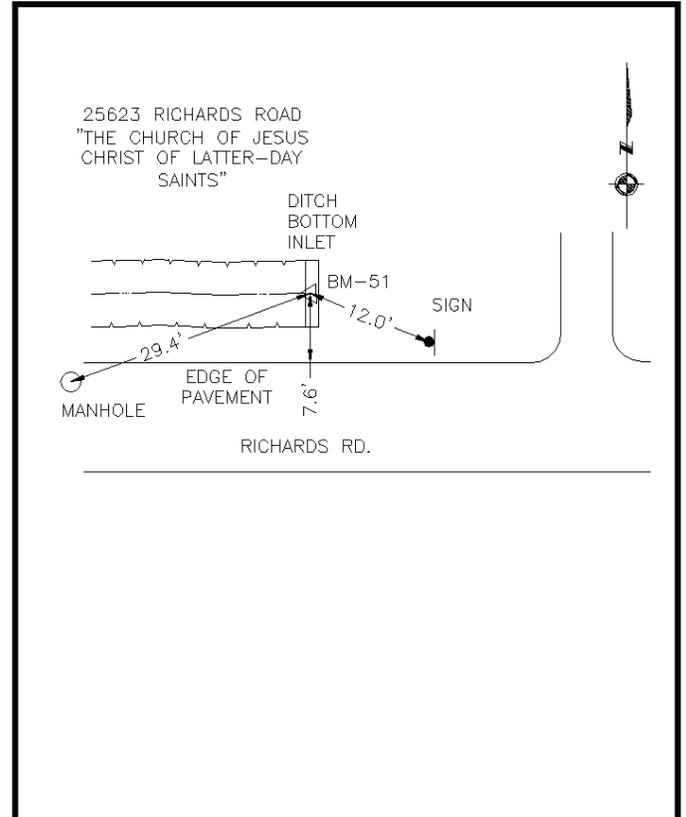


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 51 Azimuth

General Location: At the southwest corner of the intersection of Richards Road and Forestburg Drive

Latitude: 30° 08' 06.53397"
Longitude: 95° 25' 28.97559"
Grid Northing: 10,047,120.48
Grid Easting: 3,847,811.99
Surface Northing: 10,047,494.85
Surface Easting: 3,847,955.36

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 115.25 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#51 AZ"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

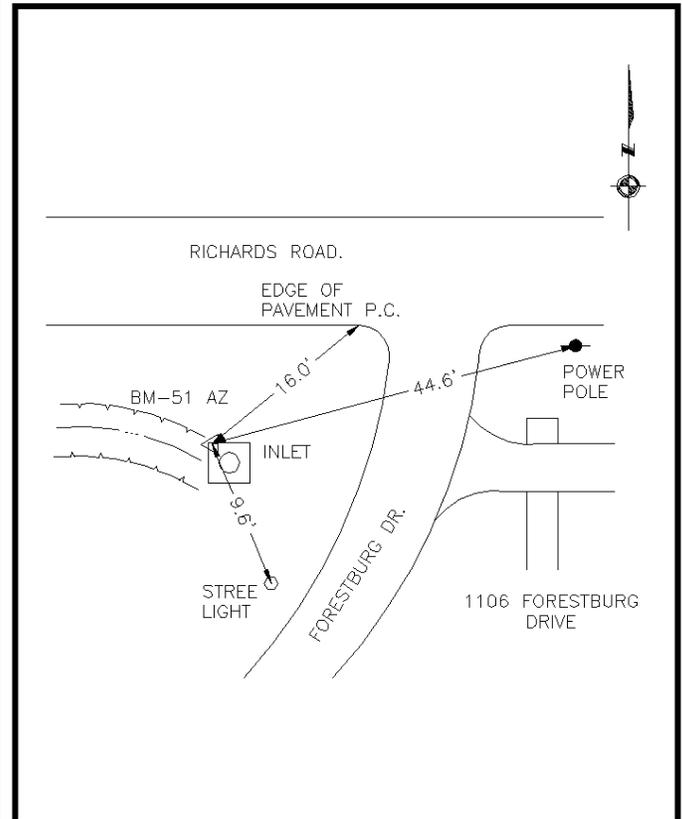


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 52

General Location: On the west side of Havenhouse Drive cul-de-sac at the entrance to Rayford Road M.U.D. Water Plant No. 1

Latitude: 30° 07' 51.98293"
Longitude: 95° 24' 43.24532"
Grid Northing: 10,045,829.25
Grid Easting: 3,851,888.76
Surface Northing: 10,046,203.57
Surface Easting: 3,852,032.29

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 109.78 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#52"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

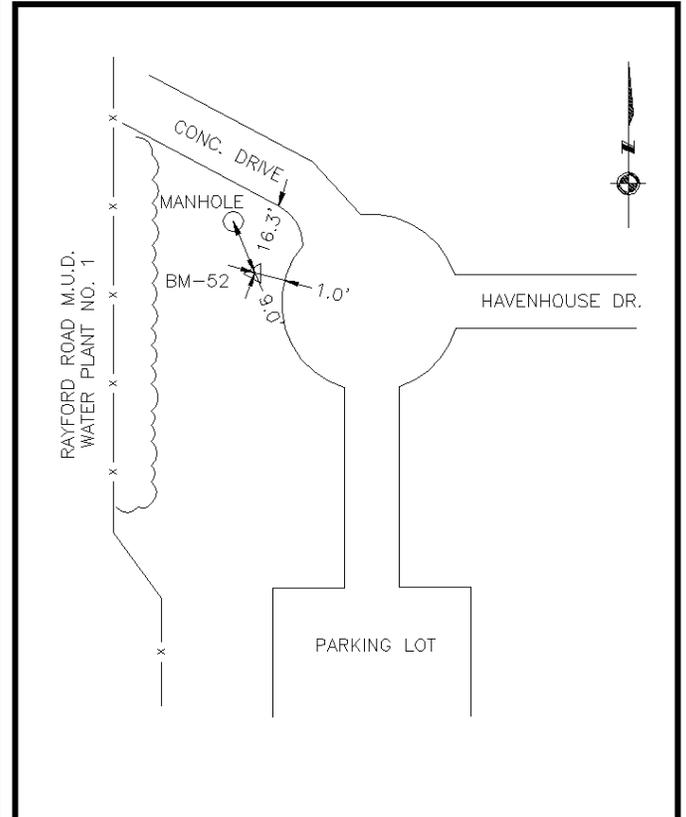


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 53

General Location: At the northwest corner of the intersection of Ashton Village Drive and Westover Park Circle

Latitude: 30° 08' 37.04821"
Longitude: 95° 24' 44.71901"
Grid Northing: 10,050,371.84
Grid Easting: 3,851,558.14
Surface Northing: 10,050,746.34
Surface Easting: 3,851,701.66

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 115.57 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#53"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

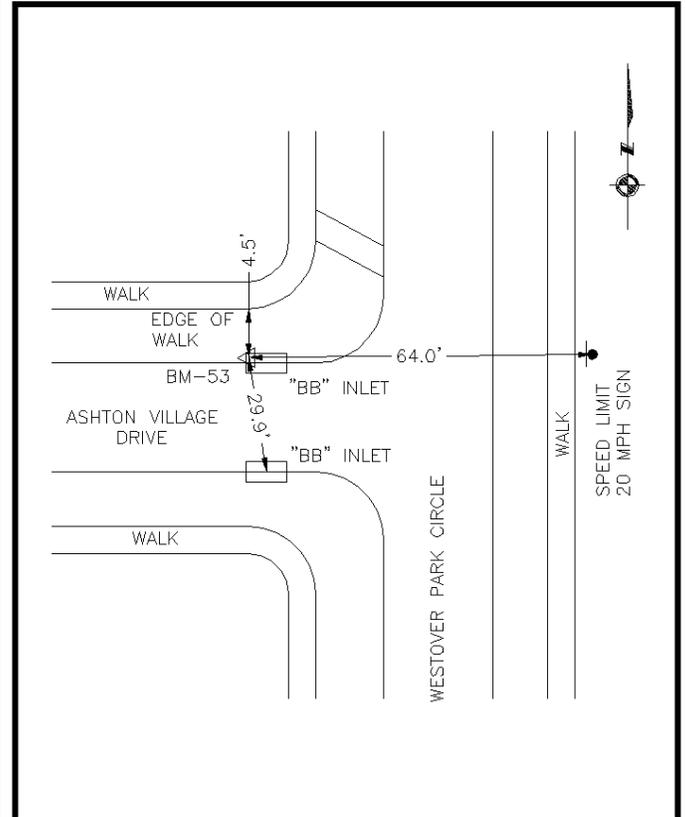


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 53 Azimuth

General Location: At the northwest corner of the intersection of Ashton Village Drive and Westover Park Drive

Latitude: 30° 08' 37.96689"
Longitude: 95° 24' 50.42450"
Grid Northing: 10,050,442.41
Grid Easting: 3,851,053.56
Surface Northing: 10,050,816.91
Surface Easting: 3,851,197.06

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 114.07 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#53 AZ"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

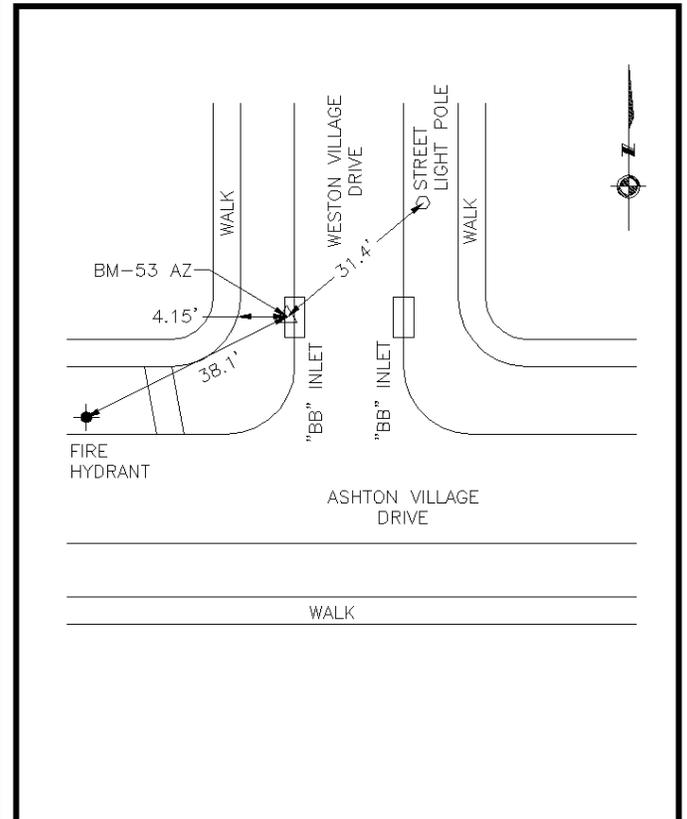


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 54

General Location: ±400 feet east of Maplewood Drive on the north side of Oak Ridge Grove Drive in the Magellan Pipeline Company and Conoco-Phillips Pipeline Company Easement

Latitude: 30° 08' 41.49596"
Longitude: 95° 26' 24.94583"
Grid Northing: 10,050,432.67
Grid Easting: 3,842,746.57
Surface Northing: 10,050,807.17
Surface Easting: 3,842,889.76

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 122.37 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#54"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

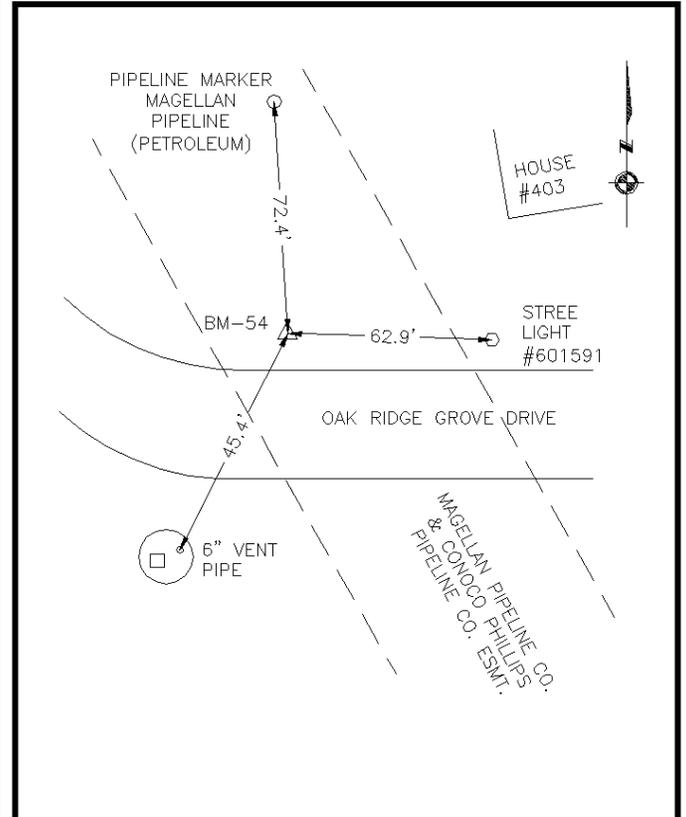


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 54 Azimuth

General Location: At the northeast corner of the intersection of Maplewood Drive and Oak Ridge Grove Drive

Latitude: 30° 08' 42.75403"
Longitude: 95° 26' 29.18950"
Grid Northing: 10,050,543.27
Grid Easting: 3,842,368.74
Surface Northing: 10,050,917.77
Surface Easting: 3,842,511.91

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 120.24 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#54 AZ"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

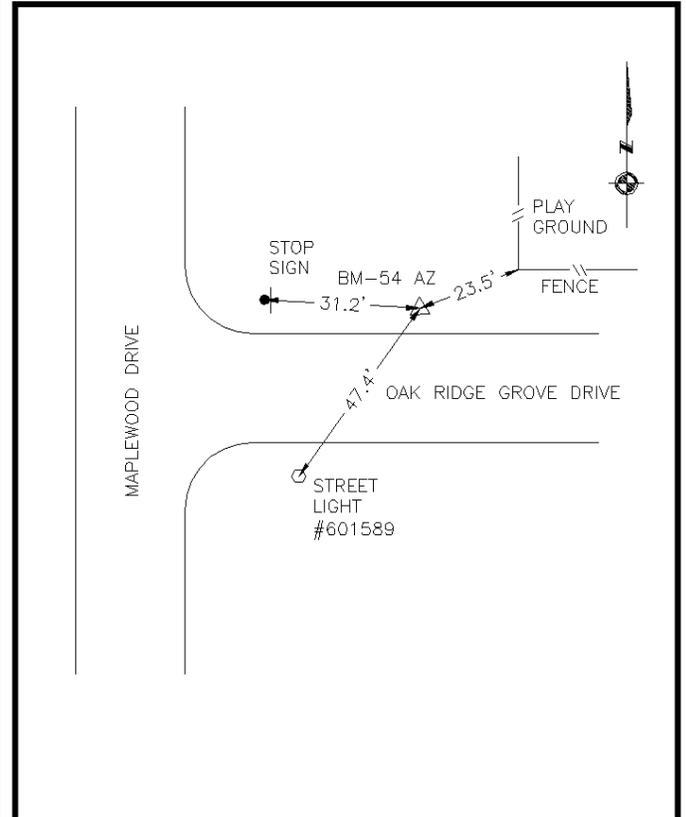


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 55

General Location: ±600 feet east of Patsy Lane/Westwood Road on the south side of Robinson Road, at address 27222 Robinson Road across from the City of Oak Ridge North Water Supply Facility

Latitude: 30° 09' 25.63591"
Longitude: 95° 26' 39.30092"
Grid Northing: 10,054,832.25
Grid Easting: 3,841,291.44
Surface Northing: 10,055,206.91
Surface Easting: 3,841,434.58

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 128.80 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#55"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

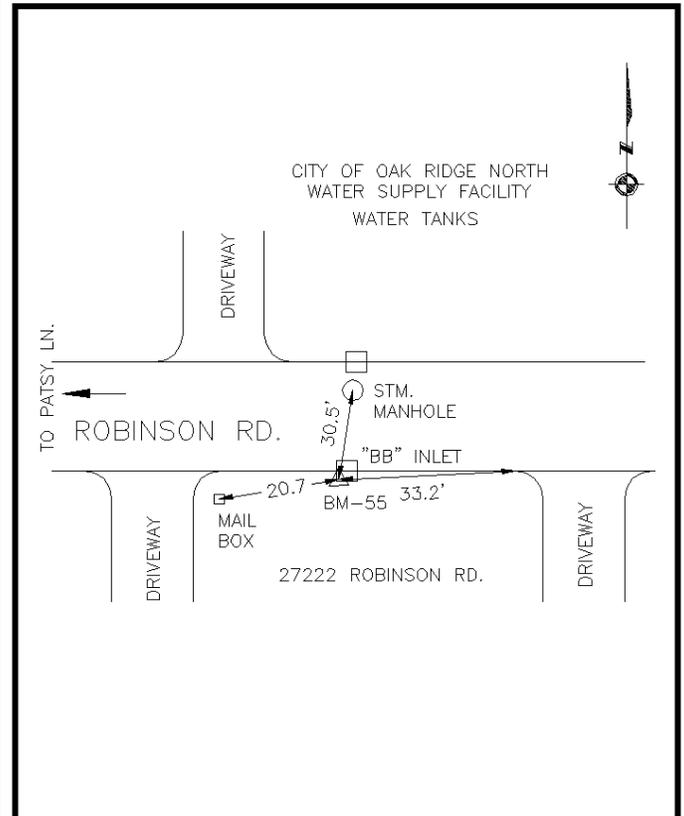
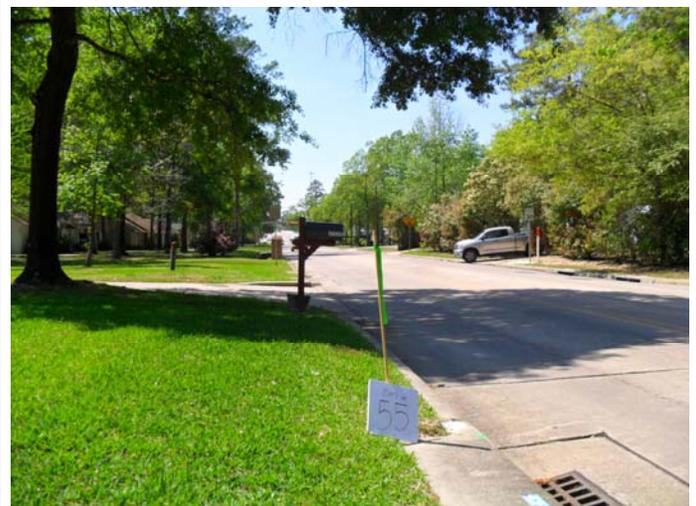


Photo 1-Station Detail:



Photo 2-Station Area Picture:





Benchmark No. 55 Azimuth

General Location: At the northwest corner of the intersection of Robinson Road and Patsy Lane/Westwood Road

Latitude: 30° 09' 25.95284"
Longitude: 95° 26' 46.56935"
Grid Northing: 10,054,836.21
Grid Easting: 3,840,652.54
Surface Northing: 10,055,210.87
Surface Easting: 3,840,795.65

Texas Coordinate System of 1983 (NAD83, CORS)
Central Zone (4203)

Elevation: 130.10 Project Datum

Mark Logo: San Jacinto River Authority
Set 3" Bronze Disk in Conc. Stamped "BM#55 AZ"

Project Datum is based on a call elevation of 212.00 at S.J.R.A. G.R.P. BM#5 being a 3" brass disk in conc. with a mark logo "City of Houston SJRA 1972" stamped "D-1 D-3" located at the Lake Conroe gauging station pier on the dam structure.

Combined Factor: 0.9999627395
Surface = Grid / Combined Factor

Units of Measure: U.S. Survey Foot

Detail Sketch:

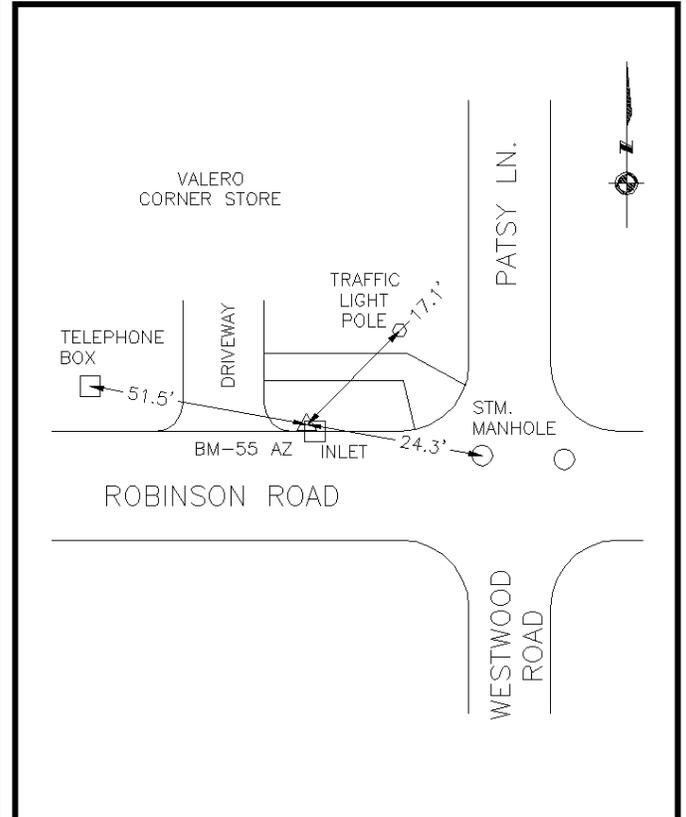


Photo 1-Station Detail:



Photo 2-Station Area Picture:



Vertical Datum Comparison Table

SJRA GRP	Designation	SJRA GRP Elevation	S.J.R.A. Conroe Dam and Spillway Control Survey Dated: March 1998 Elevation
BM#1	SJRA1	213.73	212.82
BM#2	SJRA2	183.70	182.88
BM#3	SJRA3	214.35	213.48
BM#4	SJRA4	163.84	163.14
BM#5	SJRA 5	212.00	211.19
BM#6	SJRA6	211.58	210.92
BM#7	SJRA7	212.67	211.81

SJRA GRP	Designation	SJRA GRP Elevation	The City of Conroe Elevation
BM#1 AZ	SJRA 1 AZ	212.69	211.90
BM#12	CC-26	365.28	364.30
BM#12 AZ	CC-26_AZ	371.90	370.89
BM#14	CC-1	310.55	309.58

GRP	Designation	GRP Elev.	The City of Conroe Elevation
BM#14 AZ	CC-1_AZ	297.85	296.90
BM#16	CC-10	232.76	231.66
BM#16 AZ	CC-10_AZ	202.80	201.70
BM#19	CC-11	241.40	240.38
BM#19 AZ	CC-11_AZ	229.21	228.20

SJRA GRP	Designation	SJRA GRP Elevation	The Woodlands Elevation
BM#31	SR49	192.82	192.99
BM#32	WP4	202.45	202.41
BM#33	SR53	181.45	181.47
BM#33 AZ	SR54	175.40	175.41
BM#39	RF24	140.34	140.91
BM#39 AZ	RF19	151.30	151.91
BM#42	RF12	141.69	142.54
BM#43	TC12	142.01	142.84
BM#43 AZ	TC42	133.71	134.56

SJRA GRP	Designation	SJRA GRP Elevation	The Woodlands Elevation
BM#44	GMC6	144.86	145.38
BM#45	GM10	142.30	142.90
BM#45 AZ	GM16	137.21	137.82
	GMC3	135.31	136.16
	WP10	194.30	194.27
	WP9	145.35	146.11
	GM2	146.12	146.90
	GM12	140.75	141.42
	RF1	140.88	141.63
	SR62	197.57	197.52
	TC13	143.42	144.32
	WW31	206.72	205.50
	WW43	180.50	180.59

SJRA GRP	Designation	SJRA GRP Elevation	Montgomery County FEMA Map Preliminary Dated: September 23, 2008 Elevation
BM#8	Designation: HGCSD 81 PID: AJ6405	214.02	212.73
BM#47 AZ	Floodplain RM No. 100095	112.42	111.36
BM#49 AZ	Floodplain RM No. 100080	112.27	111.27
	Designation: D 1513 PID: BL2013	241.10	240.12
	Designation: C 1513 PID: BL2016	118.50	118.43
	Designation: T 88 PID: BL1173	130.02	129.91

SJRA GRP	Designation	SJRA GRP Elevation	National Geodetic Survey Elevation
	Designation: P 1203 PID: BL1266	333.16	332.00

SJRA GRP	Designation	SJRA GRP Elevation	Texas Department of Transportation IH-45 from Loop 336 to FM 830 Elevation
	H-44	294.45	293.25
	H-45	280.83	279.64