

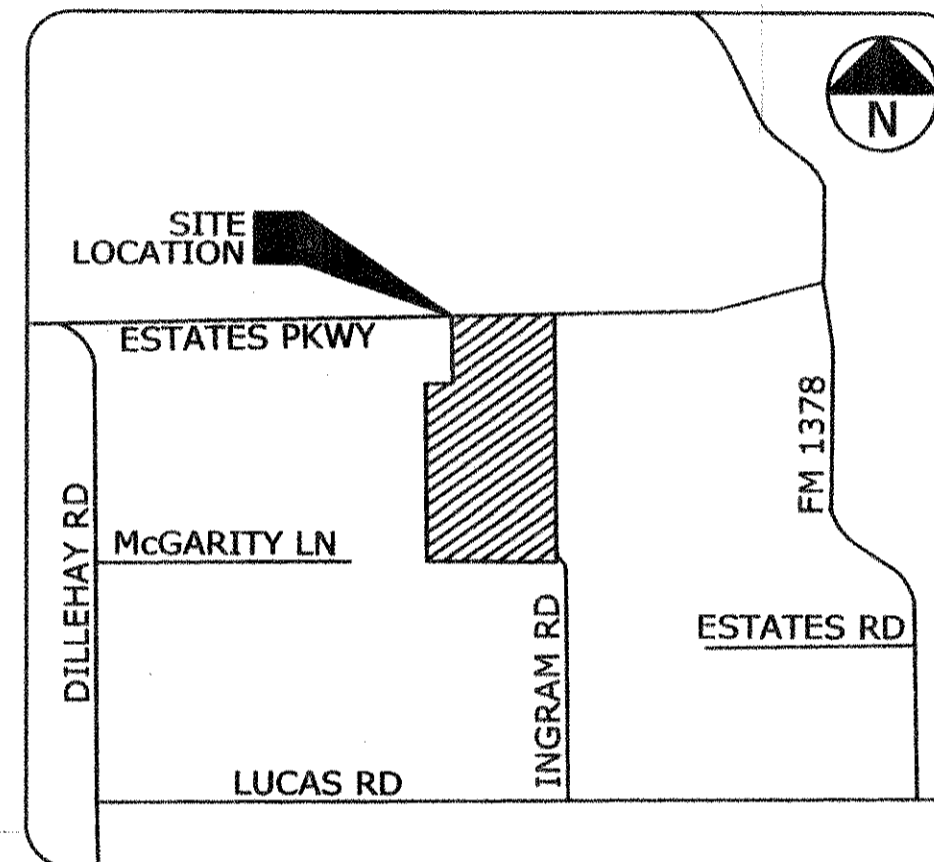
ENGINEERING CONSTRUCTION PLANS FOR CLAREMONT SPRINGS ADDITION PHASE I LUCAS, TEXAS

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GENERAL NOTES:

1. THE ENGINEERING PLANS ARE DESIGNED AND WILL BE BUILT TO THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS AND TO THE CITY OF LUCAS STANDARDS.
2. ALL CONSTRUCTION WITHIN TEXAS DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY SHALL USE MATERIALS AND INSTALLATION THAT IS ALSO IN ACCORDANCE WITH TxDOT STANDARD SPECIFICATIONS AND DETAILS. ALL WORK WITHIN TxDOT RIGHT-OF-WAY SHALL BE INSPECTED BY TxDOT INSPECTORS.
3. ALL CONSTRUCTION WITHIN NORTH TEXAS MUNICIPAL WATER DISTRICT EASEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH N.T.M.W.D. SPECIFICATIONS AS LISTED ON THESE PLANS. N.T.M.W.D. SHALL BE CONTACTED PRIOR TO BEGINNING ANY WORK WITHIN THE N.T.M.W.D. EASEMENT AREAS.
4. THE CONTRACTOR SHALL NOTIFY THE CITY OF ALLEN PUBLIC WORKS DEPARTMENT PRIOR TO BEGINNING ANY WORK WITHIN THE CITY OF ALLEN EASEMENT AREAS.
5. ALL EXISTING UTILITIES ARE SHOWN SCHEMATICALLY AND ARE FOR THE CONTRACTOR'S GUIDANCE ONLY. THE CONTRACTOR SHALL VERIFY THE LOCATION, SIZE, AND MATERIAL OF ALL UTILITIES AFFECTED BY CONSTRUCTION PRIOR TO COMMENCEMENT. THE CONTRACTOR SHALL CONTACT ALL AFFECTED UTILITIES 48 HOURS PRIOR TO CONSTRUCTION.
6. ALL CONTRACTORS MUST CONFINE THEIR ACTIVITIES TO THE WORK AREA. NO ENCROACHMENTS ONTO DEVELOPED OR UNDEVELOPED AREAS WILL BE ALLOWED. ANY DAMAGE RESULTING THERE FROM SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR.
7. ALL CONSTRUCTION AND MATERIALS TESTING SHALL MEET OR EXCEED ALL REQUIREMENTS OF THE CITY OF LUCAS.



VICINITY MAP
SCALE 1"=2000'

**SUBMITTED:
12-19-05**

OWNER

CLAREMONT SPRINGS, LTD.
3838 OAK LAWN AVENUE, SUITE 1212
DALLAS, TEXAS 75219
(214) 522-4945
CONTACT: JED DOLSON

ENGINEER

KENNEDY CONSULTING, INC.
808 S. COLLEGE STREET, SUITE 300
McKINNEY, TX 75069
(972) 542-1754
CONTACT: BRANDON AILLET, P.E.

**RECORD
DRAWING**

NTMWD NOTES

1. NORTH TEXAS MUNICIPAL WATER DISTRICT (NTMWD'S) 42-INCH WATER TRANSMISSION PIPELINE IS LOCATED WITHIN THE LIMITS OF CONSTRUCTION.
2. OPERATION OF HEAVY EARTHMOVING EQUIPMENT, COMPACTION EQUIPMENT OR HEAVY CONSTRUCTION EQUIPMENT, SUCH AS CONCRETE TRUCKS, SHALL BE RESTRICTED TO SPECIFIC CROSSING POINTS ACROSS NTMWD EASEMENT, AS APPROVED BY THE NTMWD. THE CROSSINGS SHALL BE DESIGNATED AND VERIFIED TO PROVIDE A MINIMUM OF FIVE FEET OF COVER.
3. TO ASSURE THAT PLACING OF SIGNIFICANT LOADS OVER THE NTMWD PIPELINE DOES NOT DAMAGE THE EXISTING PIPELINE, NO MATERIALS SHALL BE STOCKPILED ON THE NTMWD EASEMENT WITHOUT AUTHORIZATION FROM THE NTMWD. IF THE CONTRACTOR DESIRES TO USE NTMWD'S STOCKPILE OF MATERIALS, CONTACT NTMWD ENGINEERING AT (972) 442-5405 SO YOUR PLANS FOR USE OF NTMWD'S EASEMENT CAN BE REVIEWED.
4. A MINIMUM OF THREE FEET SEPARATION BETWEEN THE BOTTOM OF THE PAVEMENT AND TOP OF NTMWD PIPELINE IS REQUIRED. IN ADDITION, IF SEPARATION BETWEEN THE BOTTOM OF THE PAVEMENT AND THE TOP OF THE PIPELINE IS LESS THAN 3.5 FEET, A THICKENED PAVEMENT SECTION IS REQUIRED.
5. CROSSING OF THE NTMWD EASEMENT WITH OTHER UTILITIES, SUCH AS TV CABLE, PHONE, GAS, AND ELECTRIC, SHALL BE COORDINATED WITH THE NTMWD TO AVOID DAMAGE TO THE NTMWD FACILITIES.
6. OUTDOOR LIGHTING, LANDSCAPING, SCREENING WALLS OR OTHER FACILITIES SHALL NOT BE INSTALLED IN NTMWD EASEMENTS WITHOUT WRITTEN APPROVAL OF THE NTMWD.
7. UNLESS OTHERWISE SHOWN OR REQUIRED A MINIMUM OF ONE-FOOT CLEARANCE SHALL BE PROVIDED FOR ALL UTILITIES CROSSING THE NTMWD PIPELINES.
8. THE CONTRACTOR SHALL CONTACT NTMWD ENGINEERING AT (972) 442-5405 AT LEAST 48 HOURS PRIOR TO PERFORMING ANY WORK IN THE VICINITY OF THE NTMWD FACILITIES.
9. NO ENCROACHMENT SHALL BE ALLOWED ON NTMWD EASEMENT BY FRANCHISE UTILITIES. WATER, SANITARY SEWER AND STORM SEWER FACILITIES ARE NOT PERMITTED IN NTMWD EASEMENT EXCEPT FOR CROSSINGS.

**KCI KENNEDY
CONSULTING, INC.**

808 S. COLLEGE STREET, SUITE 300
McKINNEY, TEXAS 75069

PH (972) 542-1754
FX (972) 529-2294

ENGINEER:

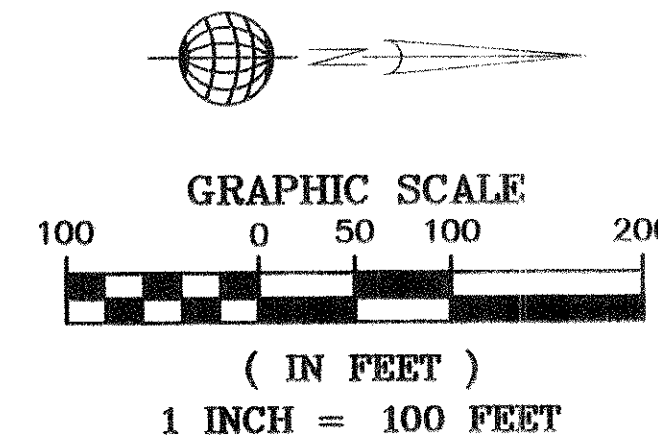
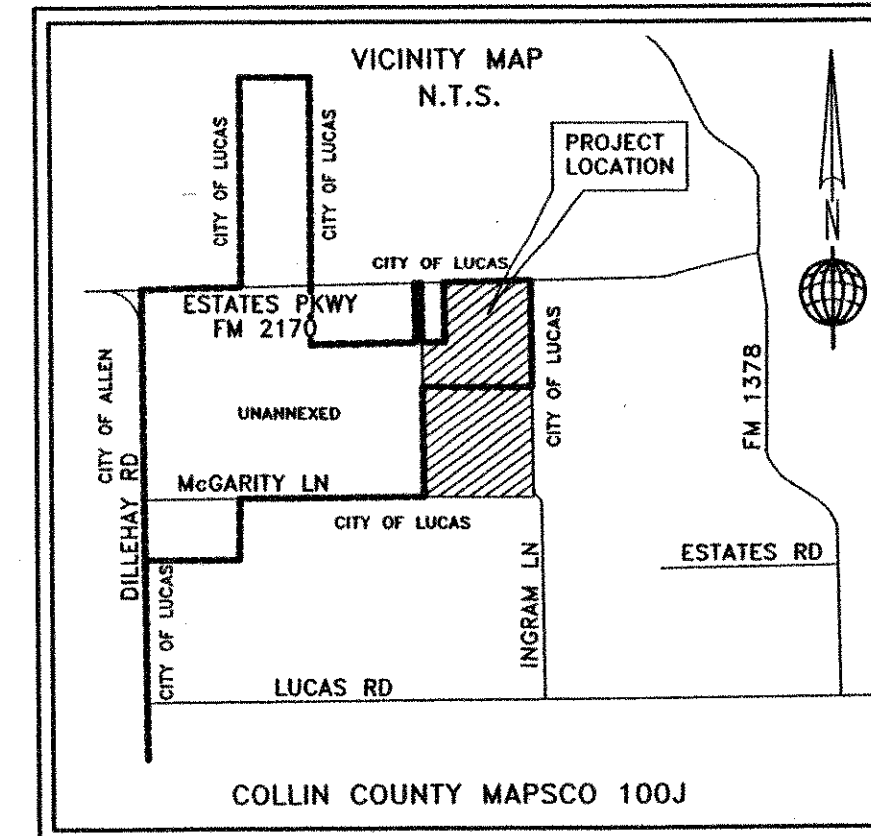
KENNEDY CONSULTING, INC.

OWNER:

CLAREMONT SPRINGS, LTD.

PROJECT:

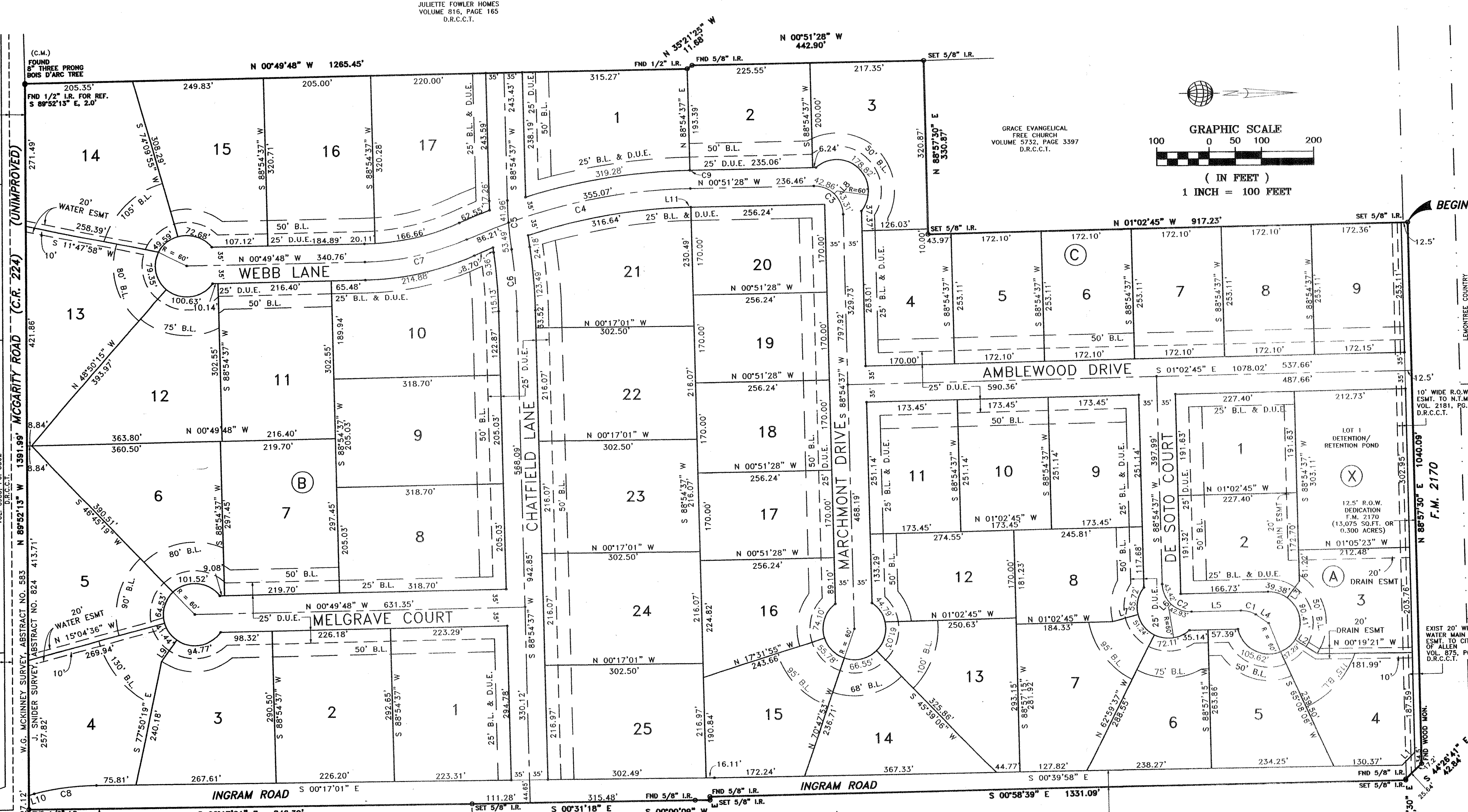
CLAREMONT SPRINGS ADDN. PH. I



LOT AREA SUMMARY TABLE

BLOCK A		BLOCK B	
LOT NO.	AREA (SQFT.)	LOT NO.	AREA (SQFT.)
1	43577	1	65585
2	43577	2	65949
3	43588	3	65361
4	43861	4	65614
5	43649	5	65350
6	43620	6	65385
7	57026	7	65351
8	43580	8	65342
9	43561	9	65342
10	43561	10	65373
11	43561	11	65472
12	46105	12	67041
13	51278	13	65844
14	49255	14	74657
15	52411	15	65408
16	46597	16	65743
17	43561	17	65520
18	43561	BLOCK C	
19	43561	1	65650
20	43561	2	47009
21	65406	3	57212
22	65354	4	44283
23	65354	5	43560
24	65354	6	43560
25	65625	7	43560
BLOCK X		8	43560
LOT NO.	AREA (SQFT.)	9	43600
1	64426		

LINE	DISTANCE	BEARING
L1	35.24'	S 45°51'14" E
L2	49.89'	N 33°03'03" E
L3	39.30'	N 53°19'32" W
L4	29.52'	N 32°53'34" E
L5	94.34'	N 01°02'45" W
L6	7.76'	S 46°19'23" E
L7	50.24'	N 14°03'49" W
L8	7.63'	N 46°12'25" W
L9	50.27'	N 54°27'49" W
L10	10.88'	S 17°00'09" E
L11	0.14'	N 00°51'28" W



CURVE	RADIUS	DELTA	ARC	TANGENT	BEARING	CHORD
C1	50.00	33°56'19"	29.62	15.26	N 15°55'24" E	29.19
C2	55.00	89°57'22"	86.35	54.96	N 43°55'56" E	77.75
C3	55.00	89°46'05"	86.17	54.78	S 44°01'34" W	77.62
C4	1100.00	22°59'05"	441.28	223.65	N 12°21'01" W	438.32
C5	800.00	06°50'09"	95.45	47.78	S 85°29'33" W	95.39
C6	1000.00	06°50'11"	119.32	59.73	S 85°29'34" W	119.25
C7	500.00	23°00'44"	200.82	101.78	S 12°20'05" E	199.47
C8	480.00	14°17'35"	119.74	60.18	S 07°25'49" E	119.43
C9	1135.00	00°00'25"	0.14	0.07	S 00°51'41" E	0.14

LEGEND

SET 5/8" I.R. = SET 5/8" IRON ROD W/YELLOW CAP STAMPED RPLS 5574
M.R.C.C.T. = MAP RECORDS COLLIN COUNTY, TEXAS
D.R.C.C.T. = DEED RECORDS COLLIN COUNTY, TEXAS
ESMT. = EASEMENT
SQ. FT. = SQUARE FEET
R.O.W. = RIGHT-OF-WAY
(C.M.) CONTROLLING MONUMENTS
B.L. = BUILDING LINE
D.U.E. = DRAINAGE AND UTILITY EASEMENT

- Notes:
- The basis of bearings for this plat are per deed recorded in Volume 5985, Page 3302, Deed Records, Collin County, Texas.
 - Selling a portion of this addition by metes and bounds is a violation of city ordinance and state law and is subject to fines and withholding of utilities and building permits.
 - This property is not shown to be within a 100-year special flood hazard area.
 - Block X, Lot 1 is to be considered as HOA open space and is to be maintained by the Subdivision HOA.
 - The drainage easements along the rear of Lots 1 and 2 and along the side of Lot 3, Block A are to be maintained by the Subdivision HOA.
 - The NTMWD easement restricts construction of permanent structures such as foundations, walls, pools and permanent storage buildings. Items such as driveways, fences, sprinkler systems and normal landscaping plants that encroach on the NTMWD easements are allowed. Fence post foundations are restricted to an installation depth no deeper than 18 inches below final ground elevation. However, the NTMWD assumes no responsibility for damages resulting from the need to repair or maintain the NTMWD pipeline. Further, any cost to repair damage to the pipeline resulting from construction by the developer, contractor or owner will be the responsibility of the developer, contractor or owner.
 - No encroachment shall be allowed on NTMWD easement by franchise utilities. Water, sanitary sewer and storm sewer facilities are not permitted in NTMWD easement except for crossings.

FINAL PLAT OF CLAREMONT SPRINGS ADDITION
51 RESIDENTIAL LOTS
BLOCK A, LOTS 1-25, BLOCK B, LOTS 1-17,
BLOCK C, LOTS 1-9, BLOCK X LOT 1
78.18 ACRES SITUATED IN THE
JAMES M. SNIDER SURVEY, ABSTRACT NO. 824
CITY OF LUCAS, COLLIN COUNTY, TEXAS

OWNER/APPLICANT: CLAREMONT SPRINGS, LTD. 3838 OAK LAWN AVENUE SUITE 300 DALLAS, TEXAS 75219 PH: (214) 522-4945

ENGINEER: KENNEDY CONSULTING INC. 808 S. COLLEGE ST. SUITE 1214 MCKINNEY, TEXAS 75069 PH: (972) 542-1754

SURVEYOR: GLOBAL LAND SURVEYING, INC. 704 CENTRAL PARKWAY EAST SUITE 1214 PLANO, TEXAS 75074 PH: (972) 881-1700 FAX: (972) 423-1083

ORIGINAL PREPARATION DATE: 10/20/05
REV. 1: 10/31/05 DATE: 4/12/16/05
REV. 2: 11/18/05 REV. 5: 12/19/05
REV. 3: 12/14/05

LEGAL DESCRIPTION

WHEREAS Claremont Springs, Ltd., is the owner of a called 41.34 acre tract, a called 36.8418 acre tract and a called 5.00 acre tract of land described in deeds recorded in Volume 5985, Page 3302, Volume 5985, Page 3283 and Volume 5985, Page 3288, Deed Records of Collin County, Texas, respectively, and being situated in the James M. Snider Survey, Abstract No. 824, Collin County, Texas, said premises being more particularly described by Metes and Bounds as follows:

BEGINNING at a 5/8-inch iron rod set for corner in the south right-of-way line of F.M. Road 2170 at the most northerly northwest corner of said 36.8418 acre tract;

THENCE North 88°57'30" East with the South right-of-way line of said F.M. Road 2170, a distance of 1040.09 feet to a wood right-of-way monument found for corner at the beginning of a corner-clip;

THENCE South 44°26'41" East along said corner-clip and the Northeast line of said 36.8418 acre tract, a distance of 42.84 feet to a 5/8-inch iron rod found for corner;

THENCE North 88°57'30" East with a North line of said 36.8418 acre tract, a distance of 2.50 feet to a 5/8-inch iron rod set for corner at the most Easterly Northeast corner thereof and being in the West line of a tract of land described in a deed to Dan Strong recorded in County Clerk No. 94-0089393 Deed Records of Collin County, Texas;

THENCE South 00°58'39" East with the East lines of said 36.8418 acre tract and said 5.00 acre tract, a distance of 1331.09 feet to a 5/8-inch iron rod found for corner in the asphalt of County Road 262 (also Ingram Road) at the Southeast corner thereof;

THENCE North 89°02'37" East, a distance of 6.44 feet to a 5/8" iron rod set for corner at the Northeast corner of said 41.34 acre tract;

THENCE with Ingram Road and along the East lines of said 41.34 acre tract as follows:

South 00°00'09" West, a distance of 28.39 feet to a 5/8-inch iron rod found for corner;

South 00°31'18" East, a distance of 426.76 feet to a 5/8-inch iron rod set for corner;

South 00°17'01" East, a distance of 846.39 feet to a 1/2-inch iron rod found for corner at the Southeast corner of said 41.34 acre tract and being in the North line of a 30' strip of land described in a deed to Collin County, recorded in Volume 2343, Page 221 Deed Records of Collin County, Texas;

THENCE North 89°52'13" West with the South line of said 41.34 acre tract and the North line of said 30' strip, a distance of 1391.99 feet to an 8-inch three prong Bois d' Arc tree found for corner at the Southwest corner thereof and the Southeast corner of a tract of land described in a deed to Juliette Fowler Homes, of record in Volume 816, Page 165, Deed Records of Collin County, Texas, from which a 1/2" iron rod found for reference bears South 89°52'13" East, a distance of 2.00 feet;

THENCE North 00°49'48" West with the West line of said 41.34 acre tract, a distance of 1265.45 feet to a 1/2-inch iron rod found for corner and North 35°21'25" West, a distance of 11.68 feet to a 5/8-inch iron rod found for corner marking the Northwest corner thereof and the Southwest corner of said 36.8418 acre tract and said 5.00 acre tract;

THENCE North 00°51'28" West with the West line of last mentioned tracts, a distance of 442.90 feet to a 5/8-inch iron rod set for corner at the most Western Northwest corner of said 36.8418 acre tract;

THENCE North 88°57'30" East with a North line of said 36.8418 acre tract, a distance of 330.87 feet to a 5/8-inch iron rod set for corner at an interior corner thereof;

THENCE North 01°02'45" West with a West line of said 36.8418 acre tract, a distance of 917.23 feet to the point of beginning and containing 3,405,533 square feet or 78.18 acres of land.

OWNERS CERTIFICATE

STATE OF TEXAS
COUNTY OF COLLIN

NOW THEREFORE, KNOW ALL MEN BY THESE PRESENTS

That CLAREMONT SPRINGS, LTD., do hereby adopt this plat, designating the herein above described property as CLAREMONT SPRINGS ADDITION, an addition to the City of Lucas, Texas. The easements shown thereon are hereby reserved for the purpose indicated. The utility and fire lane easements shall be open to the public, fire and police units, garbage and rubbish collection agencies and all public and private utilities for each particular use. The maintenance of paving on the utility and fire easements is the responsibility of the property owner. No buildings, fences, trees, shrubs or other improvements or growths shall be constructed, reconstructed or placed upon, over or across the easements as shown. Said easements being hereby reserved for the mutual use and accommodation of all public utilities using or desiring to use same. All, and any public utility shall have the right to remove and keep removed all or parts of any building, fences, trees, shrubs or interference with the construction, maintenance or efficiency of its respective system on the easements, and all public utilities shall at all times have the full right of ingress and egress to or from and upon the said easements for the purpose of constructing, reconstructing, inspecting, patrolling, maintaining and adding to or removing all or part of its respective systems without the necessity at any time of procuring the permission of anyone. (Any public utility shall have the right of ingress and egress to private property for the purpose of reading meters and any maintenance or service required or ordinarily performed by that utility).

This plat approved subject to all platting ordinances, rules, regulations and resolutions of the City of Lucas, Collin County, Texas.

DO HEREBY dedicate same to be known as CLAREMONT SPRINGS ADDITION, an addition to the City of Lucas, Texas and dedicate to the public the streets, alleys, easements, parks and other open spaces as shown hereon.

Executed this ____ day of _____ A.D., 2005.

By: _____

STATE OF TEXAS
COUNTY OF COLLIN

BEFORE ME, the undersigned, a Notary Public in and for the said County, and State on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the ____ day of _____, 2005.

NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS

My commission expires: _____

SURVEYORS CERTIFICATE

STATE OF TEXAS
COUNTY OF COLLIN

That I, Peter R. Hine, do hereby certify that I prepared this plat and the field notes made a part thereof from an actual and accurate survey of the land and that the corner monuments shown thereon were properly placed under my personal supervision, in accordance with the Subdivision Regulations of the City of Lucas, Texas.

WITNESS MY HAND AT PLANO, TEXAS, this the ____ day of _____, 2005.

RELEASED 12/19/05 FOR REVIEW PURPOSES ONLY. THIS DOCUMENT SHALL NOT BE RECORDED FOR ANY PURPOSE.

Peter R. Hine
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 5574

STATE OF TEXAS
COUNTY OF COLLIN

BEFORE ME, the undersigned, a Notary Public in and for the said County, and State on this day personally appeared PETER R. HINE, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the ____ day of _____, 2005.

NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS

The undersigned, the City Secretary of the City of Lucas, Texas, hereby certifies that the foregoing plat of Claremont Springs Addition, was submitted to the City Council on the ____ day of _____, 2005, and the Council, by formal action, then and there accepted the dedication of streets, alleys, parks, easements public places and water and sewer lines, as shown and set forth in and upon said plat, and said Council further authorized the Mayor to note acceptance thereof for the construction by signing his/her name as herein above subscribed.

Witness my hand the ____ day of _____, 2005

City Secretary
City of Lucas, Texas

RECOMMENDED FOR APPROVAL

Chairman, Planning and Zoning Commission
City of Lucas, Texas

Date

Approved for Preparation of Final Plat

Mayor
City of Lucas, Texas

Date

**RECORD
DRAWING**

**FINAL PLAT
OF
CLAREMONT SPRINGS ADDITION
51 RESIDENTIAL LOTS
BLOCK A, LOTS 1-25, BLOCK B, LOTS 1-17,
BLOCK C, LOTS 1-9, BLOCK X LOT 1
78.18 ACRES SITUATED IN THE
JAMES M. SNIDER SURVEY, ABSTRACT NO. 824
CITY OF LUCAS, COLLIN COUNTY, TEXAS**

Notes:

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- Selling a portion of this addition by metes and bounds is a violation of city ordinance and state law and is subject to fines and withholding of utilities and building permits.
- This property is not shown to be within a 100-year special flood hazard area.
- Block X, Lot 1 is to be considered as HOA open space and is to be maintained by the Subdivision HOA.
- The drainage easements along the rear of Lots 1 and 2 and along the side of Lot 3, Block A are to be maintained by the Subdivision HOA.

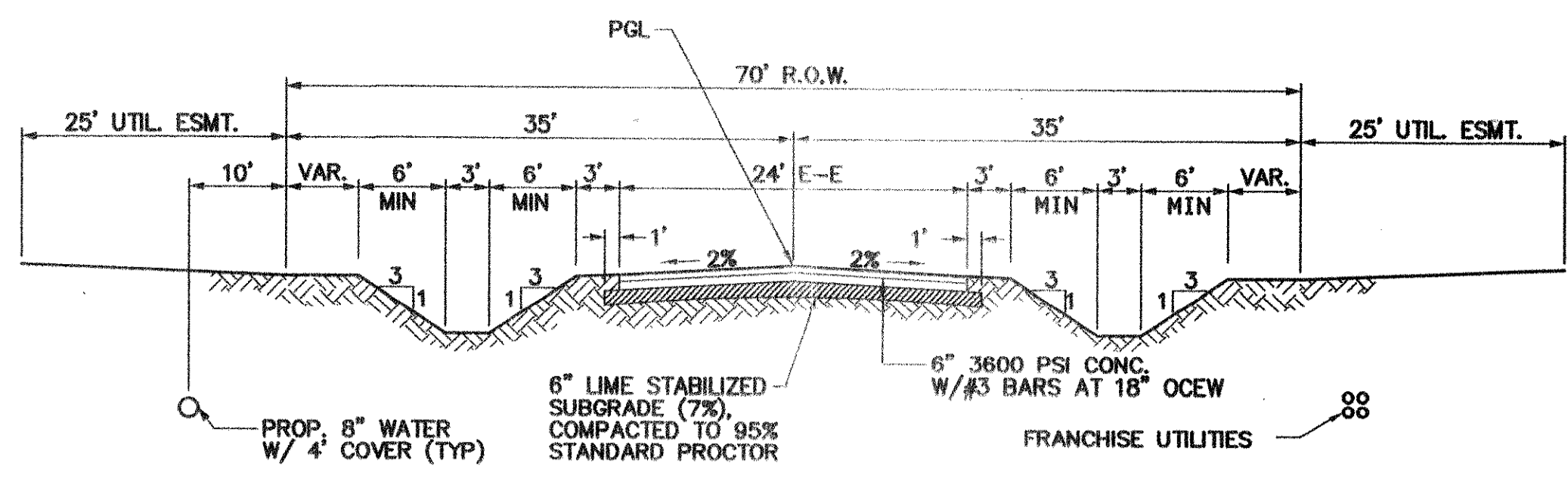
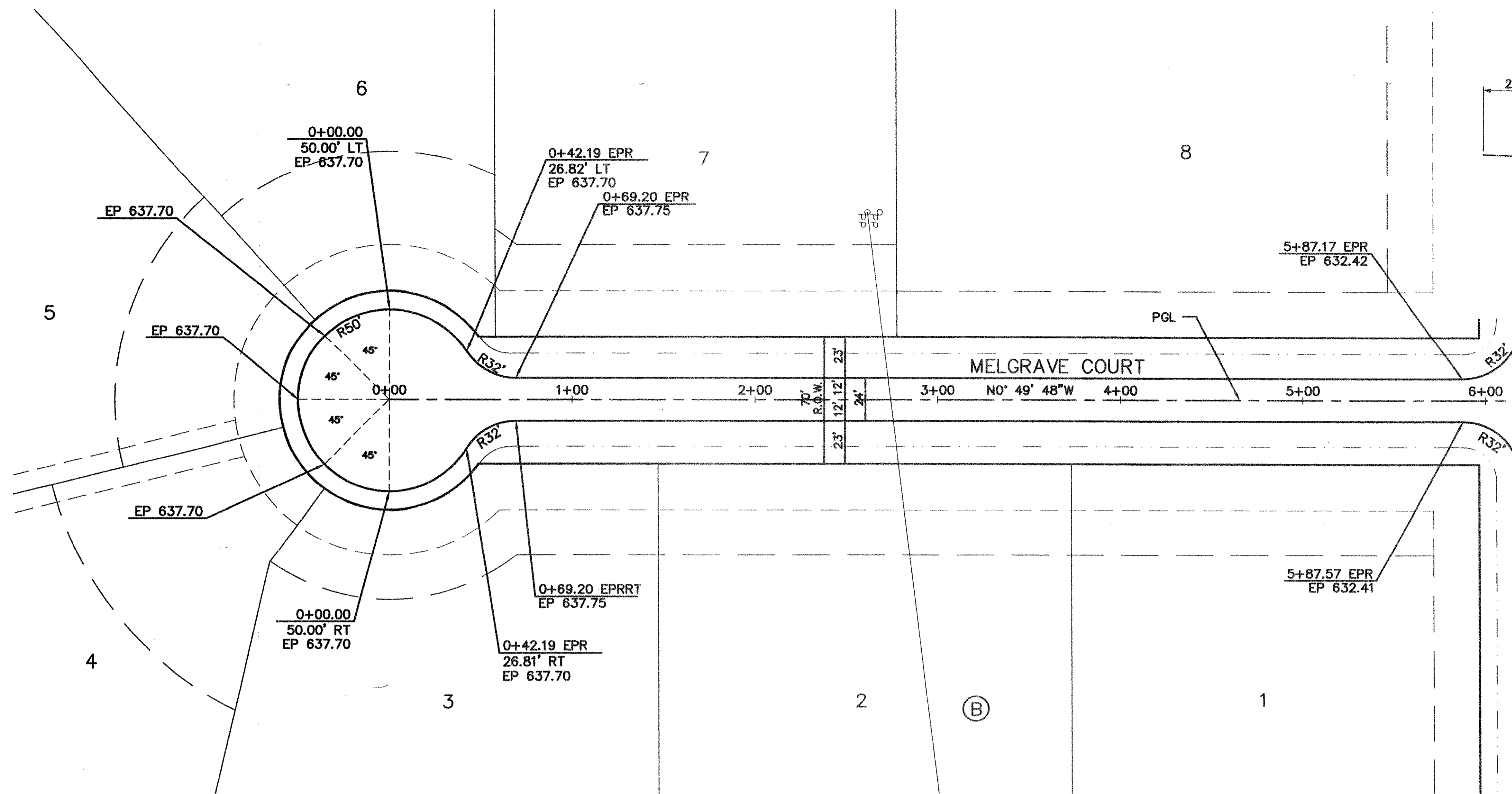
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- No encroachment shall be allowed on NTMWD easement by franchise utilities. Water, sanitary sewer and storm sewer facilities are not permitted in NTMWD easement except for crossings.

OWNER: CLAREMONT SPRINGS, LTD. 3838 OAK LAWN AVENUE SUITE 1212 DALLAS, TEXAS 75219 PH: (214) 522-0945	APPLICANT: SKORBBORG COMPANY 3838 OAK LAWN AVENUE SUITE 1212 DALLAS, TEXAS 75219 PH: (214) 522-4945	ENGINEER: KENNEDY CONSULTING INC. 808 S. COLLEGE ST. SUITE 300 MCKINNEY, TEXAS 75069 PH: (972) 542-1754	SURVEYOR: GLOBAL LAND SURVEYING, INC. 704 CENTRAL PARKWAY EAST SUITE 1214 PLANO, TEXAS 75074 PH: (972) 881-1700 FAX: (972) 423-1083
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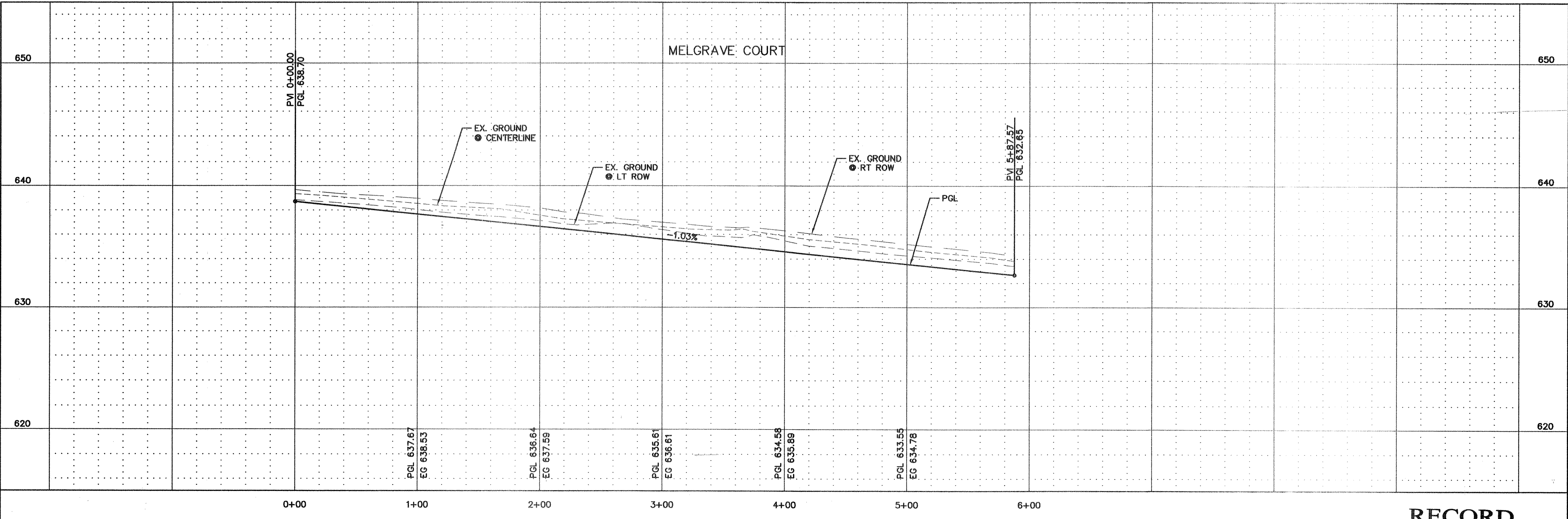
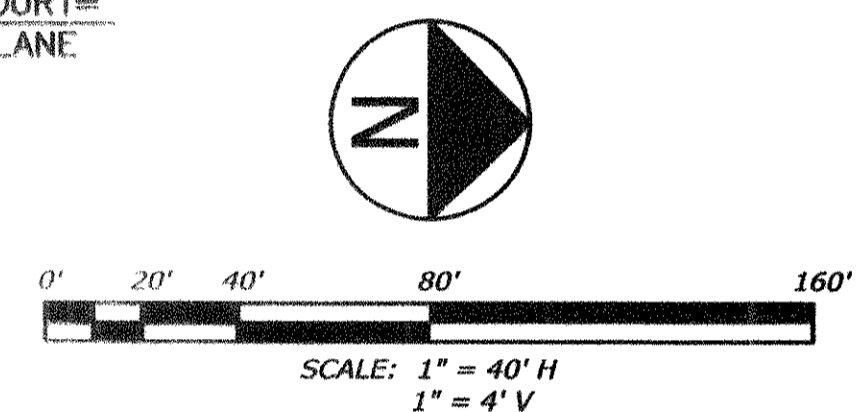
ORIGINAL PREPARATION DATE: 10/20/05
REV. 1: 10/31/05
REV. 2: 11/18/05
REV. 3: 12/14/05

REV. 4: 12/16/05
REV. 5: 12/19/05
GLS JOB NO. 05-10-113

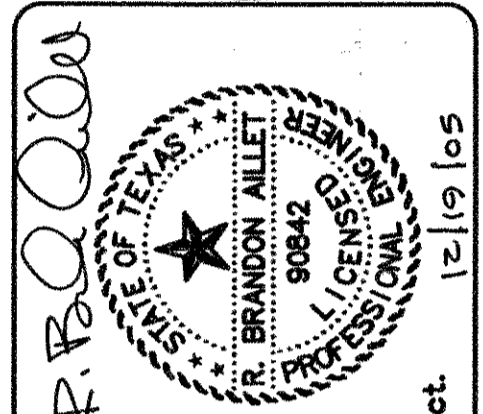




TYPICAL PAVEMENT SECTION
N.T.S.



PAVING PLAN & PROFILE
MELGRAVE COURT
CLAREMONT SPRINGS ADDITION PHASE I
LUCAS, TEXAS



The seal appearing on this document was authorized by R. Brandon Allet, P.E. NO. 90842 on Dec. 19th, 2005. The original document is on record at the office of Kennedy Consulting, Inc. Attention: without prior notification to the responsible engineer is an offense under the Texas Engineering Practice Act.

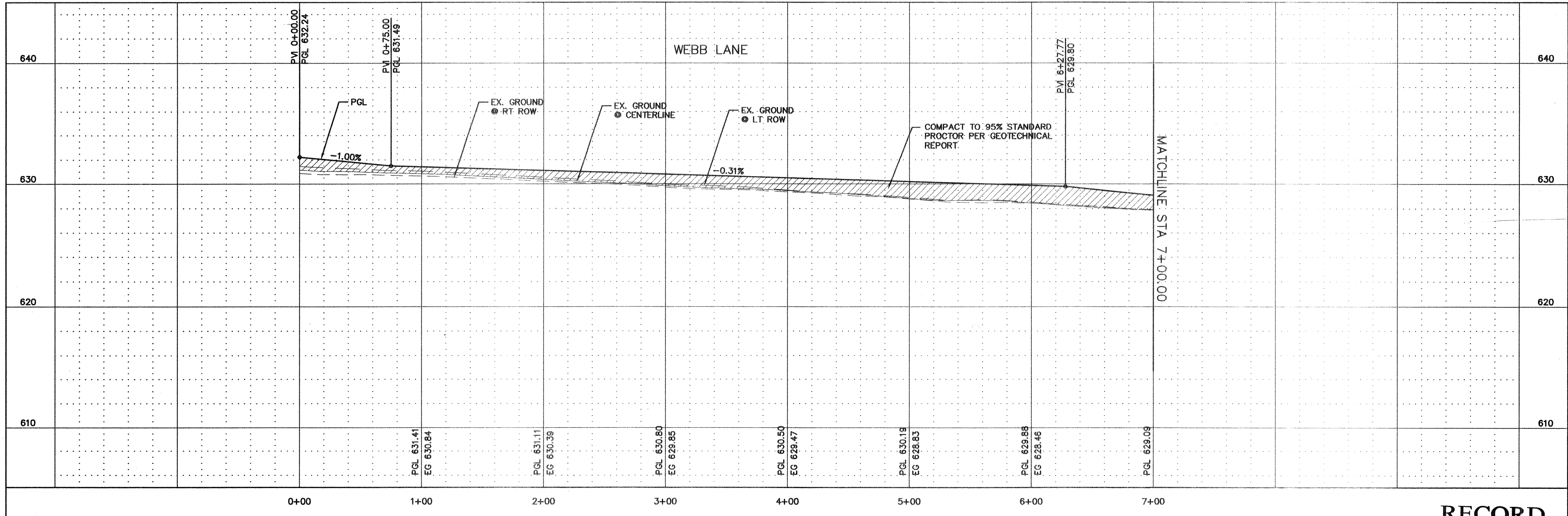
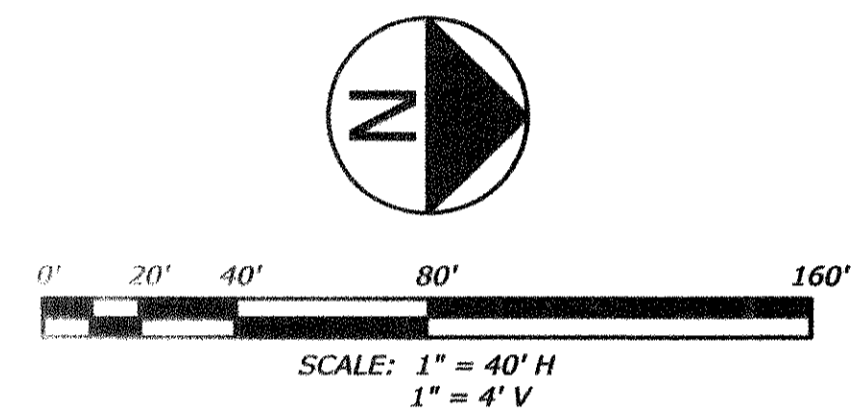
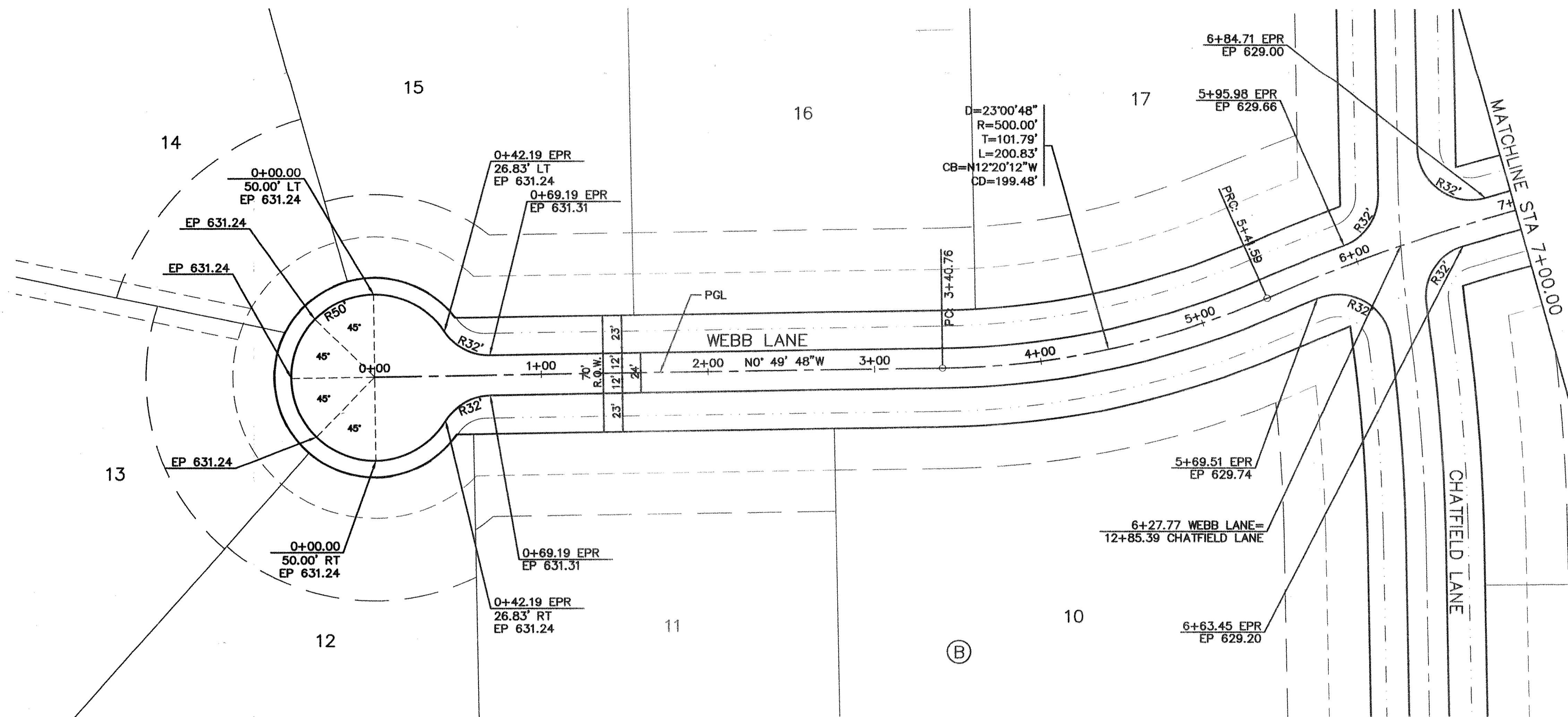
KENNEDY CONSULTING, INC.
 808 S. COLLEGE STREET, SUITE 300
 MCKINNEY, TEXAS 75069
 PH (972) 542-1754
 FX (972) 529-2294

No.	Date	Description
REVISIONS		
Scale:		SHOWN
Drawn by:		CAD
Designed by:		EVE
Checked by:		RBA
Issue Date:		12-19-05
Project No.:		05003.00
SHEET TITLE: PAVING PLAN & PROFILE		
SHEET NUMBER: C4		

BENCHMARK DATA: BM #1 - EL. 618.54 - SQUARE CUT ON HDWL. S OF 2170, 500' W OF INGRAM; BM #2 - EL. 618.44 - PK NAIL IN ASPHALT, SW CORNER OF INGRAM & 2170

**RECORD
DRAWING**

NOTE: SEE SHEET C4 FOR TYPICAL PAVING SECTION



**RECORD
DRAWING**

**PAVING PLAN & PROFILE
WEBB LANE
CLAREMONT SPRINGS ADDITION PHASE I
LUCAS, TEXAS**

The seal appearing on this document was authorized by R. Brandon Allet, P.E. NO. 90842 on Dec. 19th, 2005. The original document is on record at the office of Alameda Consulting, Inc. Alameda Consulting, Inc. does not warrant the accuracy of the information contained in this document without prior notification to the responsible engineer is an offense under the Texas Engineering Practice Act.

R. Brandon Allet

REGISTERED PROFESSIONAL ENGINEER
STATE OF TEXAS
R. BRANDON ALLET
90842
12-19-05

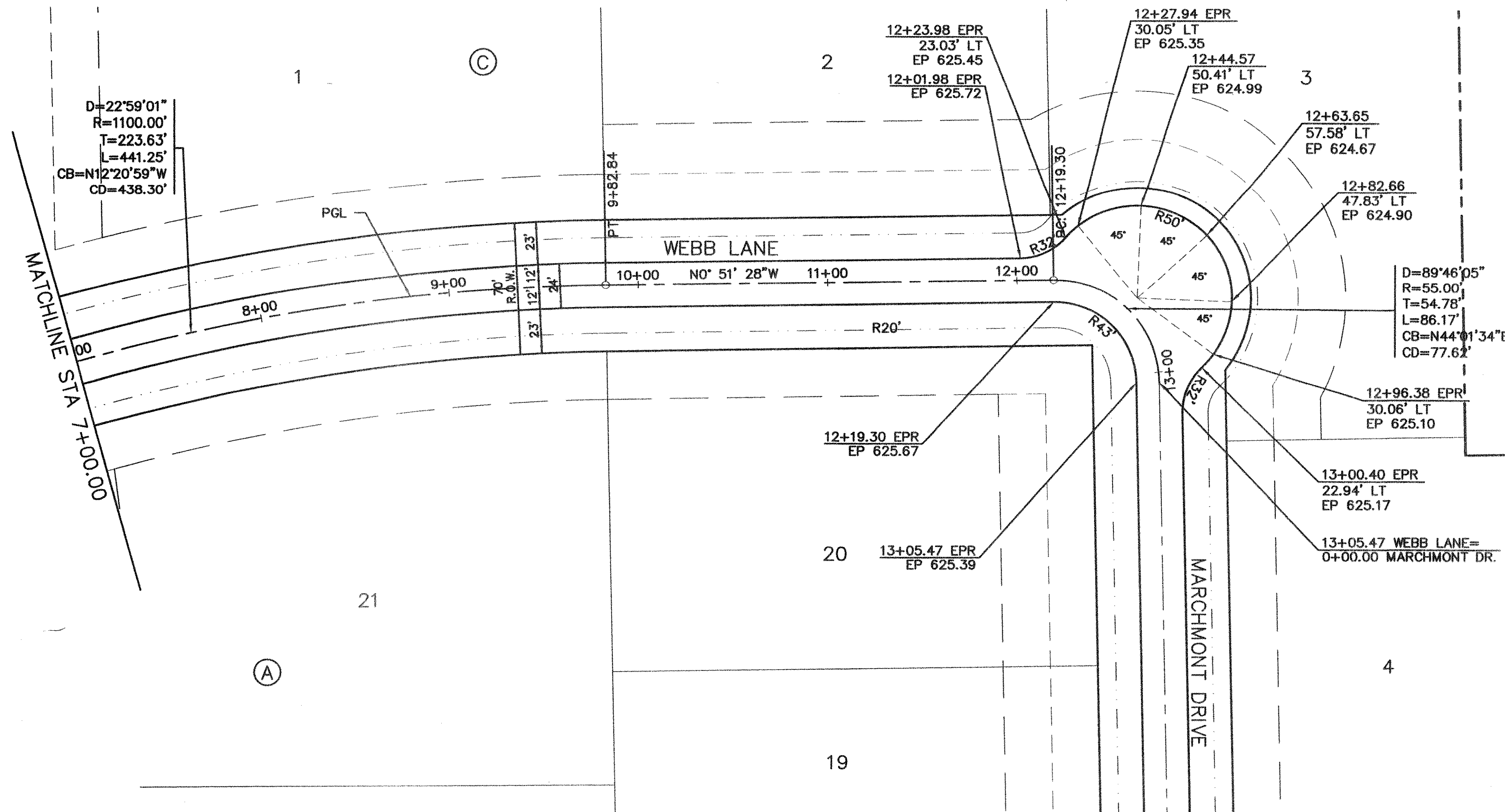
**KENNEDY
CONSULTING, INC.**

808 S. COLLEGE STREET, SUITE 300
MCKINNEY, TEXAS 75069

PH (972) 542-1754
FX (972) 529-2294

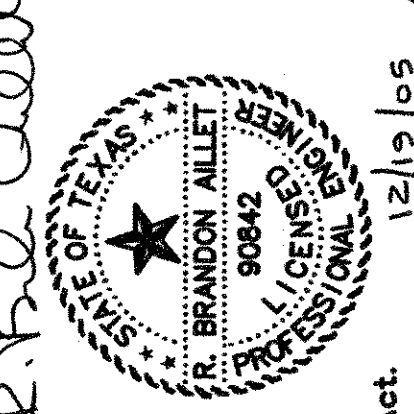
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Checked by:		RBA
Issue Date:		12-19-05
Project No.:		05003.00
SHEET TITLE:		PAVING PLAN & PROFILE
SHEET NUMBER:		C5

BENCHMARK DATA: BM #1 - EL. 618.54 - SQUARE CUT ON HDWL, S OF 2170, 500' W OF INGRAM; BM #2 - EL. 618.44 - PK NAIL IN ASPHALT, SW CORNER OF INGRAM & 2170

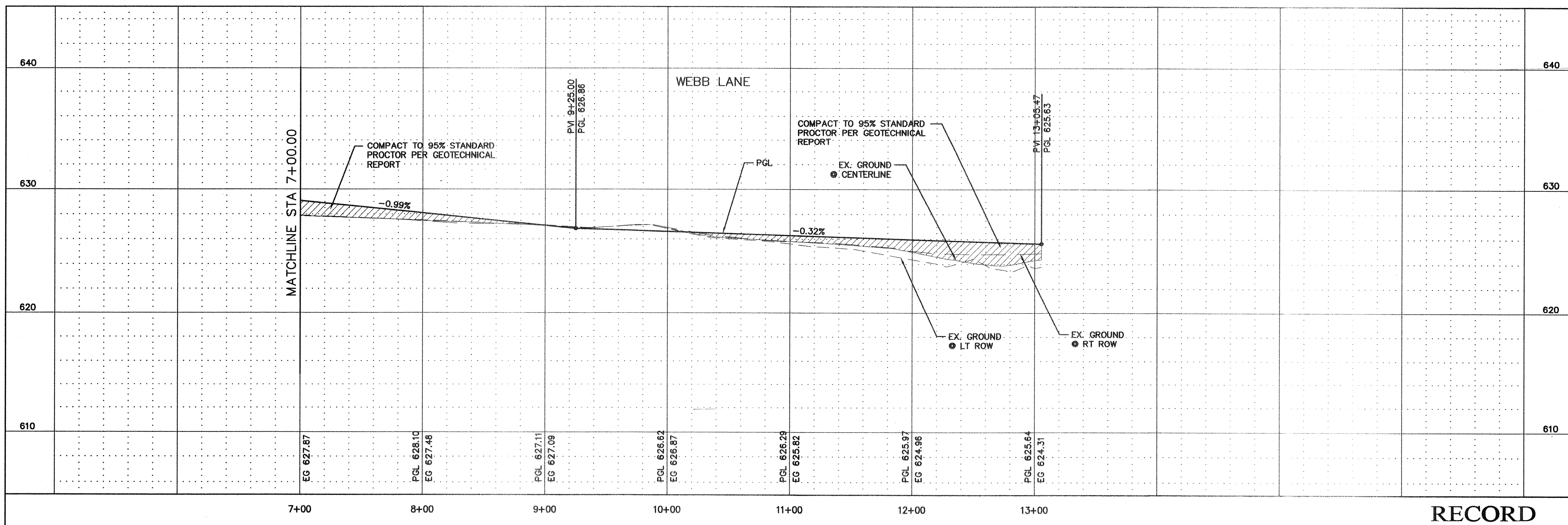
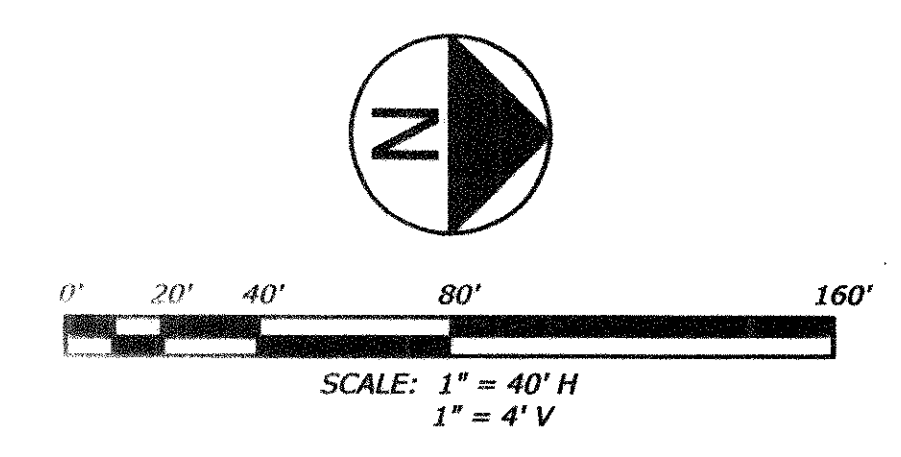


NOTE: SEE SHEET C4 FOR TYPICAL PAVING SECTION

PAVING PLAN & PROFILE
 WEBB LANE
 CLAREMONT SPRINGS ADDITION PHASE I
 LUCAS, TEXAS



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No.	Date	Description
REVISIONS		

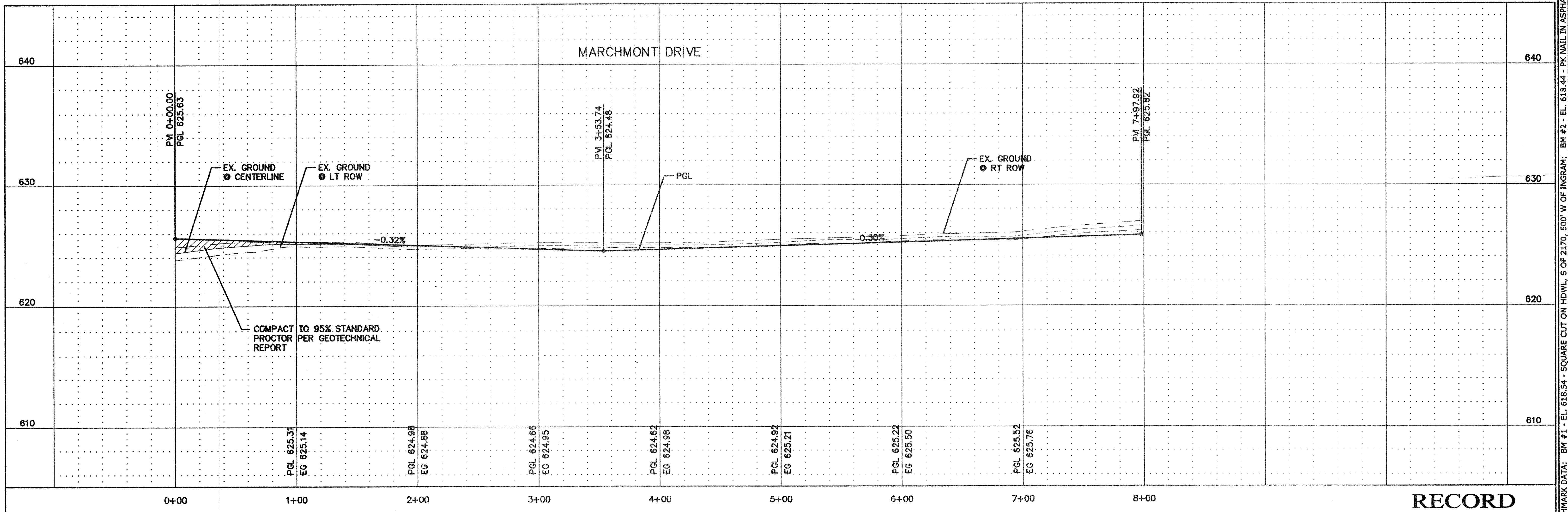
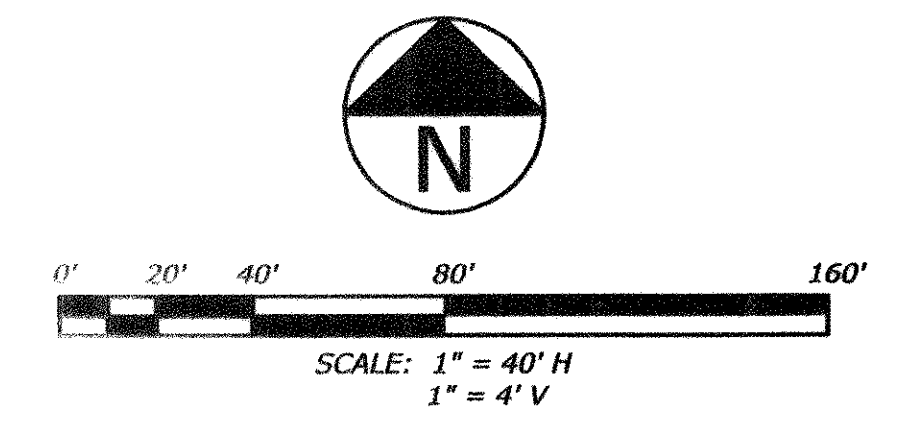
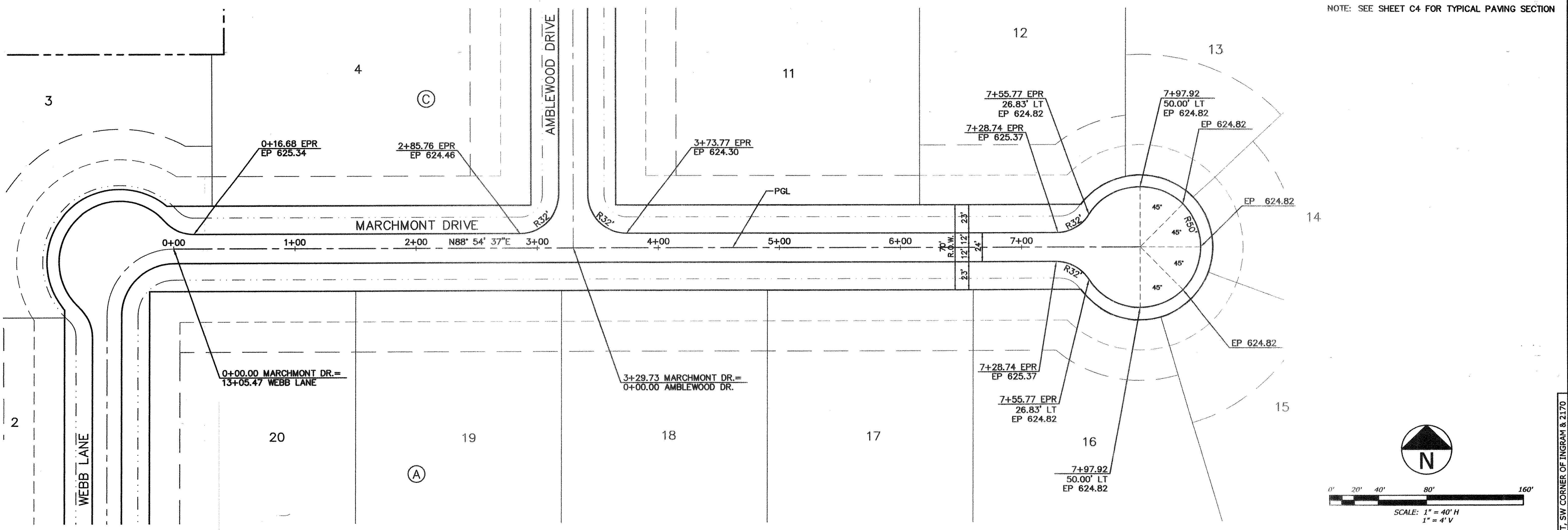
BENCHMARK DATA: BM #1 - EL. 618.54 - SQUARE CUT ON HDWL, S OF 2170' 500' W OF INGRAM; BM #2 - EL. 618.44 - PK NAIL IN ASPHALT, SW CORNER OF INGRAM & 2170

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 808 S. COLLEGE STREET, SUITE 300
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RECORD DRAWING

Scale: SHOWN
 Drawn by: CAD
 Designed by: EVE
 Checked by: RBA
 Issue Date: 12-19-05
 Project No.: 05003.00
 SHEET TITLE:
 PAVING PLAN & PROFILE
 SHEET NUMBER:
C6

NOTE: SEE SHEET C4 FOR TYPICAL PAVING SECTION



PAVING PLAN & PROFILE
MARCHMONT DRIVE
 CLAREMONT SPRINGS ADDITION PHASE I
 LUCAS, TEXAS

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R. P. O. O. O. O. O.
 12/19/05

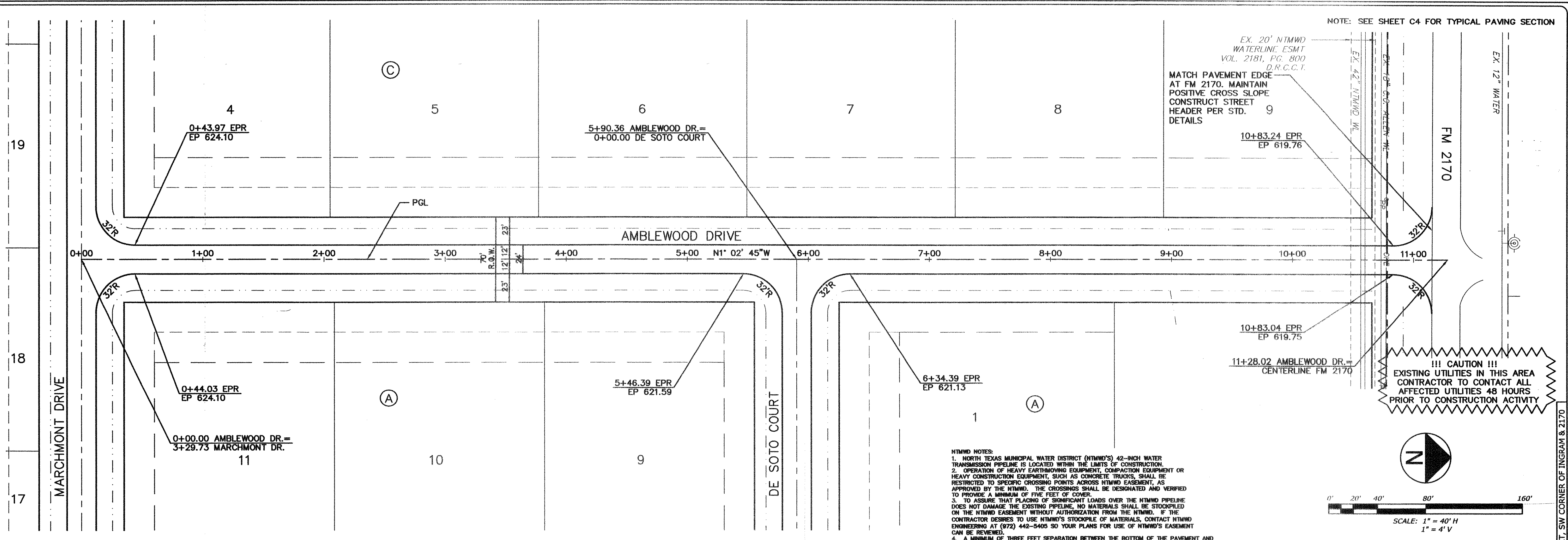
KENNEDY CONSULTING, INC.
 808 S. COLLEGE STREET, SUITE 300
 MCKINNEY, TEXAS 75069
 PH (972) 542-1754
 FX (972) 529-2294

BENCHMARK DATA: BM #1 - EL. 618.54 - SQUARE CUT ON HDWL, S OF 2170, 500' W OF INGRAM; BM #2 - EL. 618.44 - PK NAIL IN ASPHALT, SW CORNER OF INGRAM & 2170

No.	Date	Description
REVISIONS		
		SHOW
Scale:		SHOW
Drawn by:		CAD
Designed by:		EVE
Checked by:		RBA
Issue Date:		12-19-05
Project No.:		05003.00
SHEET TITLE:		
PAVING PLAN & PROFILE		
SHEET NUMBER:		

RECORD DRAWING

C7

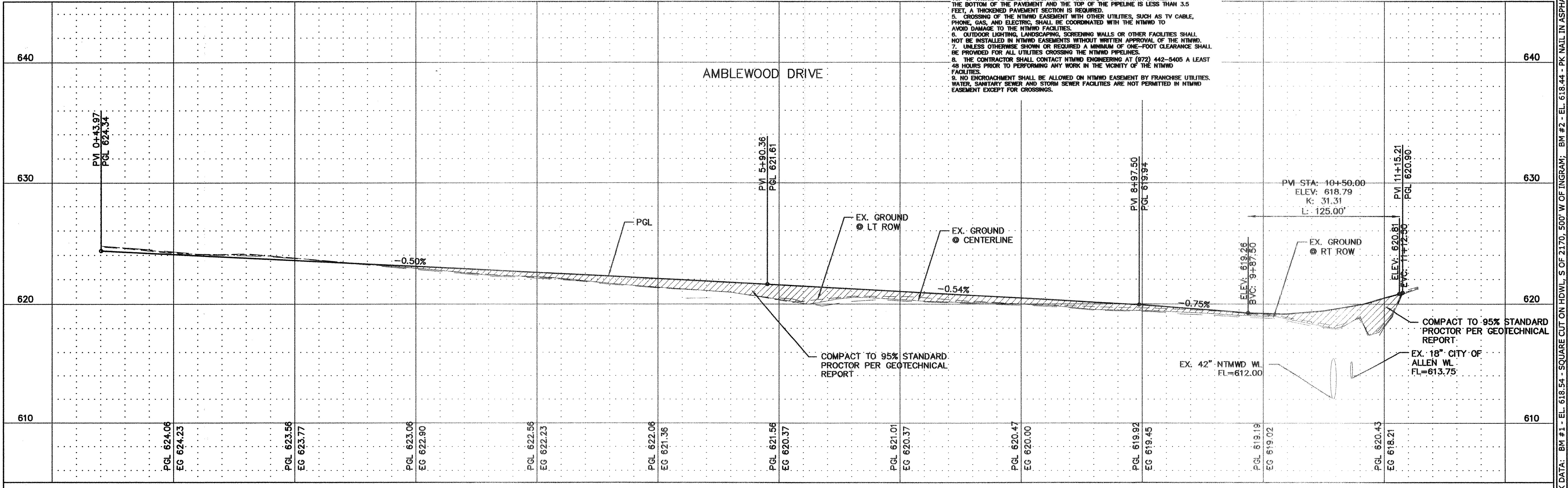
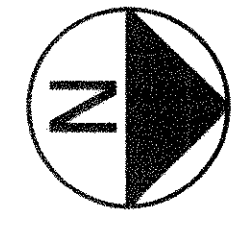
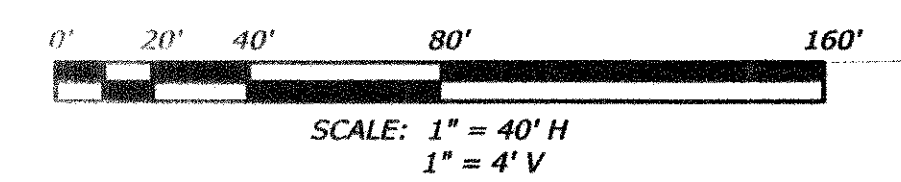


NOTE: SEE SHEET C4 FOR TYPICAL PAVING SECTION

EX. 20" NTMWD WATERLINE ESMT VOL. 2181, PG. 800 D.R.C.C.T.
MATCH PAVEMENT EDGE AT FM 2170. MAINTAIN POSITIVE CROSS SLOPE CONSTRUCT STREET HEADER PER STD. DETAILS

!!! CAUTION !!!
EXISTING UTILITIES IN THIS AREA
CONTRACTOR TO CONTACT ALL
AFFECTED UTILITIES 48 HOURS
PRIOR TO CONSTRUCTION ACTIVITY

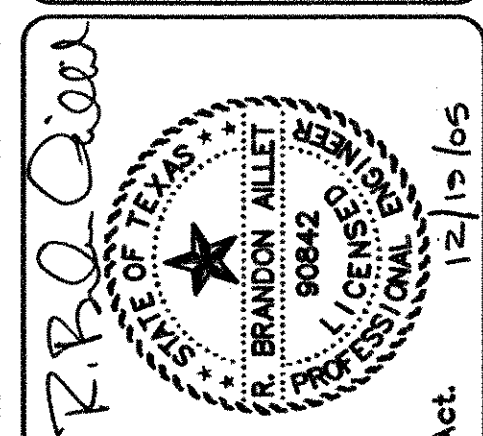
- NTMWD NOTES:
1. NORTH TEXAS MUNICIPAL WATER DISTRICT (NTMWD'S) 42-INCH WATER TRANSMISSION PIPELINE IS LOCATED WITHIN THE LIMITS OF CONSTRUCTION.
 2. OPERATION OF HEAVY EARTHMOVING EQUIPMENT, COMPACTION EQUIPMENT OR HEAVY CONSTRUCTION EQUIPMENT, SUCH AS CONCRETE TRUCKS, SHALL BE RESTRICTED TO SPECIFIC CROSSING POINTS ACROSS NTMWD EASEMENT AS APPROVED BY THE NTMWD. THE CROSSINGS SHALL BE DESIGNATED AND VERIFIED TO PROVIDE A MINIMUM OF FIVE FEET OF COVER.
 3. TO ASSURE THAT PLACING OF SIGNIFICANT LOADS OVER THE NTMWD PIPELINE DOES NOT DAMAGE THE EXISTING PIPELINE, NO MATERIALS SHALL BE STOCKPILED ON THE NTMWD EASEMENT WITHOUT AUTHORIZATION FROM THE NTMWD. IF THE CONTRACTOR DESIRES TO USE NTMWD'S STOCKPILE OF MATERIALS, CONTACT NTMWD ENGINEERING AT (972) 442-5405 SO YOUR PLANS FOR USE OF NTMWD'S EASEMENT CAN BE REVIEWED.
 4. A MINIMUM OF THREE FEET SEPARATION BETWEEN THE BOTTOM OF THE PAVEMENT AND TOP OF NTMWD PIPELINE IS REQUIRED. IN ADDITION, IF SEPARATION BETWEEN THE BOTTOM OF THE PAVEMENT AND THE TOP OF THE PIPELINE IS LESS THAN 3.5 FEET, A THICKENED PAVEMENT SECTION IS REQUIRED.
 5. CROSSING OF THE NTMWD EASEMENT WITH OTHER UTILITIES, SUCH AS TV CABLE, PHONE, GAS, AND ELECTRIC, SHALL BE COORDINATED WITH THE NTMWD TO AVOID DAMAGE TO THE NTMWD FACILITIES.
 6. OUTDOOR LIGHTING, LANDSCAPING, SCREENING WALLS OR OTHER FACILITIES SHALL NOT BE INSTALLED IN NTMWD EASEMENTS WITHOUT WRITTEN APPROVAL OF THE NTMWD.
 7. UNLESS OTHERWISE SHOWN OR REQUIRED A MINIMUM OF ONE-FOOT CLEARANCE SHALL BE PROVIDED FOR ALL UTILITIES CROSSING THE NTMWD PIPELINES.
 8. THE CONTRACTOR SHALL CONTACT NTMWD ENGINEERING AT (972) 442-5405 AT LEAST 48 HOURS PRIOR TO PERFORMING ANY WORK IN THE VICINITY OF THE NTMWD FACILITIES.
 9. NO ENCROACHMENT SHALL BE ALLOWED ON NTMWD EASEMENT BY FRANCHISE UTILITIES. WATER, SANITARY SEWER AND STORM SEWER FACILITIES ARE NOT PERMITTED IN NTMWD EASEMENT EXCEPT FOR CROSSINGS.



Station	Point	Elevation
0+00	PGL 624.06	
0+00	EG 624.23	
2+00	PGL 623.56	
2+00	EG 623.77	
3+00	PGL 623.06	
3+00	EG 622.90	
4+00	PGL 622.56	
4+00	EG 622.23	
5+00	PGL 622.06	
5+00	EG 621.36	
6+00	PGL 621.56	
6+00	EG 620.37	
7+00	PGL 621.01	
7+00	EG 620.37	
8+00	PGL 620.47	
8+00	EG 620.00	
9+00	PGL 619.92	
9+00	EG 619.45	
10+00	PGL 619.19	
10+00	EG 619.02	
11+00	PGL 620.43	
11+00	EG 618.21	

**RECORD
DRAWING**

**PAVING PLAN & PROFILE
AMBLEWOOD DRIVE
CLAREMONT SPRINGS ADDITION PHASE I
LUCAS, TEXAS**



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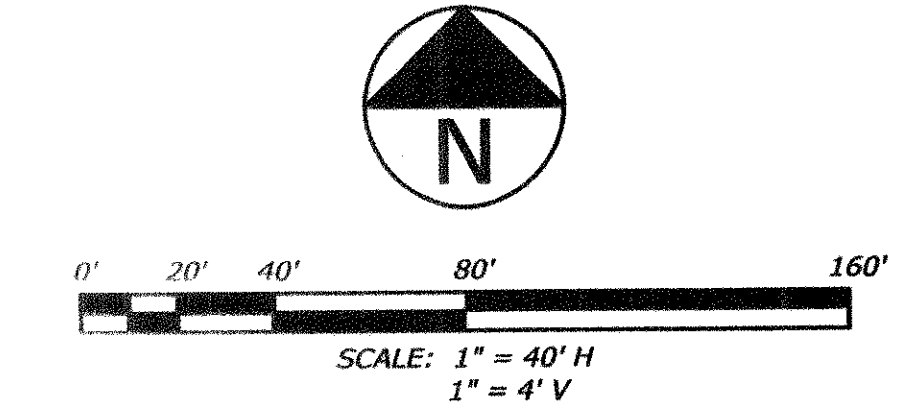
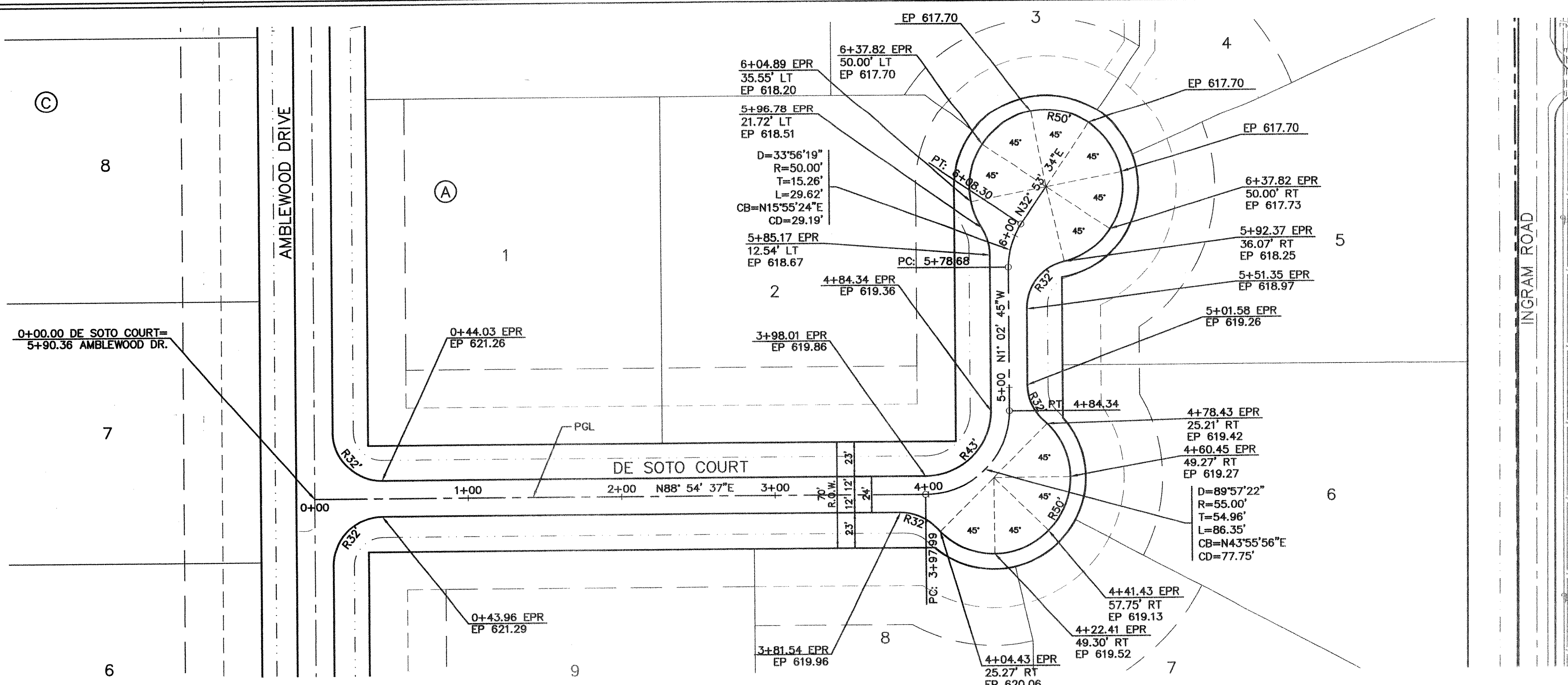
**KENNEDY
CONSULTING, INC.**
808 S. COLLEGE STREET, SUITE 300
MCKINNEY, TEXAS 75069
PH (972) 542-1754
FX (972) 529-2294

No.	Date	Description
REVISIONS		

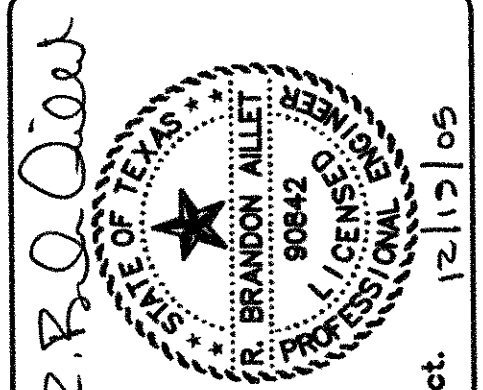
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Checked by: RBA
Issue Date: 12-19-05
Project No.: 05003.00
SHEET TITLE: PAVING PLAN & PROFILE
SHEET NUMBER: C8

BENCHMARK DATA: BM #1 - EL. 618.54 - SQUARE CUT ON HDWL, S OF 2170, 500' W OF INGRAM; BM #2 - EL. 618.44 - PK NAIL IN ASPHALT, SW CORNER OF INGRAM & 2170

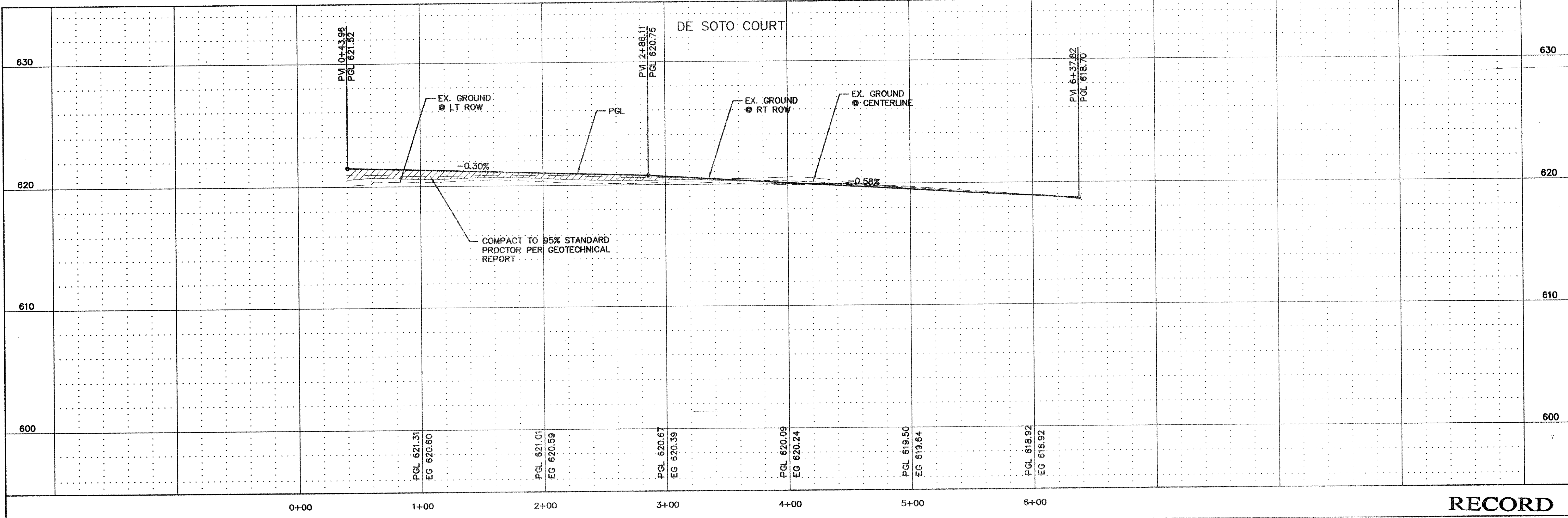
NOTE: SEE SHEET C4 FOR TYPICAL PAVING SECTION



PAVING PLAN & PROFILE
DE SOTO COURT
CLAREMONT SPRINGS ADDITION PHASE I
LUCAS, TEXAS



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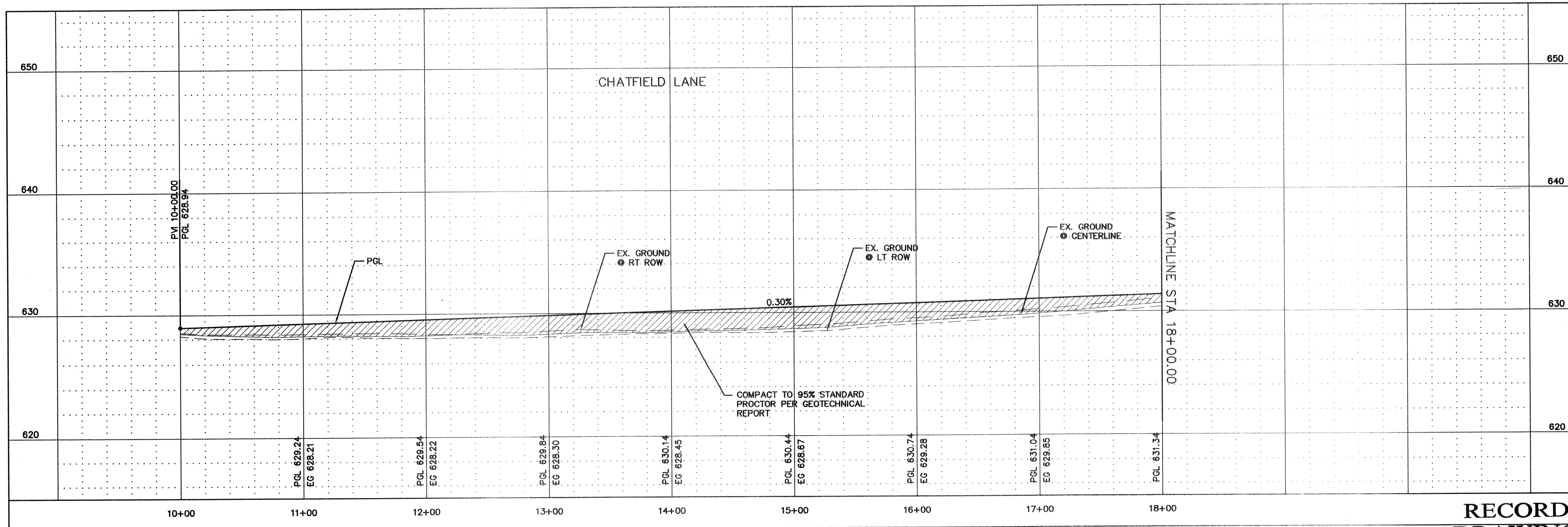
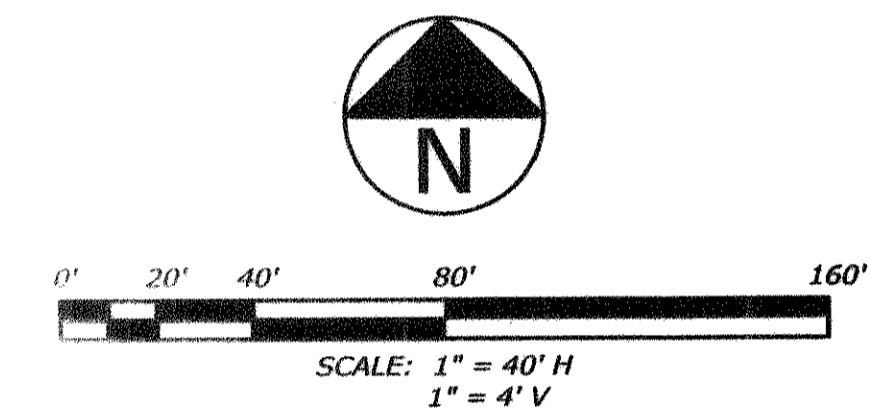
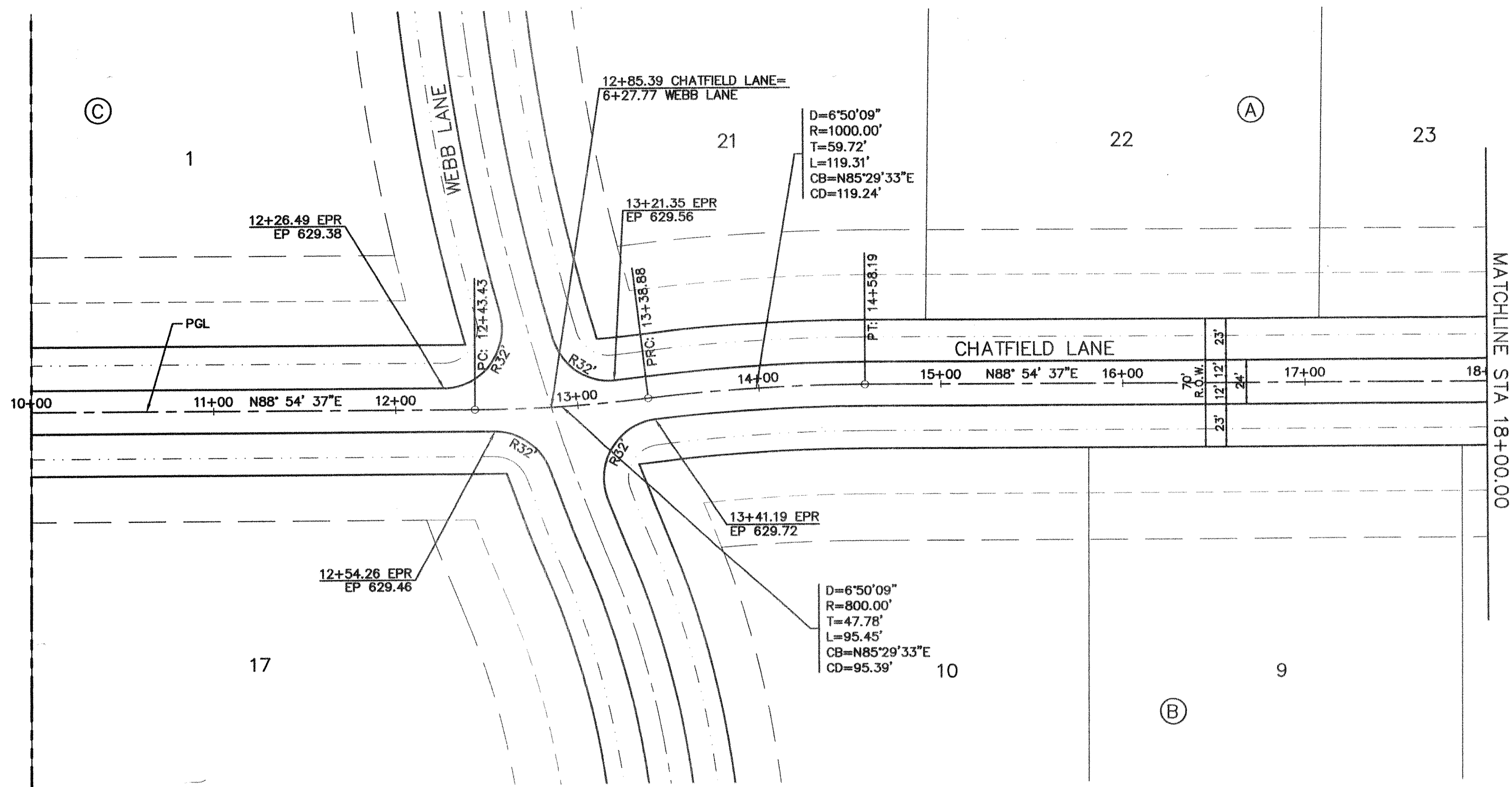
No.	Date	Description
REVISIONS		

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 Issue Date: 12-19-05
 Project No.: 05003.00
 SHEET TITLE: PAVING PLAN & PROFILE
 SHEET NUMBER: C9

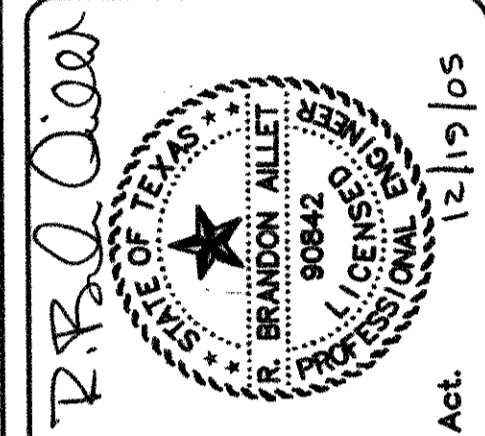
RECORD DRAWING

BENCHMARK DATA: BM #1 - EL. 618.54 - SQUARE CUT ON HDWL, S OF 2170, 500' W OF INGRAM; BM #2 - EL. 618.44 - PK NAIL IN ASPHALT, SW CORNER OF INGRAM & 2170

NOTE: SEE SHEET C4 FOR TYPICAL PAVING SECTION



PAVING PLAN & PROFILE
 CHATFIELD LANE
 CLAREMONT SPRINGS ADDITION PHASE I
 LUCAS, TEXAS



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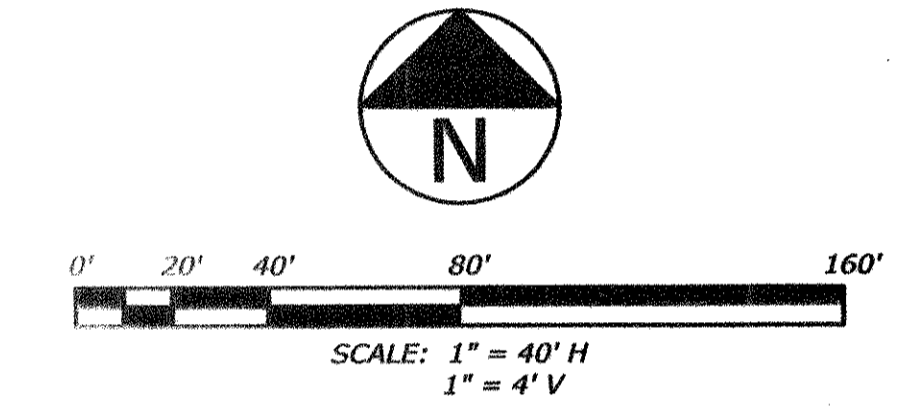
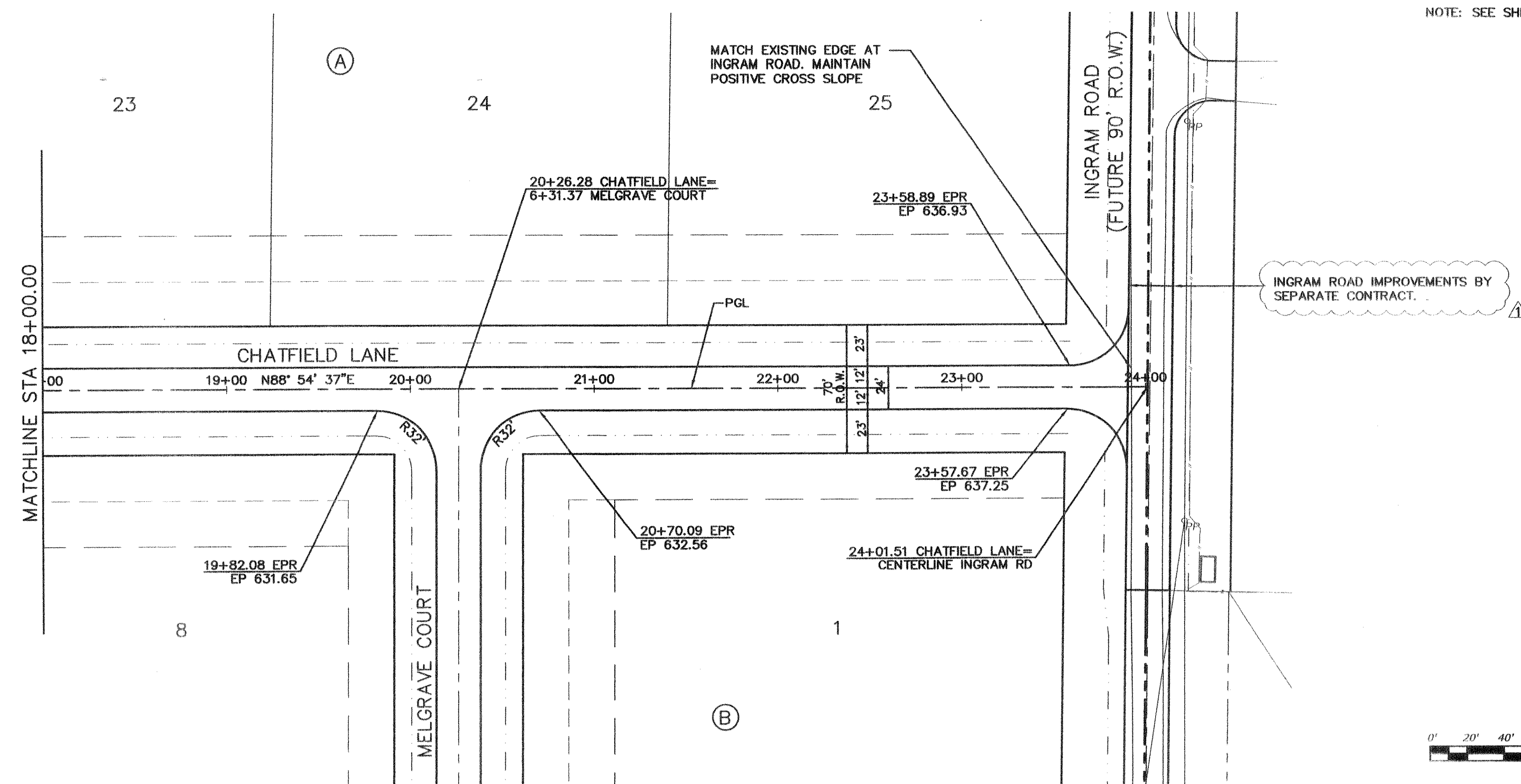
KENNEDY CONSULTING, INC.
 808 S. COLLEGE STREET, SUITE 300
 MCKINNEY, TEXAS 75069
 PH (972) 542-1754
 FX (972) 529-2294

No.	Date	Description
REVISIONS		

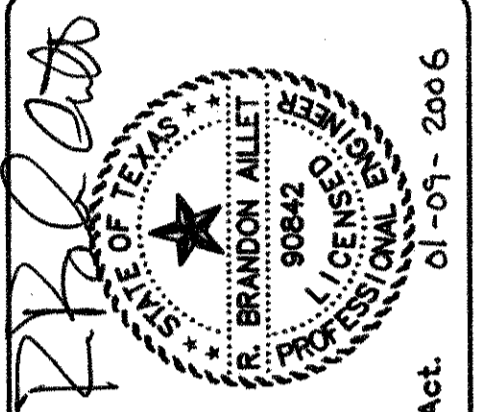
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 Checked by: _____ RBA
 Issue Date: 12-19-05
 Project No.: 05003.00
 SHEET TITLE: PAVING PLAN & PROFILE
 SHEET NUMBER: C10

**RECORD
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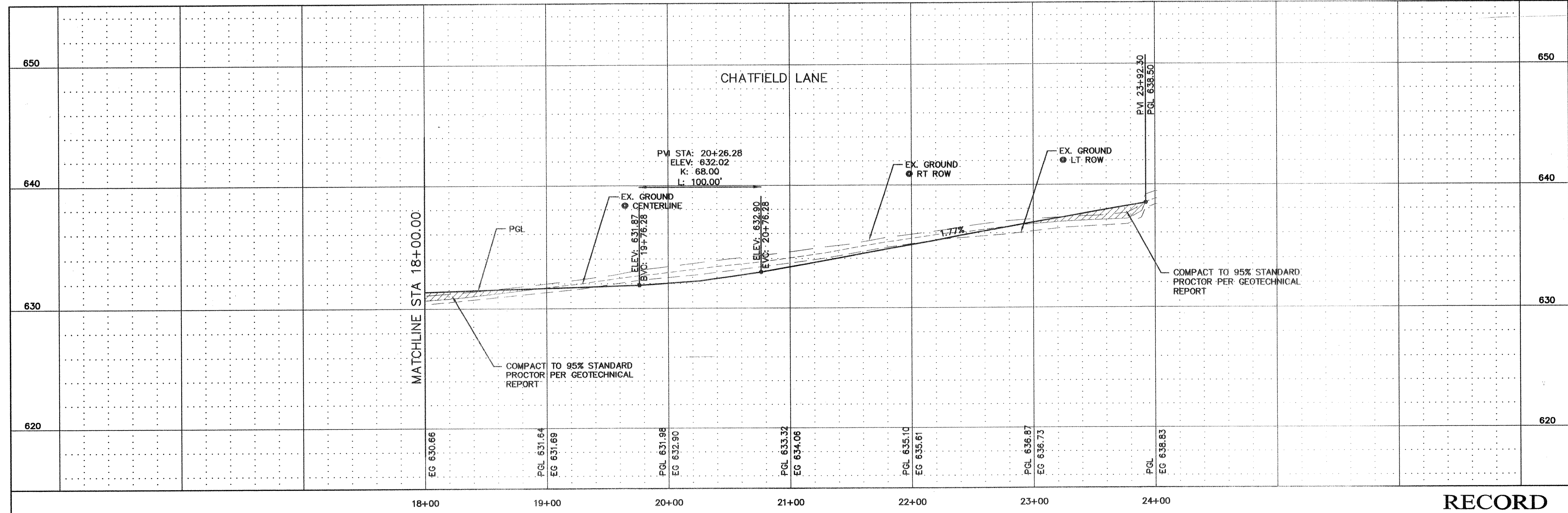
NOTE: SEE SHEET C4 FOR TYPICAL PAVING SECTION



PAVING PLAN & PROFILE
 CHATFIELD LANE
 CLAREMONT SPRINGS ADDITION PHASE I
 LUCAS, TEXAS



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BENCHMARK DATA: BM #1 - EL. 618.54 - SQUARE CUT ON HDWL, S OF 2170, 500' W OF INGRAM; BM #2 - EL. 618.44 - PK NAIL IN ASPHALT, SW CORNER OF INGRAM & 2170

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 MCKINNEY, TEXAS 75069
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REVISIONS		
No.	Date	Description
1	01/09/06	Rev. Note

Scale: SHOWN
 Drawn by: CAD
 Designed by: EVE
 Checked by: RBA
 Issue Date: 12-19-05
 Project No.: 05003.00
 SHEET TITLE: PAVING PLAN & PROFILE
 SHEET NUMBER: C11

**RECORD
 DRAWING**

(TO GRACE EVANGELICAL FREE CHURCH DRIVEWAY)

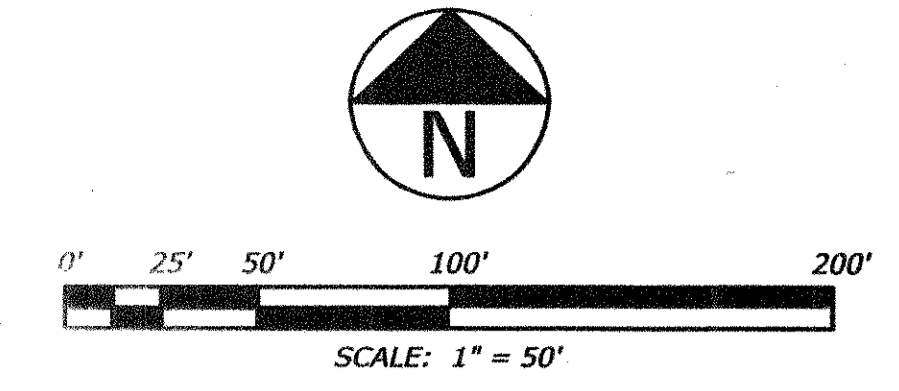
!!! CAUTION !!!
EXISTING UTILITIES IN THIS AREA
CONTRACTOR TO CONTACT ALL
AFFECTED UTILITIES 48 HOURS
PRIOR TO CONSTRUCTION ACTIVITY

567' REMOVE ERODED CONC. SLAB

233'



EX. 20" NTMWD ESMT.
VOL. 2181, PG. 800
D.R.C.C.1



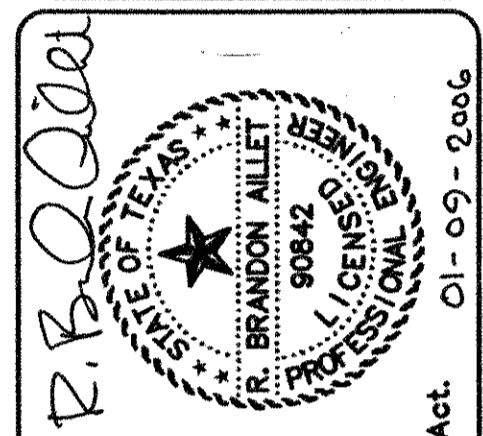
NTMWD NOTES

1. NORTH TEXAS MUNICIPAL WATER DISTRICT (NTMWD'S) 42-INCH WATER TRANSMISSION PIPELINE IS LOCATED WITHIN THE LIMITS OF CONSTRUCTION. OPERATION OF HEAVY EARTHMOVING EQUIPMENT, COMPACTION EQUIPMENT OR HEAVY CONSTRUCTION EQUIPMENT, SUCH AS CONCRETE TRUCKS, SHALL BE RESTRICTED TO SPECIFIC CROSSING POINTS ACROSS NTMWD EASEMENT, AS APPROVED BY THE NTMWD. THE CROSSINGS SHALL BE DESIGNATED AND VERIFIED TO PROVIDE A MINIMUM OF FIVE FEET OF COVER.
2. TO ASSURE THAT PLACING OF SIGNIFICANT LOADS OVER THE NTMWD PIPELINE DOES NOT DAMAGE THE EXISTING PIPELINE, NO MATERIALS SHALL BE STOCKPILED ON THE NTMWD EASEMENT WITHOUT AUTHORIZATION FROM THE NTMWD. IF THE CONTRACTOR DESIRES TO USE NTMWD'S STOCKPILE OF MATERIALS, CONTACT NTMWD ENGINEERING AT (972) 442-5405 SO YOUR PLANS FOR USE OF NTMWD'S EASEMENT CAN BE REVIEWED.
3. A MINIMUM OF THREE FEET SEPARATION BETWEEN THE BOTTOM OF THE PAVEMENT AND TOP OF NTMWD PIPELINE IS REQUIRED. IN ADDITION, IF SEPARATION BETWEEN THE BOTTOM OF THE PAVEMENT AND THE TOP OF THE PIPELINE IS LESS THAN 3.5 FEET, A THICKENED PAVEMENT SECTION IS REQUIRED.
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5. OUTDOOR LIGHTING, LANDSCAPING, SCREENING WALLS OR OTHER FACILITIES SHALL NOT BE INSTALLED IN NTMWD EASEMENTS WITHOUT WRITTEN APPROVAL OF THE NTMWD.
6. UNLESS OTHERWISE SHOWN OR REQUIRED A MINIMUM OF ONE-FOOT CLEARANCE SHALL BE PROVIDED FOR ALL UTILITIES CROSSING THE NTMWD PIPELINES.
7. THE CONTRACTOR SHALL CONTACT NTMWD ENGINEERING AT (972) 442-5405 AT LEAST 48 HOURS PRIOR TO PERFORMING ANY WORK IN THE VICINITY OF THE NTMWD FACILITIES.
8. NO ENCROACHMENT SHALL BE ALLOWED ON NTMWD EASEMENT BY FRANCHISE UTILITIES. WATER, SANITARY SEWER AND STORM SEWER FACILITIES ARE NOT PERMITTED IN NTMWD EASEMENT EXCEPT FOR CROSSINGS.

GRADING NOTES:

1. VEGETATIVE COVER SHALL BE MAINTAINED PER THE EROSION CONTROL PLAN (THIS SET) AND THE CONTRACTOR'S SWPPP.
2. LANDSCAPE BERM SHALL HAVE SIDE SLOPES OF 3:1 MINIMUM, AND SHALL BE A MINIMUM OF 3' WIDE AT THE TOP OF BERM.
3. SEE LANDSCAPE ARCHITECT PLANS FOR PERMANENT VEGETATION AND IRRIGATION OF BERM.
4. REFER TO FINAL GEOTECHNICAL REPORT FURNISHED BY OWNER FOR GRADING DESIGN RECOMMENDATIONS.
5. THE CITY OF LUCAS SHALL ACCEPT THE FINAL SUBDIVISION IMPROVEMENTS ONCE ALL PADS ARE GRADED ACCORDING TO THE GRADING PLAN.
6. CONTRACTOR TO REMOVE ALL TREES WITHIN A 15' DISTANCE OF ANY GRADING PAD.
7. CONTRACTOR SHALL MAKE EVERY EFFORT TO PROTECT EXISTING TREES FROM CONSTRUCTION ACTIVITIES, PER CITY OF LUCAS MUNICIPAL CODE OF ORDINANCES, SPECIFICALLY, ARTICLE 13.
8. REFER TO PAVING PLAN AND PROFILE SHEETS AND STORM DRAINAGE PLAN AND PROFILE SHEETS FOR EXACT PAVEMENT ELEVATIONS AND DITCH FLOWLINES.

GRADING PLAN
CLAREMONT SPRINGS ADDITION PHASE I
LUCAS, TEXAS

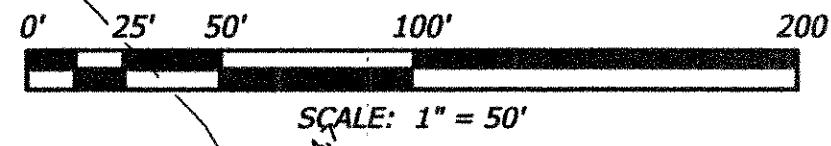
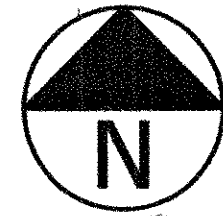


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MCKINNEY, TEXAS 75069
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FX (972) 529-2294

No.	Date	Description
1	01/09/06	Rev. Pond Grading
REVISIONS		
Scale: 1"=50'		
Drawn by: CAD		
Designed by: EVE		
Checked by: RBA		
Issue Date: 12-19-05		
Project No.: 05003.00		
SHEET TITLE: GRADING PLAN		
SHEET NUMBER: C12		

RECORD
DRAWING



SEE SHEET C12 FOR GRADING NOTES.

GRADING PLAN
CLAREMONT SPRINGS ADDITION PHASE I
LUCAS, TEXAS

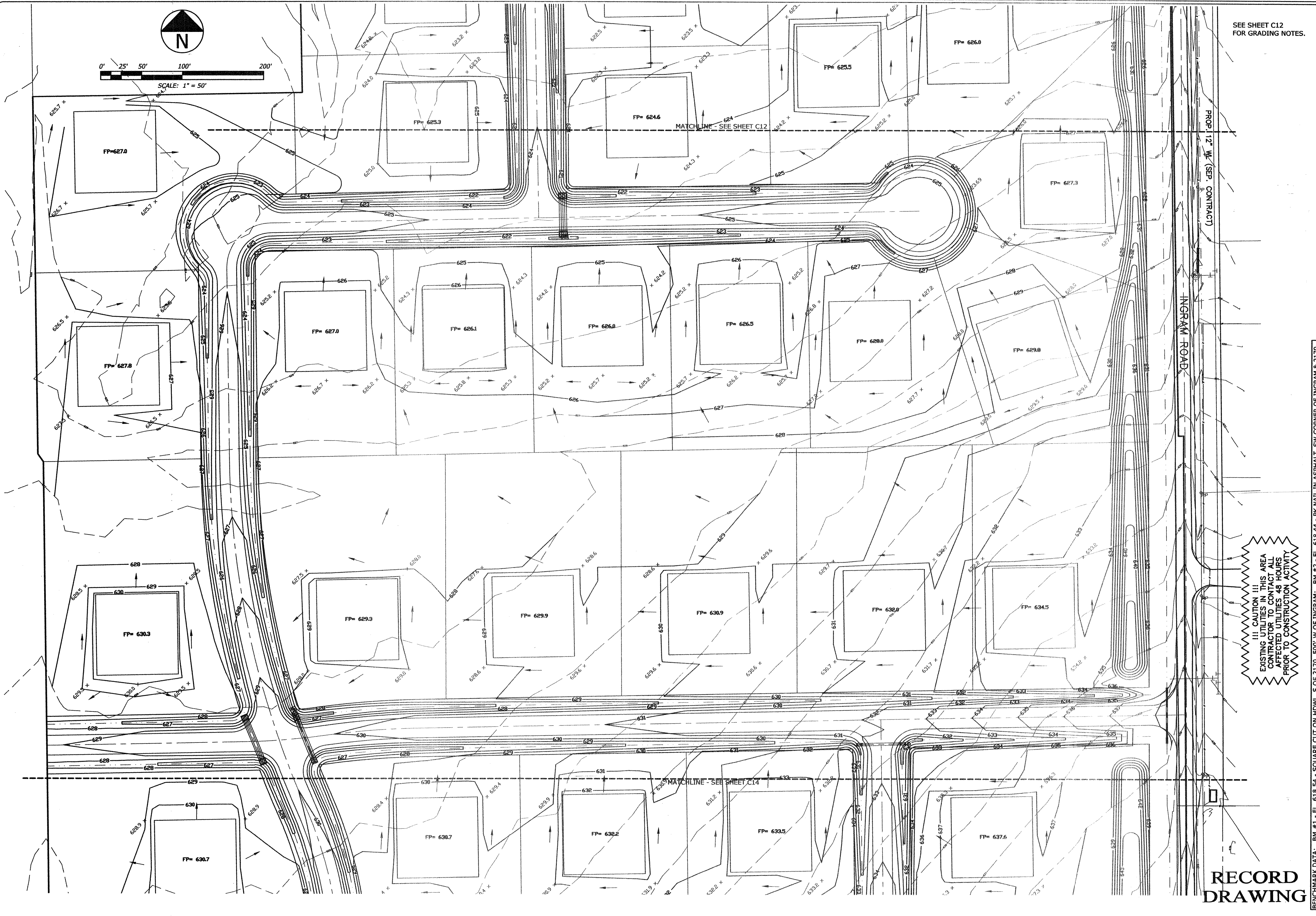
R. Brandon Allet
REGISTERED PROFESSIONAL ENGINEER
STATE OF TEXAS
NO. 90842
R. BRANDON ALLET
KENNEDY CONSULTING, INC.
808 S. COLLEGE STREET, SUITE 300
MCKINNEY, TEXAS 75069
12/19/05

KENNEDY CONSULTING, INC.
808 S. COLLEGE STREET, SUITE 300
MCKINNEY, TEXAS 75069
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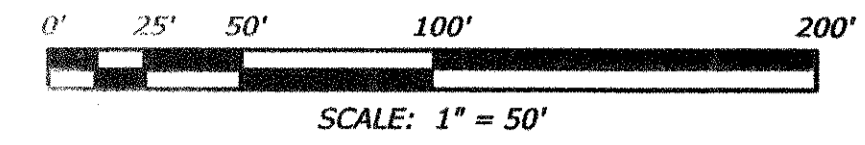
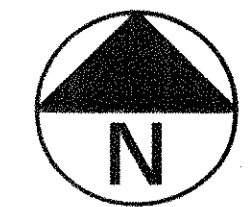
No.	Date	Description
REVISIONS		
Scale:		1"=50'
Drawn by:		CAD
Designed by:		EVE
Checked by:		RBA
Issue Date:		12-19-05
Project No.:		05003.00
SHEET TITLE:		
GRADING PLAN		
SHEET NUMBER:		
C13		

RECORD DRAWING

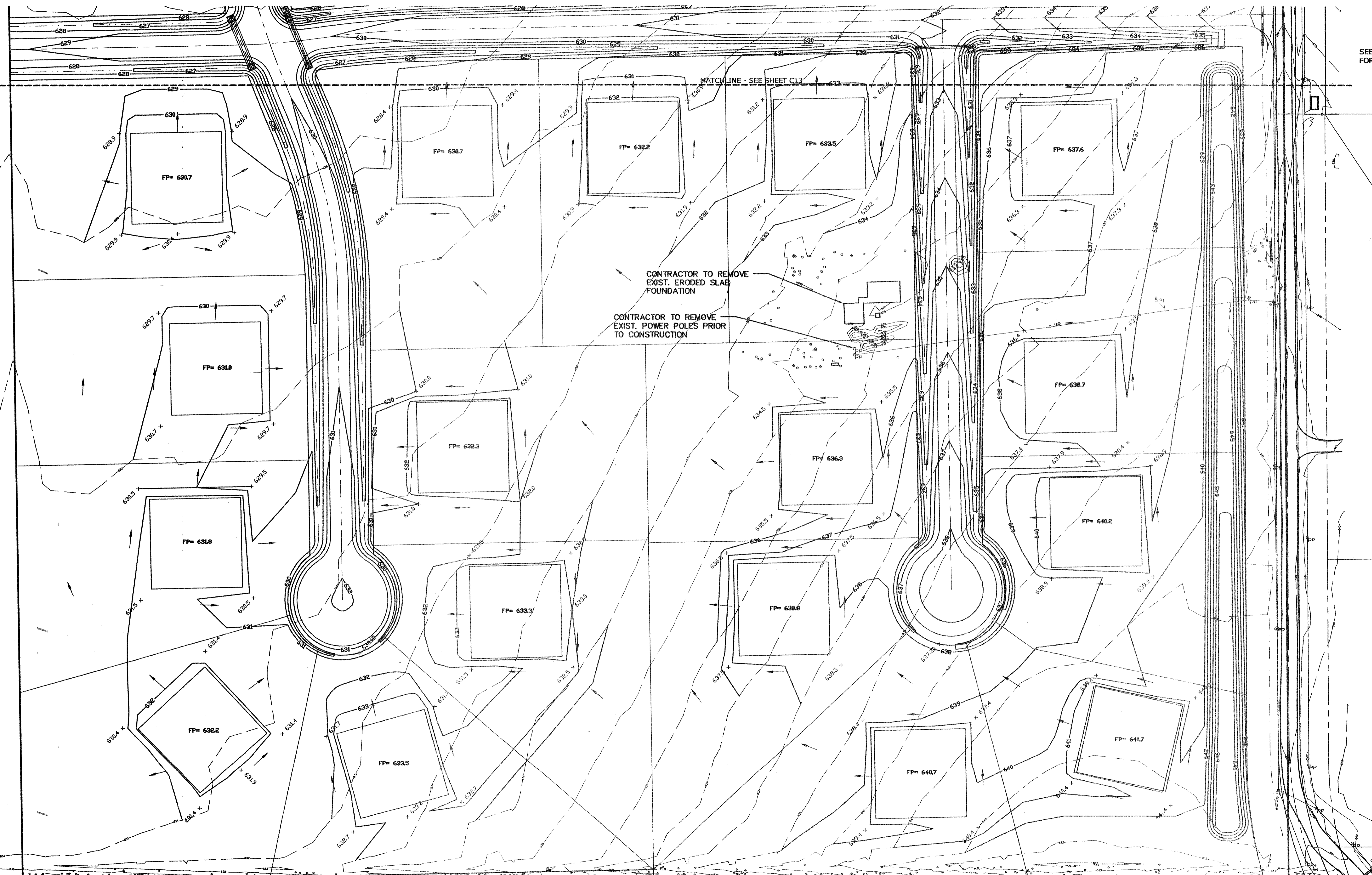
CAUTION !!!
EXISTING UTILITIES IN THIS AREA
CONTRACTOR TO CONTACT ALL
AFFECTED UTILITIES 48 HOURS
PRIOR TO CONSTRUCTION ACTIVITY



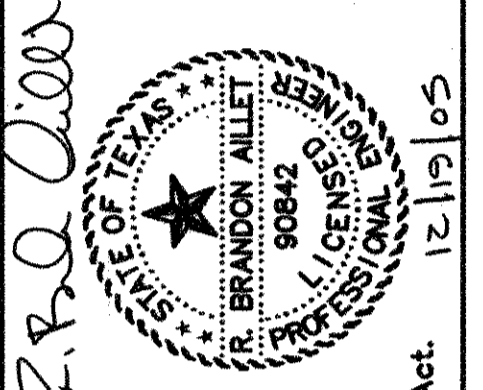
BENCHMARK DATA: BM #1 - EL. 618.54 - SQUARE CUT ON HDWL. S OF 2170, 500' W OF INGRAM; BM #2 - EL. 618.44 - PK NAIL IN ASPHALT, SW CORNER OF INGRAM & 2170



SEE SHEET C12
FOR GRADING NOTES.



GRADING PLAN
CLAREMONT SPRINGS ADDITION PHASE I
LUCAS, TEXAS



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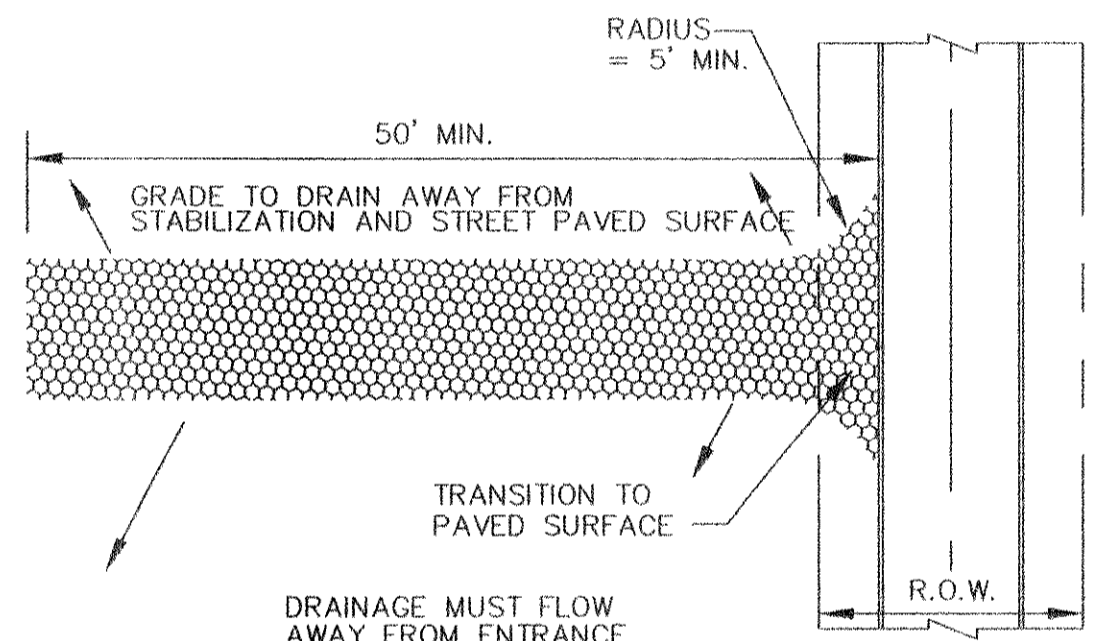
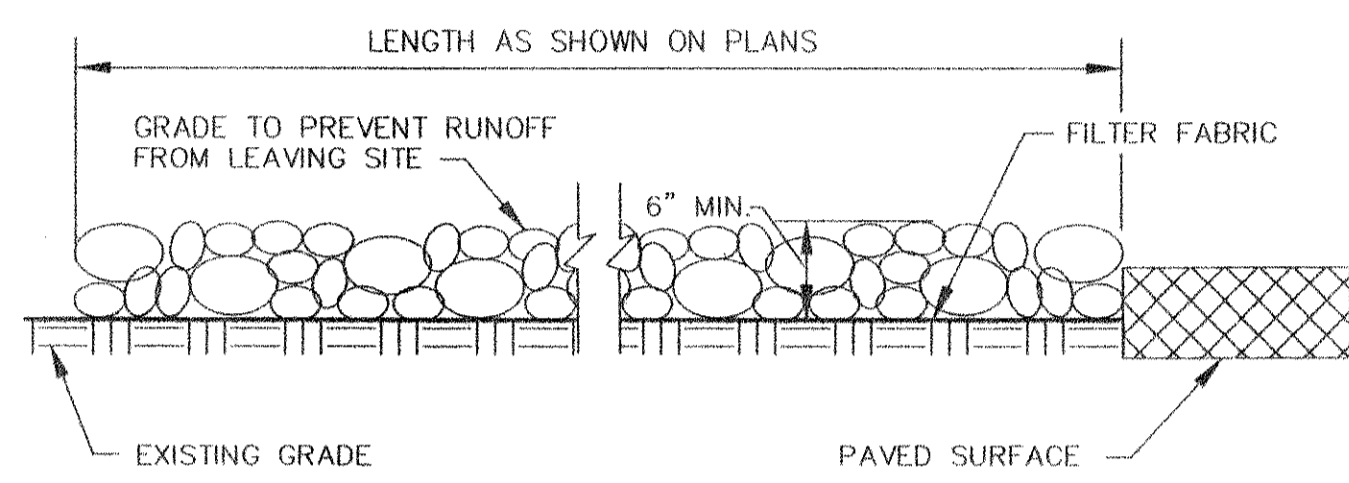
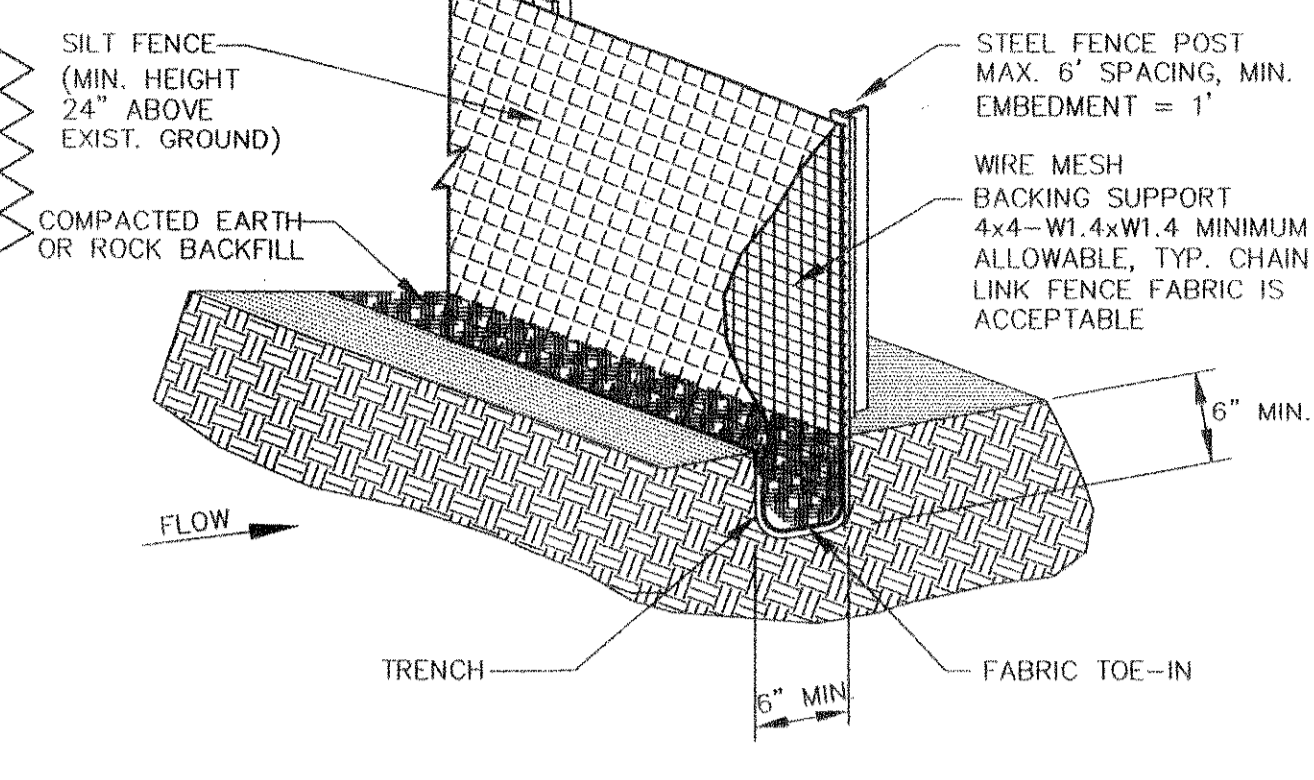
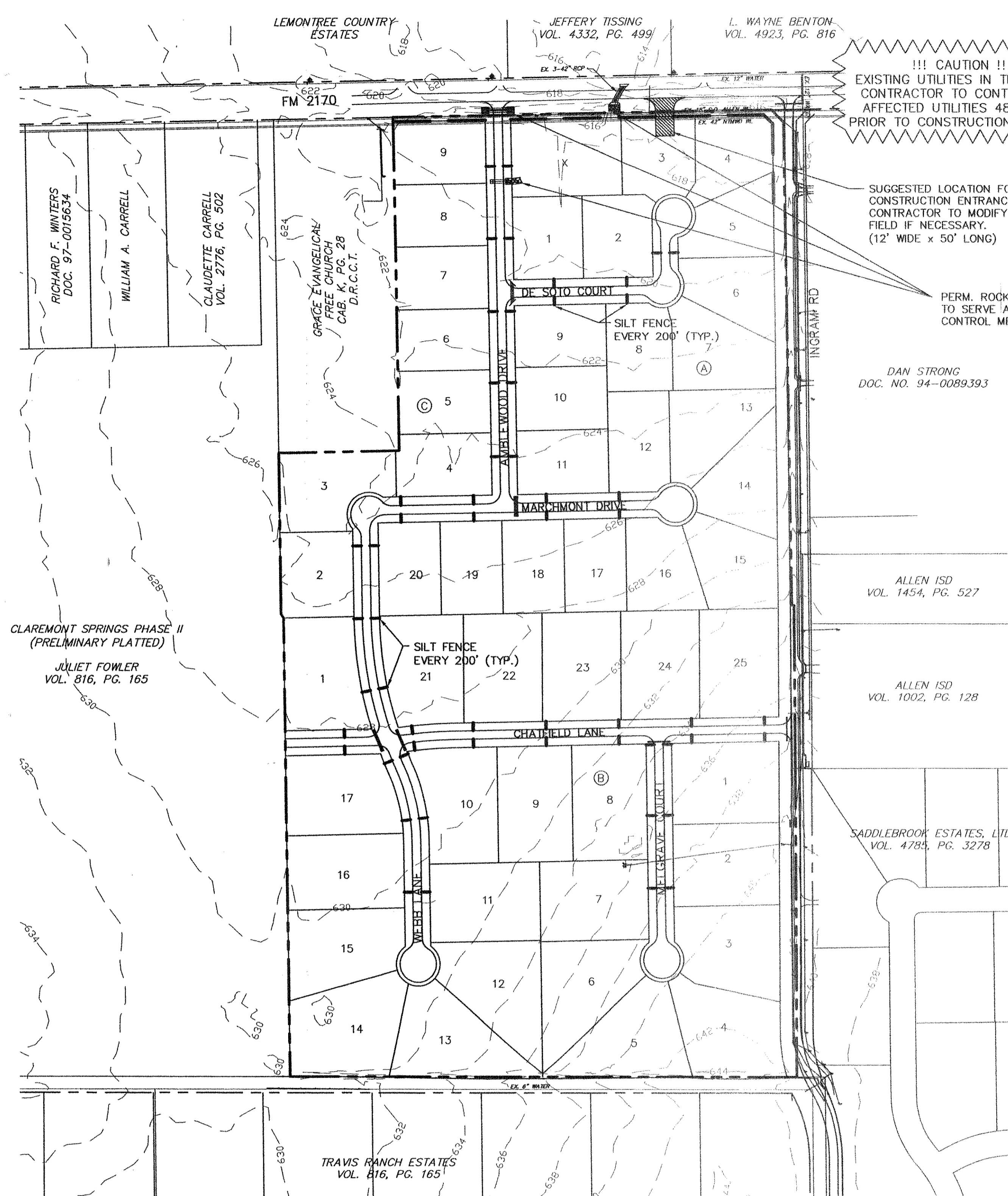
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No.	Date	Description
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Checked by: RBA
Issue Date: 12-19-05
Project No.: 05003.00
SHEET TITLE:
SHEET NUMBER:

RECORD DRAWING
C14

BENCHMARK DATA: BM #1 - EL. 618.54 - SQUARE CUT ON HDWL, S OF 2170, 500' W OF INGRAM; BM #2 - EL. 618.44 - PK NAIL IN ASPHALT, SW CORNER OF INGRAM & 2170



!!! CAUTION !!!
EXISTING UTILITIES IN THIS AREA
CONTRACTOR TO CONTACT-ALL
AFFECTED UTILITIES 48 HOURS
PRIOR TO CONSTRUCTION ACTIVITY

SUGGESTED LOCATION FOR
CONSTRUCTION ENTRANCE.
CONTRACTOR TO MODIFY IN
FIELD IF NECESSARY.
(12' WIDE x 50' LONG)

PERM. ROCK RIPRAP
TO SERVE AS EROSION
CONTROL MEASURE.

DAN STRONG
DOC. NO. 94-0089393

ALLEN ISD
VOL. 1454, PG. 527

ALLEN ISD
VOL. 1002, PG. 128

SADDLEBROOK ESTATES, LTD
VOL. 4785, PG. 3278

TRAVIS RANCH ESTATE
VOL. 816, PG. 165

CLAREMONT SPRINGS PHASE II
(PRELIMINARY PLATTED)

JULIET FOWLER
VOL. 816, PG. 165

RICHARD F. WINTERS
DOC. 97-0015634

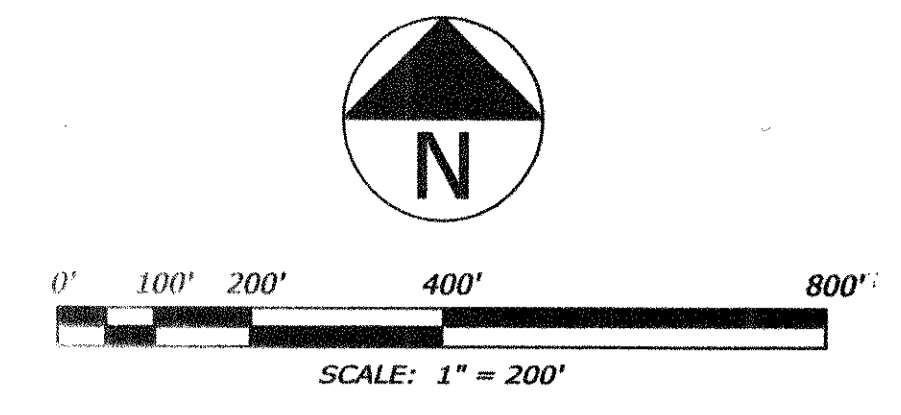
WILLIAM A. CARRELL

CLAUDETTE CARRELL
VOL. 2776, PG. 502

LEMONTREE COUNTRY
ESTATES

JEFFERY TISSING
VOL. 4332, PG. 499

L. WAYNE BENTON
VOL. 4923, PG. 816



SILT FENCE GENERAL NOTES:

1. STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF ONE FOOT.
2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (E.G. PAVEMENT), WEIGHT FABRIC FLAP WITH ROCK ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
3. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
4. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IN TURN IS ATTACHED TO THE STEEL FENCE POST. THERE SHALL BE A 3 FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
5. INSPECTION SHALL BE MADE EVERY TWO WEEKS AND AFTER EACH 1/2" RAINFALL. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF HALF THE HEIGHT OF THE FENCE. THE SILT SHALL BE DISPOSED OF AT AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.

STABILIZED CONSTRUCTION ENTRANCE GENERAL NOTES:

1. STONE SHALL BE 3 TO 5 INCH DIAMETER CRUSHED ROCK OR ACCEPTABLE CRUSHED PORTLAND CEMENT CONCRETE.
2. LENGTH SHALL BE SHOWN ON PLANS, WITH A MINIMUM LENGTH OF 30 FEET FOR LOTS WHICH ARE LESS THAN 150 FEET FROM EDGE OF PAVEMENT. THE MINIMUM DEPTH IN ALL OTHER CASES SHALL BE 50 FEET.
3. THE THICKNESS SHALL NOT BE LESS THAN 6 INCHES.
4. THE WIDTH SHALL BE NO LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
5. WHEN NECESSARY, VEHICLES SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WITH DRAINAGE FLOWING AWAY FROM BOTH THE STREET AND THE STABILIZED ENTRANCE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
6. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PAVED SURFACES. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SPLIED, DROPPED, WASHED, OR TRACKED ONTO PAVED SURFACES MUST BE REMOVED IMMEDIATELY.
7. THE ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR PREPARING AND IMPLEMENTING A STORM WATER POLLUTION PREVENTION PLAN IN ACCORDANCE WITH THE TCEQ TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM (TPDES) PERMIT NO. TXR150000 (PERMIT).
2. THE NOTICE OF INTENT (NOI), AS REQUIRED BY THE GENERAL PERMIT, MUST BE PROPERLY DISPLAYED ON SITE AT ALL TIMES BY EACH OPERATOR.
3. ALL RELEASES OF THE REPORTABLE QUANTITIES OF HAZARDOUS SUBSTANCES SHALL BE REPORTED IMMEDIATELY TO THE FACILITY OPERATOR AND EPA.
4. QUALIFIED OPERATOR PERSONNEL MUST INSPECT THE SITE AT LEAST ONCE EVERY DAY AND IMMEDIATELY AFTER A 1/2-INCH OR GREATER RAINFALL EVENT. THE INSPECTOR SHALL DOCUMENT THE RESULTS.
5. MODIFICATIONS TO THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE IMPLEMENTED AND BE IN-PLACE WITHIN A SEVEN CALENDAR DAY PERIOD.
6. IF ANY CONTRACTOR SEES A VIOLATION BY AN OPERATOR OR ANOTHER CONTRACTOR, THAT OPERATOR OR CONTRACTOR IN VIOLATION SHALL BE NOTIFIED AS WELL AS THE FACILITY OPERATOR.
7. EROSION CONTROL SHALL BE INSTALLED PRIOR TO ANY GRADING.
8. ACCUMULATED SILT DEPOSITS SHALL BE REMOVED FROM SILT FENCES AND HAY BALE DIKES WHEN SILT DEPTH REACHES SIX INCHES. REMOVAL OF SILT DEPOSITS BY THE CONTRACTOR SHALL BE INCIDENTAL TO THE PERFORMANCE OF THE CONTRACT AND A SEPARATE BID ITEM SHALL NOT BE INCLUDED.
9. THE CONTRACTOR SHALL ADD OR DELETE EROSION PROTECTION AT THE REQUEST AND DIRECTION OF THE OPERATOR OF THE CITY.
10. AFTER INSTALLATION OF PAVEMENT, FINAL LOT BENCHING AND GENERAL CLEANUP, THE PAVING CONTRACTOR SHALL ESTABLISH GRASS GROUND COVER IN ALL STREET PARKWAYS, LOTS AND ALL OTHER DISTURBED AREAS. MATERIALS SHALL BE AS SPECIFIED IN ITEM 2.15 AND SEEDING SHALL BE IN ACCORDANCE WITH ITEM 3.10 OF THE NCTCOG STANDARD SPECIFICATION.
11. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTROL AND LIMIT SILT AND SEDIMENT LEAVING THE SITE. SPECIFICALLY, THE CONTRACTOR SHALL PROTECT ALL PUBLIC STREETS, ALLEYS, STREAMS AND STORM DRAINAGE SYSTEMS FROM EROSION DEPOSITS.
12. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE A DUMPSTER TO COLLECT SOLID WASTE MATERIALS DURING CONSTRUCTION.
13. A DRAINAGE AREA MAP WILL BE INCLUDED WITH THE STORM WATER POLLUTION PLAN.
14. IT IS ANTICIPATED THAT THE FOLLOWING NON-STORM DISCHARGES WILL BE ASSOCIATED WITH THIS PROJECT. THESE DISCHARGES ARE AUTHORIZED THROUGH THE CONSTRUCTION GENERAL PERMIT:
 - A. FIRE HYDRANT FLUSHINGS
 - B. WATER USED TO WASH VEHICLES AND TO CONTROL DUST
 - C. POTABLE WATER SOURCES INCLUDING WATER LINE FLUSHINGS
 - D. IRRIGATION DRAINAGE
 - E. PAVEMENT WASHDOWN
 - F. UNCONTAMINATED GROUND WATER
 - G. CONSTRUCTION WATER
15. CONSTRUCTION WASTE DISPOSAL CONTAINERS SHALL BE PROVIDED ON THE SITE FOR DISPOSAL OF ALL NON-HAZARDOUS CONSTRUCTION WASTE MATERIALS. THE CONTAINERS SHALL BE HAULED TO LANDFILL BY THE CONTRACTOR.
16. ALL HAZARDOUS MATERIALS SHALL BE HANDLED AND DISPOSED OF BY THE CONTRACTOR IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.
17. THE NOTES AND DETAILS CONTAINED HEREIN DO NOT RELIEVE THE CONTRACTOR AND OWNER OF MEETING AND IMPLEMENTING THE REQUIREMENTS OF THE PERMIT.
18. THE CONTRACTOR SHALL ADD TO THIS SITE MAP THE FOLLOWING:
 - A. OFFSITE BORROW AND FILL AREAS
 - B. AREAS DISTURBED/AREAS UNDISTURBED
 - C. ASPHALT OF CONCRETED BATCH PLANTS
 - D. EQUIPMENT STORAGE AREAS
 - E. ONSITE WASTE AND TRASH STORAGE
 - F. FUELING AREA
 - G. CONCRETE TRUCK WASHOUT LOCATION

NTMWD NOTES:

1. NORTH TEXAS MUNICIPAL WATER DISTRICT (NTMWD)'S 42-INCH WATER TRANSMISSION PIPELINE IS LOCATED WITHIN THE LIMITS OF CONSTRUCTION.
2. OPERATION OF HEAVY EARTHMOVING EQUIPMENT, COMPACTION EQUIPMENT OR HEAVY CONSTRUCTION EQUIPMENT, SUCH AS CONCRETE TRUCKS, SHALL BE RESTRICTED TO SPECIFIC CROSSING POINTS ACROSS NTMWD EASEMENT, AS APPROVED BY THE NTMWD. THE CROSSINGS SHALL BE DESIGNATED AND VERIFIED TO PROVIDE A MINIMUM OF FIVE FEET OF COVER.
3. TO ASSURE THAT PLACING OF SIGNIFICANT LOADS OVER THE NTMWD PIPELINE DOES NOT DAMAGE THE EXISTING PIPELINE, NO MATERIALS SHALL BE STOCKPILED ON THE NTMWD EASEMENT WITHOUT AUTHORIZATION FROM THE NTMWD. IF THE CONTRACTOR DESIRES TO USE NTMWD'S STOCKPILE OF MATERIALS, CONTACT NTMWD ENGINEERING AT (972) 442-5405 SO YOUR PLANS FOR USE OF NTMWD'S EASEMENT CAN BE REVIEWED.
4. A MINIMUM OF THREE FEET SEPARATION BETWEEN THE BOTTOM OF THE PAVEMENT AND TOP OF NTMWD PIPELINE IS REQUIRED. IN ADDITION, IF SEPARATION BETWEEN THE BOTTOM OF THE PAVEMENT AND THE TOP OF THE PIPELINE IS LESS THAN 3.5 FEET, A THICKENED PAVEMENT SECTION IS REQUIRED.
5. CROSSING OF THE NTMWD EASEMENT WITH OTHER UTILITIES, SUCH AS TV CABLE, PHONE, GAS, AND ELECTRIC, SHALL BE COORDINATED WITH THE NTMWD TO AVOID DAMAGE TO THE NTMWD FACILITIES.
6. OUTDOOR LIGHTING, LANDSCAPING, SCREENING WALLS OR OTHER FACILITIES SHALL NOT BE INSTALLED IN NTMWD EASEMENTS WITHOUT WRITTEN APPROVAL OF THE NTMWD.
7. UNLESS OTHERWISE SHOWN OR REQUIRED A MINIMUM OF ONE-FOOT CLEARANCE SHALL BE PROVIDED FOR ALL UTILITIES CROSSING THE NTMWD PIPELINES.
8. THE CONTRACTOR SHALL CONTACT NTMWD ENGINEERING AT (972) 442-5405 A LEAST 48 HOURS PRIOR TO PERFORMING ANY WORK IN THE VICINITY OF THE NTMWD FACILITIES.
9. NO ENCROACHMENT SHALL BE ALLOWED ON NTMWD EASEMENT BY FRANCHISE UTILITIES. WATER, SANITARY SEWER AND STORM SEWER FACILITIES ARE NOT PERMITTED IN NTMWD EASEMENT EXCEPT FOR CROSSINGS.

LEGEND



EROSION CONTROL PLAN
CLAREMONT SPRINGS ADDITION PHASE I
LUCAS, TEXAS



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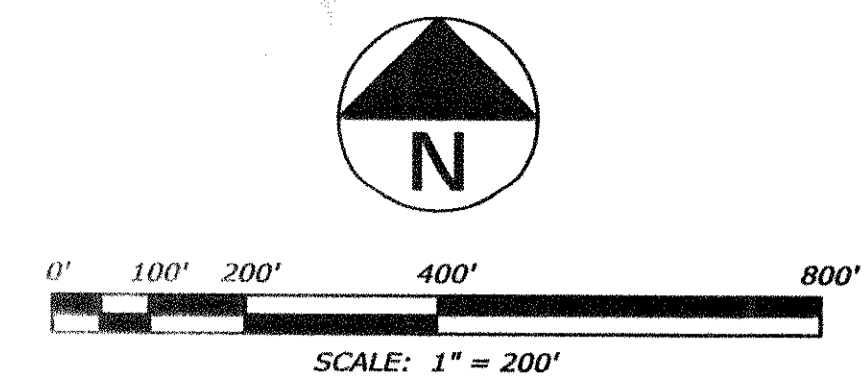
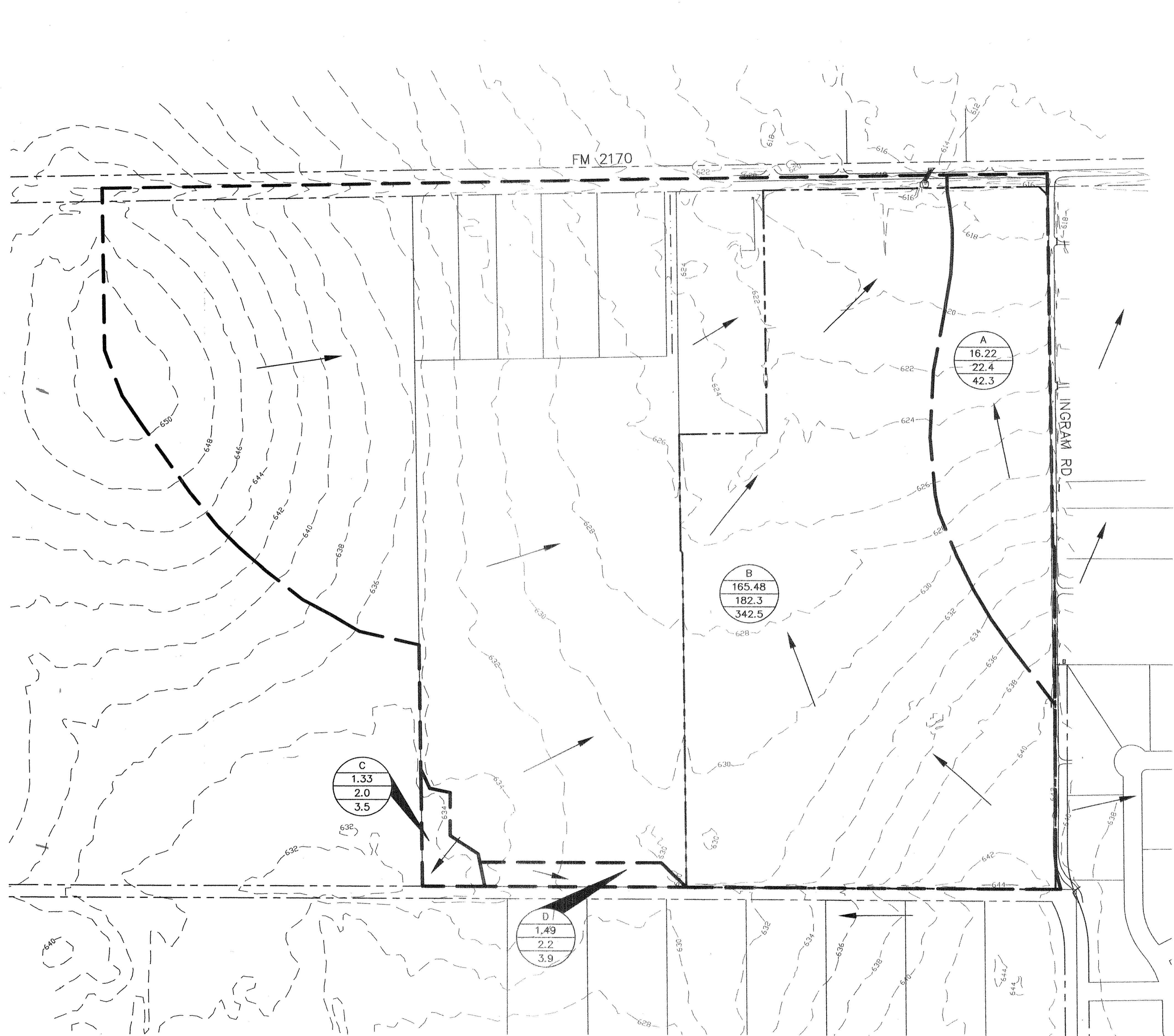
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No.	Date	Description
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Scale: SHOW
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Designed by: RBA
Checked by: EBE
Issue Date: 12-19-05
Project No.: 05003.00
SHEET TITLE: EROSION CONTROL PLAN
SHEET NUMBER: C15

**RECORD
DRAWING**

BENCHMARK DATA: BM #1 - EL. 618.54 - SQUARE CUT ON HDWL, S OF 2170, 500' W OF INGRAM; BM #2 - EL. 618.44 - PK NAIL IN ASPHALT, SW CORNER OF INGRAM & 2170



EXISTING DRAINAGE AREA MAP
 CLAREMONT SPRINGS ADDITION PHASE I
 LUCAS, TEXAS

R.P.O. O'Neil
 R. BRANDON ALLET, P.E.
 LICENSE NO. 90842
 PROFESSIONAL ENGINEER
 STATE OF TEXAS
 12/19/05

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EXISTING CONDITIONS DRAINAGE AREA CALCULATIONS

AREA NUMBER	INCREMENTAL AREA (ACRES)	RUNOFF COEFF. "C"	TIME (CONC.) Tc (MIN.)	INTENSITY "I(2)" (IN./HR.)	INTENSITY "I(100)" (IN./HR.)	DISCHARGE "Q(2)" (CFS)	DISCHARGE "Q(100)" (CFS)
A	16.22	0.35	17	3.95	7.45	22.4	42.3
B	165.48	0.36	30	3.06	5.75	182.3	342.5
C	1.33	0.35	15	4.20	7.52	2.0	3.5
D	1.49	0.35	15	4.20	7.52	2.2	3.9

LEGEND

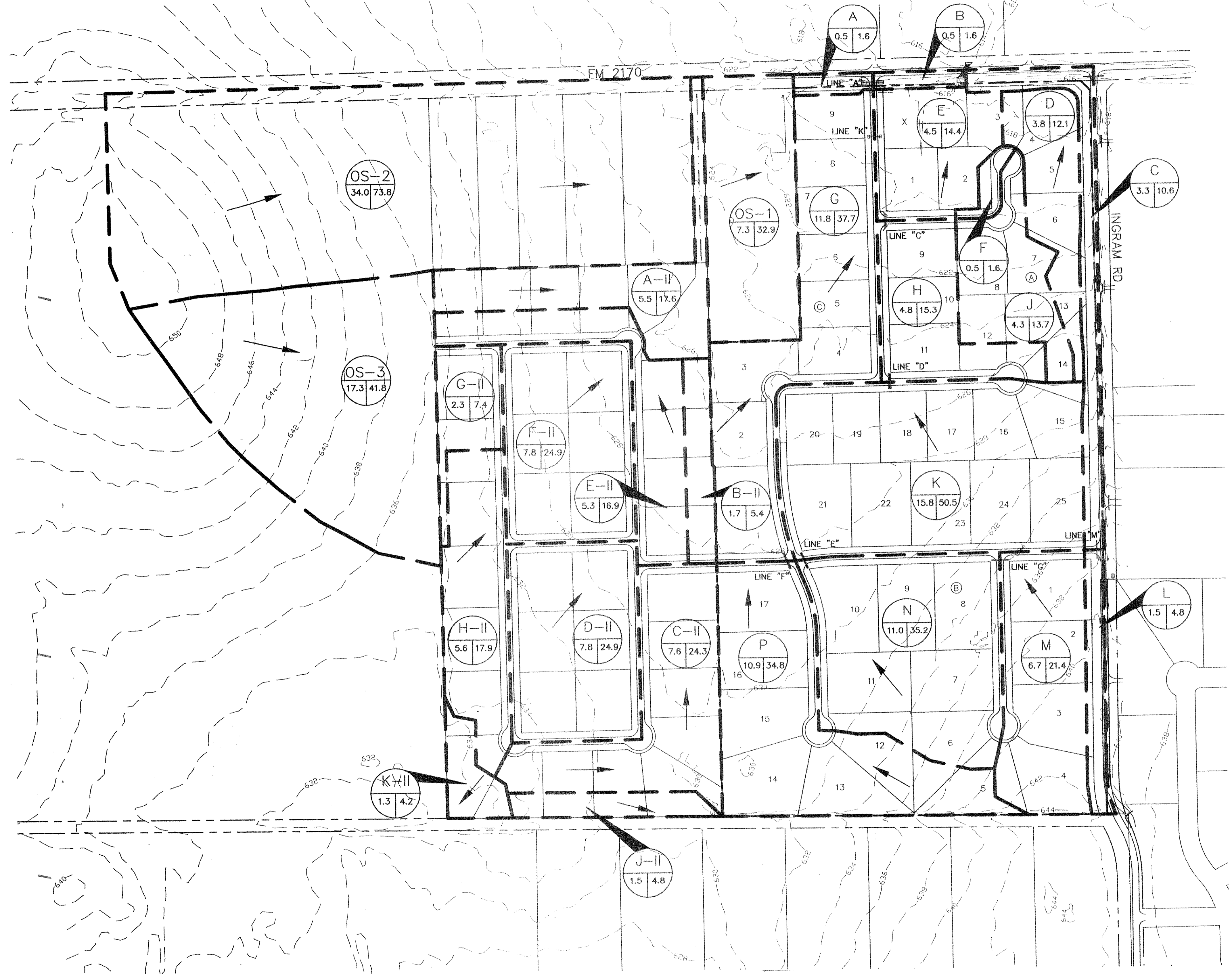
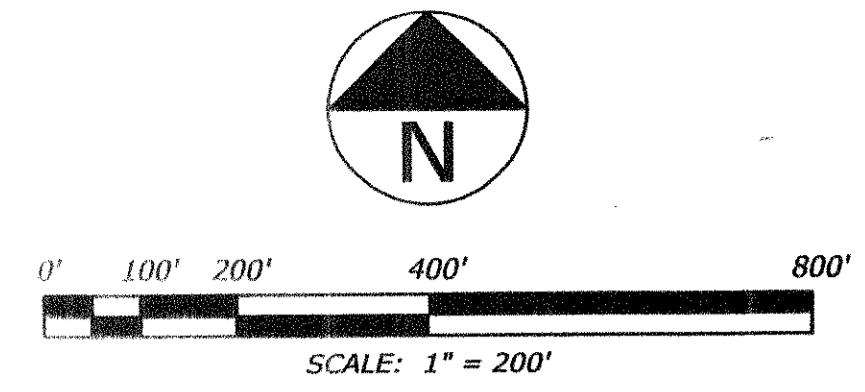
- AREA NAME
- ACREAGE
- 2 YR RUNOFF (CFS)
- 100 YR RUNOFF (CFS)
- DIRECTION OF FLOW
- DRAINAGE DIVIDE LINE
- EXISTING CONTOUR

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Designed by:	EVE	
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Issue Date:	12-19-05	
Project No.:	05003.00	
SHEET TITLE: EXISTING CONDITIONS DRAINAGE MAP		
SHEET NUMBER: C16		

RECORD
 DRAWING

BENCHMARK DATA: BM #1 - EL. 618.54 - SQUARE CUT ON HDWL, S OF 2170, 500' W OF INGRAM; BM #2 - EL. 618.44 - PK NAIL IN ASPHALT, SW CORNER OF INGRAM & 2170



POST-DEVELOPED DRAINAGE AREA CALCULATIONS

AREA NUMBER	INCREMENTAL AREA (ACRES)	RUNOFF COEFF. "C"	TIME (CONC.) Tc (MIN.)	INTENSITY "I (100)" (IN./HR.)	DISCHARGE "Q (100)" (CFS)
A	0.5	0.425	15	7.52	1.60
B	0.5	0.425	15	7.52	1.60
C	3.3	0.425	15	7.52	10.55
D	3.8	0.425	15	7.52	12.14
E	4.5	0.425	15	7.52	14.38
F	0.5	0.425	15	7.52	1.60
G	11.8	0.425	15	7.52	37.71
H	4.8	0.425	15	7.52	15.34
J	4.3	0.425	15	7.52	13.74
K	15.8	0.425	15	7.52	50.50
L	1.5	0.425	15	7.52	4.79
M	6.7	0.425	15	7.52	21.41
N	11.0	0.425	15	7.52	35.16
P	10.9	0.425	15	7.52	34.84
A-II	5.5	0.425	15	7.52	17.58
B-II	1.7	0.425	15	7.52	5.43
C-II	7.6	0.425	15	7.52	24.29
D-II	7.8	0.425	15	7.52	24.93
E-II	5.3	0.425	15	7.52	16.94
F-II	7.8	0.425	15	7.52	24.93
G-II	2.3	0.425	15	7.52	7.35
H-II	5.6	0.425	15	7.52	17.90
J-II	1.5	0.425	15	7.52	4.79
K-II	1.3	0.425	15	7.52	4.15
OS-1	7.3	0.60	15	7.52	32.94
OS-2	34.0	0.35	24	6.20	73.78
OS-3	17.3	0.35	19	6.90	41.78

LEGEND

- AREA NAME
- ACREAGE
- 100 YR RUNOFF (CFS)
- DIRECTION OF FLOW
- DRAINAGE DIVIDE LINE
- EXISTING CONTOUR

RECORD DRAWING

POST-DEVELOPED
DRAINAGE AREA MAP
CLAREMONT SPRINGS ADDITION PHASE I
LUCAS, TEXAS

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R. Brandon Allet
BRANDON ALLET
90842
REGISTERED PROFESSIONAL ENGINEER
STATE OF TEXAS
12/15/05

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BENCHMARK DATA: BM #1 - EL. 618.54 - SQUARE CUT ON HDWL. S OF 2170, 500' W OF INGRAM; BM #2 - EL. 618.44 - PK. NAIL IN ASPHALT, SW CORNER OF INGRAM & 2170

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REVISIONS		

Scale: SHOWN
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 Issue Date: 12-19-05
 Project No.: 05003.00
 SHEET TITLE: POST-DEVELOPED DRAINAGE MAP
 SHEET NUMBER: C17

Existing Conditions

Existing Drainage Area A drains to an existing 36" RCP under Ingram Road and to the east. This culvert will remain in place until the reconstruction of Ingram Road. The existing runoff value is calculated below:

Existing Runoff Coefficient "C": 0.35
 Area: 16.2 acres
 Time of Concentration (Tc): 17 min.
 100-Yr Intensity (I100): 7.45 in/hr (based on I values from City of Allen Storm Drainage Manual)
 50-Yr Intensity (I50): 6.67 in/hr
 2-Yr Intensity (I2): 3.95 in/hr
 100-Yr Runoff (EX_Q100): = C x I x A = 0.35 x 7.45 x 16.2 = 42.3 cfs
 50-Yr Runoff (EX_Q50): = C x I x A = 0.35 x 6.67 x 16.2 = 37.9 cfs
 2-Yr Runoff (EX_Q2): = C x I x A = 0.35 x 3.95 x 16.2 = 22.4 cfs

Existing Drainage Area B drains to existing 3-42" RCP's under FM 2170. The existing runoff value is calculated below:

Existing Runoff Coefficient "C": 0.36
 Area: 164.5 acres
 Time of Concentration (Tc): 30 min.
 100-Yr Intensity (I100): 5.75 in/hr (based on I values from City of Allen Storm Drainage Manual)
 50-Yr Intensity (I50): 5.25 in/hr
 2-Yr Intensity (I2): 3.06 in/hr
 100-Yr Runoff (EX_Q100): = C x I x A = 0.35 x 5.75 x 166.0 = 341 cfs
 50-Yr Runoff (EX_Q50): = C x I x A = 0.35 x 5.25 x 166.0 = 311 cfs
 2-Yr Runoff (EX_Q2): = C x I x A = 0.35 x 3.06 x 166.0 = 181 cfs

Proposed Conditions - Claremont Springs Phase I

The proposed drainage area that drains to the 36" RCP culvert outfall of existing Drainage Area A has been reduced so that the developed runoff rate, Q, is equal to the existing runoff rate:

Proposed Runoff Coefficient "C": 0.425
 Area: 13.4 acres (Proposed Areas C, D, F, J, & L)
 Time of Concentration (Tc): 17 min.
 100-Yr Intensity (I100): 7.45 in/hr (based on I values from City of Allen Storm Drainage Manual)
 50-Yr Intensity (I50): 6.67 in/hr
 2-Yr Intensity (I2): 3.95 in/hr
 100-Yr Runoff (EX_Q100): = C x I x A = 0.425 x 7.45 x 13.4 = 42.4 cfs
 50-Yr Runoff (EX_Q50): = C x I x A = 0.425 x 6.67 x 13.4 = 38.0 cfs
 2-Yr Runoff (EX_Q2): = C x I x A = 0.425 x 3.95 x 13.4 = 22.5 cfs

A detention pond has been designed at the outfall of Existing Drainage Area B so that the developed runoff rate does not exceed the existing runoff rate for the 100-year, 50-year, and 2-year storms. Future Phase II Areas A-II, D-II, E-II, F-II, G-II, and H-II and offsite Areas OS-2 and OS-3 bypass the pond via the southern roadway ditch of FM 2170. When calculating the Proposed Runoff Coefficient for this bypass area, the Future Phase II areas were assigned a Runoff Coefficient of 0.35 (existing conditions) since there will be a detention pond constructed with Phase II that will detain the difference between the developed and undeveloped flows. This pond only requires 1' of depth to achieve proper detention requirements.

Bypass Flowrate:

Offsite Area (Undeveloped): 51.3 acres
 "C" = 0.35
 Future Phase II (Developed Detained): 34.3 acres
 "C" = 0.35
 Time of Concentration (Tc): 30 min. (Intensities same as existing conditions)

100-Yr Bypass Runoff (Q100BP): = ((101.4 x .35) + (19.0 x 0.425)) x 5.75 = 172 cfs
 50-Yr Bypass Runoff (Q50BP): = ((101.4 x .35) + (19.0 x 0.425)) x 5.25 = 157 cfs
 2-Yr Bypass Runoff (Q2BP): = ((101.4 x .35) + (19.0 x 0.425)) x 3.60 = 92 cfs

Therefore, the allowable detention pond release rate for the three storm events are as follows:

100-Yr Release Rate (Q100RR): EX_Q100 - Q100BP = 341 - 172 = 168 cfs
 50-Yr Release Rate (Q50RR): EX_Q50 - Q50BP = 311 - 157 = 154 cfs
 2-Yr Release Rate (Q2RR): EX_Q2 - Q2BP = 181 - 92 = 90 cfs

Using the Modified Rational Method, the following required volumes were calculated:

100-yr WEIGHTED RUNOFF COEFFICIENT= 0.43
 DRAINAGE AREA= 82.1 acres
 TIME OF CONCENTRATION (Tc)= 31 minutes
 MAXIMUM OUTFLOW RATE (Q)= 168.0 cfs

Duration (minutes)	Intensity (in./hr.)	Depth (inches)	Inflow Discharge (cfs)	Inflow Volume (cubic ft.)	Outflow Duration (minutes)	Outflow Volume (cubic ft.)	Storage Volume (cubic ft.)
10	8.74	1.46	310.7	186,421	41.0	206,640	-20,219
15	7.52	1.88	267.3	240,598	46.0	231,840	8,758
20	6.93	2.31	246.4	295,628	51.0	257,040	38,588
30	5.75	2.88	204.4	367,935	61.0	307,440	60,495
40	5.14	3.42	182.6	438,252	71.0	357,840	80,412
50	4.52	3.77	160.8	482,404	81.0	408,240	74,164
60	3.91	3.91	139.0	500,392	91.0	458,640	41,752
70	3.68	4.29	130.8	549,201	101.0	509,040	40,161
80	3.45	4.60	122.5	588,128	111.0	559,440	28,688
90	3.22	4.82	114.3	617,171	121.0	609,840	7,331
120	2.52	5.04	89.6	645,006	151.0	761,040	-116,034
180	1.91	5.73	67.9	733,311	211.0	1,063,440	-330,129

50-yr WEIGHTED RUNOFF COEFFICIENT= 0.43
 DRAINAGE AREA= 82.1 acres
 TIME OF CONCENTRATION (Tc)= 31 minutes
 MAXIMUM OUTFLOW RATE (Q)= 154.0 cfs

Duration (minutes)	Intensity (in./hr.)	Depth (inches)	Inflow Discharge (cfs)	Inflow Volume (cubic ft.)	Outflow Duration (minutes)	Outflow Volume (cubic ft.)	Storage Volume (cubic ft.)
10	8.01	1.34	282.8	169,666	41.0	189,420	-19,754
15	6.89	1.72	243.2	218,914	46.0	212,520	6,394
20	6.34	2.11	223.9	268,726	51.0	236,620	33,106
30	5.25	2.63	185.3	333,613	61.0	281,820	51,793
40	4.68	3.12	165.2	396,523	71.0	326,020	68,503
50	4.11	3.43	145.1	435,286	81.0	374,220	61,066
60	3.54	3.54	125.0	449,901	91.0	420,420	29,481
70	3.34	3.90	118.0	495,725	101.0	466,620	29,105
80	3.15	4.20	111.1	533,217	111.0	512,820	20,397
90	2.95	4.43	104.1	562,377	121.0	559,020	3,357
120	2.36	4.72	83.3	599,869	151.0	697,620	-97,751
180	1.72	5.16	60.7	655,789	211.0	974,820	-319,031

2-yr WEIGHTED RUNOFF COEFFICIENT= 0.43
 DRAINAGE AREA= 82.1 acres
 TIME OF CONCENTRATION (Tc)= 31 minutes
 MAXIMUM OUTFLOW RATE (Q)= 90.0 cfs

Duration (minutes)	Intensity (in./hr.)	Depth (inches)	Inflow Discharge (cfs)	Inflow Volume (cubic ft.)	Outflow Duration (minutes)	Outflow Volume (cubic ft.)	Storage Volume (cubic ft.)
10	4.91	0.82	173.3	104,003	41.0	110,700	-6,697
15	4.20	1.05	148.3	133,445	46.0	124,200	9,245
20	3.82	1.27	134.9	161,829	51.0	137,700	24,129
30	3.06	1.53	108.0	194,449	61.0	164,700	29,749
40	2.67	1.78	94.1	225,939	71.0	191,700	34,239
50	2.27	1.89	80.3	240,766	81.0	218,700	22,066
60	1.88	1.88	66.4	238,931	91.0	245,700	-6,769
70	1.76	2.05	62.1	260,713	101.0	272,700	-11,987
80	1.64	2.18	57.8	277,340	111.0	299,700	-22,360
90	1.52	2.27	53.5	288,814	121.0	326,700	-37,886
120	1.15	2.30	40.6	292,309	151.0	407,700	-115,391
180	0.83	2.49	29.3	316,456	211.0	569,700	-253,244

Below is a summary of the required storage volume for the selected storm events:

100-Year 80,412 cubic feet
 50-Year 68,503 cubic feet
 2-Year 34,239 cubic feet

Below is the volume per stage table for the proposed detention pond:

STAGE	ELEVATION	AREA	INCREM. VOLUME	TOTAL VOLUME
0	615.7	39108	11859	11859
0.3	616	39951	42431	54289
1.3	617	44910	48996	103285
2.3	618	53082		

Interpolating between the volumes per stage, the pond elevation per the three storms are as follows:

100-Year 617.52
 50-Year 617.29
 2-Year 616.53

DRAINAGE & DETENTION CALCULATIONS
 CLAREMONT SPRINGS ADDITION PHASE I
 LUCAS, TEXAS



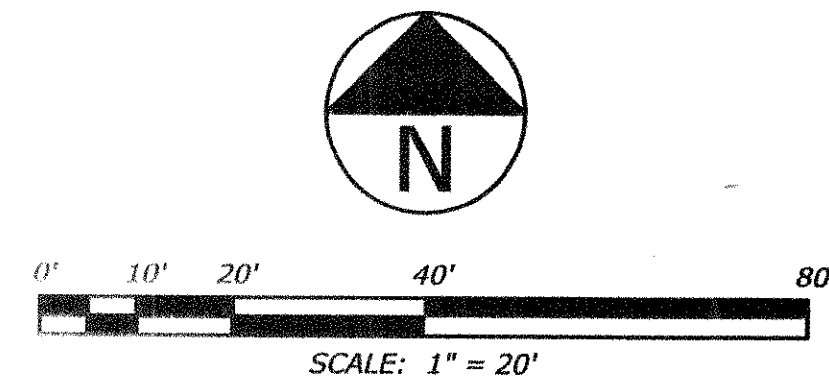
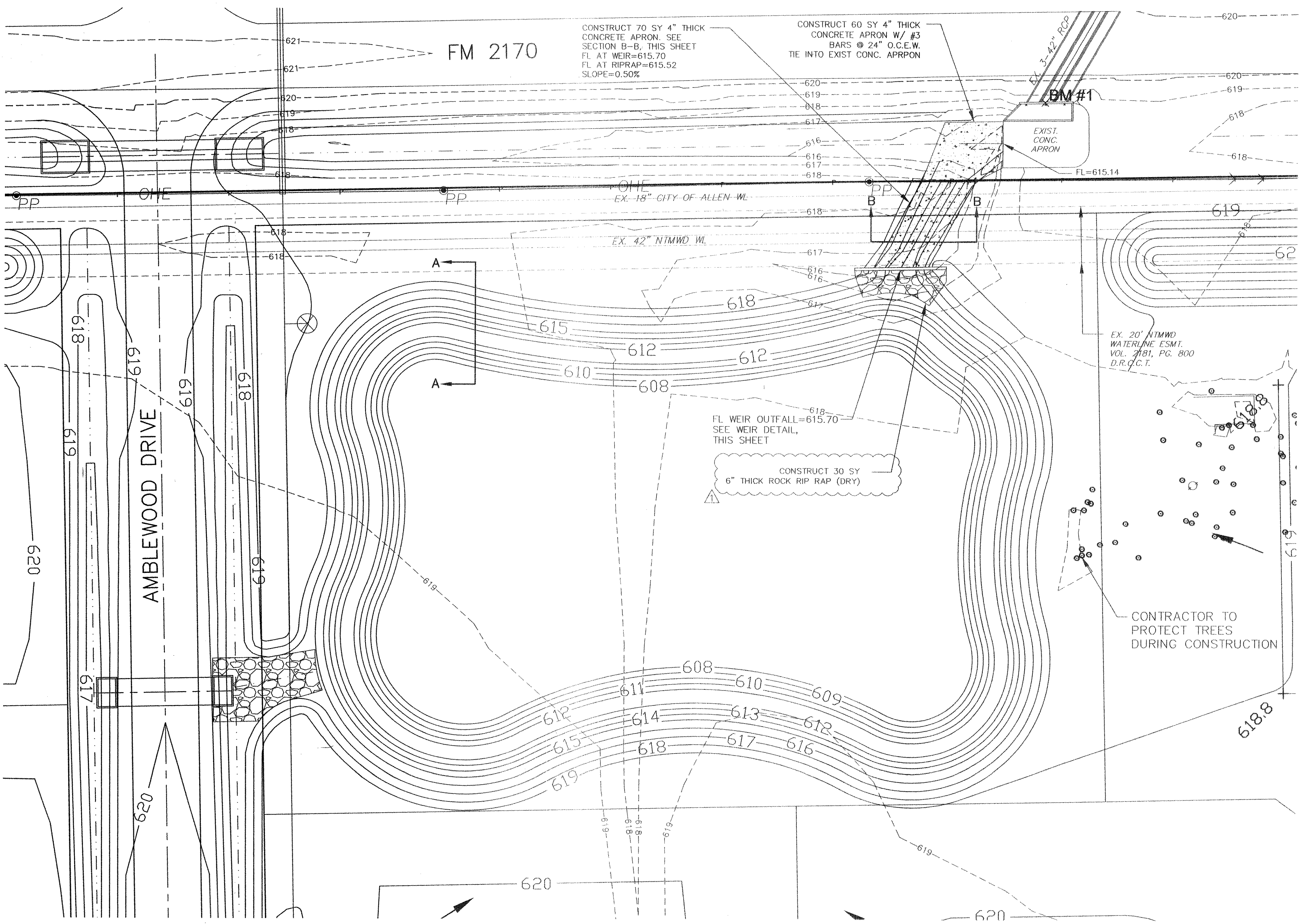
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 FX (972) 529-2294

No.	Date	Rev. Volume Description
1	01/09/06	Rev. Volume Description

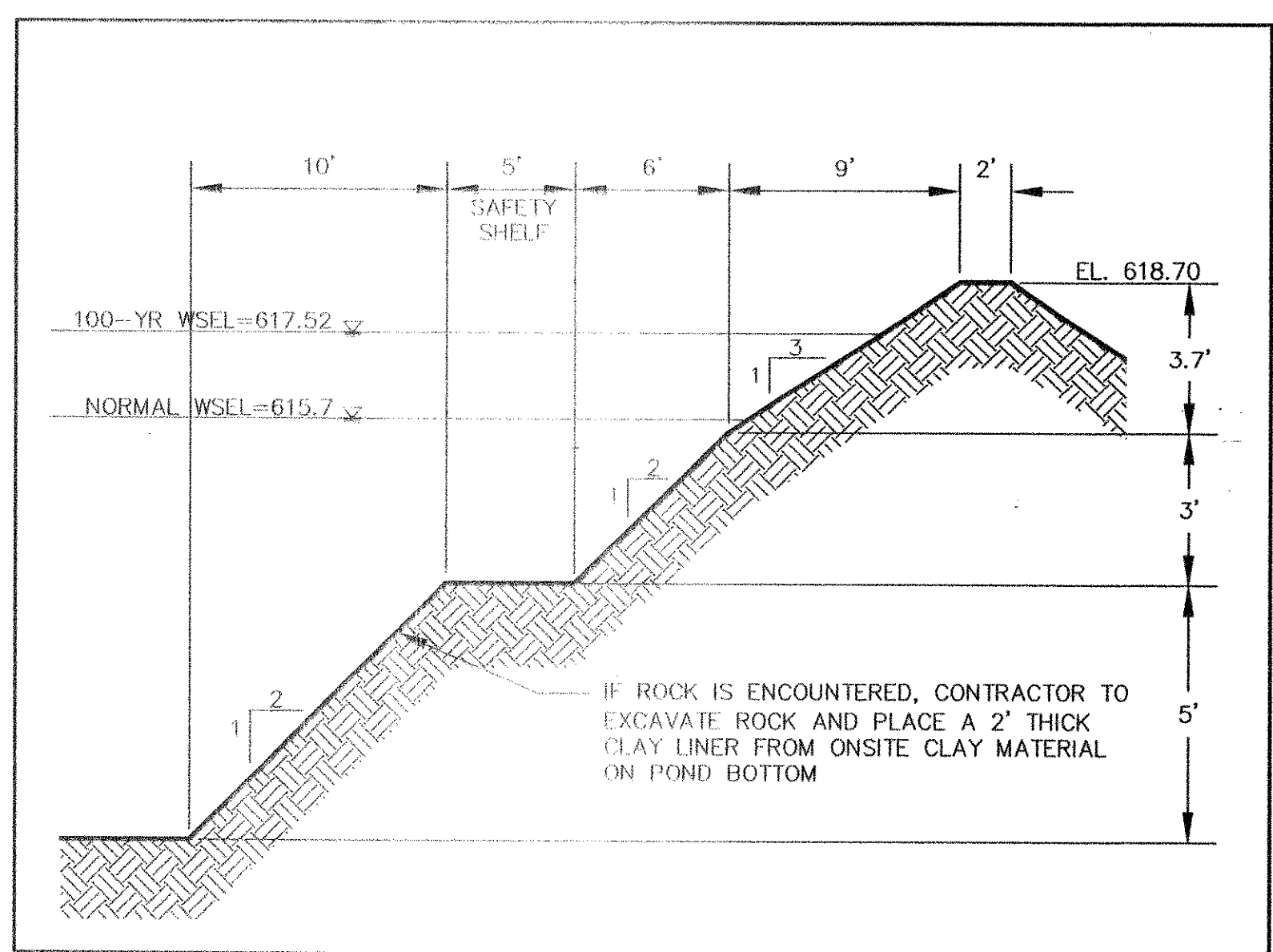
Scale: _____
 Drawn by: CAD
 Designed by: EVE
 Checked by: RBA
 Issue Date: 12-19-05
 Project No.: 05003.00
 SHEET TITLE: DRAINAGE & DETENTION CALCULATIONS
 SHEET NUMBER: C18

RECORD DRAWING

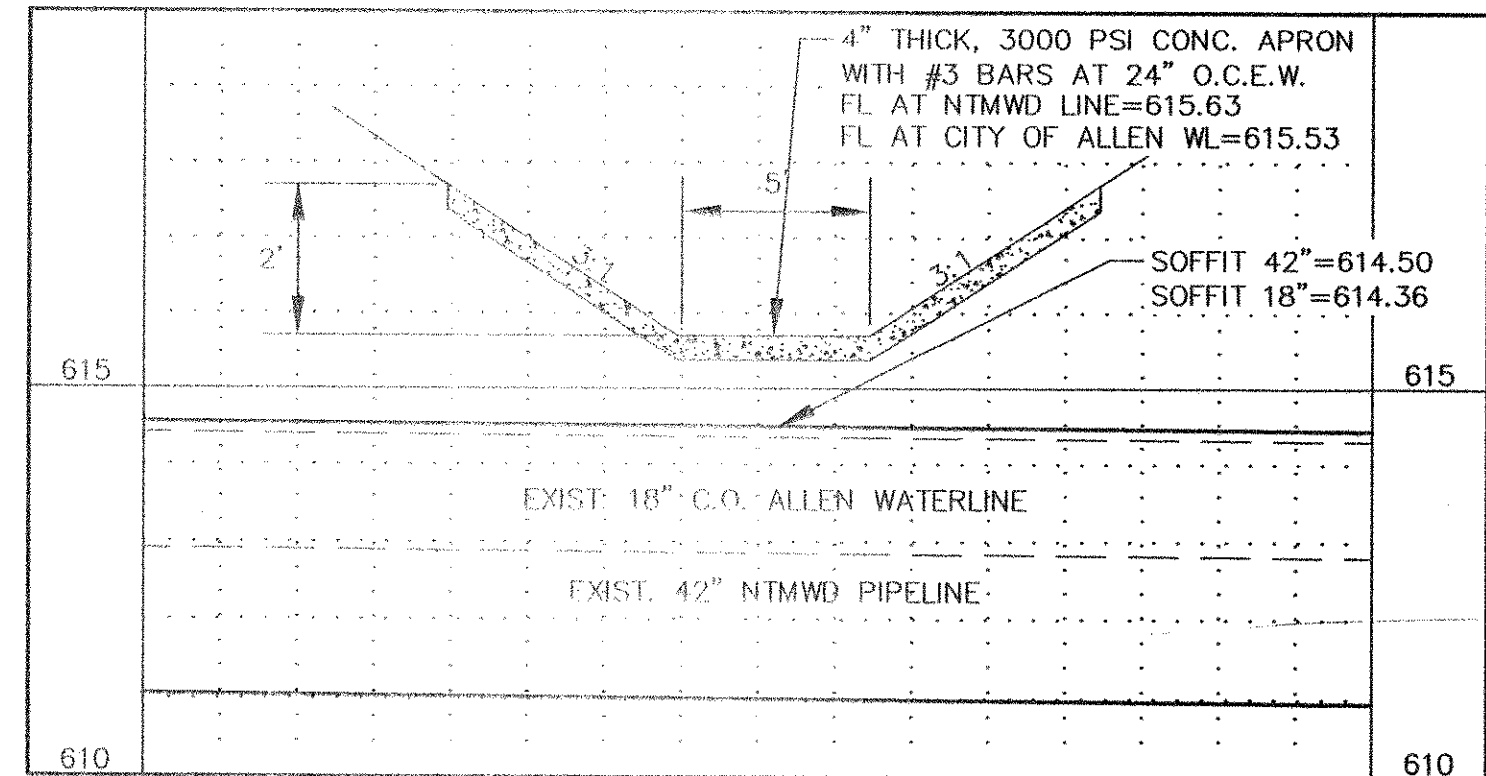


NTMWD NOTES:

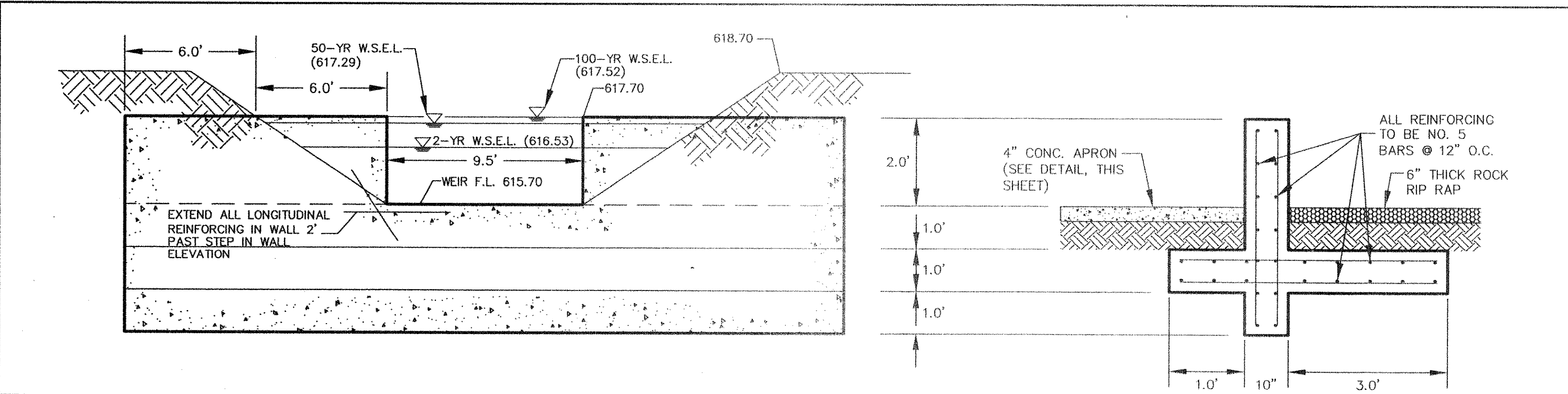
1. NORTH TEXAS MUNICIPAL WATER DISTRICT (NTMWD'S) 42-INCH WATER TRANSMISSION PIPELINE IS LOCATED WITHIN THE LIMITS OF CONSTRUCTION.
2. OPERATION OF HEAVY EARTHMOVING EQUIPMENT, COMPACTION EQUIPMENT OR HEAVY CONSTRUCTION EQUIPMENT, SUCH AS CONCRETE TRUCKS, SHALL BE RESTRICTED TO SPECIFIC CROSSING POINTS ACROSS NTMWD EASEMENT, AS APPROVED BY THE NTMWD. THE CROSSINGS SHALL BE DESIGNATED AND VERIFIED TO PROVIDE A MINIMUM OF FIVE FEET OF COVER.
3. TO ASSURE THAT PLACING OF SIGNIFICANT LOADS OVER THE NTMWD PIPELINE DOES NOT DAMAGE THE EXISTING PIPELINE, NO MATERIALS SHALL BE STOCKPILED ON THE NTMWD EASEMENT WITHOUT AUTHORIZATION FROM THE NTMWD. IF THE CONTRACTOR DESIRES TO USE NTMWD'S STOCKPILE OF MATERIALS, CONTACT NTMWD ENGINEERING AT (972) 442-5405 SO YOUR PLANS FOR USE OF NTMWD'S EASEMENT CAN BE REVIEWED.
4. A MINIMUM OF THREE FEET SEPARATION BETWEEN THE BOTTOM OF THE PAVEMENT AND TOP OF NTMWD PIPELINE IS REQUIRED. IN ADDITION, IF SEPARATION BETWEEN THE BOTTOM OF THE PAVEMENT AND THE TOP OF THE PIPELINE IS LESS THAN 3.5 FEET, A THICKENED PAVEMENT SECTION IS REQUIRED.
5. CROSSING OF THE NTMWD EASEMENT WITH OTHER UTILITIES, SUCH AS TV CABLE, PHONE, GAS, AND ELECTRIC, SHALL BE COORDINATED WITH THE NTMWD TO AVOID DAMAGE TO THE NTMWD FACILITIES.
6. OUTDOOR LIGHTING, LANDSCAPING, SCREENING WALLS OR OTHER FACILITIES SHALL NOT BE INSTALLED IN NTMWD EASEMENTS WITHOUT WRITTEN APPROVAL OF THE NTMWD.
7. UNLESS OTHERWISE SHOWN OR REQUIRED A MINIMUM OF ONE-FOOT CLEARANCE SHALL BE PROVIDED FOR ALL UTILITIES CROSSING THE NTMWD PIPELINES.
8. THE CONTRACTOR SHALL CONTACT NTMWD ENGINEERING AT (972) 442-5405 A LEAST 48 HOURS PRIOR TO PERFORMING ANY WORK IN THE VICINITY OF THE NTMWD FACILITIES.
9. NO ENCROACHMENT SHALL BE ALLOWED ON NTMWD EASEMENT BY FRANCHISE UTILITIES. WATER, SANITARY SEWER AND STORM SEWER FACILITIES ARE NOT PERMITTED IN NTMWD EASEMENT EXCEPT FOR CROSSINGS.



SECTION A-A
N.T.S.



SECTION B-B
N.T.S.



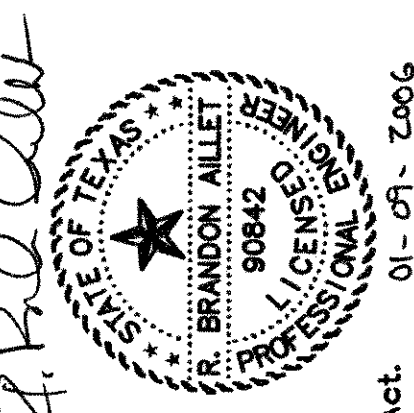
WEIR STRUCTURE LAYOUT
N.T.S.

Water Surface Elevation	Open Channel					
	Flowing	Width @ WSEL (feet)	Area (sq. ft.)	Wetted Perim. (ft)	Head (feet)	Discharge (cfs)
615.70	615.70	9.5	0.0	9.5	0.00	0.00
615.95	615.70	9.5	2.4	10.0	0.25	7.38
616.20	615.70	9.5	4.8	10.5	0.50	22.69
616.53	615.70	9.5	7.9	11.2	0.83	50.69
616.78	615.70	9.5	10.3	11.7	1.08	76.36
617.00	615.70	9.5	12.3	12.1	1.30	101.46
617.29	615.70	9.5	15.1	12.7	1.59	137.57
617.52	615.70	9.5	17.3	13.1	1.82	168.26
617.70	615.70	9.5	19.0	13.5	2.00	193.39

(*) less than 90 cfs, so 2-yr storm is over-detained
 (***) less than 154 cfs, so 50-yr storm is over-detained
 **** 100-YEAR STORM

RECORD DRAWING

BENCHMARK DATA: BM #1 - EL. 618.54 - SQUARE CUT ON HDWL, S OF 2170, 500' W OF INGRAM; BM #2 - EL. 618.44 - PK NAIL IN ASPHALT, SW CORNER OF INGRAM & 2170

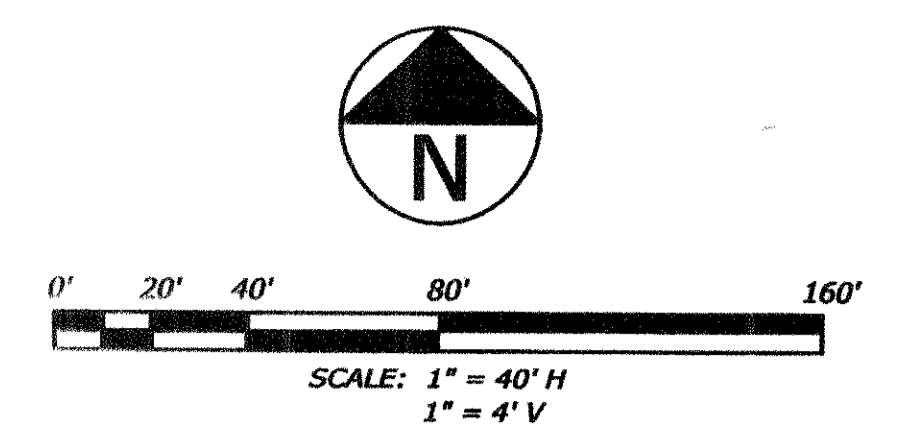
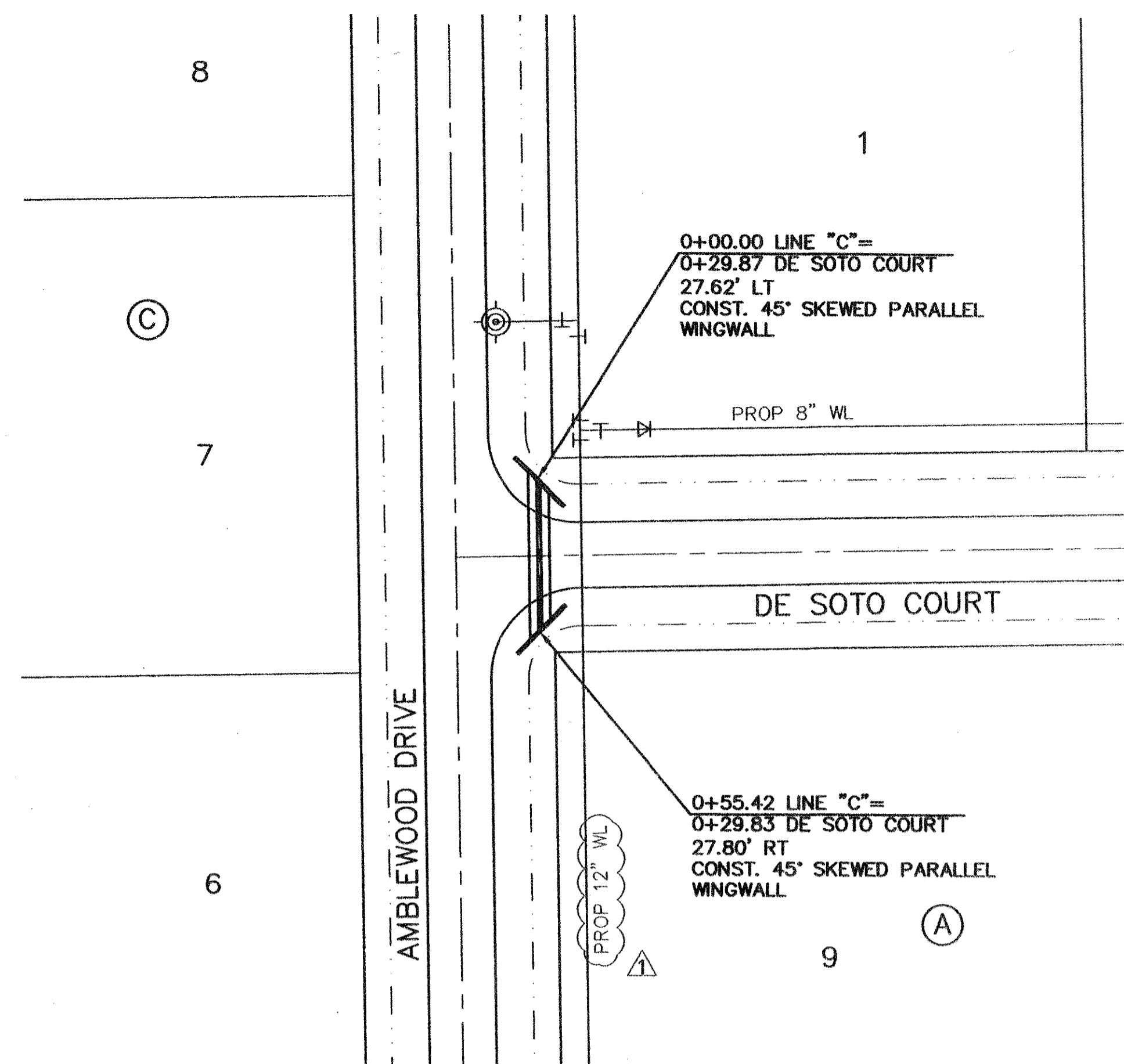
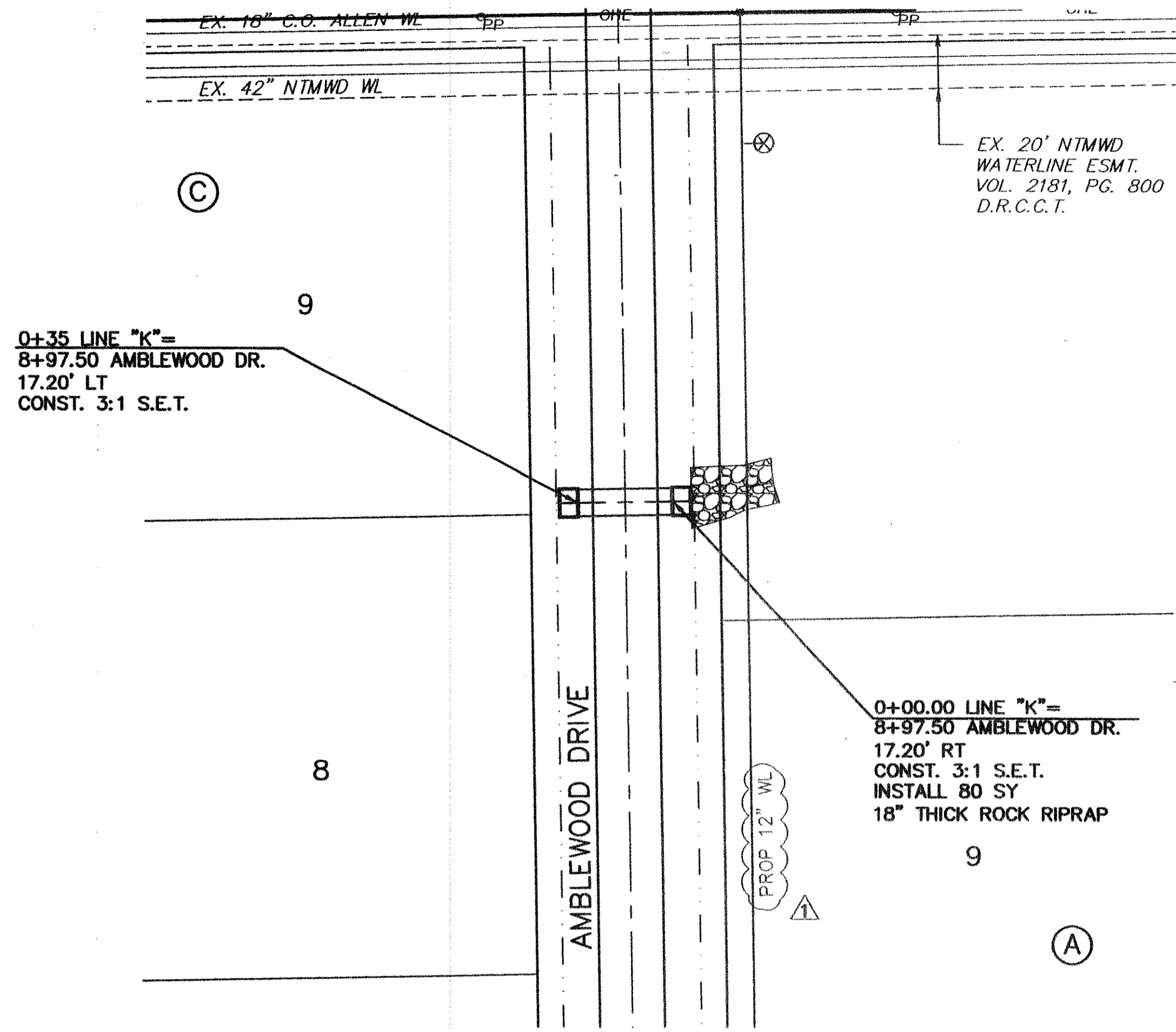


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No.	Date	Description
1	01/09/06	Rev. Surface Elevations

Scale: SHOW
 Drawn by: CAD
 Designed by: EVE
 Checked by: RBA
 Issue Date: 12-19-05
 Project No.: 05003.00
 SHEET TITLE: DETENTION POND & OUTFALL LAYOUT
 SHEET NUMBER: C19



Station	Water Surface Elevation	Culvert Description	Notes
630		2-4'x2' BOX CULV. Q(100) = 103.90 cfs V(100) = 7.48 fps S = 0.0048	
620	*WSE=619.33	2-4'x2' BC 0.48%	0+36.00 LINE "K" CONST. 3:1 S.E.T. 0+00.00 LINE "K" CONST. 3:1 S.E.T.
610			2-4'x2' FL=616.58 2-4'x2' FL=616.35
600			LINE "K"
630		2-3'x2' BOX CULV. Q(100) = 97.40 cfs V(100) = 5.98 fps S = 0.0056	
620	*WSE=620.62	2-3'x2' BC 0.56%	0+00.00 LINE "C" CONST. 45\"/>
610			3-3'x2' FL=617.74 3-3'x2' FL=618.05
600			LINE "C"

CULVERT PLAN & PROFILES
CLAREMONT SPRINGS ADDITION PHASE I
LUCAS, TEXAS

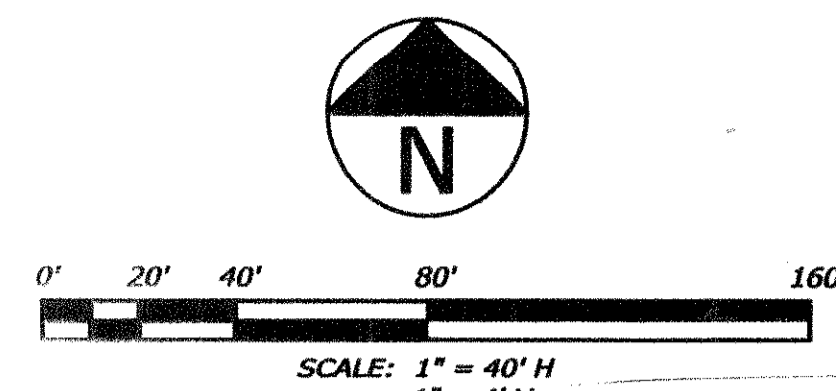
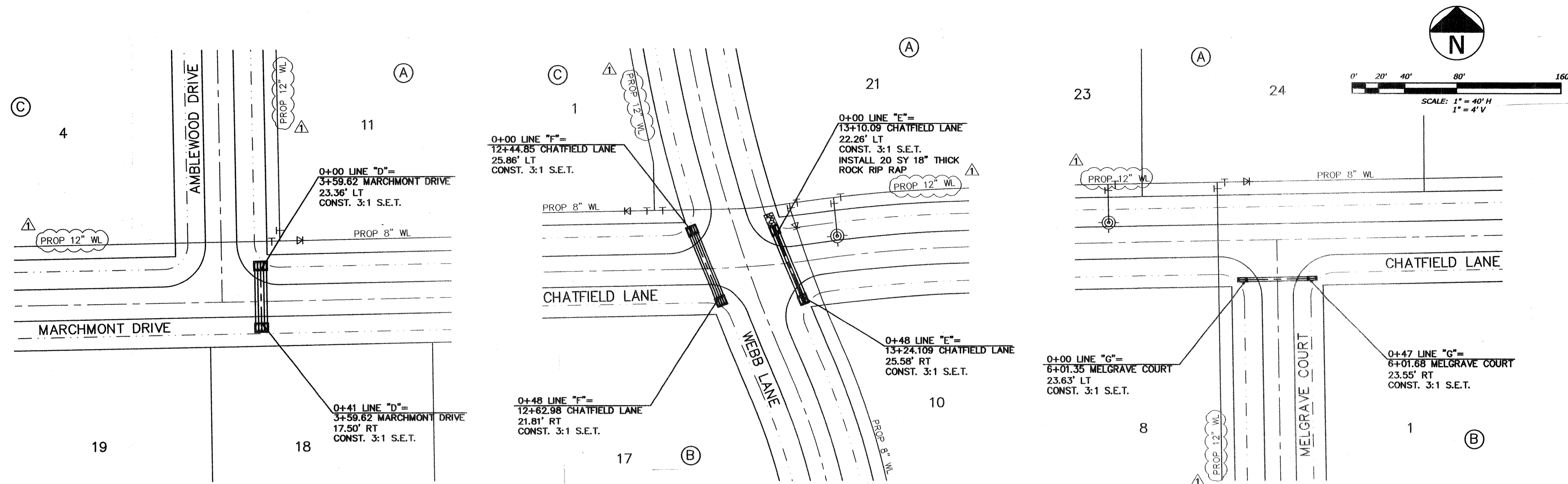
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1 01/09/06 Rev. 12" WL	
No.	Date Description
REVISIONS	
Scale:	SHOWN
Drawn by:	CAD
Designed by:	EVE
Checked by:	RBA
Issue Date:	12-19-05
Project No.:	05003.00
SHEET TITLE: CULVERT PLAN & PROFILES	
SHEET NUMBER: C21	

BENCHMARK DATA: BM #1 - EL. 618.54 - SQUARE CUT ON HDWL, S OF 2170, 500' W OF INGRAM; BM #2 - EL. 618.44 - PK NAIL IN ASPHALT, SW CORNER OF INGRAM & 2170

**RECORD
DRAWING**



Station	Water Surface Elevation	Culvert Details	Flow Data
640	640	4-27" RCP Q(100) = 91.90 cfs V(100) = 5.78 fps S = 0.0052	
630	630	0+00.00 LINE "D" CONST. 3:1 S.E.T. 0+41 LINE "D" CONST. 3:1 S.E.T.	
620	620	4-27" RCP 0.52% *WSE=624.01	
610	610	4-27" FL=620.63 4-27" FL=620.84 LINE "D"	
640	640	4-21" RCP Q(100) = 54.50 cfs V(100) = 5.66 fps S = 0.0055	
630	630	0+00.00 LINE "F" CONST. 3:1 S.E.T. 0+48 LINE "F" CONST. 3:1 S.E.T.	
620	620	4-21" RCP 0.55% *WSE=629.26	
610	610	4-21" FL=626.24 4-21" FL=626.50 LINE "F"	
640	640	3-24" RCP Q(100) = 53.90 cfs V(100) = 6.35 fps S = 0.0068	
630	630	0+00.00 LINE "E" CONST. 3:1 S.E.T. 0+48 LINE "E" CONST. 3:1 S.E.T.	
620	620	3-24" RCP 0.68% *WSE=629.05	
610	610	3-24" FL=625.76 3-24" FL=626.09 LINE "E"	
640	640	2-18" RCP Q(100) = 21.40 cfs V(100) = 5.96 fps S = 0.0050	
630	630	0+00.00 LINE "G" CONST. 3:1 S.E.T. 0+47 LINE "G" CONST. 3:1 S.E.T.	
620	620	2-18" RCP 0.50% *WSE=632.37	
610	610	2-18" FL=629.50 2-18" FL=629.74 LINE "G"	

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No.	Date	Description
1	01/09/06	Rev. 12" WL

Scale: SHOWN
 Drawn by: CAD
 Designed by: EVE
 Checked by: RBA
 Issue Date: 12-19-05
 Project No.: 05003.00
 SHEET TITLE: CULVERT PLAN & PROFILES
 SHEET NUMBER: C22

RECORD DRAWING

CULVERT PLAN & PROFILES
 CLAREMONT SPRINGS ADDITION PHASE I
 LUCAS, TEXAS

BENCHMARK DATA: BM #1 - EL. 618.54 - SQUARE CUT ON HDWL, S OF 2170, 500' W OF INGRAM; BM #2 - EL. 618.44 - PK NAIL IN ASPHALT, SW CORNER OF INGRAM & 2170

LOT#	AREA (Accum.) (acres)	L-OF (ft.)	L-SC (ft.)	L-CH (ft.)	V-OF (fps)	V-SC (fps)	V-CH (avg.) (fps)	T-OF (min.)	T-SC (min.)	T-CH (min.)	Tc (Actual) (min.)	Tc (Design) (min.)	I-25 (in./hr.)	I-100 (in./hr.)	RUNOFF COEF. C	Q-25 (cfs)	Q-100 (cfs)	CULVERT SIZE REQUIRED (in. diam.)					
EXISTING 3-42" CULVERT UNDER FM 2170																							
	165.5	300	200	3200	0.7	1	2.7	7.1	3.3	19.8	30.2	30.2	4.7	5.8	0.36	282.4	342.5	NA					
ROADWAY CULVERTS																							
LINE																							
A	72.2	300	200	2345	0.7	1	2	7.1	3.3	19.5	30.0	30.0	4.7		0.350	119.8		3-3x2 BOX					
C	38.3	300	700	2125	0.7	1.5	2.7	7.1	7.8	13.1	28.0	28.0		6.0	0.425		97.4	2-3x2 BOX					
D	33.5	300	700	1550	0.7	1.5	2.7	7.1	7.8	9.6	24.5	24.5		6.5	0.425		91.9	4-27					
E	17.7	300	700	575	0.7	1.5	2.7	7.1	7.8	3.5	18.5	18.5		7.2	0.425		53.9	3-24					
F	18.5	300	570	250	0.5	1	2.9	10.0	9.5	1.4	20.9	20.9		6.9	0.425		54.5	4-21					
G	6.7	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0		7.5	0.425		21.4	2-18
K	39.3	300	570	1915	0.5	1	2.9	10.0	9.5	11.0	30.5	30.5		5.8	0.460		103.9	2-4x2 BOX					
M	1.5	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0		7.5	0.425		4.8	18
DRIVEWAY CULVERTS																							
BLOCK A																							
1	0.37	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	1.0		18	
2	0.03	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	0.1		18	
3	0.96	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	2.6		18	
4	6.84	300	200	570	0.7	1.5	2	7.1	2.2	4.8	14.1	15.0	6.3		0.425	18.2		24					
5	6.61	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	17.6		24	
6	5.60	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	14.9		24	
7	2.98	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	7.9		18	
8	0.38	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	1.0		18	
9	36.34	300	700	2840	0.7	1.5	3.2	7.1	7.8	14.8	29.7	29.7		4.8	0.425	74.8		3-30					
10	35.71	300	700	2665	0.7	1.5	3.1	7.1	7.8	14.3	29.2	29.2		4.8	0.425	73.5		3-30					
11	35.01	300	700	2490	0.7	1.5	3.1	7.1	7.8	13.4	28.3	28.3		4.9	0.425	73.5		3-30					
12	0.23	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	0.6		18	
13	0.10	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	0.3		18	
14	0.00	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.																	0.425	0.0		HIGH POINT	
15	1.16	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	3.1		18	
16	2.47	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	6.6		18	
17	5.74	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	15.3		24	
18	8.42	300	380	270	0.7	1.5	2.5	7.1	4.2	1.8	13.2	15.0	6.3		0.425	22.4		30					
19	25.68	300	700	2220	0.7	1.5	2.7	7.1	7.8	13.7	28.6	28.6		4.9	0.425	53.9		3-24					
20	23.29	300	700	2050	0.7	1.5	2.5	7.1	7.8	13.7	28.6	28.6		4.9	0.425	48.9		3-24					
21	0.84	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	2.2		18	
22	0.60	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	1.6		18	
23	0.43	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	1.1		18	
24	0.26	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	0.7		18	
25	0.11	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	0.3		18	
BLOCK B																							
1	6.28	300	200	510	1	2	2	5.0	1.7	4.3	10.9	15.0	6.3		0.425	16.7		24					
2	5.03	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	13.4		21	
3	3.21	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	8.5		18	
4	2.15	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	5.7		18	
5	0.00	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.																				HIGH POINT	
6	0.17	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	0.5		18	
7	0.39	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	1.0		18	
8	7.48	300	200	760	1	2	2.5	5.0	1.7	5.1	11.7	15.0	6.3		0.425	19.9		27					
9	8.87	300	200	960	1	2	2.5	5.0	1.7	6.4	13.1	15.0	6.3		0.425	23.6		30					
10	11.05	300	200	1175	1	2	2.5	5.0	1.7	7.8	14.5	15.0	6.3		0.425	29.4		2-24					
11	5.03	300	200	550	1	2	2	5.0	1.7	4.6	11.3	15.0	6.3		0.425	13.4		21					
12	2.82	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	7.5		18	
13	0.00	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.																				HIGH POINT	
14	0.69	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	1.8		18	
15	1.26	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	3.4		18	
16	1.91	The actual Tc is less than 15 minutes, therefore, 15 minutes was used as a minimum.															15.0	6.3	0.425	5.1		18	
17	2.66	300	200	280	1	2	2	5.0	1.7	2.3	9.0	15.0	6.3		0.425	7.1		18					
BLOCK C																							
1	0.41	50	0	100	1	1.5	2	0.8	0.0	0.8	1.7	15.0	6.3		0.425	1.1		18					
2	19.12	300	570	1020	0.5	1	3	10.0	9.5	5.7	25.2	25.2	5.2		0.425	42.6		3-24					
3	21.09	300	570	1245	0.5	1	3	10.0	9.5	6.9	26.4	26.4	5.1		0.425	46.1		3-24					
4	21.93	300	570	1735	0.5	1	3.5	10.0	9.5	8.3	27.8	27.8	5.0		0.425	47.0		3-24					
5	22.63	300	570	1910	0.5	1	3.5	10.0	9.5	9.1	28.6	28.6	4.9		0.425	47.5		3-24					
6	23.32	300	570	2080	0.5	1	4	10.0	9.5	8.7	28.2	28.2	4.9		0.425	49.0		3-24					
7	28.98	300	570	2255	0.5	1	4	10.0	9.5	9.4	28.9	28.9	4.9		0.425	60.9		3-27					
8	29.79	300	570	2430	0.5	1	4	10.0	9.5	10.1	29.6	29.6	4.8		0.425	61.3		3-27					
9	5.11	300	200	500	0.5	1	2	10.0	3.3	4.2	17.5	17.5	6.1		0.425	13.2		21					

NOTE: Texas Department of Transportation's "THYSYS" was used to design all culverts.

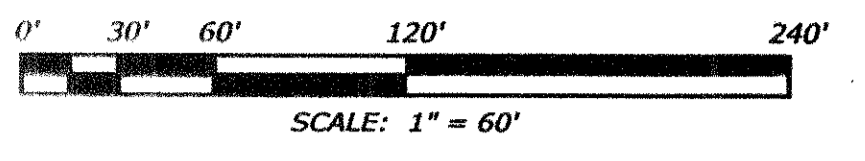
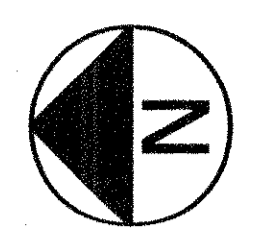
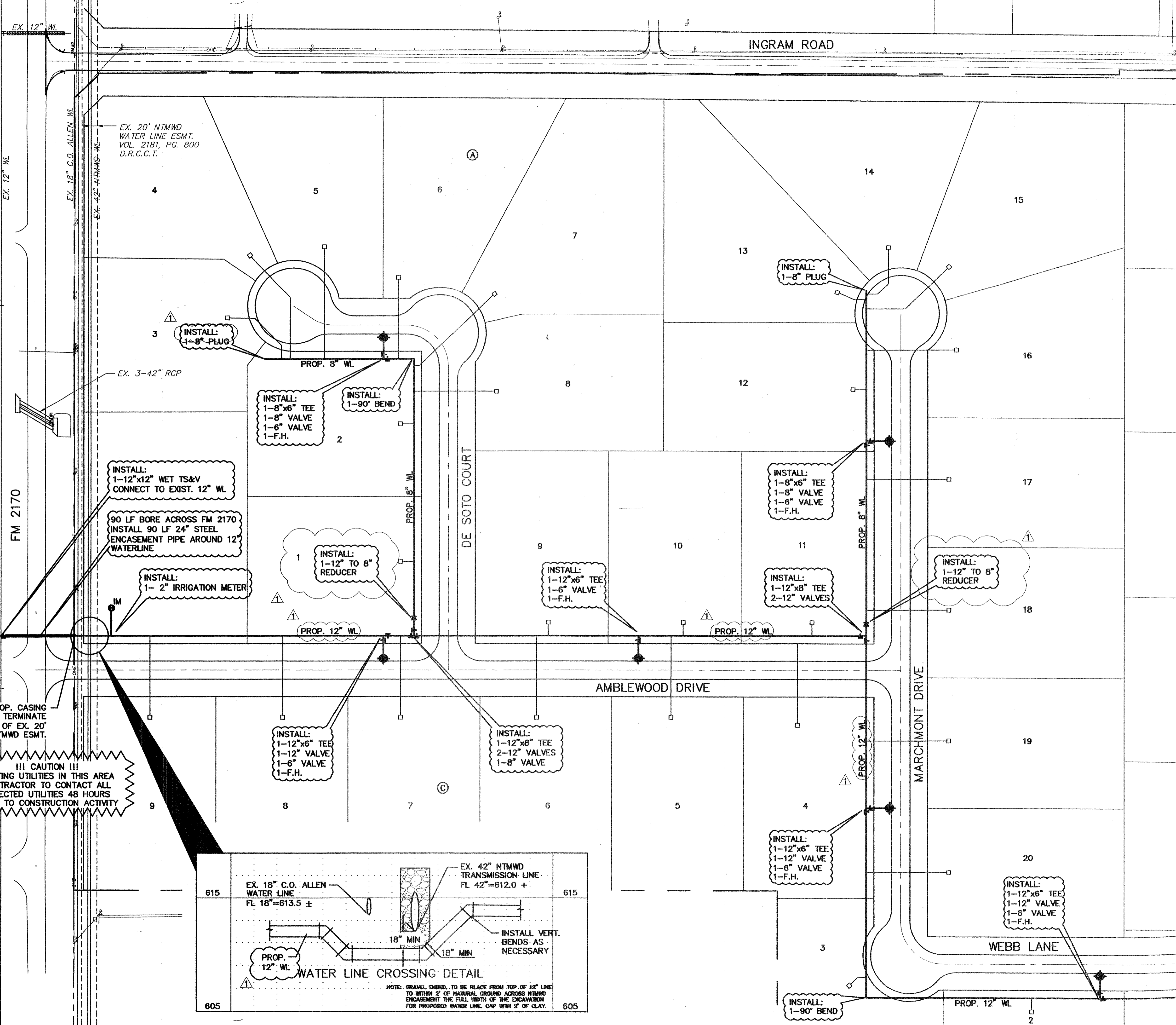
ROADWAY AND DRIVEWAY
CULVERT CALCULATIONS
CLAREMONT SPRINGS ADDITION PHASE I
LUCAS, TEXAS

R. Brandon Allet
Professional Engineer
No. 90842
State of Texas
12/19/05





KENNEDY CONSULTING, INC.
808 S. COLLEGE STREET, SUITE 300
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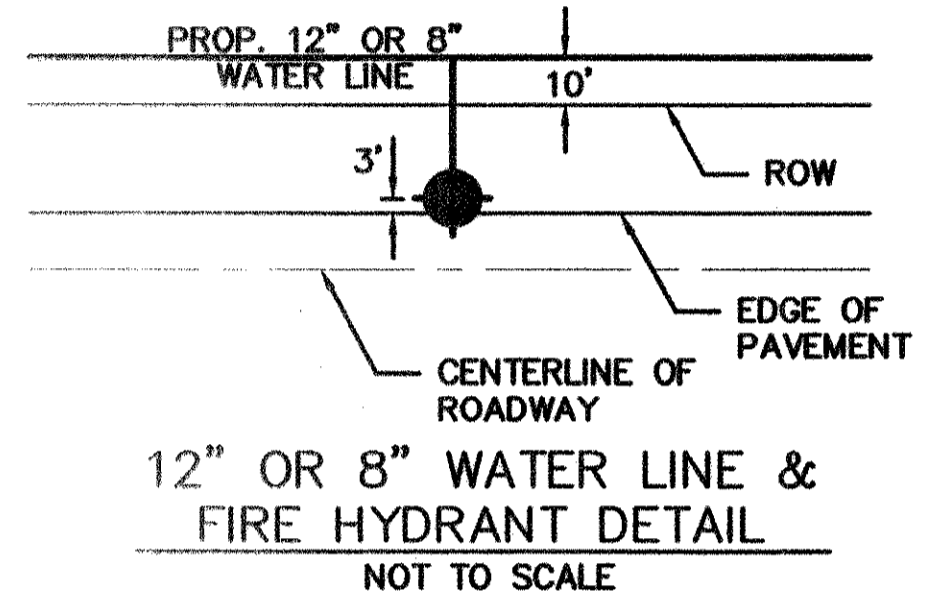
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REVISIONS		
Scale:		
Drawn by:	CAD	
Designed by:	EVE	
Checked by:	RBA	
Issue Date:	12-19-05	
Project No.:	05003.00	
SHEET TITLE:	ROADWAY AND DRIVEWAY CULVERT CALCULATIONS	
SHEET NUMBER:	C22A	

RECORD
DRAWING



LEGEND

-  PROP. WATER LINE & VALVE
-  PROP. FIRE HYDRANT
-  PROP. IRRIGATION METER
-  EXIST. FIRE HYDRANT & VALVE
- 1" DOM. SERVICE & 3/4" METER



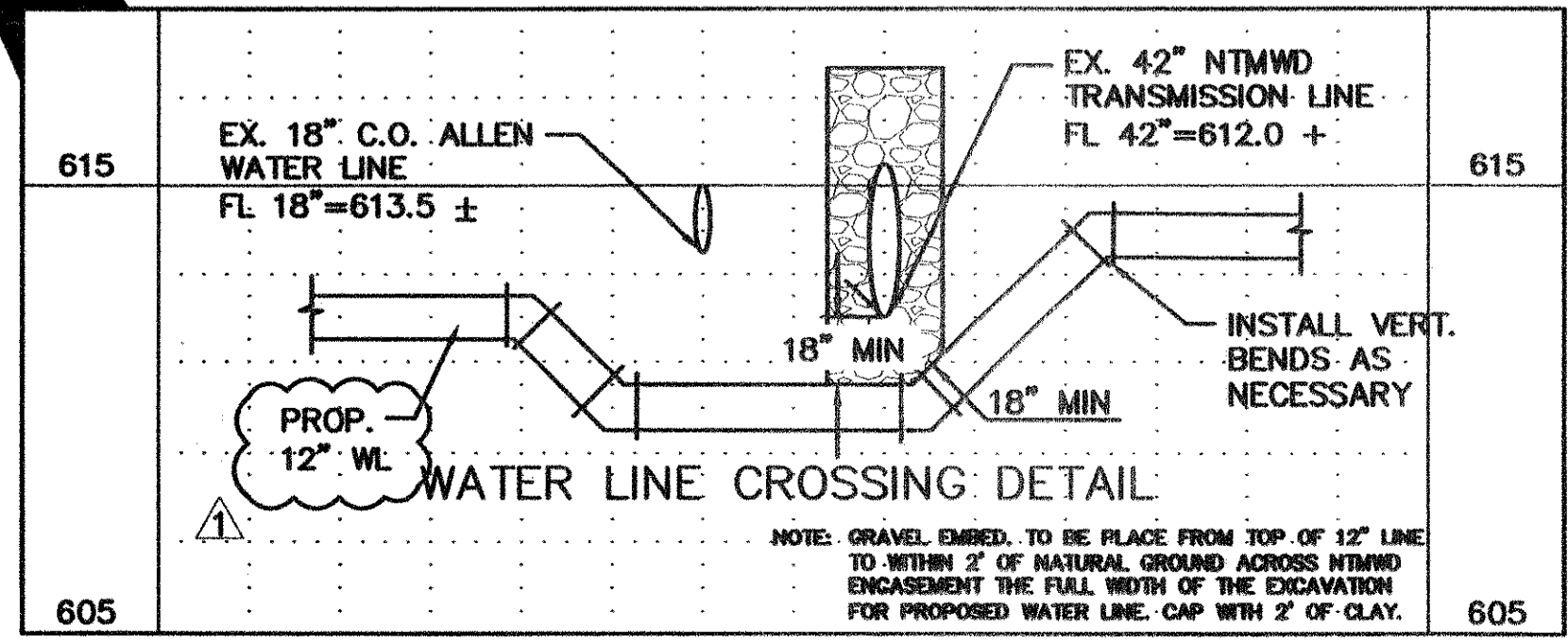
MATCHLINE - SEE SHEET C24

- CITY OF ALLEN 16\"/>
 - CONTRACTOR TO COORDINATE WITH CITY OF ALLEN'S ENGINEERING AND INSPECTION DEPARTMENTS PRIOR TO INSTALLING IMPROVEMENTS WITHIN THE LIMITS OF THE CITY OF ALLEN WATERLINE EASEMENT.
 - CONTRACTOR TO FIELD VERIFY LOCATION AND SLOTT ELEVATION OF CITY OF ALLEN 16\"/>**

- NTMWD NOTES:**
- NORTH TEXAS MUNICIPAL WATER DISTRICT (NTMWD)'S 42-INCH WATER TRANSMISSION PIPELINE IS LOCATED WITHIN THE LIMITS OF CONSTRUCTION.
 - OPERATION OF HEAVY EARTHMOVING EQUIPMENT, COMPACTION EQUIPMENT OR HEAVY CONSTRUCTION EQUIPMENT, SUCH AS CONCRETE TRUCKS, SHALL BE RESTRICTED TO SPECIFIC CROSSING POINTS ACROSS NTMWD EASEMENT, AS APPROVED BY THE NTMWD. THE CROSSINGS SHALL BE DESIGNATED AND VERIFIED TO PROVIDE A MINIMUM OF FIVE FEET OF COVER.
 - TO ASSURE THAT PLACING OF SIGNIFICANT LOADS OVER THE NTMWD PIPELINE DOES NOT DAMAGE THE EXISTING PIPELINE, NO MATERIALS SHALL BE STOCKPILED ON THE NTMWD EASEMENT WITHOUT AUTHORIZATION FROM THE NTMWD. IF THE CONTRACTOR DESIRES TO USE NTMWD'S STOCKPILE OF MATERIALS, CONTACT NTMWD ENGINEERING AT (972) 442-5405 SO YOUR PLANS FOR USE OF NTMWD'S EASEMENT CAN BE REVIEWED.
 - A MINIMUM OF THREE FEET SEPARATION BETWEEN THE BOTTOM OF THE PAVEMENT AND TOP OF NTMWD PIPELINE IS REQUIRED. IN ADDITION, IF SEPARATION BETWEEN THE BOTTOM OF THE PAVEMENT AND THE TOP OF THE PIPELINE IS LESS THAN 3.5 FEET, A THICKENED PAVEMENT SECTION IS REQUIRED.
 - CROSSING OF THE NTMWD EASEMENT WITH OTHER UTILITIES, SUCH AS TV CABLE, PHONE, GAS, AND ELECTRIC, SHALL BE COORDINATED WITH THE NTMWD TO AVOID DAMAGE TO THE NTMWD FACILITIES.
 - OUTDOOR LIGHTING, LANDSCAPING, SCREENING WALLS OR OTHER FACILITIES SHALL NOT BE INSTALLED IN NTMWD EASEMENTS WITHOUT WRITTEN APPROVAL OF THE NTMWD.
 - UNLESS OTHERWISE SHOWN OR REQUIRED A MINIMUM OF ONE-FOOT CLEARANCE SHALL BE PROVIDED FOR ALL UTILITIES CROSSING THE NTMWD PIPELINES.
 - THE CONTRACTOR SHALL CONTACT NTMWD ENGINEERING AT (972) 442-5405 A LEAST 48 HOURS PRIOR TO PERFORMING ANY WORK IN THE VICINITY OF THE NTMWD FACILITIES.
 - NO ENCROACHMENT SHALL BE ALLOWED ON NTMWD EASEMENT BY FRANCHISE UTILITIES, WATER, SANITARY SEWER AND STORM SEWER FACILITIES ARE NOT PERMITTED IN NTMWD EASEMENT EXCEPT FOR CROSSINGS.

- NTMWD UTILITY CROSSING NOTES:**
- WATER LINES CROSSING THE NTMWD EASEMENT SHALL BE INSTALLED IN COMPLIANCE WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS PARAGRAPH 290.44 (a), LOCATION OF WATER LINES.
 - FOR OPEN CUT, WHERE CROSSING UNDER THE NTMWD PIPELINE WITHIN TEN FEET EITHER SIDE OF CENTERLINE OF PIPELINE, THE TRENCH WIDTH TO BE CUT SHALL BE LIMITED TO FOUR-FOOT VERTICAL WALLS, NO SLOPPING BANK WITH THE APPROPRIATE TRENCH SAFETY. THE ENTIRE EXCAVATION WITHIN THE LIMITS NOTED ABOVE SHALL BE BACKFILLED WITH GRAVEL, TO A MINIMUM OF ONE-FOOT ABOVE TOP OF NTMWD PIPELINE, ONE-FOOT MINIMUM VERTICAL CLEARANCE IS REQUIRED BETWEEN NTMWD PIPELINE AND PROPOSED UTILITIES.
 - LIMITS OF THE BORE SHALL BE A MINIMUM WIDTH OF THE NTMWD EASEMENT. A CASING PIPE JOINT SHALL BE CENTERED ON NTMWD'S PIPELINE.
 - THE CASING PIPE SHALL TERMINATE OUTSIDE OF NTMWD'S EASEMENT.

!!! CAUTION !!!
EXISTING UTILITIES IN THIS AREA CONTRACTOR TO CONTACT ALL AFFECTED UTILITIES 48 HOURS PRIOR TO CONSTRUCTION ACTIVITY



WATER PLAN
CLAREMONT SPRINGS ADDITION PHASE I
LUCAS, TEXAS

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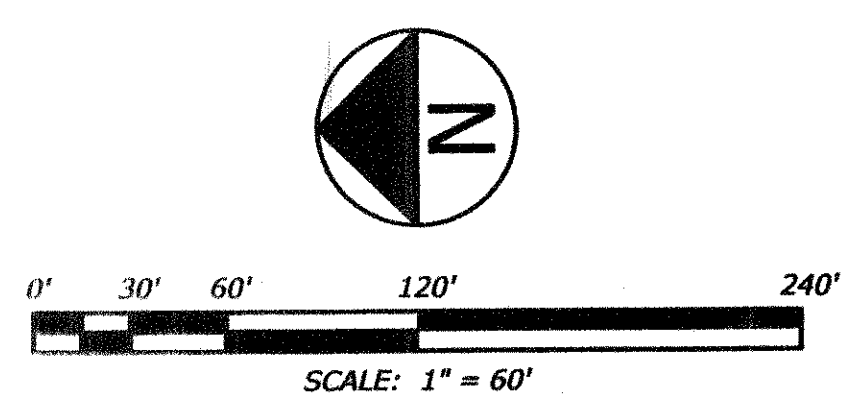
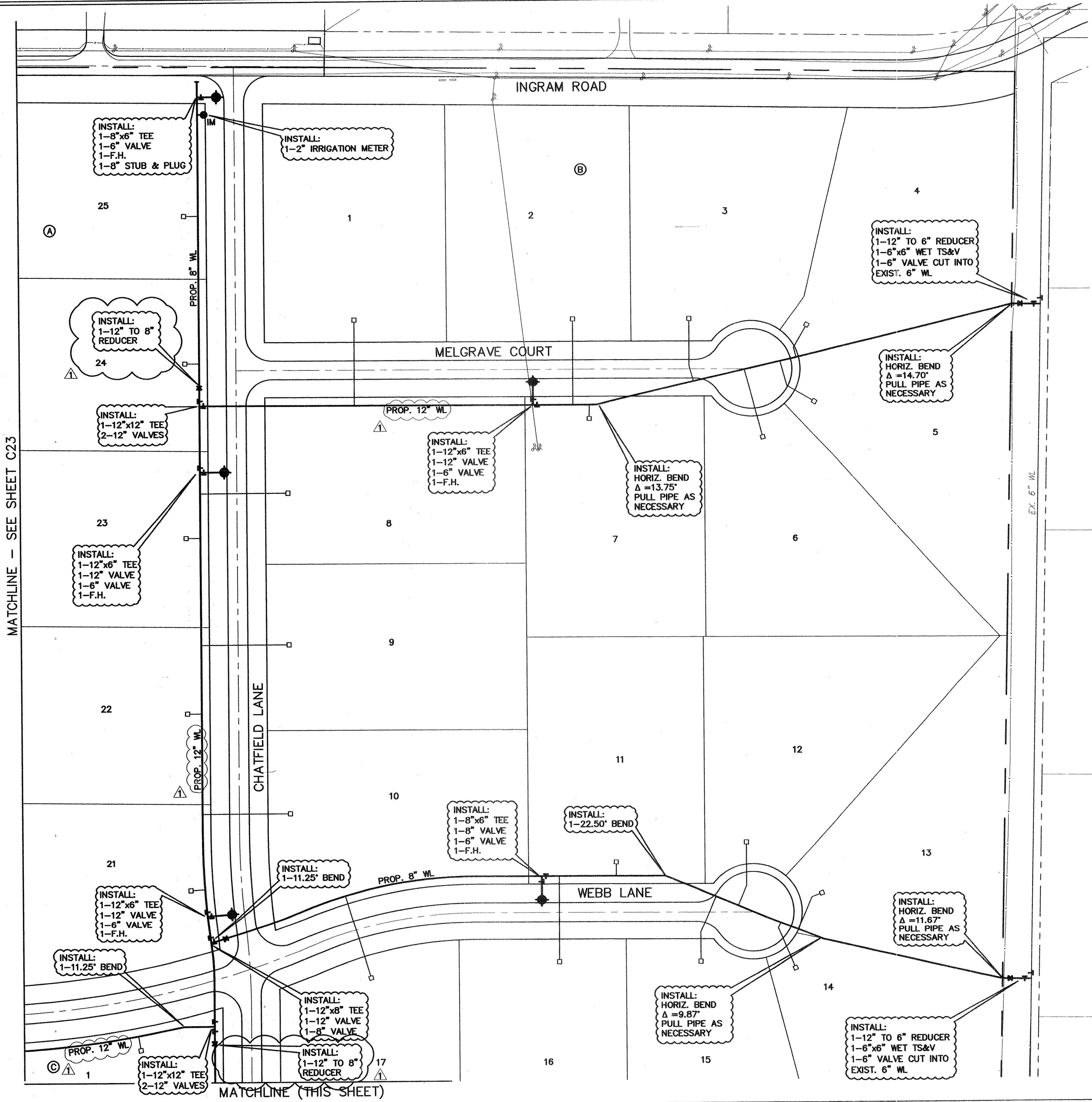
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Scale: SHOW

Drawn by: CAD
Designed by: EVE
Checked by: RBA
Issue Date: 12-19-05
Project No.: 05003.00
SHEET TITLE: WATER PLAN
SHEET NUMBER: C23

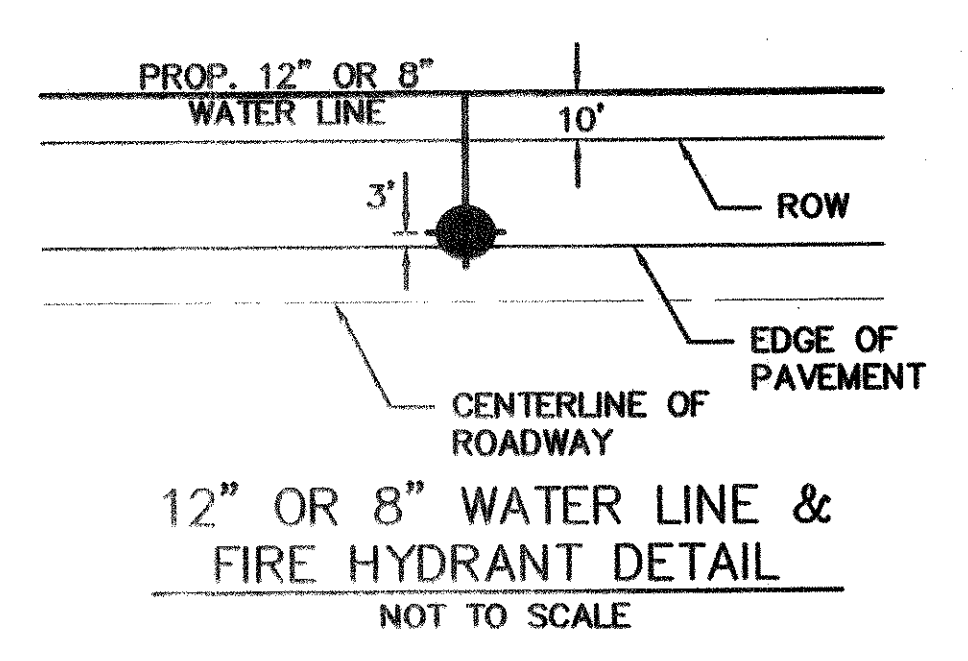
RECORD DRAWING

BENCHMARK DATA: BM #1 - EL. 618.54 - SQUARE CUT ON HDWL, S OF 2170; 500' W OF INGRAM; BM #2 - EL. 618.44 - PK NAIL IN ASPHALT, SW CORNER OF INGRAM & 2170



LEGEND

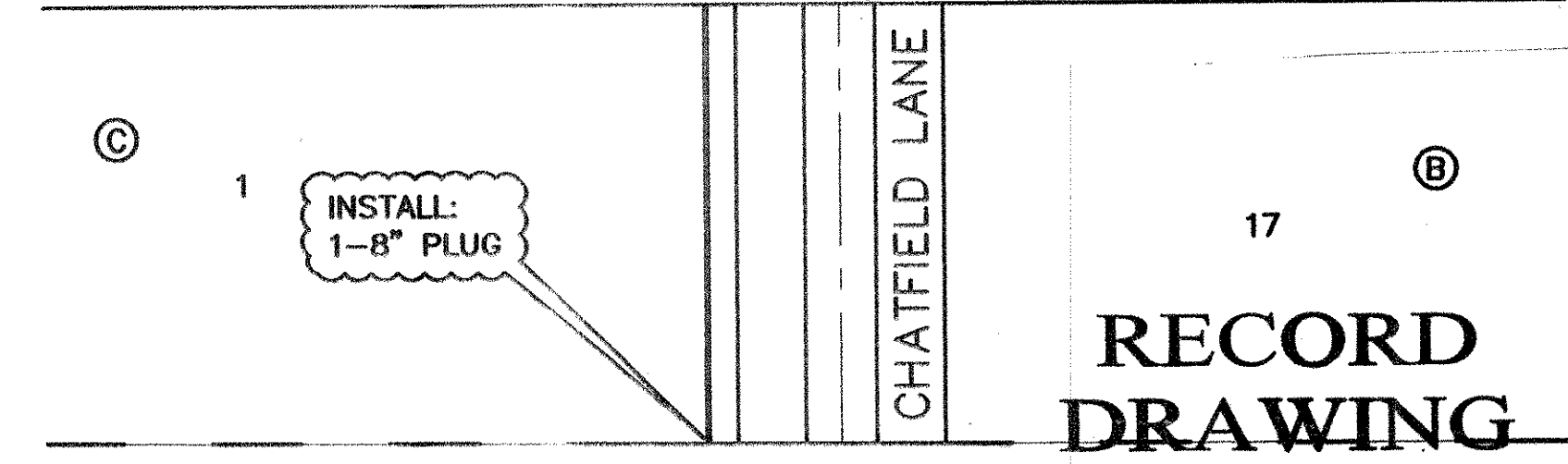
- PROP. WATER LINE & VALVE
- PROP. FIRE HYDRANT
- PROP. IRRIGATION METER
- EXIST. FIRE HYDRANT & VALVE
- 1" DOM. SERVICE & 3/4" METER



MATCHLINE - SEE SHEET C23

MATCHLINE (THIS SHEET)

MATCHLINE (THIS SHEET)



WATER PLAN
CLAREMONT SPRINGS ADDITION PHASE I
LUCAS, TEXAS

KENNEDY CONSULTING, INC.
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MCKINNEY, TEXAS 75069
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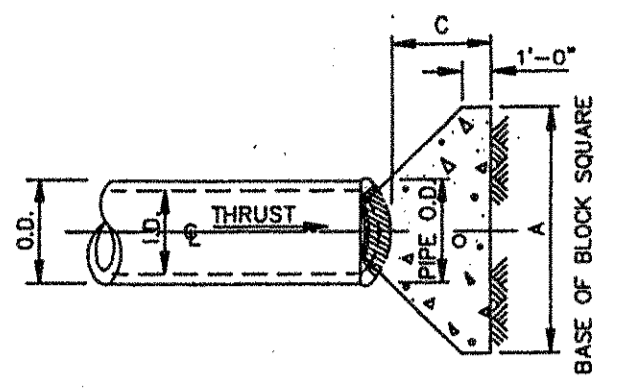
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KENNEDY CONSULTING, INC.
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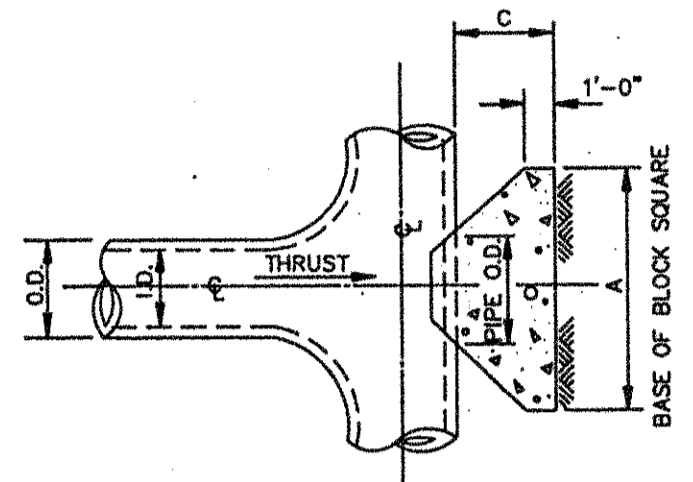
REVISIONS	
No.	Description
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Scale: SHOWN
 Drawn by: CAD
 Designed by: EVE
 Checked by: RBA
 Issue Date: 12-19-05
 Project No.: 05003.00
 SHEET TITLE: WATER PLAN
 SHEET NUMBER: C24

BENCHMARK DATA: BM # 1 - EL. 618.54 - SQUARE CUT ON HDWL, S OF 2170, 500' W OF INGRAM; BM # 2 - EL. 618.44 - PK NAIL IN ASPHALT, SW CORNER OF INGRAM & 2170



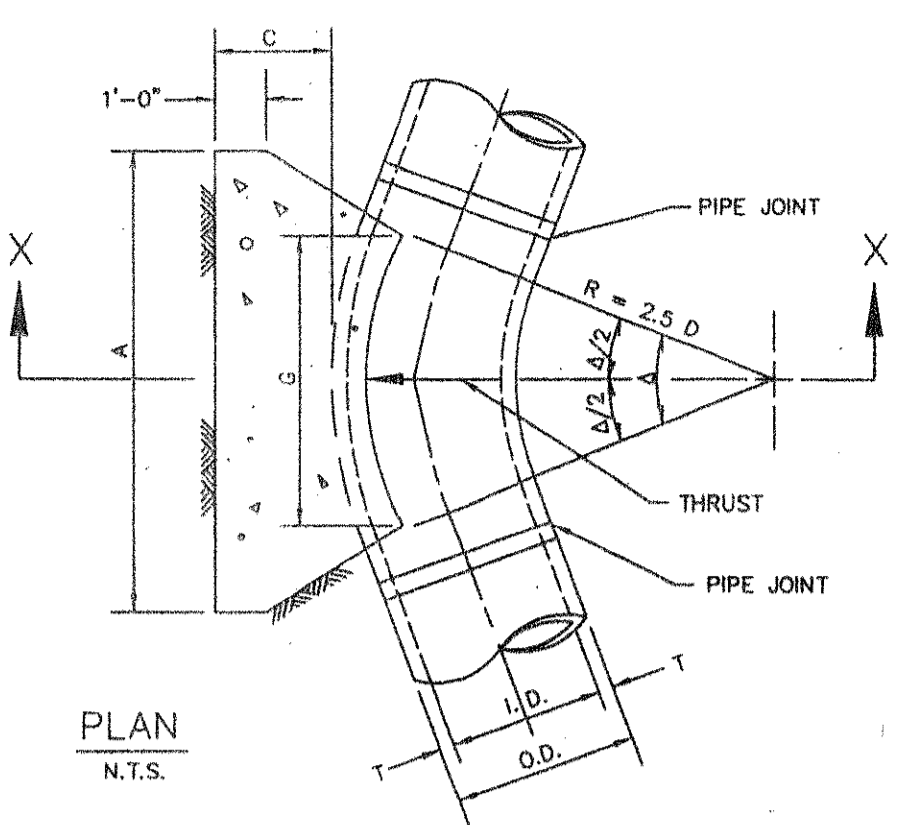
PLAN OF PLUG THRUST BLOCK
N.T.S.



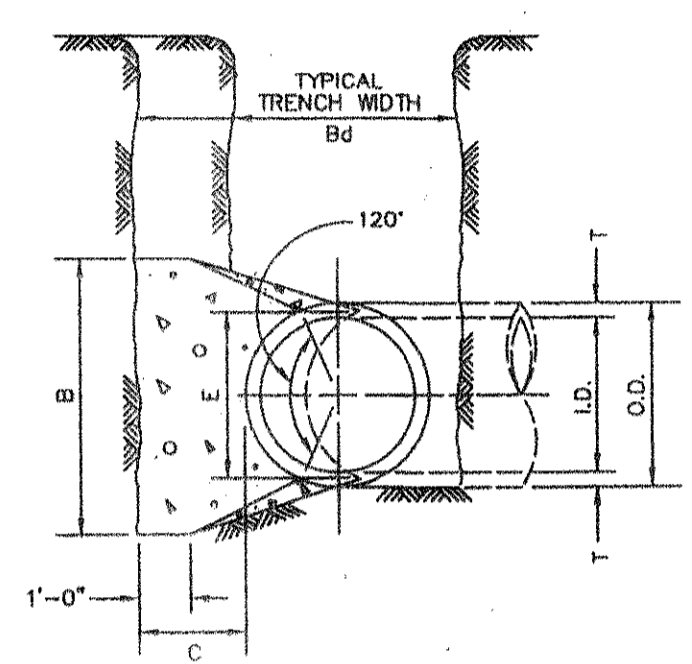
PLAN OF TEE THRUST BLOCK
N.T.S.

I.D. (IN.)	THRUST (TONS)	C (FT.)	EARTH			ROCK		
			A (FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	B (FT.)	VOL. (C.Y.)
4.6,8	1.0	2.0	1.5	1.5	0.1	1.0	1.0	0.1
10,12	1.5	2.5	2.0	2.0	0.3	1.5	1.5	0.3
16,18	2.0	3.0	2.5	2.5	0.5	2.0	2.0	0.5
20	2.5	3.5	3.0	3.0	0.7	2.5	2.5	0.7
24	3.0	4.0	3.5	3.5	0.9	3.0	3.0	0.9
30	3.5	4.5	4.0	4.0	1.1	3.5	3.5	1.1
36	4.0	5.0	4.5	4.5	1.3	4.0	4.0	1.3
42	4.5	5.5	5.0	5.0	1.5	4.5	4.5	1.5
48	5.0	6.0	5.5	5.5	1.7	5.0	5.0	1.7
54	5.5	6.5	6.0	6.0	1.9	5.5	5.5	1.9
60	6.0	7.0	6.5	6.5	2.1	6.0	6.0	2.1
66	6.5	7.5	7.0	7.0	2.3	6.5	6.5	2.3
72	7.0	8.0	7.5	7.5	2.5	7.0	7.0	2.5
78	7.5	8.5	8.0	8.0	2.7	7.5	7.5	2.7
84	8.0	9.0	8.5	8.5	2.9	8.0	8.0	2.9
90	8.5	9.5	9.0	9.0	3.1	8.5	8.5	3.1
96	9.0	10.0	9.5	9.5	3.3	9.0	9.0	3.3

REFER TO
STD. DWG. No. 4040
FOR GENERAL NOTES.



PLAN
N.T.S.



SECTION X-X
N.T.S.

REFER TO
STD. DWG. No. 4040
FOR GENERAL NOTES.

I.D. (IN.)	T (IN.)	Δ = 11.25°		Δ = 22.50°	
		C (FT.)	E (FT.)	C (FT.)	E (FT.)
4,6,8	0.4	1.5	1.5	0.9	
10,12	0.5	1.5	1.5	1.2	
16,18	0.6	1.5	1.5	1.6	
20	0.7	1.5	1.5	1.8	
24	0.8	1.5	1.5	2.1	
30	0.9	1.5	1.9	2.6	
36	1.0	1.5	2.3	3.3	
42	1.1	1.5	2.6	3.8	
48	1.2	2.0	3.0	4.3	
54	1.3	2.3	3.4	4.8	
60	1.4	2.5	3.8	5.3	
66	1.5	2.8	4.1	5.7	
72	1.6	3.0	4.5	6.3	
78	1.7	3.3	4.9	6.7	
84	1.8	3.5	5.3	7.2	
90	1.9	3.8	5.8	7.7	
96	2.0	4.0	6.0	8.2	

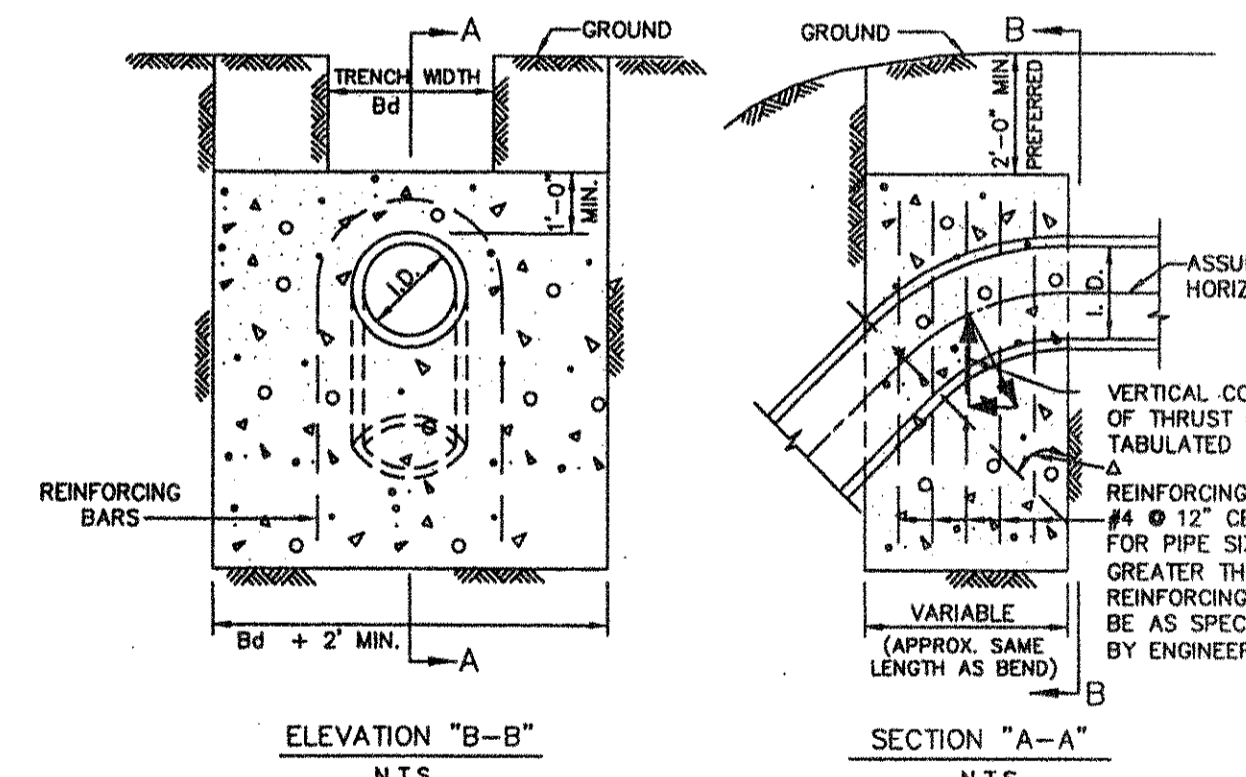
I.D. (IN.)	C (FT.)	THRUST (TONS)	EARTH			ROCK			I.D. (IN.)	C (FT.)	THRUST (TONS)	EARTH			ROCK		
			A (FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	B (FT.)	VOL. (C.Y.)				A (FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	B (FT.)	VOL. (C.Y.)
4,6,8	0.4	1.0	1.0	1.5	0.1	1.0	1.0	0.1	4,6,8	0.8	2.0	1.5	1.5	0.1	1.0	1.0	0.1
10,12	0.6	2.2	1.5	1.5	0.1	1.0	1.5	0.1	10,12	1.1	4.4	2.0	2.5	0.3	1.5	1.5	0.1
16,18	0.8	5.0	2.0	2.5	0.3	1.5	2.0	0.2	16,18	1.6	9.9	3.0	3.5	0.6	2.0	2.5	0.3
20	0.9	6.2	2.0	3.5	0.4	1.5	3.0	0.3	20	1.8	12.3	3.5	3.5	0.7	2.0	3.0	0.4
24	1.1	8.9	3.0	3.5	0.5	1.5	3.0	0.3	24	2.2	17.7	4.0	4.5	1.0	3.0	3.5	0.5
30	1.4	10.4	3.0	3.5	0.6	2.0	3.5	0.4	30	2.7	20.7	5.0	4.5	1.5	3.0	4.0	0.8
36	1.7	15.0	3.5	4.5	0.8	2.0	4.0	0.5	36	3.3	29.8	5.5	5.5	2.3	4.0	4.0	1.3
42	1.8	20.4	4.5	5.0	1.5	2.5	5.0	0.6	42	3.8	40.5	7.0	6.0	3.9	4.5	5.0	2.1
48	2.2	26.6	4.5	6.0	2.0	2.5	6.0	1.1	48	4.4	52.9	8.0	7.0	5.7	4.5	6.0	2.8
54	2.5	33.7	6.0	6.0	3.0	3.0	6.0	1.4	54	4.9	67.0	9.0	8.0	8.0	6.0	6.0	4.1
60	2.7	41.6	6.0	7.0	3.8	3.0	7.0	1.8	60	5.5	82.7	9.5	9.0	10.6	6.0	7.0	5.3
66	3.0	50.3	6.5	8.0	5.1	3.5	8.0	2.7	66	6.0	100.1	10.5	10.0	14.1	6.5	8.0	7.2
72	3.3	59.9	7.5	8.0	6.3	4.0	8.0	3.3	72	6.6	119.1	11.0	11.0	17.6	7.5	8.0	9.1
78	3.6	70.2	8.0	9.0	8.1	4.0	9.0	3.9	78	7.1	139.8	12.0	12.0	22.5	8.0	9.0	11.7
84	3.8	81.5	8.5	10.0	10.3	4.5	10.0	5.3	84	7.6	162.1	13.0	12.5	27.2	8.5	10.0	14.8
90	4.1	93.5	9.5	10.0	12.2	5.0	10.0	6.3	90	8.2	186.1	14.0	13.5	33.7	9.5	10.0	17.7
96	4.4	106.4	10.0	11.0	15.0	5.0	11.0	7.4	96	8.7	211.7	15.0	14.5	41.2	10.0	11.0	21.8

TABLES OF DIMENSIONS AND QUANTITIES

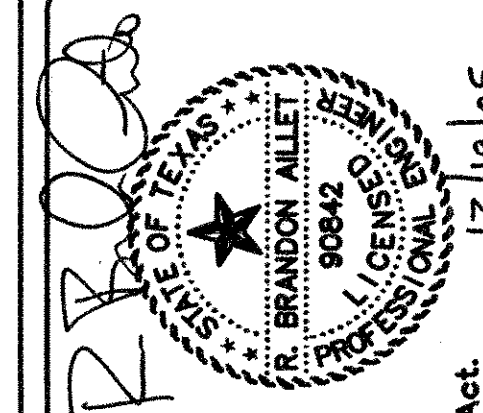
I.D. (IN.)	G (FT.)	THRUST (TONS)	EARTH			ROCK			I.D. (IN.)	G (FT.)	THRUST (TONS)	EARTH			ROCK		
			A (FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	B (FT.)	VOL. (C.Y.)				A (FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	B (FT.)	VOL. (C.Y.)
4,6,8	1.0	2.6	2.0	1.5	0.2	1.0	1.5	0.1	4,6,8	1.5	3.9	2.0	2.0	0.2	1.5	1.5	0.1
10,12	1.5	5.9	2.5	2.5	0.3	2.0	1.5	0.2	10,12	2.9	8.7	3.5	2.5	0.5	2.0	2.5	0.3
16,18	2.2	13.2	3.5	4.0	0.6	2.5	3.0	0.4	16,18	3.2	19.5	4.5	4.5	1.2	3.0	3.5	0.6
20	2.4	16.3	4.5	4.0	1.0	3.0	3.0	0.5	20	3.6	24.1	5.5	4.5	1.5	3.5	3.5	0.7
24	2.9	23.4	6.0	4.0	1.4	3.5	3.5	0.7	24	4.3	34.6	8.0	4.5	2.3	4.5	4.0	1.1
30	3.6	27.5	6.5	5.0	1.9	3.5	4.0	0.9	30	5.4	40.6	8.5	5.0	3.2	5.5	4.0	1.6
36	4.4	39.5	7.0	6.0	3.4	4.5	4.5	1.6	36	6.5	58.5	10.0	6.0	5.3	6.5	4.5	2.6
42	5.1	53.8	8.0	7.0	5.1	5.5	5.0	2.5	42	7.5	79.6	11.5	7.0	8.1	8.0	5.0	4.2
48	5.8	70.3	9.0	8.0	7.4	6.0	6.0	3.7	48	8.6	104.0	13.0	8.0	11.9	9.0	6.0	6.3
54	6.5	89.0	10.0	9.0	10.3	7.0	6.5	5.3	54	9.7	131.5	15.0	9.0	17.1	10.5	8.5	8.9
60	7.3	110.0	11.0	10.0	13.9	7.5	7.5	7.3	60	10.7	162.4	16.5	10.0	23.1	11.0	7.5	12.0
66	8.0	132.9	12.5	11.0	18.9	8.5	8.0	9.6	66	11.8	196.5	18.0	11.0	30.1	12.0	8.5	16.2
72	8.7	158.2	13.5	12.0	24.0	9.0	9.0	12.3	72	12.9	233.9	19.5	12.0	38.6	14.0	8.5	20.7
78	9.4	185.6	14.5	13.0	30.0	10.0	9.5	15.6	78	13.9	274.5	21.5	13.0	49.8	14.5	9.5	25.9
84	10.1	215.3	15.5	14.0	37.1	10.5	10.5	19.5	84	15.0	318.4	23.0	14.0	61.2	15.5	10.5	32.8
90	10.9	247.1	16.5	15.0	45.0	11.5	11.0	23.9	90	16.1	365.5	24.5	15.0	74.5	17.5	10.5	39.9
96	11.6	281.2	18.0	16.0	55.5	12.5	11.5	28.9	96	17.1	415.6	26.0	16.0	89.5	18.5	11.5	48.5

I.D. (IN.)	G (FT.)	THRUST (TONS)	EARTH			ROCK			I.D. (IN.)	G (FT.)	THRUST (TONS)	EARTH			ROCK		
			A (FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	B (FT.)	VOL. (C.Y.)				A (FT.)	B (FT.)	VOL. (C.Y.)	A (FT.)	B (FT.)	VOL. (C.Y.)
4,6,8	2.1	5.6	3.0	2.0	0.3	2.0	1.5	0.2	4,6,8	2.7	7.1	5.0	1.5	0.4	2.0	2.0	0.2
10,12	3.1	12.6	5.5	2.5	0.8	3.5	2.0	0.4	10,12	4.0	16.0	6.5	2.5	1.0	3.5	2.5	0.5
16,18	4.7	28.3	7.5	4.0	1.9	5.5	3.0	0.9	16,18	6.0	36.0	9.0	4.0	2.4	4.5	4.0	1.0
20	5.2	34.9	9.0	4.0	2.3	5.5	3.5	1.2	20	6.6	44.4	10.0	4.5	3.1	6.0	4.0	1.5
24	6.2	50.3	11.5	4.5	3.5	6.5	4.0	1.6	24	7.9	64.0	14.5	4.5	5.0	8.0	4.0	2.1
30	7.8	58.9	12.0	5.0	4.8	7.5	4.0	2.2	30	9.9	75.0	15.0	5.0	6.7	10.0	4.0	3.3
36	9.4	84.9	14.5	6.0	6.2	9.5	4.5	3.0	36	11.9	108.0	18.0	6.0	11.4	12.0	4.5	5.3
42	10.9	115.5	17.0	7.0	12.8	11.0	5.5	6.3	42	13.9	147.0	21.0	7.0	17.8	14.0	5.5	8.7
48	12.5	150.9	19.0	8.0	18.4	13.0	6.0	9.2	48	15.9	192.0	24.0	8.0	26.2	16.0	6.0	12.4
54	14.0	191.0	21.5	9.0	26.0	15.0	6.5	12.9	54	17.9	243.0	27.0	9.0	36.9	18.0	7.0	18.1
60	15.6	235.8	24.0	10.0	35.6	16.0	7.5	17.6	60	19.9	299.8	30.0	10.0	50.3	20.0	7.5	24.0
66	17.1	285.3	26.0	11.0	46.0	18.0	8.0	23.0	66	21.0	362.8	33.0	11.0	66.2	22.0	8.5	32.5
72	18.7	339.5	28.5	12.0	57.8	19.0	9.0	28.4	72	23.0	431.8	36.0	12.0	85.6	24.0	9.0	41.0
78	20.2	398.5	31.0	13.0	75.7	21.0	9.5	37.4	78	25.7	506.7	39.0	13.0	108.2	26.0	10.0	53.2
84	21.8	462.1	33.5	14.0	94.7	22.0	10.5	46.5	84	27.7	587.7	42.0	14.0	134.4	28.0	10.5	64.8
90	23.3	530.5	35.5	15.0	114.4	24.5	11.0	58.2	90	29.0	674.6	45.0	15.0	164.9	30.0	11.5	81.2
96	24.9	603.6	38.0	16.0	138.9	25.5	12.0	70.0	96	31.6	767.5	48.0	16.0	199.0	32.0	12.0	95.1

TABLES OF DIMENSIONS AND QUANTITIES



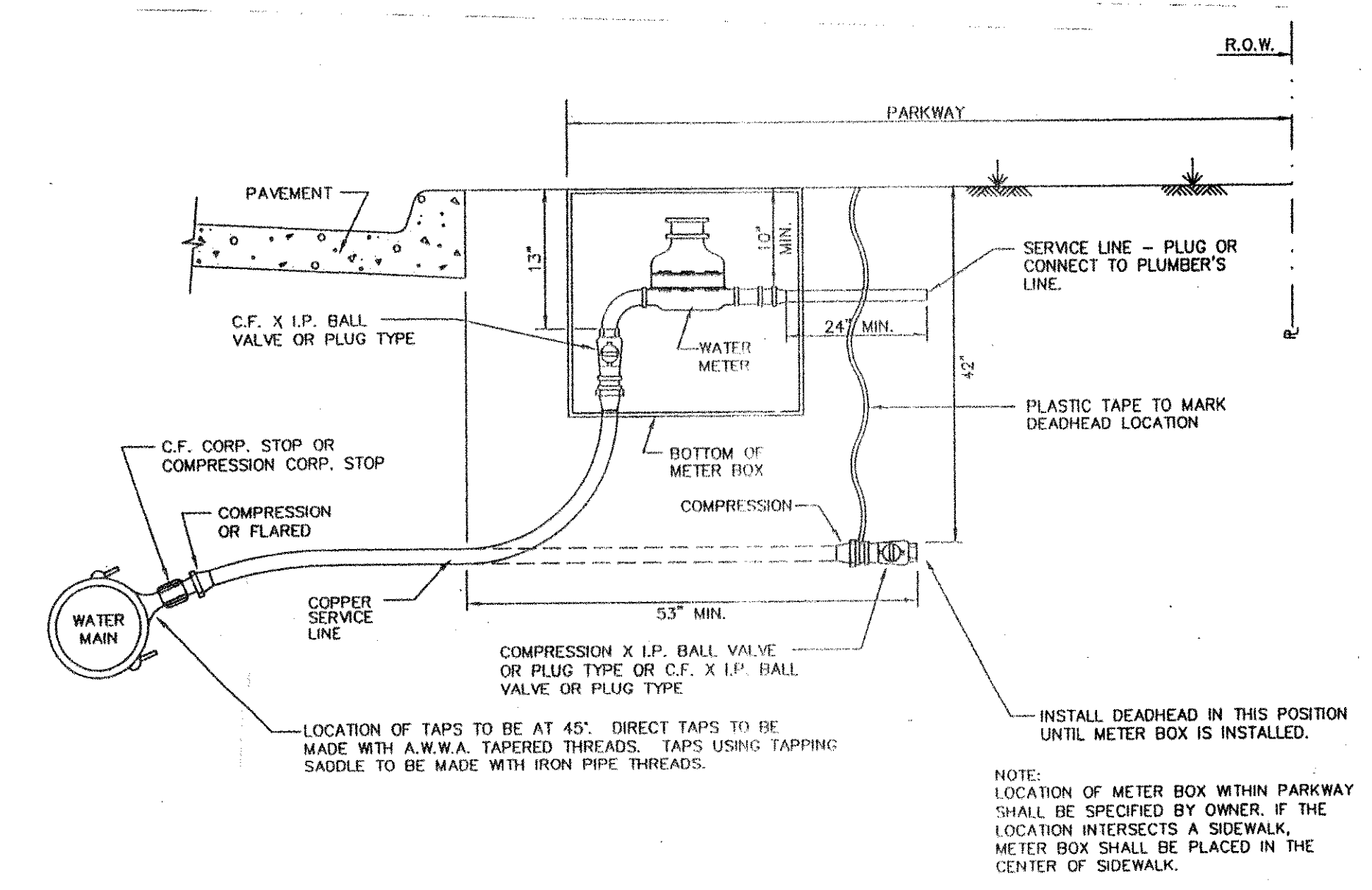
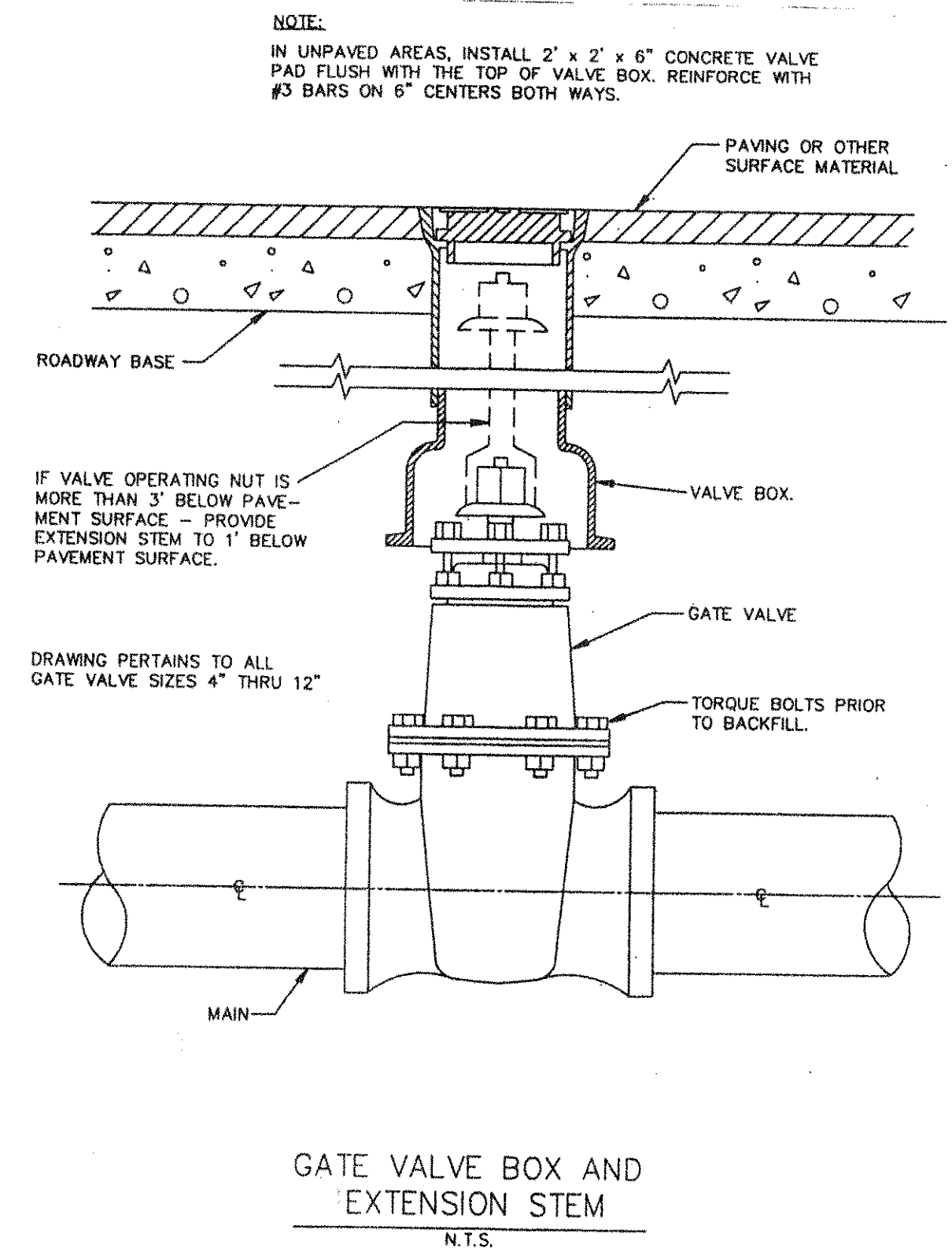
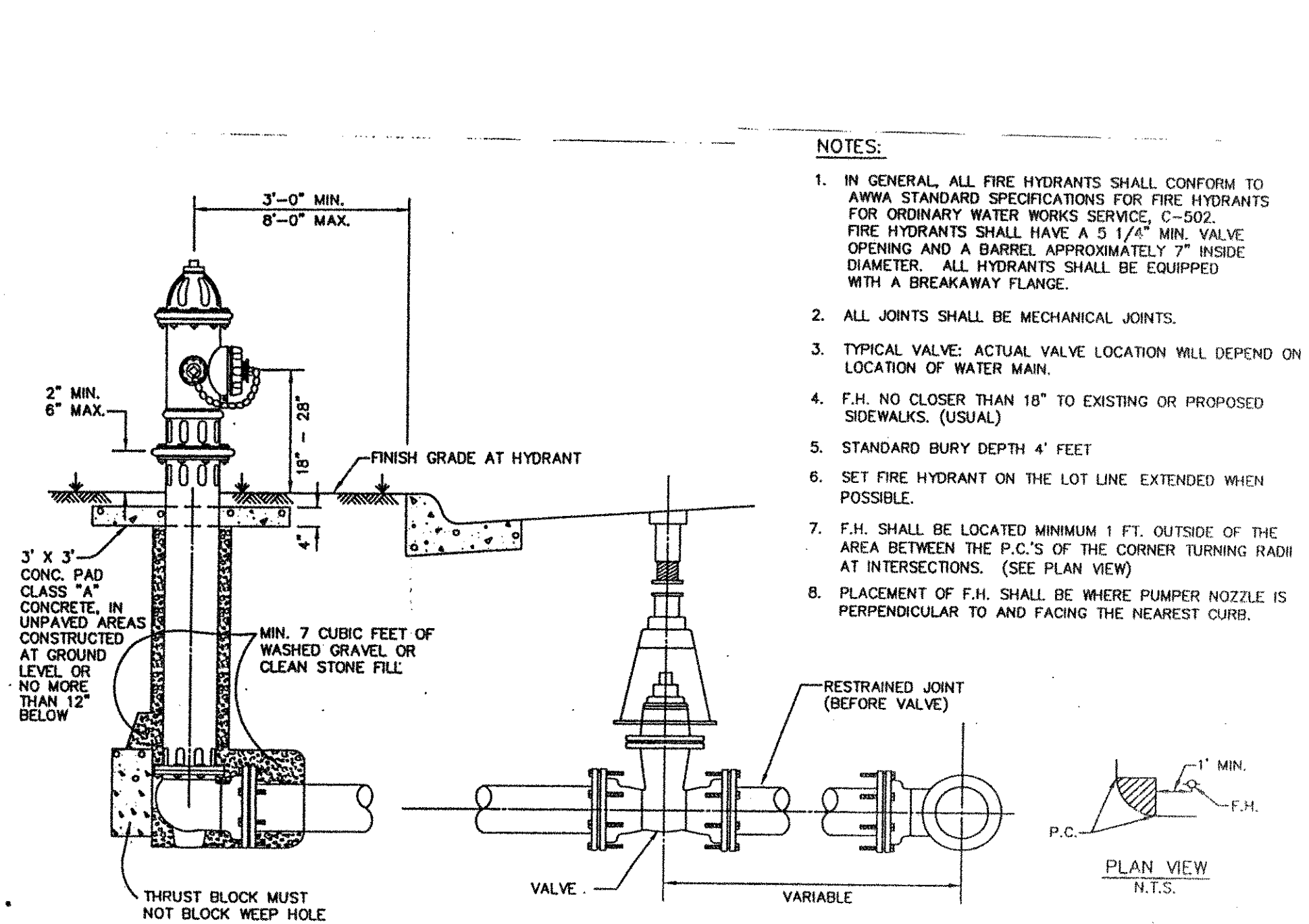
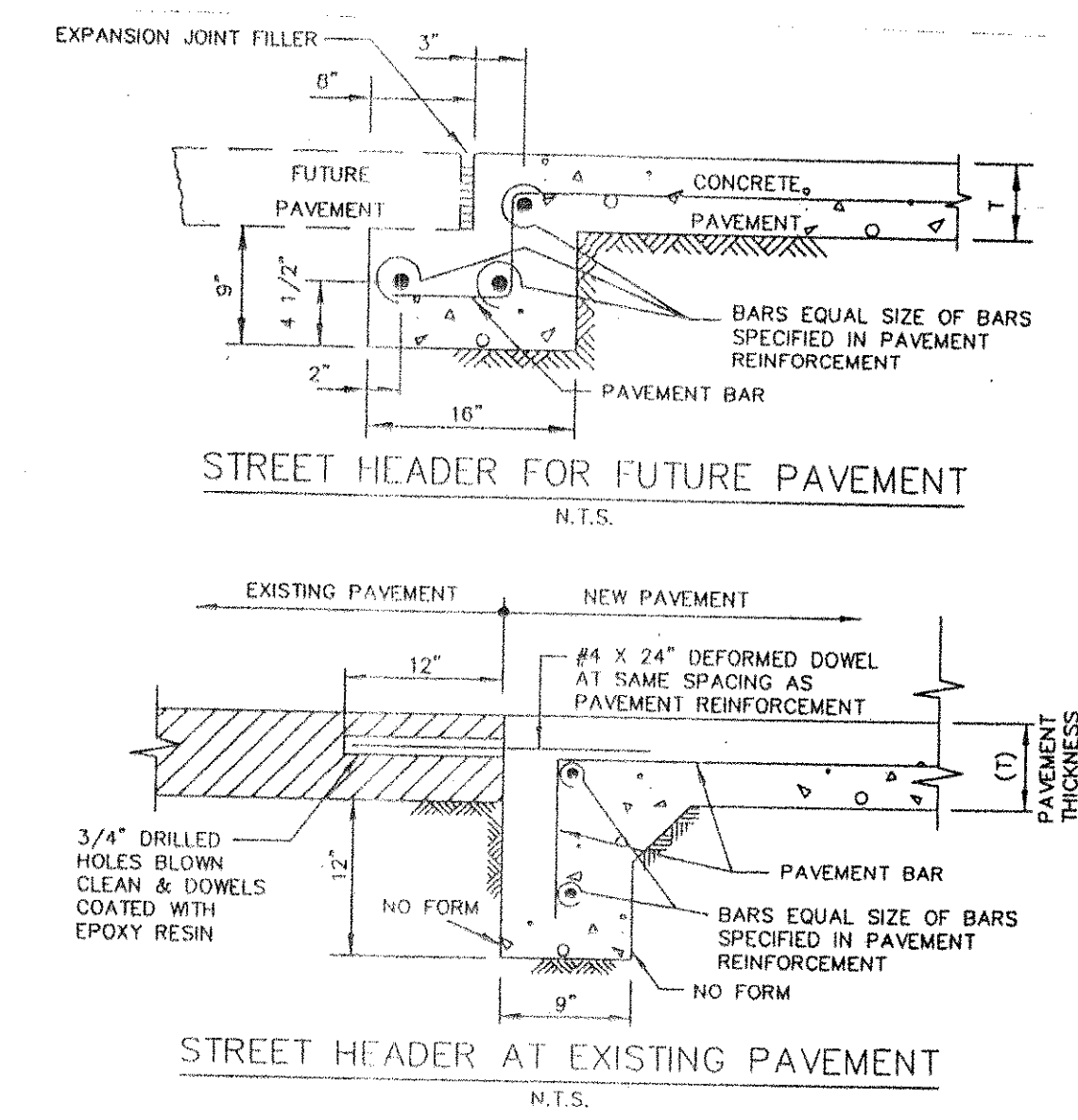
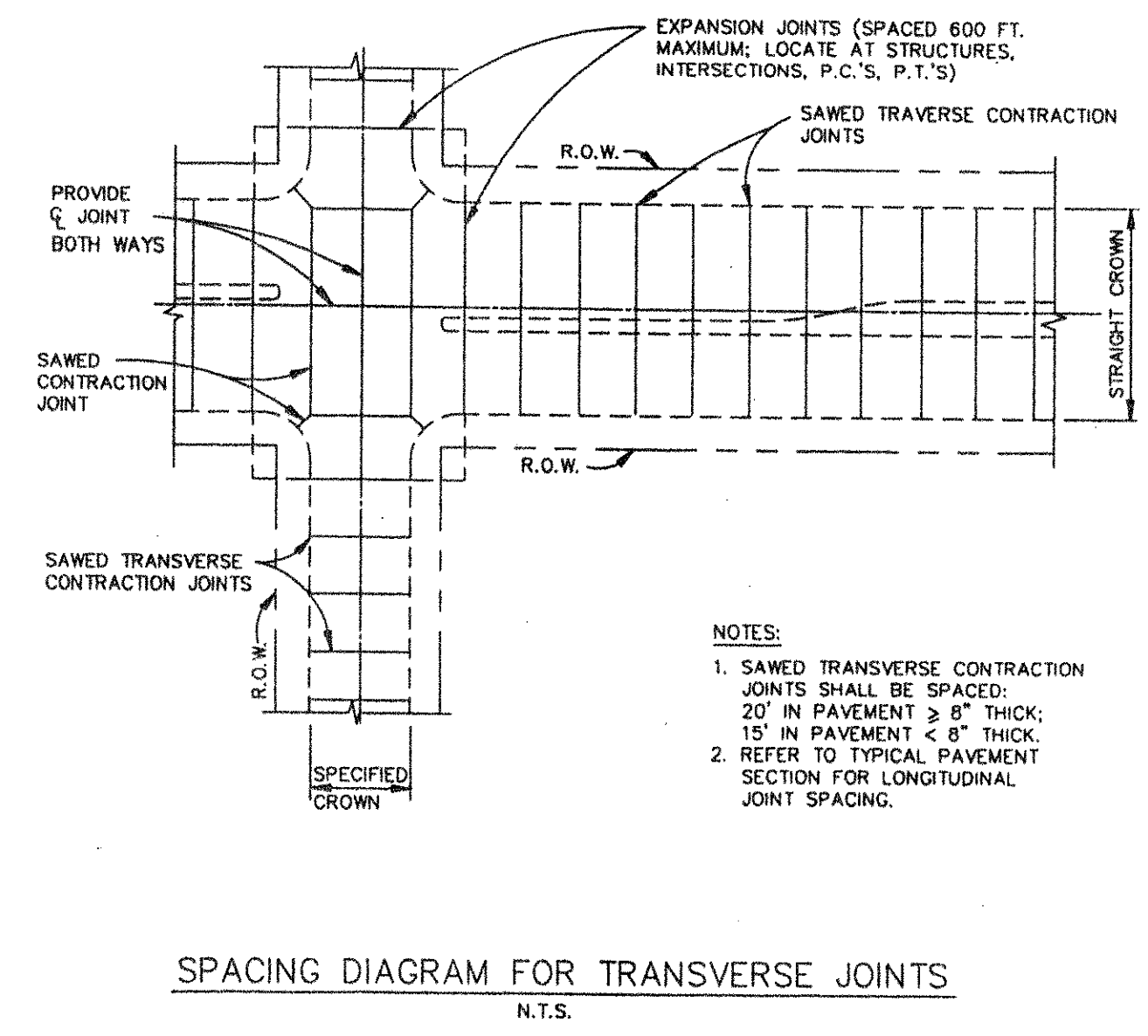
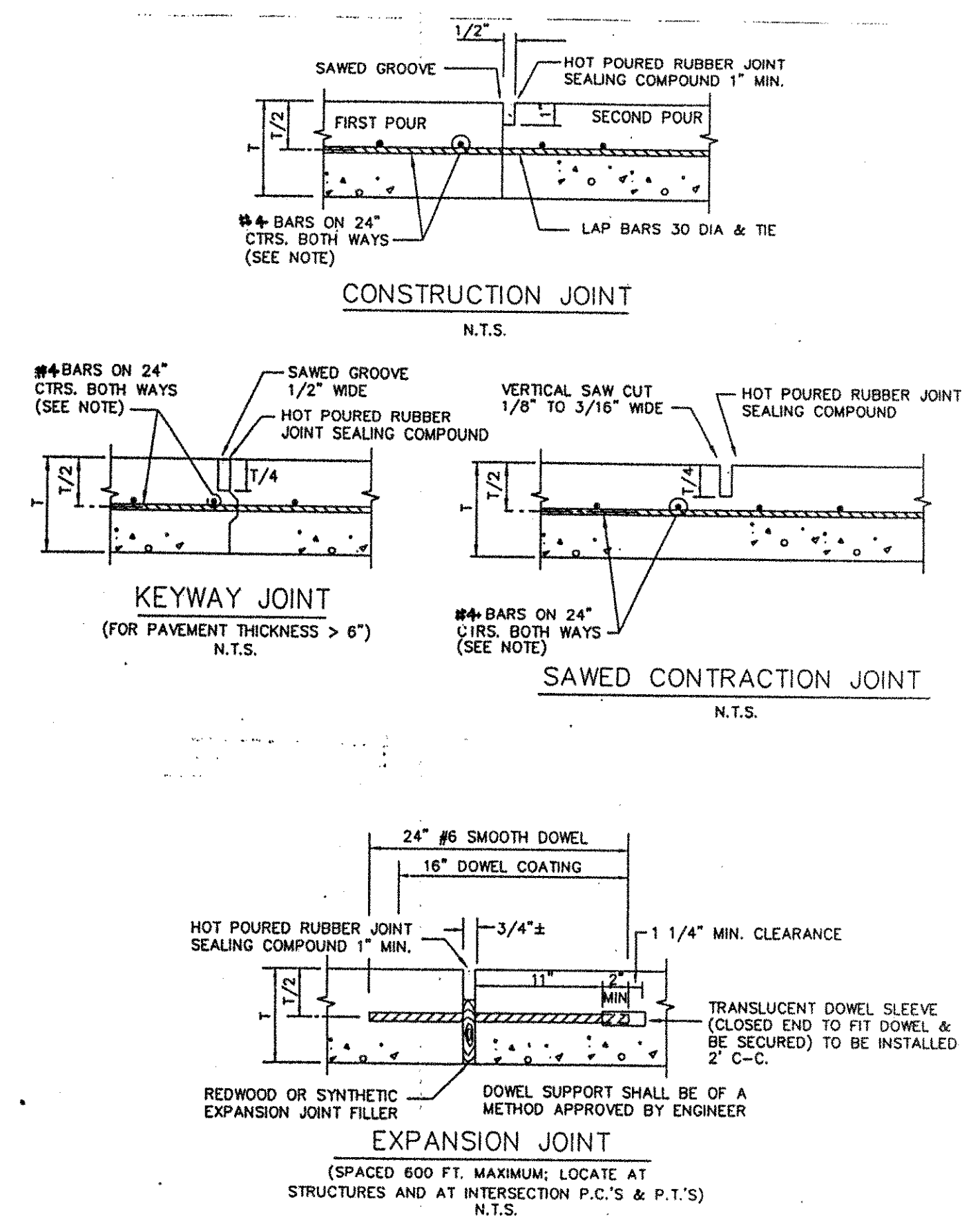
REFER TO
STD



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KENNEDY CONSULTING, INC.
 808 S. COLLEGE STREET, SUITE 300
 MCKINNEY, TEXAS 75069
 PH (972) 542-1754
 FX (972) 529-2294

No.	Date	Description
REVISIONS		
Scale: NONE		
Drawn by: CAD		
Designed by: EVE		
Checked by: RBA		
Issue Date: 12-19-05		
Project No.: 05003.00		
SHEET TITLE: STANDARD DETAILS		
SHEET NUMBER: C26		



RECORD DRAWING

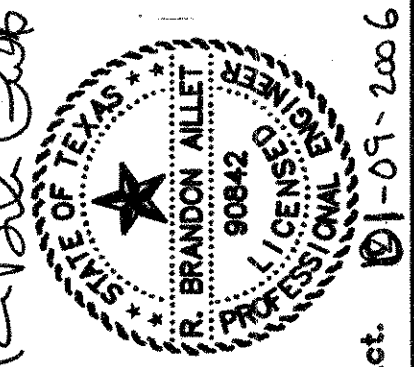
WATERLINE GENERAL NOTES:

1. All water lines shall be constructed of approved materials. Main distribution lines and feeder lines shall be constructed of Class 160 or higher grade polyvinyl chloride pipe with joint connections of the same material. Customer service lines may be constructed of copper tubing, Type K for underground service and Type L for interior and other services or polyvinyl chloride pipe. Class 160. Rings shall be natural rubbers.
2. Main distribution lines feeder lines and water meters shall be located within the utility easement. Main distribution lines and feeder lines shall not be closer than two and one half (2-1/2) feet to the boundary of the easement as measured from the closest surface of the pipe to the boundary of the easement. Water meters shall not be located outside of the easements and right of way, but shall not be more than one (7) foot from the extreme point of the meter to the boundary of the easement.
3. Water mains and feeder lines shall be embedded in trenches so as to provide a back fill depth of not less than forty two (42) inches from the surface grade to the top of the pipe. A minimum of four (4) inches of crushed stone bedding shall be between the lower surface of the pipe and the bottom of the trench. A minimum of six (6) inches of bedding sand shall cover the top surface of the pipe. The pipe may be laid with gradual curves but is limited to curves with a minimum radius of one hundred (100) feet for pipe two (2) inches and smaller in diameter. No pipe will be permitted to be deflected at the joint. Thrust blocks of concrete shall be used at all ties and bends and be computed for no less than one hundred sixty (160) pounds per square inch of internal pressure.
4. All improvements proposed for any subdivision shall be constructed in accordance with the current "Standard Specifications for Public Works Construction" published by the North Central Texas Council of Governments.
 - A. From and after July 1, 1994, all streets and roads constructed in the City of Lucas shall be constructed of concrete in accordance with the standards of the City of Lucas and the specifications as approved by the Lucas City Engineer
5. The contractor shall furnish a good and sufficient maintenance bond in the amount of ten percent (10%) of the total cost or contract price of each job, with a reputable and solvent corporate surety licensed to write insurance in the State of Texas, in favor of the City, to indemnify the City against any repairs which may become necessary to any part of the construction work performed in connection with the subdivision, arising from defective workmanship or materials used therein, for a full period of two (2) years from the date of final acceptance of the entire project. Final acceptance shall be withheld until said maintenance bond is furnished to the City.
6. No acceptance will be given on any work covered before the official representing the City has inspected the work.
7. A minimum of a eight-hour advance notice must be given before the designated City Official is expected at the job site. Any work or improvements covered before inspections must be uncovered.
8. Within thirty (30) days of acceptance of the subdivision, the engineer for the developer shall submit to the City a complete set of reproducible drawings of the paving, drainage, water and sanitary sewer improvements, if any, showing all changes made in the plans during construction and containing on each sheet a "Record-Drawing" stamp bearing the signature of the engineer and the date. In addition, a reproducible drawing of the utility plan sheets, containing the Record-Drawing information, shall be submitted to the City.

FIRE HYDRANT GENERAL NOTES

- Fire hydrants shall conform strictly to AWWA Specifications C-502, Fire Hydrants for Ordinary Water Works Service with the following supplementary details and changes or additions.
- A. Fire hydrants shall meet the requirements of the Texas Fire Insurance Division of the State Board of Insurance Commissioners.
 - B. Type of shut-off may be compression type with the flow.
 - C. Unless otherwise ordered, inlet connections shall be six inch (6") standard mechanical joint hub, complete with all joint accessories. Inlet valve shall have not less than a five and one quarter inch (5-1/4") opening. Hydrant barrel I. D. shall not be less than seven and one quarter inches (7-1/4")
 - D. All hydrant connections shall be equipped with two (2) hose connectors and one (1) steamer connector. The hose connectors shall be two and one-half inches (2-1/2") nominal I. D. National Standard Thread. Pumper nozzle shall be four and one half inches (4.5") nominal I. D., National Standard Thread. All connectors shall be mechanically attached. The pumper connection (4.5") shall be installed to face the city street.
 - E. Positive operating drain valve or valves shall be provided to drain the hydrant properly. The seat of the drain valve shall be bronze (or other corrosion resistant material), fastened securely to the hydrant. Stem threads shall be sealed away from water.
 - F. All fire hydrants shall be painted with two (2) coats of aluminum paint over one (1) shop coat of red primer paint. The hydrants shall receive a final coat of paint as follows:
BONNET COLOR CODE
 Under 4 inches Black
 4 inches Red
 6 inches Silver
 8 inches Blue
 12 inches and over Yellow
 - G. All fire hydrants shall open by turning to the left (counterclockwise).
 - H. Unless otherwise ordered, hydrants shall be furnished for a four-foot (4') depth of bury. Lower barrel must be one (1) piece.
 - I. Hydrants shall be of the breakable type, designed to break approximately three inches (3"), but not over five inches (5") above the ground line. These parts shall be of the breakable flange type, or break way lug. Breakable flanges screwed to the standpipe are not acceptable. flanges shall be so designed that an end wrench can be used on the nuts and bolts. Provision shall be made in the design of the stem to disconnect the stem from the hydrant parts above the standpipe break point in the event of a traffic accident. If breakable or sleeve type couplings are used, they shall have sufficient torsion strength such that a torsion failure of the stem will occur at some point other than at the coupling. Design of the coupling shall be such that when the coupling is broken no parts will come loose and fall into the hydrant.
 - J. All hydrants shall be capable of being extended to accommodate future grade changes.
 - K. Main valve seats on compression type hydrants closing with the flow shall be of such design that incorrect positioning is impossible and that the threads will be adequately guided into position. Arrangements shall also be made to hold the main valve gasket in place during assembly. Stainless steel bolts shall be furnished on the lower barrel to shoe connection.
 - L. Gaskets furnished for ground line flanges shall be full face or shall be recessed to hold the M. "O"-rings may be furnished in lieu of packing. They shall be the double "O"-ring type, designed so that the rubber rings move against a bronze surface. All hydrants must have travel stop device. Those using stem nut must be capable of being removed without any special tools. Any packing gland nut must be bronze.
 - N. Hydrants must be so constructed that the nozzle may face any direction and may be located eighteen inches (18") from ground line.
 - O. Each hydrant must have a sealed oil reservoir to provide positive lubrication of stem threads and bearing surfaces each time the hydrant is operated or shall be provided with a lifetime lubrication system contained in a grease chamber filled with an all temperature (50 deg. F to 125 deg. F) grease.
 - P. All hydrants must be equipped with a water cap to prevent water from entering the bonnet.
 - Q. Each hydrant shall have a 4 mil epoxy coating on the interior of the shoe.
 - R. In order to maintain a manageable parts inventory, to ensure and a working knowledge of fire hydrants and valves, the following hydrants are approved: Waterous, and Mueller, which meet the standards of the City of Lucas.
 - S. Iron or steel stems shall have bronze or stainless steel metal sleeve where passing through stuffing sealed against contact with the water at all times regardless of open or closed position of the main valve.
 - T. The hydrants shall close with the pressure and shall have either a bronze cap not to seal the bottom end of stem threads against contact with water, or the stem shall not penetrate the lower valve plate.
- Fire hydrant Installation**
 All fire hydrants shall be located as shown on the plans or as directed by the City Engineer and shall be set truly vertical with the base resting upon a stone or concrete slab four inches (4") thick and approximately twelve inches (12") square. The base of the hydrant shall be surrounded by not less than two (2) cubic feet of clean crushed stone or gravel, a size of one inch (1") to two inches (2"). Pipe joints shall be made as specified for pipe laying. The hydrants shall be carefully and substantially blocked against firm trench walls with sound stone, sound slabs of old concrete or 2000 p. s. i. concrete, but no additional pay will be allowed for same.

STANDARD DETAILS
 CLAREMONT SPRINGS ADDITION PHASE I
 LUCAS, TEXAS

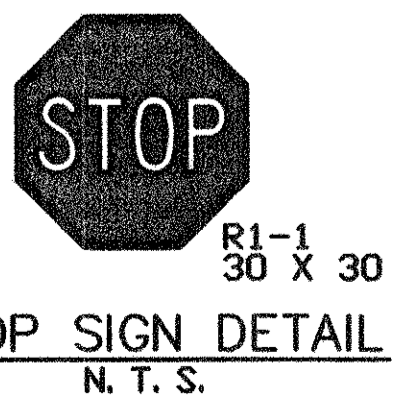
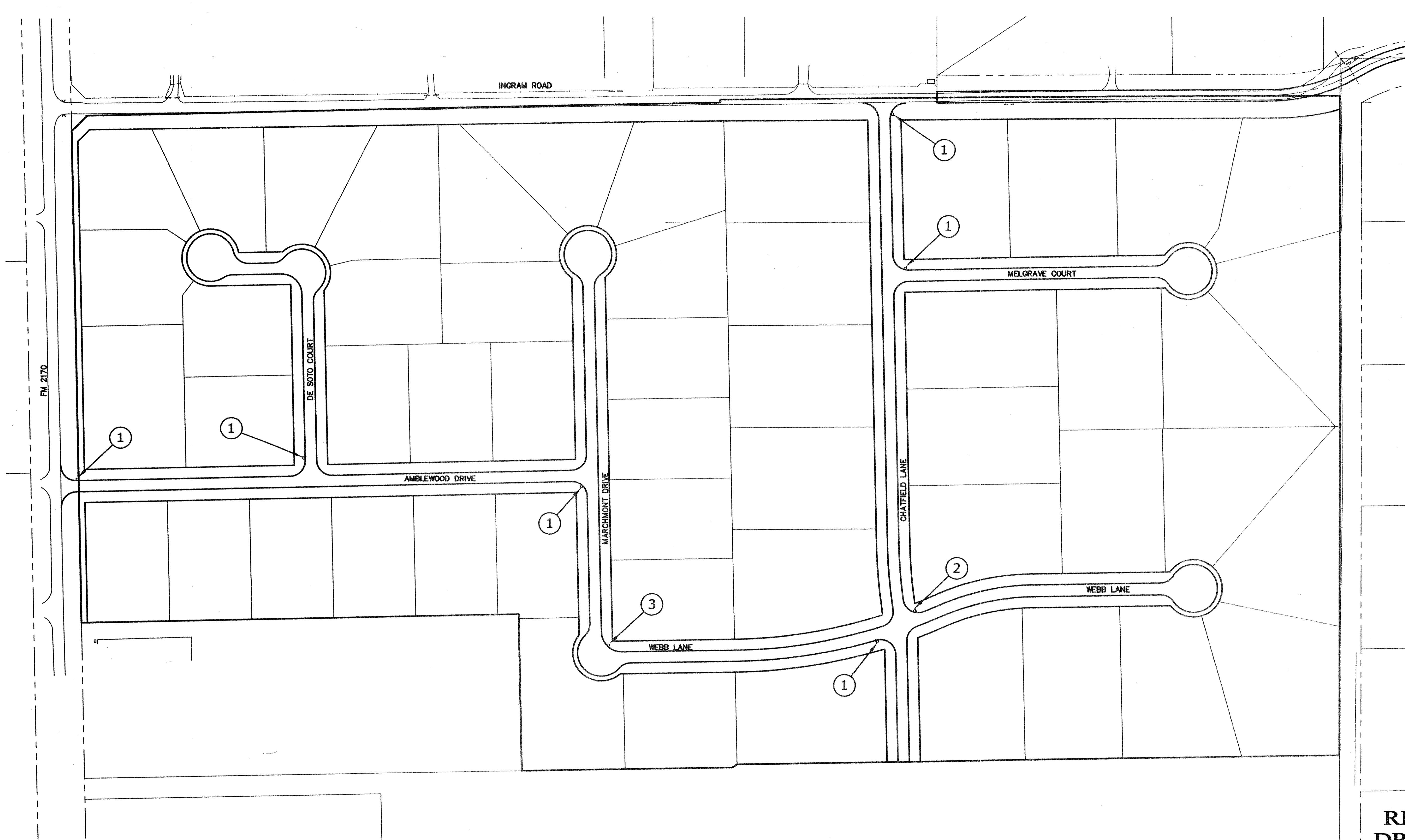


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KENNEDY CONSULTING, INC.
 808 S. COLLEGE STREET, SUITE 300
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No.	Date	Description
1	01/09/06	Added Sheet C27
REVISIONS		
Scale: NONE		
Drawn by: CAD		
Designed by: EVE		
Checked by: RBA		
Issue Date: 12-19-05		
Project No.: 05003.00		
SHEET TITLE: STANDARD DETAILS		
SHEET NUMBER: C27		

RECORD
 DRAWING



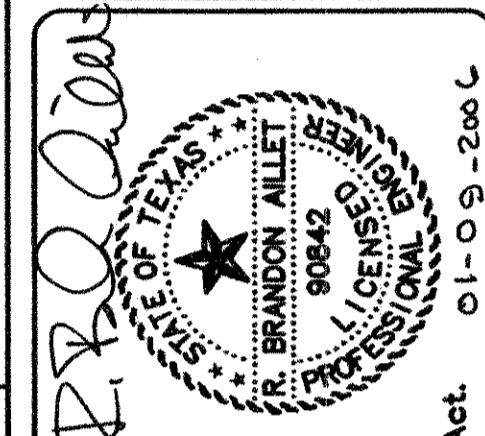
- LEGEND**
- ① PROPOSED STREET LIGHT, WITH STOP SIGN AND STREET NAME BLADES ATTACHED TO POLE
 - ② PROPOSED STOP SIGN WITH STREET NAME BLADES
 - ③ PROP. STREET NAME BLADES

NOTE:
CONTRACTOR TO ADHERE TO ALL CITY OF LUCAS STREET LIGHTING STANDARDS AS DEFINED IN THE LATEST PUBLIC WORKS SPECIFICATIONS.

RECORD DRAWING

Scale: 1" = 100'

LIGHTING & SIGNAGE PLAN
CLAREMONT SPRINGS ADDITION PHASE I
LUCAS, TEXAS



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808 S. COLLEGE STREET, SUITE 300
MCKINNEY, TEXAS 75069
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No.	Date	Description
1	01/09/06	Added Sheet

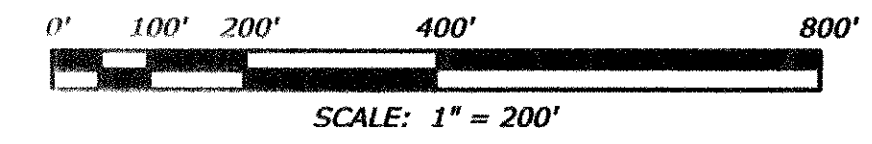
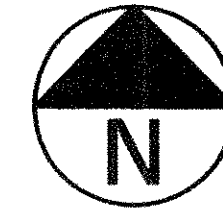
Scale: SHOWN

Drawn by: CAD
Designed by: EVE
Checked by: RBA
Issue Date: 12-19-05
Project No.: 05003.00

SHEET TITLE: LIGHTING & SIGNAGE PLAN
SHEET NUMBER: C28

BENCHMARK DATA: BM #1 - EL. 618.54 - SQUARE CUT ON HDWL, S OF 2170, 500' W OF INGRAM; BM #2 - EL. 618.44 - PK MAIL IN ASPHALT, SW CORNER OF INGRAM & 2170

TREE SURVEY TABLE



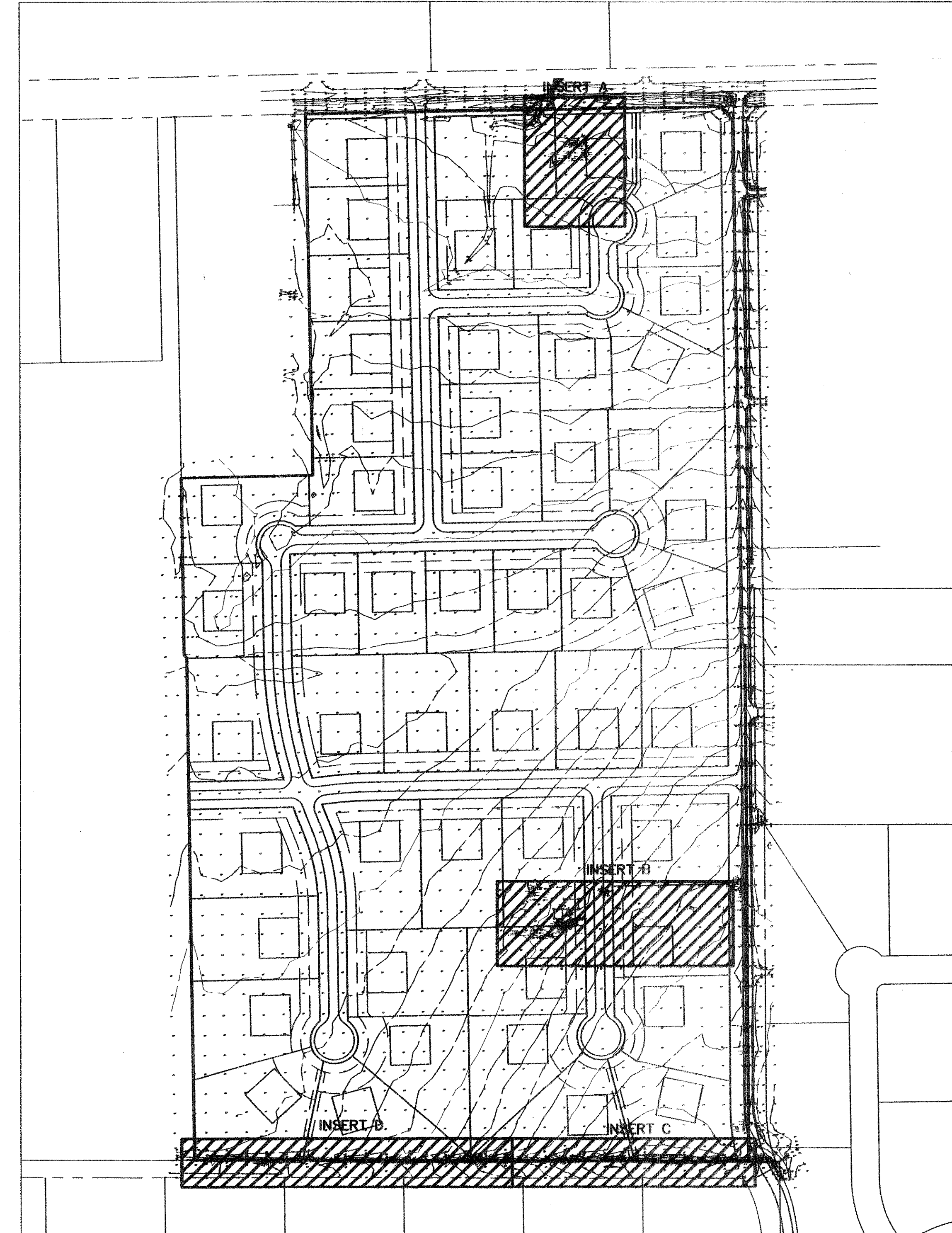
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3207	13" TREE
3208	10" TREE
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3211	7" TREE
3212	7" TREE
3213	4" TREE
3214	6" TREE
3215	6" TREE
3216	6" TREE
3217	14" TREE
3218	17" TREE
3219	17" TREE
3220	7" TREE DBL
3221	10" TREE
3222	4" TREE
3223	10" TREE
3224	16" TREE
3225	14" TREE
3226	12" TREE
3227	10" TREE
3228	9" TREE
3229	6" TREE
3230	5" TREE
3236	10" TREE
3240	6" TREE
3241	12" TREE
3242	6" TREE
3250	9" TREE
3251	5" TREE
3252	14" TREE
3256	4" TREE
3257	6" TREE
3258	4" TREE
3259	4" TREE
3260	16" TREE D
3261	4" TREE TRIP
3262	15" TREE
3263	8" TREE
3264	12" TREE
3265	7" TREE
3266	12" TREE TRIP
3267	16" TREE
3268	4" TREE
3269	5" TREE
3270	4" TREE TRIP
3271	4" TREE DBL
3272	5" TREE
3273	5" TREE
3274	5" TREE
3275	12" TREE DBL
3301	4" TREE
3304	12" TREE
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3313	30" TREE
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3315	5" TREE
3316	5" TREE
3317	4" TREE DBL
3319	5" TREE
3320	24" TREE
3324	12" TREE
3325	16" TREE
3326	8" TREE CLUSTER
3327	4" TREE
3328	5" TREE TRIP
3330	5" TREE
3331	17" TREE
3332	6" TREE DBL
3333	4" TREE

3334	7" TREE
3335	12" TREE
3336	13" TREE
3337	11" TREE
3338	4" TREE
3339	4" TREE CLUSTER
3340	12" TREE
3341	4" TREE
3342	18" TREE
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3345	12" TREE CLUSTER
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3347	42" TREE
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3353	4" TREE
3354	8" TREE CLUSTER
3355	5" TREE
3356	5" TREE CLUSTER
3357	7" TREE DBL
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3360	5" TREE DBL
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3362	4" TREE
3363	14" TREE
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3462	4" TREE
3463	4" TREE
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3473	6" TREE DBL
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3494	4" TREE
3498	4" TREE CLUSTER
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3500	18" TREE
3501	9" TREE 12" TREE
3504	13" TREE
3505	4" TREE TRIP
3506	4" TREE
3511	16" TREE

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3572	9" TREE
3573	6" TREE
3576	12" TREE
3577	4" TREE
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3623	6" TREE
3624	5" TREE
3625	8" TREE
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3633	9" TREE 6" TREE
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3653	6" TREE
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3655	4" TREE DBL

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3694	5" TREE
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3696	4" TREE
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3698	6" TREE TRIP
3699	4" TREE
3704	5" TREE
3705	5" TREE
3706	4" TREE
3707	16" TREE
3709	4" TREE
3710	6" TREE
3720	6" TREE
3723	4" TREE
3729	6" TREE
3733	4" TREE
3734	4" TREE
3736	6" TREE
3744	6" TREE
3745	13" TREE
3746	4" TREE DBL
3747	10" TREE 6" TREE
3748	5" TREE
3763	6" TREE
3764	6" TREE
3765	4" TREE
3770	4" TREE
3774	7" TREE 6" TREE
3775	7" TREE
3776	6" TREE 5" TREE
3777	4" TREE
3778	9" TREE
3783	7" TREE
3789	6" TREE
3791	10" TREE
3800	6" TREE
3812	5" TREE
3824	12" TREE 15" TREE
3825	12" TREE 6" TREE
3832	6" TREE
3834	15" TREE
3836	15" TREE 5" TREE
3836	14" TREE
3853	17" TREE
3855	10" TREE
3857	7" TREE
3862	14" TREE
3865	5" TREE
3866	4" TREE
3867	10" TREE
3868	5" TREE
3869	12" TREE 4" TREE
3874	8" TREE
3877	15" TREE TRIP
3878	12" TREE
3879	8" TREE
4014	13" TREE
4015	5" TREE
4016	8" TREE
4017	4" TREE

4031	10" TREE 8" TREE
4032	4" TREE
4033	20" TREE
4034	15" TREE
4035	12" TREE
4036	12" TREE 4" TREE
4037	8" TREE 12" TREE
4038	12" TREE
4042	12" TREE
4043	10" TREE DBL
4044	12" TREE
4045	9" TREE
4046	12" TREE 4" TREE
4047	14" TREE
4051	14" TREE
4052	12" TREE
4053	9" TREE DBL
4054	4" TREE
4055	4" TREE
4056	5" TREE
4057	20" TREE
4058	22" TREE



KEYMAP

**RECORD
DRAWING**

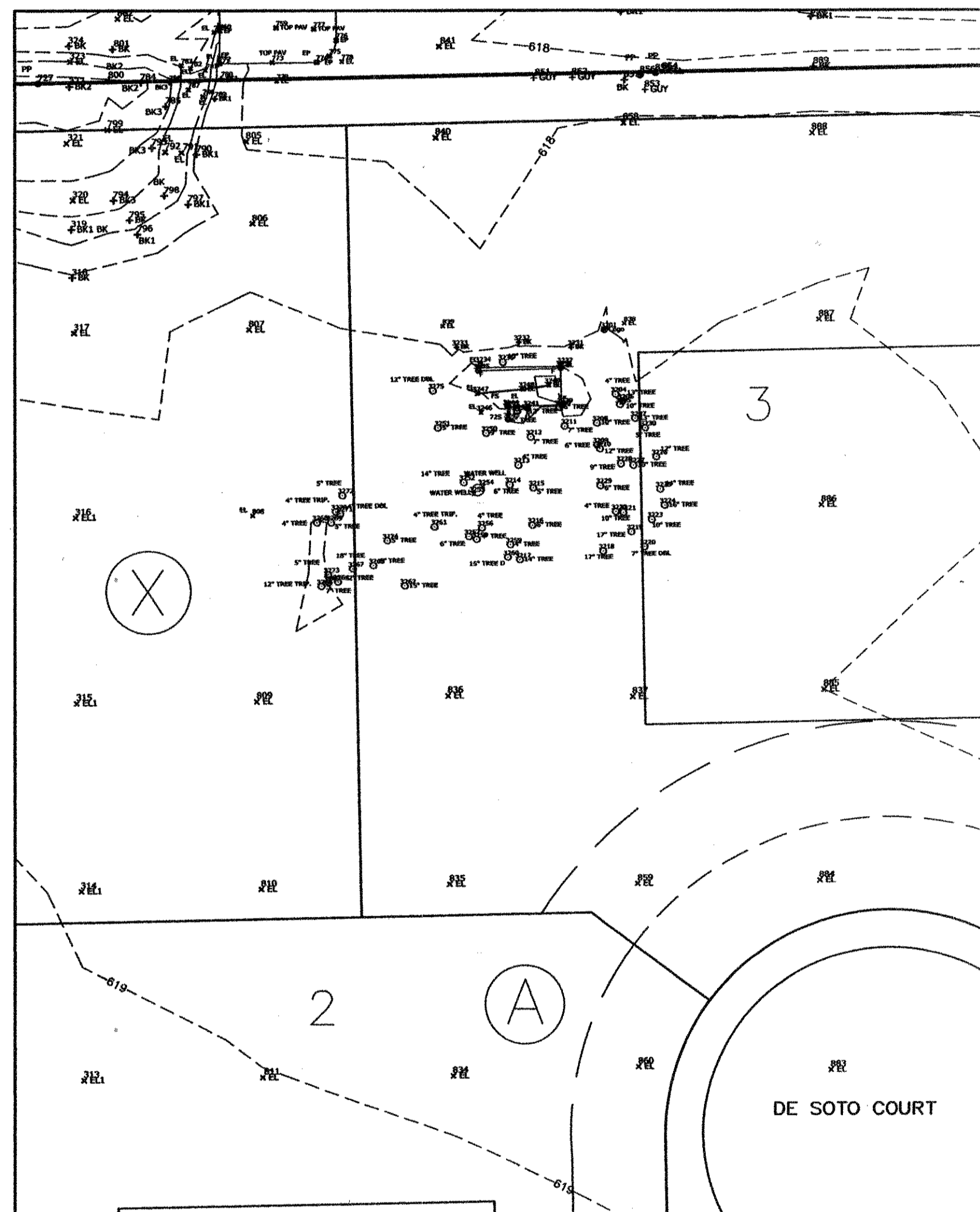
NOTE: ALL TREES LISTED ARE WITHIN OVERALL PROPERTY LIMITS.
TREES INSIDE PROPOSED R.O.W. DEDICATION ARE NOT INCLUDED.

BENCHMARK DATA: BM #1 - EL. 618.54 - SQUARE CUT ON HDWL, S OF 2170, 500' W OF INGRAM; BM #2 - EL. 618.44 - PK NAIL IN ASPHALT, SW CORNER OF INGRAM & 2170

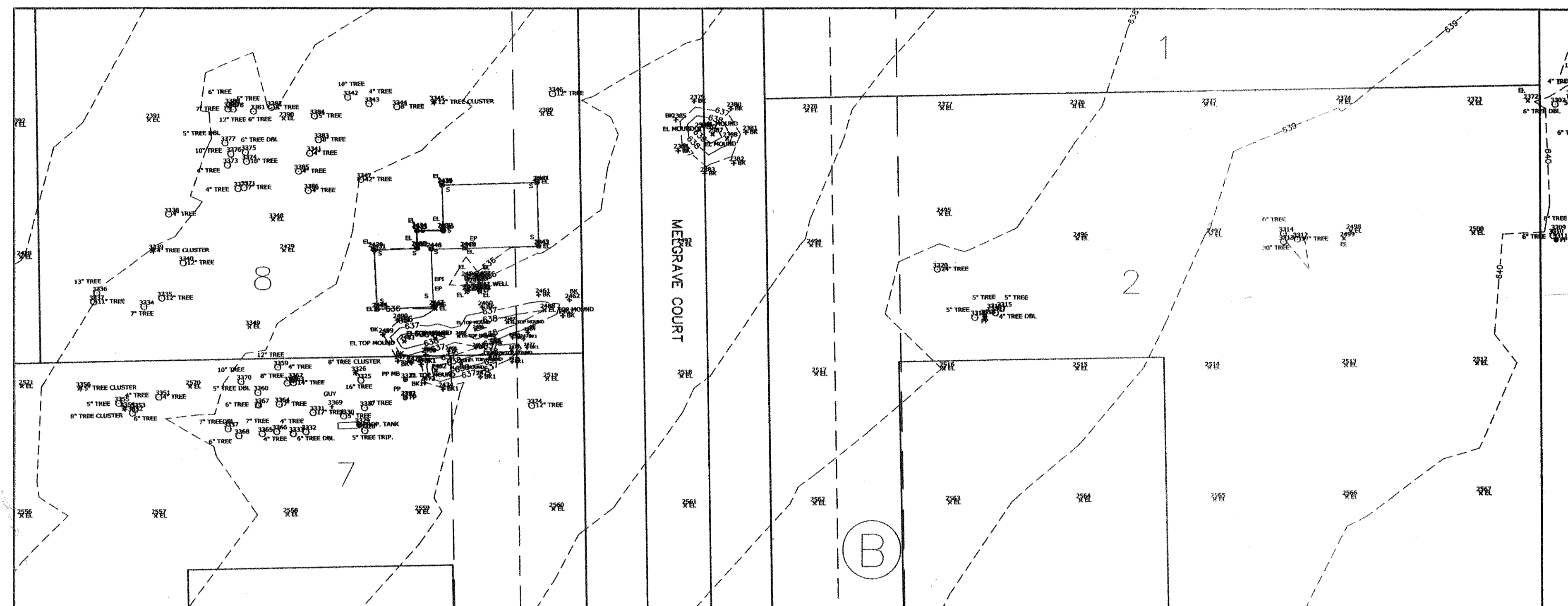
**KENNEDY
CONSULTING, INC.**
808 S. COLLEGE STREET, SUITE 300
MCKINNEY, TEXAS 75069
PH (972) 542-1754
FX (972) 529-2294

No.	Date	Description
REVISIONS		
Scale: SHOWN		
Drawn by: CAD		
Designed by: EVE		
Checked by: RBA		
Issue Date: 12-19-05		
Project No.: 05003.00		
SHEET TITLE: TREE SURVEY		
SHEET NUMBER: TS01		

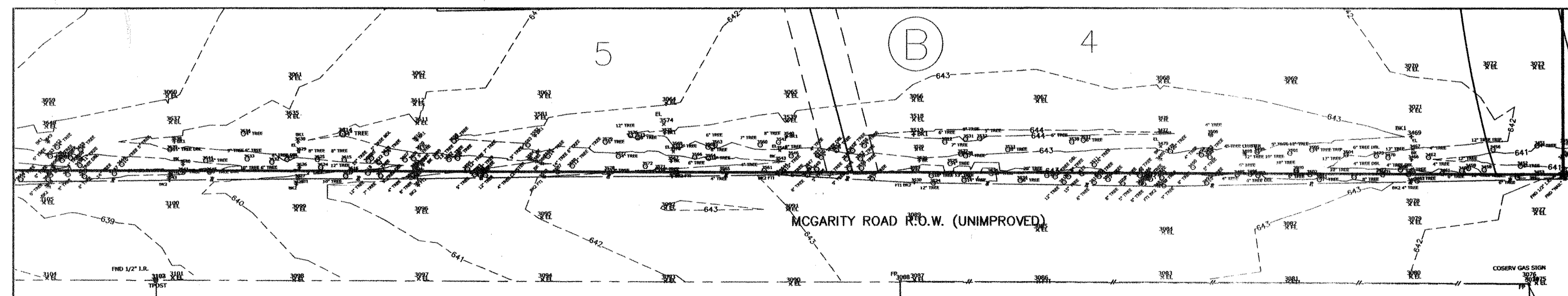
TREE SURVEY
CLAREMONT SPRINGS ADDITION PHASE I
LUCAS, TEXAS



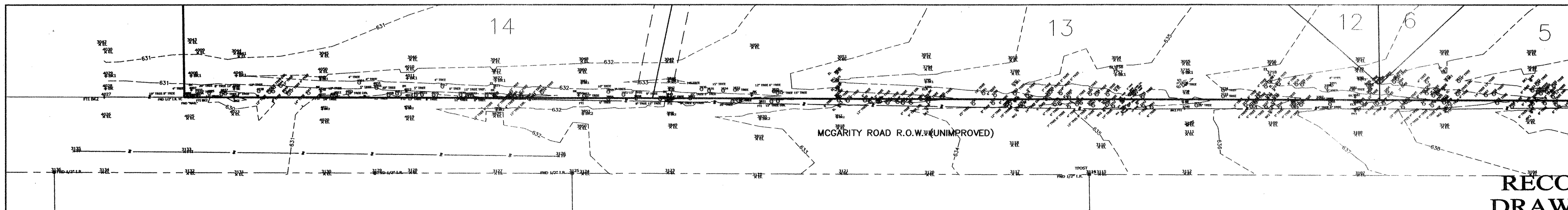
INSERT A
SCALE 1"=30'



INSERT B
SCALE 1"=30'



INSERT C
SCALE 1"=30'



INSERT D
SCALE 1"=30'

**RECORD
DRAWING**

BENCHMARK DATA: BM # 1 - EL. 618.54 - SQUARE CUT ON HDWL, S OF 2170, 500' W OF INGRAM; BM # 2 - EL. 618.44 - PK NAIL IN ASPHALT, SW CORNER OF INGRAM & 2170

No.	Date	Description
REVISIONS		

Scale: SHOWN
 Drawn by: CAD
 Designed by: EVE
 Checked by: RBA
 Issue Date: 12-19-05
 Project No.: 05003.00
 SHEET TITLE: TREE SURVEY

SHEET NUMBER:
TS02

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TREE SURVEY
 CLAREMONT SPRINGS ADDITION PHASE I
 LUCAS, TEXAS