

100% - CONSTRUCTION DOCUMENTS
FOR
RCEC OFFICE BUILDING PHASE II
LOTS 4-5 BLOCK A RAYBURN COUNTRY ADDITION 20.45 ACRES
24.96 ACRE TRACT
WILLIAM H. BARNES SURVEY, ABSTRACT NO. 26
AN ADDITION TO THE CITY OF ROCKWALL, ROCKWALL COUNTY,
TEXAS



VICINITY MAP
N.T.S.

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RECORD DRAWINGS

To the best of our knowledge Engineering Concepts & Design, L.P., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.

Todd Winters 6-13-19
TODD WINTERS DATE

CAUTION! EXISTING UTILITIES

CONTRACTOR SHOULD CALL 1-800-DIG-TESS PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES FOR EXISTING UTILITY LOCATIONS. EXISTING UTILITIES AND UNDERGROUND FACILITIES INDICATED ON THESE PLANS HAVE BEEN LOCATED FROM REFERENCE INFORMATION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY BOTH HORIZONTALLY AND VERTICALLY THE LOCATION OF ALL EXISTING UTILITIES AND UNDERGROUND FACILITIES PRIOR TO CONSTRUCTION AND TO TAKE NECESSARY PRECAUTIONS IN ORDER TO PROTECT ALL FACILITIES ENCOUNTERED. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION.

OWNER

Rayburn Country Electric
980 Sids Road
Rockwall, TX 75087
Telephone: 469.402.2100



ENGINEERING / PROJECT MANAGEMENT /
CONSTRUCTION SERVICES - FIRM REG. #F-001145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS:	
DATE:	APRIL 13, 2018
PROJECT NO.:	3560
DWG FILE NAME:	01-COVER SHEET.DWG

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF CONSTRUCTION.



OWNER'S CERTIFICATE AND DEDICATION

STATE OF TEXAS
COUNTY OF ROCKWALL

WHEREAS RAYBURN COUNTRY ELECTRIC COOPERATIVE, INC., BEING THE OWNER OF A TRACT of land in the County of Rockwall, State of Texas, said tract being described as follows:

BEING a 20.415 acre tract of land situated in the William H. Barnes Survey, Abstract No. 26, City of Rockwall, Rockwall County, Texas and being all of Lots 4 and Lot 5, Rayburn Country Addition, an addition to the City of Rockwall, as recorded in Cabinet _____ Slide _____, Plat Records, Rockwall County, Texas, said 20.415 acre tract being more particularly described by metes and bounds as follows:

BEGINNING at a 5/8-inch iron rod with yellow cap stamped "RPLS 3963" set for the northerly west corner of Lot 5 of said Rayburn Country Addition, said corner being in the northeast boundary line of a 1.50 acre tract of land described in deed to Richard E. Slaughter, Jr., as recorded in Volume 1531, Page 145 of said Deed Records and in the southeast right-of-way line of Sids Road, a 52.5 ft. right-of-way at this point;

THENCE North 44 degrees 03 minutes 02 seconds East, with the common line of said Rayburn Country Addition and said Sids Road, a distance of 1166.34 feet to an "X" set for the north corner of Lot 4 of said Rayburn Country Addition;

THENCE South 46 degrees 15 minutes 45 seconds East, passing the west corner of Lot 1, Block 1, Shrigley Addition, an addition to the City of Rockwall, as recorded in Cabinet C, Slide 367 of said Plat Records and continuing with the common line of said Shrigley Addition and said Lot 4 and said Lot 5, a total distance of 338.73 feet to a 1/2-inch iron rod found at the south corner of said Shrigley Addition and the southerly west corner of Lot 6 of said Rayburn Country Addition;

THENCE South 46 degrees 15 minutes 06 seconds East, with the common boundary of said Lot 5 and said Lot 6, a distance of 166.80 feet to a 5/8-inch iron rod with yellow cap stamped "RPLS 3963" set for a common corner thereof, from which a 1/2-inch iron rod with cap stamped "RSCI" found for reference bears North 21 degrees 16 minutes 49 seconds West, a distance of 0.41 feet;

THENCE South 18 degrees 50 minutes 25 seconds East, continuing with the common boundary of said Lot 5 and said Lot 6, a distance of 543.59 feet to a 5/8-inch iron rod with yellow cap stamped "RPLS 3963" set for the common south corner thereof, said corner being in the north boundary line of a 63.72 acre tract of land described in deed to Vincent J. Staglianilo, recorded in Volume 3484, Page 277 of said Deed Records;

THENCE Southwesterly, with the common boundary lines of said Lot 5 and said 63.72 acre tract, the following courses:

South 71 degrees 07 minutes 55 seconds West, a distance of 895.13 feet to a point for corner from which a 1/2-inch iron rod found for reference, bears South 60 degrees 54 minutes 11 seconds East, a distance of 0.21 feet;

South 79 degrees 16 minutes 39 seconds West, a distance of 276.11 feet to a 1/2-inch iron rod found for corner;

North 43 degrees 25 minutes 10 seconds West, a distance of 85.04 feet to a 1/2-inch iron rod found for corner in the southeast line of the aforementioned 1.50 acre tract at the southerly most western corner of said Lot 5;

THENCE North 44 degrees 22 minutes 56 seconds East, with the common line of said 1.50 acre tract and said Lot 5, a distance of 99.61 feet to a 3/8-inch iron rod found for the east corner of said 1.50 acre tract and an ell corner of said Lot 5;

THENCE North 46 degrees 14 minutes 22 seconds West, with the common line of said 1.50 acre tract and said Lot 5, a distance of 338.24 feet to the POINT OF BEGINNING AND CONTAINING 889,296 square feet or 20.415 acres of land.

NOW, THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

I (we) the undersigned owner(s) of the land shown on this plat, and designated herein as the RAYBURN COUNTRY ADDITION, LOTS 4-7, BLOCK A, to the City of Rockwall, Texas, and whose name is subscribed hereto, hereby dedicate to the use of the public forever all streets, alleys, parks, water courses, drains, easements and public places thereon shown on the purpose and consideration therein expressed. I (we) further certify that all other parties who have a mortgage or lien interest in the RAYBURN COUNTRY ADDITION, LOTS 4-7, BLOCK A have been notified and signed this plat. I (we) understand and do hereby reserve the easement strips shown on this plat for the purposes stated and for the mutual use and accommodation of all utilities desiring to use or using same. I (we) also understand the following:

- No buildings shall be constructed or placed upon, over, or across the utility easements as described herein.
- Any public utility shall have the right to remove and keep removed all or part of any buildings, fences, trees, shrubs, or other growths or improvements which in any way endanger or interfere with construction, maintenance or efficiency of their respective system on any of these easement strips; and any public utility shall at all times have the right of ingress or egress to, from and across, upon the said easement strips for purpose of construction, reconstruction, inspecting, patrolling, maintaining, and either adding to or removing all or part of their respective system without the necessity of, at any time, procuring the permission of anyone.
- The City of Rockwall will not be responsible for any claims of any nature resulting from or occasioned by the establishment of grade of streets in the subdivision.
- The developer and subdivision engineer shall bear total responsibility for storm drain improvements.
- The developer shall be responsible for the necessary facilities to provide drainage patterns and drainage controls such that properties within the drainage area are not adversely affected by storm drainage from the development.
- No house dwelling unit, or other structure shall be constructed on any lot in this addition by the owner or any other person until the developer and/or owner has complied with all requirements of the Subdivision Regulations of the City of Rockwall regarding improvements with respect to the entire block on the street or streets on which property abuts, including the actual installation of streets with the required base and paving, curb and gutter, water and sewer, drainage structures, storm structures, storm sewers, and alleys, all according to the specifications of the City of Rockwall; or

Until an escrow deposit, sufficient to pay for the cost of such improvements, as determined by the city's engineer and/or city administrator, computed on a private commercial rate basis, has been made with the city secretary, accompanied by an agreement signed by the developer and/or owner, authorizing the city to make such improvements at prevailing private commercial rates, or have the same made by a contractor and pay for the same out of the escrow deposit, should the developer and/or owner fail or refuse to install the required improvements within the time stated in such written agreement, but in no case shall the City be obligated to make such improvements itself. Such deposit may be used by the owner and/or developer as progress payments as the work progresses in making such improvements by making certified requisitions to the city secretary, supported by evidence of work done; or

Until the developer and/or owner files a corporate surety bond with the city secretary in a sum equal to the cost of such improvements for the designated area, guaranteeing the installation thereof within the time stated in the bond, which time shall be fixed by the city council of the City of Rockwall.

I (we) further acknowledge that the dedications and/or exaction's made herein are proportional to the impact of the Subdivision upon the public services required in order that the development will comport with the present and future growth needs of the City; I (we), my (our) successors and assigns hereby waive any claim, damage, or cause of action that I (we) may have as a result of the dedication of exactions made herein.

FOR: RAYBURN COUNTRY ELECTRIC COOPERATIVE, INC.

BY: _____

STATE OF TEXAS
COUNTY OF ROCKWALL

Before me, the undersigned authority, 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 purpose and consideration therein stated.

Given under my hand and seal of office this ____ day of _____, 2018.

Notary Public in and for the State of Texas
My Commission Expires: _____

SURVEYOR'S CERTIFICATE

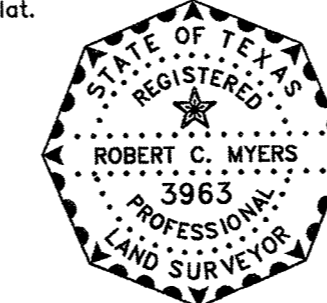
NOW, THEREFORE KNOW ALL MEN BY THESE PRESENTS:

That I, Robert C. Myers, do hereby certify that this plat was prepared under my supervision, from an actual and accurate survey of the land, and that the corner monuments shown thereon were properly placed under my personal supervision.

GIVEN UNDER MY SEAL OF OFFICE THIS THE ____ DAY OF _____, 2018.

Preliminary, this document shall not be recorded for any purpose and shall not be used or relied upon as a final survey document. This replat is released on March 23, 2018 for review by the City of Rockwall and other parties for comments and progression to an approved replat.

ROBERT C. MYERS
REGISTERED PROFESSIONAL LAND SURVEYOR
STATE OF TEXAS NO. 3963



STATE OF TEXAS
COUNTY OF COLLIN

BEFORE ME, the undersigned authority, on this date personally appeared Robert C. Myers, 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 stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS ____ DAY OF _____, 2018.

NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS
MY COMMISSION EXPIRES: 02/14/2015

STANDARD CITY SIGNATURE BLOCK

Planning & Zoning Commission, Chairman _____ Date _____

APPROVED:
I hereby certify that the above and foregoing plat of an addition to the City of Rockwall, Texas, was approved by the City Council of the City of Rockwall on the ____ day of _____, 2018.

This approval shall be invalid unless the approved plat for such addition is recorded in the office of the County Clerk of Rockwall, County, Texas, within one hundred eighty (180) days from said date of final approval.

WITNESS OUR HANDS, this ____ day of _____, 2018.

Mayor, City of Rockwall _____ City Secretary _____ City Engineer _____

GENERAL NOTES:

- It shall be the policy of the City of Rockwall to withhold issuing building permits until all streets, water, sewer and storm drainage systems have been accepted by the City. The approval of a plat by the City does not constitute any representation, assurance or guarantee that any building within such plat shall be approved, authorized or permit therefore issued, nor shall such approval constitute any representation, assurance or guarantee by the City of the adequacy and availability for water for personal use and fire protection within such plat, as required under Ordinance 8354.
- Bearings and state plane coordinates are based on Texas State Plane Coordinates. Projection: State Plane NAD83 Texas North Central Zone 4202, Lambert Conformal Conic, Feet (TX83-NGF).
- By graphical plotting, part of the parcel described hereon lies within a Special Flood Hazard Area (SFHA) Zone "AE" as delineated on the Rockwall County, Texas and Incorporated Areas, Flood Insurance Rate Map, Map Number 4839C00A0L, dated September 26, 2008, as published by the Federal Emergency Management Agency. The Surveyor utilized the above referenced floodplain information for this determination and the Surveyor does not certify that revised floodplain information has or has not been published by the Federal Emergency Management Agency or some other source. This statement shall not create liability on the part of the surveyor.
- Unless otherwise noted, a 5/8" iron rod with a yellow cap stamped "RPLS 3963" was set at all lot corners.
- The floodplain section elevations and locations shown on this plat were provided by the City of Rockwall.
- Property owner is responsible for on-site drainage, maintenance, repair and replacement.
- The purpose of this replat is to add additional easements and to remove all or parts of easements necessary after the relocation of improvements.

REPLAT

RAYBURN COUNTRY ADDITION
LOTS 4-5, BLOCK A

BEING

20.415 ACRES

SITUATED IN THE

WILLIAM H. BARNES SURVEY, A-26
CITY OF ROCKWALL,
ROCKWALL COUNTY, TEXAS

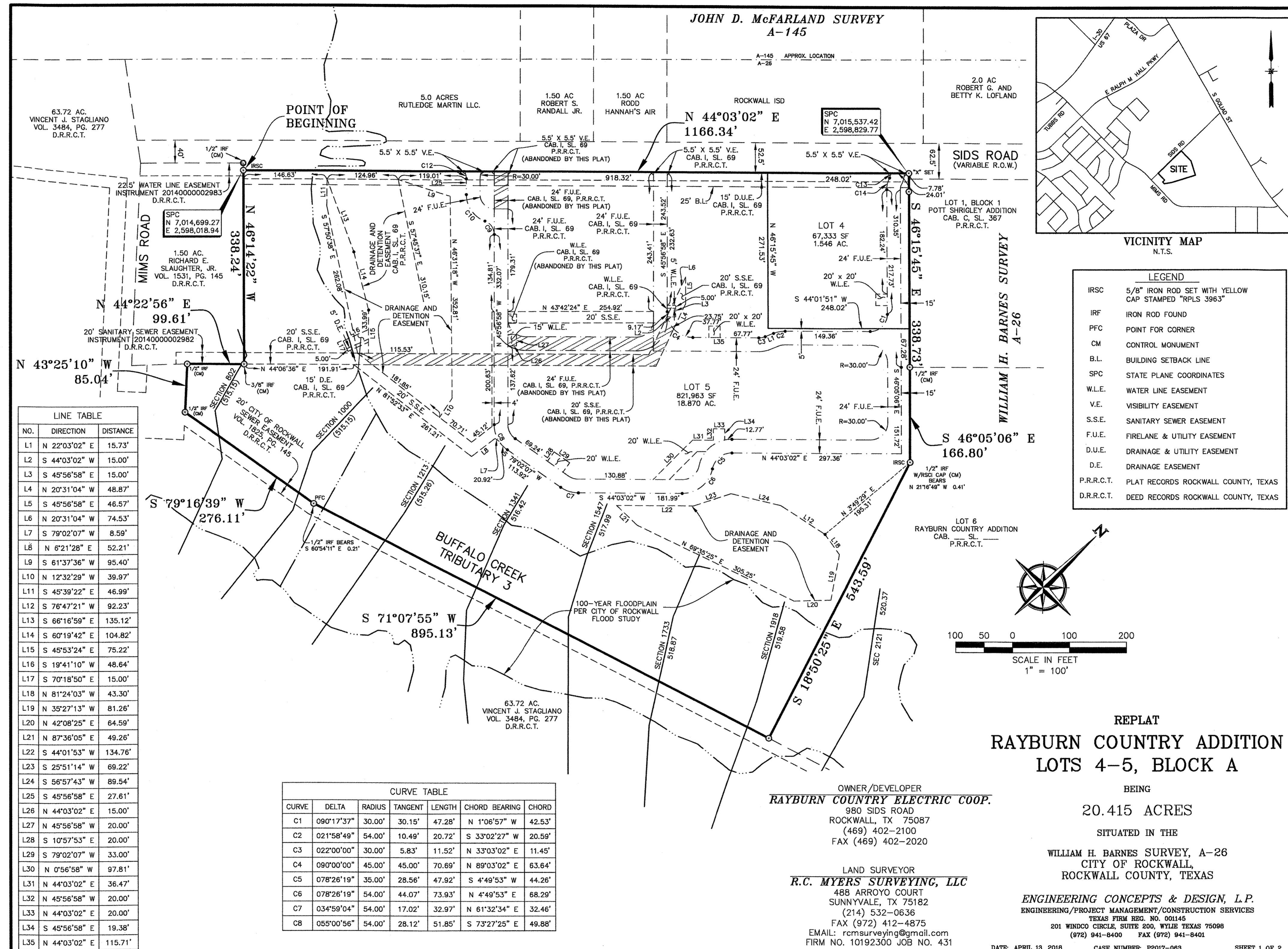
ENGINEERING CONCEPTS & DESIGN, L.P.
ENGINEERING/PROJECT MANAGEMENT/CONSTRUCTION SERVICES
TEXAS FIRM REG. NO. 001145
201 WINDCO CIRCLE, SUITE 200, WYLE TEXAS 75098
(972) 941-8400 FAX (972) 941-8401

DATE: APRIL 13, 2018

CASE NUMBER: P2017-063

SHEET 2 OF 2

03560\DWG\3560 Replat 4-5.dwg



LINE TABLE

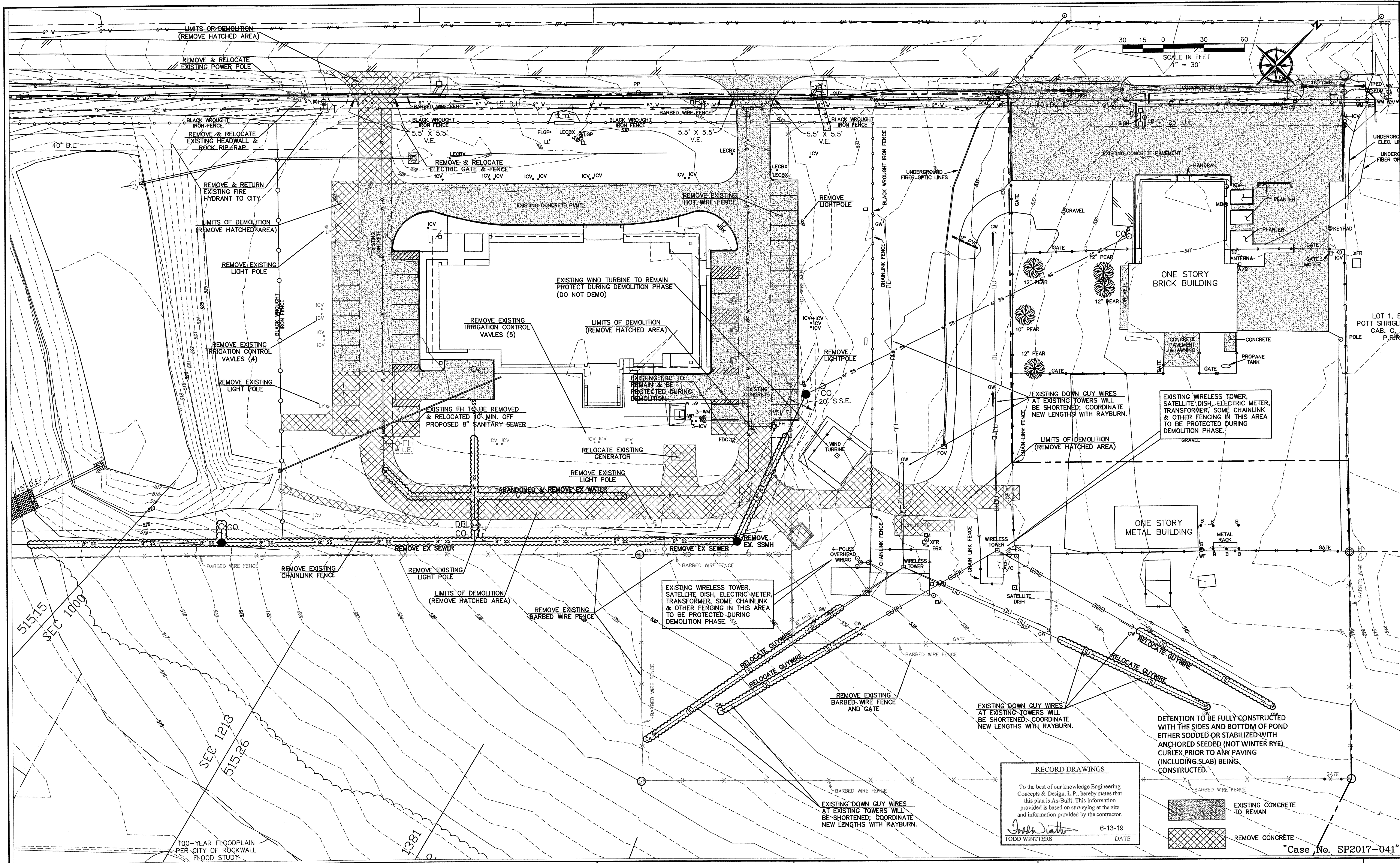
NO.	DIRECTION	DISTANCE
L1	N 22°03'02" E	15.73'
L2	S 44°03'02" W	15.00'
L3	S 45°56'58" E	15.00'
L4	N 20°31'04" W	48.87'
L5	S 45°56'58" E	46.57'
L6	N 20°31'04" W	74.53'
L7	S 79°02'07" W	8.59'
L8	N 6°21'28" E	52.21'
L9	S 61°37'36" W	95.40'
L10	N 12°32'29" W	39.97'
L11	S 45°39'22" E	46.99'
L12	S 76°47'21" W	92.23'
L13	S 66°16'59" E	135.12'
L14	S 60°19'42" E	104.82'
L15	S 45°53'24" E	75.22'
L16	S 19°41'10" W	48.64'
L17	S 70°18'50" E	15.00'
L18	N 81°24'03" W	43.30'
L19	N 35°27'13" W	81.26'
L20	N 42°08'25" E	64.59'
L21	N 87°36'05" E	49.26'
L22	S 44°01'53" W	134.76'
L23	S 25°51'14" W	69.22'
L24	S 56°57'43" W	89.54'
L25	S 45°56'58" E	27.61'
L26	N 44°03'02" E	15.00'
L27	N 45°56'58" W	20.00'
L28	S 10°57'53" E	20.00'
L29	S 79°02'07" W	33.00'
L30	N 0°56'58" W	97.81'
L31	N 44°03'02" E	36.47'
L32	N 45°56'58" W	20.00'
L33	N 44°03'02" E	20.00'
L34	S 45°56'58" E	19.38'
L35	N 44°03'02" E	115.71'

CURVE TABLE

CURVE	DELTA	RADIUS	TANGENT	LENGTH	CHORD BEARING	CHORD
C1	090°17'37"	30.00'	30.15'	47.28'	N 1°06'57" W	42.53'
C2	021°58'49"	54.00'	10.49'	20.72'	S 33°02'27" W	20.59'
C3	022°00'00"	30.00'	5.83'	11.52'	N 33°03'02" E	11.45'
C4	090°00'00"	45.00'	45.00'	70.69'	N 89°03'02" E	63.64'
C5	078°26'19"	35.00'	28.56'	47.92'	S 4°49'53" W	44.26'
C6	078°26'19"	54.00'	44.07'	73.93'	N 4°49'53" E	88.29'
C7	034°59'04"	54.00'	17.02'	32.97'	N 61°32'34" E	32.46'
C8	055°00'56"	54.00'	28.12'	51.85'	S 73°27'25" E	49.88'

LEGEND

- IRSC 5/8" IRON ROD SET WITH YELLOW CAP STAMPED "RPLS 3963"
- IRF IRON ROD FOUND
- PFC POINT FOR CORNER
- CM CONTROL MONUMENT
- B.L. BUILDING SETBACK LINE
- SPC STATE PLANE COORDINATES
- W.L.E. WATER LINE EASEMENT
- V.E. VISIBILITY EASEMENT
- S.S.E. SANITARY SEWER EASEMENT
- F.U.E. FIRELANE & UTILITY EASEMENT
- D.U.E. DRAINAGE & UTILITY EASEMENT
- D.E. DRAINAGE EASEMENT
- P.R.R.C.T. PLAT RECORDS ROCKWALL COUNTY, TEXAS
- D.R.R.C.T. DEED RECORDS ROCKWALL COUNTY, TEXAS



RECORD DRAWINGS
 To the best of our knowledge Engineering Concepts & Design, L.P., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.
Todd Winters 6-13-19
 TODD WINTERS DATE

EXISTING CONCRETE TO REMAIN
 REMOVE CONCRETE

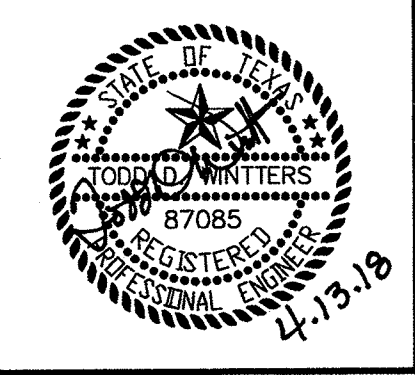
DETENTION TO BE FULLY CONSTRUCTED WITH THE SIDES AND BOTTOM OF POND EITHER SODDED OR STABILIZED WITH ANCHORED SEED (NOT WINTER RYE) CURLEX PRIOR TO ANY PAVING (INCLUDING SLAB) BEING CONSTRUCTED.

BENCHMARK:
 "X" CUT IN CURB 23'± SOUTH OF EAST DRIVE APPROACH OF EXISTING RAYBURN COUNTRY ELECTRIC BUILDING.

ENGINEERINGCONCEPTS & DESIGN, L.P.
 ENGINEERING / PROJECT MANAGEMENT / CONSTRUCTION SERVICES - FIRM REG. #F-001145
 201 WINDCO CIR, STE 200, WYLIE, TX 75098
 972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS:	
DRAWN: TONY	DATE: APRIL 13, 2018
CHECKED: TW	DATE: APRIL 13, 2018
PROJECT NO: 3560	
DWG FILE NAME:	

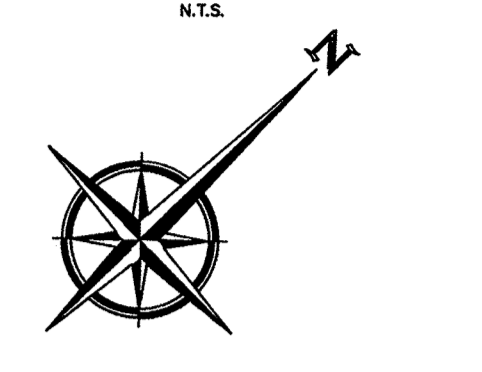
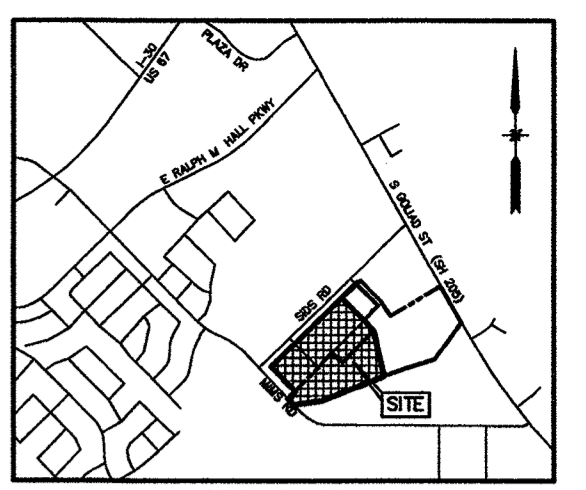
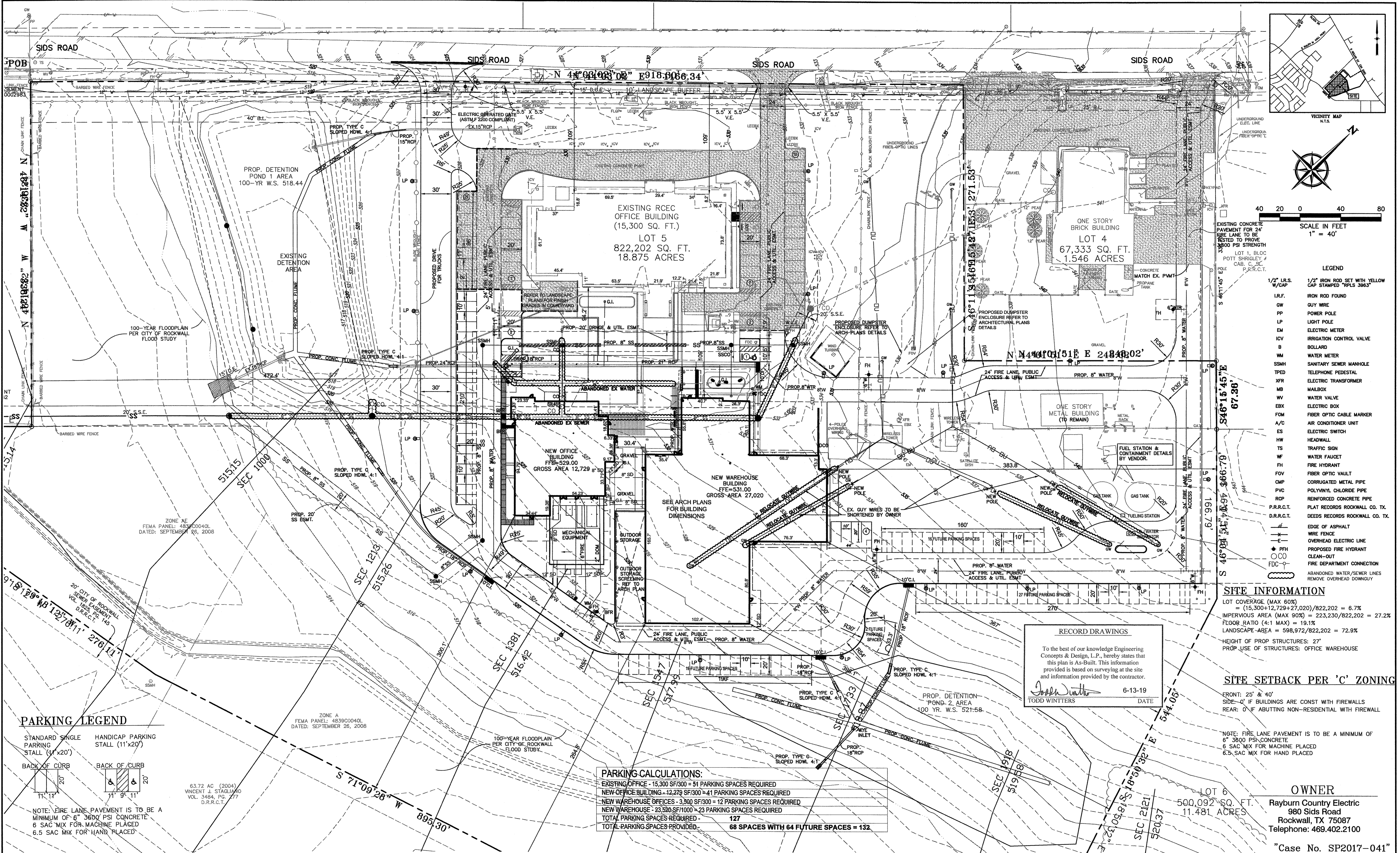
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DEMOLITION PLAN
RAYBURN ELECTRIC COOP. PHASE 2
LOT 5, BLK 1 RAYBURN COUNTRY ADDITION
 CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

SHEET **03**
 OF **20**

"Case No. SP2017-041"



SCALE IN FEET
1" = 40'

- LEGEND**
- 1/2" I.R.S. W/CAP 1/2" IRON ROD SET WITH YELLOW CAP STAMPED "RPLS 3885"
 - I.R.F. IRON ROD FOUND
 - GW GUY WIRE
 - PP POWER POLE
 - LP LIGHT POLE
 - EM ELECTRIC METER
 - ICV IRRIGATION CONTROL VALVE
 - B BOLLARD
 - WM WATER METER
 - SSMH SANITARY SEWER MANHOLE
 - TPED TELEPHONE PEDESTAL
 - XFR ELECTRIC TRANSFORMER
 - MB MAILBOX
 - WV WATER VALVE
 - EBX ELECTRIC BOX
 - FOM FIBER OPTIC CABLE MARKER
 - A/C AIR CONDITIONER UNIT
 - ES ELECTRIC SWITCH
 - HW HEADWALL
 - TS TRAFFIC SIGN
 - WF WATER FAUCET
 - FH FIRE HYDRANT
 - FOV FIBER OPTIC VAULT
 - CMP CORRUGATED METAL PIPE
 - PVC POLYVINYL CHLORIDE PIPE
 - RCP REINFORCED CONCRETE PIPE
 - P.R.R.C.T. PLAT RECORDS ROCKWALL CO. TX.
 - D.R.R.C.T. DEEDS RECORDS ROCKWALL CO. TX.
 - EDGE OF ASPHALT
 - WIRE FENCE
 - OVERHEAD ELECTRIC LINE
 - PROPOSED FIRE HYDRANT
 - CLEAN-OUT
 - FIRE DEPARTMENT CONNECTION
 - ABANDONED WATER/SEWER LINES REMOVE OVERHEAD DOWNGUY

SITE INFORMATION

LOT COVERAGE (MAX 60%)
= (15,300+12,729+27,020)/822,202 = 6.7%

IMPERVIOUS AREA (MAX 90%) = 223,230/822,202 = 27.2%

FLOOR RATIO (4:1 MAX) = 19.1%

LANDSCAPE AREA = 598,972/822,202 = 72.9%

HEIGHT OF PROP. STRUCTURES: 27'

PROP. USE OF STRUCTURES: OFFICE WAREHOUSE

SITE SETBACK PER 'C' ZONING

FRONT: 25' & 40'

SIDE: 0' IF BUILDINGS ARE CONST WITH FIREWALLS

REAR: 0' IF ABUTTING NON-RESIDENTIAL WITH FIREWALL

NOTE: FIRE LANE PAVEMENT IS TO BE A MINIMUM OF 6" 3800 PSI CONCRETE
6 SAC MIX FOR MACHINE PLACED
6.5 SAC MIX FOR HAND PLACED

OWNER

Rayburn Country Electric
980 Sids Road
Rockwall, TX 75087
Telephone: 469.402.2100

RECORD DRAWINGS

To the best of our knowledge Engineering Concepts & Design, L.P., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.

Todd Winters 6-13-19
TODD WINTERS DATE

PARKING CALCULATIONS:

EXISTING OFFICE - 15,300 SF/300 = 51 PARKING SPACES REQUIRED
NEW OFFICE BUILDING - 12,729 SF/300 = 41 PARKING SPACES REQUIRED
NEW WAREHOUSE OFFICES - 3,800 SF/300 = 12 PARKING SPACES REQUIRED
NEW WAREHOUSE - 23,520 SF/1000 = 23 PARKING SPACES REQUIRED
TOTAL PARKING SPACES REQUIRED - 127
TOTAL PARKING SPACES PROVIDED - 68 SPACES WITH 64 FUTURE SPACES = 132

PARKING LEGEND

STANDARD SINGLE PARKING STALL (11'x20')

HANDICAP PARKING STALL (11'x20')

BACK OF CURB

NOTE: FIRE LANE PAVEMENT IS TO BE A MINIMUM OF 6" 3800 PSI CONCRETE
6 SAC MIX FOR MACHINE PLACED
6.5 SAC MIX FOR HAND PLACED

BENCHMARK:
"X" CUT IN CURB 23'± SOUTH OF EAST DRIVE APPROACH OF EXISTING RAYBURN COUNTRY ELECTRIC BUILDING.

ENGINEERINGCONCEPTS & DESIGN, L.P.

ENGINEERING / PROJECT MANAGEMENT / CONSTRUCTION SERVICES - FIRM REG. #F-00145
201 WINDCO CIR. STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS:

DRAWN: TONY	DATE: APRIL 13, 2018
CHECKED: JW	DATE: APRIL 13, 2018
PROJECT NO.: 3560	
DWG FILE NAME:	

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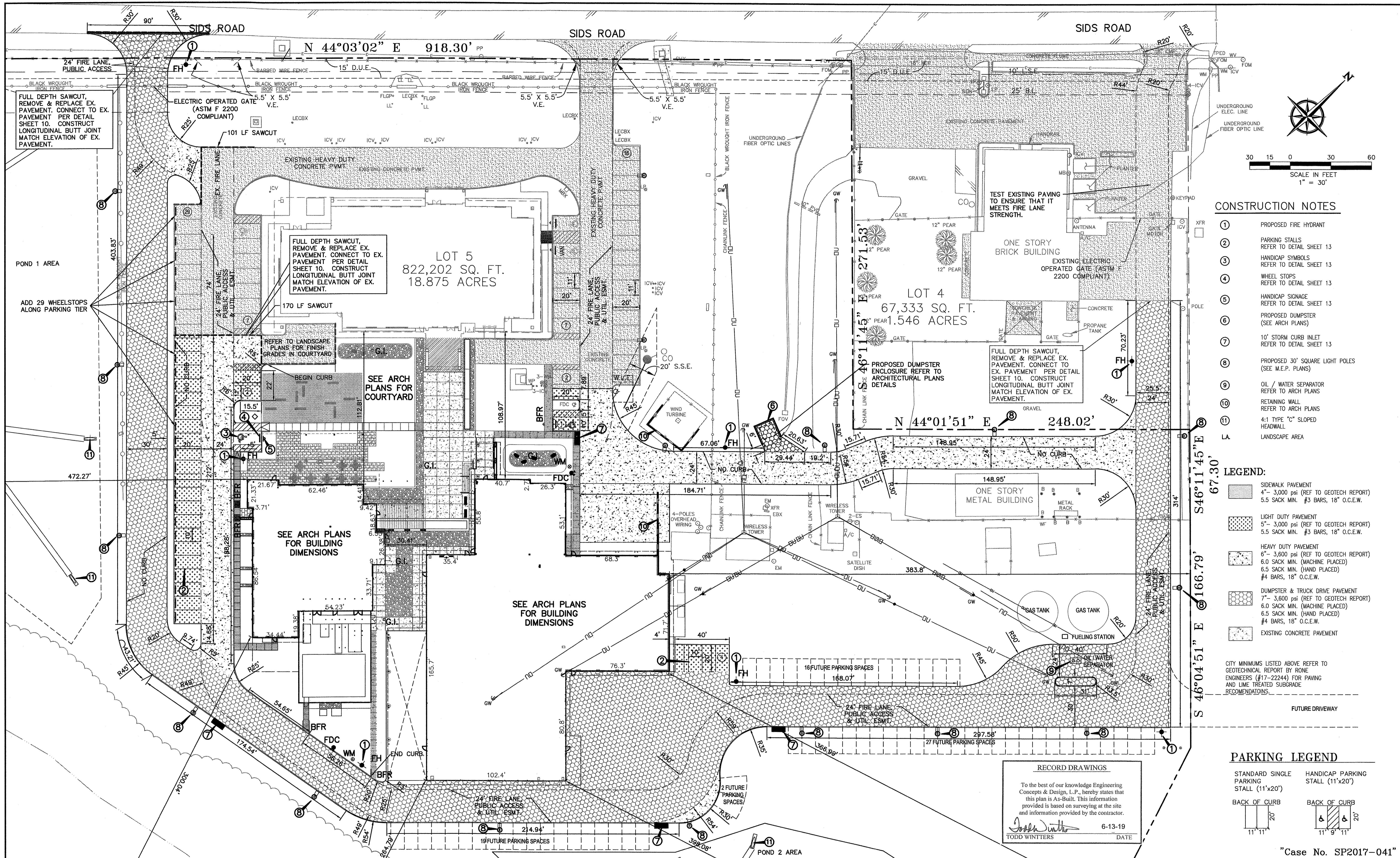


SITE PLAN

RAYBURN ELECTRIC COOP. PHASE 2
LOT 5, BLK 1 RAYBURN COUNTRY ADDITION
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

SHEET
04
OF
20

"Case No. SP2017-041"



CONSTRUCTION NOTES

- ① PROPOSED FIRE HYDRANT
- ② PARKING STALLS
REFER TO DETAIL SHEET 13
- ③ HANDICAP SYMBOLS
REFER TO DETAIL SHEET 13
- ④ WHEEL STOPS
REFER TO DETAIL SHEET 13
- ⑤ HANDICAP SIGNAGE
REFER TO DETAIL SHEET 13
- ⑥ PROPOSED DUMPSTER
(SEE ARCH PLANS)
- ⑦ 10' STORM CURB INLET
REFER TO DETAIL SHEET 13
- ⑧ PROPOSED 30" SQUARE LIGHT POLES
(SEE M.E.P. PLANS)
- ⑨ OIL / WATER SEPARATOR
REFER TO ARCH PLANS
- ⑩ RETAINING WALL
REFER TO ARCH PLANS
- ⑪ 4:1 TYPE "C" SLOPED HEADWALL
- L.A. LANDSCAPE AREA

LEGEND:

- SIDEWALK PAVEMENT
4" - 3,000 psi (REF TO GEOTECH REPORT)
5.5 SACK MIN. #3 BARS, 18" O.C.E.W.
 - LIGHT DUTY PAVEMENT
5" - 3,000 psi (REF TO GEOTECH REPORT)
5.5 SACK MIN. #3 BARS, 18" O.C.E.W.
 - HEAVY DUTY PAVEMENT
6" - 3,600 psi (REF TO GEOTECH REPORT)
6.0 SACK MIN. (MACHINE PLACED)
6.5 SACK MIN. (HAND PLACED)
#4 BARS, 18" O.C.E.W.
 - DUMPSTER & TRUCK DRIVE PAVEMENT
7" - 3,600 psi (REF TO GEOTECH REPORT)
6.0 SACK MIN. (MACHINE PLACED)
6.5 SACK MIN. (HAND PLACED)
#4 BARS, 18" O.C.E.W.
 - EXISTING CONCRETE PAVEMENT
- CITY MINIMUMS LISTED ABOVE REFER TO GEOTECHNICAL REPORT BY RONE ENGINEERS (#17-2224) FOR PAVING AND LIME TREATED SUBGRADE RECOMMENDATIONS.

PARKING LEGEND

- STANDARD SINGLE PARKING STALL (11'x20')
- HANDICAP PARKING STALL (11'x20')
- BACK OF CURB (11" x 11")
- BACK OF CURB (11" x 9" x 11")

RECORD DRAWINGS
To the best of our knowledge Engineering Concepts & Design, L.P., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.
Todd Winters
TODD WINTERS
REGISTERED PROFESSIONAL ENGINEER
87085
4-13-19
DATE

"Case No. SP2017-041"

BENCHMARK:
"X" CUT IN CURB 23'± SOUTH OF EAST DRIVE APPROACH OF EXISTING RAYBURN COUNTRY ELECTRIC BUILDING.



ENGINEERING / PROJECT MANAGEMENT / CONSTRUCTION SERVICES - FIRM REG. #F-001145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
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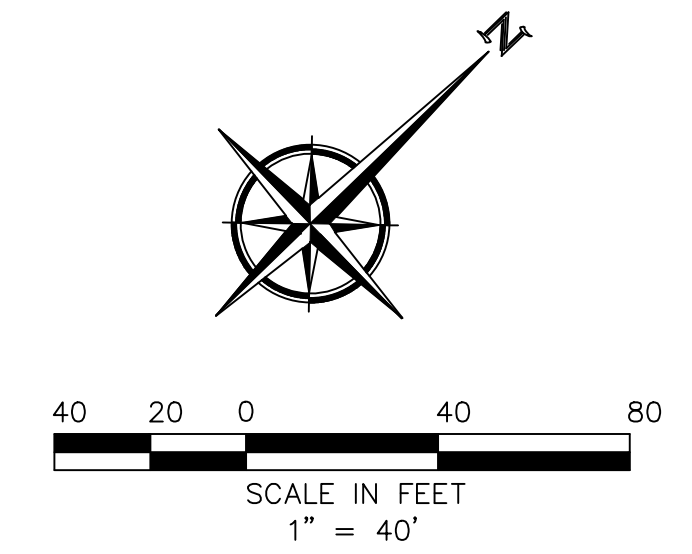
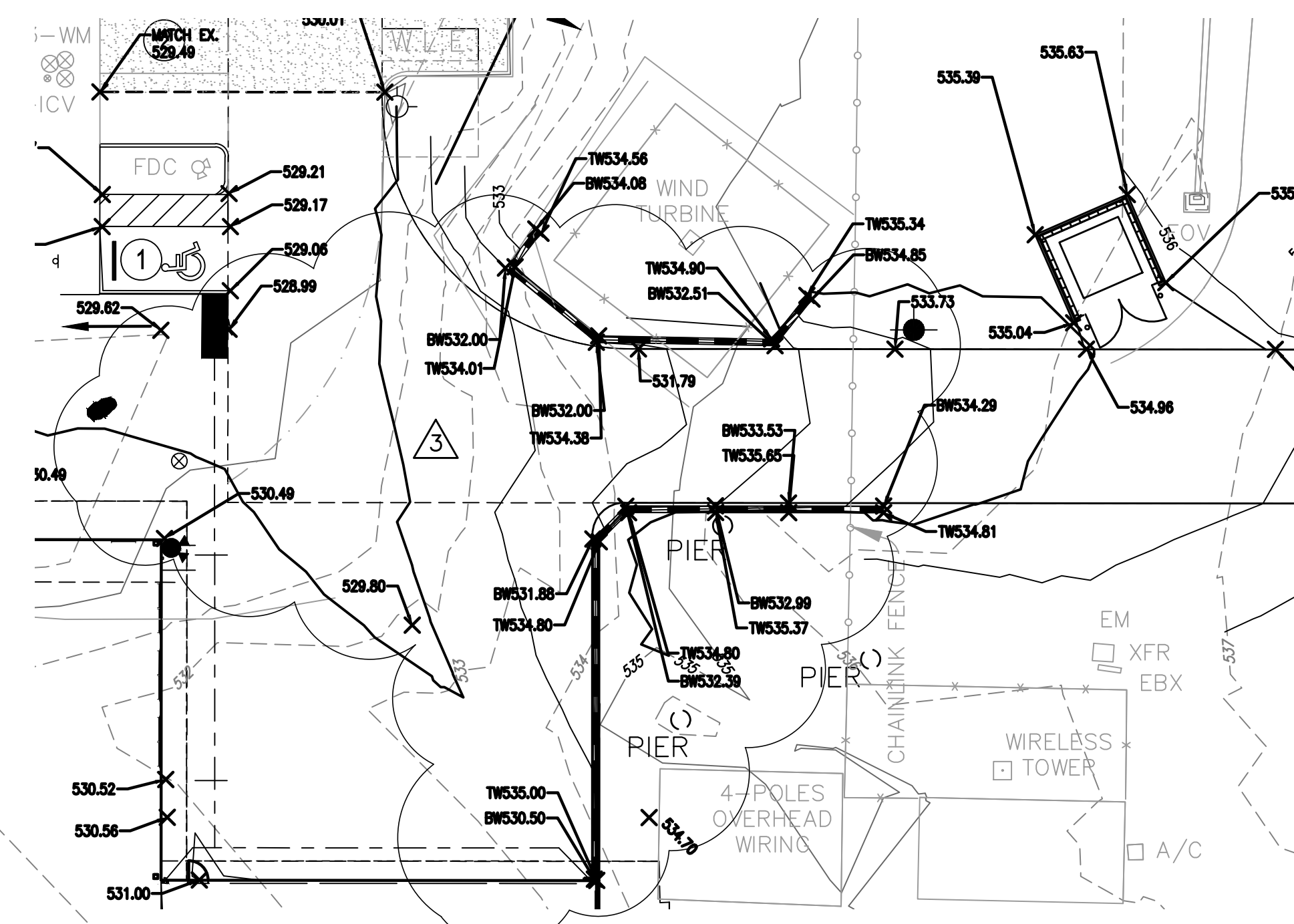
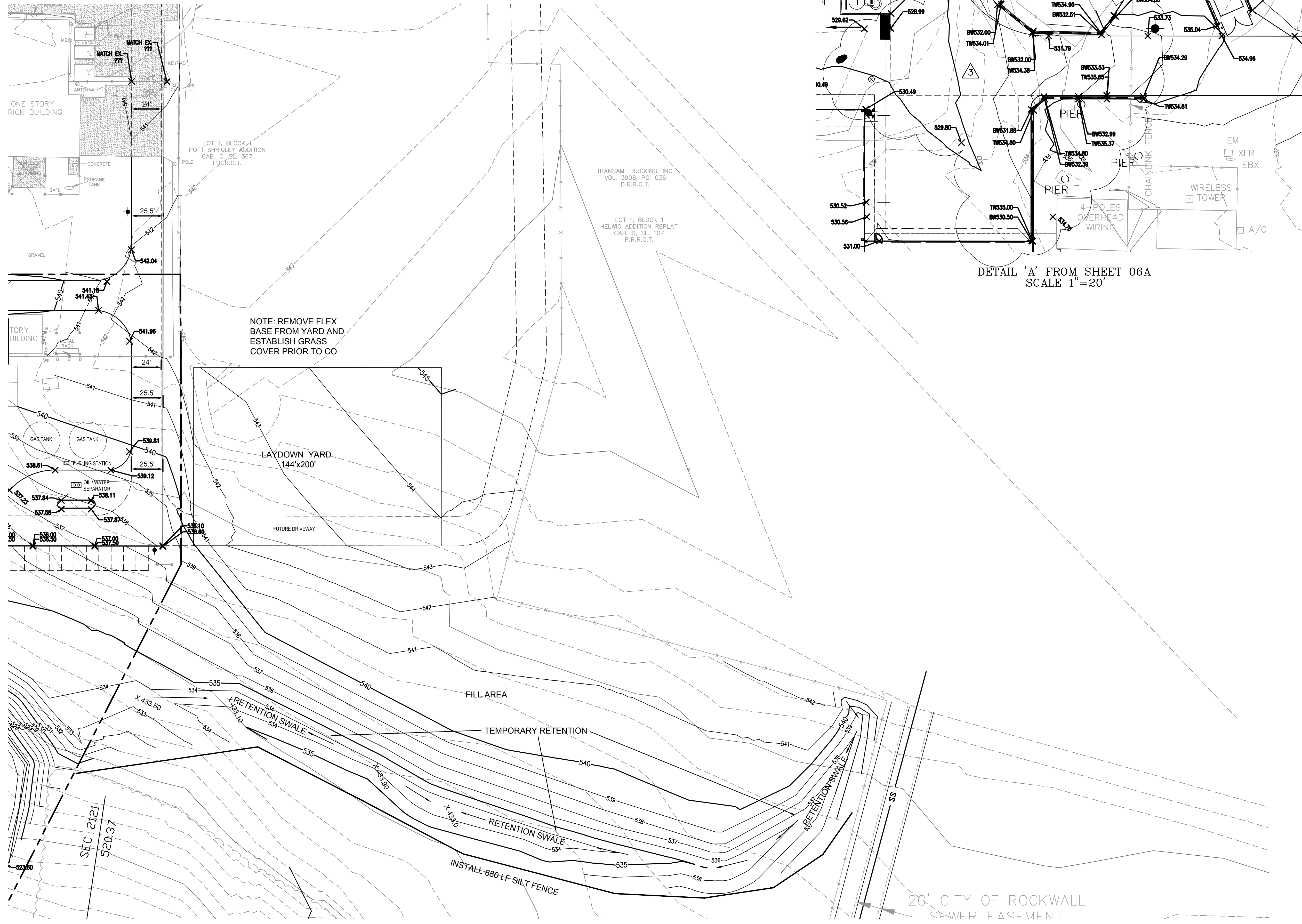
REVISIONS:	
DRAWN: TONY	DATE: APRIL 13, 2018
CHECKED: TW	DATE: APRIL 13, 2018
PROJECT NO.: 3560	
DWG FILE NAME:	

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF CONSTRUCTION.



PAVING & DIMENSION CONTROL PLAN
RAYBURN ELECTRIC COOP. PHASE 2
LOT 5, BLK 1 RAYBURN COUNTRY ADDITION
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

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RETENTION TO BE FULLY CONSTRUCTED WITH THE SIDES AND BOTTOM OF POND EITHER SODDED OR STABILIZED WITH ANCHORED SEEDS (NOT WINTER RYE) CURLEX PRIOR TO ANY PAVING (INCLUDING SLAB) BEING CONSTRUCTED.

RECORD DRAWINGS

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Todd Winters
TODD WINTERS
DATE 6-13-19

BENCHMARK:
"X" CUT IN CURB 23± SOUTH OF EAST DRIVE APPROACH OF EXISTING RAYBURN COUNTRY ELECTRIC BUILDING.

ENGINEERINGCONCEPTS & DESIGN, L.P.

ENGINEERING / PROJECT MANAGEMENT / CONSTRUCTION SERVICES - FIRM REG. #F-00145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS: JULY 18, 2018	
REVISED RETAINING WALL, RELOCATED STREET LIGHT, ADDED 12" RCP, ADDED GRATE INLET	
DRAWN: TONY	DATE: JUNE 7, 2018
CHECKED: TW	DATE: MAY 23, 2018
PROJECT NO.: 3560	
DWG FILE NAME:	

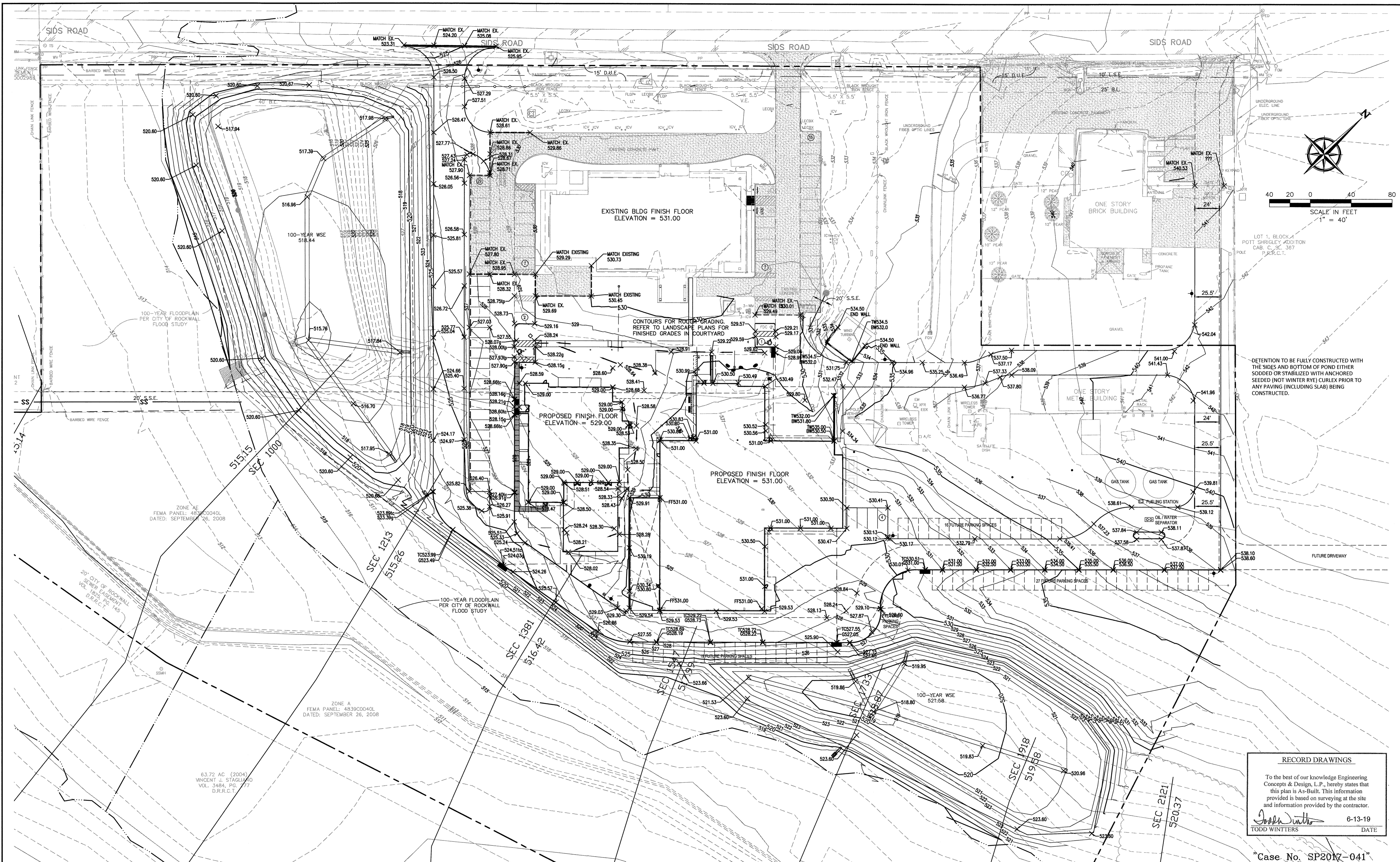
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LAYDOWN YARD AND FILL AREA
RAYBURN ELECTRIC COOP. PHASE 2
LOT 5, BLK 1 RAYBURN COUNTRY ADDITION
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

"Case No. SP2017-041"

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RECORD DRAWINGS

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Todd Winters 6-13-19
TODD WINTERS DATE

"Case No. SP2017-041"

BENCHMARK:
"X" CUT IN CURB 23± SOUTH OF EAST DRIVE APPROACH
OF EXISTING RAYBURN COUNTRY ELECTRIC BUILDING.

ENGINEERINGCONCEPTS
& DESIGN, L.P.

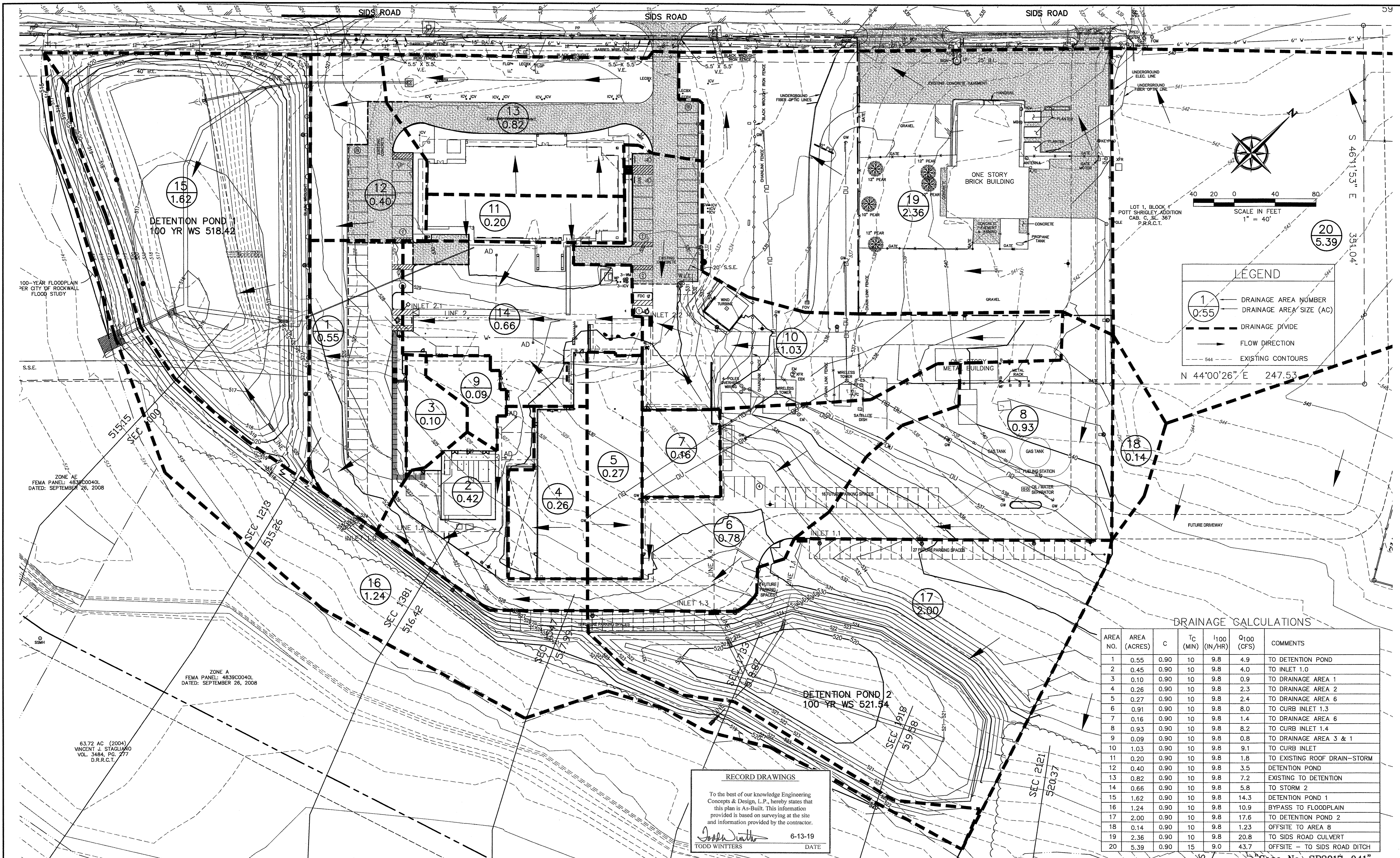
ENGINEERING / PROJECT MANAGEMENT /
CONSTRUCTION SERVICES - FIRM REG. #F-001145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS:	
DRAWN: BILL	DATE: APRIL 13, 2018
CHECKED: TW	DATE: APRIL 13, 2018
PROJECT NO.: 3560	
DWG FILE NAME:	

THIS DOCUMENT IS RELEASED FOR THE
PURPOSE OF CONSTRUCTION.



GRADING PLAN
RAYBURN ELECTRIC COOP. PHASE 2
LOT 5, BLK 1 RAYBURN COUNTRY ADDITION
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS



LEGEND

- ① — DRAINAGE AREA NUMBER
- 0.55 — DRAINAGE AREA SIZE (AC)
- DRAINAGE DIVIDE
- FLOW DIRECTION
- - - - - EXISTING CONTOURS

N 44°00'26" E 247.53'

DRAINAGE CALCULATIONS

AREA NO.	AREA (ACRES)	C	Tc (MIN)	I ₁₀₀ (IN/HR)	Q ₁₀₀ (CFS)	COMMENTS
1	0.55	0.90	10	9.8	4.9	TO DETENTION POND
2	0.45	0.90	10	9.8	4.0	TO INLET 1.0
3	0.10	0.90	10	9.8	0.9	TO DRAINAGE AREA 1
4	0.26	0.90	10	9.8	2.3	TO DRAINAGE AREA 2
5	0.27	0.90	10	9.8	2.4	TO DRAINAGE AREA 6
6	0.91	0.90	10	9.8	8.0	TO CURB INLET 1.3
7	0.16	0.90	10	9.8	1.4	TO DRAINAGE AREA 6
8	0.93	0.90	10	9.8	8.2	TO CURB INLET 1.4
9	0.09	0.90	10	9.8	0.8	TO DRAINAGE AREA 3 & 1
10	1.03	0.90	10	9.8	9.1	TO CURB INLET
11	0.20	0.90	10	9.8	1.8	TO EXISTING ROOF DRAIN-STORM
12	0.40	0.90	10	9.8	3.5	DETENTION POND
13	0.82	0.90	10	9.8	7.2	EXISTING TO DETENTION
14	0.66	0.90	10	9.8	5.8	TO STORM 2
15	1.62	0.90	10	9.8	14.3	DETENTION POND 1
16	1.24	0.90	10	9.8	10.9	BYPASS TO FLOODPLAIN
17	2.00	0.90	10	9.8	17.6	TO DETENTION POND 2
18	0.14	0.90	10	9.8	1.23	OFFSITE TO AREA 8
19	2.36	0.90	10	9.8	20.8	TO SIDS ROAD CULVERT
20	5.39	0.90	15	9.0	43.7	OFFSITE - TO SIDS ROAD DITCH

RECORD DRAWINGS

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Todd Winters 6-13-19
TODD WINTERS DATE

BENCHMARK:
"X" CUT IN CURB 23± SOUTH OF EAST DRIVE APPROACH OF EXISTING RAYBURN COUNTRY ELECTRIC BUILDING.

ENGINEERINGCONCEPTS & DESIGN, L.P.

ENGINEERING / PROJECT MANAGEMENT / CONSTRUCTION SERVICES - FIRM REG. #F-00145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
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REVISIONS:

DRAWN: TONY	DATE: APRIL 13, 2018
CHECKED: TW	DATE: APRIL 13, 2018
PROJECT NO.: 3560	
DWG FILE NAME:	

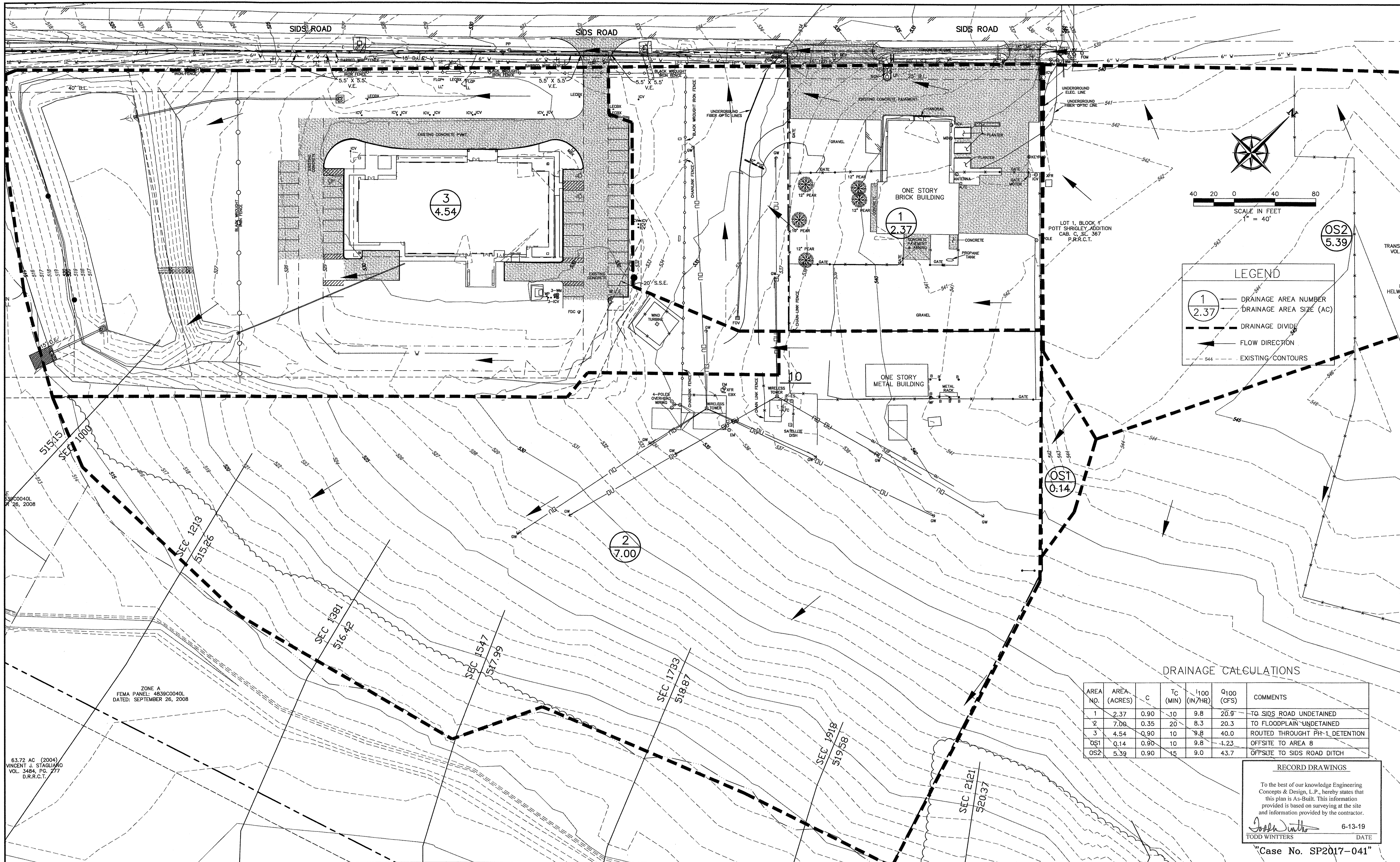
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DRAINAGE AREA MAP
RAYBURN ELECTRIC COOP. PHASE 2
LOT 5, BLK 1 RAYBURN COUNTRY ADDITION
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

SHEET
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Case No. SP2017-041



LEGEND

- ① — DRAINAGE AREA NUMBER
- ②.37 — DRAINAGE AREA SIZE (AC)
- DRAINAGE DIVIDE
- FLOW DIRECTION
- - - - - EXISTING CONTOURS

DRAINAGE CALCULATIONS

AREA NO.	AREA (ACRES)	C	Tc (MIN)	100 (IN/HR)	Q100 (CFS)	COMMENTS
1	2.37	0.90	10	9.8	20.9	TO SIDS ROAD UNDETAINED
2	7.00	0.35	20	8.3	20.3	TO FLOODPLAIN UNDETAINED
3	4.54	0.90	10	9.8	40.0	ROUTED THROUGH PH-1 DETENTION
OS1	0.14	0.90	10	9.8	-1.23	OFFSITE TO AREA 8
OS2	5.39	0.90	15	9.0	43.7	OFFSITE TO SIDS ROAD DITCH

RECORD DRAWINGS

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Todd Winters 6-13-19
 TODD WINTERS DATE

"Case No. SP2017-041"

BENCHMARK:
 "X" CUT IN CURB 23'± SOUTH OF EAST DRIVE APPROACH
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REVISIONS:

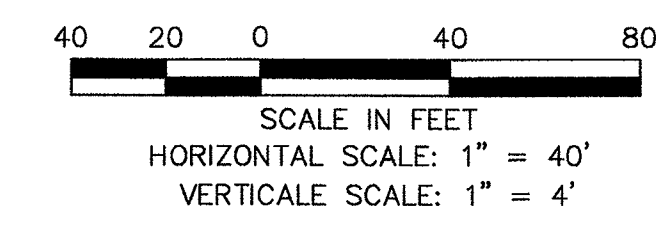
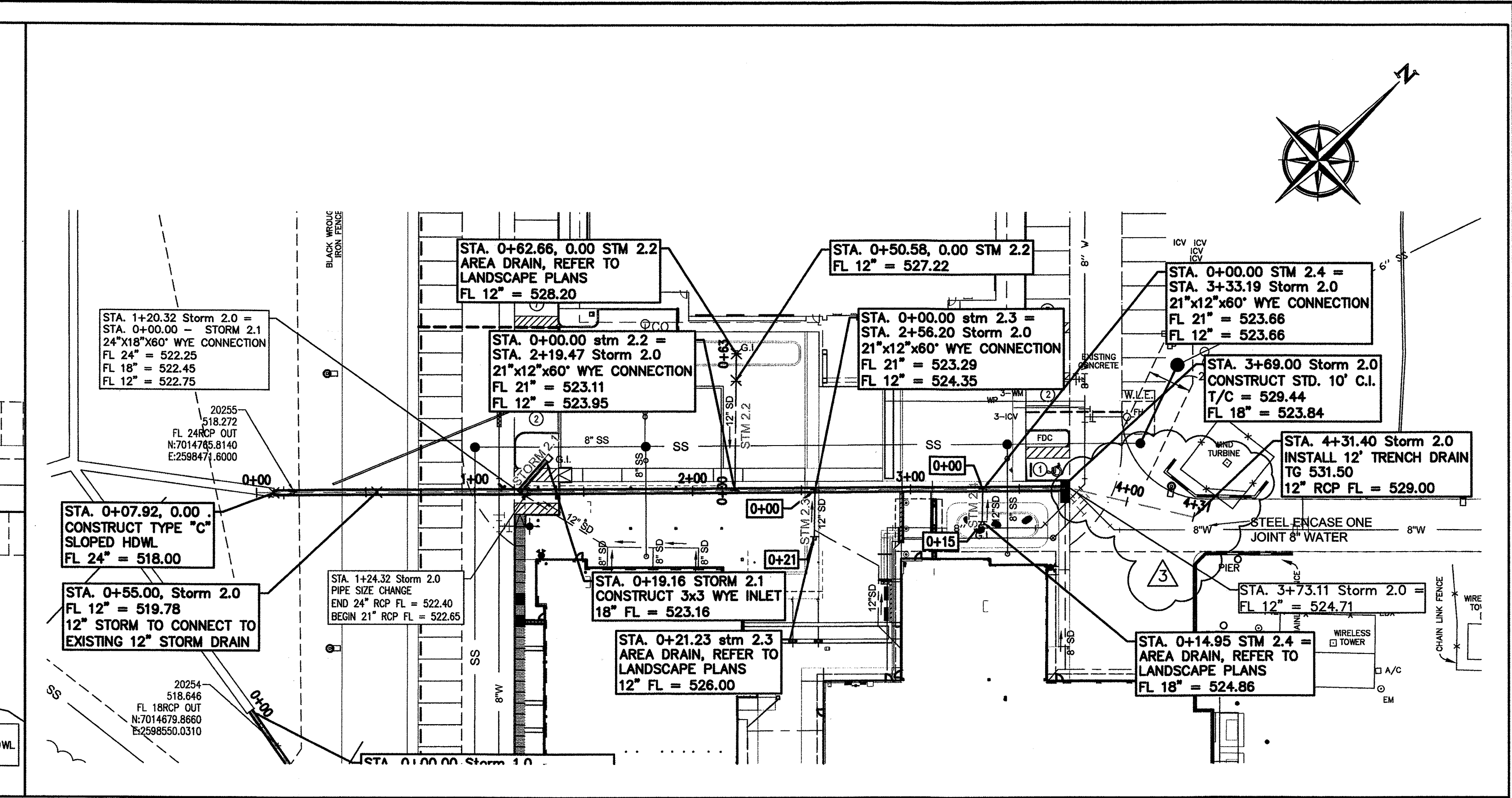
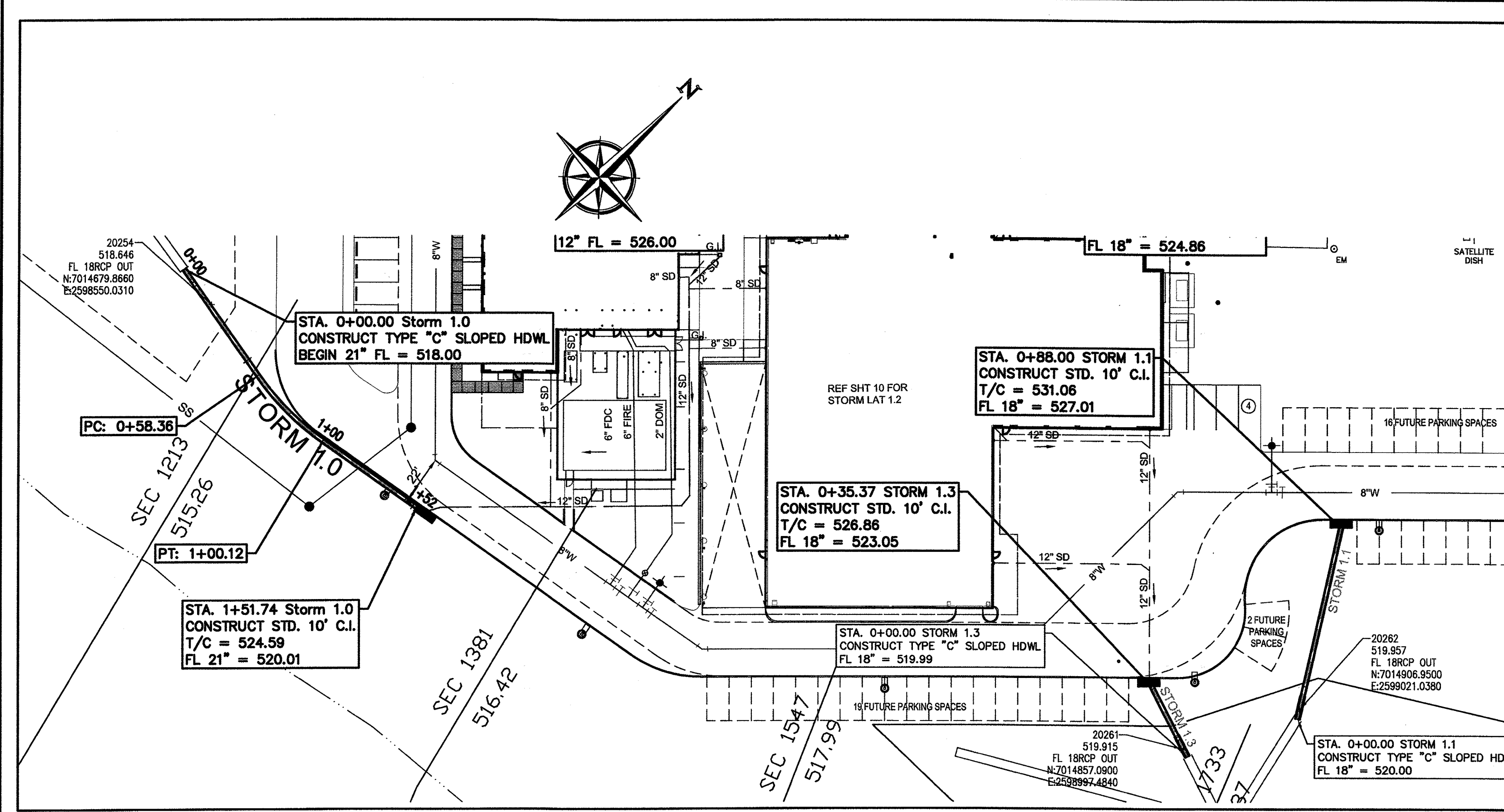
DRAWN: TONY	DATE: APRIL 13, 2018
CHECKED: TW	DATE: APRIL 13, 2018
PROJECT NO.: 3560	
DWG FILE NAME:	

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EXISTING DRAINAGE AREA MAP
RAYBURN ELECTRIC COOP. PHASE 2
LOT 5, BLK 1 RAYBURN COUNTRY ADDITION
 CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

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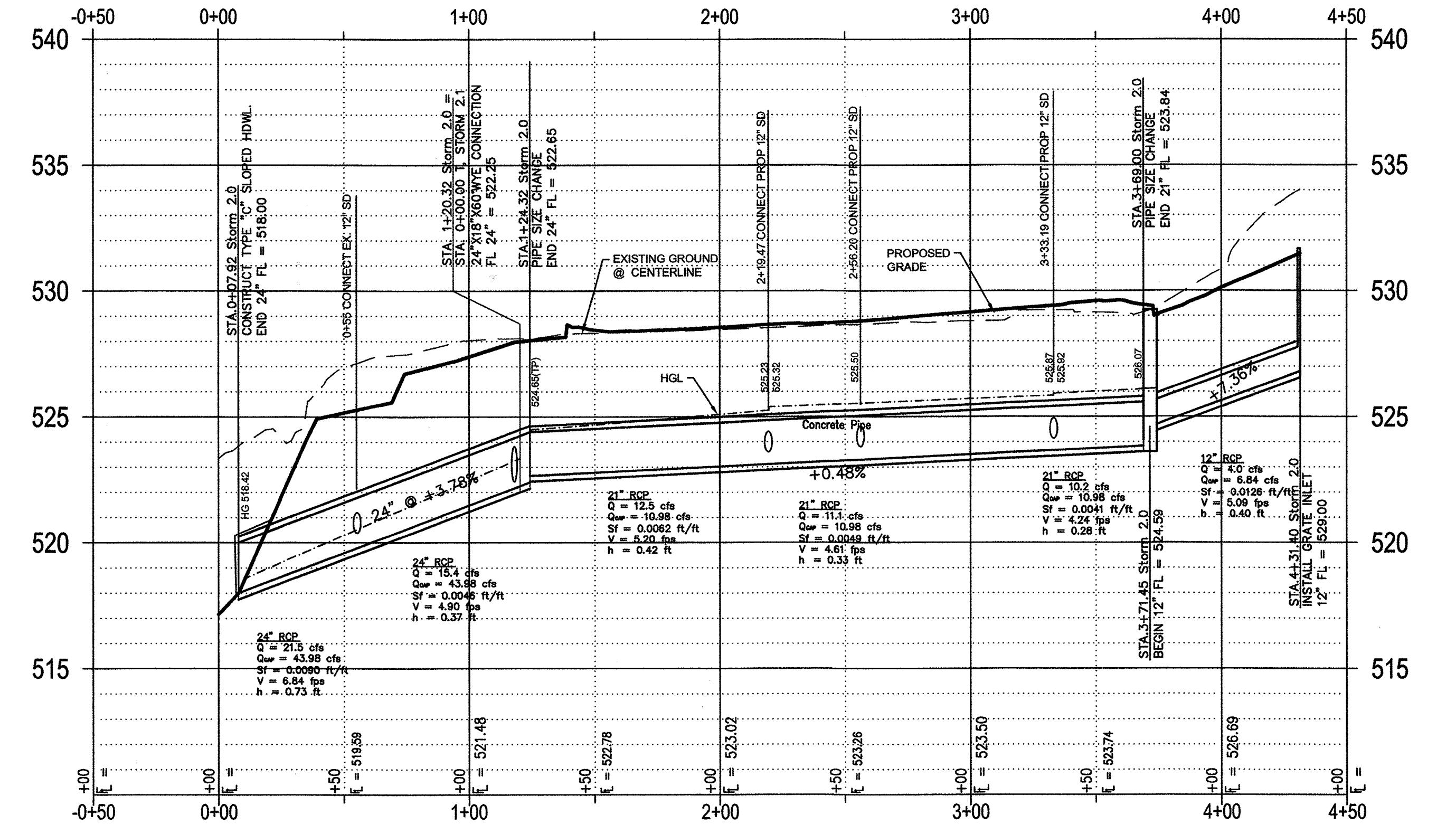
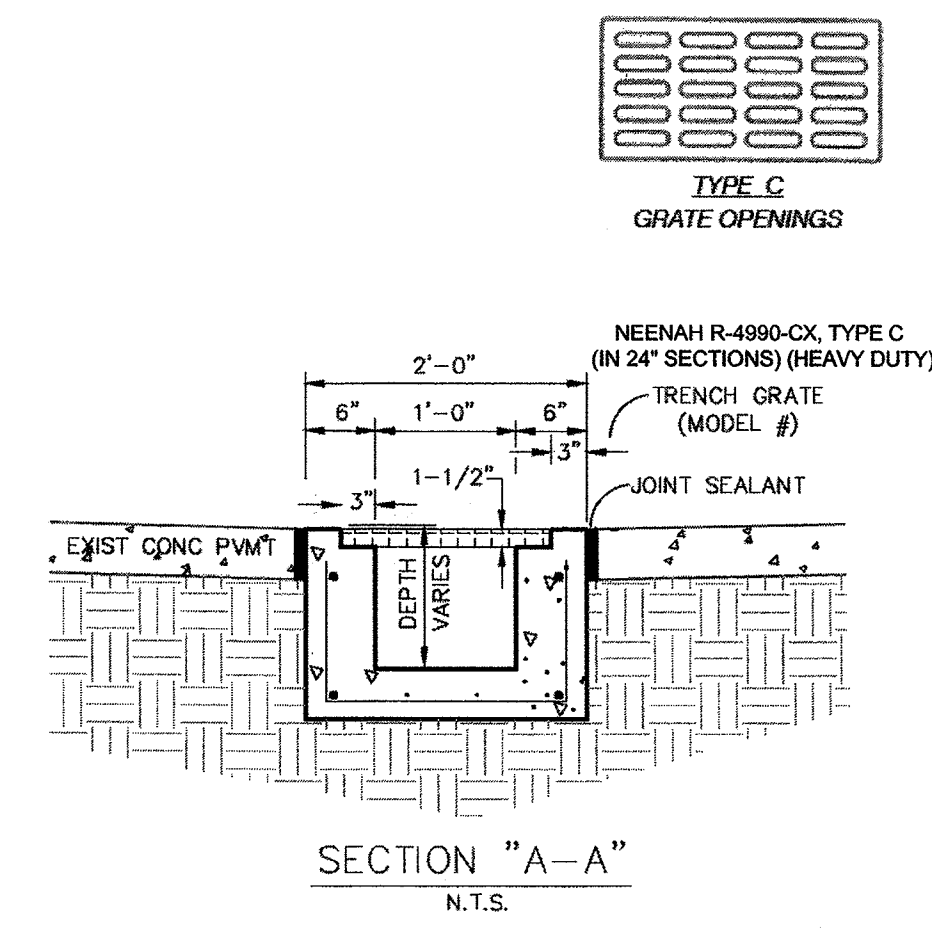
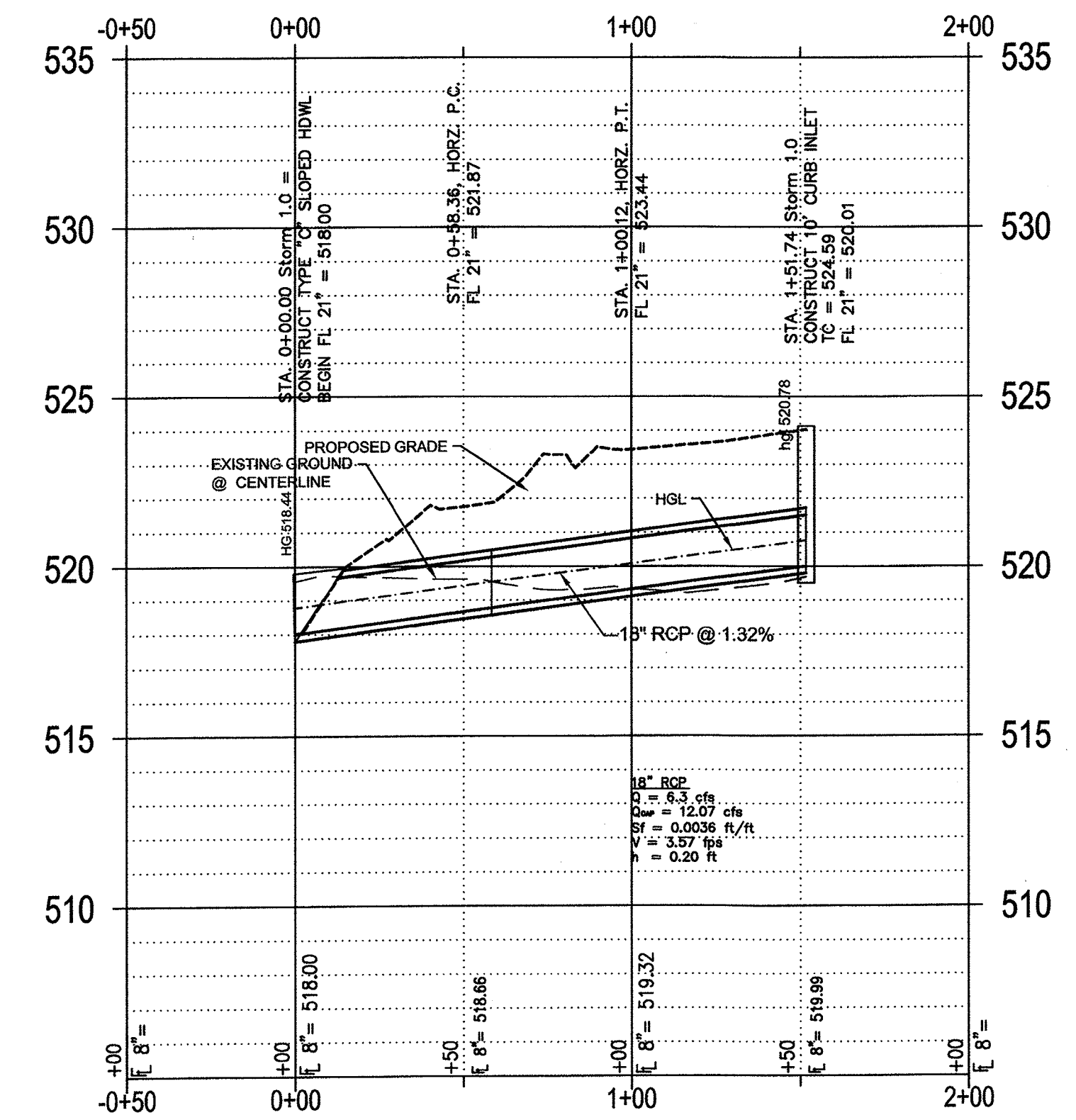
RECORD DRAWINGS

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Todd Winters 6-13-19
TODD WINTERS DATE

PRIVATE
STORM 1.0
SCALE H: 4
SCALE V: 10.00

PRIVATE
STORM 2.0
SCALE H: 4
SCALE V: 10.00



"Case No. SP2017-041"

BENCHMARK:
"X" CUT IN CURB 23± SOUTH OF EAST DRIVE APPROACH
OF EXISTING RAYBURN COUNTRY ELECTRIC BUILDING.

ENGINEERINGCONCEPTS
& DESIGN, L.P.

ENGINEERING / PROJECT MANAGEMENT /
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201 WINDCO CIR, STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS: AUGUST 29, 2018

REVISED RETAINING WALL, RELOCATED STREET LIGHT, ADDED 12" RCP, ADDED TRENCH DRAIN

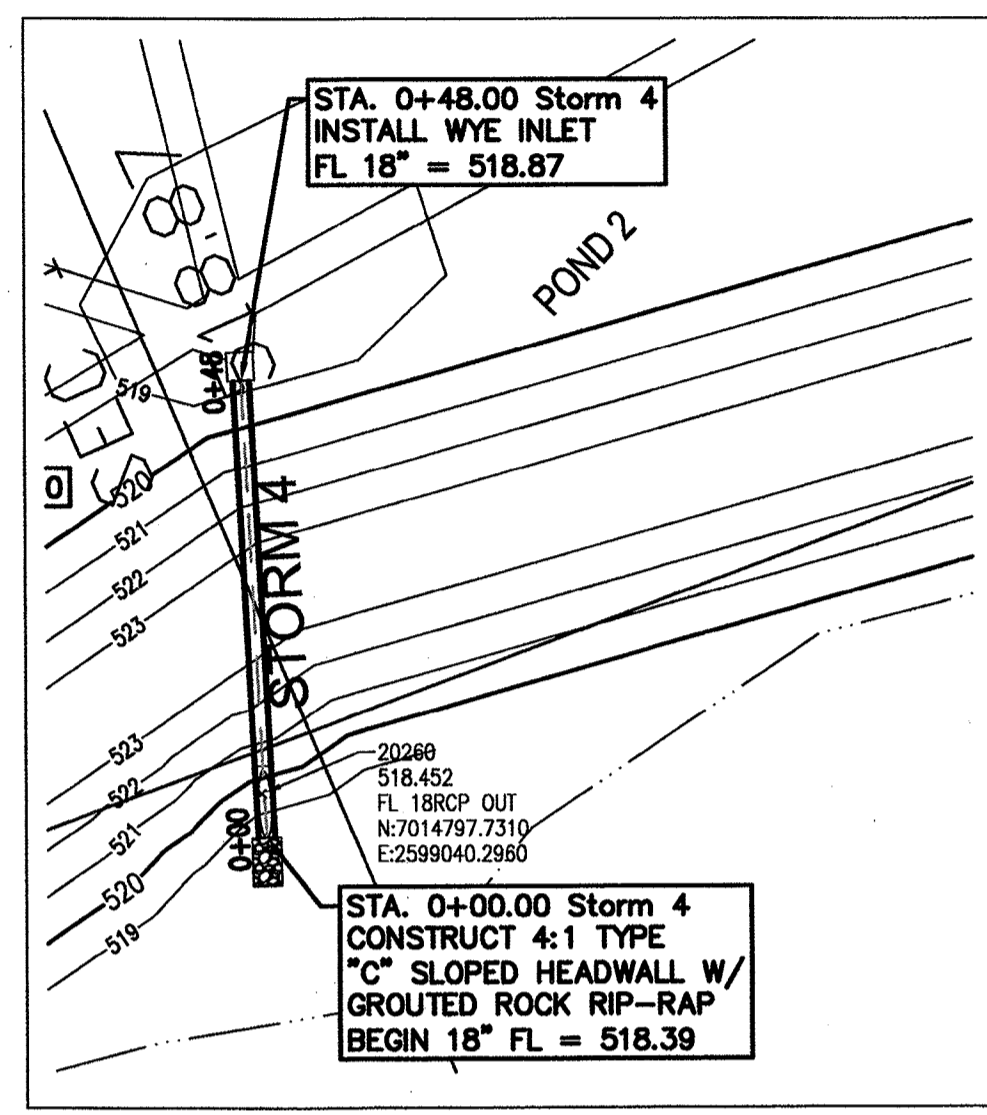
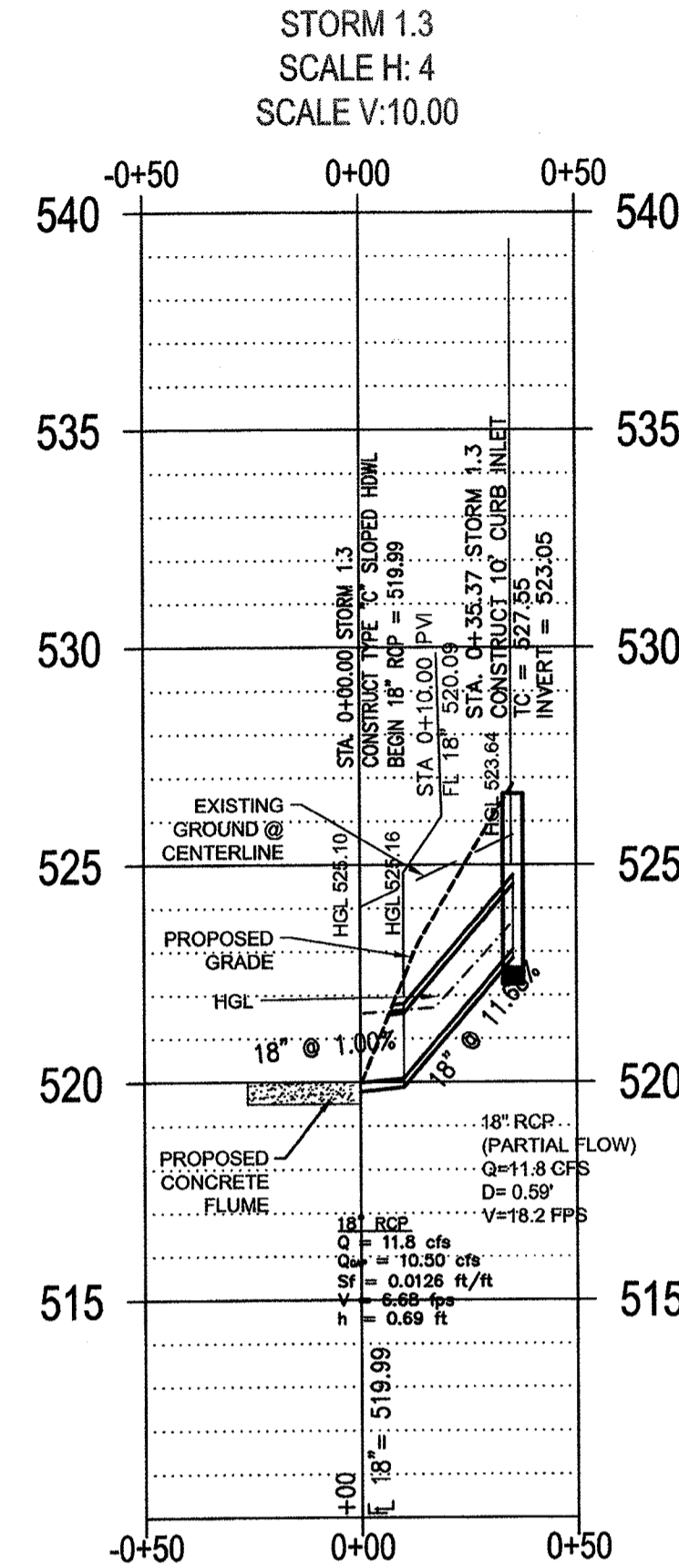
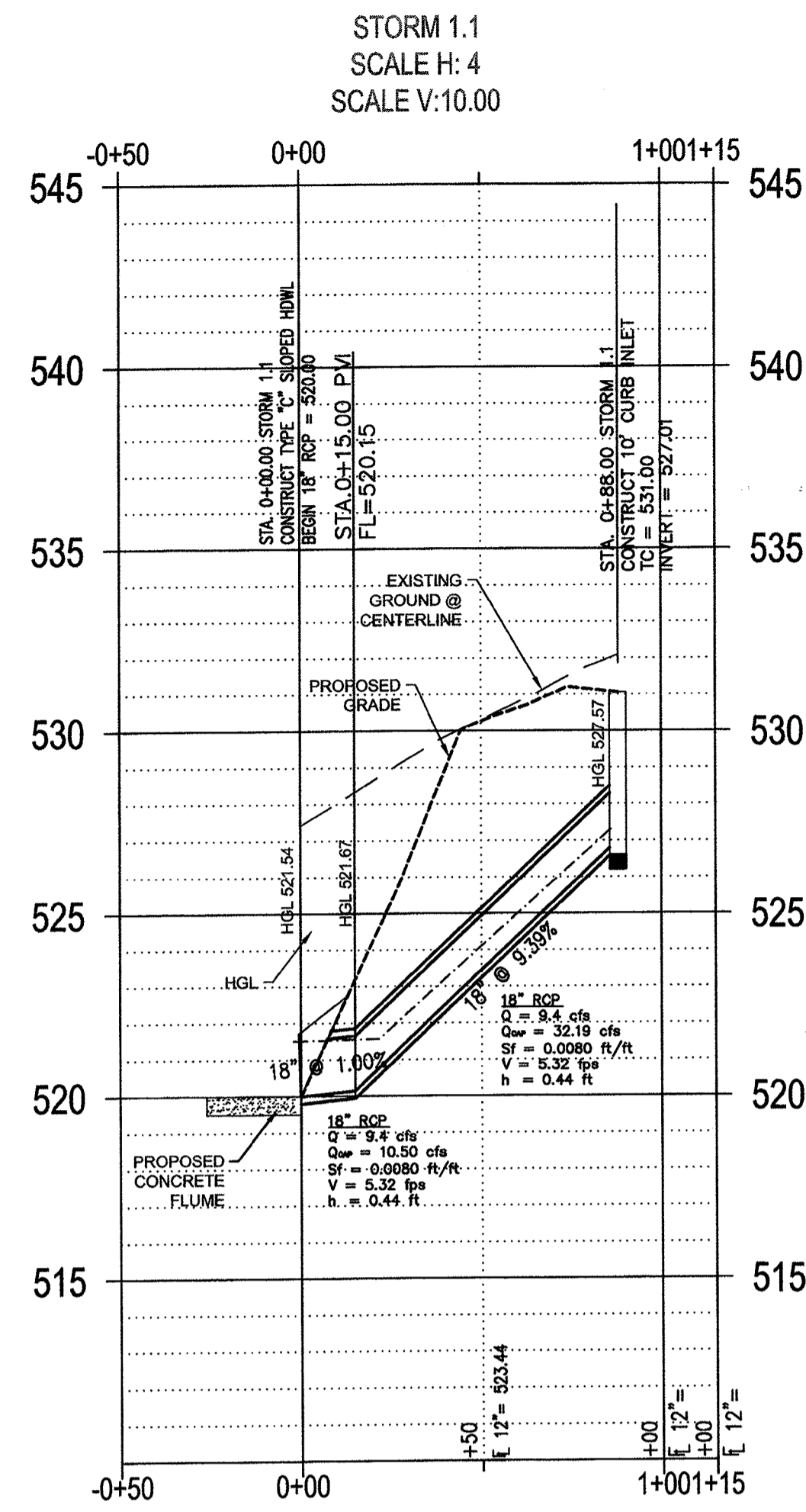
DRAWN: TONY	DATE: JUNE 7, 2018
CHECKED: TW	DATE: MAY 23, 2018
PROJECT NO.: 3560	
DWG FILE NAME:	

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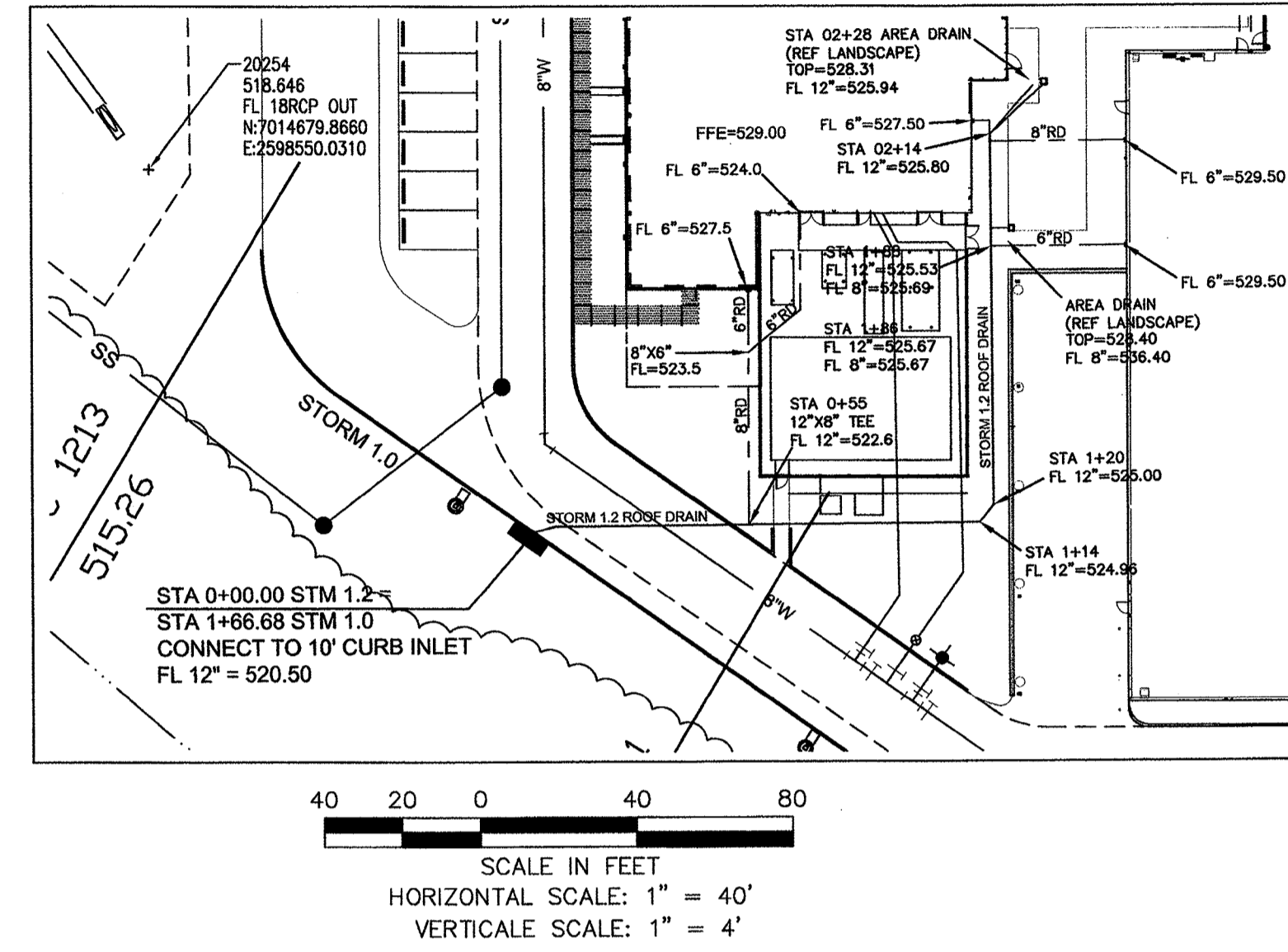


STORM SEWER PLAN & PROFILE
RAYBURN ELECTRIC COOP. PHASE 2
LOT 5, BLK 1 RAYBURN COUNTRY ADDITION
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

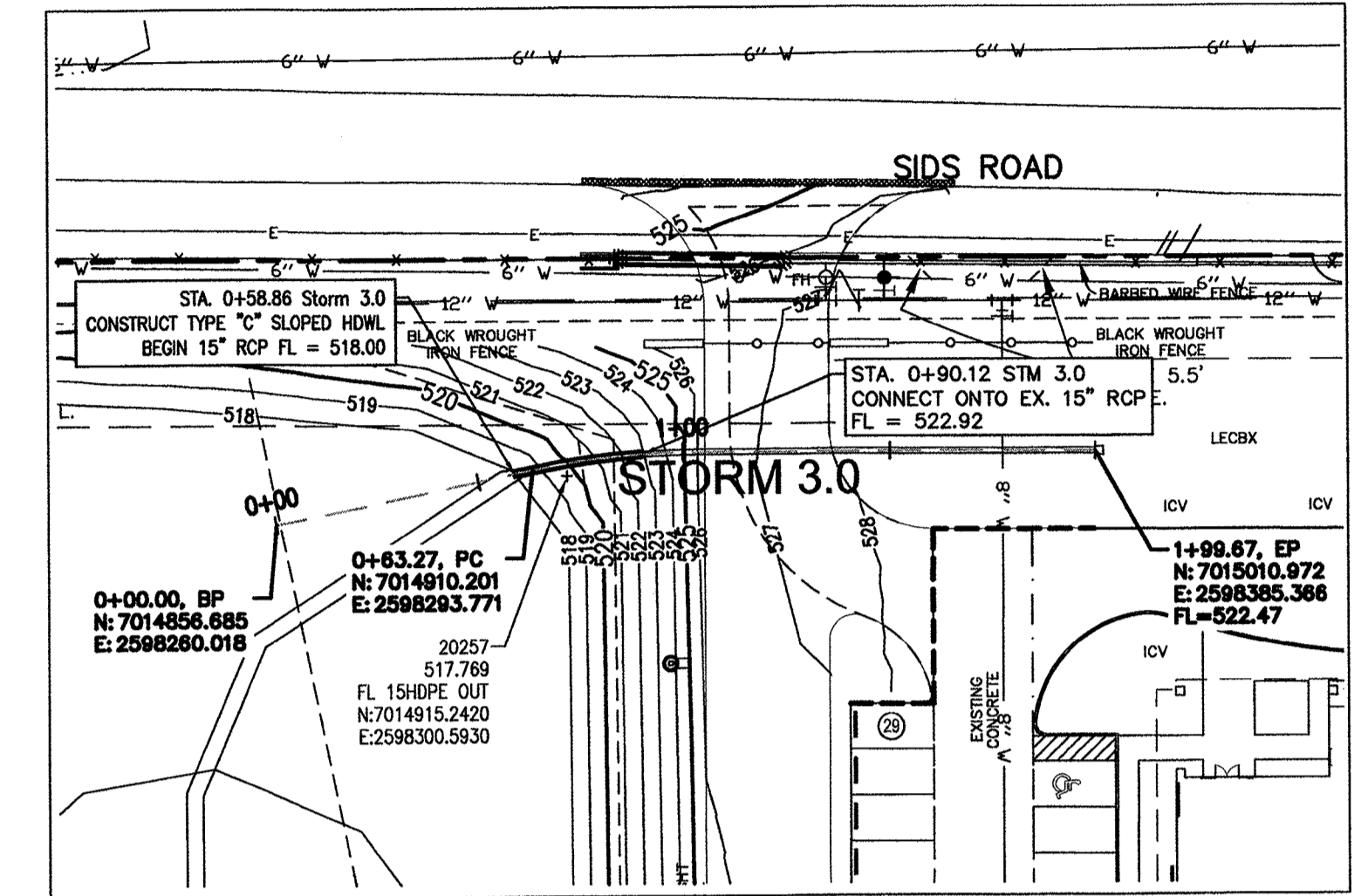
SHEET
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20



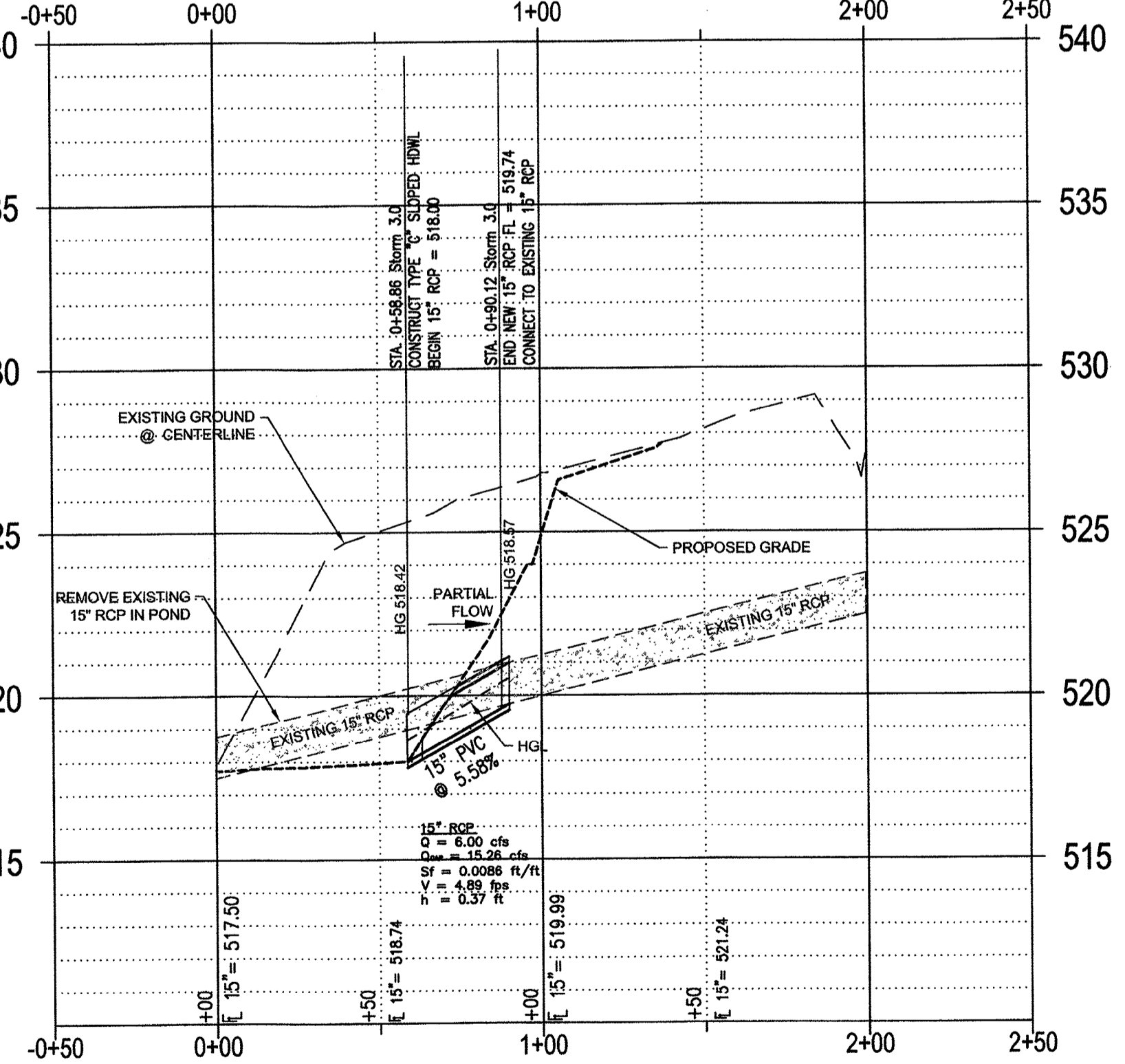
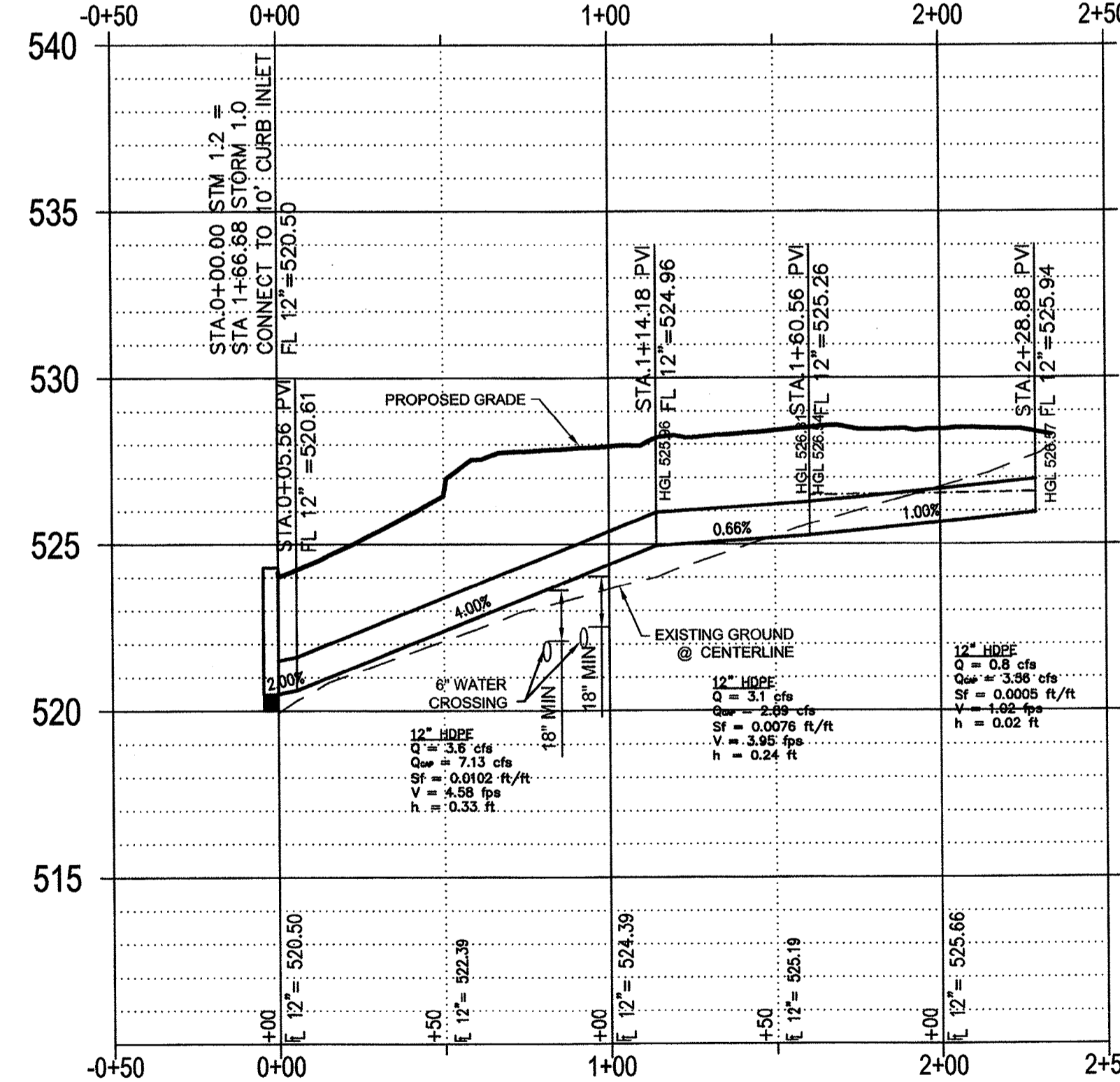
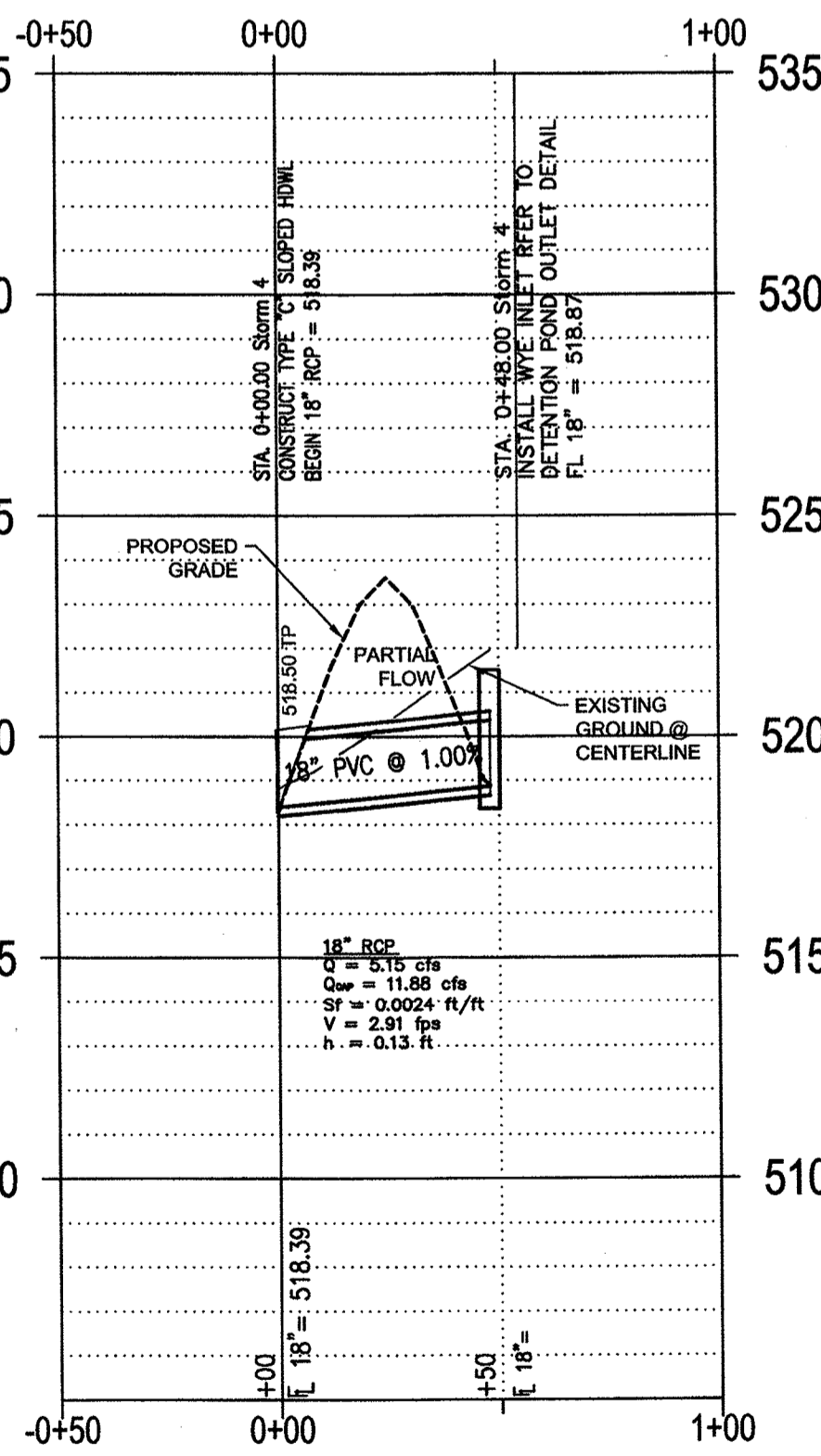
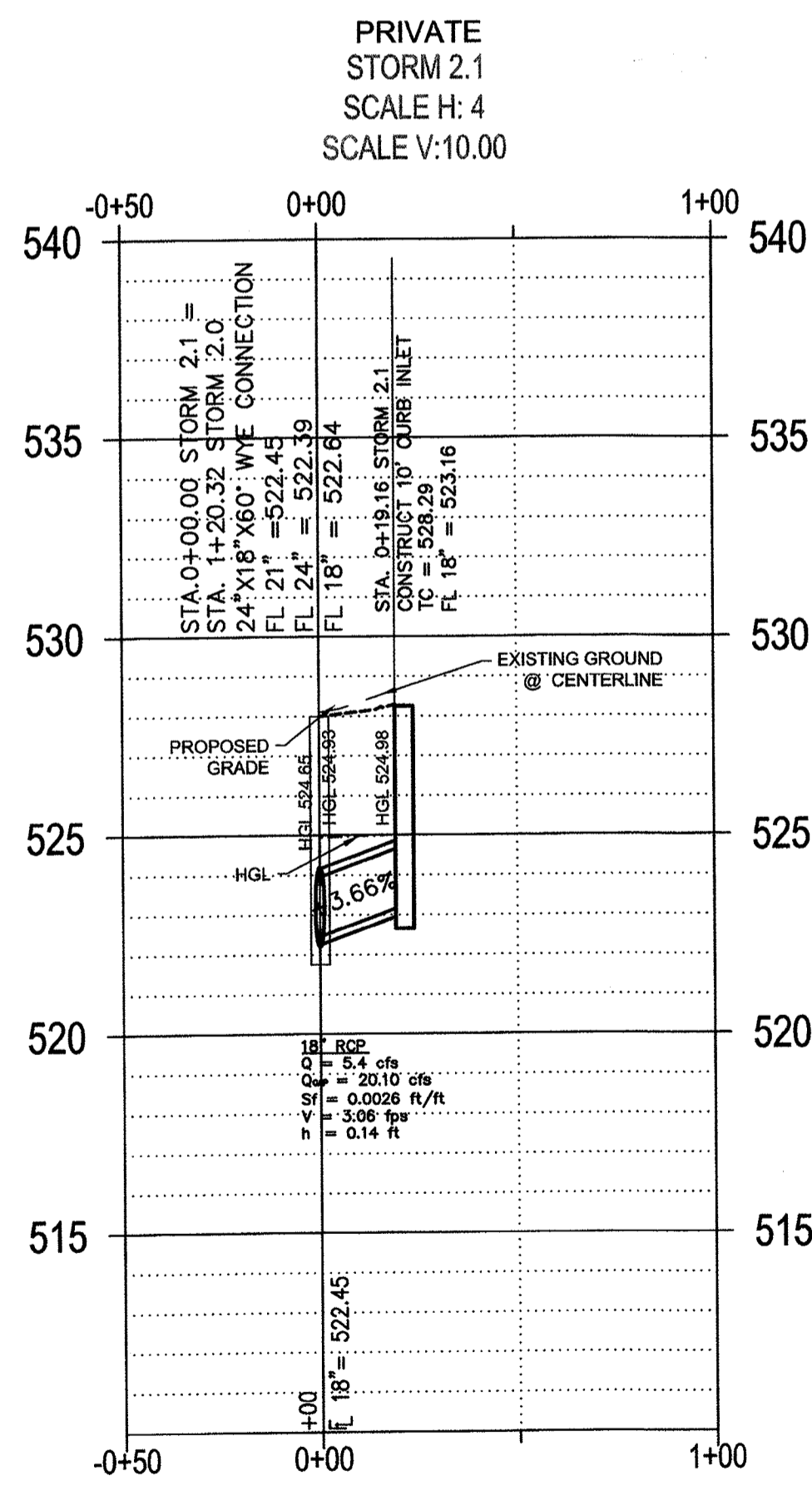
PRIVATE
STORM 4.0
SCALE H: 4
SCALE V:10.00



PRIVATE
STORM 1.2
SCALE H: 4
SCALE V:10.00



PRIVATE
STORM 3.0
SCALE H: 4
SCALE V:10.00



RECORD DRAWINGS
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TODD WINTERS 6-13-19 DATE

BENCHMARK:
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972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS:	
DRAWN: TONY	DATE: JUNE 7, 2018
CHECKED: TW	DATE: MAY 23, 2018
PROJECT NO.: 3560	
DWG FILE NAME:	

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STORM SEWER PLAN & PROFILE
RAYBURN ELECTRIC COOP. PHASE 2
LOT 5, BLK 1 RAYBURN COUNTRY ADDITION
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

SHEET
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OF
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"Case No. SP2017-041"

DETENTION POND VOLUME CALCULATOR
MODIFIED RATIONAL METHOD
100 YEAR FREQUENCY

DETECTION REQUIRED

Acre	Q
7.39	21.47
1.24	10.44
Area, acre	6.15

Present Conditions		Proposed Conditions	
C	Tc	C	Tc
0.35	10.00	0.35	10.00
I (100)	8.30	I (100)	9.80
Q (100)	10.53	Q (100)	65.18

Time	Inflow	Outflow	Storage (cf)	Tc	Intensity
5	24741	4739	20002	5	14.9
10	32546	6319	26227	10	9.8
15	44834	7898	36935	15	9.0
20	55129	9478	45651	20	8.3
30	68745	12837	56187	30	6.9
40	77047	15797	61250	40	5.8
50	83025	18956	64089	50	5.0
60	89667	22115	67552	60	4.5
70	92988	25275	67713	70	4.0
80	96973	28434	68539	80	3.7
90	104612	31593	73018	90	3.5
100	112924	34752	78151	100	3.4
110	115438	37912	77526	110	3.2
120	117862	41071	76880	120	3.0

DETENTION POND VOLUME CALCULATOR
MODIFIED RATIONAL METHOD
25 YEAR FREQUENCY

DETECTION REQUIRED

Acre	Q
7.39	17.33
1.24	10.38
Area, acre	6.15

Present Conditions		Proposed Conditions	
C	Tc	C	Tc
0.35	10.00	0.35	10.00
I (100)	6.70	I (100)	9.30
Q (100)	6.95	Q (100)	61.85

Time	Inflow	Outflow	Storage (cf)	Tc	Intensity
5	19928	3128	18788	5	12.0
10	30886	4170	26715	10	9.3
15	38856	5213	33643	15	7.8
20	44501	6256	38246	20	6.7
30	52804	8341	44463	30	5.3
40	59778	10426	49352	40	4.5
50	64760	12511	52248	50	3.9
60	67749	14597	53152	60	3.4
70	72086	16682	55384	70	3.1
80	74390	18767	56823	80	2.8
90	77711	20852	56859	90	2.6
100	78044	22937	55108	100	2.4
110	78542	25023	53519	110	2.2

DETENTION POND VOLUME CALCULATOR
MODIFIED RATIONAL METHOD
10 YEAR FREQUENCY

DETECTION REQUIRED

Acre	Q
7.39	14.74
1.24	8.93
Area, acre	6.15

Present Conditions		Proposed Conditions	
C	Tc	C	Tc
0.35	10.00	0.35	10.00
I (100)	5.70	I (100)	8.00
Q (100)	5.82	Q (100)	53.21

Time	Inflow	Outflow	Storage (cf)	Tc	Intensity
5	16771	2617	14154	5	10.1
10	26568	3489	23079	10	8.0
15	32878	4361	28517	15	6.6
20	37459	5234	32826	20	5.7
30	44834	6978	37855	30	4.5
40	50479	8723	41757	40	3.8
50	54797	10467	44329	50	3.3
60	57785	12212	45574	60	2.9
70	59977	13956	46021	70	2.6
80	62700	15701	47000	80	2.4
90	64281	17445	46816	90	2.2
100	66420	19190	47230	100	2.0
110	65756	20934	44822	110	1.8

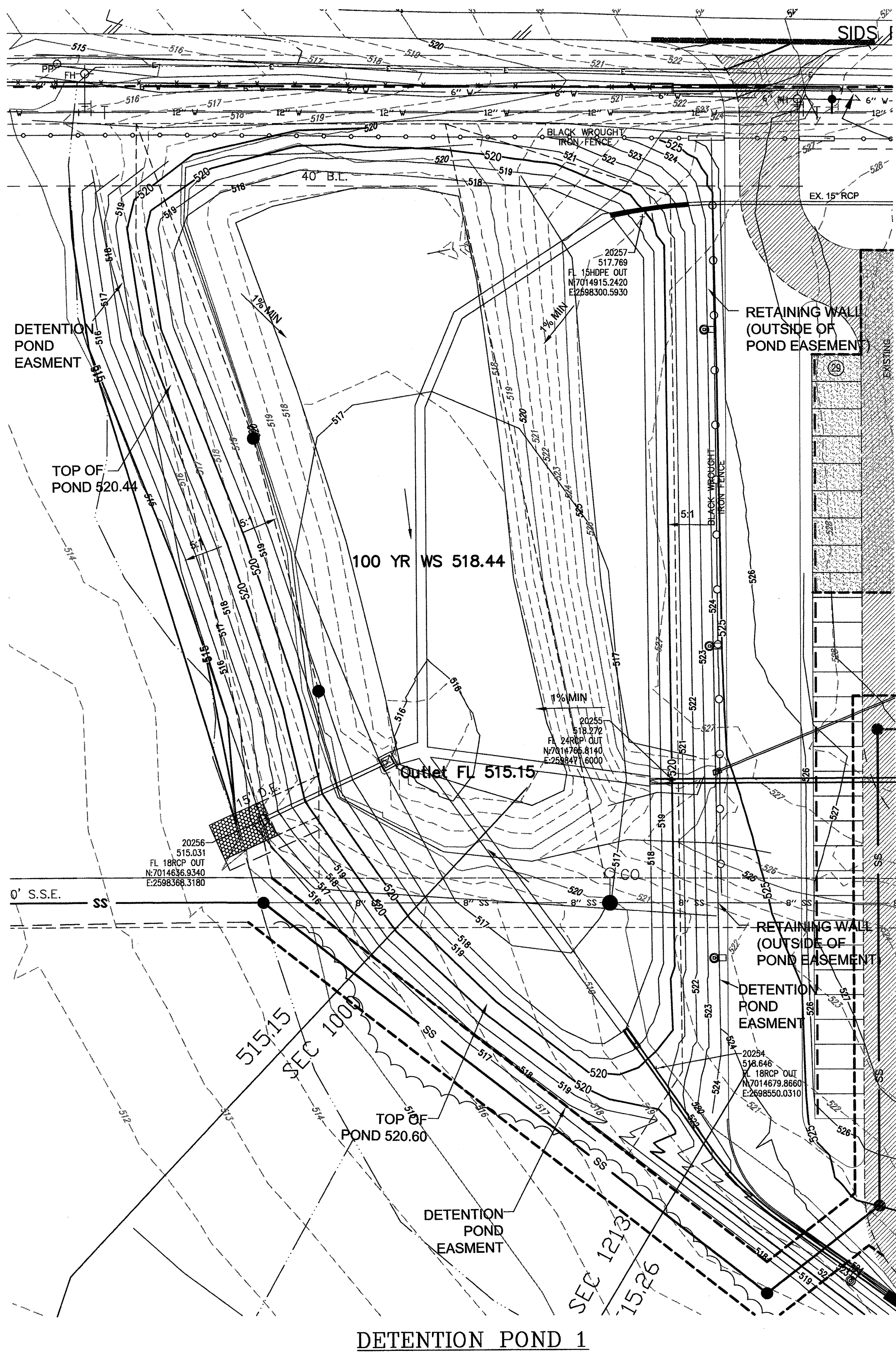
DETENTION POND VOLUME CALCULATOR
MODIFIED RATIONAL METHOD
5 YEAR FREQUENCY

DETECTION REQUIRED

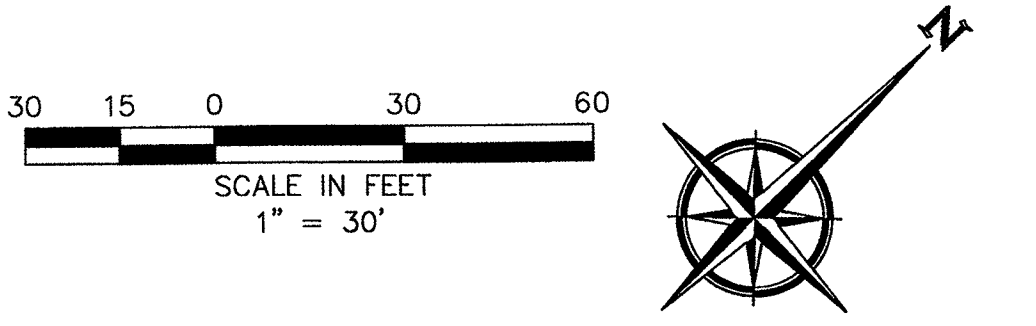
Acre	Q
7.39	12.93
1.24	7.79
Area, acre	6.15

Present Conditions		Proposed Conditions	
C	Tc	C	Tc
0.35	10.00	0.35	10.00
I (100)	5.00	I (100)	6.90
Q (100)	5.23	Q (100)	45.89

Time	Inflow	Outflow	Storage (cf)	Tc	Intensity
5	14314	2354	11959	5	8.62
10	22915	3139	19776	10	6.9
15	28893	3924	24969	15	5.8
20	33210	4709	28501	20	5
30	38856	6279	32577	30	3.9
40	43837	7849	35989	40	3.3
50	48494	9418	37076	50	2.8
60	49815	10987	38828	60	2.5
70	51143	12557	38586	70	2.2
80	53136	14127	39009	80	2
90	56789	15696	41093	90	1.9
100	56457	17266	39181	100	1.7
110	54797	18836	35981	110	1.5



NOTE: ENTIRE DETENTION SYSTEM TO BE MAINTAINED BY PROPERTY OWNER.



DETENTION POND
TOTAL DRAINAGE AREA POND 1 7.39 AC.
AREA DRAINING INTO POND 1 6.15 AC.
AREA RELEASED UNDETAINED BELOW POND 1.24 AC.
EXISTING C FACTOR, C=0.35
DEVELOPED C FACTOR, C=0.90
(7.39ac x 0.35C) - (1.24ac x 0.90C)

ALLOWABLE RELEASE, 5 YEAR (Q=CA)
5 YEAR 20 MINUTE INTENSITY I=5.00
12.93 cfs - 7.70 cfs (bypass)
Q(5)= 5.2 cfs (ALLOWABLE RELEASE)

ALLOWABLE RELEASE, 10 YEAR (Q=CA)
10 YEAR 20 MINUTE INTENSITY I=5.7
14.74 cfs - 8.93 cfs (bypass)
Q(10)= 5.8 cfs (ALLOWABLE RELEASE)

ALLOWABLE RELEASE, 25 YEAR (Q=CA)
25 YEAR 20 MINUTE INTENSITY I=6.7
17.33 cfs - 10.38 cfs (bypass)
Q(25)= 7.0 cfs (ALLOWABLE RELEASE)

ALLOWABLE RELEASE, 100 YEAR (Q=CA)
100 YEAR 20 MINUTE INTENSITY I=8.3
21.47 cfs - 10.94 cfs (bypass)
Q(100)= 10.5 cfs (ALLOWABLE RELEASE)

Detention Pond Volume Calculations

Pond Overflow Elevation = 520.60
100yr Water Surface Elevation = 518.44
INVERT ELEVATION = 515.15

Contour Elevation	Surface Area (sf)	Average Area	Cumulative Volume (cf)
515.15	0	154	54
515.50	308	2,224	1,166
516.00	4,140	14,920	16,086
517.00	25,700	38,299	54,385
518.00	50,898	53,704	108,089
519.00	56,510	58,437	166,526
520.00	60,364		

5 YEAR WS 517.65
10 YEAR WS 517.81
25 YEAR WS 518.05
100 YEAR WS 518.44

Outlet Structure Calculations
5 Year Discharge @ Max Water Surface

Q total = 5.2 cfs Allowed
Storage Elevation = 517.65
Invert Elevation = 515.15
Width Weir (1) = .40

Q total = 5.27 cfs Provided
Q ALLOW TO Q DESIGN, 10yr DIFFERENCE = 1.3%

WER (1)
Q=CA(I)²
C=3.333
H=2.95 [H = Storage elev. minus FL of weir]
L=.40
Q=5.27 cfs
Weir opening .40 feet x 2.50' @ WS 517.65

Outlet Structure Calculations
10 Year Discharge @ Max Water Surface

Q total = 5.8 cfs Allowed
Storage Elevation = 517.81
Invert Elevation = 515.15
Width Weir (1) = .40

Q total = 5.78 cfs Provided
Q ALLOW TO Q DESIGN, 10yr DIFFERENCE = -0.3%

WER (1)
Q=CA(I)²
C=3.333
H=2.68 [H = Storage elev. minus FL of weir]
L=.40
Q=5.78 cfs
Weir opening .40 feet x 2.68' @ WS 517.81

Outlet Structure Calculations
25 Year Discharge @ Max Water Surface

Q total = 7.0 cfs Allowed
Storage Elevation = 518.05
Invert Elevation = 515.15
Width Weir (1) = .40

Q total = 6.58 cfs Provided
Q ALLOW TO Q DESIGN, 10yr DIFFERENCE = -6.0%

WER (1)
Q=CA(I)²
C=3.333
H=2.90 [H = Storage elev. minus FL of weir]
L=.40
Q=6.58 cfs
Weir opening .40 feet x 2.90' @ WS 518.05

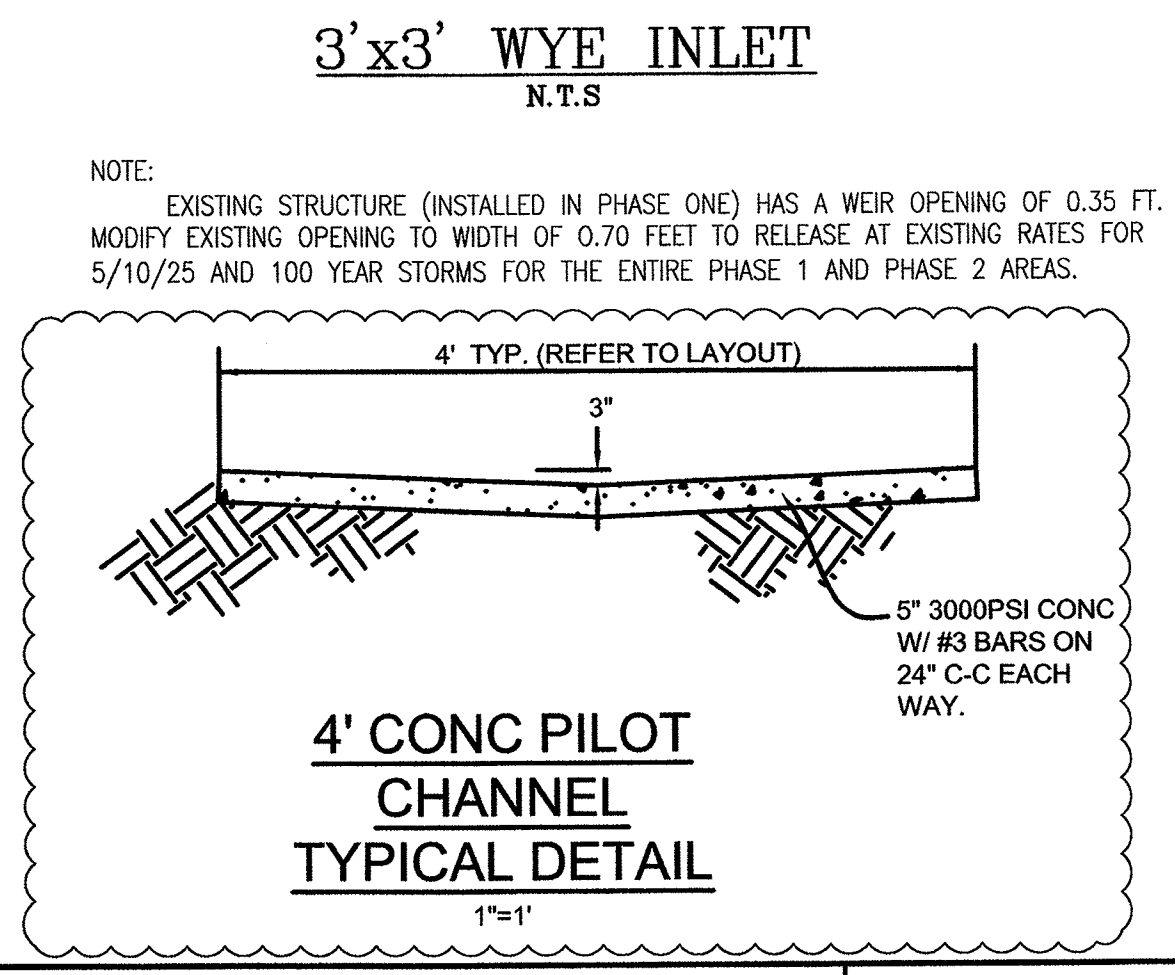
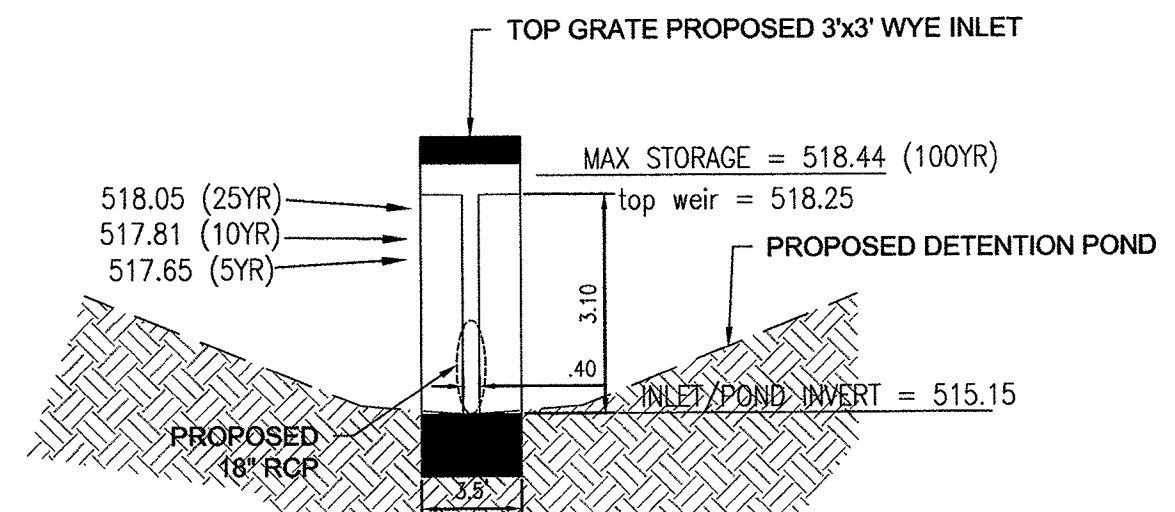
Outlet Structure Calculations
100 Year Discharge @ Max Water Surface

Q total = 10.5 cfs Allowed
Storage Elevation = 518.44
Invert Elevation = 515.15
Width Weir (2) = 12.0

Q total = 10.59 cfs Provided
Q ALLOW TO Q DESIGN, 10yr DIFFERENCE = 0.6%

WER (1)
Q=CA(I)²
C=3.333
H=3.10 [H = Storage elev. minus FL of weir]
L=.40
Q=7.28 cfs
Weir opening .40 feet x 3.10' @ FL 518.25

WER (2)
Q=CA(I)²
C=3.333
H=0.19 [H = Storage elev. minus FL of weir]
L=12.0
Q=3.31 cfs
Weir opening 12.0 feet x 0.19' @ FL 518.44



BENCHMARK:
"X" CUT IN CURB 23'± SOUTH OF EAST DRIVE APPROACH
OF EXISTING RAYBURN COUNTRY ELECTRIC BUILDING.

ENGINEERINGCONCEPTS
& DESIGN, L.P.
ENGINEERING / PROJECT MANAGEMENT /
CONSTRUCTION SERVICES - FIRM REG. #F-00145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
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REVISIONS:

DRAWN: TONY	DATE: JUNE 7, 2018
CHECKED: TW	DATE: MAY 23, 2018
PROJECT NO.: 3560	
DWG FILE NAME:	

THIS DOCUMENT IS RELEASED FOR THE
PURPOSE OF CONSTRUCTION.



DETENTION POND 1
RAYBURN ELECTRIC COOP. PHASE 2
LOT 5, BLK 1 RAYBURN COUNTRY ADDITION
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

SHEET
11
OF
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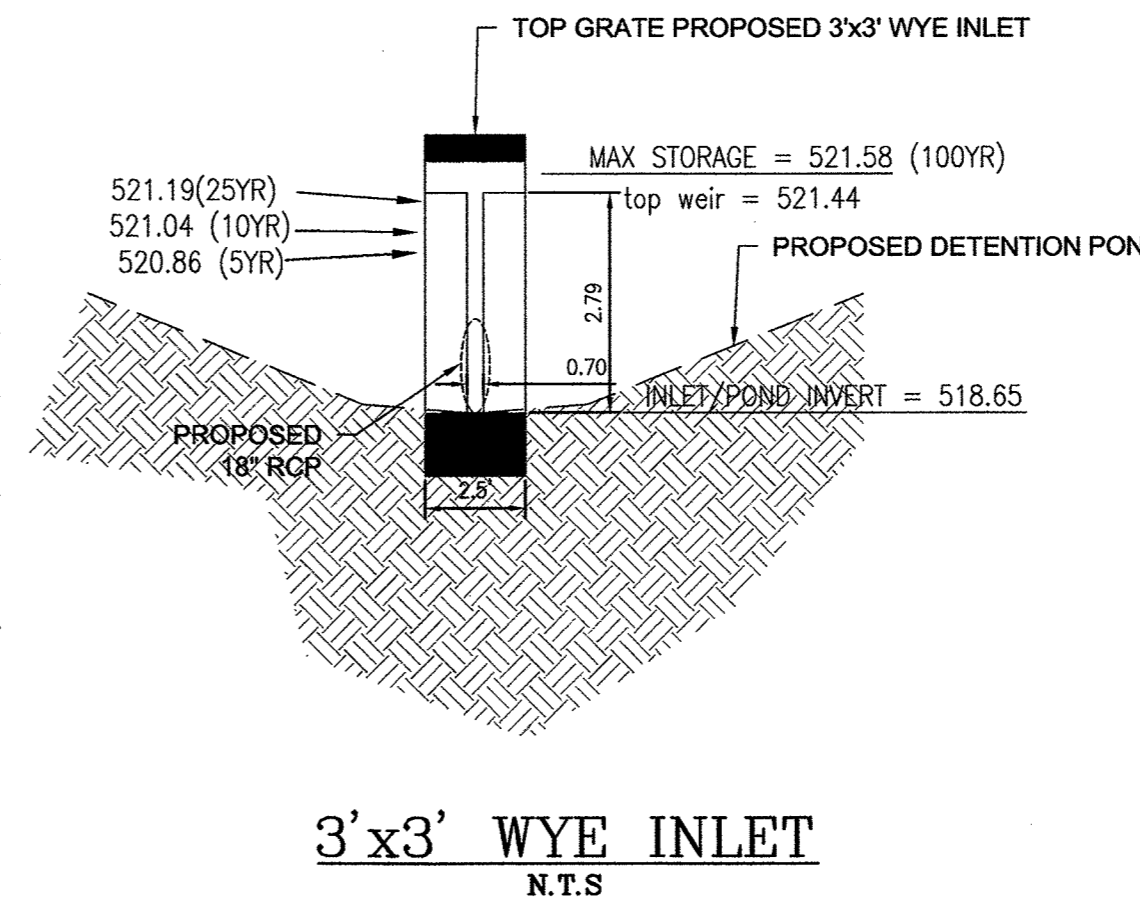
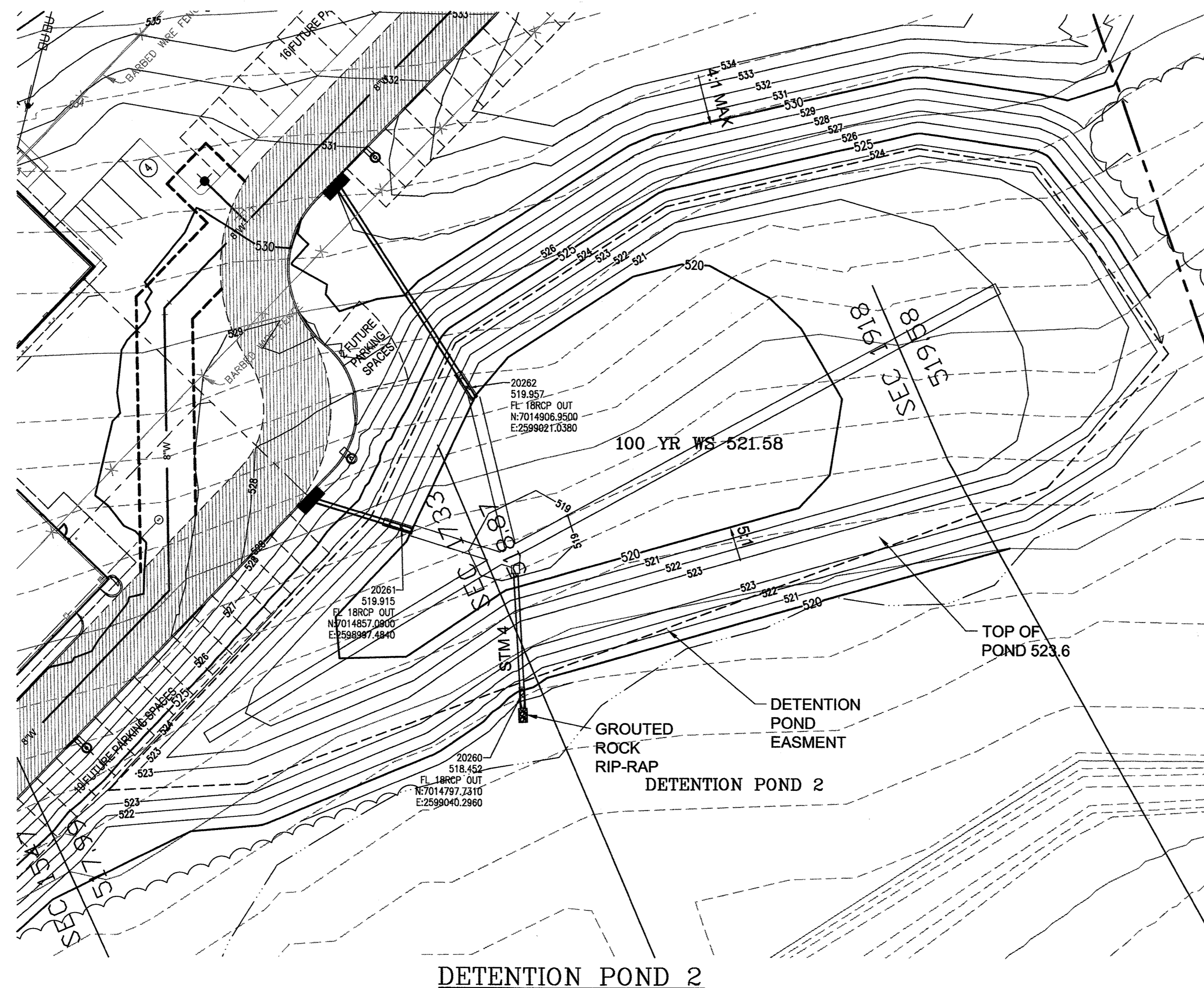
"Case No. SP2017-041"

DETENTION POND VOLUME CALCULATOR			
MODIFIED RATIONAL METHOD			
100 YEAR FREQUENCY			
DETENTION REQUIRED			
Acres	Q		
site total	4.28	12.43	
ByPass	0	0.00	
Area, acre	4.28		
Present Conditions		Proposed Conditions	
C	0.35	C	0.90
Tc	20.00	Tc	10.00
i (100)	6.30	i (100)	9.89
Q (100)	12.43	Q (100)	37.75
Proposed Intensities			
Time	Inflow	Outflow	Storage (cf)
5	17218	5595	11623
10	22850	7480	15190
15	31201	9325	21876
20	38386	11190	27176
30	47842	14920	32922
40	53620	18650	34970
50	57780	22380	35400
60	62402	26110	36292
70	64714	29840	34673
80	67487	33570	33917
90	72803	37300	35503
100	78581	41030	37551
110	81354	44760	36594

DETENTION POND VOLUME CALCULATOR			
MODIFIED RATIONAL METHOD			
25 YEAR FREQUENCY			
DETENTION REQUIRED			
Acres	Q		
site total	4.28	10.04	
ByPass	0	0.00	
Area, acre	4.28		
Present Conditions		Proposed Conditions	
C	0.35	C	0.90
Tc	20.00	Tc	10.00
i (100)	6.70	i (100)	9.30
Q (100)	10.04	Q (100)	35.82
Proposed Intensities			
Time	Inflow	Outflow	Storage (cf)
5	13887	4516	9351
10	21494	6022	15472
15	27041	7527	19514
20	30970	9033	21937
30	36748	12044	24704
40	41602	15055	26547
50	47148	18088	27003
60	47148	21072	26072
70	50153	24088	26085
80	51771	27099	24572
90	54082	30110	23972
100	55469	33121	22348
110	55931	36132	19799

DETENTION POND VOLUME CALCULATOR			
MODIFIED RATIONAL METHOD			
10 YEAR FREQUENCY			
DETENTION REQUIRED			
Acres	Q		
site total	4.28	8.54	
ByPass	0	0.00	
Area, acre	4.28		
Present Conditions		Proposed Conditions	
C	0.35	C	0.90
Tc	20.00	Tc	10.00
i (100)	5.70	i (100)	8.00
Q (100)	8.54	Q (100)	30.82
Proposed Intensities			
Time	Inflow	Outflow	Storage (cf)
5	11672	3842	7829
10	18490	5123	13366
15	22881	6404	16477
20	26348	7685	18883
30	31201	10246	20955
40	35130	12808	22322
50	38135	15369	22765
60	40215	17931	22294
70	42064	20493	21571
80	44375	23054	21321
90	45762	25616	20146
100	46224	28177	18047
110	45762	30739	15023

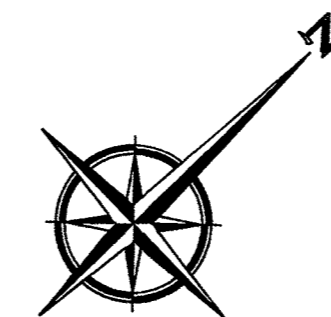
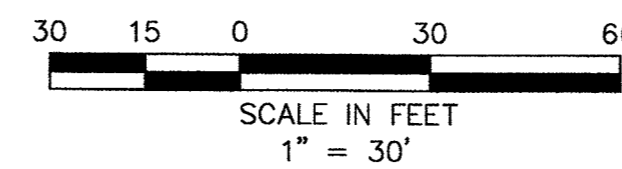
DETENTION POND VOLUME CALCULATOR			
MODIFIED RATIONAL METHOD			
5 YEAR FREQUENCY			
DETENTION REQUIRED			
Acres	Q		
site total	4.28	7.49	
ByPass	0	0.00	
Area, acre	4.28		
Present Conditions		Proposed Conditions	
C	0.35	C	0.90
Tc	20.00	Tc	10.00
i (100)	5.00	i (100)	6.90
Q (100)	7.49	Q (100)	26.58
Proposed Intensities			
Time	Inflow	Outflow	Storage (cf)
5	9961	3371	6591
10	15947	4494	11453
15	20107	5618	14490
20	23112	6741	16371
30	27041	8988	18053
40	30508	11235	19273
50	32357	13482	18875
60	34668	15729	18939
70	35592	17976	17616
80	36979	20223	16756
90	38522	22470	17052
100	39290	24717	14573



NOTE:
PROPOSED STRUCTURE HAS A WEIR OPENING OF 0.70 FEET TO RELEASE AT EXISTING RATES FOR 5/10/25 AND 100 YEAR STORMS FOR POND 2 AREA.

RECORD DRAWINGS
To the best of our knowledge Engineering Concepts & Design, L.P., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.
Todd Winters 6-13-19
TODD WINTERS DATE

NOTE:
ENTIRE DETENTION SYSTEM TO BE MAINTAINED BY PROPERTY OWNER.



DETENTION POND

TOTAL DRAINAGE AREA POND 2 4.28 AC.
EXISTING C FACTOR: C=0.35
DEVELOPED C FACTOR: C=0.90

ALLOWABLE RELEASE, 5 YEAR (Q= CIA)
5 YEAR 20 MINUTE INTENSITY I=5.00
C=0.35
Q(5)=7.5 cfs (ALLOWABLE RELEASE)

ALLOWABLE RELEASE, 10 YEAR (Q= CIA)
10 YEAR 20 MINUTE INTENSITY I=5.7
C=0.35
Q(10)=8.5 cfs (ALLOWABLE RELEASE)

ALLOWABLE RELEASE, 25 YEAR (Q= CIA)
25 YEAR 20 MINUTE INTENSITY I=6.7
C=0.35
Q(25)=10.0 cfs (ALLOWABLE RELEASE)

ALLOWABLE RELEASE, 100 YEAR (Q= CIA)
100 YEAR 20 MINUTE INTENSITY I=8.3
C=0.35
Q(100)=12.4 cfs (ALLOWABLE RELEASE)

Detention Pond Volume Calculations

Pond Overflow Elevation = 523.6
100yr Water Surface Elevation = 521.58
INVERT ELEVATION = 518.65

Contour Elevation	Surface Area (sf)	Average Area	Cumulative Volume (cf)
518.65	0		
519.00	396	198	69
520.00	13,194	6,795	3,467
521.00	23,410	18,302	21,769
522.00	30,674	27,042	48,811

5yr WS 520.86
10yr WS 521.04
25yr WS 521.19
100yr WS 521.58

19,273 CF
22,765 CF
27,003 CF
37,551 CF

Outlet Structure Calculations 5 Year Discharge @ Max Water Surface

Q total = 7.5 cfs Allowed
Storage Elevation = 520.85
Invert Elevation = 518.65
Width Weir (1) = 0.70

Q total = 7.61 cfs Provided
Q ALLOW TO Q DESIGN, 10yr DIFFERENCE = 1.5%

WEIR (1)
Q=0.147
C=3.333
H=2.20 [H = Storage elev. minus FL of weir]
L=0.70
Q=7.61 cfs
Weir opening 0.70 feet x 2.20' @ WS 520.85

Outlet Structure Calculations 10 Year Discharge @ Max Water Surface

Q total = 8.5 cfs Allowed
Storage Elevation = 521.04
Invert Elevation = 518.65
Width Weir (1) = 0.70

Q total = 8.62 cfs Provided
Q ALLOW TO Q DESIGN, 10yr DIFFERENCE = 1.4%

WEIR (1)
Q=0.147
C=3.333
H=2.20 [H = Storage elev. minus FL of weir]
L=0.70
Q=8.62 cfs
Weir opening 0.70 feet x 2.30' @ WS 521.04

Outlet Structure Calculations 25 Year Discharge @ Max Water Surface

Q total = 10.0 cfs Allowed
Storage Elevation = 521.19
Invert Elevation = 518.65
Width Weir (1) = 0.70

Q total = 9.44 cfs Provided
Q ALLOW TO Q DESIGN, 10yr DIFFERENCE = -5.6%

WEIR (1)
Q=0.147
C=3.333
H=2.54 [H = Storage elev. minus FL of weir]
L=0.70
Q=9.44 cfs
Weir opening 0.70 feet x 2.54' @ WS 521.19

Outlet Structure Calculations 100 Year Discharge @ Max Water Surface

Q total = 12.4 cfs Allowed
Storage Elevation = 521.44
Invert Elevation = 518.65
Width Weir (1) = 0.70

Q total = 12.62 cfs Provided
Q ALLOW TO Q DESIGN, 10yr DIFFERENCE = 1.8%

WEIR (1)
Q=0.147
C=3.333
H=2.78 [H = Storage elev. minus FL of weir]
L=0.70
Q=10.57 cfs
Weir opening 0.70 feet x 2.78' @ FL 521.44
WEIR (2)
Q=0.147
C=3.333
H=0.14 [H = Storage elev. minus FL of weir]
L=10.0
Q=1.75 cfs
Weir opening 10.0 feet x 0.14' @ FL 521.58

"Case No. SP2017-041"

BENCHMARK:
"X" CUT IN CURB 23± SOUTH OF EAST DRIVE APPROACH OF EXISTING RAYBURN COUNTRY ELECTRIC BUILDING.



ENGINEERING / PROJECT MANAGEMENT / CONSTRUCTION SERVICES - FIRM REG. #F-001145
201 WINDCO CIR. STE 200, WYLIE, TX 75098
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REVISIONS:	
DRAWN: TONY	DATE: JUNE 7, 2018
CHECKED: TW	DATE: MAY 23, 2018
PROJECT NO.: 3560	
DWG FILE NAME:	

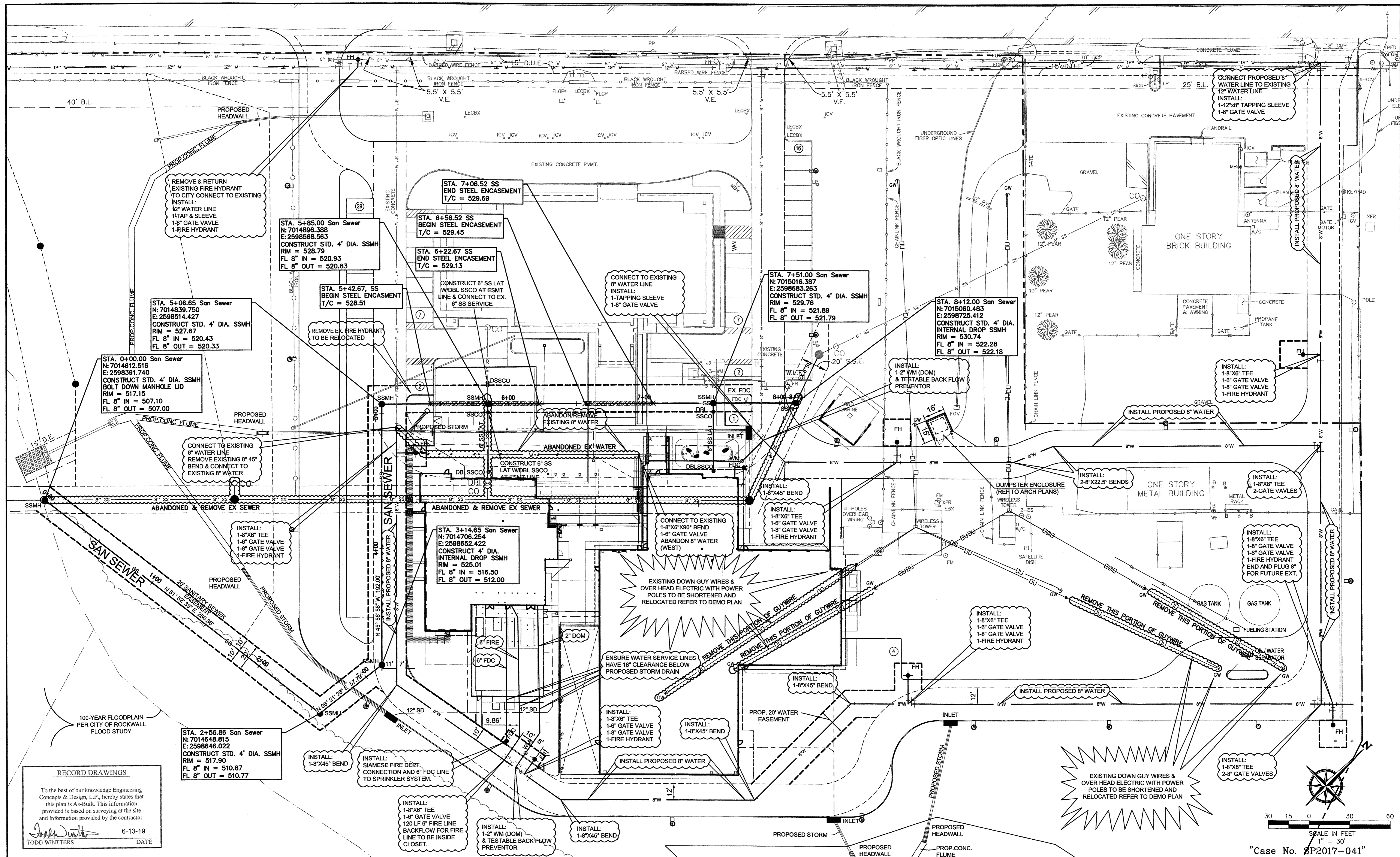
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Todd D. Winters 6-13-19

DETENTION POND 2
RAYBURN ELECTRIC COOP. PHASE 2
LOT 5, BLK 1 RAYBURN COUNTRY ADDITION
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

SHEET
12
OF
20



RECORD DRAWINGS

To the best of our knowledge Engineering Concepts & Design, L.P., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.

Todd Winters 6-13-19
TODD WINTERS DATE

BENCHMARK:
"X" CUT IN CURB 23'± SOUTH OF EAST DRIVE APPROACH OF EXISTING RAYBURN COUNTRY ELECTRIC BUILDING.

ENGINEERINGCONCEPTS & DESIGN, L.P.

ENGINEERING / PROJECT MANAGEMENT / CONSTRUCTION SERVICES - FIRM REG. #F-001145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS:	
ADDENDUM 1 NOTE	
DRAWN: TONY	DATE: APRIL 13, 2018
CHECKED: TW	DATE: APRIL 13, 2018
PROJECT NO.: 3560	DWG FILE NAME:

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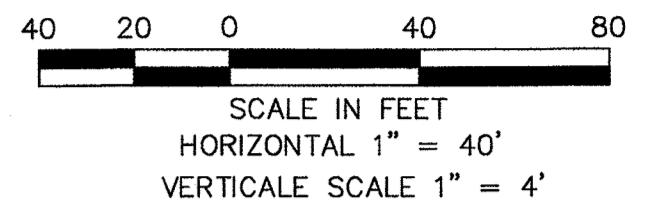
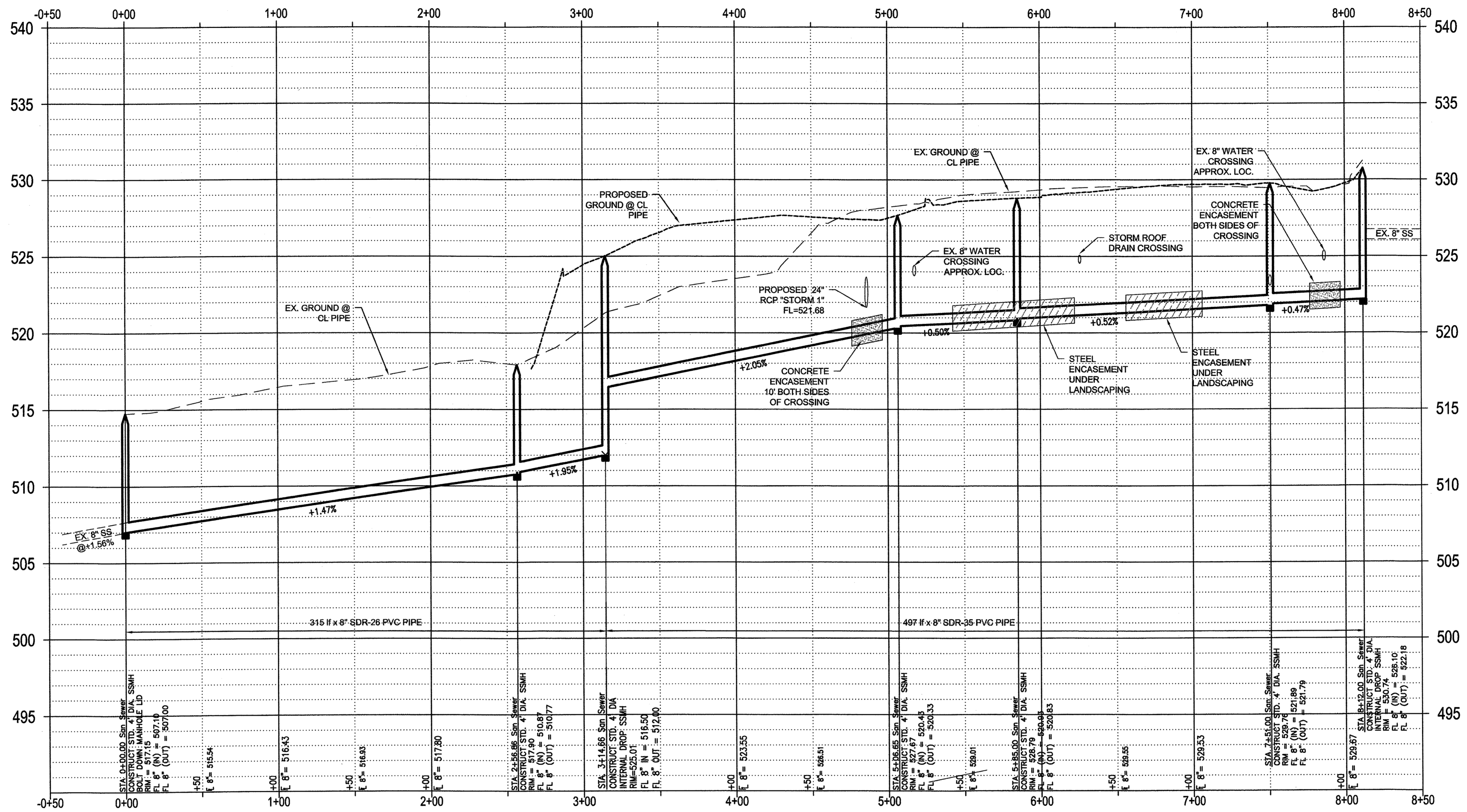


WATER & SANITARY SEWER PLAN
RAYBURN ELECTRIC COOP. PHASE 2
LOT 5, BLK 1 RAYBURN COUNTRY ADDITION
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

SHEET
13
OF
20

"Case No. 8P2017-041"

SAN SEWER
SCALE H: 4
SCALE V: 10.00



RECORD DRAWINGS
To the best of our knowledge Engineering Concepts & Design, L.P., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.
Todd Winters
TODD WINTERS DATE 6-13-19

"Case No. SP2017-041"

BENCHMARK:
"X" CUT IN CURB 23'± SOUTH OF EAST DRIVE APPROACH OF EXISTING RAYBURN COUNTRY ELECTRIC BUILDING.

ENGINEERINGCONCEPTS & DESIGN, L.P.
ENGINEERING / PROJECT MANAGEMENT / CONSTRUCTION SERVICES - FIRM REG. #F-001145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS:

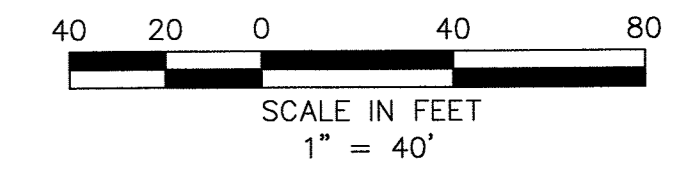
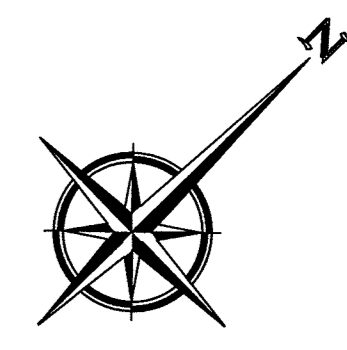
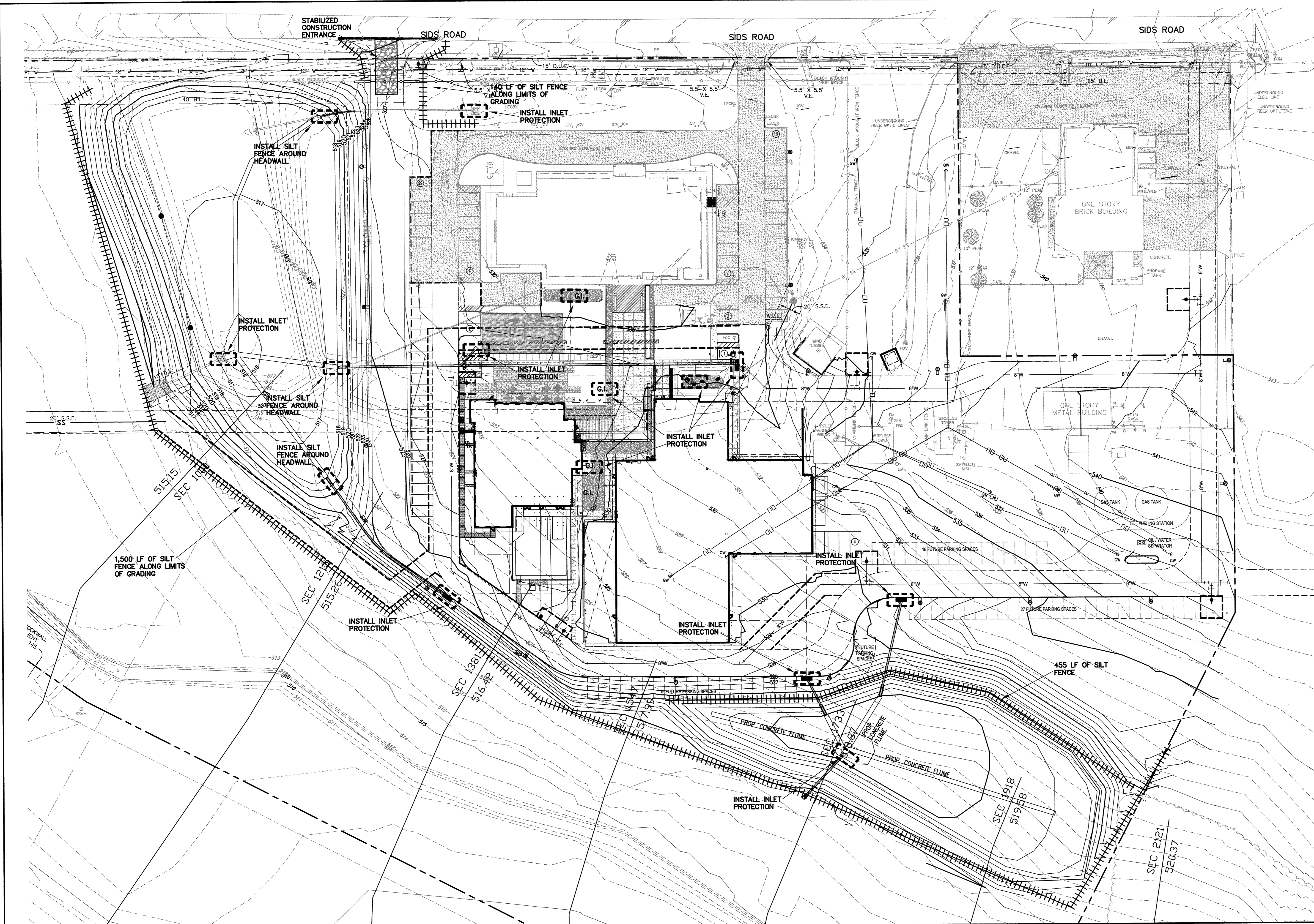
DRAWN: BILL	DATE: APRIL 13, 2018
CHECKED: TW	DATE: APRIL 13, 2018
PROJECT NO.: 3560	
DWG FILE NAME:	

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SANITARY SEWER PROFILE
RAYBURN ELECTRIC COOP. PHASE 2
LOT 5, BLK 1 RAYBURN COUNTRY ADDITION
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

SHEET
14
OF
20



NOTE:
ALL DISTURBED AREAS TO HAVE GRASS ESTABLISHED AT A HEIGHT OF 1" AND 80% COVERAGE PRIOR TO FINAL ENGINEERING ACCEPTANCE.

LEGEND:

- SILT FENCE
- INLET PROTECTION
- CONSTRUCTION ENTRANCE

REFER TO SHEET 20 FOR EROSION CONTROL DETAILS

RECORD DRAWINGS

To the best of our knowledge Engineering Concepts & Design, L.P., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.

Todd Winters 6-13-19
TODD WINTERS DATE

"Case No. SP2017-041"

BENCHMARK:
"X" CUT IN CURB 23'± SOUTH OF EAST DRIVE APPROACH OF EXISTING RAYBURN COUNTRY ELECTRIC BUILDING.



ENGINEERING / PROJECT MANAGEMENT / CONSTRUCTION SERVICES - FIRM REG. #F-001145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS:	
DRAWN: BILL	DATE: APRIL 13, 2018
CHECKED: TW	DATE: APRIL 13, 2018
PROJECT NO.: 3560	
DWG FILE NAME:	

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF CONSTRUCTION.



EROSION CONTROL PLAN
RAYBURN ELECTRIC COOP. PHASE 2
LOT 5, BLK 1 RAYBURN COUNTRY ADDITION
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

SHEET
15
OF
20

GENERAL NOTES:

1. All work, methods, materials, and equipment shall conform to City of Rockwall Subdivision Regulations, the North Central Texas Council of Government construction standards 4th edition, any special provisions to the NCTCOG approved by the city of Rockwall. Standard details can be obtained from NCTCOG and the City of Rockwall.
2. Prior to construction, the contractor shall familiarize himself with the contract documents and specifications, the plans including all notes and any other applicable standards or specifications relevant to the proper completion of the work specified. Failure on the part of the contractor to familiarize himself with all standards or specifications pertaining to this work shall in no way relieve the contractor of responsibility for performing the work in accordance with all such applicable standards and specifications.
3. Contractor shall have in his possession, prior to construction, all-necessary permits, licenses, etc. Contractor shall have at least one set of approved engineering plans and specifications on site at all times.
4. Any item of work called for by the plans and/or specification and not included, as a bid item shall be subsidiary to the construction of the various bid items.
5. Construction inspection will be performed by representatives of the owner, engineer, City, geotechnical engineer, and reviewing authorities and agencies. Unrestricted access shall be provided to them at all times. Contractor is responsible for scheduling required inspections as required by contract documents.
6. The contractor and all subcontractors must confine their activities to the work area. Any damage resulting from work outside the work area, shall be the contractor's responsibility.
7. It will be the responsibility of each contractor to protect all existing public and private utilities throughout the construction of this project. Contractor shall contact the appropriate utility companies for line locations prior to commencement of construction and shall assume full liability to those companies for any damages caused to their facilities. Location of utilities are taken from the City and Utility Company records. Contractor shall field verify to determine exact location of utilities. Contractor to adjust all existing and proposed utilities to final grade.
8. Trench safety design will be the responsibility of the contractor. The contractor shall abide by all applicable federal, state, and local laws governing excavation. Trench side slopes shall meet OSHA standards. Shuttling, shoring, and bracing shall be required when side slope standards are not met. A pull box, meeting OSHA standards will be acceptable. The contractor shall submit detailed plans to the City Engineer for review showing how OSHA Standards for excavation shall be met prior to the start of any utility construction. The plans shall be sealed by an Engineer registered by the State of Texas.
9. Contractor shall stockpile salvage materials for inspection. All items not salvaged by the owner shall be removed from the site at the contractor's expense. The owner will transport salvaged materials away from the site at the owner's expense. Salvage, stockpile, and removal of materials shall be considered subsidiary to the various bid items and shall not be paid for directly unless such items are specifically included in the bid items.
10. The contractor shall be responsible for providing and maintaining all necessary warning and safety work, material, and operations needed to provide for the health and safety of the public until all work has been completed, including maintenance bond periods, and to be accepted by City of Rockwall in writing.
11. All fill to be compacted to 95% with sheeps foot roller in 8" lifts.

WATER NOTES:

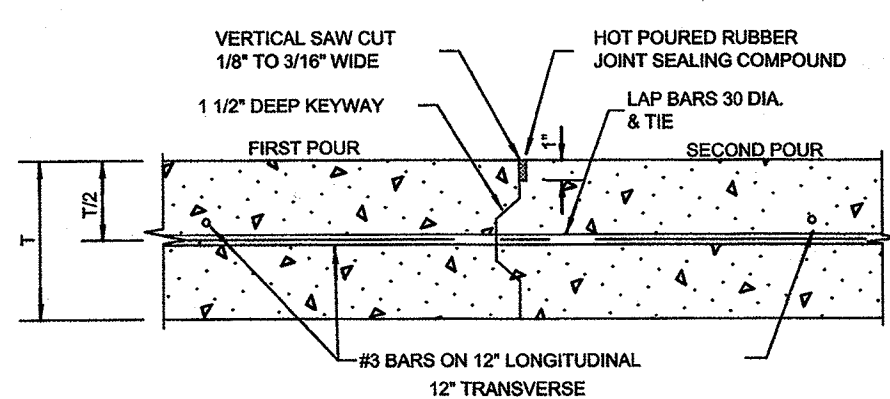
1. All new water line shall be fully purged. Do not test against existing valves when connecting to existing lines.
2. Where water mains either cross or otherwise come within 9 feet of a sanitary sewer main, the contractor will conform to Texas Administrative Code Title 30, Part 1, Chapter 290, Subchapter D, Rule §290.44.
3. Utility contractor shall use MEGALUG when installing the water line and double strap services when installing the services.
4. Water services shall be installed w/double strap saddle and tap installed with a corporation stop at the distribution pipeline and an angle stop.
5. All water lines shall be pressure tested and disinfected in accordance with AWWA C 601. A passing Bacteriological test (negative for coliform) shall be achieved prior to acceptance.
6. Water pipelines shall be PVC pipe conforming to the Standard Specifications for Construction. In general, the water pipelines shall be Class 200 PVC C900 DR14 pipe, and installed with a minimum of four feet (4') of cover, unless approved by the City. All pipes shall be installed in embedment material as shown on the Standard Drawings and in conformance with the Standard Specifications of Construction. Blue EMS locator pads to be installed on waterline every 250' and at every bend, service, and valve.
7. All gate valves shall be manufactured by Mueller or Kennedy, or an approved equal with resilient seat only and shall conform to and shall be installed according to the Standard Specifications of Construction.
8. Fire hydrants shall be either Mueller, American Darling or an approved equal conforming to the requirements set forth in the Standard Specifications for Construction. All fire hydrants shall be installed with a six-inch (6") gate valve on the hydrant lead. The installation shall be as set forth in the Standard Specifications for Construction. Fire hydrants shall be painted to meet the City's requirements for color code as set forth in the Standard Specifications. In general, the fire hydrant will be reflective silver with differing cap color, which corresponds to the size of hydrant feeder line, as detailed in Table 5.2. Fire hydrants shall be installed at the end of each dead end line. Minimum main size for a fire hydrant shall be eight inches (8") if main is over fifty feet (50') long.

In non-residential developments an eight inch (8") lead will be required on all fire hydrants that are located more than fifty feet (50') from a looped water line.
9. Service pipelines shall be in accordance with the designs shown on the Standard Drawings. The materials shall be Mueller or approved equal and shall be installed in accordance with the Standard Specifications for Construction. All connections shall be flare type or approved equal.
10. Mega-lugs or approved equal shall be installed at all horizontal change in directions at all vertical changes in directions that require a bend. The restraints shall be placed at the bend and at the next pipe joint in each direction from the bend.
11. Commercial irrigation meters shall have a testable double check backflow preventer.
12. Install blue EMS disks on the water line at every change in direction, valve, fire hydrant, and every 250'.

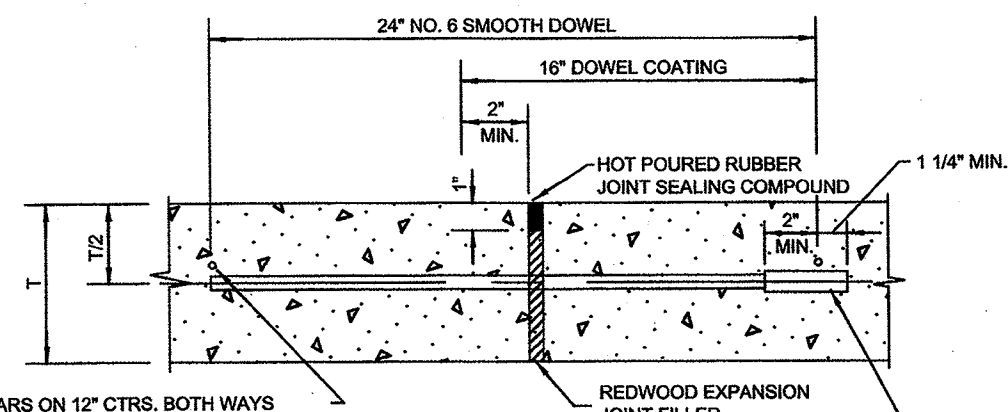
WASTEWATER NOTES:

1. All wastewater lines shall be tested for infiltration in accordance with the procedures set forth in the Standard Specifications for Construction. In general, all wastewater pipe shall be installed so that the completed wastewater will have a maximum exfiltration of one hundred fifty (150) gallons per inch of internal diameter, per mile of pipe, per 24 hours, where the maximum hydrostatic head at the centerline of the pipe does not exceed twenty-five (25) feet. A television survey will be performed as part of the final testing in the tenth (10th) month of the maintenance period. The City's representative shall be present at all testing. All expenses for this work shall be the developer's responsibility.
2. Install green EMS disks on sanitary sewer line at every change in direction, manhole, service, & clean out.
3. All manholes to be Raven lined or approved equal.

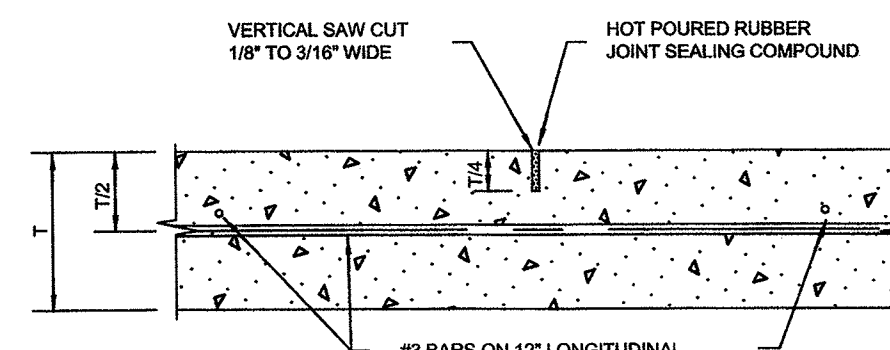
NOTE:
75%-80% OF ALL DISTURBED AREA TO HAVE A MINIMUM OF 1" STAND OF GRASS (NOT WEEDS OR WINTER RYE) PRIOR TO CITY ACCEPTANCE.



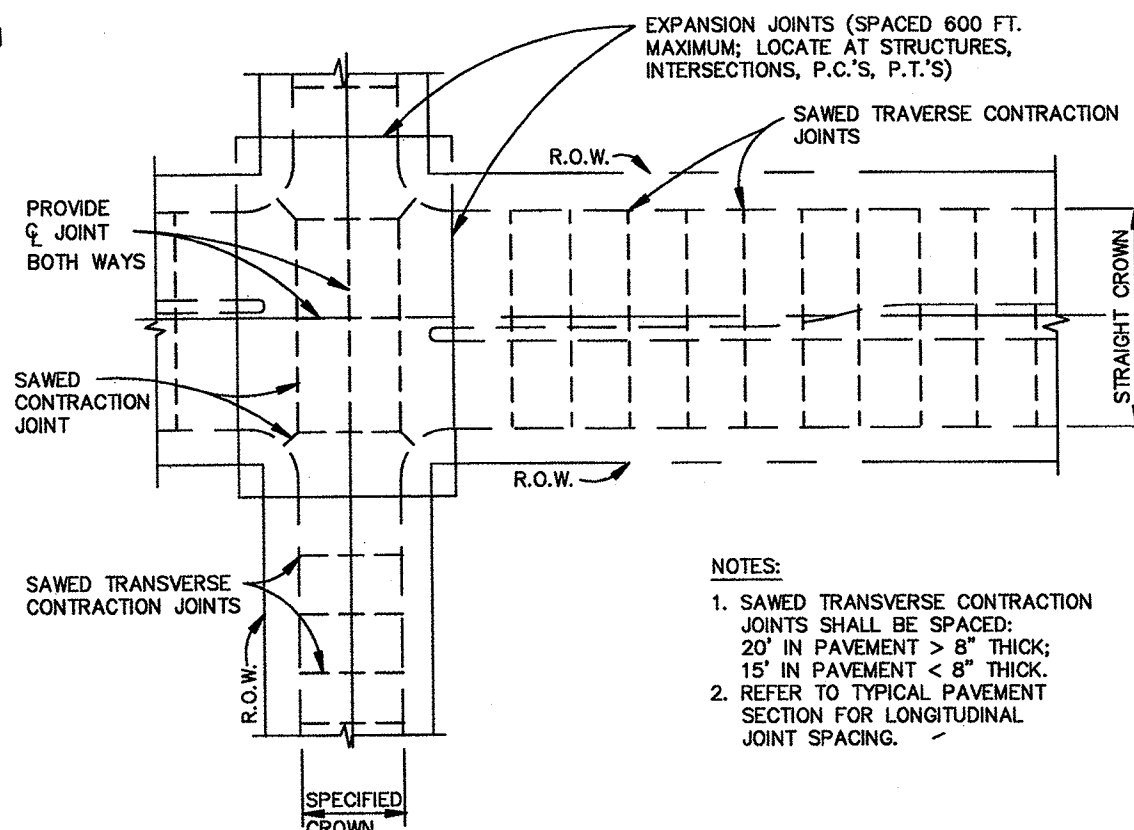
CONSTRUCTION JOINT DETAIL
N.T.S.



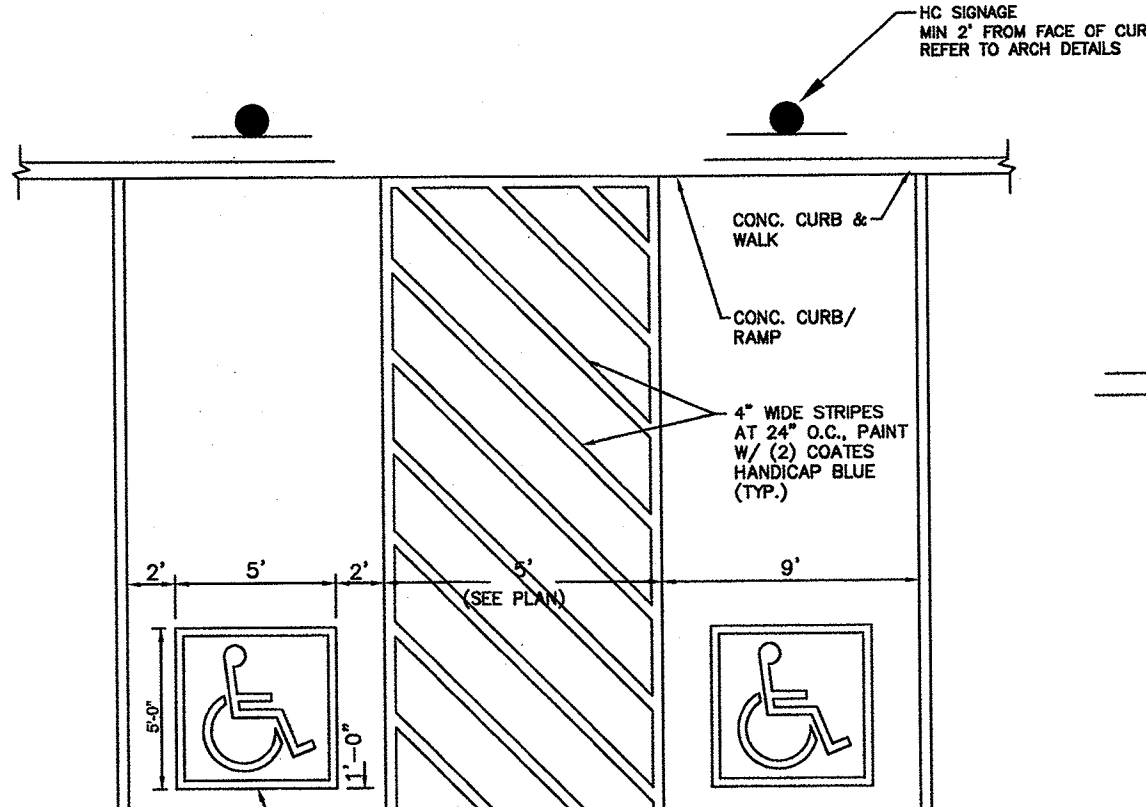
TRANSVERSE EXPANSION JOINT DETAIL
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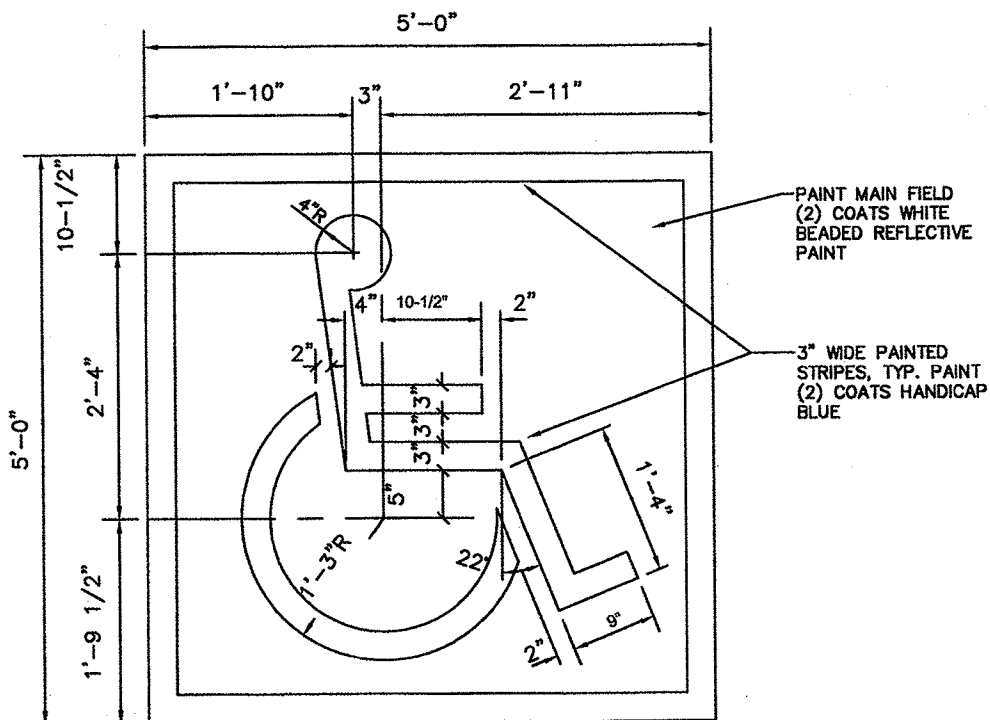
SAWED DUMMY JOINT DETAIL
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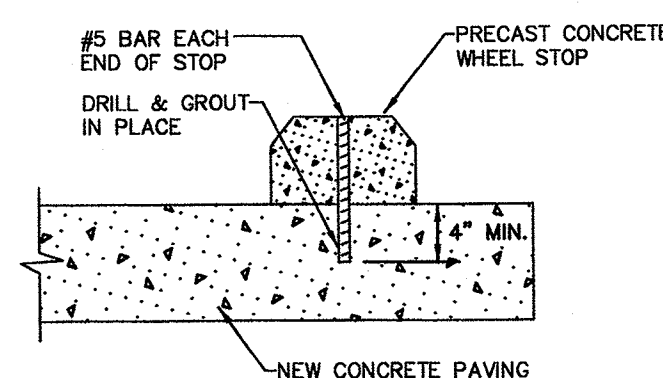
SPACING DIAGRAM FOR TRANSVERSE JOINTS
N.T.S.



ACCESSIBILITY PARKING
N.T.S.



PAINTED ACCESSIBILITY SYMBOL
N.T.S.



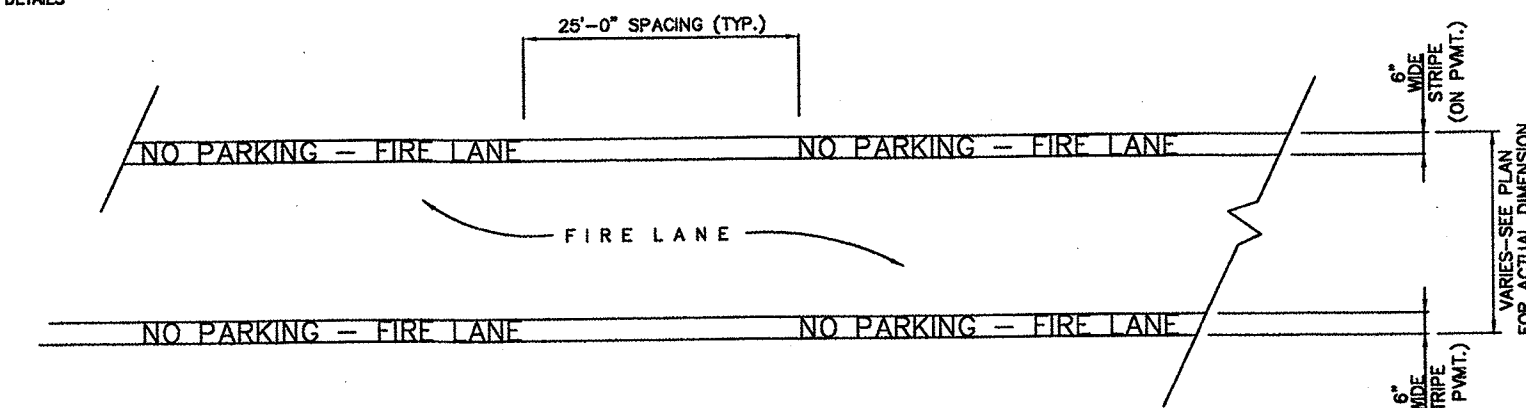
WHEEL STOP DETAIL
NO SCALE

NOTE:
-DETENTION / DRAINAGE TO BE MAINTAINED, AND REPAIRED BY PROPERTY OWNER.
-DETENTION / DRAINAGE TO BE FULLY INSTALLED AND MAINTAINED BEFORE PAVING IS INSTALLED.

RECORD DRAWINGS

To the best of our knowledge Engineering Concepts & Design, L.P., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.

Todd Winters 6-13-19
TODD WINTERS DATE



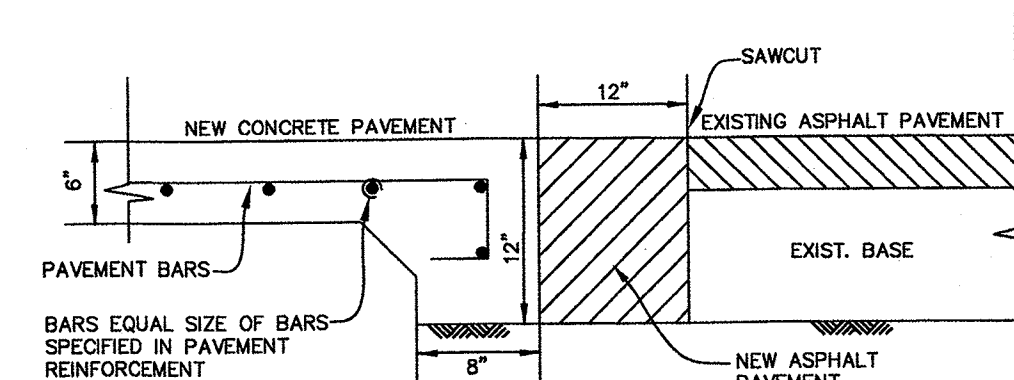
FIRELANE STRIPING DETAIL
N.T.S.

NOTE:
Firelane markings shall be placed on curb when firelane is adjacent to curb and on pavement in all other applications.

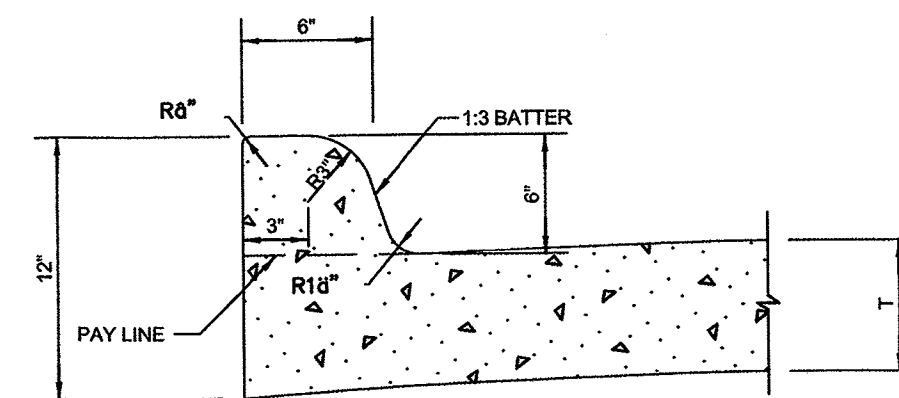
STRIPING DETAILS AND SPECIFICATIONS

A. Paint:
1. Stripes shall be six (6) inches wide when on pavement and from the top of the seam of the curb to a point even with the driving surface when on curb, painted with an exterior acrylic latex paint.
a. Color shall be "Traffic Red" Glidden No. 63251 or equal.
b. Letters shall be four (4) inches high pointed with an exterior acrylic latex paint.
i. Color shall be "Traffic White" Glidden No. 583245 or equal.

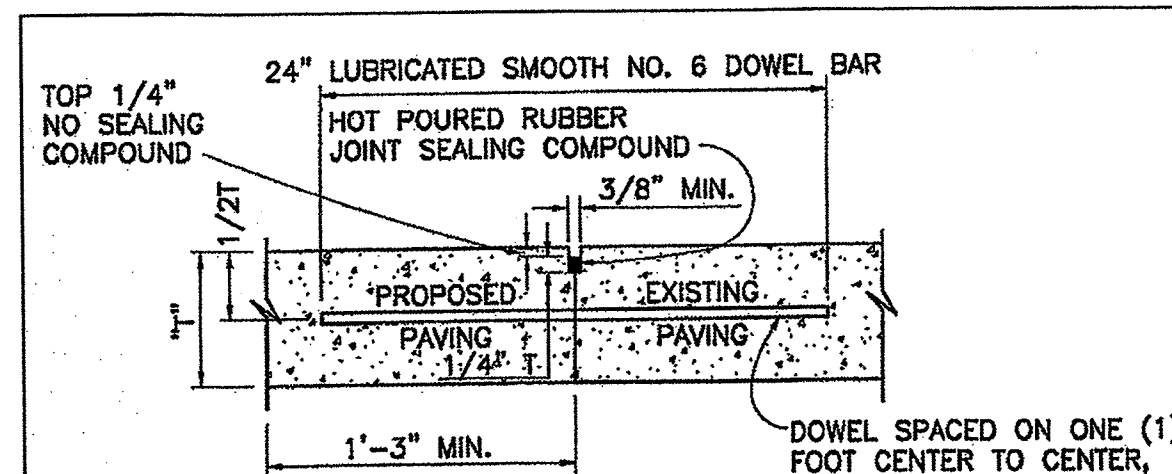
B. Application:
1. Stripes may be brushed or sprayed, one coat to finish.
2. Letters shall be stencil formed, brush applied and spaced as detailed on this sheet.



CONNECTION TO EXISTING ASPHALT PAVEMENT
N.T.S.



INTEGRAL CURB DETAIL
N.T.S.



NOTES:
T=PAVEMENT THICKNESS

1. LONGITUDINAL BUTT CONSTRUCTION MAY BE UTILIZED IN PLACE OF LONGITUDINAL HINGED (KEYWAY) JOINT AT CONTRACTORS OPTION.
2. DOWEL BARS SHALL BE DRILLED INTO PAVEMENT HORIZONTALLY BY USE OF A MECHANICAL RIG.

DRILLING BY HAND IS NOT ACCEPTABLE, PUSHING DOWEL BARS INTO GREEN CONCRETE NOT ACCEPTABLE

LONGITUDINAL BUTT JOINT
NO SCALE

BENCHMARK:
"X" CUT IN CURB 23'± SOUTH OF EAST DRIVE APPROACH OF EXISTING RAYBURN COUNTRY ELECTRIC BUILDING.

ENGINEERING CONCEPTS & DESIGN, L.P.

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REVISIONS:	
DRAWN: TONY	DATE: APRIL 13, 2018
CHECKED: TW	DATE: APRIL 13, 2018
PROJECT NO: 3560	
DWG FILE NAME:	

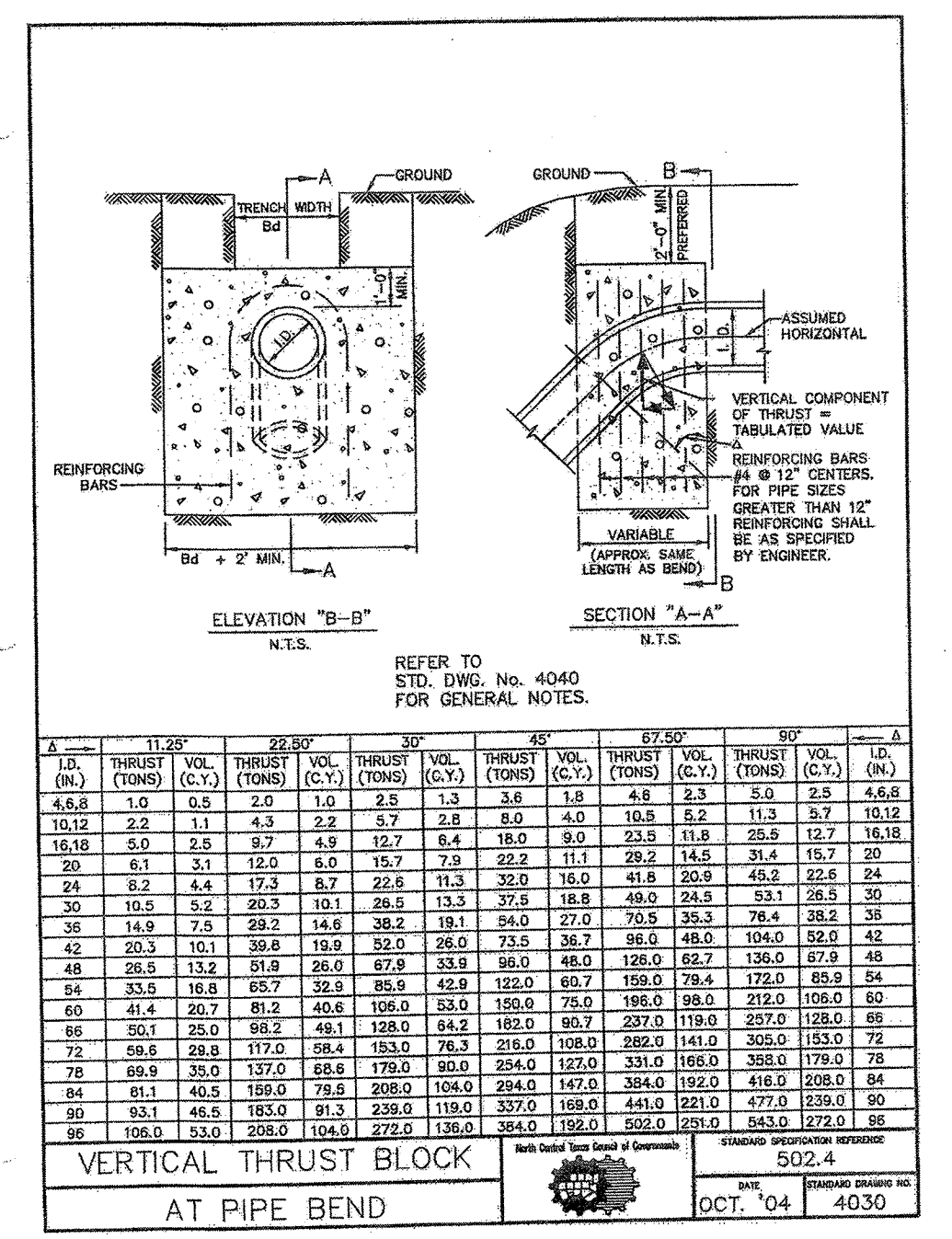
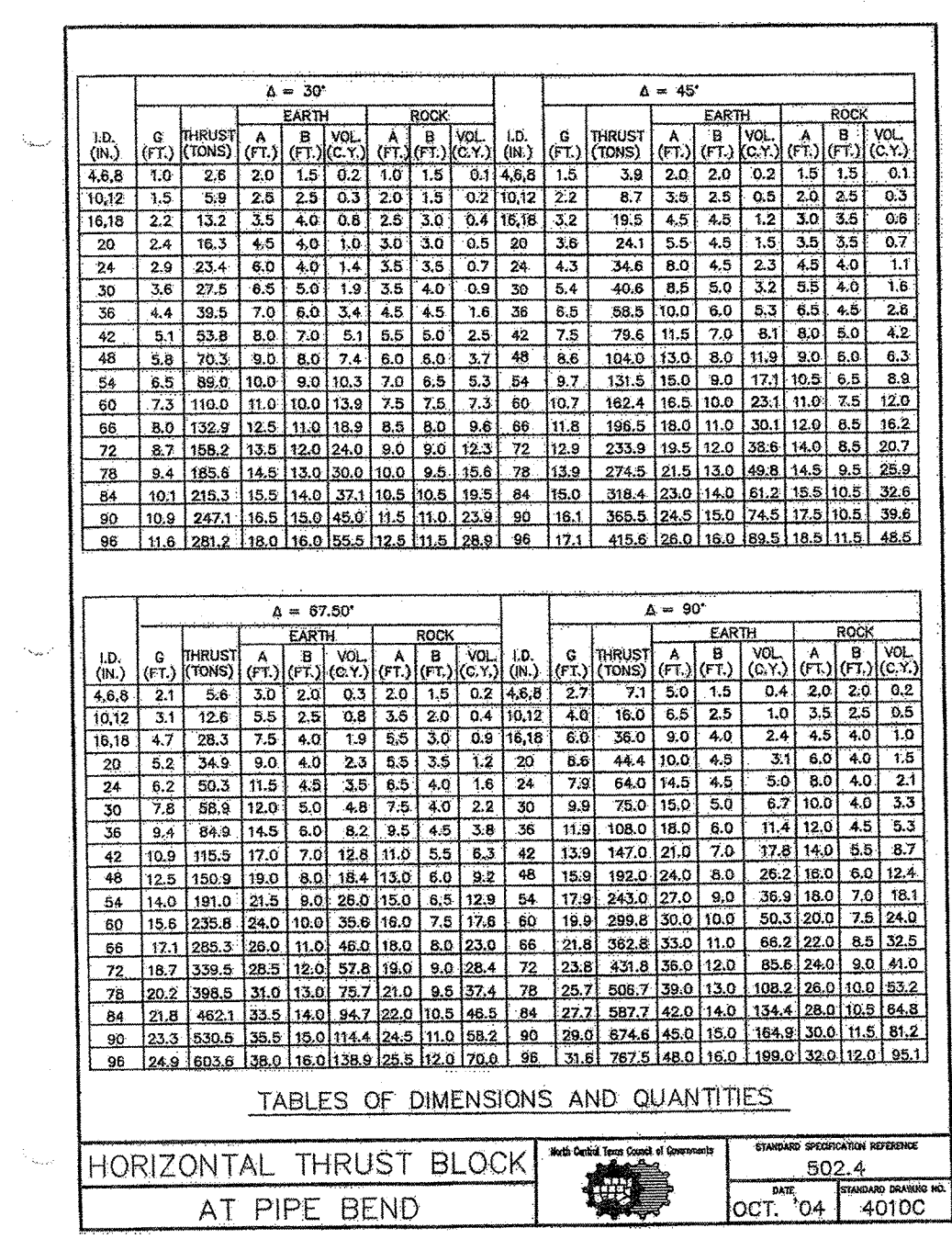
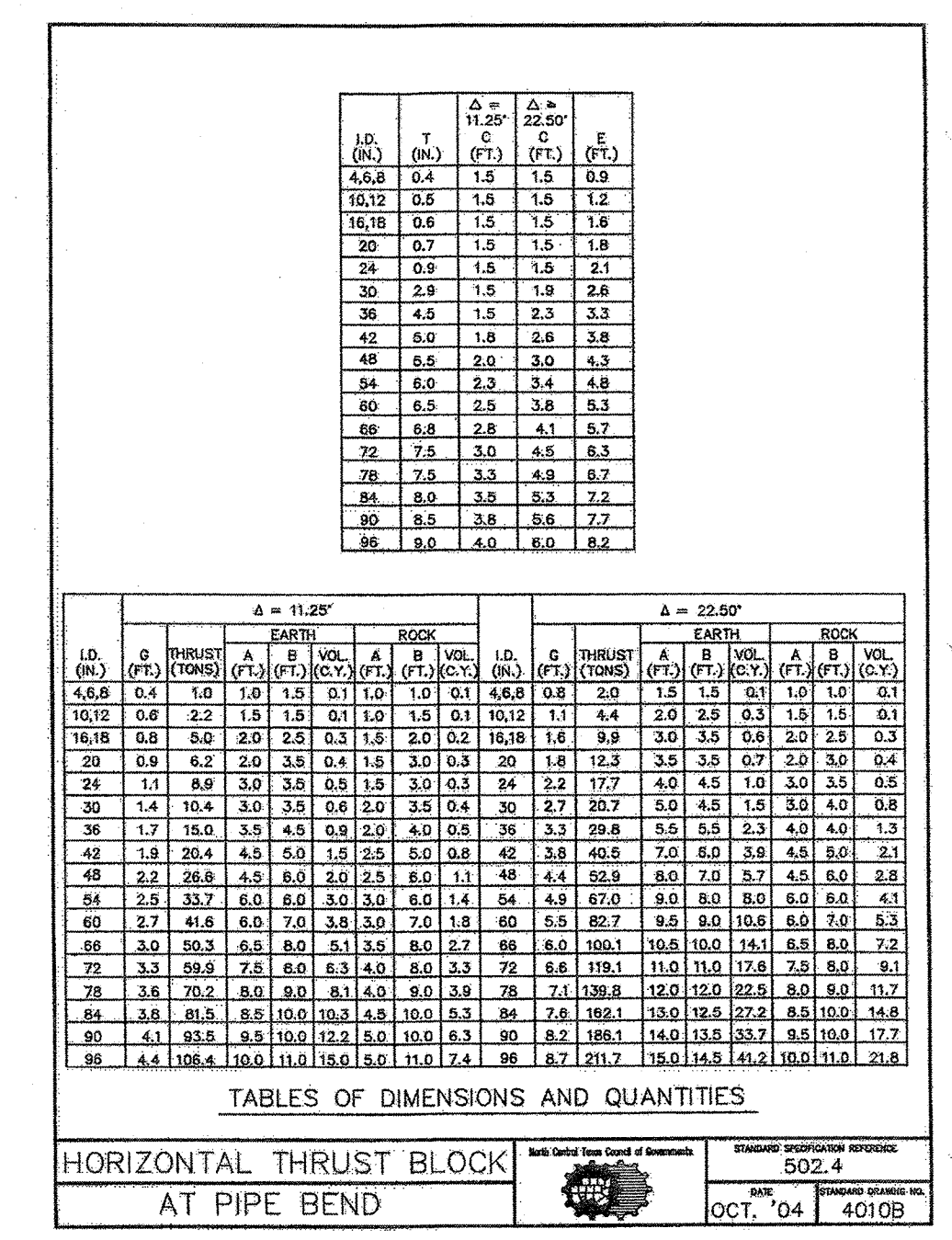
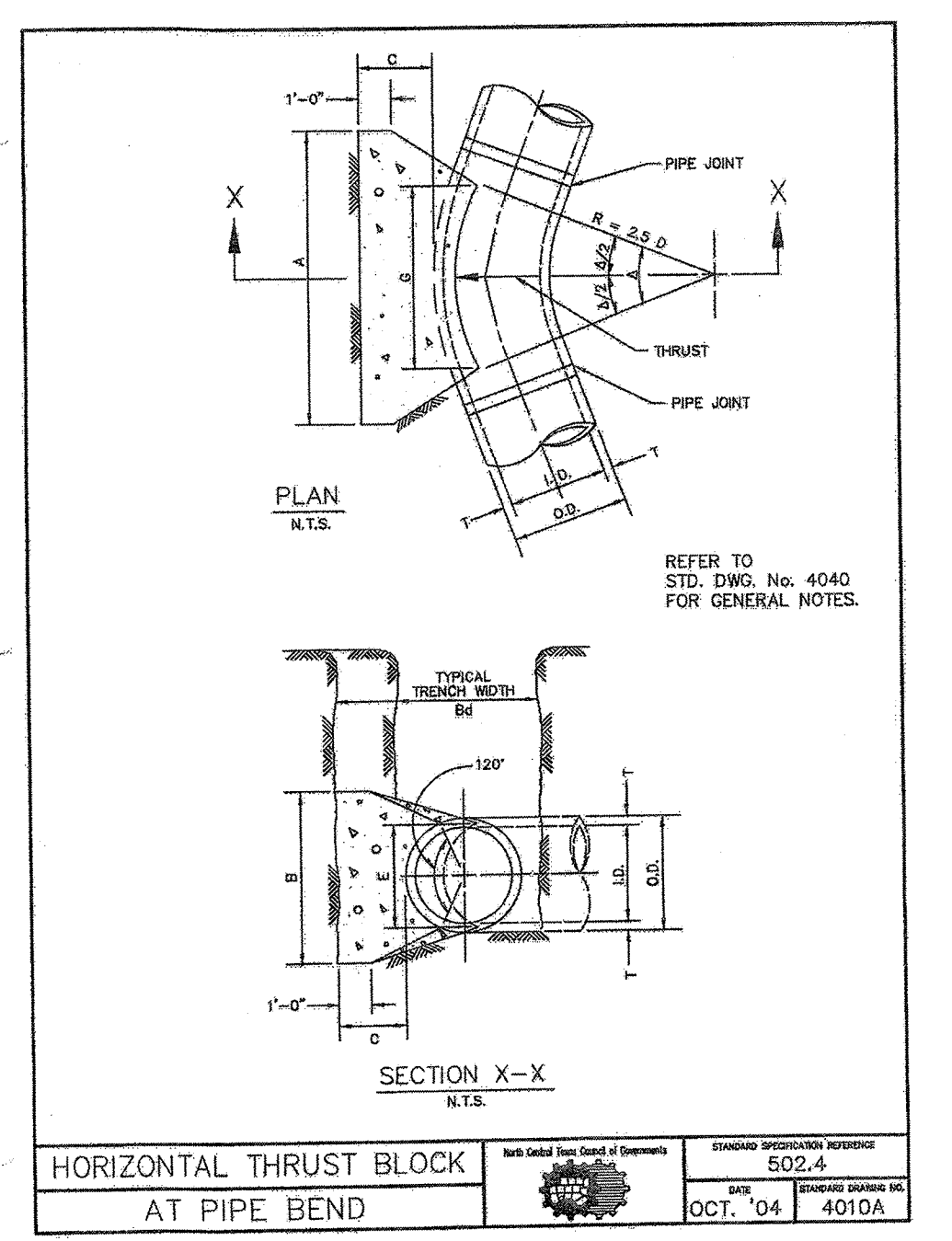
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GENERAL NOTES & PAVING SECTIONS
RAYBURN ELECTRIC COOP. PHASE 2
LOT 5, BLK 1 RAYBURN COUNTRY ADDITION
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

SHEET
16
OF
20

"Case No. SP2017-041"



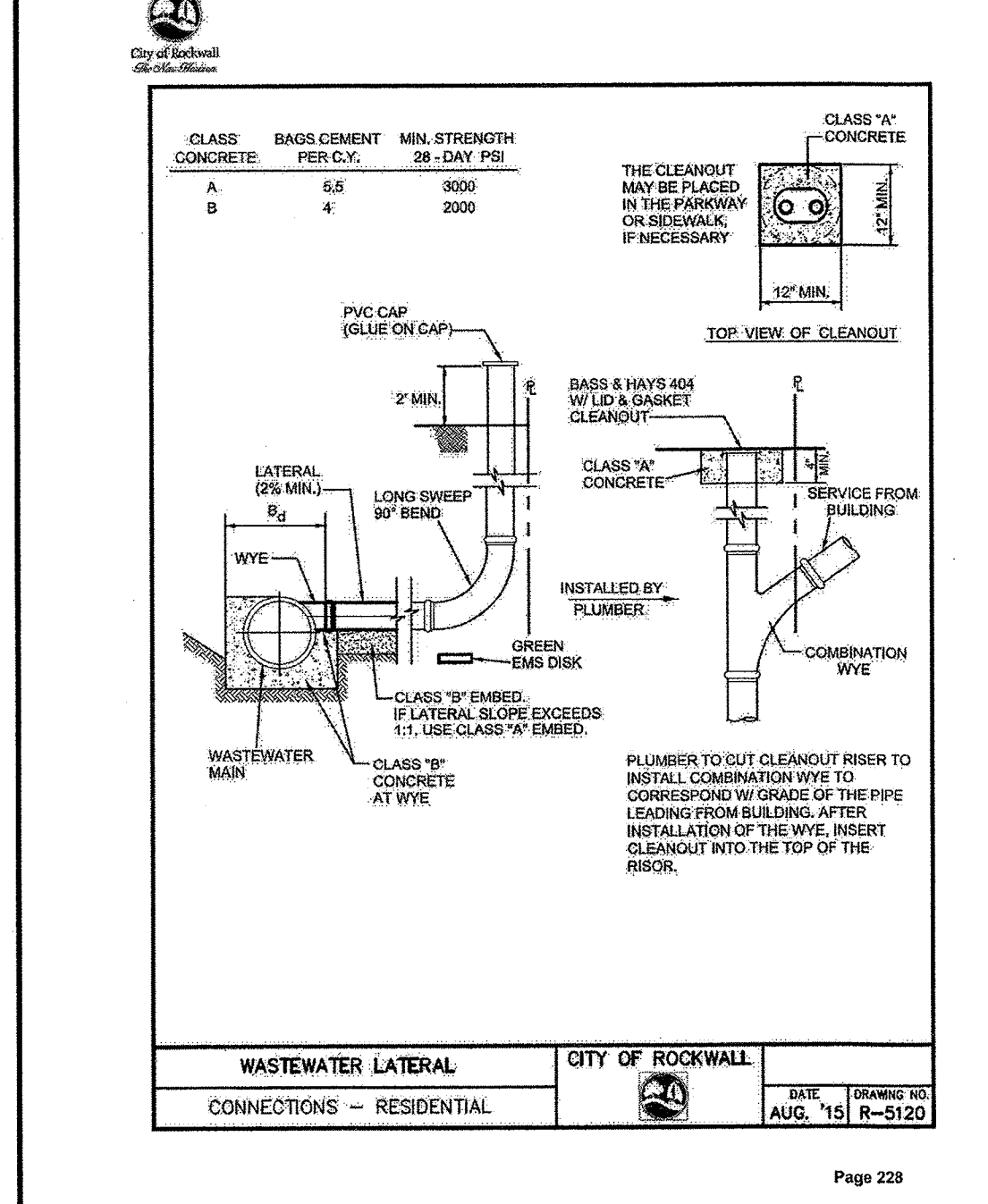
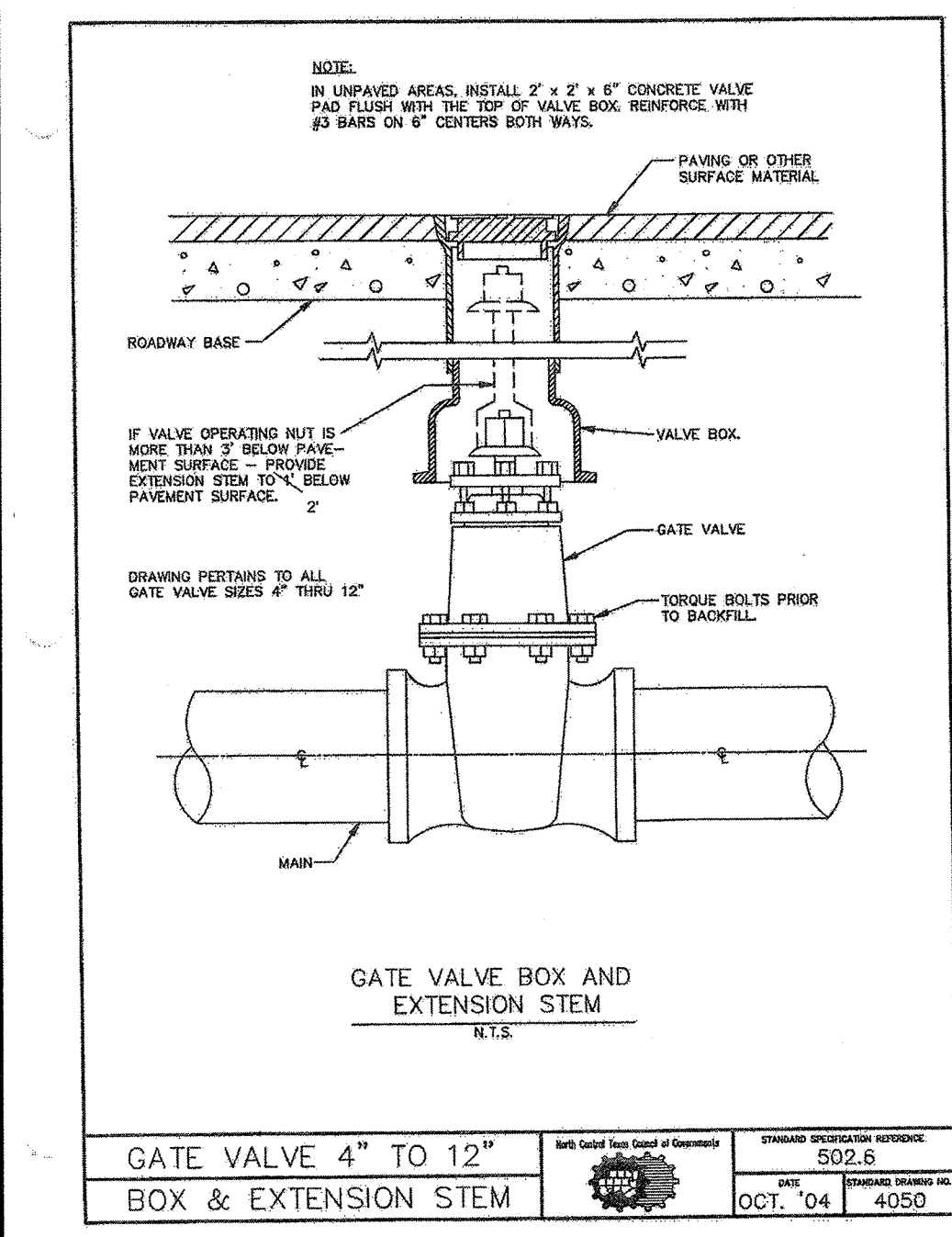
GENERAL NOTES FOR ALL THRUST BLOCKS:

1. CONCRETE FOR BLOCKING SHALL BE CLASS "D".
2. ALL CALCULATIONS ARE BASED ON INTERNAL PRESSURE OF 200 PSI FOR DUCTILE IRON, P.V.C., AND 150 PSI FOR CONCRETE PIPE.
3. VOLUMES OF THRUST BLOCKS ARE NET VOLUMES OF CONCRETE TO BE FURNISHED. THE CORRESPONDING WEIGHT OF THE CONCRETE (CLASS "B") IS EQUAL TO OR GREATER THAN THE VERTICAL COMPONENT OF THE THRUST ON THE VERTICAL BEND.
4. WALL THICKNESS (T) ASSUMED HERE FOR ESTIMATING PURPOSES ONLY.
5. POUR CONCRETE FOR BLOCK AGAINST UNDISTURBED EARTH.
6. DIMENSIONS MAY BE VARIED AS REQUIRED BY FIELD CONDITIONS WHERE AND AS DIRECTED BY THE ENGINEER. THE VOLUME OF CONCRETE BLOCKING SHALL NOT BE LESS THAN SHOWN HERE.
7. THE SOIL BEARING PRESSURES ARE BASED ON 1000 LBS./S.F. IN SOIL AND 2000 LBS./S.F. IN ROCK.
8. USE POLYETHYLENE WRAP OR EQUAL BETWEEN CONCRETE AND BEND, TEE, OR PLUG TO PREVENT THE CONCRETE FROM STICKING TO IT.
9. CONCRETE SHALL NOT EXTEND BEYOND JOINTS.

THRUST BLOCK GENERAL NOTES

DATE: OCT. '04

PROJECT NO.: 4040



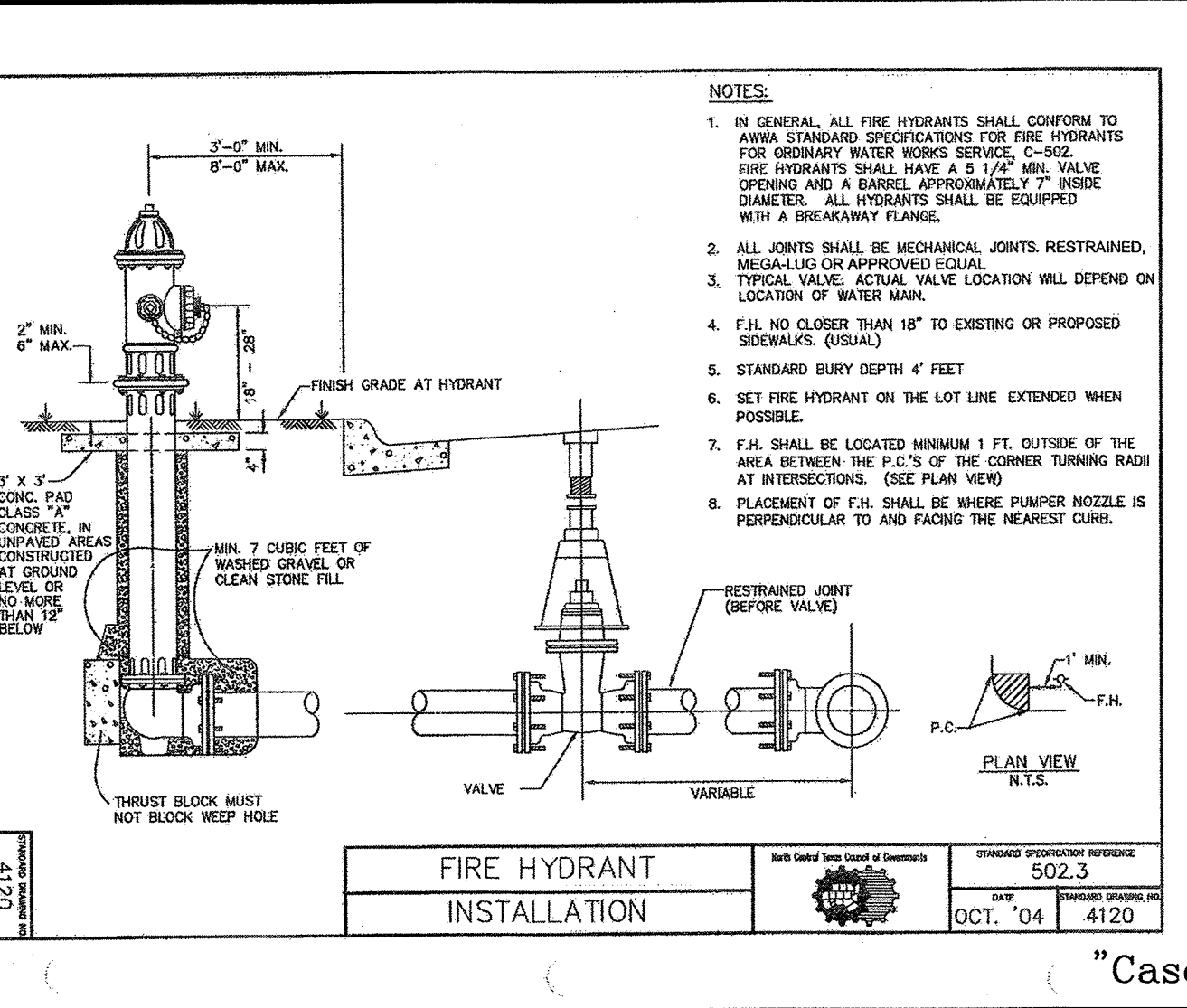
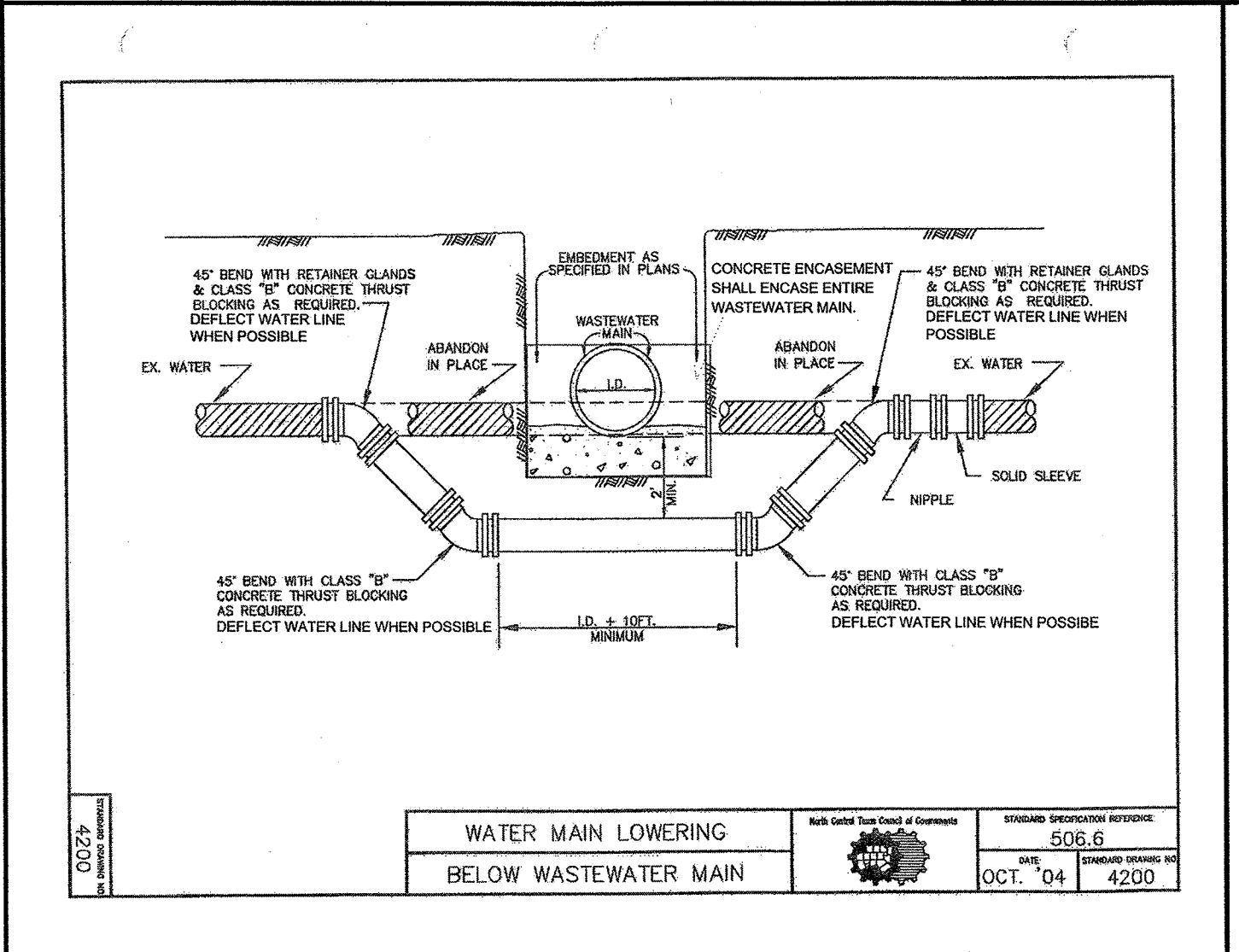
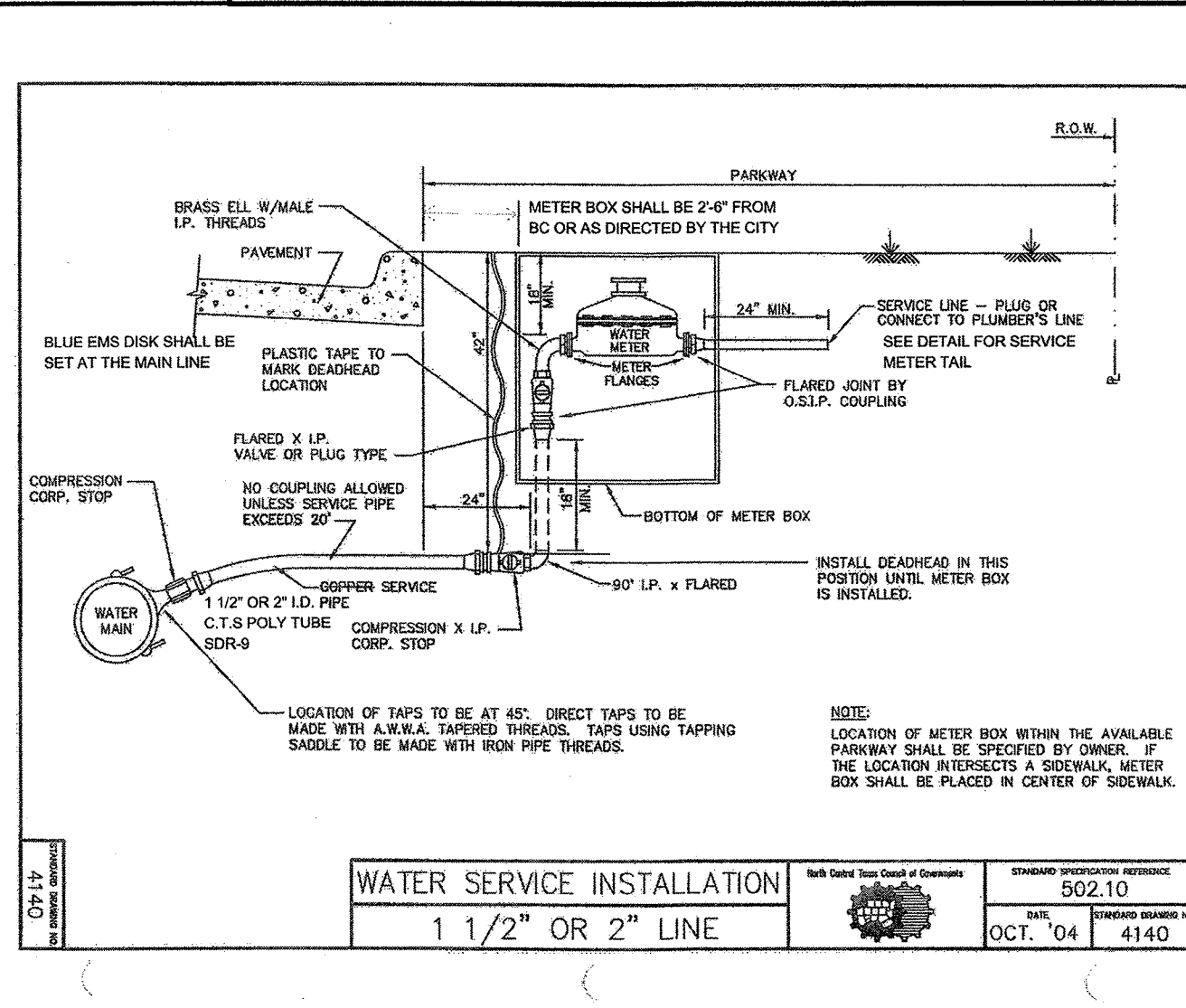
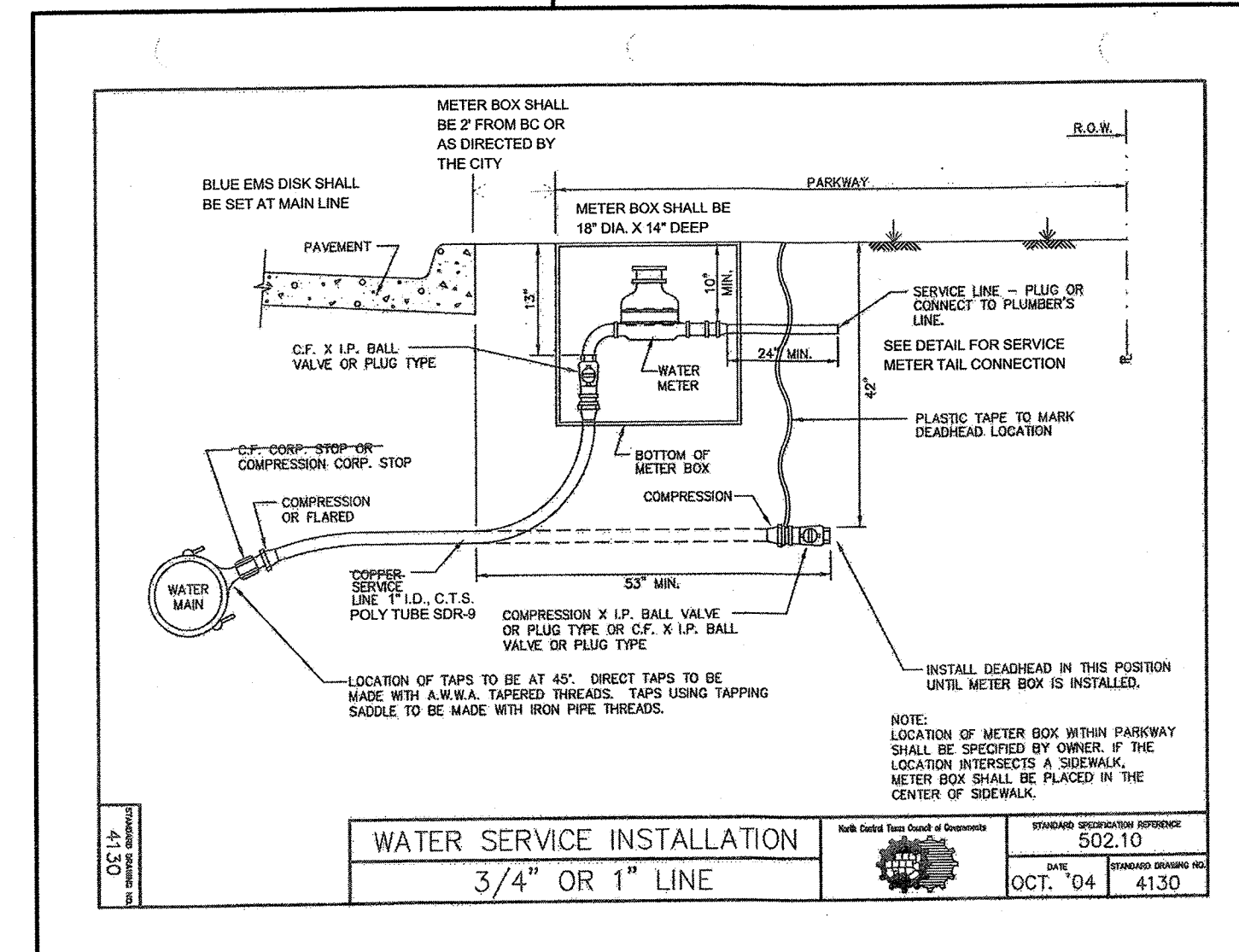
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RECORD DRAWINGS

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Joseph Winters 6-13-19

TODD WINTERS DATE



BENCHMARK: "X" CUT IN CURB 23± SOUTH OF EAST DRIVE APPROACH OF EXISTING RAYBURN COUNTRY ELECTRIC BUILDING.

ENGINEERING CONCEPTS & DESIGN, L.P.

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REVISIONS:

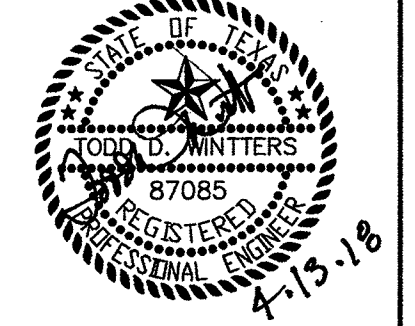
DRAWN: TONY DATE: APRIL 13, 2018

CHECKED: TW DATE: APRIL 13, 2018

PROJECT NO.: 3560

DWG FILE NAME:

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WATER DETAILS

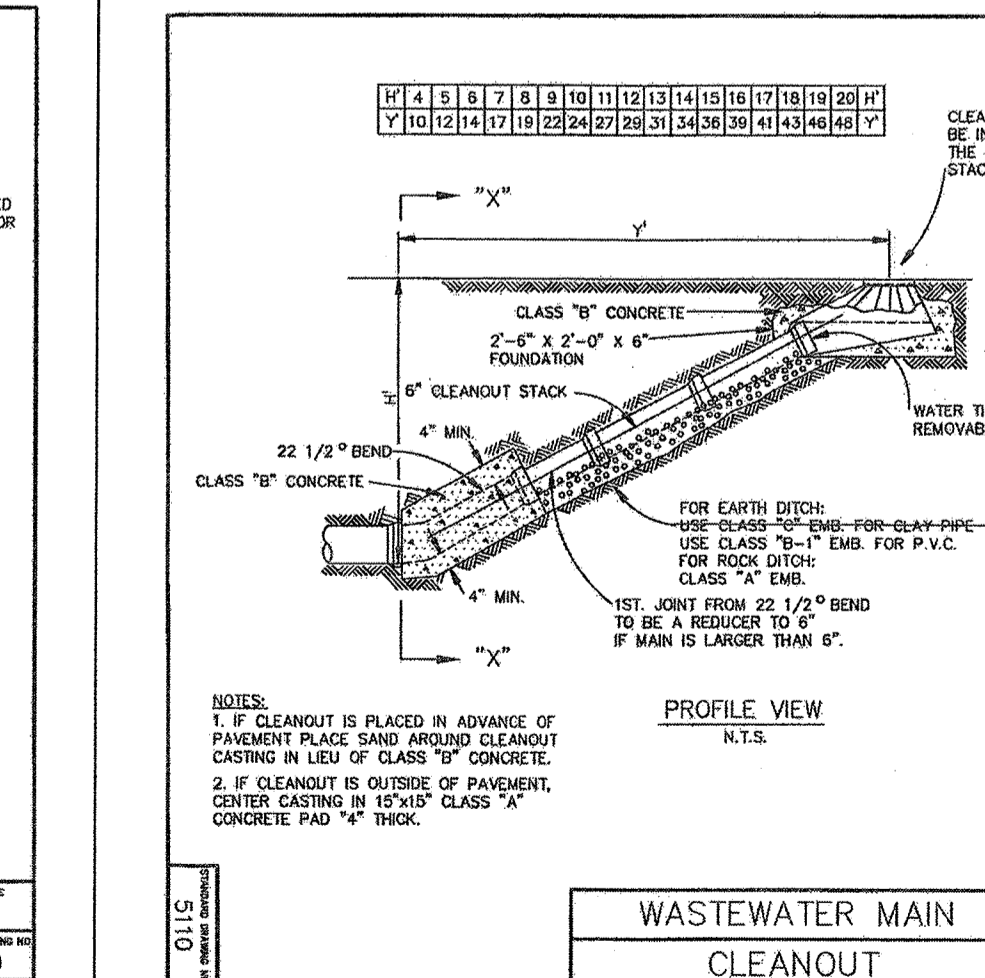
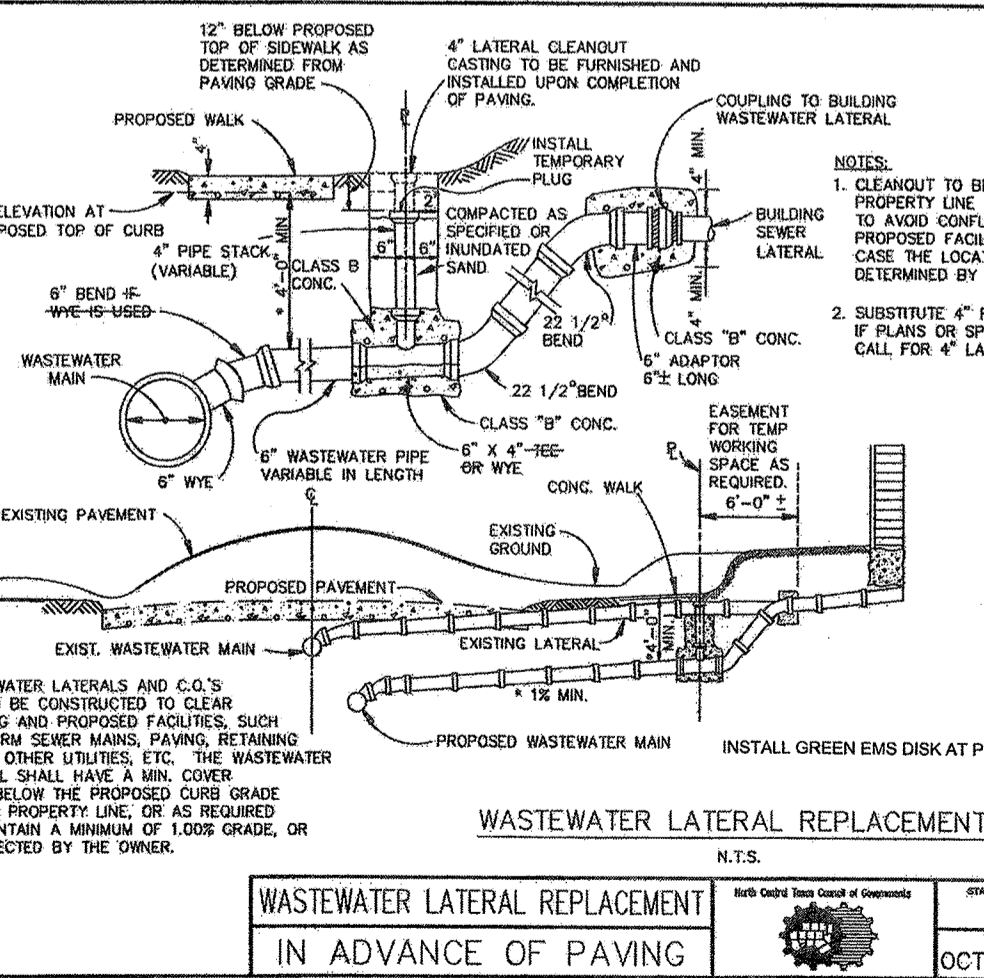
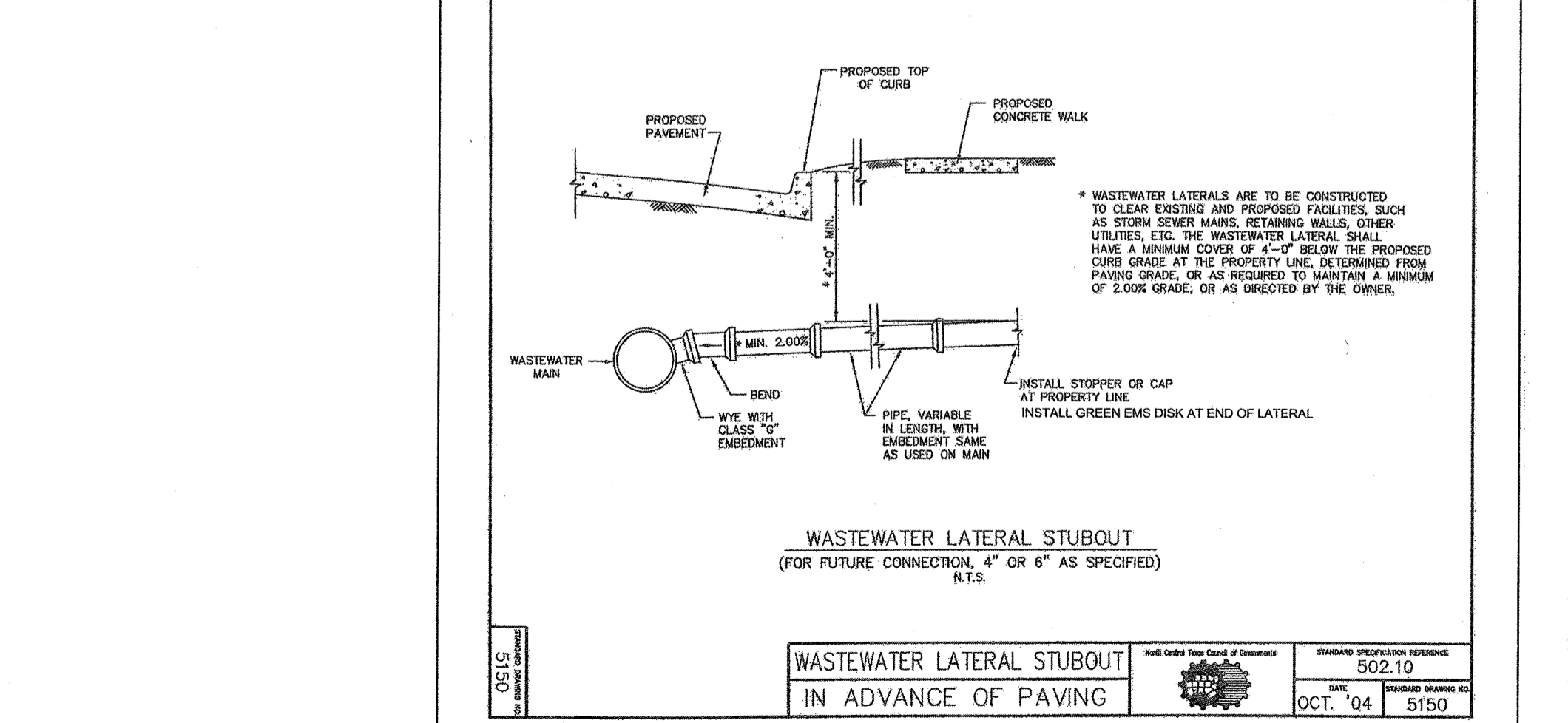
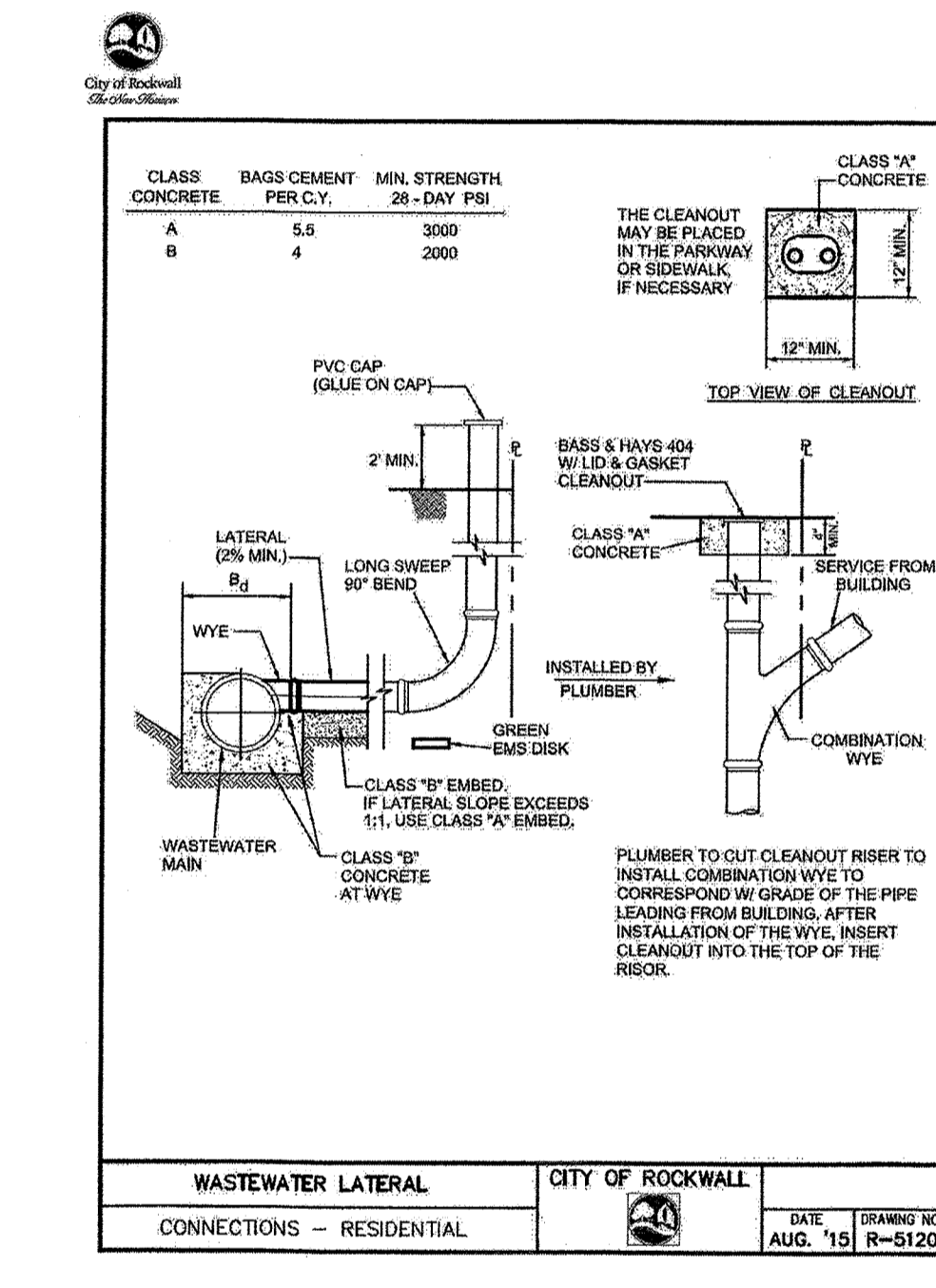
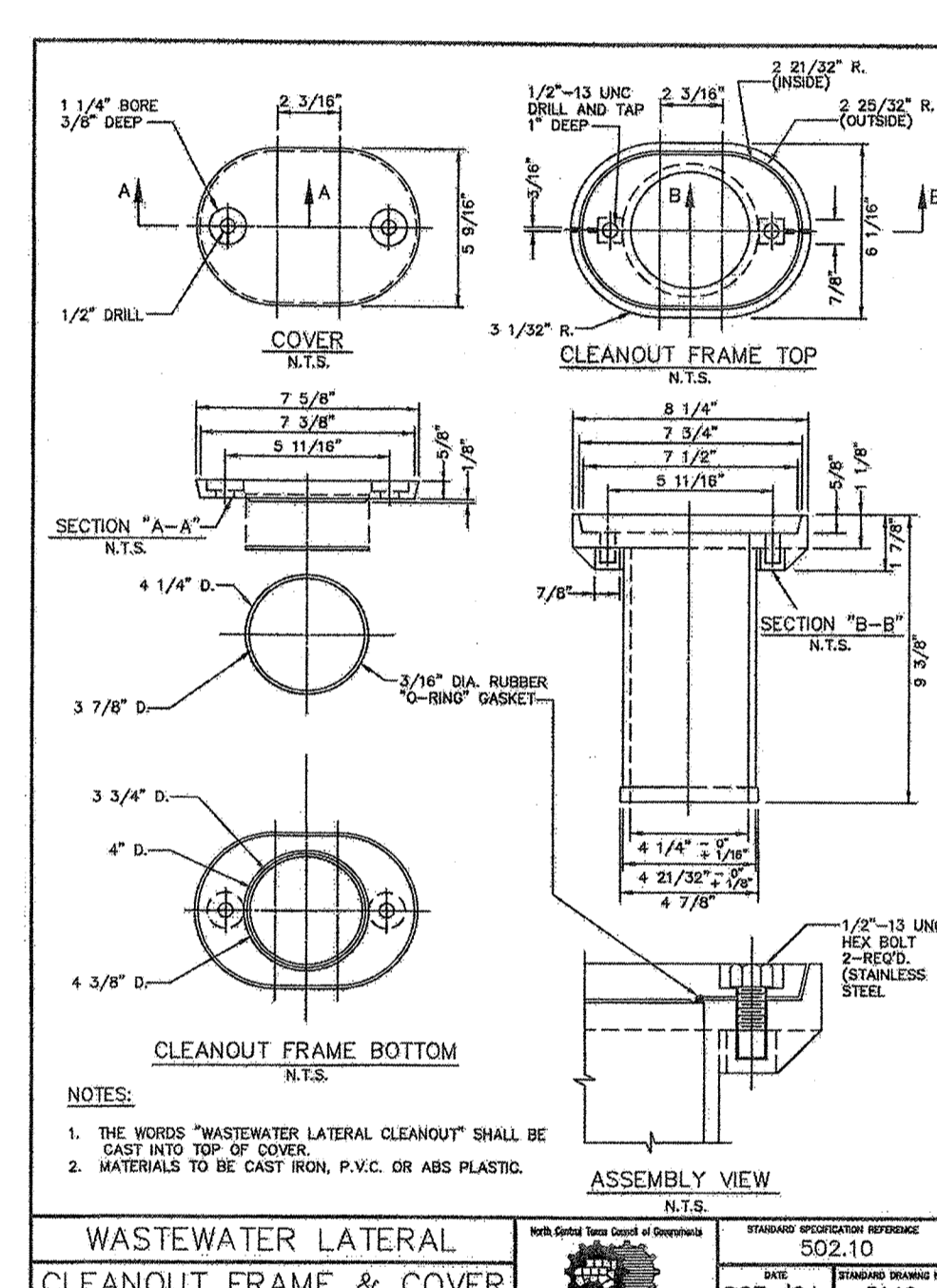
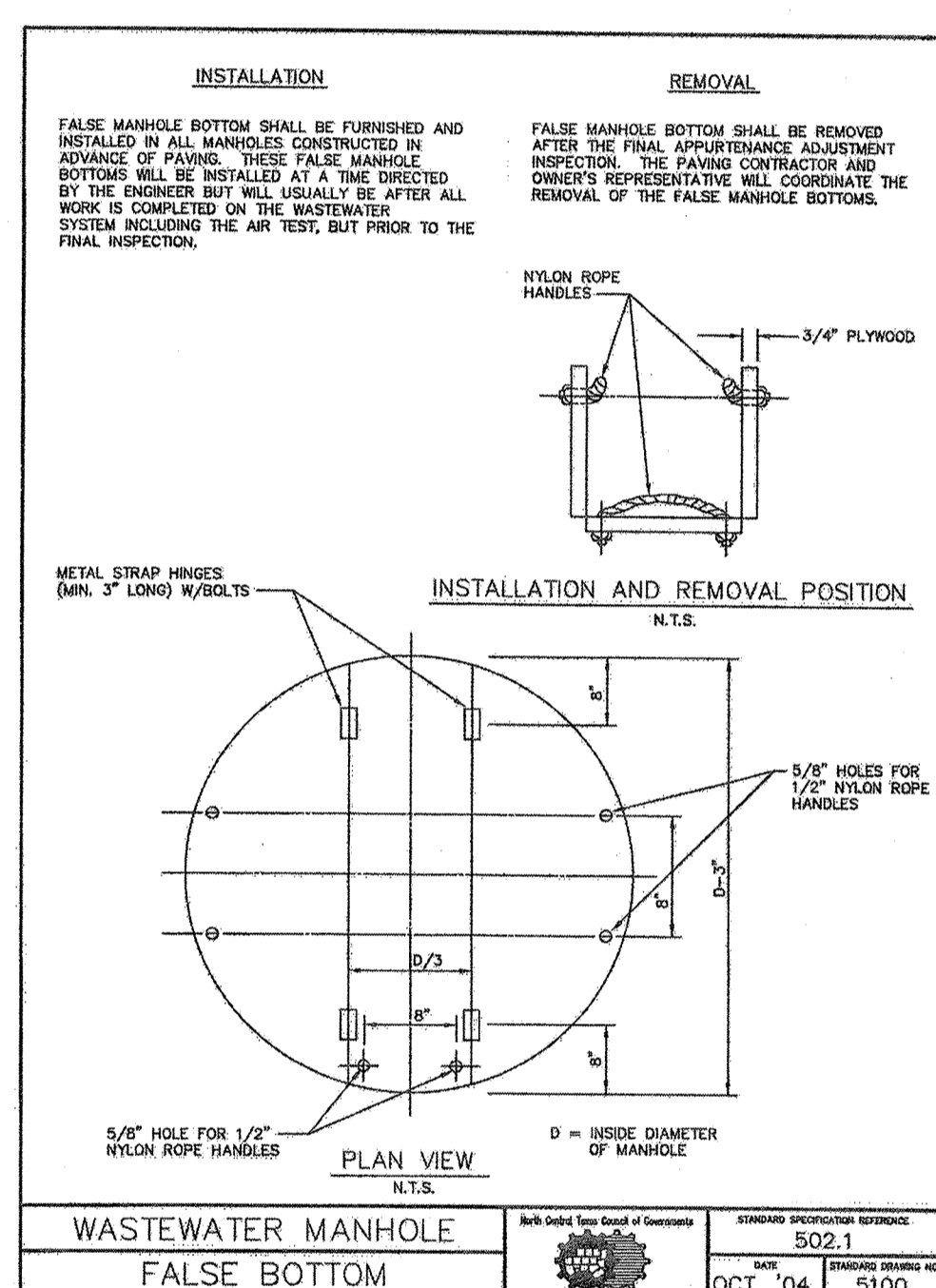
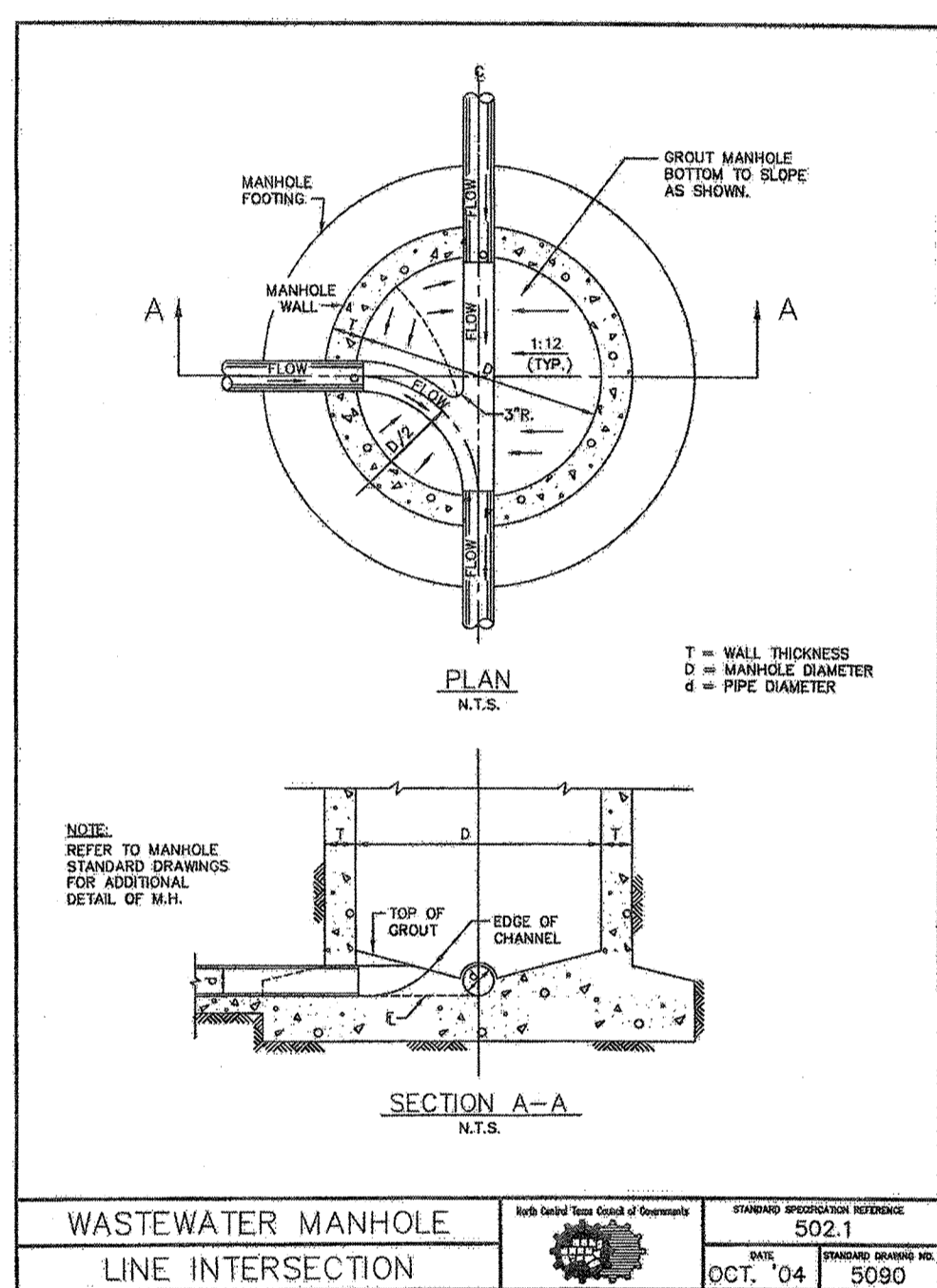
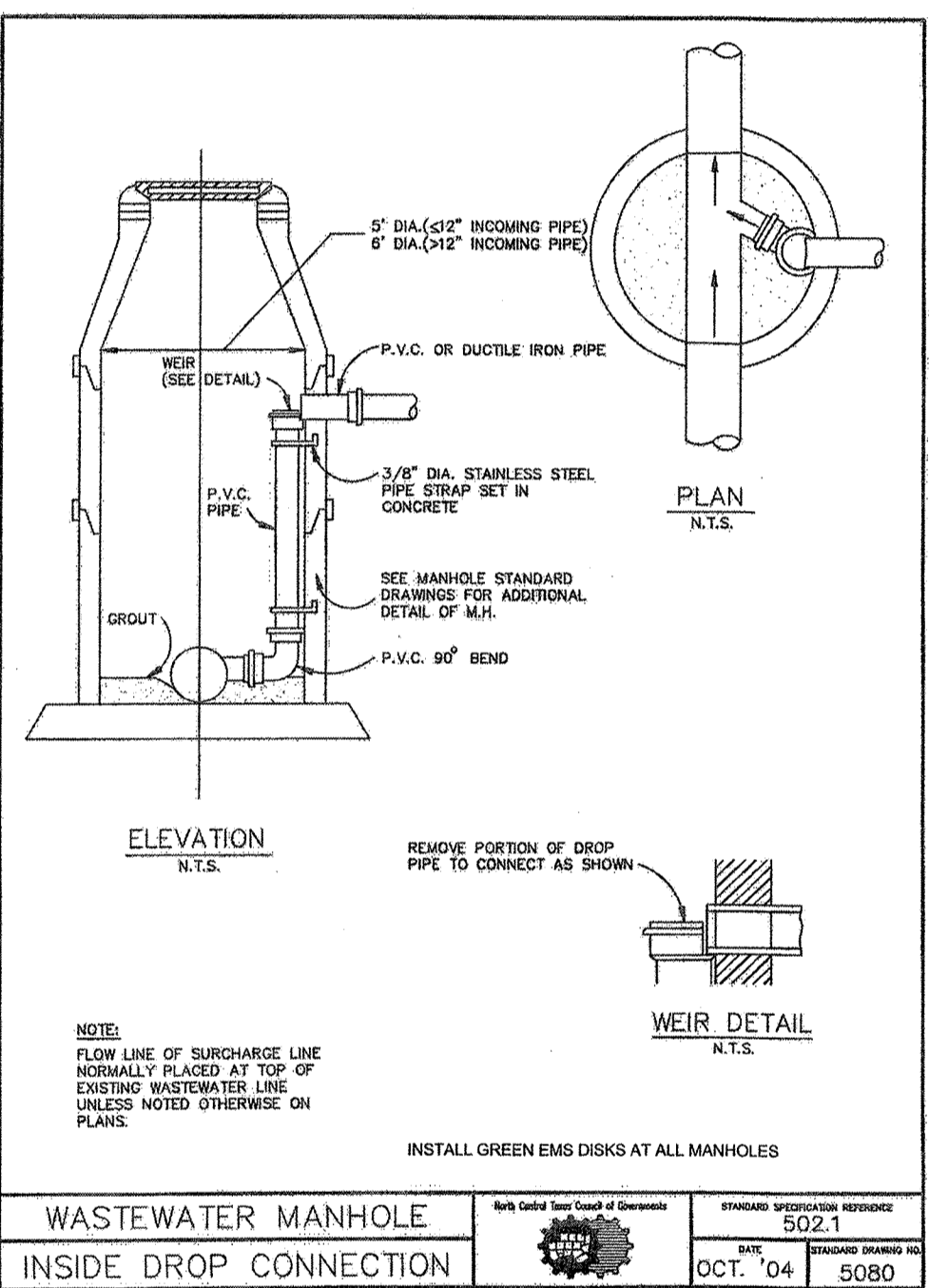
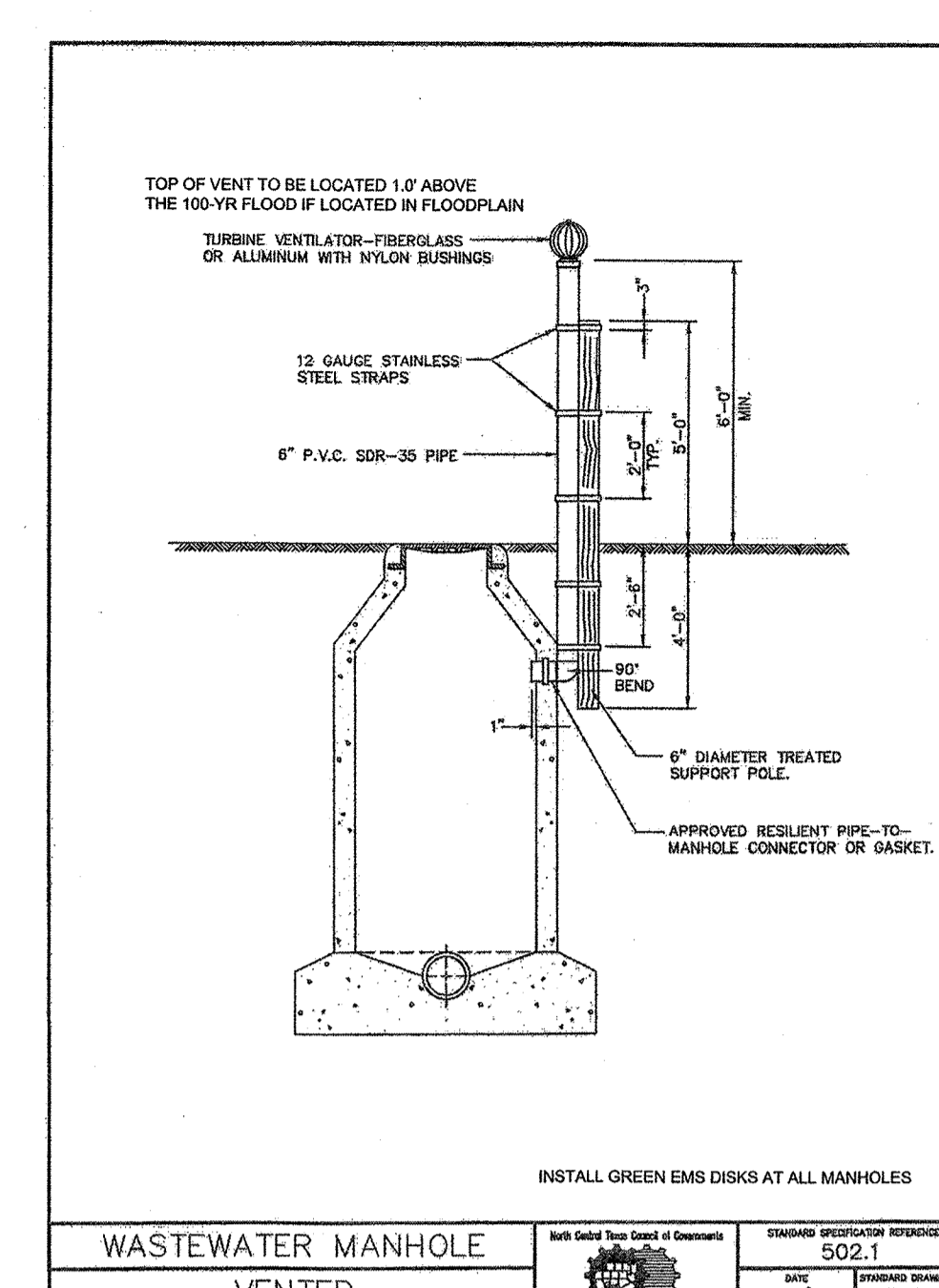
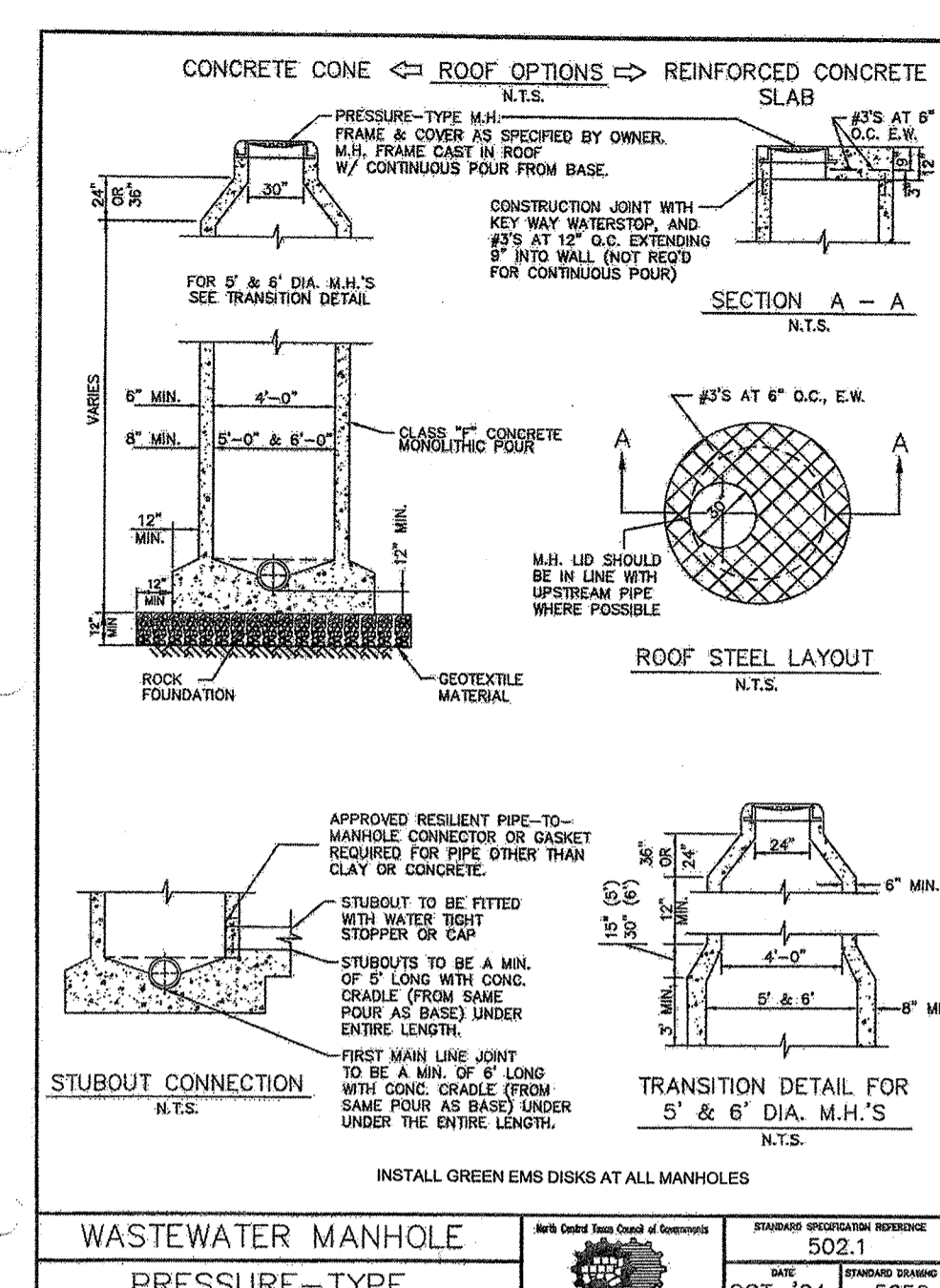
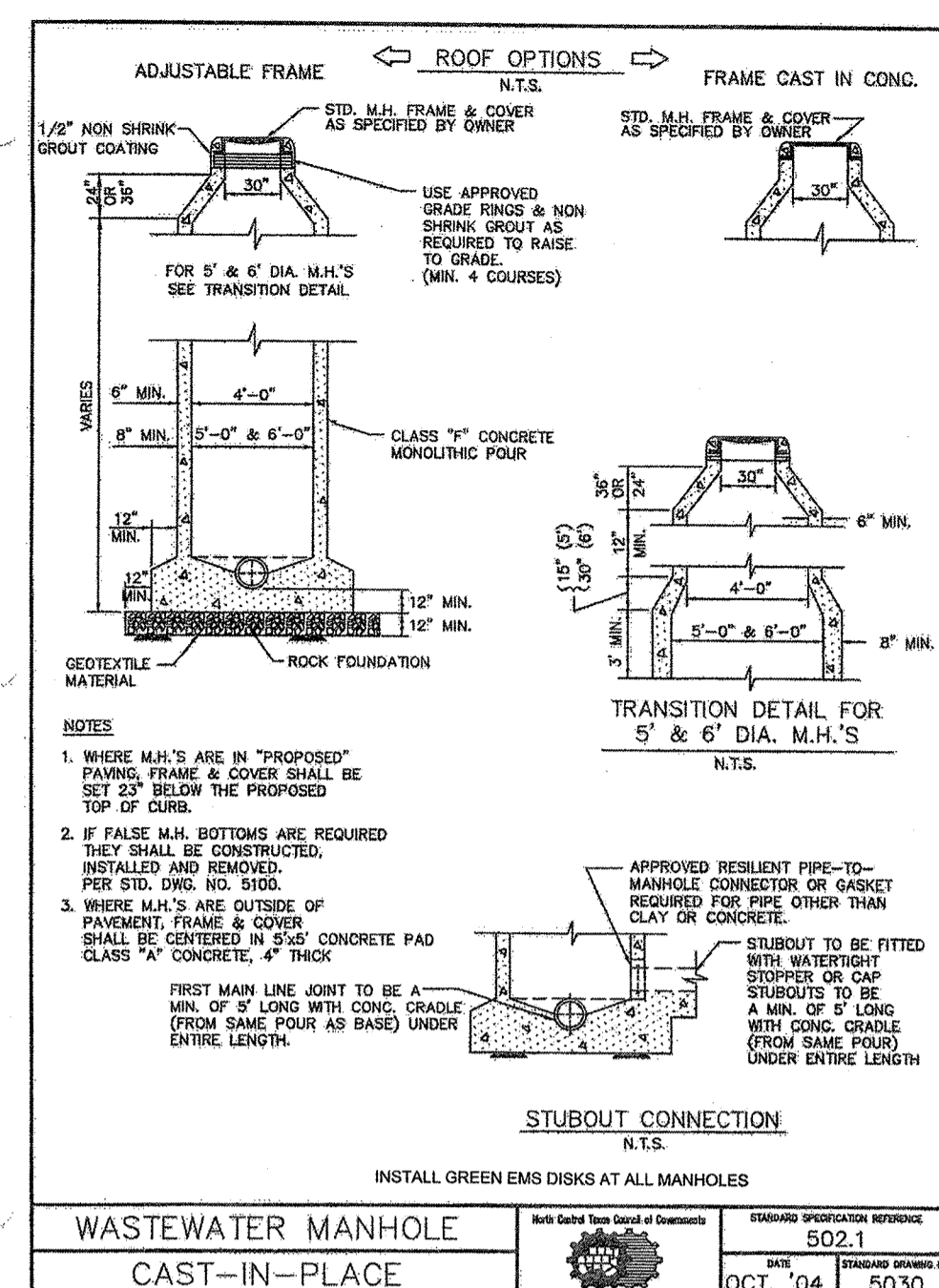
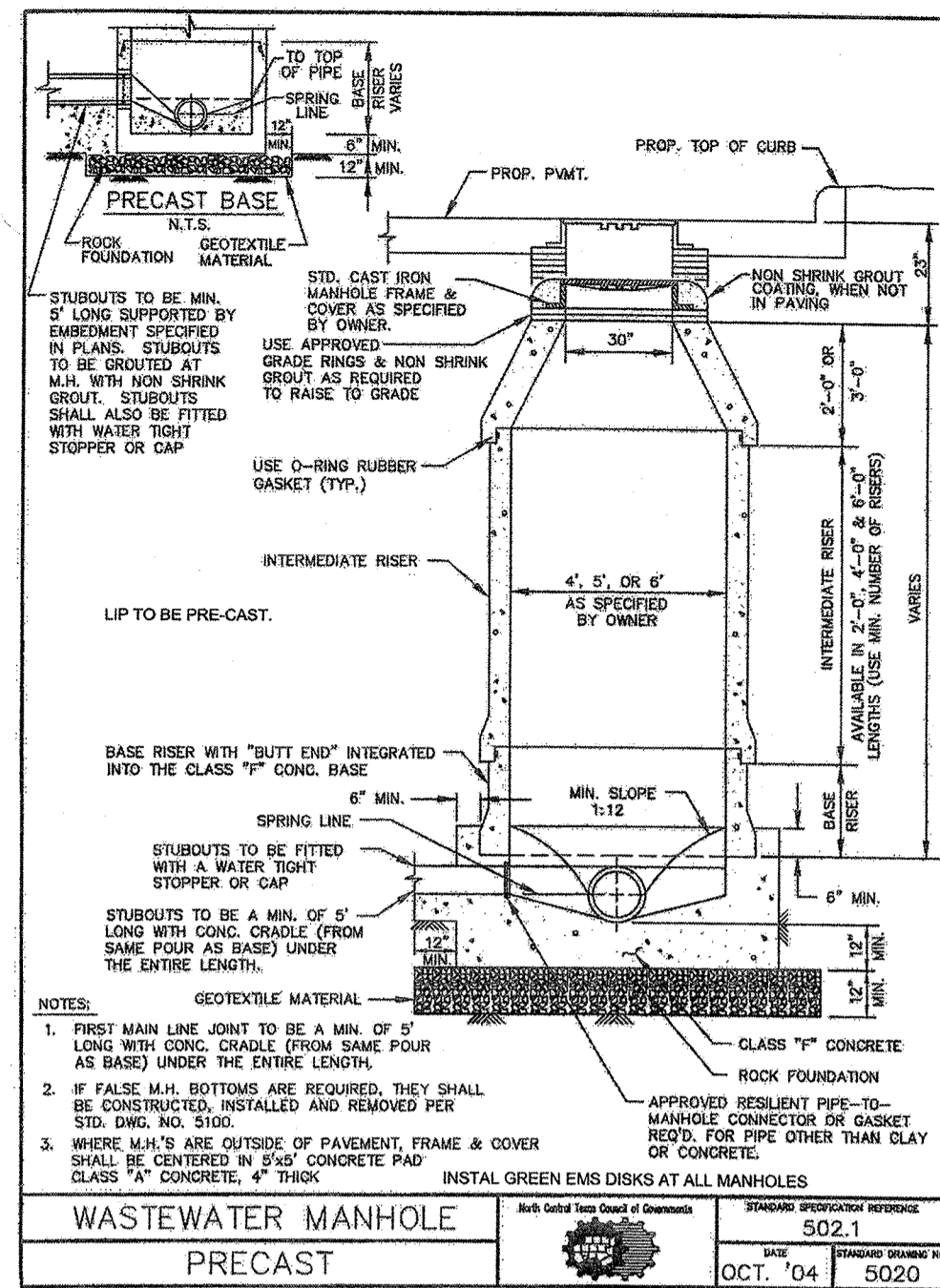
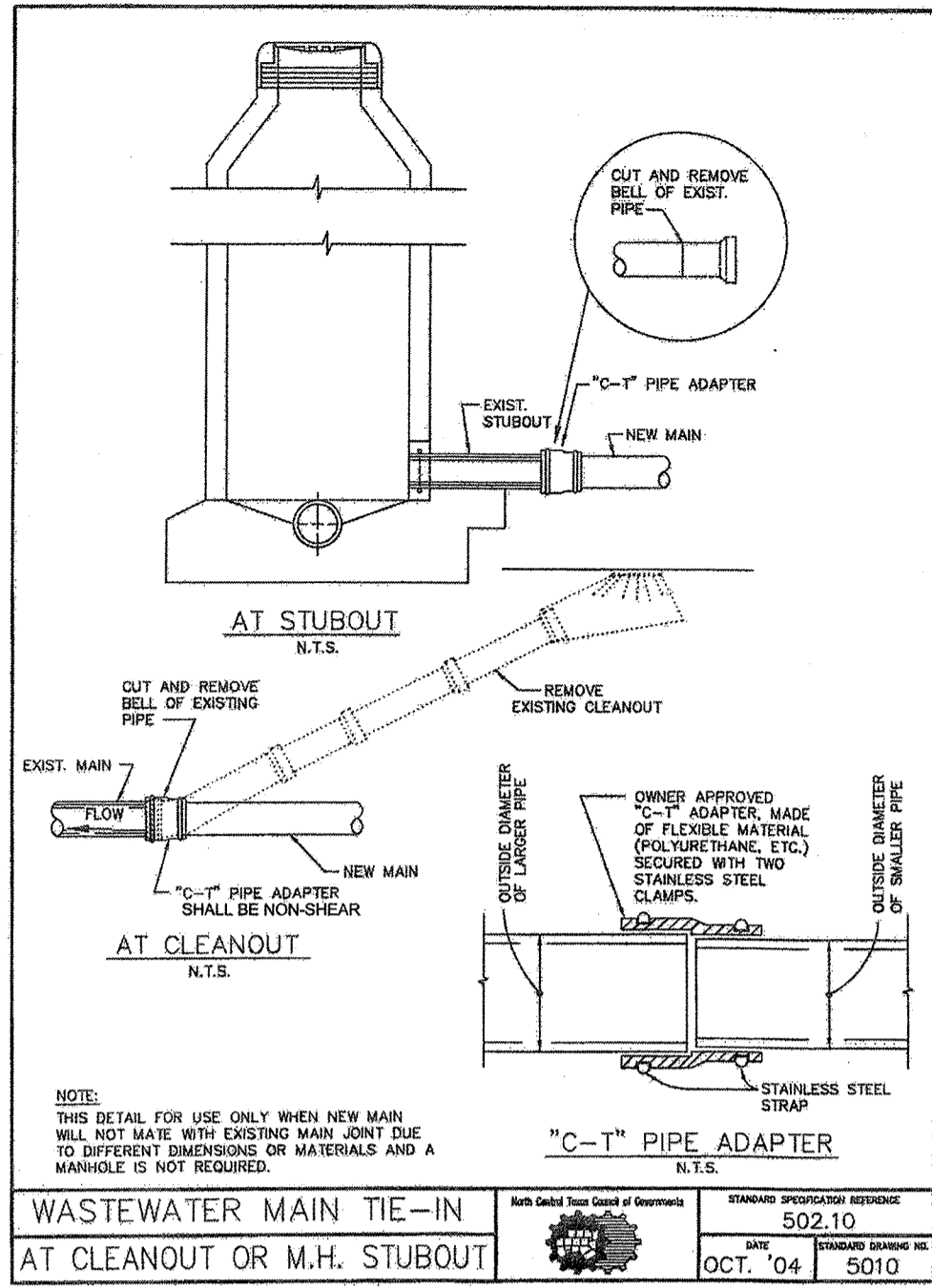
RAYBURN ELECTRIC COOP. PHASE 2

LOT 5, BLK 1 RAYBURN COUNTRY ADDITION

CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

SHEET 17 OF 20

"Case No. SP2017-041"



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TODD WINTERS 6-13-19
DATE

"Case No. SP2017-041"

BENCHMARK:
"X" CUT IN CURB 23'± SOUTH OF EAST DRIVE APPROACH OF EXISTING RAYBURN COUNTRY ELECTRIC BUILDING.

ENGINEERINGCONCEPTS & DESIGN, L.P.

ENGINEERING / PROJECT MANAGEMENT / CONSTRUCTION SERVICES - FIRM REG. #F-00145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS:

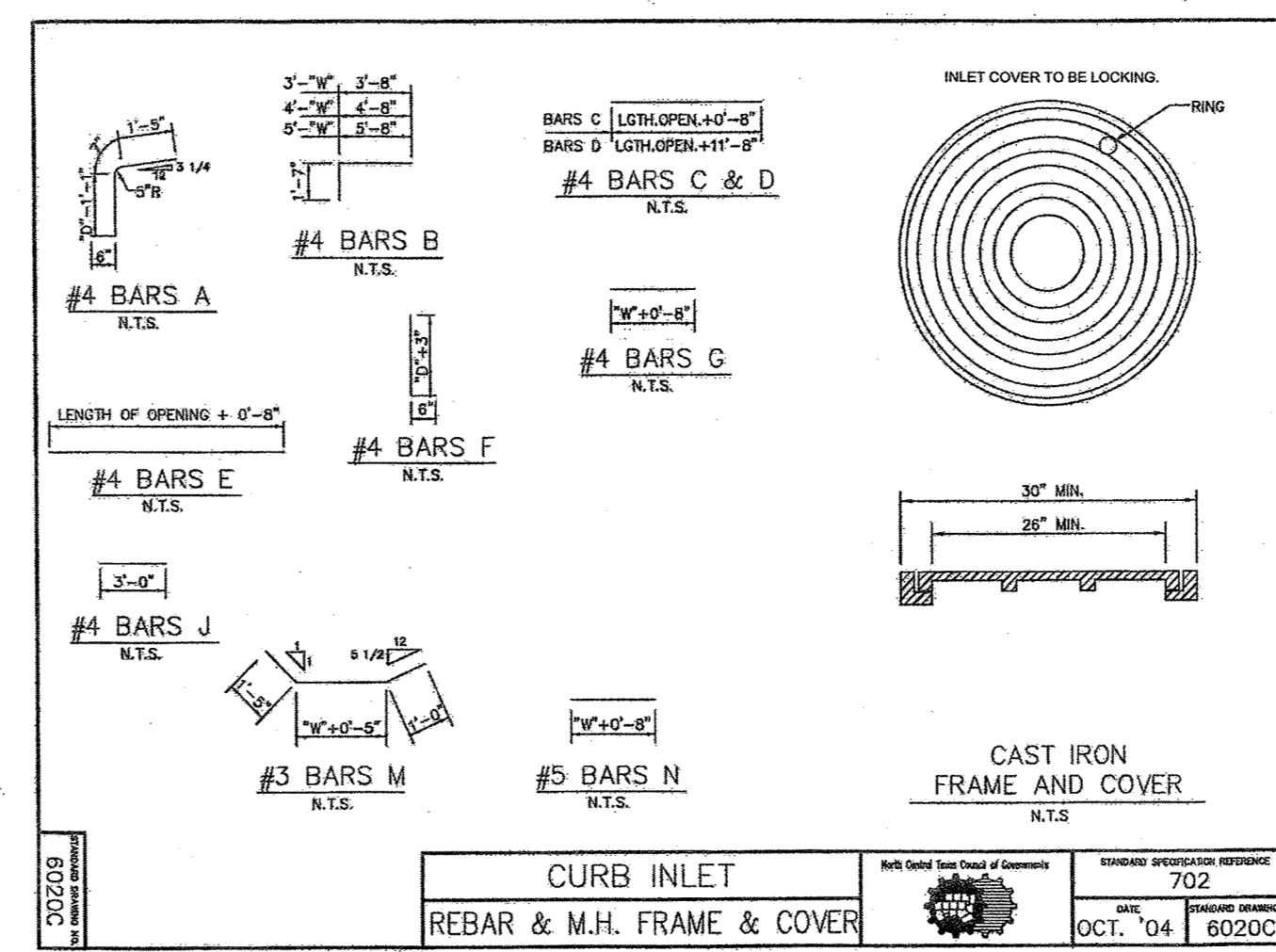
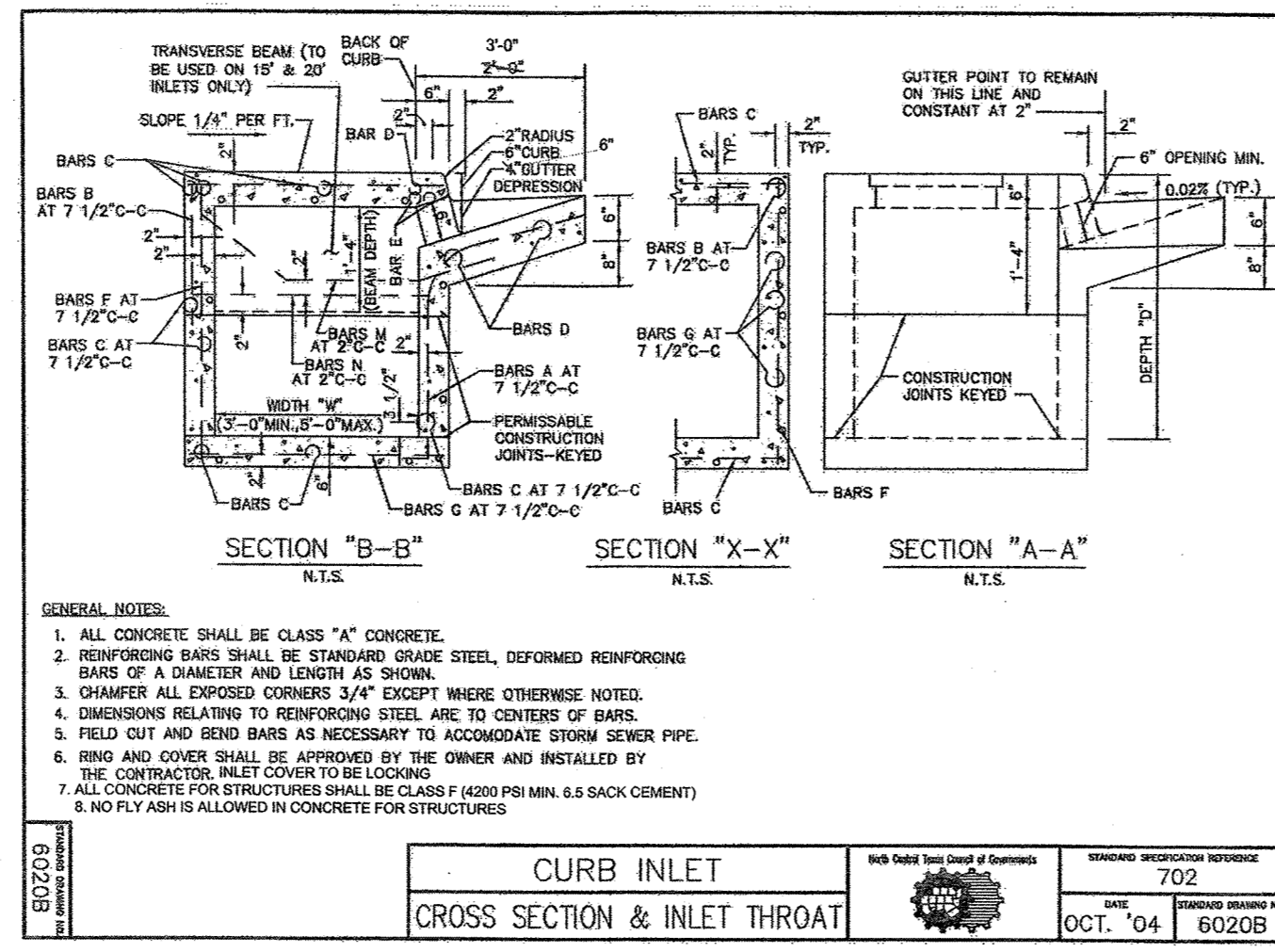
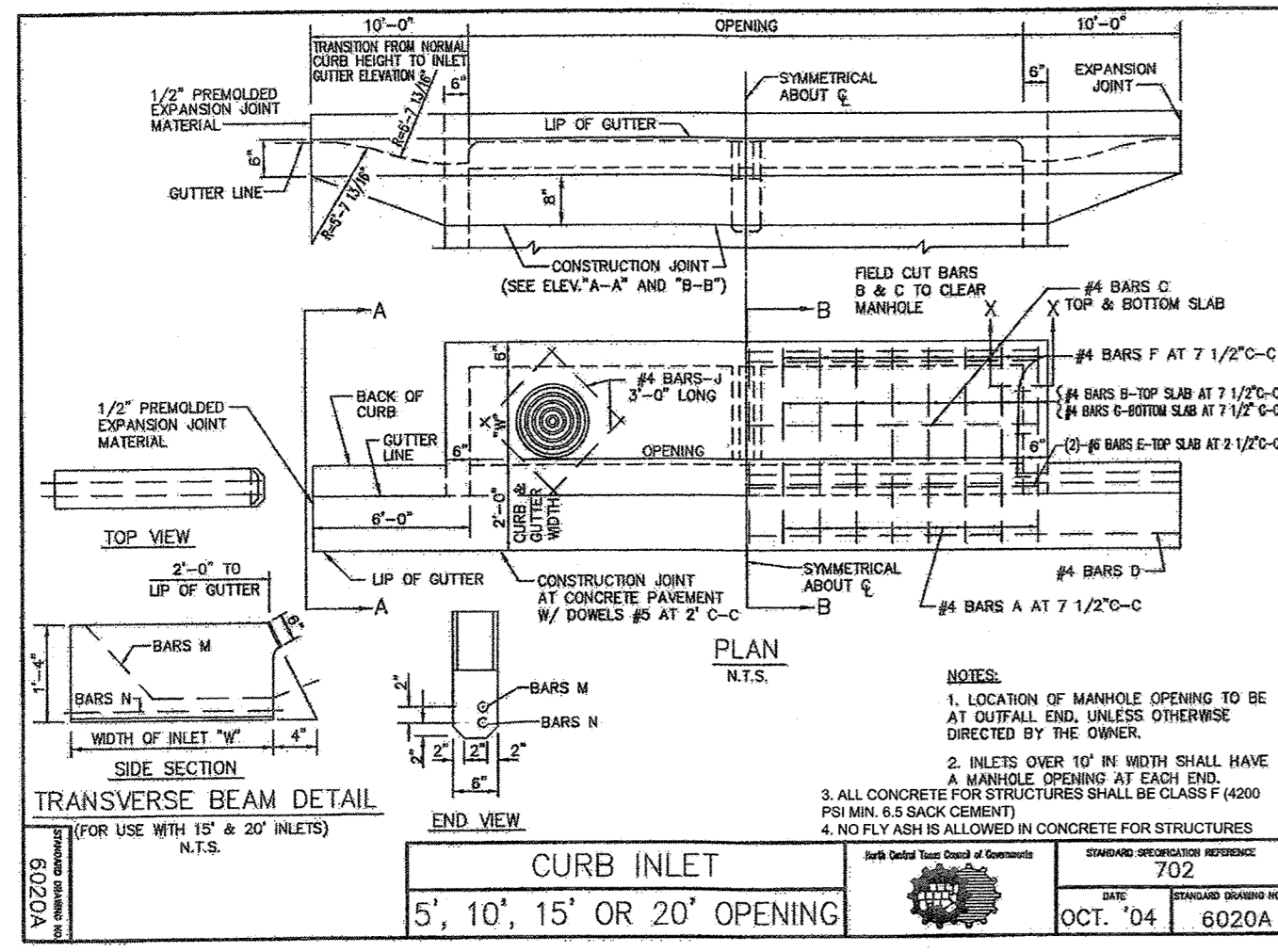
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CHECKED: TW	DATE: APRIL 13, 2018
PROJECT NO.: 3560	
DWG FILE NAME:	

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SANITARY SEWER DETAILS
RAYBURN ELECTRIC COOP. PHASE 2
LOT 5, BLK 1 RAYBURN COUNTRY ADDITION
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

SHEET
18
OF
20



BILL OF REINFORCING STEEL

DEPTH	ALL WIDTHS	SPACING LINES "x" = 5ft												SPACING LINES "x" = 15ft												SPACING LINES "x" = 20ft																																											
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12																																
3'-0"	17	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	17	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	17	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24

NOTE: FOR CONVENIENCE, DEPTHS OF INLETS SHOWN IN ABOVE TABLES ARE IN INCREMENTS OF 3 INCHES BUT ANY DEPTHS OTHER THAN THOSE SHOWN ABOVE MAY BE USED WHEREVER DEEMED NECESSARY. QUANTITIES FOR OTHER DEPTHS FALLING WITHIN THE LIMITS OF THE TABLE MAY BE FOUND BY INTERPOLATION.

CURB INLET
BILL OF REINFORCING STEEL

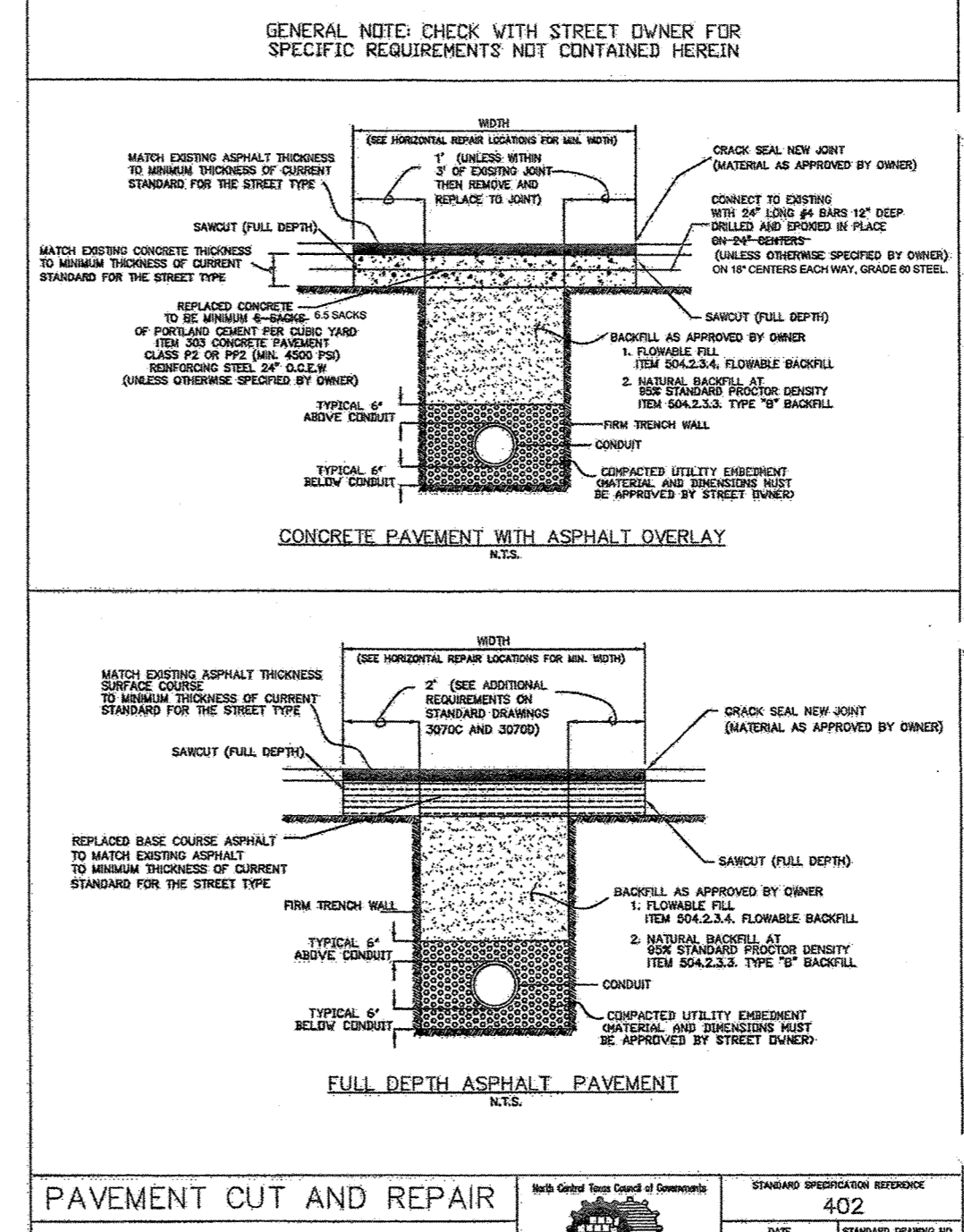
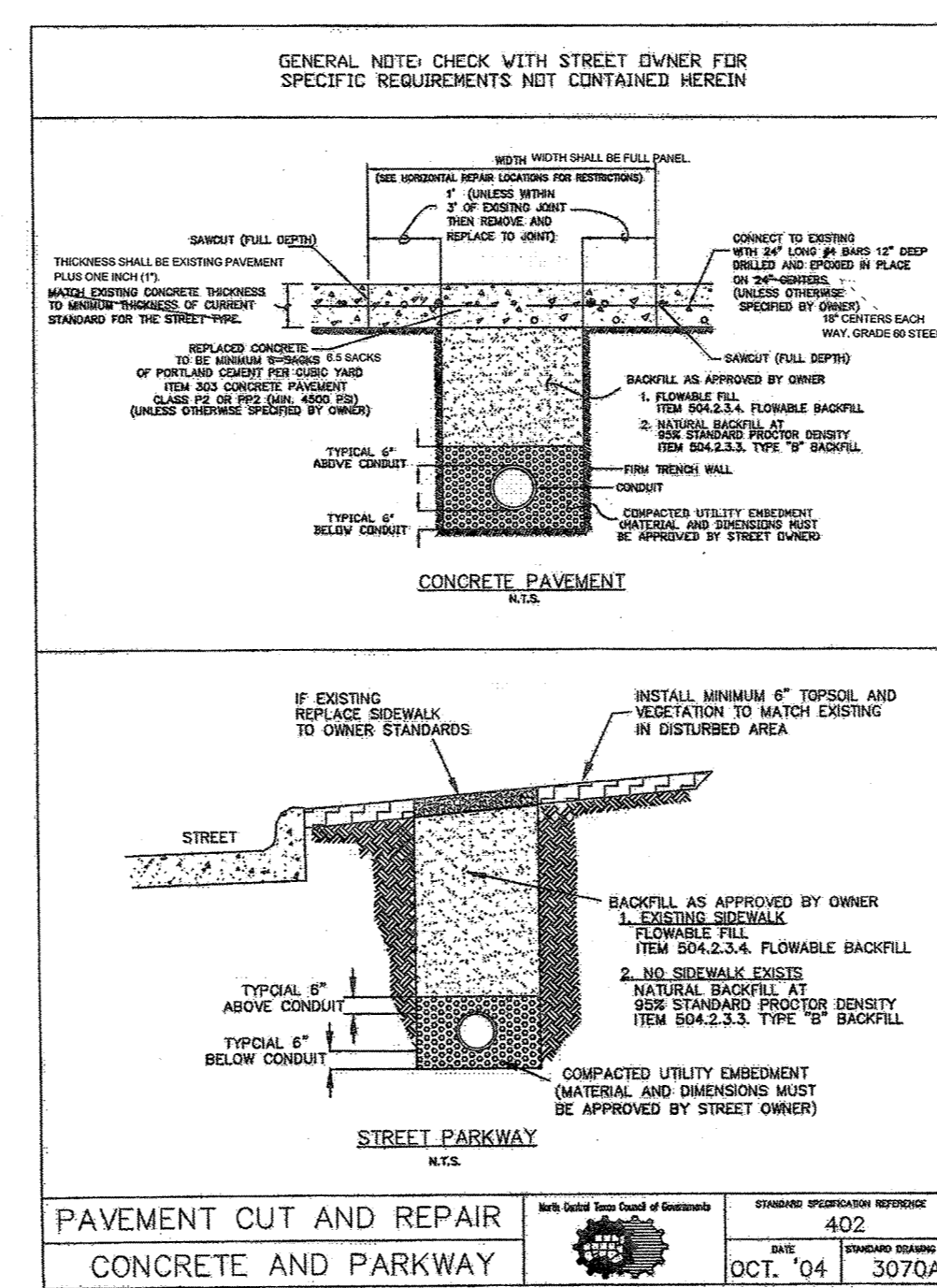
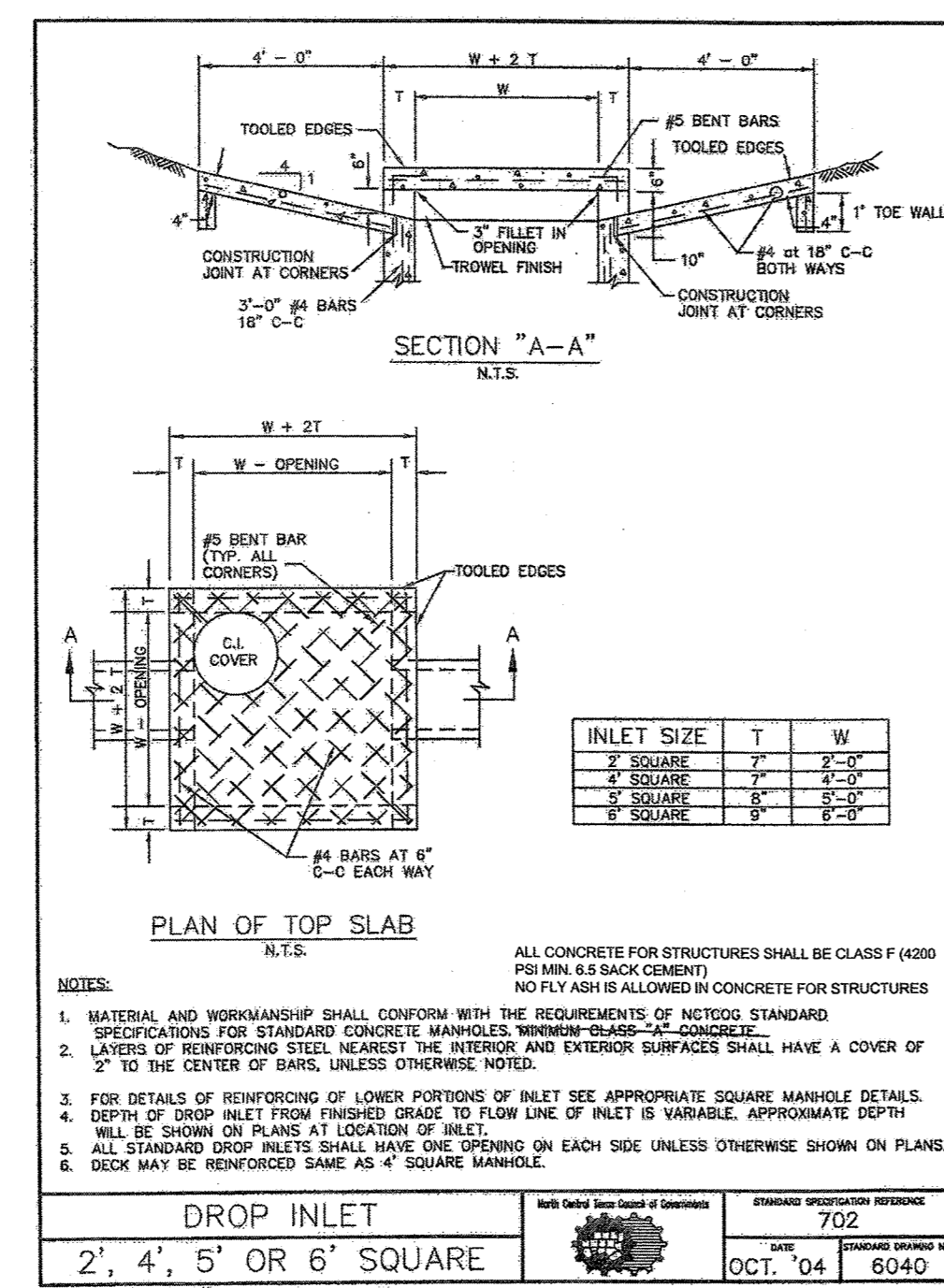
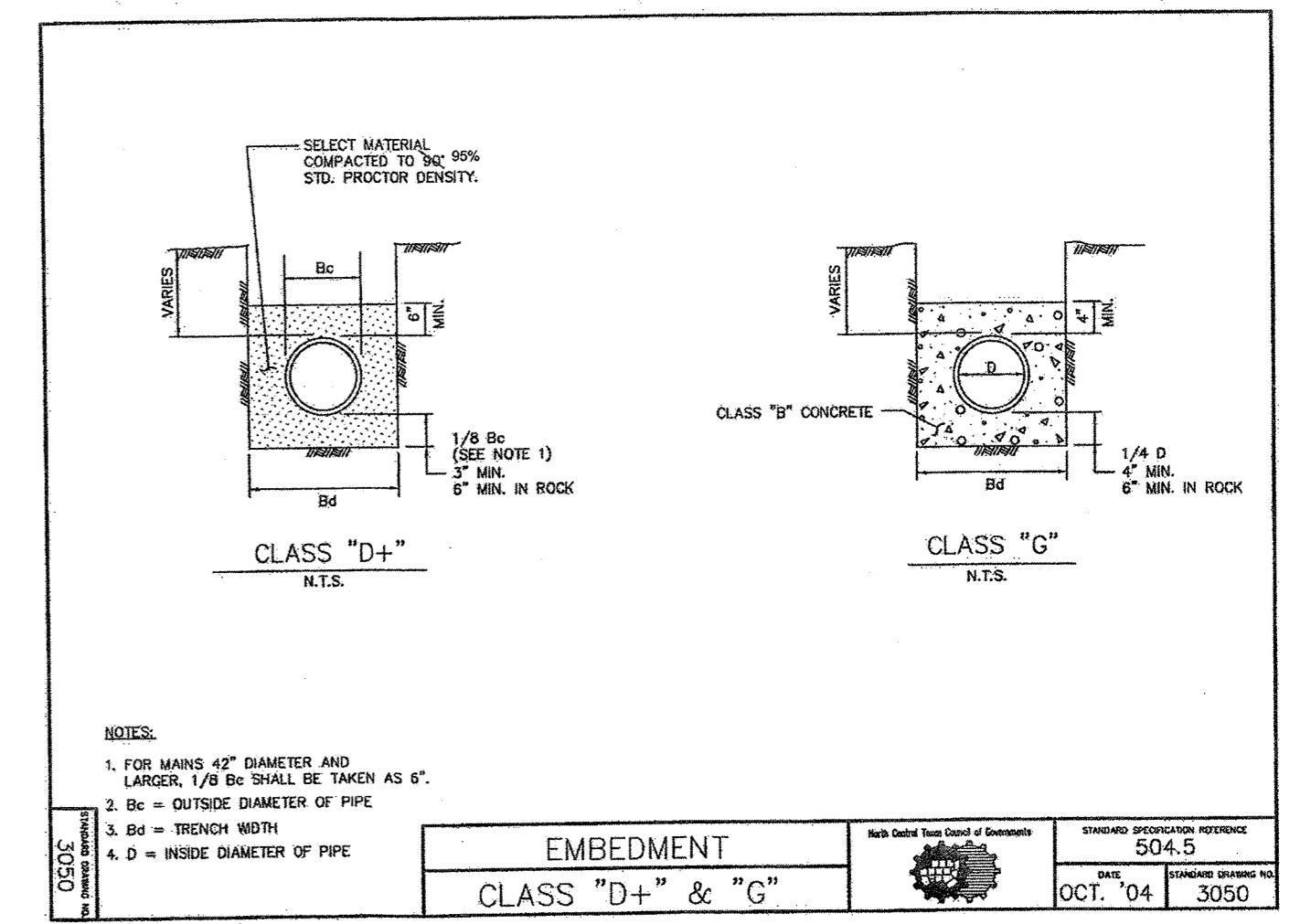
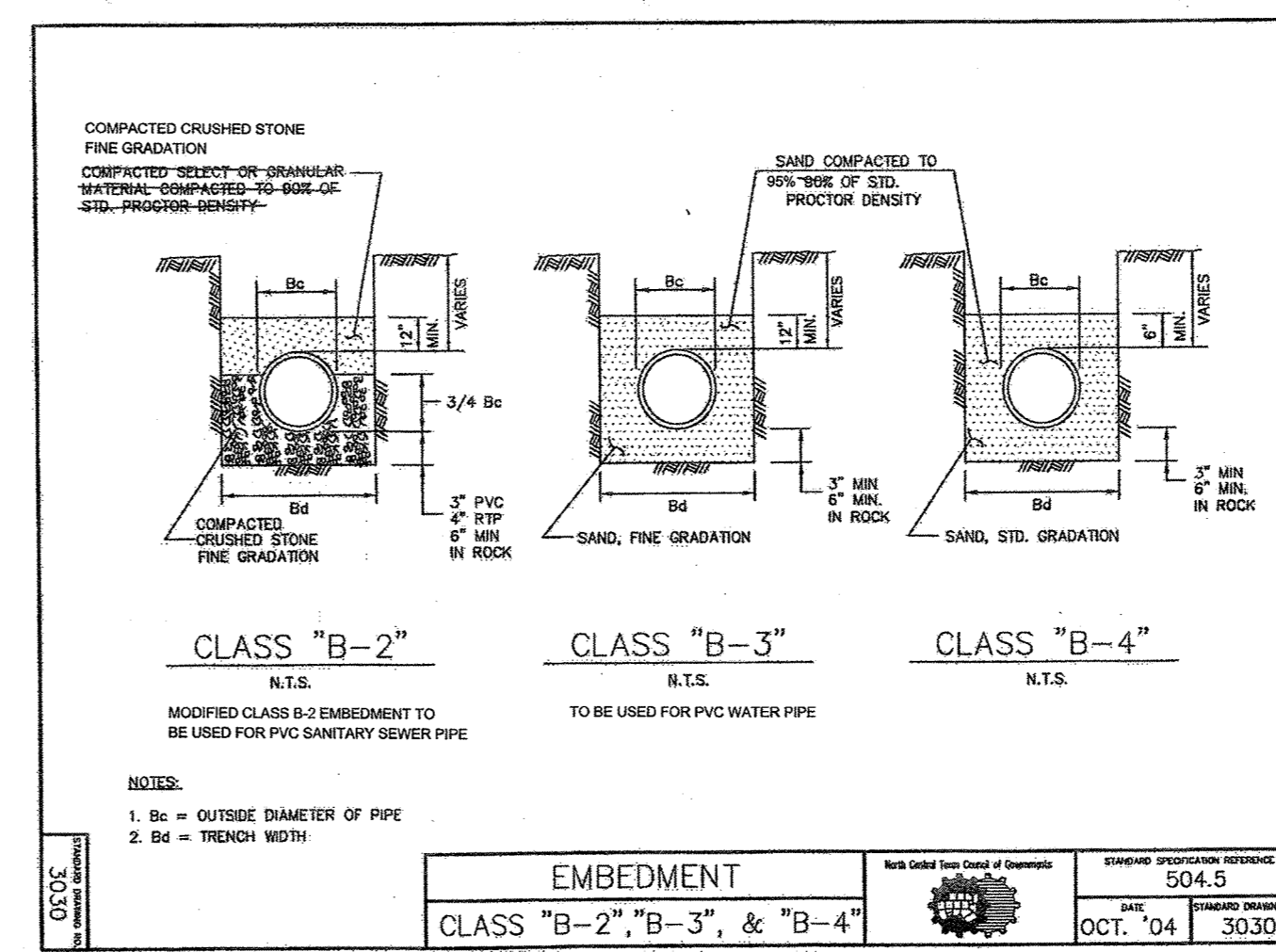
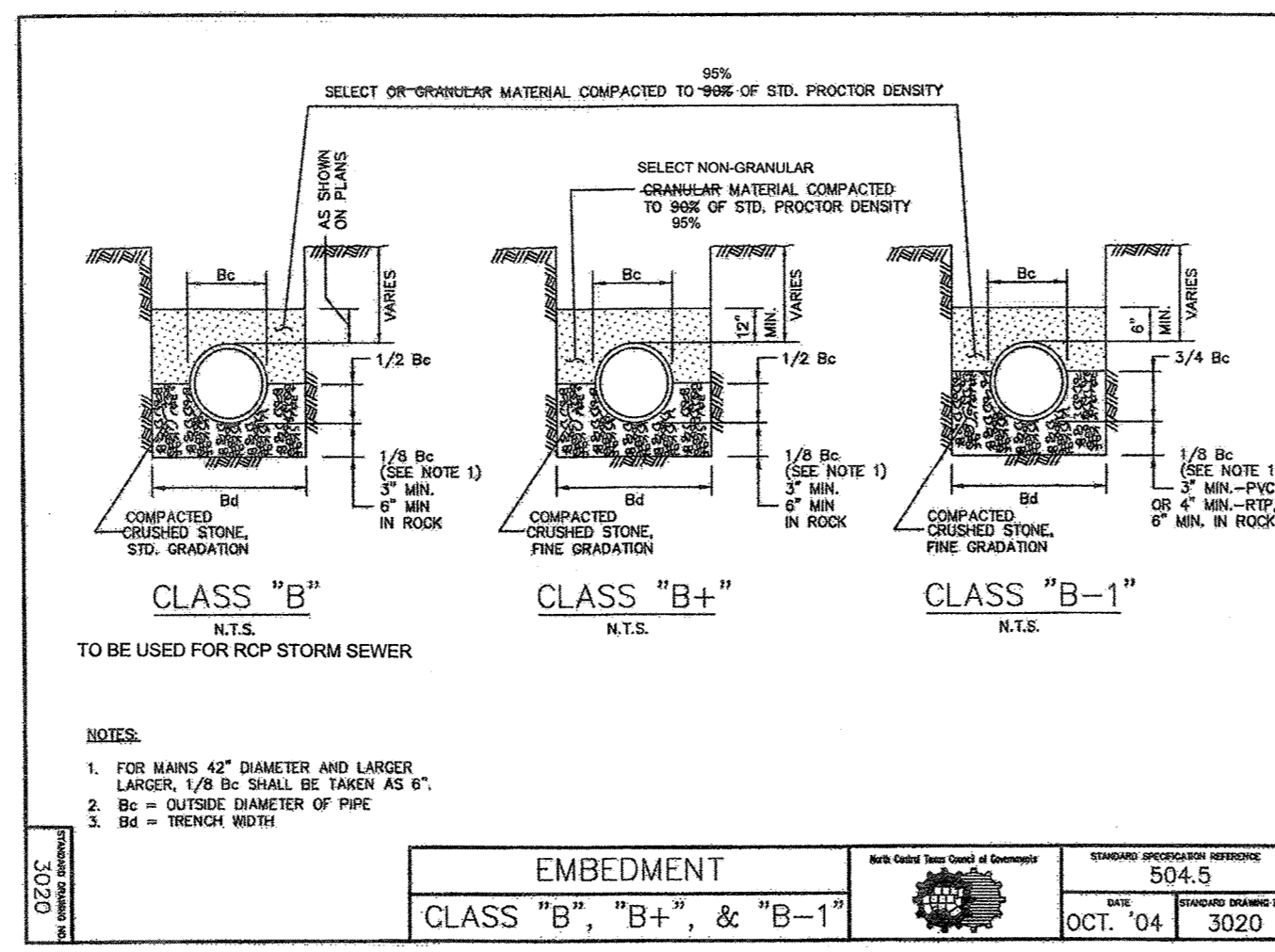
DATE: OCT. '04
DRAWN BY: 702
CHECKED BY: 6020D

SUMMARY OF QUANTITIES FOR CURB INLETS

DEPTH	5'-0" OPENING												10'-0" OPENING												15'-0" OPENING												20'-0" OPENING											
	CONC	STEEL	CONC	STEEL	CONC	STEEL	CONC	STEEL	CONC	STEEL	CONC	STEEL	CONC	STEEL	CONC	STEEL	CONC	STEEL	CONC	STEEL	CONC	STEEL	CONC	STEEL	CONC	STEEL	CONC	STEEL	CONC	STEEL	CONC	STEEL	CONC	STEEL	CONC	STEEL	CONC	STEEL	CONC	STEEL	CONC	STEEL						
3'-0"	2.82	3.09	2.82	3.09	2.82	3.09	2.82	3.09	2.82	3.09	2.82	3.09	2.82	3.09	2.82	3.09	2.82	3.09	2.82	3.09	2.82	3.09	2.82	3.09	2.82	3.09	2.82	3.09	2.82	3.09	2.82	3.09	2.82	3.09	2.82	3.09	2.82	3.09	2.82	3.09	2.82	3.09						

CURB INLET
SUMMARY OF QUANTITIES

DATE: OCT. '04
DRAWN BY: 702
CHECKED BY: 6020E



RECORD DRAWINGS

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John Winters 6-13-19
TODD WINTERS DATE

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REVISIONS:

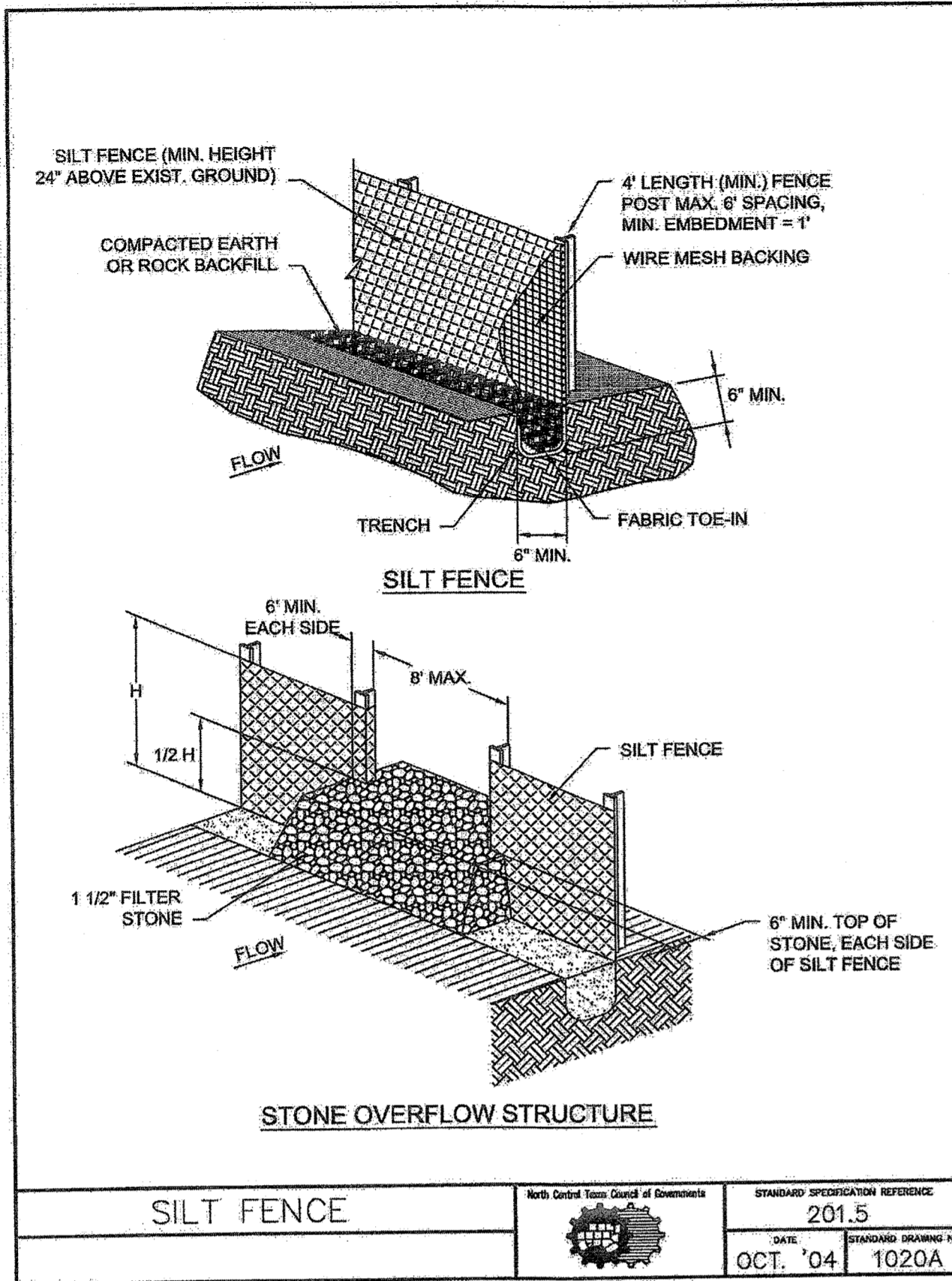
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CHECKED: TW	DATE: APRIL 13, 2018
PROJECT NO.: 3560	
DWG FILE NAME:	

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STORM SEWER DETAILS
RAYBURN ELECTRIC COOP. PHASE 2
LOT 5, BLK 1 RAYBURN COUNTRY ADDITION
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

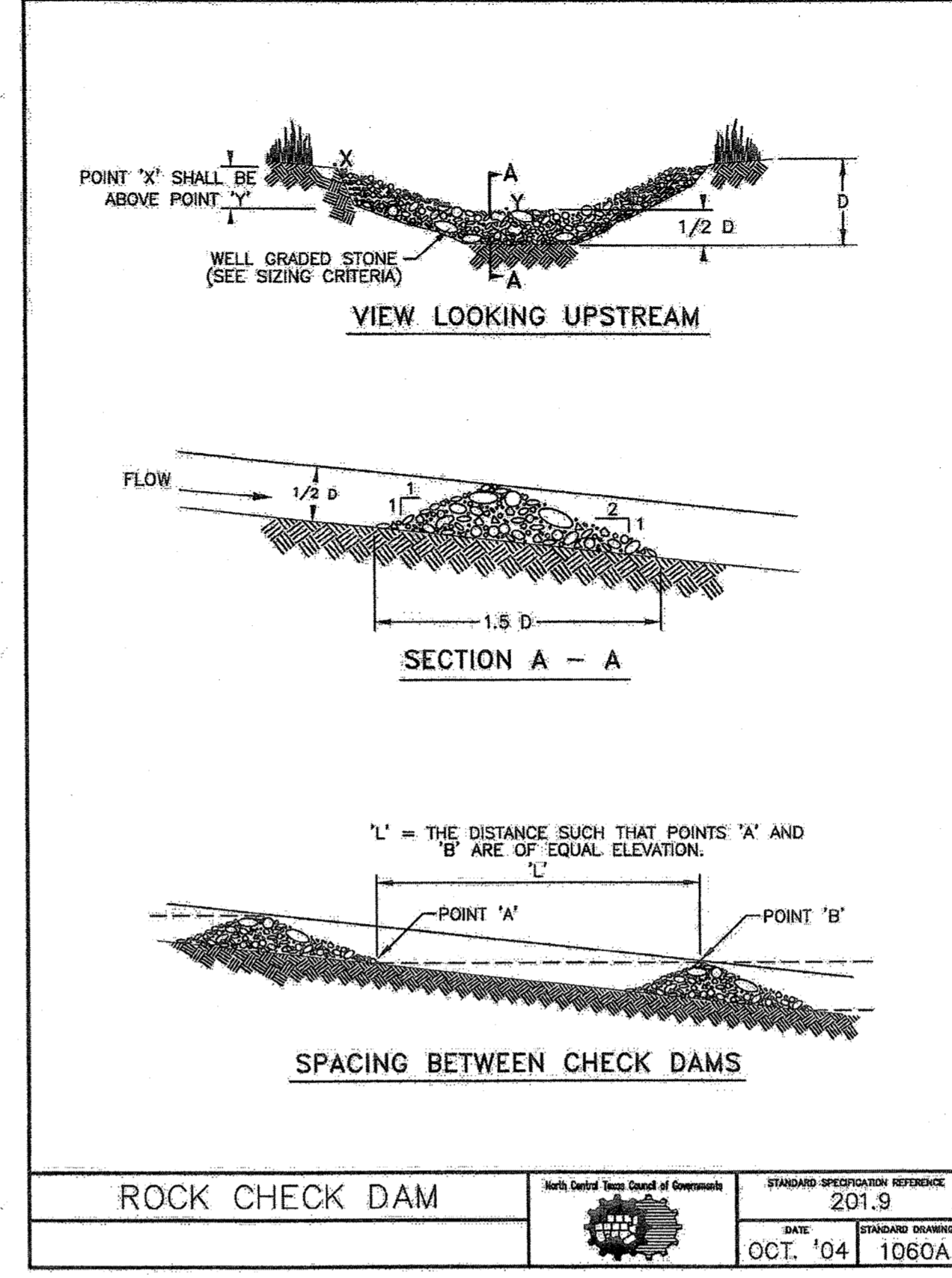
SHEET 19 OF 20



SILT FENCE GENERAL NOTES:

1. 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. POSTS SHALL BE METAL, NO WOODEN POSTS ALLOWED.
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 SUPPORT POST OR TO WIRE BACKING, WHICH IN TURN IS ATTACHED TO THE FENCE POST. THERE SHALL BE A 3 FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
5. INSPECTION SHALL BE AS SPECIFIED IN THE SWPPP. REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN FINAL STABILIZATION IS ACHIEVED OR ANOTHER EROSION OR SEDIMENT CONTROL DEVICE IS EMPLOYED.
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.
8. FILTER STONE SHALL BE WRAPPED IN FILTER FABRIC AND BURIED MINIMUM SIX (6) INCHES.

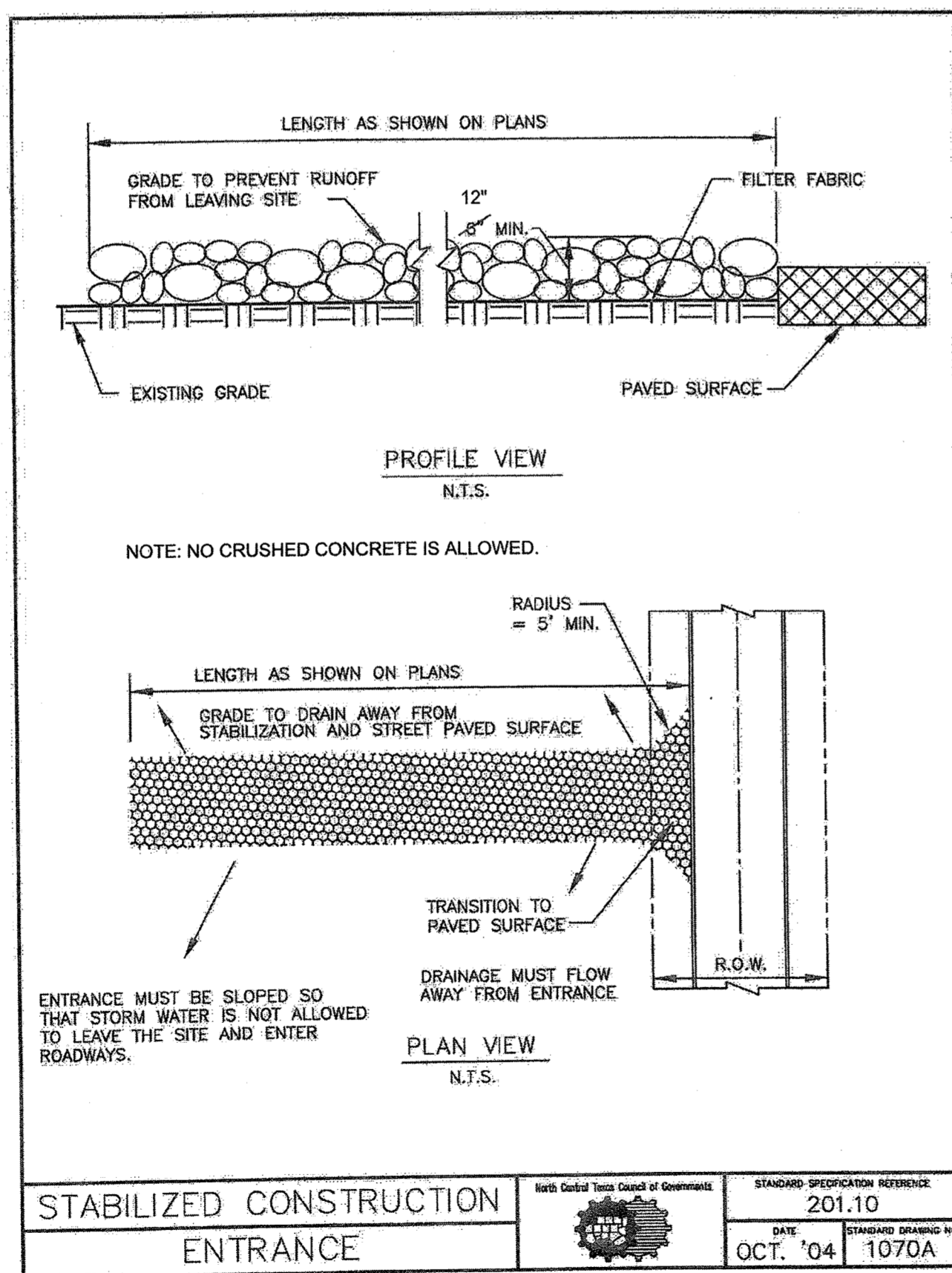
SILT FENCE	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE
		201.5
	DATE	STANDARD DRAWING NO.
	OCT. '04	1020B



ROCK CHECK DAM GENERAL NOTES:

1. STONE SHALL BE WELL GRADED WITH SIZE RANGE FROM 1 1/2 TO 3 1/2 INCHES IN DIAMETER DEPENDING ON EXPECTED FLOWS.
2. THE CHECK DAM SHALL BE INSPECTED AS SPECIFIED IN THE SWPPP AND SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
3. WHEN SILT REACHES A DEPTH EQUAL TO ONE-THIRD OF THE HEIGHT OF THE CHECK DAM OR ONE FOOT, WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF PROPERLY.
4. WHEN THE SITE HAS ACHIEVED FINAL STABILIZATION OR ANOTHER EROSION OR SEDIMENT CONTROL DEVICE IS EMPLOYED, THE CHECK DAM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.
5. FILTER STONE SHALL BE WRAPPED IN APPROPRIATE SIZED WIRE MESH TO CONTAIN STONE AND BURIED A MINIMUM OF SIX (6) INCHES.

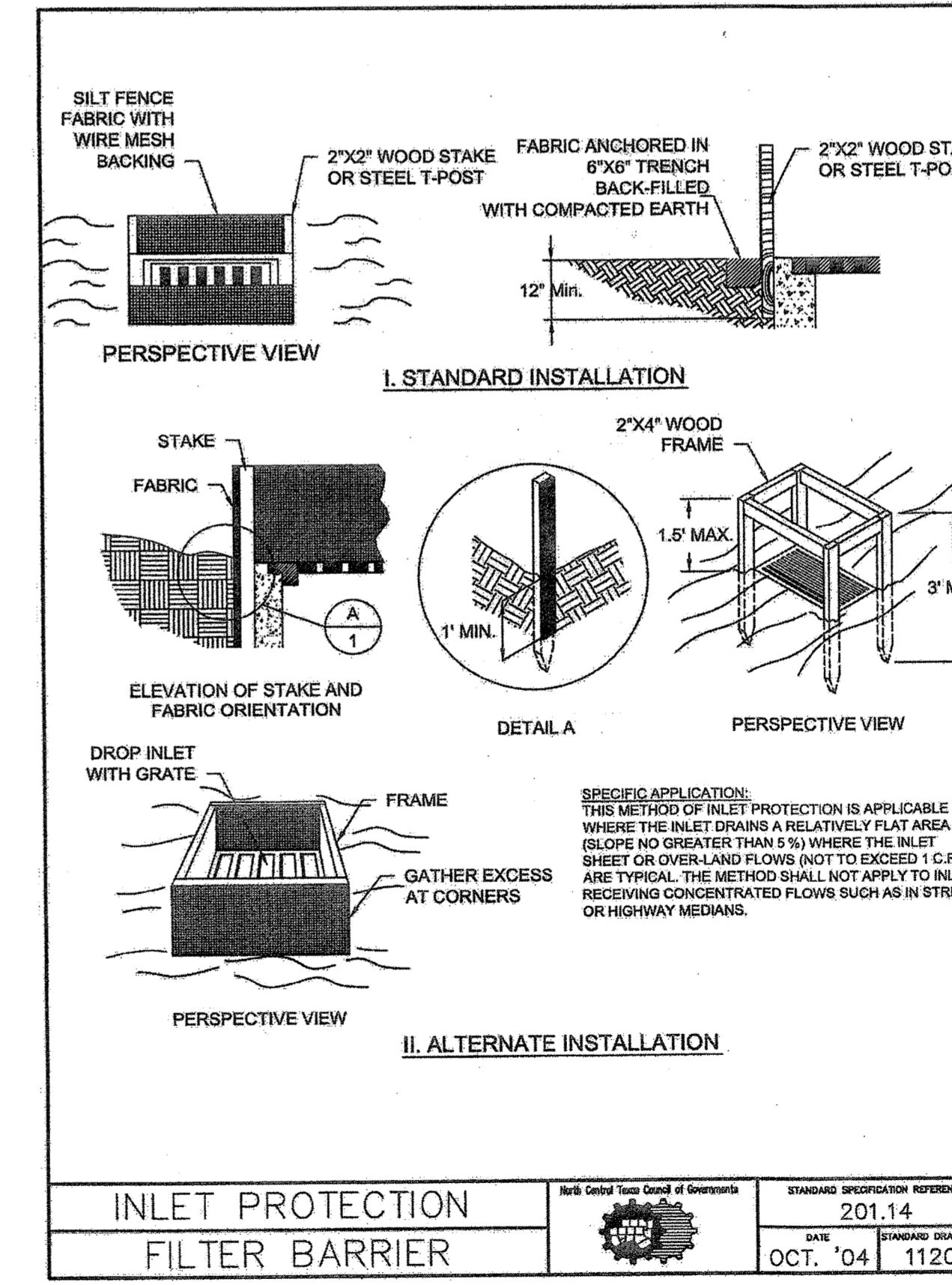
ROCK CHECK DAM	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE
		201.9
	DATE	STANDARD DRAWING NO.
	OCT. '04	1060B



STABILIZED CONSTRUCTION ENTRANCE GENERAL NOTES:

1. STONE SHALL BE 4 TO 6 INCH 3-TO-5-INCH DIAMETER COARSE AGGREGATE. NO CRUSHED CONCRETE IS ALLOWED.
2. LENGTH SHALL BE AS SPECIFIED IN THE SWPPP. MINIMUM LENGTH SHALL BE FIFTY (50) FEET AND MINIMUM WIDTH SHALL BE TWENTY (20) FEET.
3. THE THICKNESS SHALL NOT BE LESS THAN 12 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 SPILLED, 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.
8. PREVENT SHORTCUTTING OF THE FULL LENGTH OF THE CONSTRUCTION ENTRANCE BY INSTALLING BARRIERS AS NECESSARY.
9. INSPECTION SHALL BE AS SPECIFIED IN THE SWPPP.
10. NO CRUSHED CONCRETE IS ALLOWED.

STABILIZED CONSTRUCTION ENTRANCE	North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE
		201.11
	DATE	STANDARD DRAWING NO.
	OCT. '04	1070B



RECORD DRAWINGS

To the best of our knowledge Engineering Concepts & Design, L.P., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor.

Todd Winters 6-13-19
TODD WINTERS DATE

NOTE: NCTCOG DETAILS SHOWN HEREON HAVE BEEN MODIFIED TO INCLUDE THE "CITY OF ROCKWALL UPDATES" AS PUBLISHED IN THE CITY OF ROCKWALL'S UNIFIED DEVELOPMENT CODE. REFER TO THE CITY DOCUMENT FOR EXACT DESCRIPTIONS OF THE UPDATES.

"Case No. SP2017-041"

BENCHMARK:
"X" CUT IN CURB 23± SOUTH OF EAST DRIVE APPROACH OF EXISTING RAYBURN COUNTRY ELECTRIC BUILDING.

ENGINEERINGCONCEPTS & DESIGN, L.P.

ENGINEERING / PROJECT MANAGEMENT / CONSTRUCTION SERVICES - FIRM REG. #F-00145
201 WINDCO CIR, STE 200, WYLIE, TX 75098
972-941-8400 FAX: 972-941-8401 WWW.ECDLP.COM

REVISIONS:

DRAWN: TONY	DATE: APRIL 13, 2018
CHECKED: TW	DATE: APRIL 13, 2018
PROJECT NO.: 3560	
DWG FILE NAME:	

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF CONSTRUCTION.



EROSION CONTROL DETAILS
RAYBURN ELECTRIC COOP. PHASE 2
LOT 5, BLK 1 RAYBURN COUNTRY ADDITION
CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

SHEET
20
OF
20