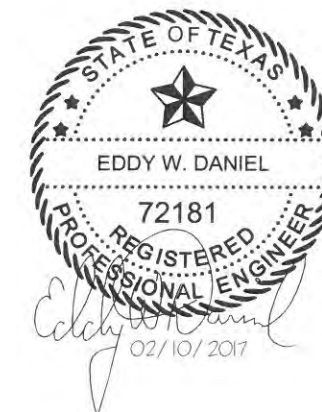


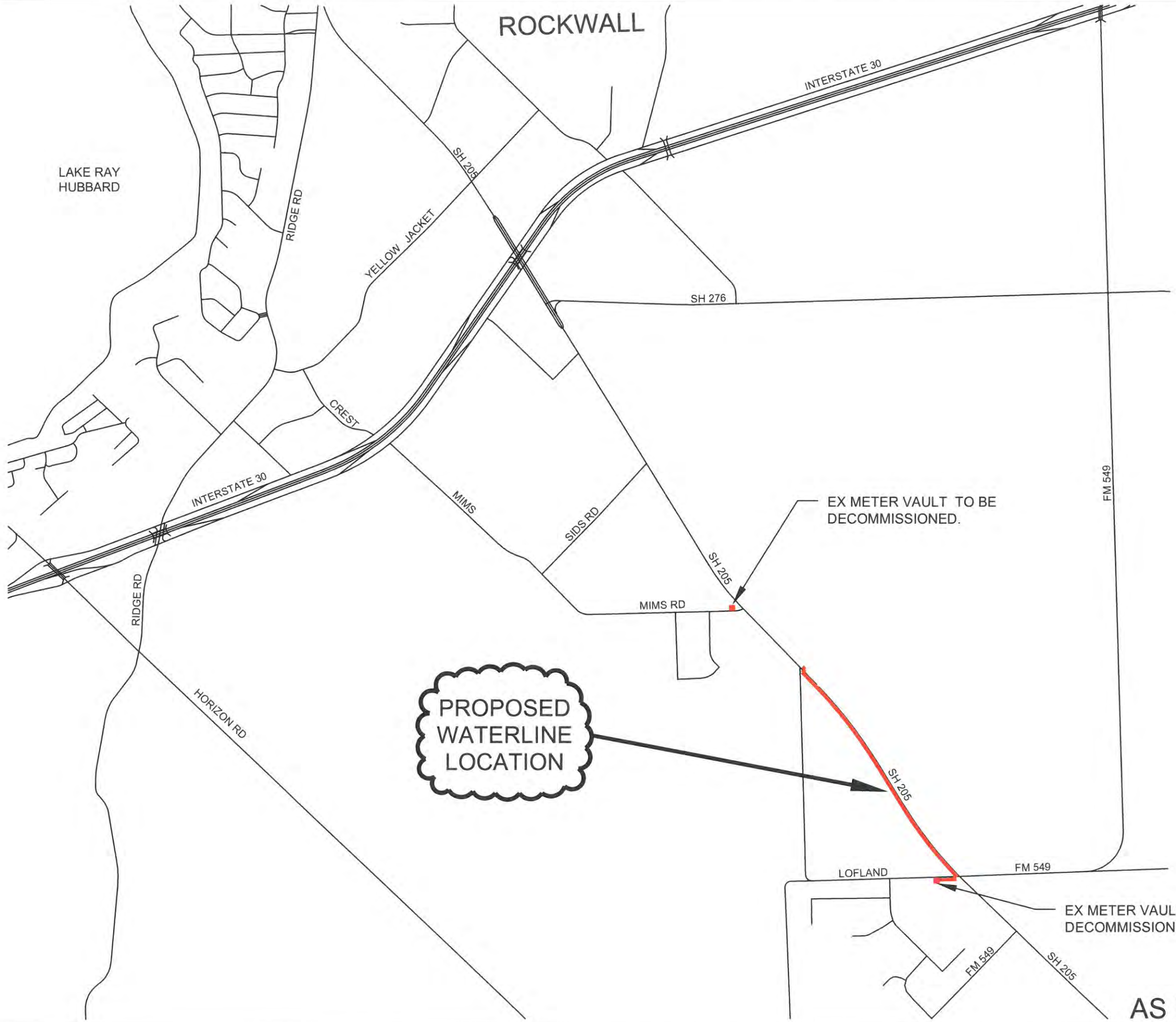
**16" WATERLINE PROJECT  
FOR  
RCH WATER SUPPLY CORPORATION  
ROCKWALL COUNTY, TEXAS  
DECEMBER 2015**



**DBI** DANIEL & BROWN INC.  
ENGINEERS/CONSULTANTS/PLANNERS  
118 McKinney St. Phone 972-784-7777  
P.O. Box 606 Fax 972-782-7721  
Farmersville, Texas 75442 www.DBIconultants.com  
Registration No.: F-002225



AS BUILT



ROCKWALL

INTERSTATE 30

LAKE RAY HUBBARD

INTERSTATE 30

PROPOSED WATERLINE LOCATION

EX METER VAULT TO BE DECOMMISSIONED.

EX METER VAULT TO BE DECOMMISSIONED.

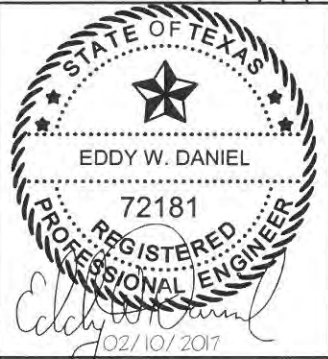
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NOT TO SCALE



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16" WATERLINE PROJECT  
 FOR  
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 ROCKWALL COUNTY, TEXAS

VICINITY MAP

SHEET 1 OF 18

DESIGNED: E.W.D. DATE: 8/17/15  
 DRAWN: M.K.W. REVISION: N/C  
 FILE: N:\RCH\WSCI\W\SH 205 0815\const\overall as built  
 REGISTRATION NO.: F-002225

**GENERAL REQUIREMENTS AND SPECIFICATIONS:**

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE RCH WSC, CITY OF ROCKWALL AND THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS (NCTCOG) STANDARD SPECIFICATIONS FOR THE PUBLIC WORKS CONSTRUCTION, 3RD ED. OR AS AMENDED.
2. ALL RULES AND REGULATIONS OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) SHALL BE MET.
3. WATER LINES AND/OR ROAD CROSSINGS INSTALLED ON PUBLIC RIGHT OF WAYS SHALL BE SUBJECT TO APPLICABLE STATE, COUNTY OR CITY REGULATIONS.
4. EXISTING UTILITIES SHALL BE LOCATED, IDENTIFIED, AND PROTECTED DURING THE INSTALLATION. CONFLICTS BETWEEN EXISTING UTILITIES AND PROPOSED UTILITIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
5. MATERIALS AND INSTALLATION SHALL BE GUARANTEED BY THE CONTRACTOR FOR A MINIMUM PERIOD OF TWO YEARS FROM THE DATE OF FINAL ACCEPTANCE.
6. THE OWNER SHALL BE HELD HARMLESS FROM ANY DAMAGES OCCURRING DURING THE CONSTRUCTION OR WARRANTY PERIOD. ALL DAMAGES AS A RESULT OF THE CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
7. ALL THIRD PARTY TEST FACILITIES, USED IN CONNECTION WITH THE PROJECT, WILL BE APPROVED BY OWNER OR OWNER'S REPRESENTATIVE BEFORE THEY ARE UTILIZED.
8. THE OWNER OR OWNER'S REPRESENTATIVE SHALL HAVE THE OPTION TO WITNESS ANY TESTS DONE IN CONNECTION WITH THE PROJECT.
9. THE CONTRACTOR SHALL SECURE A COPY OF AN EXECUTED PERMIT AND BE FULLY AWARE OF THE REQUIREMENTS CONTAINED HEREIN BEFORE A JOB IS STARTED. A COPY OF THE FULLY EXECUTED PERMIT SHALL BE LOCATED AT ALL TIMES ON THE JOB, UNTIL FINAL COMPLETION.
10. ALL STATIONING NUMBERS ARE FOR REFERENCE ONLY AND HAVE NOT BEEN FIELD VERIFIED.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH REPAIR OR REPLACEMENT OF ANY PAVEMENT (STREETS, ROADWAYS, OR DRIVEWAYS) AND UNDERGROUND UTILITIES DAMAGED AS A RESULT OF CONSTRUCTION OPERATIONS.

**PARTS AND MATERIALS:**

12. ALL PARTS AND MATERIALS USED ON ANY PROJECT SHALL BE DOMESTIC (USA) UNLESS APPROVED BY THE OWNER.

**WATERLINES AND FITTINGS:**

13. DIP SHALL BE WRAPPED WITH A POLYETHYLENE LINER.
14. ALL HORIZONTAL AND VERTICAL BENDS SHALL BE BLOCKED.
15. ALL VALVES AND FITTINGS SHALL BE PROPERLY RESTRAINED WITH MEGA-LUGS OR APPROVED EQUIVALENT AND RETAINER GLANDS
16. WATER LINES SHALL BE INSTALLED WITH A MINIMUM OF 48 INCHES AND A MAXIMUM OF 60" OF COVER, UNLESS OTHERWISE SHOWN. USE NCTCOG B+ BURY AND EMBEDMENT DETAILS FOR STANDARD APPLICATIONS.
17. EXISTING WATER LINES SHALL REMAIN IN SERVICE DURING CONSTRUCTION OF NEW WATER LINES. EXCEPT THOSE INDICATED ON THE PLANS.
18. WATER LINES MAY NOT BE BACK FILLED UNTIL INSPECTED AND APPROVED BY A OWNER REPRESENTATIVE.
19. NEW WATER LINES SHALL BE TESTED, DISINFECTED, AND FLUSHED IN ACCORDANCE WITH TCEQ REQUIREMENTS INCLUDING TAKING THE REQUIRED NUMBER OF BACTERIOLOGICAL SAMPLES WHICH INDICATE PROPER DISINFECTION BEFORE THE WATER LINE CAN BE PLACED INTO SERVICE.
20. WATER LINES SHALL BE PRESSURE TESTED IN ACCORDANCE WITH NCTCOG ITEM 506.
21. ALL WATER LINE CROSSINGS OF SANITARY SEWER LINES SHALL BE AS SHOWN IN THE DETAILS AND MEET CURRENT TCEQ REQUIREMENTS.
22. DURING INSTALLATION A MINIMUM SEPARATION DISTANCE SHALL BE MAINTAINED IN ALL DIRECTIONS OF NINE FEET BETWEEN THE PROPOSED WATERLINE AND WASTE WATER COLLECTION FACILITIES, INCLUDING MANHOLES AND SEPTIC TANK DRAIN FIELDS. IF THIS DISTANCE CANNOT BE MAINTAINED, THE INSTALLER SHALL IMMEDIATELY NOTIFY THE OWNER'S ENGINEER FOR FURTHER DIRECTION. SEPARATION DISTANCES, INSTALLATION METHODS, AND MATERIALS UTILIZED SHALL MEET 290.44 OF THE TCEQ RULES. NO COVERING OF LINES ALLOWED, UNTIL INSPECTED BY OWNER'S ENGINEER REPRESENTATIVE.

**WATERLINES AND FITTINGS CONT.:**

24. WATERLINE ENCASEMENT FOR THE PURPOSES OF A GAS LINE CROSSING SHALL BE IN ACCORDANCE WITH GAS LINE OWNER'S SPECIFICATIONS.
25. TRACER TAPE SHALL BE INCLUDED FOR ALL WATER LINE IN ACCORDANCE WITH DANIEL & BROWN, INC. SPECIFICATION 205, WATER LINE INSTALLATION. TRACER TAPE SHALL BE INSTALLED ON TOP OF EMBEDMENT CENTERED ON WATERLINE.
26. THE CONTRACTOR SHALL SUPPLY ALL EQUIPMENT NECESSARY TO SUCCESSFULLY CONDUCT ALL WATER TESTS, INCLUDING BUT NOT LIMITED TO, TEST PORTS, SAMPLE CONTAINERS, PUMPS, EXTERNAL WATER LINE, EXTERNAL HOSES, ETC.
27. ALL TAPPING SLEEVES SHALL BE STAINLESS STEEL FULL WRAP. (SMITH BLAIR 663 OR APPROVED EQUIVALENT)
28. ALL TAPPING SADDLES SHALL BE STAINLESS STEEL BAND AND BOLTS. (MODEL: FORD 202BS)
29. UNLESS OTHERWISE SPECIFIED, TRACER WIRE IS REQUIRED IN ACCORDANCE WITH DANIEL & BROWN INC. SPECIFICATION 205, WATER LINE INSTALLATION. TRACER WIRE SHALL BE RIGIDLY AFFIXED ALONG THE TOP CENTERLINE SURFACE OF THE WATERLINE.
30. USE POLYETHYLENE WRAP FOR ALL BURIED DI PIPE AND FITTINGS.
31. ALL EXPOSED PIPING AND FITTINGS SHALL BE COVERED WITH 1-1/2" THICK MINIMUM ALUMINUM BACKED INSULATION.
32. CONTRACTOR SHALL FINISH GRADE TRENCH LINE TO MATCH EXISTING TERRAIN.
33. TYPICAL OFFSET FOR LONGITUDINAL LINES, OUTSIDE R.O.W., IS 7.5 FEET UNLESS OTHERWISE SHOWN.
34. TYPICAL OFFSET FOR LONGITUDINAL LINES, INSIDE R.O.W., IS 7.5 FEET UNLESS OTHERWISE SHOWN.
35. CASING SPACERS AND MOLDED RUBBER END CAPS ARE REQUIRED FOR ENCASEMENT. CASING SPACERS SHALL BE INSTALLED AT LEAST EVERY 5 FEET. CASING SPACERS ARE RACI OR APPROVED EQUIVALENT.

**VALVES:**

36. ALL VALVES ON PIPES 12" AND SMALLER SHALL BE RESILIENT SEALED WEDGE VALVES (AWWA C515).
37. ALL VALVES ON PIPES LARGER THAN 12" SHALL BE BUTTERFLY VALVES (AWWA C504).
38. ALL VALVES SHALL BE MJ RW SQUARE HEAD UNLESS OTHERWISE NOTED.
39. CARSONITE VALVE MARKERS ARE REQUIRED AT ALL VALVES OR VALVE GROUPS.
40. CARSONITE WATER LINE MARKERS ARE REQUIRED AT LEAST EVERY 500 FEET ALONG THE WATER LINE AND ON BOTH SIDES OF ROAD CROSSINGS.

**FIRE HYDRANTS, FLUSH VALVES, BLOW-OFF VALVES, SAMPLE STATIONS:**

41. ALL FIRE HYDRANTS SHALL BE INSTALLED WITH A 24"x24" SQUARE REINFORCED CONCRETE PAD.
42. FIRE HYDRANTS SHALL BE PAINTED. COLOR SELECTION AND PAINT TYPE SHALL BE APPROVED BY OWNER OR OWNER'S REPRESENTATIVE PRIOR TO PAINTING.
43. FIRE HYDRANT STREET REFLECTORS SHALL BE INSTALLED AS APPROPRIATE WITH ASSOCIATED FIRE HYDRANT ASSEMBLIES.

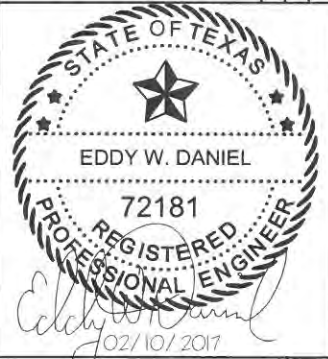
**BORINGS:**

44. ROAD CROSSINGS SHALL BE ENCASED ACCORDING TO STATE, COUNTY OR CITY REGULATIONS.
45. A ROAD BORE PERMIT MUST BE DISPLAYED AND AVAILABLE FOR INSPECTION AS REQUIRED.
46. 8" AND LARGER ROAD BORES SHALL BE DRY BORE.
47. ALL BORE PITS OR OPEN EXCAVATION SHALL BE CLOSED THE SAME DAY THEY ARE OPENED IF AT ALL POSSIBLE. ANY PIT OR EXCAVATION LEFT OPEN OVERNIGHT SHALL BE BARRICADED. TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) RULES AND REGULATIONS SHALL APPLY FOR STATE RIGHT OF WAY APPLICATIONS.
48. WATER LINES, CROSSING BENEATH THE PROPOSED ROADWAY SURFACE, SHALL MAINTAIN A MINIMUM CLEARANCE OF 18 INCHES BETWEEN THE BOTTOM OF THE PAVEMENT STRUCTURE AND THE WATER LINE/ENCASEMENT.
49. BORE PIT EDGES SHALL BE AT LEAST 1-FT HORIZONTAL PER 1-FT VERTICAL DEPTH AWAY FROM THE EXISTING ROADWAY SHOULDER'S EDGE.
50. BORINGS SHALL HAVE A MINIMUM COVER OF 42 INCHES VERTICALLY BELOW THE EXISTING DITCH FLOW LINE.

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16' WATERLINE PROJECT  
 FOR  
 RCH WATER SUPPLY CORPORATION  
 ROCKWALL COUNTY, TEXAS

**GENERAL NOTES**

**AS BUILT**

**METERS AND VAULTS:**

1. NOTIFY THE OWNER PRIOR TO CONSTRUCTION OF METER VAULT OR BY-PASS ASSEMBLY.
2. THE VAULT SHALL NOT BE INSTALLED IN ANY DRIVE OR PARKING AREA & MUST BE LOCATED IN A UTILITY EASEMENT DEDICATED TO THE OWNER.
3. ALL PIPING INSIDE THE VAULT & THE VAULT ITSELF MUST BE INSPECTED & APPROVED BY THE OWNER.
4. ALL PIPING INSIDE THE VAULT SHALL BE DUCTILE IRON PIPE WITH FLANGED FITTINGS.

**SITE PREPARATION:**

5. SITE SHALL BE GRADED TO DRAIN WITH NO PUDDLING.
6. ALL GRADED AREAS SHALL BE SEEDED WITH BERMUDA GRASS OR OTHER SEASONAL GRASSES, IN ACCORDANCE WITH DANIEL & BROWN INC. SPECIFICATION 203 - SEEDING, UPON COMPLETION OF FINAL GRADING.
7. PROPER EROSION CONTROL MEASURES SHALL CONSIST OF THE INSTALLATION, MAINTENANCE, AND REMOVAL OF THE SILT FENCING, STRAW BALES, INLET SEDIMENT BARRIERS, ETC., INCLUDING ANY SEEDING (CELLULOSE FIBER MULCH) OF DISTURBED GRASS; SUCH MEASURES SHALL REMAIN IN PLACE AND WATERED SUFFICIENTLY UNTIL 70% RE-VEGETATION OF AN DISTURBED AREAS HAS BEEN ESTABLISHED.

**TRAFFIC CONTROL:**

8. TRAFFIC CONTROL SIGNAGE, BARRICADES, ETC., PER THE LATEST EDITION TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES SHALL REMAIN IN PLACE DURING CONSTRUCTION.
9. PROPER TRAFFIC CONTROL MEASURES SHALL BE MAINTAINED FOR DURATION OF CONSTRUCTION AS PRESCRIBED BY THE TEXAS DEPARTMENT OF TRANSPORTATION PERSONNEL. (REF. TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES) THE CONTRACTOR OR OWNER SHALL PROVIDE BARRICADES, WARNING SIGNS, AND FLAGGERS WHEN APPLICABLE.
10. OPERATIONS ALONG HIGHWAYS SHALL BE PERFORMED IN SUCH MANNER THAT ALL EXCAVATED MATERIAL, ALL OPERATING EQUIPMENT, AS WELL AS PARKED VEHICLES, ARE KEPT OFF THE PAVEMENT AT ALL TIMES. ANY VEHICLES REQUIRED TO REMAIN ON THE ROADWAY, INCLUDING SHOULDERS, ARE TO BE PROPERLY BARRICADED ACCORDING TO THE TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
11. CONSTRUCTION OPERATIONS SHALL BE SUSPENDED DURING WET CONDITIONS, WHEN IN THE CITY, COUNTY, OR STATE'S OPINION, DAMAGE TO THE RIGHT-OF-WAY COULD OCCUR OR WHEN SAFETY TO THE TRAVELING PUBLIC IS AN ISSUE.

**DANIEL & BROWN SPECIFICATIONS:**

12. THIS PROJECT SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING DANIEL & BROWN INC. SPECIFICATIONS. IN THE EVENT OF A CONFLICT BETWEEN THE SPECIFICATIONS BELOW AND THE PLANS THEN THE PLANS WILL PRESIDE.
  - 201 - EARTHWORK
  - 203 - SEEDING
  - 205 - WATERLINE INSTALLATION
  - 206 - STRUCTURAL EXCAVATING, BACKFILLING, AND COMPACTING
  - 301 - CONCRETE
  - 1002 - TRENCH EXCAVATION SAFETY SYSTEMS

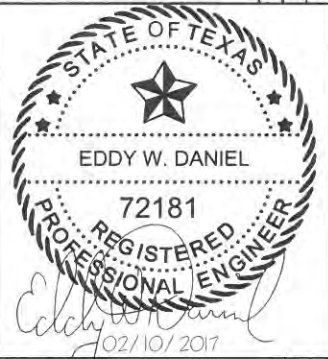
**METER VAULT DECOMMISSIONING PLAN:**

1. EXISTING METER VAULTS & APPURTANCES LOCATED AT MIMS ROAD AND LOFLAND CIRCLE WILL BE REMOVED FROM SERVICE.
2. EXISTING METER ON LOFLAND CIRCLE WILL REMAIN IN SERVICE UNTIL NEW 16" WATERLINE AND VAULT ARE IN SERVICE.
3. METER VAULTS AND PIPING WILL BE REMOVED AND DELIVERED TO THE CITY OF ROCKWALL.
4. SCADA PANELS LOCATED AT MIMS ROAD WILL BE REMOVED AND DELIVERED TO THE CITY OF ROCKWALL. SCADA PANELS LOCATED AT LOFLAND CIRCLE WILL BE RELOCATED.
5. EXISTING WATERLINES WILL BE CAPPED.
6. EXISTING ELECTRICAL SERVICE POLES WILL BE REMOVED AND DELIVERED TO THE CITY OF ROCKWALL.
7. VAULT REMOVAL AREA WILL BE PROPERLY BACKFILLED AND GRADED AFTER VAULT, SCADA AND ELECTRICAL REMOVAL.

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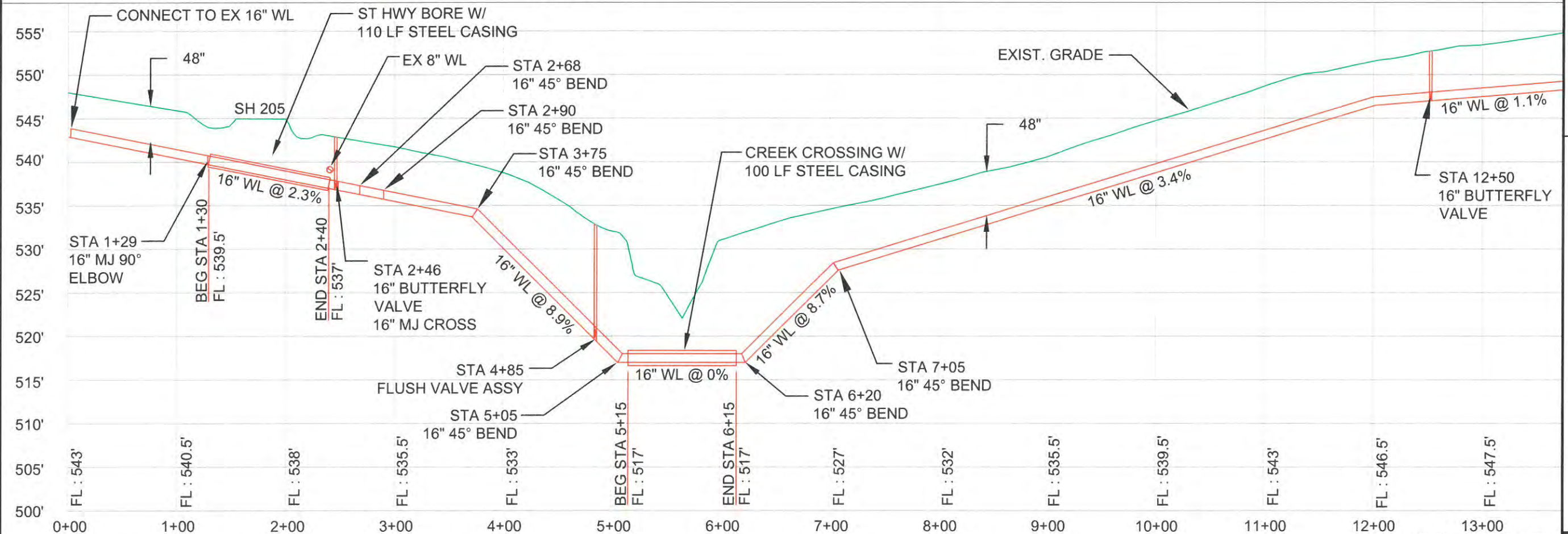
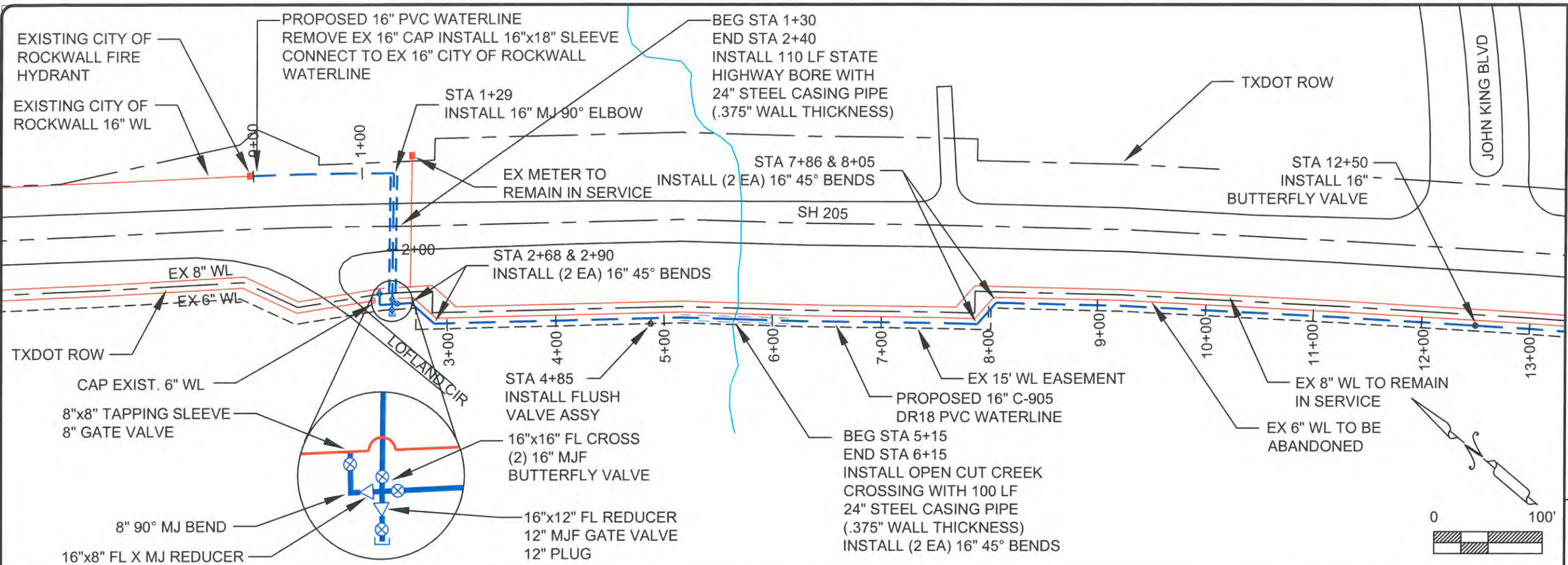
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 DRAWN: M.K.W. REVISION: N/C  
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 REGISTRATION NO.: F-002225



16" WATERLINE PROJECT  
 FOR  
 RCH WATER SUPPLY CORPORATION  
 ROCKWALL COUNTY, TEXAS

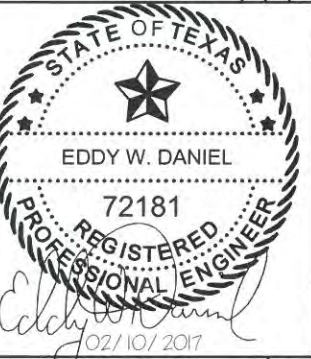
**GENERAL NOTES**

**AS BUILT**



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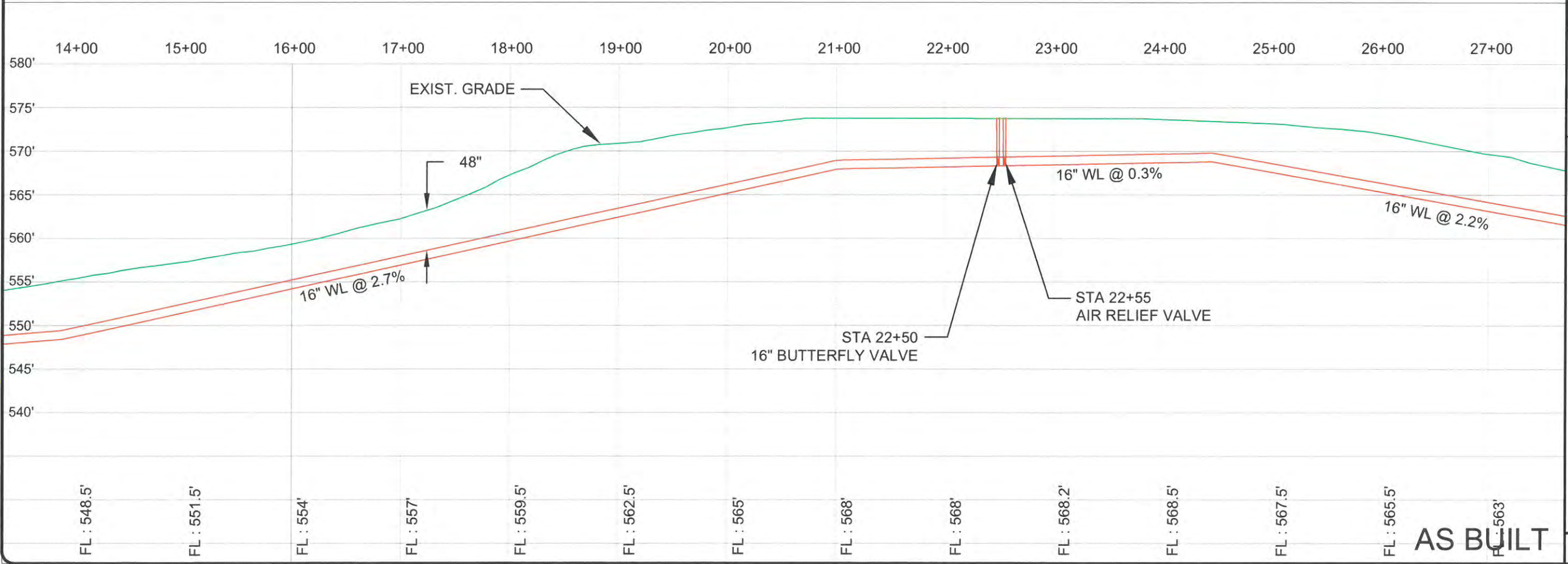
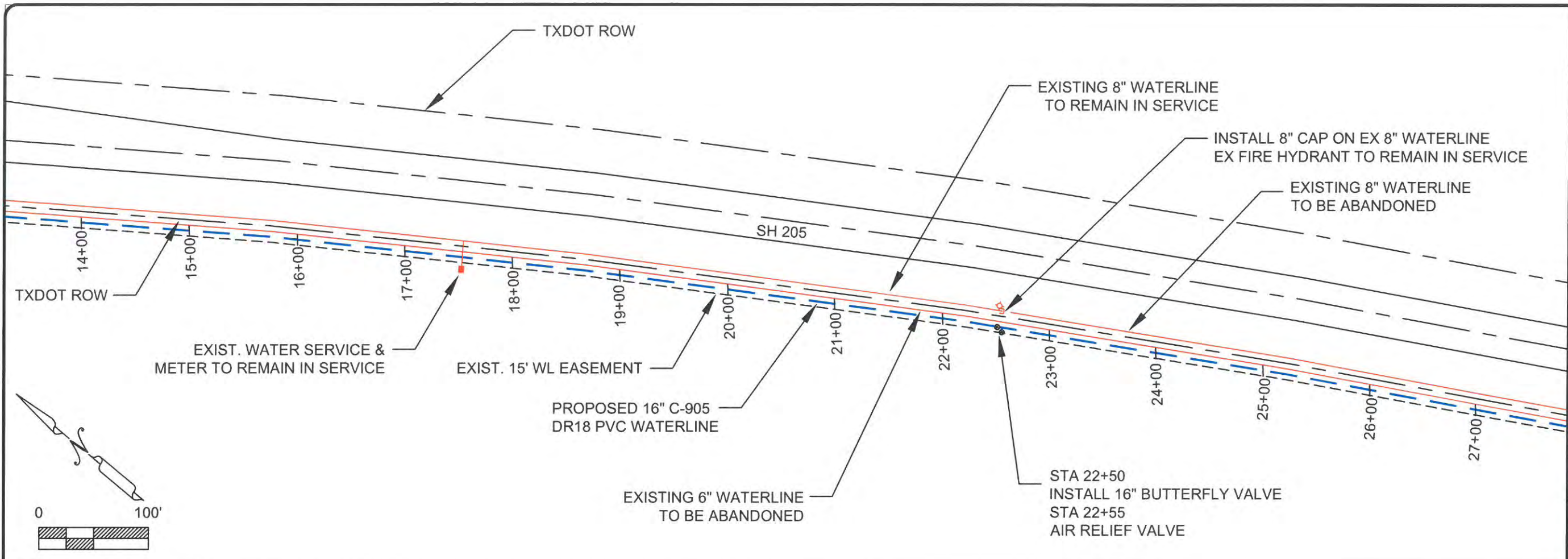
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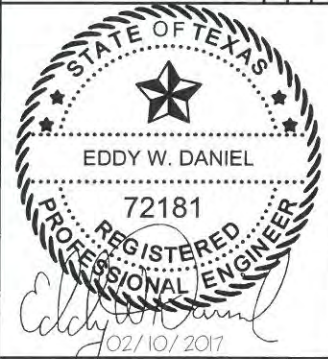
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**MAP SHEET 1**



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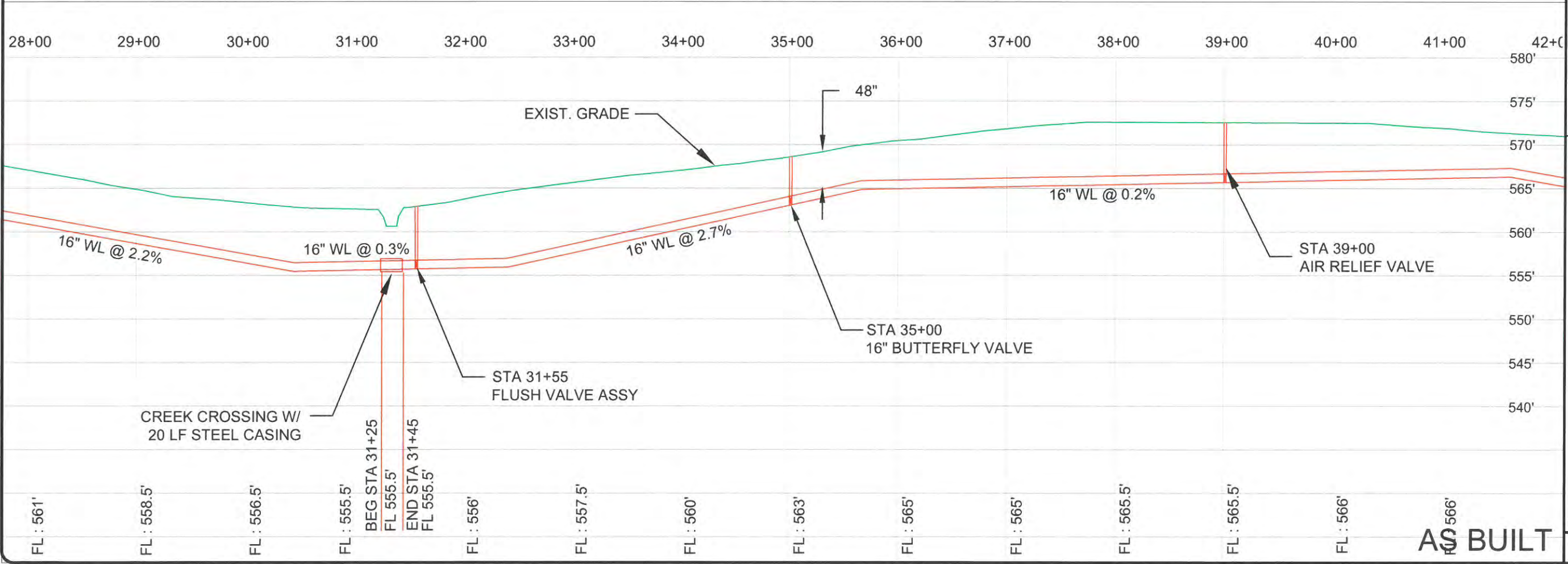
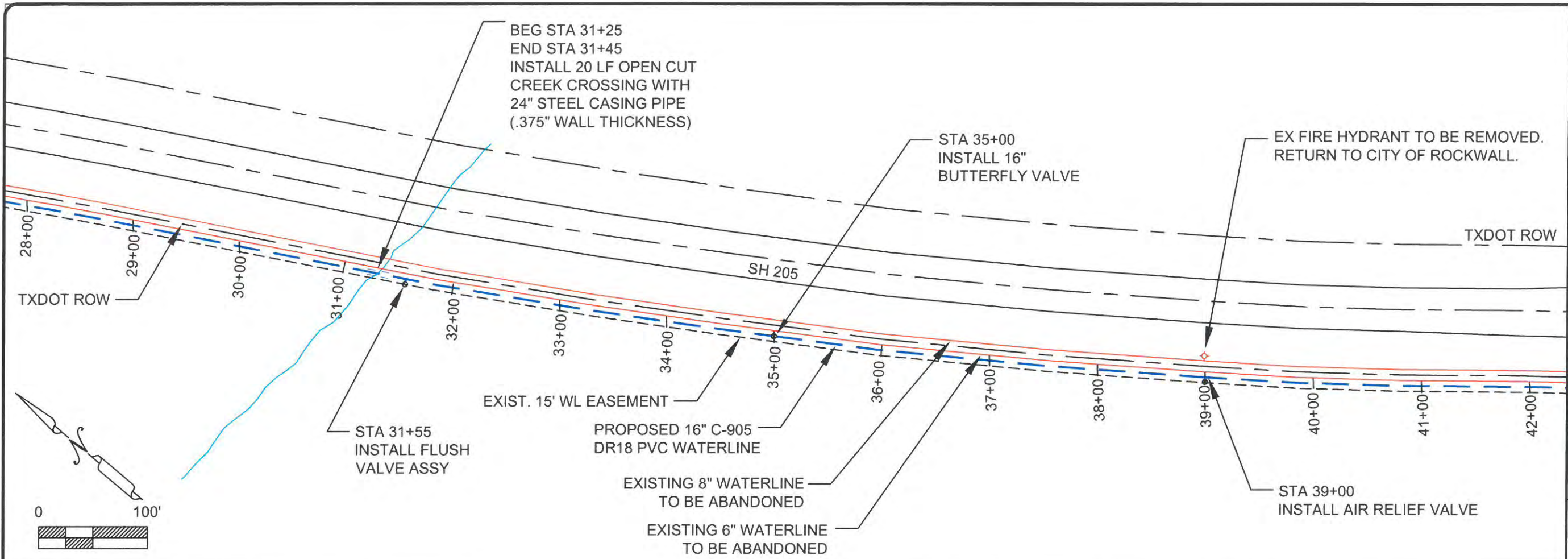
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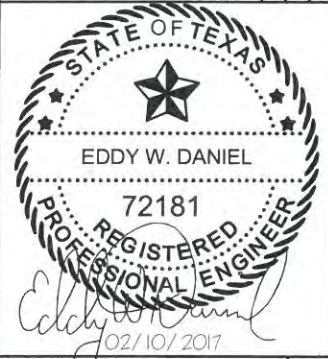
MAP SHEET 2

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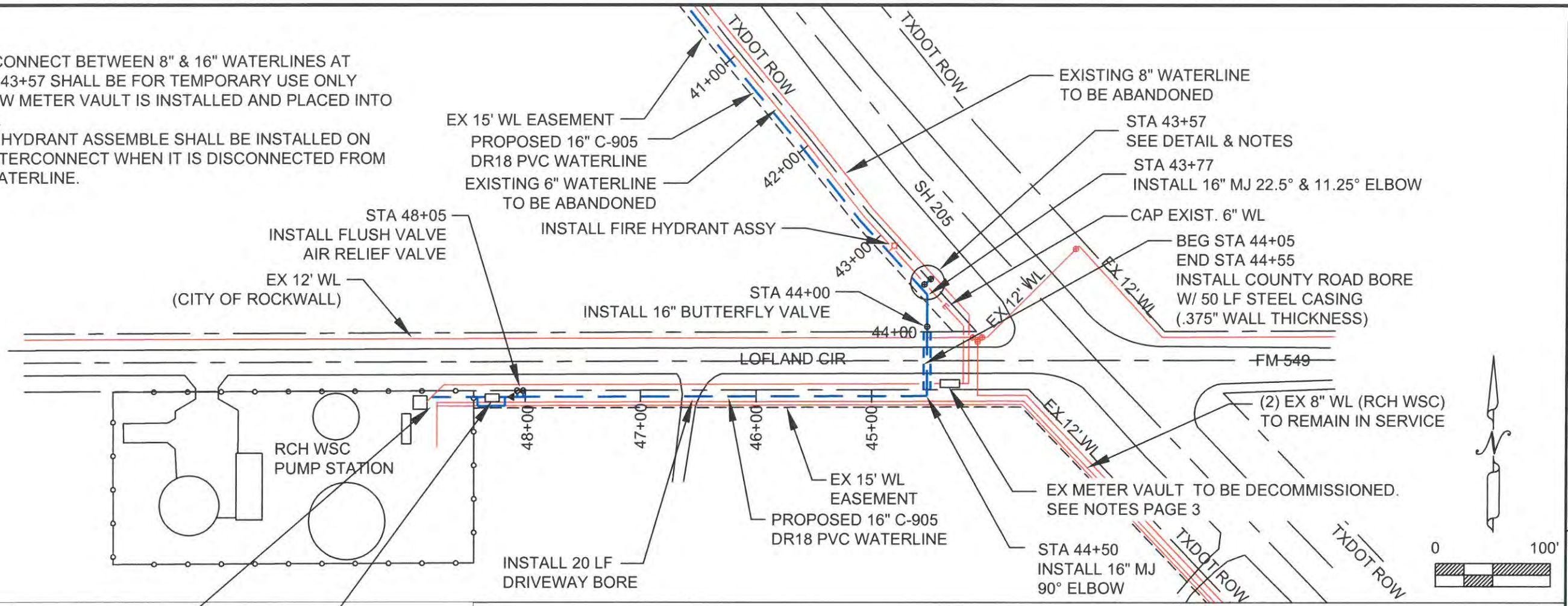
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MAP SHEET 3

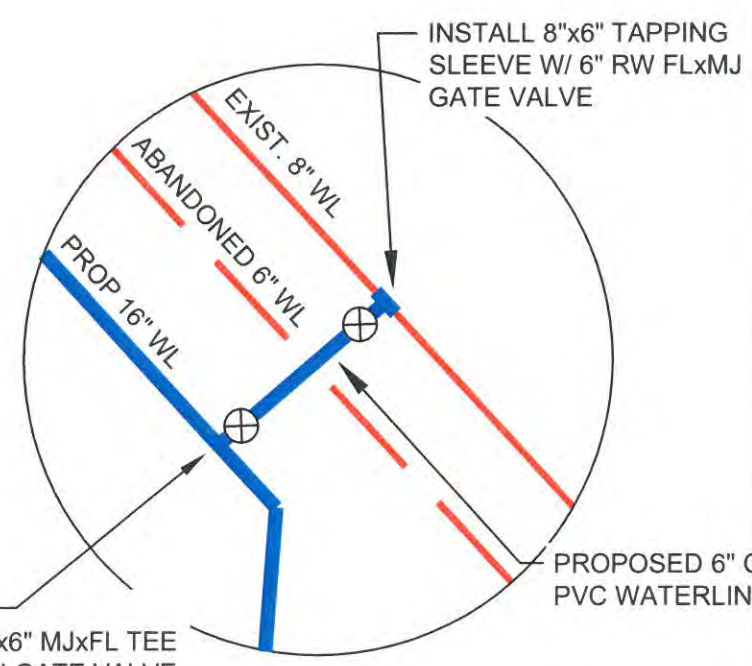
**NOTES:**

1. INTERCONNECT BETWEEN 8" & 16" WATERLINES AT STATION 43+57 SHALL BE FOR TEMPORARY USE ONLY UNTIL NEW METER VAULT IS INSTALLED AND PLACED INTO SERVICE.
2. A FIRE HYDRANT ASSEMBLY SHALL BE INSTALLED ON THE 6" INTERCONNECT WHEN IT IS DISCONNECTED FROM THE 8" WATERLINE.

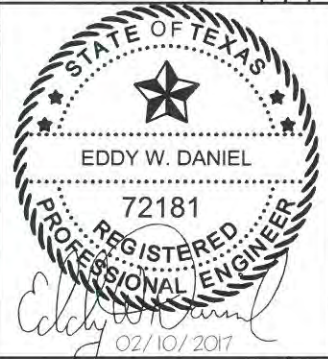
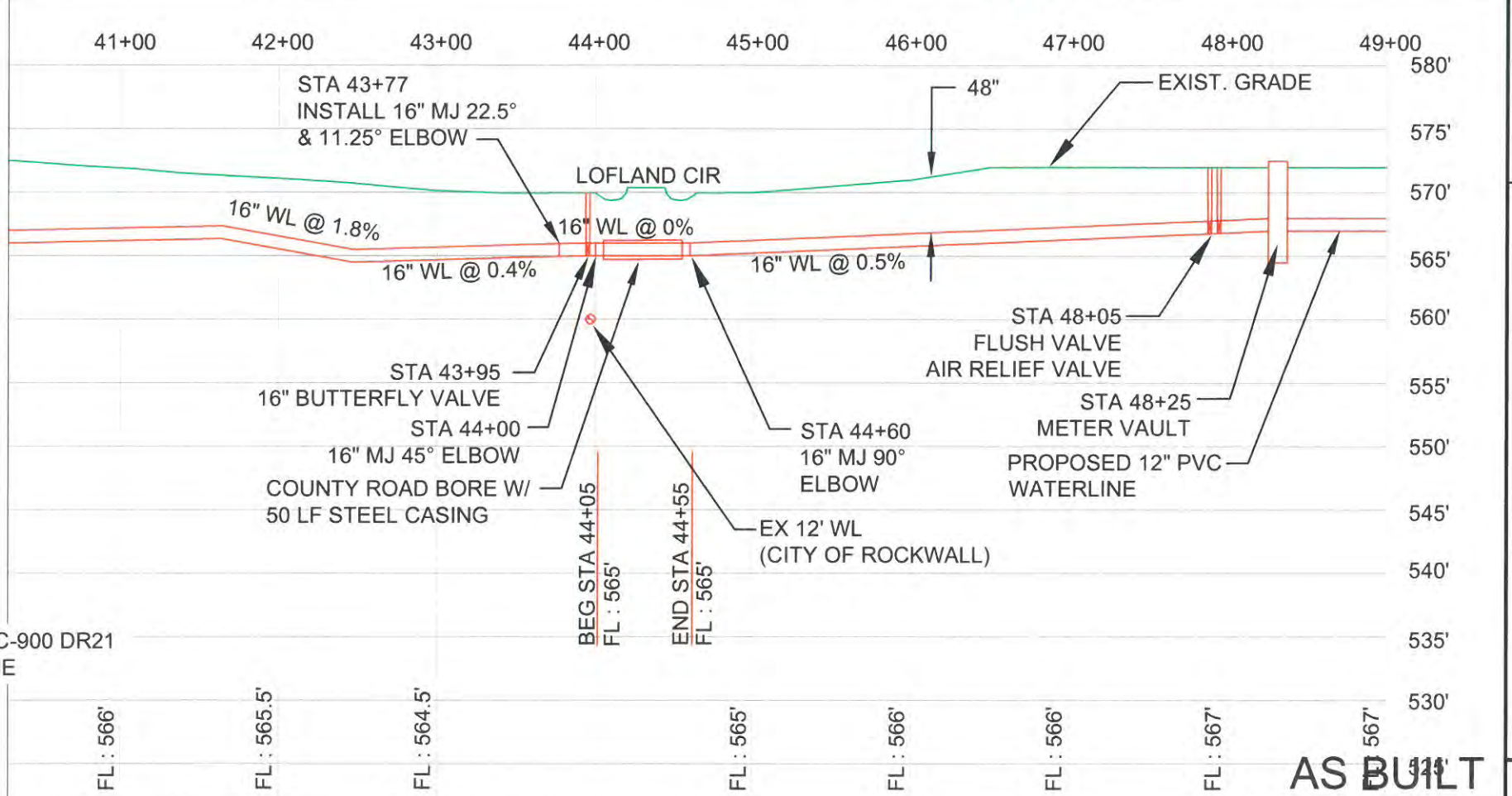


SEE SHT 8 FOR PUMP STATION DETAILS

STA 48+25  
INSTALL METER VAULT & 10" BYPASS  
SEE SHTS 9 & 10 FOR DETAILS



**DETAIL STA 43+57**



16" WATERLINE PROJECT  
FOR  
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**MAP SHEET 4 (REVISION 3-2-16)**

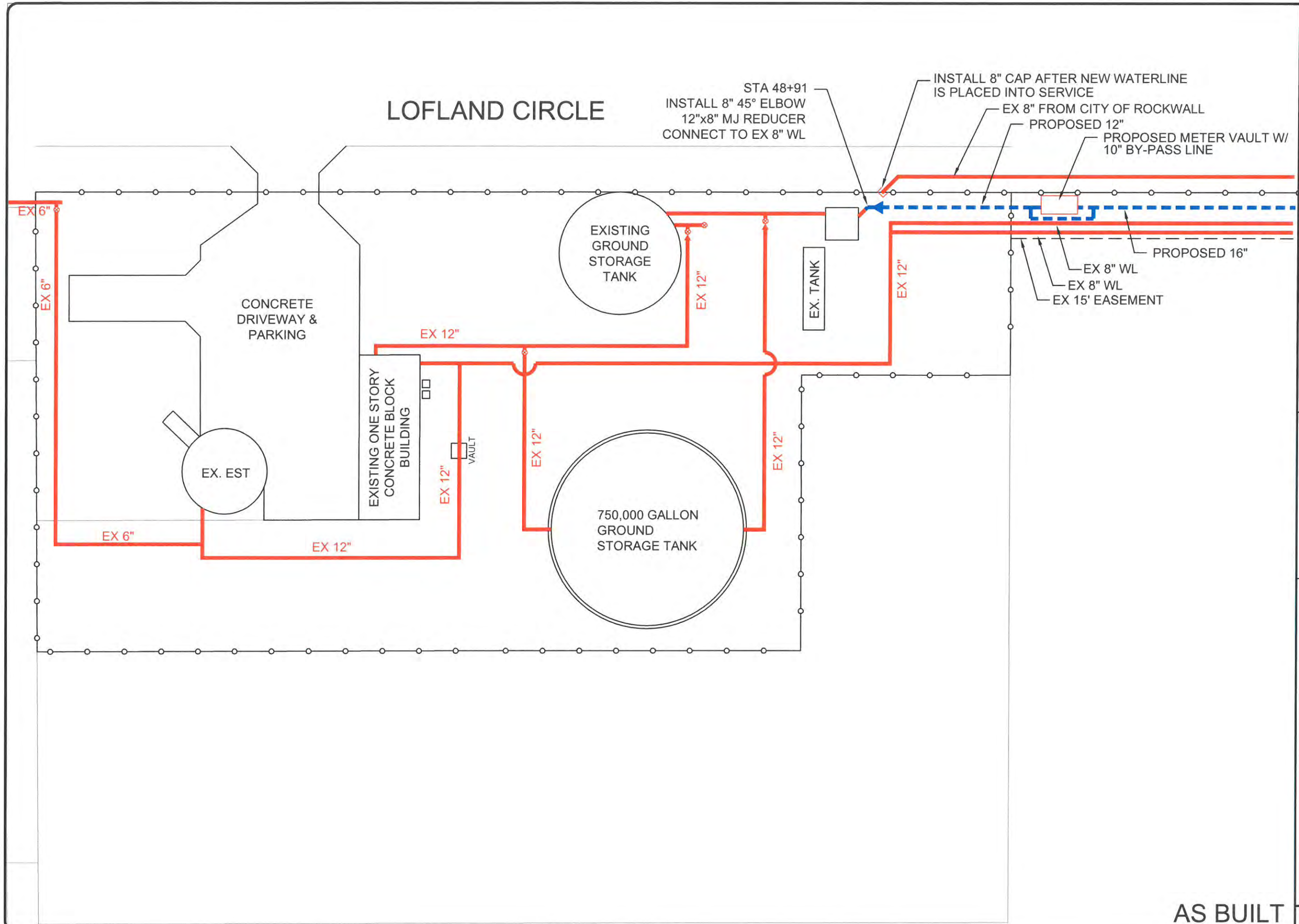
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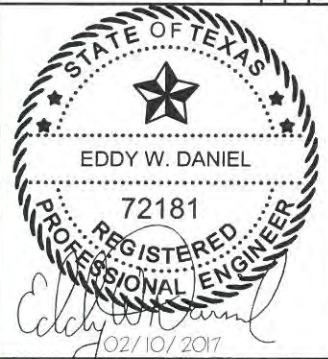




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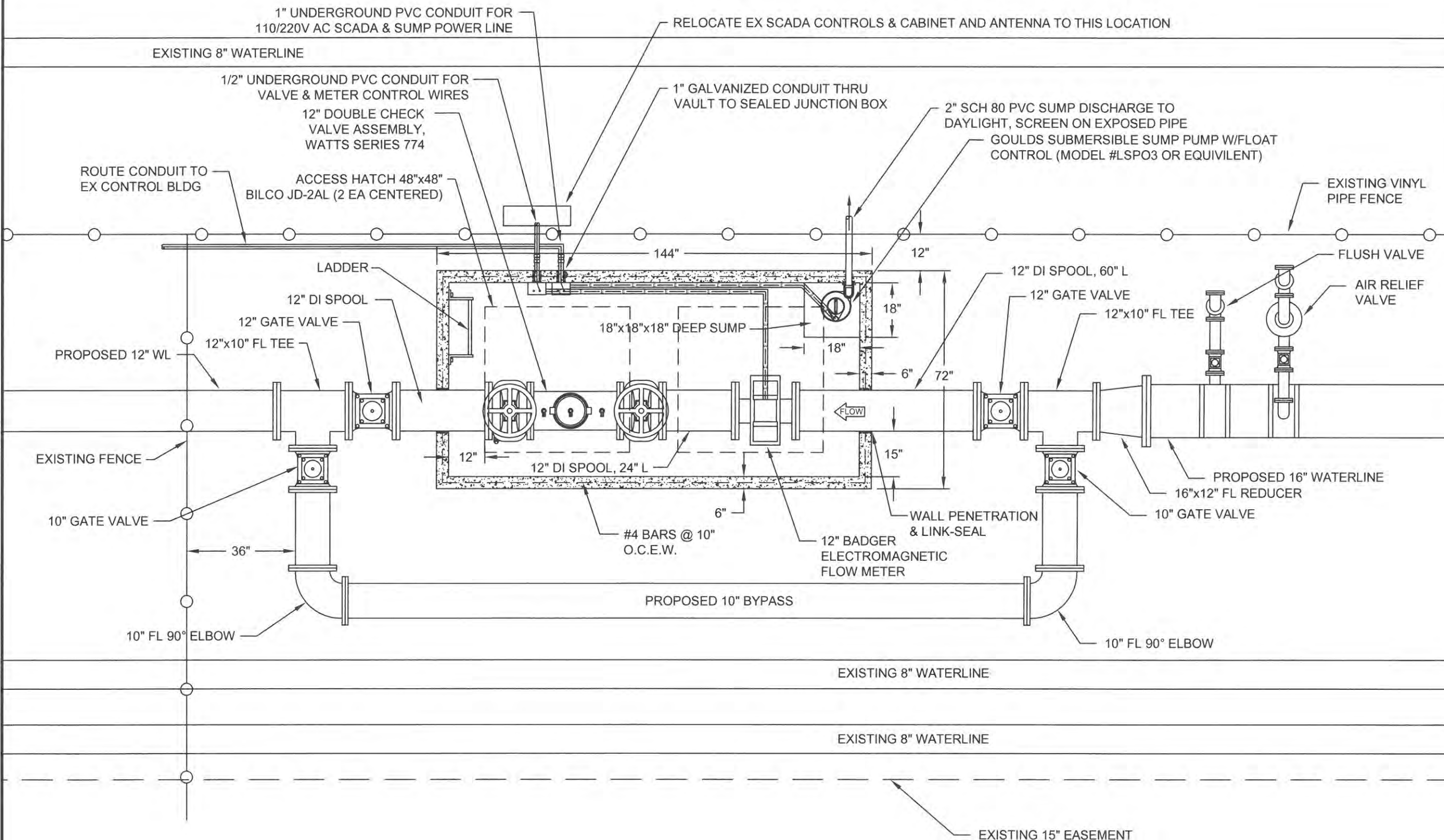
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**PUMP STATION SITE PLAN**

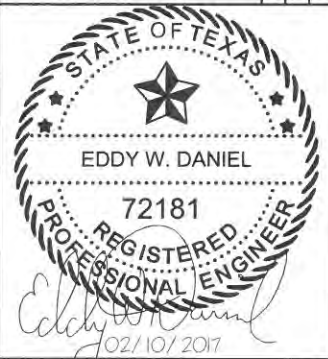
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**NOTES:**

1. PROVIDE 110V 1-PHASE ELECTRICAL FEED FROM ADJACENT CONTROL BUILDING FOR SUMP PUMP AND SCADA PANEL.
2. SCADA PANEL FOR THE FLOW METER WILL BE MOUNTED WITH NECESSARY ANTENNA AND CONTROL WIRES TO SEND METER SIGNAL TO THE CITY OF ROCKWALL.
3. CITY OF ROCKWALL WILL PROVIDE SCADA INTEGRATION.



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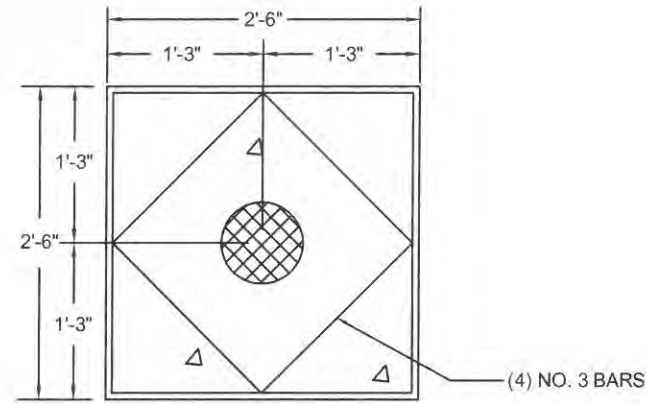
**METER VAULT DETAIL**

**AS BUILT**

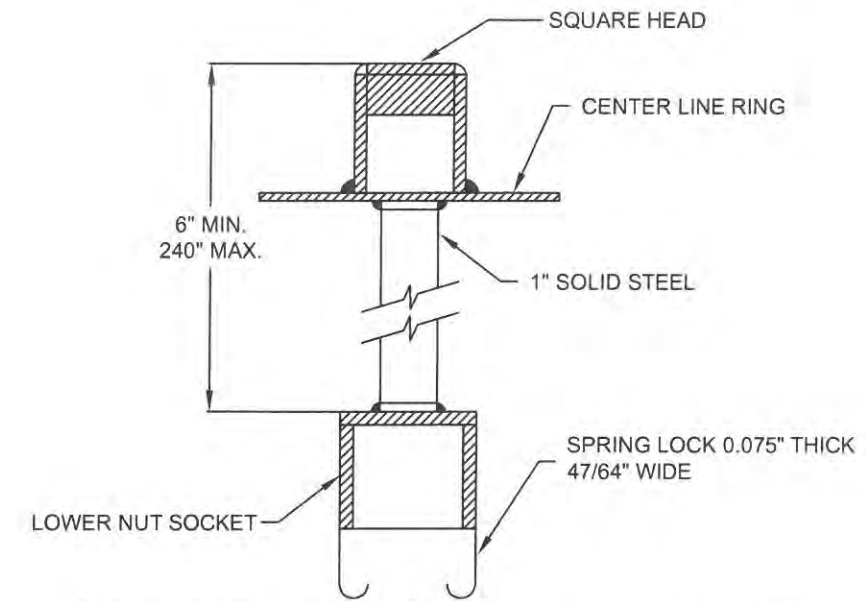




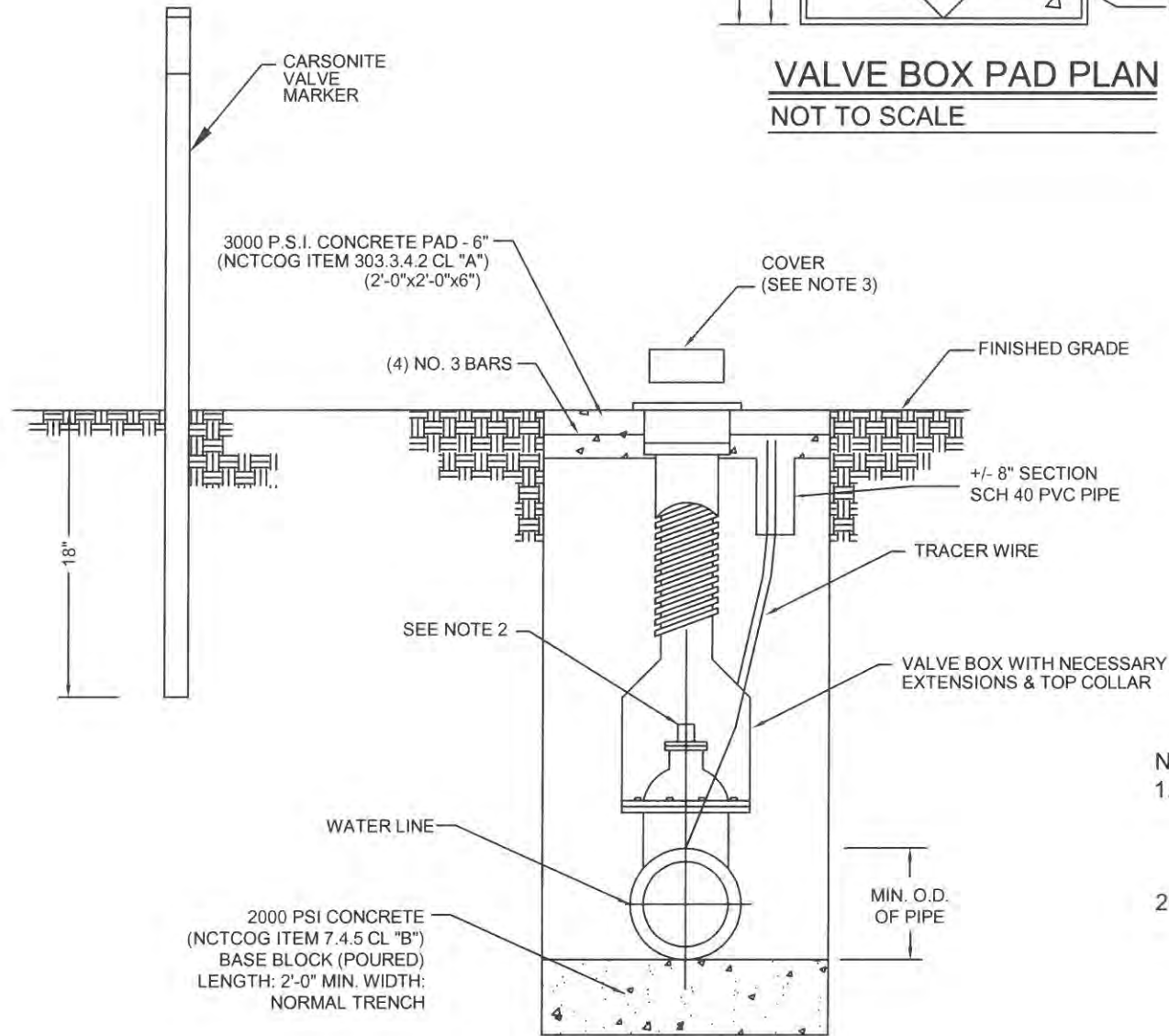
NOTE:  
CONCRETE PAD 30" SQUARE  
TO BE POURED AROUND ALL  
VALVE BOXES NOT PLACED  
WITHIN CONCRETE PAVEMENT.  
300 P.S.I. CONCRETE



**VALVE BOX PAD PLAN**  
NOT TO SCALE

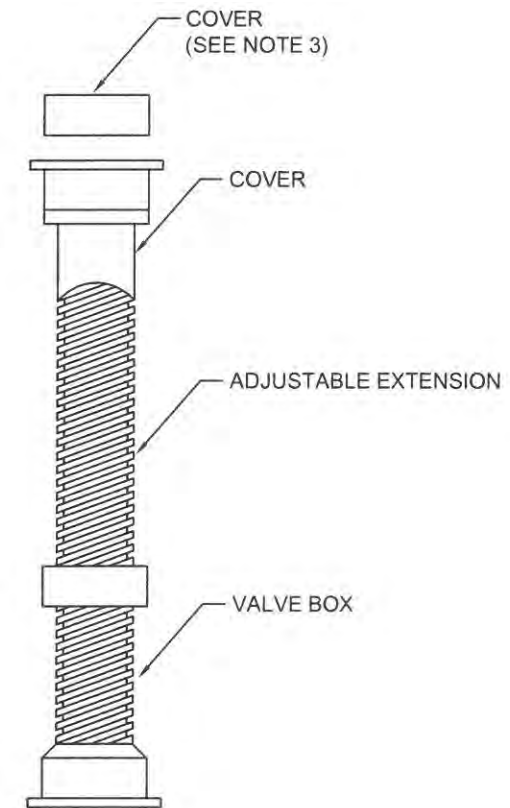


**SPRING LOCK VALVE EXTENSION**  
NOT TO SCALE



**GATE VALVE INSTALLATION**  
NOT TO SCALE

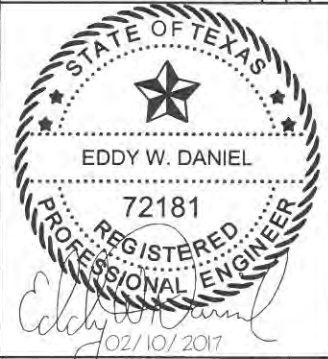
- NOTE:
- 4" TO 12" GATE VALVE SHALL BE RESILIENT SEATED WEDGE IN ACCORDANCE WITH AWWA STANDARD C-515.
  - A PERMANENTLY ATTACHED VALVE EXTENSION STEM SHALL BE REQUIRED FOR ANY VALVE WHOSE OPERATING NUT IS LOCATED IN EXCESS OF 4 FT BELOW THE TOP OF VALVE BOX. THIS EXTENSION SHALL BE OF SUFFICIENT LENGTH TO INSURE THAT ITS TOP IS WITHIN 4" OF THE VALVE BOX COVER.
  - COVER COLOR DEPICTIONS:
    - FIRE HYDRANT - RED
    - NORMAL WATER - BLUE
    - DEAD END - WHITE
    - FLUSH VALVE - BLACK
    - SAMPLING STATION - BLACK
    - BLOW OFF VALVE - BLACK



**VALVE BOX W/ EXTENSION**  
NOT TO SCALE

AS BUILT

**DBI DANIEL & BROWN INC.**  
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118 McKinney St.  
P.O. Box 606  
Farmersville, Texas 75442  
Phone 972-784-7777  
Fax 972-782-7721  
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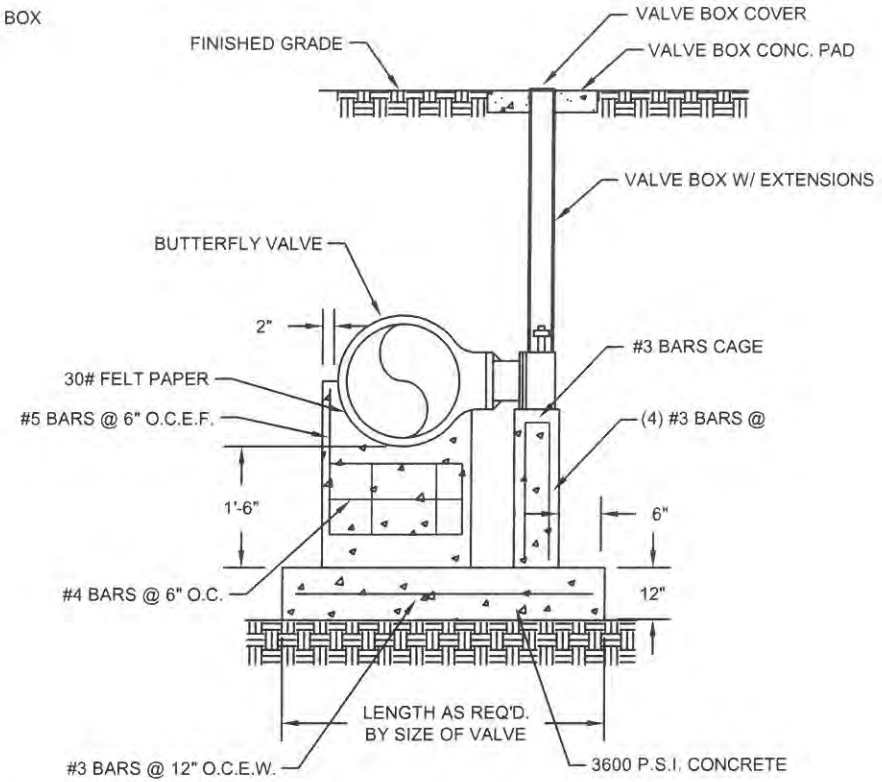
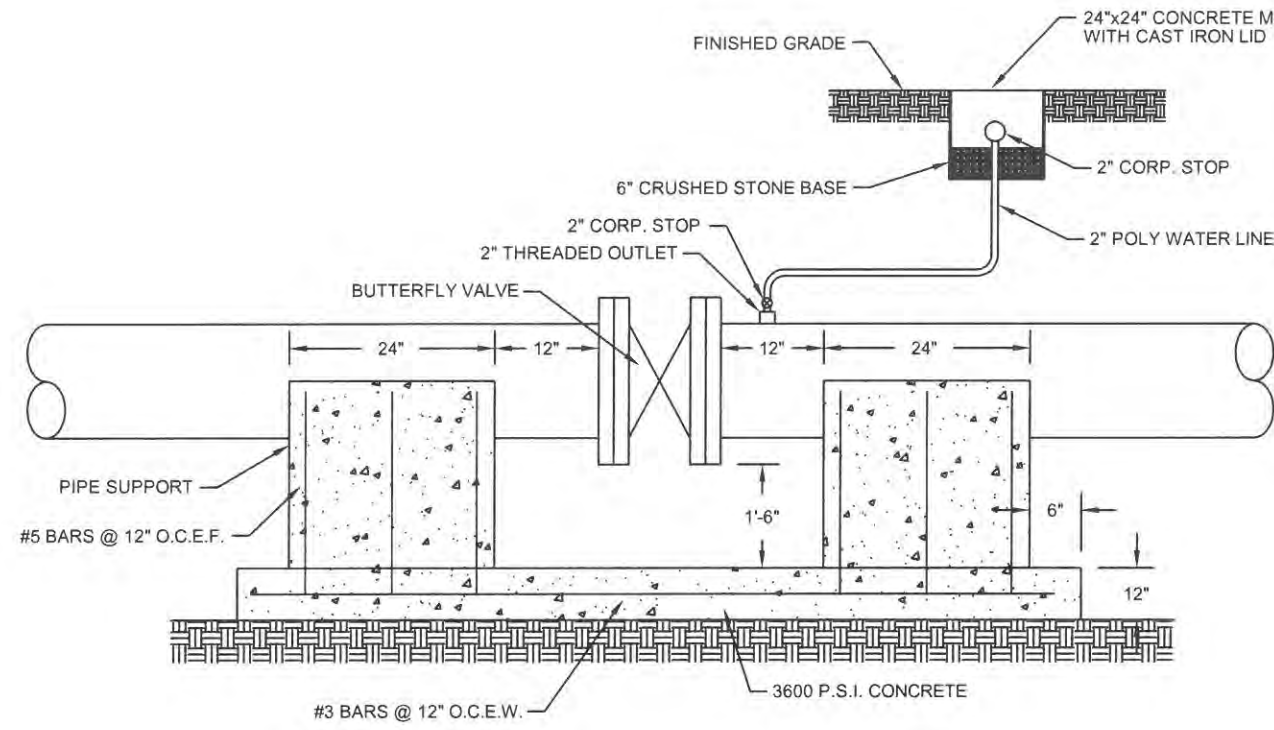
16" WATERLINE PROJECT  
FOR  
RCH WATER SUPPLY CORPORATION  
ROCKWALL COUNTY, TEXAS

STANDARD DETAILS

DESIGNED: E.W.D.  
DRAWN: M.K.W.  
FILE: N:\RCH\WSCIWL\_SH 205 0815\const\overall as built

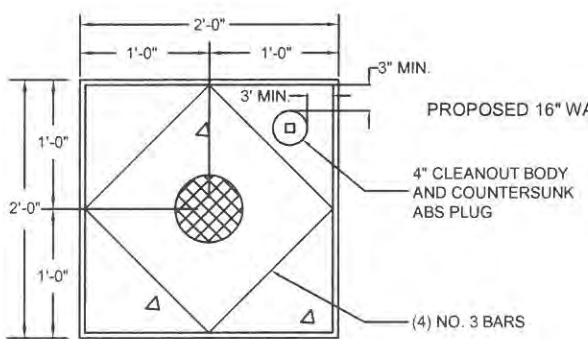
DATE: 8/17/15  
REVISION: N/C

REGISTRATION NO.: F-002225

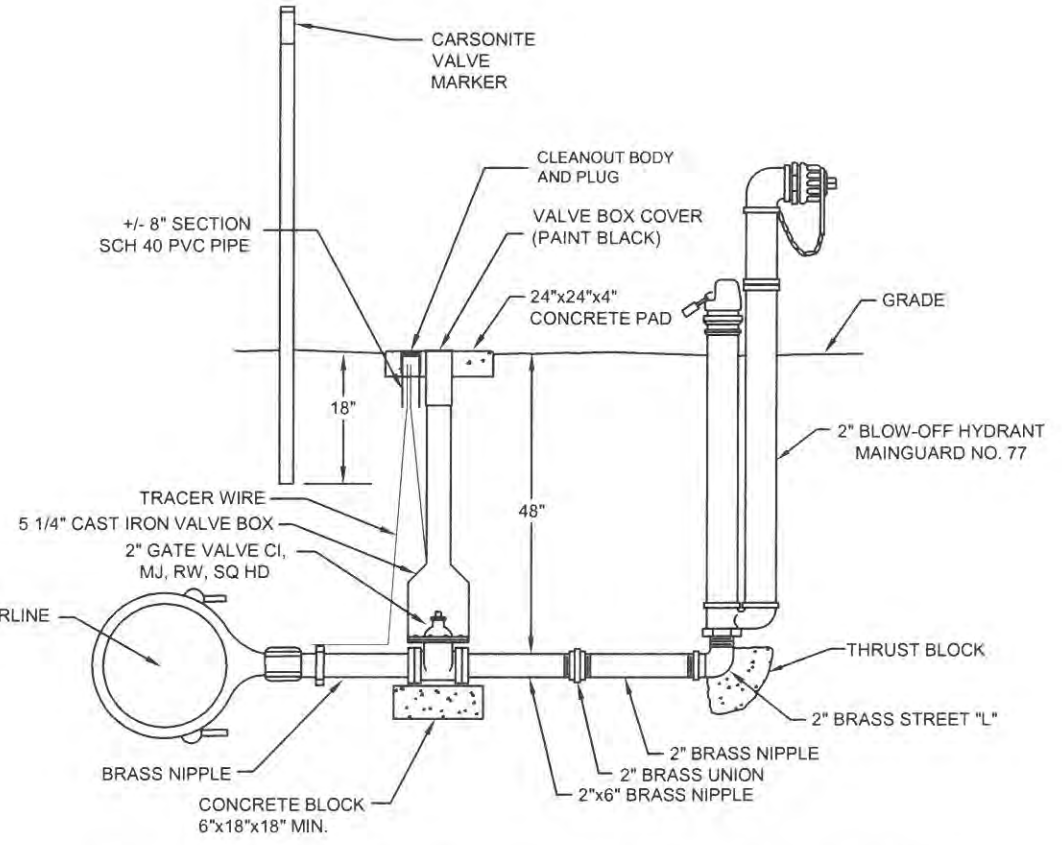


**BUTTERFLY VALVE INSTALLATION**  
NOT TO SCALE

NOTE:  
CONCRETE PAD 30" SQUARE TO BE  
POURED AROUND ALL VALVE BOXES  
NOT PLACED WITHIN CONCRETE  
PAVEMENT. 300 P.S.I. CONCRETE

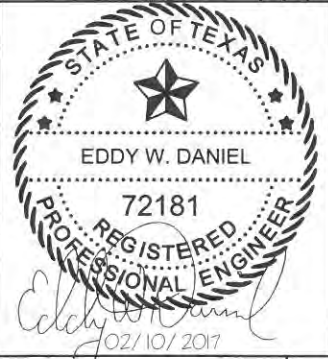


**VALVE BOX PAD PLAN**  
NOT TO SCALE



**ABOVE GROUND FLUSH VALVE ASSEMBLY DETAIL**  
NOT TO SCALE

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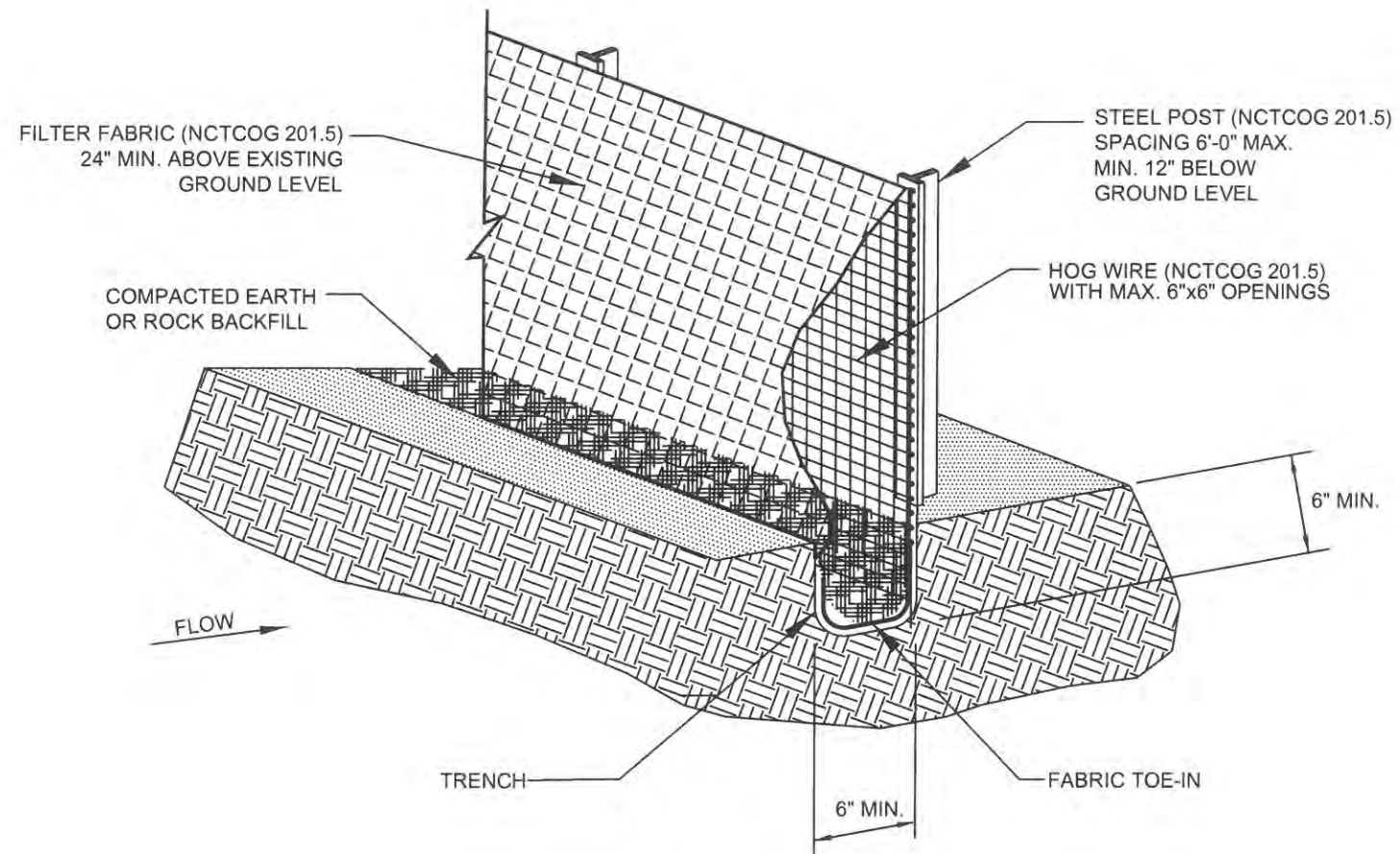
STANDARD DETAILS

AS BUILT

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REGISTRATION NO.: F-002225

**SILT FENCE 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 DOWN SLOPE 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. THE CONTRACTOR SHALL INSPECT SILT FENCE WEEKLY AND AFTER MAJOR RAIN EVENTS TO ENSURE THAT THE DEVICE IS FUNCTIONING PROPERLY AND MAINTAINED IN ACCORDANCE WITH NCTCOG ITEM 201.
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. THE CONTRACTOR SHALL REMOVE SEDIMENT FROM BEHIND THE FENCE WHEN THE DEPTH HAS BUILT UP TO ONE-THIRD THE HEIGHT OF THE FENCE ABOVE GRADE. THE SEDIMENT SHALL BE DISPOSED OF AT AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SEDIMENTATION.
8. THE CONTRACTOR SHALL INSPECT FENCE POSTS TO ENSURE THAT THEY ARE PROPERLY SUPPORTING THE FENCE, IF NECESSARY, THE CONTRACTOR SHALL RESET AND ADD POSTS.
9. THE CONTRACTOR SHALL INSPECT THE BASE OF THE FENCE TO ENSURE THAT NO GAPS HAVE DEVELOPED AND RE-TRENCH AS NECESSARY.
10. THE CONTRACTOR SHALL INSPECT THE FILTER FABRIC TO ENSURE THAT IT IS NOT RIPPED, DAMAGED OR DETERIORATED AND REPLACE IT IN ACCORDANCE WITH THE ORIGINAL SPECIFICATIONS AND DETAILS.
11. MAINTENANCE OF THE SILT FENCE SHALL BE AT THE CONTRACTORS OWN EXPENSE.



**SILT FENCE DETAIL**  
NOT TO SCALE

**AS BUILT**

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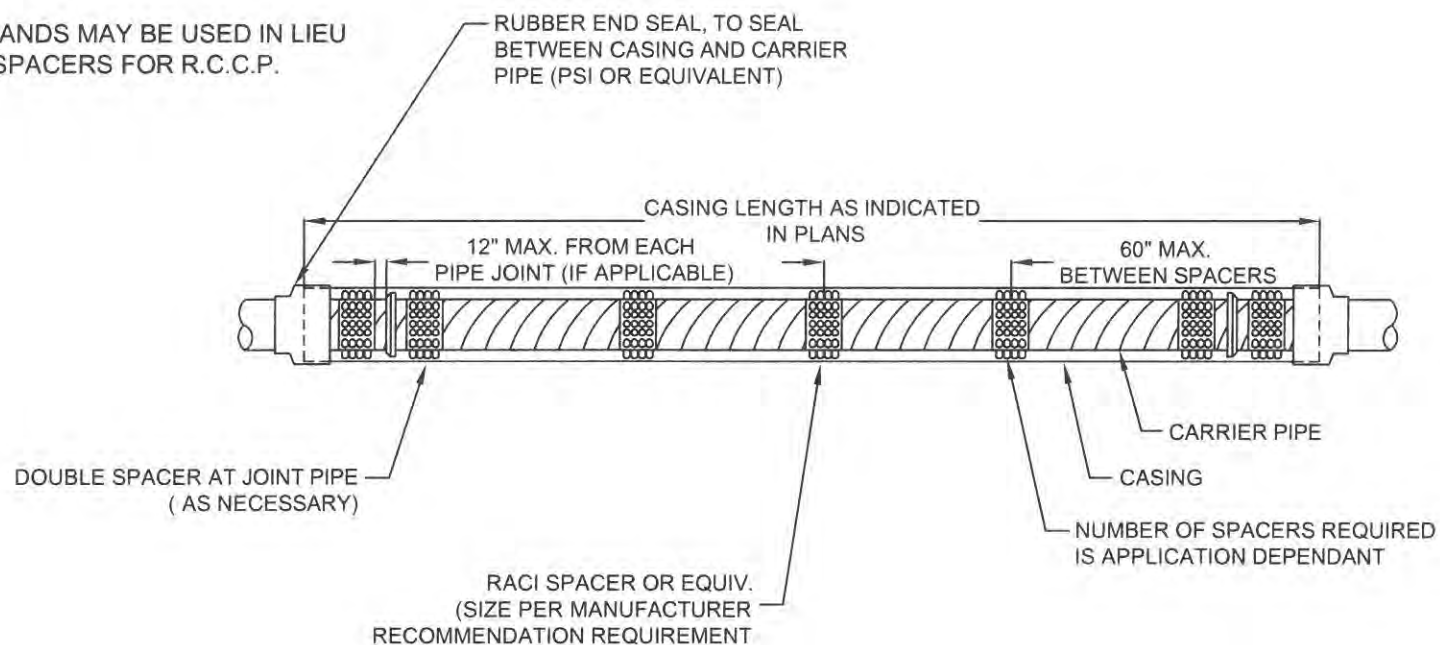
16" WATERLINE PROJECT  
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ROCKWALL COUNTY, TEXAS

**STANDARD DETAILS**

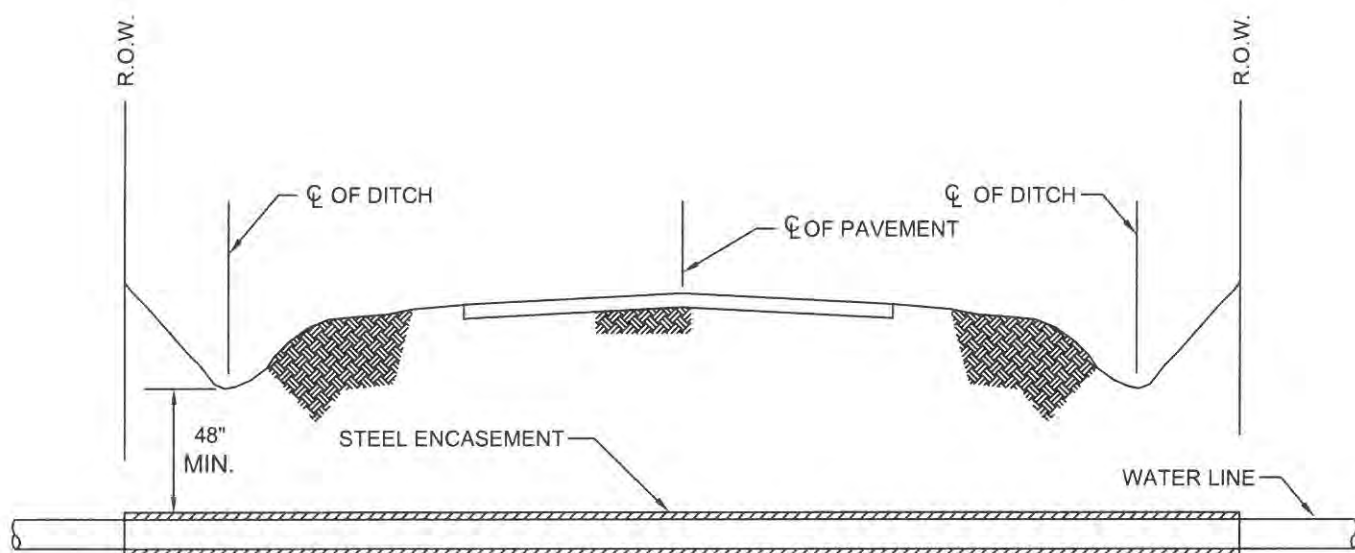
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**NOTES:**

1. 3 MORTAR BANDS MAY BE USED IN LIEU OF CASING SPACERS FOR R.C.C.P.



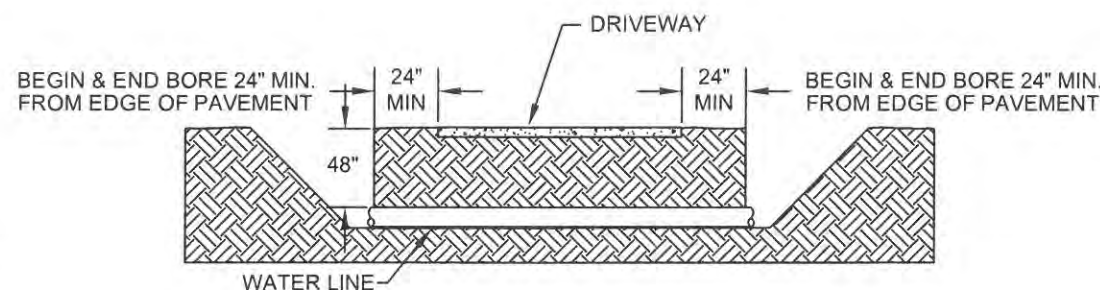
**ENCASED WATERLINE DETAIL**  
NOT TO SCALE



**ROAD BORE & ENCASEMENT DETAILS**  
NOT TO SCALE

**NOTES:**

1. SELECT BACKFILL SHALL BE SOIL MATERIAL. ROCK IN SELECT BACKFILL SHALL BE LIMITED TO 2" MAX. DIMENSION.
2. SELECT BACKFILL SHALL BE COMPACTED TO 90% OF STANDARD PROCTOR DENSITY.
3. FINISH GRADE TO MATCH EXISTING ELEVATIONS.
4. CUSTOMER FUNDED TESTING WILL BE PERFORMED ON THIS PROJECT FOR SOIL DENSITY (COMPACTION) AND CONCRETE REQUIREMENTS. IN THE EVENT OF A TEST FAILURE, THE CONTRACTOR SHALL PAY FOR ANY RETEST FEES.

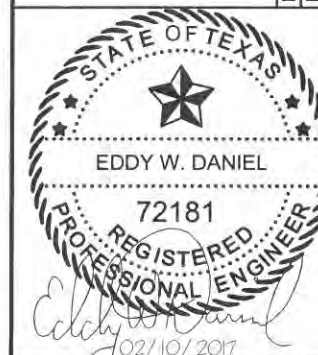


**CONCRETE/ASPHALT DRIVEWAY BORE DETAIL**  
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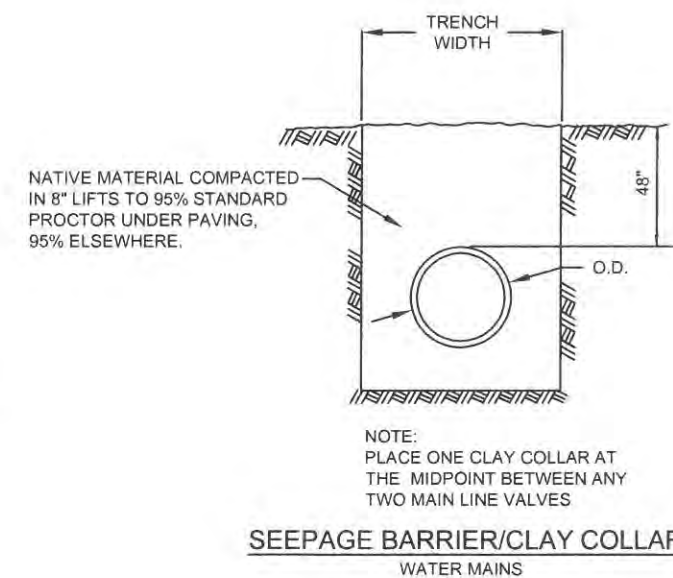
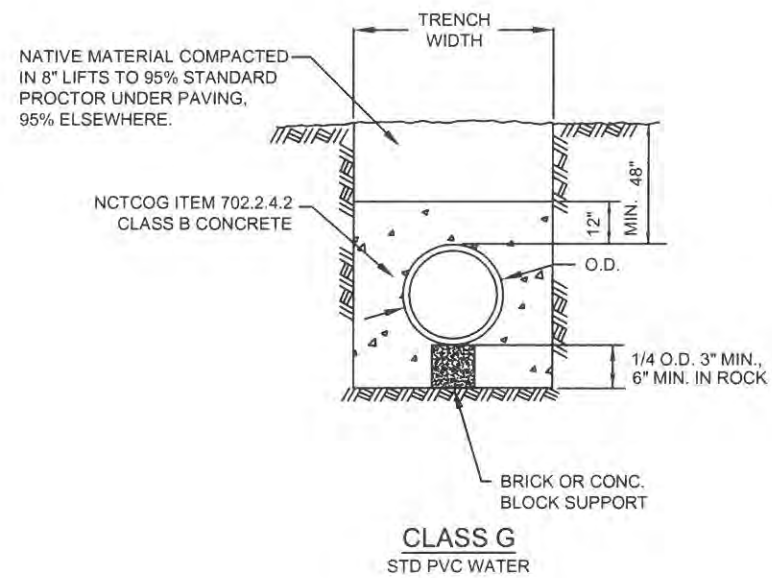
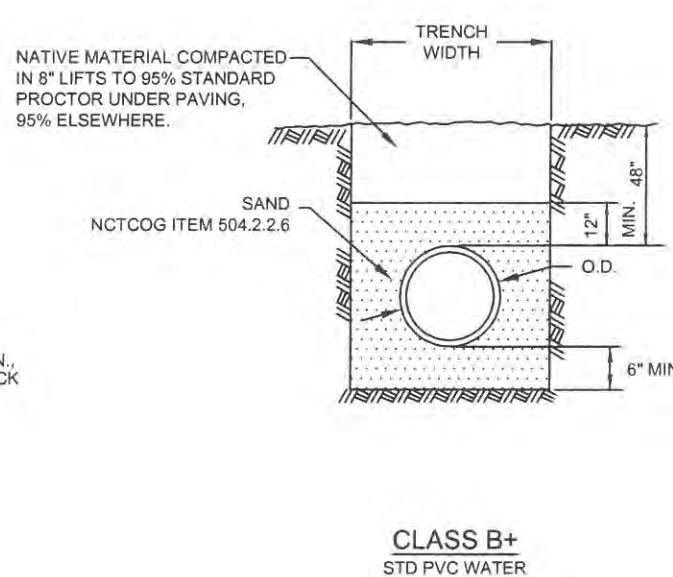
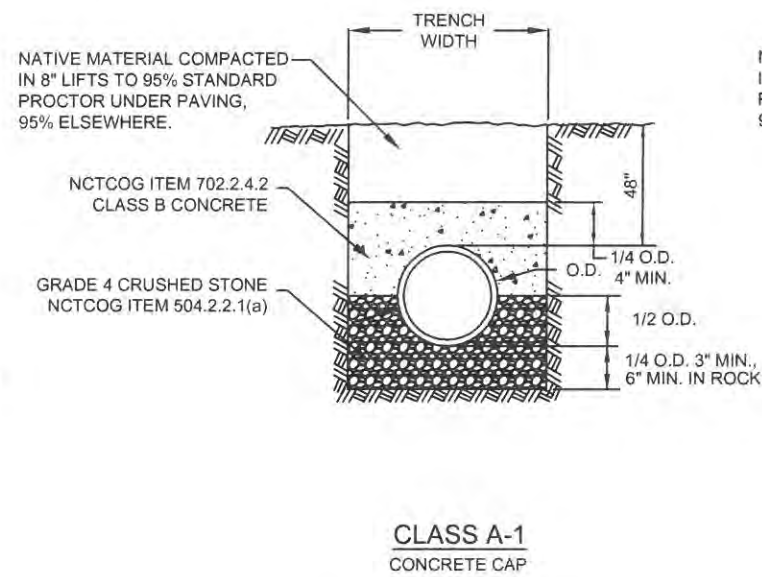
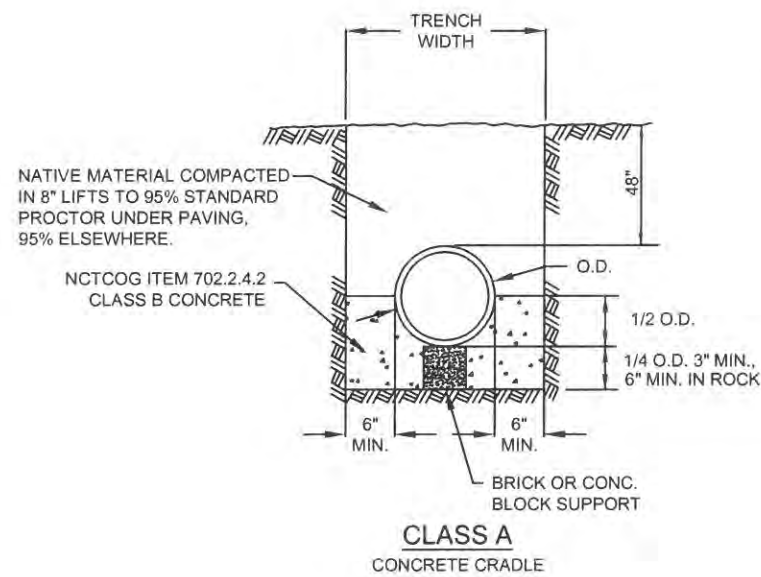


16" WATERLINE PROJECT  
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ROCKWALL COUNTY, TEXAS

STANDARD DETAILS

AS BUILT



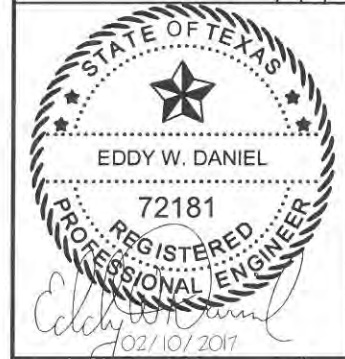


**EMBEDMENT DETAILS FOR PVC WATER PIPE**  
**NOT TO SCALE**

TRENCH WIDTH = MIN. 16" GREATER THAN PIPE O.D.  
 MAX. 36" GREATER THAN PIPE O.D.

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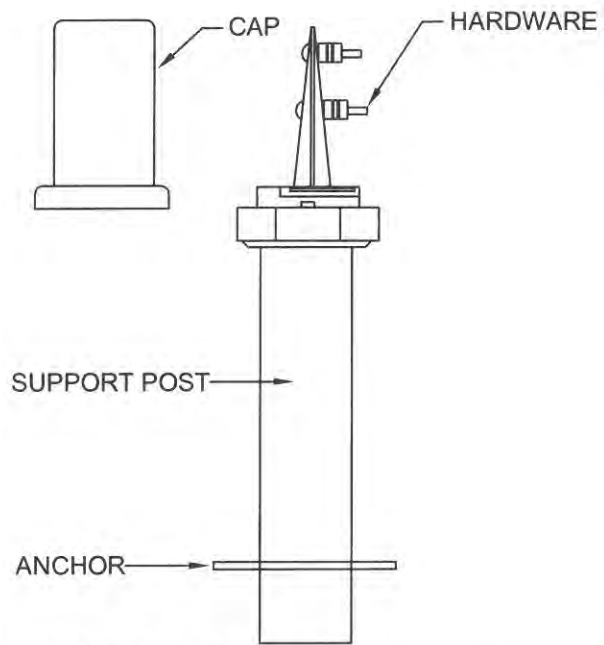
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16" WATERLINE PROJECT  
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**STANDARD DETAILS**

**AS BUILT**



GENERAL NOTES:

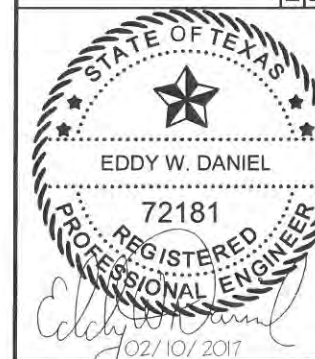
1. INSTALL EVERY 1,000 FEET OR AS REQ'D. BY ENGINEER.
2. LOCATE AT PROPERTY LINES & ADJACENT TO EXISTING FENCES, UTILITY POLES OR OTHER APPURTENANCES AS MAY BE PRACTICAL.
3. COLOR IS BLUE.
4. LITTLE FINK MODEL, AS MANUFACTURED BY COTT OR EQUIVALENT
5. MAYBE INCORPORATED INTO VALVE BOX CONFIGURATION AS NOTED IN PLAN SET.

LOCATOR WIRE TEST STATION

NOT TO SCALE

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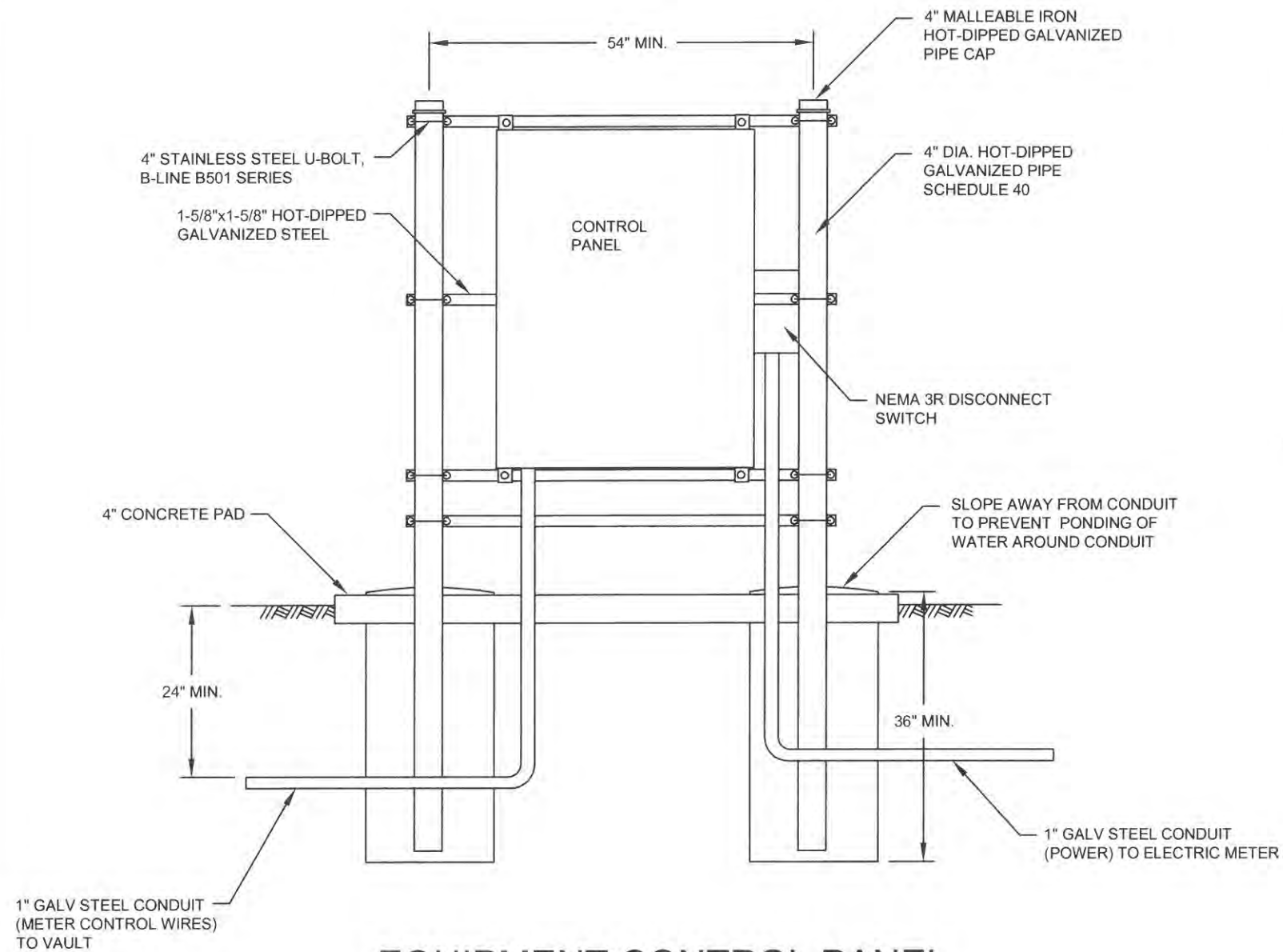
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16" WATERLINE PROJECT  
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**STANDARD DETAILS**

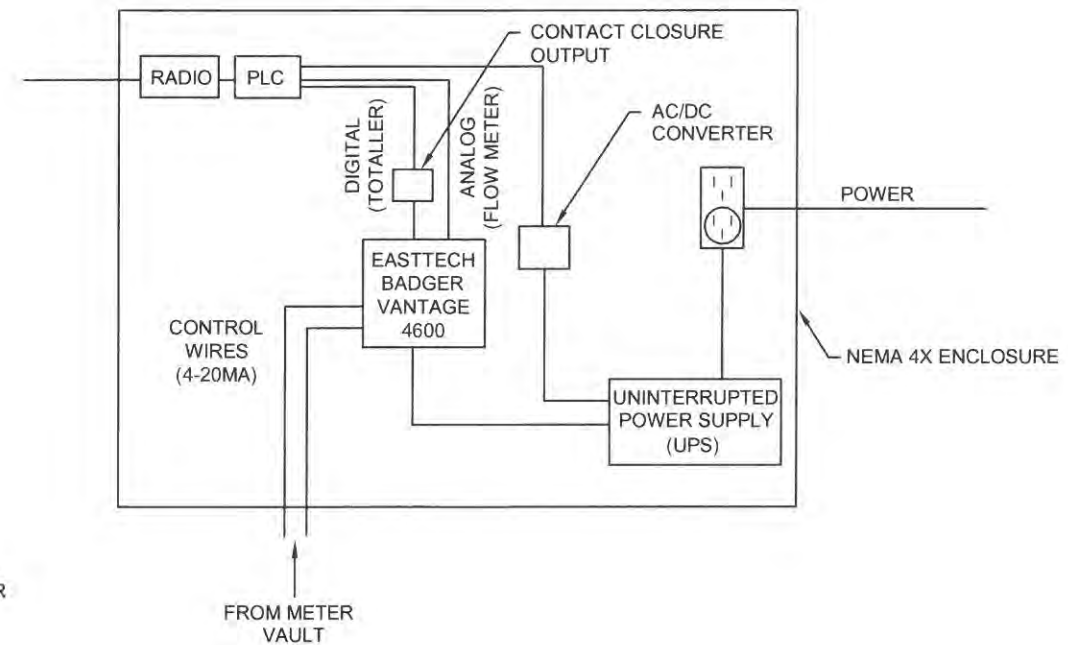
AS BUILT



**EQUIPMENT CONTROL PANEL**  
NOT TO SCALE

NOTES:

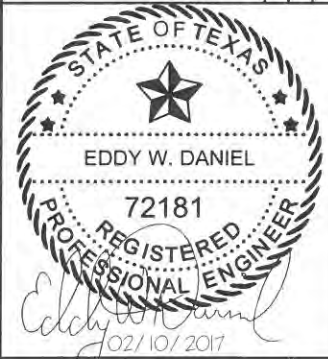
1. ELECTRICAL CONTROL PANEL, NEMA 4X, 36"x24"x18".
2. 4" VERTICAL SUPPORT PIPES SHALL BE PLUMB.
3. ALL CONCRETE SHALL BE 3000 P.S.I. NCTCOG CLASS C.
4. CONCRETE PAD SHALL BE REINFORCED WITH #3 REBAR @ 18" O.C.E.W. MIN. PAD DIMENSIONS SHALL BE 7'-0" x 3'-0".
5. CONTRACTOR SHALL INCLUDE IN THEIR BID, ALL ELECTRICAL WORK REQUIRED TO BRING POWER FROM ELECTRIC METER TO CONTROL PANEL.
6. CONTRACTOR SHALL INCLUDE IN THEIR BID, ALL WORK REQUIRED TO CONNECT METER VAULT TO THE CITY'S SCADA SYSTEM. CONTRACTOR SHALL USE SAUL SANCHEZ (972)890-7910 TO FURNISH, PROGRAM & COMMISSION THE PLC INTO THE CITY'S SCADA SYSTEM, INCLUDING MAKING CONFIGURATION CHANGES TO HMI COMPUTER.
7. SCADA SYSTEM & METER SHALL BE CONFIGURED TO ALLOW BOTH INSTANTANEOUS FLOW & MONTHLY VOLUME TO BE READ BOTH LOCALLY & AT HMI COMPUTER. THIS WILL BE A BILLING METER.



**CONTROL PANEL SCHEMATIC**  
NOT TO SCALE

AS BUILT

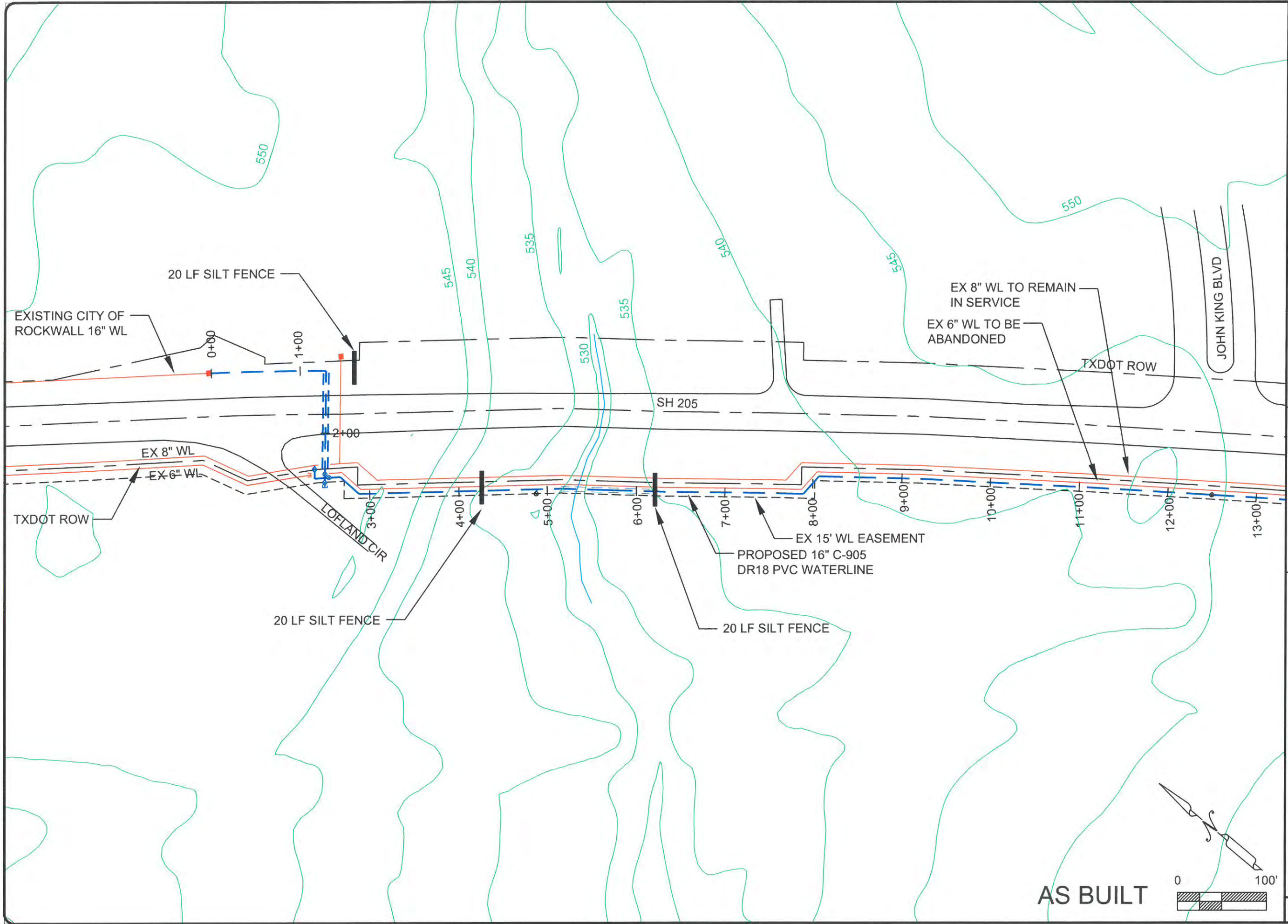
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STANDARD DETAILS

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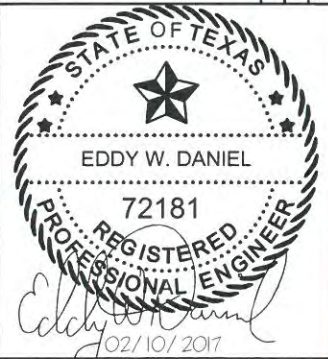


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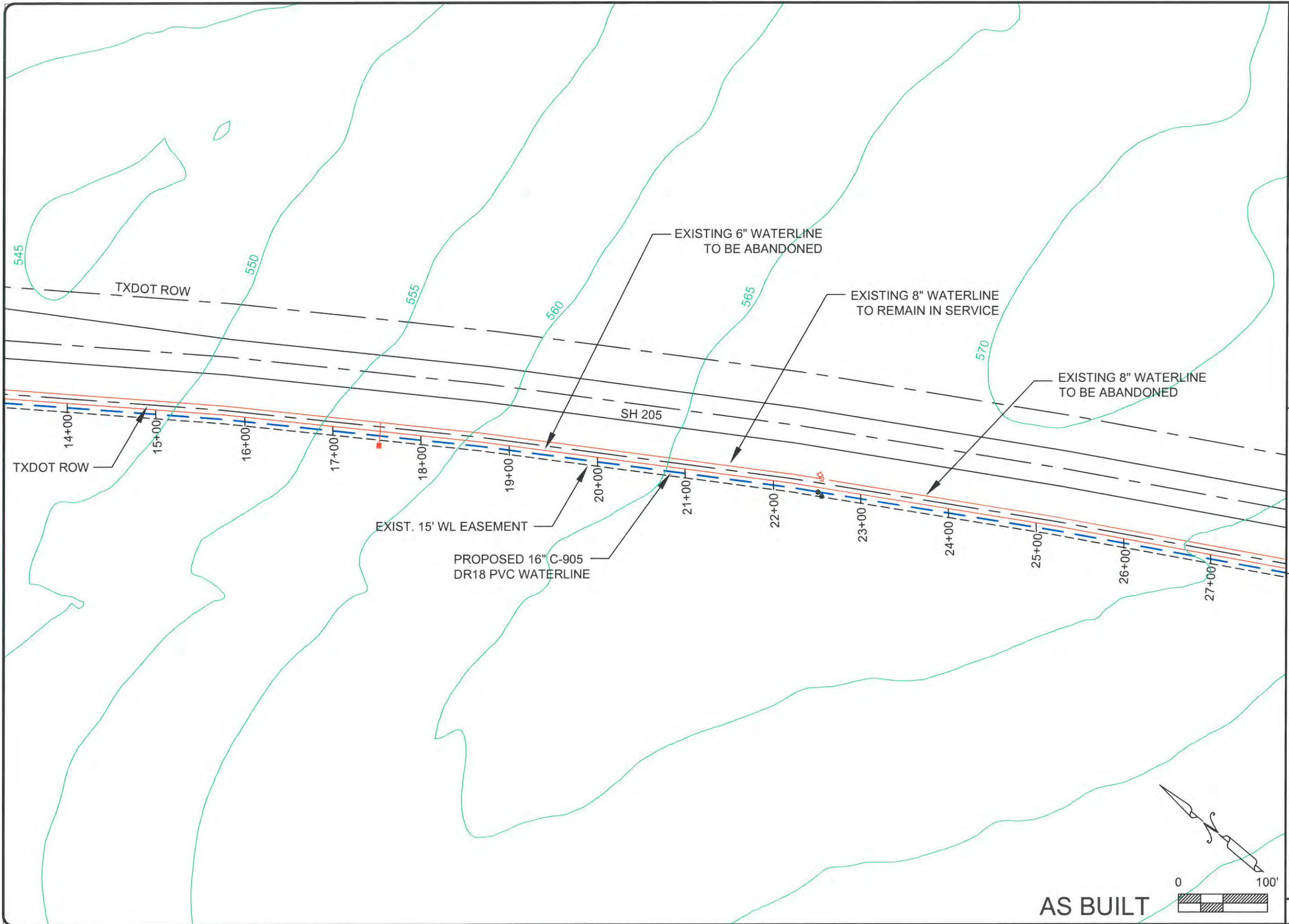
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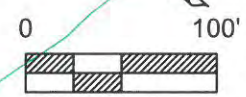


16" WATERLINE PROJECT  
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WATERLINE ROUTE EROSION CONTROL



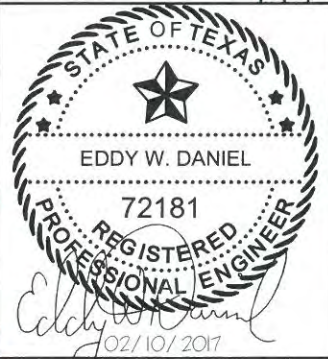
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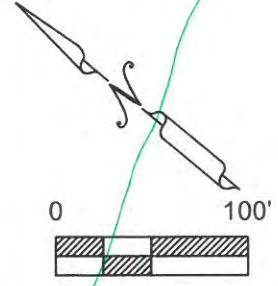
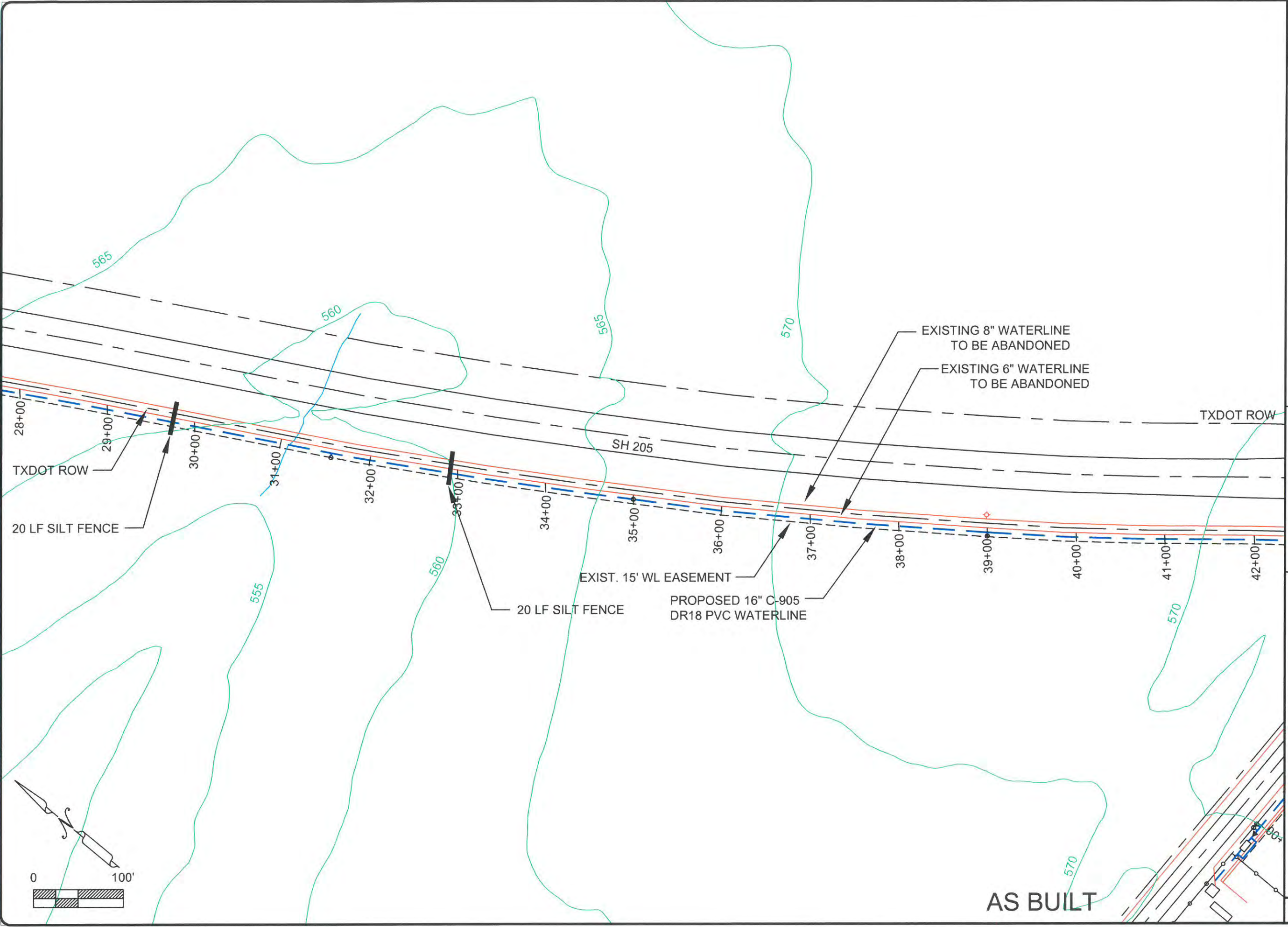
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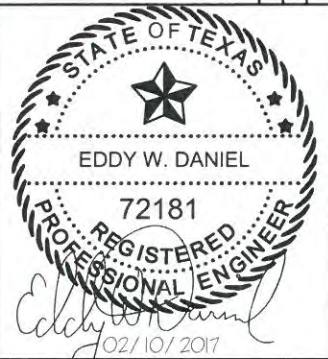
WATERLINE ROUTE EROSION CONTROL



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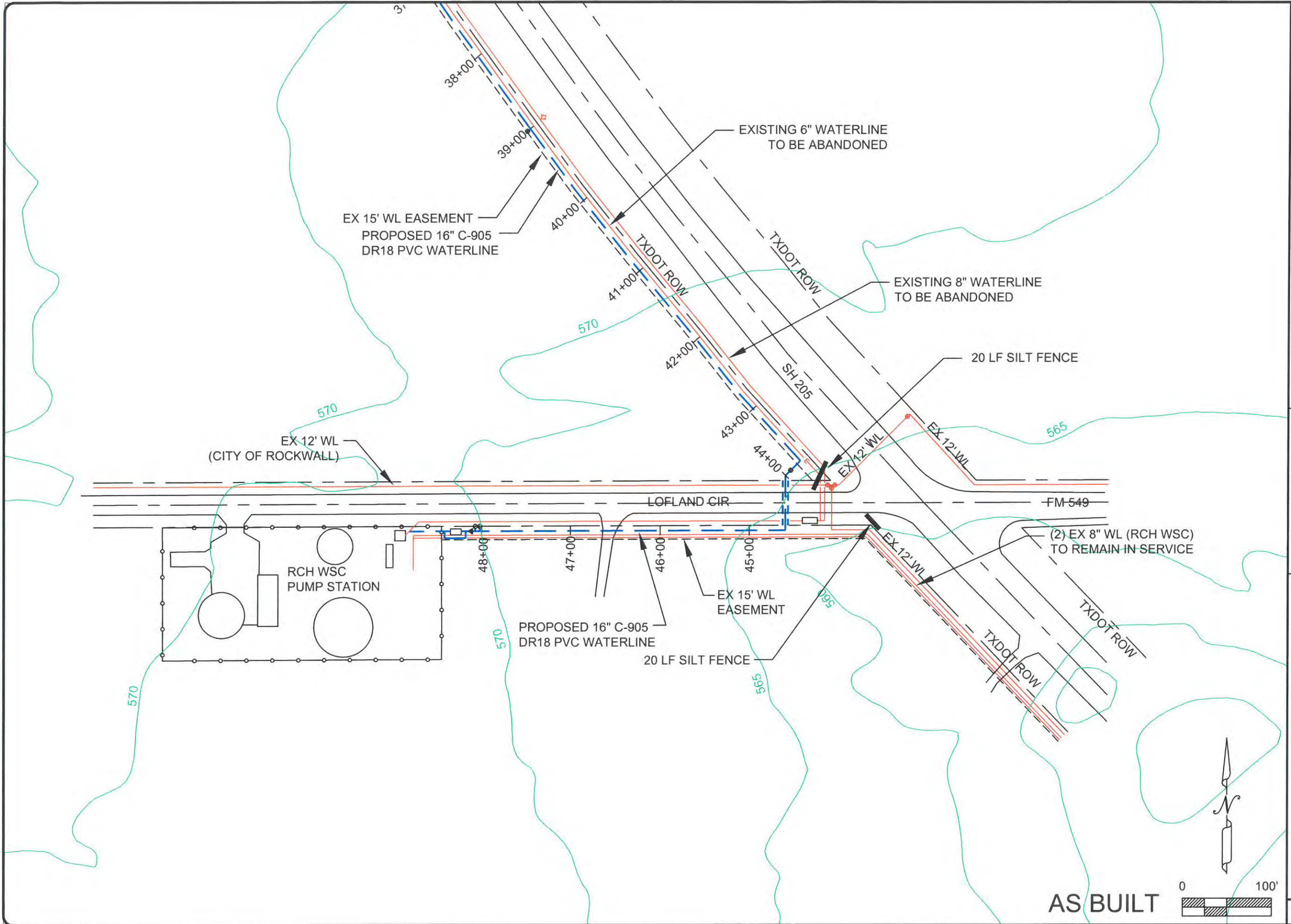
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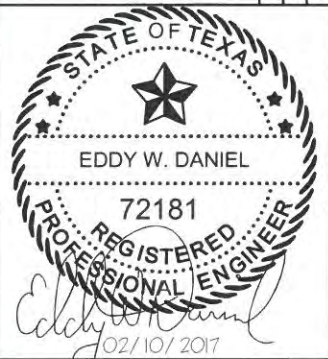
WATERLINE ROUTE EROSION CONTROL



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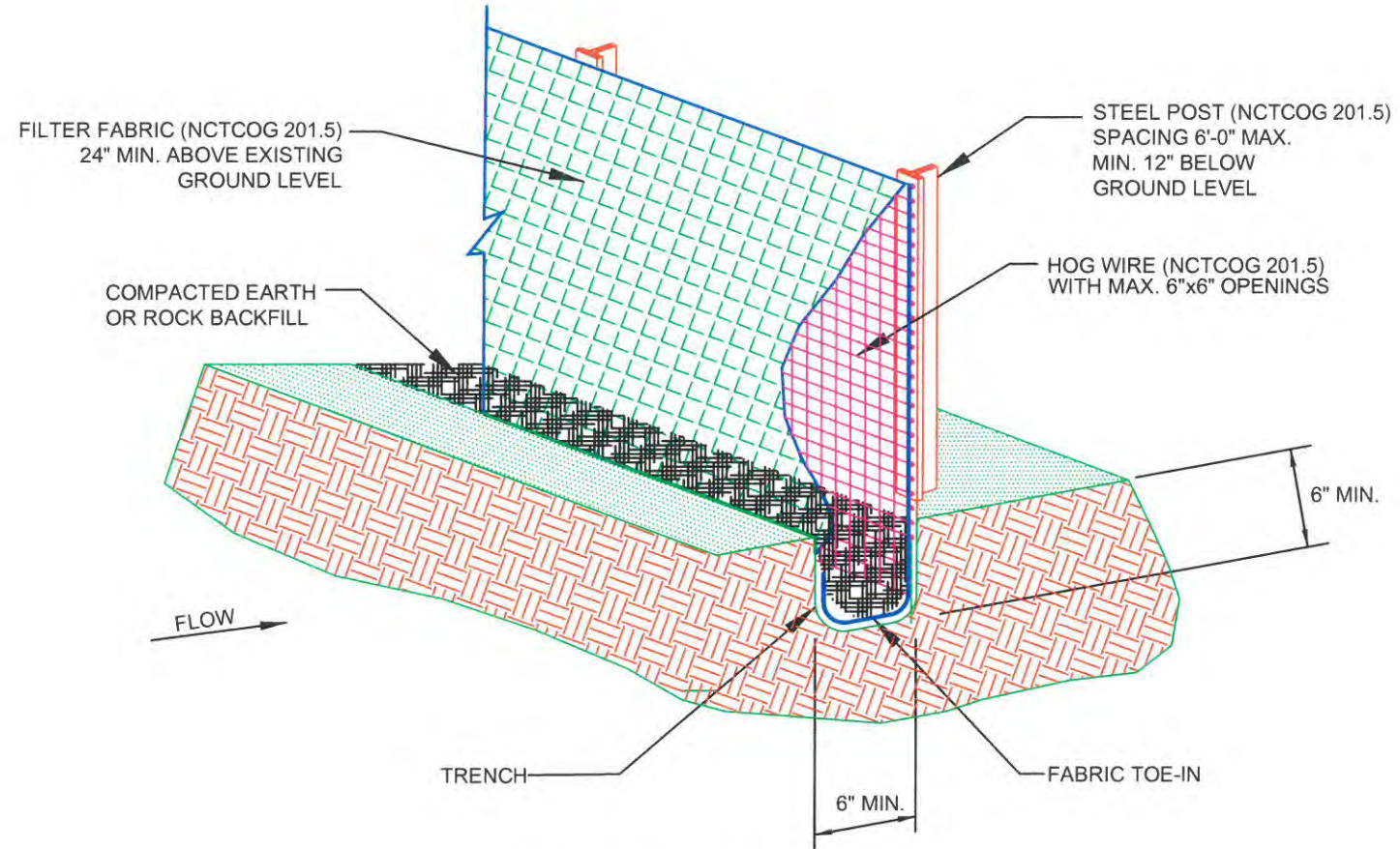


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WATERLINE ROUTE EROSION CONTROL

**SILT FENCE NOTES:**

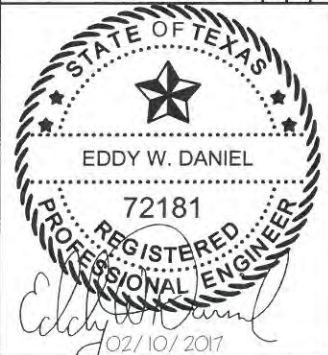
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**SILT FENCE DETAIL**  
NOT TO SCALE

**AS BUILT**

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 P.O. Box 606  
 Farmersville, Texas 75442



16" WATERLINE PROJECT  
 FOR  
 RCH WATER SUPPLY CORPORATION  
 ROCKWALL COUNTY, TEXAS

**SILT FENCE DETAIL**

DESIGNED: E.W.D. DATE: 8/17/15  
 DRAWN: M.K.W. REVISION: N/C  
 FILE: N:\RCH\WSCIWL\_SH 205.0815\Erosion Control Plan\overall AS BUILT  
 REGISTRATION NO.: F-002225