CONSTRUCTION PLANS FOR
ORCHARD RANCH
TRAVIS COUNTY, TEXAS
PAVING, DRAINAGE, WATER & WASTEWATER IMPROVEMENTS

JANUARY, 2026

SUMMARY NOTES

ENGINEER: GRAY ENGINEERING, INC. TBPE F-2946
8834 N. CAPITAL OF TEXAS HIGHWAY, SUITE 140
AUSTIN, TEXAS 78759
(512) 452-0371

SURVEYOR: G&R SURVEYING, LLC., TBPLS F-10032000
1805 OUIDA DR.
AUSTIN, TX 78728
(512) 267-7430

DEVELOPER/OWNER: CLAYTON PROPERTIES GROUP, INC.
6720 VAUGHT RANCH ROAD
SUITE 200
AUSTIN, TEXAS 78730

NOTES

1. THE ENGINEER WHO PREPARED THESE PLANS IS RESPONSIBLE FOR THEIR ADEQUACY. IN APROVING THESE PLANS, TRAVIS COUNTY MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.
2. SUBJECT PROPERTY IS OUTSIDE ANY CITIES JURISDICTION - TRAVIS COUNTY, TEXAS
3. WATERSHED STATUS - THIS PROJECT IS LOCATED IN THE BARTON CREEK & SLAUGHTER CREEK WATERSHEDS
4. THIS PROJECT IS LOCATED WITHIN THE EDWARDS AQUIFER CONTRIBUTING ZONE
5. NO PORTION OF THIS PROJECT IS LOCATED WITHIN THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOODPLAIN AS IDENTIFIED ON MAP NO. 48453C0555J DATED JANUARY 22, 2020.
6. THIS PROJECT IS LOCATED WITHIN THE TRAVIS COUNTY ESD-3 (OAK HILL FIRE DEPT.)
7. ALL STRUCTURAL FIELD CHANGES REQUIRE A PLAN REVISION APPROVAL IN WRITING BEFORE COMMENCEMENT OF THE WORK
8. THE APPLICANT/OWNER MUST COORDINATE WITH UTILITY COMPANIES PRIOR TO CONSTRUCTION
9. CONTRACTOR SHALL COORDINATE CONTINUOUSLY AND AS NECESSARY WITH PROPERTY/BUSINESS OWNERS TO MAINTAIN CONTINUATION OF TRAFFIC CONTROL AND ACCESS.
10. BE INFORMED THAT THE CONTRACTOR MUST OBTAIN A SEPARATE PERMIT TO WORK WITHIN THE COUNTY ROW.
11. ALL CHANGES TO THE TRAFFIC CONTROL PLAN MUST BE APPROVED AND DOCUMENTED BY THE SEALING ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ANY PROPOSED CHANGES TO THE TRAFFIC CONTROL PLAN TO THE ENGINEER FOR APPROVAL.
12. THE DOWNSTREAM RECEIVING WATERS ARE BARTON CREEK AND SLAUGHTER CREEK.
13. THE OWNER'S ENGINEER WILL MAKE PERIODIC SITE VISITS AND OBSERVATIONS DURING CONSTRUCTION TO ENSURE ADEQUACY OF THE DESIGN AND SAFETY OF STRUCTURES IN COMPLIANCE WITH THE ISSUANCE OF THE CONSTRUCTION SUMMARY REPORT AND ENGINEERING CONCURRENCE LETTER AS REQUIRED AS PART OF THE PROJECT CLOSE-OUT PROCESS.

PRE-CONSTRUCTION NOTES

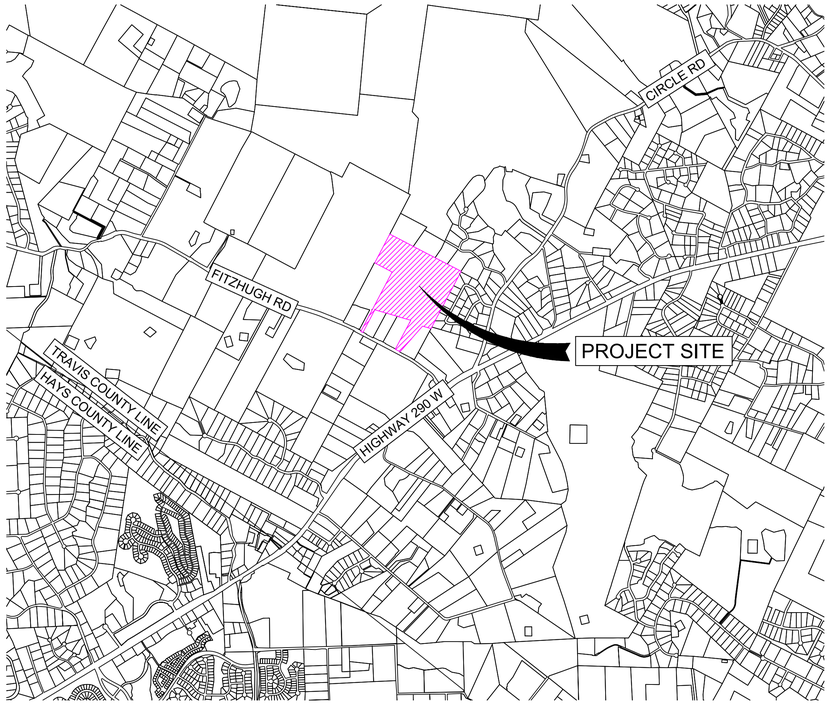
1. PRIOR TO SCHEDULING THE PRE-CONSTRUCTION MEETING ENSURE THAT ALL REQUIRED NOTICES AND PERMITS ARE POSTED AND THE CERTIFIED INSPECTOR FOR YOUR SITE HAS UPLOADED A SWP3 INSPECTION REPORT TO YOUR ACCOUNT THAT CONFIRMS THAT THE FIRST PHASE OF TEMPORARY ESC HAVE BEEN INSTALLED PER PLANS AND SPECIFICATIONS.

   FAILURE TO FOLLOW THE PRE-CONSTRUCTION MEETING REQUIREMENTS MAY RESULT IN WORK STOPPAGE AND ADDITIONAL PERMIT FEES

   SPECIAL PRE-CON NOTES:
1. PROVIDE 48 HR. MINIMUM NOTICE TO SCHEDULE THE PRE-CON MEETING.
2. PROVIDE A 1/2 SIZE SET OF PLANS FOR THE INSPECTOR AT THE PRE-CON.
3. PROVIDE AN ANTICIPATED CONSTRUCTION SCHEDULE AT THE PRE-CON.
4. BRING YOUR SWP3 FOR COMPLETENESS CHECK AT THE PRE-CON.

2. ALL DEVELOPMENT SHALL BE IN ACCORDANCE WITH THE PLANS APPROVED BY TRAVIS COUNTY

3. SCHEDULE YOUR PROJECTS PRE-CONSTRUCTION MEETING THROUGH THE HTTPS://WWW.MGOCONNECT.ORG/CP/PORTAL AFTER THE INITIAL 3RD PARTY SWP3 INSPECTION REPORT HAS BEEN UPLOADED AND ALL PERMITS AND NOTICES HAVE BEEN POSTED, THEN FOLLOW UP WITH EMAIL TO THE ENGINEERING INSPECTOR, JOHNNY ANGLIN, AT johnny.anglin@traviscountytx.gov



VICINITY MAP
N.T.S.

NO.	DATE	SHEETS	REVISION DESCRIPTION

Sheet List Table

Sheet Number	Sheet Title
1	COVER SHEET
2	GENERAL NOTES (1 OF 4)
3	GENERAL NOTES (2 OF 4)
4	GENERAL NOTES (3 OF 4)
5	GENERAL NOTES (4 OF 4)
6	FINAL PLAT (1 OF 3)
7	FINAL PLAT (2 OF 3)
8	FINAL PLAT (3 OF 3)
9	EROSION AND SEDIMENT CONTROL PLAN (1 OF 2)
10	EROSION AND SEDIMENT CONTROL PLAN (2 OF 2)
11	EROSION AND SEDIMENT CONTROL PLAN DETAILS (1 OF 2)
12	EROSION AND SEDIMENT CONTROL PLAN DETAILS (2 OF 2)
13	RESTORATION PLAN
14	TREE LIST
15	SIGNAGE AND STRIPING PLAN (2 OF 2)
16	SIGNAGE AND STRIPING PLAN (1 OF 2)
17	GRADING PLAN (1 OF 2)
18	GRADING PLAN (2 OF 2)
19	SHADOW RIDER DRIVE (1+00 TO 8+00)
20	SHADOW RIDER DRIVE (8+00 TO 16+00)
21	SHADOW RIDER DRIVE (16+00 TO END)
22	HIGHWHEEL ROAD (1+00 TO 8+00)
23	HIGHWHEEL ROAD (8+00 TO 14+00)
24	HIGHWHEEL ROAD (14+00 TO END)
25	HIGHWHEEL ROAD CDS
26	CASA GRANDERA DRIVE (1+00 TO 7+00)
27	CASA GRANDERA DRIVE (7+00 TO END)
28	CASA GRANDERA DRIVE CDS
29	DROVER TRACE (1+00 TO 8+00)
30	DROVER TRACE (8+00 TO END)
31	DROVER TRACE CDS
32	SADDLE IRON WAY (1+00 TO 7+00)
33	SADDLE IRON WAY (7+00 TO END)
34	CONCHO CAMP DRIVE (1+00 TO 7+00)
35	CONCHO CAMP DRIVE (7+00 TO END)
36	ROUGH RIG ROAD (1+00 TO 7+00)
37	ROUGH RIG ROAD (7+00 TO END)
38	PARADA STREET (1+00 TO END)
39	TWISTER ROAD (1+00 TO END)
40	PAINT HORSE DRIVE (1+00 TO 6+00)
41	PAINT HORSE DRIVE (6+00 TO END)
42	FOX HOLE PLACE (1+00 TO END) & CDS
43	EXISTING HYDROLOGY MAP
44	PROPOSED HYDROLOGY MAP
45	DRAINAGE AREA MAP
46	DRAINAGE AREA CALCULATIONS (1 OF 2)
47	DRAINAGE AREA CALCULATIONS (2 OF 2)
48	WATER QUALITY DRAINAGE AREA MAP
49	TCEQ VEGETATIVE FILTER STRIP CALCULATIONS
50	DETENTION & WATER QUALITY POND SLAUGHTER EAST
51	DETENTION & WATER QUALITY POND SLAUGHTER WEST
52	DETENTION & WATER QUALITY POND BARTON NORTH
53	POND DETAILS
54	OVERALL STORM SEWER PLAN (1 OF 2)
55	OVERALL STORM SEWER PLAN (2 OF 2)
56	SSL-A (STA 1+00 TO 6+00)
57	SSL-A (STA 6+00 TO 10+00)
58	SSL-A (STA 10+00 TO 14+00) & (STA 14+00 TO END)
59	SSL-A LATS
60	SSL-B (STA 1+00 TO 9+00)
61	SSL-B (STA 9+00 TO END) & LATS
62	SSL-C (STA 1+00 TO END) & LATS
63	SSL-D (STA 1+00 TO END) & LAT
64	SSL E (STA 1+00 TO END) & SSL-G (STA 1+00 TO END) & LAT

Sheet List Table

Sheet Number	Sheet Title
65	SSL-F (STA 1+00 TO END)
66	SSL-H (STA 1+00 TO 7+00)
67	SSL-H (STA 7+00 TO END)
68	SSL-I (STA 1+00 TO END)
69	SSL-J (STA 1+00 TO 4+00)
70	SSL-J (STA 4+00 TO END)
71	LATS (SSL-F & SSL-H & SSL-J)
72	SSL-K (STA 1+00 TO END) & LATS
73	SSL-L (STA 1+00 TO END) & LATS
74	SSL-M (STA 1+00 TO END) & LATS
75	SSL N (1+00 TO END) & LAT
76	SSL-O (STA 1+00 TO END) & LATS
77	CHANNEL-A (STA 1+00 TO END)
78	CHANNEL-B (STA 1+00 TO END)
79	CHANNEL-C (STA. 1+00 TO END)
80	OVERALL WATER PLAN (1 OF 2)
81	OVERALL WATER PLAN (2 OF 2)
82	WL-A (STA 1+00 TO 11+00)
83	WL-A (STA 11+00 TO 16+00)
84	WL-A (STA 16+00 TO 25+00)
85	WL-A (STA 25+00 TO END)
86	WL-B (STA 1+00 TO 11+00)
87	WL-B (11+00 TO 16+00)
88	WL-B (16+00 TO 23+00)
89	WL-B (23+00 TO END)
90	WL-C (STA 1+00 TO END)
91	WL-D (STA 1+00 TO END)
92	WL-E (STA 1+00 TO END)
93	WL-F (STA 1+00 TO END)
94	WL-G (STA 1+00 TO END)
95	WL-H (STA 1+00 TO 9+50)
96	WL-H (STA 9+50 TO END)
97	WL-I (STA 1+00 TO END)
98	OVERALL WASTEWATER COLLECTION PLAN (1 OF 2)
99	OVERALL WASTEWATER COLLECTION PLAN (2 OF 2)
100	WWTR-A (STA 1+00 TO 7+50)
101	WWTR-A (7+50 TO END)
102	WWTR-A 2 (STA 1+00 TO 6+00)
103	WWTR-A 2 (6+00 TO END)
104	WWTR A 3 (STA 1+00 TO END)
105	WWTR A 3-1 (STA 1+00 TO END)
106	WWTR B (STA 1+00 TO 5+50)
107	WWTR B (STA 5+50 TO END)
108	WWTR B 2 (STA 1+00-END)
109	WWTR C (STA 1+00 TO 9+50)
110	WWTR C (STA 9+50 TO END)
111	WWTR C 1 (STA 1+00- TO 6+50)
112	WWTR C 1 (STA 6+50 TO END)
113	WWTR C 2 (STA 1+00 TO 5+50)
114	WWTR C 2 (STA 5+50 TO END)
115	WWTR C 3 (STA 1+00 TO END)
116	WWTR C 4 (STA 1+00 TO END)
117	WWTR C 5 (STA 1+00 TO END)
118	WWTR C 6 (STA 1+00 TO END)
119	LIFT STATION OVERALL PLAN
120	LIFT STATION SITE PLAN
121	LIFT STATION DETAILS (1 OF 2)
122	LIFT STATION DETAILS (2 OF 2)
123	STANDARD DETAILS (1 OF 3)
124	STANDARD DETAILS (2 OF 3)
125	STANDARD DETAILS (3 OF 3)
126	WATER DETAILS & NOTES

REVIEWED B Y:

TRAVIS COUNTY TRANSPORTATION AND NATURAL RESOURCES DATE

TNR DEVELOPMENT PERMIT NUMBER DATE

TRAVIS COUNTY FIRE MARSHAL DATE

TCEQ EAPP ID NO.

ORCHARD RANCH POND DAM SAFETY CERTIFICATION STATEMENT

I, BRANDON GILMORE, TEXAS LICENSE NUMBER 150018, CERTIFY THAT THE DESIGN OF THE DAM IN THIS SET OF PLANS CAN SAFELY PASS 75-PERCENT OF THE PROBABLE MAXIMUM FLOOD BASED ON THE HYDROLOGIC, HYDRAULIC, STRUCTURAL AND GEOTECHNICAL ANALYSIS USING STANDARD ACCEPTED ENGINEERING PRACTICES.

SUBMITTED BY

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

01/29/2026
DATE

BRANDON GILMORE, P.E.,
LICENSED PROFESSIONAL ENGINEER NO. 150018
GRAY ENGINEERING, INC. TBPE F-2946
8834 N. CAPITAL OF TEXAS HIGHWAY, SUITE 140
AUSTIN, TEXAS 78759

PROJECT NO. 1636-11741		DRAWN BY:	SM
DATE:	04/04/2025	CHECKED BY:	XXX

GRAY ENGINEERING
8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

I:\PROJECTS\1636 - BROWN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-COVR.DWG DATE: 1/12/2026 3:06:14 PM BY: BDILMORE

GENERAL NOTES
482.1003, EXHIBIT 482.301C, TRAVIS COUNTY

STANDARD CONSTRUCTION NOTES FOR SUBDIVISION DEVELOPMENT, DRAINAGE WATER AND WASTEWATER

1. EACH DRIVEWAY MUST BE CONSTRUCTED IN ACCORDANCE WITH TRAVIS COUNTY CODE SECTION 482.302(G), AND EACH DRAINAGE STRUCTURE OR SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF AUSTIN DRAINAGE CRITERIA MANUAL, UNLESS OTHER DESIGN CRITERIA ARE APPROVED BY TRAVIS COUNTY.

2. BEFORE BEGINNING ANY CONSTRUCTION, THE OWNER MUST OBTAIN A TRAVIS COUNTY DEVELOPMENT PERMIT AND POST THE DEVELOPMENT PERMIT, THE TCEQ SITE NOTICE, AND ANY OTHER REQUIRED PERMITS AT THE JOB SITE.

3. CONSTRUCTION MAY NOT TAKE PLACE WITHIN TRAVIS COUNTY RIGHT-OF-WAY UNTIL AFTER THE OWNER HAS SUBMITTED A TRAFFIC CONTROL PLAN TO TRAVIS COUNTY AND OBTAINED WRITTEN APPROVAL OF THE TRAFFIC CONTROL PLAN FROM TRAVIS COUNTY.

4. THE CONTRACTOR AND PRIMARY OPERATOR SHALL FOLLOW THE SEQUENCE OF CONSTRUCTION AND THE SWP3 IN THESE APPROVED PLANS. THE CONTRACTOR AND PRIMARY OPERATOR SHALL REQUEST TRAVIS COUNTY INSPECTION AT SPECIFIC MILESTONES IN THE SEQUENCE OF THE CONSTRUCTION OF THE SITE DEVELOPMENT CORRESPONDING TO THE PRIORITY INSPECTIONS SPECIFIED IN CONSTRUCTION SEQUENCING NOTES IN THESE APPROVED PLANS. DEVELOPMENT OUTSIDE THE LIMITS OF CONSTRUCTION SPECIFIED IN THE APPROVED PERMIT AND CONSTRUCTION PLANS IS PROHIBITED.

5. BEFORE BEGINNING ANY CONSTRUCTION, ALL STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENTS SHALL BE MET, AND THE FIRST PHASE OF THE TEMPORARY EROSION CONTROL (ESC) PLAN INSTALLED WITH A SWP3 INSPECTION REPORT UPLOADED TO MYPERMITNOW.ORG. ALL SWP3 AND ESC PLAN MEASURES AND PRIMARY OPERATOR SWP3 INSPECTIONS MUST BE PERFORMED BY THE PRIMARY OPERATOR IN ACCORDANCE WITH THE APPROVED PLANS AND SWP3 AND ESC PLAN NOTES THROUGHOUT THE CONSTRUCTION PROCESS.

6. BEFORE STARTING CONSTRUCTION, THE OWNER OR CONTRACTOR OR THEIR DESIGNATED REPRESENTATIVES SHALL SUBMIT A REQUEST VIA THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY TO REQUEST AND SCHEDULE A MANDATORY PRECONSTRUCTION CONFERENCE AND ESC INSPECTION. IF FURTHER ASSISTANCE IS NEEDED, THE TNR PLANNING AND ENGINEERING DIVISION STAFF OR TNR STORM WATER MANAGEMENT PROGRAM STAFF CAN BE CONTACTED BY TELEPHONE AT 512-854-9383.

7. THE CONTRACTOR SHALL KEEP TRAVIS COUNTY TNR ASSIGNED INSPECTION STAFF CURRENT ON THE STATUS OF SITE DEVELOPMENT AND UTILITY CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY TRAVIS COUNTY AND REQUEST PRIORITY INSPECTIONS THROUGH THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY IN ACCORDANCE WITH THE SPECIFIC MILESTONES IN THE CONSTRUCTION SEQUENCING NOTES IN THESE APPROVED PLANS.

8. CONTOUR DATA SOURCE: LIDAR TOPOGRAPHY BY CHAPARRAL PROFESSIONAL LAND SURVEYING 12/20/2014. OFFSITE TOPOGRAPHY DOWNLOADED FROM TNRIS

9. FILL MATERIAL MUST BE MANAGED AND DISPOSED OF IN ACCORDANCE WITH ALL REQUIREMENTS SPECIFIED IN THE APPROVED PLANS, SWP3, AND THE TRAVIS COUNTY CODE. THE CONTRACTOR SHALL STOCKPILE FILL AND CONSTRUCTION MATERIALS ONLY IN THE AREAS DESIGNATED ON THE APPROVED PLANS AND NOT WITHIN THE 0.2 PERCENT ANNUAL CHANCE FLOODPLAIN OR THE 1 PERCENT ANNUAL CHANCE FLOODPLAIN, WATERWAY SETBACK, CRITICAL ENVIRONMENTAL FEATURE SETBACK, OR OUTSIDE THE LIMITS OF CONSTRUCTION. DISPOSAL OF SOLID WASTE MATERIALS, AS DEFINED BY STATE LAW (E.G., LITTER, TIRES, DECOMPOSABLE WASTES, ETC.) IS PROHIBITED IN PERMANENT FILL SITES.

10. BEFORE DISPOSING ANY EXCESS FILL MATERIAL OFF-SITE, THE CONTRACTOR OR PRIMARY OPERATOR MUST PROVIDE THE COUNTY INSPECTOR DOCUMENTATION THAT DEMONSTRATES THAT ALL REQUIRED PERMITS FOR THE PROPOSED DISPOSAL SITE LOCATION, INCLUDING TRAVIS COUNTY, TCEQ NOTICE, AND OTHER APPLICABLE DEVELOPMENT PERMITS, HAVE BEEN OBTAINED. THE OWNER OR PRIMARY OPERATOR MUST REVISE THE SWP3 AND ESC PLAN IF HANDLING OR PLACEMENT OF EXCESS FILL ON THE CONSTRUCTION SITE IS REVISED FROM THE EXISTING SWP3. IF THE FILL DISPOSAL LOCATION IS OUTSIDE TRAVIS COUNTY OR DOES NOT REQUIRE A DEVELOPMENT PERMIT, THE CONTRACTOR OR PRIMARY OPERATOR MUST PROVIDE THE COUNTY INSPECTOR THE SITE ADDRESS, CONTACT INFORMATION FOR THE PROPERTY OWNER OF THE FILL

11. THE DESIGN ENGINEER IS RESPONSIBLE FOR THE ADEQUACY OF THE CONSTRUCTION PLANS. IN REVIEWING THE CONSTRUCTION PLANS, TRAVIS COUNTY WILL RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

12. IN THE EVENT OF ANY CONFLICTS BETWEEN THE CONTENT IN THE SWP3 SITE NOTEBOOK AND THE CONTENT IN THE CONSTRUCTION PLANS APPROVED BY TRAVIS COUNTY, THE CONSTRUCTION PLANS SHALL TAKE PRECEDENCE.

13. A MINIMUM OF TWO SURVEY BENCHMARKS SHALL BE SET, INCLUDING DESCRIPTION, LOCATION, AND ELEVATION; THE BENCHMARKS SHOULD BE TIED TO A TRAVIS COUNTY CONTROL BENCHMARK WHEN POSSIBLE.

14. ANY EXISTING PAVEMENT, CURBS, SIDEWALKS, OR DRAINAGE STRUCTURES WITHIN COUNTY RIGHT-OF-WAY WHICH ARE DAMAGED, REMOVED, OR SILTED, WILL BE REPAIRED BY THE CONTRACTOR AT OWNER OR CONTRACTOR'S EXPENSE BEFORE APPROVAL AND ACCEPTANCE OF THE CONSTRUCTION BY TRAVIS COUNTY.

15. CALL THE TEXAS EXCAVATION SAFETY SYSTEM AT 8-1-1 AT LEAST 2 BUSINESS DAYS BEFORE BEGINNING EXCAVATION ACTIVITIES.

16. ALL STORM SEWER PIPES SHALL BE CLASS III RCP, UNLESS OTHERWISE NOTED.

17. CONTRACTOR IS REQUIRED TO OBTAIN A UTILITY INSTALLATION PERMIT IN ACCORDANCE WITH TRAVIS COUNTY CODE SECTION 482.901(A)(3) BEFORE ANY CONSTRUCTION OF UTILITIES WITHIN ANY TRAVIS COUNTY RIGHT-OF-WAY.

18. THIS PROJECT IS LOCATED ON FLOOD INSURANCE RATE MAP 48453C0555J DATED 01/22/2020.

19. TEMPORARY STABILIZATION MUST BE PERFORMED IN ALL DISTURBED AREAS THAT HAVE CEASED CONSTRUCTION ACTIVITIES FOR 14 DAYS OR LONGER, IN ACCORDANCE WITH THE STANDARDS DESCRIBED IN THE SWP3 AND ESC PLAN SHEET NOTES.

20. PERMANENT SITE STABILIZATION/RE-VEGETATION MUST BE PERFORMED IMMEDIATELY IN ALL SITE AREAS WHICH ARE AT FINAL PLAN GRADE AND IN ALL SITE AREAS SPECIFIED IN THE APPROVED PLANS FOR PHASED RE-VEGETATION, IN ACCORDANCE WITH THE STANDARDS DESCRIBED IN THE SWP3 AND ESC PLAN SHEET NOTES.

21. ALL TREES WITHIN THE RIGHT-OF-WAY AND DRAINAGE EASEMENTS SHALL BE SAVED OR REMOVED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PLANS. TRAVIS COUNTY TREE PRESERVATION STANDARDS IN TRAVIS COUNTY CODE SECTION 482.973, INCLUDING INSTALLATION AND MAINTENANCE OF ALL SPECIFIED TREE PROTECTION MEASURES, MUST BE FOLLOWED DURING CONSTRUCTION.

22. AN ENGINEER'S CONCURRENCE LETTER IN ACCORDANCE WITH TRAVIS COUNTY CODE SECTION 482.953 MUST BE SUBMITTED VIA THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY WHEN CONSTRUCTION IS SUBSTANTIALLY COMPLETE. THE ENGINEER'S CONCURRENCE LETTER MUST BE SUBMITTED BEFORE THE CONTRACTOR OR PRIMARY OPERATOR REQUESTS A FINAL INSPECTION BY TRAVIS COUNTY.

23. SITE IMPROVEMENTS MUST BE CONSTRUCTED IN CONFORMANCE WITH THE ENGINEER'S CONSTRUCTION PLANS APPROVED BY TRAVIS COUNTY. NON-CONFORMANCE WITH THE APPROVED PLANS WILL DELAY FINAL INSPECTION APPROVAL BY THE COUNTY UNTIL PLAN CONFORMANCE IS ACHIEVED OR ANY REQUIRED PLAN REVISIONS ARE APPROVED.

24. FINAL SITE STABILIZATION. ALL AREAS DISTURBED BY THE CONSTRUCTION MUST BE PERMANENTLY REVEGETATED AND ALL TEMPORARY SEDIMENT CONTROLS AND ACCUMULATED SEDIMENTATION MUST BE REMOVED BEFORE THE COUNTY WILL ISSUE A CERTIFICATE OF COMPLIANCE FOR FINAL SITE STABILIZATION AS PART OF FINAL INSPECTION AND PROJECT COMPLETION. A DEVELOPERS CONTRACT, AS DESCRIBED IN THE SWP3 AND ESC NOTES SHEET MAY BE EXECUTED WITH TRAVIS COUNTY FOR CONDITIONAL ACCEPTANCE OF A PROJECT FOR WHICH HAS ESC FISCAL SECURITY POSTED AND FOR WHICH ALL ITEMS ARE COMPLETE

25. ALL SUBDIVISION LOTS AND AREAS OUTSIDE THE RIGHT-OF-WAY WHICH ARE DISTURBED DURING THE CONSTRUCTION PROCESS MUST BE INCLUDED IN THE FINAL STABILIZATION/REVEGETATION PLAN OF THE SUBDIVISION FOR FINAL INSPECTION APPROVAL, EXCEPT FOR SUBDIVISION LOTS THAT ARE SUBJECT TO SEPARATE TRAVIS COUNTY DEVELOPMENT PERMIT(S), SWP3 NOTICE(S), AND ESC PLAN(S).

26. SOIL DATA SOURCES: USDA WEB SOIL SURVEY

27. THE OWNER, UTILITY CONTRACTOR, OR A DESIGNATED REPRESENTATIVE SHALL SUBMIT A NOTICE OF CONSTRUCTION VIA THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY AT LEAST TWO WORKING DAYS PRIOR TO CONSTRUCTION. IF FURTHER ASSISTANCE IS NEEDED, THE TNR PLANNING AND ENGINEERING DIVISION STAFF CAN BE CONTACTED BY TELEPHONE AT 512-854-9383

28. THE WORK WILL NOT BE ACCEPTED AND THE ONE-YEAR WARRANTY PERFORMANCE PERIOD WILL NOT BEGIN UNTIL AFTER THE CONTRACTOR HAS OBTAINED TNR APPROVAL OF THE CONSTRUCTION.

29. THE CONTRACTOR SHALL INSTALL ALL TRAFFIC MARKINGS, BARRICADES, AND SIGNAGE IN ACCORDANCE WITH THE LATEST EDITION OF TXDOT'S MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PRIOR TO TNR APPROVAL OF THE ROADWAY CONSTRUCTION.

TREE PROTECTION NOTES

1. ALL TREES NOT LOCATED WITHIN THE LIMITS OF CONSTRUCTION AND OUTSIDE OF DISTURBED AREAS SHALL BE PRESERVED.

2. ALL TREES AND NATURAL AREAS SHOWN ON PLAN TO BE PRESERVED SHALL BE PROTECTED DURING CONSTRUCTION WITH TEMPORARY FENCING.

3. PROTECTIVE FENCES SHALL BE ERECTED ACCORDING TO CITY OF AUSTIN STANDARDS FOR TREE PROTECTION AS ADOPTED BY TRAVIS COUNTY.

4. PROTECTIVE FENCES SHALL BE INSTALLED PRIOR TO THE START OF ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR GRADING), AND SHALL BE MAINTAINED THROUGHOUT ALL PHASES OF THE CONSTRUCTION PROJECT.

5. EROSION AND SEDIMENTATION CONTROL BARRIERS SHALL BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILDUP WITHIN TREE DRIP LINES.

6. PROTECTIVE FENCES SHALL SURROUND THE TREES OR GROUP OF TREES AND WILL BE LOCATED AT THE OUTERMOST LIMIT OF BRANCHES (DRIP LINE), OR, FOR NATURAL AREAS, PROTECTIVE FENCES SHALL FOLLOW THE LIMIT OF THE CONSTRUCTION LINE, IN ORDER TO PREVENT THE FOLLOWING:

A. SOIL COMPACTION IN THE ROOT ZONE AREA RESULTING FROM VEHICULAR TRAFFIC OR STORAGE OF EQUIPMENT OR MATERIALS;
B. ROOT ZONE DISTURBANCE DUE TO GRADE CHANGES;
C. WOUNDS TO EXPOSED ROOTS, TRUNK OR LIMBS BY MECHANICAL EQUIPMENT;
D. OTHER ACTIVITIES DETRIMENTAL TO TREES SUCH AS CHEMICAL STORAGE, CEMENT TRUCK CLEANING, AND FIRES.

7. EXCEPTIONS TO INSTALLING FENCES AT TREE DRIP LINES MAY BE PERMITTED IN THE FOLLOWING CASES:

A. WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE TREE WELL, OR OTHER SUCH SITE DEVELOPMENT, ERECT THE FENCE APPROXIMATELY 2 TO 4 FEET BEHIND THE AREA IN QUESTION.
B. WHERE PERMEABLE PAVING IS TO BE INSTALLED WITHIN A TREE'S DRIP LINE, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA (PRIOR TO SITE GRADING SO THAT THIS AREA IS GRADED SEPARATELY PRIOR TO PAVING INSTALLATION TO MINIMIZE ROOT DAMAGE);

8. WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN A FENCE BEING CLOSER THAN 4 FEET TO A TREE TRUNK, PROTECT THE TRUNK WITH STRAPPED-ON PLANKING TO A HEIGHT OF 8 FEET (OR TO THE LIMITS OF LOWER BRANCHING) IN ADDITION TO THE REDUCED FENCING PROVIDED.

9. TREES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.

10. ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL. BACK FILL ROOT AREAS WITH GOOD QUALITY TOP SOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACK FILLED WITHIN 2 DAYS, COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.

11. NO LANDSCAPE TOPSOIL DRESSING GREATER THAN 4 INCHES SHALL BE PERMITTED WITHIN THE DRIP LINE OF TREES. NO SOIL IS PERMITTED ON THE ROOT FLARE OF ANY TREE.

12. PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC AND EQUIPMENT SHALL TAKE PLACE BEFORE DAMAGE OCCURS (RIPPING OF BRANCHES, ETC.)

13. ALL OAK TREE CUTS, INTENTIONAL OR UNINTENTIONAL, SHALL BE PAINTED IMMEDIATELY (WITHIN 10 MINUTES). TREE PAINT MUST BE KEPT ON SITE AT ALL TIMES.

14. THE CODE ENFORCEMENT OFFICER, CITY ENGINEER OR CITY INSPECTOR HAS THE AUTHORITY TO REQUIRE ADDITIONAL TREE PROTECTION BEFORE OR DURING CONSTRUCTION.

15. DEVIATIONS FROM THE ABOVE NOTES MAY BE CONSIDERED ORDINANCE VIOLATIONS IF THERE IS SUBSTANTIAL NONCOMPLIANCE OR IF A TREE SUSTAINS DAMAGE AS A RESULT.

16. TREES OVER ROADWAY SHALL BE TRIMMED A MINIMUM OF 13' PRIOR TO CONSTRUCTION.

TREE PROTECTION NOTES

1. THE CONTRACTOR SHALL INSTALL PHASE 1 EROSION/SEDIMENTATION CONTROLS PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING, OR EXCAVATION).

2. THE CONTRACTOR SHALL INSTALL ALL OTHER EROSION/SEDIMENTATION CONTROLS AS NOTED BELOW:
   2.1. INSTALL MID-SLOPE SILT FENCE AFTER FINAL GRADING, PRIOR TO THE ADDITION OF TOPSOIL.
   2.2. INSTALL INLET PROTECTION IMMEDIATELY FOLLOWING INSTALLATION OF EACH INLET.
   2.3. INSTALL SILT FENCE SHOWN ADJACENT TO ROW PRIOR TO STREET AND SIDEWALK PAVING OPERATIONS.

3. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS BE IN ACCORDANCE WITH THE LCRA WATER QUALITY MANAGEMENT TECHNICAL MANUAL AND THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN.

4. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD ON-SITE WITH THE CONTRACTOR, DESIGN ENGINEER/PERMIT APPLICANT, TRAVIS COUNTY STAFF, AND LCRA WATERSHED MANAGEMENT INSPECTOR AFTER INSTALLATION OF THE EROSION/SEDIMENTATION CONTROLS AND PRIOR TO BEGINNING ANY SITE PREPARATION WORK. THE CONTRACTOR SHALL NOTIFY THE LCRA INSPECTOR, AT LEAST THREE DAYS PRIOR TO THE MEETING DATE.

5. ANY MAJOR VARIATION IN MATERIALS OR LOCATIONS OF CONTROLS OR FENCES FROM THOSE SHOWN ON THE APPROVED PLANS WILL REQUIRE A REVISION AND MUST BE APPROVED BY THE LCRA WATERSHED MANAGEMENT PROGRAM. MINOR CHANGES TO BE MADE AS FIELD REVISIONS TO THE EROSION AND SEDIMENTATION CONTROL PLAN MAY BE REQUIRED BY THE LCRA WATERSHED MANAGEMENT INSPECTOR DURING THE COURSE OF CONSTRUCTION TO CORRECT CONTROL INADEQUACIES.

6. THE CONTRACTOR IS REQUIRED TO INSPECT HE CONTROLS AND FENCES AT WEEKLY INTERVALS AND AFTER RAINFALL EVENTS IN EXCESS OF 0.5" TO INSURE THAT THEY ARE FUNCTIONING PROPERLY. THE PERSON(S) RESPONSIBLE FOR MAINTENANCE OF CONTROLS AND FENCES SHALL IMMEDIATELY MAKE ANY NECESSARY REPAIRS TO DAMAGED AREAS. SILT ACCUMULATION AT CONTROLS MUST BE REMOVED WHEN THE DEPTH REACHES SIX(6) INCHES.

7. PRIOR TO FINAL ACCEPTANCE BY THE TRAVIS COUNTY STAFF AND THE LCRA, HAUL ROADS AND WATERWAY CROSSINGS CONSTRUCTED FOR TEMPORARY CONTRACTOR ACCESS MUST BE REMOVED, ACCUMULATED SEDIMENT REMOVED FROM THE WATERWAY AND THE AREA RESTORED TO ORIGINAL GRADE AND RE-VEGETATED. ALL LAND CLEARING DEBRIS SHALL BE DISPOSED OF IN APPROVED SOIL DISPOSAL SITES.

8. PERMANENT EROSION CONTROL: ALL DISTURBED AREAS SHALL BE RESTORED AS NOTED BELOW:
   8.1. A MINIMUM OF FOUR INCHES OF TOPSOIL SHALL BE PLACED IN ALL DISTURBED AREAS (EXCEPT ROCK OUTCROP). SALVAGED TOPSOIL FORM THE SITE SHOULD BE USED WHENEVER POSSIBLE. IMPORTED TOPSOIL SHALL BE WEED FREE WITH A MINIMUM OF 20% ORGANIC CONTENT. ROCK SHALL BE SCREENED FROM TOPSOIL BEFORE PLACEMENT.
   8.2. THE SEEDING FOR PERMANENT EROSION CONTROL SHALL BE APPLIED OVER AREAS DISTURBED BY CONSTRUCTION AS FOLLOWS:

DATES	CLIMATE	SPECIES (lb/ac)	
YEAR ROUND	PERMANENT COOL/WARM SEASON (NATIVE SPECIES)	PURPLE THREE-AWN (ARISTIDA PURPUREA)	1.4
		SIDEOATS GRAMA (BOUTELOUA CURTIPENDULA)	2.0
		SILVER BLUESTEM (BOTHRIOCHLOA LAGUROIDES)	6.0
		BUFFALOGRASS (BUCHLOE DACTYLOIDES)	1.4
		CANADIAN WILDRYE (ELYMUS CANADENSIS)	1.4
		ENGELMANN'S DAISY (ENGELMANNIA PINNATIFIDIA)	0.6
		GREEN SPRANGLETOP (LEPTOCHLOA DUBIA)	2.6
		MEXICAN HAT (RATIBIDIA COLUMNIFERA)	1.0
		LITTLE BLUESTEM (SCHIZACHYRIUM SCOPARIUM)	1.8
		INDIANGRASS (SORGHASTRUM NUTANS)	1.8
		TEXAS WINTERGRASS (NASSELA LEUCOTRICHA)	1.8
		TOTAL	15.0 35.0
MAR 30-OCT 1	PERMANENT WARM SEASON	BERMUDA (CYNODON DACTYLON) (HULLED)	45.0
OCT 1-MAR 30	PERMANENT COOL/WARM SEASON	BERMUDA (CYNODON DACTYLON) (HULLED)	70.0
		*CEREAL RYE (SECALE CEREALE)	90.0
		TOTAL	160

   8.2.1. TAKE CARE TO DISTRIBUTE SEED EVENLY, BY SOWING FINE AND LARGE SEEDS SEPARATELY OR USING A FINE SEED BOX. WHEN BROADCASTING SEEDING, THE APPLICATION RATE SHOULD BE DOUBLED AND AREA ROLLED TO ENSURE A GOOD SEED/SOIL CONTACT.
   8.2.2. FROM SEPTEMBER 15 TO MARCH 1, OATS (21 lb/acre) AND WINTER WHEAT (30 lb/acre) MAY BE SUBSTITUTED FOR RYE.
   8.2.3. MULCH TYPE USED SHALL BE HAY, STRAW OR MULCH APPLIED AT A RATE OF 3500 lb/acre (HAY), 4500 lb/acre (STRAW) OR 2500 lb/acre (HYDRAULIC MULCH), TACKIFIER, IF USED SHALL BE BIODEGRADABLE.
   8.2.4. THE PLANTED AREA SHALL BE IRRIGATED OR SPRINKLED IN A MANNER THAT WILL NOT ERODE THE TOPSOIL, BUT WILL SUFFICIENTLY SOAK THE SOIL TO A DEPTH OF SIX INCHES. THE IRRIGATION SHALL OCCUR AT TEN-DAY INTERVALS DURING THE FIRST TWO MONTHS. RAINFALL OCCURENCES OF ½ INCH OR MORE SHALL POSTPONE THE WATERING SCHEDULE FOR ONE WEEK.
   8.2.5. RESTORATION SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1.5 INCHES HIGH WITH 70% COVERAGE, PROVIDED NO BARE SPOTS LARGER THAN 16 SQUARE FEET EXIST.

9. DEVELOPER INFORMATION:
   OWNER: CLAYTON PROPERTIES GROUP
   CONTACT: ADAM BOENIG
   ADDRESS: 6720 VAUGHT RANCH ROAD, SUITE 200 AUSTIN, TX 78730-2354
   OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS: GRAY CIVIL

   PERSON OR FIRM RESPONSIBLE FOR EROSION/SEDIMENTATION CONTROL MAINTENANCE:
   _____ _____ PHONE#_____
   PERSON OR FIRM RESPONSIBLE FOR TREE/NATURAL AREA PROTECTION MAINTENANCE
   _____ _____ PHONE#_____

10. THE CONTRACTOR SHALL NOT DISPOSE OF SURPLUS EXCAVATED MATERIAL FROM THE SITE WITHOUT NOTIFYING THE LCRA WATERSHED MANAGEMENT INSPECTOR AT LEAST 48 HOURS PRIOR WITH THE LOCATION AND A COPY OF THE PERMIT ISSUED TO RECEIVE THE MATERIAL.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

GENERAL NOTES (1 OF 4)

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-NOTE.DWG DATE: 1/29/2026 5:11:28 PM BY: TMARSHALL

STANDARD CONSTRUCTION NOTES FOR SUBDIVISION DEVELOPMENT, DRAINAGE WATER AND WASTEWATER

EDWARDS AQUIFER PROTECTION PROGRAM CONSTRUCTION NOTES – LEGAL DISCLAIMER

THE FOLLOWING/LISTED "CONSTRUCTION NOTES" ARE INTENDED TO BE ADVISORY IN NATURE ONLY AND DO NOT CONSTITUTE AN APPROVAL OR CONDITIONAL APPROVAL BY THE EXECUTIVE DIRECTOR (ED), NOR DO THEY CONSTITUTE A COMPREHENSIVE LISTING OF RULES OR CONDITIONS TO BE FOLLOWED DURING CONSTRUCTION. FURTHER ACTIONS MAY BE REQUIRED TO ACHIEVE COMPLIANCE WITH TCEQ REGULATIONS FOUND IN TITLE 30, TEXAS ADMINISTRATIVE CODE (TAC), CHAPTERS 213 AND 217, AS WELL AS LOCAL ORDINANCES AND REGULATIONS PROVIDING FOR THE PROTECTION OF WATER QUALITY. ADDITIONALLY, NOTHING CONTAINED IN THE FOLLOWING/LISTED "CONSTRUCTION NOTES" RESTRICTS THE POWERS OF THE ED, THE COMMISSION OR ANY OTHER GOVERNMENTAL ENTITY TO PREVENT, CORRECT, OR CURTAIL ACTIVITIES THAT RESULT OR MAY RESULT IN POLLUTION OF THE EDWARDS AQUIFER OR HYDROLOGICALLY CONNECTED SURFACE WATERS. THE HOLDER OF ANY EDWARDS AQUIFER PROTECTION PLAN CONTAINING "CONSTRUCTION NOTES" IS STILL RESPONSIBLE FOR COMPLIANCE WITH TITLE 30, TAC, CHAPTERS 213 OR ANY OTHER APPLICABLE TCEQ REGULATION, AS WELL AS ALL CONDITIONS OF AN EDWARDS AQUIFER PROTECTION PLAN THROUGH ALL PHASES OF PLAN IMPLEMENTATION. FAILURE TO COMPLY WITH ANY CONDITION OF THE ED'S APPROVAL, WHETHER OR NOT IN CONTRADICTION OF ANY "CONSTRUCTION NOTES," IS A VIOLATION OF TCEQ REGULATIONS AND ANY VIOLATION IS SUBJECT TO ADMINISTRATIVE RULES, ORDERS, AND PENALTIES AS PROVIDED UNDER TITLE 30, TAC § 213.10 (RELATING TO ENFORCEMENT). SUCH VIOLATIONS MAY ALSO BE SUBJECT TO CIVIL PENALTIES AND INJUNCTION. THE FOLLOWING/LISTED "CONSTRUCTION NOTES" IN NO WAY REPRESENT AN APPROVED EXCEPTION BY THE ED TO ANY PART OF TITLE 30 TAC, CHAPTERS 213 AND 217, OR ANY OTHER TCEQ APPLICABLE REGULATION

1. A WRITTEN NOTICE OF CONSTRUCTION MUST BE SUBMITTED TO THE TCEQ REGIONAL OFFICE AT LEAST 48 HOURS PRIOR TO THE START OF ANY GROUND DISTURBANCE OR CONSTRUCTION ACTIVITIES. THIS NOTICE MUST INCLUDE:

– THE NAME OF THE APPROVED PROJECT;
– THE ACTIVITY START DATE
– THE CONTACT INFORMATION OF THE PRIME CONTRACTOR

2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT SHOULD BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED CONTRIBUTING ZONE PLAN (CZP) AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTOR(S) SHOULD KEEP COPIES OF THE APPROVED PLAN AND APPROVAL LETTER ONSITE.

3. NO HAZARDOUS SUBSTANCE STORAGE TANK SHALL BE INSTALLED WITHIN 150 FEET OF A WATER SUPPLY SOURCE, DISTRIBUTION SYSTEM, WELL, OR SENSITIVE FEATURE.

4. PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THESE CONTROLS MUST REMAIN IN PLACE UNTIL THE DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.

5. ANY SEDIMENT THAT ESCAPES THE CONSTRUCTION SITE MUST BE COLLECTED AND PROPERLY DISPOSED OF BEFORE THE NEXT RAIN EVENT TO ENSURE IT IS NOT WASHED INTO SURFACE STREAMS, SENSITIVE FEATURES, ETC.

6. SEDIMENT MUST BE REMOVED FROM THE SEDIMENT TRAPS OR SEDIMENTATION BASINS WHEN IT OCCUPIES 50% OF THE BASIN'S DESIGN CAPACITY.

7. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BEING DISCHARGED OFFSITE.

8. ALL EXCAVATED MATERIAL THAT WILL BE STORED ON–SITE MUST HAVE PROPER E&S CONTROLS.

9. IF PORTIONS OF THE SITE WILL HAVE A CEASE IN CONSTRUCTION ACTIVITY LASTING LONGER THAN 14 DAYS, SOIL STABILIZATION IN THOSE AREAS SHALL BE INITIATED AS SOON AS POSSIBLE PRIOR TO THE 14TH DAY OF INACTIVITY. IF ACTIVITY WILL RESUME PRIOR TO THE 21ST DAY, STABILIZATION MEASURES ARE NOT REQUIRED. IF DROUGHT CONDITIONS OR INCLEMENT WEATHER PREVENT ACTION BY THE 14TH DAY, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE.

10. THE FOLLOWING RECORDS SHOULD BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ UPON REQUEST:
– THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR
– THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE
– THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.

11. THE HOLDER OF ANY APPROVED CZP MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING:

A. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY BEST MANAGEMENT PRACTICES (BMPS) OR STRUCTURE(S), INCLUDING BUT NOT LIMITED TO TEMPORARY OR PERMANENT PONDS, DAMS, BERMS, SILT FENCES, AND DIVERSIONARY STRUCTURES;
B. ANY CHANGE IN THE NATURE OR CHARACTER OF THE REGULATED ACTIVITY FROM THAT WHICH WAS ORIGINALLY APPROVED;
C. ANY CHANGE THAT WOULD SIGNIFICANTLY IMPACT THE ABILITY TO PREVENT THE POLLUTION OF THE EDWARDS AQUIFER; OR
D. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE APPROVED CONTRIBUTING ZONE PLAN

Austin Regional Office	San Antonio Regional Office
12100 Park 35 Circle, Building A	14250 Judson Road
Austin, Texas 78753–1808	San Antonio, Texas 78233–4480
Phone: (512) 339–2929	Phone: (210) 490–3096
Fax: (512) 339–3795	Fax: (210) 545–4329

NOTES FOR CONSTRUCTION IN CREEKS

SCHEDULE WORK WHEN A MINIMUM OF (3) DAYS OF DRY WEATHER ARE FORECAST. DEWATER OR DIVERT FLOW PRIOR TO COMMENCING WORK WITHIN CREEK CHANNELS. CONTACT LCRA FOR INSPECTION OF DEWATERING/DIVERSION SYSTEM PRIOR TO COMMENCING WORK.

NO LOOSE EXCAVATED MATERIAL SHALL BE LEFT IN THE CREEK AT THE END OF THE WORK DAY.

REMOVE ALL LOOSE EXCAVATED MATERIAL TO A SECURE LOCATION OUTSIDE THE CREEK CHANNEL AND SUSPEND FURTHER CONSTRUCTION IN THE CREEK AREA IF RAINFALL THREATENS.

SPECIAL NOTES

AS APPLICABLE, FOR SITE DEVELOPMENT OR STREETS AND DRAINAGE

1. THE SUBGRADE MATERIAL IN (NAME OF SUBDIVISION) WAS TESTED BY (NAME OF PROFESSIONAL SOIL LAB) IN (DAY, MONTH, AND YEAR) AND THE STREET SECTION DESIGNED ACCORDING TO APPROVED DESIGN CRITERIA. THE STREET SECTIONS ARE TO BE CONSTRUCTED AS FOLLOWS:
2. [GIVE STREET NAMES, WIDTH OF RIGHT–OF–WAY, OR OTHER METHODS TO IDENTIFY PROPOSED DESIGN OF DIFFERENT PAVEMENT THICKNESSES. IN WRITING OR GRAPHICALLY, DESCRIBE THE STREET SECTION(S) TO BE CONSTRUCTED.]
3.
4. MANHOLE FRAMES, COVERS, AND WATER VALVE COVERS WILL BE RAISED TO FINISHED PAVEMENT GRADE AT THE OWNER'S EXPENSE BY A QUALIFIED CONTRACTOR WITH COUNTY INSPECTION. ALL UTILITY ADJUSTMENTS SHALL BE COMPLETED PRIOR TO FINAL PAVING CONSTRUCTION.
5. ALL COLLECTOR AND ARTERIAL STREETS SHALL HAVE AUTOMATIC SCREED CONTROL ON ASPHALTIC CONCRETE PAVEMENT CONSTRUCTION, PLACED AS PER ITEM 350–6 OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS.
6. AT INTERSECTIONS WHICH HAVE VALLEY DRAINAGE, THE CROWNS OF THE INTERSECTING STREETS WILL CULMINATE IN A DISTANCE OF 40' FROM THE INTERSECTING CURB LINE UNLESS OTHERWISE NOTED. INLETS ON THE INTERSECTING STREET SHALL NOT BE CONSTRUCTED WITHIN 40' OF THE VALLEY GUTTER.
7. AT THE INTERSECTION OF TWO 44' STREETS OR LARGER, THE CROWNS OF THE INTERSECTING STREETS WILL CULMINATE IN A DISTANCE OF 40' FROM INTERSECTING CURB LINE UNLESS OTHERWISE NOTED.
8. PRIOR TO FINAL ACCEPTANCE OF A STREET, STREET NAME SIGNS CONFORMING TO COUNTY STANDARDS SHALL BE INSTALLED BY DEVELOPER.
9. WHEN USING LIME STABILIZATION OF SUBGRADE, IT SHALL BE PLACED IN SLURRY FORM.
10. IF APPLICABLE, A LICENSE AGREEMENT FOR LANDSCAPING MAINTENANCE AND IRRIGATION IN STREET RIGHT–OF–WAY SHALL BE EXECUTED BY THE DEVELOPER WITH TRAVIS COUNTY PRIOR TO FINAL ACCEPTANCE OF THE ROADWAY SYSTEM FOR MAINTENANCE.

EROSION CONTROL NOTES

1. CONCRETE WASHOUT LOCATION WILL BE DETERMINED ONCE CONSTRUCTION HAS BEGUN WILL BE PROPERLY NOTATED ON THE SITE MAP AT THAT TIME.
2. POSTINGS AND PERMITS MUST BE PLACED IN A HIGHLY VISIBLE LOCATION ONSITE.
3. ALL EROSION AND SEDIMENTATION CONTROLS (ESC) MUST BE INSTALLED PRIOR TO ANY DISTURBANCE ON SITE AND PLACED DOWN GRADIENT FROM ALL DISTURBANCES.
4. ALL ESC USED ONSITE MUST BE REGULARLY MONITORED AND MAINTAINED AS NEEDED.
5. MUD AND OR DIRT TRACKED INTO THE ROADWAY MUST BE IMMEDIATELY REMOVED UPON DISCOVERY.
6. EXCESS MATERIALS THAT WILL BE TRANSPORTED TO AN OFFSITE LOCATION MUST HAVE THAT LOCATION CLEARED BY THE COUNTY INSPECTOR.
7. LOOSE TRASH AND DEBRIS MUST BE DISPOSED OF PROPERLY ONSITE.
8. INITIATE TEMPORARY STABILIZATION WHEN CONSTRUCTION CEASES IN A DISTURBED AREA FOR 14 DAYS.
9. INITIATE PERMANENT STABILIZATION IMMEDIATELY ONCE WORK HAS CEASED AND FINAL GRADE HAS BEEN ACHIEVED.
10. COUNTY INSPECTOR MAY REQUEST ADDITIONAL CONTROLS BE INSTALLED ONSITE AS NEEDED.
11. IT SHALL BE PERMITTEE'S RESPONSIBILITY TO INSPECT ALL INLET PROTECTION DEVICES AS PART OF THE WEEKLY REQUIRED SWP3 REPORT, UPON RECEIVING A FORECAST CALLING FOR RAIN, DAILY DURING EXTENDED RAIN EVENTS, AFTER RAIN EVENTS AND SHALL BE RESPONSIBLE FOR THE REMOVAL AND/OR MODIFICATION OF INLET PROTECTION DEVICES SHOULD FLOODING OR THE PONDING OF WATER BECOME A CONCERN TO EITHER TRAFFIC OR PROPERTY.

EROSION CONTROL NOTES

1. THE CITY OF AUSTIN STANDARD SPECIFICATIONS CURRENT AT THE TIME OF BIDDING SHALL GOVERN MATERIALS AND METHODS USED TO PERFORM THIS WORK, EXCEPT WHERE THOSE STANDARD SPECIFICATIONS CONTRADICT INFORMATION AND REQUIREMENTS STATED IN TCEQ WATER DISTRIBUTION SYSTEM GENERAL CONSTRUCTION NOTES.
2. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE STATE STATUTES AND U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS (O.S.H.A.) COPIES OF O.S.H.A STANDARDS MAY BE PURCHASED FORM THE U.S. GOVERNMENT PRINTING OFFICE. INFORMATION AND OTHER RELATED REFERENCE MATERIALS MAY BE OBTAINED FROM O.S.H.A. AT 611 6th ST., RM. 303, AUSTIN, TX.
3. THE ATTENTION OF PROSPECTIVE BIDDERS IS DIRECTED TO SECTION 00140; PARAGRAPHS 2.08, 3.09, AND 3.14, OF THE GENERAL CONDITIONS OF THE AGREEMENT, CITY OF AUSTIN STANDARD SPECIFICATIONS, AND TO THE STATE LAW, (VERNON'S ANNOTATED TEXAS STATUTES, ARTICLE 1436 (C)) AND THE NEED FOR EFFECTIVE PRECAUTIONARY MEASURES WHEN OPERATING IN THE VICINITY OF ELECTRICAL LINES. IF THE CONTRACTOR CHOOSES TO USE EQUIPMENT WITH THE POTENTIAL OF COMING WITHIN THE DISTANCES PROSCRIBED BY STATUTE, THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF THE WORK WITH THE APPROPRIATE ELECTRIC UTILITY/COMPANY.
4. AT LEAST 48 HOURS BEFORE BEGINNING ANY WATER OR WASTEWATER CONSTRUCTION IN THE PUBLIC RIGHT–OF–WAY OR PUBLIC EASEMENT, THE CONTRACTORS MUST NOTIFY:

   LOWER COLORADO RIVER AUTHORITY WATERSHED MANAGER @ 473–3200 EXT. 2892 TRAVIS COUNTY TNR @ (512) 854–9383.
5. THE CONTRACTOR SHALL CONTACT TESS @ 1–800–344–8377 AND AT&T @ 1–800–852–3786 FOR EXISTING UTILITY LOCATIONS 48 HOURS PRIOR TO ANY EXCAVATION. KNOWN EXISTING UTILITIES ARE SHOWN ON THE DRAWINGS. PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES THAT ARE TO BE EXTENDED, TIED–TO, CROSSED, OR ALTERED; OR SUBJECT TO DAMAGE/INCONVENIENCE BY THE CONSTRUCTION OPERATIONS. THE LOCATION AND TYPE OF UTILITIES AND UNDERGROUND FACILITIES SHOWN ON THESE PLANS ARE NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR SHALL VERIFY ALL DEPTHS AND LOCATIONS OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ALL EXISTING UTILITIES. IN ADDITION TO NORMAL PRECAUTIONS WHEN EXCAVATING, USE EXTRA CAUTION WHEN EXCAVATING WITHIN 25 FEET OF ANY UTILITIES SHOWN ON THE PLANS.
6. FIRE HYDRANTS ON MAINS UNDER CONSTRUCTION SHALL BE SECURELY WRAPPED WITH A POLY WRAP BAG TAPED INTO PLACE. THE POLY WRAP WILL BE REMOVED WHEN THE MAINS ARE ACCEPTED AND PLACED INTO SERVICE.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION BETWEEN HIMSELF AND OTHER CONTRACTORS AND UTILITIES IN THE VICINITY OF THE PROJECT DEVELOPMENT PROPERTY. THIS INCLUDES GAS, WATER, WASTEWATER, ELECTRICAL, TELEPHONE, CABLE TELEVISION, AND STREET & DRAINAGE WORK. ONCE THE CONTRACTOR BECOMES AWARE OF A POSSIBLE CONFLICT, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER WITHIN TWENTY–FOUR (24) HOURS.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING OF AL SPOILS MATERIAL FROM THE CONSTRUCTION SITE. ALL SPOILS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR AT AN APPROVED SPOIL SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SECURING A PERMIT FOR THE SITE; AND SHALL NOTIFY THE PROPER AUTHORITIES OF AT LEAST FORTY–EIGHT (48) HOURS PRIOR TO DISPOSAL OF THE MATERIAL.
9. NO BLASTING OR BURNING WILL BE ALLOWED.
10. WATER VALVES SHALL BE RAISED TO FINISHED PAVEMENT GRADE AT THE CONTRACTOR'S EXPENSE. ALL UTILITY ADJUSTMENTS WILL BE COMPLETED BY THE CONTRACTOR AND INSPECTED BY THE ENGINEER OR HIS REPRESENTATIVE.
11. THE ALIGNMENT SHOWN ON THE PLANS SHALL BE ACHIEVED BY DEFLECTION, EXCEPT WHERE SPECIFIC FITTINGS ARE CALLED FOR ON THE PLANS. THERE WILL BE NO ADDITIONAL PAYMENTS FOR FITTINGS USED FOR DEFLECTION PURPOSES UNDER NO CONDITIONS SHALL THE CONTRACTOR EXCEED THE MAXIMUM DEFLECTION ANGLE AS RECOMMENDED BY THE PIPE MANUFACTURER.
12. ALL MATERIALS TESTING, INCLUDING SOIL DENSITY TESTS AND RELATED SOIL ANALYSIS, SHALL BE DONE BY AN INDEPENDENT LABORATORY FUNDED BY THE OWNER.
13. THRUST RESTRAINT SHALL BE IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM 510.3 (22).
14. FIRE HYDRANTS SHALL BE SET IN ACCORDANCE TRAVIS CO. EMERGENCY SERVICE DISTRICT NO. 6 REQUIREMENTS
15. WATER LINES SHALL BE FILLED AND ALL AIR EXPELLED AT LEAST 24 HOURS BEFORE TESTING. ALL SERVICE LATERALS AND FIRE HYDRANT LEADS, WITH THE HYDRANT VALVES CLOSED AND NOZZLE CAPS OPEN, SHALL BE INCLUDED IN THE TESTS. THE CONTRACTOR IS RESPONSIBLE FOR PURCHASING ALL WATER USED FOR TESTING.
16. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR, AT HIS EXPENSE, ALL UTILITIES, PAVEMENT, DRIVEWAYS, CURB, FENCES, AND ANY OTHER ITEMS DAMAGED DURING CONSTRUCTION REGARDLESS OF WHETHER THESE ITEMS ARE SHOWN ON THE PLANS.
17. WHENEVER EXISTING UTILITIES, INDICATED OR NOT ON PLANS, PRESENT OBSTRUCTIONS TO GRADE OR ALIGNMENT OF PROPOSED PIPE, CONTRACTOR IS TO IMMEDIATELY NOTIFY ENGINEER WHO WILL DETERMINE IF EXISTING IMPROVEMENTS ARE TO BE RELOCATED OR IF THE GRADE AND ALIGNMENT OF PROPOSED PIPE IS TO BE CHANGED.
18. DUST PREVENTION IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS, OR AS OTHERWISE DIRECTED BY THE OWNER OR HIS REPRESENTATIVE, SHALL BE PROVIDED BY THE CONTRACTOR AT HIS EXPENSE. THIS WILL INCLUDE SPRAYING WATER ON ALL DISTURBED AREAS, SPOIL PILES, OR HAUL MATERIALS ASSOCIATED WITH THE PROJECT. CONTRACTOR MUST SWEEP DIRT AND DEBRIS ASSOCIATED WITH OFF THE ROADWAY AT THE END OF EACH CONSTRUCTION ACTIVITY.
19. UPON COMPLETION AND BEFORE MAKING APPLICATION FOR ACCEPTANCE OF THE WORK, THE CONTRACTOR SHALL CLEAN ALL STREETS AND ALL GROUND OCCUPIED BY HIM IN CONNECTION WITH THE WORK OF ALL RUBBISH, EXCESS MATERIALS, EXCESS EXCAVATED MATERIALS, TEMPORARY STRUCTURES AND EQUIPMENT. ALL PARTS OF THE WORK SHALL BE LEFT IN A NEAT AND PRESENTABLE CONDITION SATISFACTORY TO THE OWNER AND GOVERNMENTAL BODIES HAVING JURISDICTION PRIOR TO SUBMITTAL OF THE FINAL PAYMENT, FINAL CLEANUP PAYMENT IS CONSIDERED AS INCIDENTAL TO UNIT PRICES ON THE BID PROPOSAL.
20. DEWATERING, IF NECESSARY, WILL BE CONSIDERED INCIDENTAL TO THE WORK AND SHALL NOT CONSTITUTE A BASIS FOR ADDITIONAL PAYMENT. DEWATERING SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM NO. 510.3 (8)
21. ALL CONCRETE SHALL BE CLASS 'A' WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 P.S.I. UNLESS OTHERWISE NOTED
22. ALL REINFORCING STEEL SHALL BE ASTM A615M, GRADE 60, UNLESS OTHERWISE NOTED.
23. ANY FITTINGS, VAVLES, OR OTHER APPURTENANCES NECESSARY FOR TESTING OF UTILITY LINES SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
24. NO DRIVEWAY OR STREET SHALL BE CLOSED OVERNIGHT. CONTRACTOR SHALL REPAIR AL STREET CROSSINGS, DRIVEWAYS AND DITCHES TO THEIR ORIGINAL CONDITION OR BETTER. STREET CROSSINGS SHALL BE REPAIRED WITHIN 10 WORKING DAYS AFTER CROSSING IS MADE.
25. WHILE WORKING IN ROADWAYS, CONTRACTOR SHALL BACKFILL TRENCH AS WORK IS COMPLETED. ROADWAYS SHALL BE RESTORED TO NORMAL SERVICE BY THE END OF EACH DAY.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

GENERAL NOTES (2 OF 4)

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-CC-NOTE.DWG DATE: 1/29/2026 2:41:34 PM BY: TMARSHALL

TCEQ WATER DISTRIBUTION SYSTEM GENERAL CONSTRUCTION NOTES

1. THIS WATER DISTRIBUTION SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS 30 TEXAS ADMINISTRATIVE CODE (TAC) CHAPTER 290 SUBCHAPTER D. WHEN CONFLICTS ARE NOTED WITH LOCAL STANDARDS, THE MORE STRINGENT REQUIREMENT SHALL BE APPLIED. AT A MINIMUM, CONSTRUCTION FOR PUBLIC WATER SYSTEMS MUST ALWAYS MEET TCEQ'S "RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS."
2. ALL NEWLY INSTALLED PIPES AND RELATED PRODUCTS MUST CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)/NSF INTERNATIONAL STANDARD 61 AND MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI [§290.44(A)(1)].
3. PLASTIC PIPE FOR USE IN PUBLIC WATER SYSTEMS MUST BEAR THE NSF INTERNATIONAL SEAL OF APPROVAL (NSF-PW) AND HAVE AN ASTM DESIGN PRESSURE RATING OF AT LEAST 150 PSI OR A STANDARD DIMENSION RATIO OF 26 OR LESS [§290.44(A)(2)].
4. NO PIPE WHICH HAS BEEN USED FOR ANY PURPOSE OTHER THAN THE CONVEYANCE OF DRINKING WATER SHALL BE ACCEPTED OR RELOCATED FOR USE IN ANY PUBLIC DRINKING WATER SUPPLY [§290.44(A)(3)].
5. ALL WATER LINE CROSSINGS OF WASTEWATER MAINS SHALL BE PERPENDICULAR [§290.44(E)(4)(B)].
6. WATER TRANSMISSION AND DISTRIBUTION LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. HOWEVER, THE TOP OF THE WATER LINE MUST BE LOCATED BELOW THE FROST LINE AND IN NO CASE SHALL THE TOP OF THE WATER LINE BE LESS THAN 24 INCHES BELOW GROUND SURFACE [§290.44(A)(4)].
7. THE MAXIMUM ALLOWABLE LEAD CONTENT OF PIPES, PIPE FITTINGS, PLUMBING FITTINGS, AND FIXTURES IS 0.25 PERCENT [§290.44(B)].
8. THE CONTRACTOR SHALL INSTALL APPROPRIATE AIR RELEASE DEVICES WITH VENT OPENINGS TO THE ATMOSPHERE COVERED WITH 16-MESH OR FINER, CORROSION RESISTANT SCREENING MATERIAL OR AN ACCEPTABLE EQUIVALENT [§290.44(D)(1)].
9. THE CONTRACTOR SHALL NOT PLACE THE PIPE IN WATER OR WHERE IT CAN BE FLOODED WITH WATER OR SEWAGE DURING ITS STORAGE OR INSTALLATION [§290.44(F)(1)].
10. WHEN WATERLINES ARE LAID UNDER ANY FLOWING OR INTERMITTENT STREAM OR SEMI-PERMANENT BODY OF WATER THE WATERLINE SHALL BE INSTALLED IN A SEPARATE WATERTIGHT PIPE ENCASEMENT. VALVES MUST BE PROVIDED ON EACH SIDE OF THE CROSSING WITH FACILITIES TO ALLOW THE UNDERWATER PORTION OF THE SYSTEM TO BE ISOLATED AND TESTED [§290.44(F)(2)].
11. PURSUANT TO 30 TAC §290.44(A)(5), THE HYDROSTATIC LEAKAGE RATE SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY THE MOST CURRENT AWWA FORMULAS FOR PVC PIPE, CAST IRON AND DUCTILE IRON PIPE. INCLUDE THE FORMULAS IN THE NOTES ON THE PLANS.

11.1. THE HYDROSTATIC LEAKAGE RATE FOR POLYVINYL CHLORIDE (PVC) PIPE AND APPURTENANCES SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY FORMULAS IN AMERICA WATER WORKS ASSOCIATION (AWWA) C-605 AS REQUIRED IN 30 TAC §290.44(A)(5). PLEASE ENSURE THAT THE FORMULA FOR THIS CALCULATION IS CORRECT AND MOST CURRENT FORMULA IS IN USE;

$$Q = \frac{LD\sqrt{P}}{148{,}000}$$

WHERE:

- Q = THE QUANTITY OF MAKEUP WATER IN GALLONS PER HOUR
- L = THE LENGTH OF PIPE SECTION BEING TESTED, IN FEET
- D = THE NOMINAL DIAMETER OF THE PIPE IN INCHES
- P = THE AVERAGE TEST PRESSURE DURING THE HYDROSTATIC TEST IN POUNDS PER SQUARE INCH (PSI)

11.2. THE HYDROSTATIC LEAKAGE RATE FOR DUCTILE IRON (DI) PIPE AND APPURTENANCES SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY FORMULAS IN AMERICA WATER WORKS ASSOCIATION (AWWA) C-600 AS REQUIRED IN 30 TAC §290.44(A)(5). PLEASE ENSURE THAT THE FORMULA FOR THIS CALCULATION IS CORRECT AND MOST CURRENT FORMULA IS IN USE;

$$L = \frac{SD\sqrt{P}}{148{,}000}$$

WHERE:

- L = THE QUANTITY OF MAKEUP WATER IN GALLONS PER HOUR
- S = THE LENGTH OF PIPE SECTION BEING TESTED, IN FEET
- D = THE NOMINAL DIAMETER OF THE PIPE IN INCHES
- P = THE AVERAGE TEST PRESSURE DURING THE HYDROSTATIC TEST IN POUNDS PER SQUARE INCH (PSI)

12. THE CONTRACTOR SHALL MAINTAIN A MINIMUM SEPARATION DISTANCE IN ALL DIRECTIONS OF NINE FEET BETWEEN THE PROPOSED WATERLINE AND WASTEWATER COLLECTION FACILITIES INCLUDING MANHOLES. IF THIS DISTANCE CANNOT BE MAINTAINED, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROJECT ENGINEER FOR FURTHER DIRECTION. SEPARATION DISTANCES, INSTALLATION METHODS, AND MATERIALS UTILIZED MUST MEET §290.44(E)(1)-(4).
13. THE SEPARATION DISTANCE FROM A POTABLE WATERLINE TO A WASTEWATER MAIN OR LATERAL MANHOLE OR CLEANOUT SHALL BE A MINIMUM OF NINE FEET. WHERE THE NINE-FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, THE POTABLE WATERLINE SHALL BE ENCASED IN A JOINT OF AT LEAST 150 PSI PRESSURE CLASS PIPE AT LEAST 18 FEET LONG AND TWO NOMINAL SIZES LARGER THAN THE NEW CONVEYANCE. THE SPACE AROUND THE CARRIER PIPE SHALL BE SUPPORTED AT FIVE-FOOT INTERVALS WITH SPACERS OR BE FILLED TO THE SPRINGLINE WITH WASHED SAND. THE ENCASEMENT PIPE SHALL BE CENTERED ON THE CROSSING AND BOTH ENDS SEALED WITH CEMENT GROUT OR MANUFACTURED SEALANT [§290.44(E)(5)].
14. FIRE HYDRANTS SHALL NOT BE INSTALLED WITHIN NINE FEET VERTICALLY OR HORIZONTALLY OF ANY WASTEWATER LINE, WASTEWATER LATERAL, OR WASTEWATER SERVICE LINE REGARDLESS OF CONSTRUCTION [§290.44(E)(6)].
15. SUCTION MAINS TO PUMPING EQUIPMENT SHALL NOT CROSS WASTEWATER MAINS, WASTEWATER LATERALS, OR WASTEWATER SERVICE LINES. RAW WATER SUPPLY LINES SHALL NOT BE INSTALLED WITHIN FIVE FEET OF ANY TILE OR CONCRETE WASTEWATER MAIN, WASTEWATER LATERAL, OR WASTEWATER SERVICE LINE [§290.44(E)(7)].
16. WATERLINES SHALL NOT BE INSTALLED CLOSER THAN TEN FEET TO SEPTIC TANK DRAINFIELDS [§290.44(E)(8)].
17. THE CONTRACTOR SHALL DISINFECT THE NEW WATERLINES IN ACCORDANCE WITH AWWA STANDARD C651-14 OR MOST RECENT, THEN FLUSH AND SAMPLE THE LINES BEFORE BEING PLACED INTO SERVICE. SAMPLES SHALL BE COLLECTED FOR MICROBIOLOGICAL ANALYSIS TO CHECK THE EFFECTIVENESS OF THE DISINFECTION PROCEDURE WHICH SHALL BE REPEATED IF CONTAMINATION PERSISTS. A MINIMUM OF ONE SAMPLE FOR EACH 1,000 FEET OF COMPLETED WATERLINE WILL BE REQUIRED OR AT THE NEXT AVAILABLE SAMPLING POINT BEYOND 1,000 FEET AS DESIGNATED BY THE DESIGN ENGINEER [§290.44(F)(3)].
18. DECHLORINATION OF DISINFECTING WATER SHALL BE IN STRICT ACCORDANCE WITH CURRENT AWWA STANDARD C655-09 OR MOST RECENT.

482.1003, EXHIBIT 482.301E

SEQUENCE OF CONSTRUCTION AND PRIORITY INSPECTIONS - SUBDIVISION DEVELOPMENT

THE OWNER AND PRIMARY OPERATOR MUST FOLLOW THIS BASIC SEQUENCE OF CONSTRUCTION FOR EACH SUBDIVISION DEVELOPMENT. WITHIN THE FOLLOWING SEQUENCE OF CONSTRUCTION ARE LISTED PRIORITY INSPECTIONS THAT THE OWNER AND PRIMARY OPERATOR MUST REQUEST FROM A REPRESENTATIVE OF TRAVIS COUNTY'S STORM WATER MANAGEMENT PROGRAM INSPECTION TEAM. EACH PRIORITY INSPECTION MUST BE REQUESTED ON-LINE THROUGH THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY. THE PRIORITY INSPECTIONS IN THIS EXHIBIT ARE CONSISTENT WITH THE PRIORITY INSPECTIONS FOUND IN THE CUSTOMER PORTAL FOR THE PROJECT. FOR ASSURANCE PURPOSES, A SECOND REQUEST TO TRAVIS COUNTY IS STRONGLY ENCOURAGED BY ADDITIONALLY SENDING AN E-MAIL TO THE FOLLOWING ADDRESS: ENV-INSPECT@TRAVISCOUNTYTX.GOV.

THE SEQUENCE FOR ITEMS 1-4 AND ITEMS 17-22 MUST NOT BE ALTERED, BUT THE SEQUENCE FOR ITEMS 5-16 MAY BE MODIFIED WITH THE WRITTEN APPROVAL OF THE COUNTY.

1. ESC INSTALLATION. INSTALL ALL TEMPORARY EROSION AND SEDIMENT CONTROLS (ESC) AND TREE PROTECTION MEASURES IN ACCORDANCE WITH THE APPROVED ESC PLAN SHEETS AND THE SWP3.
   A. HAVE A QUALIFIED INSPECTOR (AS SPECIFIED IN SECTION 482.934(C)(3) OF THE TRAVIS COUNTY CODE) INSPECT THE TEMPORARY EROSION AND SEDIMENT CONTROLS AND PREPARE A CERTIFIED SWP3 INSPECTION REPORT REGARDING WHETHER THE TEMPORARY EROSION AND SEDIMENT CONTROLS WERE INSTALLED IN CONFORMANCE WITH THE APPROVED PLANS;
   B. UPLOAD THE QUALIFIED INSPECTOR'S CERTIFIED SWP3 INSPECTION REPORT TO THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY; AND
   C. REQUEST A MANDATORY PRE-CONSTRUCTION MEETING WITH TRAVIS COUNTY THROUGH THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY GIVING AT LEAST 3 BUSINESS DAYS NOTIFICATION.
2. PRE-CONSTRUCTION MEETING AND ESC INSPECTION. HOLD A MANDATORY PRE-CONSTRUCTION MEETING THAT ADDRESSES THE ITEMS IN EXHIBIT 482.950 AND THE ESC PRE-CONSTRUCTION INSPECTION BY THE COUNTY AND OBTAIN COUNTY'S APPROVAL TO START CONSTRUCTION. (PRIORITY INSPECTION)
3. INSPECT FOR COMPLIANCE WITH SWP3 AND ESC PLAN. MAINTAIN AND INSPECT THE SWP3 CONTROLS AND PREPARE AND UPLOAD A WEEKLY CERTIFIED SWP3 INSPECTION REPORT THAT INCLUDES THE CONTENTS LISTED IN EXHIBIT 482.951 TO THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY.
4. CONSTRUCT SEDIMENT BASIN(S). CONSTRUCT ANY STORM WATER POND(S) FIRST, WHENEVER APPLICABLE, TO BE FUNCTIONAL AS CONSTRUCTION SEDIMENT BASIN(S) BEFORE GRADING AND EXCAVATING THE ENTIRE SITE, AS FOLLOWS:
   A. CLEAR, GRUB, AND EXCAVATE ONLY THE SITE AREAS AND CUT AND FILL QUANTITIES NECESSARY TO CONSTRUCT THE POND(S) IN ACCORDANCE WITH THESE APPROVED PLANS AND THE MINIMUM STANDARDS DESCRIBED IN THE SWP3 AND ESC PLAN SHEET NOTES FOR THE TEMPORARY SEDIMENT BASIN EMBANKMENTS, WALLS, INFLOWS, OUTFALLS, DRAINAGE CONVEYANCE MEASURES, SEDIMENT CONTROLS, AND STABILIZATION.
   B. REQUEST COUNTY INSPECTION AND OBTAIN COUNTY'S WRITTEN APPROVAL OF THE TEMPORARY SEDIMENT BASIN(S) BEFORE PROCEEDING FURTHER IN THE SEQUENCE OF CONSTRUCTION. (PRIORITY INSPECTION)
5. CONSTRUCT SUBDIVISION IMPROVEMENTS. BEGIN THE PRIMARY SUBDIVISION CLEARING, EXCAVATION, AND CONSTRUCTION ACTIVITIES AND CONTINUE THE SWP3 AND ESC PLAN IMPLEMENTATION AND MAINTENANCE PER THE APPROVED PLANS.
6. ROUGH GRADE STREETS.
7. INSTALL UTILITIES TO BE LOCATED UNDER THE PROPOSED PAVEMENT.
8. BEGIN INSTALLATION OF STORM SEWER LINES.
9. REGRADE STREETS TO SUBGRADE.
10. PERFORM TEMPORARY STABILIZATION IN ALL DISTURBED AREAS THAT HAVE CEASED CONSTRUCTION ACTIVITIES FOR 14 DAYS OR LONGER.
11. PERFORM PERMANENT SITE STABILIZATION/RE-VEGETATION IMMEDIATELY IN ALL SITE AREAS AT FINAL PLAN GRADE AND IN ALL SITE AREAS SPECIFIED FOR PHASED RE-VEGETATION.
12. COMPLETE UNDERGROUND UTILITY CROSSINGS ON ALL STREETS.
13. INSTALL CURB AND GUTTER.
14. LAY FINAL BASE COURSE MATERIAL.
15. INSTALL ALL TRAFFIC CONTROL SIGNING, STRIPING, AND PAVEMENT MARKERS.
16. COMPLETE ALL UNDERGROUND INSTALLATIONS WITHIN THE RIGHT-OF-WAY.
17. COMPLETE PERMANENT WATER QUALITY CONTROLS. BEGIN COMPLETION OF PERMANENT WATER QUALITY CONTROL(S) AND INSTALL THE UNDERDRAIN PER APPROVED PLANS, WHEN APPLICABLE.
   A. REMOVE CONSTRUCTION SEDIMENT, RE-ESTABLISH THE BASIN SUBGRADE, AND INSTALL UNDERDRAIN PIPING.
   B. REQUEST COUNTY INSPECTION AND OBTAIN COUNTY'S WRITTEN APPROVAL OF THE UNDERDRAIN PIPING INSTALLATION AND ASSOCIATED CONSTRUCTION MATERIALS (AGGREGATE, FILTER MEDIA, ETC.) BEFORE COVERING THE UNDERDRAIN AND PROCEEDING WITH CONSTRUCTION OF THE CONTROL. (PRIORITY INSPECTION)
18. COMPLETE FINAL SITE STABILIZATION INCLUDING STABILIZATION OF ALL DISTURBED SUBDIVISION LOTS STILL UNDER THE SWP3 AND ESC PLAN OF THE PRIMARY OPERATOR FOR THE SUBDIVISION STREET AND DRAINAGE CONSTRUCTION.
19. PROVIDE ENGINEER'S CONCURRENCE LETTER THROUGH THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY WHEN CONSTRUCTION IS SUBSTANTIALLY COMPLETE AND REQUEST A FINAL INSPECTION BY TRAVIS COUNTY.
20. PERFORM A FINAL INSPECTION WITH THE COUNTY AND PREPARE A PUNCH LIST WITH REMAINING ITEMS THAT NEED TO BE COMPLETED FOR PROJECT ACCEPTANCE. (PRIORITY INSPECTION)
21. OBTAIN A CERTIFICATE OF COMPLIANCE FOR FINAL STABILIZATION FROM THE COUNTY WHEN ALL FINAL INSPECTION PUNCH LIST ITEMS ARE FINISHED AND FINAL SITE STABILIZATION AND REMOVAL OF TEMPORARY SEDIMENT CONTROLS IS COMPLETE. (PRIORITY INSPECTION)
   A. PROVIDE SEPARATE PERMIT DOCUMENTATION FOR ANY SUBDIVISION LOTS NOT STABILIZED AS PART OF THE FINAL SUBDIVISION STABILIZATION PLAN, IF NECESSARY - INCLUDING SEPARATE COUNTY DEVELOPMENT PERMIT(S), SWP3 NOTICE(S), ESC PLAN(S).
   B. PROVIDE A DEVELOPERS CONTRACT, IF NECESSARY, IF ALL ITEMS ARE COMPLETE EXCEPT RE-VEGETATION COVERAGE AND CONDITIONAL ACCEPTANCE IS REQUESTED. REQUEST RE-INSPECTION WHEN RE-VEGETATION COVERAGE IS COMPLETE.
22. RECEIVE A CONDITIONAL ACCEPTANCE FROM TRAVIS COUNTY TO BEGIN THE CONSTRUCTION WARRANTY PERIOD WHEN ALL PUNCH LIST ITEMS ARE COMPLETE. (PRIORITY INSPECTION).

NOTE:

1. BEFORE PROJECT APPROVAL/ISSUANCE OF THE CERTIFICATE OF COMPLETION (COC) AND FISCAL RELEASE, THE FOLLOWING MUST BE COMPLETE:
2. THE OWNER MUST CONTACT LCRA FOR THEIR REQUIREMENTS REGARDING PWQC (BMP) PERMITTING AND/OR MAINTENANCE PLAN
3. UPON APPROVAL, THE PWQC MAINTENANCE PLAN ALONG WITH THE ORIGINAL NOTARIZED DOCUMENT MUST BE FILED IN THE REAL PROPERTY RECORDS OF TRAVIS COUNTY. A COPY OF RECORDED DOCUMENT MUST BE PROVIDED PRIOR TO THE PROJECT FINAL ACCEPTANCE.
4. THE PWQC MAINTENANCE PLAN MUST BE SEALED AND SIGNED BY THE DESIGN ENGINEER.
5. UPON REQUEST, A PWQC (BMP) MAINTENANCE PLAN EXAMPLE WILL BE PROVIDED OR UPLOADED TO THE MYPERMITNOW.ORG ACCOUNT.

482.1009, EXHIBIT 482.950

PRE-CONSTRUCTION CONFERENCE PLANNING AND AGENDA FOR SWP3 AND ESC PLAN

BEFORE STARTING CONSTRUCTION, THE OWNER OR THEIR REPRESENTATIVE MUST SUBMIT A REQUEST, USING THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY, TO PARTICIPATE IN A PRE-CONSTRUCTION CONFERENCE WITH THE DESIGNATED COUNTY INSPECTOR. PRIOR TO THE PRE-CONSTRUCTION CONFERENCE REQUEST, THE OWNER OR OWNER'S REPRESENTATIVE SHALL ENSURE THE FIRST PHASE OF THE ESC CONTROLS ARE INSTALLED IN CONFORMANCE WITH THE APPROVED PLANS, THE OWNER'S QUALIFIED INSPECTOR HAS INSPECTED THE CONTROLS AND VERIFIED COMPLIANCE WITH THE PLANS, AND AN SWP3 INSPECTION REPORT DOCUMENTING THIS INFORMATION HAS BEEN SENT TO THE COUNTY THROUGH THE METHOD SPECIFIED BY THE DESIGNATED COUNTY INSPECTOR.

AFTER ARRANGING AN AGREED UPON DATE WITH THE COUNTY AND PROVIDING THE INITIAL SWP3 INSPECTION REPORT, THE OWNER OR OWNER'S DESIGNATED REPRESENTATIVE SHALL PROVIDE NOTICE OF THE SWP3 PRE-CONSTRUCTION CONFERENCE AND A COPY OF THE APPROVED PLANS, IF REQUESTED, TO THE FOLLOWING PERSONS OR ENTITIES AT LEAST TWO BUSINESS DAYS BEFORE THE CONFERENCE:

1. DESIGNATED COUNTY INSPECTOR(S)
2. DESIGN ENGINEER FOR THE APPROVED PLANS AND SWP3, OR THEIR REPRESENTATIVE
3. CONTRACTOR(S)/PRIMARY OPERATOR(S)
4. PRIMARY OPERATOR'S QUALIFIED INSPECTOR RESPONSIBLE FOR PREPARING THE SWP3 INSPECTION REPORTS
5. OTHER STAKEHOLDERS, AS APPROPRIATE: MUNICIPALITIES, UTILITIES, ETC.

THE SWP3 PRE-CONSTRUCTION CONFERENCE MAY BE A STANDALONE MEETING OR A PART OF A LARGER PRE-CONSTRUCTION CONFERENCE, BUT MUST INCLUDE AN ON-SITE INSPECTION APPROVAL OF THE FIRST PHASE OF THE PROJECT'S ESC PLAN BY THE COUNTY INSPECTOR BEFORE CONSTRUCTION BEGINS. THE COUNTY INSPECTOR WILL DISCUSS THE FOLLOWING APPLICABLE ITEMS IN THE APPROVED PLANS AND THE SWP3 WITH THE PARTICIPANTS:

1. THE SWP3 SITE NOTEBOOK FOR THE PROJECT, INCLUDING REVIEW OF COMPLETENESS, SIGNATURES, CONSISTENCY WITH THE APPROVED CONSTRUCTION AND ESC PLANS, AND THE REQUIREMENTS FOR MAINTAINING THE SWP3 SITE NOTEBOOK DURING THE CONSTRUCTION PROCESS.
2. THE SEQUENCE OF CONSTRUCTION AND ESC PLAN IMPLEMENTATION; SEDIMENT BASIN CONSTRUCTION SCOPE PRIOR TO FULL SITE GRADING; NON-STRUCTURAL EROSION SOURCE CONTROLS; START DATES AND SCHEDULE OF EVENTS.
3. SEDIMENT CONTROLS; PHASING OF PERIMETER AND INTERIOR SEDIMENT CONTROLS DURING CONSTRUCTION; STRUCTURAL EROSION SOURCE CONTROLS SUCH AS DRAINAGE DIVERSION; ESC MAINTENANCE REQUIREMENTS.
4. ADEQUACY OF THE FIRST ESC PHASE AND FUTURE ESC PHASES TO ADDRESS SPECIFIC SITE CONDITIONS, AND ADJUSTMENT AND REVISION OF THE ESC PLAN AND SWP3 CONTROLS DURING CONSTRUCTION.
5. TEMPORARY AND PERMANENT STABILIZATION AND RE-VEGETATION REQUIREMENTS, INCLUDING SCHEDULE, CRITICAL SITE IMPROVEMENTS AND PRIORITY RE-VEGETATION AREAS.
6. ON AND OFF-SITE TEMPORARY AND PERMANENT SPOIL AND FILL DISPOSAL AREAS, HAUL ROADS, STAGING AREAS, AND STABILIZED CONSTRUCTION ENTRANCES;
7. PERMANENT WATER QUALITY CONTROLS CONSTRUCTION AND COUNTY INSPECTIONS, AND RELATED GRADING AND DRAINAGE CONSTRUCTION.
8. SUPERVISION OF THE SWP3 IMPLEMENTATION BY THE PRIMARY OPERATOR'S DESIGNATED PROJECT MANAGER, INCLUDING ROLES, RESPONSIBILITIES, AND COORDINATION WHEN MORE THAN ONE OPERATOR IS RESPONSIBLE FOR IMPLEMENTATION.
9. INSPECTION AND PREPARATION OF THE WEEKLY SWP3 INSPECTION REPORTS BY THE PRIMARY OPERATOR'S QUALIFIED INSPECTOR; REPORT SUBMITTAL BY THE PRIMARY OPERATOR, AND SWP3 MONITORING INSPECTIONS CONDUCTED BY THE COUNTY INSPECTOR.
10. OBSERVATION AND DOCUMENTATION OF EXISTING SITE CONDITIONS ADJACENT TO THE LIMITS OF CONSTRUCTION BEFORE CONSTRUCTION, INCLUDING WATERWAYS AND POTENTIAL OUTFALL DISCHARGE ROUTES, RIGHTS-OF-WAY AND EASEMENTS, BUFFER ZONES, AND CRITICAL ENVIRONMENTAL FEATURES.
11. SPECIAL SITE CONDITIONS AND PLAN PROVISIONS, SUCH AS PROTECTION OF WATERWAYS, CRITICAL ENVIRONMENTAL FEATURES, TREES TO BE SAVED, AND FUTURE HOMEBUILDING ON SUBDIVISION LOTS.
12. RAIN GAGE LOCATION OR RAINFALL INFORMATION SOURCE TO BE USED DURING CONSTRUCTION AND REPORTING.
13. FINAL INSPECTION AND ACCEPTANCE REQUIREMENTS, INCLUDING THE ENGINEER'S CONCURRENCE LETTER, COMPLETION OF REVEGETATION COVERAGE BEFORE THE NOTICE OF TERMINATION IS SUBMITTED BY THE PRIMARY OPERATOR, STABILIZATION OF RESIDENTIAL SUBDIVISION LOTS, REMOVAL OF TEMPORARY SEDIMENT CONTROLS, THE CERTIFICATE OF COMPLIANCE AND RELEASE OF ESC FISCAL SURETY.
14. EXCHANGE OF TELEPHONE NUMBERS AND CONTACT INFORMATION FOR THE PRIMARY PARTICIPANTS.

THE DESIGN ENGINEER SHALL PREPARE AND DISTRIBUTE NOTES, KEY DECISIONS, AND FOLLOW UP FROM THE PRECONSTRUCTION CONFERENCE TO ALL PARTICIPANTS WITHIN THREE BUSINESS DAYS AFTER COMPLETION OF THE CONFERENCE.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

GENERAL NOTES (3 OF 4)

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-NOTE.DWG DATE: 1/29/2026 2:41:38 PM BY: TMARSHALL

482.1009, EXHIBIT 482.951

SWP3 INSPECTION AREAS AND REPORT CONTENTS

THE OWNER OR PRIMARY OPERATOR OF THE CONSTRUCTION SITE SHALL DESIGNATE A QUALIFIED INSPECTOR POSSESSING THE REQUIRED CERTIFICATION (AS SPECIFIED IN SECTION 482.934(C)(3)) TO PERFORM A WEEKLY SWP3 INSPECTION AND PREPARE A SIGNED SWP3 INSPECTION REPORT OF THE INSPECTION FINDINGS.

THE CONSTRUCTION SITE AREAS AND THE CONTROL MEASURES LISTED HEREIN ARE TO BE USED AS A MINIMUM AS THE UNIFORM CRITERIA BY THE OWNER'S QUALIFIED INSPECTOR, AS WELL AS THE COUNTY INSPECTOR, TO EVALUATE AND DETERMINE A PROJECT'S COMPLIANCE STATUS WITH THE APPROVED SWP3 AND ESC PLAN.

IN ADDITION, ON AN ONGOING BASIS AND FOLLOWING STORM EVENTS, THE PRIMARY OPERATOR'S RESPONSIBLE ON-SITE PERSONNEL SHALL ALSO INSPECT AND ADDRESS THESE ITEMS DURING CONSTRUCTION AS REQUIRED BY THE SWP3, ESC PLAN, AND TRAVIS COUNTY CODE, SECTION 482.951.

AREAS OF INSPECTION. AT THE VERY LEAST, THE FOLLOWING AREAS MUST BE INSPECTED:

1. DISTURBED AREAS AND THE APPROVED LIMITS OF CONSTRUCTION.
2. PERIMETER AND INTERIOR SEDIMENT CONTROLS.
3. AREAS UNDERGOING TEMPORARY STABILIZATION OR PERMANENT VEGETATION ESTABLISHMENT.
4. TEMPORARY AND PERMANENT FILL AND SPOIL STORAGE OR DISPOSAL AREAS.
5. STORAGE AREAS FOR MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO RAINFALL.
6. OUTFALL LOCATIONS AND THE AREAS IMMEDIATELY DOWNSTREAM.
7. STRUCTURAL CONTROLS, INCLUDING SEDIMENT PONDS, SEDIMENT TRAPS, AND DRAINAGE DIVERSIONS.
8. HAUL ROADS AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE, AND ADJACENT ROADWAYS FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.
9. WATERWAY CROSSINGS AND AREAS ADJACENT TO WATERWAYS AND CRITICAL ENVIRONMENTAL FEATURES.
10. CONCRETE WASH OUT AREAS AND ALL AREAS REQUIRING CONTROL MEASURES FOR NON-STORM WATER DISCHARGES, INCLUDING DUST, SOLID WASTE, DE-WATERING, MATERIAL SPILLS, VEHICLE MAINTENANCE AND WASHING, AND WASH WATER DISCHARGES.
11. LOCATIONS OF ALL CONTROL MEASURES THAT REQUIRE MAINTENANCE, INCLUDING ANY CONTROL MEASURE IDENTIFIED IN THE PREVIOUS SWP3 INSPECTION REPORT WHICH REQUIRED MAINTENANCE OR REVISION BY THE OWNER OR PRIMARY OPERATOR.
12. LOCATIONS OF ANY DISCHARGE OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE AND ANY DISTURBANCE BEYOND THE APPROVED LIMITS OF CONSTRUCTION.
13. LOCATIONS OF CONTROL MEASURES THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION.
14. LOCATIONS WHERE AN ADDITIONAL ESC OR CONTROL MEASURE IS NEEDED.

THE SWP3 INSPECTION REPORT MUST INCLUDE:

A. FINDINGS AS TO WHETHER THE FOLLOWING STRUCTURAL AND NON-STRUCTURAL CONTROLS REQUIRED
   1. EROSION SOURCE CONTROLS, INCLUDING THE APPROVED SEQUENCE OF CONSTRUCTION AND GRADING PLAN LIMITS, DRAINAGE DIVERSION MEASURES, TEMPORARY AND PERMANENT FILL DISPOSAL AND STOCKPILE MANAGEMENT MEASURES.
   2. SEDIMENT CONTROLS, INCLUDING PERIMETER AND INTERIOR CONTROLS, SEDIMENT TRAPS AND BASINS, AND THE SEQUENCE OF CONSTRUCTION REQUIREMENTS FOR THE SEDIMENT CONTROLS.
   3. PERMANENT EROSION AND SOIL STABILIZATION CONTROLS, BASED ON THE SEQUENCE OF CONSTRUCTION AND CRITICAL SITE IMPROVEMENTS, AND THE CESSATION OF CONSTRUCTION ACTIVITIES, INCLUDING TEMPORARY STABILIZATION MEASURES FOR AREAS INACTIVE FOR LONGER THAN 14 DAYS, AND PERMANENT STABILIZATION MEASURES FOR AREAS AT FINAL GRADE.
   4. OTHER APPLICABLE CONTROLS AND POLLUTION PREVENTION MEASURES.

B. RAINFALL DOCUMENTATION
   1. FOR PROJECTS THAT COMPRISE TEN ACRES OR MORE, THE DOCUMENTATION MUST INCLUDE RAINFALL DATES AND AMOUNTS IN ACCORDANCE WITH SECTION 482.934(E); AND
   2. FOR PROJECTS THAT COMPRISE LESS THAN TEN ACRES, THE DOCUMENTATION MUST INCLUDE ACCURATE RAINFALL DATA FROM A LOCATION CLOSEST TO THE SITE.

C. CORRECTIVE ACTIONS REQUIRED FOR ANY NON-COMPLIANT ITEMS AND THE SCHEDULE FOR BRINGING THESE ITEMS INTO COMPLIANCE.

THE SWP3 INSPECTION REPORT CONTENTS MUST CONTAIN THE INSPECTION FINDINGS FOR THE REQUIRED AREAS AND CONTROL MEASURES LISTED HEREIN AND CERTIFY WHETHER THE SITE IS IN COMPLIANCE WITH THE APPROVED SWP3 AND ESC PLAN.

EITHER AT THE TIME OF EACH SWP3 INSPECTION, OR NO LATER THAN THE DATE OF THE INSPECTION, THE OWNER'S QUALIFIED INSPECTOR SHALL PREPARE AND SIGN A SWP3 INSPECTION REPORT.

THE OWNER OR PRIMARY OPERATOR SHALL UPLOAD EACH REQUIRED SWP3 OR ESC PLAN INSPECTION REPORT TO THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY. AN ALTERNATE METHOD OF REPORT SUBMITTAL MAY BE USED IF APPROVED BY THE COUNTY INSPECTOR.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

GENERAL NOTES (4 OF 4)

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

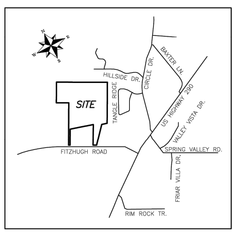
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 5 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-NOTE.DWG DATE: 1/29/2026 2:41:36 PM BY: TMARSHALL

FINAL PLAT OF
ORCHARD RANCH SUBDIVISION



LOCATION MAP
N.T.S.

BENCHMARK INFORMATION:

T.B.M = 4" ALUMINUM DISK IN CONCRETE FOUND

SURFACE COORDINATES:
N = 10054494.42
E = 3046483.09

GRID COORDINATES:
N = 10053489.07
E = 3046178.147

ELEVATION = 1117.36
VERTICAL DATUM: NAVD 88 (GEOID 18)

LEGEND

- ● 1/2" IRON ROD FOUND (UNLESS NOTED)
- INSIGNIA ● IRON ROD WITH CAP FOUND (*INSIGNIA NOTED*)
- ⊙ 1/2" IRON PIPE FOUND (UNLESS NOTED)
- ○ IRON ROD WITH G&R CAP SET
- □ CONCRETE MONUMENT SET
- ◪ BENCHMARK
- △ CALCULATED POINT
- S.L.E. SIGHT LINE EASEMENT
- (XXX) RECORD INFORMATION
- ····· SIDEWALK REQUIRED

BEARING BASIS: TEXAS CENTRAL ZONE,
STATE PLANE COORDINATES (NAD 83)
DISTANCES SHOWN HEREON ARE SURFACE VALUES
COMBINED SCALE FACTOR IS 1.000100

OWNER AND DEVELOPER:
CLAYTON PROPERTIES GROUP, INC.
6720 VAUGHT RANCH ROAD, SUITE 200
AUSTIN, TEXAS 78730

SURVEYOR:
G&R SURVEYING, LLC
1805 OUIDA DRIVE
AUSTIN, TEXAS 78728

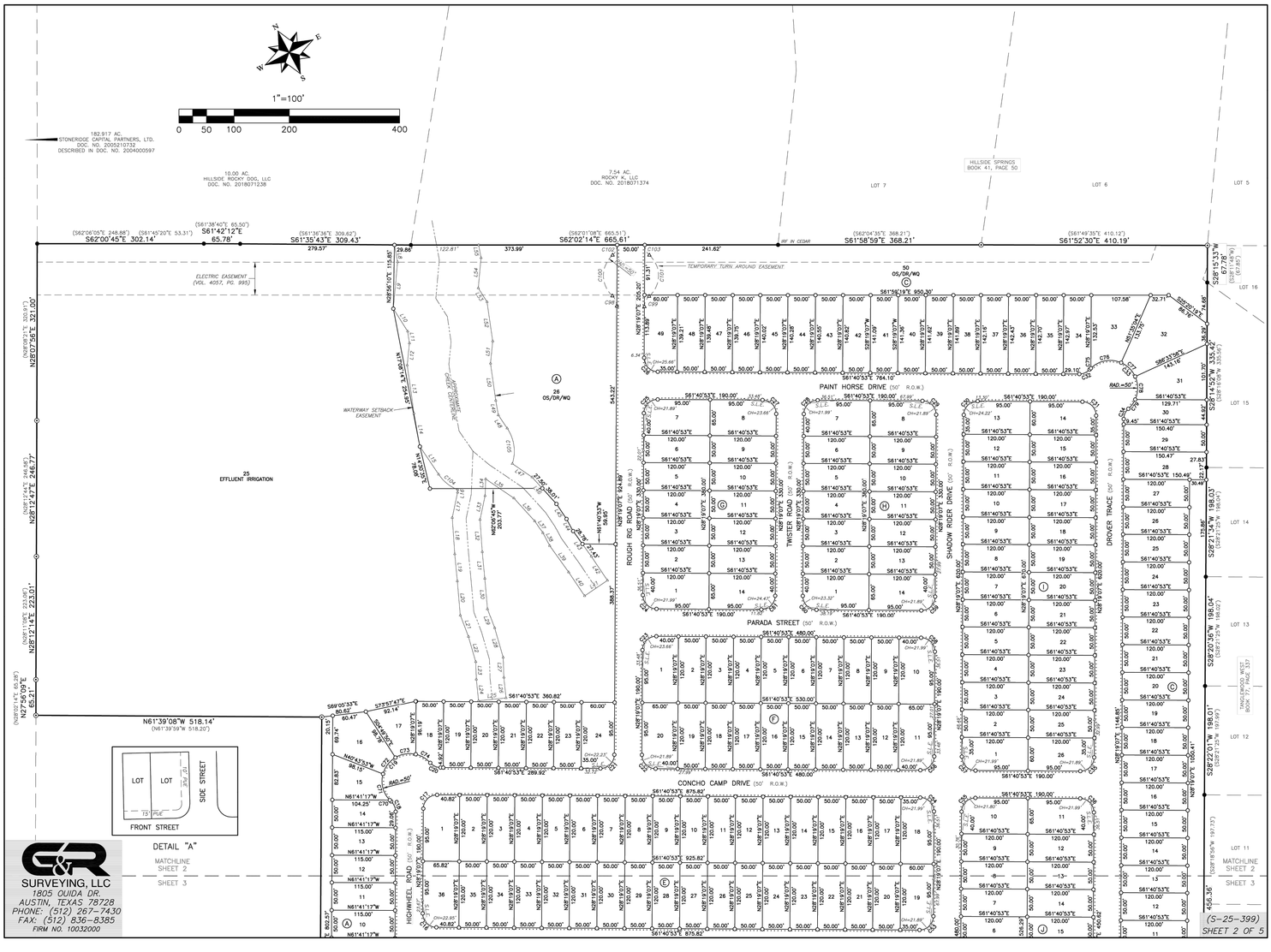
ENGINEER:
GRAY ENGINEERING, INC.
8834 N. CAPITAL OF TEXAS HWY., SUITE 140
AUSTIN, TEXAS 78759

TRAVIS COUNTY CONSUMER PROTECTION NOTICE FOR HOMEBUYERS:

IF YOU ARE BUYING A LOT OR HOME, YOU SHOULD DETERMINE WHETHER IT IS INSIDE OR OUTSIDE THE CITY LIMITS. DEPENDING ON STATE LAW AND OTHER FACTORS, LAND OUTSIDE THE CITY LIMITS MAY BE SUBJECT TO FEWER LOCAL GOVERNMENT CONTROLS OVER THE DEVELOPMENT AND USE OF LAND THAN INSIDE THE CITY LIMITS. BECAUSE OF THIS, LOCAL GOVERNMENT MAY NOT BE ABLE TO RESTRICT THE NATURE OR EXTENT OF DEVELOPMENT NEAR THE LOT OR HOME NOR PROHIBIT NEARBY LAND USES THAT ARE INCOMPATIBLE WITH A RESIDENTIAL NEIGHBORHOOD. THIS CAN AFFECT THE VALUE OF YOUR PROPERTY. TRAVIS COUNTY REQUIRES THIS NOTICE TO BE PLACED ON SUBDIVISION PLATS. IT IS NOT A STATEMENT OR REPRESENTATION OF THE OWNER OF THE PROPERTY, THE SUBDIVIDER, OR THEIR REPRESENTATIVES.

G&R SURVEYING, LLC
1805 OUIDA DR.
AUSTIN, TEXAS 78728
PHONE: (512) 267-7430
FAX: (512) 836-8385
FIRM NO. 10032000

(S-25-399)
SHEET 1 OF 5



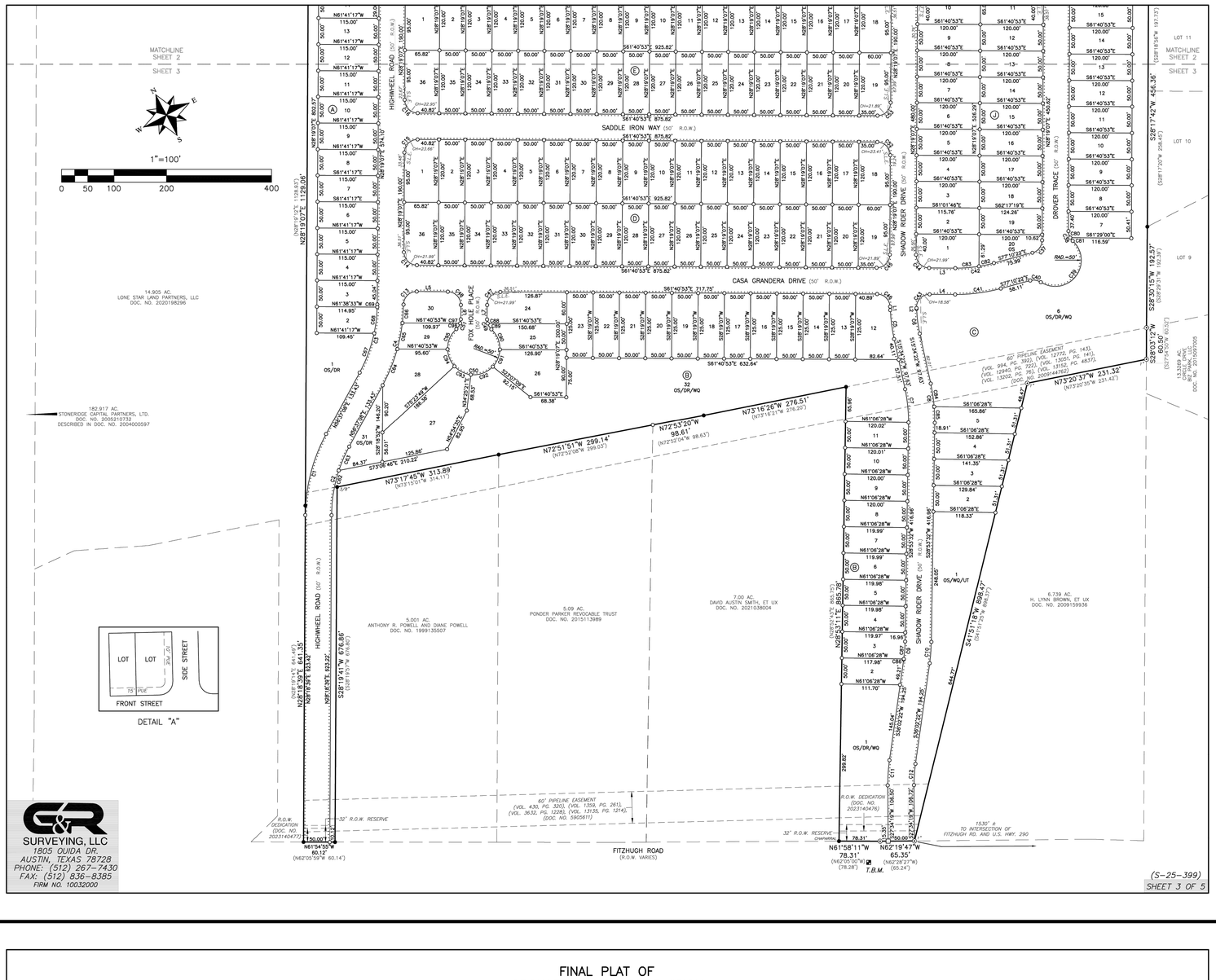
SHEET 6 OF 126	01/29/2026	CHECKED BY: CR	DRAWN BY: TAM	DESIGNED BY: BG	PROJECT NO: 1636-11741	FINAL PLAT (1 OF 3)	ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

NOTICE:
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER AUTHORITY TO DO SO BY THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE ENGINEERING PRACTICE ACT.

NO.	BY	DATE	REVISION DESCRIPTION

GRAY ENGINEERING
8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-PLAT.DWG DATE: 1/29/2026 4:56:07 PM BY: BGILMORE



FINAL PLAT OF ORCHARD RANCH SUBDIVISION

LINE TABLE

LINE	BEARING	DISTANCE
L1	S25°27'14"W	6.67'
L2	S25°27'14"W	1.62'
L3	N61°40'53"W	50.00'
L4	N61°40'53"W	48.59'
L5	N61°40'53"W	59.28'
L6	S28°19'07"W	27.40'
L7	S28°19'07"W	27.40'
L8	S17°18'52"W	31.21'
L9	S13°09'11"W	85.51'
L10	S04°22'25"E	48.59'
L11	S19°41'13"W	21.39'
L12	S33°36'35"W	40.66'
L13	S19°58'53"W	88.07'
L14	S18°02'16"W	61.43'
L15	S06°04'57"E	60.80'
L16	S12°07'31"W	4.68'
L17	S40°01'26"W	46.81'
L18	S24°02'00"W	66.46'
L19	S22°31'59"W	48.94'
L20	S23°03'08"W	62.14'
L21	S07°14'29"W	41.94'
L22	S11°51'37"W	47.32'
L23	S26°06'33"W	31.70'
L24	S21°59'13"W	39.11'
L25	S68°00'47"E	50.00'
L26	N21°59'13"E	37.31'
L27	N26°06'33"E	35.15'
L28	N11°51'37"E	55.59'
L29	N07°14'29"E	37.02'
L30	N23°03'08"E	55.42'
L31	N22°31'59"E	48.51'
L32	N24°02'00"E	58.78'
L33	N40°01'26"E	44.11'
L34	N33°09'11"E	30.09'
L35	S82°53'32"E	51.80'
L36	S14°23'58"E	55.94'
L37	S06°00'46"E	26.43'
L38	S00°00'00"E	28.31'
L39	S07°45'22"E	58.82'
L40	S05°58'05"E	51.75'
L41	N84°01'55"E	50.00'
L42	N05°58'05"W	52.53'
L43	N07°45'22"W	58.21'
L44	N00°00'00"W	25.54'
L45	N06°00'46"W	32.72'
L46	N14°23'58"W	65.52'
L47	N27°53'32"W	43.19'
L48	N26°04'57"W	28.75'
L49	N18°02'16"E	26.84'
L50	N19°58'53"E	67.80'
L51	N33°36'35"E	41.04'
L52	N19°41'33"E	71.68'
L53	N04°22'25"W	29.61'
L54	N33°09'11"E	55.42'
L55	N17°18'52"E	23.64'

CURVE TABLE

NO.	DELTA	RADIUS	ARC	CHORD BEARING	CHORD LENGTH	TANGENT
C1	28°18'29"	325.00'	160.57'	N42°27'23"E	158.94'	81.96'
C2	28°18'29"	275.00'	135.83'	S42°27'23"W	134.45'	69.35'
C3	28°18'01"	275.00'	135.83'	S42°28'07"W	134.46'	69.33'
C4	28°18'29"	325.00'	160.57'	N42°27'23"E	158.94'	81.94'
C5	5°49'52"	325.00'	56.05'	S20°03'48"W	55.98'	28.09'
C6	9°55'59"	275.00'	47.43'	S20°00'48"W	47.37'	23.77'
C7	13°19'10"	275.00'	63.93'	S29°21'53"W	63.78'	32.11'
C8	13°19'10"	325.00'	75.55'	S29°21'53"W	75.38'	37.95'
C9	7°08'50"	325.00'	40.54'	S32°27'57"W	40.52'	20.30'
C10	7°08'50"	325.00'	40.54'	S39°27'57"W	40.51'	20.30'
C11	8°29'22"	325.00'	48.01'	S31°49'11"W	47.97'	24.08'
C12	8°29'22"	275.00'	40.61'	S31°49'11"W	40.47'	20.29'
C13	90°00'00"	25.00'	39.27'	N73°19'07"E	35.36'	25.00'
C14	89°59'59"	25.00'	39.27'	N16°40'53"W	35.36'	25.00'
C15	90°00'01"	25.00'	39.27'	N73°19'07"E	35.36'	25.00'
C16	89°59'59"	25.00'	39.27'	N16°40'53"W	35.36'	25.00'
C17	90°00'01"	25.00'	39.27'	N73°19'07"E	35.36'	25.00'
C18	48°11'23"	25.00'	21.03'	N04°13'26"W	20.41'	11.18'
C19	186°22'46"	50.00'	162.65'	N73°19'07"E	99.85'	897.19'
C20	48°11'23"	25.00'	21.03'	S37°45'11"E	20.41'	11.18'
C21	90°00'00"	25.00'	39.27'	N73°19'07"E	35.36'	25.00'
C22	90°00'00"	25.00'	39.27'	N16°40'53"W	35.36'	25.00'
C23	90°00'00"	25.00'	39.27'	S73°19'07"W	35.36'	25.00'
C24	90°00'00"	25.00'	39.27'	N16°40'53"W	35.36'	25.00'
C25	90°00'00"	25.00'	39.27'	N73°19'07"E	35.36'	25.00'
C26	90°00'00"	25.00'	39.27'	N16°40'53"W	35.36'	25.00'
C27	90°00'00"	25.00'	39.27'	S16°40'53"E	35.36'	25.00'
C28	90°00'00"	25.00'	39.27'	N73°19'07"E	35.36'	25.00'
C29	90°00'00"	25.00'	39.27'	S16°40'53"E	35.36'	25.00'
C30	90°00'00"	25.00'	39.27'	N73°19'07"E	35.36'	25.00'
C31	90°00'00"	25.00'	39.27'	S16°40'53"E	35.36'	25.00'
C32	48°11'23"	25.00'	21.03'	S85°40'45"E	20.41'	11.18'
C33	186°22'46"	50.00'	162.65'	S16°40'53"E	99.85'	897.21'
C34	48°11'23"	25.00'	21.03'	S73°19'07"W	20.41'	11.18'
C35	90°00'00"	25.00'	39.27'	S73°19'07"W	35.36'	25.00'
C36	90°00'00"	25.00'	39.27'	S16°40'53"E	35.36'	25.00'
C37	74°30'11"	25.00'	32.51'	S55°24'23"E	30.27'	19.01'
C38	48°11'23"	25.00'	21.03'	S04°13'26"W	20.41'	11.18'
C39	170°53'17"	50.00'	149.13'	S65°44'23"W	99.68'	827.47'
C40	48°11'23"	25.00'	21.03'	N53°04'40"W	20.41'	11.18'
C41	15°39'29"	325.00'	88.82'	N73°19'07"E	87.60'	44.21'
C42	15°39'29"	275.00'	74.35'	N69°29'37"W	74.13'	37.40'
C43	9°21'53"	25.00'	40.59'	S71°43'11"W	36.23'	26.28'
C44	90°00'00"	25.00'	39.27'	N16°40'53"W	35.36'	25.00'
C45	90°00'00"	25.00'	39.27'	S73°19'07"W	35.36'	25.00'
C46	87°08'09"	25.00'	38.02'	S18°08'48"E	34.46'	23.78'
C47	90°00'00"	25.00'	39.27'	S73°19'07"W	35.36'	25.00'
C48	90°00'00"	25.00'	39.27'	N16°40'53"W	35.36'	25.00'
C49	48°11'23"	25.00'	21.03'	S04°13'26"W	20.41'	11.18'
C50	276°22'46"	50.00'	241.19'	N61°40'53"W	68.67'	44.72'
C51	48°11'23"	25.00'	21.03'	S85°40'45"E	20.41'	11.18'
C52	90°00'00"	25.00'	39.27'	S16°40'53"E	35.36'	25.00'
C53	90°00'00"	25.00'	39.27'	S73°19'07"W	35.36'	25.00'
C54	90°00'00"	25.00'	39.27'	S16°40'53"E	35.36'	25.00'
C55	90°00'00"	25.00'	39.27'	N73°19'07"E	35.36'	25.00'
C56	90°00'00"	25.00'	39.27'	S73°19'07"W	35.36'	25.00'
C57	90°00'00"	25.00'	39.27'	N16°40'53"W	35.36'	25.00'
C58	90°00'00"	25.00'	39.27'	N16°40'53"W	35.36'	25.00'
C59	90°00'00"	25.00'	39.27'	S73°19'07"W	35.36'	25.00'
C60	90°00'00"	25.00'	39.27'	N16°40'53"W	35.36'	25.00'
C61	90°00'00"	25.00'	39.27'	S73°19'07"W	35.36'	25.00'
C62	71°19'54"	275.00'	85.39'	S37°18'36"W	84.03'	43.50'
C63	10°18'35"	275.00'	49.48'	S51°27'50"W	49.42'	24.81'
C64	13°08'25"	325.00'	74.53'	N50°22'50"E	74.36'	37.43'
C65	8°58'45"	325.00'	50.93'	N38°59'25"E	50.88'	25.52'
C66	6°10'56"	325.00'	35.07'	N31°24'33"E	35.05'	17.55'
C67	18°44'29"	275.00'	89.99'	N48°13'08"E	89.61'	45.54'
C68	10°28'54"	275.00'	50.28'	N34°36'30"E	50.21'	25.21'
C69	1°03'07"	275.00'	5.05'	N29°50'40"E	5.05'	2.52'
C70	3°49'49"	50.00'	3.34'	S17°57'22"E	3.34'	1.67'
C71	51°52'07"	50.00'	45.27'	S13°12'08"W	43.76'	24.38'
C72	43°51'10"	50.00'	38.27'	S65°02'13"W	37.34'	20.13'
C73	43°51'21"	50.00'	38.27'	N71°08'29"W	37.33'	20.13'
C74	35°41'15"	50.00'	31.14'	N31°20'08"W	30.64'	16.10'
C75	3°45'46"	50.00'	3.28'	S72°00'37"W	3.28'	1.64'
C76	67°41'36"	50.00'	59.07'	N72°15'43"W	55.70'	33.53'
C77	41°50'59"	50.00'	36.52'	N17°29'27"W	35.71'	19.12'
C78	48°59'44"	50.00'	42.76'	N27°55'54"E	41.43'	22.78'
C79	24°04'44"	50.00'	21.01'	N64°28'08"E	20.86'	10.66'
C80	39°13'53"	25.00'	17.12'	S13°10'12"W	13.02'	8.77'
C81	17°53'39"	25.00'	7.81'	S19°55'50"E	7.78'	3.94'
C82	6°04'24"	275.00'	29.15'	S74°08'10"E	29.14'	14.59'
C83	9°23'05"	275.00'	45.20'	S66°23'22"E	45.15'	22.65'
C84	7°49'48"	325.00'	44.41'	N19°29'18"E	44.38'	22.24'
C85	2°29'29"	325.00'	13.14'	N26°08'51"E	13.13'	6.57'
C86	0°14'47"	275.00'	1.18'	N59°54'59"E	1.18'	0.59'
C87	6°54'03"	275.00'	33.12'	N62°20'34"E	33.10'	16.58'
C88	17°41'57"	25.00'	7.72'	S19°28'09"W	7.69'	3.89'
C89	30°29'28"	25.00'	13.30'	S04°57'13"E	13.15'	6.81'
C90	50°08'13"	25.00'	43.75'	N05°11'50"E	42.37'	23.39'
C91	41°17'38"	50.00'	36.04'	N50°54'44"E	35.26'	18.84'
C92	52°51'49"	50.00'	46.13'	S82°00'34"E	44.51'	24.85'
C93	40°58'29"	50.00'	35.76'	S35°05'23"E	35.00'	18.68'
C94	40°58'29"	50.00'	35.76'	S75°53'52"W	35.00'	18.68'
C95	50°08'12"	50.00'	43.75'	S01°26'24"W	42.37'	23.39'
C96	30°29'28"	25.00'	13.30'	N61°15'47"E	13.15'	6.81'
C97	17°41'57"	25.00'	7.72'	N37°10'05"E	7.69'	3.89'
C98	47°50'00"	25.00'	20.87'	N04°24'07"E	20.27'	11.09'
C99	48°32'39"	25.00'	21.18'	N52°35'27"E	20.55'	11.27'
C100	95°40'01"	50.00'	83.49'	N28°19'08"E	74.12'	55.21'
C101	97°29'57"	50.00'	84.73'	N65°11'50"E	74.95'	56.60'
C102	48°11'23"	25.00'	21.03'	N52°03'27"E	20.41'	11.18'
C103	48°11'23"	25.00'	21.03'	N03°52'04"E	20.41'	11.18'
C104	34°19'15"	75.00'	44.93'	S23°14'35"E	44.26'	23.16'
C105	51°40'47"	75.00'	67.65'	N19°45'27"E	65.38'	36.32'

LOT AREA TABLE

BLOCK/LOT	SQ. FT.	TYPE	BLOCK/LOT	SQ. FT.	TYPE	BLOCK/LOT	SQ. FT.	TYPE
A/1	35120	OS/DR	C/34	7086	R	F/3	6000	R
A/2	5644	R	C/35	7142	R	F/4	6000	R
A/3	5755	R	C/36	7128	R	F/5	6000	R
A/4	5750	R	C/37	7115	R	F/6	6000	R
A/5	5750	R	C/38	7101	R	F/7	6000	R
A/6	5750	R	C/39	7088	R	F/8	6000	R
A/7	5750	R	C/40	7075	R	F/9	6000	R
A/8	5750	R	C/41	7061	R	F/10	7666	R
A/9	5750	R	C/42	7048	R	F/11	7666	R
A/10	5750	R	C/43	7034	R	F/12	6000	R
A/11	5750	R	C/44	7021	R	F/13	6000	R
A/12	5750	R	C/45	7007	R	F/14	6000	R
A/13	5750	R	C/46	6994	R	F/15	6000	R
A/14	5680	R	C/47	6981	R	F/16	6000	R
A/15	6066	R	C/48	6967	R	F/17	6000	R
A/16	8338	R	C/49	8209	R	F/18	6000	R
A/17	5875	R	C/50	94946	OS/DR/WQ	F/19	6000	R
A/18	5478	R	D/1	7765	R	F/20	7666	R
A/19	6000	R	D/2	6000	R	G/1	7666	R
A/20	6000	R	D/3	6000	R	G/2	6000	R
A/21	6000	R	D/4	6000	R	G/3	6000	R
A/22	6000	R	D/5	6000	R	G/4	6000	R
A/23	6000	R	D/6	6000	R	G/5	6000	R
A/24	7066	R	D/7	6000	R	G/6	6000	R
A/25	70068	DT/-IRR	D/8	6000	R	G/7	7666	R
A/26	177780	OS/DR/WQ	D/9	6000	R	G/8	7666	R
B/1	20092	OS/DR/WQ	D/10	6000	R	G/9	6000	R
B/2	5742	R	D/11	6000	R	G/10	6000	R
B/3	5977	R	D/12	6000	R	G/11	6000	R
B/4	5999	R	D/13	6000	R	G/12	6000	R
B/5	5999	R	D/14	6000	R	G/13	6000	R
B/6	5999	R	D/15	6000	R	G/14	7666	R
B/7	6000	R	D/16	6000	R	H/1	7666	R
B/8	6000	R	D/17	6000	R	H/2	6000	R
B/9	6000	R	D/18	7066	R	H/3	6000	R
B/10	6000	R	D/19	7066	R	H/4	6000	R
B/11	6001	R	D/20	6000	R	H/5	6000	R
B/12	8767	R	D/21	6000	R	H/6	6000	R
B/13	6250	R	D/22	6000	R	H/7	7666	R
B/14	6250	R	D/23	6000	R	H/8	7666	R
B/15	6250	R	D/24	6000	R	H/9	6000	R
B/16	6250	R	D/25	6000	R	H/10	6000	R
B/17	6250	R	D/26	6000	R	H/11	6000	R
B/18	6250	R	D/27	6000	R	H/12	6000	R
B/19	6250	R	D/28	6000	R	H/13	6000	R
B/20	6250	R	D/29	6000	R	H/14	7666	R
B/21	6250	R	D/30	6000	R	I/1	7066	R
B/22	6250	R	D/31	6000	R	I/2	6000	R
B/23	6250	R	D/32	6000	R	I/3	6000	R
B/24	8975	R	D/33	6000	R	I/4	6000	R
B/25	6765	R	D/34	6000	R	I/5	6000	R
B/26	6274	R	D/35	6000	R	I/6	6000	R
B/27	16899	R	D/36	7765	R	I/7	6000	R
B/28	11730	R	E/1	7765	R	I/8	6000	R
B/29	4931	R	E/2	6000	R	I/9	6000	R
B/30	6306	R	E/3	6000	R	I/10	6000	R
B/31	6578	OS/DR	E/4	6000	R	I/11	6000	R
B/32	109322	OS/DR/WQ	E/5	6000	R	I/12	6000	R
C/1	58641	OS/WQ/UT	E/6	6000	R	I/13	7066	R
C/2	6204	R	E/7	6000	R	I/14	7066	R
C/3	6780	R	E/8	6000	R	I/15	6000	R
C/4	7355	R	E/9	6000	R	I/16	6000	R
C/5	7946	R	E/10	6000	R	I/17	6000	R
C/6	124414	OS/DR/WQ	E/11	6000	R	I/18	6000	R
C/7	6011	R	E/12	6000	R	I/19	6000	R
C/8	6000	R	E/13	6000	R	I/20	6000	R
C/9	6000	R	E/14	6000	R	I/21	6000	R
C/10	6000	R	E/15	6000	R	I/22	6000	R
C/11	6000	R	E/16	6000	R	I/23	6000	R
C/12	6000	R	E/17	6000	R	I/24	6000	R
C/13	6000	R	E/18	7066	R	I/25	6000	R
C/14	6000	R	E/19	7066	R	I/26	7066	R
C/15	6000	R	E/20	6000	R	J/1	7610	R
C/16	6000	R	E/21	6000	R	J/2	6000	R
C/17	6000	R	E/22	6000	R	J/3	6000	R
C/18	6000	R	E/23	6000	R	J/4	6000	R
C/19	6000	R	E/24	6000	R	J/5	6000	R
C/20	6000	R	E/25	6000	R	J/6	6000	R
C/21	6000	R	E/26	6000	R	J/7	6000	R
C/22	6000	R	E/27	6000	R	J/8	6000	R
C/23	6000	R	E/28	6000	R	J/9	6000	R
C/24	6000	R	E/29	6000	R	J/10	7666	R
C/25	6000	R	E/30	6000	R	J/11	7666	R
C/26	6000	R	E/31	6000	R	J/12	6000	R
C/27	6000	R	E/32	6000	R	J/13	6000	R
C/28	7524	R	E/33	6000	R	J/14	6000	R
C/29	7522	R	E/34	6000	R	J/15	6000	R
C/30	6448	R	E/35	6000	R	J/16	6000	R
C/31	9171	R	E/36	7765	R	J/17	6000	R
C/32	13635	R	F/1	7666	R	J/18	6000	R
C/33	9902	R	F/2	6000	R	J/19	6000	R
						J/20	5468	OS
						TOTAL	3022119	

STREET TABLE

STREET NAME	R.O.W. WIDTH	LENGTH (L.F.)	CLASSIFICATION
HIGHWHEEL ROAD	50'	1683'	LOCAL
SHADOW RIDER DRIVE	50'	2373'	LOCAL
CASA GRANDERA DRIVE	50'	1271'	LOCAL
SADDLE IRON WAY	50'	976'	LOCAL
CONCHO CAMP DRIVE	50'	1266'	LOCAL
PARADA STREET	50'	580'	LOCAL
PAINT HORSE DRIVE	50'	870'	LOCAL
ROUGH RIG ROAD	50'	975'	LOCAL
TWISTER ROAD	50'	430'	LOCAL
DROVER TRACE	50'	1259'	LOCAL
FOX HOLE PLACE	50'	133'	LOCAL

LAND USE SCHEDULE

DESCRIPTION	NO.	ACREAGE
RESIDENTIAL	264	38.881
OPEN SPACE	1	0.126
OPEN SPACE/DRAINAGE	2	0.953
OPEN SPACE/DRAINAGE/WATER QUALITY	5	12.295
OPEN SPACE/WATER QUALITY/UTILITY	1	0.823
EFFLUENT IRRIGATION	1	16.301
RIGHT-OF-WAY	–	13.532
TOTAL	274	82.911

SURVEYING, LLC
1805 OUIDA DR.
AUSTIN, TEXAS 78728
PHONE: (512) 267-7430
FAX: (512) 836-8385
FIRM NO. 10032000

(S-25-399)
SHEET 4 OF 5

SHEET 7 OF 126

01/29/2026

NOTICE: ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER AUTHORITY IS A VIOLATION OF THE PRACTICE ACT.

CHECKED BY: CR

DRAWN BY: TAM

DESIGNED BY: BG

PROJECT NO: 1636-11741

FINAL PLAT (2 OF 3)

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

NO.	BY	DATE	REVISION DESCRIPTION

GRAY ENGINEERING
8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

FINAL PLAT OF
ORCHARD RANCH SUBDIVISION

STATE OF TEXAS:
COUNTY OF TRAVIS:

DEDICATION STATEMENT:

KNOW ALL MEN BY THESE PRESENTS THAT CLAYTON PROPERTIES GROUP, INC. (D.B.A. BROHN HOMES), BEING THE OWNER OF THOSE CERTAIN 71.10 ACRE AND 11.80 ACRE TRACTS, CONVEYED TO IT BY DEED OF RECORD IN DOCUMENT NO. 2018073892, OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS, DOES HEREBY SUBDIVIDE 82.911 ACRES OF LAND OUT OF THE B.D. BASSFORD SURVEY NO. 625, ABS. NO. 84, TRAVIS COUNTY, TEXAS, IN ACCORDANCE WITH THE MAP OR PLAT ATTACHED HERETO, PURSUANT TO CHAPTER 212 OF THE TEXAS LOCAL GOVERNMENT CODE TO BE KNOWN AS "ORCHARD RANCH SUBDIVISION", AND DO HEREBY DEDICATE TO THE PUBLIC THE USE OF ALL STREETS AND EASEMENTS SHOWN HEREON, SUBJECT TO ANY EASEMENTS, COVENANTS OR RESTRICTIONS HERETOFORE GRANTED AND NOT RELEASED.

WITNESS MY HAND THIS THE _____DAY OF _____, 20___ A.D.

BY: _____

PRINTED NAME: _____

COMPANY NAME: _____

ADDRESS: _____

CITY, STATE, ZIPCODE: _____

STATE OF TEXAS:

COUNTY OF _____:

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 IN THE CAPACITY THEREIN STATED FOR THE PURPOSES AND CONSIDERATION THEREIN EXPRESSED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, THIS THE ____ DAY OF _____, 20___, A.D.

_____
NOTARY PUBLIC FOR THE STATE OF TEXAS

MY COMMISSION EXPIRES:_____

WITNESS MY HAND THIS THE _____DAY OF _____, 20___ A.D.

STATE OF TEXAS:
COUNTY OF TRAVIS:

THAT I, PHILLIP L. MCLAUGHLIN, AM AUTHORIZED UNDER THE LAWS OF THE STATE OF TEXAS TO PRACTICE THE PROFESSION OF LAND SURVEYING, AND DO HEREBY CERTIFY THAT THIS PLAT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND WAS PREPARED FROM AN ACTUAL ON THE GROUND SURVEY OF THE PROPERTY UNDER MY SUPERVISION AND SHALL COMPLY WITH CHAPTER 482, TRAVIS COUNTY SUBDIVISION REGULATIONS.

_____ _____
PHILLIP L. MCLAUGHLIN, R.P.L.S. NO. 5300 DATE
C&R SURVEYING, LLC
1805 OUIDA DRIVE
AUSTIN, TX 78728
(512) 267-7430

STATE OF TEXAS:
COUNTY OF TRAVIS:

NO PORTION OF THIS SUBDIVISION IS WITHIN THE DESIGNATED FLOOD HAZARD AREA AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAPS (FIRM) NO. 48453C0555J, TRAVIS COUNTY, TEXAS, DATED JANUARY 22, 2020.

I, BRANDON GILMORE, P.E., AM AUTHORIZED UNDER THE LAWS OF THE STATE OF TEXAS TO PRACTICE THE PROFESSION OF ENGINEERING, AND DO HEREBY CERTIFY THAT THIS PLAT IS FEASIBLE FROM AN ENGINEERING STANDPOINT, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND SHALL COMPLY WITH CHAPTER 482, TRAVIS COUNTY SUBDIVISION REGULATIONS.

_____ _____
BRANDON GILMORE, P.E. NO. 150018 DATE
GRAY ENGINEERING, INC.
8834 N. CAPITAL OF TEXAS HIGHWAY, SUITE 140
AUSTIN, TEXAS 78759
FIRM REGISTRATION F-2946

C&R SURVEYING, LLC
1805 OUIDA DR.
AUSTIN, TEXAS 78728
PHONE: (512) 267-7430
FAX: (512) 836-8385
FIRM NO. 10032000

PLAT NOTES:

1) WATER SERVICE FOR THIS SUBDIVISION WILL BE PROVIDED BY WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY. WASTEWATER SHALL BE PROVIDED BY OWNER AND REGULATED BY TCEQ.

2) NO LOT SHALL BE OCCUPIED UNTIL THE STRUCTURE IS CONNECTED TO THE WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY WATER SYSTEM. WASTEWATER TREATMENT PLANT HAS BEEN CONSTRUCTED AND APPROVED FOR OPERATION BY TCEQ.

3) THE OWNER OF THIS SUBDIVISION, AND HIS OR HER SUCCESSORS AND ASSIGNS, ASSUMES RESPONSIBILITY FOR PLANS FOR CONSTRUCTION OF SUBDIVISION IMPROVEMENTS WHICH COMPLY WITH APPLICABLE CODES AND REQUIREMENTS OF TRAVIS COUNTY. THE OWNER UNDERSTANDS AND ACKNOWLEDGES THAT PLAT VACATION OR REPLATTING MAY BE REQUIRED, AT THE OWNER'S SOLE EXPENSE, IF PLANS TO CONSTRUCT THIS SUBDIVISION DO NOT COMPLY WITH SUCH CODES AND REQUIREMENTS.

4) PRIOR TO CONSTRUCTION ON LOTS IN THIS SUBDIVISION, DRAINAGE PLANS WILL BE SUBMITTED TO TRAVIS COUNTY FOR REVIEW. RAINFALL RUN-OFF SHALL BE HELD TO THE AMOUNT EXISTING AT UNDEVELOPED STATUS BY PONDING OR OTHER APPROVED METHODS.

5) THE OWNER SHALL BE RESPONSIBLE FOR INSTALLATION OF TEMPORARY EROSION CONTROL, REVEGETATION AND TREE PROTECTION. IN ADDITION, THE OWNER SHALL BE RESPONSIBLE FOR ANY INITIAL TREE PRUNING AND TREE REMOVAL THAT IS WITHIN TEN FEET OF THE CENTER LINE OF THE PROPOSED OVERHEAD ELECTRICAL FACILITIES DESIGNED TO PROVIDE ELECTRIC SERVICE TO THIS PROJECT.

6) A FIFTEEN FOOT ELECTRIC AND TELECOMMUNICATIONS EASEMENT IS REQUIRED ADJACENT TO ALL STREET RIGHTS-OF-WAY EXCEPT AS SHOWN IN DETAIL "A".

7) PUBLIC SIDEWALKS, SHALL BE BUILT TO TRAVIS COUNTY STANDARDS ALONG ALL ROADS, AS SHOWN BY A DOTTED LINE ON THE FACE OF THE PLAT. THESE SIDEWALKS MAY RESULT IN THE WITHHOLDING OF CERTIFICATES OF OCCUPANCY, BUILDING PERMITS, OR UTILITY CONNECTIONS BY THE GOVERNING BODY OR UTILITY COMPANY.

8) BY APPROVING THIS PLAT, TRAVIS COUNTY ASSUMES NO OBLIGATION TO CONSTRUCT ANY INFRASTRUCTURE IN CONNECTION WITH THIS SUBDIVISION. ANY SUBDIVISION INFRASTRUCTURE REQUIRED FOR THE DEVELOPMENT OF THE LOTS IN THIS SUBDIVISION IS THE RESPONSIBILITY OF THE DEVELOPER AND/OR THE OWNERS OF THE LOTS. FAILURE TO CONSTRUCT ANY REQUIRED INFRASTRUCTURE TO TRAVIS COUNTY STANDARDS MAY BE JUST CAUSE FOR THE COUNTY TO DENY APPLICATIONS FOR CERTAIN DEVELOPMENT PERMITS INCLUDING BUILDING PERMITS, SITE PLAN APPROVALS, AND/OR CERTIFICATES OF OCCUPANCY.

9) PARKLAND DEDICATION HAS BEEN SATISFIED VIA PAYMENT OF A FEE IN LIEU OF LAND TO TRAVIS COUNTY FOR 264 DWELLING UNITS.

10) NO OBJECTS, INCLUDING BUT NOT LIMITED TO, BUILDINGS, FENCES, OR LANDSCAPING SHALL BE ALLOWED IN A DRAINAGE EASEMENT EXCEPT AS APPROVED BY TRAVIS COUNTY (AND OTHER APPROPRIATE JURISDICTION).

11) PROPERTY OWNER AND/OR HIS/HER ASSIGNS SHALL PROVIDE FOR ACCESS TO THE DRAINAGE EASEMENTS AS MAY BE NECESSARY AND SHALL NOT PROHIBIT ACCESS BY TRAVIS COUNTY FOR INSPECTION OR MAINTENANCE OF SAID EASEMENT.

12) ALL DRAINAGE EASEMENTS ON PRIVATE PROPERTY SHALL BE MAINTAINED BY THE OWNER AND/OR HIS/HER ASSIGNS.

13) A TRAVIS COUNTY DEVELOPMENT PERMIT IS REQUIRED PRIOR TO SITE DEVELOPMENT.

14) BLOCK A, LOTS 1, 25, AND 26; BLOCK B, LOTS 1, 31, AND 32; BLOCK C, LOTS 1, 6, AND 50, WILL BE OWNED AND MAINTAINED BY THE ESTABLISHED HOMEOWNERS ASSOCIATION OF THIS SUBDIVISION.

15) WITHIN A SIGHT LINE EASEMENT, ANY OBSTRUCTION OF SIGHT LINE BY VEGETATION, FENCING, EARTHWORK, BUILDINGS, SIGNS, OR ANY OTHER OBJECT WHICH IS DETERMINED TO CAUSE A TRAFFIC HAZARD IS PROHIBITED AND MAY BE REMOVED BY ORDER OF THE TRAVIS COUNTY COMMISSIONERS COURT AT THE OWNER'S EXPENSE. THE PROPERTY OWNER IS TO MAINTAIN AN UNOBSTRUCTED VIEW CORRIDOR WITHIN THE BOUNDS OF SUCH EASEMENT AT ALL TIMES.

16) THE LOTS IN THIS SUBDIVISION RECEIVE POTABLE WATER SERVICE, EITHER DIRECTLY OR VIA WHOLESALE CONTRACT, FROM THE WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY. AS SUCH, THE PROPERTY IS SUBJECT TO COMPLIANCE WITH THE TERMS SET FORTH IN THE MAY 24, 2000 UNITED STATES FISH AND WILDLIFE SERVICE MEMORANDUM OF UNDERSTANDING WITH THE LOWER COLORADO RIVER AUTHORITY.

17) NO LOTS IN THIS SUBDIVISION CONTAIN USFWS STREAM BUFFER ZONES AND/OR SENSITIVE FEATURE BUFFER ZONES.

18) COMMON, DRAINAGE EASEMENT, AND OPEN SPACE LOTS WILL BE OWNED AND MAINTAINED BY THE ESTABLISHED HOMEOWNERS ASSOCIATION OF THIS SUBDIVISION.

19) PROPERTY OWNER SHALL SUBMIT PLANS FOR CONSTRUCTION ACTIVITY (INCLUDING BUT NOT LIMITED TO GRADE CHANGES, TEMPORARY OR PERMANENT, FENCE INSTALLATIONS, ROADS, ABOVE GROUND APPURTENANCES, SEPTIC SYSTEMS) WITHIN THE PEDERNALES ELECTRIC COOPERATIVE, INC (PEC) ELECTRIC TRANSMISSION EASEMENT FOR REVIEW TO ENSURE THAT ACTIVITIES WILL NOT INTERFERE WITH THE SAFE AND EFFICIENT OPERATION OF THE TRANSMISSION LINE.

20) PROPERTY OWNER SHALL NOTIFY PEC 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION.

21) PROPERTY OWNER SHALL NOT CONSTRUCT, LOCATE, OR CAUSE TO BE CONSTRUCTED OR LOCATED, ANY BUILDING OR HABITABLE STRUCTURE WITHIN PEC'S TRANSMISSION EASEMENT AND RIGHT-OF-WAY.

22) PROPERTY OWNER SHALL NOT STORE MATERIALS, EQUIPMENT, OR SPOILS WITHIN THE PEC ELECTRIC TRANSMISSION EASEMENT.

23) FENCES THAT CROSS THE PEC EASEMENT SHALL CROSS THE EASEMENT PERPENDICULAR TO THE CENTERLINE OF THE EASEMENT AND A GATE WITH A MINIMUM OF 16 FEET OPENING SHALL BE INSTALLED AND INCLUDE A PROVISION FOR THE INSTALLATION OF A PEC LOCK.

24) TEMPORARY OR PERMANENT FENCING LOCATED WITHIN THE PEC ELECTRIC TRANSMISSION EASEMENT SHALL NOT INTERFERE WITH PEC'S 24-HOUR ACCESS TO FACILITIES INSTALLED WITHIN THE EASEMENT.

25) AS DEPICTED ON THE PLAT, EACH PROTECTIVE EASEMENT FROM A CRITICAL ENVIRONMENTAL FEATURE, INCLUDING A CAVE, SINKHOLE, POINT RECHARGE FEATURE, JURISDICTIONAL WETLAND, AND SPRING MUST REMAIN IN ITS EXISTING, UNDEVELOPED, NATURAL STATE. NATURAL VEGETATIVE COVER MUST BE RETAINED. CONSTRUCTION ACTIVITIES, WASTEWATER DISPOSAL, AND WASTEWATER IRRIGATION ARE PROHIBITED WITHIN A PROTECTIVE EASEMENT. A RESIDENTIAL LAWN OR TRAIL IS ALLOWED IF IT IS LOCATED AT LEAST 50 FEET FROM THE EDGE OF A CRITICAL ENVIRONMENTAL FEATURE IN ACCORDANCE WITH THE TRAVIS COUNTY CODE.

26) AS DEPICTED ON THE PLAT, THE SETBACK AREA IDENTIFIED FOR EACH WATERWAY IS A PROTECTIVE EASEMENT THAT MUST REMAIN UNDEVELOPED AND ACTIVITIES MUST BE LIMITED WITHIN THE EASEMENT. THE PROTECTIVE EASEMENT MUST REMAIN FREE OF CONSTRUCTION, DEVELOPMENT, AND OTHER ALTERATIONS EXCEPT WHEN SPECIFICALLY APPROVED IN A TRAVIS COUNTY DEVELOPMENT PERMIT.

27) BEFORE BEGINNING CONSTRUCTION ACTIVITIES ON A SUBDIVISION LOT, THE OWNER MUST OBTAIN A TRAVIS COUNTY DEVELOPMENT PERMIT AND, WHEN APPLICABLE, OBTAIN AND IMPLEMENT A STORM WATER POLLUTION PREVENTION PLAN (SWP3). THE SWP3 REQUIRES IMPLEMENTATION OF TEMPORARY AND PERMANENT BEST MANAGEMENT PRACTICES, INCLUDING EROSION AND SEDIMENT CONTROLS, FOR PROTECTION OF STORM WATER RUNOFF QUALITY, IN ACCORDANCE WITH THE TRAVIS COUNTY CODE.

28) THE OWNER IS RESPONSIBLE FOR MAINTAINING AND OPERATING ALL PERMANENT WATER QUALITY CONTROLS IN COMPLIANCE WITH ALL APPLICABLE STANDARDS AND REQUIREMENTS OF THE TRAVIS COUNTY CODE.

29) AN ACTIVITY THAT MAY ADVERSELY AFFECT A TREE OF EIGHT INCHES OR MORE IN TRUNK DIAMETER (MEASURED AT FOUR FEET HEIGHT ABOVE THE GROUND) IN A RIGHT-OF-WAY ACCEPTED FOR MAINTENANCE BY TRAVIS COUNTY MUST COMPLY WITH ALL STANDARDS AND REQUIREMENTS IN THE TRAVIS COUNTY CODE.

30) EROSION/SEDIMENTATION CONTROLS ARE REQUIRED FOR ALL CONSTRUCTION ON EACH LOT INCLUDING SINGLE FAMILY AND DUPLEX CONSTRUCTION PURSUANT TO THE LAND DEVELOPMENT CODE AND THE ENVIRONMENTAL CRITERIA MANUAL.

31) THE OWNER SHALL CONSTRUCT AND POST FISCAL SECURITY FOR SIDEWALKS AND CURB RAMPS ON ARTERIAL AND COLLECTOR STREETS AND ADJACENT TO SCHOOLS, PARKS, OR OTHER COMMON AREAS CONCURRENT WITH CONSTRUCTION AND POSTING OF FISCAL SECURITY FOR SUBDIVISION INFRASTRUCTURE. IF RESIDENTIAL CONSTRUCTION OR OTHER SITE DEVELOPMENT WILL OCCUR SHORTLY AFTER STREET CONSTRUCTION, THE COUNTY EXECUTIVE MAY GRANT VARIANCES WHEREBY SIDEWALKS AND CONSTRUCTED AND FISCAL SECURITY POSTED AT A LATER DATE AND/OR BY THE HOMEBUILDER OR OTHER PERSON UNDERTAKING SITE DEVELOPMENT IN LIEU OF THE OWNER.

TRAVIS COUNTY COMMISSIONERS COURT RESOLUTION

IN APPROVING THIS PLAT BY THE COMMISSIONERS COURT OF TRAVIS COUNTY, TEXAS, ASSUMES NO OBLIGATION TO BUILD THE STREETS, ROADS, AND OTHER PUBLIC THOROUGHFARES SHOWN ON THIS PLAT OR ANY BRIDGES OR CULVERTS IN CONNECTION THEREWITH. THE BUILDINGS OF ALL STREETS, ROADS AND OTHER PUBLIC THOROUGHFARES SHOWN ON THIS PLAT, AND ALL BRIDGES AND CULVERTS NECESSARY TO BE CONSTRUCTED OR PLACED IN SUCH STREETS, ROADS, OR OTHER PUBLIC THOROUGHFARES OR IN CONNECTION THEREWITH, IS THE RESPONSIBILITY OF THE OWNER AND/OR DEVELOPER OF THE TRACT OF LAND COVERED BY THIS PLAT IN ACCORDANCE WITH PLANS AND SPECIFICATIONS PRESCRIBED BY THE COMMISSIONERS COURT OF TRAVIS COUNTY, TEXAS.

THIS SUBDIVISION IS NOT LOCATED IN THE CITY OF AUSTIN'S EXTRA-TERRITORAL JURISDICTION.

IN APPROVING THIS PLAT, THE COMMISSIONERS' COURT OF TRAVIS COUNTY, TEXAS, ASSUMES NO OBLIGATION TO BUILD THE STREETS, ROADS, AND OTHER PUBLIC THOROUGHFARES SHOWN ON THIS PLAT OR ANY BRIDGES OR CULVERTS IN CONNECTION THEREWITH. THE BUILDING OF ALL STREETS, ROADS, AND OTHER PUBLIC THOROUGHFARES SHOWN ON THIS PLAT, AND ALL BRIDGES AND CULVERTS NECESSARY TO BE CONSTRUCTED OR PLACED IN SUCH STREETS, ROADS, OR OTHER PUBLIC THOROUGHFARES OR IN CONNECTION THEREWITH, IS THE RESPONSIBILITY OF THE OWNER AND/OR DEVELOPER OF THE TRACT OF LAND COVERED BY THIS PLAT IN ACCORDANCE WITH PLANS AND SPECIFICATIONS PRESCRIBED BY THE COMMISSIONERS' COURT OF TRAVIS COUNTY, TEXAS.

THE OWNER(S) OF THE SUBDIVISION SHALL CONSTRUCT THE SUBDIVISION'S STREET AND DRAINAGE IMPROVEMENTS (THE "IMPROVEMENTS") TO COUNTY STANDARDS IN ORDER FOR THE COUNTY TO ACCEPT THE PUBLIC IMPROVEMENTS FOR MAINTENANCE OR TO RELEASE FISCAL SECURITY POSTED TO SECURE PRIVATE IMPROVEMENTS. TO SECURE THIS OBLIGATION, THE OWNER(S) MUST POST FISCAL SECURITY WITH THE COUNTY IN THE AMOUNT OF THE ESTIMATED COST OF THE IMPROVEMENTS. THE OWNER(S)' OBLIGATION TO CONSTRUCT THE IMPROVEMENTS TO COUNTY STANDARDS AND TO POST THE FISCAL SECURITY TO SECURE SUCH CONSTRUCTION IS A CONTINUING OBLIGATION BINDING ON THE OWNERS AND THEIR SUCCESSORS AND ASSIGNS UNTIL THE PUBLIC IMPROVEMENTS HAVE BEEN ACCEPTED FOR MAINTENANCE BY THE COUNTY, OR THE PRIVATE IMPROVEMENTS HAVE BEEN CONSTRUCTED AND ARE PERFORMING TO COUNTY STANDARDS.

THE AUTHORIZATION OF THIS PLAT BY THE COMMISSIONERS' COURT FOR FILING OR THE SUBSEQUENT ACCEPTANCE FOR MAINTENANCE BY TRAVIS COUNTY, TEXAS, OF ROADS AND STREETS IN THE SUBDIVISION DOES NOT OBLIGATE THE COUNTY TO INSTALL STREET NAME SIGNS OR ERECT TRAFFIC CONTROL SIGNS, SUCH AS SPEED LIMIT, STOP SIGNS, AND YELD SIGNS, WHICH IS CONSIDERED TO BE A PART OF THE DEVELOPER'S CONSTRUCTION.

STATE OF TEXAS:
COUNTY OF TRAVIS:

BY APPROVING THIS PLAT, THE TRAVIS COUNTY ASSUMES NO OBLIGATION TO CONSTRUCT ANY INFRASTRUCTURE IN CONNECTION WITH THIS SUBDIVISION. ANY SUBDIVISION INFRASTRUCTURE REQUIRED FOR THE DEVELOPMENT OF THE LOTS IN THIS SUBDIVISION IS THE RESPONSIBILITY OF THE DEVELOPER AND/OR THE OWNERS OF THE LOTS. FAILURE TO CONSTRUCT ANY REQUIRED INFRASTRUCTURE TRAVIS COUNTY STANDARDS MAY BE JUST CAUSE FOR THE TRAVIS COUNTY TO DENY APPLICATIONS FOR CERTAIN DEVELOPMENT PERMITS INCLUDING BUILDING PERMITS, SITE PLAN APPROVALS, AND/OR CERTIFICATES OF OCCUPANCY.

APPROVED, ACCEPTED AND AUTHORIZED FOR RECORD, UNDER SECTION 482.201 TRAVIS COUNTY SUBDIVISION REGULATIONS, BY THE COUNTY EXECUTIVE OF TRANSPORTATION AND NATURAL RESOURCES, TRAVIS COUNTY,

THIS THE _____ DAY OF _____, 20___, AD.

_____
CYNTHIA C. MCDONALD, COUNTY EXECUTIVE DATE
TRANSPORTATION AND NATURAL RESOURCES

STATE OF TEXAS:
COUNTY OF TRAVIS:

I DYANA LIMON-MERCADO, CLERK OF THE COUNTY COURT OF TRAVIS COUNTY, TEXAS, DO HEREBY CERTIFY THAT ON THE _____ DAY OF _____, 20_____ A.D., THE COMMISSIONER'S COURT OF TRAVIS COUNTY, TEXAS, PASSED AN ORDER AUTHORIZING THE FILING FOR RECORD OF THIS PLAT AND THAT SAID ORDER WAS DULY ENTERED IN THE MINUTES OF SAID COURT.

WITNESS MY HAND AND SEAL OF OFFICE OF THE COUNTY COURT OF SAID COUNTY, THE ____ DAY OF _____, 20 ____ A.D.

DYANA LIMON-MERCADO, COUNTY CLERK
TRAVIS COUNTY, TEXAS

_____
DEPUTY

STATE OF TEXAS:
COUNTY OF TRAVIS:

I, DYANA LIMON-MERCADO, CLERK OF TRAVIS COUNTY, TEXAS, DO HEREBY CERTIFY THE FOREGOING INSTRUMENT OF WRITING, AND ITS CERTIFICATE OF AUTHENTICATION, WAS FILED FOR RECORD IN MY OFFICE ON THE ____ DAY OF _____, 20____, A.D. AT _____ O'CLOCK ___M., AND WAS DULY RECORDED ON THIS THE ____ DAY OF _____, 20 ____, A.D. AT _____ O'CLOCK ___M, PLAT RECORDS OF SAID COUNTY AND STATE IN DOCUMENT NO. _____ OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS.

WITNESS MY HAND AND SEAL OF OFFICE OF THE COUNTY CLERK, THIS THE ____ DAY OF _____,
20 ____, A.D.

DYANA LIMON-MERCADO, COUNTY CLERK
TRAVIS COUNTY, TEXAS

_____
DEPUTY

(S-25-399)
SHEET 5 OF 5

01/29/2026

NOTICE
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER AUTHORITY IS RESPONSIBLE ENGINEER IS A VIOLATION OF THE ENGINEERING PRACTICE ACT.

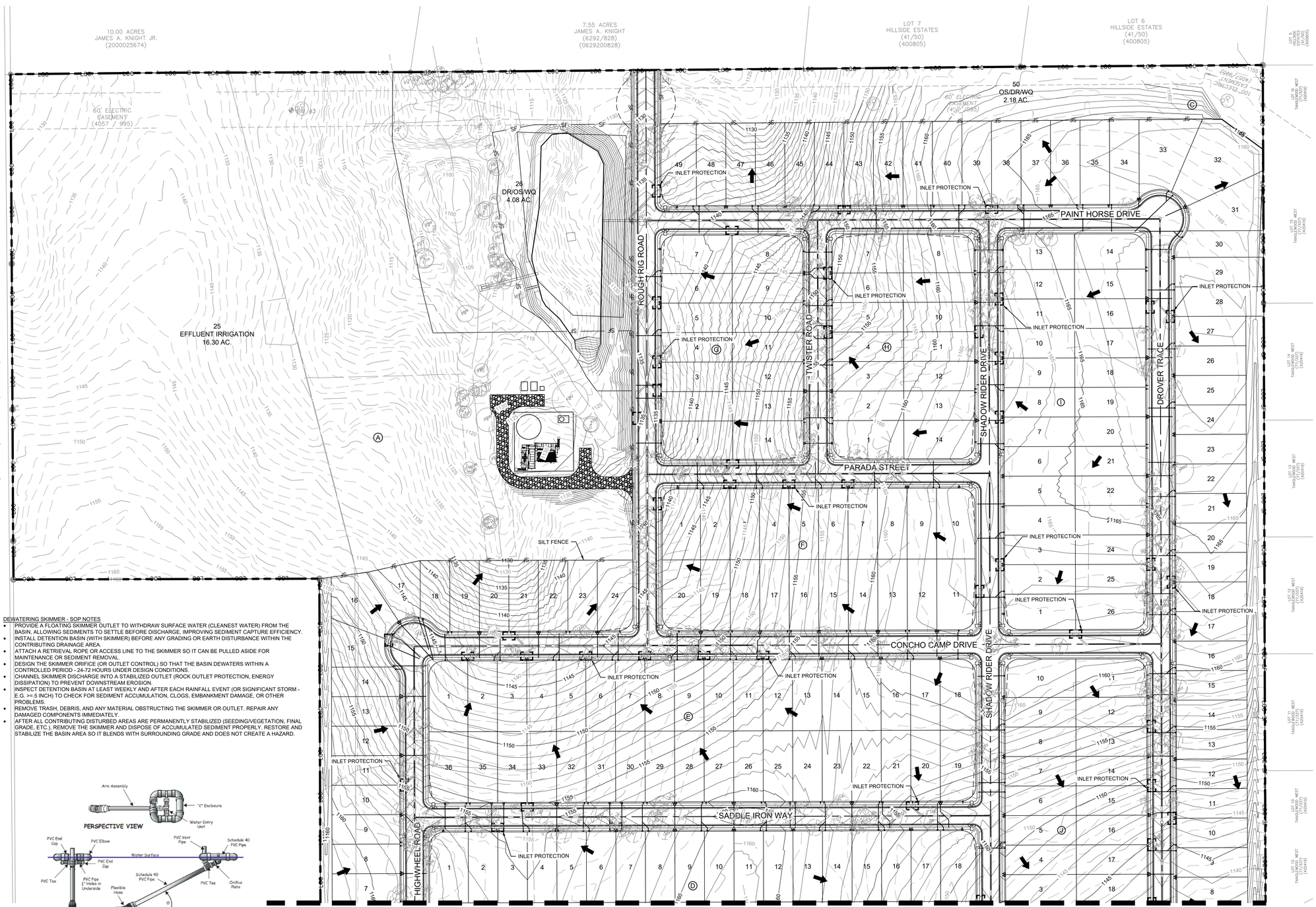
CHECKED BY: CR
DRAWN BY: TAM
DESIGNED BY: BG
PROJECT NO: 1636-11741

FINAL PLAT (3 OF 3)

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

NO.	BY	DATE	REVISION DESCRIPTION

GRAY ENGINEERING
8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946



MATCHLINE TO SHEET 10

SCALE: 1" = 80'
GRAPHIC SCALE IN FEET
0 40' 80' 160'

LEGEND

- PROPERTY BOUNDARY
- PHASE BOUNDARY
- LOC — LIMITS OF CONSTRUCTION
- SF — SILT FENCE
- XXX — EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- XXX — PROPOSED MAJOR CONTOURS
- PROPOSED MINOR CONTOURS
- TP — TREE PROTECTION
- INLET PROTECTION
- ROCK BERM
- FLOW DIRECTION
- DIVERSION DIKE
- CONSTRUCTION ENTRANCE
- CONCRETE WASHOUT AREA
- SPOILS PILE
- CEF BUFFER
- WETLAND

TRAVIS COUNTY ESC NOTES:

1. IF AN ADDITIONAL CONCRETE WASHOUT IS NEEDED, THE LOCATION WILL BE DETERMINED ONCE CONSTRUCTION HAS BEGUN AND WILL BE PROPERLY NOTATED ON THE ESC PLAN SHEET AND SWP3 AT THAT TIME.
2. ALL REQUIRED NOTICES AND PERMITS MUST BE PLACED IN A HIGHLY VISIBLE LOCATION ONSITE BEFORE THE COMMENCEMENT OF CONSTRUCTION.
3. ALL EROSION AND SEDIMENTATION CONTROLS (ESC) MUST BE INSTALLED PRIOR TO ANY DISTURBANCE TO THE PROJECT SITE.
4. INSTALL SILT FENCE ACCORDINGLY FOR RUN-ON DIVERSION OR OFFSITE SEDIMENT CONTROL DEPENDING ON UP OR DOWN SLOPE, FACING POST SIDE ON THE DOWN GRADIENT SIDE.
5. ALL ESC USED ONSITE MUST BE REGULARLY MONITORED AND MAINTAINED AS NEEDED.
6. MUD AND OR DIRT TRACKED INTO THE ROADWAY MUST BE IMMEDIATELY REMOVED UPON DISCOVERY.
7. EXCESS MATERIALS THAT WILL BE TRANSPORTED TO AN OFFSITE LOCATION MUST HAVE THAT LOCATION CLEARED BY COUNTY INSPECTOR.
8. LOOSE TRASH AND DEBRIS MUST BE DISPOSED OF PROPERLY ONSITE.
9. CONTRACTOR SHALL MAINTAIN AND UTILIZE DUST CONTROL FOR THE DURATION OF THE PROJECT.
10. THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT PREVENTS TRACKING ONTO THE PUBLIC ROADWAY ON AN ONGOING/REGULAR BASIS.
11. INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY UPON INLET INSTALLATION.
12. INITIATE TEMPORARY STABILIZATION WHEN CONSTRUCTION CEASES IN A DISTURBED AREA FOR 14 DAYS.
13. INITIATE PERMANENT STABILIZATION IMMEDIATELY ONCE WORK HAS CEASED AND FINAL GRADE HAS BEEN ACHIEVED.
14. ALL DISTURBED/BARE AREAS WILL REQUIRE PERMANENT STABILIZATION BEFORE FINAL ACCEPTANCE CAN BE ACHIEVED. AVOID DISTURBING AREAS OF THE PROJECT THAT ARE NOT NECESSARY FOR CONSTRUCTION.
15. COUNTY INSPECTOR MAY REQUEST ADDITIONAL CONTROLS BE INSTALLED ONSITE AS NEEDED.
16. TEMPORARY ESC MEASURES SHALL REMAIN IN PLACE IN ALL DISTURBED AREAS UNTIL ADEQUATE STABILIZATION HAS BEEN ACHIEVED.
17. CONTRACTOR MUST REMOVE SEDIMENT FROM ALL STORM SEWER INLET BOXES, LINES, PIPES AND CULVERTS BEFORE CONDITIONAL/FINAL ACCEPTANCE CAN OBTAINED.
18. TRAVIS COUNTY REQUIRES CERTIFIED SWP3 INSPECTORS TO CONDUCT SWP3 INSPECTIONS AND REPORTING ON ALL PROJECTS WITH ONE ACRE OF DISTURBANCE AND LARGER.
19. PERMITTEE SHALL INSPECT ALL INLET PROTECTION DEVICES AS PART OF THE WEEKLY SWP3 REPORT, UPON RECEIVING A FORECAST CALLING FOR A RAIN EVENT FOR AN EXTENDED PERIOD. MODIFICATION OF INLET PROTECTION SHOULD BE MADE TO PREVENT FLOODING OR PONDING OF WATER IF TRAFFIC OR PROPERTY CONCERNS ARISE.

DEWATERING SKIMMER - SOP NOTES

- PROVIDE A FLOATING SKIMMER OUTLET TO WITHDRAW SURFACE WATER (CLEANEST WATER) FROM THE BASIN, ALLOWING SEDIMENTS TO SETTLE BEFORE DISCHARGE, IMPROVING SEDIMENT CAPTURE EFFICIENCY.
- INSTALL DETENTION BASIN (WITH SKIMMER) BEFORE ANY GRADING OR EARTH DISTURBANCE WITHIN THE CONTRIBUTING DRAINAGE AREA.
- ATTACH A RETRIEVAL ROPE OR ACCESS LINE TO THE SKIMMER SO IT CAN BE PULLED ASIDE FOR MAINTENANCE OR SEDIMENT REMOVAL.
- DESIGN THE SKIMMER ORIFICE (OR OUTLET CONTROL) SO THAT THE BASIN DEWATERS WITHIN A CONTROLLED PERIOD - 24-72 HOURS UNDER DESIGN CONDITIONS.
- CHANNEL SKIMMER DISCHARGE INTO A STABILIZED OUTLET (ROCK OUTLET PROTECTION, ENERGY DISSIPATION) TO PREVENT DOWNSTREAM EROSION.
- INSPECT DETENTION BASIN AT LEAST WEEKLY AND AFTER EACH RAINFALL EVENT (OR SIGNIFICANT STORM - E.G. >=.5 INCH) TO CHECK FOR SEDIMENT ACCUMULATION, CLOGS, EMBANKMENT DAMAGE, OR OTHER PROBLEMS.
- REMOVE TRASH, DEBRIS, AND ANY MATERIAL OBSTRUCTING THE SKIMMER OR OUTLET. REPAIR ANY DAMAGED COMPONENTS IMMEDIATELY.
- AFTER ALL CONTRIBUTING DISTURBED AREAS ARE PERMANENTLY STABILIZED (SEEDING/VEGETATION, FINAL GRADE, ETC.), REMOVE THE SKIMMER AND DISPOSE OF ACCUMULATED SEDIMENT PROPERLY. RESTORE AND STABILIZE THE BASIN AREA SO IT BLENDS WITH SURROUNDING GRADE AND DOES NOT CREATE A HAZARD.

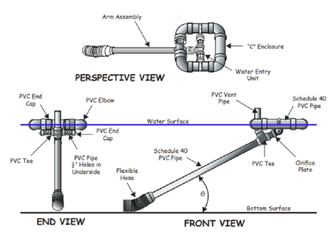


Figure 6.64a Schematic of a skimmer, from Pennsylvania Erosion and Sediment Pollution Control Manual, March, 2000.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

EROSION AND SEDIMENT CONTROL PLAN (1 OF 2)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

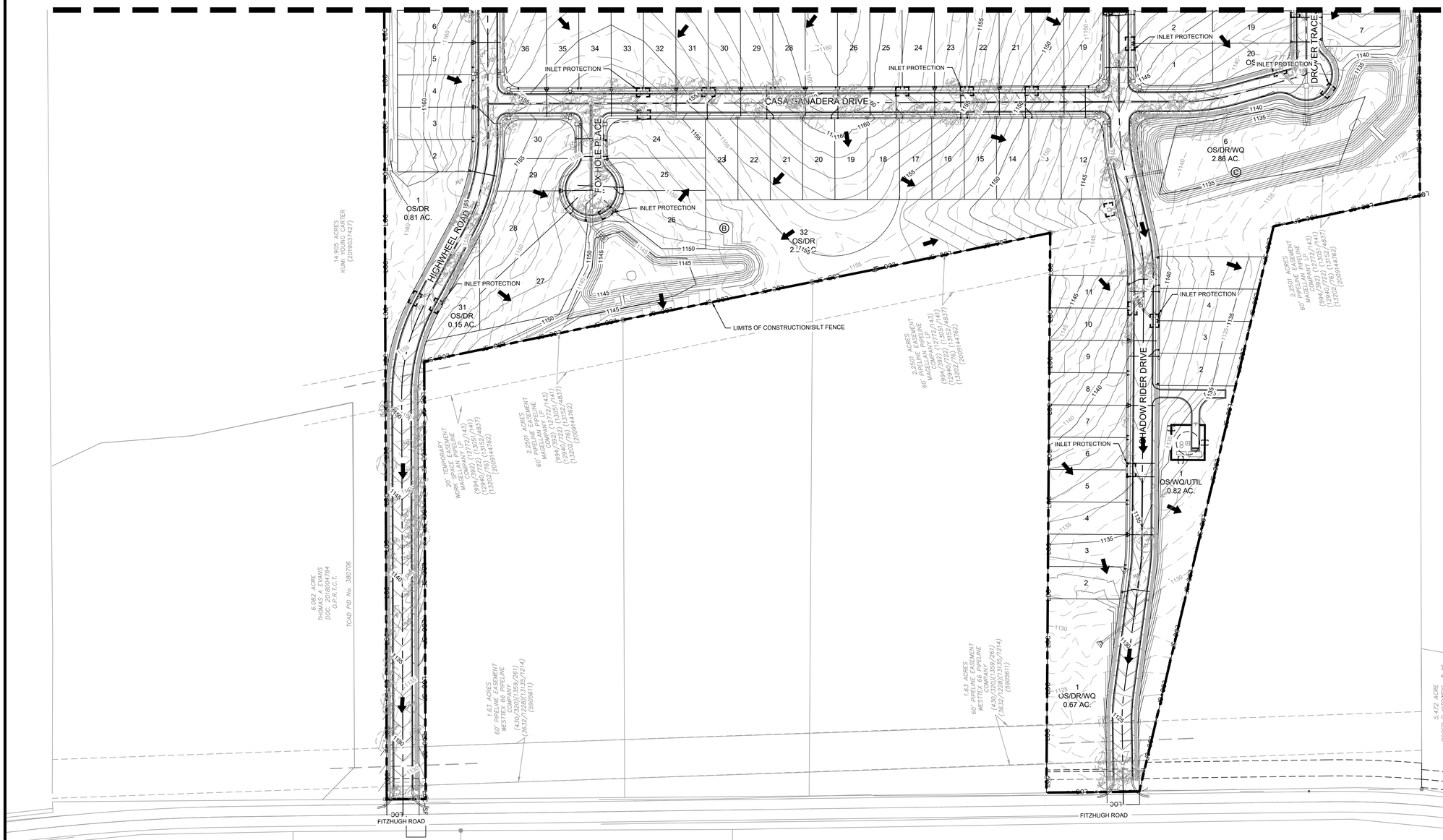
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
130018
LICENSED PROFESSIONAL ENGINEER

SHEET 9 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ESC.DWG DATE: 1/29/2026 2:42:46 PM BY: BGILMORE

MATCHLINE TO SHEET 9



SCALE: 1" = 80'
GRAPHIC SCALE IN FEET
0 40' 80' 160'

LEGEND

- PROPERTY BOUNDARY
- PHASE BOUNDARY
- LOC — LIMITS OF CONSTRUCTION
- SF — SILT FENCE
- XXX — EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- XXX — PROPOSED MAJOR CONTOURS
- PROPOSED MINOR CONTOURS
- TP — TREE PROTECTION
- INLET PROTECTION
- ROCK BERM
- FLOW DIRECTION
- DIVERSION DIKE
- CONSTRUCTION ENTRANCE
- CONCRETE WASHOUT AREA
- SPOILS PILE
- CEF BUFFER
- WETLAND

TRAVIS COUNTY ESC NOTES:

1. IF AN ADDITIONAL CONCRETE WASHOUT IS NEEDED, THE LOCATION WILL BE DETERMINED ONCE CONSTRUCTION HAS BEGUN AND WILL BE PROPERLY NOTATED ON THE ESC PLAN SHEET AND SWP3 AT THAT TIME.
2. ALL REQUIRED NOTICES AND PERMITS MUST BE PLACED IN A HIGHLY VISIBLE LOCATION ONSITE BEFORE THE COMMENCEMENT OF CONSTRUCTION.
3. ALL EROSION AND SEDIMENTATION CONTROLS (ESC) MUST BE INSTALLED PRIOR TO ANY DISTURBANCE TO THE PROJECT SITE.
4. INSTALL SILT FENCE ACCORDINGLY FOR RUN-ON DIVERSION OR OFFSITE SEDIMENT CONTROL DEPENDING ON UP OR DOWN SLOPE, FACING POST SIDE ON THE DOWN GRADIENT SIDE.
5. ALL ESC USED ONSITE MUST BE REGULARLY MONITORED AND MAINTAINED AS NEEDED.
6. MUD AND OR DIRT TRACKED INTO THE ROADWAY MUST BE IMMEDIATELY REMOVED UPON DISCOVERY.
7. EXCESS MATERIALS THAT WILL BE TRANSPORTED TO AN OFFSITE LOCATION MUST HAVE THAT LOCATION CLEARED BY COUNTY INSPECTOR.
8. LOOSE TRASH AND DEBRIS MUST BE DISPOSED OF PROPERLY ONSITE.
9. CONTRACTOR SHALL MAINTAIN AND UTILIZE DUST CONTROL FOR THE DURATION OF THE PROJECT.
10. THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT PREVENTS TRACKING ONTO THE PUBLIC ROADWAY ON AN ONGOING/REGULAR BASIS.
11. INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY UPON INLET INSTALLATION.
12. INITIATE TEMPORARY STABILIZATION WHEN CONSTRUCTION CEASES IN A DISTURBED AREA FOR 14 DAYS.
13. INITIATE PERMANENT STABILIZATION IMMEDIATELY ONCE WORK HAS CEASED AND FINAL GRADE HAS BEEN ACHIEVED.
14. ALL DISTURBED/BARE AREAS WILL REQUIRE PERMANENT STABILIZATION BEFORE FINAL ACCEPTANCE CAN BE ACHIEVED. AVOID DISTURBING AREAS OF THE PROJECT THAT ARE NOT NECESSARY FOR CONSTRUCTION.
15. COUNTY INSPECTOR MAY REQUEST ADDITIONAL CONTROLS BE INSTALLED ONSITE AS NEEDED.
16. TEMPORARY ESC MEASURES SHALL REMAIN IN PLACE IN ALL DISTURBED AREAS UNTIL ADEQUATE STABILIZATION HAS BEEN ACHIEVED.
17. CONTRACTOR MUST REMOVE SEDIMENT FROM ALL STORM SEWER INLET BOXES, LINES, PIPES AND CULVERTS BEFORE CONDITIONAL/FINAL ACCEPTANCE CAN OBTAINED.
18. TRAVIS COUNTY REQUIRES CERTIFIED SWP3 INSPECTORS TO CONDUCT SWP3 INSPECTIONS AND REPORTING ON ALL PROJECTS WITH ONE ACRE OF DISTURBANCE AND LARGER.
19. PERMITTEE SHALL INSPECT ALL INLET PROTECTION DEVICES AS PART OF THE WEEKLY SWP3 REPORT. UPON RECEIVING A FORECAST CALLING FOR A RAIN EVENT FOR AN EXTENDED PERIOD. MODIFICATION OF INLET PROTECTION SHOULD BE MADE TO PREVENT FLOODING OR PONDING OF WATER IF TRAFFIC OR PROPERTY CONCERNS ARISE.

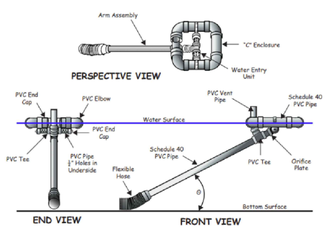


Figure 6.64a Schematic of a skimmer, from Pennsylvania Erosion and Sediment Pollution Control Manual, March, 2000.

DEWATERING SKIMMER - SOP NOTES

- PROVIDE A FLOATING SKIMMER OUTLET TO WITHDRAW SURFACE WATER (CLEANEST WATER) FROM THE BASIN, ALLOWING SEDIMENTS TO SETTLE BEFORE DISCHARGE, IMPROVING SEDIMENT CAPTURE EFFICIENCY.
- INSTALL DETENTION BASIN (WITH SKIMMER) BEFORE ANY GRADING OR EARTH DISTURBANCE WITHIN THE CONTRIBUTING DRAINAGE AREA.
- ATTACH A RETRIEVAL ROPE OR ACCESS LINE TO THE SKIMMER SO IT CAN BE PULLED ASIDE FOR MAINTENANCE OR SEDIMENT REMOVAL.
- DESIGN THE SKIMMER ORIFICE (OR OUTLET CONTROL) SO THAT THE BASIN DEWATERS WITHIN A CONTROLLED PERIOD - 24-72 HOURS UNDER DESIGN CONDITIONS.
- CHANNEL SKIMMER DISCHARGE INTO A STABILIZED OUTLET (ROCK OUTLET PROTECTION, ENERGY DISSIPATION) TO PREVENT DOWNSTREAM EROSION.
- INSPECT DETENTION BASIN AT LEAST WEEKLY AND AFTER EACH RAINFALL EVENT (OR SIGNIFICANT STORM - E.G. >=.5 INCH) TO CHECK FOR SEDIMENT ACCUMULATION, CLOGS, EMBANKMENT DAMAGE, OR OTHER PROBLEMS.
- REMOVE TRASH, DEBRIS, AND ANY MATERIAL OBSTRUCTING THE SKIMMER OR OUTLET. REPAIR ANY DAMAGED COMPONENTS IMMEDIATELY.
- AFTER ALL CONTRIBUTING DISTURBED AREAS ARE PERMANENTLY STABILIZED (SEEDING/VEGETATION, FINAL GRADE, ETC.), REMOVE THE SKIMMER AND DISPOSE OF ACCUMULATED SEDIMENT PROPERLY. RESTORE AND STABILIZE THE BASIN AREA SO IT BLENDS WITH SURROUNDING GRADE AND DOES NOT CREATE A HAZARD.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

EROSION AND SEDIMENT CONTROL PLAN (2 OF 2)

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

SHEET 10 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ESC.DWG DATE: 1/29/2026 2:43:02 PM BY: BGILMORE

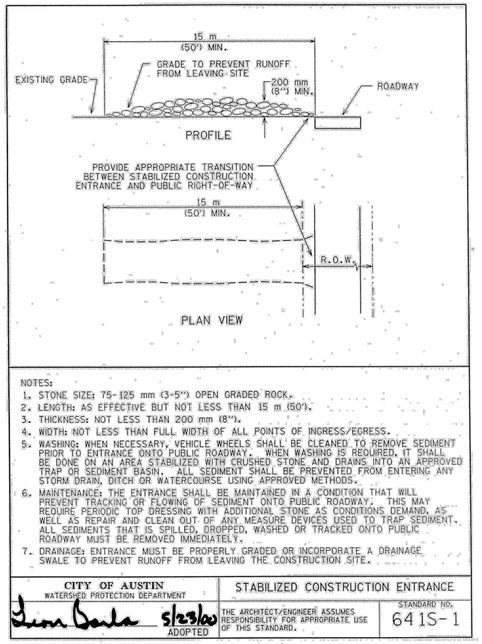


Figure 1.4.5.G.1 Silt Fence Installation

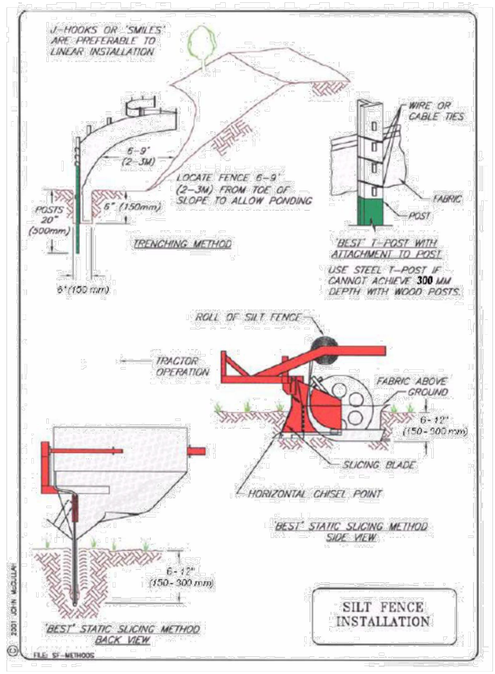


Figure 1.4.5.G.3 Silt Fence Placement for Perimeter Control

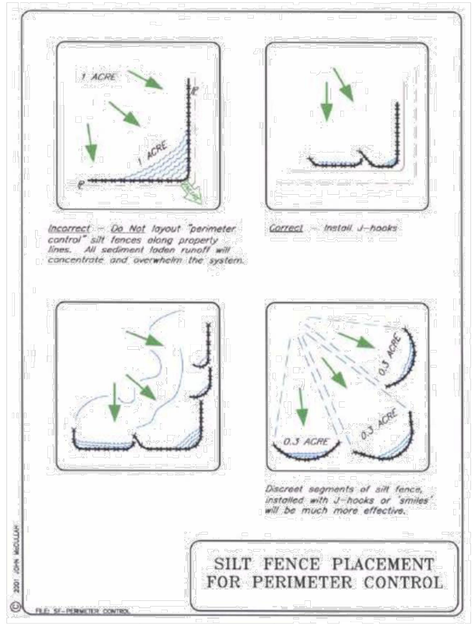
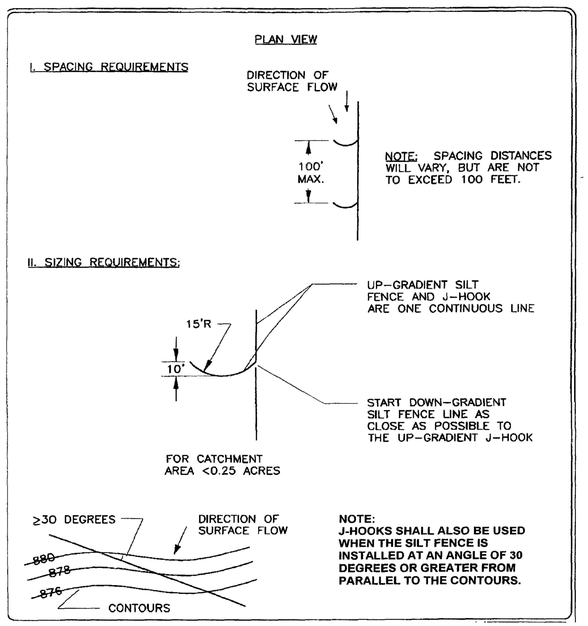
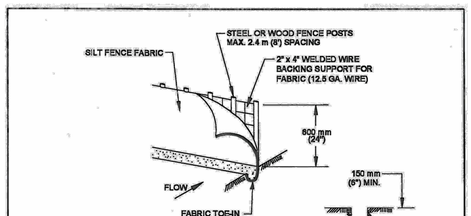
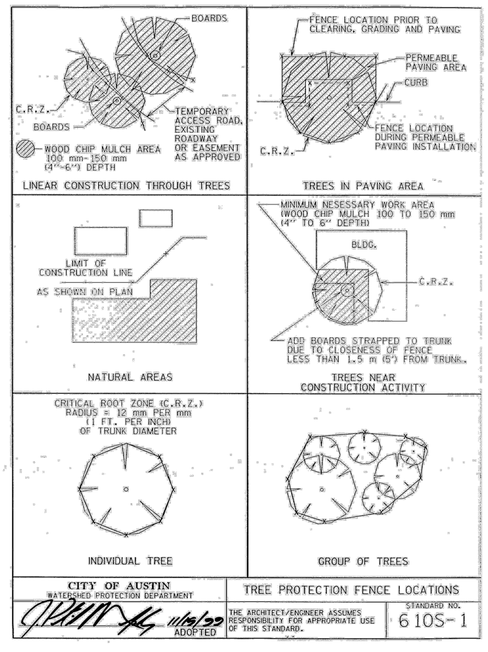
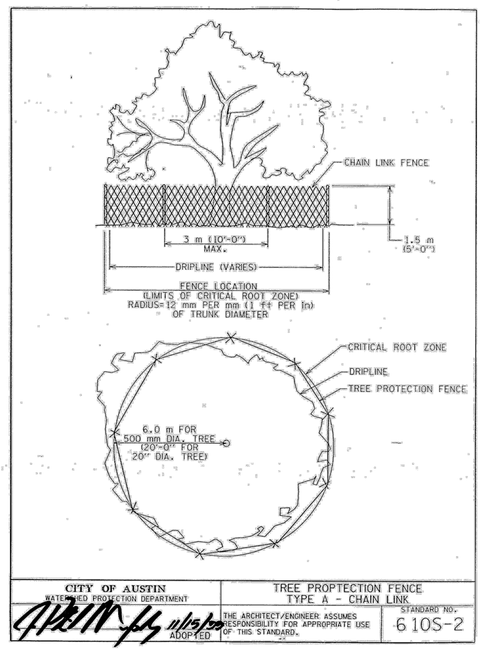


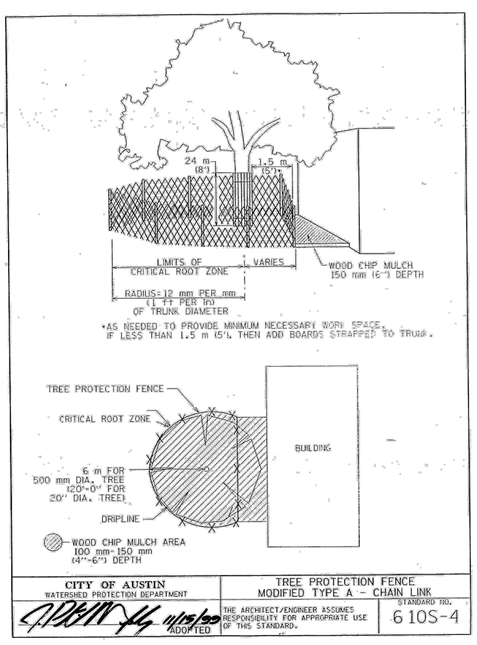
Figure 1.4.5.G.4 Silt Fence J - Hook Detail











8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

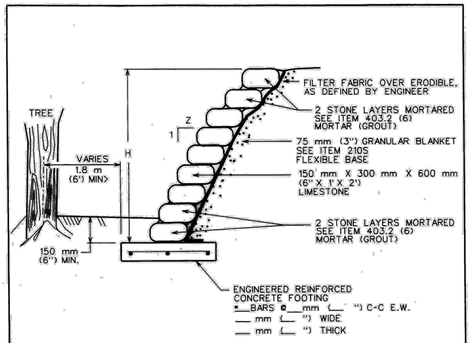
EROSION AND
SEDIMENT CONTROL
PLAN DETAILS (1 OF 2)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-EROS DETL.DWG DATE: 1/29/2026 2:43:19 PM BY: LRYAN



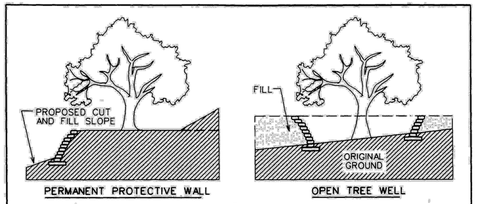
THIS STANDARD APPLIES ONLY UNDER THE FOLLOWING CONDITIONS:

A. H AND Z ARE SPECIFIED ON THE DRAWING.
B. GROUNDWATER IS NO HIGHER THAN THE BOTTOM OF THE FOOTING.
C. THE MATERIAL BELOW THE FOOTING IS FIRM AND STABLE.
D. THE MATERIAL BEHIND THE WALL HAS A LEVEL SURFACE.
E. THE MATERIAL IN FRONT OF THE WALL HAS A SLOPE NO STEEPER THAN 4 HORIZONTAL TO 1 VERTICAL.
F. THE FACE OF THE WALL IS NO STEEPER THAN 1 HORIZONTAL TO 2 VERTICAL.
G. SURCHARGE LOADS BEHIND THE WALL ARE NO CLOSER THAN DISTANCE H FROM THE TOP OF WALL.

NOTES:

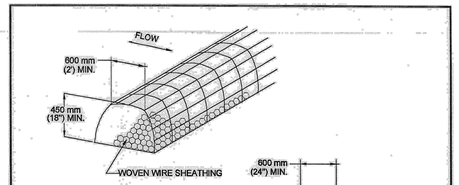
1. DESIGN AND CONSTRUCTION OF ROCK WALL SHALL CONFORM TO THE REQUIREMENTS OF CITY CODE 16-7-2, PLACEMENT OF FENCES IN STREET CORNER AREAS, AND THE CITY OF AUSTIN TRANSPORTATION CRITERIA MANUAL FOR MINIMM SIGHT DISTANCE.
2. CONCRETE SHALL CONFORM TO ITEM 403S, "CONCRETE FOR STRUCTURES".

CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	SLOPE PROTECTION AND TREE WELLS	
1/29/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 610S-6 1 OF 2



TREE WELL WITH RAISED GRADE

CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	SLOPE PROTECTION AND TREE WELLS	
1/29/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 610S-6 2 OF 2



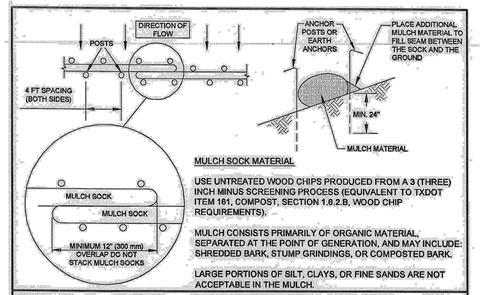
STANDARD SYMBOL FOR ROCK BERM (RB)

__RB__

NOTES:

1. USE ONLY OPEN GRADED ROCK 75 to 125 mm (3 to 5") DIAMETER FOR ALL CONDITIONS.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 25 mm (1") OPENING AND MINIMUM WIRE DIAMETER OF 12.9 mm (20 GAUGE).
3. THE ROCK BERM SHALL BE INSPECTED DAILY OR AFTER EACH RAIN, AND THE STONE AND/OR FABRIC CORE-WOVEN SHEATHING SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED, DUE TO SEDIMENT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
4. IF SEDIMENT REACHES A DEPTH EQUAL TO ONE-THIRD THE HEIGHT OF THE BERM OR 150 mm (6"), WHICHEVER IS LESS, THE SEDIMENT SHALL BE REMOVED AND DISPOSED OF ON AN APPROVED SITE AND IN A MANNER THAT WILL NOT CREATE A SEDIMENTION PROBLEM.
5. WHEN THE SITE IS COMPLETELY STABILIZED,THE BERM AND ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	ROCK BERM	
8/24/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 639S-1



MULCH SOCK MATERIAL

USE UNTREATED WOOD CHIPS PRODUCED FROM A 3 (THREE) INCH MINUS SCREENING PROCESS (EQUIVALENT TO TXDOT ITEM 161, COMPOST, SECTION 1.6.2.B, WOOD CHIP REQUIREMENTS).

MULCH CONSISTS PRIMARILY OF ORGANIC MATERIAL, SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE: SHREDDED BARK, STUMP GRINDINGS, OR COMPOSTED BARK.

LARGE PORTIONS OF SILT, CLAYS, OR FINE SANDS ARE NOT ACCEPTABLE IN THE MULCH.

NOTES:

1. STEEL OR WOOD POSTS WHICH SUPPORT THE MULCH SOCK SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 600mm (24 inches). IF WOOD POSTS CANNOT ACHIEVE 600mm (24 inches) DEPTH, USE STEEL POSTS. EARTH ANCHORS ARE ALSO ACCEPTABLE.
2. THE TOE OF THE MULCH SOCK SHALL BE PLACED SO THAT THE MULCH SOCK IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. IN ORDER TO PREVENT WATER FROM FLOWING BETWEEN THE JOINTS OF ADJACENT ENDS OFMULCH SOCKS, LAP THE ENDS OF ADJACENT MULCH SOCKS A MINIMUM OF 300mm (12 inches).
3. MULCH MATERIAL MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH; IT IS NOT ACCEPTABLE FOR THE MULCH MATERIAL TO CONTAIN GROUND CONSTRUCTION DEBRIS, BIOSOLIDS, OR MANURE.
4. SOCK MATERIAL WILL BE 100% BIODEGRADABLE, PHOTODEGRADABLE, OR RECYCLABLE SUCH AS BURLAP, TWINE, UV PHOTOBIODEGRADABLE PLASTIC, POLYESTER, OR ANY OTHER ACCEPTABLE MATERIAL.
5. MULCH SOCKS SHOULD BE USED AT THE BASE OF SLOPES NO STEEPER THAN 2:1 AND SHOULD NOT EXCEED THE MAXIMUM SPACING CRITERIA PROVIDED IN CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL TABLE 1.4.5.F.1 FOR A GIVEN SLOPE CATEGORY.
6. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 150mm (6 Inches). THE SILT SHALL BE DISPOSED OF ON AN APPROVED SITE AND IN SUCH A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	MULCH SOCK	
08/24/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 648S-1

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

EROSION AND
SEDIMENT CONTROL
PLAN DETAILS (2 OF 2)

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

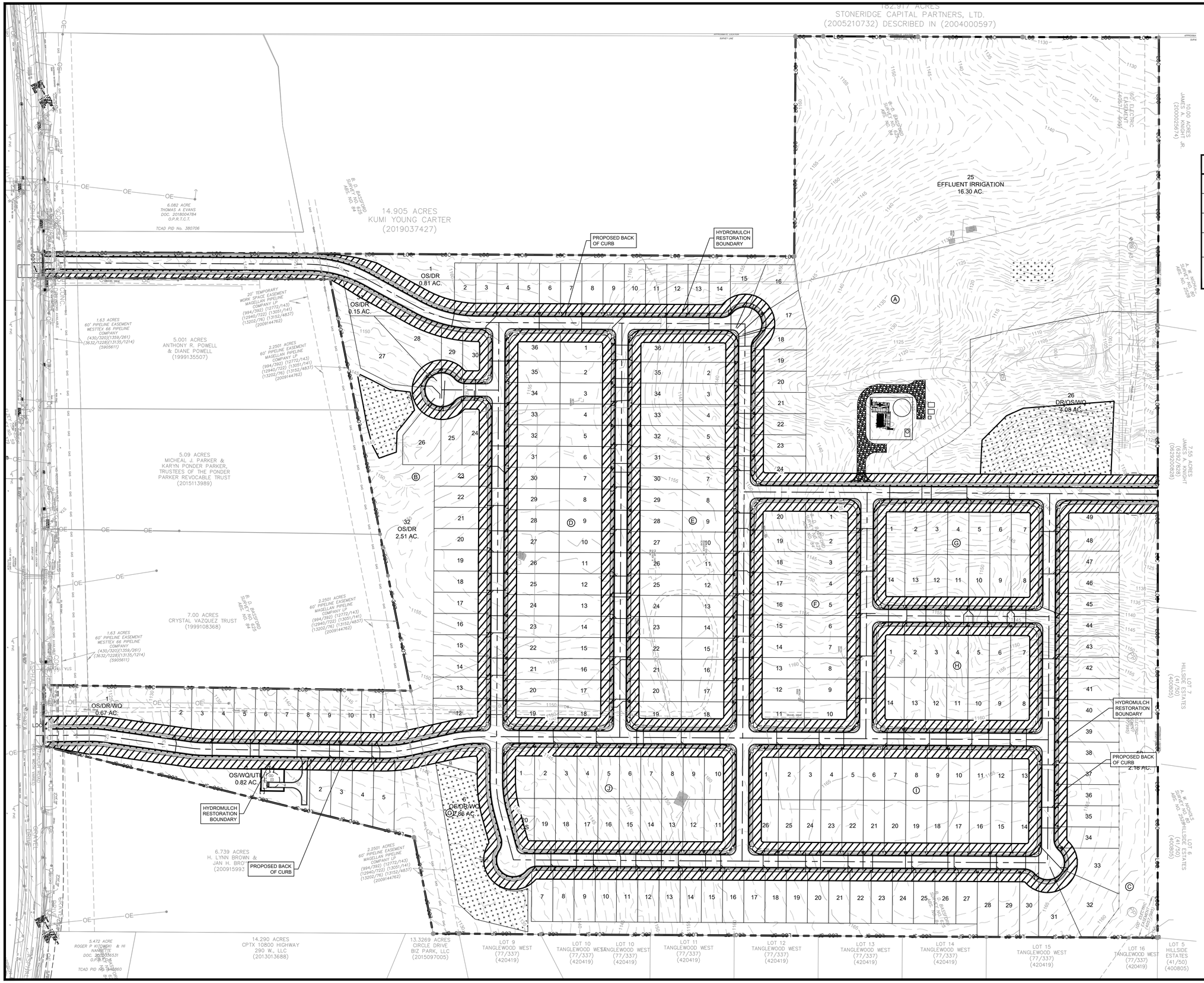
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

SHEET 12 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-EROS DETL.DWG DATE: 1/29/2026 2:43:22 PM BY: LRYAN



SCALE: 1" = 100'
GRAPHIC SCALE IN FEET
0 50' 100' 200'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- HYDROMULCH RESTORATION
- SOD RESTORATION

NOTE:
ALL AREAS OF DISTURBANCE ARE TO BE RESTORED AND REVEGETATED.

TRAVIS COUNTY RESTORATION NOTES:

1. INITIATE PERMANENT STABILIZATION IMMEDIATELY ONCE WORK HAS CEASED AND FINAL GRADE HAS BEEN ACHIEVED IN ANY GIVEN AREA.
2. THE FINAL STABILIZATION/REVEGETATION EFFORTS SHALL BE IN ACCORDANCE WITH THE APPROVED RESTORATION PLAN DETAILS AND SPECIFICATIONS.
3. ALL 3:1 SLOPES OR STEEPER REQUIRE SOIL RETENTION BLANKET (SRB).
4. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE WATERING/IRRIGATION TO ACHIEVE THE PERMANENT STABILIZATION REQUIREMENTS IN ALL DISTURBED/REVEGETATED AREAS BEFORE FINAL ACCEPTANCE FOR THIS PROJECT CAN BE OBTAINED.
5. ALL COMMON AREAS INCLUDING PWQC STRUCTURES MUST BE PERMANENTLY STABILIZED PER JURISDICTIONAL TECHNICAL SPECIFICATIONS BEFORE A CONDITIONAL ACCEPTANCE CAN BE ISSUED.
6. ALL DISTURBED/BARE AREAS WILL REQUIRE PERMANENT STABILIZATION BEFORE FINAL ACCEPTANCE CAN BE ACHIEVED. AVOID DISTURBING AREAS OF THE PROJECT THAT ARE NOT NECESSARY FOR CONSTRUCTION.
7. ANY DISTURBED AREA(S) NOT INDICTED TO BE RESTORED ON THE RESTORATION PLAN REQUIRES THE SAME EFFORTS AS THOSE INDICATED.
8. ALL DISTURBED AREAS MUST MEET THE REQUIREMENT FOR PERMANENT STABILIZATION.
9. THE NOTICE OF TERMINATION (NOT) FOR THIS PROJECT SHALL NOT BE SUBMITTED UNTIL THE TRAVIS COUNTY ENVIRONMENTAL INSPECTOR APPROVES CLEARANCE.
10. A PARTIAL RELEASE OF THE FISCAL SECURITY CAN OCCUR IF THE COUNTY DETERMINES THAT COMPLIANCE WITH A PORTION OF THE STABILIZATION PLAN HAS BEEN ACHIEVED AND ALL CRITICAL SITE IMPROVEMENTS ARE FULLY STABILIZED, AND ALL DISTURBED HOME LOTS ARE EITHER IN COMPLIANCE WITH THE RESIDENTIAL SUBDIVISION ESC PLAN OR UNDER A SEPARATE SWP3 AND PRIMARY OPERATOR WITH A SEPARATE ESC PLAN.
- TO BE CONSIDERED FOR A REDUCTION, AN OWNER MUST HAVE:
  - FOLLOWED THE APPROVED PLAN FOR PHASING AND SEQUENCE OF CONSTRUCTION
  - FOLLOWED THE APPROVED PLAN FOR TEMPORARY AND PERMANENT STABILIZATION
  - SUBSTANTIALLY COMPLETED ALL PERMANENT WATER QUALITY CONTROLS AND OTHER INSPECTION PUNCH LIST ITEMS
  - INITIATED PERMANENT RE-VEGETATION IN ALL REQUIRED AREAS
  - SUBMITTED THE ENGINEER'S CONCURRENCE LETTER REQUIRED BY SECTION 482.953 AND
  - A DIGITAL FILE OF THE FINAL DEVELOPMENT CONSTRUCTION PLANS THAT IS IN AN AUTOCAD.DWG FORMAT GEOREFERENCED TO NAD 1983 STATE PLANE GRID COORDINATE SYSTEM, TEXAS CENTRAL ZONE (4203), WITH DRAWING UNITS OF US FEET.
11. ALL DISTURBED AREAS INCLUDING FUTURE HOME LOTS, ARE TO BE REVEGETATED PRIOR TO THE SUBMISSION OF THE ENGINEER'S CONCURRENCE LETTER UNLESS:
- A DEVELOPERS AGREEMENT IS EXECUTED FOR THE REMAINING AREAS IN NEED OF STABILIZATION, OR
- TRANSFERENCE OF OWNERSHIP HAS OCCURRED IN THE MANNER SPECIFIED IN SEC 482.401.G

AREAS THAT CANNOT PROVIDE DOCUMENTATION OF A DEVELOPER'S AGREEMENT OR TRANSFER OF CONTROL OF OWNERSHIP WILL FALL TO THE DEVELOPER TO STABILIZE PRIOR TO SUBMISSION OF THE ENGINEER'S CONCURRENCE LETTER AND BEFORE FINAL INSPECTION. DEVELOPERS PLEASE TAKE NOTE: THIS REQUIREMENT WILL BE STRONGLY ENFORCED AT TIME OF PROJECT FINAL

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

RESTORATION PLAN

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

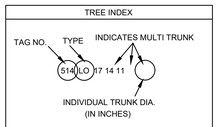
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

SHEET 13 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-REST.DWG DATE: 1/29/2026 2:43:48 PM BY: BGILMORE

(R)	1105 CDR10	(R)	3651 CDR17	(R)	3705 CDR9	(R)	4004 LO10	(R)	2309 LO12	(R)	1436 LO14	(R)	1755 LO8	(R)	2446 LO9
(R)	1751 CDR10	(R)	3924 CDR17	(R)	3797 CDR9	(R)	4078 LO10	(R)	2311 LO12	(R)	1519 LO14	(R)	1785 LO8	(R)	2524 LO9
(R)	1801 CDR10	(R)	3715 CDR18	(R)	3804 CDR9	(R)	1084 LO10	(R)	2333 LO12	(R)	1523 LO14	(R)	1813 LO8	(R)	2542 LO9
(R)	1826 CDR10	(R)	3818 CDR18	(R)	3809 CDR9	(R)	2718 LO10	(R)	2401 LO12	(R)	1538 LO14	(R)	1952 LO8	(R)	2716 LO9
(R)	1835 CDR10	(R)	3800 CDR20	(R)	3876 CDR9		1200 LO10	(R)	2402 LO12	(R)	1704 LO14	(R)	1954 LO8	(R)	3432 LO9
(R)	1845 CDR10	(R)	3803 CDR20	(R)	3923 CDR9		1810 LO10	(R)	2410 LO12	(R)	1716 LO14	(R)	1976 LO8	(R)	3434 LO9
(R)	2179 CDR10		3942 CDR20	(R)	3971 CDR9		2001 LO10	(R)	2426 LO12	(R)	1771 LO14	(R)	1977 LO8	(R)	3437 LO9
(R)	2497 CDR10	(R)	1816 CDR21	(R)	4368 CDR9		2023 LO10	(R)	2449 LO12	(R)	1788 LO14	(R)	1981 LO8	(R)	3438 LO9
(R)	2554 CDR10	(R)	1799 CDR24	(R)	4369 CDR9		2024 LO10	(R)	2527 LO12	(R)	1842 LO14	(R)	2176 LO8	(R)	3627 LO9
(R)	2563 CDR10	(R)	3943 CDR24		2013 CDR9		2036 LO10	(R)	2578 LO12	(R)	1912 LO14	(R)	2187 LO8	(R)	3827 LO9
(R)	2564 CDR10		3652 CDR24		2016 CDR9	(R)	1521 LO10,8	(R)	2642 LO12	(R)	2221 LO14	(R)	2229 LO8	(R)	3830 LO9
(R)	3444 CDR10	(R)	1059 CDR8		2813 CDR9	(R)	3949 LO10,8	(R)	2652 LO12	(R)	2252 LO14	(R)	2419 LO8	(R)	3878 LO9
(R)	3459 CDR10	(R)	1106 CDR8		2814 CDR9	(R)	1030 LO10,9	(R)	2724 LO12	(R)	2422 LO14	(R)	2423 LO8	(R)	3888 LO9
(R)	3462 CDR10	(R)	1107 CDR8		2818 CDR9	(R)	1637 LO10,9	(R)	2725 LO12	(R)	2747 LO14	(R)	2425 LO8	(R)	3896 LO9
(R)	3463 CDR10	(R)	1126 CDR8		2820 CDR9	(R)	3466 LO10,9	(R)	2744 LO12	(R)	3454 LO14	(R)	2523 LO8	(R)	3929 LO9
(R)	3465 CDR10	(R)	1161 CDR8		2822 CDR9	(R)	4043 LO10,9	(R)	2748 LO12	(R)	3605 LO14	(R)	2532 LO8	(R)	4000 LO9
(R)	3468 CDR10	(R)	1438 CDR8		2824 CDR9	(R)	1029 LO11	(R)	2751 LO12	(R)	3845 LO14	(R)	2546 LO8	(R)	4022 LO9
(R)	3474 CDR10	(R)	1820 CDR8		2826 CDR9	(R)	1080 LO11	(R)	3470 LO12	(R)	4273 LO14	(R)	2562 LO8	(R)	4074 LO9
(R)	3618 CDR10	(R)	1823 CDR8		2843 CDR9	(R)	1122 LO11	(R)	3759 LO12		2772 LO14	(R)	2645 LO8	(R)	4092 LO9
(R)	3625 CDR10	(R)	1833 CDR8		4134 CDR9	(R)	1131 LO11	(R)	3765 LO12		2812 LO14	(R)	2657 LO8	(R)	4097 LO9
(R)	3782 CDR10	(R)	1836 CDR8		4135 CDR9	(R)	1141 LO11	(R)	3967 LO12		2899 LO14	(R)	2658 LO8	(R)	4101 LO9
(R)	3805 CDR10	(R)	1837 CDR8		4136 CDR9	(R)	1150 LO11	(R)	3970 LO12	(R)	4080 LO14,10	(R)	2709 LO8	(R)	4337 LO9
(R)	3925 CDR10	(R)	1993 CDR8		4137 CDR9	(R)	1237 LO11	(R)	4007 LO12		2008 LO14,12	(R)	2721 LO8	(R)	1282 LO9
(R)	3930 CDR10	(R)	2178 CDR8	(R)	3927 CDR9 8	(R)	1251 LO11	(R)	4021 LO12	(R)	1997 LO14,13	(R)	3429 LO8	(R)	2351 LO9
(R)	4338 CDR10	(R)	2220 CDR8		2883 CDR9,5	(R)	1348 LO11	(R)	4076 LO12	(R)	2184 LO14,13	(R)	3430 LO8	(R)	2310 LO9,9
(R)	2307 CDR10	(R)	2531 CDR8	(R)	3493 CDR9,8	(R)	1633 LO11	(R)	4096 LO12	(R)	1390 LO15	(R)	3439 LO8	(R)	2190 LO9,9,8
	2019 CDR10	(R)	2556 CDR8		4141 CDR9,8	(R)	1635 LO11	(R)	4099 LO12	(R)	1530 LO15	(R)	3440 LO8		
	2816 CDR10	(R)	2559 CDR8	(R)	1750 ELM8	(R)	1636 LO11	(R)	2420 LO12	(R)	1531 LO15	(R)	3442 LO8		
	2819 CDR10	(R)	2560 CDR8	(R)	1786 ELM8	(R)	1717 LO11		1808 LO12	(R)	1534 LO15	(R)	3477 LO8		
	2821 CDR10	(R)	3426 CDR8	(R)	3769 HB12	(R)	1747 LO11		1811 LO12	(R)	1611 LO15	(R)	3481 LO8		
	4138 CDR10	(R)	3436 CDR8	(R)	4367 HC9	(R)	1783 LO11		2828 LO12	(R)	1631 LO15	(R)	3611 LO8		
(R)	3926 CDR10,8	(R)	3448 CDR8	(R)	1034 LO10	(R)	1784 LO11		4331 LO12	(R)	1701 LO15	(R)	3612 LO8		
(R)	1073 CDR11	(R)	3460 CDR8	(R)	1058 LO10	(R)	1812 LO11	(R)	1386 LO12,10	(R)	1762 LO15	(R)	3760 LO8		
(R)	1277 CDR11	(R)	3461 CDR8	(R)	1078 LO10	(R)	1924 LO11	(R)	2227 LO12,10	(R)	1770 LO15	(R)	3761 LO8		
(R)	1518 CDR11	(R)	3464 CDR8	(R)	1115 LO10	(R)	1959 LO11		3948 LO12,10	(R)	4088 LO15	(R)	3764 LO8		
(R)	1961 CDR11	(R)	3467 CDR8	(R)	1123 LO10	(R)	2225 LO11	(R)	2570 LO12,11	(R)	4336 LO15	(R)	3768 LO8		
(R)	3447 CDR11	(R)	3472 CDR8	(R)	1125 LO10	(R)	2245 LO11	(R)	2611 LO12,11	(R)	3831 LO15,11	(R)	3808 LO8		
(R)	3453 CDR11	(R)	3476 CDR8	(R)	1127 LO10	(R)	2279 LO11	(R)	2746 LO12,11	(R)	1532 LO16	(R)	3824 LO8		
(R)	3471 CDR11	(R)	3478 CDR8	(R)	1133 LO10	(R)	2290 LO11	(R)	4095 LO12,11	(R)	1698 LO16	(R)	3825 LO8		
(R)	3621 CDR11	(R)	3480 CDR8	(R)	1320 LO10	(R)	2308 LO11	(R)	2453 LO12,11	(R)	1742 LO16	(R)	3826 LO8		
(R)	3624 CDR11	(R)	3483 CDR8	(R)	1359 LO10	(R)	2312 LO11	(R)	1800 LO12,11,1	(R)	1763 LO16	(R)	3828 LO8		
(R)	3653 CDR11	(R)	3485 CDR8	(R)	1439 LO10	(R)	2334 LO11	(R)	4002 LO12,12	(R)	1925 LO16	(R)	3833 LO8		
(R)	3707 CDR11	(R)	3490 CDR8	(R)	1442 LO10	(R)	2412 LO11	(R)	1387 LO12,8	(R)	2250 LO16	(R)	3873 LO8		
(R)	4087 CDR11	(R)	3491 CDR8	(R)	1522 LO10	(R)	2418 LO11		3419 LO12,8,8	(R)	3479 LO16	(R)	3874 LO8		
	2017 CDR11	(R)	3497 CDR8	(R)	1525 LO10	(R)	2424 LO11	(R)	1033 LO13	(R)	4006 LO16	(R)	3875 LO8		
	2825 CDR11	(R)	3499 CDR8	(R)	1537 LO10	(R)	2442 LO11	(R)	1057 LO13	(R)	1068 LO17	(R)	3880 LO8		
	2793 CDR11,10	(R)	3620 CDR8	(R)	1539 LO10	(R)	2447 LO11	(R)	1060 LO13	(R)	2219 LO17	(R)	3881 LO8		
(R)	3706 CDR11,8	(R)	3622 CDR8	(R)	1606 LO10	(R)	2450 LO11	(R)	1124 LO13	(R)	3823 LO17	(R)	3885 LO8		
	4133 CDR11,8	(R)	3623 CDR8	(R)	1607 LO10	(R)	2526 LO11	(R)	1164 LO13	(R)	4020 LO17	(R)	3886 LO8		
(R)	1082 CDR11,9	(R)	3626 CDR8	(R)	1609 LO10	(R)	2529 LO11	(R)	1281 LO13		2773 LO17	(R)	3887 LO8		
(R)	1824 CDR12	(R)	3628 CDR8	(R)	1610 LO10	(R)	2543 LO11	(R)	1349 LO13	(R)	1069 LO18	(R)	3891 LO8		
(R)	1825 CDR12	(R)	3629 CDR8	(R)	1706 LO10	(R)	2544 LO11	(R)	1385 LO13	(R)	2287 LO18	(R)	3999 LO8		
(R)	1841 CDR12	(R)	3647 CDR8	(R)	1708 LO10	(R)	2646 LO11	(R)	1389 LO13	(R)	2289 LO18	(R)	4093 LO8		
(R)	2561 CDR12	(R)	3682 CDR8	(R)	1709 LO10	(R)	2707 LO11	(R)	1533 LO13	(R)	3752 LO18		2035 LO8		
(R)	3616 CDR12	(R)	3703 CDR8	(R)	1710 LO10	(R)	2708 LO11	(R)	1702 LO13	(R)	3758 LO18	(R)	1757 LO8,10		
(R)	3619 CDR12	(R)	3757 CDR8	(R)	1968 LO10	(R)	2743 LO11	(R)	1743 LO13	(R)	3844 LO18	(R)	1113 LO8,8		
(R)	3645 CDR12	(R)	3762 CDR8	(R)	1995 LO10	(R)	3433 LO11	(R)	1746 LO13	(R)	4370 LO18	(R)	1027 LO9		
(R)	3816 CDR12	(R)	3806 CDR8	(R)	2189 LO10	(R)	3443 LO11	(R)	1764 LO13	(R)	1075 LO18,16,1	(R)	1031 LO9		
(R)	4098 CDR12	(R)	3931 CDR8	(R)	2246 LO10	(R)	3495 LO11	(R)	1769 LO13	(R)	1077 LO19	(R)	1032 LO9		
(R)	4152 CDR12	(R)	4003 CDR8	(R)	2257 LO10	(R)	3799 LO11	(R)	1934 LO13	(R)	1242 LO19	(R)	1083 LO9		
	2015 CDR12	(R)	4157 CDR8	(R)	2302 LO10	(R)	3807 LO11	(R)	1937 LO13		3908 LO19,10,1	(R)	1104 LO9		
	4139 CDR12	(R)	4366 CDR8	(R)	2306 LO10	(R)	3950 LO11	(R)	1967 LO13	(R)	1035 LO20	(R)	1112 LO9		
(R)	3451 CDR12,10	(R)	4371 CDR8	(R)	2335 LO10	(R)	3969 LO11	(R)	1974 LO13	(R)	1070 LO20	(R)	1121 LO9		
(R)	4024 CDR12,11		2014 CDR8	(R)	2336 LO10	(R)	4001 LO11	(R)	1979 LO13	(R)	2291 LO20	(R)	1129 LO9		
	2827 CDR12,11		2823 CDR8	(R)	2338 LO10	(R)	4023 LO11	(R)	1980 LO13		2794 LO20	(R)	1130 LO9		
	4142 CDR12,11		2844 CDR8	(R)	2339 LO10	(R)	4079 LO11	(R)	2223 LO13	(R)	1257 LO21	(R)	1268 LO9		
(R)	1846 CDR12,8		3973 CDR8	(R)	2417 LO10	(R)	4094 LO11	(R)	2236 LO13	(R)	2251 LO21	(R)	1296 LO9		
(R)	1848 CDR12,9		4132 CDR8	(R)	2440 LO10	(R)	1897 LO11	(R)	2242 LO13	(R)	2340 LO21	(R)	1318 LO9		
(R)	1953 CDR13	(R)	3488 CDR8,8	(R)	2441 LO10	(R)	1948 LO11	(R)	2244 LO13		2798 LO21	(R)	1350 LO9		
(R)	2235 CDR13	(R)	3500 CDR8,8	(R)	2525 LO10		1201 LO11	(R)	2262 LO13		3848 LO21	(R)	1351 LO9		
(R)	2558 CDR13	(R)	3763 CDR8,8	(R)	2528 LO10		1524 LO11	(R)	2337 LO13	(R)	4081 LO22	(R)	1526 LO9		
(R)	3817 CDR13	(R)	3781 CDR8,8	(R)	2530 LO10		2799 LO11	(R)	2349 LO13	(R)	4153 LO22	(R)	1528 LO9		
(R)	3922 CDR13	(R)	1851 CDR8,8	(R)	2545 LO10		1199 LO11	(R)	2413 LO13	(R)	1520 LO24	(R)	1529 LO9		
	1849 CDR13		4131 CDR8,8	(R)	2547 LO10	(R)	1445 LO11,10	(R)	2533 LO13	(R)	1748 LO24	(R)	1535 LO9		
	2810 CDR13	(R)	1162 CDR9	(R)	2555 LO10	(R)	2710 LO11,11	(R)	2715 LO13		4342 LO24,13	(R)	1549 LO9		
	4332 CDR13	(R)	1441 CDR9	(R)	2572 LO10	(R)	3484 LO11,8	(R)	2717 LO13	(R)	1550 LO24,15,1	(R)	1604 LO9		
(R)	1680 CDR13,12	(R)	1758 CDR9	(R)	2643 LO10	(R)	2218 LO11,9	(R)	2752 LO13	(R)	1028 LO8	(R)	1605 LO9		
(R)	3646 CDR13,8	(R)	1839 CDR9	(R)	2644 LO10	(R)	1782 LO11,9,8	(R)	3609 LO13	(R)	1076 LO8	(R)	1632 LO9		
(R)	1512 CDR14	(R)	1840 CDR9	(R)	2647 LO10	(R)	2280 LO11,9,8	(R)	3843 LO13	(R)	1081 LO8	(R)	1718 LO9		
(R)	1819 CDR14	(R)	1844 CDR9	(R)	2659 LO10	(R)	2191 LO11,9,9	(R)	3846 LO13	(R)	1085 LO8	(R)	1719 LO9		
(R)	1822 CDR14	(R)	1847 CDR9	(R)	2706 LO10	(R)	1037 LO12	(R)	3921 LO13	(R)	1103 LO8	(R)	1730 LO9		
(R)	1834 CDR14	(R)	1850 CDR9	(R)	2719 LO10	(R)	1056 LO12	(R)	3951 LO13	(R)	1114 LO8	(R)	1749 LO9		
(R)	1843 CDR14	(R)	2177 CDR9	(R)	2720 LO10	(R)	1072 LO12	(R)	4075 LO13	(R)	1116 LO8	(R)	1766 LO9		
(R)	1936 CDR14	(R)	2303 CDR9	(R)	2726 LO10	(R)	1079 LO12	(R)	4089 LO13	(R)	1252 LO8	(R)	1768 LO9		
(R)	3455 CDR14	(R)	2498 CDR9	(R)	2742 LO10	(R)	1128 LO12	(R)	4272 LO13	(R)	1295 LO8	(R)	1919 LO9		
(R)	3669 CDR14	(R)	3431 CDR9	(R)	2745 LO10	(R)	1134 LO12		1198 LO13	(R)	1319 LO8	(R)	1926 LO9		
	2018 CDR14	(R)	3445 CDR9	(R)	2749 LO10	(R)	1238 LO12		1807 LO13	(R)	1357 LO8	(R)	1994 LO9		
	4140 CDR14	(R)	3450 CDR9	(R)	2750 LO10	(R)	1360 LO12		2802 LO13	(R)	1358 LO8	(R)	2175 LO9		
(R)	3603 CDR15	(R)	3452 CDR9	(R)	3428 LO10	(R)	1429 LO12		2803 LO13	(R)	1437 LO8	(R)	2182 LO9		
(R)	3617 CDR15	(R)	3469 CDR9	(R)	3449 LO10	(R)	1440 LO12		2811 LO13	(R)	1527 LO8	(R)	2228 LO9		
(R)	3644 CDR15	(R)	3473 CDR9	(R)	3482 LO10	(R)	1697 LO12		4042 LO13	(R)	1536 LO8	(R)	2230 LO9		
(R)	3802 CDR15	(R)	3475 CDR9	(R)	3486 LO10	(R)	1744 LO12	(R)	1767 LO13,10	(R)	1634 LO8	(R)	2231 LO9		
	2774 CDR15	(R)	3492 CDR9	(R)	3487 LO10	(R)	1756 LO12	(R)	2222 LO13,12	(R)	1705 LO8	(R)	2301 LO9		
	3649 CDR15,12	(R)	3494 CDR9	(R)	3592 LO10	(R)	1765 LO12	(R)	1163 LO13,13	(R)	1707 LO8	(R)	2304 LO9		
(R)	1815 CDR16	(R)	3496 CDR9	(R)	3829 LO10	(R)	1927 LO12	(R)	2216 LO13,13	(R)	1711 LO8	(R)	2313 LO9		
(R)	1920 CDR16	(R)	3498 CDR9	(R)	3854 LO10	(R)	1928 LO12	(R)	1624 LO13,9	(R)	1714 LO8	(R)	2350 LO9		
(R)	1960 CDR16	(R)	3593 CDR9	(R)	3877 LO10	(R)	1978 LO12	(R)	1036 LO14	(R)	1715 LO8	(R)	2411 LO9		
(R)	3591 CDR16	(R)	3615 CDR9	(R)	3879 LO10	(R)	2226 LO12	(R)	1071 LO14	(R)	1745 LO8	(R)	2416 LO9		
(R)	3822 CDR16	(R)	3702 CDR9	(R)	3907 LO10	(R)	2243 LO12	(R)	1119 LO14	(R)	1753 LO8	(R)	2421 LO9		
(R)	1821 CDR17	(R)	3704 CDR9	(R)	3928 LO10	(R)	2263 LO12	(R)	1149 LO14	(R)	1754 LO8	(R)	2445 LO9		

TREE INDEX



CRITICAL ROOT ZONES (TREE CIRCLES) ARE SHOWN USING THE COA FORMULA FOR SINGLE AND MULTI TRUNK TREES.

CDR = CEDAR
HB = HACKBERRY
LO = LIVE OAK
CB = CHINA BERRY
CE = CEDAR ELM
PO = POST OAK
WAL = WALNUT
BUM = WOOLY BUMELIA
RO = RED OAK
SHIN OAK = SHIN OAK
PEAR = PEAR
WO=WHITE OAK

NOTE ABOUT DEAD TREES: IF THE TREE APPEARED TO BE DEAD, THEN IT HAS BEEN NOTED AS DEAD; HOWEVER, SUCH DETERMINATION IS SUBJECT TO VERIFICATION BY A QUALIFIED ARBORIST.

* (R): EX. TREES PROPOSED TO BE REMOVED

TRAVIS COUNTY APPROVAL

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

TREE LIST

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

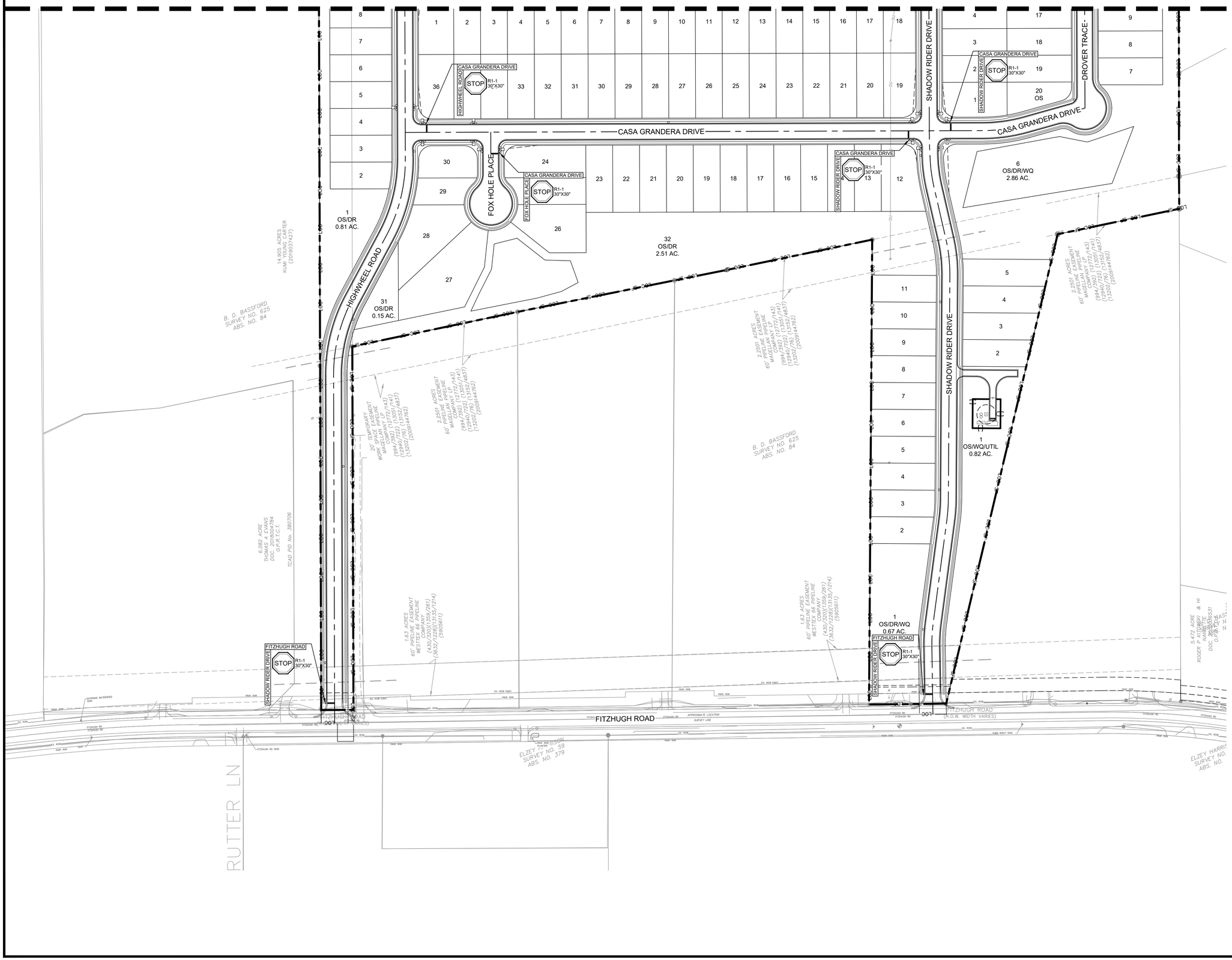
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 14 OF 126

CASE NO. S-24-242

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-TREE LIST.DWG DATE: 1/29/2026 2:43:59 PM BY: TMARSHALL

MATCHLINE TO SHEET 14



SCALE: 1" = 80'
GRAPHIC SCALE IN FEET
0 40' 80' 160'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED STOP SIGN W/ STREET NAME SIGNS (STREET NAME / STOP R1-1 30"X30")
- PROPOSED SIGN
- PROPOSED STOP BAR
- PROPOSED BLUE FIRE HYDRANT DELINEATOR
- PROPOSED STREET END BARRICADE
- PROPOSED STREET LIGHT

NOTES:

1. STREET NAMES SHALL BE DISPLAYED ON STANDARD D3-1 GUIDE SIGNS ERECTED AT EACH STREET INTERSECTION AND HAVE GREEN LETTERS ON A WHITE BACKGROUND.
2. ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE TEXAS MANUAL OF UNIFORM TRAFFIC DEVICES (TxMUTCD).
3. PER TxMUTCD REQUIREMENTS, THERE MUST BE A 2' MINIMUM OFFSET BETWEEN THE FACE OF CURB AND THE OUTSIDE EDGE OF SIGNS.
4. BLUE FIRE HYDRANT DELINEATORS TO BE PLACED IN OUTSIDE TRAVEL LANE, 3' FROM LIP OF GUTTER.
5. ALL CHANGES TO THE TRAFFIC CONTROL PLAN MUST BE APPROVED AND DOCUMENTED BY THE SEALING ENGINEER AND THE COUNTY ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ANY PROPOSED CHANGES TO THE TRAFFIC CONTROL PLAN TO THE ENGINEER FOR APPROVAL.
6. THE LETTERING FOR NAMES OF STREETS ON STREET NAME SIGNS SHALL BE COMPOSED OF ALL UPPER-CASE LETTERS.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

SIGNAGE AND STRIPING PLAN (2 OF 2)

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

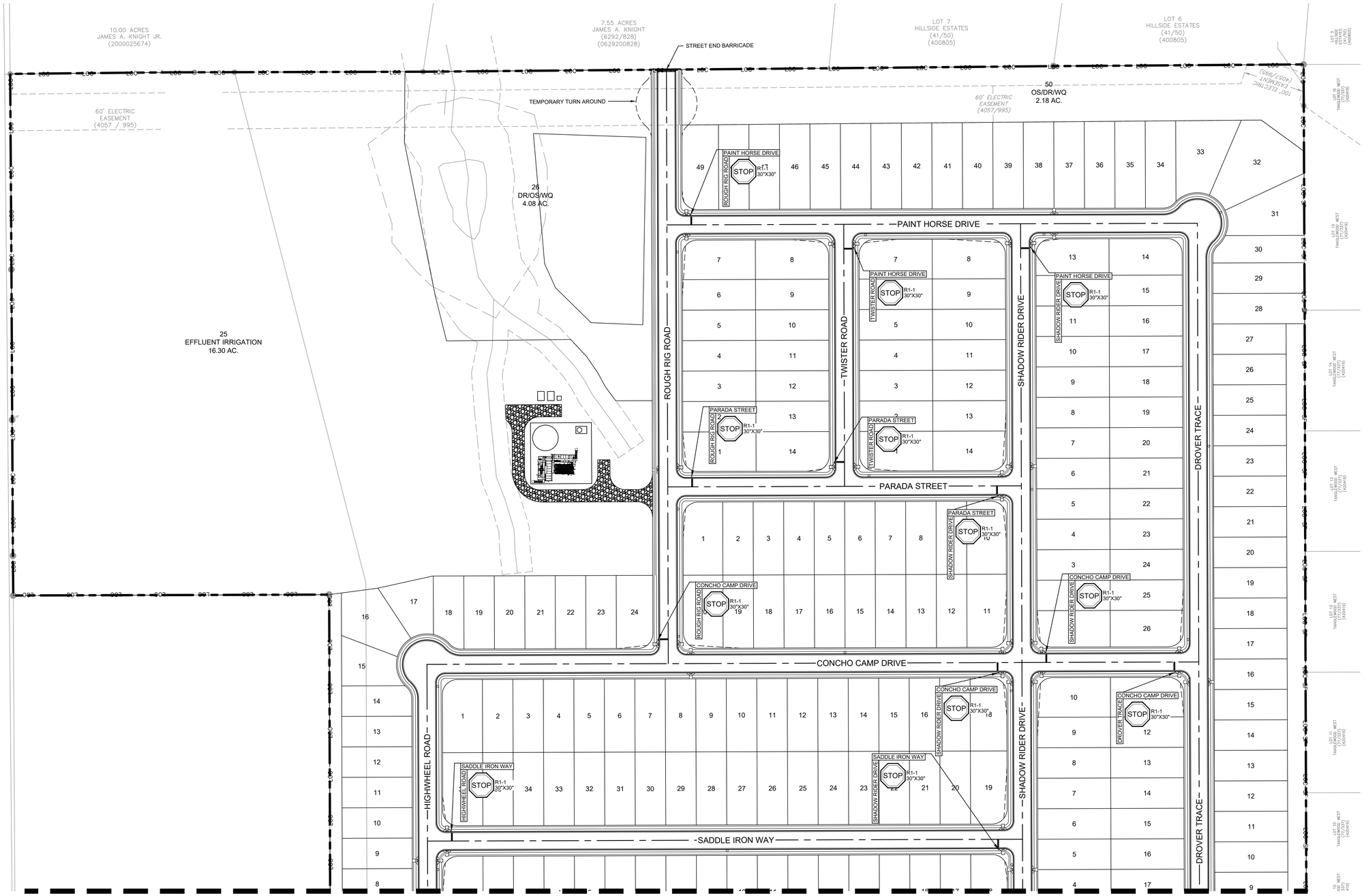
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 15 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-SIGN.DWG DATE: 1/29/2026 2:44:24 PM BY: BGILMORE



MATCHLINE TO SHEET 17

SCALE: 1" = 80'
GRAPHIC SCALE IN FEET
0 40' 80' 160'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED STOP SIGN W/ STREET NAME SIGNS (STREET NAME / STOP R1-1 30"X30")
- PROPOSED SIGN
- PROPOSED STOP BAR
- PROPOSED BLUE FIRE HYDRANT DELINEATOR
- PROPOSED STREET END BARRICADE
- PROPOSED STREET LIGHT

NOTES:

1. STREET NAMES SHALL BE DISPLAYED ON STANDARD D3-1 GUIDE SIGNS ERECTED AT EACH STREET INTERSECTION AND HAVE GREEN LETTERS ON A WHITE BACKGROUND.
2. ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE TEXAS MANUAL OF UNIFORM TRAFFIC DEVICES (TxMUTCD).
3. PER TxMUTCD REQUIREMENTS, THERE MUST BE A 2' MINIMUM OFFSET BETWEEN THE FACE OF CURB AND THE OUTSIDE EDGE OF SIGNS.
4. BLUE FIRE HYDRANT DELINEATORS TO BE PLACED IN OUTSIDE TRAVEL LANE, 3' FROM LIP OF GUTTER.
5. ALL CHANGES TO THE TRAFFIC CONTROL PLAN MUST BE APPROVED AND DOCUMENTED BY THE SEALING ENGINEER AND THE COUNTY ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ANY PROPOSED CHANGES TO THE TRAFFIC CONTROL PLAN TO THE ENGINEER FOR APPROVAL.
6. THE LETTERING FOR NAMES OF STREETS ON STREET NAME SIGNS SHALL BE COMPOSED OF ALL UPPER-CASE LETTERS.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

SIGNAGE AND STRIPING PLAN (1 OF 2)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-SIGN.DWG DATE: 1/29/2026 2:44:32 PM BY: BGILMORE

MATCHLINE TO SHEET 18

SCALE: 1" = 80'
GRAPHIC SCALE IN FEET
0 40' 80' 160'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED WALL
- FLOW ARROW
- TREES TO BE REMOVED
- TREES TO BE PRESERVED

1. ALL ACCESSIBLE ROUTES SHALL BE INSPECTED AND CERTIFIED BY A TDLR REGISTERED ACCESSIBILITY SPECIALIST (RAS).

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

GRADING PLAN (1 OF 2)

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

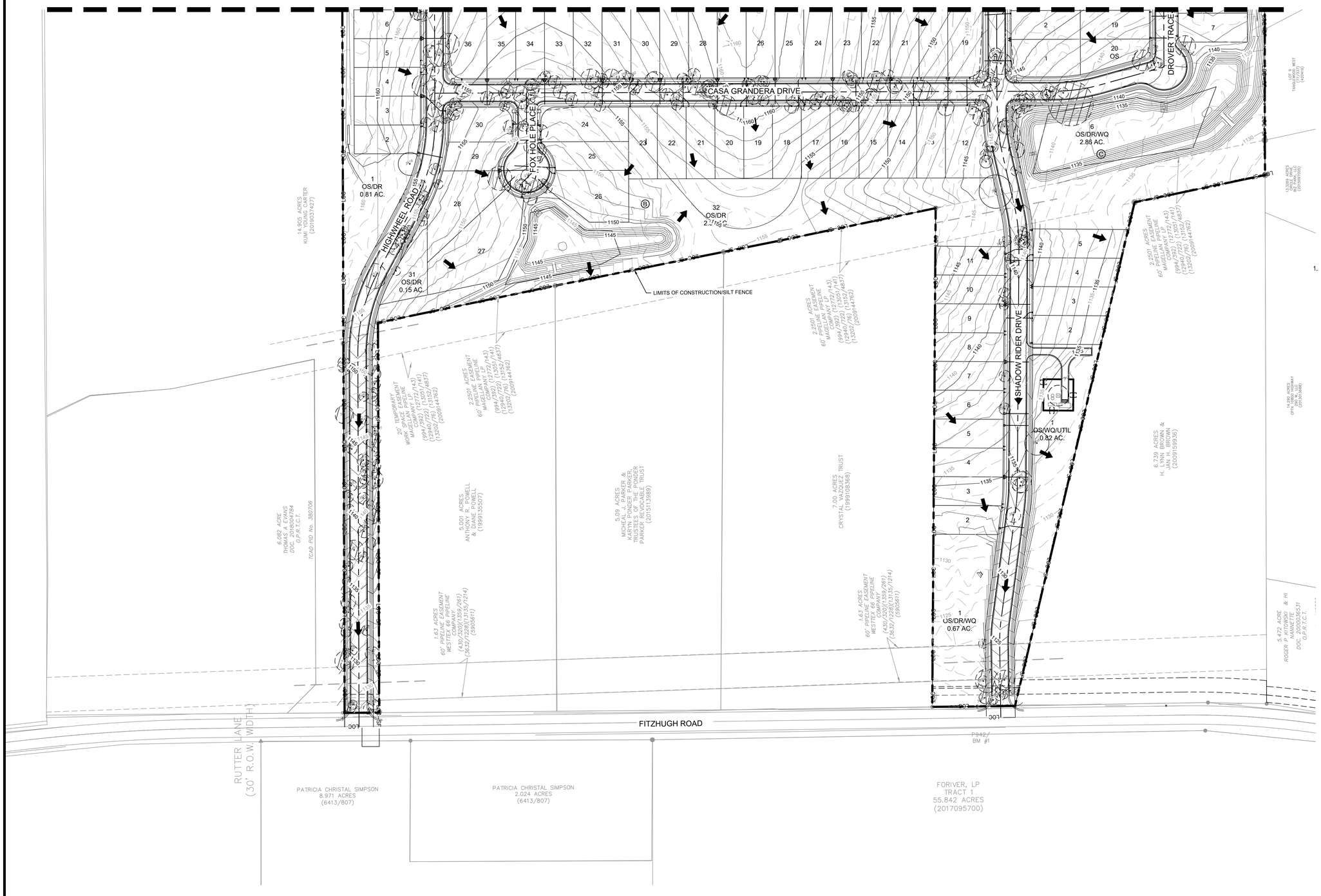
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

Brandon Gilmore

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-GRADE.DWG DATE: 1/29/2026 2:45:04 PM BY: SMEDINA

MATCHLINE TO SHEET 17



SCALE: 1" = 80'
GRAPHIC SCALE IN FEET
0 40' 80' 160'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED WALL
- FLOW ARROW
- TREES TO BE REMOVED
- TREES TO BE PRESERVED

1. ALL ACCESSIBLE ROUTES SHALL BE INSPECTED AND CERTIFIED BY A TDLR REGISTERED ACCESSIBILITY SPECIALIST (RAS).

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

GRADING PLAN (2 OF 2)

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

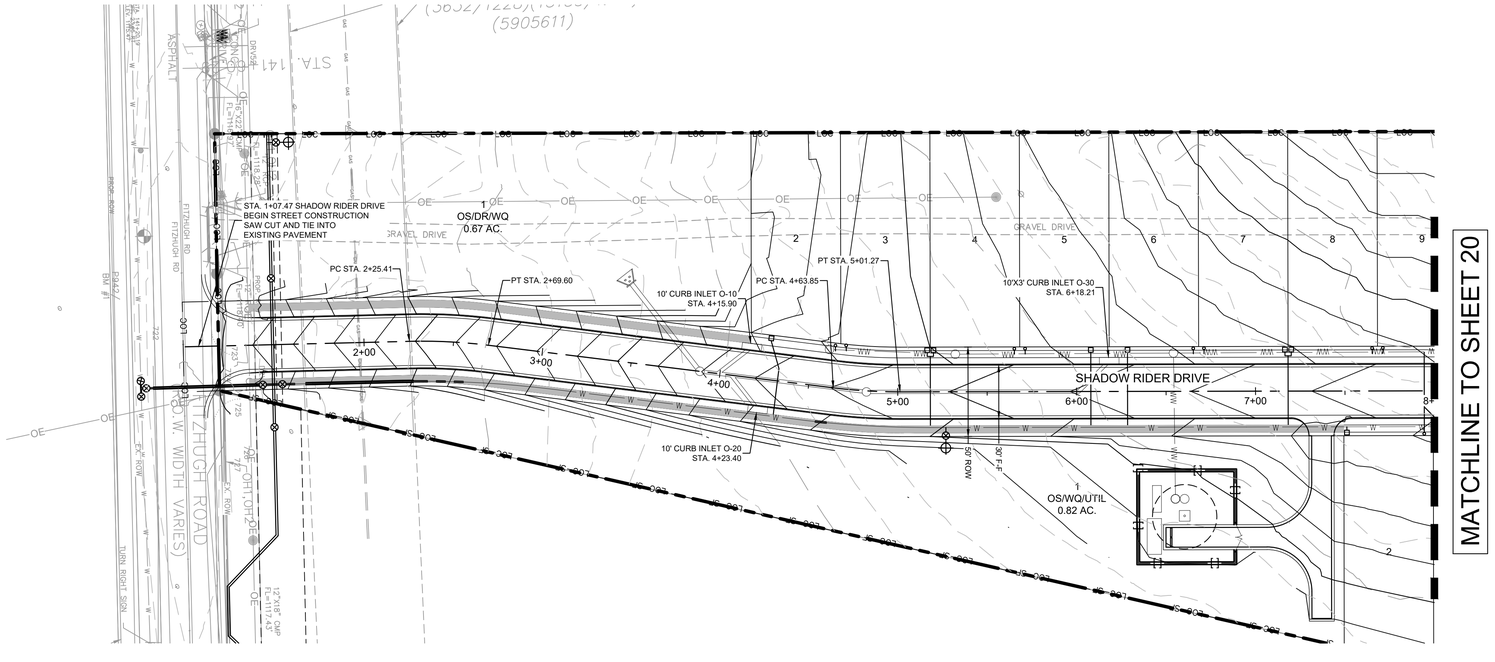
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

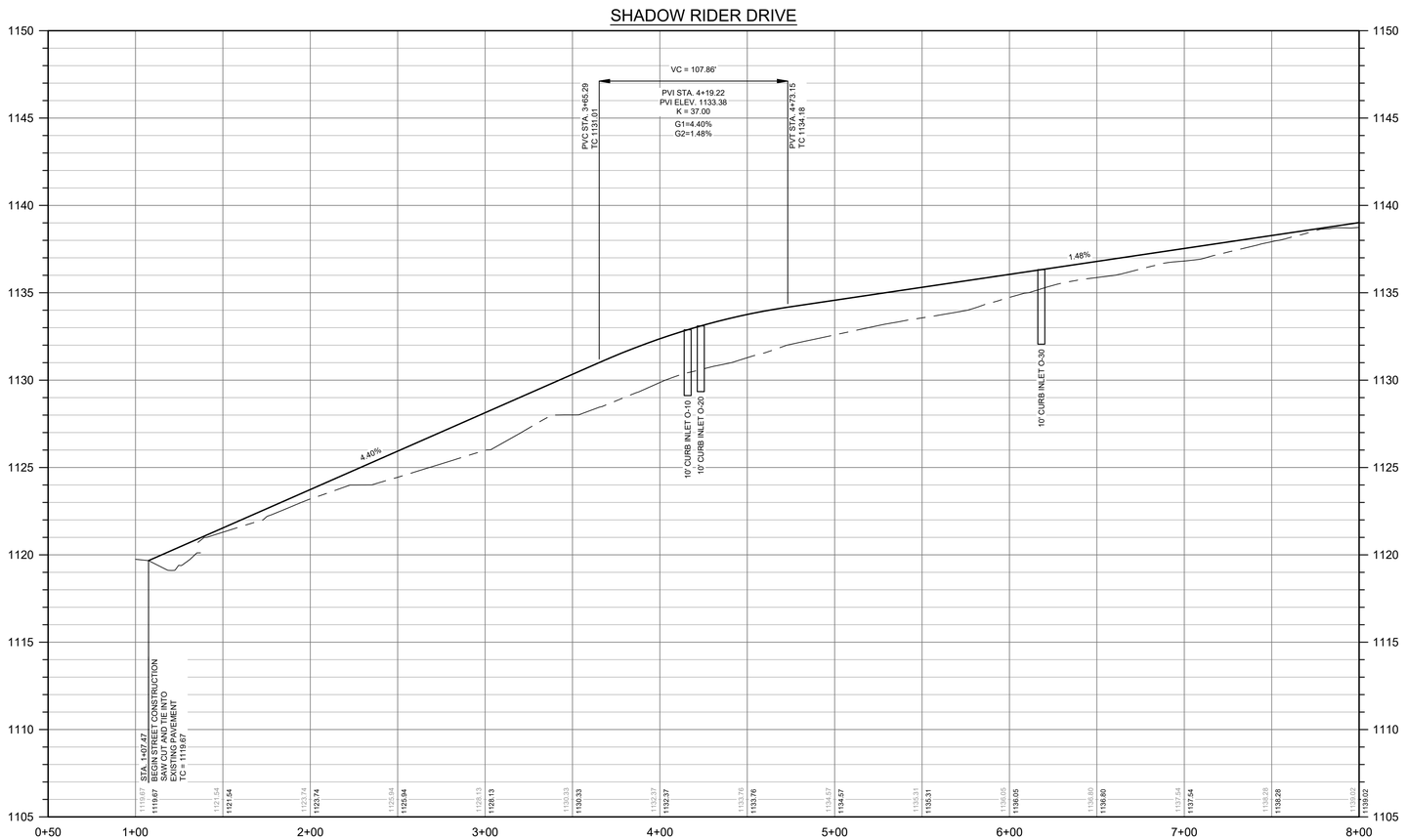
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

SHEET 18 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-GRADE.DWG DATE: 1/29/2026 2:45:14 PM BY: SMEDINA





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- _EHZ
- CWQZ — CWQZ_COA
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- WW — WASTEWATER LINE
- W — WATERLINE
- SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED BY HOMEBUILDERS DURING HOME CONSTRUCTION
- ADA RAMP WITH DETECTABLE WARNINGS
- CVG — CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25' UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.): PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

SHADOW RIDER DRIVE
(1+00 TO 8+00)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

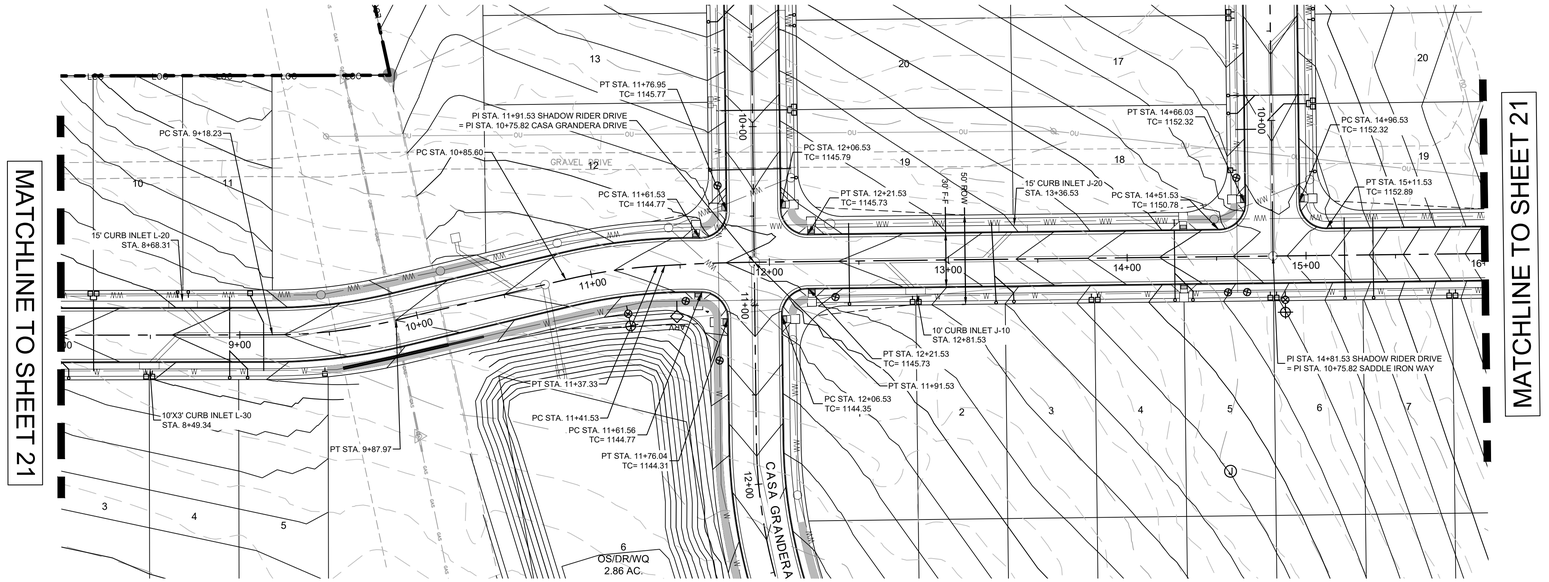
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

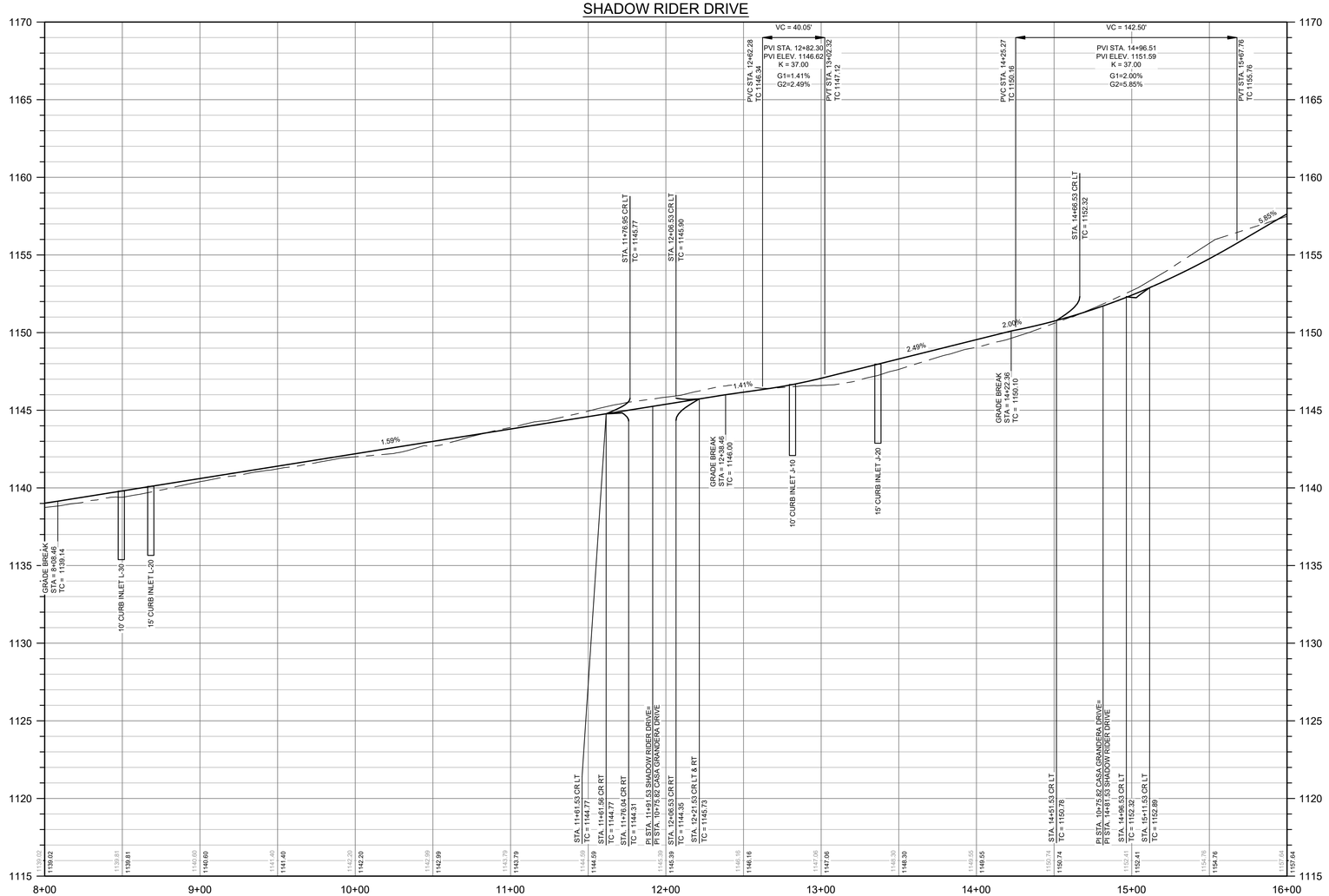
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 19 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ROAD.DWG DATE: 1/29/2026 2:48:16 PM BY: SMEDINA



SHADOW RIDER DRIVE



SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- _EHZ
- CWQZ — CWQZ_COA
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- WW — WASTEWATER LINE
- W — WATERLINE
- SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED BY HOMEBUILDERS DURING HOME CONSTRUCTION
- ADA RAMP WITH DETECTABLE WARNINGS
- CVG — CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25' UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.): PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

SHADOW RIDER DRIVE
(8+00 TO 16+00)

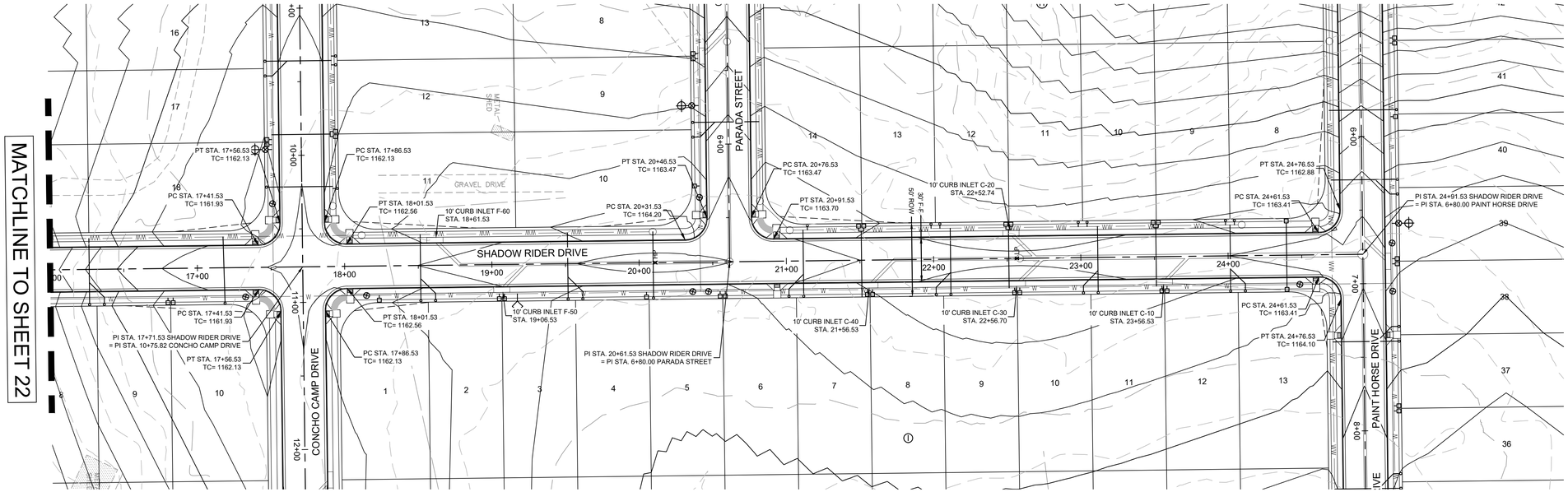
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

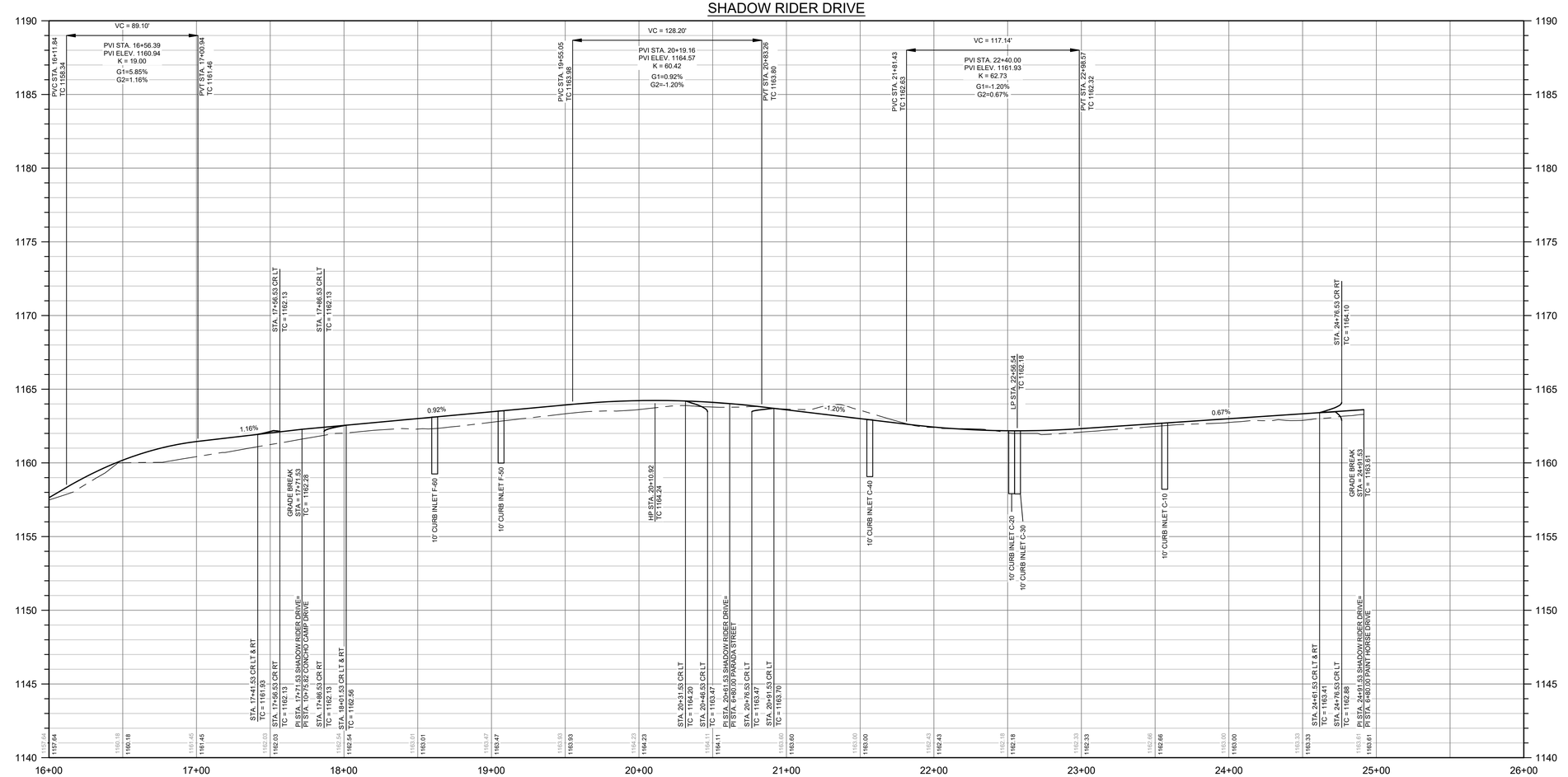
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ROAD.DWG DATE: 1/28/2026 2:48:36 PM BY: SMEDINA





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- _EHZ
- CWQZ — CWQZ_COA
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- WW — WASTEWATER LINE
- W — WATERLINE
- SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED BY HOMEBUILDERS DURING HOME CONSTRUCTION
- ADA RAMP WITH DETECTABLE WARNINGS
- CVG — CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25' UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.): PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

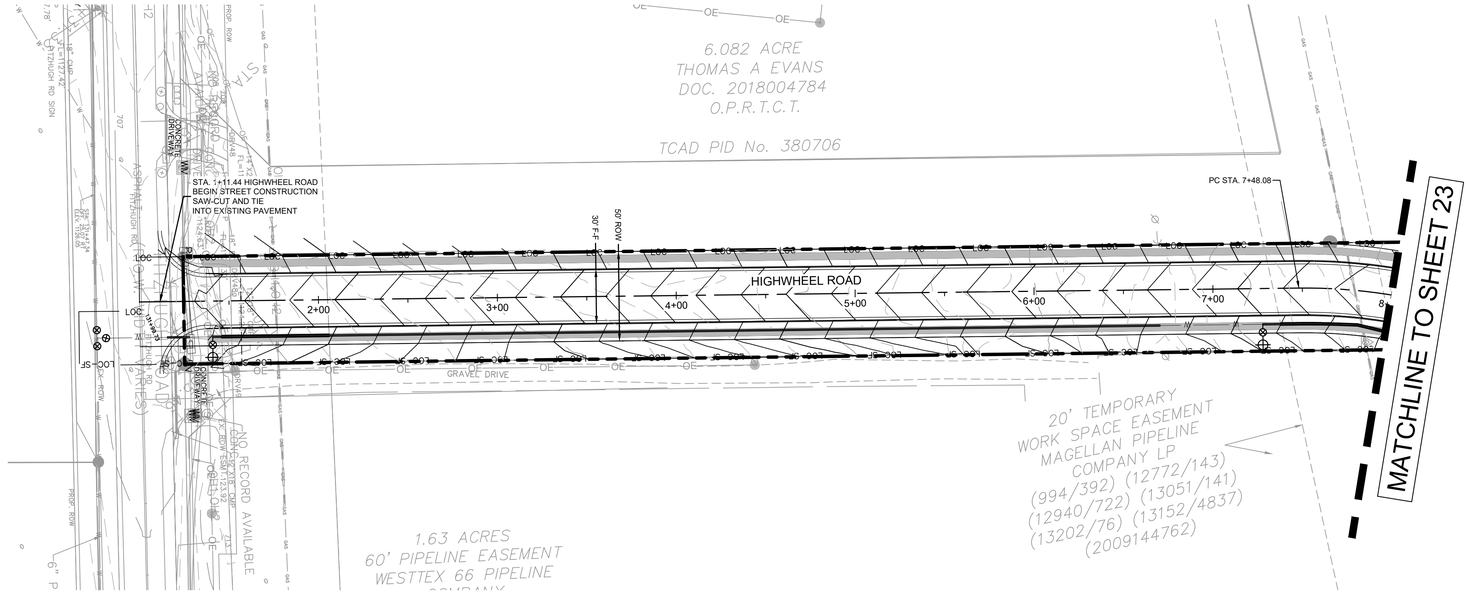
SHADOW RIDER DRIVE (16+00 TO END)

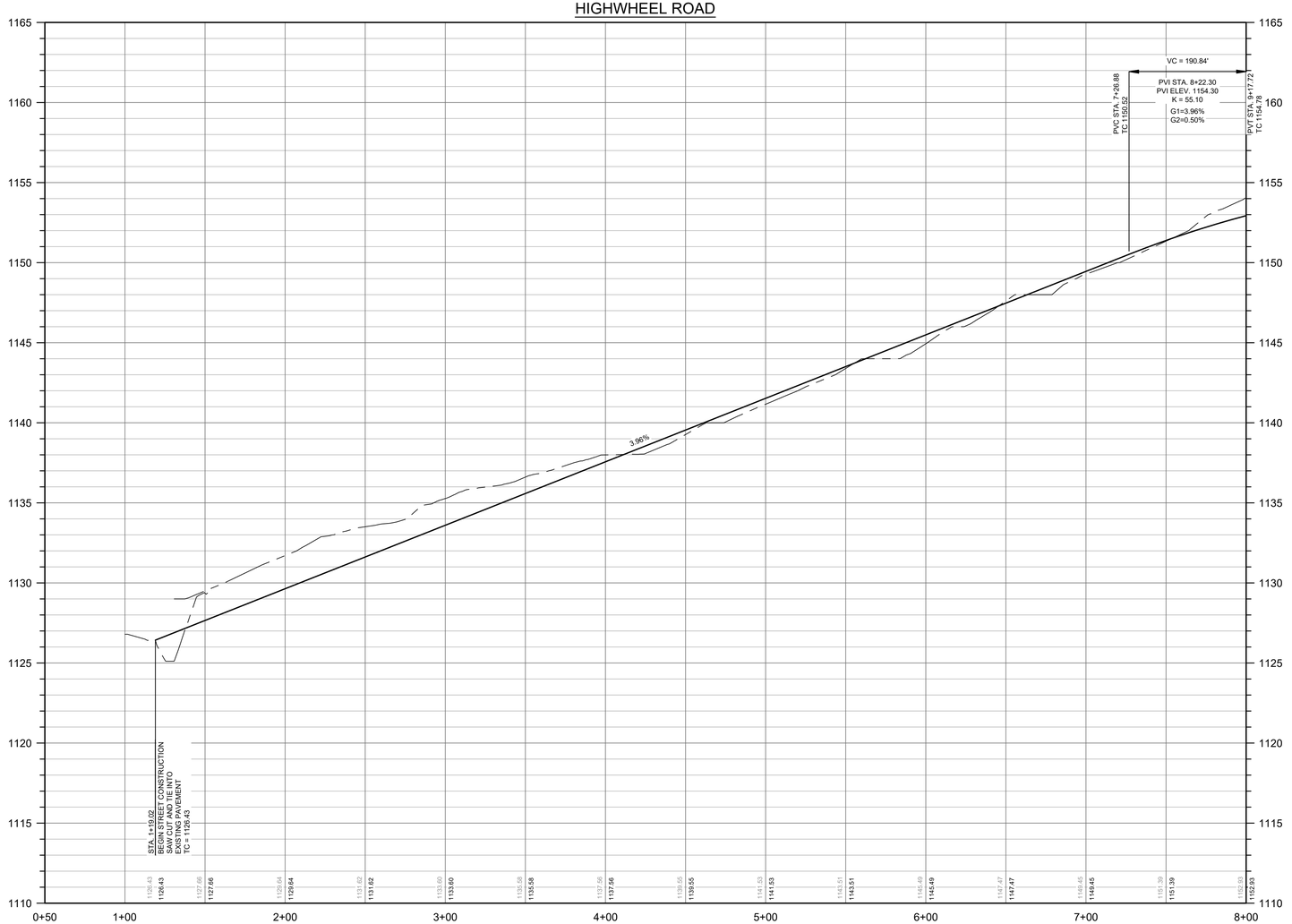
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ROAD.DWG DATE: 1/29/2026 2:46:57 PM BY: SMEDINA





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- _EHZ
- CWQZ — CWQZ_COA
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- WW — WASTEWATER LINE
- W — WATERLINE
- SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED BY HOMEBUILDERS DURING HOME CONSTRUCTION
- ADA RAMP WITH DETECTABLE WARNINGS
- CVG — CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25' UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.): PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

HIGHWHEEL ROAD
(1+00 TO 8+00)

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

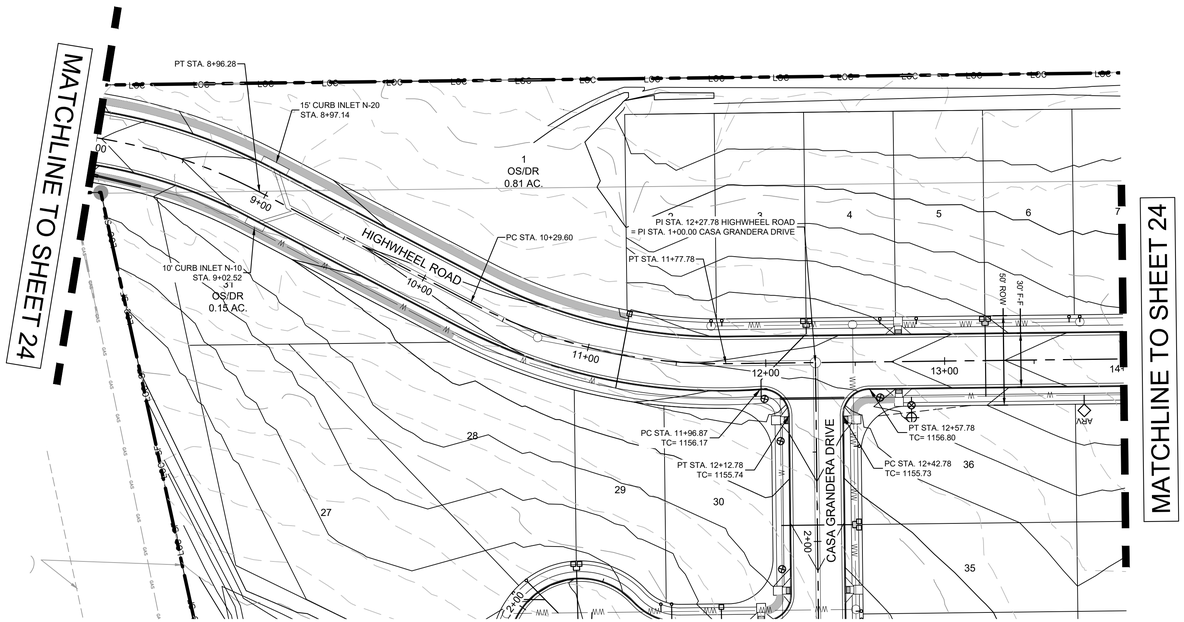
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

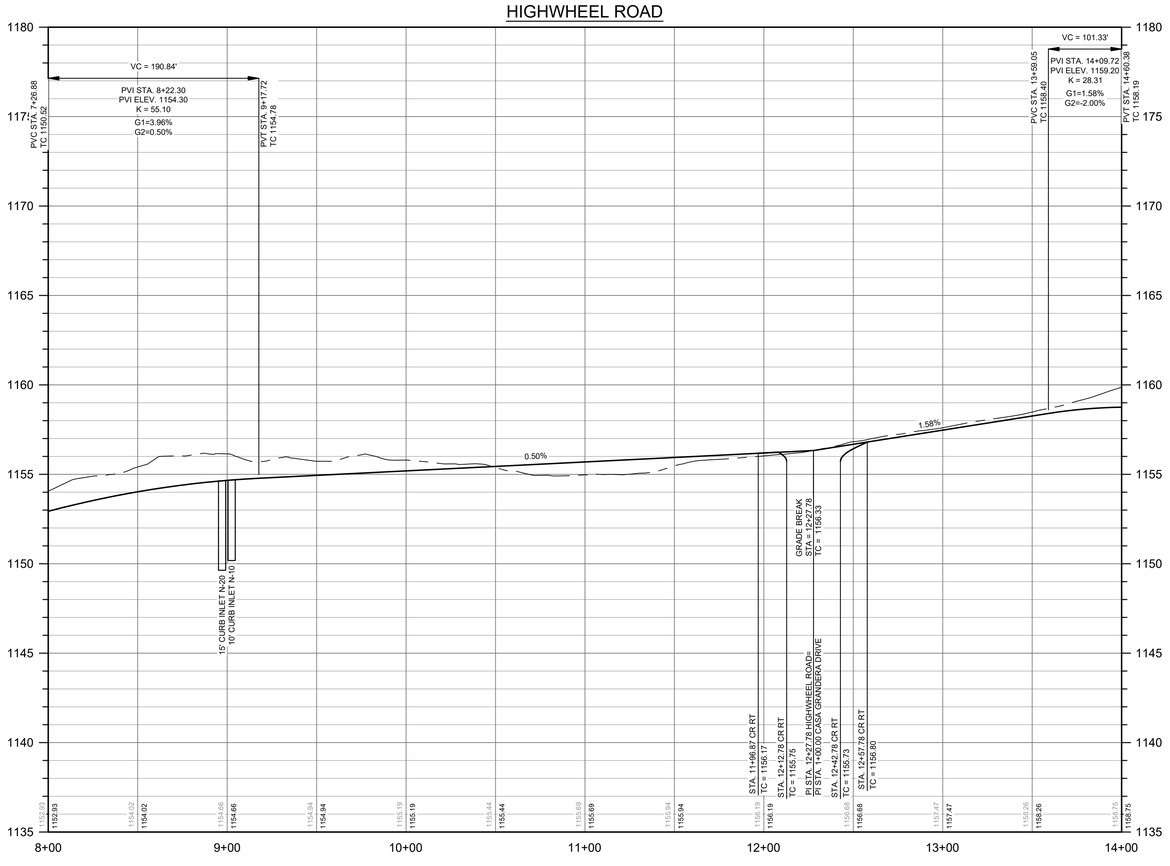
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 22 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ROAD.DWG DATE: 1/29/2026 2:47:19 PM BY: SMEDINA





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- _EHZ
- CWQZ — CWQZ_COA
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- WW — WASTEWATER LINE
- W — WATERLINE
- SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED BY HOMEBUILDERS DURING HOME CONSTRUCTION
- ADA RAMP WITH DETECTABLE WARNINGS
- CVG — CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25' UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.): PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

HIGHWHEEL ROAD (8+00 TO 14+00)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

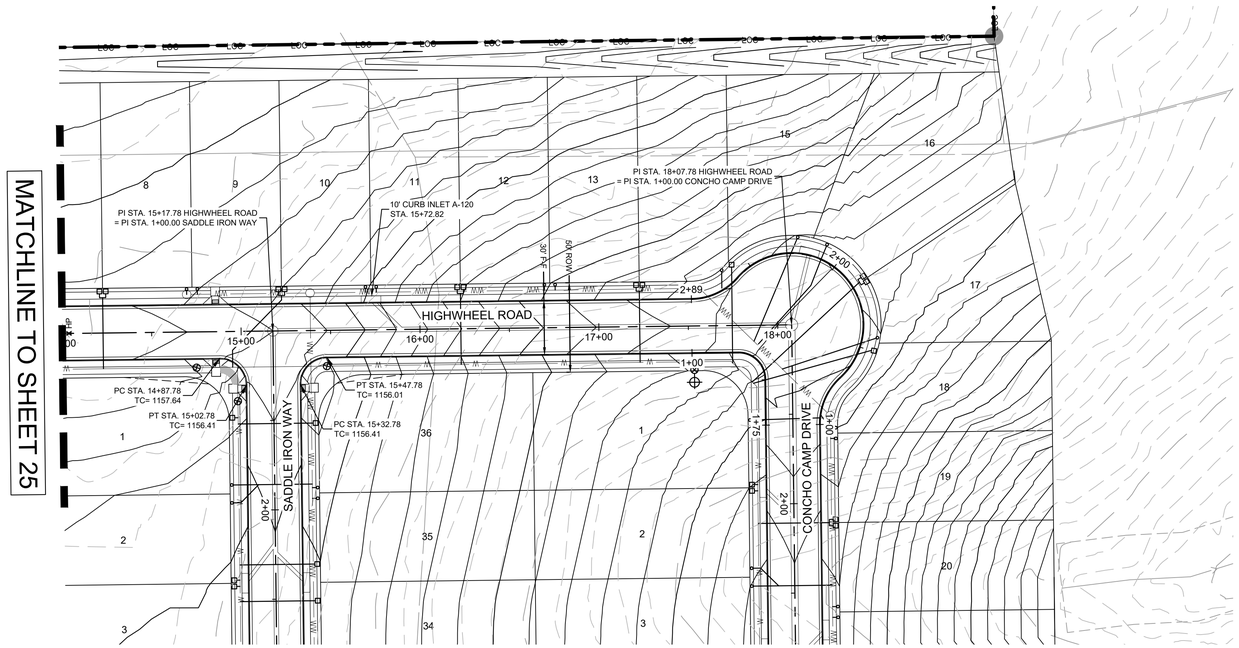
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

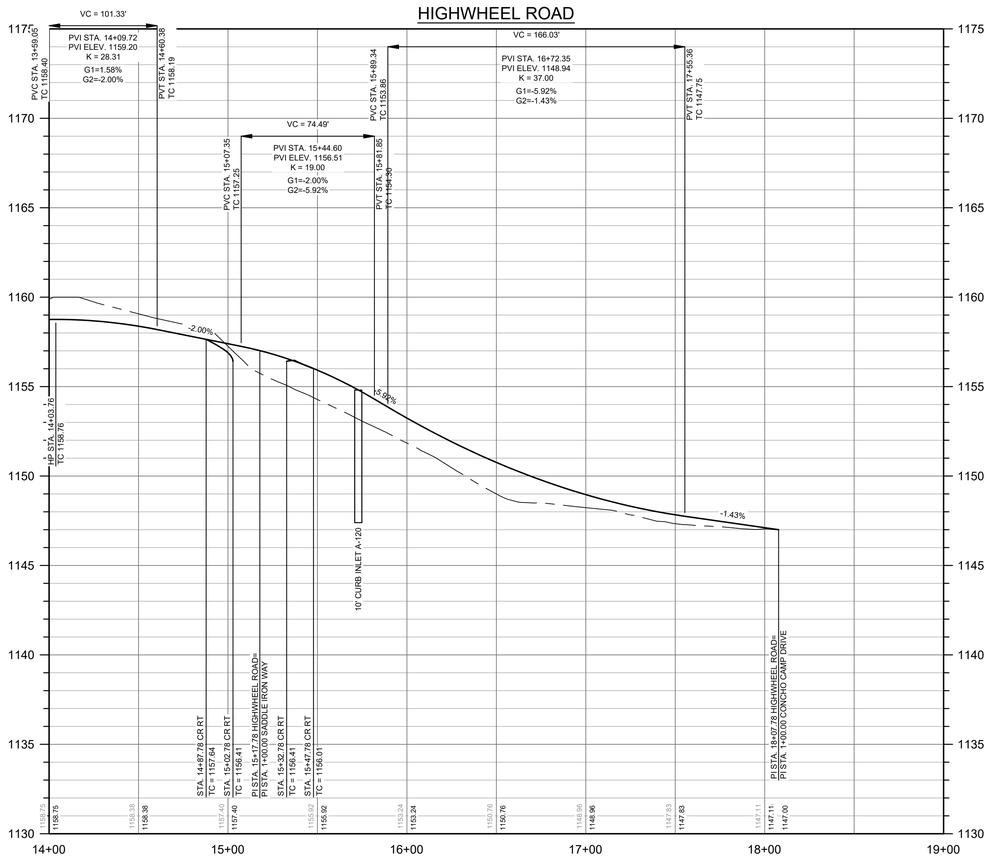
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

SHEET 23 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ROAD.DWG DATE: 1/29/2026 2:47:44 PM BY: SMEDINA





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- _EHZ
- CWQZ — CWQZ_COA
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- WW — WASTEWATER LINE
- W — WATERLINE
- SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED BY HOMEBUILDERS DURING HOME CONSTRUCTION
- ADA RAMP WITH DETECTABLE WARNINGS
- CVG — CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25' UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.): PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

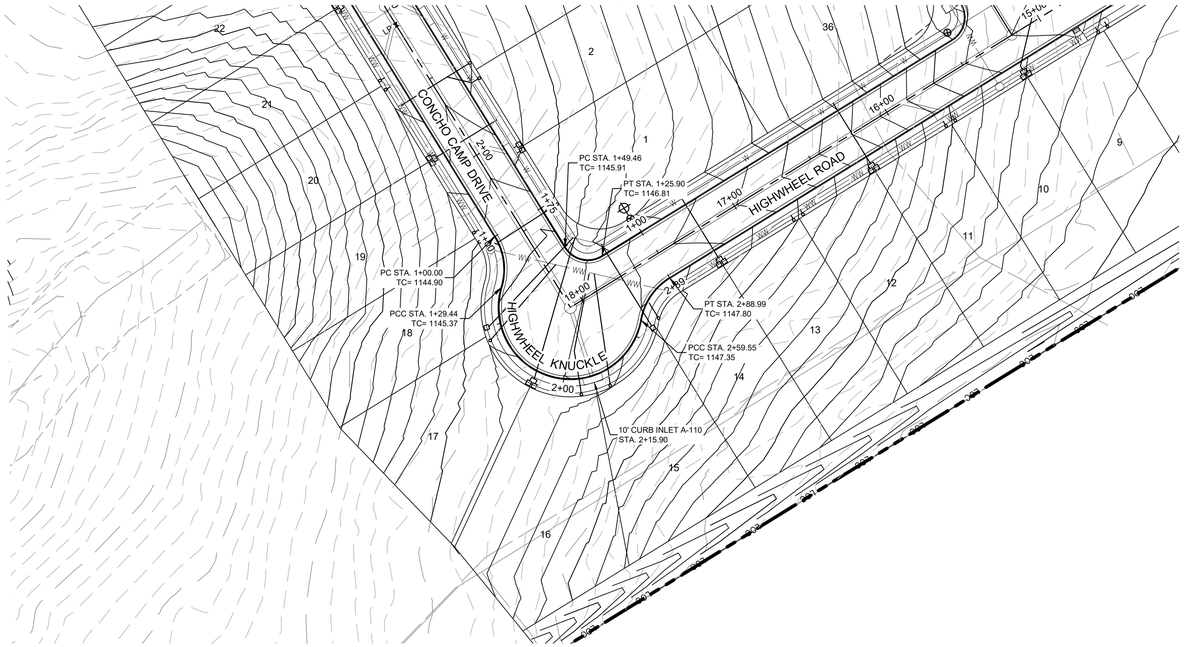
HIGHWHEEL ROAD (14+00 TO END)

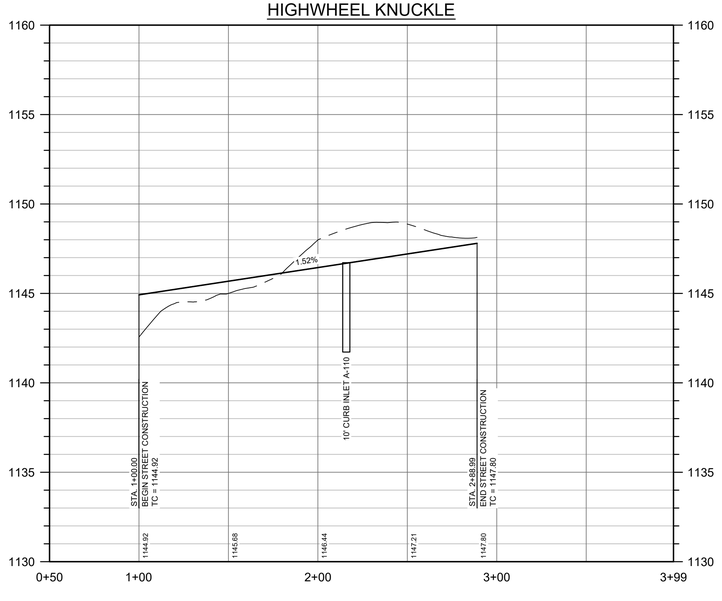
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ROAD.DWG DATE: 1/29/2026 2:48:06 PM BY: SMEDINA





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- _EHZ
- CWQZ — CWQZ_COA
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- WW — WASTEWATER LINE
- W — WATERLINE
- SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED BY HOMEBUILDERS DURING HOME CONSTRUCTION
- ADA RAMP WITH DETECTABLE WARNINGS
- CVG — CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25' UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.): PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

HIGHWHEEL ROAD CDS

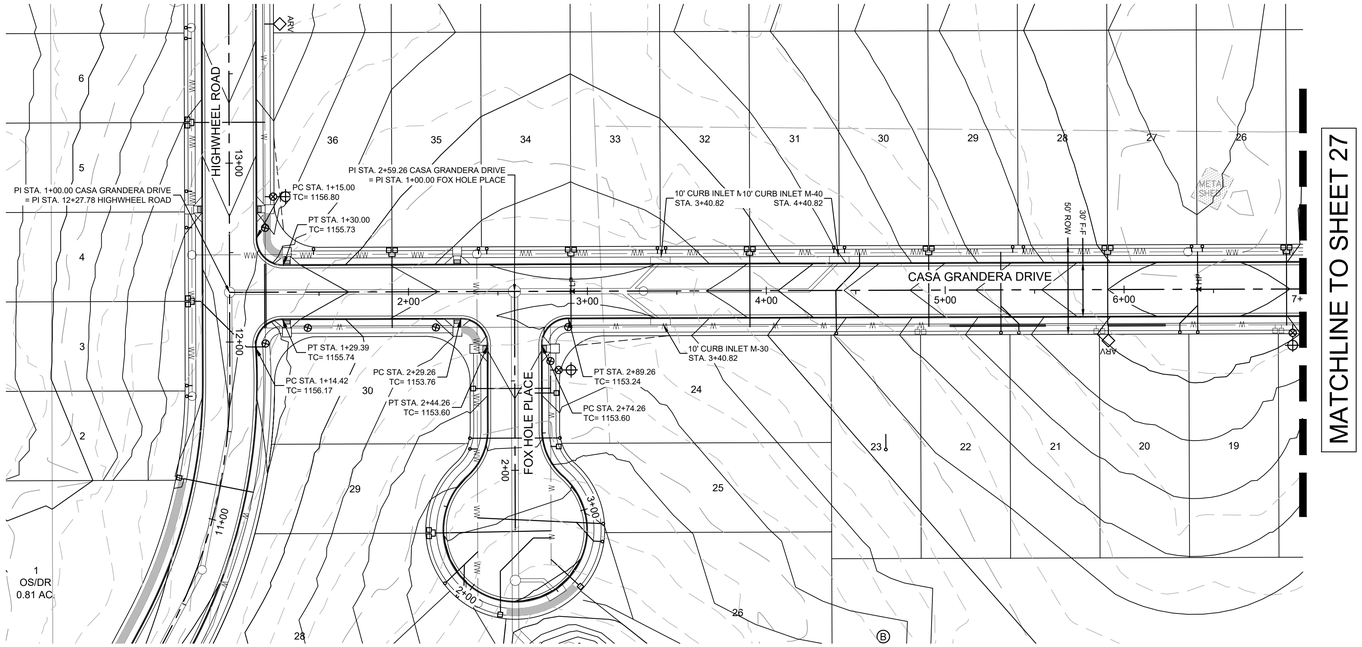
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

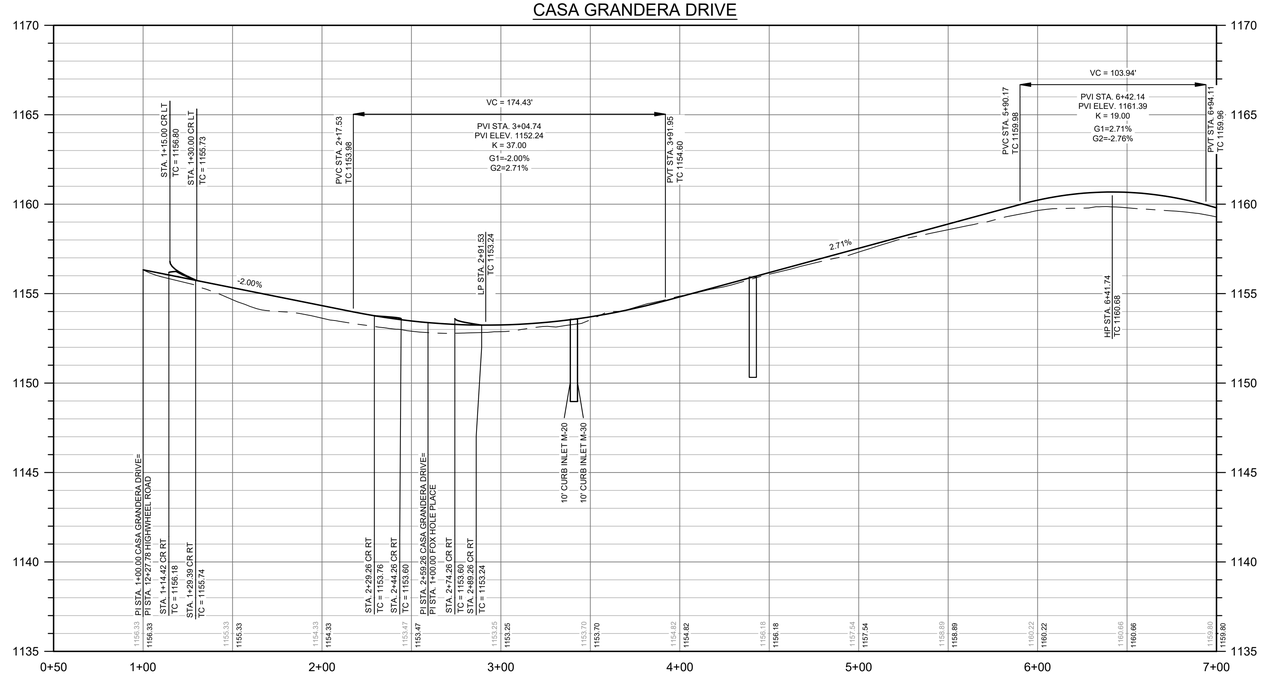
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ROAD.DWG DATE: 1/29/2026 2:48:27 PM BY: SMEDINA





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- _EHZ
- CWQZ — CWQZ_COA
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- WW — WASTEWATER LINE
- W — WATERLINE
- SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED BY HOMEBUILDERS DURING HOME CONSTRUCTION
- ADA RAMP WITH DETECTABLE WARNINGS
- CVG — CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25' UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.); PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

CASA GRANDERA DRIVE (1+00 TO 7+00)

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

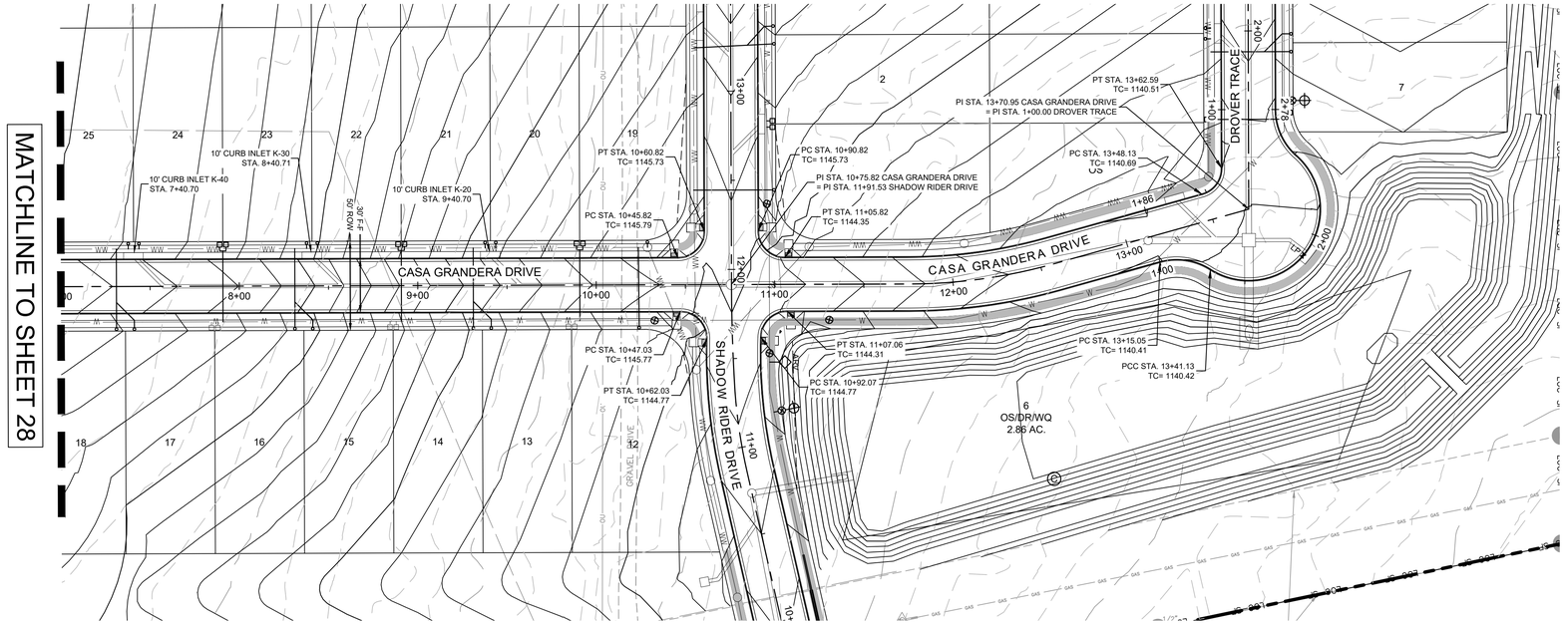
CHECKED BY: CR

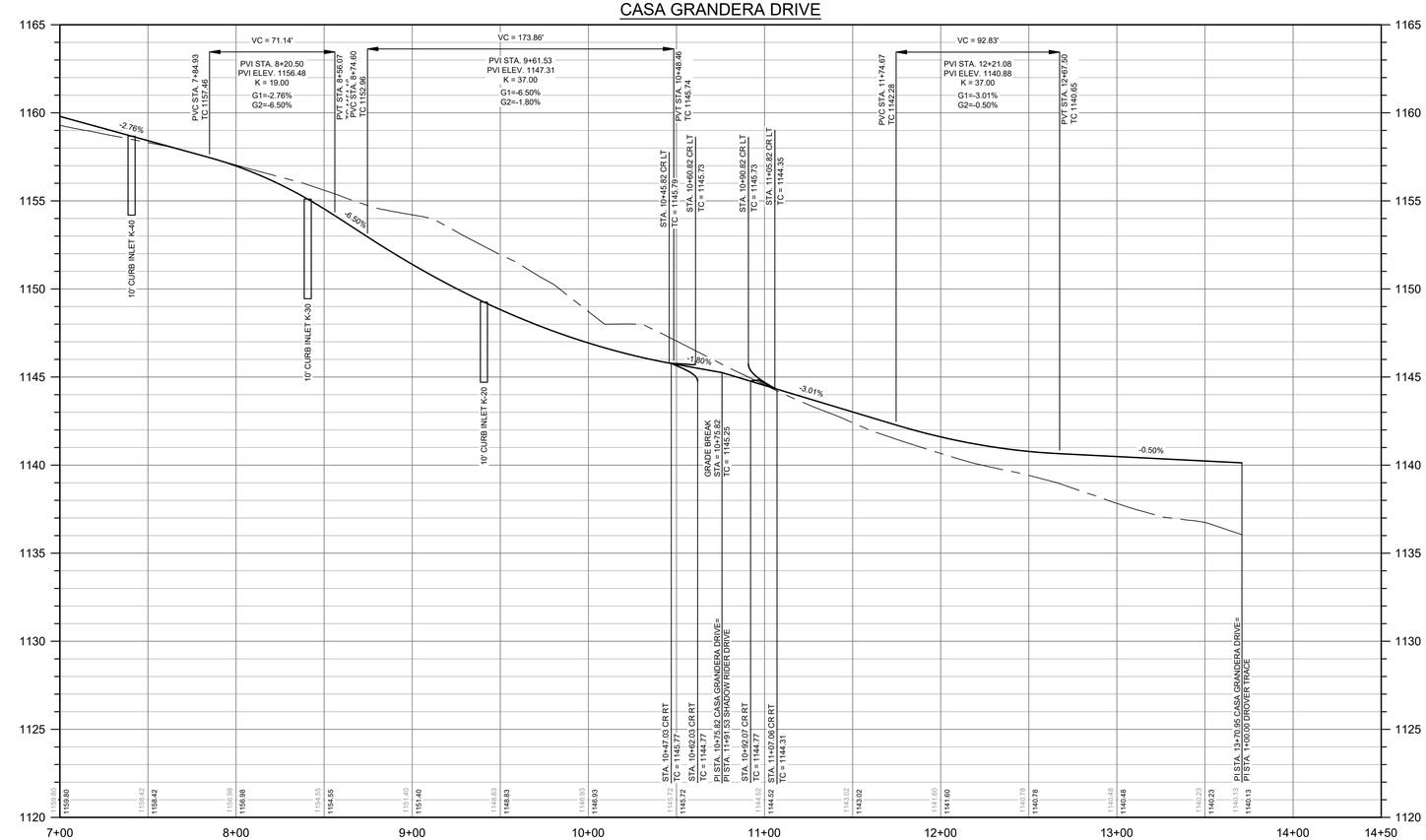
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

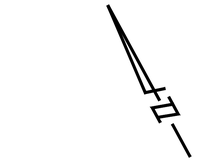
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ROAD.DWG DATE: 1/29/2026 2:48:50 PM BY: SMEDINA







SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- _EHZ
- CWQZ — CWQZ_COA
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- WW — WASTEWATER LINE
- W — WATERLINE
- SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED BY HOMEBUILDERS DURING HOME CONSTRUCTION
- ADA RAMP WITH DETECTABLE WARNINGS
- CVG — CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25' UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.): PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

CASA GRANDERA
DRIVE (7+00 TO END)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

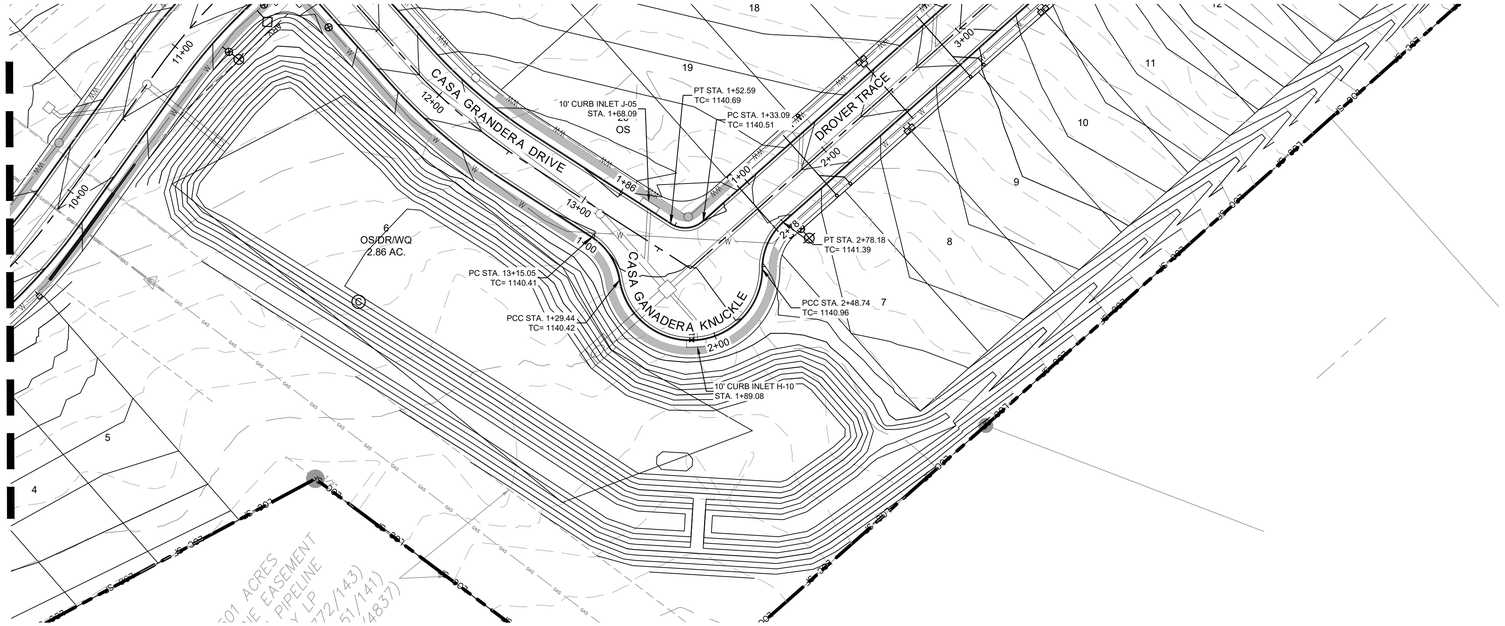
01/29/2026

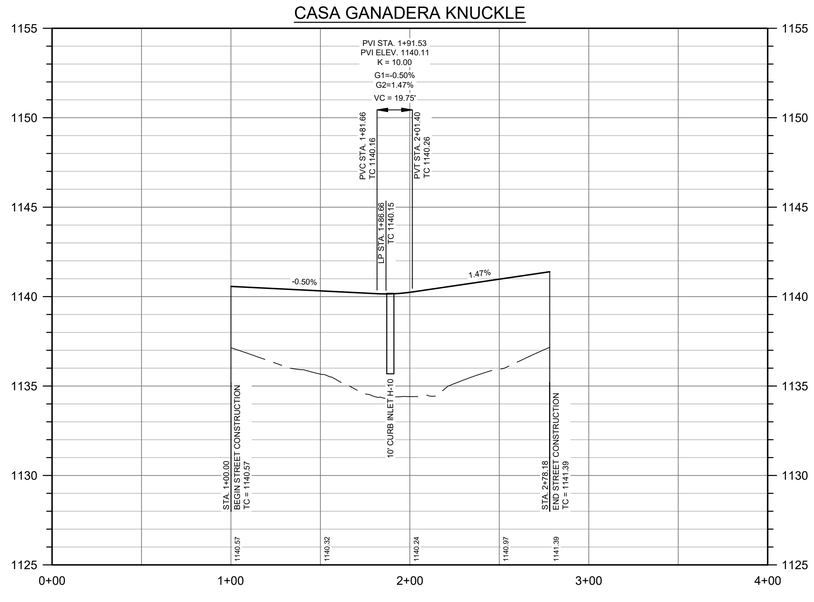
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 27 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ROAD.DWG DATE: 1/29/2026 2:49:12 PM BY: SMEDINA

MATCHLINE TO SHEET 29





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- _EHZ
- CWQZ — CWQZ_COA
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- WW — WASTEWATER LINE
- W — WATERLINE
- SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED BY HOMEBUILDERS DURING HOME CONSTRUCTION
- ADA RAMP WITH DETECTABLE WARNINGS
- CVG — CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25' UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.): PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

CASA GRANDERA
DRIVE CDS

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

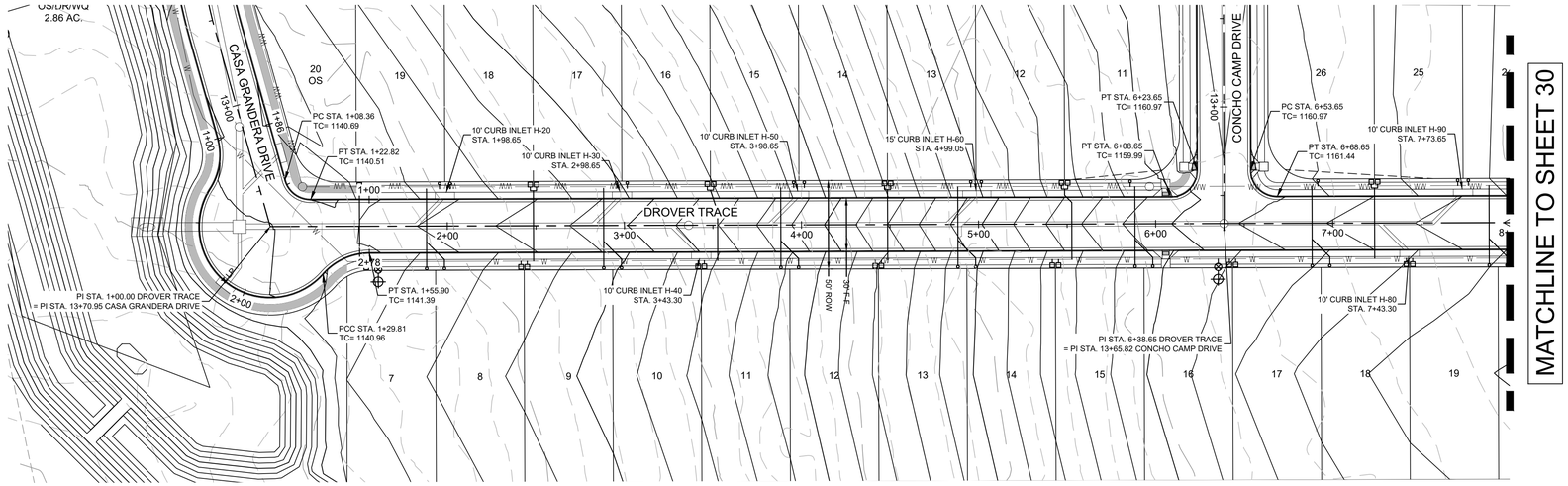
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

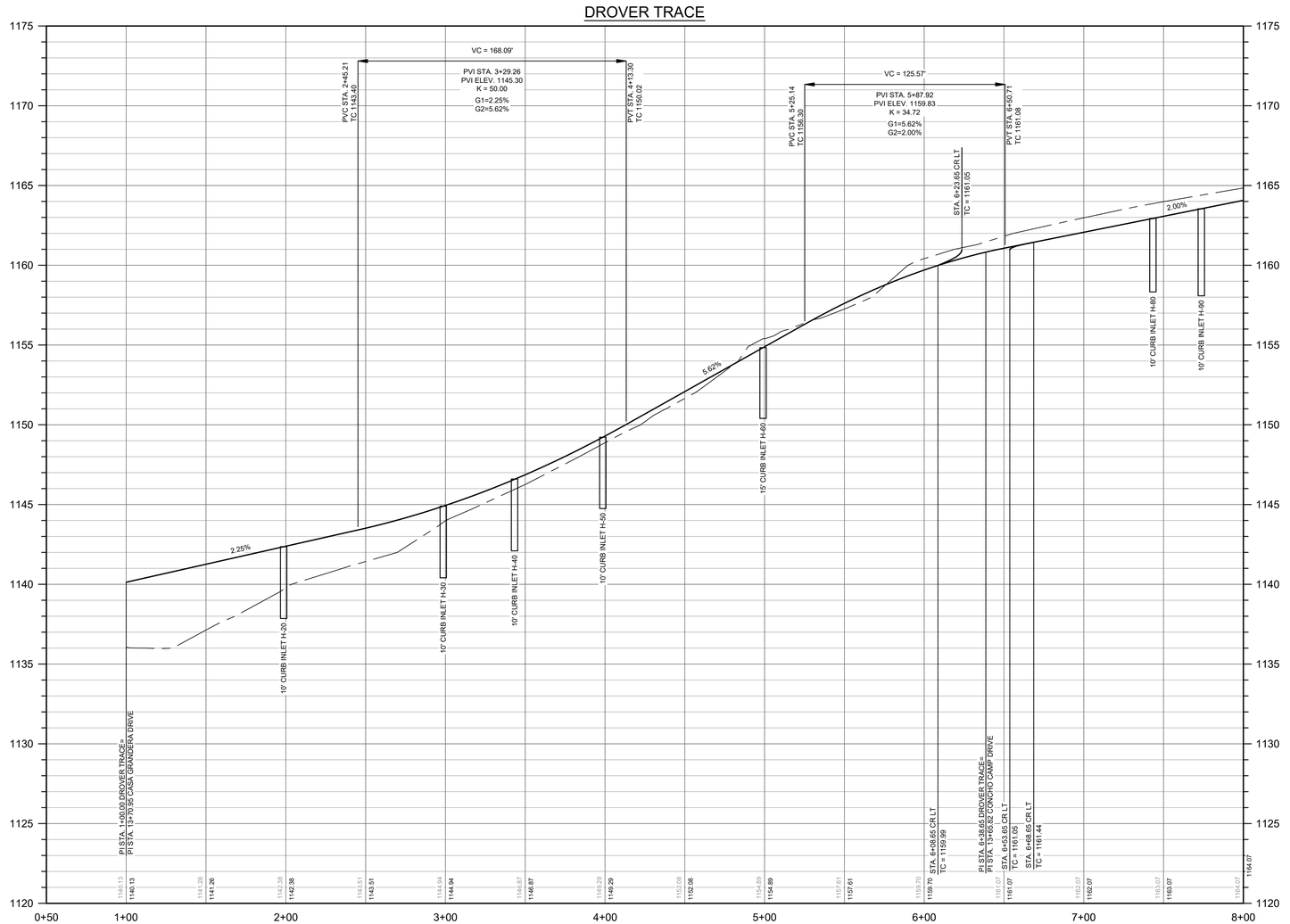
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

SHEET 28 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ROAD.DWG DATE: 1/29/2026 2:49:34 PM BY: SMEDINA





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- _EHZ
- CWQZ — CWQZ_COA
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- WW — WASTEWATER LINE
- W — WATERLINE
- SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED BY HOMEBUILDERS DURING HOME CONSTRUCTION
- ADA RAMP WITH DETECTABLE WARNINGS
- CVG — CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25' UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.): PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

DROVER TRACE (1+00 TO 8+00)

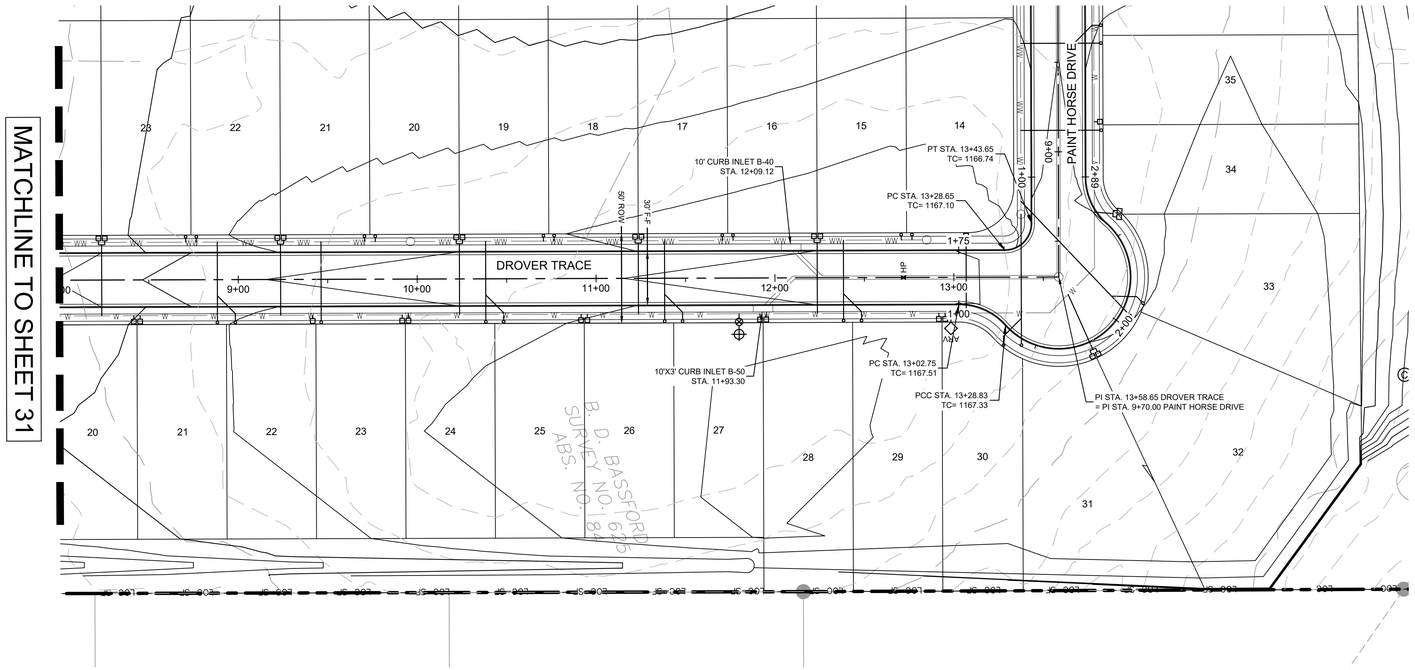
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

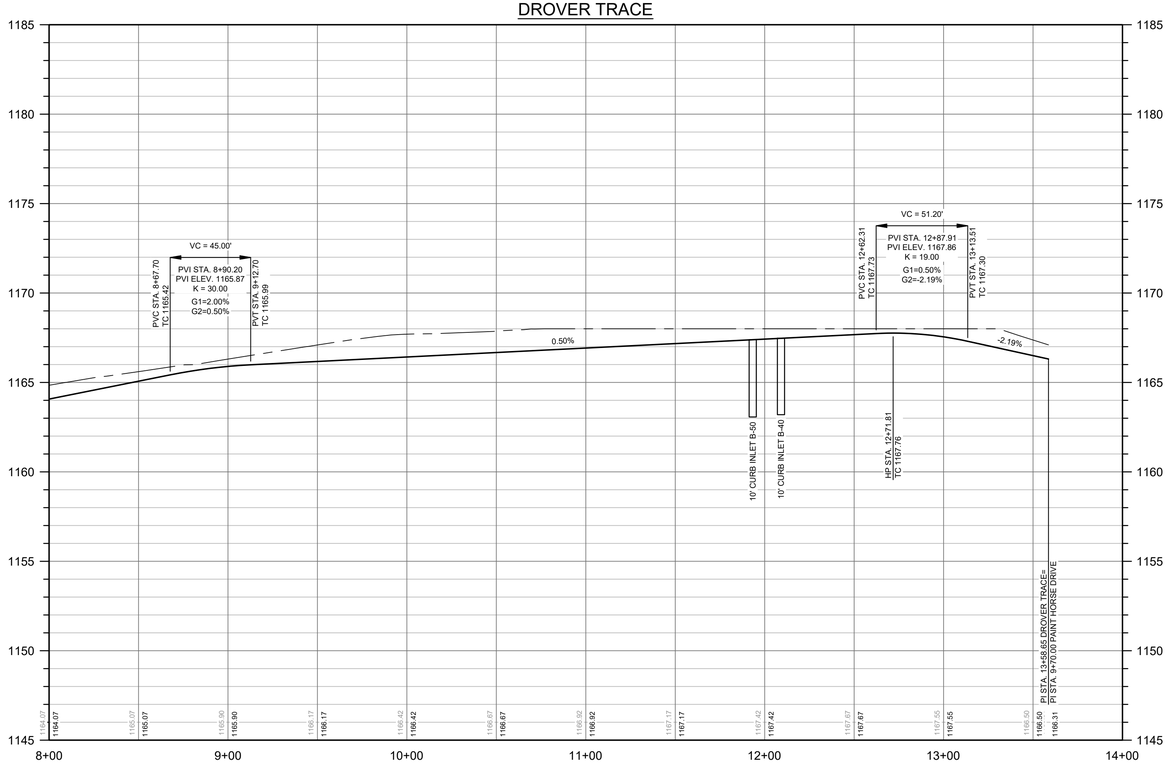
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ROAD.DWG DATE: 1/29/2026 2:49:57 PM BY: SMEDINA





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- _EHZ
- CWQZ — CWQZ_COA
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- WW — WASTEWATER LINE
- W — WATERLINE
- SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED BY HOMEBUILDERS DURING HOME CONSTRUCTION
- ADA RAMP WITH DETECTABLE WARNINGS
- CVG — CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25' UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.): PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

DROVER TRACE (8+00
TO END)

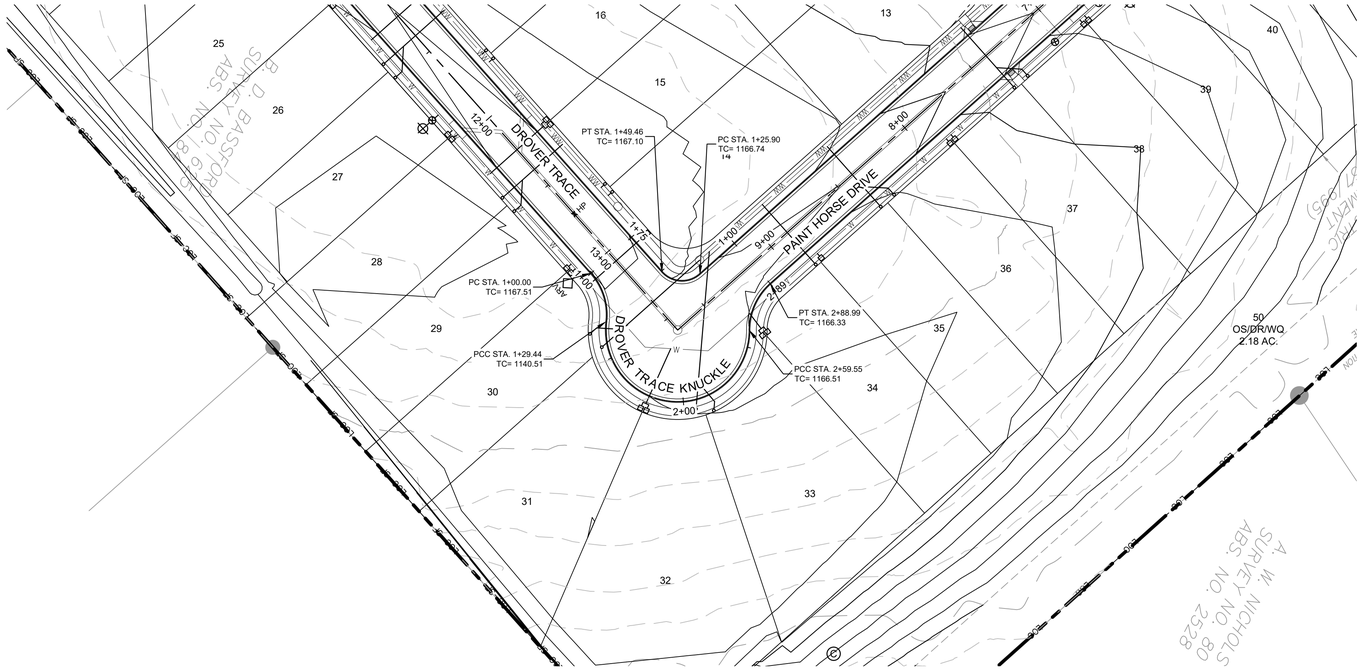
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

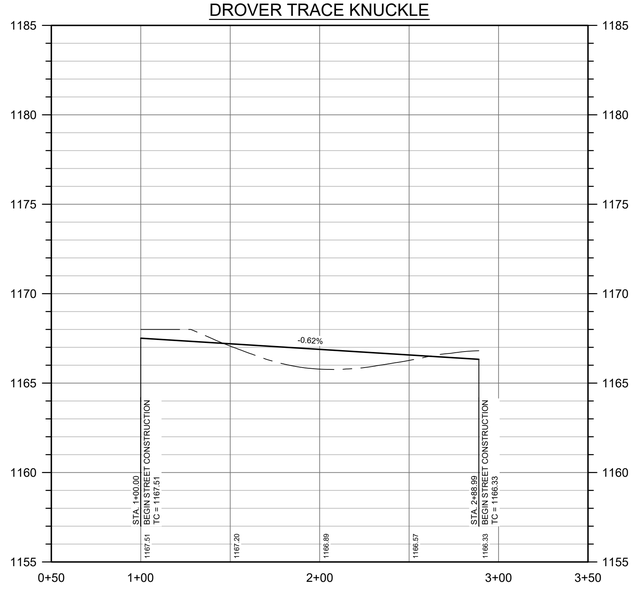
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ROAD.DWG DATE: 1/29/2026 2:50:21 PM BY: SMEDINA





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- _EHZ
- CWQZ — CWQZ_COA
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- WW — WASTEWATER LINE
- W — WATERLINE
- SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED BY HOMEBUILDERS DURING HOME CONSTRUCTION
- ADA RAMP WITH DETECTABLE WARNINGS
- CVG — CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25' UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.); PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

DROVER TRACE CDS

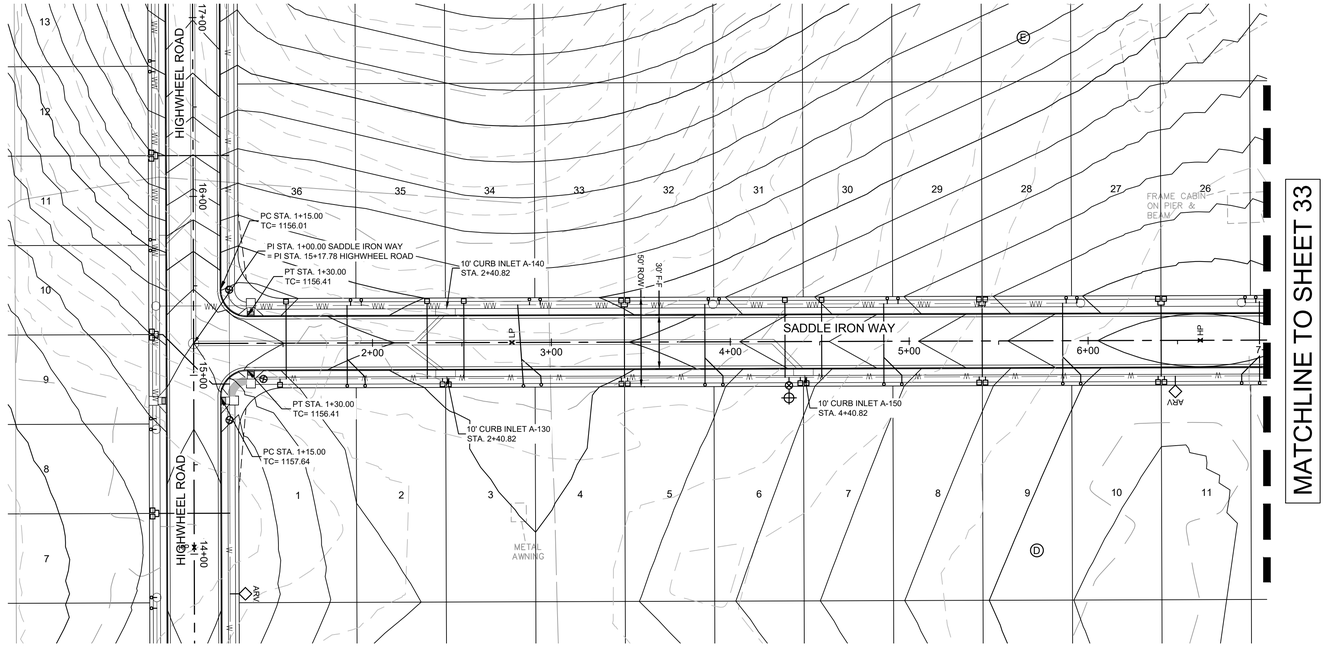
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

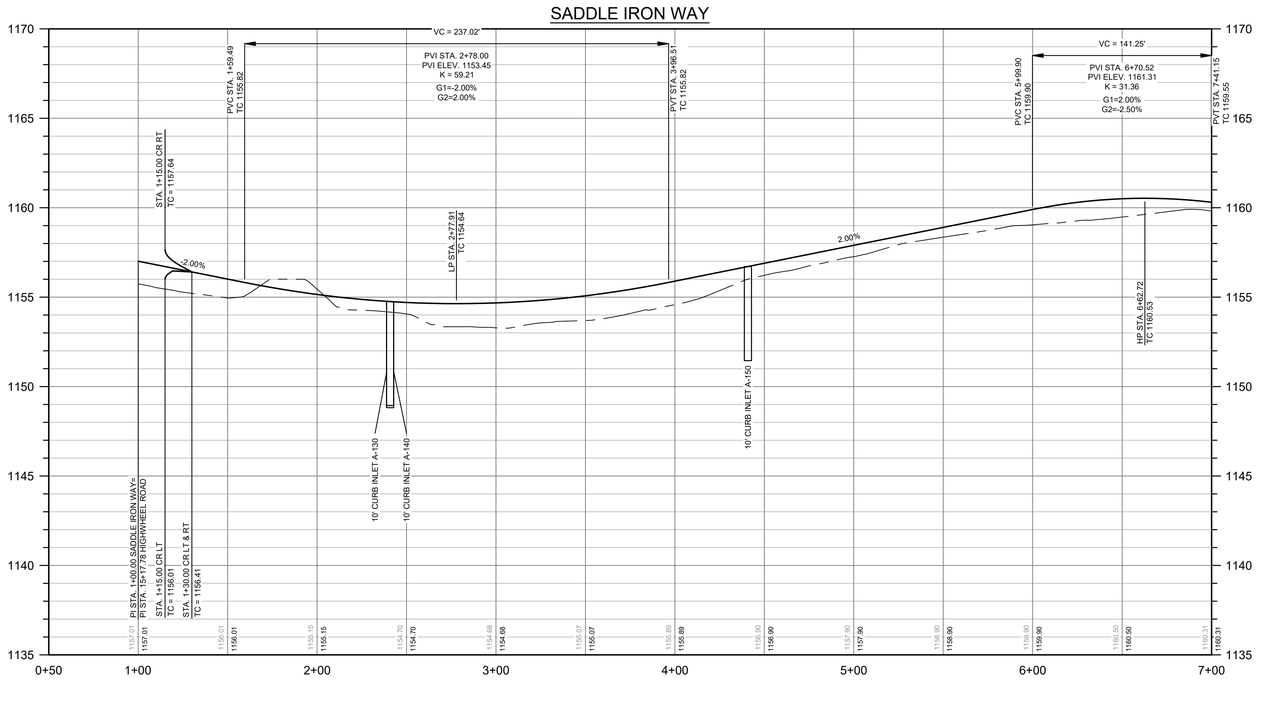
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ROAD.DWG DATE: 1/29/2026 2:50:43 PM BY: SMEDINA





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- _EHZ
- CWQZ — CWQZ_COA
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- WW — WASTEWATER LINE
- W — WATERLINE
- SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED BY HOMEBUILDERS DURING HOME CONSTRUCTION
- ADA RAMP WITH DETECTABLE WARNINGS
- CVG — CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25' UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.): PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

SADDLE IRON WAY
(1+00 TO 7+00)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

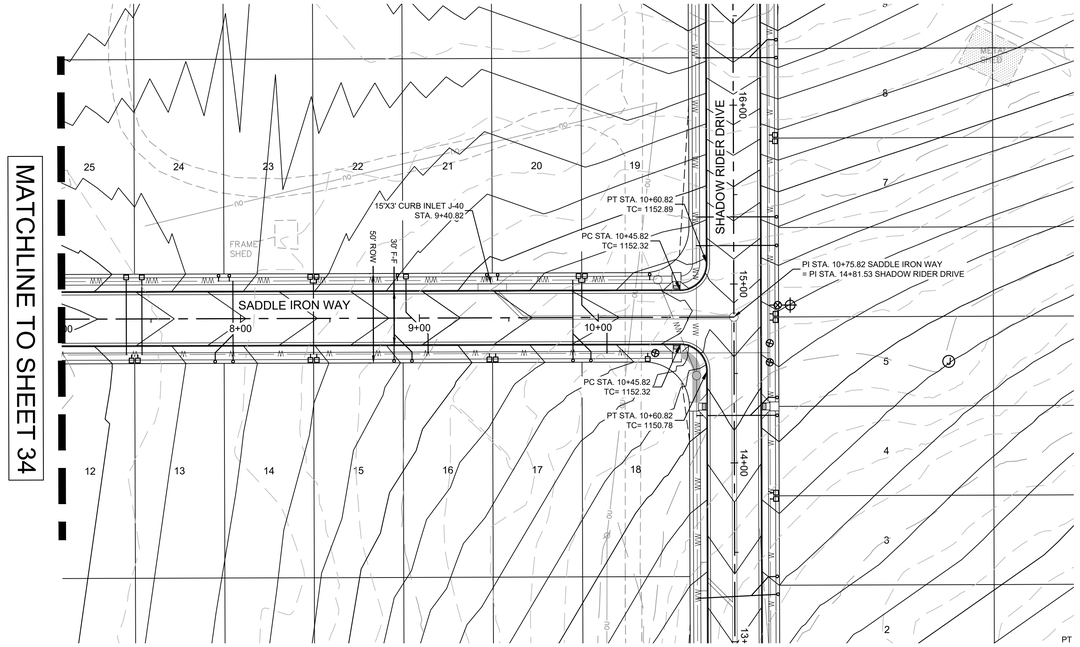
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

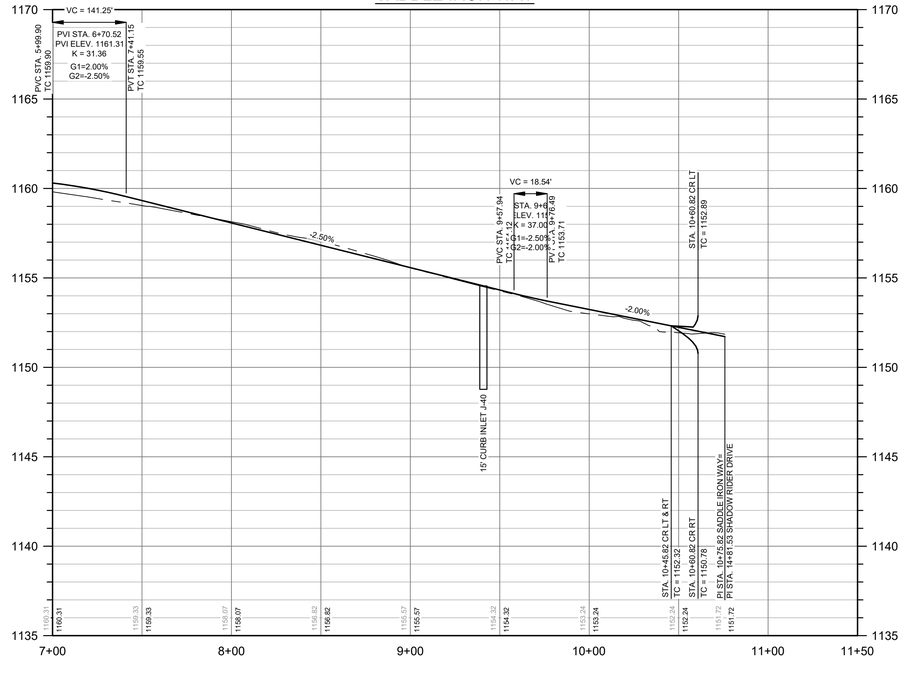
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

SHEET 32 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ROAD.DWG DATE: 1/29/2026 2:51:00 PM BY: SMEDINA





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- _EHZ
- CWQZ_COA
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- WW — WASTEWATER LINE
- W — WATERLINE
- SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED BY HOMEBUILDERS DURING HOME CONSTRUCTION
- ADA RAMP WITH DETECTABLE WARNINGS
- CVG — CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25' UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.): PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

SADDLE IRON WAY (7+00 TO END)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

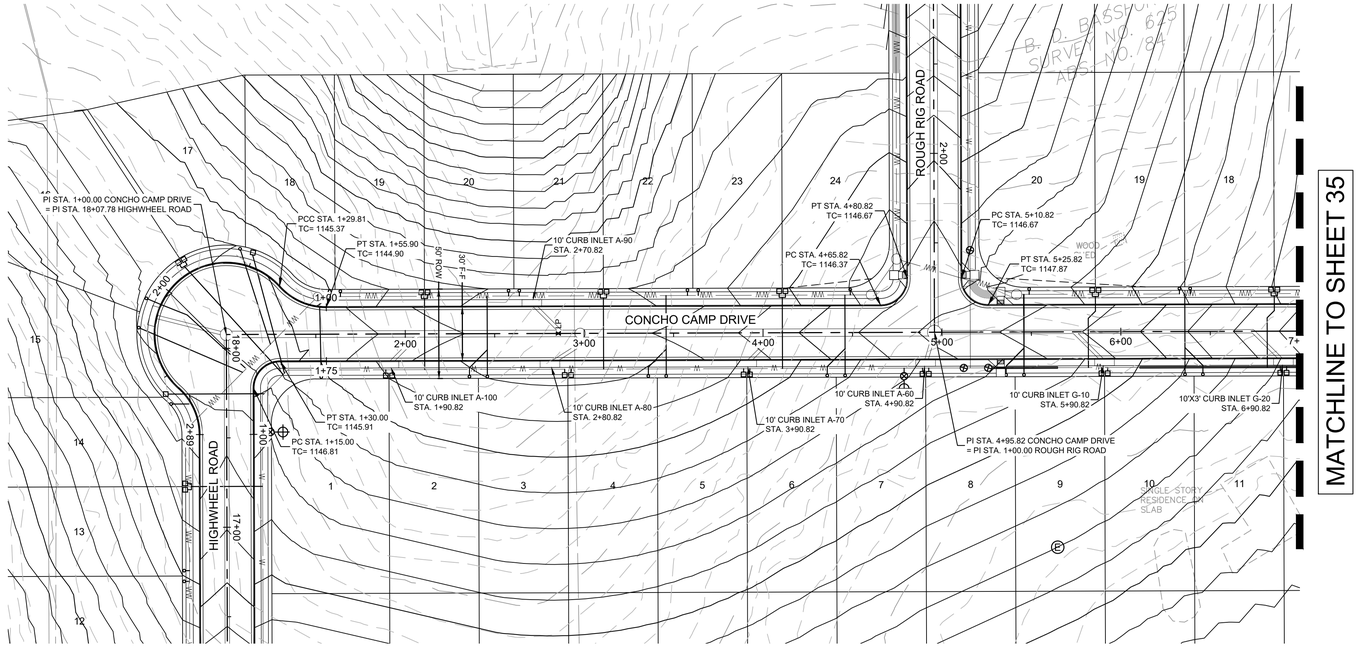
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

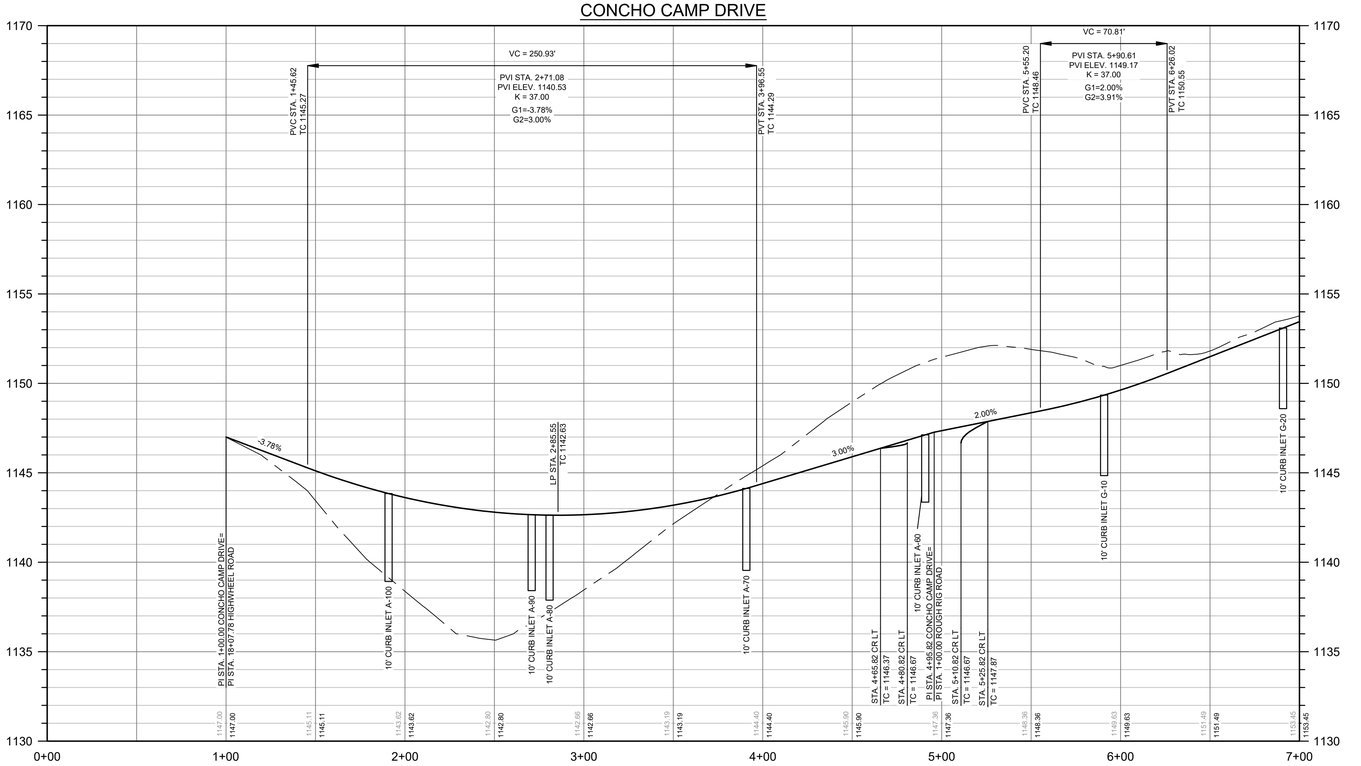
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
130018
LICENSED PROFESSIONAL ENGINEER

SHEET 33 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ROAD.DWG DATE: 1/29/2026 2:51:18 PM BY: SMEDINA





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- _EHZ
- CWQZ — CWQZ_COA
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- WW — WASTEWATER LINE
- W — WATERLINE
- SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED BY HOMEBUILDERS DURING HOME CONSTRUCTION
- ADA RAMP WITH DETECTABLE WARNINGS
- CVG — CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25' UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.): PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

CONCHO CAMP DRIVE
(1+00 TO 7+00)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

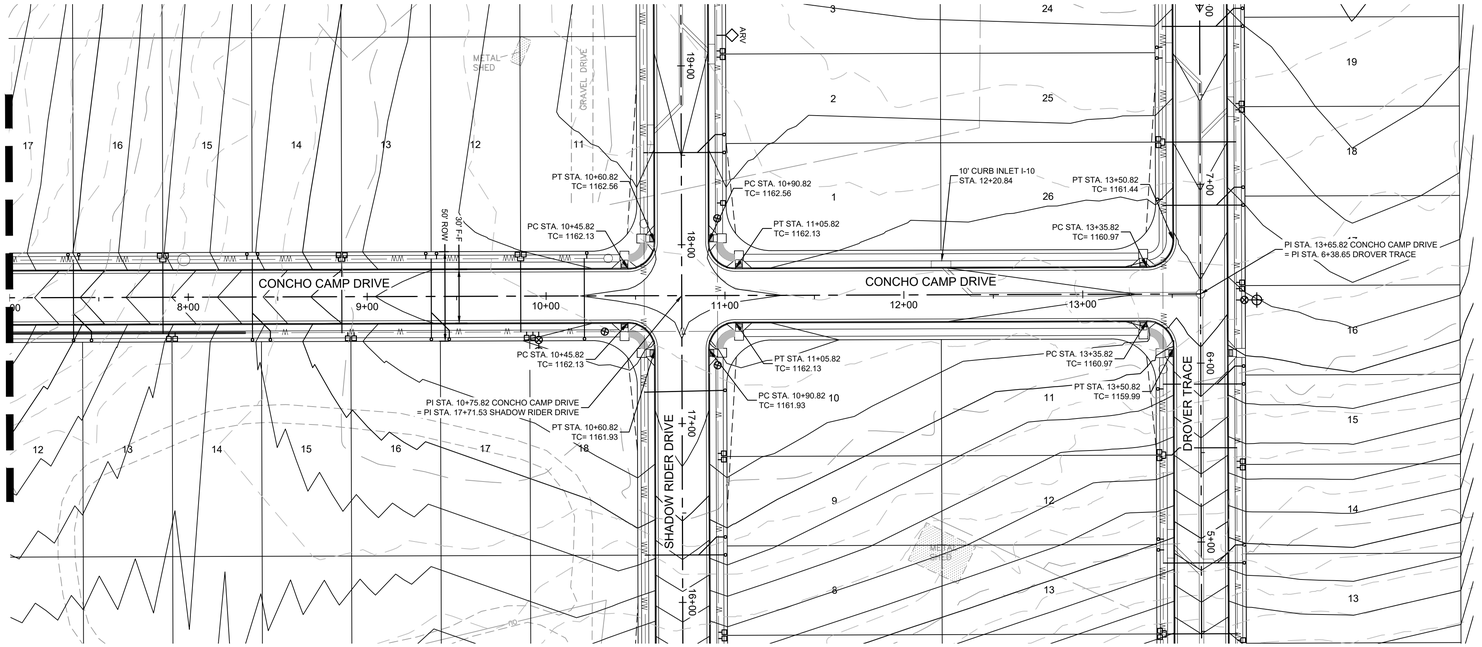
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

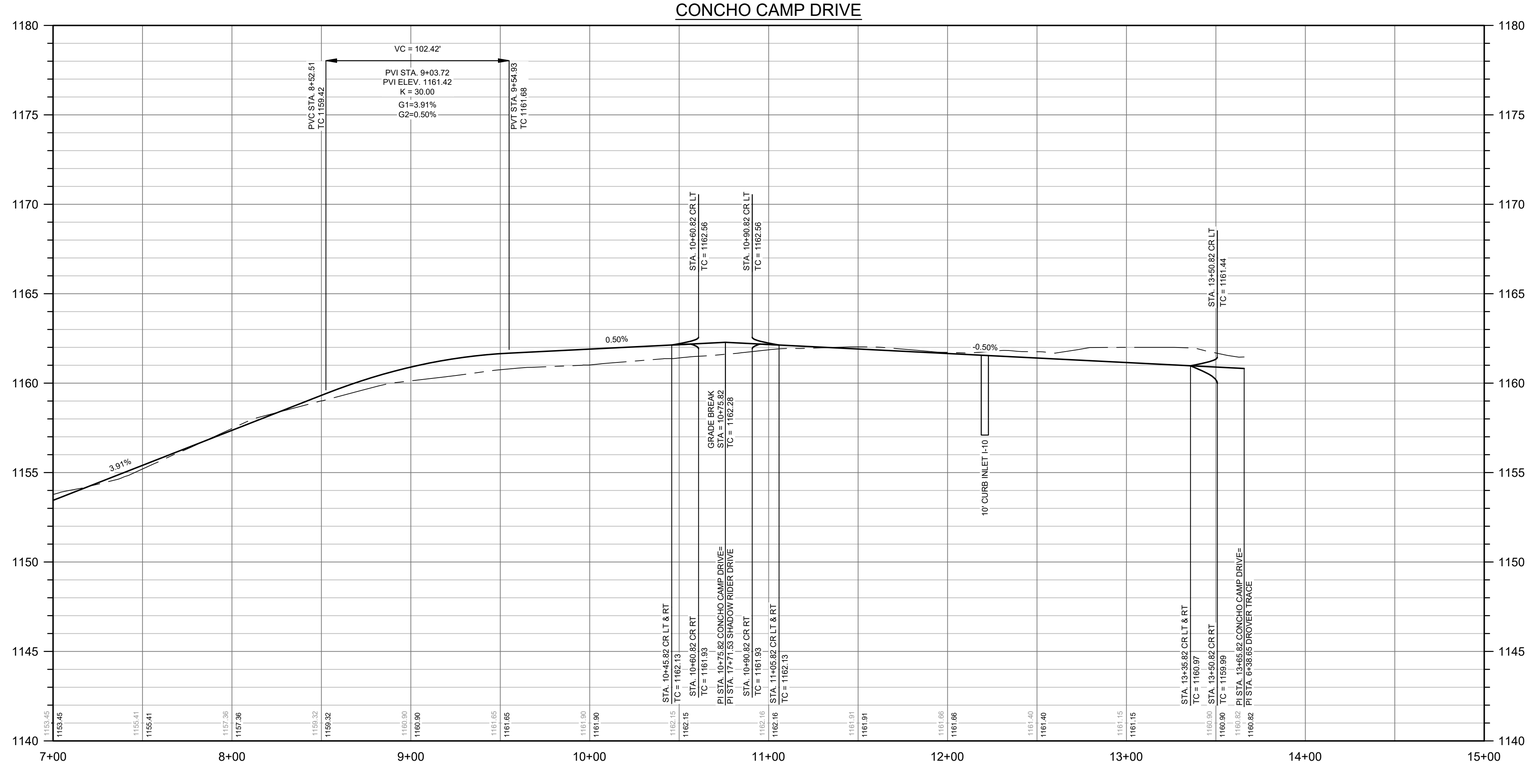
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 34 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ROAD.DWG DATE: 1/29/2026 2:51:36 PM BY: SMEDINA





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- _EHZ
- CWQZ — CWQZ_COA
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- WW — WASTEWATER LINE
- W — WATERLINE
- SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED BY HOMEBUILDERS DURING HOME CONSTRUCTION
- ADA RAMP WITH DETECTABLE WARNINGS
- CVG — CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25' UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.): PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

CONCHO CAMP DRIVE
(7+00 TO END)

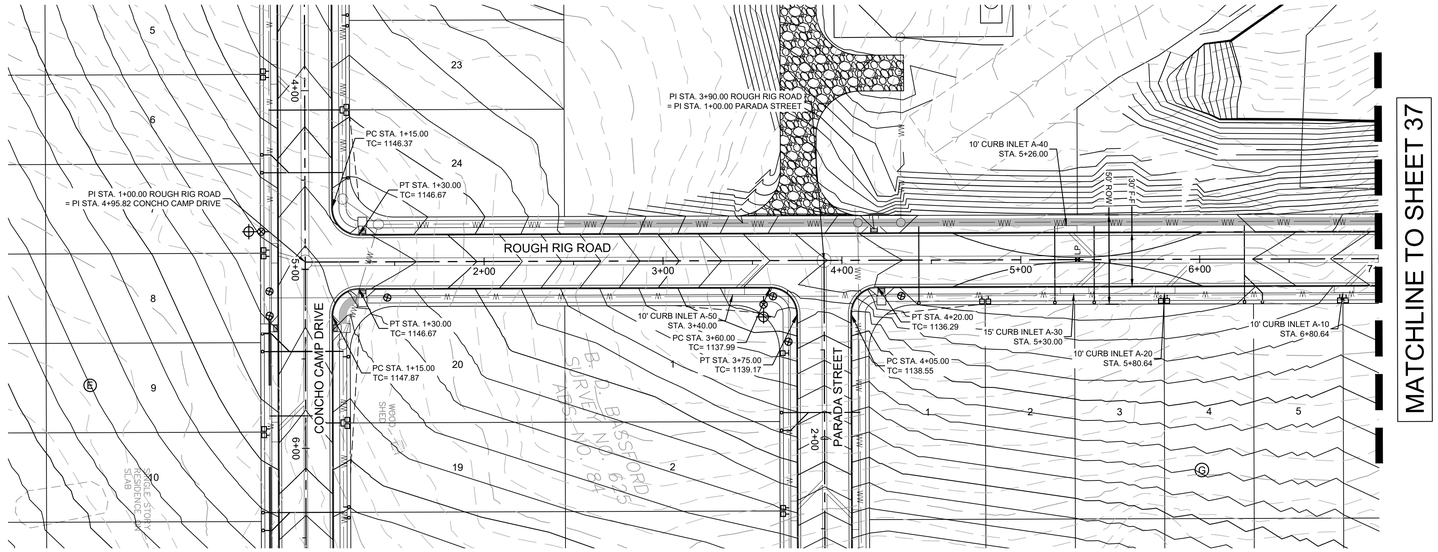
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

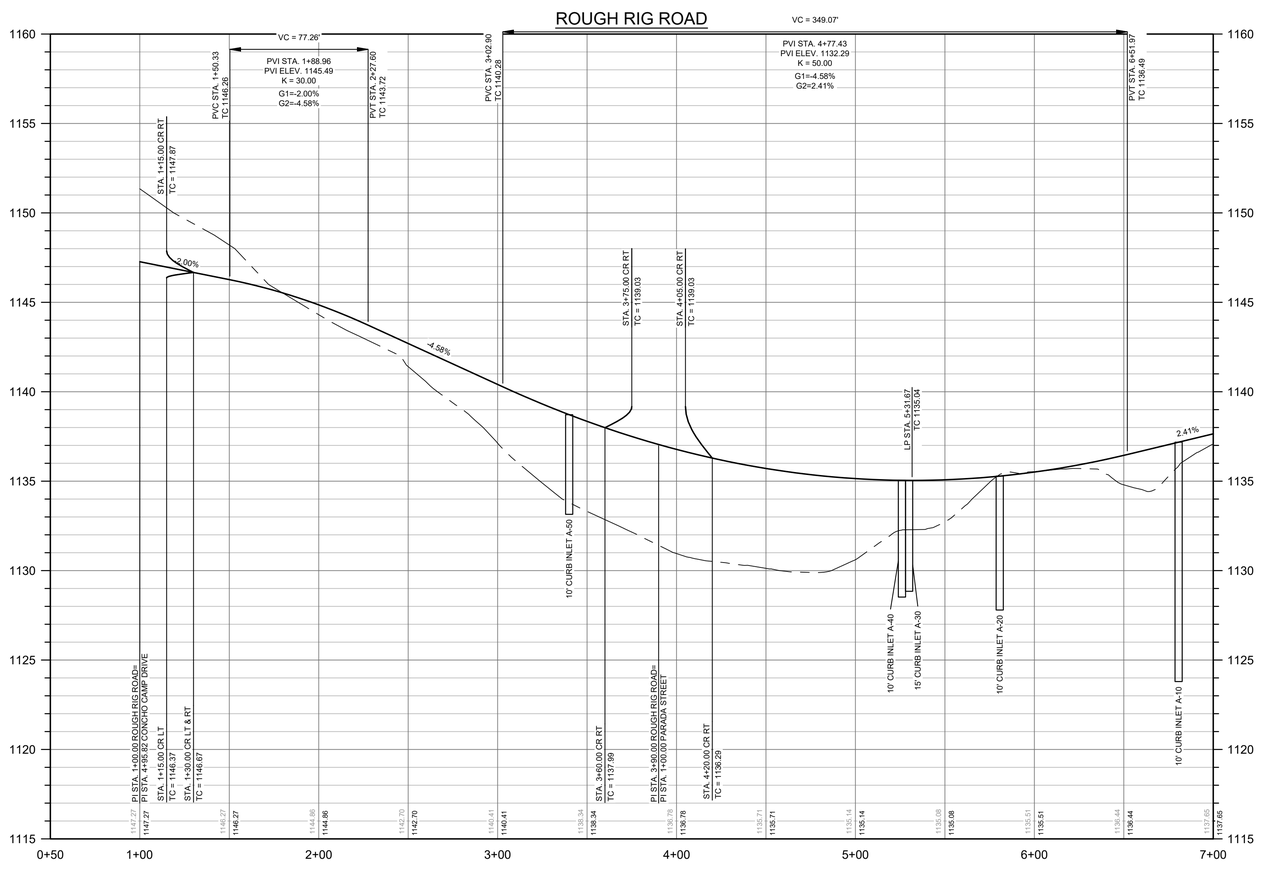
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ROAD.DWG DATE: 1/29/2026 2:51:53 PM BY: SMEDINA





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- _EHZ
- CWQZ — CWQZ_COA
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- WW — WASTEWATER LINE
- W — WATERLINE
- SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED BY HOMEBUILDERS DURING HOME CONSTRUCTION
- ADA RAMP WITH DETECTABLE WARNINGS
- CVG — CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25' UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.): PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

ROUGH RIG ROAD (1+00 TO 7+00)

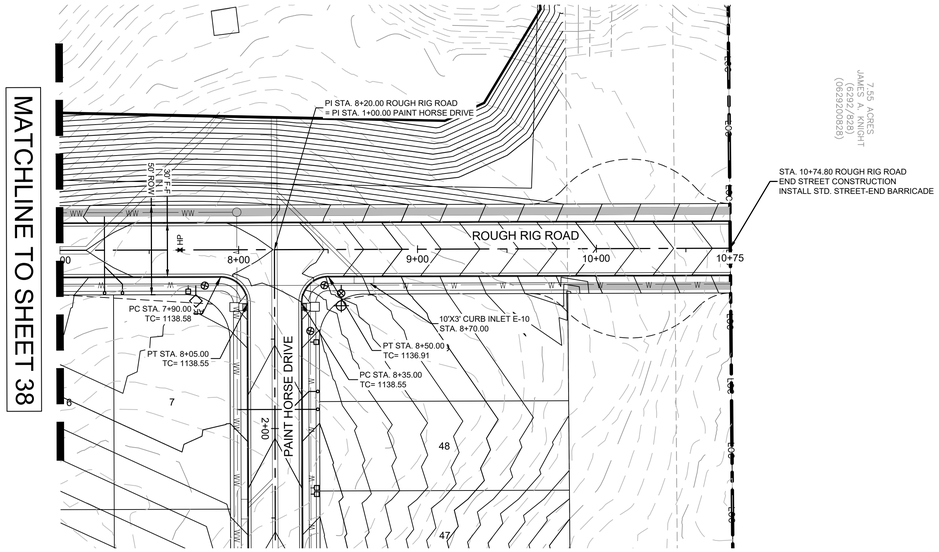
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

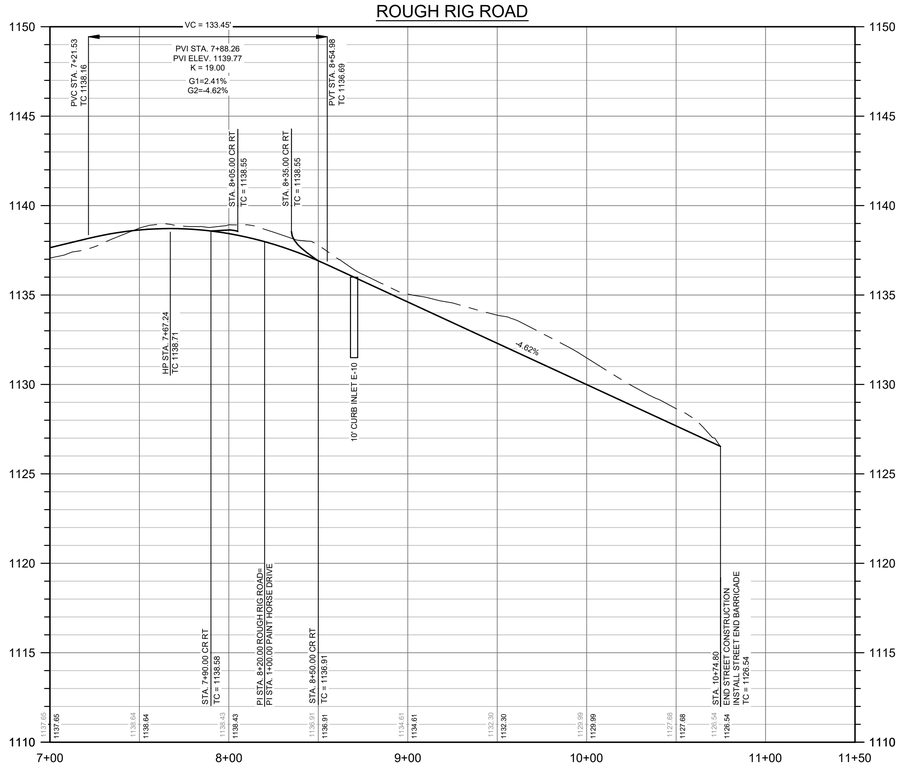
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ROAD.DWG DATE: 1/29/2026 2:52:12 PM BY: SMEDINA





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- _EHZ
- CWQZ — CWQZ_COA
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- WW — WASTEWATER LINE
- W — WATERLINE
- SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED BY HOMEBUILDERS DURING HOME CONSTRUCTION
- ADA RAMP WITH DETECTABLE WARNINGS
- CVG — CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25' UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.): PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

ROUGH RIG ROAD
(7+00 TO END)

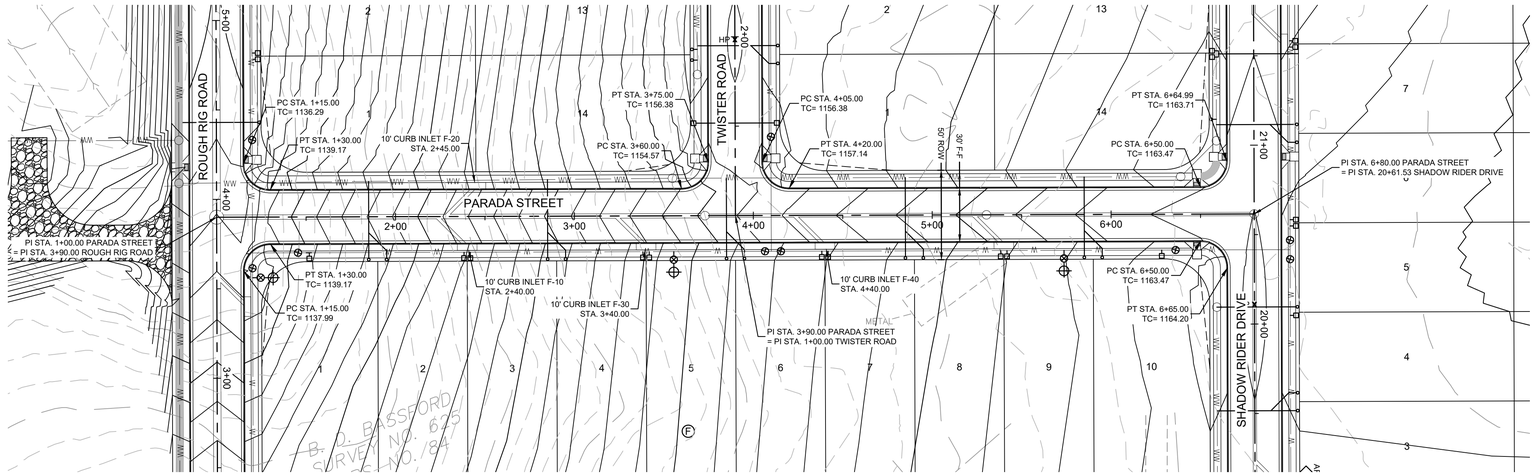
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

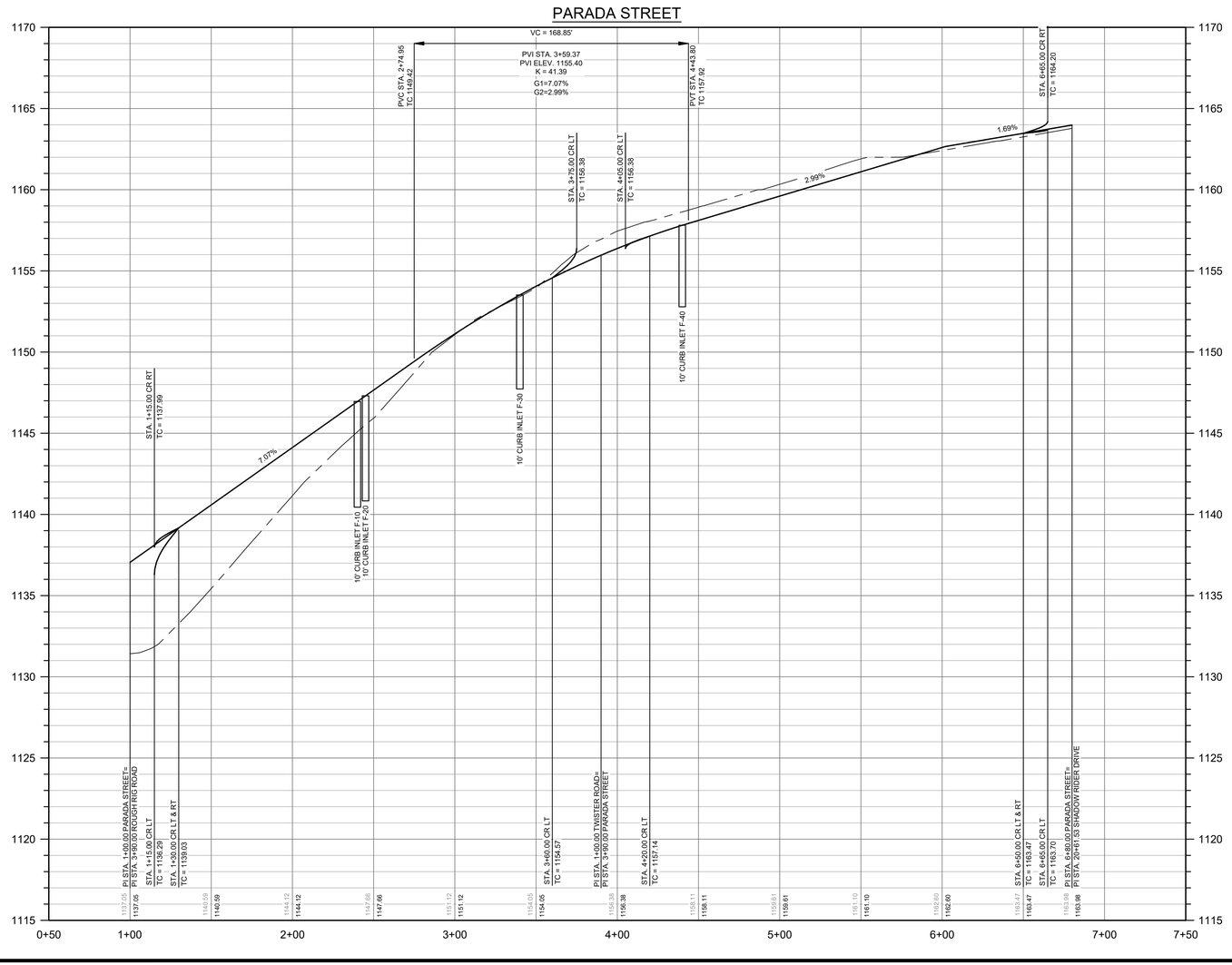
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ROAD.DWG DATE: 1/29/2026 2:52:30 PM BY: SMEDINA





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- _EHZ
- CWQZ — CWQZ_COA
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- WW — WASTEWATER LINE
- W — WATERLINE
- SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED BY HOMEBUILDERS DURING HOME CONSTRUCTION
- ADA RAMP WITH DETECTABLE WARNINGS
- CVG — CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25' UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.): PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

PARADA STREET (1+00 TO END)

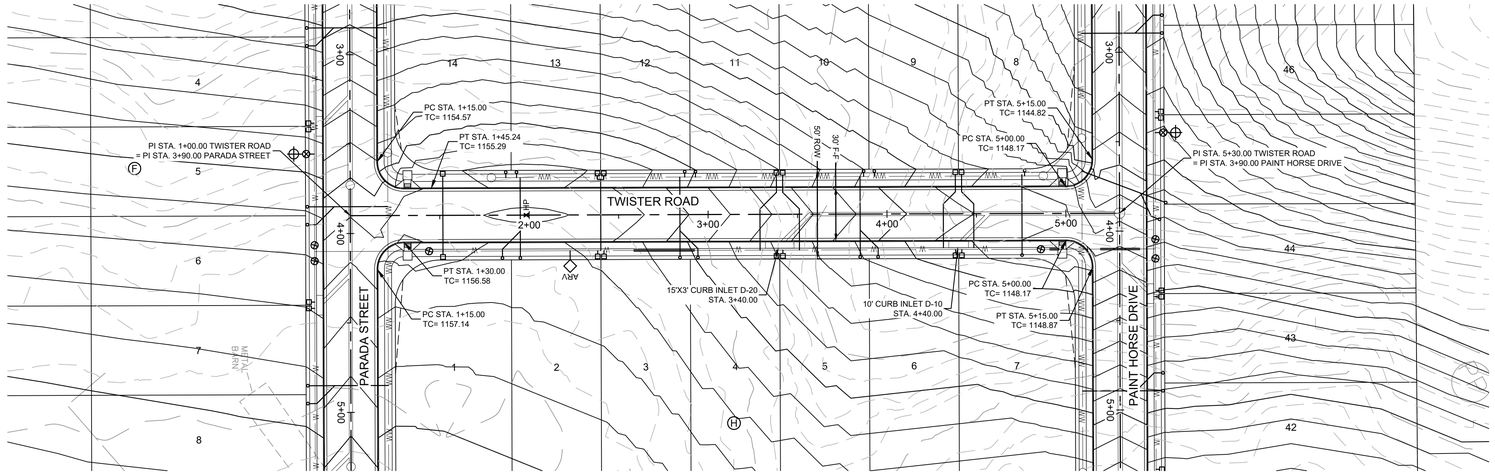
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

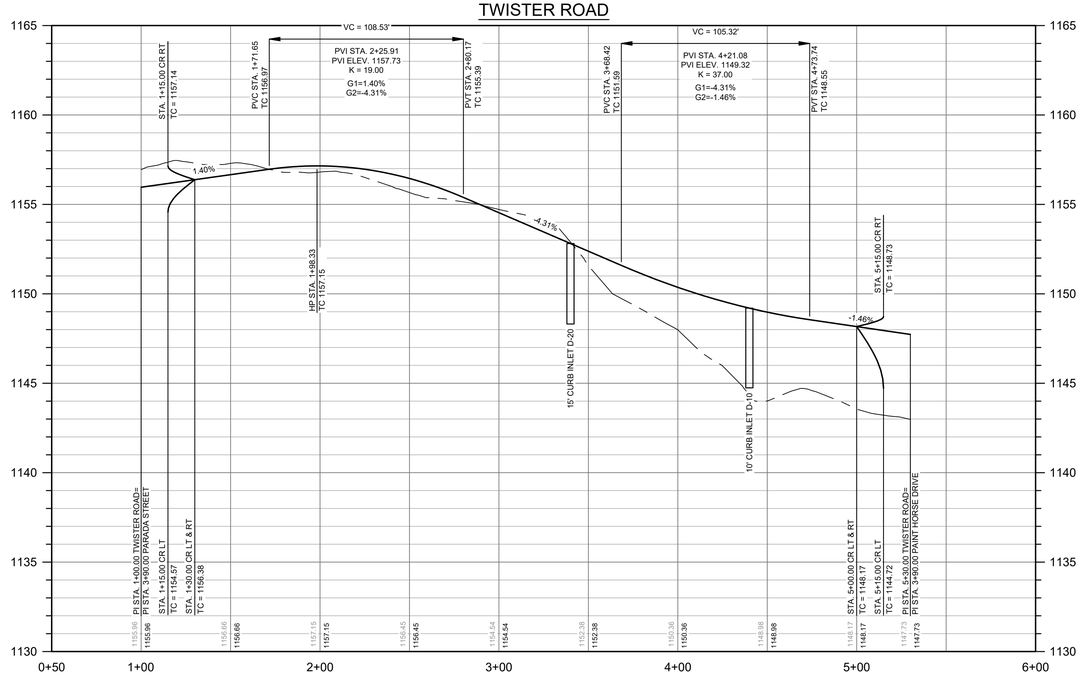
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
130018
LICENSED
PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ROAD.DWG DATE: 1/29/2026 2:52:51 PM BY: SMEDINA





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- _EHZ
- CWQZ — CWQZ_COA
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- WW — WASTEWATER LINE
- W — WATERLINE
- SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED BY HOMEBUILDERS DURING HOME CONSTRUCTION
- ADA RAMP WITH DETECTABLE WARNINGS
- CVG — CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25' UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.): PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

TWISTER ROAD (1+00 TO END)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

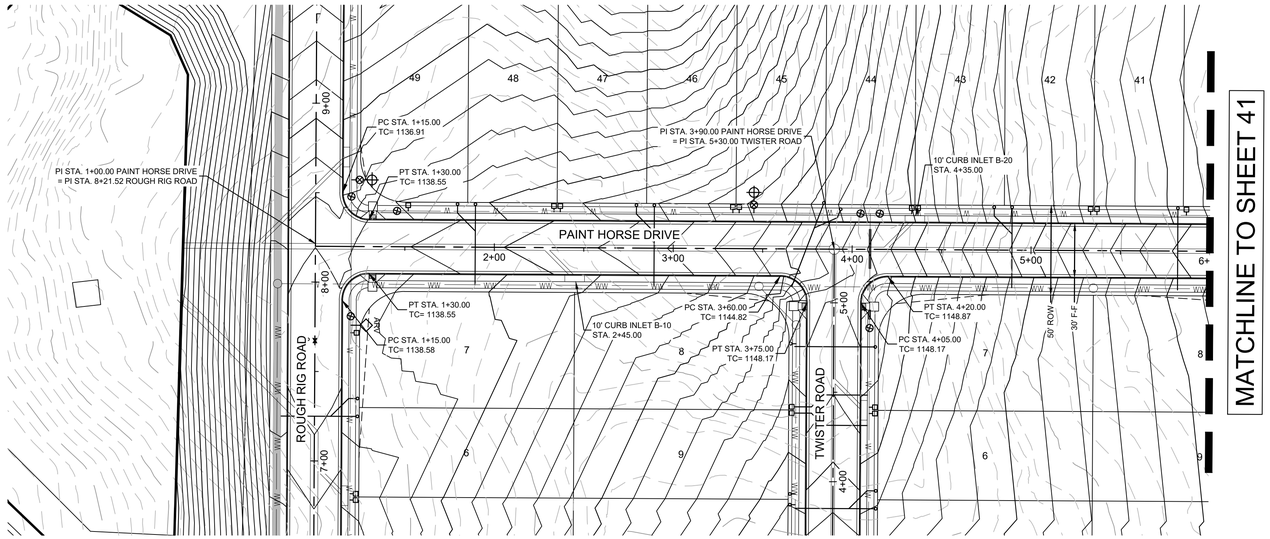
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

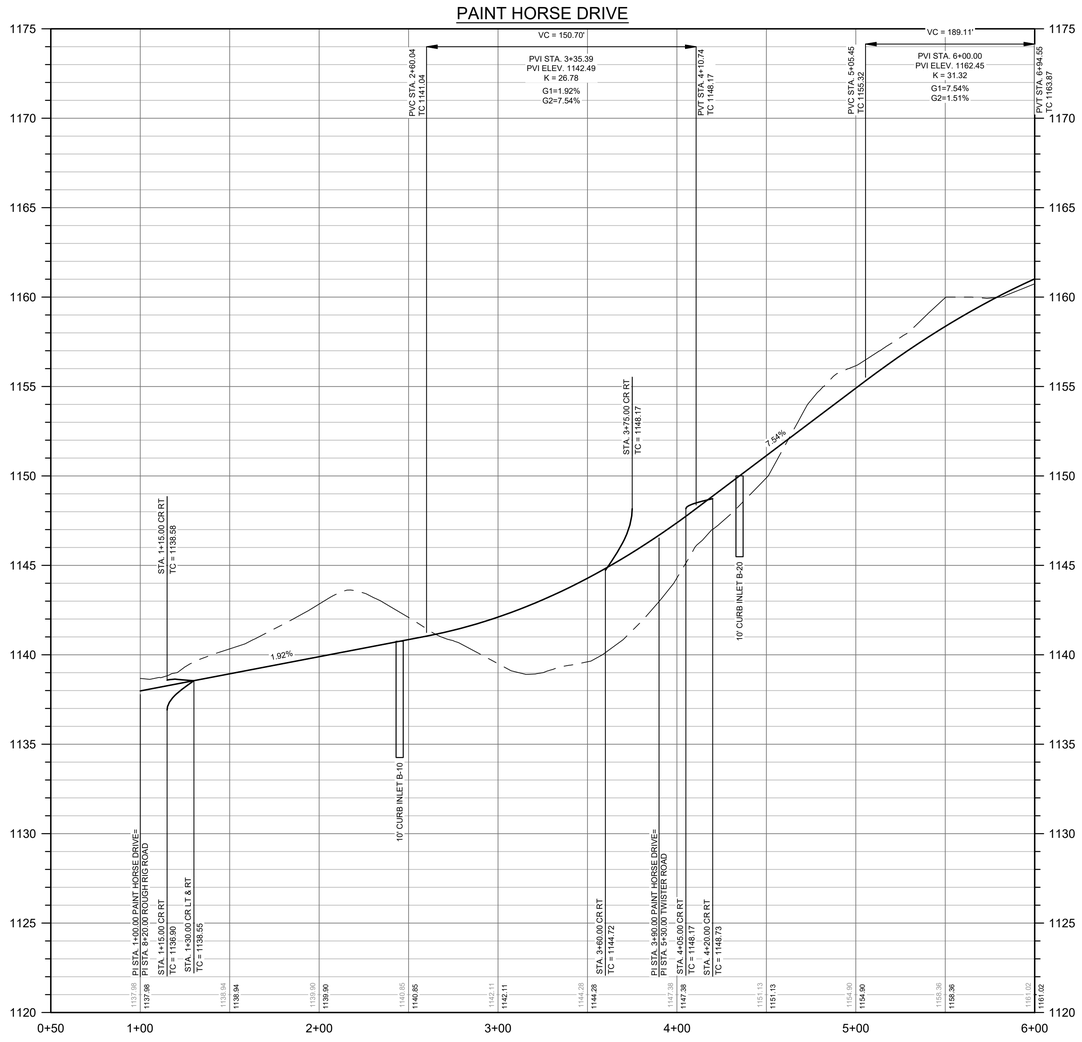
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

SHEET 39 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ROAD.DWG DATE: 1/29/2026 2:53:11 PM BY: SMEDINA





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- _EHZ
- CWQZ — CWQZ_COA
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- WW — WASTEWATER LINE
- W — WATERLINE
- SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED BY HOMEBUILDERS DURING HOME CONSTRUCTION
- ADA RAMP WITH DETECTABLE WARNINGS
- CVG — CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25' UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.); PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

PAINT HORSE DRIVE (1+00 TO 6+00)

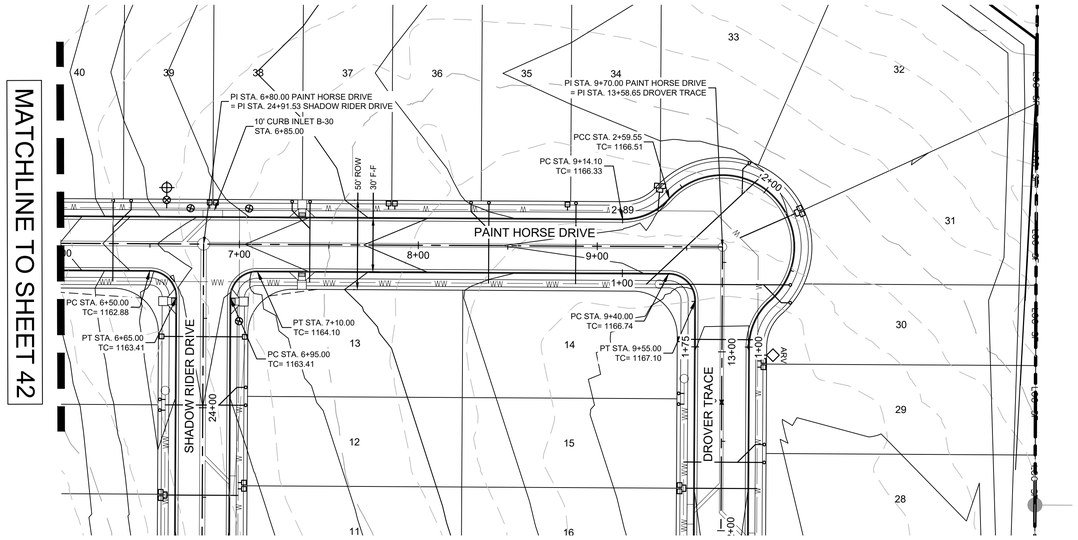
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

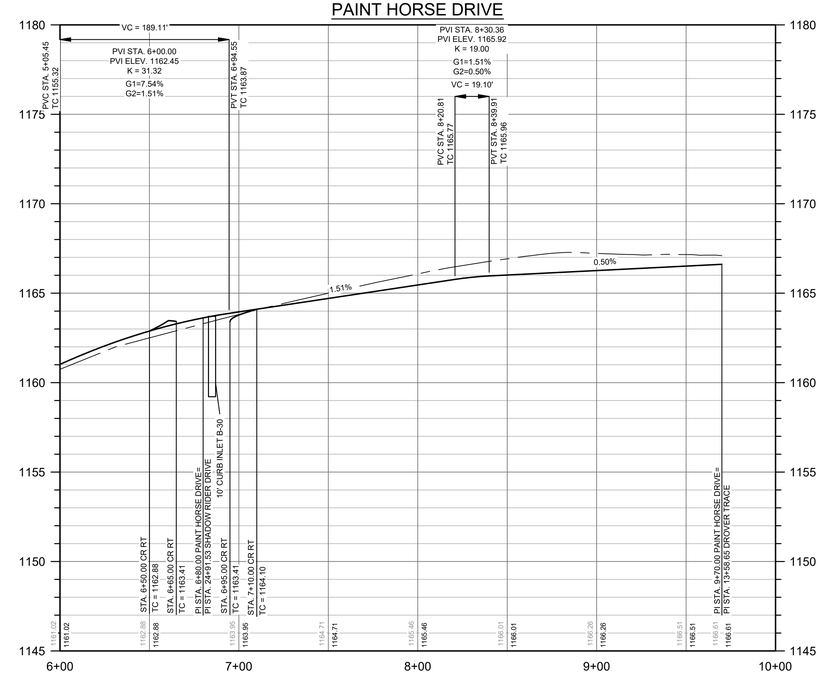
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ROAD.DWG DATE: 1/29/2026 2:53:31 PM BY: SMEDINA





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- _EHZ
- CWQZ — CWQZ_COA
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- WW — WASTEWATER LINE
- W — WATERLINE
- SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED BY HOMEBUILDERS DURING HOME CONSTRUCTION
- ADA RAMP WITH DETECTABLE WARNINGS
- CVG — CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25' UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.): PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

PAINT HORSE DRIVE
(6+00 TO END)

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

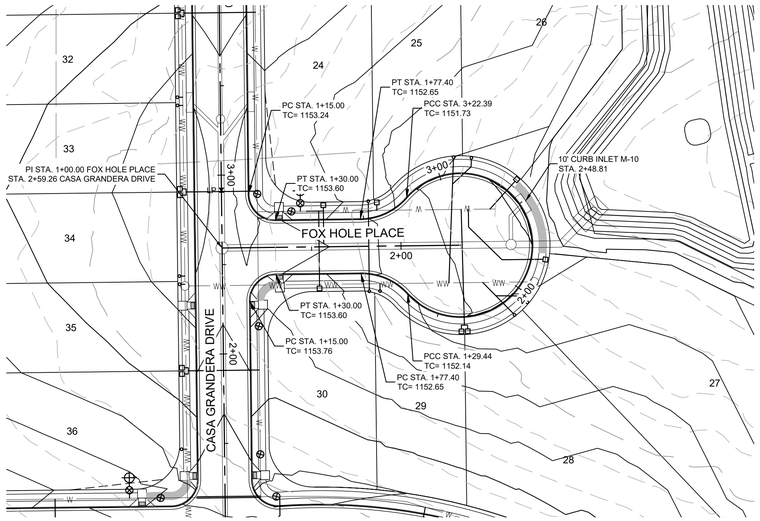
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

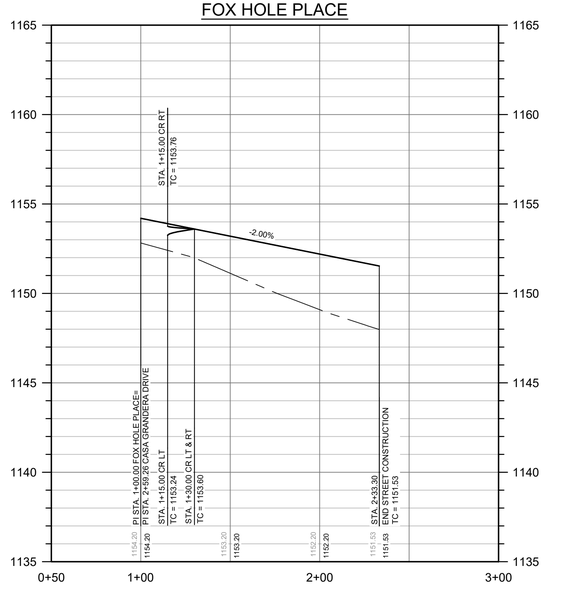
01/29/2026

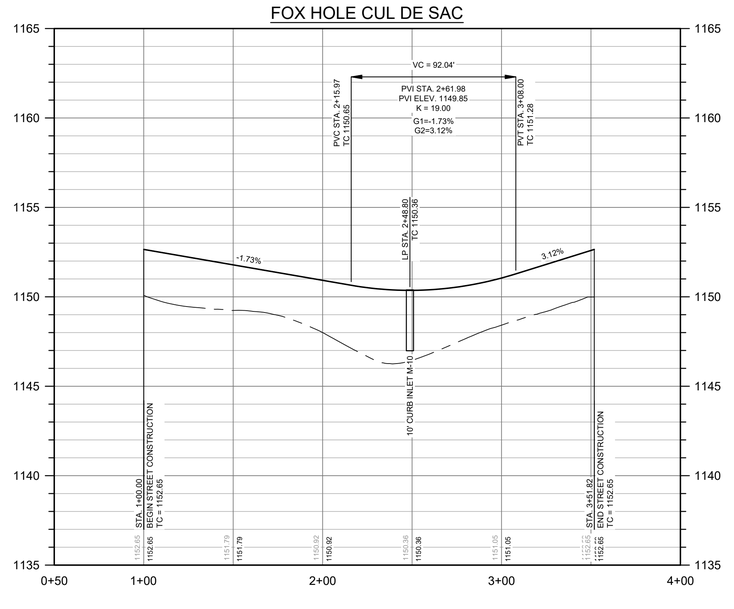
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

SHEET 41 OF 126

H:\PROJECTS\1636 - BRONIN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ROAD.DWG DATE: 1/29/2026 2:53:49 PM BY: SMEDINA







SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PROPOSED RIGHT OF WAY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- _EHZ
- CWQZ — CWQZ_COA
- 28 — LOT NUMBER
- ROAD CENTERLINE
- RIBBON CURB
- CURB AND GUTTER
- DIRECTION OF FLOW
- CURB INLET
- WW — WASTEWATER LINE
- W — WATERLINE
- SIDEWALK TO BE CONSTRUCTED WITH SUBDIVISION IMPROVEMENTS
- SIDEWALK TO BE CONSTRUCTED BY HOMEBUILDERS DURING HOME CONSTRUCTION
- ADA RAMP WITH DETECTABLE WARNINGS
- CVG — CONCRETE VALLEY GUTTER
- AVG — ASPHALT VALLEY GUTTER

NOTES:
1. ALL CURB RETURN RADII TO BE 25' UNLESS OTHERWISE NOTED.
2. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED WITH THE CONTRACTORS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
3. SIDEWALKS ADJACENT TO SINGLE FAMILY LOTS ARE TO BE CONSTRUCTED CONCURRENTLY WITH EACH SINGLE FAMILY HOUSE.
4. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
5. ALL PAVEMENT MARKINGS SHALL BE PER THE CURRENT "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.): PART III MARKINGS". ALL STRIPING TO BE THERMOPLASTIC.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- PROPOSED CURB INLET

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

FOX HOLE PLACE (1+00 TO END) & CDS

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

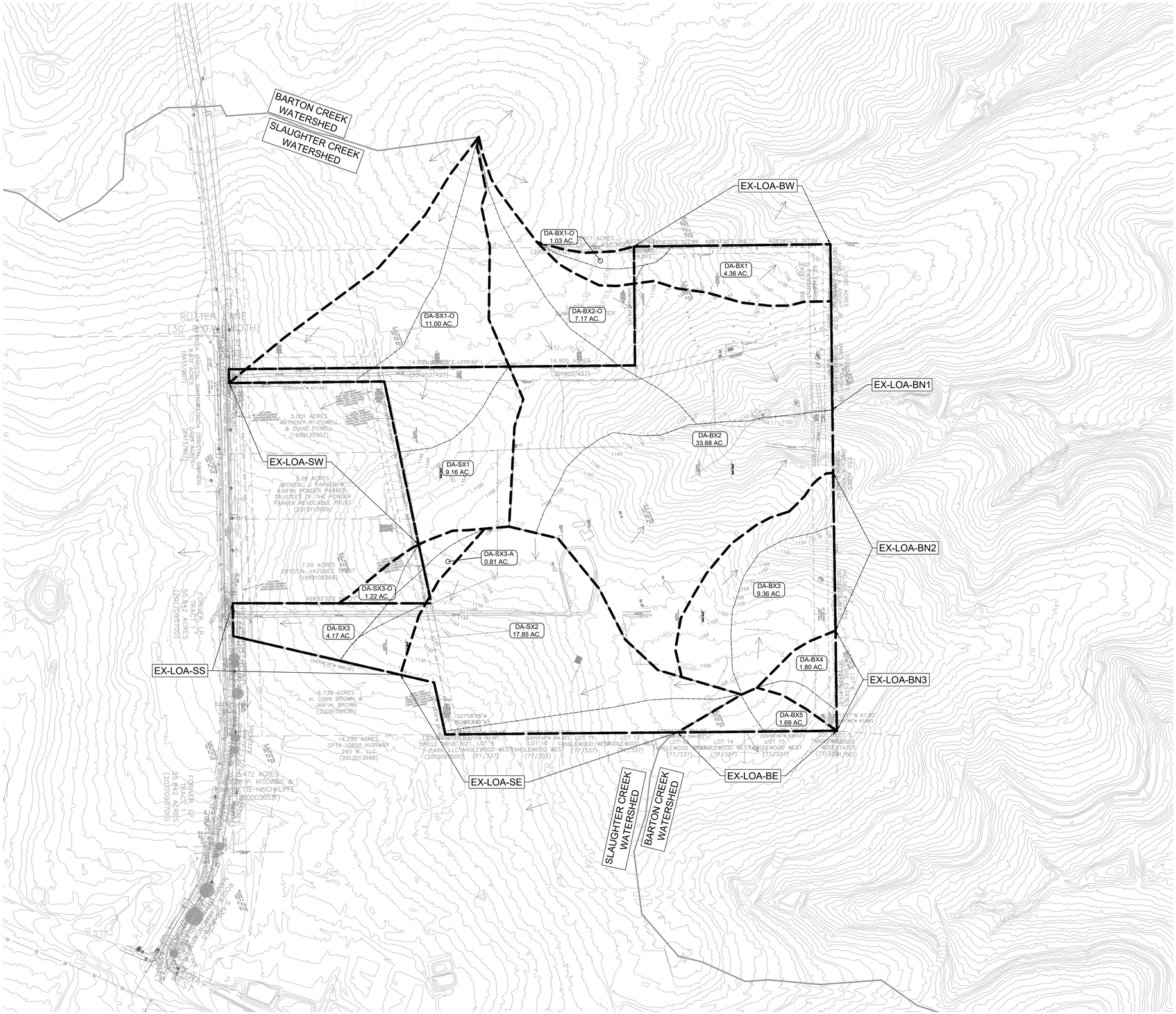
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

SHEET 42 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-ROAD.DWG DATE: 1/29/2026 2:54:16 PM BY: SMEDINA



SCALE: 1" = 200'
GRAPHIC SCALE IN FEET
0 100' 200' 400'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- FLOW ARROW
- DRAINAGE DIVIDE
- DA / XX AC — INLET ID / DRAINAGE AREA

Pre-Development Runoff					
Drainage Basin	Area AC	Q_2 cfs	Q_{10} cfs	Q_{25} cfs	Q_{100} cfs
BX1	4.36	14.40	26.70	34.90	48.30
BX1-O	1.03	3.00	5.60	7.30	10.10
BX2	33.68	80.90	150.30	197.00	271.60
BX2-O	7.17	17.70	32.90	43.10	59.40
BX3	9.36	23.20	43.10	56.50	77.90
BX4	1.80	5.20	9.60	12.50	17.30
BX5	1.68	5.30	9.80	12.90	17.80
SX1	9.16	25.40	47.00	61.60	84.90
SX1-O	11.00	26.50	49.20	64.40	88.80
SX2	17.85	42.90	79.70	104.40	144.00
SX3	4.17	12.70	23.50	30.70	42.40
SX3-A	0.81	2.10	4.00	5.20	7.20
SX3-O	1.22	3.80	7.00	9.10	12.60
Point/Line of Analysis					
EX-LOA-BW	5.39	17.30	31.90	41.80	57.70
EX-LOA-BN1	40.85	98.60	182.80	239.70	330.60
EX-LOA-BN2	9.36	23.20	43.10	56.50	77.90
EX-LOA-BN3	1.80	5.20	9.60	12.50	17.30
EX-LOA-BE	1.68	5.30	9.80	12.90	17.80
EX-LOA-SW	20.16	50.60	94.10	123.30	170.00
EX-LOA-SE	17.85	42.90	79.70	104.40	144.00
EX-LOA-SS	6.20	18.30	33.80	44.30	61.20

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

EXISTING HYDROLOGY MAP

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

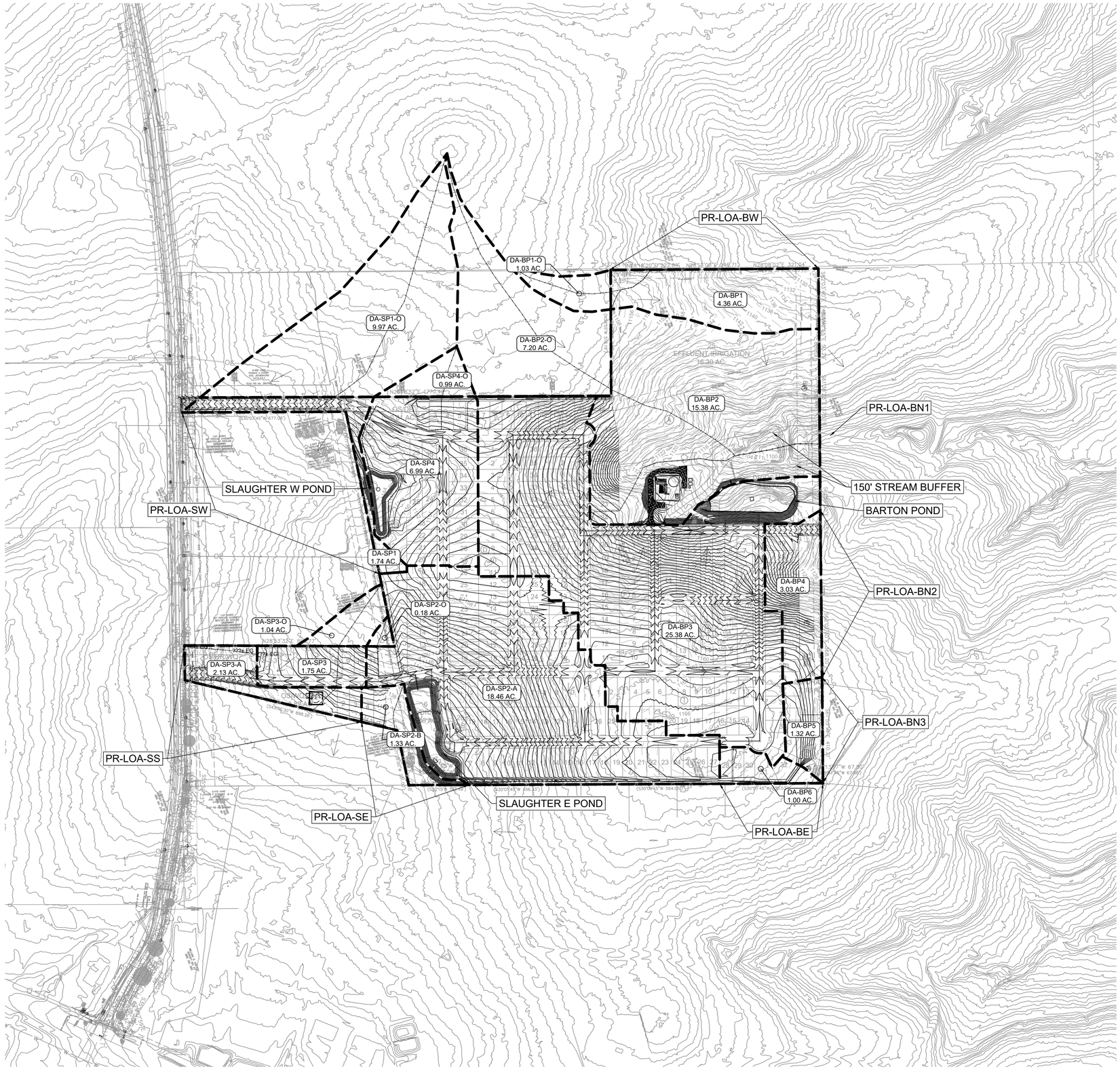
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-HYDRO-E.DWG DATE: 1/29/2026 4:08:52 PM BY: BGILMORE

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-HYDRO-E.DWG DATE: 1/29/2026 4:08:52 PM BY: BGILMORE



SCALE: 1" = 200'
GRAPHIC SCALE IN FEET
0 100' 200' 400'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- FLOW ARROW
- DRAINAGE DIVIDE
- DA / XX AC — DRAINAGE AREA ID / DRAINAGE AREA

Post-Development Runoff

Drainage Basin	Area AC	Q_2 cfs	Q_{10} cfs	Q_{25} cfs	Q_{100} cfs
BP1	4.36	13.40	25.60	33.90	47.40
BP1-O	1.03	3.00	5.60	7.30	10.10
BP2	15.38	52.40	99.30	131.20	182.90
BP2-O	7.20	19.40	36.00	47.10	64.90
BP3	25.38	91.80	155.90	198.20	265.80
BP4	3.03	10.60	18.90	24.40	33.30
BP5	1.32	4.40	8.10	10.60	14.70
BP6	1.00	4.30	7.60	9.70	13.20
SP1	1.93	7.50	13.00	16.50	22.30
SP1-O	9.97	24.30	45.10	59.10	81.40
SP2-A	18.46	65.10	110.50	140.30	188.00
SP2-B	1.33	4.60	8.50	11.10	15.40
SP2-O	0.18	0.60	1.10	1.40	2.00
SP3	1.75	7.40	12.30	15.50	20.60
SP3-A	2.13	7.60	14.10	18.40	25.40
SP3-O	1.04	3.40	6.20	8.10	11.20
SP4	6.81	30.10	51.90	66.20	89.40
SP4-O	0.99	2.90	5.40	7.10	9.80

Point/Line of Analysis						ΔQ_2	ΔQ_{10}	ΔQ_{25}	ΔQ_{100}
PR-LOA-BW	5.39	16.30	30.90	40.80	56.80	-1.0	-1.0	-1.0	-0.9
PR-LOA-BN1	47.96	98.00	178.40	234.50	327.90	-0.6	-4.4	-5.2	-2.7
PR-LOA-BN2	3.03	10.60	18.90	24.40	33.30	-12.6	-24.2	-32.1	-44.6
PR-LOA-BN3	1.32	4.40	8.10	10.60	14.70	-0.8	-1.5	-1.9	-2.6
PR-LOA-BE	1.00	4.30	7.60	9.70	13.20	-1.0	-2.2	-3.2	-4.6
PR-LOA-SW	19.70	48.00	92.30	120.80	165.70	-2.6	-1.8	-2.5	-4.3
PR-LOA-SE	19.97	41.20	76.60	100.00	141.90	-1.7	-3.1	-4.4	-2.1
PR-LOA-SS	4.92	18.30	32.20	41.50	56.60	0.0	-1.6	-2.8	-4.6

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

PROPOSED HYDROLOGY MAP

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-HYDRO-P.DWG DATE: 1/29/2026 4:09:39 PM BY: BGILMORE

SCALE: 1" = 100'
GRAPHIC SCALE IN FEET
0 50' 100' 200'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- FLOW ARROW
- DRAINAGE DIVIDE
- DA / XX AC — DRAINAGE AREA ID / DRAINAGE AREA

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

DRAINAGE AREA MAP

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 45 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-DAM.DWG DATE: 1/29/2026 4:10:29 PM BY: BGILMORE

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-DAM.DWG DATE: 1/29/2026 4:10:30 PM BY: BGILMORE

	2 Yr	10 Yr	25 Yr	100 Yr
Asphalt	0.73	0.81	0.86	0.95
Conc. / Roof	0.75	0.83	0.88	0.97
Grass (0-2%)	0.21	0.25	0.29	0.36
Grass (2-7%)	0.29	0.35	0.39	0.46

Avg. Imperv. per lot
2,500 sf

			STREET							IMPERVIOUS				GRASS						
Drainage Area	Total Area (sf)	Total Area (Ac)	Street Width (ft)	Sidewalk Width (ft)	% of Street	Street Length (lf)	Area Street (sf)	Area Street (Ac)	Area Street (%)	Num Homes in Area	Area Imper. 0p;.	Area Imper. (Ac)	Area Imper. (%)	Area Grass (sf)	Area Grass (Ac)	Area Grass (%)	Composite 2 Yr "C"	Composite 10 Yr "C"	Composite 25 Yr "C"	Composite 100 Yr "C"
A-150	36,247	0.83	30	4	50%	250	4,750	0.11	13.1%	5.00	12500	0.29	34.5%	18,997	0.44	52.4%	0.464	0.523	0.568	0.648
A-140	14,524	0.33	30	4	50%	591	11,229	0.26	77.3%	0.00	0	0.00	0.0%	3,295	0.08	22.7%	0.612	0.683	0.731	0.816
A-130	49,411	1.13	30	4	50%	341	6,479	0.15	13.1%	6.00	15000	0.34	30.4%	27,932	0.64	56.5%	0.442	0.500	0.544	0.623
A-120	32,069	0.74	30	4	50%	200	3,800	0.09	11.8%	4.00	10000	0.23	31.2%	18,269	0.42	57.0%	0.440	0.497	0.542	0.620
A-110	41,704	0.96	30	4	50%	235	4,465	0.10	10.7%	5.00	12500	0.29	30.0%	24,739	0.57	59.3%	0.428	0.484	0.528	0.606
A-100	24,314	0.56	30	4	50%	381	7,239	0.17	29.8%	2.00	5000	0.11	20.6%	12,075	0.28	49.7%	0.476	0.536	0.581	0.661
A-90	12,100	0.28	30	4	50%	445	8,455	0.19	69.9%	0.00	0	0.00	0.0%	3,645	0.08	30.1%	0.573	0.641	0.688	0.772
A-80	53,000	1.22	30	4	50%	200	3,800	0.09	7.2%	8.00	20000	0.46	37.7%	29,200	0.67	55.1%	0.451	0.509	0.554	0.632
A-70	26,500	0.61	30	4	50%	100	1,900	0.04	7.2%	4.00	10000	0.23	37.7%	14,600	0.34	55.1%	0.451	0.509	0.554	0.632
A-60	26,500	0.61	30	4	50%	100	1,900	0.04	7.2%	4.00	10000	0.23	37.7%	14,600	0.34	55.1%	0.451	0.509	0.554	0.632
A-50	17,744	0.41	30	4	50%	792	15,048	0.35	84.8%	0.00	0	0.00	0.0%	2,696	0.06	15.2%	0.651	0.725	0.773	0.860
A-40	16,550	0.38	30	4	50%	655	12,445	0.29	75.2%	0.00	0	0.00	0.0%	4,105	0.09	24.8%	0.601	0.671	0.719	0.804
A-30	78,821	1.81	30	4	50%	365	9,055	0.21	11.5%	10.00	25000	0.57	31.7%	44,766	1.03	56.8%	0.441	0.498	0.543	0.621
A-20	26,500	0.61	30	4	50%	100	1,900	0.04	7.2%	4.00	10000	0.23	37.7%	14,600	0.34	55.1%	0.451	0.509	0.554	0.632
A-10	24,329	0.56	30	4	50%	92	1,748	0.04	7.2%	4.00	10000	0.23	41.1%	12,581	0.29	51.7%	0.469	0.529	0.573	0.653
B-50	10,206	0.23	30	4	50%	206	3,914	0.09	38.3%	0.50	1250	0.03	12.2%	5,042	0.12	49.4%	0.476	0.536	0.581	0.661
B-40	3,493	0.08	30	4	50%	150	2,850	0.07	81.6%	0.00	0	0.00	0.0%	643	0.01	18.4%	0.634	0.707	0.755	0.841
B-30	30,902	0.71	30	4	50%	325	6,175	0.14	20.0%	3.00	7500	0.17	24.3%	17,227	0.40	55.7%	0.445	0.503	0.547	0.626
B-20	23,903	0.55	30	4	50%	250	4,750	0.11	19.9%	2.50	6250	0.14	26.1%	12,903	0.30	54.0%	0.455	0.513	0.558	0.637
B-10	35,729	0.82	30	4	50%	762	14,352	0.00	40.2%	2.00	5000	0.11	14.0%	16,377	0.38	45.8%	0.494	0.556	0.602	0.682
C-40	23,500	0.54	30	4	50%	100	1,900	0.04	8.1%	3.50	8750	0.20	37.2%	12,850	0.29	54.7%	0.453	0.511	0.556	0.635
C-30	53,000	1.22	30	4	50%	200	3,800	0.09	7.2%	8.00	20000	0.46	37.7%	29,200	0.67	55.1%	0.451	0.509	0.554	0.632
C-20	10,259	0.24	30	4	50%	430	8,170	0.19	79.6%	0.00	0	0.00	0.0%	2,089	0.05	20.4%	0.624	0.696	0.744	0.830
C-10	36,020	0.83	30	4	50%	425	8,075	0.19	22.4%	4.00	10000	0.23	27.8%	17,945	0.41	49.8%	0.476	0.537	0.582	0.662
D-20	39,750	0.91	30	4	50%	150	2,850	0.07	7.2%	6.00	15000	0.34	37.7%	21,900	0.50	55.1%	0.451	0.509	0.554	0.632
D-10	26,500	0.61	30	4	50%	100	1,900	0.04	7.2%	4.00	10000	0.23	37.7%	14,600	0.34	55.1%	0.451	0.509	0.554	0.632
E-10	18,770	0.43	30	4	50%	413	9,972	0.23	53.1%	0.50	1250	0.03	6.7%	7,548	0.17	40.2%	0.522	0.586	0.632	0.714
F-60	4,755	0.11	30	4	50%	180	3,420	0.08	71.9%	0.00	0	0.00	0.0%	1,335	0.03	28.1%	0.584	0.653	0.700	0.784
F-50	30,750	0.71	30	4	50%	140	2,660	0.06	8.7%	4.50	11250	0.26	36.6%	16,840	0.39	54.8%	0.453	0.511	0.555	0.634
F-45	30,586	0.70	30	4	50%	115	2,185	0.05	7.1%	4.00	10000	0.23	32.7%	18,401	0.42	60.2%	0.424	0.480	0.524	0.602
F-40	26,500	0.61	30	4	50%	100	1,900	0.04	7.2%	4.00	10000	0.23	37.7%	14,600	0.34	55.1%	0.451	0.509	0.554	0.632
F-30	26,500	0.61	30	4	50%	100	1,900	0.04	7.2%	4.00	10000	0.23	37.7%	14,600	0.34	55.1%	0.451	0.509	0.554	0.632
F-20	29,481	0.68	30	4	50%	497	10,403	0.24	35.3%	2.00	5000	0.11	17.0%	14,078	0.32	47.8%	0.485	0.546	0.591	0.672
F-10	26,500	0.61	30	4	50%	100	1,900	0.04	7.2%	4.00	10000	0.23	37.7%	14,600	0.34	55.1%	0.451	0.509	0.554	0.632
G-20	32,558	0.75	30	4	50%	295	5,605	0.13	17.2%	4.50	11250	0.26	34.6%	15,703	0.36	48.2%	0.486	0.547	0.592	0.672
G-10	26,500	0.61	30	4	50%	100	1,900	0.04	7.2%	4.00	10000	0.23	37.7%	14,600	0.34	55.1%	0.451	0.509	0.554	0.632
H-90	22,887	0.53	30	4	50%	435	8,265	0.19	36.1%	2.00	5000	0.11	21.8%	9,622	0.22	42.0%	0.516	0.579	0.625	0.706
H-80	38,415	0.88	30	4	50%	435	8,265	0.19	21.5%	4.50	11250	0.26	29.3%	18,900	0.43	49.2%	0.480	0.540	0.585	0.666
H-60	56,383	1.29	30	4	50%	515	11,885	0.27	21.1%	6.00	15000	0.34	26.6%	29,498	0.68	52.3%	0.463	0.522	0.567	0.647
H-50	26,792	0.62	30	4	50%	100	1,900	0.04	7.1%	4.00	10000	0.23	37.3%	14,892	0.34	55.6%	0.448	0.506	0.551	0.630
H-40	34,422	0.79	30	4	50%	400	7,600	0.17	22.1%	4.00	10000	0.23	29.1%	16,822	0.39	48.9%	0.482	0.542	0.587	0.667
H-30	26,500	0.61	30	4	50%	100	1,900	0.04	7.2%	4.00	10000	0.23	37.7%	14,600	0.34	55.1%	0.451	0.509	0.554	0.632
H-20	26,500	0.61	30	4	50%	100	1,900	0.04	7.2%	4.00	10000	0.23	37.7%	14,600	0.34	55.1%	0.451	0.509	0.554	0.632
H-10	28,801	0.66	20	4	50%	550	7,700	0.18	26.7%	4.00	10000	0.23	34.7%	11,101	0.25	38.5%	0.537	0.601	0.647	0.730
J-05	36,190	0.83	30	4	50%	484	17,819	0.41	49.2%	4.00	10000	0.23	27.6%	8,371	0.19	23.1%	0.615	0.686	0.734	0.819
I-10	19,575	0.45	30	4	50%	280	5,320	0.12	27.2%	2.00	5000	0.11	25.5%	9,255	0.21	47.3%	0.489	0.550	0.596	0.676
J-30	41,067	0.94	30	4	50%	250	4,750	0.11	11.6%	5.50	13750	0.32	33.5%	22,567	0.52	55.0%	0.451	0.509	0.553	0.632
J-20	54,793	1.26	30	4	50%	525	21,139	0.49	38.6%	0.00	0	0.00	0.0%	33,654	0.77	61.4%	0.411	0.466	0.510	0.588
J-10	12,250	0.28	30	4	50%	490	9,310	0.21	76.0%	0.00	0	0.00	0.0%	2,940	0.07	24.0%	0.605	0.676	0.723	0.808
K-40	20,499	0.47	30	4	50%	100	1,900	0.04	9.3%	3.00	7500	0.17	36.6%	11,099	0.25	54.1%	0.456	0.514	0.559	0.638
K-30	26,110	0.60	30	4	50%	100	1,900	0.04	7.3%	4.00	10000	0.23	38.3%	14,210	0.33	54.4%	0.455	0.513	0.557	0.637
K-20	26,890	0.62	30	4	50%	101	1,919	0.04	7.1%	4.00	10000	0.23	37.2%	14,971	0.34	55.7%	0.448	0.506	0.550	0.629
L-30	8,255	0.19	30	4	50%	342	6,498	0.15	78.7%	2.00	5000	0.11	60.6%	-3,243	-0.07	-39.3%	0.946	1.042	1.096	1.194
L-20	66,282	1.52	30	4	50%	887	18,725	0.43	28.3%	5.00	12500	0.29	18.9%	35,057	0.80	52.9%	0.459	0.518	0.562	0.642
L-10	82,096	1.88	30	4	0%	0	0	0.00	0.0%	8.00	20000	0.46	24.4%	62,096	1.43	75.6%	0.342	0.391	0.434	0.509
M-40	29,003	0.67	30	4	50%	198	3,762	0.09	13.0%	4.00	10000	0.23	34.5%	15,241	0.35	52.5%	0.464	0.523	0.567	0.647
M-30	9,091	0.21	30	4	50%	377	7,163	0.16	78.8%	0.00	0	0.00	0.0%	1,928	0.04	21.2%	0.620	0.691	0.739	0.825
M-20	49,427	1.13	30	4	50%	340	6,460	0.15	13.1%	6.00	15000	0.34	30.3%	27,967	0.64	56.6%	0.442	0.499	0.544	0.622
M-10	64,272	1.48	30	4	100%	253	8,602	0.20	13.4%	6.00	15000	0.34	23.3%	40,670	0.93	63.3%	0.406	0.460	0.504	0.581
N-20	105,361	2.42	30	4	50%	471	8,949	0.21	8.5%	5.00	12500	0.29	11.9%	83,912	1.93	79.6%	0.318	0.366	0.408	0.482
N-10	8,100	0.19	30	4	50%	328	6,232	0.14	76.9%	0.00	0	0.00	0.0%	1,868	0.04	23.1%	0.610	0.681	0.729	0.814
O-10	28,733	0.66	30	4	50%	200	3,800	0.09	13.2%	4.00	10000	0.23	34.8%	14,933	0.34	52.0%	0.467	0.526	0.571	0.650
O-20	10,671	0.24	30	4	50%	426	8,094	0.19	75.9%	0.00	0	0.00	0.0%	2,577	0.06	24.1%	0.604	0.675	0.722	0.808
O-30	36,250	0.83	30	4	50%	250	4,750	0.11	13.1%	5.00	12500	0.29	34.5%	19,000	0.44	52.4%	0.464	0.523	0.568	0.648
CHANNEL-A	231,906	5.32	30	4	50%	250	0	0.00	0.0%	0.00	0	0.00	0.0%	231,906	5.32	100.0%	0.210	0.250	0.290	0.360
CHANNEL-B	31,407	0.72	30	4	50%	250	0	0.00	0.0%	0.00	0	0.00	0.0%	31,407	0.72	100.0%	0.210	0.250	0.290	0.360
CHANNEL-C	82,747	1.90	30	4	50%	250	0	0.00	0.0%	10.50	26250	0.60	31.7%	56,497	1.30	68.3%	0.381	0.434	0.477	0.554

Inlet Flow Calculations

Zone 1

Basin			Area	Area	T_c	2-year			10-year			25-year			100-year		
From		To	(Ac)	(sf)	(min)	C	I (in/hr)	Q (cfs)	C	I (in/hr)	Q (cfs)	C	I (in/hr)	Q (cfs)	C	I (in/hr)	Q (cfs)
A-150		INLET	0.83212	36247	5.00	0.46	6.31	2.43	0.52	9.61	4.17	0.57	11.79	5.56	0.65	15.42	8.31
A-140		INLET	0.33343	14524	5.00	0.61	6.31	1.27	0.68	9.61	2.17	0.73	11.79	2.84	0.82	15.42	4.20
A-130		INLET	1.13432	49411	5.00	0.44	6.31	3.15	0.50	9.61	5.42	0.54	11.79	7.25	0.62	15.42	10.89
A-120		INLET	0.7362	32069	5.00	0.44	6.31	2.05	0.50	9.61	3.54	0.54	11.79	4.73	0.62	15.42	7.04
A-110		INLET	0.95739	41704	5.00	0.43	6.31	2.59	0.48	9.61	4.46	0.53	11.79	5.98	0.61	15.42	8.95
A-100		INLET	0.55817	24314	5.00	0.48	6.31	1.68	0.54	9.61	2.88	0.58	11.79	3.84	0.66	15.42	5.69
A-90		INLET	0.27778	12100	5.00	0.57	6.31	1.01	0.64	9.61	1.73	0.69	11.79	2.27	0.77	15.42	3.31
A-80		INLET	1.21671	53000	5.00	0.45	6.31	3.47	0.51	9.61	5.97	0.55	11.79	7.96	0.63	15.42	11.87
A-70		INLET	0.60836	26500	5.00	0.45	6.31	1.74	0.51	9.61	2.98	0.55	11.79	3.98	0.63	15.42	5.93
A-60		INLET	0.60836	26500	5.00	0.45	6.31	1.74	0.51	9.61	2.98	0.55	11.79	3.98	0.63	15.42	5.93
A-50		INLET	0.40735	17744	5.00	0.65	6.31	1.68	0.72	9.61	2.86	0.77	11.79	3.74	0.86	15.42	5.41
A-40		INLET	0.37994	16550	5.00	0.60	6.31	1.44	0.67	9.61	2.45	0.72	11.79	3.22	0.80	15.42	4.71
A-30		INLET	1.80948	78821	5.00	0.44	6.31	5.03	0.50	9.61	8.67	0.54	11.79	11.58	0.62	15.42	17.34
A-20		INLET	0.60836	26500	5.00	0.45	6.31	1.74	0.51	9.61	2.98	0.55	11.79	3.98	0.63	15.42	5.93
A-10		INLET	0.55852	24329	5.00	0.47	6.31	1.66	0.53	9.61	2.84	0.57	11.79	3.79	0.65	15.42	5.63
B-50		INLET	0.2343	10206	5.00	0.48	6.31	0.69	0.54	9.61	1.18	0.58	11.79	1.58	0.66	15.42	2.39
B-40		INLET	0.08019	3493	5.00	0.63	6.31	0.32	0.71	9.61	0.54	0.76	11.79	0.71	0.84	15.42	1.04
B-30		INLET	0.70941	30902	5.00	0.44	6.31	1.99	0.50	9.61	3.43	0.55	11.79	4.58	0.63	15.42	6.85
B-20		INLET	0.54874	23903	5.00	0.45	6.31	1.58	0.51	9.61	2.71	0.56	11.79	3.62	0.64	15.42	5.39
B-10		INLET	0.82022	35729	5.00	0.49	6.31	2.56	0.56	9.61	4.38	0.60	11.79	5.82	0.68	15.42	8.63
C-40		INLET	0.53949	23500	5.00	0.45	6.31	1.54	0.51	9.61	2.65	0.56	11.79	3.54	0.63	15.42	5.28
C-30		INLET	1.21671	53000	5.00	0.45	6.31	3.47	0.51	9.61	5.97	0.55	11.79	7.96	0.63	15.42	11.87
C-20		INLET	0.23551	10259	5.00	0.62	6.31	0.94	0.70	9.61	1.61	0.74	11.79	2.11	0.83	15.42	3.01
C-10		INLET	0.82691	36020	5.00	0.48	6.31	2.49	0.54	9.61	4.28	0.58	11.79	5.69	0.66	15.42	8.44
D-20		INLET	0.91253	39750	5.00	0.45	6.31	2.59	0.51	9.61	4.45	0.55	11.79	5.94	0.63	15.42	8.90
D-10		INLET	0.60836	26500	5.00	0.45	6.31	1.74	0.51	9.61	2.98	0.55	11.79	3.98	0.63	15.42	5.93
E-10		INLET	0.43091	18770.228	5.00	0.52	6.31	1.42	0.59	9.61	2.42	0.63	11.79	3.21	0.71	15.42	4.75
F-60		INLET	0.10916	4755	5.00	0.58	6.31	0.41	0.65	9.61	0.69	0.70	11.79	0.91	0.78	15.42	1.32
F-50		INLET	0.70592	30750	5.00	0.45	6.31	2.03	0.51	9.61	3.48	0.56	11.79	4.65	0.63	15.42	6.90
F-45		INLET	0.70216	30586	5.00	0.42	6.31	1.87	0.48	9.61	3.23	0.52	11.79	4.32	0.60	15.42	6.51
F-40		INLET	0.60836	26500	5.00	0.45	6.31	1.74	0.51	9.61	2.98	0.55	11.79	3.98	0.63	15.42	5.93
F-30		INLET	0.60836	26500	5.00	0.45	6.31	1.74	0.51	9.61	2.98	0.55	11.79	3.98	0.63	15.42	5.93
F-20		INLET	0.67679	29481	5.00	0.49	6.31	2.08	0.55	9.61	3.57	0.59	11.79	4.74	0.67	15.42	7.01
F-10		INLET	0.60836	26500	5.00	0.45	6.31	1.74	0.51	9.61	2.98	0.55	11.79	3.98	0.63	15.42	5.93
G-20		INLET	0.74743	32557.852	5.00	0.49	6.31	2.30	0.55	9.61	3.94	0.59	11.79	5.24	0.67	15.42	7.75
G-10		INLET	0.60836	26500.133	5.00	0.45	6.31	1.74	0.51	9.61	2.98	0.55	11.79	3.98	0.63	15.42	5.93
H-90		INLET	0.52541	22886.658	5.00	0.52	6.31	1.72	0.58	9.61	2.95	0.62	11.79	3.90	0.71	15.42	5.72
H-80		INLET	0.88189	38415	5.00	0.48	6.31	2.66	0.54	9.61	4.57	0.59	11.79	6.07	0.67	15.42	9.05
H-60		INLET	1.29437	56382.689	5.00	0.46	6.31	3.77	0.52	9.61	6.47	0.57	11.79	8.63	0.65	15.42	12.91
H-50		INLET	0.61507	26792.311	5.00	0.45	6.31	1.75	0.51	9.61	3.02	0.55	11.79	4.03	0.63	15.42	5.97
H-40		INLET	0.79022	34422	5.00	0.48	6.31	2.40	0.54	9.61	4.12	0.59	11.79	5.47	0.67	15.42	8.14
H-30		INLET	0.60836	26500	5.00	0.45	6.31	1.74	0.51	9.61	2.98	0.55	11.79	3.98	0.63	15.42	5.93
H-20		INLET	0.60836	26500	5.00	0.45	6.31	1.74	0.51	9.61	2.98	0.55	11.79	3.98	0.63	15.42	5.93
H-10		INLET	0.66118	28801	5.00	0.54	6.31	2.23	0.60	9.61	3.81	0.65	11.79	5.04	0.73	15.42	7.44
J-05		INLET	0.83081	36190	5.00	0.62	6.31	3.22	0.69	9.61	5.47	0.73	11.79	7.18	0.82	15.42	10.50
I-10		INLET	0.44938	19575	5.00	0.49	6.31	1.39	0.55	9.61	2.38	0.60	11.79	3.16	0.68	15.42	4.69
J-30		INLET	0.94277	41067.264	5.00	0.45	6.31	2.67	0.51	9.61	4.60	0.55	11.79	6.13	0.63	15.42	9.20
J-20		INLET	1.25788	54793.283	5.00	0.41	6.31	3.26	0.47	9.61	5.64	0.51	11.79	7.58	0.59	15.42	11.40
J-10		INLET	0.28122	12250	5.00	0.61	6.31	1.07	0.68	9.61	1.82	0.72	11.79	2.39	0.81	15.42	3.51
K-40		INLET	0.47059	20499.078	5.00	0.46	6.31	1.35	0.51	9.61	2.32	0.56	11.79	3.10	0.64	15.42	4.63
K-30		INLET	0.59939	26109.639	5.00	0.45	6.31	1.72	0.51	9.61	2.96	0.56	11.79	3.94	0.64	15.42	5.88
K-20		INLET	0.61732	26890.363	5.00	0.45	6.31	1.75	0.51	9.61	3.01	0.55	11.79	4.02	0.63	15.42	5.99
L-30		INLET	0.18951	8255	5.00	0.95	6.31	1.13	1.04	9.61	1.90	1.10	11.79	2.46	1.19	15.42	3.49
L-20		INLET	1.52163	66282	5.00	0.46	6.31	4.40	0.52	9.61	7.56	0.56	11.79	10.08	0.64	15.42	15.06
L-10		INLET	1.88466	82096	5.00	0.34	6.31	4.05	0.39	9.61	7.07	0.43	11.79	9.62	0.51	15.42	14.78
M-40		INLET	0.66582	29003.133	5.00	0.46	6.31	1.96	0.52	9.61	3.36	0.57	11.79	4.48	0.65	15.42	6.64
M-30		INLET	0.2087	9091	5.00	0.62	6.31	0.82	0.69	9.61	1.39	0.74	11.79	1.83	0.82	15.42	2.66
M-20		INLET	1.1347	49427.425	5.00	0.44	6.31	3.15	0.50	9.61	5.42	0.54	11.79	7.24	0.62	15.42	10.89
M-10		INLET	1.47548	64272	5.00	0.41	6.31	3.79	0.46	9.61	6.55	0.50	11.79	8.80	0.58	15.42	13.23
N-20		INLET	2.41875	105360.63	15.29	0.32	4.23	3.26	0.37	6.39	5.66	0.41	7.85	7.76	0.48	10.25	11.97
N-10		INLET	0.18595	8099.8591	5.00	0.61	6.31	0.73	0.68	9.61	1.24	0.73	11.79	1.63	0.81	15.42	2.33
O-10		INLET	0.65962	28733	5.00	0.47	6.31	1.94	0.53	9.61	3.34	0.57	11.79	4.44	0.65	15.42	6.62
O-20		INLET	0.24497	10671	5.00	0.60	6.31	0.91	0.67	9.61	1.56	0.72	11.79	2.04	0.81	15.42	3.05
O-30		INLET	0.83219	36250	5.00	0.46	6.31	2.43	0.52	9.61	4.17	0.57	11.79	5.56	0.65	15.42	8.31
CHANNEL-A		INLET	5.32383	231906	16.82	0.21	4.04	4.52	0.25	6.11	8.12	0.29	7.51	11.59	0.36	9.82	18.81
CHANNEL-B		INLET	0.72101	31407	12.40	0.21	4.64	0.70	0.25	7.01	1.26	0.29	8.61	1.80	0.36	11.23	2.92
CHANNEL-C		INLET	1.89961	82747	5.00	0.38	6.31	4.57	0.43	9.61	7.92	0.48	11.79	10.69	0.55	15.42	16.22

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

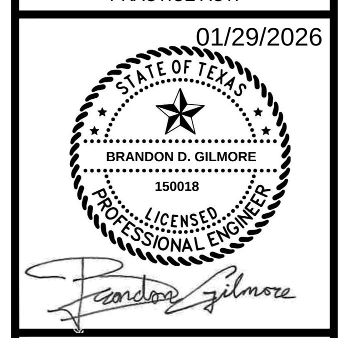
ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

DRAINAGE AREA
CALCULATIONS (1 OF 2)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026



100-YR STORM EVENT

						STREET CAPACITY						INLET ON GRADE									SUMP INLETS			
Drainage Area	Inlet Type	Upstream Inlet	Upstream Inlet	Q_{pass} (cfs)	Q_{100} (cfs)	Street Width (ft)	Cross Slope (ft/ft)	Long. Slope (ft/ft)	Ponded Width (ft)	Ponded Depth (ft)	Velocity (ft/s)	a	S_w	E_0	S'_w	S_e	Length Needed (ft)	Length (ft)	Q_i (cfs)	Q_{pass} (cfs)	Q_{100} (cfs)	Depth (ft)	Orifice/Weir ?	Length Needed (ft)
																						Curb Inlet		
A-150	GRADE INLET			0.00	8.31	30	0.0340	0.020	10.052	0.342	4.839	0.532	0.389	0.35	0.355	0.158	16.31	10.00	6.808	1.50	-	-	-	-
A-140	SUMP INLET			0.00	4.20	30	0.0340	0.020	7.780	0.265	4.079	-	-	-	-	-	-	10.00	-	-	4.20	0.26	Weir	10.00
A-130	SUMP INLET	A-150		1.50	10.89	30	0.0340	0.007	14.217	0.483	3.607	-	-	-	-	-	-	10.00	-	-	12.40	0.48	Weir	10.00
A-120	GRADE INLET			0.00	7.04	30	0.0340	0.040	8.294	0.282	6.021	0.532	0.389	0.41	0.355	0.181	17.31	10.00	5.549	1.49	-	-	-	-
A-110	GRADE INLET	A-120		1.49	8.95	30	0.0340	0.053	9.121	0.310	7.383	0.532	0.389	0.38	0.355	0.169	23.11	10.00	6.678	3.76	-	-	-	-
A-100	GRADE INLET			0.00	5.69	30	0.0340	0.022	8.566	0.291	4.562	0.532	0.389	0.40	0.355	0.177	13.41	10.00	5.208	0.48	-	-	-	-
A-90	SUMP INLET	A-110		3.76	3.31	30	0.0340	0.005	12.269	0.417	2.763	-	-	-	-	-	-	10.00	-	-	7.07	0.42	Weir	10.00
A-80	SUMP INLET	A-100	A-70	1.99	11.87	30	0.0340	0.003	17.376	0.591	2.700	-	-	-	-	-	-	10.00	-	-	13.86	0.59	Weir	10.00
A-70	GRADE INLET	A-60		1.61	5.93	30	0.0340	0.030	8.985	0.305	5.500	0.532	0.389	0.39	0.355	0.171	16.90	10.00	6.044	1.50	-	-	-	-
A-60	GRADE INLET	G-10		1.64	5.93	30	0.0340	0.033	8.819	0.300	5.731	0.532	0.389	0.39	0.355	0.173	17.34	10.00	5.965	1.61	-	-	-	-
A-50	GRADE INLET			0.00	5.41	30	0.0340	0.039	7.547	0.257	5.582	0.532	0.389	0.45	0.355	0.192	14.80	10.00	4.694	0.71	-	-	-	-
A-40	SUMP INLET			0.00	4.71	30	0.0340	0.050	6.841	0.233	5.920	-	-	-	-	-	-	10.00	-	-	4.71	0.23	Weir	10.00
A-30	SUMP INLET		A-20	0.91	17.34	30	0.0340	0.012	14.856	0.505	4.863	-	-	-	-	-	-	15.00	-	-	18.25	0.51	Weir	10.00
A-20	GRADE INLET		A-10	0.58	5.93	30	0.0340	0.026	8.733	0.297	5.024	0.532	0.389	0.40	0.355	0.174	15.04	10.00	5.604	0.91	-	-	-	-
A-10	GRADE INLET			0.00	5.63	30	0.0340	0.027	8.208	0.279	4.912	0.532	0.389	0.42	0.355	0.182	13.94	10.00	5.047	0.58	-	-	-	-
B-50	GRADE INLET			0.00	2.39	30	0.0340	0.011	7.044	0.240	2.831	0.532	0.389	0.47	0.355	0.202	6.99	10.00	2.389	0.00	-	-	-	-
B-40	GRADE INLET			0.00	1.04	30	0.0340	0.011	5.158	0.175	2.300	0.532	0.389	0.60	0.355	0.247	4.36	10.00	1.041	0.00	-	-	-	-
B-30	GRADE INLET			0.00	6.85	30	0.0340	0.020	9.348	0.318	4.610	0.532	0.389	0.37	0.355	0.166	14.60	10.00	5.993	0.86	-	-	-	-
B-20	GRADE INLET		B-30	0.86	5.39	30	0.0340	0.070	7.139	0.243	7.207	0.532	0.389	0.47	0.355	0.200	18.32	10.00	4.736	1.51	-	-	-	-
B-10	GRADE INLET			0.00	8.63	30	0.0340	0.026	9.706	0.330	5.390	0.532	0.389	0.36	0.355	0.162	17.67	10.00	6.710	1.92	-	-	-	-
C-40	GRADE INLET			0.00	5.28	30	0.0340	0.009	9.850	0.335	3.203	0.532	0.389	0.36	0.355	0.161	10.52	10.00	5.258	0.02	-	-	-	-
C-30	SUMP INLET	C-40	C-10	0.71	11.87	30	0.0340	0.005	15.226	0.518	3.191	-	-	-	-	-	-	10.00	-	-	12.58	0.52	Weir	10.00
C-20	GRADE INLET			0.00	3.01	30	0.0340	0.005	8.911	0.303	2.233	0.532	0.389	0.39	0.355	0.172	6.69	10.00	3.014	0.00	-	-	-	-
C-10	GRADE INLET			0.00	8.44	30	0.0340	0.008	12.090	0.411	3.396	0.532	0.389	0.30	0.355	0.140	13.29	10.00	7.755	0.68	-	-	-	-
D-20	GRADE INLET			0.00	8.90	30	0.0340	0.045	8.859	0.301	6.672	0.532	0.389	0.39	0.355	0.173	20.33	15.00	8.102	0.80	-	-	-	-
D-10	GRADE INLET	D-20		0.80	5.93	30	0.0340	0.020	9.289	0.316	4.591	0.532	0.389	0.38	0.355	0.167	14.46	10.00	5.925	0.81	-	-	-	-
E-10	GRADE INLET	B-20	B-10	3.43	4.75	30	0.0340	0.046	8.546	0.291	6.586	0.532	0.389	0.40	0.355	0.177	19.46	15.00	7.600	0.58	-	-	-	-
F-60	GRADE INLET			0.00	1.32	30	0.0340	0.030	4.673	0.159	3.557	0.532	0.389	0.64	0.355	0.263	6.28	10.00	1.321	0.00	-	-	-	-
F-50	GRADE INLET			0.00	6.90	30	0.0340	0.030	8.690	0.295	5.379	0.532	0.389	0.40	0.355	0.175	16.05	10.00	5.712	1.19	-	-	-	-
F-45	GRADE INLET			0.00	6.51	30	0.0340	0.034	8.319	0.283	5.537	0.532	0.389	0.41	0.355	0.180	15.94	10.00	5.413	1.10	-	-	-	-
F-40	GRADE INLET	F-45		1.10	5.93	30	0.0340	0.034	8.563	0.291	5.645	0.532	0.389	0.40	0.355	0.177	16.65	10.00	5.686	1.35	-	-	-	-
F-30	GRADE INLET	F-40		1.35	5.93	30	0.0340	0.058	7.835	0.266	6.980	0.532	0.389	0.43	0.355	0.188	19.18	10.00	5.350	1.93	-	-	-	-
F-20	GRADE INLET			0.00	7.01	30	0.0340	0.078	7.306	0.248	7.726	0.532	0.389	0.46	0.355	0.197	20.05	10.00	4.988	2.02	-	-	-	-
F-10	GRADE INLET	F-30		1.93	5.93	30	0.0340	0.072	7.745	0.263	7.717	0.532	0.389	0.44	0.355	0.189	21.04	10.00	5.404	2.46	-	-	-	-
G-20	GRADE INLET			0.00	7.75	30	0.0340	0.033	8.894	0.302	5.764	0.532	0.389	0.39	0.355	0.172	17.57	10.00	6.048	1.70	-	-	-	-
G-10	GRADE INLET	G-20		1.70	5.93	30	0.0340	0.033	8.845	0.301	5.742	0.532	0.389	0.39	0.355	0.173	17.42	10.00	5.993	1.64	-	-	-	-
H-90	GRADE INLET	B-40		0.00	5.72	30	0.0340	0.011	9.776	0.332	3.523	0.532	0.389	0.36	0.355	0.161	11.52	10.00	5.574	0.15	-	-	-	-
H-80	GRADE INLET	B-50		0.00	9.05	30	0.0340	0.011	11.610	0.395	3.951	0.532	0.389	0.31	0.355	0.144	14.98	10.00	7.804	1.25	-	-	-	-
H-60	GRADE INLET	H-90		0.15	12.91	30	0.0340	0.055	9.850	0.335	7.917	0.532	0.389	0.36	0.355	0.161	26.49	15.00	10.156	2.90	-	-	-	-
H-50	GRADE INLET	H-60		2.90	5.97	30	0.0340	0.058	8.438	0.287	7.333	0.532	0.389	0.41	0.355	0.178	21.48	10.00	6.002	2.87	-	-	-	-
H-40	GRADE INLET	H-80		1.25	8.14	30	0.0340	0.052	8.794	0.299	7.137	0.532	0.389	0.39	0.355	0.173	21.64	10.00	6.310	3.07	-	-	-	-
H-30	GRADE INLET	H-50		2.87	5.93	30	0.0340	0.043	8.891	0.302	6.554	0.532	0.389	0.39	0.355	0.172	20.02	10.00	6.273	2.53	-	-	-	-
H-20	GRADE INLET	H-30		2.53	5.93	30	0.0340	0.040	8.889	0.302	6.305	0.532	0.389	0.39	0.355	0.172	19.25	10.00	6.206	2.26	-	-	-	-
H-10	SUMP INLET	H-40		3.07	7.44	30	0.0340	0.005	14.236	0.484	3.051	-	-	-	-	-	-	10.00	-	-	10.51	0.48	Weir	10.00
J-05	SUMP INLET	H-20	J-10	2.27	10.50	30	0.0340	0.005	15.312	0.521	3.203	-	-	-	-	-	-	10.00	-	-	12.77	0.52	Weir	10.00
I-10	GRADE INLET	F-50		1.19	4.69	30	0.0340	0.005	11.449	0.389	2.639	0.532	0.389	0.31	0.355	0.145	9.81	10.00	5.880	0.00	-	-	-	-
J-30	GRADE INLET			0.00	9.20	30	0.0340	0.016	10.849	0.369	4.597	0.532	0.389	0.33	0.355	0.150	16.51	10.00	7.474	1.72	-	-	-	-
J-20	GRADE INLET	J-30	F-60	1.72	11.40	30	0.0340	0.030	11.056	0.376	6.315	0.532	0.389	0.32	0.355	0.148	23.20	15.00	11.105	2.02	-	-	-	-
J-10	GRADE INLET			0.00	3.51	30	0.0340	0.024	7.028	0.239	4.176	0.532	0.389	0.47	0.355	0.202	10.36	10.00	3.498	0.01	-	-	-	-
K-40	GRADE INLET			0.00	4.63	30	0.0340	0.019	8.174	0.278	4.076	0.532	0.389	0.42	0.355	0.182	11.49	10.00	4.513	0.12	-	-	-	-
K-30	GRADE INLET	K-40		0.12	5.88	30	0.0340	0.037	7.927	0.270	5.618	0.532	0.389	0.43	0.355	0.186	15.53	10.00	5.067	0.93	-	-	-	-
K-20	GRADE INLET	K-30		0.93	5.99	30	0.0340	0.046	8.029	0.273	6.318	0.532	0.389	0.42	0.355	0.185	17.69	10.00	5.378	1.55	-	-	-	-
L-30	GRADE INLET			0.00	3.49	30	0.0340	0.016	7.578	0.258	3.574	0.532	0.389	0.45	0.355	0.192	9.42	10.00	3.490	0.00	-	-	-	-
L-20	GRADE INLET	J-20	K-20	3.56	15.06	30	0.0340	0.016	14.201	0.483	5.432	0.532	0.389	0.26	0.355	0.125	24.57	15.00	15.212	3.41	-	-	-	-
L-10	AREA INLET			0.00	14.78	0	0.0000	0.000	-	-	-	-	-	-	-	-	-	10.00	-	-	14.78	-	-	-
M-40	GRADE INLET			0.00	6.64	30	0.0340	0.035	8.325	0.283	5.638	0.532	0.389	0.41	0.355	0.180	16.24	10.00	5.455	1.19	-	-	-	-
M-30	SUMP INLET			0.00	2.66	30	0.0340	0.005	8.497	0.289	2.163	-	-	-	-	-	-	10.00	-	-	2.66	0.29	Weir	10.00
M-20	SUMP INLET	M-40		1.19	10.89	30	0.0340	0.005	14.996	0.510	3.159	-	-	-	-	-	-	10.00	-	-	12.08	0.51	Weir	10.00
M-10	SUMP INLET			0.00	13.23	30	0.0340	0.005	15.517	0.528	3.232	-	-	-	-	-	-	10.00	-	-	13.23	0.53	Weir	10.00
N-20	GRADE INLET			0.00	11.97	30	0.0340	0.007	14.186	0.482	3.498	0.532	0.389	0.26	0.355	0.126	15.67	10.00	10.048	1.92	-	-	-	-
N-10	GRADE INLET			0.00	2.33	30	0.0340	0.006	7.849	0.267	2.229	0.532	0.389	0.43	0.355	0.187	6.00	10.00	2.334	0.00	-	-	-	-
O-10	GRADE INLET	O-30		0.00	6.62	30	0.0340	0.036	8.265	0.281	5.698	0.532	0.389	0.41	0.355	0.181	16.32	10.00	5.417	1.20	-	-	-	-
O-20	GRADE INLET	L-30		0.00	3.05	30	0.0340	0.036	6.195	0.211	4.676	0.532	0.389	0.52	0.355	0.220	10.46	10.00	3.040	0.01	-	-	-	-
O-30	GRADE INLET	L-20		3.41	8.31	30	0.0340	0.016	11.924	0.405	4.850	0.532	0.389	0.30	0.355	0.141	18.89	10.00	8.703	3.02	-	-	-	-

AREA INLET CALCULATIONS FOR 100-YR STORM

$Q = 3.0h^{1.5}L$

INLET NUMBER	FLOW (CFS)	Q_{BYPASS} (CFS)	Q_{TOTAL} (CFS)	LENGTH (FT)	Q/L or A (CFS/LF)	H(FT) $(a+Y_o)$	INLET TYPE
L-10	14.78	0	14.78	16	0.92	0.46	Area Inlet

AREA INLET CALCULATIONS FOR 25-YR STORM

$Q = 3.0h^{1.5}L$

INLET NUMBER	FLOW (CFS)	Q_{BYPASS} (CFS)	Q_{TOTAL} (CFS)	LENGTH (FT)	Q/L or A (CFS/LF)	H(FT) $(a+Y_o)$	INLET TYPE
L-10	9.62	0	9.62	16	0.60	0.34	Area Inlet

25-YR STORM EVENT

						STREET CAPACITY						INLET ON GRADE									SUMP INLETS			
Drainage Area	Inlet Type	Upstream Inlet	Upstream Inlet	Q_{pass} (cfs)	Q_{25} (cfs)	Street Width (ft)	Cross Slope (ft/ft)	Long. Slope (ft/ft)	Ponded Width (ft)	Ponded Depth (ft)	Velocity (ft/s)	a	S_w	E_0	S'_w	S_e	Length Needed (ft)	Length (ft)	Q_i (cfs)	Q_{pass} (cfs)	Q_{25} (cfs)	Depth (ft)	Orifice/Weir ?	Length Needed (ft)
																						Curb Inlet		
A-150	GRADE INLET			0.00	5.56	30	0.0340	0.020	8.645	0.294	4.376	0.532	0.389	0.40	0.355	0.176	12.95	10.00	5.172	0.39	-	-	-	-
A-140	SUMP INLET			0.00	2.84	30	0.0340	0.020	6.723	0.229	3.701	-	-	-	-	-	-	10.00	-	-	2.84	0.23	Weir	10.00
A-130	SUMP INLET	A-150		0.39	7.25	30	0.0340	0.007	11.855	0.403	3.196	-	-	-	-	-	-	10.00	-	-	7.64	0.40	Weir	10.00
A-120	GRADE INLET			0.00	4.73	30	0.0340	0.040	7.142	0.243	5.449	0.532	0.389	0.47	0.355	0.200	13.78	10.00	4.265	0.46	-	-	-	-
A-110	GRADE INLET	A-120		0.46	5.98	30	0.0340	0.053	7.607	0.259	6.542	0.532	0.389	0.44	0.355	0.191	17.51	10.00	5.033	1.40	-	-	-	-
A-100	GRADE INLET			0.00	3.84	30	0.0340	0.022	7.389	0.251	4.134	0.532	0.389	0.45	0.355	0.195	10.70	10.00	3.809	0.03	-	-	-	-
A-90	SUMP INLET	A-110		1.40	2.27	30	0.0340	0.005	9.599	0.326	2.346	-	-	-	-	-	-	10.00	-	-	3.68	0.33	Weir	10.00
A-80	SUMP INLET	A-100	A-70	0.19	7.96	30	0.0340	0.003	14.242	0.484	2.364						-	10.00	-	-	8.15	0.48	Weir	10.00
A-70	GRADE INLET	A-60		0.16	3.98	30	0.0340	0.030	7.173	0.244	4.733	0.532	0.389	0.47	0.355	0.199	11.98	10.00	3.978	0.16	-	-	-	-
A-60	GRADE INLET	G-10		0.00	3.98	30	0.0340	0.033	6.928	0.236	4.879	0.532	0.389	0.48	0.355	0.204	12.00	10.00	3.823	0.16	-	-	-	-
A-50	GRADE INLET			0.00	3.74	30	0.0340	0.039	6.573	0.223	5.091	0.532	0.389	0.50	0.355	0.211	11.99	10.00	3.592	0.15	-	-	-	-
A-40	SUMP INLET			0.00	3.22	30	0.0340	0.050	5.932	0.202	5.383	-	-	-	-	-	-	10.00	-	-	3.22	0.20	Weir	10.00
A-30	SUMP INLET		A-20	0.10	11.58	30	0.0340	0.012	12.567	0.427	4.350	-	-	-	-	-	-	15.00	-	-	11.68	0.43	Weir	10.00
A-20	GRADE INLET		A-10	0.06	3.98	30	0.0340	0.026	7.302	0.248	4.459	0.532	0.389	0.46	0.355	0.197	11.44	10.00	3.945	0.10	-	-	-	-
A-10	GRADE INLET			0.00	3.79	30	0.0340	0.027	7.076	0.241	4.449	0.532	0.389	0.47	0.355	0.201	11.12	10.00	3.726	0.06	-	-	-	-
B-50	GRADE INLET			0.00	1.58	30	0.0340	0.011	6.026	0.205	2.552	0.532	0.389	0.53	0.355	0.224	5.51	10.00	1.575	0.00	-	-	-	-
B-40	GRADE INLET			0.00	0.71	30	0.0340	0.011	4.475	0.152	2.092	0.532	0.389	0.66	0.355	0.270	3.53	10.00	0.712	0.00	-	-	-	-
B-30	GRADE INLET			0.00	4.58	30	0.0340	0.020	8.039	0.273	4.169	0.532	0.389	0.42	0.355	0.184	11.59	10.00	4.452	0.13	-	-	-	-
B-20	GRADE INLET		B-30	0.13	3.62	30	0.0340	0.070	5.893	0.200	6.342	0.532	0.389	0.54	0.355	0.227	13.69	10.00	3.390	0.35	-	-	-	-
B-10	GRADE INLET			0.00	5.82	30	0.0340	0.026	8.406	0.285	4.863	0.532	0.389	0.41	0.355	0.179	14.12	10.00	5.184	0.63	-	-	-	-
C-40	GRADE INLET			0.00	3.54	30	0.0340	0.009	8.512	0.288	2.885	0.532	0.389	0.40	0.355	0.177	8.38	10.00	3.539	0.00	-	-	-	-
C-30	SUMP INLET	C-40	C-10	0.03	7.96	30	0.0340	0.005	12.903	0.437	2.838	-	-	-	-	-	-	10.00	-	-	8.00	0.44	Weir	10.00
C-20	GRADE INLET			0.00	2.11	30	0.0340	0.005	7.822	0.266	2.024	0.532	0.389	0.43	0.355	0.188	5.46	10.00	2.105	0.00	-	-	-	-
C-10	GRADE INLET			0.00	5.69	30	0.0340	0.008	10.475	0.356	3.052	0.532	0.389	0.34	0.355	0.154	10.63	10.00	5.657	0.03	-	-	-	-
D-20	GRADE INLET			0.00	5.94	30	0.0340	0.045	7.644	0.260	5.980	0.532	0.389	0.44	0.355	0.191	16.15	15.00	5.888	0.05	-	-	-	-
D-10	GRADE INLET	D-20		0.05	3.98	30	0.0340	0.020	7.696	0.262	4.005	0.532	0.389	0.44	0.355	0.190	10.79	10.00	3.996	0.04	-	-	-	-
E-10	GRADE INLET	B-20	B-10	0.99	3.21	30	0.0340	0.046	6.680	0.227	5.526	0.532	0.389	0.49	0.355	0.209	13.30	15.00	4.192	0.00	-	-	-	-
F-60	GRADE INLET			0.00	0.91	30	0.0340	0.030	4.078	0.139	3.212	0.532	0.389	0.71	0.355	0.285	5.11	10.00	0.908	0.00	-	-	-	-
F-50	GRADE INLET			0.00	4.65	30	0.0340	0.030	7.523	0.256	4.831	0.532	0.389	0.45	0.355	0.193	12.82	10.00	4.344	0.30	-	-	-	-
F-45	GRADE INLET			0.00	4.32	30	0.0340	0.034	7.163	0.244	4.955	0.532	0.389	0.47	0.355	0.199	12.62	10.00	4.067	0.26	-	-	-	-
F-40	GRADE INLET	F-45		0.00	3.98	30	0.0340	0.034	6.946	0.236	4.855	0.532	0.389	0.48	0.355	0.204	12.04	10.00	3.818	0.16	-	-	-	-
F-30	GRADE INLET	F-40		0.00	3.98	30	0.0340	0.058	6.273	0.213	5.951	0.532	0.389	0.52	0.355	0.218	13.61	10.00	3.616	0.37	-	-	-	-
F-20	GRADE INLET			0.00	4.74	30	0.0340	0.078	6.336	0.215	6.947	0.532	0.389	0.51	0.355	0.216	16.07	10.00	3.919	0.82	-	-	-	-
F-10	GRADE INLET	F-30		0.00	3.98	30	0.0340	0.072	6.024	0.205	6.453	0.532	0.389	0.53	0.355	0.224	14.29	10.00	3.525	0.46	-	-	-	-
G-20	GRADE INLET			0.00	5.24	30	0.0340	0.033	7.710	0.262	5.181	0.532	0.389	0.44	0.355	0.190	14.06	10.00	4.676	0.56	-	-	-	-
G-10	GRADE INLET	G-20		0.00	3.98	30	0.0340	0.033	6.957	0.237	4.838	0.532	0.389	0.48	0.355	0.203	12.02	10.00	3.821	0.16	-	-	-	-
H-90	GRADE INLET	B-40		0.00	3.90	30	0.0340	0.011	8.506	0.289	3.175	0.532	0.389	0.40	0.355	0.177	9.27	10.00	3.904	0.00	-	-	-	-
H-80	GRADE INLET	B-50		0.00	6.07	30	0.0340	0.011	10.039	0.341	3.546	0.532	0.389	0.35	0.355	0.159	11.94	10.00	5.844	0.23	-	-	-	-
H-60	GRADE INLET	H-90		0.00	8.63	30	0.0340	0.055	8.468	0.288	7.077	0.532	0.389	0.41	0.355	0.178	20.92	15.00	7.738	0.89	-	-	-	-
H-50	GRADE INLET	H-60		0.00	4.03	30	0.0340	0.058	6.300	0.214	5.967	0.532	0.389	0.52	0.355	0.217	13.70	10.00	3.645	0.38	-	-	-	-
H-40	GRADE INLET	H-80		0.00	5.47	30	0.0340	0.052	7.214	0.245	6.184	0.532	0.389	0.46	0.355	0.198	15.92	10.00	4.549	0.92	-	-	-	-
H-30	GRADE INLET	H-50		0.00	3.98	30	0.0340	0.043	6.630	0.225	5.328	0.532	0.389	0.50	0.355	0.210	12.74	10.00	3.731	0.25	-	-	-	-
H-20	GRADE INLET	H-30		0.00	3.98	30	0.0340	0.040	6.726	0.229	5.177	0.532	0.389	0.49	0.355	0.208	12.52	10.00	3.759	0.22	-	-	-	-
H-10	SUMP INLET	H-40		0.00	5.04	30	0.0340	0.005	10.849	0.369	2.517	-	-	-	-	-	-	10.00	-	-	5.04	0.37	Weir	10.00
J-05	SUMP INLET	H-20	J-10	0.00	7.18	30	0.0340	0.005	12.392	0.421	2.751	-	-	-	-	-	-	10.00	-	-	7.18	0.42	Weir	10.00
I-10	GRADE INLET	F-50		0.00	3.16	30	0.0340	0.005	9.109	0.310	2.240	0.532	0.389	0.38	0.355	0.169	6.89	10.00	3.161	0.00	-	-	-	-
J-30	GRADE INLET			0.00	6.13	30	0.0340	0.016	9.360	0.318	4.119	0.532	0.389	0.37	0.355	0.166	13.11	10.00	5.674	0.46	-	-	-	-
J-20	GRADE INLET	J-30	F-60	0.00	7.58	30	0.0340	0.030	9.036	0.307	5.458	0.532	0.389	0.38	0.355	0.170	16.96	15.00	7.420	0.16	-	-	-	-
J-10	GRADE INLET			0.00	2.39	30	0.0340	0.024	6.111	0.208	3.761	0.532	0.389	0.53	0.355	0.222	8.34	10.00	2.388	0.00	-	-	-	-
K-40	GRADE INLET			0.00	3.10	30	0.0340	0.019	7.059	0.240	3.655	0.532	0.389	0.47	0.355	0.201	9.14	10.00	3.096	0.00	-	-	-	-
K-30	GRADE INLET	K-40		0.00	3.94	30	0.0340	0.037	6.801	0.231	5.016	0.532	0.389	0.49	0.355	0.206	12.23	10.00	3.759	0.18	-	-	-	-
K-20	GRADE INLET	K-30		0.00	4.02	30	0.0340	0.046	6.577	0.224	5.469	0.532	0.389	0.50	0.355	0.211	12.99	10.00	3.736	0.29	-	-	-	-
L-30	GRADE INLET			0.00	2.46	30	0.0340	0.016	6.671	0.227	3.246	0.532	0.389	0.49	0.355	0.209	7.72	10.00	2.456	0.00	-	-	-	-
L-20	GRADE INLET	J-20	K-20	0.00	10.08	30	0.0340	0.016	11.328	0.385	4.620	0.532	0.389	0.32	0.355	0.146	17.33	15.00	9.806	0.27	-	-	-	-
L-10	AREA INLET			0.00	9.62	0		0.000	-	-	-	-	-	-	-	-	-	10.00	-	-	9.62	-	-	-
M-40	GRADE INLET			0.00	4.48	30	0.0340	0.035	7.214	0.245	5.067	0.532	0.389	0.46	0.355	0.198	12.99	10.00	4.164	0.32	-	-	-	-
M-30	SUMP INLET			0.00	1.83	30	0.0340	0.005	7.422	0.252	1.954	-	-	-	-	-	-	10.00	-	-	1.83	0.25	Weir	10.00
M-20	SUMP INLET	M-40		0.00	7.24	30	0.0340	0.005	12.432	0.423	2.757	-	-	-	-	-	-	10.00	-	-	7.24	0.42	Weir	10.00
M-40	SUMP INLET			0.00	8.80	30	0.0340	0.005	13.371	0.455	2.894	-	-	-	-	-	-	10.00	-	-	8.80	0.45	Weir	10.00
N-20	GRADE INLET			0.00	7.76	30	0.0340	0.007	12.110	0.412	3.112	0.532	0.389	0.30	0.355	0.140	12.26	10.00	7.390	0.37	-	-	-	-
N-10	GRADE INLET			0.00	1.63	30	0.0340	0.006	6.893	0.234	2.021	0.532	0.389	0.48	0.355	0.205	4.90	10.00	1.632	0.00	-	-	-	-
O-10	GRADE INLET	O-30		0.00	4.44	30	0.0340	0.036	7.148	0.243	5.114	0.532	0.389	0.47	0.355	0.200	13.01	10.00	4.123	0.32	-	-	-	-
O-20	GRADE INLET	L-30		0.00	2.04	30	0.0340	0.036	5.354	0.182	4.195	0.532	0.389	0.58	0.355	0.241	8.36	10.00	2.044	0.00	-	-	-	-
O-30	GRADE INLET	L-20		0.00	5.56	30	0.0340	0.016	9.053	0.308	3.991	0.532	0.389	0.38	0.355	0.170	12.34	10.00	5.281	0.28	-	-	-	-

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-DAM.DWG DATE: 1/29/2026 4:10:32 PM BY: BGILMORE

GRAY ENGINEERING
8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

DRAINAGE AREA CALCULATIONS (2 OF 2)

PROJECT NO: 1636-11741

DESIGNED BY: BG

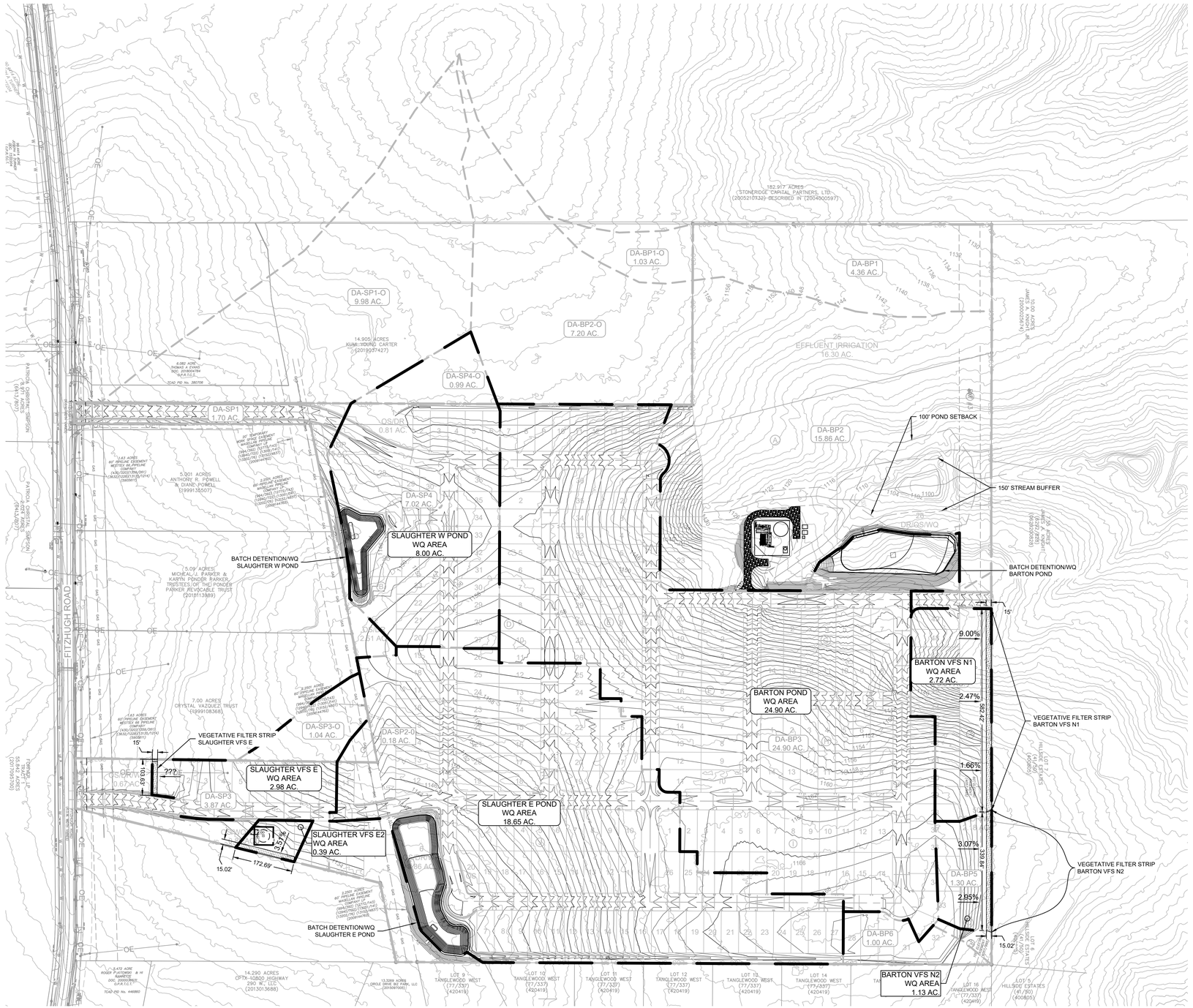
DRAWN BY: TAM

CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER



150'
GRAPHIC SCALE IN FEET
0 75' 150' 300'

LEGEND	
	PROPERTY BOUNDARY
950	EXISTING CONTOUR
	EASEMENT LINE
	WATER QUALITY AREA BOUNDARY
XX XX.XX AC	WATER QUALITY AREA LABEL
	DRAINAGE AREA BOUNDARY
XX XX.XX AC	DRAINAGE AREA LABEL

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
FINAL PLAT

WATER QUALITY DRAINAGE AREA MAP

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 48 OF 126

H:\PROJECTS\1636 - BRONN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-WQ.DWG DATE: 1/29/2026 4:11:07 PM BY: BGILMORE

BARTON VFS N1

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Orchard Ranch - Bart
Date Prepared: 6/11/2024

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the s

1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$

where:
$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of incr
A_N = Net increase in impervious area for the project
P = Average annual precipitation, inches

Site Data: Determine Required Load Removal Based on the Entire Project

		Criteria
County =	Travis	RG-348a
Total project area included in plan * =	82.90 acres	
Predevelopment impervious area within the limits of the plan * =	0.00 acres	
Total post-development impervious area within the limits of the plan* =	26.30 acres	
Total post-development impervious cover fraction * =	0.32	
P =	32 inches	
$L_{M\ TOTAL\ PROJECT}$ =	23312 lbs.	

Removed (Total)	Remaining
23,327	-15

*** The values entered in these fields should be for the total project area.**

Number of drainage basins / outfalls areas leaving the plan area = 7

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. = 4

Total drainage basin/outfall area =	2.72	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	0.52	acres
Post-development impervious fraction within drainage basin/outfall area =	0.19	
$L_{M\ THIS\ BASIN}$ =	453	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = **Vegetated Filter Strips**
Removal efficiency = 85 percent

Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: $L_R = (BMP\ efficiency) \times P \times (A_I \times 34.6 + A_P \times 0.54)$

where:
A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	2.29	acres
A_I =	0.52	acres
A_P =	1.77	acres
L_R =	515	lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ = 515 lbs.

F = 1.00

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to

Rainfall Depth = 4.00 inches
Post Development Runoff Coefficient = 0.21
On-site Water Quality Volume = 7066 cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP =	0.00	acres
Off-site Impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0	
Off-site Runoff Coefficient =	0.00	
Off-site Water Quality Volume =	0	cubic feet
Storage for Sediment =	1413	
Total Capture Volume (required water quality volume(s) x 1.20) =	8479	cubic feet

BARTON VFS N2

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Orchard Ranch - Bart
Date Prepared: 6/11/2024

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the s

1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$

where:
$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of incr
A_N = Net increase in impervious area for the project
P = Average annual precipitation, inches

Site Data: Determine Required Load Removal Based on the Entire Project

		Criteria
County =	Travis	RG-348a
Total project area included in plan * =	82.90 acres	
Predevelopment impervious area within the limits of the plan * =	0.00 acres	
Total post-development impervious area within the limits of the plan* =	26.30 acres	
Total post-development impervious cover fraction * =	0.32	
P =	32 inches	
$L_{M\ TOTAL\ PROJECT}$ =	23312 lbs.	

Removed (Total)	Remaining
23,327	-15

*** The values entered in these fields should be for the total project area.**

Number of drainage basins / outfalls areas leaving the plan area = 7

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. = 5

Total drainage basin/outfall area =	1.13	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	0.14	acres
Post-development impervious fraction within drainage basin/outfall area =	0.12	
$L_{M\ THIS\ BASIN}$ =	122	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = **Vegetated Filter Strips**
Removal efficiency = 85 percent

Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: $L_R = (BMP\ efficiency) \times P \times (A_I \times 34.6 + A_P \times 0.54)$

where:
A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	0.99	acres
A_I =	0.14	acres
A_P =	0.85	acres
L_R =	144	lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ = 144 lbs.

F = 1.00

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to

Rainfall Depth = 4.00 inches
Post Development Runoff Coefficient = 0.16
On-site Water Quality Volume = 2233 cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP =	0.00	acres
Off-site Impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0	
Off-site Runoff Coefficient =	0.00	
Off-site Water Quality Volume =	0	cubic feet
Storage for Sediment =	447	
Total Capture Volume (required water quality volume(s) x 1.20) =	2679	cubic feet

SLAUGHTER VFS E

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Orchard Ranch - Slau
Date Prepared: 6/11/2024

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the s

1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$

where:
$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of incr
A_N = Net increase in impervious area for the project
P = Average annual precipitation, inches

Site Data: Determine Required Load Removal Based on the Entire Project

		Criteria
County =	Travis	RG-348a
Total project area included in plan * =	82.90 acres	
Predevelopment impervious area within the limits of the plan * =	0.00 acres	
Total post-development impervious area within the limits of the plan* =	26.30 acres	
Total post-development impervious cover fraction * =	0.32	
P =	32 inches	
$L_{M\ TOTAL\ PROJECT}$ =	23312 lbs.	

Removed (Total)	Remaining
23,327	-15

*** The values entered in these fields should be for the total project area.**

Number of drainage basins / outfalls areas leaving the plan area = 7

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. = 6

Total drainage basin/outfall area =	2.98	acres
Predevelopment impervious area within drainage basin/outfall area =		acres
Post-development impervious area within drainage basin/outfall area =	0.84	acres
Post-development impervious fraction within drainage basin/outfall area =	0.28	
$L_{M\ THIS\ BASIN}$ =	731	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = **Vegetated Filter Strips**
Removal efficiency = 85 percent

Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: $L_R = (BMP\ efficiency) \times P \times (A_I \times 34.6 + A_P \times 0.54)$

where:
A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	1.90	acres
A_I =	0.84	acres
A_P =	1.06	acres
L_R =	806	lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ = 806 lbs.

F = 1.00

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to

Rainfall Depth = 4.00 inches
Post Development Runoff Coefficient = 0.29
On-site Water Quality Volume = 7989 cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP =	1.04	acres
Off-site Impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0.00	
Off-site Runoff Coefficient =	0.02	
Off-site Water Quality Volume =	302	cubic feet
Storage for Sediment =	1658	
Total Capture Volume (required water quality volume(s) x 1.20) =	9950	cubic feet

SLAUGHTER VFS E2

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Orchard Ranch - Slau
Date Prepared: 6/11/2024

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the s

1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$

where:
$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of incr
A_N = Net increase in impervious area for the project
P = Average annual precipitation, inches

Site Data: Determine Required Load Removal Based on the Entire Project

		Criteria
County =	Travis	RG-348a
Total project area included in plan * =	82.90 acres	
Predevelopment impervious area within the limits of the plan * =	0.00 acres	
Total post-development impervious area within the limits of the plan* =	26.30 acres	
Total post-development impervious cover fraction * =	0.32	
P =	32 inches	
$L_{M\ TOTAL\ PROJECT}$ =	23312 lbs.	

Removed (Total)	Remaining
23,327	-15

*** The values entered in these fields should be for the total project area.**

Number of drainage basins / outfalls areas leaving the plan area = 7

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. = 7

Total drainage basin/outfall area =	0.39	acres
Predevelopment impervious area within drainage basin/outfall area =		acres
Post-development impervious area within drainage basin/outfall area =	0.14	acres
Post-development impervious fraction within drainage basin/outfall area =	0.36	
$L_{M\ THIS\ BASIN}$ =	122	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = **Vegetated Filter Strips**
Removal efficiency = 85 percent

Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: $L_R = (BMP\ efficiency) \times P \times (A_I \times 34.6 + A_P \times 0.54)$

where:
A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	0.39	acres
A_I =	0.14	acres
A_P =	0.25	acres
L_R =	135	lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ = 135 lbs.

F = 1.00

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to

Rainfall Depth = 4.00 inches
Post Development Runoff Coefficient = 0.35
On-site Water Quality Volume = 2010 cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP =	1.04	acres
Off-site Impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0.00	
Off-site Runoff Coefficient =	0.02	
Off-site Water Quality Volume =	302	cubic feet
Storage for Sediment =	462	
Total Capture Volume (required water quality volume(s) x 1.20) =	2774	cubic feet

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
FINAL PLAT

WATER QUALITY DRAINAGE AREA MAP

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

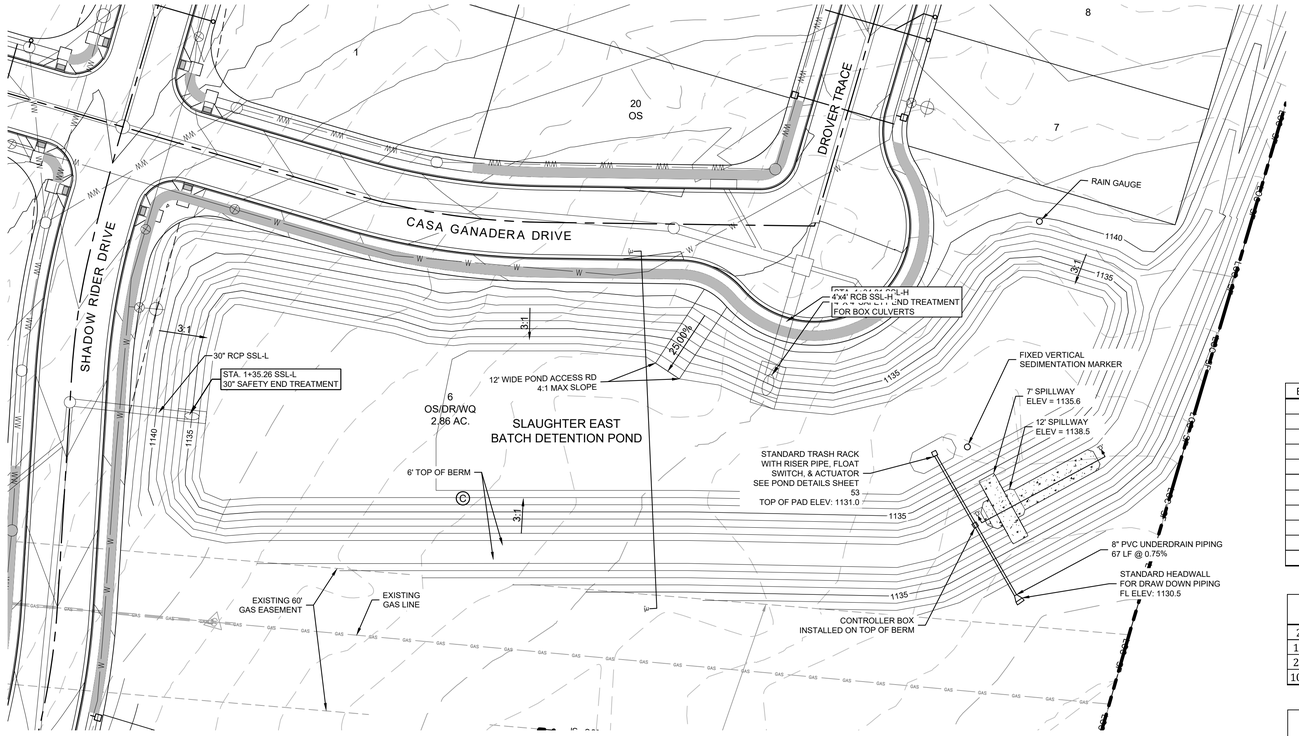
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 48 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-WQ.DWG DATE: 1/29/2026 4:11:08 PM BY: BGILMORE



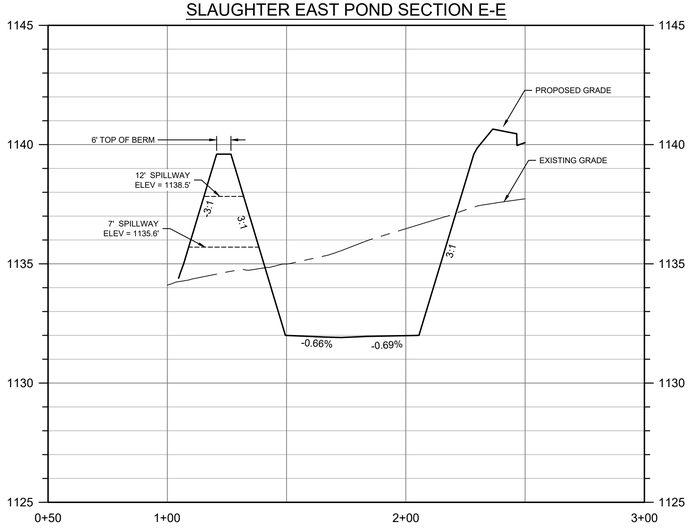
SCALE: 1" = 30'
GRAPHIC SCALE IN FEET
0 15' 30' 60'

ELEVATION	AREA (SF)	INC. VOLUME (CF)	CUM. VOLUME (CF)
1131	196	0	0
1132	13269	6732.5	6732.5
1133	22386	17827.5	24560
1134	25152	23769	48329
1135	27955	26553.5	74882.5
1135.6	29677	17289.6	92172.1
1136	30825	12100.4	104272.5
1137	33751	32288	136560.5
1138	36734	35242.5	171803
1139	39773	38253.5	210056.5
1139.6	41475	24374.4	234430.9

	Slaughter E Pond	
	Water Surface Elevation (ft)	Top of Berm (ft)
2-Year	1137.1	1139.5
10-Year	1137.9	
25-Year	1138.3	
100-Year	1139.0	

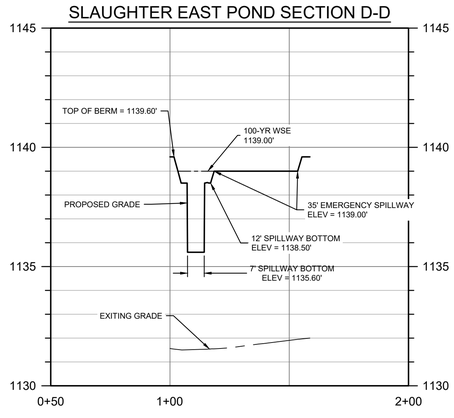
	Slaughter E Pond	
	Pond Inflow (cfs)	Pond Discharge (cfs)
2-Year	65.6	39.4
10-Year	111.5	73.1
25-Year	141.6	95.3
100-Year	189.8	135.1

SLAUGHTER EAST POND SECTION E-E



3' VERTICAL
30'HORIZONTAL
GRAPHIC SCALE IN FEET
0 15' 30' 60'

SLAUGHTER EAST POND SECTION D-D



Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Orchard Ranch - Slau
Date Prepared: 1/29/2025

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the s

1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$

where:
$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of incr
A_N = Net increase in impervious area for the project
P = Average annual precipitation, inches

Site Data: Determine Required Load Removal Based on the Entire Project

			Criteria
County =	**Travis**		RG-348a
Total project area included in plan * =	**82.90**	acres	
Predevelopment impervious area within the limits of the plan * =	**0.00**	acres	
Total post-development impervious area within the limits of the plan* =	**26.30**	acres	
Total post-development impervious cover fraction * =	**0.32**		
P =	**32**	inches	

			Removed (Total)	Remaining
$L_{M\ TOTAL\ PROJECT}$ =	**23312**	lbs.	23,327	-15

*** The values entered in these fields should be for the total project area.**

Number of drainage basins / outfalls areas leaving the plan area = **7**

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. = 3

Total drainage basin/outfall area =	**18.65**	acres
Predevelopment impervious area within drainage basin/outfall area =		acres
Post-development impervious area within drainage basin/outfall area =	**7.28**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.39**	
$L_{M\ THIS\ BASIN}$ =	**6337**	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = **Batch Detention**
Removal efficiency = **91** percent

Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: L_R = (BMP efficiency) x P x (A_I x 34.6 + A_P x 0.54)

where:
A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	**18.65**	acres
A_I =	**7.28**	acres
A_P =	**11.37**	acres
L_R =	**7514**	lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ = **7250** lbs.

F = **0.96**

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to

Rainfall Depth =	**2.80**	inches
Post Development Runoff Coefficient =	**0.38**	
On-site Water Quality Volume =	**72373**	cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP =	**0.18**	acres
Off-site Impervious cover draining to BMP =	**0.00**	acres
Impervious fraction of off-site area =	**0.00**	
Off-site Runoff Coefficient =	**0.02**	
Off-site Water Quality Volume =	**37**	cubic feet
Storage for Sediment =	**14482**	
Total Capture Volume (required water quality volume(s) x 1.20) =	**86891**	cubic feet

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

DETENTION & WATER QUALITY
POND SLAUGHTER EAST

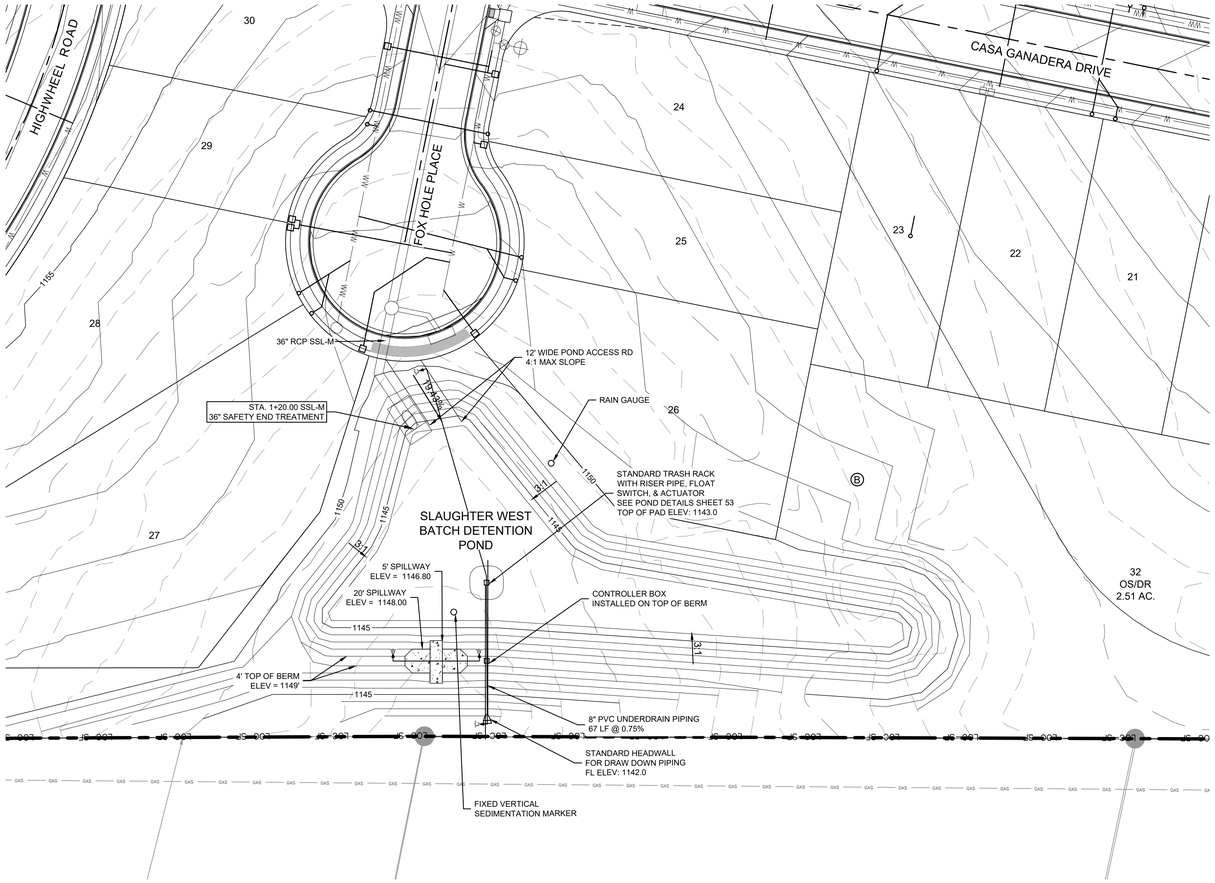
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
LICENSED
PROFESSIONAL ENGINEER
150018

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-POND.DWG DATE: 1/29/2026 4:12:17 PM BY: BGILMORE



SCALE: 1" = 30'
GRAPHIC SCALE IN FEET
0 15' 30' 60'

ELEVATION	AREA (SF)	INC. VOLUME (CF)	CUM. VOLUME (CF)
1143	100	0	0
1144	7956	4028	4028
1145	9710	8833	12861
1146	11521	10615.5	23476.5
1146.8	13014.6	9814.24	33290.74
1147	13388	12454.5	45745.24
1148	15311	14349.5	60094.74
1149	17291	16301	76395.74

	Slaughter W Pond	
	Water Surface Elevation (ft)	Top of Berm (ft)
2-Year	1148.0	1149.0
10-Year	1148.4	
25-Year	1148.6	
100-Year	1148.9	

	Slaughter W Pond	
	Pond Inflow (cfs)	Pond Discharge (cfs)
2-Year	32.0	19.9
10-Year	55.5	44.2
25-Year	71	60.3
100-Year	96.1	84.4

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Orchard Ranch - Slau
Date Prepared: 6/11/2024

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the s

1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$

where:
$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of incr
A_N = Net increase in impervious area for the project
P = Average annual precipitation, inches

Site Data: Determine Required Load Removal Based on the Entire Project

		Criteria
County =	**Travis**	RG-348a
Total project area included in plan * =	**82.90** acres	
Predevelopment impervious area within the limits of the plan * =	**0.00** acres	
Total post-development impervious area within the limits of the plan* =	**26.30** acres	
Total post-development impervious cover fraction * =	**0.32**	
P =	**32** inches	

	Removed (Total)	Remaining
$L_{M\ TOTAL\ PROJECT}$ =	**23312** lbs.	23,327 -15

*** The values entered in these fields should be for the total project area.**

Number of drainage basins / outfalls areas leaving the plan area = **7**

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. = **2**

Total drainage basin/outfall area =	**8.00**	acres
Predevelopment impervious area within drainage basin/outfall area =	**0.00**	acres
Post-development impervious area within drainage basin/outfall area =	**2.52**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.32**	
$L_{M\ THIS\ BASIN}$ =	**2193**	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = **Batch Detention**
Removal efficiency = **91** percent

Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: $L_R = (\text{BMP efficiency}) \times P \times (A_I \times 34.6 + A_P \times 0.54)$

where:
A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	**8.00**	acres
A_I =	**2.52**	acres
A_P =	**5.48**	acres
L_R =	**2625**	lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ = **2530** lbs.

F = **0.96**

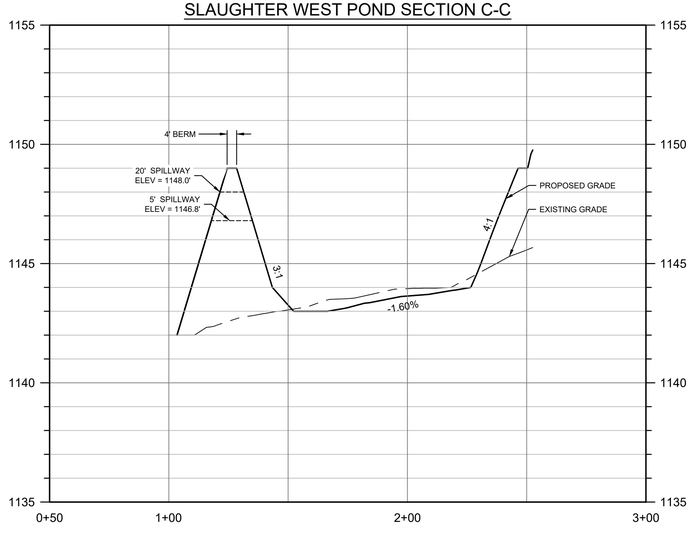
6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to

Rainfall Depth =	**2.80**	inches
Post Development Runoff Coefficient =	**0.32**	
On-site Water Quality Volume =	**25837**	cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

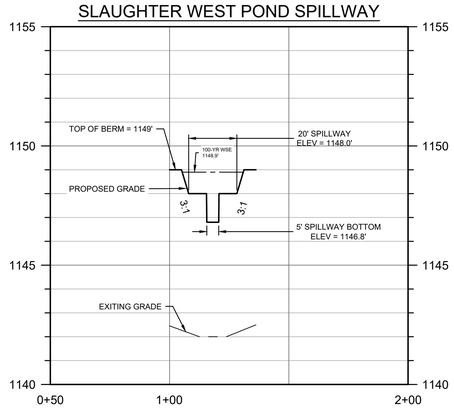
Off-site area draining to BMP =	**0.99**	acres
Off-site Impervious cover draining to BMP =	**0.00**	acres
Impervious fraction of off-site area =	**0.00**	
Off-site Runoff Coefficient =	**0.02**	
Off-site Water Quality Volume =	**201**	cubic feet
Storage for Sediment =	**5208**	
Total Capture Volume (required water quality volume(s) x 1.20) =	**31246**	cubic feet

SLAUGHTER WEST POND SECTION C-C



3' VERTICAL
30'HORIZONTAL
GRAPHIC SCALE IN FEET
0 15' 30' 60'

SLAUGHTER WEST POND SPILLWAY



8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

DETENTION & WATER QUALITY
POND SLAUGHTER WEST

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

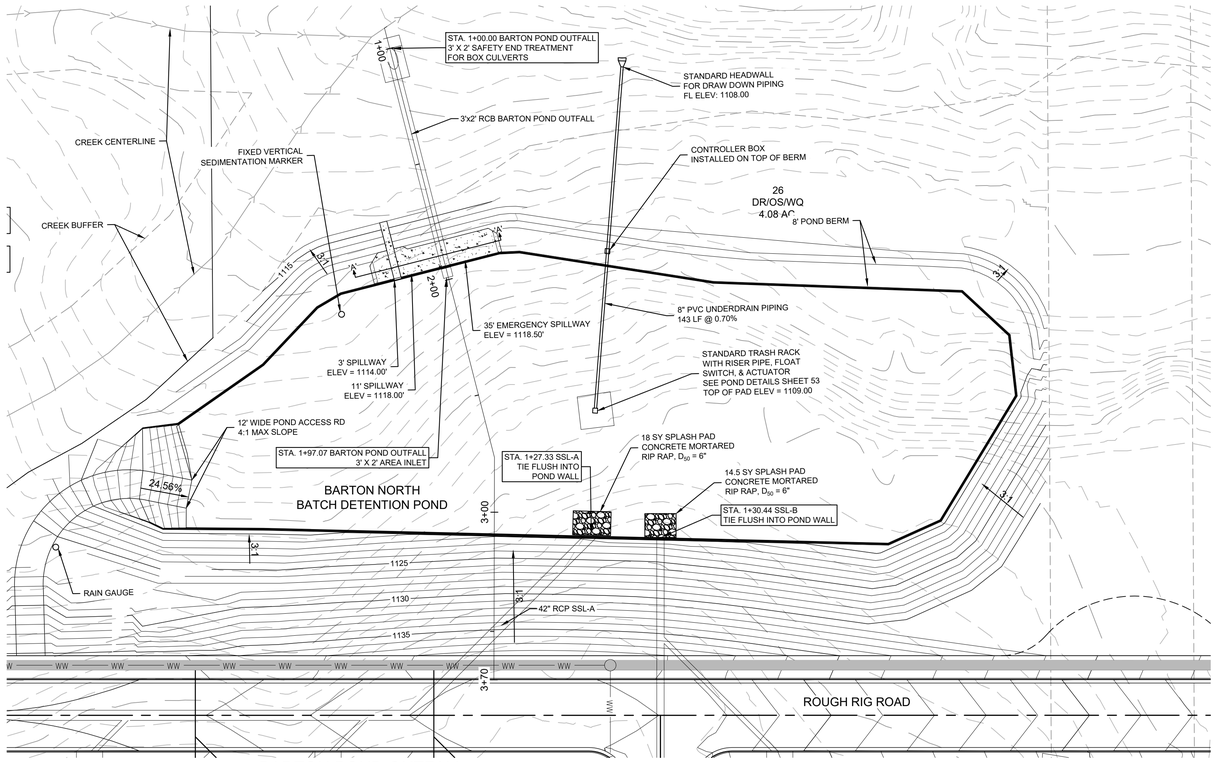
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

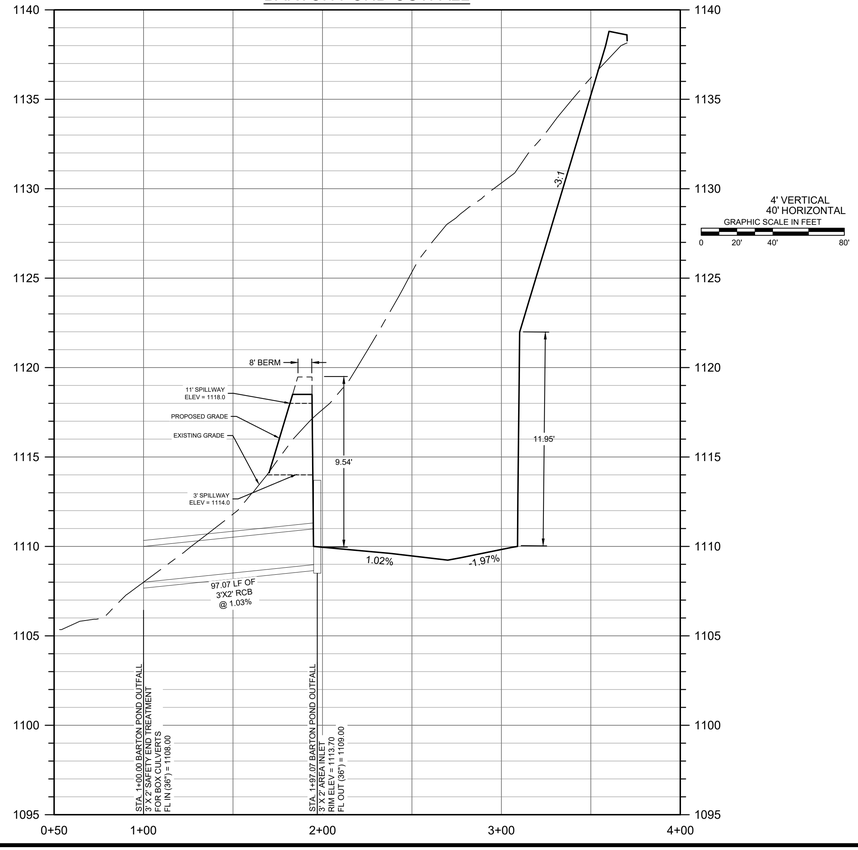
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 51 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-POND.DWG DATE: 1/29/2026 4:12:22 PM BY: BGILMORE



BARTON POND OUTFALL



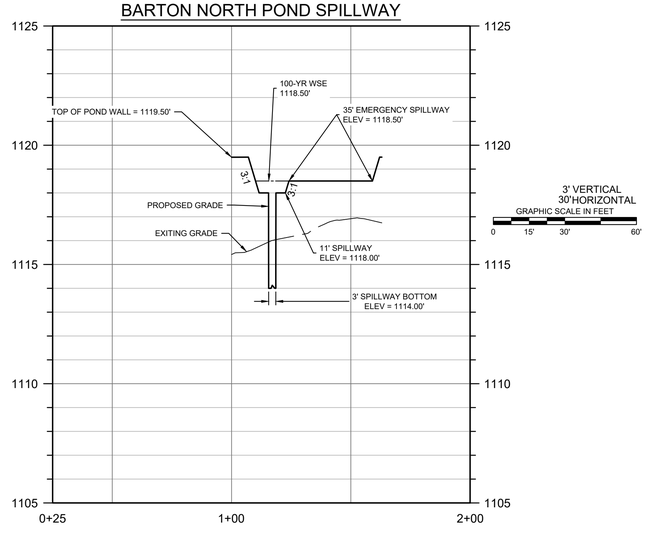
SCALE: 1" = 30'
GRAPHIC SCALE IN FEET
0 15' 30' 60'

ELEVATION	AREA (SF)	INC. VOLUME (CF)	CUM. VOLUME (CF)
1109	665	0	0
1110	33850	17257.5	17257.5
1111	34073	33961.5	51219
1112	34266	34169.5	85388.5
1113	34496	34381	119769.5
1113.7	34659.1	24204.285	143973.785
1114	34729	10408.215	154382
1115	34964	34846.5	189228.5
1116	35240	35102	224330.5
1117	35460	35350	259680.5
1118	35661	35560.5	295241
1119	35839	35750	330991
1119.5	35920	17939.75	348930.75

	Barton Pond	
	Water Surface Elevation (ft)	Top of Berm (ft)
2-Year	1115.2	1119.5
10-Year	1116.5	
25-Year	1117.3	
100-Year	1118.5	

	Barton Pond	
	Pond Inflow (cfs)	Pond Discharge (cfs)
2-Year	91.8	48.5
10-Year	155.9	84.4
25-Year	198.2	110.1
100-Year	265.8	160.5

BARTON NORTH POND SPILLWAY



Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Orchard Ranch - Barton Pond
Date Prepared: 6/11/2024

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet.

1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$

where:
$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of increased load
A_N = Net increase in impervious area for the project
P = Average annual precipitation, inches

Site Data: Determine Required Load Removal Based on the Entire Project

			Criteria
County =	Travis		RG-348a
Total project area included in plan * =	82.91	acres	
Predevelopment impervious area within the limits of the plan * =	0.00	acres	
Total post-development impervious area within the limits of the plan* =	26.30	acres	
Total post-development impervious cover fraction * =	0.32		
P =	32	inches	

			Removed (Total)	Remaining
$L_{M\ TOTAL\ PROJECT}$ =	23312	lbs.	23,327	-15

*** The values entered in these fields should be for the total project area.**

Number of drainage basins / outfalls areas leaving the plan area = **7**

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. = **1**

Total drainage basin/outfall area =	24.90	acres
Predevelopment impervious area within drainage basin/outfall area =		acres
Post-development impervious area within drainage basin/outfall area =	12.09	acres
Post-development impervious fraction within drainage basin/outfall area =	0.49	
$L_{M\ THIS\ BASIN}$ =	10523	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = **Batch Detention**
Removal efficiency = **91** percent

Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: L_R = (BMP efficiency) x P x (A_I x 34.6 + A_P x 0.54)

where:
A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	24.90	acres
A_I =	12.09	acres
A_P =	12.81	acres
L_R =	12383	lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ = **11947** lbs.

F = **0.96**

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to

Rainfall Depth =	2.80	inches
Post Development Runoff Coefficient =	0.46	
On-site Water Quality Volume =	117105	cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP =	0.00	acres
Off-site Impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0	
Off-site Runoff Coefficient =	0.00	
Off-site Water Quality Volume =	0	cubic feet
Storage for Sediment =	23421	
Total Capture Volume (required water quality volume(s) x 1.20) =	140525	cubic feet

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	DESCRIPTION	DATE	BY

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

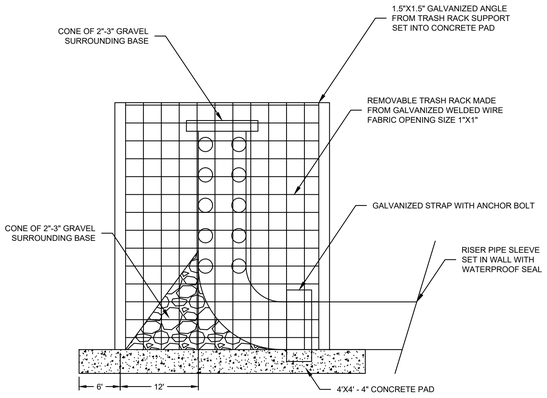
DETENTION & WATER QUALITY POND BARTON NORTH

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

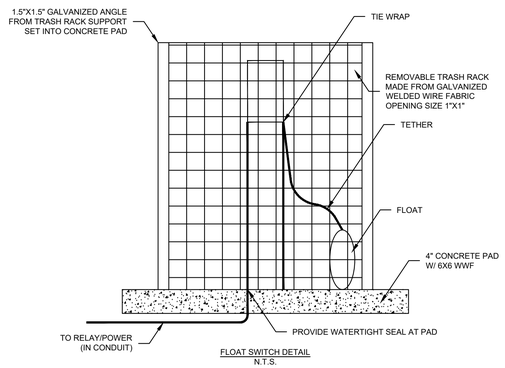
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

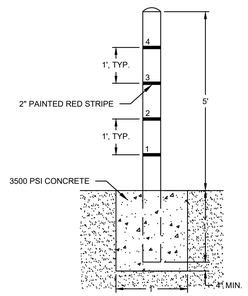
H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-POND.DWG DATE: 1/29/2026 4:12:46 PM BY: BGILMORE



TRASH RACK/RISER PIPE DETAIL
N.T.S.



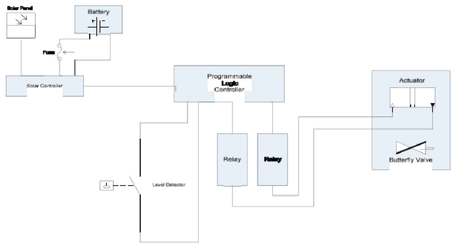
FLOAT SWITCH DETAIL
N.T.S.



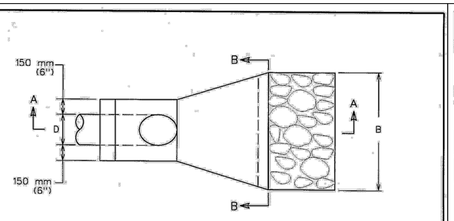
SEDIMENT MARKER DETAIL
N.T.S.

NOTES:

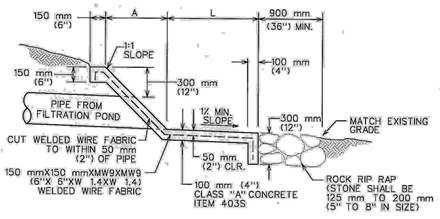
1. A SIGN WILL BE POSTED NEXT TO THE ALARM LIGHT THAT INCLUDES THE PHONE NUMBERS OF THE OWNER AND THE TCEQ AUSTIN REGIONAL OFFICE. THE ALARM SYSTEM SHOULD BE CLEARLY VISIBLE TO INDICATE SYSTEM MALFUNCTION.
2. THE CONTROLLER DETECTS WATER FILLING THE BASIN FROM THE LEVEL SENSOR AND INITIATES A 12+ HOUR DETENTION TIME. AT THE END OF THE REQUIRED DETENTION TIME, THE CONTROLLER OPENS THE VALVE AND DRAINS OUT OF THE BASIN. SUBSEQUENT RAINFALL EVENTS THAT OCCUR PRIOR TO THE BASIN DRAINING SHOULD CAUSE THE VALVE TO REMAIN OPEN AND ALLOW THE ADDITIONAL STORMWATER RUNOFF TO PASS THROUGH THE BASIN. ONCE THE BASIN IS DRAINED THE CONTROLLER CLOSES THE VALVE.
3. THE ACTUATOR VALVE FOR THE PONDS WILL BE SIZED TO ALLOW FOR COMPLETE DRAWDOWN OF THE WATER QUALITY VOLUME WITHIN 48 HOURS AFTER THE VALVE IS OPENED.
4. THE LOGIC CONTROLLER SYSTEM PROVIDES THE FOLLOWING: A TEST SEQUENCE TO SIGNAL LOW BATTERY/POWER OUTAGES, AN ON/OFF/RESET SWITCH, MANUAL OPEN/CLOSE SWITCHES, CLEARLY VISIBLE EXTERNAL INDICATOR TO INDICATE WHEN A CYCLE IS IN PROGRESS WITHOUT OPENING THE BOX. THE ABILITY TO EXERCISES THE VALVE TO PREVENT SIZING.
5. THE SYSTEM SHOULD OPERATE AT 0° TO 130° F, AND 10% TO 90% HUMIDITY.
6. RELIABILITY SHALL BE 40,000 HOURS OR GREATER.
7. SPECIFICATIONS FOR THE BASIN STRUCTURES WILL BE SUBMITTED BY THE CONTRACTOR TO THE DESIGN ENGINEER FOR REVIEW AND APPROVAL BEFORE CONSTRUCTION COMMENCES. AFTER COMPLETION OF CONSTRUCTION, A CERTIFICATION LETTER PREPARED BY A LICENSED P.E. STATING THE BMP WAS CONSTRUCTED AS DESIGNED WILL BE SUBMITTED TO THE EAPP.



CONTROLLER CIRCUIT DIAGRAM

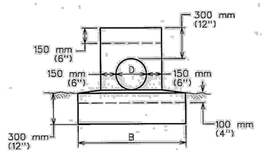


PLAN



SECTION A - A

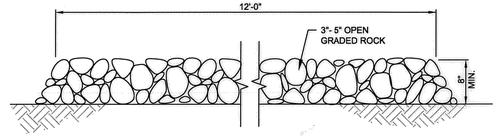
CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	HEADWALL FOR FILTRATION PONDS W/OUTFALL PIPE 150 mm (6") TO 375 mm (15") DIA.	
George E. Rawald 3/15/05 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-15 1 OF 2



SECTION B - B

A	450 mm (18")	500 mm (20")	550 mm (22")	600 mm (24")	675 mm (27")
B	750 mm (30")	800 mm (32")	850 mm (34")	1.05 m (42")	1.27 m (51")
D	150 mm (6")	200 mm (8")	250 mm (10")	300 mm (12")	375 mm (15")
L	600 mm (24")	600 mm (24")	750 mm (30")	900 mm (36")	1.2 m (48")

CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	HEADWALL FOR FILTRATION PONDS W/OUTFALL PIPE 150 mm (6") TO 375 mm (15") DIA.	
George E. Rawald 3/15/05 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-15 2 OF 2



NOTES:
1. STONE SIZE: 75–125 mm (3–5") OPEN GRADED ROCK.
2. THICKNESS: NOT LESS THAN 200 mm (8").
3. WIDTH: NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS/EGRESS.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	POND MAINTENANCE ROAD CROSS SECTION	
E. J. L., P.E. 1/4/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 662S-2

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

POND DETAILS

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

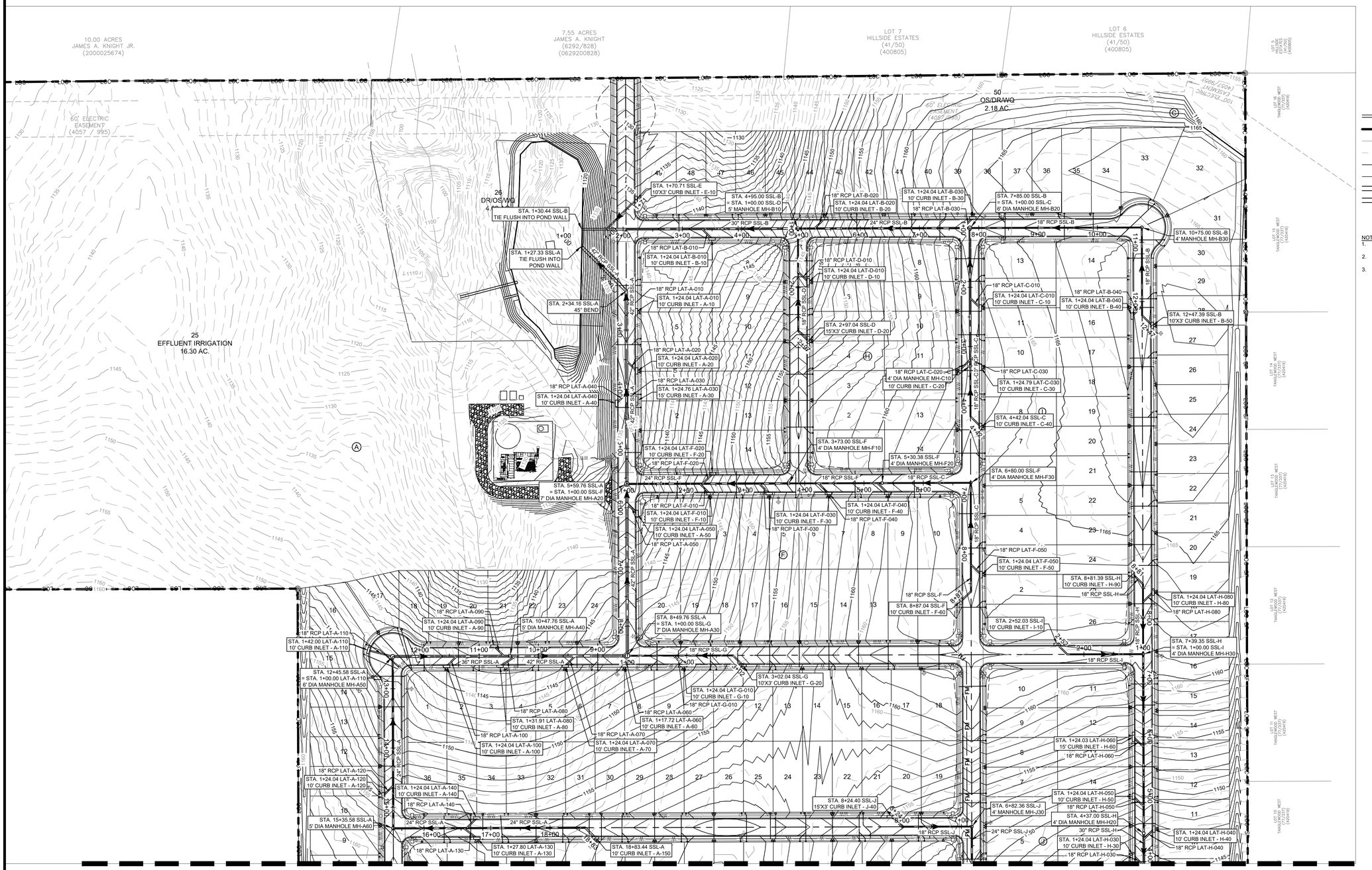
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
136018
LICENSED PROFESSIONAL ENGINEER

SHEET 53 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-POND.DWG DATE: 1/29/2026 4:12:48 PM BY: BGILMORE



SCALE: 1" = 80'
GRAPHIC SCALE IN FEET
0 40' 80' 160'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED BOX MANHOLE
- PROPOSED CURB INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.
2. CONTRACTOR TO BE AWARE OF OVERHEAD ELECTRIC LINES AT ALL TIMES.
3. ALL MANHOLE COVERS SHALL BE STAMPED "STORM DRAIN" ONLY WITHOUT ANY CITY REFERENCES.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

OVERALL STORM SEWER PLAN (1 OF 2)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

SHEET 54 OF 126

H:\PROJECTS\1636 - BRONN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-STRM-O.DWG DATE: 1/29/2026 4:14:08 PM BY: BGILMORE

MATCHLINE TO SHEET 54

MATCHLINE TO SHEET 56

SCALE: 1" = 80'
GRAPHIC SCALE IN FEET
0 40' 80' 160'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED BOX MANHOLE
- PROPOSED CURB INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.
2. CONTRACTOR TO BE AWARE OF OVERHEAD ELECTRIC LINES AT ALL TIMES.
3. ALL MANHOLE COVERS SHALL BE STAMPED "STORM DRAIN" ONLY WITHOUT ANY CITY REFERENCES.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

OVERALL STORM SEWER
PLAN (2 OF 2)

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

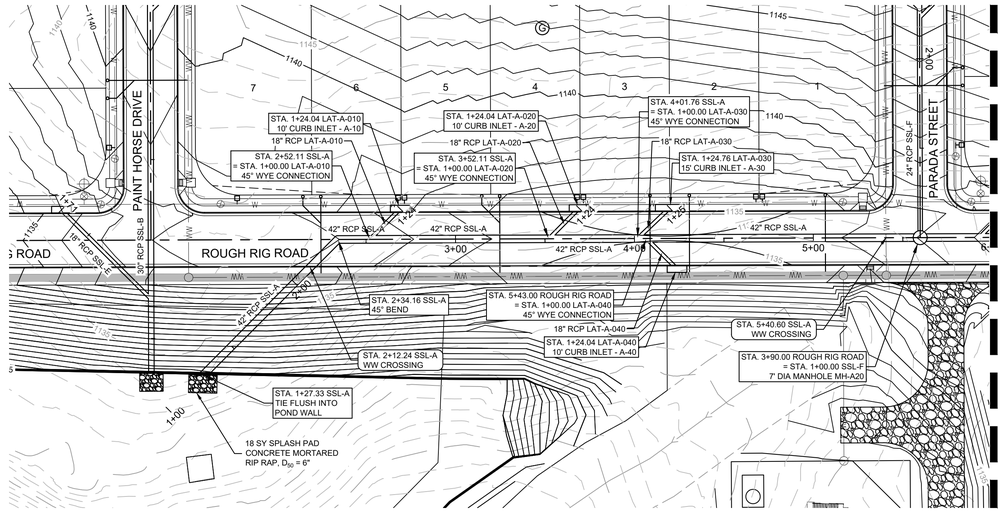
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

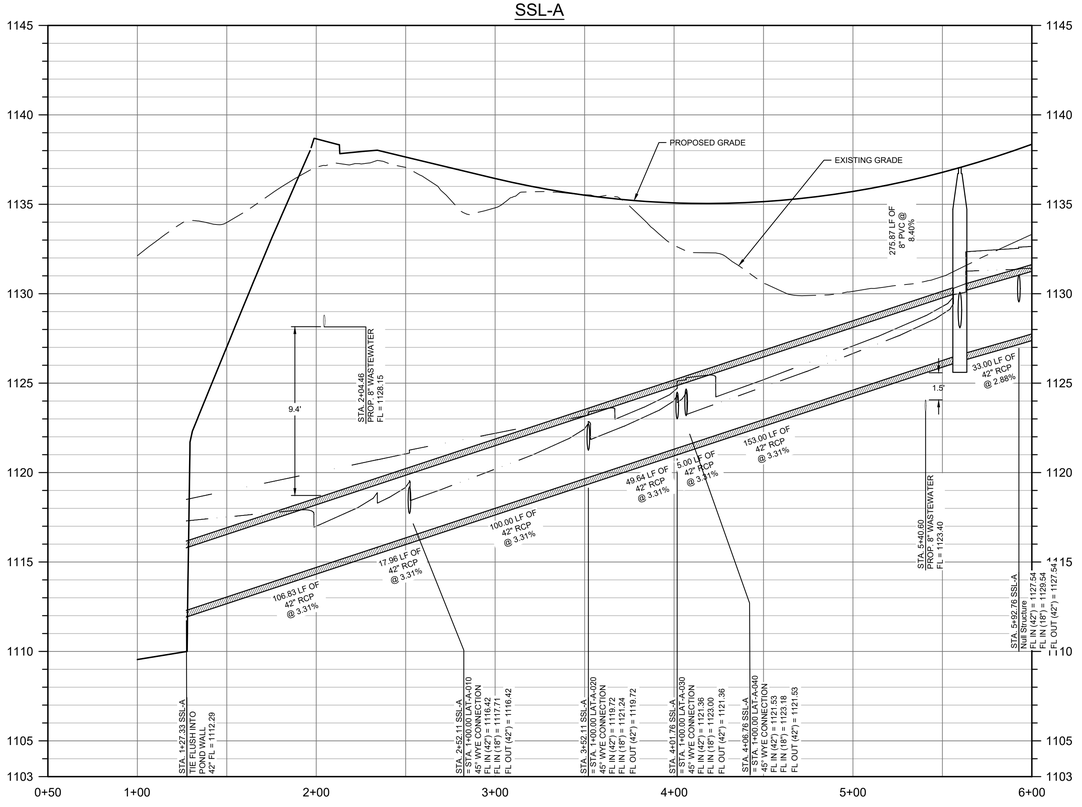
SHEET 55 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-STRM-O.DWG DATE: 1/29/2026 4:14:24 PM BY: BGILMORE



MATCHLINE TO SHEET 57

SSL-A



SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED JUNCTION BOX
- PROPOSED CURB INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

SSL-A (STA 1+00 TO 6+00)

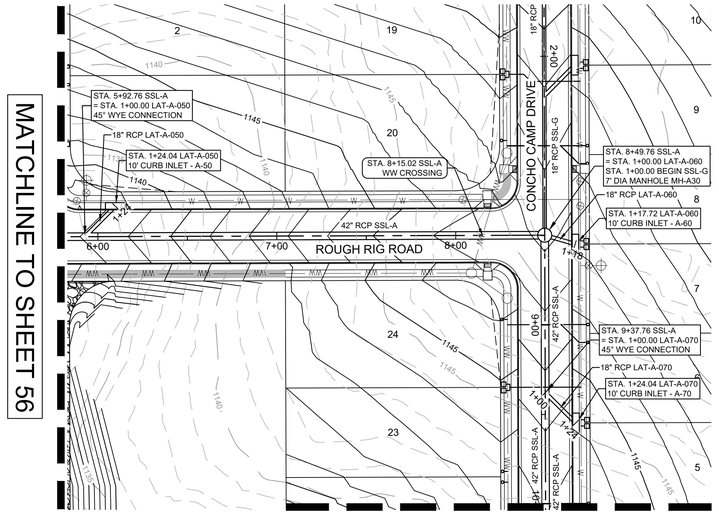
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
130018
LICENSED
PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-STRM.DWG DATE: 1/29/2026 4:16:09 PM BY: BGILMORE

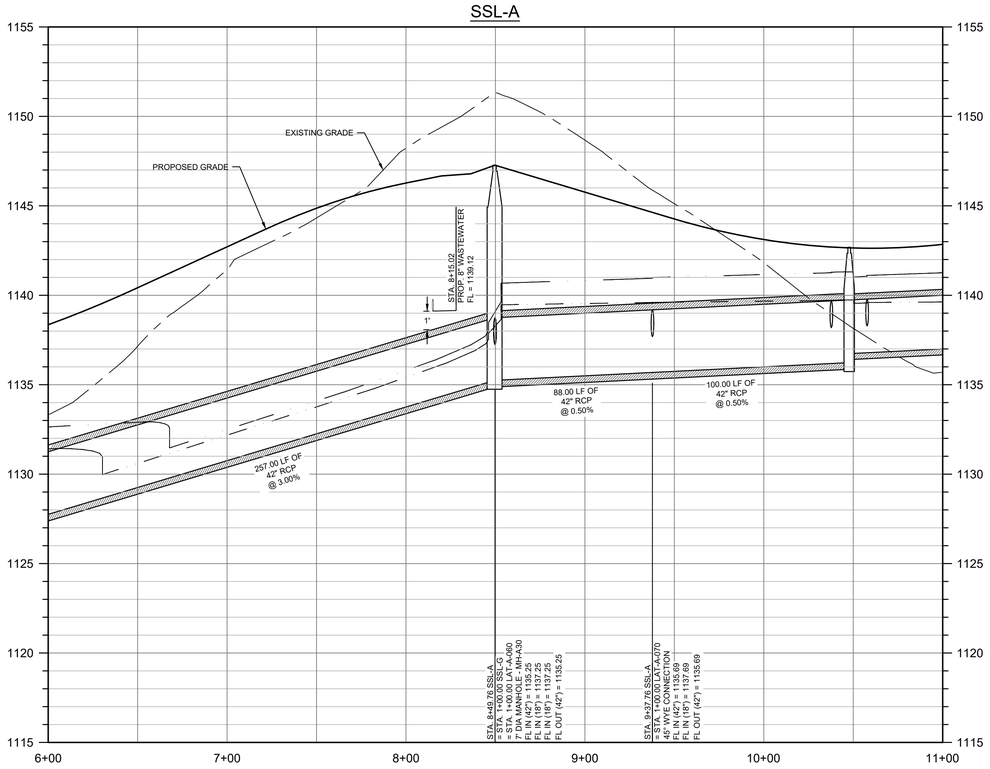


SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED JUNCTION BOX
- PROPOSED CURB INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.



PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

SSL-A (STA 6+00 TO 10+00)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

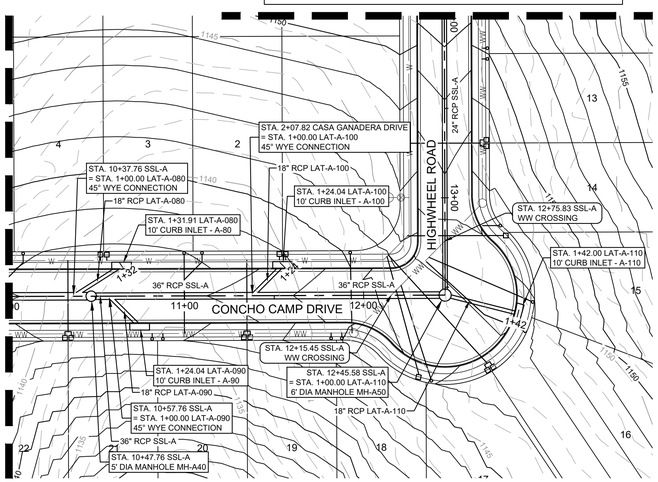
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 57 OF 126

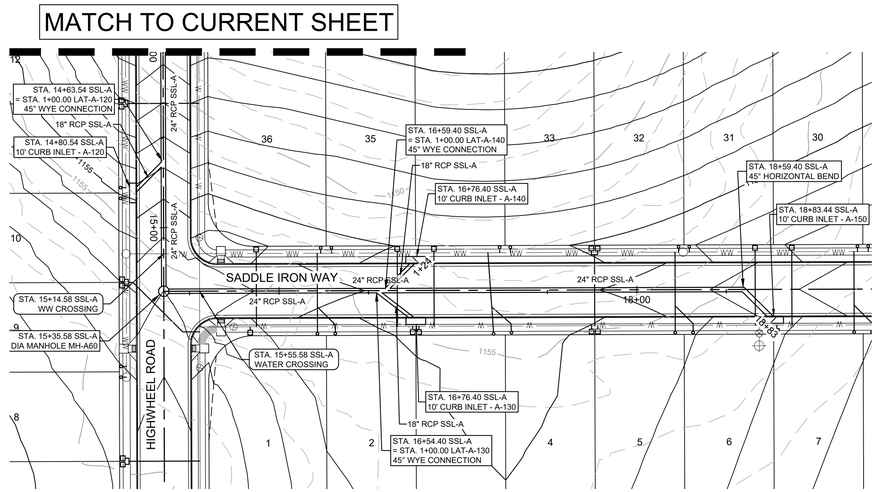
H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-STRM.DWG DATE: 1/29/2026 4:16:30 PM BY: BGILMORE

MATCH TO CURRENT SHEET

MATCHLINE TO SHEET 57



MATCH TO CURRENT SHEET



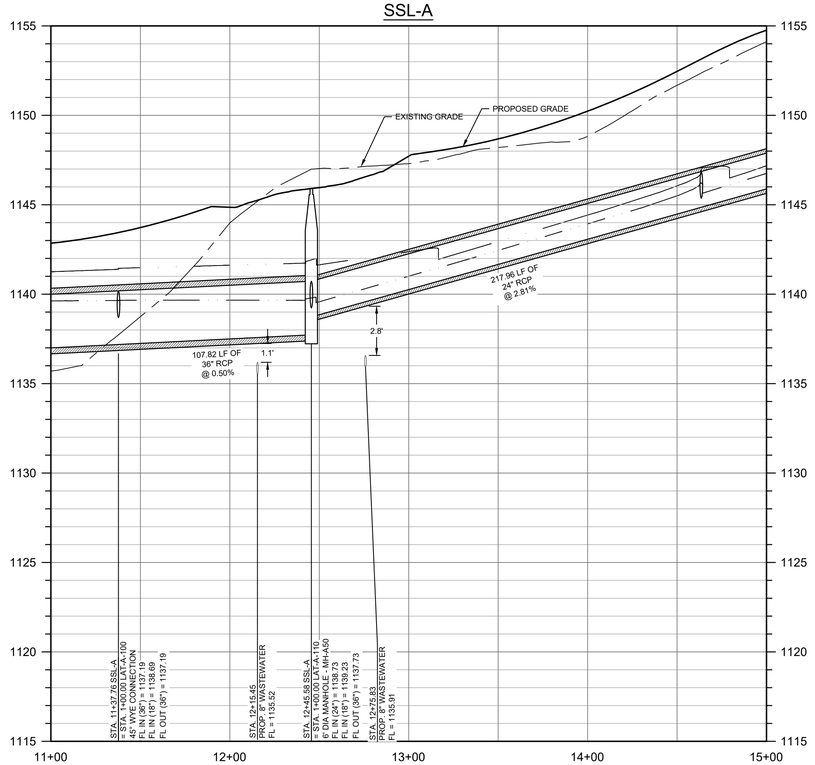
SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

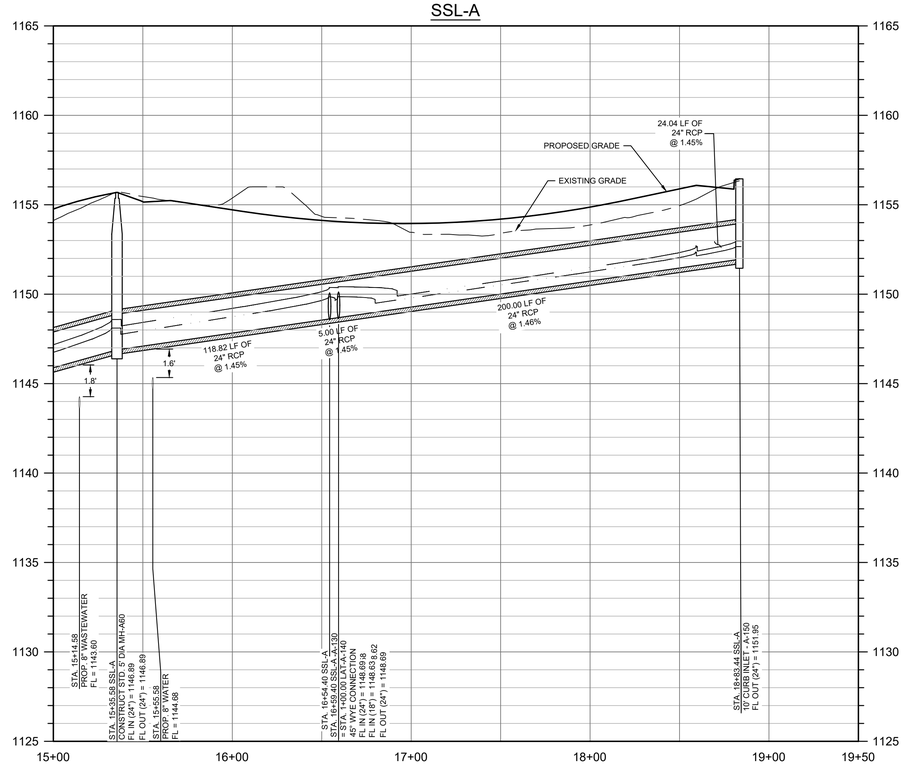
- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED JUNCTION BOX
- PROPOSED CURB INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

SSL-A



SSL-A



PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

SSL-A (STA 10+00 TO 14+00) & (STA 14+00 TO END)

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

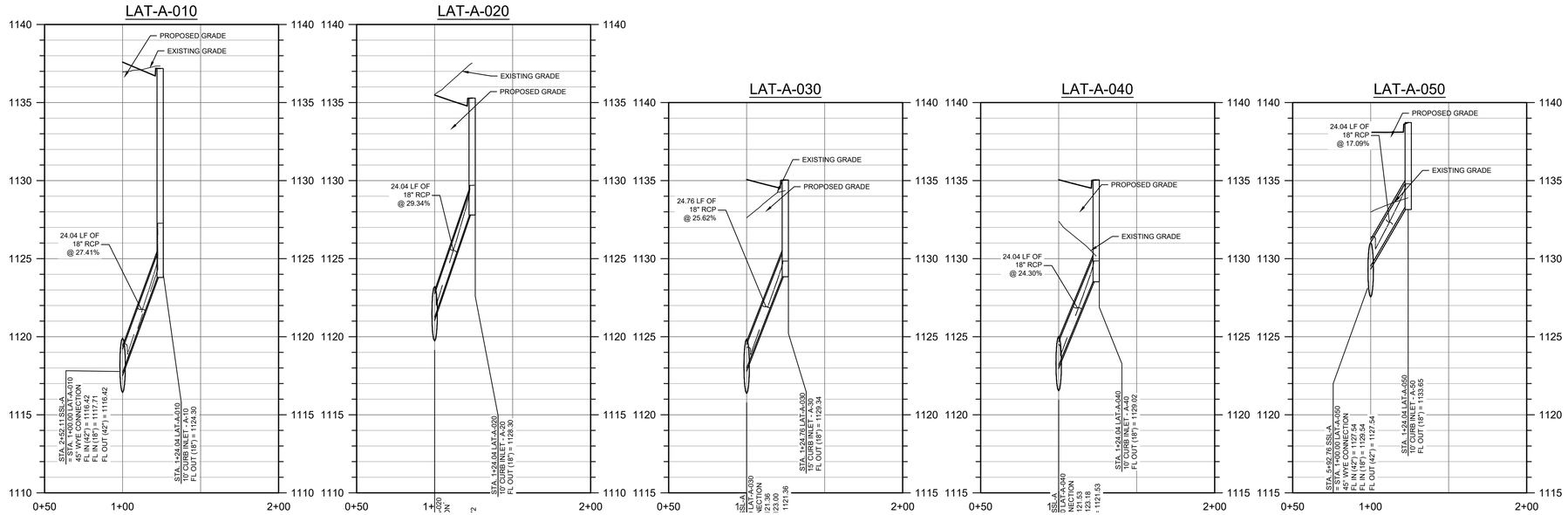
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

SHEET 58 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-STRM.DWG DATE: 1/29/2026 4:17:09 PM BY: BGILMORE



PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

SSL-A LATS

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

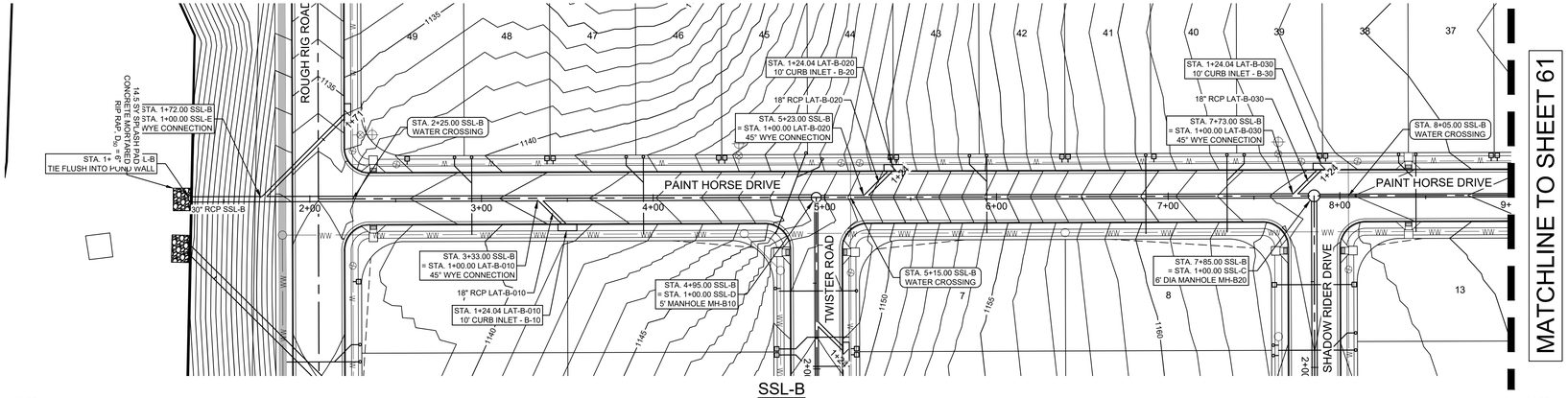
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

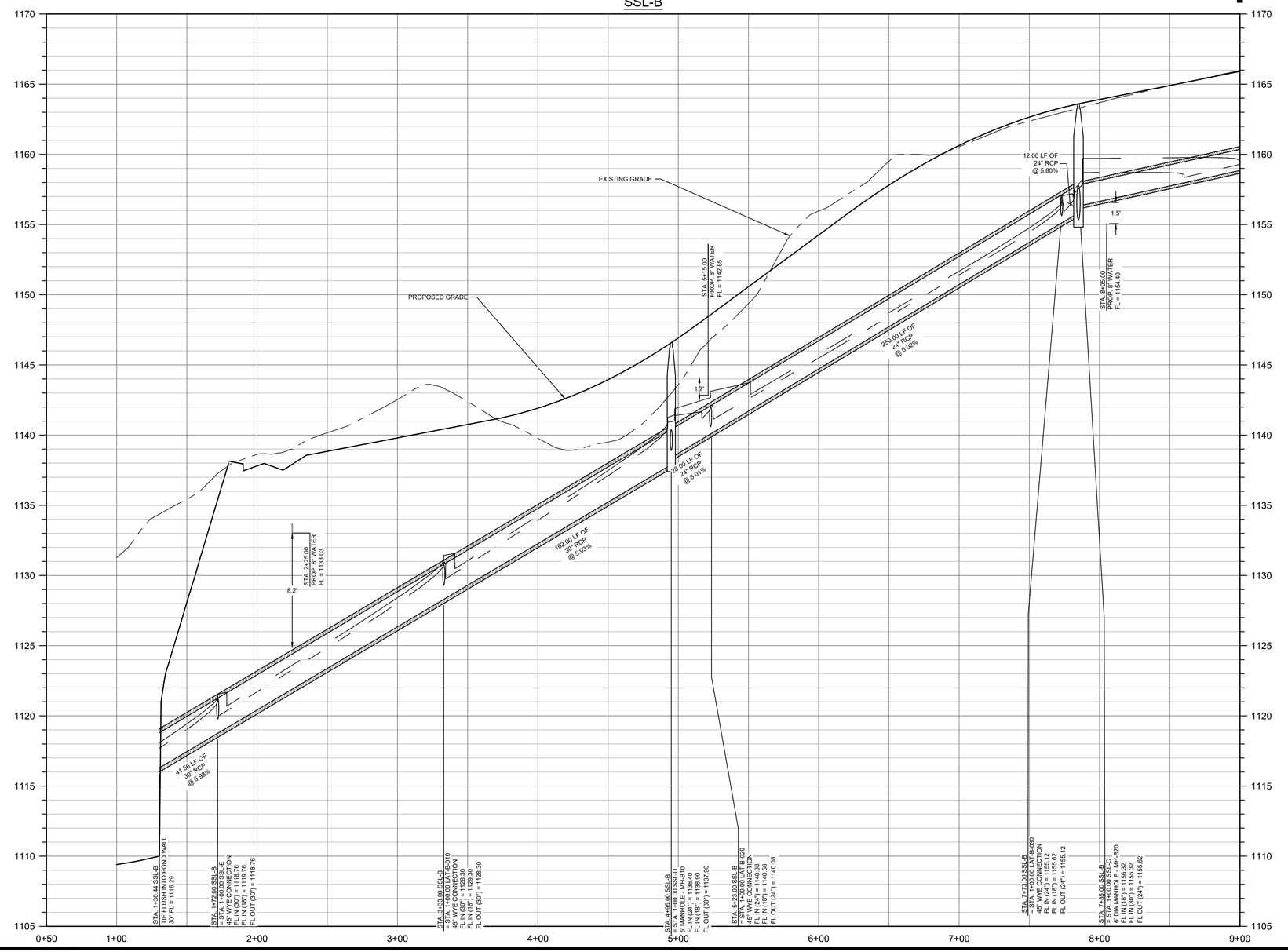
01/29/2026

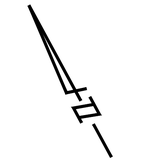
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-STRM.DWG DATE: 1/29/2026 4:17:34 PM BY: BGILMORE



SSL-B





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED JUNCTION BOX
- PROPOSED CURB INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	REVISION DESCRIPTION	DATE	BY

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

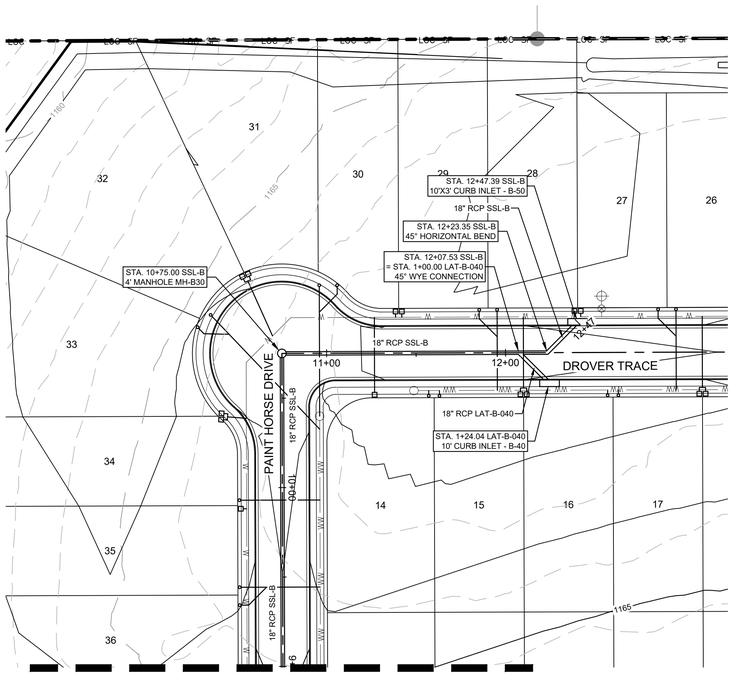
SSL-B (STA 1+00 TO 9+00)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

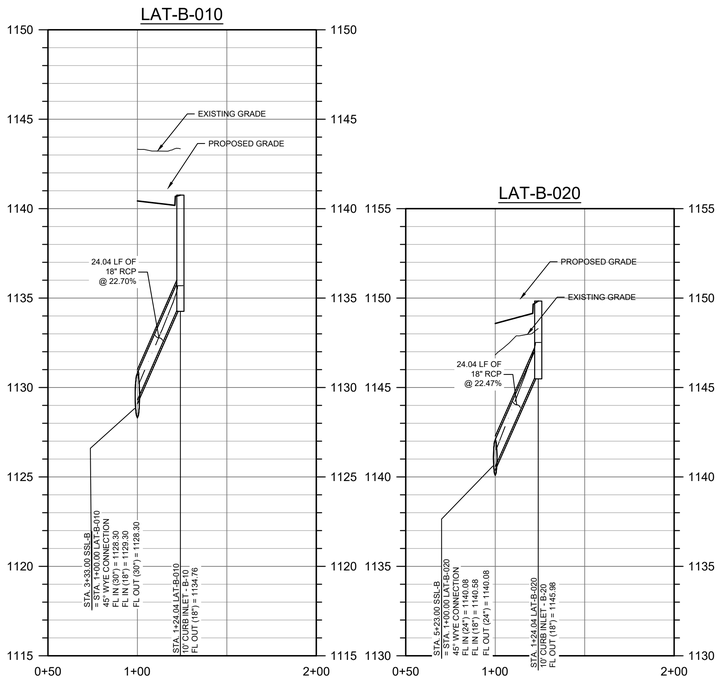
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

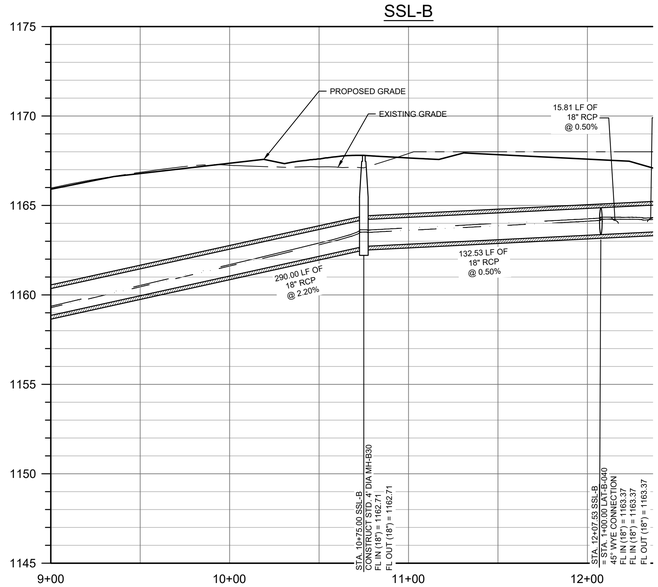
01/29/2026
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-STRM.DWG DATE: 1/29/2026 4:17:54 PM BY: BGILMORE



MATCHLINE TO SHEET 60





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED JUNCTION BOX
- PROPOSED CURB INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

SSL-B (STA 9+00 TO END) &
LATS

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

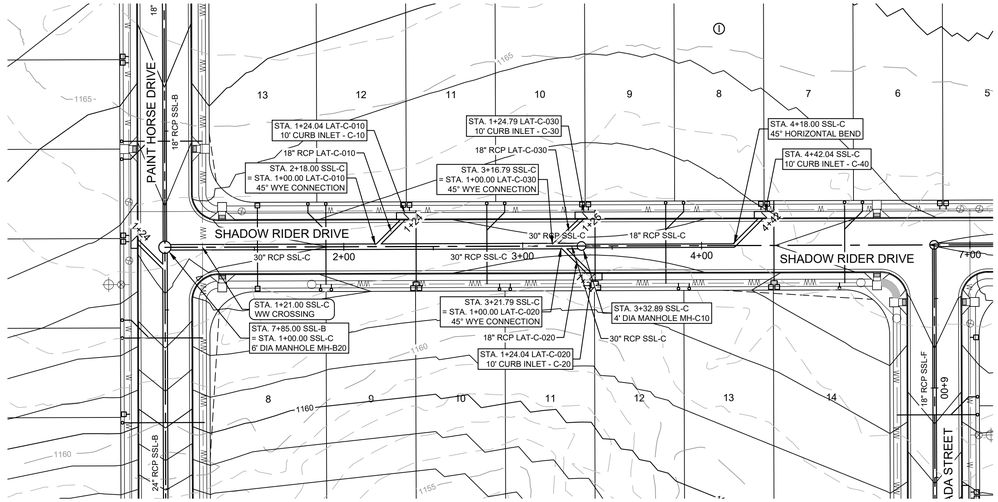
NOTICE:
ALTERATION OF A
SEALED DRAWING
WITHOUT PROPER
NOTIFICATION TO THE
RESPONSIBLE ENGINEER
IS A VIOLATION OF THE
TEXAS ENGINEERING
PRACTICE ACT.

01/29/2026

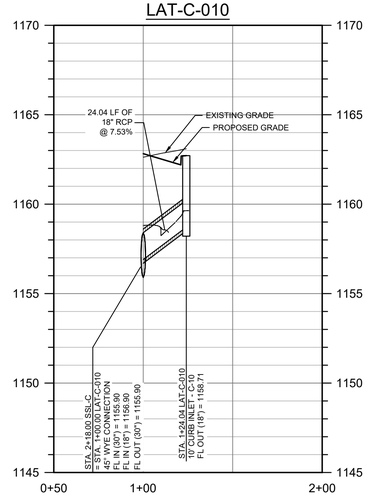
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 61 OF 126

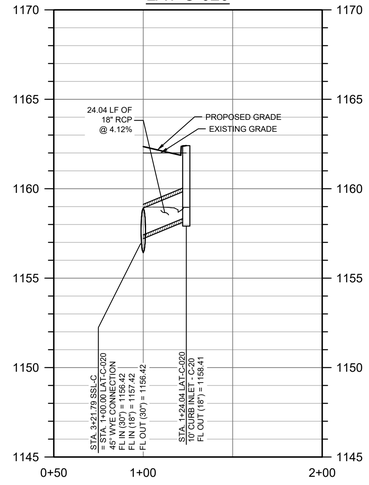
H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-STRM.DWG DATE: 1/29/2026 4:18:24 PM BY: BGILMORE



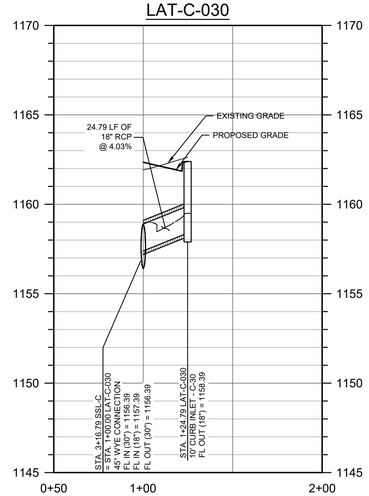
LAT-C-010



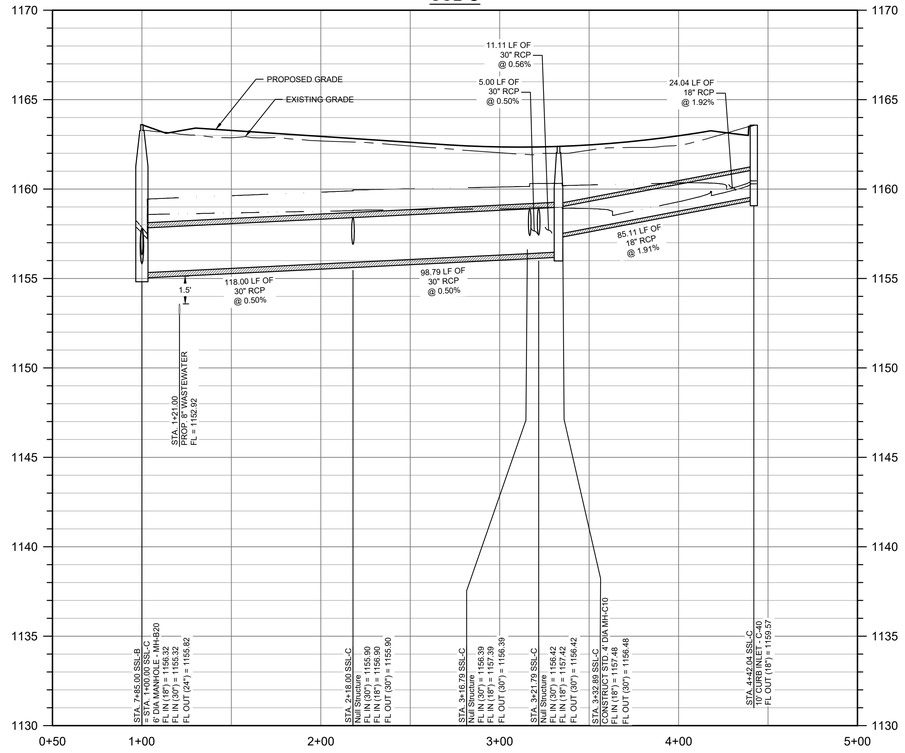
LAT-C-020



LAT-C-030



SSL-C



SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED JUNCTION BOX
- PROPOSED CURB INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

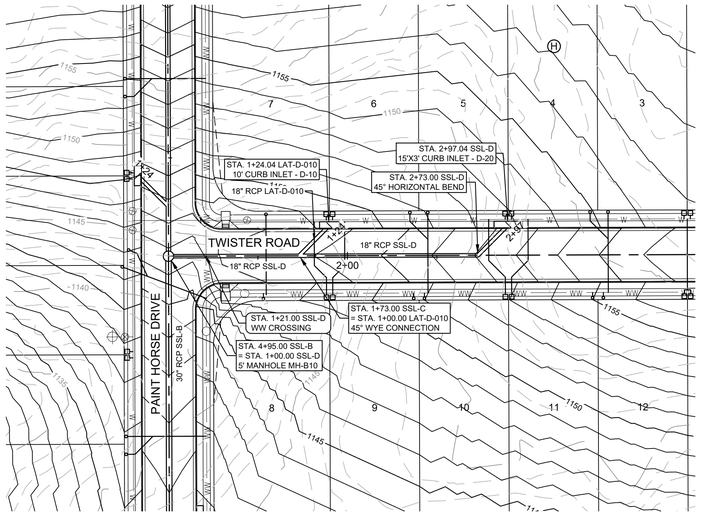
SSL-C (STA 1+00 TO END) & LATS

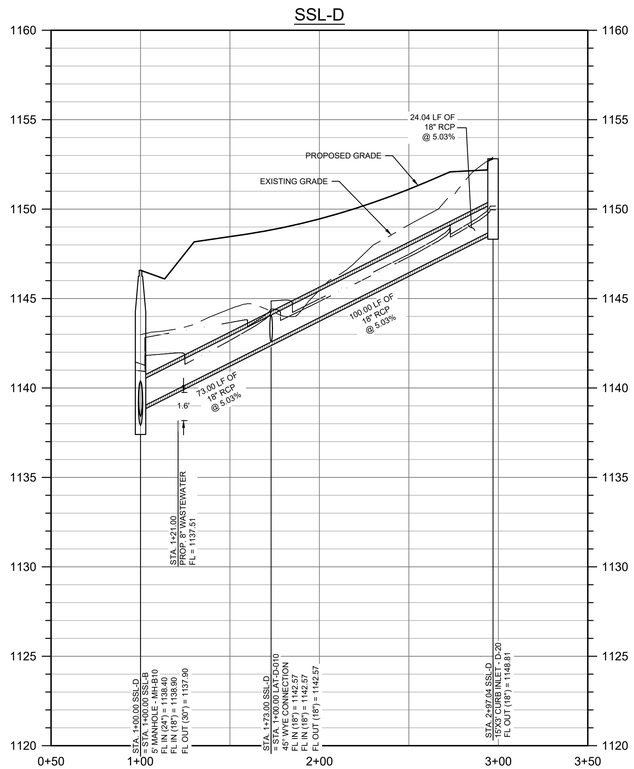
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

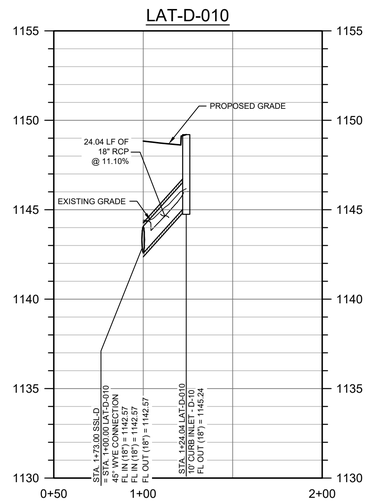
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-STRM.DWG DATE: 1/29/2026 4:19:00 PM BY: BGILMORE







SCALE: 1" = 40'

GRAPHIC SCALE IN FEET

0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED JUNCTION BOX
- PROPOSED CURB INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

SSL-D (STA 1+00 TO END) & LAT

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

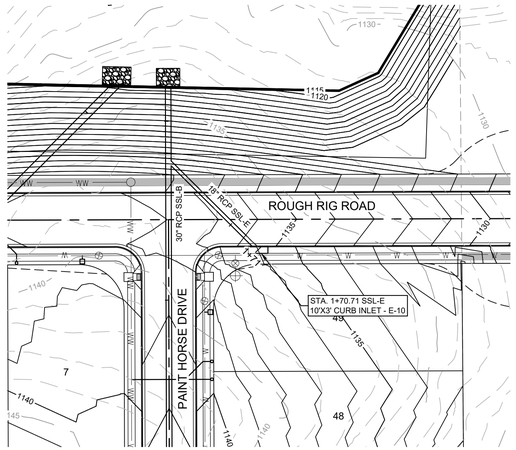
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

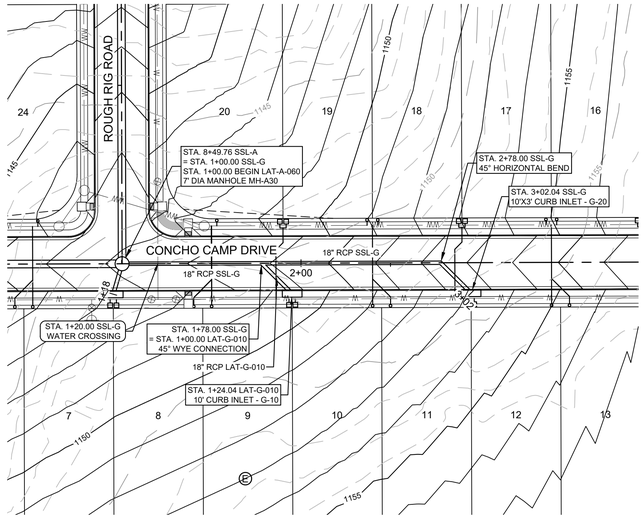
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

SHEET 63 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-STRM.DWG DATE: 1/29/2026 4:19:28 PM BY: BGILMORE





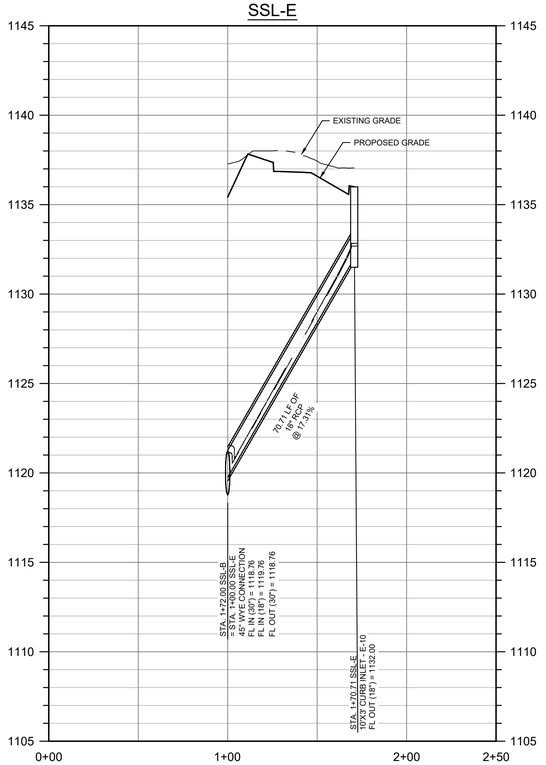
SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

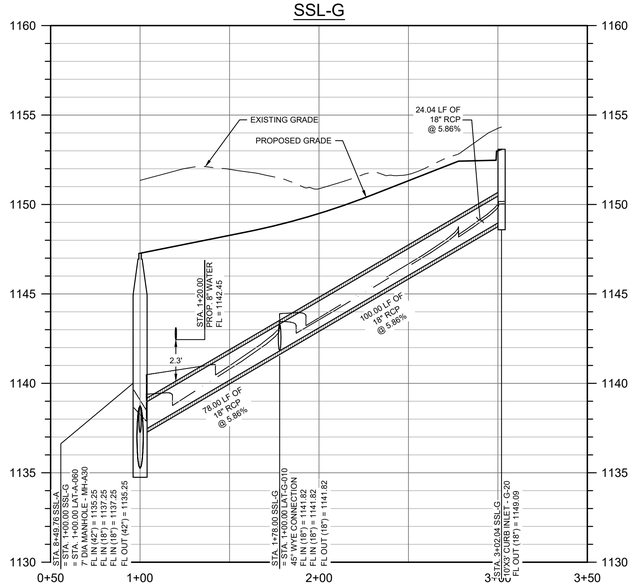
- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED JUNCTION BOX
- PROPOSED CURB INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

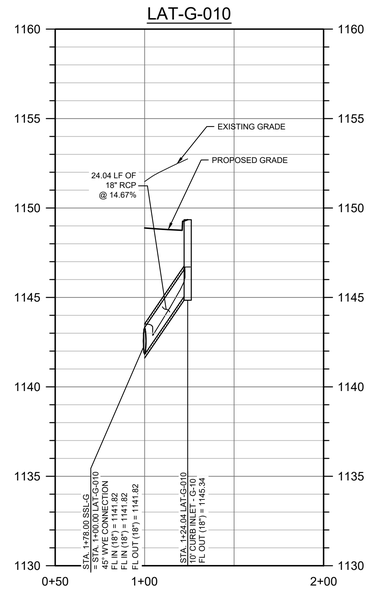
SSL-E



SSL-G



LAT-G-010



PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

SSL E (STA 1+00 TO END) & SSL-G (STA 1+00 TO END) & LAT

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

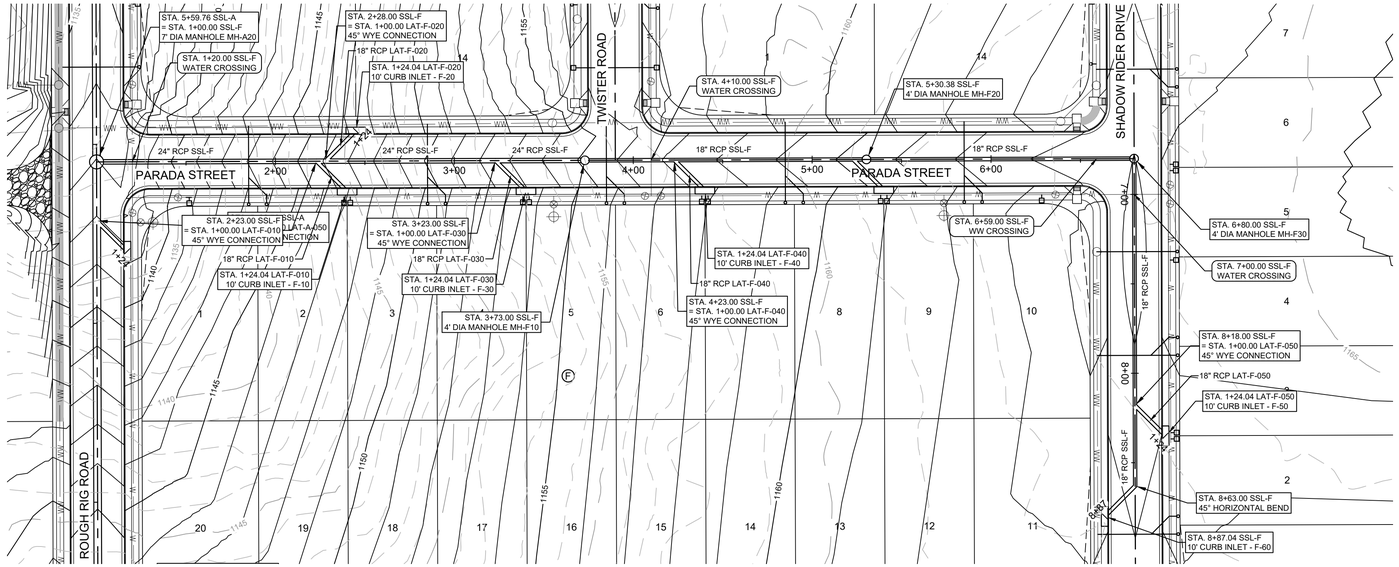
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

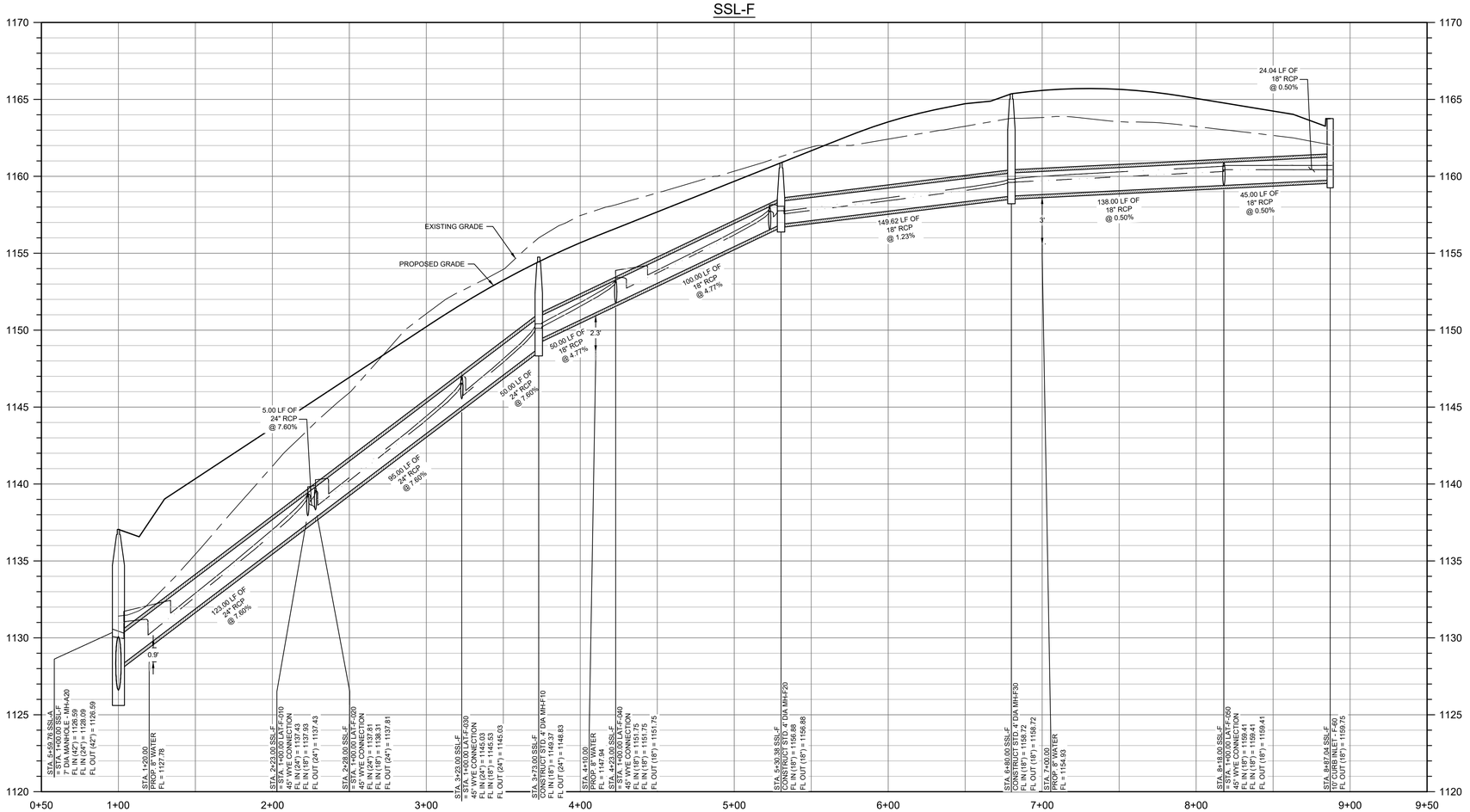
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

SHEET 64 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-STRM.DWG DATE: 1/29/2026 4:20:11 PM BY: BGILMORE





LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED JUNCTION BOX
- PROPOSED CURB INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

SSL-F (STA 1+00 TO END)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

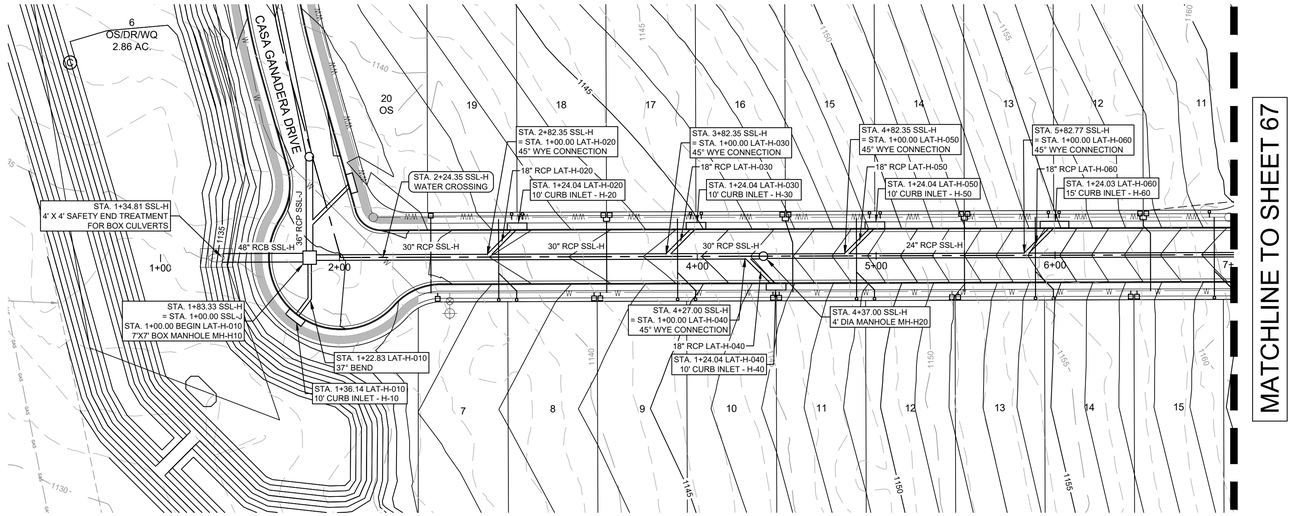
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
130018
LICENSED
PROFESSIONAL ENGINEER

SHEET 65 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-STRM.DWG DATE: 1/29/2026 4:20:33 PM BY: BGILMORE



MATCHLINE TO SHEET 67

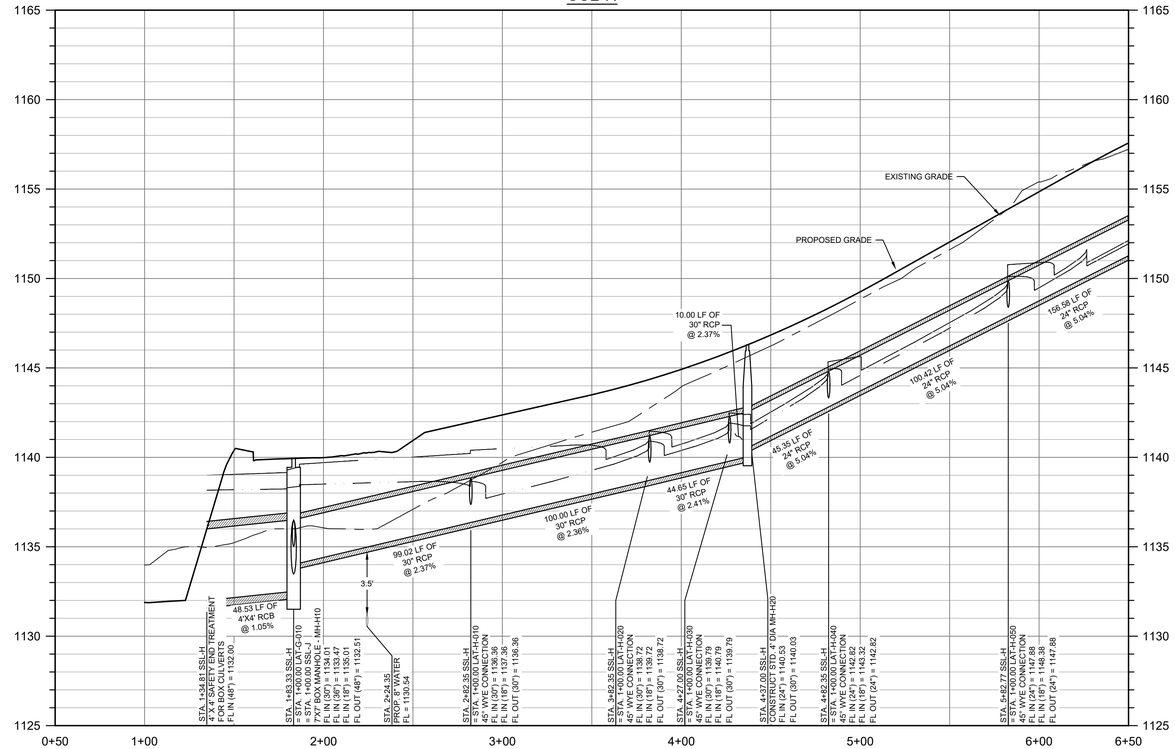
SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED JUNCTION BOX
- PROPOSED CURB INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

SSL-H



PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

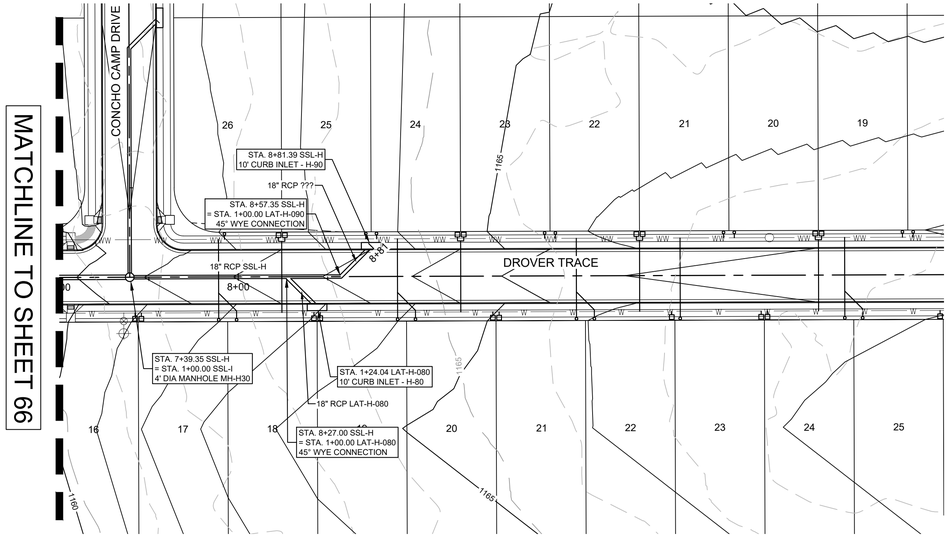
SSL-H (STA 1+00 TO 7+00)

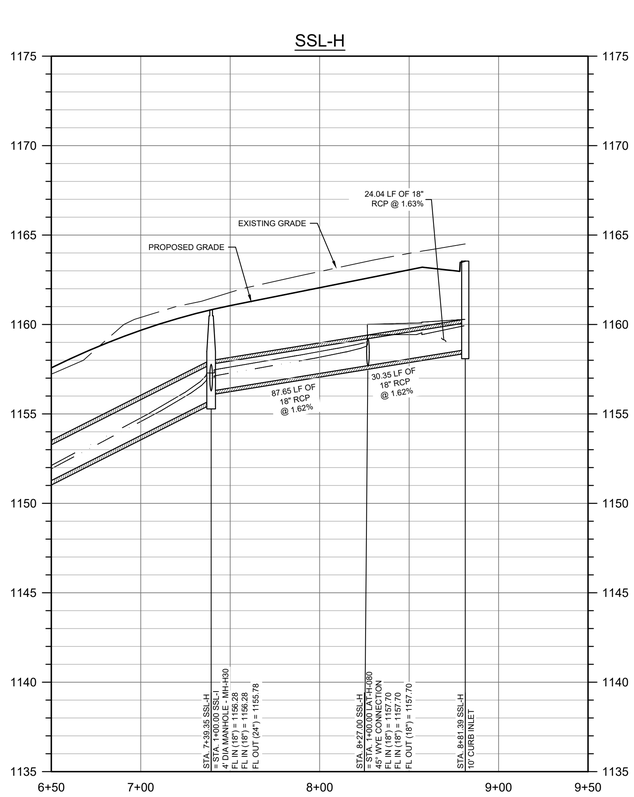
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BRODHI HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-STRM.DWG DATE: 1/29/2026 4:20:56 PM BY: BGILMORE





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED JUNCTION BOX
- PROPOSED CURB INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

SSL-H (STA 7+00 TO END)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

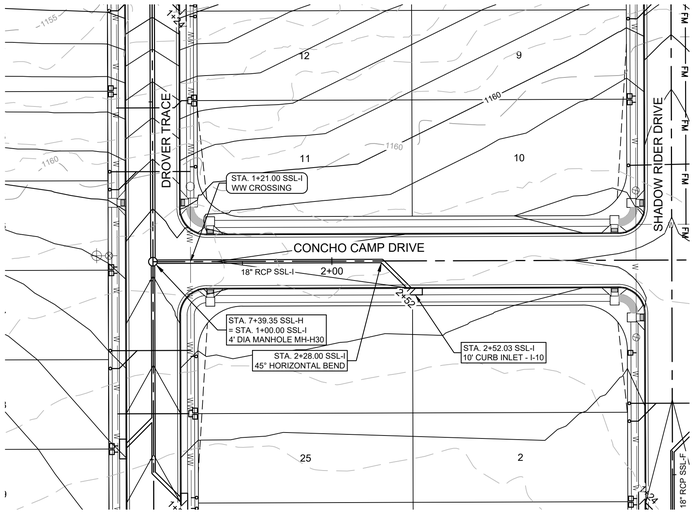
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

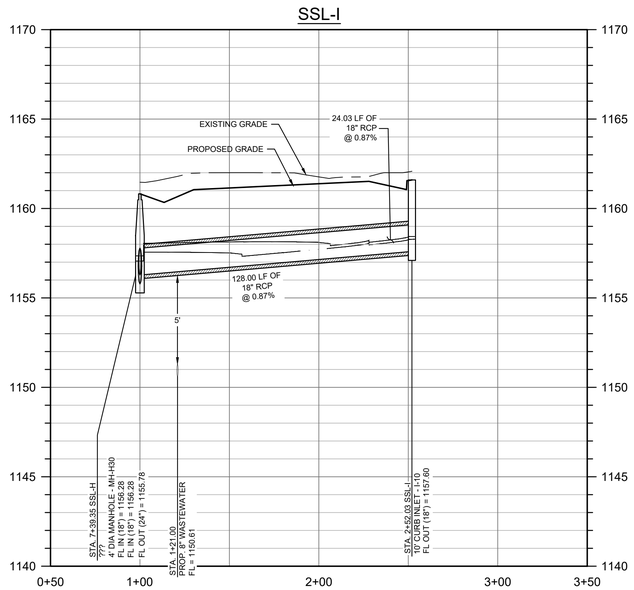
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 67 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-STRM.DWG DATE: 1/29/2026 4:21:18 PM BY: BGILMORE





SCALE: 1" = 40'

GRAPHIC SCALE IN FEET

0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED JUNCTION BOX
- PROPOSED CURB INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

SSL-I (STA 1+00 TO END)

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

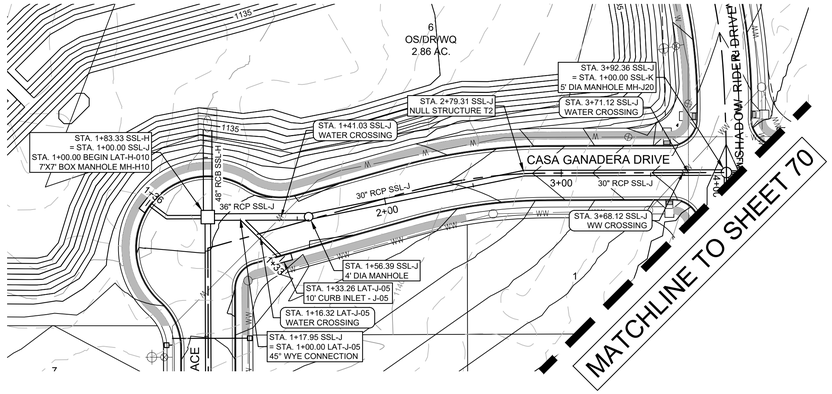
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

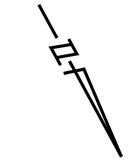
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

Brandon Gilmore

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-STRM.DWG DATE: 1/29/2026 4:21:40 PM BY: BGILMORE





SCALE: 1" = 40'

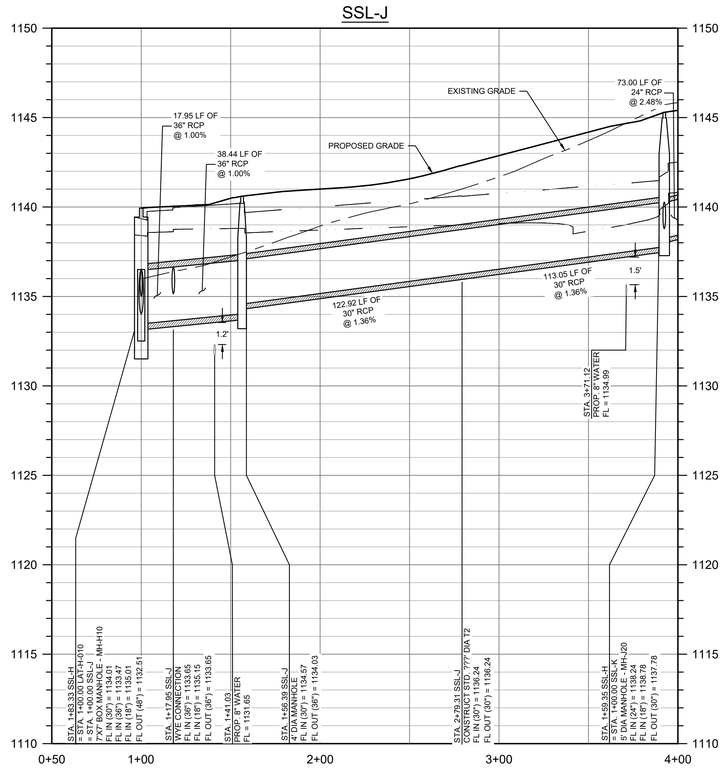
GRAPHIC SCALE IN FEET

0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED JUNCTION BOX
- PROPOSED CURB INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.



PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

SSL-J (STA 1+00 TO 4+00)

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

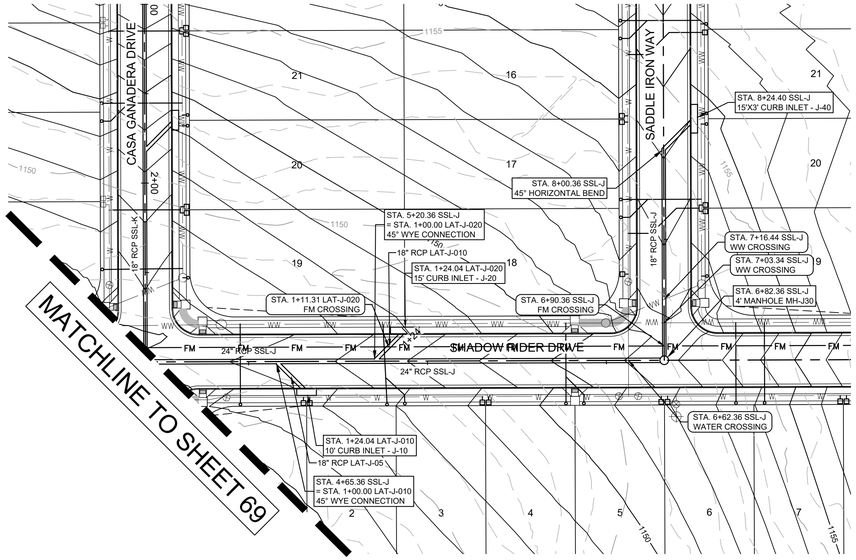
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

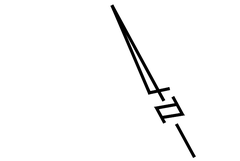
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 69 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-STRM.DWG DATE: 1/29/2026 4:22:03 PM BY: BGILMORE



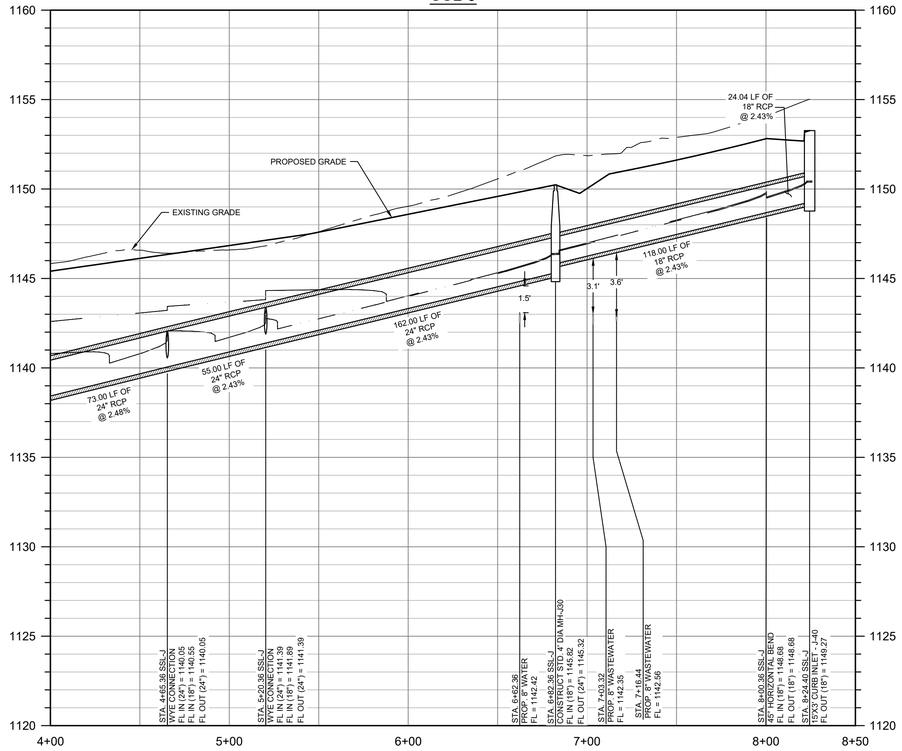


LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED JUNCTION BOX
- PROPOSED CURB INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

SSL-J



PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

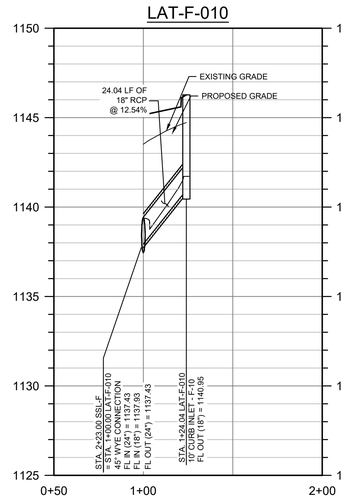
SSL-J (STA 4+00 TO END)

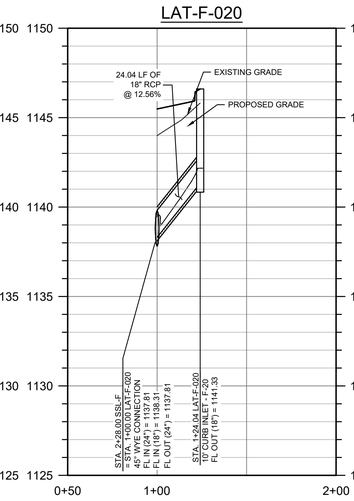
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

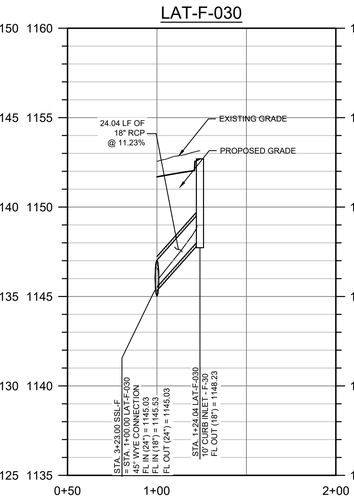
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

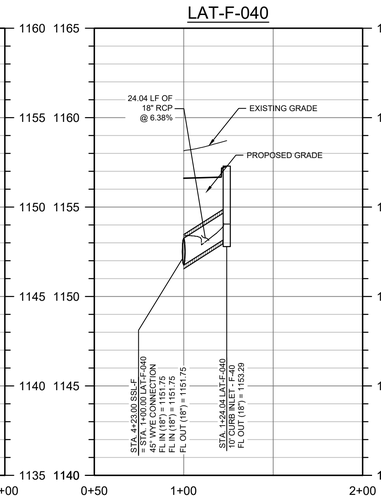
01/29/2026
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

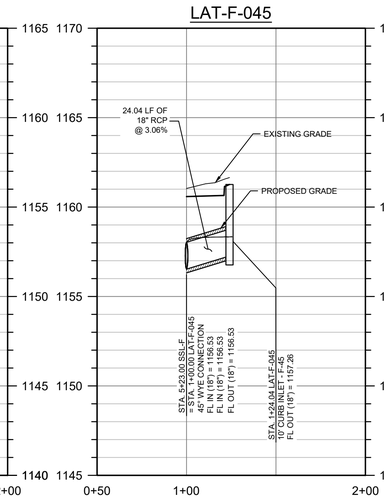
H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-STRM.DWG DATE: 1/29/2026 4:22:29 PM BY: BGILMORE

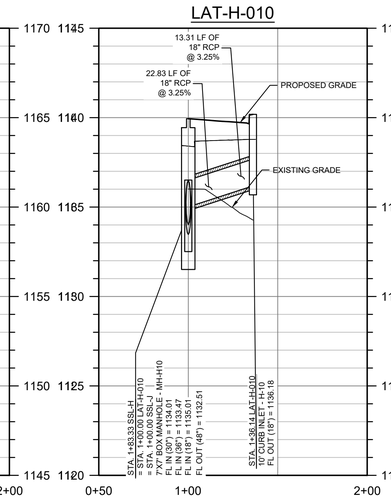


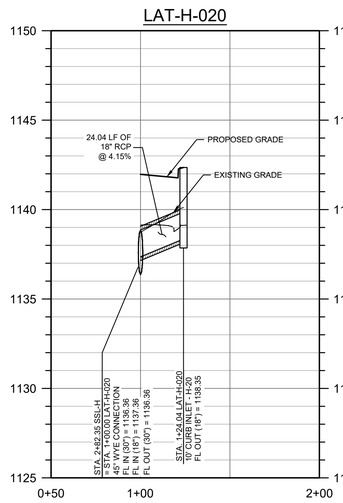


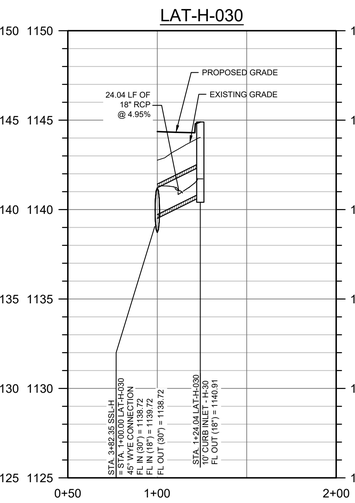


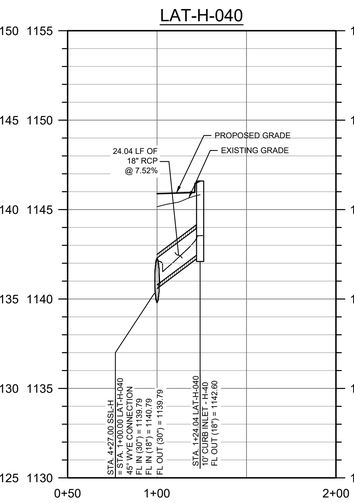


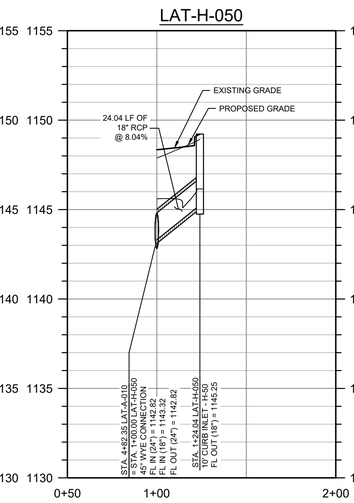


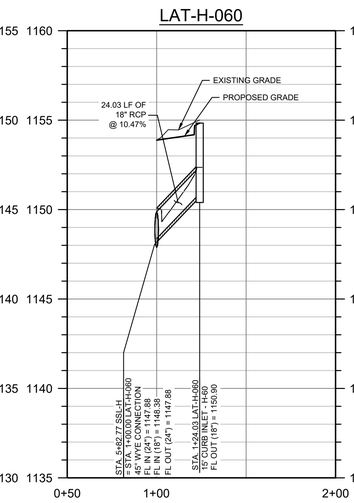


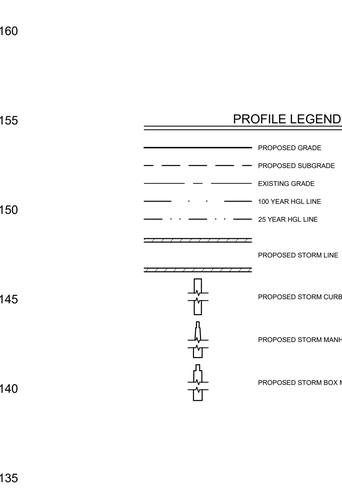












PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

LATS (SSL-F & SSL-H & SSL-J)

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

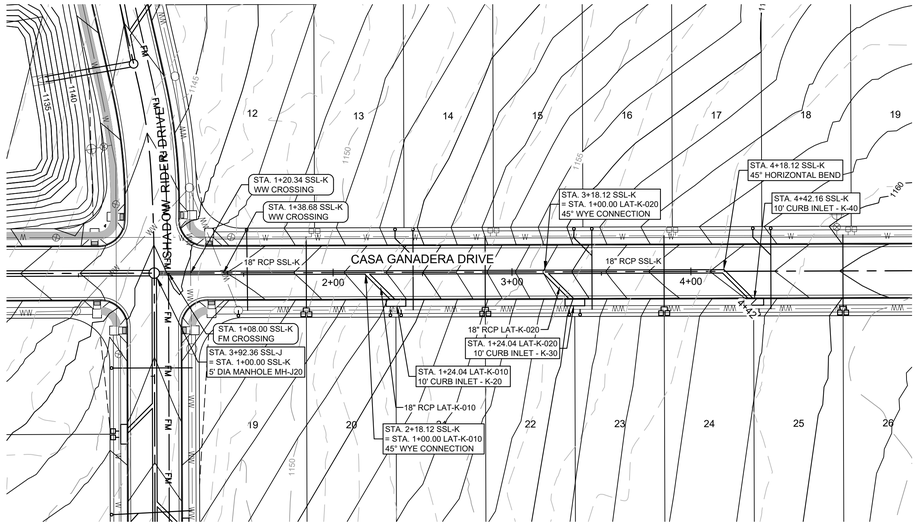
CHECKED BY: CR

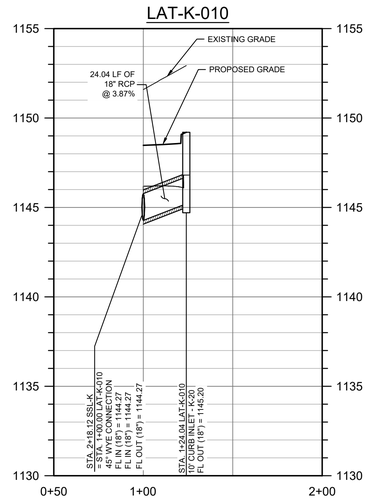
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

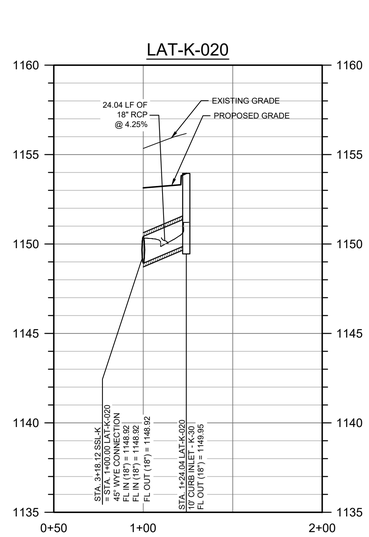
01/29/2026

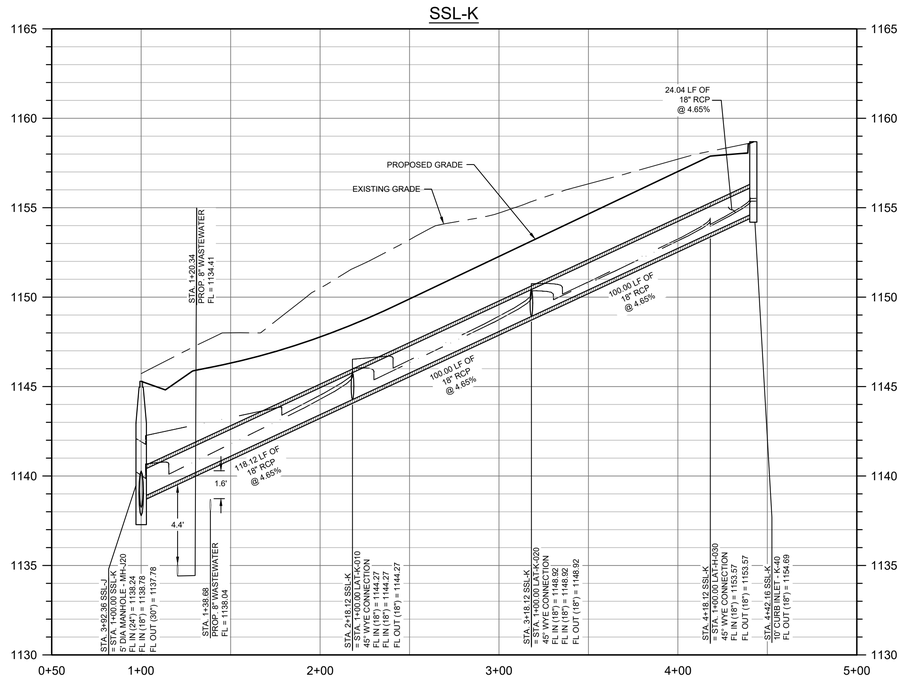
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-STRM.DWG DATE: 1/29/2026 4:23:03 PM BY: BGILMORE









SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED JUNCTION BOX
- PROPOSED CURB INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

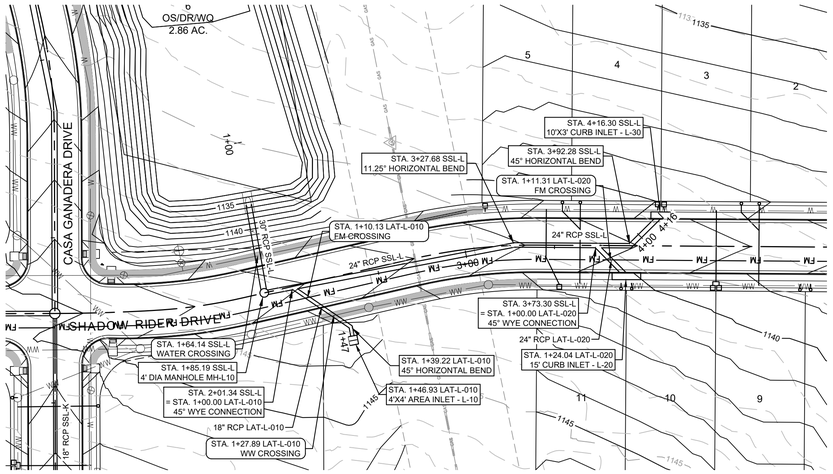
SSL-K (STA 1+00 TO END) & LATS

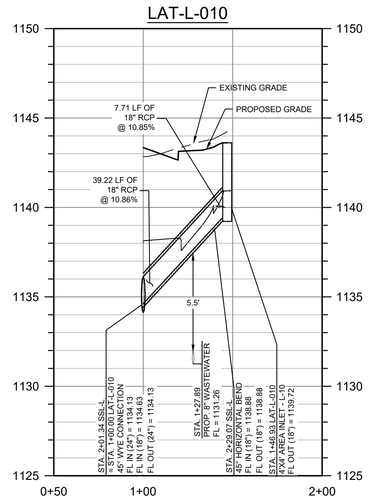
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

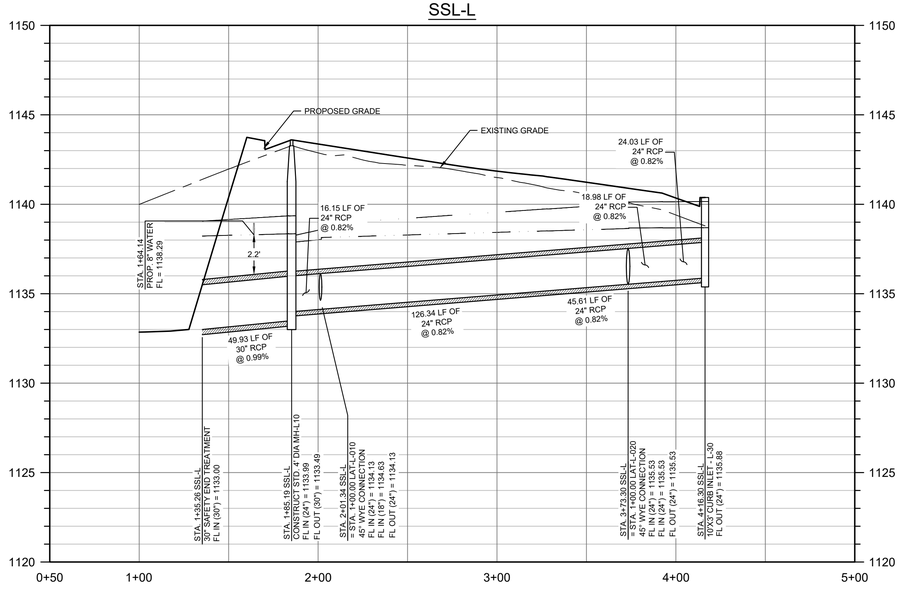
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

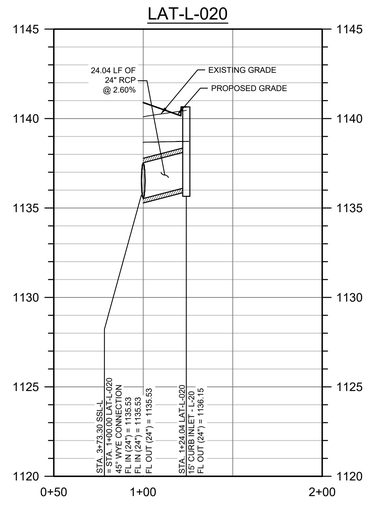
01/29/2026
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-STRM.DWG DATE: 1/29/2026 4:23:28 PM BY: BGILMORE









SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED JUNCTION BOX
- PROPOSED CURB INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	REVISION DESCRIPTION	DATE	BY

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

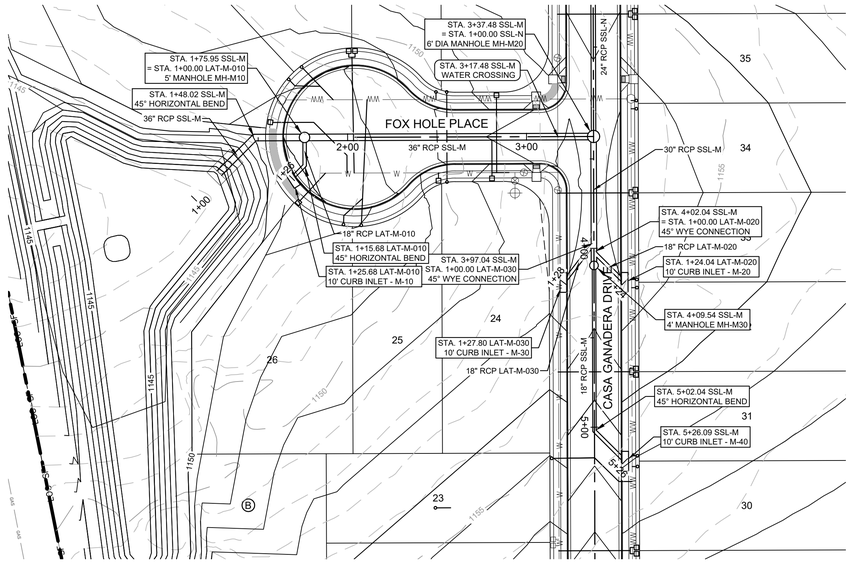
SSL-L (STA 1+00 TO END) & LATS

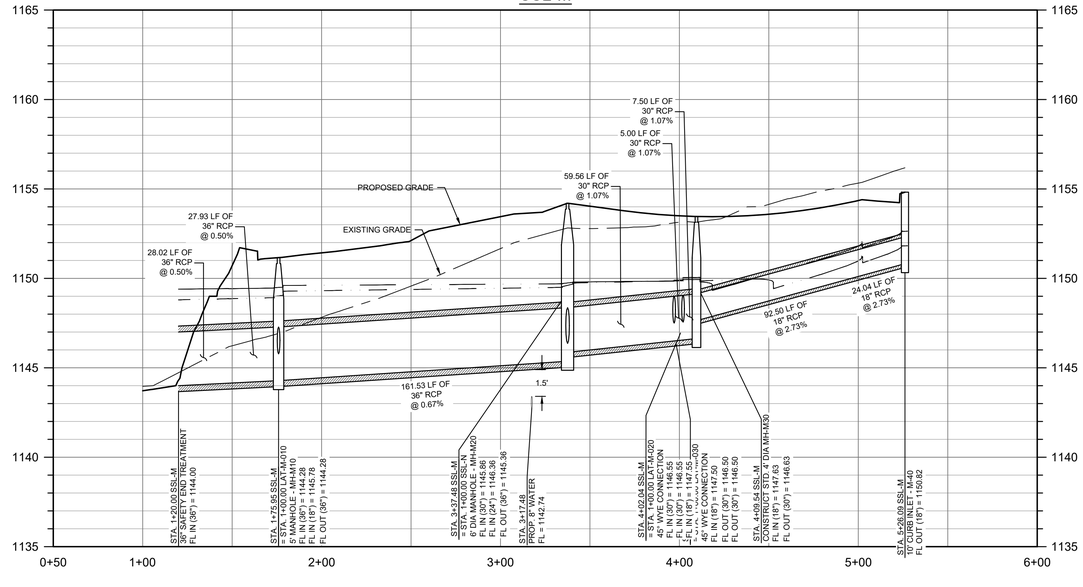
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

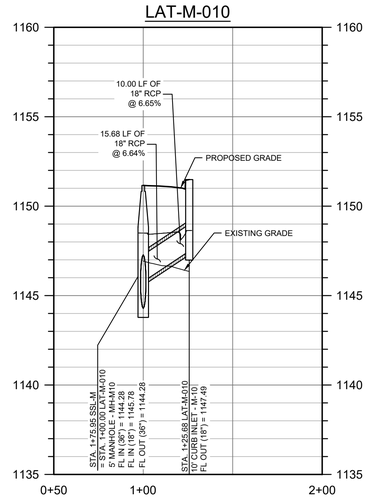
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

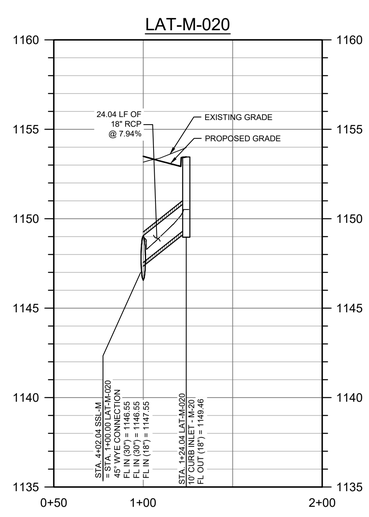
01/29/2026
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

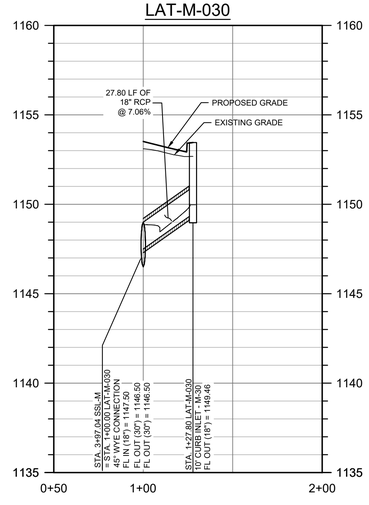
H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-STRM.DWG DATE: 1/29/2026 4:23:47 PM BY: BGILMORE











SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED JUNCTION BOX
- PROPOSED CURB INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

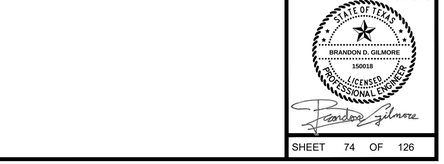
ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

SSL-M (STA 1+00 TO END) & LATS

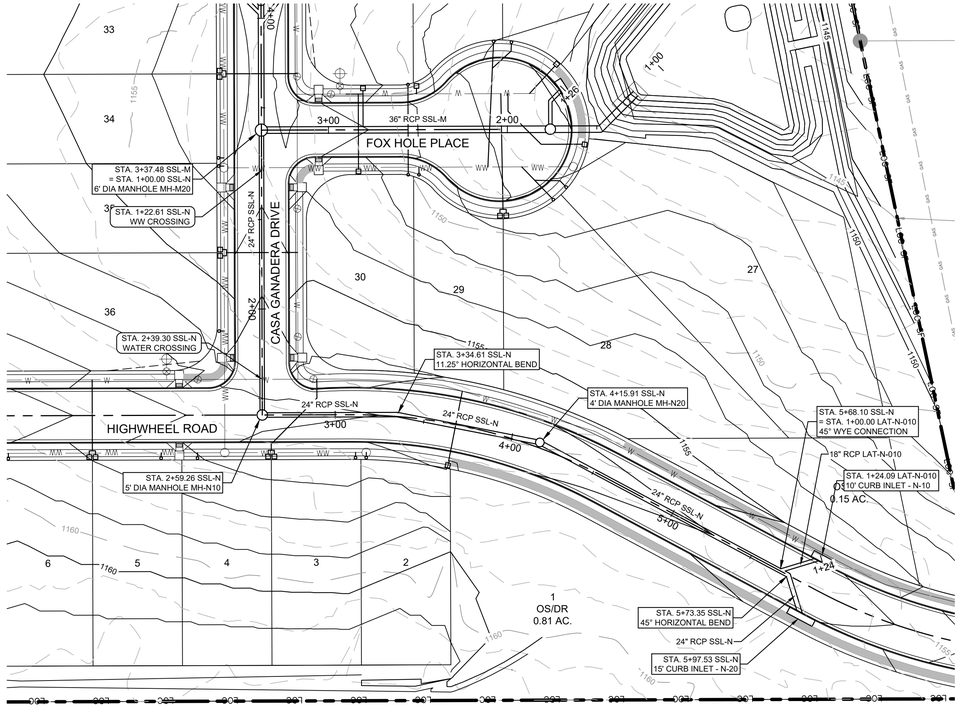
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026



H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-STRM.DWG DATE: 1/29/2026 4:24:12 PM BY: BGILMORE



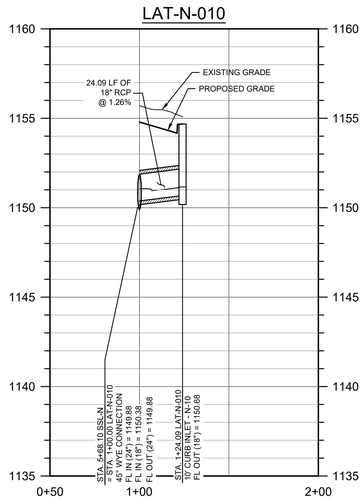
SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

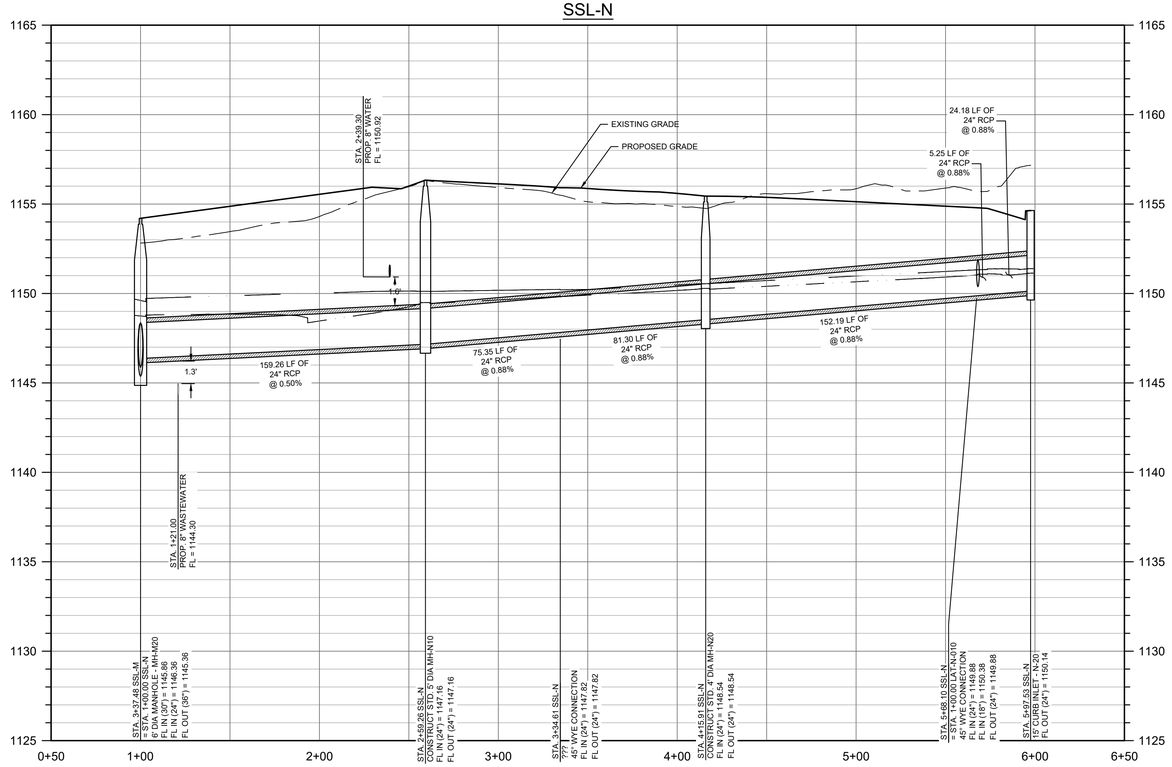
- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED JUNCTION BOX
- PROPOSED CURB INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

LAT-N-010



SSL-N



PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

SSL N (1+00 TO END) & LAT

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

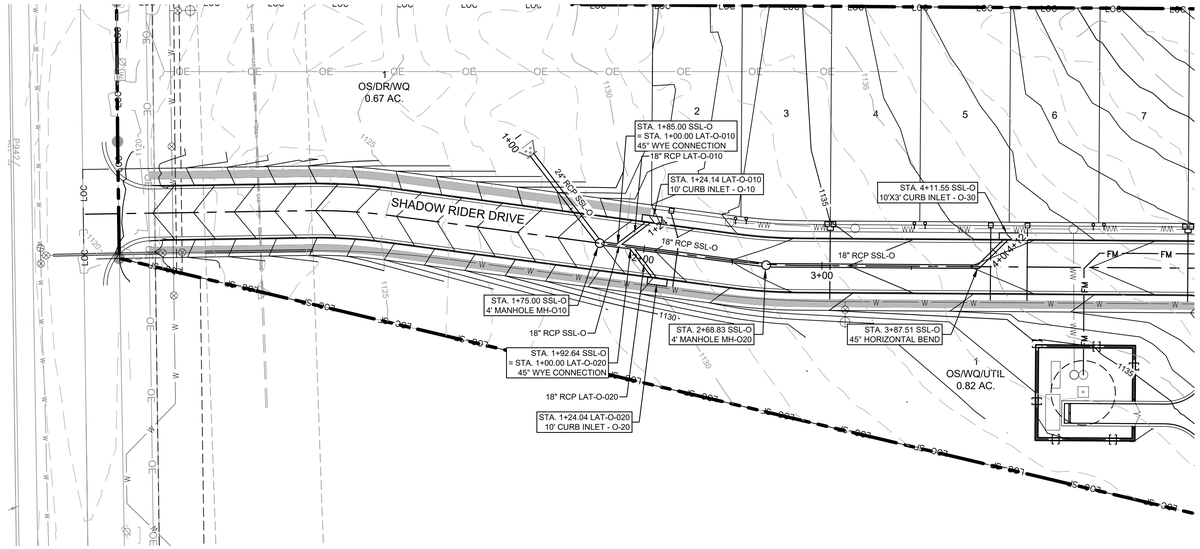
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

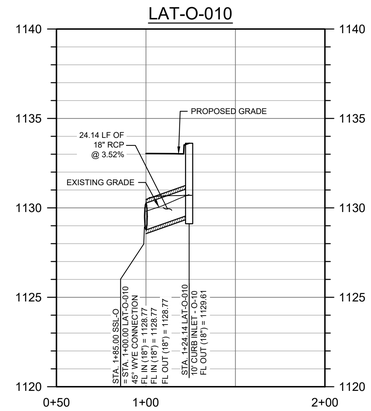
01/29/2026

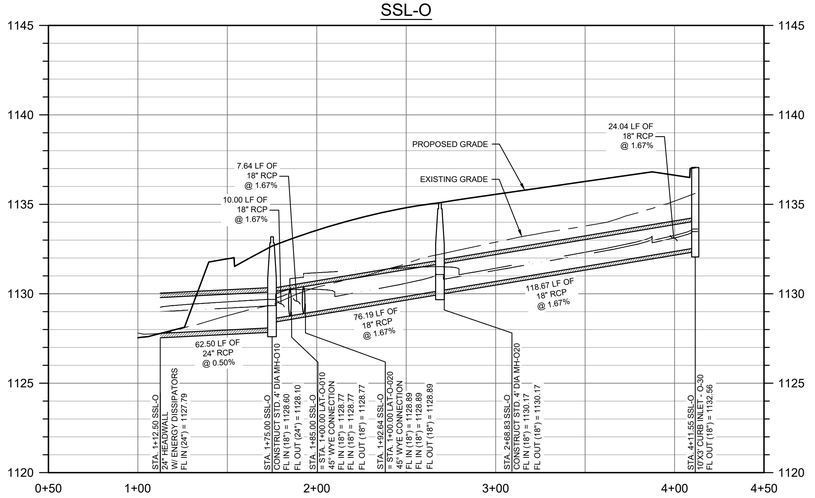
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

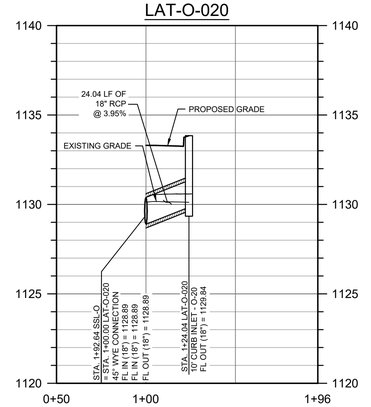
SHEET 75 OF 126

H:\PROJECTS\1636 - BROHN HOMES\1-1741 - ORCHARD RANCH\CAD\SHEETS\11741-C-STRM.DWG DATE: 1/29/2026 4:24:31 PM BY: BGILMORE









SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- STORM SEWER FLOW DIRECTION
- PROPOSED JUNCTION BOX
- PROPOSED CURB INLET

NOTES:
1. ALL INLET WYE CONNECTIONS TO BE 45 DEGREES UNLESS OTHERWISE NOTED.

PROFILE LEGEND

- PROPOSED GRADE
- PROPOSED SUBGRADE
- EXISTING GRADE
- 100 YEAR HGL LINE
- 25 YEAR HGL LINE
- PROPOSED STORM LINE
- PROPOSED STORM CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM BOX MANHOLE

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

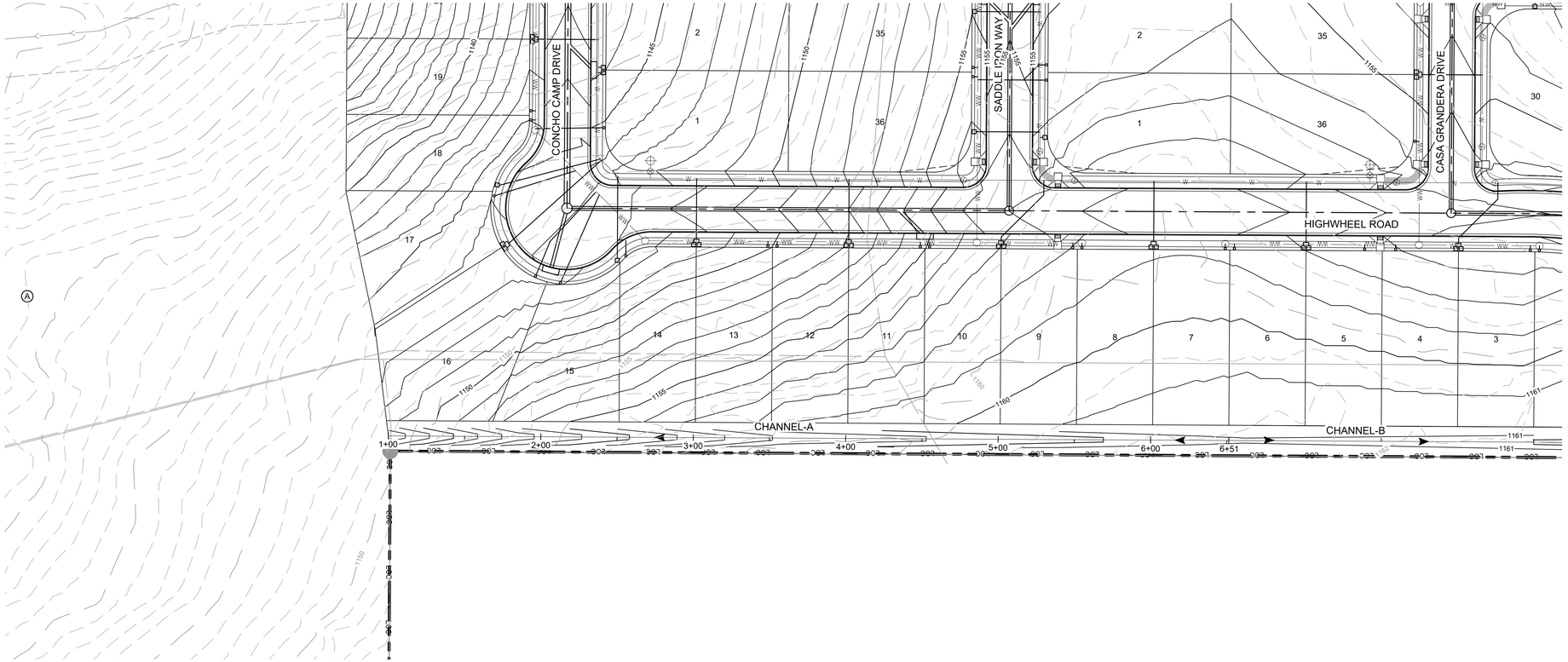
SSL-O (STA 1+00 TO END) & LATS

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-STRM.DWG DATE: 1/29/2026 4:24:56 PM BY: BGILMORE

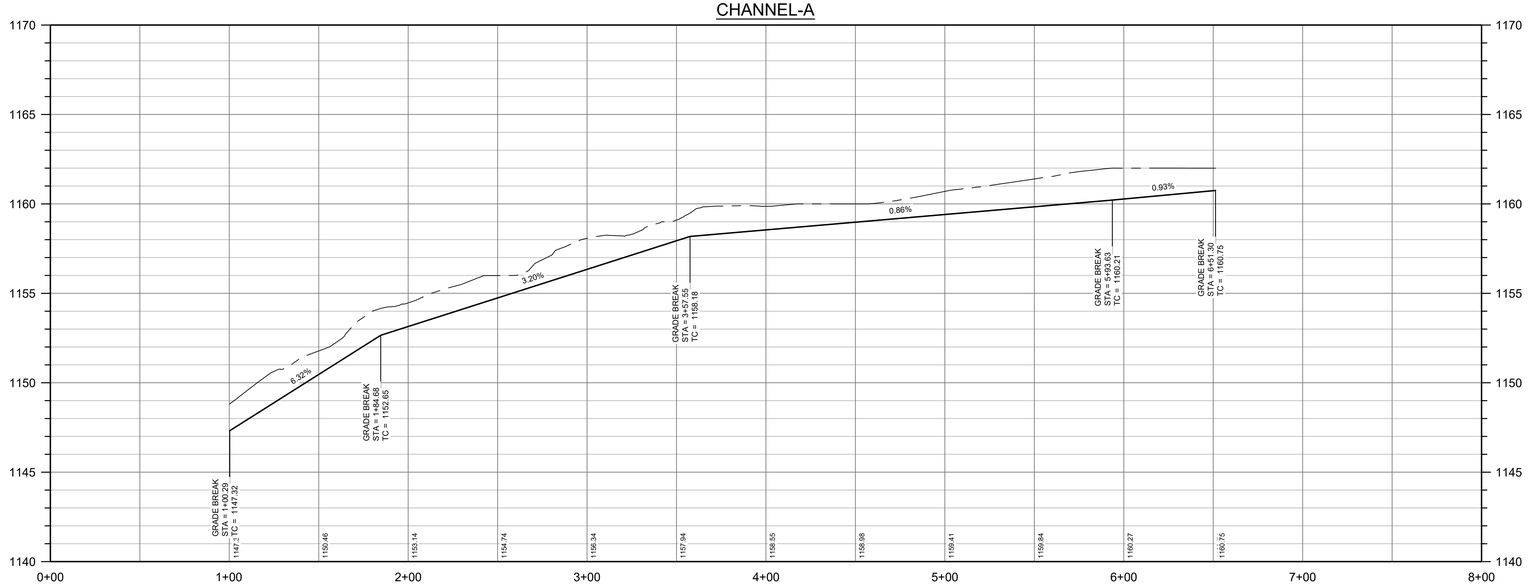


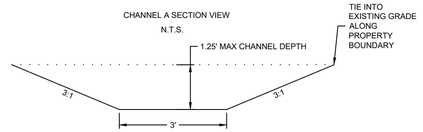
SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

CHANNEL-A			
STA.	Q_{100} (cfs)	V_{100} (fps)	D_{100} (ft)
01+00	18.81	5.59	0.67
02+00	16.02	4.19	0.74
03+00	13.23	3.97	0.67
04+00	10.61	2.32	0.83
05+00	5.94	1.98	0.62
06+00	4.16	1.47	0.59

CHANNEL-A			
STA.	Q_{25} (cfs)	V_{25} (fps)	D_{25} (ft)
01+00	11.59	4.87	0.52
02+00	9.87	3.65	0.57
03+00	8.15	3.46	0.52
04+00	6.53	2.03	0.65
05+00	3.66	1.72	0.72
06+00	2.56	1.28	0.46

CHANNEL-A





8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

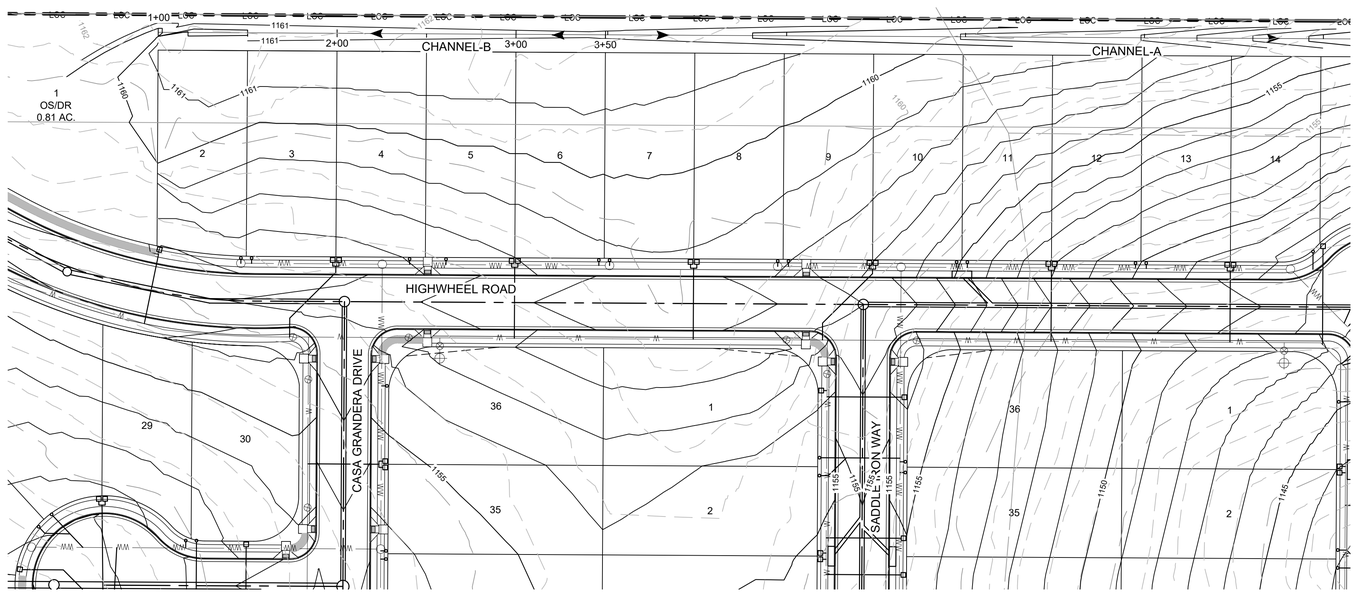
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET OF 126

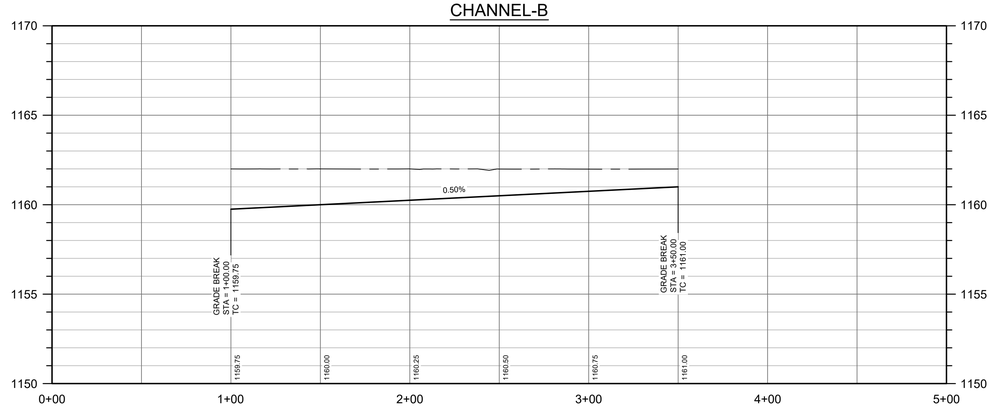
H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-CHAN.DWG DATE: 1/29/2026 4:27:06 PM BY: BGILMORE

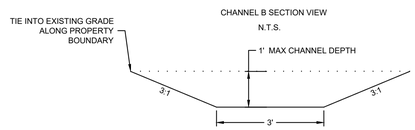


SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

CHANNEL-B			
STA.	Q_{100} (cfs)	V_{100} (fps)	D_{100} (ft)
01+00	2.92	1.33	0.49
02+00	1.44	1.08	0.33
03+00	0.19	0.55	0.10

CHANNEL-B			
STA.	Q_{25} (cfs)	V_{25} (fps)	D_{25} (ft)
01+00	1.80	1.15	0.38
02+00	0.89	0.92	0.26
03+00	0.12	0.46	0.08





8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

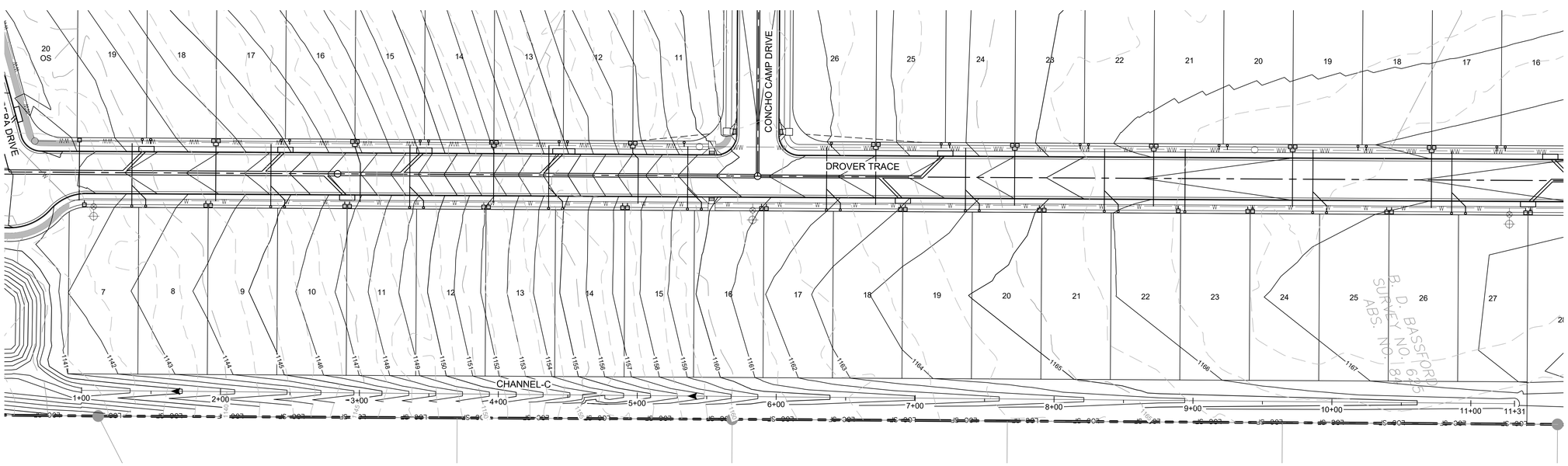
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET OF 126

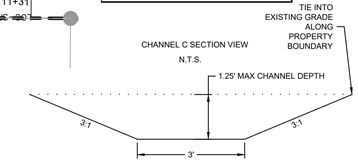
H:\PROJECTS\1636 - BRONN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-CHAN.DWG DATE: 1/29/2026 4:27:27 PM BY: BGILMORE



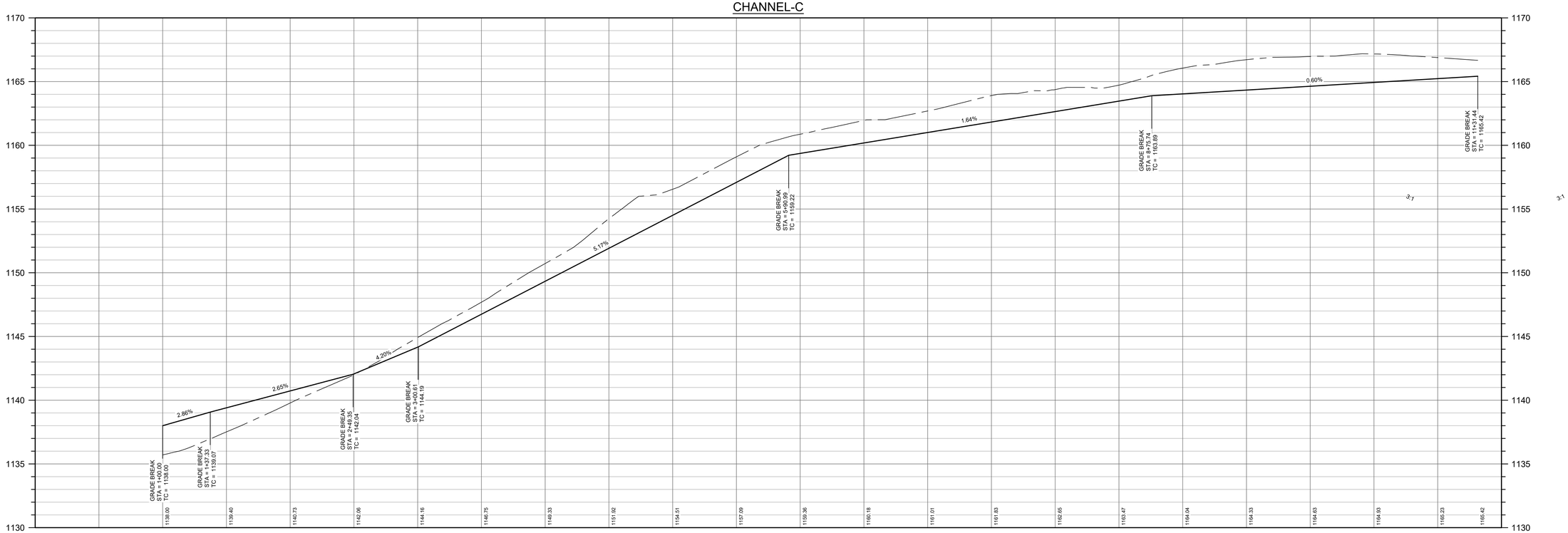
SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

CHANNEL-C			
STA.	Q_{100} (cfs)	V_{100} (fps)	D_{100} (ft)
01+00	16.22	4.06	0.76
02+00	14.70	4.59	0.65
03+00	13.19	4.62	0.60
04+00	11.67	4.46	0.56
05+00	10.14	4.29	0.52
06+00	8.61	2.74	0.64
07+00	7.05	2.59	0.58
08+00	5.50	2.41	0.50
09+00	3.94	1.45	0.58
10+00	2.34	1.25	0.44
11+00	0.75	0.87	0.23

CHANNEL-C			
STA.	Q_{25} (cfs)	V_{25} (fps)	D_{25} (ft)
01+00	10.69	3.61	0.61
02+00	9.69	4.07	0.52
03+00	8.70	4.10	0.48
04+00	7.70	3.96	0.45
05+00	6.69	3.79	0.42
06+00	5.67	2.43	0.51
07+00	4.65	2.30	0.46
08+00	3.62	2.13	0.40
09+00	2.60	1.28	0.46
10+00	1.55	1.10	0.35
11+00	0.49	0.76	0.18



CHANNEL C SECTION VIEW
N.T.S.



8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

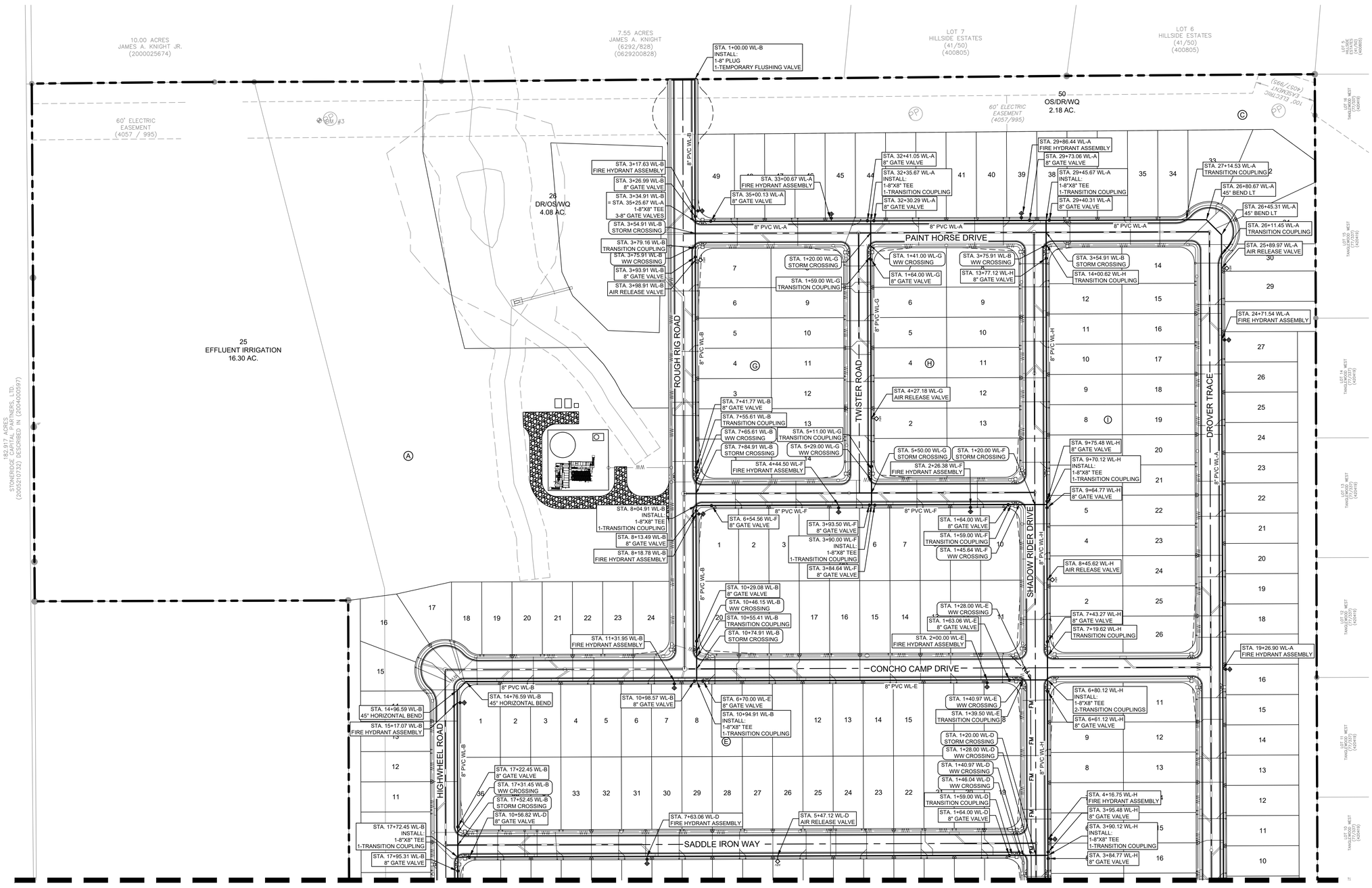
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
LICENSED PROFESSIONAL ENGINEER
136018

SHEET OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-CHAN.DWG DATE: 1/29/2026 4:27:45 PM BY: BGILMORE



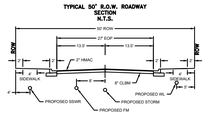
SCALE: 1" = 80'
GRAPHIC SCALE IN FEET
0 40' 80' 160'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED WATER LINE
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.
* CONTRACTOR TO PLACE GATE VALVES, FIRE HYDRANTS, ARV'S AWAY FROM CURBS, VALLEY GUTTERS AND SIDEWALK RAMPS

TYPICAL 50' R.O.W. ROADWAY SECTION
N.T.S.



8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

OVERALL WATER PLAN (1 OF 2)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

SHEET 80 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-WATR-O.DWG DATE: 1/29/2026 4:28:43 PM BY: BGILMORE

MATCHLINE TO SHEET 80

HIGHWHEEL ROAD

CASA GRANDERA DRIVE

SHADOW RIDER DRIVE

DROVER TRACE

FITZHUGH ROAD

STA. 18+92.50 WL-B
AIR RELEASE VALVE

STA. 19+89.03 WL-B
FIRE HYDRANT ASSEMBLY

STA. 20+06.45 WL-B
8" GATE VALVE

STA. 20+21.45 WL-B
WW CROSSING

STA. 20+42.45 WL-B
STORM CROSSING

STA. 20+62.45 WL-B
INSTALL:
1-8"X8" TEE
1-TRANSITION COUPLING

STA. 20+71.14 WL-B
8" GATE VALVE

STA. 20+83.50 WL-B
0.76° DEFL. LT

STA. 20+93.50 WL-B
1.00° DEFL. LT

STA. 21+03.50 WL-B
1.00° DEFL. LT

STA. 21+13.50 WL-B
1.00° DEFL. LT

STA. 21+23.50 WL-B
1.00° DEFL. LT

STA. 21+43.50 WL-B
11.25° BEND. LT

STA. 10+53.42 WL-C
8" GATE VALVE

STA. 9+81.81 WL-C
8" GATE VALVE

STA. 9+76.81 WL-C
TRANSITION COUPLING

STA. 9+59.63 WL-C
WW CROSSING

STA. 9+37.81 WL-C
STORM CROSSING

STA. 20+81.43 WL-B
8" GATE VALVE

STA. 9+07.81 WL-C
8" GATE VALVE

STA. 9+17.81 WL-C
INSTALL:
1-8"X8" TEE
1-TRANSITION COUPLING

STA. 1+24.00 WL-I
FIRE HYDRANT ASSEMBLY

STA. 6+05.94 WL-C
AIR RELEASE VALVE

STA. 5+02.88 WL-C
FIRE HYDRANT ASSEMBLY

STA. 22+32.41 WL-B
11.25° BEND. LT

STA. 2+32.83 WL-I
INSTALL:
1-8" PLUG
1-TEMPORARY FLUSHING VALVE

STA. 23+86.17 WL-B
0.90° DEFL. LT

STA. 23+96.17 WL-B
1.00° DEFL. LT

STA. 24+06.17 WL-B
1.00° DEFL. LT

STA. 24+16.20 WL-B
11.25° BEND. LT

STA. 24+89.60 WL-B
11.25° BEND. LT

STA. 24+99.60 WL-B
22.5° DEFL. LT

STA. 25+09.60 WL-B
1.00° DEFL. LT

STA. 25+19.60 WL-B
0.90° DEFL. LT

STA. 25+42.53 WL-B
FIRE HYDRANT ASSEMBLY

STA. 31+29.54 WL-B
FIRE HYDRANT ASSEMBLY

STA. 31+94.21 WL-B
1-8"X6" CUT-IN TEE
1-8" GATE VALVE
2-6" GATE VALVES

STA. 1+15.47 WL-C
WW CROSSING

STA. 1+28.75 WL-C
WW CROSSING

STA. 1+41.36 WL-C
WW CROSSING

STA. 1+52.01 WL-C
WW CROSSING

STA. 1+59.03 WL-C
TRANSITION COUPLING

STA. 1+64.31 WL-C
8" GATE VALVE

STA. 11+09.97 WL-A
= STA. 20+62.33 WL-B
INSTALL:
1-8"X8" CROSS
2-TRANSITION COUPLINGS

STA. 10+91.42 WL-A
8" GATE VALVE

STA. 10+86.42 WL-A
AIR RELEASE VALVE

STA. 10+69.89 WL-A
11.25° BEND LT

STA. 1+61.89 WL-H
11.25° HORIZONTAL BEND

STA. 1+55.50 WL-H
11.25° HORIZONTAL BEND

STA. 1+38.44 WL-H
TRANSITION COUPLING

STA. 1+20.00 WL-H
STORM CROSSING

STA. 1+16.75 WL-H
WW CROSSING

STA. 12+12.82 WL-A
11.25° BEND

STA. 11+43.49 WL-A
8" GATE VALVE

STA. 10+58.10 WL-A
FIRE HYDRANT ASSEMBLY

STA. 10+15.45 WL-A
STORM CROSSING

STA. 9+96.30 WL-A
1.00° DEFL. LT

STA. 9+76.30 WL-A
0.496° DEFL. LT

STA. 9+22.14 WL-A
0.787° DEFL. LT

STA. 8+92.35 WL-A
11.25° BEND LT

STA. 8+56.30 WL-A
0.787° DEFL. LT

STA. 14+52.57 WL-A
FIRE HYDRANT ASSEMBLY

STA. 14+35.31 WL-A
INSTALL:
1-45° HORIZONTAL BEND
1-TRANSITION COUPLING

STA. 14+07.03 WL-A
STORM CROSSING

STA. 13+65.33 WL-A
STORM CROSSING

STA. 13+49.01 WL-A
STORM CROSSING

STA. 13+29.27 WL-A
TRANSITION COUPLING

STA. 13+20.13 WL-A
22.50° BEND LT

STA. 13+06.11 WL-A
11° DEFL. LT

STA. 5+99.85 WL-A
WW CROSSING

STA. 5+92.75 WL-A
WW CROSSING

STA. 4+64.95 WL-A
FIRE HYDRANT ASSEMBLY

STA. 4+58.03 WL-A
0.573° DEFLECTION

STA. 4+48.03 WL-A
0.573° DEFLECTION

STA. 4+38.03 WL-A
1.00° DEFLECTION

STA. 4+28.03 WL-A
1.00° DEFLECTION

STA. 4+18.02 WL-A
1.00° DEFLECTION

STA. 4+08.03 WL-A
1.00° DEFLECTION

STA. 3+98.02 WL-A
1.00° DEFLECTION

STA. 3+86.77 WL-A
1.00° DEFLECTION

STA. 2+43.72 WL-A
0.68° DEFLECTION

STA. 2+33.72 WL-A
0.68° DEFLECTION

STA. 2+23.72 WL-A
1.00° DEFLECTION

STA. 2+13.72 WL-A
1.00° DEFLECTION

STA. 2+03.72 WL-A
1.00° DEFLECTION

STA. 1+93.72 WL-A
1.00° DEFLECTION

STA. 1+83.72 WL-A
1.00° DEFLECTION

STA. 1+73.72 WL-A
1.00° DEFLECTION

STA. 1+65.79 WL-A
1.00° DEFLECTION

STA. 0+99.52 WL-A
REMOVE 8" PLUG
CONNECT TO EXISTING
8" WATERLINE

UTILITY CROSSING
??? ???

OS-WL-A

32
OS/DR
2.51 AC.

OS
2.51 AC.

20
OS

14.905 ACRES
KUMI YOUNG CARTER
(2019033422)

6.052 ACRE
THOMAS A. ADAMS
DOC. 2018004784
O.P.R.T.C.T.
TCAD PID No. 380706

5.001 ACRES
ANTHONY R. POWELL
& DUSTIN POWELL
(1999135507)

5.09 ACRES
MICHAEL J. PARKER &
KARYN PONDER PARKER,
TRUSTEES OF THE MICHAEL
PARKER REVOCABLE TRUST
(2015113989)

7.00 ACRES
CRYSTAL VAZQUEZ TRUST
(1999108368)

6.739 ACRES
H. LYNN BROWN &
MARY M. BROWN
(2009159936)

5.472 ACRE
ROGER K. HERBERT &
NANNETTE
DOC. 2000035631
O.P.R. I.C.T.
TCAD PID No. 446860

1.63 ACRES
60' PIPELINE EASEMENT
WESTTEX GAS PIPELINE
COMPANY
(430/320)(1359/261)
(36/32/1228)(1315/1214)
(3906/81)

2.2501 ACRES
60' PIPELINE EASEMENT
MAGELLAN PIPELINE
COMPANY, LP
(994/3922) (1305/141)
(994/3922) (1305/143)
(1294/732) (1315/1837)
(1294/776) (1315/2)
(13202/76) (1315/2)
(13202/76) (1315/2)
(2009144762)

20' TEMPORARY
WORK SPACE EASEMENT
MAGELLAN PIPELINE
COMPANY, LP
(994/3922) (1305/143)
(994/3922) (1305/141)
(1294/732) (1315/1837)
(1294/776) (1315/2)
(13202/76) (1315/2)
(2009144762)

FORIVER, LP
TRACT 1
55.842 ACRES
(2017095700)

PATRICIA CHRISTAL SIMPSON
8.971 ACRES
(6413/807)

PATRICIA CHRISTAL SIMPSON
2.024 ACRES
(6413/807)

BM #1

SCALE: 1" = 80'
GRAPHIC SCALE IN FEET
0 40' 80' 160'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED WATER LINE
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.
* CONTRACTOR TO PLACE GATE VALVES, FIRE HYDRANTS, ARV'S AWAY FROM CURBS, VALLEY GUTTERS AND SIDEWALK RAMPS

TYPICAL 50' R.O.W. ROADWAY SECTION
N.T.S.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

OVERALL WATER PLAN
(2 OF 2)

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

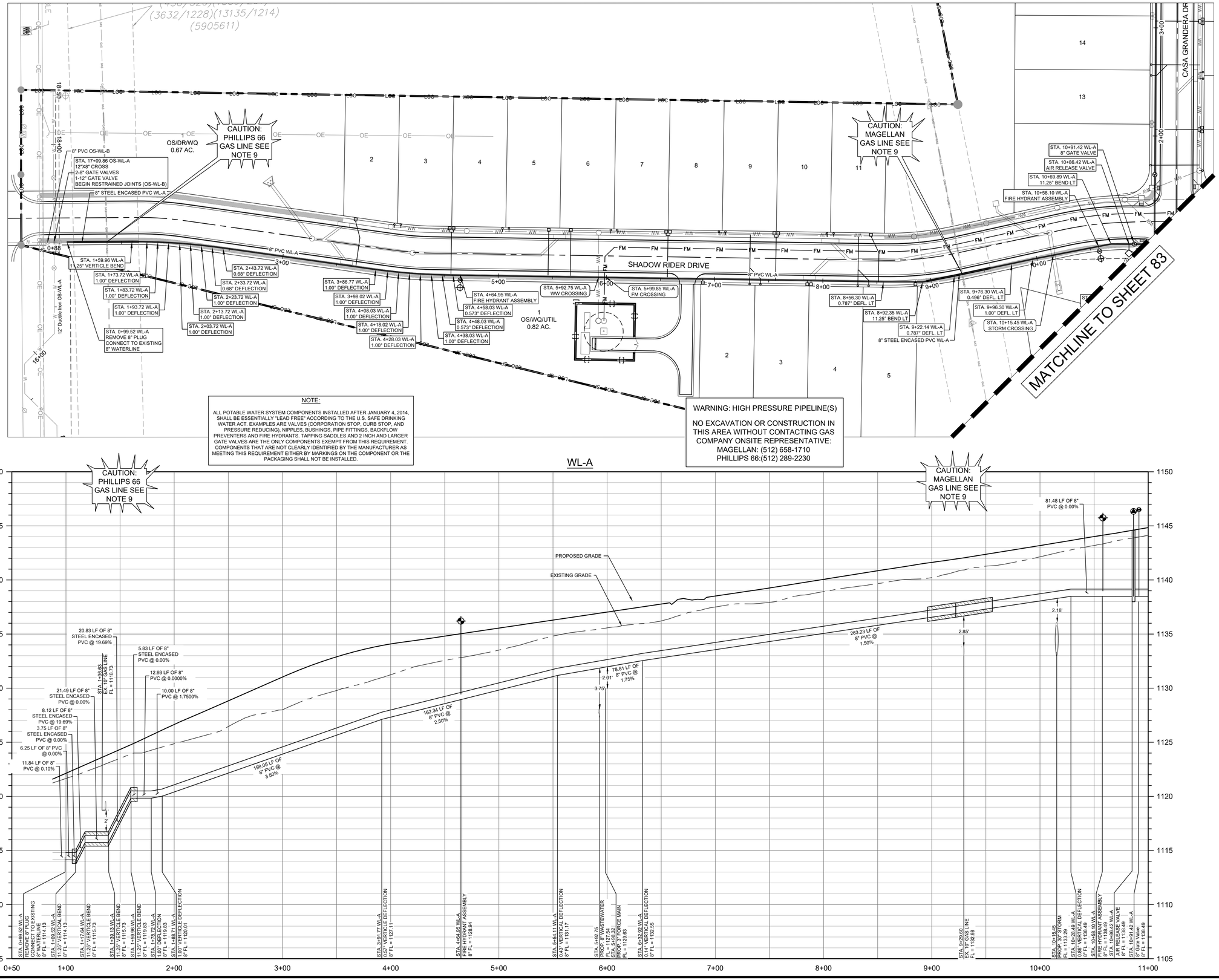
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 81 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-WATR-O.DWG DATE: 1/29/2026 4:29:02 PM BY: BGILMORE



NOTE:

ALL POTABLE WATER SYSTEM COMPONENTS INSTALLED AFTER JANUARY 4, 2014, SHALL BE ESSENTIALLY "LEAD FREE" ACCORDING TO THE U.S. SAFE DRINKING WATER ACT. EXAMPLES ARE VALVES (CORPORATION STOP, CURB STOP, AND PRESSURE REDUCING), NIPPLES, BUSHINGS, PIPE FITTINGS, BACKFLOW PREVENTERS AND FIRE HYDRANTS. TAPPING SADDLES AND 2 INCH AND LARGER GATE VALVES ARE THE ONLY COMPONENTS EXEMPT FROM THIS REQUIREMENT. COMPONENTS THAT ARE NOT CLEARLY IDENTIFIED BY THE MANUFACTURER AS MEETING THIS REQUIREMENT EITHER BY MARKINGS ON THE COMPONENT OR THE PACKAGING SHALL NOT BE INSTALLED.

SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED WATER LINE
- PROPOSED WASTEWATER LINE
- PROPOSED FORCEMAIN
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

SCALE: 1" = 40'
VERT: 1" = 4'

PROFILE LEGEND

- FINISHED GRADE
- SUBGRADE
- EXISTING GRADE
- PROPOSED WATER LINE
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

NOTES:

SEE SHEET 126 - WATER DETAILS & NOTES

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

WL-A (STA 1+00 TO 11+00)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

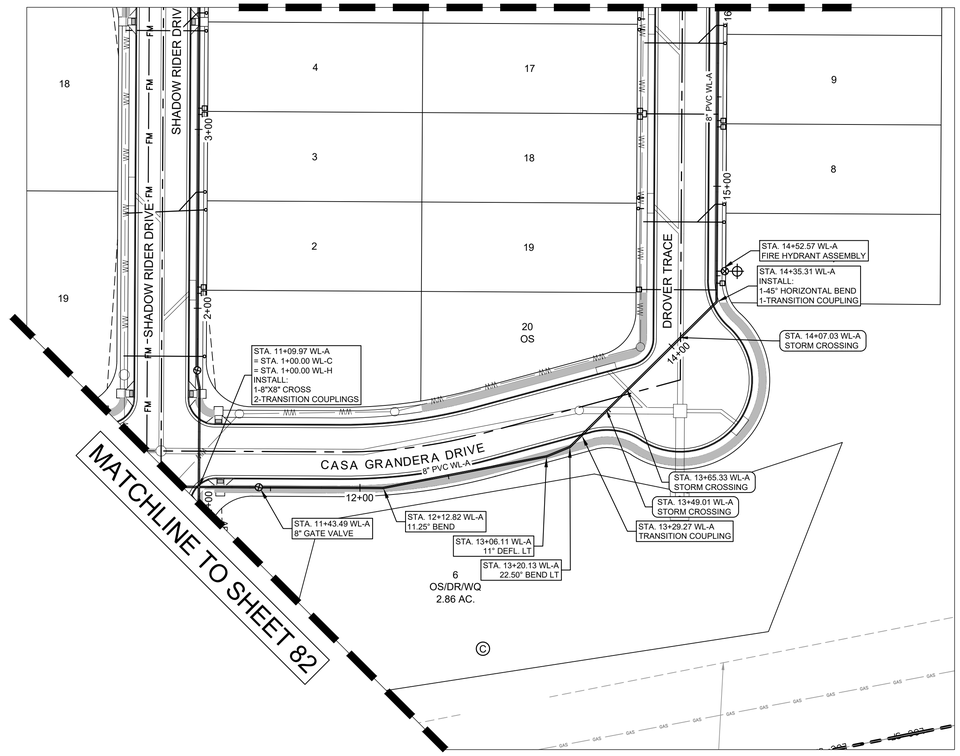
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

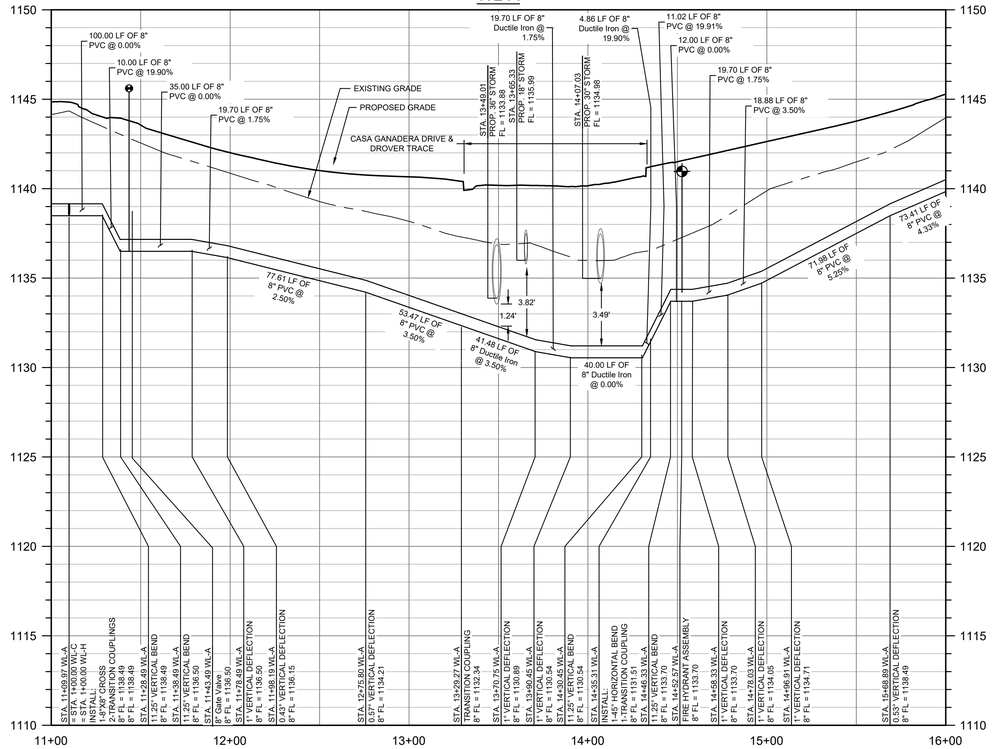
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

SHEET 82 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-WATR.DWG DATE: 1/29/2026 4:30:08 PM BY: BGILMORE





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED WATER LINE
- WW PROPOSED WASTEWATER LINE
- FM FM PROPOSED FORCEMAIN
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- [PLUG
- AIR RELEASE VALVE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

0 20' 40' 80'
SCALE: 1" = 40'
VERT: 1" = 4'

PROFILE LEGEND

- FINISHED GRADE
- SUBGRADE
- EXISTING GRADE
- PROPOSED WATER LINE
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- [PLUG
- AIR RELEASE VALVE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

NOTES:

SEE SHEET 126 - WATER DETAILS & NOTES

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

WL-A (STA 11+00 TO 16+00)

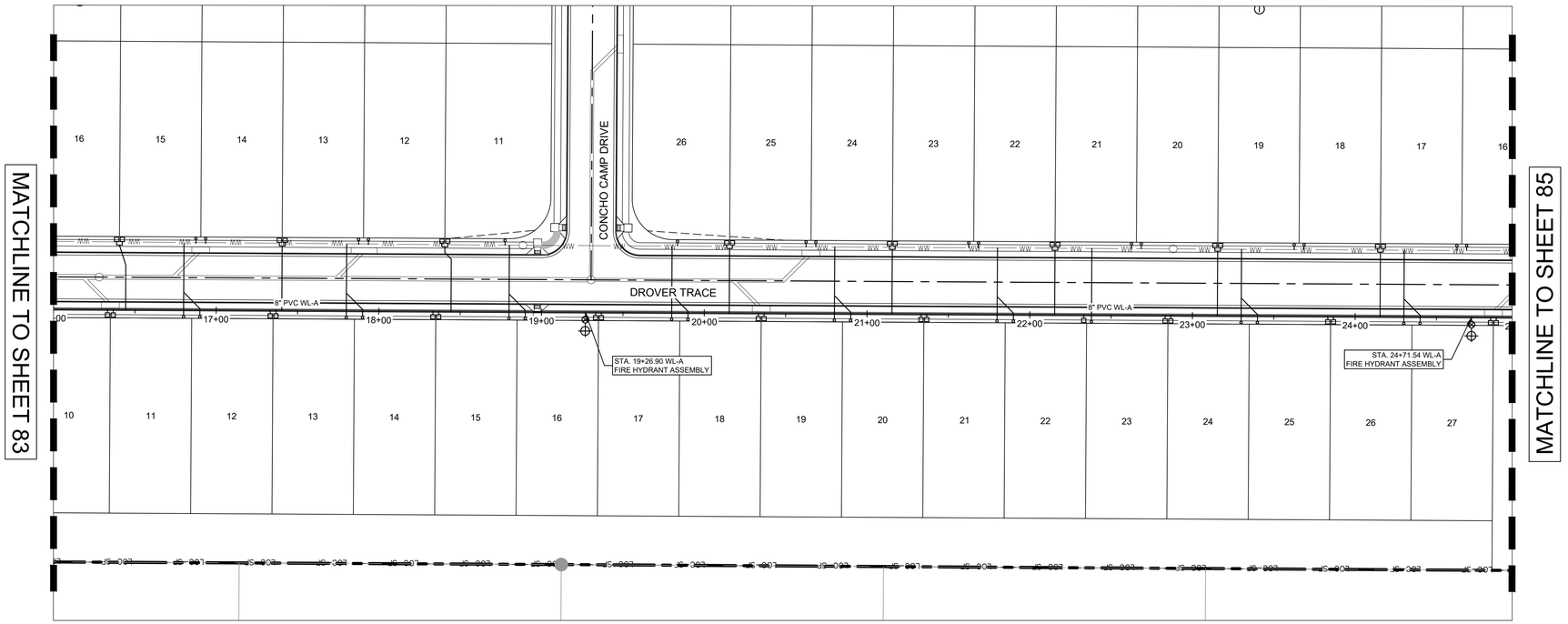
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

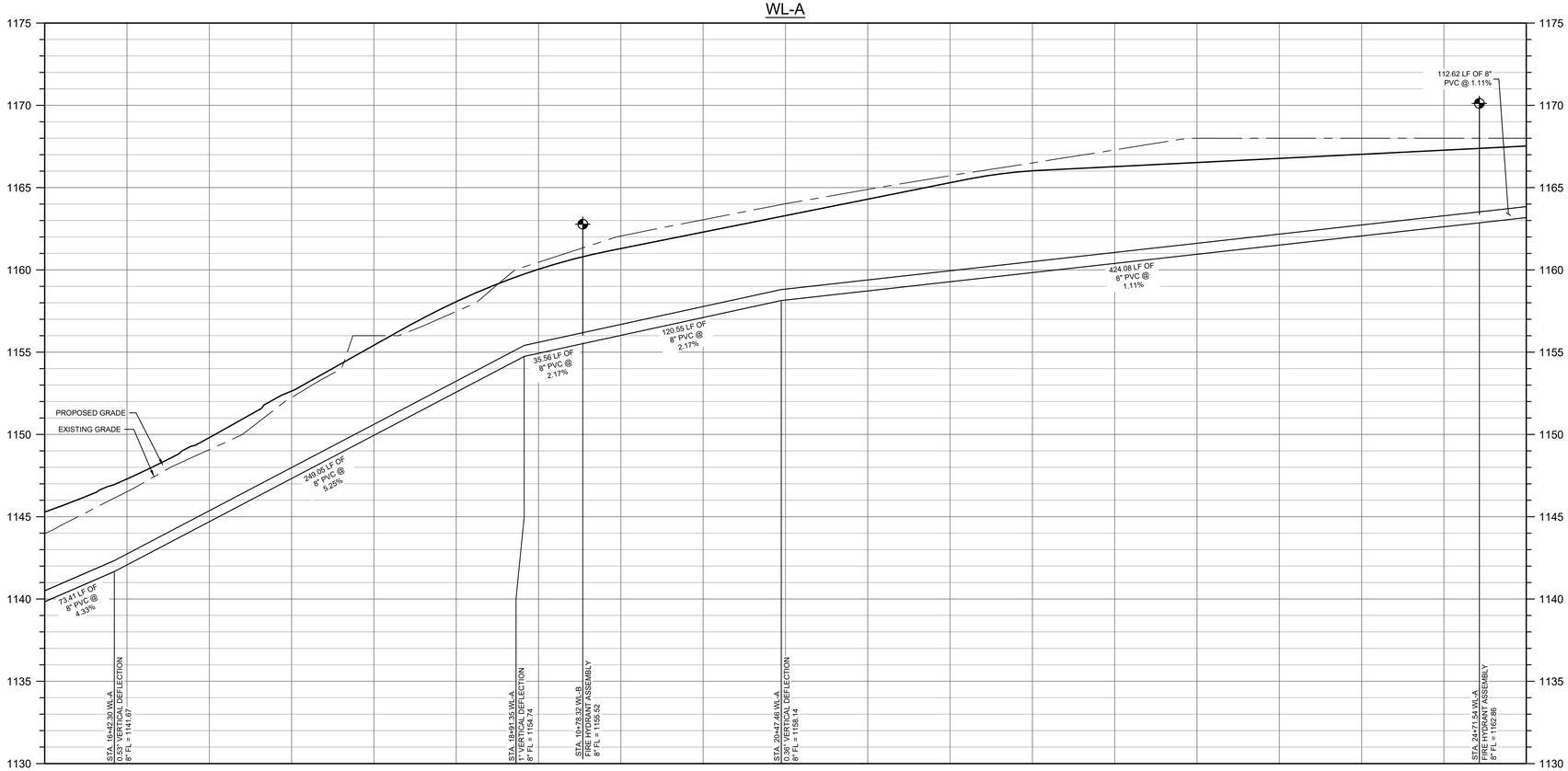
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 83 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-WATR.DWG DATE: 1/29/2026 4:30:31 PM BY: BGILMORE





H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-WATR.DWG DATE: 1/29/2026 4:30:47 PM BY: BGILMORE

SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED WATER LINE
- WW PROPOSED WASTEWATER LINE
- FM FM PROPOSED FORCEMAIN
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

0 20' 40' 80'
SCALE: 1" = 40'
VERT: 1" = 4'

PROFILE LEGEND

- FINISHED GRADE
- SUBGRADE
- EXISTING GRADE
- PROPOSED WATER LINE
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

NOTES:

SEE SHEET 126 - WATER DETAILS & NOTES

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

WL-A (STA 16+00 TO 25+00)

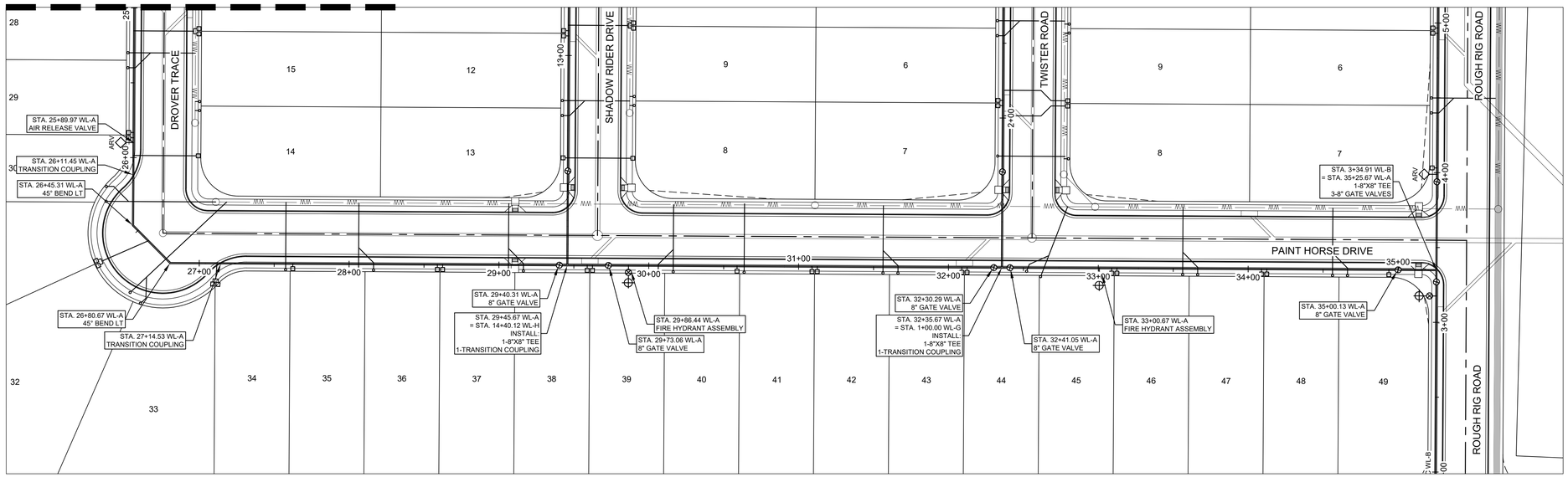
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

MATCHLINE TO SHEET 84



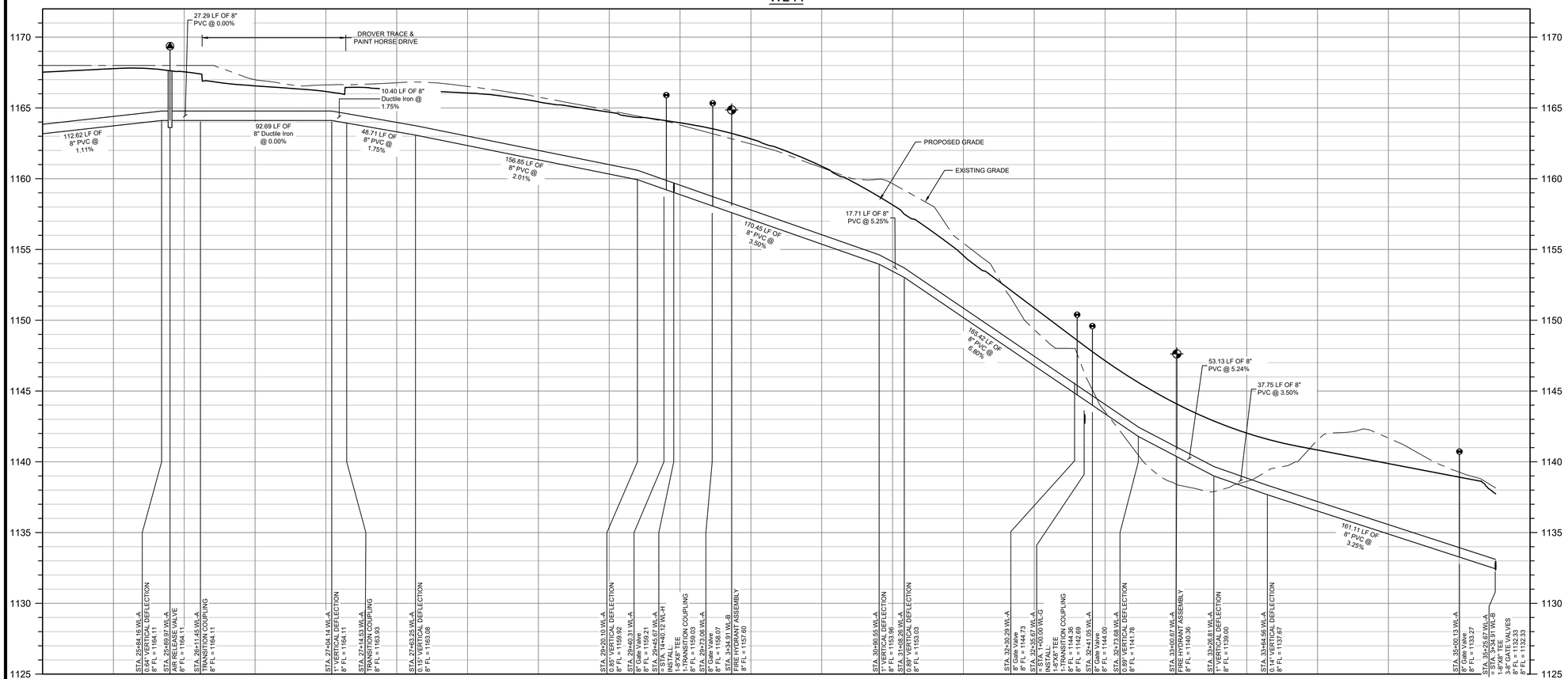
SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED WATER LINE
- PROPOSED WASTEWATER LINE
- PROPOSED FORCEMAIN
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

WL-A



0 20' 40' 80'
SCALE: 1" = 40'
VERT: 1" = 4'

PROFILE LEGEND

- FINISHED GRADE
- SUBGRADE
- EXISTING GRADE
- PROPOSED WATER LINE
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

NOTES:

SEE SHEET 126 - WATER DETAILS & NOTES

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

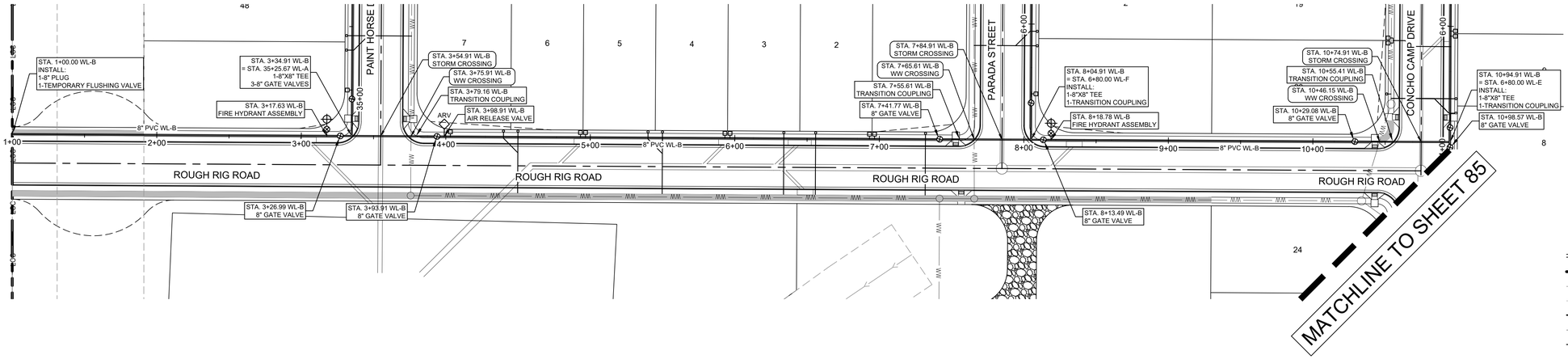
WL-A (STA 25+00 TO END)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-WATR.DWG DATE: 1/29/2026 4:31:04 PM BY: BGILMORE



SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED WATER LINE
- PROPOSED WASTEWATER LINE
- PROPOSED FORCEMAIN
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

0 20' 40' 80'
SCALE: 1" = 40'
VERT: 1" = 4'

PROFILE LEGEND

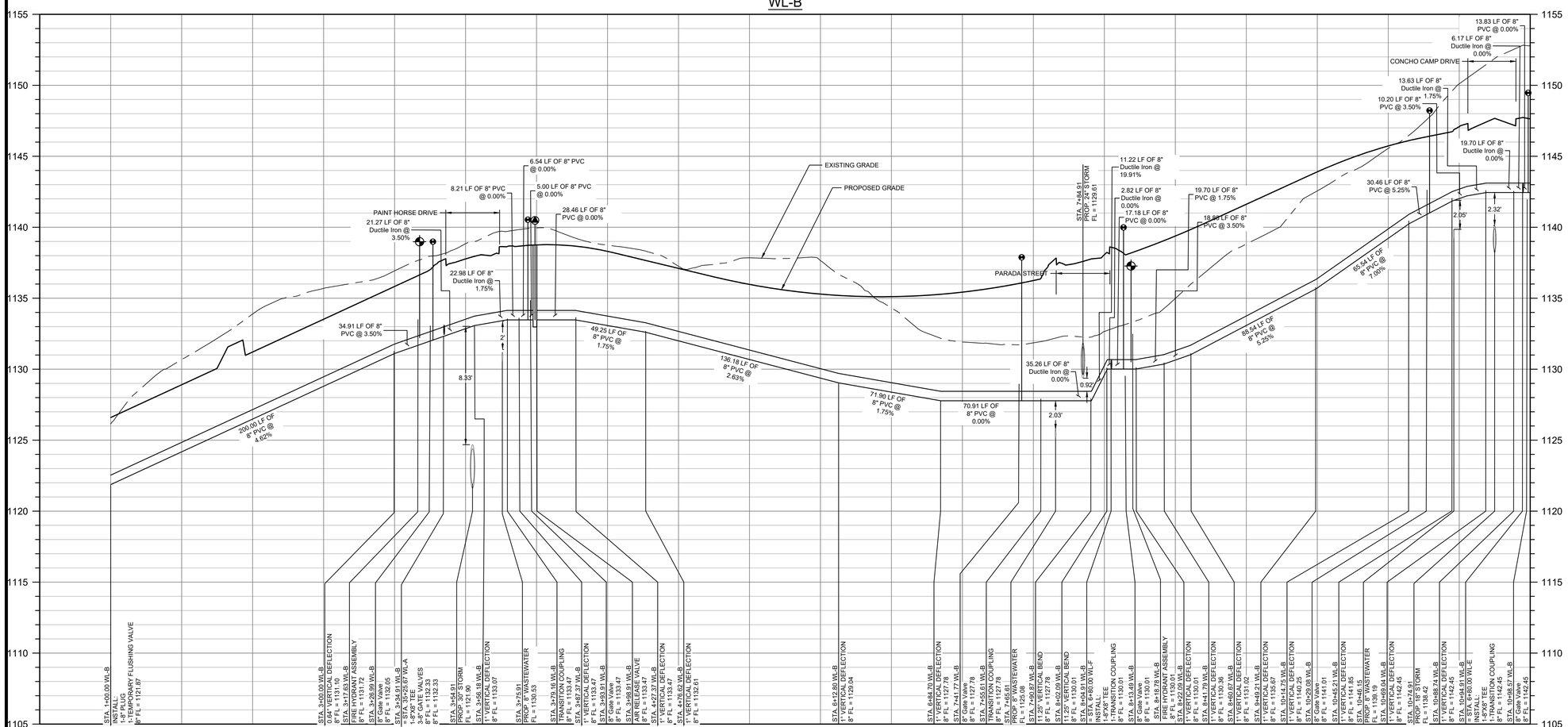
- FINISHED GRADE
- SUBGRADE
- EXISTING GRADE
- PROPOSED WATER LINE
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

NOTES:

SEE SHEET 126 - WATER DETAILS & NOTES

WL-B



H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-WATR.DWG DATE: 1/29/2026 4:31:30 PM BY BGILMORE

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

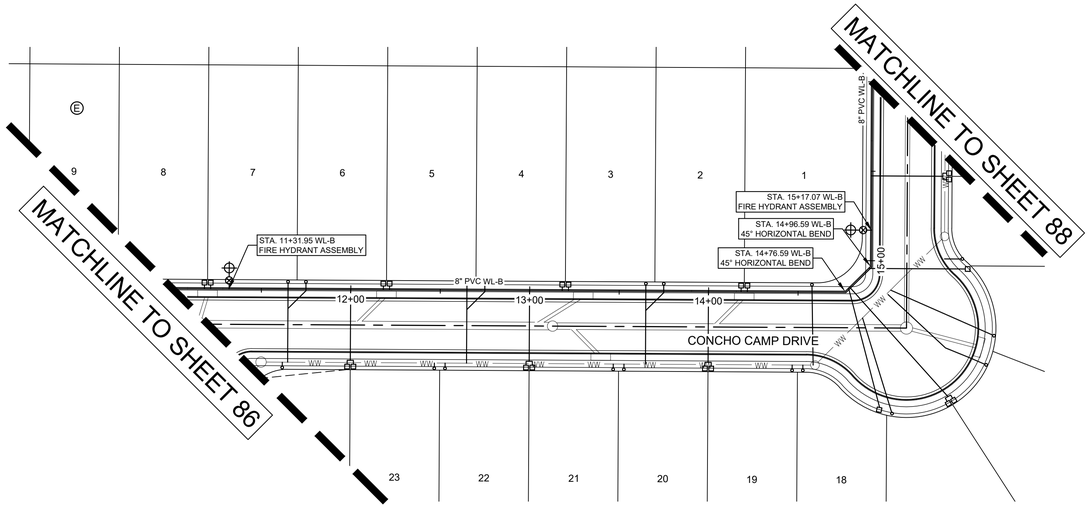
ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

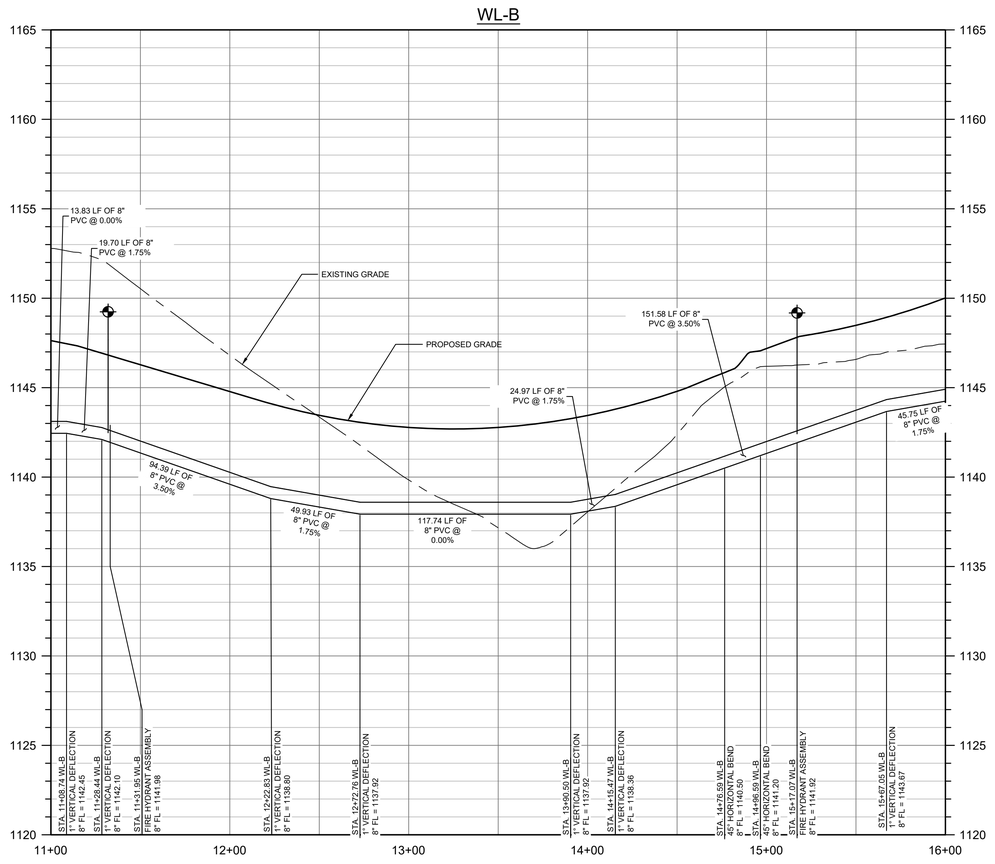
WL-B (STA 1+00 TO 11+00)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED WATER LINE
- WW PROPOSED WASTEWATER LINE
- FM FM PROPOSED FORCEMAIN
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

0 20' 40' 80'
SCALE: 1" = 40'
VERT: 1" = 4'

PROFILE LEGEND

- FINISHED GRADE
- SUBGRADE
- EXISTING GRADE
- PROPOSED WATER LINE
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

NOTES:

SEE SHEET 126 - WATER DETAILS & NOTES

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

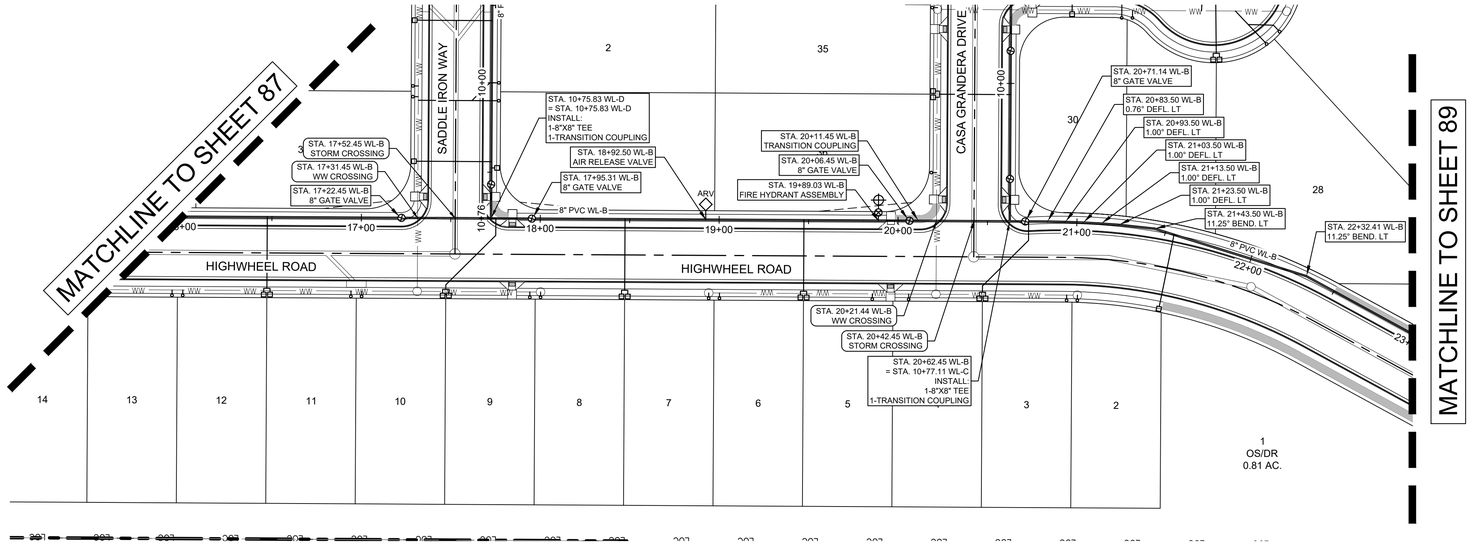
WL-B (11+00 TO 16+00)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-WATR.DWG DATE: 1/29/2026 4:31:56 PM BY: BGILMORE



SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED WATER LINE
- WW — PROPOSED WASTEWATER LINE
- FM — FM — PROPOSED FORCEMAIN
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- [PLUG
- AIR RELEASE VALVE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

0 20' 40' 80'
SCALE: 1" = 40'
VERT: 1" = 4'

PROFILE LEGEND

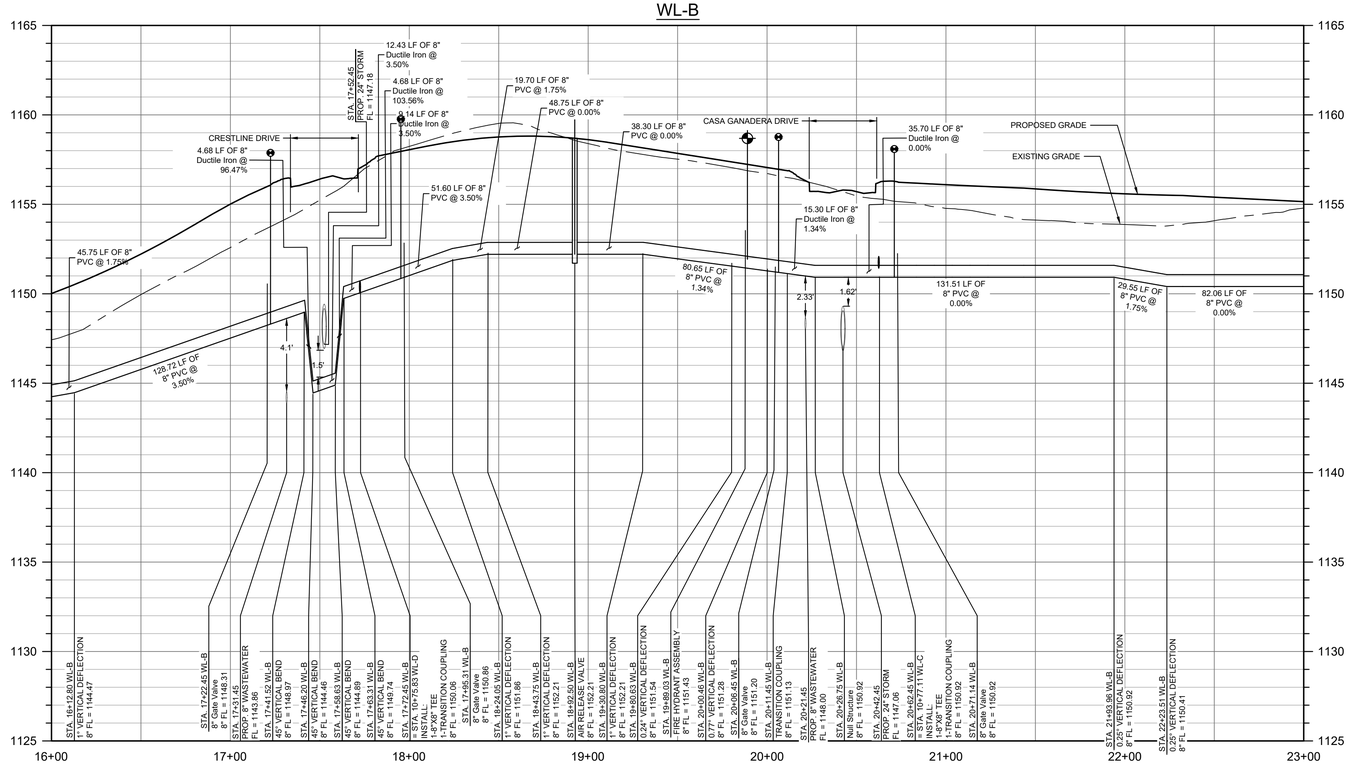
- FINISHED GRADE
- SUBGRADE
- EXISTING GRADE
- PROPOSED WATER LINE
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- [PLUG
- AIR RELEASE VALVE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

NOTES:

SEE SHEET 126 - WATER DETAILS & NOTES

WL-B



8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

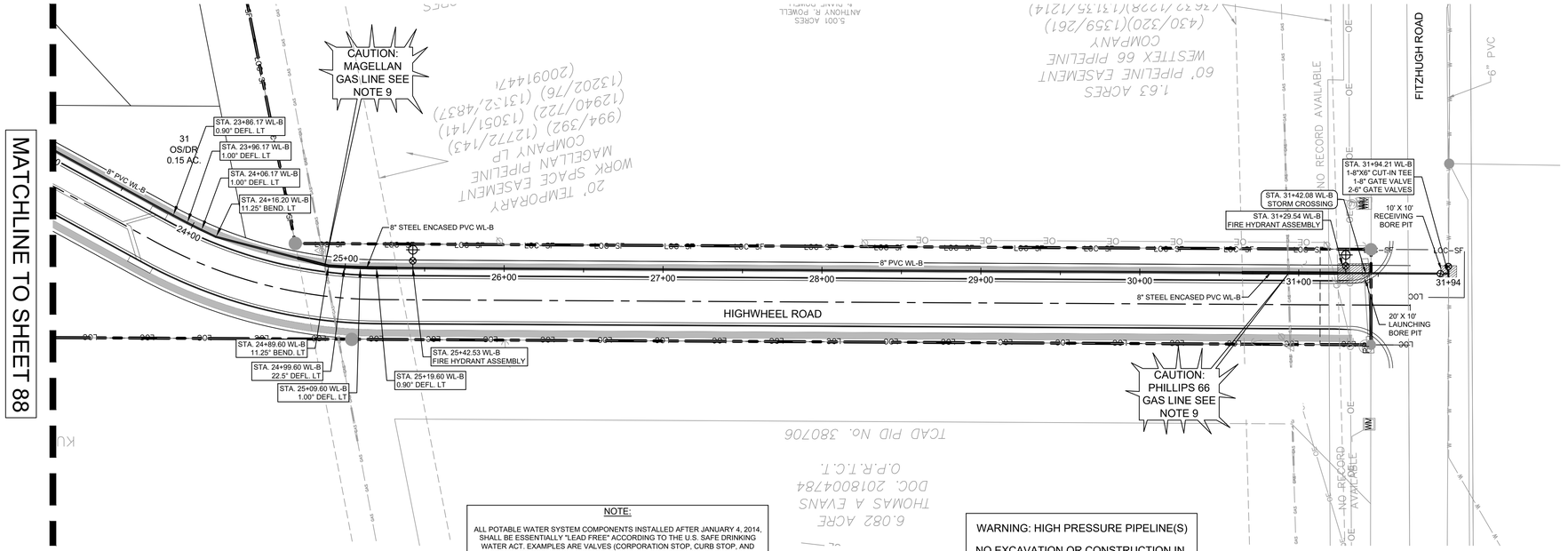
WL-B (16+00 TO 23+00)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-WATR.DWG DATE: 1/29/2026 4:33:20 PM BY: BGILMORE

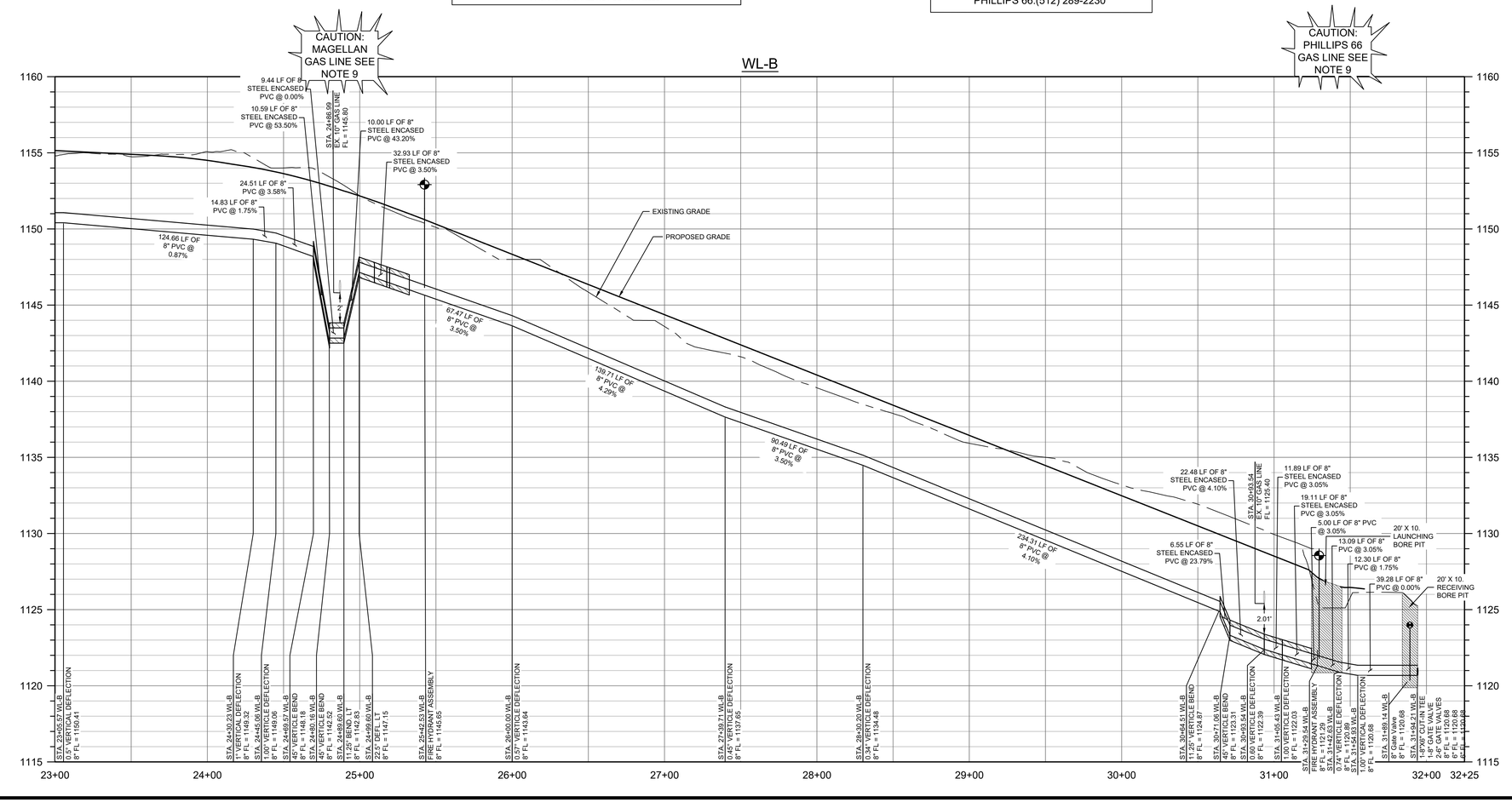


NOTE:

ALL POTABLE WATER SYSTEM COMPONENTS INSTALLED AFTER JANUARY 4, 2014, SHALL BE ESSENTIALLY "LEAD FREE" ACCORDING TO THE U.S. SAFE DRINKING WATER ACT. EXAMPLES ARE VALVES (CORPORATION STOP, CURB STOP, AND PRESSURE REDUCING), NIPPLES, BUSHINGS, PIPE FITTINGS, BACKFLOW PREVENTERS AND FIRE HYDRANTS. TAPPING SADDLES AND 2 INCH AND LARGER GATE VALVES ARE THE ONLY COMPONENTS EXEMPT FROM THIS REQUIREMENT. COMPONENTS THAT ARE NOT CLEARLY IDENTIFIED BY THE MANUFACTURER AS MEETING THIS REQUIREMENT EITHER BY MARKINGS ON THE COMPONENT OR THE PACKAGING SHALL NOT BE INSTALLED.

WARNING: HIGH PRESSURE PIPELINE(S)

NO EXCAVATION OR CONSTRUCTION IN THIS AREA WITHOUT CONTACTING GAS COMPANY ONSITE REPRESENTATIVE:
MAGELLAN: (512) 658-1710
PHILLIPS 66:(512) 289-2230



SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED WATER LINE
- WW PROPOSED WASTEWATER LINE
- FM FM PROPOSED FORCEMAIN
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- [PLUG
- AIR RELEASE VALVE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

0 20' 40' 80'
SCALE: 1" = 40'
VERT: 1" = 4'

PROFILE LEGEND

- FINISHED GRADE
- SUBGRADE
- EXISTING GRADE
- PROPOSED WATER LINE
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- [PLUG
- AIR RELEASE VALVE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

NOTES:

SEE SHEET 126 - WATER DETAILS & NOTES

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

WL-B (23+00 TO END)

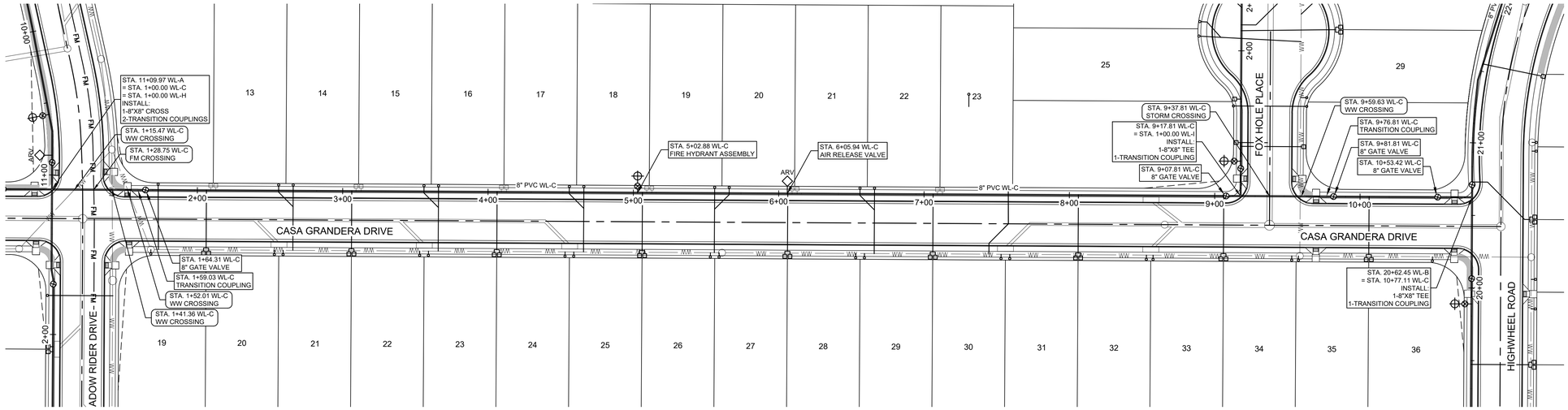
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

SHEET 89 OF 126

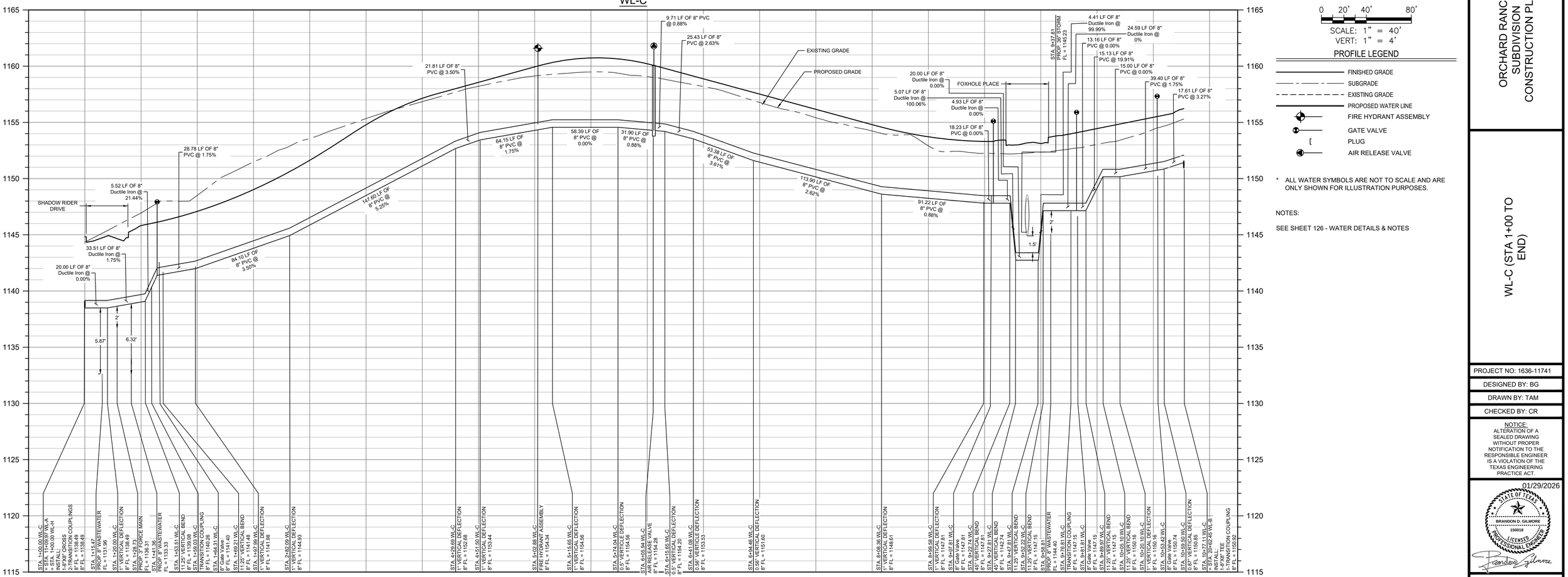
H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-WATR.DWG DATE: 1/29/2026 4:32:43 PM BY: BGILMORE



LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED WATER LINE
- PROPOSED WASTEWATER LINE
- PROPOSED FORCEMAIN
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.



SCALE: 1" = 40'
VERT: 1" = 4'

PROFILE LEGEND

- FINISHED GRADE
- SUBGRADE
- EXISTING GRADE
- PROPOSED WATER LINE
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

NOTES:

SEE SHEET 126 - WATER DETAILS & NOTES

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

WL-C (STA 1+00 TO END)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

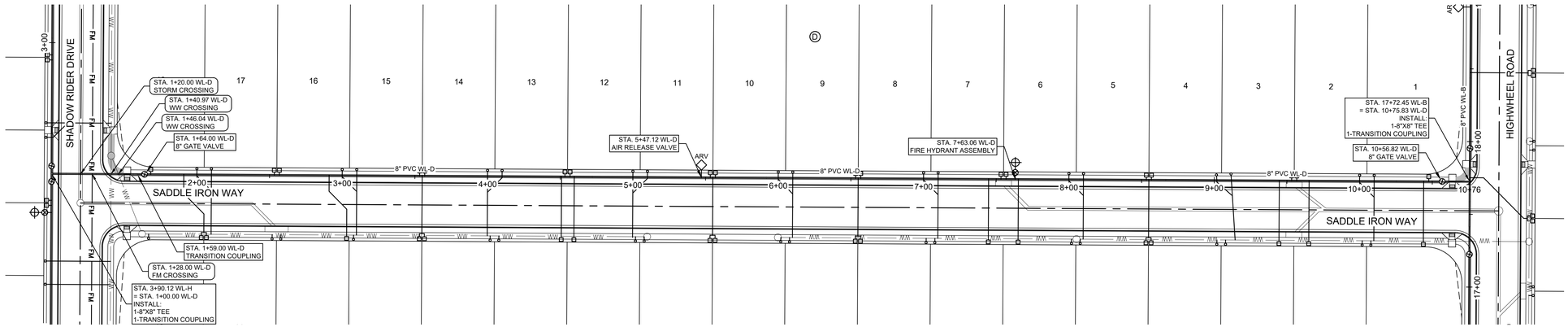
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 90 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-WATR.DWG DATE: 1/29/2026 4:33:06 PM BY: BGILMORE



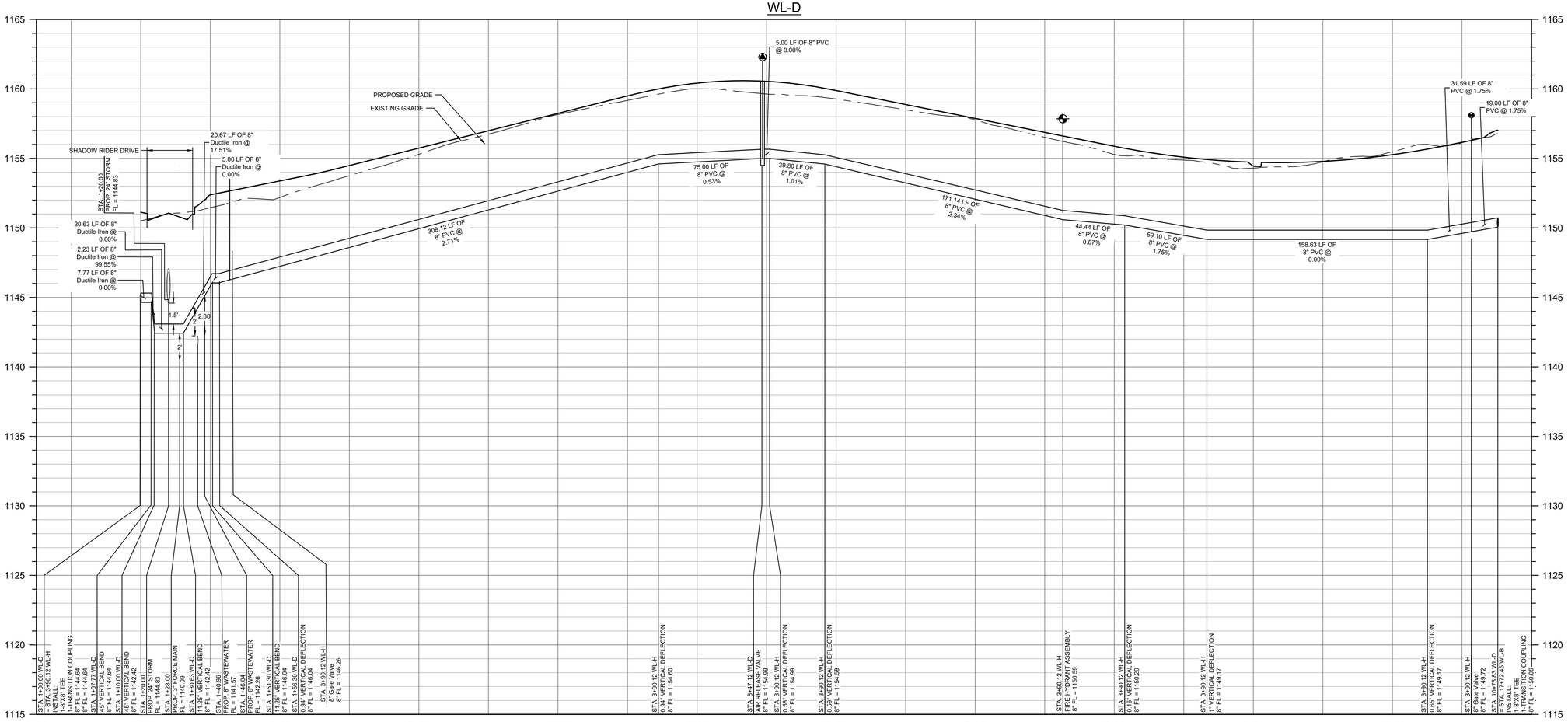
SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED WATER LINE
- PROPOSED WASTEWATER LINE
- PROPOSED FORCEMAIN
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

WL-D



SCALE: 1" = 40'
VERT: 1" = 4'

PROFILE LEGEND

- FINISHED GRADE
- SUBGRADE
- EXISTING GRADE
- PROPOSED WATER LINE
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

NOTES:

SEE SHEET 126 - WATER DETAILS & NOTES

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

WL-D (STA 1+00 TO END)

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

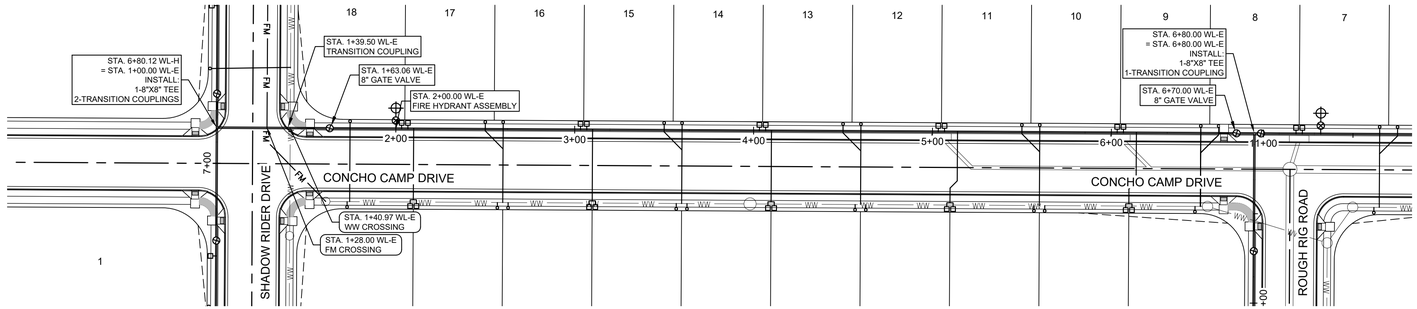
CHECKED BY: CR

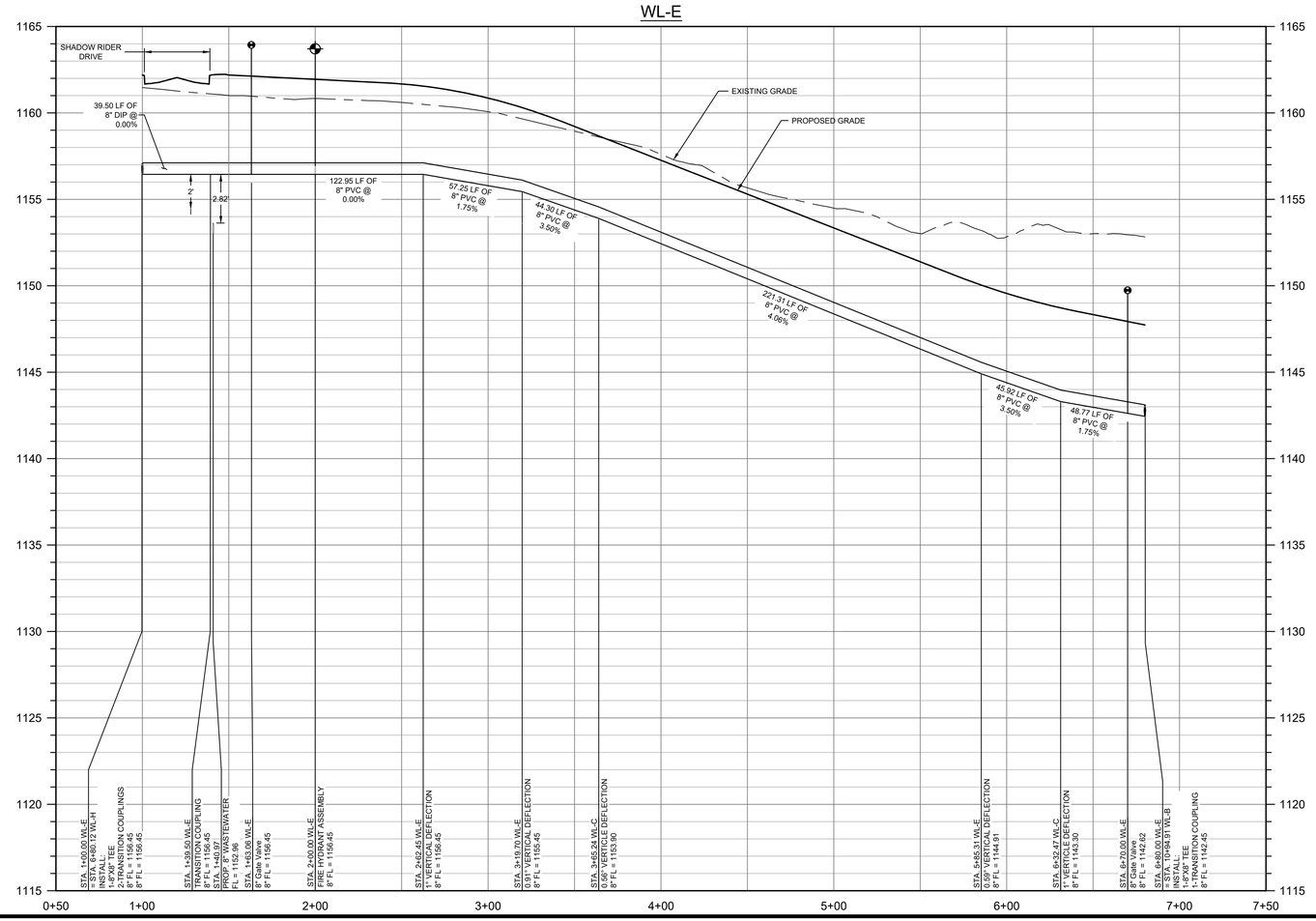
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

SHEET 91 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-WATR.DWG DATE: 1/29/2026 4:33:32 PM BY: BGILMORE





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED WATER LINE
- PROPOSED WASTEWATER LINE
- PROPOSED FORCEMAIN
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

0 20' 40' 80'
SCALE: 1" = 40'
VERT: 1" = 4'

PROFILE LEGEND

- FINISHED GRADE
- SUBGRADE
- EXISTING GRADE
- PROPOSED WATER LINE
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

NOTES:

SEE SHEET 126 - WATER DETAILS & NOTES

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

WL-E (STA 1+00 TO END)

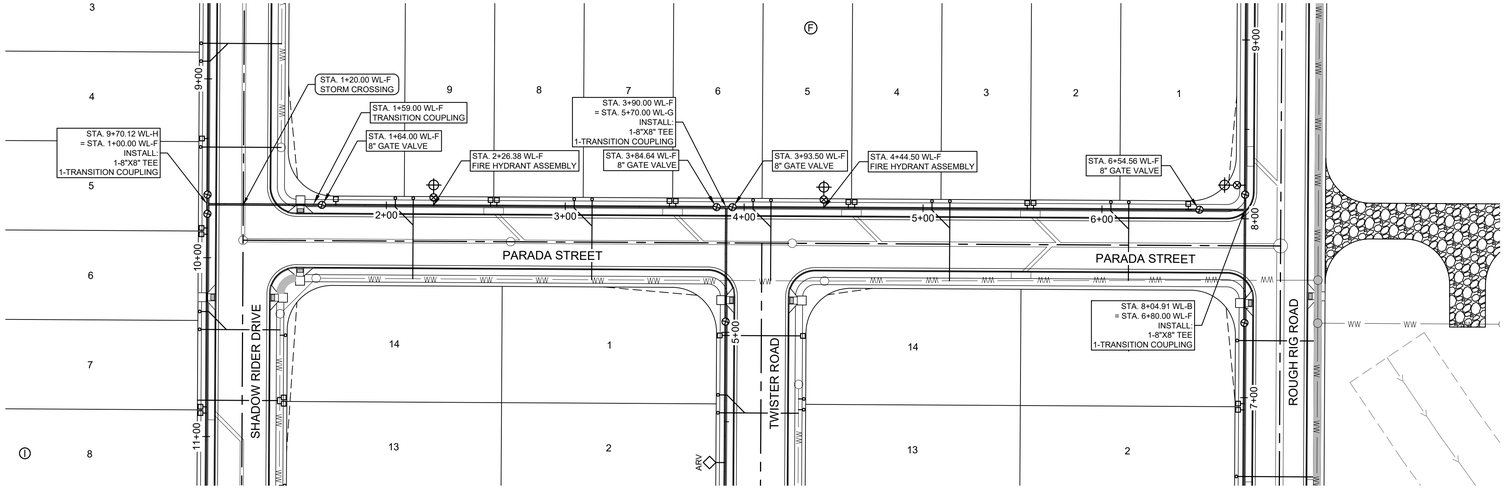
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

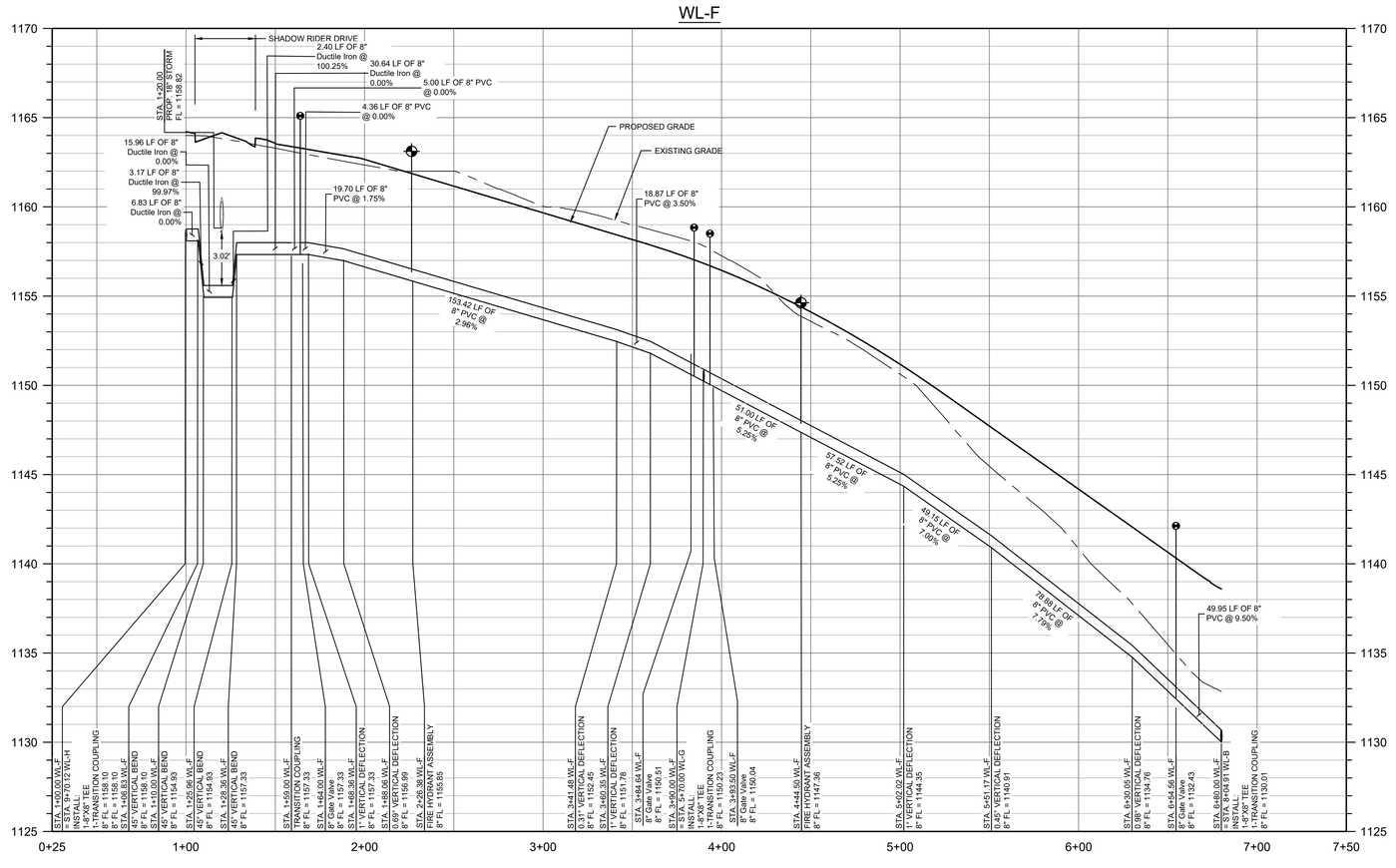
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

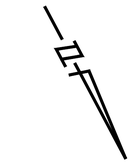
01/29/2026
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 92 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-WATR.DWG DATE: 1/29/2026 4:33:59 PM BY: BGILMORE







SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED WATER LINE
- WW PROPOSED WASTEWATER LINE
- FM FM PROPOSED FORCEMAIN
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

0 20' 40' 80'
SCALE: 1" = 40'
VERT: 1" = 4'

PROFILE LEGEND

- FINISHED GRADE
- SUBGRADE
- EXISTING GRADE
- PROPOSED WATER LINE
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

NOTES:

SEE SHEET 126 - WATER DETAILS & NOTES

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

WL-F (STA 1+00 TO END)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

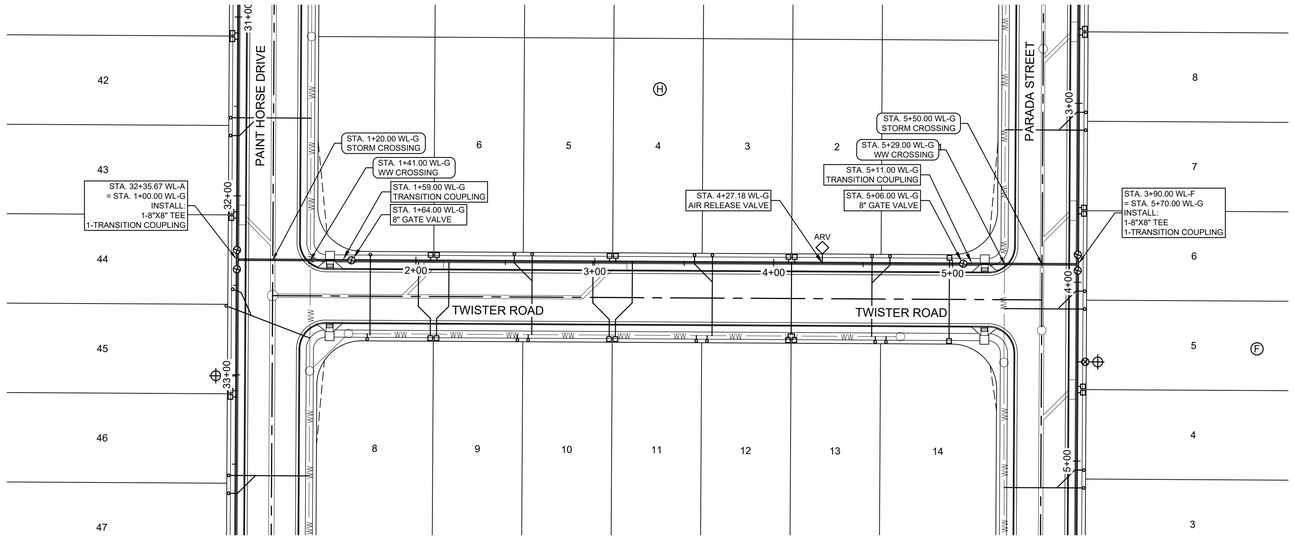
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

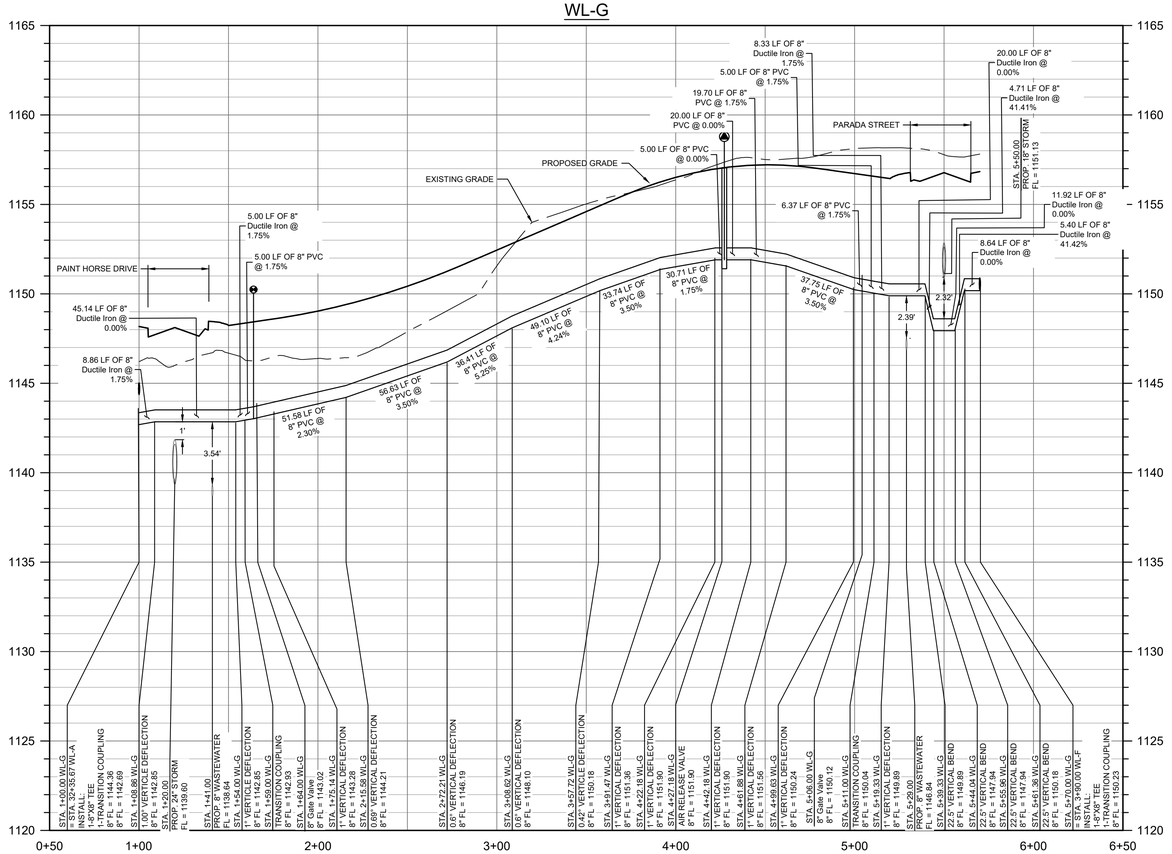
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 93 OF 126

H:\PROJECTS\1636 - BRONIN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-WATR.DWG DATE: 1/29/2026 4:34:28 PM BY: BGILMORE





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED WATER LINE
- WW PROPOSED WASTEWATER LINE
- FM FM PROPOSED FORCEMAIN
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- [PLUG
- AIR RELEASE VALVE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

0 20' 40' 80'
SCALE: 1" = 40'
VERT: 1" = 4'

PROFILE LEGEND

- FINISHED GRADE
- SUBGRADE
- EXISTING GRADE
- PROPOSED WATER LINE
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- [PLUG
- AIR RELEASE VALVE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

NOTES:

SEE SHEET 126 - WATER DETAILS & NOTES

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

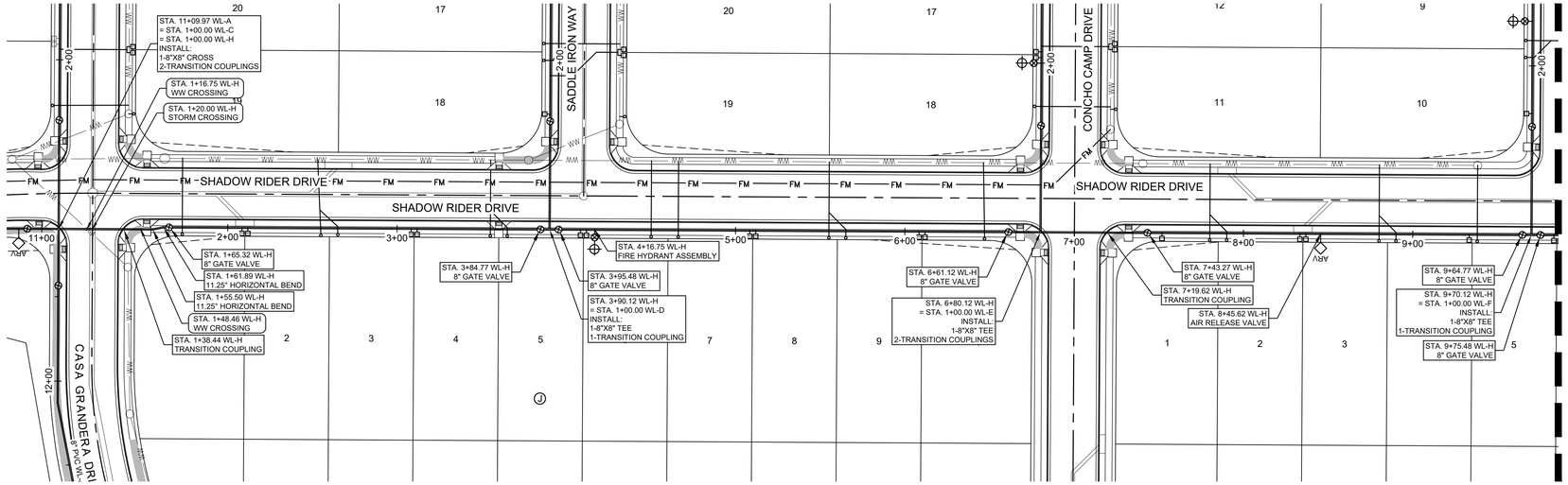
WL-G (STA 1+00 TO END)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

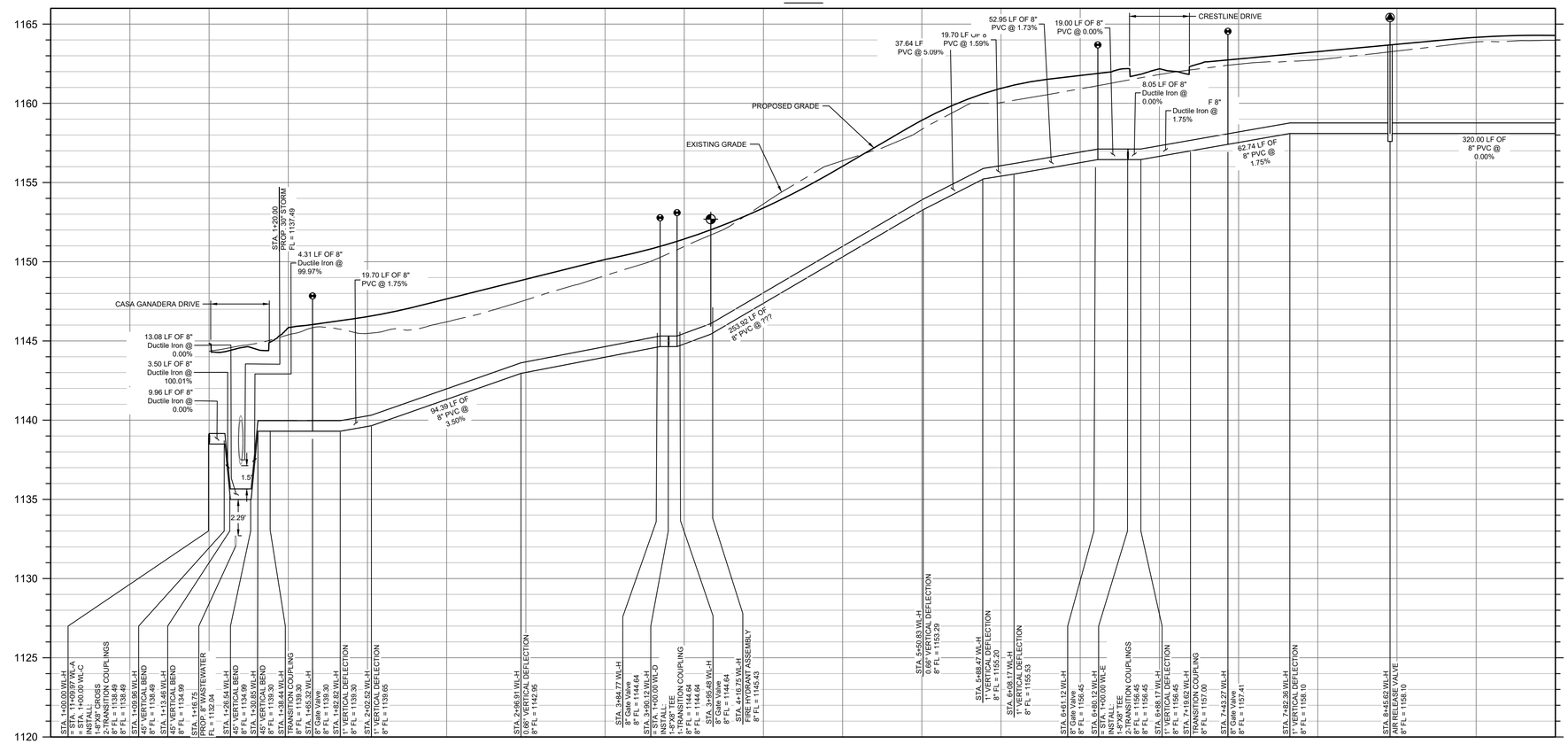
01/29/2026
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-WATR.DWG DATE: 1/29/2026 4:34:02 PM BY: BGILMORE



MATCHLINE TO SHEET 96

WL-H



SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED WATER LINE
- PROPOSED WASTEWATER LINE
- PROPOSED FORCEMAIN
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

0 20' 40' 80'
SCALE: 1" = 40'
VERT: 1" = 4'

PROFILE LEGEND

- FINISHED GRADE
- SUBGRADE
- EXISTING GRADE
- PROPOSED WATER LINE
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

NOTES:

SEE SHEET 126 - WATER DETAILS & NOTES

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

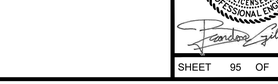
ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

WL-H (STA 1+00 TO 9+50)

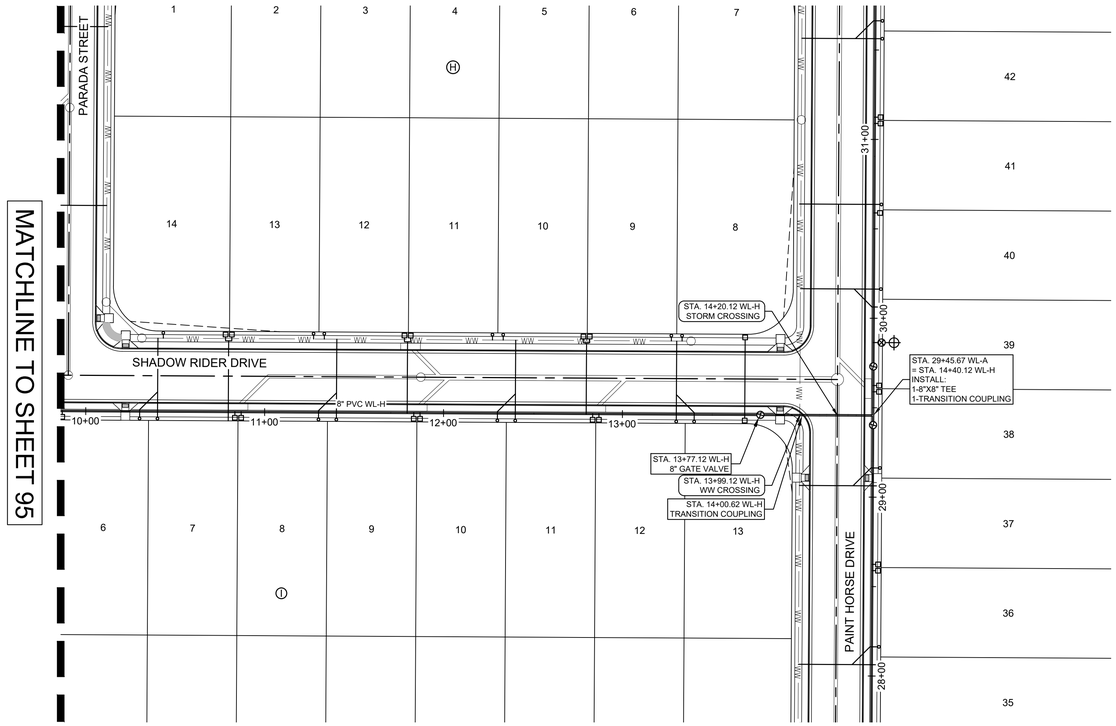
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

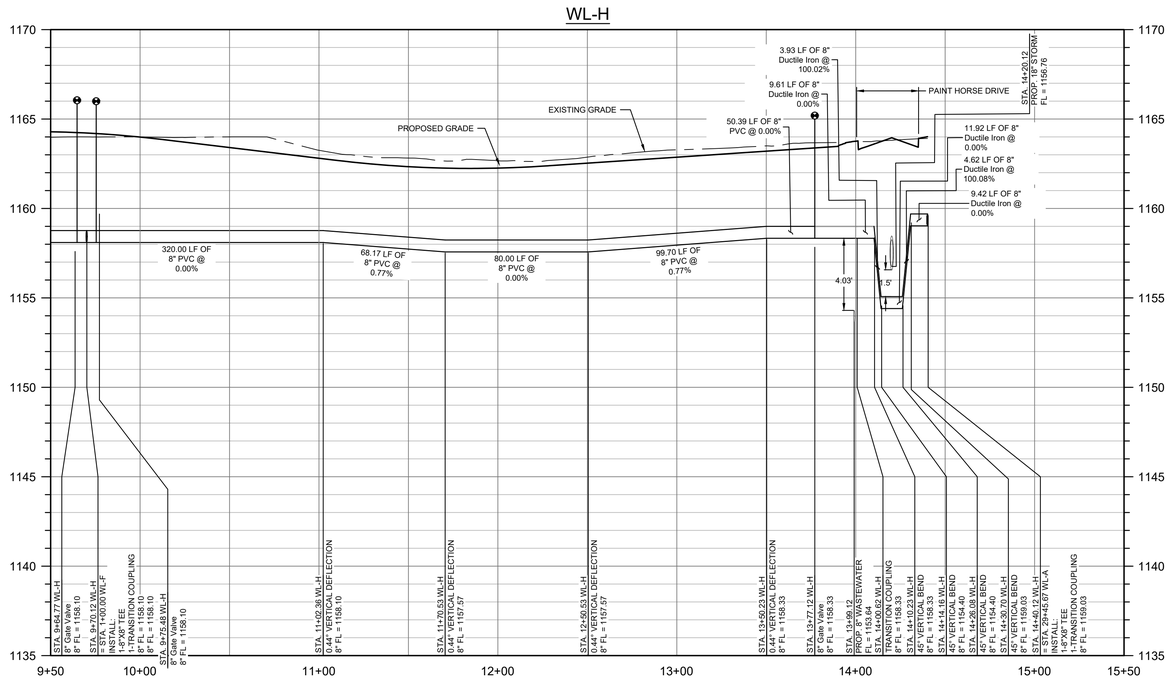
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026



H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-WATR.DWG DATE: 1/29/2026 4:35:44 PM BY: BGILMORE





8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED WATER LINE
- WW — PROPOSED WASTEWATER LINE
- FM — FM — PROPOSED FORCEMAIN
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

0 20' 40' 80'
SCALE: 1" = 40'
VERT: 1" = 4'

PROFILE LEGEND

- FINISHED GRADE
- SUBGRADE
- EXISTING GRADE
- PROPOSED WATER LINE
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

NOTES:

SEE SHEET 126 - WATER DETAILS & NOTES

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

WL-H (STA 9+50 TO END)

PROJECT NO: 1636-11741

DESIGNED BY: BG

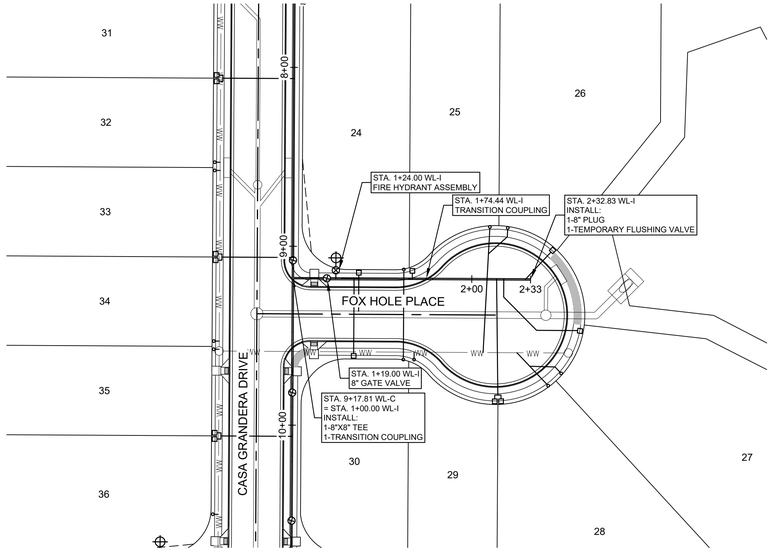
DRAWN BY: TAM

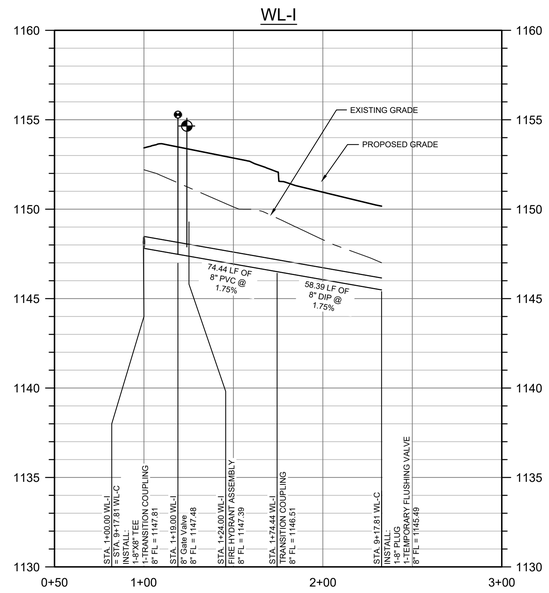
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-WATR.DWG DATE: 1/29/2026 4:36:27 PM BY: BGILMORE





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED WATER LINE
- PROPOSED WASTEWATER LINE
- PROPOSED FORCEMAIN
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

0 20' 40' 80'
SCALE: 1" = 40'
VERT: 1" = 4'

PROFILE LEGEND

- FINISHED GRADE
- SUBGRADE
- EXISTING GRADE
- PROPOSED WATER LINE
- FIRE HYDRANT ASSEMBLY
- GATE VALVE
- PLUG
- AIR RELEASE VALVE

* ALL WATER SYMBOLS ARE NOT TO SCALE AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES.

NOTES:

SEE SHEET 126 - WATER DETAILS & NOTES

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

WL-I (STA 1+00 TO END)

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 97 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-WATR.DWG DATE: 1/29/2026 4:36:53 PM BY: BGILMORE

MATCHLINE TO SHEET 99

SADDLE IRON WAY

CASA GRANDERA DRIVE

HIGHWHEEL ROAD

FOX HOLE PLACE

DROVER TRACE

SHADOW RIDER DRIVE

8" PVC WWTR A 3

STA. 4+11.41 WWTR A 3-1
4' DIA MANHOLE - WWTR A-3-1

STA. 6+16.82 WWTR A 3-1
4' DIA MANHOLE - WWTR A-3-2

8" PVC WWTR A 3-1

STA. 7+53.89 WWTR A 3
= STA. 1+00.00 WWTR A 3-1
4' DIA MANHOLE - WWTR A-3-4

STA. ??? ???
4' DIA MANHOLE - WWTR A-3-5

STA. ??? ???
4' DIA MANHOLE - WWTR C1-5
FL = 1151.42
TC = 1158.69

STA. 4+95.74 WWTR A
= STA. 1+00.00 WWTR C 5
4' DIA MANHOLE - WWTR C1-4

8" PVC WWTR C 5

STA. 1+79.05 WWTR C 5
4' DIA MANHOLE - WWTR C5-1

8" PVC WWTR C 4

STA. 2+95.23 WWTR C 4
4' DIA MANHOLE - WWTR C4-1

STA. 9+64.44 WWTR C 1
= STA. 1+00.00 WWTR C 4
4' DIA MANHOLE - WWTR C1-3

8" PVC WWTR C 1

STA. 5+66.88 WWTR C 1
4' DIA MANHOLE - WWTR C1-2

STA. 1+73.88 WWTR C 1
4' DIA MANHOLE - WWTR C1-1

STA. 5+05.30 WWTR C 3
4' DIA MANHOLE - WWTR C3-2

8" PVC WWTR C 3

STA. 1+57.82 WWTR C 3
4' DIA MANHOLE - WWTR C3-1

STA. 9+75.78 WWTR C
= STA. 1+00.00 WWTR C 3
4' DIA MANHOLE - WWTR C7

8" PVC WWTR C 2

STA. 4+22.38 WWTR C 2
4' DIA MANHOLE - WWTR C2-5

STA. 2+80.39 WWTR C 2
4' DIA MANHOLE - WWTR C2-4

8" PVC WWTR C 2

STA. 1+93.50 WWTR C 2
4' DIA MANHOLE - WWTR C2-1

8" PVC WWTR C

STA. 8+09.76 3-INCH FM-A
FM CLEANOUT

STA. 7+60.90 WWTR C
5' DIA MANHOLE - WWTR C6

STA. 6+70.73 WWTR C
= STA. 1+00.00 WWTR C 1
= STA. 1+00.00 WWTR C 2
4' DIA MANHOLE - WWTR C5

STA. 6+07.94 WWTR C
4' DIA MANHOLE - WWTR C4

8" PVC WWTR C

STA. 5+40.78 WWTR C
4' DIA MANHOLE - WWTR C3

STA. 4+72.75 WWTR C
4' DIA MANHOLE - WWTR C2

3-INCH FM-A

STA. 1+71.69 3-INCH FM-A
45° BEND

STA. 1+61.69 3-INCH FM-A
45° BEND

LIFT STATION

STA. ??? 3-INCH FM-A
BEGIN 3-INCH FM-A

STA. 1+00.00 WWTR C
4' DIA MANHOLE - Structure - (199)

STA. 1+81.52 WWTR C
= STA. 1+00.00 WWTR C 6
4' DIA MANHOLE - WWTR C1

STA. 2+21.98 WWTR C 6
4' DIA MANHOLE - WWTR C6-1

8" PVC WWTR C 6

STA. 2+92.32 WWTR C 6
4' DIA MANHOLE - WWTR C6-2

1
OS/DR
0.81 AC.

31
OS/DR
0.15 AC.

32
OS/DR
2.51 AC.

6
OS/DR/WQ
2.86 AC.

1
OS/WQ/UTIL
0.82 AC.

20
OS

2.501 ACRES
60' PIPELINE EASEMENT
MAGELLAN PIPELINE COMPANY LP
(12772/143)
(994/392) (13051/141)
(12940/722) (13152/4837)
(13202/76) (14762)
(2009144762)

20' TEMPORARY
WORK SPACE EASEMENT
MAGELLAN PIPELINE COMPANY
(12772/143)
(994/392) (13051/141)
(12940/722) (13152/4837)
(13202/76) (14762)
(2009144762)

5.001 ACRES
ANTHONY R. POWELL
& DIANE POWELL
(1999105307)

5.09 ACRES
MICHEAL J. PARKER &
KARYN PONDER PARKER,
TRUSTEE OF THE PONDER
PARKER REVOCABLE TRUST
(2015113989)

7.00 ACRES
CRYSTAL VAZQUEZ TRUST
(1999108368)

6.739 ACRES
H. LYNN BROWN &
JAN H. BROWN
(2009159936)

(2019037427)

TCAD PID No. 380706

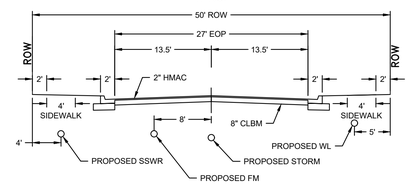
SCALE: 1" = 60'
GRAPHIC SCALE IN FEET
0 30' 60' 120'

LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- PROPOSED FORCE MAIN
- WATER LINE
- STORM SEWER LINE
- FM CLEANOUT
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.
* MINIMUM COVER OVER THE FORCE MAIN IS 5 FEET.

TYPICAL 50' R.O.W. ROADWAY SECTION
N.T.S.



FORCE MAIN CURVE TABLE

NUMBER	DELTA	TANGENT	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING
C1	13° 19' 10"	34.09	292.00	67.88	67.73	N22° 13' 57.26"E
C2	10° 37' 51"	28.81	309.70	57.46	57.38	N20° 53' 17.61"E

FORCE MAIN LINE TABLE

Line #	Length	Direction	Start Point	End Point
L1	59.52	N61° 06' 27.7856"W	(3046893.4703,10054932.0133)	(3046841.3566,10054960.7725)
L2	12.17	N16° 06' 27.7865"W	(3046841.3566,10054960.7725)	(3046837.9806,10054972.4631)
L3	249.38	N28° 53' 32.2144"E	(3046837.9806,10054972.4631)	(3046958.4724,10055190.8033)
L4	97.63	N15° 34' 22.3117"E	(3046984.0984,10055253.4959)	(3047010.3073,10055347.5377)
L5	567.60	N28° 19' 07.1710"E	(3047053.4414,10055445.8688)	(3047322.6966,10055945.5401)

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

OVERALL WASTEWATER
COLLECTION PLAN (1 OF 2)

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

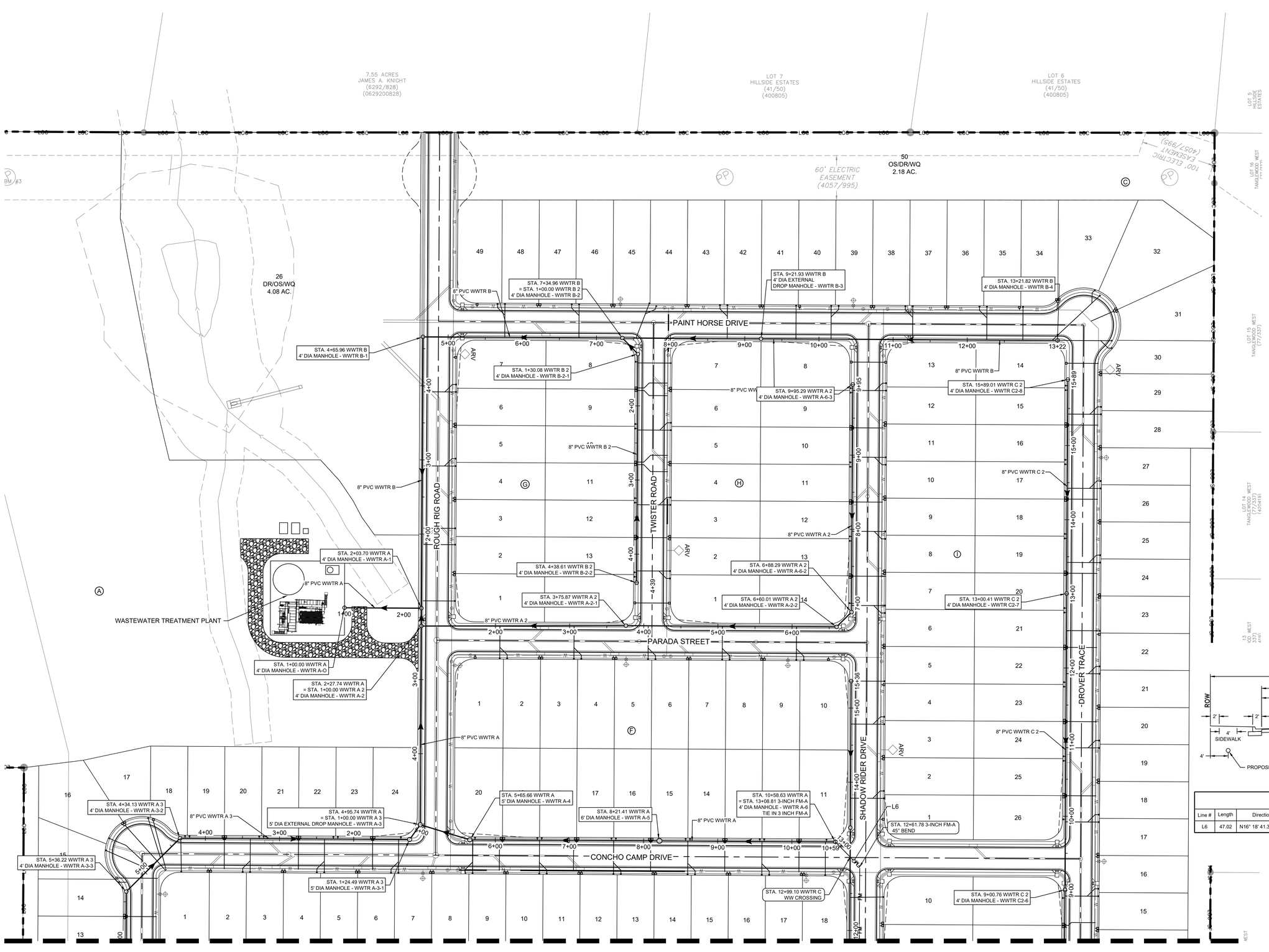
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

SHEET 98 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-SSWR-O.DWG DATE: 1/29/2026 4:38:38 PM BY: BGILMORE

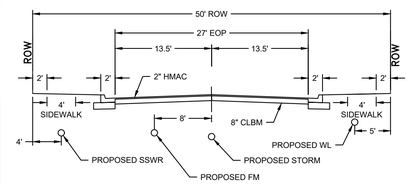


LEGEND

- PROPERTY BOUNDARY
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- PROPOSED FORCE MAIN
- WATER LINE
- STORM SEWER LINE
- FM CLEANOUT
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.
* MINIMUM COVER OVER THE FORCE MAIN IS 5 FEET.

TYPICAL 50' R.O.W. ROADWAY SECTION
N.T.S.



FORCE MAIN LINE TABLE

Line #	Length	Direction	Start Point	End Point
L6	47.02	N16° 18' 41.3074"W	(3047322.6966,10055945.5401)	(3047309.4896,10055990.6709)

MATCHLINE TO SHEET 98

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

OVERALL WASTEWATER COLLECTION PLAN (2 OF 2)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

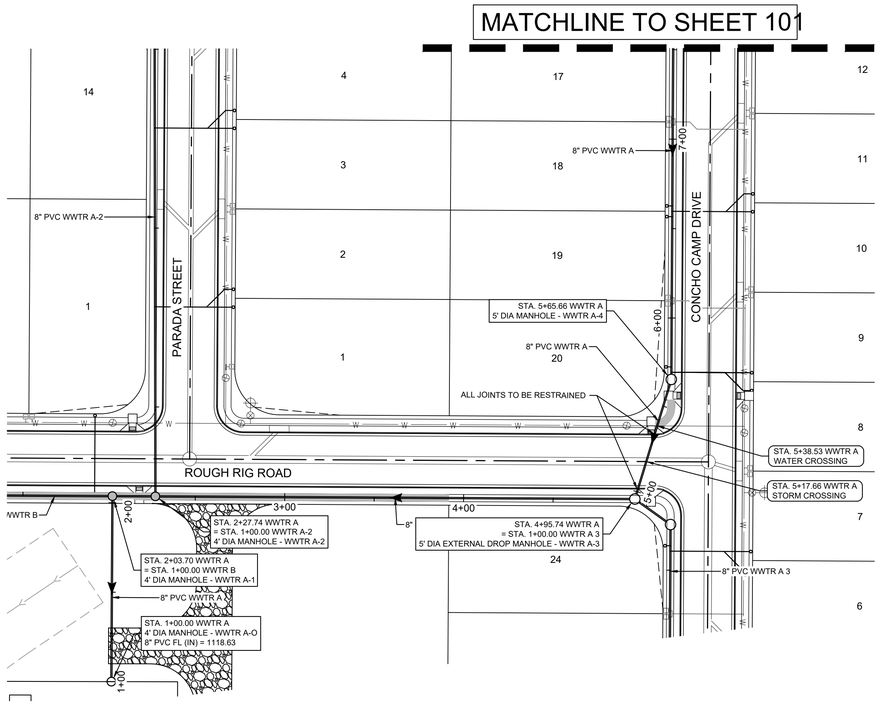
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

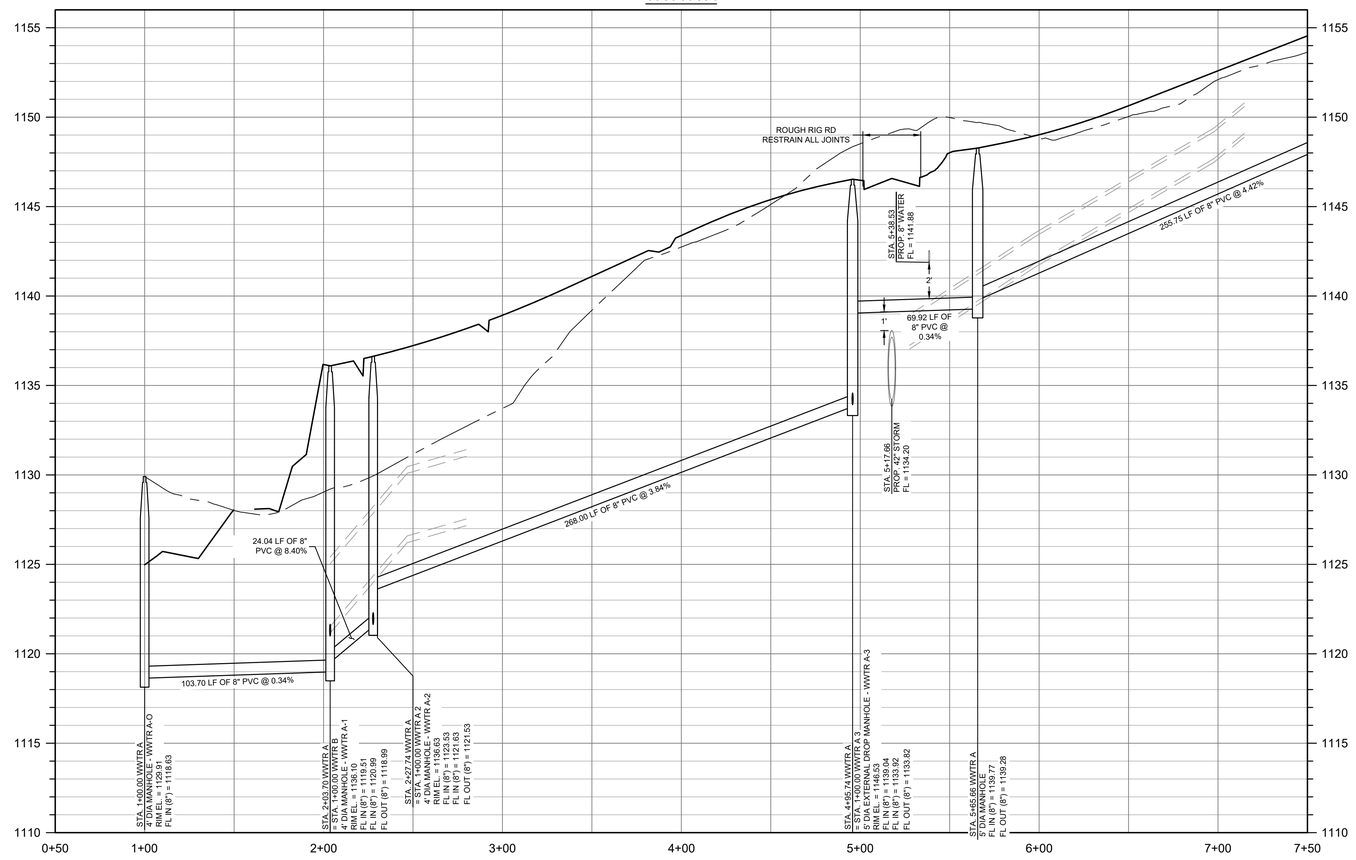
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 99 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-SSWR-O.DWG DATE: 1/29/2026 4:39:17 PM BY: BGILMORE





LEGEND

- PROPERTY BOUNDARY
- PHASE LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- FM — FM — PROPOSED FORCE MAIN
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.
* MINIMUM COVER OVER THE FORCE MAIN IS 5 FEET.
* RESTRAIN ALL JOINTS FOR FULL EXTENT OF PAVEMENT CROSSINGS.

PROFILE LEGEND

- FINISHED GRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

* ALL UTILITIES SHOWN IN PROFILE BACKGROUND ARE FOR REFERENCE ONLY. REFER TO CORRESPONDING DESIGN PLANS AND DETAILS.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

WWTR-A (STA 1+00 TO 7+50)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

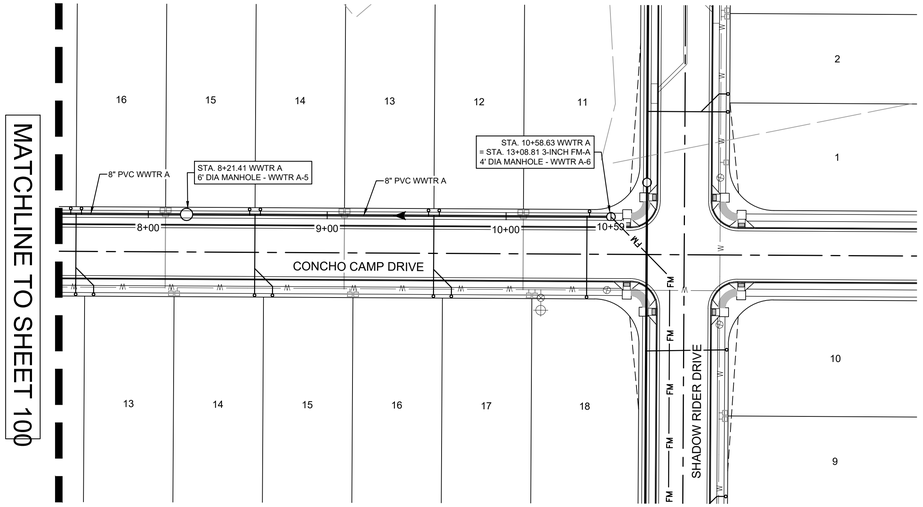
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

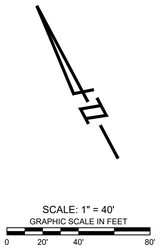
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
130518
LICENSED
PROFESSIONAL ENGINEER

SHEET 100 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-SSWR.DWG DATE: 1/29/2026 4:41:26 PM BY: BGILMORE

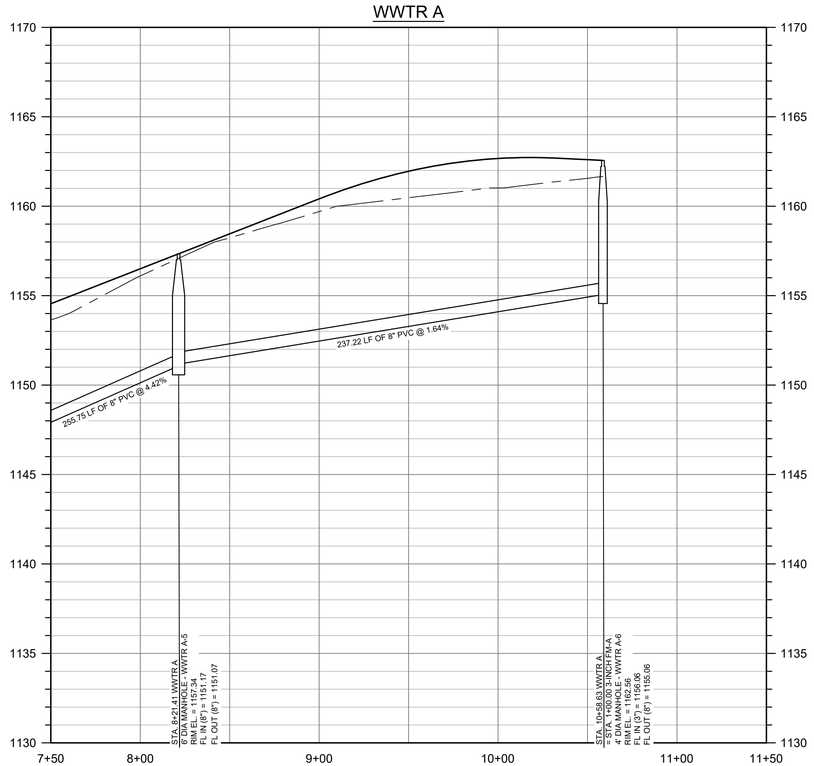




LEGEND

- PROPERTY BOUNDARY
- PHASE LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- FM FM PROPOSED FORCE MAIN
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.
* MINIMUM COVER OVER THE FORCE MAIN IS 5 FEET.
* RESTRAIN ALL JOINTS FOR FULL EXTENT OF PAVEMENT CROSSINGS.



PROFILE LEGEND

- FINISHED GRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

* ALL UTILITIES SHOWN IN PROFILE BACKGROUND ARE FOR REFERENCE ONLY. REFER TO CORRESPONDING DESIGN PLANS AND DETAILS.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

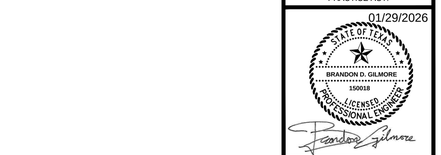
ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

WWTR-A (7+50 TO END)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

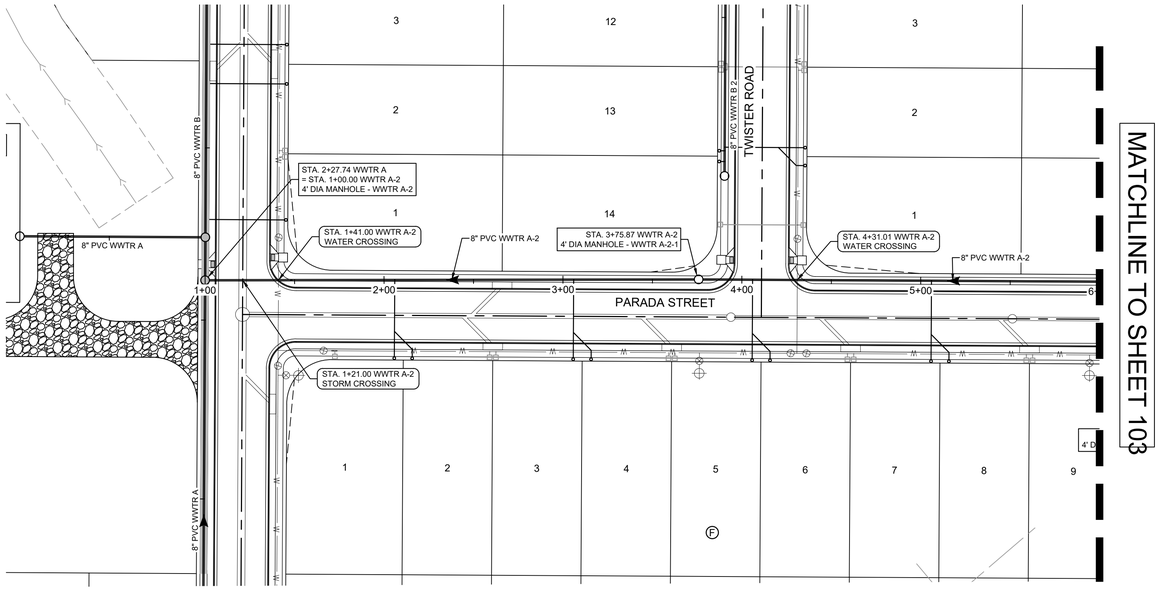
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

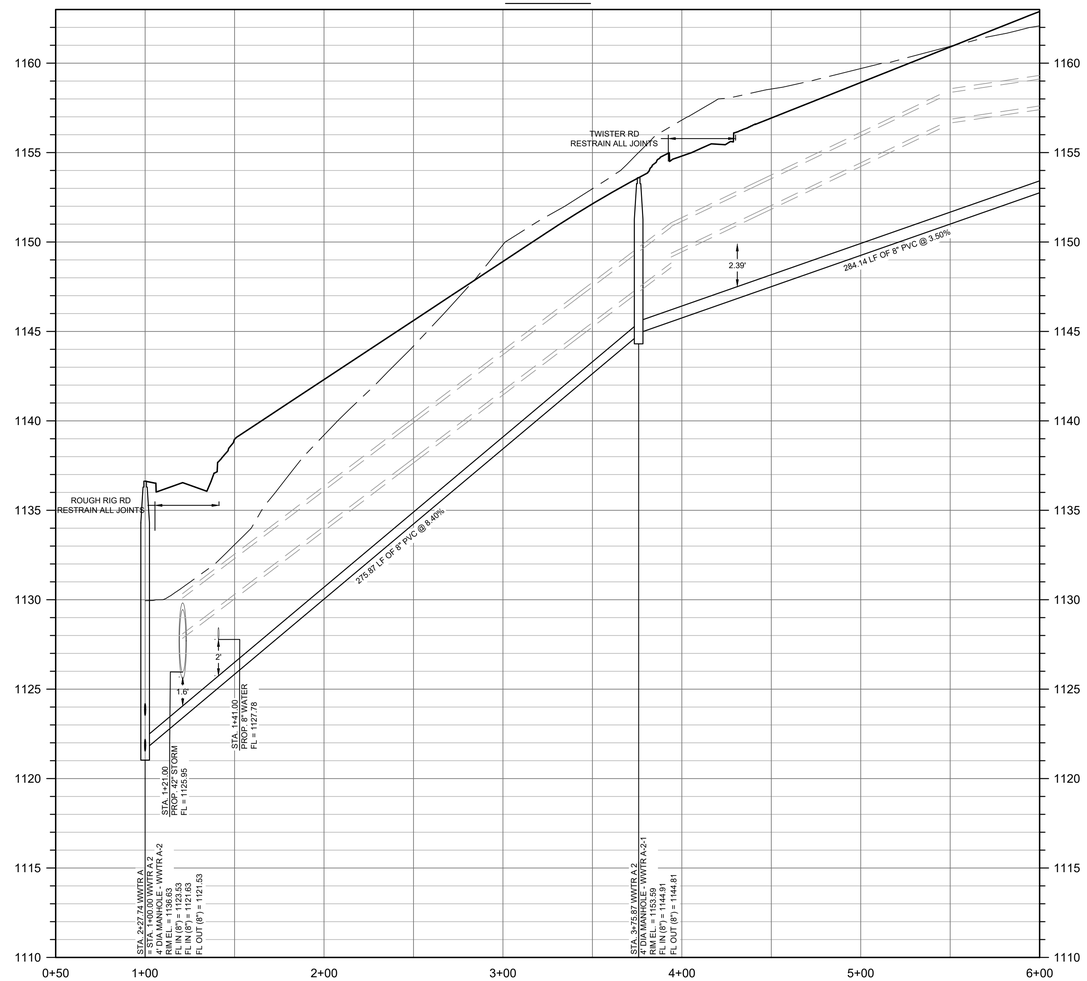


SHEET 101 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-SSWR.DWG DATE: 1/29/2026 4:41:45 PM BY: BGILMORE



WWTR A 2



SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PHASE LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- FM — FM — PROPOSED FORCE MAIN
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.
* MINIMUM COVER OVER THE FORCE MAIN IS 5 FEET.
* RESTRAIN ALL JOINTS FOR FULL EXTENT OF PAVEMENT CROSSINGS.

PROFILE LEGEND

- FINISHED GRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

* ALL UTILITIES SHOWN IN PROFILE BACKGROUND ARE FOR REFERENCE ONLY. REFER TO CORRESPONDING DESIGN PLANS AND DETAILS.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

WWTR-A 2 (STA 1+00 TO 6+00)

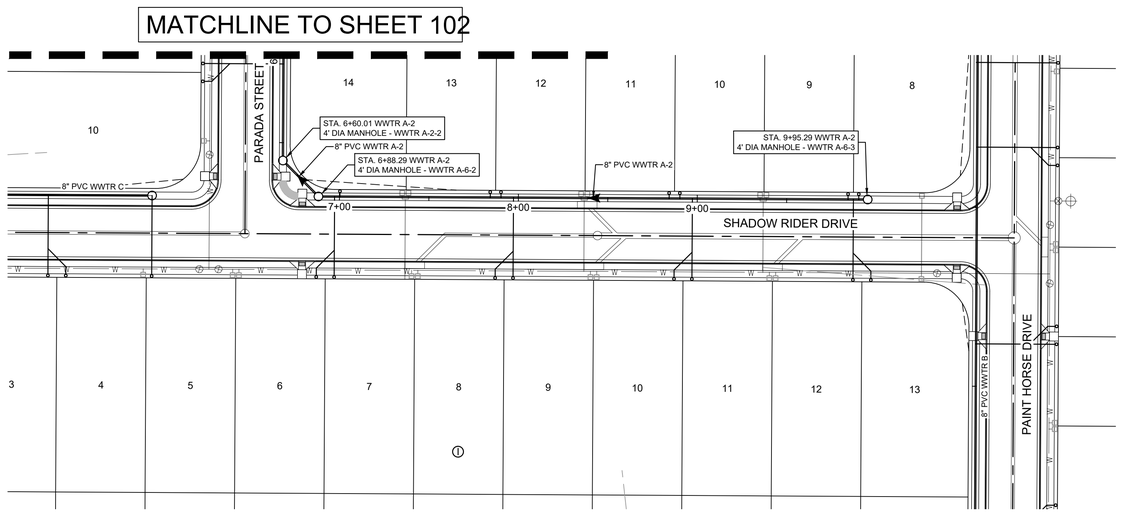
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-SSWR.DWG DATE: 1/29/2026 4:42:05 PM BY: BGILMORE

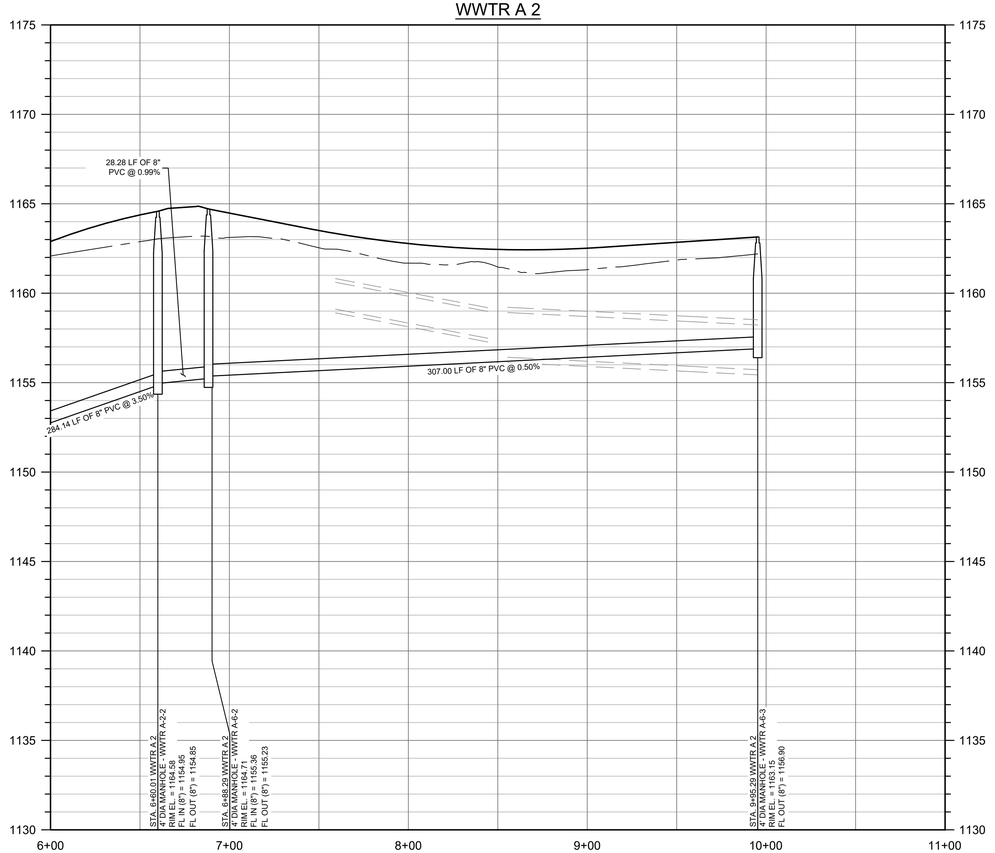


LEGEND

- PROPERTY BOUNDARY
- PHASE LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- FM — FM — PROPOSED FORCE MAIN
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.
* MINIMUM COVER OVER THE FORCE MAIN IS 5 FEET.
* RESTRAIN ALL JOINTS FOR FULL EXTENT OF PAVEMENT CROSSINGS.

WWTR A 2



PROFILE LEGEND

- FINISHED GRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

* ALL UTILITIES SHOWN IN PROFILE BACKGROUND ARE FOR REFERENCE ONLY. REFER TO CORRESPONDING DESIGN PLANS AND DETAILS.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

WWTR-A 2 (6+00 TO END)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

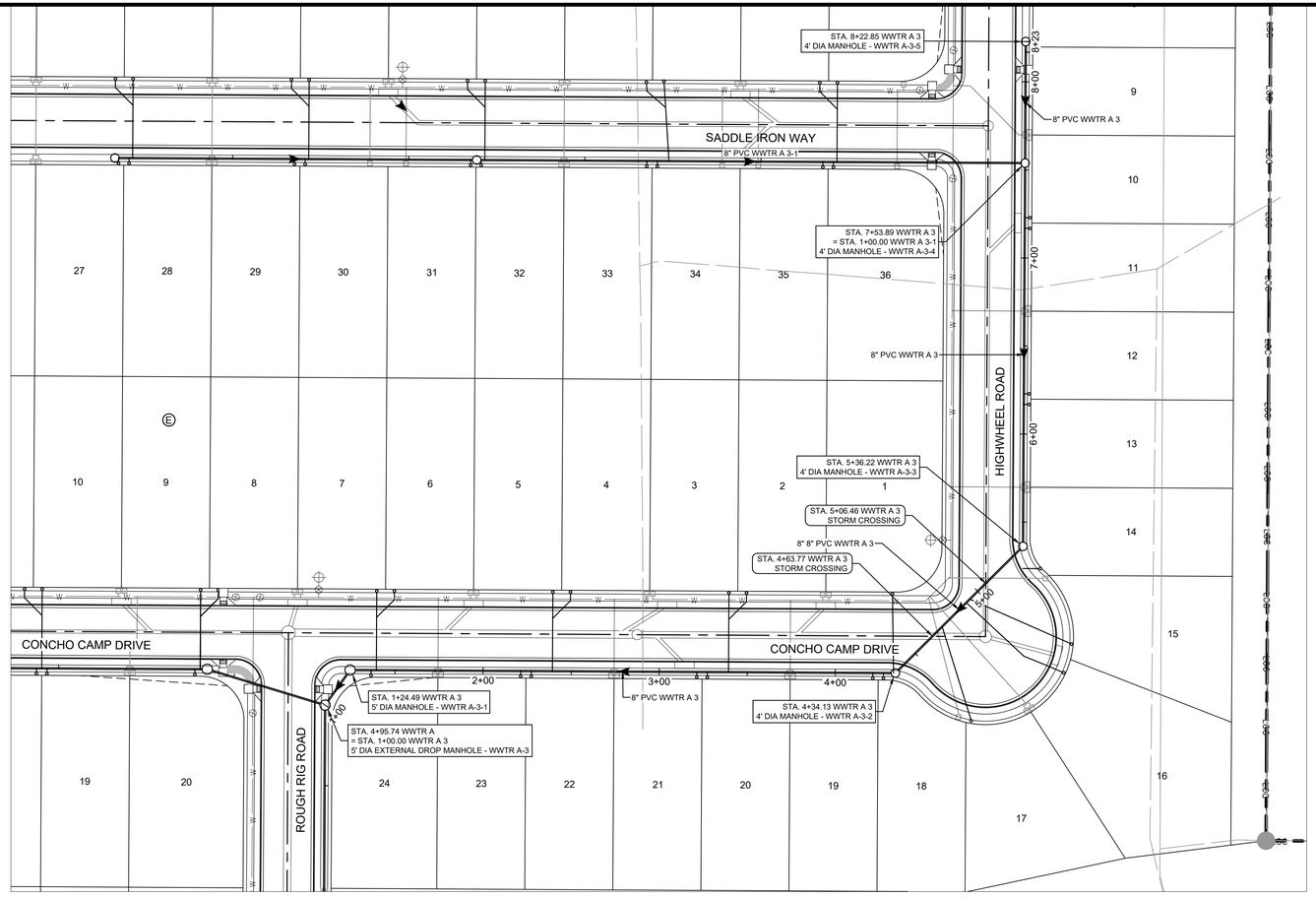
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

SHEET 103 OF 126

H:\PROJECTS\1636 - BRONIN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-SSWR.DWG DATE: 1/29/2026 4:42:25 PM BY: BGILMORE



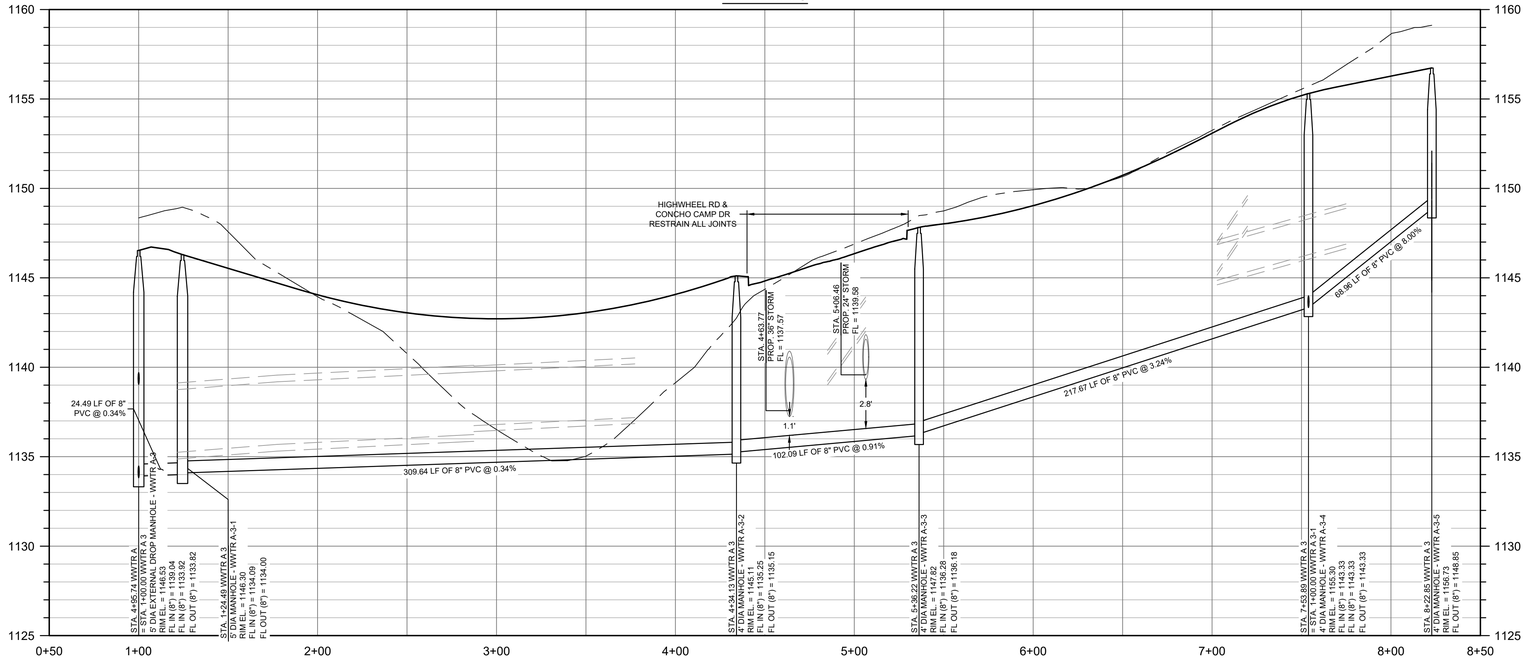
SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PHASE LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- FM — FM — PROPOSED FORCE MAIN
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.
* MINIMUM COVER OVER THE FORCE MAIN IS 5 FEET.
* RESTRAIN ALL JOINTS FOR FULL EXTENT OF PAVEMENT CROSSINGS.

WWTR A 3



PROFILE LEGEND

- FINISHED GRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

* ALL UTILITIES SHOWN IN PROFILE BACKGROUND ARE FOR REFERENCE ONLY. REFER TO CORRESPONDING DESIGN PLANS AND DETAILS.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

WWTR A 3 (STA 1+00 TO END)

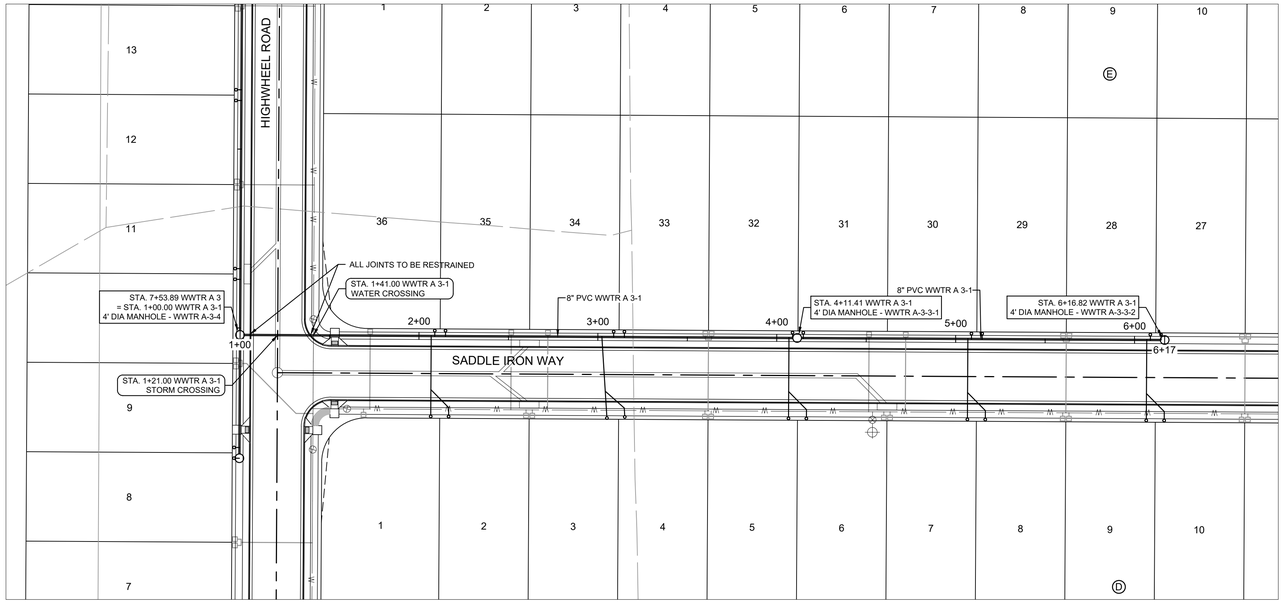
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-SSWR.DWG DATE: 1/29/2026 4:42:45 PM BY: BGILMORE

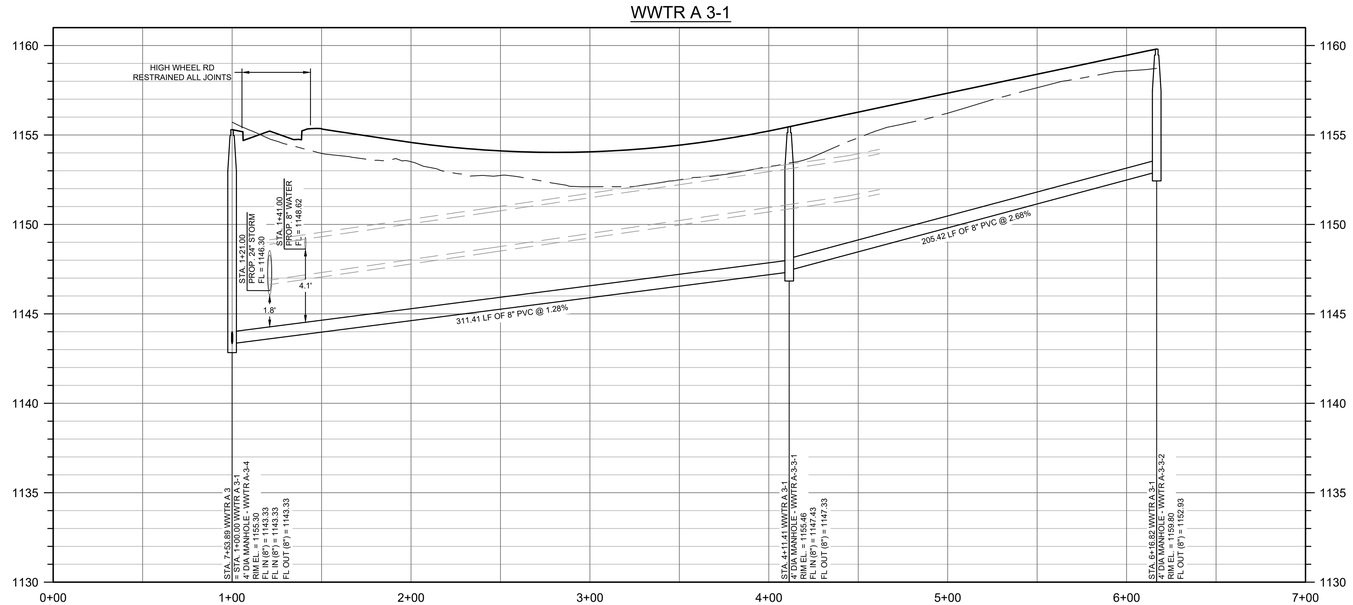


SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PHASE LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- PROPOSED FORCE MAIN
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.
* MINIMUM COVER OVER THE FORCE MAIN IS 5 FEET.
* RESTRAIN ALL JOINTS FOR FULL EXTENT OF PAVEMENT CROSSINGS.



PROFILE LEGEND

- FINISHED GRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

* ALL UTILITIES SHOWN IN PROFILE BACKGROUND ARE FOR REFERENCE ONLY. REFER TO CORRESPONDING DESIGN PLANS AND DETAILS.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

WWTR A 3-1 (STA 1+00 TO END)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

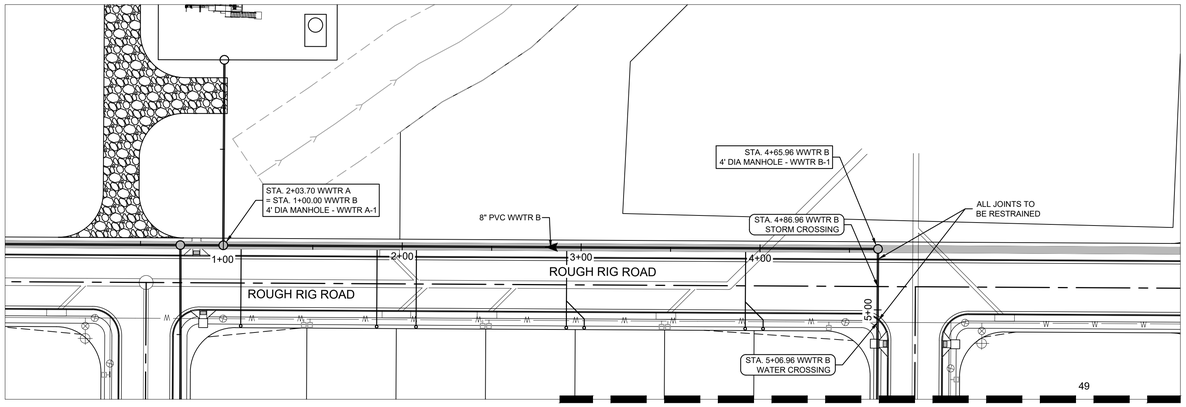
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 105 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-SSWR.DWG DATE: 1/29/2026 4:43:05 PM BY: BGILMORE



MATCHLINE TO SHEET 107

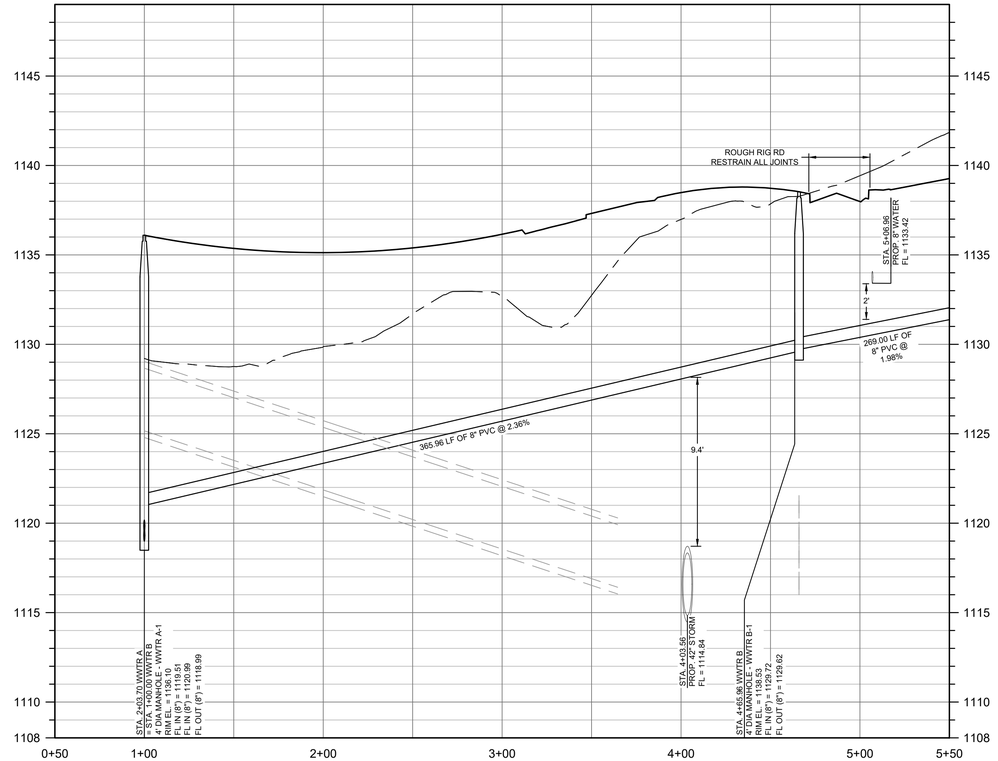
SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PHASE LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- FM — FM — PROPOSED FORCE MAIN
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.
* MINIMUM COVER OVER THE FORCE MAIN IS 5 FEET.
* RESTRAIN ALL JOINTS FOR FULL EXTENT OF PAVEMENT CROSSINGS.

WWTR B



PROFILE LEGEND

- FINISHED GRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

* ALL UTILITIES SHOWN IN PROFILE BACKGROUND ARE FOR REFERENCE ONLY. REFER TO CORRESPONDING DESIGN PLANS AND DETAILS.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

WWTR B (STA 1+00 TO 5+50)

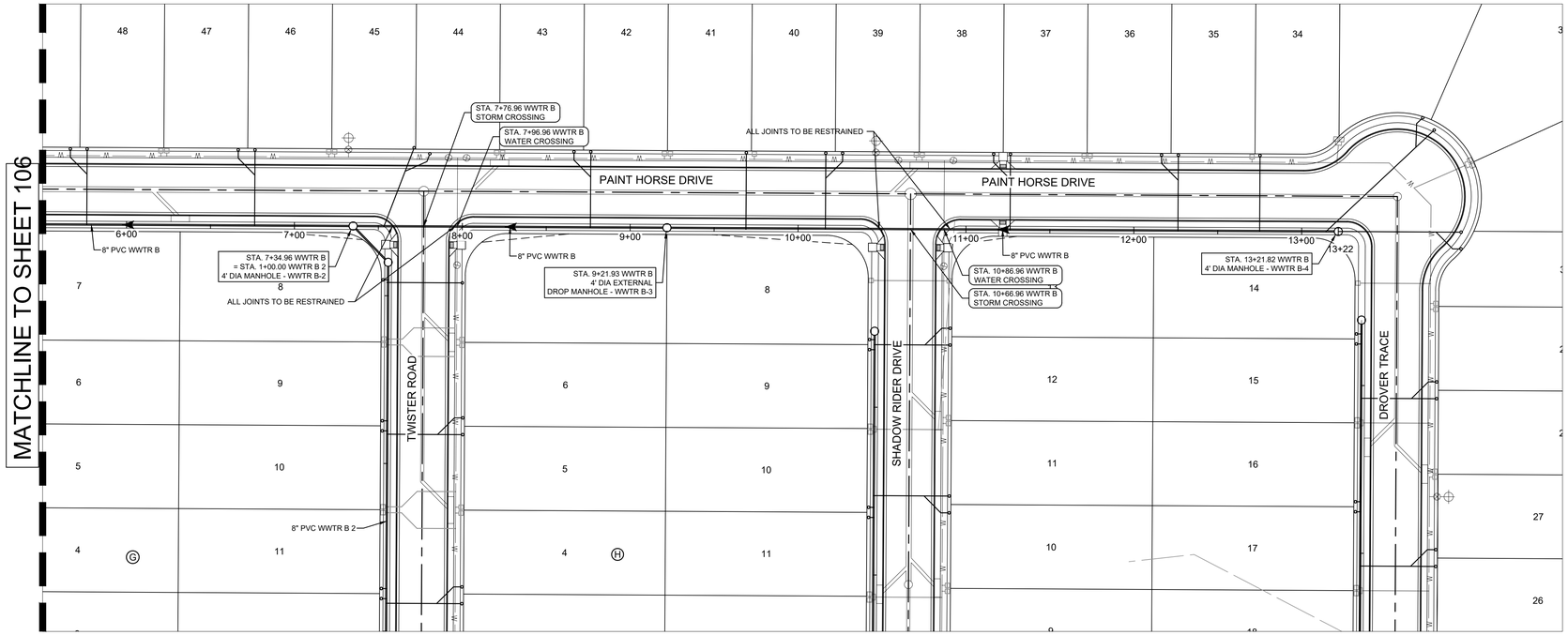
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

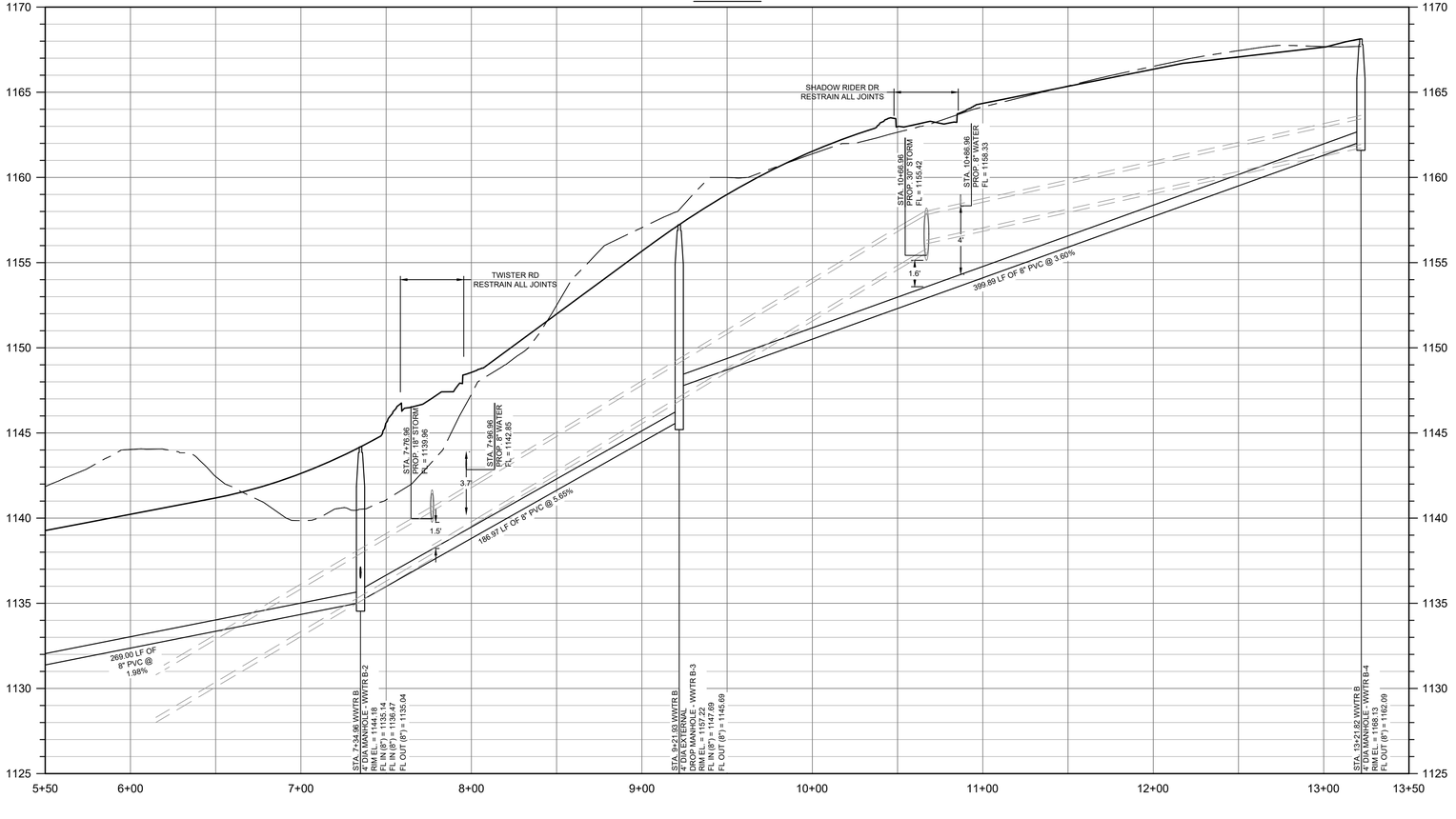
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 106 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-SSWR.DWG DATE: 1/29/2026 4:43:24 PM BY: BGILMORE





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PHASE LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- FM — FM — PROPOSED FORCE MAIN
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.
* MINIMUM COVER OVER THE FORCE MAIN IS 5 FEET.
* RESTRAIN ALL JOINTS FOR FULL EXTENT OF PAVEMENT CROSSINGS.

PROFILE LEGEND

- FINISHED GRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

* ALL UTILITIES SHOWN IN PROFILE BACKGROUND ARE FOR REFERENCE ONLY. REFER TO CORRESPONDING DESIGN PLANS AND DETAILS.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

WWTR B (STA 5+50 TO END)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

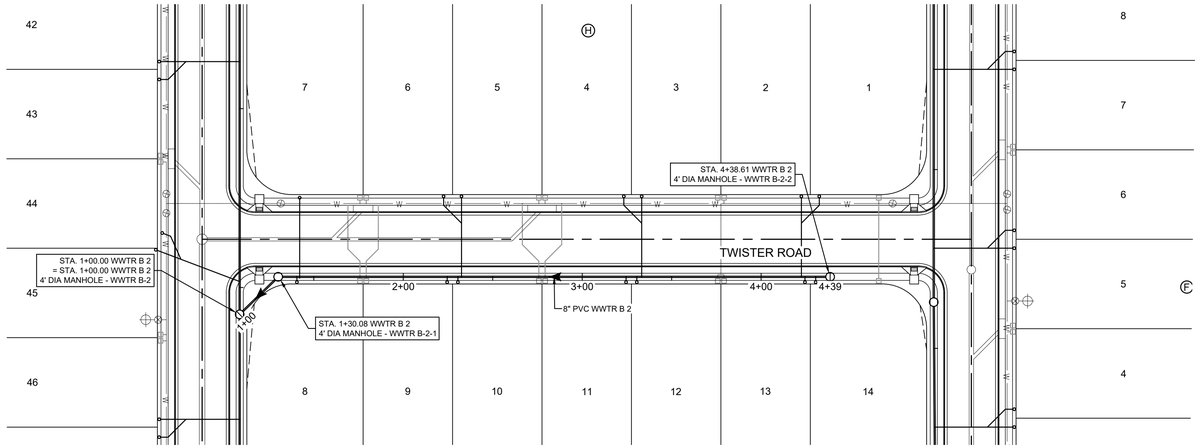
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

SHEET 107 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-SSWR.DWG DATE: 1/29/2026 4:43:45 PM BY: BGILMORE

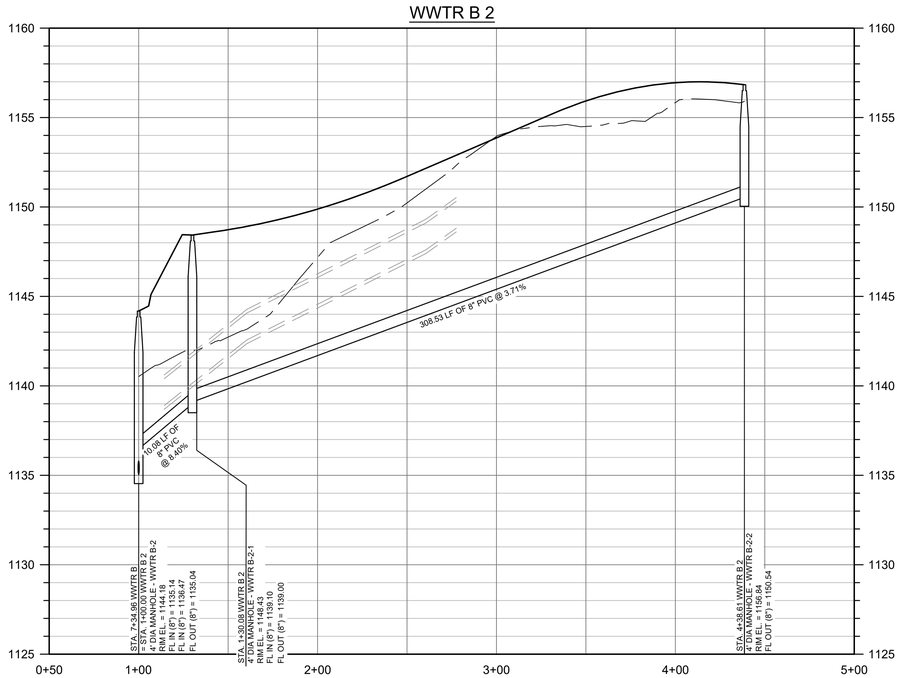


SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PHASE LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- FM — FM — PROPOSED FORCE MAIN
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.
* MINIMUM COVER OVER THE FORCE MAIN IS 5 FEET.
* RESTRAIN ALL JOINTS FOR FULL EXTENT OF PAVEMENT CROSSINGS.



PROFILE LEGEND

- FINISHED GRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

* ALL UTILITIES SHOWN IN PROFILE BACKGROUND ARE FOR REFERENCE ONLY. REFER TO CORRESPONDING DESIGN PLANS AND DETAILS.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

WWTR B 2 (STA 1+00-END)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

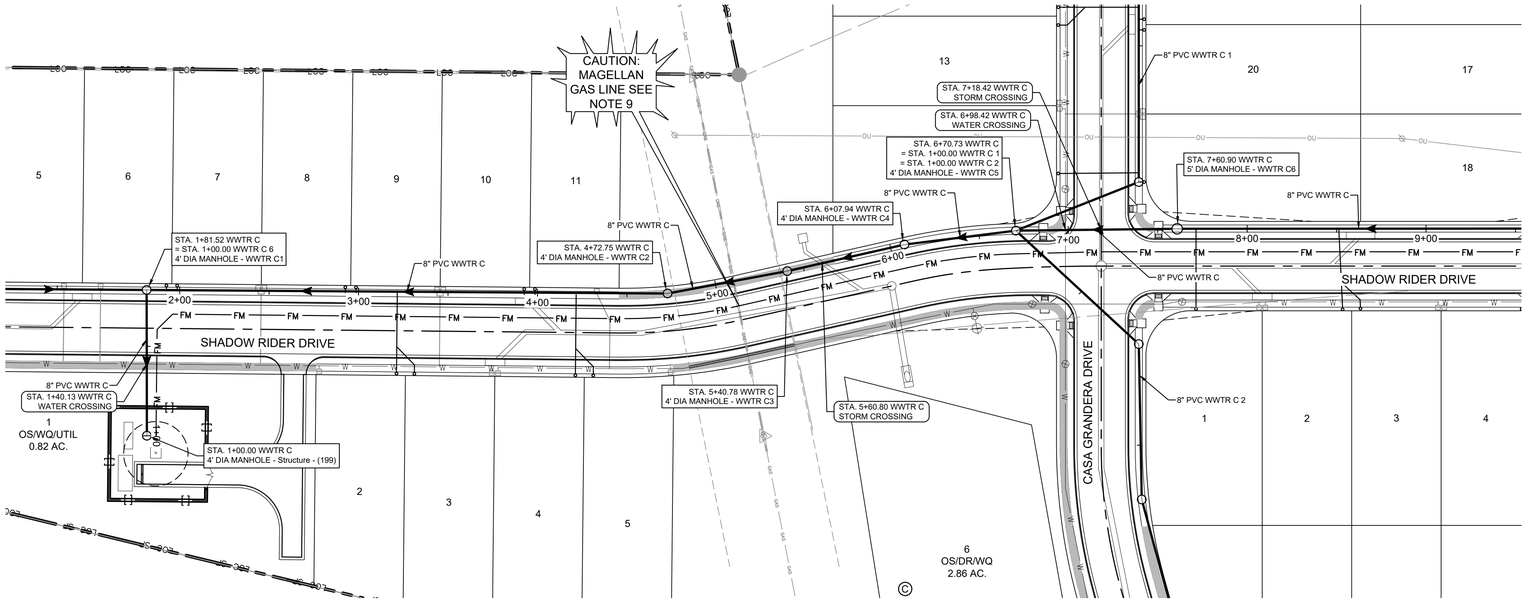
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

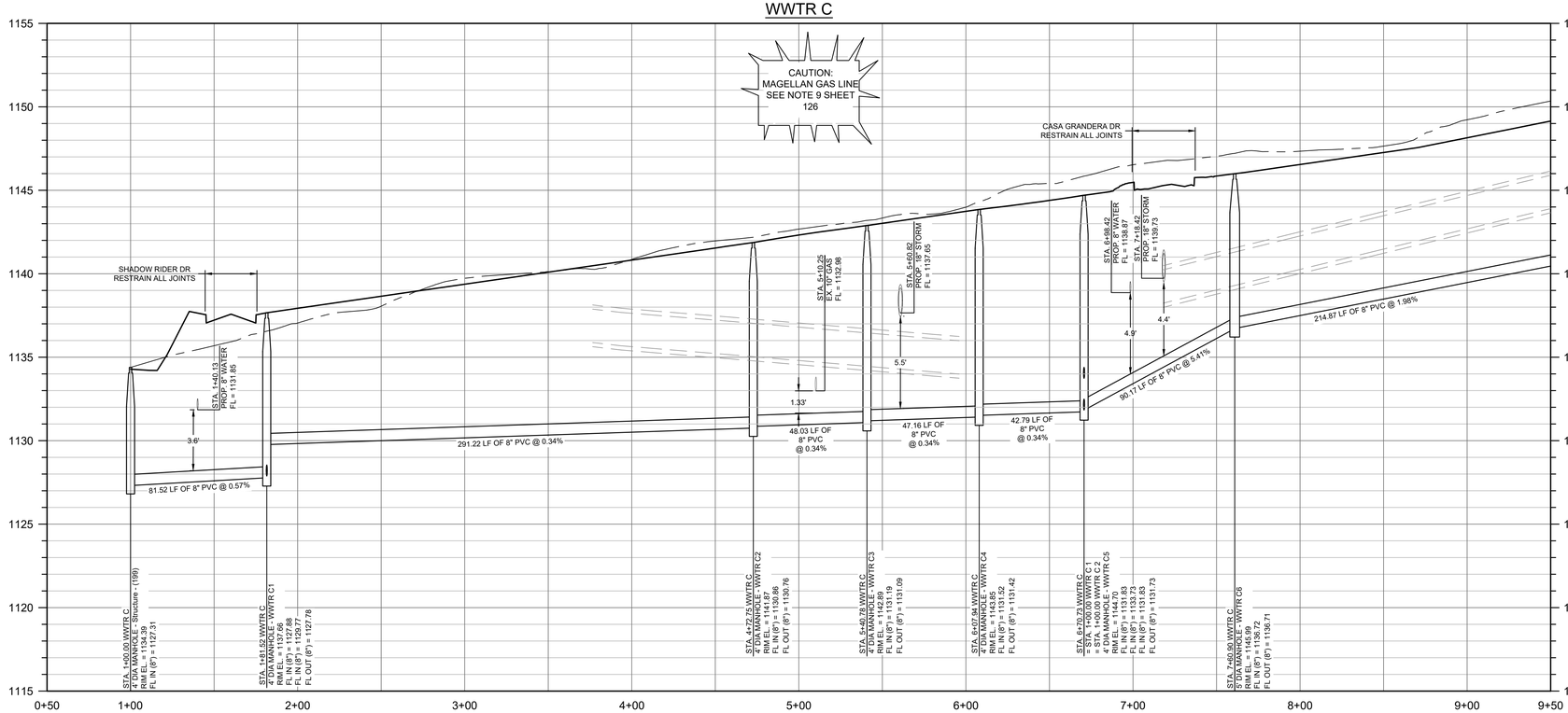
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 108 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-SSWR.DWG DATE: 1/29/2026 4:44:06 PM BY: BGILMORE





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

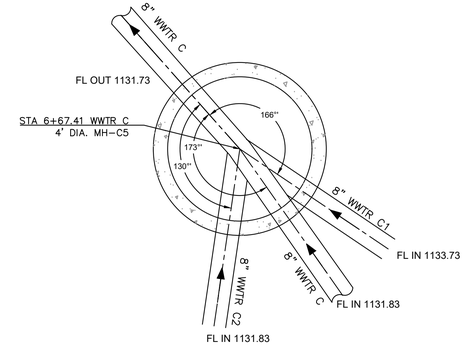
- PROPERTY BOUNDARY
- PHASE LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- PROPOSED FORCE MAIN
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.
* MINIMUM COVER OVER THE FORCE MAIN IS 5 FEET.
* RESTRAIN ALL JOINTS FOR FULL EXTENT OF PAVEMENT CROSSINGS.

PROFILE LEGEND

- FINISHED GRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

* ALL UTILITIES SHOWN IN PROFILE BACKGROUND ARE FOR REFERENCE ONLY. REFER TO CORRESPONDING DESIGN PLANS AND DETAILS.



8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

WWTR C (STA 1+00 TO 9+50)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

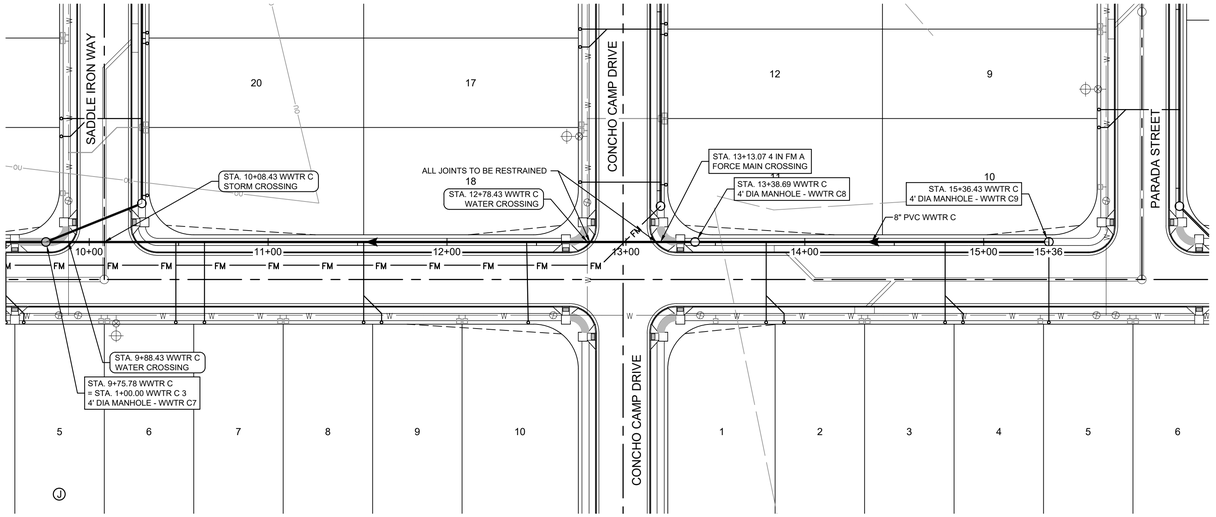
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

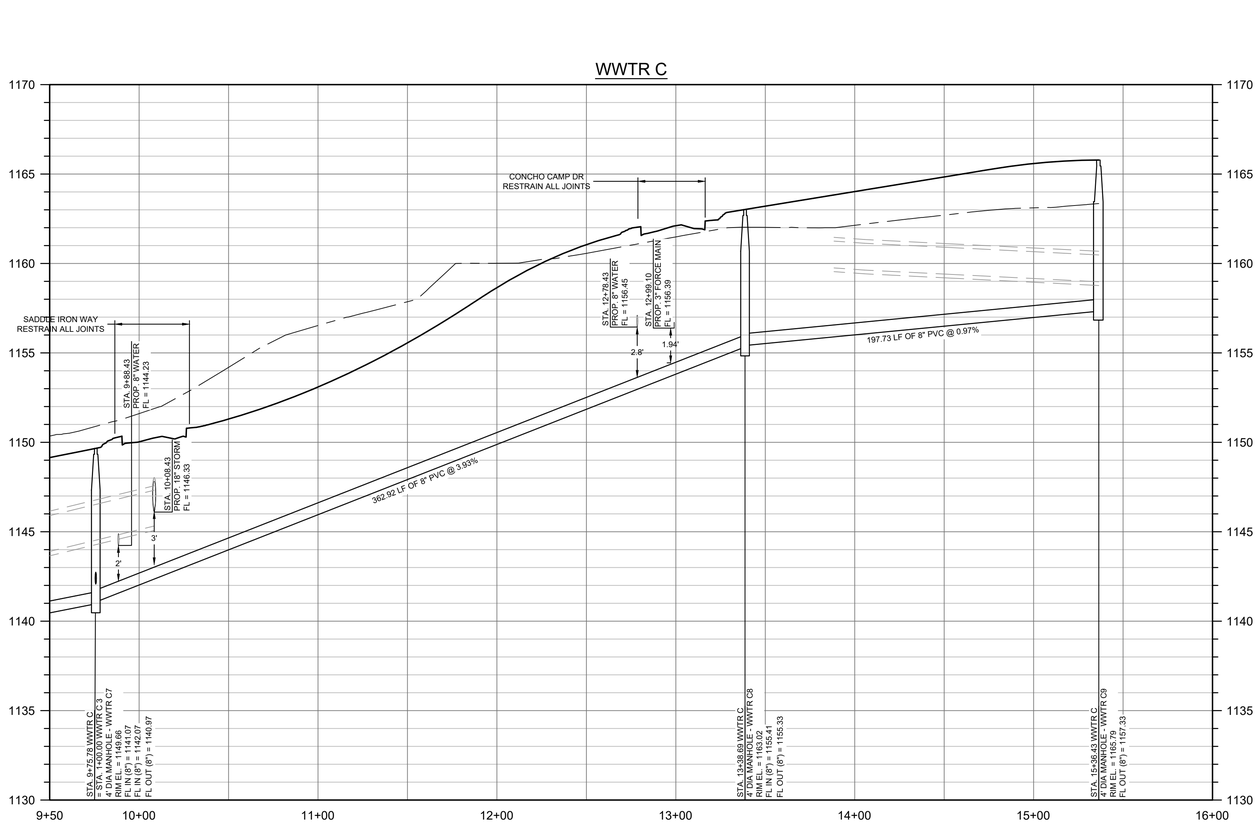
01/29/2026

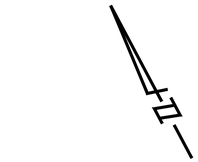
STATE OF TEXAS
BRANDON D. GILMORE
130018
LICENSED
PROFESSIONAL ENGINEER

SHEET 109 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-SSWR.DWG DATE: 1/29/2026 4:44:30 PM BY: BGILMORE







SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

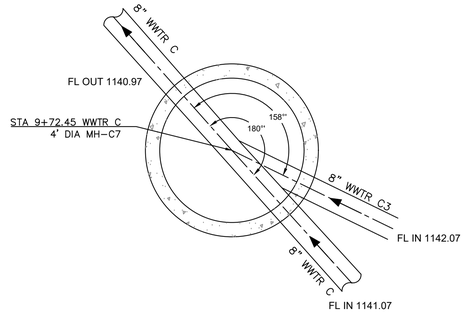
- PROPERTY BOUNDARY
- PHASE LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- FM — FM — PROPOSED FORCE MAIN
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.
* MINIMUM COVER OVER THE FORCE MAIN IS 5 FEET.
* RESTRAIN ALL JOINTS FOR FULL EXTENT OF PAVEMENT CROSSINGS.

PROFILE LEGEND

- FINISHED GRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

* ALL UTILITIES SHOWN IN PROFILE BACKGROUND ARE FOR REFERENCE ONLY. REFER TO CORRESPONDING DESIGN PLANS AND DETAILS.



8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

WWTR C (STA 9+50 TO END)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

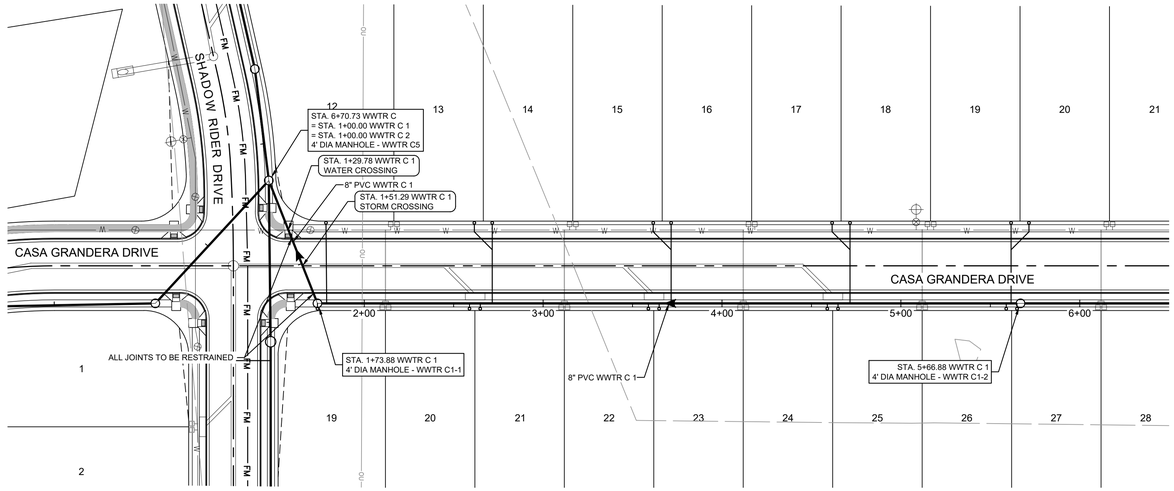
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

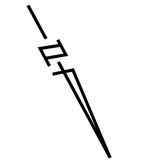
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
130018
LICENSED PROFESSIONAL ENGINEER

SHEET 110 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-SSWR.DWG DATE: 1/29/2026 4:44:50 PM BY: BGILMORE





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PHASE LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- PROPOSED FORCE MAIN
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

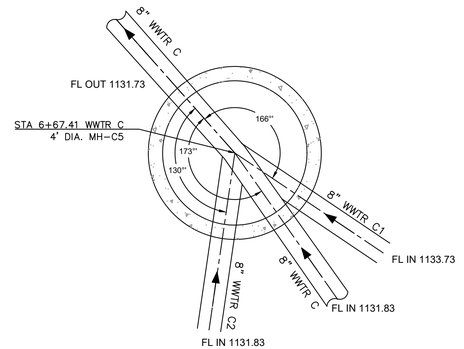
* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.
* MINIMUM COVER OVER THE FORCE MAIN IS 5 FEET.
* RESTRAIN ALL JOINTS FOR FULL EXTENT OF PAVEMENT CROSSINGS.

WWTR C 1

PROFILE LEGEND

- FINISHED GRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

* ALL UTILITIES SHOWN IN PROFILE BACKGROUND ARE FOR REFERENCE ONLY. REFER TO CORRESPONDING DESIGN PLANS AND DETAILS.



8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

WWTR C 1 (STA 1+00- TO 6+50)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

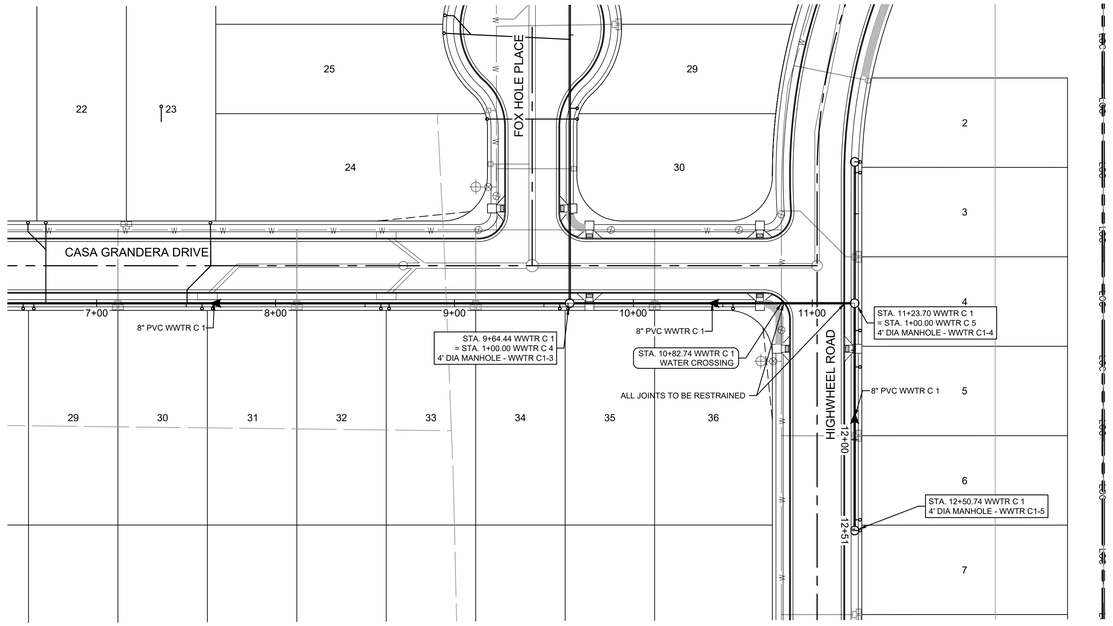
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

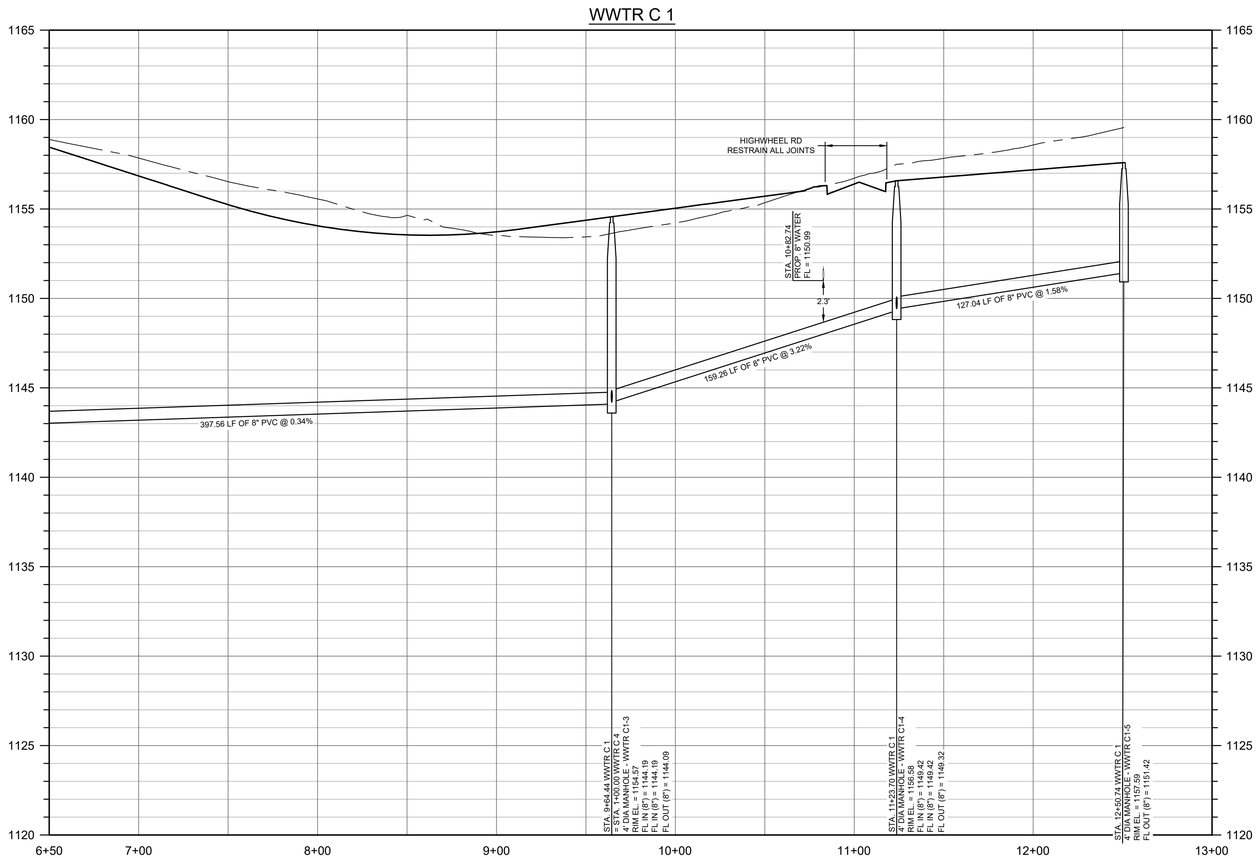
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
190518
LICENSED PROFESSIONAL ENGINEER

SHEET 111 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-SSWR.DWG DATE: 1/29/2026 4:45:13 PM BY: BGILMORE





SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PHASE LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- FM — FM — PROPOSED FORCE MAIN
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.
* MINIMUM COVER OVER THE FORCE MAIN IS 5 FEET.
* RESTRAIN ALL JOINTS FOR FULL EXTENT OF PAVEMENT CROSSINGS.

PROFILE LEGEND

- FINISHED GRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

* ALL UTILITIES SHOWN IN PROFILE BACKGROUND ARE FOR REFERENCE ONLY. REFER TO CORRESPONDING DESIGN PLANS AND DETAILS.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

WWTR C 1 (STA 6+50 TO END)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

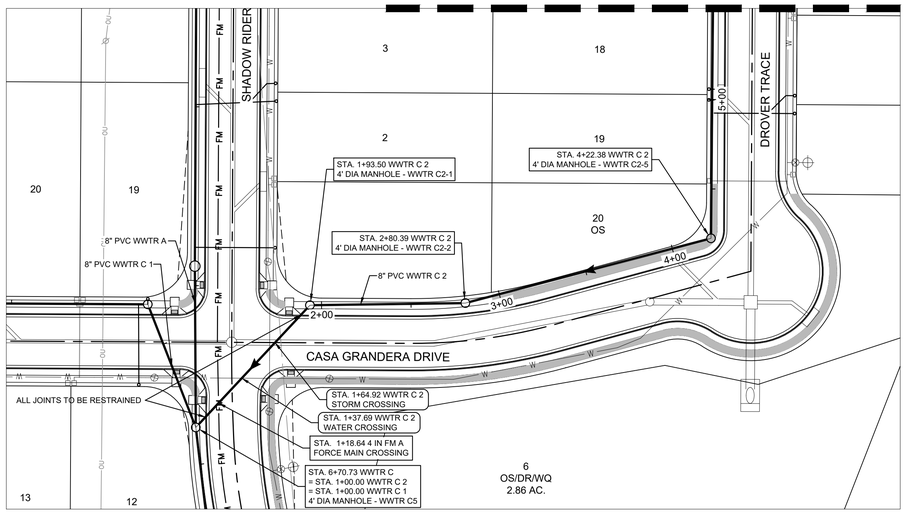
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

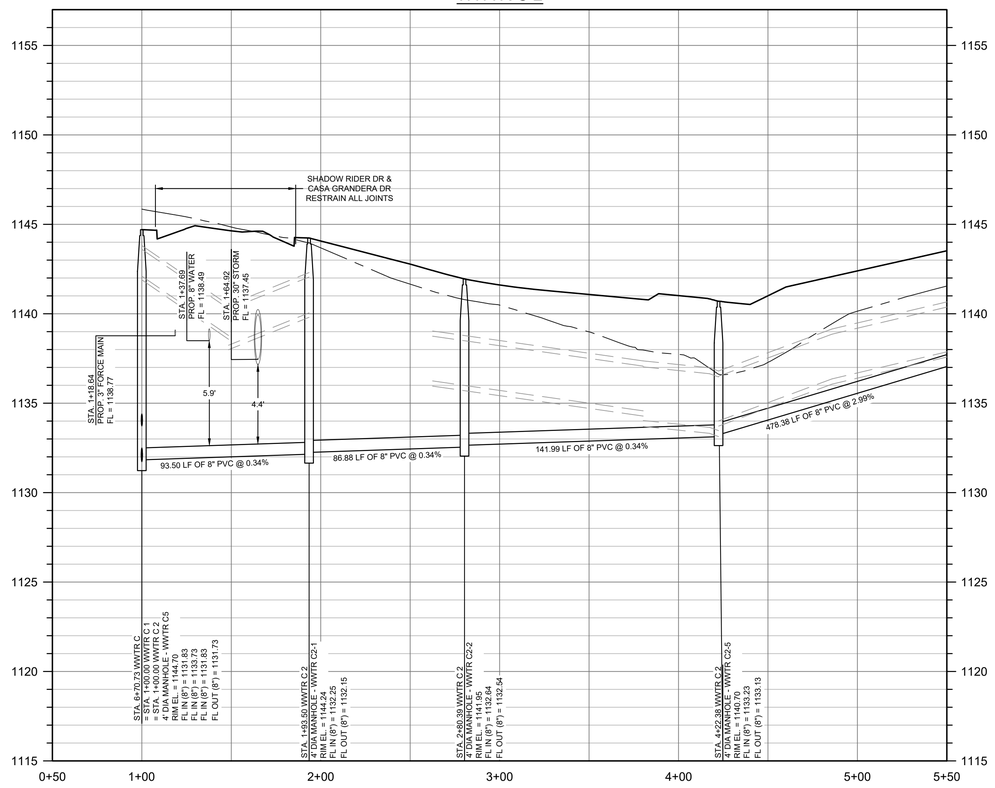
SHEET 112 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-SSWR.DWG DATE: 1/29/2026 4:45:30 PM BY: BGILMORE

MATCHLINE TO SHEET 114



WWTR C 2



SCALE: 1" = 50'
GRAPHIC SCALE IN FEET
0 25' 50' 100'

LEGEND

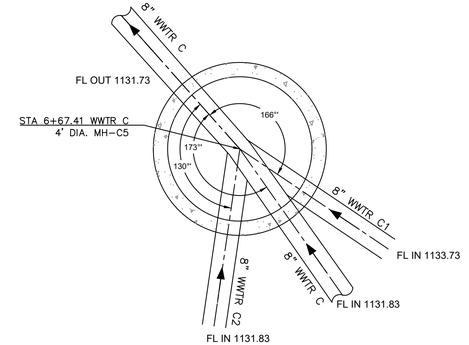
- PROPERTY BOUNDARY
- PHASE LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- FM — FM — PROPOSED FORCE MAIN
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.
* MINIMUM COVER OVER THE FORCE MAIN IS 5 FEET.
* RESTRAIN ALL JOINTS FOR FULL EXTENT OF PAVEMENT CROSSINGS.

PROFILE LEGEND

- FINISHED GRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

* ALL UTILITIES SHOWN IN PROFILE BACKGROUND ARE FOR REFERENCE ONLY. REFER TO CORRESPONDING DESIGN PLANS AND DETAILS.



8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

WWTR C 2 (STA 1+00 TO 5+50)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

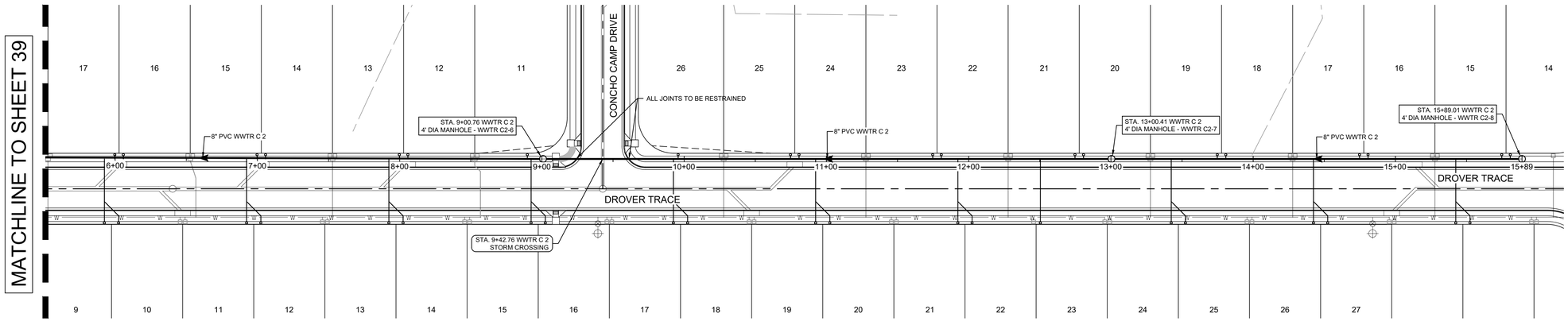
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
130018
LICENSED
PROFESSIONAL ENGINEER

SHEET 113 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-SSWR.DWG DATE: 1/29/2026 4:45:51 PM BY: BGILMORE



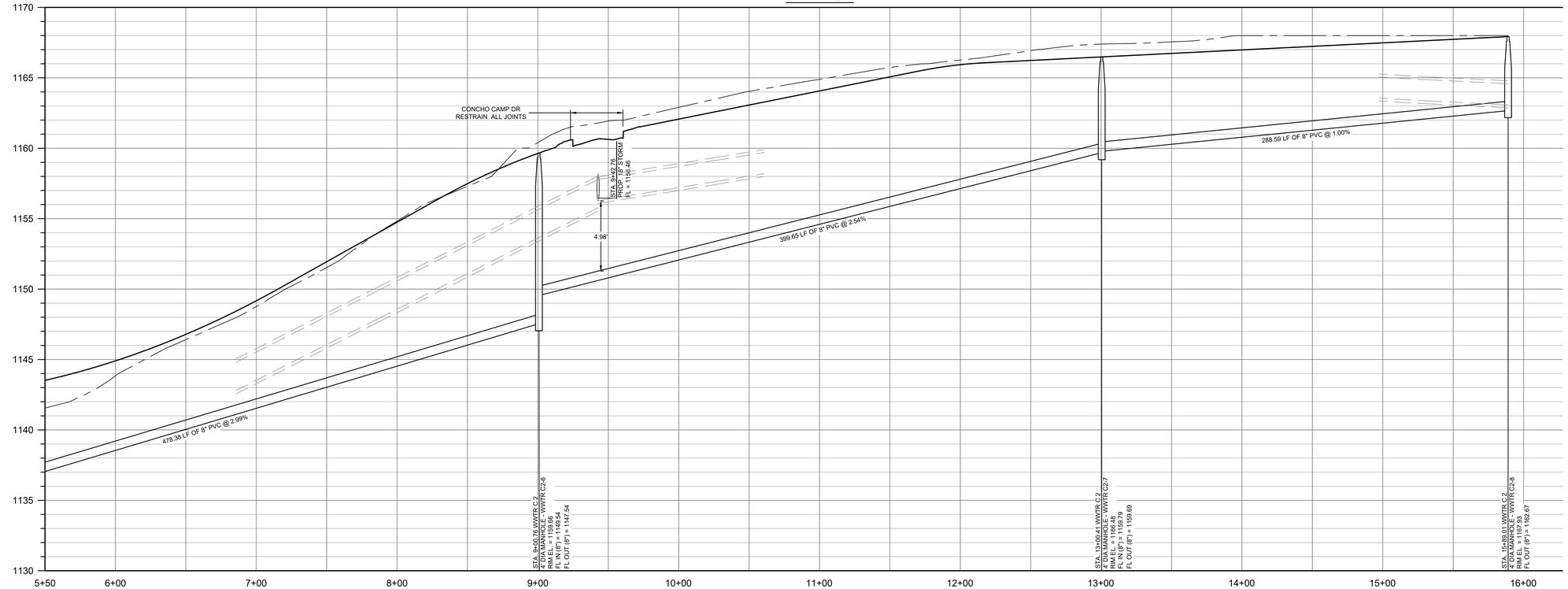
SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PHASE LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- FM — FM — PROPOSED FORCE MAIN
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.
* MINIMUM COVER OVER THE FORCE MAIN IS 5 FEET.
* RESTRAIN ALL JOINTS FOR FULL EXTENT OF PAVEMENT CROSSINGS.

WWTR C 2



PROFILE LEGEND

- FINISHED GRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

* ALL UTILITIES SHOWN IN PROFILE BACKGROUND ARE FOR REFERENCE ONLY. REFER TO CORRESPONDING DESIGN PLANS AND DETAILS.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

WWTR C 2 (STA 5+50 TO END)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

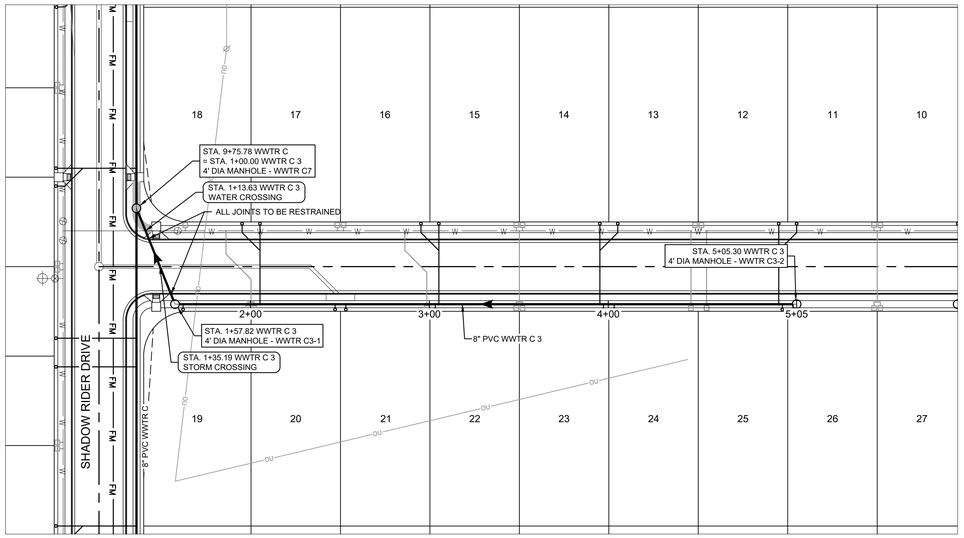
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

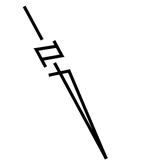
01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
130018
LICENSED PROFESSIONAL ENGINEER

SHEET 114 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-SSWR.DWG DATE: 1/29/2026 4:46:09 PM BY: BGILMORE





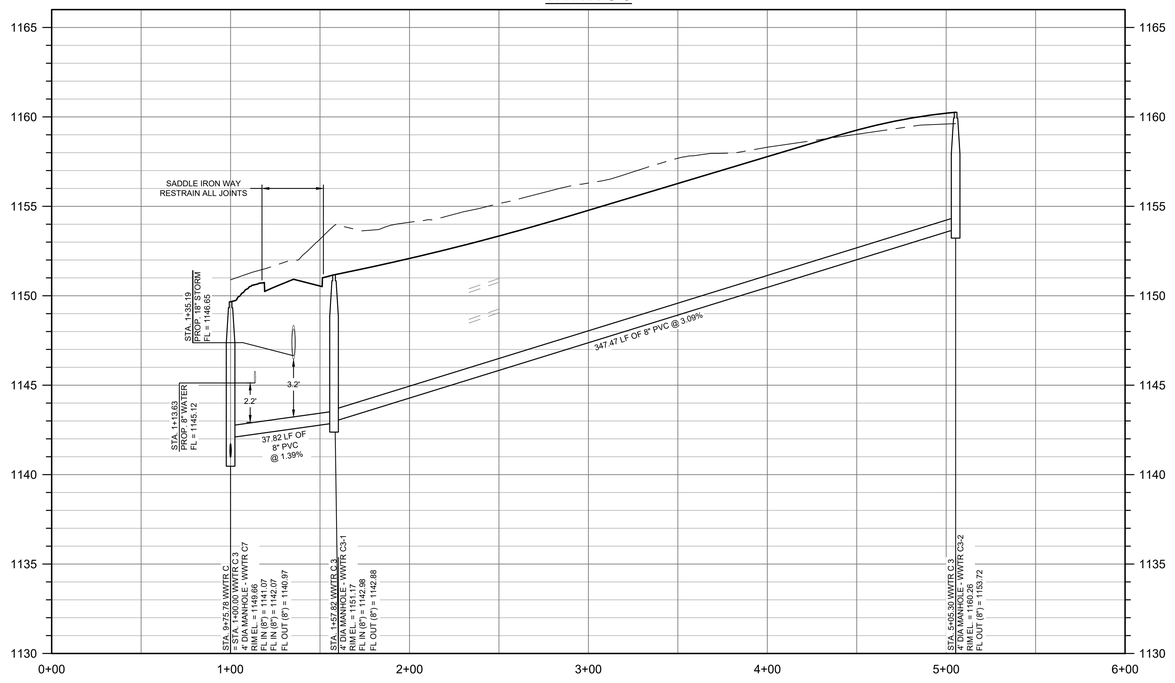
SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PHASE LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- PROPOSED FORCE MAIN
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.
* MINIMUM COVER OVER THE FORCE MAIN IS 5 FEET.
* RESTRAIN ALL JOINTS FOR FULL EXTENT OF PAVEMENT CROSSINGS.

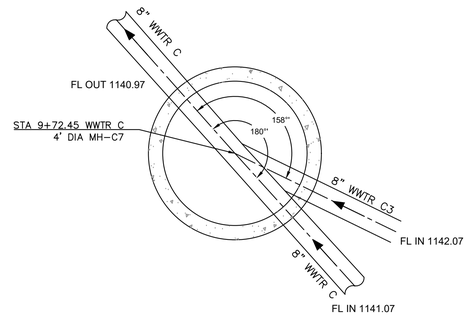
WWTR C 3



PROFILE LEGEND

- FINISHED GRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

* ALL UTILITIES SHOWN IN PROFILE BACKGROUND ARE FOR REFERENCE ONLY. REFER TO CORRESPONDING DESIGN PLANS AND DETAILS.



8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

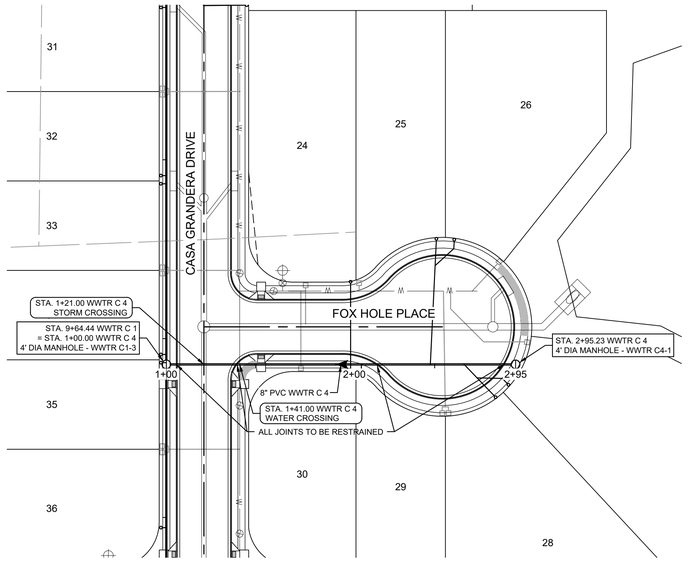
WWTR C 3 (STA 1+00 TO END)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-SSWR.DWG DATE: 1/29/2026 4:46:36 PM BY: BGILMORE



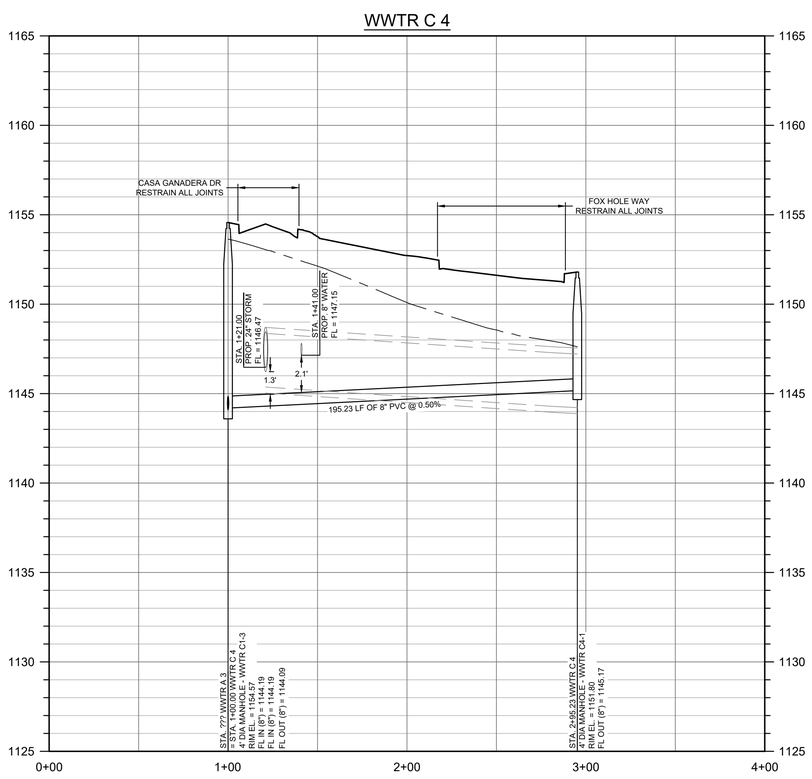
SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PHASE LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- FM — FM PROPOSED FORCE MAIN
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.
* MINIMUM COVER OVER THE FORCE MAIN IS 5 FEET.
* RESTRAIN ALL JOINTS FOR FULL EXTENT OF PAVEMENT CROSSINGS.

WWTR C 4



PROFILE LEGEND

- FINISHED GRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

* ALL UTILITIES SHOWN IN PROFILE BACKGROUND ARE FOR REFERENCE ONLY. REFER TO CORRESPONDING DESIGN PLANS AND DETAILS.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

WWTR C 4 (STA 1+00 TO END)

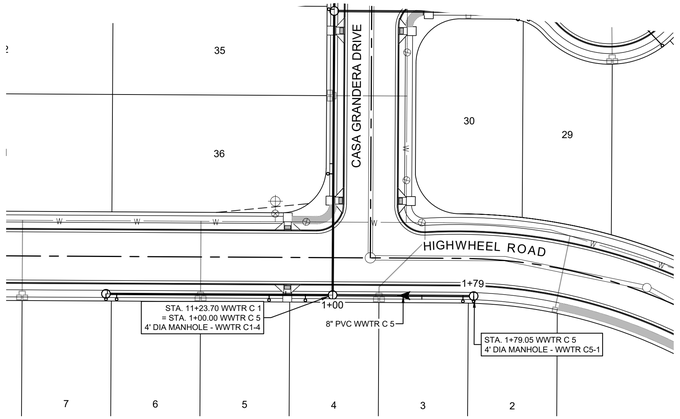
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-SSWR.DWG DATE: 1/29/2026 4:46:58 PM BY: BGILMORE

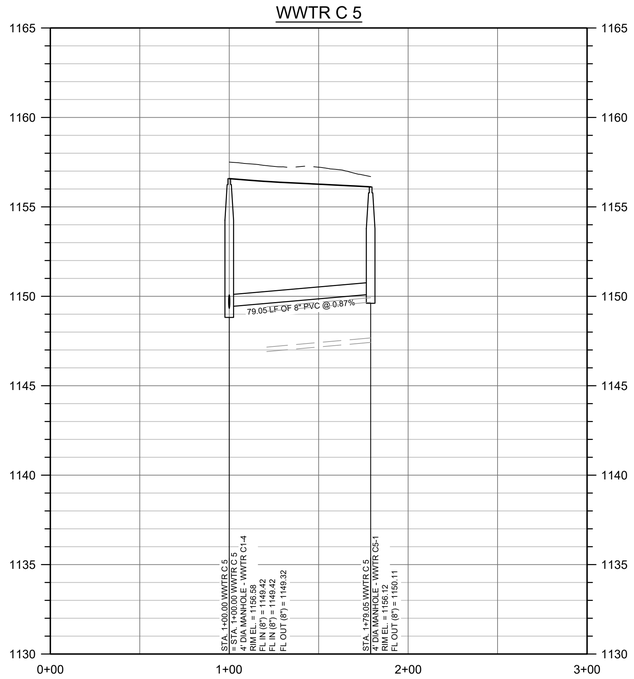


SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PHASE LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- FM — FM — PROPOSED FORCE MAIN
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.
* MINIMUM COVER OVER THE FORCE MAIN IS 5 FEET.
* RESTRAIN ALL JOINTS FOR FULL EXTENT OF PAVEMENT CROSSINGS.



PROFILE LEGEND

- FINISHED GRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

* ALL UTILITIES SHOWN IN PROFILE BACKGROUND ARE FOR REFERENCE ONLY. REFER TO CORRESPONDING DESIGN PLANS AND DETAILS.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH SUBDIVISION CONSTRUCTION PLANS

WWTR C 5 (STA 1+00 TO END)

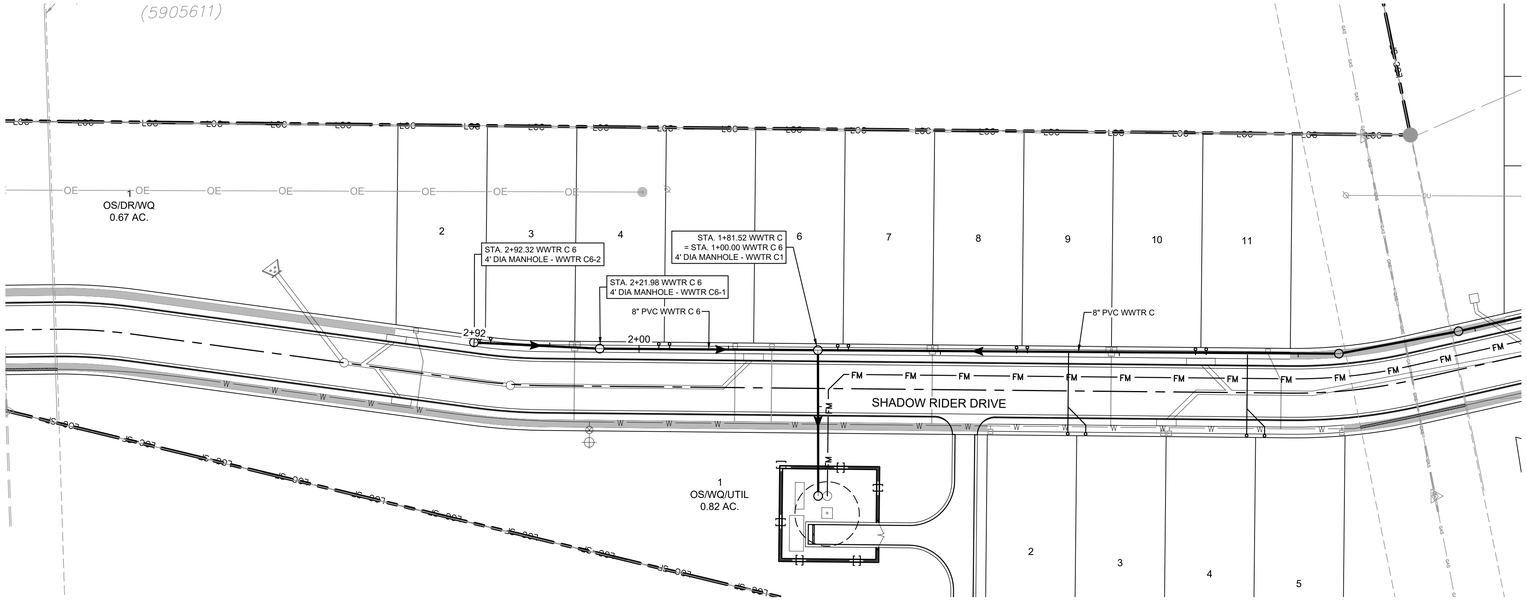
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-SSWR.DWG DATE: 1/29/2026 4:47:21 PM BY: BGILMORE

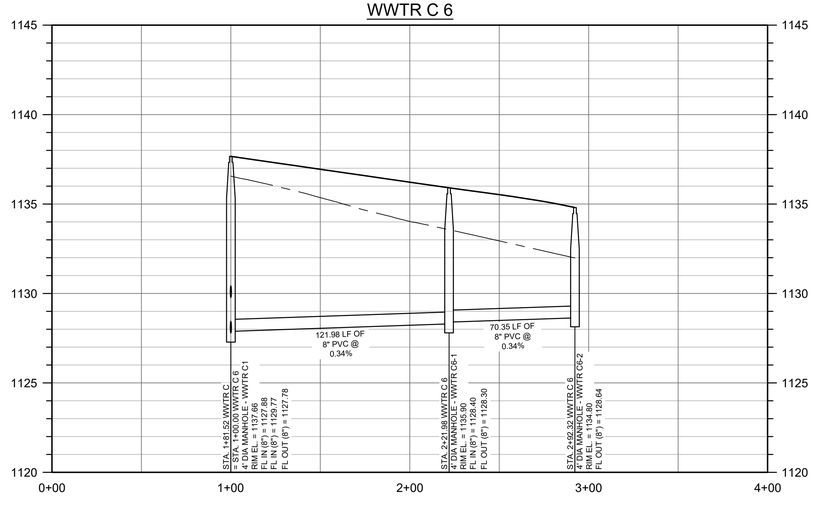


SCALE: 1" = 40'
GRAPHIC SCALE IN FEET
0 20' 40' 80'

LEGEND

- PROPERTY BOUNDARY
- PHASE LINE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- WASTEWATER LINE
- WASTEWATER MANHOLE
- DIRECTION OF FLOW
- PROPOSED FORCE MAIN
- DOUBLE WASTEWATER SERVICE
- SINGLE WASTEWATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WATER SERVICE

* ALL WASTEWATER SYMBOLS ARE NOT TO SCALE, AND ARE ONLY SHOWN FOR ILLUSTRATION PURPOSES. REFER TO DETAILS SHOWN IN THIS PLAN SET.
* MINIMUM COVER OVER THE FORCE MAIN IS 5 FEET.
* RESTRAIN ALL JOINTS FOR FULL EXTENT OF PAVEMENT CROSSINGS.



PROFILE LEGEND

- FINISHED GRADE
- EXISTING GRADE
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER MANHOLE

* ALL UTILITIES SHOWN IN PROFILE BACKGROUND ARE FOR REFERENCE ONLY. REFER TO CORRESPONDING DESIGN PLANS AND DETAILS.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

WWTR C 6 (STA 1+00 TO END)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

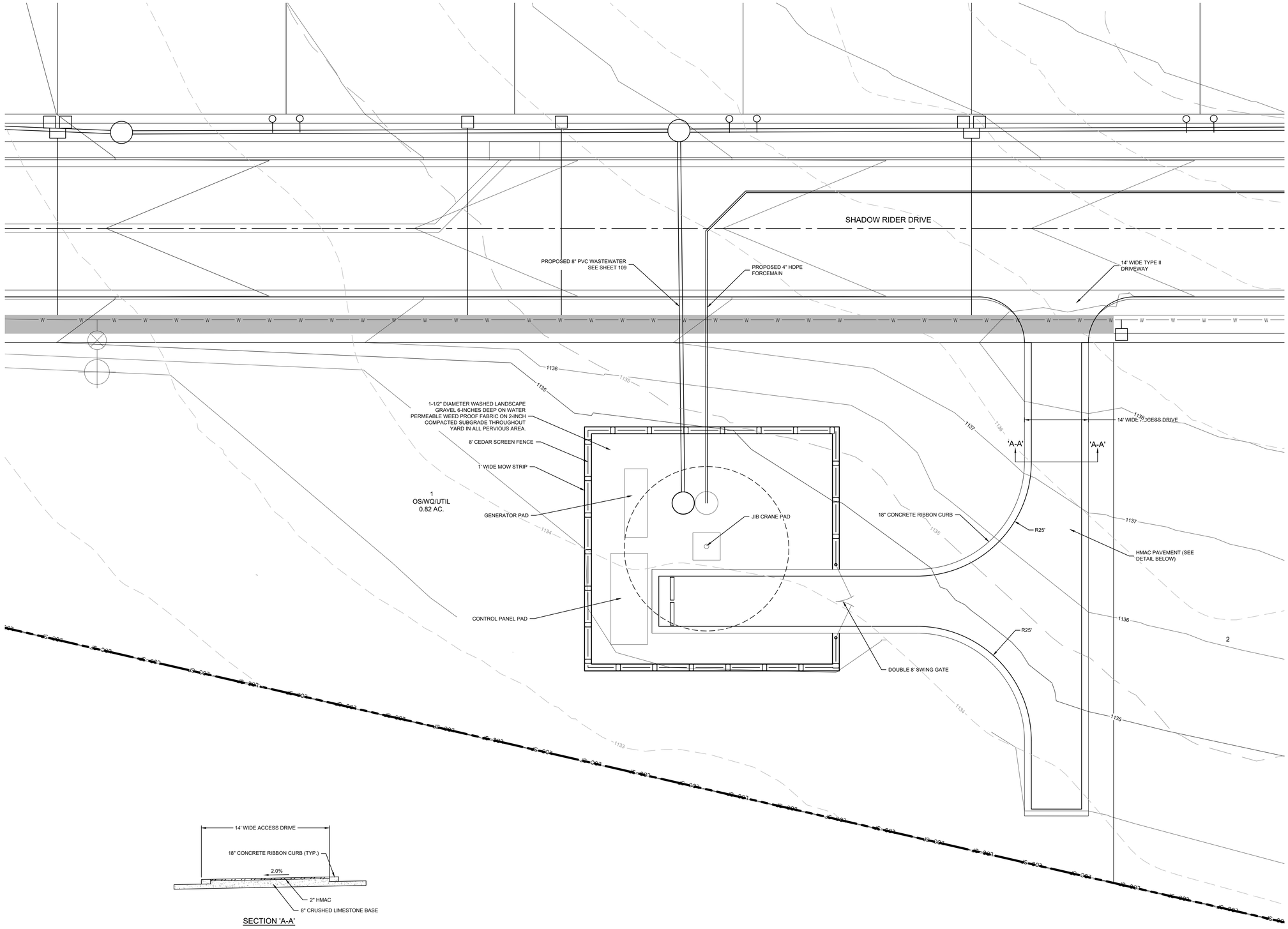
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 118 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-SSWR.DWG DATE: 1/29/2026 4:47:49 PM BY: BGILMORE



SECTION 'A-A'

SCALE: 1" = 5'
GRAPHIC SCALE IN FEET
0 2' 5' 10'

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

LIFT STATION OVERALL PLAN

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

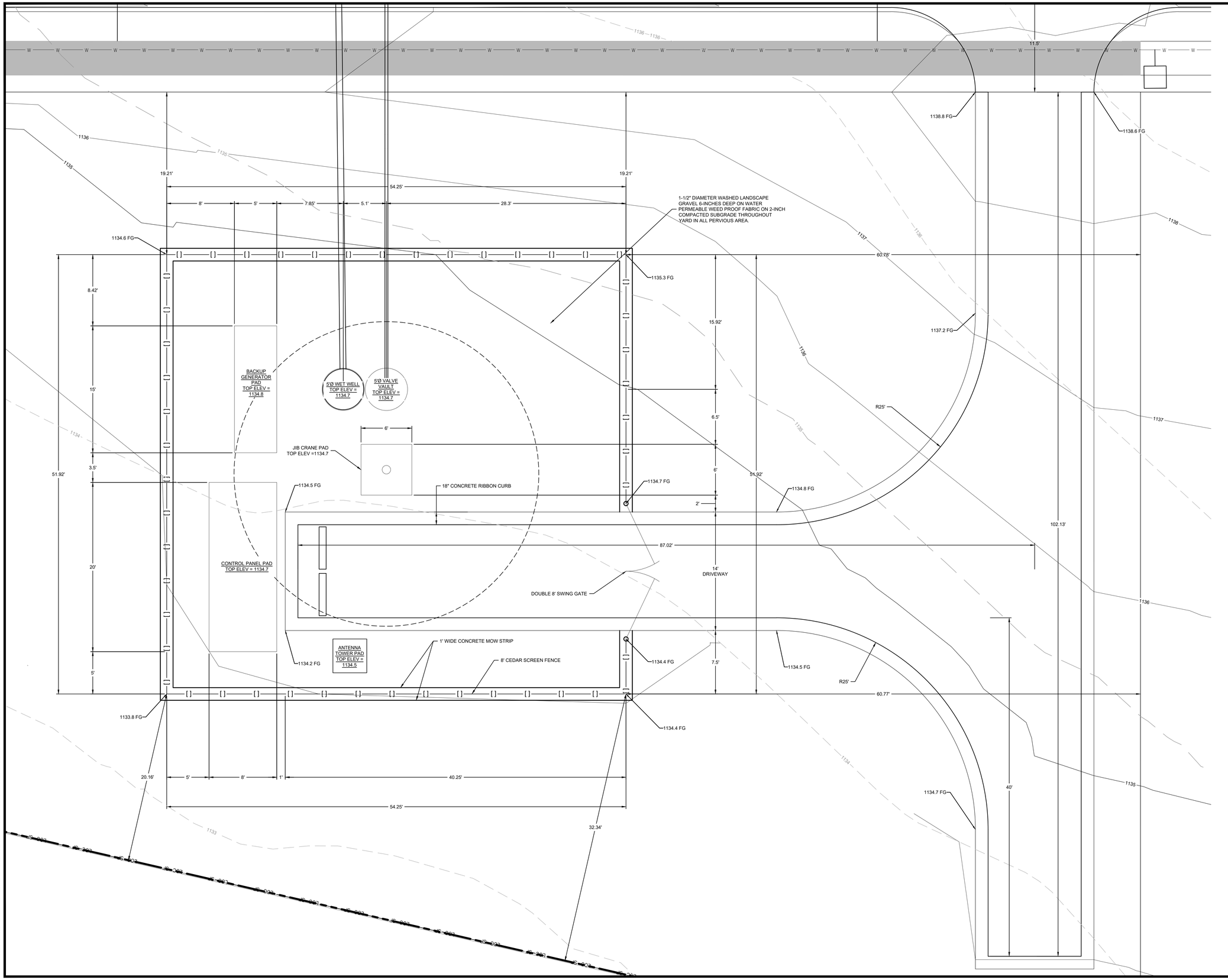
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

SHEET 119 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-LS-SITE.DWG DATE: 1/29/2026 4:48:32 PM BY: MCHILES



SCALE: 1" = 5'
GRAPHIC SCALE IN FEET
0 2' 5' 10'

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

LIFT STATION SITE PLAN

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

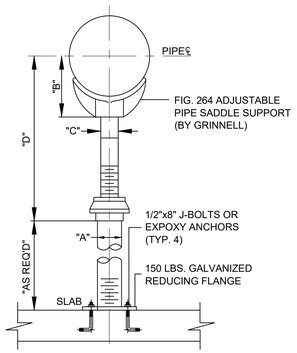
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

SHEET 120 OF 126

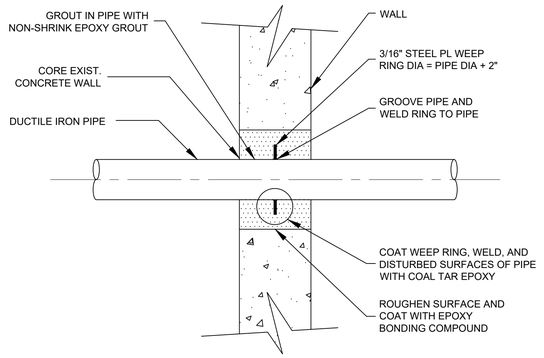
H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-LS-SITE.DWG DATE: 1/29/2026 4:48:48 PM BY: MCHILES



ADJUSTABLE PIPE SADDLE SUPPORT

N.T.S.

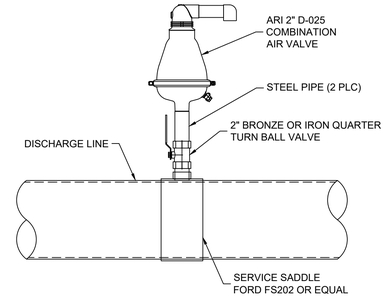
	WGT APPROX. LBS EACH					D	
PIPE SIZE	COMPLETE	SADDLE ONLY	A	A	A	MINIMUM	MAXIMUM
2 1/2	9.0	4.8	2 1/2	3 1/2	1 1/2	8	13
3	9.2	5.0	2 1/2	3 3/4	1 1/2	8 1/4	13 1/4
3 1/2	9.4	5.2	2 1/2	4	1 1/2	8 1/2	13 1/2
4	15.0	7.6	3	4 1/4	2 1/2	9 1/4	14
5	16.7	8.3	3	4 7/8	2 1/2	10	14 3/4
6	17.7	10.3	3	5 1/2	2 1/2	10 1/2	15 1/4
8	20.2	12.8	3	6 7/8	2 1/2	11 3/4	16 1/2
10	25.2	17.8	3	5 1/2	2 1/2	13 1/2	18 1/4
12	29.0	21.6	3	9 15/16	2 1/2	15	19 3/4
14	49.2	38.0	4	10 15/16	3	16 1/4	20 3/4
16	53.2	42.0	4	12 3/8	3	17 3/4	22 1/4
18	70.8	51.0	6	13 7/8	3 1/2	19 1/2	24
20	104.8	85.0	6	15 3/8	3 1/2	21	25 1/2
24	137.0	110.0	6	17 15/16	4	23 3/4	28 1/2
30	170.0	150.0	6	21 5/16	4	27	31 1/2
32	181.0	161.1	6	22 1/2	4	28 1/8	32 3/4
36	249.0	229.0	6	24 1/4	4	30 1/4	34 3/4



NOT FOR USE IN WET WELL

TYPICAL PIPE PENTRATION

N.T.S.

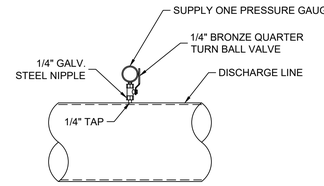


AIR VALVE DETAIL NOTES

1. AIR VALVE ASSEMBLY SHALL BE AS SHOWN OR APPROVED EQUAL. CONTRACTOR MAY PROPOSE ALTERNATIVES WHICH ARE SIMILAR IN FUNCTION.
2. THE ASSEMBLY SHALL CONSIST OF A TAP OR TEE ON THE TOP OF THE DISCHARGE MAIN PIPE, A CUT OFF VALVE AND 2-INCH COMBINATION AIR RELEASE VALVE. A SADDLE, IF USED, SHALL BE SUFFICIENT TO SUPPORT THE BALL AND AIR VALVES.
3. ALL PIPE SHALL BE IRON OR GALVANIZED STEEL. ALL VALVES SHALL BE IRON OR BRONZE. THE AIR VALVE BODY SHALL BE IRON OR STEEL. STAINLESS STEEL MAY BE USED AS WELL.
4. THE CONNECTION TO THE DISCHARGE LINE MAY BE MADE WITH A SERVICE SADDLE OR A REDUCING TEE ON THE DISCHARGE LINE.
5. THE CUT OFF VALVE SHALL HAVE ENOUGH CLEARANCE FOR THE HANDLE TO OPERATE THE VALVE. THE AIR VALVE SHALL NOT BE RAISED MORE THAN NECESSARY FOR SAID CLEARANCE.
6. DIRECT THE DISCHARGE OF THE AIR VALVE TO THE SIDE OF THE DISCHARGE LINE (NOT OVER THE PIPE).

AIR VALVE DETAIL

N.T.S.

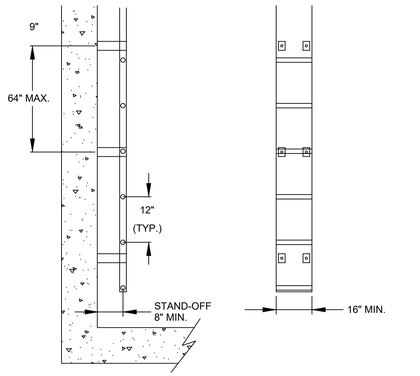


PRESSURE TAP DETAIL NOTES

1. TAP AND THREAD 1/4 INCH HOLE IN TOP OF DISCHARGE PIPE.
2. INSTALL 1/4 INCH GALVANIZED IRON PIPE AND 1/4 INCH BRONZE OR STAINLESS STEEL BALL VALVE.
3. SUPPLY ONE 1/4 INCH THREADED PRESSURE GAUGE (PER STATION) LIKE MCMASTER CARR P/N 4003K11, 0-100 PSI OR EQUAL.

PRESSURE TAP DETAIL

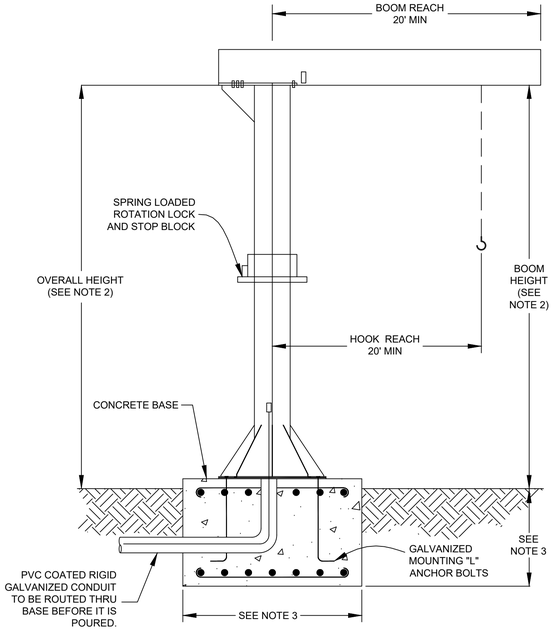
N.T.S.



NOTE: HEIGHT, WIDTH, AND STAND-OFF DIMENSIONS SHALL NOT EXCEED MANUFACTURES RECOMMENDATIONS.

VALVE VAULT ACCESS LADDER WALL MOUNT

N.T.S.



SIZE: 1.5 TON MIN

NOTES:
1. DETAILED SPECIFICATIONS ARE REQUIRED FOR SUBMITTAL PHASE.
2. SEE SPECS. CRANE MUST LIFT PUMP FROM WET WELL TO SERVICE TRUCK (AT 4' ABOVE GRADE) WITHOUT INTERFERENCE WITH OTHER STRUCTURES.
3. REF. STRUCTURAL.

JIB CRANE DETAIL

N.T.S.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

LIFT STATION DETAILS (1 OF 2)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

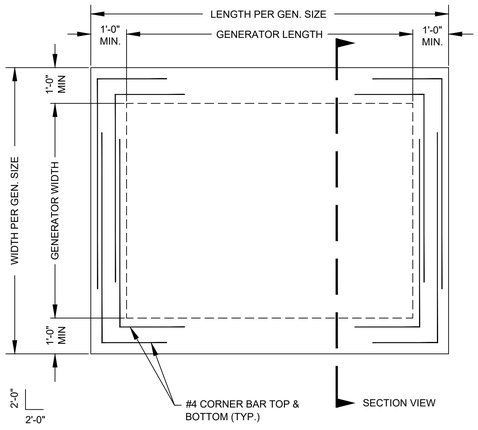
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED
PROFESSIONAL ENGINEER

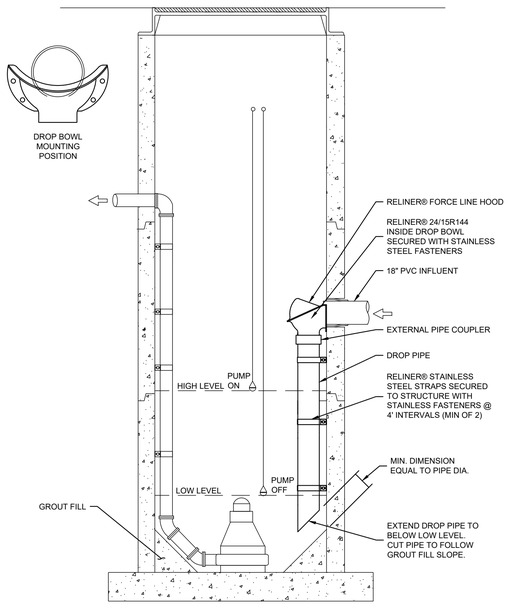
SHEET 121 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-LS-DETL.DWG DATE: 1/29/2026 4:49:00 PM BY: MCHILES



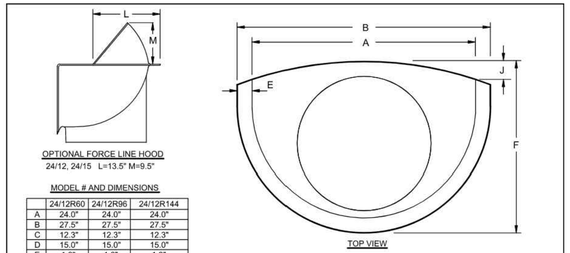
PLAN VIEW - GENERATOR FOUNDATION PAD

N.T.S.



WET WELL INFLUENT DROP BOWL DETAIL

N.T.S.



MODEL # AND DIMENSIONS

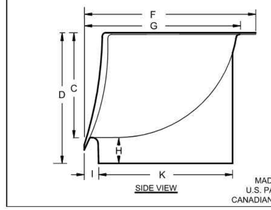
	24/12R60	24/12R96	24/12R144
A	24.0"	24.0"	24.0"
B	27.5"	27.5"	27.5"
C	12.3"	12.3"	12.3"
D	15.0"	15.0"	15.0"
E	1.8"	1.8"	1.8"
F	16.5"	16.5"	16.5"
G	15.0"	15.0"	15.0"
H	2.8"	2.8"	2.8"
I	1.5"	1.5"	1.5"
J	2.5"	1.5"	1.0"
K	12.4"	12.4"	12.4"

	24/15R60	24/15R96	24/15R144
A	24.0"	24.0"	24.0"
B	28.0"	28.0"	28.0"
C	12.3"	12.3"	12.3"
D	15.8"	15.8"	15.8"
E	2.0"	2.0"	2.0"
F	19.3"	19.3"	19.3"
G	18.0"	18.0"	18.0"
H	3.5"	3.5"	3.5"
I	1.8"	1.8"	1.8"
J	2.5"	1.5"	1.0"
K	14.8"	14.8"	14.8"

MODEL #

24/12R60 - 24" DROP BOWL WITH 12" OUTLET - USE FOR 4' - 6' DIA MH
24/12R96 - 24" DROP BOWL WITH 12" OUTLET - USE FOR 7' - 8' DIA MH
24/12R144 - 24" DROP BOWL WITH 12" OUTLET - USE FOR 9' - 12' DIA MH

24/15R60 - 24" DROP BOWL WITH 15" OUTLET - USE FOR 4' - 6' DIA MH
24/15R96 - 24" DROP BOWL WITH 15" OUTLET - USE FOR 7' - 8' DIA MH
24/15R144 - 24" DROP BOWL WITH 15" OUTLET - USE FOR 9' - 12' DIA MH



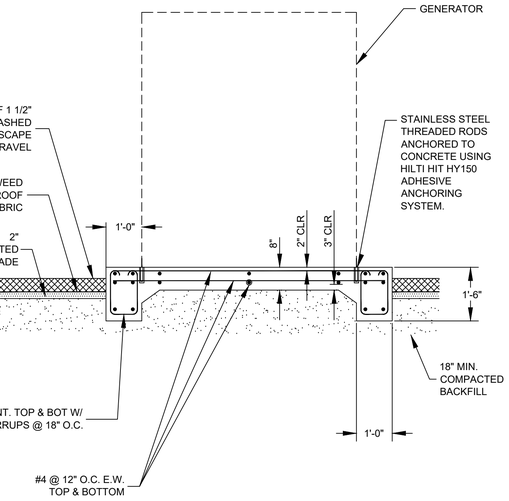
MADE IN U.S.A.
U.S. PAT. # 6074130
CANADIAN PAT. # 2269565

THE "24/12" BOWL WILL SERVICE UP THROUGH FULL 16" INLETS. THE "24/15" BOWL WILL SERVICE UP THROUGH FULL 18" INLETS. CAN BE USED FOR 21" MODERATE FLOW INLETS. ALL SIZES ARE FOR RETROFIT OR NEW CONSTRUCTION. FABRICATED IN MARINE GRADE FIBERGLASS AND FINISHED IN BRIGHT WHITE GEL COAT.

USE 6 RELINER ANCHOR ASSEMBLIES TO ATTACH DROP BOWL TO MANHOLE WALL. USE RELINER STAINLESS STEEL PIPE BRACKETS TO SUPPORT DOWN PIPE. EXTERNAL PIPE COUPLER REQUIRED. PROVIDE SWEEP AT DOWN PIPE OUTLET.

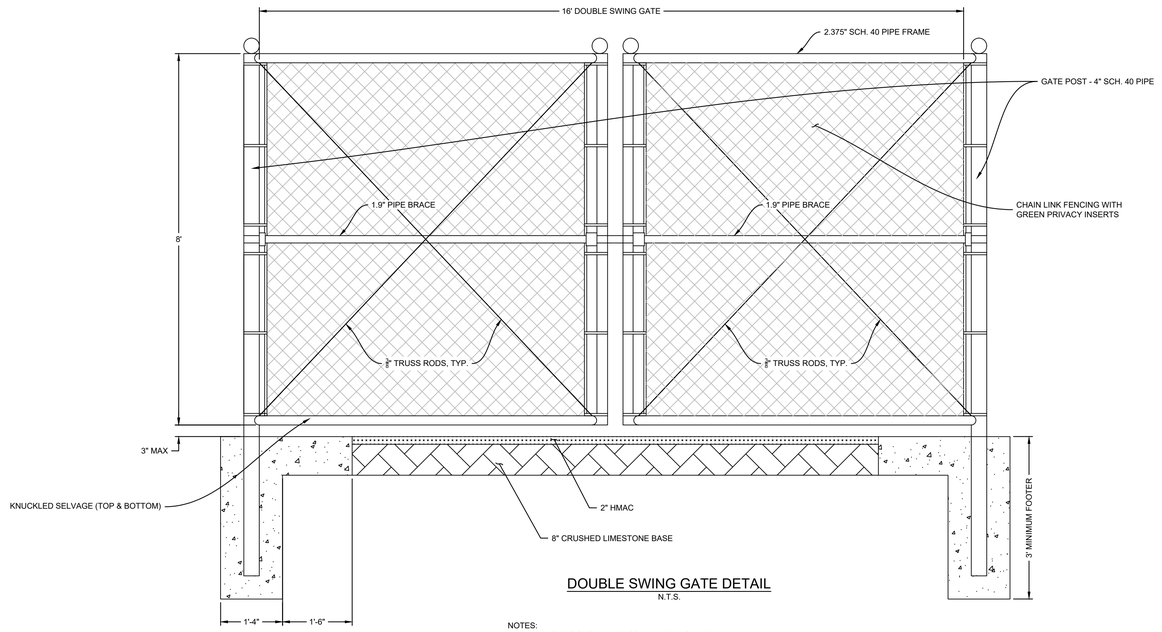
RELINER / DURAN, INC.
9 MATTHEWS DRIVE, UNIT A1/A2
EAST HADDAM, CT 06423
(800) 508-6001 FAX: (877)434-3197
WWW.RELINER.COM

DESCRIPTION	DATE	SCALE
24/12R DROP BOWLS 24/15R DROP BOWLS FOR ROUND WALLS	2/23/21	NONE
	DRAWING NUMBER	
	24/12R 24/15R	



SECTION VIEW - GENERATOR FOUNDATION PAD

N.T.S.



DOUBLE SWING GATE DETAIL

N.T.S.

NOTES:
1. PIPE SIZES SHOWN ARE SCH. 40 PER ASTM F669.
2. GATE TO PROVIDE FITTINGS AND HARDWARE FOR LOCKING GATE AND KNOX BOX.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

LIFT STATION DETAILS (2 OF 2)

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

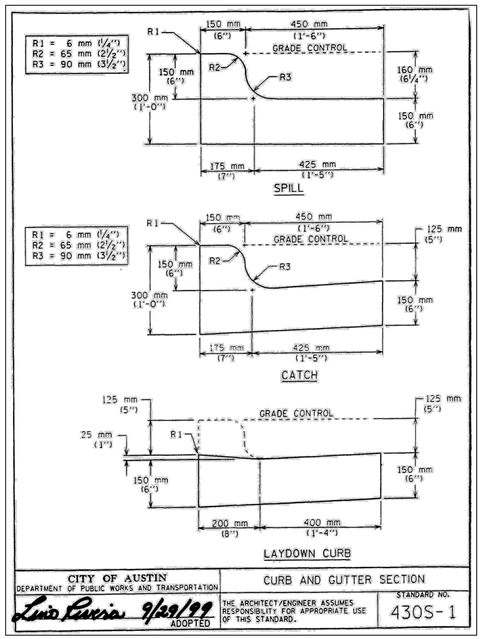
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

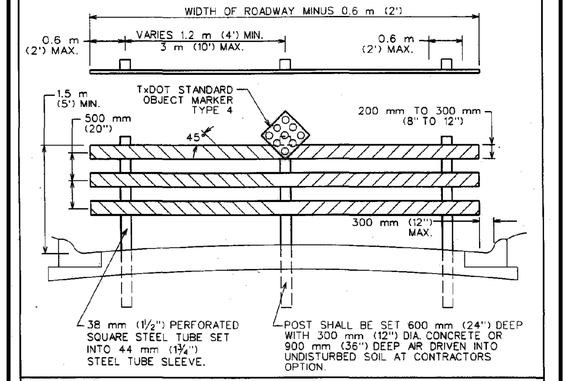
STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

SHEET 122 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-LS-DETL.DWG DATE: 1/29/2026 4:49:01 PM BY: MCHILES



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION	CURB AND GUTTER SECTION	
Louis Ramirez 9/29/99 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 430S-1



NOTES:

1. WIDTH OF RAIL SHALL BE A MINIMUM OF 200 mm (8") AND MAY BE UP TO A MAXIMUM OF 300 mm (12"). 25 mm (1") HOLLOW-PROFILE PLASTIC LUMBER WITH INTERNAL STIFFNERS.
2. RAILS SHALL BE FASTENED TO EACH TUBE WITH 50 mm (2") STEEL BOLTS WITH NUTS AND WASHERS ON EACH SIDE. BOLT THREADS SHALL BE PEENED.
3. THE RAILS SHALL HAVE 150 mm (6") WIDE REFLECTORIZED RED STRIPES OF TAPE PLACED ON 45 DEGREE SLOPES, DOWN AND TOWARD THE CENTER OF THE BARRICADE.
4. BARRICADES MAY BE CONSTRUCTED IN SECTIONS OR MAY BE CONTINUOUS ACROSS ROADWAY WIDTH; SPLICES ON CONTINUOUS RAIL BARRICADES SHALL BE AT POSTS AND SHALL HAVE A 600 mm (2') SPLICE BLOCK ON BACK SIDE OF THE SAME MATERIAL AS RAIL.
5. 450 mm (18") DIAMOND REFLECTORIZED RED PANEL OR 450 mm (18") DIAMOND RED OR BLACK PANEL WITH NINE-75 mm (3") DIAMETER RED REFLECTORS SYMMETRICALLY PLACED AT CENTER POSTS, A MINIMUM OF 1.2 m (4') ABOVE GROUND SHALL BE USED FOR END OF ROAD MARKERS AS PER TEXAS MANUAL on UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) SECTION 3C.04.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	STREET-END BARRICADE	
Bill Gardner 3/12/09 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 803S-1

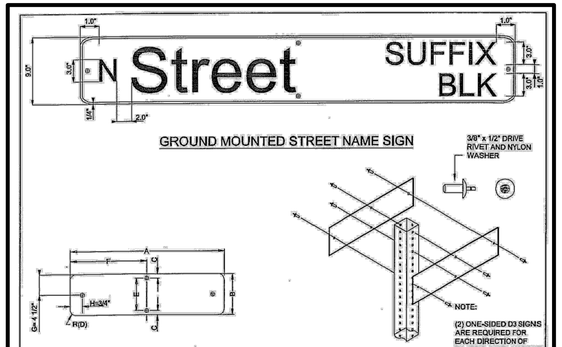


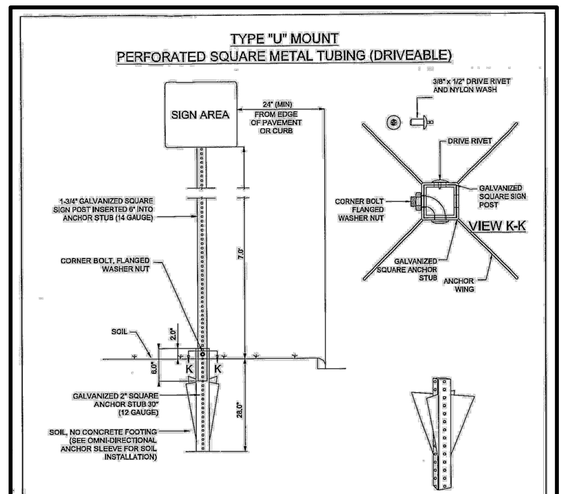
TABLE - D3 SIGNS

A	B	C	D	E	F	T
24"	9"	1/2"	3/4"	8"	12"	0.08"
30"	9"	1/2"	3/4"	8"	15"	0.08"
36"	9"	1/2"	3/4"	8"	18"	0.08"
42"	9"	1/2"	3/4"	8"	21"	0.08"
48"	9"	1/2"	3/4"	8"	24"	0.08"
54"	9"	1/2"	3/4"	8"	27"	0.08"

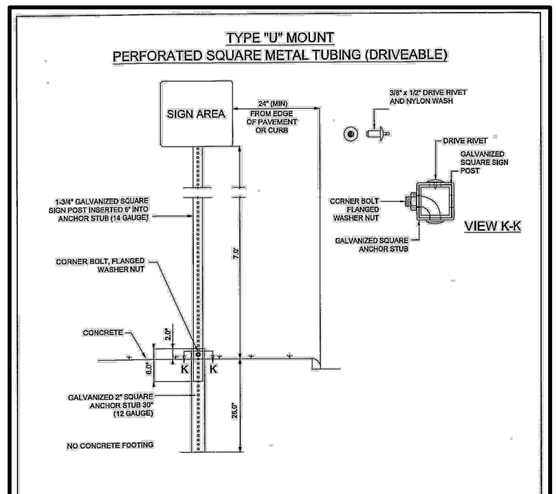
SIGN TO POLE INSTALLATION

HEIGHT	9"
LENGTH	24" MIN. 54 MAX. 6" INCREMENTS OF LENGTH
THICKNESS	0.08"
SUBSTRATE	ALUMINUM ALLOY, 6061-T-6, OR TYPE IV 5052-H38 (ASTM B-209)
SIGN FACE MATERIALS	GREEN FILM OVER HIGH INTENSITY PRISMATIC SHEETING
LEGENDS AND SYMBOLS	SERIES D (USUAL) SERIES C OR B FOR MAXIMUM LENGTH SIGN BLANK, IF NECESSARY
COLOR	WHITE LEGEND ON GREEN BACKGROUND WITH ¼" WHITE BORDER

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	GROUND MOUNTED TRAFFIC AND STREET NAME SIGNS	
Keir Bundchard-Groux 1/4/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 824-2 1 OF 3



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	GROUND MOUNTED TRAFFIC AND STREET NAME SIGNS - SOIL	
Keir Bundchard-Groux 1/4/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 824-2 2 OF 3



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	GROUND MOUNTED TRAFFIC AND STREET NAME SIGNS - CONCRETE	
Keir Bundchard-Groux 1/4/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 824-2 3 OF 3

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

STANDARD DETAILS
(1 OF 3)

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

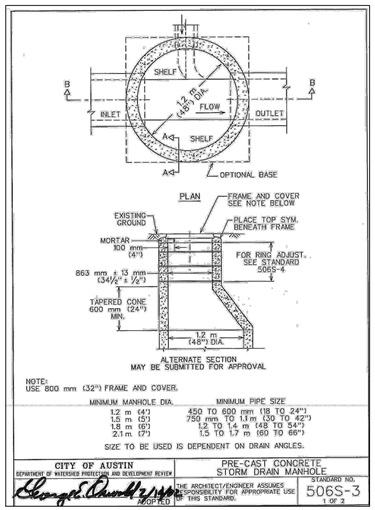
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

SHEET 123 OF 126

H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-DTLS.DWG DATE: 1/29/2026 4:49:21 PM BY: BGILMORE

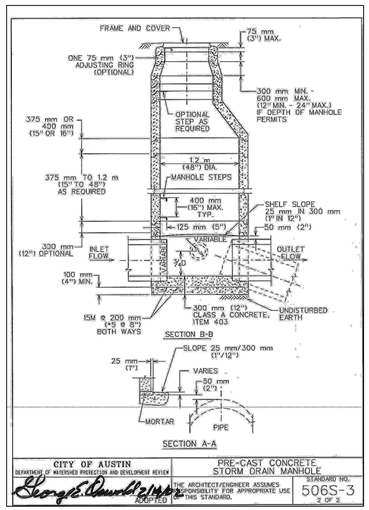


NOTE:
USE 800 mm (32") FRAME AND COVER.

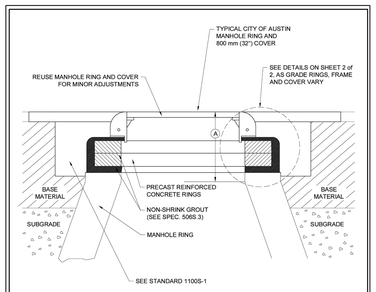
MINIMUM MANHOLE DIA.	MINIMUM PIPE SIZE
1.2 m (4')	450 TO 600 mm (18 TO 24")
1.5 m (5')	750 mm TO 1.1 m (30 TO 42")
1.8 m (6')	1.2 TO 1.4 m (48 TO 54")
2.1 m (7')	1.5 TO 1.7 m (60 TO 66")

SIZE TO BE USED IS DEPENDENT ON DRAIN ANGLES.

CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	PRE-CAST CONCRETE STORM DRAIN MANHOLE
George E. Ortwell 2/14/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
	STANDARD NO. 506S-3 1 OF 2



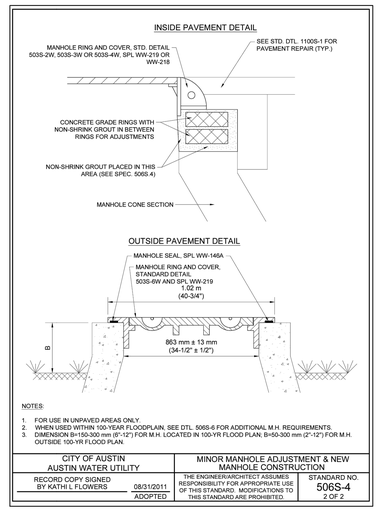
CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	PRE-CAST CONCRETE STORM DRAIN MANHOLE
George E. Ortwell 2/14/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
	STANDARD NO. 506S-3 2 OF 2



A VERTICAL FACE = ALLOWABLE THROAT OR CHIMNEY HEIGHT
= NEW CONSTRUCTION = 525mm = (21") Max.
= EXISTING CONSTRUCTION = 675mm (27") Max.

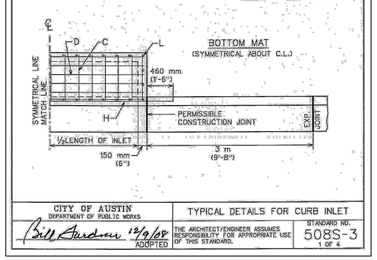
NOTES:
1. NON-SHRINK GROUT SHALL NOT EXCEED 25 mm (1") IN ANY DIMENSION
2. SUB-GRADE AND BASE MATERIALS SHALL BE COMPACTED ACCORDING TO ITEMS 201S AND 210S, RESPECTIVELY, OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS.
3. REFER TO STANDARD 1100S-1 FOR REPAIRS AROUND MANHOLES.
4. SEE STANDARD 506S-4A FOR HDPE RING INSTALLATION (FOR USE IN PAVED AREAS ONLY).

CITY OF AUSTIN AUSTIN WATER UTILITY	MINOR MANHOLE ADJUSTMENT & NEW MANHOLE CONSTRUCTION
RECORD COPY SIGNED BY KATHI L. FLOWERS 08/31/2011 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.
	STANDARD NO. 506S-4 1 OF 2

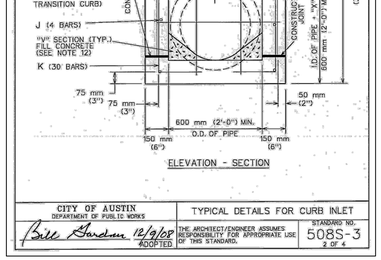


NOTES:
1. FOR USE IN UNPAVED AREAS ONLY.
2. WHEN USED WITHIN 100-YEAR FLOODPLAIN, SEE DTL. 506S-6 FOR ADDITIONAL M.H. REQUIREMENTS.
3. DIMENSION B=150-300 mm (6"-12") FOR M.H. LOCATED IN 100-YR FLOOD PLAIN; B=50-300 mm (2"-12") FOR M.H. OUTSIDE 100-YR FLOOD PLAN.

CITY OF AUSTIN AUSTIN WATER UTILITY	MINOR MANHOLE ADJUSTMENT & NEW MANHOLE CONSTRUCTION
RECORD COPY SIGNED BY KATHI L. FLOWERS 08/31/2011 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.
	STANDARD NO. 506S-4 2 OF 2



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL DETAILS FOR CURB INLET
Bill Gardner 12/9/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
	STANDARD NO. 508S-3 1 OF 4

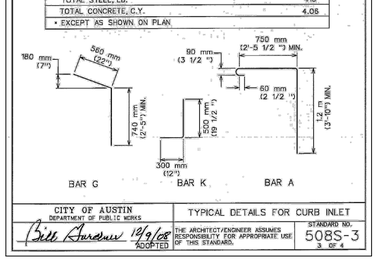


CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL DETAILS FOR CURB INLET
Bill Gardner 12/9/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
	STANDARD NO. 508S-3 2 OF 4

TABLE OF QUANTITIES
FOR 18" OUTLET PIPE
REINFORCING STEEL QUANTITIES

BARS	SIZE	SPACING	NUMBER	LENGTH	WEIGHT
A	4	230mm (9")±	15	2 m (7'-0")	73
B	4	250 mm (10")	4	3.25 m (10'-8")	29
C	4	460 mm (18")	7	760 mm (2'-6")	12
D	6	150 mm (6")	5	3.25 m (10'-8")	80
E	4	300 mm (12")	6	760 mm (2'-6")	10
F	4	250 mm (10")	3	4 m (13'-0")	35
G	4	300 mm (12")	11	1.25 m (4'-3")	31
H	6	-	1	4.25 m (14'-0")	20
J	4	300 mm (12")	7	3.25 m (10'-8")	50
K	4	230 mm (9")±	30	800 mm (2'-7 1/2")	52
L	4	300 mm (12")±	5	1.3 m (4'-4")	37
M	4	-	4	500 mm (1'-8") AVG	4
TOTAL STEEL, LB.					413
TOTAL CONCRETE, C.Y.					4.05

• EXCEPT AS SHOWN ON PLAN

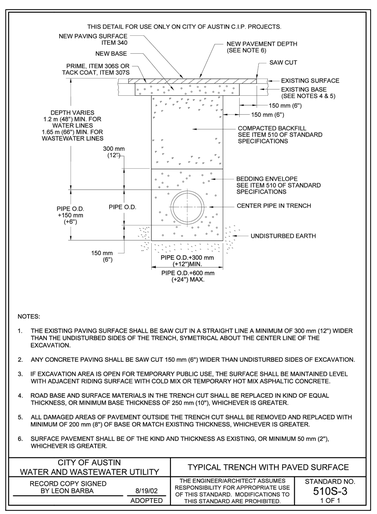


CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL DETAILS FOR CURB INLET
Bill Gardner 12/9/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
	STANDARD NO. 508S-3 3 OF 4

NOTES:
1. ALL CONCRETE SHALL BE CLASS "A"
2. ALL REINFORCING STEEL SHALL BE GRADE 60
3. DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTERS OF BARS.
4. VERTICAL STEEL MAY BE SPLICED (380 mm or 15" MIN. LAP) IN THE LOWER ONE-HALF OF ALL INLET WALLS.S. IN AREAS OF CONFLICT BETWEEN REINFORCING STEEL, PIPES AND MANHOLE FRAME, THE REINFORCEMENT SHALL BE BENT OR ADJUSTED TO CLEAR AS DIRECTED BY THE ENGINEER.
5. QUANTITIES SHOWN HEREON ARE FOR THE CONTRACTOR'S INFORMATION ONLY. PAYMENT WILL BE MADE FOR EACH INLET OF THE TYPE SPECIFIED, COMPLETE IN PLACE INCLUDING MANHOLE FRAME AND OVER.
6. CHAMFER ALL EXPOSED EDGES 20 mm (3/4 ").
7. MANHOLE FRAME AND COVER SHALL BE IN ACCORDANCE WITH CITY OF AUSTIN STANDARD 503S-1.
8. THE CONTRACTOR MAY PROPOSE ALTERNATE PROCEDURES FOR THE CONSTRUCTION OF INLETS, INCLUDING PRECAST UNITS. PLANS FOR SUCH PROPOSED ALTERNATES SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL BEFORE CONSTRUCTION.
9. ALL INLET WALLS SHALL BE FORMED EXCEPT WHERE THE NATURE OF THE SURROUNDING MATERIAL IS SUCH THAT IT CAN BE TRIMMED TO A SMOOTH VERTICAL FACE. WHEN INLET WALLS ARE PLACED TO NEAT EXCAVATION LINES THE WALL THICKNESS SHALL NOT EXCEED 10 INCHES.
10. PAYMENT FOR INLET AT THE CONTRACT PRICE SHALL INCLUDE THE TRANSITION CURB.
11. INVERT OF INLET SHALL BE SLOPED 1/20 WITH FILL CONCRETE, SHAPED AS "V" SECTION
12. NO SPLICING OF REINFORCING STEEL SHALL BE PERMITTED UNLESS OTHERWISE NOTED ON THE PLANS OR PERMITTED IN WRITING BY THE ENGINEER.

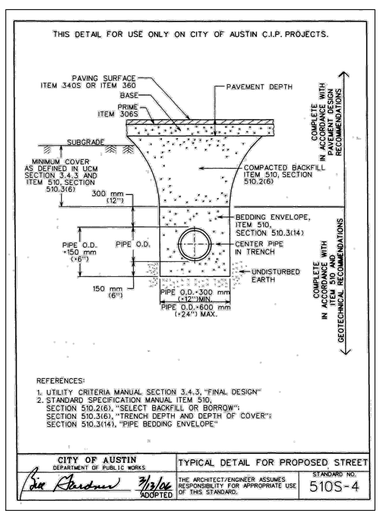
REFERENCES:
FOR EXPANSION JOINT DOWEL AND DOWEL LOCATION DETAILS SEE STD. 430S-3, "CURB EXPANSION JOINT DOWEL DETAIL".
FOR 18" MANHOLE FRAME AND COVER DETAILS SEE STD. 503S-1, "18" COVER AND FRAME".

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL DETAILS FOR CURB INLET
Bill Gardner 12/9/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
	STANDARD NO. 508S-3 4 OF 4



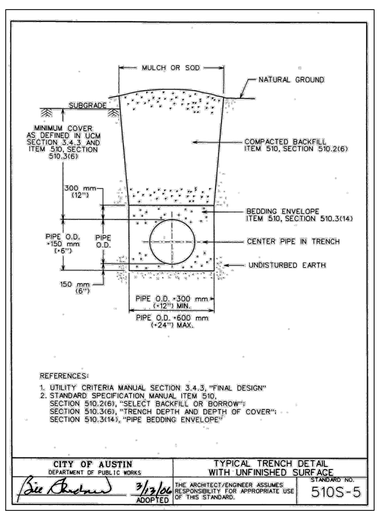
NOTES:
1. THE EXISTING PAVING SURFACE SHALL BE SAW CUT IN A STRAIGHT LINE A MINIMUM OF 300 mm (12") WIDER THAN THE UNDISTURBED SIDES OF THE TRENCH, SYMETRICAL ABOUT THE CENTER LINE OF THE EXCAVATION.
2. ANY CONCRETE PAVING SHALL BE SAW CUT 150 mm (6") WIDER THAN UNDISTURBED SIDES OF EXCAVATION.
3. IF EXCAVATION AREA IS OPEN FOR TEMPORARY PUBLIC USE, THE SURFACE SHALL BE MAINTAINED LEVEL WITH ADJACENT RIDING SURFACE WITH COLD MIX OR TEMPORARY HOT MIX ASPHALTIC CONCRETE.
4. ROAD BASE AND SURFACE MATERIALS IN THE TRENCH CUT SHALL BE REPLACED IN KIND OF EQUAL THICKNESS, OR MINIMUM BASE THICKNESS OF 250 mm (10"), WHICHEVER IS GREATER.
5. ALL DAMAGED AREAS OF PAVEMENT OUTSIDE THE TRENCH CUT SHALL BE REMOVED AND REPLACED WITH MINIMUM OF 200 mm (8") OF BASE OR MATCH EXISTING THICKNESS, WHICHEVER IS GREATER.
6. SURFACE PAVEMENT SHALL BE OF THE KIND AND THICKNESS AS EXISTING, OR MINIMUM 50 mm (2"), WHICHEVER IS GREATER.

CITY OF AUSTIN WATER AND WASTEWATER UTILITY	TYPICAL TRENCH WITH PAVED SURFACE
RECORD COPY SIGNED BY LEON BARBA 8/19/02 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.
	STANDARD NO. 510S-3 1 OF 1



REFERENCES:
1. UTILITY CRITERIA MANUAL SECTION 3.4.3, "FINAL DESIGN"
2. STANDARD SPECIFICATION MANUAL ITEM 510, SECTION 510.2(6), "SELECT BACKFILL OR BORROW"; SECTION 510.3(6), "TRENCH DEPTH AND DEPTH OF COVER"; SECTION 510.3(14), "PIPE BEDDING ENVELOPE"

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL DETAIL FOR PROPOSED STREET
Bill Gardner 3/3/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
	STANDARD NO. 510S-4



REFERENCES:
1. UTILITY CRITERIA MANUAL SECTION 3.4.3, "FINAL DESIGN"
2. STANDARD SPECIFICATION MANUAL ITEM 510, SECTION 510.2(6), "SELECT BACKFILL OR BORROW"; SECTION 510.3(6), "TRENCH DEPTH AND DEPTH OF COVER"; SECTION 510.3(14), "PIPE BEDDING ENVELOPE"

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL TRENCH DETAIL WITH UNFINISHED SURFACE
Bill Gardner 3/3/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
	STANDARD NO. 510S-5

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

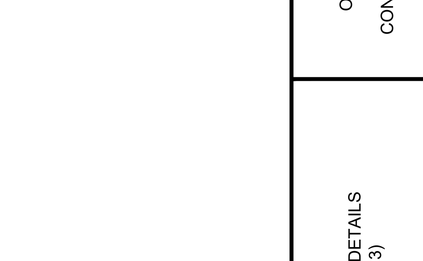
ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

STANDARD DETAILS
(2 OF 3)

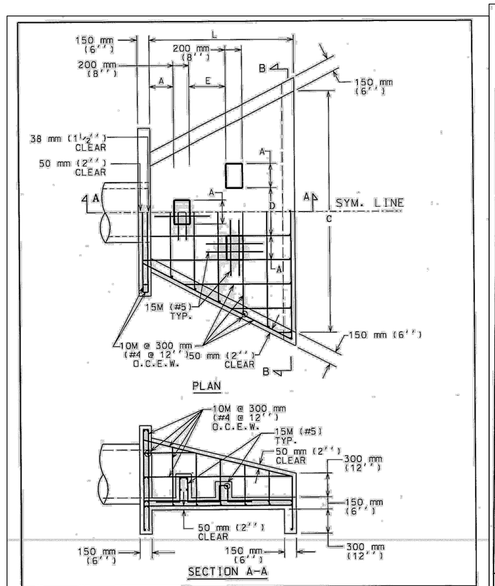
PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026



H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-DTLS.DWG DATE: 1/29/2026 4:48:30 PM BY: BGILMORE



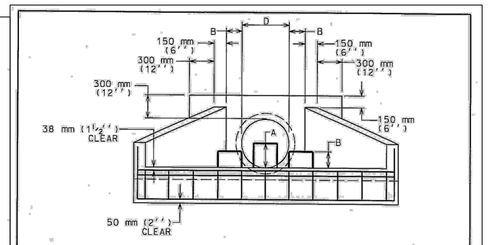
CITY OF AUSTIN
DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW

STANDARD HEADWALL AND ENERGY DISSIPATORS

STANDARD NO. 508S-13 1 OF 2

Bill Gardner 8/20/07
ADOPTED

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



SECTION B-B

NOTES:

1. ALL CONCRETE SHALL BE TYPE "C" AS PER SPEC. 403S. CONCRETE FOR STUCRTURES.
2. CHAMFER ALL EXTERNAL VISIBLE CORNERS.
3. DISSIPATOR BLOCKS REQUIRED ON DISCHARGE HEADWALLS ONLY.

D	457 mm (18")	533 mm (21")	610 mm (24")	685 mm (27")	765 mm (30")	838 mm (33")	914 mm (36")	1.067 m (42")	1.219 m (48")	1.372 m (54")	1.524 m (60")
A	225 mm (9")	250 mm (10")	300 mm (12")	350 mm (14")	375 mm (15")	400 mm (16")	450 mm (18")	525 mm (21")	600 mm (24")	675 mm (27")	750 mm (30")
B	150 mm (6")	175 mm (7")	200 mm (8")	225 mm (9")	250 mm (10")	275 mm (11")	300 mm (12")	350 mm (14")	400 mm (16")	450 mm (18")	500 mm (20")
C	2.29 m (90")	2.67 m (105")	3.05 m (120")	343 m (135")	3.81 m (150")	4.19 m (165")	4.57 m (180")	5.33 m (210")	6.10 m (240")	6.86 m (270")	7.62 m (300")
L	1.37 m (54")	1.60 m (63")	1.83 m (72")	2.06 m (81")	2.29 m (90")	2.51 m (99")	2.74 m (108")	3.20 m (126")	3.66 m (144")	4.11 m (162")	4.57 m (180")
E	300 mm (12")	350 mm (14")	400 mm (16")	450 mm (18")	500 mm (20")	550 mm (22")	600 mm (24")	700 mm (28")	800m (32")	900 mm (36")	1000 mm (40")

DIMENSIONS IN MILLIMETERS. METERS AND (INCHES).

DISCHARGE VELOCITIES GREATER THAN 3 METERS/SECOND (10 fps) REQUIRE ROCK OUTLET PROTECTION.

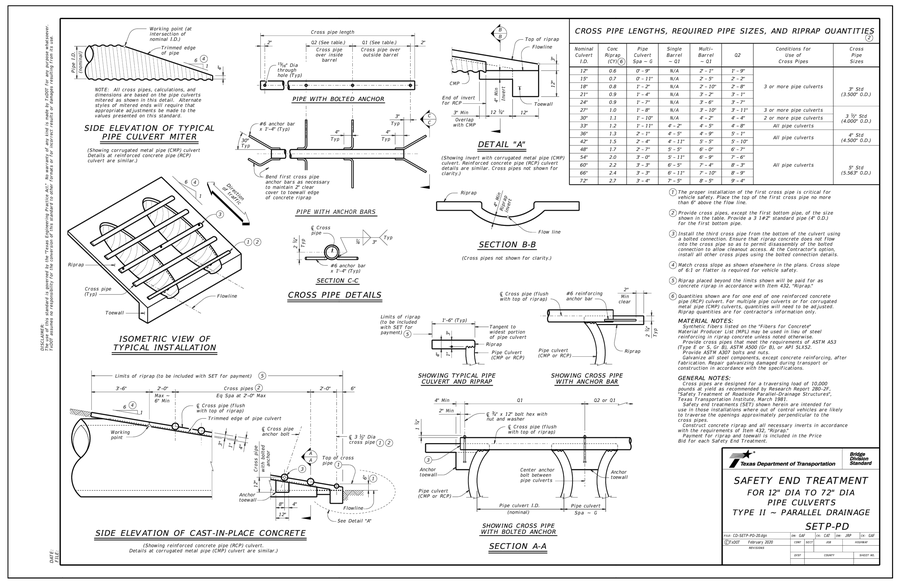
CITY OF AUSTIN
DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW

STANDARD HEADWALL AND ENERGY DISSIPATORS

STANDARD NO. 508S-13 2 OF 2

Bill Gardner 8/20/07
ADOPTED

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



CROSS PIPE LENGTHS, REQUIRED PIPE SIZES, AND RIPRAP QUANTITIES (2)

Nominal Culvert I.D.	Conc Riprap, (CY) (6)	Pipe Culvert Spa = Q	Single Barrel = Q1	Multi-Barrel = Q1	Q2	Conditions for Use of Cross Pipes	Cross Pipe Sizes
12"	0.6	0'-9"	N/A	2'-3"	1'-9"		
15"	0.7	0'-11"	N/A	2'-5"	2'-2"		
18"	0.8	1'-2"	N/A	2'-10"	2'-8"	3 or more pipe culverts	7" Std (3.500" O.D.)
21"	0.9	1'-4"	N/A	3'-2"	3'-1"		
24"	0.9	1'-7"	N/A	3'-6"	3'-7"		
27"	1.0	1'-8"	N/A	3'-10"	3'-11"	3 or more pipe culverts	3 ½" Std (4.000" O.D.)
30"	1.1	1'-10"	N/A	4'-2"	4'-4"	2 or more pipe culverts	
33"	1.2	1'-11"	4'-2"	4'-5"	4'-8"	All pipe culverts	
36"	1.3	2'-1"	4'-5"	4'-9"	5'-1"		9" Std (4.500" O.D.)
42"	1.5	2'-4"	4'-11"	5'-3"	5'-10"	All pipe culverts	
48"	1.7	2'-7"	5'-5"	6'-0"	6'-7"		
54"	2.0	2'-10"	5'-11"	6'-9"	7'-4"		
60"	2.2	3'-2"	6'-5"	7'-4"	8'-3"	All pipe culverts	9" Std (5.563" O.D.)
66"	2.4	3'-5"	6'-11"	7'-10"	8'-9"		
72"	2.7	3'-8"	7'-5"	8'-3"	9'-4"		

1. The proper installation of the first cross pipe is critical for vehicle safety. Place the top of the first cross pipe no more than 6" above the Flow line.
2. Provide cross pipes, except the first bottom pipe, of the size shown in the table. Provide a 3 1/4" standard pipe (4" O.D.) for the first bottom pipe.
3. Install the third cross pipe from the bottom of the culvert using a bolted connection. Ensure that riprap concrete does not flow into the cross pipe so as to permit disassembly of the bolted connection. Where more than three cross pipes are required, install all other cross pipes using the bolted connection details.
4. Match cross slope as shown elsewhere in the plans. Cross slope of 8:1 or flatter is required for vehicle safety.
5. Riprap placed beyond the limits shown will be paid for as concrete riprap in accordance with Item 432, "Riprap."
6. Quantities shown are for one end of one reinforced concrete pipe (RCP) culvert. For multiple pipe culverts or for corrugated metal pipe (CMP) culverts, quantities will need to be adjusted. Riprap quantities are for contractor's information only.

MATERIAL NOTES:

Synthetic fibers listed on the "Fibers for Concrete" Material Producer List (MPL) may be used in lieu of steel reinforcing in riprap concrete unless noted otherwise.

Provide cross pipes that meet the requirements of ASTM A53 (Type E or S, Grade B) or ASTM A500 or API 5L(X52).

Provide ASTM A307 bolts and nuts.

Galvanize all steel components, except concrete reinforcing, after fabrication and welding. Galvanizing damaged during transport or construction in accordance with the specifications.

GENERAL NOTES:

Cross pipes are designed for a traversing load of 10,000 lbs/axle. See Texas Transportation Institute Report 200-2F, "Safety Treatment of Roadside Parallel-Drainage Structures", Texas Transportation Institute, March 1981.

Cross pipes shown in this detail are intended for use in those installations where out of control vehicles are likely to traverse the openings approximately perpendicular to the cross pipes.

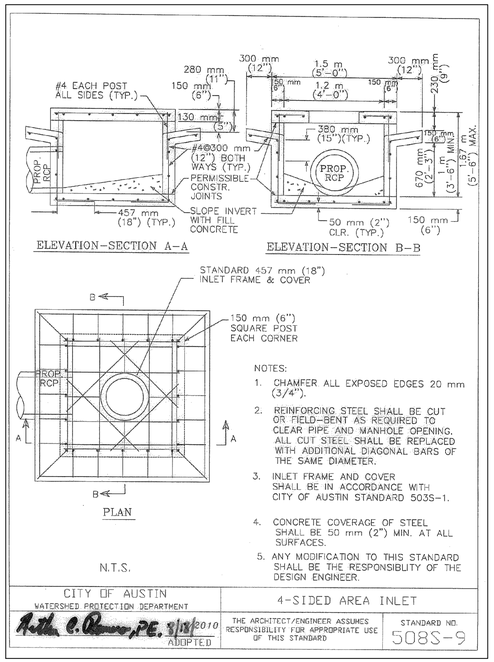
Construct concrete riprap and all necessary inverts in accordance with Item 432, "Riprap," of the Specs.

Payment for riprap and towwall is included in the Price Bid for each Safety End Treatment.

Texas Department of Transportation — Bridge Division Standard

SAFETY END TREATMENT
FOR 12" DIA TO 72" DIA PIPE CULVERTS
TYPE II ~ PARALLEL DRAINAGE
SETP-PD

FILE:	SETP-PD-20.dgn	DN: CAP	CK: CAP	DW:	CK: CAP		
© TxDOT	February 2020	CONT	SECT	JOB		HIGHWAY	
REVISIONS							
		DIST	COUNTY			SHEET NO.	



NOTES:

1. CHAMFER ALL EXPOSED EDGES 20 mm (3/4").
2. REINFORCING STEEL SHALL BE CUT OR FIELD-BENT AS REQUIRED TO CLEAR PIPE AND MANHOLE OPENING. ALL CUT STEEL SHALL BE REPLACED WITH ADDITIONAL DIAGONAL BARS OF THE SAME DIAMETER.
3. INLET FRAME AND COVER SHALL BE IN ACCORDANCE WITH CITY OF AUSTIN STANDARD 503S-1.
4. CONCRETE COVERAGE OF STEEL SHALL BE 50 mm (2") MIN. AT ALL SURFACES.
5. ANY MODIFICATION TO THIS STANDARD SHALL BE THE RESPONSIBILITY OF THE DESIGN ENGINEER.

CITY OF AUSTIN
WATERSHED PROTECTION DEPARTMENT

4-SIDED AREA INLET

Keith C. Rhoades, P.E. 5/13/2010
ADOPTED

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.

STANDARD NO. 508S-9

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946

GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

STANDARD DETAILS
(3 OF 3)

PROJECT NO: 1636-11741

DESIGNED BY: BG

DRAWN BY: TAM

CHECKED BY: CR

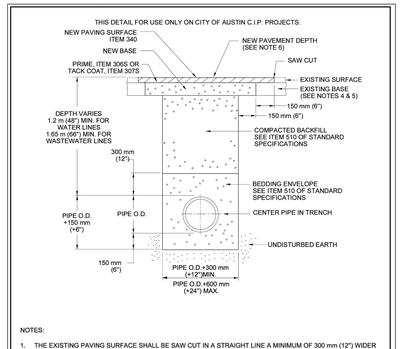
NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

SHEET 125 OF 126

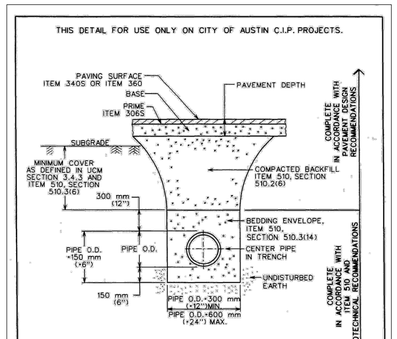
H:\PROJECTS\1636 - BROHN HOMES\11741 - ORCHARD RANCH\CADSHEETS\11741-C-DTLS.DWG DATE: 1/29/2026 4:49:34 PM BY: BGILMORE



NOTES:

1. THE EXISTING PAVING SURFACE SHALL BE SAW CUT IN A STRAIGHT LINE A MINIMUM OF 300 mm (12") WIDER THAN THE UNDISTURBED SIDES OF THE TRENCH, SYMETRICAL ABOUT THE CENTER LINE OF THE EXCAVATION.
2. ANY CONCRETE PAVING SHALL BE SAW CUT 150 mm (6") WIDER THAN UNDISTURBED SIDES OF EXCAVATION.
3. IF EXCAVATION AREA IS OPEN FOR TEMPORARY PUBLIC USE, THE SURFACE SHALL BE MAINTAINED LEVEL WITH ADJACENT RIDING SURFACE WITH COLD MIX OR TEMPORARY HOT MIX ASPHALTIC CONCRETE.
4. ROAD BASE AND SURFACE MATERIALS IN THE TRENCH CUT SHALL BE REPLACED IN KIND OF EQUAL THICKNESS, OR MINIMUM BASE THICKNESS OF 250 mm (10"), WHICHEVER IS GREATER.
5. ALL DAMAGED AREAS OF PAVEMENT OUTSIDE THE TRENCH CUT SHALL BE REMOVED AND REPLACED WITH MINIMUM OF 200 mm (8") OF BASE OR MATCH EXISTING THICKNESS, WHICHEVER IS GREATER.
6. SURFACE PAVEMENT SHALL BE OF THE KIND AND THICKNESS AS EXISTING, OR MINIMUM 50 mm (2"), WHICHEVER IS GREATER.

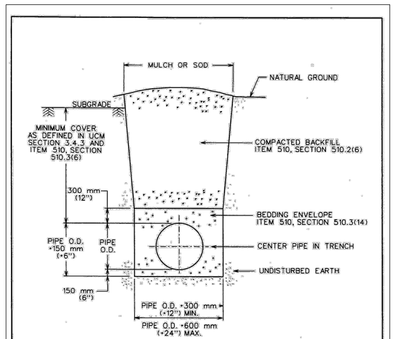
CITY OF AUSTIN WATER AND WASTEWATER UTILITY	TYPICAL TRENCH WITH PAVED SURFACE	
RECORD COPY SIGNED BY LEON BARBA 8/19/02 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 510S-3 1 OF 1



REFERENCES:

1. UTILITY CRITERIA MANUAL SECTION 3.4.3, "FINAL DESIGN"
2. STANDARD SPECIFICATION MANUAL ITEM 510, SECTION 510.2(6), "SELECT BACKFILL OR BORROW"; SECTION 510.3(6), "TRENCH DEPTH AND DEPTH OF COVER"; SECTION 510.3(14), "PIPE BEDDING ENVELOPE"

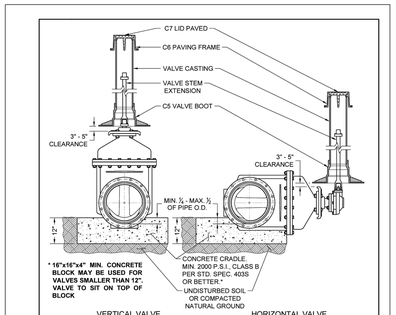
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL DETAIL FOR PROPOSED STREET	
Joe Gardner 3/13/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 510S-4



REFERENCES:

1. UTILITY CRITERIA MANUAL SECTION 3.4.3, "FINAL DESIGN"
2. STANDARD SPECIFICATION MANUAL ITEM 510, SECTION 510.2(6), "SELECT BACKFILL OR BORROW"; SECTION 510.3(6), "TRENCH DEPTH AND DEPTH OF COVER"; SECTION 510.3(14), "PIPE BEDDING ENVELOPE"

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL TRENCH DETAIL WITH UNFINISHED SURFACE	
Joe Gardner 3/13/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 510S-5



VERTICAL VALVE

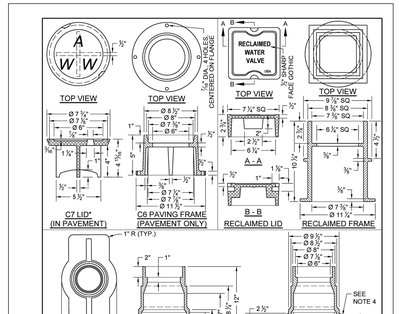
HORIZONTAL VALVE
ONLY TO BE USED WHEN CALLED OUT ON THE DRAWINGS.

NOTES:

1. WELD SOCKET 2½" x 2" DEEP TO 1" SCH. 40 CARBON STEEL ROUND STEM EXTENSION, FITTED ON OPERATING NUT, [SCH. 80 FOR LENGTHS OVER 10']
2. VALVE CASTING SHALL BE 6" D PIPE WITH BELL OR COLLAR CENTERED OVER VALVE BOOT.
3. NUT AT TOP OF VALVE EXTENSION ROD SHALL BE SQUARE 2" LONG WELDED TO TOP OF ROD.
4. VALVE STEM EXTENSIONS ARE REQUIRED ON ALL VALVES THAT EXCEED 3' DEEP FROM FINISHED GRADE. VALVE EXTENSIONS SHALL BE PLACED SUCH THAT THE EXTENSION NUT IS BETWEEN 12" AND 18" FROM FINISHED GRADE.

RECLAIMED WATER: ALL RECLAIMED PVC PIPE SHALL BE MANUFACTURED PURPLE PIPE. HDPE PIPE SHALL BE MANUFACTURED WITH PURPLE STRIPES. ALL OTHER PIPE AND APPURTENANCES SHALL BE MANUFACTURED PURPLE IF AVAILABLE. ALL PIPE AND FITTINGS THAT ARE NOT AVAILABLE FROM THE MANUFACTURER IN PURPLE SHALL BE PAINTED PURPLE PER SPL WW-3C. ALL BURIED DI AND CI PIPE AND FITTINGS SHALL ALSO BE WRAPPED IN PURPLE POLYETHYLENE PER SPL WW-27D. ALL COVERS SHALL HAVE **"RECLAIMED WATER"** CAST INTO THEM.

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L FLOWERS 05/18/2016 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 511-AW-01 1 OF 4



NOTES:

1. MATERIAL SHALL BE GRAY CAST IRON, ASTM A48, GRADE 30B.
2. THE MANUFACTURER'S IDENTIFICATION AND CASTING NUMBER, AND THE COUNTRY WHERE CAST, SHALL BE DISTINCTLY CAST ONTO EACH LID, FRAME, COLLAR AND BASE.
3. DRAFT AND SHRINKAGE ALLOWANCE SHALL BE IN ACCORDANCE WITH NORMAL FOUNDRY PRACTICE.
4. CASTING FINISH BY MANUFACTURER SHALL INCLUDE REMOVAL OF FINS AND FLASHING, AND PAINT WITH BLACK ASPHALT COATING.

WEIGHTS:
C7 LID: 13 LBS
RECLAIMED LID: 15 LBS
C6 FRAME: 23 LBS
RECLAIMED FRAME: 33 LBS
C5 BASE: 78 LBS

* LETTERING SHALL BE 1 ½" 2 PICK BAR SLOTS REQUIRED

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L FLOWERS 05/18/2016 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 511-AW-01 2 OF 4

NOTES:

1. SUB-GRADE/TRENCH BACKFILL SHALL BE COMPACTED AS PER ITEM 201S, SUB-GRADE PREPARATION.
2. TO ADJUST VALVE CASTINGS TO FINAL GRADE, REMOVE RISER PIPE BELOW SUB-GRADE AND INSTALL APPROPRIATE LENGTH OF NEW RISER PIPE TO ACHIEVE FINAL GRADE. CONNECT THE TWO PIECES OF RISER PIPE WITH A 6" COLLAR MIN. 12" LENGTH APPROXIMATELY CENTERED ON THE JOINT WITH THE TOP OF SLEEVE LOCATED ½" - 18" BELOW SUB-GRADE. THE INSIDE 1/8" OF COLLAR TO BE PAINTED WITH FLUORESCENT WHITE PAINT OR COVERED WITH FLUORESCENT WHITE TAPE, ALTERNATE FOR OPTIONAL SINGLE PIECE RISER INSTALLATION SEE SHEET 4 OF 4.
3. CLEAN VALVE BOX OF ALL DEBRIS DOWN TO THE NUT OF THE VALVE; NUT SHALL OPERATE WITH NO OBSTRUCTION.
4. WHERE CASTINGS TO BE REMOVED REQUIRE EXCAVATION GREATER THAN 20" DEEP, CONTRACTOR MAY ELECT TO FILL EXCAVATION WITH CONTROLLED LOW STRENGTH MATERIAL (SPEC. ITEM 402S) TO THE UNDERSIDE OF THE CONCRETE PAVEMENT PATCH IN LIEU OF COMPACTED BACKFILL.
5. REINFORCING STEEL SHALL MEET SPEC. ITEM 406S.7.
6. NO MORE THAN 2 SECTIONS OF PIPE SHALL BE USED FROM VALVE TO FINAL GRADE.
7. BELL AND SPIGOT IS ACCEPTABLE FOR DEPTH OVER 18'.

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L FLOWERS 05/18/2016 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 511-AW-01 3 OF 4

NOTES (CONT):

8. PAVING FRAME SHALL BE FLUSH WITH THE CONC. PAD AND PLACED ½" - 2" ABOVE RISER PIPE (FRAME SHALL NOT REST ON RISER.)
9. IN UNPAVED AREAS, INSTALL ONE DELINEATOR STAKE IMMEDIATELY ADJACENT TO THE EDGE OF THE CONCRETE PAD. DELINEATOR SHALL BE BLUE FOR POTABLE WATER AND PURPLE FOR RECLAIMED WATER AND SHALL EXTEND AT LEAST 60" ABOVE GROUND. DELINEATORS SHALL HAVE 2" WIDE, WHITE IN COLOR, TYPE I REFLECTIVE TAPE MOUNTED DIAGONALLY AT 12" SPACING ON BOTH SIDES.
10. VALVE SHALL TYPICALLY BE CENTERED IN CONCRETE DIAMOND BUT MAY BE OFFSET WITH A MIN. OF 12" FROM CENTER OF VALVE LID TO EDGE OF CONCRETE IN ALL DIRECTIONS.
11. MIN. TOTAL DEPTH OF ASPHALT PLUS CONC. IS 9" AND MIN. DEPTH OF CONC. PAD SHALL BE 5"

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L FLOWERS 05/18/2016 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 511-AW-01 4 OF 4

CITY OF AUSTIN AUSTIN WATER	FIRE HYDRANT ASSEMBLY	
JEFF A. KYLE 11/06/2023 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 511-AW-02 1 OF 3

CITY OF AUSTIN AUSTIN WATER	FIRE HYDRANT ASSEMBLY	
JEFF A. KYLE 11/06/2023 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 511-AW-02 2 OF 3

NOTES: APPLICABLE TO ALL INSTALLATION TYPES.

1. NO PART OF A HYDRANT OR ITS NOZZLE CAPS SHALL BE WITHIN 6" OF ANY SIDEWALK OR PEDESTRIAN RAMP. ANY FIRE HYDRANT PLACED NEAR A STREET CORNER SHALL BE LOCATED OUTSIDE THE CURVE RADIUS AND A MINIMUM OF 4' FROM RAMPS.
2. ONE BARREL EXTENSION NOT EXCEEDING 2' LENGTH MAY BE INSTALLED DIRECTLY BELOW THE FIRE HYDRANT IN ORDER TO MEET THE REQUIRED BURY DEPTH OF 4' - 5'. BREAK AWAY BOLTS (SHOE TYPES) SHALL BE PROPERLY SPACED AND PLACED.
3. FIRE LINE SHALL HAVE ALL JOINTS RESTRAINED FROM MAIN TO FIRE HYDRANT INCLUDING MJ RESTRAINT OF TEE AT THE MAIN. JOINTS SHOWN MAY VARY. SEE SPL WW-27A, WW-27A-01, AND WW-27B FOR RESTRAINT OPTIONS.
4. BELOW EACH HYDRANT, A DRAINAGE PIT 24" IN DIAMETER AND 12' DEEP SHALL BE EXCAVATED AND FILLED WITH COMPACTED COARSE GRAVEL OR BROKEN STONE MIXED WITH COARSE SAND UNDER AND AROUND THE BOWL OF THE HYDRANT, AND TO A LEVEL 12" ABOVE THE HYDRANT DRAIN OPENING (SEE STD. SPEC. 510). THE HYDRANT DRAINAGE PIT SHALL NOT BE CONNECTED TO A SANITARY SEWER. THE DRAIN GRAVEL SHALL BE COVERED WITH FILTER FABRIC PER STD. SPEC. 620.
5. WRAP 8 MIL. POLY-FILM WRAP ON ALL BURIED PIPE AND FITTINGS. CUT SLITS IN POLY-FILM WRAP AT BOOT TO ALLOW WATER TO ESCAPE FROM WEEP HOLES AND POLY-WRAP.
6. A BLUE TYPE II-B-B REFLECTORIZED PAVEMENT MARKER, CONFORMING TO STANDARD SPECIFICATION ITEM NO. 663S, SHALL BE PLACED 2 TO 3 FEET OFFSET FROM THE CENTERLINE OF PAVED STREETS, ON THE SIDE OF AND IN LINE WITH ALL NEWLY INSTALLED FIRE HYDRANTS.

CITY OF AUSTIN AUSTIN WATER	FIRE HYDRANT ASSEMBLY	
JEFF A. KYLE 11/06/2023 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 511-AW-02 3 OF 3

STORM SEWER & WATERLINE CROSSING DETAIL

APPLICABLE REFERENCES:
STANDARD SPECIFICATION: ITEM 505.4 & 510.3 (19)

CITY OF AUSTIN AUSTIN WATER	ENCASEMENT PIPE DETAIL WITH CASING SPACERS	
JEFF A. KYLE 02/22/2021 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 501-AW-01 1 OF 1

A. 2" SERVICE CLAMP
B. 2" CORPORATION STOP MALE THREAD INLET BY COMPRESSION OUTLET
C. 2" COPPER WATER SERVICE TUBING EXTENDED BEYOND PAVEMENT
D. BALL VALVE, SPL WW-27S (SIZE EQUAL TO "E")
E. 2" COPPER TUBING PER SPL WW-61D OR 2" HDPE PER SPL WW-65 FOR POTABLE AND PER SPL WW-65A FOR RECLAIMED
F. 2" BRASS 90° BEND, COMPRESSION x COMPRESSION OR HDPE WITH STIFFENERS PER SPL WW-65B AT ALL CONNECTIONS
G. 2" BRASS COUPLING, COMPRESSION x FIP

NOTES:

1. AUTOMATIC FLUSH VALVE MAY ALSO BE USED ON TAPPED PLUGS AND CAPS.
2. THE CONTRACTOR SHALL PROVIDE THE FLUSH VALVE ACCESS KEY TO AUSTIN WATER UPON FLUSH VALVE ACCEPTANCE.
3. VALVE "D" SHALL NOT BE LOCATED MORE THAN 36" BELOW FLUSH VALVE OR MORE THAN 24" HORIZONTALLY FROM FLUSH VALVE. VALVE "D" SHALL NOT BE LOCATED IN A SIDEWALK OR DRIVEWAY.
4. METER BOX (IF REQUIRED) AND FLUSH VALVE SHALL NOT BE LOCATED IN A SIDEWALK, DRIVEWAY, PEDESTRIAN WAY OR TRAFFIC WAY. TEMPORARY FLUSH VALVES SHALL BE LOCATED AS SHOWN ON APPROVED PLANS.
5. A DRAINAGE WAY, CONTAINED WITHIN THE R.O.W. OR AN EASEMENT, SHALL BE PROVIDED FROM FLUSH VALVE TO STORM SEWER SYSTEM OR PUBLIC DRAINAGE WAY.
6. DESIGN ENGINEER SHALL PROVIDE CALCULATIONS WITH PLANS AT THE TIME OF REVIEW INCLUDING FREQUENCY AND FLUSH RATE REQUIRED TO CIRCULATE WATER IN DEAD END MAIN EVERY 72 HOURS.

CITY OF AUSTIN AUSTIN WATER	AUTOMATIC FLUSH VALVE	
RECORD COPY SIGNED BY KATHI L FLOWERS 05/18/2016 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 511-AW-05 1 OF 1

NOTES:

1. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
2. WHERE A NEW POTABLE WATERLINE CROSSES A NEW, NON-PRESSURE RATED WASTEWATER MAIN OR LATERAL AND THE STANDARD PIPE SEGMENT LENGTH OF THE WASTEWATER MAIN OR LATERAL IS AT LEAST 18 FEET, ONE SEGMENT OF THE WATERLINE PIPE SHALL BE CENTERED OVER THE WASTEWATER MAIN OR LATERAL SUCH THAT THE JOINTS OF THE WATERLINE PIPE ARE EQUIDISTANT AND AT LEAST NINE FEET HORIZONTALLY FROM THE CENTERLINE OF THE WASTEWATER MAIN OR LATERAL. THE POTABLE WATERLINE SHALL BE AT LEAST TWO FEET ABOVE THE WASTEWATER MAIN OR LATERAL. WHENEVER POSSIBLE, THE CROSSING SHALL BE CENTERED BETWEEN THE JOINTS OF THE WASTEWATER MAIN OR LATERAL. THE WASTEWATER PIPE SHALL HAVE A MINIMUM STIFFNESS OF 115 PSI AT 5.0% DEFLECTION. THE WASTEWATER MAIN OR LATERAL SHALL BE EMBEDDED IN CEMENT STABILIZED (SEE CLAUSE (vi) OF THIS SUBPARAGRAPH) SAND FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END.
3. FIRE HYDRANTS ARE SHOWN FOR SCHEMATIC PURPOSES ONLY. SEE DETAIL SHEET FOR PLACEMENT OF APPURTENANCES. FIRE HYDRANT ASSEMBLY CONSISTS OF, BUT NOT LIMITED TO 5 1/4" FIRE HYDRANT, 6" GATE VALVE, 6" D.I. FIRE LEAD.
4. ALL 45° BENDS SHALL INCLUDE MEGA LUG RESTRAINED JOINT.
5. NO WATER METERS LOCATED IN SIDEWALK AREA.
6. SERVICES TO BE LOCATED PER DETAIL SHEET.
7. TYPICAL WATERLINE ASSIGNMENT 10.5' FROM THE R.O.W. LINE AND 14.5' FROM STREET CENTERLINE.
8. CONTRACTOR TO VERIFY ACTUAL DEPTH OF ALL EXISTING UTILITIES TO BE EXTENDED OR TIED INTO PRIOR TO EXCAVATING.
9. MAGELLAN AND PHILLIPS 66 GAS MAINS, AND EASEMENT LOCATION ARE GENERALLY SHOWN FOR VICINITY AND CONCEPTUAL INFORMATION ONLY. CONTACT MAGELLAN AND PHILLIPS 66 A MINIMUM OF 7 DAYS PRIOR TO CONSTRUCTION COMMENCEMENT TO DETERMINE EXACT LOCATION AND DEPTH AND COORDINATE ONSITE INSPECTION WITH MAGELLAN OR PHILLIPS 66.
10. FOUR(4) SCH. 40 PVC SLEEVES TO BE BURIED MINIMUM 24-INCH COVER BELOW SUBGRADE AND INCLUDE 90-DEGREE LONG SWEEP ELBOWS. EXTEND TWO-FEET BEHIND R.O.W. AND INTO MEDIAN(S) WHERE APPLICABLE.
11. ALL WATERLINES SHALL BE 8-INCH PVC, AWWA C-900, PR 305 PSI (DR14), UNLESS NOTED OTHERWISE HEREON THE PLANS.
12. ALL NEWLY INSTALLED PIPE AND FITTINGS MUST CONFORM TO ANSI/NSF STANDARD 61 AND MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI.
13. DO NOT INSTALL SERVICES AND FITTINGS OR WITHIN THREE (3') FEET OF A PIPE JOINT OR FITTING.
14. ALL SERVICES TO BE SLEEVED AT SIDEWALK CROSSINGS PER COA DETAIL 432S-1.
15. FIRE HYDRANT LEADS TO BE DUCTILE IRON PIPE, CL 350.
16. CONNECTION TO THE WTCPUA SYSTEM WILL NOT BE ALLOWED UNTIL ALL PROPOSED WATER LINES HAVE BEEN INSTALLED OR AFTER THE WTCPUA HAS ACCEPTED PORTIONS THAT HAVE PASSED TESTING AND DISINFECTION REQUIREMENTS. UNDER NO CIRCUMSTANCE WILL THE WTCPUA CONNECTION BE ALLOWED WHERE COMPACTED COVER OVER NEW WATERLINES STILL BE NEEDED OR INCOMPLETE AT THE TIME OF CONNECTION.
17. CHANGES IN DIRECTION OF PVC PIPE SHALL ONLY BE BY USE OF FITTINGS OR BY DEFLECTING STRAIGHT PIPE SECTIONS AT JOINTS. LONGITUDINAL BENDING OF PIPE IS NOT ALLOWED. DEFLECTION OF PIPE AT FITTINGS IS NOT ALLOWED. DEFLECTION OF STRAIGHT PIPES SECTIONS SHALL NOT EXCEED 1 DEGREE AT EACH JOINT (EVEN IF JOINT RESTRAINT DEVICES ARE INSTALLED). DEFLECTIONS OF PIPE JOINTS AT FITTINGS IS ONLY ALLOWED ON DUCTILE IRON PIPE.

8834 N. Capital of Texas Hwy.
Suite 140
Austin, Texas 78759
(512)452-0371
FAX(512)454-9933
TBPELS FIRM #2946
GRAY ENGINEERING

NO.	BY	DATE	REVISION DESCRIPTION

ORCHARD RANCH
SUBDIVISION
CONSTRUCTION PLANS

WATER DETAILS & NOTES

PROJECT NO: 1636-11741
DESIGNED BY: BG
DRAWN BY: TAM
CHECKED BY: CR

NOTICE:
ALTERATION OF A SEALED DRAWING WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT.

01/29/2026

STATE OF TEXAS
BRANDON D. GILMORE
150018
LICENSED PROFESSIONAL ENGINEER

SHEET 126 OF 126

H:\PROJECTS\1636 - BRONIN HOMES\11741 - ORCHARD RANCH\CAD\SHEETS\11741-C-WATR-DTLS.DWG DATE: 1/29/2026 4:49:54 PM BY: BGILMORE