

NTMWD NOTES

A. NORTH TEXAS MUNICIPLE WATER DISTRICT (NTMWD) 84-INCH WATER PIPELINE IS LOCATED WITHIN THE LIMITS OF CONSTRUCTION.

B. OPERATION OF HEAVY EARTHMOVING EQUIPMENT, COMPACTION EQUIPMENT OR HEAVY CONSTRUCTION EQUIPMENT, SUCH AS CONCRETE TRUCKS, SHALL BE RESTRICTED TO SPECIFIC CROSSING POINTS ACROSS NTMWD EASEMENTS, AS APPROVED BY THE NTMWD. THE CROSSINGS SHALL BE DESIGNATED AND VERIFIED TO PROVIDE A MINIMUM OF FIVE FEET OF COVER.

C. TO ASSURE THE PLACING OF SIGNIFICANT LOADS OVER THE NTMWD PIPELINE DOES NOT DAMAGE THE EXISTING PIPELINE, NO MATERIALS SHALL BE STOCKPILED ON THE NTMWD EASEMENT WITHOUT AUTHORIZATION FROM THE NTMWD. IF THE CONTRACTOR DESIRES TO USE NTMWD'S EASEMENT FOR STOCKPILE OF MATERIALS, CONTACT NTMWD ENGINEERING AT (972) 442-5405 SO YOUR PLANS FOR USE OF NTMWD'S EASEMENT CAN BE REVIEWED.

D. A MINIMUM OF 4.5 FEET SEPERATION BETWEEN BOTTOM OF PAVEMENT AND TOP OF NTMWD PIPELINE IS REQUIRED. IN ADDITION, IF SEPARATION BETWEEN THE BOTTOM OF PAVEMENT AND TOP OF PIPELINE IS LESS THAN 4.5 FEET, LIME STABILIZED IS NOT PERMITTED AND A THICKENED PAVEMENT SECTION IS REQUIRED.

E. CROSSING OF THE NTMWD EASEMENT WITH OTHER UTILITIES, SUCH AS TV CABLE, PHONE, GAS AND ELECTRIC, SHALL BE COORDINATED WITH THE NTMWD TO AVOID DAMAGE TO THE NTMWD FACILITIES.

F. OUTDOOR LIGHTING, LANDSCAPING, SCREENING WALLS OR OTHER FASCILITIES SHALL NOT BE INSTALLED IN NTMWD EASEMENTS WITHOUT WRITTEN APPROVAL OF THE NTMWD.

G. UNLESS OTHERWISE SHOWN OR REQUIRED, A MINIMUM OF TWO-FOOT CLEARANCE SHALL BE PROVIDED FOR ALL UTILITIES CROSSING THE NTMWD PIPELINES. DIRECTIONAL BORE CROSSINGS REQUIRE A MINIMUM OF FOUR-FEET CLEARANCE.

H. BORE CROSSINGS SHALL ONLY BE PERFORMED BETWEEN 9:00 AM AND 4:00 PM TUESDAY THRU THURSDAY.

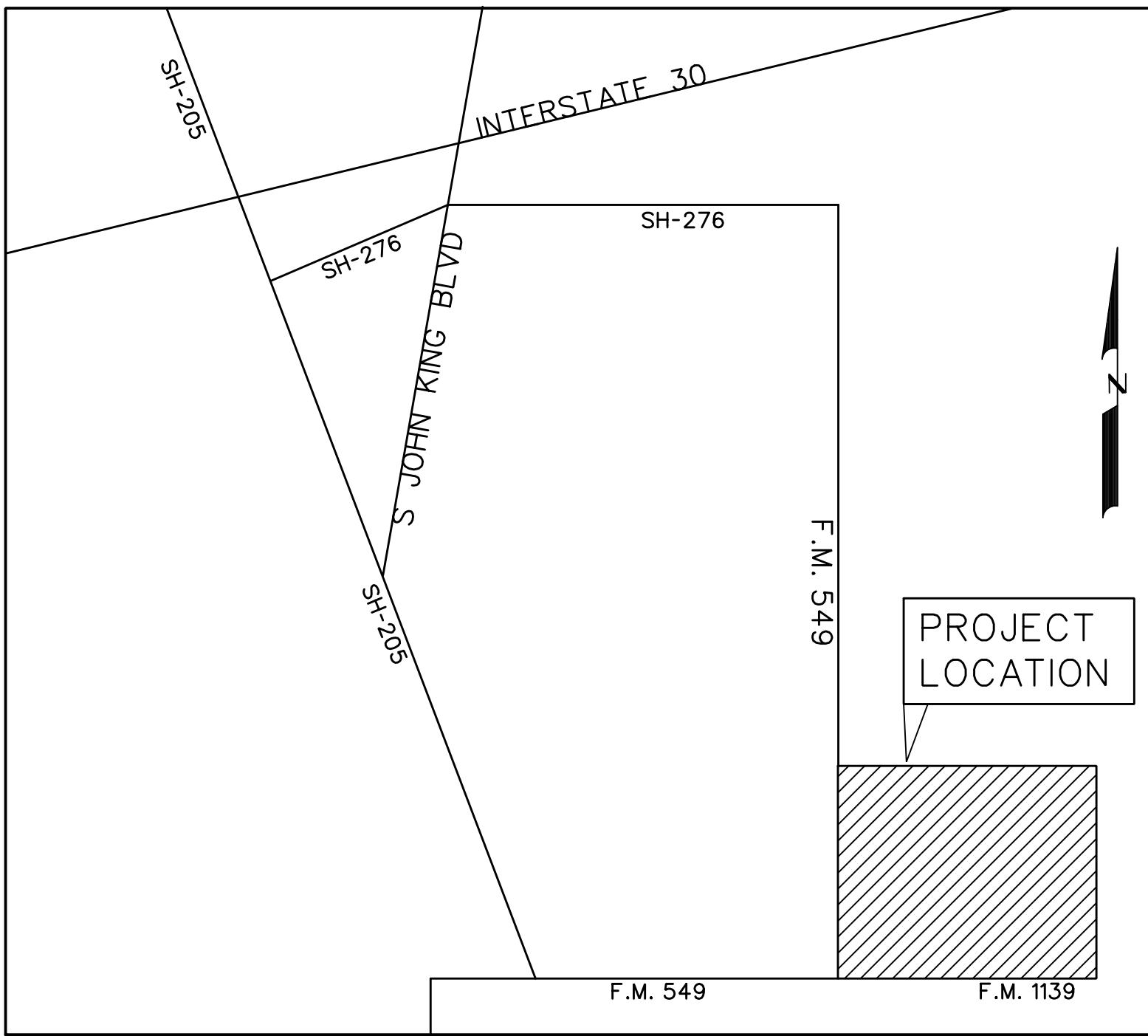
I. NO TREES ARE ALLOWED WITHIN THE NTMWD EASEMENT, ONLY CREPE MYRTLES, SHRUBS, AND BUSHES.

J. A NTMWD REPRESENTATIVE IS REQUIRED TO BE ON-SITE FOR ANY WORK IN THE VICINITY OF NTMWD PIPELINES, FEATURES, OR FASCILITIES.

K. THE CONTRACTOR SHALL CONTACT NTMWD LINE LOCATES AT (469) 626 - 4569 AT LEAST 48 HOURS PRIOR TO PERFORMING ANY WORK IN THE VICINITY OF THE NTMWD PIPELINES, FEATURES, OR FASCILITIES.

L. FOR CROSSING UNDER NTMWD PIPELINES BY OPEN CUT, SHORING IS TO BE USED TO MINIMIZE EXPOSING THE NTMWD LINE. TRENCH WILL BE LIMITED TO FOUR FEET WIDE MAXIMUM.

DEVELOPMENT PLANS
FOR
HOMESTEAD PHASE I
CITY OF ROCKWALL, TEXAS



LOCATION MAP

PREPARED FOR
SHADDOCK HOMES, INC.

2400 DALLAS PARKWAY, STE. 460, PLANO, TEXAS 75093

CORWIN ENGINEERING, INC. — CONSULTING ENGINEERS

200 W. BELMONT, SUITE E

TBPELS FIRM *10031700

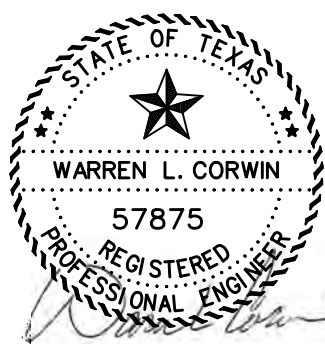
ALLEN, TEXAS 75013

NOTE:

CITY OF ROCKWALL STANDARDS
AND NCTCOG 5th ADDITION STANDARDS
SHALL BE USED FOR REFERENCE.

INDEX

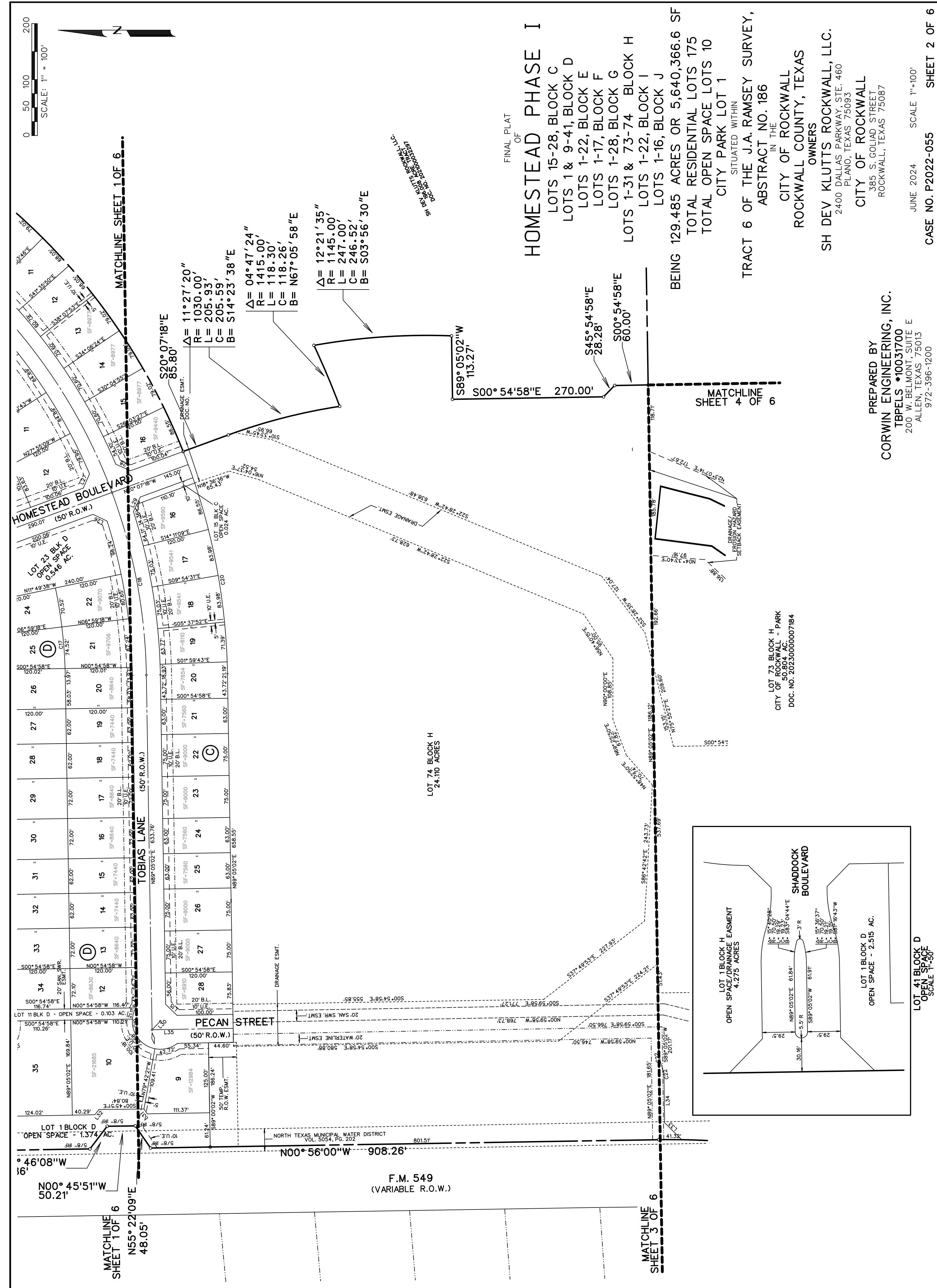
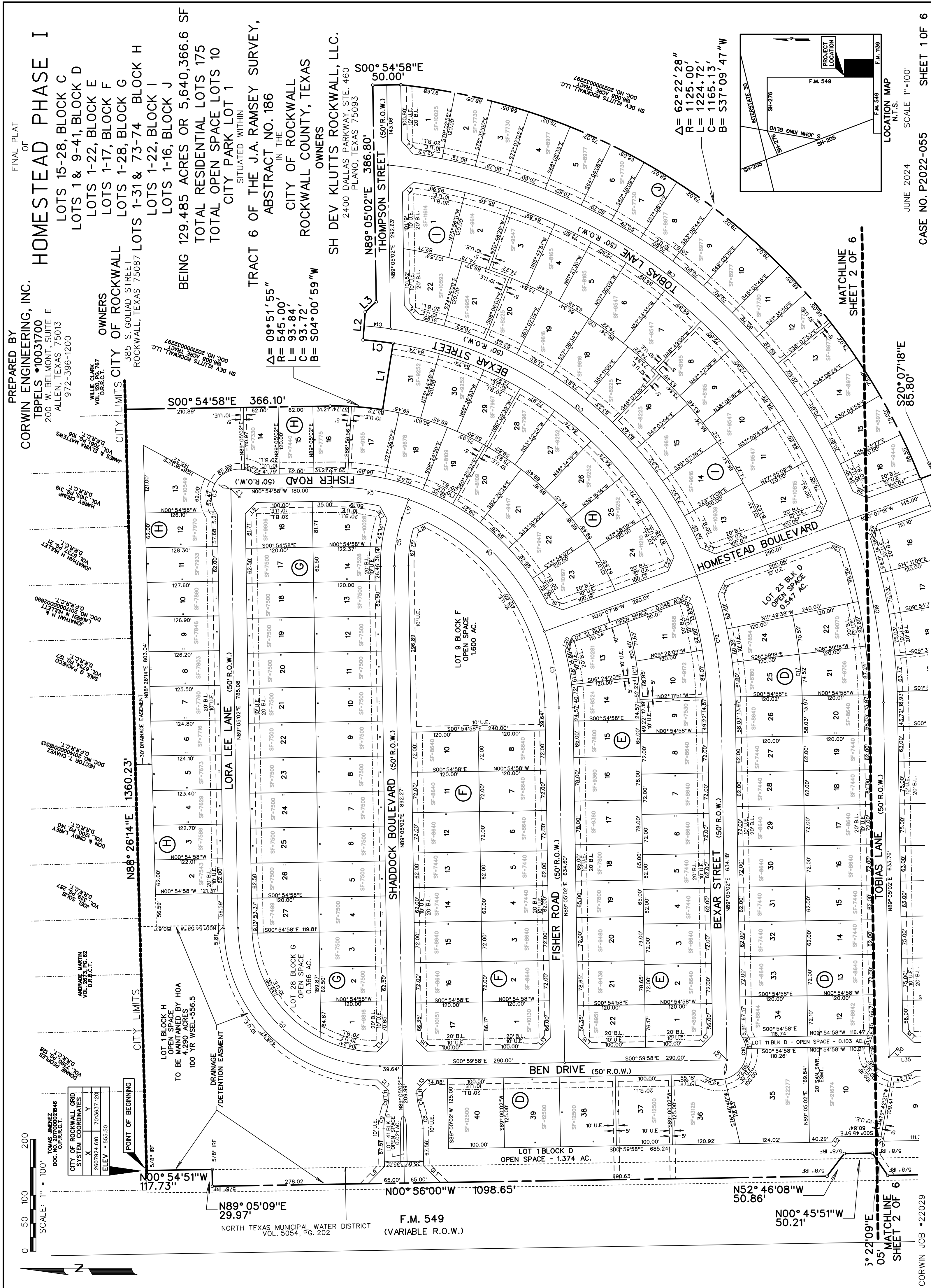
1	TITLE
2	PLAT (3 PAGES)
3	CITY GENERAL NOTES
4	CITY GENERAL NOTES
5	BEN DRIVE
6	FISHER ROAD (STA. 0+00 TO 10+00)
7	FISHER ROAD (STA. 10+00 TO END)
8	HOMESTEAD BOULEVARD (STA. 8+00 TO 11+00)
9	HOMESTEAD BOULEVARD (STA. 11+00 TO END)
10	PECAN STREET, TEMPORARY ROAD
11	BEXAR STREET (STA. 0+00 TO 12+00)
12	BEXAR STREET (STA. 12+00 TO END)
13	LORA LEE LANE
14	SHADDOCK BOULEVARD
15	THOMPSON STREET
16	TOBIAS LANE (STA. 0+00 TO 12+00)
17	TOBIAS LANE (STA. 12+00 TO END)
18	WATER AND SANITARY SEWER PLAN
19	SANITARY SEWER PROFILES
20	SANITARY SEWER PROFILES
21	SANITARY SEWER PROFILES
22	SANITARY SEWER PROFILES
23	OFFSITE SANITARY SEWER LINE S-1 STA 0+00 TO 11+00
24	OFFSITE SANITARY SEWER LINE S-1 STA 11+00 TO END
25	WATERLINE CROSSING PROFILES
26	EXISTING CONDITIONS DRAINAGE AREA MAP
27	EXISTING CONDITIONS DRAINAGE AREA MAP
28	PROPOSED CONDITIONS DRAINAGE AREA MAP
29	PROPOSED CONDITIONS DRAINAGE AREA MAP
30	INTERIM CONDITIONS DRAINAGE AREA MAP
31	INTERIM CONDITIONS DRAINAGE AREA MAP
32	DRAINAGE CALCULATIONS
33	DRAINAGE CALCULATIONS
34	STORM SEWER PLAN AND PROFILE LINES 'D-2' & 'D-4'
35	STORM SEWER PLAN AND PROFILE LINE 'D-3', 'D-5' & 'D-6'
36	STORM SEWER PLAN AND PROFILE LINE 'D-7'
37	STORM SEWER PLAN AND PROFILE LINE 'D-8'
38	STORM SEWER PLAN AND PROFILE LINE 'D-12' (STA. 7+85 TO 12+00)
39	STORM SEWER PLAN AND PROFILE LINE 'D-12' (STA. 12+00 TO END), 'D-13'
40	STORM SEWER PLAN AND PROFILE LINE 'D-18'
41	STORM SEWER PROFILES
42	STORM SEWER PROFILES
43	RESERVOIR 1 DETENTION POND PLAN
44	RESERVOIR 2 DETENTION POND PLAN
45	GRADING PLAN
46	GRADING PLAN
47	GRADING PLAN
48	GRADING PLAN
49	EROSION CONTROL PLAN
50	EROSION CONTROL PLAN
51	SIGN AND LIGHT PLAN
52	EROSION HAZARD SETBACK EASEMENT PLAN
53	EROSION HAZARD SETBACK EASEMENT CROSS SECTIONS

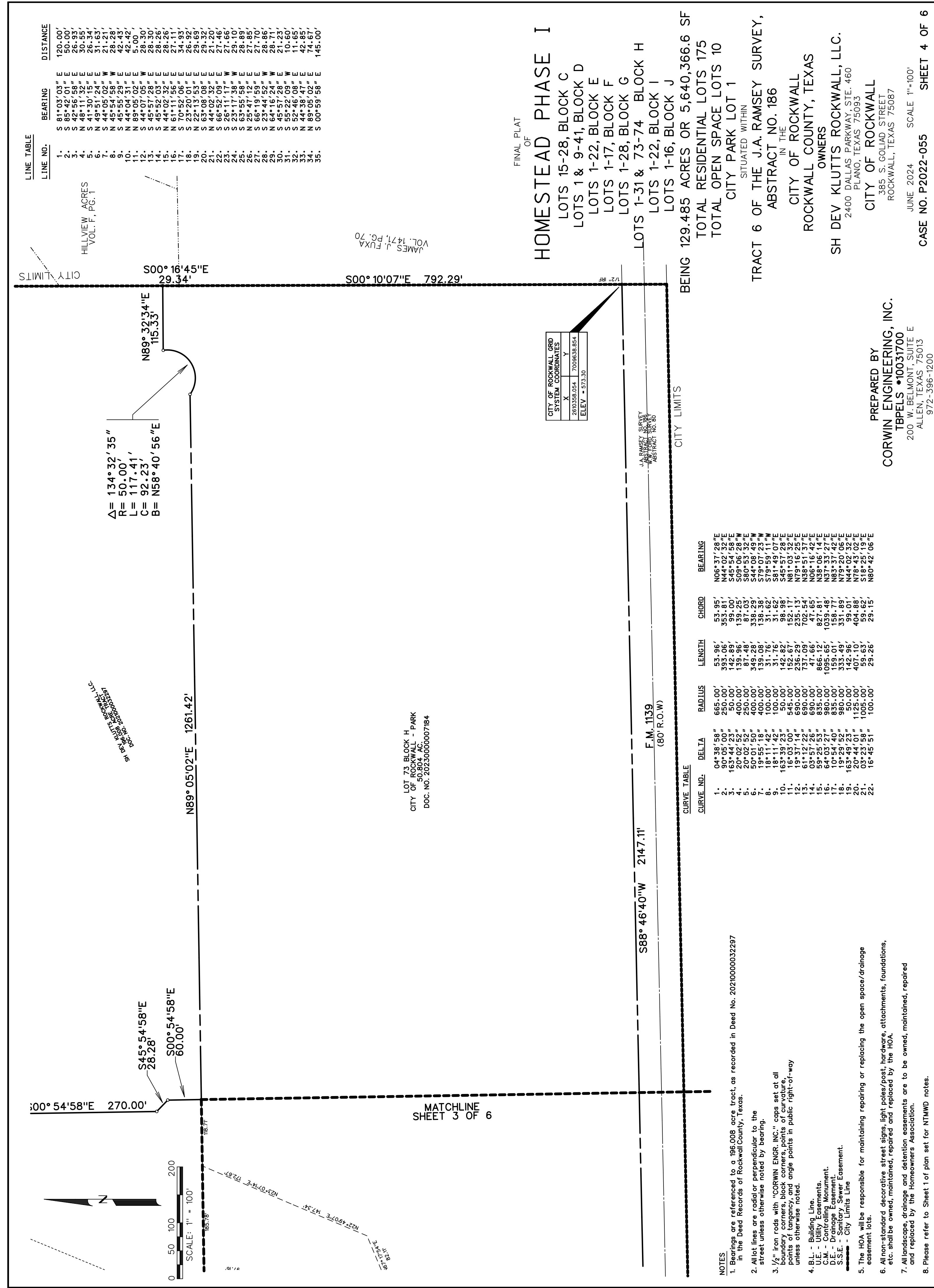
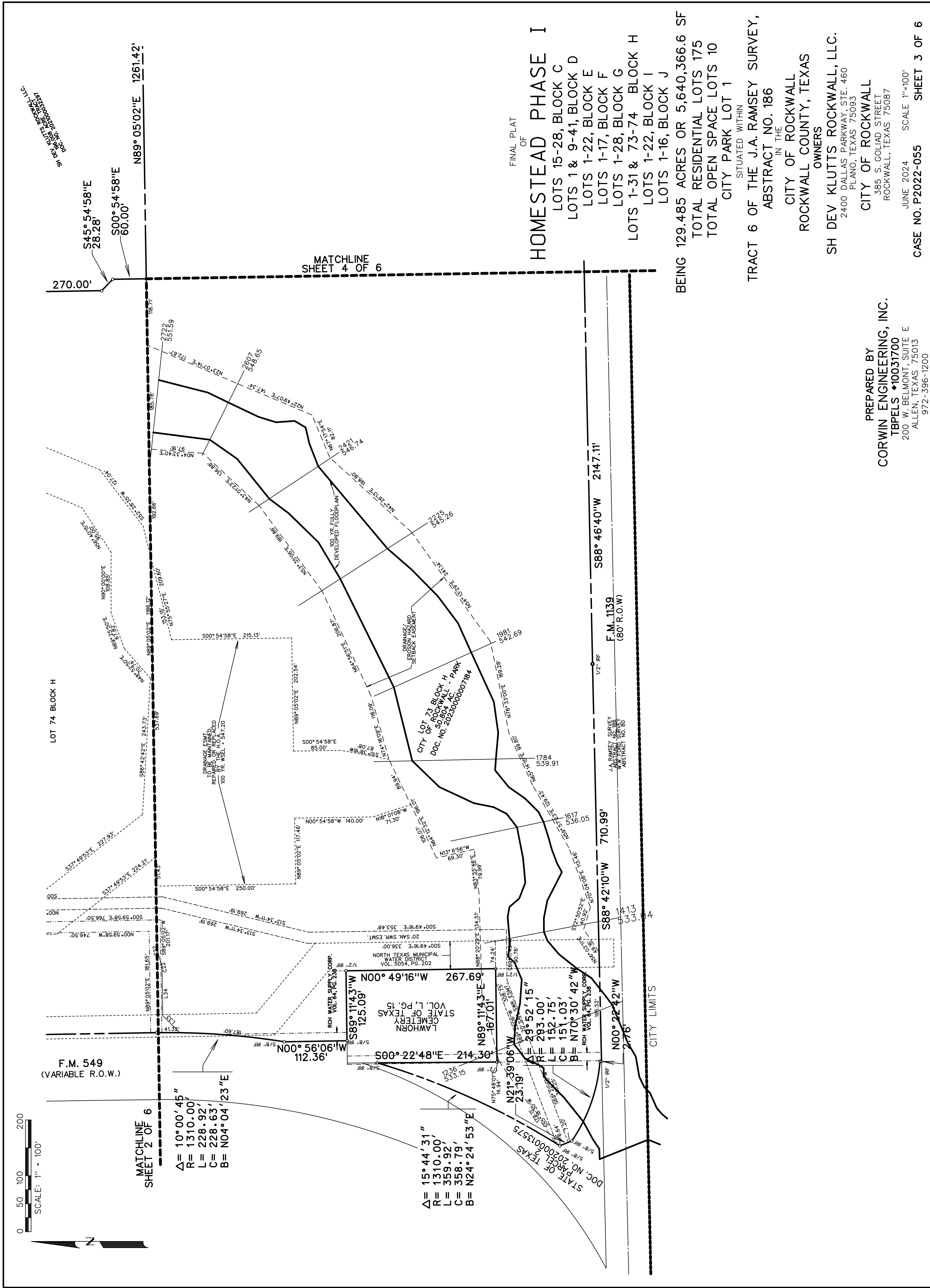


11/02/2022

AS-BUILT JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)

NO.	REVISIONS	DATE





GENERAL ITEMS

1. All construction shall conform to the requirements set forth in the City of Rockwall's Engineering Department's "Standards of Design and Construction" and the "Standard Specifications for Public Works Construction" by the North Texas Central Council of Governments, 5th edition amended by the City of Rockwall. The CONTRACTOR shall reference the latest City of Rockwall standard details provided in the Rockwall Engineering Departments "Standards of Design and Construction" manual for details not provided in these plans. The CONTRACTOR shall possess one set of the NCTCOG Standard Specifications and Details and the City of Rockwall's "Standards of Design and Construction" manual on the project site at all times.
2. Where any conflicting notes, details or specifications occur in the plans the City of Rockwall General Construction Notes, Standards, Details and Specifications shall govern unless detail or specification is more strict.
3. The City of Rockwall Engineering Departments "Standards of Design and Construction" can be found online at: <http://www.rockwall.com/eng.asp>.
4. All communication between the City and the CONTRACTOR shall be through the Engineering Construction Inspector and City Engineer or designated representative only. It is the responsibility of the CONTRACTOR to contact the appropriate department for inspections that do not fall under this approved engineering plan set.
5. Prior to construction, CONTRACTOR shall have in their possession all necessary permits, plans, licenses, etc.
6. The CONTRACTOR shall have at least one original stamped and signed set of approved engineering plans and specifications on-site and in their possession at all times. A stop work order will be issued if items are not on-site. Copies of the approved plans will not be substituted for the required original "approved plans to be on-site".
7. All material submittals, concrete batch designs and shop drawings required for City review and approval shall be submitted by the CONTRACTOR to the City sufficiently in advance of scheduled construction to allow no less than 10 business days for review and response by the City.
8. All site dimensions are referenced to the face of curb or edge of pavement unless otherwise noted.
9. The City requires ten (10%) percent-two (2) year maintenance bond for paving, paving improvements, water systems, wastewater systems, storm sewer systems including detention systems, and associated fixtures and structures which are located within the right-of-ways or defined easements. The two (2) year maintenance bond is to state "from date of City acceptance" as the starting time.
10. A review of the site shall be conducted at twenty (20) months into the two (2) year maintenance period. The design engineer or their designated representative and the CONTRACTOR shall be present to walk the site with the City of Rockwall Engineering Inspection personnel.

EROSION CONTROL & VEGETATION

1. The CONTRACTOR or developer shall be responsible, as the entity exercising operational control, for all permitting as required by the Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ). This includes, but is not limited to, preparation of the Storm Water Pollution Prevention Plan (SWPPP), the Construction Site Notice (CSN), the Notice of Intent (NOI), the Notice of Termination (NOT) and any Notice of Change (NOC) and is required to pay all associated fees.
2. Erosion control devices as shown on the erosion control plan for the project shall be installed prior to the start of land disturbing activities.
3. All erosion control devices are to be installed in accordance with the approved plans, specifications and Storm Water Pollution Prevention Plan (SWPPP) for the project. Erosion control devices shall be placed and in working order prior to start of construction. Changes are to be reviewed and approved by the design engineer and the City of Rockwall prior to implementation.
4. If the Erosion Control Plans and Storm Water Pollution Prevention Plan (SWPPP) as approved cannot appropriately control erosion and off-site sedimentation from the project, the erosion control plan and/or the SWPPP is required to be revised and any changes reported to the Texas Commission on Environmental Quality (TCEQ), when applicable.
5. All erosion control devices shall be inspected weekly by the CONTRACTOR and after all major rain events, or more frequently as dictated in the project Storm Water Pollution Prevention Plan (SWPPP). CONTRACTOR shall provide copies of inspection's reports to the engineering inspection after each inspection.
6. The CONTRACTOR shall not dispose of waste and any materials into streams, waterways or floodplains. The CONTRACTOR shall secure all excavation at the end of each day and dispose of all excess materials.
7. CONTRACTOR shall take all available precautions to control dust. CONTRACTOR shall control dust by sprinkling water or other means as approved by the City Engineer.
8. CONTRACTOR shall establish grass and maintain the seeded area, including watering, until a "Permanent Stand of Grass" is obtained at which time the project will be accepted by the City. A "Stand of Grass" (not winter rye or weeds) shall consist of 75% to 80% coverage of all disturbed areas and a minimum of one-inch (1") in height as determined by the City. No bare spots will be allowed. Re-seeding will be required in all washed areas and areas that don't grow.
9. All City right-of-ways shall be sodded if disturbed. No artificial grass is allowed in any City right-of-way and/or easements.
10. All adjacent streets/alleys shall be kept clean at all times.
11. CONTRACTOR shall keep construction site clean at all times, immediately contain all debris and trash, all debris and trash shall be removed at the end of each work day, and all vegetation on the construction site 10-inches or taller in height must be cut immediately.
12. Suspension of all construction activities for the project will be enforced by the City if any erosion control requirements are not met. Work may commence after deficiency has been rectified.
13. During construction of the project, all soil stockpiles and borrow areas shall be stabilized or protected with sediment trapping measures. The CONTRACTOR is responsible for the temporary protection and permanent stabilization of all soil stockpiles on-site as well as borrow areas and soil intentionally transported from the project site.
14. Where construction vehicles access routes intersect paved or public roads/alleys, construction entrances shall be installed to minimize the transport of sediment by vehicular tracking onto paved surfaces. Where sediment is transferred onto paved or public surfaces, the surface shall be immediately cleaned. Sediment shall be

removed from the surface by shoveling or sweeping and transported to a sediment disposal area. Pavement washing shall be allowed only after sediment is removed in this manner.

15. All drainage inlets shall be protected from siltation, ineffective or unmaintained protection devices shall be immediately replaced and the inlet and storm system cleaned. Flushing is not an acceptable method of cleaning.
16. During all dewatering operations, water shall be pumped into an approved filtering device prior to discharge into a receiving outlet.

TRAFFIC CONTROL

1. All new Detouring or Traffic Control Plans are required to be submitted to the City for review and approval a minimum of 21 calendar days prior to planned day of implementation.
2. When the normal function of the roadway is suspended through closure of any portion of the right-of-way, temporary construction work zone traffic control devices shall be installed to effectively guide the motoring public through the area. Consideration for road user safety, worker safety, and the efficiency of road user flow is an integral element of every traffic control zone.
3. All traffic control plans shall be prepared and submitted to the Engineering Department in accordance with the standards identified in Part VI of the most recent edition of the TMUTCD. Lane closures will not occur on roadways without an approval from the Rockwall Engineering Department and an approved traffic control plan. Traffic control plans shall be required on all roadways as determined by the City Engineer or the designated representative.
4. All traffic control plans must be prepared, signed, and sealed by an individual that is licensed as a professional engineer in the State of Texas. All traffic control plans and copies of work zone certification must be submitted for review and approval a minimum of three (3) weeks prior to the anticipated temporary traffic control.
5. The CONTRACTOR executing the traffic control plan shall notify all affected property owners two (2) weeks prior to any the closures in writing and verbally.
6. Any deviation from an approved traffic control plan must be reviewed by the City Engineer or the designated representative. If an approved traffic control plan is not adhered to, the CONTRACTOR will first receive a verbal warning and be required to correct the problem immediately. If the deviation is not corrected, all construction work will be suspended, the lane closure will be removed, and the roadway opened to traffic.
7. All temporary traffic control devices shall be removed as soon as practical when they are no longer needed. When work is suspended for short periods of time at the end of the workday, all temporary traffic control devices that are no longer appropriate shall be removed or covered. The first violation of this provision will result in a verbal warning to the construction foreman. Subsequent violations will result in suspension of all work at the job site for a minimum of 48 hours. All contractors working on City funded projects will be charged one working day for each 24 hour closure.
8. Lane closures on any major or minor arterial will not be permitted between the hours of 6:00 am to 9:00 am and 3:30 pm to 7:00 pm. Where lane closures are needed in a school area, they will not be permitted during peak hours of 7:00 am – 9:00 am and 3:00 pm to 5:00 pm. Closures may be adjusted according to the actual start-finish times of the actual school with approval by the City Engineer. The first violation of this provision will result in a verbal warning to the construction foreman. Subsequent violations will result in suspension of all work at the job site for a minimum of 48 hours. All contractors working on City funded projects will be charged one working day for each 24 hour closure of a roadway whether they are working or not.
9. No traffic signs shall be taken down without permission from the City.
10. No street/roadway will be allowed to be fully closed.

UTILITY LINE LOCATES

1. It is the CONTRACTOR's responsibility to notify utility companies to arrange for utility locates at least 48 hours prior to beginning construction. The completeness and accuracy of the utility data shown on the plans is not guaranteed by the design engineer or the City. The CONTRACTOR is responsible for verifying the depth and location of existing underground utilities proper to excavating, trenching, or drilling and shall be required to take any precautionary measures to protect all lines shown and/or any other underground utilities not on record or not shown on the plans.
2. The CONTRACTOR shall be responsible for damages to utilities.
3. CONTRACTOR shall adjust all City of Rockwall utilities to the final grades.
4. All utilities shall be placed underground.
5. CONTRACTOR shall be responsible for the protection of all existing main lines and service lines crossed or exposed by construction operations. Where existing mains or service lines are cut, broken or damaged, the CONTRACTOR shall immediately make repairs to or replace the entire service line with same type of original construction or better. The City of Rockwall can and will intervene to restore service if deemed necessary and charge the CONTRACTOR for labor, equipment, material and loss of water if repairs aren't made in a timely manner by the CONTRACTOR.
6. The City of Rockwall (City utilities) is not part of the Dig Tess or Texas one Call – 811 – line locate system. All City of Rockwall utility line locates are to be scheduled with the City of Rockwall Service Center. 972-771-7730. A 48-hour advance notice is required for all non-emergency line locates.
7. Underground utility lines shall be installed in accordance with the following standards in addition to other applicable criteria:
 - a. No more than 500 linear feet of trench may be opened at one time.
 - b. Material used for backfilling trenches shall be properly compacted to 95% standard density in order to minimize erosion, settlement, and promote stabilization that the geotechnical engineer recommends.
 - c. Applicable safety regulations shall be complied with.
11. This plan details pipes up to 5 feet from the building. Refer to the building plans for building connections. CONTRACTOR shall supply and install pipe adapters as necessary.
12. All underground lines shall be installed, inspected, and approved prior to backfilling.
13. All concrete encasement shall have a minimum of 28 days compressive strength at 3,000 psi (min. 5.5 sack mix).

WATER LINE NOTES

1. The CONTRACTOR shall maintain existing water service at all times during construction.
2. Proposed water lines shall be AWWA C900-16 PVC Pipe (blue in color) for all sizes, DR 14 (PC 305) for pipeline sizes 12-inch and smaller, and DR 18 (PC 235) for 14-inch and larger water pipelines unless otherwise shown on water plan and profiles sheets. Proposed water lines shall be constructed with minimum cover of 4 feet for 6-inch through 8-inch, 5 feet for 12-inch through 18-inch and 6 feet for 20-inch and larger.
3. Proposed water line embedment shall be NCTCOG Class 'B-3' as amended by the City of Rockwall's engineering standards of design and construction manual.
4. CONTRACTOR shall coordinate the shutting down of all water lines with the City of Rockwall Engineering Inspector and Water Department. The City shall operate all water valves. Allow 5 business days from the date of notice to allow City personnel time to schedule a shut down. Two additional days are required for the CONTRACTOR to notify residents in writing of the shut down after the impacted area has been identified. Water shut downs impacting businesses during their normal operation hours is not allowed. CONTRACTOR is required to coordinate with the Rockwall Fire Department regarding any fire watch requirements as well as any costs incurred when the loss of fire protection to a structure occurs.
5. CONTRACTOR shall furnish and install gaskets on water lines between all dissimilar metals and at valves (both existing and proposed).
6. All fire hydrants and valves removed and salvaged shall be returned to the City of Rockwall Municipal Service Center.
7. Blue EMS pads shall be installed at every change in direction, valve, curb stop and service tap on the proposed water line and every 250'.
8. All water valve hardware and valve extensions, bolts, nuts and washers shall be 316 stainless steel.
9. All fire hydrants bolts, nuts and washers that are buried shall be 316 stainless steel.
10. Abandoned water lines to remain in place shall be cut and plugged and all void spaces within the abandoned line shall be filled with grout, flowable fill or an expandable permanent foam product. Valves to be abandoned in place shall have any extensions and the valve box removed and shall be capped in concrete.
11. All fire hydrants will have a minimum of 5 feet of clearance around the appurtenance including but not limited to parking spaces and landscaping.
12. All joints are to be megalug joints with thrust blocking.
13. Water and sewer mains shall be kept 10 feet apart (parallel) or when crossing 2 feet vertical clearance.
14. CONTRACTOR shall maintain a minimum of 4 feet of cover on all water lines.
15. All domestic and irrigation services are required to have a testable backflow device with a double check valve installed per the City of Rockwall regulations at the property line and shown on plans.

WASTEWATER LINE NOTES

1. The CONTRACTOR shall maintain existing wastewater service at all times during construction.
2. Wastewater line for 4-inch through 15-inch shall be Green PVC – SDR 35 (ASTM D3034) [less 10 ft cover] and SDR 26 (ASTM D3034) [10 ft or more cover]. For 18-inch and larger wastewater line shall be Green PVC – PS 46 (ASTM F679) [less 10 ft cover] and PS 115 (ASTM F679) [10 ft or more cover]. No services will be allowed on a sanitary sewer line deeper than 10 feet.
3. Proposed wastewater line embedment shall be NCTCOG Class 'H' as amended by the City of Rockwall's public works standard design and construction manual.
4. Green EMS pads shall be installed at every 250', manhole, clean out and service lateral on proposed wastewater lines.
5. CONTRACTOR shall CCTV all existing wastewater lines that are to be abandoned to ensure that all laterals are accounted for and transferred to proposed wastewater lines prior to abandonment.
6. All abandoned wastewater and force main lines shall be cut and plugged and all void spaces within the abandoned line shall be filled with grout, flowable fill or an expandable permanent foam product.
7. Existing manholes and cleanouts not specifically called to be relocated shall be adjusted to match final grades.
8. All wastewater pipes and public services shall be inspected by photographic means (television and DVD) prior to final acceptance and after franchise utilities are installed. The CONTRACTOR shall furnish a DVD to the Engineering Construction Inspector for review. Pipes shall be cleaned prior to TV inspection of the pipes. Any sags, open joints, cracked pipes, etc. shall be repaired or removed by the CONTRACTOR at the CONTRACTOR's expense. A television survey will be performed as part of the final testing in the twentieth (20th) month of the maintenance period.
9. All manholes (public or private) shall be fitted with inflow prevention. The inflow prevention shall conform to the measures called out in standard detail R-5031.
10. All new or existing manholes being modified shall have corrosion protection being Raven Liner 405 epoxy coating, ConShield, or approved equal. Conshield must have terracotta color dye mixed in the precast and cast-in-place concrete. Where connections to existing manholes are made the CONTRACTOR shall rehab manhole as necessary and install a 125 mil thick coating of Raven Liner 405 or approved equal.
11. All new or existing manholes that are to be placed in pavement shall be fitted with a sealed (gasketed) rim and cover to prevent inflow.
12. If an existing wastewater main or trunk line is called out to be replaced in place a wastewater bypassing pump plan shall be required and submitted to the Engineering Construction Inspector and City Engineer for approval prior to implementation. Bypass pump shall be fitted with an auto dialer and conform to the City's Noise Ordinance. Plan shall be to the City sufficiently in advance of scheduled construction to allow no less than 10 business days for review and response by the City.
13. CONTRACTOR shall maintain a minimum of 4 feet of cover on all wastewater lines.

	GENERAL CONSTRUCTION NOTES Sheet 1 of 2 October 2020	
	CITY OF ROCKWALL ENGINEERING DEPARTMENT	385 S. Goliad Rockwall, Texas 75087
		P (972) 771-7746 F (972) 771-7748

DEMOLITION, REMOVAL, DISPOSAL AND EXCAVATION NOTES

1. All pavements to be removed and replaced shall be saw cut to full depth along neat squared lines shown in the plans.
2. Proposed concrete pavement shall be constructed with longitudinal butt construction joints at all connections to existing concrete pavement.
3. All public concrete pavement to be removed and replaced shall be full panel replacement, 1-inch thicker and on top of 6-inch thick compacted flexbase.
4. No excess excavated material shall be deposited in low areas or along natural drainage ways without written permission from the affected property owner and the City of Rockwall. No excess excavation shall be deposited in the City Limits without a permit from the City of Rockwall. If the CONTRACTOR places excess materials in these areas without written permission, the CONTRACTOR will be responsible for all damages resulting from such fill and shall remove the material at their own cost.

PAVING AND GRADING

1. All detention systems are to be installed and verified for design compliance along with the associated storm sewer and outflow structures, prior to the start of any paving operations (including building foundations). Erosion protection shall be placed at the pond outflow structures, silt fence along the perimeter of the pond along with any of the associated erosion BMPs noted on the erosion control plan, and the sides and bottom of the detention system shall have either sod or anchored seeded curlex installed prior to any concrete placement.
2. All paving roadway, driveways, fire lanes, drive-isles, parking, dumpster pads, etc. sections shall have a minimum thickness, strength, reinforcement, joint type, joint spacing and subgrade treatment shall at a minimum conform to the City standards of Design and Construction and table below.

Street/Pavement Type	Minimum Thickness (inches)	Strength 28-Day (psi)	Minimum Cement (sacks / CY)		Steel Reinforcement	
			Machine Placed	Hand Placed	Bar #	Spacing (O.C.E.W.)
Arterial	10"	3,600	6.0	6.5	#4 bars	18"
Collector	8"	3,600	6.0	6.5	#4 bars	18"
Residential	6"	3,600	6.0	6.5	#3 bars	24"
Alley	7"-5"-2"	3,600	6.0	6.5	#3 bars	24"
Fire Lane	6"	3,600	6.0	6.5	#3 bars	24"
Driveways	6"	3,600	6.0	6.5	#3 bars	24"
Barrier Free Ramps	6"	3,600	N/A	6.5	#3 bars	24"
Sidewalks	4"	3,000	N/A	5.5	#3 bars	24"
Parking Lot/Drive Aisles	5"	3,000	5.0	5.5	#3 bars	24"
Dumpster Pads	7"	3,600	6.0	6.5	#3 bars	24"

3. Reinforcing steel shall be tied (100%). Reinforcing steel shall be set on plastic chairs. Bar laps shall be minimum 30 diameters. Sawed transverse dummy joints shall be spaced every 15 feet or 1.25 time longitudinal butt joint spacing whichever is less. Sawing shall occur within 5 to 12 hours after the pour, including sealing. Otherwise, the section shall be removed and longitudinal butt joint constructed.
4. No sand shall be allowed under any paving.
5. All concrete mix design shall be submitted to the City for review and approval prior to placement.
6. Fly ash may be used in concrete pavement locations provided that the maximum cement reduction does not exceed 20% by weight per C.Y. of concrete. The fly ash replacement shall be 1.25 lbs. per 1.0 lb. cement reduction.
7. All curb and gutter shall be integral (monolithic) with the pavement.
8. All fill shall be compacted by sheep's foot roller to a minimum 95% standard proctor. Maximum loose lift for compaction shall be 8 inches. All lifts shall be tested for density by an independent laboratory. All laboratory compaction reports shall be submitted to the City Engineering Construction Inspector once results are received. All reports will be required prior to final acceptance.
9. All concrete compression tests and soil compaction/density tests are required to be submitted to the City's Engineering Inspector immediately upon results.
10. All proposed sidewalks shall include barrier free ramps at intersecting streets, alleys, etc. Barrier free ramps (truncated dome plate in Colonial or brick red color) shall meet current City and ADA requirements and be approved by the Texas Department of Licensing and Regulation (TDLR).
11. All public sidewalks shall be dowelled into pavement where it abuts curbs and driveways. Expansion joint material shall be used at these locations.
12. All connection of proposed concrete pavement to existing concrete pavement shall include a longitudinal butt joint as the load transfer device. All longitudinal butt joints shall be clean, straight and smooth (not jagged in appearance).
13. Cracks formed in concrete pavement shall be repaired or removed by the CONTRACTOR at the City's discretion. CONTRACTOR shall replace existing concrete curbs, sidewalk, paving, a gutters as indicated on the plans and as necessary to connect to the existing infrastructure, including any damage caused by the CONTRACTOR.
14. All residential lots will require individual grading plans submitted during the building permit process that correspond with the engineered grading and drainage area plans.
15. Approval of this plan is not an authorization to grade adjacent properties when the plans or field conditions warrant off-site grading. Written permission must be obtained and signed from the affected property owner(s) and temporary construction easements may be required. The written permission shall be provided to the City as verification of approval by the adjacent property owner(s). Violation of this requirement will result in suspension of all work at the job site until issue has been rectified.
16. All cut or fill slopes of non-paved areas shall be a maximum of 4:1 and minimum of 1%.
17. CONTRACTOR agrees to repair any damage to property and the public right-of-way in accordance with the City Standards of Design and Construction.
18. CONTRACTOR shall protect all monuments, iron pins/rods, and property corners during construction.
19. CONTRACTOR shall ensure positive drainage so that runoff will drain by gravity flow to new or existing drainage inlets or sheet flow per these approved plans.

DRAINAGE / STORM SEWER NOTES

1. The CONTRACTOR shall maintain drainage at all times during construction. Ponding of water in streets, drives, trenches, etc. will not be allowed. Existing drainage ways shall not be blocked or removed unless explicitly stated in the plans or written approval is given by the City.
2. All structural concrete shall be 4200 psi compressive strength at 28 days minimum 7.0 sack mix, air entrained, unless noted otherwise. Fly ash shall not be allowed in any structural concrete.
3. Proposed storm sewer embedment shall be NCTCOG Class 'B' as amended by the City of Rockwall's Engineering Department Standards of Design and Construction Manual.
4. All public storm pipe shall be a minimum of 18-inch reinforced concrete pipe (RCP), Class III, unless otherwise noted.
5. All storm pipe entering structures shall be grouted to assure connection at the structure is watertight.
6. All storm structures shall have a smooth uniform poured mortar invert from invert in to invert out.
7. All storm sewer manholes in paved areas shall be flush with the paving grade, and shall have traffic bearing ring and covers.
8. All storm sewer pipes and laterals shall be inspected by photographic means (television and DVD) prior to final acceptance and after franchise utilities are installed. The CONTRACTOR shall furnish a DVD to the Engineering Construction Inspector for review. Pipes shall be cleaned prior to TV inspection of the pipes. Any sags, open joints, cracked pipes, etc. shall be repaired or removed by the CONTRACTOR at the CONTRACTOR's expense. A television survey will be performed as part of the final testing in the twentieth (20th) month of the maintenance period.

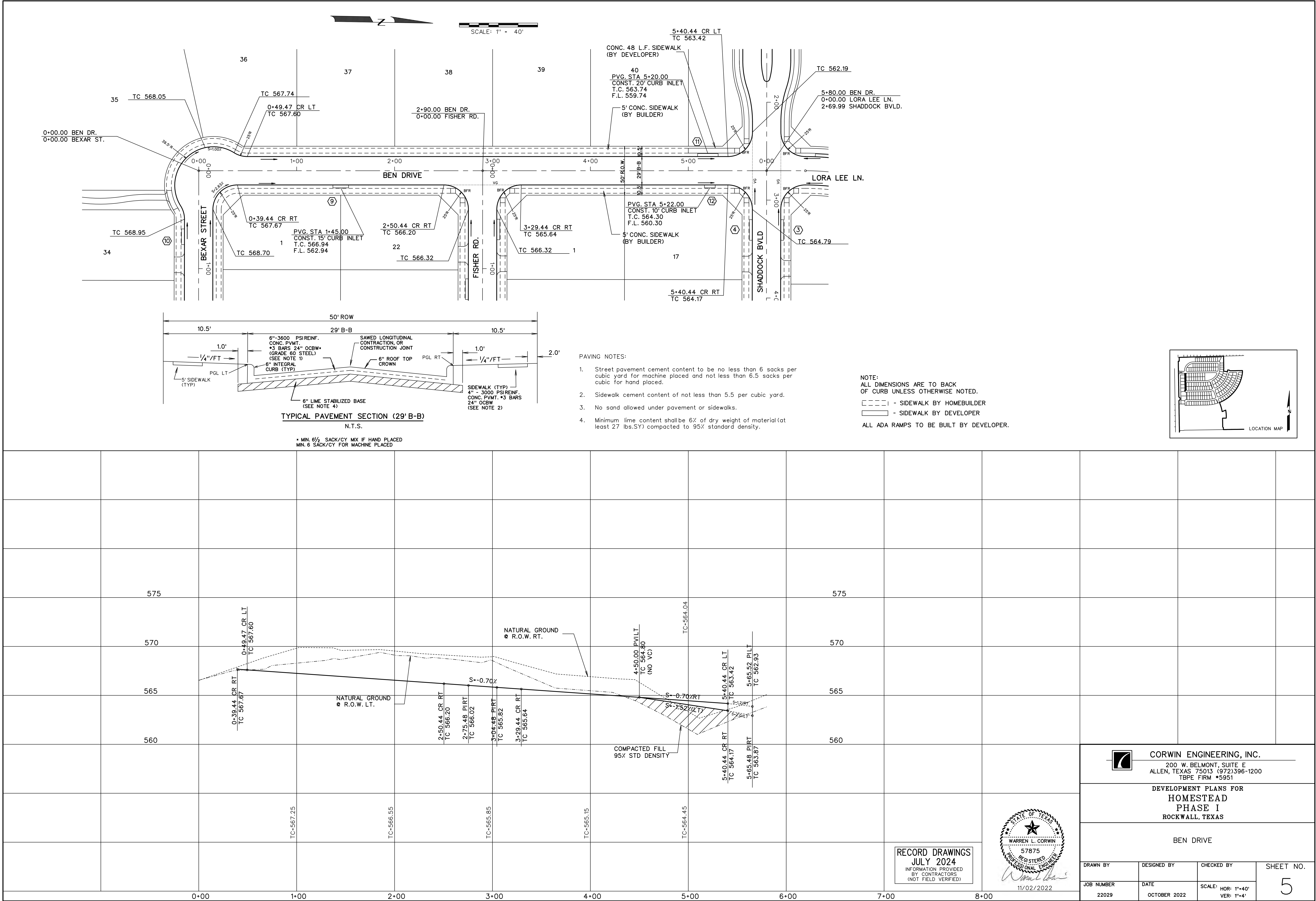
RETAINING WALLS

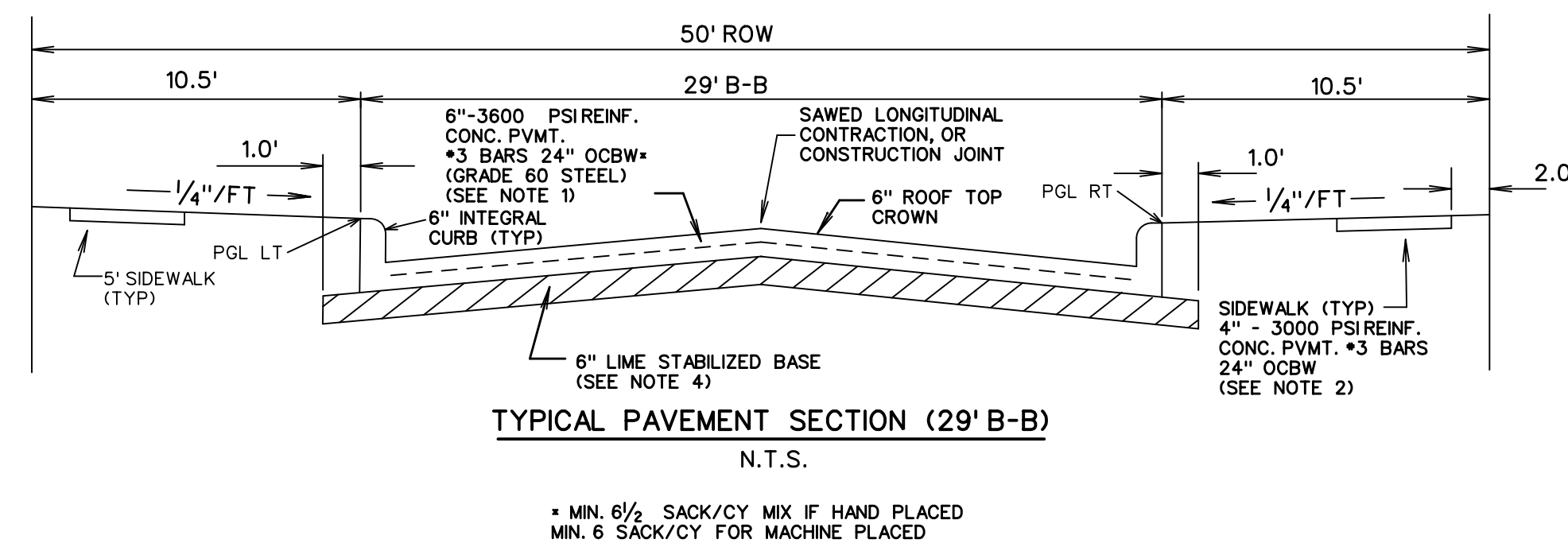
1. All retaining walls, regardless of height, will be reviewed and approved by the City Engineering Department.
2. All retaining walls (including foundation stem walls), regardless of height, will be constructed of rock/stone/brick or rock/stone/brick faced. No smooth concrete walls are allowed. Wall materials shall be the same for all walls on the project.
3. All portions, including footings, tie-backs, and drainage backfill, of the wall shall be on-site and not encroach into any public easements or right-of-way. The entire wall shall be in one lot and shall not be installed along a lot line.
4. All walls 3 feet and taller will be designed and signed/sealed by a registered professional engineer in the State of Texas. The wall design engineer is required to inspect the wall construction and supply a signed/sealed letter of wall construction compliance to the City of Rockwall along with wall as-builts prior to City Engineering acceptance.
5. No walls are allowed in detention easements. A variance to allow retaining walls in a detention easement will require approval by the Planning and Zoning Commission with appeals being heard by the City Council.

FINAL ACCEPTANCE AND RECORD DRAWINGS/AS-BUILTS

1. Final Acceptance shall occur when all the items on the Checklist for Final Acceptance have been completed and signed-off by the City. An example of the checklist for final acceptance has been included in the Appendix of the Standards of Design and Construction. Items on the checklist for final acceptance will vary per project and additional items not shown on the check list may be required.
2. After improvements have been constructed, the developer shall be responsible for providing to the City "As Built" or "Record Drawings". The Design Engineer shall furnish all digital files of the project formatted in Auto Cad 14, or 2000 format or newer and Adobe Acrobat (.pdf) format with a CD-ROM disk or flash drive. The disk or drive shall include a full set of plans along with any landscaping, wall plans, and details sheets.
3. Submit 1-set of printed drawings of the "Record Drawings" containing copies of all sheets to the Engineering Construction Inspector for the project. The printed sheets will be reviewed by the inspector PRIOR to producing the "Record Drawing" digital files on disk or flash drive. This will allow any revisions to be addressed prior to producing the digital files.
4. Record Drawing Disk drawings shall have the Design Engineers seal, signature and must be stamped and dated as "Record Drawings" or "As Built Drawings" on all sheets.
5. The City of Rockwall will not accept any Record Drawing disk drawings which include a disclaimer. A disclaimer shall not directly or indirectly state or indicate that the design engineer or the design engineer's surveyor/surveyors did not verify grades after construction, or that the Record Drawings were based solely on information provided by the construction contractor/contractors. Any Record Drawings which include like or similar disclaimer verbiage will not be accepted by the City of Rockwall.
6. Example of Acceptable Disclaimer: "To the best of our knowledge ABC Engineering, Inc., hereby states that this plan is As-Built. This information provided is based on surveying at the site and information provided by the contractor."

	GENERAL CONSTRUCTION NOTES	
	Sheet 2 of 2	
	October 2020	
	CITY OF ROCKWALL ENGINEERING DEPARTMENT	
	385 S. Goliad	P (972) 771-7746
	Rockwall, Texas 75087	F (972) 771-7748



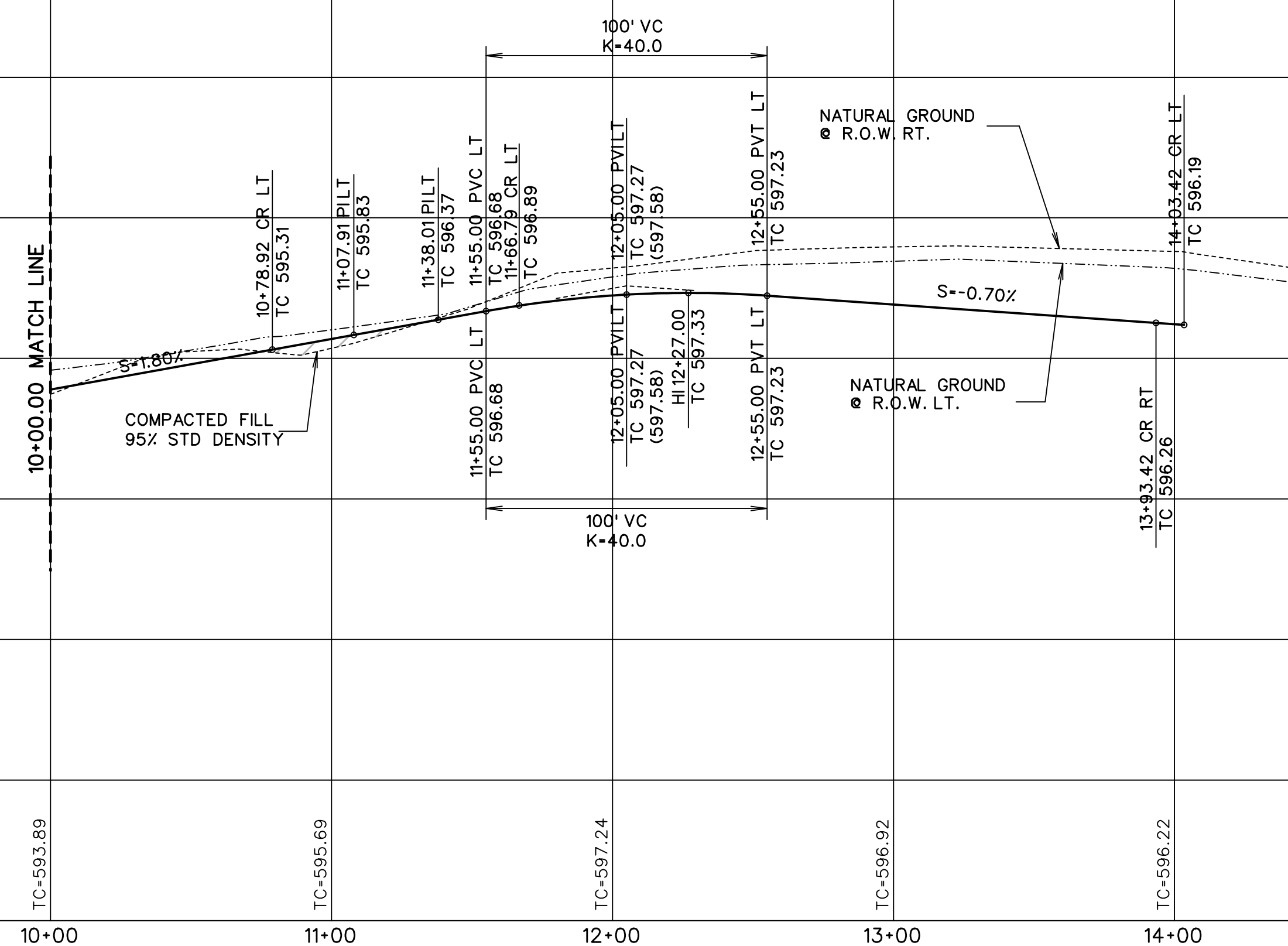
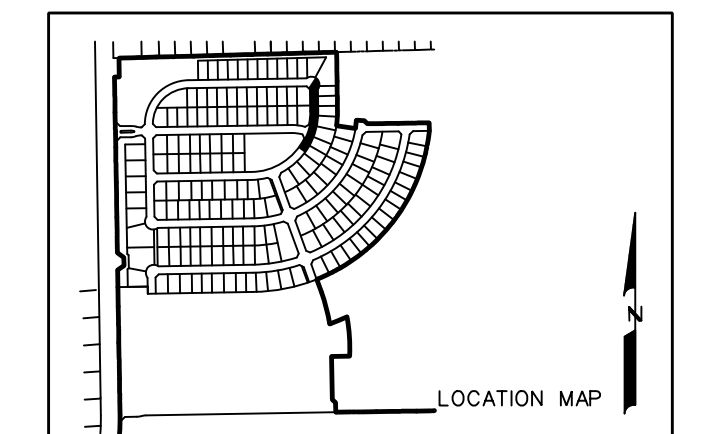


- PAVING NOTES:
1. Street pavement cement content to be no less than 6 sacks per cubic yard for machine placed and not less than 6.5 sacks per cubic for hand placed.
 2. Sidewalk cement content of not less than 5.5 per cubic yard.
 3. No sand allowed under pavement or sidewalks.
 4. Minimum lime content shall be 6% of dry weight of material (at least 27 lbs./SY) compacted to 95% standard density.

NOTE:
ALL DIMENSIONS ARE TO BACK
OF CURB UNLESS OTHERWISE NOTED.

□ - SIDEWALK BY HOMEBUILDER
▬ - SIDEWALK BY DEVELOPER

ALL ADA RAMPS TO BE BUILT BY DEVELOPER.



RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)



 CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM •5951

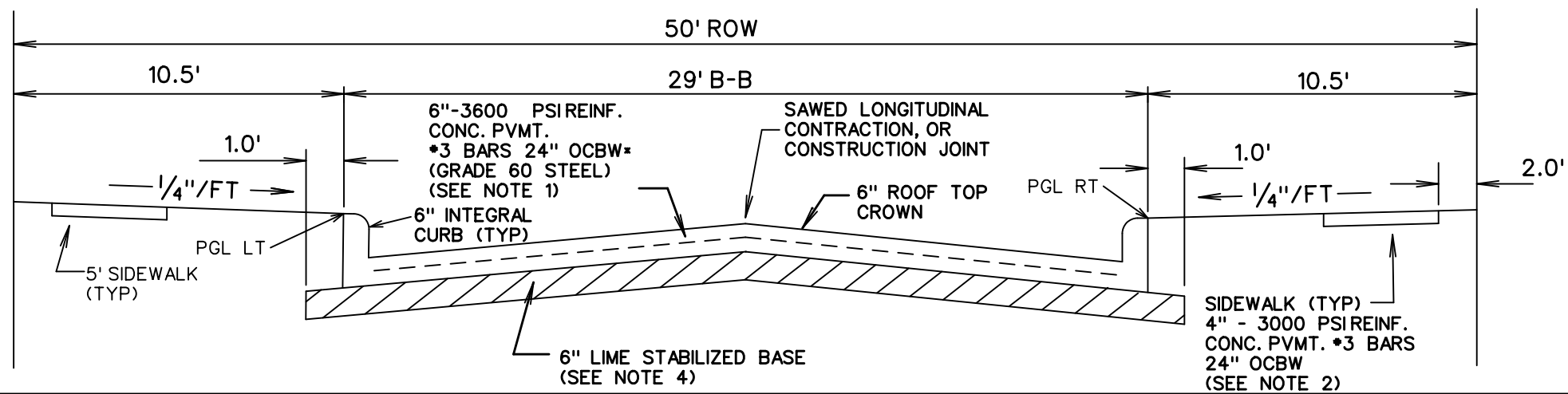
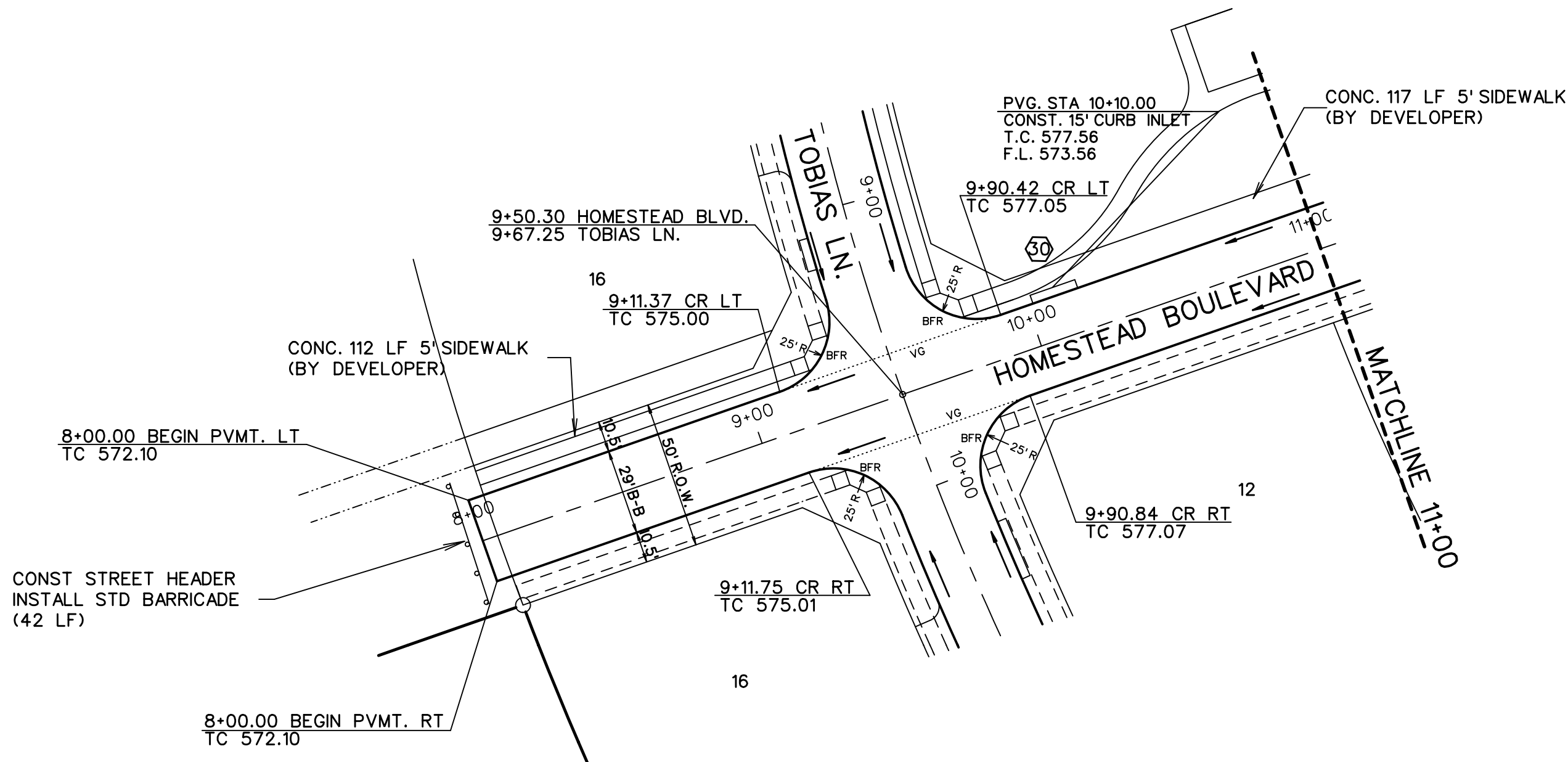
DEVELOPMENT PLANS FOR
HOMESTEAD
PHASE I
ROCKWALL, TEXAS

FISHER ROAD
STA. 10+00 TO END

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO. 7
JOB NUMBER 22029	DATE OCTOBER 2022	SCALE: HOR: 1"=40' VER: 1"=4'	



SCALE: 1" = 40'

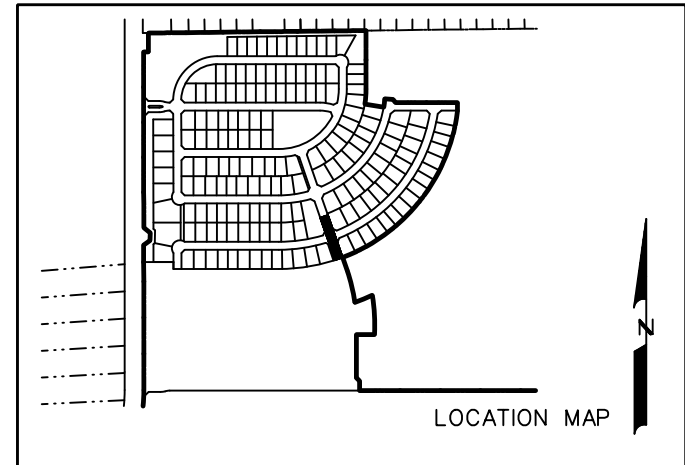


PAVING NOTES:

1. Street pavement cement content to be no less than 6 sacks per cubic yard for machine placed and not less than 6.5 sacks per cubic for hand placed.
2. Sidewalk cement content of not less than 5.5 per cubic yard.
3. No sand allowed under pavement or sidewalks.
4. Minimum lime content shall be 6% of dry weight of material (at least 27 lbs.SY) compacted to 95% standard density.

NOTE:

- ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
- - - - - SIDEWALK BY HOMEBUILDER
 - - - - - SIDEWALK BY DEVELOPER
- ALL ADA RAMPS TO BE BUILT BY DEVELOPER.



TYPICAL PAVEMENT SECTION (29' B-B)
N.T.S.

* MIN. 6 1/2 SACK/CY MIX IF HAND PLACED
MIN. 6 SACK/CY FOR MACHINE PLACED

GRADE TO ENSURE
POSITIVE DRAINAGE

NATURAL GROUND
R.O.W. RT.

NATURAL GROUND
R.O.W. LT.

S=2.60%

MATCHLINE 11+00



CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

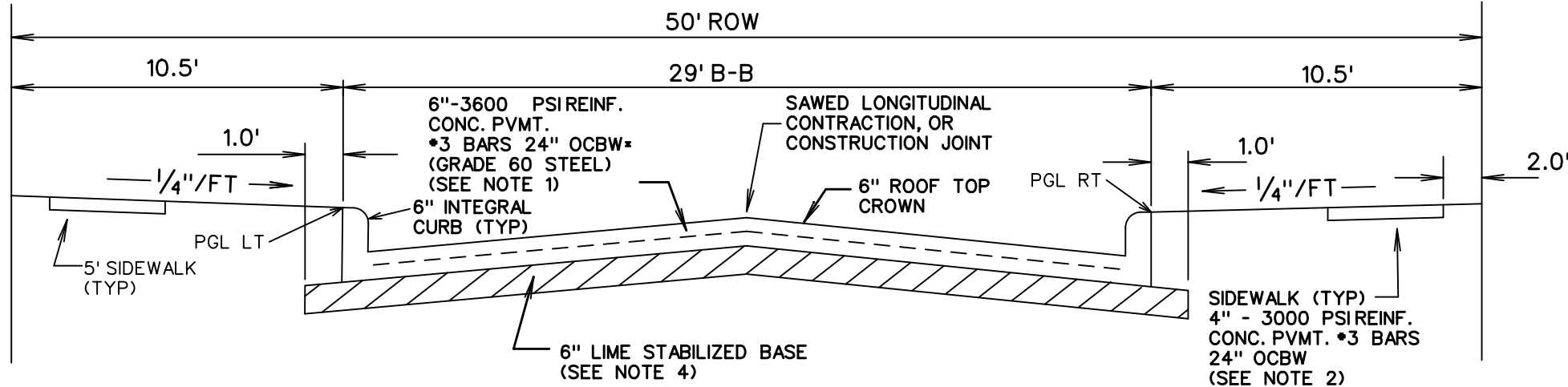
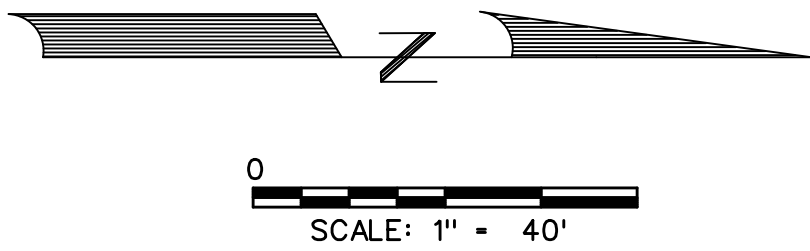
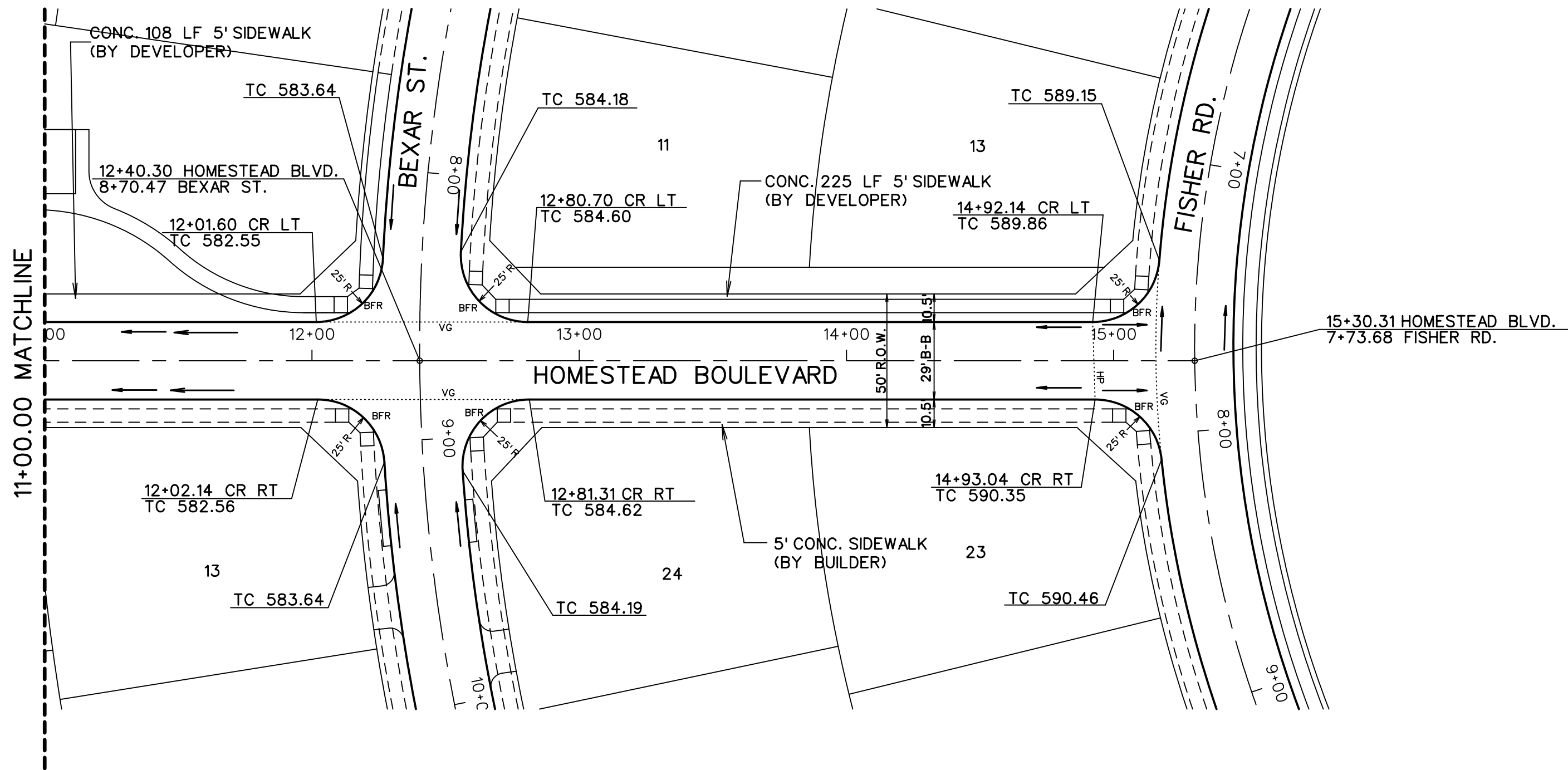
DEVELOPMENT PLANS FOR
HOMESTEAD
PHASE I
ROCKWALL, TEXAS

HOMESTEAD BOULEVARD
(STA. 8+00 TO 11+00)



RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE: HOR: 1"=40' VER: 1"=4'	8
22029	OCTOBER 2022		

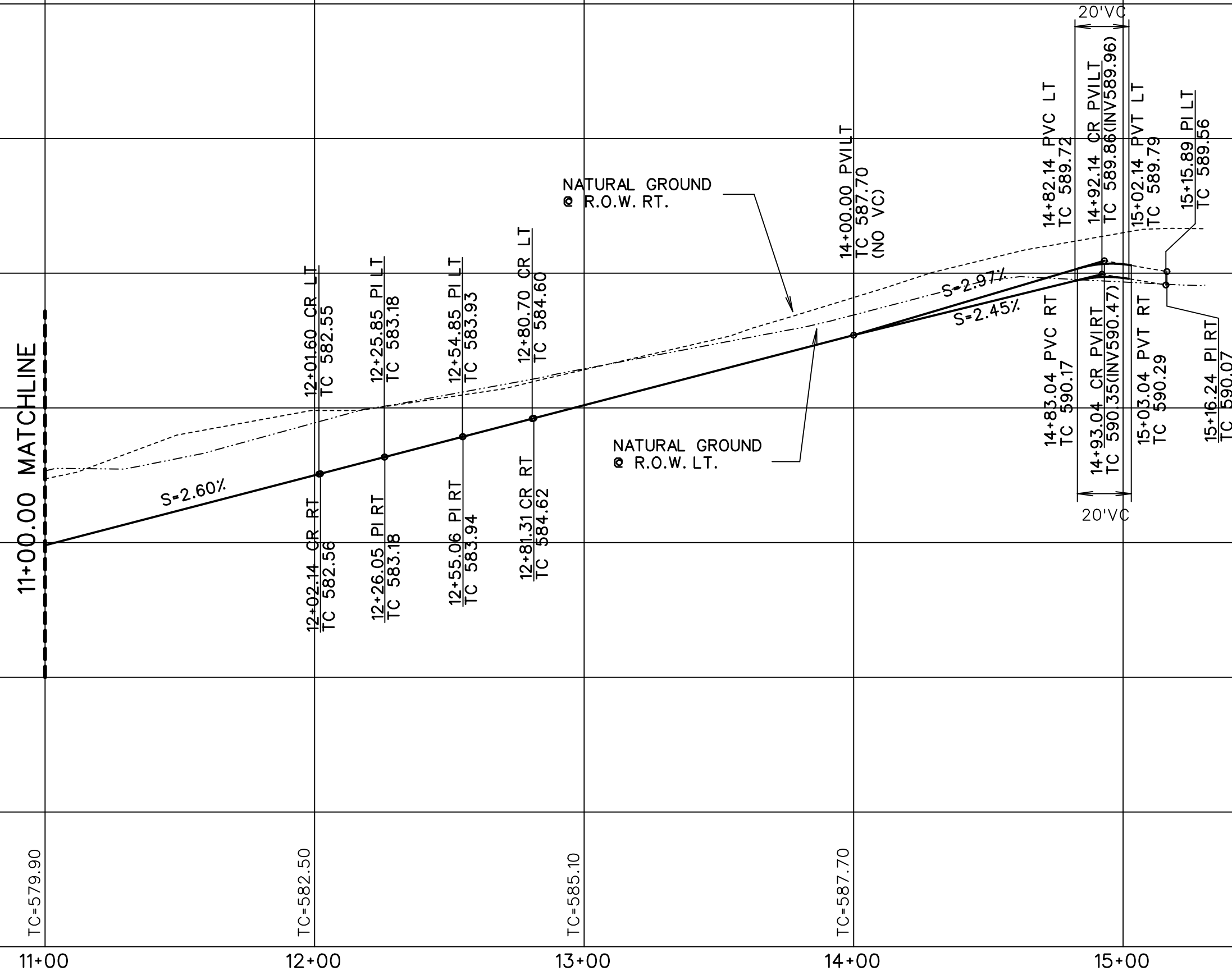
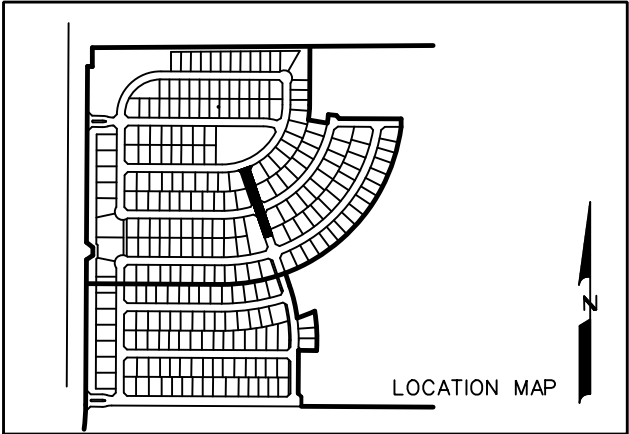


* MIN. 6 1/2 SACK/CY MIX IF HAND PLACED
MIN. 6 SACK/CY FOR MACHINE PLACED

PAVING NOTES:

1. Street pavement cement content to be no less than 6 sacks per cubic yard for machine placed and not less than 6.5 sacks per cubic for hand placed.
2. Sidewalk cement content of not less than 5.5 per cubic yard.
3. No sand allowed under pavement or sidewalks.
4. Minimum lime content shall be 6% of dry weight of material (at least 27 lbs.SY) compacted to 95% standard density.

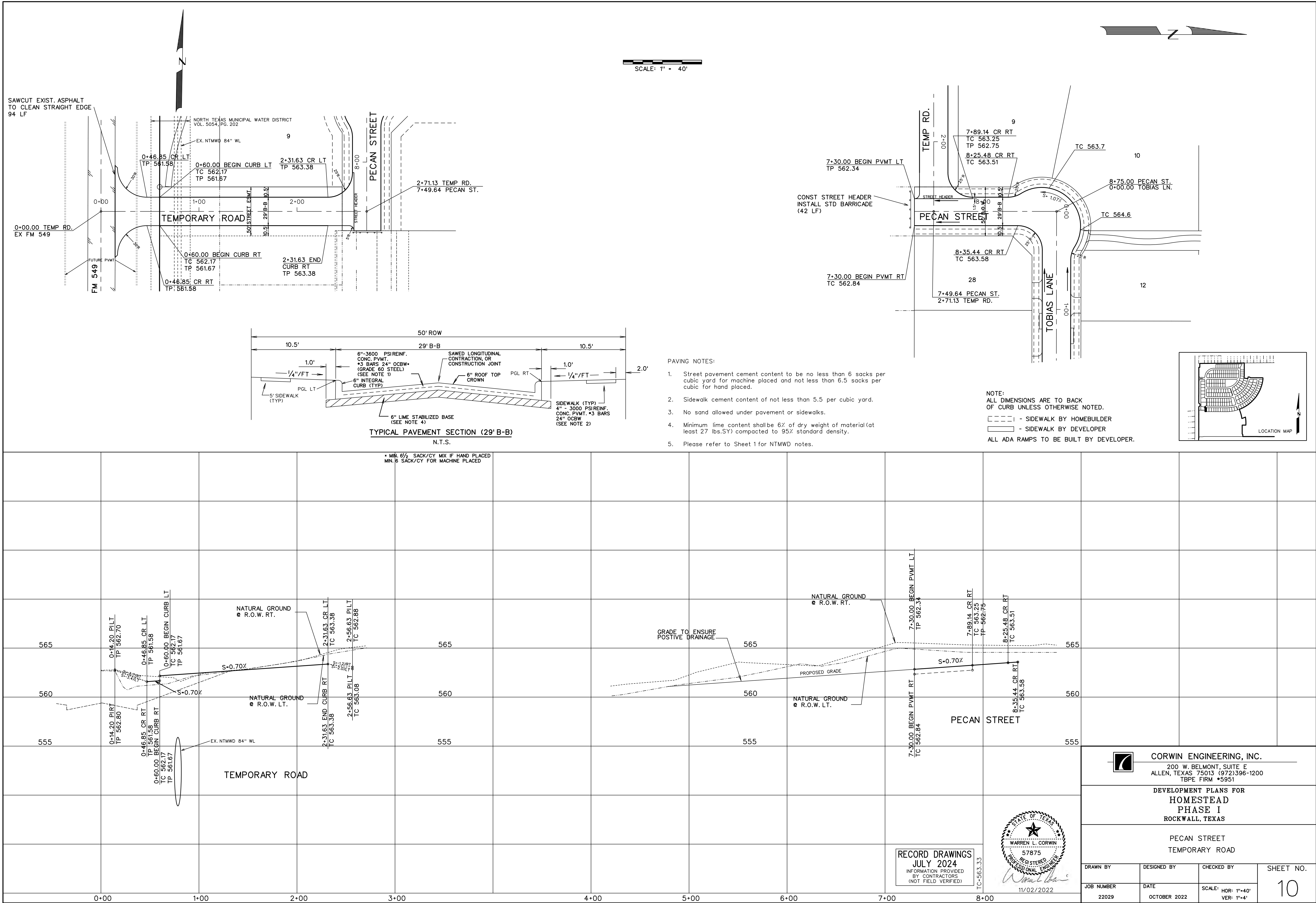
NOTE:
ALL DIMENSIONS ARE TO BACK
OF CURB UNLESS OTHERWISE NOTED.
- - - - - SIDEWALK BY HOMEBUILDER
- - - - - SIDEWALK BY DEVELOPER
ALL ADA RAMPS TO BE BUILT BY DEVELOPER.

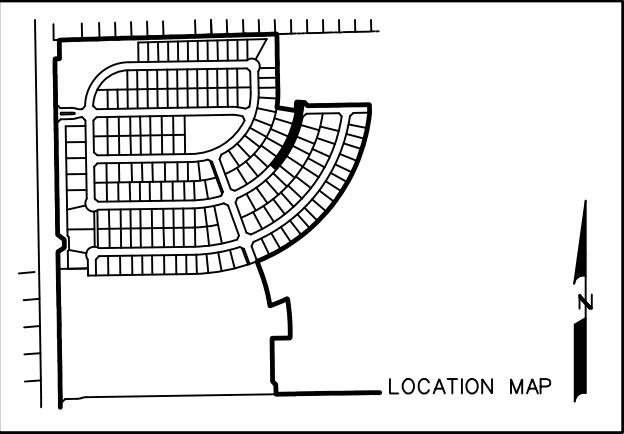
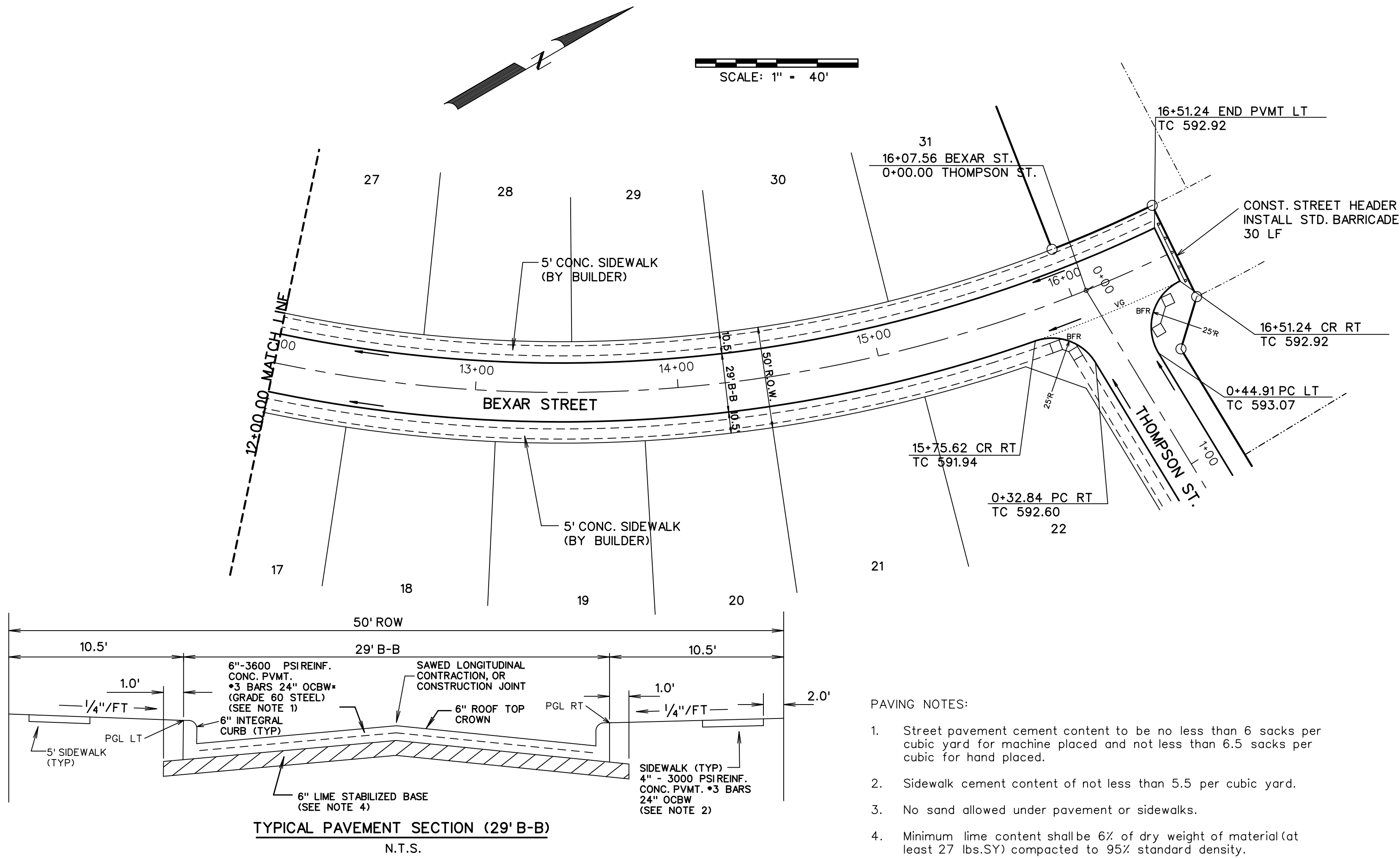


RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)

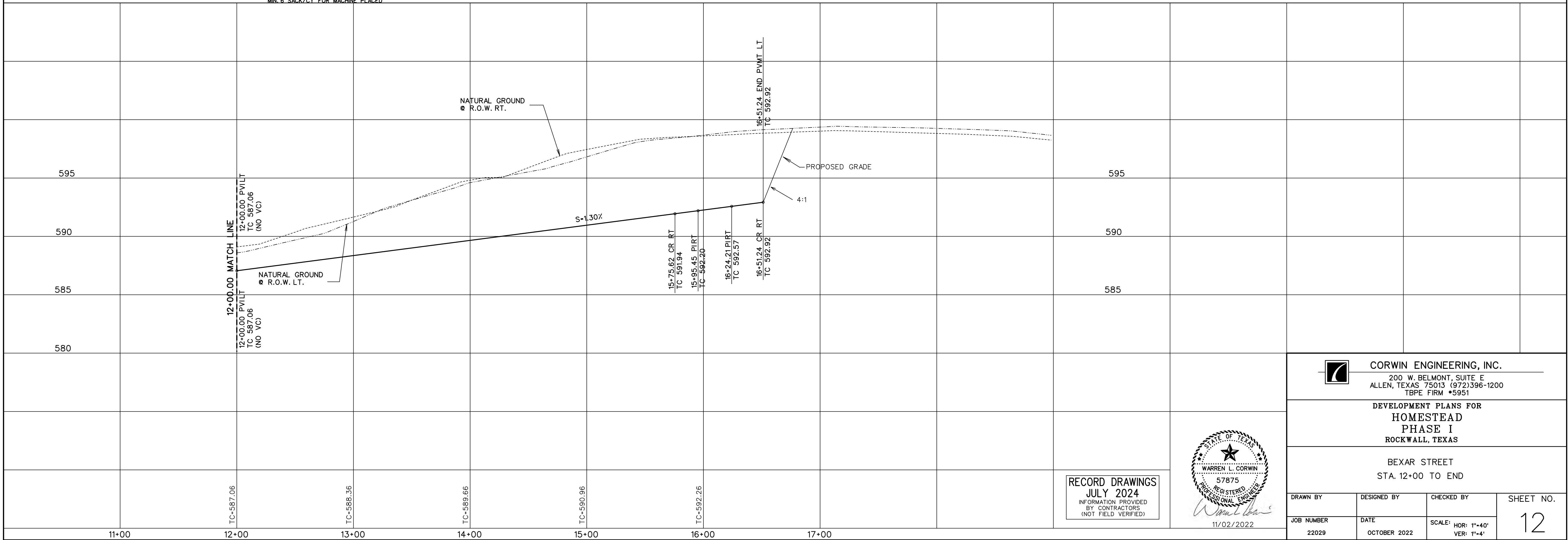


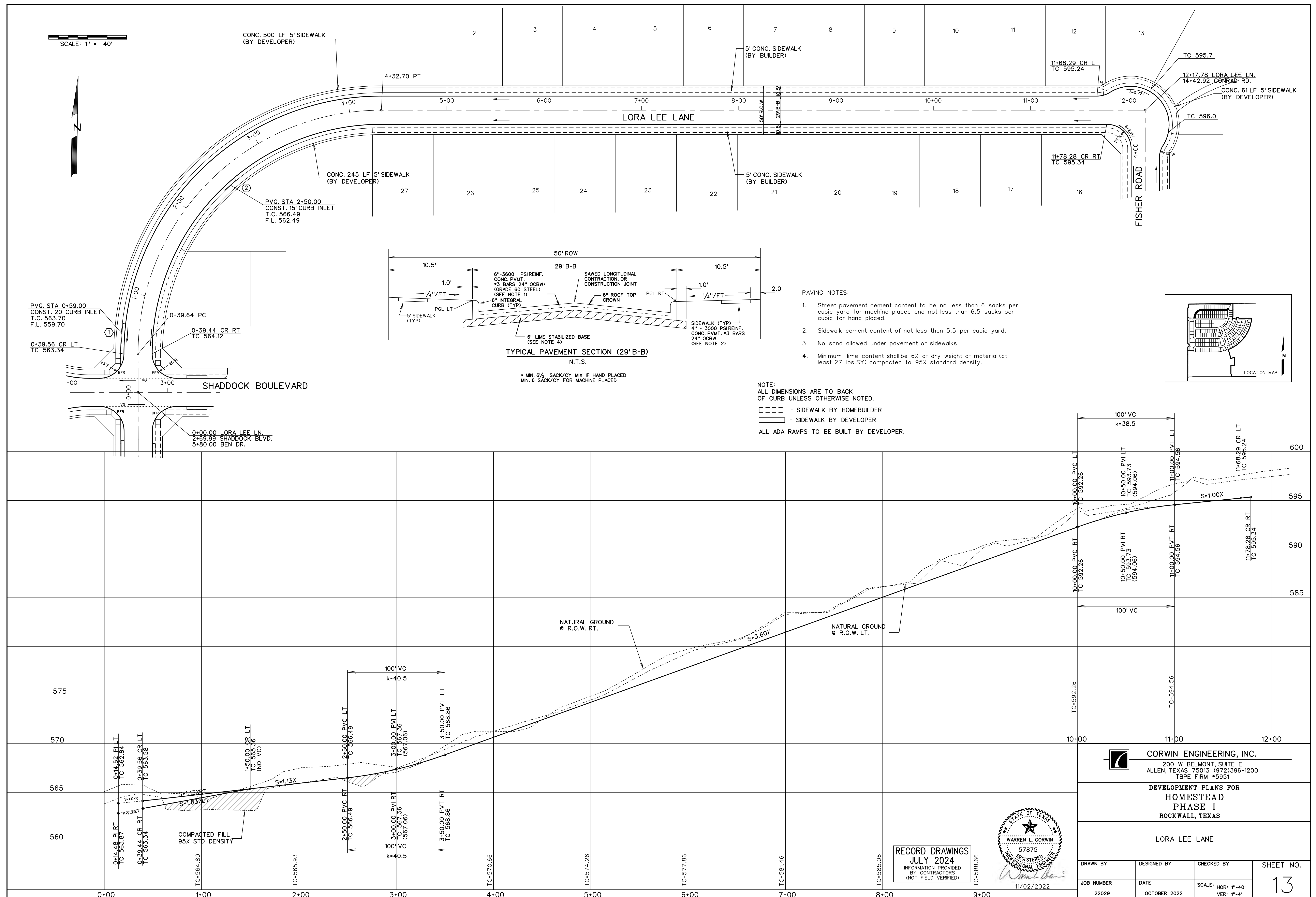
 CORWIN ENGINEERING, INC. 200 W. BELMONT, SUITE E ALLEN, TEXAS 75013 (972)396-1200 TBPE FIRM #5951			
DEVELOPMENT PLANS FOR HOMESTEAD PHASE I ROCKWALL, TEXAS			
HOMESTEAD BOULEVARD (STA. 11+00 TO END)			
DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO. 9
JOB NUMBER 22029	DATE OCTOBER 2022	SCALE: HOR: 1"=40' VER: 1"=4'	



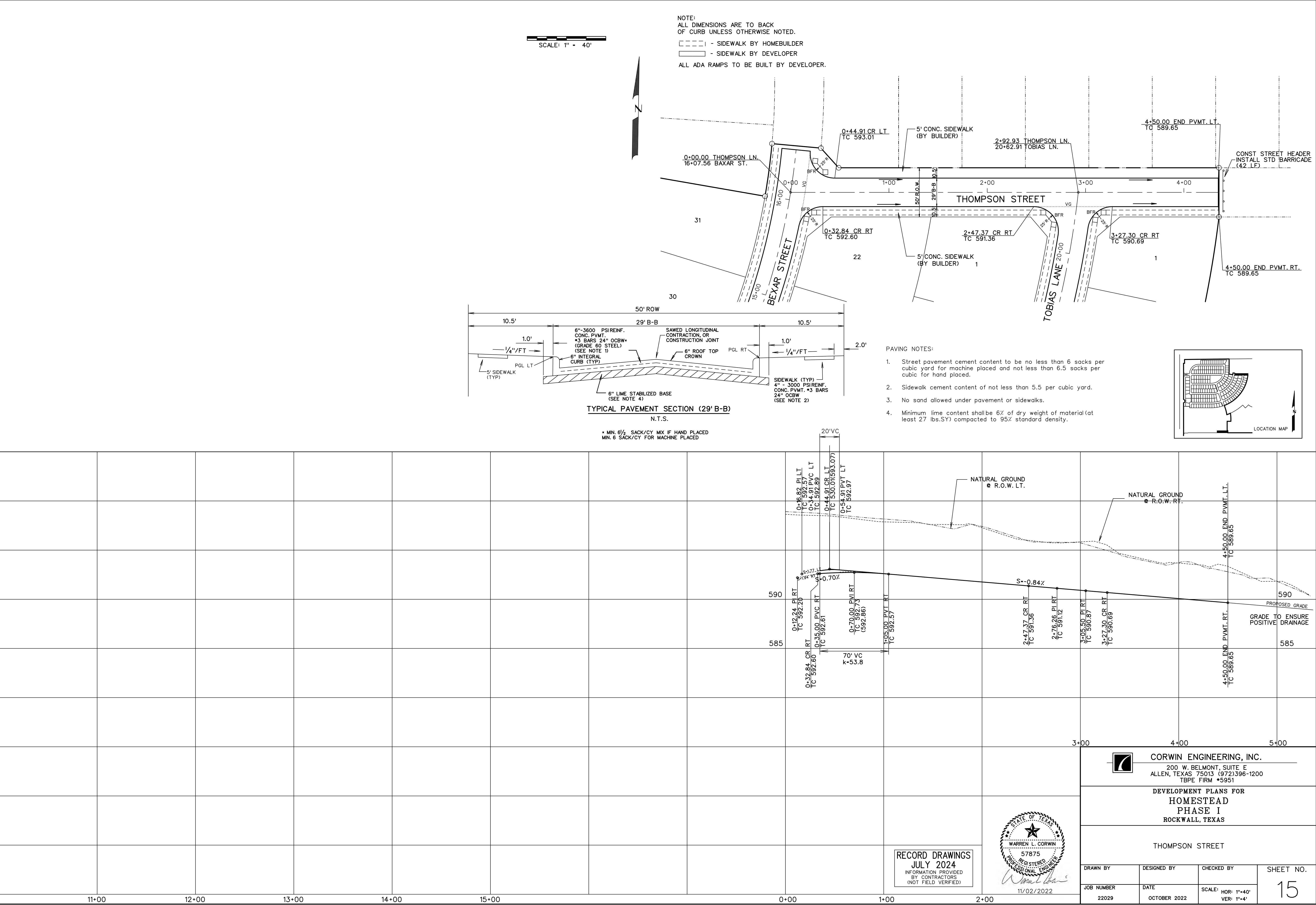


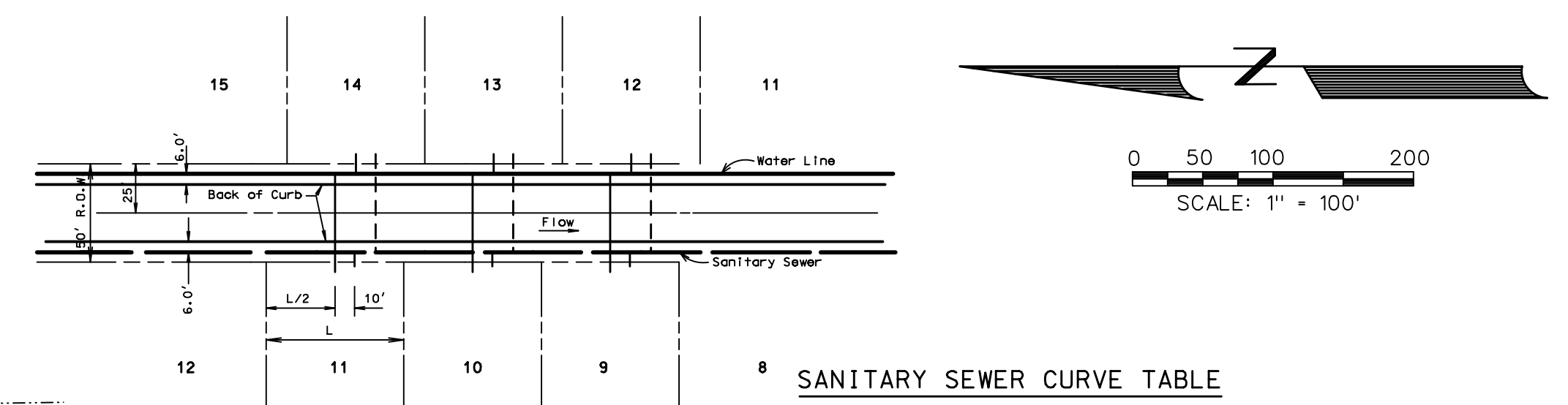
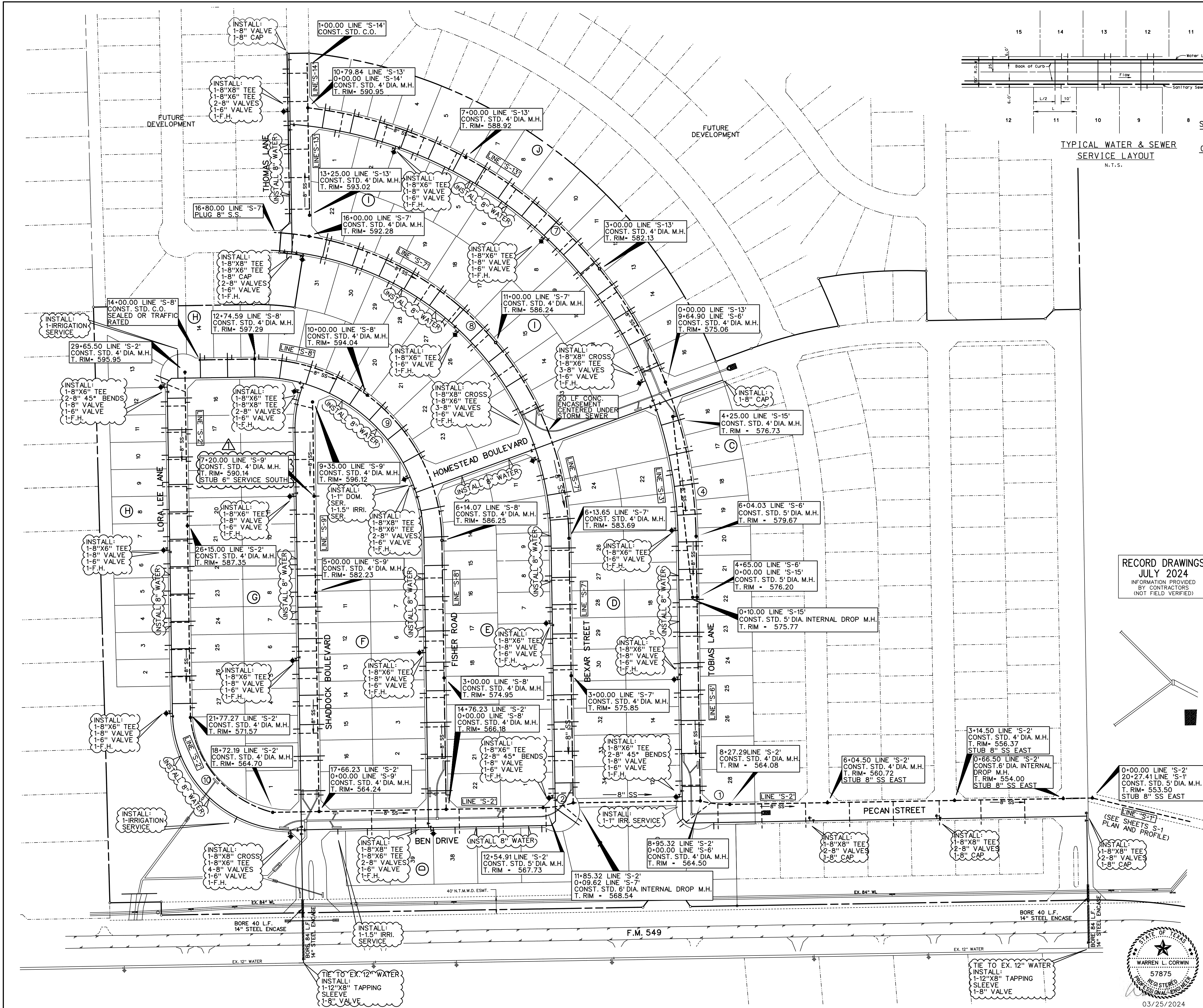
* MIN. 6 1/2 SACK/CY MIX IF HAND PLACED
MIN. 6 SACK/CY FOR MACHINE PLACED











CURVE NO.	DELTA	RADIUS	LENGTH	TANGENT
1.	15°35'30"	250.00'	68.03'	34.23'
2.	15°56'50"	250.00'	69.58'	35.02'
3.	19°05'28"	1290.50'	430.00'	217.01'
4.	20°39'57"	1000.50'	360.87'	182.42'
5.	14°44'12"	1025.50'	263.76'	132.61'
6.	04°28'07"	1025.50'	79.98'	40.01'
7.	61°50'22"	1000.50'	1079.84'	599.25'
8.	85°59'31"	710.50'	1066.35'	662.46'
9.	90°00'00"	420.50'	660.52'	420.50'
10.	66°55'06"	250.00'	305.08'	174.79'

- LEGEND
- PROP. WATER LINE
 - PROP. FIRE HYDRANT AND VALVE
 - PROP. GATE VALVE
 - PROP. FLUSH VALVE
 - EXIST. WATER LINE
 - EXIST. FIRE HYDRANT AND VALVE
 - PROP. SANITARY SEWER
 - PROP. MANHOLE
 - PROP. CLEANOUT
 - EXIST. SANITARY SEWER
 - EXIST. MANHOLE
 - PROP. STORM SEWER
 - PROP. CURB INLETS
 - PROP. CONC. HEADWALL

NOTE:

ALL WATER LINES TO BE CLASS 200 PIPE DR-14 C-900.

ALL SANITARY SEWER PIPE TO BE SDR 35 FOR 5'-10' DEEP AND SDR 26 FOR 10' AND GREATER.

INSTALL BLUE "EMS" DISK ON WATER LINE AT EVERY 250' AND CHANGE IN DIRECTION, VALVE, AND SERVICE.

INSTALL GREEN "EMS" DISK ON SANITARY SEWER LINE EVERY 250' AND AT EVERY CHANGE IN DIRECTION, MANHOLE, CLEANOUT, AND SERVICE.

ALL MANHOLES TO BE RAVEN EPOXY LINED AND SEALED OR APPROVED EQUAL TO BE SPARK AND PRESSURE TESTED.

FORCE MAIN SHALL BE AWWA (900-16) PVC PIPE DR-14 GREEN IN COLOR

Please refer to Sheet 1 for NTMWD notes.

RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)

SERVICE SCHEDULE		
TYPE	SIZE	NO.
SANITARY	4"	189
	6"	1
WATER	1"	183
IRRIGATION	1"	2
	1.5"	1

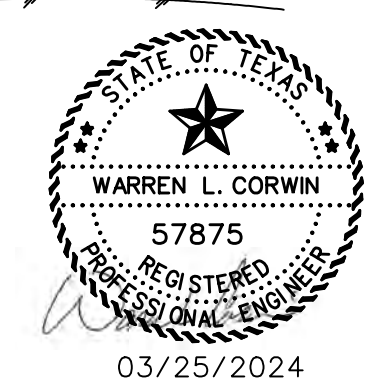
1	ADDED MANHOLE, 6" SEWER SERVICE & 1.5" DOM. SERVICE	4-9-24
NO.	REVISIONS	DATE

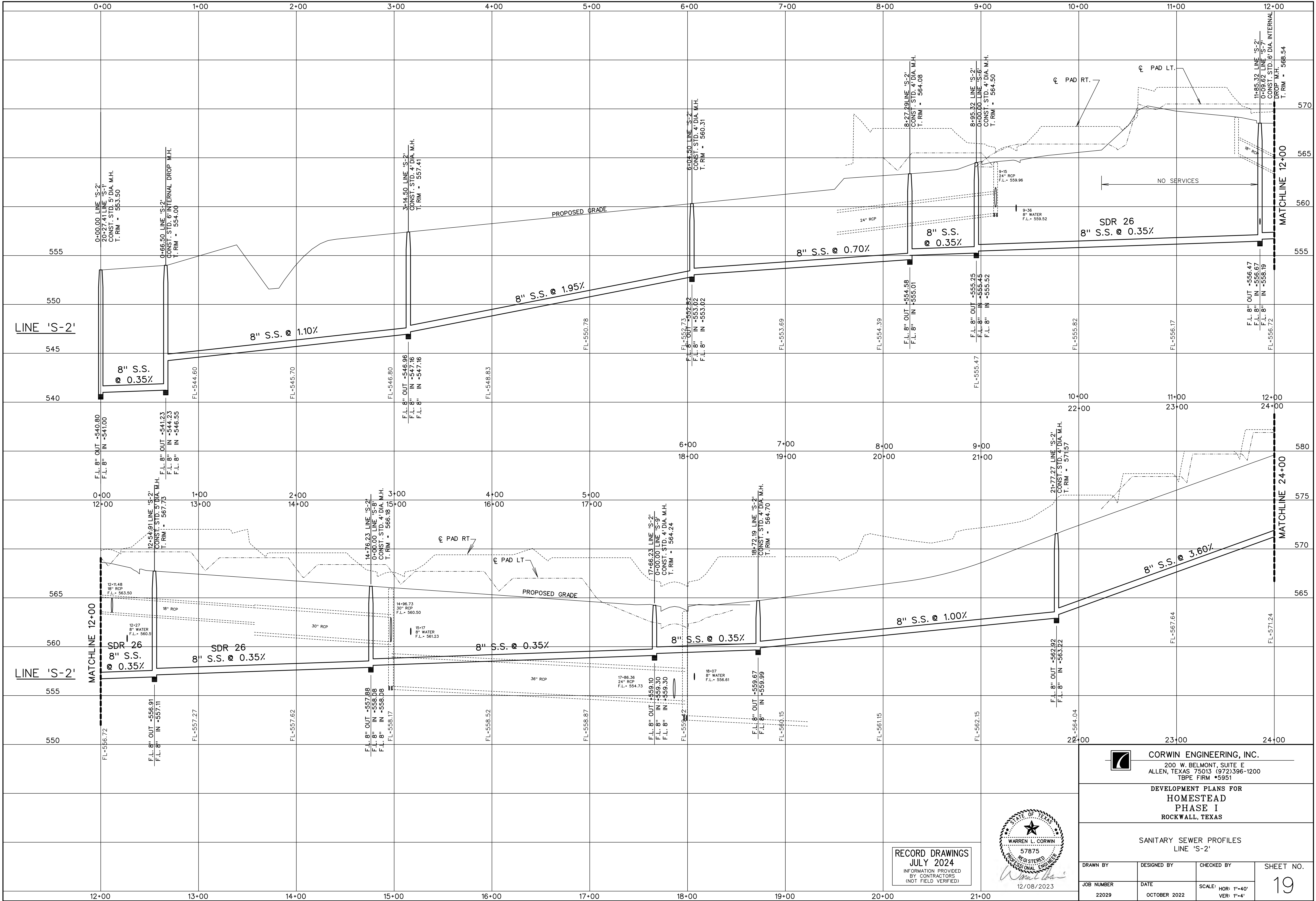
CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBP# FIRM #5951

**DEVELOPMENT PLANS FOR
HOMESTEAD
PHASE I
ROCKWALL, TEXAS**

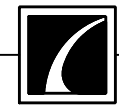
WATER AND SANITARY SEWER PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE:	18
22029	OCTOBER 2022	1"=100'	





RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)

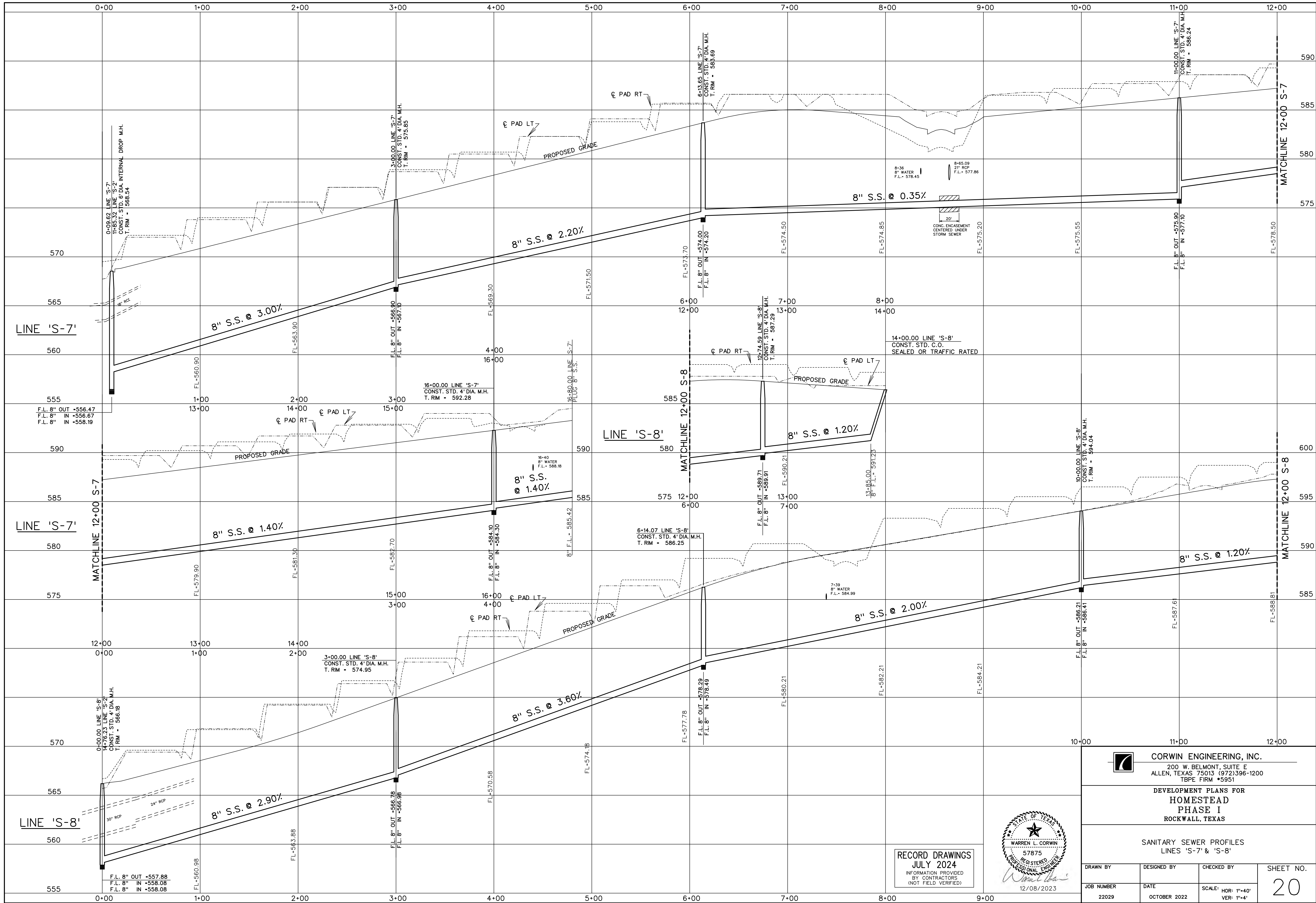


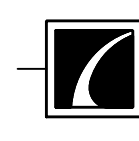
CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
HOMESTEAD
PHASE I
ROCKWALL, TEXAS

SANITARY SEWER PROFILES
LINE 'S-2'

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE: HOR: 1"=40' VER: 1"=4'	19
22029	OCTOBER 2022		





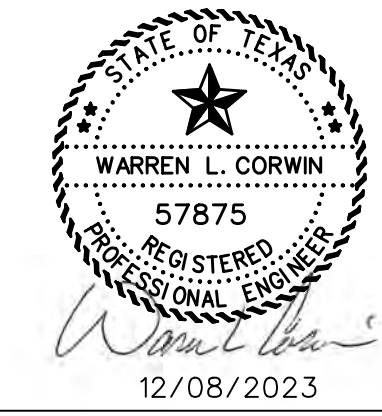
CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

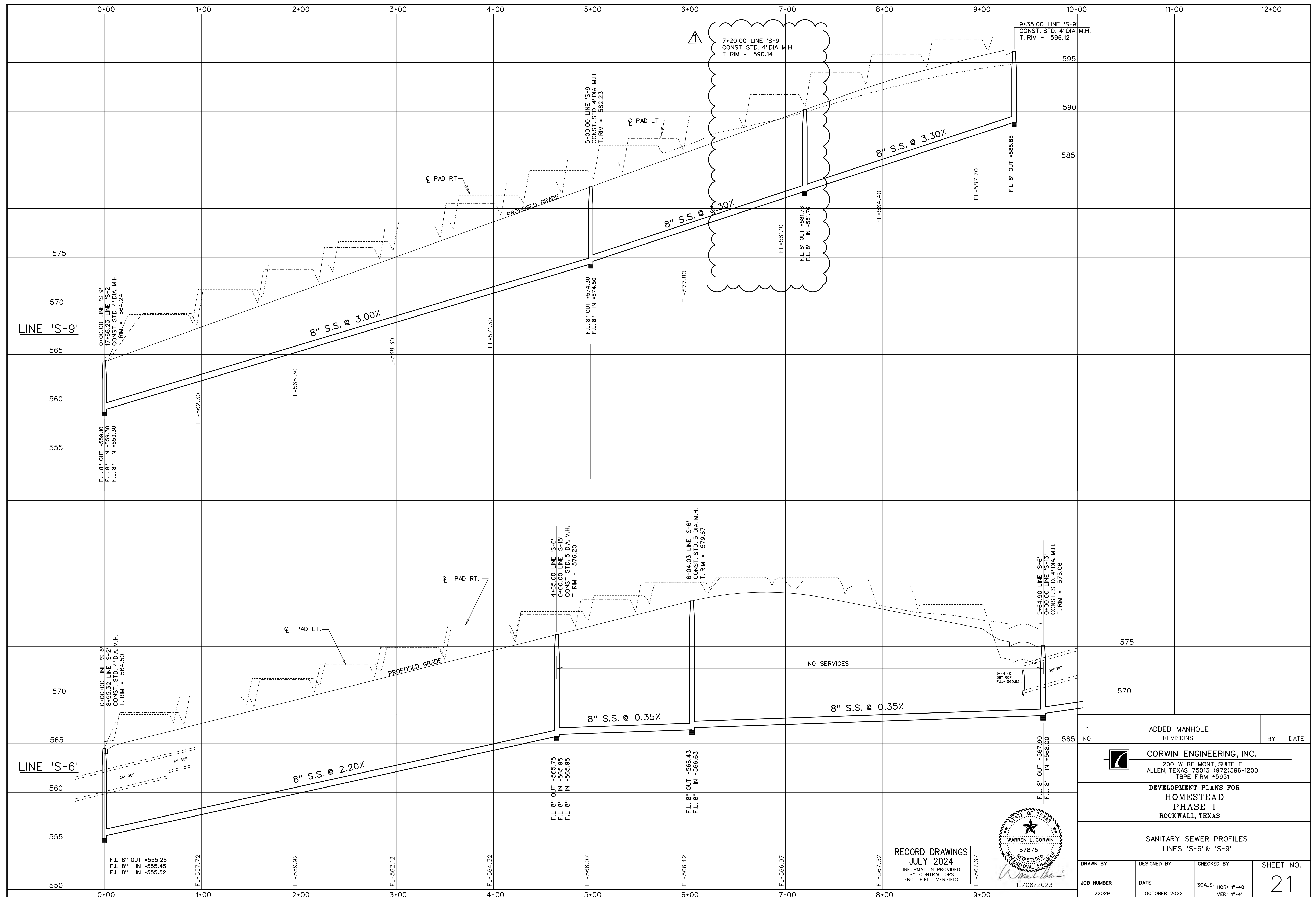
DEVELOPMENT PLANS FOR
HOMESTEAD
PHASE I
ROCKWALL, TEXAS

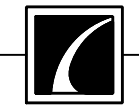
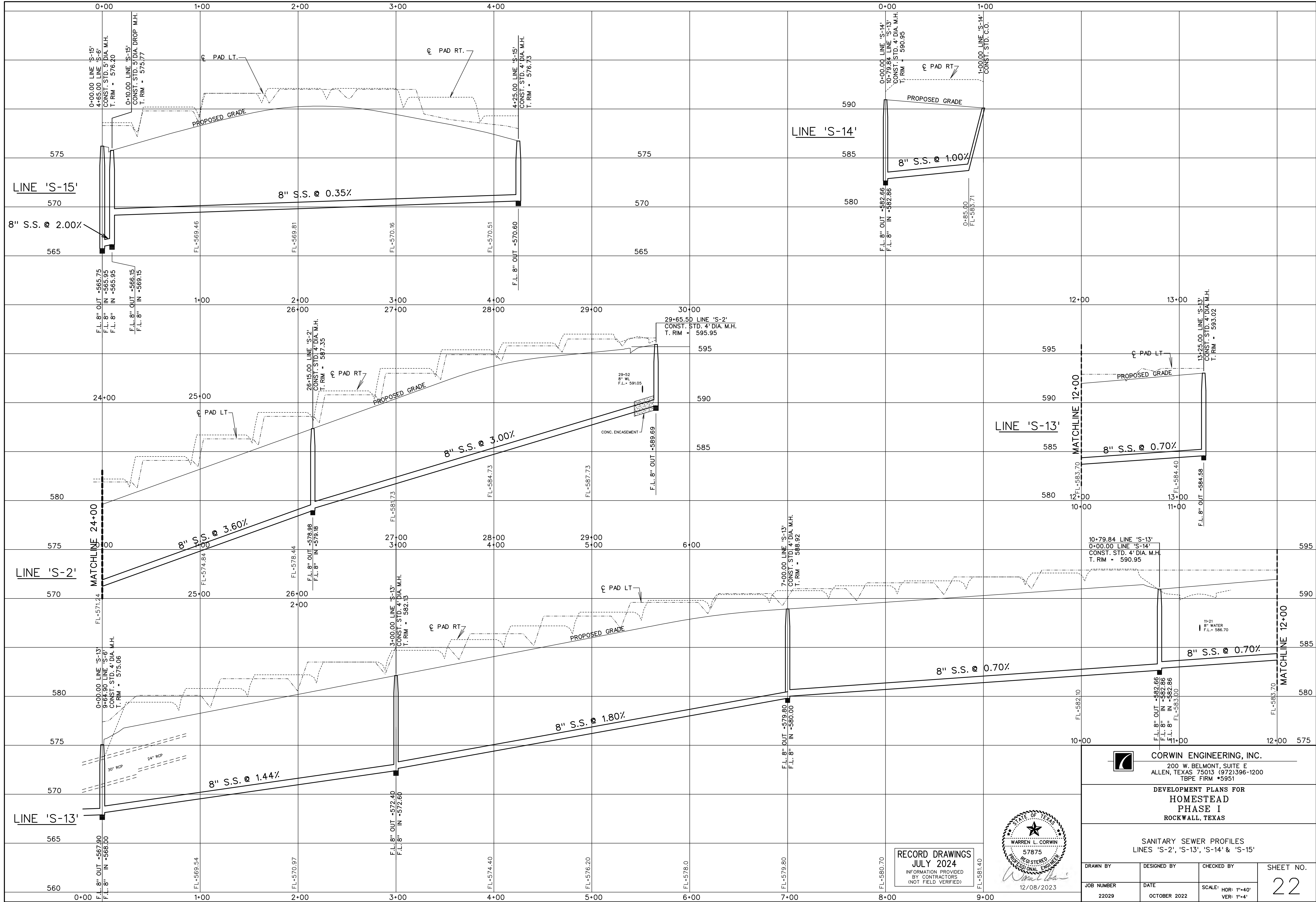
SANITARY SEWER PROFILES
LINES 'S-7' & 'S-8'

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO. 20
JOB NUMBER 22029	DATE OCTOBER 2022	SCALE: HOR: 1"=40' VER: 1"=4'	

RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)







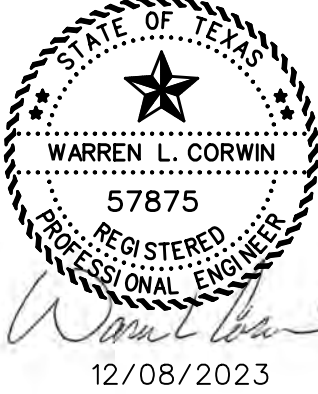
CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

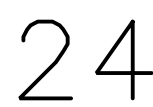
DEVELOPMENT PLANS FOR
HOMESTEAD
PHASE I
ROCKWALL, TEXAS

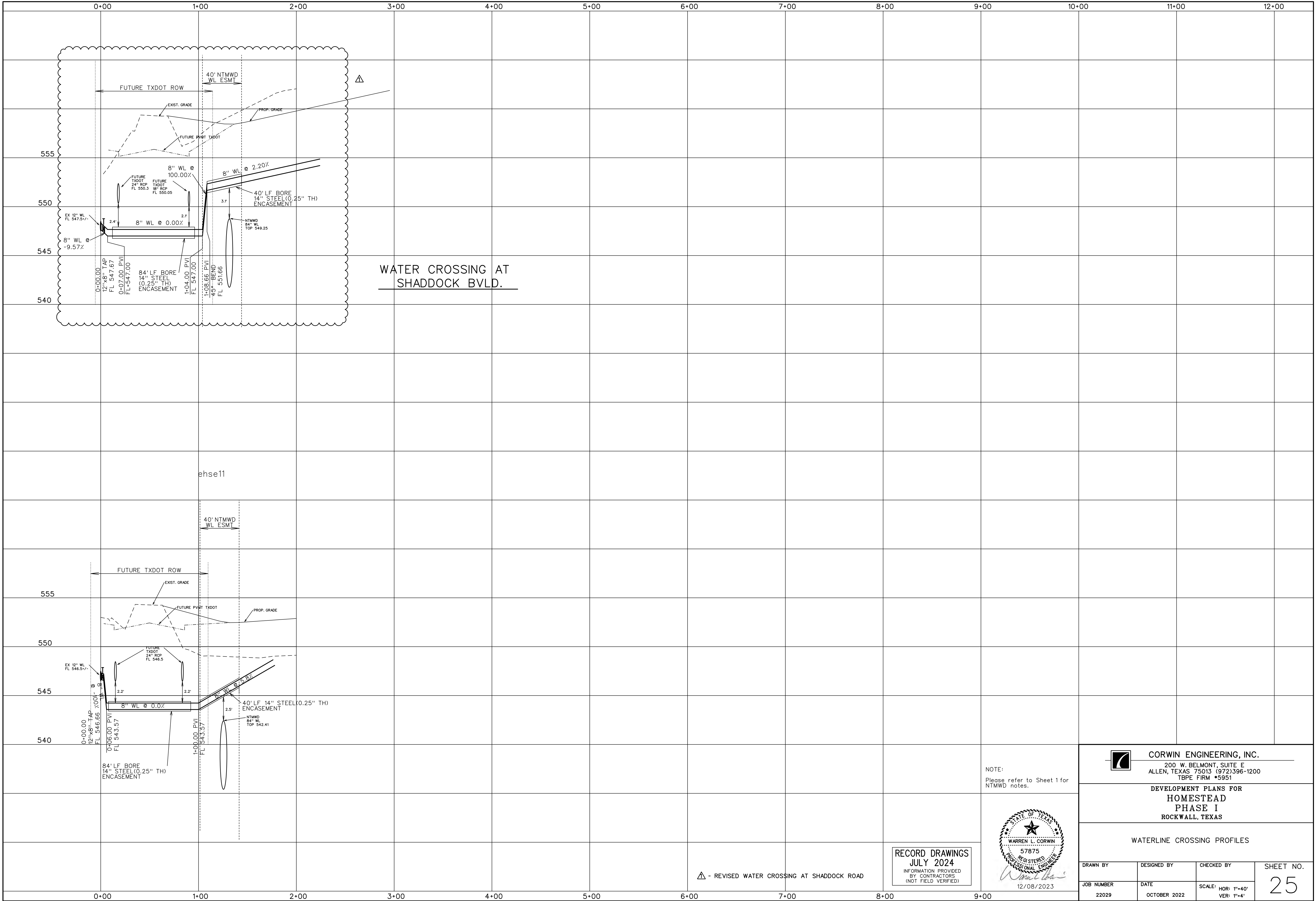
SANITARY SEWER PROFILES
LINES 'S-2', 'S-13', 'S-14' & 'S-15'

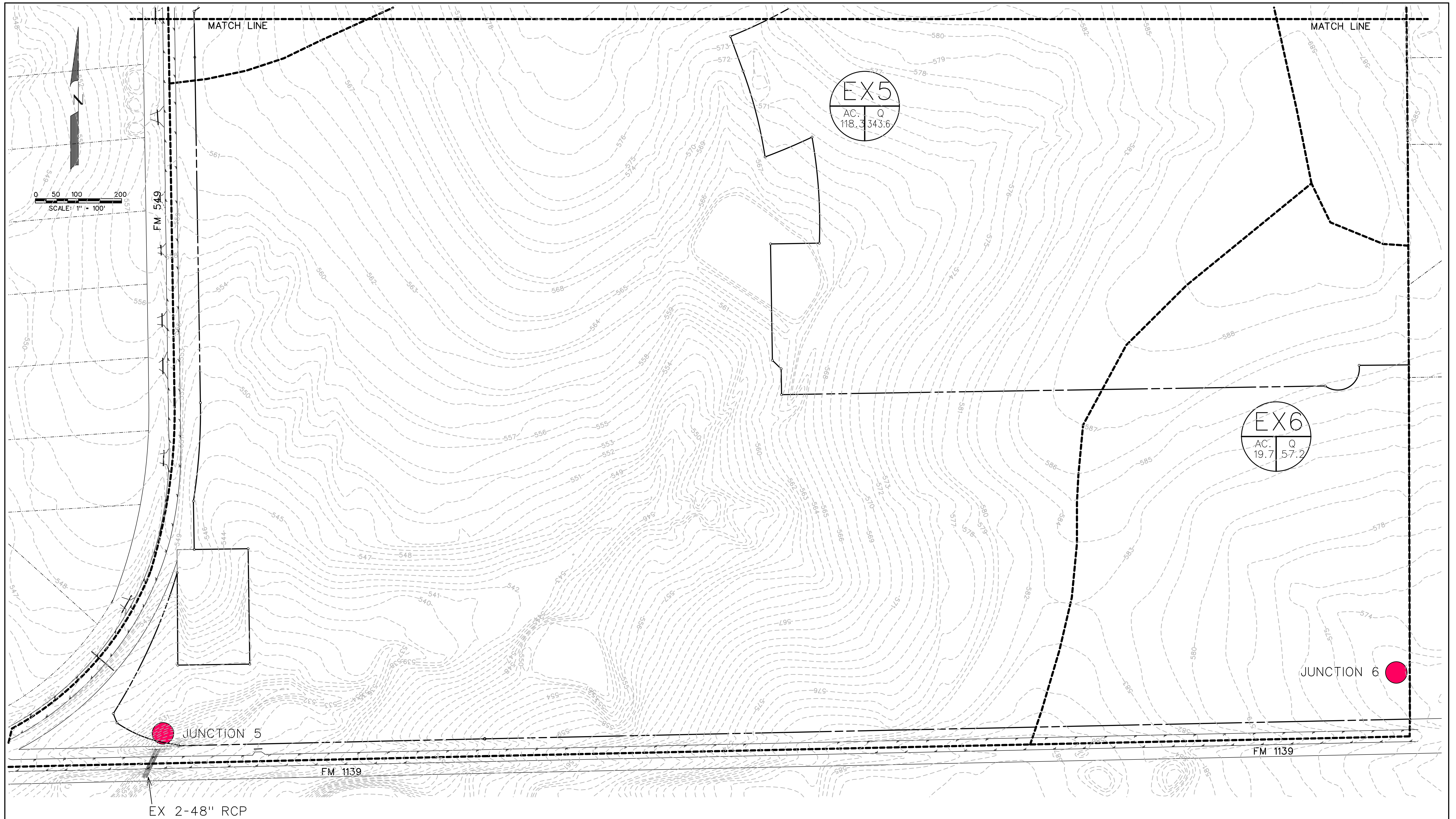
DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE: HOR: 1"=40' VER: 1"=4'	22
22029	OCTOBER 2022		

RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)









EXISTING CONDITIONS RUNOFF COMPUTATIONS								
Area #	Area (sf)	Area (acres)	Runoff Coefficient	C _A	T _c (min)	I(100) (in/hr)	Q(100) (cfs)	Drains To
EX1	962441	22.1	0.35	7.73	20	8.30	64.2	Ex 2-24" RCP
EX2	503501	11.6	0.35	4.05	10	9.80	39.6	North Property Line
EX3A	1314733	30.2	0.35	10.56	20	8.30	87.7	Existing Swale
EX3B	203936	4.68	0.50	2.34	10	9.80	22.9	Existing Swale
EX4	555653	12.8	0.35	4.46	20	8.30	37.1	Ex 24" RCP
EX5	5152975	118.3	0.35	41.40	20	8.30	343.6	Ex 2-48" RCP
EX6	857310	19.7	0.35	6.89	20	8.30	57.2	Southeast Prop. Cor.

RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)

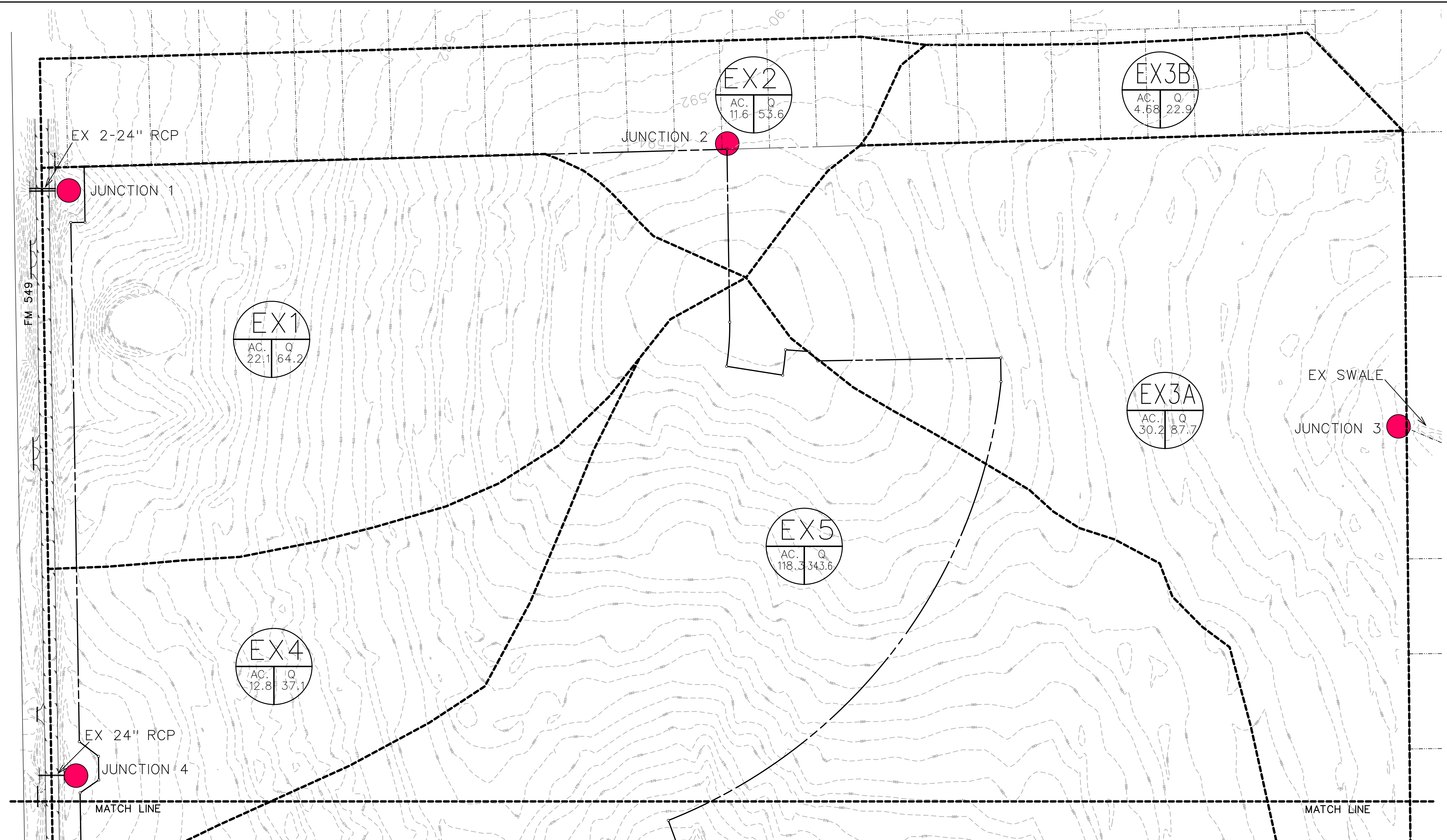
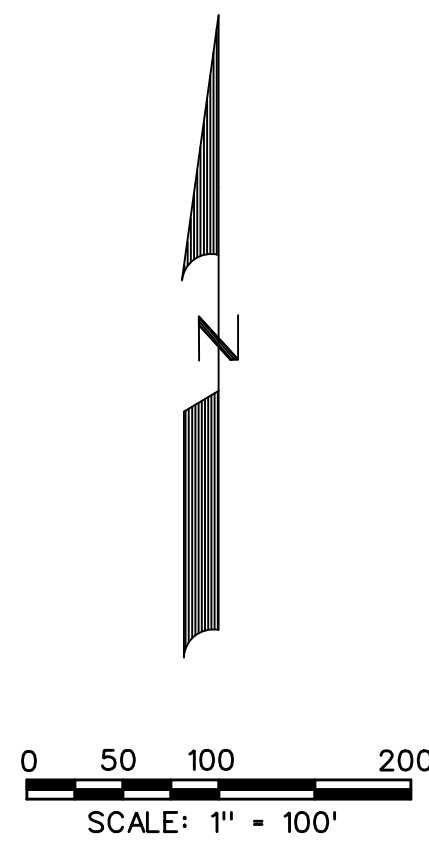


CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
HOMESTEAD
PHASE I
ROCKWALL, TEXAS

EXISTING CONDITIONS
DRAINAGE AREA MAP
SHEET 1 OF 2

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE:	26
22029	OCTOBER 2022	1"=100'	



EXISTING CONDITIONS RUNOFF COMPUTATIONS										
#	Area (sf)	Area (acres)	Runoff Coefficient	CA	Tc (min)	I(100) (in/hr)	Q(100) (cfs)	Drains To:		
EX1	962441	22.1	0.35	7.73	20	8.30	64.2	Ex 2-24" RCP		
EX2	403501	11.6	0.47	5.47	10	9.80	53.6	Ex 2-24" RCP		
EX3A	1314733	30.2	0.35	10.56	20	8.30	87.7	Existing Swale		
EX3B	203936	4.68	0.50	2.34	10	9.80	22.9	Existing Swale		
EX4	555653	12.8	0.35	4.46	20	8.30	37.1	Ex 24" RCP		
EX5	5152975	118.3	0.35	41.40	20	8.30	343.6	Ex 2-48" RCP		
EX6	857310	19.7	0.35	6.89	20	8.30	57.2	Southeast Prep. Cor.		

RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)





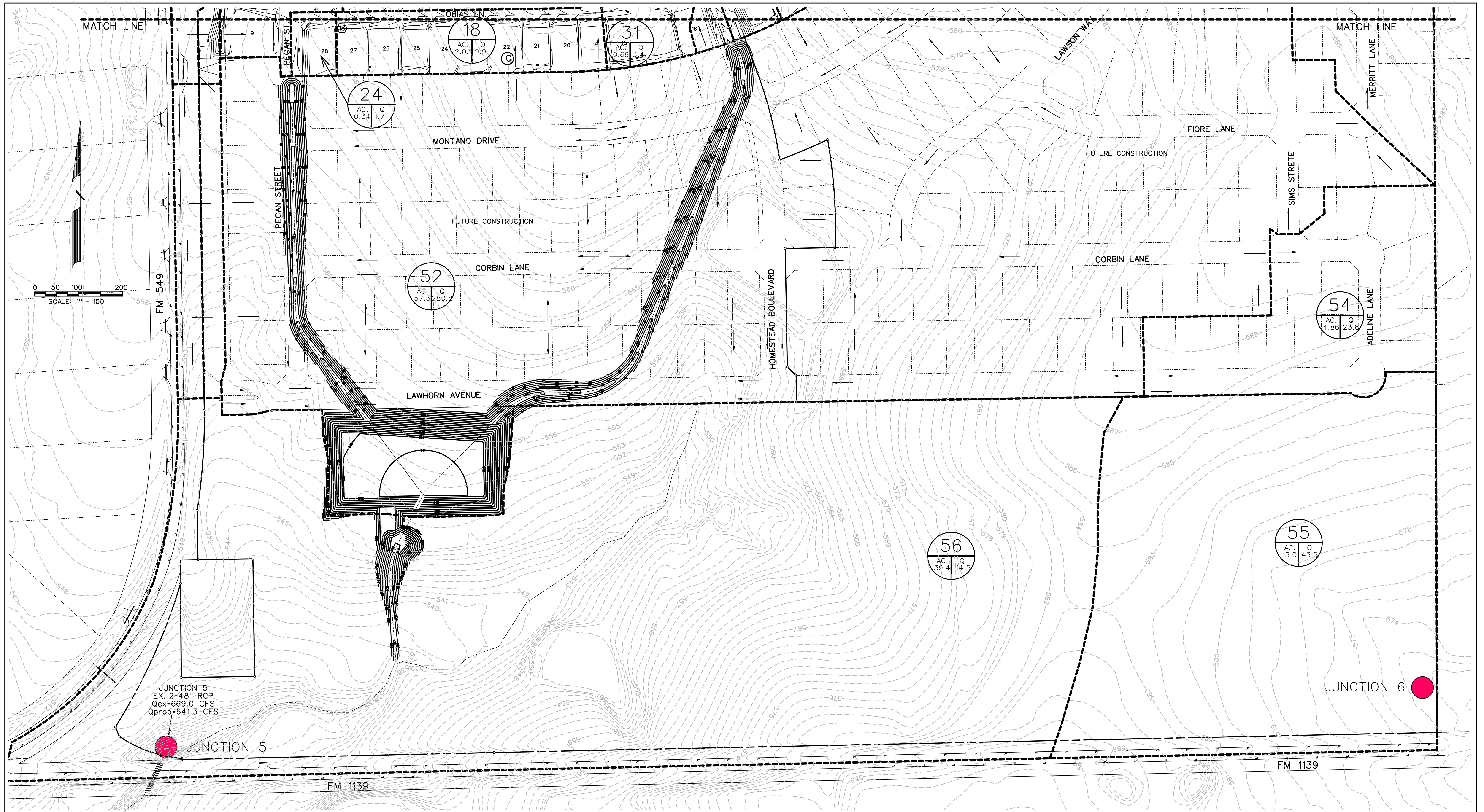
CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
HOMESTEAD
PHASE I
ROCKWALL, TEXAS

EXISTING CONDITIONS
DRAINAGE AREA MAP
SHEET 2 OF 2

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE:	27
22029	OCTOBER 2022	1"=100'	

27



RUNOFF COMPUTATIONS							
#	Area (sf)	Area (acres)	Coefficient	CA	Tc (min)	I(100) (in/hr)	Q(100) (cfs)
1	107222	2.46	0.50	1.23	10	9.80	12.1
2	133742	3.07	0.50	1.54	10	9.80	15.0
3	130009	2.98	0.50	1.49	10	9.80	14.6
4	116146	2.67	0.50	1.33	10	9.80	13.1
5	24465	0.56	0.50	0.28	10	9.80	2.8
6	16088	0.37	0.50	0.18	10	9.80	1.8
7	133898	3.07	0.50	1.54	10	9.80	15.1
8	162881	3.74	0.50	1.87	10	9.80	18.3
9	104173	2.39	0.50	1.20	10	9.80	11.7
10	97598	2.24	0.50	1.12	10	9.80	11.0
11	114869	2.63	0.50	1.32	10	9.80	12.9
12	32932	0.76	0.50	0.38	10	9.80	3.7
13	112044	2.57	0.50	1.29	10	9.80	12.6
14	115833	2.66	0.50	1.33	10	9.80	13.0
15	126880	2.91	0.50	1.46	10	9.80	14.3
16	146238	3.36	0.50	1.68	10	9.80	16.5
17	84616	1.94	0.50	0.97	10	9.80	9.5
18	88381	2.03	0.50	1.01	10	9.80	9.9
23	57764	1.33	0.50	0.66	10	9.80	6.5
24	15023	0.34	0.50	0.17	10	9.80	1.7

RUNOFF COMPUTATIONS							
#	Area (sf)	Area (acres)	Coefficient	CA	Tc (min)	I(100) (in/hr)	Q(100) (cfs)
28	57120	1.31	0.50	0.66	10	9.80	6.4
30	54588	1.25	0.50	0.63	10	9.80	6.1
31	28688	0.69	0.50	0.34	10	9.80	3.4
36	38456	0.88	0.50	0.44	10	9.80	4.3
42	52721	1.21	0.50	0.61	10	9.80	5.9
43	22947	0.53	0.50	0.26	10	9.80	2.6
44	23331	0.54	0.50	0.48	10	9.80	4.7
45	18259	0.41	0.50	0.21	10	9.80	2.0
46	41639	0.96	0.50	0.86	10	9.80	8.4
47	28526	0.65	0.50	0.33	10	9.80	3.2
50	40471	0.93	0.50	0.84	10	9.80	8.2
51	228324	5.24	0.50	2.62	10	9.80	25.7
52	249658	57.32	0.50	28.66	10	9.80	280.8
53	1220358	28.02	0.50	14.01	10	9.80	137.3
54	211918	4.86	0.50	2.43	10	9.80	23.8
55	651933	14.97	0.35	5.24	20	8.30	43.5
56	1171354	26.83	0.35	13.90	20	8.30	114.5
57	203936	4.68	0.50	2.34	10	9.80	22.9
58	412773	9.48	0.50	4.74	10	9.80	46.4

RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)



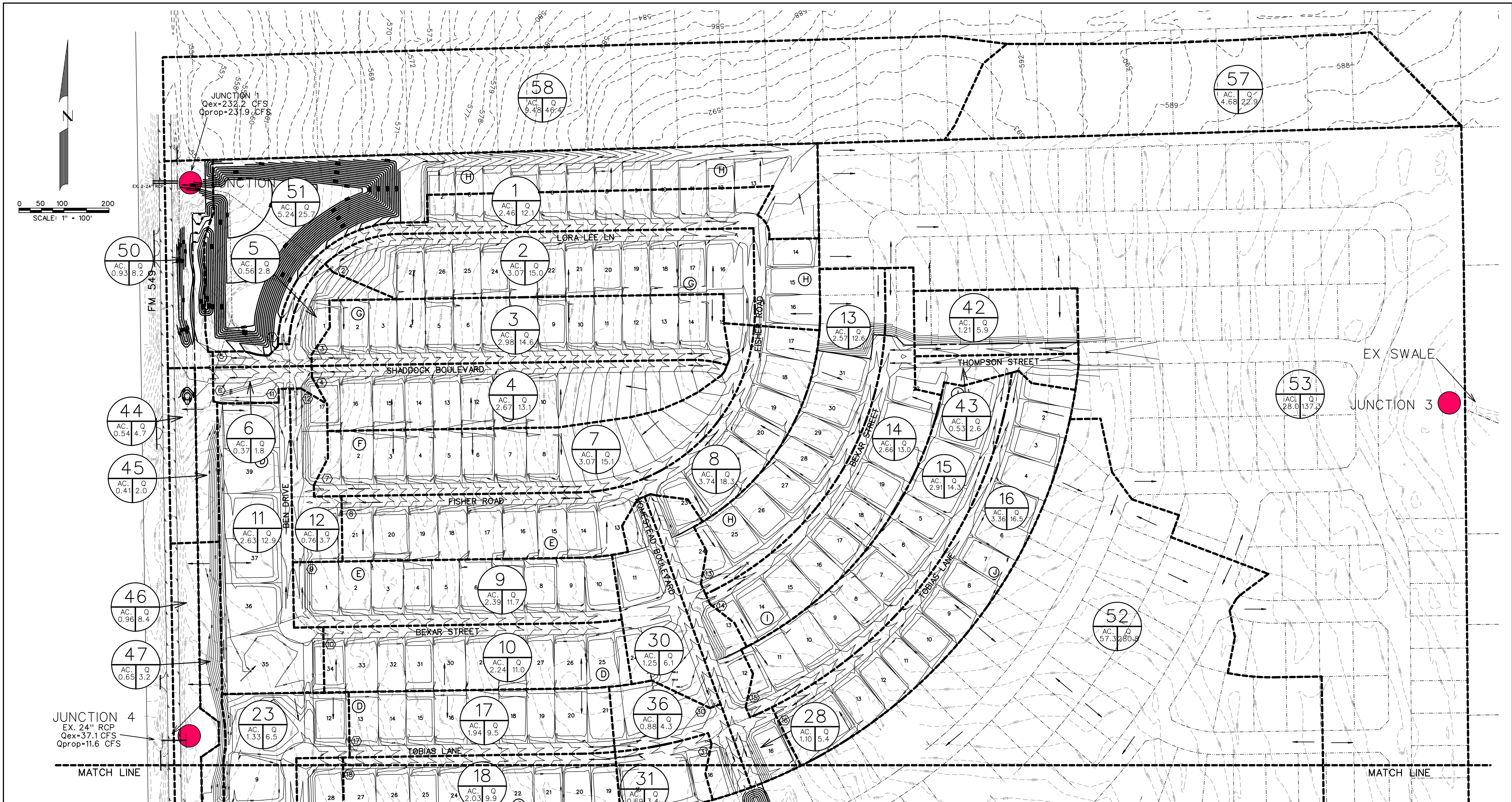
11/02/2022

CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBP E FIRM #5951

DEVELOPMENT PLANS FOR
**HOMESTEAD
PHASE I**
ROCKWALL, TEXAS

PROPOSED CONDITIONS
DRAINAGE AREA MAP
SHEET 1 OF 2

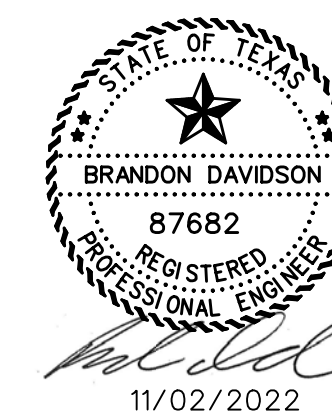
DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE:	28
22029	OCTOBER 2022	1"=100'	



RUNOFF COMPUTATIONS									
#	Area (sf)	Area (acres)	Runoff Coefficient	CA	Tc (min)	I(100) (in/hr)	Q(100) (cfs)	Drains To:	
1	10722	0.24	0.50	1.23	10	9.80	12.1	Inlet 1	Future Inlet
2	133742	3.07	0.50	1.54	10	9.80	15.0	Inlet 2	Inlet 30
3	130009	2.98	0.50	1.49	10	9.80	14.6	Inlet 3	Inlet 31
4	116146	2.67	0.50	1.33	10	9.80	13.1	Inlet 4	Future Inlet
5	24465	0.56	0.50	0.28	10	9.80	2.8	Inlet 5	Future Inlet
6	16088	0.37	0.50	0.18	10	9.80	1.8	Future Inlet	Future Inlet
7	133898	3.07	0.50	1.54	10	9.80	15.1	Inlet 7	Line D18
8	162881	3.74	0.50	1.87	10	9.80	18.3	Inlet 8	Line D18
9	104173	2.39	0.50	1.20	10	9.80	11.7	Inlet 9	Ex. 24" Culvert
10	97698	2.24	0.50	1.12	10	9.80	11.0	Inlet 10	Ex. 24" Culvert
11	114669	2.63	0.50	1.32	10	9.80	12.9	Inlet 11	Ex. 24" Culvert
12	32932	0.76	0.50	0.38	10	9.80	3.7	Inlet 12	Reservoir 1
13	112044	2.57	0.50	1.29	10	9.80	12.6	Inlet 13	Reservoir 2
14	115833	2.66	0.50	1.33	10	9.80	13.0	Inlet 14	Existing Swale
15	126860	2.90	0.50	1.46	10	9.80	14.3	Inlet 15	Southeast Corner
16	146238	3.36	0.50	1.68	10	9.80	16.5	Inlet 16	Southeast Corner
17	84616	1.94	0.50	0.97	10	9.80	9.5	Inlet 17	Ex. 24" Culvert
18	88381	2.03	0.50	1.01	10	9.80	9.9	Inlet 18	Offsite to North PL
23	57764	1.33	0.50	0.68	10	9.80	6.5	Julia Lane	Offsite to Ex. 2-24"
24	15023	0.34	0.50	0.17	10	9.80	1.7	Julia Lane	

RUNOFF COMPUTATIONS									
#	Area (sf)	Area (acres)	Runoff Coefficient	CA	Tc (min)	I(100) (in/hr)	Q(100) (cfs)	Drains To:	
28	57120	1.31	0.50	0.66	10	9.80	6.4	Future Inlet	
30	54588	1.25	0.50	0.63	10	9.80	6.1	Inlet 30	
31	29868	0.69	0.50	0.34	10	9.80	3.4	Inlet 31	
36	38456	0.88	0.50	0.44	10	9.80	4.3	Future Inlet	
42	52721	1.21	0.50	0.61	10	9.80	5.9	Future Inlet	
43	22947	0.53	0.50	0.26	10	9.80	2.6	Future Inlet	
44	23331	0.54	0.90	0.48	10	9.80	4.7	Line D18	
45	18069	0.41	0.50	0.21	10	9.80	2.0	Line D18	
46	41639	0.96	0.90	0.86	10	9.80	8.4	Ex. 24" Culvert	
47	28526	0.65	0.50	0.33	10	9.80	3.2	Ex. 24" Culvert	
50	40471	0.93	0.90	0.84	10	9.80	8.2	Ex. 2-24" Culvert	
51	228324	5.24	0.50	2.62	10	9.80	25.7	Reservoir 1	
52	2496658	57.32	0.50	28.66	10	9.80	280.8	Reservoir 2	
53	1220358	28.02	0.50	14.01	10	9.80	137.3	Existing Swale	
54	211918	4.86	0.50	2.43	10	9.80	23.5	Southeast Corner	
55	651933	14.97	0.35	5.24	20	8.30	43.5	Southeast Corner	
56	1717354	39.43	0.35	13.80	20	8.30	114.5	Ex. 2-48" Culvert	
57	203936	4.68	0.50	2.34	10	9.80	22.9	Offsite to North PL	
58	412773	9.48	0.50	4.74	10	9.80	46.4	Offsite to Ex. 2-24"	

RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)



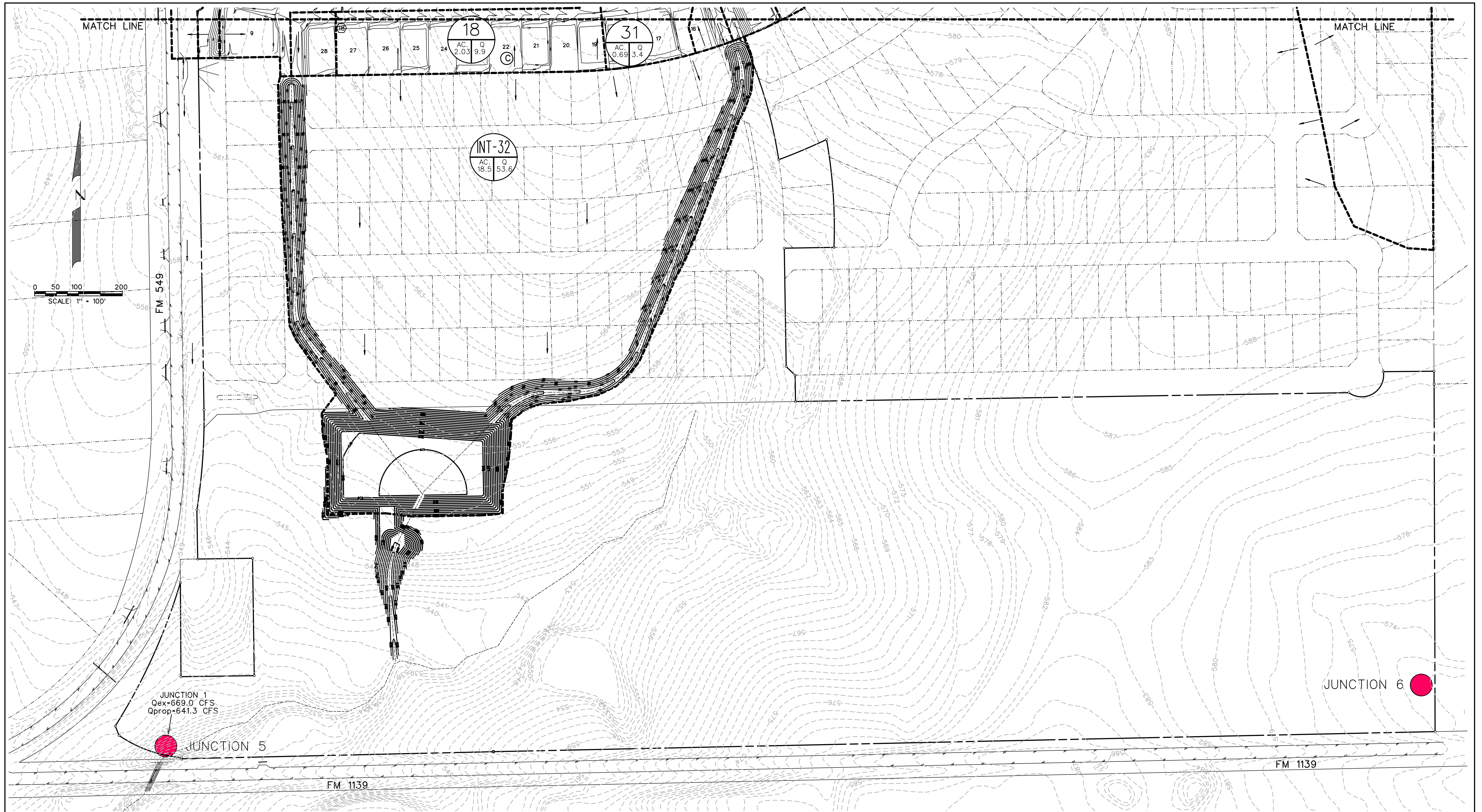


CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBP E FIRM #5951

DEVELOPMENT PLANS FOR
HOMESTEAD
PHASE I
ROCKWALL, TEXAS

PROPOSED CONDITIONS
DRAINAGE AREA MAP
SHEET 2 OF 2

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE:	29
22029	OCTOBER 2022	1"=100'	



RUNOFF COMPUTATIONS									
#	Area (sf)	Area (acres)	Coefficient	CA	Tc (min)	I(100) (in/hr)	Q(100) (cfs)	Drains To:	
1	107222	2.46	0.50	1.23	10	9.80	12.1	Inlet 1	
2	133742	3.07	0.50	1.54	10	9.80	15.0	Inlet 2	
3	130009	2.98	0.50	1.49	10	9.80	14.6	Inlet 3	
4	116146	2.67	0.50	1.33	10	9.80	13.1	Inlet 4	
5	24465	0.56	0.50	0.28	10	9.80	2.8	Inlet 5	
6	16098	0.37	0.50	0.18	10	9.80	1.8	Inlet 6	
7	133898	3.07	0.50	1.54	10	9.80	15.1	Inlet 7	
8	162881	3.74	0.50	1.87	10	9.80	18.3	Inlet 8	
9	104173	2.39	0.50	1.20	10	9.80	11.7	Inlet 9	
10	97598	2.24	0.50	1.12	10	9.80	11.0	Inlet 10	
11	114669	2.63	0.50	1.32	10	9.80	12.9	Inlet 11	
12	32932	0.76	0.50	0.38	10	9.80	3.7	Inlet 12	
13	112044	2.57	0.50	1.29	10	9.80	12.6	Inlet 13	
14	115833	2.66	0.50	1.33	10	9.80	13.0	Inlet 14	
15	126880	2.91	0.50	1.46	10	9.80	14.3	Inlet 15	
16	146238	3.36	0.50	1.68	10	9.80	16.5	Inlet 16	
17	84616	1.94	0.50	0.97	10	9.80	9.5	Inlet 17	
18	88381	2.03	0.50	1.01	10	9.80	9.9	Inlet 18	
23	57764	1.33	0.50	0.66	10	9.80	6.5	Julia Lane	
24	15023	0.34	0.50	0.17	10	9.80	1.7	Julia Lane	

RUNOFF COMPUTATIONS									
#	Area (sf)	Area (acres)	Coefficient	CA	Tc (min)	I(100) (in/hr)	Q(100) (cfs)	Drains To:	
28	57120	1.31	0.50	0.66	10	9.80	6.4	Future Inlet	
30	54588	1.25	0.50	0.63	10	9.80	6.1	Inlet 30	
31	28968	0.69	0.50	0.34	10	9.80	3.4	Inlet 31	
INT-32	804381	18.47	0.35	6.46	20	8.30	53.6	Reservoir 2	
36	38456	0.88	0.50	0.44	10	9.80	4.3	Future Inlet	
INT-42	1247564	28.64	0.35	10.02	20	8.30	83.2	Existing Swale	
43	22947	0.53	0.50	0.26	10	9.80	2.6	Future Inlet	
44	23331	0.54	0.50	0.48	10	9.80	4.7	Line D18	
45	18059	0.41	0.50	0.21	10	9.80	2.0	Line D18	
46	41639	0.96	0.50	0.48	10	9.80	4.8	Ex. 24" Culvert	
47	28526	0.65	0.50	0.33	10	9.80	3.2	Ex. 24" Culvert	
50	40471	0.93	0.50	0.47	10	9.80	4.9	Ex. 24" Culvert	
51	228324	5.24	0.50	2.62	10	9.80	25.7	Reservoir 1	
INT-52	804381	18.47	0.50	9.23	10	9.80	90.5	Reservoir 2	
53	1220358	28.02	0.50	14.01	10	9.80	137.3	Existing Swale	
54	211918	4.86	0.50	2.43	10	9.80	23.8	Southeast Corner	
55	651933	14.97	0.35	5.24	20	8.30	43.5	Southeast Corner	
56	1717354	39.43	0.35	13.80	20	8.30	114.5	Ex. 2-48" Culvert	
57	203936	4.68	0.50	2.34	10	9.80	22.9	Offsite to North PL	
58	412773	9.48	0.50	4.74	10	9.80	46.4	Offsite to Ex. 2-24"	

RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)

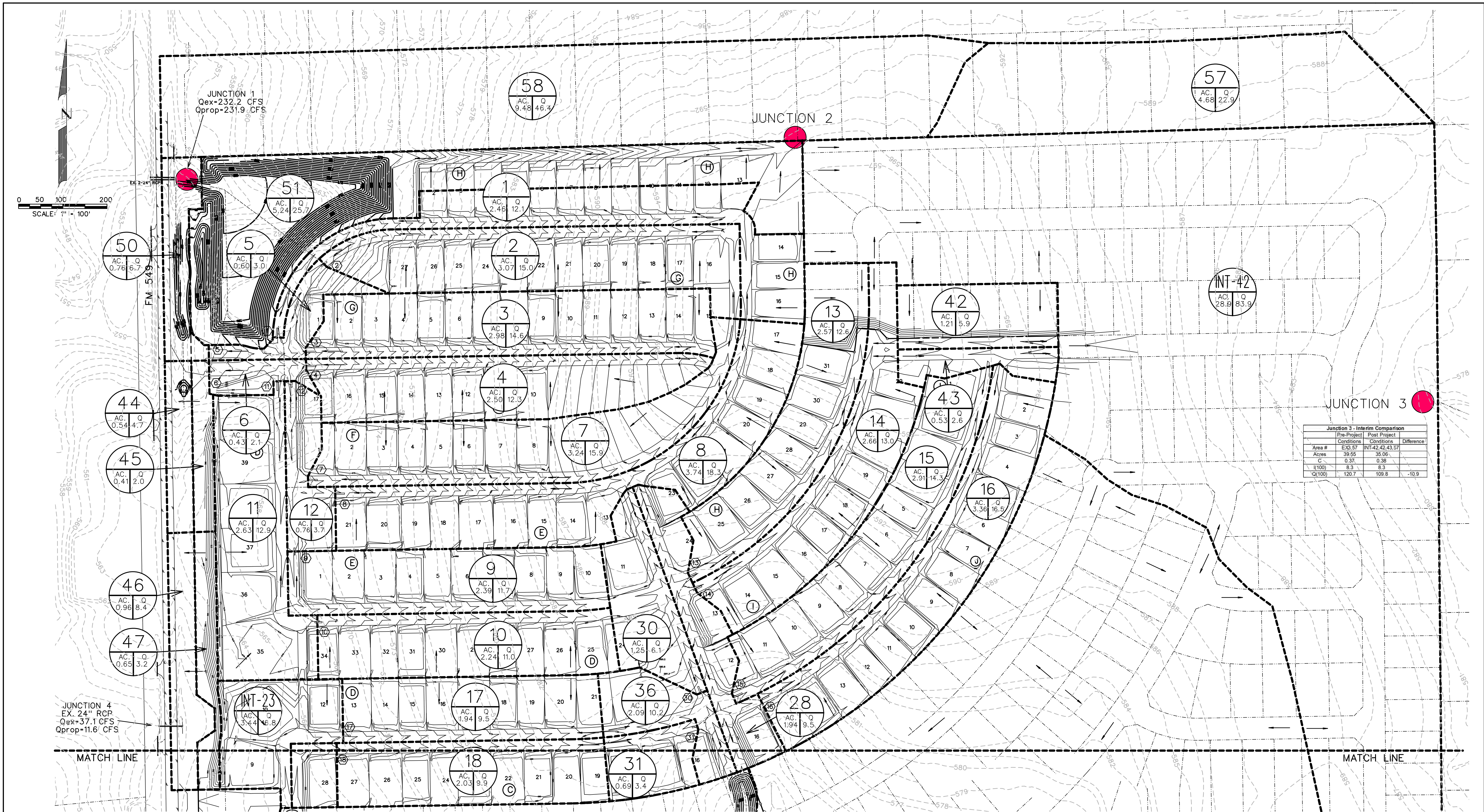


CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
HOMESTEAD
PHASE I
ROCKWALL, TEXAS

INTERIM CONDITIONS
DRAINAGE AREA MAP
SHEET 1 OF 2

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE:	30
22029	OCTOBER 2022	1"=100'	



Junction 3 - Interim Comparison				
Area #	Pre-Project		Post Project	
	Conditions	Conditions	Conditions	Difference
Area #	EX-57	INT-42	43.57	
Acres	39.55	35.06		
C	0.37	0.38		
I(100)	8.3	8.3		
Q(100)	120.7	109.8		-10.9

RUNOFF COMPUTATIONS									
#	Area (sf)	Area (acres)	Runoff Coefficient	CA	Tc (min)	I(100) (in/hr)	Q(100) (cfs)	Drains To:	
1	10722	0.24	0.50	1.23	10	9.80	12.1	Inlet 1	
2	133742	3.07	0.50	1.54	10	9.80	15.0	Inlet 2	
3	130009	2.98	0.50	1.49	10	9.80	14.6	Inlet 3	
4	116146	2.67	0.50	1.33	10	9.80	13.1	Inlet 4	
5	24465	0.56	0.50	0.28	10	9.80	2.8	Inlet 5	
6	16088	0.37	0.50	0.18	10	9.80	1.8	Inlet 6	
7	133898	3.07	0.50	1.54	10	9.80	15.1	Inlet 7	
8	162881	3.74	0.50	1.87	10	9.80	18.3	Inlet 8	
9	104173	2.39	0.50	1.20	10	9.80	11.7	Inlet 9	
10	97698	2.24	0.50	1.12	10	9.80	11.0	Inlet 10	
11	114069	2.63	0.50	1.32	10	9.80	12.9	Inlet 11	
12	32932	0.76	0.50	0.38	10	9.80	3.7	Inlet 12	
13	112044	2.57	0.50	1.29	10	9.80	12.6	Inlet 13	
14	115833	2.66	0.50	1.33	10	9.80	13.0	Inlet 14	
15	126880	2.91	0.50	1.46	10	9.80	14.3	Inlet 15	
16	146238	3.36	0.50	1.68	10	9.80	16.5	Inlet 16	
17	84616	1.94	0.50	0.97	10	9.80	9.5	Inlet 17	
18	88381	2.03	0.50	1.01	10	9.80	9.9	Inlet 18	
23	57764	1.33	0.50	0.68	10	9.80	6.5	Inlet 18	
24	15023	0.34	0.50	0.17	10	9.80	1.7	Inlet 18	

RUNOFF COMPUTATIONS									
#	Area (sf)	Area (acres)	Runoff Coefficient	CA	Tc (min)	I(100) (in/hr)	Q(100) (cfs)	Drains To:	
28	57120	1.31	0.50	0.66	10	9.80	6.4	Future Inlet	
30	54588	1.25	0.50	0.63	10	9.80	6.1	Inlet 30	
31	28868	0.69	0.50	0.34	10	9.80	3.4	Inlet 31	
INT-32	804381	18.47	0.35	6.46	20	8.30	53.6	Reservoir 2	
36	38456	0.88	0.50	0.44	10	9.80	4.3	Future Inlet	
INT-42	1247564	28.64	0.35	10.02	20	8.30	83.2	Existing Swale	
43	22947	0.53	0.50	0.26	10	9.80	2.6	Future Inlet	
44	23331	0.54	0.50	0.27	10	9.80	2.7	Line D18	
45	18059	0.41	0.50	0.21	10	9.80	2.0	Line D18	
46	41659	0.96	0.50	0.48	10	9.80	4.4	Ex. 24" Culvert	
47	28526	0.65	0.50	0.33	10	9.80	3.2	Ex. 24" Culvert	
50	40471	0.93	0.50	0.47	10	9.80	4.6	Ex. 24" Culvert	
51	228324	5.24	0.50	2.62	10	9.80	13.0	Reservoir 1	
INT-52	804381	18.47	0.50	9.23	10	9.80	90.5	Reservoir 2	
53	1220358	28.02	0.50	14.01	10	9.80	137.3	Existing Swale	
54	211918	4.86	0.50	2.43	10	9.80	11.9	Southeast Corner	
55	651933	14.97	0.35	5.24	20	8.30	43.5	Southeast Corner	
56	1717354	39.43	0.35	13.80	20	8.30	114.5	Ex. 24" Culvert	
57	203936	4.68	0.50	2.34	10	9.80	11.6	Offsite to North PL	
58	412773	9.46	0.50	4.74	10	9.80	46.4	Offsite to Ex. 24" PL	

RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)





CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBP E FIRM #5951

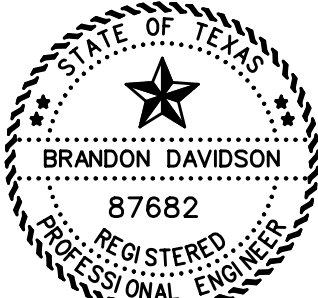
DEVELOPMENT PLANS FOR
HOMESTEAD
PHASE I
ROCKWALL, TEXAS

INTERIM CONDITIONS
DRAINAGE AREA MAP
SHEET 2 OF 2

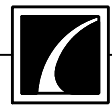
DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE:	31
22029	OCTOBER 2022	1"=100'	

Inlet ID	Location			Design Freq	C	Area Runoff				Upstream Bypass C'A	Total Gutter Flow Q _s	Gutter Flow										Gutter Flow				Inlets Capacity										Inlets Capacity				Inlet By-pass																		
	Street	Station	Offset			Area ID	Time of		Intensity I	Area A	Runoff Q		Thoroughfare Type	On-Grade/ Sag	Manning's n	Long Slope S	Crown Type	Cross Slope S _x	Depression		Depth of Gutter Flow		Ponding Width/ Spread		Max Allow Flow based on Ponding Q _{max} Gutter	Depressed Gutter Section		Section Beyond Depression		Conveyance		Ratio of Depression flow to Total Flow E _o	Equivalent Cross-slope, S _e	Inlet Length		Inlet Capacity Q _c	Flow Q _{bypass}	C'A	To Inlet ID																			
							Concentration	To											Depth a	Width W	(allow) Yellow	(actual) Y _{actual}	(allow) T _{allow}	(actual) T _{actual}		Area A _W	Wetted Perimeter P _W	Area A _o	Wetted Perimeter P _o	K _w	K _o			Required L _{req'd}	Actual L _{actual}																							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)																			
1	Lora Lee	0+59.00	14.50	LT	100	0.5	1	10	9.8	2.46	12.1	12.1	Local	On Grade	0.0175	1.61%	6" Rooftop	3.57%	0.5	2	0.5	0.43	14	12.0	17.9	1.29	2.08	1.80	10.04	79.55	48.65	0.62	0.19	15.14	20	23.4	0.0	0.00																				
2	Lora Lee	2+50.00	14.50	RT	100	0.5	2	10	9.8	3.07	15.0	15.0	Local	On Grade	0.0175	1.13%	6" Rooftop	3.57%	0.5	2	0.5	0.41	14	11.4	15.0	1.24	2.08	1.57	9.39	74.77	40.62	0.65	0.20	14.63	15	16.0	0.0	0.00																				
3	Shaddock	3+30.50	14.50	LT	100	0.5	3	10	9.8	2.98	14.6	14.6	Local	On Grade	0.0175	3.60%	6" Rooftop	3.57%	0.5	2	0.5	0.40	14	11.1	26.8	1.22	2.08	1.49	9.13	72.97	37.76	0.66	0.20	20.29	20	14.1	0.5	0.05	5																			
4	Shaddock	3+30.50	14.50	RT	100	0.5	4	10	9.8	2.67	13.1	13.1	Local	On Grade	0.0175	3.60%	6" Rooftop	3.57%	0.5	2	0.5	0.38	14	10.7	26.8	1.19	2.08	1.34	8.67	69.73	32.89	0.68	0.21	19.06	20	14.6	0.0	0.00																				
5	Shaddock	0+66.00	14.50	LT	100	0.5	5	10	9.8	0.56	2.8	0.05	3.3	Local	On Grade	0.0175	1.55%	6" Rooftop	3.57%	0.5	2	0.5	0.27	14	7.43	17.6	0.96	2.08	0.53	5.43	48.60	9.42	0.94	0.25	6.93	10	6.6	0.0	0.00																			
6	Shaddock	0+76.00	14.50	RT	100	0.5	6	10	9.8	0.37	1.8	1.8	Local	On Grade	0.0175	0.70%	6" Rooftop	3.57%	0.5	2	0.5	0.25	14	6.91	11.8	0.92	2.08	0.43	4.91	45.55	7.23	0.86	0.25	4.51	10	12.1	0.0	0.00																				
7	Fisher	0+60.00	14.50	LT	100	0.5	7	10	9.8	3.07	15.1	15.1	Local	On Grade	0.0175	2.60%	6" Rooftop	3.57%	0.5	2	0.5	0.43	14	12.0	22.8	1.28	2.08	1.77	9.97	78.97	47.64	0.62	0.19	19.14	20	16.7	0.0	0.00																				
8	Fisher	1+21.00	14.50	RT	100	0.5	8	10	9.8	3.74	18.3	18.3	Local	On Grade	0.0175	2.60%	6" Rooftop	3.57%	0.5	2	0.5	0.46	14	12.88	22.8	1.35	2.08	2.11	10.88	85.76	60.18	0.59	0.18	21.40	20	15.6	2.7	0.28	12																			
9	Ben	1+45.00	14.50	RT	100	0.5	9	10	9.8	2.39	11.7	11.7	Local	On Grade	0.0175	0.70%	6" Rooftop	3.57%	0.5	2	0.5	0.50	14	13.93	11.8	1.42	2.08	2.54	11.93	93.87	76.95	0.55	0.17	12.35	15	18.6	0.0	0.00																				
10	Bexar	0+67.50	14.50	RT	100	0.5	10	10	9.8	2.24	11.0	11.0	Local	On Grade	0.0175	2.50%	6" Rooftop	3.57%	0.5	2	0.5	0.38	14	10.71	22.3	1.19	2.08	1.35	8.71	69.96	33.23	0.68	0.21	15.00	15	9.6	1.4	0.15	11																			
11	Ben	5+20.00	14.50	LT	100	0.5	11	10	9.8	2.63	12.9	0.15	14.3	Local	On Grade	0.0175	1.35%	6" Rooftop	3.57%	0.5	2	0.5	0.47	14	13.28	16.4	1.38	2.08	2.27	11.28	88.81	66.25	0.57	0.18	15.36	20	24.2	0.0	0.00																			
12	Ben	5+22.00	14.50	RT	100	0.5	12	10	9.8	0.76	3.7	0.28	6.4	Local	On Grade	0.0175	0.70%	6" Rooftop	3.57%	0.5	2	0.5	0.40	14	11.12	11.8	1.22	2.08	1.48	9.12	72.85	37.57	0.66	0.20	6.97	10	8.7	0.0	0.00																			
13	Bexar	9+32.00	14.50	LT	100	0.5	13	10	9.8	2.57	12.6	12.6	Local	On Grade	0.0175	1.00%	6" Rooftop	3.57%	0.5	2	0.5	0.48	14	13.39	14.1	1.38	2.08	2.32	11.39	89.66	68.01	0.57	0.18	13.95	15	15.0	0.0	0.00																				
14	Bexar	9+26.00	14.50	RT	100	0.5	14	10	9.8	2.66	13.0	13.0	Local	On Grade	0.0175	1.33%	6" Rooftop	3.57%	0.5	2	0.5	0.45	14	12.52	17.5	1.32	2.08	1.98	10.52	83.05	55.01	0.60	0.19	15.64	20	23.4	0.0	0.00																				
15	Shaddock	10+30.00	14.50	LT	100	0.5	15	10	9.8	2.91	14.3	14.3	Local	On Grade	0.0175	1.97%	6" Rooftop	3.57%	0.5	2	0.5	0.44	14	12.35	19.8	1.31	2.08	1.91	10.35	81.82	62.74	0.61	0.19	17.44	20	19.8	0.0	0.00																				
16	Shaddock	10+82.00	14.50	RT	100	0.5	16	10	9.8	3.36	16.5	16.5	Local	On Grade	0.0175	2.45%	6" Rooftop	3.57%	0.5	2	0.5	0.45	14	12.51	22.1	1.32	2.08	1.97	10.51	82.97	54.85	0.60	0.19	19.85	20	16.7	0.0	0.00																				
17	Shaddock	1+27.00	14.50	LT	100	0.5	17	10	9.8	1.94	9.5	9.5	Local	On Grade	0.0175	2.50%	6" Rooftop	3.57%	0.5	2	0.5	0.36	14	10.15	22.3	1.15	2.08	1.19	8.15	66.11	27.85	0.70	0.21	14.70	15	10.0	0.0	0.00																				
18	Shaddock	1+12.00	14.50	RT	100	0.5	18	10	9.8	2.03	9.9	9.9	Local	On Grade	0.0175	2.50%	6" Rooftop	3.57%	0.5	2	0.5	0.37	14	10.32	22.3	1.17	2.08	1.23	8.32	67.25	29.40	0.70	0.21	15.05	15	9.9	0.1	0.01	Future																			
30	Homestead	10+10.00	14.50	RT	100	0.5	30	10	9.8	1.25	6.1	6.1	Local	On Grade	0.0175	2.60%	6" Rooftop	3.57%	0.5	2	0.5	0.31	14	8.55	22.8	1.04	2.08	0.77	6.55	55.55	15.54	0.78	0.23	11.74	15	11.0	0.0	0.00																				
31	Shaddock	9+13.00	14.50	RT	100	0.5	31	10	9.8	0.69	3.4	3.4	Local	On Grade	0.0175	2.67%	6" Rooftop	3.57%	0.5	2	0.5	0.24	14	6.78	23.1	0.91	2.08	0.41	4.78	44.78	6.75	0.67	0.25	8.70	10	4.7	0.0	0.00																				

RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)



11/02/2022

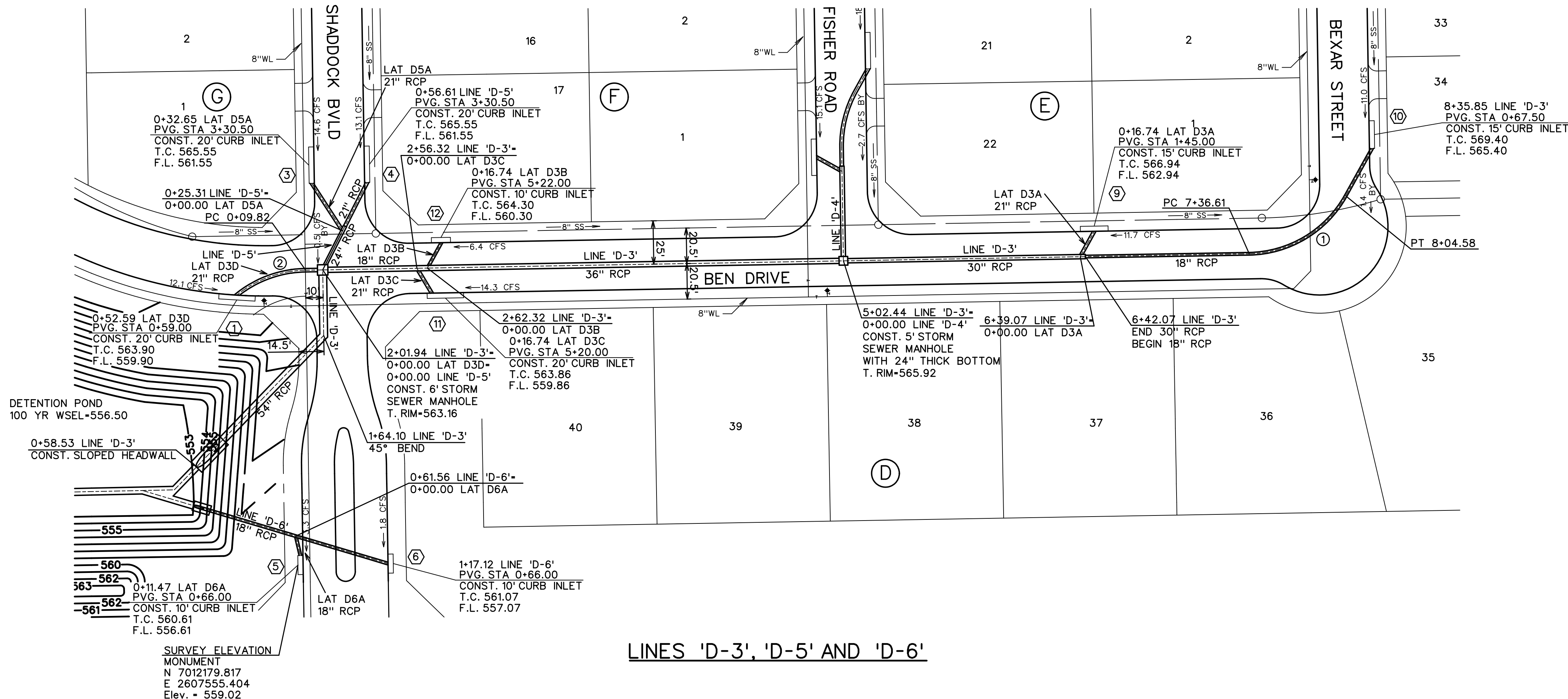
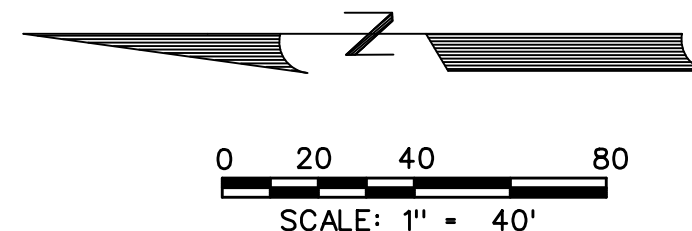


CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
HOMESTEAD
PHASE I
ROCKWALL, TEXAS

INLET CALCULATIONS

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO. 33
JOB NUMBER 22029	DATE OCTOBER 2022	SCALE: 1" = 100'	



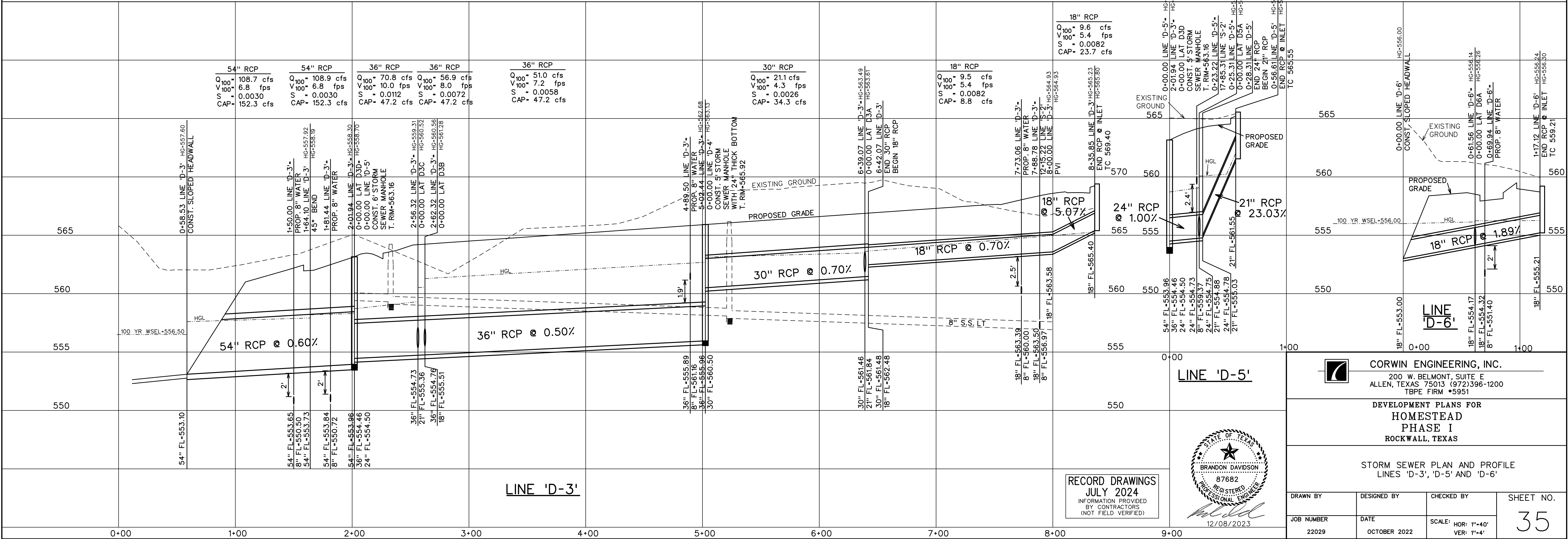
STORM SEWER CURVE DATA		
CURVE NO.	①	②
Δ	59° 55' 00"	37° 42' 05"
R	65.00'	65.00'
T	37.46'	22.19'
L	67.97'	42.77'

- LEGEND**
- (B) - BLOCK LABEL
 - (18) - INLET NUMBER
 - ① - CURVE NUMBER
 - - SANITARY SEWER
 - ⊕ - WATER
 - - PROPOSED STORM SEWER
 - === - EXISTING STORM SEWER

24" RCP		21" RCP	
Q ₁₀₀	27.2 cfs	Q ₁₀₀	13.1 cfs
V ₁₀₀	8.6 fps	V ₁₀₀	5.4 fps
S	0.0143	S	0.0068
CAP	22.6 cfs	CAP	76.0 cfs

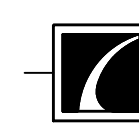
18" RCP		18" RCP	
Q ₁₀₀	5.0 cfs	Q ₁₀₀	3.2 cfs
V ₁₀₀	2.8 fps	V ₁₀₀	1.8 fps
S	0.0023	S	0.0010
CAP	14.4 cfs	CAP	14.4 cfs

LINES 'D-3', 'D-5' AND 'D-6'



RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)



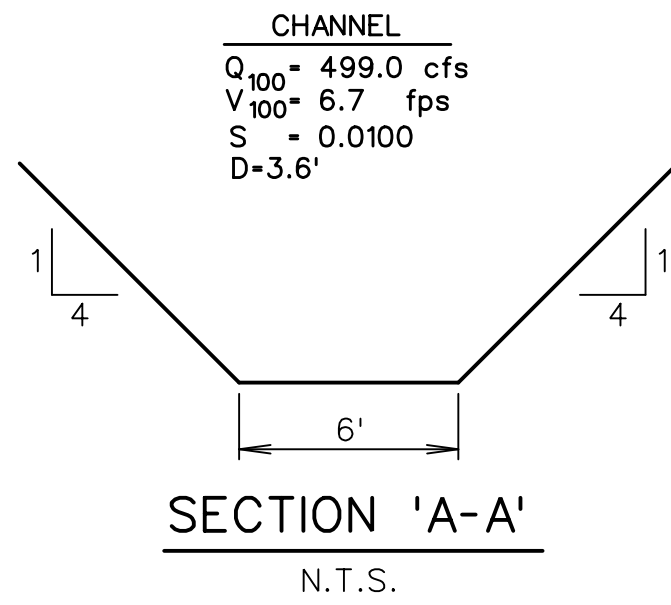


CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

**DEVELOPMENT PLANS FOR
HOMESTEAD
PHASE I
ROCKWALL, TEXAS**

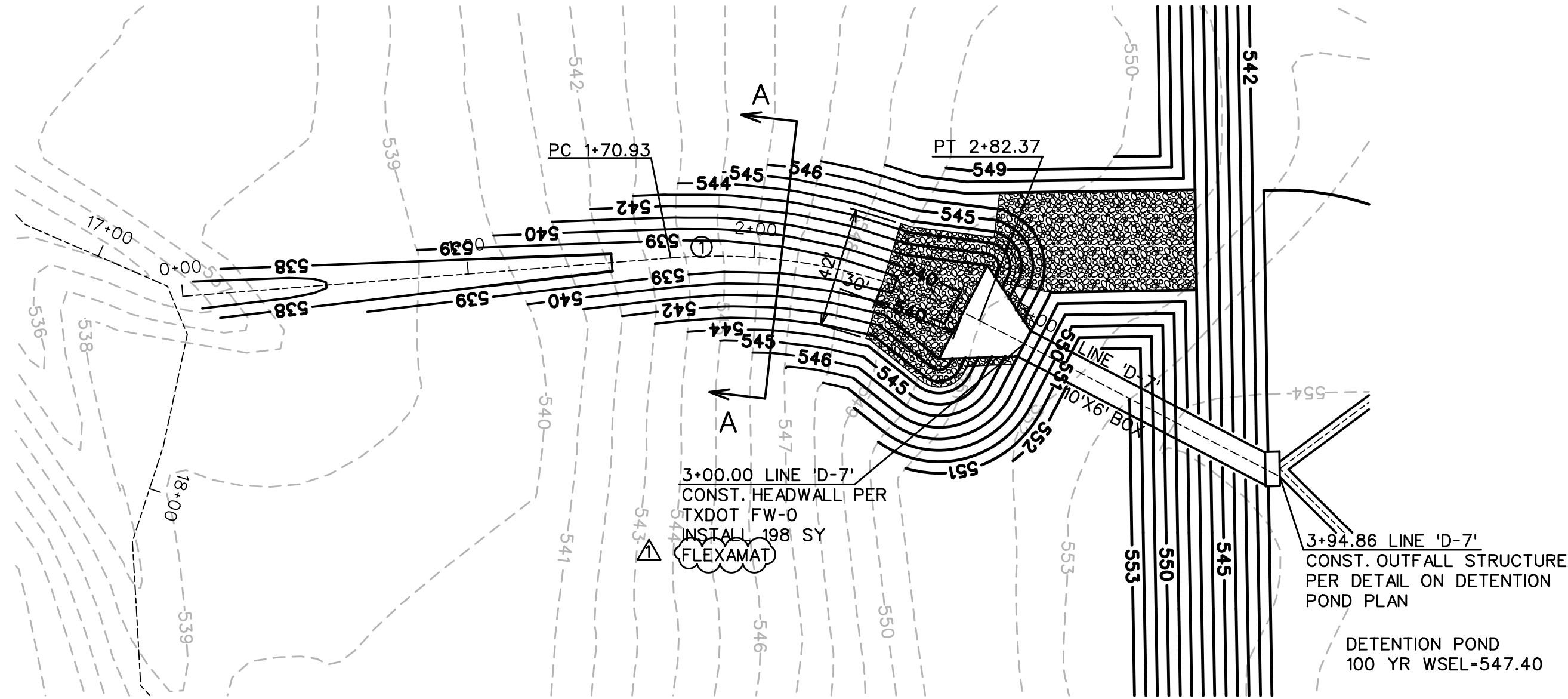
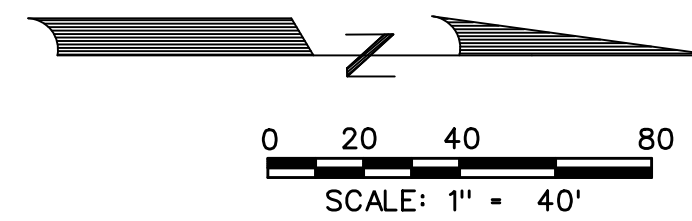
**STORM SEWER PLAN AND PROFILE
LINES 'D-3', 'D-5' AND 'D-6'**

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE: HOR: 1"=40' VER: 1"=4'	35
22029	OCTOBER 2022		



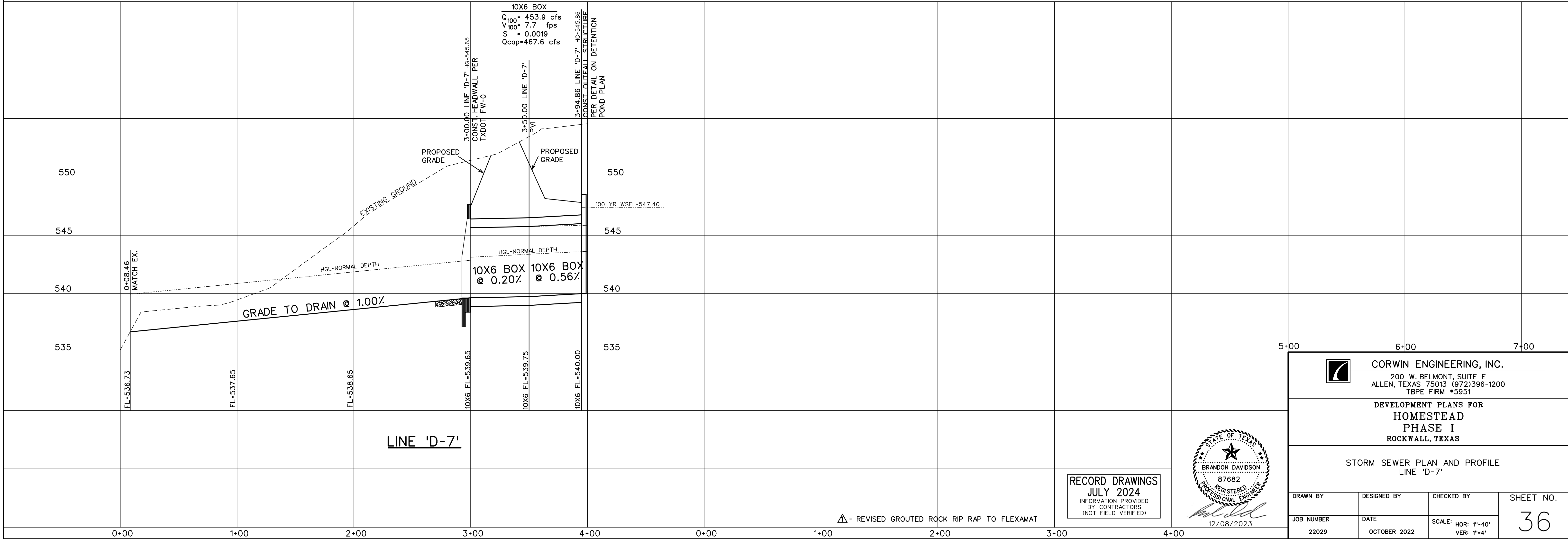
STORM SEWER CURVE DATA				
CURVE NO.	①	②	③	④
Δ	31° 55' 27"	53° 30' 26"	21° 06' 08"	41° 53' 56"
R	200.00'	150.00'	65.00'	65.00'
T	57.21'	75.62'	12.11'	24.89'
L	111.44'	140.08'	23.94'	47.54'

PVG. STA 1+00.00
CONST. 10" CURB INLET
T.C. 553.00
F.L. 549.00



LINE 'D-7'

- LEGEND
- Ⓑ - BLOCK LABEL
 - ⑩ - INLET NUMBER
 - ① - CURVE NUMBER
 - - SANITARY SEWER
 - ⬆ - WATER
 - - PROPOSED STORM SEWER
 - /// - EXISTING STORM SEWER



LINE 'D-7'

Δ - REVISED GROUTED ROCK RIP RAP TO FLEXAMAT

RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)

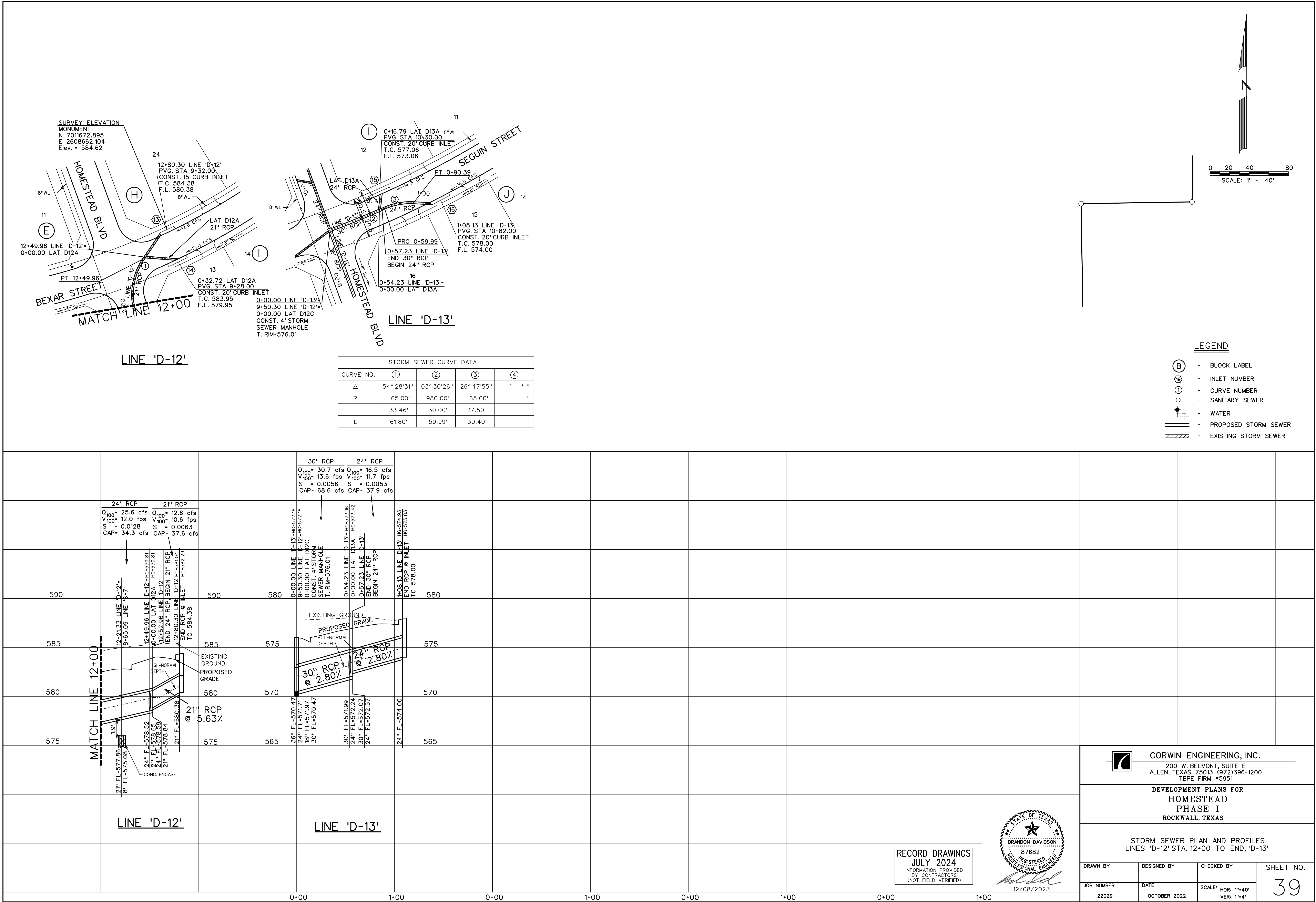


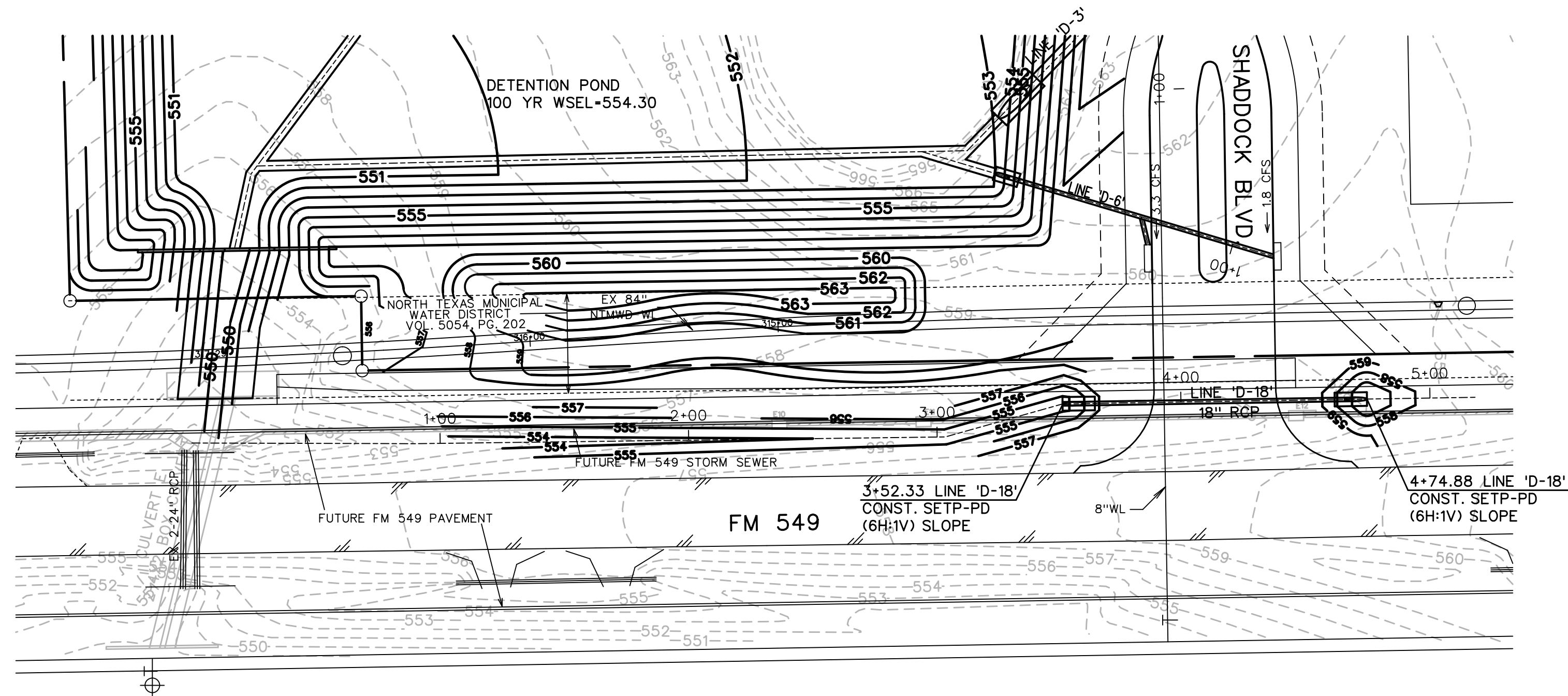
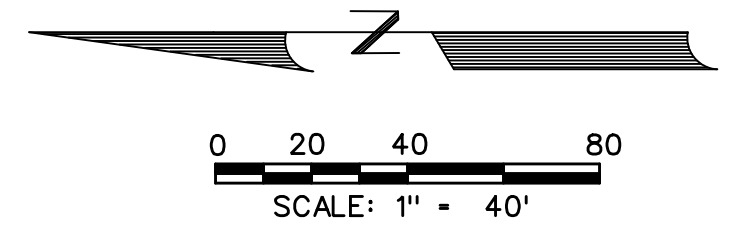
CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
HOMESTEAD
PHASE I
ROCKWALL, TEXAS

STORM SEWER PLAN AND PROFILE
LINE 'D-7'

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE: HOR: 1"=40' VER: 1"=4'	36
22029	OCTOBER 2022		



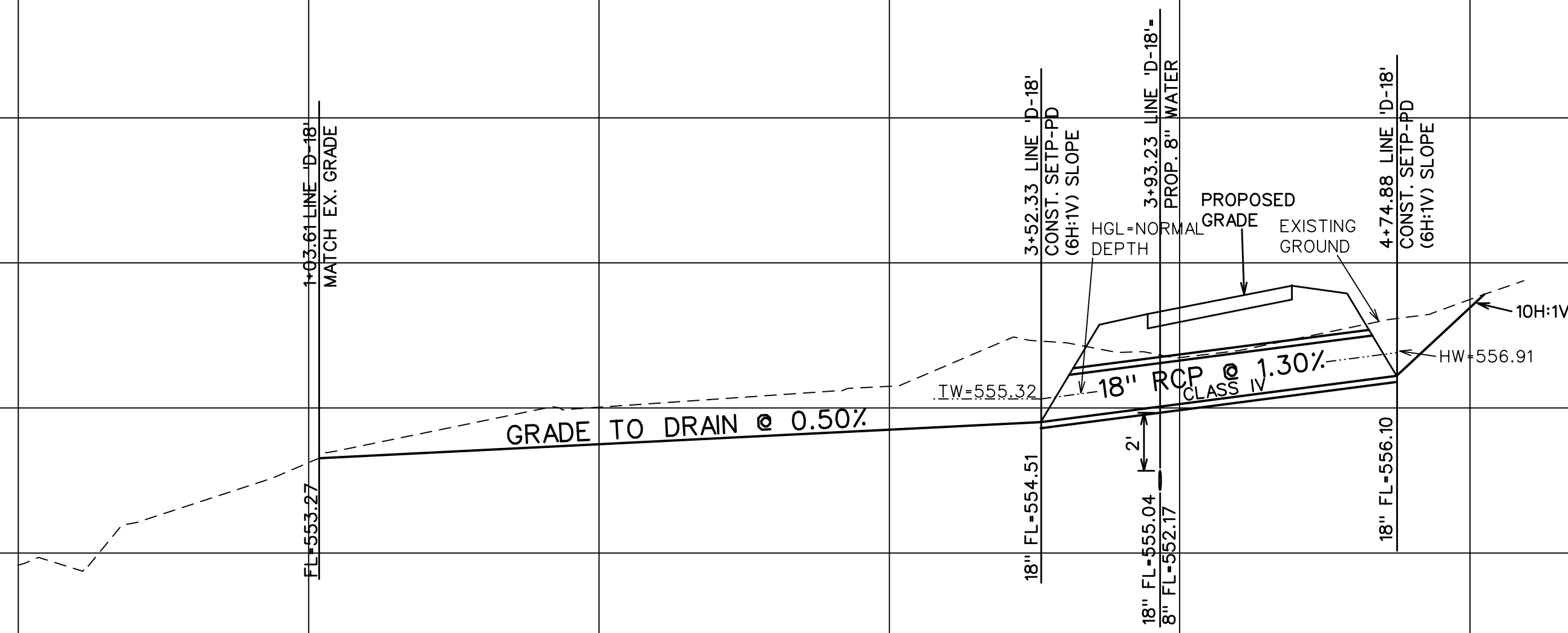


LINE 'D-18'

NOTE:
LINE 'D-18' WILL ONLY BE REQUIRED TO
BE CONSTRUCTED IF PROPOSED FM 549 IMPROVEMENTS
ARE NOT IN PLACE AT TIME OF CONSTRUCTION

- LEGEND
- (B) - BLOCK LABEL
 - (10) - INLET NUMBER
 - (1) - CURVE NUMBER
 - - SANITARY SEWER
 - ⊕ - WATER
 - ==== - PROPOSED STORM SEWER
 - ===== - EXISTING STORM SEWER

18" RCP
Q₁₀₀ = 6.8 cfs
V₁₀₀ = 7.0 fps
S = 0.0041
CAP = 12.0 cfs



LINE 'D-18'

NOTE:
Please refer to Sheet 1 for
NTMWD notes.



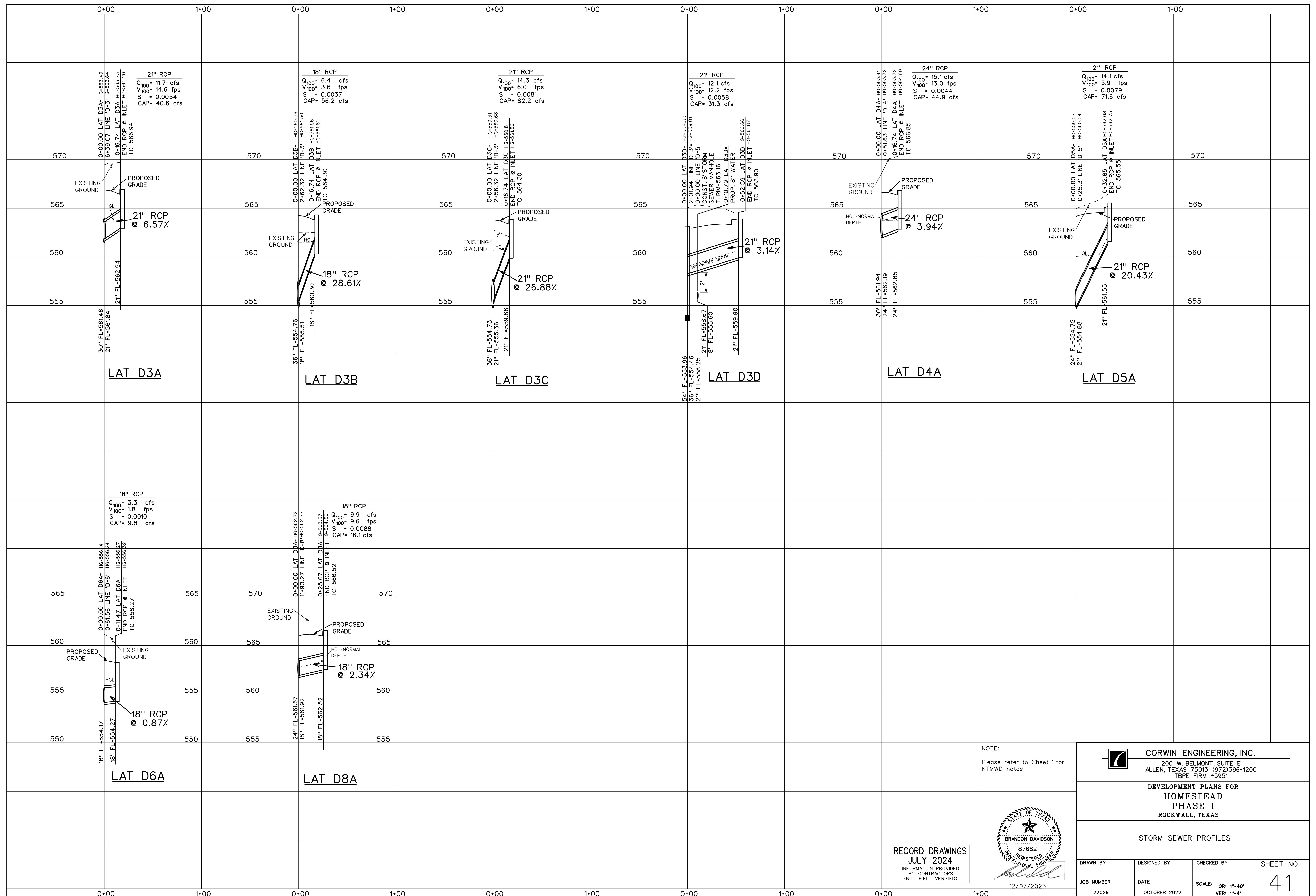
RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)

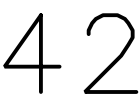
CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

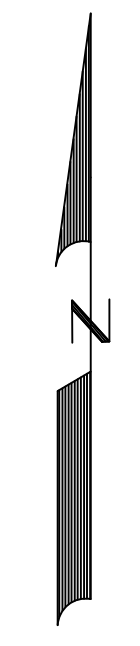
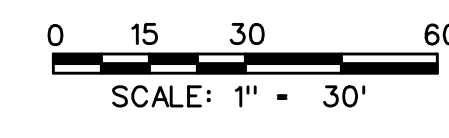
DEVELOPMENT PLANS FOR
HOMESTEAD
PHASE I
ROCKWALL, TEXAS

STORM SEWER PLAN AND PROFILE
LINE 'D-18'

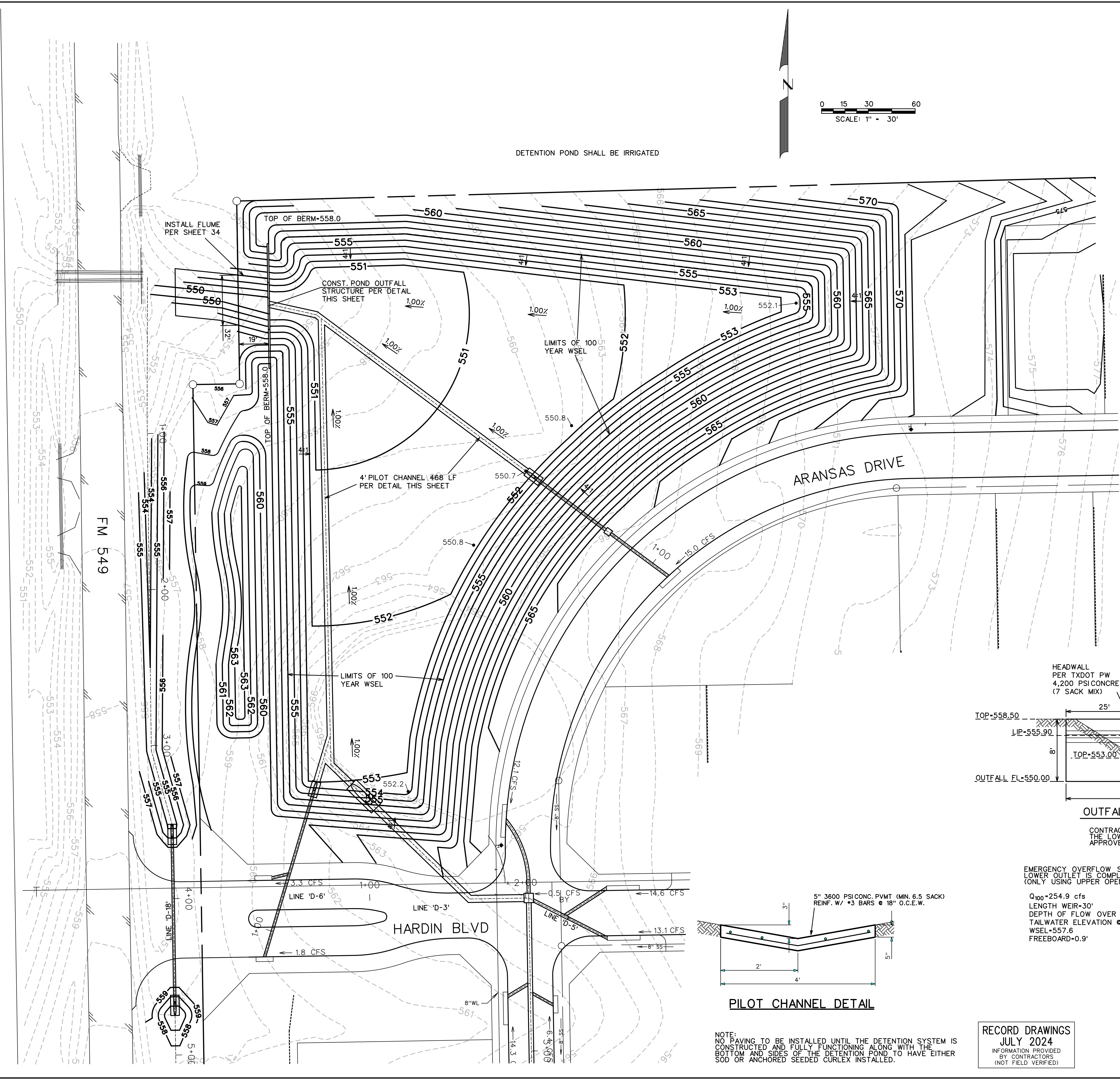
DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE: HOR: 1"=40' VER: 1"=4'	40
22029	OCTOBER 2022		



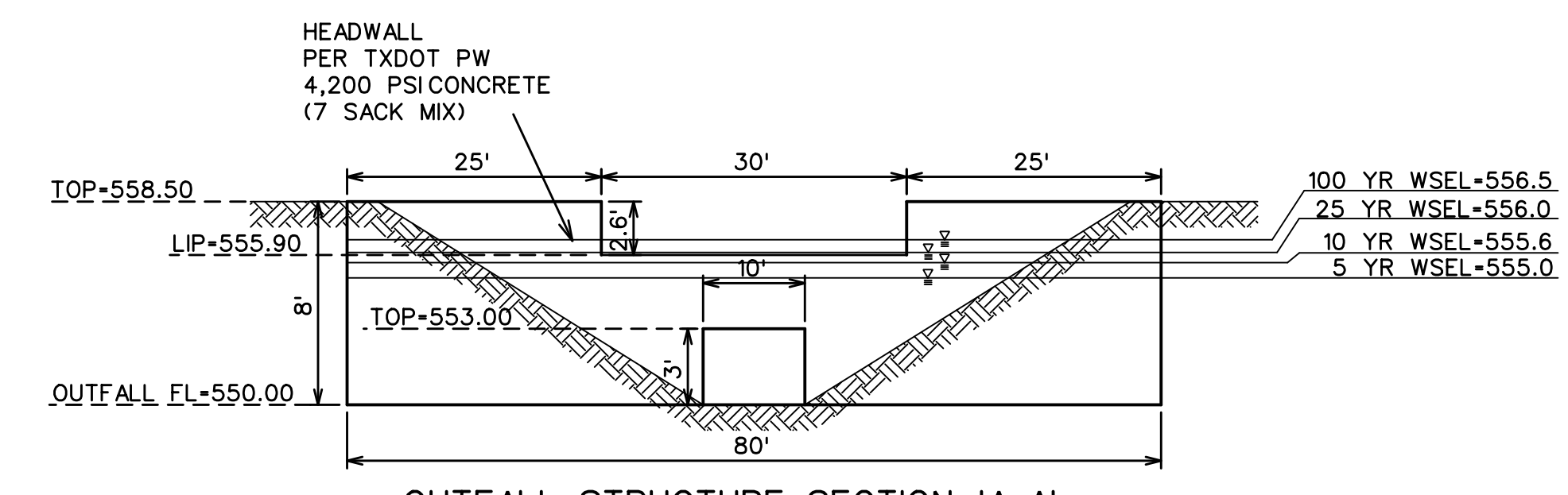




DETENTION POND SHALL BE IRRIGATED

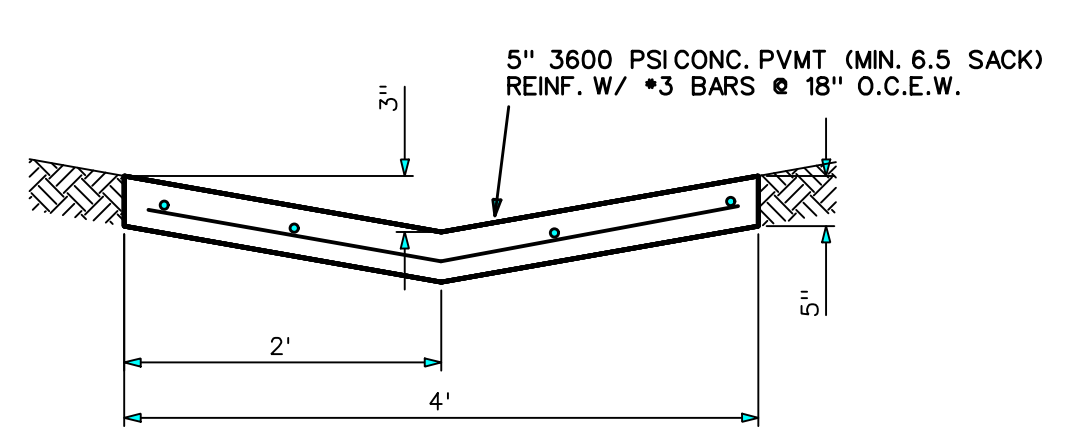


Elevation-Storage Table				
Elevation	Area	Incremental Volume (cf)	Cumulative Volume (cf)	Cumulative Volume (ac-ft)
550.0	0	0	0	0
551.0	10729	5364.5	5364.5	0.1232
552.0	34965	22847	28211.5	0.6476
553.0	49174	42069.5	70281	1.6134
554.0	54087	51630.5	121911.5	2.7987
554.1			127558.45	2.9283
554.8			167087.1	3.8358
555.0	58852	56469.5	173811	4.0951
555.2			203891.5	4.6807
556.0	63744	61298	239679	5.5023
556.1			245304.45	5.6544
557.0	68765	66254.5	305933.5	7.0233
558.0	73914	71339.5	377273	8.6610



OUTFALL STRUCTURE SECTION 'A-A'

CONTRACTOR SHALL INSTALL A TRASH RACK OVER THE LOW OUTFALL PER CONTECH STORMRAX OR APPROVED EQUAL.



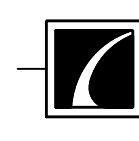
PILOT CHANNEL DETAIL

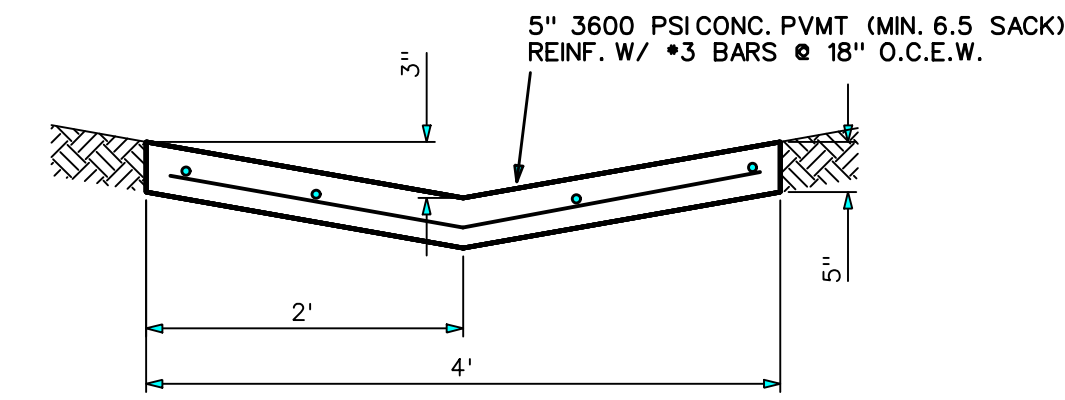
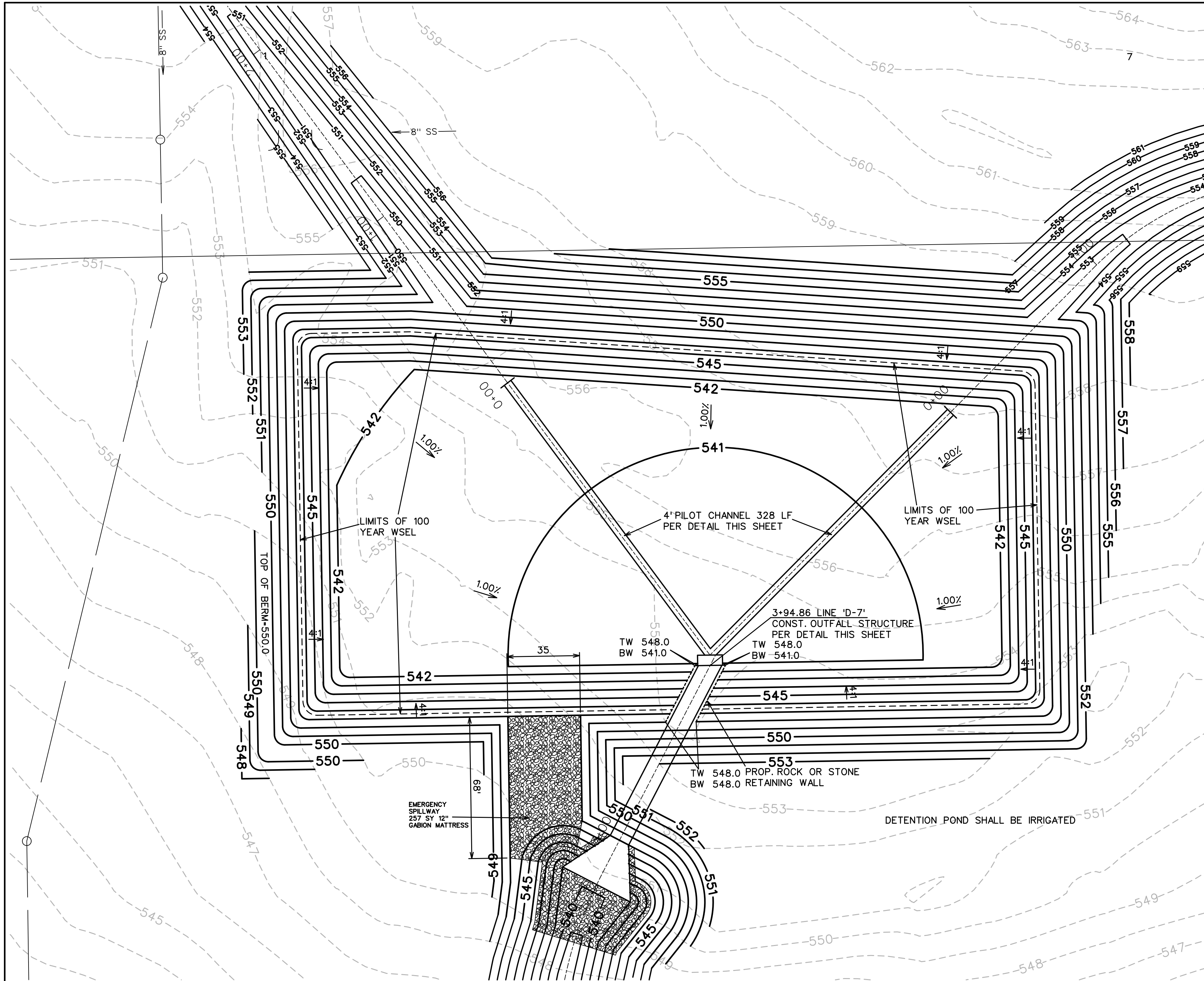
NOTE:
NO PAVING TO BE INSTALLED UNTIL THE DETENTION SYSTEM IS CONSTRUCTED AND FULLY FUNCTIONING ALONG WITH THE BOTTOM AND SIDES OF THE DETENTION POND TO HAVE EITHER SOD OR ANCHORED SEEDED CURLEX INSTALLED.

RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)



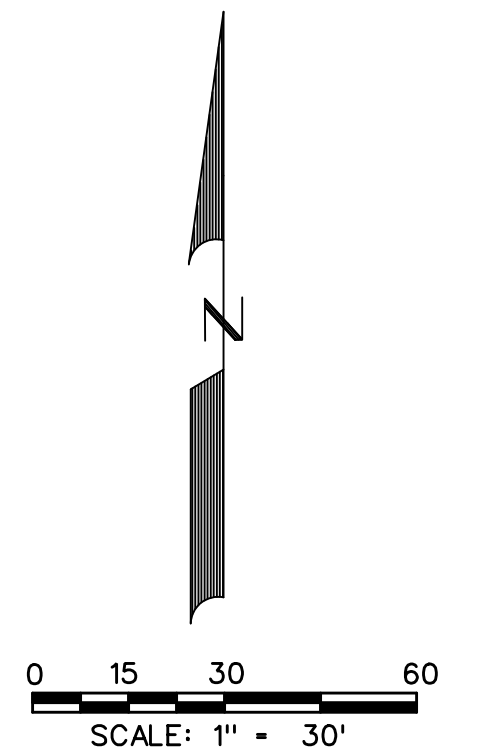
NOTE:
Please refer to Sheet 1 for NTMWD notes.

 CORWIN ENGINEERING, INC. 200 W. BELMONT, SUITE E ALLEN, TEXAS 75013 (972)396-1200 TBPE FIRM #5951			
DEVELOPMENT PLANS FOR HOMESTEAD PHASE I ROCKWALL, TEXAS			
RESERVOIR 1 DETENTION POND PLAN			
DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE:	43
22029	OCTOBER 2022	1"=30'	



PILOT CHANNEL DETAIL

NOTE:
NO PAVING TO BE INSTALLED UNTIL THE DETENTION SYSTEM IS
CONSTRUCTED AND FULLY FUNCTIONING ALONG WITH THE
BOTTOM AND SIDES OF THE DETENTION POND TO HAVE EITHER
SOD OR ANCHORED SEEDED CURLEX INSTALLED.

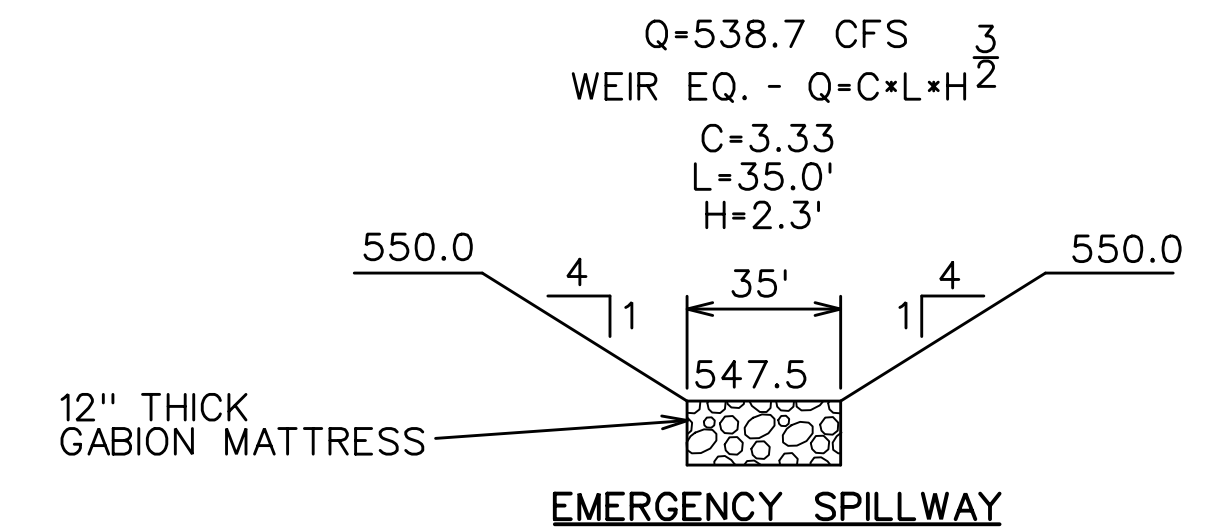
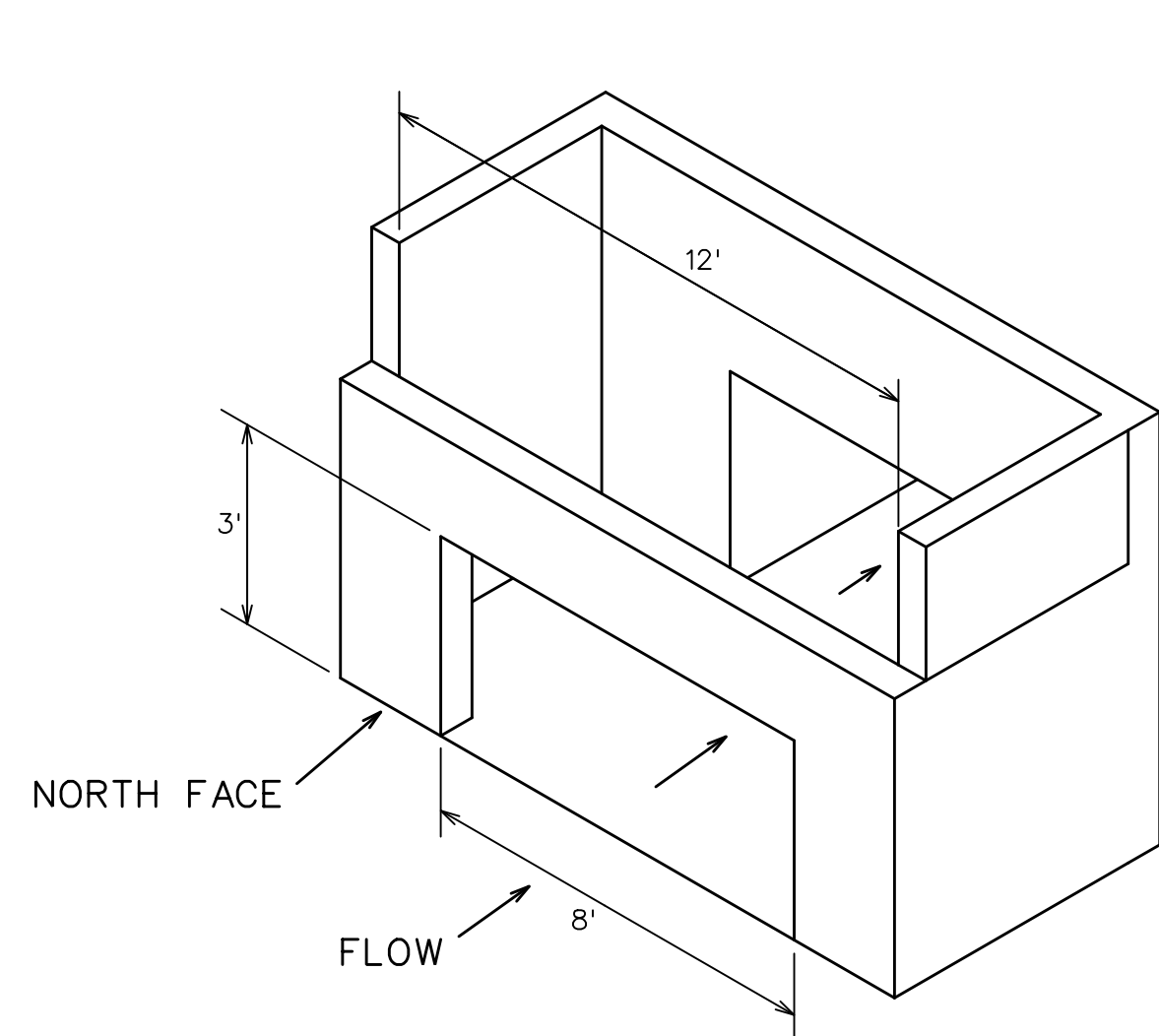
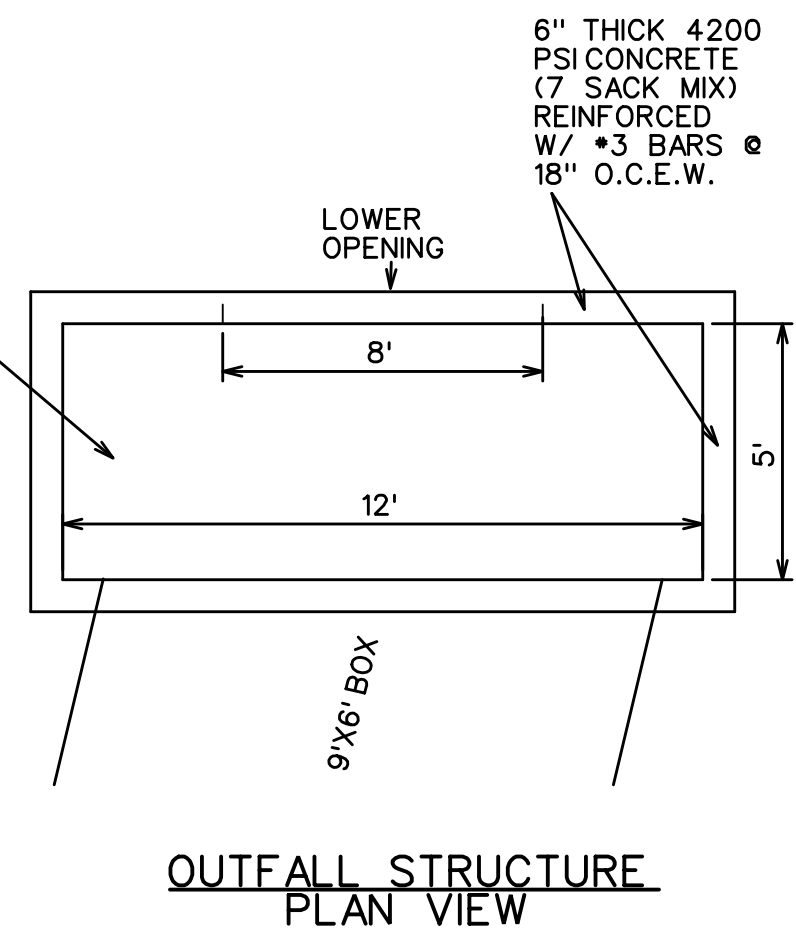
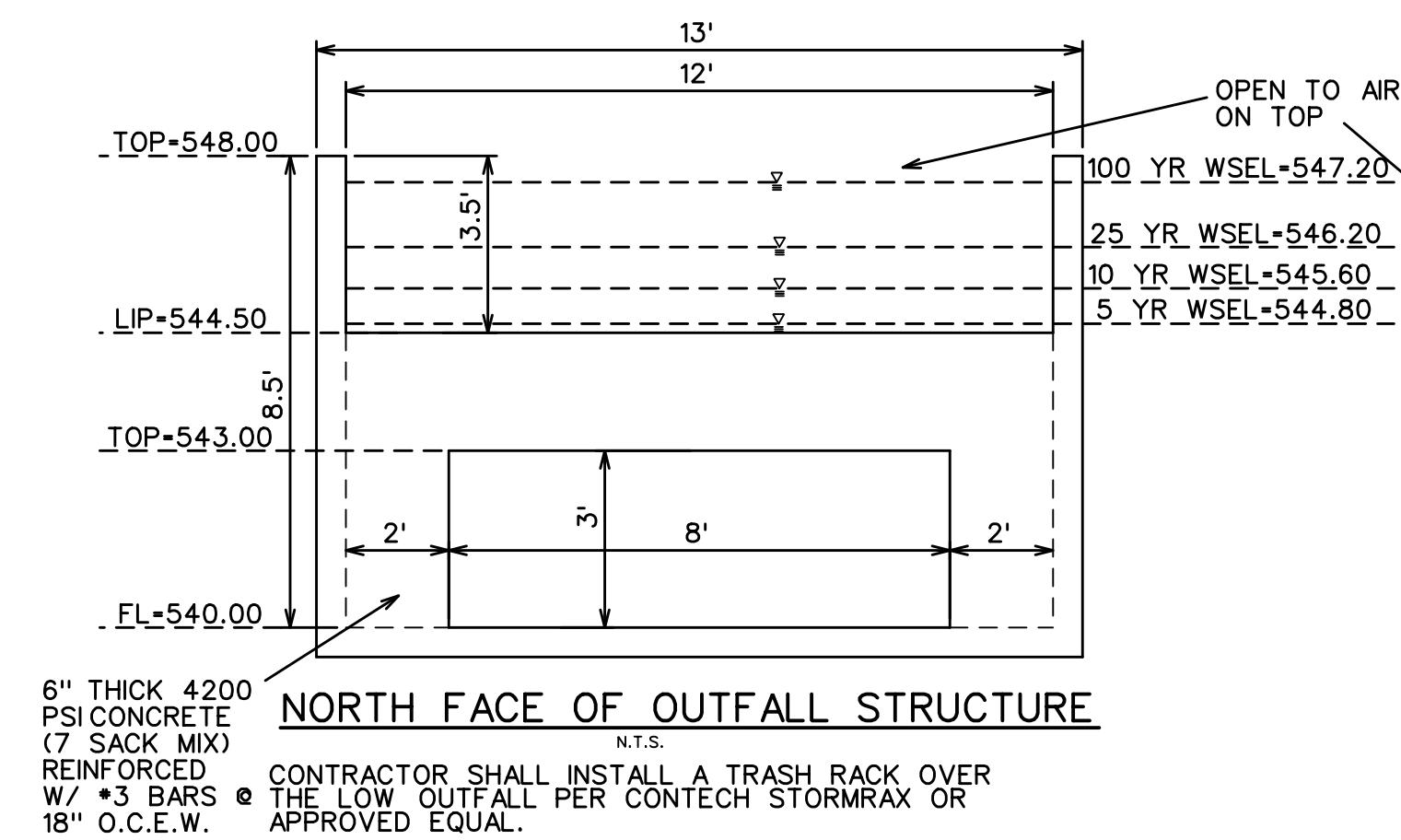


Reservoir 2 Stage-Discharge Table									
Opening #1 - 8' w x 3' h opening				Opening #2 Weir - 12' Long @ 544.5					
Stage	H	Area	Discharge	Weir Length	Depth of Row Over Weir	Weir Discharge	Weir Length	Depth of Row Over Weir	Total Discharge
540.00	0	0	0						0.0
541.00	0.50	8.00	27.2						27.2
542.00	1.00	16.00	77.0						77.0
543.00	1.50	24.00	141.5						141.5
544.00	2.50	24.00	182.7						182.7
544.80	3.30	24.00	209.9	12.0	0.30	6.6			216.5
545.00	3.50	24.00	216.2	12.0	0.50	14.1			230.3
545.60	4.10	24.00	234.0	12.0	1.10	46.1			280.1
546.00	4.50	24.00	245.1	12.0	1.50	73.4			318.5
546.20	4.70	24.00	250.5	12.0	1.70	88.6			339.1
547.00	5.50	24.00	271.0	12.0	2.50	158.0			429.0
547.20	5.70	24.00	275.9	12.0	2.70	177.3			453.2
548.00	6.50	24.00	294.6	12.0	3.50	261.7	35.0	1.00	116.6
549.00	7.50	24.00	316.5	12.0	4.50	381.5	35.0	2.00	329.7
550.00	8.50	24.00	336.9	12.0	5.50	515.4	35.0	3.00	606.6

Orifice Equation: $C^2 A^2 (2G^3 H)^{0.5}$
C-Coefficient of Discharge=0.6
A - Area of opening
G - Gravitational Acceleration=32.2 ft/s²
H - Depth of Water to Center of Opening

Weir Equation: $C^2 H^3 (3/2)^{1/2} L$
C - Weir Coefficient=3.33
H - Depth of Flow over Weir
L - Length of Weir

Elevation-Storage Table				
Elevation	Area	Incremental Volume (cf)	Cumulative Volume (cf)	Cumulative Volume ac-ft
540.0	0.0	0.0	0.0	0.0
541.0	16508.0	8254.0	8254.0	0.1895
542.0	43087.0	29797.5	38051.5	0.8735
543.0	47733.0	45410.0	83461.5	1.9160
544.0	51574.0	49653.5	133115.0	3.0559
544.8			175960.6	4.0395
545.0	55540.0	53557.0	186672.0	4.2854
545.6			221224.5	5.0786
546.0	59635.0	57587.5	244259.5	5.6074
546.2			256608.8	5.8909
547.0	63856.0	61745.5	306005.0	7.0249
547.2			319210.9	7.3281
548.0	68203.0	66029.5	372034.5	8.5407
549.0	72678.0	70440.5	442475.0	10.1578
550.0	77279.0	74978.5	517453.5	11.8791



EMERGENCY OVERFLOW SPILLWAY ASSUMING LOWER OUTLET IS COMPLETELY CLOGGED
Q₁₀₀=422.0 cfs
LENGTH OF LOWER WEIR=10'
DEPTH OF FLOW OVER LOWER WEIR=4.25'
LENGTH OF UPPER WEIR=34' (ENTIRE STRUCTURE)
DEPTH OF FLOW OVER UPPER WEIR=1.15'
WSEL=549.15'
FREEBOARD=0.85'

OUTFALL STRUCTURE ISOMETRIC VIEW
N.T.S.
RECORD DRAWINGS
INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)



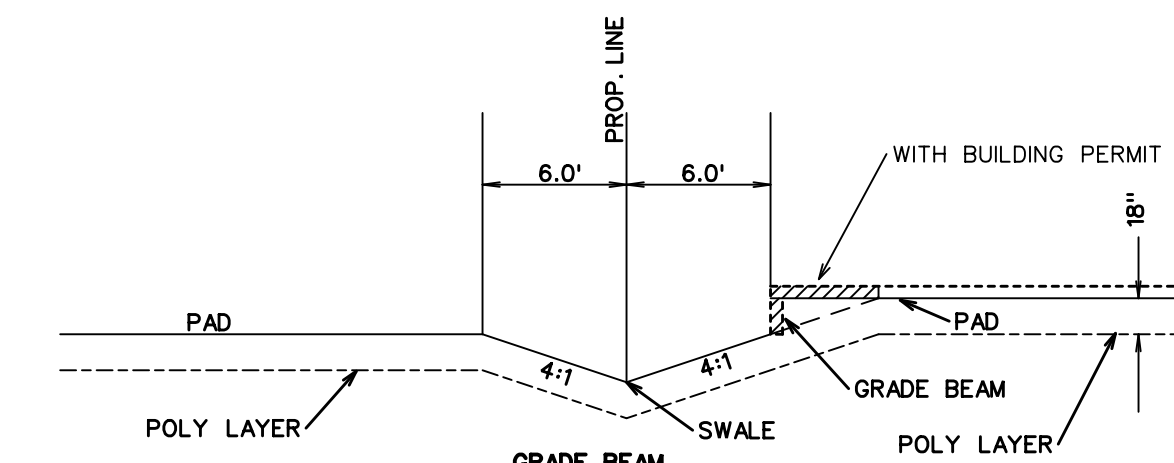
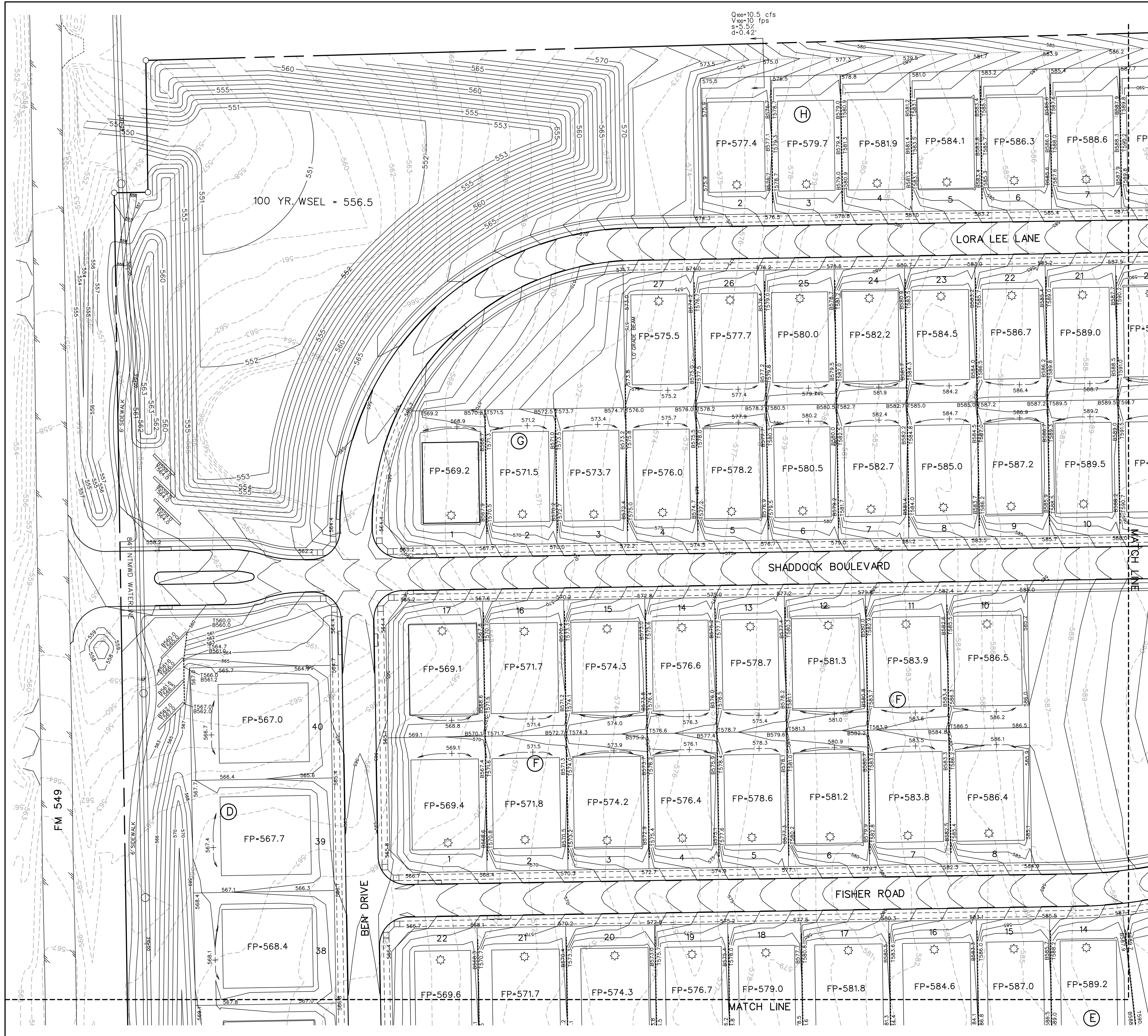


CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

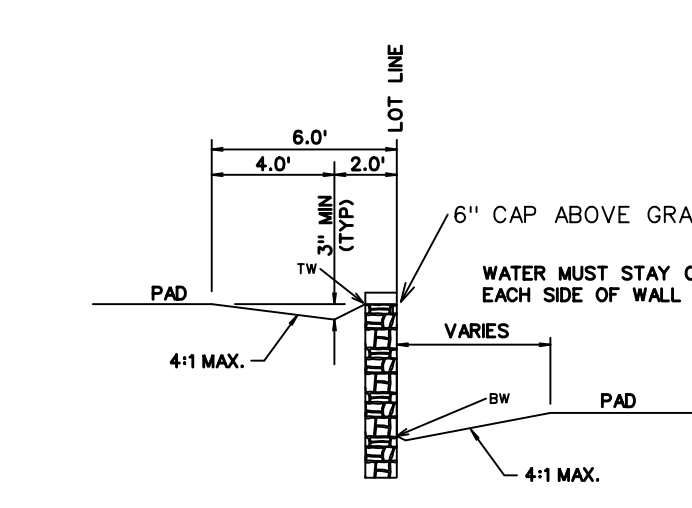
DEVELOPMENT PLANS FOR
HOMESTEAD
PHASE I
ROCKWALL, TEXAS

RESERVOIR 2 DETENTION POND PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE:	44
22029	OCTOBER 2022	1"=30'	



SCALE: 1" = 40'



TYPICAL SIDEYARD RETAINING WALL
N.T.S.

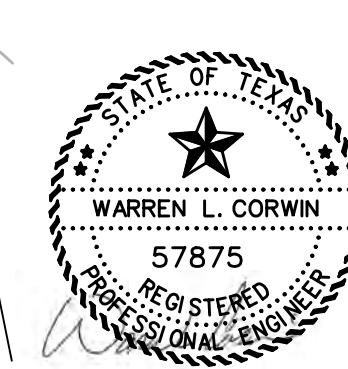
NOTE:
RETAINING WALLS 3' IN HEIGHT AND OVER
NEED A ENGINEERED SEALED PLAN.
(PLANS TO BE SUBMITTED PRIOR
TO ENGINEERING APPROVAL)

14% DRIVEWAY SLOPE
OR DROP GARAGE.
DROP GARAGES SHALL BE A
MINIMUM OF 1' ABOVE CROWN OF ROAD.

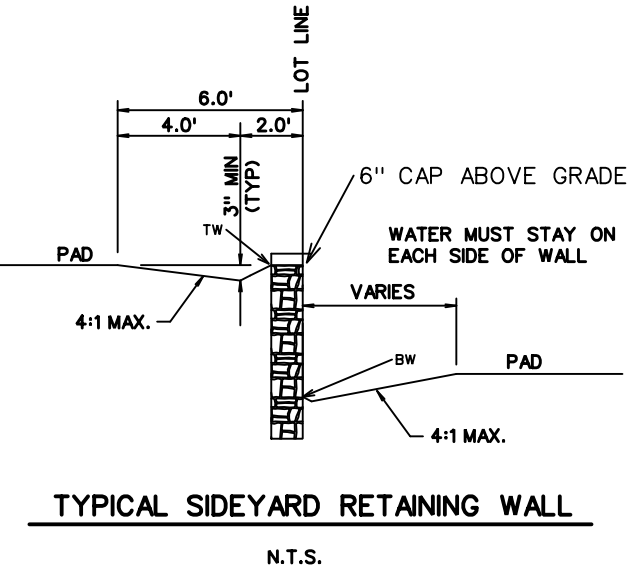
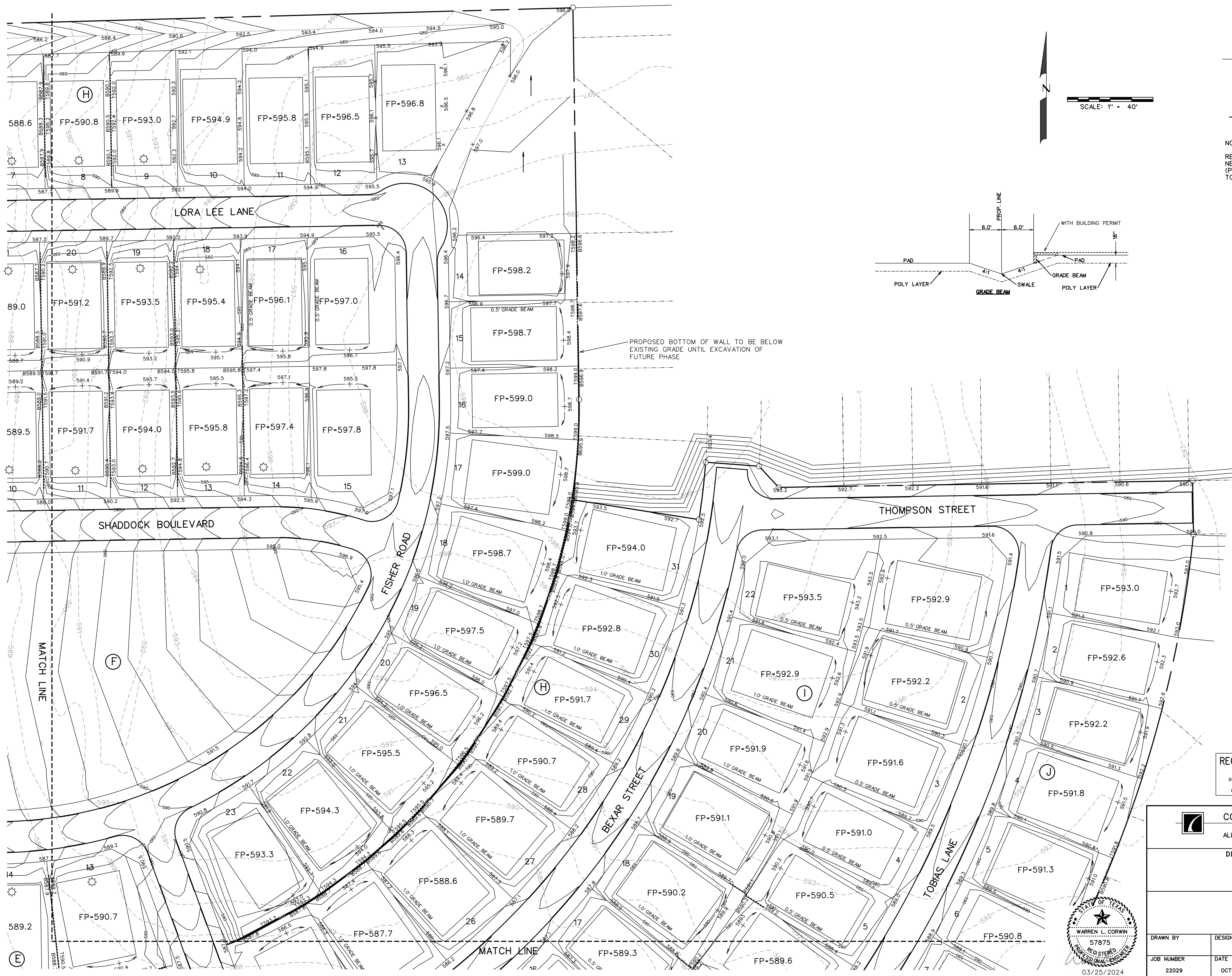
LEGEND	
SPOT ELEVATION	706.2
EXIST. CONTOUR	-700--
PROP. CONTOUR	-704--
RETAINING WALL	-----
HIGH POINT	HP
TOP OF WALL GRADE	7706.2
BOTTOM OF WALL GRADE	8706.2

- NOTES:
1. Finish Floor Elevation to be 0.70 Feet above Finished Pad.(FP)
 2. Additional Erosion Control to be installed in Parkways as determined by the City Inspector.
 3. Finished Pad Elevations are within ± 0.3 Feet.
 4. All fill compacted to min 95% std. density using sheeps foot roller.
 5. All portions of the wall to be on one lot. Do not install on property line or in easements or right of way.
 6. All R.O.W. to be 1/4" per foot.
 7. All retaining walls to be rock or stone faced
 8. Walls 3' and over must be engineered.

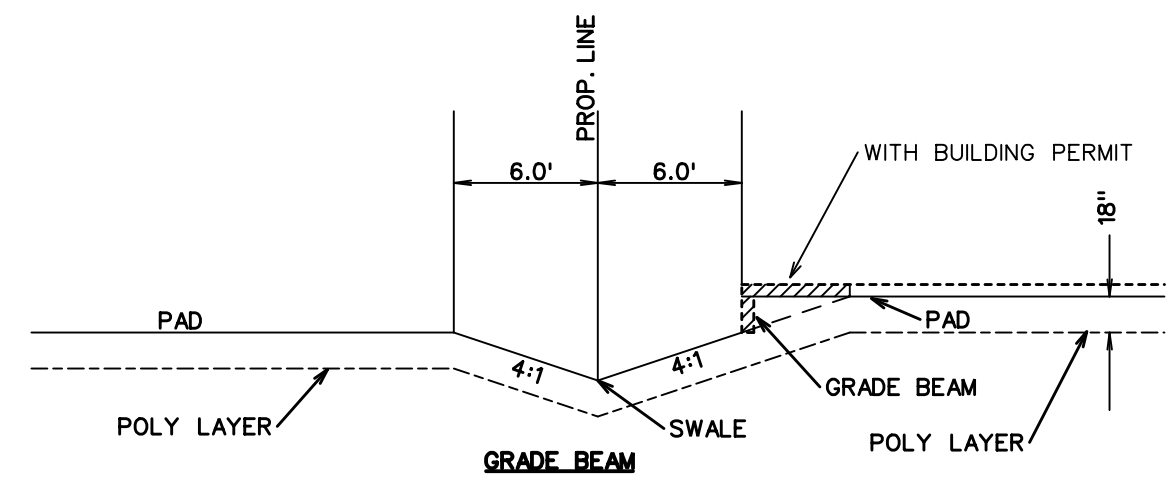
RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)



 CORWIN ENGINEERING, INC. 200 W. BELMONT, SUITE E ALLEN, TEXAS 75013 (972)396-1200 TBPE FIRM #5951			
DEVELOPMENT PLANS FOR HOMESTEAD PHASE I ROCKWALL, TEXAS			
GRADING PLAN			
DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE:	45
22029	OCTOBER 2022	1"=40'	



NOTE:
RETAINING WALLS 3' IN HEIGHT AND OVER
NEED AN ENGINEERED SEALED PLAN.
(PLANS TO BE SUBMITTED PRIOR
TO ENGINEERING APPROVAL)



- LEGEND
- SPOT ELEVATION 706.2
 - EXIST. CONTOUR -700-
 - PROP. CONTOUR -704-
 - RETAINING WALL
 - HIGH POINT HP
 - TOP OF WALL GRADE 7706.2
 - BOTTOM OF WALL GRADE 8706.2

- NOTES:
1. Finish Floor Elevation to be 0.70 Feet above Finished Pad.(FP)
 2. Additional Erosion Control to be installed in Parkways as determined by the City Inspector.
 3. Finished Pad Elevations are within ± 0.3 Feet.
 4. All fill compacted to min 95% std. density using sheeps foot roller.
 5. All portions of the wall to be on one lot. Do not install on property line or in easements or right of way.
 6. All R.O.W. to be $\frac{1}{4}$ " per foot.
 7. All retaining walls to be rock or stone faced
 8. Walls 3' and over must be engineered.

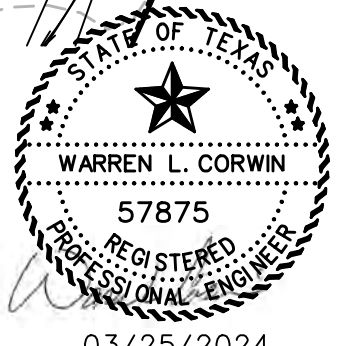
☆ - 14% DRIVEWAY SLOPE OR DROP GARAGE

RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)

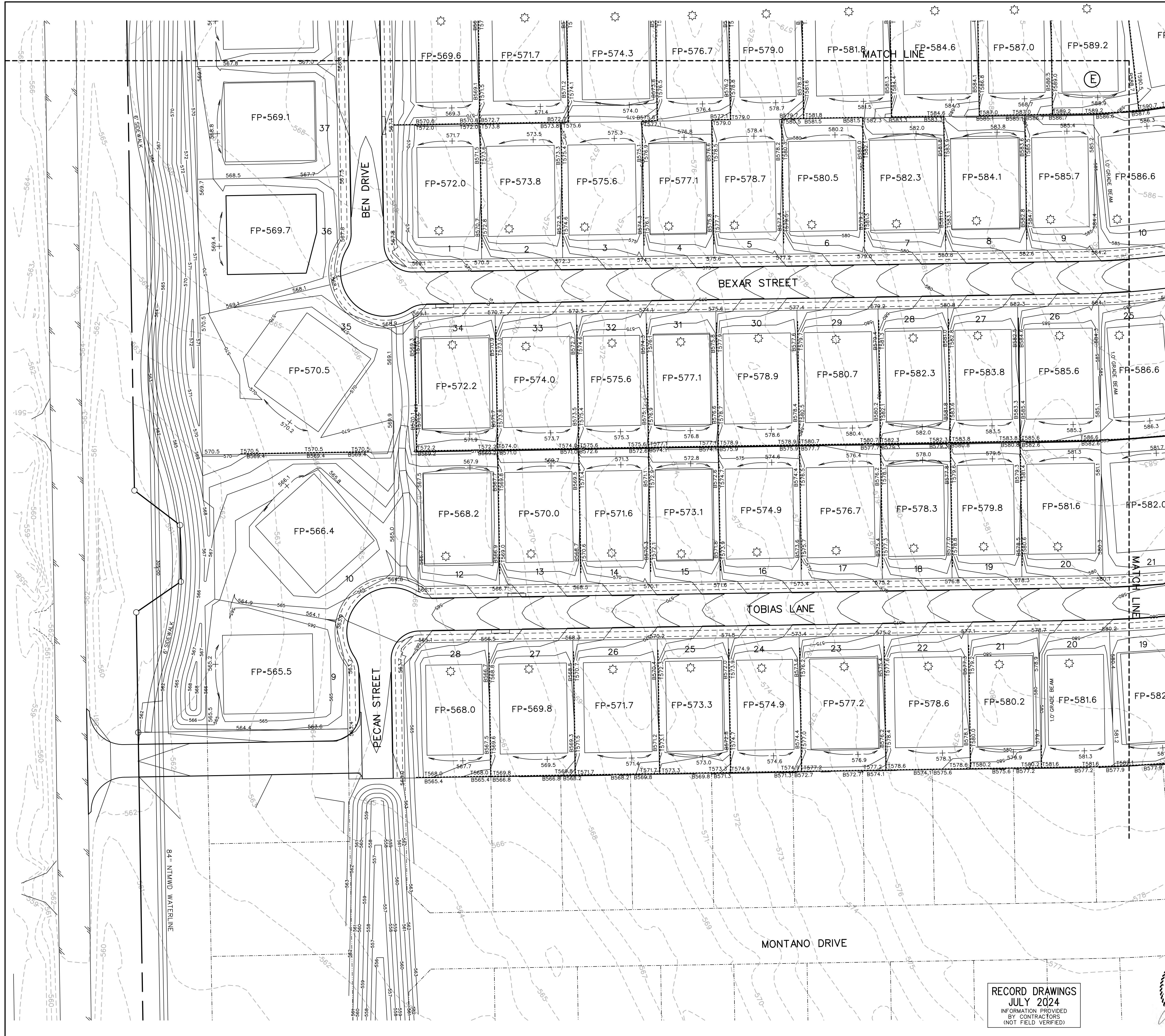
 CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TXPE FIRM #5951

DEVELOPMENT PLANS FOR
HOMESTEAD
PHASE I
ROCKWALL, TEXAS

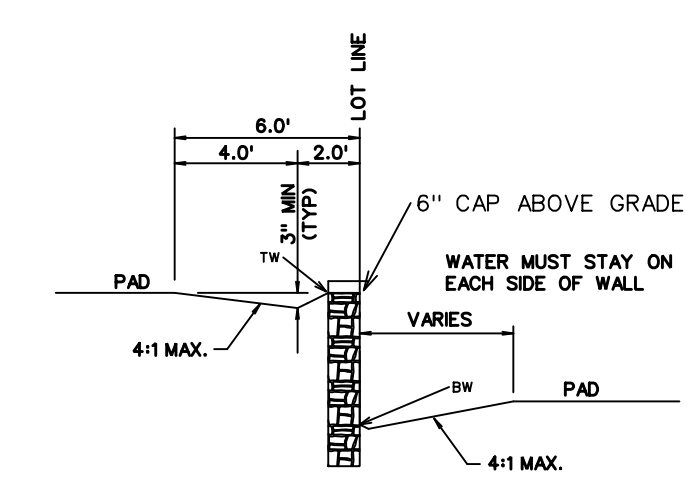
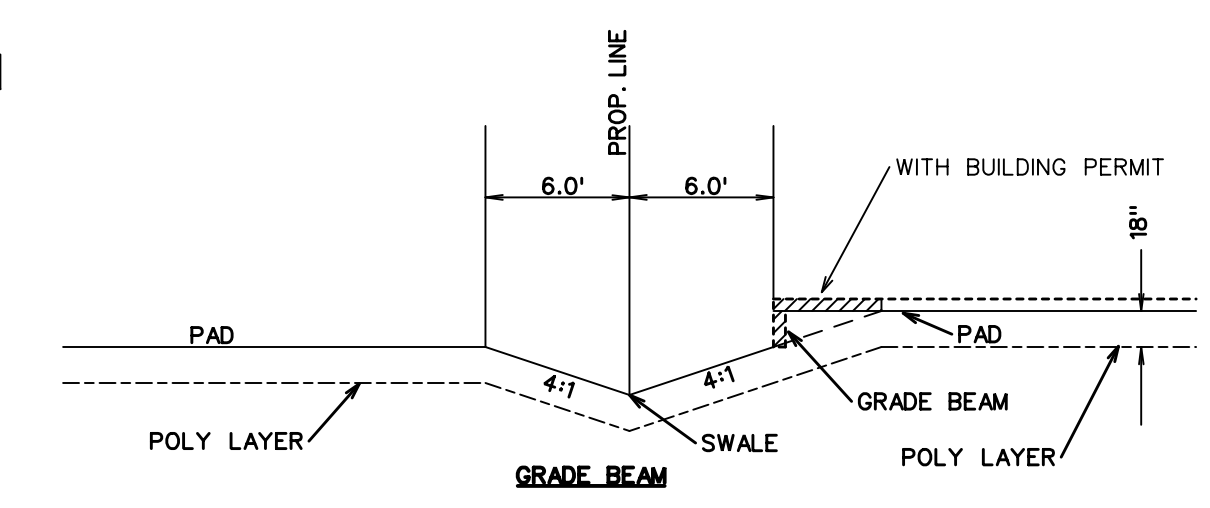
GRADING PLAN



DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE:	46
22029	OCTOBER 2022	1"=40'	



SCALE: 1" = 40'



TYPICAL SIDEYARD RETAINING WALL
N.T.S.

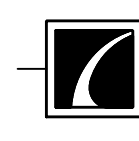
NOTE:
RETAINING WALLS 3' IN HEIGHT AND OVER
NEED AN ENGINEERED SEALED PLAN.
(PLANS TO BE SUBMITTED PRIOR
TO ENGINEERING APPROVAL)

☆ - 14% DRIVEWAY SLOPE
OR DROP GARAGE
DROP GARAGES SHALL BE A
MINIMUM OF 1' ABOVE CROWN OF ROAD.

LEGEND

- SPOT ELEVATION 706.2
- EXIST. CONTOUR -700-
- PROP. CONTOUR -704-
- RETAINING WALL
- HIGH POINT HP
- TOP OF WALL GRADE 1706.2
- BOTTOM OF WALL GRADE 8706.2

- NOTES:
1. Finish Floor Elevation to be 0.70 Feet above Finished Pad.(FP)
 2. Additional Erosion Control to be installed in Parkways as determined by the City Inspector.
 3. Finished Pad Elevations are within ± 0.3 Feet.
 4. All fill compacted to min 95% std. density using sheeps foot roller.
 5. All portions of the wall to be on one lot. Do not install on property line or in easements or right of way.
 6. All R.O.W. to be 1/4" per foot.
 7. All retaining walls to be rock or stone faced
 8. Walls 3' and over must be engineered.

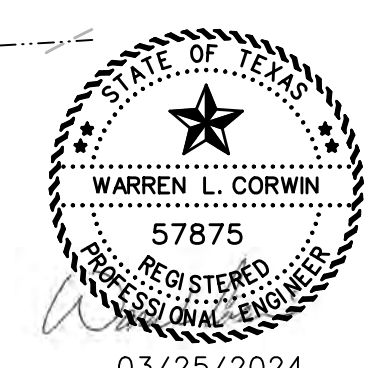


CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
HOMESTEAD
PHASE I
ROCKWALL, TEXAS

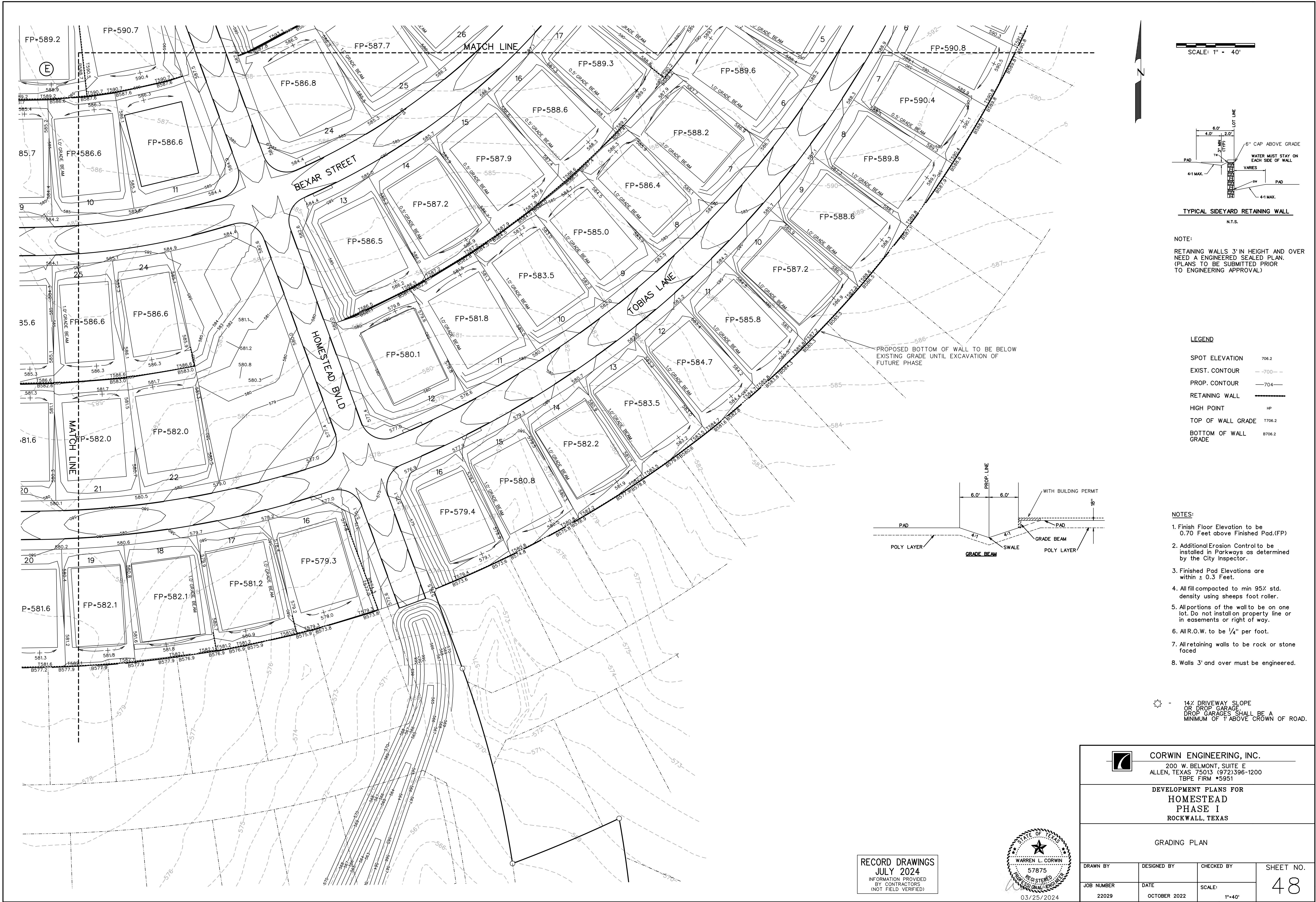
GRADING PLAN

RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)

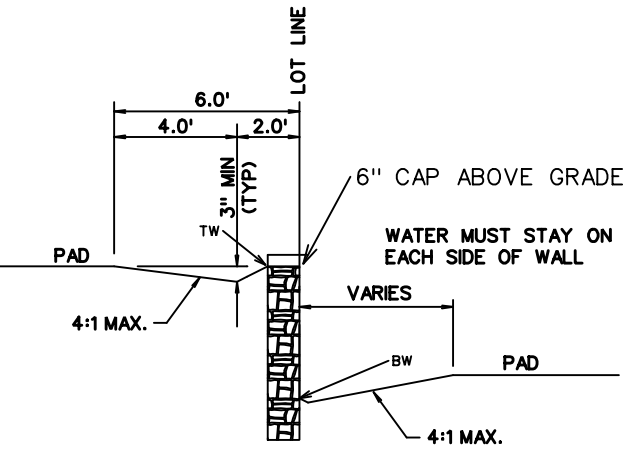


03/25/2024

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE:	47
22029	OCTOBER 2022	1"=40'	



SCALE: 1" = 40'



TYPICAL SIDEYARD RETAINING WALL
N.T.S.

NOTE:
RETAINING WALLS 3' IN HEIGHT AND OVER
NEED A ENGINEERED SEALED PLAN.
(PLANS TO BE SUBMITTED PRIOR
TO ENGINEERING APPROVAL)

LEGEND

SPOT ELEVATION	706.2
EXIST. CONTOUR	-700-
PROP. CONTOUR	-704-
RETAINING WALL	-----
HIGH POINT	HP
TOP OF WALL GRADE	T706.2
BOTTOM OF WALL GRADE	B706.2

- NOTES:
1. Finish Floor Elevation to be 0.70 Feet above Finished Pad.(FP)
 2. Additional Erosion Control to be installed in Parkways as determined by the City Inspector.
 3. Finished Pad Elevations are within ± 0.3 Feet.
 4. All fill compacted to min 95% std. density using sheeps foot roller.
 5. All portions of the wall to be on one lot. Do not install on property line or in easements or right of way.
 6. All R.O.W. to be 1/4" per foot.
 7. All retaining walls to be rock or stone faced
 8. Walls 3' and over must be engineered.

14% DRIVEWAY SLOPE OR DROP GARAGE DROP GARAGES SHALL BE A MINIMUM OF 1' ABOVE CROWN OF ROAD.

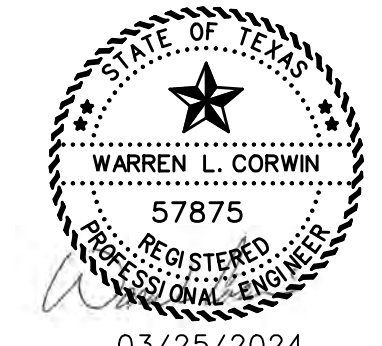
CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
**HOMESTEAD
PHASE I**
ROCKWALL, TEXAS

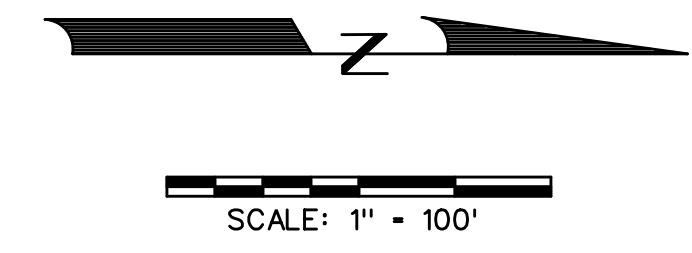
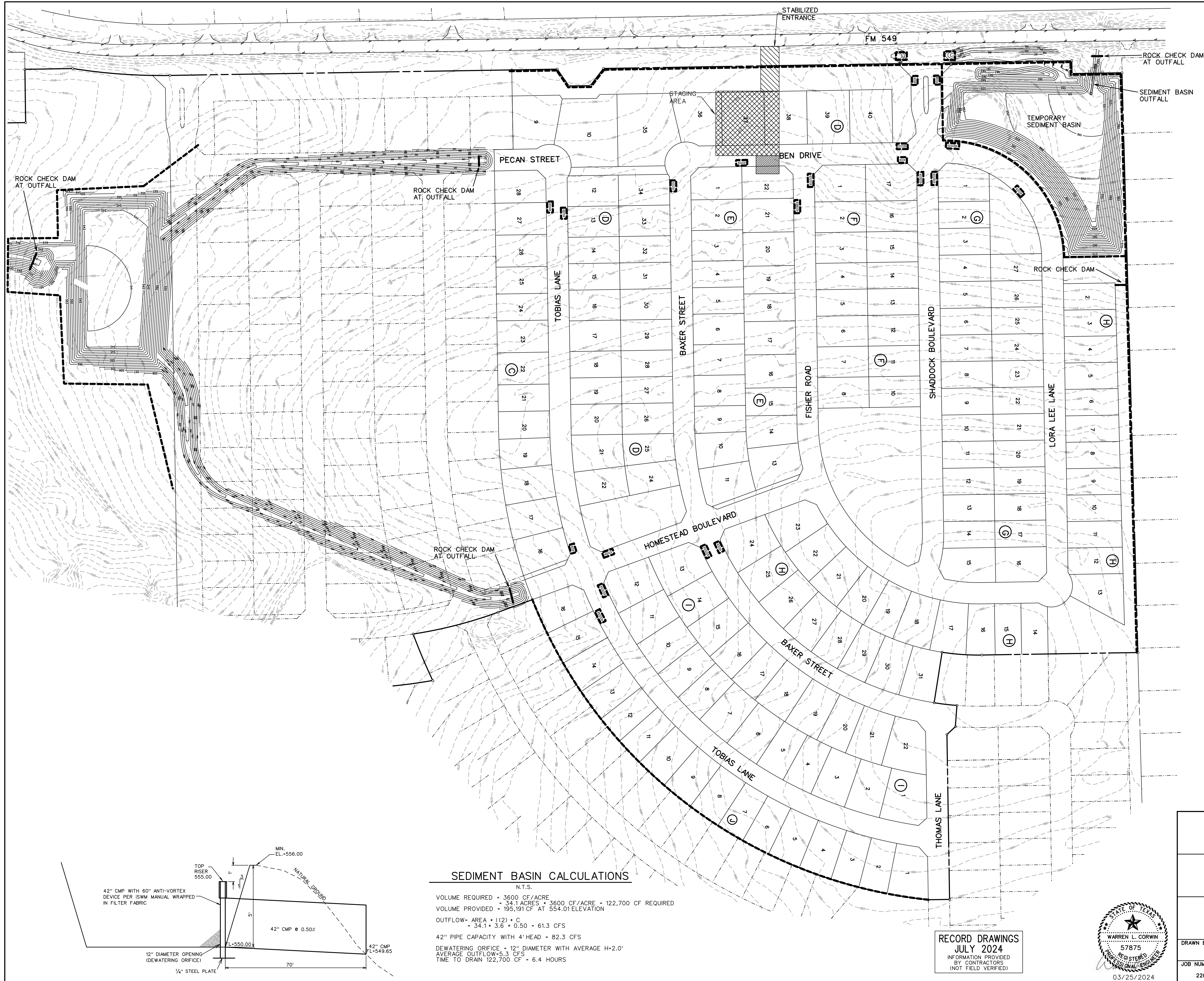
GRADING PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE:	48
22029	OCTOBER 2022	1"=40'	

RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)



03/25/2024



- LEGEND**
- SILT FENCE (BEFORE CONSTRUCTION)
 - INLET PROTECTION
 - ROCK CHECK DAM

SEDIMENT BASIN CALCULATIONS

N.T.S.

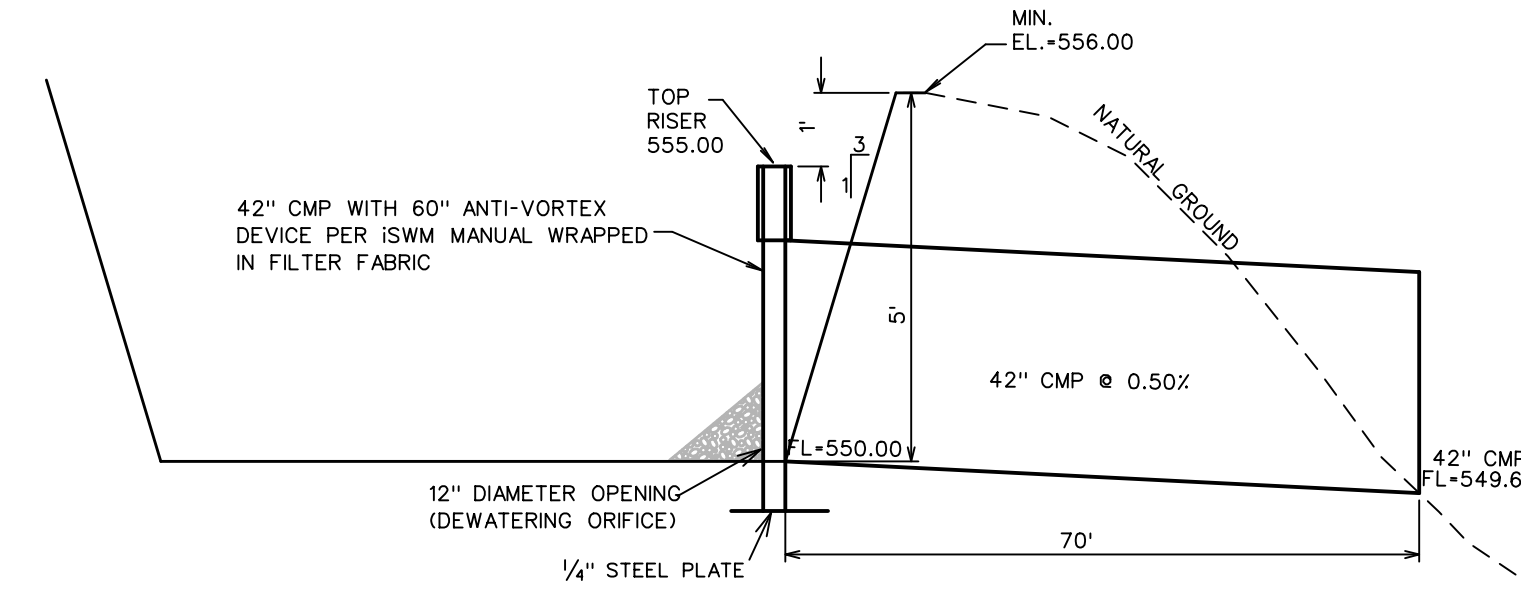
VOLUME REQUIRED = 3600 CF/ACRE
= 34.1 ACRES • 3600 CF/ACRE = 122,700 CF REQUIRED

VOLUME PROVIDED = 195,191 CF AT 554.01 ELEVATION

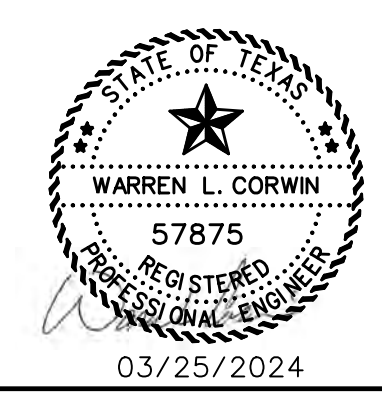
OUTFLOW = AREA • I(2) • C
= 34.1 • 3.6 • 0.50 = 61.3 CFS

42" PIPE CAPACITY WITH 4" HEAD = 82.3 CFS

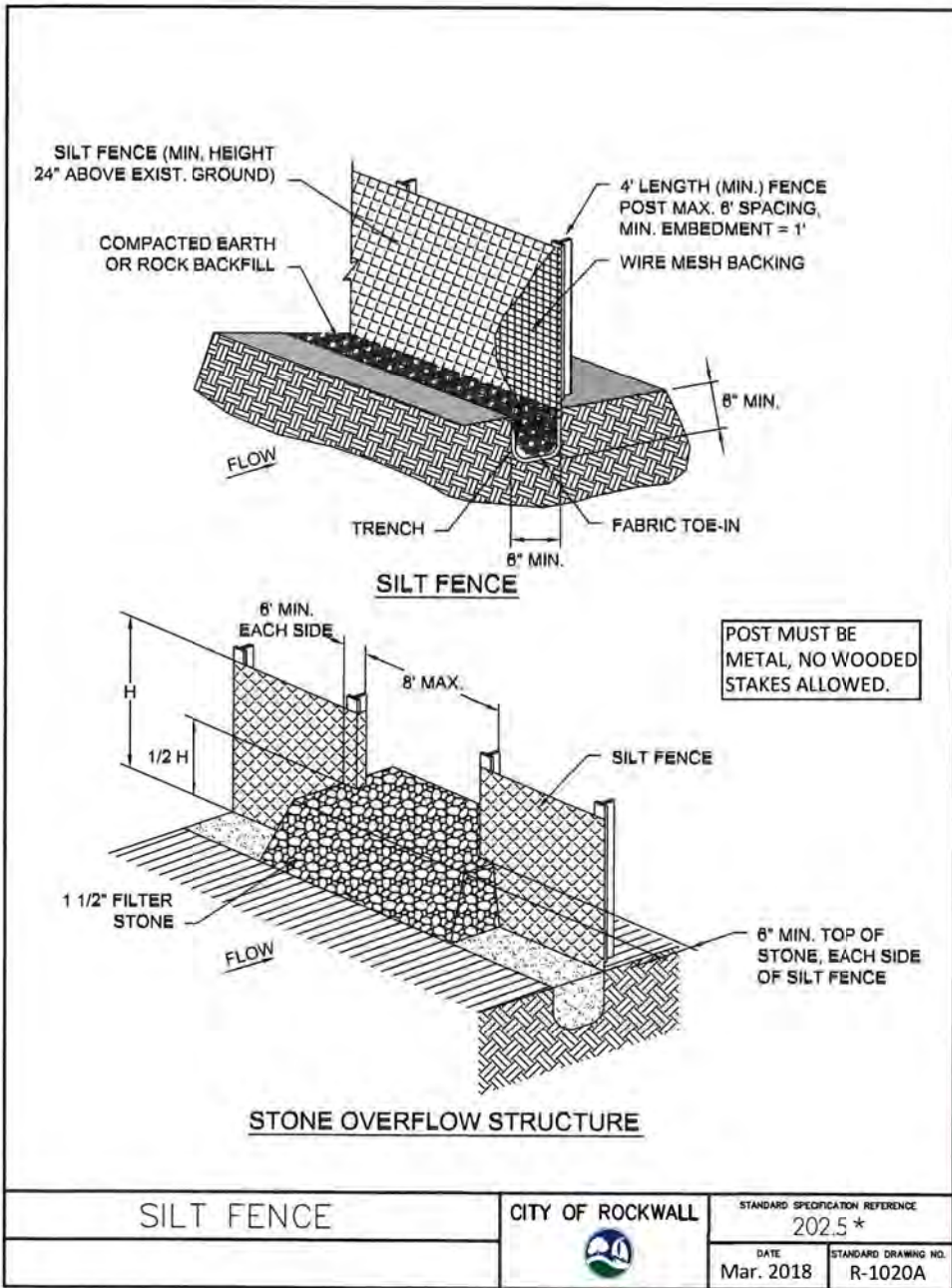
DEWATERING ORIFICE = 12" DIAMETER WITH AVERAGE H=2.0'
AVERAGE OUTFLOW=5.3 CFS
TIME TO DRAIN 122,700 CF = 6.4 HOURS



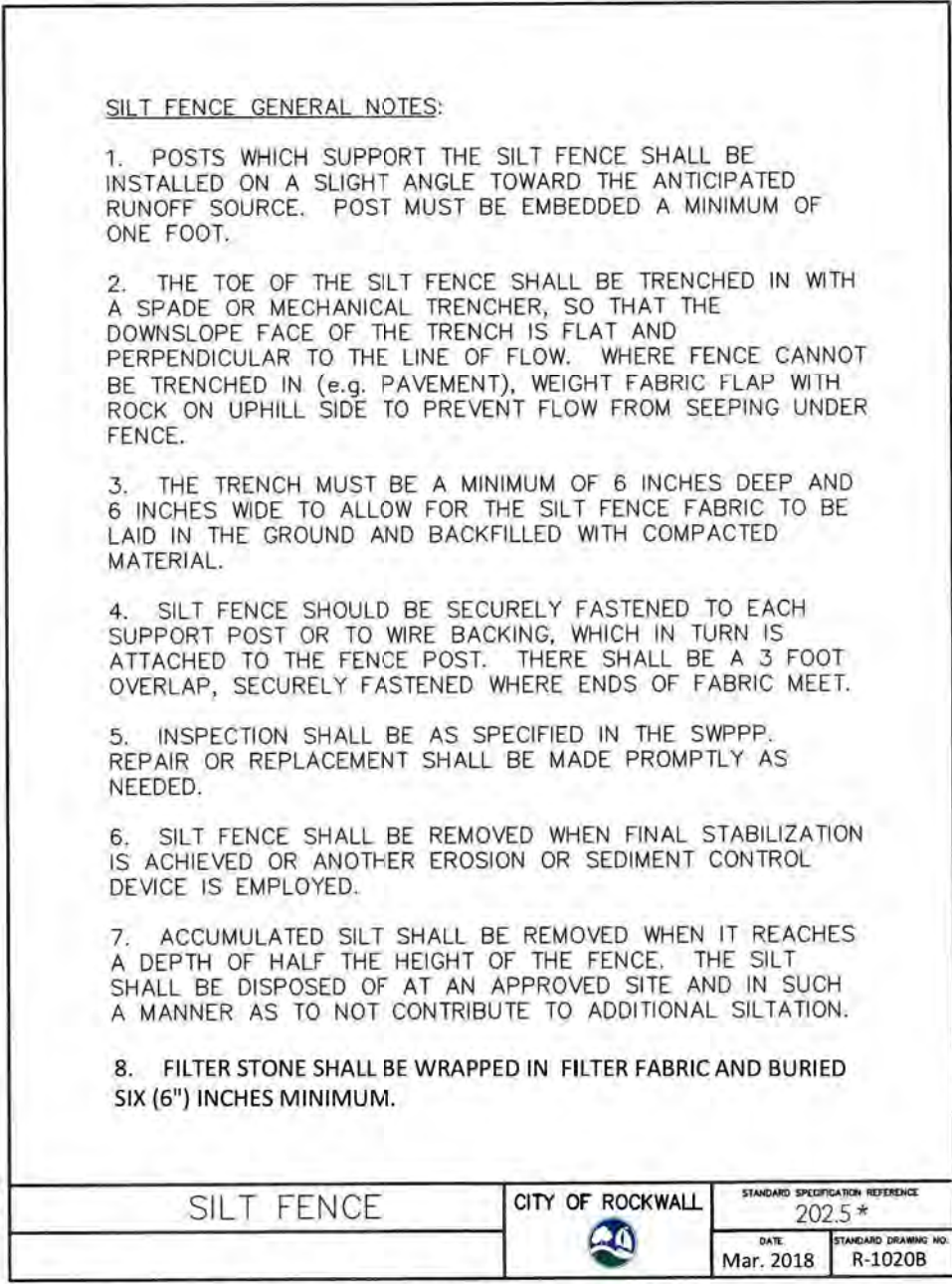
RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)



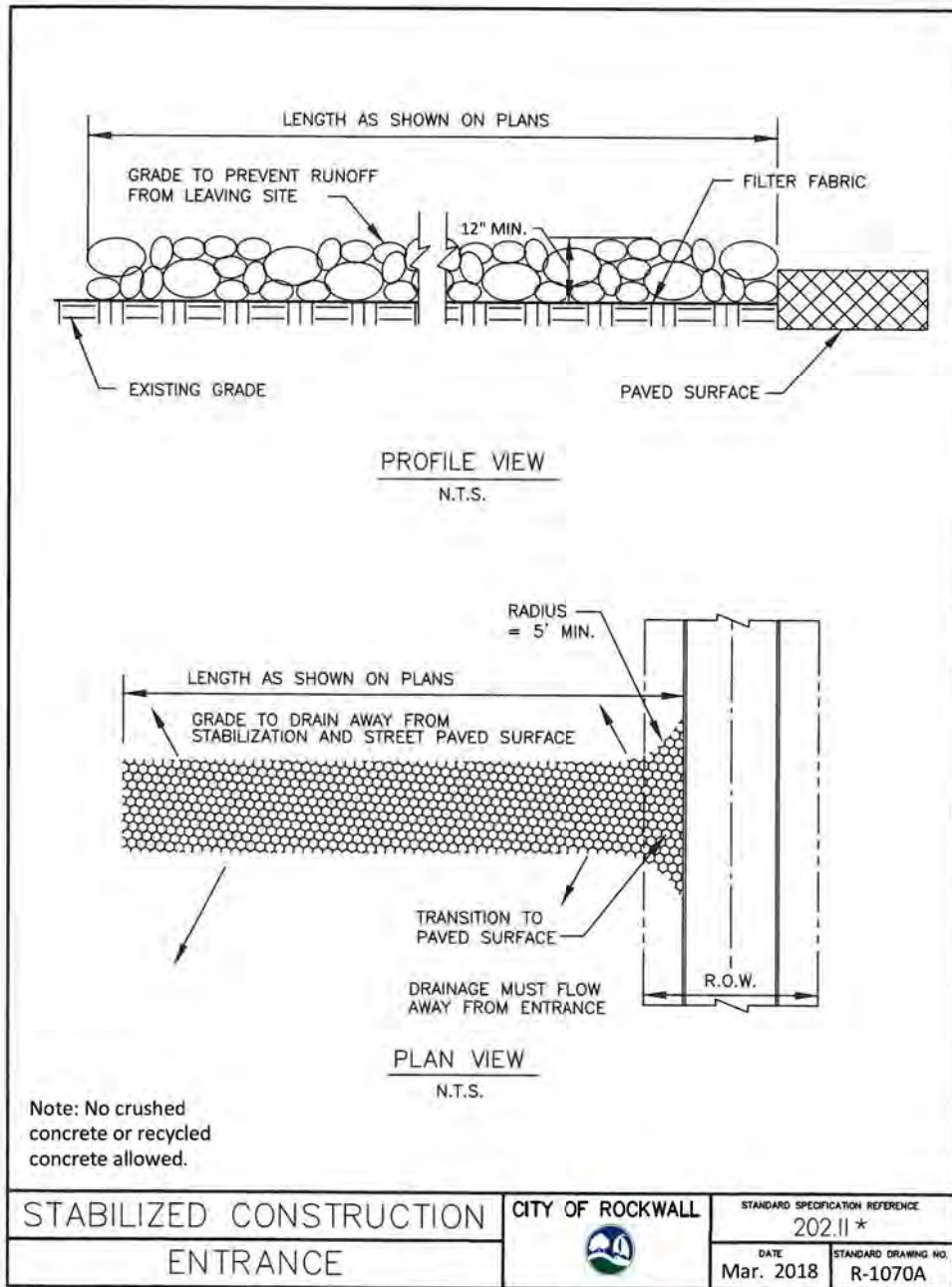
CORWIN ENGINEERING, INC. 200 W. BELMONT, SUITE E ALLEN, TEXAS 75013 (972)396-1200 TBPE FIRM #5951			
DEVELOPMENT PLANS FOR HOMESTEAD PHASE I ROCKWALL, TEXAS			
EROSION CONTROL PLAN			
DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO. 49
JOB NUMBER 22029	DATE OCTOBER 2022	SCALE: 1"=100'	



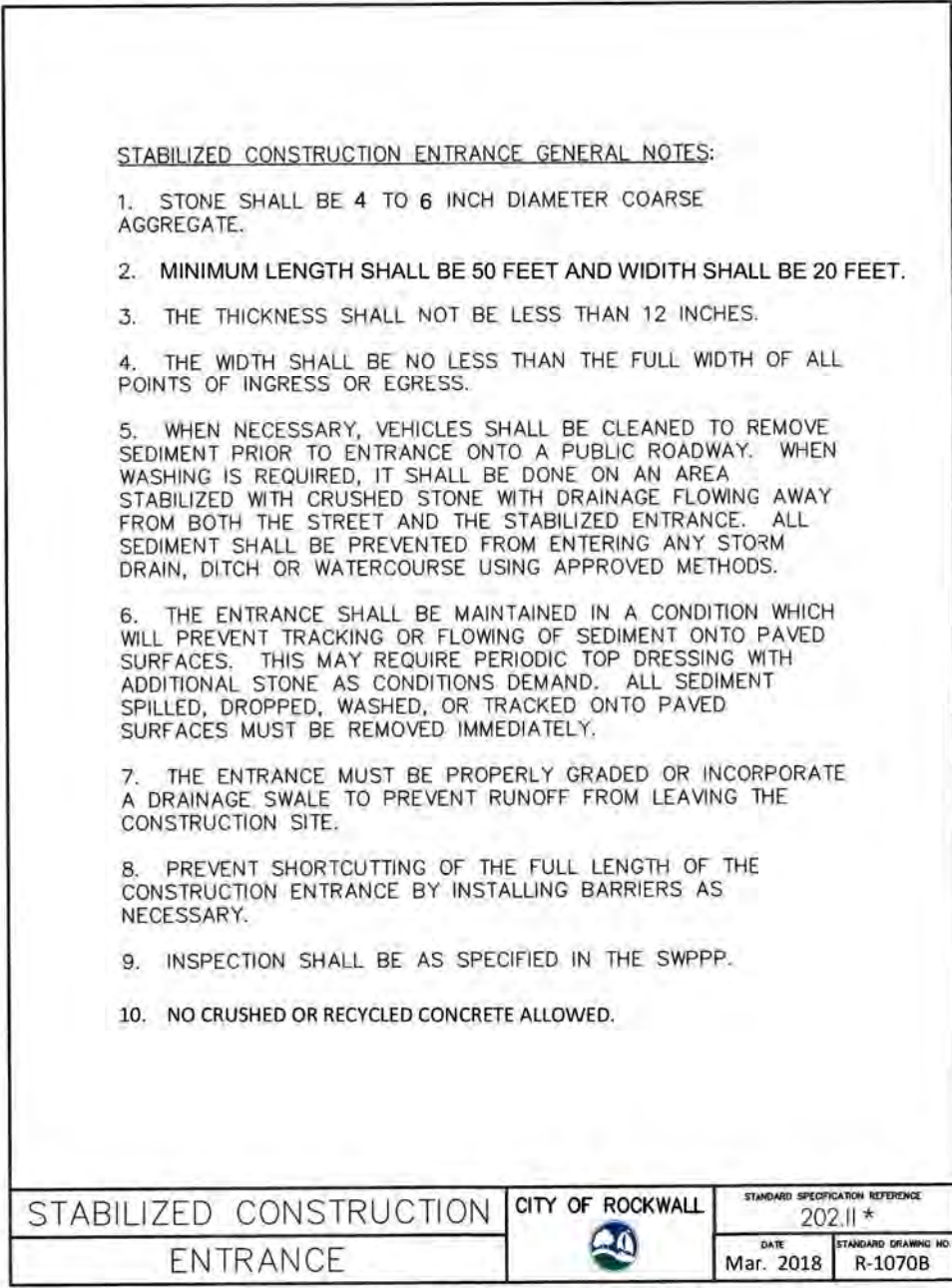
*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. Public Works Construction Standards North Central Texas, Fifth Edition.



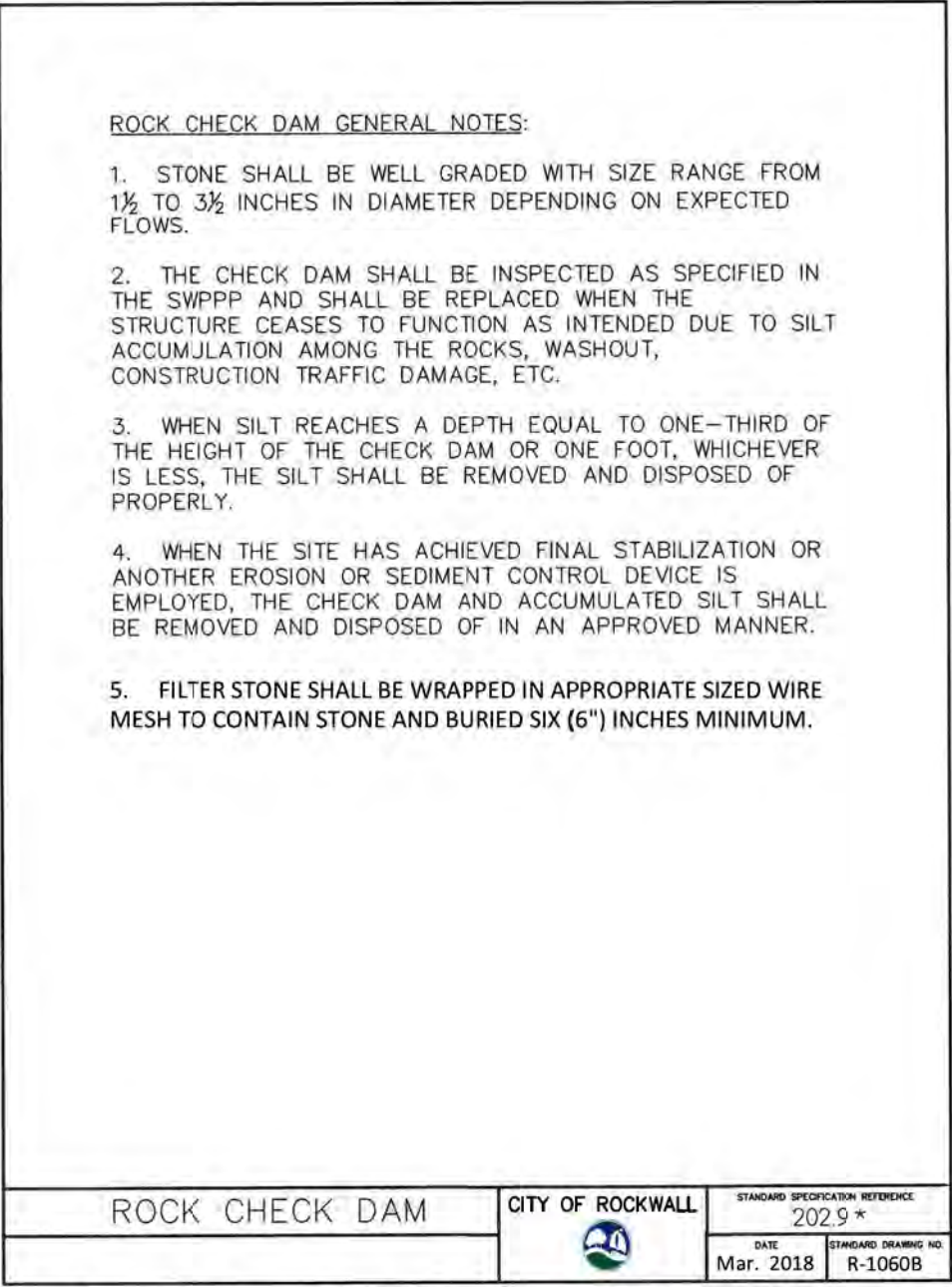
*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. Public Works Construction Standards North Central Texas, Fifth Edition.



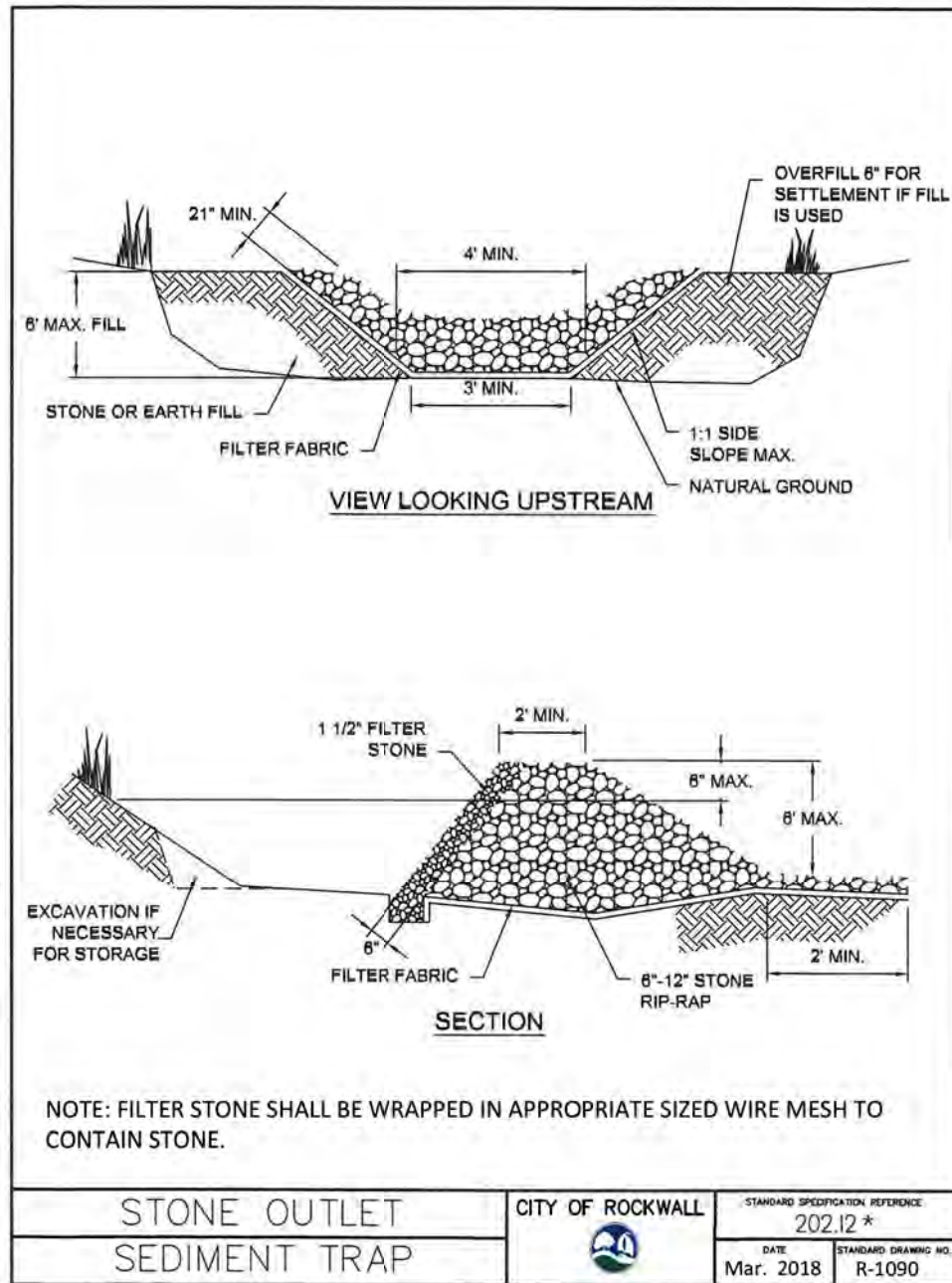
*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. Public Works Construction Standards North Central Texas, Fifth Edition.



*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. Public Works Construction Standards North Central Texas, Fifth Edition.



*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. Public Works Construction Standards North Central Texas, Fifth Edition.

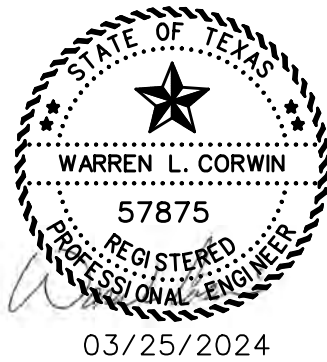


*Section II Standard Drawings as of October 2004. Reference number only has been updated for Fifth Edition Specifications. Public Works Construction Standards North Central Texas, Fifth Edition.

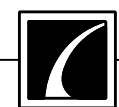
CONSTRUCTION SEQUENCE

1. GRADING CONTRACTOR TO INSTALL TEMPORARY STABILIZED ENTRANCE.
2. INSTALL SILT FENCE AS SHOWN, (TS-600 POLY FELT) PER C.O.G. SPECIFICATIONS.
3. PERFORM GRADING AND UTILITY CONSTRUCTION.
4. AFTER THE INLET BOTTOMS ARE CONSTRUCTED, THE INLETS SHALL BE FILLED WITH STONE AND COVERED WITH A FILTER FABRIC (TS-600 POLY FELT OR EQUIVALENT) BY UTILITY CONTRACTOR.
5. PRIOR TO CITY RELEASING PAVING, SOD OR SEEDED CURLEX SHALL BE INSTALLED ON SIDES AND BOTTOM OF ALL DETENTION PONDS.
6. AFTER PAVING AND COMPLETION OF INLETS, INLET FILTERS SHALL BE INSTALLED IN ALL INLETS AND MAINTAINED UNTIL RE-VEGETATION HAS BEEN COMPLETED BY PAVING CONTRACTOR.
7. SILT FENCE SHALL REMAIN IN PLACE UNTIL RE-VEGETATION HAS BEEN COMPLETED.
8. PAVING CONTRACTOR SHALL REMOVE TEMPORARY STABILIZED ENTRANCE.
9. PRIOR TO CITY ACCEPTANCE THE PAVING CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ANY MUD OR SILT WHICH COLLECTS ON THE EXISTING AND NEW PAVEMENT.
10. PRIOR TO CITY ACCEPTANCE 75-80% OF ALL DISTURBED AREA SHALL HAVE A MIN. 1" TALL GRASS ESTABLISHED
11. 75-80% OF ALL DISTURBED AREA TO HAVE 1" HIGH GRASS ESTABLISHED PRIOR TO ENGINEERING ACCEPTANCE.
12. ALL BAR DITCHES TO BE ANCHORED, SEEDED & CURLEXED PRIOR TO ACCEPTANCE OF GRASS ISN'T ESTABLISHED.

RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)



03/25/2024

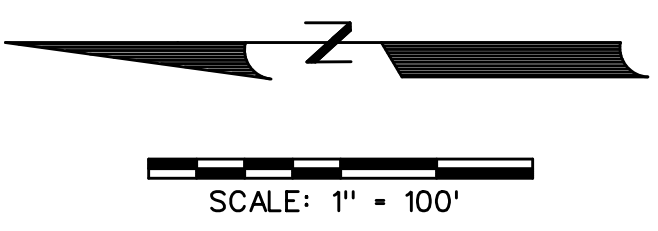
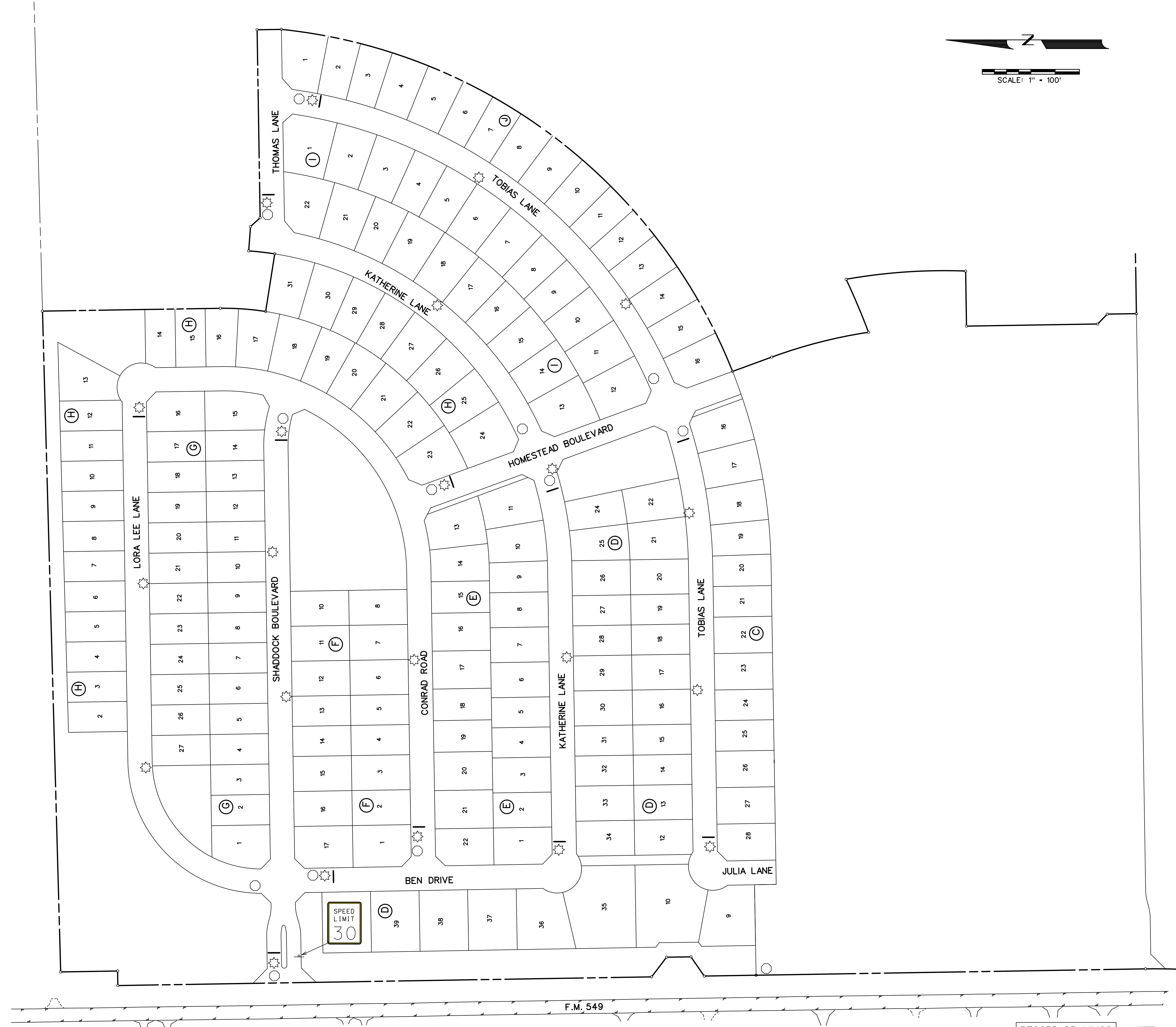


CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

**DEVELOPMENT PLANS FOR
HOMESTEAD
PHASE I
ROCKWALL, TEXAS**

EROSION CONTROL PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE:	50
22029	OCTOBER 2022	1"=100'	



The developer shall arrange for the installation of all pavement striping, regulatory, warning and guide signs, including posts, as shown on the plans or as directed by the City. Street name signs shall be installed at each intersection. Examples of regulatory, warning, information and guide signs are as follows:

-Regulatory signs shall include, but are not limited to, STOP, ALL-WAY, YIELD, KEEP RIGHT and speed limit signs.

-Warning signs shall include, but are not limited to, DEAD END, NO OUTLET, DIVIDED ROAD, DIP, and PAVEMENT ENDS.

-Guide signals shall include, but are not limited to, street name signs, DETOUR, direction arrow and advance arrow.

Regulatory signs should be used only where justified by engineering judgment or study. All signage plans shall be reviewed and approved by the City of Rockwall Engineering Department and be designed in accordance with the principles described in the current TMUTCD.

-A detailed street and regulatory signage plan is to be submitted to the City of Rockwall Engineering Department. All signs shall be shown in the engineering plans for review and approval. The signage plan shall be shown on a separate signage & pavement marking layout sheet or as a part of the plan & profile sheet. The plan shall identify the specific sign designation, size and location for each sign. Sign standards shall also be included in the engineering plans.

-All signage installed shall comply with the current "Texas Manual on Uniform Traffic Control Devices" and the "Standard Highway Sign Designs for Texas." The sign layout drawings shall show the color and dimensions of all sign face legend components including background color, legend color, borders, symbols, letter size and style.

-The developer shall be responsible for furnishing and installing all regulatory signage, warning signage and street name signage along with all necessary sign mounts in accordance with the approved engineering plans. A sample production sign shall be submitted to the Traffic Signs & Pavement Markings Supervisor for review and approval. The sample shall be directed to the City of Rockwall Service Center located at 1600 Airport Road, Rockwall Texas 75087. The sample sign must be submitted at least 10 days prior to the scheduled installation date.

-For a street with a cul-de-sac end, a standard W 14-2a shall be mounted over the street name blade, if the cul-de-sac is not clearly visible from the adjoining roadway, or is located in excess of 400 linear feet from the adjoining roadway.

-Sign posts shall be 2 3/8" O.D. galvanized steel tube sign post with a galvanized finish.

-Sign clamps and brackets shall be high strength aluminum.

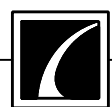
-Any decorative sign poles and fixtures installed shall be maintained by the HOA.

All developments shall be provided with streetlights. In general, lights should be located at street intersections and at intervals no greater than four hundred (400) feet apart. Streetlights should be the equivalent of 175-watt mercury vapor fixtures on minor residential streets. All collector and arterial, or commercial streets shall have sodium vapor fixtures with a minimum wattage of 250 or 400 watts as directed by the City. In some instances, the City may require greater wattage.

LEGEND

- ☼ - STREET LIGHT
- - STOP SIGN
- - STREET NAME BLADE

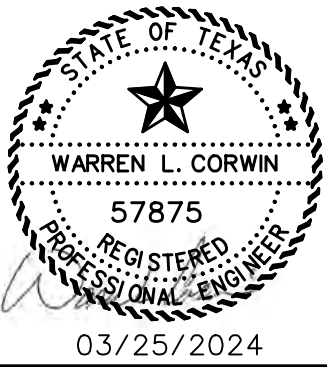
NOTE:
Please refer to Sheet 1 for
NTMWD notes.



CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

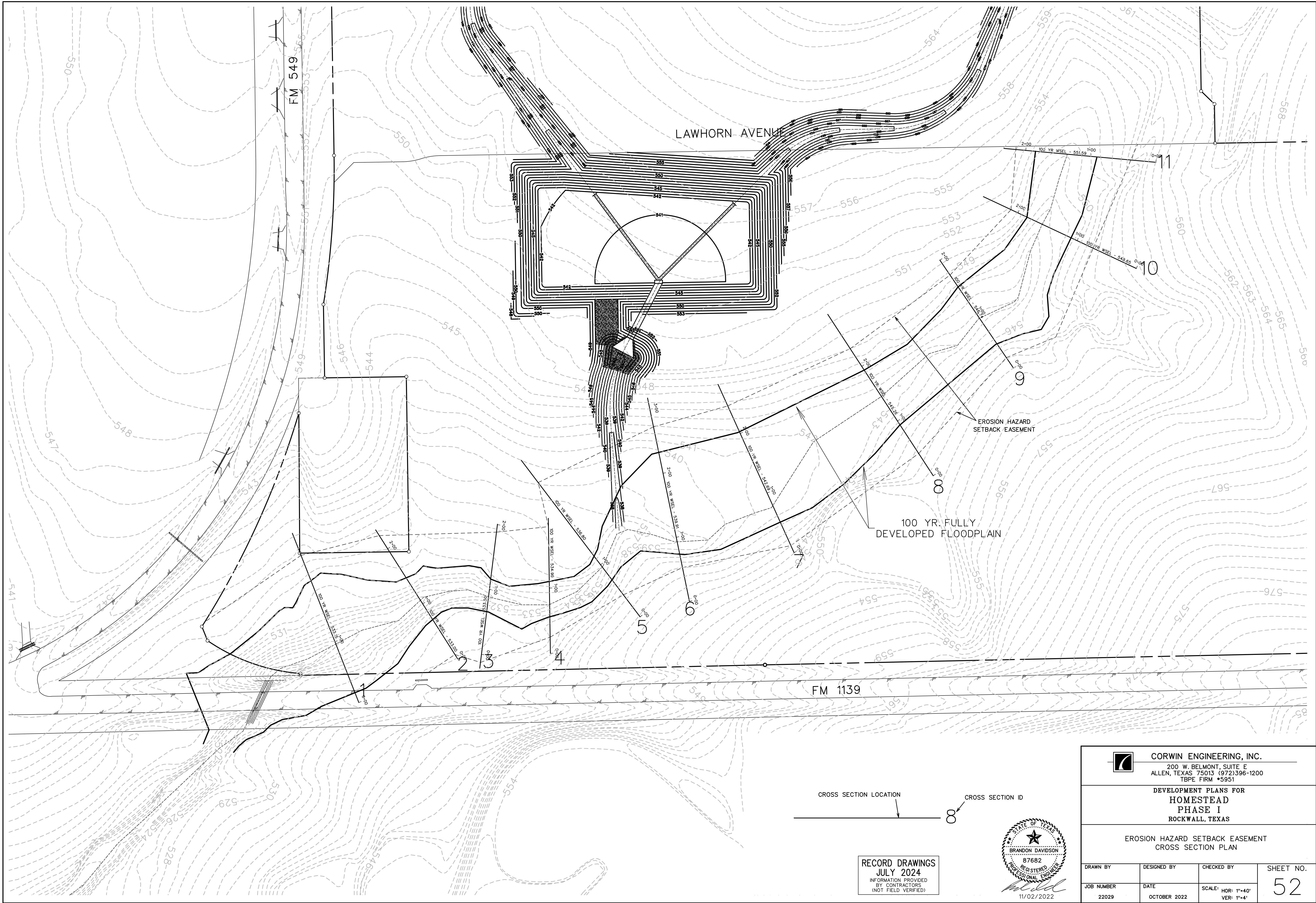
DEVELOPMENT PLANS FOR
HOMESTEAD
PHASE I
ROCKWALL, TEXAS

SIGN AND LIGHT PLAN



RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO. 51
JOB NUMBER 22029	DATE OCTOBER 2022	SCALE: 1"=100'	





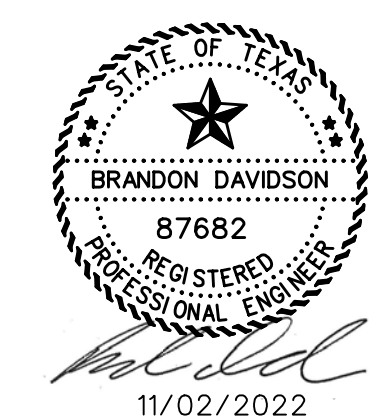
CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
HOMESTEAD
PHASE I
ROCKWALL, TEXAS

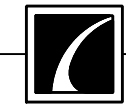
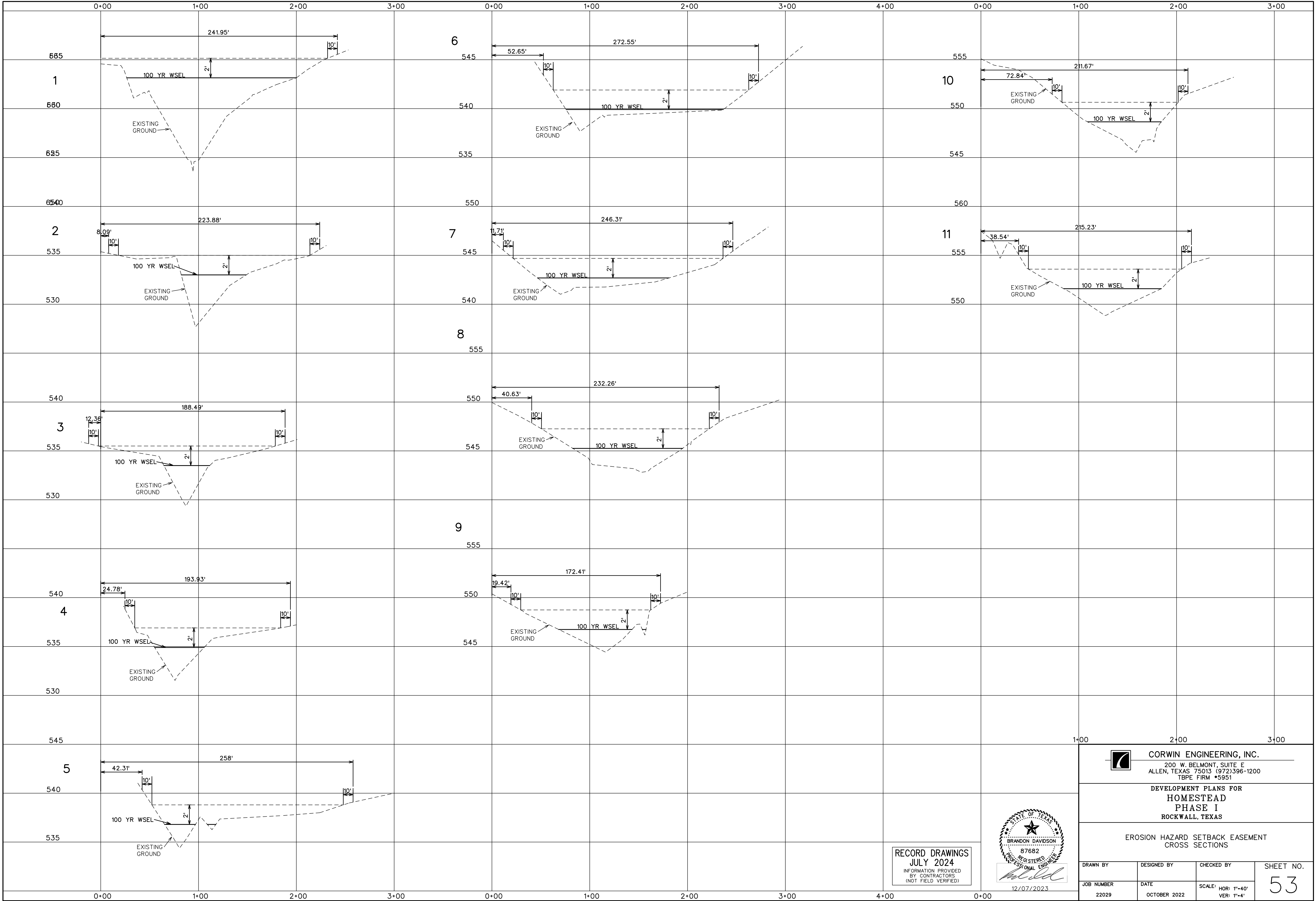
EROSION HAZARD SETBACK EASEMENT
CROSS SECTION PLAN

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO. 52
JOB NUMBER 22029	DATE OCTOBER 2022	SCALE: HOR: 1"=40' VER: 1"=4'	

RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)



CROSS SECTION LOCATION
CROSS SECTION ID



CORWIN ENGINEERING, INC.
200 W. BELMONT, SUITE E
ALLEN, TEXAS 75013 (972)396-1200
TBPE FIRM #5951

DEVELOPMENT PLANS FOR
HOMESTEAD
PHASE I
ROCKWALL, TEXAS

EROSION HAZARD SETBACK EASEMENT
CROSS SECTIONS



RECORD DRAWINGS
JULY 2024
INFORMATION PROVIDED
BY CONTRACTORS
(NOT FIELD VERIFIED)

DRAWN BY	DESIGNED BY	CHECKED BY	SHEET NO.
JOB NUMBER	DATE	SCALE: HOR: 1"=40' VER: 1"=4'	53
22029	OCTOBER 2022		