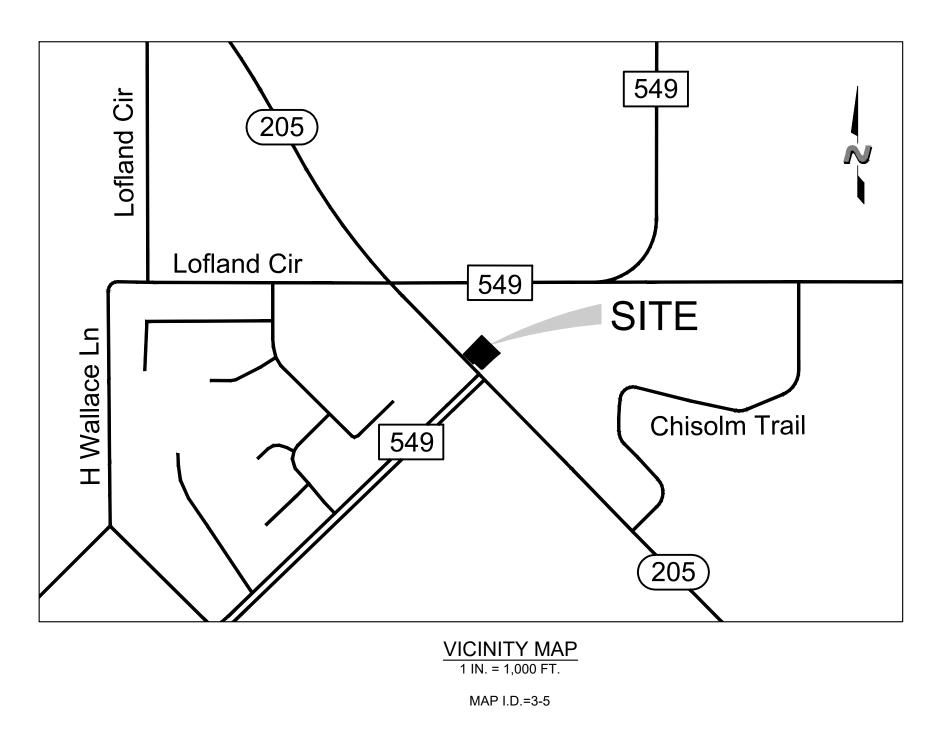
## 7-ELEVEN STORE SITE CONSTRUCTION PLAN

NWC STATE HIGHWAY 205 & F.M. 549 CREEKSIDE COMMONS LOT 1, BLOCK A CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS



PROBABLE START OF CONSTRUCTION:SEPTEMBER 2022

OWNER/DEVELOPER PRUDENT GROUP 10755 SANDHILL ROAD DALLAS, TEXAS 75238 PHONE: (214) 271-4630

**ENGINEER/APPLICANT** THE DIMENSION GROUP 10755 SANDHILL ROAD PHONE: (214) 343-9400 CONTACT: KEATON L. MAI, PE CONTACT: RODNEY McNABB

SURVEYOR TEXAS HERITAGE SURVEYING, LLC 10610 METRIC DRIVE, SUITE 124 PHONE: (214) 340-9700

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TBPE FIRM REGISTRATION #F-8396



RECORD DRAWING THESE RECORD DRAWINGS HAVE BEEN FIELD OBSERVATIONS AN BY THE CONTRACTOR. **ELEVATIONS HAVE NOT** BEEN VERIFIED. THE ORIGINAL SEALED CONSTRUCTIONS PLANS ARE ON FILE AT THE CITY

ENGINEER OF RECORD: KEATON L. MAI, P.E. THE DIMENSION GROUP, INC. TBPE FIRM F-8396 DATE: November 10, 2023

CREEKSIDE COMMONS UTILITY EXTENSION NWC STATE HIGHWAY 205 & FM 549 ROCKWALL, TEXAS

SHEET

C1.0

CITY OF ROCKWALL MONUMENTS:

GEODETIC CONTROL MONUMENTS - NORTH AMERICAN DATUM - 1983 (2011) TEXAS NORTH CENTRAL ZONE (4202).

COR-8: ALUMINUM DISK STAMPED "CITY OF ROCKWALL SURVEY MONUMENT" AT THE NORTHERLY INTERSECTION OF SILVER VIEW LANE AND DIAMOND WAY DRIVE ±1 FOOT NORTH OF CURB LINE IN CENTER OF CURVE. N: 7018063.113, E: 2609533.682 ELEVATION: 600.48'

COR-9: BRASS DISK STAMPED "CITY OF ROCKWALL SURVEY MONUMENT" ON THE SOUTH SIDE OF DISCOVERY BOULEVARD AT THE SOUTHEAST CORNER OF CURB INLET ±180 FOOT EAST INTERSECTION OF DISCOVERY/CORPORATE. N: 7020550.132, E: 2607463.893 ELEVATION: 595.63'

#### CAUTION NOTICE TO CONTRACTORS

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL 811 AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATED ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.

DALLAS, TX, 75238 CONTACT: MICHAEL HAMPTON

LANDSCAPE ARCHITECT EVERGREEN DESIGN GROUP 15455 DALLAS PARKWAY #600 ADDISON, TX 75001 PHONE: (800) 680-6630

DALLAS, TX 75243 CONTACT: GARY E. JOHNSON, RPLS

#### 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
- 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
- The City of Rockwall Engineering Departments "Standards of Design and Construction" can be found online at: <a href="http://www.rockwall.com/engr.asp">http://www.rockwall.com/engr.asp</a>
- 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.
- Prior to construction, CONTRACTOR shall have in their possession all necessary permits, plans, licenses,
- 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".
- 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.
- All site dimensions are referenced to the face of curb or edge of pavement unless otherwise noted.
- 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
- Erosion control devices as shown on the erosion control plan for the project shall be installed prior to the start of land disturbing activities.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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 10inches 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 meet. 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
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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

- 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 lager 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.
- 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 (20<sup>th</sup>) 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. Consheild 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**

P (972) 771-7746 385 S. Goliad Rockwall, Texas 75087

F (972) 771-7748

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TBPE FIRM REGISTRATION



RECORD DRAWING
THESE RECORD DRAWINGS HAVE BEEN FIELD OBSERVATIONS AND INFORMATION PROVIDED BY THE CONTRACTOR. **ELEVATIONS HAVE NOT** BEEN VERIFIED. THE ORIGINAL SEALED **CONSTRUCTIONS PLANS** ARE ON FILE AT THE CITY OF FRISCO.

ENGINEER OF RECORD: KEATON L. MAI, P.E. THE DIMENSION GROUP, INC. TBPE FIRM F-8396 DATE: November 10, 2023

1#41110

CREEKSIDE COMMONS UTILITY EXTENSIONS NWC STATE HIGHWAY 205 & FM 549 ROCKWALL, TEXAS ROCKWALL GENERAL NOTES

SHEET

C1.1

#### 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.
- 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

- 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/Devement Tyree	Minimum	Streng th 28-	Minimum (sacks /		Steel Re	einforcement
Street/Pavement Type	Thickness (inches)	Day (psi)	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"-7"	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 doweled 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

- All retaining walls, regardless of height, will be reviewed and approved by the City Engineering Department
   All retaining walls (including foundation stem walls), regardless of height, will be constructed of
- 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 DRWINGS/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

SHEET

THE DIMERING MERING

ARCHITECTURE - CIVIL ENGINEERING

10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214.343.9400 www.DimensionGroup.com

TBPE FIRM REGISTRATION #F-8396



11/10/2023

INCLUDING COPYRIGHT. THEY MAY NOT BE REPRODUCED OR USED FOR ANY PURPOSE WITHOUT THE WRITTEN CONSENT OF THE DIMENSION GROUP.

RECORD DRAWING THESE RECORD DRAWINGS HAVE BEEN PREPARED BASED ON FIELD OBSERVATIONS AND INFORMATION PROVIDED BY THE CONTRACTOR. ELEVATIONS HAVE NOT BEEN VERIFIED. THE ORIGINAL SEALED CONSTRUCTIONS PLANS ARE ON FILE AT THE CITY OF FRISCO.

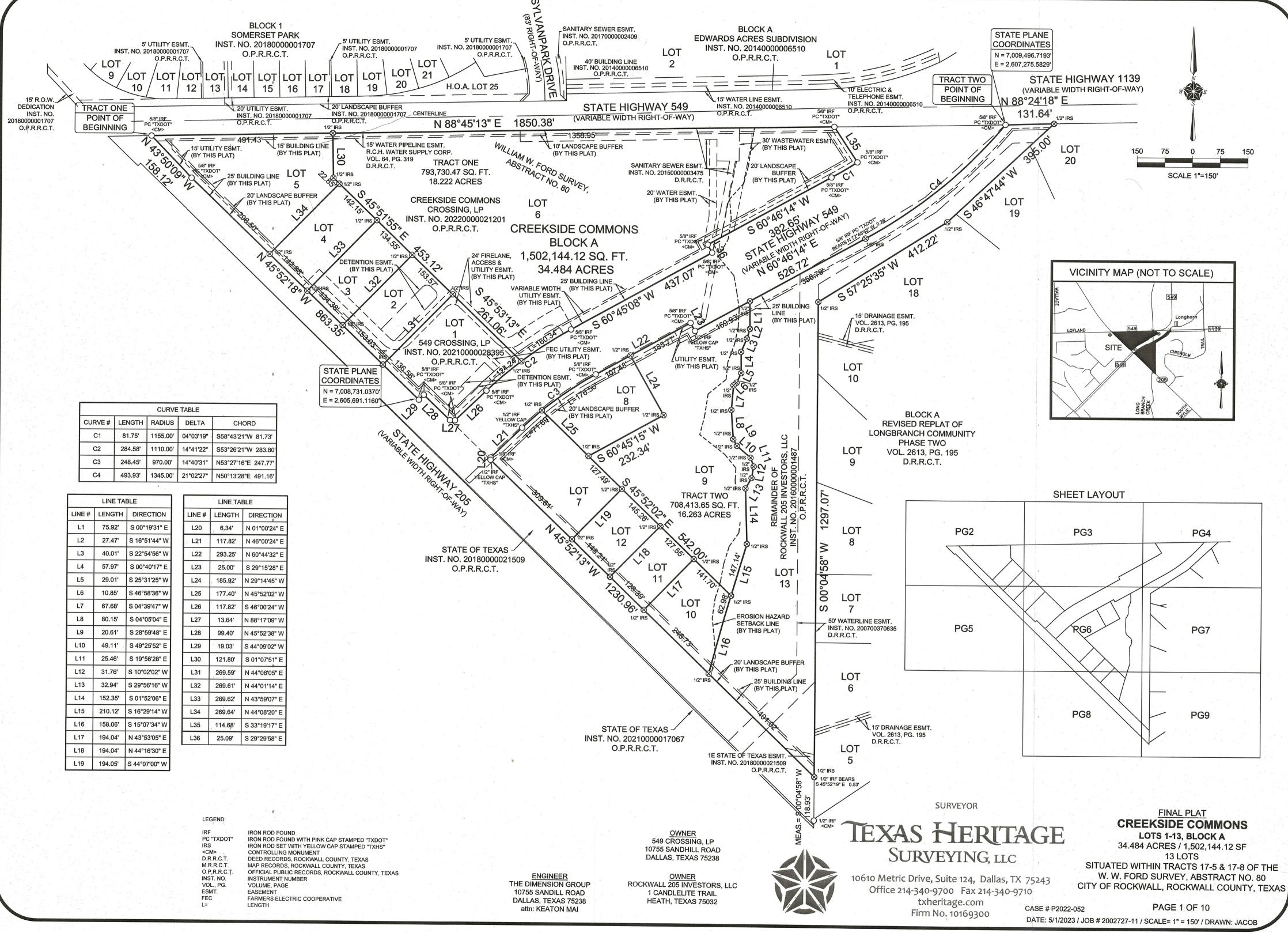
ENGINEER OF RECORD: KEATON L. MAI, P.E. THE DIMENSION GROUP, INC. TBPE FIRM F-8396 DATE: November 10, 2023

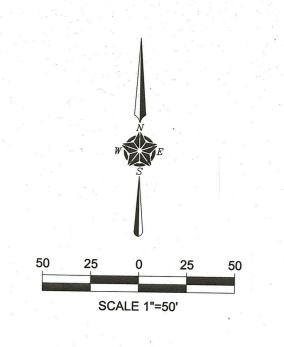
CREEKSIDE COMMONS UTILITY EXTENSIONS
NWC STATE HIGHWAY 205 & FM 549
ROCKWALL, TEXAS

SHEET

C1.2







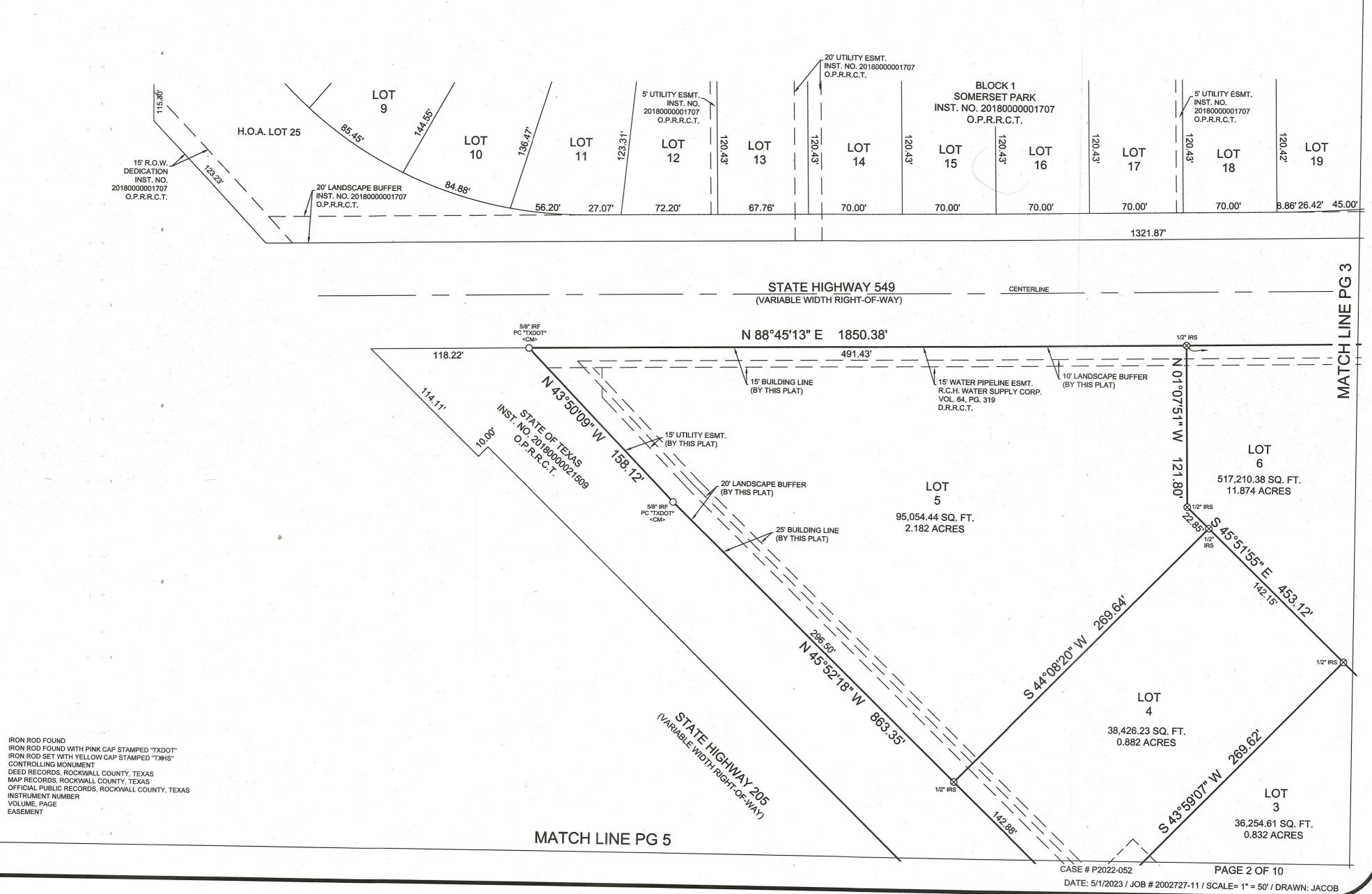
LEGEND:

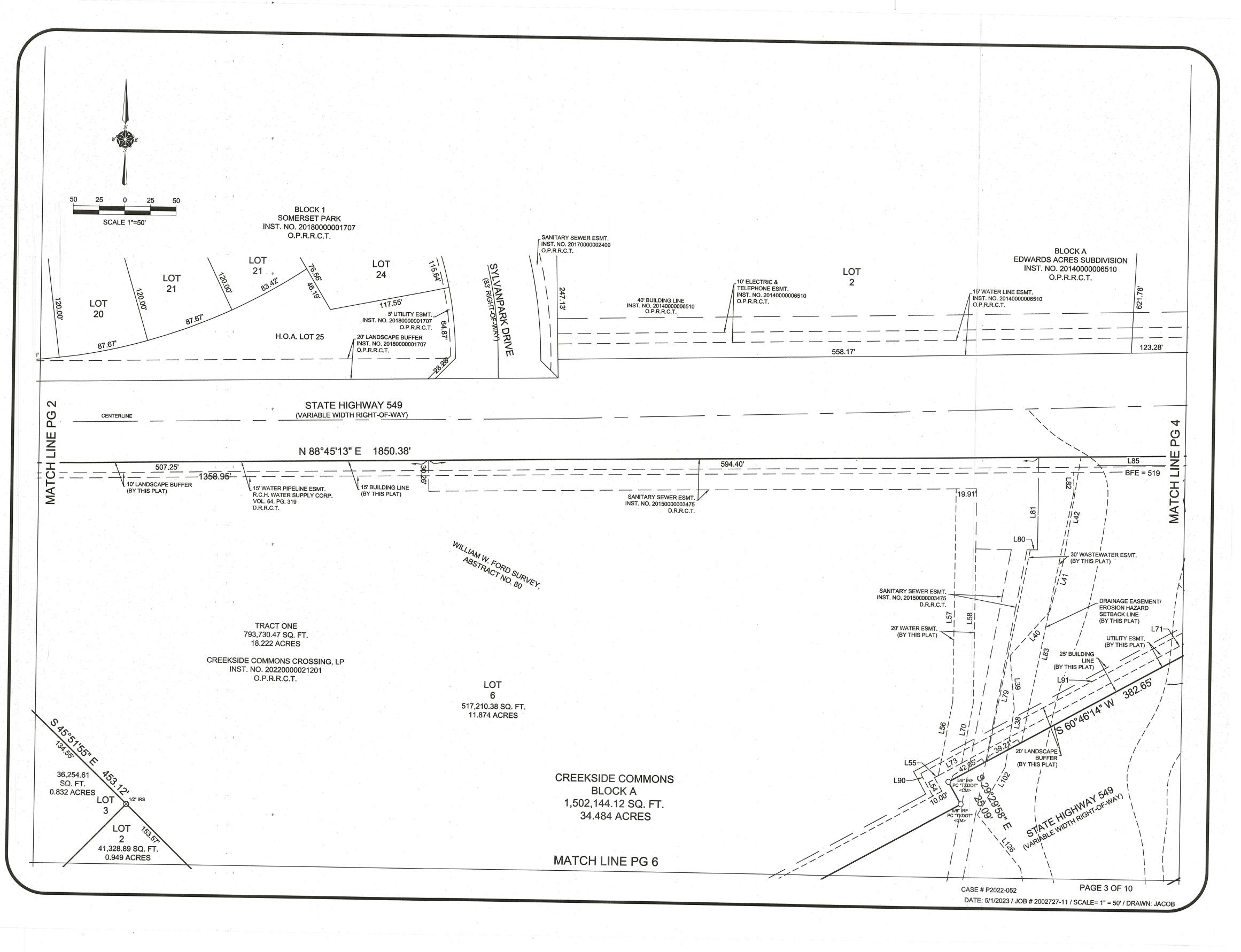
PC "TXDOT" IRS <CM> D.R.R.C.T. M.R.R.C.T. O.P.R.R.C.T.

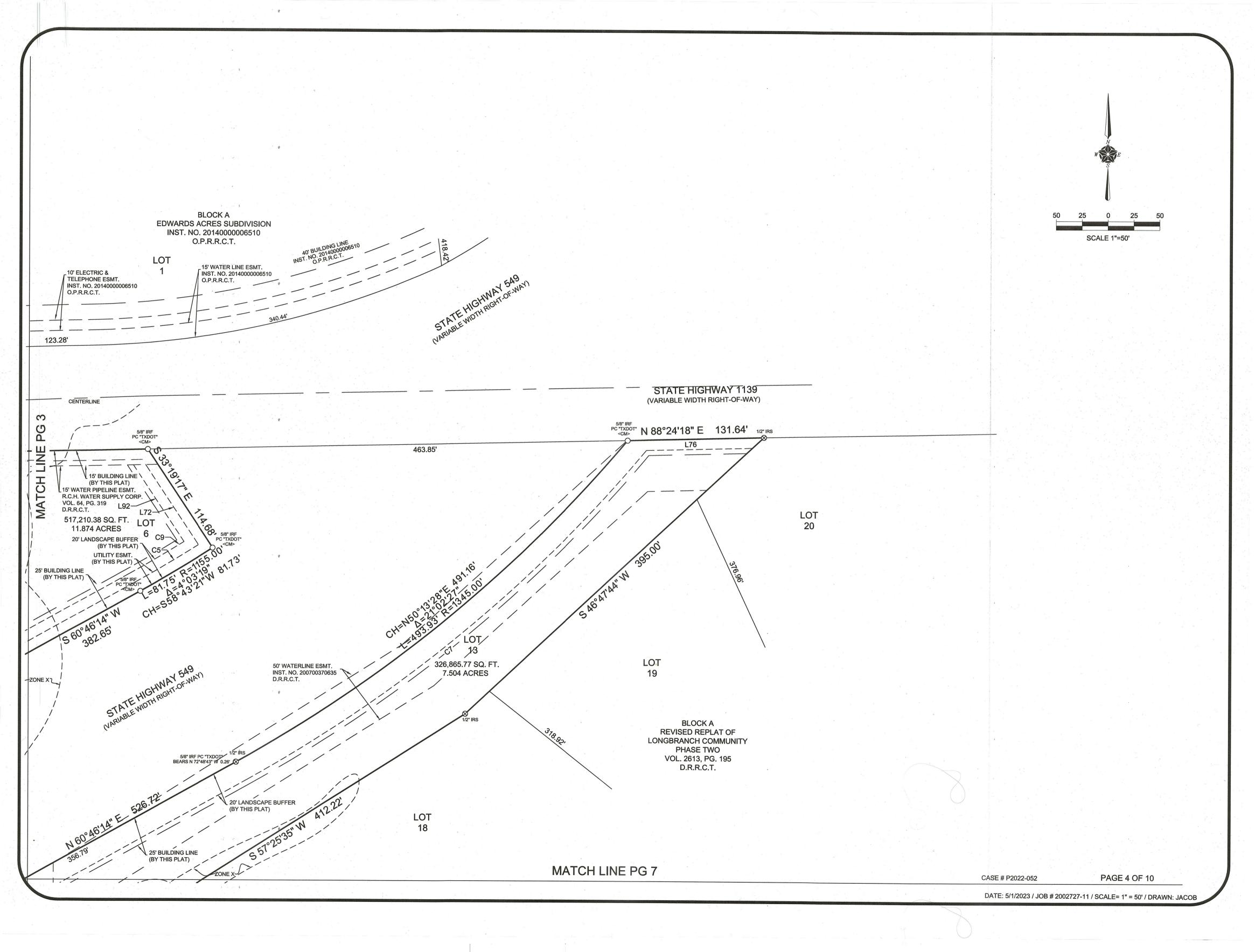
INST. NO. VOL., PG. ESMT.

IRON ROD FOUND

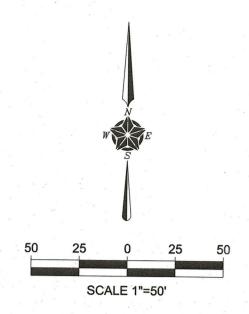
VOLUME, PAGE EASEMENT



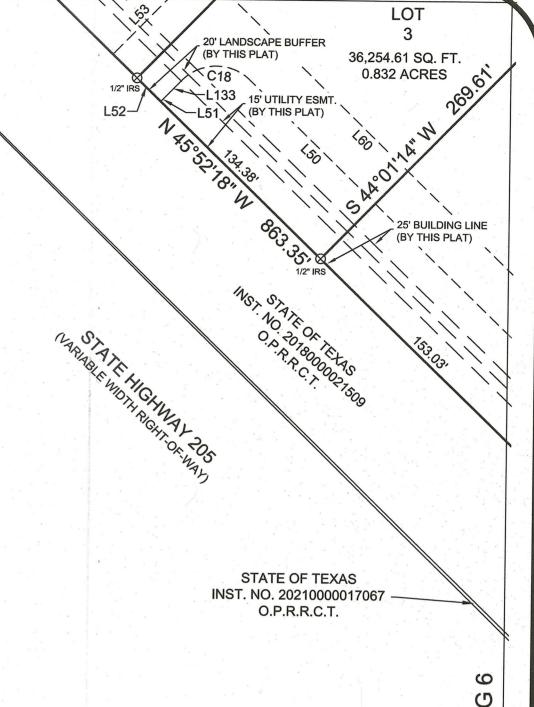


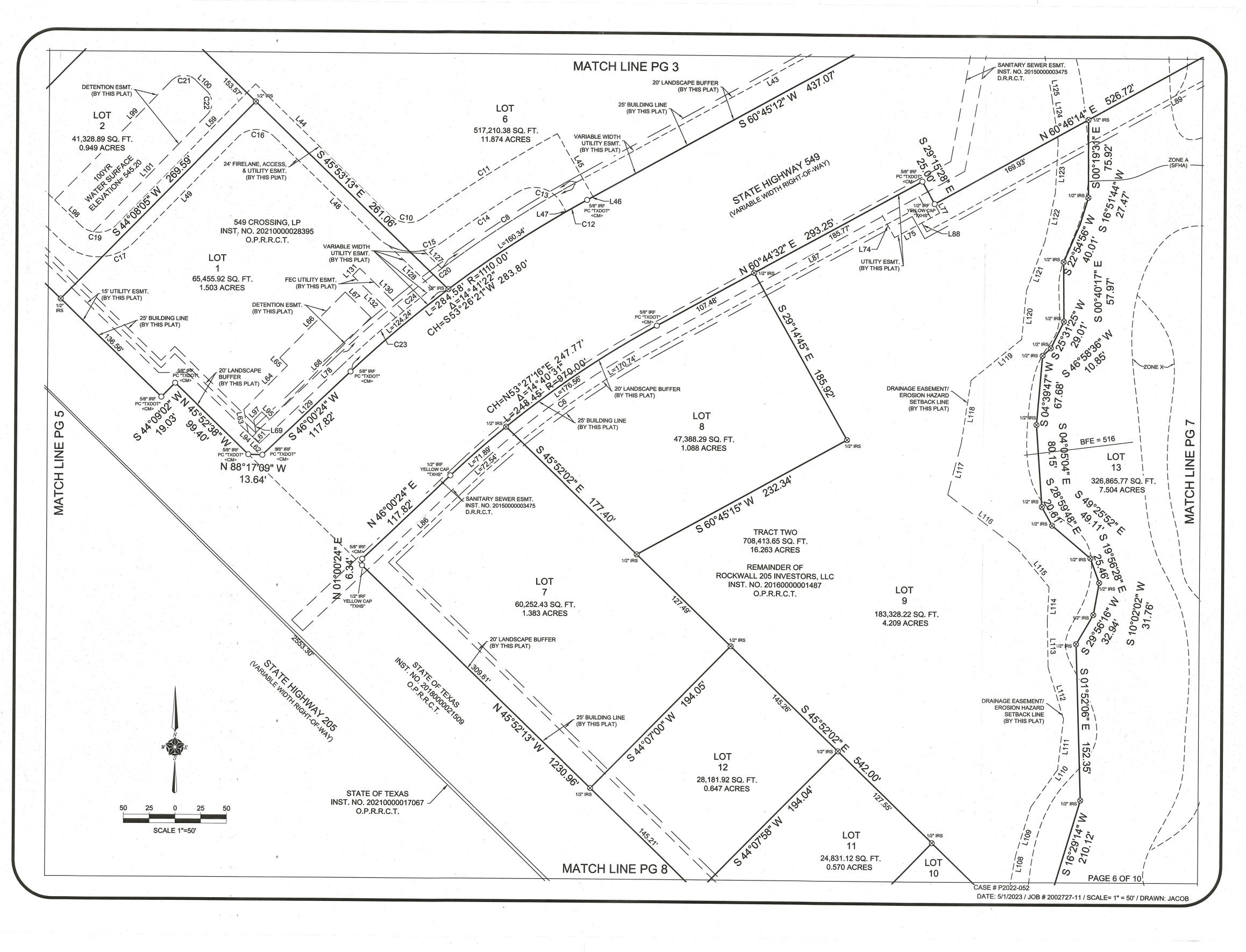


## MATCH LINE PG 2



	EAS	SEMENT	CURVE TA	ABLE
CURVE#	LENGTH	RADIUS	DELTA	CHORD
C5	71.03'	1133.58'	3°35'25"	N58° 58' 31"E 71.02'
C6	243.28'	935.72'	14°53'48"	N53° 27' 17"E 242.60
C7	505.55'	1361.76'	21°16'15"	N50° 08' 06"E 502.65
C8	156.06'	1129.92'	7°54'49"	N56° 49' 37"E 155.94
C9	60.32'	1123.58'	3°04'33"	N59° 13' 57"E 60.31'
C10	35.08'	25.00'	80°24'27"	S86° 04' 08"E 32.28'
C11	153.50'	1217.83'	7°13'18"	N57° 20' 17"E 153.39'
C12	23.41'	1110.00'	1°12'29"	S60° 10' 48"W 23.41'
C13	48.20'	30.00'	92°03'14"	N75° 56' 55"W 43.18'
C14	88.11'	1187.83'	4°15'00"	S55° 53' 57"W 88.09'
C15	68.78'	49.00'	80°25'32"	S86° 00' 47"E 63.27'
C16	39.27'	25.00'	90°00'00"	S89° 08' 05"W 35.36'
C17	76.97'	49.00'	90°00'04"	S89° 08' 07"W 69.30'
C18	39.27'	25.00'	90°00'08"	S89° 08' 12"W 35.36'
C19	39.27'	25.00'	90°00'07"	N89° 07' 55"E 35.35'
C20	289.70'	1130.00'	14°41'20"	N53° 26' 20"E 288.91'
C21	25.92'	16.50'	90°00'00"	N88° 44' 15"E 23.34'
C22	25.92'	16.50'	90°00'00"	S1° 15' 34"E 23.33'
C23	113.79'	1106.94'	5°53'23"	N48° 57' 05"E 113.74'
C24	35.80'	1106.94'	1°51'11"	S50° 58' 11"W 35.80'





#### MATCH LINE PG 4

EASE	EMENT LI	NE TABLE
LINE#	LENGTH	DIRECTION
L38	58.09'	S7°53'35"W
L39	52.52'	S5°12'37"E
L40	57.86'	S41°00'19"W
L41	50.06'	S14°21'43"W
L42	104.55'	S8°38'06"W
L43	427.07'	N60°45'08"E
L44	182.35'	S45°51'55"E
L45	70.46'	S29°55'18"E
L46	6.59'	S60°50'37"W
L47	9.73'	N29°55'18"W
L48	139.25	N45°51'55"W
L49	143.09'	S44°08'02"W
L50	208.04'	N45°51'50"W
L51	4.00'	S44°06'49"W
L52	35.00'	N45°53'11"W
L53	64.54'	N44°06'49"E
L54	15.09'	N29°13'46"W
L55	4.21'	N60°46'14"E
L56	74.46'	N10°06'25"E
L57	208.50'	N0°05'08"E

LOT 18

BLOCK A REVISED REPLAT OF LONGBRANCH COMMUNITY PHASE TWO VOL. 2613, PG. 195 D.R.R.C.T.

15' DRAINAGE ESMT. VOL. 2613, PG. 195 D.R.R.C.T.

LOT 10

LOT

LOT 8

350.00'

50' WATERLINE ESMT. INST. NO. 200700370635 D.R.R.C.T.

9

PG

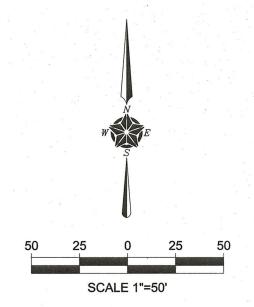
MATCH LINE

LOT 13

326,865.77 SQ. FT. 7.504 ACRES

EASE	EMENT LI	NE TABLE
LINE#	LENGTH	DIRECTION
L58	151.54'	N0°05'08"E
L59	192.10'	N44°05'45"E
L60	268.07'	S45°52'02"E
L61	17.51'	S45°59'58"W
L62	9.30'	N45°52'38"W
L63	22.87'	N10°59'40"W
L64	60.33'	N44°05'55"E
L65	10.50'	N45°53'11"W
L66	90.21'	N44°07'24"E
L67	35.00'	S45°53'11"E
L68	139.95'	S44°06'49"W
L69	12.97'	S10°59'31"E
L70	59.83'	N10°06'25"E
L71	362.47'	N60°46'14"E
L72	93.20'	N33°19'17"W
L73	25.86'	N60°46'14"E
L74	34.98'	S29°15'28"E
L75	49.99'	N60°46'14"E
L76	102.56'	N88°24'18"E
L77	10.00'	N29°13'33"W

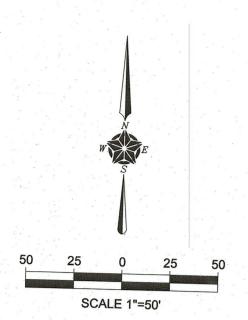
	EASE	EMENT LI	NE TABLE
Secure Constitution	LINE#	LENGTH	DIRECTION
	L78	107.70'	N 46°00'24" E
the section of the section of	L79	211.93'	\$10°51'32"W
	L80	6.95'	N89°50'07"E
	L81	57.32'	N0°03'08"E
	L82	19.37'	S1°14'41"E
	L83	250.76'	S10°51'32"W
	L84	7.65'	N45°52'13"W
	L85	216.36'	N88°45'13"E
	L86	101.78'	N46°00'24"E
STATISTICAL DISTRIBUTION OF THE PARTY OF THE	L87	273.27'	N60°44'32"E
	L88	24.99'	S29°15'28"E
	L89	546.71'	N60°46'14"E
	L90	25.09'	N29°13'46"W
	L91	402.53'	N60°46'14"E
	L92	89.33'	N33°19'17"W
	L93	1195.44'	N45°52'13"W
	L94	5.74'	N45°52'38"W
	L95	10.50'	N45°53'11"W
	L96	20.94'	S44°07'47"W
	L97	11.21'	Ś44°06'49"W



EASE	EMENT LI	NE TABLE
LINE#	LENGTH <sup>-</sup>	DIRECTION
L98	34.53'	N45°52'02"W
L99	162.36'	N43°47'26"E
L100	15.00'	S46°15'34"E
L101	158.64'	S43°43'24"W
L102	53.86'	S29°22'22"W
L103	52.29'	S13°32'54"W
L104	53.58'	S3°57'56"E
L105	53.41'	S5°53'02"E
L106	51.52'	S7°48'14"W
L107	50.33'	S16°43'19"W
L108	48.99'	S10°05'04"W
L109	49.98'	S16°46'36"W
L110	44.78'	S35°07'49"W
L111	49.90'	S6°11'07"W
L112	52.17'	S16°56'45"E
L113	45.99'	S1°24'22"E
L114	32.33'	S2°47'42"W
L115	48.32'	S39°25'12"E
L116	85.80'	S52°19'37"E
L117	51.84'	S14°13'56"W

EASE	EMENT LI	NE TABLE
LINE#	LENGTH	DIRECTION
L118	61.86'	S8°26'16"W
L119	63.29'	S50°19'42"W
L120	47.58'	S5°11'50"W
L121	51.87'	S19°51'38"W
L122	47.73'	S11°41'54"W
L123	50.26'	S2°46'22"W
L124	42.15'	S8°20'29"E
L125	50.04'	S10°07'11"E
L126	67.17'	S39°36'35"E
L127	25.11'	N45°53'13"W
L128	59.25'	N45°54'13"W
L129	112.34'	N46°00'24"E
L130	59.56'	N45°53'11"W
L131	10.00'	S44°06'49"W
L132	58.55'	S45°53'11"E
L133	11.54'	S44°08'51"W

MATCH LINE PG 9



#### GENERAL NOTES:

- 1) It shall be the policy of the City of Rockwall to withhold issuing building permits until all streets, water, sewer and storm drainage systems have been accepted by the City. The approval of a plat by the City does not constitute any representation, assurance or guarantee that any building within such plat shall be approved, authorized or permit therefore issued, nor shall such approval constitute any representation, assurance or guarantee by the City of the adequacy and availability for water for personal use and fire protection within such plat, as required under Ordinance 83-54.
- 2) Bearings are based upon the Texas State Plane Coordinate System, Texas North Central Zone, (4202) North American Datum of 1983, (2011).
- 3) The purpose of this plat is to create 13 lots.
- 4) Benchmarks:

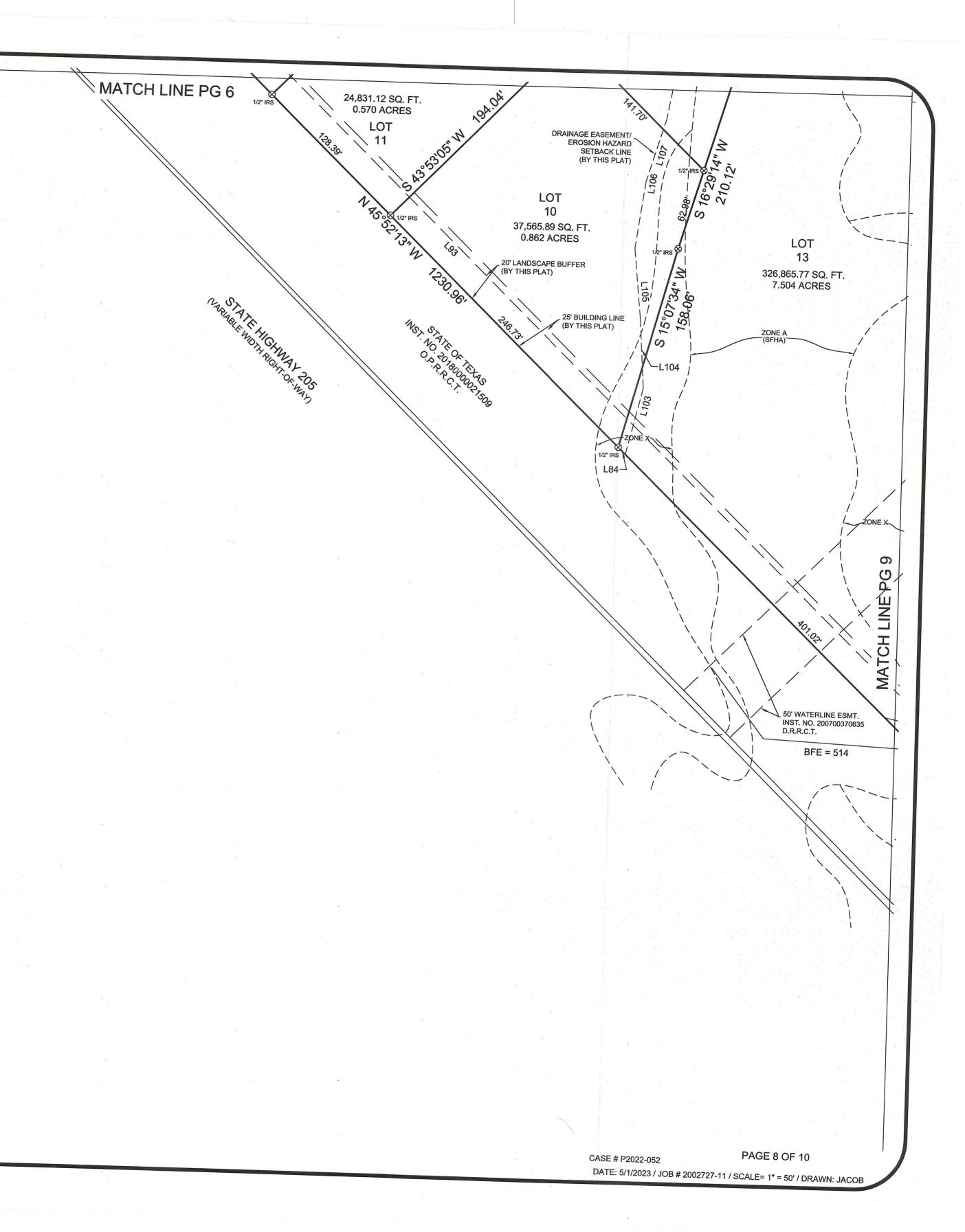
COR-8: Aluminum disk stamped "City of Rockwall Survey Monument" at the northerly intersection of Silver View Lane and Diamond Way Drive ± 1 foot north of curb line in center of curve.

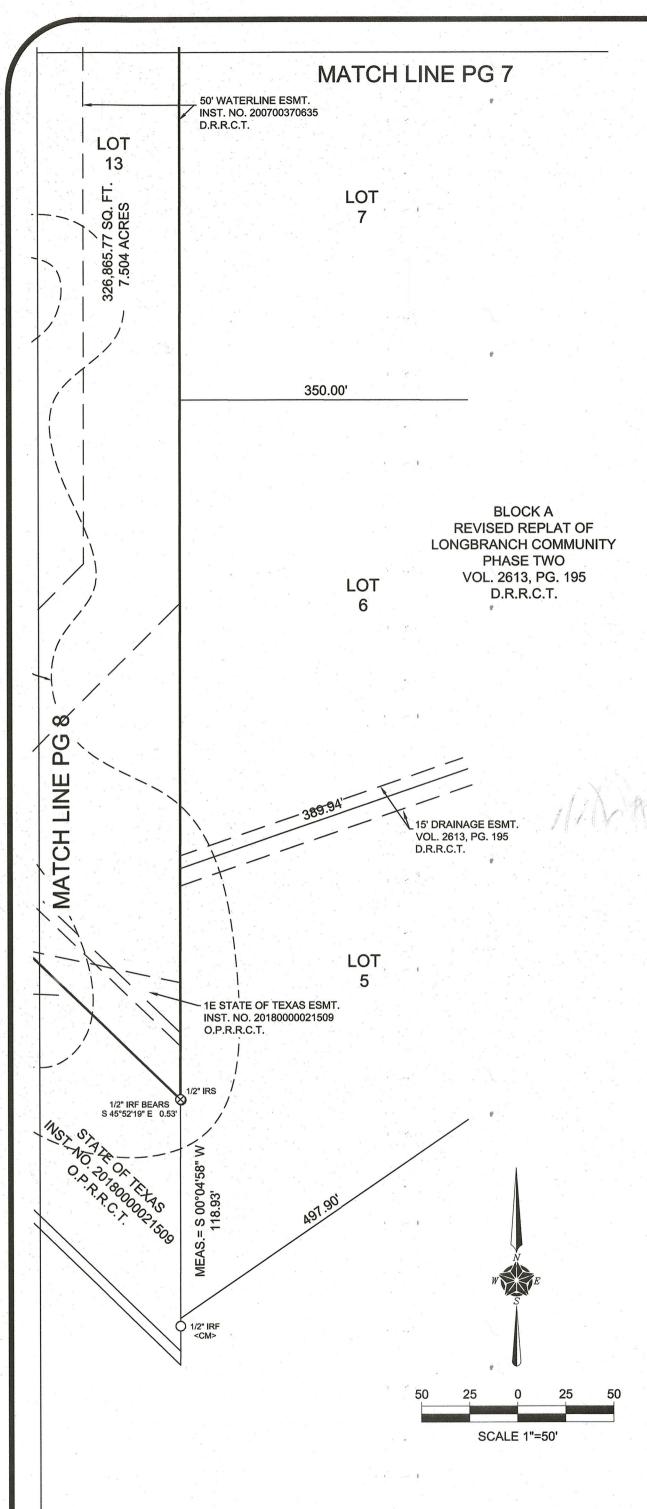
N= 7,018,063.113; E= 2,609533.682; Elevation= 600.48'

COR-9: Brass disk stamped "City of Rockwall Survey Monument" on the south side of Discovery Boulevard at the southeaster corner of curb inlet ± 180 feet east intersection of Discovery/Corporate.

N= 7,020,550.132; E= 2,607,463.893; Elevation= 595.63'

- 5) Zoning: Commercial (C) District
- 6) Property owner shall be responsible for maintenance, repairs, and reconstruction of drainage and detention easements.
- 7) Base Flood Elevation information per FEMA GIS, FIRM Panel #48397C0045L.





**OWNER'S CERTIFICATE:** 

STATE OF TEXAS **COUNTY OF ROCKWALL** 

TRACT ONE

WHEREAS, Creekside Commons Crossing, LP and 549 CROSSING, LP are the owners of that tract of land situated in the William W. Ford Survey, Abstract No. 80, City of Rockwall, Rockwall County, Texas, being that same tract of land described in Special Warranty Deed to Creekside Commons Crossing, LP recorded in Instrument Number 20220000021201 of the Official Public Records of Rockwall County, Texas, together with that tract of land described in Special Warranty Deed to 549 CROSSING, LP recorded in Instrument Number 20210000028395 of the Official Public Records of Rockwall County, Texas, and being more particularly described by metes and bounds as follows:

Beginning at a 5/8 inch iron rod with pink plastic cap stamped "TXDOT" found for corner, said corner being in the northeast corner of said State of Texas Parcel 1 Part 1 tract, said corner also being in the south right-of-way line of existing State Highway 549 (variable width right-of-way);

Thence North 88 degrees 45 minutes 13 seconds East, along the south right-of-way line of said existing State Highway 549, a distance of 1,850.38 feet to a 5/8 inch iron rod with pink plastic cap stamped "TXDOT" found for corner, said corner being the northwest corner of said State of Texas Parcel 1 Part 2 tract, said corner also being in a northwest right-of-way line of new State Highway 549 (variable width right-of-way);

Thence, along the northwest line of said State of Texas Parcel 1 Part 2 tract and along the northwest line of said new State Highway 549, the following courses and distances:

Thence South 33 degrees 19 minutes 17 seconds East, a distance of 114.68 feet to a 5/8 inch iron rod with pink plastic cap stamped "TXDOT" found for corner, said corner being the beginning of a non-tangent curve to the right, having a delta of 04 degrees 03 minutes 19 seconds, a radius of 1,155.00 feet and a chord bearing and distance of South 58 degrees 43 minutes 21 seconds West, 81.73 feet:

Thence, in a southwesterly direction, along said curve to the right, an arc length of 81.75 feet to a 5/8 inch iron rod with pink plastic cap stamped "TXDOT" found for corner:

Thence South 60 degrees 46 minutes 14 seconds West, a distance of 382.65 feet to a 5/8 inch iron rod with pink plastic cap stamped "TXDOT" found for corner;

Thence South 29 degrees 29 minutes 58 seconds East, a distance of 25.09 feet to a 5/8 inch iron rod with pink plastic cap stamped "TXDOT" found for corner;

Thence South 60 degrees 45 minutes 08 seconds West, a distance of 437.07 feet to a 5/8 inch iron rod with pink plastic cap stamped "TXDOT" found for corner, said corner being the beginning of a non-tangent curve to the left, having a delta of 14 degrees 41 minutes 22 seconds, a radius of 1,110.00 feet and a chord bearing and distance of South 53 degrees 26 minutes 21 seconds West, 283.80 feet;

Thence, in a southwesterly direction, along said curve to the left, an arc length of 284.58 feet to a 5/8 inch iron rod with pink plastic cap stamped "TXDOT" found for corner:

Thence South 46 degrees 00 minutes 24 seconds West, a distance of 117.82 feet to a 5/8 inch iron rod with pink plastic cap stamped "TXDOT" found for corner;

Thence North 88 degrees 17 minutes 09 seconds West, a distance of 13.64 feet to a 5/8 inch iron rod with pink plastic cap stamped "TXDOT" found for corner, said corner being in a northeast line of said State of Texas Parcel 1 Part 1 tract;

Thence North 45 degrees 52 minutes 38 seconds West, along a northeast line of said State of Texas Parcel 1 Part 1 tract, a distance of 99.40 feet to a 5/8 inch iron rod with pink plastic cap stamped "TXDOT" found for corner;

Thence South 44 degrees 09 minutes 02 seconds West, along a northeast line of said State of Texas Parcel 1 Part 1 tract, a distance of 19.03 feet to a 5/8 inch iron rod with pink plastic cap stamped "TXDOT" found for corner;

Thence North 45 degrees 52 minutes 18 seconds West, along a northeast line of said State of Texas Parcel 1 Part 1 tract, a distance of 863.35 feet to a 5/8 inch iron rod with pink plastic cap stamped "TXDOT" found for corner;

Thence North 45 degrees 50 minutes 09 seconds West, along a northeast line of said State of Texas Parcel 1 Part 1 tract, a distance of 158.12 feet back to the POINT OF BEGINNING and containing 793,730.47 square feet or 18.222 acres of land.

#### TRACT TWO

WHEREAS, Rockwall 205 Investors, LLC is the owner of that tract of land situated in the William W. Ford Survey, Abstract No. 80, Rockwall County, Texas, being that same tract of land described in General Warranty Deed to Rockwall 205 Investors, LLC recorded in Instrument Number 20160000001487 of the Official Public Records of Rockwall County, Texas, less that tract of land described as Parcel 1 Part 1 and Parcel 1 Part 2 in deed to the State of Texas recorded in Instrument Number 20180000021509 of the Official Public Records of Rockwall County, Texas, and the remaining being more particularly described by metes and bounds as follows:

Beginning at a 5/8 inch iron rod with pink plastic cap stamped "TXDOT" found for corner, said corner being in the northeast corner of said State of Texas Parcel 1 Part 2 tract, said corner also being in the south right-of-way line of State Highway 1139 (variable width right-of-way);

Thence North 88 degrees 24 minutes 18 seconds East, along the south right-of-way line of State Highway 1139 (variable width right-of-way), a distance of 131.64 feet to a 1/2 inch iron rod with yellow plastic cap stamped "TXHS" set for corner, said corner being in the north line of Lot 20, Block A of Revised Replat of Longbranch Community Phase Two, an addition to the City of Rockwall, Rockwall County, Texas according to the plat thereof recorded in Volume 2613, Page 195 of the Deed Records of Rockwall County, Texas;

Thence South 46 degrees 47 minutes 44 seconds West, along the northwest line of Lots 20, 19 and 18, Block A of said Revised Replat of Longbranch Community Phase Two, a distance of 395.00 feet to a 1/2 inch iron rod with yellow plastic cap stamped "TXHS" set for corner, said corner being in a northwest line of said Lot 18;

Thence South 57 degrees 25 minutes 35 seconds West, along a northwest line of said Lot 18, a distance of 412.22 feet to a 1/2 inch iron rod with yellow plastic cap stamped "TXHS" set for corner, said corner being in the west line of said Lot 18;

Thence South 00 degrees 04 minutes 58 seconds West, along a west line of Lots 18, 10, 9, 8, 7, 6, and 5 of Block A of said Revised Replat of Longbranch Community Phase Two, a distance of 1,297.07 feet to a 1/2 inch iron rod with yellow plastic cap stamped "TXHS" set for corner, from which lies a 1/2 inch iron rod found which bears South 45 degrees 52 minutes 19 seconds East, 0.53 feet;

Thence North 45 degrees 52 minutes 13 seconds West, along the northeast line of said State of Texas Parcel 1 Part 1 tract, a distance of 1,230.96 feet to a 1/2 inch iron rod with yellow plastic cap stamped "TXHS" found for corner;

Thence North 01 degrees 00 minutes 24 seconds East, along a northeast line of said State of Texas Parcel 1 Part 1 tract, a distance of 6.34 feet to a 5/8 inch iron rod found for corner;

Thence, along the southeastern line of said State of Texas Parcel 1 Part 2 tract and along the southeast line of said new State Highway 549, the following courses and distances:

Thence North 46 degrees 00 minutes 24 seconds East, a distance of 117.82 feet to a 1/2 inch iron rod with yellow plastic cap stamped "TXHS" found for corner, said corner being the beginning of a non-tangent curve to the right, having a delta of 14 degrees 40 minutes 31 seconds, a radius of 970.00 feet and a chord bearing and distance of North 53 degrees 27 minutes 16 seconds East, 247.77 feet;

Thence, in a northeasterly direction, an arc length of 248.45 feet to a 5/8 inch iron rod with pink plastic cap stamped "TXDOT" found for corner;

Thence North 60 degrees 44 minutes 32 seconds East, a distance of 293.25 feet to a 5/8 inch iron rod with pink plastic cap stamped "TXDOT" found for corner;

Thence South 29 degrees 15 minutes 28 seconds East, a distance of 25.00 feet to a 1/2 inch iron rod with yellow plastic cap stamped "TXHS" found for corner;

Thence North 60 degrees 46 minutes 14 seconds East, a distance of 526.72 feet to a 1/2 inch iron rod with yellow plastic cap stamped "TXHS" set for corner, from which lies a 5/8 inch iron rod with pink plastic cap stamped "TXDOT" found which bears North 72 degrees 48 minutes 43 seconds West, 0.26 feet, said corner being the beginning of a non-tangent curve to the left, having a delta of 21 degrees 02 minutes 27 seconds, a radius of 1,345.00 feet and a chord bearing and distance of North 50 degrees 13 minutes 28 seconds East, 491.16 feet:

Thence, in a northeasterly direction, along the southeast line of said State of Texas Parcel 1 Part 2 tract, along said curve to the left, an arc length of 493.93 feet back to the POINT OF BEGINNING and containing 708,413.65 square feet or 16.263 acres of land.

**SURVEYOR** 

## TEXAS HERITAGE SURVEYING, LLC

10610 Metric Drive, Suite 124, Dallas, TX 75243 Office 214-340-9700 Fax 214-340-9710

Firm No. 10169300

CASE # P2022-052

txheritage.com

13 LOTS SITUATED WITHIN TRACTS 17-5 & 17-8 OF THE W. W. FORD SURVEY, ABSTRACT NO. 80

PAGE 9 OF 10

CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

FINAL PLAT

**CREEKSIDE COMMONS ADDITION** 

LOTS 1-13, BLOCK A 34.484 ACRES / 1,502,144.12 SF

DATE: 5/1/2023 / JOB # 2002727-11 / SCALE= 1" = 50' / DRAWN: JACOB

#### **OWNER'S DEDICATION:**

NOW THEREFORE, KNOW ALL MEN BY THESE PRESENTS:

STATE OF TEXAS COUNTY OF ROCKWALL

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

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

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

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

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

Rockwall 205 Investors, LLC

Justin Webb

Manager

STATE OF TEXAS COUNTY OF ROCKWALL

BEFORE ME, the undersigned authority, on this day personally appeared Justin Webb, a Texas limited liability company, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and considerations therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this

549 CROSSING, LP

Jassem Setayesh President/CEO

STATE OF TEXAS **COUNTY OF DALLAS** 

BEFORE ME, the undersigned authority, on this day personally appeared Jassem Setayesh, a Texas limited liability company, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and considerations therein stated.

Filed and Recorded

Official Public Records

05/31/2023 03:42:43 PM

Jennifer Fogg, County Clerk Rockwall County, Texas

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this

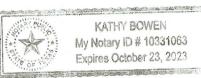
Creekside Commons Crossing, LP

Jassem Setavesh President/CEO

STATE OF TEXAS COUNTY OF DALLAS

BEFORE ME, the undersigned authority, on this day personally appeared Jassem Setayesh, a Texas limited liability company, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and considerations therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this



#### **SURVEYORS CERTIFICATE:**

I, Gary E. Johnson, do hereby certify that I prepared this plat from an actual and accurate survey of the land, and that the corner monuments shown thereon were properly placed under my personal supervision.

Gary E. Jóhnson, R.P.L.S. No. 5299

Approved:

BARY E. JOHNSON

Planning and Zoning Commission, Chairman

0.2023

I hereby certify that the above and foregoing plat of an addition to the City of Rockwall, Texas, was approved by the City Council of the City of Rockwall on the 1 day of November, 2023.

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

City Engineer

**SURVEYOR** 

TEXAS HERITAGE SURVEYING, LLC

10610 Metric Drive, Suite 124, Dallas, TX 75243 Office 214-340-9700 Fax 214-340-9710

txheritage.com

13 LOTS

SITUATED WITHIN TRACTS 17-5 & 17-8 OF THE W. W. FORD SURVEY, ABSTRACT NO. 80 CITY OF ROCKWALL, ROCKWALL COUNTY, TEXAS

FINAL PLAT **CREEKSIDE COMMONS** 

LOTS 1-13, BLOCK A 34.484 ACRES / 1,502,144.12 SF

Firm No. 10169300

THE DIMENSION GROUP 10755 SANDILL ROAD DALLAS, TEXAS 75238 attn: KEATON MAI

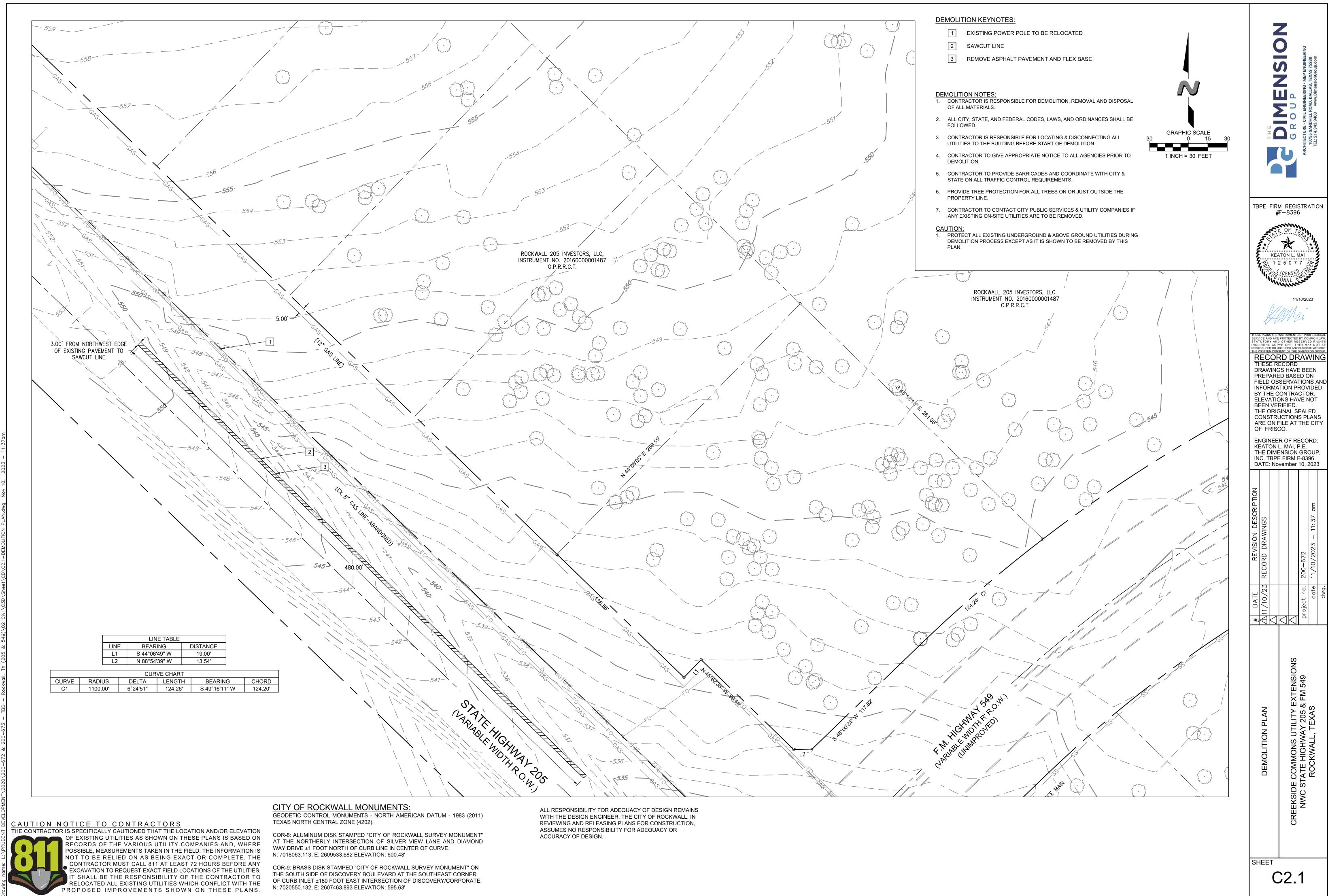
ROCKWALL 205 INVESTORS, LLC 1 CANDLELITE TRAIL HEATH, TEXAS 75032

OWNER 549 CROSSING, LP

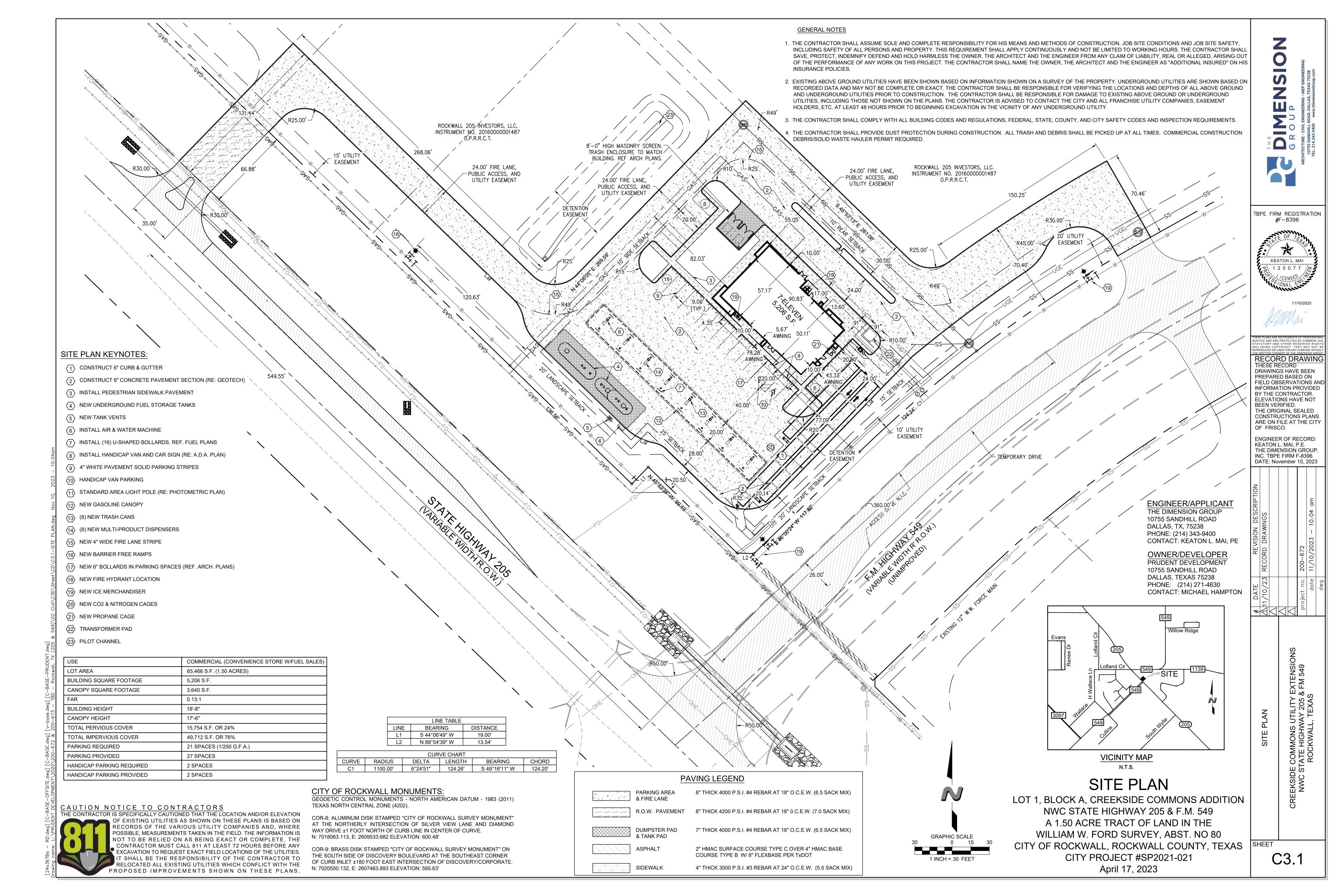
10755 SANDHILL ROAD

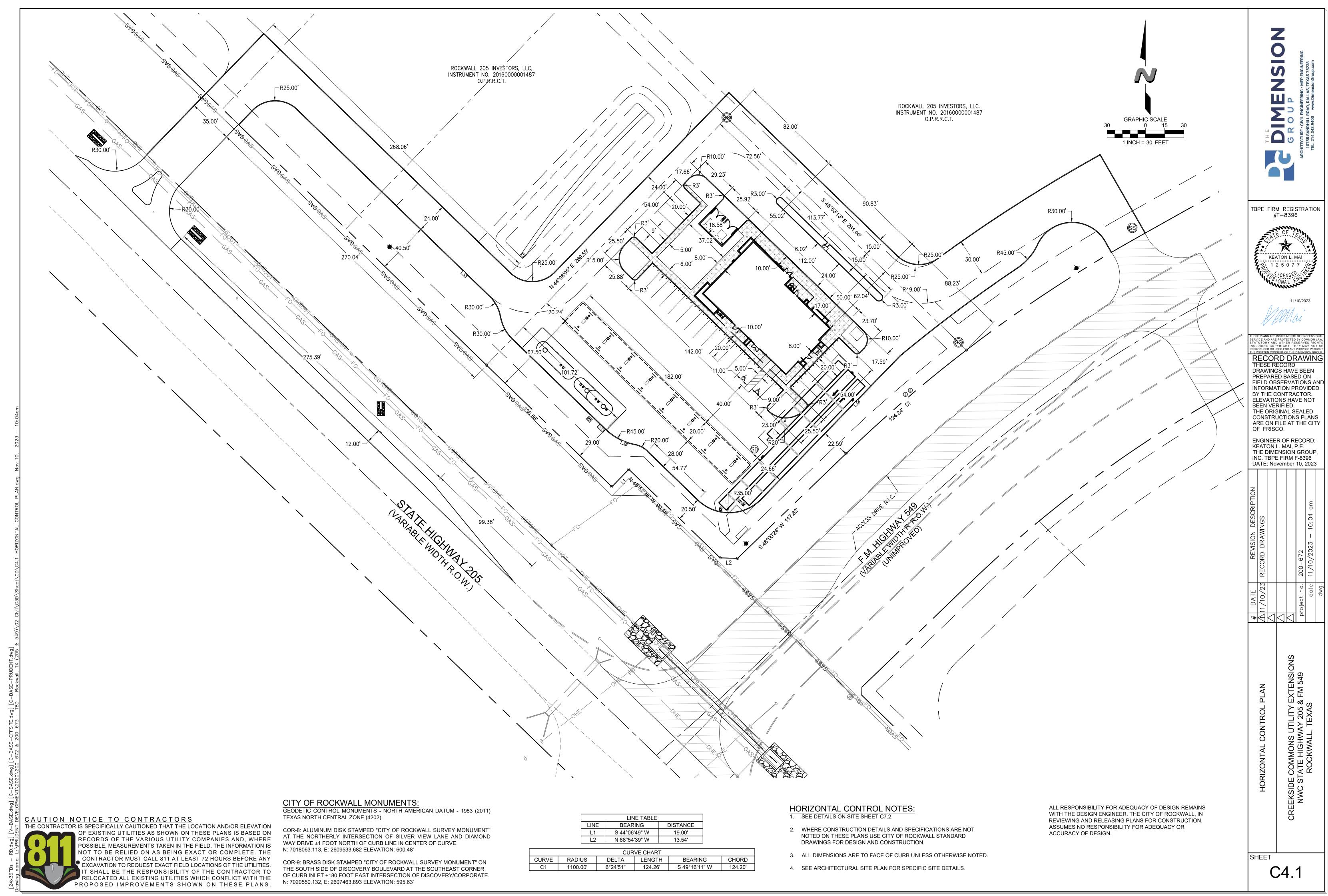
DALLAS, TEXAS 75238

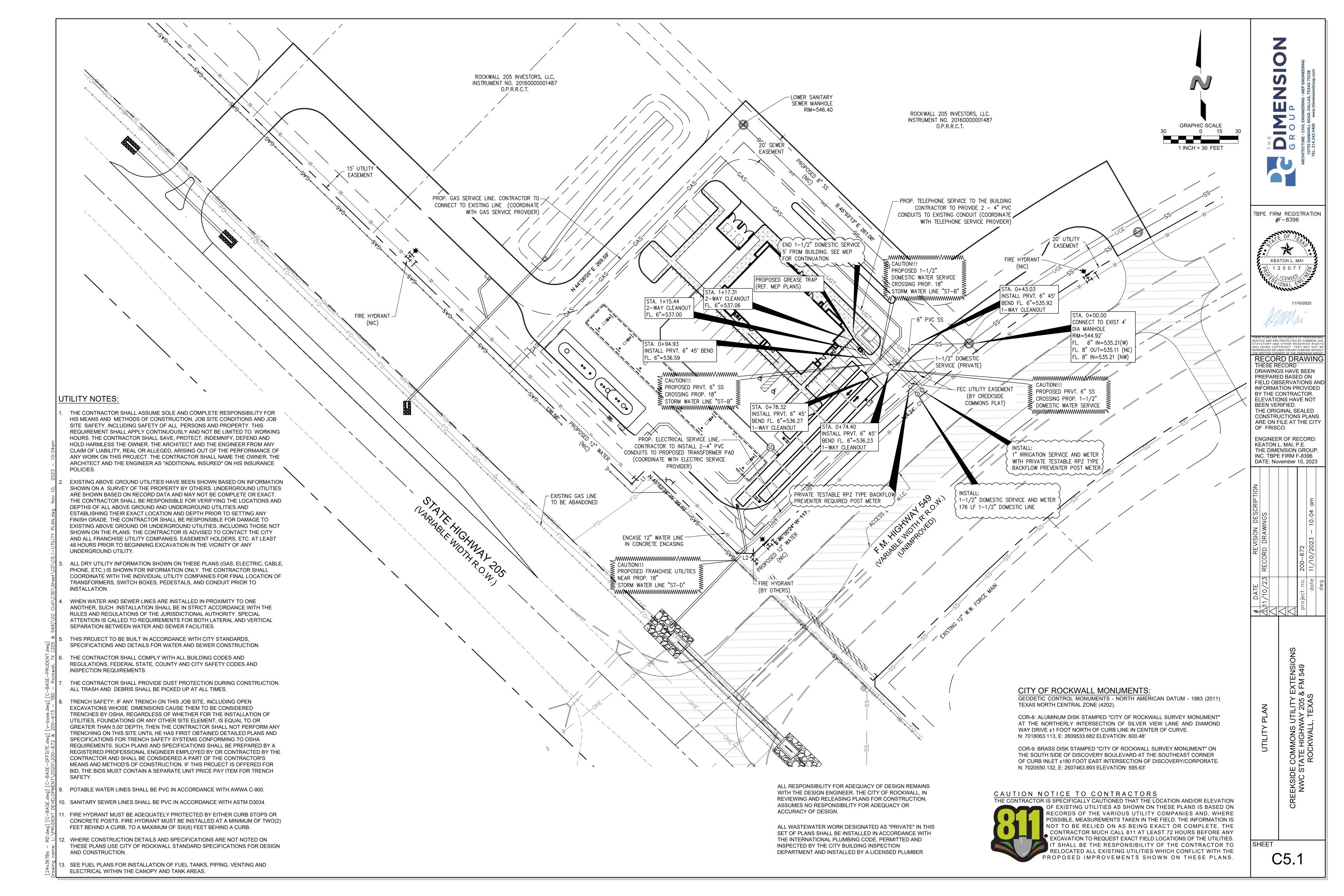
PAGE 10 OF 10 CASE # P2022-052 DATE: 5/1/2023 / JOB # 2002727-11 / SCALE= 1" = 50' / DRAWN: JACOB

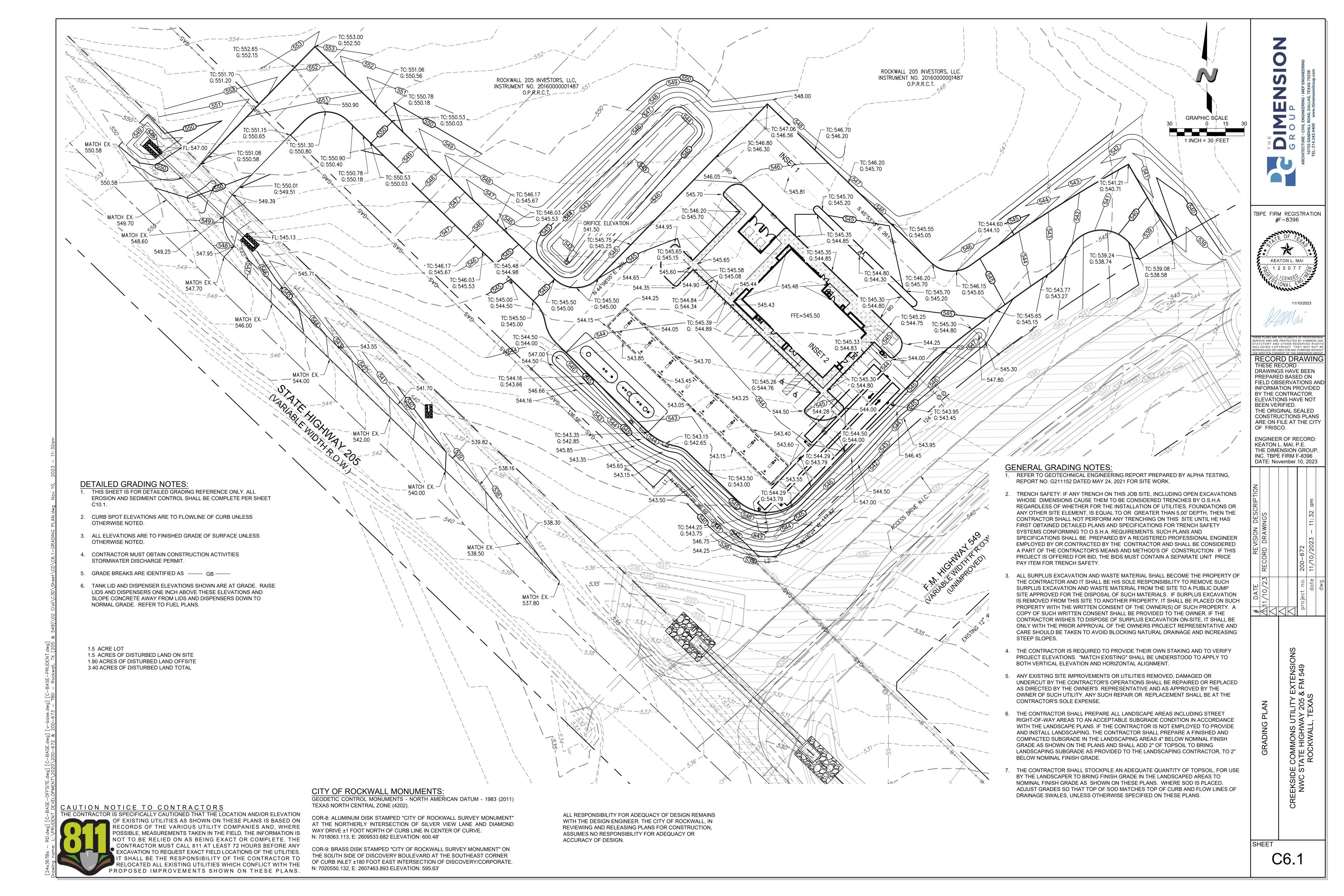


TBPE FIRM REGISTRATION









REFER TO GEOTECHNICAL ENGINEERING REPORT PREPARED BY ALPHA TESTING, REPORT NO. G211152 DATED MAY 24, 2021 FOR SITE WORK.

- 2. TRENCH SAFETY: IF ANY TRENCH ON THIS JOB SITE, INCLUDING OPEN EXCAVATIONS WHOSE DIMENSIONS CAUSE THEM TO BE CONSIDERED TRENCHES BY O.S.H.A REGARDLESS OF WHETHER FOR THE INSTALLATION OF UTILITIES, FOUNDATIONS OR ANY OTHER SITE ELEMENT, IS EQUAL TO OR GREATER THAN 5.00' DEPTH, THEN THE CONTRACTOR SHALL NOT PERFORM ANY TRENCHING ON THIS SITE UNTIL HE HAS FIRST OBTAINED DETAILED PLANS AND SPECIFICATIONS FOR TRENCH SAFETY SYSTEMS CONFORMING TO O.S.H.A. REQUIREMENTS. SUCH PLANS AND SPECIFICATIONS SHALL BE PREPARED BY A REGISTERED PROFESSIONAL ENGINEER EMPLOYED BY OR CONTRACTED BY THE CONTRACTOR AND SHALL BE CONSIDERED A PART OF THE CONTRACTOR'S MEANS AND METHOD'S OF CONSTRUCTION . IF THIS PROJECT IS OFFERED FOR BID, THE BIDS MUST CONTAIN A SEPARATE UNIT PRICE PAY ITEM FOR TRENCH SAFETY.
- 3. ALL SURPLUS EXCAVATION AND WASTE MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND IT SHALL BE HIS SOLE RESPONSIBILITY TO REMOVE SUCH SURPLUS EXCAVATION AND WASTE MATERIAL FROM THE SITE TO A PUBLIC DUMP SITE APPROVED FOR THE DISPOSAL OF SUCH MATERIALS. IF SURPLUS EXCAVATION IS REMOVED FROM THIS SITE TO ANOTHER PROPERTY, IT SHALL BE PLACED ON SUCH PROPERTY WITH THE WRITTEN CONSENT OF THE OWNER(S) OF SUCH PROPERTY. A COPY OF SUCH WRITTEN CONSENT SHALL BE PROVIDED TO THE OWNER. IF THE CONTRACTOR WISHES TO DISPOSE OF SURPLUS EXCAVATION ON-SITE, IT SHALL BE ONLY WITH THE PRIOR APPROVAL OF THE OWNERS PROJECT REPRESENTATIVE AND CARE SHOULD BE TAKEN TO AVOID BLOCKING NATURAL DRAINAGE AND INCREASING STEEP SLOPES.
- 4. THE CONTRACTOR IS REQUIRED TO PROVIDE THEIR OWN STAKING AND TO VERIFY PROJECT ELEVATIONS. "MATCH EXISTING" SHALL BE UNDERSTOOD TO APPLY TO BOTH VERTICAL ELEVATION AND HORIZONTAL ALIGNMENT.
- 5. ANY EXISTING SITE IMPROVEMENTS OR UTILITIES REMOVED, DAMAGED OR UNDERCUT BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE OWNER'S REPRESENTATIVE AND AS APPROVED BY THE OWNER OF SUCH UTILITY. ANY SUCH REPAIR OR REPLACEMENT SHALL BE AT THE CONTRACTOR'S SOLE EXPENSE.
- 6. THE CONTRACTOR SHALL PREPARE ALL LANDSCAPE AREAS INCLUDING STREET RIGHT-OF-WAY AREAS TO AN ACCEPTABLE SUBGRADE CONDITION IN ACCORDANCE WITH THE LANDSCAPE PLANS. IF THE CONTRACTOR IS NOT EMPLOYED TO PROVIDE AND INSTALL LANDSCAPING, THE CONTRACTOR SHALL PREPARE A FINISHED AND COMPACTED SUBGRADE IN THE LANDSCAPING AREAS 4" BELOW NOMINAL FINISH GRADE AS SHOWN ON THE PLANS AND SHALL ADD 2" OF TOPSOIL TO BRING LANDSCAPING SUBGRADE AS PROVIDED TO THE LANDSCAPING CONTRACTOR, TO 2" BELOW NOMINAL FINISH GRADE.
- 7. THE CONTRACTOR SHALL STOCKPILE AN ADEQUATE QUANTITY OF TOPSOIL, FOR USE BY THE LANDSCAPER TO BRING FINISH GRADE IN THE LANDSCAPED AREAS TO NOMINAL FINISH GRADE AS SHOWN ON THESE PLANS. WHERE SOD IS PLACED, ADJUST GRADES SO THAT TOP OF SOD MATCHES TOP OF CURB AND FLOW LINES OF DRAINAGE SWALES, UNLESS OTHERWISE SPECIFIED ON THESE PLANS.

OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON

RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE

POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS

NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE

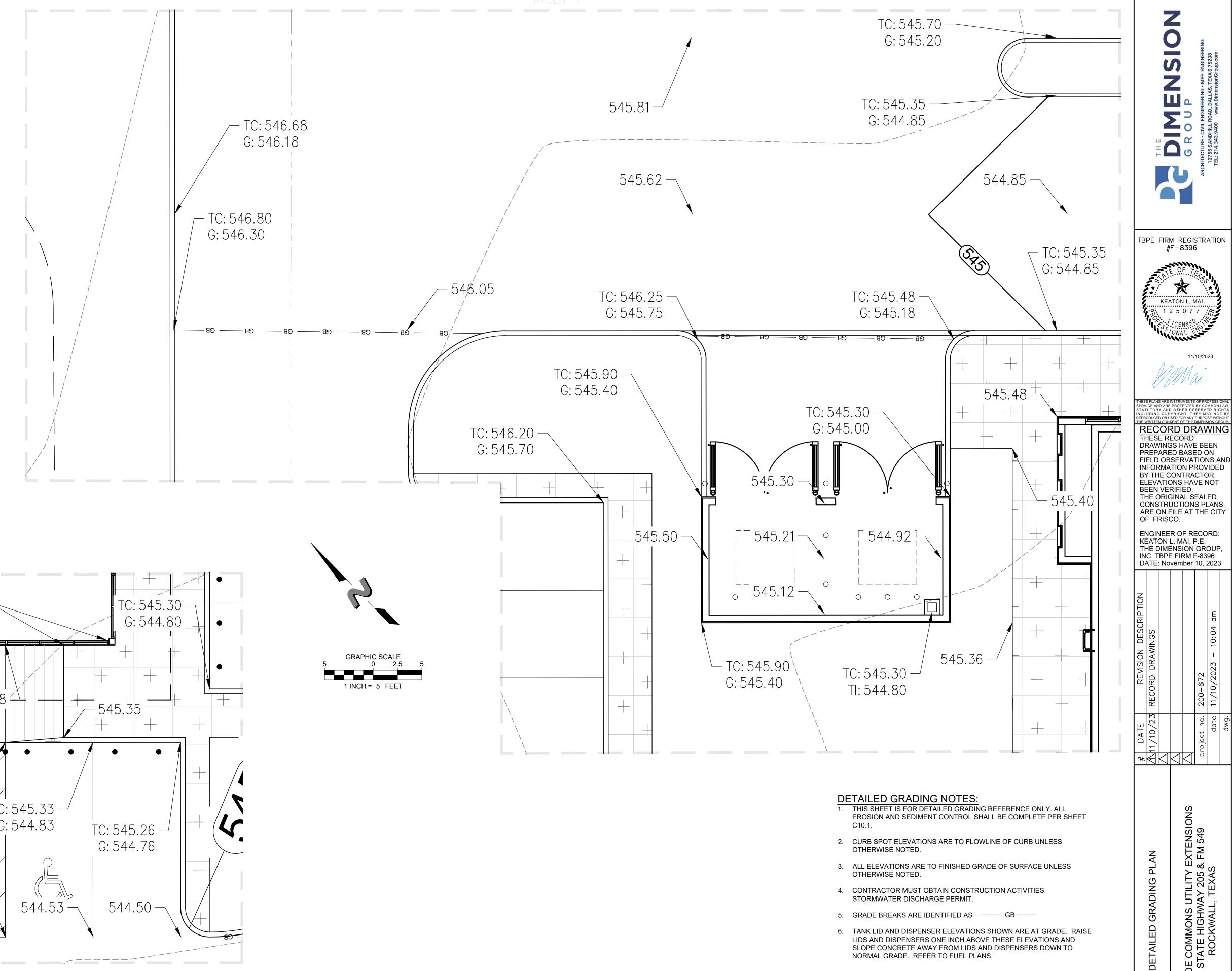
CONTRACTOR MUST CALL 811 AT LEAST 72 HOURS BEFORE ANY

XCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES.

SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO

ELOCATED ALL EXISTING UTILITIES WHICH CONFLICT WITH THE

PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.



# TC: 545.35 544.85 -544.85 -TC: 545.33 -G: 544.85 G: 544.83 544.59 -544.57

### CITY OF ROCKWALL MONUMENTS:

GEODETIC CONTROL MONUMENTS - NORTH AMERICAN DATUM - 1983 (2011) TEXAS NORTH CENTRAL ZONE (4202).

COR-8: ALUMINUM DISK STAMPED "CITY OF ROCKWALL SURVEY MONUMENT" AT THE NORTHERLY INTERSECTION OF SILVER VIEW LANE AND DIAMOND WAY DRIVE ±1 FOOT NORTH OF CURB LINE IN CENTER OF CURVE. N: 7018063.113, E: 2609533.682 ELEVATION: 600.48'

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SLOPE CONCRETE AWAY FROM LIDS AND DISPENSERS DOWN TO NORMAL GRADE. REFER TO FUEL PLANS.

1.5 ACRE LOT

- 1.5 ACRES OF DISTURBED LAND ON SITE
- 1.90 ACRES OF DISTURBED LAND OFFSITE
- 3.40 ACRES OF DISTURBED LAND TOTAL

SHEET

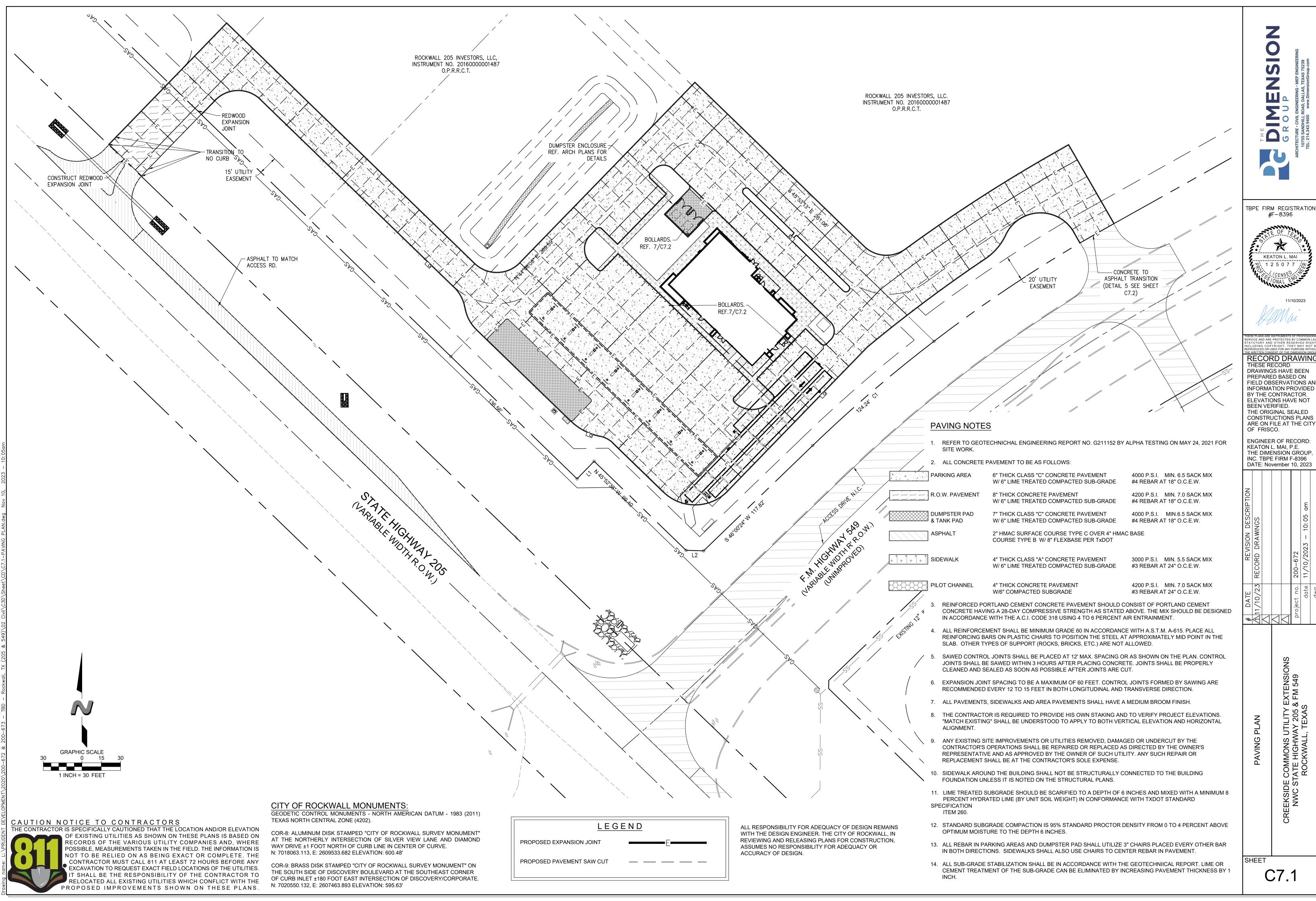
C6.2

Y EXTENSIONS S & FM 549

EKSIDE COMMONS UTILITY NWC STATE HIGHWAY 205 ROCKWALL, TEXAS

#F-8396

CAUTION NOTICE TO CONTRACTORS THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION

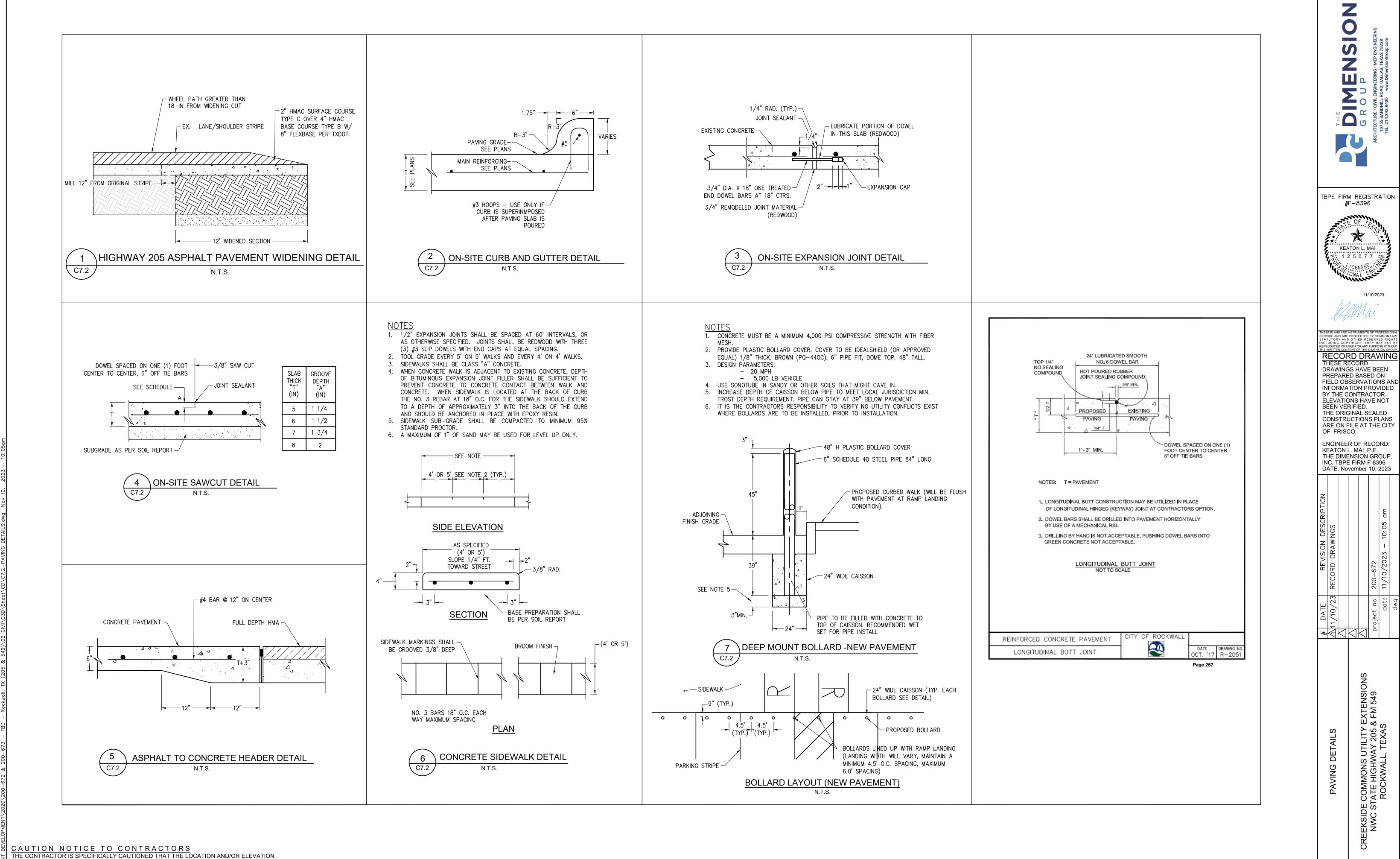


TBPE FIRM REGISTRATION



RECORD DRAWING DRAWINGS HAVE BEEN FIELD OBSERVATIONS AND INFORMATION PROVIDED

NEVISION DESCRIPTION	11/10/23 RECORD DRAWINGS		roject no. 200-672	date 11/10/2023 - 10:05 am	
DAIE	11/10/23		roject no.	date	dwg.



SHEET

Y EXTENSION 5 & FM 549 S

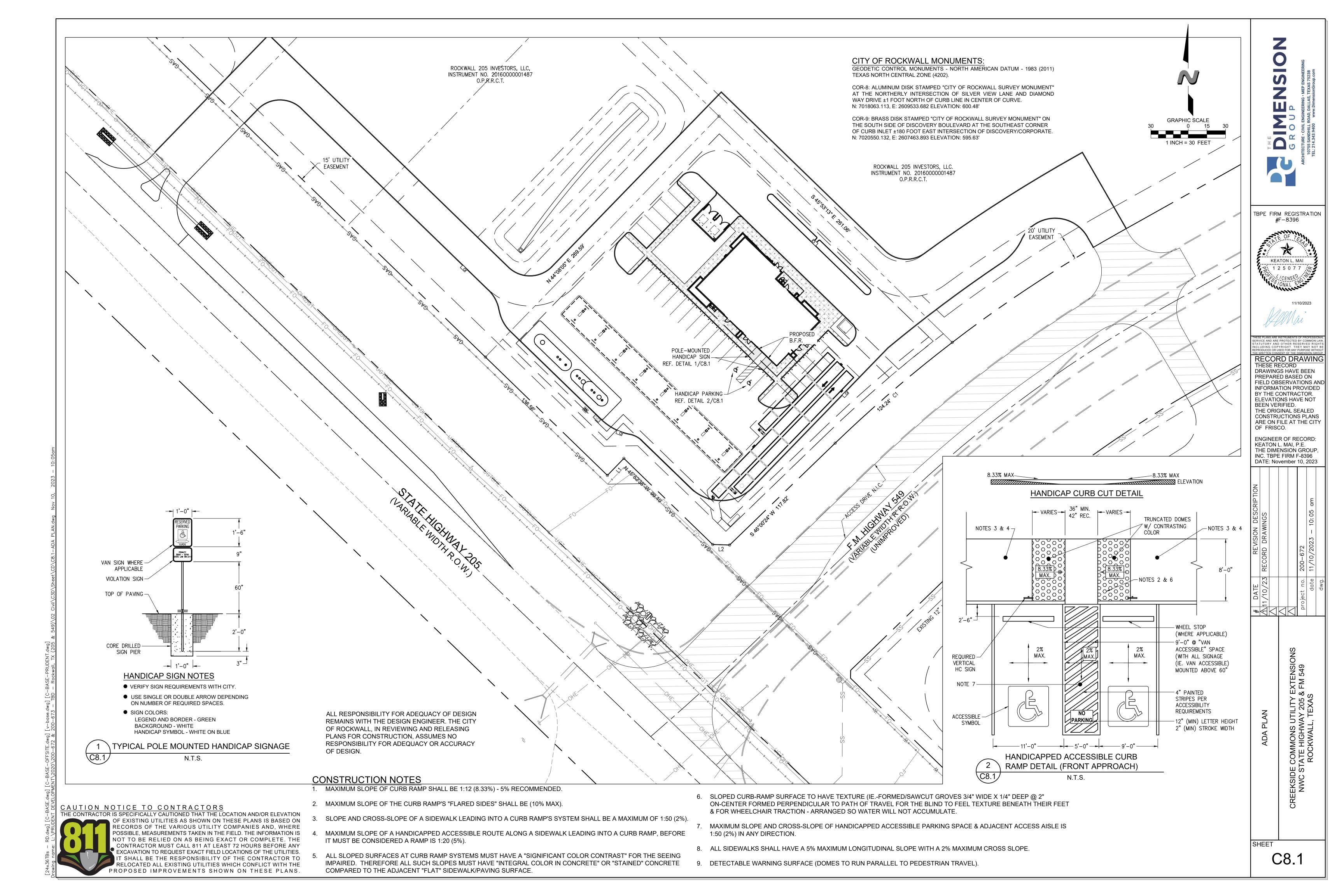
#F-8396

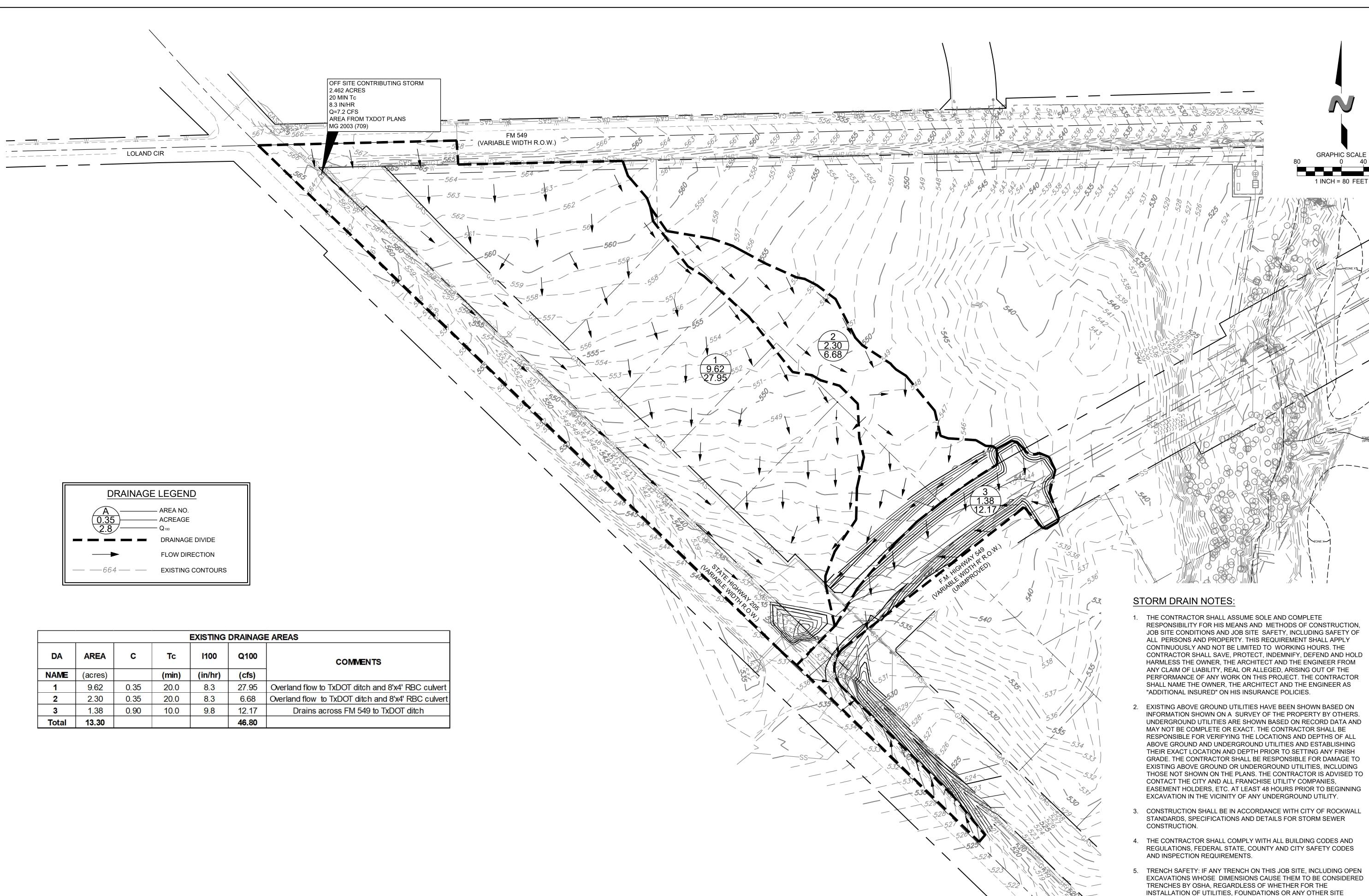
KEATON L. MAI

125077

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- RESPONSIBILITY FOR HIS MEANS AND METHODS OF CONSTRUCTION, JOB SITE CONDITIONS AND JOB SITE SAFETY, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO WORKING HOURS. THE CONTRACTOR SHALL SAVE, PROTECT, INDEMNIFY, DEFEND AND HOLD HARMLESS THE OWNER, THE ARCHITECT AND THE ENGINEER FROM ANY CLAIM OF LIABILITY, REAL OR ALLEGED, ARISING OUT OF THE PERFORMANCE OF ANY WORK ON THIS PROJECT. THE CONTRACTOR SHALL NAME THE OWNER, THE ARCHITECT AND THE ENGINEER AS
- INFORMATION SHOWN ON A SURVEY OF THE PROPERTY BY OTHERS. UNDERGROUND UTILITIES ARE SHOWN BASED ON RECORD DATA AND MAY NOT BE COMPLETE OR EXACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATIONS AND DEPTHS OF ALL ABOVE GROUND AND UNDERGROUND UTILITIES AND ESTABLISHING THEIR EXACT LOCATION AND DEPTH PRIOR TO SETTING ANY FINISH GRADE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO EXISTING ABOVE GROUND OR UNDERGROUND UTILITIES, INCLUDING THOSE NOT SHOWN ON THE PLANS. THE CONTRACTOR IS ADVISED TO CONTACT THE CITY AND ALL FRANCHISE UTILITY COMPANIES, EASEMENT HOLDERS, ETC. AT LEAST 48 HOURS PRIOR TO BEGINNING EXCAVATION IN THE VICINITY OF ANY UNDERGROUND UTILITY.
- STANDARDS, SPECIFICATIONS AND DETAILS FOR STORM SEWER
- 4. THE CONTRACTOR SHALL COMPLY WITH ALL BUILDING CODES AND REGULATIONS, FEDERAL STATE, COUNTY AND CITY SAFETY CODES
- EXCAVATIONS WHOSE DIMENSIONS CAUSE THEM TO BE CONSIDERED INSTALLATION OF UTILITIES, FOUNDATIONS OR ANY OTHER SITE ELEMENT, IS EQUAL TO OR GREATER THAN 5.00' DEPTH, THEN THE CONTRACTOR SHALL NOT PERFORM ANY TRENCHING ON THIS SITE UNTIL HE HAS FIRST OBTAINED DETAILED PLANS AND SPECIFICATIONS FOR TRENCH SAFETY SYSTEMS CONFORMING TO OSHA REQUIREMENTS. SUCH PLANS AND SPECIFICATIONS SHALL BE PREPARED BY A REGISTERED PROFESSIONAL ENGINEER EMPLOYED BY OR CONTRACTED BY THE CONTRACTOR AND SHALL BE CONSIDERED A PART OF THE CONTRACTOR'S MEANS AND METHOD'S OF CONSTRUCTION. IF THIS PROJECT IS OFFERED FOR BID, THE BIDS MUST CONTAIN A SEPARATE UNIT PRICE PAY ITEM FOR TRENCH SAFETY.

6. WHERE CONSTRUCTION DETAILS AND SPECIFICATIONS ARE NOT NOTED ON THESE PLANS USE CITY OF ROCKWALL STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION.

TBPE FIRM REGISTRATION #F-8396



RECORD DRAWING THESE RECORD DRAWINGS HAVE BEEN PREPARED BASED ON FIELD OBSERVATIONS AND INFORMATION PROVIDED BY THE CONTRACTOR. **ELEVATIONS HAVE NOT** BEEN VERIFIED. THE ORIGINAL SEALED **CONSTRUCTIONS PLANS** ARE ON FILE AT THE CITY OF FRISCO.

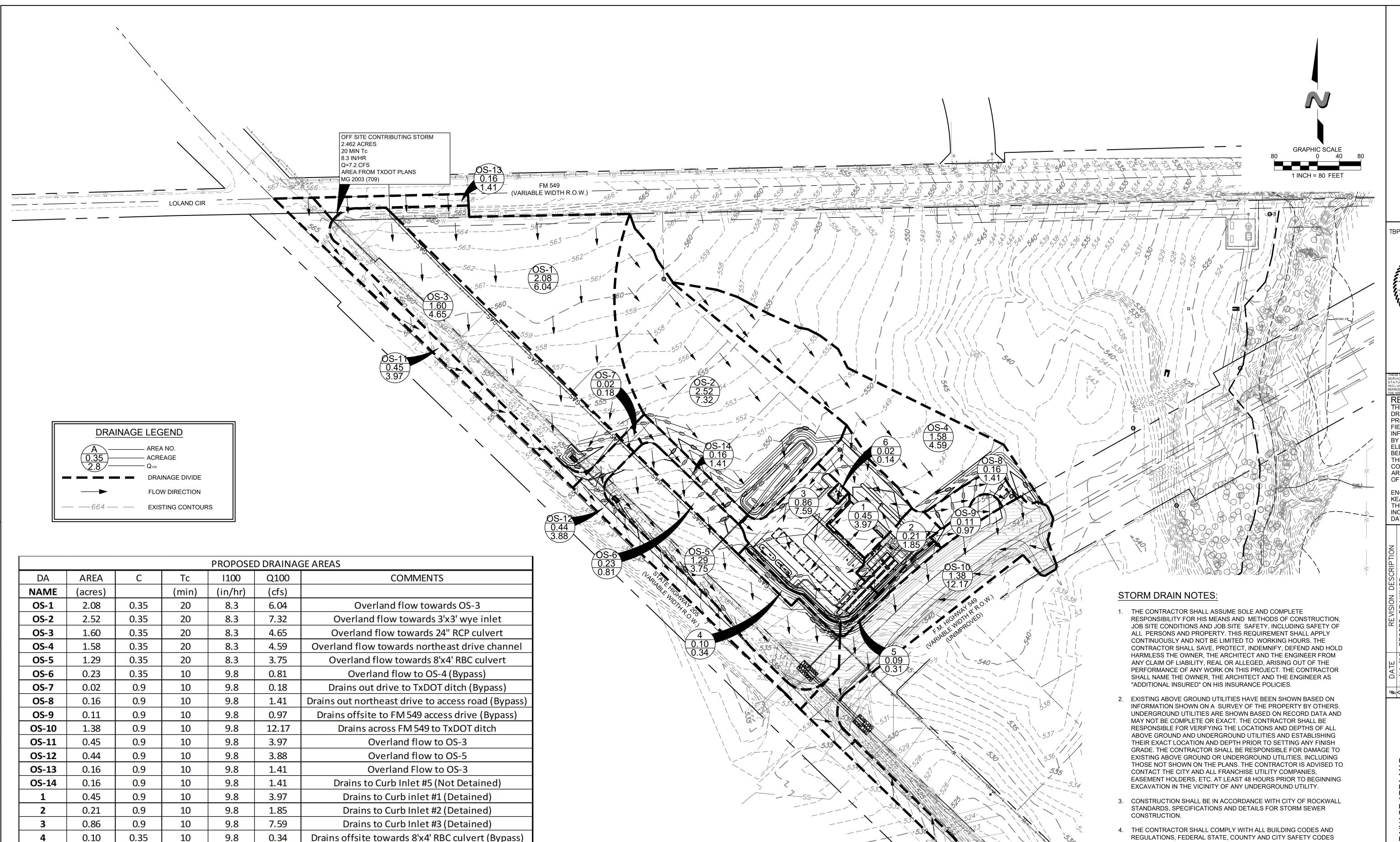
**ENGINEER OF RECORD:** KEATON L. MAI, P.E. THE DIMENSION GROUP, INC. TRPF FIRM F-8396

/	ATE	: No	vem	ber	10, 2	2023	3
	RECORD DRAWINGS				200–672	11/10/2023 — 10:05 am	
	0/23				t no.	date	dwg.

Y EXTENSIONS SA FM 549

EKSIDE COMMONS UTILITY NWC STATE HIGHWAY 205 ROCKWALL, TEXAS STING DRAINAGE

SHEET



CAUTION NOTICE TO CONTRACTORS

0.35

0.9

0.09

0.02

13.91

5

**Total** 

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10

10

9.8

9.8

0.31

0.14

66.61

CITY OF ROCKWALL MONUMENTS:
GEODETIC CONTROL MONUMENTS - NORTH AMERICAN DATUM - 1983 (2011) TEXAS NORTH CENTRAL ZONE (4202).

Drains offsite towards 8'x4' RBC culvert (Bypass)

Drains to Grate Inlet #4 (Detained)

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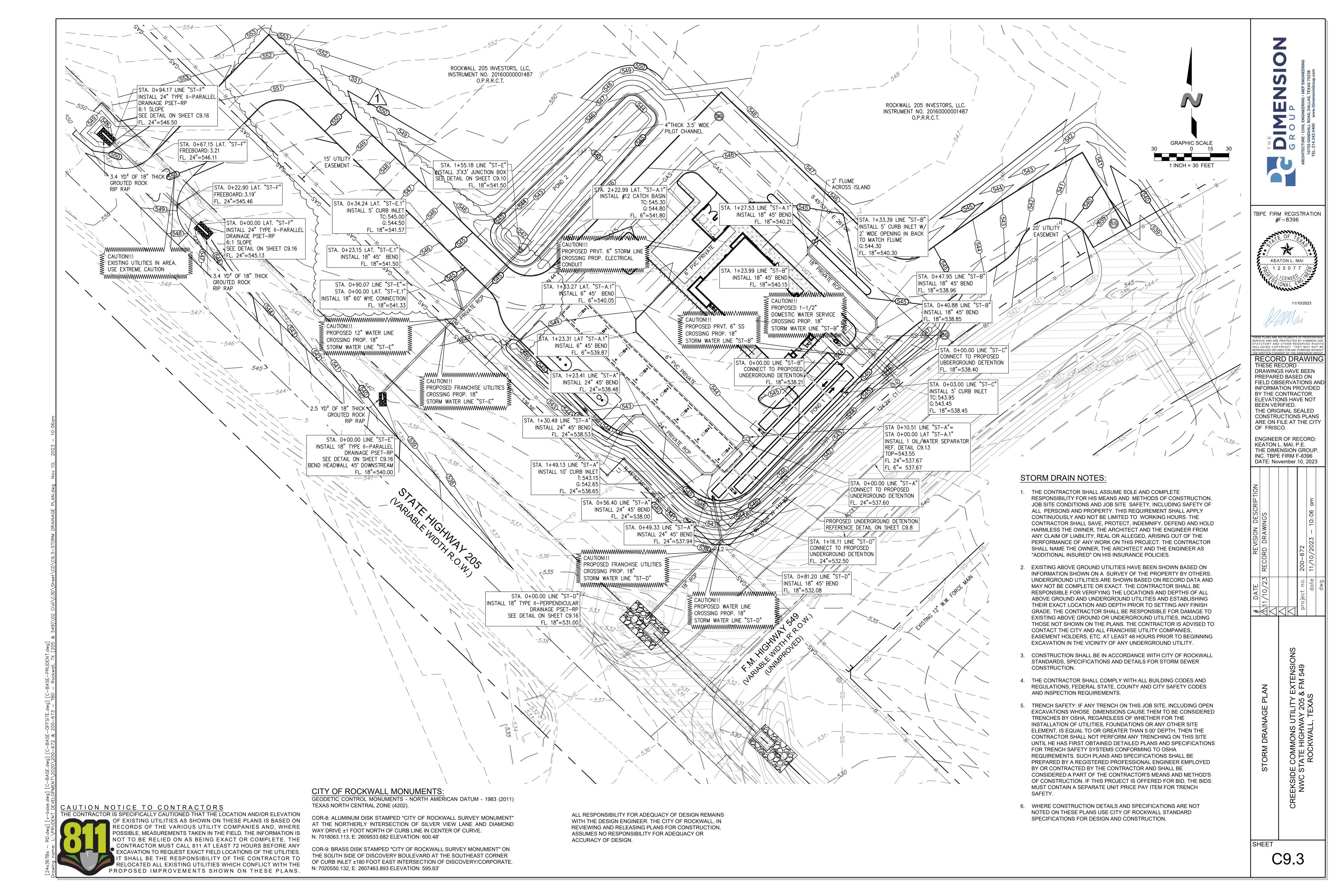
TBPE FIRM REGISTRATION #F-8396 KEATON L. MAI

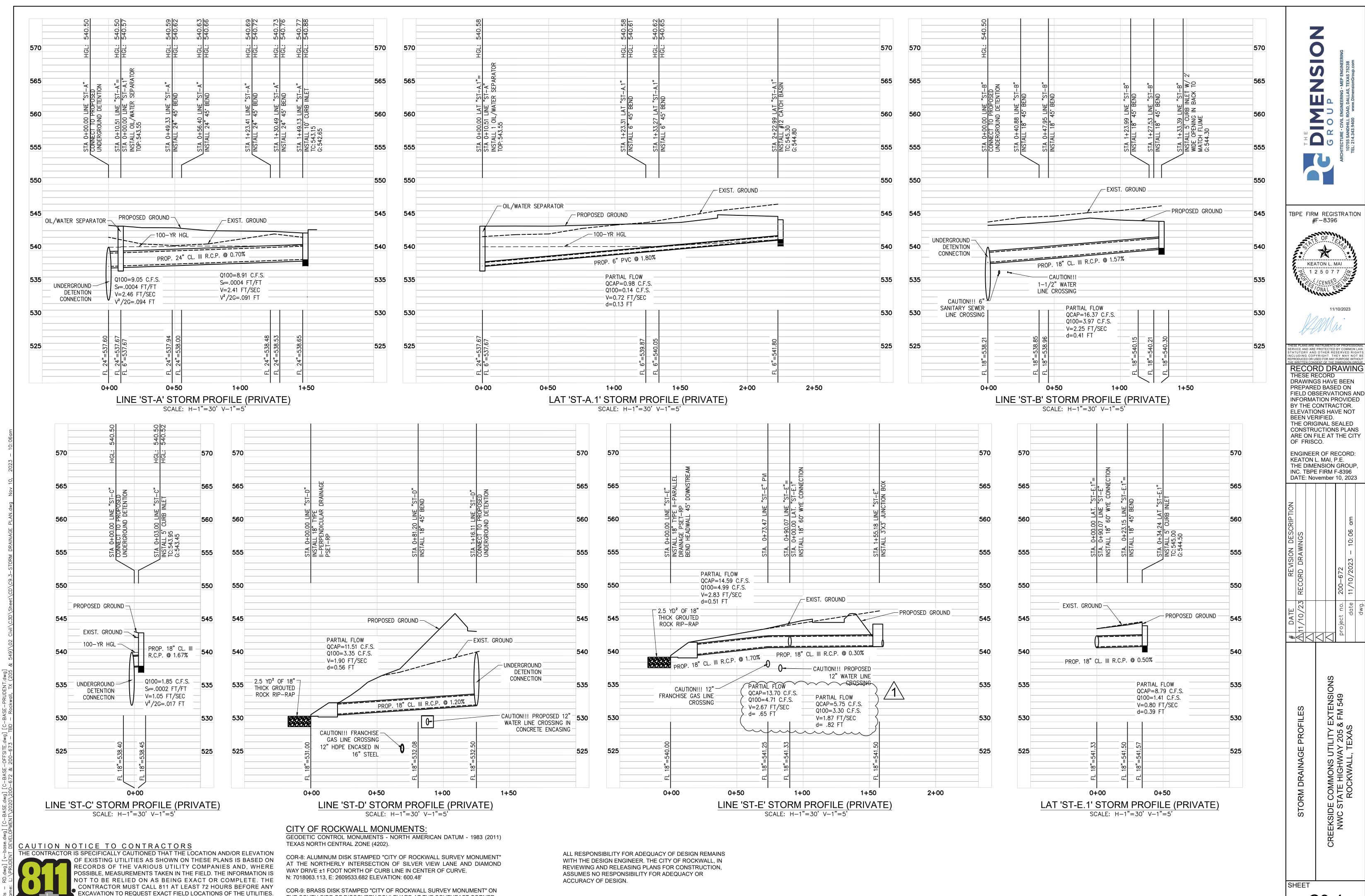
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**ENGINEER OF RECORD:** KEATON L. MAI, P.E. THE DIMENSION GROUP, INC. TBPE FIRM F-8396 DATE: November 10, 2023

Y EXTENSION 5 & FM 549 S EKSIDE COMMONS UTILITY NWC STATE HIGHWAY 205 ROCKWALL, TEXAS

SHEET





THE SOUTH SIDE OF DISCOVERY BOULEVARD AT THE SOUTHEAST CORNER

OF CURB INLET ±180 FOOT EAST INTERSECTION OF DISCOVERY/CORPORATE

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SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO

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CREEKSIDE COMMONS UTILITY EXTENSIONS NWC STATE HIGHWAY 205 & FM 549 ROCKWALL, TEXAS

#F-8396

KEATON L. MAI 1 2 5 0 7 7

SHEET C9.4

							Co	nduit Pro	perties								Inc	remental Dr	rainage Are	ea		$\overline{}$				1					l I	Н	lGL			Headloss Calculations					
SYSTEMID	Collection I Station	1	ngth	# of	Pipe Size	E	Вох		Area	Wette Perime	ete Hydra	Mai	nning's	Flowli Elevati		Slope		Area	Runof	Incre-	Accum ulated	Stream	am Storm	Intensi	ty Runoff Q	Condu	ty Partial	Velocity V	Time in Conduit	Friction Slope	Head-			$\frac{v_1^2}{2}$	$\frac{v_2^2}{2\pi}$		Coeff.	Head-	Design HGL	Top of	HGL Depth
	U/S	D/S	ft)	arrels	(inches)	Span (ft)	Rise (ft)	Туре	(ft²)	r Pw (ft)			n S	Up- stream	Down- Stream	(ft/ft)	Inlet ID	(acres)	Coeff.	menta C*A	C*A	(min	rn) (yr)	(in/hr	) (cfs)	Qc (cfs)	(Yes/No)	(ft/s)	(min)	Sr (ft/ft)	Loss (ft)	U/S	D/S	2 <i>g</i> (ft)	2 <i>g</i> (ft)	Jct. Type	KJ	loss HL		Curb Elev.	Below T/C
1	2	3	4	5	6	7	8	9	10	11	12	2	13	14	15	16	17	18	19	20	21	22	2 23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
LINE ST-A																																									
Proposed 10' Curb Inlet	1+49.1	1+30.5	18.64	1	24			RCP	3.14	4 6.	.28	0.5	0.013	538.65	538.53	0.006	LINE ST-A	0.8	36 0	.9 0.77	74 0.7	77	10 100-Yea	r 9	9.8 7.5	9 28.	89 <b>N</b> o	2.41	0.13	0.0011	0.021	540.87	540.85	0.091	0.093	Proposed 5' Curb Inlet	1.25	0.11	540.986	543.15	2.164
45 Degree Bend	1+30.5	1+23.4	7.07	1	24			RCP	3.14	4 6	.28	0.5	0.013	538.53	538.48	0.007		0.8	36 0	.9 0.77	74 0.7	77	10 100-Yea	r 9	9.8 7.5	9 30.	28 No	2.41	0.05	0.0011	0.008	540.82	540.81	0.091	0.093	45 Degree Bend	0.37	0.03	540.852		
45 Degree Bend	1+23.4	0+56.4	67.02	1	24			RCP	3.14	4 6.	.28	0.5	0.013	538.48	538.00	0.007		0.8	36 0	.9 0.77	74 0.7	77	10 100-Yea	r 9	9.8 7.5	9 30.	47 No	2.41	0.46	0.0011	0.075	540.78	540.70	0.091	0.093	45 Degree Bend	0.37	0.03	540.811		
45 Degree Bend	0+56.4	0+49.3	7.07	1	24			RCP	3.14	4 6	.28	0.5	0.013	538.00	537.94	0.008		0.8	36 0	.9 0.77	74 0.7	77	10 100-Yea	r 9	9.8 7.5	9 33.	17 No	2.41	0.05	0.0011	0.008	540.67	540.66	0.091	0.093	45 Degree Bend	0.37	0.03	540.702		
45 Degree Bend	0+49.3	0+10.5	38.82	1	24			RCP	3.14	4 6	.28	0.5	0.013	537.94	537.67	0.007		0.8	36 0	.9 0.77	74 0.7	77	10 100-Yea	r 9	9.8 7.5	9 30.	03 No	2.41	0.27	0.0011	0.043	540.63	540.58	0.091	0.093	45 Degree Bend	0.37	0.03	540.661		
Oil/Water Separator	0+10.5	0+00.0	10.51	1	24			RCP	3.14	4 6	.28	0.5	0.013	537.67	537.6	0.007	LINE ST-A.1	0.8	38 0	.9 0.78	38 0.7	79	10 100-Yea	r 9	9.8 7.7	3 29.	39 No	2.46	0.07	0.0012	0.012	540.51	540.50	0.094	0.094	Oil/Water Seperator	0.25	0.07	540.583		
LINE ST-A.1																																									
Proposed 2 Grate Inlet		1+33.3	89.72	1	6			PVC	0.20	0 1	.57 0.	.125			540.05	0.018	LINE ST-A.1	0.0	02 0	.9 0.01	14 0.01	14	10 100-Yea	r 9	9.8 0.1	4 0.	98 Yes	0.72	2.08	0.0004	0.033	540.67	540.64	0.008	0.008	Grate Inlet	1.25	0.01	540.682	545.15	4.468
45 Degree Bend	1+33.3	1+23.3	9.96	1	6			PVC	0.20	0 1	.57 0.	.125	0.01	540.05	539.87	0.018		0.0	02 0	.9 0.03	14 0.01	14	10 100-Yea	r 9	9.8 0.1	4 0.	98 Yes	0.72	0.23	0.0004	0.004	540.64	540.63	0.008	0.008	45 Degree Bend	0.37	0.003	540.638		
45 Degree Bend	1+23.3	0+00.0	123.31	1	6			PVC	0.20	0 1	.57 0.	.125	0.01	539.87	537.67	0.018		0.0	02 0	.9 0.01	0.01	14	10 100-Yea	r 9	9.8 0.1	4 0.	98 Yes	0.72	2.86	0.0004	0.046	540.63	540.58	0.008	0.008	3 45 Degree Bend	0.37	0.003	540.632		
LINE ST-B																																									
#12 Catch Basin	1+33.4		5.86	1	18			RCP	1.77			.375	0.013	540.30	540.21	0.016	LINE ST-B	0.4	.5	.9 0.40			10 100-Yea		9.8 3.9	7 20.	93 Yes	2.25	0.04						111	Proposed 5' Curb Inlet	1.25	0.098	540.903	544.90	3.997
45 Degree Bend	1+27.5		3.54	1	18			RCP	1.77			.375	0.013	540.21	540.15	0.016		0.4	13 0	.9 0.40			10 100-Yea	- 1	9.8 3.9	7 21.	43 Yes	2.25	0.03	0.0014	0.005	540.77				3 45 Degree Bend	0.37	0.029	540.797		
45 Degree Bend	1+24.0		76.04	1	18			RCP	1.77			.375	0.013	0.0.20	538.96		-	0.4		.9 0.40			10 100-Yea		9.8 3.9		272	2.25		The second second						3 45 Degree Bend	0.37		540.763		
45 Degree Bend	0+48.0		7.07	1	18			RCP	1.77		1000	.375	0.013	538.96	538.85	0.016		0.4	.5	.9 0.40			10 100-Yea		9.8 3.9	,		2.25	0.05			540.60				3 45 Degree Bend	0.37	0.029	540.626	<b>+</b>	
45 Degree Bend	0+40.9	0+00.0	40.88	1	18			RCP	1.77	7 4.	.71 0.	.375	0.013	538.85	538.21	0.016		0.4	15 0	.9 0.40	0.40	)5	10 100-Yea	r 9	9.8 3.9	7 20.	92 Yes	2.25	0.30	0.0014	0.058	540.56	540.50	0.078	0.078	3 45 Degree Bend	0.37	0.029	540.587		
LINE ST-C																																									
Proposed 5' Curb inlet	0+03.0	0+00.0	3.00	1	18			RCP	1.77	7 4.	.71 0.	.375	0.013	538.45	538.40	0.017	LINE ST-C	0.2	21 0	.9 0.18	0.18	89	10 100-Yea	r 9	9.8 1.8	5 21.	58 No	1.05	0.05	0.0003	0.001	540.50	540.50	0.017	0.01	Proposed 5' Curb Inlet	1.25	0.021	540.522	543.95	3.428
LINE ST-D																						$\pm$																			
Underground Detention		0+81.2		1	18			RCP	1.77	7 4	.71 0.	.375			532.08		LINE ST-D						10 100-Yea	r 9	9.8 3.3			1.88	0.31						+	Underground Detention	1.25	0.069	532.569		7.931
45 Degree Bend	0+81.2	0+00.0	81.20	1	18			RCP	1.77	7 4.	.71 0.	.375	0.013	532.08	531	0.013	LINE ST-D						10 100-Yea	r 9	9.8 3.3	2 19.	28 Yes	1.88	0.72	0.0010	0.081	531.08	531.00	0.055	0.055	45 Degree Bend	0.37	0.020	531.101		
LINE ST-E																																									
Detention Pond (Orifice)		0+90.1		1	18			RCP	1.77	7 4.	.71 0.	.375	0.013	541.50	541.33		LINE ST-E						10 100-Yea	r 9	9.8 3.3	0 8.	54 Yes	1.87	0.58	0.0010	0.064	541.97	541.91	0.054	0.054	Detention Pond	1.25	0.068	542.042	546.50	4.458
60 Degree Wye Connection		0+73.5		1	18			RCP	1.77	7 4		.375				0.003	LINE ST-E.1	0.1	16 0	.9 0.14	14 0.14	44	10 100-Yea	r 9	9.8 4.7	_	16 Yes	2.67	0.10	0.0020	0.033	541.74	541.70	0.110	0.110	Wye Connection	0.37	0.041	541.776		
Slope Change	0+73.5	0+00.0	73.47	1	18			RCP	1.77	7 4.	.71 0.	.375	0.013	541.25	540.00	0.017		0.1	16 0	.9 0.14	0.14	44	10 100-Yea	r 9	9.8 4.7	1 21.	81 Yes	2.67	0.46	0.0020	0.147	541.65	541.50	0.110	0.110	Slope Change	0.5	0.055	541.702		
LINE ST-E.1																						+				+															
Proposed 5' Curb Inlet	0+34.2	0+00.0	34.24	1	18			RCP	1.77	7 4	.71 0.	.375	0.013	541.50	541.43	0.002	LINE ST_E.1	0.1	16 0	.9 0.14	14 0.14	.44	10 100-Yea	r 9	9.8 1.4	1 7.	56 Yes	0.80	0.71	0.0002	0.006	541.71	541.70	0.010	0.010	Proposed 5' Curb Inlet	1.25	0.012	541.721	545.00	3.279
45 Degree Bend	0+23.2			1	18			RCP	0-000 0					541.43			LINE ST_E.1	0.1	16 0	.9 0.14			10 100-Yea	_	9.8 1.4		99 Yes	0.80		1			541.50			45 Degree Bend		0.004			

		Location					Area	Runoff											Gutter Flo	ow											Inlets Capacity	У					Inl	let By-pass		
				Dasies			Time of				Unatusaus	Total							Depres	sion	onding W	idth/ Spread		of Gutter low	Max. Allowable	Depres: Se	sed Gutter ection		n Beyond ression	Conve	eyance	Ratio of		Inlet I	ength.					
Inlet ID	Alignment	Station	Offset	Design Freq.	С	Area ID	Concen-	Intensity I	Area A	Runoff Q	Upstream Bypass C*A	Flow Qa	Thorough - fare Type	On- Grade/ Mar Sag	100	Slope S	Crown	Cross Slope Sv	Depth	Width	(allow)	(actual)	(allow)	(actual)	Flow based on Max. Allowable Ponding Width	Area	Wetted Perimeter	Area	Wetted Perimeter	Depression	Section Beyond	Depression flow to Total Flow	Cross-	Required	Actual	Inlet Capacity	Flow Qbypass	C*A	To Rem	narks
							Tc							348		J			а	W	Tallow	T <sub>actual</sub>	<b>Y</b> allow	<b>y</b> actual)	Qallow gutter	Aw	Pw	Ao	Po	Section K <sub>w</sub>	Depression Ko	Eo	3.000,00	L <sub>Req'd</sub>	Lactual	4.0				
				(yr)			(min)	(in/hr)	(acres)	(cfs)	(cfs)	(cfs)				(ft/ft)	(	ft/ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(cfs)	(ft <sup>2</sup> )	(ft)	(ft²)	(ft)	(cfs)	(cfs)	(ft)	(ft/ft)	(ft)	(ft)	(cfs)	(cfs)			
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 /	41
Curb Inlet #1	Line B	1+31.1	N/A	100- yr	0.9	DA 1	10	9.8	0.45	3.97	0	3.97	Parking	Sag (	.0175	0.011	N/A	0.018	0.5	2	45.45	13.08	0.82	0.24	109.19	0.94	2.07	1.11	11.08	46.73	20.20	0.70	0.19	11.50	5	14.64	N/A	N/A	N/A	
Curb Inlet #2	Line C	0+03.4	N/A	100- yr	0.9	DA 2	10	9.8	0.21	1.85	0	1.85	Parking	Sag (	.0175	0.016	N/A	0.028	0.5	2	32.05	7.07	0.88	0.19	103.80	0.83	2.08	0.35	5.07	38.53	5.07	0.88	0.25	5.80	5	16.37	N/A	N/A	N/A	
Curb Inlet #3	Lat. E.1	0+23.2	N/A	100- yr	0.9	OS 14	10	9.8	0.16	1.41	0	1.41	Parking	Sag (	.0175	0.022	N/A (	0.020	0.5	2	22.73	7.30	0.45	0.15	28.99	0.75	2.07	0.28	5.30	32.49	3.37	0.91	0.25	7.40	5	6.06	N/A	N/A	N/A	
Curb Inlet #4	Line A	1+49.1	N/A	100- yr	0.9	DA 3	10	9.8	0.86	7.59	0	7.59	Parking	Sag (	.0175	0.012	N/A	0.012	0.5	2	41.67	21.37	0.49	0.25	44.73	0.98	2.07	2.21	19.37	50.65	44.26	0.53	0.15	22.45	10	10.78	N/A	N/A	N/A	

#### STORM DRAIN NOTES:

- 1. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR HIS MEANS AND METHODS OF CONSTRUCTION, JOB SITE CONDITIONS AND JOB SITE SAFETY, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO WORKING HOURS. THE CONTRACTOR SHALL SAVE, PROTECT, INDEMNIFY, DEFEND AND HOLD HARMLESS THE OWNER, THE ARCHITECT AND THE ENGINEER FROM ANY CLAIM OF LIABILITY, REAL OR ALLEGED, ARISING OUT OF THE PERFORMANCE OF ANY WORK ON THIS PROJECT. THE CONTRACTOR SHALL NAME THE OWNER, THE ARCHITECT AND THE ENGINEER AS "ADDITIONAL INSURED" ON HIS INSURANCE POLICIES.
- 2. EXISTING ABOVE GROUND UTILITIES HAVE BEEN SHOWN BASED ON INFORMATION SHOWN ON A SURVEY OF THE PROPERTY BY OTHERS. UNDERGROUND UTILITIES ARE SHOWN BASED ON RECORD DATA AND MAY NOT BE COMPLETE OR EXACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATIONS AND DEPTHS OF ALL ABOVE GROUND AND UNDERGROUND UTILITIES AND ESTABLISHING THEIR EXACT LOCATION AND DEPTH PRIOR TO SETTING ANY FINISH GRADE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO EXISTING ABOVE GROUND OR UNDERGROUND UTILITIES, INCLUDING THOSE NOT SHOWN ON THE PLANS. THE CONTRACTOR IS ADVISED TO CONTACT THE CITY AND ALL FRANCHISE UTILITY COMPANIES, EASEMENT HOLDERS, ETC. AT LEAST 48 HOURS PRIOR TO BEGINNING EXCAVATION IN THE VICINITY OF ANY UNDERGROUND UTILITY.
- CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF ROCKWALL STANDARDS, SPECIFICATIONS AND DETAILS FOR STORM SEWER CONSTRUCTION.
- 4. THE CONTRACTOR SHALL COMPLY WITH ALL BUILDING CODES AND REGULATIONS, FEDERAL STATE, COUNTY AND CITY SAFETY CODES AND INSPECTION REQUIREMENTS.
- 5. TRENCH SAFETY: IF ANY TRENCH ON THIS JOB SITE, INCLUDING OPEN EXCAVATIONS WHOSE DIMENSIONS CAUSE THEM TO BE CONSIDERED TRENCHES BY OSHA, REGARDLESS OF WHETHER FOR THE INSTALLATION OF UTILITIES, FOUNDATIONS OR ANY OTHER SITE ELEMENT, IS EQUAL TO OR GREATER THAN 5.00' DEPTH, THEN THE CONTRACTOR SHALL NOT PERFORM ANY TRENCHING ON THIS SITE UNTIL HE HAS FIRST OBTAINED DETAILED PLANS AND SPECIFICATIONS FOR TRENCH SAFETY SYSTEMS CONFORMING TO OSHA REQUIREMENTS. SUCH PLANS AND SPECIFICATIONS SHALL BE PREPARED BY A REGISTERED PROFESSIONAL ENGINEER EMPLOYED BY OR CONTRACTED BY THE CONTRACTOR AND SHALL BE CONSIDERED A PART OF THE CONTRACTOR'S MEANS AND METHOD'S OF CONSTRUCTION. IF THIS PROJECT IS OFFERED FOR BID, THE BIDS MUST CONTAIN A SEPARATE UNIT PRICE PAY ITEM FOR TRENCH SAFETY.
- 6. WHERE CONSTRUCTION DETAILS AND SPECIFICATIONS ARE NOT NOTED ON THESE PLANS USE CITY OF ROCKWALL STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION.

## CAUTION NOTICE TO CONTRACTORS

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION
OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON
RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE
POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS
NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE
CONTRACTOR MUST CALL 811 AT LEAST 72 HOURS BEFORE ANY
EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES.
IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO
RELOCATED ALL EXISTING UTILITIES WHICH CONFLICT WITH THE

PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.

CITY OF ROCKWALL MONUMENTS:
GEODETIC CONTROL MONUMENTS - NORTH AMERICAN DATUM - 1983 (2011)

TEXAS NORTH CENTRAL ZONE (4202).

COR-8: ALUMINUM DISK STAMPED "CITY OF ROCKWALL SURVEY MONUMENT" AT THE NORTHERLY INTERSECTION OF SILVER VIEW LANE AND DIAMOND WAY DRIVE ±1 FOOT NORTH OF CURB LINE IN CENTER OF CURVE. N: 7018063.113, E: 2609533.682 ELEVATION: 600.48'

COR-9: BRASS DISK STAMPED "CITY OF ROCKWALL SURVEY MONUMENT" ON THE SOUTH SIDE OF DISCOVERY BOULEVARD AT THE SOUTHEAST CORNER OF CURB INLET ±180 FOOT EAST INTERSECTION OF DISCOVERY/CORPORATE. N: 7020550.132, E: 2607463.893 ELEVATION: 595.63'

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.

THE DIMENSION GROUP GROUPERING MEP ENGINEERING TO TO SE SANDHILL ROAD, DALLAS, TEXAS 75238

TBPE FIRM REGISTRATION #F-8396

KEATON L. MAI

S. 1 2 5 0 7 7

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ONAL

11/10/2023

11/10/2023

RECORD DRAWING
THE WRITTEN CONSENT OF THE DIMENSION GROUP.

RECORD DRAWING
THESE RECORD
DRAWINGS HAVE BEEN
PREPARED BASED ON
FIELD OBSERVATIONS AND
INFORMATION PROVIDED
BY THE CONTRACTOR.
ELEVATIONS HAVE NOT
BEEN VERIFIED.
THE ORIGINAL SEALED
CONSTRUCTIONS PLANS
ARE ON FILE AT THE CITY
OF FRISCO.

ENGINEER OF RECORD: KEATON L. MAI, P.E. THE DIMENSION GROUP, INC. TBPE FIRM F-8396

# DATE REVISION DESCRIPTION

11/10/23 RECORD DRAWINGS

Project no. 200–672

date 11/10/2023 – 10:06 am

dwg.

JRM DRAINAGE CALCULATIONS

DE COMMONS UTILITY EXTENSIONS

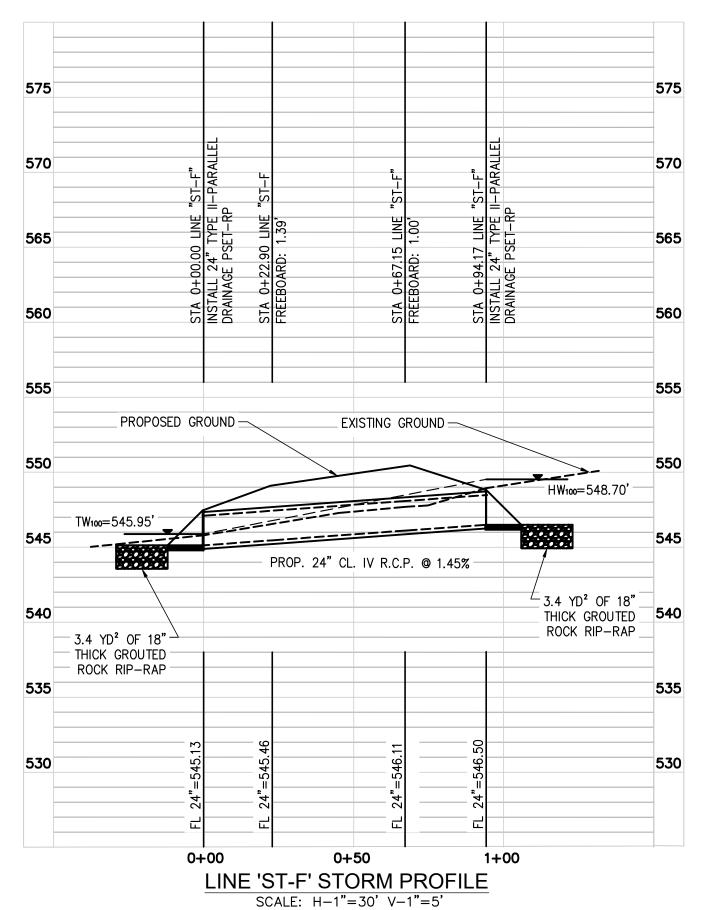
STATE HIGHWAY 205 & FM 549

ROCKWALL, TEXAS

SHEET

		DEPTH	RANGE	TRIAL CU	LVERT	POSS	SIBLE CULVERT	SIZES		IN	ILET CONT	ROL (See F	igure 25&2	6)			HEADWA	ATER CALCU		ITROL (See	Figure 27,	28, 29, & 3	0)				The Greater	
Trial Area of Opening T=Ac=Q/Vmax (sq. ft.)	Channel Width "W" (feet)	T*Ac W (feet)	AHW (feet)	Try Depth "D" (feet)	No. Openings	Width of Box "B" (feet)	Box Depth or Pipe Dia. "D" (feet)	Total Culvert Area "Ac" (sq. ft.)	"Q" Each Opening (c.f.s.)	Entrance Type	Case No.	Q B (c.f.s.)	HW D (figure 25&26)	HW	Entrance Coeff. Ke	"H" (feet) (figure 27&28)	"TW" (feet)	L x So (feet)	HW (feet)	"H" (feet) (figure 27&28)	dc (feet) (figure 29&30)	dc+D 2 (feet)	TW (feet)	ho (feet)	L x So (feet)	"HW" (feet)		SELECTED  CONDUIT  SIZE
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
2.91	2	1.45	3.08	2	1	N/A	2	3.14	23.24	5	II	N/A	1.5	3	0.2	1.6	0.85	1.37	1.08	1.6	0.85	1.43	0.85	1.43	1.37	1.66	3.00	24" pipe

	CLUVEDT DECICAL								
		CULVERT	DESIGN						
CULVERT LOCAT	ION:	SH 205- 7-Eleven Dr	iveway						
LENGTH, L	94.17 ft								
TOTAL DISCHAR	GE, Q	23.24	_DESIGN STORM F	REQ.	100 yr				
ROUGHNESS COEFF., n		0.013	MAX. VEL.	MAX. VEL. 8F.P.S					
TAILWATER		0.85	 D.S. CHANNEL W	IDTH	2'				
ENTRANCE DESC	CRIPTION	Bell end with heady	– wall, type 5						
RDWY. ELEV.	550.58		U.S. CULV. F.L.	546.50					
U.S. CULV. F.L.	546.50		D.S. CULV. F.L.	545.13					
DIFFERENCE	4.08		DIFFERENCE	1.37 f.t.					
REQ'D FREE	3OARD	1 F.T.	CULV. SLOP	CULV. SLOPE, So=					
ALLOW. HEADW	/ATER	3.08 F.T.	S <sub>o</sub> =	0.015					



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GEODETIC CONTROL MONUMENTS - NORTH AMERICAN DATUM - 1983 (2011) TEXAS NORTH CENTRAL ZONE (4202).

COR-8: ALUMINUM DISK STAMPED "CITY OF ROCKWALL SURVEY MONUMENT" AT THE NORTHERLY INTERSECTION OF SILVER VIEW LANE AND DIAMOND WAY DRIVE ±1 FOOT NORTH OF CURB LINE IN CENTER OF CURVE. N: 7018063.113, E: 2609533.682 ELEVATION: 600.48'

COR-9: BRASS DISK STAMPED "CITY OF ROCKWALL SURVEY MONUMENT" ON THE SOUTH SIDE OF DISCOVERY BOULEVARD AT THE SOUTHEAST CORNER OF CURB INLET ±180 FOOT EAST INTERSECTION OF DISCOVERY/CORPORATE. N: 7020550.132, E: 2607463.893 ELEVATION: 595.63'

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.

#4444

TBPE FIRM REGISTRATION #F-8396

KEATON L. MAI

RECORD DRAWING

THESE RECORD DRAWINGS HAVE BEEN PREPARED BASED ON FIELD OBSERVATIONS AND INFORMATION PROVIDED BY THE CONTRACTOR. ELEVATIONS HAVE NOT

BEEN VERIFIED.

OF FRISCO.

THE ORIGINAL SEALED CONSTRUCTIONS PLANS ARE ON FILE AT THE CITY

ENGINEER OF RECORD:

DATE: November 10, 2023

KEATON L. MAI, P.E. THE DIMENSION GROUP, INC. TBPE FIRM F-8396

Y EXTENSION 5 & FM 549 S

REEKSIDE COMMONS UTILITY NWC STATE HIGHWAY 205 ROCKWALL, TEXAS

SHEET

C9.6

CAUTION NOTICE TO CONTRACTORS

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION

OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON

RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE

POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS

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EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES.

T SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO

RELOCATED ALL EXISTING UTILITIES WHICH CONFLICT WITH THE

PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS.

E	CISTING SITE C	CONDITIONS (	5 YR CRITERIA)	·					
С	i	Α	Q						
0.35	4.90	1.72	2.95						
Area	s 1-6 are evaluat	ted for detenti	on calculations	<del>'</del>					
PROPOSED SITE CONDITIONS (100 YR CRITERIA)									
Runoff	Coefficient (C) =	•	0.9						
Total Dr	ainage Area (A)	=	1.72	acres					
Bypass Drai	inage Areas 4-5	(A) =	0.19	acres					
Detained I	Orainage Area (A	() =	1.53	acres					
Time of C	Concentration (tc	) =	10	minutes					
100 Yr By	pass Rate (Q=C	IA)	1.04	cfs					
Max Allowable	e Outflow Rate	1.91	cfs						

	CITY OF ROCKWALL DETENTION CALCULATION								
			Inflow	Inflow	Outflow	Outflow	Storage		
Duration	Intensity	Depth	Discharge	Volume	Duration	Volume	Volume		
(minutes)	(inches/hr)	(inches)	Q=CiA	Cu. Ft.	(minutes)	Cu. Ft.	Cu. Ft.		
10	6.10	1.02	8.4	5,040	20	1,144	3,896		
15	5.50	1.38	7.6	6,816	25	1,430	5,386		
20	4.90	1.63	6.7	8,097	30	1,716	6,381		
30	4.10	2.05	5.6	10,162	40	2,288	7,874		
40	3.40	2.27	4.7	11,236	50	2,860	8,376		
50	2.80	2.33	3.9	11,567	60	3,432	8,135		
60	2.60	2.60	3.6	12,889	70	4,004	8,885		
70	2.40	2.80	3.3	13,880	80	4,576	9,304		
80	2.30	3.07	3.2	15,202	90	5,148	10,054		
90	2.10	3.15	2.9	15,615	100	5,720	9,895		
100	1.90	3.17	2.6	15,698	110	6,292	9,406		
110	1.80	3.30	2.5	16,359	120	6,864	9,495		
				Required Storag	je Volume	10,054	cubic feet		
						0.23	acre-feet		

10 Y	R. MODII	FIED RATIONAL M	ETHOD-PON	D 1	
	EXISTING	SITE CONDITIONS (10	YR CRITERIA)		
С	i	Α	Q		
0.35	5.90	1.72	3.55		
А	reas 1-6 are	e evaluated for detention	n calculations	·	
PR	OPOSED S	ITE CONDITIONS (100	YR CRITERIA)		
Run	off Coefficie	0.9			
Total	Drainage A	1.72	acres		
Bypass I	Orainage Ar	reas 4-5 (A) =	0.19	acres	
Detaine	ed Drainage	e Area (A) =	1.53	acres	
Time o	of Concentra	ation (tc) =	10	minutes	
100 Yr	Bypass Ra	ate (Q=CIA)	1.21	cfs	
Max Allowa	ble Outflo	w Rate (Q=CIA)	2.34	cfs	

		(	CITY OF RO	OCKWALL DETENTION	CALCULATION		
			Inflow	Inflow	Inflow Outflow		Storage
Duration	Intensity	Depth	Discharge	Volume	Duration	Volume	Volume
(minutes)	(inches/hr)	(inches)	Q=CiA	Cu. Ft.	(minutes)	Cu. Ft.	Cu. Ft.
10	7.10	1.18	9.8	5,866	20	1,403	4,463
15	6.50	1.63	9.0	8,055	25	1,753	6,302
20	5.90	1.97	8.1	9,749	30	2,104	7,645
30	4.80	2.40	6.6	11,897	40	2,805	9,092
40	4.00	2.67	5.5	13,219	50	3,507	9,713
50	3.50	2.92	4.8	14,459	60	4,208	10,251
60	3.00	3.00	4.1	14,872	70	4,909	9,962
70	2.80	3.27	3.9	16,194	80	5,610	10,583
80	2.60	3.47	3.6	17,185	90	6,312	10,873
90	2.50	3.75	3.4	18,590	100	7,013	11,576
100	2.40	4.00	3.3	19,829	110	7,714	12,114
110	2.30	4.22	3.2	20,903	120	8,416	12,487
				Required Storag	e Volume	12,487	cubic feet
						0.29	acre-feet

	Actual Release (cfs)	llowable Release (cf
5 year	1.86	1.92
10 year	2.05	2.36
25 year	2.16	2.58
100 year	3.35	3.35

70	2.40	2.80	3.3	13,880	80	4,5/6	9,304			
80	2.30	3.07	3.2	15,202	90	5,148	10,054			
90	2.10	3.15	2.9	15,615	100	5,720	9,895			
100	1.90	3.17	2.6	15,698	110	6,292	9,406			
110	1.80	3.30	2.5	16,359	120	6,864	9,495			
				Required Storag	e Volume	10,054	cubic feet			
						0.23	acre-feet			
25 YR. MODIFIED RATIONAL METHOD- POND 1										
		EXISTING SITE CONDITIONS (25 YR CRITERIA)								
				SITE CONDITIONS (25	III CIN I LINA)					
		С	i	A	Q					

	COLUMN TO THE STATE OF THE STAT				
	EVICTING	OLTE CONDITIONS (SE	VD ODITEDIA		
	EXISTING	SITE CONDITIONS (25	YR CRITERIA)		
С	Ĭ	Α	Q		
0.35	6.60	1.72	3.97		
Ar	eas 1-6 are	e evaluated for detention	calculations		
PRO	POSED S	ITE CONDITIONS (100	YR CRITERIA)		
Run	off Coefficie	0.9			
Total	Drainage A	rea (A) =	1.72	acres	
Bypass D	rainage Ar	reas 4-5 (A) =	0.19	acres	
Detaine	d Drainage	Area (A) =	1.53	acres	
Time o	f Concentra	ation (tc) =	10	minutes	
100 Yr	Bypass Ra	ate (Q=CIA)	1.42	cfs	
Max Allowa	ble Outflo	w Rate (Q=CIA)	2.55	cfs	
		OCKNALL DETENTION	CALCUL ATION		

		(	CITY OF RO	OCKWALL DETENTION	CALCULATION		
			Inflow	Inflow	Outflow	Outflow	Storage
Duration	Intensity	Depth	Discharge	Volume	Duration	Volume	Volume
(minutes)	(inches/hr)	(inches)	Q=CiA	Cu. Ft.	(minutes)	Cu. Ft.	Cu. Ft.
10	8.30	1.38	11.4	6,857	20	1,532	5,325
15	7.50	1.88	10.3	9,295	25	1,915	7,379
20	6.60	2.20	9.1	10,906	30	2,299	8,607
30	5.50	2.75	7.6	13,632	40	3,065	10,568
40	4.60	3.07	6.3	15,202	50	3,831	11,371
50	4.00	3.33	5.5	16,524	60	4,597	11,927
60	3.50	3.50	4.8	17,350	70	5,363	11,987
70	3.30	3.85	4.5	19,085	80	6,129	12,956
80	3.10	4.13	4.3	20,490	90	6,896	13,594
90	2.90	4.35	4.0	21,564	100	7,662	13,902
100	2.70	4.50	3.7	22,307	110	8,428	13,880
110	2.50	4.58	3.4	22,721	120	9,194	13,526
				Required Storag	e Volume	13,902	cubic feet
						0.32	acre-feet

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CITY OF ROCKWALL	MONI IMENTS:

GEODETIC CONTROL MONUMENTS - NORTH AMERICAN DATUM - 1983 (2011)
TEXAS NORTH CENTRAL ZONE (4202).

COR-8: ALUMINUM DISK STAMPED "CITY OF ROCKWALL SURVEY MONUMENT" AT THE NORTHERLY INTERSECTION OF SILVER VIEW LANE AND DIAMOND WAY DRIVE ±1 FOOT NORTH OF CURB LINE IN CENTER OF CURVE. N: 7018063.113, E: 2609533.682 ELEVATION: 600.48'

COR-9: BRASS DISK STAMPED "CITY OF ROCKWALL SURVEY MONUMENT" ON THE SOUTH SIDE OF DISCOVERY BOULEVARD AT THE SOUTHEAST CORNER OF CURB INLET ±180 FOOT EAST INTERSECTION OF DISCOVERY/CORPORATE. N: 7020550.132, E: 2607463.893 ELEVATION: 595.63'

	EXISTING SI	TE CONDITIONS (	100 YR CRITERIA)			
С	i	Α	Q			
0.3	5 8.30	1.72	5.00			
	Areas 1-6 are e	valuated for detent	ion calculations			
I	PROPOSED SIT	E CONDITIONS (1	00 YR CRITERIA)			
F	Runoff Coefficient	(C) =	0.9			
To	tal Drainage Are	a (A) =	1.72	acres		
Bypas	s Drainage Area	s 4-5 (A) =	0.19	acres		
Deta	ined Drainage A	rea (A) =	1.53	acres		
Tim	e of Concentration	on (tc) =	10	minutes		
100	Yr Bypass Rate	(Q=CIA)	1.68	cfs		
Max Allo	wable Outflow	Rate (Q=CIA)	3.32	cfs		

			CITY OF RO	OCKWALL DETENTION	CALCULATION			
			Inflow	Inflow	Outflow	Outflow	Storage	
Duration	Intensity	Depth	Discharge	Volume	Duration	Volume	Volume	
(minutes)	(inches/hr)	(inches)	Q=CiA	Cu. Ft.	(minutes)	Cu. Ft.	Cu. Ft.	
10	9.80	1.63	13.5	8,097	20	1,992	6,104	
15	9.00	2.25	12.4	11,154	25	2,491	8,663	
20	8.30	2.77	11.4	13,715	30	2,989	10,726	
30	6.90	3.45	9.5	17,102	40	3,985	13,117	
40	5.80	3.87	8.0	19,168	50	4,981	14,187	
50	5.00	4.17	6.9	20,655 60		5,977	14,678	
60	4.50	4.50	6.2	22,307 70		6,974	15,334	
70	4.00	4.67	5.5	23,134	80	7,970	15,164	
80	3.70	4.93	5.1	24,456	90	8,966	15,489	
90	3.50	5.25	4.8	26,025	100	9,962	16,063	
100	3.40	5.67	4.7	28,091	110	10,959	17,132	
110	3.20	5.87	4.4	29,082	120	11,955	17,127	
				Required Storag	e Volume	17,132	cubic feet	
						0.39	acre-feet	

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.

#### STORM DRAIN NOTES:

- 1. THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR HIS MEANS AND METHODS OF CONSTRUCTION, JOB SITE CONDITIONS AND JOB SITE SAFETY, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO WORKING HOURS. THE CONTRACTOR SHALL SAVE, PROTECT, INDEMNIFY, DEFEND AND HOLD HARMLESS THE OWNER, THE ARCHITECT AND THE ENGINEER FROM ANY CLAIM OF LIABILITY, REAL OR ALLEGED, ARISING OUT OF THE PERFORMANCE OF ANY WORK ON THIS PROJECT. THE CONTRACTOR SHALL NAME THE OWNER, THE ARCHITECT AND THE ENGINEER AS "ADDITIONAL INSURED" ON HIS INSURANCE POLICIES.
- 2. EXISTING ABOVE GROUND UTILITIES HAVE BEEN SHOWN BASED ON INFORMATION SHOWN ON A SURVEY OF THE PROPERTY BY OTHERS. UNDERGROUND UTILITIES ARE SHOWN BASED ON RECORD DATA AND MAY NOT BE COMPLETE OR EXACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATIONS AND DEPTHS OF ALL ABOVE GROUND AND UNDERGROUND UTILITIES AND ESTABLISHING THEIR EXACT LOCATION AND DEPTH PRIOR TO SETTING ANY FINISH GRADE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO EXISTING ABOVE GROUND OR UNDERGROUND UTILITIES, INCLUDING THOSE NOT SHOWN ON THE PLANS. THE CONTRACTOR IS ADVISED TO CONTACT THE CITY AND ALL FRANCHISE UTILITY COMPANIES, EASEMENT HOLDERS, ETC. AT LEAST 48 HOURS PRIOR TO BEGINNING EXCAVATION IN THE VICINITY OF ANY UNDERGROUND UTILITY.
- 3. CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF ROCKWALL STANDARDS, SPECIFICATIONS AND DETAILS FOR STORM SEWER CONSTRUCTION.
- 4. THE CONTRACTOR SHALL COMPLY WITH ALL BUILDING CODES AND REGULATIONS, FEDERAL STATE, COUNTY AND CITY SAFETY CODES AND INSPECTION REQUIREMENTS.
- 5. TRENCH SAFETY: IF ANY TRENCH ON THIS JOB SITE, INCLUDING OPEN EXCAVATIONS WHOSE DIMENSIONS CAUSE THEM TO BE CONSIDERED TRENCHES BY OSHA, REGARDLESS OF WHETHER FOR THE INSTALLATION OF UTILITIES, FOUNDATIONS OR ANY OTHER SITE ELEMENT, IS EQUAL TO OR GREATER THAN 5.00' DEPTH, THEN THE CONTRACTOR SHALL NOT PERFORM ANY TRENCHING ON THIS SITE UNTIL HE HAS FIRST OBTAINED DETAILED PLANS AND SPECIFICATIONS FOR TRENCH SAFETY SYSTEMS CONFORMING TO OSHA REQUIREMENTS. SUCH PLANS AND SPECIFICATIONS SHALL BE PREPARED BY A REGISTERED PROFESSIONAL ENGINEER EMPLOYED BY OR CONTRACTED BY THE CONTRACTOR AND SHALL BE CONSIDERED A PART OF THE CONTRACTOR'S MEANS AND METHOD'S OF CONSTRUCTION. IF THIS PROJECT IS OFFERED FOR BID, THE BIDS MUST CONTAIN A SEPARATE UNIT PRICE PAY ITEM FOR TRENCH SAFETY.
- 6. WHERE CONSTRUCTION DETAILS AND SPECIFICATIONS ARE NOT NOTED ON THESE PLANS USE CITY OF ROCKWALL STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION.

THE DIMENSION
GROUP

ARCHITECTURE · CIVIL ENGINEERING · MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214.343.9400 www.DimensionGroup.com

TBPE FIRM REGISTRATION #F-8396



11/10/2023

RECORD DRAWING
THE WRITTON CONSENT OF THE DIMENSION GROUP.

RECORD DRAWING
THESE RECORD
DRAWINGS HAVE BEEN
PREPARED BASED ON
FIELD OBSERVATIONS AND
INFORMATION PROVIDED
BY THE CONTRACTOR.
ELEVATIONS HAVE NOT
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THE ORIGINAL SEALED
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OF FRISCO.

ENGINEER OF RECORD: KEATON L. MAI, P.E. THE DIMENSION GROUP, INC. TBPE FIRM F-8396 DATE: November 10, 2023

I DETENTION CALCULATIONS
COMMONS UTILITY EXTENSIONS
TATE HIGHWAY 205 & FM 549
ROCKWALL, TEXAS

CREEKSIDE O NWC STA

SHEET

#### **5 YR. MODIFIED RATIONAL METHOD-POND 2 EXISTING SITE CONDITIONS (5 YR CRITERIA)** C Q 5.49 0.35 3.20 4.90 Areas OS2, OS6-OS9, & OS14 are evaluated for offsite detention calculations PROPOSED SITE CONDITIONS (5 YR CRITERIA) Runoff Coefficient (C) = Total Drainage Area (A) = 3.20 acres Bypass Drainage Areas OS6-OS9 & OS14 (A) = 0.68 acres Detained Drainage Area (A) = 2.52 acres 10 Time of Concentration (tc) = minutes 100 Yr Bypass Rate (Q=CIA) 3.73 cfs Max Allowable Outflow Rate (Q=CIA) 1.75

		(	CITY OF RO	OCKWALL DETENTION	CALCULATION		
			Inflow	Inflow	Outflow	Outflow	Storage
Duration	Intensity	Depth	Discharge	Volume	Duration	Volume	Volume
(minutes)	(inches/hr)	(inches)	Q=CiA	Cu. Ft.	(minutes)	Cu. Ft.	Cu. Ft.
10	6.10	1.02	5.4	3,228	20	1,053	2,175
15	5.50	1.38	4.9	4,366	25	1,316	3,050
20	4.90	1.63	4.3	5,186	30	1,579	3,607
30	4.10	2.05	3.6	6,509	40	2,106	4,403
40	3.40	2.27	3.0	7,197	50	2,632	4,565
50	2.80	2.33	2.5	7,409	60	3,159	4,250
60	2.60	2.60	2.3	8,256	70	3,685	4,570
70	2.40	2.80	2.1	8,891	80	4,212	4,679
80	2.30	3.07	2.0	9,737	90	4,738	4,999
90	2.10	3.15	1.9	10,002	100	5,264	4,737
100	1.90	3.17	1.7	10,055	110	5,791	4,264
110	1.80	3.30	1.6	10,478	120	6,317	4,161
				Required Storag	je Volume	4,999	cubic feet
						0.11	acre-feet
		<del></del>					·

	10 Y	R. MODIF	TIED RATIONAL M	ETHOD-PON	ND 2	
		EXISTING	SITE CONDITIONS (10	YR CRITERIA)		
	С	i	Α	Q		
	0.35	5.90	3.20	6.61		
Areas	OS2, OS	6-OS9, & C	S14 are evaluated for o	offsite detention of	alculations	
	PR	OPOSED S	ITE CONDITIONS (10	YR CRITERIA)		
	Run	off Coefficie	nt (C) =	0.9		
	Total	Drainage A	rea (A) =	3.20	acres	
Bypass	Drainage	Areas OS	6-OS9 & OS14 (A) =	0.68	acres	
	Detaine	d Drainage	Area (A) =	2.52	acres	
	Time o	f Concentra	ntion (tc) =	10	minutes	
	100 Yr Bypass Rate (Q=CIA)				cfs	
Max		15 6	w Rate (Q=CIA)	2.26	cfs	

	CITY OF ROCKWALL DETENTION CALCULATION									
			Inflow	Inflow	Outflow	Outflow	Storage			
Duration	Intensity	Depth	Discharge	Volume	Duration	Volume	Volume			
(minutes)	(inches/hr)	(inches)	Q=CiA	Cu. Ft.	(minutes)	Cu. Ft.	Cu. Ft.			
10	7.10	1.18	6.3	3,757	20	1,358	2,400			
15	6.50	1.63	5.7	5,160	25	1,697	3,463			
20	5.90	1.97	5.2	6,245	30	2,037	4,208			
30	4.80	2.40	4.2	7,620	40	2,715	4,905			
40	4.00	2.67	3.5	8,467	50	3,394	5,073			
50	3.50	2.92	3.1	9,261	60	4,073	5,188			
60	3.00	3.00	2.6	9,526	70	4,752	4,774			
70	2.80	3.27	2.5	10,372	80	5,431	4,942			
80	2.60	3.47	2.3	11,007	90	6,110	4,898			
90	2.50	3.75	2.2	11,907	100	6,788	5,119			
100	2.40	4.00	2.1	12,701	110	7,467	5,234			
110	2.30	4.22	2.0	13,389	120	8,146	5,243			
				Required Storag	je Volume	5,243	cubic feet			
						0.12	acre-feet			

	Actual Release (cfs)	llowable Release (c
5 year	1.74	1.75
10 year	1.75	2.26
25 year	2.26	2.31
100 year	2.96	3.30

**DETENTION NOTE** 

POND 2 IS DESIGNED TO PROVIDE DETENTION VOLUME FOR THE TWO OFFSITE DRIVES SERVING LOT 1. THE POND WILL REMAIN IN PLACE UNTIL LOT 2 IS DEVELOPED OR A REGIONAL DETENTION POND IS CONSTRUCTED. ANY FUTURE DEVELOPMENT THAT ELIMINATES POND 2 WOULD BE REQUIRED TO OFFSET THE DETENTION PROVIDED BY POND 2.

	25 YF	R. MODIF	IED RATIONAL M	ETHOD-PON	D 2	
		EXISTING S	SITE CONDITIONS (25	YR CRITERIA)		
	С	i	Α	Q		
	0.35	6.60	3.20	7.39		
Areas	OS2, OS6	6-OS9, & O	S14 are evaluated for o	offsite detention ca	alculations	
	PRO	OPOSED S	ITE CONDITIONS (25	YR CRITERIA)		
	Rund	off Coefficier	0.9			
	Total	Drainage Ar	rea (A) =	3.20	acres	
Bypas	s Drainage	Areas OS6	6-OS9 & OS14 (A) =	0.68	acres	
	Detaine	d Drainage	Area (A) =	2.52	acres	
	Time o	f Concentra	tion (tc) =	10	minutes	
	100 Yr I	Bypass Rat	e (Q=CIA)	5.08	cfs	
Ma	ax Allowa	ble Outflov	v Rate (Q=CIA)	2.31	cfs	

	CITY OF ROCKWALL DETENTION CALCULATION							
			Inflow	Inflow	Outflow	Outflow	Storage	
Duration	Intensity	Depth	Discharge	Volume	Duration	Volume	Volume	
(minutes)	(inches/hr)	(inches)	Q=CiA	Cu. Ft.	(minutes)	Cu. Ft.	Cu. Ft.	
10	8.30	1.38	7.3	4,392	20	1,387	3,005	
15	7.50	1.88	6.6	5,954	25	1,734	4,219	
20	6.60	2.20	5.8	6,985	30	2,081	4,904	
30	5.50	2.75	4.9	8,732	40	2,775	5,957	
40	4.60	3.07	4.1	9,737	50	3,469	6,269	
50	4.00	3.33	3.5	10,584	60	4,162	6,422	
60	3.50	3.50	3.1	11,113	70	4,856	6,257	
70	3.30	3.85	2.9	12,225	80	5,550	6,675	
80	3.10	4.13	2.7	13,124	90	6,243	6,881	
90	2.90	4.35	2.6	13,812	100	6,937	6,875	
100	2.70	4.50	2.4	14,288	110	7,631	6,657	
110	2.50	4.58	2.2	14,553	120	8,325	6,228	
				Required Storag	e Volume	6,881	cubic feet	
						0.16	acre-feet	

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CITY OF ROCKWALL MONUMENTS: GEODETIC CONTROL MONUMENTS - NORTH AMERICAN DATUM - 1983 (2011) TEXAS NORTH CENTRAL ZONE (4202).

COR-8: ALUMINUM DISK STAMPED "CITY OF ROCKWALL SURVEY MONUMENT" AT THE NORTHERLY INTERSECTION OF SILVER VIEW LANE AND DIAMOND WAY DRIVE ±1 FOOT NORTH OF CURB LINE IN CENTER OF CURVE. N: 7018063.113, E: 2609533.682 ELEVATION: 600.48'

COR-9: BRASS DISK STAMPED "CITY OF ROCKWALL SURVEY MONUMENT" ON THE SOUTH SIDE OF DISCOVERY BOULEVARD AT THE SOUTHEAST CORNER OF CURB INLET ±180 FOOT EAST INTERSECTION OF DISCOVERY/CORPORATE. N: 7020550.132, E: 2607463.893 ELEVATION: 595.63'

	100 Y	R. MODIFIE	ED RATIONAL	METHOD-PO	ND 2
	E	XISTING SIT	E CONDITIONS (	100 YR CRITERIA)	
	С	i	Α	Q	
	0.35	8.30	3.20	9.30	
Areas	OS2, OS6	6-OS9, & OS1	4 are evaluated fo	r offsite detention ca	alculations
	PRO	POSED SITE	CONDITIONS (1	00 YR CRITERIA)	
	Rund	off Coefficient	(C) =	0.9	
	Total	Drainage Area	a (A) =	3.20	acres
Bypass	Drainage	Areas OS6-C	S9 & OS14 (A) =	0.68	acres
	Detaine	d Drainage Ar	ea (A) =	2.52	acres
Time of Concentration (tc) =				10	minutes
100 Yr Bypass Rate (Q=ClA)			6.00	cfs	
Ма	x Allowa	ble Outflow I	Rate (Q=CIA)	3.30	cfs

	CITY OF ROCKWALL DETENTION CALCULATION									
		Inflow Inflow Outflow		Outflow	Outflow	Storage				
Duration	Intensity	Depth	Discharge	Volume	Duration	Volume	Volume			
(minutes)	(inches/hr)	(inches)	Q=CiA	Cu. Ft.	(minutes)	Cu. Ft.	Cu. Ft.			
10	9.80	1.63	8.6	5,186	20	1,979	3,207			
15	9.00	2.25	7.9	7,144	25	2,474	4,670			
20	8.30	2.77	7.3	8,785	30	2,969	5,816			
30	6.90	3.45	6.1	10,954	40	3,958	6,996			
40	5.80	3.87	5.1	12,277	50	4,948	7,330			
50	5.00	4.17	4.4	13,230	60	5,937	7,293			
60	4.50	4.50	4.0	14,288	70	6,927	7,362			
70	4.00	4.67	3.5	14,818	80	7,916	6,901			
80	3.70	4.93	3.3	15,664	90	8,906	6,759			
90	3.50	5.25	3.1	16,670	100	9,895	6,775			
100	3.40	5.67	3.0	17,993	110	10,885	7,108			
110	3.20	5.87	2.8	18,628	120	11,874	6,754			
		_		Required Storag	je Volume	7,362	cubic feet			
						0.17	acre-feet			

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#### STORM DRAIN NOTES:

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- 6. WHERE CONSTRUCTION DETAILS AND SPECIFICATIONS ARE NOT NOTED ON THESE PLANS USE CITY OF ROCKWALL STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION.

TBPE FIRM REGISTRATION #F-8396



RECORD DRAWING THESE RECORD DRAWINGS HAVE BEEN PREPARED BASED ON FIELD OBSERVATIONS AND INFORMATION PROVIDED BY THE CONTRACTOR. **ELEVATIONS HAVE NOT** BEEN VERIFIED. THE ORIGINAL SEALED **CONSTRUCTIONS PLANS** ARE ON FILE AT THE CITY OF FRISCO.

**ENGINEER OF RECORD:** KEATON L. MAI, P.E. THE DIMENSION GROUP. INC. TBPE FIRM F-8396

DATE: November 10, 2023

EXTENSIC & FM 549 S DETENTION EKSIDE O

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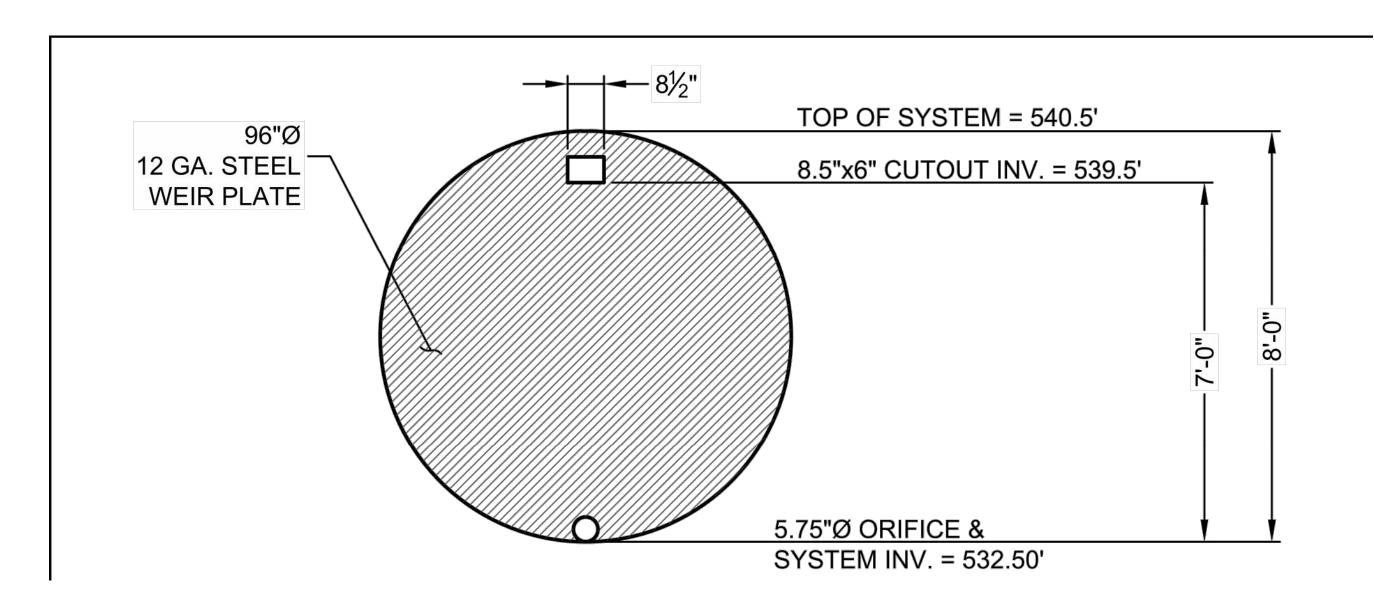
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100-yr Ca	alculations	
Outlet Q (Allowable)	3.35	cfs
g	32.20	ft/s^2
g Cd	0.62	
water elev	540.50	
outlet FL	532.50	
Pipe Size	5.75	in
	0.48	ft
ho	7.76	ft
Ao	0.18	ft^2
diameter	0.48	ft
	5.75	in
Pipe Size	0.48	ft
Ao	0.18	
Q (Actual)	2.50	

100-yr Overflow Calculations							
Outlet Q (Allowable)		cfs					
	0.85						
Water Elev.	540.50						
Outlet FL	540.00						
Н	6.0000	in					
Н	0.50	ft					
b	0.72	ft					
Q (Actual)	0.85						

25-yr Ca	alculations			10-yr Ca	lculations		5-yr Calculations		
Outlet Q (Allowable)	2.58	cfs		Outlet Q (Allowable)	2.36	cfs	Outlet Q (Allowable)	1.92	cfs
g	32.20	ft/s^2		g	32.20	ft/s^2	g	32.20	ft/s^2
Cd	0.62			Cd	0.62		Cd	0.62	
	500 54				507.00		, ,	507.04	
water elev	538.54			water elev	537.96		water elev	537.04	
outlet FL	532.50			outlet FL	532.50		outlet FL	532.50	
Pipe Size	5.75	in		Pipe Size	5.75	in	Pipe Size	5.75	in
	0.48	ft			0.48	ft		0.48	ft
ho	5.80	ft		ho	5.22	ft	ho	4.30	ft
Ao	0.18	ft^2		Ao	0.18	ft^2	Ao	0.18	ft^2
diameter	0.48			diameter	0.48		diameter	0.48	
	5.75				5.75			5.75	
Pipe Size	0.48	ft		Pipe Size	0.48	ft	Pipe Size	0.48	ft
Ao	0.18			Ao	0.18		Ao	0.18	
O (Actual)	2 16		-	O (Actual)	2.05		O (Actual)	1 86	
Q (Actual)	2.16			Q (Actual)	2.05		Q (Actual)	1	1.86

Q100=Q100 ORIFICE+Q100 OVERFLOW=2.50 CFS+0.85 CFS=3.35 CFS  $\leq$  Q100 allowable





CITY OF ROCKWALL MONUMENTS: GEODETIC CONTROL MONUMENTS - NORTH AMERICAN DATUM - 1983 (2011) TEXAS NORTH CENTRAL ZONE (4202).

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ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING

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TBPE FIRM REGISTRATION #F-8396



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**ENGINEER OF RECORD:** KEATON L. MAI, P.E. THE DIMENSION GROUP,

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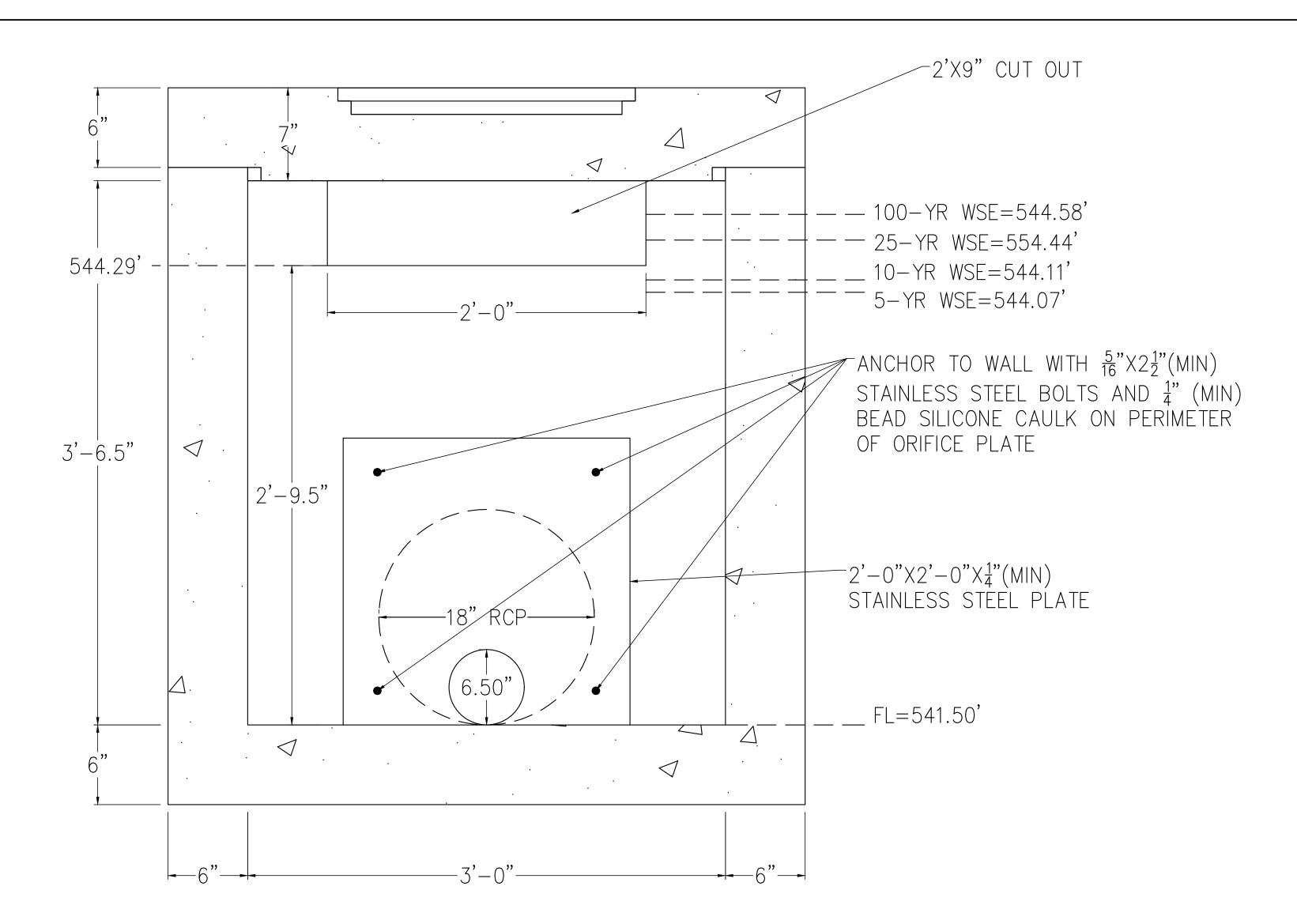
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AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.



# $Q = C_d * A_o * \sqrt{2g * h_o}$

5-yr Cal	culations	
Outlet Q (Allowable)	1.75	cfs
g	32.20	ft/s^2
Cd	0.62	
Water Elev.	544.07	
Outlet FL	541.50	
Pipe Size	6.5000	in
	0.54	ft
ho	2.30	ft
Ao	0.23	ft^2
Diameter	0.54	ft
	6.50	in
Pipe Size	0.54	ft
Ao	0.23	
Q (Actual)	1.74	

# $Q = C_d * A_o * \sqrt{2g * h_o}$

10-yr Ca	culations	
Outlet Q (Allowable)	2.26	cfs
g	32.20	ft/s^2
Cd	0.62	
Water Elev.	544.11	
Outlet FL	541.50	
Pipe Size	6.5000	in
	0.54	ft
ho	2.34	ft
Ao	0.23	ft^2
Diameter	0.54	ft
	6.50	in
Pipe Size	0.54	ft
Ao	0.23	
Q (Actual)	1.75	

#F-8396 KEATON L. MAI

TBPE FIRM REGISTRATION

4

RECORD DRAWING
THESE RECORD
DRAWINGS HAVE BEEN PREPARED BASED ON FIELD OBSERVATIONS AND INFORMATION PROVIDED
BY THE CONTRACTOR.
ELEVATIONS HAVE NOT
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THE ORIGINAL SEALED
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ARE ON FILE AT THE CITY
OF FRISCO.

ENGINEER OF RECORD: KEATON L. MAI, P.E. THE DIMENSION GROUP, INC. TBPE FIRM F-8396

DATE: November 10, 2023 # DATE
A11/10/23
A

CREEKSIDE COMMONS UTILITY EXTENSIONS NWC STATE HIGHWAY 205 & FM 549 ROCKWALL, TEXAS

C9.10

 $Q = C_d * A_o * \sqrt{2g * h_o}$ 

25-yr Calculations

Outlet Q (Allowable)

Pipe Size

Q (Actual)

2.31 cfs

0.62

544.44

**6.50** in

0.54 ft

0.23

1.87

32.20 ft/s^2

 $Q = 3.33*B*H^{(\frac{3}{2})}$ 

Outlet Q (Allowable)

Water Elev.

Outlet FL

25-yr Overflow Calculations

0.44 cfs

544.44

544.29

**1.8000** in

 $Q = C_d * A_o * \sqrt{2g * h_o}$ 100-yr Calculations Outlet Q (Allowable) Water Elev. Outlet FL

Pipe Size

Q (Actual)

544.58 541.50 Pipe Size **6.5000** in 0.54 ft 2.81 ft 0.23 ft^2 **0.54** ft Diameter **6.50** in

32.20 ft/s^2 0.62  $\bigcirc \vdash \bigcirc = \bigcirc$ 100 allowable 0.54 ft 0.23

1.92

**3.30** cfs

	Ь	2.00	ft
	Q (Actual)	1.04	
`	AL— Q100 ORIFICE+ Q100		
+1.04	CFS=2.96 C	CFS<3.30 (	CFS .
	<u> </u>		

 $Q = 3.33*B*H^{(\frac{3}{2})}$ 

Outlet Q (Allowable)

Water Elev.

Outlet FL

100-yr Overflow Calculations

1.38 cfs

544.58

544.29

**3.4800** in

0.29 ft

Outlet FL	541.50			Н	0.1
Pipe Size	6.5000	in		b	2.0
	0.54	ft			
ho	2.67	ft			
				Q (Actual)	0.3
Ao	0.23	ft^2	O 25 ACTUAL	L $\equiv$ $\bigcirc$ 25 ORIFICE $+$ $\bigcirc$ 25 O $^\circ$	VEDELOW—
Diameter	0.54	ft	25 ACTOA	L_ Q25 0111110L+ Q25 0	

+0.39 CFS=2.26 CFS<2.31 CFS

CFS=Q25 ALLOWABLE

CITY OF ROCKWALL MONUMENTS:
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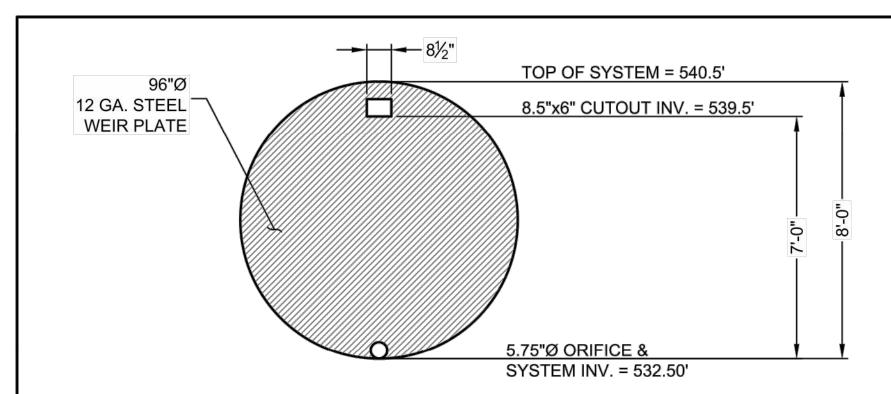
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**END VIEW** 

#### **WEIR PLATE DETAIL** 62'-3" 18"Ø STUB H1 PART E3 NOT TO SCALE 96"Ø BULKHEAD J1 W/ 18"Ø STUB J2 5'-0" 49'-6" 4'-0" 36"Ø RISER J3 24"Ø STUB G1 36"Ø RISER L3 14'-0" 5'-0" 36"Ø RISER E1 36"Ø RISER D3 — 96"Ø WEIR PLATE E3 96"Ø BULKHEAD D1 W/ 18"Ø STUB D2 96"Ø BULKHEAD L1 W/ 18"Ø STUB L2 5'-0" 14'-6" - 96"Ø BULKHEAD M1 BAND, TYPICAL 36"Ø RISER F3 18"Ø STUB M2 96"Ø BULKHEAD F1 SEE DETAIL SHEET P3 W/ 18"Ø STUB F2 12'-3" 18"Ø STUB E2

INFORMA	TION
STUB INVERT	SYSTEM INVERT
532.50	532.50
532.50	532.50
532.50	532.50
537.60	532.50
532.50	532.50
532.50	532.50
538.21	532.50
538.40	532.50
	532.50 532.50 532.50 537.60 532.50 532.50 538.21

RISER	INFORMA	ATION
PIECE	RIM ELEV.	SYSTEM INVERT
36"Ø RISER D3	TBD	532.50
36"Ø RISER E1	TBD	532.50
36"Ø RISER F3	TBD	532.50
36"Ø RISER J3	TBD	532.50
36"Ø RISER L3	TBD	532.50

NORTH ARROW PROVIDED FOR REFERENCE ONLY. REFER TO ENGINEERED SITE PLANS FOR EXACT LOCATION AND ORIENTATION

THE UNDERSIGNED HEREBY APPROVES THE ATTACHED (P4) PAGES INCLUDING THE FOLLOWING:

- PIPE STORAGE = 17,341 CF
- MAINLINE PIPE GAGE = 16
- WALL TYPE = SOLIDDIAMETER = 96, 18"
- FINISH = ALT2
- CORRUGATION = 5x1

CUSTOMER DATE

## **ASSEMBLY**

SCALE: 1" = 20'
PIPE STORAGE: 17,341 CF
LOADING: H20
PIPE INV. = 532.5'±

#### <u>NOTES</u>

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE.
- ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD (EOR) PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE 2⅓" x½" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE AS REQUIRED, BY CONTRACTOR.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL ACCESS CASTINGS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE NOT SUPPLIED BY CONTECH.

/						
167	The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by					
5	Contech Engineered Solutions LLC ("Contech"). Neither this					
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		lacksquare				
겁	Contech. Failure to comply is done at the user's own risk and					
쁘	Contech expressly disclaims any liability or responsibility for					
σĺ	such use.	-				
IN\PROJE	If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered					
	as site work progresses, these discrepancies must be reported					
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_	inaccurate information supplied by others.					

ENGINEERED SOLUTIONS LLC
www.ContechES.com

9100 Centre Pointe Dr., Suite 400, West Chester, OH 45069 800-338-1122 513-645-7000 513-645-7993 FAX CMP DETENTION SYSTEMS

CONTECH
PROPOSAL
DRAWING

96"Ø UNDERGROUND DETENTION SYSTEM - 677720-010
7-ELEVEN ROCKWALL TX
ROCKWALL, TX
SITE DESIGNATION: UDS

077700 040 045/0000	
677720 010 9/15/2022	
DESIGNED: DRAWN:	
MJK MJK	
CHECKED: APPROVED:	
MB/CEU MJK	
SHEET NO.:	
P1 of P4	

CAUTION NOTICE TO CONTRACTORS

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CITY OF ROCKWALL MONUMENTS:

GEODETIC CONTROL MONUMENTS - NORTH AMERICAN DATUM - 1983 (2011)

TEXAS NORTH CENTRAL ZONE (4202).

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THE DIMENSION STATEMENT OF GROUP ARCHITECTURE - CIVIL ENGINEERING - MEP ENGINEERING 10755 SANDHILL ROAD, DALLAS, TEXAS 75238 TEL: 214.343.9400 www.DimensionGroup.com

TBPE FIRM REGISTRATION #F-8396



11/10/2023

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RECORD DRAWING
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DRAWINGS HAVE BEEN
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ENGINEER OF RECORD: KEATON L. MAI, P.E. THE DIMENSION GROUP, INC. TBPE FIRM F-8396 DATE: November 10, 2023

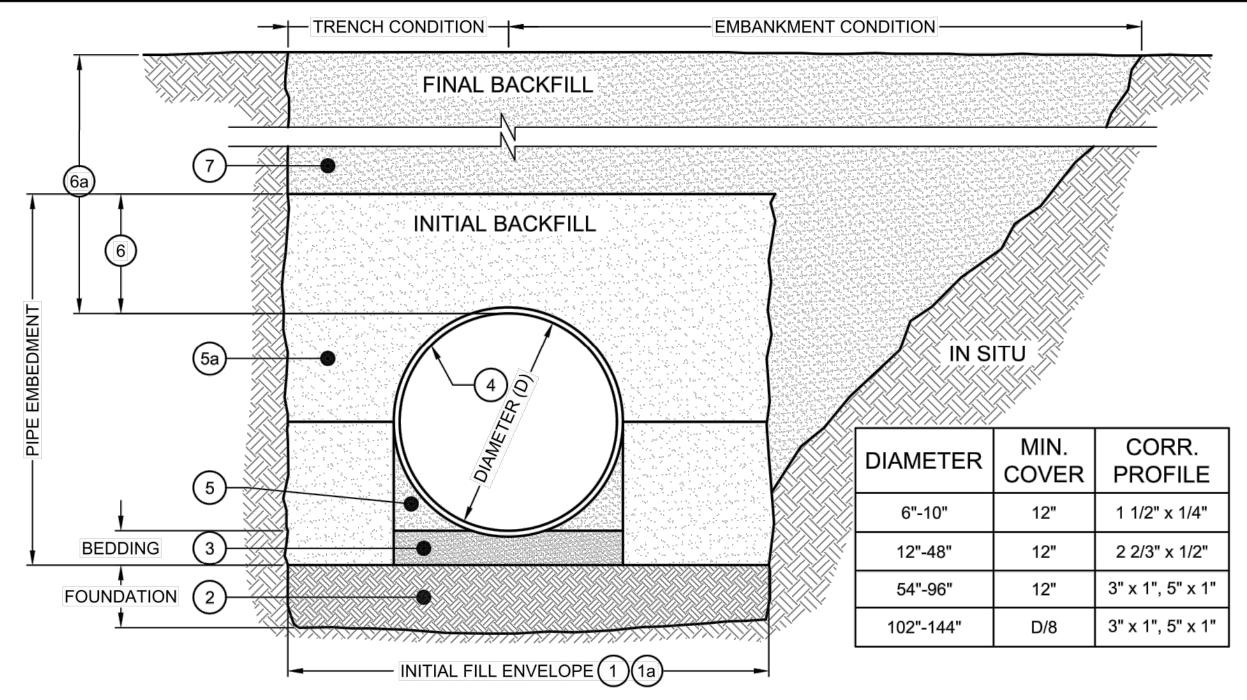
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OMMONS UTILITY EXTENSIONS FE HIGHWAY 205 & FM 549 OCKWALL, TEXAS

CREEKSIDE COMMONS UT NWC STATE HIGHWAN

## **TYPICAL SECTION VIEW**

NOT TO SCALE



#### BACKFILL REQUIREMENTS FOLLOW THE GUIDELINES OF AASHTO LRFD BRIDGE DESIGN (SEC 12) AND CONSTRUCTION (SEC 26)

1 MINIMUM TRENCH WIDTH MUST ALLOW ROOM FOR PROPER COMPACTION OF HAUNCH MATERIALS UNDER THE PIPE. THE MINIMUM TRENCH WIDTH (12.6.6.1): PIPE ≤ 12": D + 16" PIPE > 12": 1.5D + 12"

1a MINIMUM EMBANKMENT WIDTH (IN FEET) FOR INITIAL FILL ENVELOPE (12.6.6.2): PIPE < 24": 3.0D PIPE 24" - 144": D + 4'0" PIPE > 144": D + 10'0"

- 2 THE FOUNDATION UNDER THE PIPE AND SIDE BACKFILL SHALL BE ADEQUATE TO SUPPORT THE LOADS ACTING UPON IT (26.5.2).
- 3 ENGINEER TO DETERMINE IF BEDDING IS REQUIRED. BEDDING MATERIAL SHALL BE A RELATIVELY LOOSE MATERIAL THAT IS ROUGHLY SHAPED TO FIT THE BOTTOM OF THE PIPE, AND A MINIMUM OF TWICE THE CORRUGATION DEPTH IN THICKNESS, WITH THE MAXIMUM PARTICLE SIZE OF ONE-HALF OF THE CORRUGATION DEPTH (26.3.8.1, 26.5.3).
- 4 CORRUGATED STEEL PIPE (CSP / HEL-COR).
- 5 HAUNCH ZONE MATERIAL SHALL BE HAND SHOVELED OR SHOVEL SLICED INTO PLACE TO ALLOW FOR PROPER COMPACTION (26.5.4).
- 5a INITIAL BACKFILL FOR PIPE EMBEDMENT TO MEET AASHTO A-1, A-2 OR A-3 CLASSIFICATION, OR APPROVED EQUAL, COMPACTED TO 90% STANDARD PROCTOR (T 99). MAXIMUM PARTICLE SIZE NOT TO EXCEED 3" (12.4.1.2). ALL LIFTS PLACED IN A CONTROLLED MANNER. IT IS RECOMMENDED THAT LIFTS NOT EXCEED AN 8" UNCOMPACTED LIFT HEIGHT TO PREVENT UNEVEN LOADING, AND THE LESSER OF 1/3 THE DIAMETER OR 24" AS THE MAXIMUM DIFFERENTIAL SIDE-TO-SIDE (26.5.4).
- 6 INITIAL BACKFILL ABOVE PIPE MAY INCLUDE ROAD BASE MATERIAL (AND RIGID PAVEMENT IF APPLICABLE). SEE TABLE ABOVE.
- 6a TOTAL HEIGHT OF COMPACTED COVER FOR CONVENTIONAL HIGHWAY LOADS IS MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF RIGID PAVEMENT (12.6.6.3).
- 7 FINAL BACKFILL MATERIAL SELECTION AND COMPACTION REQUIREMENTS SHALL FOLLOW THE PROJECT PLANS AND SPECIFICATIONS PER THE ENGINEER OF RECORD (26.5.4.1).

#### NOTES:

- ENGINEER TO DETERMINE IF GEOTEXTILE SHOULD BE USED TO PREVENT SOIL MIGRATION INTO VARYING SOIL TYPES (PROJECT
- FOR MULTIPLE BARREL INSTALLATIONS THE RECOMMENDED STANDARD SPACING BETWEEN PARALLEL PIPE RUNS SHALL BE PIPE DIA./2 BUT NO LESS THAN 12", OR 36" FOR PIPE DIAMETERS 72" AND LARGER.
- CONTACT YOUR CONTECH REPRESENTATIVE FOR NONSTANDARD SPACING (TABLE C12.6.7-1).

## TYPICAL BACKFILL DETAIL

NOT TO SCALE

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**C**INTECH **ENGINEERED SOLUTIONS LLC** www.ContechES.com

9100 Centre Pointe Dr., Suite 400, West Chester, OH 45069

800-338-1122 513-645-7000 513-645-7993 FAX

**CMP DETENTION SYSTEMS** 

**PROPOSAL** 

DRAWING

96"Ø UNDERGROUND DETENTION SYSTEM - 677720-010 7-ELEVEN ROCKWALL TX ROCKWALL, TX SITE DESIGNATION: UDS

677720	010		9/15/2022
DESIGNED:		DRAWN:	
MJK		MJK	
CHECKED:		APPROVED:	
MB/CEU			MJK
SHEET NO.:		_	D4
P2	C	F	P4

**CITY OF ROCKWALL MONUMENTS:** GEODETIC CONTROL MONUMENTS - NORTH AMERICAN DATUM - 1983 (2011) TEXAS NORTH CENTRAL ZONE (4202).

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CAUTION NOTICE TO CONTRACTORS THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION

SHEET C9.12

TBPE FIRM REGISTRATION #F-8396

KEATON L. MAI

RECORD DRAWING

INFORMATION PROVIDED BY THE CONTRACTOR.

**ELEVATIONS HAVE NOT** 

THE ORIGINAL SEALED CONSTRUCTIONS PLANS ARE ON FILE AT THE CITY

**ENGINEER OF RECORD:** 

THE DIMENSION GROUP, INC. TBPE FIRM F-8396

DATE: November 10, 2023

KEATON L. MAI, P.E.

DRAWINGS HAVE BEEN PREPARED BASED ON FIELD OBSERVATIONS AND

THESE RECORD

BEEN VERIFIED.

OF FRISCO.

1 2 5 0 7

#### PLAIN END CMP RISER PIPE

#### **GENERAL NOTES:**

- 1. DELIVERED BAND STYLE AND FASTENER TYPE MAY VARY BY FABRICATION PLANT.
- 2. JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
- 3. BAND MATERIAL AND GAGE TO BE SAME AS RISER MATERIAL.
- 4. IF RISER HAS A HEIGHT OF COVER OF 10' OR MORE, USE A SLIP JOINT.
- 5. BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
  - 12" THRU 48" 1-PIECE
- 54" 2-PIECES

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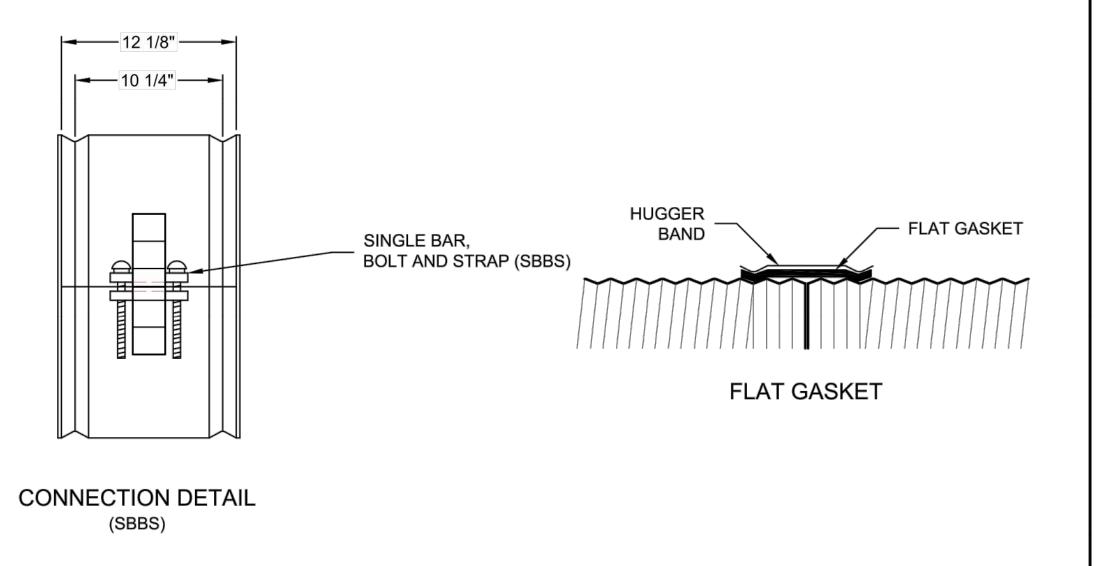
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- 6. ALL RISER JOINT COMPONENTS WILL BE FIELD ASSEMBLED.
- 7. MANHOLE RISERS IN APPLICATIONS WHERE TRAFFIC LOADS ARE IMPOSED REQUIRE SPECIAL DESIGN CONSIDERATIONS.
- 8. DIMENSIONS SUBJECT TO MANUFACTURING TOLERANCES.

# 12" RISER BAND DETAIL NOT TO SCALE



## 2 2/3"x1/2" RE-ROLLED END HEL-COR PIPE

#### GENERAL NOTES:

- 1. JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
- 2. BAND MATERIALS AND/OR COATING CAN VARY BY LOCATION. CONTACT YOUR CONTECH REPRESENTATIVE FOR AVAILABILITY.
- 3. BANDS ARE SHAPED TO MATCH THE PIPE-ARCH WHEN APPLICABLE.
- 4. BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
  - 12" THRU 48" 1-PIECE
  - 54" THRU 96" 2-PIECES102" THRU 144" 3-PIECES
- 5. BAND FASTENERS ARE ATTACHED WITH SPOT WELDS, RIVETS OR HAND WELDS.
- 6. ALL CMP IS REROLLED TO HAVE ANNULAR END CORRUGATIONS OF 2 2/3"x1/2"
- 7. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
- 8. ORDER SHALL DESIGNATE GASKET OPTION, IF REQUIRED (SEE DETAILS ABOVE).

# H-12 HUGGER BAND DETAIL NOT TO SCALE

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	as site work progresses, these discrepancies must be reported					1
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_	inaccurate information supplied by others.	*** ** **	D, (1 L	THE VICTORY DECORAL FIGURE		4

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CONTECH
PROPOSAL
DRAWING

96"Ø UNDERGROUND DETENTION SYSTEM - 677720-010
7-ELEVEN ROCKWALL TX
ROCKWALL, TX
SITE DESIGNATION: UDS

PROJECT No.:	SEQ. I	No.:	DATE:	1	
677720	01	10	9/15/2022		
DESIGNED:		DRAWN:			
MJK		MJK			
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**CMP DETENTION SYSTEMS** 

THE DIMENSION REPRING ARCHITECTURE CIVIL ENGINEERING TO TESS SANDHILL ROAD, DALLAS, TEXAS 75238 TEL: 214.343.9400 www.DimensionGroup.com

TBPE FIRM REGISTRATION
#F-8396

KEATON L. MAI

11/10/2023

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DATE REVISION DESCRIPTION

Andre 11/10/2023 – 10:07 am

DATE REVISION DESCRIPTION

Adate 11/10/2023 – 10:07 am

TENTION DETAIL

CREEKSIDE C NWC ST

SHEET

#### CONSTRUCTION LOADS

FOR TEMPORARY CONSTRUCTION VEHICLE LOADS, AN EXTRA AMOUNT OF COMPACTED COVER MAY BE REQUIRED OVER THE TOP OF THE PIPE. THE HEIGHT-OF-COVER SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THE TABLE BELOW. THE USE OF HEAVY CONSTRUCTION EQUIPMENT NECESSITATES GREATER PROTECTION FOR THE PIPE THAN FINISHED GRADE COVER MINIMUMS FOR NORMAL HIGHWAY TRAFFIC.

DIDE ODAN	AXLE LOADS (kips)								
PIPE SPAN, INCHES									
	18-50	18-50 50-75 75-110							
		MINIMUM C	COVER (FT)						
12-42	2.0	2.5	3.0	3.0					
48-72	3.0	3.0	3.5	4.0					
78-120	3.0	3.5	4.0	4.0					
126-144	3.5	4.0	4.5	4.5					

\*MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.

#### CONSTRUCTION LOADING DIAGRAM

NOT TO SCALE

#### SPECIFICATION FOR CORRUGATED STEEL PIPE-ALUMINIZED TYPE 2 STEEL

#### SCOPE

THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE CORRUGATED STEEL PIPE (CSP) DETAILED IN THE PROJECT PLANS.

#### MATERIAL

THE ALUMINIZED TYPE 2 STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M274 OR ASTM A929.

THE CSP SHALL BE MANUFACTURED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF AASHTO M36 OR ASTM A760. THE PIPE SIZES, GAGES AND CORRUGATIONS SHALL BE AS SHOWN ON THE PROJECT PLANS.

ALL FABRICATION OF THE PRODUCT SHALL OCCUR WITHIN THE UNITED STATES.

#### HANDLING AND ASSEMBLY

SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF THE NATIONAL CORRUGATED STEEL PIPE ASSOCIATION (NCSPA)

#### INSTALLATION

SHALL BE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 26, DIVISION II OR ASTM A798 AND IN CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. IF THERE ARE ANY INCONSISTENCIES OR CONFLICTS THE CONTRACTOR SHOULD DISCUSS AND RESOLVE WITH THE SITE ENGINEER.

IT IS ALWAYS THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW OSHA GUIDELINES FOR SAFE PRACTICES.

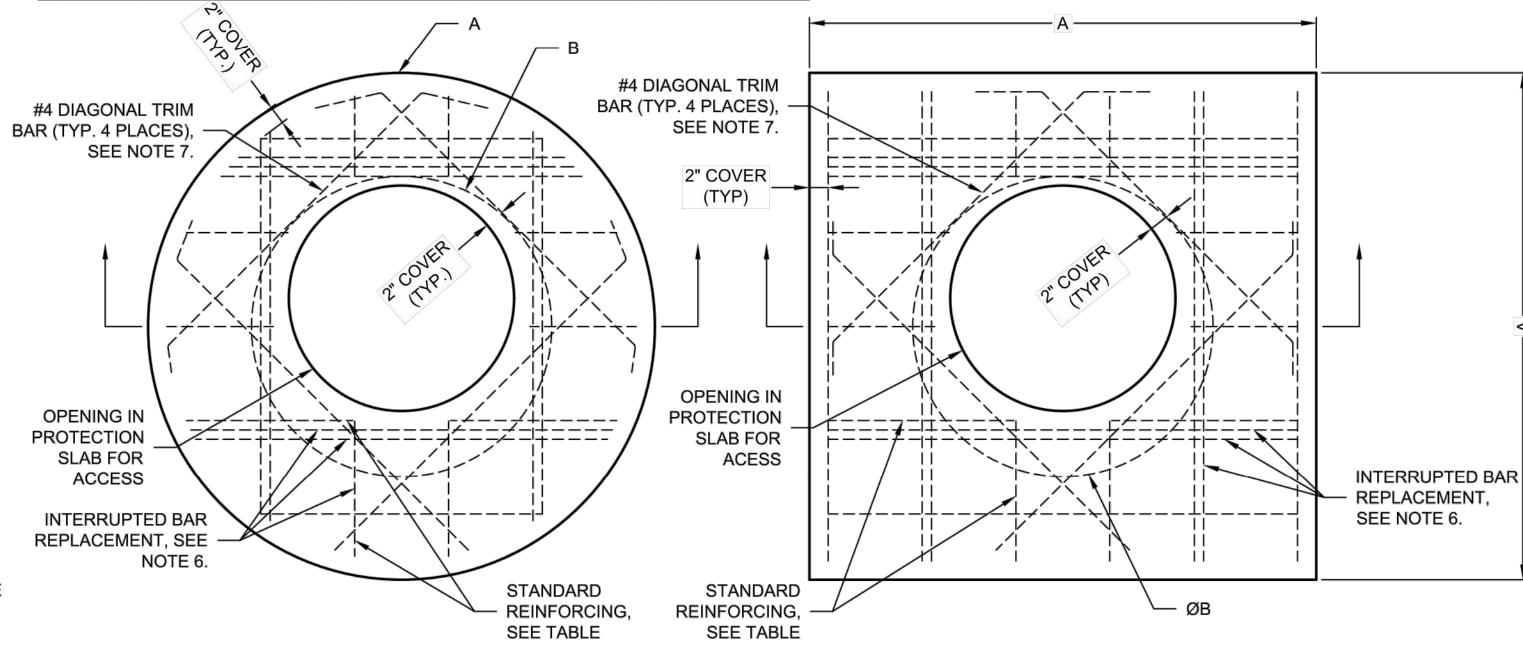
ANTI-FLOTATION PROVISIONS DUE TO HIGH GROUNDWATER OR OTHER FLOTATION CONCERNS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.

#### 36"Ø MAX., HS-25 ACCESS CASTING WITH GRADE RINGS AS REQUIRED. TO BE PROVIDED AND INSTALLED BY CONTRACTOR. MAY BE TOP MOUNTED CMP (AS SHOWN) OR RECESSED. PROTECTION RIM/FINISHED SLAB **GRADE GASKET MATERIAL** SUFFICIENT TO PREVENT SLAB FROM BEARING ON RISER TO BE PROVIDED BY CONTRACTOR. SECTION VIEW

#### REINFORCING TABLE \*\*BEARING **PRESSURE** ВØ REINFORCING **RISER** (PSF) #5 @ 10" OCEW 2,540 26" #5 @ 10" OCEW 1,900 4'x4' #5 @ 10" OCEW 2,260 #5 @ 9" OCEW 1,670 4'-6" x 4'-6" #5 @ 9" OCEW 2,060 #5 @ 8" OCEW 1,500 5' x 5' #5 @ 8" OCEW 1,490 #5 @ 8" OCEW 1,370 5'-6" x 5'-6" #5 @ 7" OCEW 1,210 #5 @ 7" OCEW 1,270 6' x 6'

## **ACCESS CASTING SUPPLIED BY CONTECH IN** SELECT MARKETS UNDER SEPARATE SUBMITTAL





#### ROUND OPTION PLAN VIEW

#### NOTES:

- 1. DESIGN IN ACCORDANCE WITH AASHTO, 17th EDITION AND ACI 350.
- 2. DESIGN LOAD HS25.
- 3. EARTH COVER = 1' MAX.
- 4. CONCRETE STRENGTH = 4,000 psi
- 5. REINFORCING STEEL = ASTM A615, GRADE 60.
- 6. PROVIDE ADDITIONAL REINFORCING AROUND OPENINGS EQUAL TO THE BARS INTERRUPTED, HALF EACH SIDE. ADDITIONAL BARS TO BE IN THE SAME PLANE.

### SQUARE OPTION PLAN VIEW

- 7. TRIM OPENING WITH DIAGONAL #4 BARS, EXTEND BARS A MINIMUM OF 12" BEYOND OPENING, BEND BARS AS REQUIRED TO MAINTAIN BAR COVER.
- 8. PROTECTION SLAB AND ALL MATERIALS TO BE PROVIDED AND INSTALLED BY CONTRACTOR.
- 9. DETAIL DESIGN BY DELTA ENGINEERS, ARCHITECTS AND LAND SURVEYORS, ENDWELL, NY.

## MANHOLE CAP DETAIL

NOT TO SCALE

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	PROJECT No.:	SEQ. N	10.:	DATE:
96"Ø UNDERGROUND DETENTION SYSTEM - 677720-010	677720	01	0	9/15/2022
7-ELEVEN ROCKWALL TX	DESIGNED:		DRAW	
7-ELEVEN ROCKWALL IX	MJK	_	MJK	
ROCKWALL, TX	CHECKED:  MB/CEU		APPRO	MJK
SITE DESIGNATION: UDS	SHEET NO.:			
OTTE BESTON, THOM: OBS	I P4	Ol	F	P4

#### MATERIAL SPECIFICATION

NOT TO SCALE

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## **C**INTECH **ENGINEERED SOLUTIONS LLC**

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www.ContechES.com 9100 Centre Pointe Dr., Suite 400, West Chester, OH 45069 CENTECH **CMP DETENTION SYSTEMS** 

> **PROPOSAL** DRAWING

677720	01	10 9/15/2022				
DESIGNED:		DRAWN:				
MJK		MJK				
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MB/CEU			MJK			
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ENGINEER OF RECORD: KEATON L. MAI, P.E. THE DIMENSION GROUP INC. TBPE FIRM F-8396 DATE: November 10, 2023

\*4444

Y EXTENSIONS 5 & FM 549

SHEET

#### CASCADE SEPARATOR DESIGN NOTES

THE STANDARD CS-5 CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

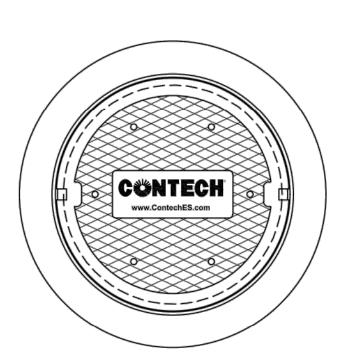
CONFIGURATION DESCRIPTION

GRATED INLET ONLY (NO INLET PIPE)

GRATED INLET WITH INLET PIPE OR PIPES

CURB INLET ONLY (NO INLET PIPE)

**CURB INLET WITH INLET PIPE OR PIPES** 



## FRAME AND COVER (DIAMETER VARIES)

NOT TO SCALE

## SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID										
WATER QUALITY FLO										
PEAK FLOW RATE (cfs										
RETURN PERIOD OF F										
RIM ELEVATION										
PIPE DATA:	INVERT	MATERIAL	DIAMETER							
INLET PIPE 1										
INLET PIPE 2										

NOTES / SPECIAL REQUIREMENT

OUTLET PIPE

CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE

- 2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
- 3. CASCADE SEPARATOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
- 4. CASCADE SEPARATOR STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING EARTH COVER OF 0' 2' [610], AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
- 5. CASCADE SEPARATOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN
- 6. ALTERNATE UNITS ARE SHOWN IN MILLIMETERS [mm].

**INSTALLATION NOTES** 

- A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CASCADE SEPARATOR MANHOLE STRUCTURE
- C. CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
- D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
- E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

**ENGINEERED SOLUTIONS LLC** www.contechES.com

9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069 800-338-1122 513-645-7000 513-645-7993 FAX

CS-5 **CASCADE SEPARATOR** STANDARD DETAIL

GEODETIC CONTROL MONUMENTS - NORTH AMERICAN DATUM - 1983 (2011)

AT THE NORTHERLY INTERSECTION OF SILVER VIEW LANE AND DIAMOND N: 7018063.113, E: 2609533.682 ELEVATION: 600.48

COR-9: BRASS DISK STAMPED "CITY OF ROCKWALL SURVEY MONUMENT" ON THE SOUTH SIDE OF DISCOVERY BOULEVARD AT THE SOUTHEAST CORNER OF CURB INLET ±180 FOOT EAST INTERSECTION OF DISCOVERY/CORPORATE N: 7020550.132, E: 2607463.893 ELEVATION: 595.63

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.

WATER QUALITY FLOWRATE CALCULATIONS (SEE SHEET C9.13 FOR OIL/WATER SEPARATOR DETAIL)

Rv=0.05+0.009(94)=0.896 [Volumetric runoff coefficient] Qwv=1.5(Rv)=1.5(.896)=1.344 [Water Quality Volume]  $CN=1000/[10+5p+10Qwv-10(Qwv^2+1.25QwvP)^{1/2}]$ 

 $=1000/[10+5(1.5)+10(1.344)-10(1.344^2+1.25(1.344)(1.5))^{1/2}]$ 

=1000/(17.5+13.44-20.80)

CN=1000/10.14=98.62 [Curve Number]

ia=0.2(1000/98.62-10)=0.028

ia/p=0.019

per figure 1.10 in ISWM qu=875 csm/in A=1.03 AC

875 cfs/mi<sup>2</sup>/in(.00156 sqm./ac)(1.03 ac)(1.344 in)=1.89 cfs

[Water Quality Peak Discharge]

TBPE FIRM REGISTRATION #F-8396



RECORD DRAWING THESE RECORD DRAWINGS HAVE BEEN PREPARED BASED ON FIELD OBSERVATIONS AND INFORMATION PROVIDED BY THE CONTRACTOR. **ELEVATIONS HAVE NOT** BEEN VERIFIED. THE ORIGINAL SEALED CONSTRUCTIONS PLANS ARE ON FILE AT THE CITY OF FRISCO.

**ENGINEER OF RECORD:** KEATON L. MAI, P.E. THE DIMENSION GROUP INC. TBPE FIRM F-8396

DATE: November 10, 2023

Y EXTENSIONS 5 & FM 549

\*4000

SHEET

C9.15

CAUTION NOTICE TO CONTRACTORS THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL 811 AT LEAST 72 HOURS BEFORE ANY XCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ELOCATED ALL EXISTING UTILITIES WHICH CONFLICT WITH THE

CITY OF ROCKWALL MONUMENTS:

separator™

TEXAS NORTH CENTRAL ZONE (4202). WAY DRIVE ±1 FOOT NORTH OF CURB LINE IN CENTER OF CURVE.

#### 1) Slope as shown elsewhere in the plans. Slope of 6:1 or flatter is required for vehicle safety.

#### 2 Provide cement stabilized bedding and backfill in accordance with the Item, "Excavation and Backfill for Structures". Bedding and backfill is considered subsidiary to the Item 467, "Safety End Treatment". When concrete riprap is specified around the safety end treatment, backfill as directed by Engineer.

- (3) Fill the top 4" of void between precast end treatments with concrete riprap. Concrete riprap is considered subsidiary to the Item 467, "Safety End Treatment".
- 4 Adjust clear distance between pipes to provide for the minimum distance between safety end treatments.

Safety pipe runner-

¾" Threaded

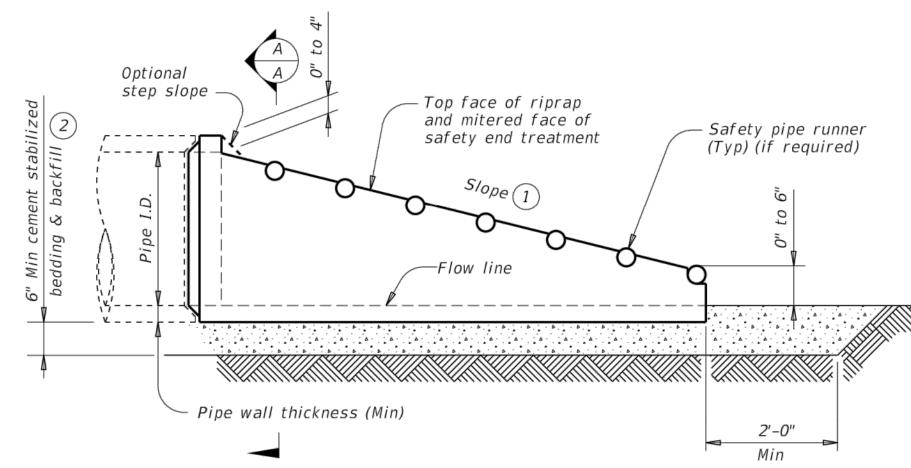
insert :

(5) Safety pipe runners are required for multiple pipe culverts with more than two pipes.

#### REQUIREMENTS FOR CULVERT PIPES AND SAFETY PIPE RUNNERS

Nin   Nin												
Pipe I.D.         Wall Thickness         Min O.D.         Tapered Fit. of Pipe         (sq. in. per fit. of Pipe)         Max Slope         Of Unit         Single Pipe         Multiple Pipe         Nominal Dia         O.D.         I.D.           12"         2"         16"         16"         0.07 Circ.         6:1         4' - 0"         No         5         3" STD         3.500"         3.068"           15"         2 ½"         19"         0.07 Circ.         6:1         5' - 8"         No         5         3" STD         3.500"         3.068"           18"         2 ½"         23"         21 ½"         0.07 Circ.         6:1         7' - 3"         No         5         3" STD         3.500"         3.068"           24"         3"         30"         27"         0.07 Circ.         6:1         10' - 6"         No         5         3" STD         3.500"         3.068"           30"         3 ½"         37"         31"         0.18 Circ.         6:1         12' - 1"         No         Yes         4" STD         4.500"         4.026"           36"         4"         44"         36"         0.19 Ellip.         6:1         15' - 4"         Yes         4" STD         4.500" <t< td=""><td></td><td></td><td></td><td></td><td>I</td><td></td><td>Min</td><td></td><td></td><td>Required</td><td>Pipe Runi</td><td>ner Sizes</td></t<>					I		Min			Required	Pipe Runi	ner Sizes
15"         2 ½"         19 ½"         19"         0.07 Circ.         6:1         5' - 8"         No         5         3" STD         3.500"         3.068"           18"         2 ½"         23"         21 ½"         0.07 Circ.         6:1         7' - 3"         No         5         3" STD         3.500"         3.068"           24"         3"         30"         27"         0.07 Circ.         6:1         10' - 6"         No         5         3" STD         3.500"         3.068"           30"         3 ½"         37"         31"         0.18 Circ.         6:1         12' - 1"         No         Yes         4" STD         4.500"         4.026"           36"         4"         44"         36"         0.19 Ellip.         6:1         15' - 4"         Yes         Yes         4" STD         4.500"         4.026"		Wall	ı	Tapered			of		'		0.D.	I.D.
18"         2 ½"         23"         21 ½"         0.07 Circ.         6:1         7' - 3"         No         5         3" STD         3.500"         3.068"           24"         3"         30"         27"         0.07 Circ.         6:1         10' - 6"         No         5         3" STD         3.500"         3.068"           30"         3 ½"         37"         31"         0.18 Circ.         6:1         12' - 1"         No         Yes         4" STD         4.500"         4.026"           36"         4"         44"         36"         0.19 Ellip.         6:1         15' - 4"         Yes         Yes         4" STD         4.500"         4.026"	12"	2"	16"	16"	0.07 Circ.	6:1	4' - 0''	No	5	3" STD	3.500"	3.068"
24"     3"     30"     27"     0.07 Circ.     6:1     10' - 6"     No     5     3" STD     3.500"     3.068"       30"     3 ½"     37"     31"     0.18 Circ.     6:1     12' - 1"     No     Yes     4" STD     4.500"     4.026"       36"     4"     44"     36"     0.19 Ellip.     6:1     15' - 4"     Yes     Yes     4" STD     4.500"     4.026"	15"	2 1/4"	19 ½"	19"	0.07 Circ.	6:1	5' - 8''	No	5	3" STD	3.500"	3.068"
30"     3½"     37"     31"     0.18 Circ.     6:1     12' - 1"     No     Yes     4" STD     4.500"     4.026"       36"     4"     44"     36"     0.19 Ellip.     6:1     15' - 4"     Yes     Yes     4" STD     4.500"     4.026"	18"	2 ½"	23"	21 ½"	0.07 Circ.	6:1	7' - 3''	No	5	3" STD	3.500"	3.068"
36" 4" 44" 36" 0.19 Ellip. 6:1 15' - 4" Yes Yes 4" STD 4.500" 4.026"	24"	3"	30"	27"	0.07 Circ.	6:1	10' - 6''	No	5	3" STD	3.500"	3.068"
	30"	3 1/2"	37"	31"	0.18 Circ.	6:1	12' - 1''	No	Yes	4" STD	4.500"	4.026"
42" 4 ½" 51" 41 ½" 0.23 Ellip, 6:1 18' - 7" Yes Yes 4" STD 4.500" 4.026"	36"	4"	44"	36"	0.19 Ellip.	6:1	15' - 4"	Yes	Yes	4" STD	4.500"	4.026"
12 172 31 1172 312 1171 311 1333 1333	42"	4 ½"	51"	41 ½"	0.23 Ellip.	6:1	18' - 7''	Yes	Yes	4" STD	4.500"	4.026"

#### PLAN VIEW - 12" THRU 24"



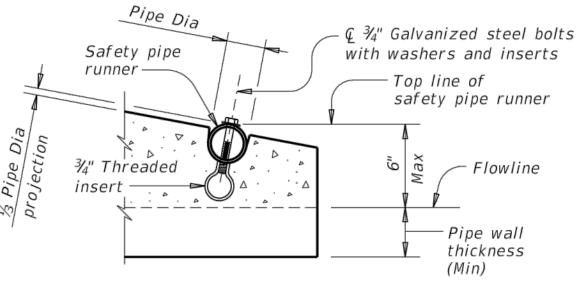
### INSTALLATION DETAIL FOR SAFETY PIPE RUNNERS

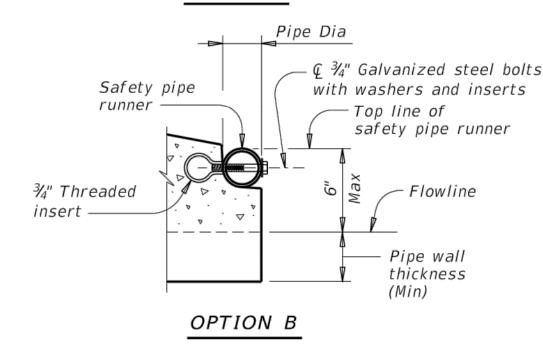
© ¾" galvanized

steel bolts with

washers and inserts

(If required)





## END DETAILS FOR INSTALLATION OF SAFETY PIPE RUNNERS

(If required)

#### MATERIAL NOTES:

- Synthetic fibers listed on the "Fibers for Concrete" Material Producer List (MPL) may be used in lieu of steel reinforcing in riprap concrete unless noted otherwise.
- Provide pipe runners meeting the requirements of ASTM A53 (Type E or S, Gr B), ASTM A500 Gr B, or API 5LX52.
- Galvanize steel components except reinforcing steel after fabrication. Repair galvanizing damaged during transport or construction in accordance with the specifications.

#### GENERAL NOTES:

- Precast safety end treatment for reinforced concrete pipe (RCP) may be used for TYPE II end treatment as specified in Item 467, "Safety End
- When precast safety end treatment is used as a Contractor's alternate to mitered RCP, riprap will not be required unless noted otherwise on
- Manufacture precast concrete end sections in accordance with Item 464, "Reinforced Concrete Pipe" and in accordance with ASTM Specification C-76, Class III, Wall B for circular pipe.
- Provide precast concrete end sections with a spigot or bell end for compatibility to upstream or downstream end conditions with sufficient annular space to allow for grout, mortar, cold applied asphalt joint compound or pre-formed plastic gasket material.
- Methods of lifting shall be provided by the manufacturer for ease of loading, unloading and installation.
- Pipe runners are designed for a traversing load of 10,000 Lbs at yield as recommended by Research Report 280-2F, "Safety Treatment of Roadside Parallel-Drainage Structures", Texas Transportation Institute, March 1981.

Texas Department of Transportation

Bridge Division

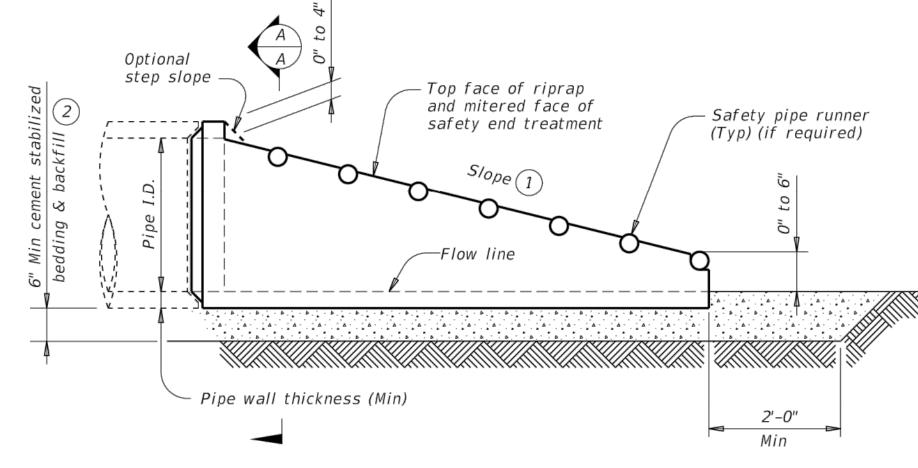
PRECAST SAFETY END TREATMENT

TYPE II ~ PARALLEL DRAINAGE

PSET-RP

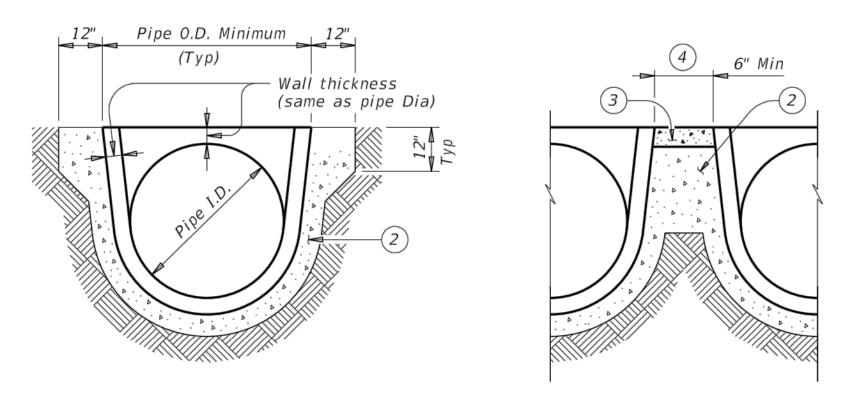
LE:	psetrpss-20.dgn	DN: RLW		CK:	K: KLR DW:		JTR		CK:	GAF
TXDOT	February 2020	CONT	SECT	T JOB			HIGHWAY			,
	REVISIONS									
		DIST	COUNTY					.5	SHEE	T NO.

### (Showing spigot end connection.)



#### LONGITUDINAL ELEVATION - 12" THRU 24"

(Showing spigot end connection.)



SECTION A-A

MULTIPLE PIPE INSTALLATION

## CAUTION NOTICE TO CONTRACTORS

CLAI The The

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TBPE FIRM REGISTRATION #F-8396



RECORD DRAWING THESE RECORD DRAWINGS HAVE BEEN PREPARED BASED ON FIELD OBSERVATIONS AND INFORMATION PROVIDED BY THE CONTRACTOR. **ELEVATIONS HAVE NOT** BEEN VERIFIED. THE ORIGINAL SEALED **CONSTRUCTIONS PLANS** ARE ON FILE AT THE CITY

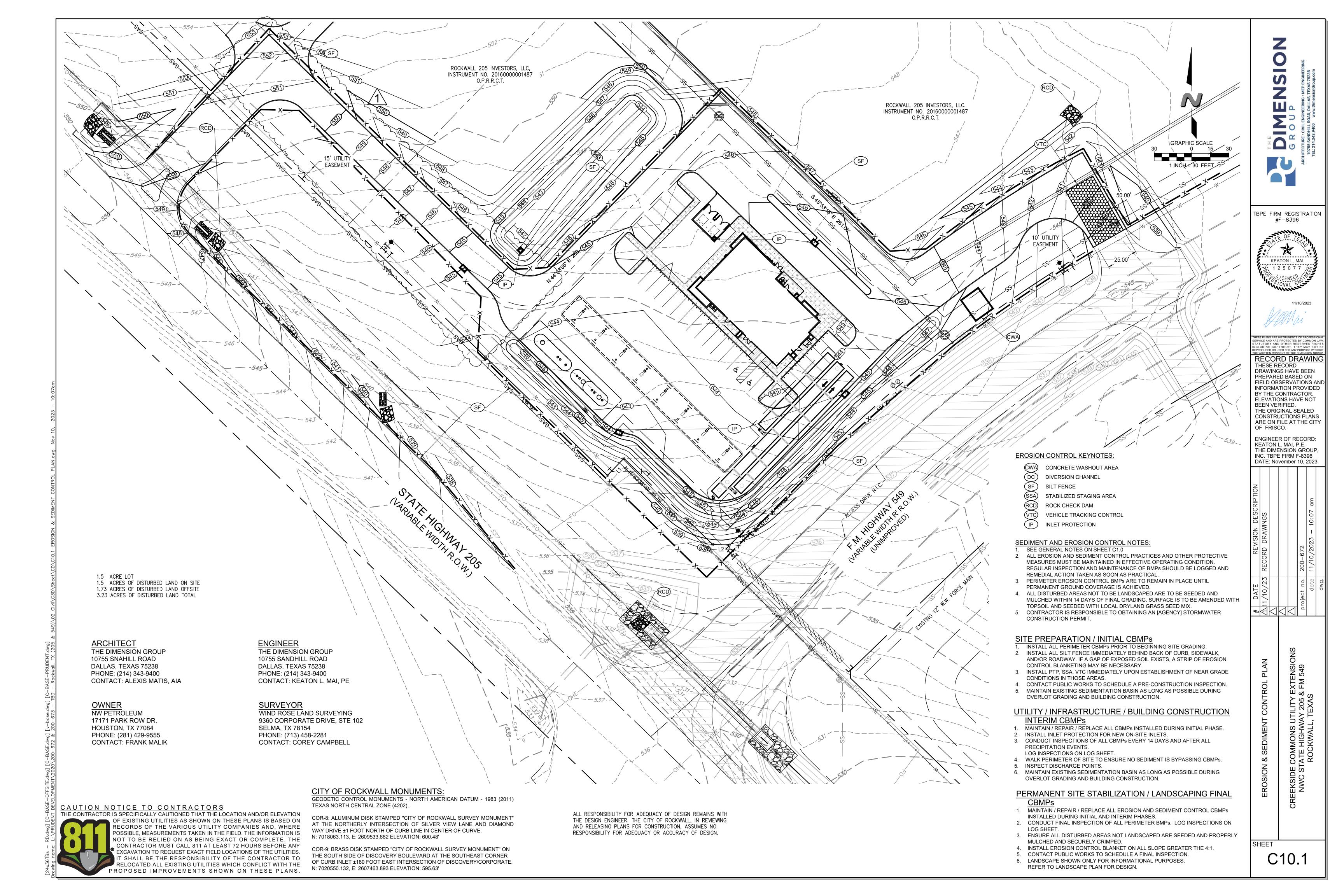
**ENGINEER OF RECORD:** KEATON L. MAI, P.E. THE DIMENSION GROUP. INC. TBPE FIRM F-8396 DATE: November 10, 2023

OF FRISCO.

\*4000

CREEKSIDE COMMONS UTILITY EXTENSIONS NWC STATE HIGHWAY 205 & FM 549 ROCKWALL, TEXAS

SHEET



#### STABILIZED CONSTRUCTION ENTRANCE

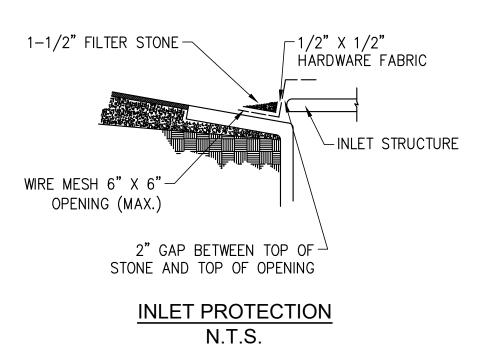
N.T.S.

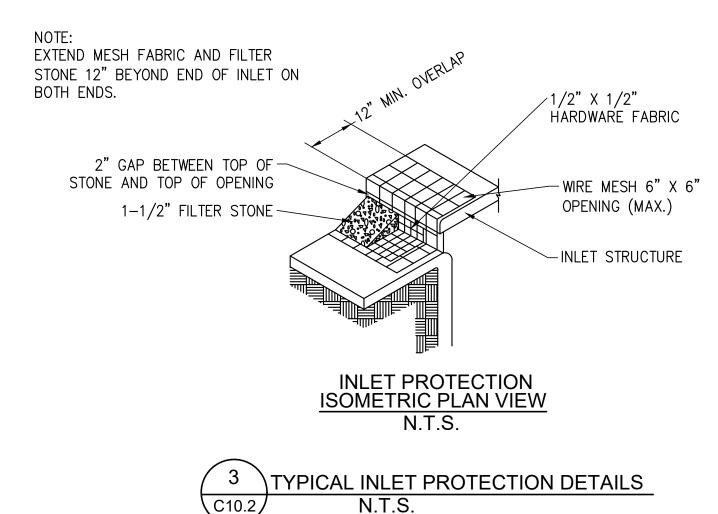
#### **GENERAL NOTES**

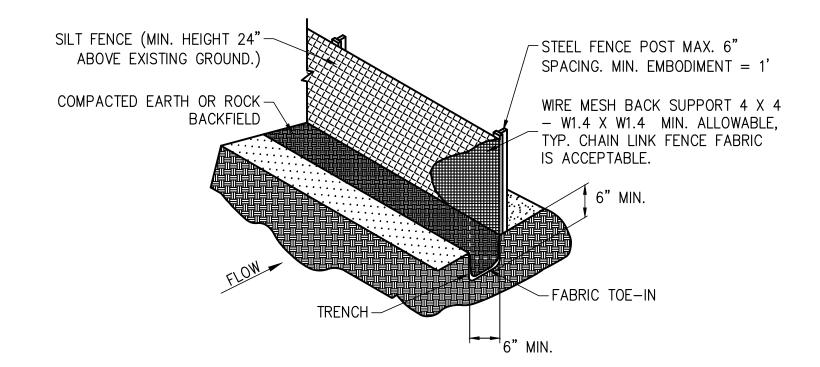
N.T.S.

- 1. STONE SHALL BE 4 TO 6 INCH DIAMETER CRUSHED ROCK. NO CRUSHED OR RECYCLED CONCRETE ALLOWED
- 2. LENGTH SHALL BE SHOWN ON PLANS, WITH A MINIMUM LENGTH OF 30 FEET FOR LOTS WHICH ARE LESS THAN 150 FEET FROM EDGE OF PAVEMENT. THE MINIMUM DEPTH IN ALL OTHER CASES SHALL BE 50 FEET.
- 3. THE THICKNESS SHALL NOT BE LESS THAN 12 INCHES.
- 4. THE WIDTH SHALL BE NO LESS THAN THE FULL WIDTH OF ALL POINTS ON INGRESS OR EGRESS.
- 5. WHEN NECESSARY, VEHICLES SHALL BE CLEANED. REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH CRUSHED STONE WITH DRAINAGE FLOWING AWAY FROM BOTH THE STREET AND THE STABILIZED ENTRANCE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
- 6. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF FLOWING SEDIMENT ON TO PAVED SURFACES. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PAVED SURFACES MUST BE REMOVED IMMEDIATELY.
- 7. THE ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.
- 8. MINIMUM LENGTH OF 50' AND MINIMUM WIDTH OF 20'







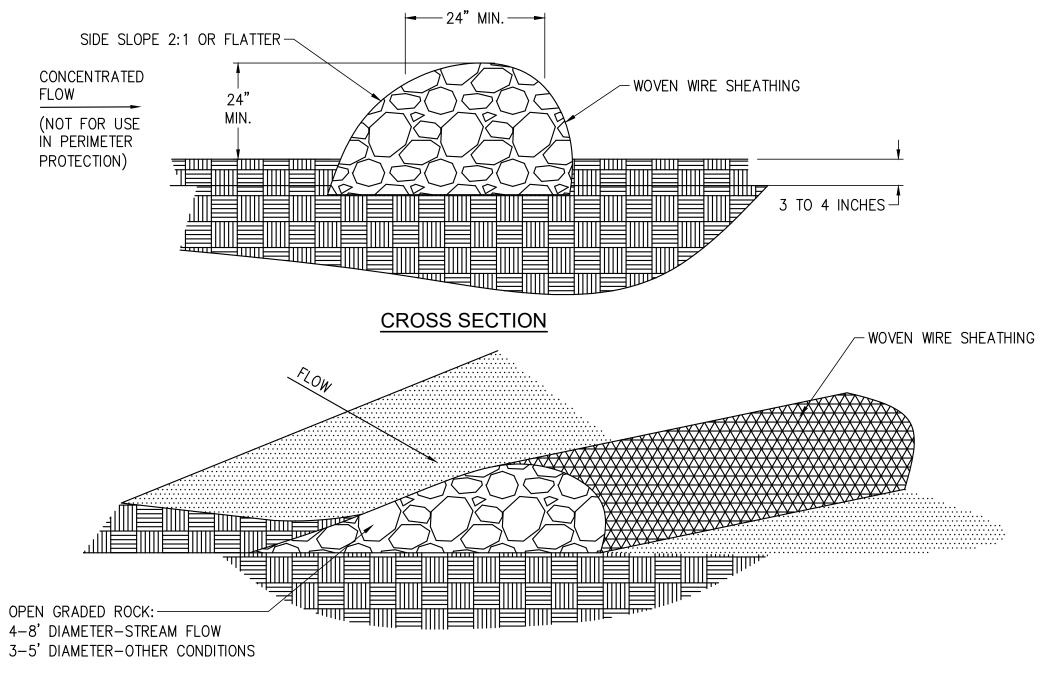


## SILT FENCE - ISOMETRIC PLAN VIEW N.T.S.

#### **GENERAL NOTES**

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

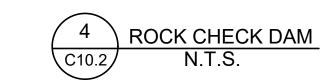




#### ISOMETRIC VIEW

#### **ROCK CHECK DAM GENERAL NOTES**

- 1. WOVEN WIRE SHEATHING SHALL HAVE MAXIMUM OPENING OF ONE (1) INCH AND A MINIMUM WIRE SIZE OF 20 GAUGE AND SHALL BE SECURED WITH SHOAT RINGS.
- 2. THE ROCK BERM SHALL BE INSPECTED WEEKLY OR AFTER EACH RAIN AND SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION PROPERLY.
- 3. WHEN SILT REACHES A DEPTH EQUAL TO ONE—THIRD OF THE HEIGHT OF THE BERM OR ONE FOOT. WHICHEVER IS LESS. THE SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.
- 4. WHEN THE SITE IS COMPLETELY STABILIZED. THE BERM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.



#### **EROSION GENERAL NOTES**

- 1. EROSION CONTROL DEVICES AS SHOWN ON THE EROSION CONTROL PLAN FOR THE PROJECT SHALL BE INSTALLED PRIOR TO THE START OF LAND DISTURBING ACTIVITIES ON THE PROJECT.
- 2. ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS FOR THE PROJECT. CHANGES ARE TO BE APPROVED BEFORE CONSTRUCTION BY THE DESIGN ENGINEER FOR ROCKWALL COUNTY.
- 3. IF THE EROSION CONTROL PLANS AS APPROVED CANNOT CONTROL EROSION AND OFF-SITE SEDIMENTATION FROM THE PROJECT, THE EROSION CONTROL PLAN WILL BE REQUIRED TO BE REVISED AND/OR ADDITIONAL EROSION CONTROL DEVICES WILL BE REQUIRED ON SITE.
- 4. IF OFF-SITE SOIL BORROW OR SPOIL SITES ARE USED IN CONJUNCTION WITH THIS PROJECT, THIS INFORMATION SHALL BE DISCLOSED AND SHOWN ON THE EROSION CONTROL PLAN. OFF-SITE BORROW AND SPOIL AREAS ARE CONSIDERED A PART OF THE PROJECT SITE AND THEREFORE SHALL COMPLY WITH MONTGOMERY COUNTY EROSION CONTROL REQUIREMENTS. THESE AREAS SHALL BE STABILIZED WITH PERMANENT GROUND COVER PRIOR TO FINAL APPROVAL OF THE PROJECT.
- 5. ALL EROSION CONTROL DEVICES SHALL BE INSPECTED WEEKLY BY THE CONTRACTOR AND AFTER ALL MAJOR RAIN EVENTS.
- 6. ALL NON-IMPERVIOUS AREAS AFTER CONSTRUCTION SHALL BE COVERED WITH SOD OR LANDSCAPED IN ACCORDANCE WITH THE LANDSCAPE DRAWINGS. ALL OTHER REMAINING AREAS SHALL BE HYDRO-MULCHED OR COVERED WITH CURLEX BLANKET (WHERE SHOWN) AND MAINTAINED UNTIL ESTABLISHED.
- 7. TEMPORARY STONE STABILIZED CONSTRUCTION ENTRANCE SHALL HAVE THE FOLLOWING MINIMUM DIMENSIONS: 25' WIDE X 50' LONG X 6" DEEP. (3"-5" COURSE AGGREGATE). PLACE FILTER FABRIC UNDER STONE PER N.C.T.C.O.G. ITEM 2.23.3.
- 8. THE STABILIZED CONSTRUCTION ENTRANCE IS TO BE USED AS A VEHICLE WASH DOWN AREA FOR DEBRIS AND SOIL REMOVAL PRIOR TO EXITING THE SITE. THIS STABLIZED ENTRANCE SHALL BE TOP DRESSED WITH ADDITIONAL STONE AS NECESSARY. LOCATION OF STABLIZED ENTRANCE MAY BE MODIFIED IF APPROVED BY MONTGOMERY COUNTY AND THE DESIGN ENGINEER.
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE, AS THE ENTITY EXERCISING OPERATIONAL CONTROL, FOR ALL PERMITTING AS REQUIRED BY THE EPA/TCEQ. THIS INCLUDES, BUT IS NOT LIMITED TO, PREPARATION OF N.O.I. AND NOT AND PAYMENT OF ALL ASSOCIATED FEES.
- 10. INSPECTIONS SHALL BE MADE WEEKLY AND AFTER RAIN STORM EVENTS TO INSURE THAT THE DEVICES ARE FUNCTIONING PROPERLY. WHEN SEDIMENT OR MUD HAS CLOGGED THE VOID SPACES BETWEEN STONES OR MUD IS BEING TRACKED ONTO A PUBLIC ROADWAY THE AGGREGATE PAD MUST BE WASHED DOWN OR REPLACED. RUNOFF FROM THE WASH DOWN OPERATION SHALL NOT BE ALLOWED TO DRAIN DIRECTLY OFF SITE WITHOUT FIRST LOWING THROUGH ANOTHER BMP TO CONTROL OFF SITE SEDIMENTATION. PERIODIC RE-GRADING OR THE ADDITION OF NEW STONE MAY BE REQUIRED TO MAINTAIN THE EFFICIENCY OF THE INSTALLATION.
- 11. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTAL OF N.O.I., N.O.T. & ANY ADDITIONAL INFORMATION REQUIRED BY THE E.P.A.. CONTRACTOR SHALL COMPLY WITH ALL E.P.A. STORM WATER POLLUTION PREVENTION REQUIREMENTS.
- 12.EROSION CONTROL MEASURES MAY ONLY BE PLACED IN FRONT OF INLETS, OR IN CHANNELS, DRAINAGEWAYS OR BORROW DITCHES AT RISK OF THE CONTRACTOR. THE CONTRACTOR SHALL REMAIN LIABLE FOR ANY DAMAGE CAUSED BY THE MEASURES, INCLUDING FLOODING DAMAGE, WHICH MAY OCCUR DUE TO BLOCKED DRAINAGE. AT THE CONCLUSION OF ANY PROJECT, ALL CHANNELS, DRAINAGEWAYS AND BORROW DITCHES IN THE WORK ZONE SHALL BE DREDGED OF ANY SEDIMENT GENERATED BY THE PROJECT OR DEPOSITED AS A RESULT OF EROSION CONTROL MEASURES.

THE DIMENSION
GROUP
ARCHITECTURE CIVIL ENGINEERING · MEP ENGINEERING
10755 SANDHILL ROAD, DALLAS, TEXAS 75238
TEL: 214.343.9400 www.DimensionGroup.com

TBPE FIRM REGISTRATION #F-8396



11/10/2023

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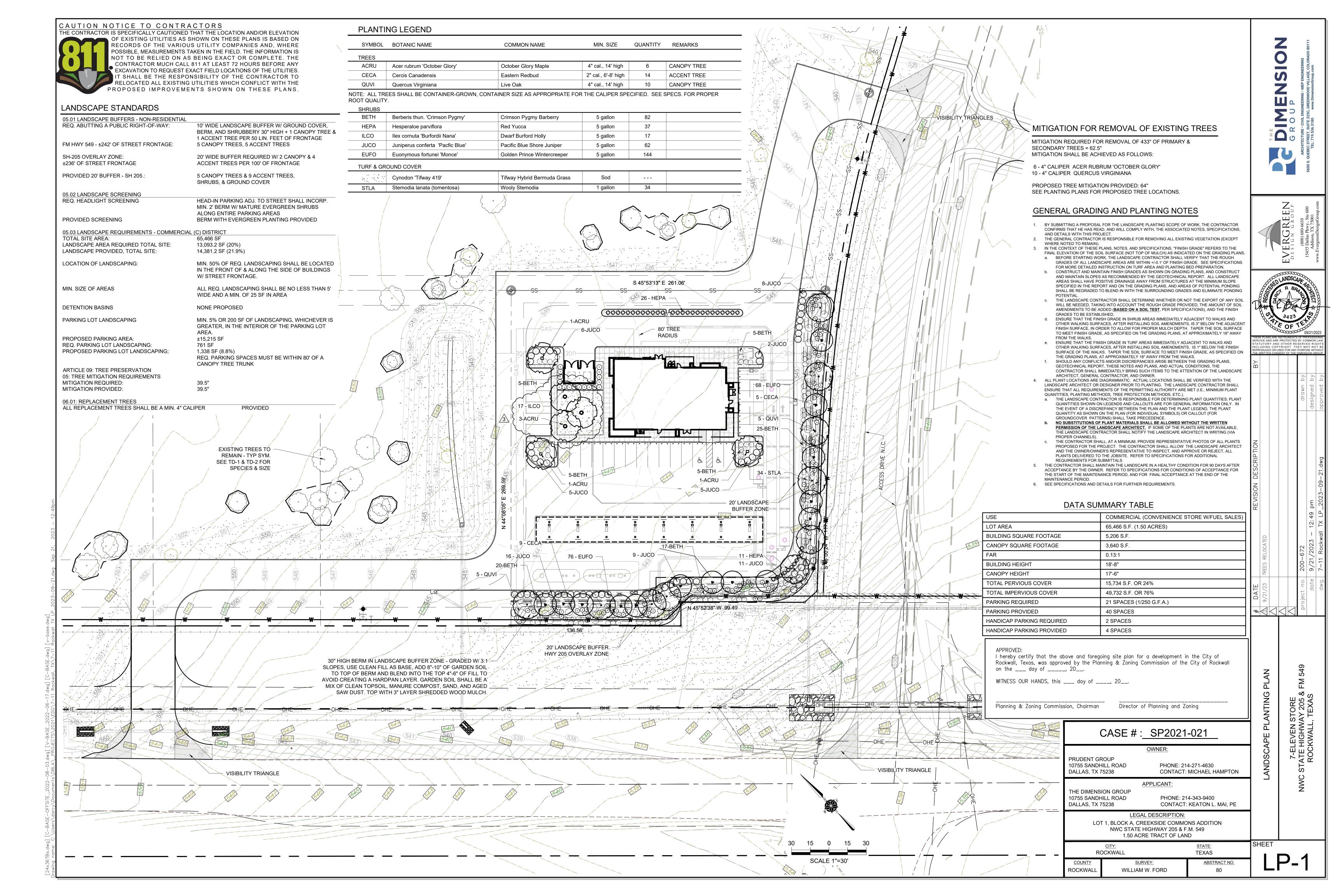
RECORD DRAWING
THESE RECORD
DRAWINGS HAVE BEEN
PREPARED BASED ON
FIELD OBSERVATIONS AND INFORMATION PROVIDED
BY THE CONTRACTOR.
ELEVATIONS HAVE NOT BEEN VERIFIED.
THE ORIGINAL SEALED CONSTRUCTIONS PLANS ARE ON FILE AT THE CITY OF FRISCO.

ENGINEER OF RECORD: KEATON L. MAI, P.E. THE DIMENSION GROUP, INC. TBPE FIRM F-8396 DATE: November 10, 2023

EROSION CONTROL NOTES & DETAILS
EEKSIDE COMMONS UTILITY EXTENSIONS
NWC STATE HIGHWAY 205 & FM 549
ROCKWALL, TEXAS

SHEET

C10.2



- A. QUALIFICATIONS OF LANDSCAPE CONTRACTOR ALL LANDSCAPE WORK SHOWN ON THESE PLANS SHALL BE PERFORMED BY A SINGLE FIRM SPECIALIZING IN LANDSCAPE PLANTING.
- 2. A LIST OF SUCCESSFULLY COMPLETED PROJECTS OF THIS TYPE, SIZE AND NATURE MAY BE
- REQUESTED BY THE OWNER FOR FURTHER QUALIFICATION MEASURES. THE LANDSCAPE CONTRACTOR SHALL HOLD A VALID NURSERY AND FLORAL CERTIFICATE ISSUED BY THE TEXAS DEPARTMENT OF AGRICULTURE, AS WELL AS OPERATE UNDER A COMMERCIAL PESTICIDE APPLICATOR LICENSE ISSUED BY EITHER THE TEXAS DEPARTMENT OF AGRICULTURE OR THE TEXAS STRUCTURAL PEST CONTROL BOARD.
- B. SCOPE OF WORK WORK COVERED BY THESE SECTIONS INCLUDES THE FURNISHING AND PAYMENT OF ALL MATERIALS. LABOR, SERVICES, EQUIPMENT, LICENSES, TAXES AND ANY OTHER ITEMS THAT ARE NECESSARY FOR
- THE EXECUTION, INSTALLATION AND COMPLETION OF ALL WORK, SPECIFIED HEREIN AND / OR SHOWN ON THE LANDSCAPE PLANS, NOTES, AND DETAILS. 2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES AND REGULATIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION OVER SUCH WORK, INCLUDING ALL
- INSPECTIONS AND PERMITS REQUIRED BY FEDERAL, STATE AND LOCAL AUTHORITIES IN SUPPLY, TRANSPORTATION AND INSTALLATION OF MATERIALS. 3. THE LANDSCAPE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITY LINES (WATER, SEWER, ELECTRICAL, TELEPHONE, GAS, CABLE, TELEVISION, ETC.) PRIOR TO THE START OF

#### **PRODUCTS**

- ALL MANUFACTURED PRODUCTS SHALL BE NEW. CONTAINER AND BALLED-AND-BURLAPPED PLANTS
- FURNISH NURSERY-GROWN PLANTS COMPLYING WITH ANSI Z60.1-2014. PROVIDE WELL-SHAPED, FULLY BRANCHED, HEALTHY, VIGOROUS STOCK FREE OF DISEASE, INSECTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT. ALL PLANTS WITHIN A SPECIES SHALL HAVE SIMILAR SIZE, AND SHALL BE OF A FORM TYPICAL FOR THE SPECIES. ALL TREES SHALL BE OBTAINED FROM SOURCES WITHIN 200 MILES OF THE PROJECT SITE, AND WITH SIMILAR
- CLIMACTIC CONDITIONS. 2. ROOT SYSTEMS SHALL BE HEALTHY, DENSELY BRANCHED ROOT SYSTEMS, NON-POT-BOUND, FREE
- FROM ENCIRCLING AND/OR GIRDLING ROOTS, AND FREE FROM ANY OTHER ROOT DEFECTS (SUCH AS TREES MAY BE PLANTED FROM CONTAINERS OR BALLED-AND-BURLAPPED (B&B), UNLESS SPECIFIED
- ON THE PLANTING LEGEND. BARE-ROOT TREES ARE NOT ACCEPTABLE. 4. ANY PLANT DEEMED UNACCEPTABLE BY THE LANDSCAPE ARCHITECT OR OWNER SHALL BE IMMEDIATELY REMOVED FROM THE SITE AND SHALL BE REPLACED WITH AN ACCEPTBLE PLANT OF LIKE TYPE AND SIZE AT THE CONTRACTOR'S OWN EXPENSE. ANY PLANTS APPEARING TO BE UNHEALTHY. FVFN IF DETERMINED TO STILL BE ALIVE, SHALL NOT BE ACCEPTED. THE LANDSCAPE ARCHITECT AND
- OWNER SHALL BE THE SOLE JUDGES AS TO THE ACCEPTABILITY OF PLANT MATERIAL 5. ALL TREES SHALL BE STANDARD IN FORM, UNLESS OTHERWISE SPECIFIED. TREES WITH CENTRAL LEADERS WILL NOT BE ACCEPTED IF LEADER IS DAMAGED OR REMOVED. PRUNE ALL DAMAGED TWIGS
- 6. CALIPER MEASUREMENTS FOR STANDARD (SINGLE TRUNK) TREES SHALL BE AS FOLLOWS: SIX INCHES ABOVE THE ROOT FLARE FOR TREES UP TO AND INCLUDING FOUR INCHES IN CALIPER, AND TWELVE INCHES ABOVE THE ROOT FLARE FOR TREES EXCEEDING FOUR INCHES IN CALIPER
- MULTI-TRUNK TREES SHALL BE MEASURED BY THEIR OVERALL HEIGHT, MEASURED FROM THE TOP OF THE ROOT BALL. WHERE CALIPER MEASUREMENTS ARE USED, THE CALIPER SHALL BE CALCULATED AS ONE-HALF OF THE SUM OF THE CALIPER OF THE THREE LARGEST TRUNKS. ANY TREE OR SHRUB SHOWN TO HAVE EXCESS SOIL PLACED ON TOP OF THE ROOT BALL, SO THAT
- THE ROOT FLARE HAS BEEN COMPLETELY COVERED, SHALL BE REJECTED. SOD: PROVIDE WELL-ROOTED SOD OF THE VARIETY NOTED ON THE PLANS. SOD SHALL BE CUT FROM HEALTHY, MATURE TURF WITH SOIL THICKNESS OF 3/4" TO 1". EACH PALLET OF SOD SHALL BE ACCOMPANIED BY A CERTIFICATE FROM SUPPLIER STATING THE COMPOSITION OF THE SOD.
- TOPSOIL: SANDY TO CLAY LOAM TOPSOIL, FREE OF STONES LARGER THAN 1/2 INCH, FOREIGN MATTER, COMPOST: WELL-COMPOSTED, STABLE, AND WEED-FREE ORGANIC MATTER, pH RANGE OF 5.5 TO 8; MOISTURE CONTENT 35 TO 55 PERCENT BY WEIGHT; 100 PERCENT PASSING THROUGH 3/4-INCH SIEVE; SOLUBLE SALT CONTENT OF 5 TO 10 DECISIEMENS/M; NOT EXCEEDING 0.5 PERCENT INERT CONTAMINANTS AND FREE OF SUBSTANCES TOXIC TO PLANTINGS. NO MANURE OR ANIMAL-BASED PRODUCTS SHALL BE
- FERTILIZER: GRANULAR FERTILIZER CONSISTING OF NITROGEN, PHOSPHORUS, POTASSIUM, AND OTHER NUTRIENTS IN PROPORTIONS, AMOUNTS, AND RELEASE RATES RECOMMENDED IN A SOIL REPORT FROM A
- QUALIFIED SOIL-TESTING AGENCY (SEE BELOW). MULCH: SIZE AND TYPE AS INDICATED ON PLANS, FREE FROM DELETERIOUS MATERIALS AND SUITABLE AS A TOP DRESSING OF TREES AND SHRUBS.
- H. TREE STAKING AND GUYING STAKES: 6' LONG GREEN METAL T-POSTS.

SHALL BE APPLIED PER THE MANUFACTURER'S LABELED RATES.

- GUY AND TIE WIRE: ASTM A 641, CLASS 1, GALVANIZED-STEEL WIRE, 2-STRAND, TWISTED, 0.106 INCH
- 3. STRAP CHAFING GUARD: REINFORCED NYLON OR CANVAS AT LEAST 1-1/2 INCH WIDE, WITH GROMMETS TO PROTECT TREE TRUNKS FROM DAMAGE.
- STEEL EDGING: PROFESSIONAL STEEL EDGING, 14 GAUGE THICK X 4 INCHES WIDE, FACTORY PAINTED DARK GREEN. ACCEPTABLE MANUFACTURERS INCLUDE COL-MET OR APPROVED EQUAL. PRE-EMERGENT HERBICIDES: ANY GRANULAR, NON-STAINING PRE-EMERGENT HERBICIDE THAT IS LABELED FOR THE SPECIFIC ORNAMENTALS OR TURF ON WHICH IT WILL BE UTILIZED. PRE-EMERGENT HERBICIDES

#### **METHODS**

- A. SOIL PREPARATION
- BEFORE STARTING WORK, THE LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE GRADE OF ALL LANDSCAPE AREAS ARE WITHIN +/-0.1' OF FINISH GRADE. THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY SHOULD ANY DISCREPANCIES EXIST. SOIL TESTING:
- FROM THE PROJECT'S LANDSCAPE AREAS TESTED BY AN ESTABLISHED SOIL TESTING LABORATORY FACH SAMPLE SUBMITTED TO THE LAB SHALL CONTAIN NO LESS THAN ONE QUART OF SOIL, TAKEN FROM BETWEEN THE SOIL SURFACE AND 6" DEPTH. IF NO SAMPLE LOCATIONS ARE INDICATED ON THE PLANS, THE CONTRACTOR SHALL TAKE A MINIMUM OF THREE SAMPLES FROM VARIOUS REPRESENTATIVE LOCATIONS FOR TESTING. THE CONTRACTOR SHALL HAVE THE SOIL TESTING LABORATORY PROVIDE RESULTS FOR THE

a. AFTER FINISH GRADES HAVE BEEN ESTABLISHED, CONTRACTOR SHALL HAVE SOIL SAMPLES

- FOLLOWING: SOIL TEXTURAL CLASS, GENERAL SOIL FERTILITY, pH, ORGANIC MATTER CONTENT, SALT (CEC), LIME, SODIUM ADSORPTION RATIO (SAR) AND BORON CONTENT. THE CONTRACTOR SHALL ALSO SUBMIT THE PROJECT'S PLANT LIST TO THE LABORATORY ALONG
- THE SOIL REPORT PRODUCED BY THE LABORATORY SHALL CONTAIN RECOMMENDATIONS FOR THE FOLLOWING (AS APPROPRIATE): SEPARATE SOIL PREPARATION AND BACKFILL MIX RECOMMENDATIONS FOR GENERAL ORNAMENTAL PLANTS, XERIC PLANTS, TURF, AND NATIVE SEED, AS WELL AS PRE-PLANT FERTILIZER APPLICATIONS AND RECOMMENDATIONS FOR ANY OTHER SOIL RELATED ISSUES. THE REPORT SHALL ALSO PROVIDE A FERTILIZER PROGRAM FOR
- THE ESTABLISHMENT PERIOD AND FOR LONG-TERM MAINTENANCE. THE CONTRACTOR SHALL INSTALL SOIL AMENDMENTS AND FERTILIZERS PER THE SOILS REPORT RECOMMENDATIONS. ANY CHANGE IN COST DUE TO THE SOIL REPORT RECOMMENDATIONS, EITHER INCREASE OR DECREASE, SHALL BE SUBMITTED TO THE OWNER WITH THE REPORT.
- 4. FOR BIDDING PURPOSES ONLY, THE SOIL PREPARATION SHALL CONSIST OF THE FOLLOWING: TURF: INCORPORATE THE FOLLOWING AMENDMENTS INTO THE TOP 8" OF SOIL BY MEANS OF ROTOTILLING AFTER CROSS-RIPPING: NITROGEN STABILIZED ORGANIC AMENDMENT - 4 CU. YDS. PER 1 000 S.F.
- PREPLANT TURF FERTILIZER (10-20-10 OR SIMILAR, SLOW RELEASE, ORGANIC) 15 LBS PER 1,000 iii. "CLAY BUSTER" OR EQUAL - USE MANUFACTURER'S RECOMMENDED RATE
- TREES, SHRUBS, AND PERENNIALS: INCORPORATE THE FOLLOWING AMENDMENTS INTO THE TOP 8" OF SOIL BY MEANS OF ROTOTILLING AFTER CROSS-RIPPING: NITROGEN STABILIZED ORGANIC AMENDMENT - 4 CU. YDS PFR 1 000 S F
- 12-12-12 FERTILIZER (OR SIMILAR, ORGANIC, SLOW RELEASE) 10 LBS. PER CU. YD. "CLAY BUSTER" OR EQUAL - USE MANUFACTURER'S RECOMMENDED RATE IRON SULPHATE - 2 LBS. PER CU. YD 5. IN THE CONTEXT OF THESE PLANS, NOTES, AND SPECIFICATIONS, "FINISH GRADE" REFERS TO THE
- FINAL ELEVATION OF THE SOIL SURFACE (NOT TOP OF MULCH) AS INDICATED ON THE GRADING PLANS. a. BEFORE STARTING WORK, THE LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE ROUGH GRADES OF ALL LANDSCAPE AREAS ARE WITHIN +/-0.1' OF FINISH GRADE. SEE SPECIFICATIONS FOR MORE DETAILED INSTRUCTION ON TURF AREA AND PLANTING BED PREPARATION.
- CONSTRUCT AND MAINTAIN FINISH GRADES AS SHOWN ON GRADING PLANS, AND CONSTRUCT AND MAINTAIN SLOPES AS RECOMMENDED BY THE GEOTECHNICAL REPORT. ALL LANDSCAPE AREAS SHALL HAVE POSITIVE DRAINAGE AWAY FROM STRUCTURES AT THE MINIMUM SLOPE SPECIFIED IN THE REPORT AND ON THE GRADING PLANS, AND AREAS OF POTENTIAL PONDING SHALL BE REGRADED TO BLEND IN WITH THE SURROUNDING GRADES AND ELIMINATE PONDING
- c. THE LANDSCAPE CONTRACTOR SHALL DETERMINE WHETHER OR NOT THE EXPORT OF ANY SOIL WILL BE NEEDED, TAKING INTO ACCOUNT THE ROUGH GRADE PROVIDED, THE AMOUNT OF SOIL AMENDMENTS TO BE ADDED (BASED ON A SOIL TEST, PER SPECIFICATIONS), AND THE FINISH GRADES TO BE ESTABLISHED. d. ENSURE THAT THE FINISH GRADE IN SHRUB AREAS IMMEDIATELY ADJACENT TO WALKS AND
- OTHER WALKING SURFACES, AFTER INSTALLING SOIL AMENDMENTS, IS 3" BELOW THE ADJACENT FINISH SURFACE, IN ORDER TO ALLOW FOR PROPER MULCH DEPTH. TAPER THE SOIL SURFACE TO MEET FINISH GRADE, AS SPECIFIED ON THE GRADING PLANS, AT APPROXIMATELY 18" AWAY FROM THE WALKS. e. ENSURE THAT THE FINISH GRADE IN TURF AREAS IMMEDIATELY ADJACENT TO WALKS AND
- OTHER WALKING SURFACES, AFTER INSTALLING SOIL AMENDMENTS, IS 1" BELOW THE FINISH SURFACE OF THE WALKS. TAPER THE SOIL SURFACE TO MEET FINISH GRADE, AS SPECIFIED ON THE GRADING PLANS AT APPROXIMATELY 18" AWAY FROM THE WALKS
- SHOULD ANY CONFLICTS AND/OR DISCREPANCIES ARISE BETWEEN THE GRADING PLANS, GEOTECHNICAL REPORT, THESE NOTES AND PLANS, AND ACTUAL CONDITIONS, THE CONTRACTOR SHALL IMMEDIATELY BRING SUCH ITEMS TO THE ATTENTION OF THE LANDSCAPE ARCHITECT, GENERAL CONTRACTOR, AND OWNER.
- 6. ONCE SOIL PREPARATION IS COMPLETE, THE LANDSCAPE CONTRACTOR SHALL ENSURE THAT THERE ARE NO DEBRIS, TRASH, OR STONES LARGER THAN 1" REMAINING IN THE TOP 6" OF SOIL.

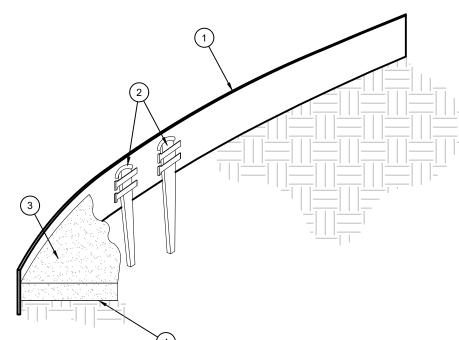
- - THE CONTRACTOR SHALL PROVIDE SUBMITTALS AND SAMPLES, IF REQUIRED, TO THE LANDSCAPE ARCHITECT, AND RECEIVE APPROVAL IN WRITING FOR SUCH SUBMITTALS BEFORE WORK COMMENCES. SUBMITTALS SHALL INCLUDE PHOTOS OF PLANTS WITH A RULER OR MEASURING STICK FOR SCALE, PHOTOS OR SAMPLES OF ANY REQUIRED MULCHES, AND SOIL TEST RESULTS AND PREPARATION RECOMMENDATIONS FROM THE TESTING LAB (INCLUDING COMPOST AND FERTILIZER RATES AND TYPES, AND OTHER AMENDMENTS FOR TREE/SHRUB, TURF, AND SEED AREAS AS MAY BE
- APPROPRIATE). 3. SUBMITTALS SHALL ALSO INCLUDE MANUFACTURER CUT SHEETS FOR PLANTING ACCESSORIES SUCH AS TREE STAKES AND TIES EDGING AND LANDSCAPE FARRICS (IF ANY) 4. WHERE MULTIPLE ITEMS ARE SHOWN ON A PAGE, THE CONTRACTOR SHALL CLEARLY INDICATE THE ITEM BEING CONSIDERED
- C GENERAL PLANTING REMOVE ALL NURSERY TAGS AND STAKES FROM PLANTS. EXCEPT IN AREAS TO BE PLANTED WITH ORNAMENTAL GRASSES, APPLY PRE-EMERGENT HERBICIDES AT THE MANUFACTURER'S RECOMMENDED RATE.
- TRENCHING NEAR EXISTING TREES: CONTRACTOR SHALL NOT DISTURB ROOTS 1-1/2" AND LARGER IN DIAMETER WITHIN THE CRITICAL ROOT ZONE (CRZ) OF EXISTING TREES, AND SHALL EXERCISE ALL POSSIBLE CARE AND PRECAUTIONS TO AVOID INJURY TO TREE ROOTS, TRUNKS, AND BRANCHES. THE CRZ IS DEFINED AS A CIRCULAR AREA EXTENDING OUTWARD FROM THE TREE TRUNK, WITH A RADIUS EQUAL TO 1' FOR EVERY 1" OF TRUNK DIAMETER-AT-BREAST-HEIGHT (4.5' ABOVE THE AVERAGE
- GRADE AT THE TRUNK). ALL EXCAVATION WITHIN THE CRZ SHALL BE PERFORMED USING HAND TOOLS. NO MACHINE EXCAVATION OR TRENCHING OF ANY KIND SHALL BE ALLOWED WITHIN THE CRZ.
- ALTER ALIGNMENT OF PIPE TO AVOID TREE ROOTS 1-1/2" AND LARGER IN DIAMETER. WHERE TREE ROOTS 1-1/2" AND LARGER IN DIAMETER ARE ENCOUNTERED IN THE FIELD, TUNNEL UNDER SUCH ROOTS. WRAP EXPOSED ROOTS WITH SEVERAL LAYERS OF BURLAP AND KEEP MOIST. CLOSE ALL TRENCHES WITHIN THE CANOPY DRIP LINES WITHIN 24 HOURS. ALL SEVERED ROOTS SHALL BE HAND PRUNED WITH SHARP TOOLS AND ALLOWED TO AIR-DRY. DO NOT USE ANY SORT OF SEALERS OR WOUND PAINTS.
- TREE PLANTING HOLES SHALL BE EXCAVATED TO MINIMUM WIDTH OF TWO TIMES THE WIDTH OF THE ROOTBALL, AND TO A DEPTH EQUAL TO THE DEPTH OF THE ROOTBALL LESS TWO TO FOUR INCHES. 2. SCARIFY THE SIDES AND BOTTOM OF THE PLANTING HOLE PRIOR TO THE PLACEMENT OF THE TREE. REMOVE ANY GLAZING THAT MAY HAVE BEEN CAUSED DURING THE EXCAVATION OF THE HOLE. 3. FOR CONTAINER AND BOX TREES, TO REMOVE ANY POTENTIALLY GIRDLING ROOTS AND OTHER ROOT DEFECTS, THE CONTRACTOR SHALL SHAVE A 1" LAYER OFF OF THE SIDES AND BOTTOM OF THE ROOTBALL OF ALL TREES JUST BEFORE PLACING INTO THE PLANTING PIT. DO NOT "TEASE" ROOTS
- OUT FROM THE ROOTBALL. 4. INSTALL THE TREE ON UNDISTURBED SUBGRADE SO THAT THE TOP OF THE ROOTBALL IS TWO TO FOUR INCHES ABOVE THE SURROUNDING GRADE. 5. BACKFILL THE TREE HOLE UTILIZING THE EXISTING TOPSOIL FROM ON-SITE. ROCKS LARGER THAN 1"
- DIA. AND ALL OTHER DEBRIS SHALL BE REMOVED FROM THE SOIL PRIOR TO THE BACKFILL. SHOULD ADDITIONAL SOIL BE REQUIRED TO ACCOMPLISH THIS TASK. USE STORED TOPSOIL FROM ON-SITE OR IMPORT ADDITIONAL TOPSOIL FROM OFF-SITE AT NO ADDITIONAL COST TO THE OWNER. IMPORTED TOPSOIL SHALL BE OF SIMILAR TEXTURAL CLASS AND COMPOSITION IN THE ON-SITE SOIL 6 TREES SHALL NOT BE STAKED UNLESS LOCAL CONDITIONS (SUCH AS HEAVY WINDS OR SLOPES) REQUIRE STAKES TO KEEP TREES UPRIGHT. SHOULD STAKING BE REQUIRED. THE TOTAL NUMBER OF
- TREE STAKES (BEYOND THE MINIMUMS LISTED BELOW) WILL BE LEFT TO THE LANDSCAPE CONTRACTOR'S DISCRETION. SHOULD ANY TREES FALL OR LEAN, THE LANDSCAPE CONTRACTOR SHALL STRAIGHTEN THE TREE, OR REPLACE IT SHOULD IT BECOME DAMAGED. TREE STAKING SHALL ADHERE TO THE FOLLOWING GUIDELINES: TWO STAKES PER TREE
- 2-1/2"-4" TREES THREE STAKES PER TREE TREES OVER 4" CALIPER GUY AS NEEDED
- MULTI-TRUNK TREES THREE STAKES PER TREE MINIMUM, QUANTITY AND POSITIONS AS NEEDED TO STABILIZE THE TREE
- THREE STAKES PER TREE MINIMUM, QUANTITY AND POSITIONS AS MULTI-TRUNK TREES NEEDED TO STABILIZE THE TREE
- 7. UPON COMPLETION OF PLANTING, CONSTRUCT AN EARTH WATERING BASIN AROUND THE TREE. COVER THE INTERIOR OF THE TREE RING WITH THE WEED BARRIER CLOTH AND TOPDRESS WITH MULCH (TYPE AND DEPTH PER PLANS).
- E. SHRUB, PERENNIAL, AND GROUNDCOVER PLANTING DIG THE PLANTING HOLES TWICE AS WIDE AND 2" LESS DEEP THAN EACH PLANT'S ROOTBALL. INSTALL THE PLANT IN THE HOLE. BACKFILL AROUND THE PLANT WITH SOIL AMENDED PER SOIL TEST
- 2. INSTALL THE WEED BARRIER CLOTH, OVERLAPPING IT AT THE ENDS. UTILIZE STEEL STAPLES TO KEEP THE WEED BARRIER CLOTH IN PLACE. 3. WHEN PLANTING IS COMPLETE, INSTALL MULCH (TYPE AND DEPTH PER PLANS) OVER ALL PLANTING
- BEDS, COVERING THE ENTIRE PLANTING AREA. SOD VARIETY TO BE AS SPECIFIED ON THE LANDSCAPE PLAN.
- LAY SOD WITHIN 24 HOURS FROM THE TIME OF STRIPPING. DO NOT LAY IF THE GROUND IS FROZEN. LAY THE SOD TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS. BUTT ENDS AND SIDES OF SOD STRIPS - DO NOT OVERLAP. STAGGER STRIPS TO OFFSET JOINTS IN ADJACENT COURSES. 4. ROLL THE SOD TO ENSURE GOOD CONTACT OF THE SOD'S ROOT SYSTEM WITH THE SOIL
- 5. WATER THE SOD THOROUGHLY WITH A FINE SPRAY IMMEDIATELY AFTER PLANTING TO OBTAIN AT LEAST SIX INCHES OF PENETRATION INTO THE SOIL BELOW THE SOD.
- INSTALL MULCH TOPDRESSING, TYPE AND DEPTH PER MULCH NOTE, IN ALL PLANTING AREAS AND
- 2. DO NOT INSTALL MULCH WITHIN 6" OF TREE ROOT FLARE AND WITHIN 24" OF HABITABLE STRUCTURES, EXCEPT AS MAY BE NOTED ON THESE PLANS. MULCH COVER WITHIN 6" OF CONCRETE WALKS AND CURBS SHALL NOT PROTRUDE ABOVE THE FINISH SURFACE OF THE WALKS AND CURBS. MULCH COVER WITHIN 12" OF WALLS SHALL BE AT LEAST 3" LOWER THAN THE TOP OF WALL.
- 1. DURING LANDSCAPE PREPARATION AND PLANTING, KEEP ALL PAVEMENT CLEAN AND ALL WORK AREAS IN A NEAT, ORDERLY CONDITION. DISPOSED LEGALLY OF ALL EXCAVATED MATERIALS OFF THE PROJECT SITE.
- INSPECTION AND ACCEPTANCE UPON COMPLETION OF THE WORK, THE LANDSCAPE CONTRACTOR SHALL PROVIDE THE SITE CLEAN, FREE OF DEBRIS AND TRASH, AND SUITABLE FOR USE AS INTENDED. THE LANDSCAPE CONTRACTOR SHALL THEN REQUEST AN INSPECTION BY THE OWNER TO DETERMINE FINAL ACCEPTABILITY.
- 2. WHEN THE INSPECTED PLANTING WORK DOES NOT COMPLY WITH THE CONTRACT DOCUMENTS, THE LANDSCAPE CONTRACTOR SHALL REPLACE AND/OR REPAIR THE REJECTED WORK TO THE OWNER'S SATISFACTION WITHIN 24 HOURS 3. THE LANDSCAPE MAINTENANCE PERIOD WILL NOT COMMENCE UNTIL THE LANDSCAPE WORK HAS BEEN RE-INSPECTED BY THE OWNER AND FOUND TO BE ACCEPTABLE. AT THAT TIME, A WRITTEN

NOTICE OF FINAL ACCEPTANCE WILL BE ISSUED BY THE OWNER, AND THE MAINTENANCE AND

LANDSCAPE MAINTENANCE THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL WORK SHOWN ON THESE PLANS FOR 90 DAYS BEYOND FINAL ACCEPTANCE OF ALL LANDSCAPE WORK BY THE OWNER. LANDSCAPE MAINTENANCE SHALL INCLUDE WEEKLY SITE VISITS FOR THE FOLLOWING ACTIONS (AS APPROPRIATE): PROPER PRUNING, RESTAKING OF TREES, RESETTING OF PLANTS THAT HAVE SETTLED MOWING AND AFRATION OF LAWNS, WEEDING, TREATING FOR INSECTS AND DISEASES.REPLACEMENT OF MULCH. REMOVAL OF LITTER. REPAIRS TO THE IRRIGATION SYSTEM DU TO FAULTY PARTS AND/OR WORKMANSHIP, AND THE APPROPRIATE WATERING OF ALL PLANTINGS.

GUARANTEE PERIODS WILL COMMENCE.

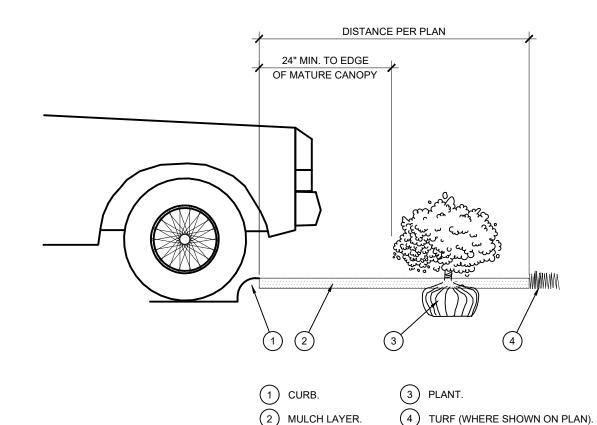
- THE LANDSCAPE CONTRACTOR SHALL MAINTAIN THE IRRIGATION SYSTEM IN PROPER WORKING ORDER WITH SCHEDULING ADJUSTMENTS BY SEASON TO MAXIMIZE WATER CONSERVATION 2. SHOULD SEEDED AND/OR SODDED AREAS NOT BE COVERED BY AN AUTOMATIC IRRIGATION SYSTEM THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING THESE AREAS AND OBTAINING A FULL. HEALTHY STAND OF PLANTS AT NO ADDITIONAL COST TO THE OWNER.
- 3. TO ACHIEVE FINAL ACCEPTANCE AT THE END OF THE MAINTENANCE PERIOD, ALL OF THE FOLLOWING CONDITIONS MUST OCCUR: THE LANDSCAPE SHALL SHOW ACTIVE, HEALTHY GROWTH (WITH EXCEPTIONS MADE FOR
- SEASONAL DORMANCY). ALL PLANTS NOT MEETING THIS CONDITION SHALL BE REJECTED AND REPLACED BY HEALTHY PLANT MATERIAL PRIOR TO FINAL ACCEPTANCE. ALL HARDSCAPE SHALL BE CLEANED PRIOR TO FINAL ACCEPTANCE.
- SODDED AREAS MUST BE ACTIVELY GROWING AND MUST REACH A MINIMUM HEIGHT OF 1 1/2 INCHES BEFORE FIRST MOWING. BARE AREAS LARGER THAN TWELVE SQUARE INCHES MUST BE RESODDED (AS APPROPRIATE) PRIOR TO FINAL ACCEPTANCE. ALL SODDED TURF SHALL BE NEATLY MOWED.
- K. WARRANTY PERIOD, PLANT GUARANTEE AND REPLACEMENTS THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL TREES, SHRUBS, PERENNIALS, SOD, AND IRRIGATION SYSTEMS FOR A PERIOD OF ONE YEAR FROM THE DATE OF THE OWNER'S FINAL ACCEPTANCE (90 DAYS FOR ANNUAL PLANTS). THE CONTRACTOR SHALL REPLACE, AT HIS OWN EXPENSE AND TO THE SATISFACTION OF THE OWNER, ANY PLANTS WHICH DIE IN THAT TIME, OR REPAIR ANY PORTIONS OF THE IRRIGATION SYSTEM WHICH OPERATE IMPROPERLY. 2. AFTER THE INITIAL MAINTENANCE PERIOD AND DURING THE GUARANTEE PERIOD, THE LANDSCAPE CONTRACTOR SHALL ONLY BE RESPONSIBLE FOR REPLACEMENT OF PLANTS WHEN PLANT DEATH
- CANNOT BE ATTRIBUTED DIRECTLY TO OVERWATERING OR OTHER DAMAGE BY HUMAN ACTIONS. PROVIDE A MINIMUM OF (2) COPIES OF RECORD DRAWINGS TO THE OWNER UPON COMPLETION OF WORK. A RECORD DRAWING IS A RECORD OF ALL CHANGES THAT OCCURRED IN THE FIELD AND THAT ARE DOCUMENTED THROUGH CHANGE ORDERS, ADDENDA, OR CONTRACTOR/CONSULTANT DRAWING MARKUPS.



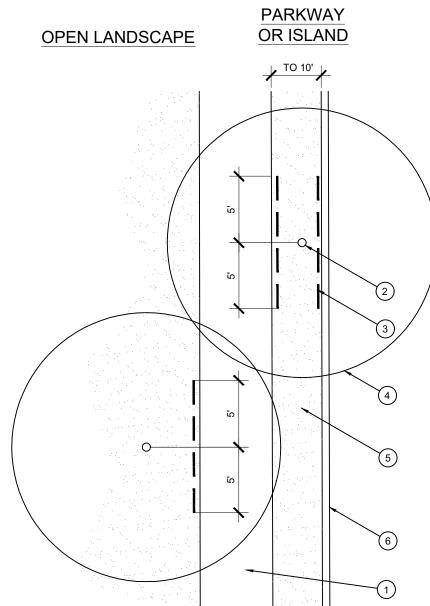
- (1) ROLLED-TOP STEEL EDGING PER PLANS. (2) TAPERED STEEL STAKES.
- (3) MULCH, TYPE AND DEPTH PER PLANS.
- (4) FINISH GRADE.



- 1) INSTALL EDGING SO THAT STAKES WILL BE ON INSIDE OF PLANTING BED. 2) BOTTOM OF EDGING SHALL BE BURIED A
- MINIMUM OF 1" BELOW FINISH GRADE. 3) TOP OF MULCH SHALL BE 1" LOWER THAN TOP



PLANTING AT PARKING AREA

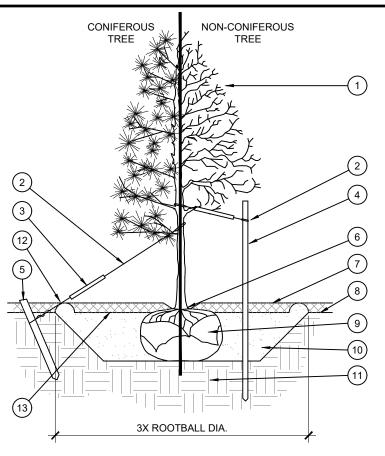


- (1) TYPICAL WALKWAY OR PAVING
- (2) TREE TRUNK (3) LINEAR ROOT BARRIER MATERIAL. SEE PLANTING NOTES FOR TYPE AND MANUFACTURER. INSTALL PER MANUFACTURER'S SPECIFICATIONS.
- (4) TREE CANOPY (5) TYPICAL PLANTING AREA

(6) TYPICAL CURB AND GUTTER

- 1) INSTALL ROOT BARRIERS NEAR ALL NEWLY-PLANTED TREES THAT ARE LOCATED
- WITHIN FIVE (5) FEET OF PAVING OR CURBS. 2) BARRIERS SHALL BE LOCATED IMMEDIATELY ADJACENT TO HARDSCAPE. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR USE ROOT BARRIERS OF A TYPE THAT COMPLETELY ENCIRCLE THE ROOTBALL.

**ROOT BARRIER - PLAN VIEW** 



STAKING EXAMPLES (PLAN VIEW) PREVAILING PREVAILING WINDS

REMOVE EXCESS SOIL APPLIED ON TOP OF THE ROOTBALL THAT COVERS THE ROOT FLARE. THE PLANTING HOLE DEPTH SHALL BE SUCH THAT THE ROOTBALL RESTS ON UNDISTURBED SOIL, AND THE ROOT FLARE IS 2"-4" ABOVE FINISH GRADE. 3. FOR B&B TREES, CUT OFF BOTTOM 1/3 OF WIRE BASKET BEFORE PLACING TREE IN HOLE, CUT OFF AND REMOVE REMAINDER OF BASKET AFTER TREE IS SET IN HOLE, REMOVE ALL NYLON TIES, TWINE, ROPE, AND OTHER PACKING MATERIAL. REMOVE AS MUCH

SCARIFY SIDES OF PLANTING PIT PRIOR TO SETTING TREE.

(1) TREE CANOPY.

(2) CINCH-TIES (24" BOX/2" CAL. TREES AND SMALLER) OR 12 GAUGE GALVANIZED WIRE WITH NYLON TREE

JUST ABOVE LOWEST MAJOR BRANCHES.

(3) 24" X 3/4" P.V.C. MARKERS OVER WIRES.

18" MIN. INTO UNDISTURBED SOIL.

PLACE MULCH WITHIN 6" OF TRUNK.

(10) BACKFILL, AMEND AND FERTILIZE ONLY AS

(11) UNDISTURBED NATIVE SOIL.

(12) 4" HIGH EARTHEN WATERING BASIN.

RECOMMENDED IN SOIL FERTILITY ANALYSIS.

UNDISTURBED SOIL

(6) TRUNK FLARE.

(8) FINISH GRADE.

(13) FINISH GRADE.

(9) ROOT BALL

STRAPS AT TREE AND STAKE (36" BOX/2.5" CAL. TREES

AND LARGER). SECURE TIES OR STRAPS TO TRUNK

(4) GREEN STEEL T-POSTS. EXTEND POSTS 12" MIN. INTO

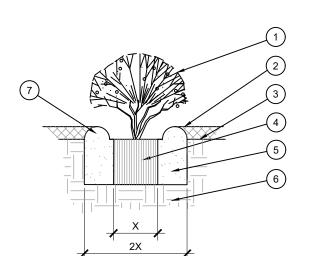
PRESSURE-TREATED WOOD DEADMAN, TWO PER

MULCH, TYPE AND DEPTH PER PLANS. DO NOT

TREE (MIN.). BURY OUTSIDE OF PLANTING PIT AND

4. REMOVE ALL NURSERY STAKES AFTER PLANTING. 5. FOR TREES 36" BOX/2.5" CAL. AND LARGER, USE THREE STAKES OR DEADMEN (AS APPROPRIATE), SPACED EVENLY AROUND TREE. 6. STAKING SHALL BE TIGHT ENOUGH TO PREVENT TRUNK FROM BENDING, BUT LOOSE ENOUGH TO ALLOW SOME TRUNK MOVEMENT

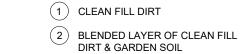
BURLAP FROM AROUND ROOTBALL AS IS PRACTICAL.



- (1) SHRUB, PERENNIAL, OR ORNAMENTAL GRASS. MULCH, TYPE AND DEPTH PER PLANS. PLACE NO MORE THAN 1" OF MULCH WITHIN 6" OF PLANT
- (3) FINISH GRADE.
- (4) ROOT BALL.
- (5) BACKFILL. AMEND AND FERTILIZE ONLY AS RECOMMENDED IN SOIL FERTILITY ANALYSIS.
- (7) 3" HIGH EARTHEN WATERING BASIN

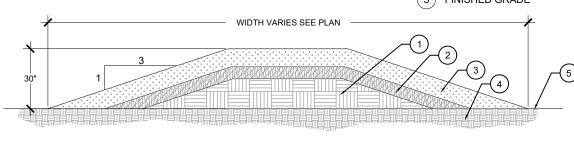
(6) UNDISTURBED NATIVE SOIL.

SHRUB AND PERENNIAL PLANTING



(3) GARDEN SOIL MIX - TO INCLUDE CLEAN FILL, MANURE COMPOST SAND, & AGED SAW DUST

(4) EXISTING SUBGRADE SOIL (5) FINISHED GRADE



LANDSCAPE BERM

I hereby certify that the above and foregoing site plan for a development in the City of Rockwall, Texas, was approved by the Planning & Zoning Commission of the City of Rockwall

WITNESS OUR HANDS, this \_\_\_ day of \_\_\_\_, 20\_\_.

Planning & Zoning Commission, Chairman

on the \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_.

Director of Planning and Zoning

CASE #: SP2021-021

OWNER:

PHONE: 214-271-4630

CONTACT: MICHAEL HAMPTON

DALLAS, TX 75238 THE DIMENSION GROUP

10755 SANDHILL ROAD

PRUDENT GROUP

10755 SANDHILL ROAD PHONE: 214-343-9400 DALLAS, TX 75238 CONTACT: KEATON L. MAI, PE LEGAL DESCRIPTION:

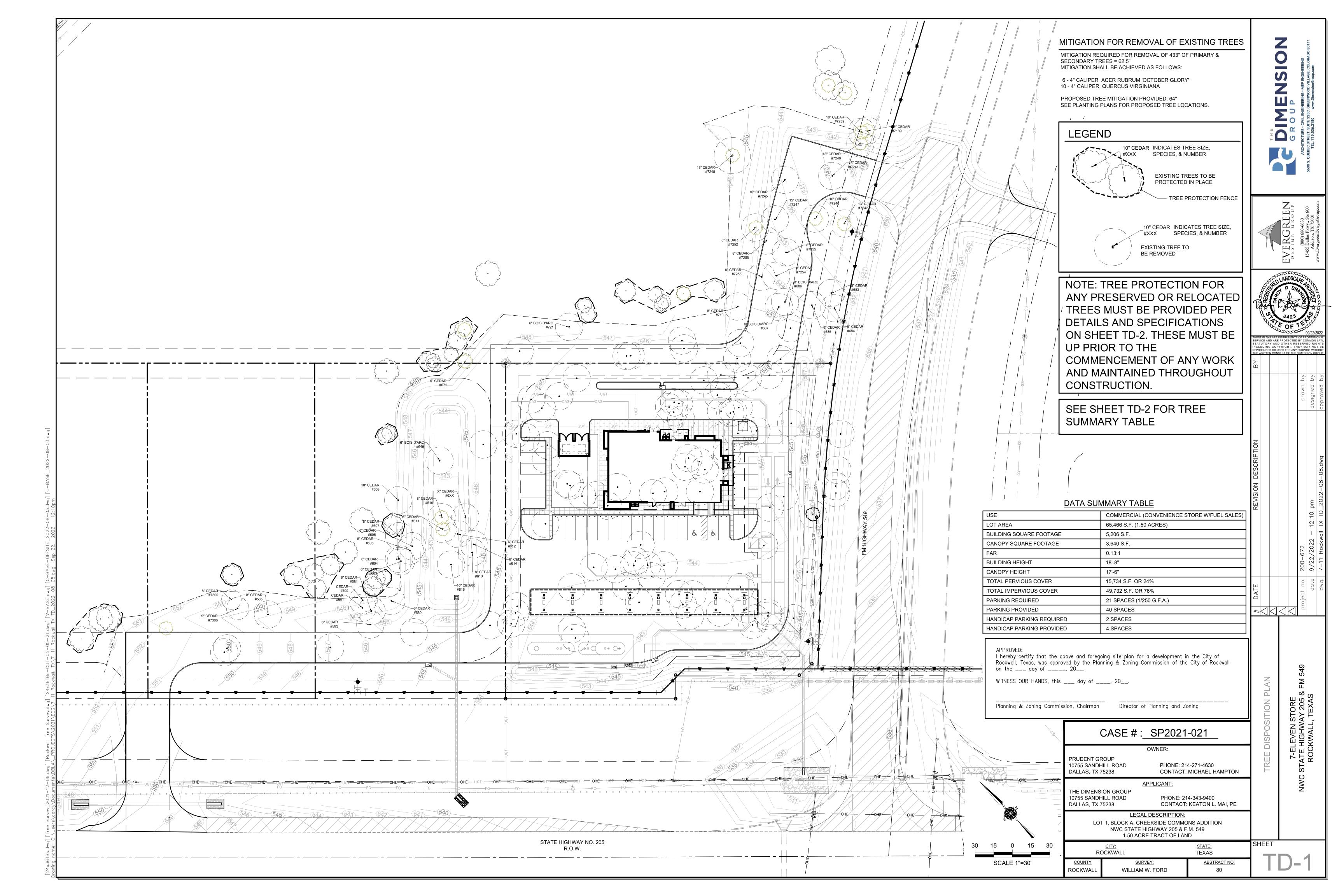
APPLICANT:

LOT 1, BLOCK A, CREEKSIDE COMMONS ADDITION NWC STATE HIGHWAY 205 & F.M. 549 1.50 ACRE TRACT OF LAND

CITY: **ROCKWALL TEXAS** ABSTRACT NO. WILLIAM W. FORD ROCKWALI



SHEET



#### **MATERIALS**

- FABRIC: 4 FOOT HIGH ORANGE PLASTIC FENCING AS SHOWN ON THE PLANS AND SHALL BE WOVEN WITH 2 INCH MESH OPENINGS SUCH THAT IN A VERTICAL DIMENSION OF 23 INCHES ALONG THE DIAGONALS OF THE OPENINGS THERE SHALL BE AT LEAST 7 MESHES.
- 2. POSTS: POSTS SHALL BE A MINIMUM OF 72 INCHES LONG AND STEEL 'T'
- SHAPED WITH A MINIMUM WEIGHT OF 1.3 POUNDS PER LINEAR FOOT. 3. TIE WIRE: WIRE FOR ATTACHING THE FABRIC TO THE T-POSTS SHALL BE
- NOT LESS THAN NO. 12 GAUGE GALVANIZED WIRE 4. USED MATERIALS: PREVIOUSLY-USED MATERIALS, MEETING THE ABOVE REQUIREMENTS AND WHEN APPROVED BY THE OWNER, MAY BE USED.

#### CONSTRUCTION METHODS

- ALL TREES AND SHRUBS SHOWN TO REMAIN WITHIN THE PROXIMITY OF THE CONSTRUCTION SITE SHALL BE PROTECTED PRIOR TO BEGINNING ANY DEVELOPMENT ACTIVITY.
- 2. EMPLOY THE SERVICES OF AN ISA (INTERNATIONAL SOCIETY OF ARBORICULTURE) CERTIFIED ARBORIST AND OBTAIN ALL REQUIRED PERMITS TO PRUNE THE EXISTING TREES FOR CLEANING, RAISING AND THINNING, AS MAY BE REQUIRED.
- 3. PROTECTIVE FENCING SHALL BE ERECTED OUTSIDE THE CRITICAL ROOT ZONE (CRZ, EQUAL TO 1' FROM THE TRUNK FOR EVERY 1" OF DBH) AT LOCATIONS SHOWN IN THE PLANS OR AS DIRECTED BY THE LANDSCAPE CONSULTANT AND/OR CITY ARBORIST. AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS. FENCING SHALL BE MAINTAINED AND REPAIRED BY THE CONTRACTOR DURING SITE CONSTRUCTION. TREES IN CLOSE PROXIMITY SHALL BE FENCED TOGETHER, RATHER THAN INDIVIDUALLY.
- PROTECTIVE FENCE LOCATIONS IN CLOSE PROXIMITY TO STREET INTERSECTIONS OR DRIVES SHALL ADHERE TO THE APPLICABLE JURISDICTION'S SIGHT DISTANCE CRITERIA.
- 5. THE PROTECTIVE FENCING SHALL BE ERECTED BEFORE SITE WORK COMMENCES AND SHALL REMAIN IN PLACE DURING THE ENTIRE CONSTRUCTION PHASE.
- 6. THE INSTALLATION POSTS SHALL BE PLACED EVERY 6 FEET ON CENTER AND EMBEDDED TO 18 INCHES DEEP. MESH FABRIC SHALL BE ATTACHED TO THE INSTALLATION POSTS BY THE USE OF SUFFICIENT WIRE TIES TO SECURELY FASTEN THE FABRIC TO THE T-POSTS TO HOLD THE FABRIC IN A STABLE AND UPRIGHT POSITION.
- 7. WITHIN THE CRZ:
- a. DO NOT CLEAR, FILL OR GRADE IN THE CRZ OF ANY TREE.
- b. DO NOT STORE, STOCKPILE OR DUMP ANY JOB MATERIAL, SOIL OR RUBBISH UNDER THE SPREAD OF THE TREE BRANCHES.
- DO NOT PARK OR STORE ANY EQUIPMENT OR SUPPLIES UNDER THE
- d. DO NOT SET UP ANY CONSTRUCTION OPERATIONS UNDER THE TREE CANOPY (SUCH AS PIPE CUTTING AND THREADING, MORTAR MIXING,
- PAINTING OR LUMBER CUTTING). e. DO NOT NAIL OR ATTACH TEMPORARY SIGNS METERS, SWITCHES,
- WIRES, BRACING OR ANY OTHER ITEM TO THE TREES. DO NOT PERMIT RUNOFF FROM WASTE MATERIALS INCLUDING SOLVENTS, CONCRETE WASHOUTS, ASPHALT TACK COATS (MC-30 OIL), ETC. TO ENTER THE CRZ. BARRIERS ARE TO BE PROVIDED TO PREVENT SUCH RUNOFF SUBSTANCES FROM ENTERING THE CRZ

(A) PRIOR TO THE LAND CLEARING STAGE OF DEVELOPMENT. THE CONTRACTOR SHALL CLEARLY MARK ALL PROTECTED TREES FOR WHICH A

TREE REMOVAL PERMIT HAS NOT BEEN ISSUED AND SHALL ERECT BARRIERS FOR THE PROTECTION OF THE TREES ACCORDING TO THE

(1) AROUND AN AREA AT OR GREATER THAN A SIX-FOOT RADIUS OF ALL SPECIES OF MANGROVES AND PROTECTED CABBAGE PALMS:

SCREWS TO ANY PROTECTED TREE IN ANY MANNER THAT COULD PROVE HARMFUL TO THE PROTECTED TREE. EXCEPT AS NECESSARY IN

TREES WHICH IS TO BE PRESERVED. WITHIN THE OUTSIDE PERIMETER OF THE CROWN (DRIPLINE) OF ANY TREE OR ON NEARBY GROUND.

MATERIAL SUCH AS PAINTS, OIL, SOLVENTS, ASPHALT, CONCRETE, MORTAR OR ANY OTHER MATERIAL HARMFUL TO THE LIFE OF THE TREE.

DESIGNATED TO BE PRESERVED THAT WERE DESTROYED DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR WITH TREES OF EQUIVALENT DIAMETER AT BREAST HEIGHT TREE CALIPER AND OF THE SAME SPECIES AS SPECIFIED BY THE CITY ADMINISTRATOR,

(B) NO PERSON SHALL ATTACH ANY SIGN, NOTICE OR OTHER OBJECT TO ANY PROTECTED TREE OR FASTEN ANY WIRES, CABLES, NAILS OR

(C) DURING THE CONSTRUCTION STAGE OF DEVELOPMENT, THE CONTRACTOR SHALL NOT CAUSE OR PERMIT THE CLEANING OF EQUIPMENT

THE CONTRACTOR SHALL NOT CAUSE OR PERMIT STORAGE OF BUILDING MATERIAL AND/OR EQUIPMENT, OR DISPOSAL OF WASTE

(F) PRIOR TO ISSUING A CERTIFICATE OF OCCUPANCY OR COMPLIANCE FOR ANY DEVELOPMENT, BUILDING OR STRUCTURE, ALL TREES

(H) IF, IN THE OPINION OF THE CITY ADMINISTRATOR, DEVELOPMENT ACTIVITIES WILL SO SEVERELY STRESS SLASH PINES OR ANY OTHER

PROTECTED TREE SUCH THAT THEY ARE MADE SUSCEPTIBLE TO INSECT ATTACK, PREVENTATIVE SPRAYING OF THESE TREES BY THE

(G) THE CITY ADMINISTRATOR MAY CONDUCT PERIODIC INSPECTIONS OF THE SITE DURING LAND CLEARANCE AND CONSTRUCTION.

OR MATERIAL WITHIN THE OUTSIDE PERIMETER OF THE CROWN (DRIPLINE) OR ON THE NEARBY GROUND OF ANY TREE OR GROUP OF

(2) AROUND AN AREA AT OR GREATER THAN THE FULL DRIPLINE OF ALL PROTECTED NATIVE PINES;

(E) ANY LANDSCAPING ACTIVITIES WITHIN THE BARRIER AREA SHALL BE ACCOMPLISHED WITH HAND LABOR.

BEFORE OCCUPANCY OR USE, UNLESS APPROVAL FOR THEIR REMOVAL HAS BEEN GRANTED UNDER PERMIT.

(3) AROUND AN AREA AT OR GREATER THAN TWO-THIRDS OF THE DRIPLINE OF ALL OTHER PROTECTED SPECIES.

(D) NO PERSON SHALL PERMIT ANY UNNECESSARY FIRE OR BURNING WITHIN 30 FEET OF THE DRIPLINE OF A PROTECTED TREE.

WHENEVER POSSIBLE, INCLUDING IN AN AREA WHERE RAIN OR SURFACE WATER COULD CARRY SUCH MATERIALS TO THE ROOT

8. ROUTE UNDERGROUND UTILITIES TO AVOID THE CRZ. IF DIGGING IS UNAVOIDABLE, BORE UNDER THE ROOTS, OR HAND DIG TO AVOID SEVERING THEM.

CONJUNCTION WITH ACTIVITIES IN THE PUBLIC INTEREST.

TREE PROTECTION GENERAL NOTES

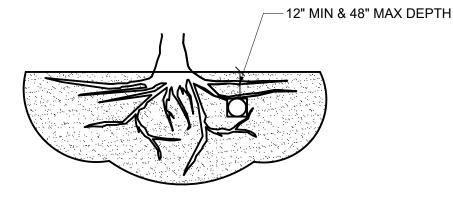
SYSTEM OF THE TREE.

CONTRACTOR MAY BE REQUIRED.

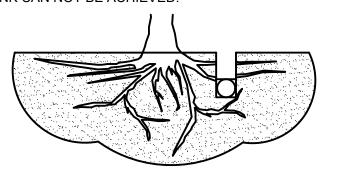
- 9. WHERE EXCAVATION IN THE VICINITY OF TREES MUST OCCUR, SUCH AS FOR IRRIGATION INSTALLATION, PROCEED WITH CAUTION, AND USING HAND TOOLS ONLY.
- 10. THE CONTRACTOR SHALL NOT CUT ROOTS LARGER THAN ONE INCH IN DIAMETER WHEN EXCAVATION OCCURS NEAR EXISTING TREES. ALL ROOTS LARGER THAN ONE INCH IN DIAMETER ARE TO BE CUT CLEANLY. FOR OAKS ONLY, ALL WOUNDS SHALL BE PAINTED WITH WOUND SEALER WITHIN 30 MINUTES
- 11. REMOVE ALL TREES, SHRUBS OR BUSHES TO BE CLEARED FROM PROTECTED ROOT ZONE AREAS BY HAND.
- 12. TREES DAMAGED OR KILLED DUE TO CONTRACTOR'S NEGLIGENCE DURING CONSTRUCTION SHALL BE MITIGATED AT THE CONTRACTOR'S EXPENSE AND TO THE PROJECT OWNER'S AND LOCAL JURISDICTION'S SATISFACTION.
- 13. ANY TREE REMOVAL SHALL BE APPROVED BY THE OWNER AND LOCAL JURISDICTION PRIOR TO ITS REMOVAL, AND THE CONTRACTOR SHALL HAVE ALL REQUIRED PERMITS FOR SUCH ACTIVITIES.
- 14. COVER EXPOSED ROOTS AT THE END OF EACH DAY WITH SOIL, MULCH OR WET BURLAP.
- 15. IN CRITICAL ROOT ZONE AREAS THAT CANNOT BE PROTECTED DUING CONSTRUCTION AND WHERE HEAVY TRAFFIC IS ANTICIPATED, COVER THE SOIL WITH EIGHT INCHES OF ORGANIC MULCH TO MINIMIZE SOIL COMPACTION. THIS EIGHT INCH DEPTH OF MULCH SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
- 16. WATER ALL TREES IMPACTED BY CONSTRUCTION ACTIVITIES, DEEPLY ONCE A WEEK DURING PERIODS OF HOT DRY WEATHER. SPRAY TREE CROWNS WITH WATER PERIODICALLY TO REDUCE DUST ACCUMULATION ON THE LEAVES.
- 17. WHEN INSTALLING CONCRETE ADJACENT TO THE ROOT ZONE OF A TREE, USE A PLASTIC VAPOR BARRIER BEHIND THE CONCRETE TO PROHIBIT LEACHING OF LIME INTO THE SOIL.
- 18. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL TREE PROTECTION FENCING WHEN ALL THREATS TO THE EXISTING TREES FROM CONSTRUCTION-RELATED ACTIVITIES HAVE BEEN REMOVED.

TREES THAT ARE MARKED TO BE PRESERVED ON A SITE PLAN AND FOR WHICH UTILITIES MUST PASS TROUGH THEIR ROOT PROTECTION ZONES MAY REQUIRE TUNNELING AS OPPOSED TO OPEN TRENCHES. THE DECISION TO TUNNEL WILL BE DETERMINED ON A CASE BY CASE BASIS BY THE ENGINEER.

TUNNELS SHALL BE DUG THROUGH THE ROOT PROTECTION ZONE IN ORDER TO MINIMIZE ROOT DAMAGE.



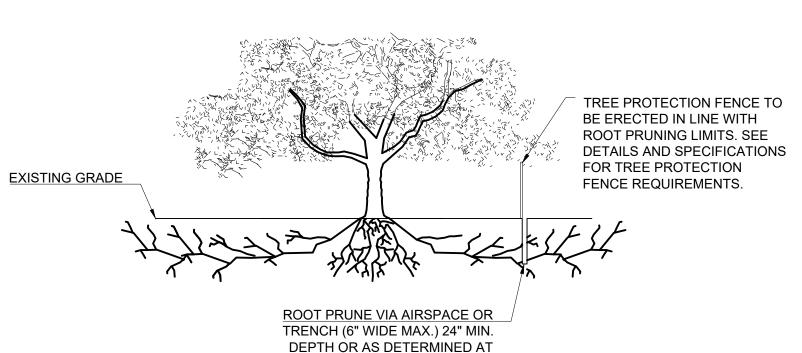
TUNNEL TO MINIMIZE ROOT DAMAGE (TOP) AS OPPOSED TO SURFACE-DUG TRENCHES IN ROOT PROTECTION ZONE WHEN THE 5' MINIMUM DISTANCE FROM TRUNK CAN NOT BE ACHIEVED.



OPEN TRENCHING MAY BE USED IF EXPOSED TREE ROOTS DO NOT EXCEED 3" OR ROOTS CAN BE BENT BACK.

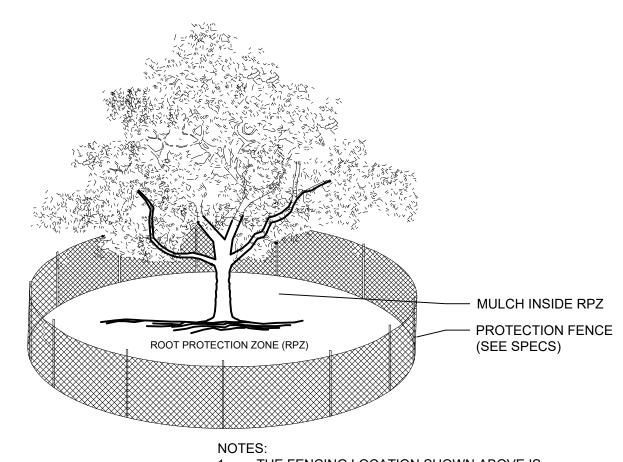
BORING THROUGH ROOT PROTECTION ZONE

- 1. RETENTION AREAS WILL BE SET AS PART OF THE REVIEW PROCESS AND PRE-CONSTRUCTION MEETING.
- BOUNDARIES OF RETENTION AREAS MUST BE STAKED AT THE PRE-CONSTRUCTION MEETING AND FLAGGED PRIOR TO ROOT PRUNING.
- EXACT LOCATION OF ROOT PRUNING SHALL BE DETERMINED IN THE FIELD IN
- COORDINATION WITH THE FORESTRY INSPECTOR. TRENCH SHOULD BE IMMEDIATELY BACKFILLED WITH EXCAVATED SOIL OR OTHER
- ORGANIC SOIL AS SPECIFIED PER PLAN OR BY THE FORESTRY INSPECTOR. ROOTS SHALL BE CLEANLY CUT USING VIBRATORY KNIFE OR OTHER ACCEPTABLE EQUIPMENT. ROT PRUNING METHODS AND MEANS MUST BE IN ACCORDANCE WITH ANSI STANDARD A3000.
- ALL PRUNING MUST BE EXECUTED AT LOD SHOWN ON PLANS OR AS AUTHORIZED IN WRITING BY THE FORESTRY INSPECTOR.
- SUPPLEMENTAL WATERING MAY BE REQUIRED FOR ROOT PRUNED TREES THROUGHOUT THE GROWING SEASON DURING CONSTRUCTION AND SUBSEQUENT WARRANTY AND MAINTENANCE PERIOD.



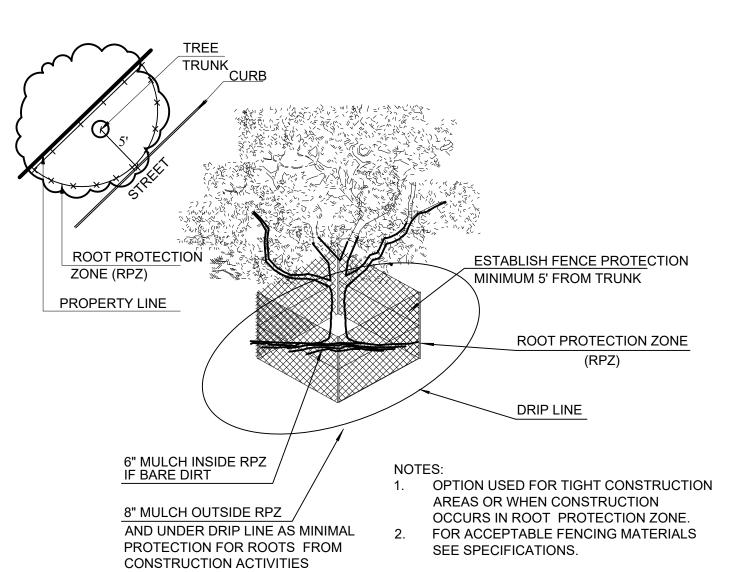
PRE-CONSTRUCTION MEETING.

**ROOT PRUNING DETAIL** SCALE: NOT TO SCALE



THE FENCING LOCATION SHOWN ABOVE IS DIAGRAMATIC ONLY AND WILL CONFORM TO THE DRIP LINE AND BE LIMITED TO PROJECT BOUNDARY. WHERE MULTIPLE ADJACENT TREES WILL BE ENCLOSED BY FENCING, THE FENCING SHALL BE CONTINUOUS AROUND ALL TREES. FOR ACCEPTABLE FENCING MATERIALS SEE SPECIFICATIONS.

TREE PROTECTION FENCE



TREE PROTECTION FENCE - TIGHT CONSTRUCTION

I hereby certify that the above and foregoing site plan for a development in the City of Rockwall, Texas, was approved by the Planning & Zoning Commission of the City of Rockwall on the \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_.

WITNESS OUR HANDS, this \_\_\_ day of \_\_\_\_, 20\_\_.

Planning & Zoning Commission, Chairman

ROCKWALI

#### Director of Planning and Zoning CASE #: SP2021-021 OWNER: PRUDENT GROUP 10755 SANDHILL ROAD PHONE: 214-271-4630 CONTACT: MICHAEL HAMPTON **DALLAS, TX 75238** APPLICANT: THE DIMENSION GROUP PHONE: 214-343-9400 10755 SANDHILL ROAD CONTACT: KEATON L. MAI, PE DALLAS, TX 75238 LEGAL DESCRIPTION: LOT 1. BLOCK A. CREEKSIDE COMMONS ADDITION NWC STATE HIGHWAY 205 & F.M. 549 1.50 ACRE TRACT OF LAND

SHEET CITY: **ROCKWALL TEXAS** ABSTRACT NO. WILLIAM W. FORD