

OWNER: 2800 RIDGE, LLC
8214 WESTCHESTER DR, SUITE 550
DALLAS, TX 75225

DEVELOPER: PANERA, LLC
3630 SOUTH GEYER ROAD, SUITE 100
ST. LOUIS, MO 63127
314-984-2646

CIVIL ENGINEER: COLE
POWER HOUSE AT UNION STATION
401 S. 18TH STREET, SUITE 200
ST. LOUIS, MO 63103
314-984-9887

ARCHITECT: WHA DESIGN, INC.
9867 SOUTHWEST 184TH STREET
PALMETTO BAY, FL 33157
305-615-1716

SURVEYOR: COOMBS LAND SURVEYING, INC.
P.O. BOX 11370
FORT WORTH, TEXAS 76110
817-920-7600

LANDSCAPE ARCHITECT: COLE
POWER HOUSE AT UNION STATION
401 S. 18TH STREET, SUITE 200
ST. LOUIS, MO 63103
314-984-9887

ZONING DEPARTMENT:

CITY OF ROCKWALL PLANNING DEPARTMENT
385 S. GOLIAD STREET
ROCKWALL, TX 75087
RYAN MILLER, DIRECTOR OF PLANNING
972-771-7745
RMILLER@ROCKWALL.COM

BUILDING DEPARTMENT:

CITY OF ROCKWALL BUILDING INSPECTIONS DEPARTMENT
385 S. GOLIAD STREET
ROCKWALL, TX 75087
JOHN ANKRUM, PLANS EXAMINER
972-772-6774
JANKRUM@ROCKWALL.COM

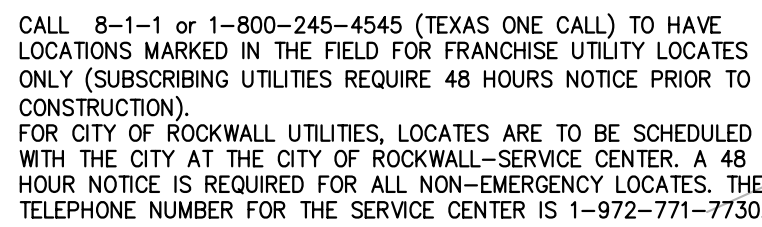
FIRE DEPARTMENT:

CITY OF ROCKWALL FIRE DEPARTMENT
STATION 1
305 E. BOYDSTUN
ROCKWALL, TX 75087
ARIANA HARGROVE
972-771-7770
AHARGROVE@ROCKWALL.COM

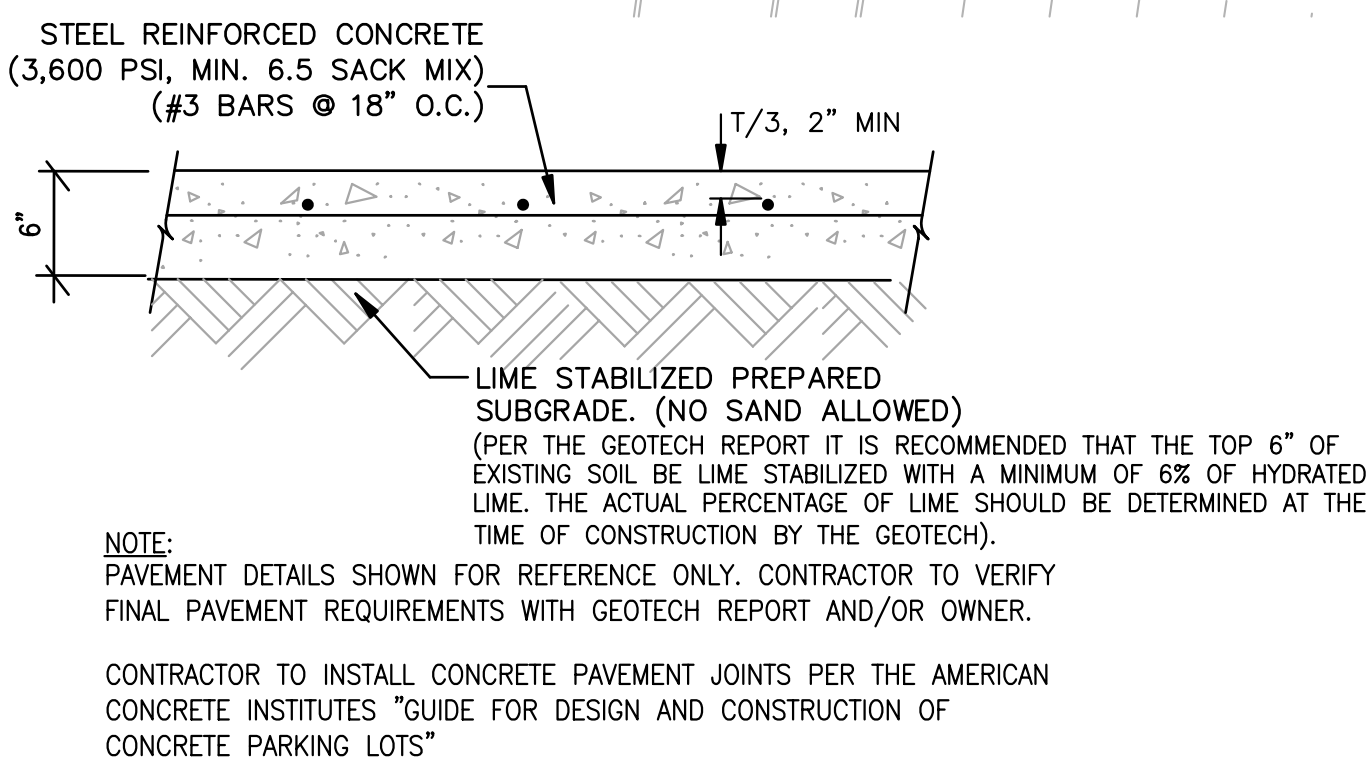
ENGINEERING:

CITY OF ROCKWALL ENGINEERING DEPARTMENT
385 S. GOLIAD STREET
ROCKWALL, TX 75087
AMY WILLIAMS, ASSISTANT CITY ENGINEER
972-771-7746
AWILLIAMS@ROCKWALL.COM

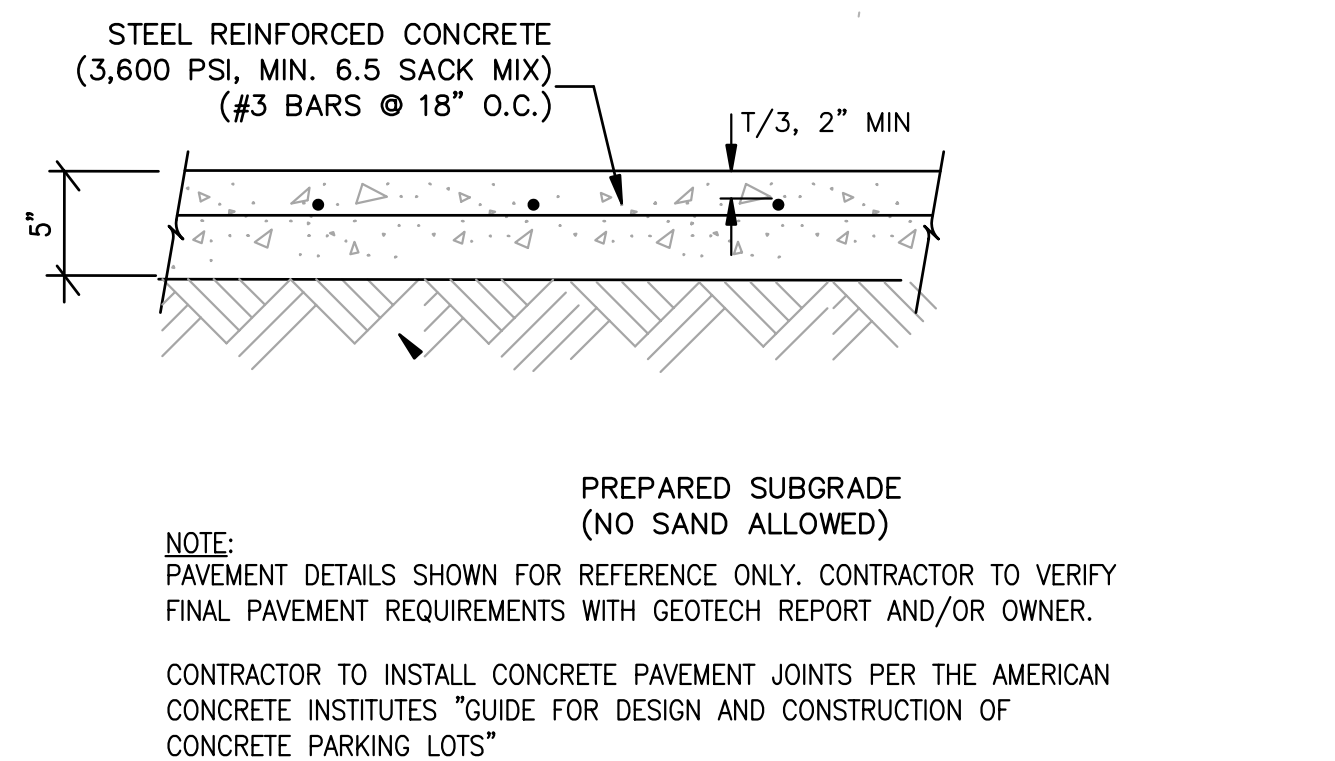
WATER SERVICE:	CITY OF ROCKWALL ENGINEERING DEPARTMENT 385 S. GOLIAD STREET ROCKWALL, TX 75087 AMY WILLIAMS, ASSISTANT CITY ENGINEER 972-771-7746 AWILLIAMS@ROCKWALL.COM
SANITARY SEWER SERVICE:	CITY OF ROCKWALL ENGINEERING DEPARTMENT 385 S. GOLIAD STREET ROCKWALL, TX 75087 AMY WILLIAMS, ASSISTANT CITY ENGINEER 972-771-7746 AWILLIAMS@ROCKWALL.COM
STORM SEWER SERVICE:	CITY OF ROCKWALL ENGINEERING DEPARTMENT 385 S. GOLIAD STREET ROCKWALL, TX 75087 AMY WILLIAMS, ASSISTANT CITY ENGINEER 972-771-7746 AWILLIAMS@ROCKWALL.COM
ELECTRIC SERVICE:	ONCOR MTN ELECTRIC OPERATIONS 310 HIGHWAY 205 N TERRELL, TX 75160 PHILLIP DICKERSON, SR. PROJECT DESIGNER 972-551-6712 PHILLIP.DICKERSON@ONCOR.COM
GAS SERVICE:	ATMOS ENERGY DINAH WOOD, PROJECT SPECIALIST 972-485-6277 DINAH.WOOD@ATMOSENERGY.COM
TELEPHONE SERVICE:	AT&T 2702 WESLEY STREET GREENVILLE, TX 75401 SCOTT ULRICH, PLANNING/ENGINEERING DESIGN 903-457-2303 SUE782@ATT.COM



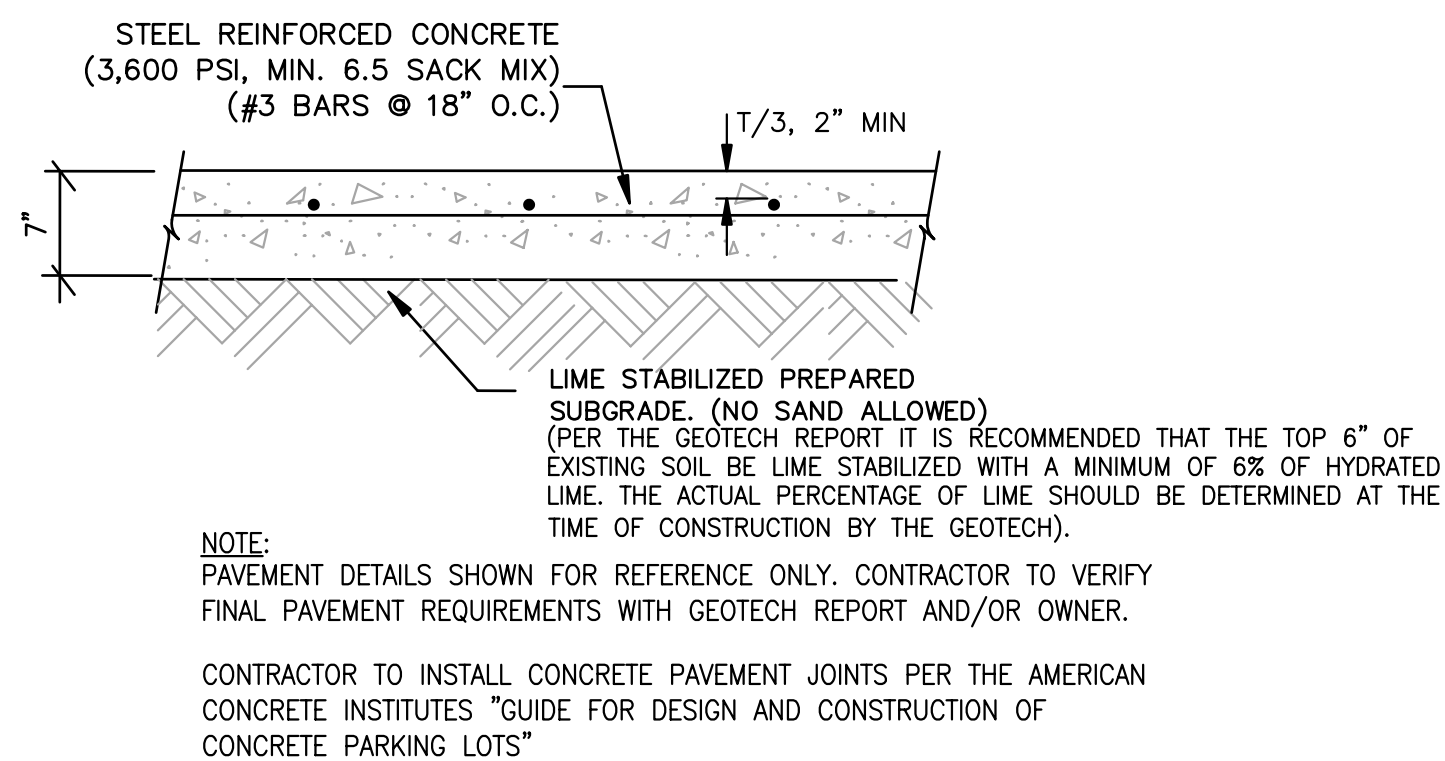
CALL 8-1-1 or 1-800-245-4545 (TEXAS ONE CALL) TO HAVE LOCATIONS MARKED IN THE FIELD FOR FRANCHISE UTILITY LOCATES ONLY (SUBSCRIBING UTILITIES REQUIRE 48 HOURS NOTICE PRIOR TO CONSTRUCTION).
FOR CITY OF ROCKWALL UTILITIES, LOCATES ARE TO BE SCHEDULED WITH THE CITY AT THE CITY OF ROCKWALL-SERVICE CENTER. A 48 HOUR NOTICE IS REQUIRED FOR ALL NON-EMERGENCY LOCATES. THE TELEPHONE NUMBER FOR THE SERVICE CENTER IS 1-972-771-7730.



1 HEAVY DUTY CONCRETE DETAIL



2 LIGHT DUTY CONCRETE DETAIL
SCALE: N.T.S. REF. DWG. ???



3 REFUSE AREA CONCRETE DETAIL

SCALE: N.T.S. REF. DWG. ???

A. ALL DIMENSIONS AND RADII ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.

UTILITY INFORMATION:

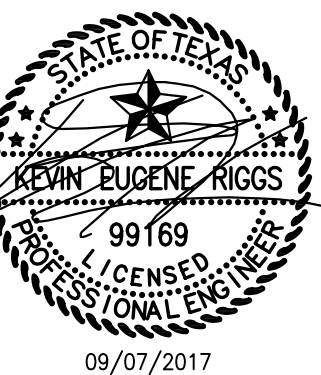
UTILITIES SHOWN HAVE BEEN TAKEN FROM AVAILABLE SURVEYS, UTILITY COMPANY MAPS AND PHYSICAL PROPERTY INSPECTION. THE LOCATIONS AND FACILITIES SHALL BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE ADDITIONAL UTILITIES THAT HAVE NOT BEEN SHOWN ON THIS SURVEY. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE LOCATIONS OF ALL UTILITIES PRIOR TO EXCAVATION OR CONSTRUCTION.

2804 RIDGE ROAD
(F. M. 740)
CONCRETE PAVEMENT w/CURB
VARIABLE WIDTH R.O.W.

* SITE BENCHMARK *
BOX CUT ON TOP OF CURB
ELEV. = 561.51

- 1 NEW TRASH ENCLOSURE. (PROVIDE DRAIN TO GREASE TRAP). REFER TO ARCHITECTURAL PLANS
- 2 NEW PATIO AREA. REFER TO ARCHITECTURAL PLANS.
- 3 NEW 4" BOLLARD(S). REFER TO DETAIL ON SHEET C9.0. REFER TO ARCHITECTURAL PLANS FOR LOCATION AND QUANTITY.
- 4 NEW 6" BOLLARD(S). REFER TO DETAIL ON SHEET C9.0. REFER TO ARCHITECTURAL PLANS FOR LOCATION AND QUANTITY.
- 5 NEW PATIO HANDRAIL WITH INTEGRATED BOLLARDS. REFER TO ARCHITECTURAL PLANS.
- 6 NEW CLEARANCE BAR. REFER TO ARCHITECTURAL PLANS.
- 7 NEW MENU BOARD. REFER TO ARCHITECTURAL PLANS.
- 8 NEW MENU CANOPY. REFER TO ARCHITECTURAL PLANS.
- 9 NEW PREVIEW BOARD. REFER TO ARCHITECTURAL PLANS.
- 10 NEW BUILDING MOUNTED CAMERA. REFER TO ARCHITECTURAL PLANS.
- 11 NEW "DO NOT ENTER / THANK YOU" SIGN. REFER TO ARCHITECTURAL PLANS.
- 12 NEW "DRIVE-THRU" SIGN. REFER TO ARCHITECTURAL PLANS.
- 13A NEW HEAVY DUTY CONCRETE PAVEMENT. REFER TO C5.1 PAVING PLAN.
- 13B NEW LIGHT DUTY CONCRETE PAVEMENT. REFER TO C5.1 PAVING PLAN.
- 13C NEW REFUSE AREA CONCRETE PAVEMENT. REFER TO C5.1 PAVING PLAN.
- 14 NEW "STOP" SIGN. REFER TO DETAIL ON SHEET C9.0.
- 15 NEW CONCRETE PAD WITH SENSOR LOOP. REFER TO ARCHITECTURAL PLANS.
- 16 NEW 6" VERTICAL CONCRETE CURB (STANDARD SECTION). REFER TO C5.1 PAVING PLAN.
- 17 NEW 6" VERTICAL CONCRETE CURB (WIDE SECTION). REFER TO C5.1 PAVING PLAN.
- 18 NEW TURNED DOWN CONCRETE WALK. REFER TO DETAIL ON SHEET C9.0.
- 19 NEW WHEEL STOPS (7 TOTAL). REFER TO DETAIL ON SHEET C9.0.
- 20 NEW FLARED ACCESSIBLE RAMP WITH TRUNCATED DOMES IN SIDEWALK. REFER TO DETAIL ON SHEET C9.0.
- 21 NEW PARALLEL ACCESSIBLE RAMP WITH TRUNCATED DOMES IN SIDEWALK. REFER TO DETAIL ON SHEET C9.0.
- 22 NEW TRAFFIC FLOW ARROW. REFER TO DETAIL ON SHEET C9.1.
- 23 NEW "DRIVE-THRU" STRIPING AND TRAFFIC FLOW ARROW. REFER TO DETAIL ON SHEET C9.1.
- 24 NEW "DO NOT ENTER" STRIPING AND TRAFFIC FLOW ARROWS. REFER TO DETAIL ON SHEET C9.1.
- 25 NEW ACCESSIBLE PARKING PAINTED SYMBOL AND STRIPING (2 TOTAL). REFER TO DETAIL ON SHEET C9.1.
- 26 NEW ACCESSIBLE PARKING AND FINE SIGN(S) IN BOLLARD (2 TOTAL). REFER TO DETAIL ON SHEET C9.1.
- 27 NEW RAPID PICK UP SIGNS. REFER TO ARCHITECTURAL PLANS.
- 28 NEW PAINTED AISLE. REFER TO DETAIL ON SHEET C9.1.
- 29 NEW LANDSCAPE AREA. REFER TO LANDSCAPE PLANS.
- 30 NEW SITE LIGHTING. REFER TO ELECTRICAL PLANS.
- 31 NEW STANDARD DRIVE APPROACH PER TXDOT STANDARDS.
- 32 NEW CURB TO BE PAINTED RED WITH CONTRASTING WHITE LETTERS READING "NO PARKING FIRE LANE" PER ROCKWALL FIRE PROTECTION STANDARDS.
- 33 NEW RED PAINTED STRIPE WITH CONTRASTING WHITE LETTERS READING "NO PARKING FIRE LANE" PER ROCKWALL FIRE PROTECTION STANDARDS.
- 34 NEW SEGMENTAL RETAINING WALL. (DESIGNED BY OTHERS)
- 35 EXISTING PYLON SIGN TO REMAIN AND BE REFACED. REFER TO ARCHITECTURAL PLANS.
- 36 NEW 12'X65' LOADING AREA.
- 37 EXISTING DRIVEWAY EXTENTS (TO BE ALTERED).
- 38 NEW DRAINAGE/DETENTION EASEMENT.
- 39 EXISTING FIRE HYDRANT.
- 40 NEW 4' WIDE CONCRETE SWALE.
- 41 TAPER CURB. REFER TO DETAIL ON C5.1 PAVING PLAN.
- 42 NEW CONCRETE WALK AND TYPE 10 RAMP PER TXDOT STANDARDS. TRUNCATED DOME PLATES TO BE COLONIAL OR BRICK RED COLOR. REFER TO DETAIL SHEET C9.2. NEW WALK TO MATCH EXISTING IN LOCATION AND ELEVATION.
- 43 NEW 4'X4'X4" CONCRETE PAD FOR REMOTE FDC.
- 44 NEW CONCRETE STEPS. 2- 8" TREADS/6" RISERS.
- 45 NEW CONCRETE PAD FOR ELECTRIC TRANSFORMER.
- 46 NEW FLOW OPENING IN CURB (TYPICAL OF 7). REFER TO DETAIL ON SHEET C-9.1.
- 47 NEW EDGE OF CONCRETE PAVEMENT (NO CURB).
- 48 NEW 2' LONG X 2' WIDE X 12" THICK ROCK BLANKET (TXDOT COMMON RIPRAP) OVER FILTER FABRIC (TYPE 1).
- 49 NEW 1' WIDE X 12" THICK ROCK BLANKET (TXDOT COMMON RIPRAP) OVER FILTER FABRIC (TYPE 1).
- 50 NEW 2' WIDE CONCRETE MOW STRIP. REFER TO DETAIL ON SHEET C-9.1.

PANERA, LLC
3630 SOUTH GEYER ROAD, SUITE 100
ST. LOUIS, MO 63127
(314) 984-2646



Panera Cate #1982

75032
SITE PLAN

401 S. 18th Street
Suite 200
St. Louis, MO 63103
314.984.9887 *tel*

CIVIL ENGINEERING / SURVEYING / PLANNING / LANDSCAPE ARCHITECTURE
Cole & Associates, Inc. is a Missouri Corporation d.b.a. Cole Design Group, Inc. In Arizona & Texas herein referred to as "Cole"

SIGN/CALC BY	CAW
DRAWN BY	CAW
CHECKED BY	EWM
DRAWING SCALE	AS SHOWN
DATE	06/01/2016

Job Number
15-0157
Sheet Number

C2.0

THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE CONTRACT DOCUMENTS, THE PLANS INCLUDING ALL NOTES, THE CITY SPECIFICATIONS, AND ANY OTHER ORDINANCES OR SPECIFICATIONS RELEVANT TO THE PROPER COMPLETION OF THE WORK. IT IS THE PART OF THE CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL STANDARDS OR SPECIFICATIONS APPLICABLE TO THIS WORK SHALL IN NO WAY RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR THE WORK IN ACCORDANCE WITH ALL SUCH APPLICABLE STANDARDS AND SPECIFICATIONS.

1. PRIOR TO ANY CONSTRUCTION THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS, THE PLANS INCLUDING ALL NOTES, THE CITY SPECIFICATIONS, AND ANY OTHER APPLICABLE STANDARDS OR SPECIFICATIONS RELEVANT TO THE PROPER COMPLETION OF THE WORK. SPECIFIC FAILURE ON THE PART OF THE CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL STANDARDS OR SPECIFICATIONS PERTAINING TO THIS WORK SHALL IN NO WAY RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PERFORMING THE WORK IN ACCORDANCE WITH ALL SUCH APPLICABLE STANDARDS AND SPECIFICATIONS.
2. CONTRACTOR SHALL HAVE IN HIS POSSESSION, PRIOR TO CONSTRUCTION, ALL NECESSARY PERMITS, LICENSES, ETC. CONTRACTOR SHALL HAVE AT LEAST ONE SET OF APPROVED ENGINEERING PLANS AND SPECIFICATIONS ON-SITE AT ALL TIMES. INSPECTION OF IMPROVEMENTS DOES NOT RELIEVE THE SUBDIVIDER, OR HIS CONTRACTOR, FROM INSURING THAT THE IMPROVEMENTS ARE CONSTRUCTED IN ACCORDANCE WITH THE ACCEPTED PLANS AND SPECIFICATIONS.
3. ALL PUBLIC UTILITY CONSTRUCTION SHALL CONFORM TO CITY SPECIFICATIONS, STANDARDS, AND DETAILS UNLESS OTHERWISE NOTED.
4. IN THE EVENT PUBLIC CONSTRUCTION ITEM IS NOT COVERED BY CITY CRITERIA, THE NORTH CENTRAL TRENCH COUNCIL OF GOVERNMENTS (NCTCCOG) 3RD EDITION STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION SHALL APPLY WITH CONCURRING NOTIFICATION TO THE CITY ENGINEER AND PROJECT ENGINEER.
5. CONSTRUCTION INSPECTION WILL BE PERFORMED BY REPRESENTATIVES OF THE OWNER, ENGINEER, CITY, GEOTECHNICAL ENGINEER, AND REVIEWING AUTHORITIES AND AGENCIES. UNRESTRICTED ACCESS SHALL BE PROVIDED TO THEM AT ALL TIMES. CONTRACTOR IS RESPONSIBLE FOR UNDERSTANDING AND SCHEDULING REQUIRED INSPECTIONS.
6. ALL CONTRACTORS MUST CONFINE THEIR ACTIVITIES TO THE WORK AREA. NO ENCROACHMENTS ONTO DEVELOPED OR UNDEVELOPED AREAS WILL BE ALLOWED. ANY DAMAGE RESULTING THEREFROM SHALL BE CONTRACTOR'S RESPONSIBILITY TO REPAIR.
7. IT WILL BE THE RESPONSIBILITY OF EACH CONTRACTOR TO PROTECT ALL EXISTING PUBLIC AND PRIVATE UTILITIES THROUGHOUT THE CONSTRUCTION OF THIS PROJECT. CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANIES FOR LINE LOCATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL ASSUME FULL LIABILITY TO THOSE COMPANIES FOR ANY DAMAGES CAUSED BY THEIR FACILITIES.
8. TRENCH SAFETY DESIGN WILL BE THE RESPONSIBILITY OF THE UTILITY CONTRACTOR. CONTRACTOR SHALL SUBMIT A TRENCH SAFETY DESIGN APPROVED BY A TEXAS REGISTERED PROFESSIONAL ENGINEER TO THE CITY ENGINEERING DEPARTMENT FOR REVIEW PRIOR TO THE START OF ANY UTILITY CONSTRUCTION.
9. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THAT THIS REQUIREMENTS SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF THE WORK ON THIS PROJECT, EXCEPTION FROM LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER.
10. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION. COPIES OF OSHA STANDARDS MAY BE PURCHASED FROM U.S. GOVERNMENT PRINTING OFFICE. INFORMATION AND RELATED REFERENCE MATERIALS MAY BE PURCHASED FROM OSHA, 611 EAST 6TH STREET, AUSTIN, TEXAS.
11. ANY EXISTING UTILITIES, PAVEMENT, CURBS, SIDEWALKS, STRUCTURES, TREES, ETC., THAT ARE DAMAGED OR UNDERCUT BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE OWNER OR ENGINEER AND APPROVED BY THE RESPECTIVE AUTHORITY AT THE CONTRACTOR'S EXPENSE.
12. CONTRACTOR SHALL MATCH EXISTING PAVEMENT, CURBS, AND GUTTER IN GRADE, TYPE AND ALIGNMENT.
13. WHERE CONSTRUCTION IS IN THE PROXIMITY OF AN EXISTING UTILITY, THE CONTRACTOR WILL TAKE PRECAUTIONS TO PROTECT AND/OR SUPPORT THE UTILITY AND ANY DAMAGE THAT MIGHT OCCUR SHALL BE REPAIRED IMMEDIATELY. IF IT IS DURING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE A NEW SEWER LINE LESS THAN 3.5 FEET OF COVER, IT SHALL BE ENCASED OR SADDLED WITH CONCRETE.
14. ALL EXISTING UTILITIES WILL NEED TO BE ADJUSTED TO PROPOSED GRADE.
15. FRAMES, COVERS, VALVES, CLEANOUTS, ETC. SHALL BE RAISED TO FINISH GRADE PRIOR TO FINAL ASPHALT COURSE.
16. THE CONTRACTOR SHALL FURNISH ALL ASSISTANCE REQUIRED OF HIM BY THE INSPECTOR IN OBTAINING SAMPLES AT THE EXPENSE OF THE CONTRACTOR.
17. IF IN THE OPINION OF THE OWNER, BASED ON TESTING SERVICE REPORTS AND INSPECTION, MATERIALS OR COMPACTION ARE BELOW THE SPECIFIED REQUIREMENTS THE CONTRACTOR SHALL PROVIDE ADDITIONAL SERVICES AND TESTING TO OBTAIN THE SPECIFIED PARAMETERS AT NO ADDITIONAL EXPENSE.
18. BARRICADES AND WARNING SIGNS SHALL CONFORM TO THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND GENERALLY LOCATED TO AFFORD MAXIMUM PROTECTION TO THE PUBLIC AS WELL AS CONSTRUCTION PERSONNEL AND EQUIPMENT AND TO ASSUME AN EXPEDITIOUS TRAFFIC FLOW AT ALL TIMES. DURING THE PROGRESS OF WORK, THE CONTRACTOR SHALL PROVIDE ACCESS FOR LOCAL TRAFFIC.
19. THE CONTRACTOR SHALL PROTECT EXISTING GRASS, LANDSCAPING AND TREES NOT IN DIRECT CONFLICT WITH THE CONSTRUCTED IMPROVEMENTS. ALL AREAS DISTURBED OR EXPOSED DURING CONSTRUCTION SHALL BE REVEGETATED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL PROVIDED REVEGETATION OF ALL DAMAGED GRASSED AREAS EQUAL TO OR EXCEEDING THE TYPE OF VEGETATION PRESENT BEFORE CONSTRUCTION UNLESS OTHERWISE REQUESTED BY THE PROPERTY OWNER.
20. CONTRACTOR SHALL MAINTAIN AN AS-BUILT SET OF PLANS WITH MARKUPS DEPICTING FIELD ADJUSTMENTS OR CONSTRUCTION ALTERATIONS. THE SET SHALL BE PROVIDED TO ENGINEER FOR REVIEW AND PREPARATION OF RECORD DRAWINGS TO BE PROVIDED TO THE CITY FOR FINAL ACCEPTANCE.

1. THE CONTRACTOR SHALL FIELD VERIFY EXISTING FLOWLINES OF ALL UTILITIES AND COORDINATE ALL UTILITIES WITH MEP DRAWINGS. REPORT ANY DISCREPANCIES TO THE ARCHITECT AND ENGINEER IMMEDIATELY.
2. THE CONTRACTOR SHALL COORDINATE WATER METER INSTALLATIONS WITH UTILITY COMPANIES AND PAY ALL COSTS ASSOCIATED WITH THE SAME.
3. THE TOP ELEVATION OF PROPOSED MANHOLES, CLEANOUTS AND JUNCTION BOXES SHALL MATCH THE FINISHED GRADE ELEVATIONS ON PAVEMENT AND SHALL EXTEND 6" ABOVE GRADE ON NON-PAVEMENT. THE CONTRACTOR SHALL EXTEND ALL EXISTING UTILITY MANHOLES, BOXES, COVERS, ETC. TO PROPOSED FINISHED GRADE PRIOR TO FINAL PAVING OPERATIONS, UNLESS APPROVED OTHERWISE.
4. THRUST BLOCKING SHALL BE USED AT ALL WATER LINE TEES, BENDS, DEAD ENDS, ETC., IN ACCORDANCE WITH CITY STANDARD SPECIFICATIONS.
5. UNLESS OTHERWISE DIRECTED BY THE CITY OR ENGINEER, DEPTH OF COVER FOR ALL WATER AND WASTEWATER LINES SHALL BE 42" MINIMUM.
6. THE CONTRACTOR SHALL OBTAIN A BULK WATER PERMIT OR PURCHASE AND INSTALL A WATER METER FOR ALL WATER USED DURING CONSTRUCTION. A COPY OF THIS PERMIT MUST BE CARRIED AT ALL TIMES BY ALL WHO USE WATER.
7. ALL WATER METERS AND DETECTOR CHECKS TO BE INSTALLED BY THE CITY AT THE DEVELOPER'S EXPENSE. CONTRACTOR SHALL COORDINATE WITH THE CITY.

1. ALL SANITARY SEWER MAINS SHALL BE PVC ASTM D3034, SD35, GREEN IN COLOR, AND SHALL BE PLACED ON MINIMUM CLASS "B" EMBEDED PER CITY SPECIFICATIONS. GREEN TRACER TAPE SHALL BE INSTALLED IN THE BACK FILL MATERIAL TWO-FOOT (2') ABOVE PIPE AND TWO-FOOT BELOW FINISHED GRADE (2 LINES).
2. IF SANITARY SEWER DEPTH EXCEEDS 10 FEET, SANITARY SEWER SHALL BE PVC (ASTM D2329, ASTM 2737), ASTM 3035, F714) SDR26.
3. THE TOP ELEVATION OF PROPOSED MANHOLES, CLEANOUTS, AND JUNCTION BOXES SHALL MATCH THE FINISHED GRADE ELEVATIONS ON PAVEMENT AND SHALL EXTEND 6" ABOVE GRADE ON NON-PAVEMENT. THE CONCRETE SHALL EXTEND ALL EXISTING UTILITY MANHOLES, BOXES, COVERS, ETC. TO PROPOSED FINISHED GRADE PRIOR TO FINAL PAVING OPERATIONS, UNLESS APPROVED OTHERWISE.
4. SANITARY SEWERS SHALL BE TESTED IN ACCORDANCE WITH THE CITY'S SPECIFICATIONS.
5. ALL SANITARY SEWER MANHOLES SHALL BE PRE-CAST OR CAST-IN-PLACE CONCRETE MANHOLES CONSTRUCTED IN ACCORDANCE WITH CITY'S DESIGN STANDARDS. ALL MANHOLES TO BE RAVEN LINED OR APPROVED EQUIVALENT.
6. ALL 6" SANITARY SEWER LATERALS SHALL GO INTO SANITARY SEWER MANHOLES WHERE THEY CONNECT TO CITY SANITARY SEWER MAINS. ONCE SANITARY SEWER LATERAL LEAVES THE CITY EASEMENT IT SHALL BE GOVERNED BY ALL RULES AND REGULATIONS OF THE CITY'S BUILDING INSPECTION DEPARTMENT.
7. ALL 6-INCH SEWER LEADS TO BUILDINGS SHALL BE PER TCEQ MINIMUM SLOPE.
8. WATER/SANITARY MANHOLE AND SANITARY SEWER SEPARATION: ALL SANITARY SEWER FACILITIES AND POTABLE WATER LINES MUST BE INSTALLED AT A MINIMUM HORIZONTAL & VERTICAL SEPARATION OF NINE (9) FEET. IF A MINIMUM SEPARATION OF NINE (9) FEET CANNOT BE ACHIEVED, THE FOLLOWING TABLES SHALL BE UTILIZED TO DETERMINE CONSTRUCTION REQUIREMENTS:

PROTECTION REQUIREMENTS AT
WATERLINE - SANITARY SEWER CROSSINGS
(UNLESS VARIANCE IS GRANTED BY TCEQ)
(ALL CLEARANCES SHALL BE MEASURED FROM OUTSIDE WALL TO OUTSIDE WALL)

PRIMARY CONDITION	PROPOSED WATER – EXISTING SANITARY				EXISTING WATER – PROPOSED SANITARY OR PROPOSED WATER – PROPOSED SANITARY			
SECONDARY CONDITION	WATER OVER SANITARY		WATER UNDER SANITARY		WATER OVER SANITARY		WATER UNDER SANITARY	
IF THE CLEARANCE IS	LESS THAN 2 FT.	GREATER THAN 2 FT. BUT LESS THAN 9 FT.	LESS THAN 2 FT.	GREATER THAN 2 FT. BUT LESS THAN 9 FT.	LESS THAN 2 FT.	GREATER THAN 2 FT. BUT LESS THAN 9 FT.	LESS THAN 2 FT.	GREATER THAN 2 FT. BUT LESS THAN 9 FT.
* PROTECTION REQUIREMENT	A.	B.	C.	D.	E.	F.	C.	F. OR G.

- A. ONE, 20-FOOT JOINT, C900 PVC, 150 PSI CENTERED OVER SANITARY SEWER; 6" ABSOLUTE MINIMUM CLEARANCE ONLY FOR EXISTING PRESSURE-RATED SANITARY.
- B. ONE, 20-FOOT JOINT, C900 PVC, 150 PSI CENTERED OVER SANITARY SEWER. IF NO EVIDENCE OF SANITARY SEWER LEAKAGE CENTER ONE JOINT OF WATERLINE OVER SANITARY SEWER; 2" ABSOLUTE MINIMUM CLEARANCE. IF THE SEWER LINE IS LEAKING, THE SEWER LINE SHALL BE REPLACED WITH 150 PSI LINED DUCTILE IRON PIPE OR PVC PIPE WITH THE APPROPRIATE ADAPTER ON ALL PORTIONS OF THE SANITARY SEWER WITHIN 9' OF WATERLINE.
- C. NOT ALLOWED.
- D. ENCASE SANITARY SEWER WITH STEEL ENCASEMENT SEALED AT BOTH ENDS WITH CEMENT GROUT OR MANUFACTURES SEAL. CENTER A MINIMUM 18-FOOT JOINT OF PRESSURE RATED (150 PSI) STEEL ENCASEMENT ON WATERLINE. MUST AT LEAST 2 NOMINAL SIZES LARGER THAN SANITARY. WATER AND SANITARY LINES MUST BE SUPPORTED BY SPACERS AS MAX 5-FOOT INTERVALS.
- E. CENTER A MINIMUM 18' JOINT OF SANITARY SEWER, PRESSURE RATED (150 PSI), LINED DUCTILE IRON PIPE OR PVC CENTERED ON WATERLINE; 6" ABSOLUTE MINIMUM CLEARANCE.
- F. CENTER A MINIMUM 18' JOINT OF SANITARY SEWER, PRESSURE RATED (150 PSI) LINED DUCTILE IRON PIPE OR PVC CENTERED ON THE WATERLINE.
- G. ENCASE SANITARY SEWER WITH STEEL ENCASEMENT SEALED AT BOTH ENDS WITH CEMENT GROUT OR MANUFACTURES SEAL. CENTER A MINIMUM 18-FOOT JOINT OF PRESSURE RATED (150 PSI) STEEL ENCASEMENT ON WATERLINE. MUST AT LEAST 2 NOMINAL SIZES LARGER THAN SANITARY. WATER AND SANITARY LINES MUST BE SUPPORTED BY SPACERS AS MAX 5-FOOT INTERVALS.

PROTECTION REQUIREMENTS AT
WATERLINE - SANITARY SEWER PARALLEL
(UNLESS VARIANCE IS GRANTED BY TCEQ)
(ALL CLEARANCES SHALL BE MEASURED FROM OUTSIDE WALL TO OUTSIDE WALL)

PRIMARY CONDITION	PROPOSED WATER ~ EXISTING SANITARY				EXISTING WATER ~ PROPOSED SANITARY OR PROPOSED WATER ~ PROPOSED SANITARY			
SECONDARY CONDITION	WATER OVER SANITARY		WATER UNDER SANITARY		WATER OVER SANITARY		WATER UNDER SANITARY	
IF THE CLEARANCE IS	LESS THAN 2 FT.	GREATER THAN 2 FT. BUT LESS THAN 9 FT.	LESS THAN 2 FT.	GREATER THAN 2 FT. BUT LESS THAN 9 FT.	LESS THAN 2 FT.	GREATER THAN 2 FT. BUT LESS THAN 9 FT.	LESS THAN 2 FT.	GREATER THAN 2 FT. BUT LESS THAN 9 FT.
* PROTECTION REQUIREMENT	A.	B.	A.	A.	C.	C.	A.	A.

- A. NOT ALLOWED.
- B. ENGINEER MUST DETERMINE THAT EXISTING SANITARY MAIN OR LATERAL IS NOT LEAKING. HORIZONTAL SEPARATION SHALL BE NO LESS THAN 4 FEET (OUTSIDE WALL TO OUTSIDE WALL).
- C. ENTIRE SANITARY LINE BETWEEN MANHOLES MUST BE PRESSURE RATED (150 PSI), LINED DUCTILE IRON PIPE OR PVC. HORIZONTAL SEPARATION SHALL NOT BE LESS THAN 4 FEET (OUTSIDE WALL TO OUTSIDE WALL).
- D. CONTRACTOR TO INSTALL GREEN EMS PAD AT EVERY CHANGE IN DIRECTION, MANHOLE, CONNECTION AND CLEANOUT.

1. TREES AND OTHER VEGETATION DESIGNATED TO REMAIN UNDISTURBED SHALL BE PROTECTED FROM DAMAGE THROUGHOUT THE DURATION OF THE CONSTRUCTION PERIOD. ANY DAMAGES RESULTING FROM THE CONTRACTOR'S OPERATIONS OR NEGLIGENCE SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR.
2. THE LIMITS OF THE AREA(S) TO BE CLEARED AND GRUBBED WILL BE MARKED BY STAKES, TREES, MARKINGS, OR OTHER SUITABLE METHODS. TREES TO BE LEFT STANDING AND UNINJURED WILL BE DESIGNATED BY MARKINGS AND/OR FENCING THAT IS CONDUCTIVE TO PREVENTING INJURY TO THE TREE AND SHALL BE PLACED ON THE TRUNK 15 FEET ABOVE GROUND.
3. TRIMMING OF TREES AND SHRUBS DESIGNATED TO REMAIN SHALL BE CONDUCTED AS NECESSARY IN ACCORDANCE WITH PROPER TREE SURGERY TECHNIQUES TO ENSURE THE CONTINUED HEALTH OF THE TREE OR SHRUB.
4. ALL TREES NOT MARKED FOR PRESERVATION AND ALL SNAGS, LOGS, BRUSH, STUMPS, SHRUBS, RUBBISH AND SIMILAR MATERIALS SHALL BE CLEARED FROM WITHIN THE LIMITS OF THE DESIGNATED AREAS. UNLESS OTHERWISE SPECIFIED, ALL STUMPS, ROOTS, AND ROOT CLUSTERS THAT HAVE A DIAMETER OF ONE INCH OR LARGER SHALL BE GRUBBED OUT TO A DEPTH OF AT LEAST TWO FEET BELOW SUBGRADE FOR CONCRETE STRUCTURES, INCLUDING FOUNDATIONS AND PAVEMENT, AND ONE FOOT BELOW THE GROUND SURFACE AT EMBANKMENT SITES AND ALL OTHER AREAS.
5. ALL MATERIALS CLEARED AND GRUBBED FROM THE DESIGNATED AREAS SHALL BE DISPOSED OF OFF-SITE. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL LOCAL RULES AND REGULATIONS AND THE PAYMENT OF ANY AND ALL FEES THAT MAY RESULT FROM DISPOSAL AT LOCATIONS AWAY FROM THE PROJECT SITE.
6. EXCEPT IN AREAS TO BE EXCAVATED, STUMP HOLES AND OTHER HOLES FROM WHICH OBSTRUCTIONS ARE REMOVED SHALL BE BACKFILLED WITH SUITABLE MATERIALS AND COMPACTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
7. ALL CLEARING AND GRUBBING OPERATIONS SHALL BE COMPLETE AND DISPOSAL MATERIAL REMOVED FROM SITE PRIOR TO COMMENCEMENT OF GRADING OPERATIONS.
8. ORGANIC TOPSOIL, VOID OF DEBRIS OR MATERIAL NOT SUITABLE FOR RE-SPREADING MAY BE STRIPPED AND STOCKPILED WITH APPROPRIATE SILT FENCING TO PREVENT SOIL LOSS.
9. MAXIMUM SLOPE OF FINISHED GRADES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL.
10. FINAL DESIGN GRADES SHALL BE ESTABLISHED PRIOR TO SPREADING OF TOPSOIL, EXCEPT AT BACK OF CURB. FINAL GRADES SHALL NOT BE ESTABLISHED USING EXCESSIVE AMOUNTS OF TOPSOIL FOR FILL.
11. CURBS SHALL BE BACKFILLED AND MECHANICALLY COMPACTED TO WITHIN 4 INCHES OF THE TOP OF CURB WITH NON-ORGANIC MATERIAL. REMAINDER OF FILL SHALL BE TOPSOIL PLACED TO WITHIN 0.5 INCHES OF TOP OF CURB.
12. TOP SOIL SHALL BE COMPACTED SUFFICIENTLY WITH A LIGHT ROLLER TO ENSURE GOOD CONTACT WITH THE UNDERLYING SOIL. AVOID EXCESSIVE COMPACTION THAT MAY INHIBIT SEED GERMINATION.
13. ANY OFF-SITE PROPERTY (I.E. TREES, BUSHED, FENCES, MAILBOXES, ETC) DISTURBED DURING CLEARING, GRUBBING, OR GRADING OPERATIONS, OR DURING THE COURSE OF ANY CONSTRUCTION ACTIVITIES, SHALL BE REPLACED BY THE CONTRACTOR.
14. ELEVATIONS SHOWN ON GRADING PLAN ARE TO FINISH GRADE OR FINISH PAVEMENT. THE CONTRACTOR SHALL BEDDUT CONCRETE AND STABILIZATION MATERIAL THICKNESS TO OBTAIN SUBGRADE ELEVATIONS.
15. IF CUT AND FILL OPERATIONS OCCUR DURING A SEASON NOT FAVORABLE FOR IMMEDIATE ESTABLISHMENT OF A PERMANENT GROUND COVER, TURF STABILIZATION AND REINFORCEMENT MATS SHALL BE INSTALLED.
16. ALL FILL TO BE COMPACTED TO A MINIMUM OF 95% USING A SHEEP'S FOOT ROLLER.

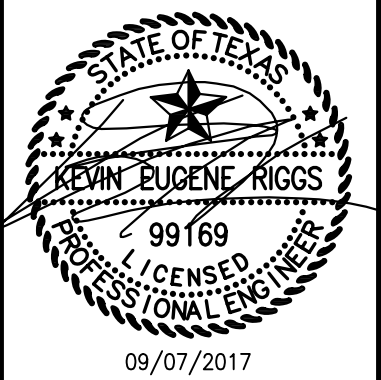
1. ALL PUBLIC UTILITIES CONFORMANCE WITH CITY DETAILS AND SPECIFICATIONS.
2. ALL 6-INCH, 8-INCH, AND 12-INCH WATER MAINS TO BE AWWA C500 PVC PIPE SDR 14 OR DUCTILE IRON, AWWA C150 OR C153, AND BLUE IN COLOR. ALL VALVES SHALL BE DUCTILE AWWA C509, APPROVED DUCTILE RISE/SEAL VALVES WITH O-RING SEALS. WATER MAINS SHALL BE PLACED ON MINIMUM CLASS "B" EMBEDED PER CITY SPECIFICATIONS. BLUE TRACER TAPE SHALL BE INSTALLED IN THE BACK FILL MATERIAL ONE-FOOT (1') OVER THE TOP OF PIPE.
3. FIRE HYDRANTS SHALL BE THREE WAY BREAKAWAY TYPE NO LESS THAN 5-1/4 INCHES IN SIZE AND MUST CONFORM TO AWWA SPECIFICATIONS C502.
4. HYDRANTS SHALL HAVE 1-1/4" OPERATING HEX-NUTS, ONE 4-1/2" NOZZLE PUMPER AND TWO 2-1/2" HOSE NOZZLE. ALL THREADS TO BE NATIONAL STANDARD THREADS (NST). ALL JOINTS SHALL BE RESTRAINED, MEGA-LUG OR APPROVED EQUAL.
5. A BLUE STEMSTONE, FIRE-LITE REFLECTOR (OR APPROVED EQUAL) SHALL BE PLACED IN THE CENTER OF THE STREET OR DRIVE OPPOSITE EACH FIRE HYDRANT.
6. INSTALL 2"x2"x6" THICK, CONCRETE SLAB AROUND ALL WATER VALVES OUTSIDE OF CONCRETE PAVEMENT. VALVE EXTENSIONS SHALL BE PROVIDED ON ALL VALVES WITH OPERATING NUTS GREATER THAN 5' BELOW FINISHED GROUND OR PAVING GRADE.
7. BOLTS AND NUTS FOR MECHANICAL JOINTS WILL BE OF HIGH-STRENGTH LOW-ALLOY CORROSION RESISTANT STEEL CONFORMING TO A.I.S.I. A325 (TYPE 3).
8. ALL POLY SDR-9 WATER SERVICE LINES SHALL BE EMBEDDED WITH 3/8" ROCK BELOW AND AROUND THE PIPE AND 1' OF GRAVEL OVER THE TOP OF THE PIPE; FROM THE WATER MAIN TO THE METER. COPPER AND SAND EMBEDMENT WILL NOT BE ALLOWED.
9. ALL HORIZONTAL AND VERTICAL BENDS SHALL HAVE CONCRETE THRUST BLOCKING PER CITY STANDARDS.
10. ALL TEES, BENDS, AND CASINGS WITHIN 25' OF EACH OTHER SHALL BE ALL THREADED TOGETHER WITH CONCRETE THRUST BLOCKING WHERE NEEDED.
11. ALL METER BANKS WILL BE MADE UP OF SINGLE METER AND SEPARATE METER BOXES. CONTRACTOR TO CREATE MANIFOLDS SO THAT EACH METER IS SPACED APART FROM EACH OTHER.
12. CONTRACTOR TO INSTALL BLUE EMS PAD AT EVERY CHANGE IN DIRECTION, CONNECTION, VALVE AND EVERY 400'-FT.

DATE	NO	REVISION DESCRIPTION
08/30/2017	6	AS-BUILT DRAWINGS
07/12/2017	5	ELECTRIC COMMENTS
04/12/2017	4	TROUT COMMENTS
10/26/2016	3	CITY COMMENTS
10/17/2016	2	CITY COMMENTS
09/02/2016	1	CITY COMMENTS

DEVELOPER/OWNER:

PANERA, LLC
3630 SOUTH GUYER ROAD, SUITE 100
ST. LOUIS, MO 63127
(314) 984-2646

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ROCKWALL, TX 75032

SPECIFICATION SHEET

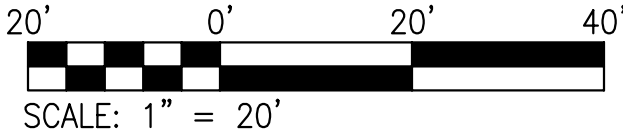
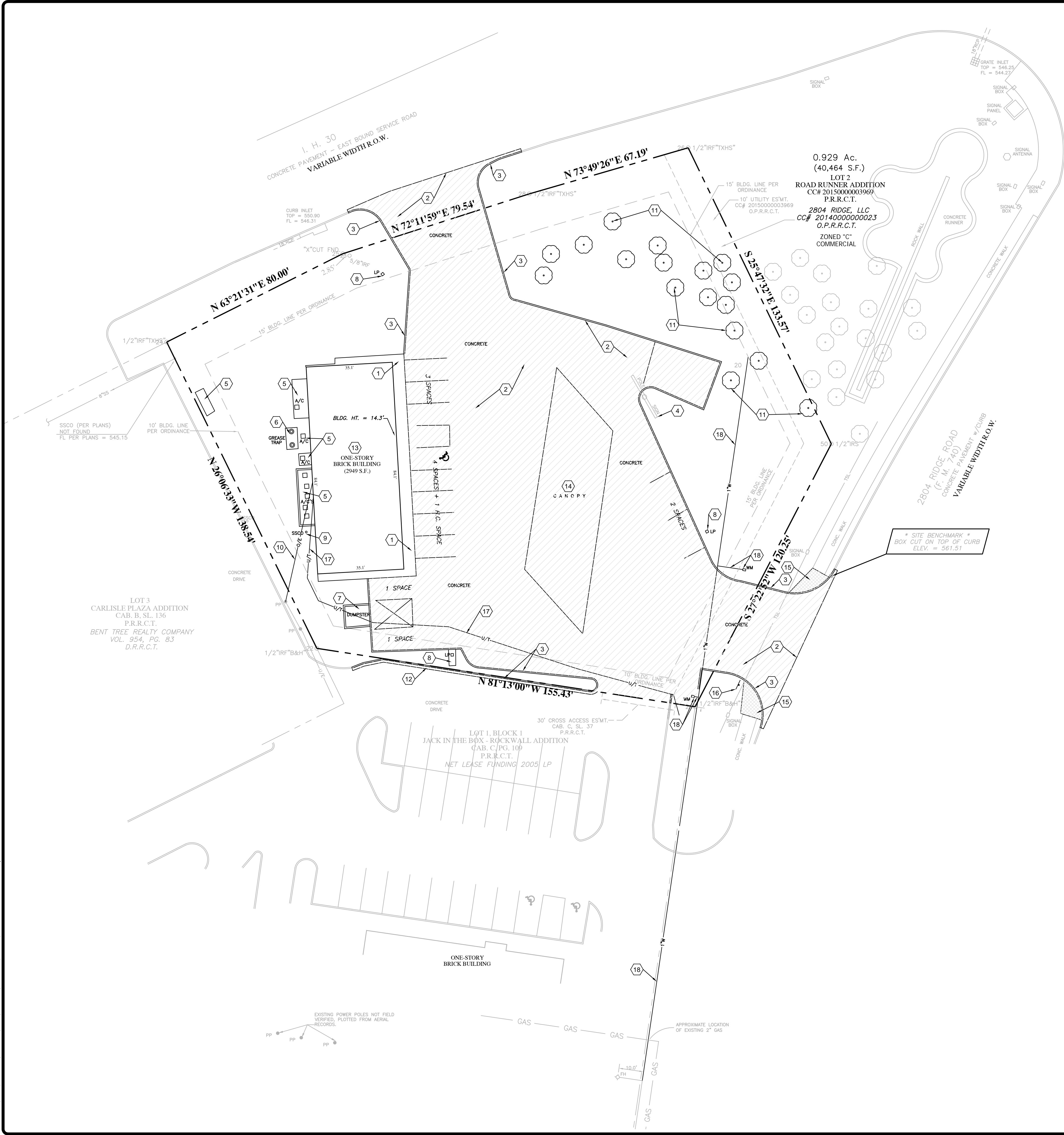
cole[®]

+ ST. LOUIS
401 S. 16th Street
Suite 200
St. Louis, MO 63103
T 314.394.5000
F 314.394.5987 Tel

CIVIL ENGINEERING / SURVEYING / PLANNING / LANDSCAPE ARCHITECTURE

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DRAWN BY	CAW
CHECKED BY	EWM
DRAWING SCALE	AS SHOWN
DATE	06/01/2016
<i>Job Number</i> 15-0157	
<i>Sheet Number</i> C3.0	



KEYED NOTES:

- 1 EXISTING CONCRETE WALK TO BE REMOVED.
- 2 EXISTING PAVEMENT TO BE REMOVED.
- 3 EXISTING CURB TO BE REMOVED.
- 4 EXISTING POLE SIGN TO REMAIN AND BE RE-FACED.
- 5 EXISTING CONCRETE PADS AND MECHANICAL EQUIPMENT TO BE REMOVED.
- 6 EXISTING GREASE TRAP TO BE REMOVED.
- 7 EXISTING REFUSE ENCLOSURE TO BE REMOVED.
- 8 EXISTING SIGHT LIGHTING TO BE REMOVED.
- 9 EXISTING SANITARY SEWER CLEANOUT TO BE REMOVED.
- 10 EXISTING OVERHEAD ELECTRIC TO BE REMOVED.
- 11 EXISTING TREES TO BE REMOVED.
- 12 EXISTING PAVEMENT TO BE REMOVED AND REPLACED IN KIND.
- 13 EXISTING BUILDING TO BE REMOVED.
- 14 EXISTING CANOPY TO BE REMOVED.
- 15 EXISTING WALK AND RAMP TO BE REMOVED AND REPLACED.
- 16 EXISTING STOP SIGN TO BE REMOVED AND RELOCATED.
- 17 EXISTING UNDERGROUND TELEPHONE TO BE REMOVED.
- 18 REMOVE EXISTING 1" WATER LINE AND ASSOCIATED METERS.

DEMOLITION NOTES:

- A. REFER TO SHEET C3.0 FOR SITE PLAN.
- B. REFER TO SHEET C4.0 FOR GRADING PLAN.
- C. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR LOCATIONS AND DIMENSIONS OF SIDEWALKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.



UTILITY INFORMATION:

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CALL 8-1-1 or 1-800-245-4545 (TEXAS ONE CALL) TO HAVE LOCATIONS MARKED IN THE FIELD FOR FRANCHISE UTILITY LOCATES ONLY (SUBSCRIBING UTILITIES REQUIRE 48 HOURS NOTICE PRIOR TO CONSTRUCTION). FOR CITY OF ROCKWALL UTILITIES, LOCATES ARE TO BE SCHEDULED WITH THE CITY AT THE CITY OF ROCKWALL-SERVICE CENTER. A 48 HOUR NOTICE IS REQUIRED FOR ALL NON-EMERGENCY LOCATES. THE TELEPHONE NUMBER FOR THE SERVICE CENTER IS 1-972-771-7730.

DEVELOPER/OWNER:
PANERA, LLC
3630 SOUTH CETER ROAD, SUITE 100
ST. LOUIS, MO 63127
(314) 984-2646

09/07/2017

Panera Café #1982
2804 RIDGE ROAD
ROCKWALL, TX 75082

DEMOLITION PLAN

+ ST. LOUIS
1515 1/2 South Street
Suite 200
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CAW

CHECKED BY
EWM

DRAWING SCALE
AS SHOWN

DATE
06/01/2016

Job Number
15-0157

Sheet Number
C4.0

USER: Brian Jolani TAB: C5.0
DATE: September 7, 2017 - 2:41:55 PM
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SITE NOTES:

- ALL DIMENSIONS ARE TO GROUND LEVEL IMPROVEMENTS (FACE OF CURB, CONCRETE SLAB, ETC.) UNLESS NOTED OTHERWISE. REFER TO ARCHITECTURAL PLANS FOR OTHER (CANOPY, AWNING, OVERHANG) DETAILS AND DIMENSIONS.
- REFER TO SHEET C4.0 FOR DEMOLITION PLAN.
- REFER TO SHEET C8.0 FOR GRADING PLAN.
- CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR LOCATIONS AND DIMENSIONS OF SIDEWALKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.

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KEYED NOTES:

- NEW TRASH ENCLOSURE. (PROVIDE DRAIN TO GREASE TRAP). REFER TO ARCHITECTURAL PLANS
- NEW PATIO AREA. REFER TO ARCHITECTURAL PLANS.
- NEW 4" BOLLARD(S). REFER TO DETAIL ON SHEET C9.0. REFER TO ARCHITECTURAL PLANS FOR LOCATION AND QUANTITY.
- NEW 6" BOLLARD(S). REFER TO DETAIL ON SHEET C9.0. REFER TO ARCHITECTURAL PLANS FOR LOCATION AND QUANTITY.
- NEW PATIO HANDRAIL WITH INTEGRATED BOLLARDS. REFER TO ARCHITECTURAL PLANS.
- NEW CLEARANCE BAR. REFER TO ARCHITECTURAL PLANS.
- NEW MENU BOARD. REFER TO ARCHITECTURAL PLANS.
- NEW MENU CANOPY. REFER TO ARCHITECTURAL PLANS.
- NEW PREVIEW BOARD. REFER TO ARCHITECTURAL PLANS.
- NEW BUILDING MOUNTED CAMERA. REFER TO ARCHITECTURAL PLANS.
- NEW "DO NOT ENTER / THANK YOU" SIGN. REFER TO ARCHITECTURAL PLANS.
- NEW "DRIVE-THRU" SIGN. REFER TO ARCHITECTURAL PLANS.
- NEW HEAVY DUTY CONCRETE PAVEMENT. REFER TO C5.1 PAVING PLAN.
- NEW LIGHT DUTY CONCRETE PAVEMENT. REFER TO C5.1 PAVING PLAN.
- NEW REFUSE AREA CONCRETE PAVEMENT. REFER TO C5.1 PAVING PLAN.
- NEW "STOP" SIGN. REFER TO DETAIL ON SHEET C9.0.
- NEW CONCRETE PAD WITH SENSOR LOOP. REFER TO ARCHITECTURAL PLANS.
- NEW 6" VERTICAL CONCRETE CURB (STANDARD SECTION). REFER TO C5.1 PAVING PLAN.
- NEW 6" VERTICAL CONCRETE CURB (WIDE SECTION). REFER TO C5.1 PAVING PLAN.
- NEW TURNED DOWN CONCRETE WALK. REFER TO DETAIL ON SHEET C9.0.
- NEW WHEEL STOPS (7 TOTAL). REFER TO DETAIL ON SHEET C9.0.
- NEW FLARED ACCESSIBLE RAMP WITH TRUNCATED DOMES IN SIDEWALK. REFER TO DETAIL ON SHEET C9.0.
- NEW PARALLEL ACCESSIBLE RAMP WITH TRUNCATED DOMES IN SIDEWALK. REFER TO DETAIL ON SHEET C9.0.
- NEW TRAFFIC FLOW ARROW. REFER TO DETAIL ON SHEET C9.1.
- NEW "DRIVE-THRU" STRIPING AND TRAFFIC FLOW ARROW. REFER TO DETAIL ON SHEET C9.1.
- NEW "DO NOT ENTER" STRIPING AND TRAFFIC FLOW ARROWS. REFER TO DETAIL ON SHEET C9.1.
- NEW ACCESSIBLE PARKING PAINTED SYMBOL AND STRIPING (2 TOTAL). REFER TO DETAIL ON SHEET C9.1.
- NEW ACCESSIBLE PARKING AND FINE SIGN(S) IN BOLLARD (2 TOTAL). REFER TO DETAIL ON SHEET C9.1.
- NEW RAPID PICK UP SIGNS. REFER TO ARCHITECTURAL PLANS.
- NEW PAINTED AISLE. REFER TO DETAIL ON SHEET C9.1.
- NEW LANDSCAPE AREA. REFER TO LANDSCAPE PLANS.
- NEW SITE LIGHTING. REFER TO ELECTRICAL PLANS.
- NEW STANDARD DRIVE APPROACH PER TXDOT STANDARDS.
- NEW CURB TO BE PAINTED RED WITH CONTRASTING WHITE LETTERS READING "NO PARKING FIRE LANE" PER ROCKWALL FIRE PROTECTION STANDARDS.
- NEW RED PAINTED STRIPE WITH CONTRASTING WHITE LETTERS READING "NO PARKING FIRE LANE" PER ROCKWALL FIRE PROTECTION STANDARDS.
- NEW SEGMENTAL RETAINING WALL. (DESIGNED BY OTHERS)
- EXISTING PYLON SIGN TO REMAIN AND BE REFACED. REFER TO ARCHITECTURAL PLANS.
- NEW 12'X65' LOADING AREA.
- EXISTING DRIVEWAY EXTENTS (TO BE ALTERED).
- NEW DRAINAGE/DETENTION EASEMENT.
- EXISTING FIRE HYDRANT.
- NEW 4' WIDE CONCRETE SWALE.
- TAPER CURB. REFER TO DETAIL ON C5.1 PAVING PLAN.
- NEW CONCRETE WALK AND TYPE 10 RAMP PER TXDOT STANDARDS. TRUNCATED DOME PLATES TO BE COLONIAL OR BRICK RED IN COLOR. REFER TO DETAIL SHEET C9.2. NEW WALK TO MATCH EXISTING IN LOCATION AND ELEVATION.
- NEW 4'X4'X4" CONCRETE PAD FOR REMOTE FDC.
- NEW CONCRETE STEPS. 2- 8" TREADS/6" RISERS.
- NEW CONCRETE PAD FOR ELECTRIC TRANSFORMER.
- NEW FLOW OPENING IN CURB (TYPICAL OF 7). REFER TO DETAIL ON SHEET C-9.1.
- NEW EDGE OF CONCRETE PAVEMENT (NO CURB).
- NEW 2' LONG X 2' WIDE X 12" THICK ROCK BLANKET (TXDOT COMMON RIPRAP) OVER FILTER FABRIC (TYPE 1).
- NEW 1' WIDE X 12" THICK ROCK BLANKET (TXDOT COMMON RIPRAP) OVER FILTER FABRIC (TYPE 1).
- NEW 2' WIDE CONCRETE MOW STRIP. REFER TO DETAIL ON SHEET C-9.0.

"AS-BUILT DRAWINGS" 8/30/17 CITY CASE #SP2016-009

AS-BUILT DRAWINGS	08/30/2017	6	AS-BUILT DRAWINGS
ELECTRIC COMMENTS	07/12/2017	5	ELECTRIC COMMENTS
PAVING COMMENTS	12/27/2016	4	PAVING COMMENTS
LANDSCAPE COMMENTS	10/17/2016	2	LANDSCAPE COMMENTS
CITY COMMENTS	09/02/2016	1	CITY COMMENTS
REVISION DESCRIPTION	DATE	NO	

DEVELOPER/OWNER:
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3630 SOUTH CETER ROAD, SUITE 100
ST. LOUIS, MO 63127
(314) 984-2646

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09/07/2017

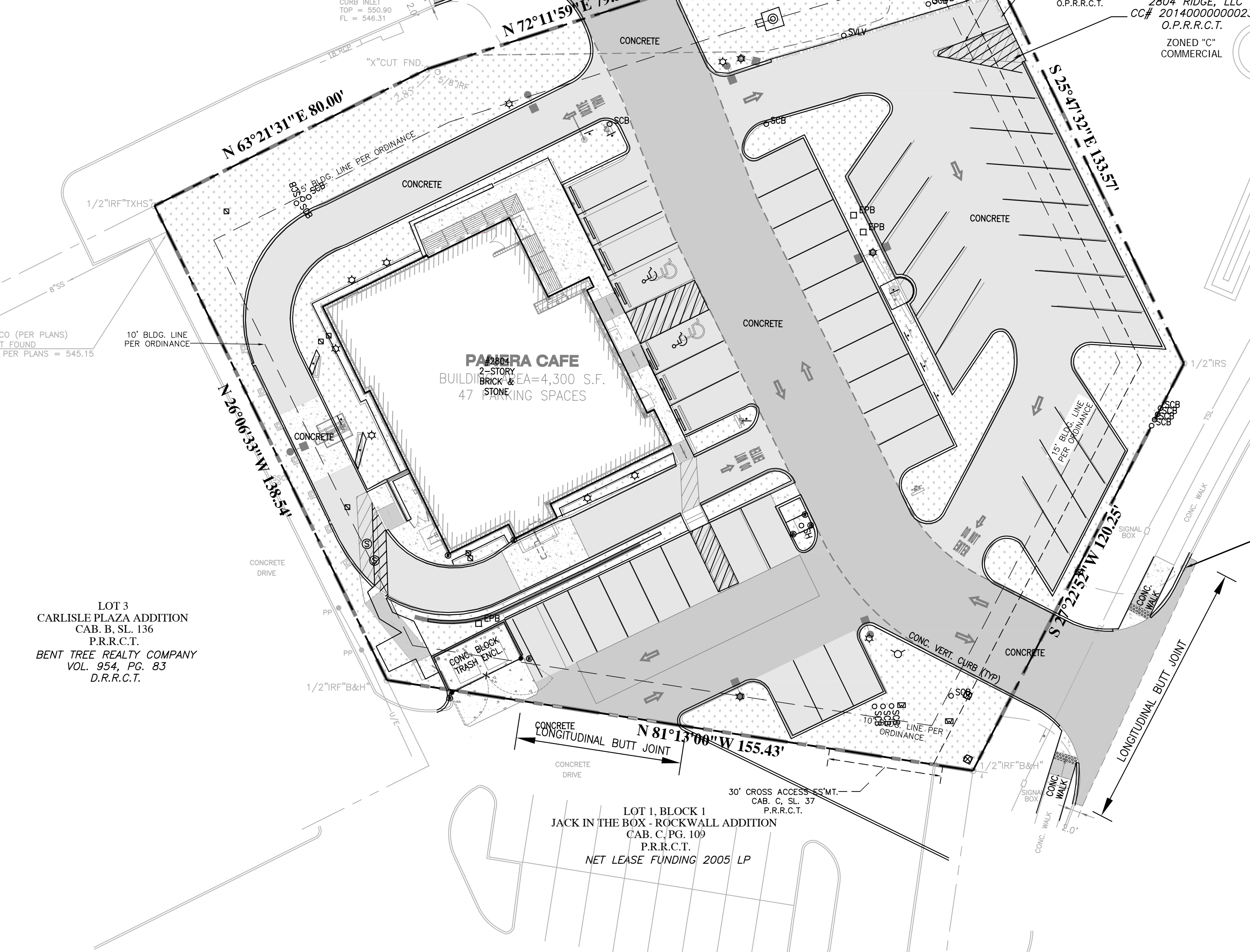
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ROCKWALL, TX 75082

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DESIGN/CALC BY: CAW
DRAWN BY: CAW
CHECKED BY: EWM
DRAWING SCALE: AS SHOWN
DATE: 06/01/2016
Job Number: 15-0157
Sheet Number: C5.0

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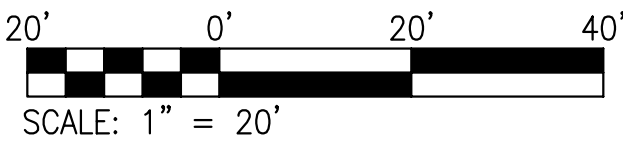


NOTE

DETENTION HAS TO BE INSTALLED AND FULLY FUNCTIONING WITH EITHER SOD OR ANCHORED, SEEDED CURLEX ON THE SIDES AND BOTTOM OF THE BASIN PRIOR TO ANY PAVING (INCLUDING SLAB) BEING INSTALLED.

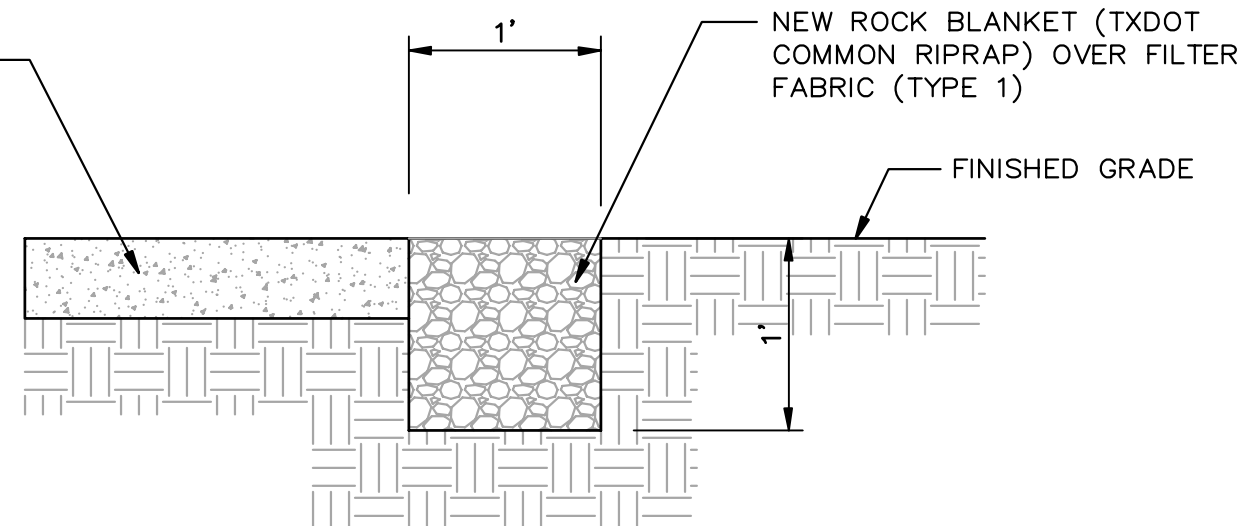
GEOTECHNICAL REFERENCE

PAVEMENT DESIGN BASED ON FINAL-GEOTECHNICAL EVALUATION PREPARED BY GEOTECHNICAL TESTING AND CONSULTING DATED 11/25/15. CONTRACTOR SHALL REFER TO FINAL GEOTECHNICAL REPORT FOR FINAL PAVEMENT DESIGN PRIOR TO CONSTRUCTION.



LEGEND

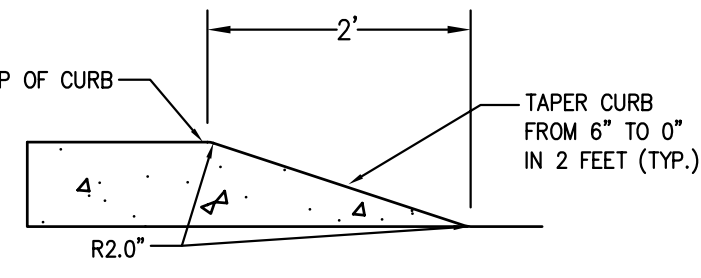
- LIGHT DUTY CONCRETE
- REFUSE AREA CONCRETE
- HEAVY DUTY CONCRETE
- CONCRETE SIDEWALK (SEE SHEET C9.0 FOR DETAILS)
- ROCK BLANKET



8 ROCK BLANKET DETAIL

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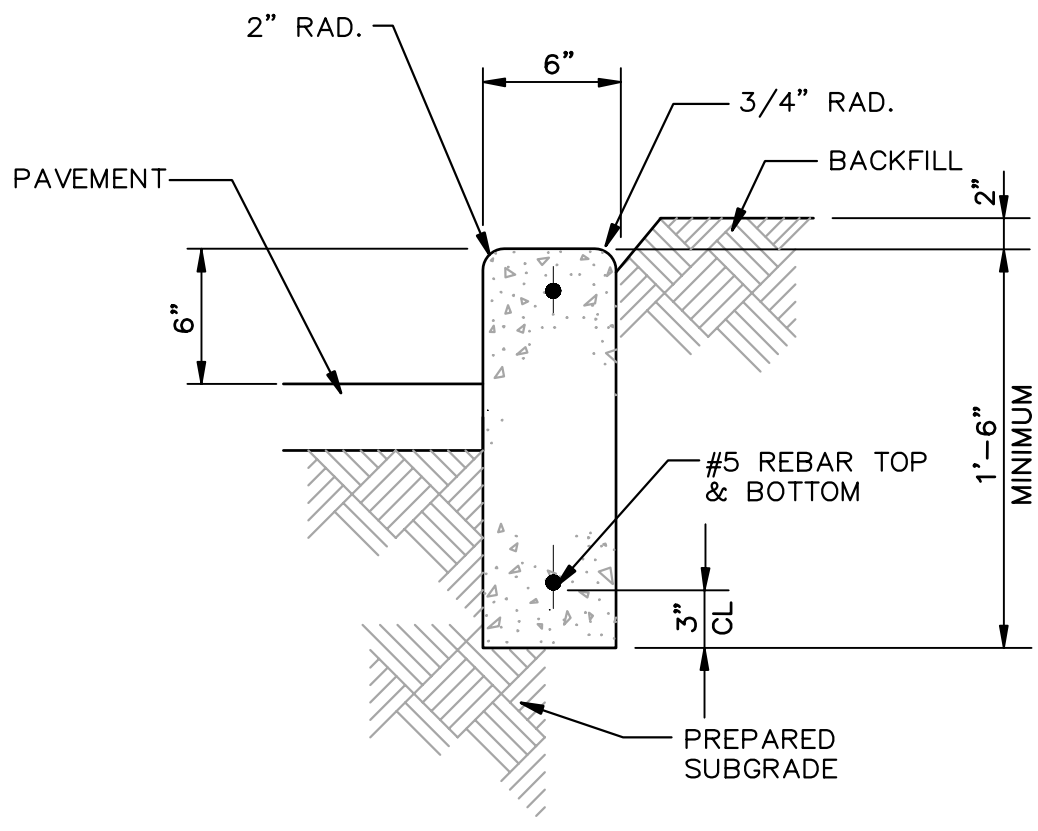
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1 CURB TAPER DETAIL

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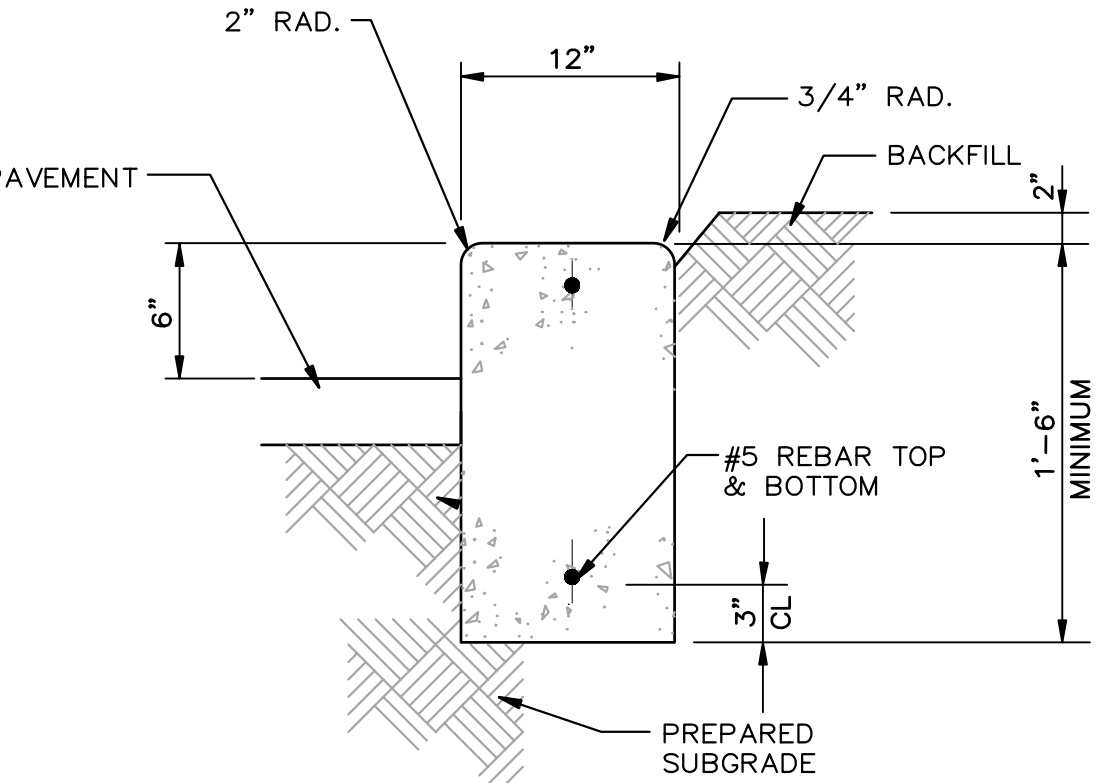
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2 VERTICAL CONCRETE CURB DETAIL STANDARD SECTION

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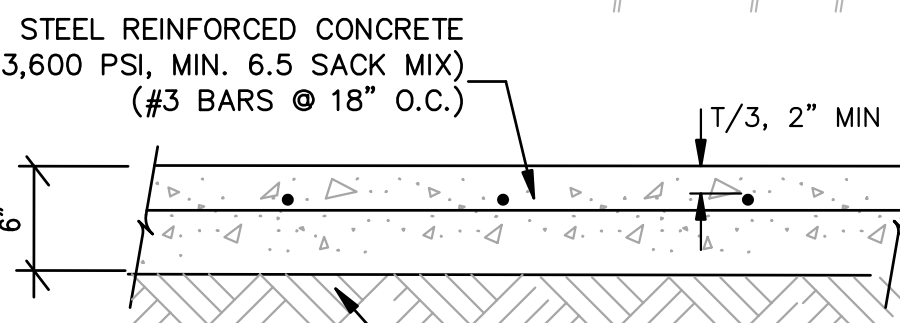
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3 VERTICAL CONCRETE CURB DETAIL WIDE SECTION

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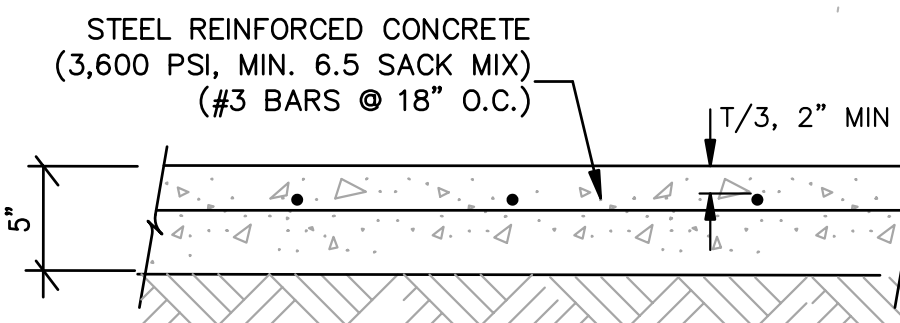
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4 HEAVY DUTY CONCRETE DETAIL

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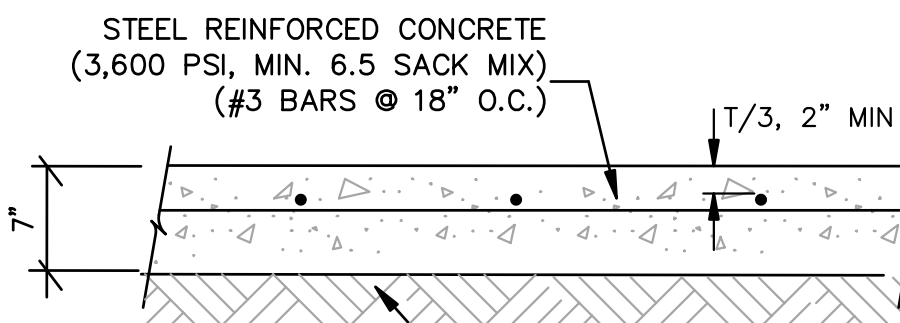
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5 LIGHT DUTY CONCRETE DETAIL

SCALE: N.T.S.

REF. DWG. ???



6 REFUSE AREA CONCRETE DETAIL

SCALE: N.T.S.

REF. DWG. ???

7 LONGITUDINAL BUTT JOINT DETAIL

SCALE: N.T.S.

REF. DWG. ???

File: ..\Details\Longitudinal Butt Joint Detail.pdf
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DATE: September 7, 2017 - 2:41:41 PM
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AS-BUILT DRAWINGS
ELECTRIC COMMENTS
PAVING COMMENTS
CITY COMMENTS
CITY COMMENTS
CITY COMMENTS
REVISION DESCRIPTION
DATE
NO

DEVELOPER/OWNER:
PANERA, LLC
3630 SOUTH CETER ROAD, SUITE 100
ST. LOUIS, MO 63127
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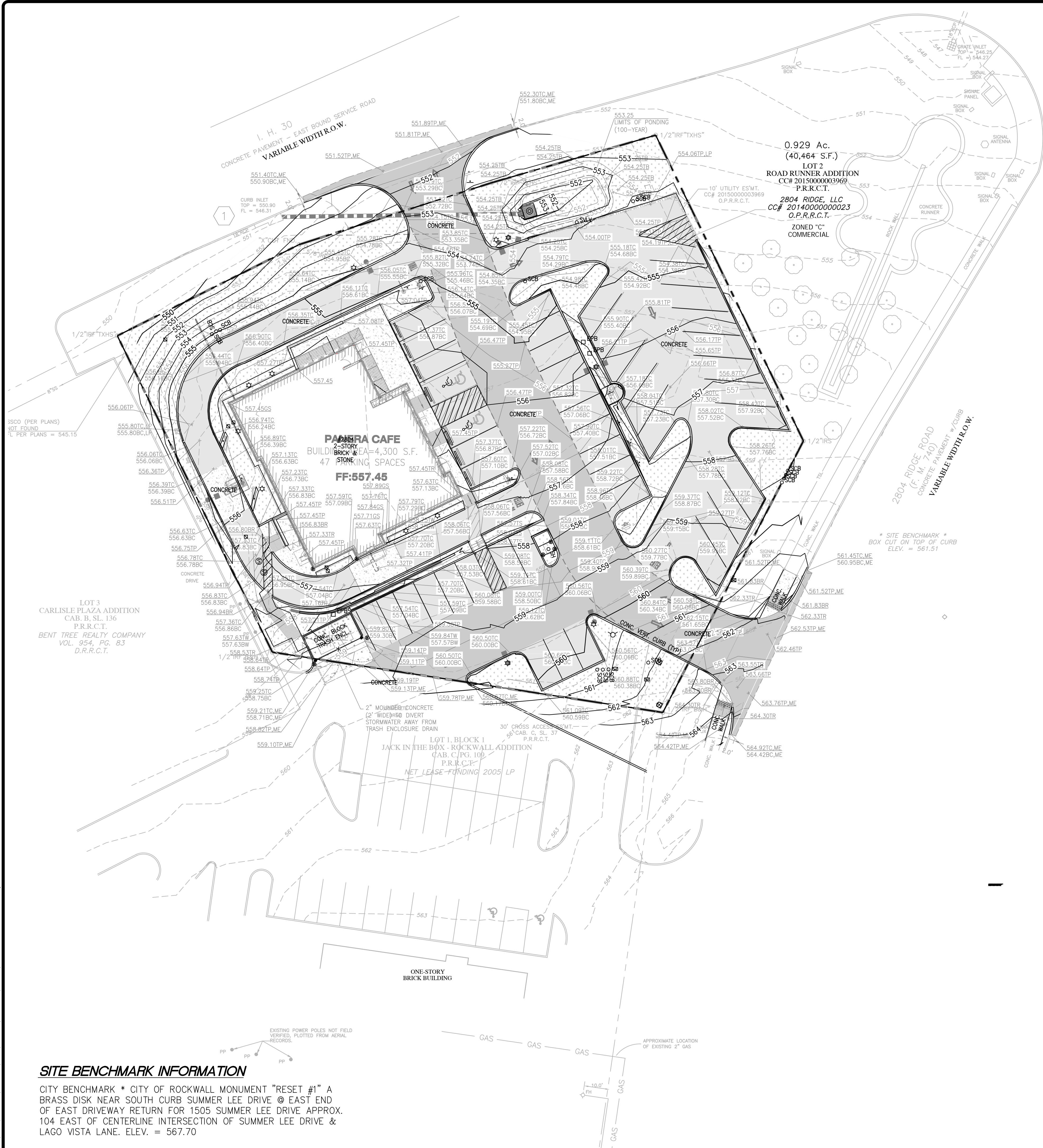
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Panera Café #1982
2804 RIDGE ROAD
ROCKWALL, TX 75082
PAVING PLAN

COLE
CIVIL ENGINEERING / SURVEYING / PLANNING / LANDSCAPE ARCHITECTURE
11515 1/2 South Street
Suite 200
St. Louis, MO 63103
314.984.9887 tel
Cole & Associates, Inc. is an Equal Opportunity Employer. Minorities and Women are encouraged to apply.

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CAW
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CAW
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EWM
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AS SHOWN
DATE
06/01/2016
Job Number
15-0157
Sheet Number
C5.1

USER: Brian Johnson TAB: C6.0
DATE: September 7, 2017 - 2:22:44 PM
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SITE BENCHMARK INFORMATION

CITY BENCHMARK * CITY OF ROCKWALL MONUMENT "RESET #1" A BRASS DISK NEAR SOUTH CURB SUMMER LEE DRIVE @ EAST END OF EAST DRIVEWAY RETURN FOR 1505 SUMMER LEE DRIVE APPROX. 104 EAST OF CENTERLINE INTERSECTION OF SUMMER LEE DRIVE & LAGO VISTA LANE. ELEV. = 567.70

LEGEND

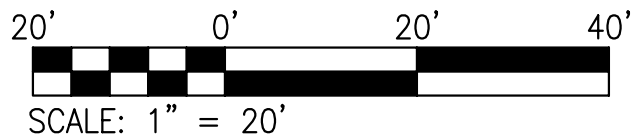
- HP HIGH POINT IN GRADE
- LP LOW POINT IN GRADE
- TC TOP OF CURB
- BC BOTTOM OF CURB
- TP TOP OF PAVEMENT
- EX EXISTING SHOT
- ME MATCH EXISTING
- EC EDGE CONCRETE
- TR TOP RAMP
- BR BOTTOM RAMP
- OS GROUND SHOT
- TB TOP OF BERM
- TS TOP OF STEP

GRADING NOTES:

- A. REFER TO SHEET C4.0 FOR DEMOLITION PLAN.
- B. REFER TO SHEET C5.0 FOR SITE PLAN.
- C. REFER TO SHEET C8.0 FOR UTILITY PLAN.

NOTE

DETENTION HAS TO BE INSTALLED AND FULLY FUNCTIONING WITH EITHER SOD OR ANCHORED, SEEDED CURLEX ON THE SIDES AND BOTTOM OF THE BASIN PRIOR TO ANY PAVING (INCLUDING SLAB) BEING INSTALLED.



NO	REVISION DESCRIPTION	DATE
1	CITY COMMENTS	10/17/2016
2	CITY COMMENTS	10/17/2016
3	CITY COMMENTS	10/17/2016
4	CITY COMMENTS	10/17/2016
5	ELECTRIC COMMENTS	01/12/2017
6	AS-BUILT DRAWINGS	08/30/2017

PANERA, LLC
3630 SOUTH CETER ROAD, SUITE 100
ST. LOUIS, MO 63127
(314) 984-2646

DEVELOPER/OWNER:

THE PROFESSIONAL WHOSE SIGNATURE AND PERSONAL SEAL APPEAR HEREON IS A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MISSOURI AND HAS ASSUMED RESPONSIBILITY FOR THE DESIGN AND CONSTRUCTION OF THE PROJECT. ANY CHANGES TO THE DESIGN OR CONSTRUCTION SHALL BE MADE BY THE PROFESSIONAL WHOSE SIGNATURE AND PERSONAL SEAL APPEAR HEREON. THE PROFESSIONAL WHOSE SIGNATURE AND PERSONAL SEAL APPEAR HEREON IS NOT RESPONSIBLE FOR THE DESIGN OR CONSTRUCTION OF THE PROJECT IF THE PROJECT IS NOT COMPLETED WITHIN THE TIME FRAME SPECIFIED IN THE CONTRACT. THE PROFESSIONAL WHOSE SIGNATURE AND PERSONAL SEAL APPEAR HEREON IS NOT RESPONSIBLE FOR THE DESIGN OR CONSTRUCTION OF THE PROJECT IF THE PROJECT IS NOT COMPLETED WITHIN THE TIME FRAME SPECIFIED IN THE CONTRACT.

STATE OF TEXAS
KYLE EUGENE RIGGS
99169
LICENSED PROFESSIONAL ENGINEER
09/07/2017

Panera BREAD

Panera Café #1982
2804 RIDGE ROAD
ROCKWALL, TX 75082

GRADING PLAN

ST. LOUIS
1515 15th Street
St. Louis, MO 63103
314.984.9887 tel
314.984.9887 fax

COLE

CIVIL ENGINEERING / SURVEYING / PLANNING / LANDSCAPE ARCHITECTURE
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DATE	06/01/2016

Job Number	15-0157
Sheet Number	C6.0

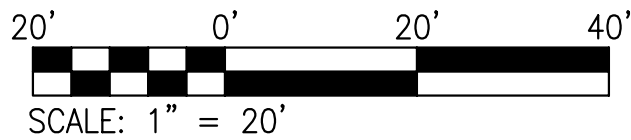


UTILITY INFORMATION:

UTILITIES SHOWN HAVE BEEN TAKEN FROM AVAILABLE SURVEYS, UTILITY COMPANY MAPS AND PHYSICAL PROPERTY INSPECTION. THE LOCATIONS AND FACILITIES SHALL BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE ADDITIONAL UTILITIES THAT HAVE NOT BEEN SHOWN ON THIS SURVEY. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE LOCATIONS OF ALL UTILITIES PRIOR TO EXCAVATION OR CONSTRUCTION.

CALL 8-1-1 or 1-800-245-4545 (TEXAS ONE CALL) TO HAVE LOCATIONS MARKED IN THE FIELD FOR FRANCHISE UTILITY LOCATES ONLY (SUBSCRIBING UTILITIES REQUIRE 48 HOURS NOTICE PRIOR TO CONSTRUCTION). FOR CITY OF ROCKWALL UTILITIES, LOCATES ARE TO BE SCHEDULED WITH THE CITY AT THE CITY OF ROCKWALL-SERVICE CENTER. A 48 HOUR NOTICE IS REQUIRED FOR ALL NON-EMERGENCY LOCATES. THE TELEPHONE NUMBER FOR THE SERVICE CENTER IS 1-972-771-7730.

USER: Brian Johnson TAB: 06.1(A)
DATE: September 7, 2017 - 2:27:01 PM
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LEGEND

- = DRAINAGE AREA BOUNDARY
- = PROPOSED SHEET FLOW
- = DRAINAGE AREA (TXDOT DRAINAGE AREA)
- = DRAINAGE AREA (ACRES)
- = Q5 (CFS)
- = DESIGN POINT

DISCHARGE CALCULATIONS

Panera Café #1982
2804 Ridge Road
Rockwall, TX
Cale Project # 15-0157

Design Parameters

Area Type	C Value ¹
Pavement	0.90
Commercial	0.70
ROW (average)	0.70
ROW (average)	0.50

¹ Based on TXDOT Runoff Computations Sheet provided by City of Rockwall

Existing Conditions

Basin	TXDOT Drainage Area ²	Pavement [ac]	Area Commercial [ac]	ROW [ac]	Total CA	Calculated T ^{1,2} (min)	Design T ² (min)	I ₁ ¹ (in/hr)	I ₂ ² (in/hr)	I ₂₅ ³ (in/hr)	I ₁₀₀ ³ (in/hr)	Q _{DES} (cfs)	Q _{DES-10} (cfs)	Q _{DES-25} (cfs)	Q _{DES-100} (cfs)
1	39	0.73	0.00	0.00	0.66	1.0	10.0	6.93	7.98	8.30	9.80	4.55	5.24	5.45	6.44
3	8	0.00	0.00	0.48	0.24	1.3	10.0	6.93	7.98	8.30	9.80	1.66	1.92	1.99	2.35
OS-1	53	0.00	0.00	0.08	0.06	2.1	10.0	6.93	7.98	8.30	9.80	0.39	0.45	0.46	0.55
OS-2	38	0.21	0.00	0.00	0.19	0.9	10.0	6.93	7.98	8.30	9.80	1.31	1.51	1.57	1.85

The numbers above represent the maximum allowable discharge of the basin for the corresponding storm event.

² Based on TXDOT Drainage Area Map and Runoff Computations Sheet provided by City of Rockwall

³ Based on City of Rockwall Standards of Design and Construction Figure 3.1

UTILITY INFORMATION:

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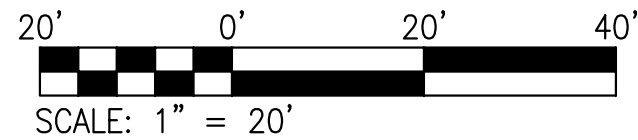
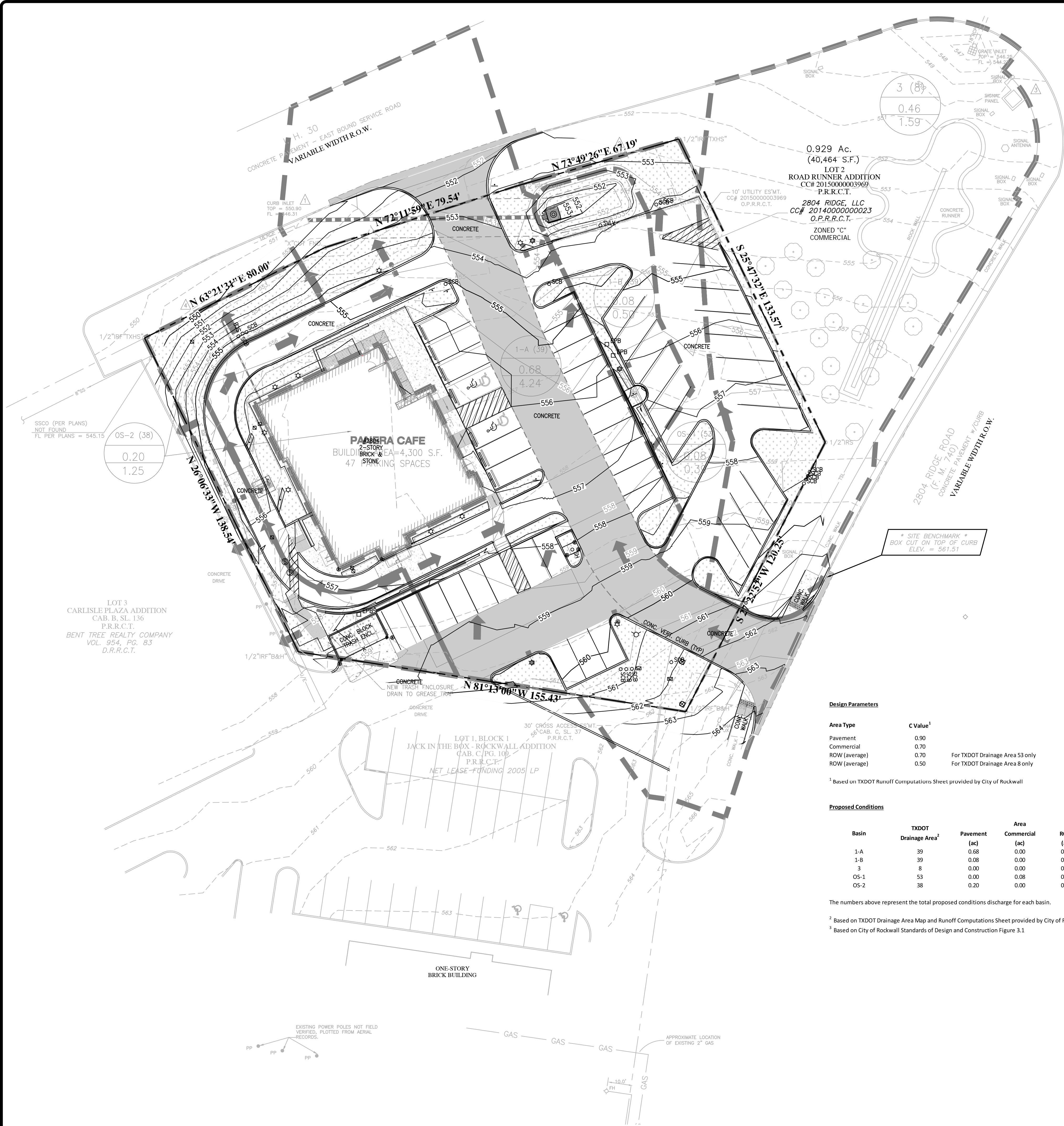
DEVELOPER/OWNER:
PANERA, LLC
3630 SOUTH CRYER ROAD, SUITE 100
ST. LOUIS, MO 63127
(314) 984-2646

Panera Café #1982
2804 RIDGE ROAD
ROCKWALL, TX 75087

+ ST. LOUIS
314-984-5887
314-984-5887
CIVIL ENGINEERING / SURVEYING / PLANNING / LANDSCAPE ARCHITECTURE
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DATE
06/01/2016
Job Number
15-0157
Sheet Number
C6.1A

USER: Brian Johnson TAB: C6.1 (B)
DATE: September 7, 2017 - 2:26:16 PM
DRAWING: S:\JOBS\Job2015\15-0157\CAD\15-0157.dwg



LEGEND

- = DRAINAGE AREA BOUNDARY
- = PROPOSED SHEET FLOW
- 0.00
0.00
0.00 = DRAINAGE AREA LABEL
- 0.00
0.00 = DRAINAGE AREA (ACRES)
- 1 = Q5 (CFS)
- 1 = DESIGN POINT

DISCHARGE CALCULATIONS

Panera Café #1982
2804 Ridge Road
Rockwall, TX
Cole Project #15-0157

Design Parameters

Area Type	C Value ¹
Pavement	0.90
Commercial	0.70
ROW (average)	0.70
ROW (average)	0.50

¹ Based on TxDOT Runoff Computations Sheet provided by City of Rockwall

Proposed Conditions

Basin	TxDOT	Pavement	Area			Total CA	Calculated T _c ² (min)	Design T _c ² (min)	Intensity					Runoff			
	Drainage Area ² (ac)		Commercial (ac)	ROW (ac)	I ₁ ² (in/hr)				I ₂ ² (in/hr)	I ₃ ² (in/hr)	I ₄ ² (in/hr)	I ₅ ² (in/hr)	Q _{0.05} -5 (cfs)	Q _{0.05} -10 (cfs)	Q _{0.05} -25 (cfs)	Q _{0.05} -100 (cfs)	
1-A	39	0.68	0.00	0.00	0.61	1.0	10.0	6.93	7.98	8.30	9.80	4.24	4.88	5.08	6.00		
1-B	39	0.08	0.00	0.00	0.07	1.0	10.0	6.93	7.98	8.30	9.80	0.50	0.57	0.60	0.71		
3	8	0.00	0.00	0.46	0.23	1.3	10.0	6.93	7.98	8.30	9.80	1.59	1.84	1.91	2.25		
OS-1	53	0.00	0.08	0.00	0.06	2.1	10.0	6.93	7.98	8.30	9.80	0.39	0.45	0.46	0.55		
OS-2	38	0.20	0.00	0.00	0.18	0.9	10.0	6.93	7.98	8.30	9.80	1.25	1.44	1.49	1.76		

The numbers above represent the total proposed conditions discharge for each basin.

² Based on TxDOT Drainage Area Map and Runoff Computations Sheet provided by City of Rockwall

³ Based on City of Rockwall Standards of Design and Construction Figure 3.1

UTILITY INFORMATION:

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AS-BUILT DRAWINGS
ELECTRIC COMMENTS
TWO COMMENTS
TWO COMMENTS
CITY COMMENTS
CITY COMMENTS
REVISION DESCRIPTION
DATE

08/30/2017 6 AS-BUILT DRAWINGS
07/12/2017 5 ELECTRIC COMMENTS
12/27/2016 4 TWO COMMENTS
10/17/2016 2 TWO COMMENTS
09/02/2016 1 CITY COMMENTS

DEVELOPER/OWNER:
PANERA, LLC
3630 SOUTH GUYER ROAD, SUITE 100
ST. LOUIS, MO 63127
(314) 984-2646

THE PROFESSIONAL WHOSE SIGNATURE AND PERSONAL SEAL APPEAR HEREON HAS PREPARED THIS PLAN FOR THE CITY OF ROCKWALL. ANY PERSONS, FIRMS, OR INDIVIDUALS ASSOCIATED WITH THIS PROJECT, INCLUDING BUT NOT LIMITED TO, ARCHITECTS, ENGINEERS, SURVEYORS, ESTIMATORS, REPORTERS, OR OTHER DOCUMENTS OR INSTRUMENTS NOT SPECIFICALLY IDENTIFIED HEREON, ARE HEREBY RELEASED FROM ANY AND ALL LIABILITY FOR THE PREPAREDNESS OF THIS PLAN. THE CITY OF ROCKWALL IS NOT RESPONSIBLE FOR THE PREPAREDNESS OF THIS PLAN.

STATE OF TEXAS
KYLE EUGENE RIGGS
99169
LICENSED PROFESSIONAL ENGINEER
09/07/2017

Panera Café #1982
2804 Ridge Road
Rockwall, TX 75087

DRAINAGE AREA MAP (PROPOSED)

+ ST. LOUIS
1515 15th Street
Suite 100
St. Louis, MO 63103
314.984.9887
Call & Schedule, Inc. is a Missouri Corporation & a Civil Design Group, Inc. is a Missouri & Texas Member firm registered in Mo. "Call"

COLE
CIVIL ENGINEERING / SURVEYING / PLANNING / LANDSCAPE ARCHITECTURE

DESIGN/CALC BY
CAW

DRAWN BY
CAW

CHECKED BY
EWM

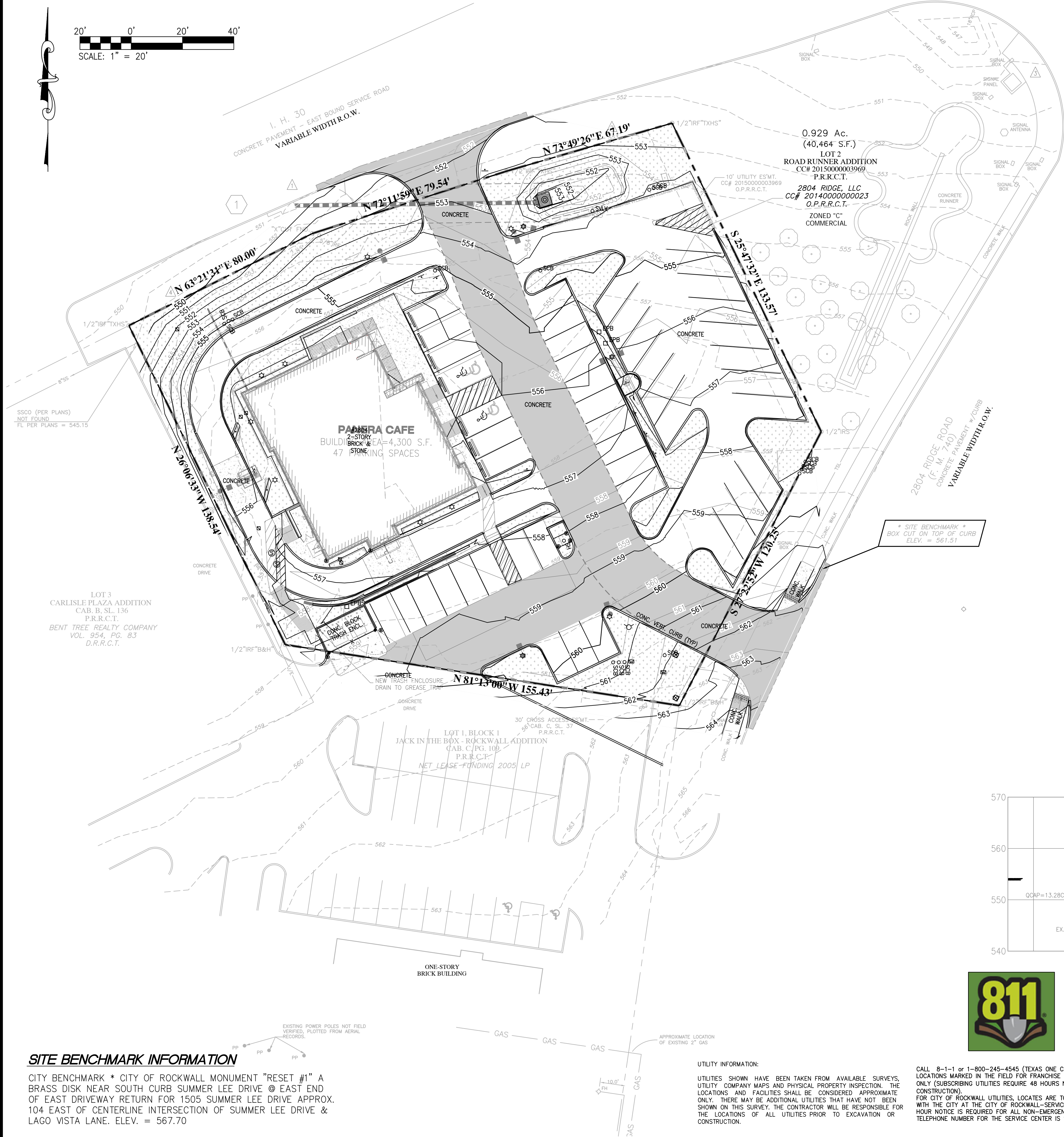
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AS SHOWN

DATE
06/01/2016

Job Number
15-0157

Sheet Number
C6.1B

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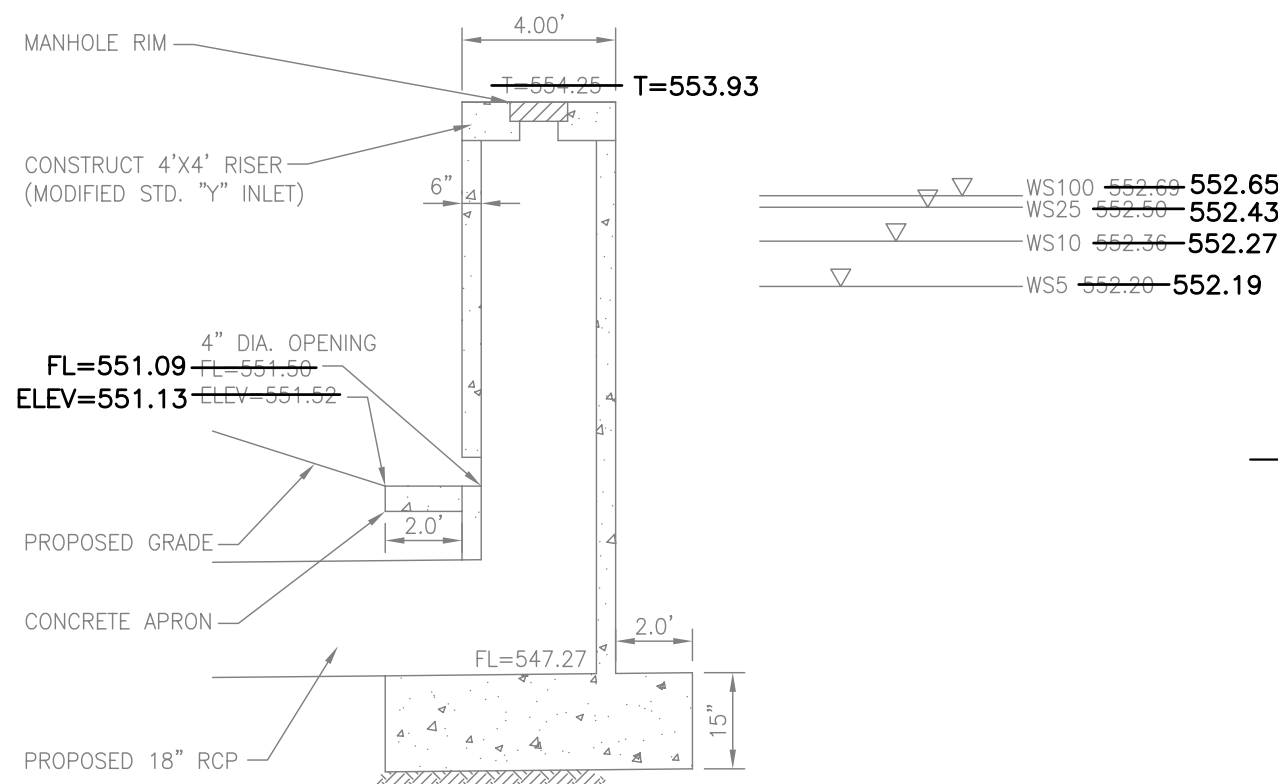
SITE BENCHMARK INFORMATION

CITY BENCHMARK * CITY OF ROCKWALL MONUMENT "RESET #1" A BRASS DISK NEAR SOUTH CURB SUMMER LEE DRIVE @ EAST END OF EAST DRIVEWAY RETURN FOR 1505 SUMMER LEE DRIVE APPROX. 104 EAST OF CENTERLINE INTERSECTION OF SUMMER LEE DRIVE & LAGO VISTA LANE. ELEV. = 567.70

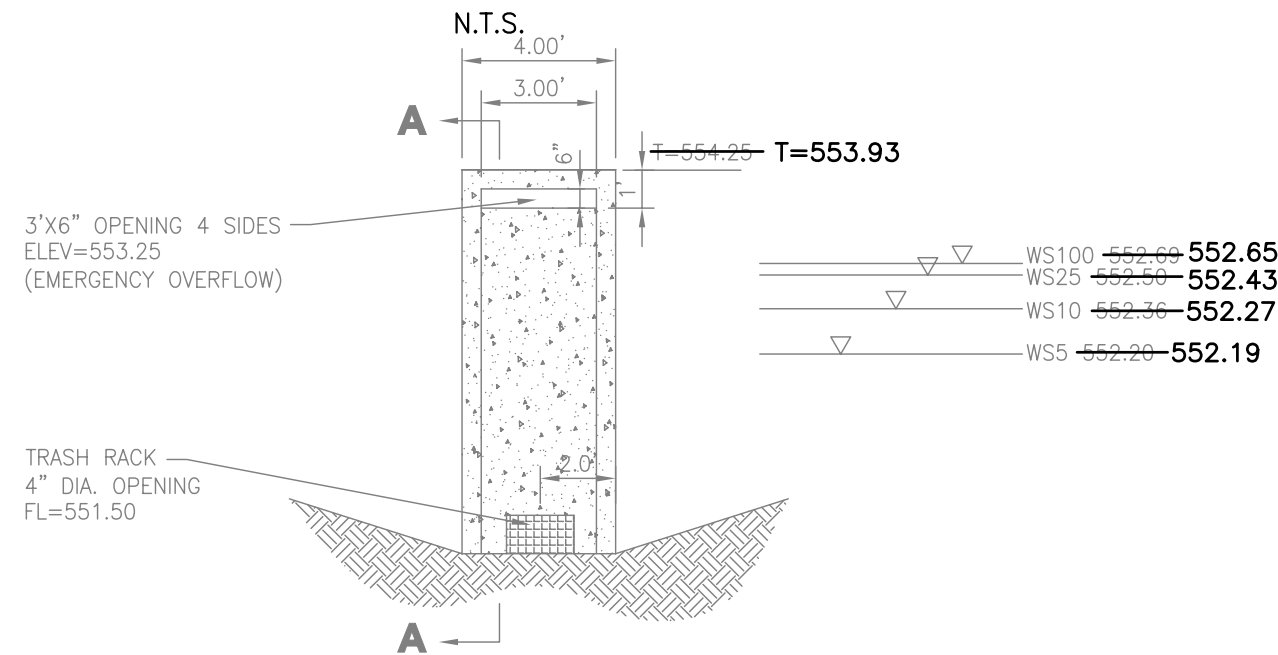
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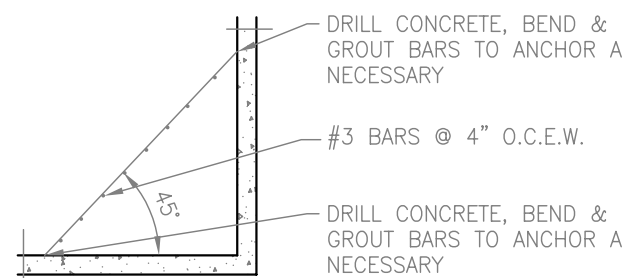
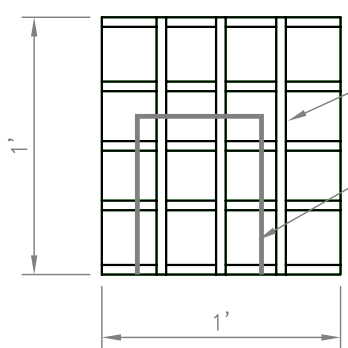
OUTLET STRUCTURE #2 SECTION A-A



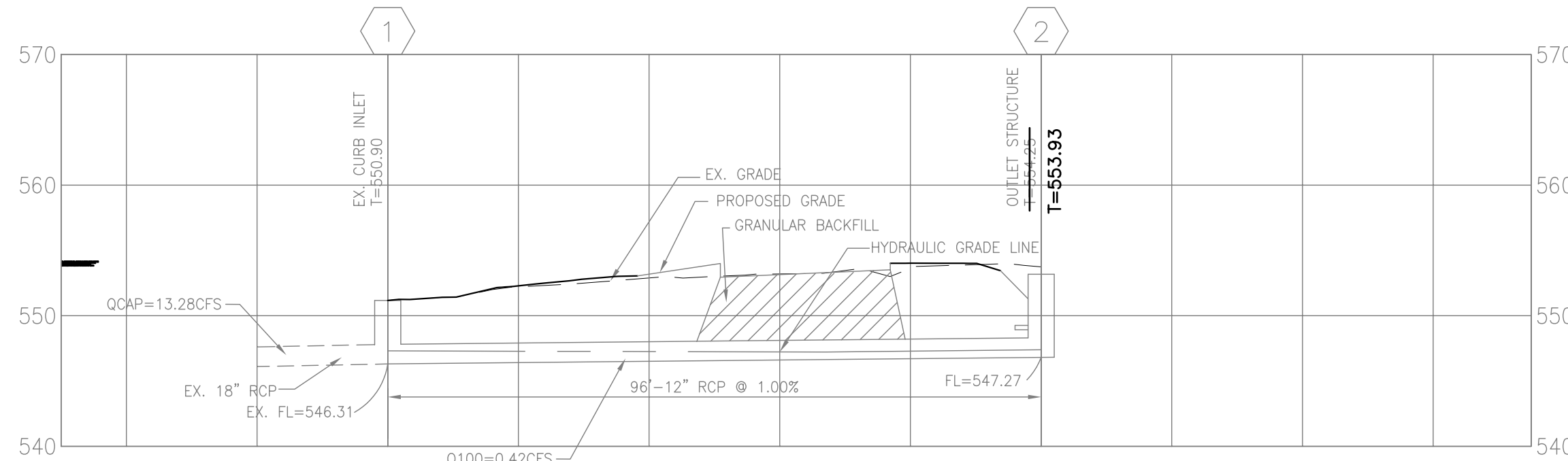
OUTLET STRUCTURE #2 FRONT VIEW

NOTES:

1. REFER TO CITY OF ROCKWALL AND/OR NCTCOG 3RD EDITION STANDARD DROP INLET DETAIL FOR CONCRETE SPECS., REINFORCEMENT LAYOUT AND ADDITIONAL STRUCTURAL INFORMATION.
2. CONCRETE SHALL BE 4,200 PSI. MINIMUM 7.5 SACK MIX FOR POUR IN PLACE AND 7.0 SACK MIX FOR PRE CAST.



TRASH RACK DETAIL



STORM SEWER PROFILE



DEVELOPER/OWNER:
PANERA, LLC
3630 SOUTH CETER ROAD, SUITE 100
ST. LOUIS, MO 63127
(314) 984-2646



Panera Café #1982
2804 RIDGE ROAD
ROCKWALL, TX 75087

STORM DRAINAGE PLAN

ST. LOUIS
1515 15th Street
Suite 200
St. Louis, MO 63103
314.984.9887 tel
314.984.9887 fax

cole
CIVIL ENGINEERING / SURVEYING / PLANNING / LANDSCAPE ARCHITECTURE
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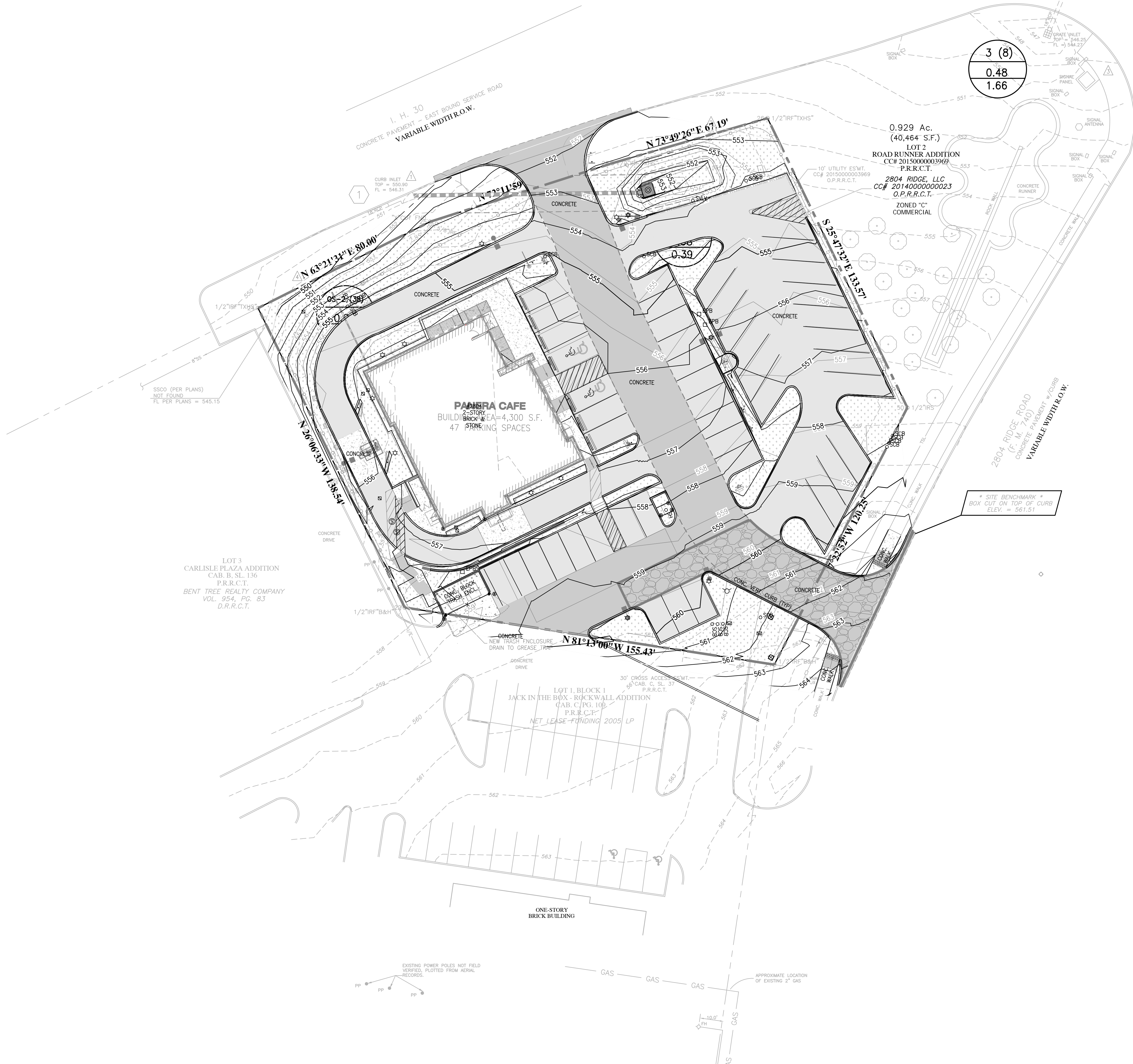
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Job Number
15-0157

Sheet Number
C6.2

USER: Brian Jolene1 Tab: C6.3
DATE: September 7, 2017 - 2:25:13 PM
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DISCHARGE CALCULATIONS																					
Panera Café #1982 2804 Ridge Road Rockwall, TX Cole Project # 15-0157																					
Design Parameters																					
Area Type	C Value ¹																				
Pavement	0.90																				
Commercial	0.70																				
ROW (average)	0.70 For TXDOT Drainage Area 53 only																				
ROW (average)	0.50 For TXDOT Drainage Area 8 only																				
¹ Based on TXDOT Runoff Computations Sheet provided by City of Rockwall																					
Existing Conditions																					
Basin	TXDOT Drainage Area ²	Pavement	Area Commercial	ROW	Total CA	Calculated T _c ² (min)	Design T _c ² (min)	I _s ² (in/hr)	Intensity			I ₁₀ ³ (in/hr)	I ₂₅ ³ (in/hr)	I ₁₀₀ ³ (in/hr)	Q _{PRE-5} (cfs)	Runoff		Q _{PRE-10} (cfs)	Q _{PRE-25} (cfs)	Q _{PRE-100} (cfs)	
1	39	0.73	0.00	0.00	0.66	1.0	10.0	6.93	7.98	8.30	9.80	4.55	5.24	5.45	6.44						
3	8	0.00	0.00	0.48	0.24	1.3	10.0	6.93	7.98	8.30	9.80	1.66	1.92	1.99	2.35						
OS-1	53	0.00	0.00	0.08	0.06	2.1	10.0	6.93	7.98	8.30	9.80	0.39	0.45	0.46	0.55						
OS-2	38	0.21	0.00	0.00	0.19	0.9	10.0	6.93	7.98	8.30	9.80	1.31	1.51	1.57	1.85						
The numbers above represent the maximum allowable discharge of the basin for the corresponding storm event.																					
² Based on TXDOT Drainage Area Map and Runoff Computations Sheet provided by City of Rockwall																					
³ Based on City of Rockwall Standards of Design and Construction Figure 3.1																					
Proposed Conditions																					
Basin	TXDOT Drainage Area ²	Pavement	Area Commercial	ROW	Total CA	Calculated T _c ² (min)	Design T _c ² (min)	I _s ² (in/hr)	Intensity			I ₁₀ ³ (in/hr)	I ₂₅ ³ (in/hr)	I ₁₀₀ ³ (in/hr)	Q _{POST-5} (cfs)	Runoff		Q _{POST-10} (cfs)	Q _{POST-25} (cfs)	Q _{POST-100} (cfs)	
1-A	39	0.68	0.00	0.00	0.61	1.0	10.0	6.93	7.98	8.30	9.80	4.24	4.88	5.08	6.00						
1-B	39	0.08	0.00	0.00	0.07	1.0	10.0	6.93	7.98	8.30	9.80	0.50	0.57	0.60	0.71						
3	8	0.00	0.00	0.46	0.23	1.3	10.0	6.93	7.98	8.30	9.80	1.59	1.84	1.91	2.25						
OS-1	53	0.00	0.08	0.00	0.06	2.1	10.0	6.93	7.98	8.30	9.80	0.39	0.45	0.46	0.55						
OS-2	38	0.20	0.00	0.00	0.18	0.9	10.0	6.93	7.98	8.30	9.80	1.25	1.44	1.49	1.76						
The numbers above represent the total proposed conditions discharge for each basin.																					
² Based on TXDOT Drainage Area Map and Runoff Computations Sheet provided by City of Rockwall																					
³ Based on City of Rockwall Standards of Design and Construction Figure 3.1																					
Allowable Release Rate																					
Q _{ALL-5} (BASIN 1-B) =						Q _{PRE-5} (BASIN 1) - Q _{POST-5} (BASIN 1-A) =						0.31 cfs									
Q _{ALL-10} (BASIN 1-B) =						Q _{PRE-10} (BASIN 1) - Q _{POST-10} (BASIN 1-A) =						0.36 cfs									
Q _{ALL-25} (BASIN 1-B) =						Q _{PRE-25} (BASIN 1) - Q _{POST-25} (BASIN 1-A) =						0.37 cfs									
Q _{ALL-100} (BASIN 1-B) =						Q _{PRE-100} (BASIN 1) - Q _{POST-100} (BASIN 1-A) =						0.44 cfs									
The numbers above represent the maximum allowable release rate for the detention area (Basin 1-B)																					



EROSION CONTROL NOTES

- TOTAL DISTURBED AREA: XXXXX ACRES (ROUND TO THE NEAREST TENTH)
- EROSION CONTROL FACILITIES AND STABILIZATION MEASURES SHALL BE PROVIDED AND MAINTAINED BY A QUALIFIED CONTRACTOR OR CONTRACTORS EXPERIENCED IN PROVIDING SUCH FACILITIES AND SERVICES. ALL PROCEDURES AND MATERIALS USED FOR EROSION CONTROL SHALL BE APPROVED BY THE CITY AND MAY BE ADDED AND/OR DELETED BY THE SAME. SWP3 TO BE SUBMITTED TO OWNER PRIOR TO ANY CONSTRUCTION OR DEMOLITION.
- THE CITY ENGINEER SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF THE GRADING TO VERIFY SILT CONTROL INSTALLATION. (GRADING PERMIT REQUIRED).
- DURING THE GRADING OPERATION ADDITIONAL SILTATION CONTROL MEASURES MAY BE REQUIRED AS DIRECTED BY THE CITY, THE OWNER, AND/OR THE PROJECT ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF THE EROSION CONTROL MEASURES HEREIN AND WHATEVER ADDITIONAL MEASURES ARE NECESSARY TO CONTROL SILT AND SEDIMENT LEAVING THE PROJECT SITE INCLUDING SOIL TRACKED OFF SITE BY CONSTRUCTION VEHICLES. SPECIFICALLY, THE CONTRACTOR SHALL PROTECT ALL PUBLIC STREETS, ALLEYS, STREAMS, STORM DRAIN SYSTEMS AND INLETS FROM SILTATION AND EROSION DEPOSITION.
- SILT FENCES AND INLET PROTECTION SHALL BE INSTALLED AND MAINTAINED AT LOCATIONS SHOWN ON THESE PLANS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES AND MAINTAINED UNTIL AFTER PAVING CONSTRUCTION AND FINAL GRADING IS COMPLETED. ACCUMULATED SEDIMENT SHALL BE PERIODICALLY REMOVED AS REQUIRED IN ORDER TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL MEASURES.
- SILT FENCING SHALL BE APPROVED BY THE ENGINEER AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND DETAILS SHOWN HEREON.
- INLET PROTECTION MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS.
- DURING DRAINAGE SYSTEM CONSTRUCTION, ALL INLETS SHALL BE PROTECTED FROM SILT AND SOIL DEPOSITS UNTIL PAVING AND INLETS ARE COMPLETED. UPON COMPLETION OF CONSTRUCTION OF INLETS, INLET PROTECTION MEASURES AS REQUIRED BY THIS PLAN SHALL BE INSTALLED TO PREVENT SILTING OR SEDIMENTATION. INLET PROTECTION MEASURES SHALL BE MAINTAINED UNTIL DRAINAGE AREAS AND PARKWAYS HAVE BEEN STABILIZED WITH A MINIMUM OF 90% VEGETATION COVERAGE.
- UPON COMPLETION OF PAVING AND DRAINAGE CONSTRUCTION, FINAL LOT GRADING AND CLEANUP, ALL ON-SITE PARKWAYS AND ADJACENT STREET PARKWAYS DISTURBED BY CONSTRUCTION OPERATIONS SHALL BE STABILIZED BY THE INSTALLATION OF LANDSCAPING, SOIL SOD, SEEDING OR HYDROMULCHING AND SHALL CONFORM TO CITY STANDARDS AND SPECIFICATIONS. STABILIZED PARKWAYS SUBSEQUENTLY DISTURBED BY CONTRACTORS OR SUBCONTRACTORS SHALL BE REPAIRED TO A CONDITIONS EQUAL TO OR BETTER THAN THAT OF EXISTING PRIOR TO DISTURBANCE.
- EROSION CONTROL MEASURES MAY BE TEMPORARILY REMOVED FOR ACCESS AND CONSTRUCTION ACTIVITIES, BUT SHALL BE REPLACED AT THE END OF EACH DAY.
- UPON COMPLETION OF ALL UTILITY AND PAVING CONSTRUCTION AND PRIOR TO FINISHED GRADING ALL SOIL CONTAMINATED BY CONSTRUCTION OPERATIONS AND CONSTRUCTION DEBRIS/WASTE MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN APPROPRIATE LANDFILL OR WASTE DISPOSAL FACILITY. (NO SEPARATE PAY.) EROSION CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE EVERY 7 DAYS AND WITHIN 24 HOURS AFTER ANY RAINFALL GREATER THAN 1/2". INSPECTION REPORTS SHALL BE MAINTAINED BY THE CONTRACTOR AND SHALL BECOME PART OF THE COMPLETE PLAN.
- THE CONTRACTOR SHALL MAINTAIN APPROPRIATE CONSTRUCTION SITE MANAGEMENT PRACTICES TO PREVENT THE DISCHARGE OF OIL, GREASE, PAINT, GASOLINE, AND OTHER POLLUTANTS TO THE STORM DRAIN SYSTEM OR ADJACENT STREAMS.
- A COPY OF THE NOTICE OF INTENT (NOI) AND A COPY OF THE STORM WATER POLLUTANT PREVENTION PLAN (SWPPP) MUST BE MAINTAINED AT THE CONSTRUCTION SITE AT ALL TIMES. CONTRACTORS SHALL NOTIFY THE FACILITY OPERATOR IF A VIOLATION OF THIS PLAN IS NOTED.
- EROSION CONTROL MEASURES MAY BE PLACED IN FRONT OF INLETS, OR IN CHANNELS, DRAINAGEWAYS OR BORROW DITCHES AT RISK OF CONTRACTOR. CONTRACTOR SHALL REMAIN LIABLE FOR ANY DAMAGE CAUSED BY THE MEASURES, INCLUDING FLOODING DAMAGE WHICH MAY OCCUR DUE TO BLOCKED DRAINAGE. UPON COMPLETION OF CONSTRUCTION, ALL CHANNELS, DRAINAGEWAYS AND BORROW DITCHES SHALL BE DREDGED OF ANY SEDIMENTS GENERATED BY THE PROJECT.

NOTE

DETENTION HAS TO BE INSTALLED AND FULLY FUNCTIONING WITH EITHER SOD OR ANCHORED, SEEDING CURLEX ON THE SIDES AND BOTTOM OF THE BASIN PRIOR TO ANY PAVING (INCLUDING SLAB) BEING INSTALLED.

50' 0' 50' 100'
SCALE: 1" = 50'

LEGEND

- [Symbol] = INLET PROTECTION
- [Symbol] = CONSTRUCTION ENTRANCE
- [Symbol] = LIMITS OF DISTURBANCE
- [Symbol] = SILT FENCE

AS-BUILT DRAWINGS	08/30/2017	6
ELECTRIC COMMENTS	07/12/2017	5
PAVING COMMENTS	07/27/2016	4
LANDSCAPE COMMENTS	10/17/2016	2
CITY COMMENTS	09/02/2016	1
REVISION DESCRIPTION	DATE	NO

DEVELOPER/OWNER:
PANERA, LLC
3630 SOUTH CETER ROAD, SUITE 100
ST. LOUIS, MO 63127
(314) 984-2646

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STATE OF TEXAS
KEVIN EUGENE RIGGS
99169
PROFESSIONAL ENGINEER
09/07/2017

Panera Café #1982
2804 RIDGE ROAD
ROCKWALL, TX 75082

EROSION CONTROL PLAN

ST. LOUIS
1515 15th Street
Suite 100
St. Louis, MO 63103
314.984.9887 tel
314.984.9887 fax

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DATE
06/01/2016

Job Number
15-0157


Sheet Number
C7.0

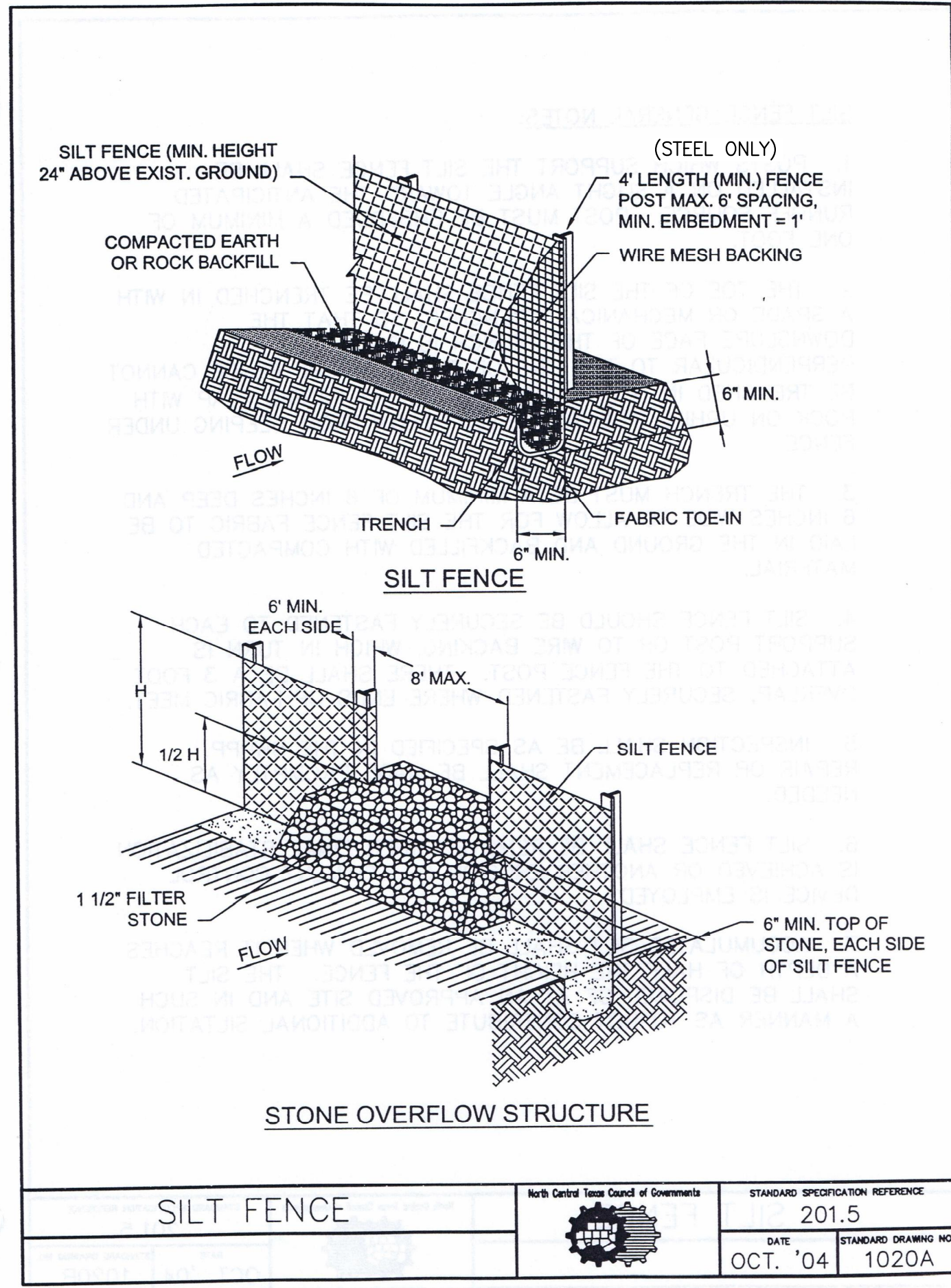
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DATE: September 7, 2017 - 2:44:34 PM
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SILT FENCE GENERAL NOTES:


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

SILT FENCE

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



SILT FENCE

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

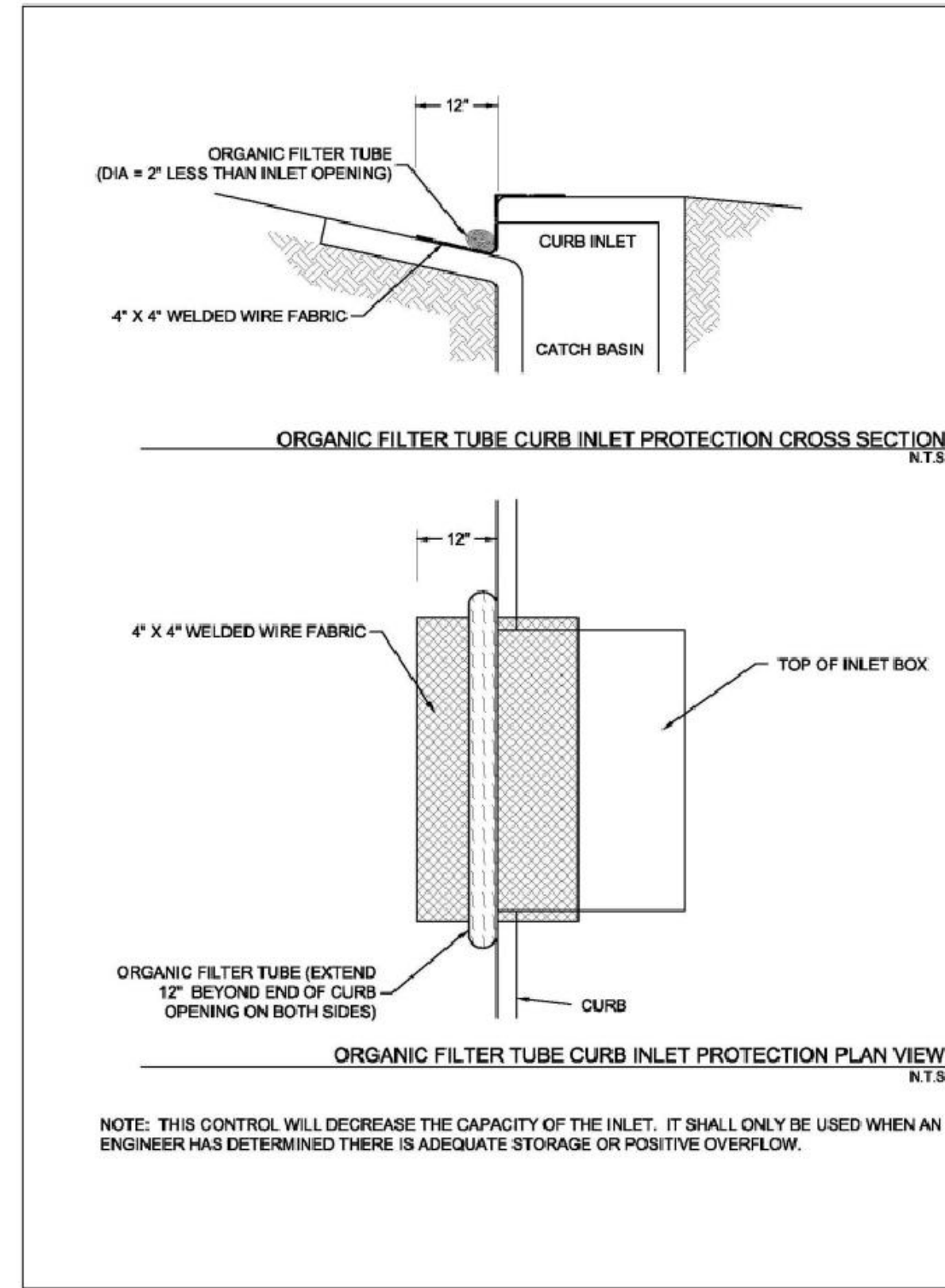


Figure 3.6 Schematics of Organic Filter Tube Curb Inlet Protection
(Source: Modified from City of Plano BMP SP-4)


Inlet Protection
Revised 04/10

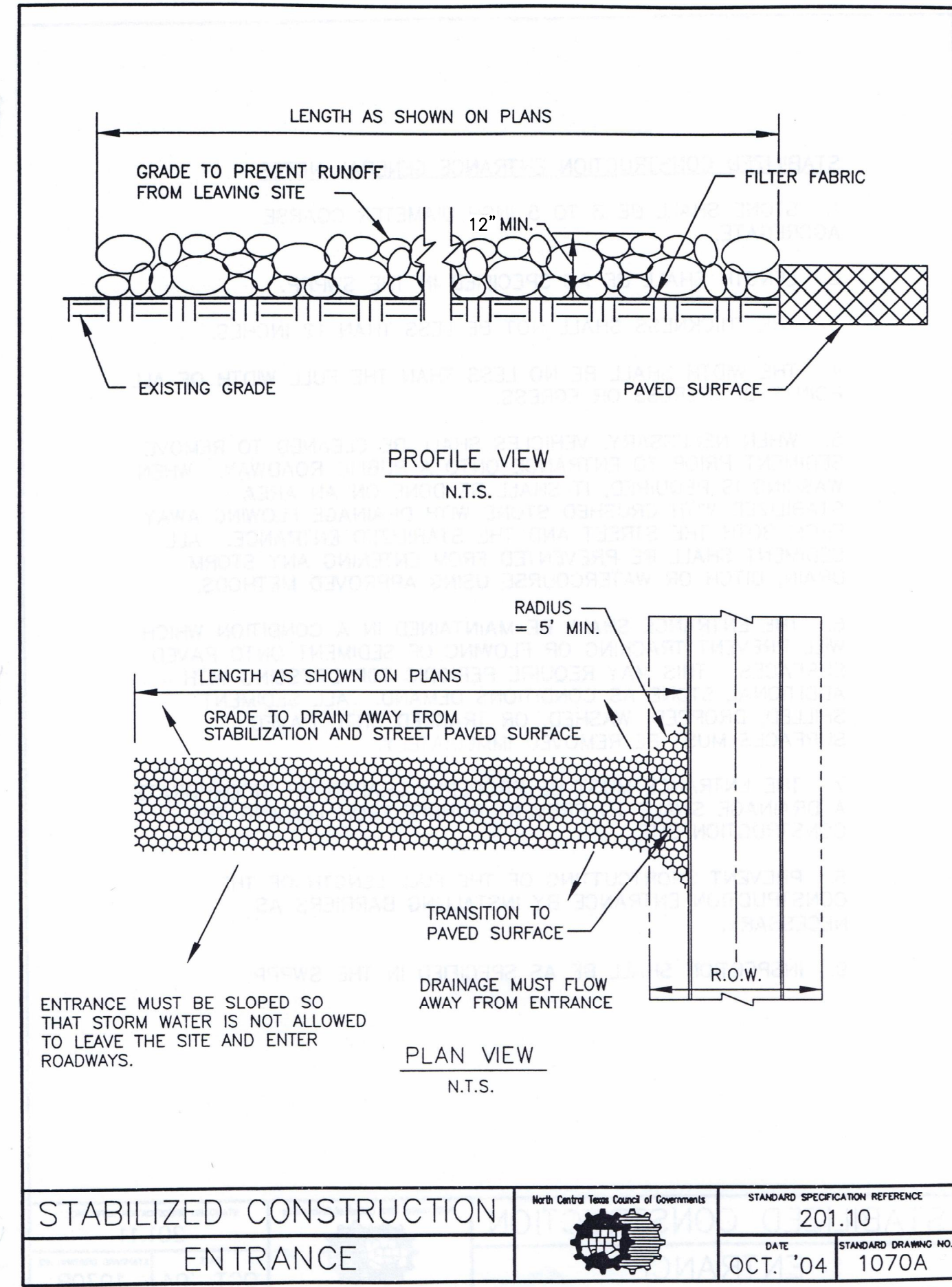
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STABILIZED CONSTRUCTION ENTRANCE GENERAL NOTES:


1. STONE SHALL BE 4 TO 6 INCH DIAMETER COARSE AGGREGATE. (NO CRUSHED CONCRETE ALLOWED)
2. LENGTH SHALL BE AS SPECIFIED IN THE SWPPP.
3. THE THICKNESS SHALL NOT BE LESS THAN 12 INCHES.
4. THE WIDTH SHALL BE NO LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
5. WHEN NECESSARY, VEHICLES SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO A PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WITH DRAINAGE FLOWING AWAY FROM BOTH THE STREET AND THE STABILIZED ENTRANCE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
6. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PAVED SURFACES. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PAVED SURFACES MUST BE REMOVED IMMEDIATELY.
7. THE ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.
8. PREVENT SHORTCUTTING OF THE FULL LENGTH OF THE CONSTRUCTION ENTRANCE BY INSTALLING BARRIERS AS NECESSARY.
9. INSPECTION SHALL BE AS SPECIFIED IN THE SWPPP.

STABILIZED CONSTRUCTION ENTRANCE

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



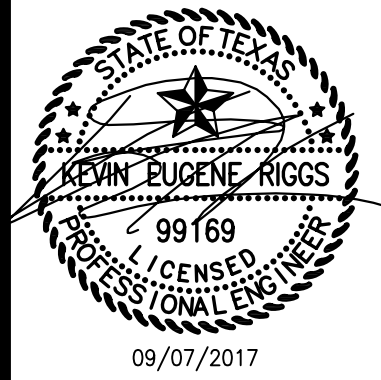
STABILIZED CONSTRUCTION ENTRANCE

North Central Texas Council of Governments	STANDARD SPECIFICATION REFERENCE
	201.10
DATE	STANDARD DRAWING NO.
OCT. '04	1070A

NO	REVISION DESCRIPTION	DATE
1	CITY COMMENTS	09/02/2016
2	CITY COMMENTS	10/17/2016
3	CITY COMMENTS	10/17/2016
4	CITY COMMENTS	10/17/2016
5	ELECTRIC COMMENTS	01/12/2017
6	AS-BUILT DRAWINGS	08/30/2017

DEVELOPER/OWNER:
PANERA, LLC
3630 SOUTH GUYER ROAD, SUITE 100
ST. LOUIS, MO 63127
(314) 994-2646

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Panera
BREAD

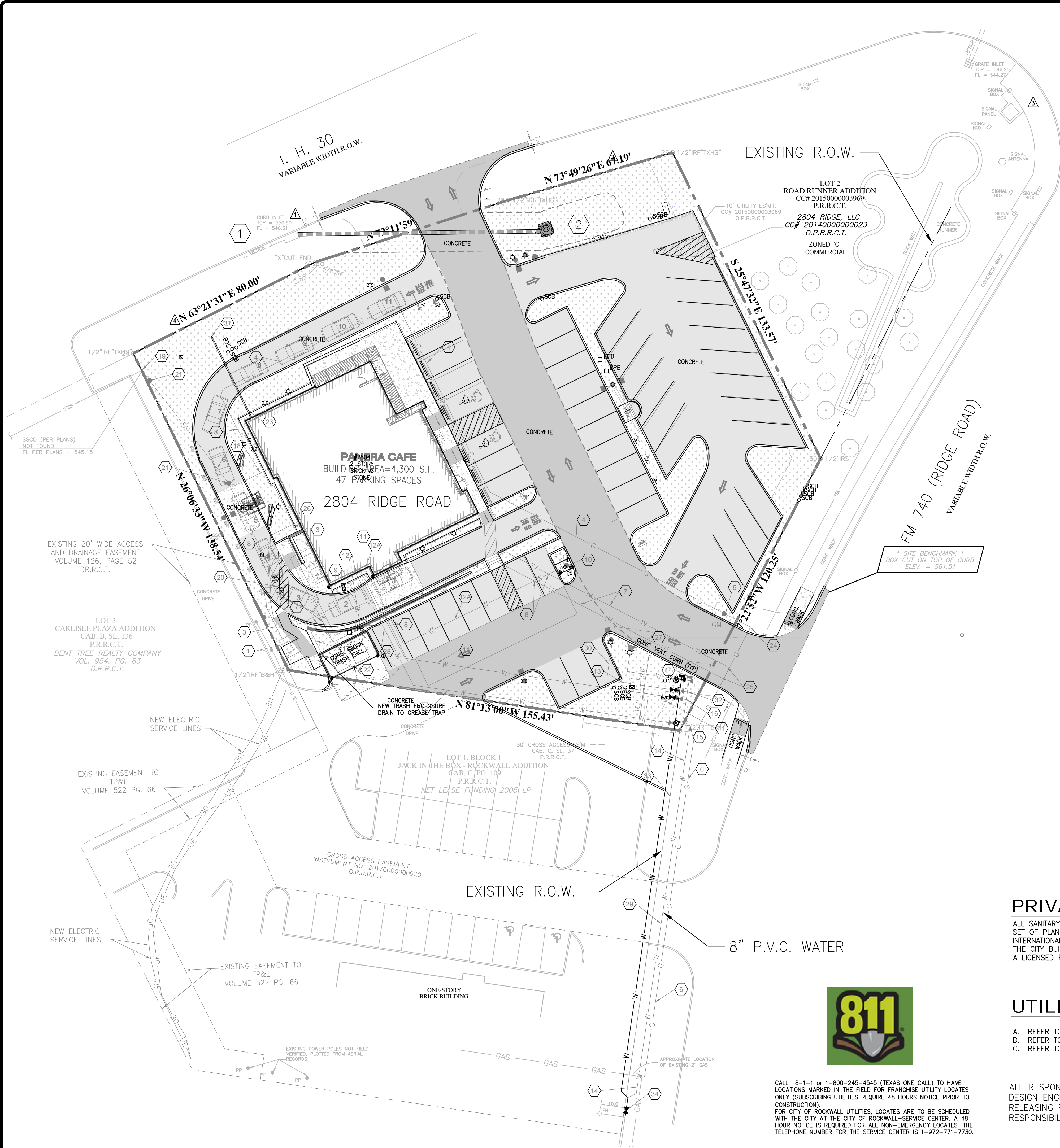
Panera Café #1982
2804 RIDGE ROAD
ROCKWALL, TX 75087

EROSION CONTROL DETAILS

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11515 1/2th Street
Suite 200
St. Louis, MO 63103
314.994.9887 tel

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DRAWING SCALE	AS SHOWN
DATE	06/01/2016
Job Number	15-0157
Sheet Number	C7.1



PRIVATE UTILITY NOTE:

ALL SANITARY SEWER WORK DESIGNATED AS "PRIVATE" IN THIS SET OF PLANS SHALL BE INSTALLED IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE, PERMITTED AND INSPECTED BY THE CITY BUILDING INSPECTION DEPARTMENT AND INSTALLED BY A LICENSED PLUMBER.

UTILITY NOTES:

- REFER TO SHEET C4.0 FOR DEMOLITION PLAN.
- REFER TO SHEET C5.0 FOR SITE PLAN
- REFER TO SHEET C6.0 FOR GRADING PLAN.

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.

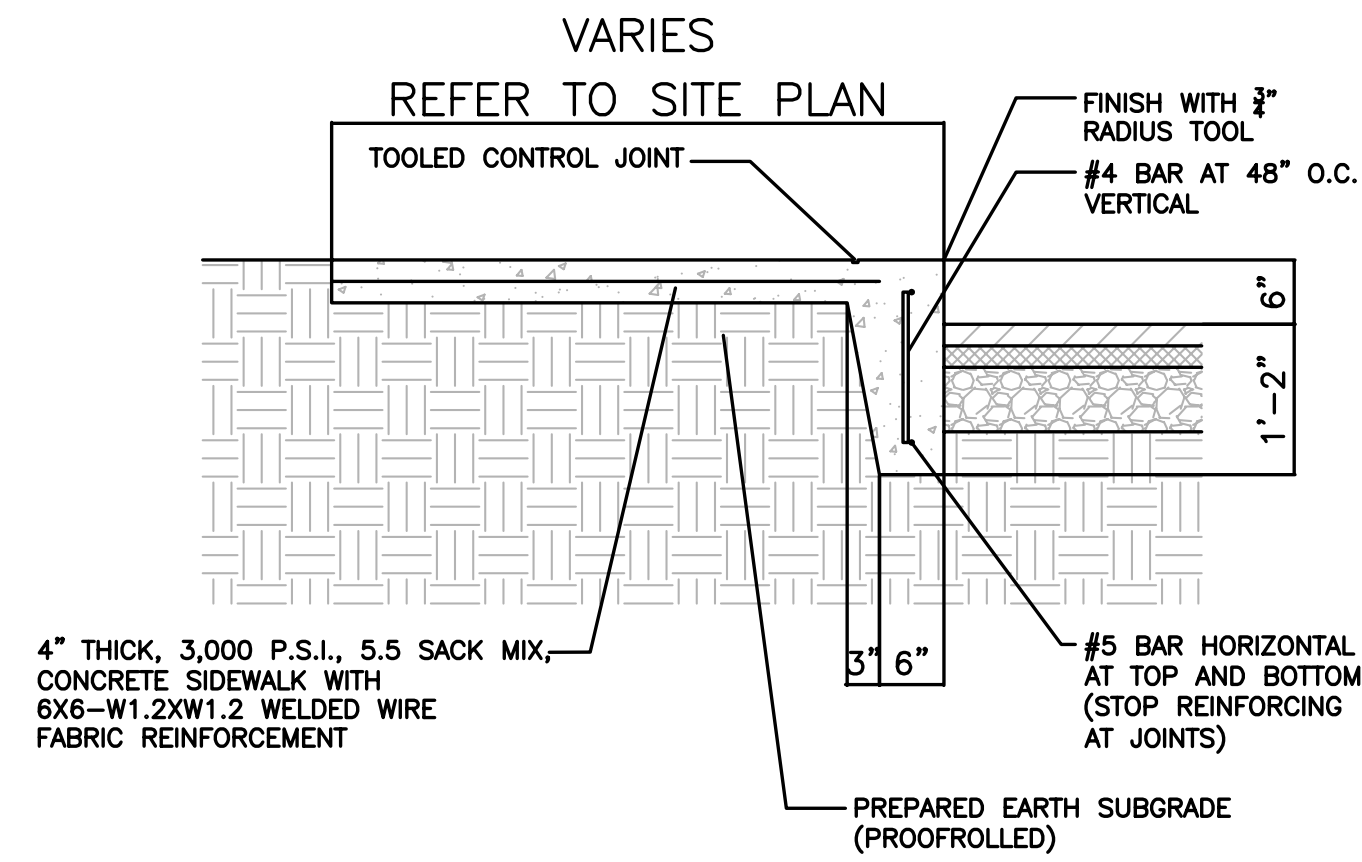
KEYED NOTES:

- NEW GROUND MOUNTED TRANSFORMER (PER ONCOR STANDARDS). ONCOR TO PROVIDE AND INSTALL THE TRANSFORMER. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING THE CONCRETE PAD PER ONCOR REQUIREMENTS.
- NEW PRIMARY, UNDERGROUND ELECTRIC SERVE TO THE NEAREST POINT OF CONNECTION AS DIRECTED BY ONCOR. ONCOR TO SIZE CONDUIT AND PROVIDE AND PULL CONDUCTOR AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING THE CONDUIT. CONTRACTOR SHALL CONTACT ONCOR AS SOON AS POSSIBLE TO ACCOMMODATE REQUIRED LEAD TIME FOR DESIGN AND COORDINATION OF NEW SERVICE.
- NEW SECONDARY UNDERGROUND ELECTRIC SERVICE
- NEW 1-1/4" GAS SERVICE FROM NEW METER TO THE BACK OF BUILDING. THIS SERVICE IS TO BE INSTALLED BY AN ATMOS ENERGY APPROVED CONTRACTOR AT THE OWNER'S EXPENSE. THE GENERAL CONTRACTOR SHALL CONTACT ATMOS ENERGY AS SOON AS POSSIBLE TO ACCOMMODATE REQUIRED LEAD TIMES FOR DESIGN AND COORDINATION OF NEW SERVICE.
- NEW GAS METER (BY ATMOS ENERGY). THE GENERAL CONTRACTOR SHALL COORDINATE THE EXACT LOCATION OF THE METER WITH ATMOS ENERGY PRIOR TO THE START OF CONSTRUCTION.
- NEW GAS LINE EXTENSION (PER ATMOS STANDARDS).
- NEW (1) 4" CONDUIT AND PULL STRING FOR TELEPHONE SERVICE AND (1) 2" CONDUIT AND PULL STRING FOR TELEVISION. COORDINATE ENTRY POINT WITH ELECTRICAL PLANS AND FINAL TERMINATION POINT WITH SERVICE PROVIDER.
- MAINTAIN 18" VERTICAL CLEARANCE AT ALL UTILITY CROSSINGS (TYPICAL)
- NEW 3/4" DOMESTIC WATER TO FREEZE PROOF HOSE BIB. (PRIVATE)
- NEW FIRE DEPARTMENT CONNECTION (FDC). PER ROCKWALL FIRE DEPARTMENT STANDARDS. SEE NOTES AND DETAILS SHEET C9.4.
- NEW 150'-2" SDR-9 POLY DOMESTIC WATER SERVICE AND METER W/TESTABLE BACKFLOW PREVENTION DEVICE AND DOUBLE CHECK VALVE. (PRIVATE)
- NEW 150'-6" PVC (200 PSI PER ASTM D1784 AND D2241) FIRE SERVICE (PRIVATE); 1-6"x8" TEE; 1-6" GATE VALVE. SIZE TO BE VERIFIED BY FIRE SPRINKLER CONTRACTOR. FIRE SERVICE LINE TO BE MIN. 10' SEPARATION FROM ALL OTHER UTILITIES AND REQUIRES A SEPARATE PERMIT FROM THE FIRE DEPARTMENT.
- NEW 106'-6" PVC (200 PSI PER ASTM D1784 AND D2241) FIRE SERVICE TO FDC (PRIVATE. SIZE TO BE VERIFIED BY FIRE SPRINKLER CONTRACTOR. FIRE SERVICE LINE TO BE MIN. 10' SEPARATION FROM ALL OTHER UTILITIES AND REQUIRES A SEPARATE PERMIT FROM THE FIRE DEPARTMENT.
- NEW STUB AND 1-1/2" METER FOR PROPOSED IRRIGATION AROUND PROPOSED BUILDING (PRIVATE). COORDINATE STUB AND METER SIZE WITH PROPOSED IRRIGATION SYSTEM DESIGN (BY OTHERS). ALL METERED WATER SERVICES TO HAVE A TESTABLE BACKFLOW PREVENTER WITH DOUBLE CHECK VALVE.
- NEW 175' AWWA C900 PVC PIPE SDR 14 8" WATER MAIN (PUBLIC). INSTALL 8" PLUG AT TERMINAL END.
- NEW FIRE WATER POINT OF CONNECTION (8"x2" TEE).
- NEW DOMESTIC WATER POINT OF CONNECTION (8"x2" TEE).
- NEW 6" GREASE WASTE SANITARY SERVICE @ 2.0% MINIMUM SLOPE. (PRIVATE)
- NEW 6" PVC ASTM D3034, SDR35 SANITARY SEWER @ 2.0% MINIMUM SLOPE. (PRIVATE)
- NEW SANITARY POINT OF CONNECTION.
- NEW 1000 GALLON GREASE INSTALLED OVER COMPACTED SUBGRADE AND BACKFILLED WITH GRAVEL. REFER TO PLUMBING PLANS FOR DETAIL.
- NEW SANITARY SEWER CLEANOUT.
- NEW NEENAH R-4937-B FLOOR DRAIN OR EQUAL IN REFUSE ENCLOSURE.
- 6" PVC DOWNSPOUT DRAIN @ 2.00% MINIMUM SLOPE.
- NEW GAS SERVICE, CONTRACTOR TO COORDINATE WITH LOCAL UTILITY COMPANY FOR CONNECTION.
- NEW TELEPHONE AND TELEVISION SERVICE, CONTRACTOR TO COORDINATE WITH LOCAL UTILITY COMPANY FOR CONNECTION.
- NEW ELECTRICAL SWITCHGEAR AND METER.
- NEW FIRE HYDRANT; 1-8"x6" TEE; 1-8" GATE VALVE; 1-6" GATE VALVE
- NEW 50' CONCRETE ENCASED 6" PVC FIRE SERVICE
- NEW 24'-8" WATER MAIN BORED UNDER DRIVE ENTRANCE. CONTRACTOR SHALL PHASE CONSTRUCTION AND COORDINATE WITH ADJACENT PROPERTY OWNER AS NEEDED TO ENSURE EXISTING DRIVEWAY REMAINS OPEN.
- NEW 15' UTILITY EASEMENT.
- NEW POP-UP EMITTER (TOP = 553.50, FL = 552.50). REFER TO DETAIL ON SHEET CX.X.
- NEW IRRIGATION POINT OF CONNECTION (8"x1-1/2" TEE). FINAL STUB SIZE TO BE VERIFIED BY IRRIGATION SYSTEM DESIGNER.
- EXISTING RIGHT-OF-WAY LINE.
- NEW 8" GATE VALVE.

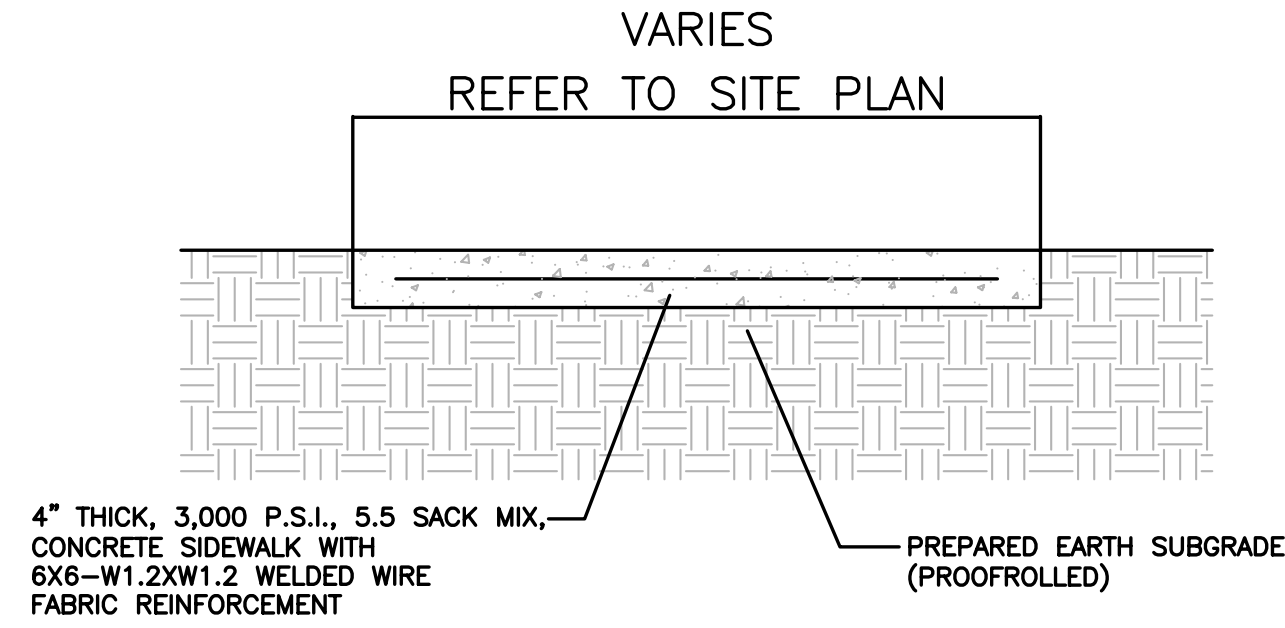
UTILITY INFORMATION:

UTILITIES SHOWN HAVE BEEN TAKEN FROM AVAILABLE SURVEYS, UTILITY COMPANY MAPS AND PHYSICAL PROPERTY INSPECTION. THE LOCATIONS AND FACILITIES SHALL BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE ADDITIONAL UTILITIES THAT HAVE NOT BEEN SHOWN ON THIS SURVEY. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE LOCATIONS OF ALL UTILITIES PRIOR TO EXCAVATION OR CONSTRUCTION.

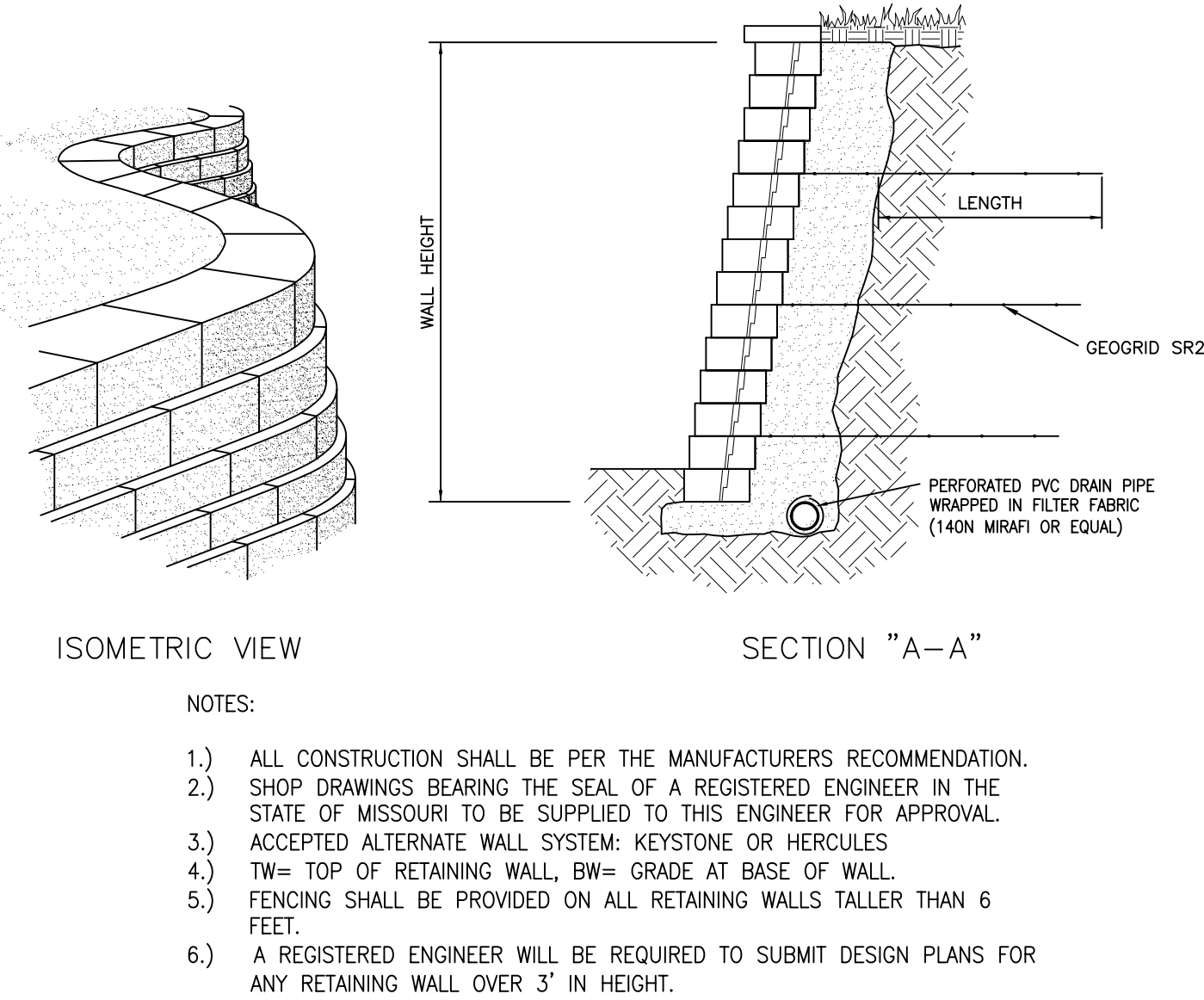
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Panera Café #1982		UTILITY PLAN	
2804 RIDGE ROAD ROCKWALL, TX 75082		+ ST. LOUIS 1515 1/2th Street Suite 200 St. Louis, MO 63103 314.984.9887 tel 314.984.9887 fax	
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1 TURNED DOWN CONCRETE WALK DETAIL
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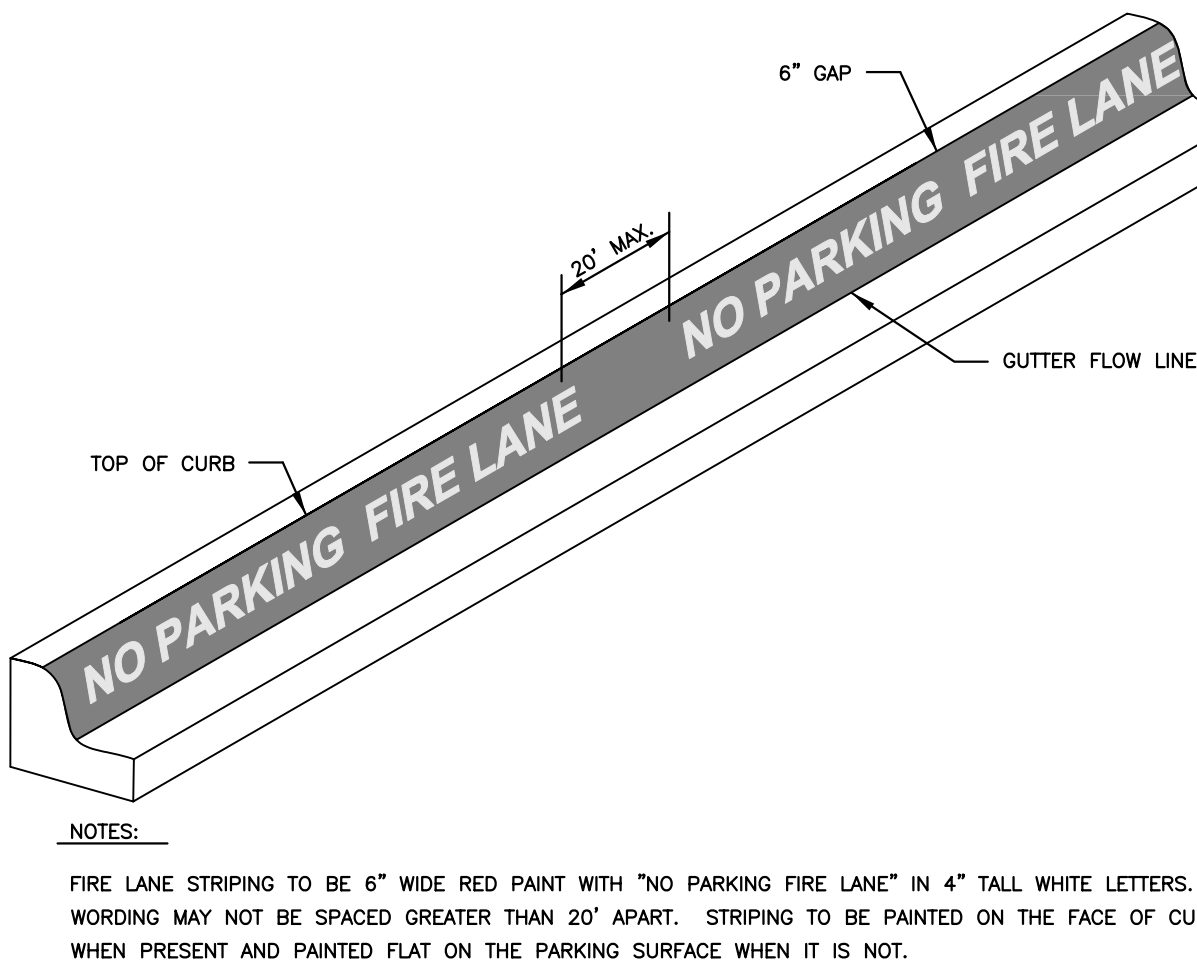
2 CONCRETE SIDEWALK DETAIL
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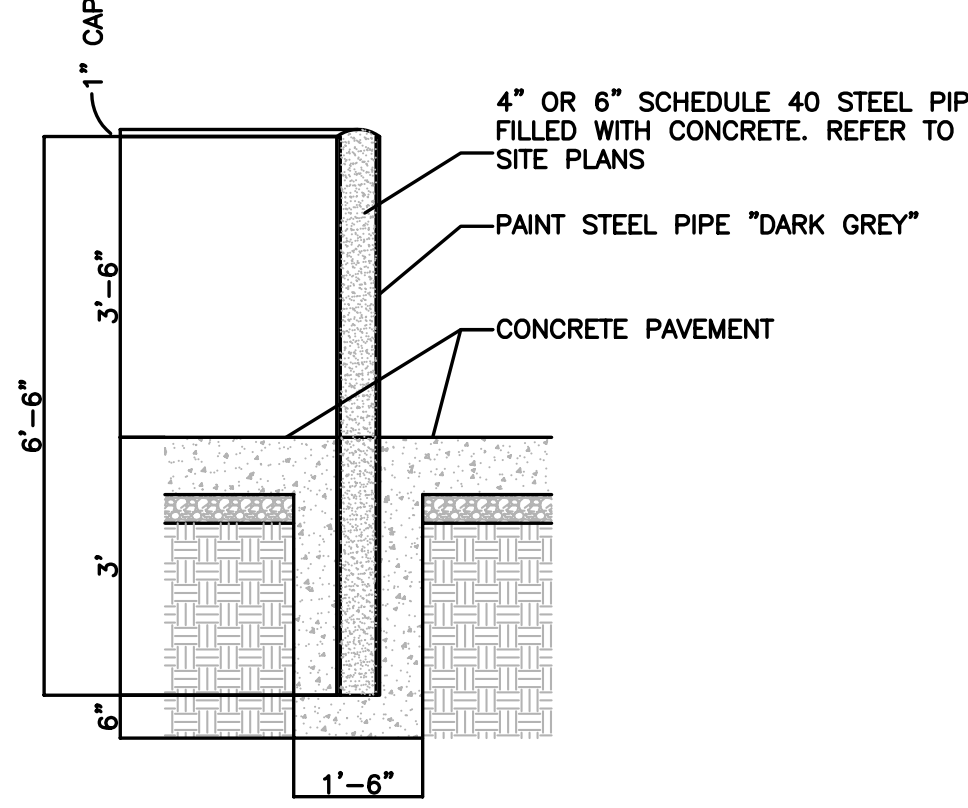
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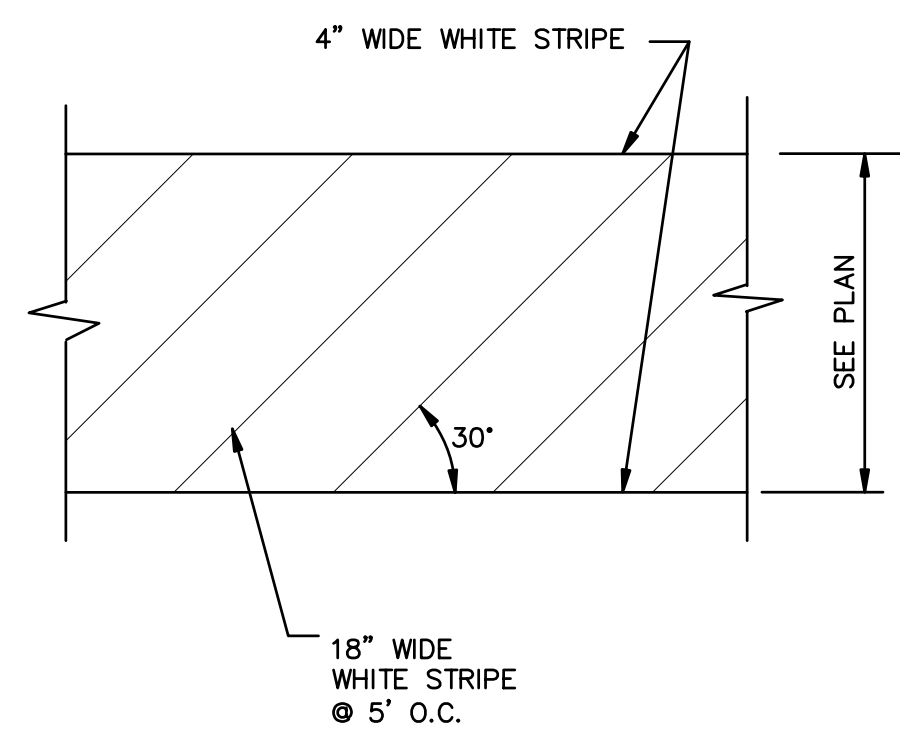
4 "STOP" SIGN DETAIL
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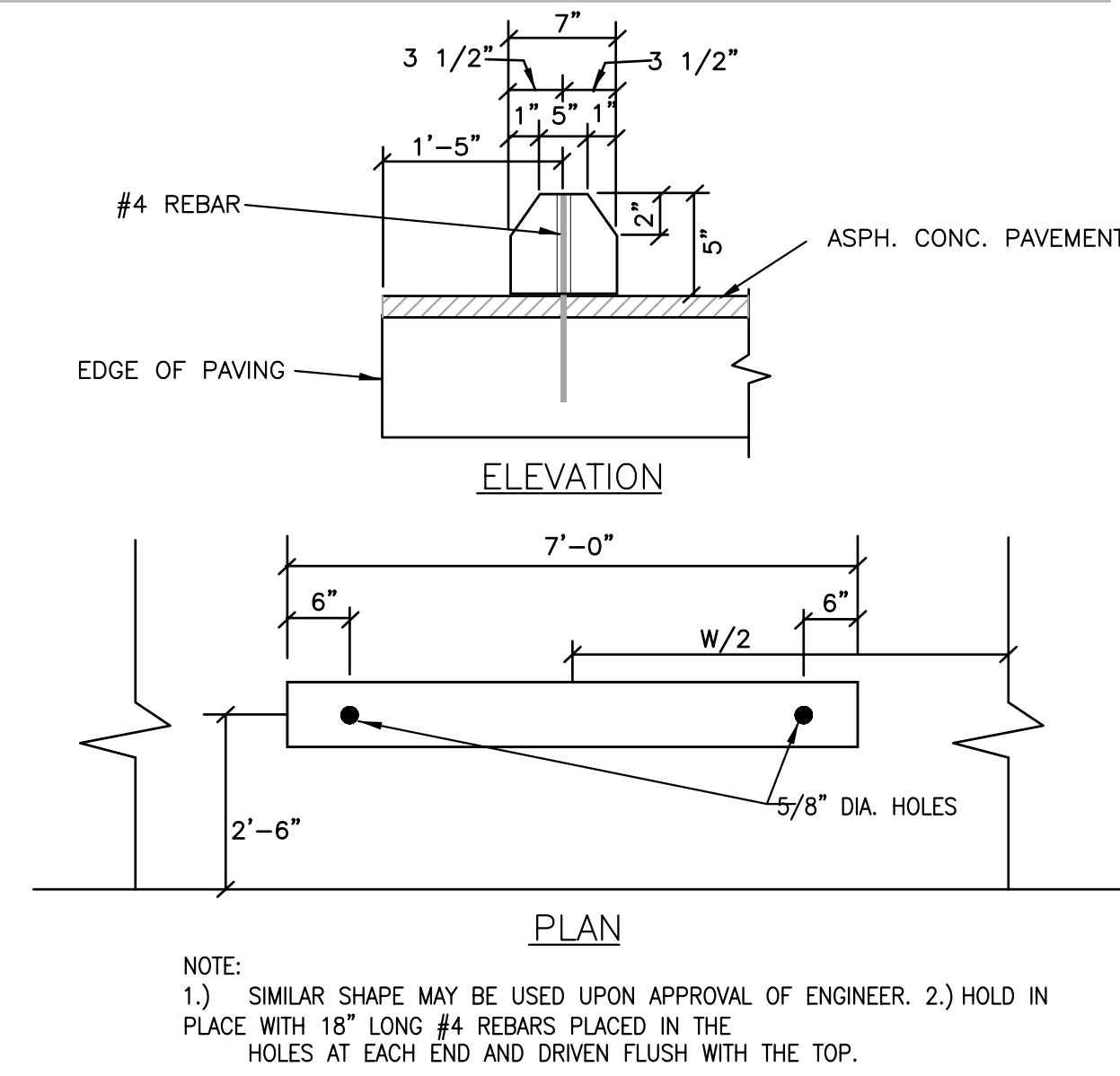
5 FIRE LANE CURB DETAIL
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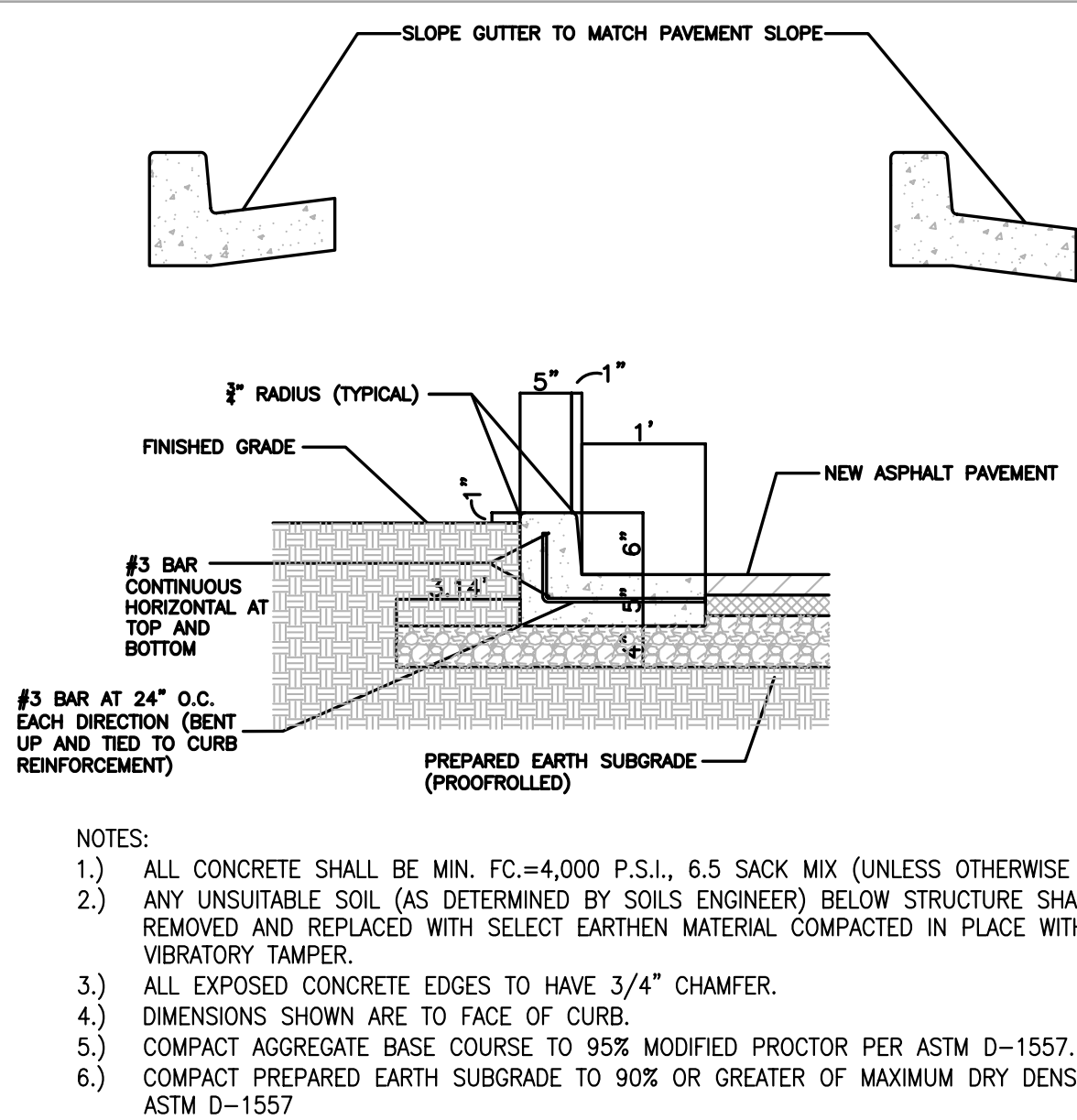
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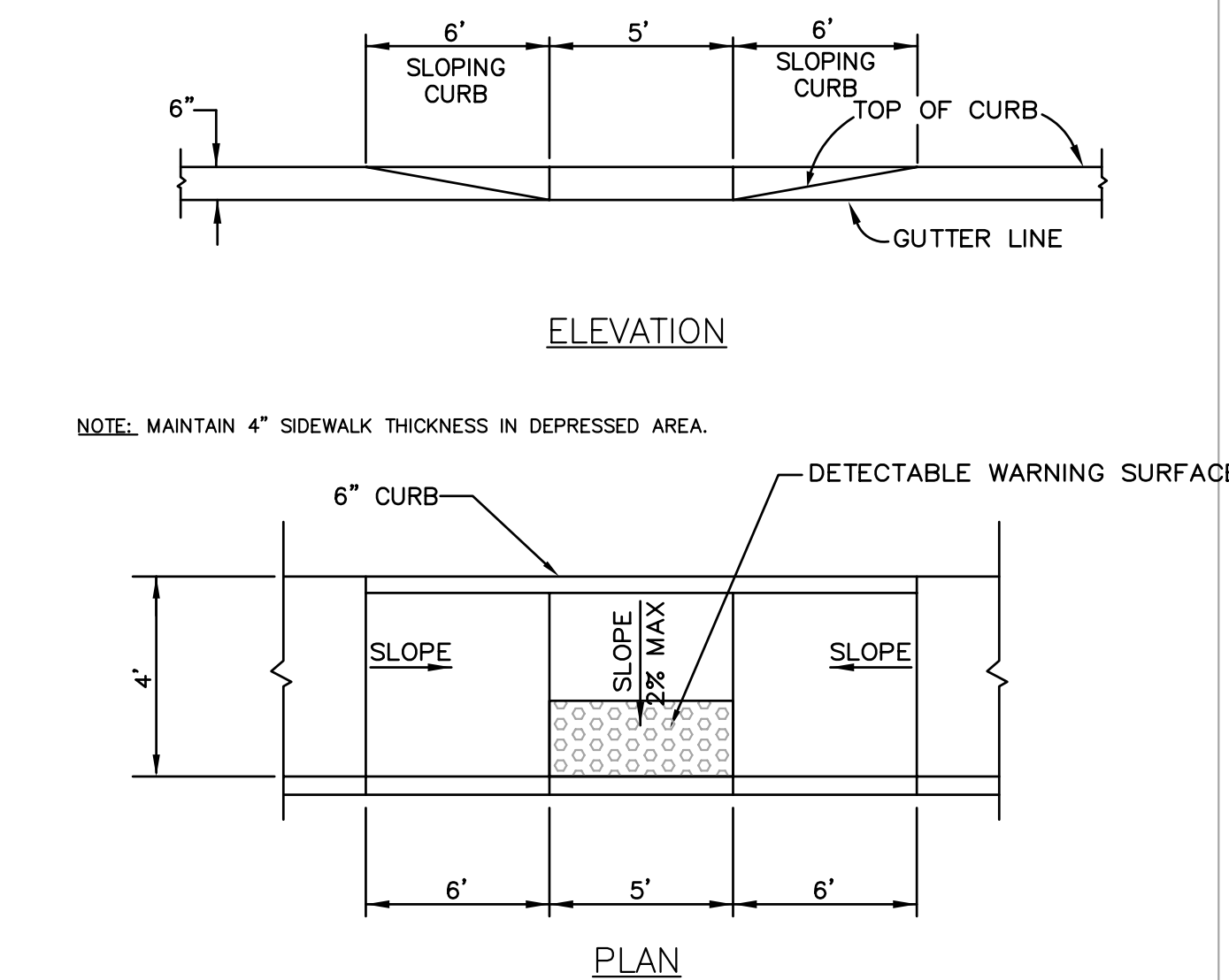
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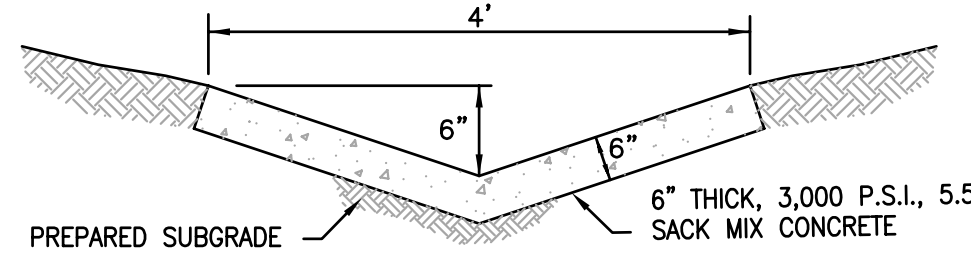
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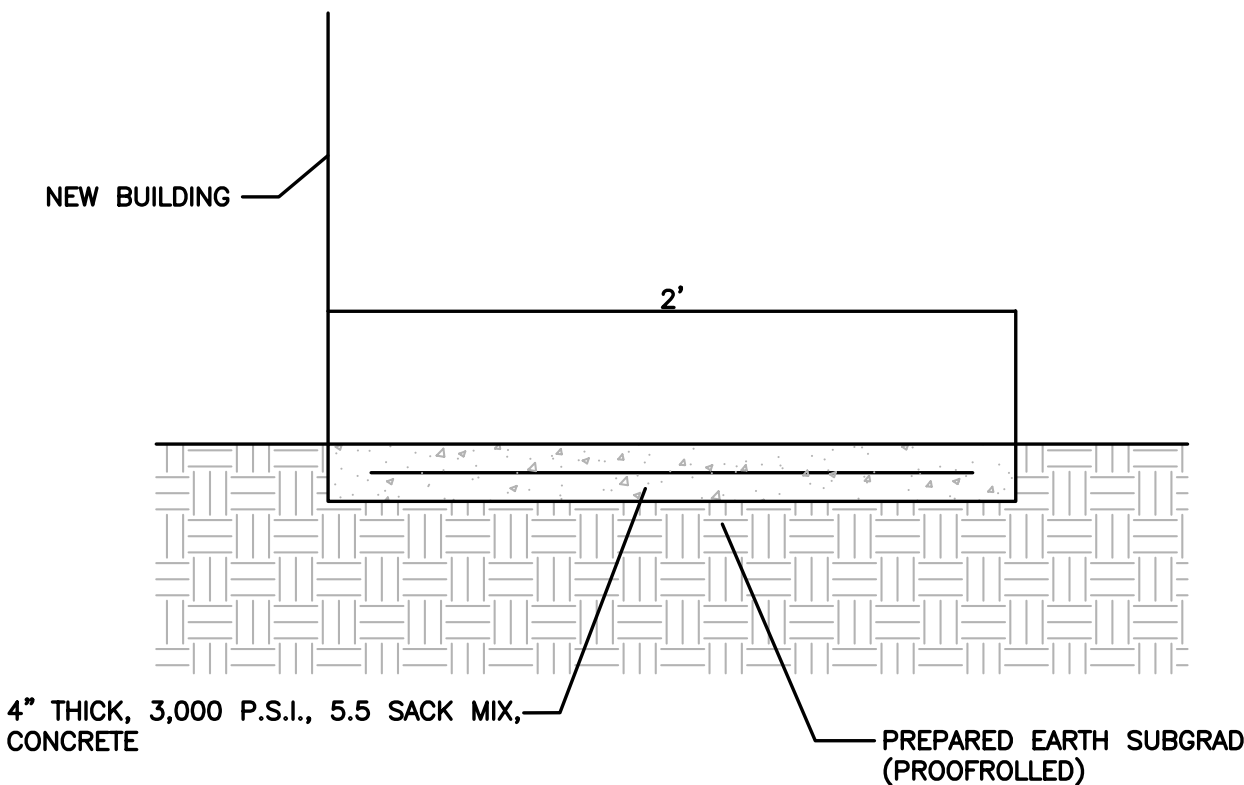
9 CONCRETE CURB & GUTTER DETAIL
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10 PARALLEL ACCESSIBLE RAMP DETAIL (PRIVATE)
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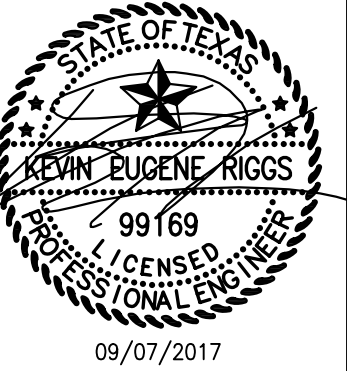
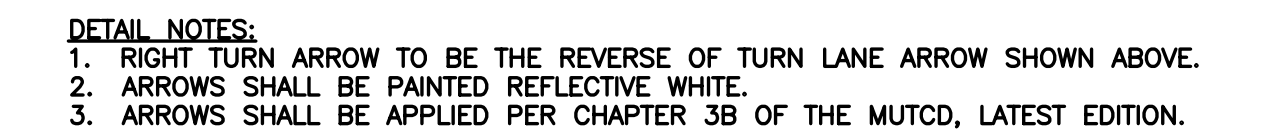
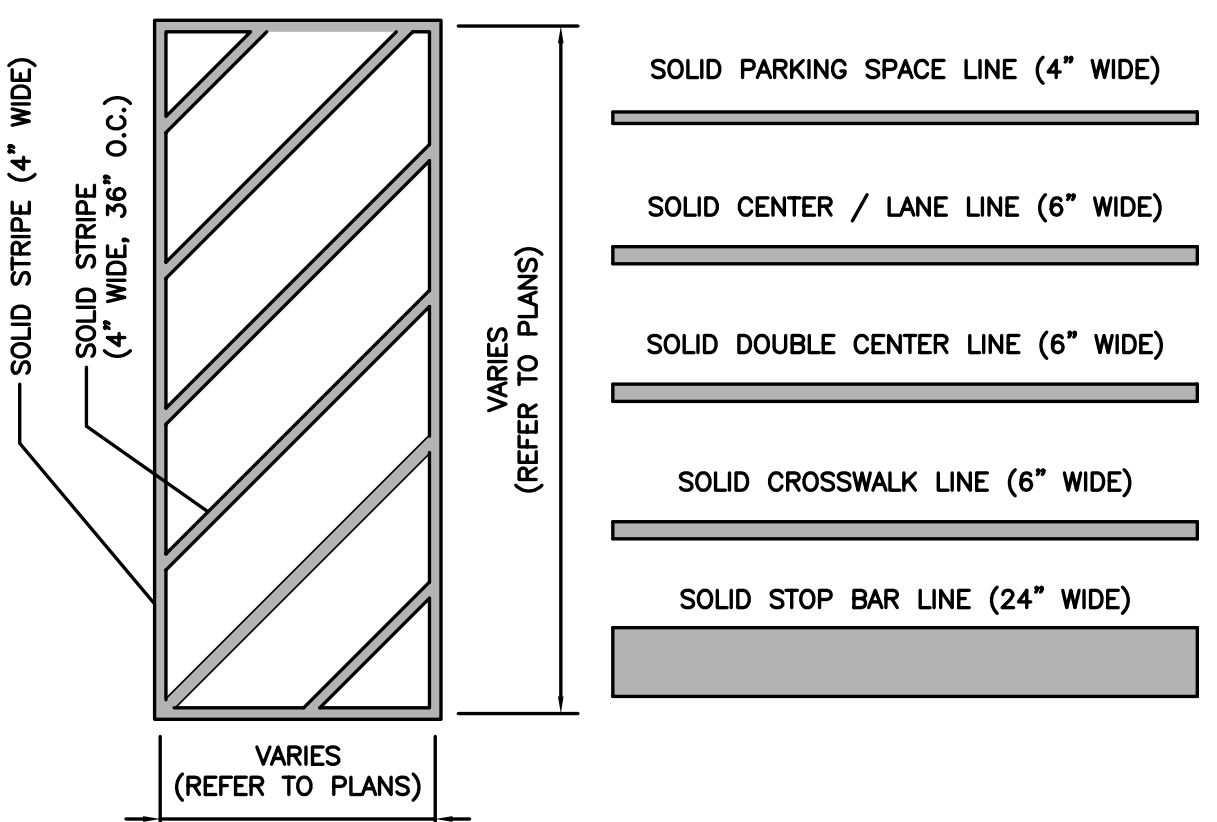
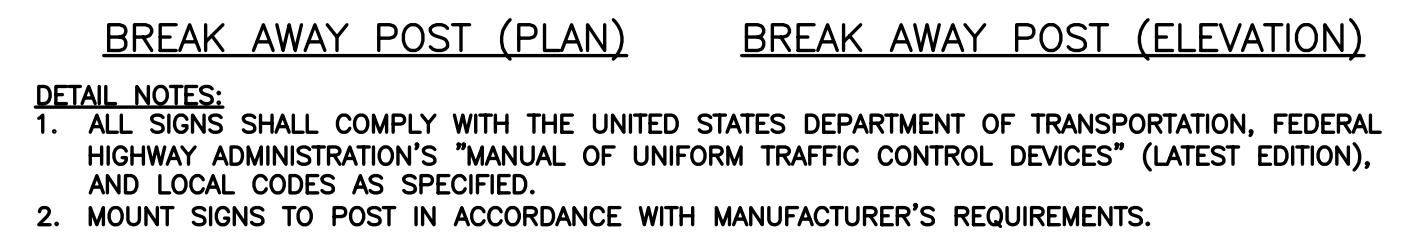
11 CONCRETE SWALE DETAIL
SCALE: N.T.S. REF. DWG. ???



12 CONCRETE MOW STRIP DETAIL
SCALE: N.T.S. REF. DWG. ???

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DATE: 06/01/2016	Job Number: 15-0157
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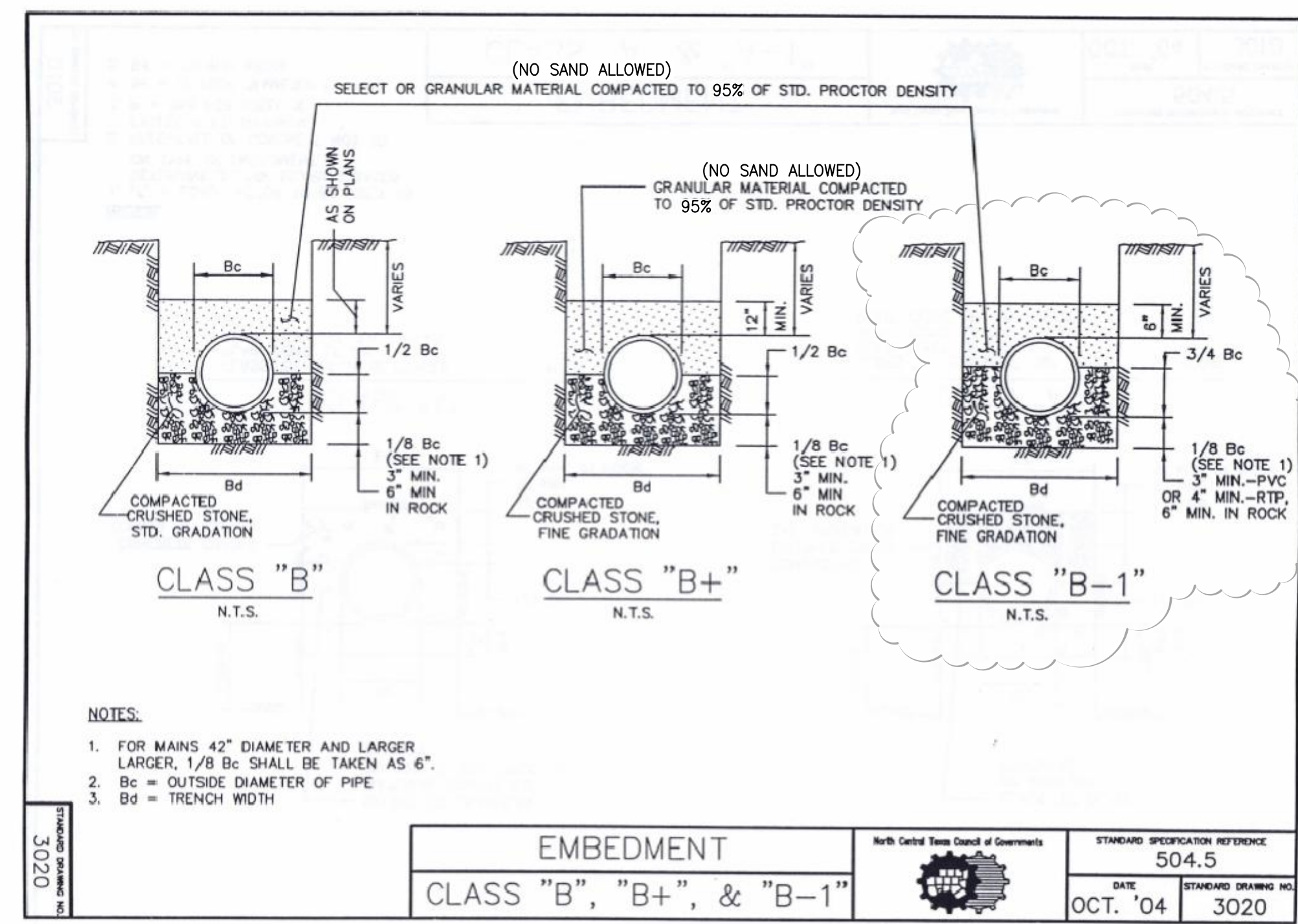
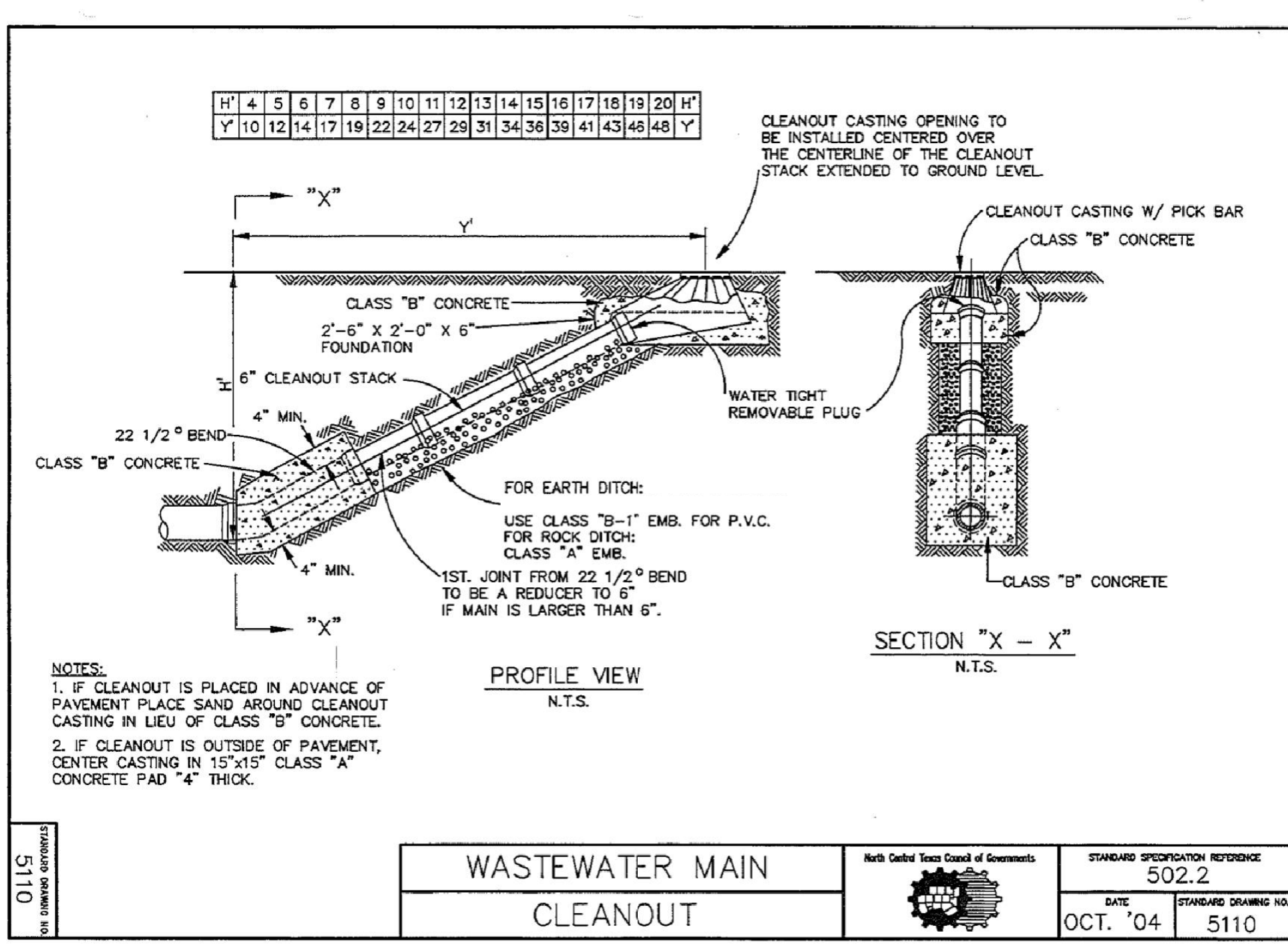
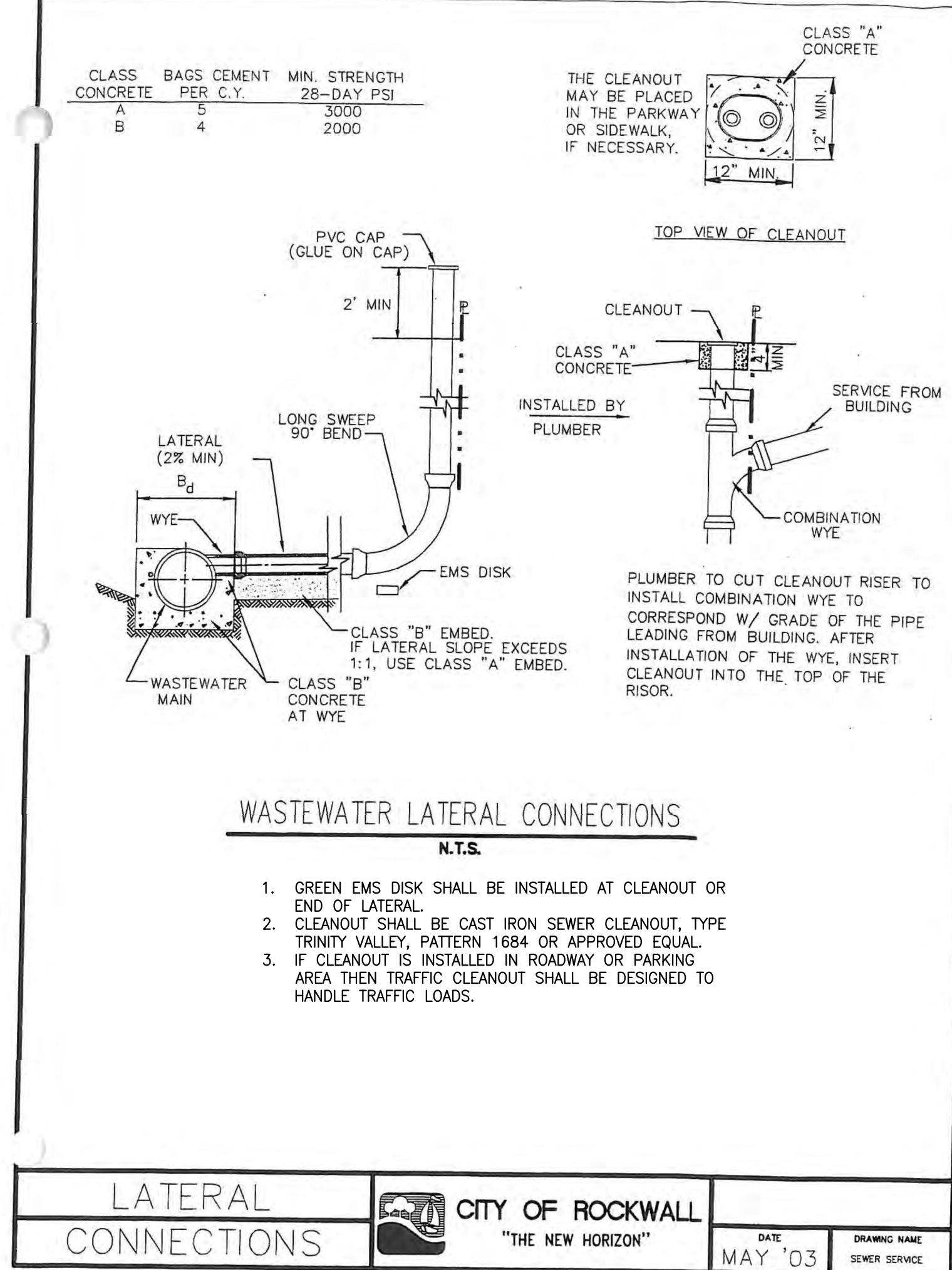
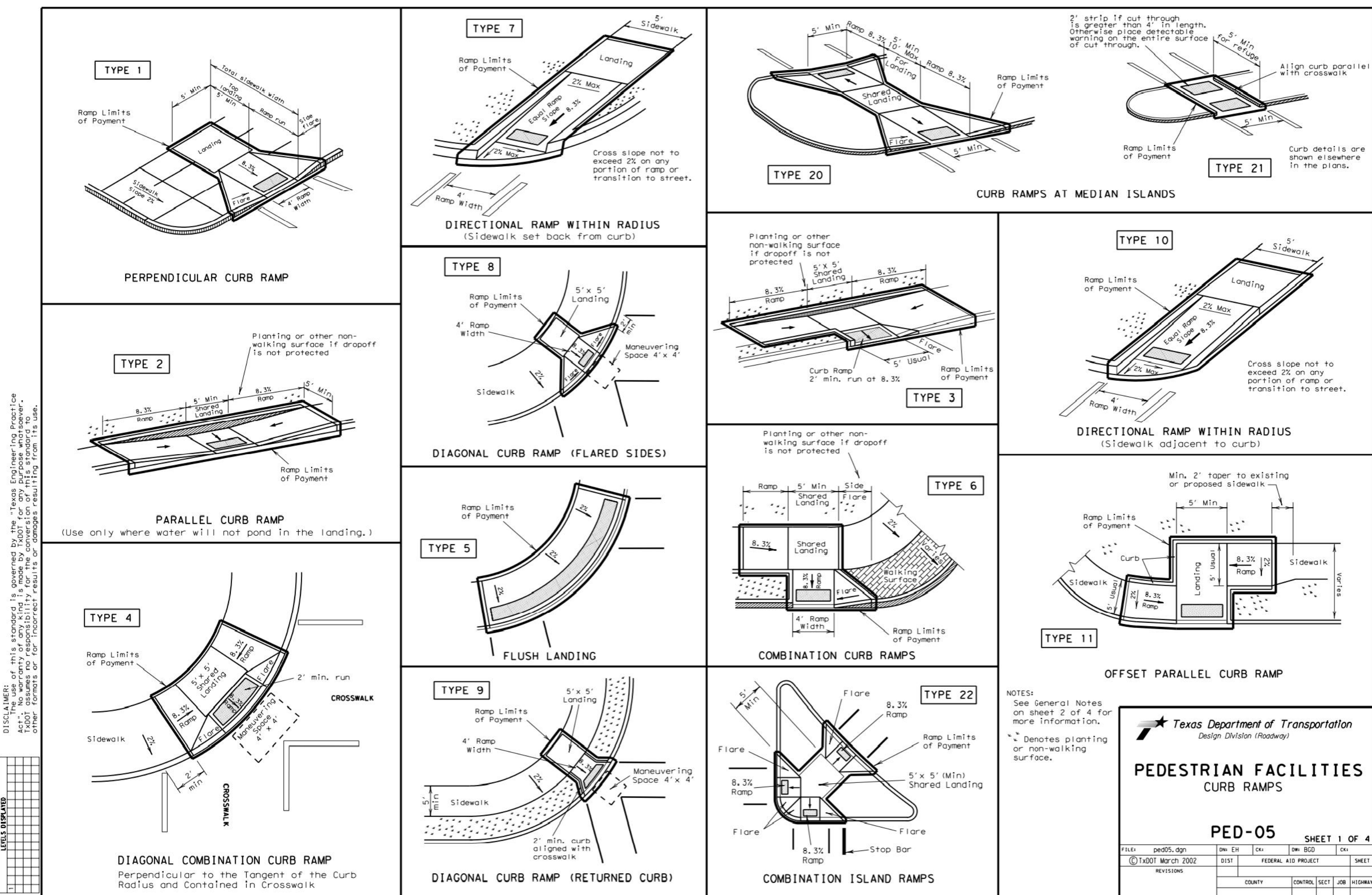
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DESIGN/CALC BY	CAW
DRAWN BY	CAW
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DRAWING SCALE	AS SHOWN
DATE	06/01/2016

Job Number
15-0157
Sheet Number

C9.1



AS-BUILT DRAWINGS
ELECTRIC COMMENTS
PAVED COMMENTS
PAVED COMMENTS
CITY COMMENTS
CITY COMMENTS
DATE

NO
REVISION DESCRIPTION

DEVELOPER/OWNER:
PANERA, LLC
3630 SOUTH CETER ROAD, SUITE 100
ST. LOUIS, MO 63127
(314) 984-2646

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STATE OF TEXAS
KEVIN EUGENE RIGGS
99169
LICENSED PROFESSIONAL ENGINEER
09/07/2017

Panera
BREAD

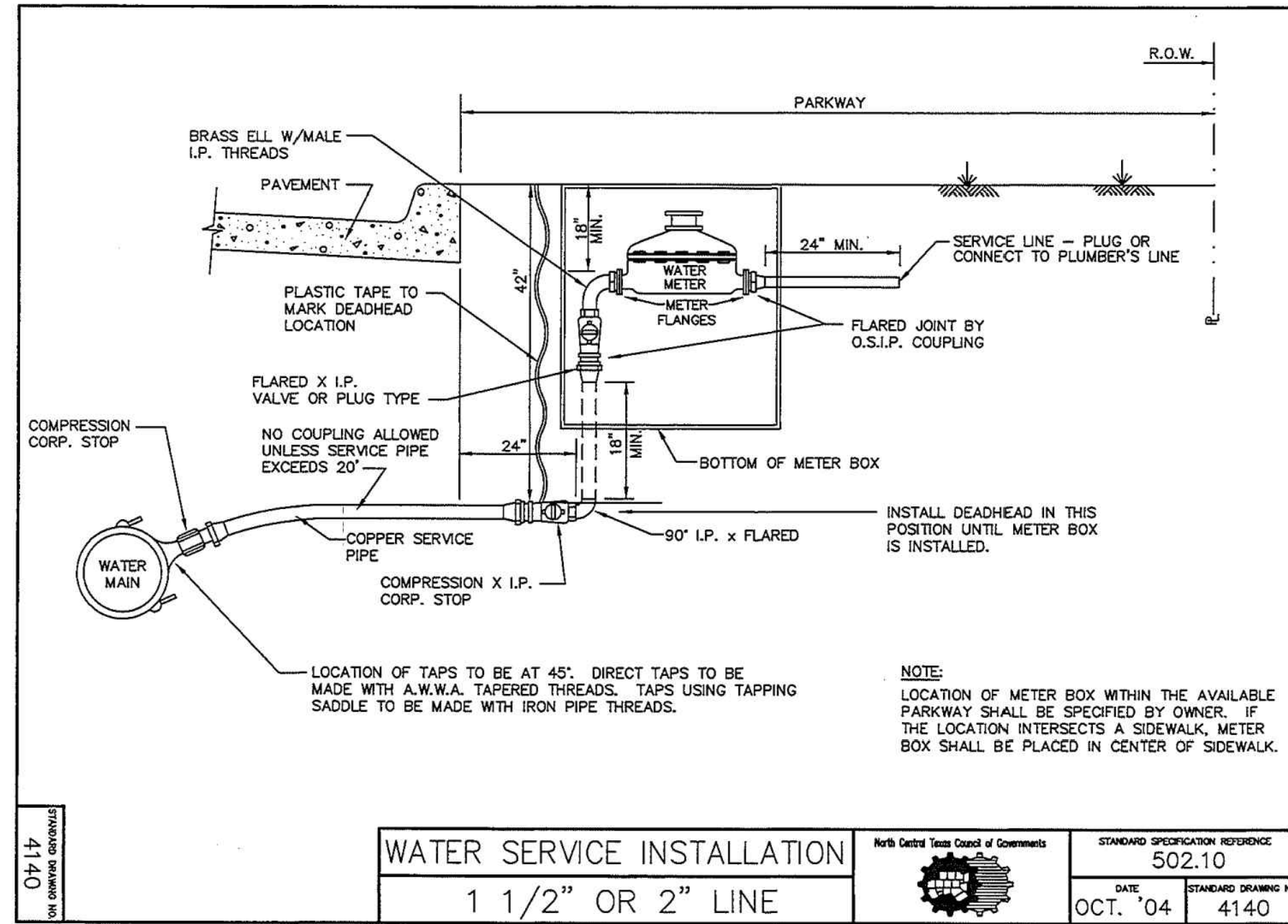
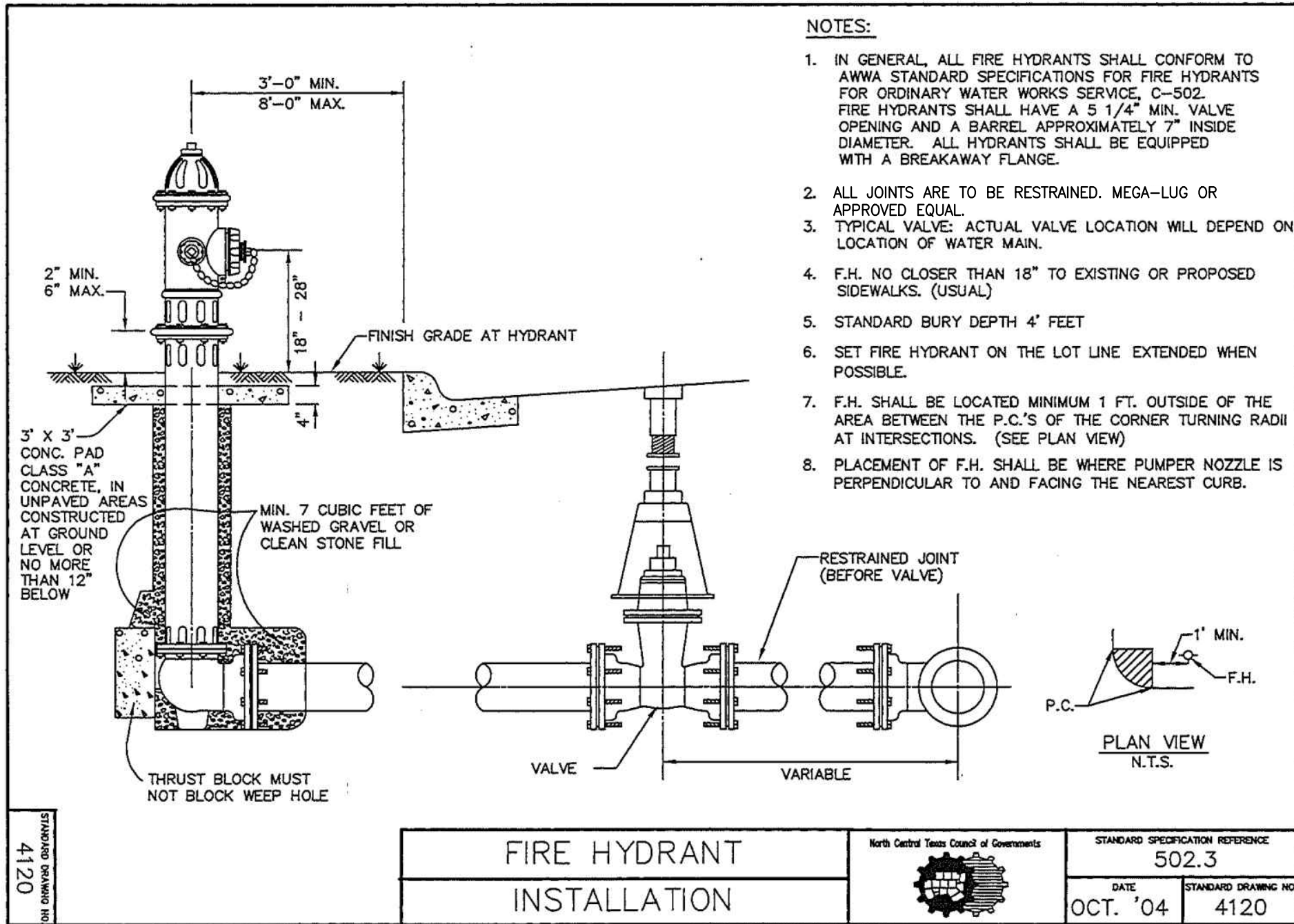
Panera Café #1982
2804 RIDGE ROAD
ROCKWALL, TX 75087

+ ST. LOUIS
11515 28th Street
St. Louis, MO 63103
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DRAWN BY: CAW
CHECKED BY: EWM
DRAWING SCALE: AS SHOWN
DATE: 06/01/2016
Job Number: 15-0157
Sheet Number: C9.2

"AS-BUILT DRAWINGS" 8/30/17 CITY CASE #SP2016-009

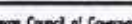


WATER SERVICE INSTALLATION NOTES:


1. Copper service line shall be 1 1/2" or 2" I.D. C.T.S. poly tube SDR-9.
2. Tapping saddle shall be Clow F-6350 or approved equal.
3. Corporation stop shall be 1 1/2" or 2" Mueller Corporation Stop No. H-15008 or Hays equal.
4. Angle stop (compression x 2 bolt meter flange).
5. Meter box shall be two feet, six-inches (2'-6") from back of curb or as directed by the City.
6. Meter box shall be eighteen (18) inch diameter by fourteen (14) inch deep corrugated galvanized slotted meter box with composite lid (see City lid detail).
7. Blue EMS disk shall be set at main line.
8. See City detail for Service Meter Tail Connection.

Δ = 30°												Δ = 45°												
EARTH						ROCK						EARTH						ROCK						
I.D. (N.)	G (F)	THRUST (TONS)	A (F)	B (F)	VOL. (C.Y.)	I.D. (N.)	G (F)	THRUST (TONS)	A (F)	B (F)	VOL. (C.Y.)	I.D. (N.)	G (F)	THRUST (TONS)	A (F)	B (F)	VOL. (C.Y.)	I.D. (N.)	G (F)	THRUST (TONS)	A (F)	B (F)	VOL. (C.Y.)	
4,6,8	1.0	2.6	2.0	1.5	0.2	1.0	1.5	0.1	4,6,8	1.5	3.9	2.0	2.0	0.2	1.5	1.0	0.1	10,12	1.5	5.9	2.5	2.5	0.3	2.0
10,12	1.5	5.9	2.5	2.5	0.3	2.0	1.5	0.2	10,12	2.2	8.7	3.5	2.5	0.5	2.0	2.5	0.3	16,18	2.2	13.2	3.5	4.0	0.8	2.5
16,18	2.2	13.2	3.5	4.0	0.8	2.5	3.0	0.4	16,18	3.2	19.5	4.5	4.5	1.2	3.0	3.5	0.6	20	2.4	16.3	4.5	4.0	1.0	3.0
20	2.4	16.3	4.5	4.0	1.0	3.0	3.0	0.5	20	3.6	24.1	5.5	4.5	1.5	3.5	3.5	0.7	24	2.9	23.4	6.0	4.0	1.4	3.5
24	2.9	23.4	6.0	4.0	1.4	3.5	3.5	0.7	24	4.3	34.6	8.0	4.5	2.3	4.5	4.0	1.1	30	3.6	27.5	6.5	5.0	1.9	3.5
30	3.6	27.5	6.5	5.0	1.9	3.5	4.0	0.9	30	5.4	40.6	8.5	5.0	3.2	5.5	4.0	1.6	36	4.4	39.5	7.0	6.0	3.4	4.5
36	4.4	39.5	7.0	6.0	3.4	4.5	4.5	1.6	36	6.5	58.5	10.0	6.0	5.3	6.5	4.5	2.6	42	5.1	53.8	8.0	7.0	5.1	5.5
42	5.1	53.8	8.0	7.0	5.1	5.5	5.0	2.5	42	7.5	79.6	11.5	7.0	8.1	8.0	5.0	4.2	48	5.8	70.3	9.0	8.0	7.4	6.0
48	5.8	70.3	9.0	8.0	7.4	6.0	6.0	3.7	48	8.6	104.0	13.0	8.0	11.9	9.0	6.0	6.3	54	6.5	89.0	10.0	9.0	10.3	7.0
54	6.5	89.0	10.0	9.0	10.3	7.0	6.5	5.3	54	9.7	131.5	15.0	9.0	17.1	10.5	6.5	8.9	60	7.3	110.0	11.0	10.0	13.9	7.5
60	7.3	110.0	11.0	10.0	13.9	7.5	7.5	7.3	60	10.7	162.4	16.5	10.0	23.1	11.0	7.5	12.0	66	8.0	132.9	12.5	11.0	16.9	8.5
66	8.0	132.9	12.5	11.0	16.9	8.5	8.0	9.6	66	11.8	196.5	18.0	11.0	30.1	12.0	8.5	16.2	72	8.7	158.2	13.5	12.0	24.0	9.0
72	8.7	158.2	13.5	12.0	24.0	9.0	9.0	12.3	72	12.9	233.9	19.5	12.0	38.6	14.0	8.5	20.7	78	9.4	185.6	14.5	13.0	30.0	10.0
78	9.4	185.6	14.5	13.0	30.0	10.0	9.5	15.6	78	13.9	274.5	21.5	13.0	49.8	14.5	9.5	25.9	84	10.1	215.3	15.5	14.0	37.1	10.5
84	10.1	215.3	15.5	14.0	37.1	10.5	10.5	19.5	84	15.0	318.4	23.0	14.0	61.2	15.5	10.5	32.6	90	10.9	247.1	16.5	15.0	45.0	11.5
90	10.9	247.1	16.5	15.0	45.0	11.5	11.0	23.9	90	16.1	365.5	24.5	15.0	74.5	17.5	10.5	39.6	96	11.6	281.2	18.0	16.0	55.5	12.5
96	11.6	281.2	18.0	16.0	55.5	12.5	11.5	28.9	96	17.1	415.6	26.0	16.0	89.5	18.5	11.5	48.5							

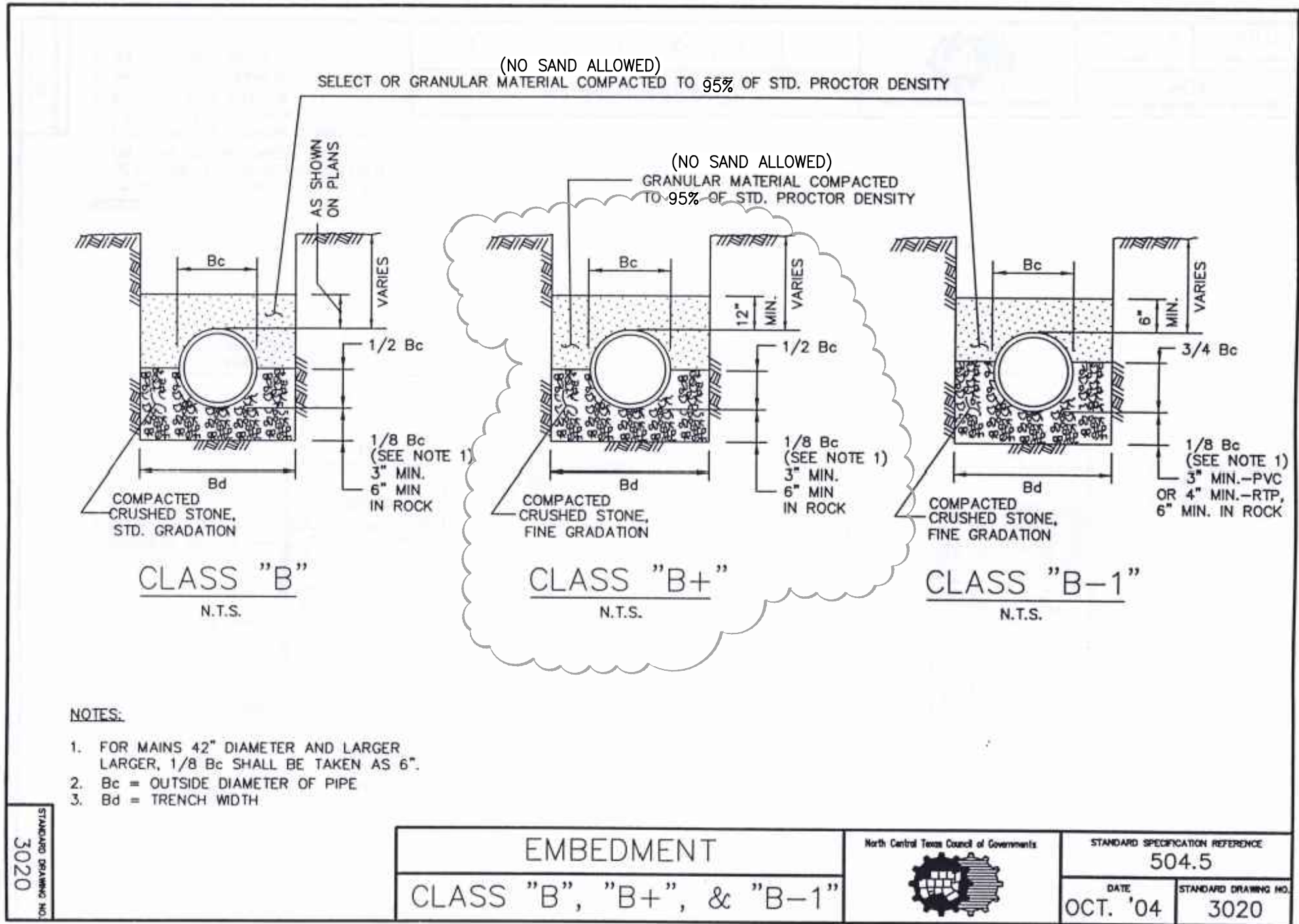
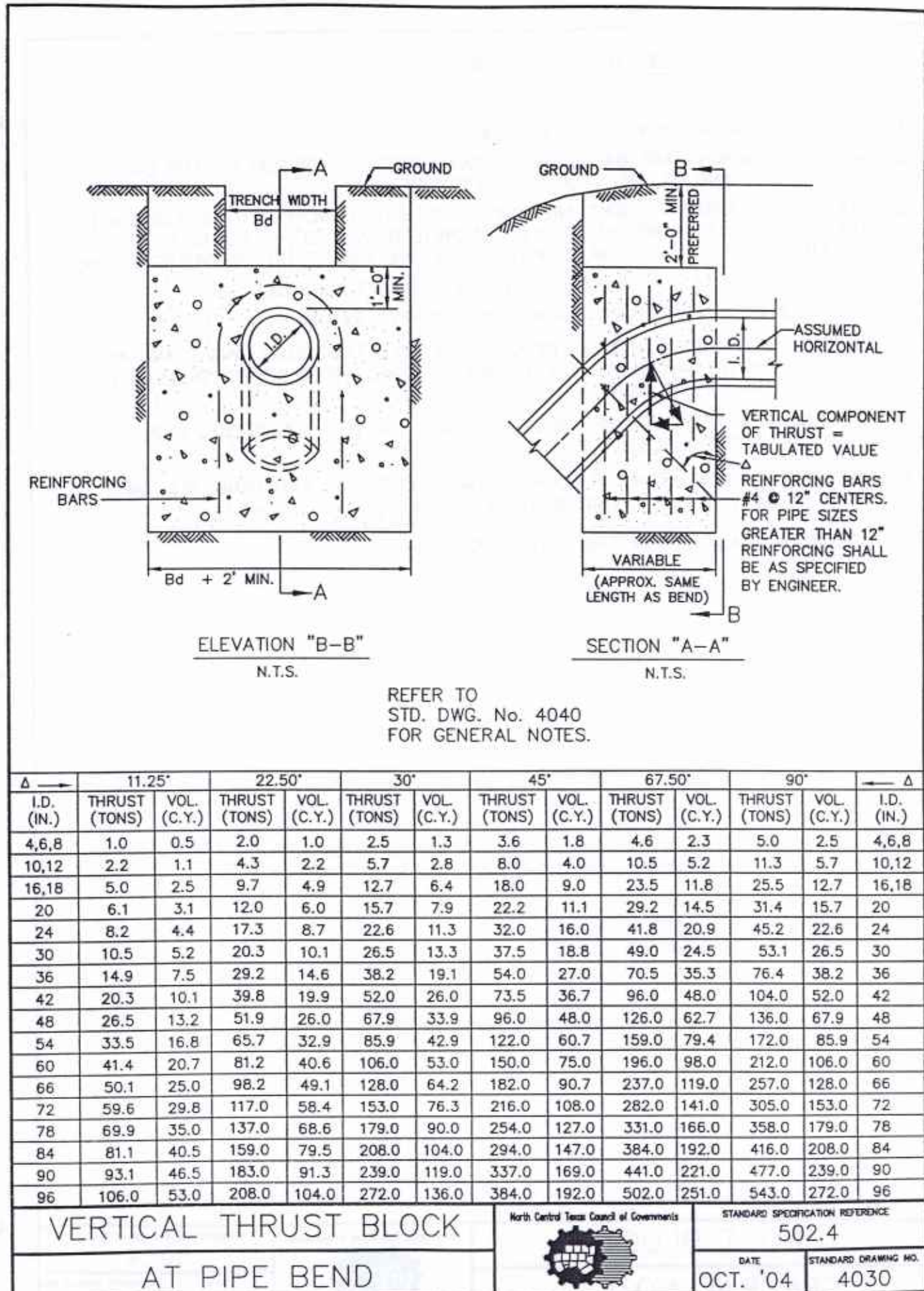
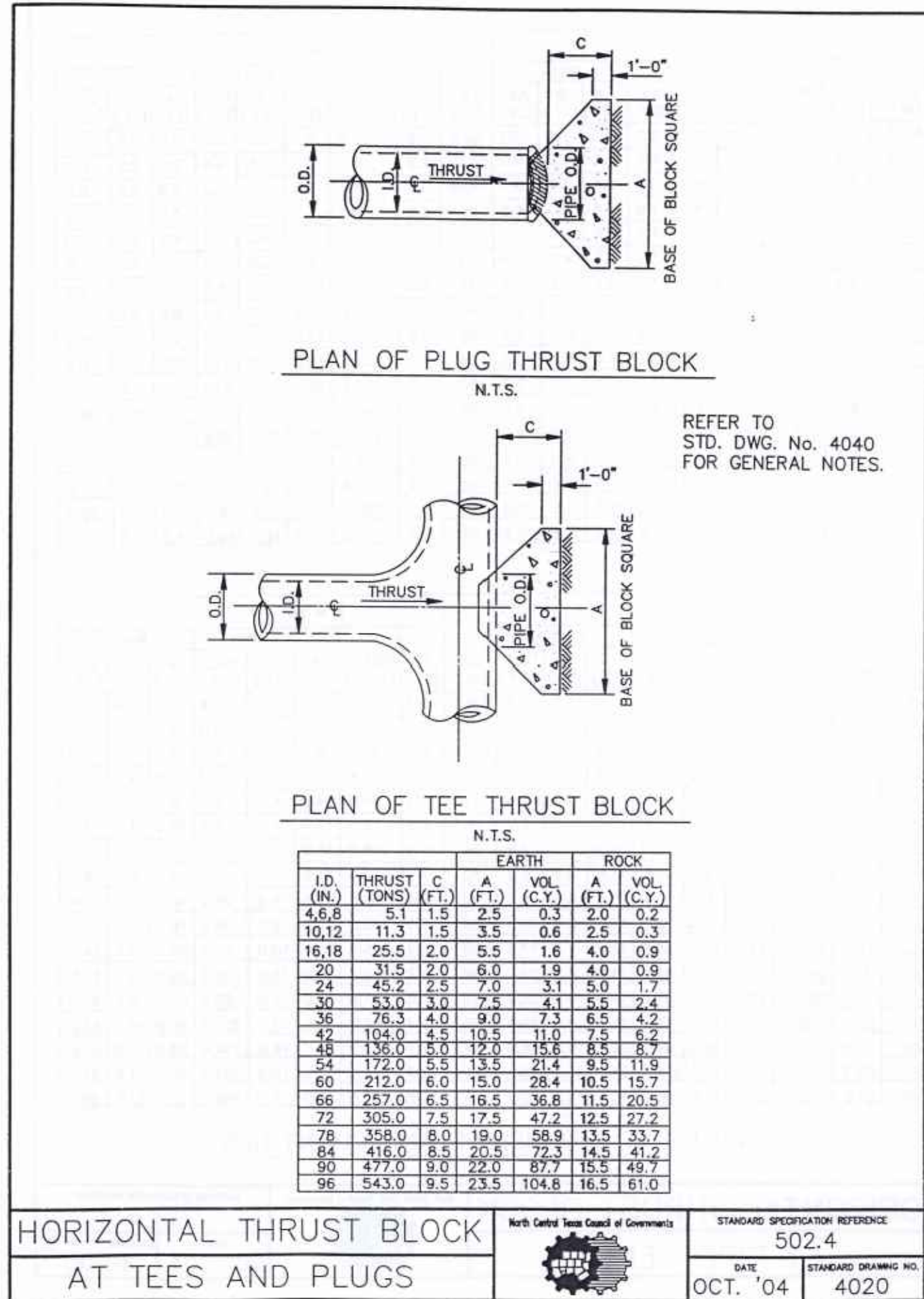
Δ = 67.50°												Δ = 90°												
EARTH						ROCK						EARTH						ROCK						
I.D. (N.)	G (F)	THRUST (TONS)	A (F)	B (F)	VOL. (C.Y.)	I.D. (N.)	G (F)	THRUST (TONS)	A (F)	B (F)	VOL. (C.Y.)	I.D. (N.)	G (F)	THRUST (TONS)	A (F)	B (F)	VOL. (C.Y.)	I.D. (N.)	G (F)	THRUST (TONS)	A (F)	B (F)	VOL. (C.Y.)	
4,6,8	2.1	5.6	3.0	2.0	0.3	2.0	1.5	0.2	4,6,8	2.7	7.1	5.0	1.5	0.4	2.0	2.0	0.2	10,12	3.1	12.6	5.5	2.5	0.8	3.0
10,12	3.1	12.6	5.5	2.5	0.8	3.0	2.5	0.4	10,12	4.0	16.0	6.5	2.5	1.0	3.5	2.5	0.5	16,18	4.7	28.3	7.5	4.0	1.9	5.0
16,18	4.7	28.3	7.5	4.0	1.9	5.0	3.0	0.9	16,18	6.0	36.0	9.0	4.0	2.4	4.5	4.0	1.0	20	5.2	34.9	9.0	4.0	2.3	5.5
20	5.2	34.9	9.0	4.0	2.3	5.5	3.5	1.2	20	6.6	44.4	10.5	4.5	3.1	6.0	4.0	1.5	24	6.2	50.3	11.5	4.5	3.5	6.5
24	6.2	50.3	11.5	4.5	3.5	6.5	4.0	1.6	24	7.9	64.0	14.5	4.5	5.0	8.0	4.5	2.1	30	7.8	58.9	12.0	5.0	4.8	7.5
30	7.8	58.9	12.0	5.0	4.8	7.5	4.0	2.2	30	9.9	75.0	15.0	5.0	6.7	10.0	4.0	3.3	36	9.4	84.9	14.5	6.0	8.2	9.5
36	9.4	84.9	14.5	6.0	8.2	9.5	4.5	3.8	36	11.9	106.0	18.0	6.0	11.4	12.0	4.5	5.3	42	10.9	115.5	17.0	7.0	12.8	11.0
42	10.9	115.5	17.0	7.0	12.8	11.0	5.5	6.3	42	13.9	147.0	21.0	7.0	17.8	14.0	5.5	8.7	48	12.5	150.9	19.0	8.0	14.4	13.0
48	12.5	150.9	19.0	8.0	14.4	13.0	6.0	9.2	48	15.9	192.0	24.0	8.0	26.2	16.0	6.0	12.4	54	14.0	191.0	21.5	9.0	26.0	15.5
54	14.0	191.0	21.5	9.0	26.0	15.5	6.5	12.9	54	17.9	243.0	27.0	9.0	36.9	18.0	7.0	18.0	60	15.6	235.8	24.0	10.0	35.6	16.5
60	15.6	235.8	24.0	10.0	35.6	16.5	7.5	17.6	60	19.9	298.0	30.0	10.0	50.3	20.0	7.5	24.0	66	17.1	285.3	26.0	11.0	46.0	18.0
66	17.1	285.3	26.0	11.0	46.0	18.0	8.0	23.0	66	21.8	362.8	33.0	11.0	66.2	22.0	8.5	32.5	72	18.7	339.5	28.5	12.0	57.8	19.0
72	18.7	339.5	28.5	12.0	57.8	19.0	9.0	28.4	72	23.8	431.8	36.0	12.0	85.6	24.0	9.0	41.0	78	20.2	398.5	31.0	13.0	75.7	21.0
78	20.2	398.5	31.0	13.0	75.7	21.0	9.5	37.4	78	25.7	506.7	39.0	13.0	108.2	26.0	10.0	53.8	84	21.8	462.1	33.5	14.0	94.7	22.0
84	21.8	462.1	33.5	14.0	94.7	22.0	10.5	46.5	84	27.7	587.7	42.0	14.0	134.4	28.0	10.5	64.8	90	23.3	530.5	35.5	15.0	114.4	24.5
90	23.3	530.5	35.5	15.0	114.4	24.5	11.0	58.2	90	29.0	674.6	45.0	15.0	164.9	30.0	11.5	81.2	96	24.9	603.6	38.0	16.0	138.9	25.5
96	24.9	603.6	38.0	16.0	138.9	25.5	12.0	70.0	96	31.6	767.5	48.0	16.0	199.0	32.0	12.0	95.5							

TABLES OF DIMENSIONS AND QUANTITIES												
HORIZONTAL THRUST BLOCK							STANDARD SPECIFICATION REFERENCE					
							502.4					
AT PIPE BEND							DATE		STANDARD DRAWING			
						OCT. '04		4010C				

TABLES OF DIMENSIONS AND QUANTITIES

HORIZONTAL THRUST BLOCK										North Central Team Council of Governments										STANDARD SPECIFICATION REFERENCE									
AT PIPE BEND																				502.4									
																				DATE									
																				OCT. '04 40100									

USER: Brian Johnson, TAB: C9.4
DATE: September 7, 2017
DRAWING: S:\JOBS\Jobs2015\15-0157\CADD\15-0157.dwg



UNDERGROUND FIRE LINE

Rockwall Fire Department
Fire Marshal's Office

These guidelines are to be followed when an underground water supply serving an automatic fire sprinkler system within the City of Rockwall is to be installed or modified. These guidelines are not to be interpreted as containing all data required for proper design, installation, or approval.

All fire sprinkler underground supply lines shall conform to the 2009 International Fire Code, as adopted and amended by the City of Rockwall and 2010 NFPA 24. These guidelines are not intended to replace, nor supersede any codes and/or ordinances adopted by the City of Rockwall, or determinations and positions of the Rockwall Fire Department.

General Requirements

- 1) All underground lines shall begin at the point of connection to the underground circulating public/private water main. A valve shall be provided at the point of connection such that the fire sprinkler underground service line can be isolated from the public/private water distribution system.
- 2) Underground piping shall have a 10-foot minimum separation from all other utilities and placed in a separate trench. Underground piping within 5-feet of the building may be combined with other utilities for entrance into the building.
- 3) All underground lines shall terminate at the top of the spigot no more than 5-feet inside the building and 1-foot above finished floor.
- 4) All ductile iron, retaining rods, and other non-corrosive resistant components shall be externally coated for corrosion or poly wrapped.
- 5) All underground piping shall be a minimum of Class 200 DR14 or greater.
- 6) Water supply shall be provided in conformance with the requirements of the respective standards; however, every fire protection system shall be designed with a minimum 5 psi safety factor at 20 psi residual on City mains.
- 7) The water supply test for the hydraulic design of fire protection systems shall be witnessed by the Rockwall Fire Department. The results of the flow test shall be within one year of the sprinkler plan submittal. The exact location of the static/residual hydrant and the flow hydrant shall be indicated on the design drawings. All fire protection plan submittals shall be accompanied by a water flow test report provided by the Rockwall Fire Department at the time of the water supply test.

Fire Department Connection (FDC)

- 8) FDC shall be a separate and independent service main from the underground water line
- 9) FDC's for automatic sprinkler systems and/or standpipe systems for new buildings shall be equipped with a 5-inch "Storz" angled down with a "short bend" or 30° downturn. (See Details)
- 10) All FDC's shall be equipped with a locking Knox FDC Cap/s. Knox products may be ordered online at www.knoxbox.com.
- 11) Check valves shall be accessible for 5-year inspection. If located underground, shall be installed within a meter can/valve box.
- 12) FDC shall be facing and visible from the fire lane.
- 13) FDC must be within 100-feet of a fire hydrant.
- 14) FDC installed in a "yard" should have 4-feet x 4-feet x 4-inch concrete pad placed at the base to provide additional stability.
- 15) The FDC shall be clear and unobstructed with a minimum of a 5-foot clear all-weather path from fire lane access.
- 16) The FDC shall be installed 18-48 inches above grade.

Rockwall Fire Department – Fire Marshal's Office
305 E Boydston, Rockwall, TX 75087

Underground Fire Line
Page 1 of 4



UNDERGROUND FIRE LINE

Rockwall Fire Department
Fire Marshal's Office

- 17) Fire hose threads shall be national standard hose thread.
- 18) Underground piping shall be designed and constructed as required for an underground fire main using NFPA 24, Standard for the Installation of Private Fire Service Mains and Their Appurtenances, as the installation standard.
- 19) The FDC shall discharge into the system on the discharge side of the pump if a pump is present.
- 20) Where the FDC is subject to vehicular damage, the connection shall be protected. Protection components shall not be closer than 36-inches to the connection and shall not interfere with the operation of the connection.
- 21) The pipe size and arrangement of the FDC should conform to the latest edition of NFPA 13, Standard for the Installation of Sprinkler Systems.

Inspection Requirements

- 22) Visual: All underground piping, joints, and thrust blocks must be uncovered and exposed, with labeling of the pipe legible from grade. All ductile iron, retaining rods, and other non-plastic components shall be externally coated for corrosion and poly wrapped.
- 23) Hydrostatic Test: Visual inspection must be approved prior to hydrostatic test. The test will be at 200 psi or at 50-psi pressure in excess of the maximum static pressure when the maximum static pressure exceeds 150 psi, for a minimum of two hours. Testing to be from the gate valve to the top of the spigot, no pressure drop or gain allowed.
- 24) Flush: Upon completion of the underground hydrostatic test, the underground piping will be flushed, witnessed by the Fire Department. All piping used to flush must be properly secured or restrained. The flushing must be completed prior to stacking the riser to the overhead piping.
- 25) Fire Sprinkler Underground Final: Final Fire Department sign-off of completion of all inspections and the receipt of all State require paperwork.

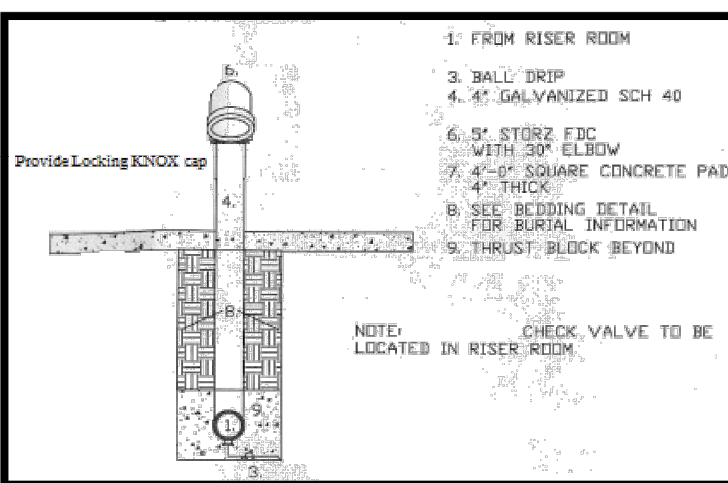


UNDERGROUND FIRE LINE

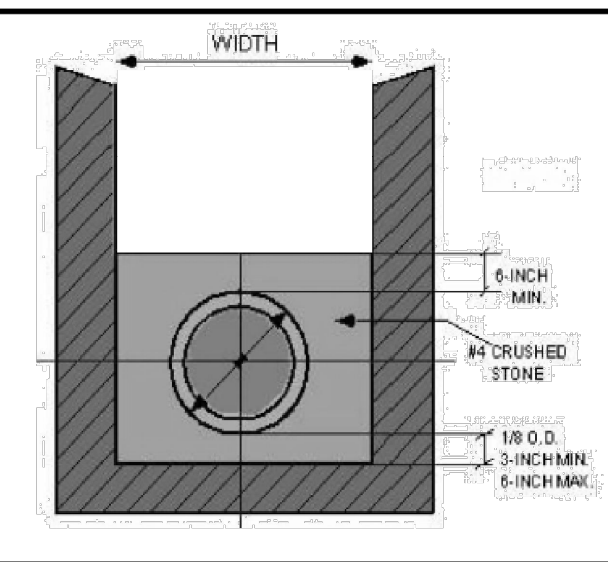
Rockwall Fire Department
Fire Marshal's Office

Details

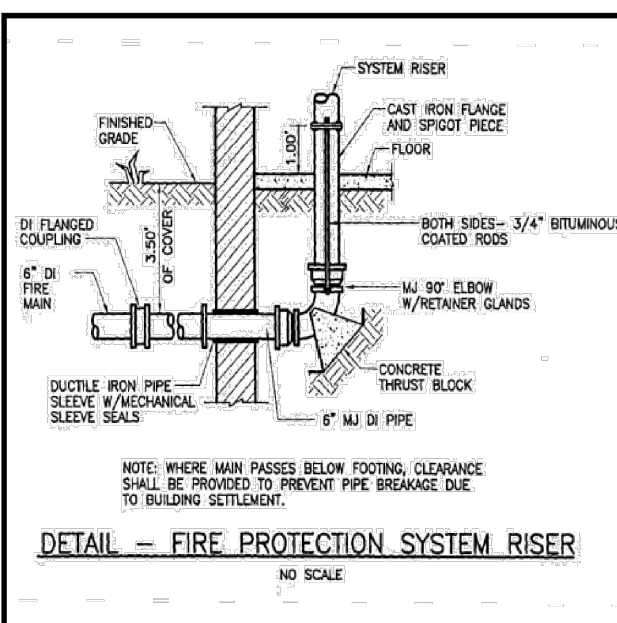
Remote Fire Department Connection (FDC) Example



Embedment Detail



Spigot Detail



Thrust Block Detail

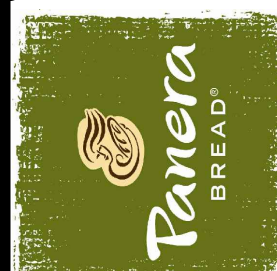
TYPE OF FITTING	THRUST BLOCK BEARING AREA (SQ. FT.)			TYPE OF FITTING	THRUST BLOCK BEARING AREA (SQ. FT.)		
	4"	6"	8"		4"	6"	8"
90° BEND	3	2	2	90° BEND	3	2	2
45° BEND	4	3	3	45° BEND	4	3	3
TEE	5	4	4	TEE	5	4	4
CROSS	6	5	5	CROSS	6	5	5
PLUG	7	6	6	PLUG	7	6	6
FLANGE	8	7	7	FLANGE	8	7	7
WELD	9	8	8	WELD	9	8	8
END	10	9	9	END	10	9	9

Rockwall Fire Department – Fire Marshal's Office
305 E Boydston, Rockwall, TX 75087

Underground Fire Line
Page 4 of 4

DATE	NO	REVISION DESCRIPTION
08/30/2017	6	AS-BUILT DRAWINGS
07/12/2017	5	ELECTRIC COMMENTS
07/12/2016	4	CITY COMMENTS
10/17/2016	3	CITY COMMENTS
09/02/2016	2	CITY COMMENTS
09/02/2016	1	CITY COMMENTS

DEVELOPER/OWNER:
PANERA LLC
3630 SOUTH Geyer Road, Suite 100
ST. LOUIS, MO 63127
(314) 984-2646



Panera Café #1982
2804 RIDGE ROAD
ROCKWALL, TX 75087

WATER DETAILS



DESIGN/CALC BY	CAW
DRAWN BY	CAW
CHECKED BY	EWM
DRAWING SCALE	AS SHOWN
DATE	06/01/2016
Job Number	15-0157
Sheet Number	C9.4