



SITE TBM #1  
SET BM-DESC.-4 MAG IN ASPHALT  
N: 13797046.0947  
E: 2237758.3049  
ELEV: 649.63

### LEGAL DESCRIPTION

PLEASE NOTE: NBU REQUIRES GPS POINTS FOR CERTAIN ELECTRIC, WATER AND WASTEWATER ATTRIBUTES, SOME OF WHICH MUST BE TAKEN PRIOR TO BACKFILL DURING CONSTRUCTION.

GPS POINTS SHALL BE REQUIRED FROM THE DEVELOPER'S CONTRACTOR OR ENGINEER. A MINIMUM OF THREE COORDINATE POINTS FOR GEOREFERENCING SHALL BE REQUIRED. THE WATER AND WASTEWATER GPS POINTS SHALL BE TO SURVEY GRADE. THE ELECTRIC GPS POINTS SHALL BE TO MAP GRADE.

WATER

VERTICAL BENDS AND EDGE OF STEEL CASING (IF APPLICABLE) PRIOR TO BACKFILL  
HORIZONTAL BENDS PRIOR TO BACKFILL  
TEES PRIOR TO BACKFILL  
FITTINGS (REDUCERS AND COUPLINGS) PRIOR TO BACKFILL  
FIRE HYDRANTS (TOP OF FLANGE)  
VALVES  
METERS (TOP CENTER OF BOX)  
BLOW OFF ASSEMBLY  
CORNER SLAB OF WATER TANK & GATE VALVE ON WATER TANK

WASTEWATER

MANHOLES  
CLEANOUTS  
CORNER SLAB OF LIFT STATION

ELECTRIC

POLES  
TRANSFORMERS, BOTH ABOVE AND UNDERGROUND (FRONT LOCK)  
PULL BOXES  
STREET LIGHTS

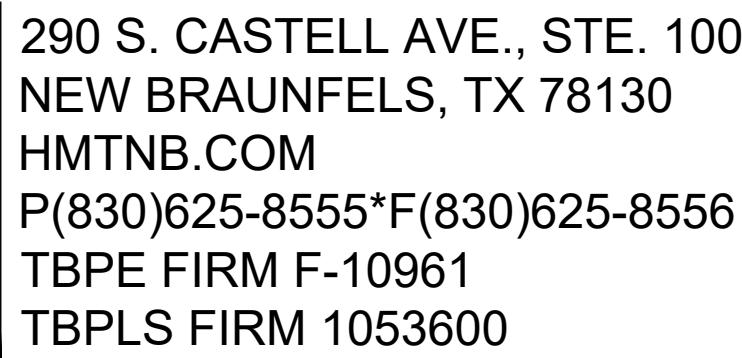
COORDINATE GPS REQUIREMENTS WITH NBU INSPECTOR

1. IF CONSTRUCTION HAS NOT COMMENCED WITHIN ONE-YEAR OF CITY APPROVAL FOR CONSTRUCTION INSPECTION, THAT APPROVAL IS NO LONGER VALID. THE MOST CURRENT EDITIONS OF THE CITY OF SAN ANTONIO STANDARD SPECIFICATIONS AND THE TEXAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND BRIDGES SHALL BE FOLLOWED FOR ALL CONSTRUCTION EXCEPT AS AMENDED BY THE CITY OF NEW BRAUNFELS STANDARD DETAILS.
2. ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER OF RECORD. IN ACCEPTING THESE PLANS, THE CITY OF NEW BRAUNFELS MUST RELY UPON THE ADEQUACY OF THE WORK OF THE ENGINEER IN RECORD.
3. PRIOR TO THE START OF SUBSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY OF NEW BRAUNFELS TO SET A PRE-CONSTRUCTION MEETING. A 48-HOUR ADVANCED NOTIFICATION IS REQUIRED FOR ALL INSPECTION AND MEETING REQUESTS.
  - 4.1 ALL INSPECTIONS ARE TO BE CALLED IN AT 830-221-4068 OR,
  - 4.2 FAXED IN AT 830-608-2117 OR,
  - 4.3 E-MAILED AT INSPECTIONS@NBTEXAS.ORG.
5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT ALL TEMPORARY AND PERMANENT TRAFFIC CONTROL DEVICES ARE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE PLANS AND LATEST EDITION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. IF THE NEED ARISES, ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES MAY BE ORDERED BY THE ENGINEERING REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
6. DRAINAGE IMPROVEMENTS SHALL BE INSTALLED TO MITIGATE OFFSITE IMPACT OF CONSTRUCTION MUST BE COMPLETED AND IN PLACE PRIOR TO ADDING IMPERVIOUS COVER TO THE SITE.
  7. THIS DEVELOPMENT IS A TYPE 3 DEVELOPMENT.
8. NO PORTION OF THE SUBDIVISION IS LOCATED WITHIN ANY SPECIAL FLOOD HAZARD AREA (100 YR. FLOOD), AS DEFINED BY THE COMAL COUNTY, TEXAS, FIRM PANEL NUMBER 480901025F EFFECTIVE DATE SEPTEMBER 2, 2009, AS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY. THIS PROJECT IS NOT LOCATED WITHIN THE EDWARDS AQUIFER RECHARGE ZONE.

# JULY 2020

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER OF RECORD. IN ACCEPTING THESE PLANS, THE CITY OF NEW BRAUNFELS MUST RELY UPON THE ADEQUACY OF THE WORK OF THE ENGINEER OF RECORD.

PREPARED BY:



SHEET LIST TABLE	
NUMBER	SHEET TITLE
C0.0	COVER SHEET
C0.1	CONSTRUCTION NOTES
C1.0	PLAT (1 OF 2)
C1.1	PLAT (2 OF 2)
C2.0	EXISTING CONDITIONS DRAINAGE AREA MAP
C2.1	ULTIMATE CONDITIONS DRAINAGE AREA MAP
C3.0	EROSION CONTROL PLAN
C3.1	EROSION CONTROL DETAILS
C4.0	SITE PLAN (1 OF 4)
C4.1	SITE PLAN (2 OF 4)
C4.2	SITE PLAN (3 OF 4)
C4.3	SITE PLAN (4 OF 4)
C4.4	SITE DETAILS
C4.5	FIRE PROTECTION PLAN
C5.0	SITE GRADING OVERALL
C5.1	DETAILED GRADING (1 OF 4)
C5.2	DETAILED GRADING (2 OF 4)
C5.3	DETAILED GRADING (3 OF 4)
C5.4	DETAILED GRADING (4 OF 4)
C6.0	OVERALL WATER PLAN
C6.1	WATER DETAILS
C7.0	OVERALL WASTEWATER PLAN
C7.1	WW LN A PLAN & PROFILE
C7.2	WASTEWATER DETAILS
C8.0	OVERALL STORM PLAN
C8.1	CHANNEL B PLAN & PROFILE
C8.2	SD LN A1 PLAN & PROFILE
C8.3	SD LN A3 PLAN & PROFILE (1 OF 2)
C8.4	SD LN A3 PLAN & PROFILE (2 OF 2)
C8.5	BASIN A DETAILS
C8.6	STORM DETAILS
C9.0	UTILITY PLAN

BY THE ACT OF SUBMITTING A BID FOR THIS PROPOSED CONTRACT, THE BIDDER WARRANTS THAT THE BIDDER, AND ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS HE INTENDS TO USE HAVE CAREFULLY AND THOROUGHLY REVIEWED THE DRAWINGS, SPECIFICATIONS AND ALL OTHER CONTRACT DOCUMENTS AND HAVE FOUND THEM COMPLETE AND FREE FROM ANY AMBIGUITIES AND SUFFICIENT FOR THE PURPOSE INTENDED. THE BIDDER FURTHER WARRANTS THAT TO THE BEST OF HIS OR HIS SUBCONTRACTORS' AND MATERIAL SUPPLIERS' KNOWLEDGE, ALL MATERIALS USED, ARE EQUAL TO OR BETTER THAN PRODUCTS SPECIFIED OR INDICATED HEREIN.

THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS HAS BEEN BASED UPON RECORD INFORMATION ONLY AND MAY NOT MATCH LOCATIONS AND/OR DEPTHS AS CONSTRUCTED. THE CONTRACTOR SHALL CONTACT EACH OF THE INDIVIDUAL UTILITIES FOR ASSISTANCE IN DETERMINING EXISTING UTILITY LOCATIONS AND DEPTHS PRIOR TO BEGINNING ANY CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF ALL UTILITY CROSSINGS PRIOR TO BEGINNING ANY CONSTRUCTION.



UTILITIES	GENERAL NBU NOTES	REVISED 3/31/11	CITY OF NEW BRAUNFELS CONSTRUCTION NOTES	REVISED 03/2020	CITY OF NEW BRAUNFELS GENERAL NOTES
LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN HERE ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION, INCLUDING THOSE NOT SHOWN ON THE DRAWINGS.					
ANY EXISTING UTILITIES, ON OR OFF THE SITE, THAT ARE DAMAGED OR UNDERCUT BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER AND APPROVED BY THE RESPECTIVE UTILITY COMPANY AT THE CONTRACTOR'S EXPENSE.					
CONTRACTOR SHALL NOTIFY APPROPRIATE UTILITY COMPANIES AND GOVERNMENTAL AGENCIES AT LEAST 48 HOURS PRIOR TO CONSTRUCTION AT:					
THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES 48 HOURS PRIOR TO EXCAVATION					
NEW BRAUNFELS UTILITIES (WATER AND SEWER)	(830) 608-8971				
NEW BRAUNFELS UTILITIES (ELECTRIC)	(830) 608-8951				
SPECTRUM CABLE	(830) 625-3408				
CENTERPOINT ENERGY (GAS)	(830) 643-6434				
AT&T	(830) 303-1333				
TEXAS ONE CALL SYSTEM	(800) 245-4545				
ENERGY TRANSFER (PETROLEUM PIPELINE)	(210) 262-2486				
CONTRACTOR SHALL REFERENCE NEW BRAUNFELS UTILITIES PLANS FOR FINAL ELECTRICAL LINE DESIGNS AND LAYOUT.					
WASTEWATER NOTES	REVISED 3/31/11				
1. THE CONTRACTOR SHALL MAINTAIN SERVICE TO EXISTING WASTEWATER SYSTEM AT ALL TIMES DURING CONSTRUCTION.					
2. A MINIMUM OF 8" WASTEWATER PIPE AND FITTING (P.V.C. SDR-26, ASTM, D-3034, D-3212, F-477) ARE REQUIRED ON NEW INSTALLATION.					
3. ALL RESIDENTIAL WASTEWATER SERVICE LATERALS SHALL BE EXTENDED TO THE PROPERTY LINE AND A CLEANOUT SHALL BE INSTALLED AT THE PROPERTY LINE. SERVICES TO LOTS WILL EXTEND FOUR (4) FEET PAST THE UNDERGROUND ELECTRIC CONDUIT IF ELECTRIC IS INSTALLED IN THE FRONT EASEMENT.					
4. PIPE BEDDING OF WASTEWATER LINES SHALL BE MANUFACTURED SAND OR PEA GRAVEL AS PER NBU SPECIFICATIONS.					
5. SECONDARY BACKFILL OF WASTEWATER LINES SHALL GENERALLY CONSIST OF MATERIALS REMOVED FROM THE TRENCH AND SHALL BE FREE FROM BRUSH, DEBRIS AND TRASH, NO ROCKS OR STONES HAVING ANY DIMENSION LARGER THAN 6 INCHES AT THE LARGEST DIMENSION.					
6. ALL WASTEWATER PIPES SHALL HAVE COMPRESSION OR MECHANICAL JOINTS AS PER 30 TAC §217.53 (C) (2).					
7. FOR WASTEWATER LINES LESS THAN 24" IN DIAMETER, SELECT INITIAL BACKFILL MATERIAL SHALL BE PLACED IN TWO LIFTS.					
a. THE FIRST LIFT SHALL BE SPREAD UNIFORMY AND SIMULTANEOUSLY ON EACH SIDE AND UNDER THE SHOULDERS OF THE PIPE TO THE MID POINT OR SPRING LINE OF THE PIPE.					
b. THE SECOND LIFT SHALL BE PLACED TO A DEPTH AS SHOWN ON THE PIPE BACKFILL DETAIL. FOR PIPES LARGER THAN 24", 12" MAXIMUM LIFTS SHALL BE USED.					
8. ALL MANHOLES MUST BE WATER TIGHT, EITHER MONOLITHIC, CAST-IN-PLACE CONCRETE STRUCTURES OR PREFABRICATED MANHOLES SPECIFICALLY APPROVED BY NBU. THE MANHOLES SHALL HAVE WATER-TIGHT RINGS AND COVERS. WHEREVER THEY ARE WITHIN THE 100 YEAR FLOODPLAIN, THE MANHOLE COVERS SHALL BE BOLTED. EVERY THIRD MANHOLE IN SEQUENCE SHALL HAVE AN ALTERNATE MEANS OF VENTING, 30 TAC §213.5 (C)(3)(A) AND 30 TAC §217.75 (O).					
9. ALL MANHOLES SHALL BE CONSTRUCTED SO THAT THE TOP OF THE RING IS TWO INCHES (2") ABOVE SURROUNDING GROUND EXCEPT WHEN LOCATED IN PAVED AREA. IN PAVED AREAS, THE MANHOLE RING SHALL BE FLUSH WITH PAVEMENT.					
10. ALL NEW MANHOLES, UNLESS APPROVED BY NBU ENGINEERING, ARE TO HAVE COVERS WITH 32" OPENINGS.					
11. WASTEWATER PIPE CONNECTIONS TO PRE-CAST MANHOLES SHALL BE COMPRESSION JOINTS OR MECHANICAL "BOOT" TYPE JOINT AS APPROVED BY NBU.					
12. WASTEWATER LINES SHALL BE TESTED FROM MANHOLE TO MANHOLE.					
13. IN AREAS WHERE A NEW WASTEWATER MANHOLE IS TO BE CONSTRUCTED OVER AN EXISTING WASTEWATER SYSTEM, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO TEST THE EXISTING MANHOLES BEFORE CONSTRUCTION. AFTER THE PROPOSED MANHOLE(S) HAS BEEN BUILT, THE CONTRACTOR SHALL RE-TEST THE EXISTING SYSTEM TO THE SATISFACTION OF THE CONSTRUCTION INSPECTOR. (NO SEPARATE PAY ITEM).					
14. WHERE THE MINIMUM 9 FOOT SEPARATION DISTANCE BETWEEN WASTEWATER LINES AND WATER LINES / MAINS CANNOT BE MAINTAINED, THE INSTALLATION OF WASTEWATER LINES SHALL BE IN STRICT ACCORDANCE WITH TDED. THE WASTEWATER LINE SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON OR PVC MEETING THE ASTM SPECIFICATION FOR BOTH PIPES AND JOINTS OF 150 PSI AND SHALL BE IN ACCORDANCE WITH 30 TAC §217.53 (C) (3) (A) (I).					
15. NO TESTING WILL BE PERFORMED PRIOR TO 30 DAYS FROM COMPLETE INSTALLATION OF THE WASTEWATER LINES. THE FOLLOWING SEQUENCE WILL BE STRICTLY ADHERED TO:					
a. PULL MANHOLE					
b. PERFORM AIR TEST					
c. CLEANING OF ANY DEBRIS					
d. FLUSHING SYSTEM					
e. TV INSPECTION (WITHIN 72 HOURS OF FLUSHING)					
16. A MINIMUM OF 3 FEET OF COVER IS TO BE MAINTAINED OVER THE WASTEWATER MAIN AND LATERALS AT SUBGRADE. OTHERWISE CONCRETE ENCASEMENT WILL BE REQUIRED.					
17. WASTEWATER MAIN CONNECTIONS MADE DIRECTLY TO EXISTING MANHOLES WILL REQUIRE SUCCESSFUL TESTING OF THE MANHOLE IN ACCORDANCE WITH NBU CONNECTION & CONSTRUCTION POLICY MANUAL.					
18. TDED AND EPA REQUIRE EROSION AND SEDIMENTATION CONTROL FOR CONSTRUCTION OF WASTEWATER COLLECTION SYSTEMS. DEVELOPER OR AUTHORIZED REPRESENTATIVE SHALL PROVIDE EROSION AND SEDIMENTATION CONTROL AS NOTES ON THE PROJECT'S PLAN AND PROFILE SHEETS. ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS SHALL BE REMOVED BY THE CONTRACTOR AT FINAL ACCEPTANCE OF THE PROJECT BY NBU WATER UTILITIES.					
19. ALL MANHOLES NOT WITHIN PAVED STREETS SHALL HAVE LOOKING CONCRETE COLLAR TO SECURE RING AND COVER TO MANHOLE CONE PER NBU DETAIL DRAWING #329.					
20. ALL MANHOLES OVER THE EDWARDS AQUIFER RECHARGE ZONE SHALL HAVE LOOKING CONCRETE COLLAR TO SECURE RING AND COVER TO MANHOLE CONE PER NBU DETAIL DRAWING #329.					
WATER NOTES	REVISED 9/12/14				
1. ALL WATER MAINS SHALL BE AWWA C900 (CLASS 150 OR GREATER).					
2. WATER SERVICES SHALL BE SINGLE 1" COPPER TUBING.					
3. WATER LINE IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE NBU SYSTEMS CONNECTION & CONSTRUCTION POLICY.					
4. WATER MAIN SHALL HAVE A MINIMUM OF 42 INCHES OF COVER, OTHERWISE CONCRETE ENCASEMENT WILL BE REQUIRED.					
5. EACH UNIT IN A DUPLEX, TRIPLEX, FOURPLEX, OR CONDOMINIUM SHALL BE PROVIDED WITH AN INDIVIDUAL WATER METER. A MASTER METER CAN BE CONSIDERED FOR SEPARATE BUILDINGS, HOWEVER, THOSE BUILDINGS MUST BE PLUMBED TO ALLOW SEPARATE METERS FOR FUTURE CONSIDERATION.					
6. CONTRACTOR WILL KEEP THE AREA ON TOP OF AND AROUND THE WATER METER BOX FREE OF ALL OBJECTS AND DEBRIS.					
7. INITIAL BACKFILL OF WATER LINES SHALL BE MANUFACTURED SAND OR PEA GRAVEL AS PER NBU SYSTEMS CONNECTION & CONSTRUCTION POLICY.					
8. SECONDARY BACKFILL OF WATER LINES SHALL GENERALLY CONSIST OF MATERIAL REMOVED FROM THE TRENCH AND SHALL BE FREE FROM BRUSH, DEBRIS AND TRASH OR STONES HAVING ANY DIMENSION LARGER THAN 6" INCHES AT THE LARGEST DIMENSION.					
9. HYDROSTATIC TESTING IS DONE FROM VALVE TO VALVE.					
10. NO METER BOXES TO BE SET IN DRIVEWAYS OR SIDEWALKS. ANY METER BOXES SET IN DRIVEWAYS OR SIDEWALKS WILL BE RELOCATED AT CONTRACTOR'S AND/OR DEVELOPER'S EXPENSE.					
11. METER BOXES MUST BE SET AT THE PROPOSED GRADE. ANY METER BOXES THAT ARE NOT SET AT THE FINAL GRADE WILL BE ADJUSTED AT CONTRACTOR'S AND/OR DEVELOPER'S EXPENSE.					
12. ACCEPTABLE METER BOXES ARE D13-BAMR AND D15-BAMR. NEW RESIDENTIAL LOTS ARE REQUIRED TO USE THE D15-BAMR METER BOXES (DOUBLE AMR). COMMERCIAL LOTS SHOULD CHOOSE WHICH BOX APPLIES TO THE DOMESTIC AND/OR IRRIGATION METER LAYOUT.					
13. THRUST BLOCKS WILL NOT BE ALLOWED ON THE SYSTEM WITHOUT SPECIAL APPROVAL. JOINTS WILL BE RESTRAINED WITH RESTRAINING SYSTEMS APPROVED BY NBU AND RESTRAINT LENGTH SHALL BE SUBMITTED TO NBU AT THE TIME OF PLAN SUBMITTAL.					
14. CONTRACTOR SHALL PLACE TRACER WIRE ON TOP OF THE WATER MAINS. TRACER WIRE SHOULD RUN FROM VALVE TO VALVE AND EXIT AT THE VALVE BOX. THE TRACER WIRE SHOULD BE ATTACHED TO THE TOP OF THE PIPE USING TAPE. EXCESS WIRE SHOULD BE LEFT WITHIN VALVE BOXES TO BE PLACED WITHIN LID OF COVER.					
SEQUENCE OF CONSTRUCTION					
1. INSTALL EROSION CONTROLS PER APPROVED PLAN.					
2. TEMPORARY CONTROLS TO BE INSPECTED AND MAINTAINED WEEKLY AND PRIOR TO ANTICIPATED RAINFALL EVENTS, AND AFTER RAINFALL EVENTS, AS NEEDED. CONTRACTOR/OWNER SHALL PROVIDE A CONTACT NAME AND NUMBER FOR EROSION CONTROL ISSUES.					
3. CONDUCT DEMOLITION ACTIVITIES, IF APPLICABLE.					
4. CONSTRUCT DRAINAGE IMPROVEMENTS, IF APPLICABLE.					
5. CONSTRUCT CURB INLET PROTECTION AT THE TIME OF CURB INLET INSTALLATION.					
6. CONSTRUCT DEVELOPMENT PER APPROVED PLANS.					
7. INSTALL STREETScape AND/OR LANDSCAPING IMPROVEMENTS.					
8. CONTRACTOR TO VEGETATE ANY DISTURBED AREAS ONCE FINAL GRADING IS COMPLETE, AND ESTABLISH A MIN OF 70% VEGETATION PRIOR TO COMPLETION.					
9. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.					
10. TIDES REQUIREMENTS - DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITIES HAVE CEASED (TEMPORARY OR PERMANENTLY) SHALL BE STABILIZED WITHIN 14 DAYS UNLESS ACTIVITY WILL BEGIN AGAIN WITHIN 21 DAYS.					
NOTE TO CONTRACTOR:					
BY THE ACT OF SUBMITTING A BID FOR THIS PROPOSED CONTRACT, THE BIDDER WARRANTS THAT THE BIDDER, AND ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS HE INTENDS TO USE HAVE CAREFULLY AND THOROUGHLY REVIEWED THE DRAWINGS, SPECIFICATIONS AND ALL OTHER CONTRACT DOCUMENTS AND HAVE FOUND THEM COMPLETE AND FREE FROM ANY AMBIGUITIES AND SUFFICIENT FOR THE PURPOSE INTENDED. THE BIDDER FURTHER WARRANTS THAT TO THE BEST OF HIS OR HIS SUBCONTRACTORS' AND MATERIAL SUPPLIERS' KNOWLEDGE, ALL MATERIALS AND PRODUCTS SPECIFIED OR INDICATED HEREIN ARE ACCEPTABLE FOR ALL APPLICABLE CODES AND AUTHORITIES.					
THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS HAS BEEN BASED UPON RECORD INFORMATION ONLY AND MAY NOT MATCH LOCATIONS AND/OR DEPTHS AS CONSTRUCTED. THE CONTRACTOR SHALL CONTACT EACH OF THE INDIVIDUAL UTILITIES FOR ASSISTANCE IN DETERMINING EXISTING UTILITY LOCATIONS AND DEPTHS PRIOR TO BEGINNING ANY CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF ALL UTILITY CROSSINGS PRIOR TO BEGINNING ANY CONSTRUCTION.					

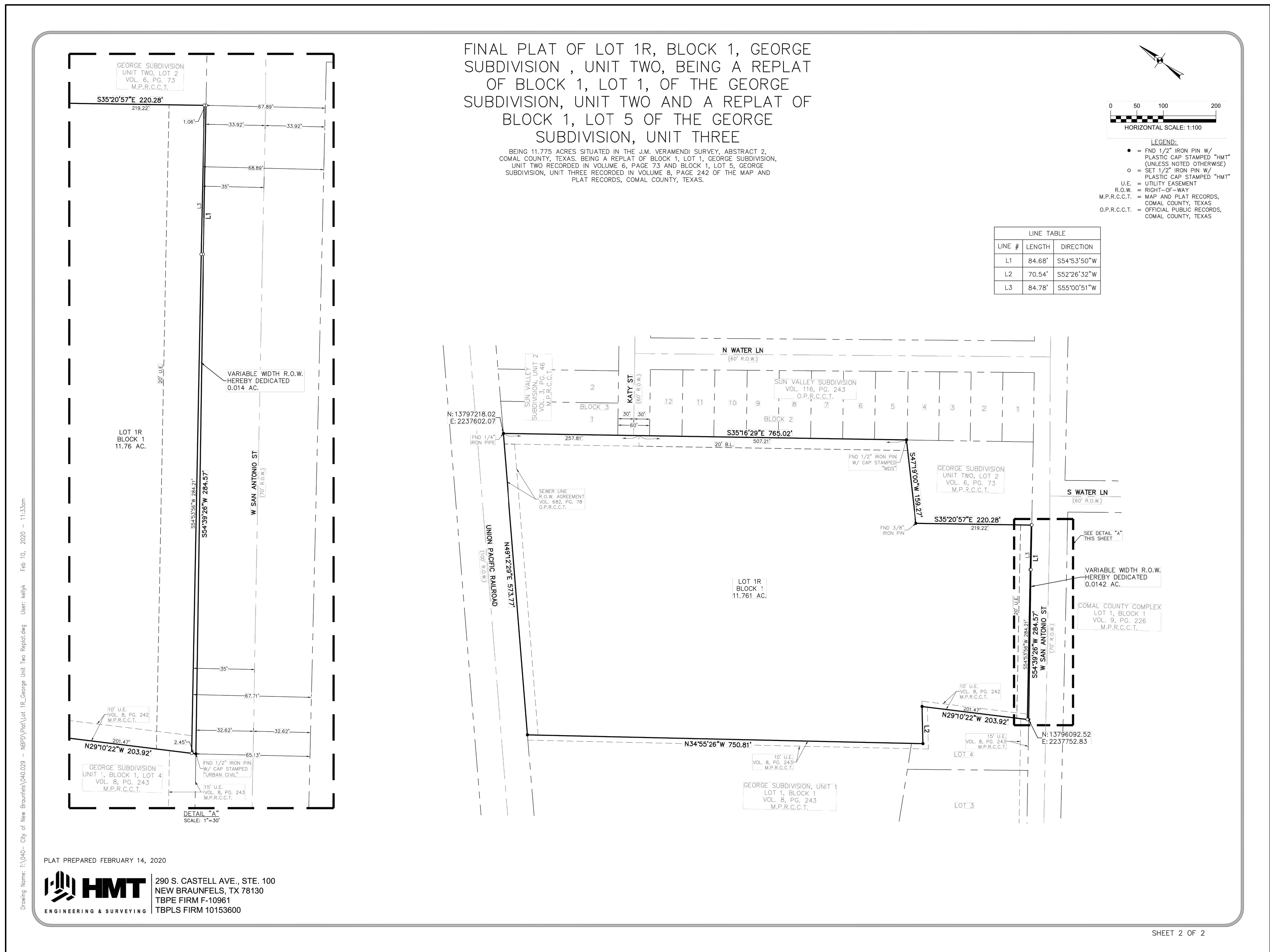
GENERAL NBU NOTES	REVISED 3/31/11	CITY OF NEW BRAUNFELS CONSTRUCTION NOTES	REVISED 03/2020
1. ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THE PROJECT SHALL BE APPROVED BY NEW BRAUNFELS UTILITIES AND COMPLY WITH THE CURRENT NEW BRAUNFELS UTILITIES WATER SYSTEMS CONNECTION/CONSTRUCTION POLICY.			
2. CONTRACTOR SHALL NOT PROCEED WITH ANY PIPE INSTALLATION WORK UNTIL THEY OBTAIN A COPY OF THE PLANS FROM THE CONSULTANT OR ENGINEER AND VERIFY NBU WATER SYSTEMS ENGINEERING # 630-608-8971 WITH AT LEAST TWO (2) WORKING DAYS (48 HOURS) WORK COMPLETED BY THE CONTRACTOR, WHICH HAS NOT RECEIVED A NOTICE TO PROCEED FROM NEW BRAUNFELS UTILITIES WATER SYSTEMS ENGINEERING WILL BE SUBJECT TO REMOVAL AND REPLACEMENT BY AND AT THE EXPENSE OF THE CONTRACTOR.			
3. THE DEVELOPER DEDICATES THE WATER / WASTEWATER MAINS UPON COMPLETION BY THE CONTRACTOR AND ACCEPTANCE BY THE NEW BRAUNFELS UTILITIES WATER SYSTEM. NBU WILL OWN AND MAINTAIN THE WATER / WASTEWATER MAINS WHICH ARE LOCATED WITHIN PLATTED UTILITY EASEMENTS OR PUBLIC ROW OF PROPOSED DEVELOPMENTS. (AS APPLICABLE).			
4. CONTRACTOR AGREES TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THE CONTRACTOR SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNERS AND THE ENGINEER AND HIS EMPLOYEES, PARTNERS OFFICERS, DIRECTORS, OR CONSULTANTS HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF THE WORK ON THIS PROJECT, EXCEPTED FROM LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER OR ENGINEER, ENGINEER'S DIRECTORS, OFFICERS, EMPLOYEES, OR CONSULTANTS.			
5. CONTRACTOR TO CONTACT THE ENGINEER-OF-RECORD (EOR) FOR ANY FIELD CHANGES, ANY REVISIONS OR CHANGES TO THE APPROVED CONSTRUCTION PLANS WILL REQUIRE ADDITIONAL APPROVAL BY NBU IN WRITING.			
6. CONTRACTOR AND / OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.			
7. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL OR BETTER CONDITION, ANY DAMAGES DONE TO EXISTING FENCES, CURBS, STREETS, DRIVEWAYS, LANDSCAPING AND STRUCTURES, AND EXISTING UTILITIES (NOT ADJUSTED ON PLANS). COST OF RESTORATIONS, IF ANY, SHALL BE THE CONTRACTOR'S ENTIRE EXPENSE.			
8. THE CONTRACTOR SHALL AVOID CUTTING ROOTS LARGER THAN ONE INCH IN DIAMETER WHEN EXCAVATING NEAR EXISTING TREES. EXCAVATION IN VICINITY OF TREES SHALL PROCEED WITH CAUTION.			
9. CONTRACTOR SHALL PROCURE ALL PERMITS AND LICENSES, PAY ALL CHARGES, FEES, AND TAXES AND GIVE ALL NOTICES NECESSARY AND INCIDENTAL TO THE DUE AND LAWFUL PROSECUTION OF THE WORK.			
10. NO EXTRA PAYMENT SHALL BE ALLOWED FOR WORK CALLED FOR ON THE PLANS BUT NOT INCLUDED ON THE BID SCHEDULE. THIS INCIDENT WORK WILL BE REQUIRED AND SHALL BE INCLUDED UNDER THE PAY ITEM TO WHICH IT RELATES.			
11. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL WASTE MATERIALS UPON PROJECT COMPLETION. THE CONTRACTOR SHALL NOT PERMANENTLY PLACE ANY WASTE MATERIALS IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAN DEVELOPMENT PERMIT.			
12. THE CONTRACTOR SHALL NOT PLACE ANY MATERIALS ON THE RECHARGE ZONE OF THE EDWARDS AQUIFER OR EXCEED THE APPROVED WATER POLLUTION ABATEMENT PLAN FROM THE TDED 31 TAC 313.4 AND 31 TAC 313.9.			
13. BARRICADES AND WARNING SIGNS SHALL CONFORM TO THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND SHALL BE LOCATED TO PROVIDE MAXIMUM PROTECTION TO THE PUBLIC AS WELL AS CONSTRUCTION PERSONNEL AND EQUIPMENT WHILE PROVIDING CONTINUOUS TRAFFIC FLOW AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL DEVICES DURING CONSTRUCTION.			
14. CONTRACTOR IS REQUIRED TO VERIFY PROJECT ELEVATIONS. THE TERM "MATCH EXISTING" SHALL BE UNDERSTOOD TO SIGNIFY BOTH HORIZONTAL AND VERTICAL ALIGNMENT.			
15. THE LOCATION OF UTILITIES, EITHER UNDERGROUND OR OVERHEAD, SHOWN WITHIN THE RIGHT OF WAY ARE APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR BEFORE BEGINNING CONSTRUCTION OPERATIONS.			
16. OSHA REGULATIONS PROHIBIT OPERATIONS THAT WILL BRING PERSONS OR EQUIPMENT WITHIN 10 FEET OF AN ENERGIZED LINE. WHEN WORKMEN AND/OR EQUIPMENT HAVE TO WORK CLOSE TO AN ENERGIZED ELECTRICAL LINE, THE CONTRACTOR SHALL NOTIFY THE ELECTRICAL POWER COMPANY, ADVISE AND MAKE WHATEVER ADJUSTMENTS NECESSARY TO ENSURE THE SAFETY OF THOSE WORKMEN.			
17. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION. CONTRACTORS SHALL CALL THE ONE CALL SYSTEM FOR WATER/WASTEWATER LOCATION.			
18. DUE TO FEDERAL REGULATIONS TITLE 49, PART 192 (B), GAS COMPANIES MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.			
19. THE CONTRACTOR IS FULLY RESPONSIBLE FOR THE TRAFFIC CONTROL AND WILL BE RESPONSIBLE FOR FURNISHING ALL TRAFFIC CONTROL DEVICES, AND FLAGGERS, THE CONSTRUCTION METHOD OF TRAFFIC CONTROL SHALL BE CONDUCTED TO THE MAXIMUM POSSIBLE INTERFERENCE TO TRAFFIC SO AS TO PERMIT THE CONTINUOUS MOVEMENT OF THE TRAFFIC IN ONE DIRECTION AT ALL TIMES. THE CONTRACTOR SHALL CLEAN UP AND REMOVE FROM THE WORK AREA ANY LOOSE MATERIAL RESULTING FROM CONTRACT OPERATIONS AT THE END OF EACH WORKDAY.			
20. PRIOR TO ORDERING MATERIALS TO BE USED IN CONSTRUCTION, CONTRACTOR SHALL PROVIDE THE ENGINEER WITH FOUR (4) COPIES OF THE SOURCE, TYPE, GRADATION, MATERIAL SPECIFICATION DATA AND / OR SHOP DRAWINGS, AS APPLICABLE, TO SATISFY THE REQUIREMENTS OF THE FOLLOWING ITEMS AND ALL MATERIAL ITEMS REFERRED TO IN THESE LISTED ITEMS:			
A. WATER MAINS AND SERVICES			
B. WASTEWATER MAINS AND SERVICES			
21. THRUST BLOCKS WILL NOT BE ALLOWED ON THE SYSTEM WITHOUT SPECIAL APPROVAL. JOINTS WILL BE RESTRAINED WITH RESTRAINING SYSTEMS APPROVED BY NBU AND RESTRAINT LENGTH SHALL BE SUBMITTED TO NBU AT THE TIME OF PLAN SUBMITTAL.			
22. WATER TESTING THE BACKFILL WITHIN A STREET WILL NOT BE PERMITTED. WASTEWATER TRENCHES SUBJECT TO TRAFFIC SHALL CONFORM TO NBU CONNECTION AND CONSTRUCTION POLICY MANUAL.			
23. WHERE THE MINIMUM 9 FOOT SEPARATION DISTANCE BETWEEN WASTEWATER LINES AND WATER LINES / MAINS CANNOT BE MAINTAINED, THE INSTALLATION OF WASTEWATER LINES SHALL BE IN STRICT ACCORDANCE WITH 30 TAC 217.			
24. CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTORS' TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.			
25. UTILITY TRENCH COMPACTION WITH STREET R.O.W.			
A. ALL UTILITY TRENCH COMPACTION TEST WITHIN THE STREET PAVEMENT SECTION SHALL BE THE RESPONSIBILITY OF THE DEVELOPER'S GEO-TECHNICAL ENGINEER.			
B. FILL MATERIAL SHALL BE PLACED IN UNIFORM LAYERS NOT TO EXCEED TWELVE INCHES (12") LOOSE.			
C. EACH LAYER OF MATERIAL SHALL BE COMPACTED AS SPECIFIED AND TESTED FOR DENSITY AND MOISTURE IN ACCORDANCE WITH TEST METHODS TEX-113-E, TEX-114-E, TEX-115-E.			
D. THE NUMBER AND LOCATION OF REQUIRED TESTS SHALL BE DETERMINED BY THE GEOTECHNICAL ENGINEER AND APPROVED BY THE CITY OF NEW BRAUNFELS STREET INSPECTOR.			
E. UPON COMPLETION OF TESTING THE GEO-TECHNICAL ENGINEER SHALL PROVIDE THE CITY OF NEW BRAUNFELS STREET INSPECTOR WITH ALL TESTING DOCUMENTATION AND A CERTIFICATION STATING THE PLACEMENT OF FILL MATERIAL HAS BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.			
IF CONSTRUCTION HAS NOT COMMENCED WITHIN ONE-YEAR OF CITY APPROVAL FOR CONSTRUCTION INSPECTION, THAT APPROVAL IS NO LONGER VALID.			
THE MOST CURRENT EDITIONS OF THE CITY OF SAN ANTONIO STANDARD SPECIFICATIONS AND THE TEXAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND BRIDGES SHALL BE FOLLOWED FOR ALL CONSTRUCTION EXCEPT AS AMENDED BY THE CITY OF NEW BRAUNFELS STANDARD DETAILS.			
ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER OF RECORD. IN ACCEPTING THESE PLANS, THE CITY OF NEW BRAUNFELS MUST RELY UPON THE ADEQUACY OF THE WORK OF THE ENGINEER OF RECORD.			
PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL CONTACT THE CITY OF NEW BRAUNFELS TO SCHEDULE A PRECONSTRUCTION MEETING.			
FOR PUBLIC INFRASTRUCTURE PERMIT OR GRADING PERMIT PROJECTS:			
FOR INSPECTIONS, YOU MUST CALL BEFORE 12:00 P.M., 48 HOURS PRIOR TO YOUR INSPECTION REQUEST.			
EACH INSPECTION WILL BE ALLOTTED 1 HOUR UNLESS YOU REQUEST FOR MORE TIME.			
ONCE YOUR REQUEST HAS BEEN ACCEPTED, YOU WILL RECEIVE A CALL FROM THE CITY OF NEW BRAUNFELS INSPECTOR.			
FOR COMMERCIAL PERMIT (CP) PROJECTS:			
ALL INSPECTIONS ARE TO BE CALLED IN AT 830-221-4068 OR, FAXED IN AT 830-608-2117 OR, E-MAILED AT INSPECTIONS@NBUTEXAS.ORG.			
IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT ALL TEMPORARY AND PERMANENT TRAFFIC CONTROL DEVICES ARE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE PLANS AND LATEST EDITION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. IF, IN THE OPINION OF THE ENGINEERING REPRESENTATIVE AND THE CONSTRUCTION INSPECTOR, THE BARRICADES AND SIGNS DO NOT CONFORM TO ESTABLISHED STANDARDS OR ARE INCORRECTLY PLACED OR ARE INSUFFICIENT IN QUANTITY TO PROTECT THE GENERAL PUBLIC, THE CONSTRUCTION INSPECTOR SHALL HAVE THE OPTION TO STOP OPERATIONS UNTIL SUCH TIME AS THE CONDITIONS ARE CORRECTED. IF THE NEED ARISES, ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES MAY BE ORDERED BY THE ENGINEERING REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.			
A TXDOT TYPE II B-B BLUE REFLECTIVE RAISED PAVEMENT MARKER SHALL BE INSTALLED IN THE CENTER OF THE ROADWAY ADJACENT TO ALL FIRE HYDRANTS. IN LOCATIONS WHERE HYDRANTS ARE SITUATED ON CORNERS, BLUE REFLECTIVE RAISED PAVEMENT MARKERS SHALL BE INSTALLED ON BOTH APPROACHES WHICH FRONT THE HYDRANT. THE RAISED PAVEMENT MARKER SHALL MEET TXDOT MATERIAL, EPOXY AND ADHESIVE SPECIFICATIONS.			
GROUNDWATER			
IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER, CONTRACTOR, SUBCONTRACTORS, BUILDERS, GEO-TECHNICAL ENGINEER, AND PROJECT ENGINEER TO IMMEDIATELY NOTIFY THE OFFICE OF THE CITY ENGINEER AND PROJECT ENGINEER IF THE PRESENCE OF GROUNDWATER WITHIN THE SITE IS EVIDENT. UPON NOTIFICATION THE PROJECT ENGINEER SHALL RESPOND WITH TWO (2) BUSINESS DAYS UPON RECEIPT OF THE MITIGATION PLAN. ALL CONSTRUCTION ACTIVITY, IMPACTED BY THE DISCOVERY OF GROUNDWATER, SHALL BE SUSPENDED UNTIL THE CITY ENGINEER GRANTS A WRITTEN APPROVAL OF THE GROUNDWATER MITIGATION PLAN.			
RECORD DRAWINGS			
AS PER PLATING ORDINANCE SECTION 118-38M.: WHEN ALL OF THE IMPROVEMENTS ARE FOUND TO BE CONSTRUCTED AND COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND WITH THE CITY'S STANDARDS, AND UPON RECEIPT OF ONE SET OF "RECORD DRAWINGS" PLANS, AND A DIGITAL COPY OF ALL PLANS (AUTOCAD AND/or MINIMUM) THE CITY ENGINEER AND PROJECT ENGINEER SHALL ACCEPT SUCH IMPROVEMENTS FOR THE CITY OF NEW BRAUNFELS, SUBJECT TO THE GUARANTY OF MATERIAL AND WORKMANSHIP PROVISIONS IN THIS SECTION.			
CONSTRUCTION NOTE			
ENGINEER OF RECORD IS RESPONSIBLE TO ENSURE THAT EROSION CONTROL MEASURES AND STORMWATER CONTROL SUFFICIENT TO MITIGATE OFF SITE IMPACTS ARE IN PLACE AT ALL STAGES OF CONSTRUCTION.			
DRAINAGE NOTE			
DRAINAGE IMPROVEMENTS SUFFICIENT TO MITIGATE THE IMPACT OF CONSTRUCTION SHALL BE INSTALLED PRIOR TO ADDING IMPROVISED CURB.			
FINISHED FLOOR ELEVATIONS			
THE ELEVATION OF THE LOWEST FLOOR SHALL BE AT LEAST 10 INCHES ABOVE THE FINISHED GRADE OF THE SURROUNDING GROUND, WHICH SHALL BE SLOPED IN A FASHION SO AS TO DIRECT STORMWATER AWAY FROM THE STRUCTURE. PROTECTORS ADJACENT TO STORMWATER CONVEYANCE STRUCTURES MUST HAVE FLOOR SLAB ELEVATION OR BOTTOM OF FLOOR JOISTS A MINIMUM OF ONE FOOT ABOVE THE 100-YEAR WATER FLOW ELEVATION IN THE STRUCTURE. DRIVEWAYS SERVING HOUSES ON THE DOWNHILL SIDE OF THE STREET SHALL HAVE A PROPERLY SIZED CROSS SWALE PREVENTING RUNOFF FROM ENTERING THE GARAGE.			
SOILS TESTING			
PROCTORS SHALL BE SAMPLED FROM ON-SITE MATERIAL (ON-SITE IS DEFINED AS LIMITS OF CONSTRUCTION FOR THIS PLAN SET) AND A COPY OF THE PROCTOR RESULTS SHALL BE DELIVERED TO THE CITY OF NEW BRAUNFELS STREET INSPECTOR PRIOR TO ANY DENSITY TESTS.			
ROADWAY			
ALL ROADWAY COMPACTION TESTS SHALL BE THE RESPONSIBILITY OF THE DEVELOPER'S GEOTECHNICAL ENGINEER. FLEXIBLE BASE OR FILL/EMBANKMENT MATERIAL SHALL BE PLACED IN UNIFORM LAYERS NOT TO EXCEED EIGHT INCHES (8") LOOSE. THE REQUIRED DENSITY FOR THE FILL/EMBANKMENT MATERIAL SHALL MEET THE REQUIREMENTS OF TXDOT'S SPECIFICATION ITEM 132. THE REQUIRED DENSITY FOR THE FLEXIBLE BASE MATERIAL SHALL MEET THE REQUIREMENTS OF TXDOT'S SPECIFICATION ITEM 247. EACH LAYER OF MATERIAL, INCLUSIVE OF SUBGRADE, SHALL BE COMPACTED AS SPECIFIED AND TESTED FOR DENSITY AND MOISTURE IN ACCORDANCE WITH TEST METHODS TEX-113-E, TEX-114-E, TEX-115-E. THE NUMBER AND LOCATION OF REQUIRED TESTS SHALL BE DETERMINED BY THE GEO-TECHNICAL ENGINEER AND APPROVED BY THE CITY OF NEW BRAUNFELS STREET INSPECTOR WITH ALL TESTING DOCUMENTATION AND A CERTIFICATION STATING THAT THE PLACEMENT OF FLEXIBLE BASE, AND FILL MATERIAL, AND SUBGRADE, HAS BEEN COMPLETED IN ACCORDANCE WITH THE PLANS. ADDITIONAL DENSITY TESTS MAY BE REQUESTED BY THE CITY OF NEW BRAUNFELS INSPECTOR.			
ITEM 340			
ASPHALTIC CONCRETE PAVEMENT SHALL BE THE TYPE OF HOT MIX ASPHALT AS DEFINED IN TXDOT'S STANDARD SPECIFICATIONS FOR CURRENT TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREET AND BRIDGES.			
THE CITY OF NEW BRAUNFELS WILL NOT ACCEPT THE USE OF RECYCLED ASPHALT PAVEMENT (RAP) OR RECYCLED ASPHALT SHINGLES (RAS) IN ASPHALT MIXTURES FOR NEW ROADWAYS. ANY DEBRIS INCLUSIONS WITHIN NEW ASPHALT PAVEMENTS WILL RESULT IN ASPHALT REMOVAL AND REPLACEMENT FROM CURB TO CURB FOR LIMITS TO BE DETERMINED BY THE CITY OF NEW BRAUNFELS.			
THE ASPHALTIC CONCRETE PAVEMENT SURFACE COURSE SHALL BE PLANT MIXED, HOT LAID TYPE "B" MEETING THE SPECIFICATION REQUIREMENTS OF TXDOT ITEM 340. THE ASPHALTIC CONCRETE PAVEMENT SUB-SURFACE COURSES SHALL BE PLANT MIXED, HOT LAID TYPE "B" MEETING THE SPECIFICATION REQUIREMENTS OF TXDOT ITEM 340. THE MIXTURE SHALL BE DESIGNED PER THE DESIGN REQUIREMENTS SPECIFIED IN TXDOT ITEM 340 AND SHALL BE COMPACTED TO BETWEEN 91 AND 95 PERCENT OF THE MAXIMUM THEORETICAL DENSITY AS DETERMINED BY TXDOT TEST METHOD TEX-227-F. PLACE THE MIXTURE WHEN THE ROADWAY SURFACE TEMPERATURE IS AT OR ABOVE 60° COMPLETE ALTS COMPACTION OPERATIONS BEFORE THE PAVEMENT TEMPERATURE DROPS BELOW 160°. THE ASPHALT CEMENT CONTENT BY PERCENT OF TOTAL MIXTURE WEIGHT SHALL FALL WITHIN A TOLERANCE OF +0.5 PERCENT FROM A SPECIFIC MIX DESIGN.			
PLEASE NOTE: NBU REQUIRES GPS POINTS FOR CERTAIN ELECTRIC, WATER AND WASTEWATER ATTRIBUTES, SOME OF WHICH MUST BE TAKEN PRIOR TO BACKFILL DURING CONSTRUCTION.			
GPS POINTS SHALL BE REQUIRED FROM THE DEVELOPER'S CONTRACTOR OR ENGINEER. A MINIMUM OF THREE COORDINATE POINTS FOR GEOREFERENCING SHALL BE REQUIRED. THE WATER AND WASTEWATER GPS POINTS SHALL BE TO SURVEY GRADE. THE ELECTRIC GPS POINTS SHALL BE TO MAP GRADE.			
WATER			
VERTICAL BENDS AND EDGE OF STEEL CASING (IF APPLICABLE) PRIOR TO BACKFILL			
HORIZONTAL BENDS PRIOR TO BACKFILL			
TEES PRIOR TO BACKFILL			
FITTINGS (REDUCERS AND COUPLINGS) PRIOR TO BACKFILL			
FIRE HYDRANTS (TOP OF FLANGE)			
VALVES			
METERS (TOP CENTER OF BOX)			
BLOW OFF ASSEMBLY			
CORNER SLAB OF WATER TANK & GATE VALVE ON WATER TANK			
WASTEWATER			
MANHOLES			
CLEANOUTS			
CORNER SLAB OF LIFT STATION			
ELECTRIC			
POLES			
TRANSFORMERS, BOTH ABOVE AND UNDERGROUND (FRONT LOCK)			
PULL BOXES			
STREET LIGHTS			
COORDINATE GPS REQUIREMENTS WITH NBU INSPECTOR			

CITY OF NEW BRAUNFELS GENERAL NOTES
ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT SHALL COMPLY WITH:
A. CURRENT CITY OF NEW BRAUNFELS CONSTRUCTION SPECIFICATIONS AND STANDARDS AS OF THE DATE OF THIS CONTRACT
B. THE MOST CURRENT EDITION OF TEXAS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS, AND BRIDGES".
ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MOST CURRENT TEXAS DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS, AND BRIDGES." ALONG WITH CURRENT CITY OF NEW BRAUNFELS AND COMAL COUNTY SPECIFICATIONS. ANY DISCREPANCIES BETWEEN SPECIFICATIONS SHALL BE RESOLVED BY THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.
CONTRACTOR SHALL PROCURE ALL PERMITS AND LICENSES, PAY ALL CHARGES, FEES, AND TAXES AREA AND GIVE ALL NOTICES NECESSARY AND INCIDENTAL TO THE DUE AND LAWFUL PROSECUTION OF THE WORK.
ANY EXISTING OFF-SITE IMPROVEMENTS THAT ARE DAMAGED OR UNDERCUT BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER AND APPROVED BY THE OWNER OF THE EXISTING IMPROVEMENT AT THE CONTRACTOR'S EXPENSE. (NO SEPARATE PAY ITEM)
WORK COMPLETED BY THE CONTRACTOR WHICH HAS NOT RECEIVED A WORK ORDER OR CONSENT OF THE OWNER OR ENGINEER WILL BE SUBJECT TO REMOVAL AND REPLACEMENT BY AND AT THE EXPENSE OF THE CONTRACTOR.
CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL WASTE MATERIALS UPON PROJECT COMPLETION. THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIAL IN THE 100YR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN DEVELOPMENT PERMIT.
BARRICADES AND WARNING SIGNS SHALL CONFORM TO THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND SHALL BE LOCATED TO PROVIDE MAXIMUM PROTECTION TO THE PUBLIC AS WELL AS CONSTRUCTION PERSONNEL AND EQUIPMENT WHILE PROVIDING CONTINUOUS TRAFFIC FLOW AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL DEVICES DURING CONSTRUCTION.
CONTRACTOR IS REQUIRED TO VERIFY PROJECT ELEVATIONS. THE TERM "MATCH EXISTING" SHALL BE UNDERSTOOD TO SIGNIFY BOTH HORIZONTAL AND VERTICAL ALIGNMENT.
WHEN MATCHING EXISTING PAVEMENTS, CURBS, DRIVES, AND WALKS, THEY SHALL BE SAW CUT FULL DEPTH AND REMOVED TO ALLOW FOR PROPOSED CONSTRUCTION. IF ANY EXISTING JOINT IS ENCOUNTERED, PRECAUTION SHALL BE TAKEN DURING REMOVAL OF CONCRETE SO AS NOT TO DAMAGE EXISTING DOWELS. ALL EXISTING DOWELS SHALL BE EXPOSED AND CLEANED.
ITEM OF WORK DESIGNATED "BY OTHERS" SHALL NOT BE CONSIDERED PART OF THIS CONTRACT.
ALL "COMPACTED SUBGRADE" SHALL CONSIST OF NATIVE MATERIAL SCARIFIED TO A MINIMUM DEPTH OF SIX INCHES AND COMPACTED TO 95% DENSITY ACCORDING TO DENSITY TEST METHOD TEX-115E OR ACCORDING TO ASTM D-698 AND TESTED BY ASTM D-2922.
ALL "FLEXIBLE BASE" SHALL BE TYPE "A", GRADE 4, ACCORDING TO TXDOT ITEM 247. COMPACTED TO 95% DENSITY ACCORDING TO DENSITY TEST METHOD TEX-115E OR ACCORDING TO ASTM D-698 AND TESTED BY ASTM D-2922.
ASPHALT PAVEMENT SHALL BE THE TYPE SPECIFIED ON THE PLANS AND ACCORDING TO TXDOT ITEM 340 "HOT MIX ASPHALT CONCRETE PAVEMENT".
PRIME COAT USING MC-30 AT A RATE OF 0.2 GALLONS PER SQUARE YARD SHALL BE PLACED OVER PREPARED BASE AT LEAST ONE DAY PRIOR TO LAYING ASPHALTIC CONCRETE PAVEMENT. ANY NECESSARY TACK COAT SHALL BE MC-30 AT 0.0









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## REGISTRATION

07/17/2020

### DRAWING HISTORY

[illegible]

### KEY PLAN

PROJECT NAME

NEW  
BRAUNFELS  
POLICE  
DEPARTMENT  
HQ

### PROJECT LOCATION

1488 S SEGUIN  
NEW BRAUNFELS, TX  
78130

PROJECT NUMBER

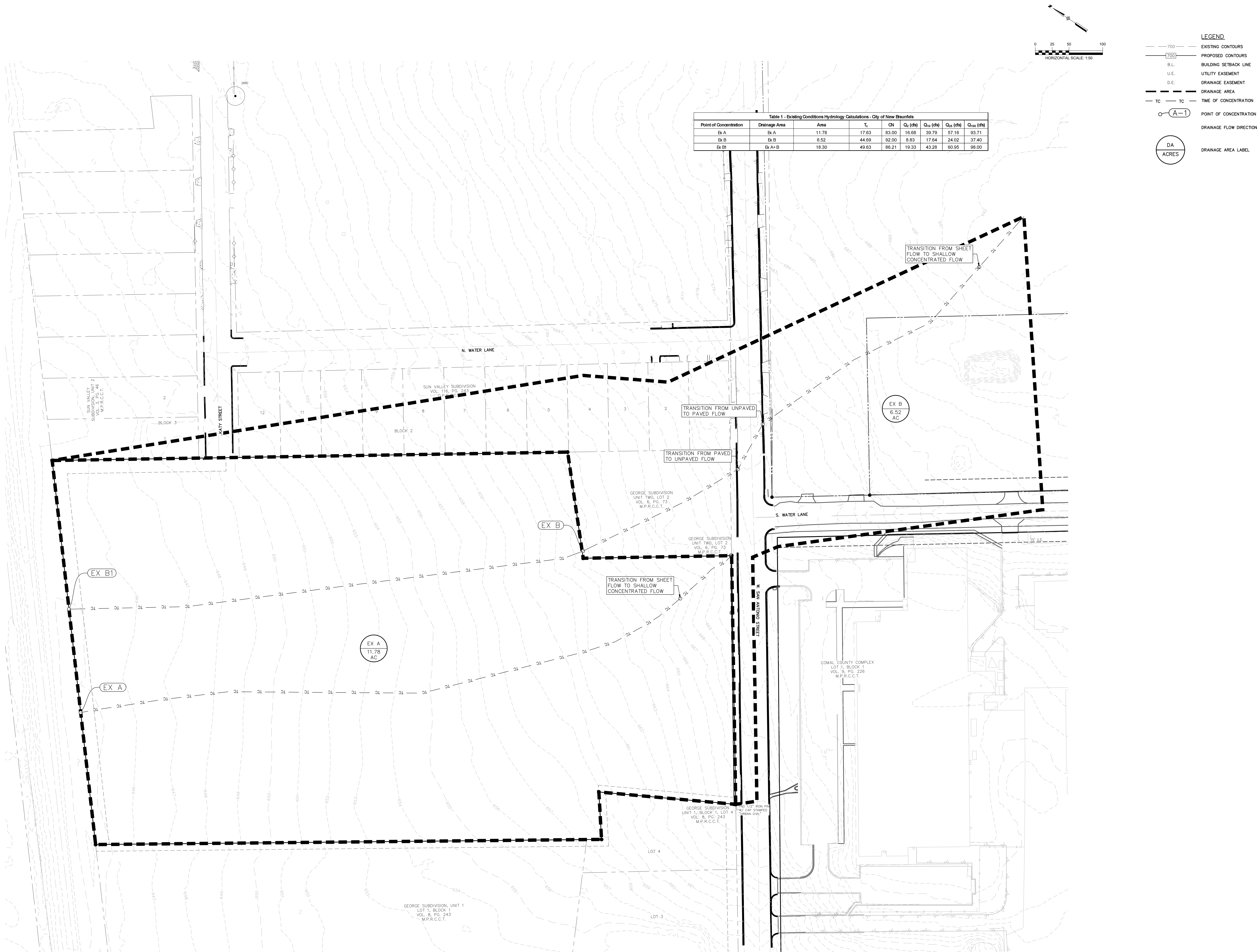
040.030

SHEET TITLE

# EXISTING CONDITIONS DRAINAGE AREA MAP

SHEET NUMBER

## C2.0





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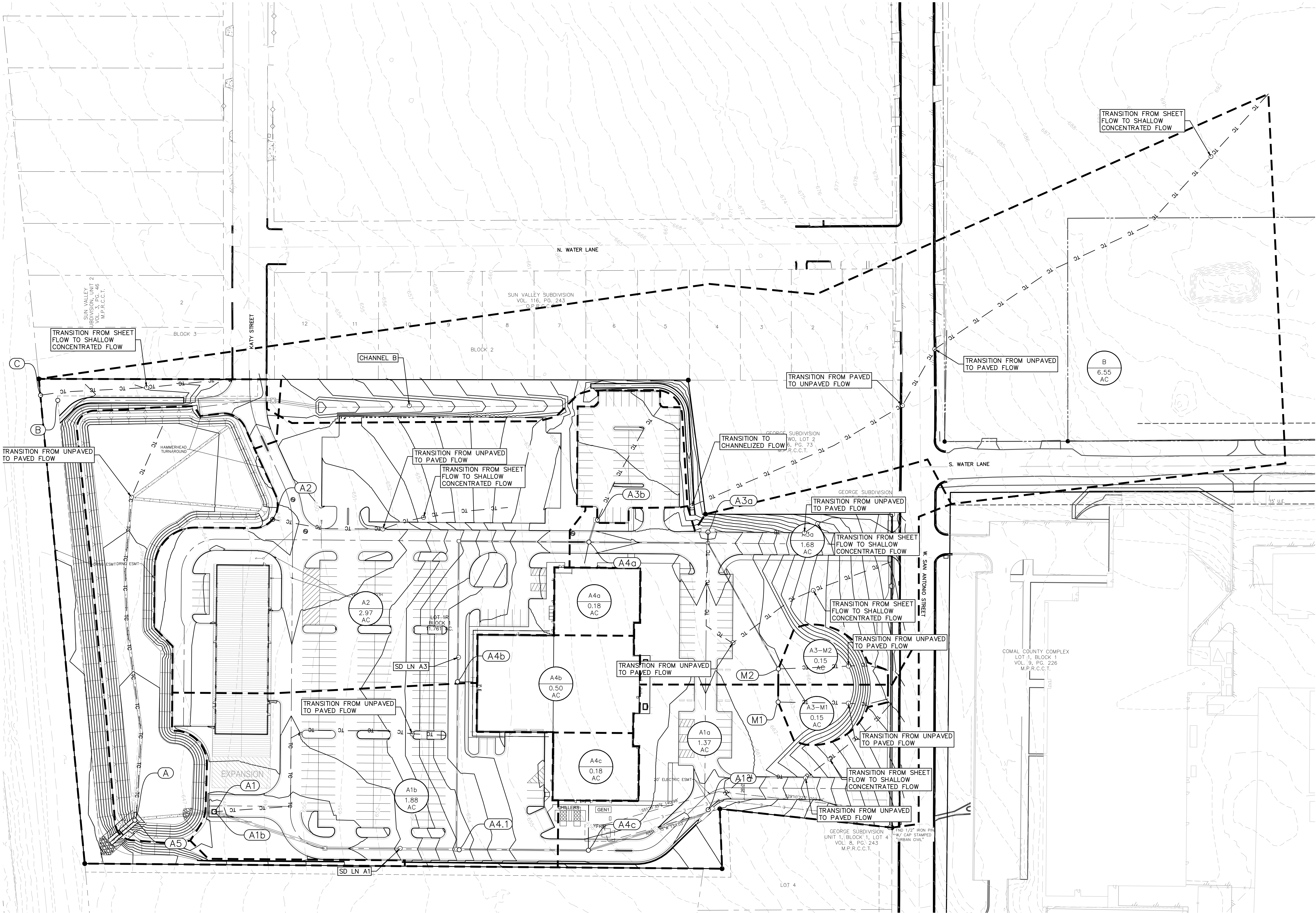
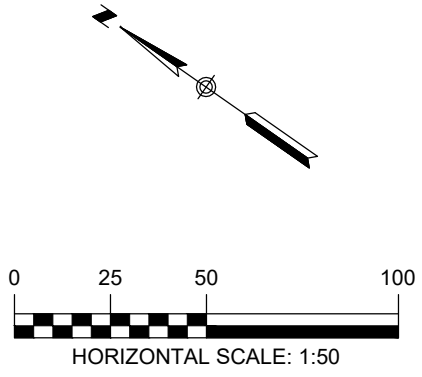


Table 2 - Proposed Conditions Hydrology Calculations - City of New Braunfels									
Point of Concentration	Drainage Area	Area	T <sub>c</sub>	Q <sub>1</sub> (cfs)	Q <sub>2</sub> (cfs)	Q <sub>3</sub> (cfs)	Q <sub>4</sub> (cfs)	Q <sub>5</sub> (cfs)	Q <sub>6</sub> (cfs)
A1a	A1a	1.37	12.28	87.02	2.73	5.97	8.35	13.32	
A1b	A1b	1.88	10.00	92.16	4.56	8.96	12.15	18.84	
A2	A2	2.97	13.14	92.09	7.07	14.05	19.10	29.89	
A3-M1	A3-M1	0.15	10.00	88.67	0.32	0.67	0.93	1.47	
A3-M2	A3-M2	0.15	10.00	88.67	0.32	0.67	0.93	1.47	
A3a	A3a	1.68	12.59	88.68	3.57	7.55	10.45	16.51	
A3b	A3b	0.39	10.00	93.00	0.95	1.87	2.53	3.91	
A3a	A3a+A3-M	1.83	12.59	88.62	3.87	8.21	11.37	17.98	
A4a	A3+A4a	2.55	12.85	90.00	5.67	11.70	16.08	25.24	
A4b	A3+A4a+A4b	3.05	13.38	90.97	6.25	12.65	17.30	27.03	
A4c	A1a+A4c	1.56	12.52	88.33	3.59	7.65	10.60	16.78	
A4.1	A1a+A3+A4	4.47	13.71	90.14	9.18	18.91	25.97	40.76	
A1	A1+A3+A4	6.50	14.20	90.69	13.18	26.85	36.76	57.51	
A	A	10.89	25.83	90.43	18.21	37.41	51.36	80.55	
B	B	6.55	46.78	91.67	8.79	17.64	24.06	37.52	
C	C	0.86	16.57	81.51	1.20	2.97	4.31	7.13	
A	A Thru Pond	10.89	25.83	90.43	7.74	19.21	29.17	53.30	
A	A+B+C	18.30	46.78	90.46	17.73	39.82	57.54	97.95	

Table 4 - Existing to Proposed Comparison					
Point of Concentration	Drainage Area	Q <sub>1</sub> (cfs)	Q <sub>2</sub> (cfs)	Q <sub>3</sub> (cfs)	Q <sub>4</sub> (cfs)
Ex B1	Ex A+B	19.33	43.28	80.95	98.00
A	A+B+C	17.73	39.82	57.54	97.95
Proposed	Is Less Than or Equal to Existing	YES	YES	YES	YES



- LEGEND**
- 700 — EXISTING CONTOURS
  - 700 — PROPOSED CONTOURS
  - B.L. — BUILDING SETBACK LINE
  - U.E. — UTILITY EASEMENT
  - D.E. — DRAINAGE EASEMENT
  - TC — TC — TIME OF CONCENTRATION
  - O — A-1 — POINT OF CONCENTRATION
  - — DRAINAGE FLOW DIRECTION
  - DA — ACRES — DRAINAGE AREA LABEL

**CLIENT**



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**CONSULTANT**



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TBPLS FIRM 1053600

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07/17/2020

**DRAWING HISTORY**

DATE	DESCRIPTION
01/16/20	SCHEMATIC DESIGN SET
02/09/20	50% DESIGN DEVELOPMENT
04/05/20	75% DESIGN DEVELOPMENT
04/17/20	100% DESIGN DEVELOPMENT
04/17/20	50% CONSTRUCTION DOCUMENTS
07/17/20	75% CONSTRUCTION DOCUMENTS

**KEY PLAN**

**PROJECT NAME**  
NEW BRAUNFELS POLICE DEPARTMENT HQ

**PROJECT LOCATION**  
1488 S SEGUIN  
NEW BRAUNFELS, TX 78130

**PROJECT NUMBER**  
040.030

**SHEET TITLE**  
ULTIMATE CONDITIONS DRAINAGE AREA MAP

**SHEET NUMBER**  
C2.1



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07/17/2020

### DRAWING HISTORY

[illegible]

### KEY PLAN

PROJECT NAME

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BRAUNFELS  
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PROJECT LOCATION

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BRAUNFELS, TX  
78130

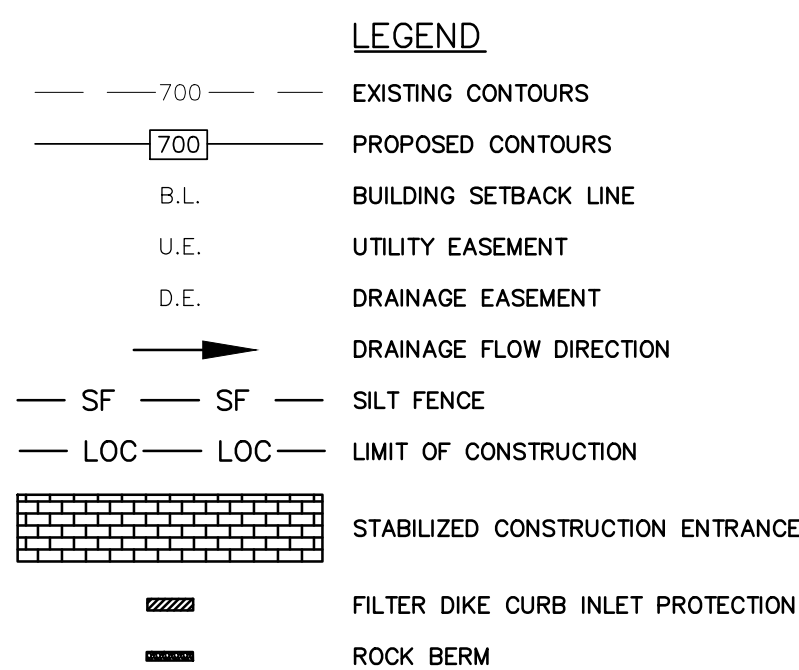
PROJECT NUMBER  
040.030

SHEET    TITLE

# EROSION CONTROL PLAN

SHEET NUMBER

## C3.0



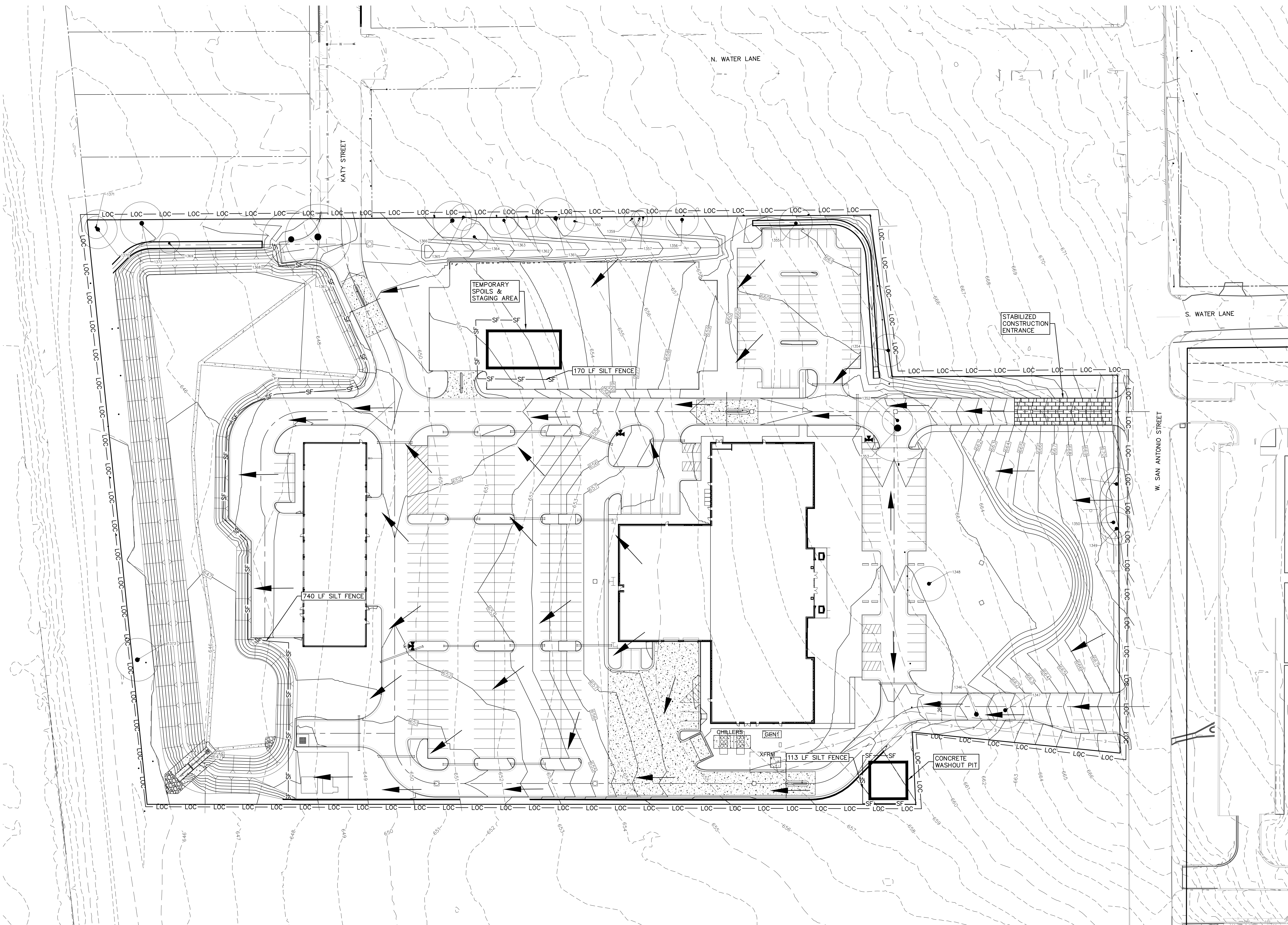
### SEQUENCE OF CONSTRUCTION

1. INSTALL EROSION CONTROLS PER APPROVED PLAN.
2. TEMPORARY CONTROLS TO BE INSPECTED AND MAINTAINED WEEKLY AND PRIOR TO ANTICIPATED RAIN EVENTS; AND REPAIRS TO BE MADE AS NEEDED. CONTRACTOR/OWNER SHALL PROVIDE A CONTACT NAME AND NUMBER FOR EROSION CONTROL ISSUES.
3. CONDUCT DEMOLITION ACTIVITIES, IF APPLICABLE.
4. CONSTRUCT DRAINAGE IMPROVEMENTS, IF APPLICABLE.
5. CONSTRUCT CURB INLET PROTECTION AT THE TIME OF CURB AND INSTALLATION.
6. CONSTRUCT DEVELOPMENT PER APPROVED PLANS.
7. INSTALL STREETScape AND/OR LANDSCAPING IMPROVEMENTS.
8. CONTRACTOR TO VEGETATE ANY DISTURBED AREAS ONCE FINAL GRADING IS COMPLETE, AND ESTABLISH A MINIMUM 70% VEGETATION COVER. SEEDING SHALL BE PER PER'S REQUIREMENTS. DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITIES HAVE CEASED TEMPORARILY OR PERMANENTLY SHALL BE STABILIZED WITHIN 14 DAYS UNLESS ACTIVITY RESUMES WITHIN 21 DAYS. SEEDING DOES NOT CONSTITUTE AS STABILIZATION.
9. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.

**NOTE:**

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITIES HAVE CEASED (TEMPORARILY OR PERMANENT) AND SHALL BE STABILIZED WITHIN 14 DAYS UNLESS ACTIVITY RESUMES IN 21 DAYS, PER TPDES REQUIREMENTS. SEEDING DOES NOT CONSTITUTE AS STABILIZATION.

THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR WILL AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MUST BE INCURRED BY THEIR FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES, STRUCTURES OR FACILITIES. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES 24-HOURS PRIOR TO COMMENCING CONSTRUCTION.



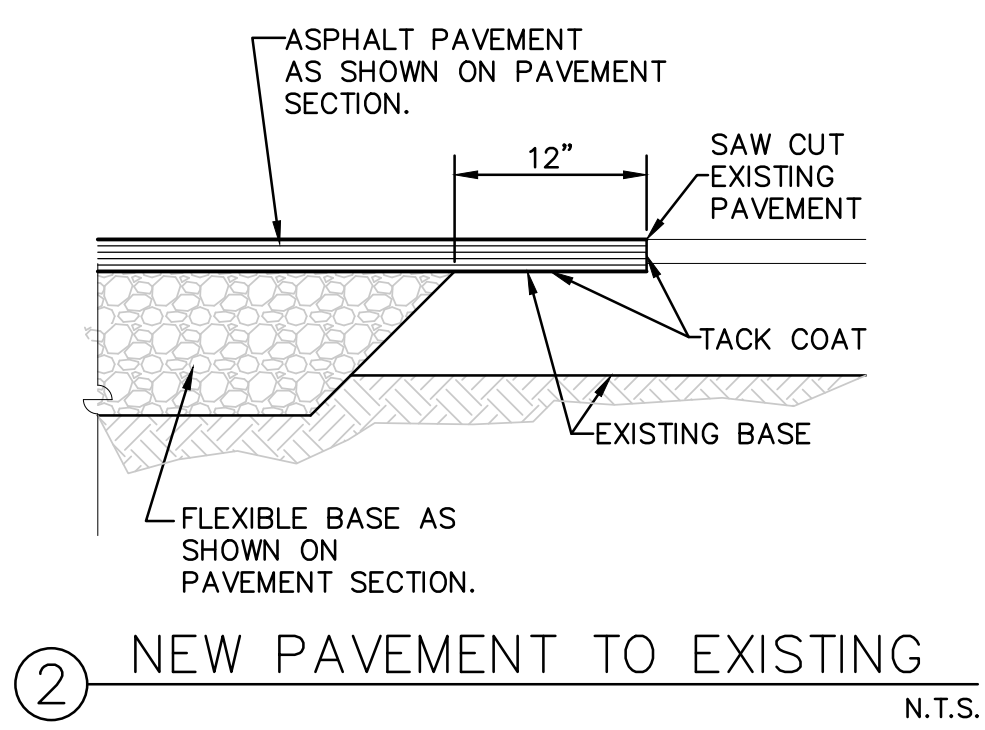
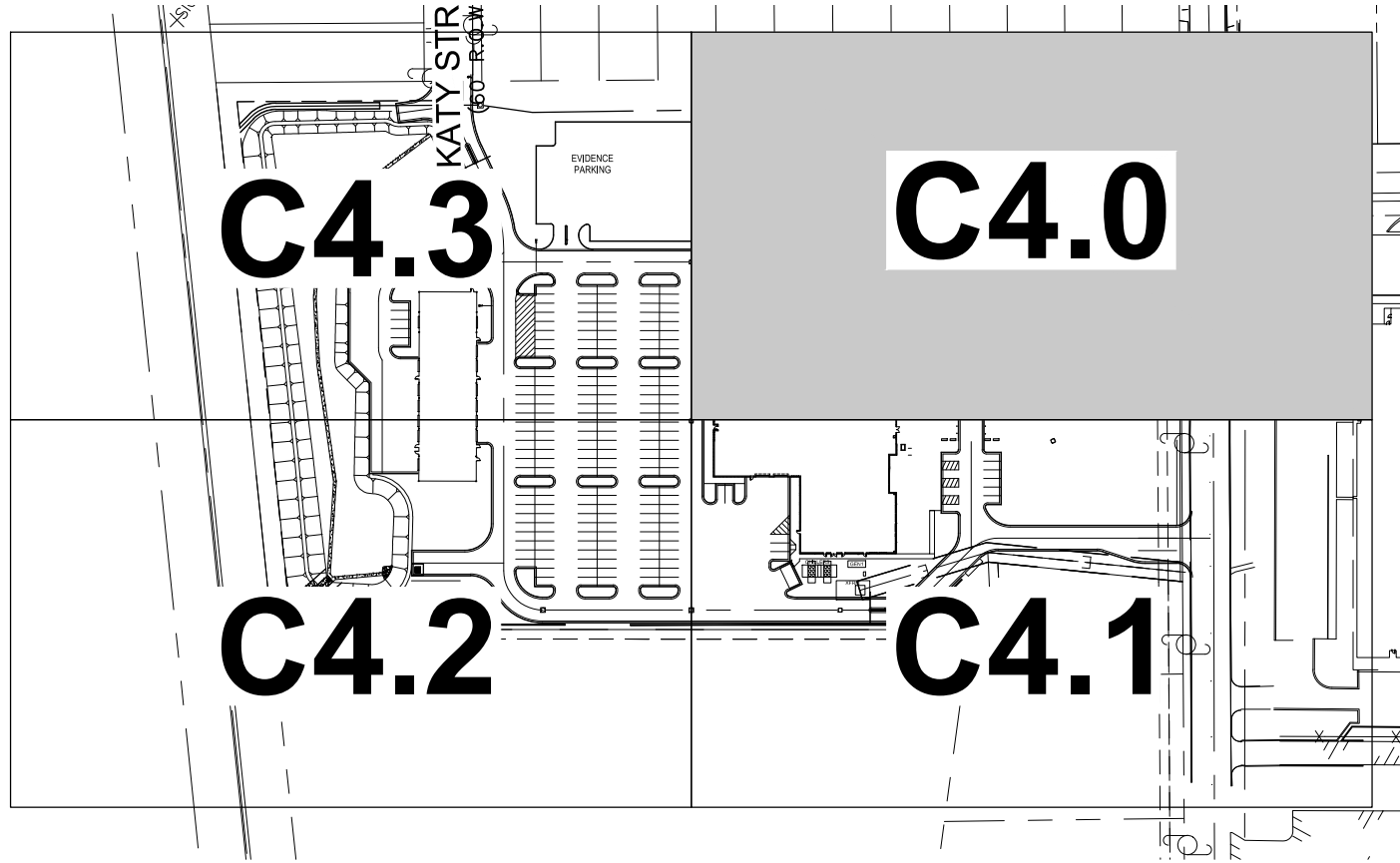
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#### KEY NOTES

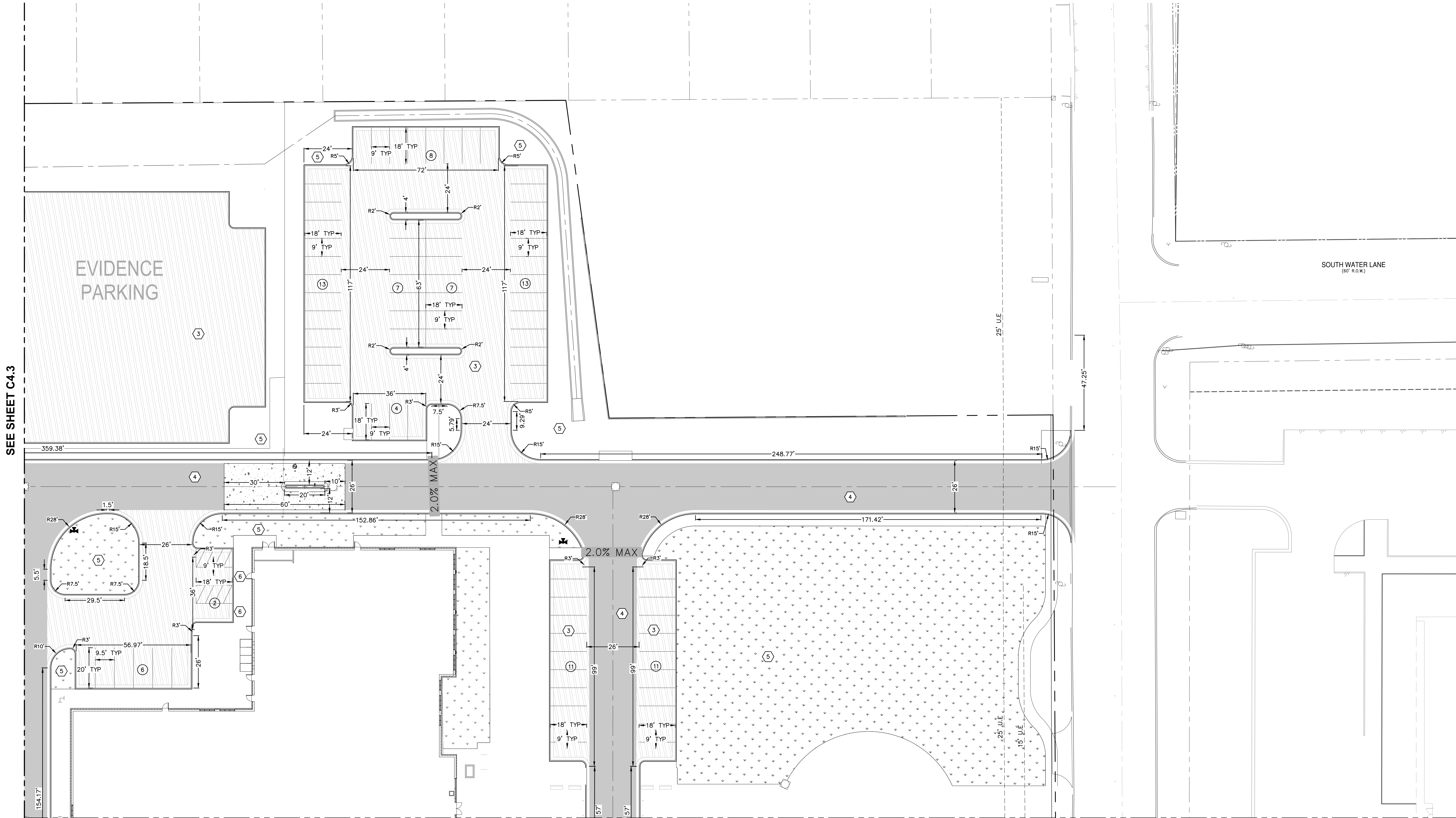
- 1 SPILL CURB
- 2 CATCH CURB
- 3 LIGHT DUTY PAVEMENT
- 4 HEAVY DUTY PAVEMENT
- 5 LANDSCAPE AREA
- 6 ACCESSIBLE PARKING WITH SIGN
- 7 ROCK FACADE ON EXTERIOR OF POND WALL
- 8 CREEPING FIG ON INTERIOR OF POND WALL
- 9 ROCK RIP-RAP
- 10 OVERFLOW WEIR
- 11 PARKING COUNT

#### LEGEND

- U.E.  
D.E.
- A.D.A. RAMPS
- A.D.A. PARKING
- HEAVY DUTY PAVEMENT
- LIGHT DUTY PAVEMENT
- HEAVY DUTY CONCRETE PAVEMENT
- DECOMPOSED GRANITE

#### NOTES:

1. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE STATED.
2. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF NO GREATER THAN 2.0%.



#### NOTE:

1. ALL PAVEMENT CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE TO THE "GEOTECHNICAL ENGINEERING REPORT FOR POLICE HEADQUARTER AND ANNEX BUILDING" PREPARED BY TERRACON CONSULTANTS, INC. ON FEBRUARY 21, 2020.
2. ALL PAVEMENT SECTIONS SHOWN ON THE ABOVE TABLE SHALL SUPERCODE ANY STANDARD DETAILS WITH RESPECT TO DEPTH OF MATERIALS ASSOCIATED WITH THIS PROJECT.
3. THE SUBGRADE SHOULD BE MOISTURE CONDITIONED AS DIRECTED BY THE GEOTECHNICAL REPORT TO ACHIEVE THE FOLLOWING:
  - 3.1. MOISTURE CONDITIONED TO WITHIN 0% TO +4% OF THE OPTIMUM MOISTURE CONTENT
  - 3.2. COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY DETERMINED IN ACCORDANCE WITH ASTM D 698.

FLEXIBLE PAVEMENTS		
PAVEMENT MATERIAL	HEAVY	LIGHT
TYPE "D" HMAC	3.0	2.0
CRUSHED LESTONE FLEXIBLE BASE, IN.	10.0	6.0
COMPACTED SUBGRADE (LIME)	6.0	6.0

RIGID PAVEMENTS		
PAVEMENT MATERIAL	HEAVY	LIGHT
CONCRETE	6.0	5.0
COMPACTED SUBGRADE (LIME)	6.0	6.0

#### 3 TYPICAL PAVEMENT SECTION

THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR WILL AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE INCURRED BY THEIR FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES, STRUCTURES OR FACILITIES. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES 24- HOURS PRIOR TO COMMENCING CONSTRUCTION.

#### CLIENT



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New Braunfels, TX 78130  
T (830) 221-4100

#### ARCHITECT



2222 Western Trails Blvd  
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Austin, TX 78745  
(512) 236-1005

TBPE REG. No. F-2742  
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#### CONSULTANT



#### REGISTRATION

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07/17/2020

#### DRAWING HISTORY

DATE	DESCRIPTION
01/16/20	SCHEMATIC DESIGN SET
02/09/20	50% DESIGN DEVELOPMENT
04/20/20	75% DESIGN DEVELOPMENT
04/17/20	100% DESIGN DEVELOPMENT
04/17/20	80% CONSTRUCTION DOCUMENTS
07/17/20	75% CONSTRUCTION DOCUMENTS

#### KEY PLAN

#### PROJECT NAME

**NEW BRAUNFELS POLICE DEPARTMENT HQ**

#### PROJECT LOCATION

**1488 S SEGUIN  
NEW BRAUNFELS,  
TX 78130**

#### PROJECT NUMBER

**040.030**

#### SHEET TITLE

**SITE PLAN  
(1 OF 4)**

#### SHEET NUMBER

**C4.0**



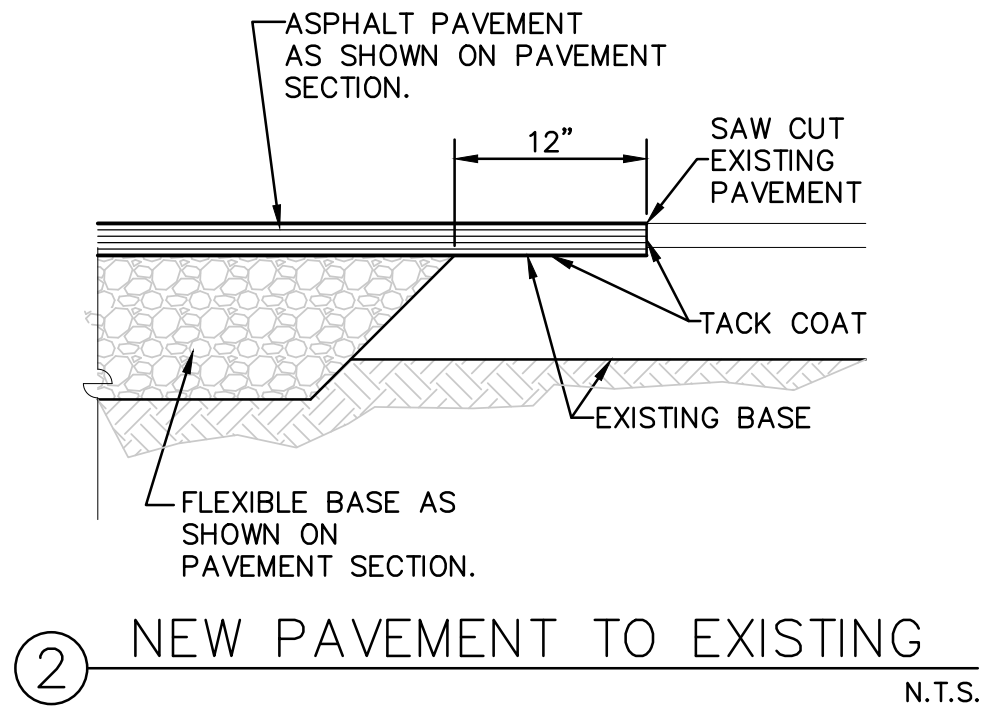
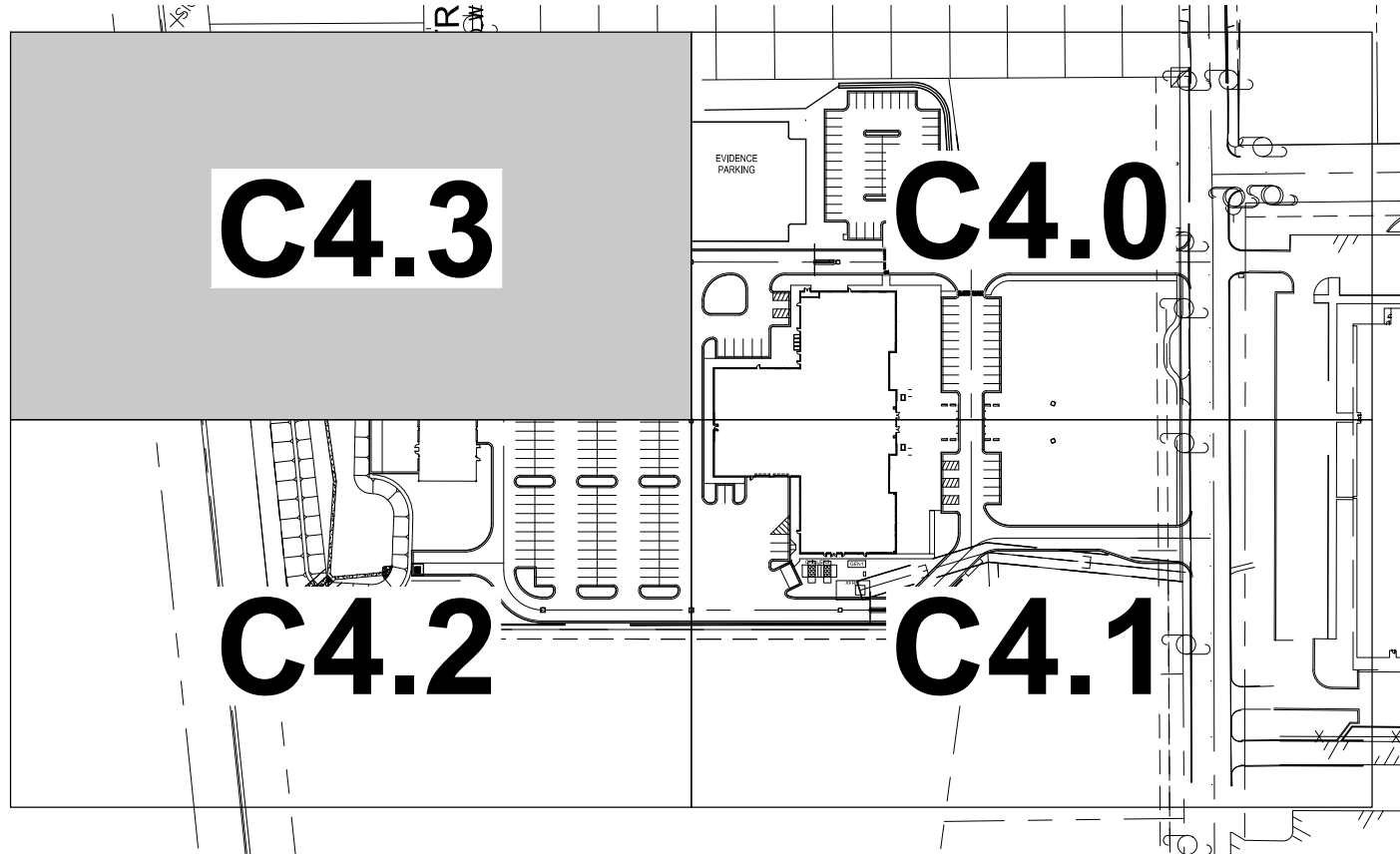








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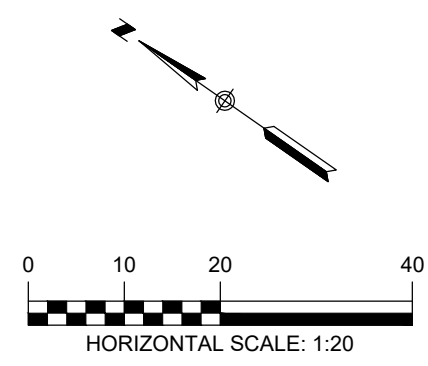


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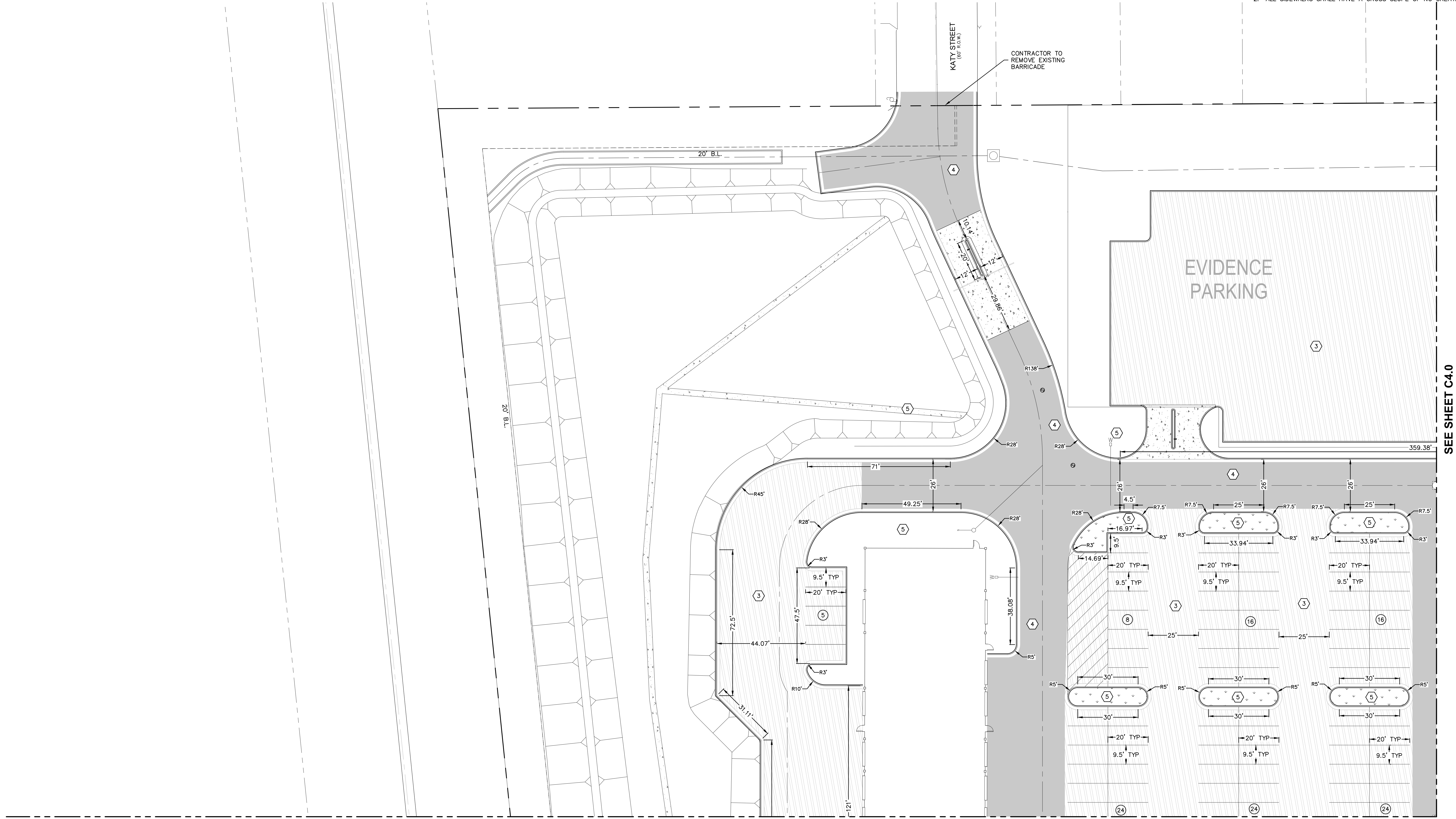
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- NOTES:  
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2. ALL SIDEWALKS SHALL HAVE A CROSS SLOPE OF NO GREATER THAN 2.0%.



SEE SHEET C4.0

SEE SHEET C4.2

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#### KEY PLAN

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**NEW BRAUNFELS POLICE DEPARTMENT HQ**

#### PROJECT LOCATION

**1488 S SEGUIN NEW BRAUNFELS, TX 78130**

#### PROJECT NUMBER

**040.030**

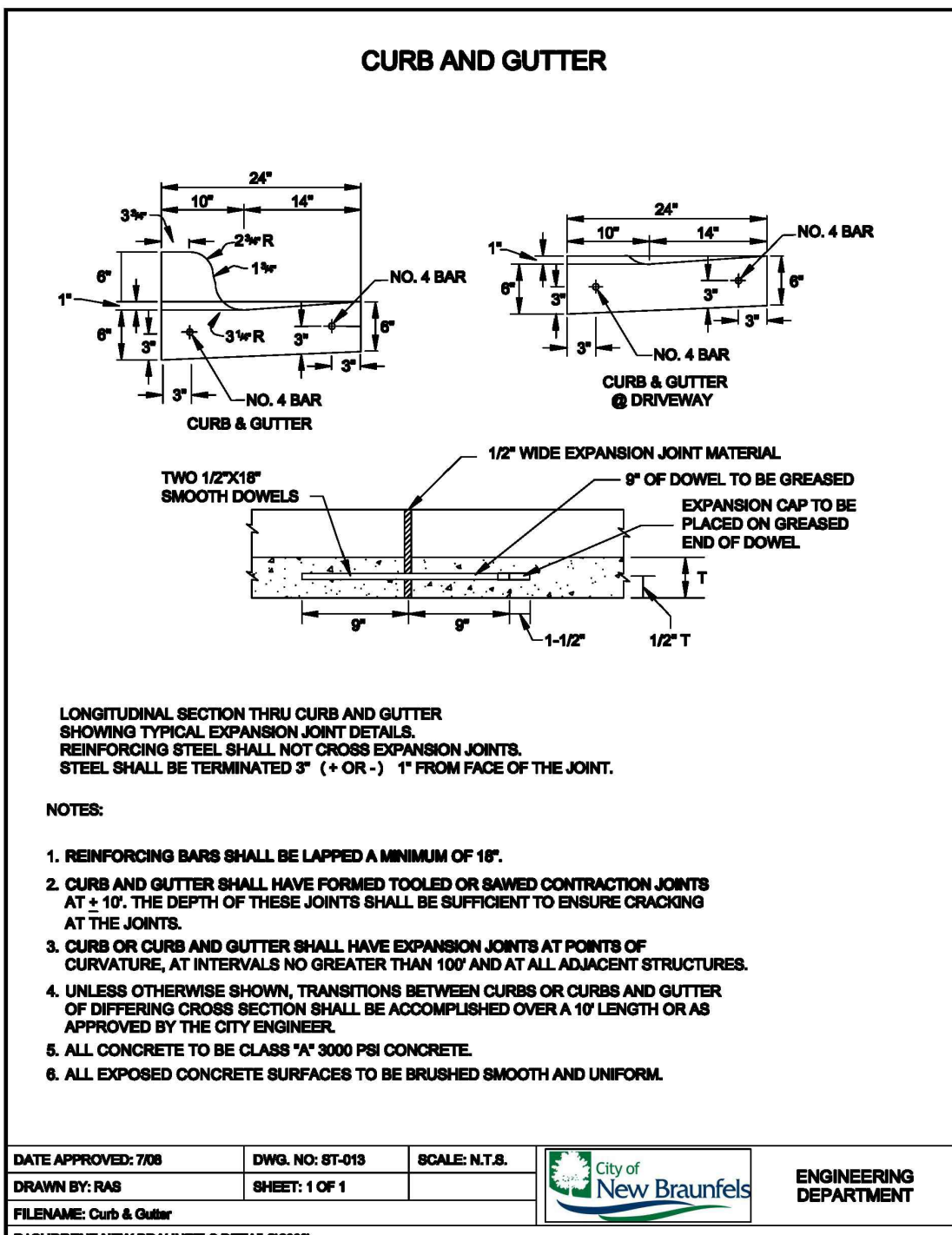
#### SHEET TITLE

**SITE PLAN (4 OF 4)**

#### SHEET NUMBER

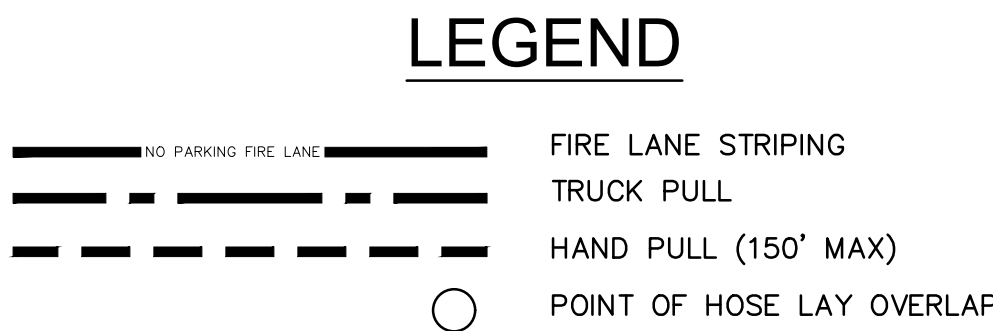
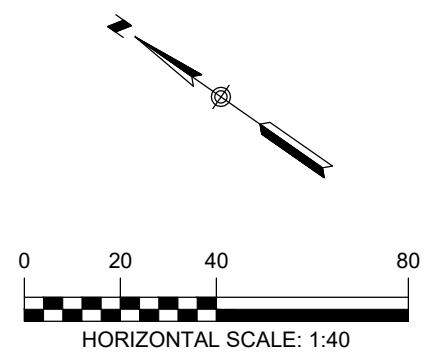
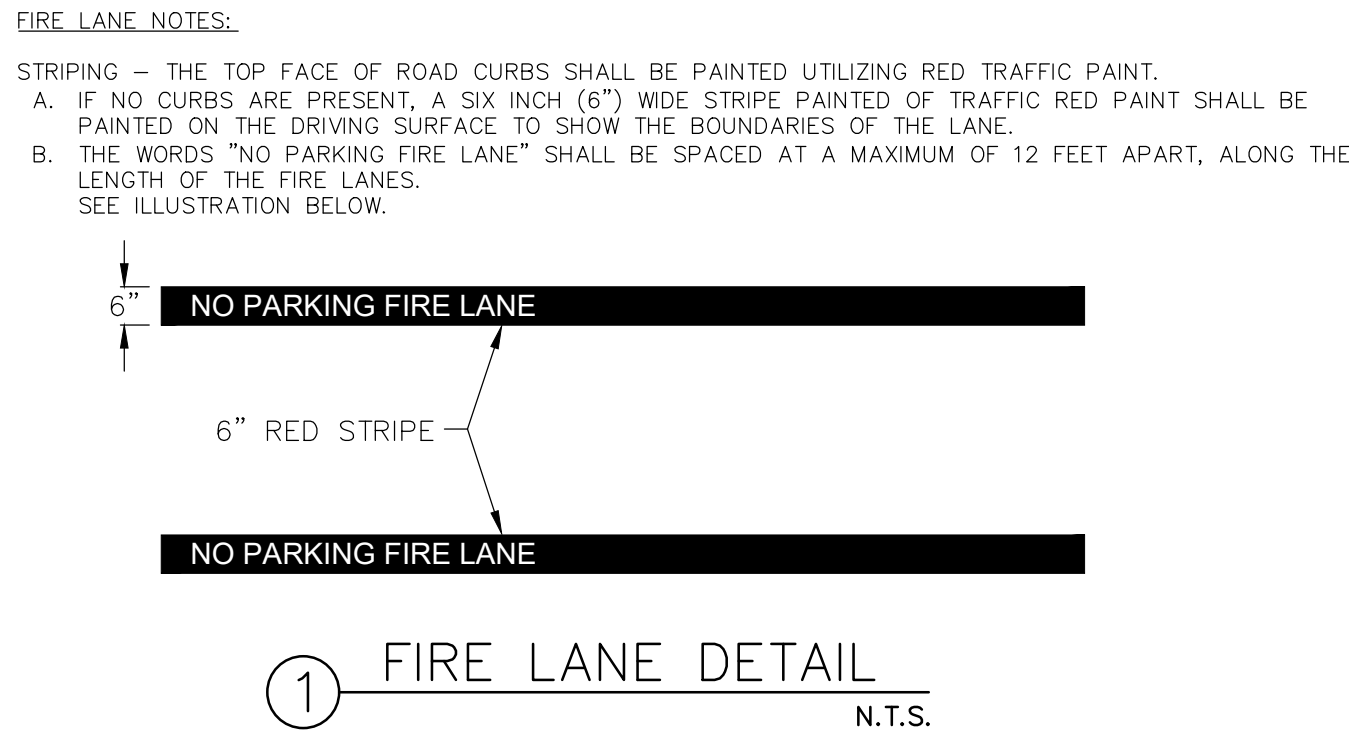
**C4.3**



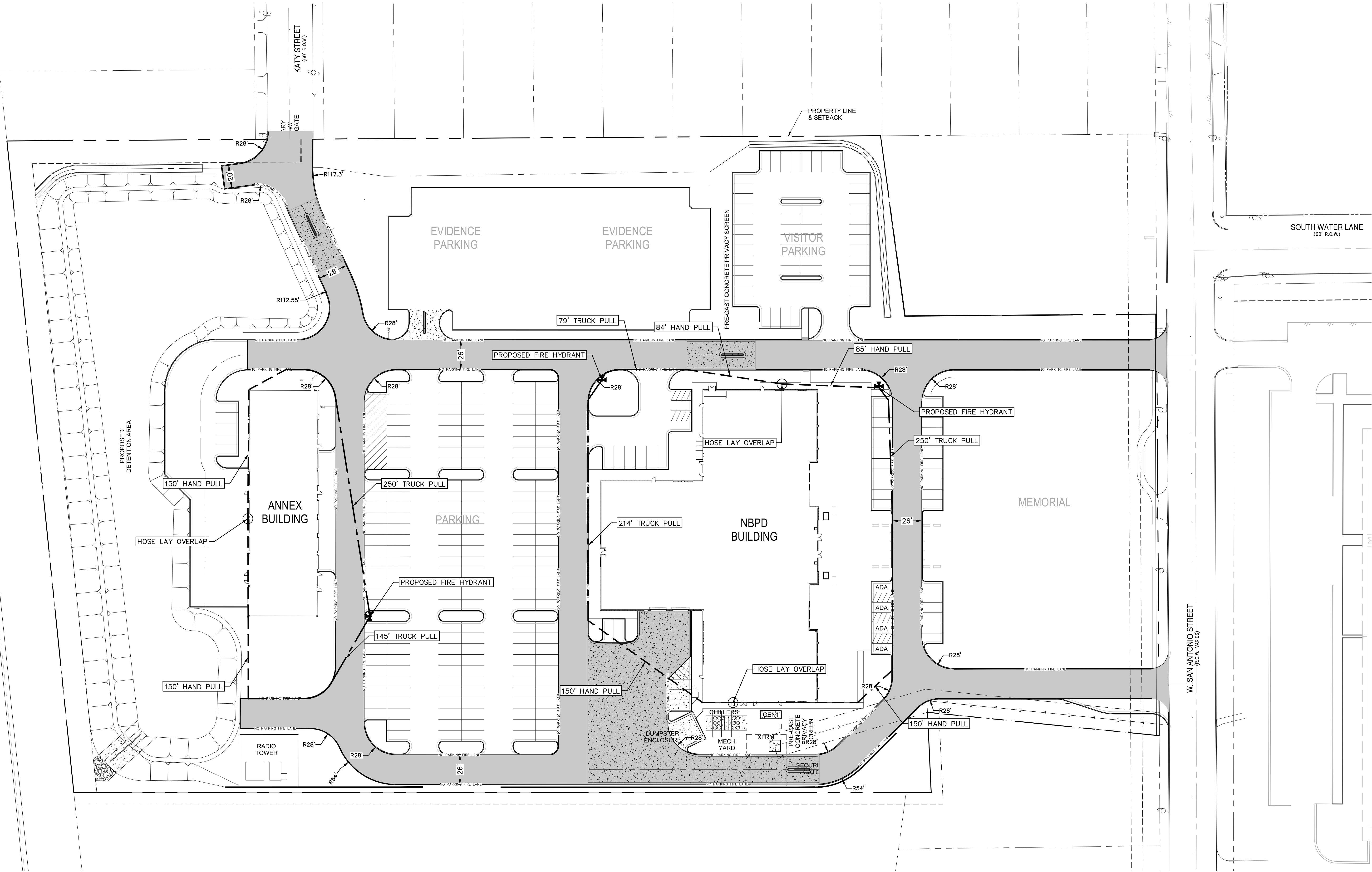


## C4.4





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KEY PLAN

PROJECT NAME  
NEW BRAUNFELS POLICE DEPARTMENT HQ

PROJECT LOCATION  
1488 S SEGUIN NEW BRAUNFELS, TX 78130

PROJECT NUMBER  
040.030

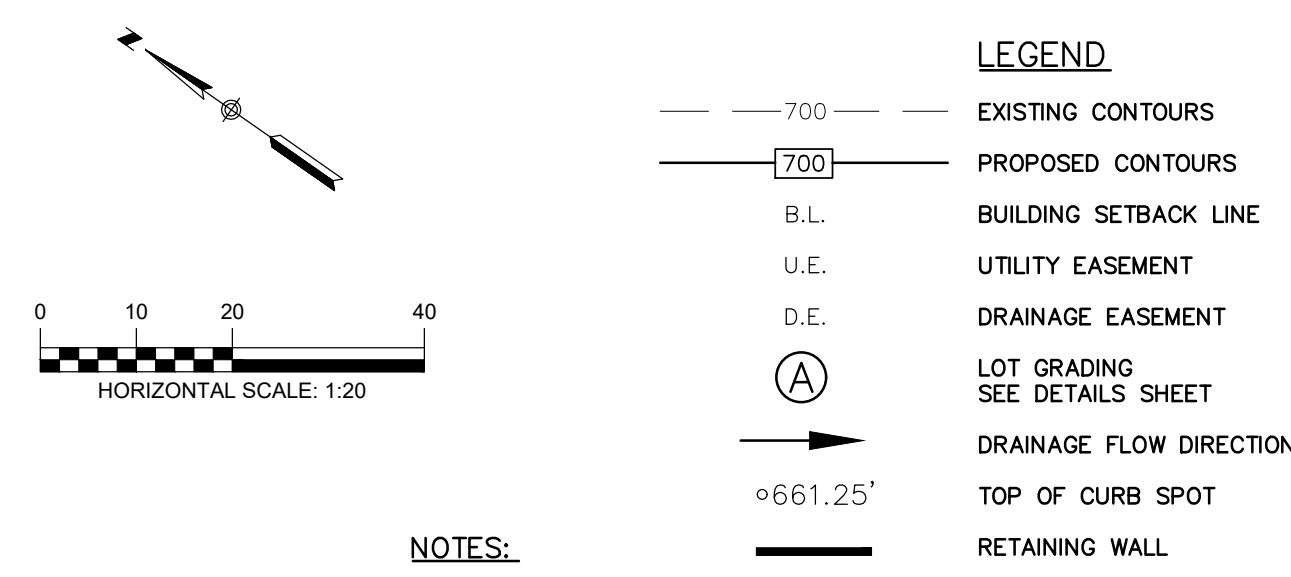
SHEET TITLE  
FIRE PROTECTION PLAN

SHEET NUMBER  
C4.5

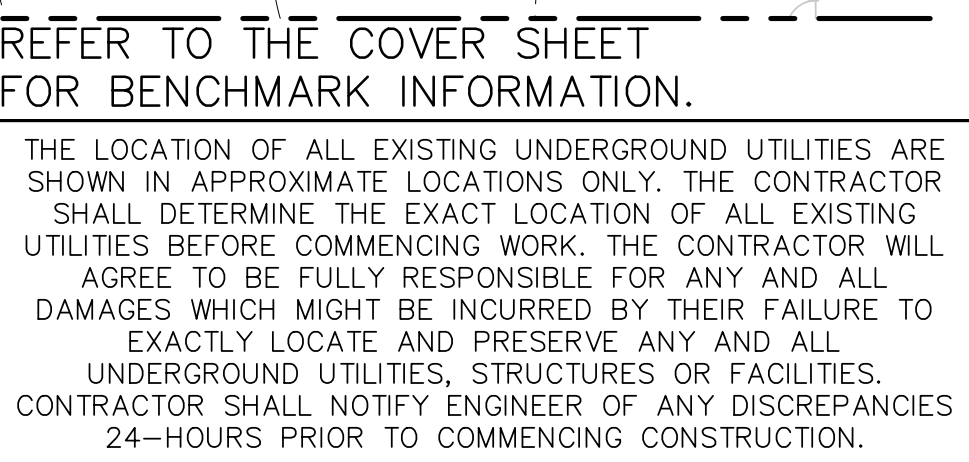




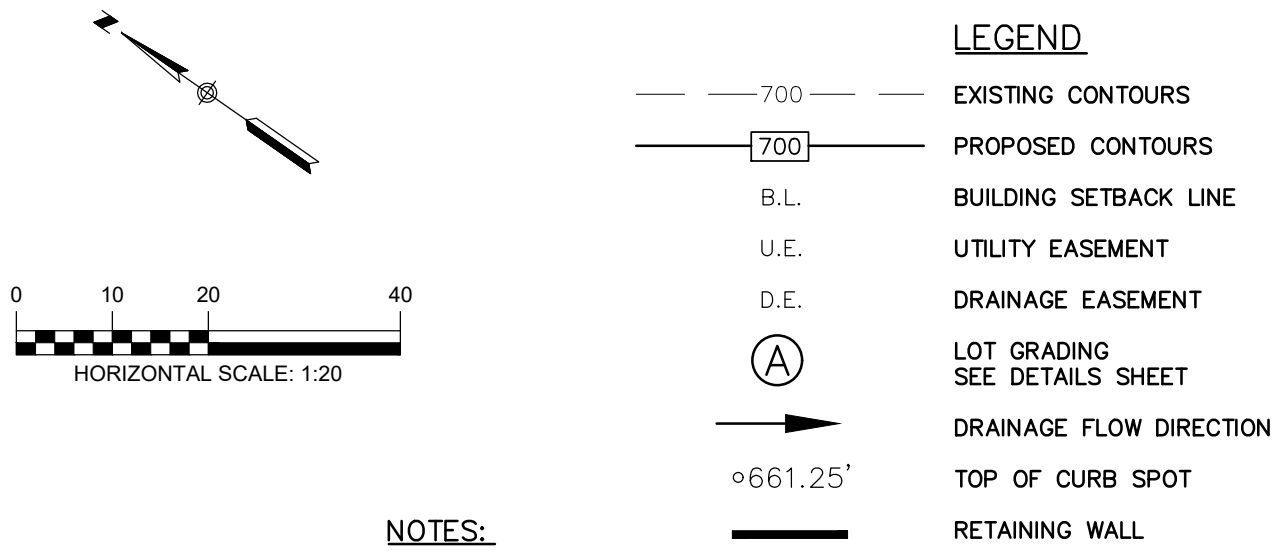




1. DRAINAGE IMPROVEMENTS SUFFICIENT TO MITIGATE OFFSITE IMPACT OF CONSTRUCTION MUST BE COMPLETED AND IN PLACE PRIOR TO ADDING IMPERVIOUS COVER TO THE SITE.
2. ALL FINISHED FLOOR ELEVATIONS SHALL MEET THE FOLLOWING REQUIREMENTS:  
 PER NOTE 11 ON PLAT SHEET **C1.0**.
3. WHEN POSSIBLE, CONTRACTOR SHALL CONSIDER PHASE GRADING SO AS TO EXPOSE THE MINIMUM AMOUNT OF AREA TO SOIL EROSION FOR THE SHORTEST PERIOD OF TIME.
4. ALL SPOT GRADES ARE TOP OF CURB UNLESS OTHERWISE NOTED.

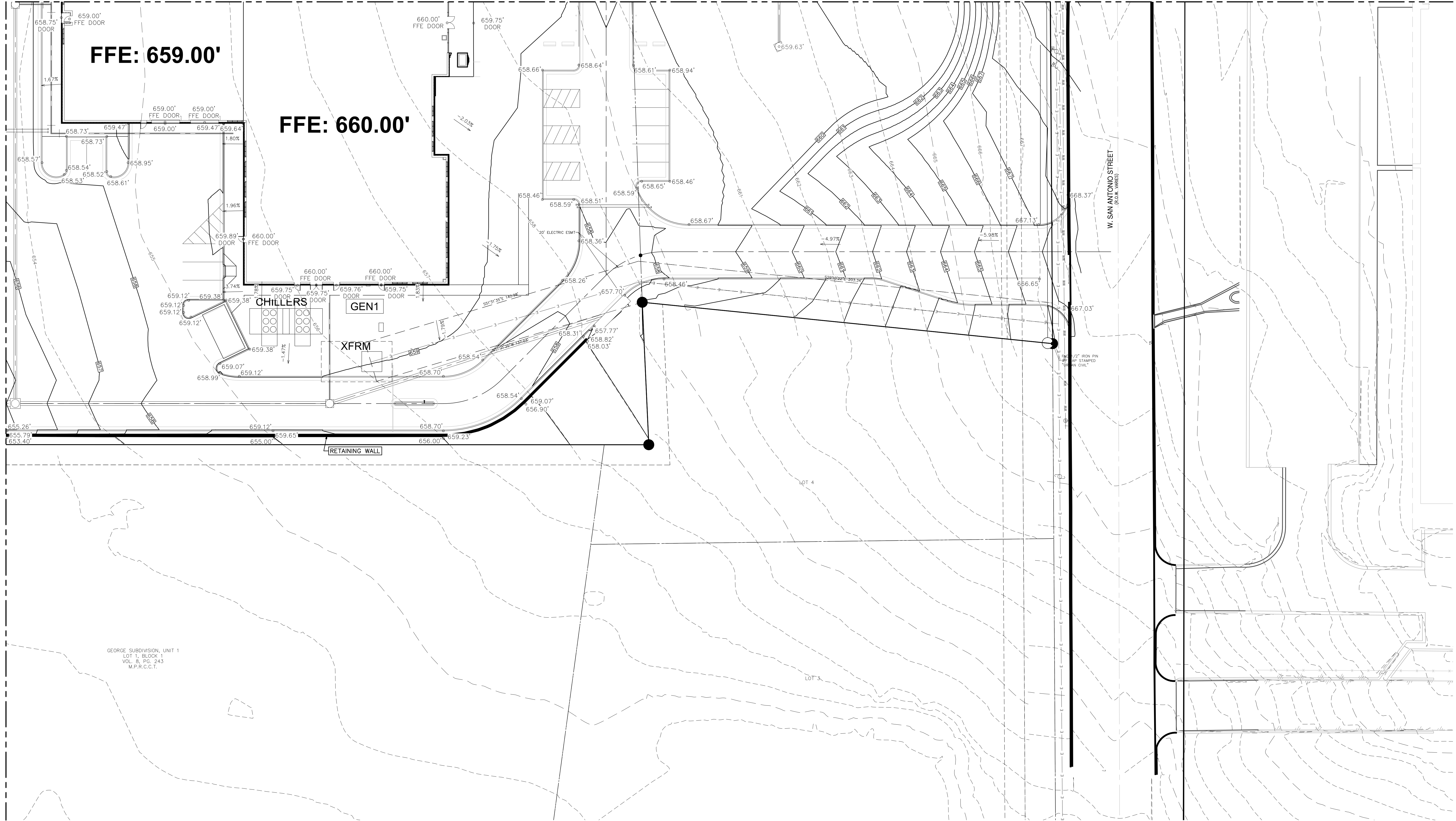






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**SEE SHEET C5.3**



REFER TO THE COVER SHEET  
FOR BENCHMARK INFORMATION.

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P.E. # 93047 ON 7/15/20.  
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07/17/2020

### DRAWING HISTORY

[illegible]

## KEY PLAN

PROJECT NAME

NEW  
BRAUNFELS  
POLICE  
DEPARTMENT  
HQ

### PROJECT LOCATION

1488 S SEGUIN  
NEW  
BRAUNFELS, TX  
78130

PROJECT NUMBER  
040.030

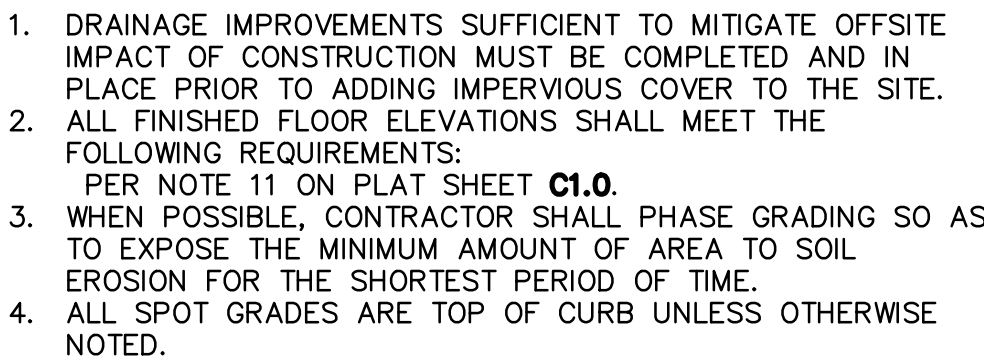
SHEET TITLE

# DETAILED GRADING (2 OF 4)

SHEET NUMBER

## C5.2





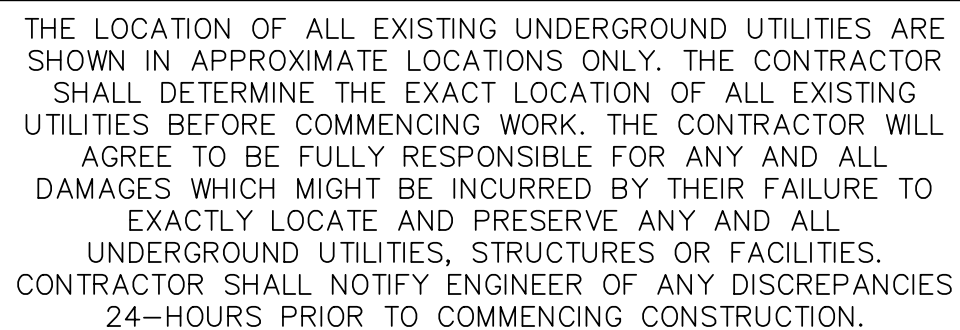
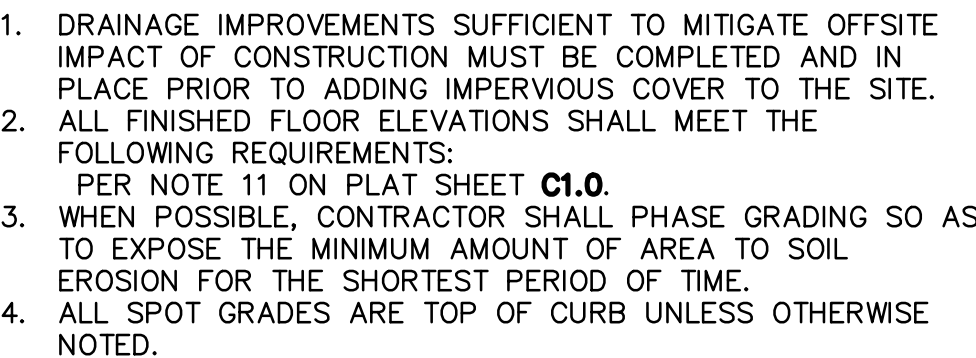
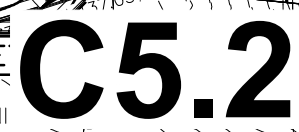
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SHEET NUMBER

C5.3







CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES 48 HOURS PRIOR TO EXCAVATION:

New Braunfels Utilities	830-620-8400
Time Warner Cable	830-625-3408
Centerpoint Gas	830-643-6434
Robert Sonders	830-643-6903
Damaged Lines	888-876-5786
AT&T Telephone	850-303-1333
Eric White PM	210-283-1706
Scott McBrearty (Construction)	210-658-4886
Texas One Call	830-545-6005

C.P.E. LOCATOR

CALL CENTER POINT ENERGY LOCATOR AT 1-800-545-6005, 48HRS BEFORE BEGINNING ANY EXCAVATION. DUE TO FEDERAL REGULATIONS TITLE 49, PART 192.191, CENTER POINT ENERGY MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

TELEPHONE LOCATOR

THE EXISTENCE AND LOCATION OF UNDERGROUND CABLE INDICATED ON THE PLANS ARE TAKEN FROM THE BEST RECORDS AVAILABLE AND ARE NOT GUARANTEED TO BE ACCURATE. CONTRACTOR TO CONTACT THE TELEPHONE COMPANY CABLE LOCATOR 48HRS PRIOR TO EXCAVATION AT 1-800-545-6005, CONTRACTOR HAS THE RESPONSIBILITY TO PROTECT AND SUPPORT TELEPHONE COMPANY DURING CONSTRUCTION.

TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTORS IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATIONS.

RESTRAINED LENGTH NOTES:

- CONTRACTOR TO COORDINATE WITH NEW BRAUNFELS UTILITIES (N.B.U.) FOR WATER, SEWER, AND ELECTRIC SERVICE TO THE SITE.
- ALL IN-LINE VALVES, BENDS & PLUGS SHALL BE RESTRAINED, RESTRAINT TO BE PROVIDED ON EACH SIDE OF THE VALVE, FITTING OR ANY REQUIRED JOINT.
- RL=RESTRAINT LENGTH
- CONTRACTOR SHALL DETERMINE RESTRAINT LENGTH REQUIRED FOR HORIZONTAL VERTICAL FITTINGS BASED ON RESTRAINT LENGTH TABLE SHOWN BELOW.

RESTRAINT LENGTH FOR PIPE									
PIPE INSIDE DIAMETER	MATERIAL	HORIZONTAL BENDS				VERTICAL BENDS			
		UPPER				LOWER			
		90°	45°	22.5°	11.25°	45°	22.5°	11.25°	DEAD END/ INCLINE VALVES
8"	PVC	32	14	7	4	37	18	9	88
8"	DUCTILE IRON	27	11	6	3	33	16	8	56
12"	PVC	45	19	9	5	52	25	13	124

NOTES:

LENGTHS SHOWN ABOVE WERE COMPUTED BASED ON THE FOLLOWING VALUES:

- SAFETY FACTOR = 1.5 TO 1
- TEST PRESSURE = 200PSI
- SOIL DESIGNATION = IN ORGANIC CLAY OF HIGH PLASTICITY
- DEPTH OF COVER = 3.5 FEET (TYPICAL AND UPPER BEND)
- DEPTH OF COVER = 5 FEET (LOWER BEND)
- LENGTH ALONG RUN = 2 FEET

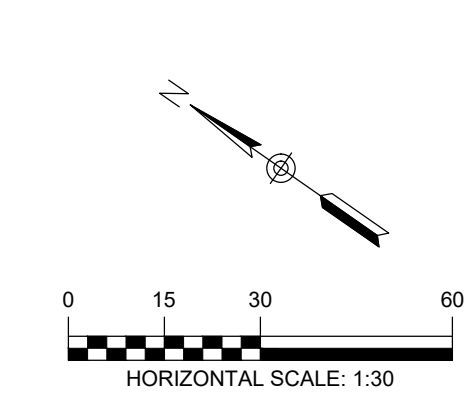
TEE			
PIPE INSIDE DIAMETER OF RUN	PIPE INSIDE DIAMETER OF BRANCH	MATERIAL	FT.
8"	8"	PVC	77
8"	8"	DUCTILE IRON	50
12"	8"	PVC	72

CONSTRUCTION NOTES:

- ALL WATER MAINS SHALL BE AWWA C900 (CLASS 150 OR GREATER).
- WATER SERVICES SHALL BE SINGLE 1" COPPER TUBING.
- WATER LINE IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE NBU SYSTEMS CONNECTION & CONSTRUCTION POLICY.
- WATER MAIN SHALL HAVE A MINIMUM OF 48 INCHES OF COVER, OTHERWISE CONCRETE ENCASEMENT WILL BE REQUIRED.
- EACH UNIT IN A DUPLEX, TRIPLEX, FOURPLEX, OR CONDOMINIUM SHALL BE PROVIDED WITH AN INDIVIDUAL WATER METER. A MASTER METER CAN BE CONSIDERED FOR SEPARATE BUILDINGS, HOWEVER, THOSE BUILDINGS MUST BE PLUMBED TO ALLOW SEPARATE METERS FOR FUTURE CONSIDERATION.
- CONTRACTOR WILL KEEP THE AREA ON TOP OF AND AROUND THE WATER METER BOX FREE OF ALL OBJECTS AND DEBRIS.
- INITIAL BACKFILL OF WATER LINES SHALL BE MANUFACTURED SAND OR PEA GRAVEL AS PER NBU SYSTEMS CONNECTION & CONSTRUCTION POLICY.
- SECONDARY BACKFILL OF WATER LINES SHALL GENERALLY CONSIST OF MATERIAL REMOVED FROM THE TRENCH AND SHALL BE FREE FROM BRUSH, DEBRIS AND TRASH OR STONES HAVING ANY DIMENSION LARGER THAN 6" INCHES AT THE LARGEST DIMENSION.
- HYDROSTATIC TESTING IS DONE FROM VALVE TO VALVE.
- NO METER BOXES TO BE SET IN DRIVEWAYS OR SIDEWALKS. ANY METER BOXES SET IN DRIVEWAYS OR SIDEWALKS WILL BE RELOCATED AT CONTRACTOR'S AND/OR DEVELOPER'S EXPENSE.
- NO VALVES, HYDRANTS, ETC. SHALL BE CONSTRUCTED WITHIN CURBS, SIDEWALKS, OR DRIVEWAYS.
- METER BOXES MUST BE SET AT THE PROPOSED GRADE. ANY METER BOXES THAT ARE NOT SET AT THE FINAL GRADE WILL BE ADJUSTED AT CONTRACTOR'S AND/OR DEVELOPER'S EXPENSE.
- ACCEPTABLE METER BOXES ARE D13-BAMR AND D15-BAMR. NEW RESIDENTIAL LOTS ARE REQUIRED TO USE THE D15-BAMR METER BOXES (DOUBLE JAMR). COMMERCIAL LOTS SHOULD CHOOSE WHICH BOX APPLIES TO THE DOMESTIC AND/OR IRRIGATION METER LAYOUT.
- THRUST BLOCKS WILL NOT BE ALLOWED ON THE SYSTEM WITHOUT SPECIAL APPROVAL. JOINTS WILL BE RESTRAINED WITH RESTRAINING SYSTEMS APPROVED BY NBU AND RESTRAINT LENGTH SHALL BE SUBMITTED TO NBU AT THE TIME OF PLAN SUBMITTAL.
- CONTRACTOR SHALL PLACE TRACER WIRE ON TOP OF THE WATER MAINS. TRACER WIRE SHOULD RUN FROM VALVE TO VALVE AND EXIT AT THE VALVE BOX. THE TRACER WIRE SHOULD BE ATTACHED TO THE TOP OF THE PIPE USING TAPE. EXCESS WIRE SHOULD BE LEFT WITHIN VALVE BOXES TO BE PLACED WITHIN LID OF COVER.
- ALL VALVES, HYDRANTS, AND METERS ARE SHOWN SCHEMATICALLY AND SHALL BE INSTALLED ACCORDING TO THE DETAILS.

UTILITY TRENCH COMPACTION

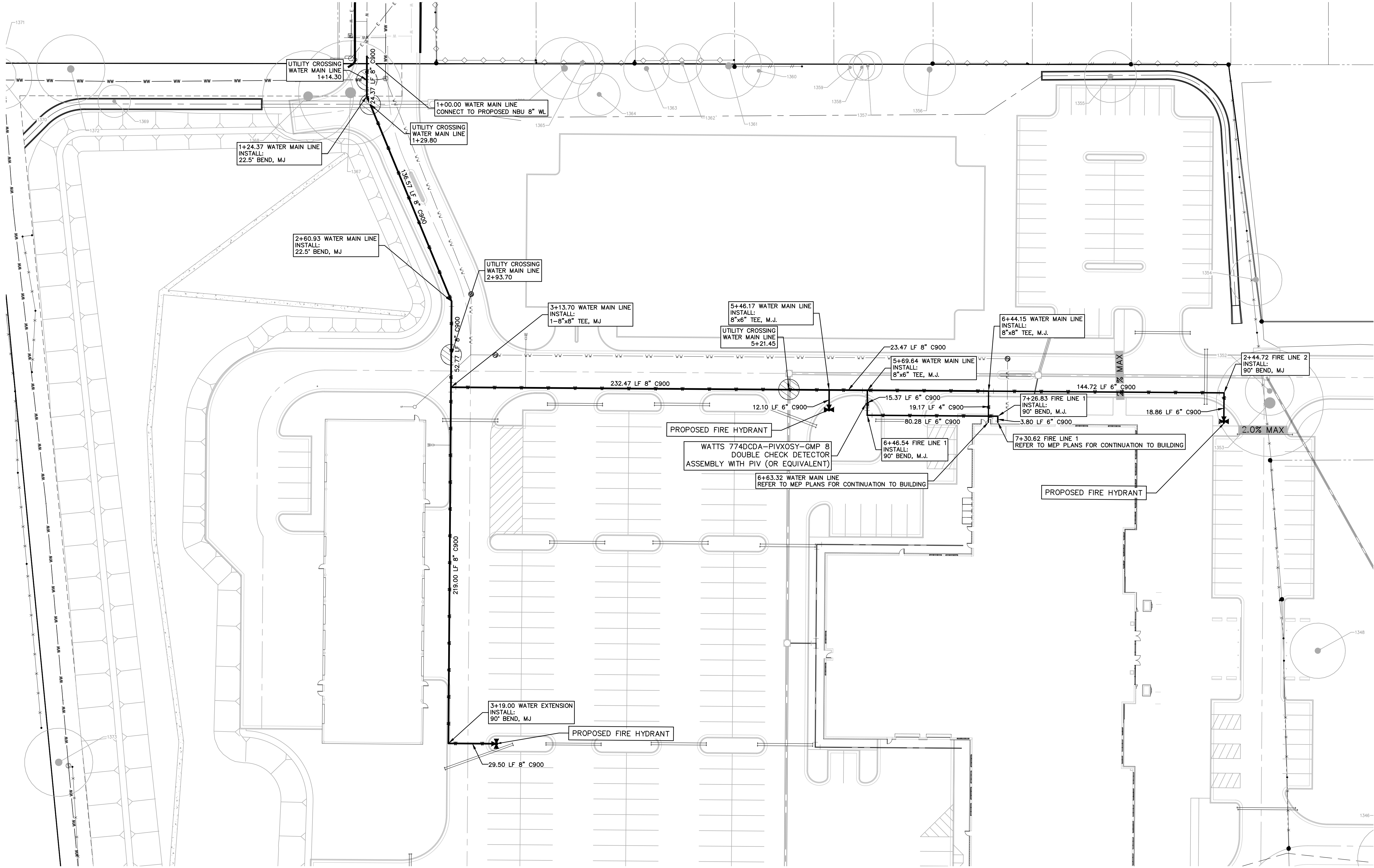
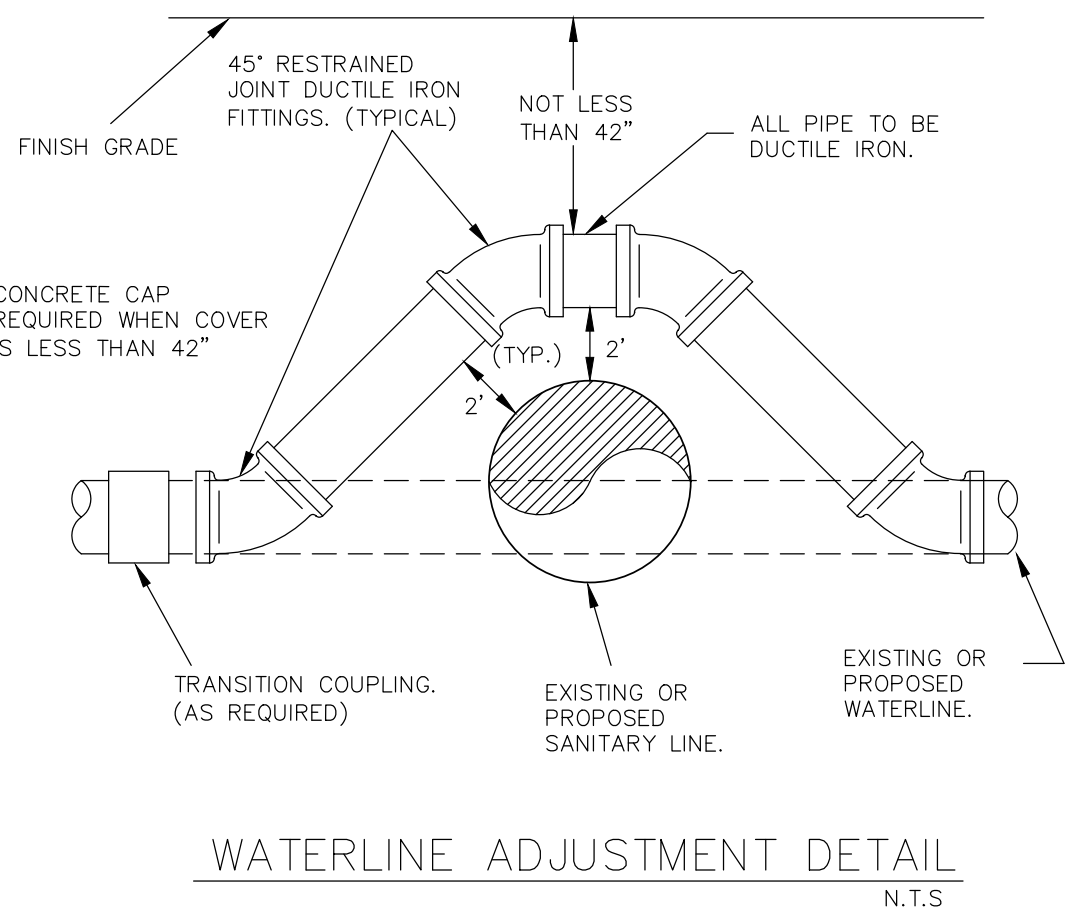
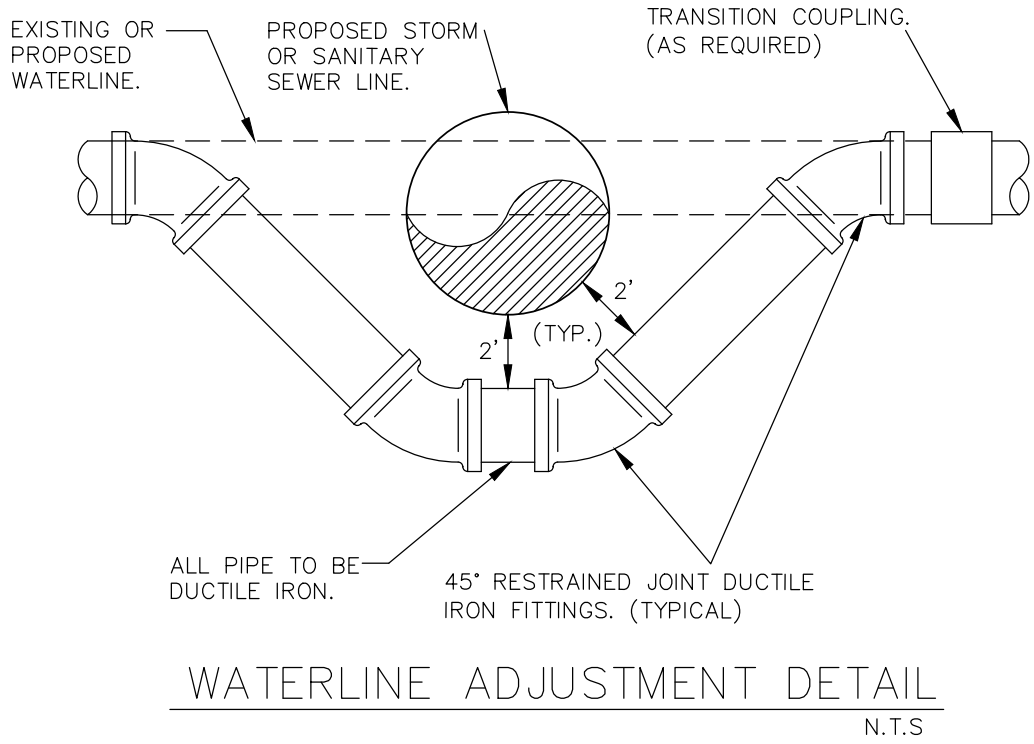
ALL UTILITY TRENCH COMPACTION TESTS WITHIN THE STREET PAVEMENT SECTION SHALL BE THE RESPONSIBILITY OF THE DEVELOPER'S GEO-TECHNICAL ENGINEER. FILL MATERIAL SHALL BE PLACED IN UNIFORM LAYERS NOT TO EXCEED TWELVE INCHES (12") LOOSE. EACH LAYER OF MATERIAL SHALL BE COMPACTED TO A MINIMUM 90% DENSITY AND TESTED FOR DENSITY AND MOISTURE IN ACCORDANCE WITH TEST METHODS T20-115-E, T20-114-E, T20-115-E. THE NUMBER AND LOCATION OF REQUIRED TESTS SHALL BE DETERMINED BY THE GEOTECHNICAL ENGINEER AND APPROVED BY THE CITY OF NEW BRAUNFELS STREET INSPECTOR. AT A MINIMUM, TESTS SHALL BE TAKEN EVERY 100LF FOR EACH LIFT. UPON COMPLETION OF TESTING THE GEO-TECHNICAL ENGINEER SHALL PROVIDE THE CITY OF NEW BRAUNFELS STREET INSPECTOR WITH ALL TESTING DOCUMENTATION AND A CERTIFICATION STATING THAT THE PLACEMENT OF FILL MATERIAL HAS BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.



LEGEND	
---	EXISTING CONTOURS
---	PROPOSED CONTOURS
B.L.	BUILDING SETBACK LINE
U.E.	UTILITY EASEMENT
D.E.	DRAINAGE EASEMENT
---	EXISTING WATER LINE
---	PROPOSED WATER LINE
---	PROPOSED WATER SERVICE
---	UTILITY CROSSING

UTILITY NOTES:

- ALL UTILITIES TO BE CONSTRUCTED PRIOR TO THE STREETS.
- NO VALVES, HYDRANTS, ETC. SHALL BE CONSTRUCTED WITHIN CURBS, SIDEWALKS OR DRIVEWAYS.
- THIS SITE IS IN THE DOWNTOWN PRESSURE ZONE ACCORDING TO NEW BRAUNFELS UTILITIES PRESSURE RECORDER LOCATIONS.
- CONTRACTOR TO VERIFY EXISTING LATERAL HAS A MINIMUM LONGITUDINAL SLOPE OF 2%.
- POINT OF DELIVERY SHALL BE IN ACCORDANCE WITH NBU WATER AND WASTEWATER DESIGN CRITERIA MANUAL, SECTION 2.3.0.



REFER TO THE COVER SHEET FOR BENCHMARK INFORMATION.

THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR WILL AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE INCURRED BY THEIR FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES, STRUCTURES OR FACILITIES. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES 24-HOURS PRIOR TO COMMENCING CONSTRUCTION.

CLIENT



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ARCHITECT



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TBPE REG. No. F-2742

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CONSULTANT



REGISTRATION

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07/17/2020

DRAWING HISTORY

DATE	DESCRIPTION
01/16/00	SCHEMATIC DESIGN SET
02/09/02	50% DESIGN DEVELOPMENT
06/20/02	70% DESIGN DEVELOPMENT
04/17/02	100% DESIGN DEVELOPMENT
04/17/02	80% CONSTRUCTION DOCUMENTS
07/17/20	70% CONSTRUCTION DOCUMENTS

KEY PLAN

PROJECT NAME

**NEW  
BRAUNFELS  
POLICE  
DEPARTMENT  
HQ**

PROJECT LOCATION

**1488 S SEGUIN  
NEW BRAUNFELS, TX  
78130**

PROJECT NUMBER

**040.030**

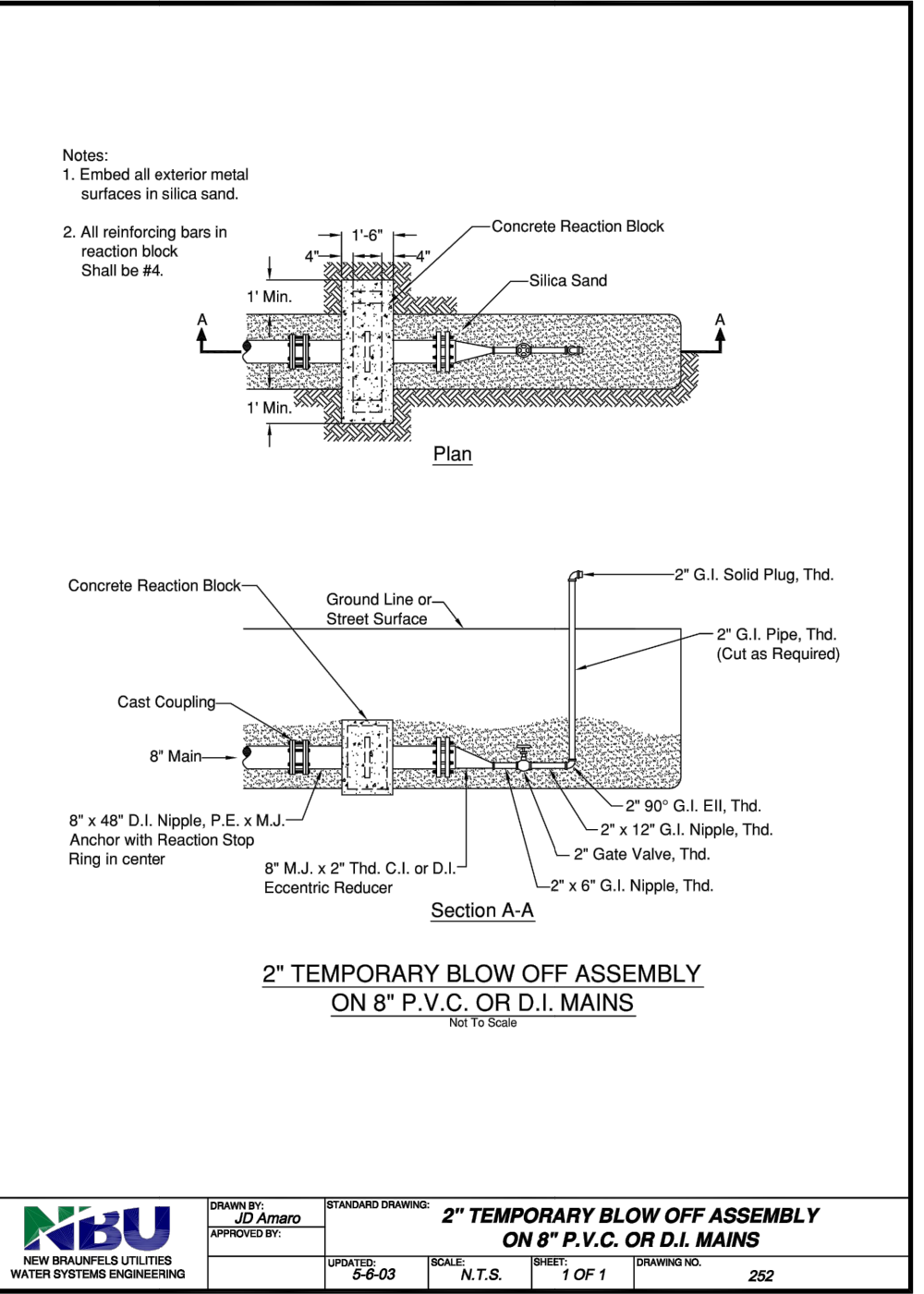
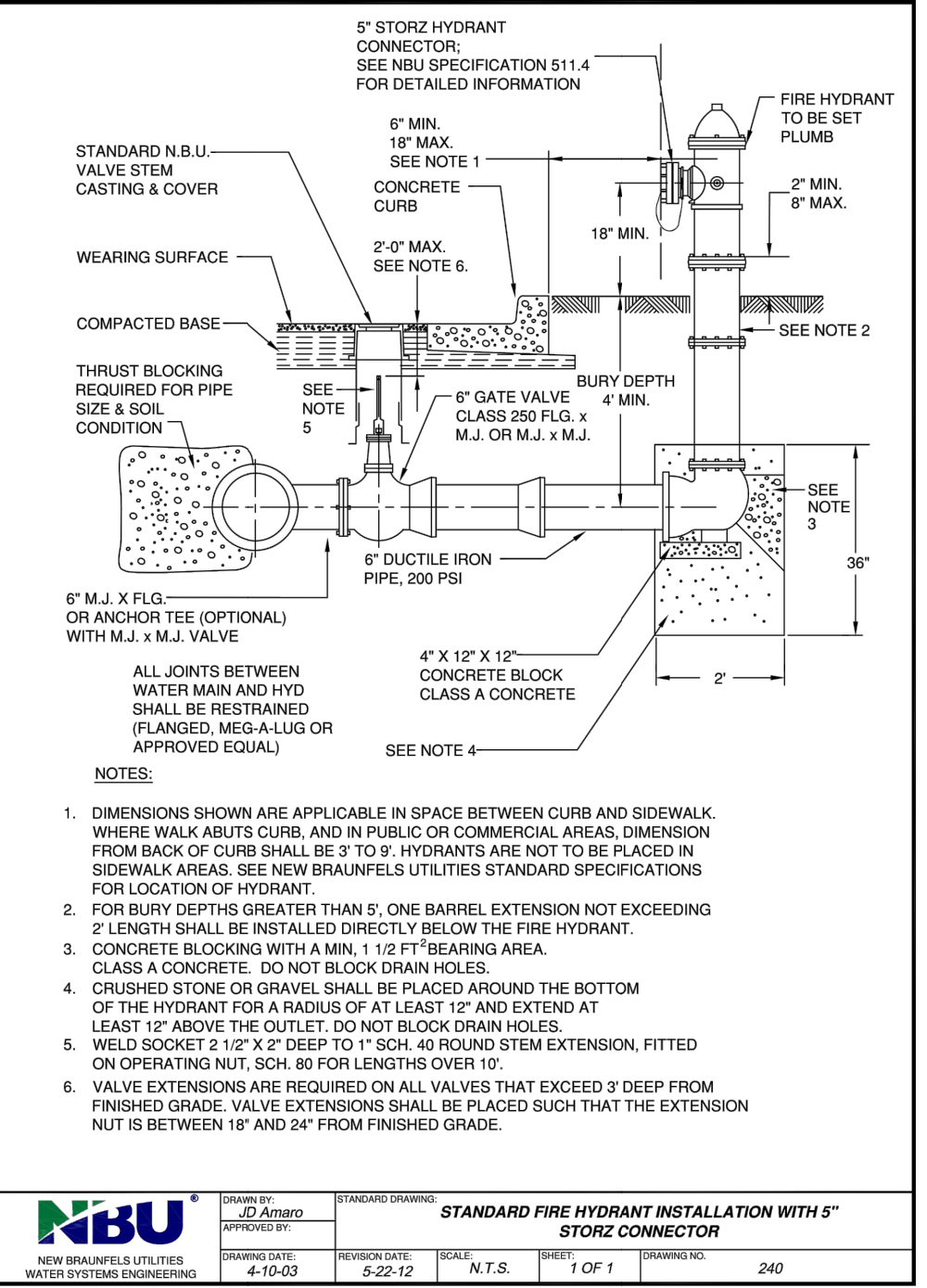
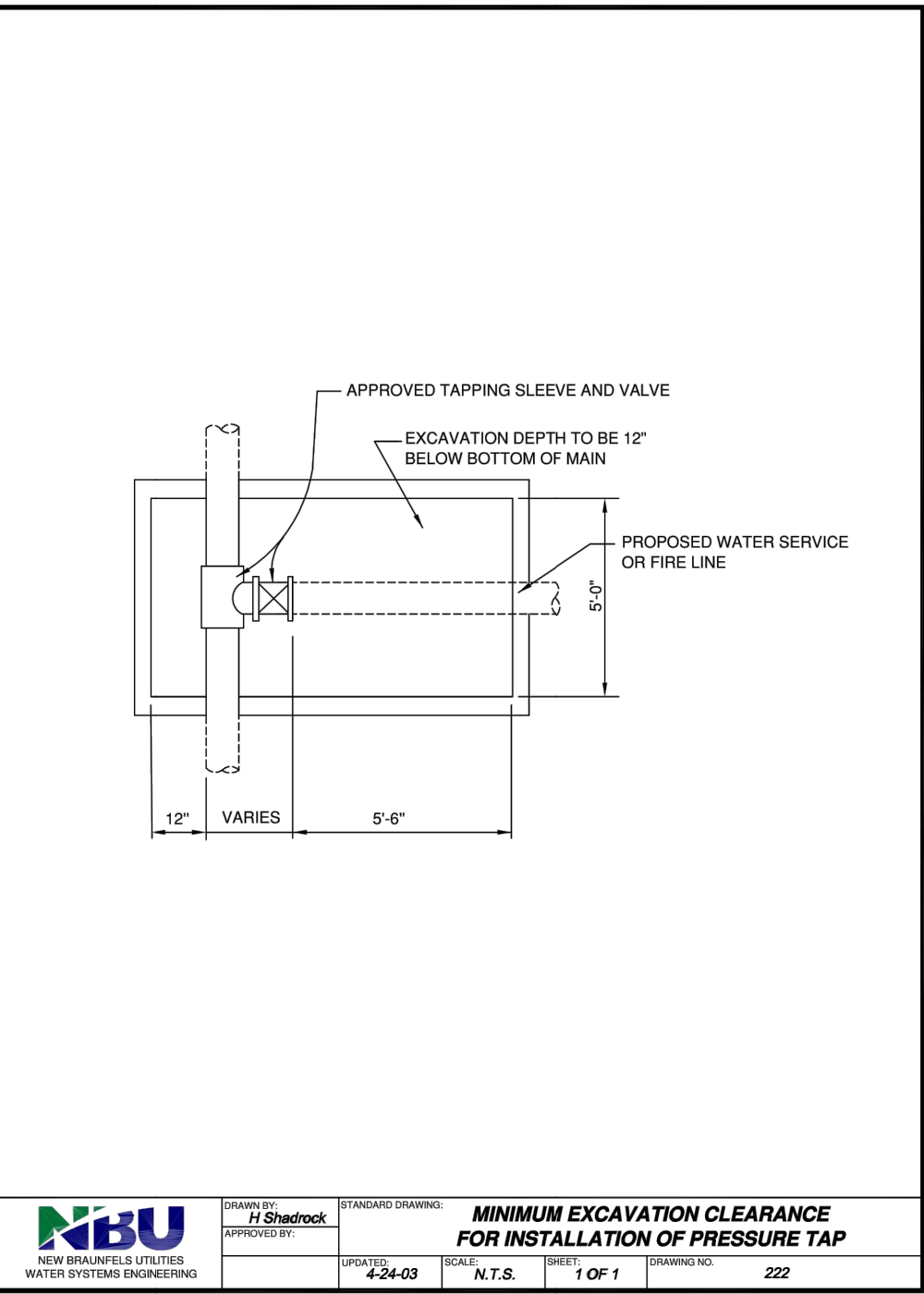
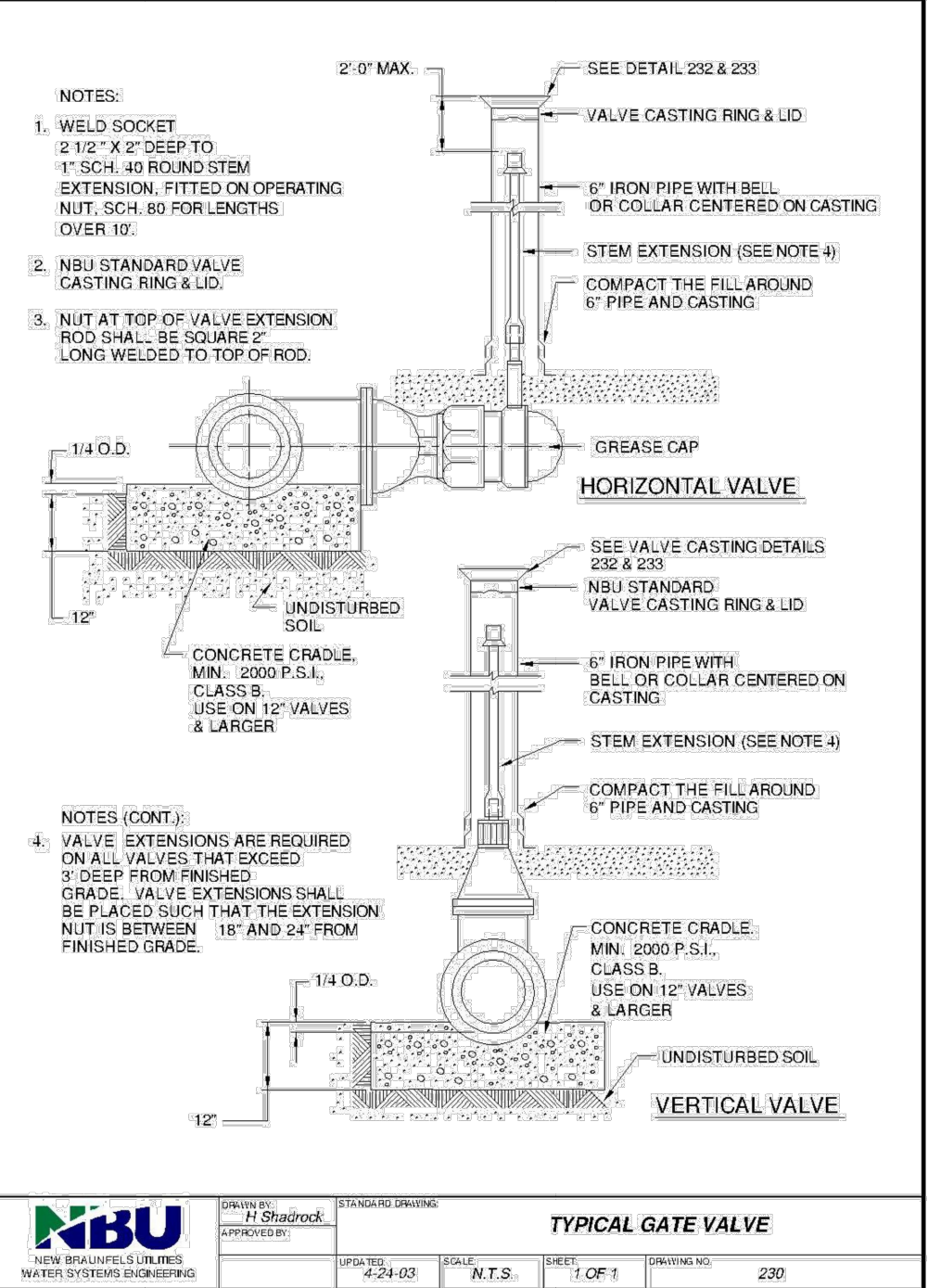
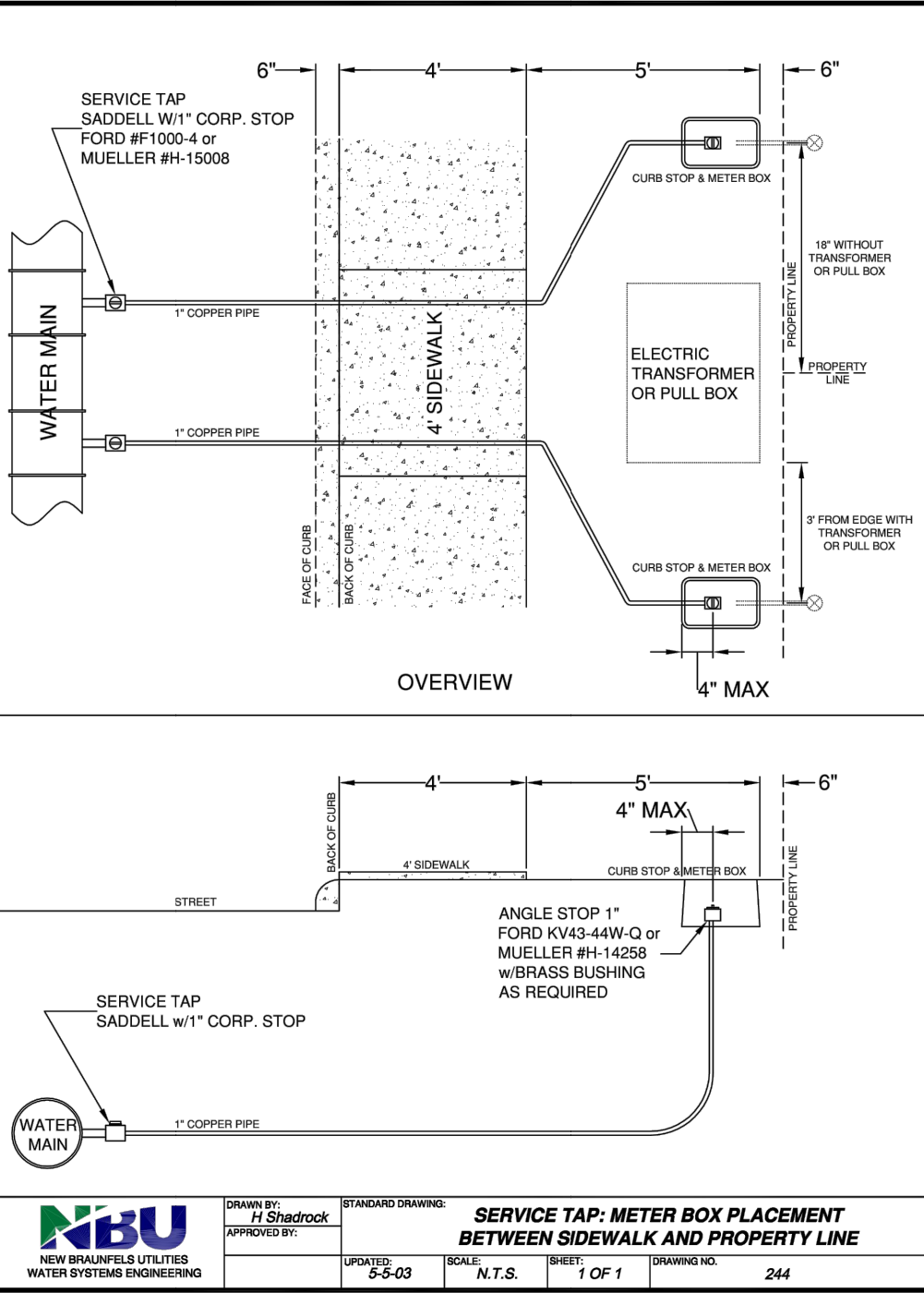
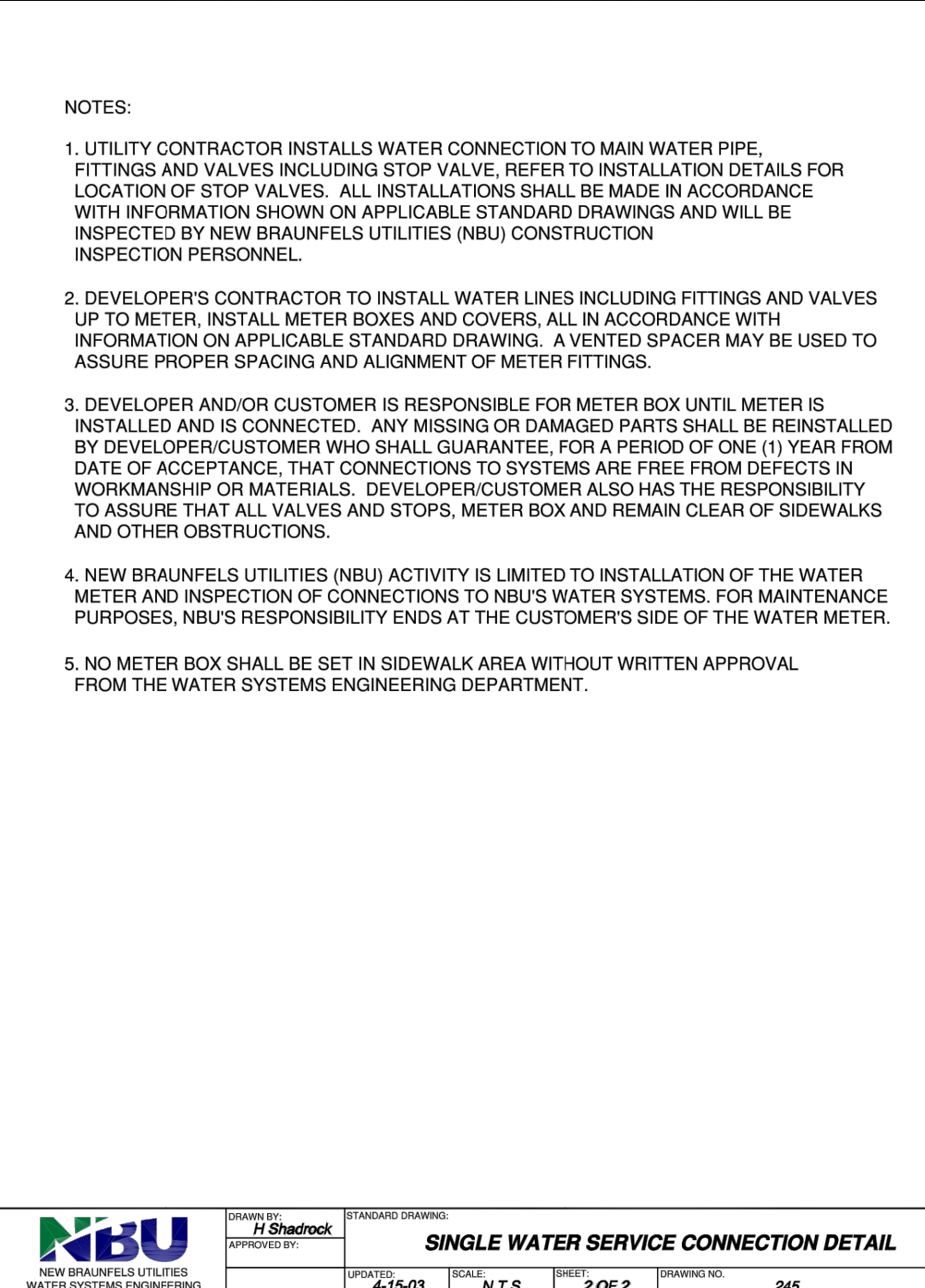
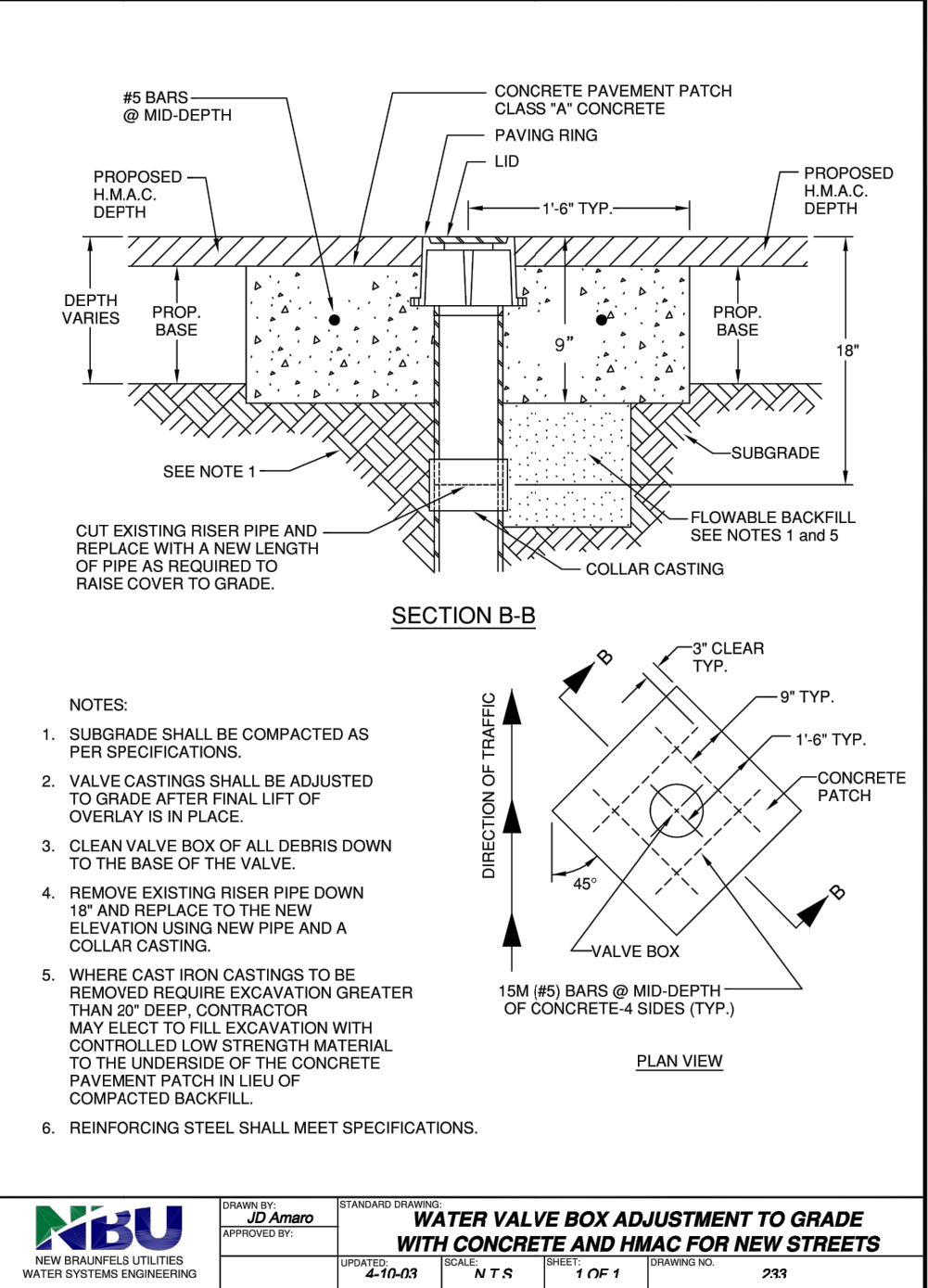
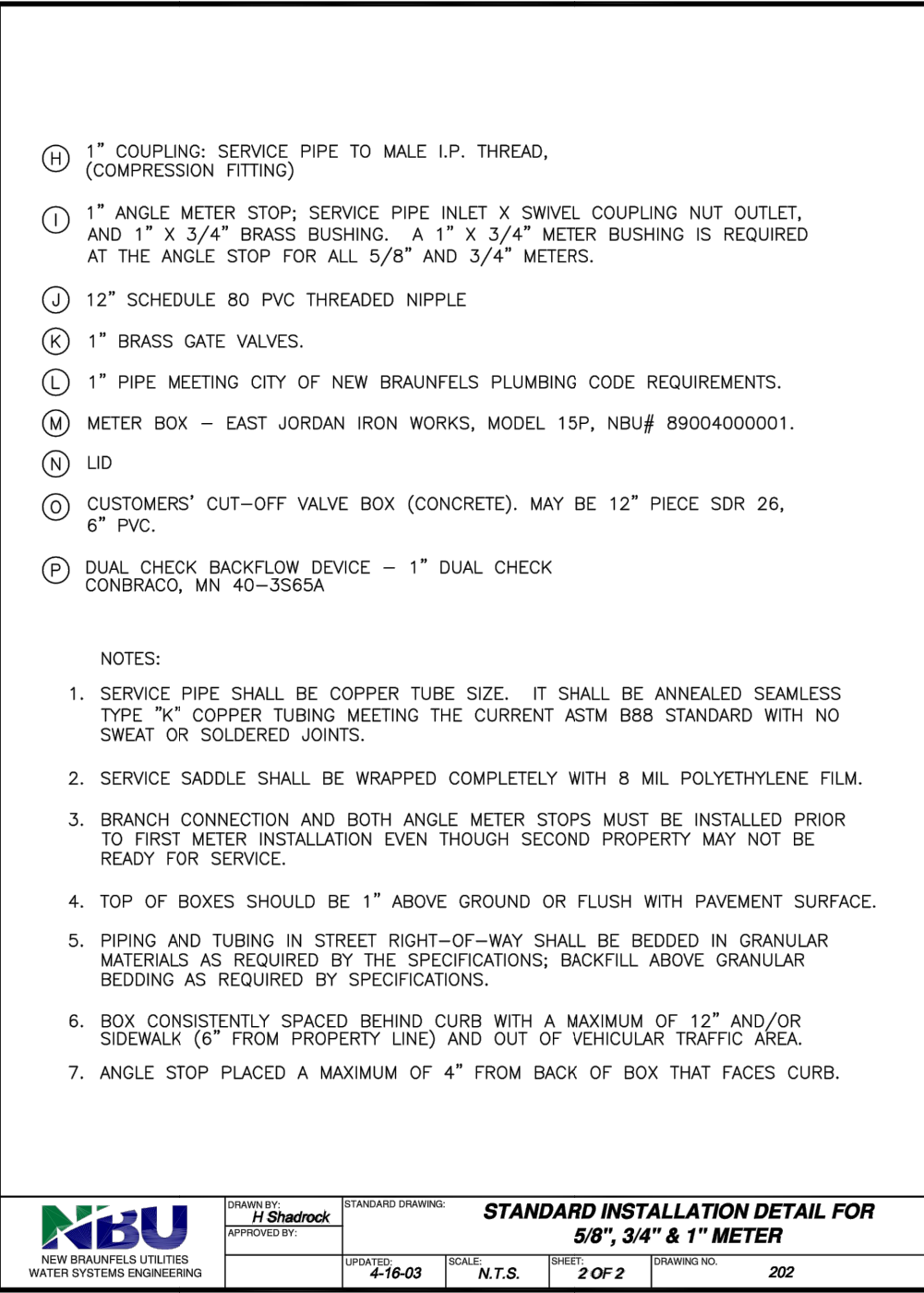
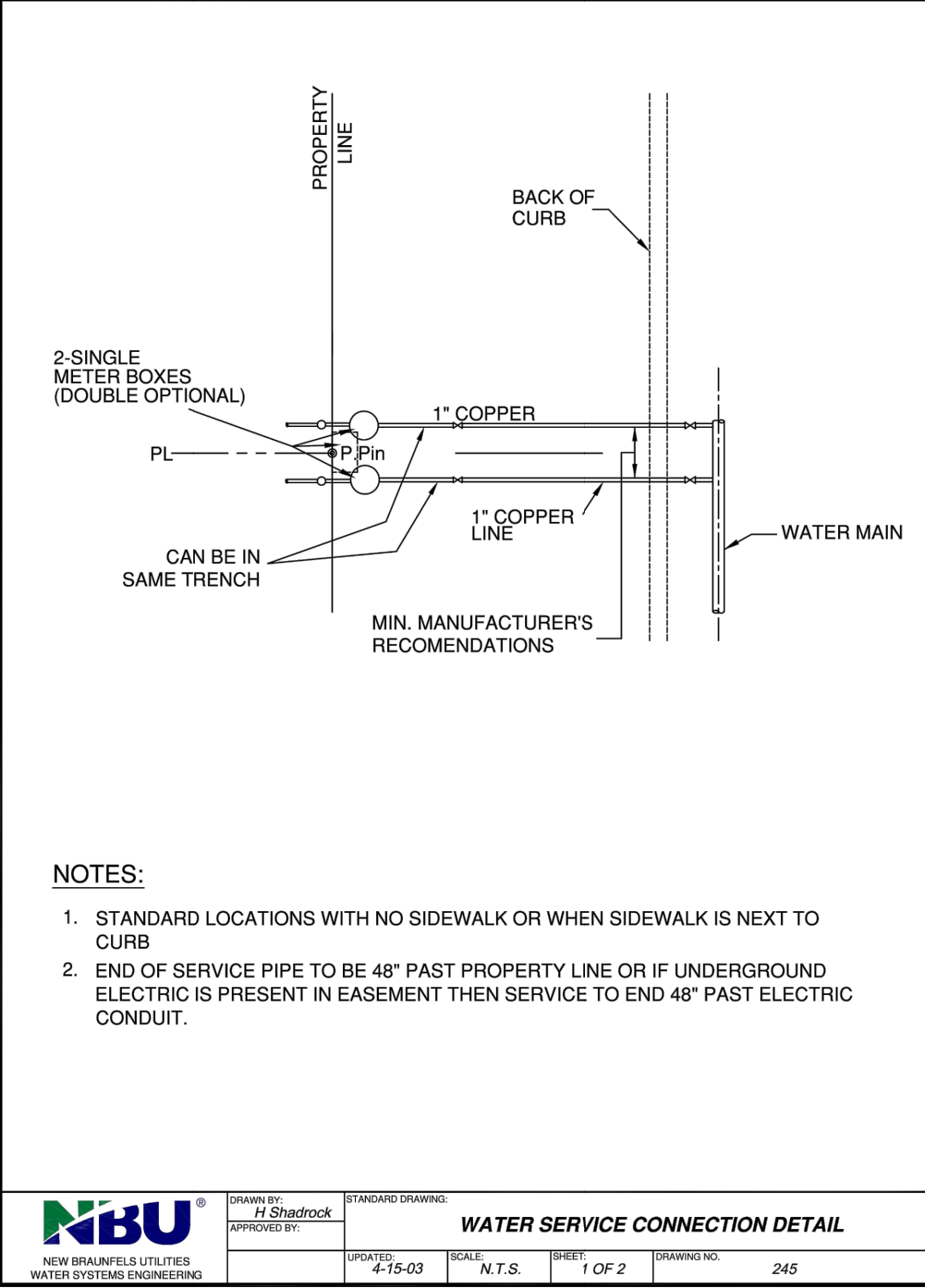
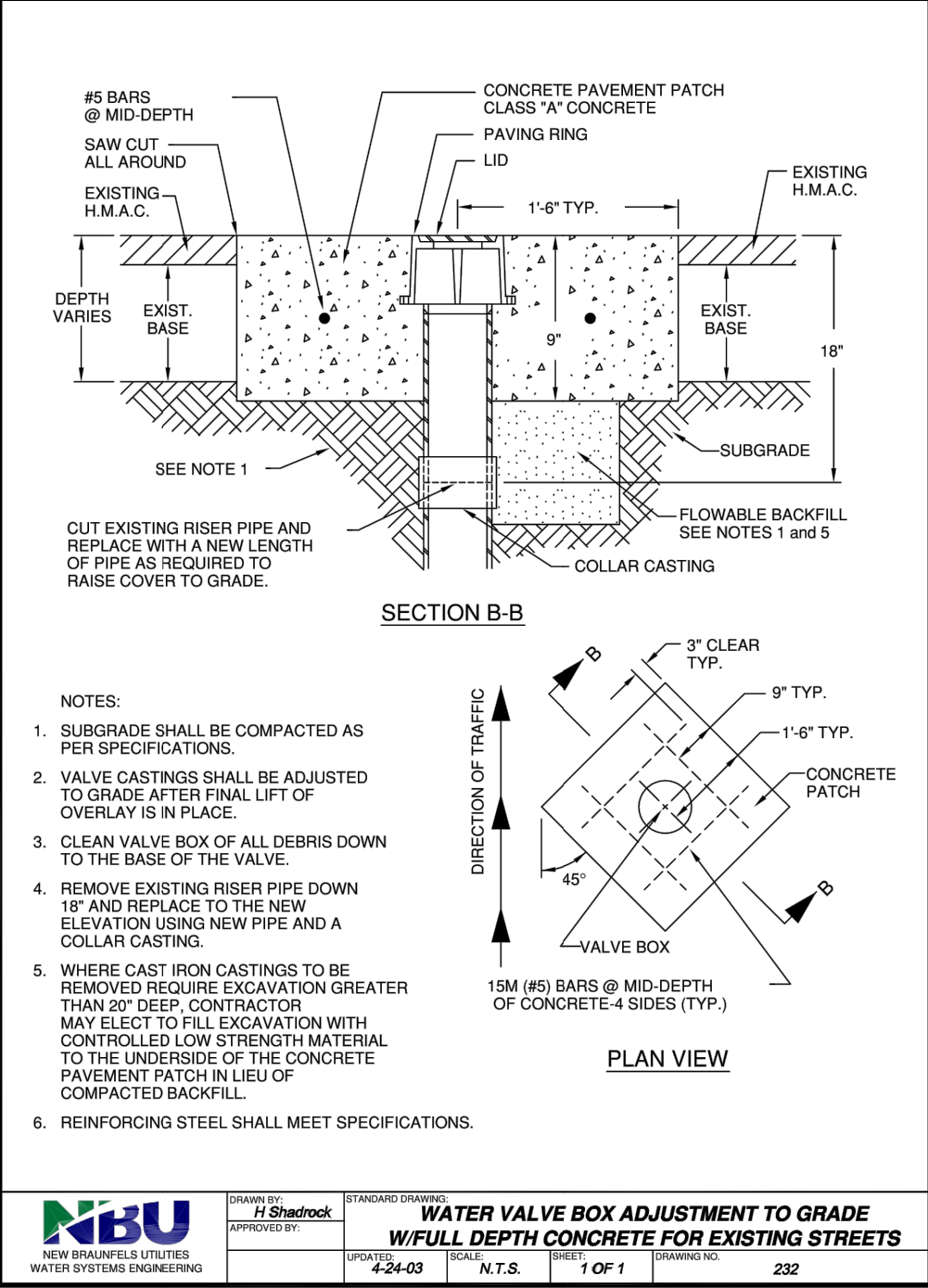
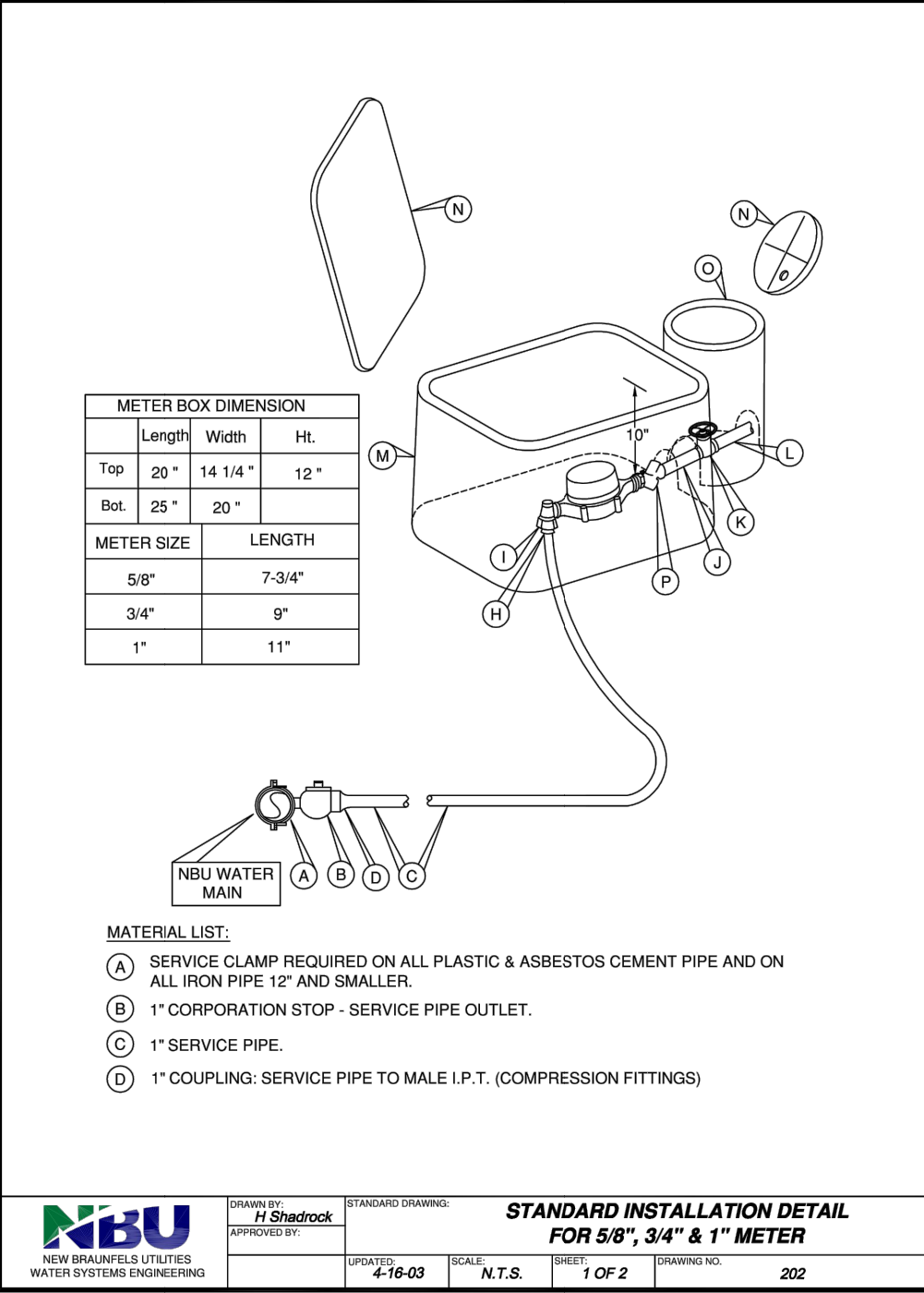
SHEET TITLE

**OVERALL  
WATER PLAN**

SHEET NUMBER

**C6.0**





- UTILITY NOTES:
- ALL UTILITIES TO BE CONSTRUCTED PRIOR TO THE STREETS.
  - NO VALVES, HYDRANTS, ETC. SHALL BE CONSTRUCTED WITHIN CURES, SIDEWALKS OR DRIVEWAYS.

07/17/2020

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04/17/00	50% CONSTRUCTION DOCUMENTS
07/17/00	75% CONSTRUCTION DOCUMENTS

KEY PLAN

PROJECT NAME  
**NEW BRAUNFELS POLICE DEPARTMENT HQ**

PROJECT LOCATION  
**1488 S SEGUIN NEW BRAUNFELS, TX 78130**

PROJECT NUMBER  
**040.030**

SHEET TITLE  
**WATER DETAILS**

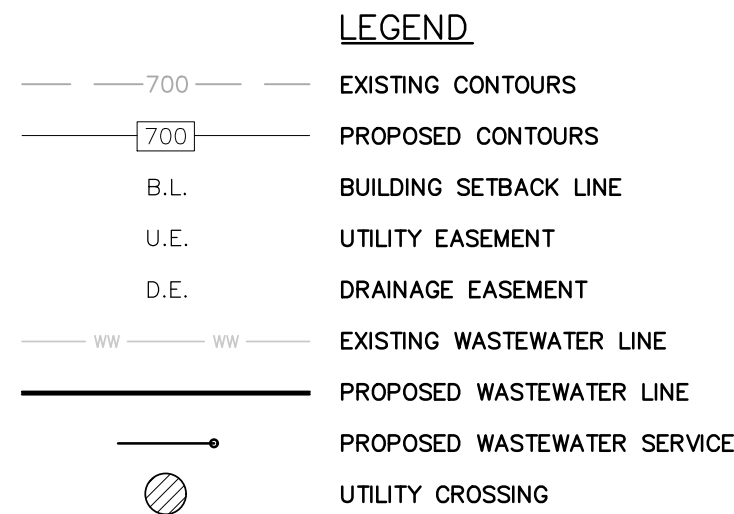
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**C6.1**



ALL UTILITY TRENCH COMPACTION TESTS WITHIN THE STREET PAVEMENT SECTION SHALL BE THE RESPONSIBILITY OF THE DEVELOPER'S GEO-TECHNICAL ENGINEER. FILL MATERIAL SHALL BE PLACED IN UNIFORM LAYERS NOT TO EXCEED TWELVE INCHES (12") THICK. EACH LAYER OF MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 95% RELATIVE COMPACTION. THE NUMBER OF LIFTS IN ACCORDANCE WITH TEST METHODS T93-113-E, T93-114-E, T93-115-E AND THE NUMBER AND LOCATION OF REQUIRED TESTS SHALL BE DETERMINED BY THE GEOTECHNICAL ENGINEER AND SHALL BE SUBMITTED TO THE CITY OF NEW BRUNSWICK FOR REVIEW AND APPROVAL. A MINIMUM OF ONE TEST SHALL BE TAKEN EVERY 100LF FOR EACH LIFT. UPON COMPLETION OF TESTING THE GEO-TECHNICAL ENGINEER SHALL PROVIDE THE CITY OF NEW BRUNSWICK STREET INSPECTOR WITH ALL TESTING RESULTS. THE CITY OF NEW BRUNSWICK SHALL BE RESPONSIBLE FOR THE PLACEMENT OF FILL MATERIAL, HAS BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.

1. NO VALVES, HYDRANTS, CLEAN-OUTS, ETC. SHALL BE CONSTRUCTED WITHIN CURBS, SIDEWALKS, OR DRIVEWAYS.
2. ALL SEWER PIPE ASTM 3034 (115 PSI)
3. ALL MANHOLES SHALL BE 48" DIAMETER.
4. ALL RING AND COVER SHALL BE 32" DIAMETER.
5. EXISTING MANHOLES, RIM AND FLOWLINE ELEVATIONS SURVEYED BY HMT ENGINEERING & SURVEYING DATED FEBRUARY 13, 2020.
6. POINT OF DELIVERY SHALL BE IN ACCORDANCE WITH NBU WATER AND WASTEWATER DESIGN CRITERIA MANUAL, SECTION 2.3.0.

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND SPECIFICATIONS FOR CONFORMANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE TRENCH EXCAVATION PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION FOR ALL TRENCH EXCAVATION STAFF AND ALL TRENCH EXCAVATION SPECIALTIES. CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH THE FOLLOWING TRENCH EXCAVATION SAFETY ACTIVITIES FOR INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATIONS.

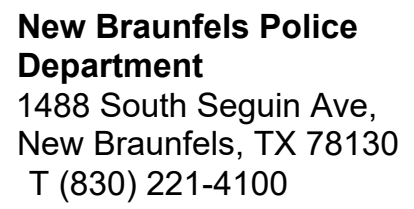


1. ALL UTILITIES TO BE CONSTRUCTED PRIOR TO THE STREETS.

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THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR WILL AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MUST BE INCURRED BY THEIR FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES, STRUCTURES OR FACILITIES. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES 24-HOURS PRIOR TO COMMENCING CONSTRUCTION.



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**HMT**  
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290 S. CASTELL AVE., STE. 100  
NEW BRAUNFELS, TX 78130  
TBPE FIRM F-10961  
TBPLS FIRM 1053600

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CHRISTOPHER P. VAN HEERDE  
P.E. # 93047 ON 7/15/20.  
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OR PERMIT PURPOSES.

[illegible]

NEW  
BRAUNFELS  
POLICE  
DEPARTMENT  
HQ

1488 S SEGUIN  
NEW  
BRAUNFELS, TX  
78130

PROJECT NUMBER  
040.030

# OVERALL WASTEWATER PLAN

## C7.0



UTILITY TRENCH COMPACTION

ALL UTILITY TRENCH COMPACTION TESTS WITHIN THE STREET PAVEMENT SECTION SHALL BE THE RESPONSIBILITY OF THE DEVELOPER'S GEO-TECHNICAL ENGINEER. FILL MATERIAL SHALL BE PLACED IN UNIFORM LAYERS NOT TO EXCEED TWELVE INCHES (12") LOOSE. EACH LAYER OF MATERIAL SHALL BE COMPACTED TO A MINIMUM 95% DENSITY AND TESTED FOR DENSITY AND MOISTURE IN ACCORDANCE WITH TEST METHODS TEX-113-E, TEX-114-E, TEX-115-E. THE NUMBER AND LOCATION OF REQUIRED TESTS SHALL BE DETERMINED BY THE GEOTECHNICAL ENGINEER AND APPROVED BY THE CITY OF NEW BRAUNFELS STREET INSPECTOR. AT A MINIMUM, TESTS SHALL BE TAKEN EVERY 100LF FOR EACH LIFT. UPON COMPLETION OF TESTING THE GEO-TECHNICAL ENGINEER SHALL PROVIDE THE CITY OF NEW BRAUNFELS STREET INSPECTOR WITH ALL TESTING DOCUMENTATION AND A CERTIFICATION STATING THAT THE PLACEMENT OF FILL MATERIAL HAS BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.

CONSTRUCTION NOTES:

1. NO VALVES, HYDRANTS, CLEAN-OUTS, ETC. SHALL BE CONSTRUCTED WITHIN CURBS, SIDEWALKS, OR DRIVEWAYS.
2. ALL SEWER PIPE ASTM 3034 (115 PS)
3. ALL MANHOLES SHALL BE 48" DIAMETER.
4. ALL RING AND COVER SHALL BE 32" DIAMETER.
5. EXISTING MANHOLES, RIM AND FLOWLINE ELEVATIONS SURVEYED BY HMT ENGINEERING & SURVEYING DATED FEBRUARY 13, 2020.
6. POINT OF DELIVERY SHALL BE IN ACCORDANCE WITH NBU WATER AND WASTEWATER DESIGN CRITERIA MANUAL, SECTION 2.3.0.

TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATIONS.

LEGEND

EXISTING CONTOURS

PROPOSED CONTOURS

B.L.

U.E.

D.E.

EXISTING WASTEWATER LINE

PROPOSED WASTEWATER LINE

PROPOSED WASTEWATER SERVICE

UTILITY CROSSING

0 25 50 100

SCALE: 1" = 50' HORIZ.

SCALE: 1" = 5' VERT.

UTILITY NOTES:

1. ALL UTILITIES TO BE CONSTRUCTED PRIOR TO THE STREETS.

2. NO VALVES, HYDRANTS, ETC. SHALL BE CONSTRUCTED WITHIN CURBS, SIDEWALKS OR DRIVEWAYS.

Plan view of WW LN A showing manholes, utility crossings, and proposed ground profile. Key features include: EX MH A1 (1+00.00 WW LN A, 8" FL (N)=641.50'), EX MH A2 (2+80.00 WW LN A, 8" FL (N)=643.50'), EX MH A3 (6+10.00 WW LN A, 8" FL (N)=647.62'), EX MH A4 (6+10.00 WW LN A, 4" FL (N)=647.72'), EX MH A5 (6+10.00 WW LN A, 4" FL (N)=648.27'), EX MH A6 (6+10.00 WW LN A, 4" FL (N)=648.27'). Utility crossings include: UTILITY CROSSING WW LN A (1+17.00'), UTILITY CROSSING WW LN A (2+17.00'), UTILITY CROSSING WW LN A (6+10.00'). Proposed ground profile is shown with elevations ranging from 635 to 665.

WW LN A  
0+50 - 7+00

Profile view of WW LN A showing existing and proposed ground, manholes, and pipe segments. Key features include: EX MH A1 (8.4' DEEP, 1+00.00 WW LN A, 8" FL (N)=641.50'), EX MH A2 (7.5' DEEP, 2+80.00 WW LN A, 8" FL (N)=643.50'), EX MH A3 (11.4' DEEP, 6+10.00 WW LN A, 8" FL (N)=647.62'), EX MH A4 (11.4' DEEP, 6+10.00 WW LN A, 4" FL (N)=647.72'), EX MH A5 (11.4' DEEP, 6+10.00 WW LN A, 4" FL (N)=648.27'). Pipe segments include: 142.65 LF 8" PVC @ 1.00%, 37.35 LF 8" PVC @ 1.00%, 330.00 LF 8" PVC @ 1.25%, 38.27 LF 4" PVC @ -1.43%. Elevation ranges from 635 to 665.

REFER TO THE COVER SHEET FOR BENCHMARK INFORMATION.

THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR WILL AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE INCURRED BY THEIR FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES, STRUCTURES OR FACILITIES. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES 24-HOURS PRIOR TO COMMENCING CONSTRUCTION.

CLIENT

NEW BRAUNFELS POLICE

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ARCHITECT

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HMT

ENGINEERING & SURVEYING

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TBPE FIRM F-0961  
TBPLS FIRM 1053600

REGISTRATION

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07/17/2020

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02/09/20	50% DESIGN DEVELOPMENT
04/20/20	75% DESIGN DEVELOPMENT
04/17/20	100% DESIGN DEVELOPMENT
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07/17/20	70% CONSTRUCTION DOCUMENTS

KEY PLAN

PROJECT NAME

NEW BRAUNFELS POLICE DEPARTMENT HQ

PROJECT LOCATION

1488 S SEGUIN  
NEW BRAUNFELS, TX 78130

PROJECT NUMBER

040.030

SHEET TITLE

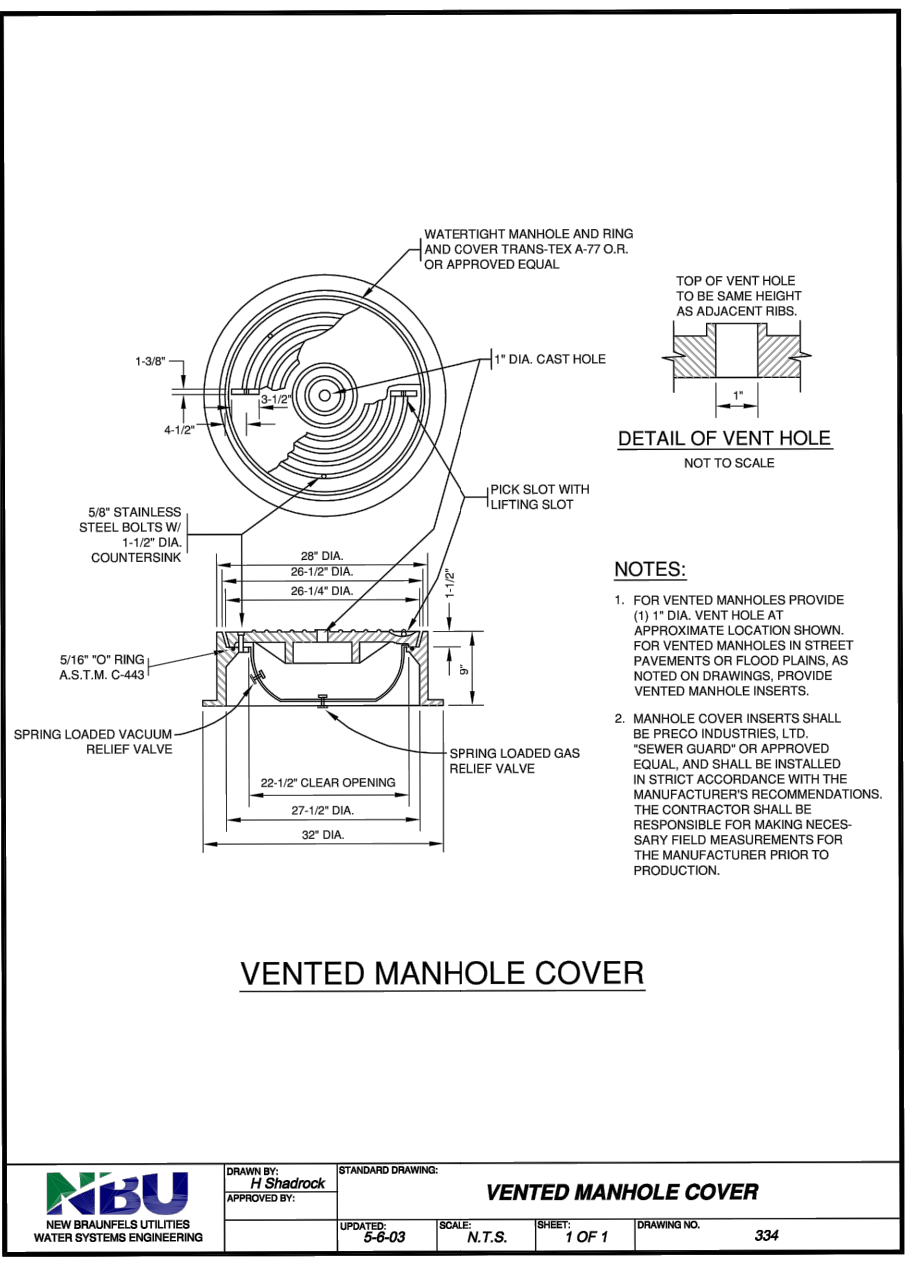
WW LN A  
PLAN &  
PROFILE

SHEET NUMBER

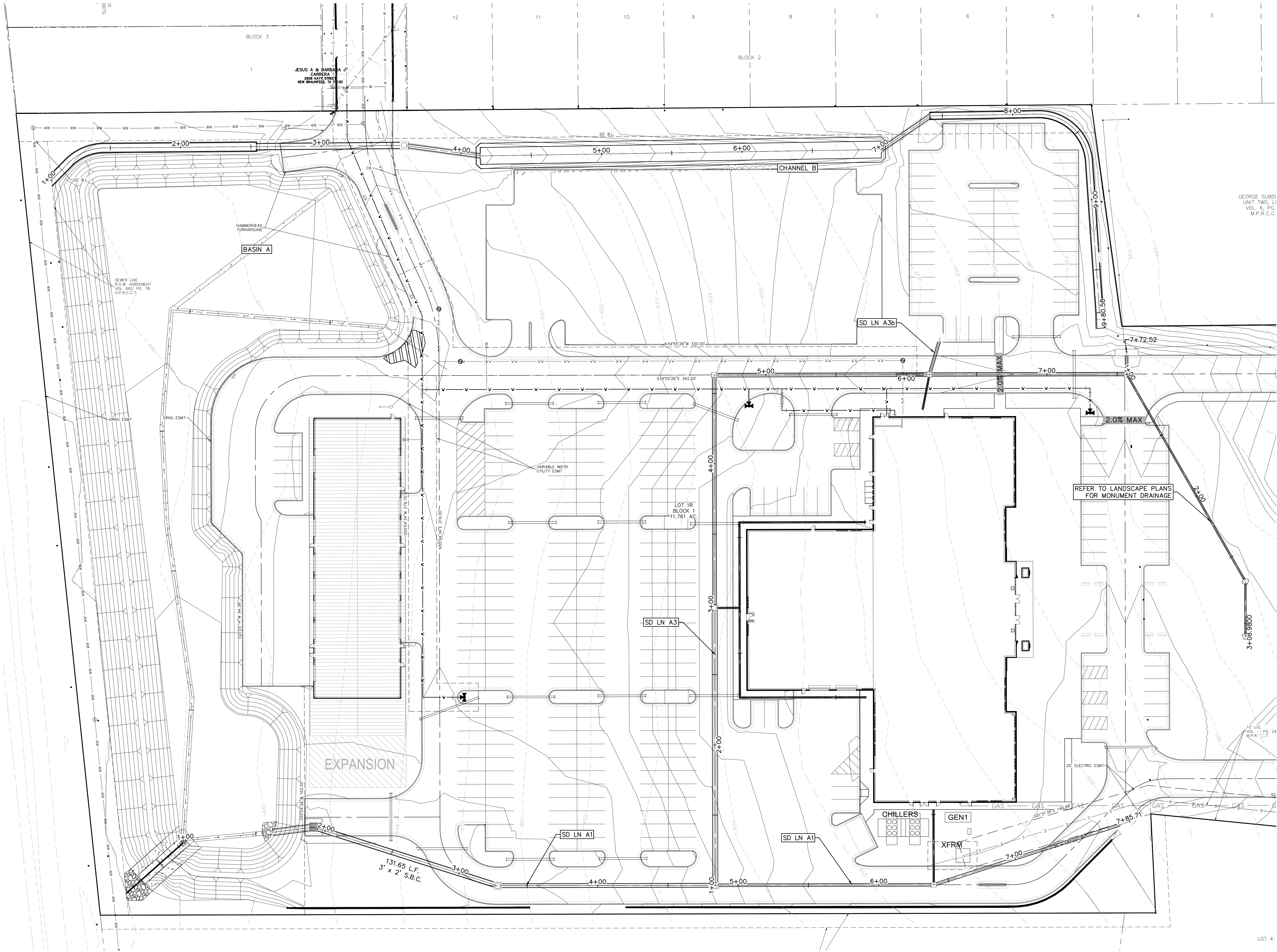
C7.1

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DRAINAGE FEATURES, DETENTION  
BASIN MAINTENANCE AND EQUIPMENT  
ACCESS REQUIREMENTS:

A. TO LIMIT EROSION, NO  
UNVEGETATED AREA SHALL EXCEED  
10 SQ. FT. IN EXTENT.

B. ACCUMULATED PAPER, TRASH,  
AND DEBRIS SHALL BE REMOVED  
FROM DRAINAGE BASINS EVERY 6  
MONTHS OR AS NECESSARY TO  
MAINTAIN PROPER OPERATION.

C. ACCUMULATED PAPER, TRASH,  
AND DEBRIS SHALL BE REMOVED  
FROM STORM INLETS AND CHANNELS  
EVERY 12 MONTHS OR AS  
NECESSARY TO MAINTAIN PROPER  
OPERATION.

D. STORM SEWER LINES SHALL BE  
INSPECTED EVERY 24 MONTHS OR AS  
NECESSARY TO MAINTAIN PROPER  
OPERATION.

E. BASINS SHALL BE MOWED  
ANNUALLY BETWEEN THE MONTHS OF  
JUNE AND SEPTEMBER.

F. CORRECTIVE MAINTENANCE IS  
REQUIRED ANY TIME A BASIN DOES  
NOT DRAIN COMPLETELY WITHIN 60  
HOURS OR CESSATION OF INFLOW (IE:  
NO STANDING WATER IS ALLOWED).

G. STRUCTURAL INTEGRITY OF  
BASINS AND CHANNELS SHALL BE  
MAINTAINED AT ALL TIMES.

H. MAINTENANCE VEHICLE FOR  
POND AND CHANNEL ACCESS SHOULD  
BE A BOBCAT S175 SKID STEER  
LOADER OR VEHICLE OF EQUAL TO  
LESSER SIZE.

I. SILT SHALL BE REMOVED AND  
THE BASIN RETURNED TO ORIGINAL  
LINES AND GRADES WHEN STANDING  
WATER CONDITIONS OCCUR OR THE  
BASIN STORAGE VOLUME IS REDUCED  
BY MORE THAN 10%.

REFER TO THE COVER SHEET  
FOR BENCHMARK INFORMATION.

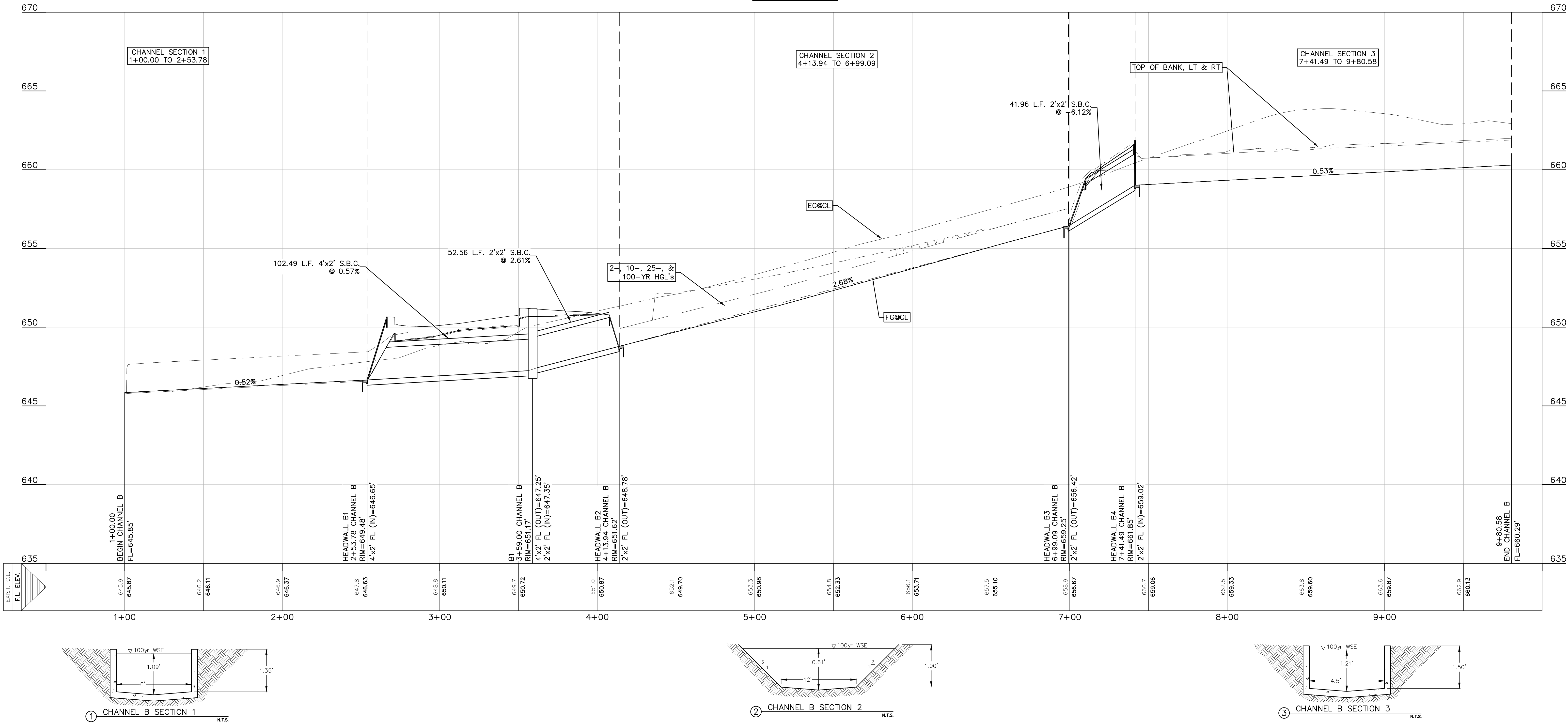
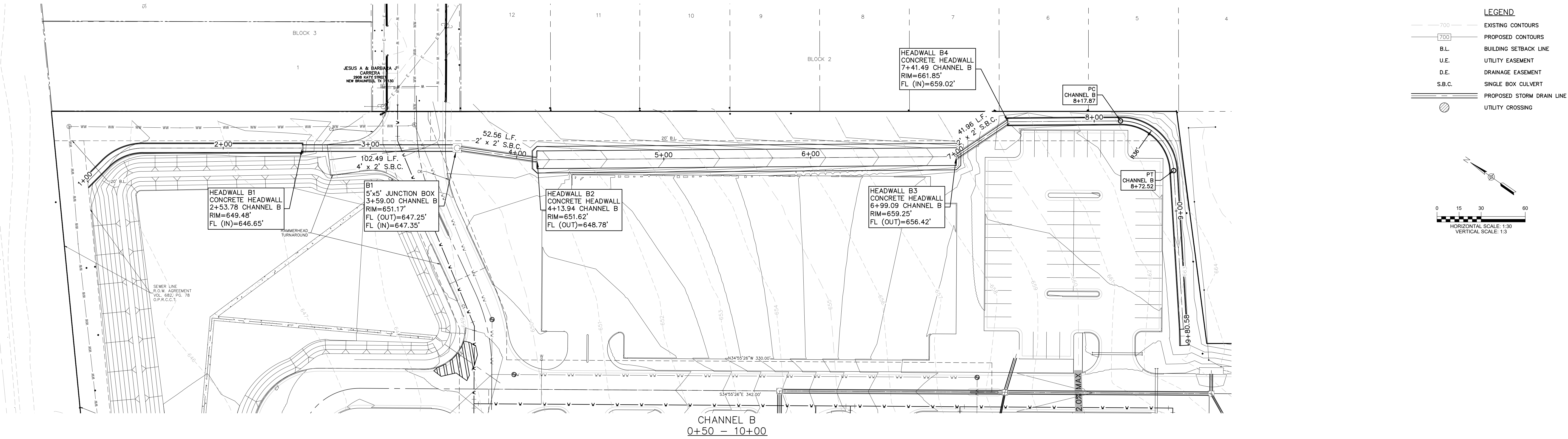
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AGREE TO BE FULLY RESPONSIBLE FOR ANY AND ALL  
DAMAGES WHICH MIGHT BE INCURRED BY THEIR FAILURE TO  
EXACTLY LOCATE AND PRESERVE ANY AND ALL  
UNDERGROUND UTILITIES, STRUCTURES OR FACILITIES.  
CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES  
24-HOURS PRIOR TO COMMENCING CONSTRUCTION.

07/17/2020

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Drawing Name: \\N:\Projects\040 - City of New Braunfels\Police Department\040.030\040.030\_STRM.dwg User: jghorn Jul 16, 2020 - 10:10am



DRAINAGE FEATURES, DETENTION BASIN MAINTENANCE AND EQUIPMENT ACCESS REQUIREMENTS:

- TO LIMIT EROSION, NO UNVEGETATED AREA SHALL EXCEED 10 SQ. FT. IN EXTENT.
- ACCUMULATED PAPER, TRASH, AND DEBRIS SHALL BE REMOVED FROM STORM INLETS AND CHANNELS EVERY 12 MONTHS OR AS NECESSARY TO MAINTAIN PROPER OPERATION.
- STORM SEWER LINES SHALL BE INSPECTED EVERY 24 MONTHS OR AS NECESSARY TO MAINTAIN PROPER OPERATION.
- STRUCTURAL INTEGRITY OF BASINS AND CHANNELS SHALL BE MAINTAINED AT ALL TIMES.
- MAINTENANCE VEHICLE FOR POND AND CHANNEL ACCESS SHOULD BE A BOBCAT S175 SKID STEER LOADER OR VEHICLE OF EQUAL TO LESSER SIZE.

REFER TO THE COVER SHEET  
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CLIENT



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ARCHITECT



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CONSULTANT



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KEY PLAN

PROJECT NAME

**NEW  
BRAUNFELS  
POLICE  
DEPARTMENT  
HQ**

PROJECT LOCATION

**1488 S SEGUIN  
NEW  
BRAUNFELS, TX  
78130**

PROJECT NUMBER

**040.030**

SHEET TITLE

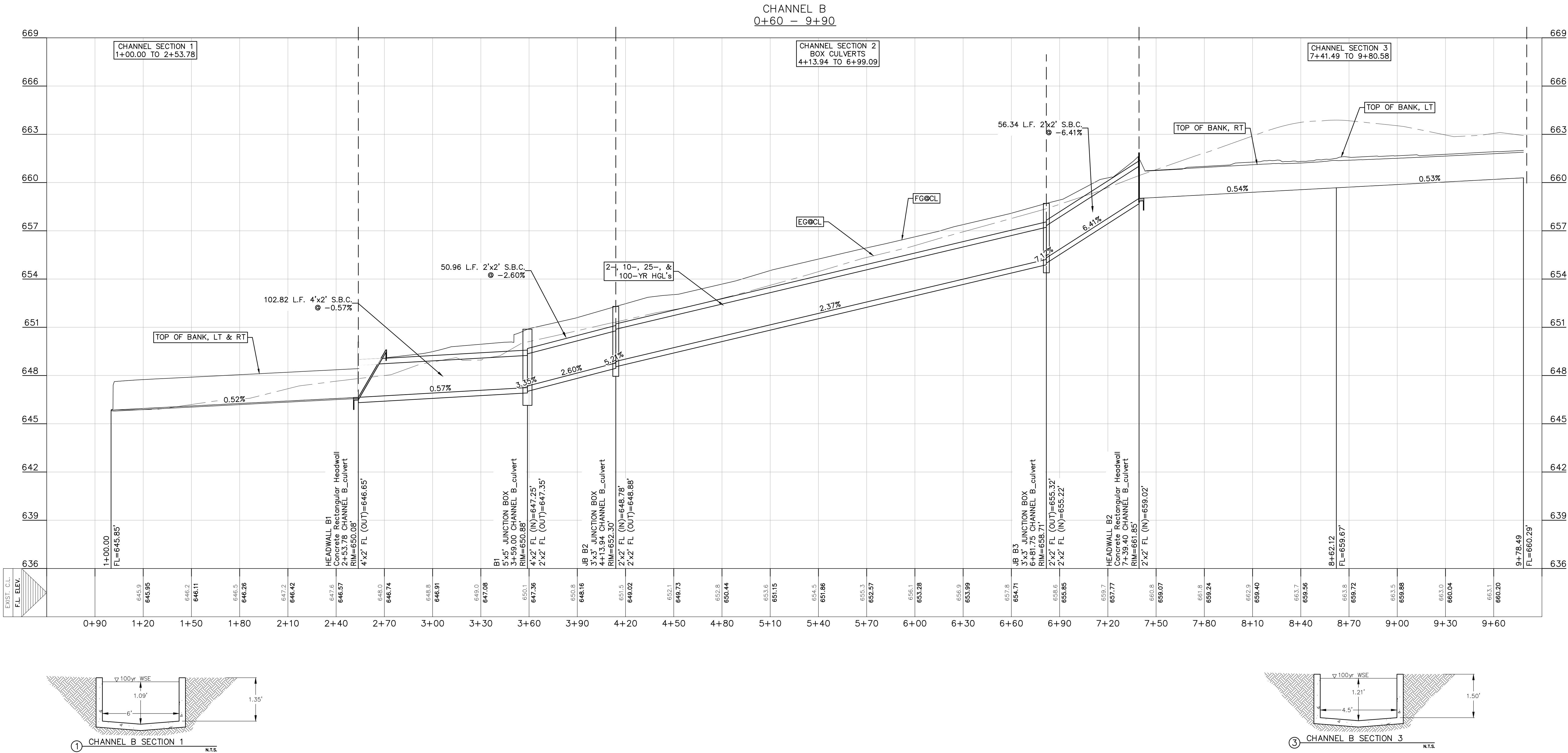
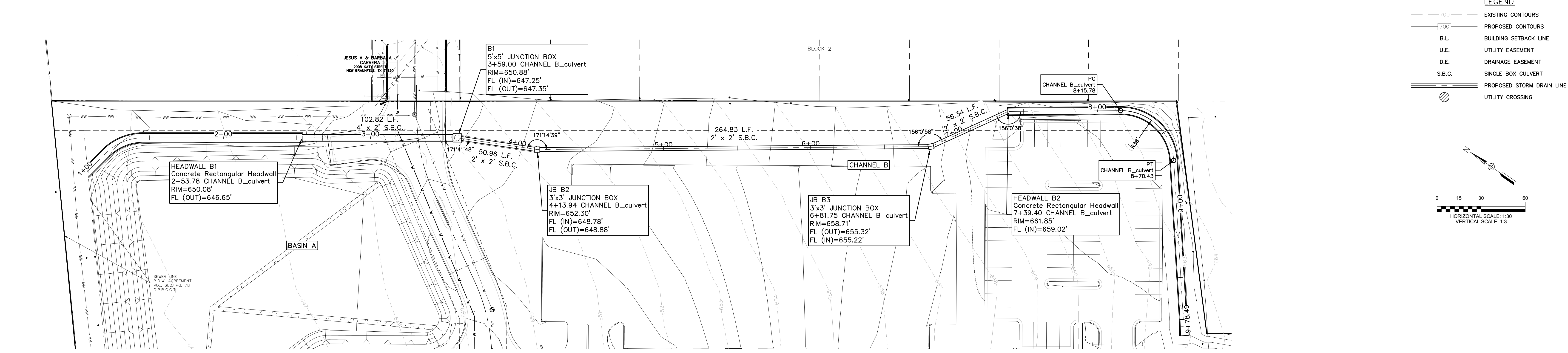
**CHANNEL B  
PLAN &  
PROFILE**

SHEET NUMBER

**C8.1**



Drawing Name: \\N:\Projects\040 - City of New Braunfels Police Department\040\030-STRM\_CULVERT.dwg User: jpham Jul 16, 2023 - 10:20am



DRAINAGE FEATURES, DETENTION BASIN MAINTENANCE AND EQUIPMENT ACCESS REQUIREMENTS:

- TO LIMIT EROSION, NO UNVEGETATED AREA SHALL EXCEED 10 SQ. FT. IN EXTENT.
- ACCUMULATED PAPER, TRASH, AND DEBRIS SHALL BE REMOVED FROM STORM INLETS AND CHANNELS EVERY 12 MONTHS OR AS NECESSARY TO MAINTAIN PROPER OPERATION.
- STORM SEWER LINES SHALL BE INSPECTED EVERY 24 MONTHS OR AS NECESSARY TO MAINTAIN PROPER OPERATION.
- STRUCTURAL INTEGRITY OF BASINS AND CHANNELS SHALL BE MAINTAINED AT ALL TIMES.
- MAINTENANCE VEHICLE FOR POND AND CHANNEL ACCESS SHOULD BE A BOBCAT S175 SKID STEER LOADER OR VEHICLE OF EQUAL TO LESSER SIZE.

REFER TO THE COVER SHEET FOR BENCHMARK INFORMATION.

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**CLIENT**

**NEW BRAUNFELS POLICE**

**New Braunfels Police Department**  
1488 South Seguin Ave.  
New Braunfels, TX 78130  
T (830) 221-4100

**ARCHITECT**

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**CONSULTANT**

**HMT**

**ENGINEERING & SURVEYING**

290 S. CASTELL AVE., STE. 100  
NEW BRAUNFELS, TX 78130  
TBPE FIRM F-10961  
TBPLS FIRM 1053600

**REGISTRATION**

THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF CHRISTOPHER P. VAN HEERDE P.E. # 80847 ON 7/15/2020. IT IS NOT TO BE USED FOR CONSTRUCTION BIDDING OR PERMIT PURPOSES.

07/17/2020

DATE	DESCRIPTION
01/16/20	SCHEMATIC DESIGN/SET
02/28/20	50% DESIGN DEVELOPMENT
04/20/20	75% DESIGN DEVELOPMENT
04/17/20	100% DESIGN DEVELOPMENT
04/17/20	80% CONSTRUCTION DOCUMENTS
07/17/20	75% CONSTRUCTION DOCUMENTS

**KEY PLAN**

**PROJECT NAME**

**NEW BRAUNFELS POLICE DEPARTMENT HQ**

**PROJECT LOCATION**

**1488 S SEGUIN NEW BRAUNFELS, TX 78130**

**PROJECT NUMBER**

**040.030**

**SHEET TITLE**

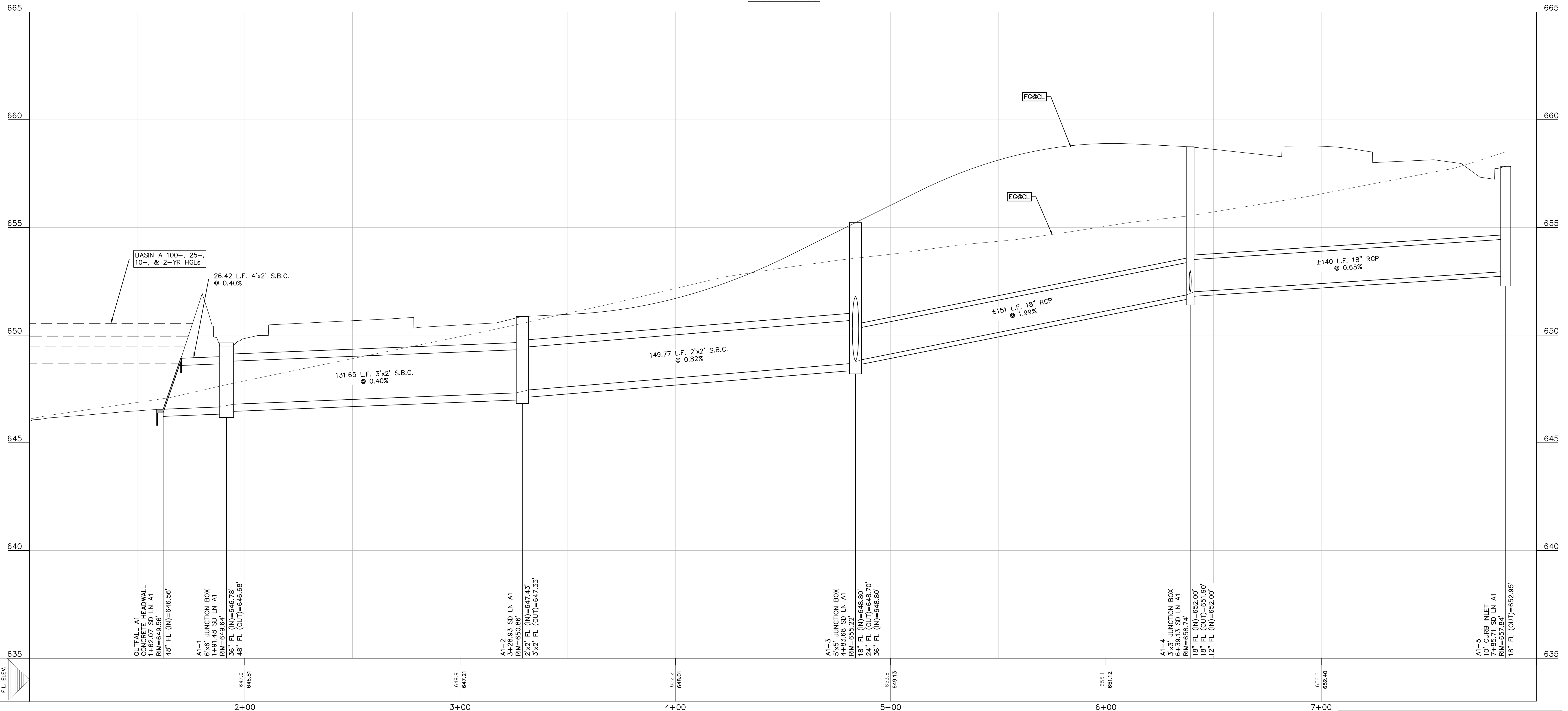
**CULVERT B PLAN AND PROFILE**

**SHEET NUMBER**

**C8.2**



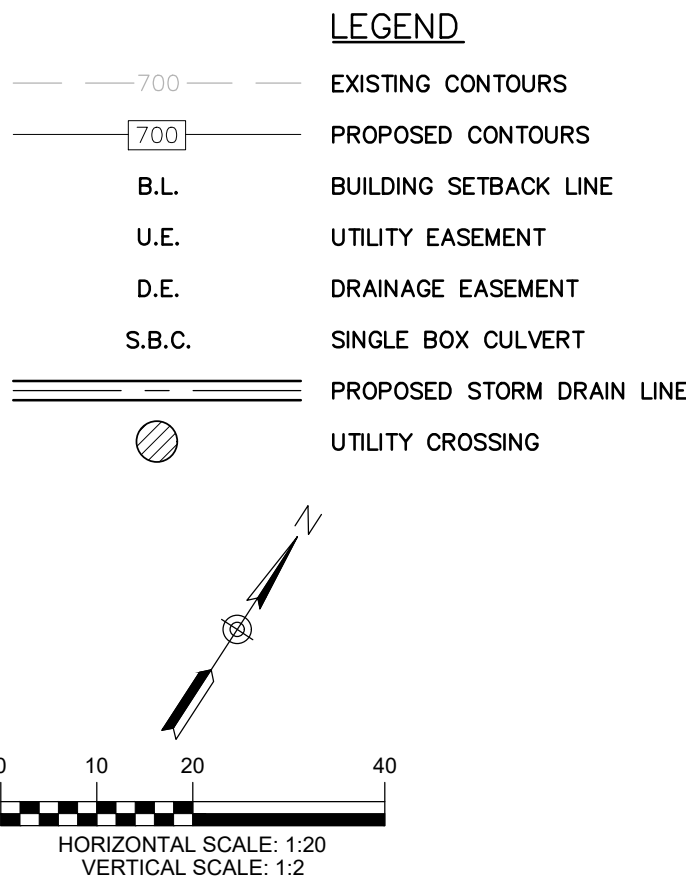
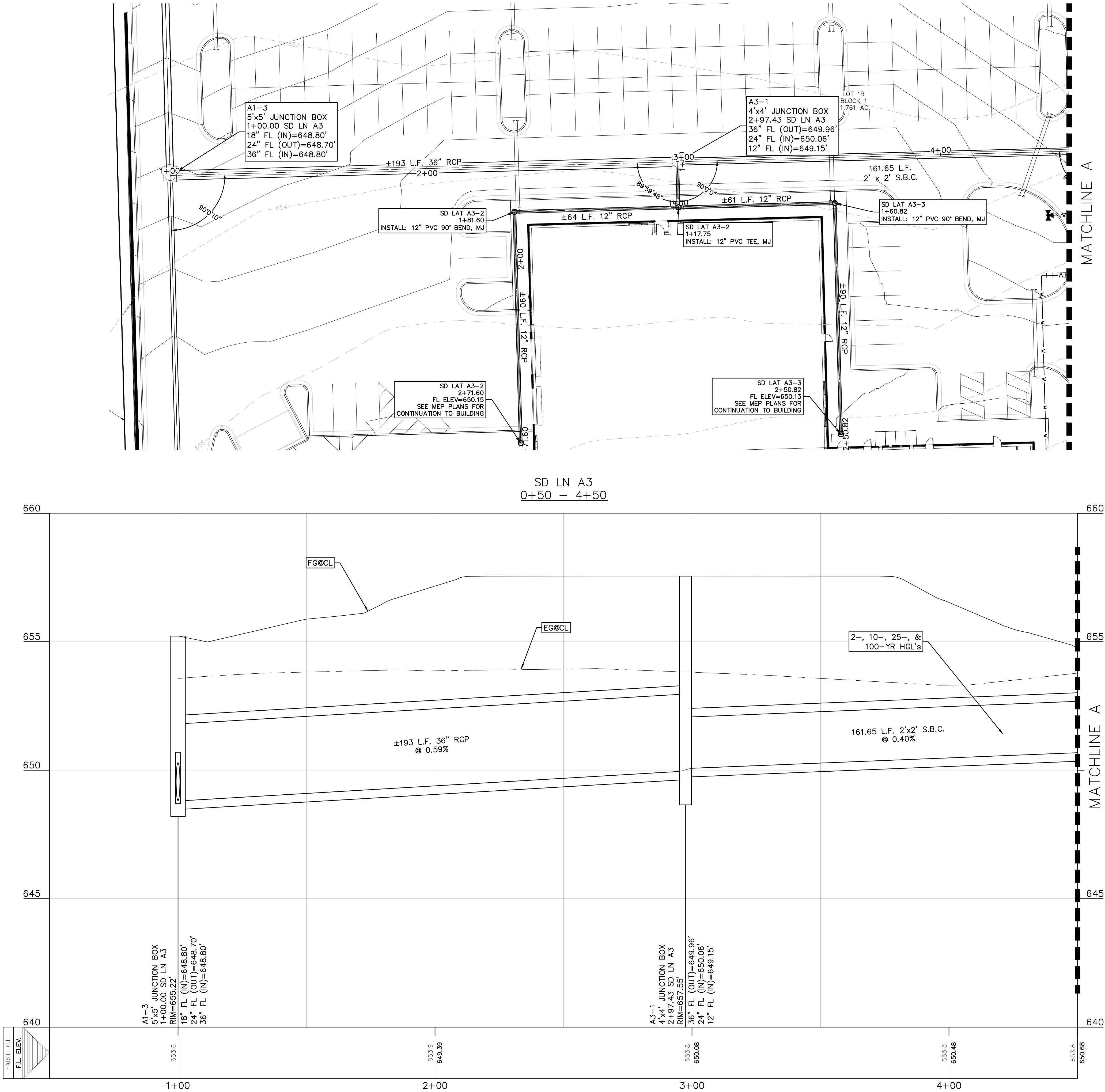
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OPERATION.

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MAINTAINED AT ALL TIMES.

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POND AND CHANNEL ACCESS SHOULD  
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KEY PLAN

PROJECT NAME  
NEW  
BRAUNFELS  
POLICE  
DEPARTMENT  
HQ

PROJECT LOCATION  
1488 S SEGUIN  
NEW  
BRAUNFELS, TX  
78130

PROJECT NUMBER  
040.030

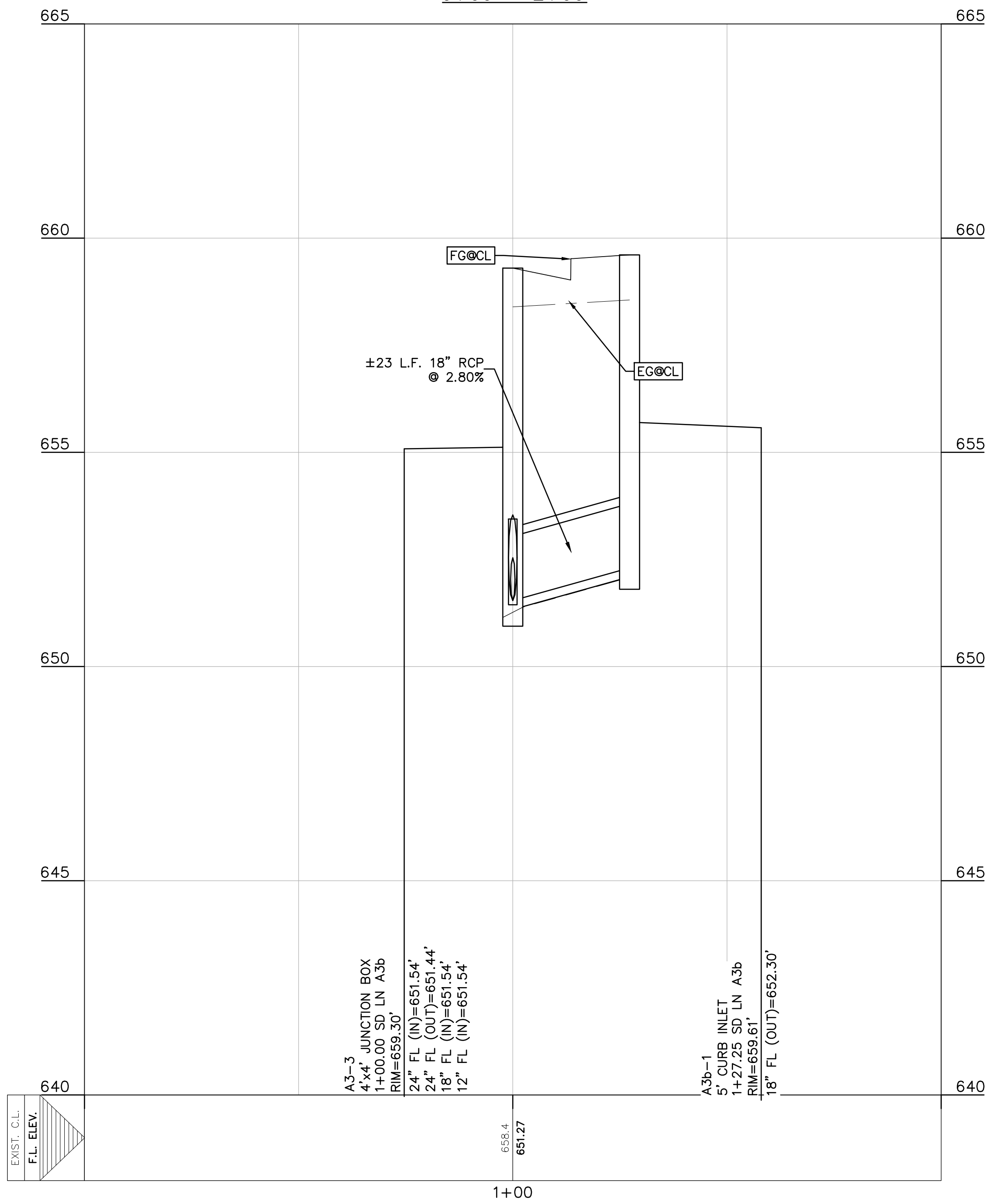
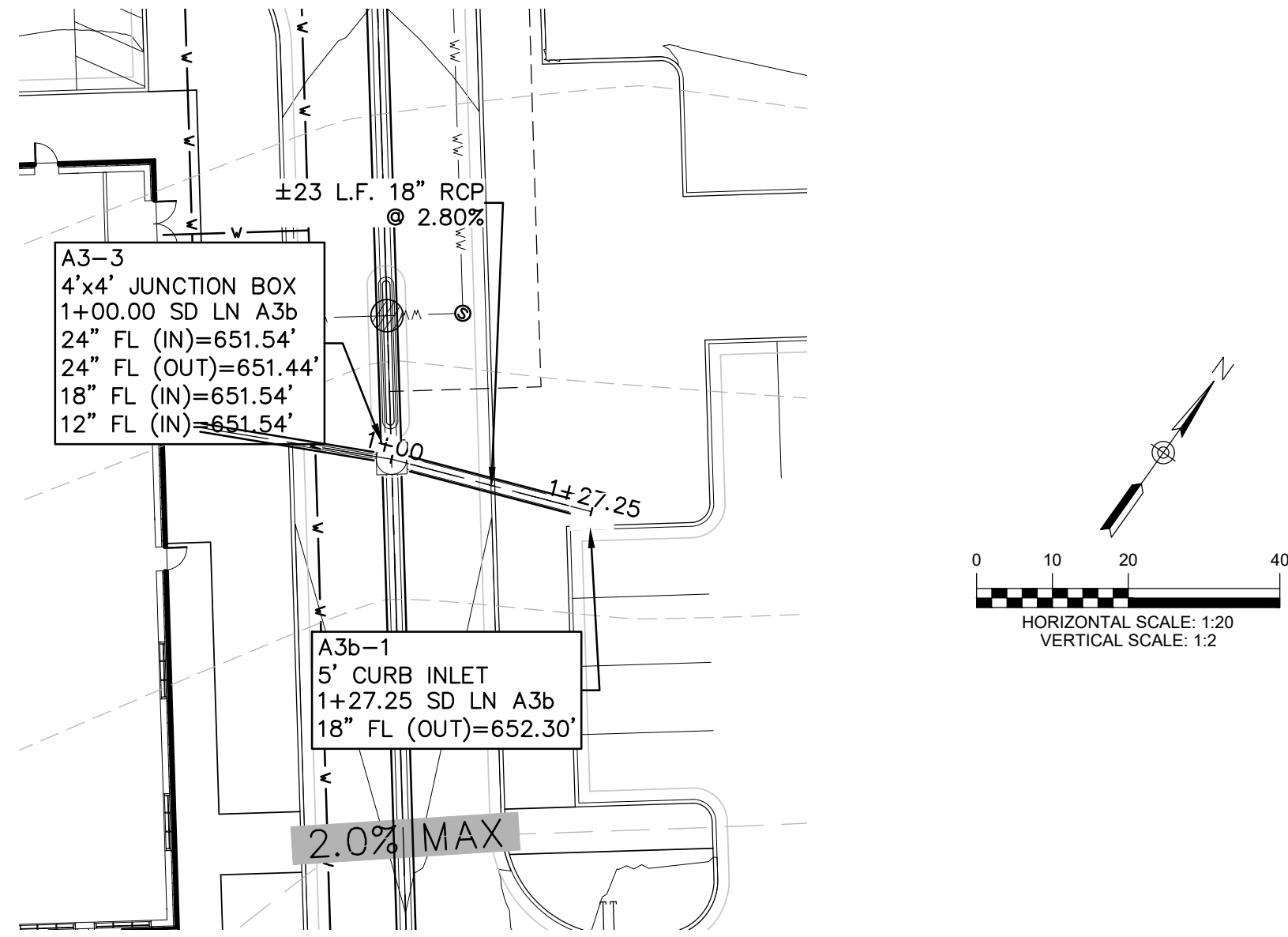
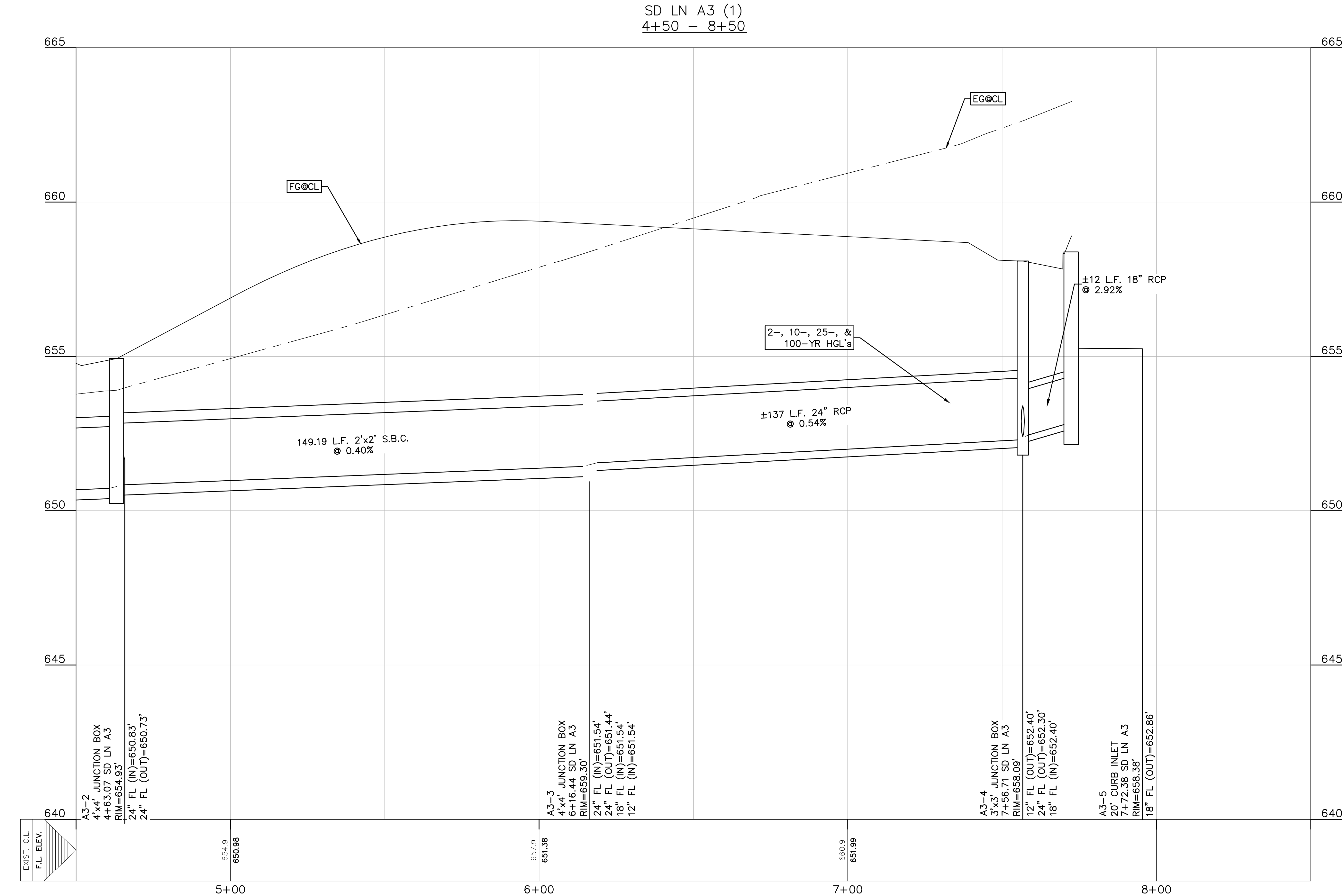
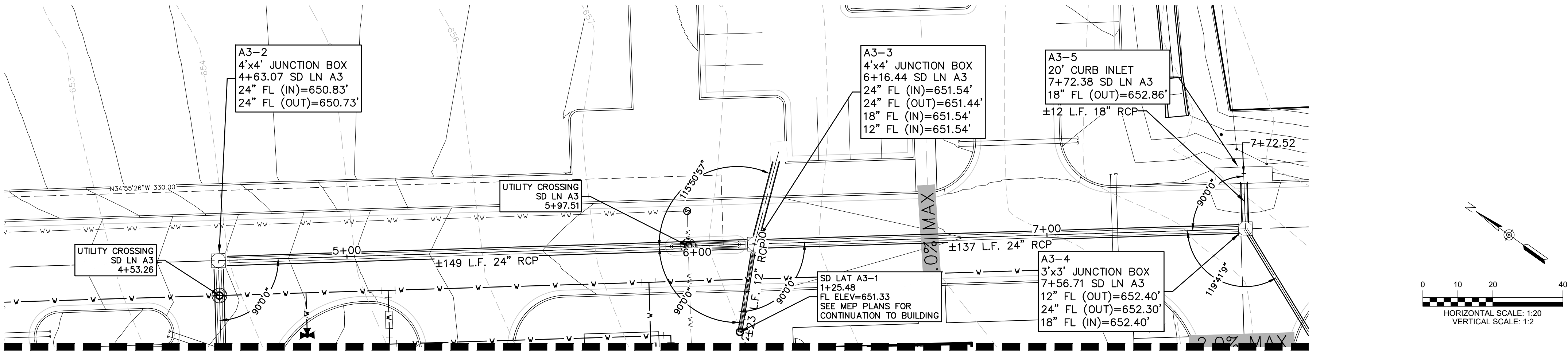
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SD LN A3  
PLAN &  
PROFILE (1  
OF 2)

SHEET NUMBER  
C8.4



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KEY PLAN

PROJECT NAME

NEW  
BRAUNFELS  
POLICE  
DEPARTMENT  
HQ

PROJECT LOCATION

1488 S SEGUIN  
NEW  
BRAUNFELS, TX  
78130

PROJECT NUMBER

040.030

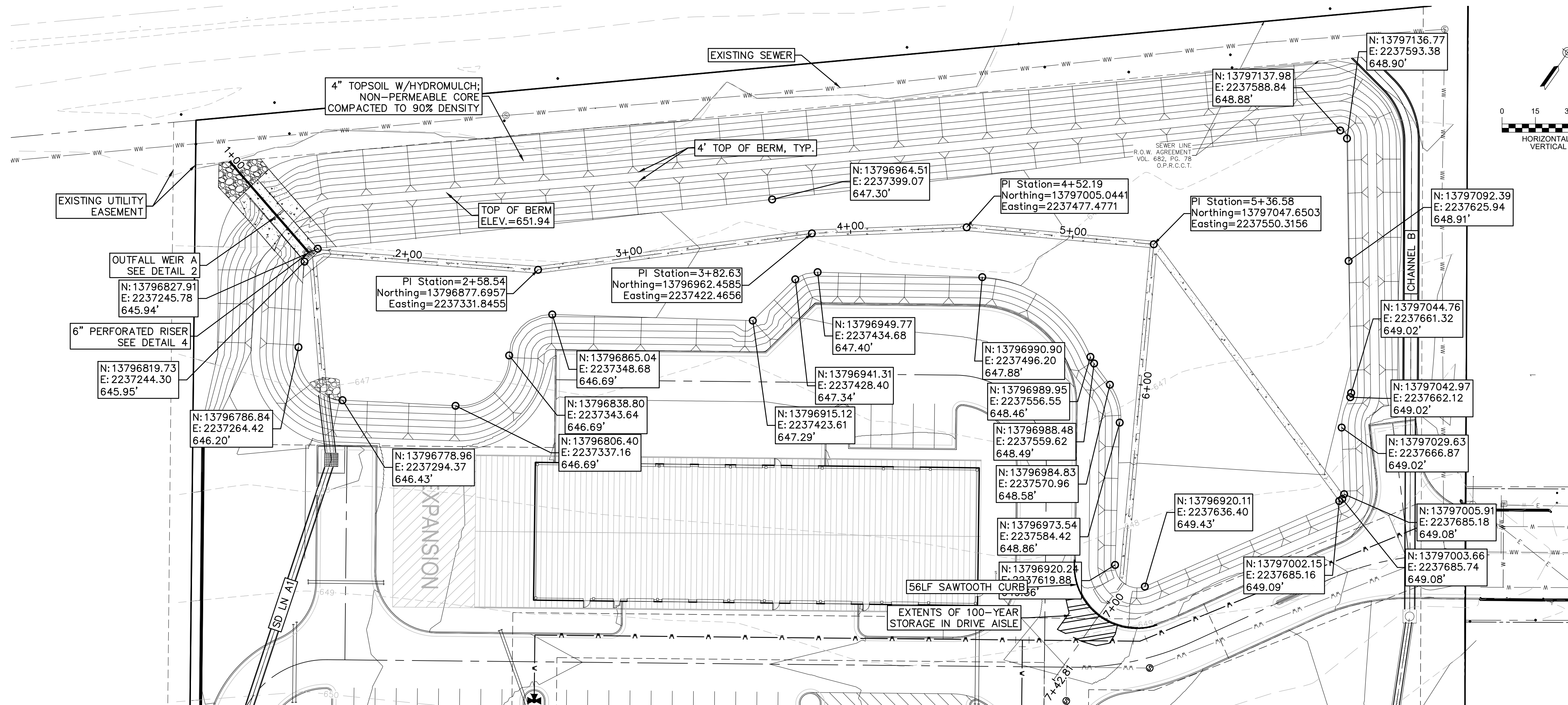
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SD LN A3  
PLAN &  
PROFILE (2  
OF 2)

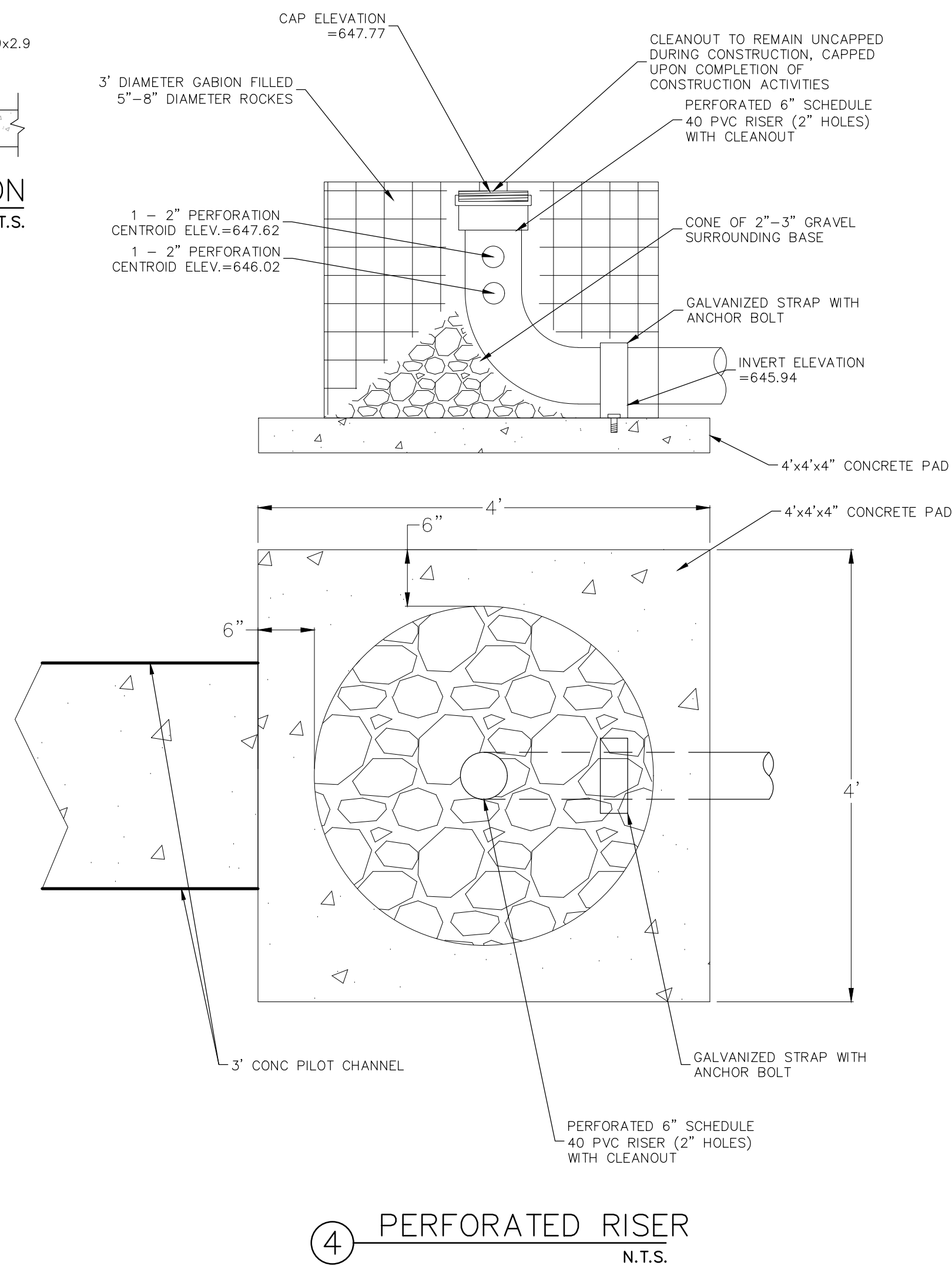
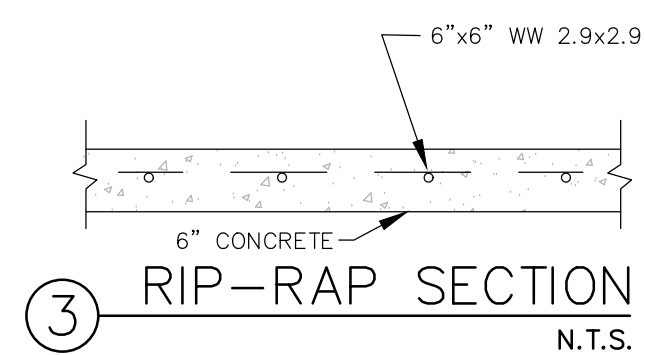
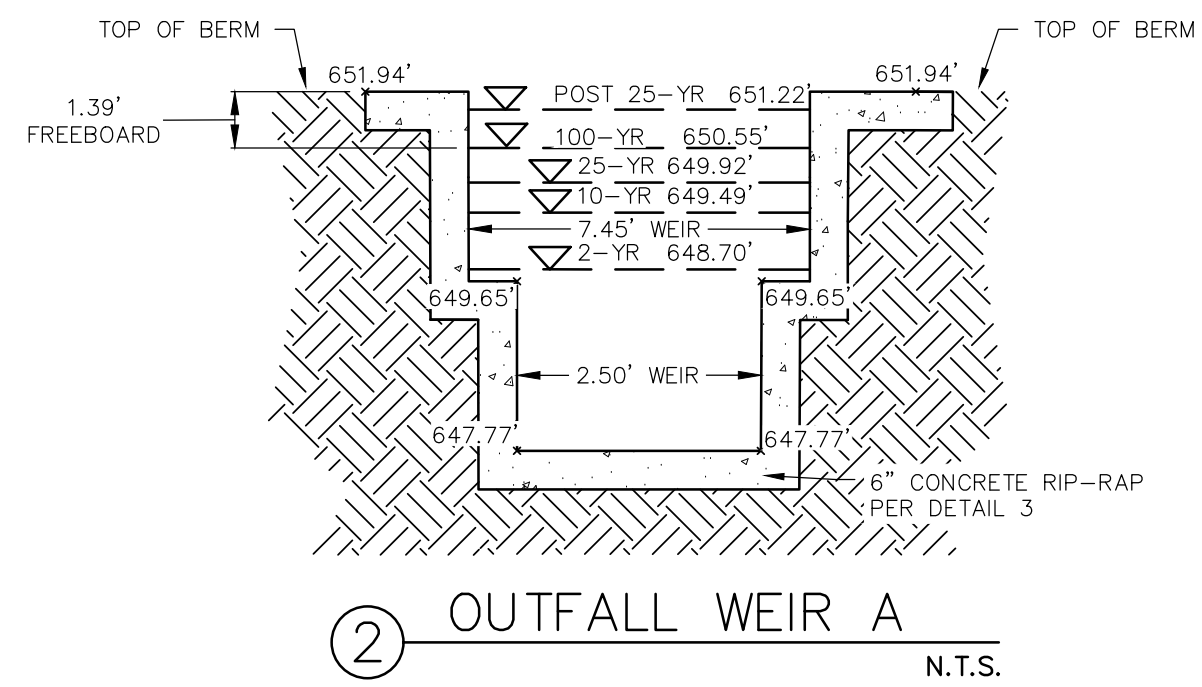
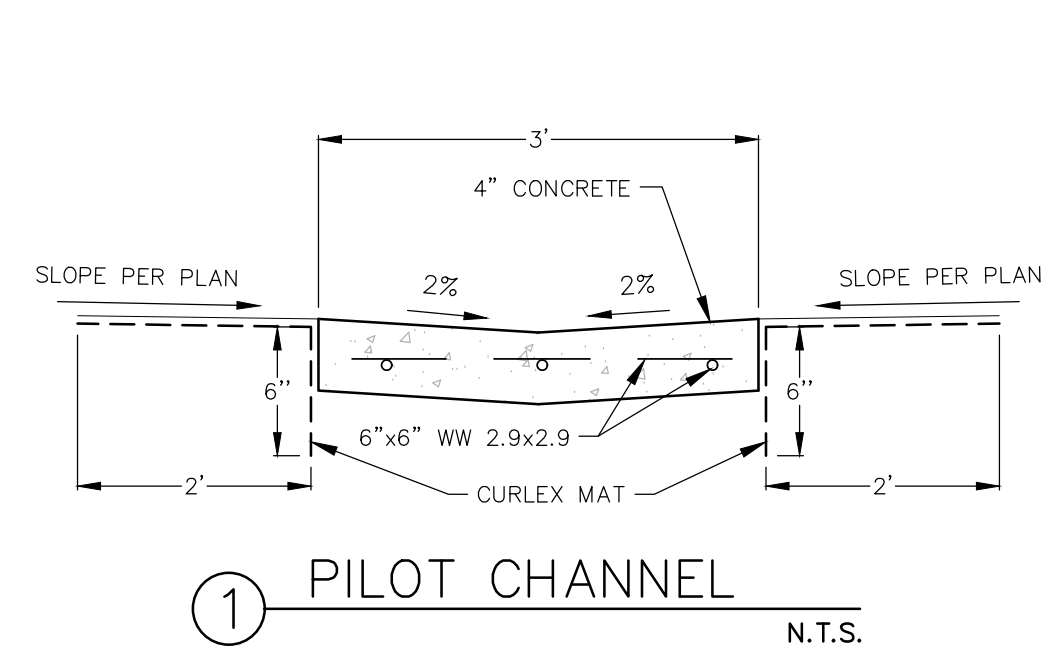
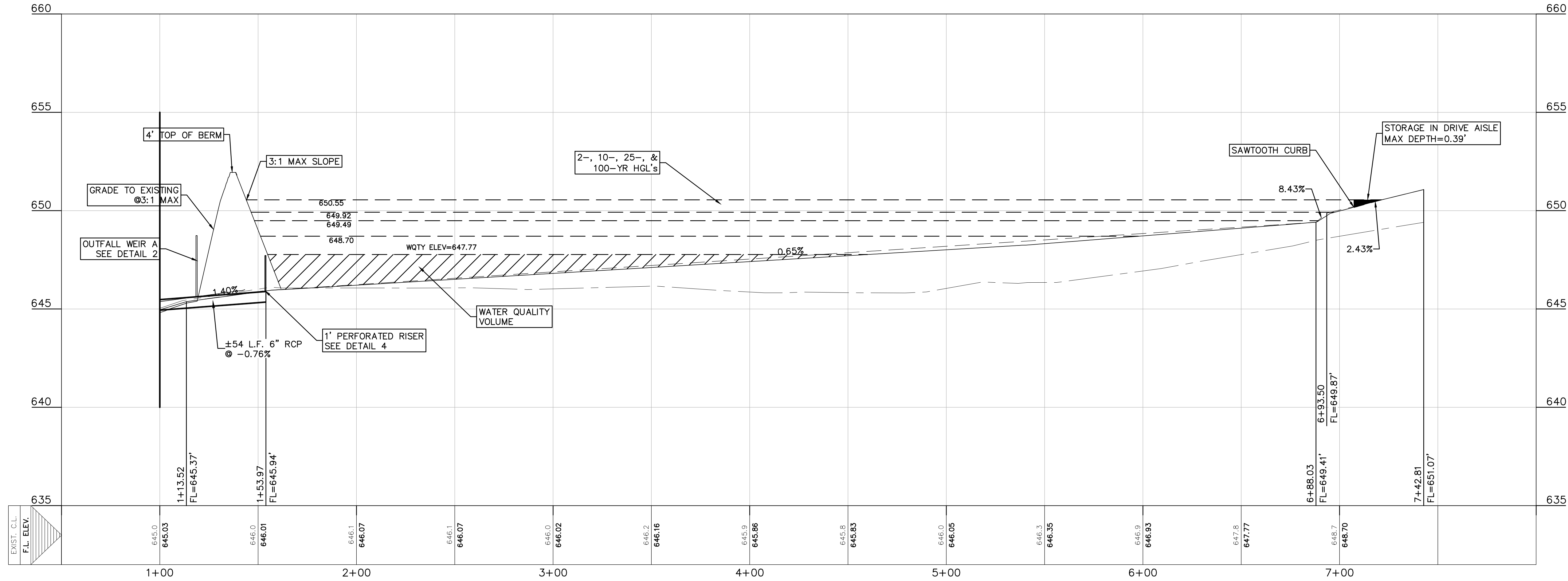
SHEET NUMBER

C8.5





POND A CENTERLINE  
0+50 - 8+00



**DETENTION BASIN MAINTENANCE  
AND EQUIPMENT ACCESS REQUIREMENTS:**

- SILT SHALL BE REMOVED AND THE BASIN RETURNED TO ORIGINAL LINES AND GRADES WHEN STANDING WATER CONDITIONS OCCUR OR THE BASIN STORAGE VOLUME IS REDUCED BY MORE THAN 10%.
- TO LIMIT EROSION, NO UNVEGETATED AREA SHALL EXCEED 10 SQ. FT. IN EXTENT.
- ACCUMULATED PAPER, TRASH, AND DEBRIS SHALL BE REMOVED EVERY 6 MONTHS OR AS NECESSARY TO MAINTAIN PROPER OPERATION.
- BASINS SHALL BE MOWED ANNUALLY BETWEEN THE MONTHS OF JUNE AND SEPTEMBER.
- CORRECTIVE MAINTENANCE IS REQUIRED ANY TIME A BASIN DOES NOT DRAIN COMPLETELY WITHIN 60 HOURS OR CESSATION OF INFLOW (IE: NO STANDING WATER IS ALLOWED).
- STRUCTURAL INTEGRITY OF BASINS SHALL BE MAINTAINED AT ALL TIMES.

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CONSULTANT



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KEY PLAN

PROJECT NAME

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POLICE  
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PROJECT LOCATION

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PROJECT NUMBER

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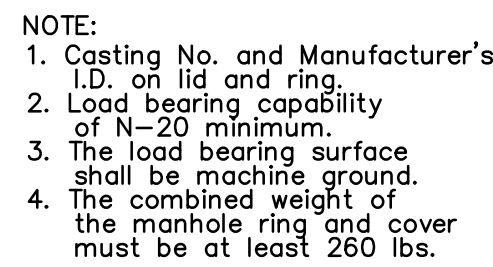
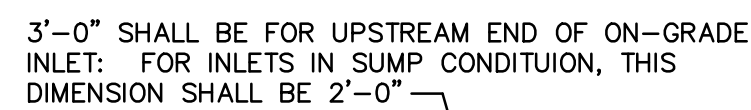
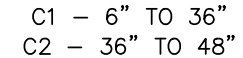
SHEET TITLE

**BASIN A  
DETAILS**

SHEET NUMBER

**C8.6**



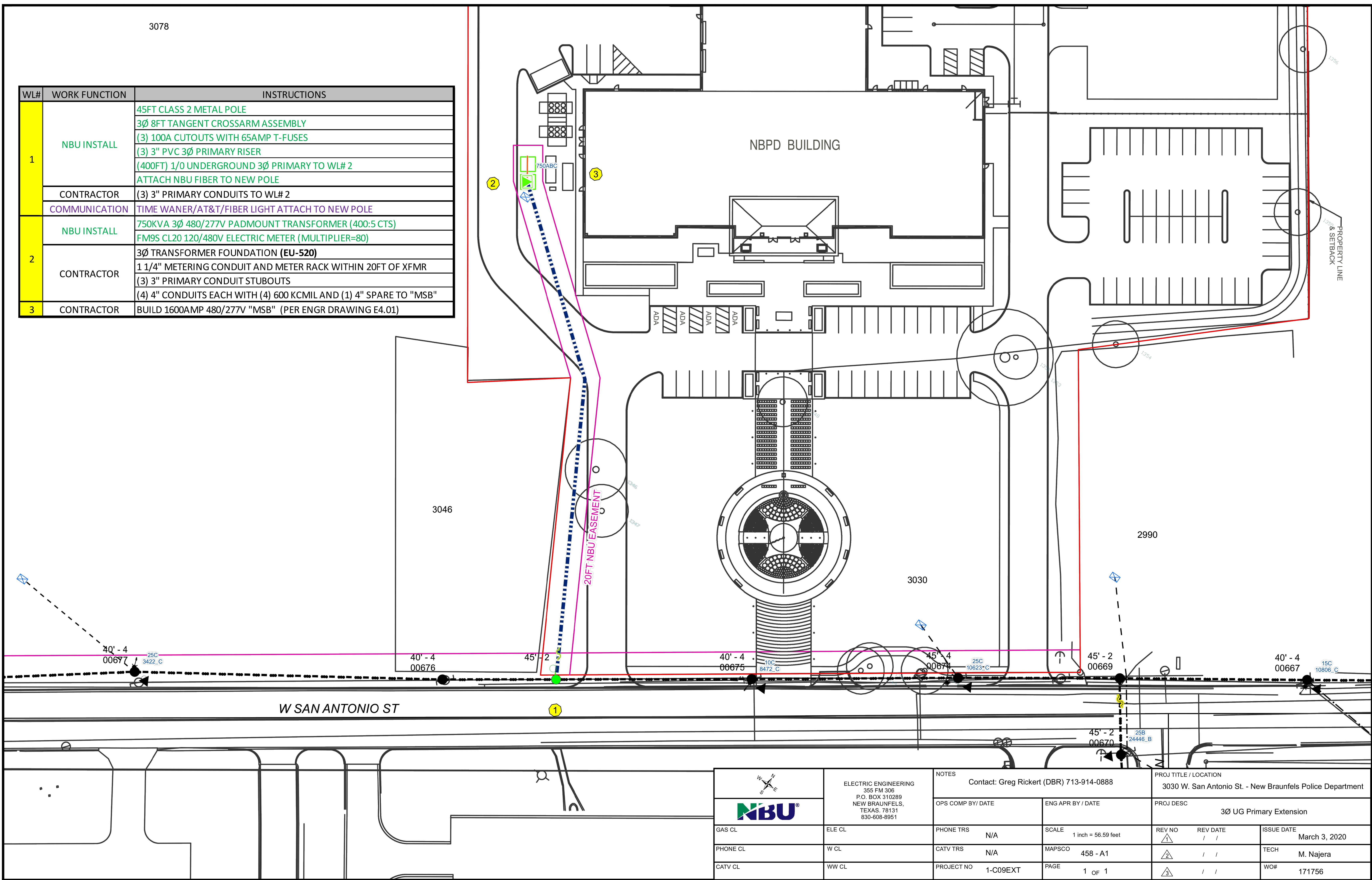


\*These figures do not exclude concrete and steel intercepted by Manhole and Reinforced Concrete Pipe.  
\*Includes concrete gutter for on-grade inlet. Reduce by .05 cy for inlets in sump.

- GENERAL NOTES:
1. ALL BARS INTERCEPTING MANHOLE RING & REINFORCING CONCRETE PIPE SHALL BE FIELD CUT.
  2. CONCRETE FOR STRUCTURES SHALL BE CLASS "A", 3000 P.S.I. IN 28 DAYS.
  3. ALL DIMENSIONS RELATING TO REINFORCING STEEL ARE, TO CENTER OF BARS.
  4. ALL EXPOSED CORNERS SHALL BE CHAMFERED TO 3/4"
  5. CONSTRUCTION JOINTS SHOWN AT FLOWLINE MAY BE RAISED A MAXIMUM OF 6" AT THE CONTRACTOR'S DISCRETION. ADJUST LENGTH OF VERTICAL STEEL AS REQUIRED.
  6. ALL REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF A.S.T.M. A-615, GRADE 60.



WL#	WORK FUNCTION	INSTRUCTIONS
1	NBU INSTALL	45FT CLASS 2 METAL POLE
		3Ø 8FT TANGENT CROSSARM ASSEMBLY
		(3) 100A CUTOUTS WITH 65AMP T-FUSES
		(3) 3" PVC 3Ø PRIMARY RISER
		(400FT) 1/0 UNDERGROUND 3Ø PRIMARY TO WL# 2
	ATTACH NBU FIBER TO NEW POLE	
	CONTRACTOR	(3) 3" PRIMARY CONDUITS TO WL# 2
	COMMUNICATION	TIME WANER/AT&T/FIBER LIGHT ATTACH TO NEW POLE
2	NBU INSTALL	750KVA 3Ø 480/277V PADMOUNT TRANSFORMER (400:5 CTS)
		FM95 CL20 120/480V ELECTRIC METER (MULTIPLIER=80)
	CONTRACTOR	3Ø TRANSFORMER FOUNDATION (EU-520)
		1 1/4" METERING CONDUIT AND METER RACK WITHIN 20FT OF XFMR
		(3) 3" PRIMARY CONDUIT STUBOUTS
	(4) 4" CONDUITS EACH WITH (4) 600 KCML AND (1) 4" SPARE TO "MSB"	
3	CONTRACTOR	BUILD 1600AMP 480/277V "MSB" (PER ENGR DRAWING E4.01)



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