LIMITS OF CONSTRUCTION PROPOSED MAJOR CONTOUR PROPOSED MINOR CONTOUR **EXISTING MAJOR CONTOUR**

OVERHEAD COMMUNICATION **OVERHEAD ELECTRIC** UNDERGROUND ELECTRIC NATURAL GAS SEWER FORCE MAIN SANITARY SEWER MAIN SANITARY SEWER SERVICE DRAINAGE AREA, MAJOR DRAINAGE AREA, MINOR DRAINAGE FLOW PATH STORM DRAINAGE PIPE FIRE LINE WATER LINE

Ø UTILITY POLE **\$**^{LP} LIGHT POLE

← GUY ANCHOR ■ ELECTRIC BOX ELECTRIC METER ELECTRIC TRANSFORMER A/C UNIT ELECTRIC MANHOLE GAS METER GAS VALVE OIL/GAS WELLHEAD

VENT PIPE ₽^{PLM} PIPELINE MARKER SEWER CLEAN-OUT SANITARY SEWER MANHOLE DOWNSPOUT **ROOF DRAIN**

STORM DRAIN MANHOLE
FIRE DEPARTMENT CONNECTION FIRE HYDRANT MICV IRRIGATION CONTROL VALVE SHUT-OFF VALVE SPRINKLER HEAD WATER VALVE O^{YH} YARD HYDRANT PIPE BOLLARD BENCHMARK

& ACCESSIBLE PARKING

MONITORING WELL

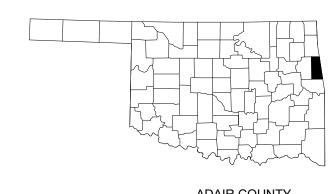
M MAILBOX

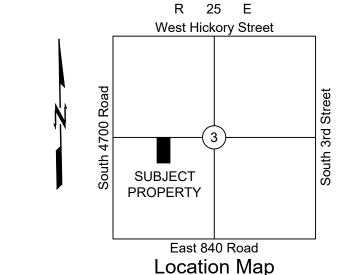
POTHOLE

SITE DEVELOPMENT CRITTENDEN ADDITION

STILWELL, OKLAHOMA

PART OF THE SOUTHWEST QUARTER (SW/4) OF SECTION THREE (3), TOWNSHIP FIFTEEN (15) NORTH, RANGE TWENTY-FIVE (25) EAST OF THE INDIAN BASE AND MERIDIAN, CITY OF STILWELL, ADAIR COUNTY, STATE OF OKLAHOMA.





INTERIM REVIEW ONLY

> THESE DOCUMENTS ARE INCOMPLETE THEY ARE NOT INTENDED TO BE USED FOR PERMIT, BIDDING, OR CONSTRUCTION.

structural·civil·landscape·survey

123 north martin luther king jr. blvd.

tulsa, oklahoma 74103

oklahoma ca #1460

CITY UTILITIES:

THE CITY OF STILWELL WATER DEPT.: LARRY EAGLETON SANITARY SEWER DEPT. : JOE MILLER 925 W. HICKORY STILWELL, OKLAHOMA 74960 918.696.5084

GAS

NEO PUBLIC FACILITIES ATTN: RUSTY DANRIDGE 81075 HWY 59 STILWELL, OKLAHOMA 74960 918.797.0069

TELEPHONE: SALINA STILWELL TELEPHONE 109 E. EVANJOY SALINA, OKLAHOMA 74365 918.434-5392

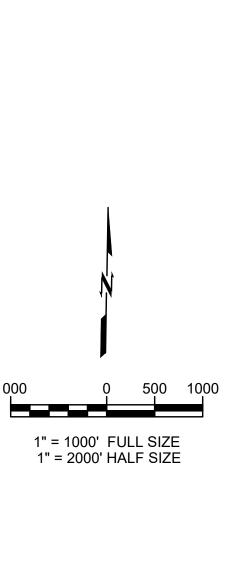
ELECTRIC: CITY OF STILWELL

ELEC DEPT.: JEROMY JOHNSON 926 W. HICKORY STILWELL, OKLAHOMA 74960 918.696.5084

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BENCHMARKS

3/8" Iron Pin ELEV=1156.40 ELEV=1163.98 N=310171.144 N=309718.166 E=2963534.680 E=2963507.066





Know what's **below**.

NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THE LOCATION AND ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY Call before you dig. LOCATION CENTER AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES.

SHEET NO.

COVER SHEET

PROJECT NO. SHEET NAME

2. THE CONTRACTOR SHALL PROVIDE DUST CONTROL MEASURES IN ACCORDANCE WITH LOCAL AUTHORITIES.

3. ALL STREET SURFACES, DRIVEWAYS, CULVERTS, ROADSIDE DRAINAGE DITCHES, AND OTHER STRUCTURES THAT ARE DISTURBED OR DAMAGED IN ANY MANNER AS A RESULT OF CONSTRUCTION SHALL BE REPLACED IN ACCORDANCE WITH THE SPECIFICATIONS.

4. UNLESS SPECIFIED OTHERWISE, ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE STANDARDS, SPECIFICATIONS, AND REGULATIONS OF THE CITY OF STILWELL AND OKLAHOMA DEPT OF ENVIRONMENTAL QUALITY, AND STATE DEPARTMENT OF TRANSPORTATION, AND/OR THE APPROPRIATE LOCAL AUTHORITIES

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS. PERMIT FEES. LICENSES, LICENSE FEES, TAP FEES, ETC.

6. ALL ELEVATIONS IN PAVED AREAS ARE TOP OF FINISHED PAVEMENT UNLESS OTHERWISE NOTED.

7. RELOCATION OF ANY UTILITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF THE APPROPRIATE UTILITY COMPANY AND/OR REGULATORY AGENCY CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FROM ENGINEER BEFORE ANY UTILITY RELOCATION.

8. NO DIMENSION MAY BE SCALED. REFER UNCLEAR ITEMS TO THE ENGINEER FOR INTERPRETATION.

EXCAVATION NOTIFICATION

1. ALL CONTRACTORS SHALL NOTIFY UTILITY COMPANIES AND GOVERNMENT AGENCIES IN WRITING OF THE INTENT TO EXCAVATE NO LESS THAN 72 HOURS PRIOR TO SUCH EXCAVATION (EXCLUSIVE OF SATURDAYS, SUNDAYS, AND HOLIDAYS).

2. CONTRACTORS TO CALL 811 (OR VISIT CALL811.COM) TO REQUEST UTILITY LOCATES. ONCE COMPLETION OF MARKINGS HAS BEEN CONFIRMED BY THE CONTRACTOR, NO AUTOMATED OR MECHANICAL EQUIPMENT SHOULD BE USED WITHIN TWO FEET ON EITHER SIDE OF THE MARKINGS (OR ANOTHER MORE STRINGENT TOLERANCE AS DIRECTED), AND EXISTING FACILITIES MUST BE EXPOSED BY HAND.

3. EXISTING UTILITY LOCATIONS SHOWN SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION. LOCATIONS OF UNDERGROUND UTILITIES ON THESE DRAWINGS ARE APPROXIMATE ONLY AND BASED ON ACTUAL FIELD LOCATIONS OF VISIBLE STRUCTURES AND PLAN COMPUTATIONS.

SITE ACCESSIBILITY

1. ALL FEATURES OF THIS PROJECT INCLUDING. BUT NOT LIMITED TO. SIDEWALKS. CURB RAMPS, ACCESSIBLE PARKING, AND ACCESSIBLE ROUTES SHALL COMPLY WITH THE APPLICABLE ACCESSIBILITY CODES [AMERICAN DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES; THE PROPOSED PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG) PUBLISHED IN THE FEDERAL REGISTER JULY 2011; INTERNATIONAL BUILDING CODE (IBC); ICC A117.1; ETC.]

2. WHERE SPATIAL LIMITATIONS OR EXISTING FEATURES WITHIN THE LIMITS OF THE PROJECT PREVENT FULL COMPLIANCE WITH THESE GUIDELINES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER UPON DISCOVERY OF SUCH FEATURES. THE CONTRACTOR SHALL NOT PROCEED WITH ANY ASPECT OF THE WORK WHICH IS NOT IN FULL COMPLIANCE WITH THESE GUIDELINES WITHOUT PRIOR, WRITTEN PERMISSION FROM THE ENGINEER. ANY WORK WHICH IS NOT PERFORMED WITHIN THESE GUIDELINES. FOR WHICH THE CONTRACTOR DOES NOT HAVE WRITTEN APPROVAL, SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

3. GENERAL SLOPE GUIDANCE: 3.1. CROSS SLOPES SHALL NOT EXCEED 1:50 (2.0%). PREFERRED SLOPE IS 1.5%.

3.2. RUNNING SLOPES SHALL NOT EXCEED 5% EXCEPT AT RAMPS. PREFERRED MAXIMUM SLOPE IS 4.5%.

3.3. RAMP RUNNING SLOPES SHALL NOT EXCEED 1:12 (8.3%). PREFERRED MAXIMUM SLOPE IS 7.8%.

3.4. SLOPES AT LANDINGS, ACCESSIBLE PARKING STALLS, AND ACCESSIBLE AISLES SHALL NOT EXCEED 2% IN ANY DIRECTION. PREFERRED MAXIMUM SLOPE IS 1.5%.

3.5. EXCEPTIONS WITHIN THE PUBLIC RIGHT-OF-WAY: WHERE THE ESTABLISHED ADJACENT STREET GRADE EXCEEDS 5%, RUNNING SLOPES PARALLEL TO THE STREET SLOPES SHALL NOT EXCEED THE GENERAL GRADE ESTABLISHED FOR THE ADJACENT STREET. CURB RAMP RUNNING SLOPE CAN EXCEED 8.3% TO LIMIT THE RESULTING THE RAMP LENGTH TO 15 FEET.

GEOTECHNICAL

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT PREPARED BY BUILDING & EARTH SCIENCES INC. DATED FEBRUARY 14, 2023.

SURVEY

1. EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION ARE SHOWN PER THE FIELD SURVEY PERFORMED BY BENNETT SURVEYING, INC. DATED 01/26/2023

GENERAL CONSTRUCTION NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN STRICT ACCORDANCE WITH 2019 OKLAHOMA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, AND CITY OF TAHLEQUAH STANDARDS.

2. ALL EXCAVATED MATERIAL NOT REQUIRED IN OTHER AREAS OF THE PROJECT, INCLUDING CONCRETE AND CURB REMOVAL, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF BY THE CONTRACTOR IN A MANNER ACCEPTABLE TO THE ENGINEER WITHOUT COST TO THE OWNER. THE CONTRACTOR SHALL BE REQUIRED TO OBTAIN AN EARTH CHANGE PERMIT IF MATERIAL IS TO BE DISPOSED OF OFFSITE.

3. THE CONTRACTOR SHALL WORK IN COOPERATION WITH THE LOCAL AUTHORITY TO ESTABLISH, INSTALL, MAINTAIN AND OPERATE COMPLETE, ADEQUATE AND SAFE TRAFFIC CONTROLS DURING THE ENTIRE CONSTRUCTION PERIOD. IF IT IS NECESSARY TO CLOSE ANY PORTION OF ANY STREET TO ACCOMODATE ANY PHASE OF CONSTRUCTION, THE CONTRACTOR SHALL PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN TO CHEROKEE NATION ROADS AND LOCAL AUTHORITY PUBLIC WORKS AT LEAST 72 HOURS PRIOR TO COMMENCING THE PHASE OF WORK. ALL TRAFFIC CONTROL DEVICES SHALL BE APPROVED BY THE CHEROKEE NATION ROADS AND LOCAL AUTHORITY PUBLIC WORKS. THE CONTRACTOR SHALL PLACE TRAFFIC CONTROL FLAGMEN, BARRICADES AND ALL OTHER DEVICES WITHIN THE VICINITY OF THE CONSTRUCTION AS REQUIRED. ALL CONSTRUCTION SIGNING WILL BE DONE ACCORDING TO STANDARDS SET FORTH IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.

4. WHERE MATERIALS ARE TRANSPORTED IN THE EXECUTION OF WORK, VEHICLES SHALL NOT BE LOADED BEYOND CAPACITY RECOMMENDED BY THE MANUFACTURER OF THE VEHICLE OR PRESCRIBED BY FEDERAL, TRIBAL, STATE OR LOCAL LAW OR

5. LOCAL AND THRU TRAFFIC SHALL BE MAINTAINED THROUGH PROJECT AT ALL TIMES. ALL PUBLIC AND PRIVATE STREETS AND DRIVES SHALL BE ACCESSIBLE FOR TRAFFIC AT ALL TIMES DURING CONSTRUCTION OF THIS PROJECT.

6. PHYSICAL TESTING FOR QUALITY ASSURANCE WILL BE FURNISHED BY THE CONTRACTOR.

7. CONTRACTOR SHALL GIVE THE NOTIFICATION CENTER OF OKLAHOMA ONE-CALL SYSTEM, INC, NOTICE OF ANY EXCAVATION NO SOONER THAN TEN DAYS NOR LATER THAN 48 HOURS, EXCLUDING SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS, PRIOR TO COMMENCEMENT OF WORK. PHONE 1-800-522-6543.

8. CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO PREVENT EXCESS MOISTURE FROM INCLEMENT WEATHER OR OTHER SOURCES FROM ENTERING ANY STREET OR UTILITY EXCAVATION. IF EXCESS MOISTURE DOES ENTER THE EXCAVATION THROUGH THE NEGLIGENCE OF THE CONTRACTOR AND THE ADJOINING PAVEMENT IS ADVERSELY EFFECTED BY THE EXCESS MOISTURE, THE CONTRACTOR SHALL REPLACE THE ADJOINING PAVEMENT AND SUBBASE AT HIS SOLE EXPENSE.

9. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, TRIBAL, STATE OR LOCAL LAWS GOVERNING HEALTH. SAFETY AND SANITATION. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL SAFEGUARDS. SAFETY DEVICES AND PROTECTIVE EQUIPMENT THE CONTRACTOR OR THE ENGINEER DETERMINE REASONABLY NECESSARY TO PROTECT THE PUBLIC, MOTORIST, PEDESTRIANS OR PROPERETY FROM HARM OR DAMAGE IN CONNECTION WITH THE PERFORMANCE OF THE WORK UNDER THIS CONTRACT.

10. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO MINIMIZE DAMAGE TO TREES, SHRUBS, IRRIGATION SYSTEMS AND EXISTING LANDSCAPING DURING CONSTRUCTION, AND SHALL REPAIR ALL DAMAGE CAUSED AT THE CONTRACTOR'S EXPENSE AT NO ADDITIONAL COST TO THE OWNER.

11. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE AREAS SURROUNDING AND ADJACENT TO THE PROJECT AREA. AS WELL AS COMPLETED PROJECT ELEMENTS, FROM DAMAGE CAUSED BY THE CONTRACTOR'S OPERATIONS. DAMAGED ITEMS SHALL BE REPAIRED AT THE CONTRACTOR'S SOLE EXPENSE.

12. MASONRY STRUCTURES SHALL NOT BE CONSTRUCTED WITHIN THE RIGHT-OF-WAY.

13. COST OF ANY TEMPORARY FENCING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, NO ADDITIONAL PAYMENT SHALL BE MADE.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE HE MAY INFLICT TO THE EXISTING UNDERGROUND UTILITIES WITHIN THE PROJECT AREA AS A RESULT OF HIS DIGGING, TRENCHING, BORING, ETC. PRIOR TO DIGGING NEAR THE UTILITIES, THE CONTRACTOR SHALL CALL FOR A LIST OF ALL UNDERGROUND FACILITIES REGISTERED IN THE AREA OF CONSTRUCTION LISTED WITH THE FOLLOWING AGENCIES: THE "OKIE" NOTIFICATION CENTER (405) 840-5021 OR 1-800-522-6543; CONTRACTOR SHALL NOTIFY OWNER AND ENGINEER OF ANY CONFLICTS

15. NO DOWELED ON CURBS WILL BE ALLOWED ON THIS PROJECT

16. THE CONTRACTOR SHALL NOT WASTE ANY EXCESS EXCAVATION UNTIL ALL PLANNED EMBANKMENTS AND BACKFILLS ARE COMPLETED. EXCESS UNCLASSIFIED EXCAVATION MATERIAL DETERMINED BY THE ENGINEER TO BE SUITABLE FOR BACKFILL SHALL BE USED TO REDUCE ANY UNCLASSIFIED BORROW NEEDED. COST OF SECOND HANDLING SHALL BE INCLUDED IN OTHER ITEMS OF WORK. ANY REMAINING EXCESS EXCAVATION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER.

17. PRIOR TO FINAL ACCEPTANCE, ALL EXPOSED CURB SURFACES SHALL BE CLEANED OF ALL DISCOLORATION SUCH AS ASPHALT STAIN, TIRE MARKS OR OTHER DISFIGUREMENT.

EROSION CONTROL NOTES:

ALL EROSION CONTROL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN AND DEQ STANDARDS AND SPECIFICATIONS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A STABILIZED CONSTRUCTION ENTRANCE, AND FOR CLEANING OF VEHICLE WHEELS IN ACCORDANCE WITH DEQ STANDARDS AND SPECIFICATIONS.

SILT FENCES: PLACEMENT OF SILT FENCES SHALL BE AS SHOWN ON THE DEMOLITION & EROSION CONTROL PLAN. FENCING WHICH BECOMES DAMAGED SHALL BE REPLACED PROMPTLY. DEPOSITS OF SILT WHICH BUILD UP BEHIND DIKES MAY BE DISKED INTO THE SITE BEFORE PLACEMENT OF TEMPORARY COVER. AFTER TEMPORARY COVER IS PLACED OR AFTER LANDSCAPING COMMENCES, SILT SHALL BE REMOVED AND DISPOSED OF IN A MANNER APPROVED BY THE ENGINEER.

TEMPORARY EROSION CONTROL

ALL DISTURBED EARTH SURFACES WHICH ARE NOT PAVED OR BUILDING PADS SHALL BE LANDSCAPED OR REVEGETATED IMMEDIATELY IF CONSTRUCTION CEASES FOR 14 DAYS WITH A TEMPORARY COVER, DEPENDING ON THE PLANTING SEASON, AS OUTLINED BELOW.

PLANT TYPE	PER	PER 1000	PLANTING	DEPTH OF
	ACRE	SQ. FT.	DATE	SEEDING
ANNUAL RYEGRASS ELBON RYE WHEAT OATS SORGHUMS SUDAN GRASS	40 LBS. 2 BU. 2 BU. 3 BU. 60 LBS. 60 LBS.	0.9 LBS. 3.0 LBS. 3.0 LBS. 2.5 LBS. 1.4 LBS.	09/05-11/30 08/15-11/30 08/15-11/30 08/15-11/30 03/01-09/15 04/01-09/15	1/4 INCH 2 INCH 2 INCH 2 INCH 2 INCH 2 INCH 2 INCH

PRIOR TO SEEDING, NEEDED EROSION CONTROL PRACTICES SHALL BE INSTALLED.

THE SUBGRADE SHALL BE LOOSENED EVENLY TO A DEPTH OF 2 TO 3 INCHES AND 10-20-10 FERTILIZER (10 LBS. PER 1000 SQ. FT. OR 450 LBS. PER ACRE) SHALL BE MIXED WITH THE LOOSENED SOIL BY DISKING OR OTHER SUITABLE MEANS.

SOIL SHALL BE TESTED AND LIME TREATED IF REQUIRED BY TESTING FIRM.

SEEDS MAY BE DRILLED OR BROADCAST UNIFORMLY.

SEEDING IMPLEMENTS SHOULD BE USED AT RIGHT ANGLES TO THE SLOPE TO MINIMIZE EROSION.

MULCH SHALL BE USED ON ALL SLOPES GREATER THAN 5 PERCENT OR AS NEEDED

THE AREA SHALL BE WATERED DAILY OR AS OFTEN AS NECESSARY TO MAINTAIN ADEQUATE SOIL MOISTURE UNTIL THE PLANTS EXCEED 1 INCH IN HEIGHT.

PERMANENT EROSION CONTROL PRACTICES

BERMUDA GRASS SOLID SLAB SOD SHALL BE USED ON THIS PROJECT IN ALL DISTURBED AREAS.

LAWN AREAS SHALL BE FERTILIZED ACCORDING TO TIME OF INSTALLATION

MAY 1 - AUGUST 31: APPLY 16-8-8 FERTILIZER AT A

RATE OF SIX (6) POUNDS PER 1000 SQ FT TO LAWN AREAS

SEPTEMBER 1 - APRIL 30: APPLY 10-20-10 FERTILIZER AT A RATE OF TEN (10) POUNDS PER 1000 SQ FT TO LAWN AREAS

SOIL SHALL BE LOOSENED EVENLY TO A DEPTH OF 2 TO 3 INCHES AND FERTILIZER SHALL BE MIXED WITH THE LOOSENED SURFACE SOIL BY DISKING OR OTHER SUITABLE MEANS.

SOIL SHALL BE TESTED FOR pH AND SHALL BE TREATED WITH LIME AS REQUIRED.

THE AREA SHALL BE WATERED DAILY OR AS OFTEN AS NECESSARY TO MAINTAIN ADEQUATE SOIL MOISTURE UNTIL FINAL ACCEPTANCE OR ONE MONTH.

STAKE SOD ON SLOPES GREATER THAN 4:1.

AS-BUILTS

THE CONTRACTOR SHALL KEEP ON SITE A CURRENT SET OF THE APPROVED CONSTRUCTION WORKING DRAWINGS AT ALL TIMES. THE CONTRACTOR SHALL MARK (IN RED INK) ALL APPROVED CHANGES INCURRED FOLLOWING ISSUANCE OF THE INITIAL DRAWINGS. THESE CHANGES MAY BE INITIATED FROM FIELD CONDITIONS OR CHANGES MADE BY THE DESIGN ENGINEER. EXCEPT FOR MINOR FIELD ADJUSTMENTS, ALL CHANGES SHALL BE REVIEWED AND AGREED TO BY THE DESIGN ENGINEER PRIOR TO FINAL APPROVAL OF THE PROJECT. THE CONTRACTOR SHALL SUBMIT THE WORKING DRAWINGS TO THE ENGINEER OF RECORD (DESIGN ENGINEER) AFTER FINAL INSPECTION OF PROJECT TO SERVE AS A BASIS FOR DEVELOPMENT OF RECORD DRAWINGS.

Know what's **below**.

CAUTION NOTICE TO CONTRACTOR

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tulsa, oklahoma 74103

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918.584.5858

collective allace design collective, pc structural·civil·landscape·survey 123 north martin luther king jr. blvd.

INTERIM REVIEW

THESE DOCUMENTS ARE INCOMPLET THEY ARE NOT INTENDED TO BE USE FOR PERMIT, BIDDING, OR CONSTRUCTION.

SHEET NAME GENERAL

04/06/202

224047

NOTES SHEET NO.

PROJECT NO.

DATE

PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL PARTICIPATE IN A PRE-CONSTRUCTION CONFERENCE. AT THIS CONFERENCE THE CONTRACTOR SHALL FURNISH CERTIFICATION FROM THE MANUFACTURER/SUPPLIER THAT ALL MATERIALS MEET APPLICABLE SPECIFICATIONS. CERTIFICATIONS SHALL BE SUPPLIED IN FIVE (5) COPIES WITH THREE (3) COPIES STAMPED AND APPROVED, BY THE ENGINEER, RETURNED TO THE CONTRACTOR. MATERIALS SHALL NOT BE INSTALLED UNTIL THEY HAVE BEEN APPROVED BY THE ENGINEER.

DIG THROUGH LOCATOR TAPE WILL BE BURIED 2 FEET ABOVE THE LINE.

WHEN C-900 PVC IS USED, A NO. 12 COATED COPPER WIRE SHALL BE TAPED TO THE TOP SURFACE OF THE PIPE AND CONNECTED TO EACH FIRE HYDRANT BY ATTACHING TO A BOLT, JUST ABOVE GROUND LEVEL.

ALL IRON PIPE AND FITTINGS SHALL BE POLYWRAPPED.

BACKFILL AND COMPACTION REQUIREMENT FOR STREETS SHALL EXTEND TWO (2) FEET BACK OF CURB.

SERVICE LINES SHALL BE TAPPED TO MAIN LINES USING SOLID BRASS SADDLES.

FIRE HYDRANTS:

GOVERNMENT.

- a. FIRE HYDRANTS SHALL BE A MINIMUM 5 1/4 INCH NOZZLE TYPE AND OF THE KENNEDY, MUELLER, OR AMERICAN DARLING BRAND NAME.
- b. EACH HYDRANT SHALL BE SET WITH THE STREAMER NOZZLE FACING THE STREET AND WITH A MINIMUM CLEARANCE OF EIGHTEEN (18) INCHES ABOVE THE FINISHED GRADE.
- c. ALL EXPOSED PORTIONS OF FIRE HYDRANTS SHALL BE PAINTED WITH A SAFETY YELLOW ENAMEL AS MANUFACTURED BY GLIDDEN OR DUPONT.

ALL SERVICE LINE FITTINGS SHALL BE BRASS WITH FLARED, COMPRESSION, SOLDERED, OR THREADED CONNECTIONS.

WHEN CONDUIT IS PROVIDED FOR SERVICE LINES IT SHALL BE SCHEDULE 40 PVC OR STRONGER.

WHEN WORKING IN OR ADJACENT TO EXISTING SUBDIVISIONS ONLY ONE (1) DAYS WORTH OF TRENCH MAY BE OPEN AT A GIVEN TIME. THIS REQUIREMENT MAY BE MODIFIED, IN WRITING BY THE ENGINEERING DIRECTOR, FOR A SPECIFIC PROJECT.

CONTRACTOR SHALL CONNECT METERS TO WATER MAIN ONLY AFTER WATER MAIN IS PUT INTO SERVICE.

MINIMUM COVER OVER WATER LINES SHALL BE 3 FEET.

CITY CREWS ONLY ARE TO OPERATE ALL VALVES. CONTRACTOR SHALL NOTIFY CITY THRU INSPECTOR.

CONTRACTOR SHALL GIVE THE NOTIFICATION CENTER OF THE OKLAHOMA ONE-CALL SYSTEM, INC, NOTICE OF ANY EXCAVATION NO SOONER THAN 48 HOURS OR LATER THAN 10 DAYS, EXCLUDING SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS PRIOR TO COMMENCEMENT OF WORK, PHONE 1-800-522-6543.

CONSTRUCTION FOR ALL PUBLIC WORKS FACILITIES SHALL BE IN COMPLIANCE WITH THE LATEST EDITION OF TITLE 252, DEPARTMENT OF ENVIRONMENTAL QUALITY, CHAPTER 626, PUBLIC WATER SUPPLY CONSTRUCTION STANDARDS, OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (ODEQ).

ALL TRENCHES SHALL BE BACKFILLED AND COMPACTED TO 95 PERCENT STANDARD PROCTOR DENSITY, EXCEPT IN AREAS TO BE SODDED OR LANDSCAPED. WHERE TOPSOIL SHALL BE PREPARED FOR IRRIGATION OR RE-VEGETATION.

CONTRACTOR SHALL VERIFY DEPTH OF EXISTING WATER LINES AT CONNECTIONS IN ORDER TO ADJUST DEPTH OF FITTINGS.

THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK IN EACH AREA. HE IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT RESULT FROM HIS FAILURE TO LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

PHYSICAL TESTING FOR QUALITY ASSURANCE WILL BE FURNISHED BY THE CONTRACTOR.

ALL FITTING BENDS, TEES AND FIRE HYDRANTS SHALL HAVE MECHANICAL JOINT RESTRAINTS, WITH MIDCO

ALL MATERIALS INCLUDING PIPING, FITTINGS, VALVES, FIRE HYDRANTS, GASKETS, PACKING AND OTHER JOINT MATERIALS SHALL MEET THE LATEST SPECIFICATIONS ISSUED BY THE AWWA, ASTM, ANSI, NSF OR FEDERAL

NO CONSTRUCTION ACTIVITIES ON THE WATER SYSTEM ARE PERMITTED UNTIL THE CITY ENGINEER'S OFFICE HAS RECEIVED A COPY OF THE ODEQ 'PERMIT TO CONSTRUCT' AND AUTHORIZATION TO PROCEED WITH THE WATER SYSTEM HAS BEEN PROVIDED BY THE CITY ENGINEER.

TEST THE INSTALLED PIPE FOR LEAKAGE IN ACCORDANCE WITH AWWA STANDARD SPECIFICATIONS. LEAKAGE MUST NOT EXCEED 10 GALLONS PER INCH PER MILE OF PIPE PER 24 HOURS AT 150 PSI TESTING PRESSURE.

DISINFECT ALL WATERLINES ACCORDING TO AWWA STANDARD SPECIFICATIONS. OBTAIN SAFE BACTERIOLOGICAL SAMPLES ON TWO CONSECUTIVE DAYS BEFORE PLACING THE WATERLINE INTO SERVICE.

IN ACCORDANCE WITH ODEQ STANDARDS MAINTAIN 10 FEET HORIZONTAL SEPARATION FROM ANY EXISTING OR PROPOSED SEWER LINES. MAINTAIN 5 FEET HORIZONTAL AND 24 INCHES BETWEEN WATERLINES, SANITARY SEWER, STORM SEWER AND OTHER BURIED UTILITY LINES.

LOCATED WATERLINES AT LEAST 15 FEET FROM ALL PARTS OF SEPTIC TANKS AND ABSORPTION FIELDS, OR OTHER SEWAGE TREATMENT AND DISPOSAL SYSTEMS.

IN ACCORDANCE WITH ODEQ STANDARDS FOR VERTICAL SEPARATION AT CROSSINGS, PROVIDE A VERTICAL DISTANCE OF 2 FEET BETWEEN THE WATER MAIN AND SEWER MAIN. MAINTAIN A 2 FOOT VERTICAL SEPARATION BETWEEN WATERLINES AND ANY EXISTING OR PROPOSED STORM SEWER, RAW WATER LINES, PETROLEUM PRODUCT LINES, NATURAL GAS LINES AND OTHER BURIED UTILITY LINES.

WHEN IT IS IMPOSSIBLE TO OBTAIN SUCH A HORIZONTAL OR VERTICAL SEPARATION BETWEEN THE WATER AND SEWER LINES CONSTRUCT THE SEWER LINE OF WATER PIPE AND PRESSURE TEST IT TO ASSURE WATER TIGHTNESS.

GENERAL CONSTRUCTION NOTES - SANITARY SEWER LINE

ALL SANITARY SEWER COLLECTION SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT CITY ENGINEERING SERVICES DEPARTMENT STANDARDS AND SPECIFICATIONS. ALL SANITARY SEWER COLLECTION SYSTEM CONSTRUCTION SHALL BE INSPECTED BY THE ENGINEERING SERVICES DEPARTMENT UTILITY INSPECTORS, IN ACCORDANCE WITH CITY POLICY.

THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS BEFORE EXCAVATING, AND SHALL BE RESPONSIBLE FOR CONTACTING AND COORDINATING WITH ALL PUBLIC OR PRIVATE UTILITY COMPANIES IN THE VICINITY OF CONSTRUCTION.

THE CONTRACTOR SHALL VERIFY THE INVERT AND FLOWLINE ELEVATIONS OF THE EXISTING SANITARY SEWER PRIOR TO LAYING ANY NEW PIPE.

PVC SEWER PIPE SHALL BE ASTM D1784 SDR-35.

DUCTILE IRON PIPE SHALL BE USED AT ANY POINT WHERE THE CENTERLINE CUT IS SIXTEEN (16) FEET OR MORE, WHERE CONCRETE ENCASEMENT IS SPECIFIED, OR WHERE A WATER MAIN IS WITHIN TWO (2) FEET OF THE SEWER.

DUCTILE IRON PIPE (DIP) IN CRUSHED STONE BEDDING SHALL BE USED AT ANY POINT WHERE THE CENTERLINE CUT TO ORIGINAL GROUND IS LESS THAN FOUR (4) FEET OR GREATER THAN SIXTEEN (16) FEET.

TEES FOR FUTURE SERVICE CONNECTIONS SHALL BE INSTALLED AND PLUGGED DURING MAIN CONSTRUCTION.

IN-LINE SERVICE TEES SHALL BE OF THE SAME MATERIAL AS PIPE INSTALLED. FOR EXAMPLE, UNDER PAVED DRIVING SURFACES, THE MAIN AND SERVICE TEE SHALL BE DUCTILE IRON PIPE (DIP).

SPECIAL RISERS SHALL BE INSTALLED FOR EACH LOT WHERE THE MAIN SEWER DEPTH WILL BE TWELVE (12) FEET OR GREATER BELOW FINISHED GRADE.

TAPS ON EXISTING LINES, THAT DID NOT HAVE TEES INSTALLED DURING CONSTRUCTION, SHALL BE INSTALLED IN ACCORDANCE WITH CITY STANDARD DRAWINGS.

MANHOLES LESS THAN 4'-6" IN HEIGHT SHALL HAVE A FULL 5'-0" INSIDE DIAMETER FROM TOP TO BOTTOM.

ALL PRECAST MANHOLES SHALL HAVE ADJUSTABLE TOP RIMS PROVIDING SIX (6) INCHES, PLUS OR MINUS, FOR ADJUSTMENT TO FINAL GRADES. ELEVATIONS SHOWN ON PLANS MAY BE ADJUSTED WHILE THE WORK IS IN PROGRESS TO CONFORM TO FINAL IN-PLACE PAVING AND LANDSCAPE GRADES.

THE UTILITY CONTRACTOR ASSUMES THE RISK OF ORDERING PRECAST CONCRETE COMPONENTS PRIOR TO FIELD STAKING AND REVIEW OF FIELD CONDITIONS AT THE TIME OF CONSTRUCTION.

THE UTILITY CONTRACTOR SHALL BE REQUIRED TO VACUUM TEST ALL MANHOLES ACCORDING TO CURRENT CITY ENGINEERING SERVICES DEPARTMENT STANDARDS AND SPECIFICATIONS.

BEDDING, BACKFILL, AND COMPACTION SHALL BE IN ACCORDANCE WITH CITY STANDARD DRAWINGS. STREET BACKFILL AND COMPACTION REQUIREMENTS SHALL EXTEND TWO (2) FEET BACK OF CURB. WHEN REPLACING A SEWER IN SERVICE 3/8 INCH CHIPS SHALL BE USED FOR BEDDING AND INITIAL BACKFILL.

ALL SERVICE TEES ARE STATIONED AS SHOWN.

WHEN WORKING IN OR ADJACENT TO EXISTING SUBDIVISIONS ONLY ONE (1) DAYS WORTH OF TRENCH MAY BE OPEN AT A GIVEN TIME. THIS REQUIREMENT MAY BE MODIFIED, IN WRITING BY THE ENGINEERING SERVICES DIRECTOR, FOR A SPECIFIC

ROAD CLOSURES MUST BE COORDINATED A MINIMUM OF TWENTY FOUR (24) HOURS IN ADVANCE. ROADS WILL NOT BE CLOSED FOR OVER EIGHT (8) HOURS WITHOUT WRITTEN PERMISSION FROM THE ENGINEERING SERVICES DIRECTOR.

CONTRACTOR SHALL SUBMIT PROFESSIONAL ENGINEER'S TRENCH EXCAVATION PLAN FOR ALL EXCAVATIONS IN EXCESS OF 20

THE OWNER SHALL FURNISH AS-BUILT FIELD NOTES AND QUANTITIES TO THE ENGINEER UPON COMPLETION OF THE PROJECT.

ALL NON-FERROUS PIPING SHALL BE INSTALLED WITH A METAL TRACER WIRE.

CONTRACTOR SHALL ENSURE THAT ALL MANHOLES MEET ASTM C478-18, ASTM C1821, AND C1244-11.

CONTRACTOR SHALL JOIN INLET AND OUTLET PIPES TO THE MANHOLE WITH A GASKET OR OTHER FLEXIBLE WATERTIGHT CONNECTION THAT ALLOWS FOR DIFFERENTIAL SETTLEMENT.

WATERTIGHT MANHOLE COVERS SHALL BE USED IN ALL AREAS THAT MAY BECOME SUBMERGED.

MANHOLE BASES SHALL BE AT LEAST 8 INCHES THICK, WITH A DIAMETER OF 8 INCHES MORE THAN THE LARGEST OUTSIDE DIAMETER OF THE MANHOLE. CONSTRUCT WITH LEAKPROOF JOINTS BETWEEN THE BASE AND MANHOLE.

MANHOLES SHALL BE TESTED FOR LEAKS PER THE ASTM C1244 STANDARD.

DEFLECTION TESTS SHALL BE PERFORMED ON ALL FLEXIBLE PIPE AFTER THE FINAL BACKFILL HAS BEEN IN PLACE FOR AT LEAST 30 DAYS. DEFLECTION MUST NOT EXCEED 5%. TESTS MUST BE RUN USING A RIGID BALL OR MANDREL WITH A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE, TAKING INTO ACCOUNT MANUFACTURING TOLERANCES. TESTS MUST BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES. REFER TO ASTM D3034 AND ASTM F679.

LEAKAGE TESTS ARE REQUIRED FOR ALL GRAVITY LINES. HYDROSTATIC TESTS MUST USE A 2 FOOT TEST HEAD AND LEAKAGE INWARD OR OUTWARD MUST NOT EXCEED 10 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY. REFER TO ASTM E1003-13. THE PROCEDURES LISTED IN THE HANDBOOK OF PVC PIPE, UNIBELL PVC PIPE ASSOCIATION, 2001 MAY BE USED FOR PVC PIPE. AN AIR TEST RESULT MUST ASSURE A LEAKAGE LIMIT EQUIVALENT TO THE HYDROSTATIC TEST LIMIT.

PIPE BEDDING AND BACKFILL SHALL BE MATCHED TO THE PROPER STRENGTH OF THE PIPE TO SUPPORT ANTICIPATED LOADS PER ASTM D2321. TRENCHES SHALL BE AMPLE ENOUGH TO ALLOW PIPE TO BE LAID AND JOINED PROPERLY AND FOR THE BACKFILL TO BE PLACED AND COMPACTED. A MINIMUM OF 4 INCHES OF CLEARANCE SHALL BE PROVIDED BETWEEN PIPE AND ANY LARGE STONES, LEDGE ROCK, OR BOULDERS. WITH THE EXCEPTION OF 30 INCHES OF COVER AS PROTECTION FROM TRAFFIC LOAD DAMAGE TO THE PIPE. ASTM D2321 SHALL BE FOLLOWED FOR ALL TRENCHES EXCAVATED. ASTM A746 SHALL BE FOLLOWED FOR ALL DUCTILE IRON PIPE.

IN ACCORDANCE WITH ODEQ STANDARDS MAINTAIN 10 FEET HORIZONTAL SEPARATION FROM ANY EXISTING OR PROPOSED WATER MAIN LINES. MAINTAIN 5 FEET HORIZONTAL FROM ELECTRICAL, PETROLEUM LINES, STORM SEWER AND OTHER BURIED UTILITY LINES AND 24 INCHES VERTICAL SEPARATION BETWEEN SEWER AND WATERLINES, WITH THE THE CROSSING SECTION CENTERED SO THE JOINTS WILL BE AS FAR AS POSSIBLE FROM THE WATER LINES.

LOCATED SEWER LINES AT LEAST 50 FEET FROM PETROLEUM PRODUCT TANKS, 300 FEET FROM A PUBLIC WATER SUPPLY WELL AND 50 FEET FROM A PRIVATE WATER WELL.

IN ACCORDANCE WITH ODEQ STANDARDS FOR VERTICAL SEPARATION AT CROSSINGS, PROVIDE A VERTICAL DISTANCE OF 2 FEET BETWEEN THE WATER MAIN AND SEWER MAIN. MAINTAIN A 2 FOOT VERTICAL SEPARATION BETWEEN WATERLINES AND ANY EXISTING OR PROPOSED STORM SEWER, RAW WATER LINES, PETROLEUM PRODUCT LINES, NATURAL GAS LINES AND OTHER BURIED UTILITY LINES.

WHEN IT IS IMPOSSIBLE TO OBTAIN SUCH A HORIZONTAL OR VERTICAL SEPARATION BETWEEN THE WATER AND SEWER LINES CONSTRUCT THE SEWER LINE OF WATER PIPE AND PRESSURE TEST IT TO ASSURE WATER TIGHTNESS.

SANITARY SEWER LINES AND SERVICES LINES SHALL NOT BE LAID IN THE SAME TRENCH AS WATER MAINS OR SERVICE LINES.

SERVICE LINES RUNNING ACROSS ROADWAYS SHALL BE SCHEDULE 40 PVC.

THE CONTRACTOR SHALL NOTIFY THE OWNER IF BURIED ARCHEOLOGICAL MATERIALS SUCH AS CHIT STONE TOOLS AND POTTERY, BONE, HISTORIC CROCKERY, GLASS, METAL ITEMS OR BUILDING MATERIALS ARE EXPOSED DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL ALSO NOTIFY MR. ROBERT L. BROOKS WITH THE OKLAHOMA ARCHEOLOGICAL SURVEY

ALL WORK NOT CLASSIFIED AS A CONTRACT PAY ITEM SHALL BE CONSIDERED INCIDENTAL AND THE COST THEREOF SHALL BE INCLUDED IN THE UNIT BID PRICES FOR ITEMS WHICH ARE CLASSIFIED FOR PAYMENT.

CONTRACTOR SHALL PROVIDE TEMPORARY ORANGE SAFETY FENCING AROUND ALL EXCAVATIONS INCLUDING TRENCHES, PITS VAULTS, ETC. TO MAINTAIN SECURITY AND SAFETY FOR ANIMALS, CHILDREN OR ANY BYSTANDER. COST OF ORANGE SAFETY FENCING TO BE INCLUDED IN OTHER ITEMS.

FLOW IN EXISTING PIPES SHALL BE MAINTAINED AT ALL TIMES. COST OF ANY NECESSARY BYPASS PUMPING SHALL BE INCLUDED IN THE COST OF THE PIPE.

ALL MANHOLE CASTINGS, LIDS, FRAMES, CURB HOODS, GRATES, HYDRANTS, VALVES, AND OTHER FITTINGS REMOVED AS PART OF ANY CONSTRUCTION PROJECT ARE PROPERTY OF THE TAHLEQUAH PUBLIC WORKS AUTHORITY. ALL SANITARY SEWER CASTINGS SHALL BE SALVAGED AND DELIVERED BY THE CONTRACTOR TO THE TAHLEQUAH PUBLIC WORKS AUTHORITY.

GENERAL CONSTRUCTION NOTES - UTILITIES

- CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY PLUGS WITH ADEQUATE BLOCKING OR RESTRAINTS, PLUS CORPORATION STOPS, AS DIRECTED BY CITY TESTING PERSONNEL. THEN, ONCE TESTING, CHLORINATION AND FLUSHING BY CITY PERSONNEL IS COMPLETED, REMOVE TEMPORARY BLOCKING AND TIE INTO EXISTING SYSTEM USING FITTINGS SWABBED INTERNALLY WITH 2% BLEACH SOLUTION.
- TESTING, CHLORINATION AND FLUSHING OF NEW WATER MAIN SHALL BE PERFORMED BY CITY PERSONNEL ON MAINS WHICH ARE PHYSICALLY DISCONNECTED FROM THE EXISTING WATER SYSTEM. TESTING, CHLORINATION, AND FLUSHING OF NEW WATER MAINS SHALL NOT BE PERFORMED AGAINST VALVES WHICH ARE PHYSICALLY CONNECTED TO EXISTING SYSTEM.
- ALL COSTS FOR TEMPORARY PLUGS, BLOCKING, RESTRAINING, CORPORATION COCKS, TUBING, THREADED CONNECTIONS, BLEACH AND OTHER INCIDENTALS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PIPE.
- BURIED BOLTS, HARNESS LUGS, AND COUPLINGS SHALL BE GIVEN TWO COATS OF KOPPER'S BITUMASTIC 300-M (DRY MIL THICKNESS OF 16 MILS) OR EQUAL. COST TO BE INCLUDED IN UNIT PRICE BID FOR PIPE.
- CONTRACTOR TO EXCAVATE ALL UTILITY CROSSINGS AHEAD OF PIPE LAYING SO THAT THE GRADES CAN BE ADJUSTED ON THE PROPOSED WATER MAIN TO AVOID UTILITY CONFLICTS. FAILURE TO DO SO SHALL NOT ENTITLE THE CONTRACTOR TO CLAIM EXTRA COMPENSATION FOR ADJUSTMENTS TO THE PROPOSED WATER MAIN. COST FOR EXCAVATING UTILITY CROSSINGS SHALL BE INCLUDED IN UNIT PRICE BID FOR PIPE.
- ALL COSTS FOR COMPONENTS NECESSARY TO RESTRAIN JOINTS FOR PIPE AND FITTINGS DESIGNATED RESTRAINED JOINT ("RJ") SHALL BE INCLUDED IN UNIT PRICE BID FOR PIPE OR FITTINGS.US PIPE "TRFLEX", GRIFFIN "SNAPLOK", MCWANE "THRUSTLOCK", AMERICAN "FLEXRING, EBAA "MEGALUG", SMITH-BLAIR "CAMLOCK", CLOW "TUFGRIP" OR EQUAL, SHALL BE USED ON THIS PROJECT, LOCKING GASKETS NOT ALLOWED. SHOULD RJ PIPE BE SPECIFIED THRU UNCASED BORES, ONLY US PIPE "TRFLEX", GRIFFIN "SNAPLOK", MCWANE "THRUSTLOCK", OR AMERICAN "FLEXRING IS TO BE USED. NO ADDITIONAL PAYMENT SHALL BE MADE.
- DETECTABLE MARKING TAPE SHALL BE INSTALLED OVER PVC PIPE. COST WILL BE INCLUDED IN COST OF POLYVINYL (PVC) PIPE.
- ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO CONNECT PROPOSED WATER MAINS TO EXISTING WATER MAINS IS INCLUDED IN THE COST OF "WATERLINE LOWERED". NO ADDITIONAL PAYMENT SHALL BE MADE.
- CONTRACTOR IS REMINDED TO BED AND BACKFILL ALL TRENCHES EXCAVATED ACROSS ANY EXISTING OR PROPOSED DRIVING OR PARKING SURFACE W/TYPE "A" AGGREGATE BASE, PLACED IN 8-INCH MAXIMUM LIFTS AND COMPACTED TO 98% MODIFIED PROCTOR DENSITY. COST TO BE INCLUDED IN PRICE BID FOR "AGGREGATE BASE, TYPE A". NO ADDITIONAL PAYMENT SHALL BE MADE.
- (U-10) SERVICE CONNECTIONS SHALL INCLUDE COST OF MATERIAL, LABOR AND EQUIPMENT TO REMOVE AND INSTALL SADDLES, CORPORATION STOPS, BENDS, 3-PART UNIONS, COUPLINGS, SETTERS AND ANY OTHER INCIDENTALS REQUIRED FOR A COMPLETE WATER SERVICE CONNECTION WITH EXCEPTION OF WATER METERS. NO ADDITIONAL PAYMENT SHALL BE MADE. WATER METERS & CANS SHALL BE PROVIDED BY TOWN OF FAIRFAX.

SERVICE LINES SHALL BE OF TYPE AND SIZE PER DRAWINGS.

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DATE 04/06/2023 PROJECT NO. 224047 SHEET NAME

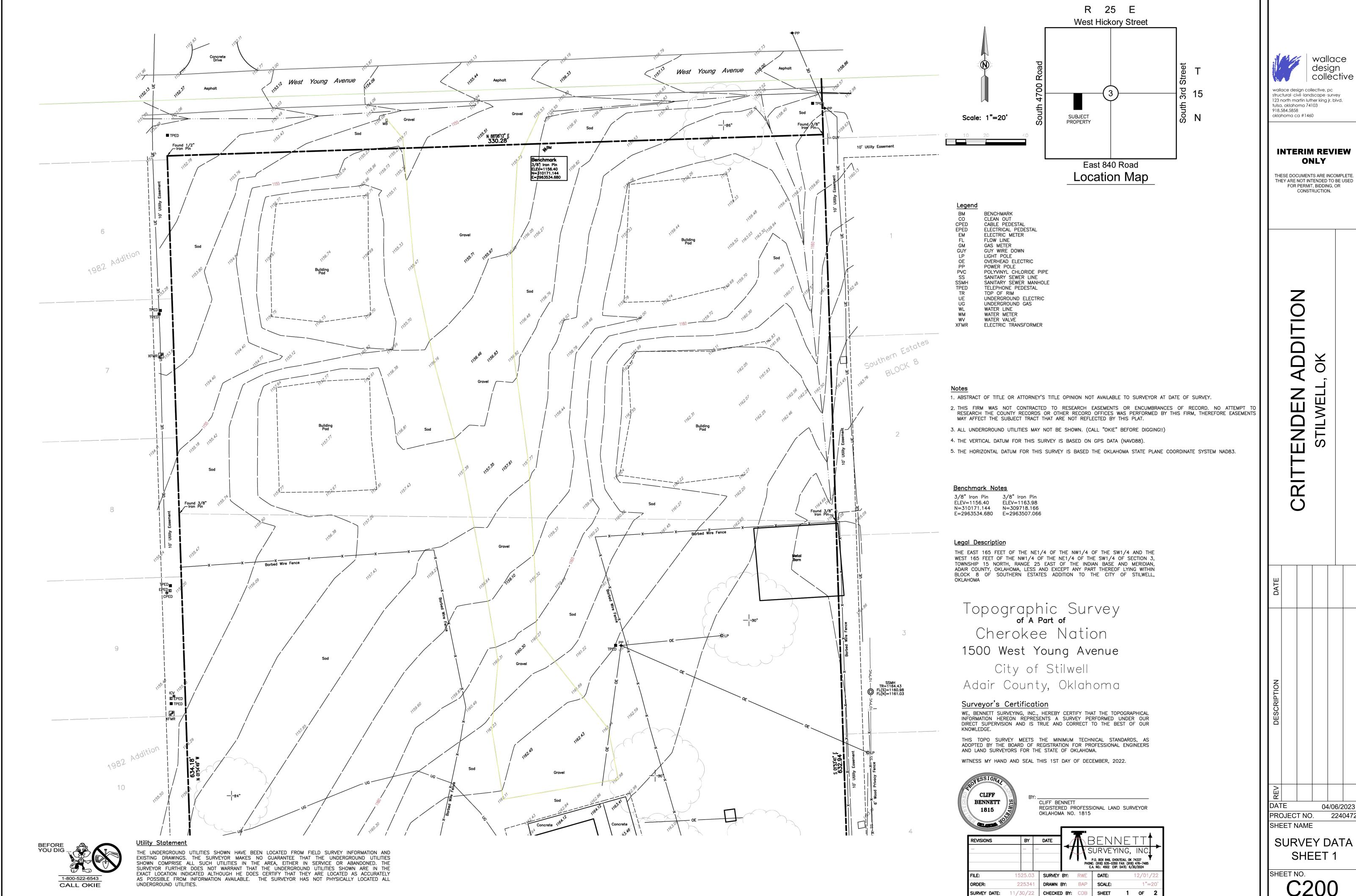
UTILITY NOTES

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Know what's **below.**

CAUTION

NOTICE TO CONTRACTOR



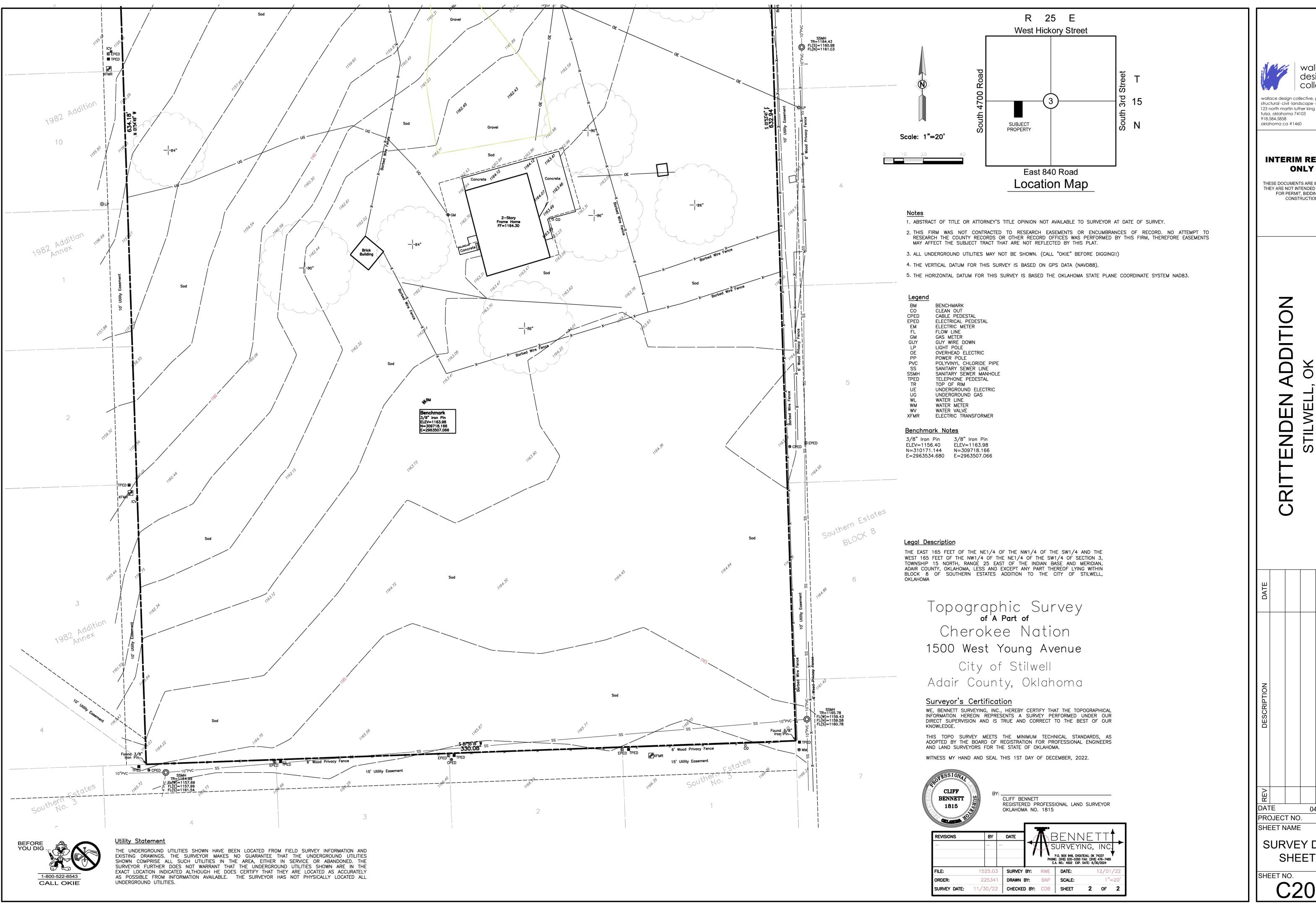
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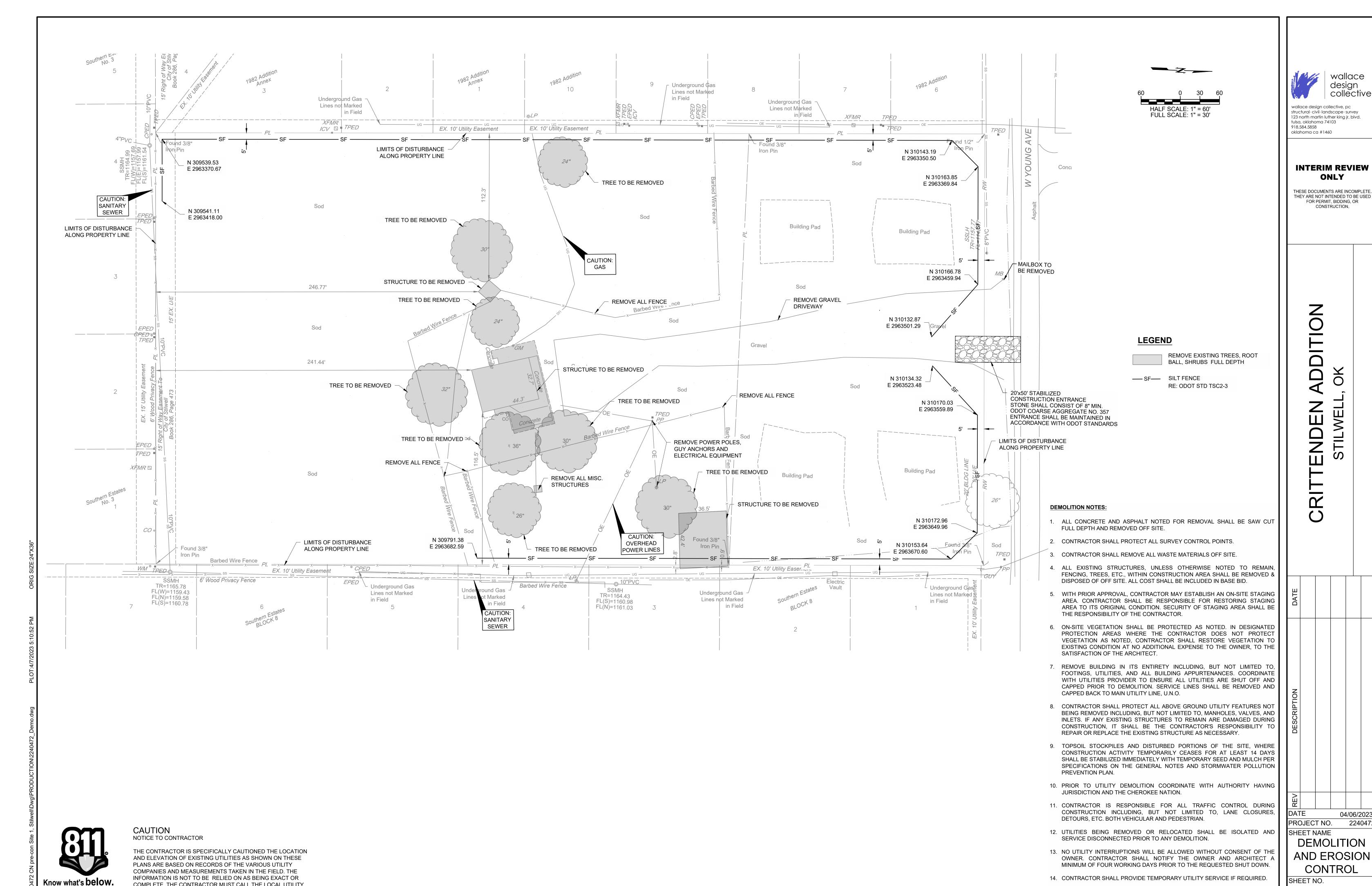
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PROJECT NO. 2240472

SURVEY DATA SHEET 2



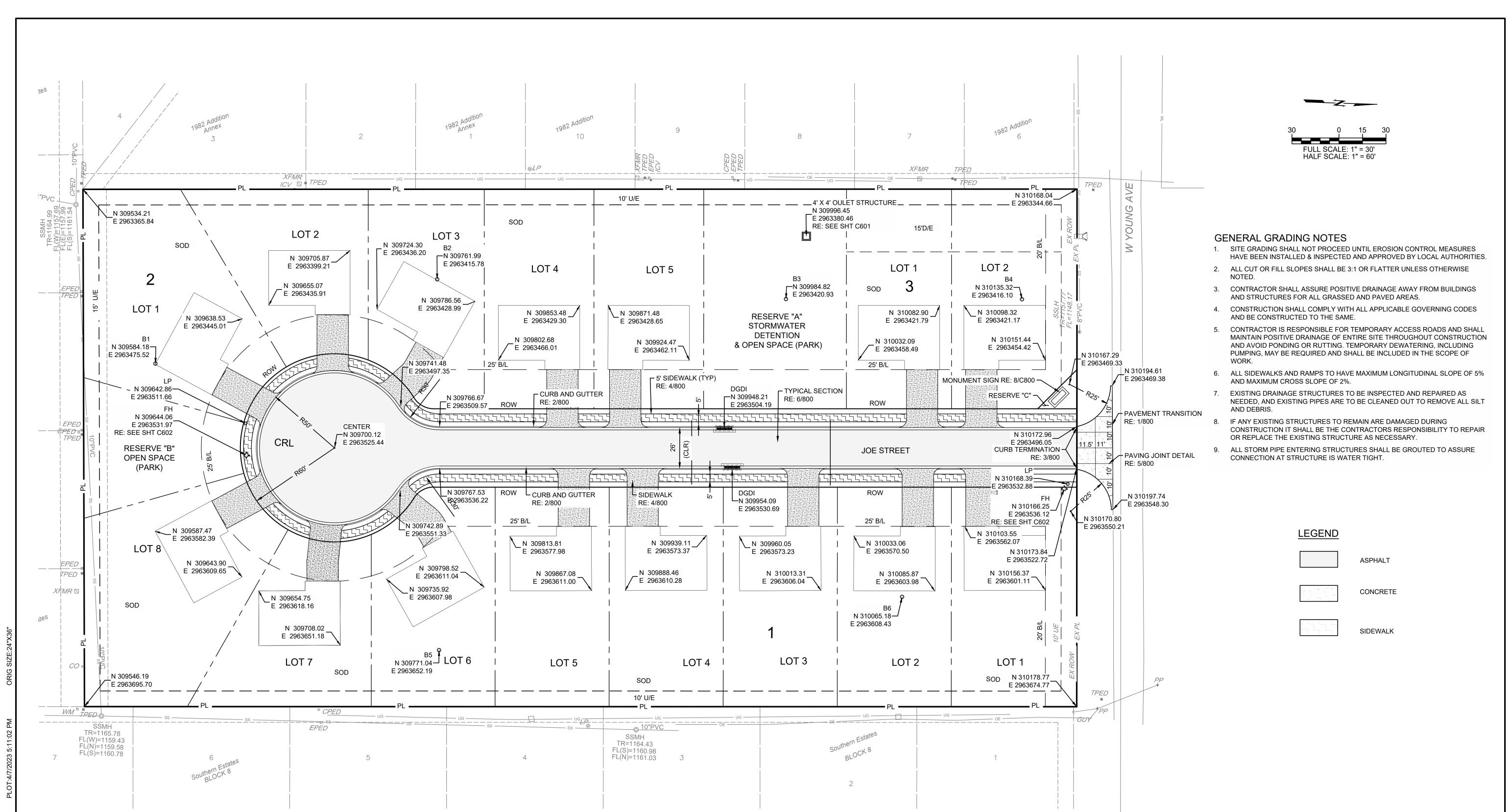
15. CONTRACTOR SHALL ENSURE CONSTRUCTION SITE HAS POSITIVE DRAINAGE

THROUGHOUT THE DURATION OF CONSTRUCTION.

COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY

TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES.

Call before you dig. LOCATION CENTER AT LEAST 72 HOURS BEFORE ANY EXCAVATION





CAUTION NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THE LOCATION AND ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY Call before you dig. LOCATION CENTER AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES.



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04/06/202 224047

PROJECT NO. SHEET NAME

SITE PLAN

STORM WATER MANAGEMENT PLAN

SITE	DESCRIPTION			
PROJECT LIMITS:	EAST 165 FEET OF NE 1/4, NW 1/4, SW 1/4 AND WEST 165			
	FEET OF NW 1/4, NE 1/4, SW 1/4 SEC 3, T-15-N, R-25-E			
F	PRE-CONSTRUCTION SITE DEVELOPMENT FOR 15 1/4			
PROJECT DESCRIPTION:	ACRE SINGLE FAMILY RESIDENTIAL LOTS, INCLUDING			
	ACCESS STREET, UTILITIES AND DRAINAGE PER CITY			
	OF STILWELL STANDARDS.			
SOIL T	YPE:			
TOTAL AREA O CONSTRUCTION	F THE I SITE: 5.5 AC			
ESTIMATED AREA TO BE DISTURBED:				
OFFSITE AREA TO BE DISTUI	RBED: N/A			
(FOR CONTRACTOR				
TOTAL IMPERVIOUS PRE-CONSTRUC	O(A, AC)			
TOTAL IMPERVIOUS	4 0 4 0			
POST-CONSTRUC				
POST-CONSTRUCTION RU COEFFICIENT OF THE	A =			
LATITUDE & LONGI OF CENTER OF PRO	35 / 18 1/1 NI			
PRO	JECT WILL DISCHARGE TO:			
NAME OF RECEIVING WATERS	S: UNNAMED TRIBUTORY TO CANEY CREEK			
SENSITIVE WATERS OR WATERSHEDS	YES NO X			
303 (d) IMPAIRED WATER	S: YES NO X			
IF YES, LIST IMPAIRMENT	Γ:			
LOCATED IN A TMDI	L: YES NO X			
LAKE THUNDERBIRD TMDL:	YES NO X			
MS4 ENT	TITY YES NO X			
IF YES, LOCATIO	DN:			
ILLUSTRATES THE DRAINAG	SED IN CONJUNCTION WITH A DRAINAGE MAP THAT GE PATTERNS/PATHWAYS AND RECEIVING WATERS SHEET SHOULD ALSO BE USED WITH THE EROSION Y ITEMS, & NOTES.			
CAUTION				
NOTICE TO CONTRACTOR				

EROSION AND SEDIMENT CONTROLS

CUL CIVE	ILIZATION PRACTICES:
	ILIZATION PRACTICES.
X	_ TEMPORARY SEEDING
X	_ PERMANENT SODDING, SPRIGGING OR SEEDING
	_ VEGETATIVE MULCHING
	_ SOIL RETENTION BLANKET
	_ PRESERVATION OF EXISTING VEGETATION
ALL DISTURE OR OVER 1	PORARY EROSION CONTROL METHODS MUST BE USED ON BED AREAS WHERE CONSTRUCTION ACTIVITIES HAVE CEASED 4 DAYS. METHODS USED WILL BE AS SHOWN ON PLANS, CTED BY THE ENGINEER.
STRUCTUR	RAL PRACTICES:
X	_ STABILIZED CONSTRUCTION EXIT
X	_ TEMPORARY SILT FENCE
	_ TEMPORARY SILT DIKES
X	_ TEMPORARY FIBER LOG
	_ DIVERSION, INTERCEPTOR OR PERIMETER DIKES
	_ DIVERSION, INTERCEPTOR OR PERIMETER SWALES
	_ ROCK FILTER DAMS
	_ TEMPORARY SLOPE DRAIN
	_ PAVED DITCH W/ DITCH LINER PROTECTION
	_ TEMPORARY DIVERSION CHANNELS
	_ TEMPORARY SEDIMENT BASINS
	_ TEMPORARY SEDIMENT TRAPS
	_ TEMPORARY SEDIMENT FILTERS
X	_ TEMPORARY SEDIMENT REMOVAL
	_ RIP RAP
	_ INLET SEDIMENT FILTER
	_ TEMPORARY BRUSH SEDIMENT BARRIERS
	_ SANDBAG BERMS
	_ TEMPORARY STREAM CROSSINGS
JEFSITE VI	EHICLE TRACKING:
	_ HAUL ROADS DAMPENED FOR DUST CONTROL
X	_ LOADED HAUL TRUCKS TO BE COVERED WITH TARPAULIN
X_	_ EXCESS DIRT ON ROAD REMOVED DAILY
NOTES:	

THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE FOLLOWING:

MAINTENANCE AND INSPECTION:

ALL EROSION AND SEDIMENT CONTROLS WILL BE MAINTAINED IN GOOD WORKING ORDER FROM THE BEGINNING OF CONSTRUCTION UNTIL AN ACCEPTABLE VEGETATIVE COVER IS ESTABLISHED. INSPECTION BY THE CONTRACTOR AND ANY NECESSARY REPAIRS SHALL BE PERFORMED ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCH AS RECORDED BY A NON-FREEZING RAIN GAUGE TO BE LOCATED ON SITE. POTENTIALLY ERODIBLE AREAS, DRAINAGEWAYS, MATERIAL STORAGE, STRUCTURAL DEVICES, CONSTRUCTION ENTRANCES AND EXITS ALONG WITH EROSION AND SEDIMENT CONTROL LOCATIONS ARE EXAMPLES OF SITES THAT NEED TO BE INSPECTED.

WASTE MATERIALS:

PROPER MANAGEMENT AND DISPOSAL OF CONSTRUCTION WASTE MATERIAL IS REQUIRED BY THE CONTRACTOR. MATERIALS INCLUDE STOCKPILES, SURPLUS, DEBRIS AND ALL OTHER BY-PRODUCTS FROM THE CONSTRUCTION PROCESS. PRACTICES INCLUDE DISPOSAL, PROPER MATERIALS HANDLING, SPILL PREVENTION AND CLEANUP MEASURES. CONTROLS AND PRACTICES SHALL MEET THE REQUIREMENTS OF ALL FEDERAL, STATE AND LOCAL AGENCIES.

HAZARDOUS MATERIALS:

PROPER MANAGEMENT AND DISPOSAL OF HAZARDOUS WASTE MATERIALS IS REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING MANUFACTURER'S RECOMMENDATIONS, STATE AND FEDERAL REGULATIONS TO ENSURE CORRECT HANDLING, DISPOSAL, SPILL PREVENTION AND CLEANUP MEASURES. EXAMPLES INCLUDE BUT ARE NOT LIMITED TO: PAINTS, ACIDS, CLEANING SOLVENTS, CHEMICAL ADDITIVES. CONCRETE CURING COMPOUNDS AND CONTAMINATED SOILS.

GENERAL NOTES:

A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED TO COMPLY WITH THE OKLAHOMA POLLUTION DISCHARGE ELIMINATION SYSTEM (OPDES) REGULATIONS. THIS PLAN IS INITIATED DURING THE DESIGN PHASE, CONFIRMED IN THE PRE-WORK MEETINGS AND AVAILABLE ON THE JOB SITE ALONG WITH COPIES OF THE NOTICE OF INTENT (NOI) FORM AND PERMIT CERTIFICATE THAT HAVE BEEN FILED WITH THE OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (ODEQ). THE PLAN MUST BE KEPT CURRENT WITH UP-TO-DATE AMENDMENTS DURING THE PROGRESSION OF THE PROJECT. ALL CONTRACTOR OFF-SITE OPERATIONS ASSOCIATED WITH SITES, ASPHALT/CONCRETE PLANTS, ETC. THE BASIC GOAL OF STORM WATER MANAGEMENT IS TO IMPROVE WATER QUALITY BY REDUCING POLLUTANTS IN STORM WATER DISCHARGES. RUNOFF FROM CONSTRUCTION SITES HAS A POTENTIAL FOR POLLUTION DUE TO EXPOSED SOILS AND THE PRESENCE OF HAZARDOUS MATERIALS USED IN THE CONSTRUCTION PROCESS. THE PREVENTION OF SOIL EROSION, CONTAINMENT OF HAZARDOUS MATERIALS AND/OR THE INTERCEPTION OF THESE POLLUTANTS BEFORE LEAVING THE CONSTRUCTION SITE ARE THE BEST PRACTICES FOR CONTROLLING STORM WATER POLLUTION.

THE FOLLOWING SECTIONS OF THE 2019 ODOT STANDARD SPECIFICATIONS SHOULD BE NOTED:

103.05 BONDING REQUIREMENTS

104.10 FINAL CLEANING UP

104.12 CONTRACTOR'S RESPONSIBILITY FOR WORK

104.13 ENVIRONMENTAL PROTECTION

106.08 STORAGE AND HANDLING OF MATERIAL

107.01 LAWS, RULES AND REGULATIONS TO BE OBSERVED

107.20 STORM WATER MANAGEMENT

220 MANAGEMENT OF EROSION, SEDIMENTATION, AND STORM WATER POLLUTION PREVENTION

221 TEMPORARY SEDIMENT CONTROL

IN ADDITION:

"ODEQ GENERAL PERMIT (OKR10) FOR STORM

WATER DISCHARGES FROM CONSTRUCTION

ACTIVITIES WITHIN THE STATE OF OKLAHOMA.

"ODEQ, WATER QUALITY DIVISION,

SEPTEMBER 13, 2022.



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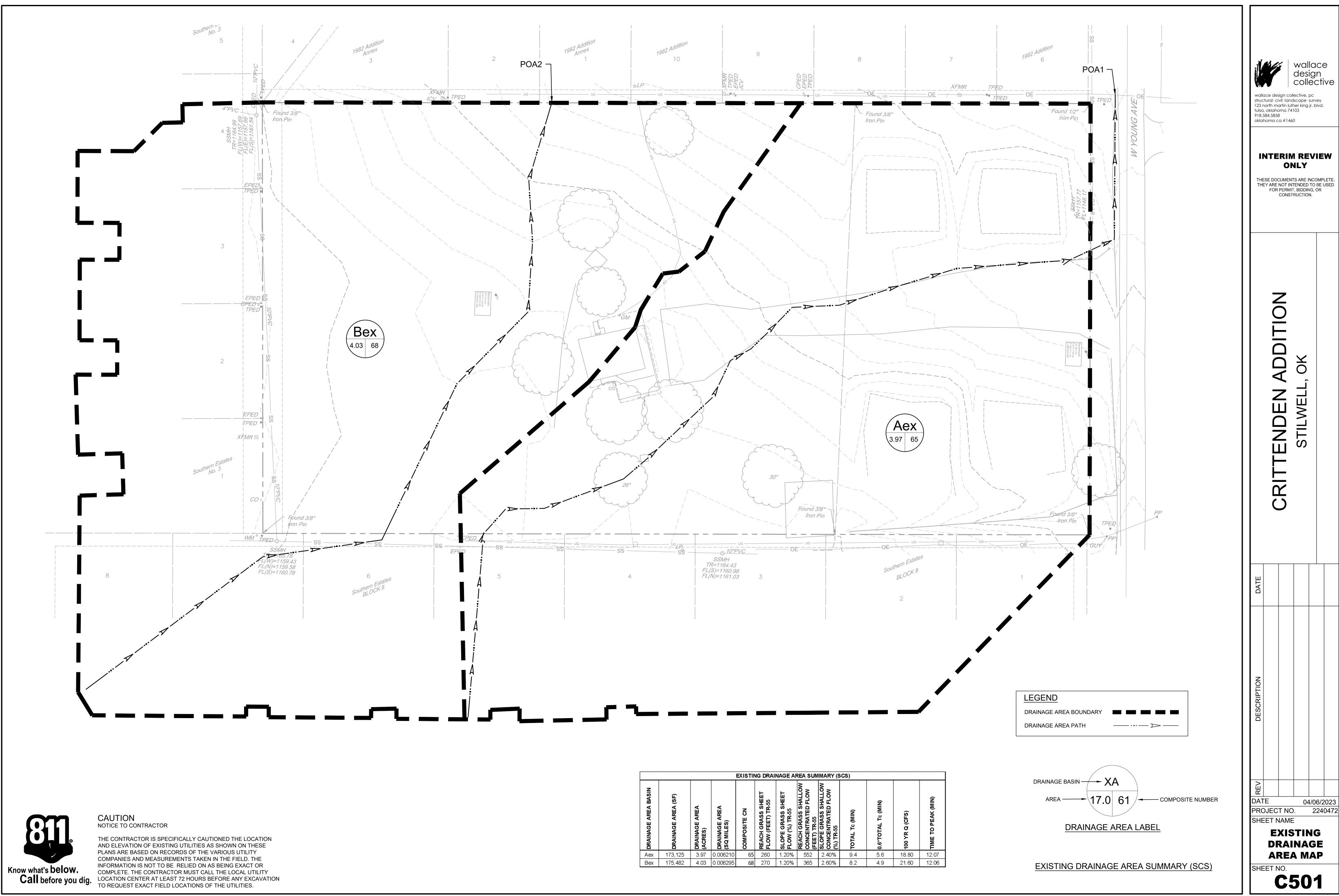
STORWATER

MANAGEMENT

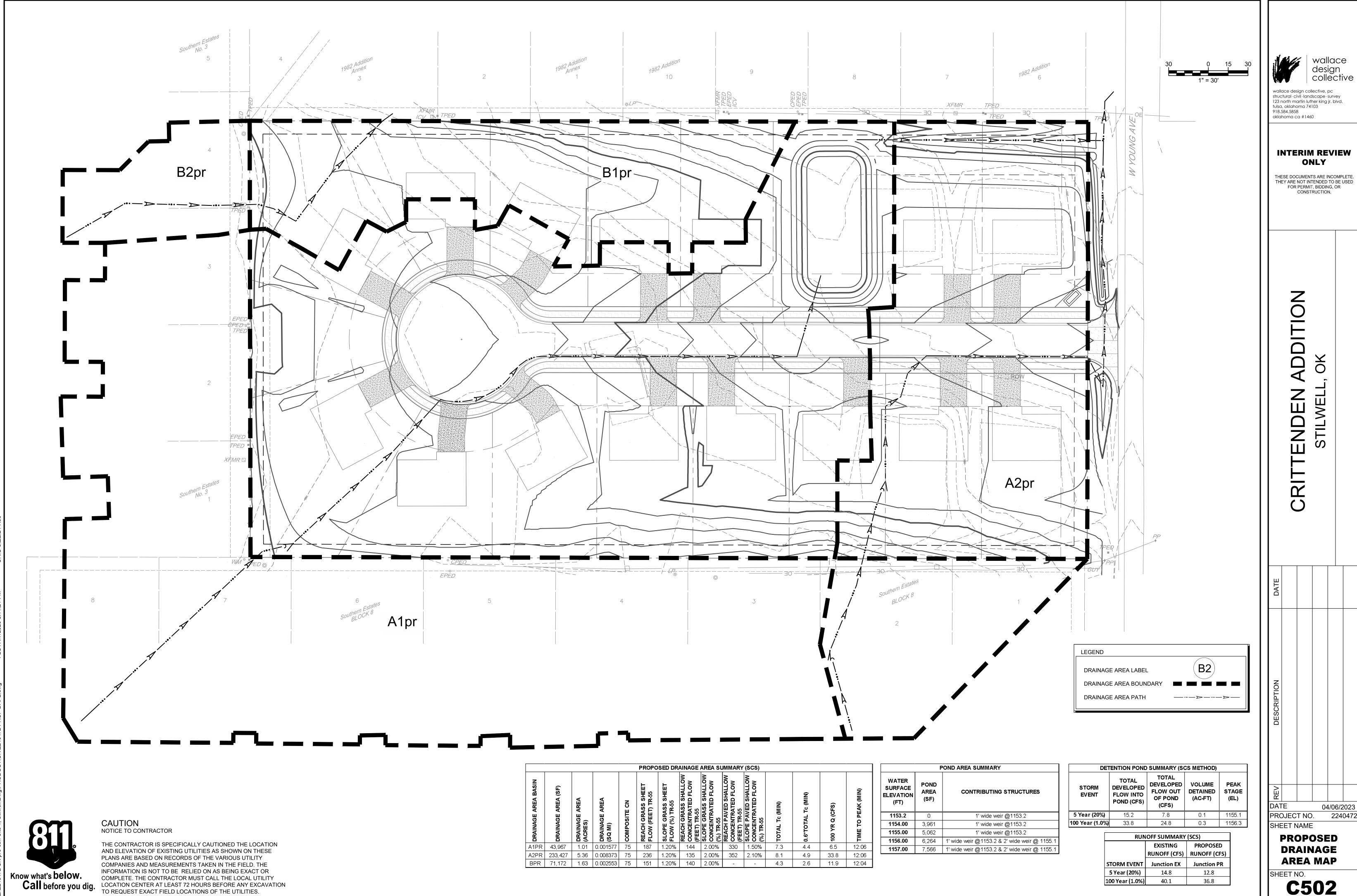
PLAN

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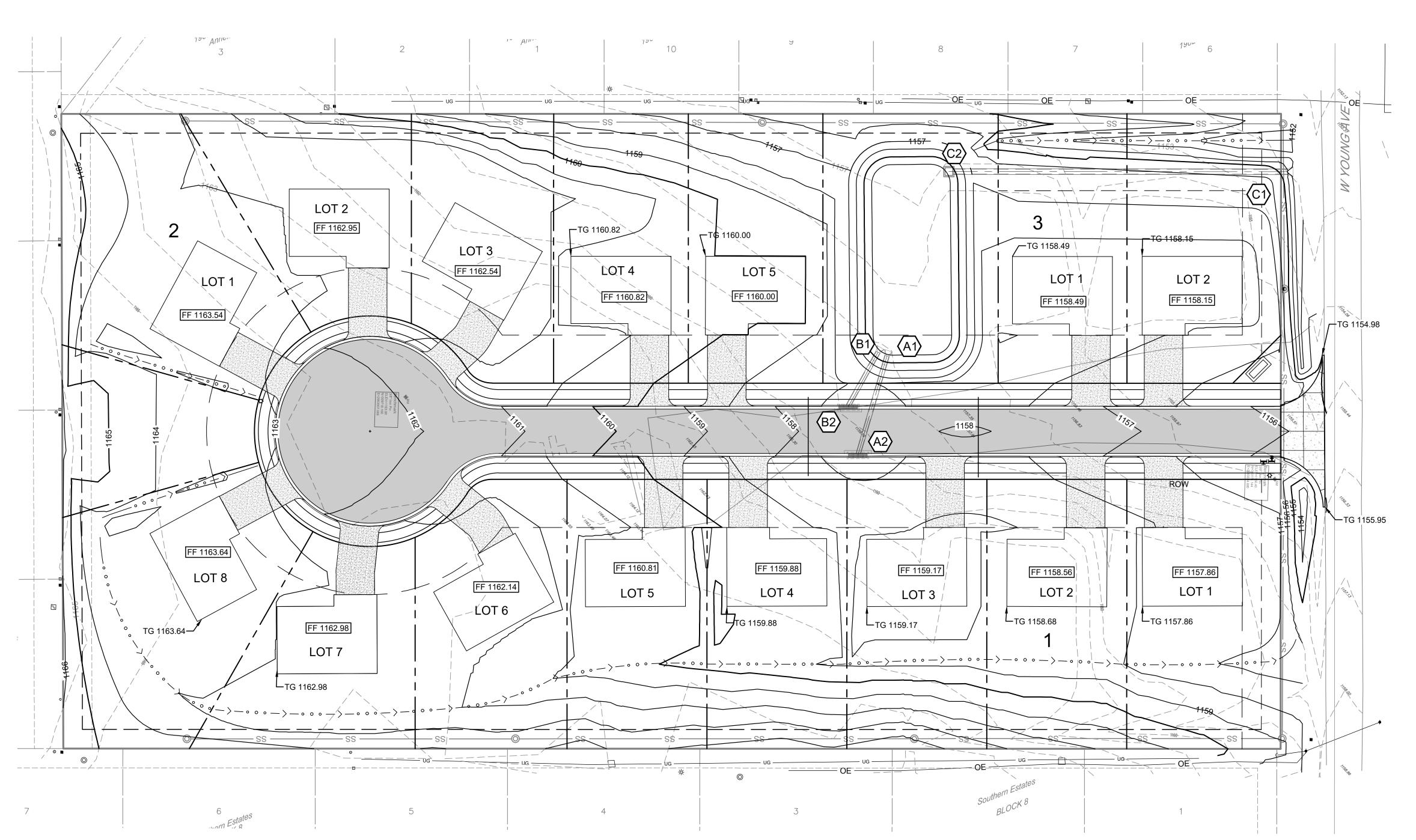


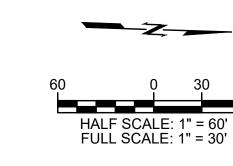
DRAINAGE AREA MAP



C502 PROPOSED DRAINAGE AREA MAP, 4/7/2023 5:11:20 PM, ARCH full bleed D (24.00 x 36.00 Inches), 1:1, robs machine

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GENERAL GRADING NOTES

- 1. SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED & INSPECTED AND APPROVED BY LOCAL AUTHORITIES.
- 2. ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE
- 3. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND STRUCTURES FOR ALL GRASSED AND PAVED AREAS.
- 4. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO THE SAME.
- CONTRACTOR IS RESPONSIBLE FOR TEMPORARY ACCESS ROADS AND SHALL MAINTAIN POSITIVE DRAINAGE OF ENTIRE SITE THROUGHOUT CONSTRUCTION AND AVOID PONDING OR RUTTING. TEMPORARY DEWATERING, INCLUDING PUMPING, MAY BE REQUIRED AND SHALL BE INCLUDED IN THE SCOPE OF
- 6. ALL SIDEWALKS AND RAMPS TO HAVE MAXIMUM LONGITUDINAL SLOPE OF 5% AND MAXIMUM CROSS SLOPE OF 2%.
- 7. EXISTING DRAINAGE STRUCTURES TO BE INSPECTED AND REPAIRED AS NEEDED, AND EXISTING PIPES ARE TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
- 8. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR OR REPLACE THE EXISTING STRUCTURE AS NECESSARY.
- 9. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATER TIGHT.



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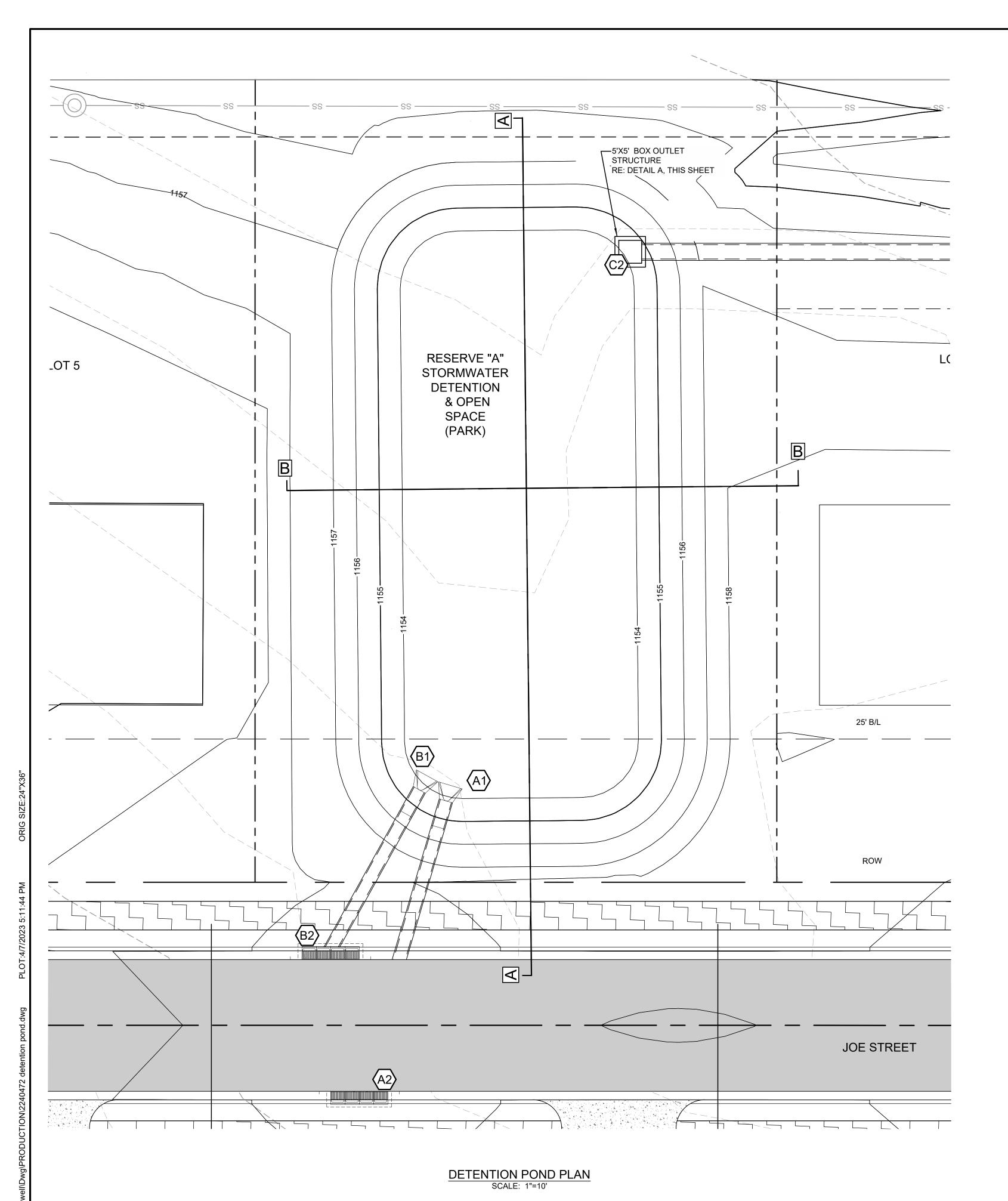
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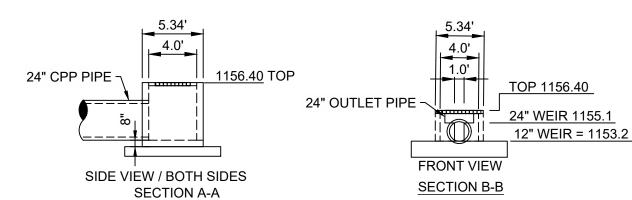
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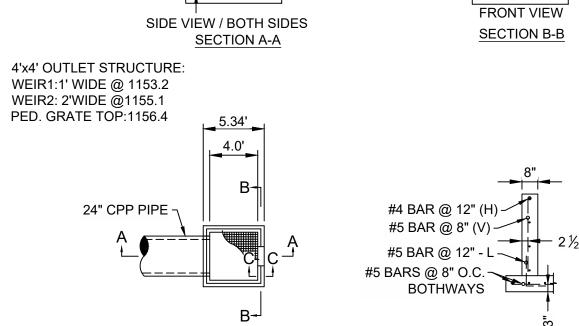
GRADING PLAN SHEET NO.

Know what's **below**.

CAUTION NOTICE TO CONTRACTOR



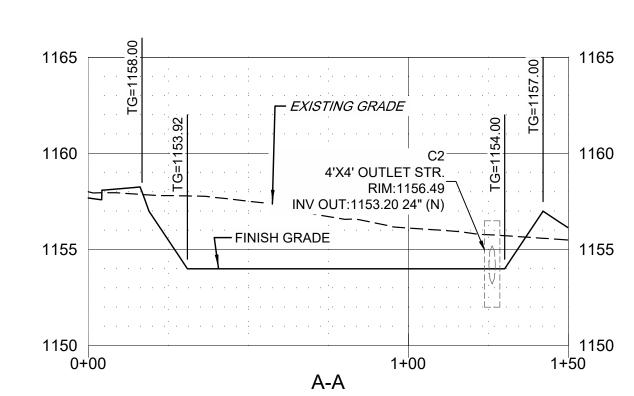




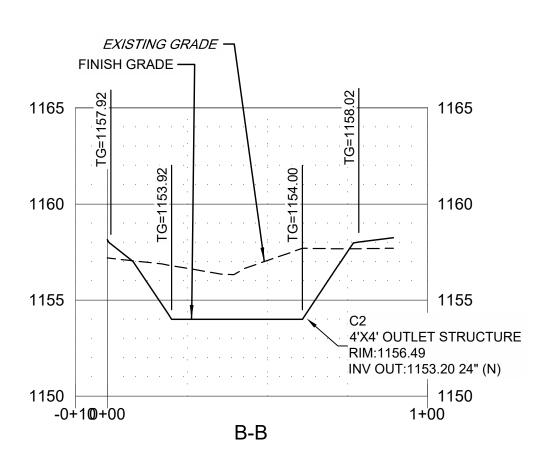
PLAN VIEW

DETENTION POND OUTLET STRUCTURE DETAIL NO SCALE

TYPICAL WALL - SECTION C-C



POND "A-A" PROFILE SCALE: 1"=30' HORIZ. 1"=5' VERT.



POND "B-B" PROFILE SCALE: 1"=30' HORIZ. 1"=5' VERT.



GENERAL GRADING NOTES

- 1. SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED & INSPECTED AND APPROVED BY LOCAL AUTHORITIES.
- 2. ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE
- 3. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND STRUCTURES FOR ALL GRASSED AND PAVED AREAS.
- 4. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO THE SAME.
- 5. CONTRACTOR IS RESPONSIBLE FOR TEMPORARY ACCESS ROADS AND SHALL MAINTAIN POSITIVE DRAINAGE OF ENTIRE SITE THROUGHOUT CONSTRUCTION AND AVOID PONDING OR RUTTING. TEMPORARY DEWATERING, INCLUDING PUMPING, MAY BE REQUIRED AND SHALL BE INCLUDED IN THE SCOPE OF
- 6. ALL SIDEWALKS AND RAMPS TO HAVE MAXIMUM LONGITUDINAL SLOPE OF 5% AND MAXIMUM CROSS SLOPE OF 2%.
- 7. EXISTING DRAINAGE STRUCTURES TO BE INSPECTED AND REPAIRED AS NEEDED, AND EXISTING PIPES ARE TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
- 8. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR OR REPLACE THE EXISTING STRUCTURE AS NECESSARY.
- 9. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATER TIGHT.



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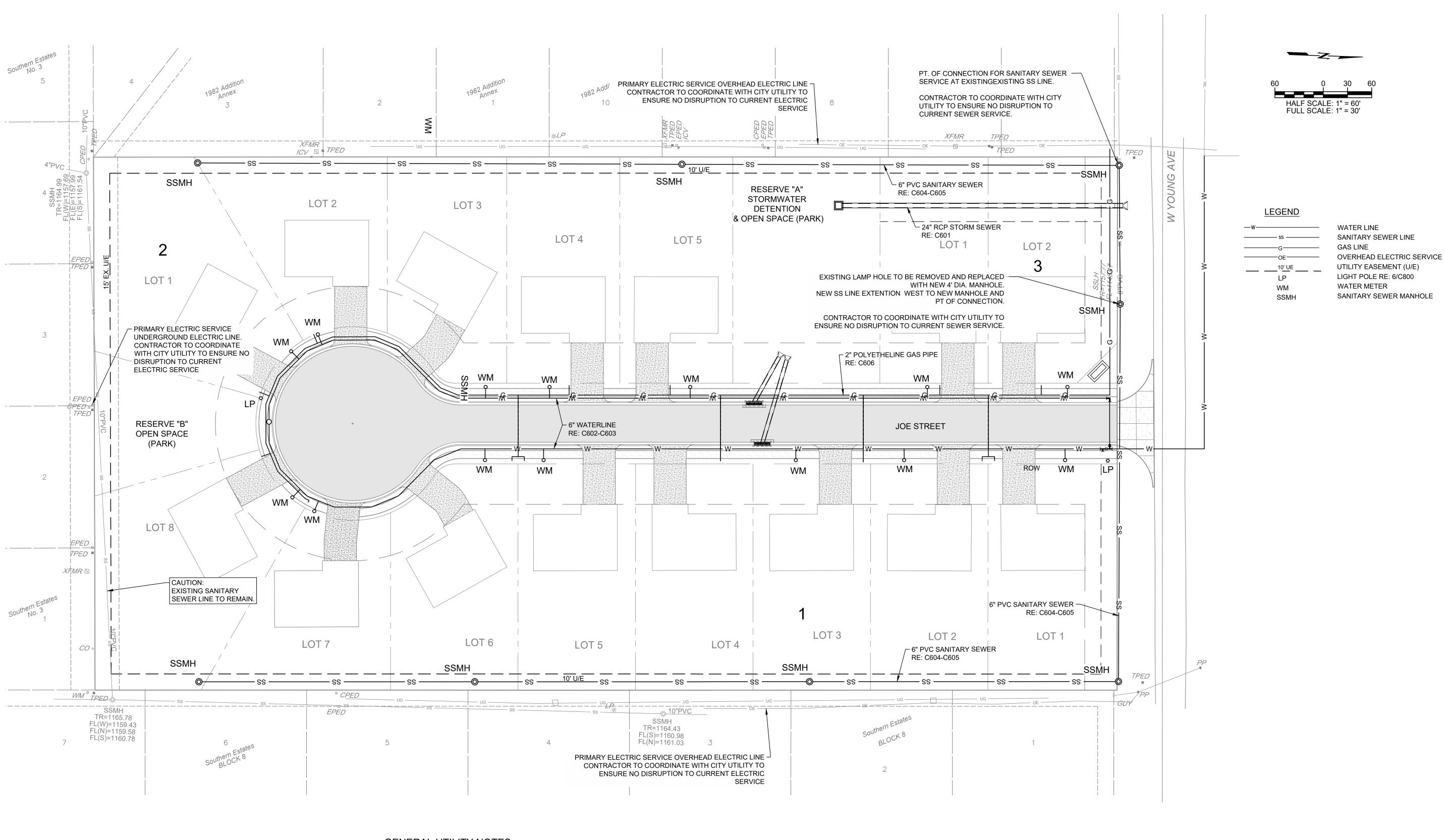
DATE 04/06/2023 PROJECT NO. 224047 SHEET NAME

DETENTION POND

SHEET NO.

Know what's below.

CAUTION NOTICE TO CONTRACTOR



GENERAL UTILITY NOTES

- 1. ALL TRENCHING, PIPE LAYING AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA
- 2. PRIOR TO CONSTRUCTION, LOCATION OF SITE UTILITIES SHALL BE VERIFIED BY CONTRACTOR WITH THE PROPER UTILITY COMPANY PROVIDING SERVICE.
- 3. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES' INSPECTORS BEFORE CONNECTING TO ANY EXISTING LINE IN ACCORDANCE WITH LOCAL REQUIREMENTS.
- 4. CONTRACTOR IS TO COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
- 5. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE SPECIFICATIONS OF THE LOCAL AUTHORITIES REGARDING TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
- 6. TERMINATE SERVICE PIPING 5' FROM BUILDING WALL UNTIL BUILDING PIPING SYSTEMS ARE INSTALLED. TERMINATE PIPING WITH VALVE AND CAP PLUG OR FLANGE AS REQUIRED FOR PIPING MATERIAL.
- 7. ALL PIPING SHALL BE INSTALLED WITH A MINIMUM OF 30" OF COVER, UNLESS NOTED OTHERWISE.

MAKE CONNECTIONS TO BUILDING PIPING SYSTEMS WHEN THOSE SYSTEMS ARE INSTALLED.

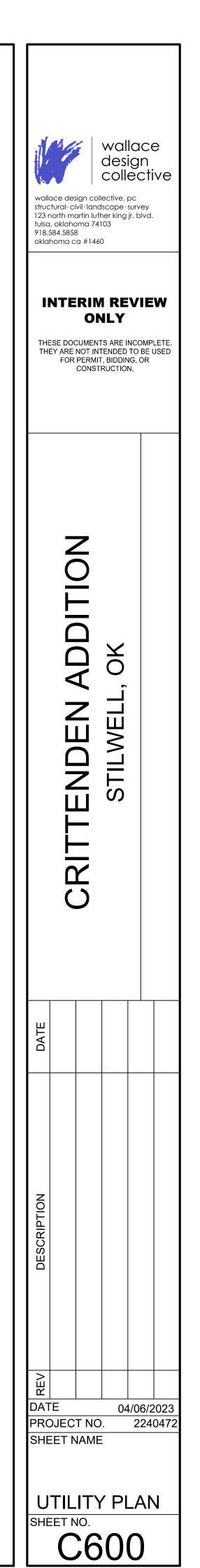
8. UTILITY TRENCH DETAIL REFER TO MEP FOR CONTINUATION OF UTILITIES AT BUILDING.

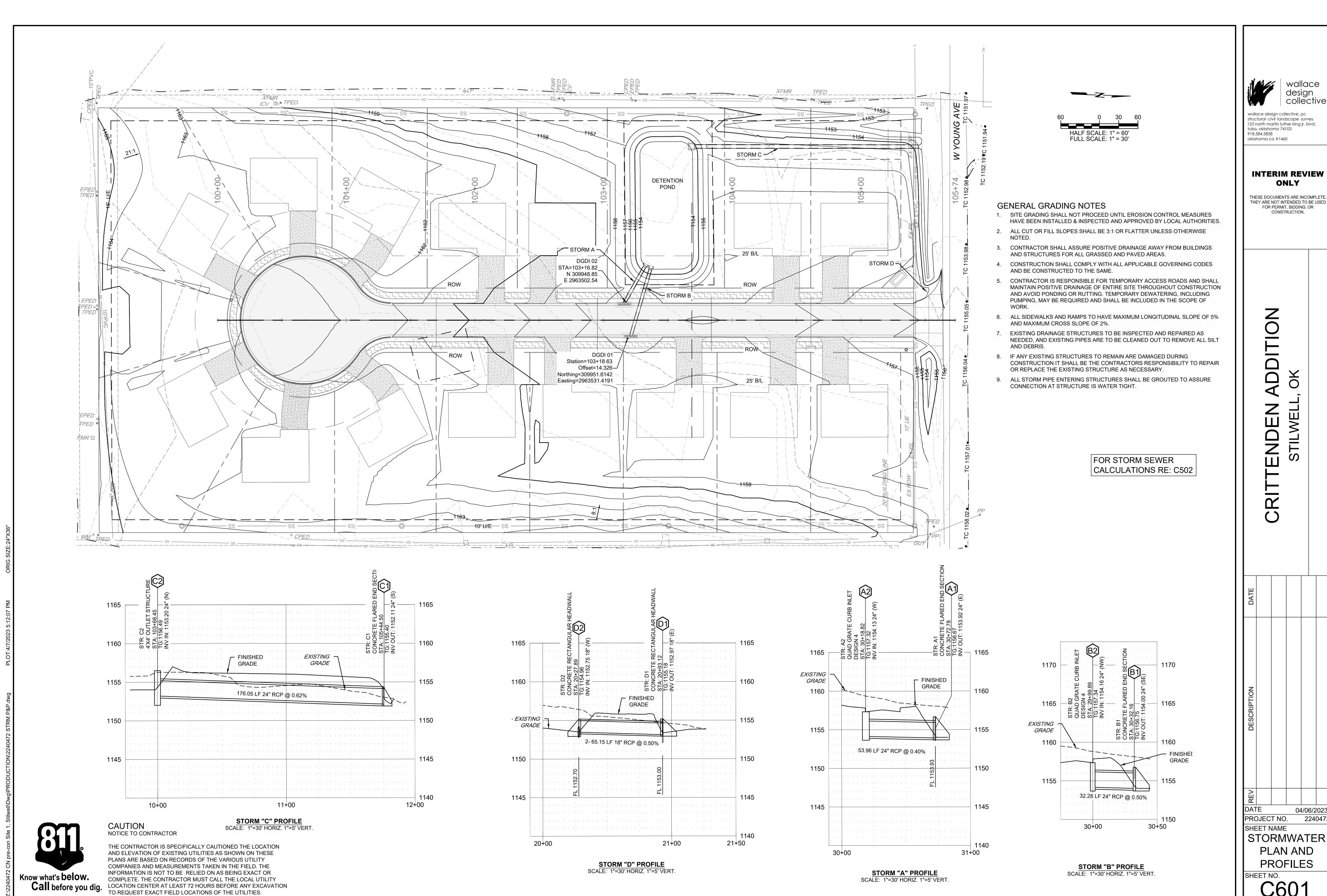
- 9. CONSTRUCT CLAY TRENCH PLUG THAT EXTENDS AT LEAST 5 FEET OUT FROM THE FACE OF THE BUILDING EXTERIOR. THE PLUG MATERIAL SHALL CONSIST OF CLAY COMPACTED AT A WATER CONTENT AT OR ABOVE THE SOILS OPTIMUM WATER CONTENT. THE CLAY FILL SHALL BE PLACED TO COMPLETELY SURROUND THE UTILITY LINE AND BE COMPACTED TO AT LEAST 95% STANDARD
- 10. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR OR REPLACE THE EXISTING STRUCTURE AS NECESSARY.
- 11. RESTRAINED JOINTS SHALL BE PROVIDED ON 4" AND LARGER WATER LINES AT ALL BENDS TEES AND FIRE HYDRANTS FOR A MINIMUM 2 JOINTS BOTH SIDES OF FITTING PER AWWA MINIMUM STANDARDS.
- 12. CONTRACTOR SHALL UTILIZE AWWA AND FACTORY MUTUAL TEST AND CERTIFICATIONS FOR ALL UNDERGROUND FIRE PROTECTION LINES AS A MINIMUM. LOCAL OR STATE AUTHORITIES MAY REQUIRE MORE STRINGENT TESTING WHICH SHALL BE PROVIDED BY THE GC IF REQUIRED.
- 13. ALL DIMENSION TO THE BACK OF CURB UNLESS NOTED OTHERWISE.



Call before you dig.

CAUTION NOTICE TO CONTRACTOR



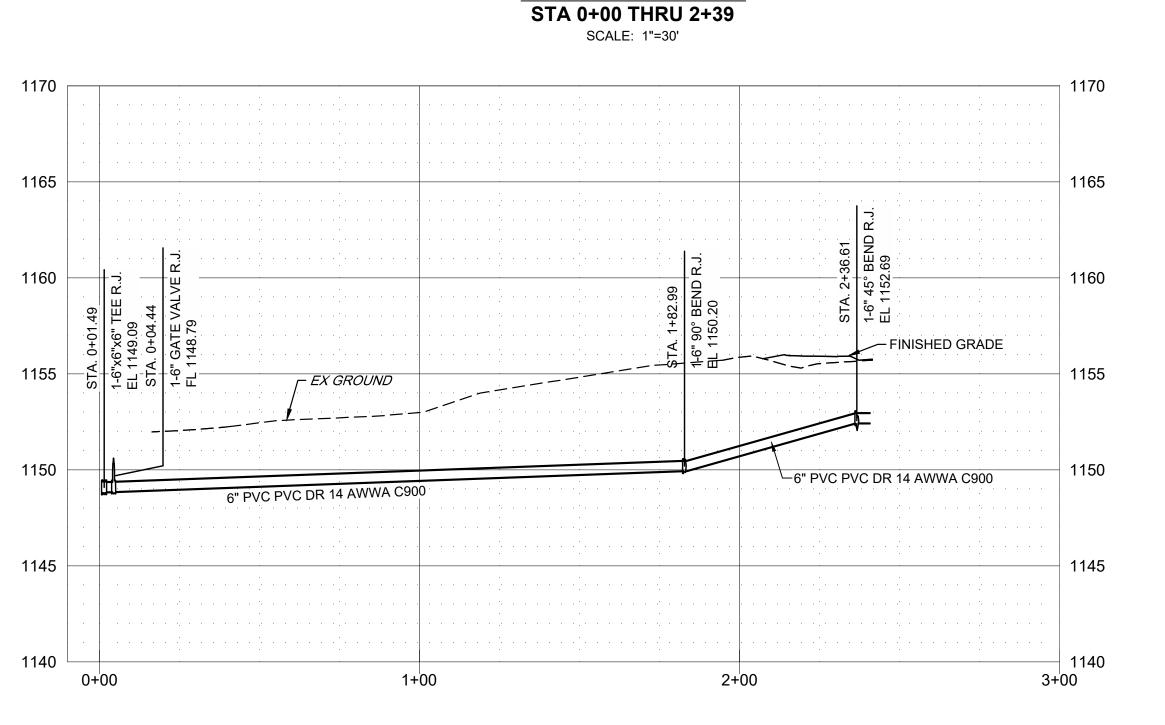


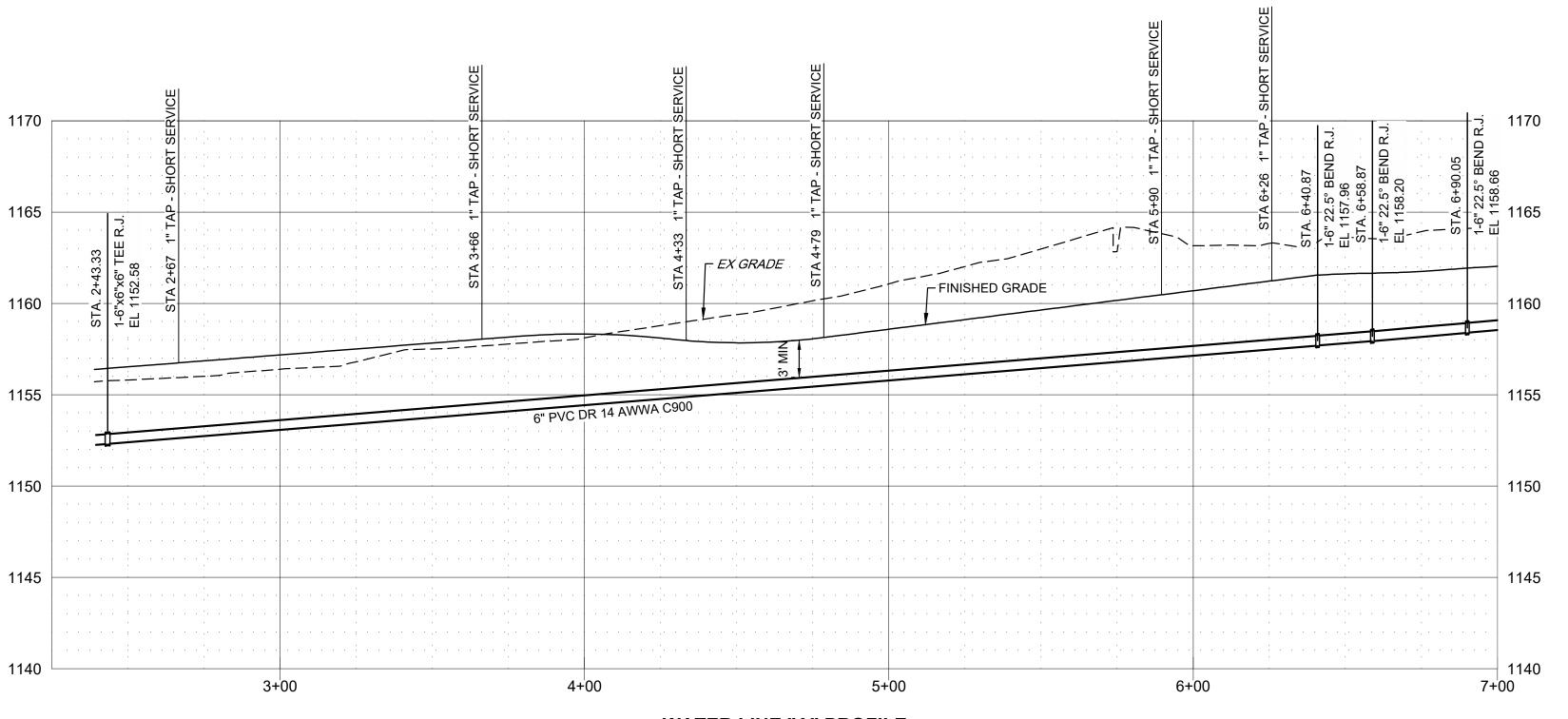


CONNECT TO EXIST WATERLINE. FIELD VERIFY LOCATION. _STA. 0+01.49 √1-6"x6"x6" TEE R.J. N 310221.76 STA. 1+82.99 E 2963342.16 1-6" 90° BEND R.J. STA. 0+04.44 N 310227.79 6" GATE VALVE R.J. E 2963523.56 STA. 2+36.61 1-6" 45° BEND R.J. N 310174.20 E 2963525.37 2+00 STA. STA. 13+96.34_ STA 2+39 = 1-6" 90° B6" GATE VALVE R.J. STA 13+98 N 310168.25 - 1- 6"X6"X6" TEE, RJ E 2963494.21 N:310169.2650 E:2963525.5315 13+98 *20′ BUILDI*/\1-6"x6"x6" TEE R.J. STA. 13+57.32 -1-6" GATE VALVE, R.J.--1" T**ДР** - SHORT SERVICE-1-VALVE BOX N 310158.68 STA. 2+66.64 1 FH ASSEMBLY E 2963494.53 1" TAP - SHORT SERVICE 4LF OF 6" DIP, R.J. _N 310141.64 N 310164.94 |--E 2963526.45 E 2963525.68 2 3+00 -13+00-**WATER LINE "A" PLAN**

— SS - ∃/∩ .0↓ - - - SS | STA. 6+90.05 1-6" 22.5° BEND R.J. LOT 2 S TOJ I 1/ TOJ LOT LOT 3 N 309730.02 E 2963569.20 STA. 2+43.32 STA. 6+58.87 1-6"x6"x6" TEE R.J. 1-6" 22.5° BEND R.J. 1-6" GATE VALVE, R.J. STA. 4+33.41 N 309751.25 1-VALVE BOX STA. 5+89.63 1" TAP - SHORT SERVICE E 2963546.37 1 FH ASSEMBLY 1" TAP - SHORT SERVICE N 309974.96 4LF OF 6" DIP, R.J. N 309818.83 E 2963531.99 9 TO_ N 310164.94 E 2963537.18 E 2963525.68 \mathcal{C} STA. 3+66.33 STA. 6+25.87 STA. 2+66.64 1" TAP - SHORT SERVICE 1" TAP - SHORT SERVICE 1" TAP - SHORT SERVICE N 310042.01 N 309782.61 N 310141.64 E 2963529.76 E 2963538.42 E 2963526.45 STA. 6+40.87 | 6" 22.5° BEND R.J._ N 309767.62 E 2963538.88 **WATER LINE "A" PLAN** STA 2+39 THRU 7+00

SCALE: 1"=30'





Know what's below.

NOTICE TO CONTRACTOR

WATER LINE "A" PROFILE STA 0+00 THRU 2+39 SCALE: 1"=30' HORIZ. 1"=5' VERT.

TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES.

WATER LINE "A" PROFILE STA 2+39 THRU 7+00 SCALE: 1"=30' HORIZ. 1"=5' VERT.

RESTRAIN ALL JOINTS 10' EACH SIDE OF EVERY FITTING AND VALVE.

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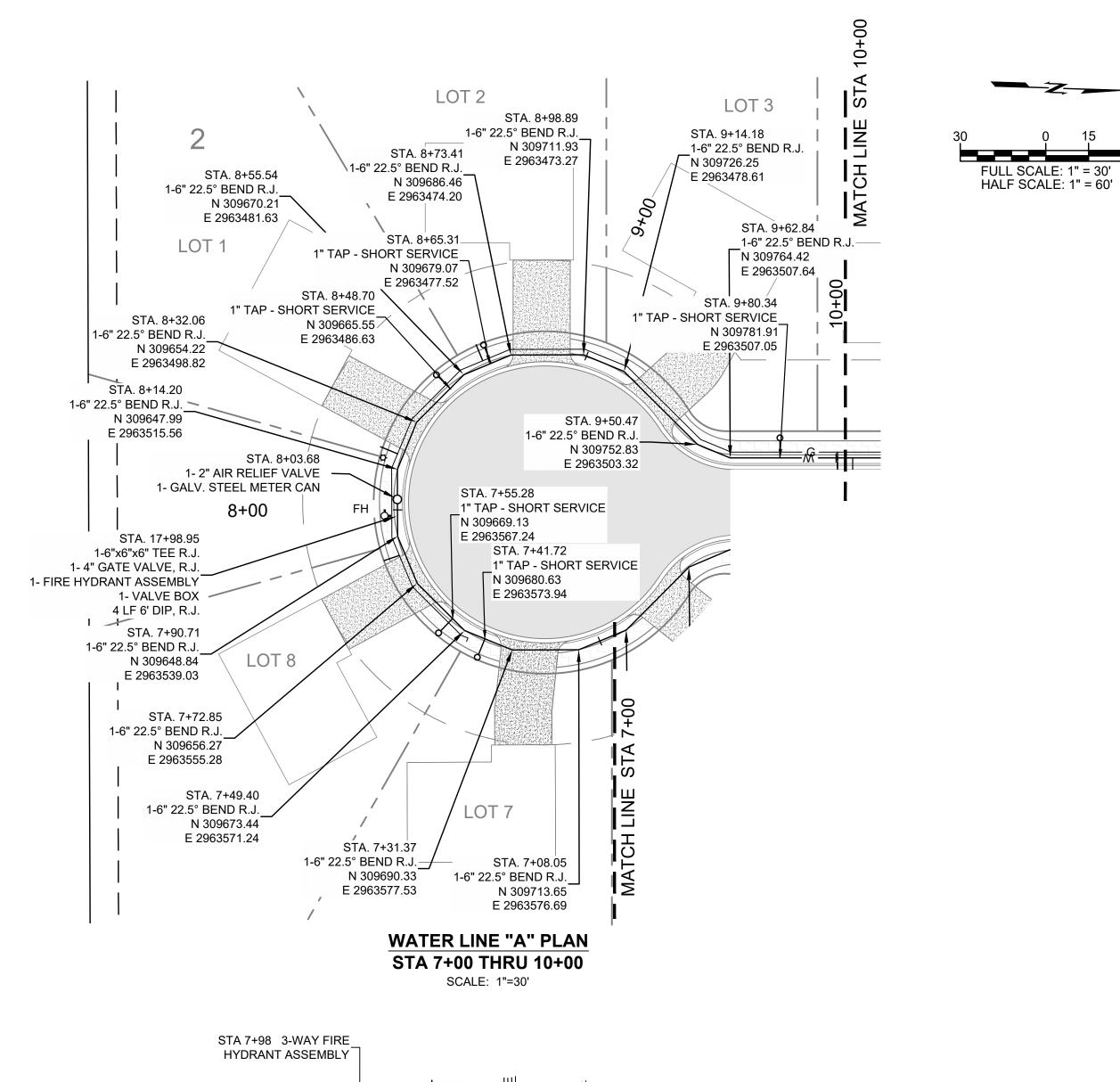
CONSTRUCTION.

FNDEN

PROJECT NO. 224047

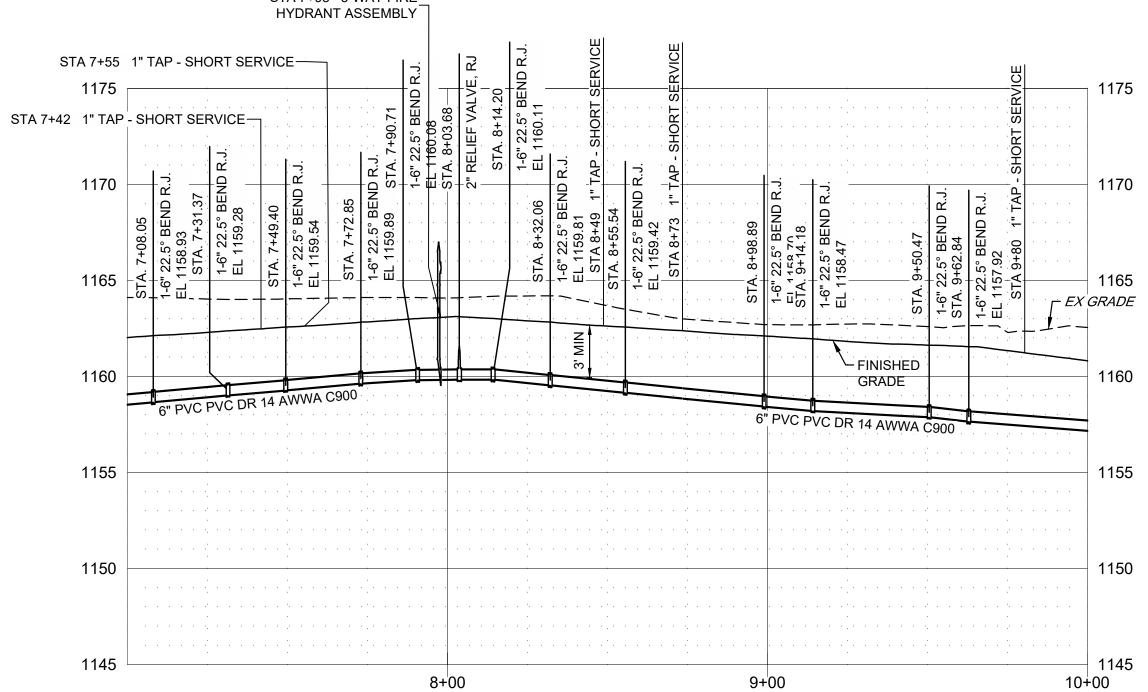
SHEET NAME WATERLINE PLAN AND

PROFILE



FULL SCALE: 1" = 30' HALF SCALE: 1" = 60' LOT 1 LOT 4 LOT 5 STA 11+31 _ 1- 6" 45° VERTICAL BEND, RJ STA. 11+07.08 STA. 13+57.32 N:309932.69, E:2963502.05 1" TAP - SHORT SERVICE 1" TAP - SHORT SERVICE STA 11+40 N 309908.58 STA 11+84 N 310158.68 __ 1- 6" 45° VERTICAL BEND, RJ E 2963502.84 - 1- 6" 45° VERTICAL BEND, RJ E 2963494.53 N:309941.86, E:2963501.74 N:309985.67, E:2963500.28 STA 12+00 - 1- 6" 45° VERTICAL BEND, RJ N:310001.15, E:2963499.76 _STA. 12+53.93 _1" TAP - SHORT SERVICE STA. 10+19.93 N 310055.35 1" TAP - SHORT SERVICE E 2963497.96 STA. 13+66.89 N 309821.47 _1-6" 90° BEND R. E 2963505.74 N 310168.25 E 2963494.21 STA. 13+96.34 □6" GATE VALVE 13+98-└─ STA 2+39 = STA 13+98 **WATER LINE "A" PLAN** 1- 6"X6"X6" TEE, RJ N 310169.2650 STA 10+00 THRU 13+98

SCALE: 1"=30'



1165 ┌ EX GRADE - FINISHED GRADE 1150 24" RCP STORM STA: 11+48.21⁻ 24" RCP STORM INV: 1154.15 LSTA: 11+59.90 INV: 1154.02 1145 12+00 14+00 11+00

> WATER LINE "A" PROFILE STA 10+00 THRU 13+98

SCALE: 1"=30' HORIZ. 1"=5' VERT.

RESTRAIN ALL JOINTS 10' EACH SIDE OF

EVERY FITTING AND VALVE.

WATER LINE "A" PROFILE STA 7+00 THRU 10+00 SCALE: 1"=30' HORIZ. 1"=5' VERT.

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THE LOCATION AND ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR LOCATION CENTER AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES.

CAUTION

NOTICE TO CONTRACTOR

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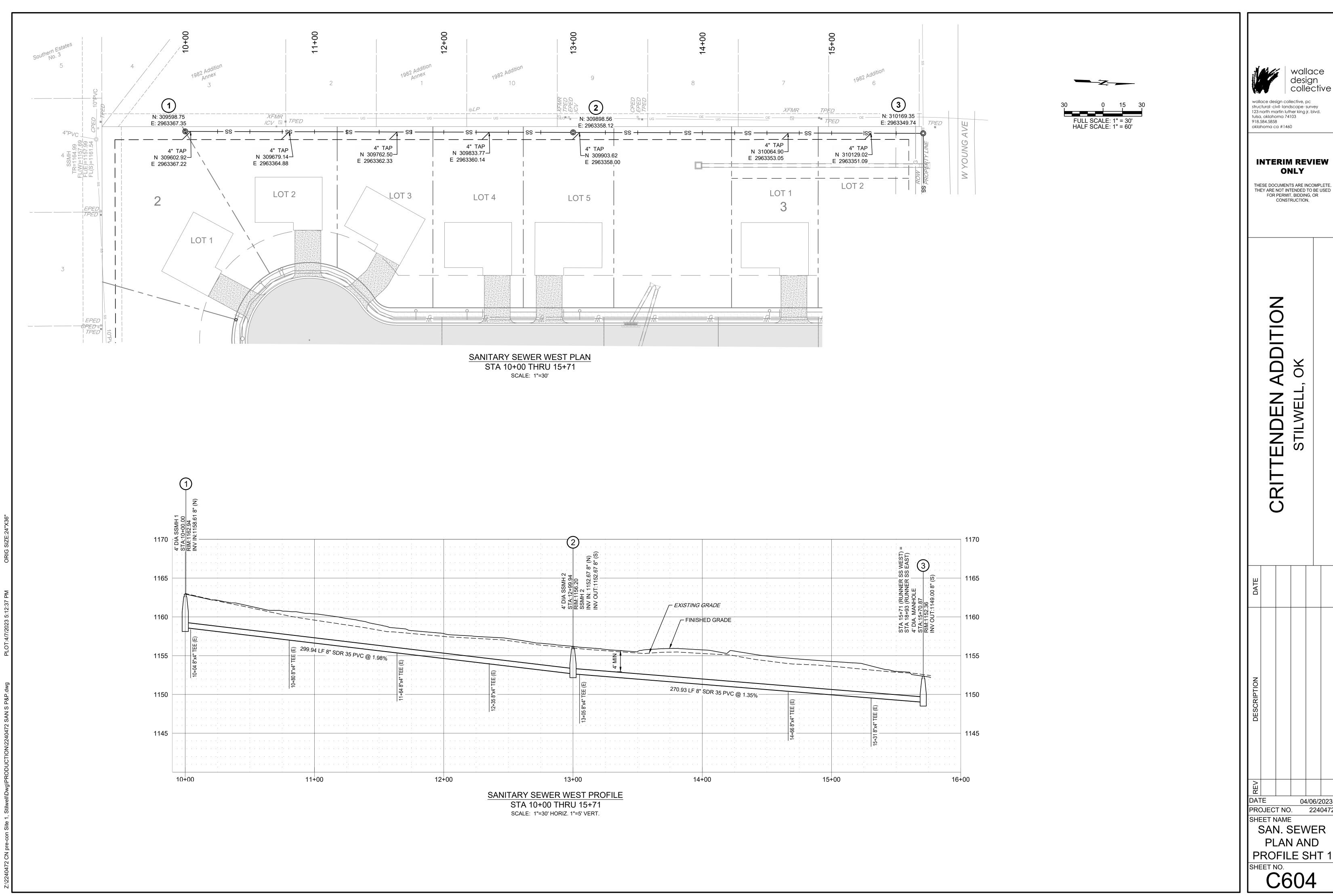
SHEET NAME WATERLINE PLAN AND

PROJECT NO.

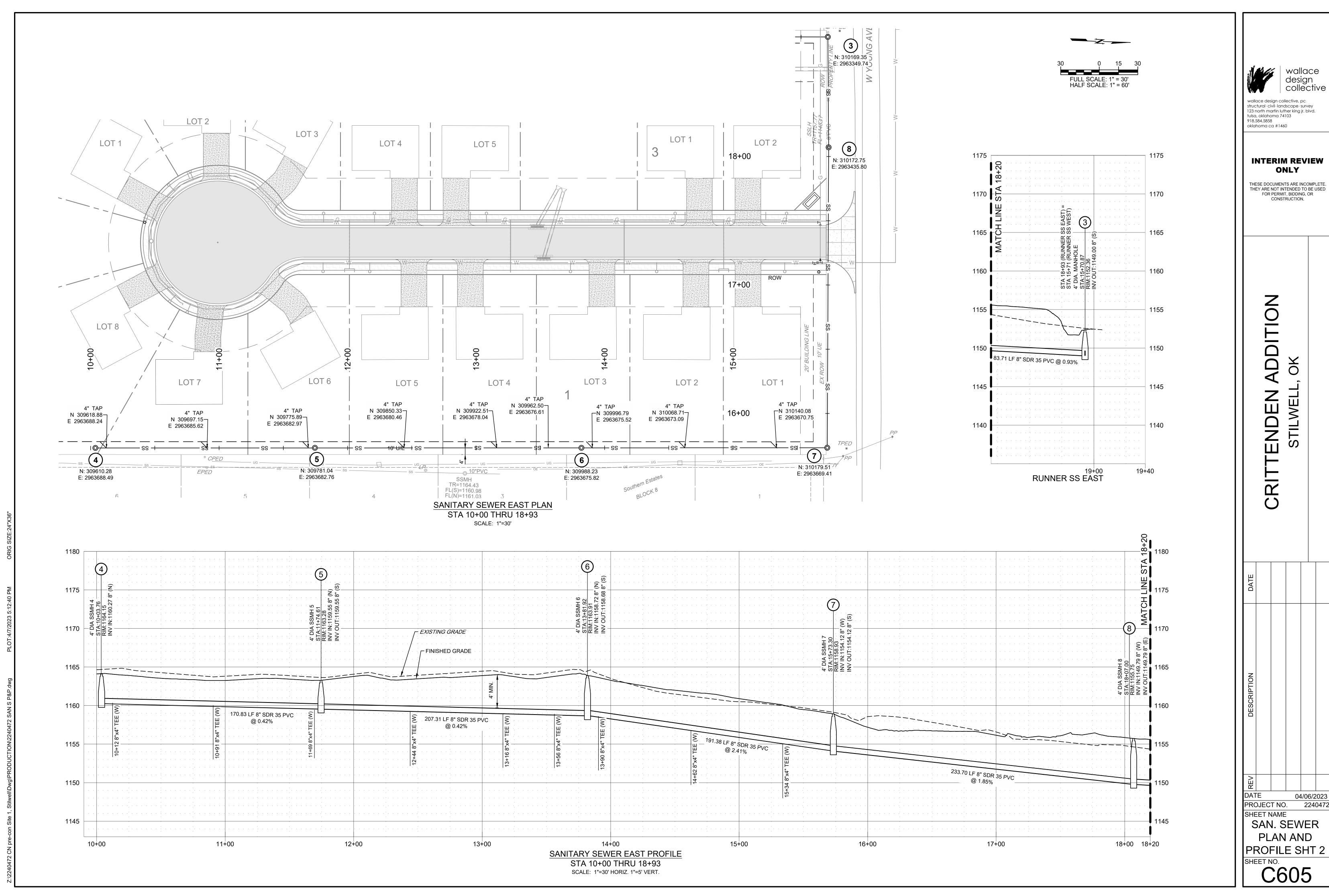
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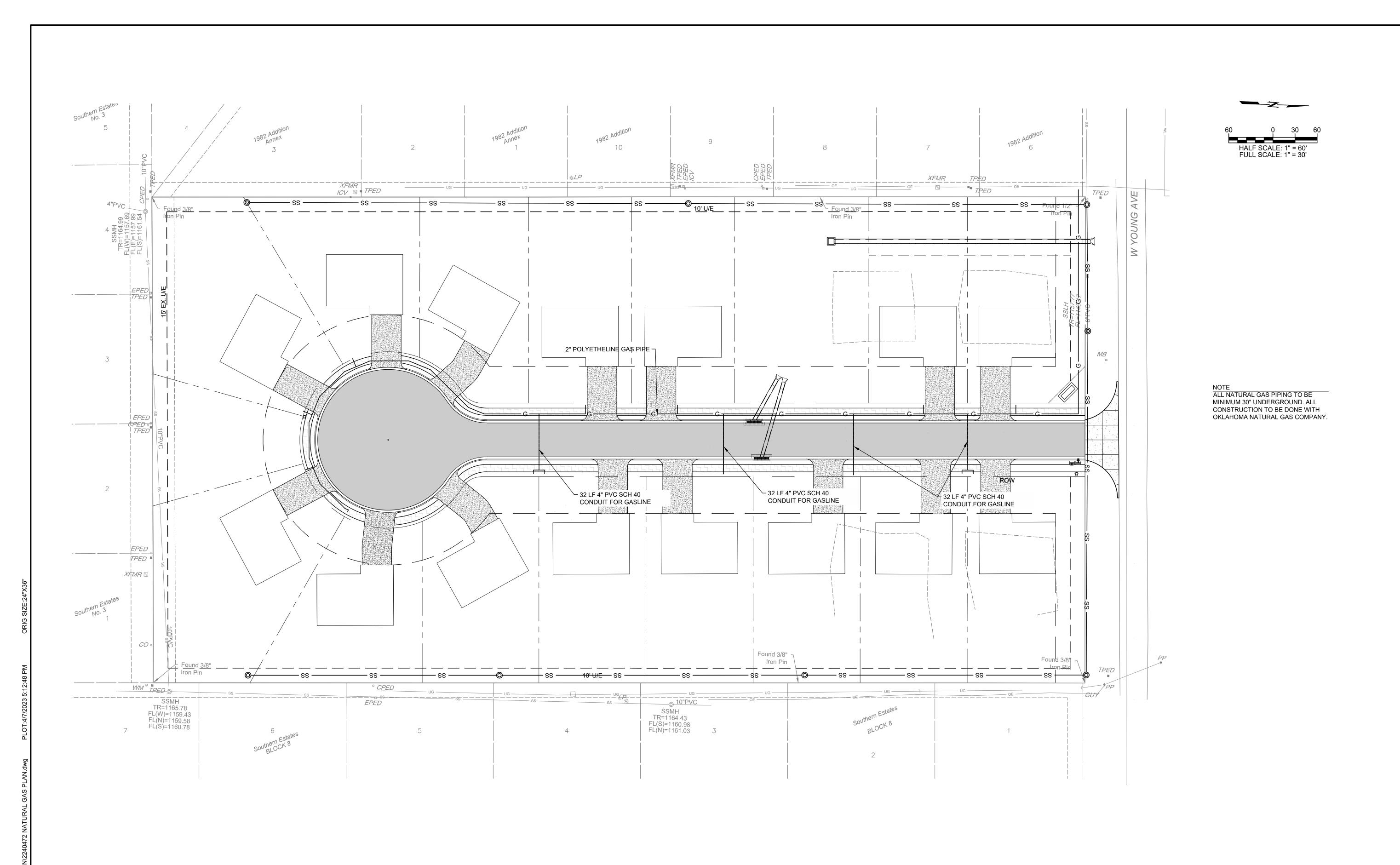
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PROFILE SHT 2



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CONSTRUCTION. **ADDITION** TENDEN A STILWELL, PROJECT NO. SHEET NAME SAN. SEWER PLAN AND







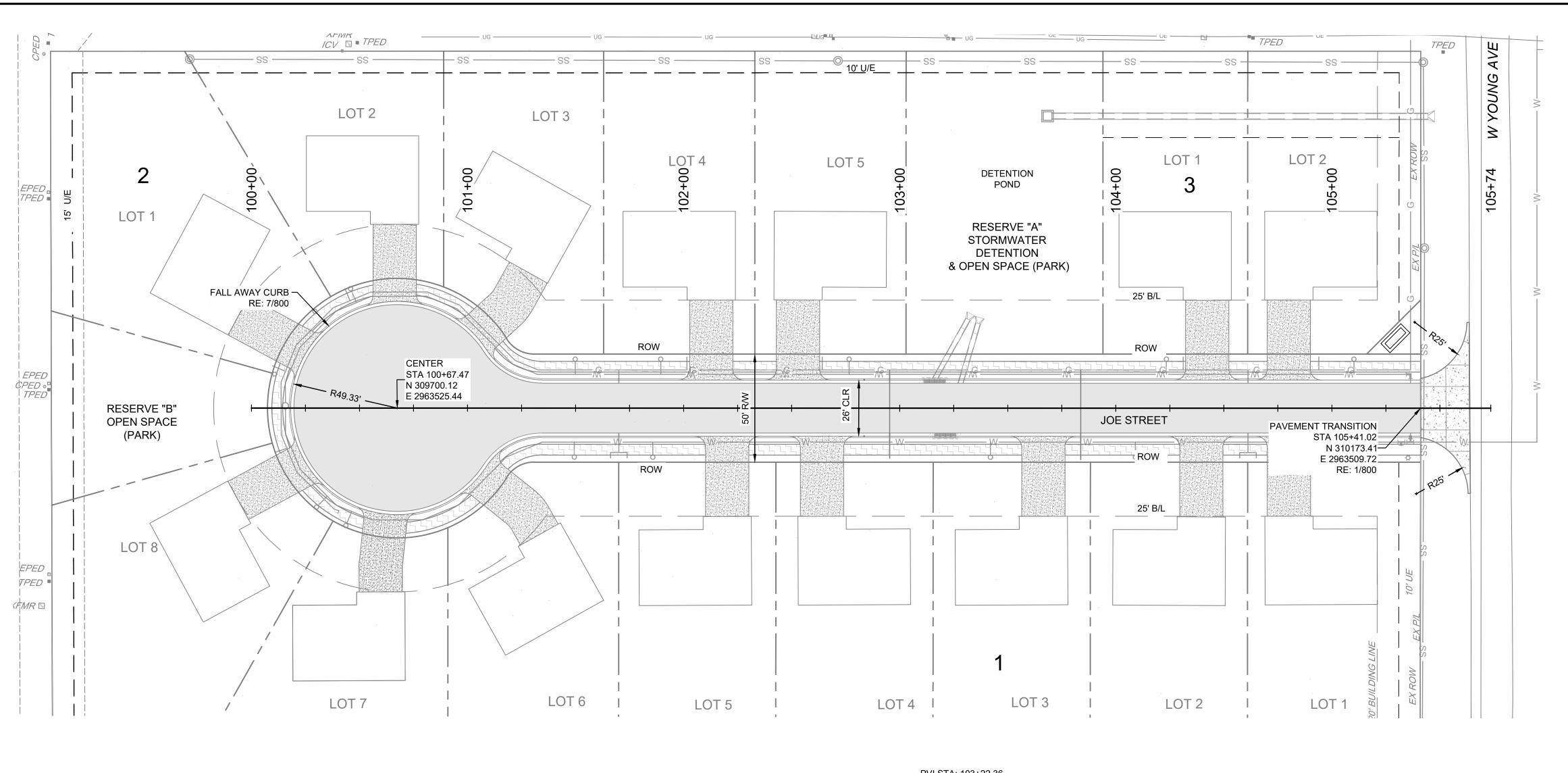
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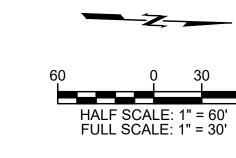
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PLAN

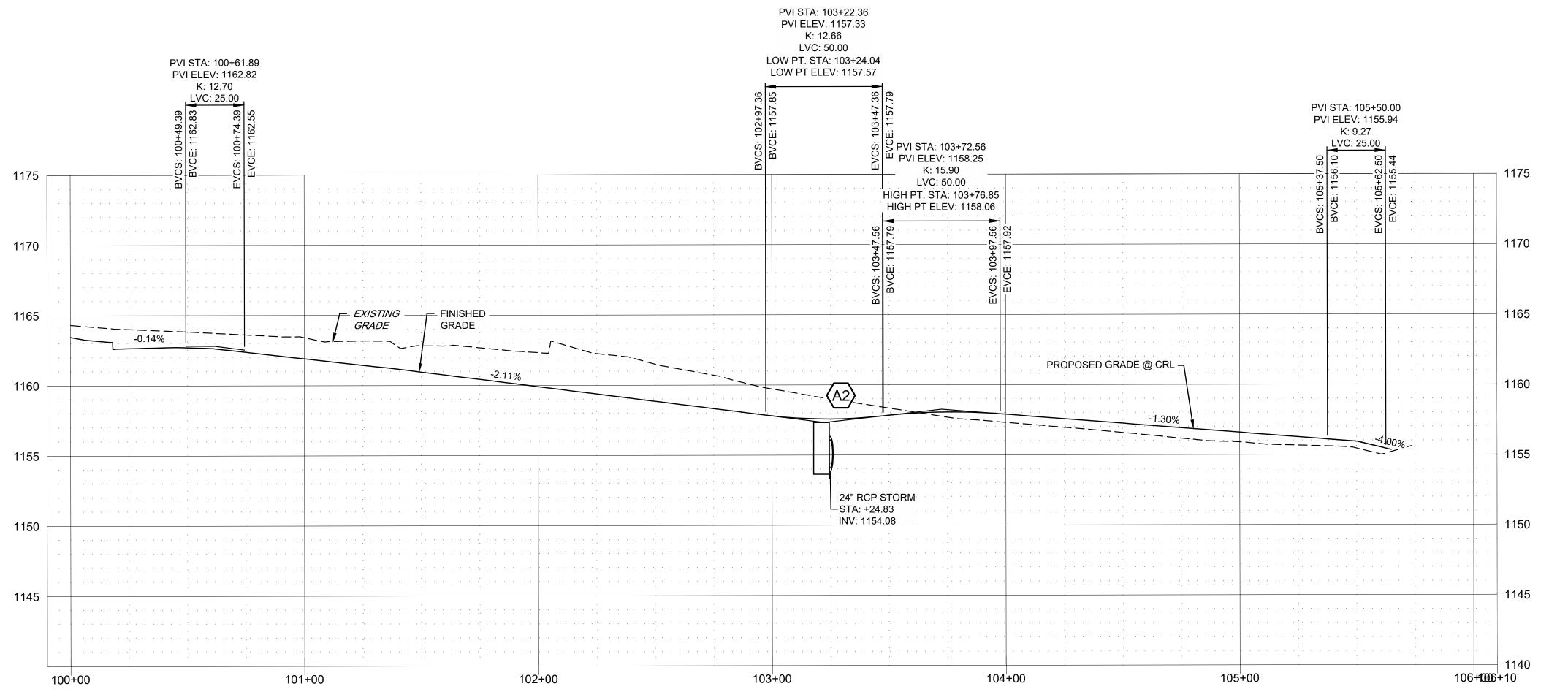
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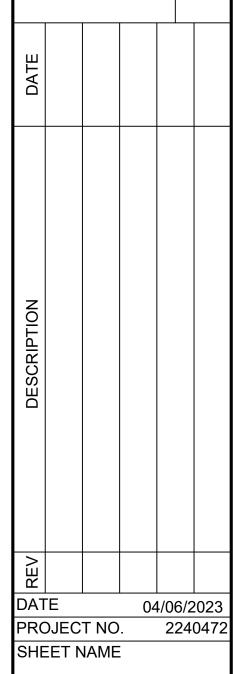
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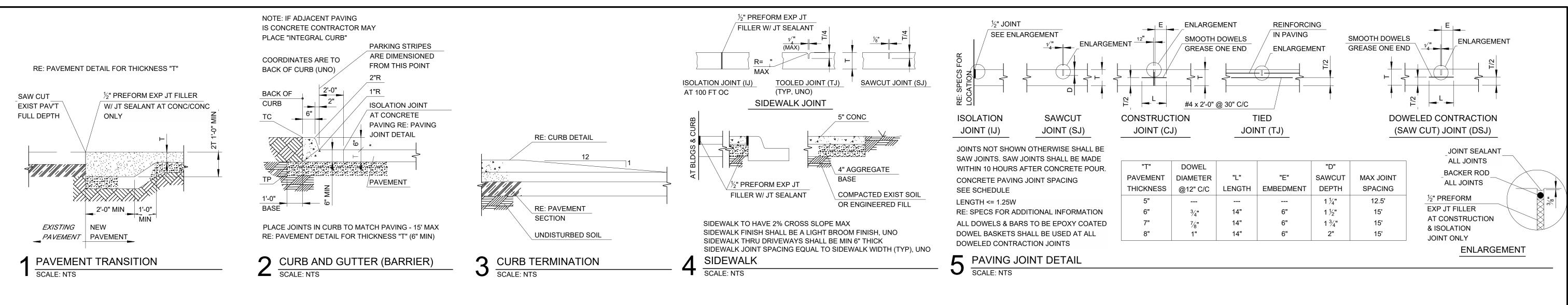
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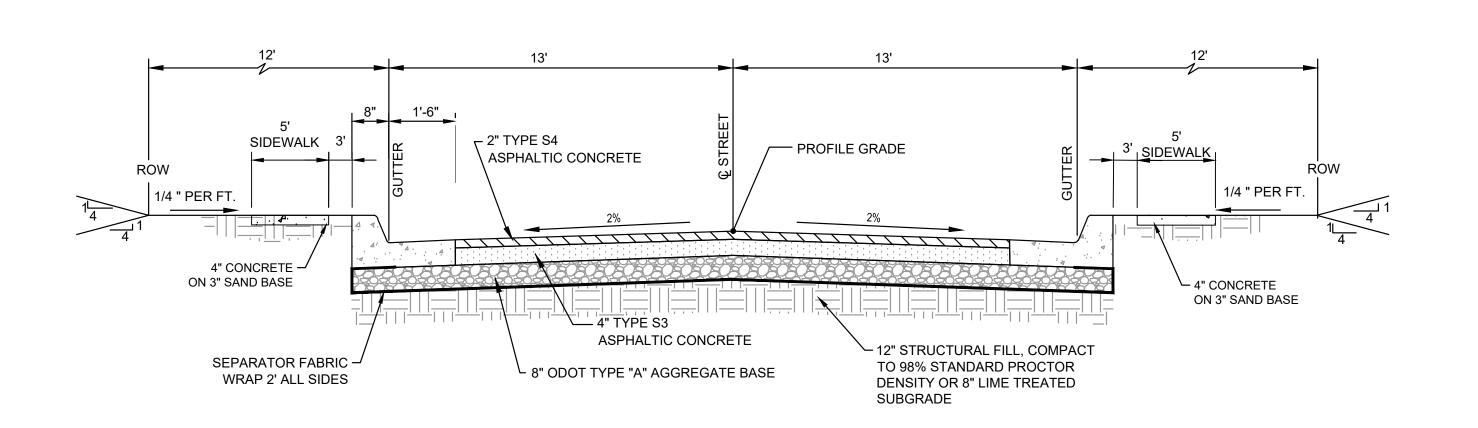
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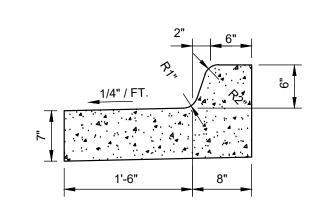
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ROADWAY PLAN
AND PROFILE
SHEET NO.

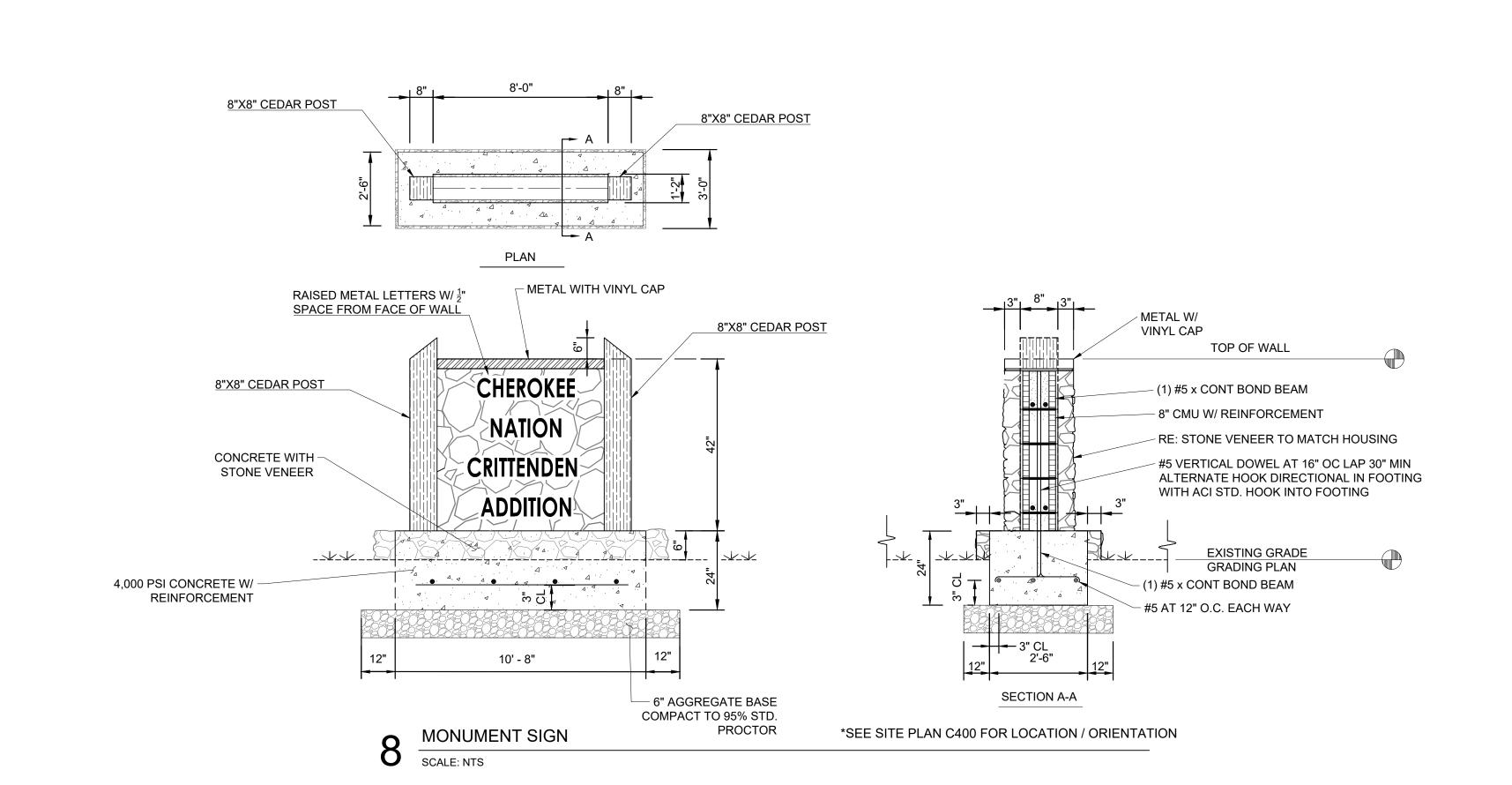






6" BARRIER CURB ABD GUTTER (FALL AWAY)

SCALE: NTS





CAUTION NOTICE TO CONTRACTOR

TYPICAL SECTION

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Z:/2240472 CN pre-con Site 1, Stilwell/Dwg/PRODUCTION/2240472 DETAILS.dwg, PAV DETAILS, 4/7/2023 5:13:03 PM, ARCH full blee

15' JOI

EV DESCRIPTION DATE

wallace

collective

design

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tulsa, oklahoma 74103

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PAVING DETAILS

04/06/2023

224047

DATE

PROJECT NO.

SHEET NAME

THRUST BLOCK DETAIL

SCALE: NTS

PLACE DOUBLE LAYER OF TAR PAPER BETWEEN CONCRETE BLOCKING AND PLUG TO PERMIT EASY REMOVAL FOR FUTURE EXTENSION OF WATER

NOTE: PLACE FELT PAPER BETWEEN ALL CONCRETE AND PVC PIPE

	BEARING AREA OF BLOCK IN SQ FT					
_	FITTING	TEE	90°	45°	22½°	11½°
	SIZES	& END	BEND	BEND	BEND	BEND
P	2",4"	2.0	2.0	1.0	1.0	1.0
	6"	4.0	3.0	3.0	1.0	1.0
	8"	5.0	8.0	4.0	2.0	1.0
	10"	8.0	12.0	6.0	3.0	2.0
	16"	20.0	19.0	16.0	8.0	4.0

SCALE: NTS

FINISHED GRADE #3 BAR ALL AROUND ROUND CONC (W/6" OVERLAP) COLLAR VALVE BOX W/LID VALVE **?** VALVEBOX DETAIL

PAVED AREA NON PAVED AREAS RE: PAVEMENT DETAIL **PAVEMENT** / 5" TOPSOIL MIN WARNING TAPE STANDARD BEDDING MATERIAL TRACE WIRE REFER PLANS FOR DIA. UNDISTURBED SOIL OR PROPERLY COMPACTED PIPE SIZE, IN. WIDTH OF TRENCH

EXCAVATION

BACKFILL

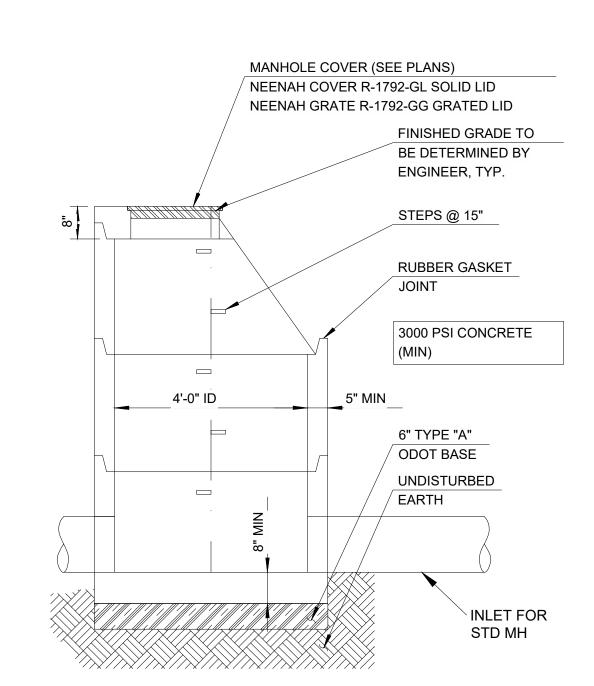
LIMITS OF STANDARD BEDDING MATERIAL QUANTITIES FOR BEDDING MATERIAL DO NOT INCLUDE THE SPACE WITHIN AND BOUNDED BY THE OUTER SURFACE OF THE PIPE CONDUIT.

TRENCH NOTE: BRACING AND SHEATHING OR OTHER TRENCH PROTECTION TO BE PROVIDED TO MEET APPLICABLE STATE AND OSHA SAFETY STANDARDS. ALL SUCH TRENCH PROTECTION TO BE RESPONSIBILITY OF THE CONTRACTOR.

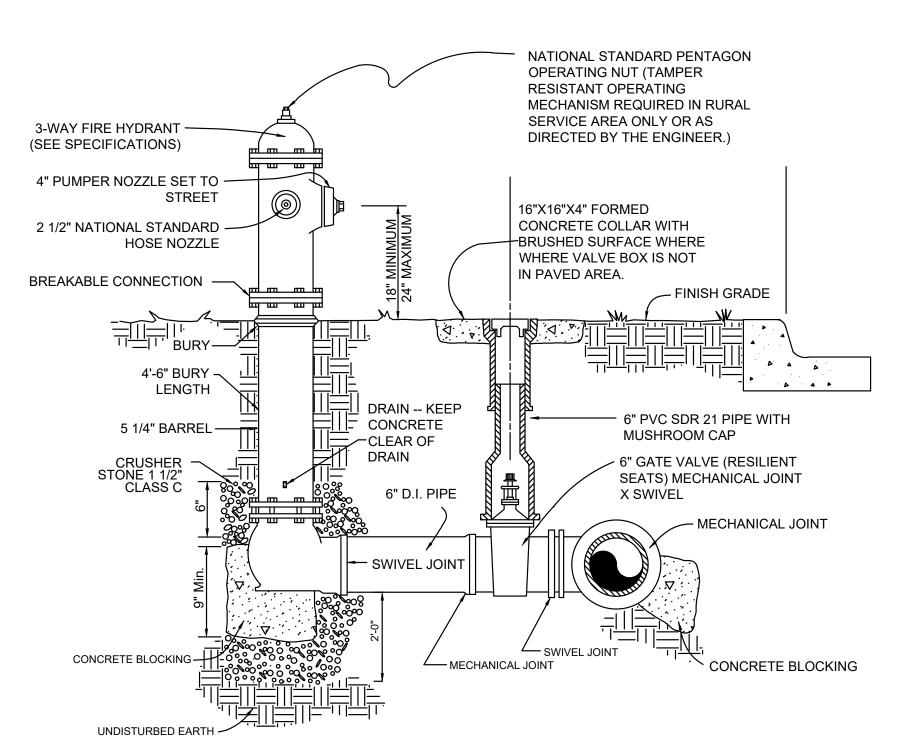
BEDDING NOTE: 学品 STANDARD BEDDING MUST BE ODOT TYPE "A" AGGREGATE BASE. UNDER PAVING ODOT TYPE "A" AGGREGATE BASE MUST BE TO THE TOP OF THE TRENCH. ODOT TYPE "A" AGGREGATE BASE TO BE COMPACTED TO 95% STANDARD PROCTOR.

> TRENCH WIDTH, FT. ID < 24" OD + 2' 24" > ID < 36" OD + 2.5' 36" > ID < 60" OD + 3.5' ID > 60" OD + 4'

STANDARD PIPE BEDDING DETAIL



TAPERED TOP PRECAST MANHOLE SCALE: NTS



5 3-WAY FIRE HYDRANT ASSEMBLY SCALE: NTS

Know what's **below**.

CAUTION NOTICE TO CONTRACTOR

