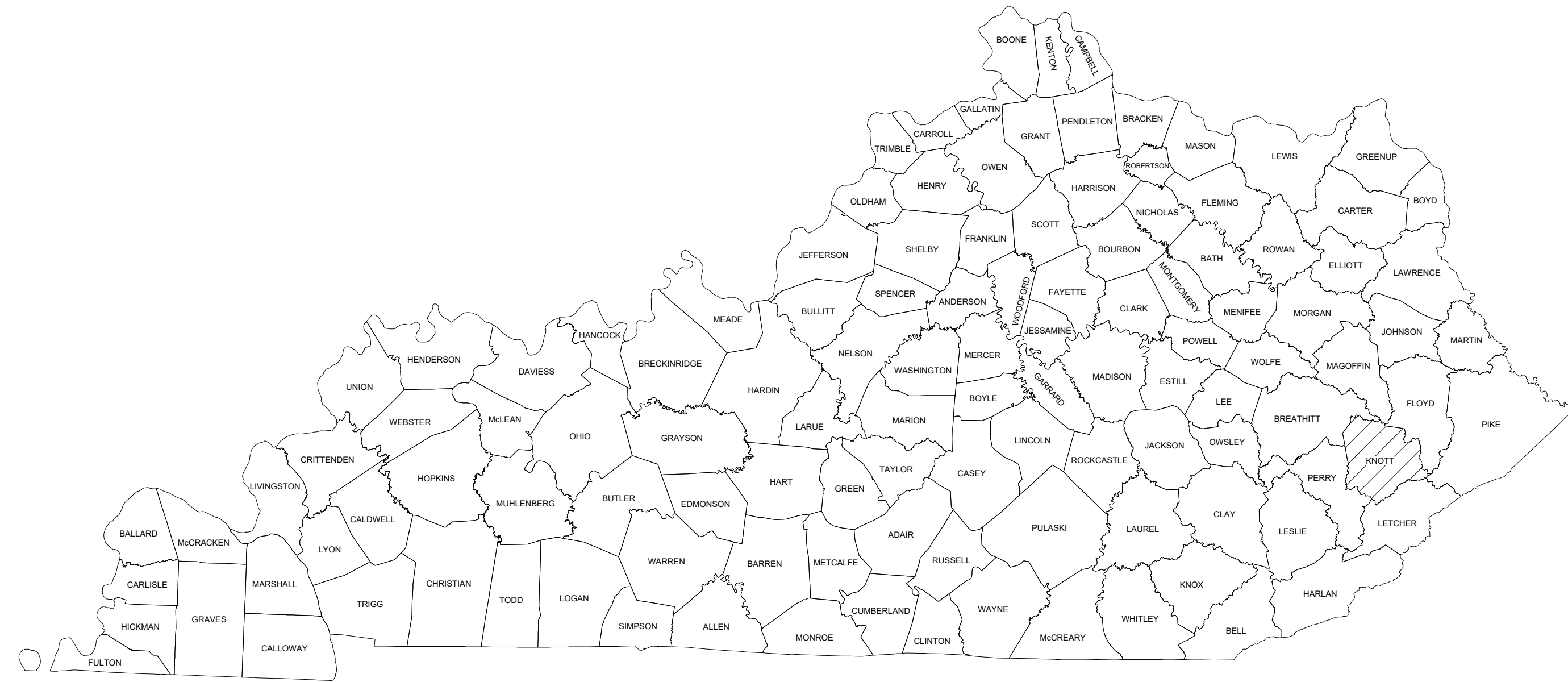




TAILED BY:	SMAJ
VIEWED BY:	SDE
NO:	25-01-033
TE:	Jul. 31, 2026
ALE:	NTS

GENERAL NOTES

- ALL BORES UNDER STATE HIGHWAY RIGHT-OF-WAY SHALL BE A MINIMUM OF 42" AT TOP OF CASING BELOW ROADWAY SURFACE. BORES ARE TO BE LOCATED NO CLOSER THAN 25' FROM ANY KYTC CULVERT OR CROSS DRAIN AND BORING PITS SHALL BE EXCAVATED AT THE TOE OF SLOPE OF ANY HIGHWAY FILL.
- THERE SHALL BE NO BLASTING WITHIN STATE RIGHT-OF-WAY WITHOUT WRITTEN CONSENT FROM THE KENTUCKY TRANSPORTATION CABINET
- TRAFFIC CONTROL SHALL BE MAINTAINED AND FLAG PERSONS SHALL BE REQUIRED AT ALL TIMES DURING CONSTRUCTION. TWO (2) FLAG PERSONS WILL BE REQUIRED WHEN 1-LANE TRAFFIC IS BEING MAINTAINED. THE PROJECT WILL HAVE ADVANCE WARNING SIGNS 1 MILE EACH SIDE OF THE WORK ZONE. ADVANCE WARNING SIGNS WILL BE MOVED AS THE PROJECT CONSTRUCTION ADVANCES. TRAFFIC CONTROL IS TO BE AS PER MUTCD STANDARDS.
- KENTUCKY TRANSPORTATION CABINET (KYTC) RIGHT-OF-WAY AS DEPICTED ON THESE PLANS WAS INTERPOLATED FROM AVAILABLE KYTC ROW MAPS AND SHOULD BE CONSIDERED APPROXIMATED
- PIPING SHALL HAVE A MINIMUM DEPTH OF COVER OF 42" ALONG KYTC ROW AND 36" AT ALL OTHER LOCATIONS.
- PROPOSED UTILITIES MUST GO UNDER OR AROUND EXISTING HIGHWAY CULVERTS. UTILITIES MAY NOT BE PLACED OVER EXISTING CULVERTS. MINIMUM SEPARATION BETWEEN CULVERTS AND A WATERLINE IS 5'
- CARE SHALL BE TAKEN BY THE CONTRACTOR TO AVOID CRACKING OR BREAKING THE BITUMINOUS PAVING. THE CONTRACTOR AT THEIR OWN EXPENSE SHALL REPAIR ALL DAMAGE TO THE EXISTING PAVEMENT CAUSED BY THE CONTRACTORS OPERATION. PAVING PROTECTION SHALL BE ACCOMPLISHED BY THE USE OF RUBBER AND STREET PADDED MACHINERY OR OTHER APPROVED EQUIPMENT WELL SUITED FOR THIS TYPE OF CONSTRUCTION.
- BACKFILL AROUND ALL STRUCTURES SHALL BE SUFFICIENTLY COMPACTED TO PREVENT SETTLEMENT AND PONDING OF WATER AROUND STRUCTURES AND GRADED TO DIVERT RUNOFF AWAY FROM THE STRUCTURES.
- RE-GRADE OF SITE SHALL BE SUCH THAT DRAINAGE IS AWAY FROM ALL STRUCTURES
- THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES AND STRUCTURES IN THE FIELD PRIOR TO CONSTRUCTION. ALL EXISTING OVERHEAD AND UNDERGROUND UTILITIES AND STRUCTURES SHALL BE PRESERVED UNLESS OTHERWISE NOTED ON THE PLANS. DAMAGES TO EXISTING UTILITIES AND/OR STRUCTURES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- EXISTING UTILITIES, ESPECIALLY GAS LINES AND OIL LINES, MAY BE CATHODICALLY PROTECTED. THEREFORE, DUCTILE IRON PIPE, FITTINGS, GATE VALVES, AND/OR BOXES LAID WITHIN 100' OF THESE LINES WITH CATHODIC PROTECTION SHALL BE WRAPPED IN POLYETHYLENE ENCASEMENT. MATERIAL AND INSTALLATION SHALL MEET THE REQUIREMENTS OF AWWA'S LATEST REVISION.
- ROCK SOUNDINGS WERE NOT PERFORMED BY THE ENGINEER, THE CONTRACTOR SHALL TAKE APPROPRIATE ACTION TO DETERMINE SUBSURFACE CONDITIONS.
- THE CONTRACTOR SHALL FIELD VERIFY EXISTING SITE CONDITIONS AND ALL DIMENSION PRIOR TO BIDDING/CONSTRUCTION.
- DIMENSIONS, DETAILS AND REINFORCEMENT MAY VARY WITH MANUFACTURER'S RECOMMENDATIONS. CONTRACTORS SHALL OBTAIN AND MAINTAIN ON SITE, APPROVED SHOP DRAWINGS PRIOR TO BEGINNING CONSTRUCTION. SHOP DRAWINGS OF ALL MATERIALS BEING USED SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
- UNLESS OTHERWISE NOTES, A SEPARATE BID ITEM HAS NOT BEEN ESTABLISHED FOR FITTINGS. THE FITTINGS INCLUDED BUT NOT LIMITED TO ARE: TEES, BENDS, PLUGS, REDUCERS, CROSSES, COUPLINGS, ETC. CONTRACTORS SHALL INCLUDE THE COST OF THESE ITEMS IN THE BID PRICES FOR THE PIPE.
- ALL EXCAVATION IS UNCLASSIFIED. COMPENSATION FOR ALL EXCAVATION SHALL BE INCLUDED IN LUMP SUM BID.
- NO PAY ITEM FOR EXTRA TRENCH DEPTH HAS BEEN SET UP. CONTRACTOR SHALL INCLUDE THE COST OF ADDITIONAL DEPTH IN HIS BID PRICE.
- THE CONTRACTOR SHALL MAINTAIN A CURRENT SET OF CONSTRUCTION PLANS ON THE JOB SITE DURING ALL PHASES OF CONSTRUCTION.
- ALL CONSTRUCTION AND INSTALLATION OF MATERIALS BEING USED SHALL BE IN CONFORMANCE WITH THE PLANS AND SPECIFICATIONS PREPARED BY THE ENGINEER OF RECORD. SUBSTITUTIONS AND DEVIATION SHALL BE PERMITTED ONLY WHEN WRITTEN APPROVAL HAS BEEN ISSUED BY THE ENGINEER.
- ALL VALVES AND APPURTENANCES SHALL BE LOCATED AT THE BACKSIDE OF THE DITCH LINE. VALVE LOCATIONS SHALL BE COORDINATED WITH THE RESIDENT INSPECTOR PRIOR TO INSTALLATION. THE GENERAL LOCATION OF THE PROPOSED WATER MAIN IS TO BE IN THE DITCH LINE OR AT THE BACK OF THE DITCH LINE.
- CONTRACTOR TO DIG/EXPOSE EXISTING WATER MAIN FAR ENOUGH AHEAD OF NEW WATER MAIN CONSTRUCTION TO AVOID DAMAGE TO EXISTING WATER MAIN AND/OR INTERRUPTION OF EXISTING CUSTOMER SERVICES.
- IN THE EVENT OF A CONFLICT BETWEEN ANY PORTION OF THE CONTRACT DOCUMENTS, THE MORE STRINGENT REQUIREMENT SHALL GOVERN.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE TEMPORARY REMOVAL/RELOCATION OF TRAILERS, BUILDINGS, FENCES, TREES, SHRUBS, ETC. AND REPLACEMENT OF SAID ITEMS AFTER CONSTRUCTION ACTIVITIES.
- IN OCCUPYING THE SITE AND COMMENCING WORK IN ACCORDANCE WITH THE NOTICE TO PROCEED, THE CONTRACTOR ASSUMES TOTAL AND COMPLETE RESPONSIBILITY FOR THE WORK UNTIL FINAL PAYMENT AND RELEASE OF CLAIMS. ANY PORTION OF THE WORK DAMAGED IN THIS PERIOD BY ACTS OF GOD, OR THE PUBLIC EMENCY, ACTS OF THE OWNER, ACTS OF OTHER CONTRACTORS, FIRES, FLUKES, EPIDEMICS, QUARANTINE, STRIKE, FREIGHT EMBARGOES, VANDALISM, AND ABNORMAL WEATHER SHALL BE CORRECTED, REPAIRED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- WHERE UNSTABLE MATERIAL IS ENCOUNTERED OR WHERE THE DEPTH OF EXCAVATION IN EARTH EXCEEDS FIVE (5) FEET, THE SIDES OF THE TRENCH OR EXCAVATION SHALL BE SUPPORTED BY SUBSTANTIAL SHEETING, BRACINGS, AND SHORING OR THE TRENCH SIDES SLOPED. SLOPING OF THE SIDES OF THE DITCH WILL NOT BE PERMITTED IN STREETS, ROADS, NARROW RIGHT-OF-WAY OR OTHER CONSTRICTED AREAS UNLESS OTHERWISE SPECIFIED. THE STANDARDS OF THE FEDERALS OCCUPATIONAL SAFETY AND HEALTH ACT AND THE KENTUCKY LABOR CABINET SHALL BE FOLLOWED.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR SHALL SELECT THE MEANS, METHODS, SEQUENCES, AND TECHNIQUES OF CONSTRUCTION THEY DEEM APPROPRIATE FOR ACCOMPLISHING THE WORK IN A SAFE MANNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE TO PERSONS AND PROPERTY RESULTING FROM HIS ACTIVITIES.
- THE WORK ZONE WILL BE CLEANED AND DRESSED AT THE END OF EACH WORKDAY. DURING CONSTRUCTION, ALL EMBANKMENTS, REFILLS, AND EXCAVATION SHALL BE MAINTAINED IN SUCH A MANNER AS TO DRAIN EFFECTIVELY AT ALL TIMES. ANY WORK AROUND CULVERT CROSS-DRAINS REQUIRE THE INLET END OF THE CULVERT TO BE PROTECTED WITH SILT CHECK. NO DEBRIS, DIRT, ROCKS, OPEN TRENCHES OR EQUIPMENT WILL BE LEFT WITHIN THE ROADWAY, SHOULDER AND DITCH. AT THE END OF EACH WORKDAY, THE ROADWAY SHALL BE CLEANED WITH A POWER BROOM AND, IF NECESSARY, A PRESSURE WASHER.
- FINAL CLEANUP AND RESTORATIONS UNLESS SPECIFICALLY APPROVED BY THE OWNER AND ENGINEER, CLEANUP OF DISTURBED AREAS SHALL BE KEPT CURRENT WITH CONSTRUCTION AND RESTORATION EFFORTS BY THE CONTRACTOR INITIATED NO LONGER THAN TWO (2) WEEKS AFTER THE TRENCH EXCAVATION WORK HAS STARTED. ALL EXCAVATED MATERIAL NOT REQUIRED FOR BACKFILLING OF THE TRENCH EXCAVATION WORK HAS STARTED. ALL EXCAVATED MATERIAL NOT REQUIRED FOR BACKFILLING OF THE TRENCH AND ANY LARGE ROCKS, STONES OR DEBRIS SHALL BE REMOVED FROM THE SITE, AND SHALL NOT BE A BURDEN TO THE PROPERTY OWNER(S) AND/OR ADJACENT PROPERTIES. THE CONTRACTOR MAY WINDROW OR TRACK-IN THE EXCAVATED MATERIAL OVER THE TRENCH PRIOR TO FINAL CLEANUP TO ALLOW FOR AND TO ASSIST IN THE INITIAL SETTLEMENT OF THE TRENCH. ALL DISTURBED AREAS MUST BE SEEDED AT LEAST WITH A TEMPORARY SEED MIX IF FOR SOME REASON THE AREA CANNOT BE PERMANENTLY SEEDED WITHIN TWO (2) WEEKS.
- PROPERTY LINES AS SHOWN ON PLANS ARE APPROXIMATE AND NO GUARANTEE IS MADE AS TO THEIR ACCURACY.
- THE ENGINEER SHALL BE THE OWNER'S DESIGNATED SITE REPRESENTATIVE. ALL COMMUNICATION FROM THE CONTRACTOR, AND TO THE CONTRACTOR SHALL BE THROUGH THE ENGINEER.

RECORD DRAWINGS

UPON COMPLETION OF CONSTRUCTION, AND BASED UPON THE CONTRACTOR, RPR RED-LINED DRAWINGS, THE CONTRACTOR/RPR SHALL PROVIDE THE RED-LINED DRAWINGS TO THE ENGINEER WHO PRODUCED RECORD DRAWINGS IN AN AUTOCAD FORMAT. DRAWINGS SHALL BE REFERENCED TO THE KENTUCKY STATE PLAN COORDINATE SYSTEM, NAD83 KENTUCKY SINGLE ZONE. SURVEYS SHALL BE TIED TO A MINIMUM OF TWO ACCEPTED GPS MONUMENTS OR ONE GPS TIE POINT PLUS AN ASTRONOMIC OBSERVATION TO DETERMINE GRID NORTH. THE SURVEY SHALL BE COMPLETED BY A LAND SURVEYOR LICENSED IN THE STATE OF KENTUCKY. IN ADDITION, THE RECORD DRAWINGS SHALL SHOW FINAL VERTICAL AND HORIZONTAL ALIGNMENT OF ALL BURIED UTILITIES ADDED OR MOVED AS A RESULT OF CONSTRUCTION. THEY SHALL INCLUDE ALL LINES, ACTUAL FIELD ANGLES BETWEEN LINES, SERVICE LINES AND TEE LOCATIONS, VALVE VAULTS AND VALVE BOXES AND STUBOUTS. THEY SHALL REFLECT ALL ALIGNMENT AND GRADES CHANGES FROM THE DESIGN DRAWINGS VALVE BOXES, AND STUBOUTS. THEY SHALL REFLECT ALL ALIGNMENT AND GRADE CHANGES FROM THE DESIGN DRAWINGS MADE DURING CONSTRUCTION. RECORD DRAWINGS MUST BE COMPLETED AND SUBMITTED PRIOR TO ACCEPTANCE OF THE FACILITIES, AND IN ACCORDANCE WITH SECTION 91785 PROJECT RECORD DOCUMENTS OF THE SPECIFICATIONS.

GENERAL NOTES - CONTINUED

- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES, ORDINANCES, REGULATIONS, AND OTHER REQUIREMENTS NECESSARY TO COMPLETE THE WORK. THIS INCLUDES PROVISIONS FOR VEHICULAR AND PEDESTRIAN TRAFFIC CONTROL AND SAFETY, BUILDING CODES, MANUFACTURE CODES (ASTM AND ACl, AND THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA)).
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. IN CASES WHERE CONFLICTS EXIST BETWEEN CITY/COUNTY UTILITIES COMMISSION'S STANDARD SPECIFICATIONS OR STANDARD DRAWINGS, THE CONTRACT DOCUMENTS SHALL PREVAIL. THE ENGINEER SHALL HAVE FINAL DETERMINATION IN ANY CONFLICTS.
- ALL CONSTRUCTION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs) SHALL BE IN ACCORDANCE WITH KENTUCKY DIVISION OF WATER (DOW).
- DEVIATIONS FROM THE PLANS AND SPECIFICATIONS SHALL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.
- PRIOR TO BID PREPARATION, THE CONTRACTOR MUST BECOME FAMILIAR WITH THE OVERALL SITE CONDITIONS AND PERFORM ADDITIONAL INVESTIGATIONS AS DETERMINED NECESSARY TO UNDERSTAND THE ADEQUACY OF EXISTING MATERIALS SUCH AS FILL, DE-WATERING REQUIREMENTS, CLEAN FILL REQUIRED FROM OFFSITE, AND MATERIALS TO BE DISPOSED OF OFFSITE. ANY DELAY, INCONVENIENCE, OR EXPENSE CAUSED TO THE CONTRACTOR DUE TO INADEQUATE INVESTIGATION OF EXISTING CONDITIONS SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED. ANY MATERIALS ANTICIPATED TO BE ENCOUNTERED DURING CONSTRUCTION MAY REQUIRE DRYING PRIOR TO USE AS BACKFILL, AND THE CONTRACTOR MAY HAVE TO IMPORT MATERIALS, AT NO EXTRA COST TO THE OWNER, FROM OFFSITE TO MEET THE REQUIREMENTS FOR COMPACTION AND PROPER FILL.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY LABOR, MATERIAL, EQUIPMENT, TOOLS, AND SERVICES REQUIRED TO COMPLETE CONSTRUCTION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- SHOP DRAWINGS SHALL BE SUBMITTED AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
- THE CONTRACTOR SHALL MAINTAIN A COPY OF THE KENTUCKY DIVISION OF WATER (DOW) APPROVED SPECIFICATIONS AND DRAWINGS ON-SITE THROUGHOUT CONSTRUCTION.
- THE CONTRACTOR SHALL PROTECT UTILITIES AND OTHER IMPROVEMENTS SHOWN ON THESE PLANS, ALONG WITH OTHER UTILITIES AND OTHER IMPROVEMENTS NOT SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF UTILITIES AND OTHER IMPROVEMENTS DAMAGED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER, AT NO ADDITIONAL COST TO THE OWNER, AND SHALL MAINTAIN SUFFICIENT PROTECTION TO UTILITIES REQUIRED TO PROTECT THEM FROM DAMAGE AND PROTECT THE PUBLIC DURING CONSTRUCTION.

GENERAL CONSTRUCTION

- THE CONTRACTOR SHALL REPLACE OR REPAIR ANY EXISTING STRUCTURE, FACILITY, OR LANDSCAPING DAMAGED DUE TO CONSTRUCTION ACTIVITIES. THIS WORK SHALL BE AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING ANY CONSTRUCTION ACTIVITIES FROM TAKING PLACE OUTSIDE OF THE LIMITS OF CONSTRUCTION SHOWN ON THE PLANS. ANY ON-SITE OR OFF-SITE AREAS DISTURBED SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER. RESTORATION OF WORK OUTSIDE THE LIMITS OF CONSTRUCTION SHALL BE AT NO ADDITIONAL COST TO THE OWNER.
- UPON COMPLETION OF CONSTRUCTION, ALL AREAS SHALL BE COMPLETELY CLEAR OF ALL TIMBER, BRUSH, STUMPS, ROOTS, GRASS, WEEDS, RUBBISH ROCKS (ONE-INCH AND LARGER), AND ALL OTHER DEBRIS AND OBSTRUCTIONS RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE GROUND.
- CONTRACTOR SHALL ADJUST ELEVATION TO FINAL GRADE ANY SURFACE FEATURE (RIM, GRATE, INLET STRUCTURE, OUTLET STRUCTURE, CURB, GUTTER, OR OTHER) AS REQUIRED BY NEW CONSTRUCTION OR GRADING. THIS WORK SHALL BE AT NO ADDITIONAL COST TO THE OWNER.
- EXCAVATION AND DISPOSAL OF ALL TREES, BRANCHES, LIMBS, BRUSH, DEMOLITION DEBRIS, TRUNK SPOILS, ROCK, PAVEMENT MATERIALS (CONCRETE OR ASPHALT), SANITARY PIPE, MANHOLES, STORM PIPE, MANHOLES, OR OTHER WASTE MATERIALS SHALL BE DONE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL LAWS AND CODES.
- ALL DE-WATERING COSTS ASSOCIATED WITH THE INSTALLATION AND CONSTRUCTION OF THE UNDERGROUND UTILITIES, STORM WATER PIPES, MANHOLES, SANITARY SEWER MAINS, FORCE MAINS, MANHOLES, LIFT STATIONS, AND STORM WATER MANAGEMENT SYSTEMS SHALL BE INCLUDED AS PART OF THE CONSTRUCTION BID COSTS. ALL PIPES SHALL HAVE A FEET MINIMUM DEPTH OF COVER UNLESS OTHERWISE SPECIFIED IN PLANS. CONTRACTOR SHALL TAKE CARE TO PROVIDE PROPER GRADE ELEVATION AND ALIGNMENTS. A DE-WATERING PLAN MUST BE SUBMITTED AND APPROVED PER SPECIFICATION SECTION 02240.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION.
- THE CONTRACTOR SHALL REQUEST, AT LEAST 72 HOURS IN ADVANCE, PERMISSION TO WORK OUTSIDE THE SPECIFIED WORK HOURS OR FOR ANY WEEKEND WORK.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR RESIDENT PROJECT REPRESENTATIVE (RPR) AT LEAST 48 HOURS BEFORE REQUIRED INSPECTION ON EACH AND EVERY PHASE OF WORK. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RPR A MINIMUM OF 48 HOURS PRIOR TO ANY SCHEDULED TESTING. NO PRESSURE OR FINAL TESTING WILL BE ACCEPTED UNLESS WITNESSES BY THE RPR.
- THE CONTRACTOR SHALL NOTIFY PROPERTY OWNERS A MINIMUM OF THREE BUSINESS DAYS (72 HOURS) IN ADVANCE OF ENTERING OR CROSSING THEIR PROPERTY FOR ANY CONSTRUCTION RELATED ACTIVITY. THIS SHALL INCLUDE CONSTRUCTING TEMPORARY FENCING PER ANY MEMO OF UNDERSTANDING (MOU) IN ADVANCE OF REMOVING ANY EXISTING FENCING.

NOTICES

- THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 48 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION.
- THE CONTRACTOR SHALL REQUEST, AT LEAST 72 HOURS IN ADVANCE, PERMISSION TO WORK OUTSIDE THE SPECIFIED WORK HOURS OR FOR ANY WEEKEND WORK.
- THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR RESIDENT PROJECT REPRESENTATIVE (RPR) AT LEAST 48 HOURS BEFORE REQUIRED INSPECTION ON EACH AND EVERY PHASE OF WORK. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RPR A MINIMUM OF 48 HOURS PRIOR TO ANY SCHEDULED TESTING. NO PRESSURE OR FINAL TESTING WILL BE ACCEPTED UNLESS WITNESSES BY THE RPR.
- THE CONTRACTOR SHALL NOTIFY PROPERTY OWNERS A MINIMUM OF THREE BUSINESS DAYS (72 HOURS) IN ADVANCE OF ENTERING OR CROSSING THEIR PROPERTY FOR ANY CONSTRUCTION RELATED ACTIVITY. THIS SHALL INCLUDE CONSTRUCTING TEMPORARY FENCING PER ANY MEMO OF UNDERSTANDING (MOU) IN ADVANCE OF REMOVING ANY EXISTING FENCING.
- THE CONTRACTOR SHALL VERIFY ALL HORIZONTAL AND VERTICAL CONTROL SHOWN ON THE PLANS. THE ENGINEER SHALL BE NOTIFIED OF ANY CONFLICTS PRIOR TO INITIATION OF ANY CONSTRUCTION WORK.
- THE CONTRACTOR(S) IS RESPONSIBLE FOR ITS RESPECTIVE SURVEYING AND LAYOUT FROM THE HORIZONTAL AND VERTICAL CONTROL PROVIDED ON THE PLANS.
- ANY SURVEY MONUMENT DISTURBED DURING CONSTRUCTION SHALL BE REPLACED UPON COMPLETION OF THE WORK BY A REGISTERED LAND SURVEYOR IN THE STATE OF KENTUCKY.
- THE CONTRACTOR AND THE RPR SHALL MAINTAIN INDEPENDENT RECORDS OF ALL CONSTRUCTION WHICH SHALL BE SUBMITTED TO THE ENGINEER UPON COMPLETION OF CONSTRUCTION.

JOB SITE SAFETY

- THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING ALL APPLICABLE OSHA REGULATIONS.
- CONTRACTOR SHALL PROVIDE FOR FIRE PROTECTION FOR ALL AREAS UNDER CONSTRUCTION AND IN AREAS WHERE COMBUSTIBLES ARE STORED.
- DURING CONSTRUCTION, WHEN COMBUSTIBLES ARE BROUGHT ONTO THE SITE IN SUCH QUANTITIES AS DEEMED HAZARDOUS BY THE FIRE OFFICIAL, STABILIZED ACCESS ROADS AND A SUITABLE TEMPORARY SUPPLY OF WATER ACCEPTABLE TO THE FIRE DEPARTMENT SHALL BE PROVIDED AND MAINTAINED.

PERMITS

- THE OWNER WILL PAY ALL RELATED COSTS, AS REQUIRED, FOR THE FOLLOWING RELATED PROJECT PERMITS:
 - KENTUCKY TRANSPORTATION CABINET (KYTC) RIGHT-OF-WAY ENCROACHMENT PERMIT
 - KENTUCKY DIVISION OF WATER (DOW) CONSTRUCTION PERMIT (401)
 - DOW FLOODPLAIN PERMIT
 - UNITED STATES ARMY CORP OF ENGINEER (COE) CONSTRUCTION PERMIT (404)
 - ANY REQUIRED RAILROAD PERMIT
 - ANY REQUIRED ENVIRONMENTAL PERMIT OR AGREEMENT
 - KENTUCKY DIVISION OF HOUSING, BUILDING AND CONSTRUCTION PERMIT
- THE CONTRACTOR WILL OBTAIN AS REQUIRED, AND PAY ALL RELATED COSTS AS INCIDENTAL TO THE CONTRACT, THE FOLLOWING RELATED PROJECT PERMITS:
 - KENTUCKY POLLUTION DISCHARGE ELIMINATION SYSTEM (KPDDES) NOTICE OF INTENT (NOI)
 - KENTUCKY DIVISION OF PLUMBING PERMIT
 - KENTUCKY ELECTRICAL PERMIT
 - BUILDING PERMIT (LOCAL ONLY, COUNTY OF VENUE)
 - KENTUCKY TRANSPORTATION CABINET (KYTC) TRAFFIC ENGINEERING TRAFFIC CONTROL OR LANE CLOSURE PERMIT
- COPIES OF ALL PERMITS SHALL BE MAINTAINED ONSITE BY THE CONTRACTOR AT ALL TIMES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH ALL PERMITS, INCLUDING KYR10 STORM WATER CONSTRUCTION, THE COST OF WHICH SHALL BE INCIDENTAL TO THE CONTRACT. ANY PENALTIES OR FINES FOR PERMIT NON-COMPLIANCE SHALL BE BORNE SOLELY BY THE CONTRACTOR.
- CONTRACTOR SHALL SUBMIT TO THE ENGINEER, FOR REVIEW AND APPROVAL, PEDESTRIAN AND VEHICULAR TRAFFIC CONTROL PLANS (TCP).
- CONTRACTOR SHALL CONTACT THE SITE'S REGIONAL KYTC OFFICE REGARDING REQUESTS FOR LANE CLOSURE OF ANY STATE MAINTAINED ROAD.

EXISTING UTILITIES

- THE LOCATION OF ALL EXISTING UTILITIES AND STORM DRAINAGE INFRASTRUCTURE SHOWN ON THE PLANS HAS BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND IS GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE OWNER AND ENGINEER ASSUME NO RESPONSIBILITY FOR THE ACCURACY OF THIS INFORMATION. INDIVIDUAL SERVICES LINES ARE NOT SHOWN.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING FIELD CONDITIONS, INCLUDING INVERTS AND GRADES, PRIOR TO INSTALLATION. IF ANY FIELD CONDITIONS DIFFER FROM THE DESIGN DOCUMENTS, THE CONTRACTOR MUST NOTIFY THE ENGINEER BEFORE PROCEEDING AND OBTAIN DIRECTION. FAILURE TO DO SO CONSTITUTES ACCEPTANCE OF RESPONSIBILITY FOR ANY RESULTING DISCREPANCIES.
- THE CONTRACTOR OR SUBCONTRACTOR SHALL NOTIFY THE KENTUCKY UNDERGROUND (811) 48 HOURS IN ADVANCE OF ANY CONSTRUCTION ON THIS PROJECT. WHEN CONTACTING THE KENTUCKY UNDERGROUND PROTECTION, CONTRACTOR SHOULD STATE THAT THE WORK TO BE DONE IS FOR THE OLIVE BRANCH SUBDIVISION DEVELOPMENT WATER & SANITARY SEWER PROJECT. CONTRACTOR IS CAUTIONED THAT SOME UTILITIES ARE NOT MEMBERS OF KENTUCKY UNDERGROUND PROTECTION AND PRIVATE UTILITIES ARE NOT LOCATED BY KENTUCKY UNDERGROUND PROTECTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ACTIVE KENTUCKY UNDERGROUND PROTECTION MARKINGS.
- RESTORATION OR REPAIR OF ANY DISTURBED OR DAMAGED UTILITY OR STORM WATER INFRASTRUCTURE, WHETHER LOCATED BY KENTUCKY UNDERGROUND PROTECTION OR NOT, SHALL BE AT THE CONTRACTOR'S EXPENSE.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES AND TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATION OF THESE UTILITIES WITH THE OWNER OF THE UTILITY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING UNDERGROUND UTILITIES WHETHER SHOWN ON THE PLAN OR LOCATED BY KENTUCKY UNDERGROUND PROTECTION OR THE UTILITY COMPANY. ALL UTILITIES WHICH INTERFERE WITH THE PROPOSED CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO INITIATION OF CONSTRUCTION.
- THE CONTRACTOR SHALL NOTIFY THE LOCAL UTILITY PROVIDER AT LEAST 30 DAYS PRIOR TO CONSTRUCTING WITHIN 25 FT OF ANY EXISTING DISTRIBUTION OR TRANSMISSION POLES. THE PROVIDER WILL ARRANGE FOR TEMPORARY BRACING OR GUY WIRE RELOCATIONS FOR ANY EXISTING UTILITY OR TRANSMISSION POLE WITHIN 25 FT OF THE PROPOSED SEWER LINE. DURING CONSTRUCTION, IF ANY TRENCH EXCAVATION FALLS WITHIN 15 FT OF ANY TRANSMISSION OR SERVICE POLE, THE CONTRACTOR SHALL USE A TRENCH BOX TO SHORE THE GROUND WITHIN THE TRENCH. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE PAYMENT OF ANY COSTS FROM THE UTILITY PROVIDER ASSOCIATED WITH ITS ASSISTANCE.
- A MINIMUM VERTICAL SEPARATION OF 18 INCHES IS REQUIRED AT ANY LOCATION WHERE A WATERLINE CROSSES OVER A SANITARY SEWER LINE. IF THIS SEPARATION CANNOT FEASIBLY BE OBTAINED, THE LOWER OF THE TWO PIPES SHALL BE WRAPPED IN POLYETHYLENE AND ENCASED IN CONCRETE FIVE FEET EACH SIDE OF THE CROSSING.
- DUCTILE IRON PIPE SHALL BE ENCASED IN POLYETHYLENE 25 FEET ONE EACH SIDE OF ANY PERPENDICULAR CROSSING OF A METALLIC GAS MAIN, OR WHEN PARALLEL TO AND WITHIN TEN FEET OF A METALLIC GAS MAIN OR OTHER CATHODICALLY PROTECTED PIPE, OR WHEN THE DUCTILE IRON PIPE IS IN THE AREA OF INFLUENCE OF A CATHODIC PROTECTION ANODE BED.

SPECIAL PROJECT NOTES

- ALL VALVES AND ABOVE GROUND STRUCTURES MUST BE PLACED AT THE BACK OF A DITCH LINE TO BE IN COMPLIANCE WITH CLEAR ZONE REGULATIONS.
- LINE IS TO BE INSTALLED AROUND OR UNDER ANY EXISTING DRAINAGE STRUCTURES WITHIN STATE RIGHT-OF-WAY.
- CONTRACTOR SHALL NOT COMMENCE ANY WORK ON PRIVATE PROPERTY WITHOUT WRITTEN AGREEMENT FROM THE PRIVATE PROPERTY OWNER IN-HAND. CONTRACTOR SHALL BEAR ALL RESPONSIBILITY IN CONFIRMING THAT ALL EASEMENTS NECESSARY TO CONSTRUCT THE PROJECT HAVE BEEN SECURED.
- ALL BORES UNDER STATE HIGHWAY RIGHT-OF-WAY SHALL MAINTAIN A MINIMUM DEPTH OF COVER OF 42" AT THE TOP OF THE CASING BELOW ROADWAY SURFACE BORES. BORES ARE TO BE LOCATED NO CLOSER THAN 25 FEET FROM ANY KYTC CULVERT OR CROSSDRAIN AND BORING PITS SHALL BE EXCAVATED AT THE TOE OF THE SLOPE OF ANY HIGHWAY FILL.
- MUD AND DEBRIS MUST BE REMOVED IMMEDIATELY.
- AT THE END OF EACH WORKDAY, THE ROADWAY SHALL BE CLEANED WITH A POWER BROOM AND, IF NECESSARY, A PRESSURE WASHER.
- 1500 FT - 1000 FT - 500 FT TRAFFIC SIGNS MUST BE MAINTAINED (SEE TRAFFIC CONTROL PLAN).
- FLAG PERSON(S) ARE REQUIRED AT ALL TIMES.
- DITCH LINES MUST BE RESTORED TO PRE-CONSTRUCTION CONDITION OR BETTER.
- ANY DAMAGE TO PAVEMENT MUST BE REPAIRED IN ACCORDANCE WITH KYTC SPECIFICATIONS.
- ALL DRIVEWAYS MUST BE REPAIRED TO OWNER'S SATISFACTION.
- ALL DISTURBED AREAS (ENTRANCES, SLOPES, ETC) ARE TO BE RESTORED TO THEIR PRE-CONSTRUCTION CONDITIONS.
- ALL WATERLINES MUST HAVE A MINIMUM DEPTH OF COVER OF 42"
- ALL WATERLINES WILL BE A MINIMUM OF 10 FEET HORIZONTALLY FROM ANY EXISTING WATERLINES
- ALL WATERLINES WILL BE A MINIMUM OF 42" BELOW THE DITCH LINE AND SHALL GO OUT AND AROUND CULVERTS WHERE POSSIBLE.
- MAILBOXES WILL NEED TO BE REMOVED AND THEN REPLACED IN LIKE CONDITION BY THE CONTRACTOR.

EROSION AND SEDIMENT CONTROL

- PRIOR TO LAND DISTURBANCE, THE CONTRACTOR SHALL APPLY FOR COVERAGE UNDER THE KPDDES PERMIT KYR10 - STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL SUBMIT THE NOTICE OF INTENT (NOI) TO DOW USING THE DOW ELECTRONIC WEB BASED NOI SUBMISSION SYSTEM A MINIMUM OF 7 DAYS BEFORE THE PROPOSED DATE FOR COMMENCEMENT OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL NOT BEGIN WORK UNTIL DOW HAS PROVIDED WRITTEN ACKNOWLEDGEMENT OF PERMIT COVERAGE. ALL PERMITS SHALL BE POSTED ON THE PROJECT SIGN AT THE SITE. THE COSTS OF ACQUIRING THE KPDDES PERMIT KYR10 PERMIT SHALL BE INCIDENTAL TO THE CONTRACT.
- SOIL AND EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND TECHNICAL SPECIFICATIONS.
- THE CONTRACTOR SHALL, AT THEIR OWN EXPENSE, AMEND THE EROSION AND SEDIMENT CONTROL (ESC) PLANS OR MAKE REVISIONS AS NECESSARY AS CONSTRUCTION PROCEEDS. MODIFICATIONS TO ESC SHOULD BE COMPLETED PRIOR TO THE NEXT STORM EVENT IF POSSIBLE. ALL MAINTENANCE REQUIRED BY INSPECTION SHALL COMMENCE WITHIN 24 HOURS AND BE COMPLETED WITHIN 48 HOURS OF AN INSPECTION REPORT. THE CONTRACTOR SHALL CLEARLY MARK ON THE ESC PLAN ALL CHANGES THAT ARE MADE, THE LOCATION OF FUELING STATIONS, MAINTENANCE AND CLEARING AREAS, LOADING AREAS, AND LOCATIONS WHERE MATERIALS ARE EXPOSED TO PRECIPITATION.
- ESC MEASURES, DISCHARGE LOCATIONS, VEHICLE EXITS, DISTURBED AREAS, AND STORAGE AREAS SHALL BE INSPECTED BY QUALIFIED PERSONNEL EMPLOYED BY THE CONTRACTOR. THE INSPECTION SHALL BE CONDUCTED AT LEAST ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT EQUAL TO 1 OR MORE INCHES OF RAIN OR 4 OR MORE INCHES OF SNOW. REPORTS OF INSPECTIONS SHALL BE KEPT ONSITE AND MADE AVAILABLE TO INSPECTORS FROM DOW OR KNOTT COUNTY. FOLLOWING INSPECTIONS, THE CONTRACTOR SHALL TAKE ALL ACTIONS NECESSARY TO MAINTAIN THE FUNCTIONALITY OF THE ESC MEASURES TO INCLUDE BUT NOT BE LIMITED TO:
 - REMOVE SEDIMENT THAT EQUALS OR EXCEEDS 1/2 OF THE SILT FENCE HEIGHT
 - REMOVE SEDIMENT THAT EQUALS OR EXCEEDS 1/2 OF THE SEDIMENT STORAGE VOLUME OF ROCK CHECK DAMS OR SEDIMENT PONDS
 - REPAIR OR REPLACE TORN SILT FENCES
 - REMOVED AND PROPERLY DE-WATER AND DISPOSE OF SEDIMENT FROM SEDIMENT PONDS OR CONCRETE WASHOUT PITS
- THE CONTRACTOR SHALL SIGN ALL INSPECTION REPORTS IN ACCORDANCE WITH KYR10. THE INSPECTION REPORTS SHALL BE KEPT ONSITE AND MADE AVAILABLE TO INSPECTORS FROM DOW AND KNOTT COUNTY.
- WHERE CONSTRUCTION OR LAND DISTURBANCE ACTIVITIES HAVE TEMPORARILY CEASED ON ANY PORTION OF A SITE, TEMPORARY SITE STABILIZATION MEASURES SHALL BE IMPLEMENTED AS SOON AS PRACTICABLE, BUT NO LATER THAN 14 CALENDAR DAYS AFTER THE ACTIVITY HAS CEASED. ALL DISTURBED AREAS SHALL BE STABILIZED, PERMANENT STABILIZATION SHALL BEGIN WITHIN 14 DAYS OF COMPLETION OF CONSTRUCTION ACTIVITIES. STABILIZATION PRACTICES SHALL INCLUDE SEEDING, MULCHING, PLACING SOD, PLANTING TREES OR SHRUBS, AND/OR USING GEOTEXTILE FABRICS OR OTHER APPROPRIATE MEASURES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SOIL AND EROSION CONTROL, DE-WATERING, WATER POLLUTION CONTROL, BYPASS PUMPING AND DUST CONTROL MEASURES PRIOR TO AND DURING CONSTRUCTION. THE CONTRACTOR SHALL MAINTAIN THE MEASURES THROUGHOUT THE CONSTRUCTION PERIOD TO PREVENT THE DISCHARGE OF SEDIMENT INTO THE STORM SEWER OR CREEKS AND STREAMS, AND AIRBORNE DUST ONTO ADJACENT PROPERTIES.
- DURING LAND DISTURBANCE ACTIVITIES AND UNTIL FINAL SITE STABILIZATION IS ACHIEVED, ALL DISTURBED AREAS SHALL AT ALL TIMES DRAIN TO APPROVED SEDIMENT CONTROL MEASURES. SEDIMENT-LADEN GROUNDWATER ENCOUNTERED DURING TRENCHING, BORING, DE-WATERING, OR OTHER ACTIVITIES SHALL BE PUMPED INTO A SEDIMENT TRAPPING DEVICE PRIOR TO BEING DISCHARGED INTO A STREAM, POND, SWALE, OR CATCH BASIN.
- ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED SO THAT THEY REMAIN FUNCTIONAL THROUGHOUT THE PROJECT. IF THE EROSION CONTROL MEASURES BECOME INEFFECTIVE DUE TO WEATHERING, DECOMPOSING, OR DAMAGE, CONTRACTOR SHALL REPLACE THE AFFECTED MEASURE IMMEDIATELY AT NO COST TO THE OWNER.
- THE ENGINEER OR RPR MAY REQUIRE THAT CERTAIN AREAS ARE TEMPORARILY SEEDED IN ACCORDANCE WITH ESTABLISHED EROSION AND SEDIMENT CONTROL REGULATIONS.
- THE CONTRACT STORM WATER MANUAL CONTAINS THAT DESIGN AND CONSTRUCTION STANDARDS FOR EROSION AND SEDIMENT CONTROL BMPs, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
 - SILT CHECKS
 - SEED AND MULCH
 - ROAD AND PARKING AREA STABILIZATION
 - CONSTRUCTION ENTRANCE
 - DUST CONTROL
 - NETS AND MATS
 - CHECK DAM
 - SEDIMENT TRAP
 - SEDIMENT POND
 - SILT FENCE
 - STORM DRAIN INLET PROTECTION
 - TEMPORARY STREAM CROSSING
 - CONSTRUCTION DE-WATERING
 - CONCRETE WASHOUT PITS
- THE KENTUCKY EROSION PREVENTION AND SEDIMENT CONTROL FIELD GUIDE PROVIDES ADDITIONAL GUIDANCE.
- A ROCK DAM(S), IF REQUIRED, SHALL BE CONSTRUCTED DURING THE FIRST PHASE OF MOBILIZATION AND SHALL REMAIN IN PLACE UNTIL FINAL SITE STABILIZATION IS ACHIEVED. AFTER FINAL SITE STABILIZATION IS ACHIEVED, ROCK CHECK DAM(S) SHALL BE CLEANED OR REPLACED AND RE-GRADED (SPREAD OUT) TO SERVE AS PERMANENT OUTLET PROTECTION(S).
- SOIL STOCKPILES SHALL BE LOCATED AWAY FROM STREAMS, PONDS, SWALES, AND CATCH BASINS. STOCKPILES SHALL BE SEEDED, MULCHED, AND ADEQUATELY CONTAINED THROUGH THE USE OF SILT FENCE. TOPSOIL, STOCKPILES, EXCAVATED STOCKPILES AND BORROW SITES SHALL BE SURROUNDED BY SILT FENCE, RE-SEEDED, AND PLACED WHERE SEDIMENT WILL NOT LEAVE THE SITE.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL BE REMOVED AND DISPOSED OF WITHIN THIRTY DAYS AFTER FINAL SITE STABILIZATION. FINAL STABILIZATION IS DEFINED AS A UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70% OR MORE ON NON-PAVED AREAS. TRAPPED SEDIMENT AND AREAS DISTURBED DURING REMOVAL OF THE CONTROLS SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION.
- TOPSOIL IN AREAS OF EXCAVATION MAY BE STRIPPED AND SEPARATELY STOCKPILED ON-SITE FOR FINISH LANDSCAPING AND/OR GRADING.

SPILL PREVENTION AND CONTROL

- THE FOLLOWING PRACTICES FOR SPILL PREVENTION CONTROL AND CLEANUP SHALL BE IMPLEMENTED BY THE CONTRACTOR:
 - THE CONTRACTOR'S SITE SUPERINTENDENT IS RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.
 - MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
 - ALL SPILLS OF TOXIC OR HAZARDOUS MATERIAL SHALL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE. THE KENTUCKY EMERGENCY RESPONSE TEAM (ERT) (800-928-2380), KNOTT COUNTY, 911, AND THE ENGINEER SHALL BE CONTACTED WITHIN ONE HOUR OF OCCURRENCE OF DISCOVERY.
 - THE SPILL PREVENTION PLAN SHALL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND SHALL INCLUDE MEASURES TO CLEAN UP FUTURE SPILLS. A DESCRIPTION OF THE SPILL, THE CAUSE, AND THE CLEANUP MEASURES SHALL BE INCLUDED

KNOTT COUNTY WATER & SEWER DISTRICT
7777 BIG BRANCH ROAD, VICO, KY 41773
OLIVE BRANCH SUBDIVISION DEVELOPMENT
WATER & SANITARY SEWER PROJECT



REVISIONS	
DATE	DESCRIPTION

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-933
DATE:	Jul. 27, 2026
SCALE:	NTS

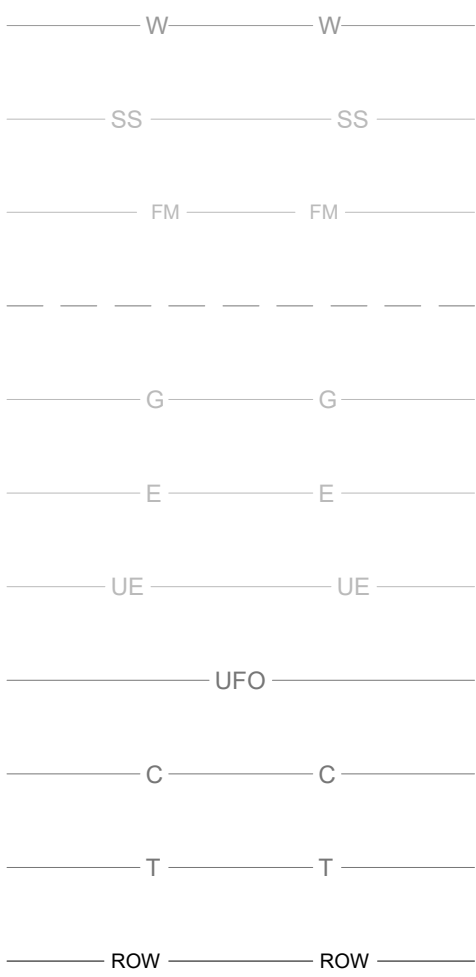


C 0.1

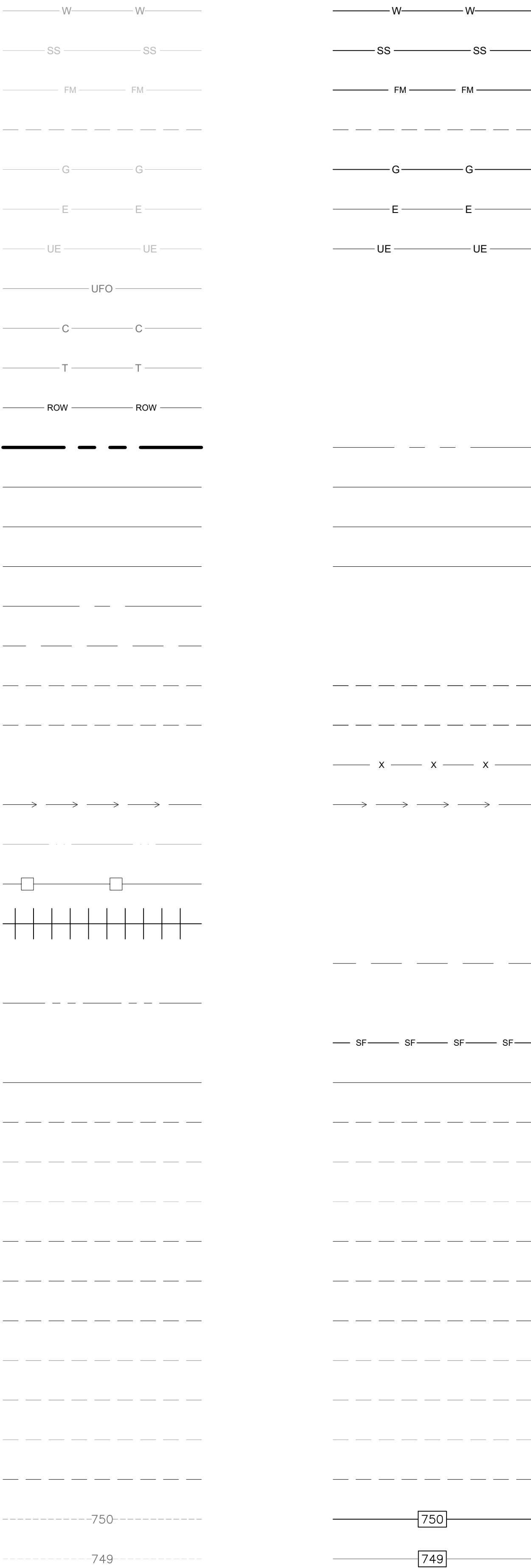
PE | RMJE GENERAL LEGEND

LINEAR FEATURES

EXISTING



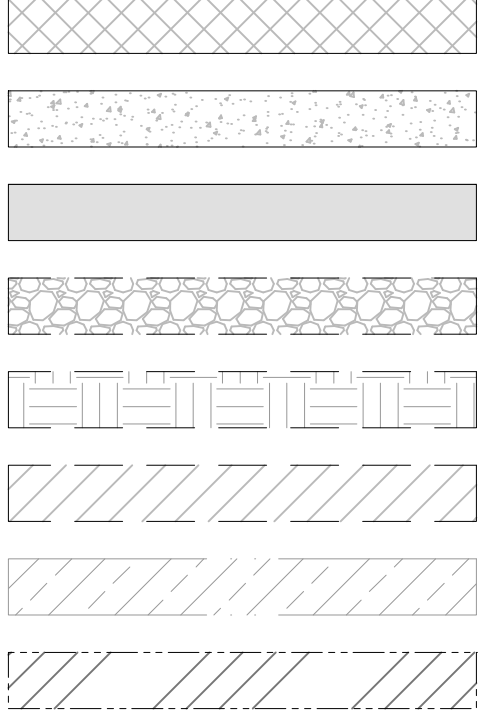
PROPOSED



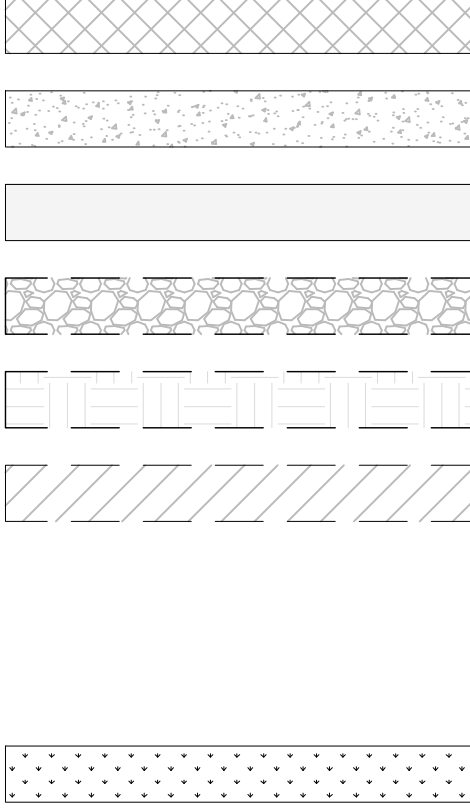
- WATERLINE
- SANITARY SEWER GRAVITY LINE
- SANITARY SEWER FORCE MAIN LINE
- STORM SEWER LINE
- GAS LINE
- OVERHEAD ELECTRIC
- UNDERGROUND ELECTRIC
- UNDERGROUND FIBER OPTIC
- UNDERGROUND COMMUNICATIONS
- UNDERGROUND TELEPHONE
- RIGHT OF WAY
- PROPERTY LINE
- PAVEMENT
- CONCRETE
- BUILDING
- CENTERLINE
- CURB
- GRAVEL
- UNPAVED ROAD
- FENCE
- FLOW LINE
- WATERWAY
- GUARDRAIL
- RAILROAD
- STEEL CASING
- FEMA FLOOD ZONE BOUNDARY
- SILT FENCE
- MISCELLANEOUS OBJECT
- ACCESS EASEMENT
- DRAINAGE EASEMENT
- ELECTRIC EASEMENT
- GAS EASEMENT
- MISCELLANEOUS EASEMENT
- SANITARY SEWER EASEMENT
- STORM SEWER EASEMENT
- TELEPHONE EASEMENT
- WATER EASEMENT
- UTILITY EASEMENT
- MAJOR CONTOUR
- MINOR CONTOUR

HATCH PATTERNS

EXISTING



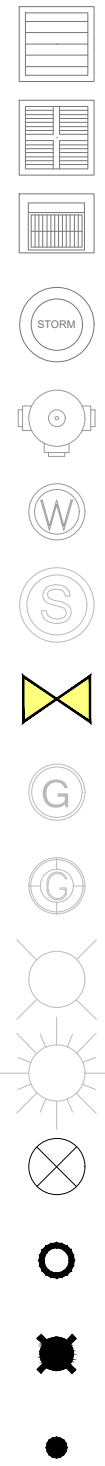
PROPOSED



- BUILDING
- CONCRETE
- PAVEMENT
- GRAVEL
- UNPAVED ROAD
- EASEMENT
- WATERWAY
- FEMA FLOODZONE BOUNDARY
- VEGETATION

TOPOGRAPHICAL FEATURES

EXISTING



PROPOSED



- INLET BOX
- YARD INLET BOX
- CURB INLET BOX
- STORM SEWER MANHOLE
- HYDRANT
- WATER METER
- SANITARY SEWER MANHOLE
- GAS VALVE
- GAS METER
- GAS WELL
- POWER POLE
- LIGHT POLE
- GATE VALVE
- AIR RELEASE VALVE
- CLEAN OUT
- IRON PIN FOUND
- IRON PIN SET

ABBREVIATIONS

EG:	EXISTING GRADE	N.T.S.:	NOT TO SCALE	TELE:	TELEPHONE	SF:	SQUARE FEET
FG:	FINISHED GRADE	KYTC:	KENTUCKY TRANSPORTATION CABINET	COMM:	COMMUNICATIONS	RCP:	REINFORCED CONCRETE PIPE
IPF:	IRON PIN FOUND	DOT:	DEPARTMENT OF TRANSPORTATION	UGFO:	UNDERGROUND FIBER OPTIC	PROP:	PROPOSED
IPS:	IRON PIN SET	DOW:	DIVISION OF WATER	FM:	FORCE MAIN	EX:	EXISTING
TOC:	TOP OF CONCRETE	CONC:	CONCRETE	DIA:	DIAMETER	INV:	INVERT
BOC:	BOTTOM OF CONCRETE	TDOT:	TENNESSEE DEPARTMENT OF TRANSPORTATION	FT:	FEET	HWY:	HIGHWAY
PVMT:	PAVEMENT	O/H:	OVERHEAD	IN:	INCH	TYP:	TYPICAL
D.I.:	DUCTILE IRON	UG:	UNDERGROUND	MI:	MILE	HT:	HEIGHT
HDPE:	HIGH DENSITY POLYETHYLENE	C/L:	CENTERLINE	ELEV:	ELEVATION	HW:	HEADWALL
PVC:	POLYVINYL CHLORIDE	PP:	POWER POLE	POC:	POINT OF CURVATURE	RR	RAILROAD
ROW:	RIGHT OF WAY	PL:	PROPERTY LINE	POT:	POINT OF TANGENT	R:	RADIUS

KNOTT COUNTY WATER & SEWER DISTRICT
7777 BIG BRANCH ROAD, VICO, KY 41773
OLIVE BRANCH SUBDIVISION DEVELOPMENT
WATER & SANITARY SEWER PROJECT

RMJE

PE

LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY
CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

REVISIONS	
DATE	DESCRIPTION

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 27, 2026
SCALE:	NTS





COORDINATE PROJECTION -
KY SINGLE ZONE (NAD83)

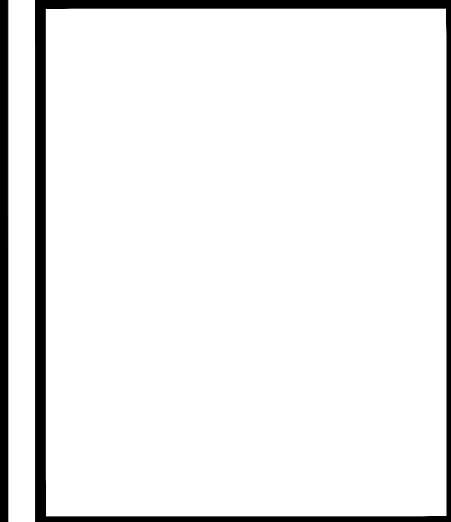
KNOTT COUNTY WATER & SEWER DISTRICT
7777 BIG BRANCH ROAD, VICO, KY 41773
OLIVE BRANCH SUBDIVISION DEVELOPMENT
WATER & SANITARY SEWER PROJECT



LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY
CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

REVISIONS	
DATE	DESCRIPTION

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 27, 2026
SCALE:	NTS



C 0.3



KNOTT COUNTY WATER & SEWER DISTRICT
7777 BIG BRANCH ROAD, VICO, KY 41773
OLIVE BRANCH SUBDIVISION DEVELOPMENT
WATER & SANITARY SEWER PROJECT



LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY
CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

REVISIONS	
DATE	DESCRIPTION

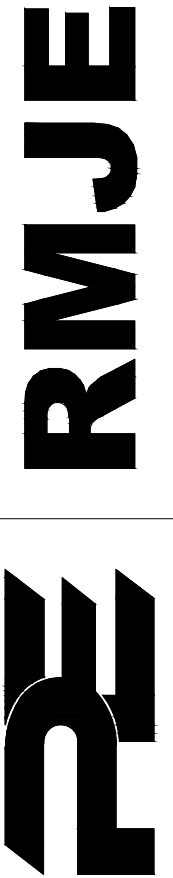
DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 27, 2026
SCALE:	NTS



C 0.4



KNOTT COUNTY WATER & SEWER DISTRICT
7777 BIG BRANCH ROAD, VICO, KY 41773
OLIVE BRANCH SUBDIVISION DEVELOPMENT
WATER & SANITARY SEWER PROJECT



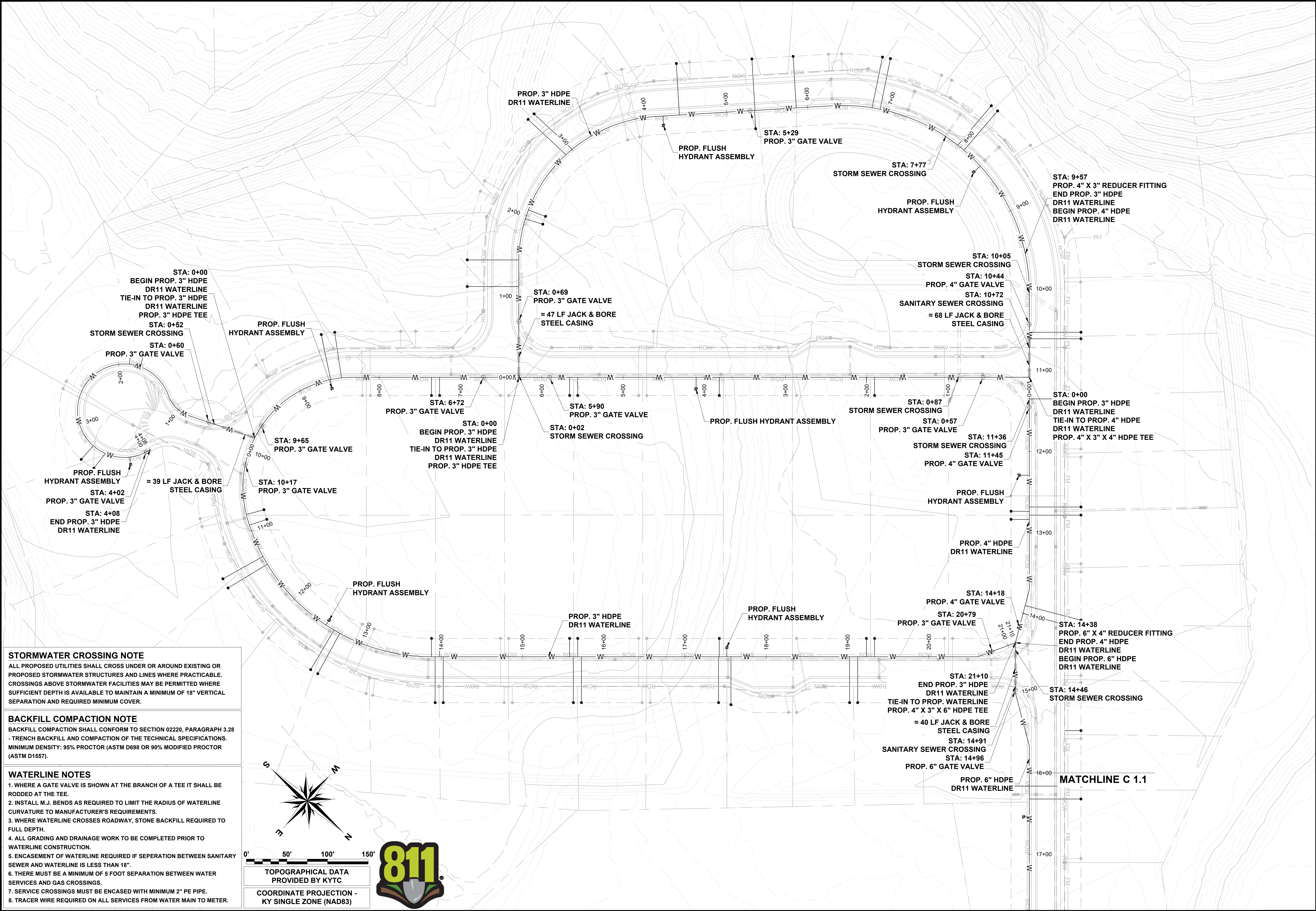
RMJE
LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY
CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

REVISIONS	
DATE	DESCRIPTION

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 27, 2026
SCALE:	NTS



C 0.5



KNOTT COUNTY WATER & SEWER DISTRICT
7777 BIG BRANCH ROAD, VICO, KY 41773
OLIVE BRANCH SUBDIVISION DEVELOPMENT
WATER & SANITARY SEWER PROJECT

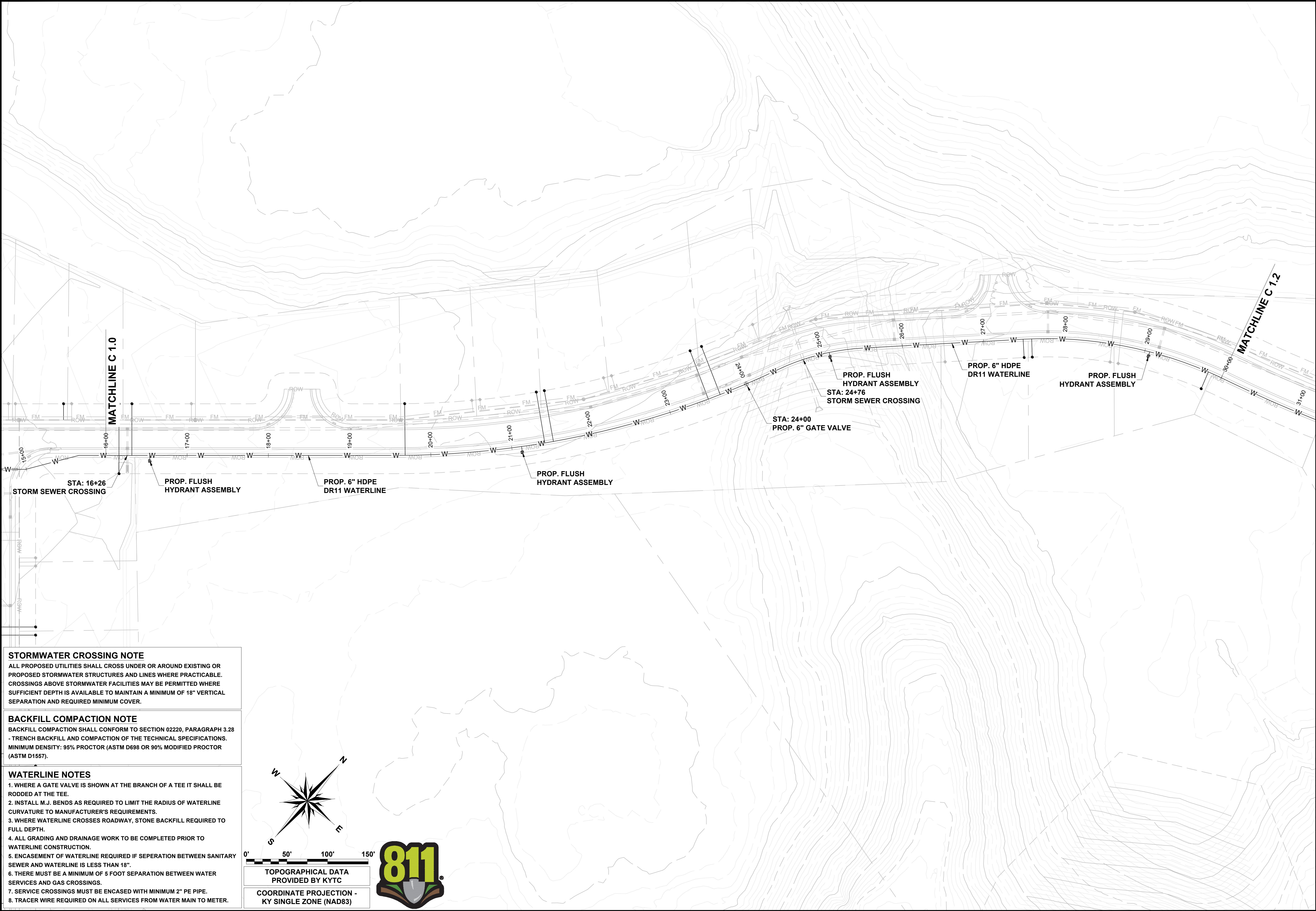
RMJE
LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY
CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

REVISIONS	
DATE	DESCRIPTION

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 27, 2026
SCALE:	SEE SHEET



C 1.0



STORMWATER CROSSING NOTE

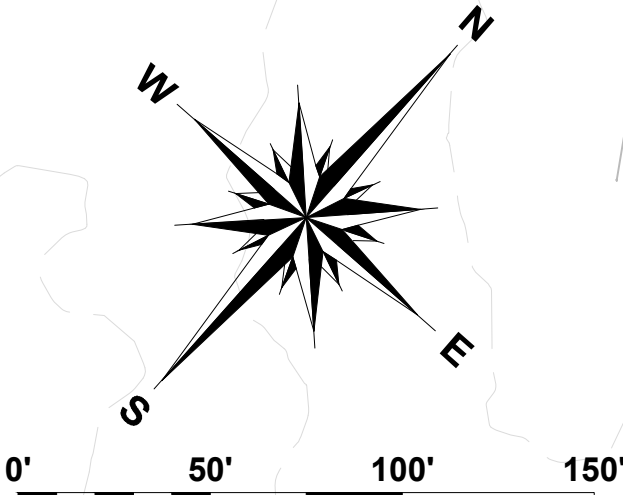
ALL PROPOSED UTILITIES SHALL CROSS UNDER OR AROUND EXISTING OR PROPOSED STORMWATER STRUCTURES AND LINES WHERE PRACTICABLE. CROSSINGS ABOVE STORMWATER FACILITIES MAY BE PERMITTED WHERE SUFFICIENT DEPTH IS AVAILABLE TO MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION AND REQUIRED MINIMUM COVER.

BACKFILL COMPACTION NOTE

BACKFILL COMPACTION SHALL CONFORM TO SECTION 02220, PARAGRAPH 3.28 - TRENCH BACKFILL AND COMPACTION OF THE TECHNICAL SPECIFICATIONS. MINIMUM DENSITY: 95% PROCTOR (ASTM D698 OR 90% MODIFIED PROCTOR (ASTM D1557).

WATERLINE NOTES

1. WHERE A GATE VALVE IS SHOWN AT THE BRANCH OF A TEE IT SHALL BE RODDED AT THE TEE.
2. INSTALL M.J. BENDS AS REQUIRED TO LIMIT THE RADIUS OF WATERLINE CURVATURE TO MANUFACTURER'S REQUIREMENTS.
3. WHERE WATERLINE CROSSES ROADWAY, STONE BACKFILL REQUIRED TO FULL DEPTH.
4. ALL GRADING AND DRAINAGE WORK TO BE COMPLETED PRIOR TO WATERLINE CONSTRUCTION.
5. ENCASEMENT OF WATERLINE REQUIRED IF SEPERATION BETWEEN SANITARY SEWER AND WATERLINE IS LESS THAN 18".
6. THERE MUST BE A MINIMUM OF 5 FOOT SEPARATION BETWEEN WATER SERVICES AND GAS CROSSINGS.
7. SERVICE CROSSINGS MUST BE ENCASED WITH MINIMUM 2" PE PIPE.
8. TRACER WIRE REQUIRED ON ALL SERVICES FROM WATER MAIN TO METER.



TOPOGRAPHICAL DATA
PROVIDED BY KYTC

COORDINATE PROJECTION -
KY SINGLE ZONE (NAD83)



KNOTT COUNTY WATER & SEWER DISTRICT
7777 BIG BRANCH ROAD, VICO, KY 41773

OLIVE BRANCH SUBDIVISION DEVELOPMENT
WATER & SANITARY SEWER PROJECT

RMJE

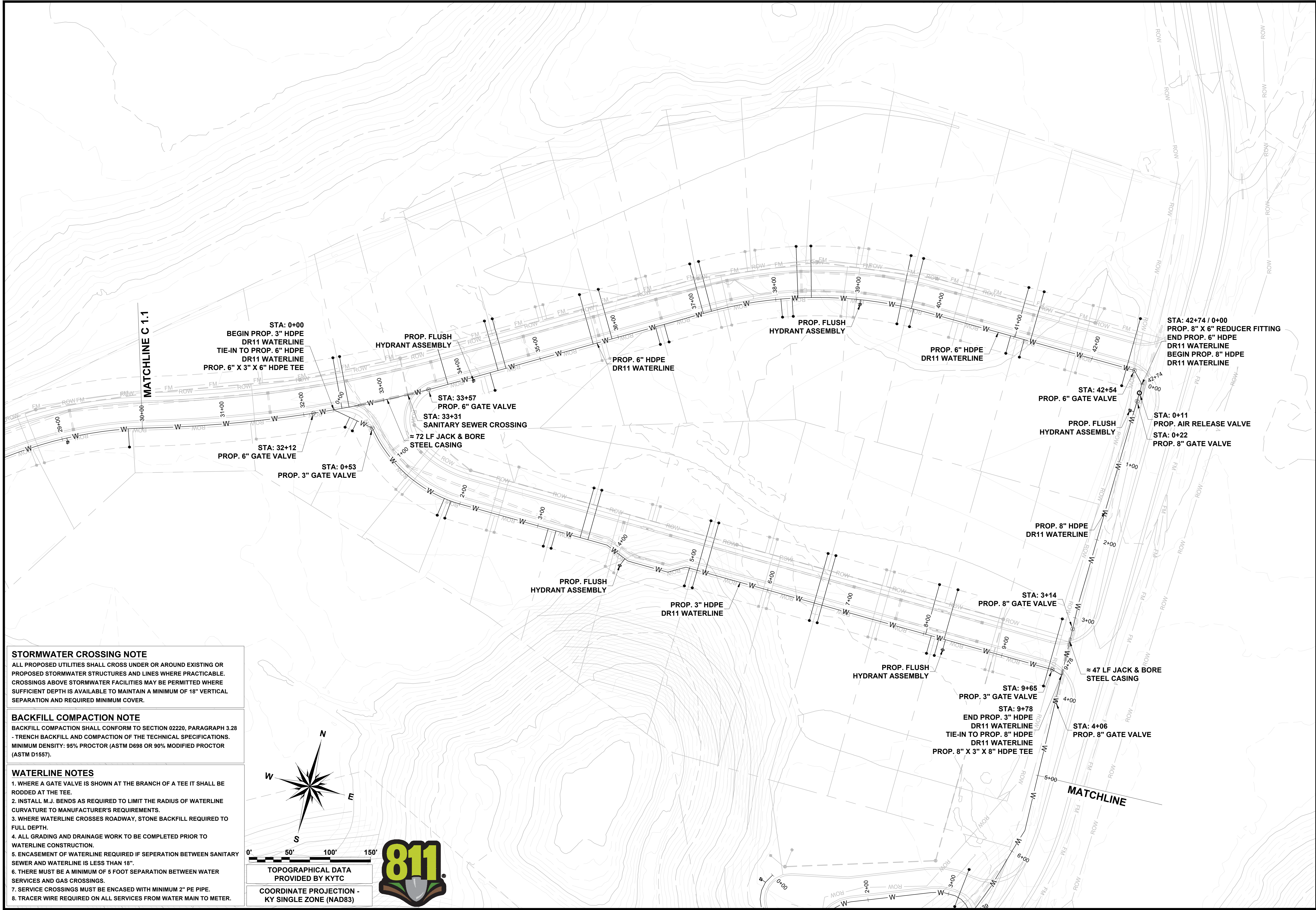
LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY

CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

REVISIONS	
DATE	DESCRIPTION

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 27, 2026
SCALE:	SEE SHEET

C 1.1



STORMWATER CROSSING NOTE
ALL PROPOSED UTILITIES SHALL CROSS UNDER OR AROUND EXISTING OR PROPOSED STORMWATER STRUCTURES AND LINES WHERE PRACTICABLE. CROSSINGS ABOVE STORMWATER FACILITIES MAY BE PERMITTED WHERE SUFFICIENT DEPTH IS AVAILABLE TO MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION AND REQUIRED MINIMUM COVER.

BACKFILL COMPACTION NOTE
BACKFILL COMPACTION SHALL CONFORM TO SECTION 02220, PARAGRAPH 3.28 - TRENCH BACKFILL AND COMPACTION OF THE TECHNICAL SPECIFICATIONS. MINIMUM DENSITY: 95% PROCTOR (ASTM D698 OR 90% MODIFIED PROCTOR (ASTM D1557).

- WATERLINE NOTES**
1. WHERE A GATE VALVE IS SHOWN AT THE BRANCH OF A TEE IT SHALL BE RODDED AT THE TEE.
 2. INSTALL M.J. BENDS AS REQUIRED TO LIMIT THE RADIUS OF WATERLINE CURVATURE TO MANUFACTURER'S REQUIREMENTS.
 3. WHERE WATERLINE CROSSES ROADWAY, STONE BACKFILL REQUIRED TO FULL DEPTH.
 4. ALL GRADING AND DRAINAGE WORK TO BE COMPLETED PRIOR TO WATERLINE CONSTRUCTION.
 5. ENCASEMENT OF WATERLINE REQUIRED IF SEPERATION BETWEEN SANITARY SEWER AND WATERLINE IS LESS THAN 18".
 6. THERE MUST BE A MINIMUM OF 5 FOOT SEPARATION BETWEEN WATER SERVICES AND GAS CROSSINGS.
 7. SERVICE CROSSINGS MUST BE ENCASED WITH MINIMUM 2" PE PIPE.
 8. TRACER WIRE REQUIRED ON ALL SERVICES FROM WATER MAIN TO METER.

TOPOGRAPHICAL DATA
PROVIDED BY KYTC

COORDINATE PROJECTION -
KY SINGLE ZONE (NAD83)

KNOTT COUNTY WATER & SEWER DISTRICT
7777 BIG BRANCH ROAD, VICO, KY 41773

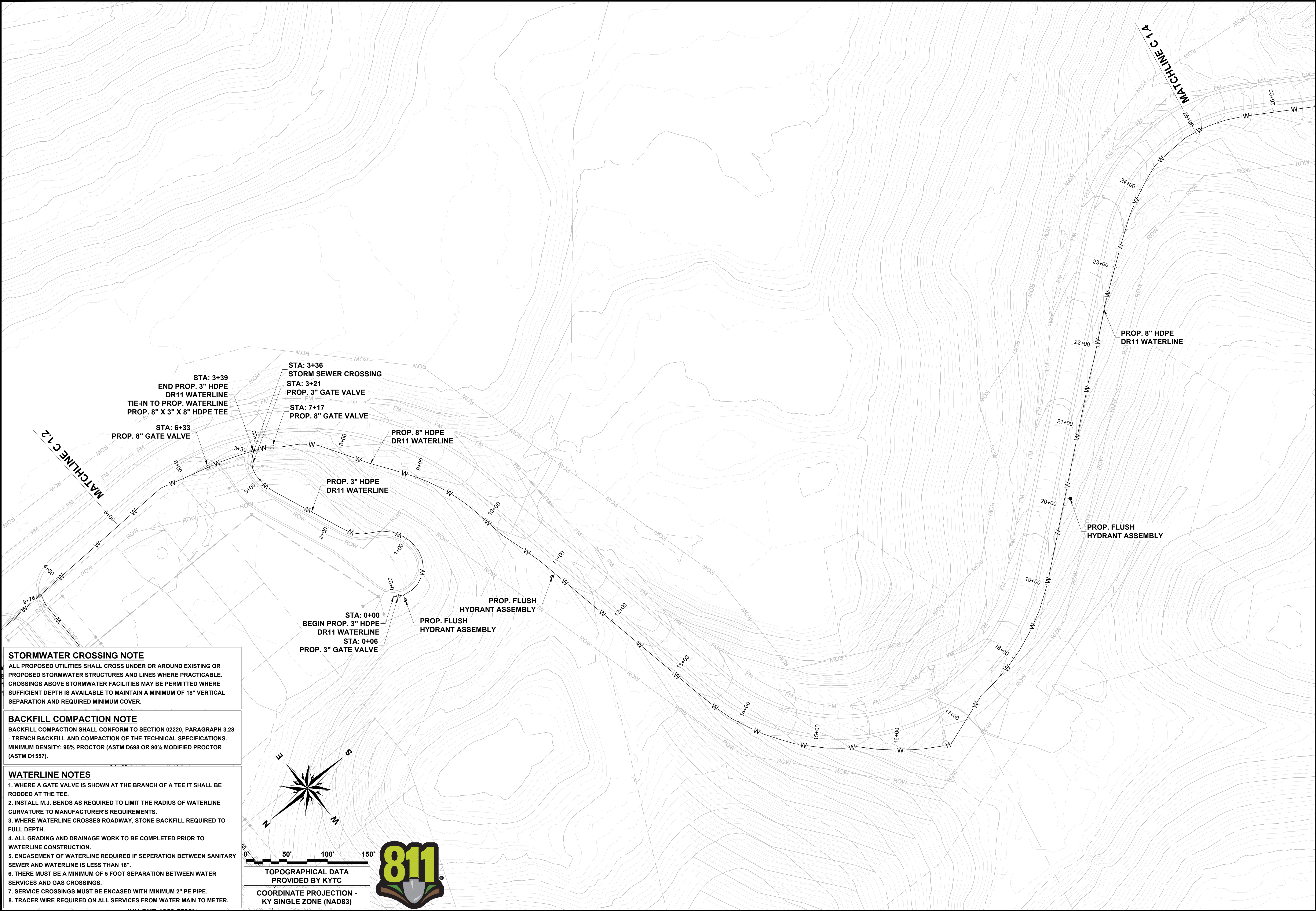
OLIVE BRANCH SUBDIVISION DEVELOPMENT
WATER & SANITARY SEWER PROJECT

LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY
CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

REVISIONS	
DATE	DESCRIPTION

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 27, 2026
SCALE:	SEE SHEET

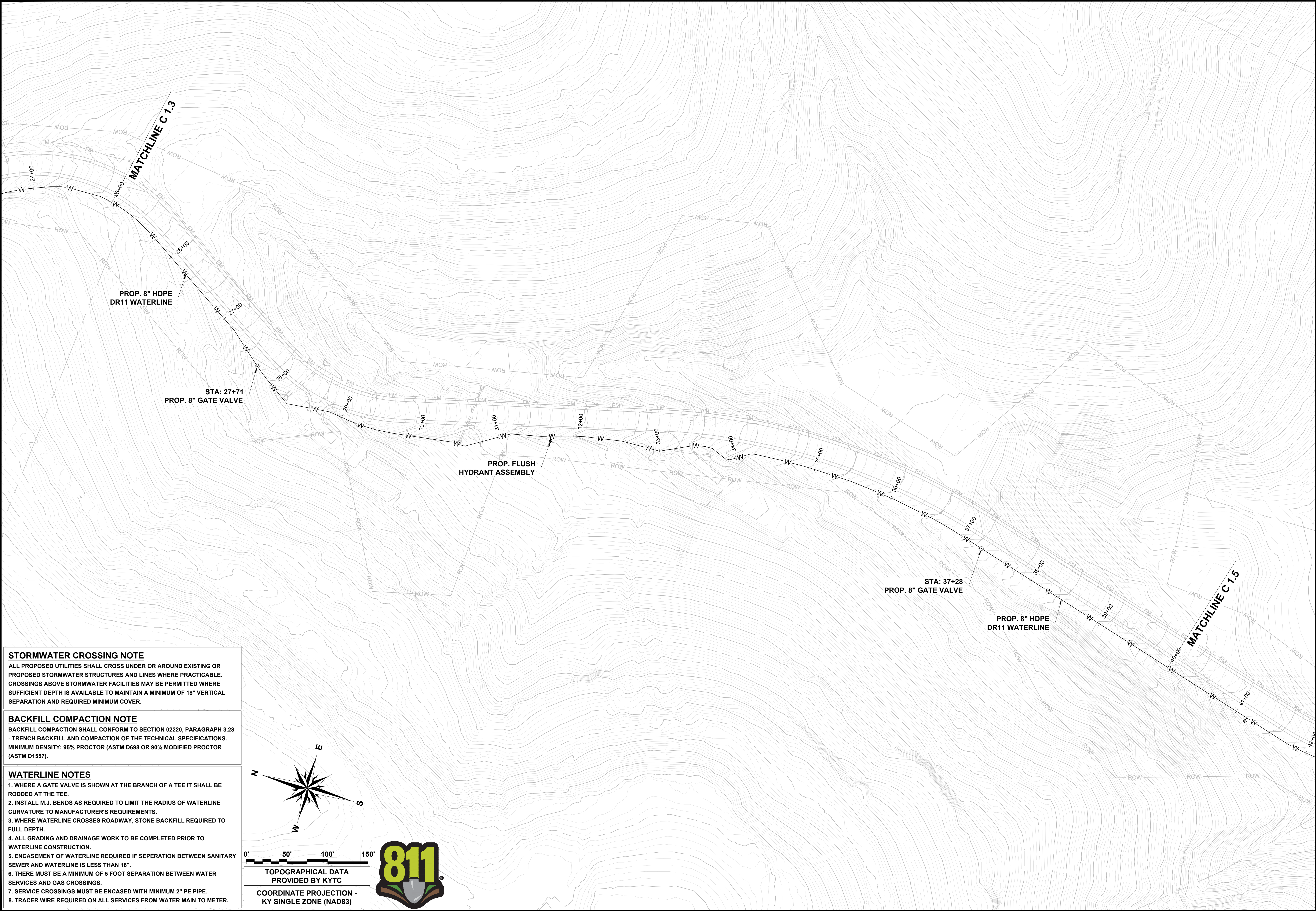
C 1.2



REVISIONS	
DATE	DESCRIPTION

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 27, 2026
SCALE:	SEE SHEET





STORMWATER CROSSING NOTE

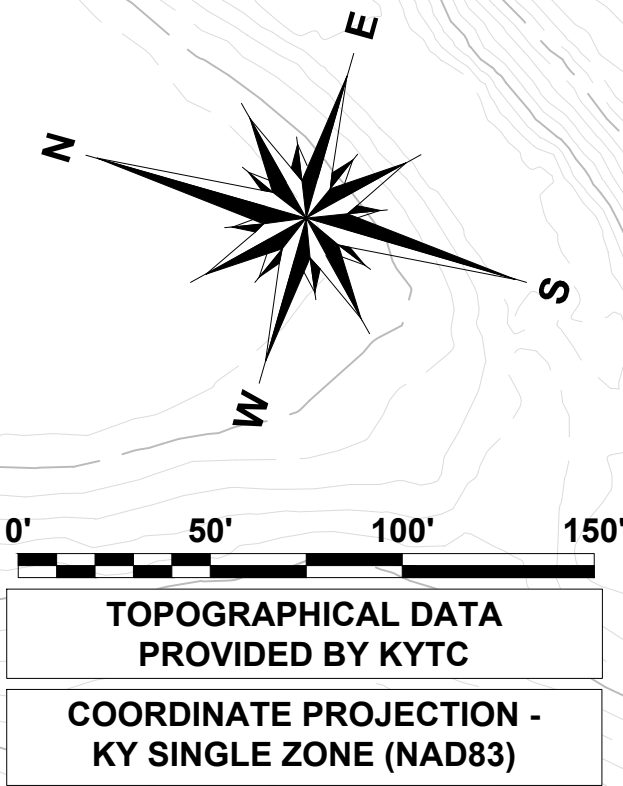
ALL PROPOSED UTILITIES SHALL CROSS UNDER OR AROUND EXISTING OR PROPOSED STORMWATER STRUCTURES AND LINES WHERE PRACTICABLE. CROSSINGS ABOVE STORMWATER FACILITIES MAY BE PERMITTED WHERE SUFFICIENT DEPTH IS AVAILABLE TO MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION AND REQUIRED MINIMUM COVER.

BACKFILL COMPACTION NOTE

BACKFILL COMPACTION SHALL CONFORM TO SECTION 02220, PARAGRAPH 3.28 - TRENCH BACKFILL AND COMPACTION OF THE TECHNICAL SPECIFICATIONS. MINIMUM DENSITY: 95% PROCTOR (ASTM D698 OR 90% MODIFIED PROCTOR (ASTM D1557).

WATERLINE NOTES

1. WHERE A GATE VALVE IS SHOWN AT THE BRANCH OF A TEE IT SHALL BE RODDED AT THE TEE.
2. INSTALL M.J. BENDS AS REQUIRED TO LIMIT THE RADIUS OF WATERLINE CURVATURE TO MANUFACTURER'S REQUIREMENTS.
3. WHERE WATERLINE CROSSES ROADWAY, STONE BACKFILL REQUIRED TO FULL DEPTH.
4. ALL GRADING AND DRAINAGE WORK TO BE COMPLETED PRIOR TO WATERLINE CONSTRUCTION.
5. ENCASEMENT OF WATERLINE REQUIRED IF SEPERATION BETWEEN SANITARY SEWER AND WATERLINE IS LESS THAN 18".
6. THERE MUST BE A MINIMUM OF 5 FOOT SEPARATION BETWEEN WATER SERVICES AND GAS CROSSINGS.
7. SERVICE CROSSINGS MUST BE ENCASED WITH MINIMUM 2" PE PIPE.
8. TRACER WIRE REQUIRED ON ALL SERVICES FROM WATER MAIN TO METER.



KNOTT COUNTY WATER & SEWER DISTRICT

7777 BIG BRANCH ROAD, VICO, KY 41773

OLIVE BRANCH SUBDIVISION DEVELOPMENT

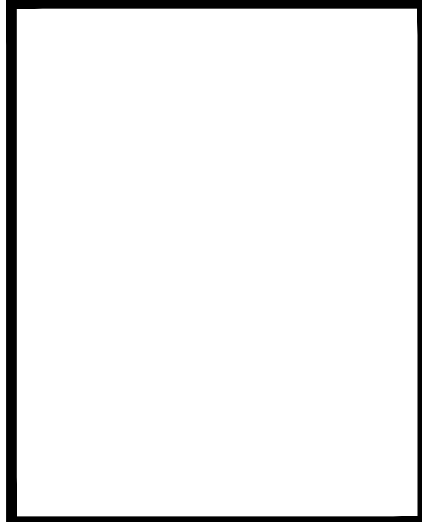
WATER & SANITARY SEWER PROJECT

RMJE

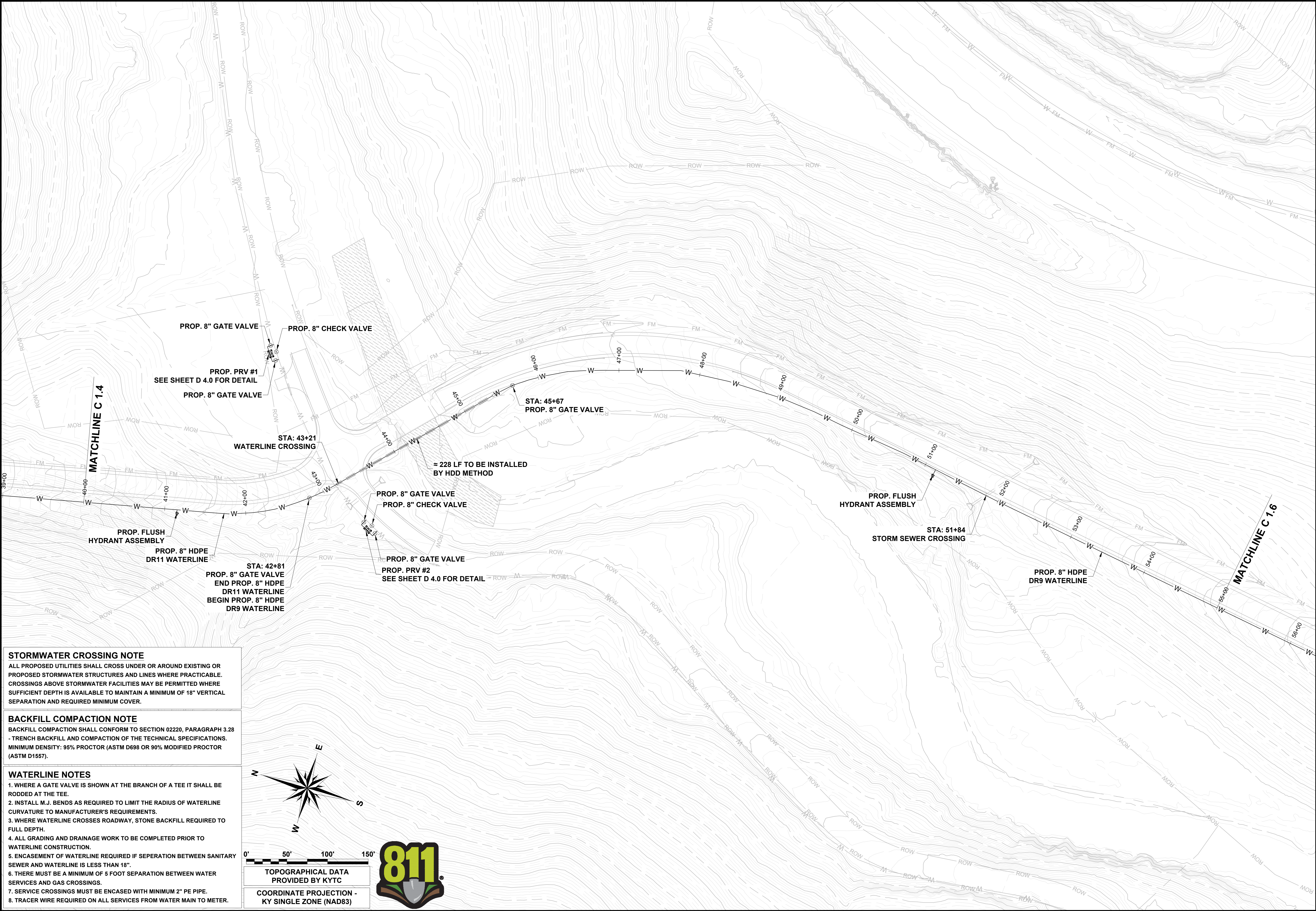
LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY
CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

REVISIONS	
DATE	DESCRIPTION

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 27, 2026
SCALE:	SEE SHEET



C 1.4



STORMWATER CROSSING NOTE
ALL PROPOSED UTILITIES SHALL CROSS UNDER OR AROUND EXISTING OR PROPOSED STORMWATER STRUCTURES AND LINES WHERE PRACTICABLE. CROSSINGS ABOVE STORMWATER FACILITIES MAY BE PERMITTED WHERE SUFFICIENT DEPTH IS AVAILABLE TO MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION AND REQUIRED MINIMUM COVER.

BACKFILL COMPACTION NOTE
BACKFILL COMPACTION SHALL CONFORM TO SECTION 02220, PARAGRAPH 3.28 - TRENCH BACKFILL AND COMPACTION OF THE TECHNICAL SPECIFICATIONS. MINIMUM DENSITY: 95% PROCTOR (ASTM D698 OR 90% MODIFIED PROCTOR (ASTM D1557)).

- WATERLINE NOTES**
1. WHERE A GATE VALVE IS SHOWN AT THE BRANCH OF A TEE IT SHALL BE RODDED AT THE TEE.
 2. INSTALL M.J. BENDS AS REQUIRED TO LIMIT THE RADIUS OF WATERLINE CURVATURE TO MANUFACTURER'S REQUIREMENTS.
 3. WHERE WATERLINE CROSSES ROADWAY, STONE BACKFILL REQUIRED TO FULL DEPTH.
 4. ALL GRADING AND DRAINAGE WORK TO BE COMPLETED PRIOR TO WATERLINE CONSTRUCTION.
 5. ENCASEMENT OF WATERLINE REQUIRED IF SEPERATION BETWEEN SANITARY SEWER AND WATERLINE IS LESS THAN 18".
 6. THERE MUST BE A MINIMUM OF 5 FOOT SEPARATION BETWEEN WATER SERVICES AND GAS CROSSINGS.
 7. SERVICE CROSSINGS MUST BE ENCASED WITH MINIMUM 2" PE PIPE.
 8. TRACER WIRE REQUIRED ON ALL SERVICES FROM WATER MAIN TO METER.

KNOTT COUNTY WATER & SEWER DISTRICT
7777 BIG BRANCH ROAD, VICO, KY 41773
OLIVE BRANCH SUBDIVISION DEVELOPMENT
WATER & SANITARY SEWER PROJECT

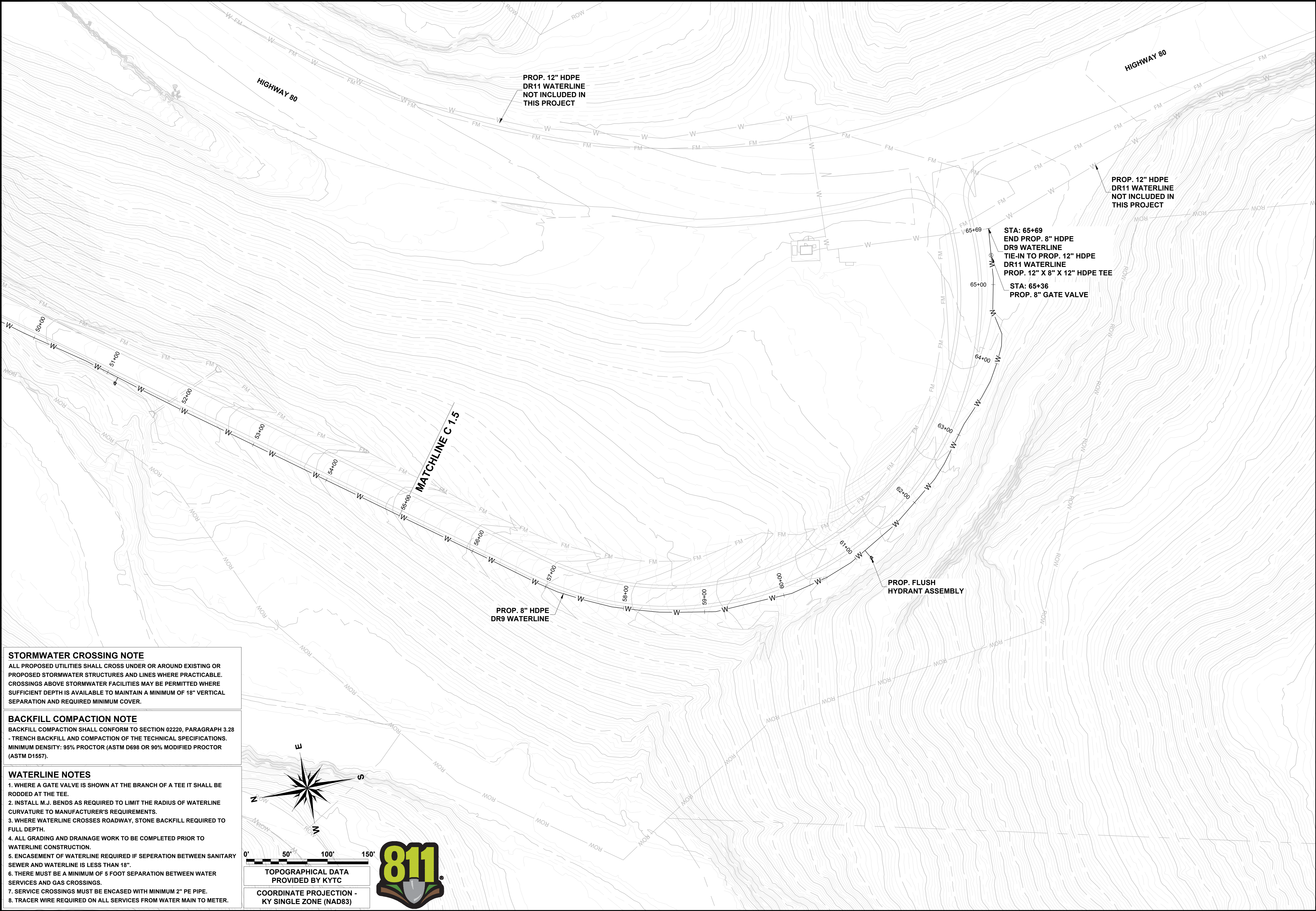
RMJE
LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY
CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

REVISIONS	
DATE	DESCRIPTION

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 31, 2026
SCALE:	SEE SHEET



C 1.5



KNOTT COUNTY WATER & SEWER DISTRICT

7777 BIG BRANCH ROAD, VICO, KY 41773

OLIVE BRANCH SUBDIVISION DEVELOPMENT

WATER & SANITARY SEWER PROJECT



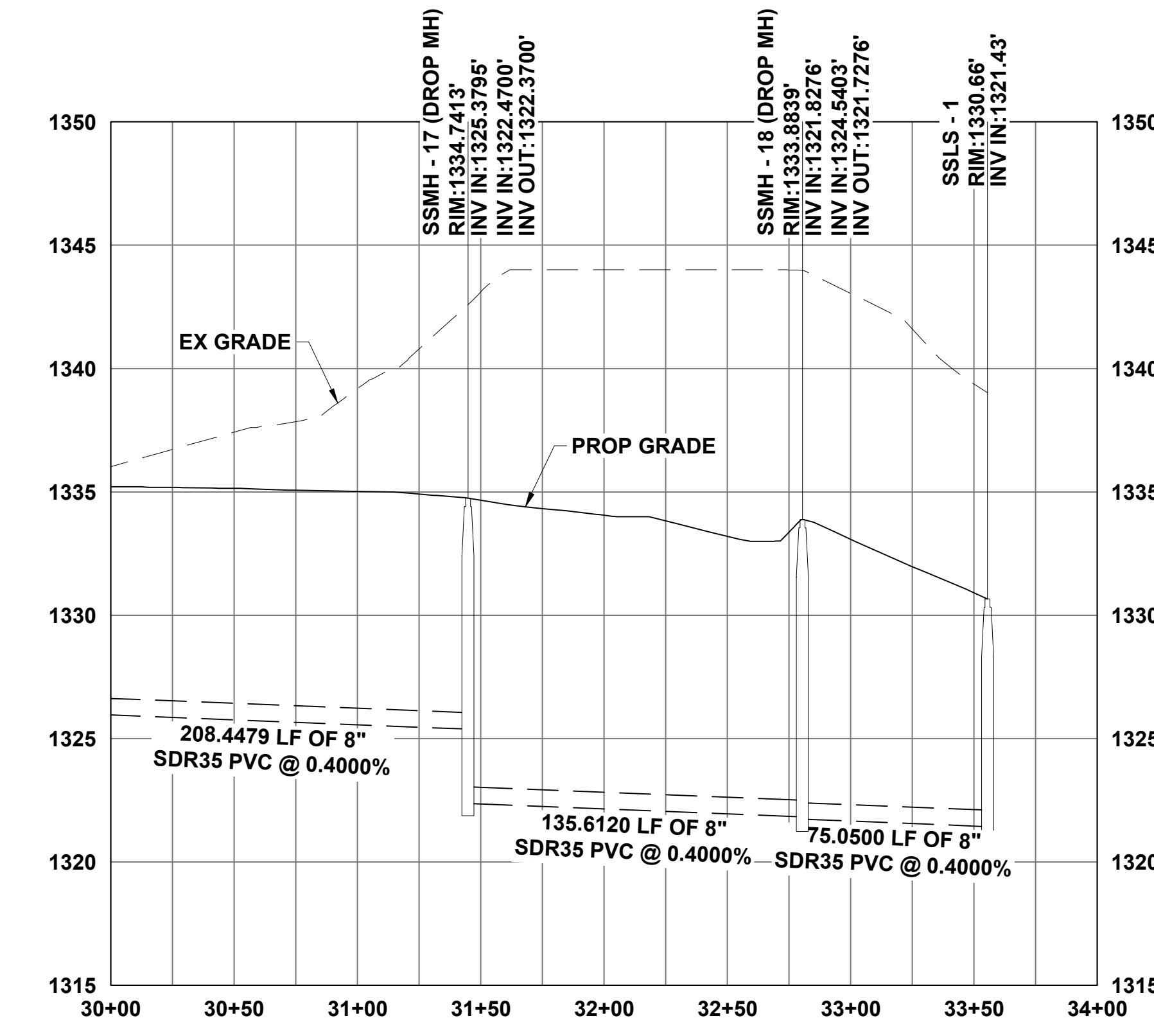
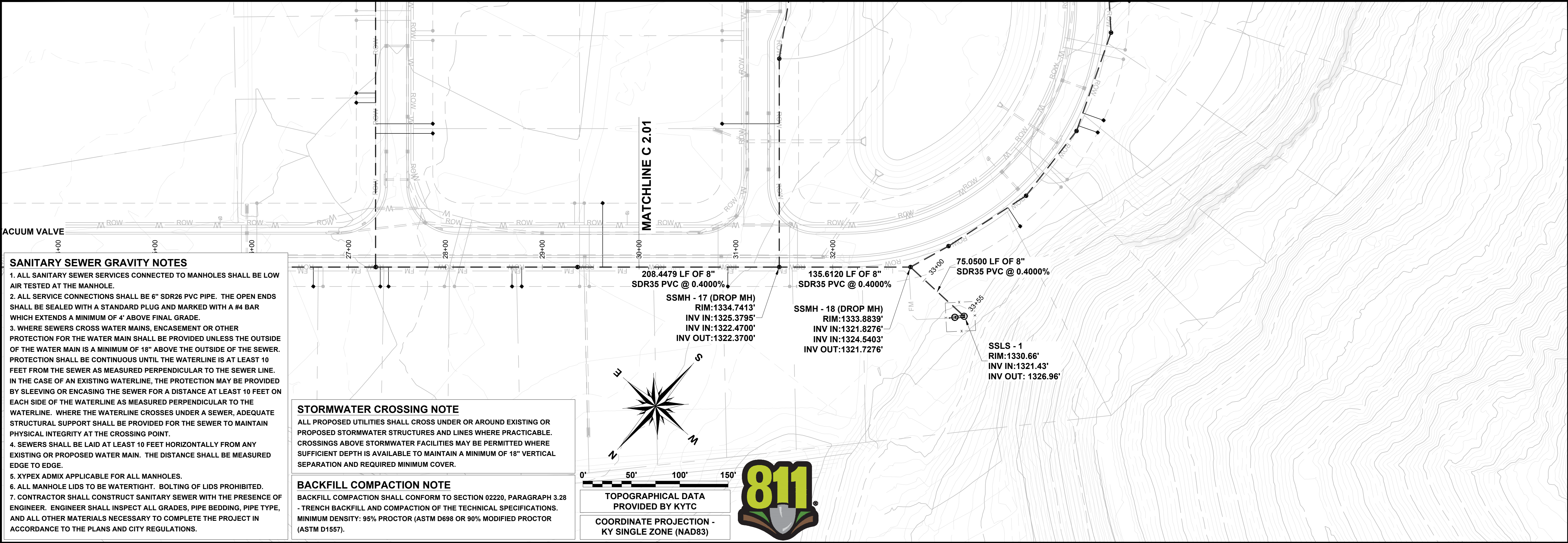
LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY
CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

REVISIONS	
DATE	DESCRIPTION

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 27, 2026
SCALE:	SEE SHEET



C 1.6



SSMH - 17 - SSLS - 1
H: 1"=50' V: 1"=5'
STA: 30+00 - 34+00

KNOTT COUNTY WATER & SEWER DISTRICT
7777 BIG BRANCH ROAD, VICO, KY 41773
OLIVE BRANCH SUBDIVISION DEVELOPMENT
WATER & SANITARY SEWER PROJECT

RMJE
LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY
CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

REVISIONS	
DATE	DESCRIPTION

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 27, 2026
SCALE:	SEE SHEET

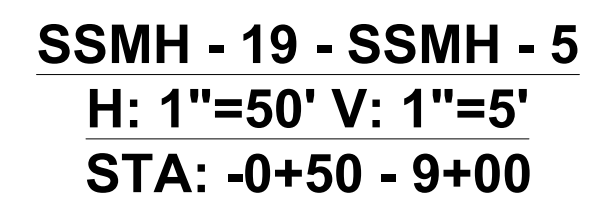


C 2.02

1. ALL SANITARY SEWER SERVICES CONNECTED TO MANHOLES SHALL BE LOW AIR TESTED AT THE MANHOLE.
2. ALL SERVICE CONNECTIONS SHALL BE 6" SDR26 PVC PIPE. THE OPEN ENDS SHALL BE SEALED WITH A STANDARD PLUG AND MARKED WITH A #4 BAR WHICH EXTENDS A MINIMUM OF 4' ABOVE FINAL GRADE.
3. WHERE SEWERS CROSS WATER MAINS, ENCASEMENT OR OTHER PROTECTION FOR THE WATER MAIN SHALL BE PROVIDED UNLESS THE OUTSIDE OF THE WATER MAIN IS A MINIMUM OF 18" ABOVE THE OUTSIDE OF THE SEWER. PROTECTION SHALL BE CONTINUOUS UNTIL THE WATERLINE IS AT LEAST 10 FEET FROM THE SEWER AS MEASURED PERPENDICULAR TO THE SEWER LINE. IN THE CASE OF AN EXISTING WATERLINE, THE PROTECTION MAY BE PROVIDED BY SLEEVING OR ENCASING THE SEWER FOR A DISTANCE AT LEAST 10 FEET ON EACH SIDE OF THE WATERLINE AS MEASURED PERPENDICULAR TO THE WATERLINE. WHERE THE WATERLINE CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO MAINTAIN PHYSICAL INTEGRITY AT THE CROSSING POINT.
4. SEWERS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE.
5. XYPEX ADMIX APPLICABLE FOR ALL MANHOLES.
6. ALL MANHOLE LIDS TO BE WATERTIGHT. BOLTING OF LIDS PROHIBITED.
7. CONTRACTOR SHALL CONSTRUCT SANITARY SEWER WITH THE PRESENCE OF ENGINEER. ENGINEER SHALL INSPECT ALL GRADES, PIPE BEDDING, PIPE TYPE, AND ALL OTHER MATERIALS NECESSARY TO COMPLETE THE PROJECT IN ACCORDANCE TO THE PLANS AND CITY REGULATIONS.

ALL PROPOSED UTILITIES SHALL CROSS UNDER OR AROUND EXISTING OR PROPOSED STORMWATER STRUCTURES AND LINES WHERE PRACTICABLE. CROSSINGS ABOVE STORMWATER FACILITIES MAY BE PERMITTED WHERE SUFFICIENT DEPTH IS AVAILABLE TO MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION AND REQUIRED MINIMUM COVER.

BACKFILL COMPACTION SHALL CONFORM TO SECTION 02220, PARAGRAPH 3.28
- TRENCH BACKFILL AND COMPACTION OF THE TECHNICAL SPECIFICATIONS.
MINIMUM DENSITY: 95% PROCTOR (ASTM D698 OR 90% MODIFIED PROCTOR
(ASTM D1557).



RMJE
 LEXINGTON | HINDMAN | TOMPKINSVILLE
 KENTUCKY
 CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

[illegible]

C 2.1

SANITARY SEWER GRAVITY NOTES

1. ALL SANITARY SEWER SERVICES CONNECTED TO MANHOLES SHALL BE LOW AIR TESTED AT THE MANHOLE.

2. ALL SERVICE CONNECTIONS SHALL BE 6" SDR26 PVC PIPE. THE OPEN ENDS SHALL BE SEALED WITH A STANDARD PLUG AND MARKED WITH A #4 BAR WHICH EXTENDS A MINIMUM OF 4" ABOVE FINAL GRADE.

3. WHERE SEWERS CROSS WATER MAINS, ENCASEMENT OR OTHER PROTECTION FOR THE WATER MAIN SHALL BE PROVIDED UNLESS THE OUTSIDE OF THE WATER MAIN IS A MINIMUM OF 18" ABOVE THE OUTSIDE OF THE SEWER. PROTECTION SHALL BE CONTINUOUS UNTIL THE WATERLINE IS AT LEAST 10 FEET FROM THE SEWER AS MEASURED PERPENDICULAR TO THE SEWER LINE. IN THE CASE OF AN EXISTING WATERLINE, THE PROTECTION MAY BE PROVIDED BY SLEEVING OR ENCASING THE SEWER FOR A DISTANCE AT LEAST 10 FEET ON EACH SIDE OF THE WATERLINE AS MEASURED PERPENDICULAR TO THE WATERLINE. WHERE THE WATERLINE CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO MAINTAIN PHYSICAL INTEGRITY AT THE CROSSING POINT.

4. SEWERS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE.

5. XYPEX ADMIX APPLICABLE FOR ALL MANHOLES.

6. ALL MANHOLE LIDS TO BE WATERTIGHT. BOLTING OF LIDS PROHIBITED.

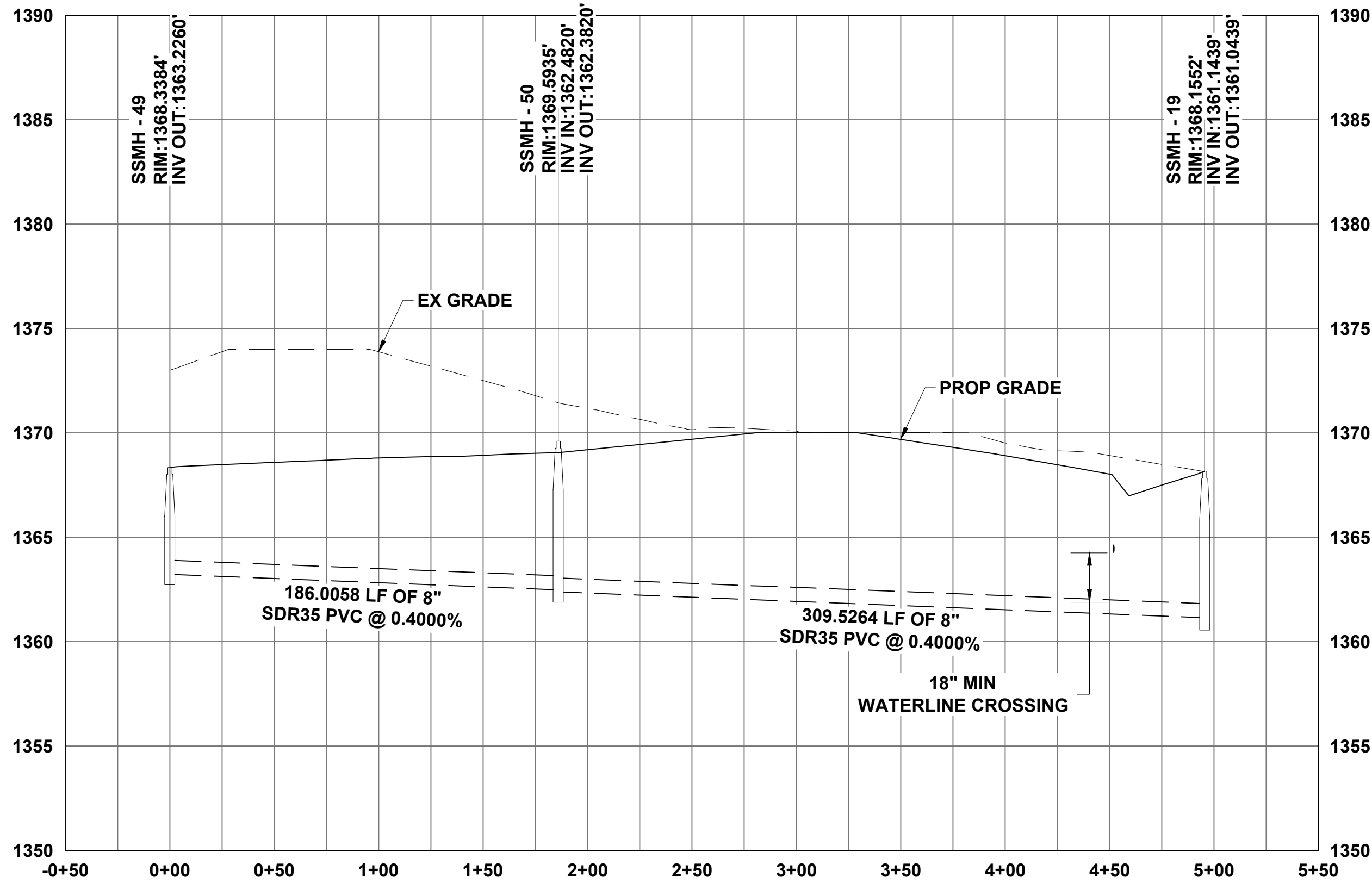
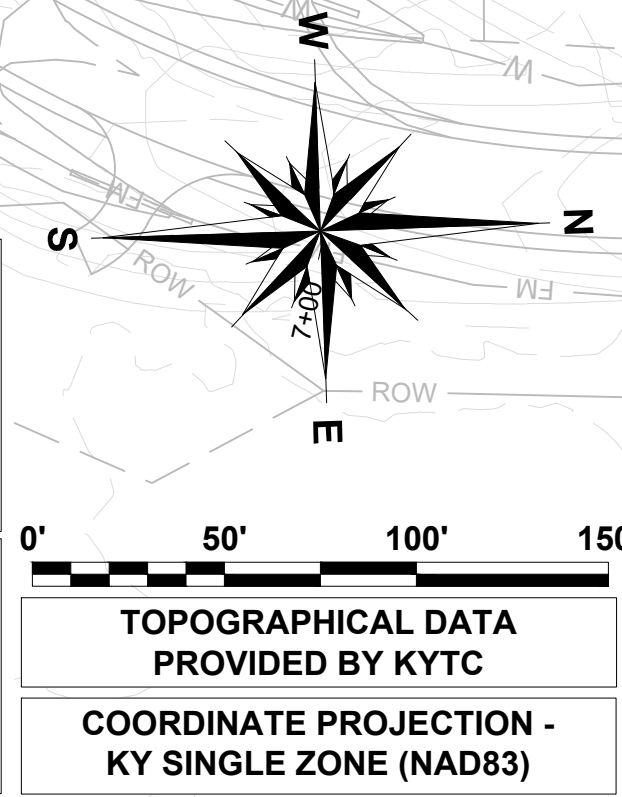
7. CONTRACTOR SHALL CONSTRUCT SANITARY SEWER WITH THE PRESENCE OF ENGINEER. ENGINEER SHALL INSPECT ALL GRADES, PIPE BEDDING, PIPE TYPE, AND ALL OTHER MATERIALS NECESSARY TO COMPLETE THE PROJECT IN ACCORDANCE TO THE PLANS AND CITY REGULATIONS.

STORMWATER CROSSING NOTE

ALL PROPOSED UTILITIES SHALL CROSS UNDER OR AROUND EXISTING OR PROPOSED STORMWATER STRUCTURES AND LINES WHERE PRACTICABLE. CROSSINGS ABOVE STORMWATER FACILITIES MAY BE PERMITTED WHERE SUFFICIENT DEPTH IS AVAILABLE TO MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION AND REQUIRED MINIMUM COVER.

BACKFILL COMPACTION NOTE

BACKFILL COMPACTION SHALL CONFORM TO SECTION 02220, PARAGRAPH 3.28 - TRENCH BACKFILL AND COMPACTION OF THE TECHNICAL SPECIFICATIONS. MINIMUM DENSITY: 95% PROCTOR (ASTM D698 OR 90% MODIFIED PROCTOR (ASTM D1557).



SSMH - 49 - SSMH - 19
H: 1"=50' V: 1"=5'
STA: -0+50 - 5+50

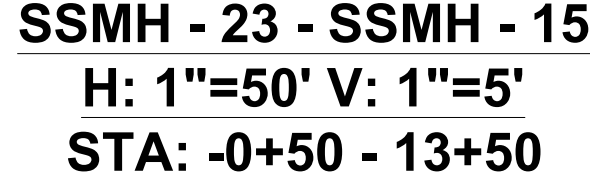
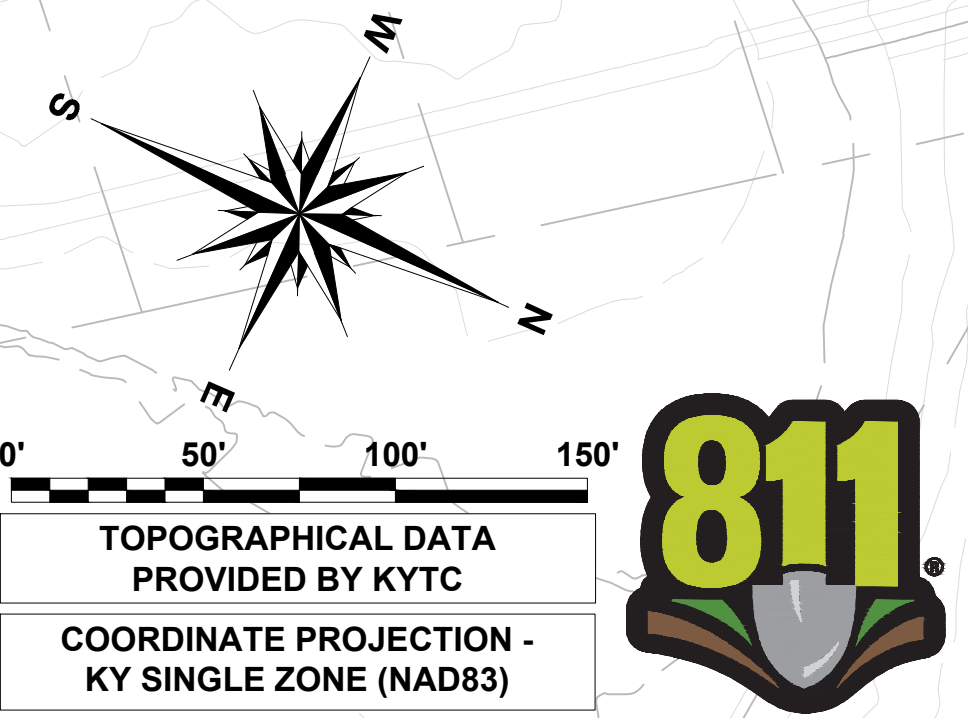
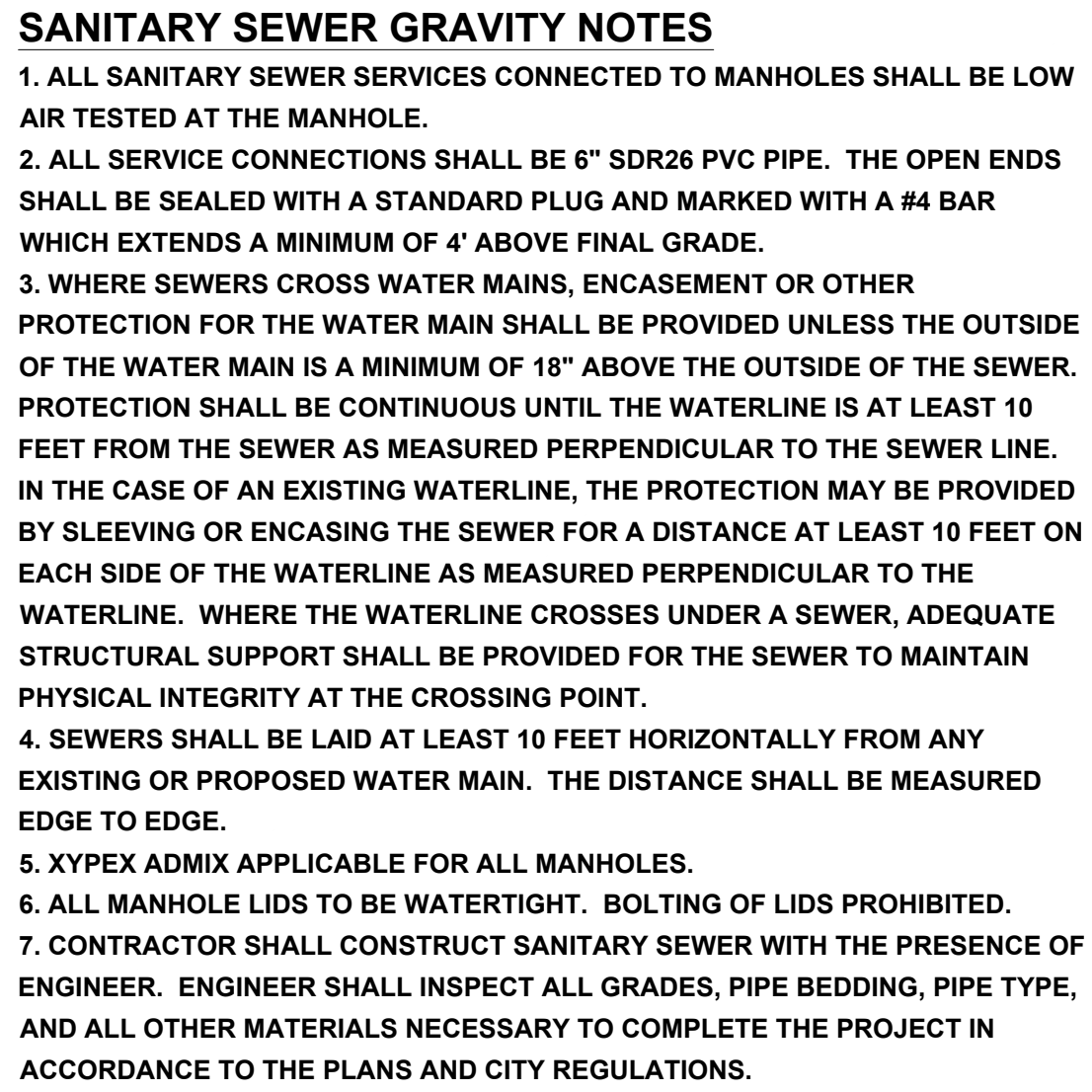
KNOTT COUNTY WATER & SEWER DISTRICT
7777 BIG BRANCH ROAD, VICO, KY 41773
OLIVE BRANCH SUBDIVISION DEVELOPMENT
WATER & SANITARY SEWER PROJECT

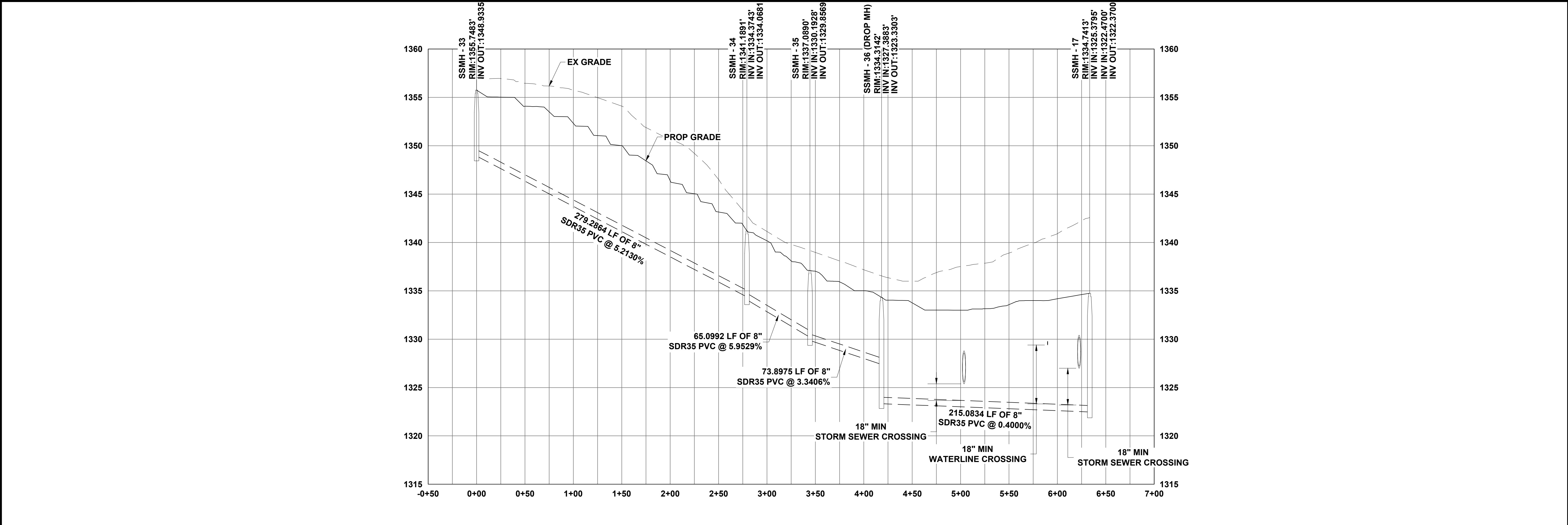
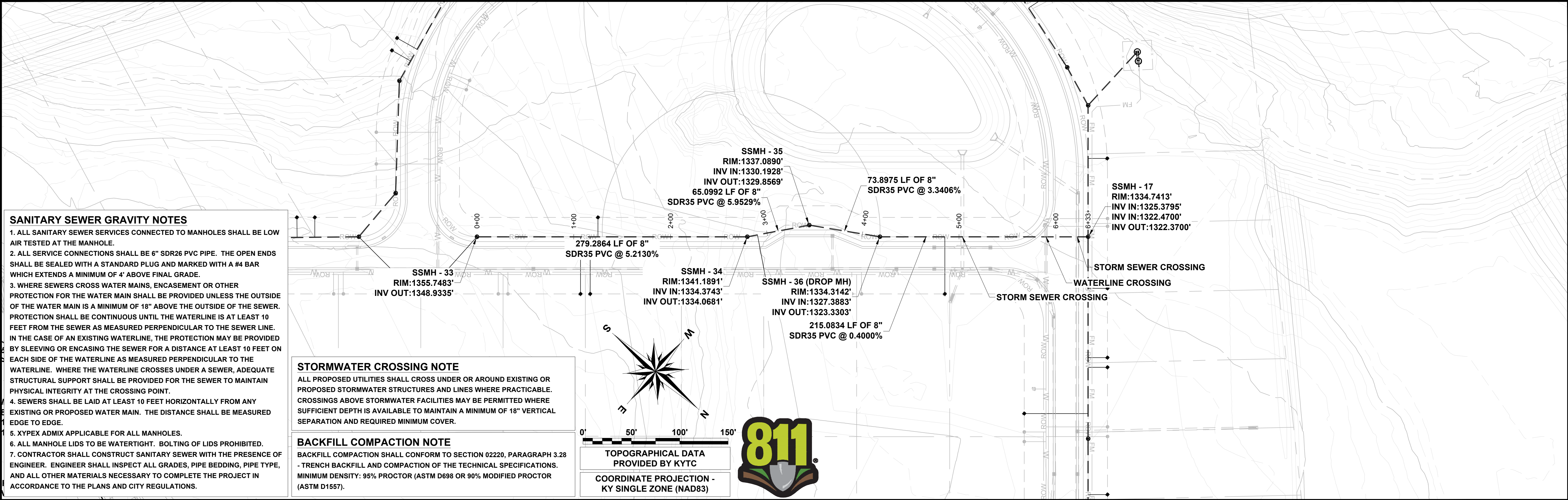
RMJE
LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY
CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

REVISIONS	
DATE	DESCRIPTION

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 27, 2026
SCALE:	SEE SHEET

C 2.2

[illegible]



KNOTT COUNTY WATER & SEWER DISTRICT
7777 BIG BRANCH ROAD, VICO, KY 41773

OLIVE BRANCH SUBDIVISION DEVELOPMENT
WATER & SANITARY SEWER PROJECT

RMJE

LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY
CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

REVISIONS	
DATE	DESCRIPTION

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 27, 2026
SCALE:	SEE SHEET

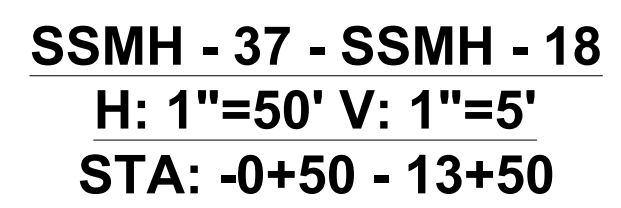
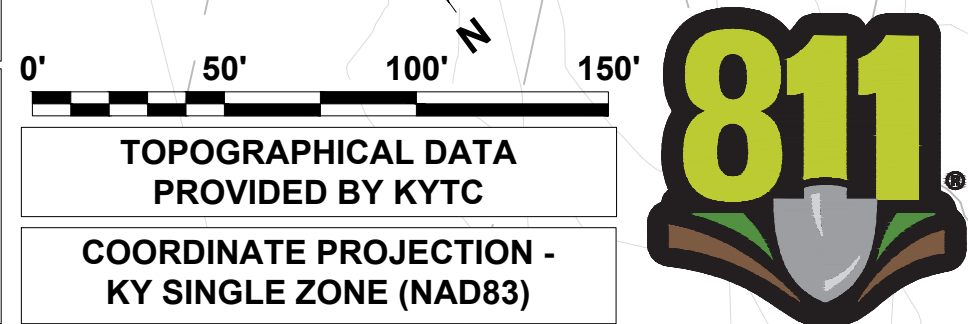


C 2.4

1. ALL SANITARY SEWER SERVICES CONNECTED TO MANHOLES SHALL BE LOW AIR TESTED AT THE MANHOLE.
2. ALL SERVICE CONNECTIONS SHALL BE 6" SDR26 PVC PIPE. THE OPEN ENDS SHALL BE SEALED WITH A STANDARD PLUG AND MARKED WITH A #4 BAR WHICH EXTENDS A MINIMUM OF 4' ABOVE FINAL GRADE.
3. WHERE SEWERS CROSS WATER MAINS, ENCASEMENT OR OTHER PROTECTION FOR THE WATER MAIN SHALL BE PROVIDED UNLESS THE OUTSIDE OF THE WATER MAIN IS A MINIMUM OF 18" ABOVE THE OUTSIDE OF THE SEWER. PROTECTION SHALL BE CONTINUOUS UNTIL THE WATERLINE IS AT LEAST 10 FEET FROM THE SEWER AS MEASURED PERPENDICULAR TO THE SEWER LINE. IN THE CASE OF AN EXISTING WATERLINE, THE PROTECTION MAY BE PROVIDED BY SLEEVING OR ENCASEING THE SEWER FOR A DISTANCE AT LEAST 10 FEET ON EACH SIDE OF THE WATERLINE AS MEASURED PERPENDICULAR TO THE WATERLINE. WHERE THE WATERLINE CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO MAINTAIN PHYSICAL INTEGRITY AT THE CROSSING POINT.
4. SEWERS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE.
5. XYPEX ADMIX APPLICABLE FOR ALL MANHOLES.
6. ALL MANHOLE LIDS TO BE WATERTIGHT. BOLTING OF LIDS PROHIBITED.
7. CONTRACTOR SHALL CONSTRUCT SANITARY SEWER WITH THE PRESENCE OF ENGINEER. ENGINEER SHALL INSPECT ALL GRADES, PIPE BEDDING, PIPE TYPE, AND ALL OTHER MATERIALS NECESSARY TO COMPLETE THE PROJECT IN ACCORDANCE TO THE PLANS AND CITY REGULATIONS.

ALL PROPOSED UTILITIES SHALL CROSS UNDER OR AROUND EXISTING OR PROPOSED STORMWATER STRUCTURES AND LINES WHERE PRACTICABLE. CROSSINGS ABOVE STORMWATER FACILITIES MAY BE PERMITTED WHERE SUFFICIENT DEPTH IS AVAILABLE TO MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION AND REQUIRED MINIMUM COVER.

**BACKFILL COMPACTION SHALL CONFORM TO SECTION 02220, PARAGRAPH 3.28
- TRENCH BACKFILL AND COMPACTION OF THE TECHNICAL SPECIFICATIONS.
MINIMUM DENSITY: 95% PROCTOR (ASTM D698 OR 90% MODIFIED PROCTOR
(ASTM D1557).**

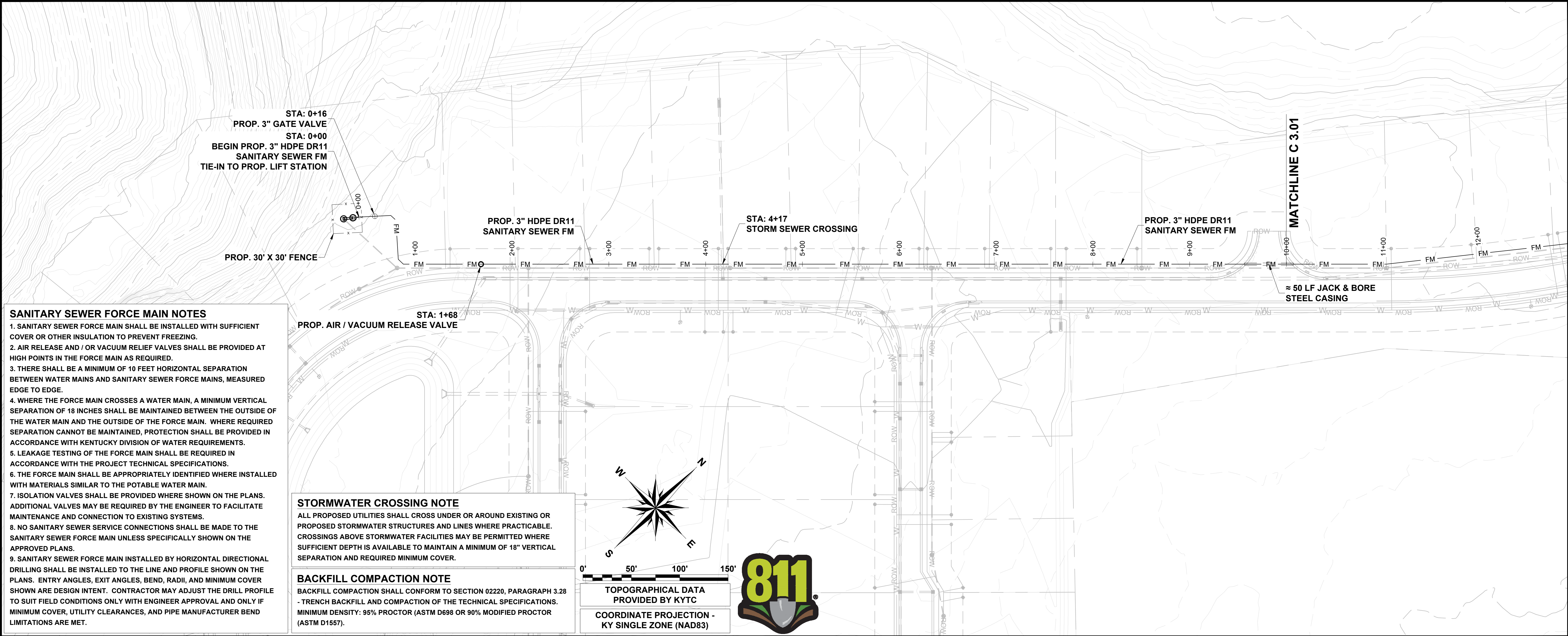


RMJE

LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY
CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

[illegible]

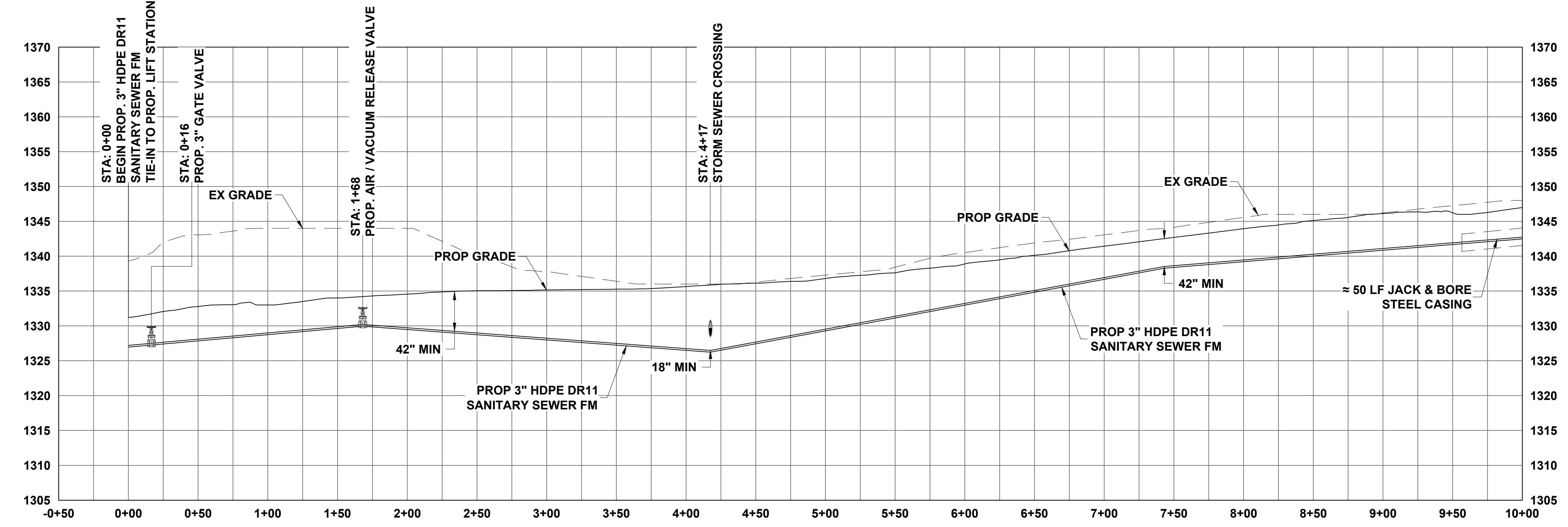
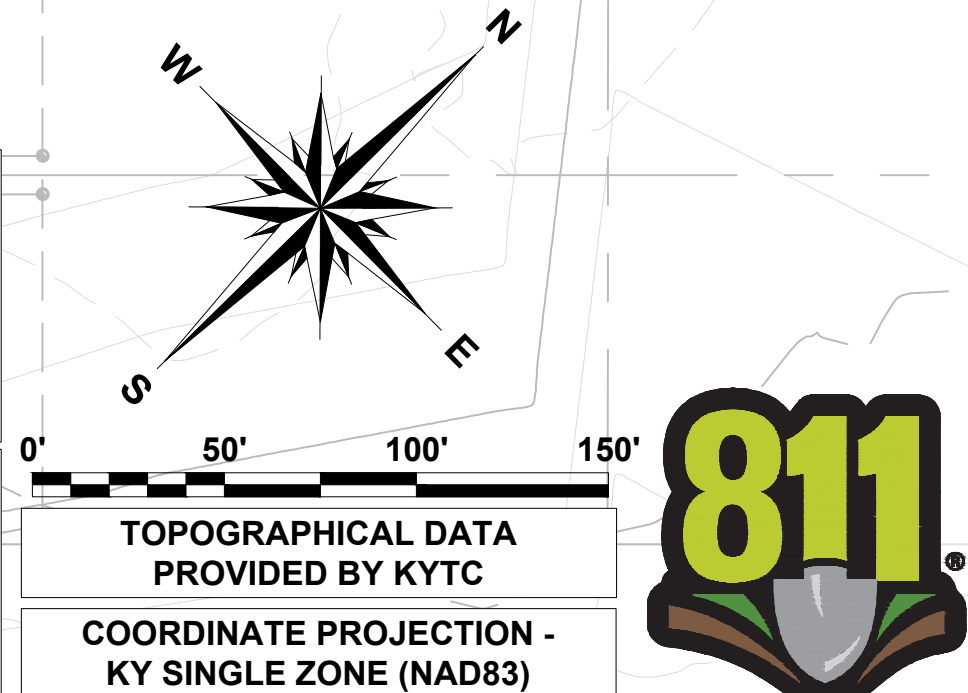
C 2.5



- SANITARY SEWER FORCE MAIN NOTES**
1. SANITARY SEWER FORCE MAIN SHALL BE INSTALLED WITH SUFFICIENT COVER OR OTHER INSULATION TO PREVENT FREEZING.
 2. AIR RELEASE AND / OR VACUUM RELIEF VALVES SHALL BE PROVIDED AT HIGH POINTS IN THE FORCE MAIN AS REQUIRED.
 3. THERE SHALL BE A MINIMUM OF 10 FEET HORIZONTAL SEPARATION BETWEEN WATER MAINS AND SANITARY SEWER FORCE MAINS, MEASURED EDGE TO EDGE.
 4. WHERE THE FORCE MAIN CROSSES A WATER MAIN, A MINIMUM VERTICAL SEPARATION OF 18 INCHES SHALL BE MAINTAINED BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE FORCE MAIN. WHERE REQUIRED SEPARATION CANNOT BE MAINTAINED, PROTECTION SHALL BE PROVIDED IN ACCORDANCE WITH KENTUCKY DIVISION OF WATER REQUIREMENTS.
 5. LEAKAGE TESTING OF THE FORCE MAIN SHALL BE REQUIRED IN ACCORDANCE WITH THE PROJECT TECHNICAL SPECIFICATIONS.
 6. THE FORCE MAIN SHALL BE APPROPRIATELY IDENTIFIED WHERE INSTALLED WITH MATERIALS SIMILAR TO THE POTABLE WATER MAIN.
 7. ISOLATION VALVES SHALL BE PROVIDED WHERE SHOWN ON THE PLANS. ADDITIONAL VALVES MAY BE REQUIRED BY THE ENGINEER TO FACILITATE MAINTENANCE AND CONNECTION TO EXISTING SYSTEMS.
 8. NO SANITARY SEWER SERVICE CONNECTIONS SHALL BE MADE TO THE SANITARY SEWER FORCE MAIN UNLESS SPECIFICALLY SHOWN ON THE APPROVED PLANS.
 9. SANITARY SEWER FORCE MAIN INSTALLED BY HORIZONTAL DIRECTIONAL DRILLING SHALL BE INSTALLED TO THE LINE AND PROFILE SHOWN ON THE PLANS. ENTRY ANGLES, EXIT ANGLES, BEND, RADII, AND MINIMUM COVER SHOWN ARE DESIGN INTENT. CONTRACTOR MAY ADJUST THE DRILL PROFILE TO SUIT FIELD CONDITIONS ONLY WITH ENGINEER APPROVAL AND ONLY IF MINIMUM COVER, UTILITY CLEARANCES, AND PIPE MANUFACTURER BEND LIMITATIONS ARE MET.

STORMWATER CROSSING NOTE
ALL PROPOSED UTILITIES SHALL CROSS UNDER OR AROUND EXISTING OR PROPOSED STORMWATER STRUCTURES AND LINES WHERE PRACTICABLE. CROSSINGS ABOVE STORMWATER FACILITIES MAY BE PERMITTED WHERE SUFFICIENT DEPTH IS AVAILABLE TO MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION AND REQUIRED MINIMUM COVER.

BACKFILL COMPACTION NOTE
BACKFILL COMPACTION SHALL CONFORM TO SECTION 02220, PARAGRAPH 3.28
- TRENCH BACKFILL AND COMPACTION OF THE TECHNICAL SPECIFICATIONS.
MINIMUM DENSITY: 95% PROCTOR (ASTM D698 OR 90% MODIFIED PROCTOR (ASTM D1557).



3" SANITARY SEWER FORCE MAIN
H: 1"=50' V: 1"=10'
STA: -0+50 - 10+00

KNOTT COUNTY WATER & SEWER DISTRICT
7777 BIG BRANCH ROAD, VICCO, KY 41773

OLIVE BRANCH SUBDIVISION DEVELOPMENT
WATER & SANITARY SEWER PROJECT

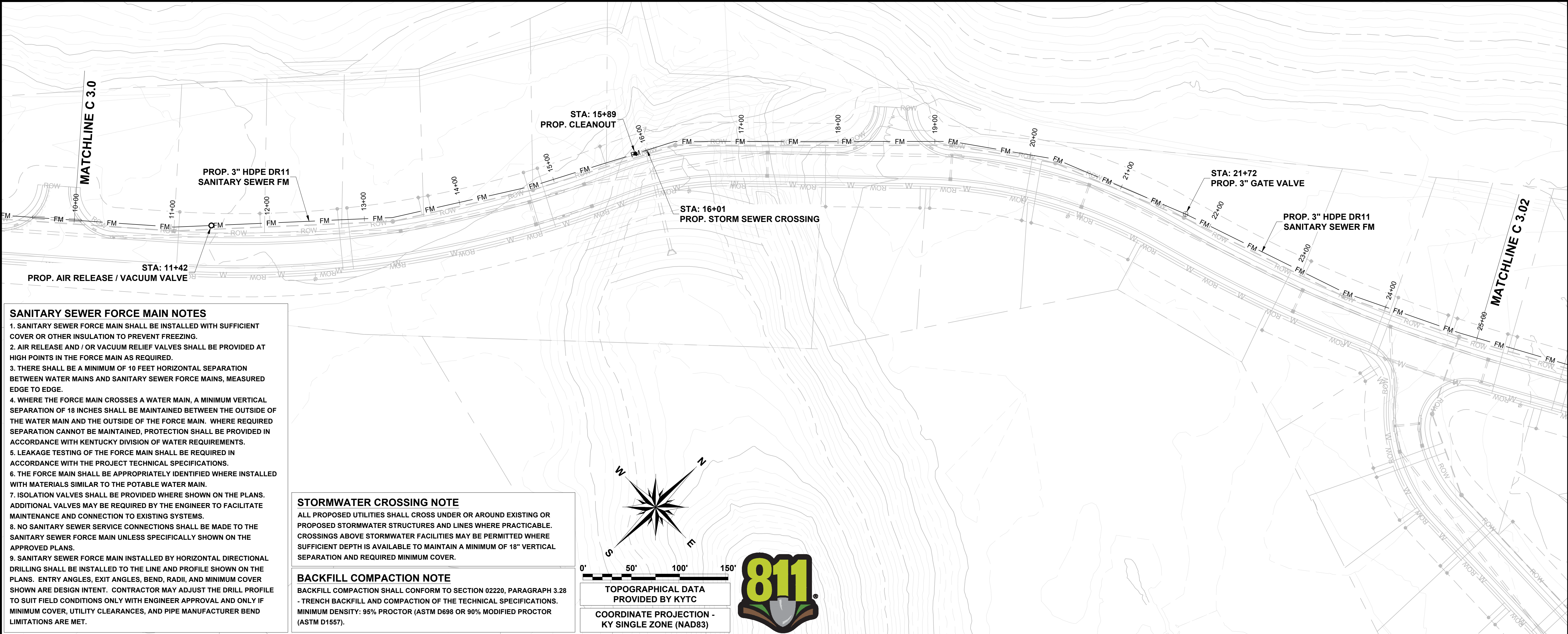
RMJE
LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY
CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

REVISIONS	
DATE	DESCRIPTION

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 27, 2026
SCALE:	SEE SHEET



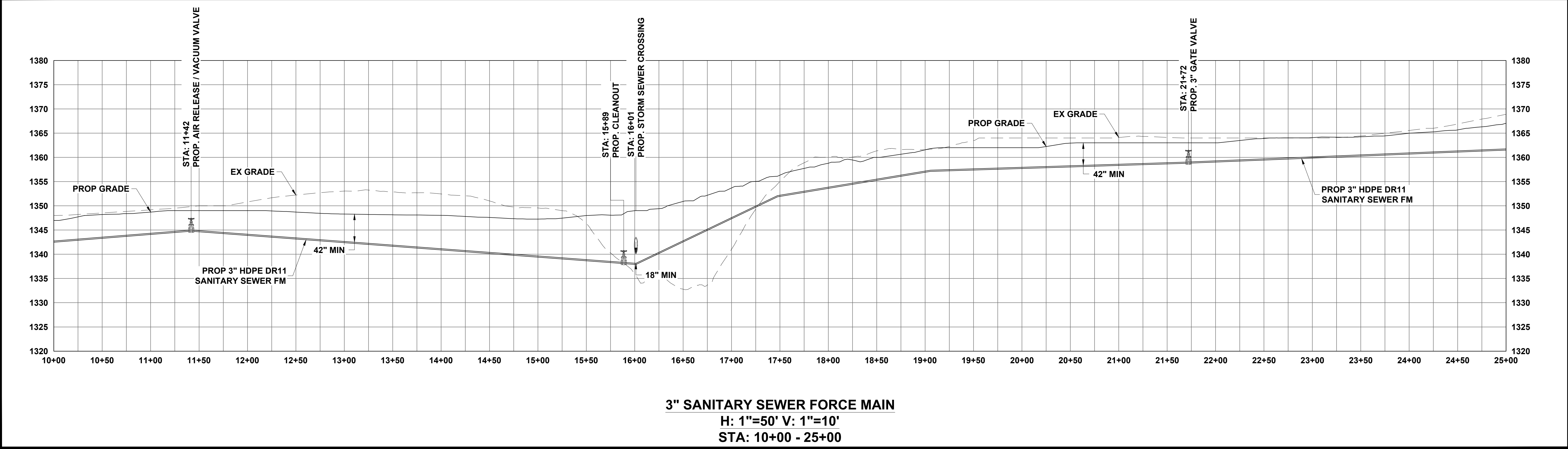
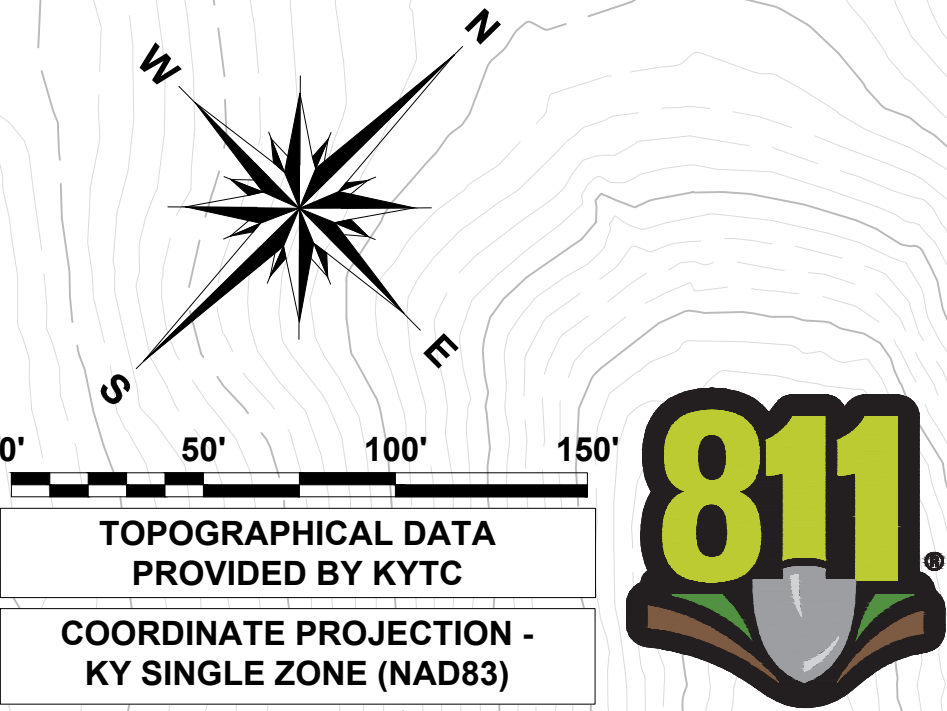
C 3.0



- SANITARY SEWER FORCE MAIN NOTES**
1. SANITARY SEWER FORCE MAIN SHALL BE INSTALLED WITH SUFFICIENT COVER OR OTHER INSULATION TO PREVENT FREEZING.
 2. AIR RELEASE AND / OR VACUUM RELIEF VALVES SHALL BE PROVIDED AT HIGH POINTS IN THE FORCE MAIN AS REQUIRED.
 3. THERE SHALL BE A MINIMUM OF 10 FEET HORIZONTAL SEPARATION BETWEEN WATER MAINS AND SANITARY SEWER FORCE MAINS, MEASURED EDGE TO EDGE.
 4. WHERE THE FORCE MAIN CROSSES A WATER MAIN, A MINIMUM VERTICAL SEPARATION OF 18 INCHES SHALL BE MAINTAINED BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE FORCE MAIN. WHERE REQUIRED SEPARATION CANNOT BE MAINTAINED, PROTECTION SHALL BE PROVIDED IN ACCORDANCE WITH KENTUCKY DIVISION OF WATER REQUIREMENTS.
 5. LEAKAGE TESTING OF THE FORCE MAIN SHALL BE REQUIRED IN ACCORDANCE WITH THE PROJECT TECHNICAL SPECIFICATIONS.
 6. THE FORCE MAIN SHALL BE APPROPRIATELY IDENTIFIED WHERE INSTALLED WITH MATERIALS SIMILAR TO THE POTABLE WATER MAIN.
 7. ISOLATION VALVES SHALL BE PROVIDED WHERE SHOWN ON THE PLANS. ADDITIONAL VALVES MAY BE REQUIRED BY THE ENGINEER TO FACILITATE MAINTENANCE AND CONNECTION TO EXISTING SYSTEMS.
 8. NO SANITARY SEWER SERVICE CONNECTIONS SHALL BE MADE TO THE SANITARY SEWER FORCE MAIN UNLESS SPECIFICALLY SHOWN ON THE APPROVED PLANS.
 9. SANITARY SEWER FORCE MAIN INSTALLED BY HORIZONTAL DIRECTIONAL DRILLING SHALL BE INSTALLED TO THE LINE AND PROFILE SHOWN ON THE PLANS. ENTRY ANGLES, EXIT ANGLES, BEND, RADII, AND MINIMUM COVER SHOWN ARE DESIGN INTENT. CONTRACTOR MAY ADJUST THE DRILL PROFILE TO SUIT FIELD CONDITIONS ONLY WITH ENGINEER APPROVAL AND ONLY IF MINIMUM COVER, UTILITY CLEARANCES, AND PIPE MANUFACTURER BEND LIMITATIONS ARE MET.

STORMWATER CROSSING NOTE
ALL PROPOSED UTILITIES SHALL CROSS UNDER OR AROUND EXISTING OR PROPOSED STORMWATER STRUCTURES AND LINES WHERE PRACTICABLE. CROSSINGS ABOVE STORMWATER FACILITIES MAY BE PERMITTED WHERE SUFFICIENT DEPTH IS AVAILABLE TO MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION AND REQUIRED MINIMUM COVER.

BACKFILL COMPACTION NOTE
BACKFILL COMPACTION SHALL CONFORM TO SECTION 02220, PARAGRAPH 3.28
- TRENCH BACKFILL AND COMPACTION OF THE TECHNICAL SPECIFICATIONS.
MINIMUM DENSITY: 95% PROCTOR (ASTM D698 OR 90% MODIFIED PROCTOR (ASTM D1557).



KNOTT COUNTY WATER & SEWER DISTRICT
7777 BIG BRANCH ROAD, VICO, KY 41773

OLIVE BRANCH SUBDIVISION DEVELOPMENT
WATER & SANITARY SEWER PROJECT

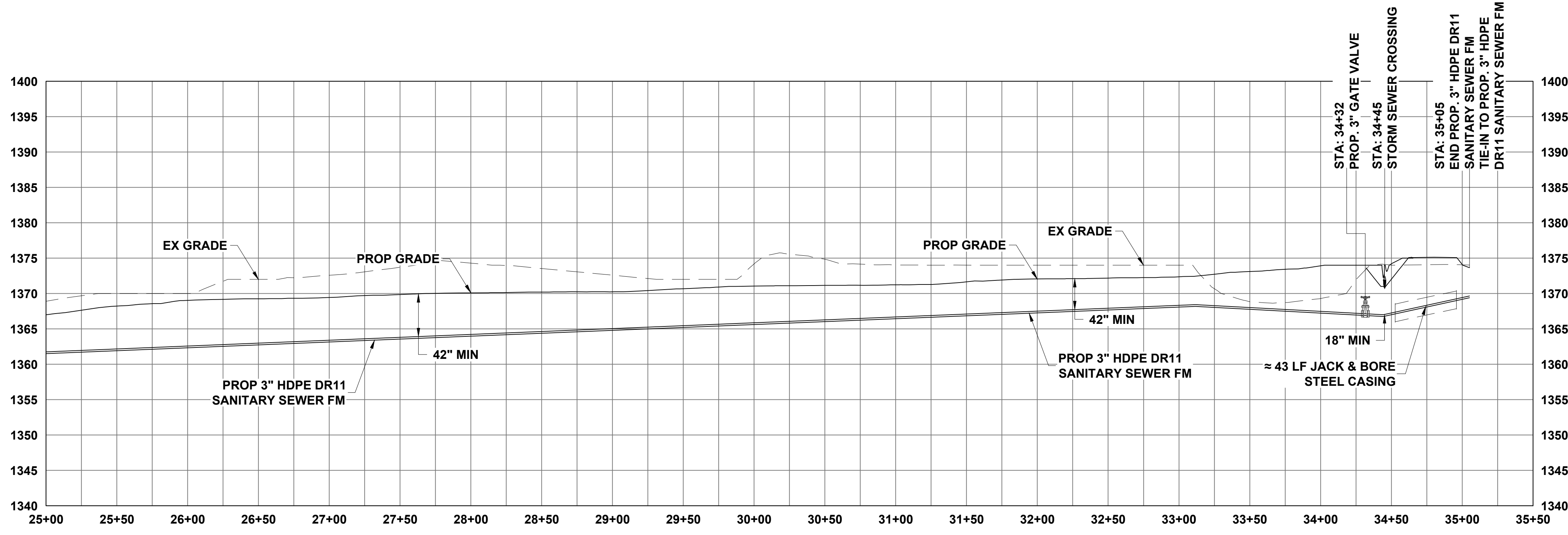
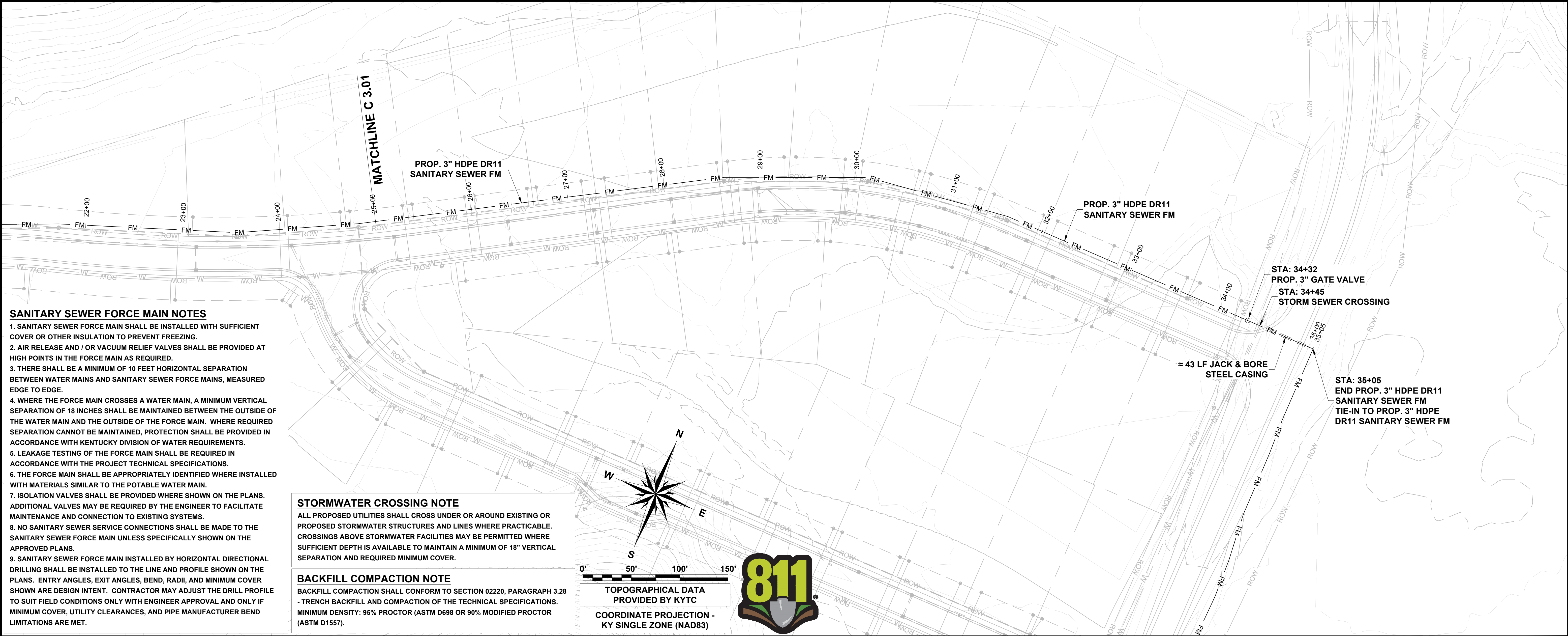
RMJE
LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY
CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

REVISIONS	
DATE	DESCRIPTION

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 27, 2026
SCALE:	SEE SHEET



C 3.01



3" SANITARY SEWER FORCE MAIN
H: 1"=50' V: 1"=10'
STA: 25+00 - 35+50

KNOTT COUNTY WATER & SEWER DISTRICT
7777 BIG BRANCH ROAD, VICO, KY 41773

OLIVE BRANCH SUBDIVISION DEVELOPMENT
WATER & SANITARY SEWER PROJECT



RMJE

LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY

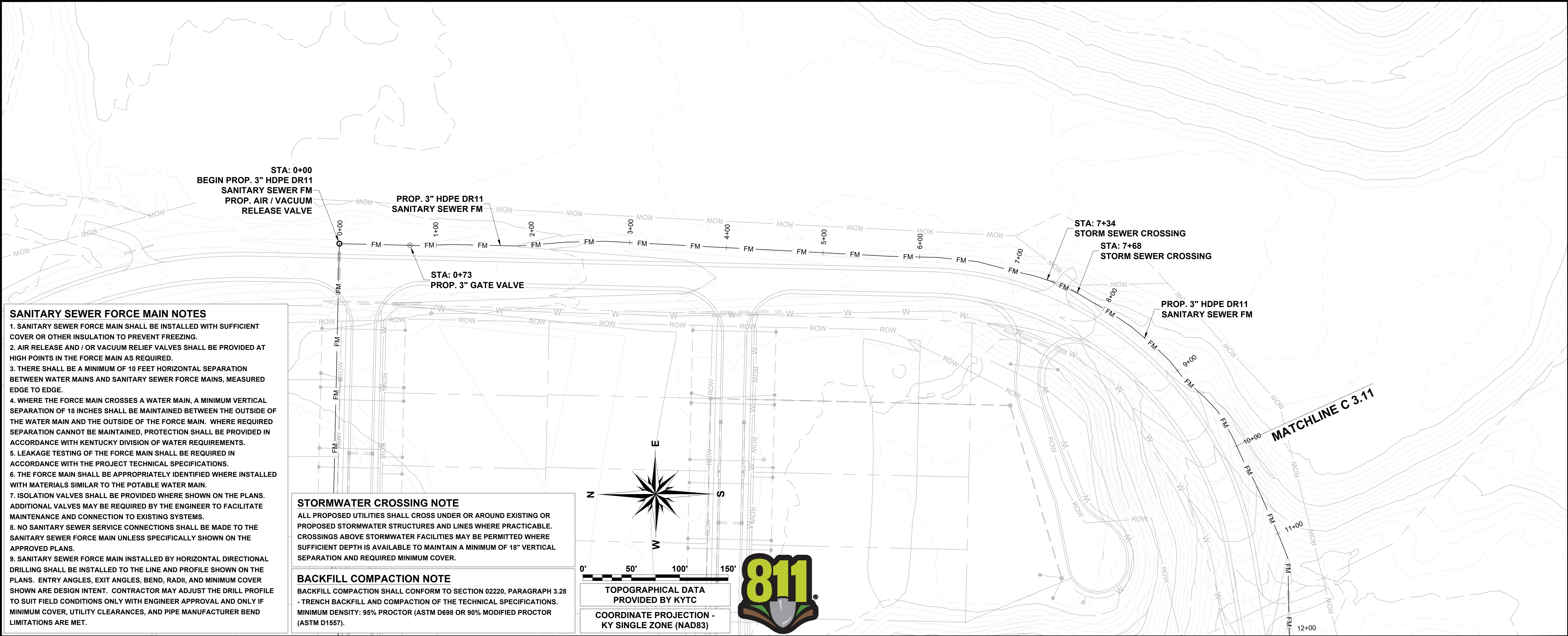
CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

REVISIONS	
DATE	DESCRIPTION

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 27, 2026
SCALE:	SEE SHEET



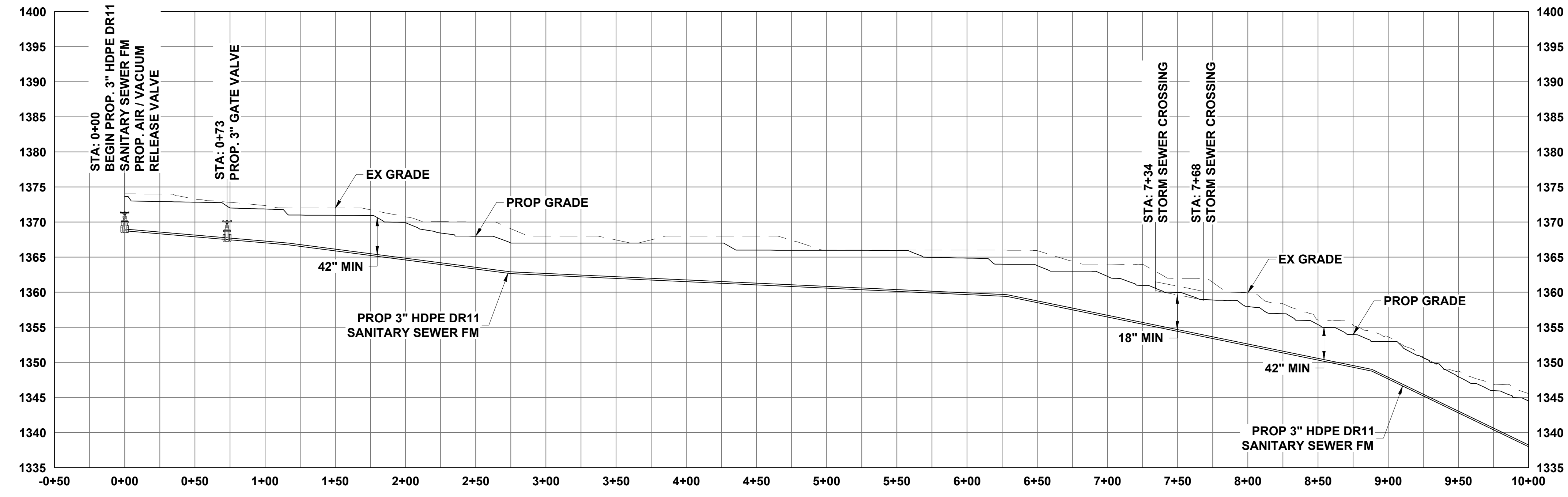
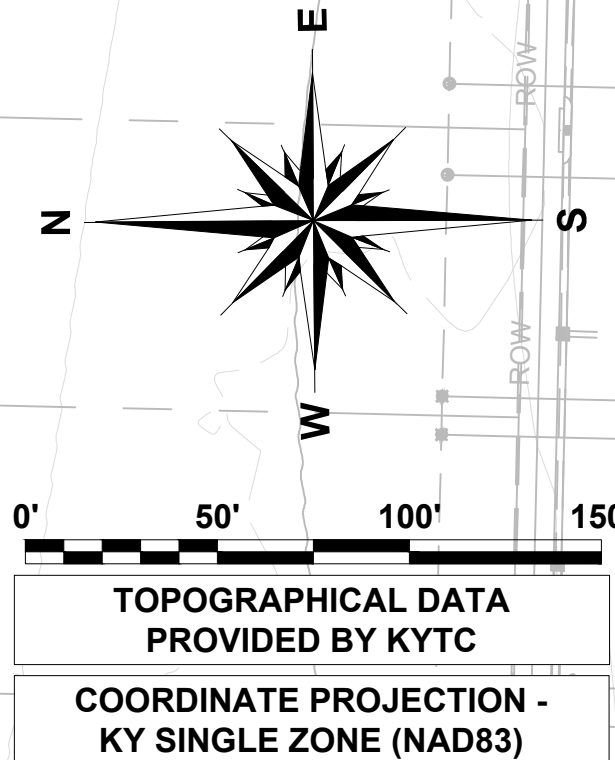
C 3.02



- SANITARY SEWER FORCE MAIN NOTES**
1. SANITARY SEWER FORCE MAIN SHALL BE INSTALLED WITH SUFFICIENT COVER OR OTHER INSULATION TO PREVENT FREEZING.
 2. AIR RELEASE AND / OR VACUUM RELIEF VALVES SHALL BE PROVIDED AT HIGH POINTS IN THE FORCE MAIN AS REQUIRED.
 3. THERE SHALL BE A MINIMUM OF 10 FEET HORIZONTAL SEPARATION BETWEEN WATER MAINS AND SANITARY SEWER FORCE MAINS, MEASURED EDGE TO EDGE.
 4. WHERE THE FORCE MAIN CROSSES A WATER MAIN, A MINIMUM VERTICAL SEPARATION OF 18 INCHES SHALL BE MAINTAINED BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE FORCE MAIN. WHERE REQUIRED SEPARATION CANNOT BE MAINTAINED, PROTECTION SHALL BE PROVIDED IN ACCORDANCE WITH KENTUCKY DIVISION OF WATER REQUIREMENTS.
 5. LEAKAGE TESTING OF THE FORCE MAIN SHALL BE REQUIRED IN ACCORDANCE WITH THE PROJECT TECHNICAL SPECIFICATIONS.
 6. THE FORCE MAIN SHALL BE APPROPRIATELY IDENTIFIED WHERE INSTALLED WITH MATERIALS SIMILAR TO THE POTABLE WATER MAIN.
 7. ISOLATION VALVES SHALL BE PROVIDED WHERE SHOWN ON THE PLANS. ADDITIONAL VALVES MAY BE REQUIRED BY THE ENGINEER TO FACILITATE MAINTENANCE AND CONNECTION TO EXISTING SYSTEMS.
 8. NO SANITARY SEWER SERVICE CONNECTIONS SHALL BE MADE TO THE SANITARY SEWER FORCE MAIN UNLESS SPECIFICALLY SHOWN ON THE APPROVED PLANS.
 9. SANITARY SEWER FORCE MAIN INSTALLED BY HORIZONTAL DIRECTIONAL DRILLING SHALL BE INSTALLED TO THE LINE AND PROFILE SHOWN ON THE PLANS. ENTRY ANGLES, EXIT ANGLES, BEND, RADII, AND MINIMUM COVER SHOWN ARE DESIGN INTENT. CONTRACTOR MAY ADJUST THE DRILL PROFILE TO SUIT FIELD CONDITIONS ONLY WITH ENGINEER APPROVAL AND ONLY IF MINIMUM COVER, UTILITY CLEARANCES, AND PIPE MANUFACTURER BEND LIMITATIONS ARE MET.

STORMWATER CROSSING NOTE
ALL PROPOSED UTILITIES SHALL CROSS UNDER OR AROUND EXISTING OR PROPOSED STORMWATER STRUCTURES AND LINES WHERE PRACTICABLE. CROSSINGS ABOVE STORMWATER FACILITIES MAY BE PERMITTED WHERE SUFFICIENT DEPTH IS AVAILABLE TO MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION AND REQUIRED MINIMUM COVER.

BACKFILL COMPACTION NOTE
BACKFILL COMPACTION SHALL CONFORM TO SECTION 02220, PARAGRAPH 3.28
- TRENCH BACKFILL AND COMPACTION OF THE TECHNICAL SPECIFICATIONS.
MINIMUM DENSITY: 95% PROCTOR (ASTM D698 OR 90% MODIFIED PROCTOR (ASTM D1557).



3" SANITARY SEWER FORCE MAIN
H: 1"=50' V: 1"=10'
STA: -0+50 - 10+00

KNOTT COUNTY WATER & SEWER DISTRICT
7777 BIG BRANCH ROAD, VICO, KY 41773

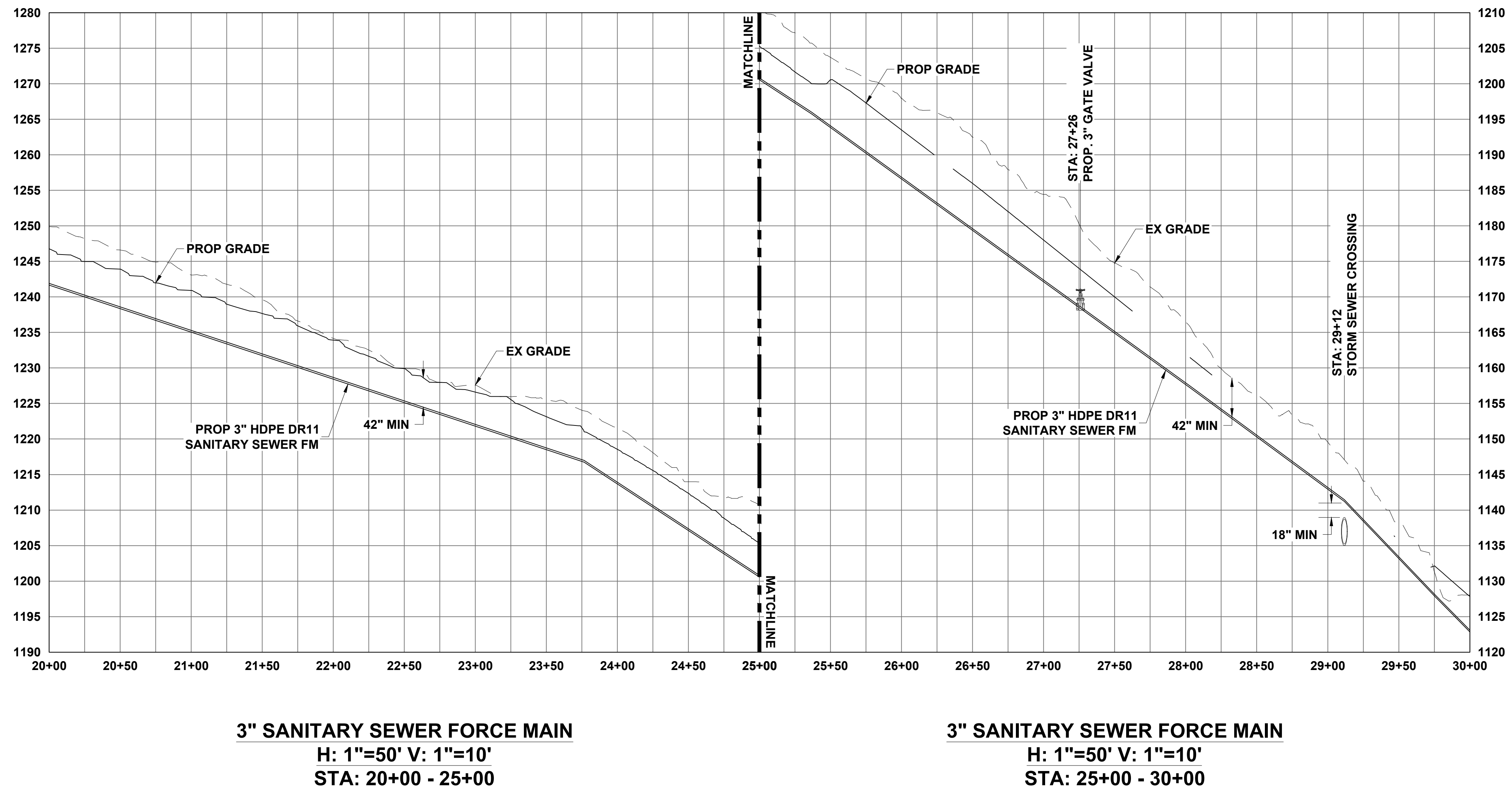
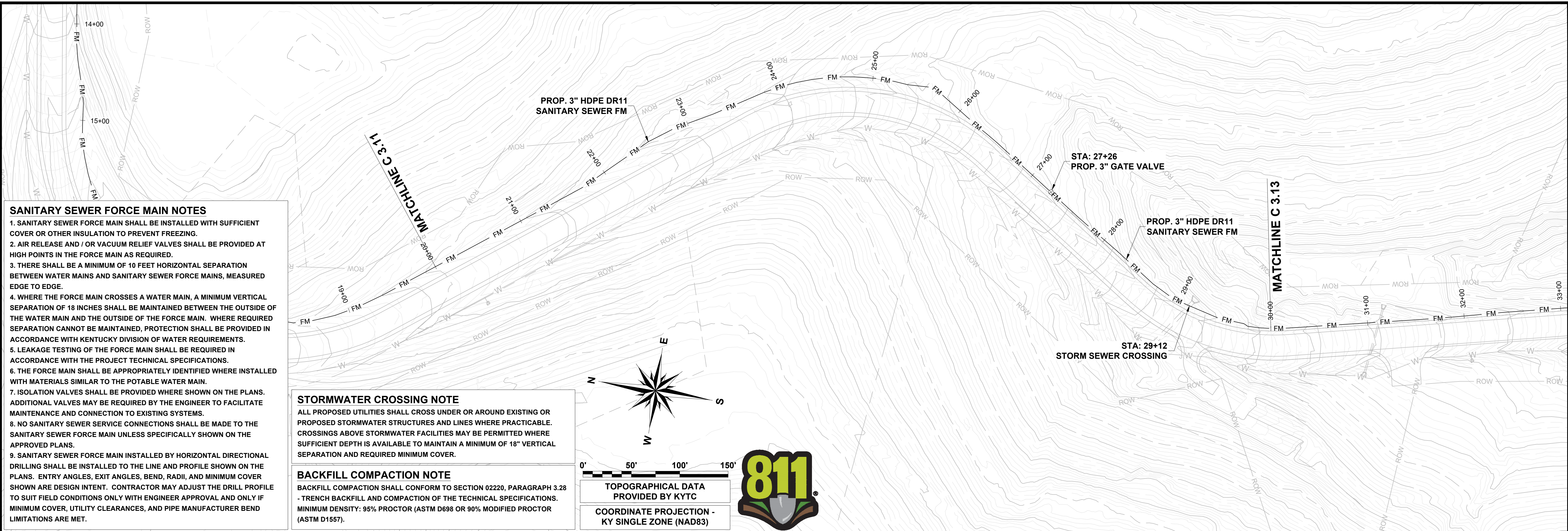
OLIVE BRANCH SUBDIVISION DEVELOPMENT
WATER & SANITARY SEWER PROJECT

RMJE
LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY
CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

REVISIONS	
DATE	DESCRIPTION

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 27, 2026
SCALE:	SEE SHEET

C 3.1



77777 BIG BRANCH ROAD, VICCO, KY 41773

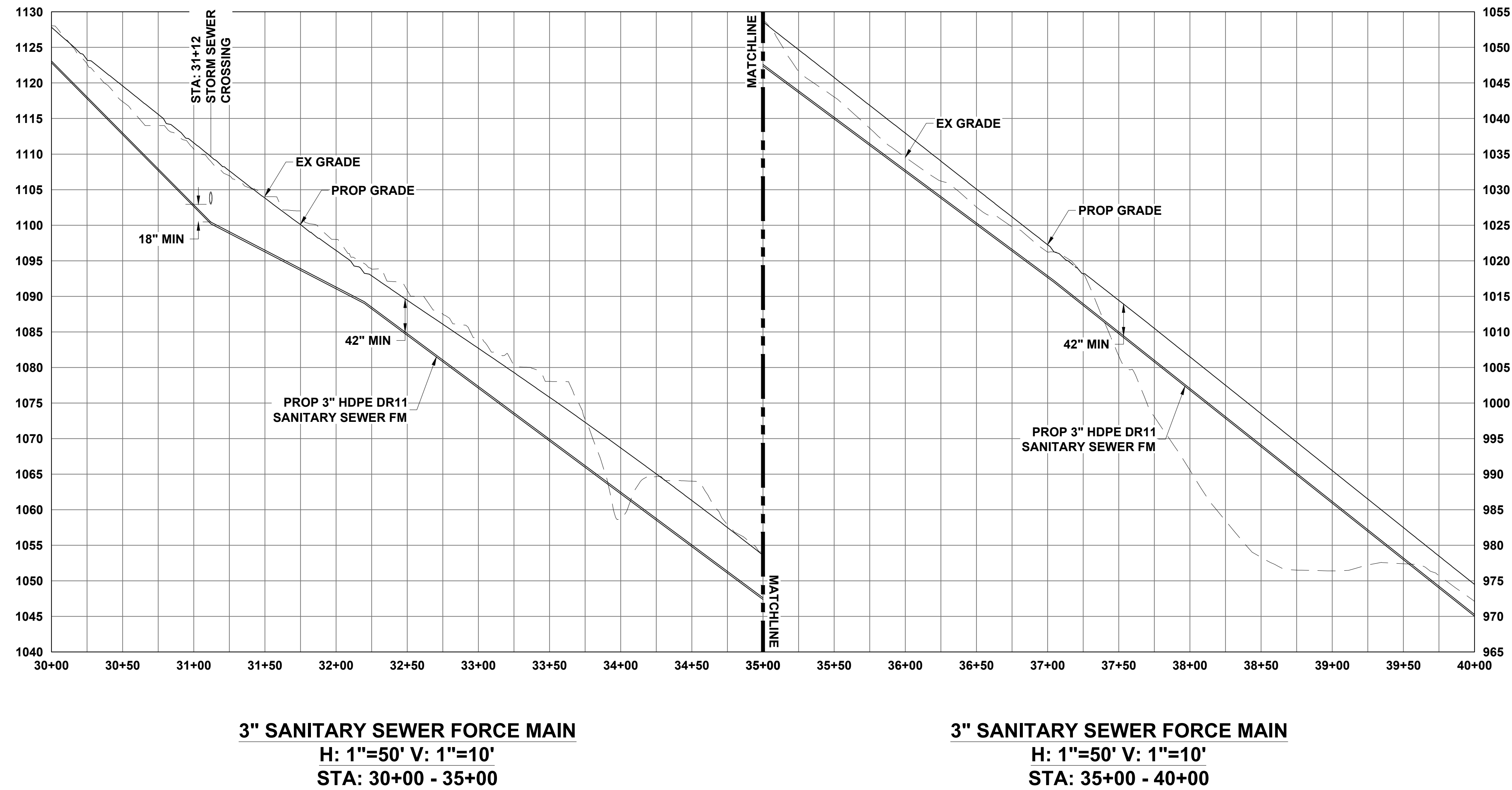
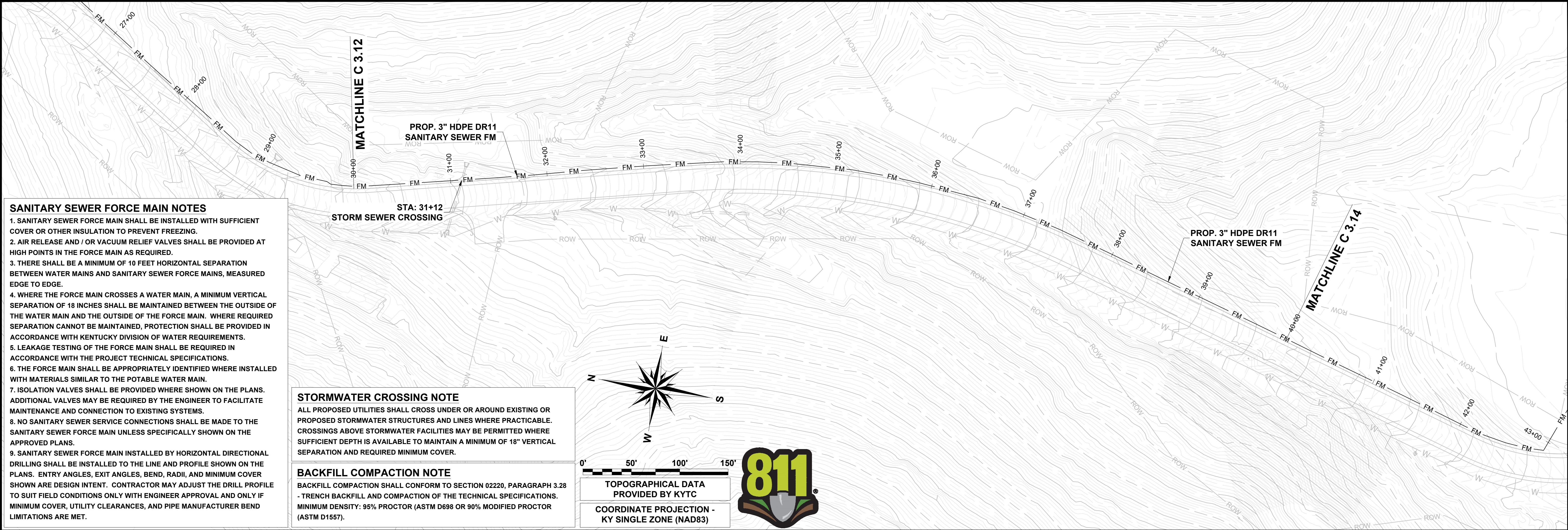
LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY

CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

[illegible]

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 27, 2026
SCALE:	SEE SHEET

C 3.12



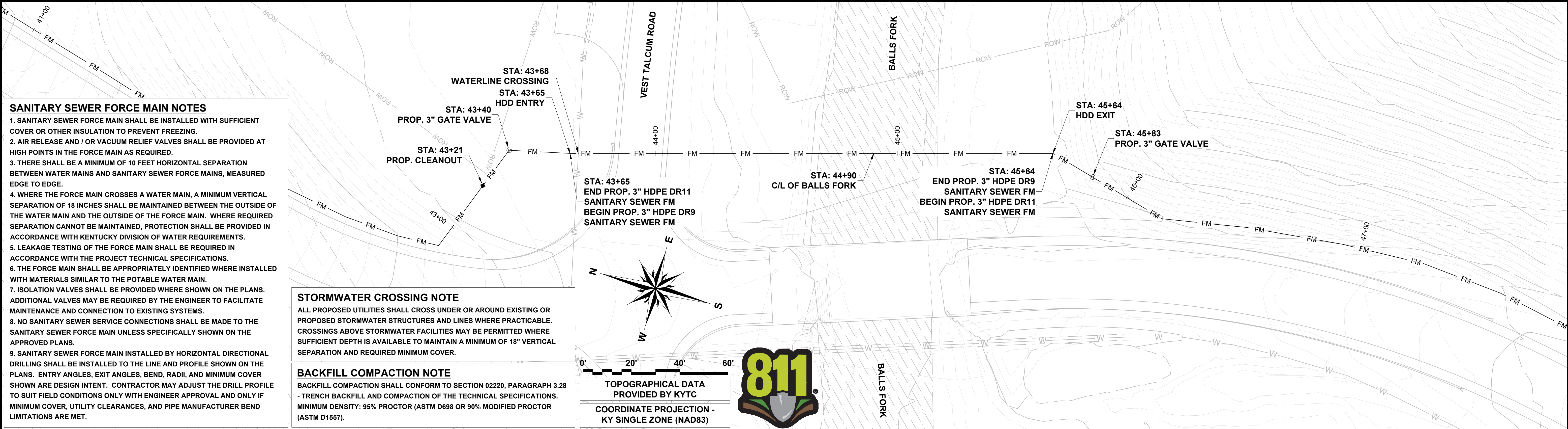
KNOTT COUNTY WATER & SEWER DISTRICT
7777 BIG BRANCH ROAD, VICO, KY 41773
OLIVE BRANCH SUBDIVISION DEVELOPMENT
WATER & SANITARY SEWER PROJECT

RMJE
LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY
CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

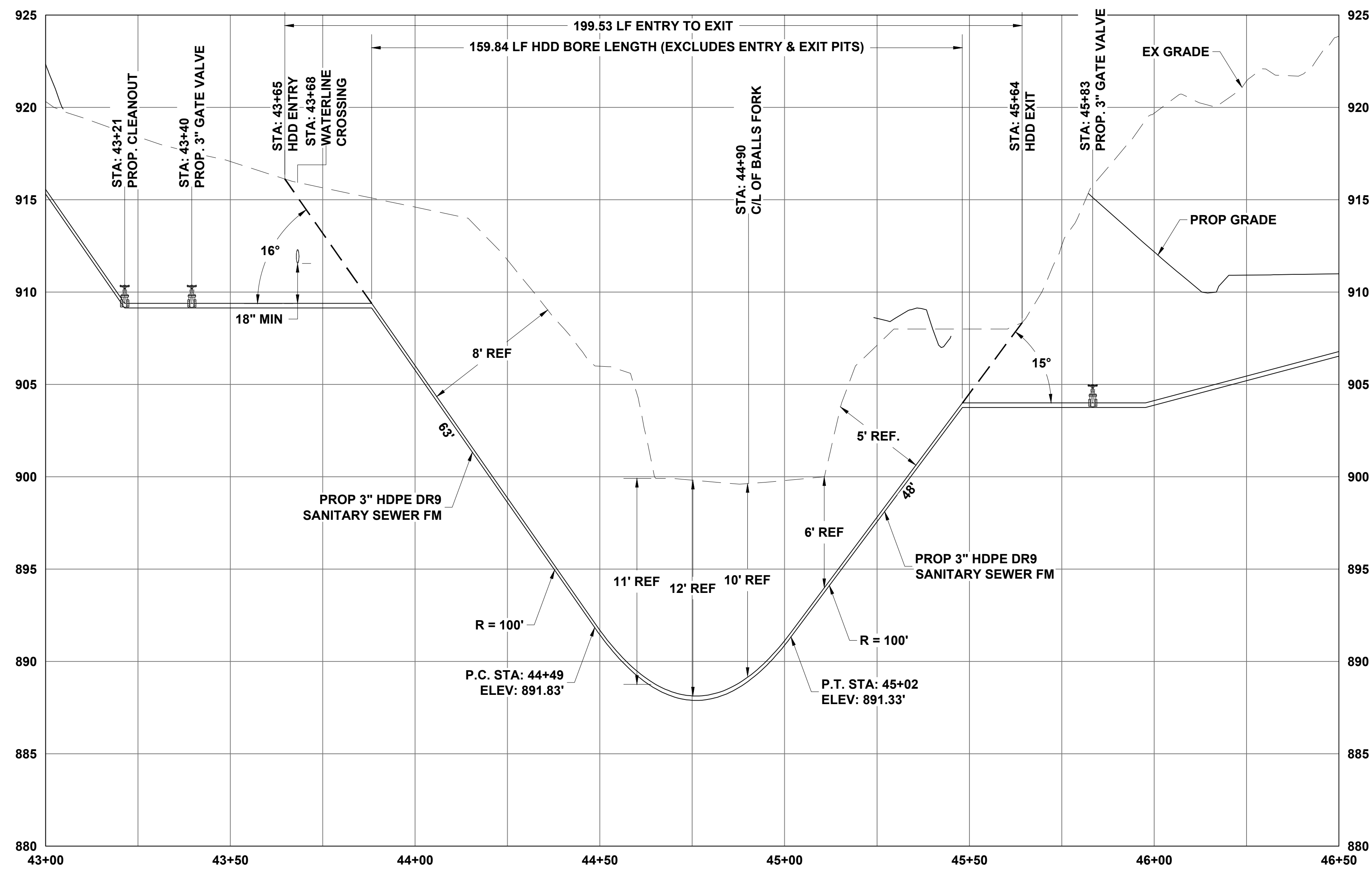
REVISIONS	
DATE	DESCRIPTION

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 27, 2026
SCALE:	SEE SHEET

C 3.13



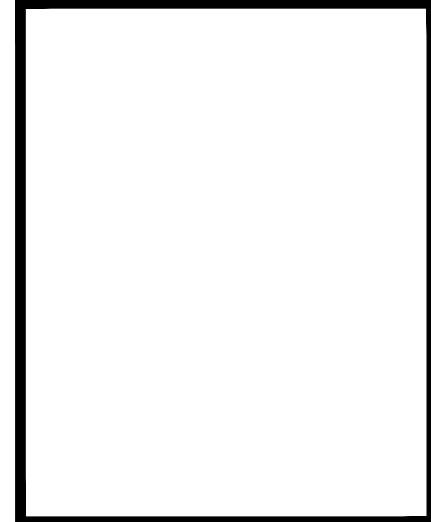
- HORIZONTAL DIRECTION DRILL (HDD) NOTES**
1. HDD ALIGNMENT SHOWN HAS A TOTAL LENGTH OF APPROXIMATELY 199.53 LF FROM ENTRY TO EXIT PIT.
 2. TOTAL HORIZONTAL DISTANCE OF HDD INSTALLATION IS APPROXIMATELY 159.84 LF (EXCLUDES ENTRY & EXIT PITS).
 3. TOTAL HDD PIPE LENGTH ALONG DRILL PATH IS APPROXIMATELY 164.59 LF (EXCLUDES ENTRY & EXIT PITS).
 4. HORIZONTAL DRILL INCLUDES A CURVED BORE SECTION. CONTRACTOR SHALL ACCOUNT FOR ADDITIONAL LENGTH REQUIRED DUE TO CURVATURE.
 5. ENTRY & EXIT ANGLES SHOWN ARE APPROXIMATE (16° ENTRY, 15° EXIT). CONTRACTOR MAY ADJUST ENTRY & EXIT ANGLES AS NECESSARY TO ACCOMMODATE FIELD CONDITIONS, PROVIDED MINIMUM COVER AND PIPE BEND RADIUS REQUIREMENTS ARE MAINTAINED AND APPROVED BY THE ENGINEER.
 6. CONTRACTOR SHALL NOT EXCEED THE MINIMUM ALLOWABLE BEND RADIUS OF THE INSTALLED PIPE MATERIAL DURING HDD OPERATIONS.
 7. CONTRACTOR SHALL MAINTAIN MINIMUM REQUIRED COVER THROUGHOUT THE HDD ALIGNMENT, INCLUDING AT CREEK CROSSING.
 8. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES AND FIELD CONDITIONS PRIOR TO DRILLING.
 9. HDD PROFILE SHOWN IS DIAGRAMMATIC. ACTUAL DRILL PATH MAY BE ADJUSTED WITH ENGINEER APPROVAL TO MEET FIELD CONDITIONS, PROVIDED DESIGN CRITERIA ARE MET.
 10. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 18 INCHES VERTICAL SEPARATION FROM EXISTING WATERLINE AT CROSSING LOCATION, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
 11. ENTRY PIT DEPTH AND DRILL PROFILE SHALL BE ADJUSTED AS NECESSARY TO AVOID CONFLICT WITH EXISTING WATERLINE WHILE MAINTAINING A REQUIRED VERTICAL CLEARANCE, MINIMUM COVER, AND PIPE BEND RADIUS REQUIREMENTS.



3" SANITARY SEWER FORCE MAIN HDD
H: 1"=20' V: 1"=4'
STA: 43+00 - 46+50

REVISIONS	
DATE	DESCRIPTION

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 27, 2026
SCALE:	SEE SHEET



SANITARY SEWER FORCE MAIN NOTES

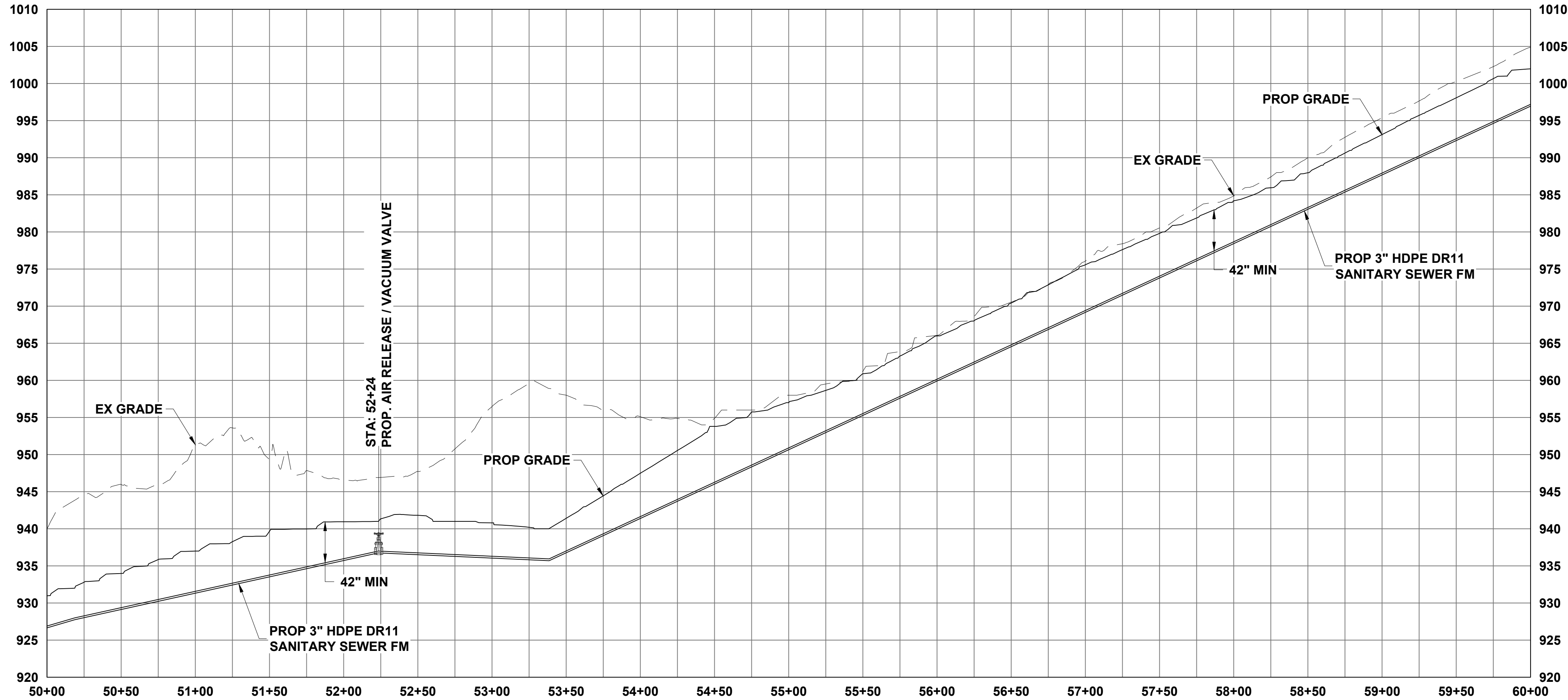
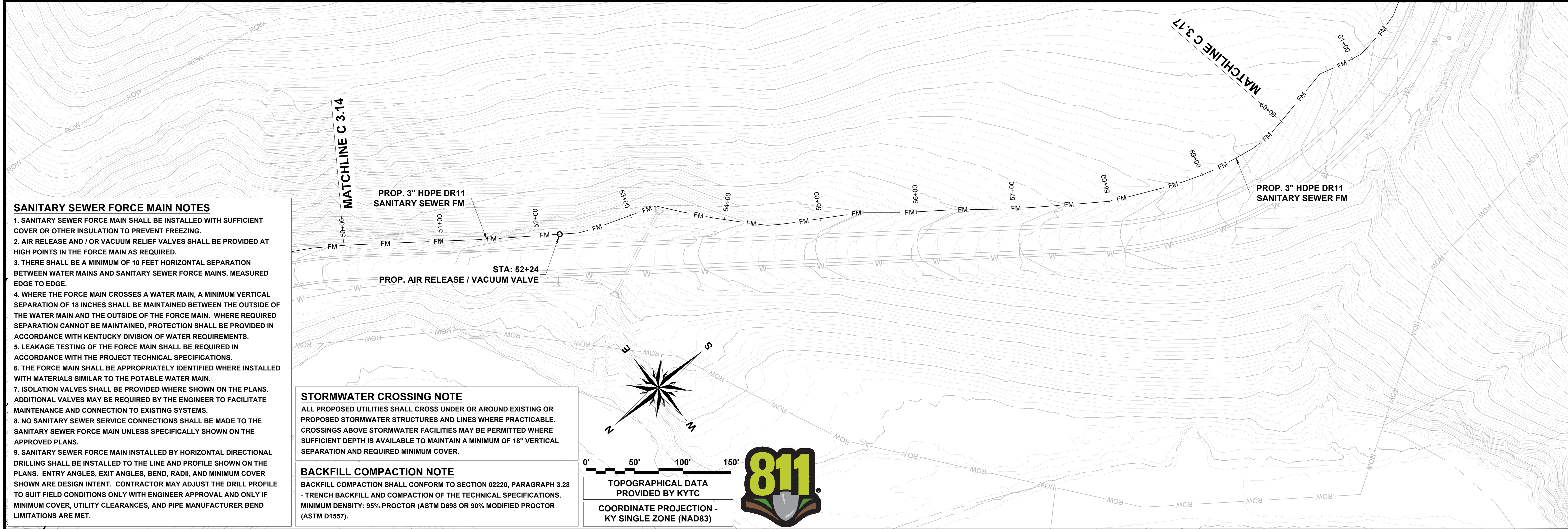
1. SANITARY SEWER FORCE MAIN SHALL BE INSTALLED WITH SUFFICIENT COVER OR OTHER INSULATION TO PREVENT FREEZING.
2. AIR RELEASE AND / OR VACUUM RELIEF VALVES SHALL BE PROVIDED AT HIGH POINTS IN THE FORCE MAIN AS REQUIRED.
3. THERE SHALL BE A MINIMUM OF 10 FEET HORIZONTAL SEPARATION BETWEEN WATER MAINS AND SANITARY SEWER FORCE MAINS, MEASURED EDGE TO EDGE.
4. WHERE THE FORCE MAIN CROSSES A WATER MAIN, A MINIMUM VERTICAL SEPARATION OF 18 INCHES SHALL BE MAINTAINED BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE FORCE MAIN. WHERE REQUIRED SEPARATION CANNOT BE MAINTAINED, PROTECTION SHALL BE PROVIDED IN ACCORDANCE WITH KENTUCKY DIVISION OF WATER REQUIREMENTS.
5. LEAKAGE TESTING OF THE FORCE MAIN SHALL BE REQUIRED IN ACCORDANCE WITH THE PROJECT TECHNICAL SPECIFICATIONS.
6. THE FORCE MAIN SHALL BE APPROPRIATELY IDENTIFIED WHERE INSTALLED WITH MATERIALS SIMILAR TO THE POTABLE WATER MAIN.
7. ISOLATION VALVES SHALL BE PROVIDED WHERE SHOWN ON THE PLANS. ADDITIONAL VALVES MAY BE REQUIRED BY THE ENGINEER TO FACILITATE MAINTENANCE AND CONNECTION TO EXISTING SYSTEMS.
8. NO SANITARY SEWER SERVICE CONNECTIONS SHALL BE MADE TO THE SANITARY SEWER FORCE MAIN UNLESS SPECIFICALLY SHOWN ON THE APPROVED PLANS.
9. SANITARY SEWER FORCE MAIN INSTALLED BY HORIZONTAL DIRECTIONAL DRILLING SHALL BE INSTALLED TO THE LINE AND PROFILE SHOWN ON THE PLANS. ENTRY ANGLES, EXIT ANGLES, BEND, RADII, AND MINIMUM COVER SHOWN ARE DESIGN INTENT. CONTRACTOR MAY ADJUST THE DRILL PROFILE TO SUIT FIELD CONDITIONS ONLY WITH ENGINEER APPROVAL AND ONLY IF MINIMUM COVER, UTILITY CLEARANCES, AND PIPE MANUFACTURER BEND LIMITATIONS ARE MET.

STORMWATER CROSSING NOTE

ALL PROPOSED UTILITIES SHALL CROSS UNDER OR AROUND EXISTING OR PROPOSED STORMWATER STRUCTURES AND LINES WHERE PRACTICABLE. CROSSINGS ABOVE STORMWATER FACILITIES MAY BE PERMITTED WHERE SUFFICIENT DEPTH IS AVAILABLE TO MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION AND REQUIRED MINIMUM COVER.

BACKFILL COMPACTION NOTE

BACKFILL COMPACTION SHALL CONFORM TO SECTION 02220, PARAGRAPH 3.28
- TRENCH BACKFILL AND COMPACTION OF THE TECHNICAL SPECIFICATIONS.
MINIMUM DENSITY: 95% PROCTOR (ASTM D698 OR 90% MODIFIED PROCTOR (ASTM D1557).



3" SANITARY SEWER FORCE MAIN
H: 1"=50' V: 1"=10'
STA: 50+00 - 60+00

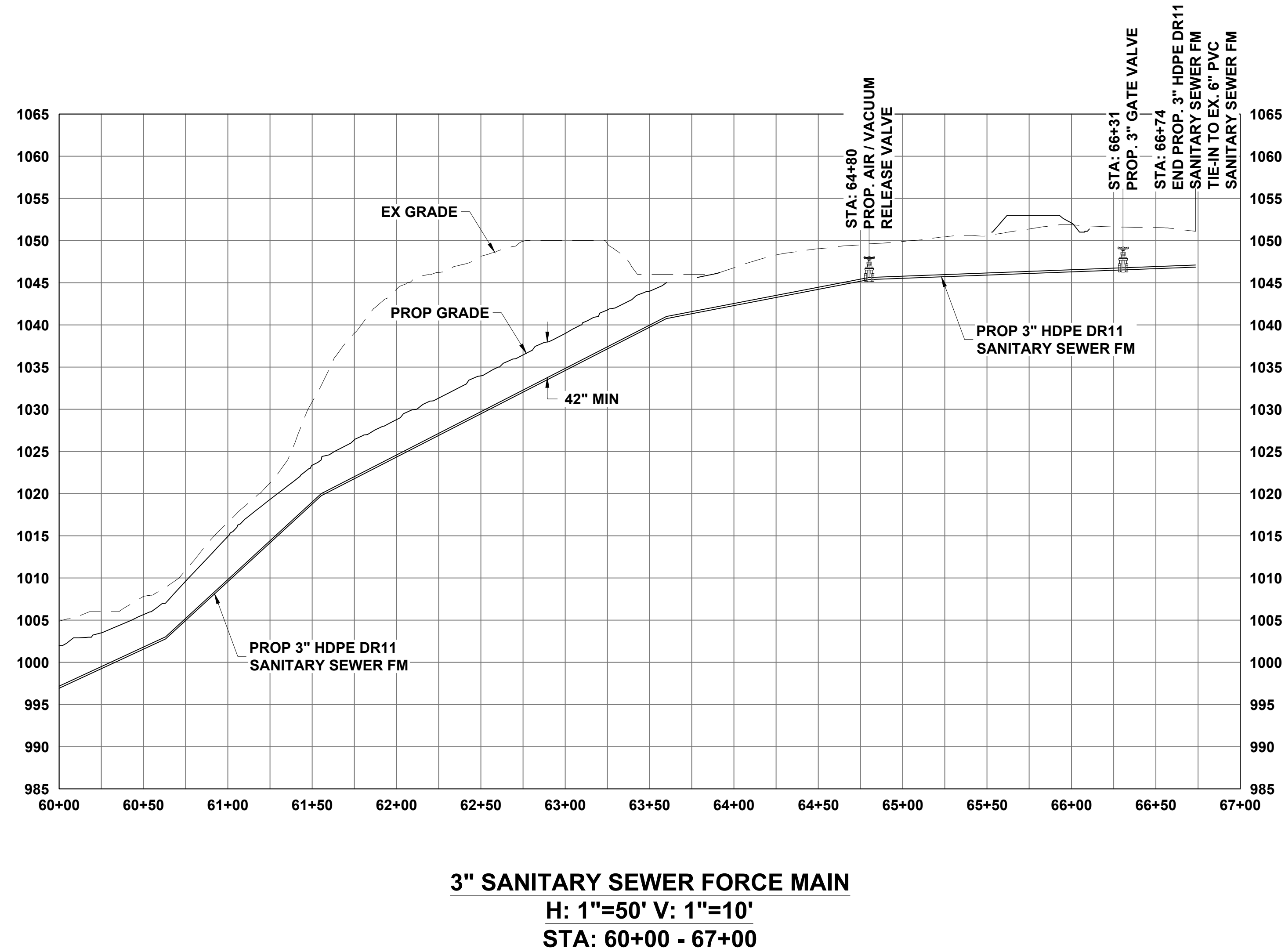
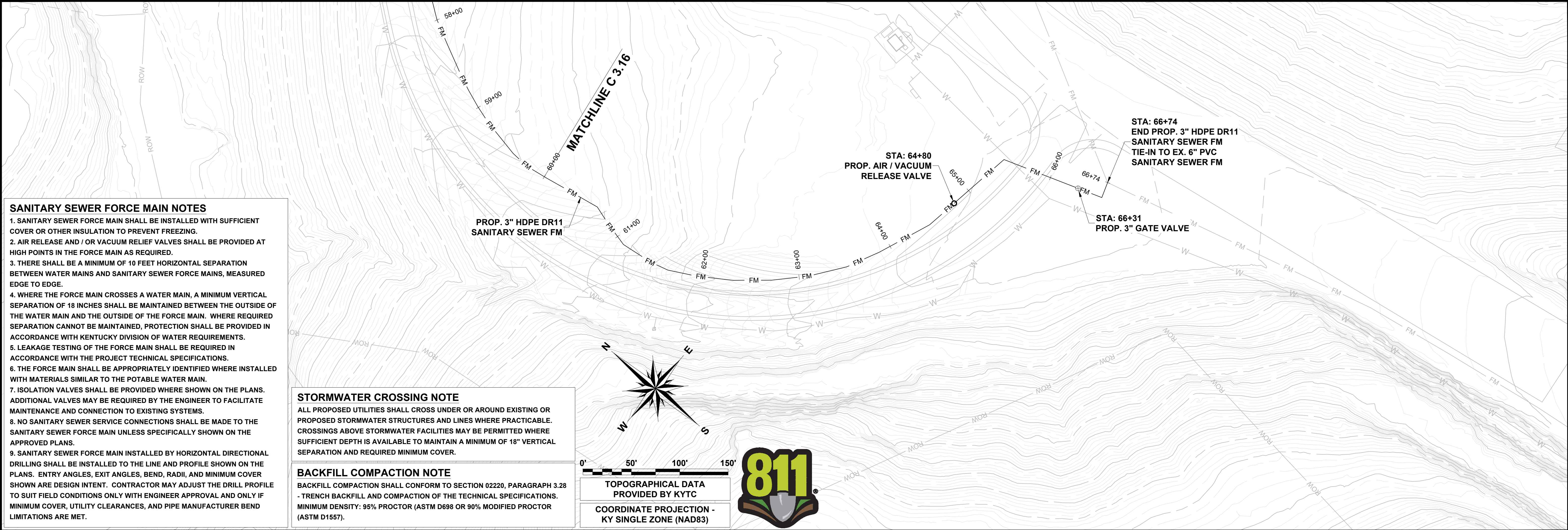
KNOTT COUNTY WATER & SEWER DISTRICT
7777 BIG BRANCH ROAD, VICCO, KY 41773
OLIVE BRANCH SUBDIVISION DEVELOPMENT
WATER & SANITARY SEWER PROJECT

RMJE
LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY
CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

REVISIONS	
DATE	DESCRIPTION

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 27, 2026
SCALE:	SEE SHEET

C 3.16



KNOTT COUNTY WATER & SEWER DISTRICT
7777 BIG BRANCH ROAD, VICO, KY 41773
OLIVE BRANCH SUBDIVISION DEVELOPMENT
WATER & SANITARY SEWER PROJECT



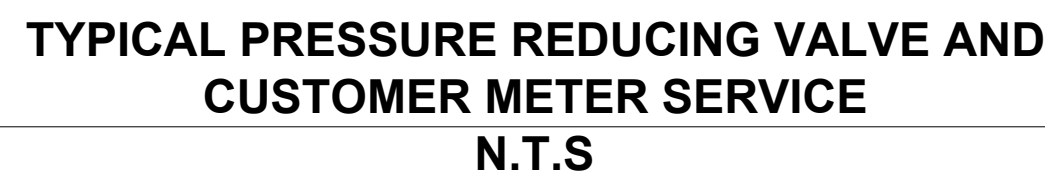
LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY
CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

REVISIONS	
DATE	DESCRIPTION

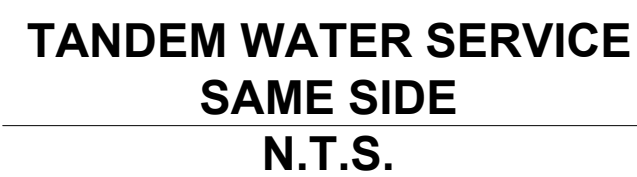
DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 27, 2026
SCALE:	SEE SHEET

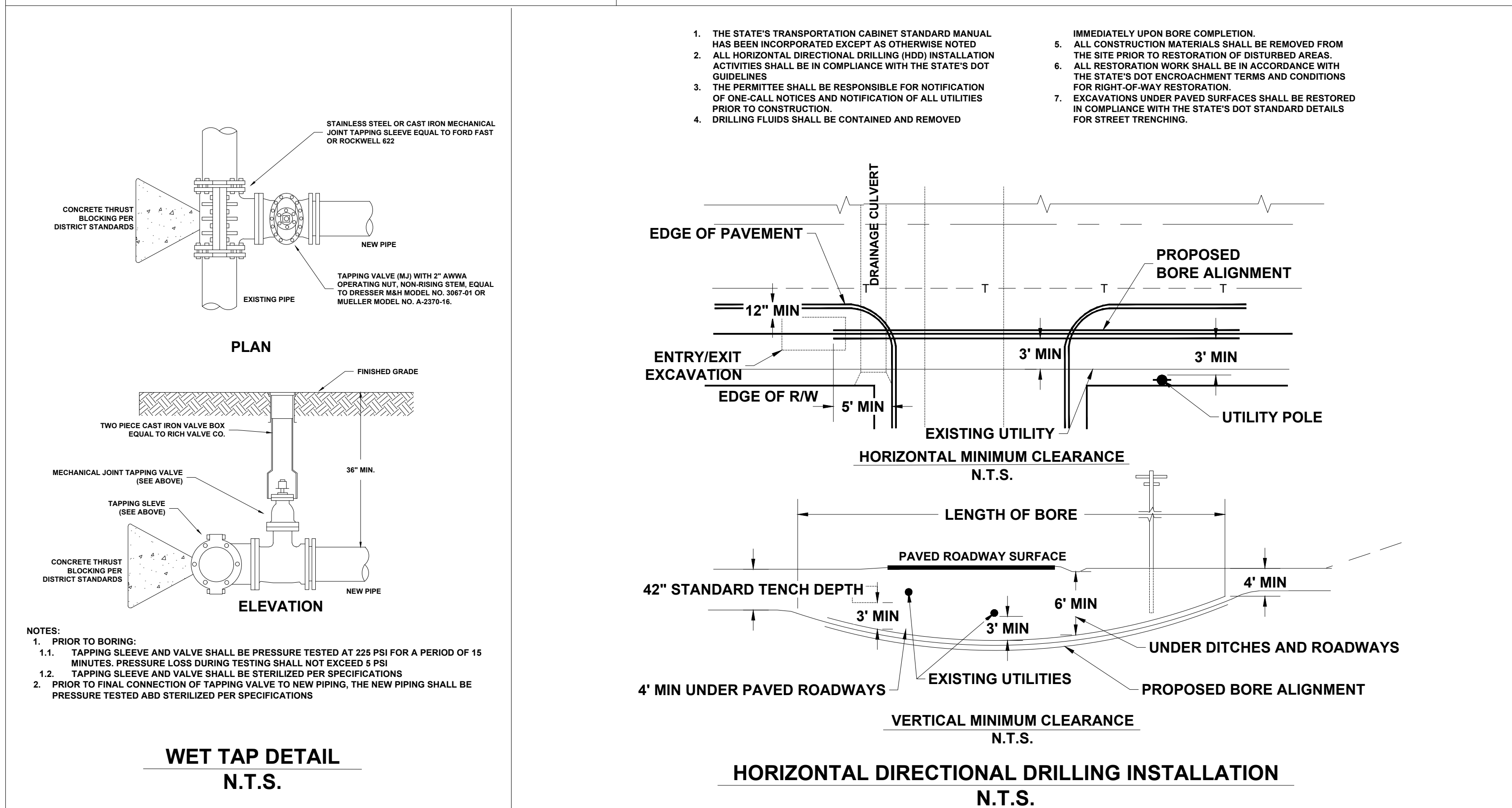
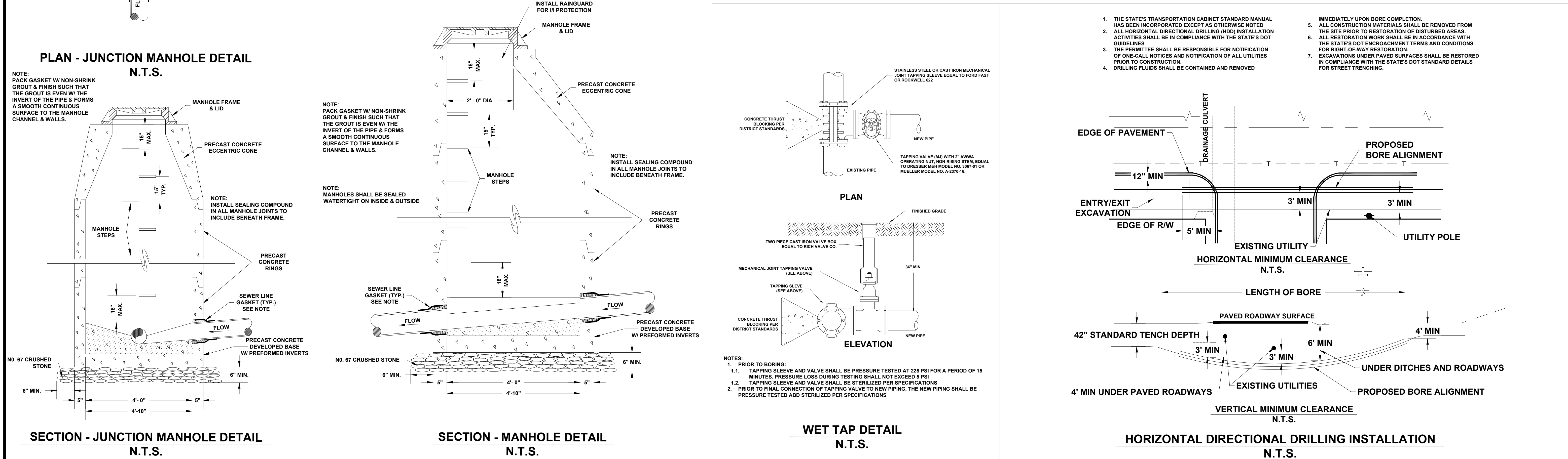
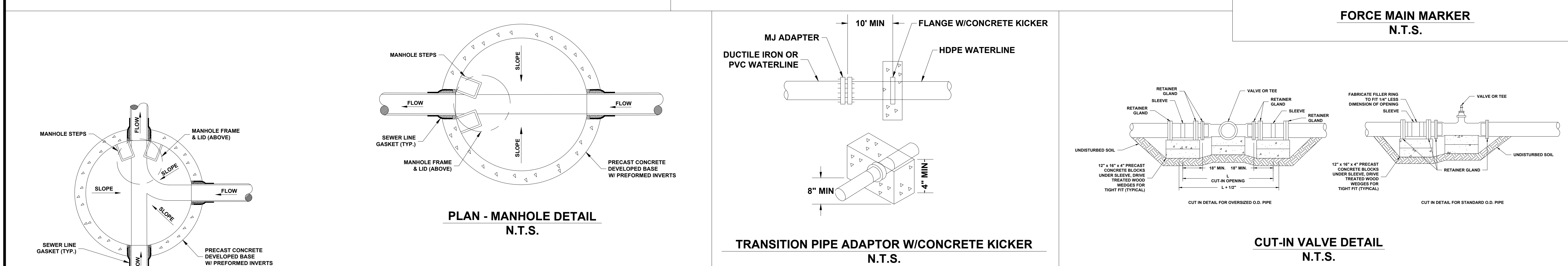
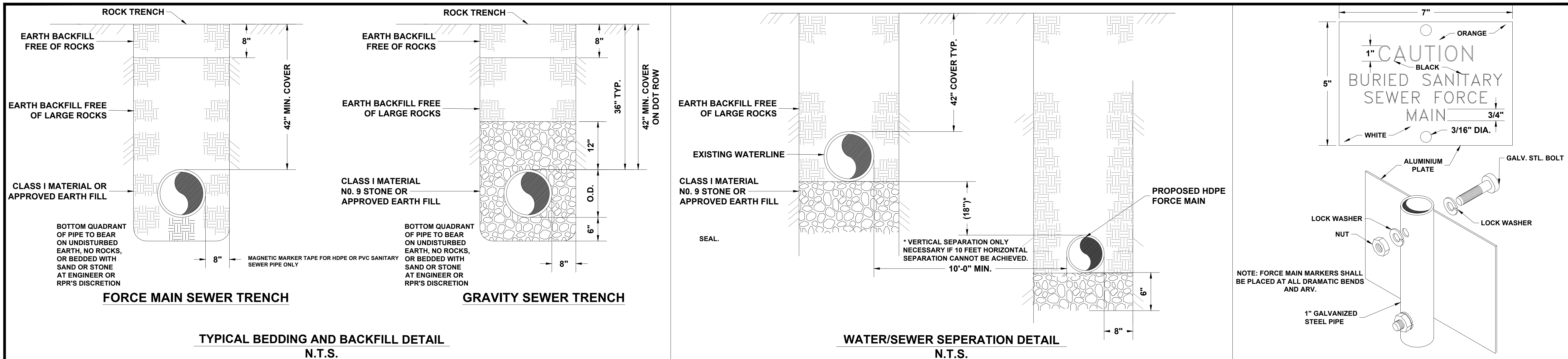
C 3.17

3/4" SERVICE LINE	MAXIMUM LENGTH
SAME SIDE	25
OPPOSITE SIDE	125
SAME SIDE W/ PRV	25
OPPOSITE SIDE W/ PRV	125



- BOXES IN GRASS AREAS SHALL BE NO HIGHER THAN $\frac{1}{2}$ " ABOVE GROUND & NO LOWER THAN FLUSH. BOXES IN CONCRETE OR PAVED AREAS SHALL BE FLUSH. IN AREAS TO BE SODDED, THE TIP OF THE BOXES SHALL BE 2" ABOVE GRADE.





KNOTT COUNTY WATER & SEWER DISTRICT
7777 BIG BRANCH ROAD, VICO, KY 41773

OLIVE BRANCH SUBDIVISION DEVELOPMENT
WATER & SANITARY SEWER PROJECT

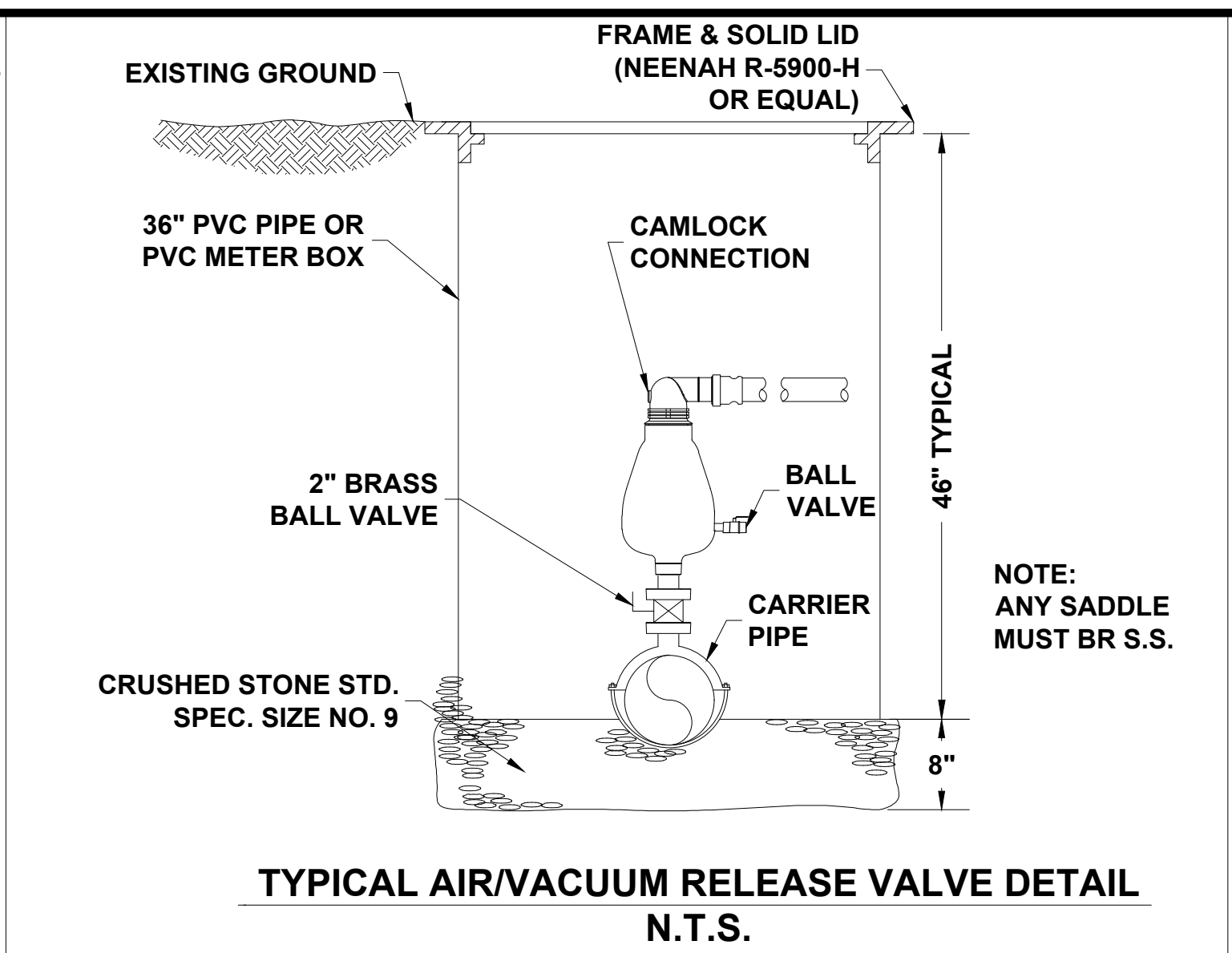
RMJE

LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY

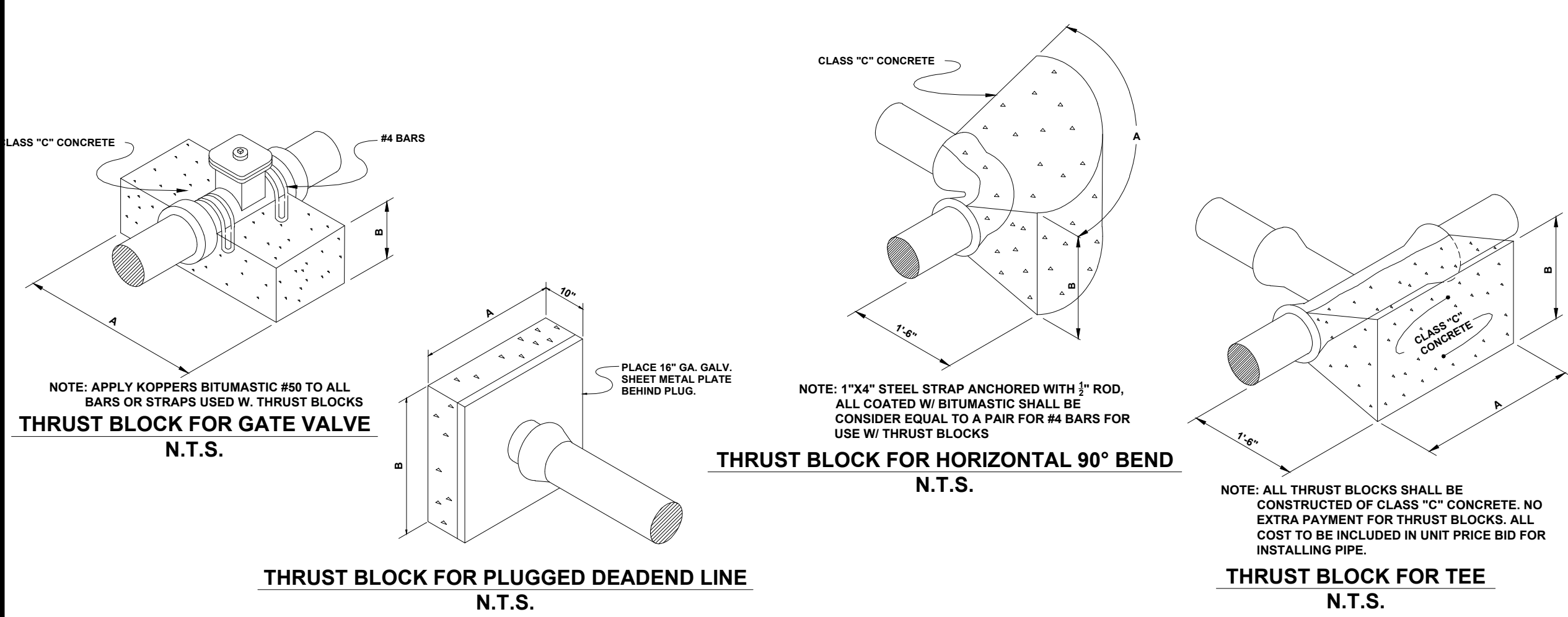
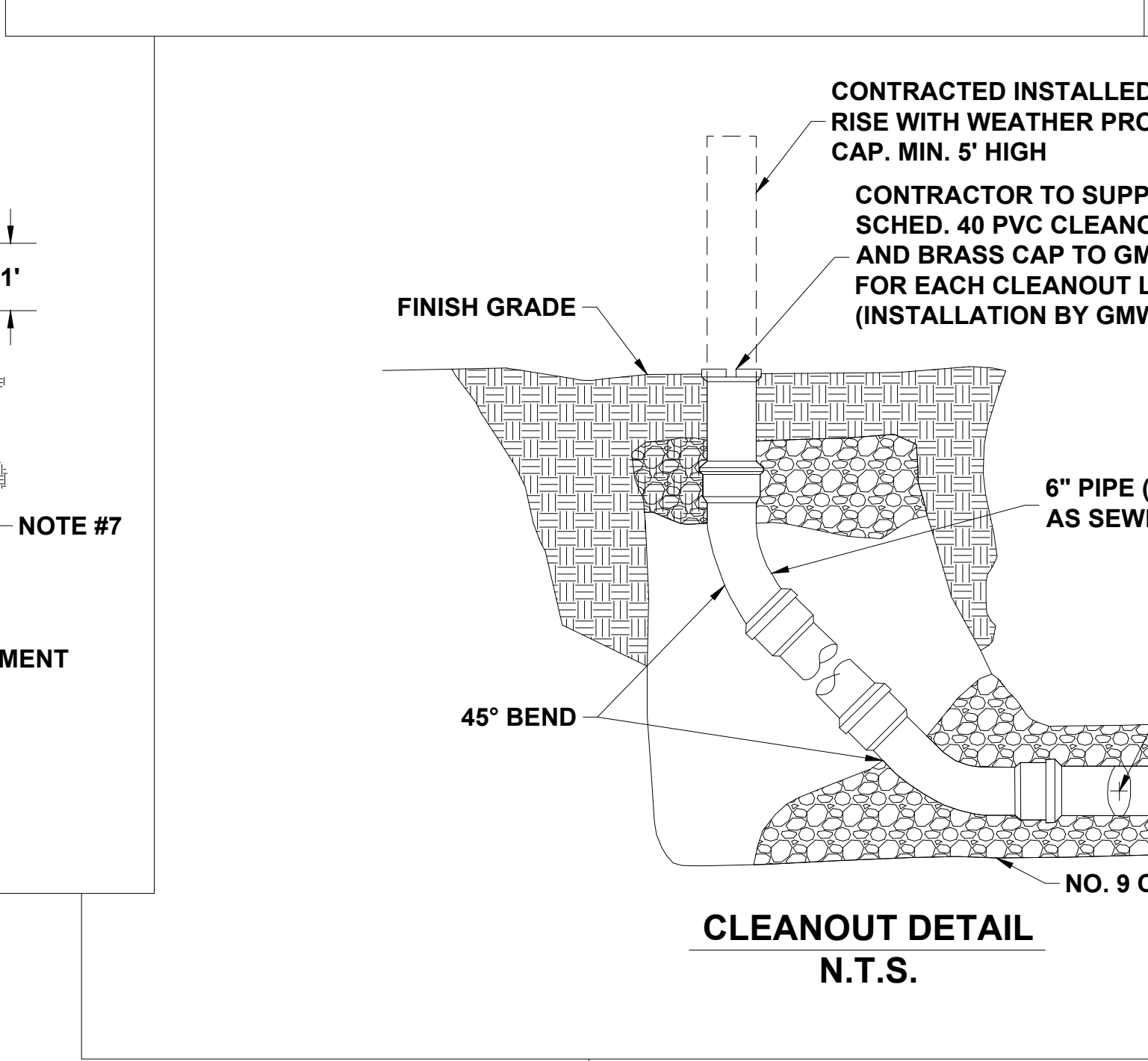
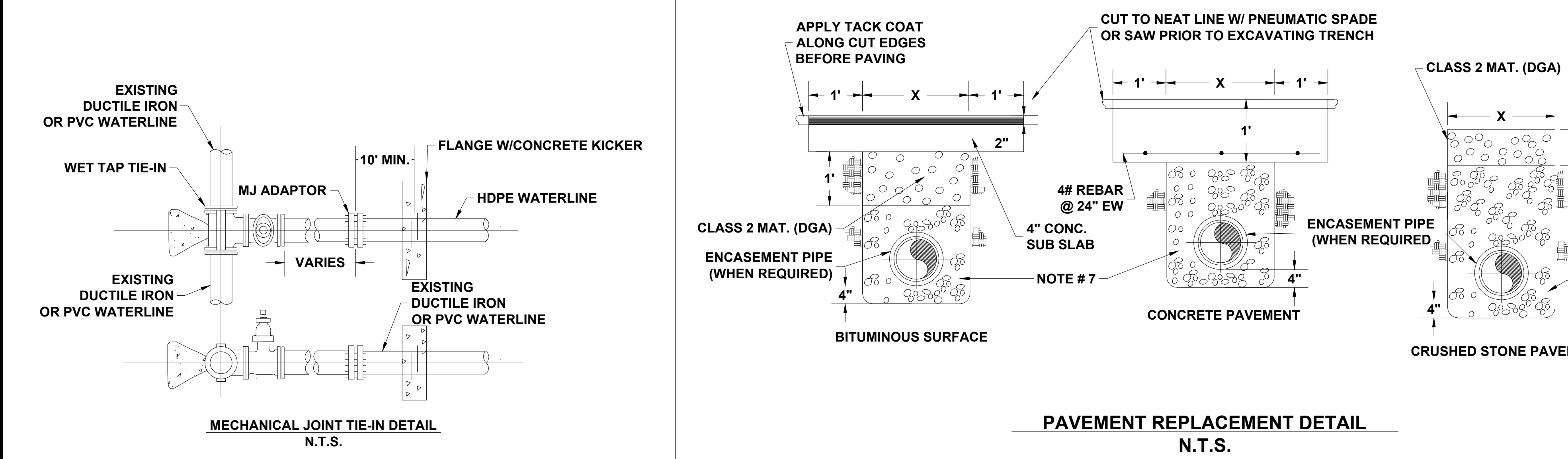
CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

[illegible]

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 27, 2026
SCALE:	NTS



NOTE:
ISOLATION VALVE IS INCLUDED IN HYDRANT ASSEMBLY.
ISOLATION VALVE SHALL BE ANCHORED TO THE TEE AND FIRE HYDRANT WITH FOUR S.S. ALL
THREAD RODS OR MECHANICAL JOINT ANCHORING FITTINGS AS MANUFACTURED BY CLOW.

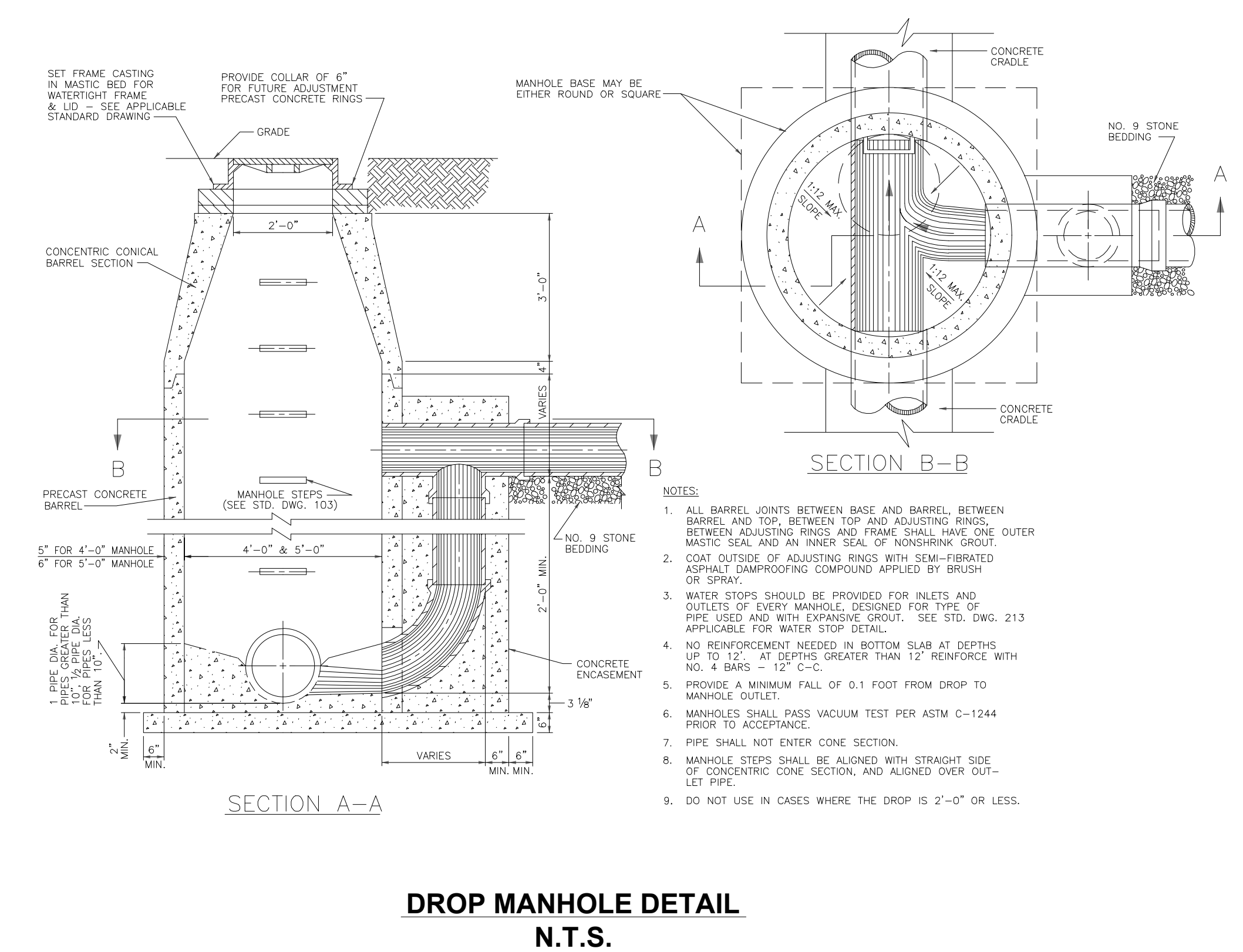


PIPE SIZE	BEARING AREA 90° BEND	"A"		"B"		BEARING AREA 45° BEND		"A"		"B"		BEARING AREA, TEE, GATE VALVE & DEADEND		"A"		"B"	
		FT. ²	FT. ²	FT. ²	FT. ²	FT. ²	FT. ²	FT. ²	FT. ²	FT. ²	FT. ²	FT. ²	FT. ²	FT. ²	FT. ²	FT. ²	FT. ²
1 1/2"	0.33	FT. ²	12"	4"	0.18	FT. ²	12"	8"	4"	0.24	FT. ²	12"	9"	4"			
2"	0.52	FT. ²	12"	7"	0.28	FT. ²	12"	4"	0.37	FT. ²	12"	12"	5"				
2 1/2"	0.75	FT. ²	12"	9"	0.41	FT. ²	12"	12"	5"	0.53	FT. ²	12"	12"	7"			
3"	1.12	FT. ²	18"	9"	0.61	FT. ²	12"	18"	8"	0.79	FT. ²	18"	18"	7"			
4"	1.84	FT. ²	24"	12"	1.00	FT. ²	12"	18"	8"	1.30	FT. ²	24"	8"				
6"	3.96	FT. ²	36"	16"	2.14	FT. ²	26"	12"	2.80	FT. ²	30"	30"	14"				
8"	6.70	FT. ²	64"	18"	3.63	FT. ²	30"	18"	4.74	FT. ²	36"	19"					
10"	10.00	FT. ²	80"	24"	5.41	FT. ²	40"	18"	7.07	FT. ²	43"	24"					
12"	13.69	FT. ²	60"	33"	7.41	FT. ²	36"	30"	9.68	FT. ²	47"	30"					
14"	16.35	FT. ²	66"	36"	9.35	FT. ²	40"	34"	12.20	FT. ²	50"	30"					
16"	19.55	FT. ²	72"	40"	11.35	FT. ²	60"	28"	14.77	FT. ²	60"	36"					

THRUST BLOCK I (160 PSI DESIGNED)
N.T.S.

PIPE SIZE	BEARING AREA 90° BEND	"A"		"B"		BEARING AREA 45° BEND		"A"		"B"		BEARING AREA, TEE, GATE VALVE & DEADEND				"A"	"B"
		FT. ²	IN. ²	6"	4"	0.90	FT. ²	IN. ²	6"	4"	0.12	FT. ²	IN. ²	5"	4"		
1 1/2"	0.17	FT. ²	12"	6"	4"	0.90	FT. ²	12"	6"	4"	0.12	FT. ²	12"	5"	4"		
2"	0.26	FT. ²	12"	10"	4"	0.14	FT. ²	22"	8"	4"	0.18	FT. ²	22"	7"	4"		
2 1/2"	0.23	FT. ²	12"	12"	5"	0.20	FT. ²	22"	8"	4"	0.26	FT. ²	22"	10"	4"		
3"	0.56	FT. ²	12"	12"	7"	0.30	FT. ²	22"	8"	5"	0.40	FT. ²	22"	10"	6"		
4"	0.92	FT. ²	18"	8"	0.50	FT. ²	22"	9"	8"	0.65	FT. ²	22"	12"	8"			
6"	1.98	FT. ²	24"	12"	1.07	FT. ²	22"	16"	10"	1.40	FT. ²	22"	18"	12"			
8"	3.35	FT. ²	42"	12"	1.82	FT. ²	22"	22"	12"	2.37	FT. ²	22"	29"	12"			
10"	5.00	FT. ²	40"	18"	2.71	FT. ²	22"	22"	18"	3.54	FT. ²	22"	29"	18"			
12"	6.85	FT. ²	42"	24"	3.71	FT. ²	22"	30"	18"	4.84	FT. ²	22"	30"	24"			
14"	8.80	FT. ²	43"	30"	4.67	FT. ²	22"	36"	19"	6.16	FT. ²	22"	36"	26"			
16"	11.20	FT. ²	62"	27"	5.66	FT. ²	24"	44"	19"	7.50	FT. ²	24"	36"	30"			

THRUST BLOCK II (160 PSI DESIGNED)
N.T.S.



TYPICAL SANITARY SEWER DETAILS - 2

KNOTT COUNTY WATER & SEWER DISTRICT
7777 BIG BRANCH ROAD, VICO, KY 41773

OLIVE BRANCH SUBDIVISION DEVELOPMENT
WATER & SANITARY SEWER PROJECT

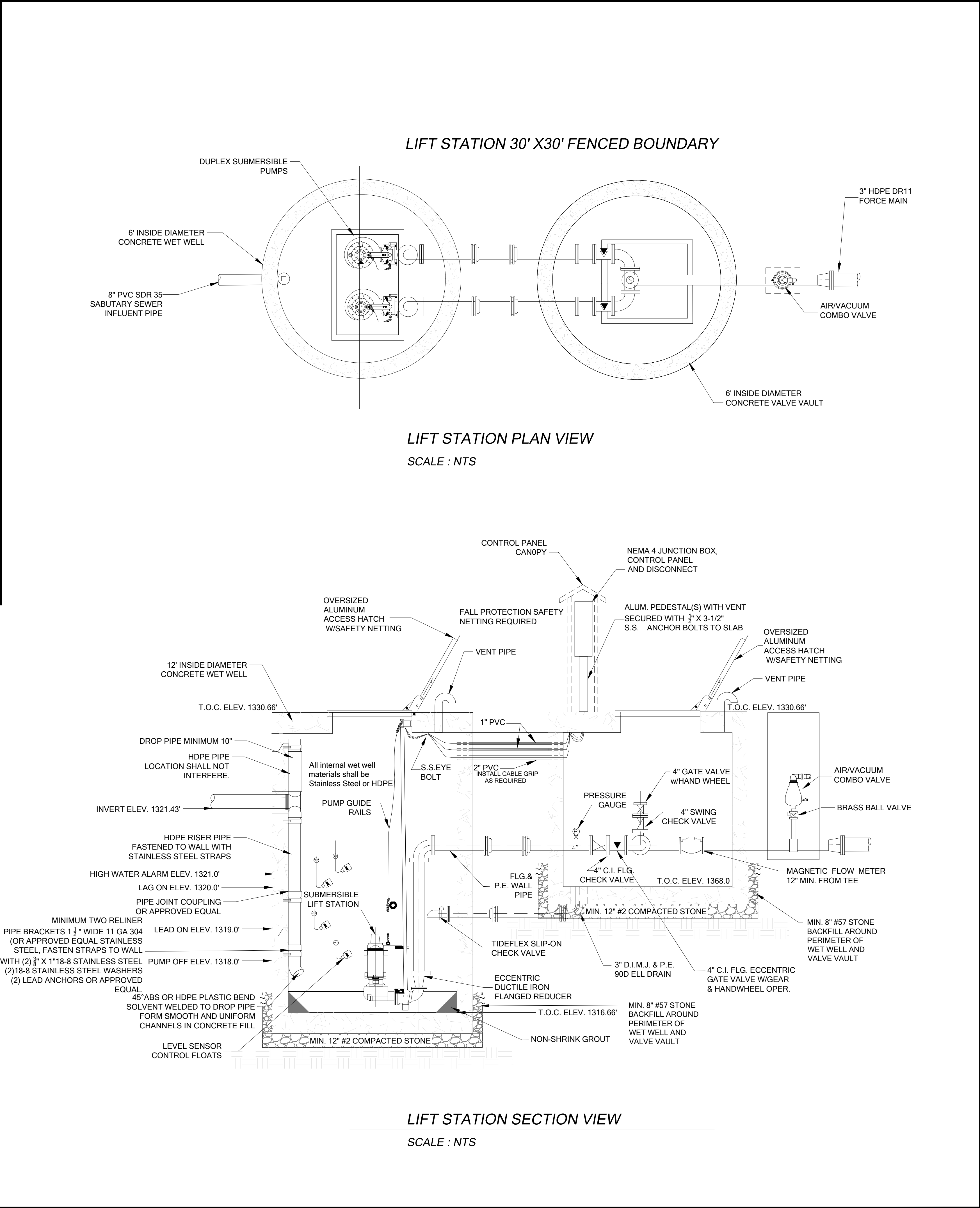
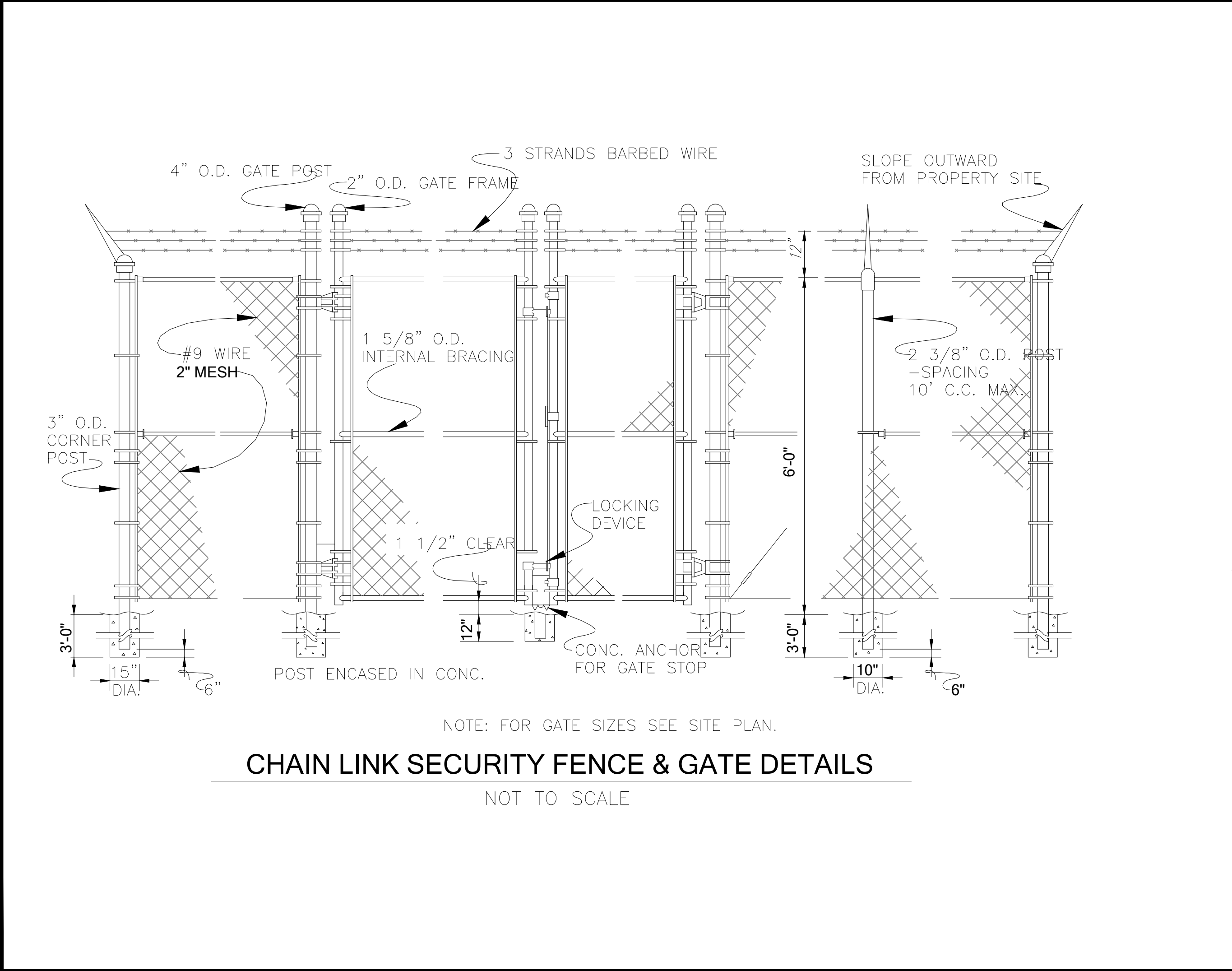
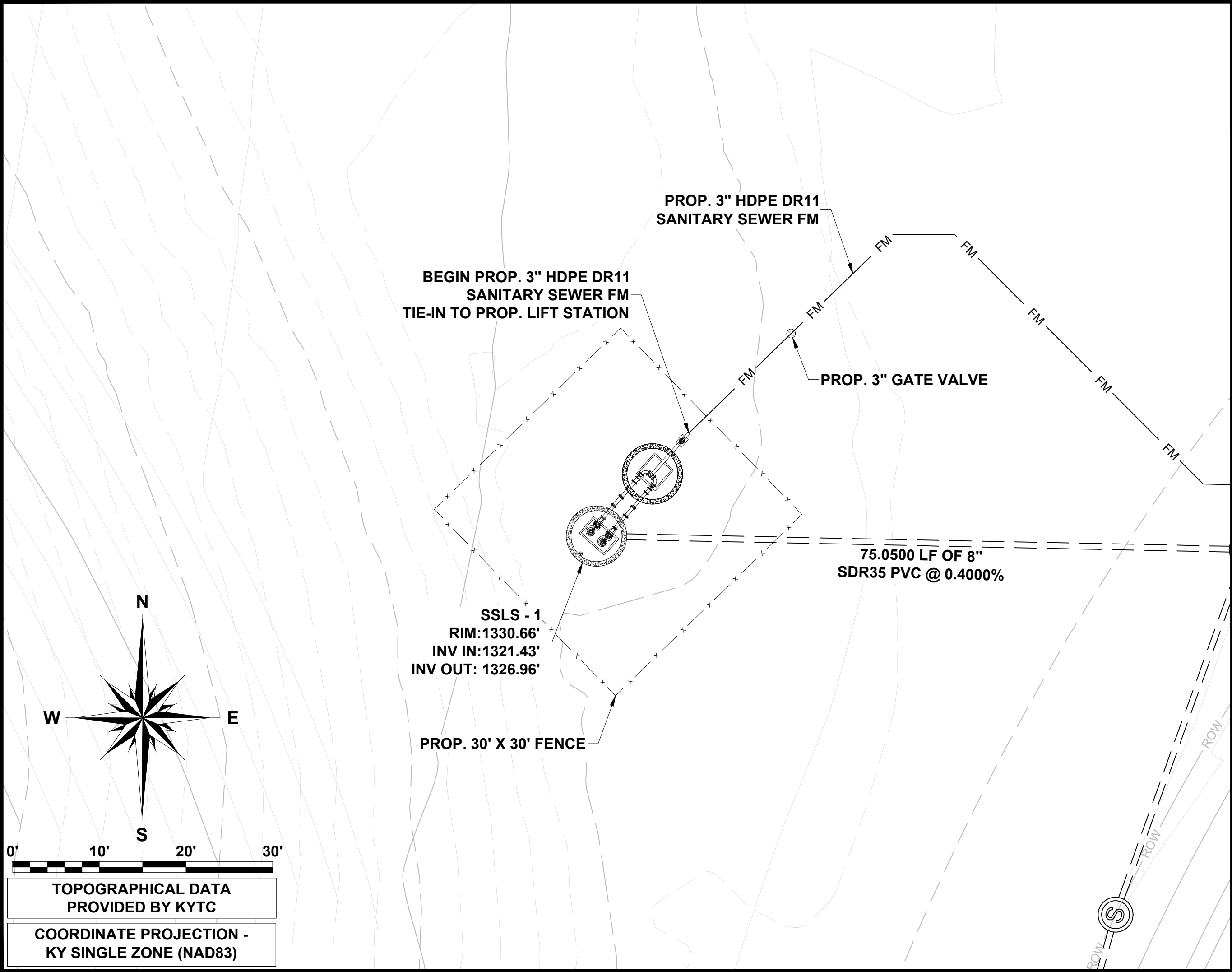
PE RMJE

LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY

CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

[illegible]

D 2.1



KNOTT COUNTY WATER & SEWER DISTRICT

7777 BIG BRANCH ROAD, VICO, KY 41773

OLIVE BRANCH SUBDIVISION DEVELOPMENT

WATER & SANITARY SEWER PROJECT

RMJE

LEXINGTON | HINDMAN | TOMPKINSVILLE

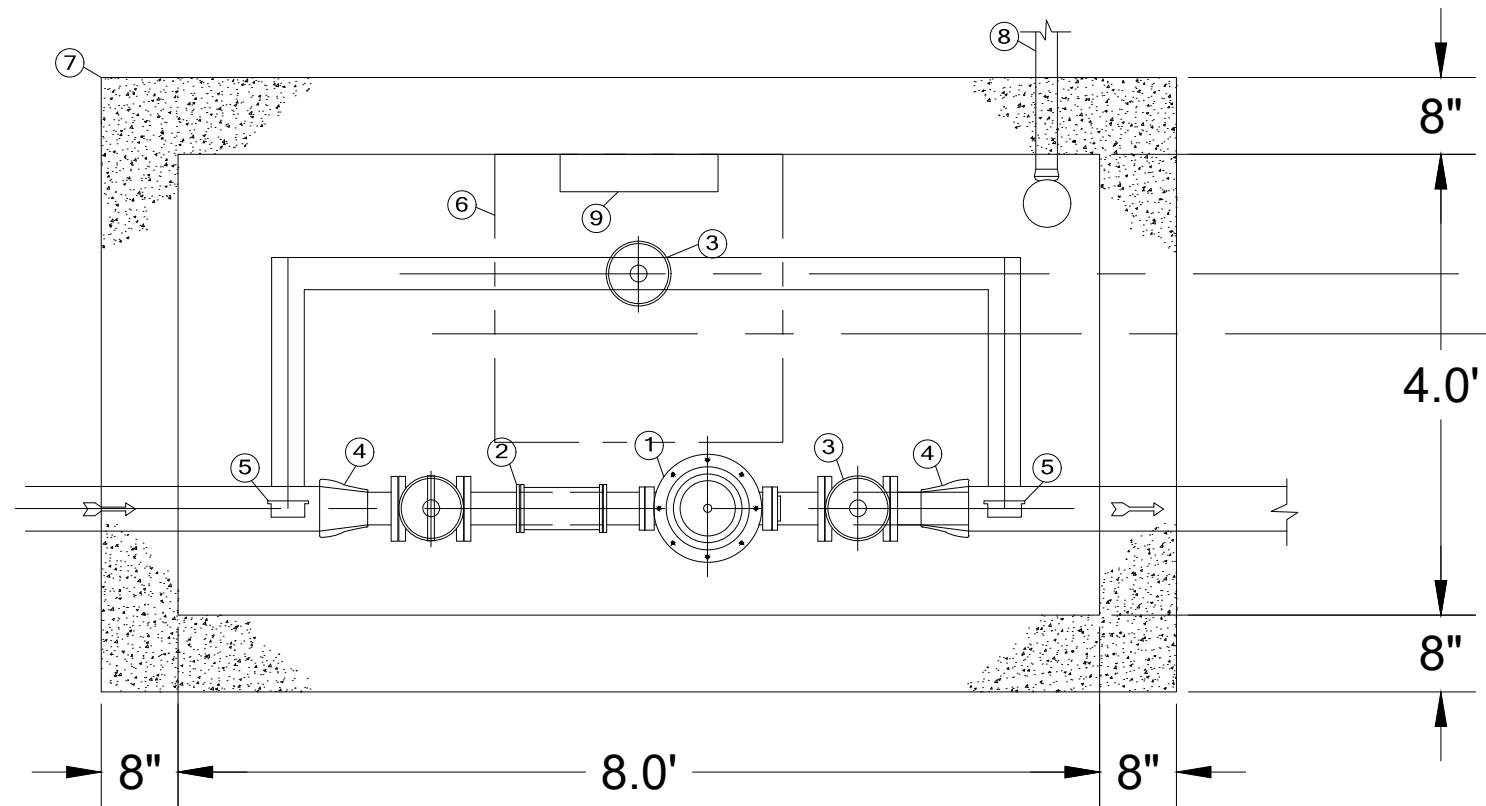
KENTUCKY

CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

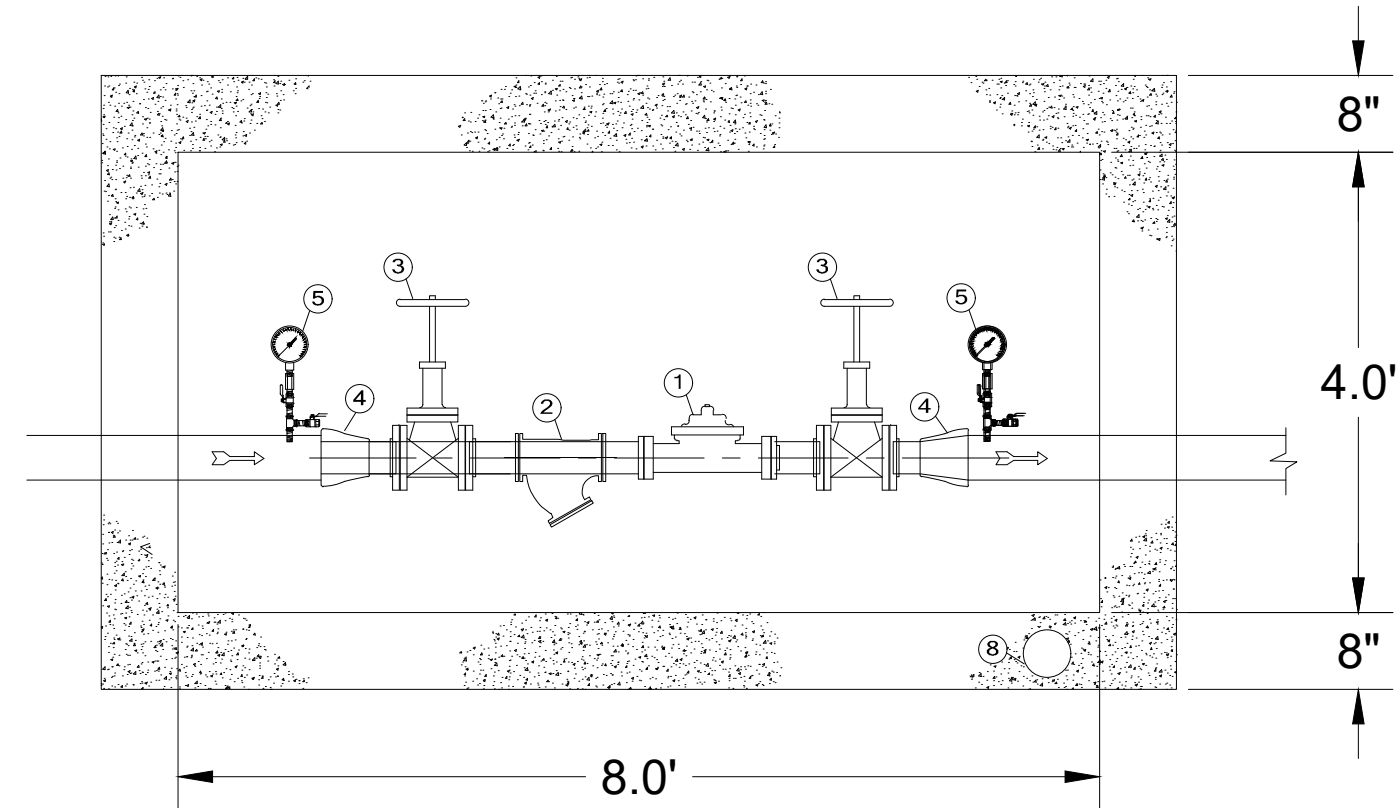
REVISIONS	
DATE	DESCRIPTION

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 27, 2026
SCALE:	NTS

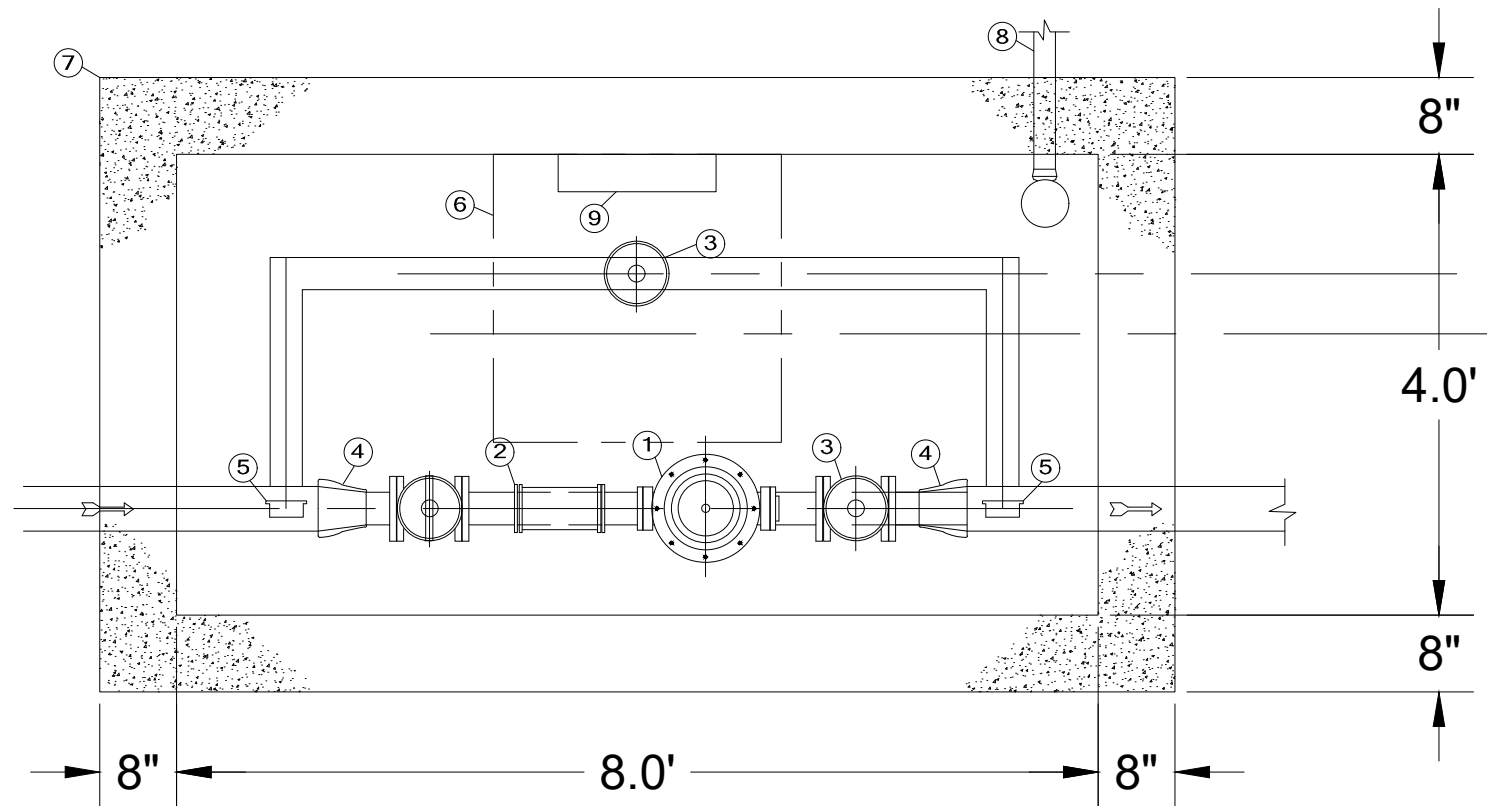
D 3.0



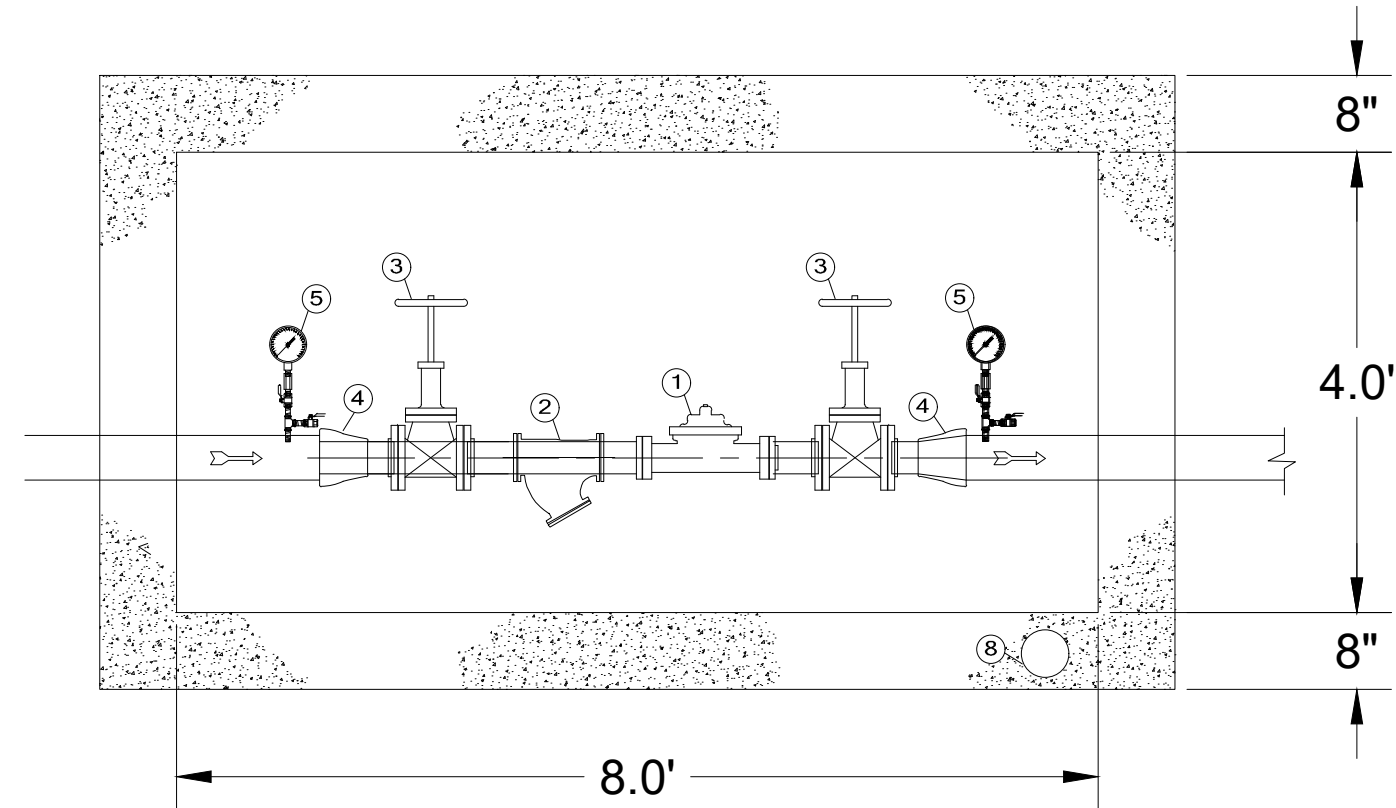
PRV LEGEND	
KEY	DESCRIPTION
1	3" PRV - SETPOINT @ 100 PSI
2	3" STRAINER W/BLOW OFF VALVE
3	3" GATE VALVE W HW
4	8" x 3" REDUCER
5	PRESSURE GAUGE W/BLOCK, BLEED
6	VALVES & NV PRESS SNUBBER
7	30" x 30" HATCH
8	VAULT 4' x 8' x 4'
9	FLOOR DRAIN W/2" PVC PIPE TO DAYLIGHT
10	CAST IN STEPS



PRESSURE REDUCING VALVE #1
N.T.S.



PRV LEGEND	
KEY	DESCRIPTION
1	3" PRV - SETPOINT @ 100 PSI
2	3" STRAINER W/BLOW OFF VALVE
3	3" GATE VALVE W HW
4	8" x 3" REDUCER
5	PRESSURE GAUGE W/BLOCK, BLEED
6	VALVES & NV PRESS SNUBBER
7	30" x 30" HATCH
8	VAULT 4' x 8' x 4'
9	FLOOR DRAIN W/2" PVC PIPE TO DAYLIGHT
10	CAST IN STEPS



PRESSURE REDUCING VALVE #2
N.T.S.

KNOTT COUNTY WATER & SEWER DISTRICT
7777 BIG BRANCH ROAD, VICO, KY 41773
OLIVE BRANCH SUBDIVISION DEVELOPMENT
WATER & SANITARY SEWER PROJECT

RMJE

RMJE

LEXINGTON | HINDMAN | TOMPKINSVILLE
KENTUCKY
CIVIL | GEOTECHNICAL | SURVEYING | MATERIAL TESTING

REVISIONS	
DATE	DESCRIPTION

DETAILED BY:	SMAJ
REVIEWED BY:	SDE
JOB NO:	25-01-033
DATE:	Jul. 31, 2026
SCALE:	NTS



D 4.0