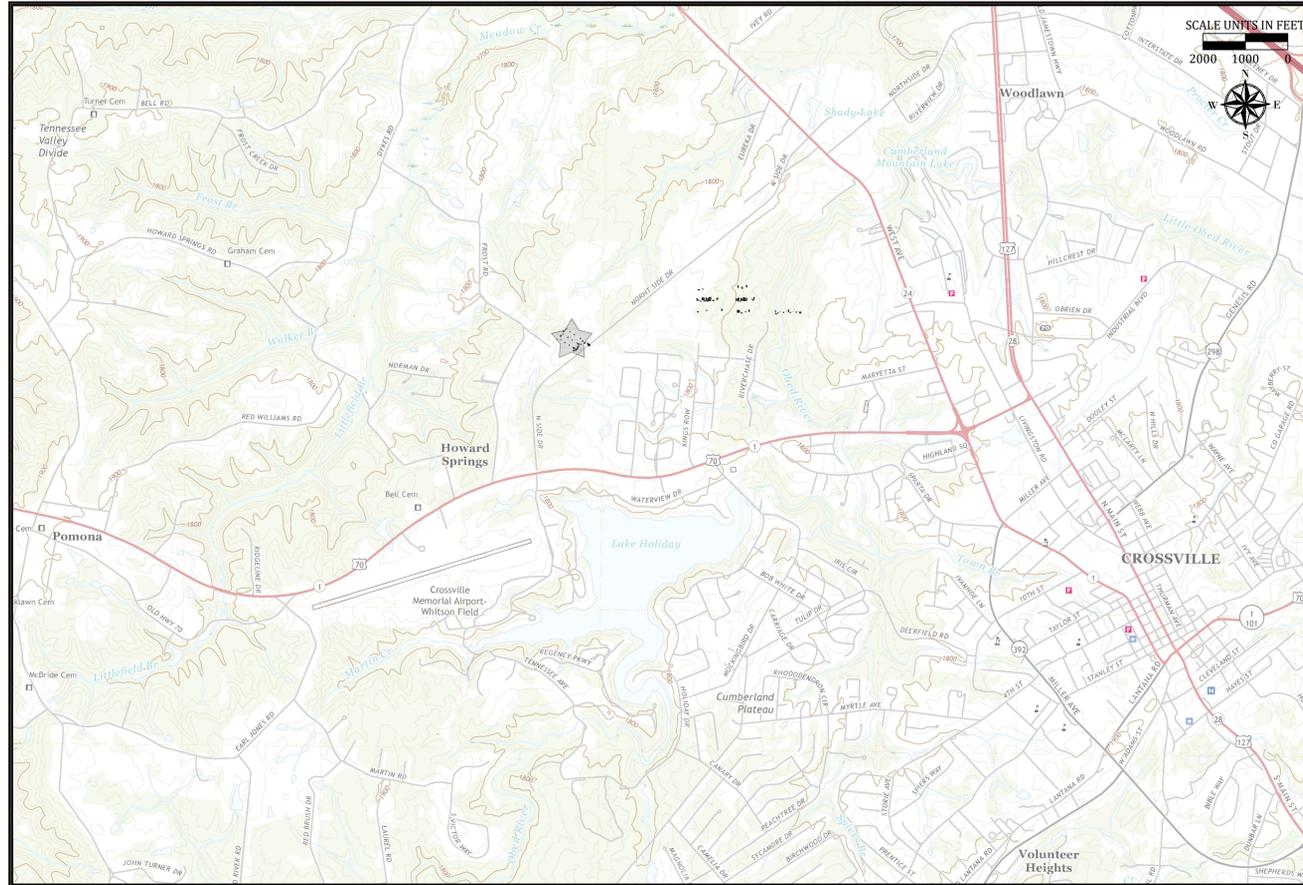


MARLOW FARMS PROPOSED RV PARK 645 NORTHSIDE DRIVE CROSSVILLE, TENNESSEE

FOR: BRAD DAUGHERTY CONSTRUCTION

CROSSVILLE, TENNESSEE



PROJECT LOCATION MAP:
USGS TOPOGRAPHIC QUADRANGLE, 7.5-MINUTE SERIES - CROSSVILLE | TENNESSEE - CUMBERLAND COUNTY

PROJECT SITE
TOTAL PROPERTY - 64.5± ACRES
LAT: N 35.966219°
LONG: W -85.072957°
COUNTY: CUMBERLAND, MAP 099,
GROUP N/A, PARCEL 014.01
NORTHSIDE DRIVE
CROSSVILLE, TENNESSEE

ECE SERVICES PROJECT # 23479

INDEX OF DRAWING SHEETS

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— P — EXISTING PROPERTY LINE	— T — EXISTING TELEPHONE OVERHEAD	⊗ WV	EXISTING WATER VALVE	8-in PVC	SS	PROPOSED GRAVITY SEWER LINE	UP	PROPOSED UTILITY POLE
— ADJOINING PROPERTY LINE	— UG-T	⊗ FH	EXISTING FIRE HYDRANT	2-in PVC	LPS	PROPOSED LOW PRESSURE SEWER LINE	LP	PROPOSED LIGHT POLE
— ROW — EXISTING RIGHT-OF-WAY	△ C.P.	⊗ PRV	EXISTING WATER PRESSURE REDUCING VALVE	2-in PE	G	PROPOSED NATURAL GAS LINE	GW	PROPOSED GUY WIRE
10-ft SIDE SB-E	B.M.	⊗ MH-T.O.C.	EXISTING SEWER MANHOLE	← FLOW →	SA	PROPOSED SEWER LEACH FIELD	GP	PROPOSED GUY POLE
EXISTING UTILITY EASEMENT	B.H.	⊗ CO	EXISTING SEWER CLEAN OUT	SA	PROPOSED FUTURE SEWER LEACH FIELD	GM	PROPOSED GAS METER	
EXISTING PERMANENT EASEMENT	⊗ IPF	⊗ ST	EXISTING LOW PRESSURE SEWER TAP	10-ft SIDE SB-R	PROPOSED PROPERTY SETBACK LINE	WM	PROPOSED WATER METER	
— X — EXISTING FENCE	⊗ PC	⊗ SV	EXISTING LOW PRESSURE SEWER VALVE	PROPOSED UTILITY EASEMENT	PROPOSED PERMANENT EASEMENT	WV	PROPOSED WATER VALVE	
— W _{fire} — EXISTING FIRE LINE	↑ GRV	EXISTING BUILDING	EXISTING BUILDING CONCRETE	PROPOSED FENCE	PROPOSED FIRE LINE	FH	PROPOSED FIRE HYDRANT ASSEMBLY	
EXISTING TREE LINE	↑ MB	EXISTING ROAD ASPHALT, LIGHT	EXISTING ROAD ASPHALT, HEAVY	— W _{fire} —	PROPOSED TREE LINE	⊗ MH-T.O.C.	PROPOSED SEWER MANHOLE	
— GR — EXISTING GUARD RAIL	↑ CB	EXISTING ROAD CONCRETE	EXISTING ROAD GRAVEL	— GR —	PROPOSED GUARD RAIL	⊗ CO	PROPOSED SEWER CLEAN OUT	
— 1000 — EXISTING TOPOGRAPHIC SURFACE	↑ WHW	EXISTING ROAD GRAVEL	PROPOSED TELEPHONE OVERHEAD	— T —	PROPOSED TELEPHONE OVERHEAD	⊗ ST	PROPOSED LOW PRESSURE SEWER TAP	
— — EXISTING STREAM	↑ EM	PROPOSED LIMIT OF DISTURBANCE	PROPOSED BUILDING	— UG-T —	PROPOSED TELEPHONE UNDERGROUND	⊗ SV	PROPOSED LOW PRESSURE SEWER VALVE	
— RIPARIAN BUFFER	↑ UP	PROPOSED ROAD ASPHALT, LIGHT	PROPOSED ROAD ASPHALT, HEAVY	⊗ BM-EL	PROPOSED SITE BENCH MARK	⊗ BH	PROPOSED BORE HOLE	
18-in CMP	↑ LP	PROPOSED ROAD ASPHALT, HEAVY	PROPOSED ROAD CONCRETE	⊗ IPF	PROPOSED IRON PIN SET	⊗ CB-T.O.C.	PROPOSED CATCH BASIN	
3 PHASE	↓ GP	PROPOSED ROAD CONCRETE	PROPOSED ROAD GRAVEL	⊗ WHW	PROPOSED WINGED HEADWALL	⊗ EM	PROPOSED ELECTRIC METER	
3 PHASE	↑ GP	PROPOSED ROAD GRAVEL	PROPOSED DUPLICATION FIELD	⊗ W	PROPOSED WATER LINE			
8-in PVC	↓ GW	PROPOSED STORM PIPE						
8-in PVC	↓ GP	PROPOSED OVERHEAD POWER LINE						
2-in PVC	⊗ GM	PROPOSED UNDERGROUND POWER LINE						
2-in PE	⊗ GV	PROPOSED UNDERGROUND POWER LINE						
← FLOW →	⊗ WM	PROPOSED WATER LINE						

SHEET SYMBOL LEGEND 1

WATER SYSTEM: CITY OF CROSSVILLE 392 NORTH MAIN STREET CROSSVILLE, TN 38555 931.484.5114	SANITARY SEWER SYSTEM: CITY OF CROSSVILLE 392 NORTH MAIN STREET CROSSVILLE, TN 38555 931.484.5114	NATURAL GAS SYSTEM: MIDDLE TENNESSEE NATURAL GAS P.O. BOX 3289 CROSSVILLE, TN 38557 931.484.2067	ELECTRIC SYSTEM: VOLUNTEER ELECTRIC COOPERATIVE 235 OBBRIEN DR. CROSSVILLE, TN 38555 931.44.3527	TELEPHONE/COMMUNICATIONS SYSTEM: CITIZENS COMMUNICATIONS, INC. 174 SPARTA HWY. CROSSVILLE, TN 38555 1.800.921.8101	CABLE TV (CATV) SYSTEM: CITIZENS COMMUNICATIONS, INC. 174 SPARTA HWY. CROSSVILLE, TN 38555 1.800.921.8101
LOCAL UTILITY PROVIDERS	LOCAL UTILITY PROVIDERS	LOCAL UTILITY PROVIDERS	LOCAL UTILITY PROVIDERS	LOCAL UTILITY PROVIDERS	LOCAL UTILITY PROVIDERS

LOCAL UTILITY PROVIDERS 1

SCOPE:

THE GRADING AND DEVELOPMENT OF 35 RV CAMPSITES LOCATED OFF NORTHSIDE DRIVE IN CROSSVILLE, TENNESSEE. ASSOCIATED WORK FOR WATERLINES, GRAVITY SEWER LINES AND LOW PRESSURE SANITARY SEWER LINES TO SERVE EACH SITE AS WELL AS CONNECTIONS FOR FUTURE GROWTH. THE FACILITY WILL COORDINATED WITH A SANITARY SEWER PUMPING SERVICE TO PERFORM PUMP AND HAUL OF THE SANITARY SEWER TILL ACCESS TO CITY OF CROSSVILLE SANITARY SEWER IS AVAILABLE.

ENVIRONMENTAL & CIVIL ENGINEERING SERVICES

CROSSVILLE | MOUNT JULIET
702 Old Jamestown Hwy
Crossville, TN 38555

Crossville | 931.484.9321
Mount Juliet | 615.863.3237

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ENGINEERING ♦ GEOTECHNICAL ♦ ENVIRONMENTAL

SHEET REFERENCE NUMBER:

G-001

SHEET 1 OF 10

DRAFT

SURVEYING PLATS

- 1. THIS SURVEY IS NOT A PROPERTY SURVEY AND IS NOT INTENDED FOR THE TRANSFER OF PROPERTY. PROPERTY LINES SHOWN ARE BASED ON RECORDED DEED CALLS BASED ON RECORDS IN THE COUNTY WHERE THE SITE IS LOCATED. ONLY PROMINENT PROPERTY MONUMENTS ARE SHOWN, AND THE RECORDED DESCRIPTION IS SHOWN TO MATCH AVAILABLE INFORMATION TO THE EXTENT POSSIBLE.
2. AS SHOWN HEREIN, UNDERGROUND UTILITY LOCATIONS ARE BASED UPON OBSERVABLE EVIDENCE FOUND IN THE FIELD, AND UTILITY COMPANY RECORDS WHERE AVAILABLE. UTILITY LOCATIONS ARE APPROXIMATE AND ARE SUBJECT TO FIELD VERIFICATION BY THE UTILITY OWNER. UTILITIES OTHER THAN THOSE SHOWN MAY EXIST. IN TENNESSEE, IT IS A REQUIREMENT PER THE "UNDERGROUND UTILITY DAMAGE PREVENTION ACT" THAT ANYONE WHO ENGAGES IN EXCAVATION MUST NOTIFY ALL KNOWN UNDERGROUND UTILITY OWNERS NO LESS THAN THREE NOR MORE THAN TEN WORKING DAYS OF THEIR INTENT TO EXCAVATE. A LIST OF THESE UTILITIES CAN BE OBTAINED FROM THE COUNTY REGISTER OF DEEDS. THE TENNESSEE ONE CALL SYSTEM CAN BE NOTIFIED BY CALLING 1-800-351-1111 FOR ALL PARTICIPATING UTILITIES.
3. SITE BENCHMARK: PROPERTY CORNER. PK NAIL IN WOOD FRAME OF TELEPHONE PEDESTAL BOX ELEVATION= 98.45
4. SITE BENCHMARK AND REFERENCE: CONTRACTOR SHALL VERIFY THAT SITE REFERENCE INFORMATION HAS NOT BEEN DISTURBED BEFORE BEING CONSTRUCTION ACTIVITY AND SHALL PROTECT AND MAINTAIN THE REFERENCE POINT DURING THE PROJECT. BEFORE THE REMOVAL OF ANY REFERENCE INFORMATION, THE CONTRACTOR SHALL INSTALL AN ACCEPTABLE AND ACCURATE REPLACEMENT.

MISCELLANEOUS NOTES

- 1. REFERENCE STANDARDS: ALL CONSTRUCTION SHALL COMPLY WITH ALL OF THE APPLICABLE REQUIREMENTS OF THE FOLLOWING DRAWINGS, SPECIFICATIONS, AND STANDARDS:
A. PROJECT PLANS AND SPECIFICATIONS
B. EXISTING PERMITS IN EFFECT FOR THE PROJECT.
C. ANY LOCAL GOVERNING UTILITY REQUIREMENTS OR STANDARDS.
D. THE STATE OF TENNESSEE, DEPARTMENT OF ENVIRONMENT AND CONSERVATION, DIVISION OF WATER POLLUTION CONTROL, CHAPTER 0400-40-02 REGULATIONS FOR PLANS, SUBMITTAL, AND APPROVAL; CONTROL OF CONSTRUCTION; CONTROL OF OPERATION, RULES AND REGULATIONS, AND OTHER CRITERIA PUBLISHED BY THE DEPARTMENT.
E. THE STATE OF TENNESSEE, DEPARTMENT OF ENVIRONMENT AND CONSERVATION, DIVISION OF WATER POLLUTION CONTROL, CHAPTER 0400-40-16 PUBLIC SEWERAGE SYSTEMS, RULES AND REGULATIONS AND OTHER CRITERIA PUBLISHED BY THE DEPARTMENT.
F. INTERNATIONAL BUILDING CODE, LATEST EDITION OR REQUIRED LOCAL AUTHORITY EDITION.
G. STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
H. NATIONAL ELECTRIC CODE, LATEST EDITION OR REQUIRED LOCAL AUTHORITY EDITION.

IN THE EVENT OF AN APPARENT DISCREPANCY IN THE ABOVE REQUIREMENTS, THE CONTRACTOR SHALL COMPLY WITH THE MORE STRINGENT REQUIREMENT. THE ENGINEER WILL BE THE JUDGE OF WHICH REQUIREMENT IS MORE STRINGENT.

- 2. PERMITS: THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL CURRENT PERMITS AND REGULATIONS FOR THIS PROJECT, INCLUDING A USACE 404 PERMIT AND ARAP PERMIT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS FOR THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH THE PROVISIONS OF ALL PERMITS. NO CONSTRUCTION ACTIVITY SHALL BEGIN BEFORE OBTAINING ALL THE NECESSARY PERMITS UNDER LOCAL, STATE, OR FEDERAL REGULATIONS. NO EXCAVATION SHALL BE PERFORMED IN FLOWING WATER.
3. VERIFICATION OF PROJECT CONDITIONS: THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, HORIZONTAL LOCATIONS, AND VERTICAL ELEVATIONS OR ANY OTHER CONDITIONS THAT ARE EXISTING AND OF THE WORK BEFORE COMMENCING CONSTRUCTION OPERATIONS AND IMMEDIATELY NOTIFY THE ENGINEER OF ANY CONFLICTS OR DISCREPANCIES. THE CONTRACTOR'S FAILURE TO IMMEDIATELY NOTIFY THE ENGINEER BEFORE COMMENCING WORK SHALL CONSTITUTE THE CONTRACTOR'S ACCEPTANCE OF THE CONDITION(S) AND RELEASE OF ANY CLAIMS FOR AN ADDITIONAL COST.
4. MODIFICATIONS: NO VARIATION, MODIFICATION, OR ALTERATION SHALL BE MADE FROM THIS PLAN WITHOUT THE EXPRESS APPROVAL OF THE ENGINEER.
5. THE CONTRACTOR SHALL ADHERE TO THE NOISE ORDINANCE OF THE CONTROLLING MUNICIPAL AUTHORITY.
6. THE OWNER REQUIRES THE CONTRACTOR TO SUBMIT A SCHEDULE FOR PROPOSED WORK FOR APPROVAL BEFORE BEGINNING ANY WORK. THE CONTRACTOR WILL COORDINATE ALL WORK AND WORK SCHEDULES WITH THE OWNER AND THE ENGINEERING.
7. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR APPROVAL ALL MATERIALS AND SUBCONTRACTOR SERVICES UTILIZED FOR THE PROJECT.
8. THE CONTRACTOR WILL MAINTAIN A COPY OF ALL PLANS, PERMITS, AND PROJECT DOCUMENTATION ON THE PROJECT SITE AT ALL TIMES.
9. ALL AGGREGATES SHALL CONFORM TO THE FOLLOWING SIZES OR EQUIVALENT SIZE AS APPROVED BY THE ENGINEER. LOCAL QUARRIES MAY NOT SUPPLY THESE STANDARD SIZES; PLEASE SUBMIT FOR REVIEW AND APPROVAL BASED ON LOCAL AVAILABILITY.

Table with columns: Run, From Station, To Station, Distance, Elevation, etc. It contains survey data for various points and lines.

10. AGGREGATE SIZES ARE NOTED IN THE PLANS AND DETAIL SECTIONS.

STORMWATER EPSC NOTES

- 32. THE STORMWATER POLLUTION PREVENTION PLAN IS NOT INCLUDED HEREIN BUT PRESENTED AS A SEPARATE PLAN, AS REQUIRED, AND BECOMES PART OF THESE ENGINEERING AND CONSTRUCTION PLANS.
33. ALL PROPOSED STORMWATER PRACTICES SHOWN ON THIS PLAN ARE IN ACCORDANCE WITH AND A PART OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED FOR THIS PROJECT. REFERENCE THE SWPPP FOR ANY CLARIFICATION OR ADDITIONAL CONTROLS THAT MAY NEED TO BE ADDED TO THESE PLANS.
34. NO VARIATION, MODIFICATION, OR ALTERATION SHALL BE MADE FROM THIS PLAN WITHOUT THE EXPRESS APPROVAL OF THE ENGINEER.
35. THE FOLLOWING APPLICATIONS AND PERMIT REQUESTS HAVE BEEN OBTAINED OR SUBMITTED FOR THE PROPOSED PROJECT.
a. TDEC CONSTRUCTION GENERAL PERMIT
b. CITY OF CROSSVILLE LAND DISTURBANCE PERMIT
c. CITY OF CROSSVILLE MS4 STORMWATER PERMIT
37. NO CONSTRUCTION ACTIVITY SHALL BEGIN BEFORE OBTAINING ALL REQUIRED PERMITS UNDER LOCAL, STATE, OR FEDERAL REGULATIONS.
38. ALL ADJACENT PROPERTIES, WATER FEATURES, AND RELATED NATURAL RESOURCES SHALL BE KEPT FREE OF DEPOSITS OR DISCHARGES OF SOIL, SEDIMENT, HAZARDOUS SUBSTANCES, OR CONSTRUCTION-RELATED MATERIAL AT THE CONSTRUCTION SITE.
39. THE CONTRACTOR IS RESPONSIBLE FOR ANY REQUIRED EPSC INSPECTIONS AND COMPLIANCE COSTS.
40. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A COPY OF THE EPSC INSPECTION FORMS ON A MONTHLY BASIS.
41. THE CONTRACTOR IS REQUIRED TO PREVENT OBTAINABLE COLORED STORMWATER WATER FROM LEAVING THE PROJECT SITE, EVEN IF NO STORMWATER PERMIT IS REQUIRED.
42. EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED PER TDEC'S CONSTRUCTION GENERAL PERMIT REQUIREMENTS. THE CONTROL MEASURES SHOWN IN THE DRAWINGS ARE THE MINIMUM REQUIRED, AND ADDITIONAL MEASURES MAY BE NECESSARY AS SITE CONDITIONS DICTATE. THE CONTRACTOR SHALL PROVIDE ADDITIONAL EROSION CONTROL DEVICES AS NEEDED AT NO EXTRA COST.
43. EROSION AND SEDIMENT CONTROL MEASURES MUST BE INSTALLED PRIOR TO DISTURBANCE OF EXISTING GROUND COVER. THEY MUST REMAIN IN PLACE AND FUNCTIONAL THROUGHOUT THE CONSTRUCTION PERIOD.
44. NATURAL VEGETATION SHOULD BE RETAINED AND PROTECTED WHERE FEASIBLE.
45. ANY STORMWATER FLOWING ONTO THE PROJECT SITE SHALL BE DIVERTED SO IT WILL NOT HAVE TO BE MANAGED AS PART OF THE PROJECT STORMWATER MEASURES.
46. ALL TOPSOIL TO BE STRIPPED FROM THE AREA BEING DEVELOPED SHALL BE STOCKPILED AND IMMEDIATELY SEEDED. STOCKPILE SHALL BE SURROUNDED WITH SILT FENCE AND HAVE A SHALLOW TRENCH AROUND THE PILE TO CAPTURE RUNOFF.
47. ALL CUT SLOPES AND EMBANKMENTS FILL ARE TO BE IMMEDIATELY LAID BACK AND STABILIZED AS FOLLOWS:
f. GRADE TO THE FINISHED SLOPE.
g. SCARIFIED
h. TOPSOIL PLACEMENT WITH NOT LESS THAN FOUR INCHES OF SUITABLE TOPSOIL MATERIAL.
i. SEED WITH HYBRID KENTUCKY 31 AT A RATE OF 6-8 LBS /1000 SF
j. MULCHED AT A RATE OF 100 LBS / 1000 SF AND ANCHOR PROPERLY.
48. ALL EMBANKMENTS ARE TO BE GRADED AND SEEDED IMMEDIATELY UPON BEING LAID BACK.
49. ON ALL EMBANKMENT FILL SLOPES, TOPSOIL SHALL BE STRIPPED AT LEAST FIVE (5) FEET WIDER THAN REQUIRED FOR THE EMBANKMENT TOE OF THE SLOPE. A PROTECTIVE BERM OF TOPSOIL SHALL BE LEFT IN THIS AREA, RUNNING PARALLEL TO THE CONTOURS TO RESTRICT DRAINAGE RUNOFF. THE TOPSOIL BERM SHALL BE SEEDED AS REQUIRED FOR STOCKPILES.
50. PAVED AND GRAVEL SURFACES SHALL BE KEPT CLEAN AT ALL TIMES.
51. ALL STORM DRAINAGE OUTLETS SHALL BE STABILIZED, AS REQUIRED BY THE DISCHARGE POINTS BECOME OPERATIONAL.
52. DUST SHALL BE CONTROLLED BY SPRINKLING OR OTHER APPROVED METHODS AS NECESSARY OR AS DIRECTED BY THE ENGINEER.
53. APPLY TEMPORARY SEEDING WHENEVER GRADING OPERATIONS ARE TEMPORARILY HALTED FOR OVER 14 DAYS, AND FINAL GRADING OF EXPOSED SURFACES IS TO BE COMPLETED WITHIN ONE YEAR. APPLY TEMPORARY SEEDING TO STEEP SLOPES (GREATER THAN OR EQUAL TO 3:1) WHENEVER GRADING OPERATIONS ARE TEMPORARILY HALTED FOR OVER SEVEN (7) DAYS. THE FINAL GRADING OF EXPOSED SURFACES IS TO BE COMPLETED WITHIN ONE YEAR. APPLY TEMPORARY SEEDING TO SOIL STOCKPILES.
54. APPLY PERMANENT SEEDING WHENEVER GRADING OPERATIONS ARE COMPLETED, AND ALL CONSTRUCTION OPERATIONS WILL NOT IMPACT THE DISTURBANCE AREA. APPLY PERMANENT SEEDING TO ALL NON-CONSTRUCTION AREAS THAT SHOW SIGNS OF EXCESSIVE EROSION.
55. PERMANENT SEEDING SHALL BE DROUGHT-TOLERANT, HYBRID KENTUCKY 31, JAGUAR, LANCER, REBEL II, FALCON II, OR OTHER BRANDS. SEED AT A RATE OF 6-8 LBS/ 1000 SF AND USE A SLOW-RELEASE STARTER FERTILIZER WITH 1 LBS / 1000 SF NITROGEN. IF GRADING IS PERFORMED DURING THE WINTER MONTHS, THE SEED MIXTURE SHALL BE SUPPLEMENTED WITH WINTER RYE OR OTHER APPROPRIATE VARIETY TO ASSURE STABILIZATION DURING THE WINTER SEASON.
56. MULCH WITH STRAW AT A RATE OF 100 LBS / 1000 SF OVER THE SEEDED AREA AND ANCHORED IN A SUITABLE MANNER.
57. SUPPOSE THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION EXIT IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD. IN THAT CASE, THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
58. ALL MATERIAL SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
59. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF SITE CONSTRUCTION POLLUTION PREVENTION PRACTICES THROUGHOUT THE LIFE OF THE PROJECT.
60. UPON COMPLETE STABILIZATION OF THE SITE, SILT FENCES AND OTHER TEMPORARY SILT BARRIERS SHALL BE REMOVED OR OTHERWISE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES
61. THE CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA, THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, CONCRETE TRUCK WASHOUT AREA, OFFICE TRAILERS, AND TOILET FACILITIES.
62. CURRENT VERSIONS OF THE STORMWATER POLLUTION PREVENTION PLAN, THE NOTICE OF INTENT, AND THE NOTICE OF COVERAGE SHALL BE KEPT ON-SITE FOR THE DURATION OF THE PROJECT.
63. ALL UNDISTURBED AREAS, INCLUDING ARCHAEOLOGICAL SITES AND STREAM BUFFERS, SHALL BE FIELD MARKED AND KEPT FREE OF CONSTRUCTION EQUIPMENT.
64. PROPOSED STORMWATER CONTROL, DITCHES, PONDS, DETENTION BASINS, AND OTHER STRUCTURES SHALL BE CLEANED OUT OF ANY SILTATION UPON COMPLETION OF GRADING OPERATIONS AND THE ESTABLISHMENT OF PERMANENT VEGETATION AND EROSION CONTROLS.
65. THE CONTRACTOR SHALL NOTIFY THE ENGINEER WHEN SITE STABILIZATION HAS BEEN ACHIEVED, SO A TDEC NOTICE OF TERMINATION CAN BE SUBMITTED, IF APPLICABLE.
66. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED UPON THE STABILIZATION, COMPLETION OF THE PROJECT, AND RECEIPT OF A TDEC NOTICE OF TERMINATION.

EARTHWORK NOTES

- 1. **ONE-CALL NOTIFICATION:** THE CONTRACTOR SHALL HAVE A COPY OF APPROVED PLANS AND SPECIFICATIONS ON-SITE AT ALL TIMES. THE CONTRACTOR SHALL NOTIFY ALL UTILITY OWNERS WITH UTILITIES IN THE VICINITY OF THE PROJECT AND THE TENNESSEE ONE-CALL SYSTEM PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL PROTECT FROM DAMAGE ALL UTILITIES THAT ARE TO REMAIN. THE PRESENCE OR ABSENCE OF ANY UTILITIES FROM THIS PLAN DOES NOT GUARANTEE THAT SUCH UTILITIES ARE OR ARE NOT PRESENT ON THE SITE OR THE LOCATION OF SUCH UTILITIES. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY CONFLICT BETWEEN EXISTING STRUCTURES OR UTILITIES AND THE PROPOSED WORK BEFORE BEGINNING THE WORK. THE CONTRACTOR WILL BE REQUIRED TO RAISE/LOWER DRAINAGE STRUCTURES, CLEANOUTS, MANHOLES, ETC. IN ORDER TO ACCOMMODATE THE PROPOSED FINISHED GRADE. THE CONTRACTOR MUST ALSO PROVIDE TEMPORARY UTILITIES OR PERFORM WORK IN SUCH A MANNER AS TO PREVENT DISRUPTION OF UTILITY SERVICES THROUGHOUT THE PROJECT.
2. UNDERGROUND UTILITY LOCATIONS, AS SHOWN, ARE BASED UPON OBSERVABLE EVIDENCE FOUND IN THE FIELD, AND UTILITY COMPANY RECORDS WHERE AVAILABLE. UTILITY LOCATIONS ARE APPROXIMATE AND ARE SUBJECT TO FIELD VERIFICATION BY THE UTILITY OWNER. UTILITIES OTHER THAN THOSE SHOWN MAY EXIST. IN TENNESSEE, IT IS A REQUIREMENT PER THE "UNDERGROUND UTILITY DAMAGE PREVENTION ACT" THAT ANYONE WHO ENGAGES IN EXCAVATION MUST NOTIFY ALL KNOWN UNDERGROUND UTILITY OWNERS NO LESS THAN THREE NOR MORE THAN TEN WORKING DAYS OF THEIR INTENT TO EXCAVATE. A LIST OF THESE UTILITIES CAN BE OBTAINED FROM THE COUNTY REGISTER OF DEEDS. THOSE UTILITIES PARTICIPATING IN THE TENNESSEE ONE CALL SYSTEM CAN BE NOTIFIED BY CALLING 1-800-351-1111.
3. **SAFE EXCAVATION PRACTICES:** THE CONTRACTOR SHALL COMPLY WITH ALL REGULATORY REQUIREMENTS FOR THE EXCAVATION OF MATERIALS. ALL TEMPORARY EXCAVATION FOR FOOTINGS, PITS, PIPES, OR OTHER PURPOSES SHALL BE SLOPED, SHORED, AND BRACED IN ACCORDANCE WITH OSHA REQUIREMENTS. PROPER PROTECTION FROM TRAFFIC SHALL BE PROVIDED IN ALL EXCAVATIONS ADJACENT OR NEAR ROADWAYS AND TRAFFIC AREAS THAT ARE IN USE.
4. **UNAUTHORIZED EARTHWORK:** DO NOT REMOVE MATERIALS, TOPSOIL, OR SUITABLE FILL MATERIAL FROM THE SITE WITHOUT THE WRITTEN PERMISSION OF THE OWNER UNLESS SPECIFICALLY DESIGNATED TO BE REMOVED IN THE PLANS OR SPECIFICATIONS.
5. **DISPOSAL/BORROW SITES:** THE OWNER, THROUGH THE ENGINEER, WILL DESIGNATE ANY ON-SITE LOCATIONS AND PROVIDE AN OFF-SITE LOCATION FOR DISPOSAL OF ANY SOIL. IN THE ABSENCE OF THE OWNER DESIGNATING ADEQUATE AREAS ON-SITE OR OFF-SITE TO ACCOMMODATE SOIL VOLUMES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE BORROW SOIL AND THE PROPER DISPOSAL OF ANY EXCESS SOIL.
6. **PROTECTION OF STRUCTURES AND SITE:** THE CONTRACTOR SHALL PROTECT ALL EXISTING BUILDINGS, UTILITIES, FENCES, STRUCTURES, AND OTHER IMPROVEMENTS TO REMAIN AND SHALL RETURN THE SITE, WORK AREAS, AND PROPERTY TO THE CONDITION IT WAS IN OR BETTER UPON COMPLETION OF THE WORK. ANY EXISTING STRUCTURES, UTILITIES, OR OTHER IMPROVEMENTS THAT ARE DAMAGED SHALL BE REPAIRED OR REPLACED TO THEIR ORIGINAL CONDITION OR BETTER BEFORE WORK CONTINUES AT NO COST TO THE OWNER.
7. **DRAINAGE:** MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES AT ALL LOCATIONS AT ALL TIMES.
8. THE SUBGRADE OF ALL FOUNDATIONS, BUILDING AREAS, PAVEMENT AREAS, OR OTHER IMPROVEMENTS SHALL BE VERIFIED TO BE FREE OF ANY DELETERIOUS MATERIAL, LOOSE SOIL, OR ANYTHING THAT MAY BE DETRIMENTAL TO THE FOUNDATION. THE SUBGRADE SHALL BE VERIFIED TO BE ADEQUATE FOR THE PURPOSE FOR WHICH IT IS TO BE UTILIZED.
9. ALL SURFACE PAVEMENTS, VEGETATION, TOPSOIL, AND OTHER ORGANIC MATERIAL OR MISCELLANEOUS FILL AND DEBRIS SHOULD BE REMOVED FROM THE CONSTRUCTION AREAS BEFORE THE BUILDING OR PLACING OF FILLS. AFTER THE COMPLETION OF THE STRIPPING OPERATIONS AND PREPARATION OF ANY PROPOSED FILL AREA AND THE REMOVAL OF ANY CUT AREAS, THE EXPOSED SUBGRADE AREAS SHOULD BE PROOF ROLLED. PROOFROLLING IS BEST ACHIEVED DURING REASONABLY DRY WEATHER USING A LOADED TANDEM AXLE, RUBBER TIRE DUMP TRUCK, OR SIMILAR APPROVED VEHICLE, TRAVERSING THE SITE IN TWO PERPENDICULAR DIRECTIONS. THE UNSUITABLE ZONES IDENTIFIED THROUGH THIS PROOF ROLL TEST SHOULD THEN BE REPLACED WITH APPROVED FILL MATERIALS.
10. ONCE THE SUBGRADE HAS BEEN PROPERLY PREPARED, SOIL OR SHOT ROCK FILL MAY BE PLACED IN ORDER TO ATTAIN THE DESIRED FINAL GRADES. IN GENERAL, ANY NON-ORGANIC COHESIVE SOIL WITH A LIQUID LIMIT LESS THAN 45% AND A PLASTICITY INDEX LESS THAN 20, AND A MAXIMUM PARTICLE SIZE OF 4 INCHES IS SATISFACTORY FOR SOIL FILLS, AS WELL AS ANY GRANULAR SOIL.
11. THE SOIL FILL SHOULD BE PLACED IN LIFTS OF UNIFORM THICKNESS. THE LIFT THICKNESS SHOULD NOT EXCEED THAT WHICH CAN BE PROPERLY COMPACTED THROUGHOUT ITS ENTIRE DEPTH WITH THE EQUIPMENT AVAILABLE, USUALLY NO MORE THAN 6 INCHES. STRUCTURAL FILLS SUPPORTING FOOTINGS, FLOOR SLABS, AND PAVEMENTS SHALL BE COMPACTED TO 98 PERCENT OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D-698). THE MOISTURE CONTENT OF THE FILL SOILS SHOULD BE WITHIN PLUS OR MINUS 3 PERCENT OF THE OPTIMUM MOISTURE CONTENT. DENSITY TESTS SHALL BE PERFORMED WITH A MINIMUM OF ONE TEST PER 6-INCH LIFT PER 5,000 TO 10,000 SQUARE FEET WITH A MINIMUM OF TWO TESTS REGARDLESS OF THE SQUARE FOOTAGE. SHOT ROCK SHOULD BE PLACED IN LIFTS OF UNIFORM THICKNESS. THE MAXIMUM PARTICLE SIZE OF SHOT ROCK MATERIALS SHOULD NOT EXCEED ONE FOOT FOR THIS PROJECT. THE SHOT ROCK SHOULD BE PLACED IN LIFTS NOT TO EXCEED THREE FEET IN THICKNESS. EACH SHOT ROCK LIFT SHOULD BE STABILIZED IN PLACE BY WALKING OVER THE FILL WITH A D-8 DOZER OR 973 TRACK LOADER A MINIMUM OF 3 TO 5 PASSES WITH THE TRACKS OVERLAPPING 50% DURING EACH PASS. SHOT ROCK FILL SHOULD BE "CHOKED OFF" BY REDUCING THE MAXIMUM PARTICLE SIZE AS THE LIFT APPROACHES THE FINAL SUBGRADE ELEVATIONS. IT IS RECOMMENDED THAT THE MAXIMUM PARTICLE SIZE NOT EXCEED FOUR INCHES IN THE LAST THREE FEET OF FILL. THE FILL PLACEMENT SHOULD BE OBSERVED AND DOCUMENTED BY A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER. FILL PADS SHOULD BE CONSTRUCTED SO THAT THE COMPACTED SURFACE EXTENDS HORIZONTALLY BEYOND THE OUTSIDE FOOTING EDGES AT LEAST 10 FEET AND BEYOND PAVEMENTS AND WALKS AT LEAST 5 FEET. IN THE EVENT, THIS SPECIFICATION CONFLICTS WITH ANOTHER REQUIREMENT IN THE PROJECT PLANS OR GEOTECHNICAL REPORT, THE MORE STRINGENT WILL GOVERN.
12. FOR PROPER AND TIMELY CONSTRUCTION OF THE FILLS, SOILS SHOULD BE PLACED AT OR NEAR THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE SPECIFIED PROCTOR TEST. THE MOISTURE CONTENT OF THE FILL SOILS SHOULD BE WITHIN PLUS OR MINUS 3 PERCENT OF THE OPTIMUM MOISTURE CONTENT. SUITABLE EQUIPMENT FOR EITHER AERATING OR ADDING WATER TO THE FILL MATERIALS SHOULD BE AVAILABLE AS THE SOIL MOISTURE AND WEATHER CONDITIONS DICTATE.
13. CONTINUOUS REVIEW OF ANY CONSTRUCTION OF THE SOILS RELATED PHASES OF THIS PROJECT IS RECOMMENDED TO BE PERFORMED. OTHERWISE, THE ENGINEER ASSUMES NO RESPONSIBILITY FOR CONSTRUCTION COMPLIANCE WITH THE DESIGN CONCEPTS, SPECIFICATIONS, OR RECOMMENDATIONS. AS A PART OF THIS REVIEW, FIELD DENSITY TESTS SHOULD BE PERFORMED AS FREQUENTLY AS NECESSARY TO ASSIST IN THE EVALUATION OF THE FILL WITH RESPECT TO THE ABOVE RECOMMENDATIONS.

UTILITY CONSTRUCTION | MISCELLANEOUS NOTES

- 1. **UTILITY AND TDEC NOTIFICATION:** THE CONTRACTOR SHALL NOTIFY THE UTILITY SYSTEM AND THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION ENVIRONMENTAL ASSISTANCE CENTER IN WRITING PRIOR TO COMMENCING OPERATIONS THAT AFFECT ANY PUBLIC UTILITIES. A COPY OF SUCH NOTIFICATION SHALL BE SENT TO THE ENGINEER.
2. **MINIMUM SEPARATIONS:** A MINIMUM SEPARATION SHALL BE MAINTAINED BETWEEN ALL WATER LINES AND ANY SEWER, STORM, SEPTIC, OR OTHER WASTE LINES. FOR PARALLEL INSTALLATIONS, THE SEPARATION SHALL BE A MINIMUM OF 10 FEET HORIZONTAL MEASURED EDGE-TO-EDGE. IN UNUSUAL CONDITIONS WITH THE PRIOR WRITTEN APPROVAL OF THE ENGINEER AND DEPARTMENT, SEPARATIONS LESS THAN 10 FEET MAY BE PROVIDED IF THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER AND THE SEWER IS CONSTRUCTED OF MATERIALS AND WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS OF CONSTRUCTION AND SHALL BE TESTED TO ASSURE WATER-TIGHTNESS PRIOR TO BACKFILL. WHEN CROSSING UNDER NORMAL CONDITIONS, THE WATER MAIN SHALL BE LAID TO PROVIDE A SEPARATION OF AT LEAST 18 INCHES BETWEEN THE BOTTOM OF THE WATER MAIN AND THE TOP OF THE SEWER. IF SUCH A CROSSING IS NOT POSSIBLE, THE ENGINEER SHALL BE NOTIFIED AND SHALL DIRECT AN ALTERNATIVE METHOD TO PERFORM THE CROSSING.

MATERIAL STANDARDS OF GOVERNING UTILITY: ALL MATERIALS USED IN THE INSTALLATION OF THE UTILITIES SHALL MEET THE REQUIREMENTS OF THE LOCAL GOVERNING UTILITY AUTHORITY, INCLUDING ANY REQUIREMENTS AS TO MANUFACTURER AND MODEL OR PART NUMBER.

- 4. **UTILITY ABANDONMENT:** ALL UTILITIES SHOWN ON THE PLANS OR DIRECTED BY ENGINEER TO BE PERMANENTLY ABANDONED SHALL BE REMOVED COMPLETELY OR SERVED AND PLUGGED WITH APPROPRIATE FITTINGS AND CONCRETE KICKERS ACCORDING TO THE REQUIREMENTS OF THE LOCAL GOVERNING UTILITY. THE CONTRACTOR SHALL COORDINATE ALL RELOCATION AND ABANDONMENT WITH THE UTILITY BEFORE BEGINNING ANY WORK.
5. **UNDERCUTTING AND BACKFILL:** THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY TRENCH BOTTOM AREAS THAT ARE SUSPECTED TO BE INADEQUATE FOR PROPER FOUNDATION SUPPORT OF BURIED PIPING. THE CONTRACTOR SHALL NOT PROCEED WITH UTILITY CONSTRUCTION UNTIL THE ENGINEER HAS REVIEWED THE SITUATION. AFTER REVIEW, THE ENGINEER WILL PROVIDE THE CONTRACTOR WITH THE HORIZONTAL EXTENTS, VERTICAL EXTENTS, AND RECOMMENDED MATERIALS FOR ANY UNDERCUTTING AND BACKFILL WORK TO BE PERFORMED. THE OWNER WILL NOT MAKE PAYMENT FOR ANY UNDERCUTTING AND BACKFILL WORK UNLESS THESE REQUIREMENTS HAVE BEEN COMPLIED WITH FULLY.
6. THE INSTALLED DEPTH OF ALL UTILITY LINES SHALL BE SUCH AS TO PROVIDE A MINIMUM COVER OF 30 INCHES ON EASEMENTS ACQUIRED BY THE UTILITY OWNER OR 36 INCHES FOR LOCATIONS ON THE TENNESSEE DEPARTMENT OF TRANSPORTATION RIGHT OF WAYS.
7. ALL UTILITY ROADWAY CROSSINGS SHALL BE CONSTRUCTED TO PROVIDE A MINIMUM OF 36 INCHES OF COVER BELOW PROPOSED DITCH ELEVATIONS AND TOE OF SLOPE ELEVATIONS, WHICHEVER LOWEST ELEVATION CONTROLS. CASINGS FOR SUCH CROSSINGS SHALL EXTEND A MINIMUM OF FIVE (5) HORIZONTAL FEET BEYOND THE TOE OF THE SLOPE OR FIVE (5) HORIZONTAL FEET BEYOND THE DITCH INVERT. THE DEPTH OF BURIAL OF ALL MAINS CONNECTING TO SUCH CROSSINGS SHALL BE SUCH THAT THE CONNECTIONS OF CROSSINGS TO THE MAIN CAN BE MADE WITHOUT THE INSTALLATION OF ANY FITTINGS OTHER THAN THE APPROPRIATE TEE AND ANY MORE THAN TWO 22.5 DEGREE FITTINGS. TRANSITIONS IN-DEPTH ON THE MAIN UTILITY LINES SHALL BE DONE WITHOUT THE USE OF FITTINGS AND SHALL BE TRANSITIONED SUCH THAT THE MAXIMUM DEFLECTION OF THE JOINTS AND PIPE ARE NOT EXCEEDED.
8. LOCATIONS OF SEPTIC TANKS, PUMP TANKS, AND LINES SHALL COMPLY WITH BUFFER STANDARDS OF THE STATE OF TENNESSEE, DEPARTMENT OF ENVIRONMENT AND CONSERVATION, DIVISION OF WATER RESOURCES CHAPTER 0400-48-01, REGULATIONS TO GOVERN SUBSURFACE SEWAGE DISPOSAL SYSTEMS AND OTHER CRITERIA PUBLISHED BY THE DEPARTMENT.
9. THE CONTRACTOR SHALL COORDINATE THE LOCATION AND SIZES OF GEOTHERMAL ZONE FIELDS WITH THE MECHANICAL PLANS FOR THE PROJECT. LOCATIONS OF SANITARY SEWERS AND WATER MAINS AS SHOWN ON OTHER PROJECT PLANS SHALL ALSO BE COORDINATED BY THE CONTRACTOR.

UTILITY CONSTRUCTION | STORM SEWER NOTES

- 1. **STORM SEWER SUBMITTALS:** SUBMITTALS FOR STORM SEWER SYSTEM SHALL INCLUDE A DRAWING DETAILING THE TYPE OF STRUCTURE TO BE INSTALLED AT EACH LOCATION. REFERENCE IN THIS SUBMITTAL SHALL MATCH THE REFERENCES IN THESE PLANS. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH THE SURVEY NOTES AND CUT SHEETS FROM THE LAST LAYOUT OF THE STORM SEWER SYSTEM PERFORMED BY A REGISTERED LAND SURVEYOR OR A PROFESSIONAL ENGINEER PRIOR TO BEGINNING ANY CONSTRUCTION OF THE STORM SEWER SYSTEM.
2. **CONNECTION OF DOWNSPOUTS AND ROOF DRAINS:** THE CONTRACTOR SHALL CONNECT ALL DOWNSPOUTS, AND INTERIOR ROOF DRAINS INTO THE PROPOSED STORM SEWER SYSTEM FOR THIS PROJECT. THE CONTRACTOR SHALL COORDINATE THIS WORK WITH THE LOCATIONS OF ALL DOWNSPOUTS AND INTERIOR ROOF DRAINS SHOWN ON THE ARCHITECTURAL AND MECHANICAL PLANS AND THE WORK OF OTHER CONTRACTORS AND SUBCONTRACTORS. THE SUBMISSION OF A BID FOR THIS WORK ASSUMES THAT THE CONTRACTOR HAS COORDINATED THE LOCATIONS OF ALL DOWNSPOUTS AND INTERIOR DRAINS AND THE BID INCLUDES ALL COSTS FOR CONNECTIONS OF ALL SUCH, EVEN IF NOT SHOWN DIRECTLY ON THE CIVIL SHEETS OF THESE PLANS. ALL DOWNSPOUTS SHALL BE CONNECTED IN ACCORDANCE WITH THE DETAIL IN THESE PLANS USING 8" HOPE STORM SEWER PIPING WITH A MINIMUM 1.00 % SLOPE. ALL INTERIOR ROOF DRAINS SHALL BE CONNECTED USING THE SAME SIZE AND MATERIALS AS EXITS THE BUILDING WITH A MINIMUM 1.00 % SLOPE. CLEANOUTS SHALL BE PROVIDED WITHIN 5 FEET OF THE BUILDING FOR ALL INTERIOR ROOF DRAIN LINES.
3. **ADJUSTMENT OF STRUCTURES TO MATCH GRADING:** THE CONTRACTOR SHALL INSTALL ALL STORMWATER STRUCTURES TO THE FINISHED GRADE DESIGNED ON THE PLANS. THE FINISHED GRADE OF ALL STORMWATER STRUCTURES SHALL BE ACCOUNTED FOR IN THE FINISH GRADING OF THE EARTHWORK. CATCH BASINS SHALL BE LEFT IN SLIGHT DEPRESSIONS WITH POSITIVE DRAINAGE TO THEM FROM ALL POINTS. EXCESSIVELY LOW OR HIGH CASTINGS WILL NOT BE PERMITTED. DETAILING OF ALL GRADES AT ALL POINTS IS NOT FEASIBLE. THE CONTRACTOR SHALL PROVIDE FINISH GRADING AT AREAS WITH NO SPECIFIC DETAIL IN ACCORDANCE WITH THE GENERAL GRADING OF THE PROJECT AVOIDING STEEP SLOPES, SUDDEN CHANGES IN GRADE, GRADE REVERSALS, AND PROBLEMATIC EROSION CONDITIONS. ENGINEER SHALL HAVE FINAL APPROVAL OF ALL WORK AND CONTRACTOR WILL BE REQUIRED TO RAISE/LOWER CASTINGS OR STRUCTURES SO AS TO MATCH SURROUNDING WORK AND CORRECT OTHER DEFICIENCIES AT NO ADDITIONAL COST TO OWNER.
4. ALL ROADWAY CROSSINGS SHALL BE CONSTRUCTED TO PROVIDE A MINIMUM OF 36 INCHES OF COVER BELOW PROPOSED DITCH ELEVATIONS AND TOE OF SLOPE ELEVATIONS, WHICHEVER LOWEST ELEVATION CONTROLS. CASINGS FOR SUCH CROSSINGS SHALL EXTEND A MINIMUM OF 5 HORIZONTAL FEET BEYOND THE TOE OF THE SLOPE OR 5 HORIZONTAL FEET BEYOND THE DITCH INVERT. THE DEPTH OF BURIAL OF ALL MAINS CONNECTING TO SUCH CROSSINGS SHALL BE SUCH THAT THE CONNECTIONS OF CROSSINGS TO THE MAIN CAN BE MADE WITHOUT THE INSTALLATION OF ANY FITTINGS OTHER THAN THE APPROPRIATE TEE AND ANY MORE THAN TWO 22.5 DEGREE FITTINGS. TRANSITIONS IN-DEPTH ON THE MAIN UTILITY LINES SHALL BE DONE WITHOUT THE USE OF FITTINGS AND SHALL BE TRANSITIONED SUCH THAT THE MAXIMUM DEFLECTION OF THE JOINTS AND PIPE ARE NOT EXCEEDED.
5. THE INSTALLED DEPTH OF ALL UTILITY LINES SHALL BE SUCH AS TO PROVIDE A MINIMUM COVER OF 30 INCHES ON EASEMENTS ACQUIRED BY THE UTILITY OWNER OR 36 INCHES FOR LOCATIONS ON THE TENNESSEE DEPARTMENT OF TRANSPORTATION RIGHT OF WAYS.

UTILITY CONSTRUCTION | SANITARY SEWER NOTES

- 1. **SEWER SUBMITTALS:** SUBMITTALS FOR SEWER SYSTEM SHALL INCLUDE A DRAWING DETAILING THE TYPE OF STRUCTURE TO BE INSTALLED AT EACH LOCATION. REFERENCE IN THIS SUBMITTAL SHALL MATCH THE REFERENCES IN THESE PLANS. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH THE SURVEY NOTES AND CUT SHEETS FROM THE LAST LAYOUT OF THE SEWER SYSTEM PERFORMED BY A REGISTERED LAND SURVEYOR OR A PROFESSIONAL ENGINEER PRIOR TO BEGINNING ANY CONSTRUCTION OF THE STORM SEWER SYSTEM.

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REVISIONS

Table with columns: NO., DATE, DESCRIPTION, ORIGINAL ISSUE. It contains one revision entry dated 9/19/23.

CHECKED BY: [Blank]

DESIGN BY: [Blank]

DRAWN BY: [Blank]

ORIGINAL DATE: FEB. 16, 2023

PROJECT NO.: 23479

DWG NO.: 23479

SCALE: NONE

GENERAL NOTES

PROPOSED RV PARK
BRAD DAUGHERTY CONSTRUCTION
645 NORTHSIDE DRIVE
CROSSVILLE, CUMBERLAND COUNTY, TENNESSEE

DRAFT

SHEET REFERENCE NUMBER:

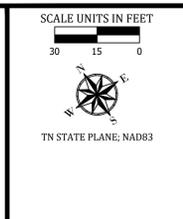
G-002

SHEET 2 OF 10

---	EXISTING PROPERTY LINE	---	EXISTING ROAD GRAVEL
---	ADJOINING PROPERTY LINE	---	PROPOSED TOPOGRAPHIC SURFACE
---	EXISTING PROPERTY SETBACK LINE	---	PROPOSED STORM PIPE
---	EXISTING TOPOGRAPHIC SURFACE	---	PROPOSED WATER LINE
---	EXISTING FENCE	---	PROPOSED GRAVITY SEWER LINE
---	EXISTING BUILDING	---	PROPOSED LOW PRESSURE SEWER LINE
---	EXISTING ROAD ASPHALT, HEAVY		

SITE PLAN NOTES:

- CONTOURS SHOWN WERE GENERATED UTILIZING SOKKIA SRX5 TOTAL STATION WITH CONTROL POINTS ESTABLISHED WITH SOKKIA GRX3 GPS WITH GPS BASE REFERENCE OF TDOT GNSS BASE STATION LOCATED AT DISTRICT 27 BUILDING. SURVEY WAS PERFORMED BY ENVIRONMENTAL & CIVIL ENGINEERING SERVICES ON APRIL 6, 2023.
- EXISTING SITE ITEMS WERE SUPPLIED BY SURVEYOR AND ADDITIONAL ITEMS WERE DIGITIZED FROM PUBLIC AERIAL IMAGES.
- PROPERTY INFORMATION WAS TAKEN FROM THE PROPERTY DEEDS OBTAINED FROM TITLESARCHER.COM.

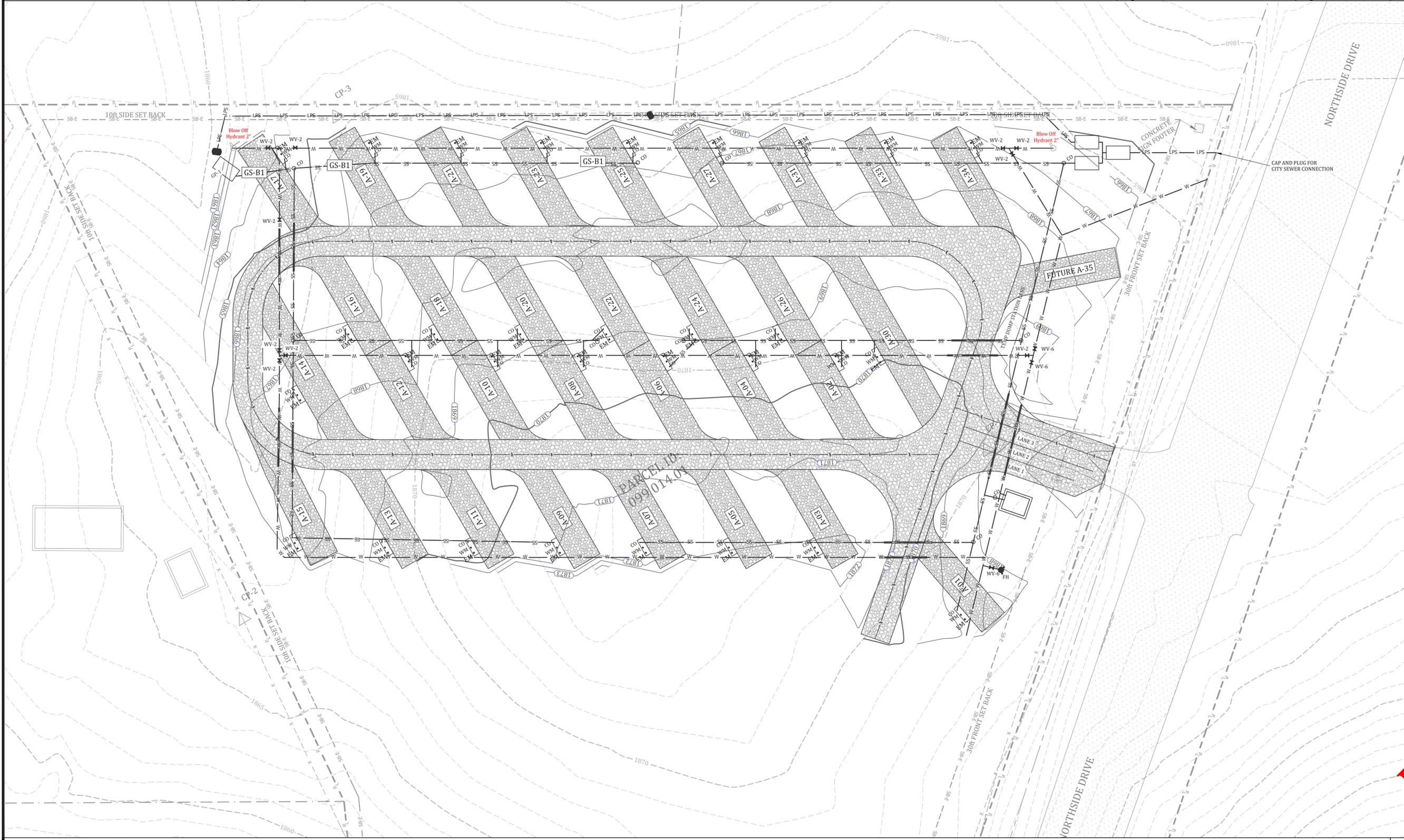


SHEET SYMBOL LEGEND 1

SITE REFERENCE AND INFORMATION 2

SITE MAP KEY 3

VIEW SCALE 4



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			CHK.	CFR.
1	9/19/23	ORIGINAL ISSUE		

PROPOSED SITE PLAN

PROPOSED RV PARK

BRAD DAUGHERTY CONSTRUCTION
645 NORTHSIDE DRIVE
CROSSVILLE, CUMBERLAND COUNTY, TENNESSEE

SHEET REFERENCE NUMBER:
C-201

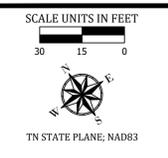
SHEET 4 OF 10

DRAFT

---	EXISTING PROPERTY LINE	---	EXISTING ROAD GRAVEL
---	ADJOINING PROPERTY LINE	---	PROPOSED TOPOGRAPHIC SURFACE
---	EXISTING PROPERTY SETBACK LINE	---	PROPOSED STORM PIPE
---	EXISTING TOPOGRAPHIC SURFACE	---	PROPOSED WATER LINE
---	EXISTING FENCE	---	PROPOSED GRAVITY SEWER LINE
---	EXISTING BUILDING	---	PROPOSED LOW PRESSURE SEWER LINE
---	EXISTING ROAD ASPHALT, HEAVY		

SITE PLAN NOTES:

- CONTOURS SHOWN WERE GENERATED UTILIZING SOKKIA SRX3 TOTAL STATION WITH CONTROL POINTS ESTABLISHED WITH SOKKIA GRX3 GPS WITH GPS BASE REFERENCE OF TDOT GNSS BASE STATION LOCATED AT DISTRICT 27 BUILDING. SURVEY WAS PERFORMED BY ENVIRONMENTAL & CIVIL ENGINEERING SERVICES ON APRIL 6, 2023.
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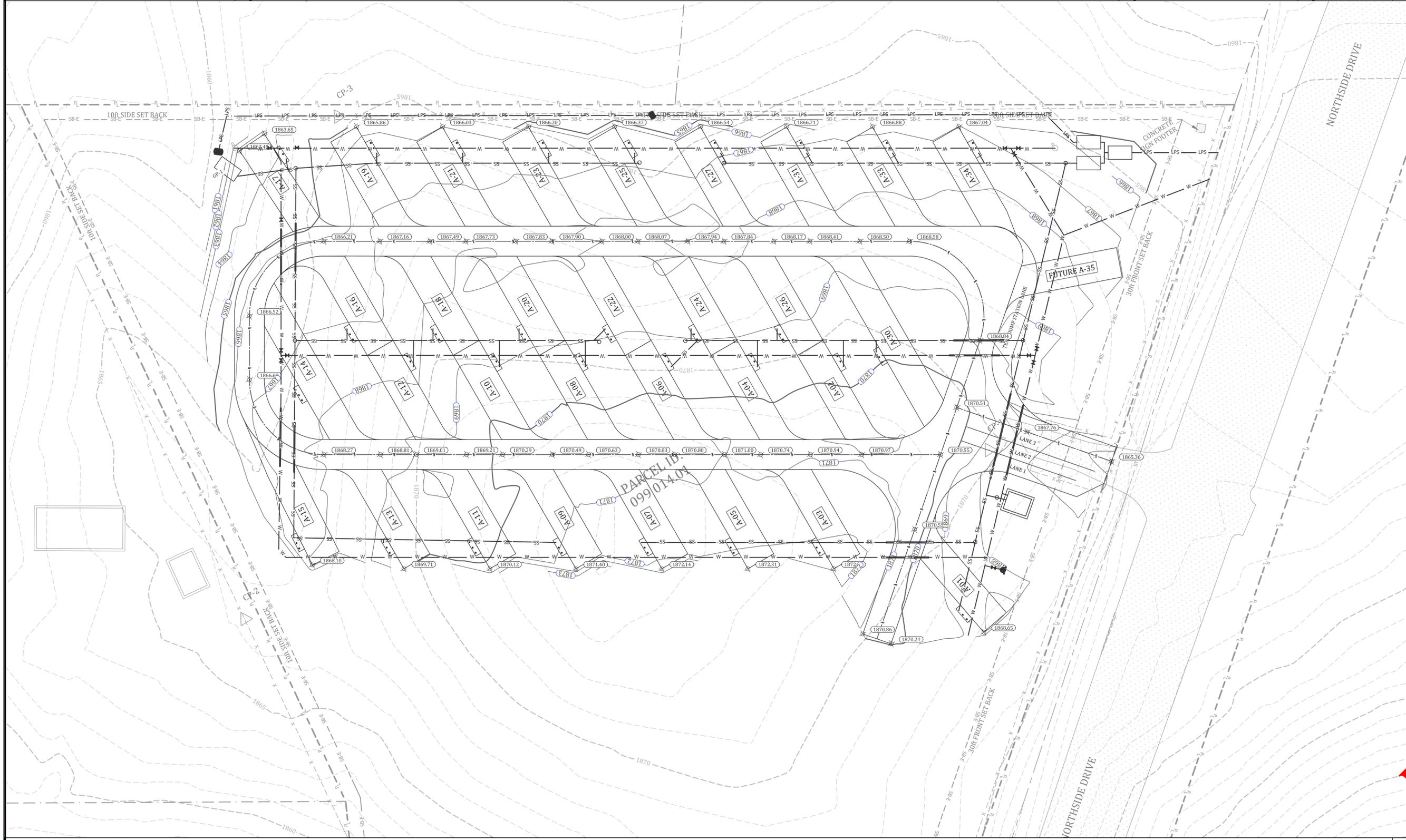


SHEET SYMBOL LEGEND 1

SITE REFERENCE AND INFORMATION 2

SITE MAP KEY 3

VIEW SCALE 4



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CHECKED BY: [Blank]
 DESIGNED BY: [Blank]
 DRAWN BY: [Blank]
 ORIGINAL DATE: FEB 16, 2023
 PROJECT NO.: 23479
 DWG NO.: 23479
 SCALE: 1in = 30ft

PROPOSED SITE GRADING PLAN
PROPOSED RV PARK
 BRAD DAUGHERTY CONSTRUCTION
 645 NORTHSIDE DRIVE
 CROSSVILLE, CUMBERLAND COUNTY, TENNESSEE

SHEET REFERENCE NUMBER:
C-202
 SHEET 5 OF 10

DRAFT

---	EXISTING PROPERTY LINE	---	EXISTING ROAD GRAVEL
---	ADJOINING PROPERTY LINE	---	PROPOSED TOPOGRAPHIC SURFACE
---	EXISTING PROPERTY SETBACK LINE	---	PROPOSED STORM PIPE
---	EXISTING TOPOGRAPHIC SURFACE	---	PROPOSED WATER LINE
---	EXISTING FENCE	---	PROPOSED GRAVITY SEWER LINE
---	EXISTING BUILDING	---	PROPOSED LOW PRESSURE SEWER LINE
---	EXISTING ROAD ASPHALT, HEAVY		

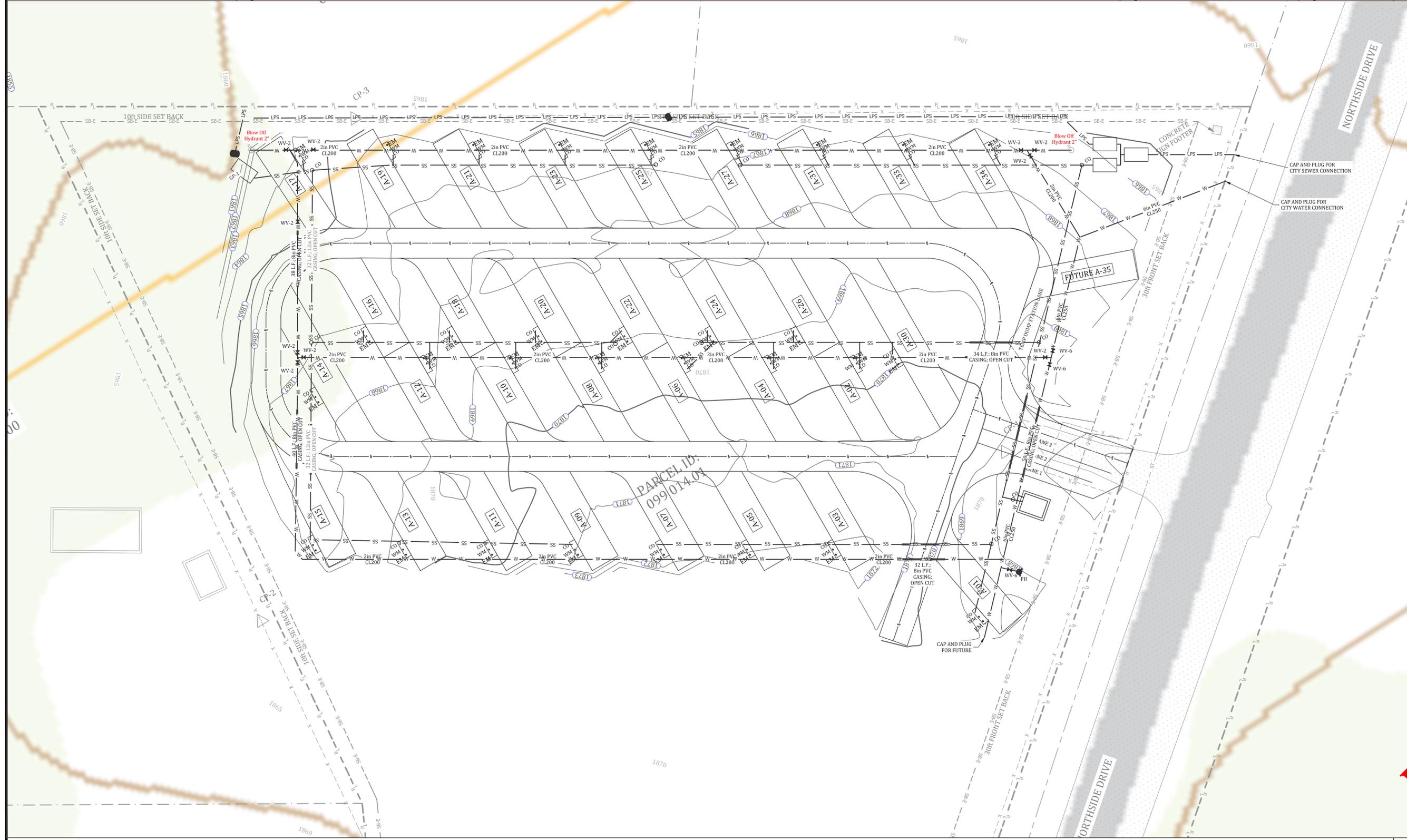
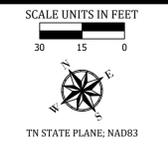
SITE PLAN NOTES:

1. CONTOURS SHOWN WERE GENERATED UTILIZING SOKKIA SRX5 TOTAL STATION WITH CONTROL POINTS ESTABLISHED WITH SOKKIA GRX3 GPS WITH GPS BASE REFERENCE OF TDOT GNSS BASE STATION LOCATED AT DISTRICT 27 BUILDING. SURVEY WAS PERFORMED BY ENVIRONMENTAL & CIVIL ENGINEERING SERVICES ON APRIL 6, 2023.
2. EXISTING SITE ITEMS WERE SUPPLIED BY SURVEYOR AND ADDITIONAL ITEMS WERE DIGITIZED FROM PUBLIC AERIAL IMAGES.
3. PROPERTY INFORMATION WAS TAKEN FROM THE PROPERTY DEEDS OBTAINED FROM TITLESEARCHER.COM.

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PROPOSED WATER UTILITY PLAN

PROPOSED RV PARK
 BRAD DAUGHERTY CONSTRUCTION
 645 NORTHSIDE DRIVE
 CROSSVILLE, CUMBERLAND COUNTY, TENNESSEE

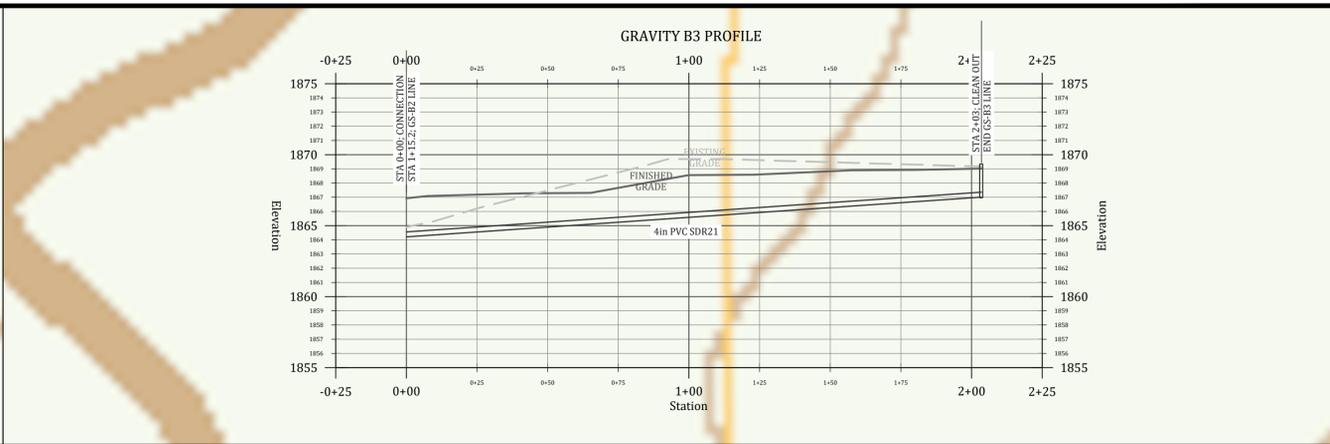
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SHEET 6 OF 10

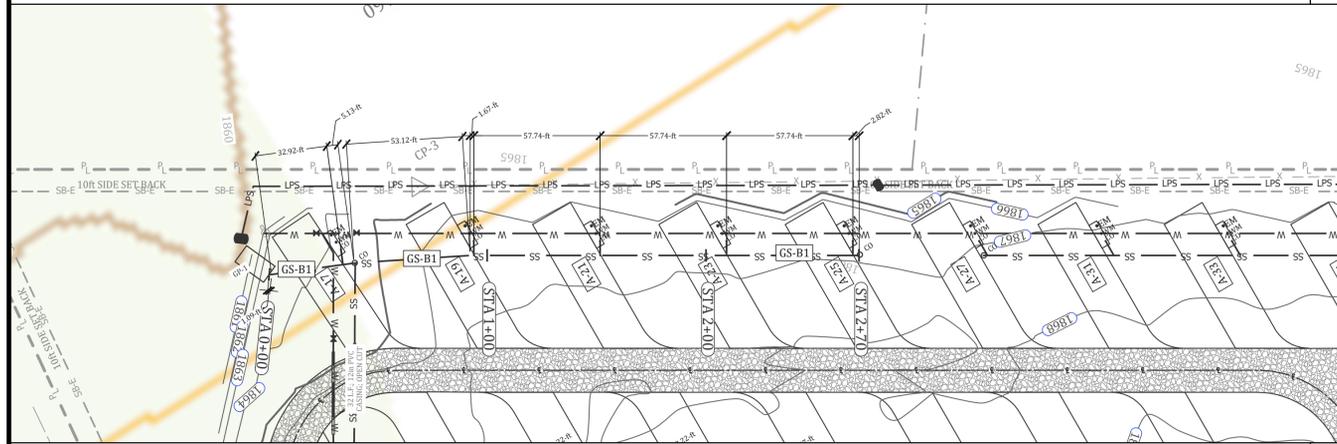
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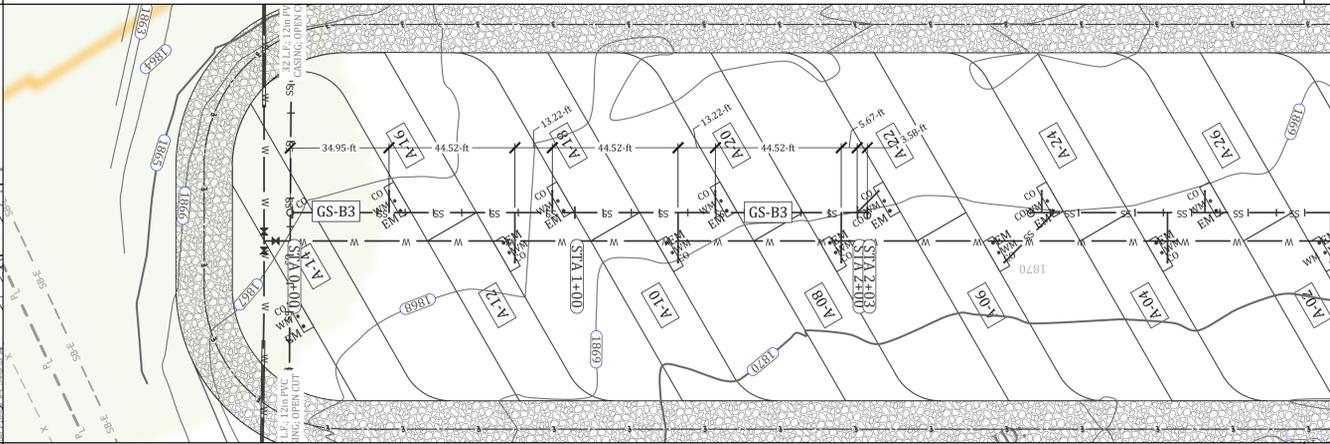
PROPOSED GRAVITY SEWER LINE B1 | PROFILE
V: 1in = 6ft
H: 1in = 30ft



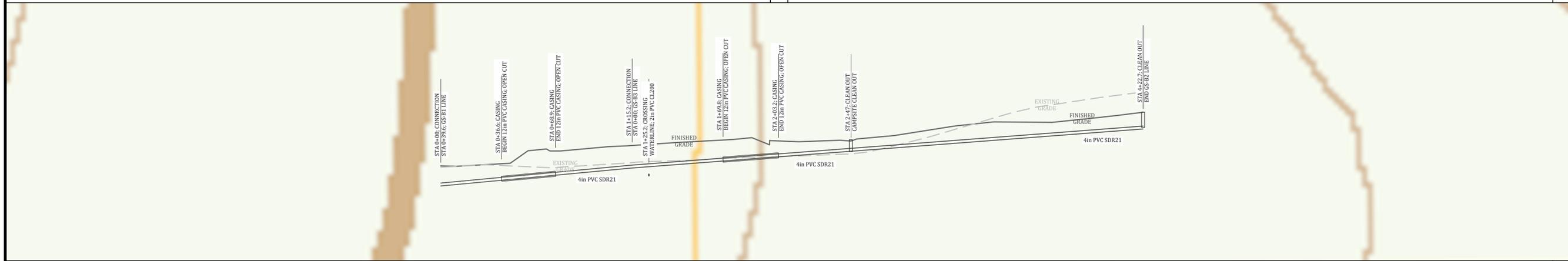
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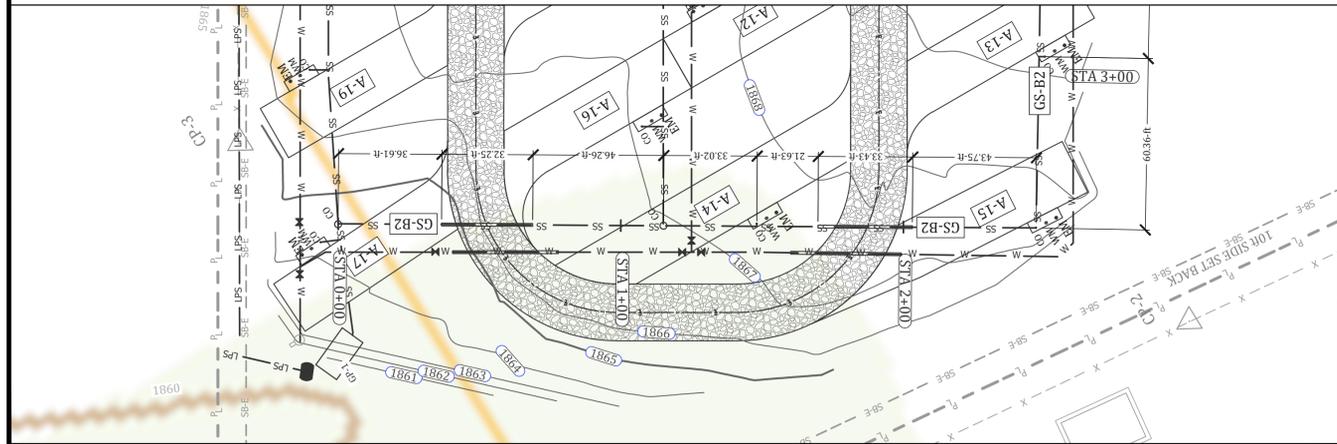
PROPOSED GRAVITY SEWER LINE B1 | PLAN
1in = 30ft



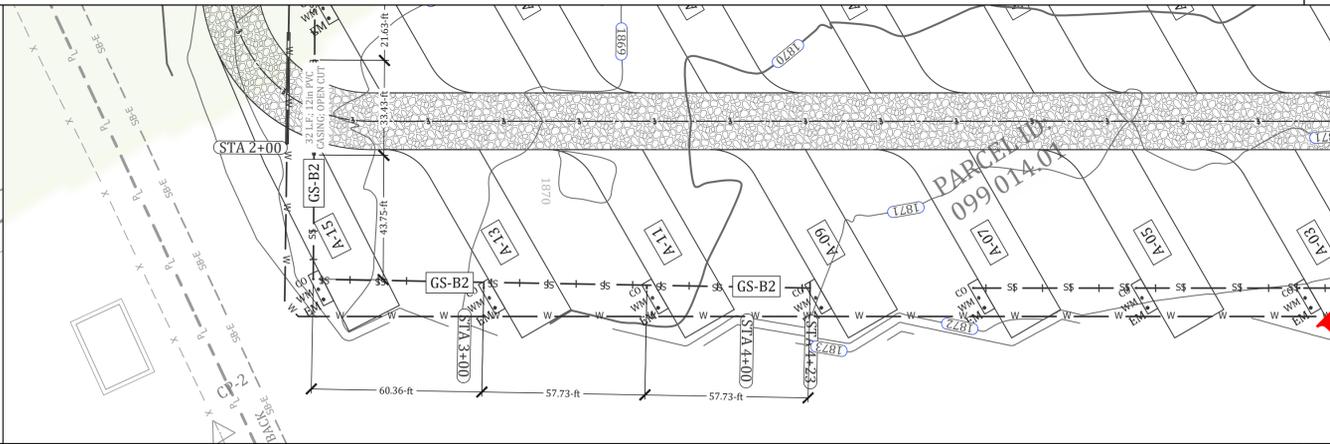
PROPOSED GRAVITY SEWER LINE B3 | PLAN
1in = 30ft



PROPOSED GRAVITY SEWER LINE B2 | PROFILE
V: 1in = 6ft
H: 1in = 30ft



PROPOSED GRAVITY SEWER LINE B2 | PLAN
1in = 30ft



PROPOSED GRAVITY SEWER LINE B2 | PLAN
1in = 30ft

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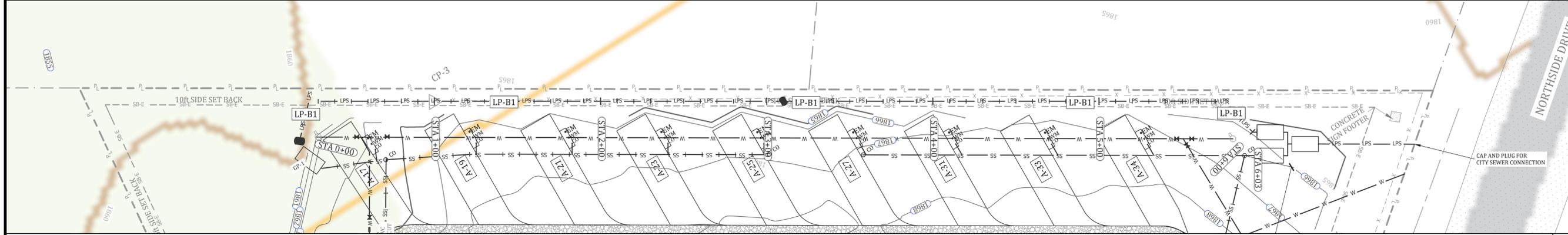
PROPOSED GRAVITY SEWER LINE GS-B PLANS AND PROFILES
PROPOSED RV PARK
 BRAD DAUGHERTY CONSTRUCTION
 645 NORTHSIDE DRIVE
 CROSSVILLE, CUMBERLAND COUNTY, TENNESSEE

SHEET REFERENCE NUMBER:
C-205
 SHEET 8 OF 10

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PROPOSED LOW PRESSURE SEWER LINE LP-B1 | PROFILE
V: 1in = 6ft
H: 1in = 30ft



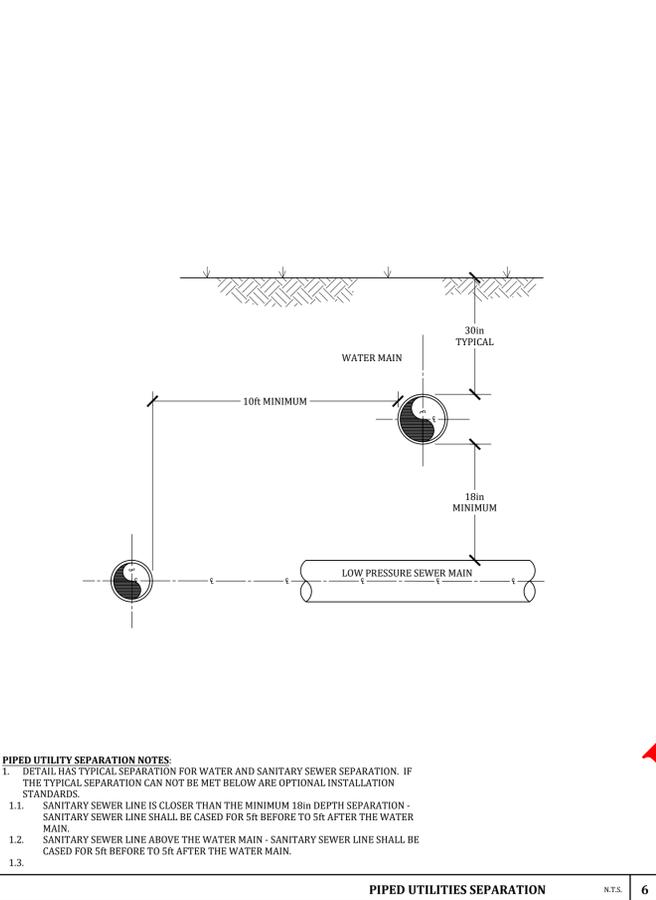
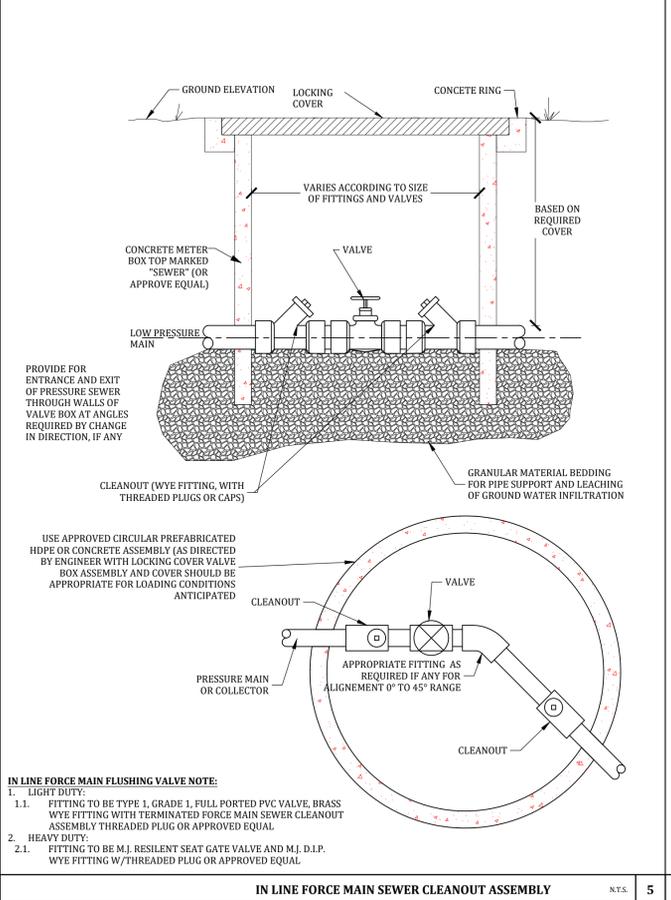
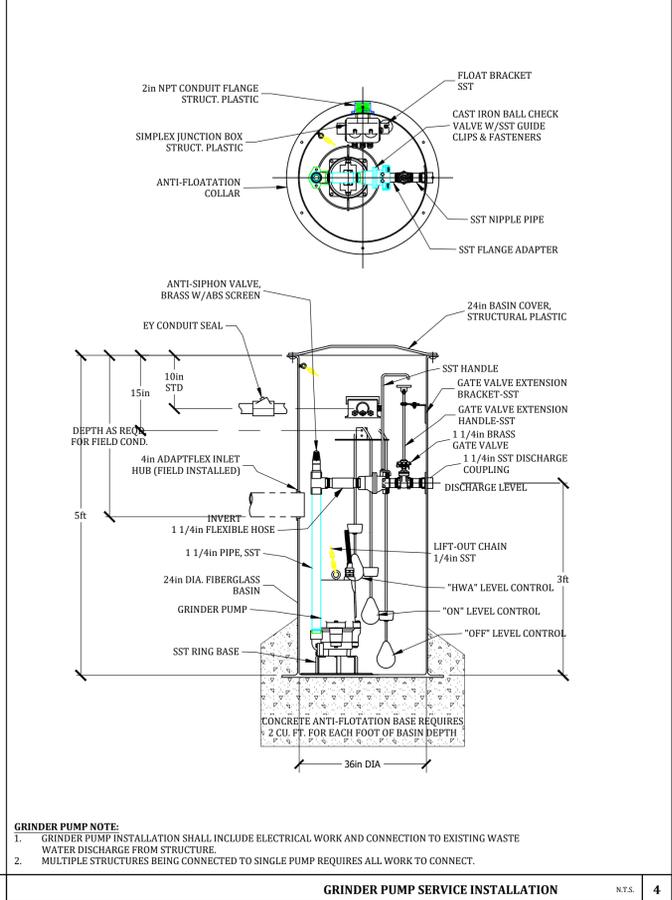
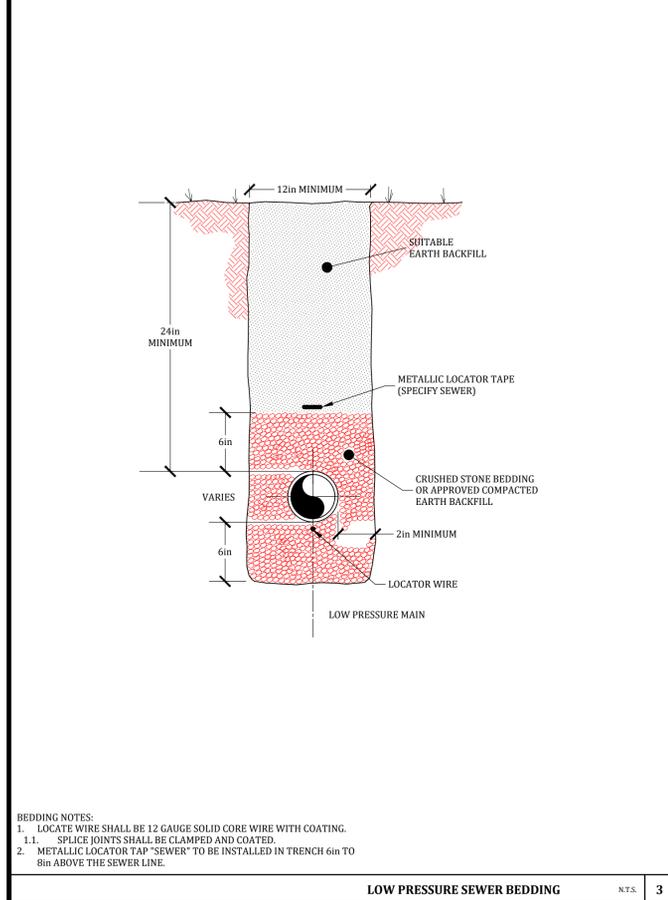
PROPOSED LOW PRESSURE SEWER LINE LP-B1 | PLAN
1in = 30ft

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NO.	DATE	DESCRIPTION	REVISIONS
1	9/19/23	ORIGINAL ISSUE	

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FILED:	LOAN:	PROJECT NO.:	AS NOTED
DATE:	BY:	DWG NO.:	



**PROPOSED LOW PRESSURE SEWER LINE LP-B1
 PLAN, PROFILE AND DETAILS**

**PROPOSED RV PARK
 BRAD DAUGHERTY CONSTRUCTION
 645 NORTHSIDE DRIVE
 CROSSVILLE, CUMBERLAND COUNTY, TENNESSEE**

SHEET REFERENCE NUMBER:
C-206

SHEET 9 OF 10

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