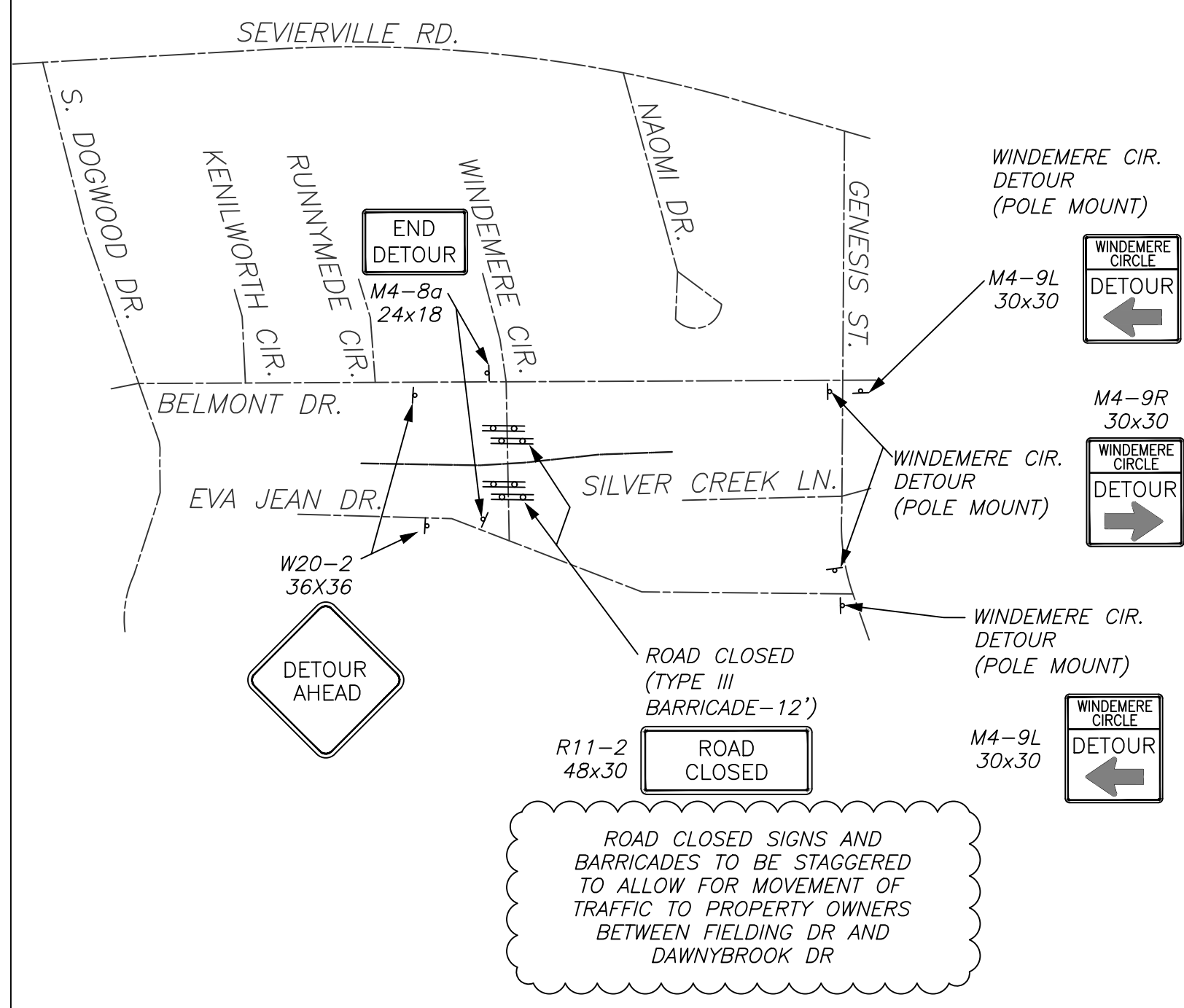


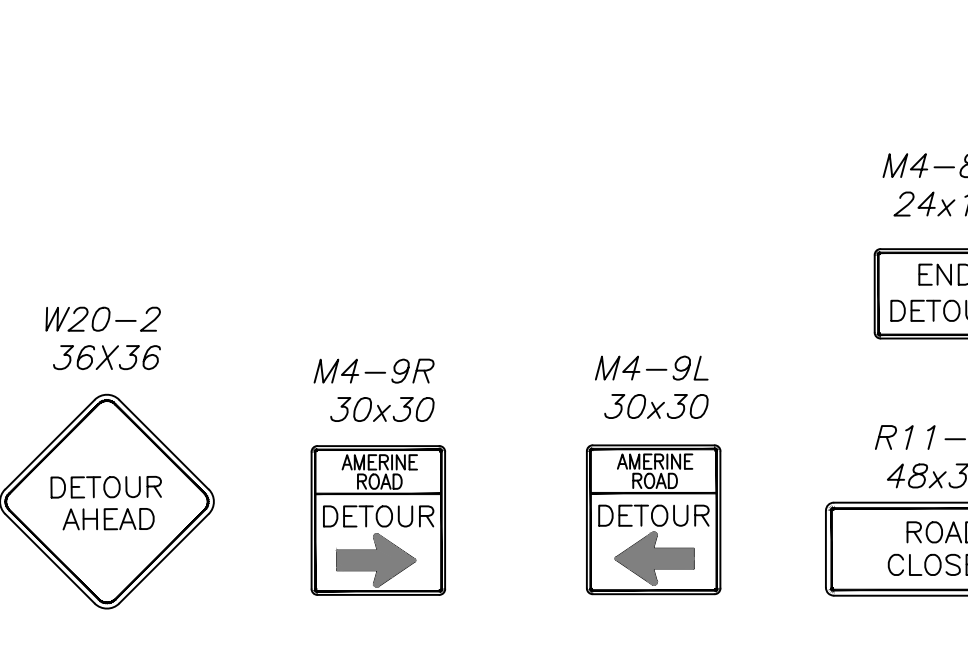
TRAFFIC CONTROL PLAN AND LOCATION MAP
NOT TO SCALE



CONSTRUCTION WORK ZONE & TRAFFIC CONTROL NOTES

- Advanced warning signs shall not be displayed more than forty-eight (48) hours before physical construction begins. Signs may be erected up to one week before needed, if the sign face is fully covered.
- If the contractor moves off the project, he shall cover or remove all unneeded signs as directed by the engineer.
- A long term but sporadic use warning sign, such as a flagger sign, may remain in place when not required provided the sign face is fully covered.
- Traffic control devices shall not be displayed or erected unless conditions necessitate warning.

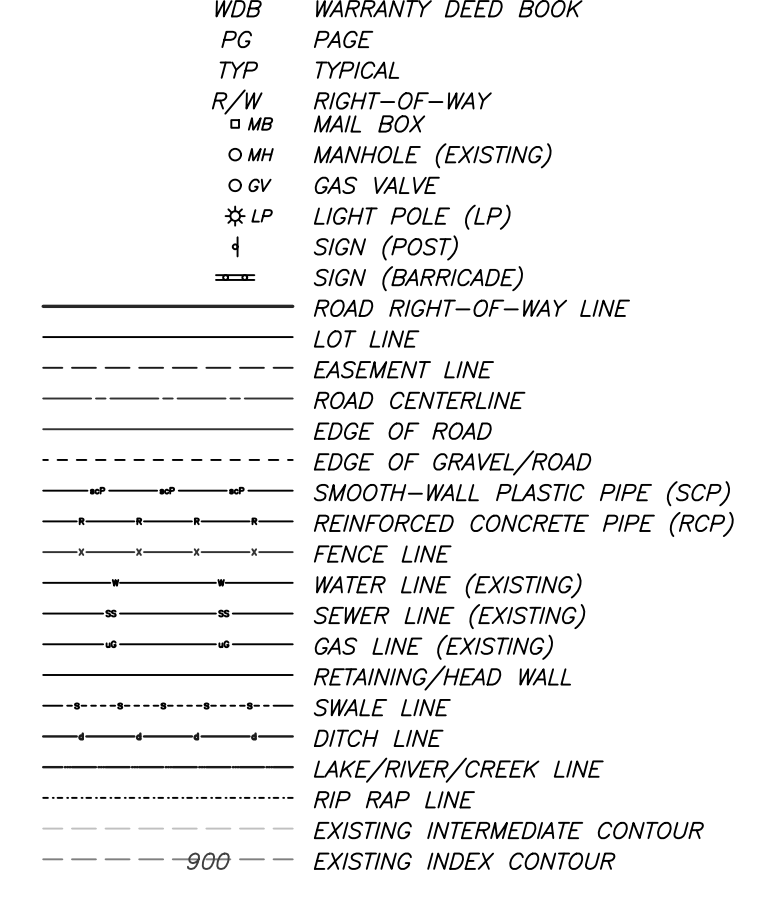
SIGN	QUANTITY	SFT
ROAD CLOSED	2	20
END DETOUR	2	6
WINDEMERE ROAD DETOUR-RIGHT	2	12.5
WINDEMERE ROAD DETOUR-LEFT	2	12.5
DETOUR AHEAD	2	18
TOTAL =		69 SFT



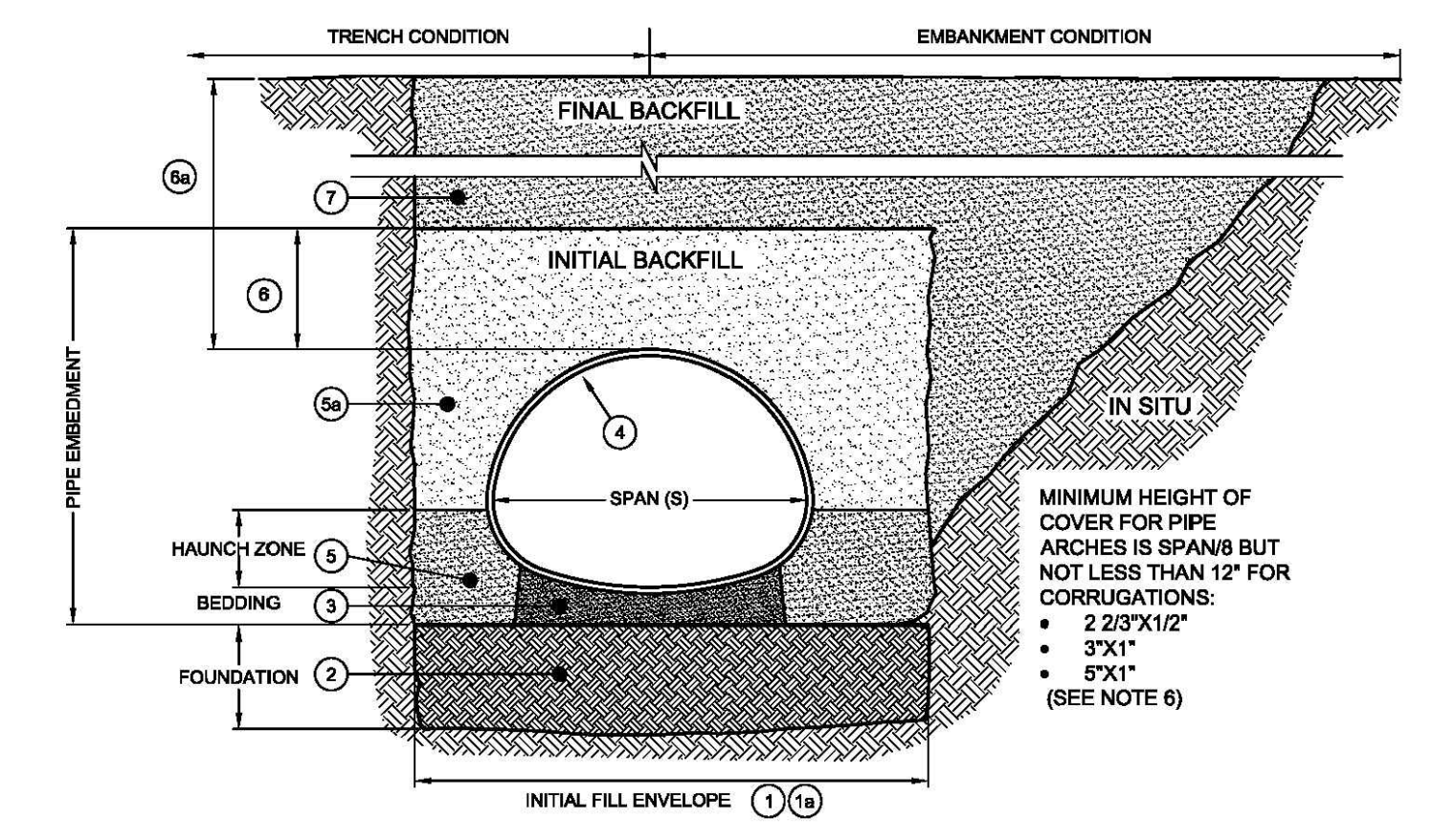
SITE NOTES:

- Erosion control measures such as straw bale barriers and silt fences shall be installed as necessary to prevent siltation onto adjoining properties and shall be maintained until permanent vegetation is established.
- The Contractor shall be responsible for obtaining all necessary permits prior to construction.
- The Contractor shall notify the Engineer immediately if discrepancies or omissions are found or if clarifications are required on the plans.
- The location of all underground utilities should be verified through Tennessee 1 Call (1-800-351-1111) or the utility provider prior to any excavation or construction.
- All material, methods of construction, testing, etc. shall comply with the current edition of the "Maryville Land Development and Public Works Standards".
- Topographic Survey based on surveyed shots along the storm sewer routing, 2 foot Contour interval shown.
- Boundary information shown hereon is from a combination of field locations and the record plat.
- Any required easements or permission for construction shall be obtained prior to construction.
- All storm water pipes and structures require inspection before covering. Contact Danny Baldwin at (865) 273-3518.
- The contractor shall immediately clean up any sediment deposited on streets by construction activities.
- All exposed ground shall be seeded and strawed upon completion of construction. Refer to the TDEC Erosion and Sediment Control Handbook requirements.
- The asphalt shall be saw-cut for trench excavation. Base stone and asphalt used for pavement replacement and repair shall meet the specifications of the Maryville Land Development and Public Works Standards. Asphalt surface shall be "T" mix.
- See 4824.P Plan for pump around details.
- Prior to installation of arch pipe, the contractor shall verify clearances between the pipe and the water and sewer lines. The contractor can make slight adjustments to the arch pipe to clear the sewer lines. The contractor shall coordinate with City of Maryville, W.G.C. if the water line needs to be lowered.

LEGEND:

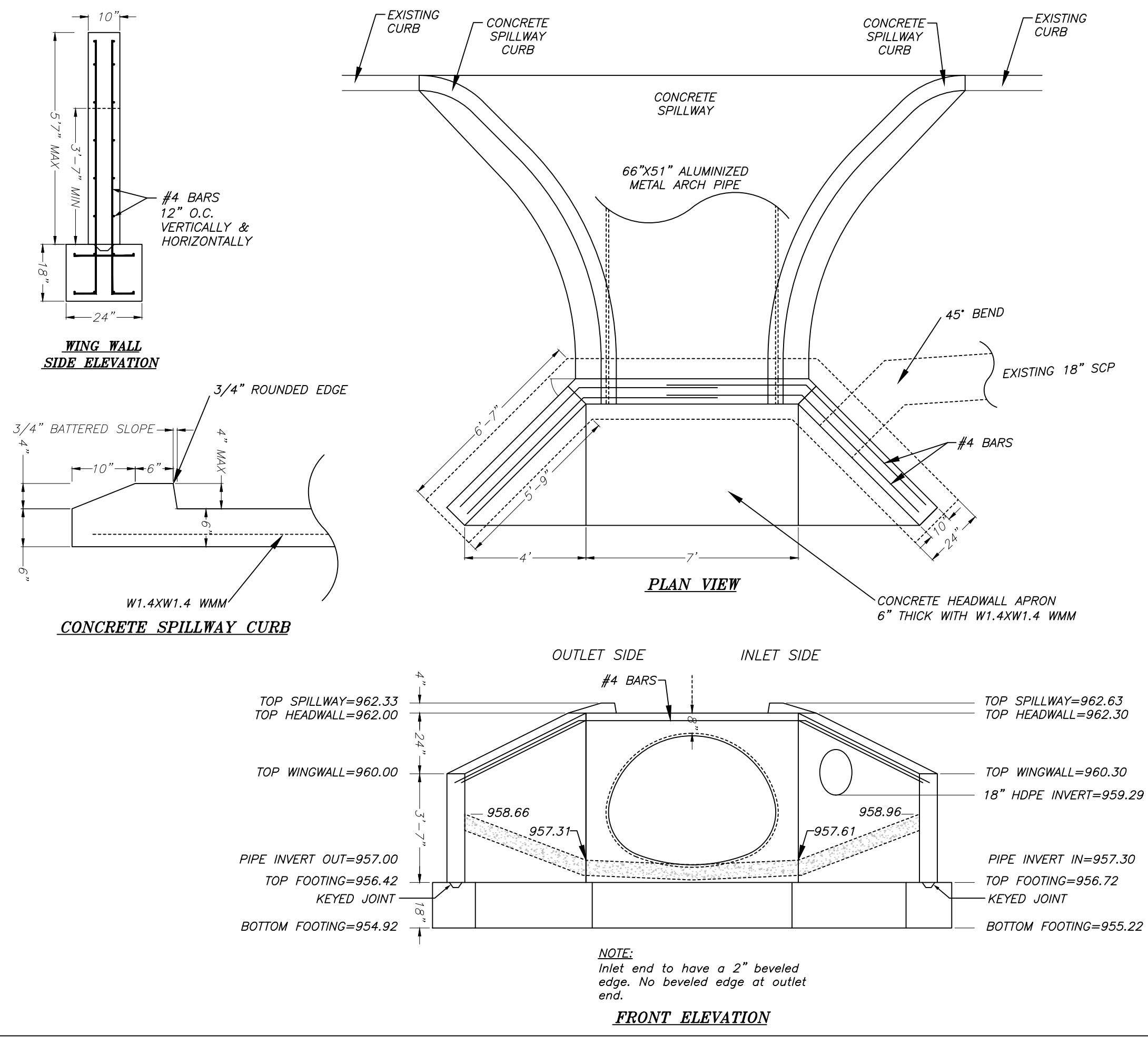
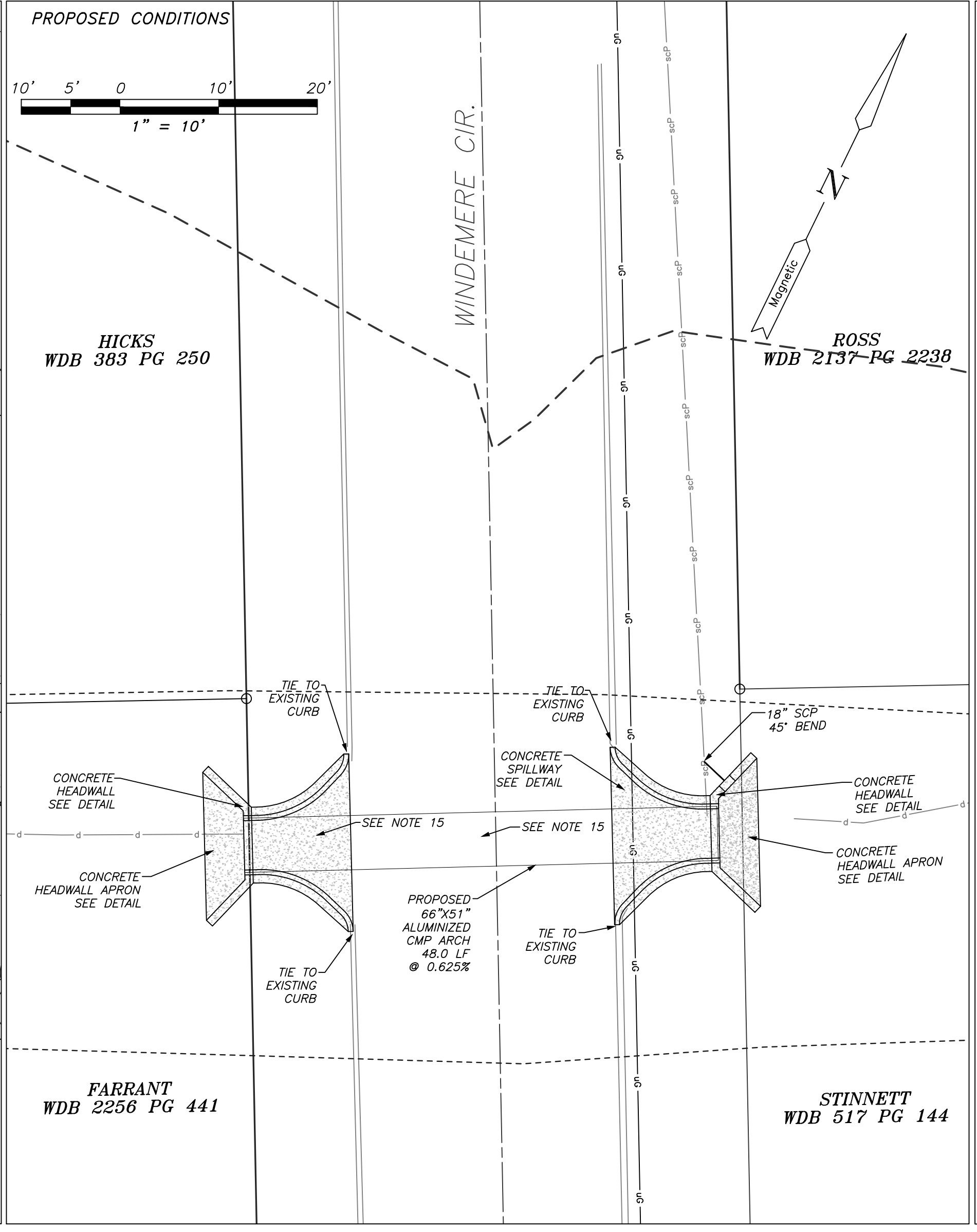
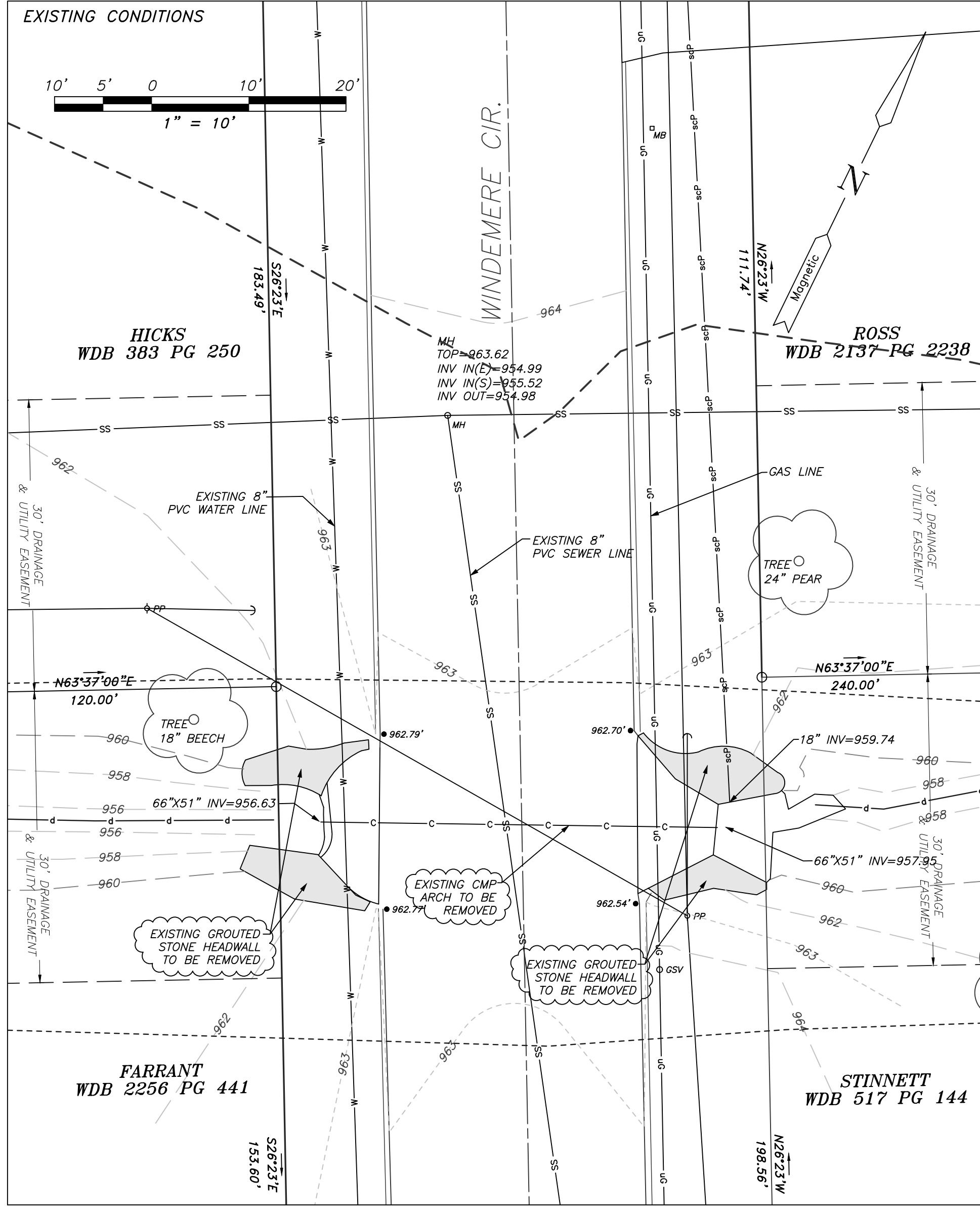


66"x51" ALUMINIZED METAL ARCH PIPE TRENCH DETAIL



- BACKFILL REQUIREMENTS FOLLOW THE GUIDELINES OF ASHTO LRFD BRIDGE DESIGN (SEC 12) and CONSTRUCTION (SEC 26).
- MINIMUM TRENCH WIDTH MUST ALLOW ROOM FOR PROPER COMPACTION OF HAUNCH MATERIALS UNDER THE PIPE ARCH. THE MINIMUM TRENCH WIDTH (12.6.6.1):
SPAN < 24': 3.05'
SPAN > 12': 1.55' + 12'
 - MINIMUM EMBANKMENT WIDTH (in feet) FOR INITIAL FILL ENVELOPE (12.6.6.2):
SPAN < 24': 3.05'
SPAN 24'-144': S + 4'0"
SPAN > 144': S + 10'0"
 - THE FOUNDATION UNDER THE PIPE ARCH AND SIDE BACKFILL SHALL BE ADEQUATE TO SUPPORT THE LOADS ACTING UPON IT (26.5.2)
 - BEDDING MATERIAL SHALL BE RELATIVELY LOOSE MATERIAL THAT IS ROUGHLY SHAPED TO FIT THE BOTTOM OF THE PIPE ARCH, AND A MINIMUM OF TWICE THE CORRUGATION DEPTH IN THICKNESS, WITH THE MAXIMUM PARTICLE SIZE OF ONE-HALF OF THE CORRUGATION DEPTH (26.5.3.1). WIDTH OF BEDDING TO BE EXTENTS OF THE INVERT OF THE PIPE ARCH (26.5.3, FIG. 26.5.3-1).
 - CORRUGATED STEEL PIPE ARCH (CSPA) [HEL-COR PIPE ARCH].
 - HAUNCH ZONE MATERIAL SHALL BE HAND SHOVELED OR SHOVEL SLICED INTO PLACE TO ALLOW FOR PROPER COMPACTION (26.5.2 & 26.5.4).
 - INITIAL BACKFILL FOR PIPE EMBEDMENT TO MEET ASHTO A-1, A-2 OR A-3 CLASSIFICATION OR APPROVED EQUAL, COMPACTED TO 90% STANDARD PROCTOR (T-99). MAXIMUM PARTICLE SIZE NOT TO EXCEED 3" (12.4.1.2). ALL LIFTS SHALL BE PLACED IN A CONTROLLED MANNER. IT IS RECOMMENDED THAT LIFTS NOT EXCEED 8" UNCOMPACTED LIFT HEIGHT TO PREVENT UNEVEN LOADING, AND THE LESSER OF 1/3 THE SPAN OR 24" AS THE MAXIMUM DIFFERENTIAL SIDE-TO-SIDE (26.5.4).
 - INITIAL BACKFILL ABOVE PIPE ARCH MAY INCLUDE ROAD BASE MATERIAL (AND ROAD PAVEMENT IF APPLICABLE). THE MINIMUM COVER HEIGHT IS DEFINED IN TABLE (12.6.6.3-1).
 - TOTAL HEIGHT OF COMPACTED COVER FOR CONVENTIONAL HIGHWAY LOADS IS MEASURED FROM TOP OF PIPE ARCH TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF RIGID PAVEMENT (12.6.6.3).
 - FINAL BACKFILL MATERIAL SELECTION AND COMPACTION REQUIREMENTS SHALL FOLLOW THE PROJECT PLANS AND SPECIFICATIONS PER THE ENGINEER OF RECORD (26.5.4.1).

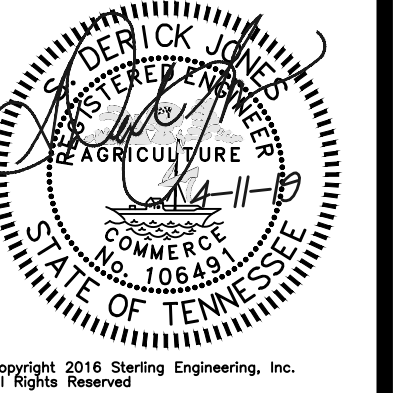
NOTES:
GEOTEXTILE SHOULD BE CONSIDERED FOR USE TO PREVENT SOIL MIGRATION INTO VARYING SOIL TYPES (PROJECT ENGINEER). FOR MULTIPLE BARREL INSTALLATIONS THE RECOMMENDED STANDARD SPACING BETWEEN PARALLEL PIPE ARCH RUNS SHALL BE SPAN/3 BUT NO LESS THAN 12", OR 36" FOR PIPE ARCH SPANS 108" AND LARGER.



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DRAINAGE AND TRAFFIC PLAN
WINDEMERE CIRCLE
CITY OF MARYVILLE, TN

REVISIONS	DATE	BY



SHEET **CD. 1**
DESIGNED: CLS
DRAWN: CLS
CHECKED: SDJ
DATE: 4/11/19
SCALE: VARIES
DRAWING: 4486C-CD
PROJECT NO: SEI#4486C