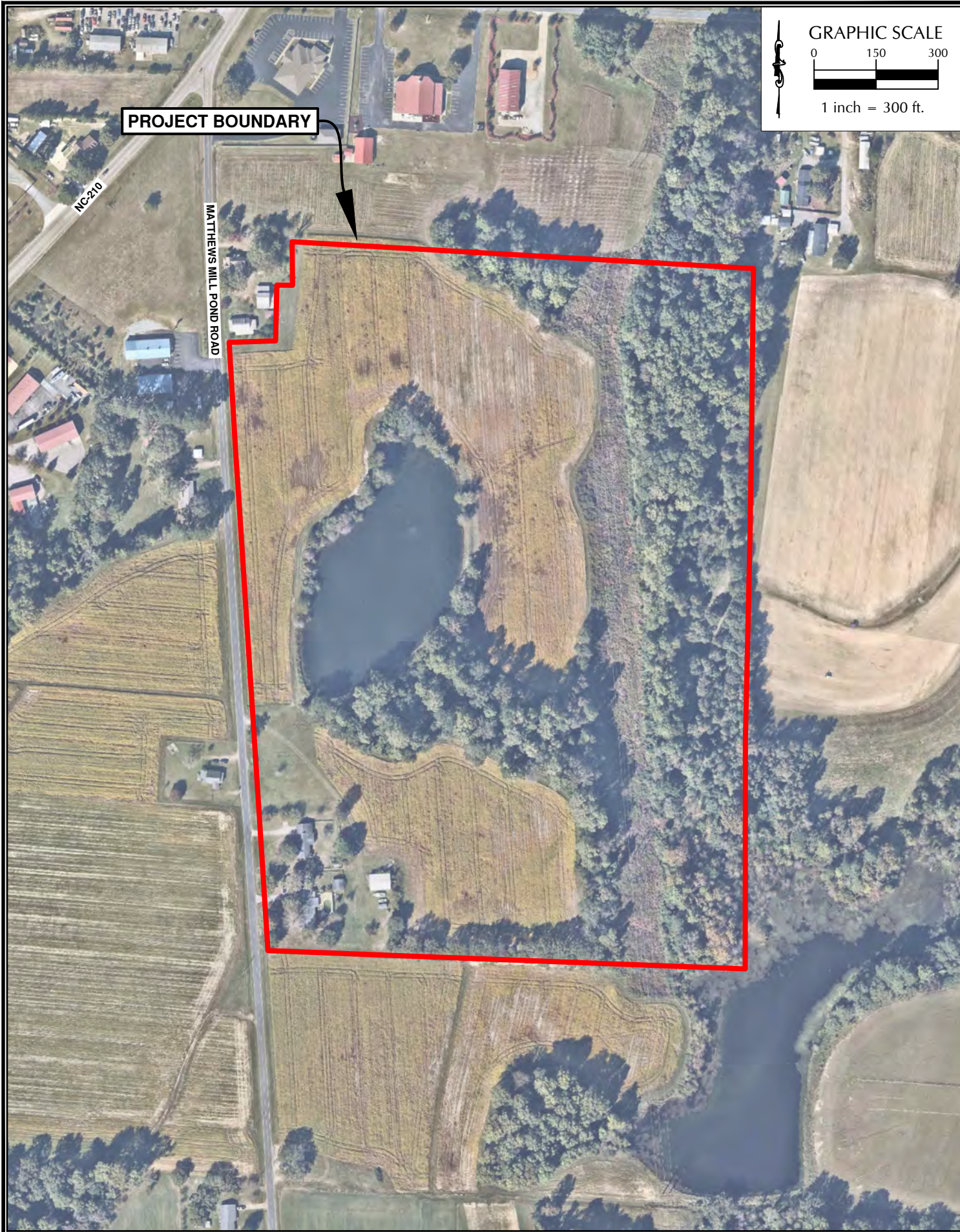
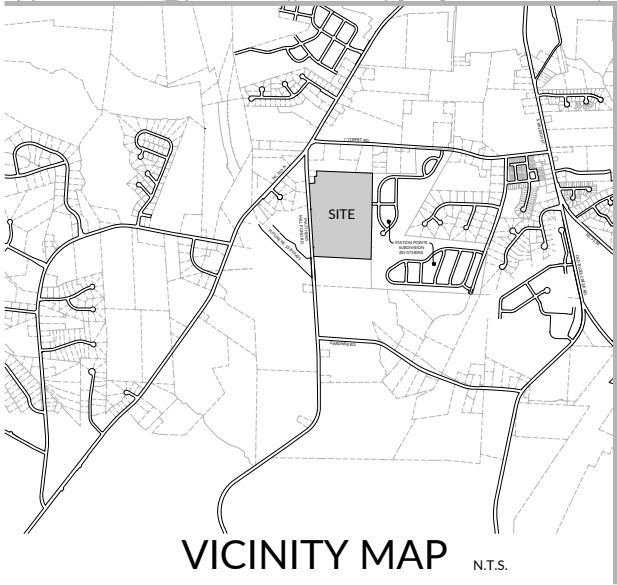
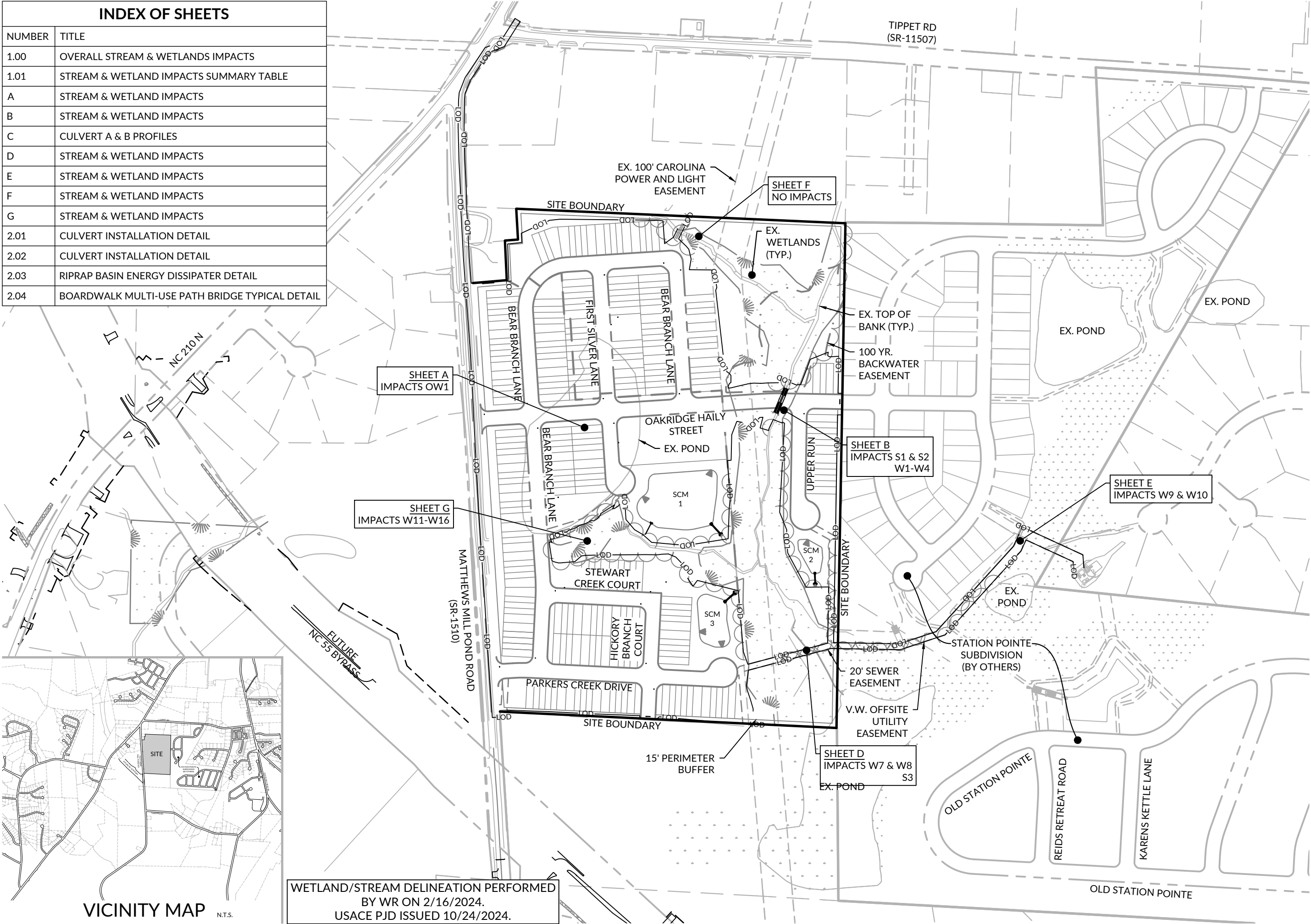


MATTHEWS MILL POND
SUBDIVISION

AERIAL (2023)

 **WithersRavenel**
Engineers | Planners | Surveyors

INDEX OF SHEETS	
NUMBER	TITLE
1.00	OVERALL STREAM & WETLANDS IMPACTS
1.01	STREAM & WETLAND IMPACTS SUMMARY TABLE
A	STREAM & WETLAND IMPACTS
B	STREAM & WETLAND IMPACTS
C	CULVERT A & B PROFILES
D	STREAM & WETLAND IMPACTS
E	STREAM & WETLAND IMPACTS
F	STREAM & WETLAND IMPACTS
G	STREAM & WETLAND IMPACTS
2.01	CULVERT INSTALLATION DETAIL
2.02	CULVERT INSTALLATION DETAIL
2.03	RIPRAP BASIN ENERGY DISSIPATER DETAIL
2.04	BOARDWALK MULTI-USE PATH BRIDGE TYPICAL DETAIL

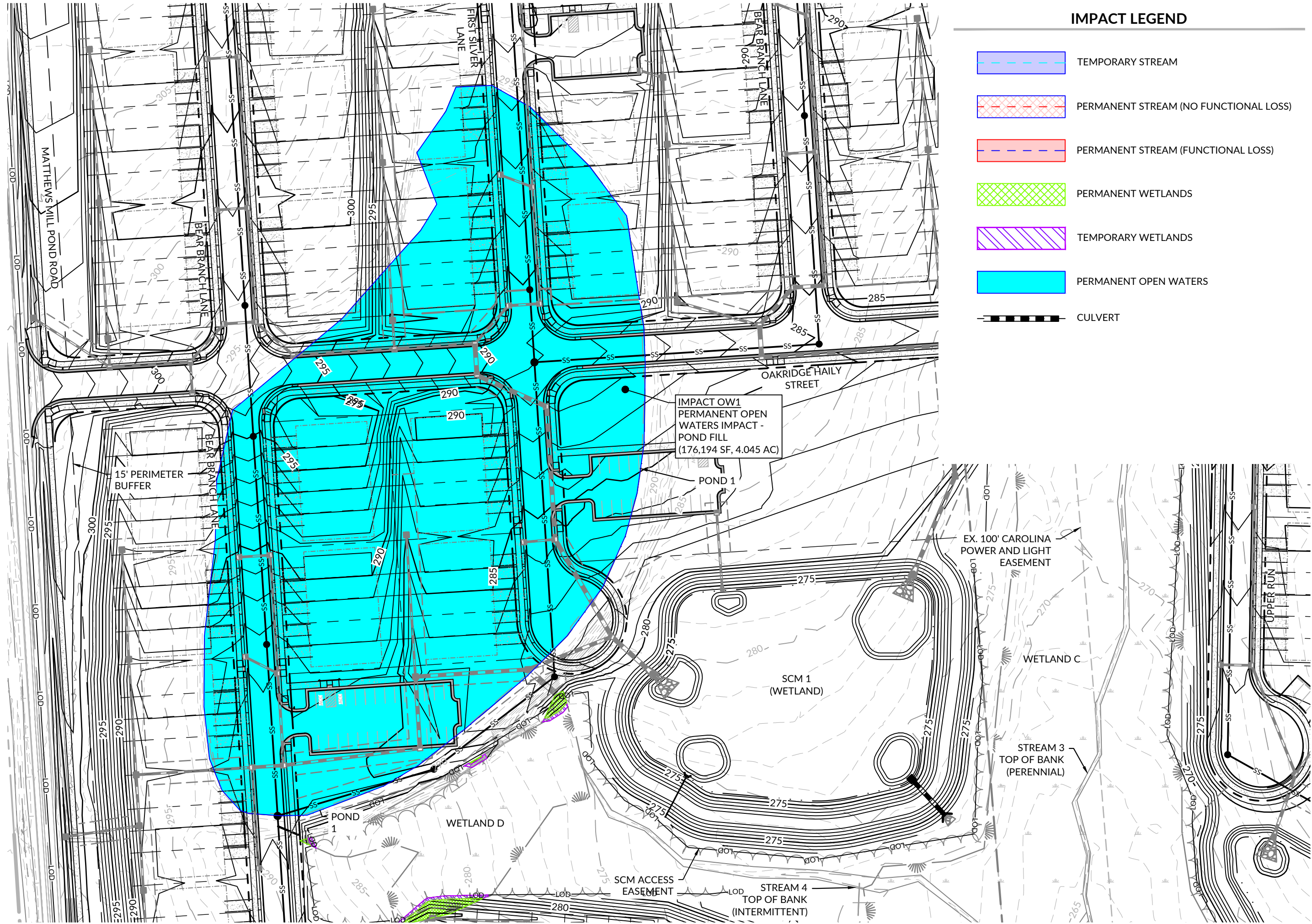


WETLAND/STREAM DELINEATION PERFORMED BY WR ON 2/16/2024.
USACE PJD ISSUED 10/24/2024.

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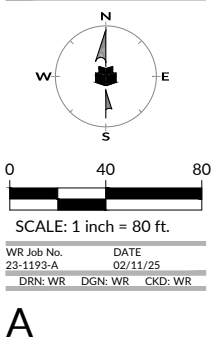
MAP	IMPACT LOCATION	IMPACT SPECIFICATION	WETLAND & STREAM																
			PERMANENT										TEMPORARY						
			STREAM (FUNCTIONAL LOSS)			STREAM (NO FUNCTIONAL LOSS)			WETLANDS		OPEN WATER		WETLANDS PERMANENT CONVERSION		STREAM			WETLANDS	
			(LF)	(SF)	(AC)	(LF)	(SF)	(AC)	(SF)	(AC)	(SF)	(AC)	(SF)	(AC)	(LF)	(SF)	(AC)	(SF)	(AC)
A	OW1	POND FILL	-	-	-	-	-	-	-	-	176,194	4.045	-	-	-	-	-	-	-
B	W1	LOT GRADING	-	-	-	-	-	-	295	0.007	-	-	-	-	-	-	-	-	-
	W2	CONSTRUCTION ACCESS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	136	0.003
	W3	ROAD CROSSING	-	-	-	-	-	-	21,413	0.492	-	-	-	-	-	-	-	-	-
	W4	CONSTRUCTION ACCESS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,096	0.094
	S1	CONSTRUCTION ACCESS	-	-	-	-	-	-	-	-	-	-	-	-	20	144	0.003	-	-
	S2	ROAD CROSSING/CULVERT	94	673	0.015	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	S3	RIP-RAP INSTALLATION	-	-	-	21	139	0.003	-	-	-	-	-	-	-	-	-	-	-
	S4	CONSTRUCTION ACCESS	-	-	-	-	-	-	-	-	-	-	-	-	43	252	0.006	-	-
C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D	W7	SANITARY SEWER	-	-	-	-	-	-	-	-	-	-	7,019	0.161	-	-	-	-	-
	W8	SANITARY SEWER	-	-	-	-	-	-	-	-	-	-	3,400	0.078	-	-	-	-	-
	S3	CONSTRUCTION ACCESS	-	-	-	-	-	-	-	-	-	-	-	-	34	103	0.002	-	-
E	W9	SANITARY SEWER	-	-	-	-	-	-	-	-	-	-	303	0.007	-	-	-	-	-
	W10	SANITARY SEWER	-	-	-	-	-	-	9	0.0002	-	-	-	-	-	-	-	-	-
F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
G	W11	SEWER LINE GRADING	-	-	-	-	-	-	29	0.001	-	-	-	-	-	-	-	-	-
	W12	CONSTRUCTION ACCESS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	91	0.002
	W13	LOT GRADING	-	-	-	-	-	-	713	0.016	-	-	-	-	-	-	-	-	-
	W14	CONSTRUCTION ACCESS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	265	0.006
	W15	SEWER LINE GRADING	-	-	-	-	-	-	226	0.002	-	-	-	-	-	-	-	-	-
	W16	CONSTRUCTION ACCESS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	79	0.002
	TOTAL IMPACTS		94	673	0.015	21	139	0.003	22,459	0.516	176,194	4.045	10,723	0.246	97	499	0.011	4,588	0.105

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IMPACT LEGEND

- TEMPORARY STREAM
- PERMANENT STREAM (NO FUNCTIONAL LOSS)
- PERMANENT STREAM (FUNCTIONAL LOSS)
- PERMANENT WETLANDS
- TEMPORARY WETLANDS
- PERMANENT OPEN WATERS
- CULVERT

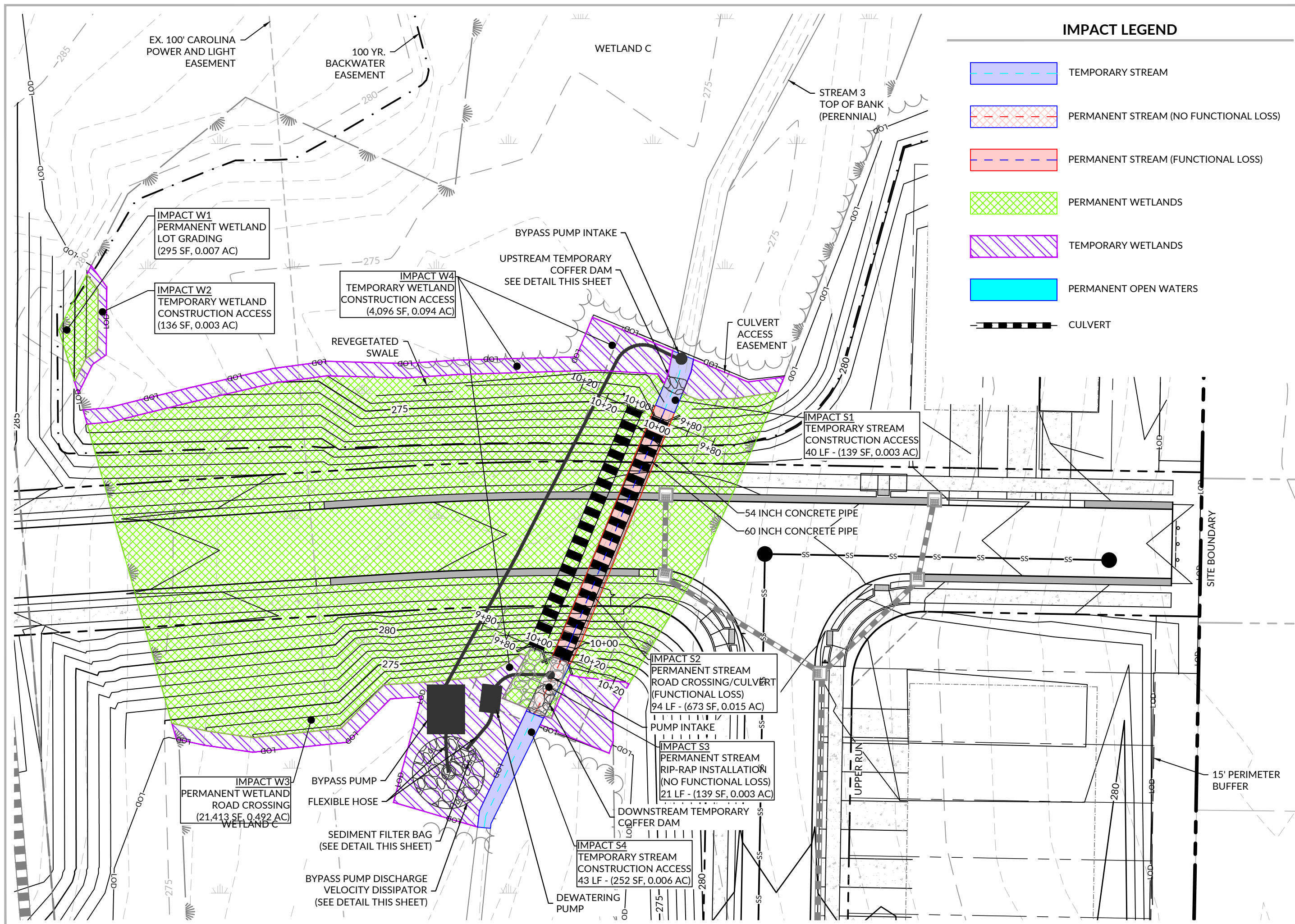


WR Job No. 23-1193-A DATE 02/11/25
DRN: WR DGN: WR CKD: WR

A

STREAM & WETLAND IMPACTS
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SUBDIVISION**
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HARNETT COUNTY

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IMPACT LEGEND

- TEMPORARY STREAM
- PERMANENT STREAM (NO FUNCTIONAL LOSS)
- PERMANENT STREAM (FUNCTIONAL LOSS)
- PERMANENT WETLANDS
- TEMPORARY WETLANDS
- PERMANENT OPEN WATERS
- CULVERT

STREAM & WETLAND IMPACTS

MATTHEWS MILL POND SUBDIVISION

316 MATTHEWS MILL POND RD | ANGIER, NORTH CAROLINA
HARNETT COUNTY

STREAM & WETLAND IMPACTS

SCALE: 1 inch = 30 ft.

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WR Job No. 23-1193-A DATE 02/11/25

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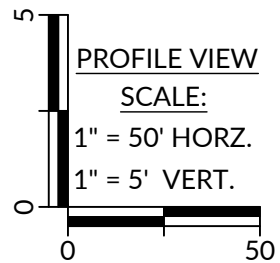
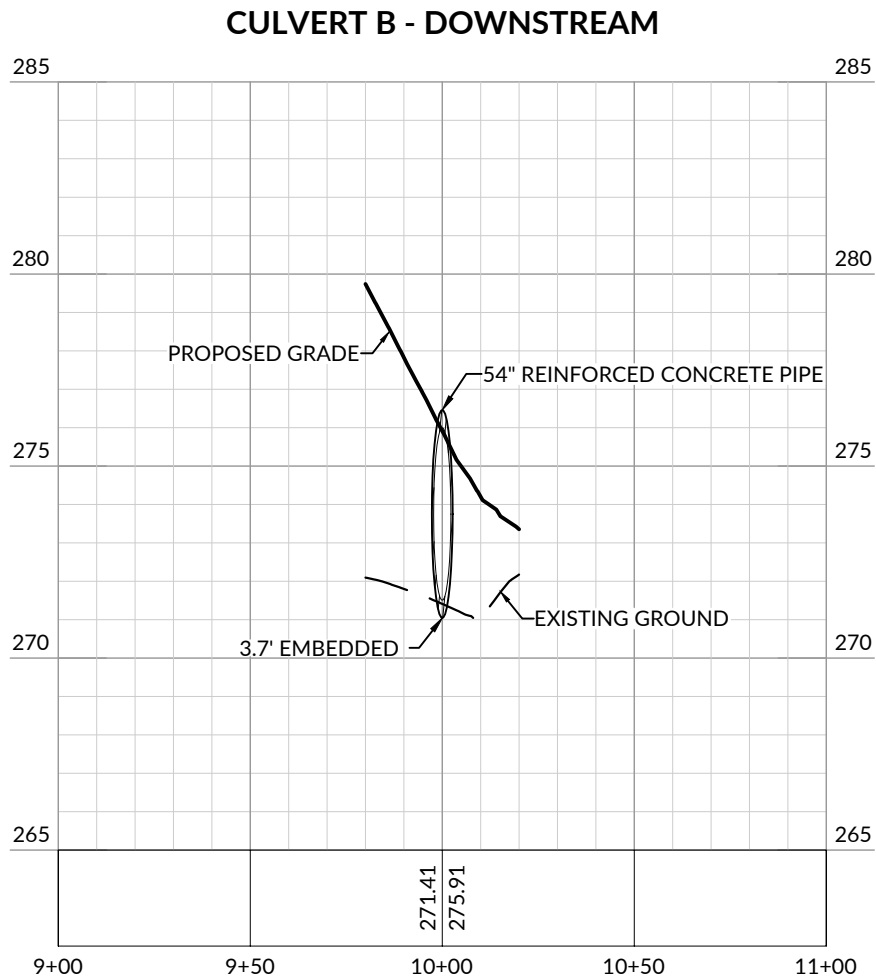
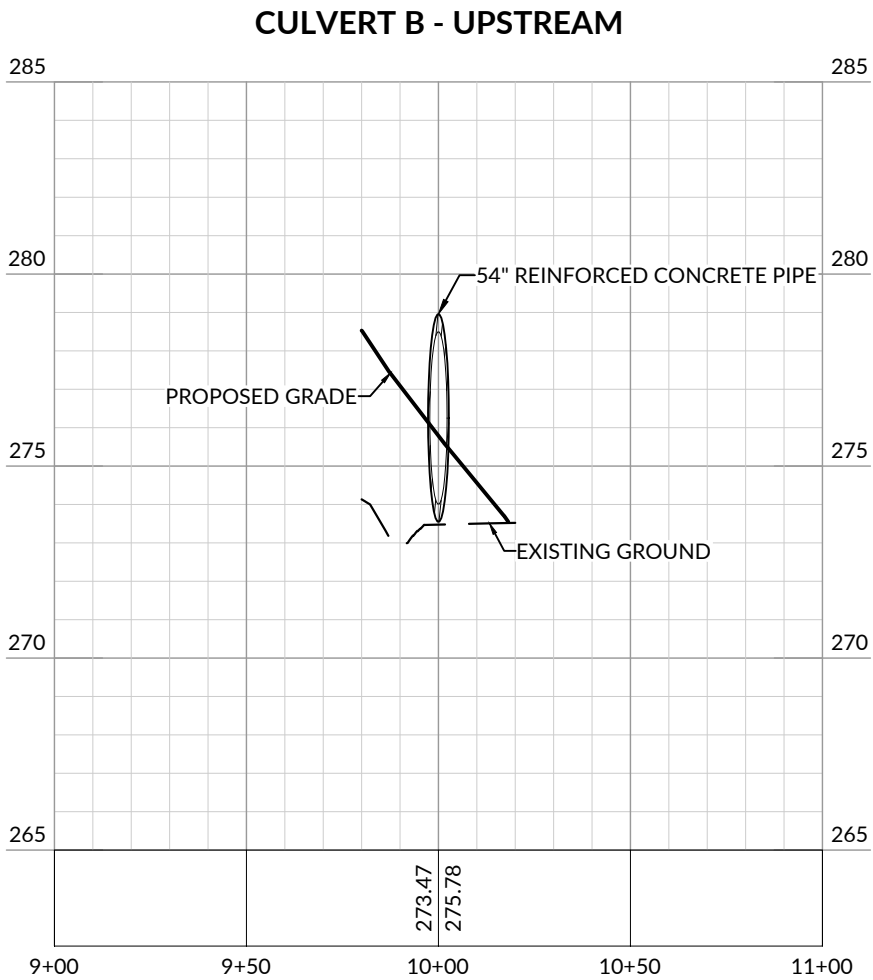
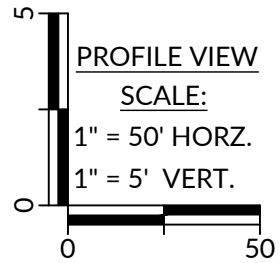
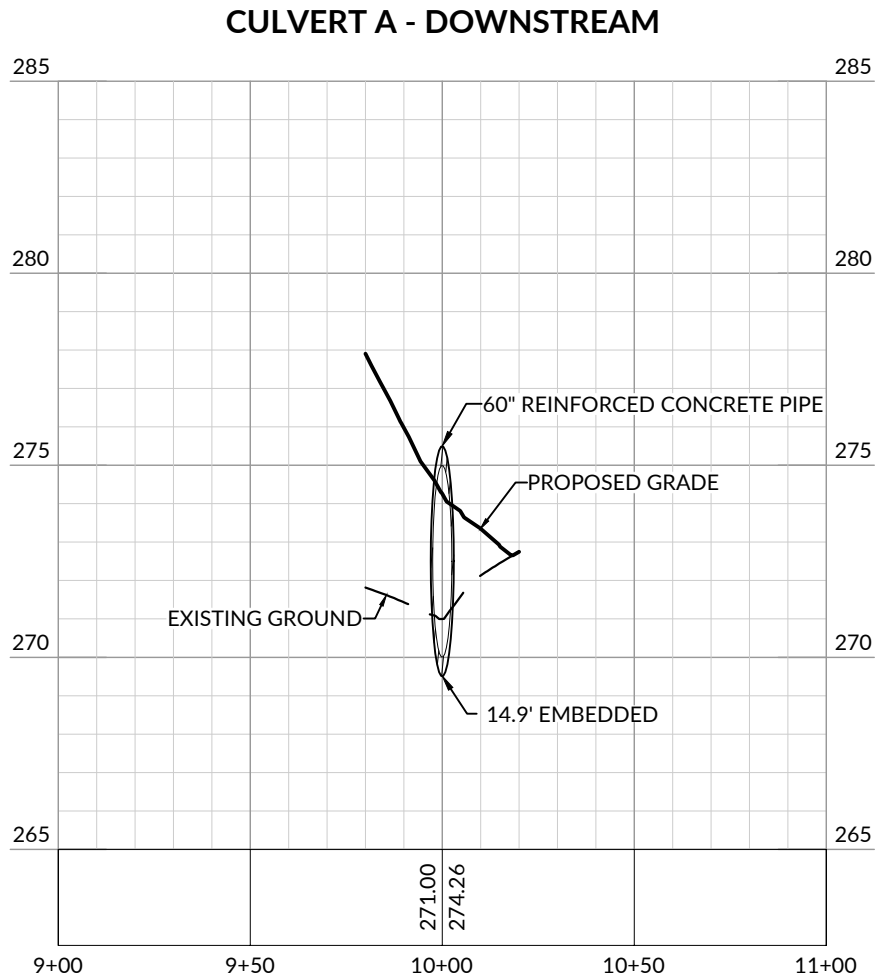
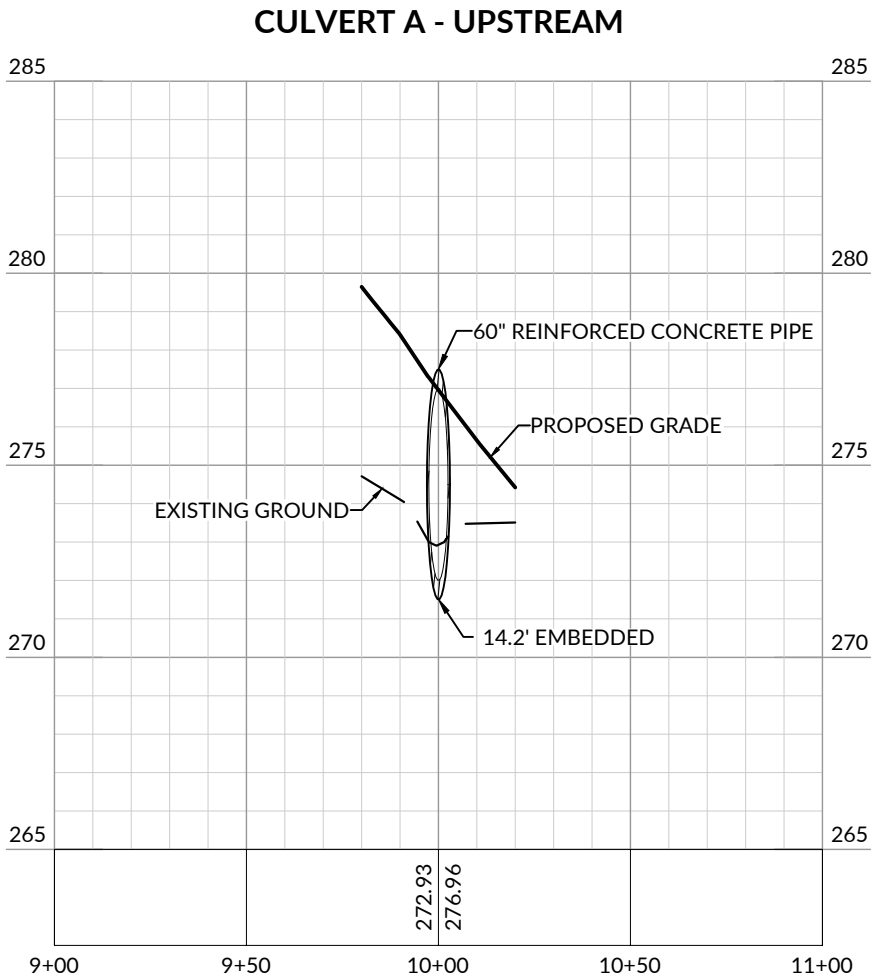
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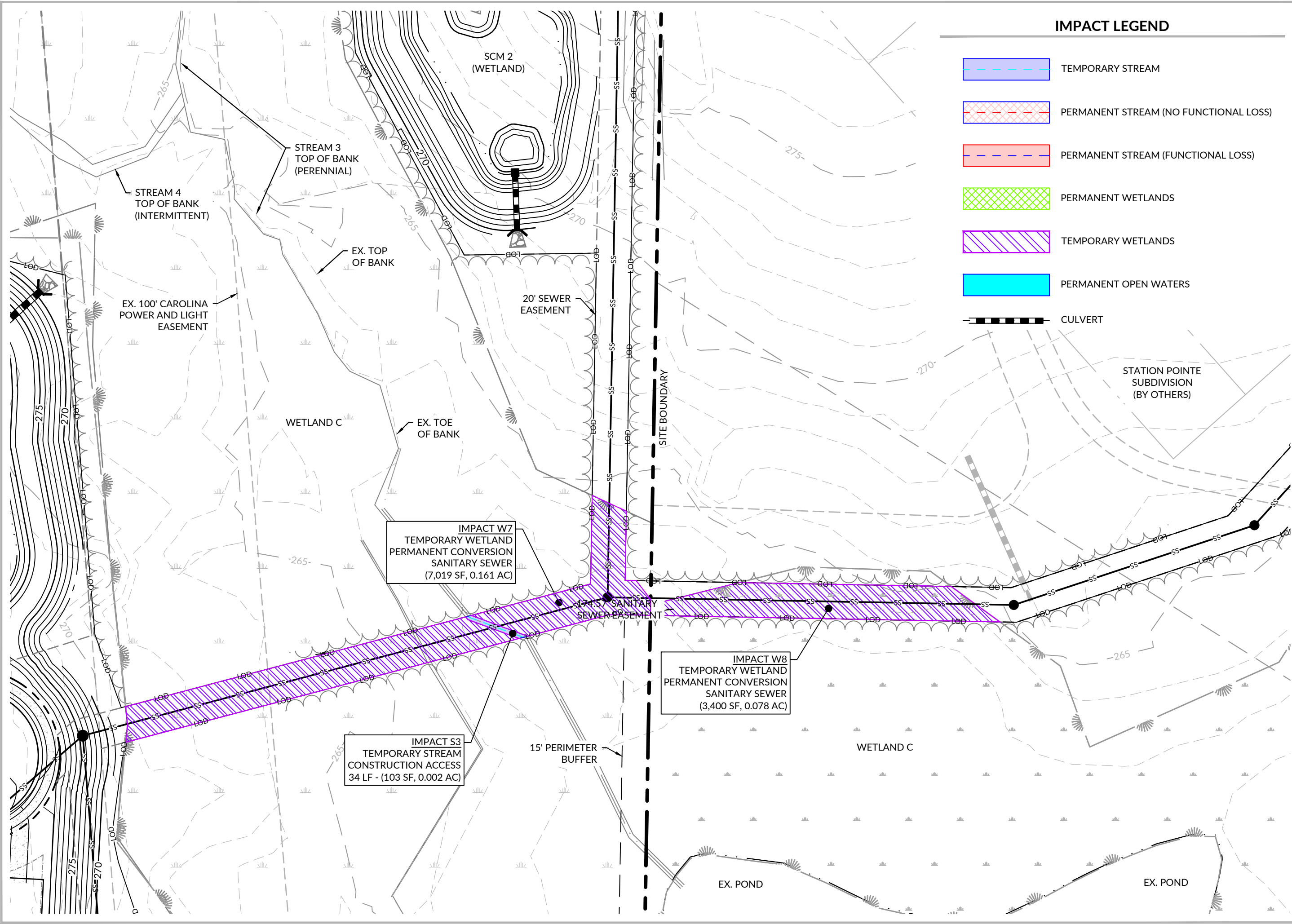
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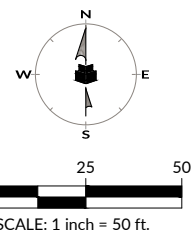
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IMPACT LEGEND

- TEMPORARY STREAM
- PERMANENT STREAM (NO FUNCTIONAL LOSS)
- PERMANENT STREAM (FUNCTIONAL LOSS)
- PERMANENT WETLANDS
- TEMPORARY WETLANDS
- PERMANENT OPEN WATERS
- CULVERT

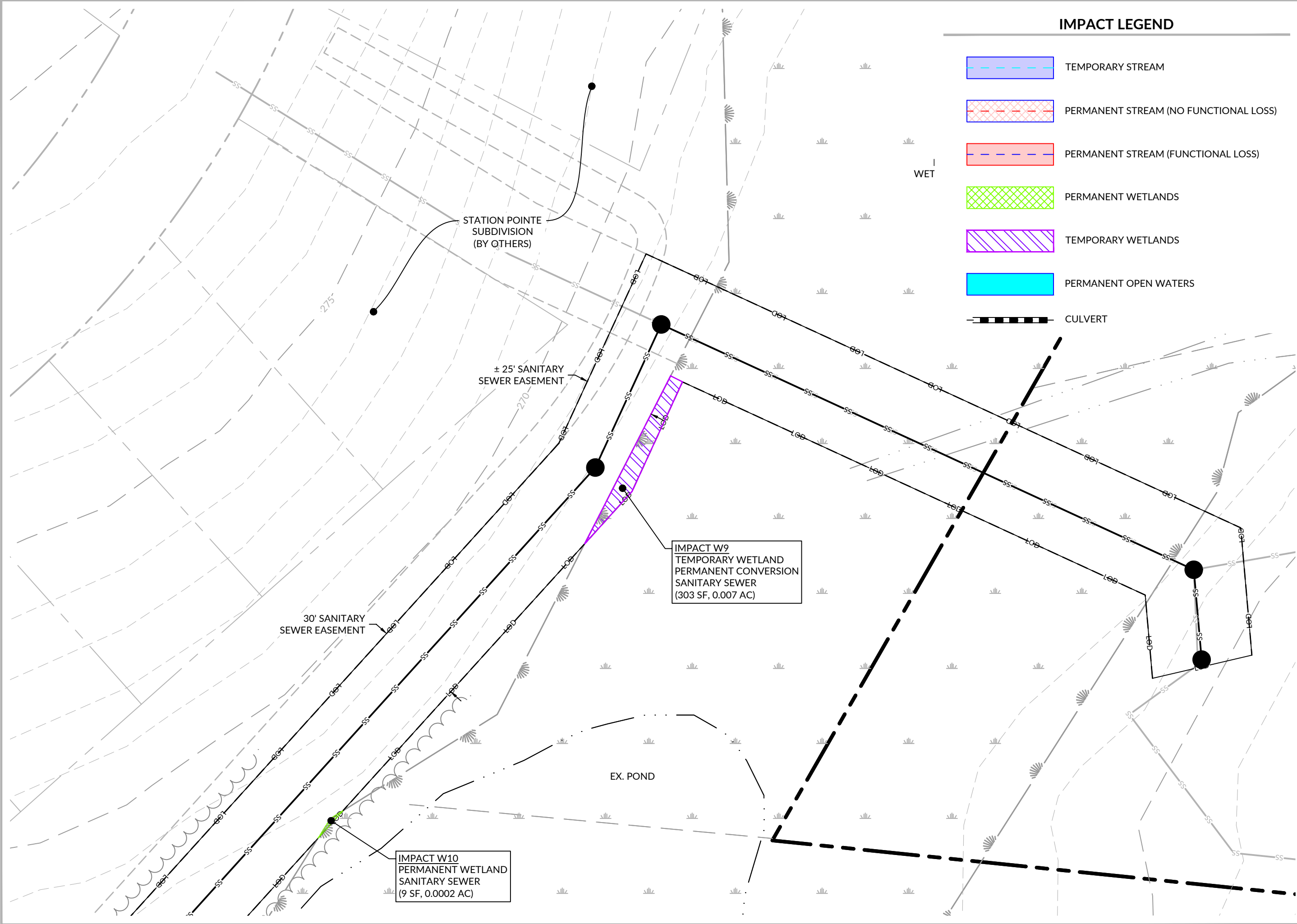
STREAM & WETLAND IMPACTS



WR Job No. 23-1193-A DATE 02/11/25
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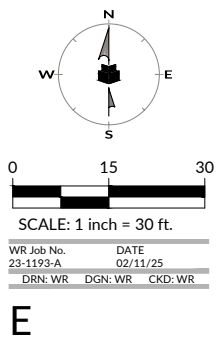
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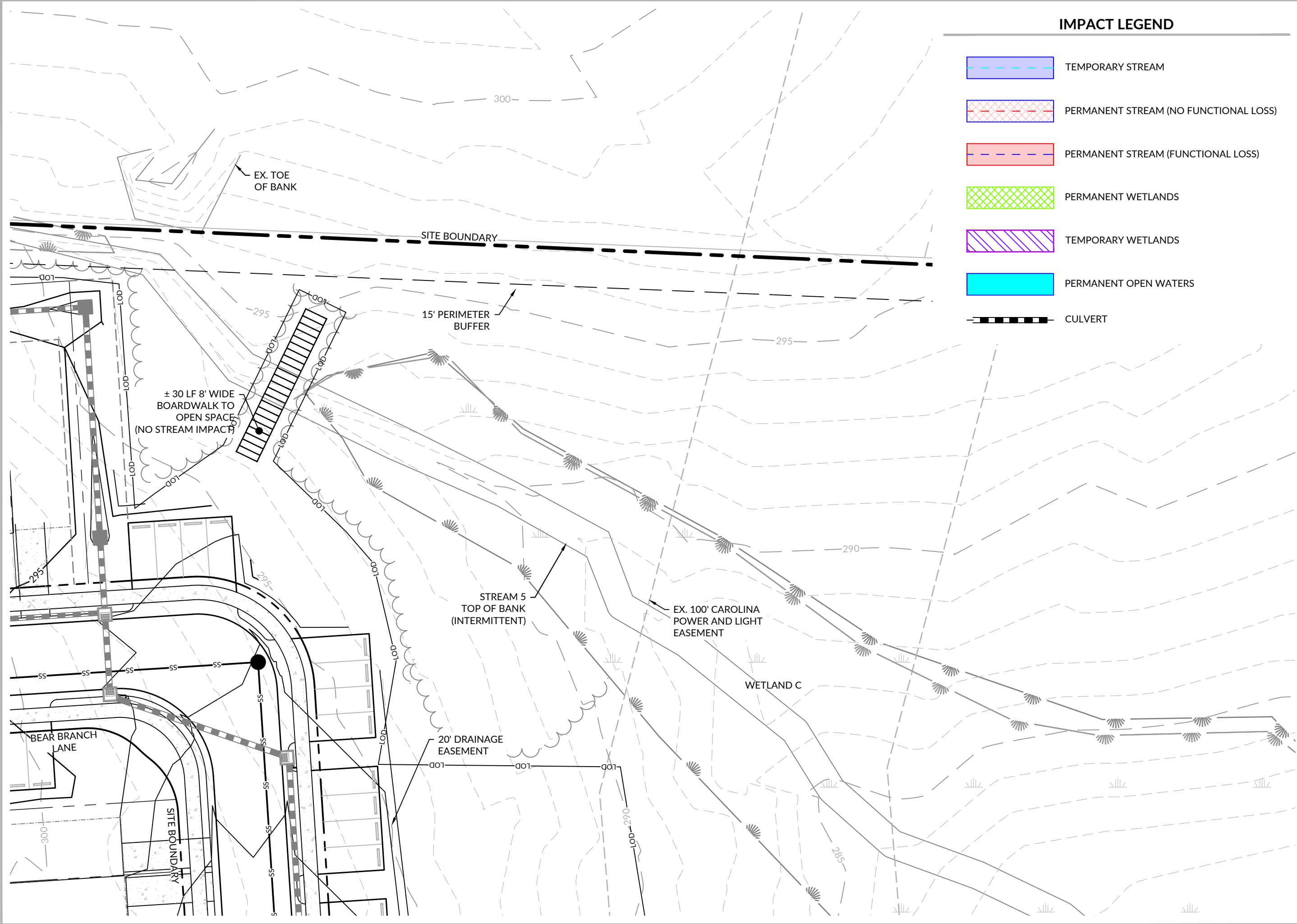
IMPACT LEGEND

- TEMPORARY STREAM
- PERMANENT STREAM (NO FUNCTIONAL LOSS)
- PERMANENT STREAM (FUNCTIONAL LOSS)
- PERMANENT WETLANDS
- TEMPORARY WETLANDS
- PERMANENT OPEN WATERS
- CULVERT



STREAM & WETLAND IMPACTS
MATTHEWS MILL POND SUBDIVISION
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HARNETT COUNTY

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IMPACT LEGEND

- TEMPORARY STREAM
- PERMANENT STREAM (NO FUNCTIONAL LOSS)
- PERMANENT STREAM (FUNCTIONAL LOSS)
- PERMANENT WETLANDS
- TEMPORARY WETLANDS
- PERMANENT OPEN WATERS
- CULVERT

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SCALE: 1 inch = 30 ft.

WR Job No. 23-1193-A

DATE 02/11/25

DRN: WR

DGN: WR

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STREAM & WETLAND IMPACTS

MATTHEWS MILL POND SUBDIVISION

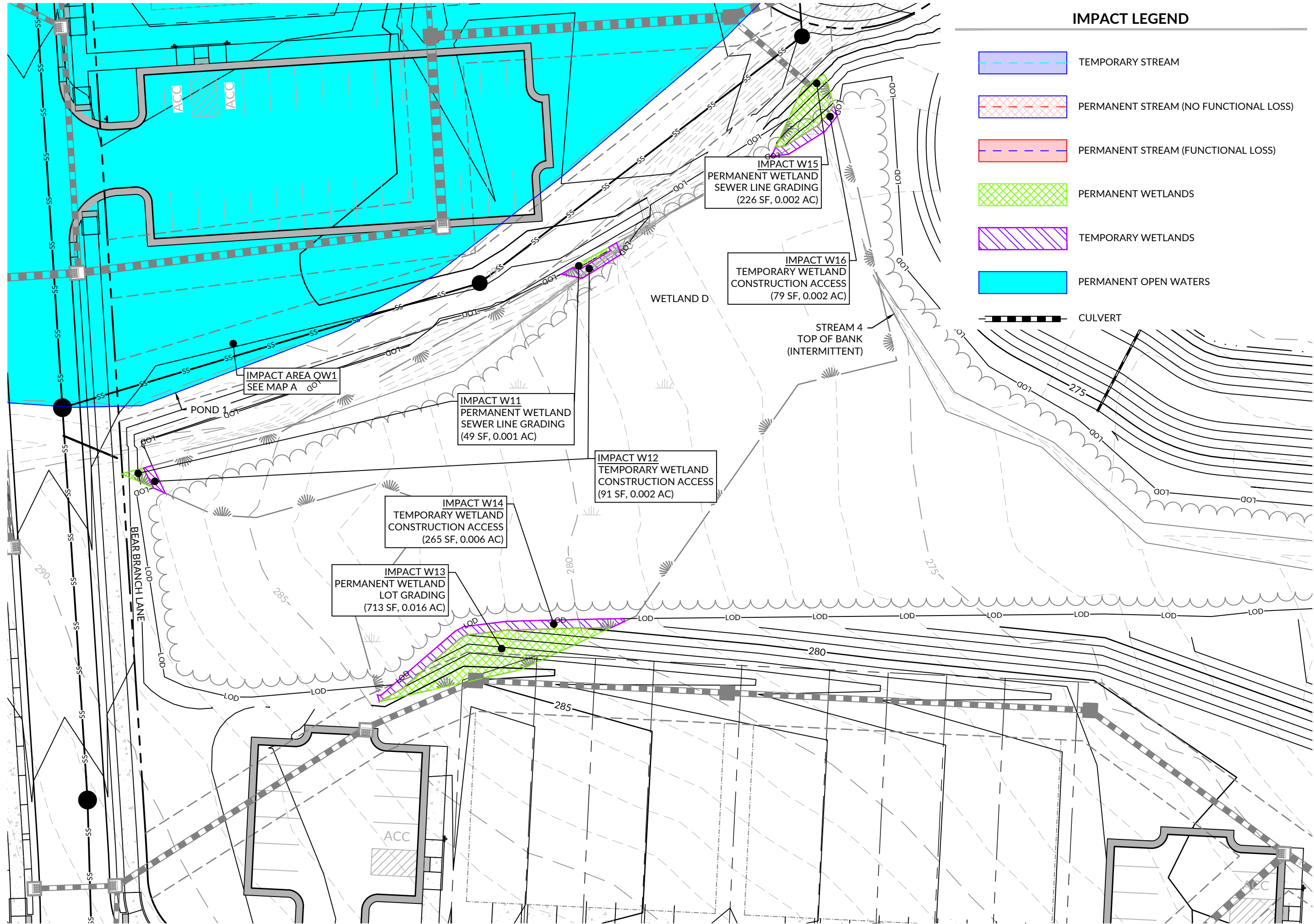
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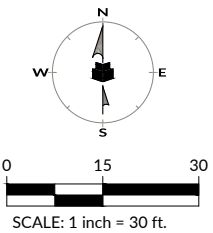
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IMPACT LEGEND

- TEMPORARY STREAM
- PERMANENT STREAM (NO FUNCTIONAL LOSS)
- PERMANENT STREAM (FUNCTIONAL LOSS)
- PERMANENT WETLANDS
- TEMPORARY WETLANDS
- PERMANENT OPEN WATERS

CULVERT

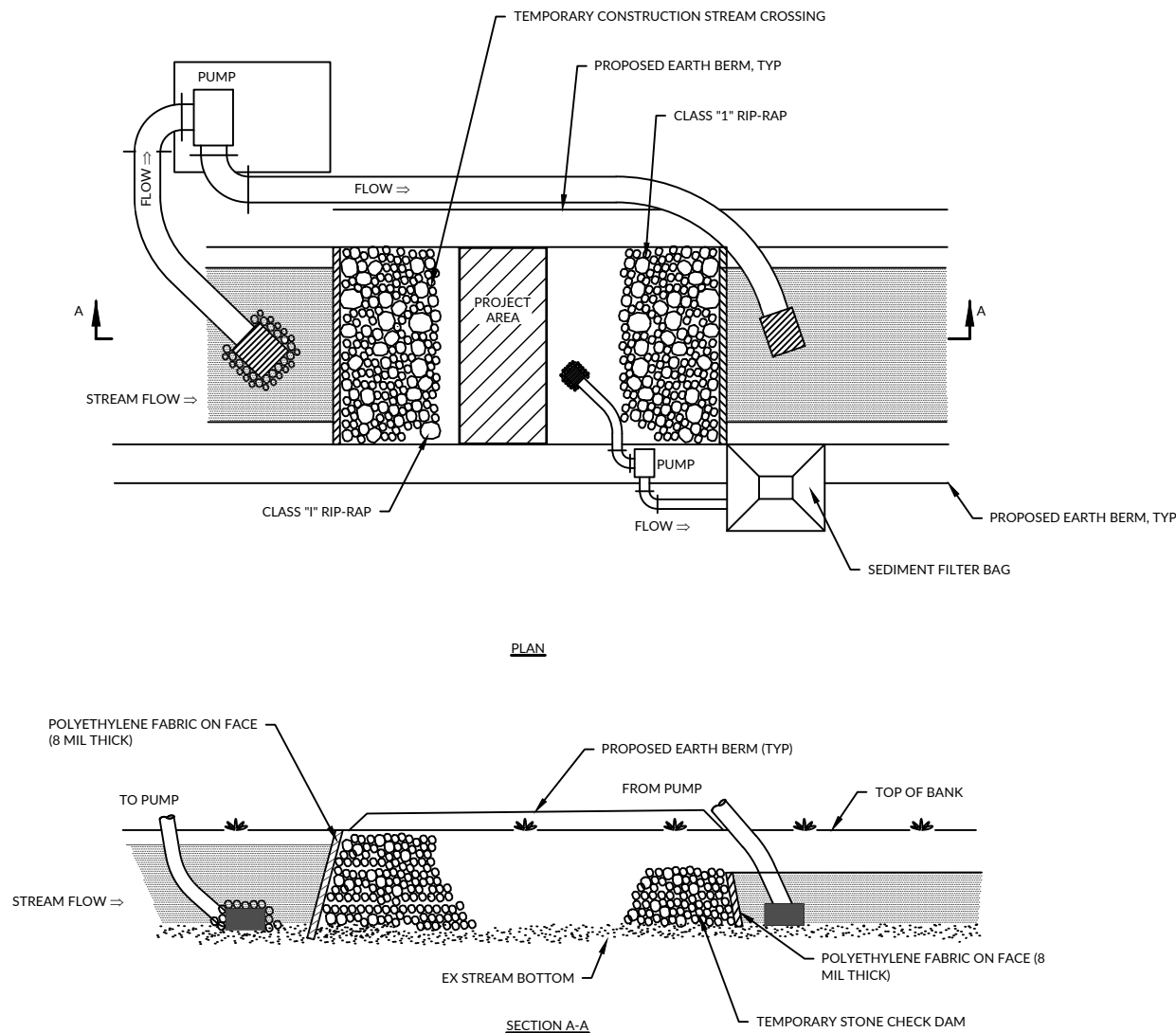


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STREAM & WETLAND IMPACTS

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TEMPORARY STREAM BYPASS PUMP AROUND
NOT TO SCALE

TEMPORARY STREAM BYPASS

NOTES

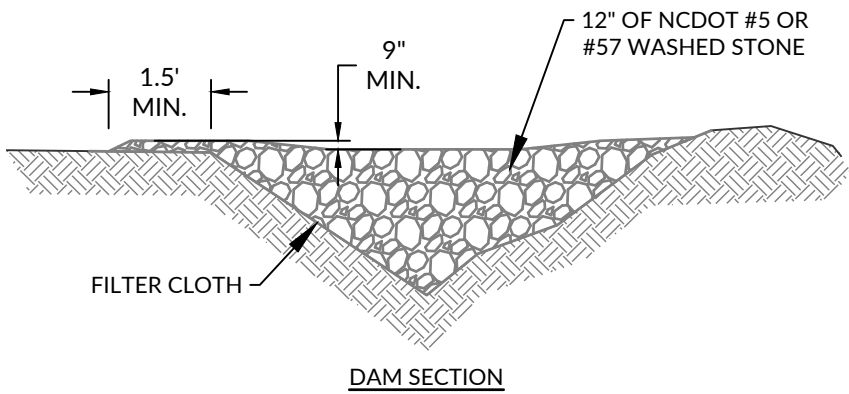
1. WORK SHOULD BE SCHEDULED SO THAT CONSTRUCTION CAN BE COMPLETED DURING A TIME OF MINIMAL PRECIPITATION.
2. PUMP AND LINE SIZES TO BE DETERMINED BY THE CONTRACTOR.
3. ALL EROSION CONTROL DEVICES TO BE IN PLACE PRIOR TO CROSS DRAINAGE PIPE INSTALLATION.
4. WIDTH OF CONSTRUCTION EASEMENT SHALL BE MINIMIZED BASED UPON FIELD CONDITIONS. ANY DISTURBANCE EXCEEDING WHAT IS SHOWN ON PLANS MAY REQUIRE ADDITIONAL WATER QUALITY PERMITTING.

MAINTENANCE

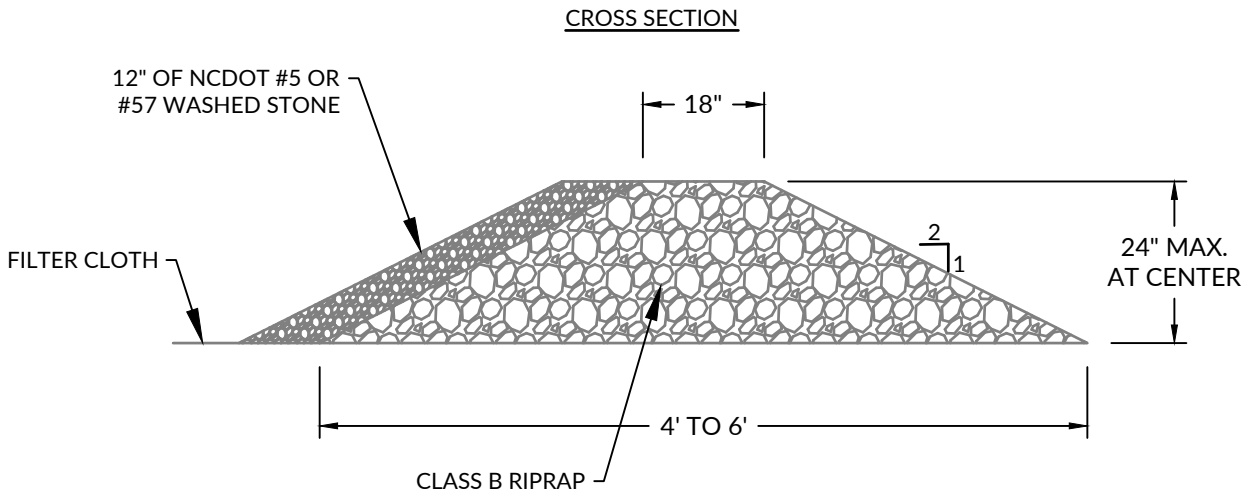
1. INSPECT WEEKLY AND AFTER EACH RAINFALL EVENT THAT PRODUCES ½ INCH OR MORE OF RAIN.
2. REMOVE SEDIMENT AND WOODY DEBRIS PROMPTLY.
3. REMOVE COLLECTED SEDIMENT FROM STONE/RIP-RAP AREAS AS NECESSARY. TOP DRESS WITH 2", WASHED STONE AS NECESSARY.

CONSTRUCTION SEQUENCE

1. CONTRACTOR TO INSTALL ALL CROSS DRAINAGE PIPING DURING DRY WEATHER.
2. INSTALL TEMPORARY SILT FENCE BETWEEN EXISTING STREAM AND AREA OF DISTURBANCE FOR ALL CULVERTS.
3. BYPASS PLANS ARE SCHEMATIC. CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, INSTALLATION, MAINTENANCE, OPERATION AND REMOVAL OF ALL EQUIPMENT AND TEMPORARY CONSTRUCTION TO INSURE "DRY" WORKING CONDITIONS.
4. INSTALL UPSTREAM AND DOWNSTREAM TEMPORARY STONE DAMS (CLASS "I" RIP-RAP) WITH WATERPROOF POLYETHYLENE FABRIC FACING (MINIMUM 8 MIL THICK). DOWNSTREAM TEMPORARY STONE DAM IS INTENDED TO FUNCTION AS A TEMPORARY STREAM CROSSING AND SHOULD HAVE A MINIMUM TOP WIDTH OF 10'.
5. INSTALL "CLEAN" WATER BYPASS PUMPS. SEE DETAILS THIS SHEET.
6. INSTALL WORK AREA DEWATERING PUMP AND SEDIMENT FILTER BAG AT TOP OF BANK. DEWATER CONSTRUCTION AREA BETWEEN STONE DAMS USING THE FILTER BAG.
7. CONSTRUCT CULVERT AND END TREATMENTS.
8. BEGIN BACKFILLING AROUND CROSS DRAINAGE PIPING.
9. REMOVE TEMPORARY SILT FENCE WHEN BACKFILL REACHES SILT FENCE.
10. CONCURRENTLY WITH STEP 10 REMOVE PUMPS, SEDIMENT BAGS, AND TEMPORARY STONE DAMS. (REMOVE POLYETHYLENE, REMOVE AND STOCKPILE RIP-RAP, TO THE LEVEL OF THE STREAM BOTTOM, FOR USE IN CONSTRUCTING RIP-RAP DISSIPATOR.
11. MAINTAIN ALL EROSION CONTROL DEVICES TO PREVENT SEDIMENT ENTERING THE CULVERT.
12. CONTRACTOR WILL BE RESPONSIBLE FOR ALL SUPPLIES REQUIRED FOR ANY PUMPING OF WATER FLOW UNTIL CULVERT IS CONSTRUCTED.



STONE SHOULD BE PLACED OVER THE CHANNEL BANKS TO KEEP WATER FROM CUTTING AROUND THE DAM.



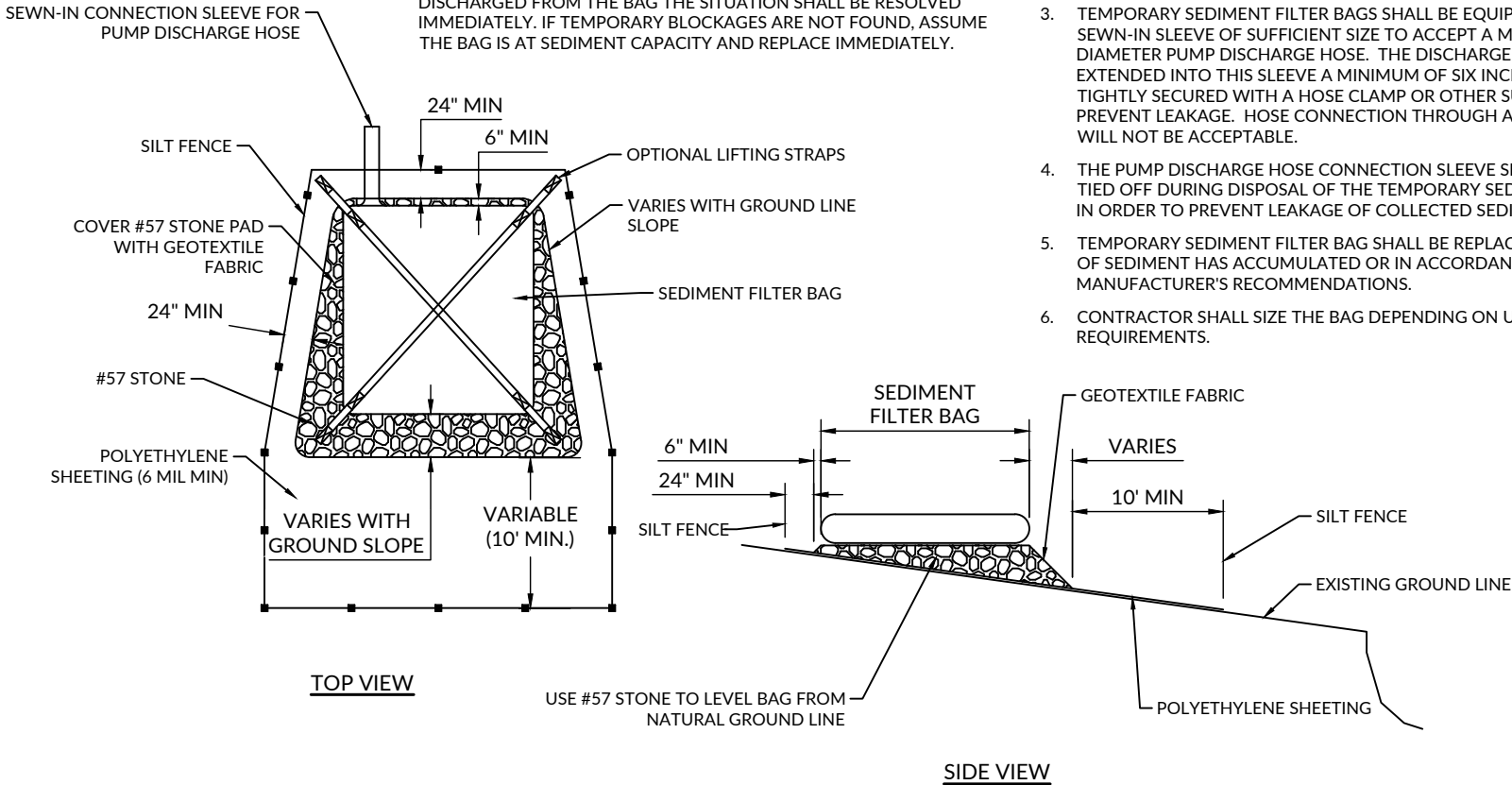
TEMPORARY STONE CHECK DAM NOT TO SCALE

MAINTENANCE NOTES:

1. INSPECT WEEKLY AND AFTER EACH RAINFALL EVENT PRODUCING $\frac{1}{2}$ INCH OR MORE OF RAIN. ANY DAMAGE TO THE SEDIMENT FILTER BAG SHALL BE REPAIRED IMMEDIATELY.
2. TEMPORARY SEDIMENT FILTER BAG SHALL BE REPLACED WHEN 6" OF SEDIMENT HAS ACCUMULATED OR IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
3. MONITOR SEDIMENT FILTER BAG REGULARLY FOR THE PRESENCE OF TURBID WATER BEING DISCHARGED. IF ANY TURBID WATER IS BEING DISCHARGED FROM THE BAG THE SITUATION SHALL BE RESOLVED IMMEDIATELY. IF TEMPORARY BLOCKAGES ARE NOT FOUND, ASSUME THE BAG IS AT SEDIMENT CAPACITY AND REPLACE IMMEDIATELY.

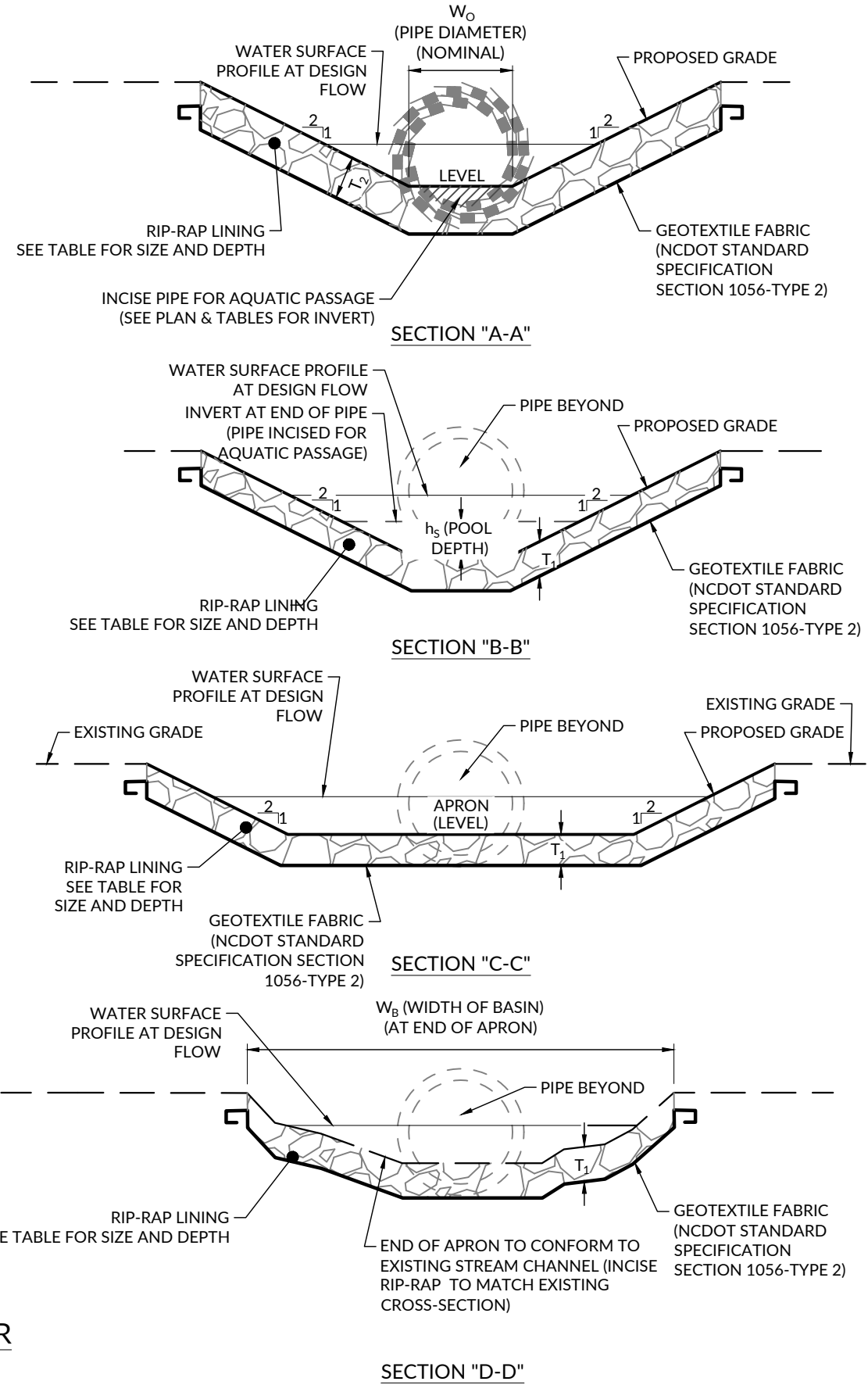
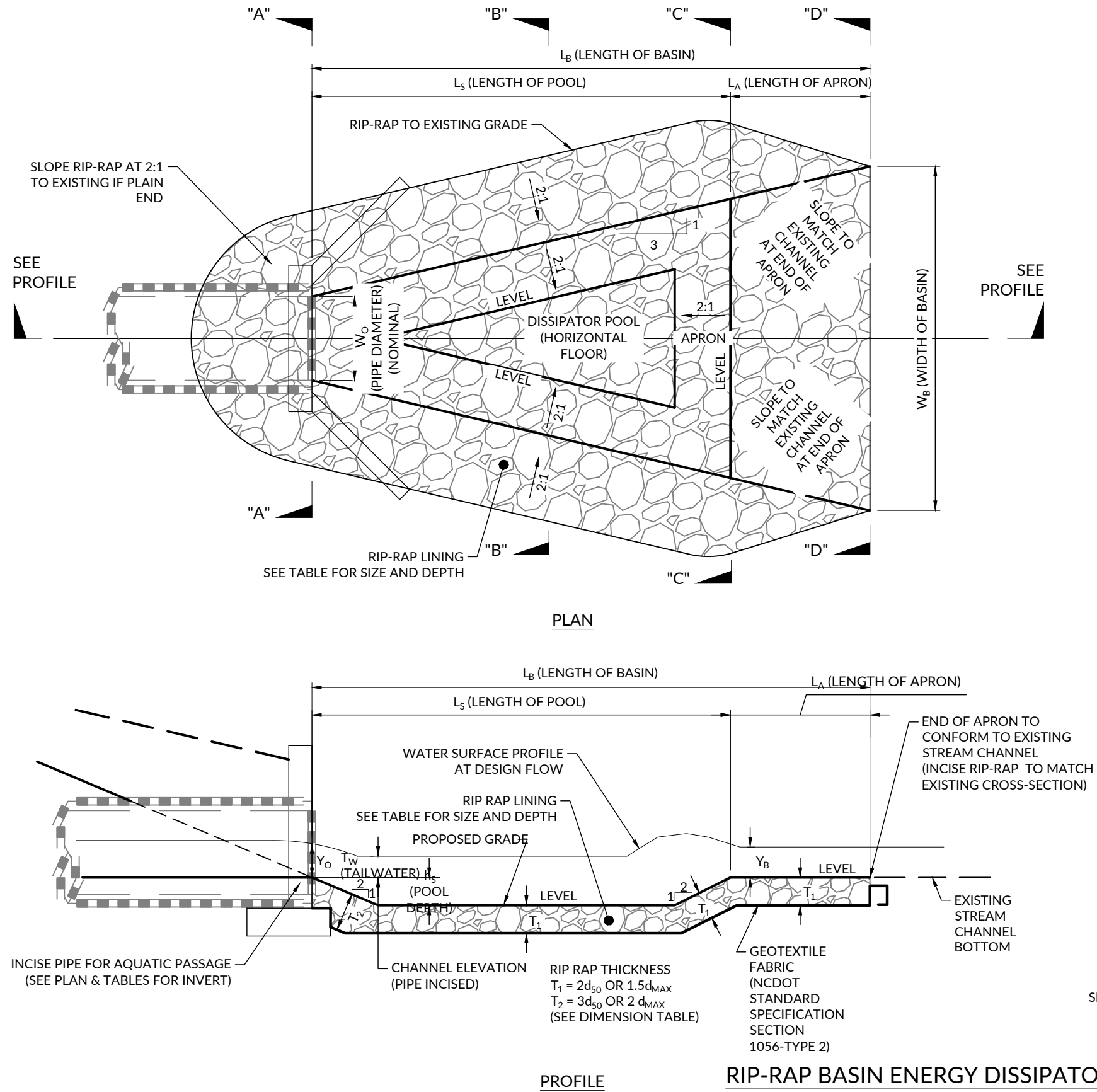
NOTES:

1. CONTRACTOR SHALL EXERCISE CAUTION NOT TO BURST OR DAMAGE THE TEMPORARY SEDIMENT FILTER BAG WHEN PUMPING.
2. THE LENGTH AND WIDTH OF THE TEMPORARY SEDIMENT BAG SHOWN ON THIS DRAWING MAY VARY PER VENDOR SPECIFICATIONS.
3. TEMPORARY SEDIMENT FILTER BAGS SHALL BE EQUIPPED WITH A SEWN-IN SLEEVE OF SUFFICIENT SIZE TO ACCEPT A MINIMUM FOUR-INCH DIAMETER PUMP DISCHARGE HOSE. THE DISCHARGE HOSE SHOULD BE EXTENDED INTO THIS SLEEVE A MINIMUM OF SIX INCHES AND BE TIGHTLY SECURED WITH A HOSE CLAMP OR OTHER SUITABLE MEANS TO PREVENT LEAKAGE. HOSE CONNECTION THROUGH A SLIT IN THE BAG WILL NOT BE ACCEPTABLE.
4. THE PUMP DISCHARGE HOSE CONNECTION SLEEVE SHALL BE SECURELY TIED OFF DURING DISPOSAL OF THE TEMPORARY SEDIMENT FILTER BAG IN ORDER TO PREVENT LEAKAGE OF COLLECTED SEDIMENTS.
5. TEMPORARY SEDIMENT FILTER BAG SHALL BE REPLACED WHEN 6 INCHES OF SEDIMENT HAS ACCUMULATED OR IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
6. CONTRACTOR SHALL SIZE THE BAG DEPENDING ON USE AND FLOW REQUIREMENTS.

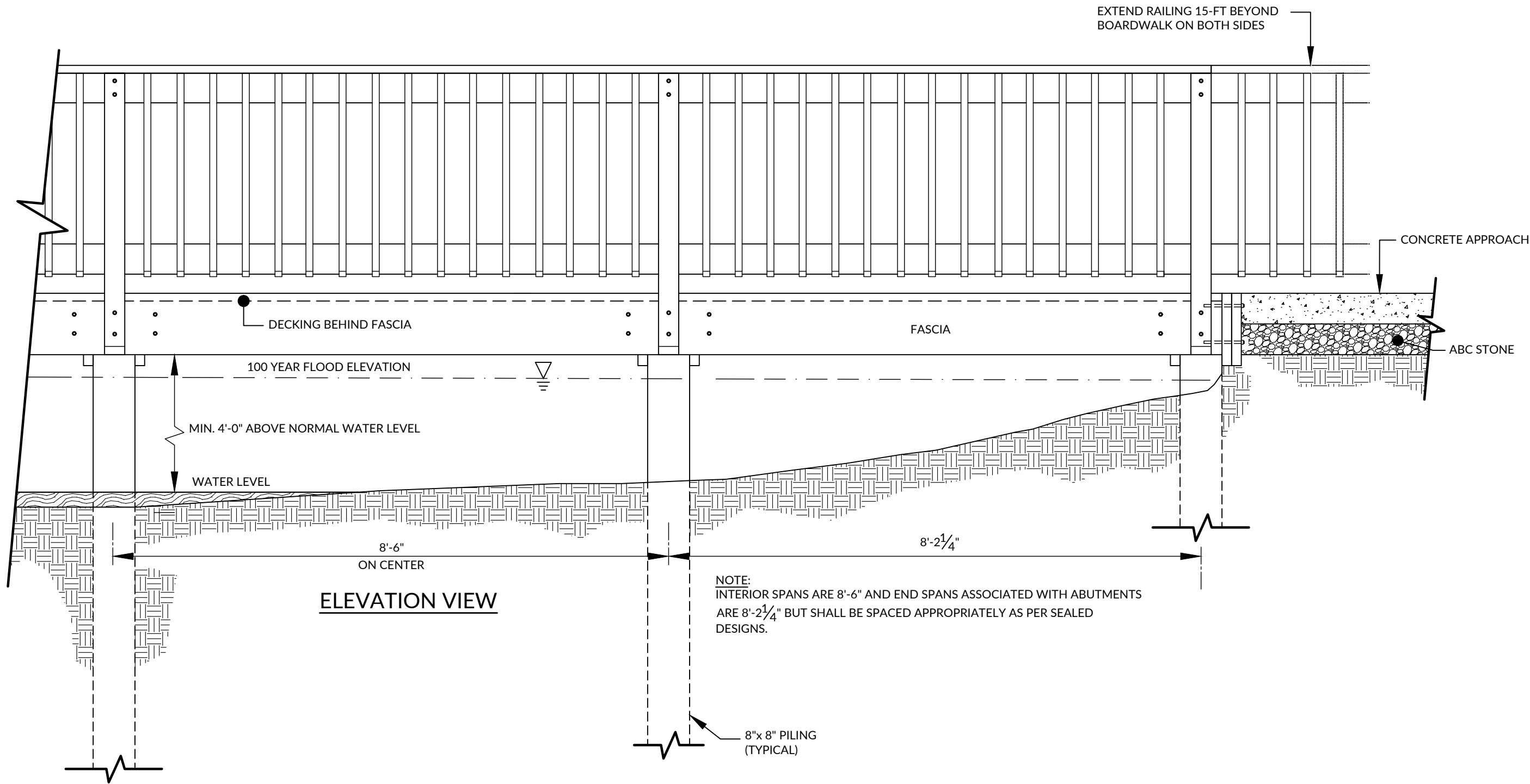


SEDIMENT FILTER BAG NOT TO SCALE

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BOARDWALK MULTI-USE PATH BRIDGE
NOT TO SCALE

