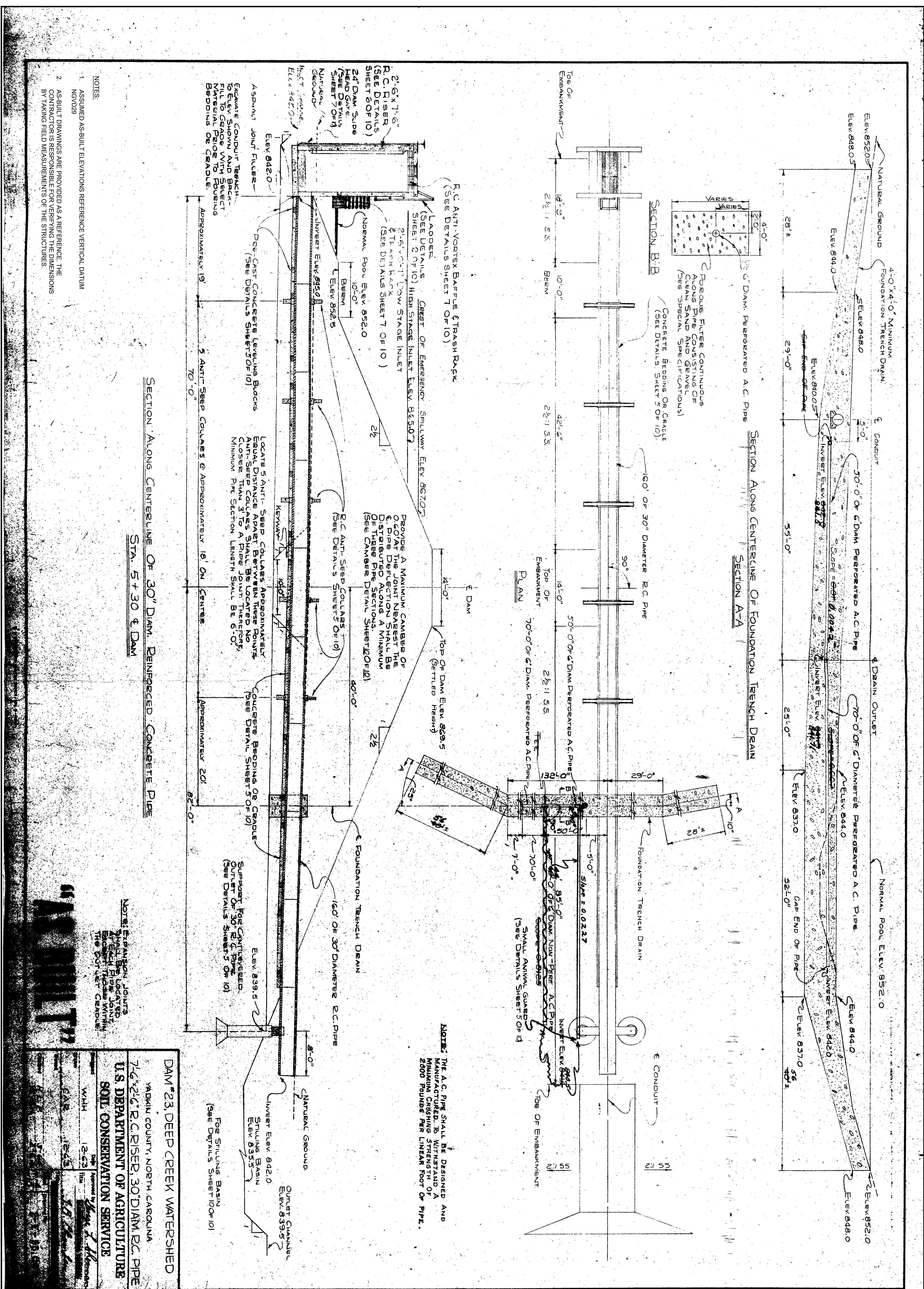


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1

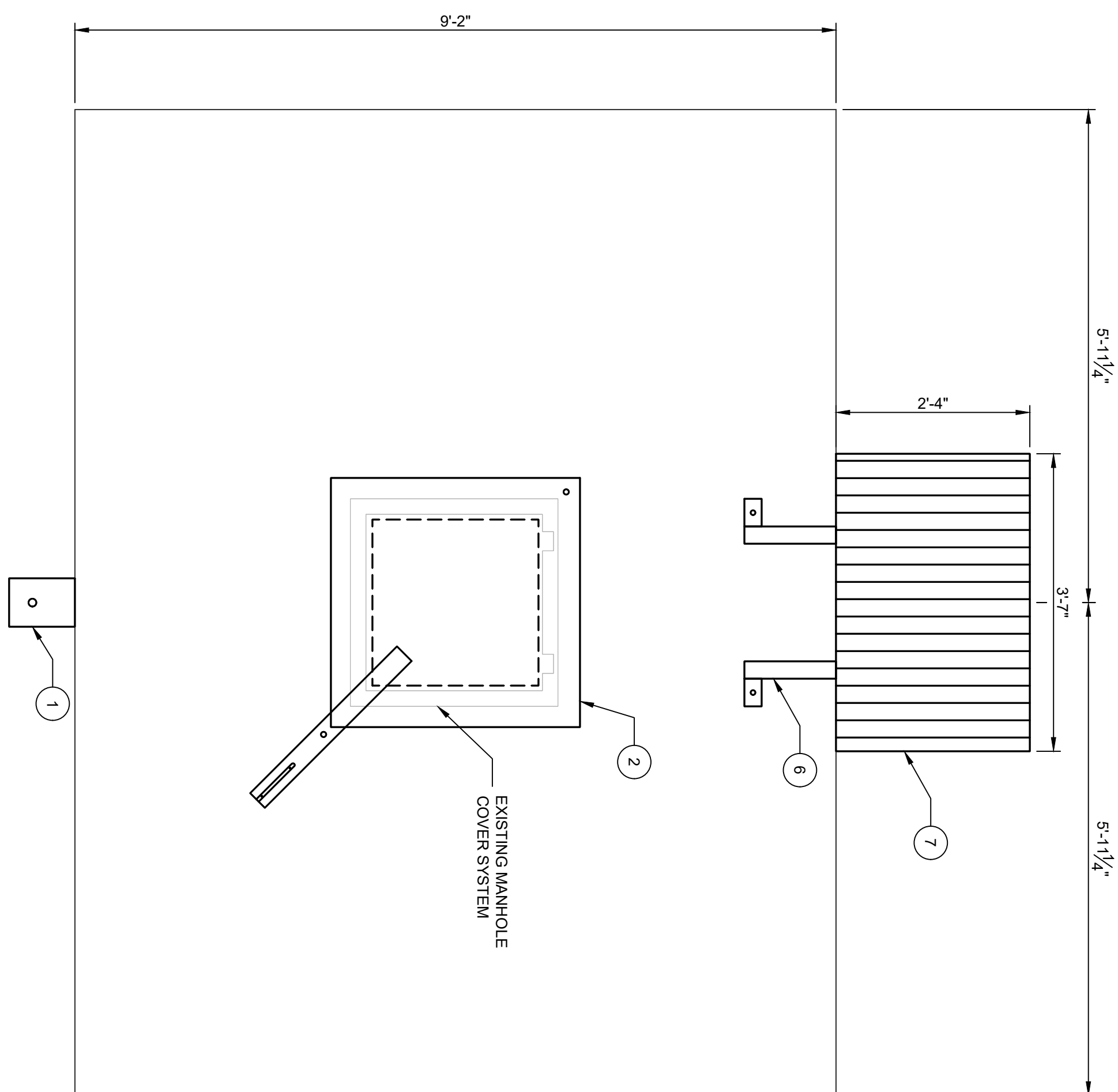
PROPOSED REPAIRS TOP VIEW

SCALE: 3/4"=1'-0"

0 1 2

0 1 2

SCALE: $3/4"=10'$



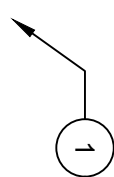
CONSTRUCTION SEQUENCE

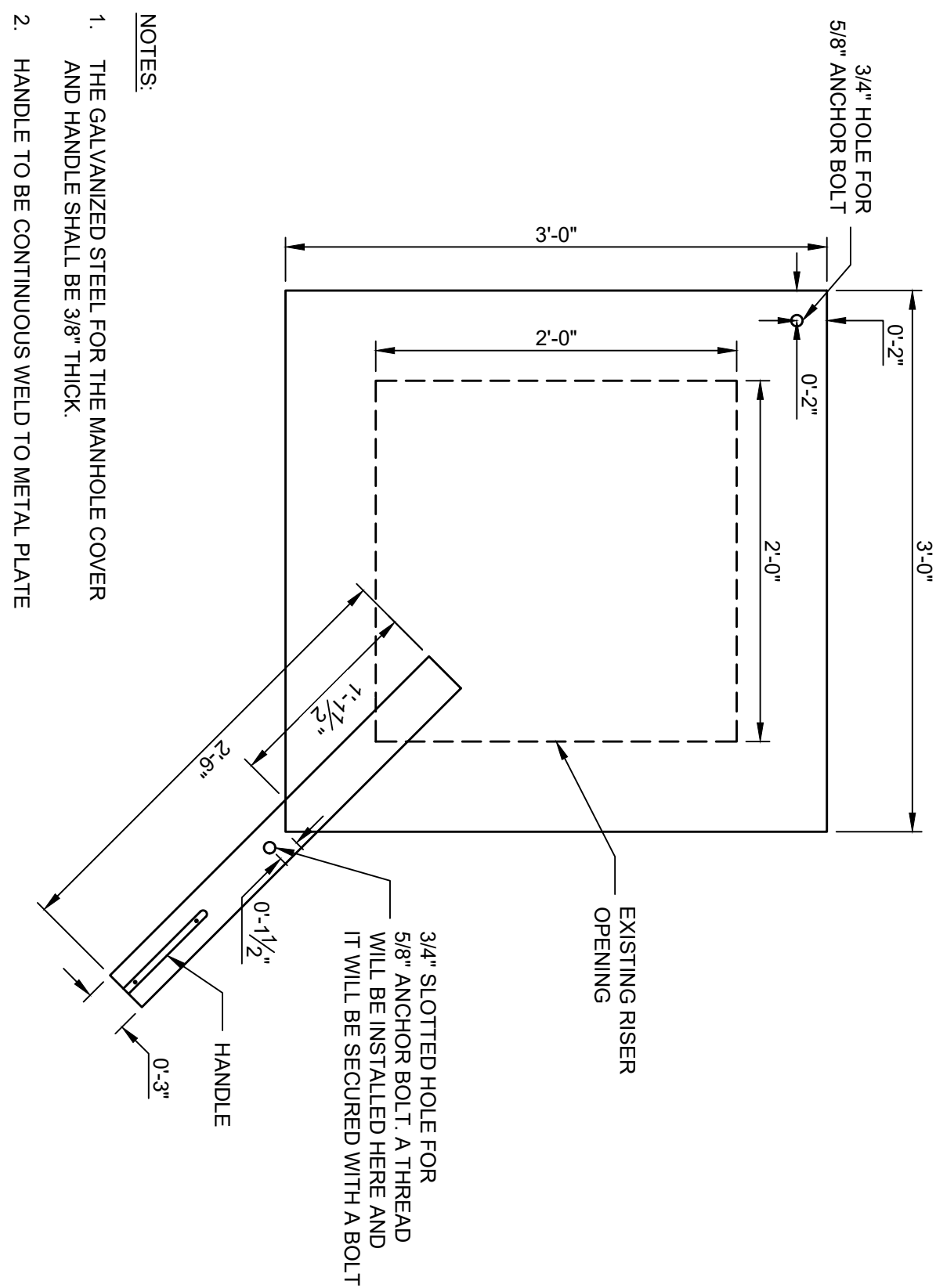
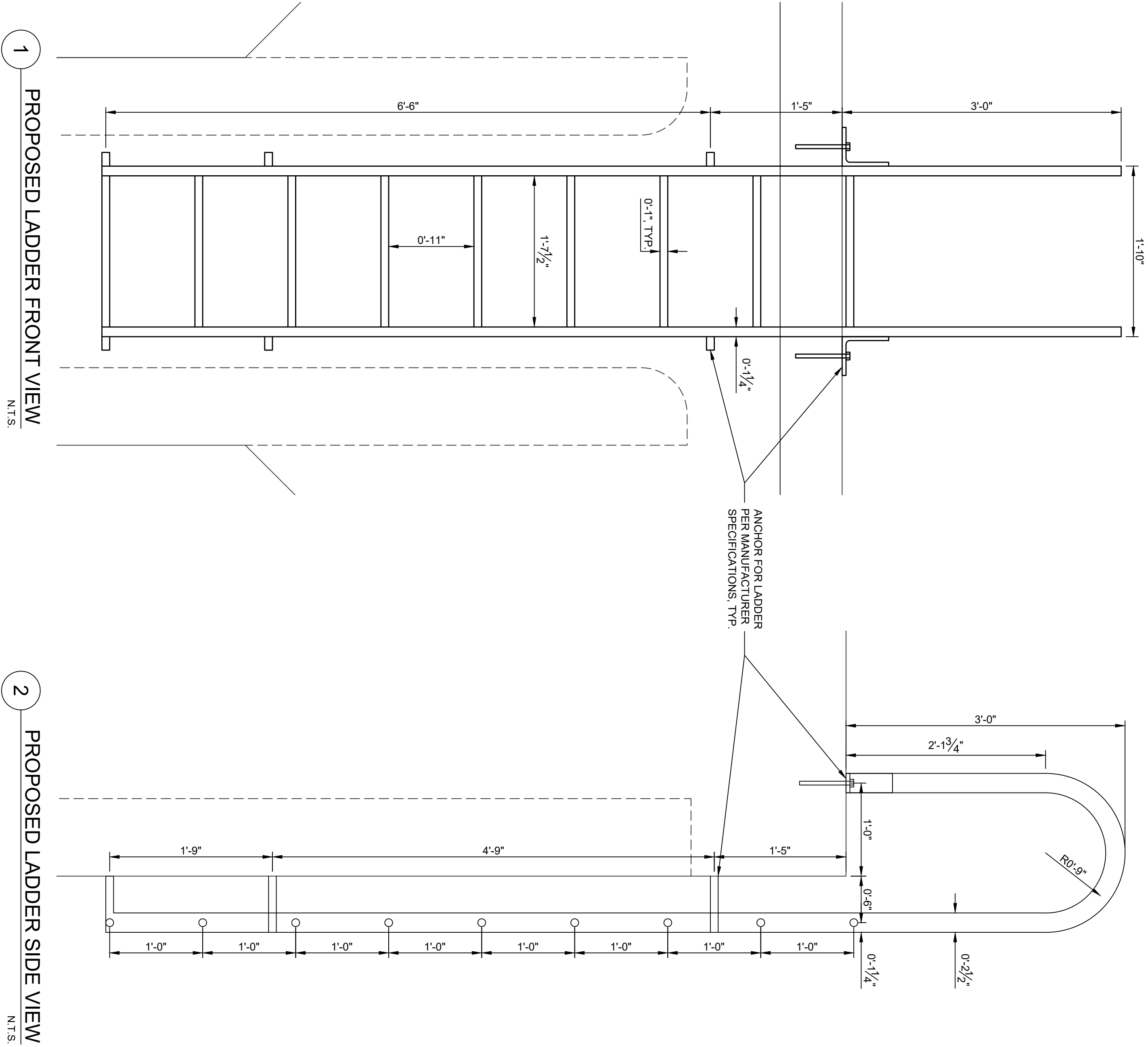
1. THE CONTRACTOR SHALL COORDINATE THEIR PLANS WITH THE ENGINEER AND OWNER AND SCHEDULE TO INSTALL THE WORK ITEMS AS SPECIFIED IN THE TECHNICAL SPECIFICATIONS AND SHOWN ON THE CONSTRUCTION DRAWINGS. THE FOLLOWING SEQUENCE OF WORK ITEMS IS PROVIDED AS A GENERAL GUIDE AND MAY BE MODIFIED BY AGREEMENT BETWEEN ALL PARTIES.
2. CONTRACTOR SHALL INSTALL THE CONSTRUCTION ENTRANCE ALONG THE ROUTE TO THE RISER WORK AREA AND ESTABLISH STAGING AREA AND ASSOCIATED EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE CONSTRUCTION DRAWINGS AND THE TECHNICAL SPECIFICATIONS.
3. CONTRACTOR SHALL COORDINATE WITH THE OWNER AND LOWER THE RESERVOIR TO FACILITATE THE WORK. IN THE DAY, THE RESERVOIR SHALL BE MAINTAINED IN A DEWATERED CONDITION UNTIL THE PROPOSED REPAIRS ARE COMPLETE.
4. CONTRACTOR SHALL REMOVE SEGMENT AND MID BY MECHANICAL METHODS FROM AROUND THE RISER AND TRANSPORT IT TO THE OWNER-DESIGNATED DISPOSAL AREA. SEDIMENT SHALL BE REMOVED TO FACILITATE THE REQUIRED WORK TO REMOVE THE EXISTING SLIDE GATE AND INSTALL THE NEW 28" X 28"X 10' NOMINAL OPENING CAST IRON SLIDE GATE. CARE SHOULD BE TAKEN DURING EXCAVATION ON THE DOWNS TROUGH SIDE OF THE RISER TO AVOID DAMAGE TO THE PRINCIPAL SPILLWAY CONDUIT. MINIMUM LIMITS OF SEDIMENT REMOVAL ARE SHOWN ON DRAWING C-07. WORK TO BE COMPLETED IN SAFE WORKING CONDITIONS FOR PERSONNEL. STABILIZING METHODS MAY BE APPLIED TO SLOPES OF THE REMAINING SEDIMENT AND MUD SLOPES.
5. CONTRACTOR SHALL REMOVE (CUTTING BY TORCH) THE EXISTING STEEL, LOW STAGE TRASH RACK AND CUT ALL OLD ANCHOR BOLTS TO BE FLUSH WITH RISER CONCRETE SURFACES.
6. CONTRACTOR SHALL REMOVE THE EXISTING SLIDE GATE, STEEL STEM, STEM GUIDES, AND OPERATOR. PLACE NEW STAINLESS STEEL, WEDGE TYPE ANCHOR BOLTS IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS AND THE NEW CAST IRON SLIDE GATE, STAINLESS STEEL STEM AND OPERATOR. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF DIMENSIONS BEFORE PLACING ORDER AND FOR PROPER INSTALLATION OF NEW LOW-LEVEL SLIDE GATE AND APPURTEANCES.
7. CONTRACTOR SHALL INSTALL THE NEW STEM GUIDES WITH NEW BOLT TSNANCHORS LOCATED AT LEAST 1' IN FROM ANY EXISTING STEM GUIDE BOLT HOLE. THE CONTRACTOR WILL ALSO INSTALL THE NEW LOW STAGE TRASH RACK, LADDER, MANHOLE COVER SYSTEM AND REFURBISH THE HIGH STAGE TRASH RACK AND HIGH STAGE GRATING.
8. THE PROPOSED MANHOLE COVER SHALL BE INSTALLED AS SHOWN ON THE DRAWINGS. CONTRACTOR TO VERIFY COVER DIMENSIONS BEFORE PLACING ORDER.
9. CONTRACTOR SHALL REMOVE FROM THE SITE ALL ITEMS THAT WERE REMOVED FROM THE RISER, INCLUDING THE OLD STEEL LOW STAGE TRASH RACK, ANCHORS, THE OLD GATE, STEM, OPERATOR, AND ANY OTHER WORK DEBRIS.
10. CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES, IF ANY ARE USED, REPAIR AND APPLY SEEDING TO ALL DISTURBED AREAS IN THE WORK AREA AND ALONG THE ACCESS ROAD IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS.

SCHEDULE OF PARTS		
KEY NOTE NO.	ITEM DESCRIPTION	MATERIAL
1	OPERATOR / HARDWARE	PER GATE MANUFACTURER SPECIFICATIONS
2	MANHOLE COVER SYSTEM	ASTM A26 GALVANIZED STEEL
3	STEM	STAINLESS STEEL
4	STEM GUIDE	STAINLESS STEEL
5	SLIDE GATE	CAST IRON
6	LADDER / HARDWARE	ASTM A26 GALVANIZED STEEL
7	LOW STAGE TRASH RACK	ASTM A26 GALVANIZED STEEL

LEGEND

KEY NOTE





NOTES:

1. THE GALVANIZED STEEL FOR THE MANHOLE COVER AND HANDLE SHALL BE 3/8" THICK.
2. HANDLE TO BE CONTINUOUS WELD TO METAL PLATE

LADDER NOTES:

1. PROVIDE LADDER SHOP DRAWINGS AND INSTALLATION PLAN TO ENGINEER FOR REVIEW AND APPROVAL.
2. ALL WELDING TO BE CONDUCTED IN SHOP BEFORE LADDER IS BROUGHT OUT TO SITE.
3. EXISTING LADDER TO BE REMOVED AND BOLTS CUT OFF. NEW BOLTS SHALL BE SPACED AT LEAST 3 INCHES FROM EXISTING BOLTS/BOLT HOLES.
4. WELD JOINTS ALL AROUND (UNLESS NOTED OTHERWISE) WITH 70KSI ELECTRODES.
5. ALL COMPONENTS SHALL BE ASTM A36 GALVANIZED STEEL.
6. HILTI HIT-RE 500 V3 ADHESIVE ANCHOR SYSTEM WITH 3/4" DIAMETER HILTI HAS-R STAINLESS STEEL THREADED RODS WITH 5/2" MINIMUM EMBEDMENT MAY BE USED AS AN ALTERNATE TO HILTI KWIK BOLT TZ ANCHORS SHOWN ON THE DRAWINGS.

MANHOLE COVER NOTES:

1. PROVIDE MANHOLE COVER SHOP DRAWINGS AND INSTALLATION PLAN TO ENGINEER FOR REVIEW AND APPROVAL.
2. ALL WELDING TO BE CONDUCTED IN SHOP BEFORE MANHOLE COVER IS BROUGHT OUT TO SITE.
3. EXISTING MANHOLE COVER TO BE REMOVED.
4. WELD JOINTS ALL AROUND (UNLESS NOTED OTHERWISE) WITH 70KSI ELECTRODES.
5. ALL COMPONENTS SHALL BE ASTM A36 GALVANIZED STEEL.
6. HILTI HIT-RE 500 V3 ADHESIVE ANCHOR SYSTEM WITH 3/4" DIAMETER HILTI HAS-R STAINLESS STEEL THREADED RODS WITH 5/2" MINIMUM EMBEDMENT MAY BE USED AS AN ALTERNATE TO HILTI KWIK BOLT TZ ANCHORS SHOWN ON THE DRAWINGS.



RISER MAINTENANCE REPAIRS
DEEP CREEK WATERSHED, DAM NO. 23
YADKIN COUNTY, NORTH CAROLINA

**PROPOSED
REPLACEMENT DETAILS**



LICENSE NUMBER C-2599

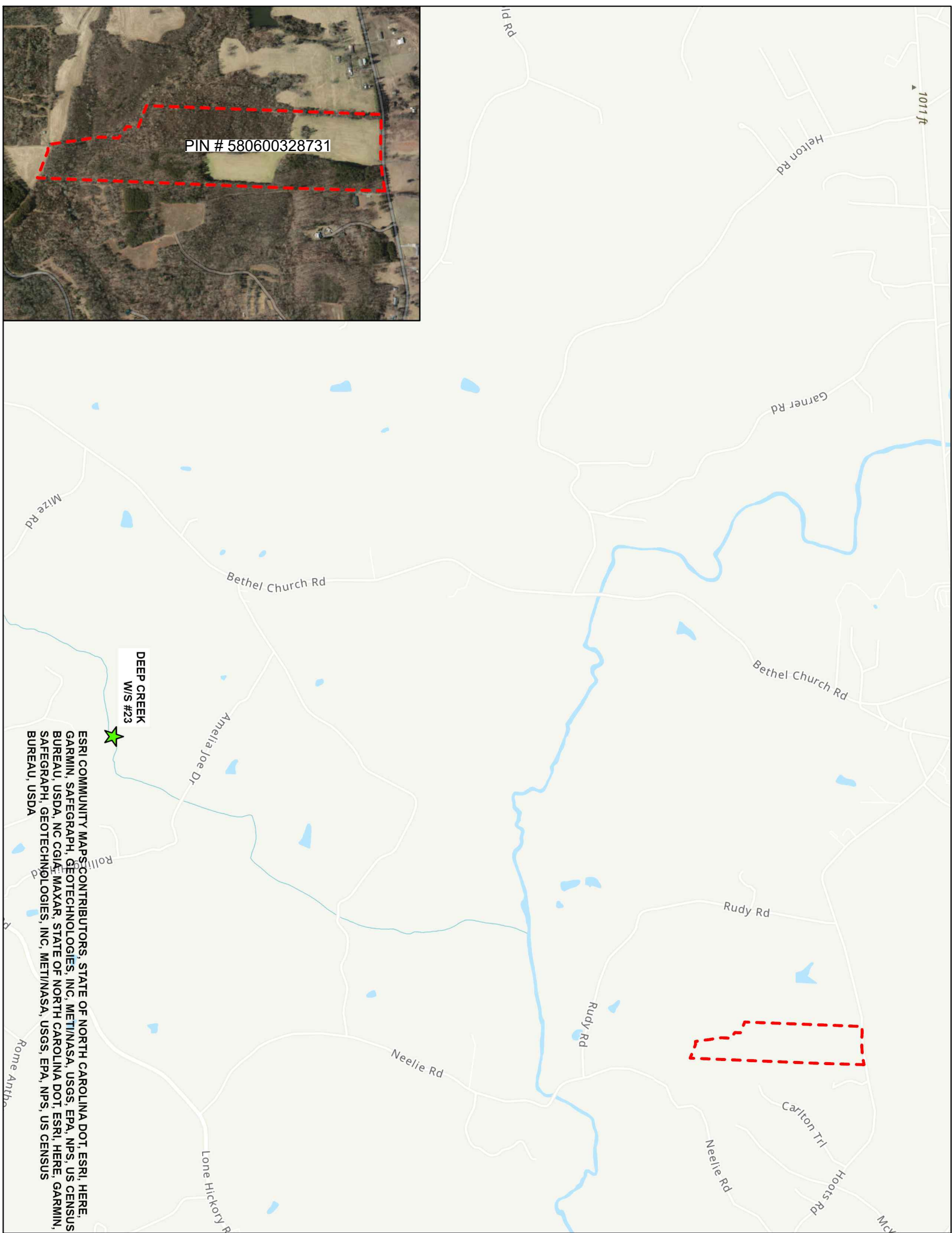
11A Oak Branch Drive / Greensboro, NC / 27407
T/ 336-274-9456 F/ 336-274-9486 / schnabel-eng.com



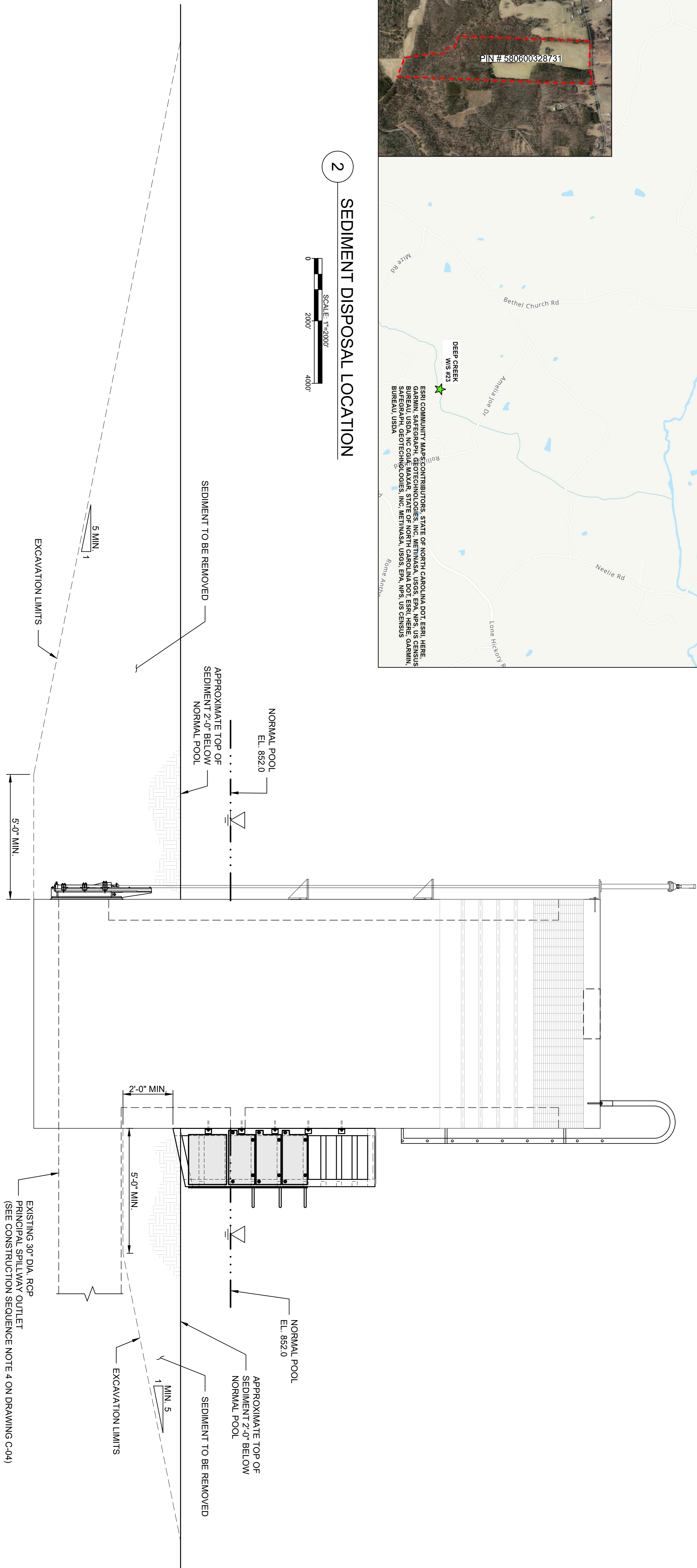
DESIGNED BY: MRG	DRAWN BY: JLA	CHECKED BY: RAS
MARIDEE ROMERO-GRAVES, P.E.		
2023.01.23 13:34:21 -05'00'		
DATE:		
STATE PROFESSIONAL ENGINEER 042119		

REV.	DESCRIPTION	DATE

PROJECT: 22210042.000	SHEET
DATE: JANUARY 2023	09 OF 10
DRAWING NO.	C-06



2 SEDIMENT DISPOSAL LOCATION



1 SEDIMENT REMOVAL SECTION AT CONCRETE RISER

N.T.S.

SEDIMENT REMOVAL NOTES:

1. CONTRACTOR SHALL EXCAVATE SEDIMENT TO THE EXTENT NECESSARY TO PERFORM THE WORK. THE EXCAVATED AREA SHALL HAVE A MINIMUM WIDTH OF 5 FEET UPSTREAM AND 10 FEET TO THE LEFT AND RIGHT OF THE RISER. CARE SHOULD BE TAKEN WHEN EXCAVATING NEAR THE RISER AND THE PRINCIPAL SPILLWAY RCP.
2. THE SLOPE OF THE SEDIMENT SHALL BE MAINTAINED AT A SLOPE NO STEEPER THAN 5 HORIZONTAL TO 1 VERTICAL (5H:1V). ROCK RIPRAP SHALL BE USED AS NEEDED TO MAINTAIN A STABLE SLOPE DURING CONSTRUCTION.
3. EXCAVATED SEDIMENT SHALL BE SPREAD AND SEEDED AT DISPOSAL LOCATION SHOWN ABOVE.
4. CONTRACTOR SHALL COORDINATE WITH THE OWNER PRIOR TO RELOCATION OF SEDIMENT.
5. SEE TECHNICAL SPECIFICATIONS FOR MORE DETAILS.



RISER MAINTENANCE REPAIRS
DEEP CREEK WATERSHED, DAM NO. 23
YADKIN COUNTY, NORTH CAROLINA

SEDIMENT REMOVAL
PLAN AND SECTIONS



LICENSE NUMBER C-2599

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DESIGNED BY: MRG	DRAWN BY: JLA	CHECKED BY: RAS
MARIDEE ROMERO-GRAVES, P.E.		
2023.01.23		
14:08:07 -05'00'		
DATE:		
STATE PROFESSIONAL ENGINEER 042119		

REV.	DESCRIPTION	DATE