RISER MAINTENANCE REPAIRS
DEEP CREEK WATERSHED, DAM NO. 15B

STATE DAM ID: YADKI-012 - HIGH HAZARD DAM

PREPARED FOR

YADKIN COUNTY SOIL AND WATER CONSERVATION DISTRICT

YADKIN COUNTY, NC

PREPARED BY

SCHNABEL ENGINEERING SOUTH, P.C.

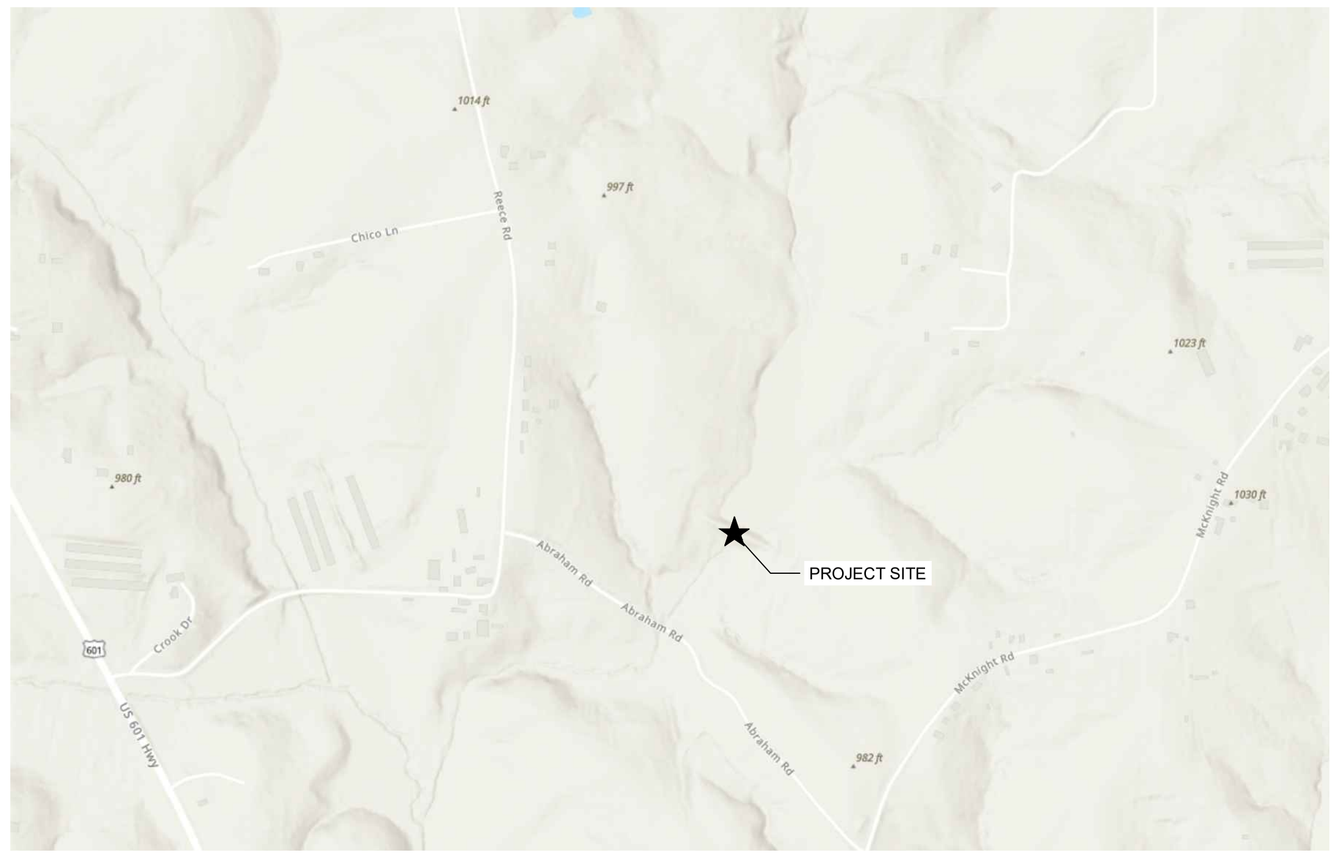
PROJECT NO. 22210042.000

PROJECT DESCRIPTION

THESE DRAWINGS AND SPECIFICATIONS ARE FOR THE MAINTENANCE REPAIRS OF AN EXISTING FLOOD CONTROL DAM IN YADKIN COUNTY. THE WORK INVOLVES REMOVAL OF THE EXISTING LOW-STAGE INLET TRASH RACK, INSTALLATION OF GALVANIZED STEEL LOW-STAGE INLET TRASH RACK, INSTALLATION OF GALVANIZED STEEL LADDER, SEDIMENT REMOVAL AS NEEDED FOR REMOVAL OF THE EXISTING CAST IRON SLIDE GATE, AND THE INSTALLATION OF A NEW 28-IN x 28-IN (NOMINAL OPENING) CAST IRON SLIDE GATE AND APPURTENANCES.

VICINITY MAP

MAP SOURCE: ARCGIS ONLINE WORLD TOPOGRAPHIC MAP



LOCATION MAP

MAP SOURCE: ARCGIS ONLINE WORLD TOPOGRAPHIC MAP

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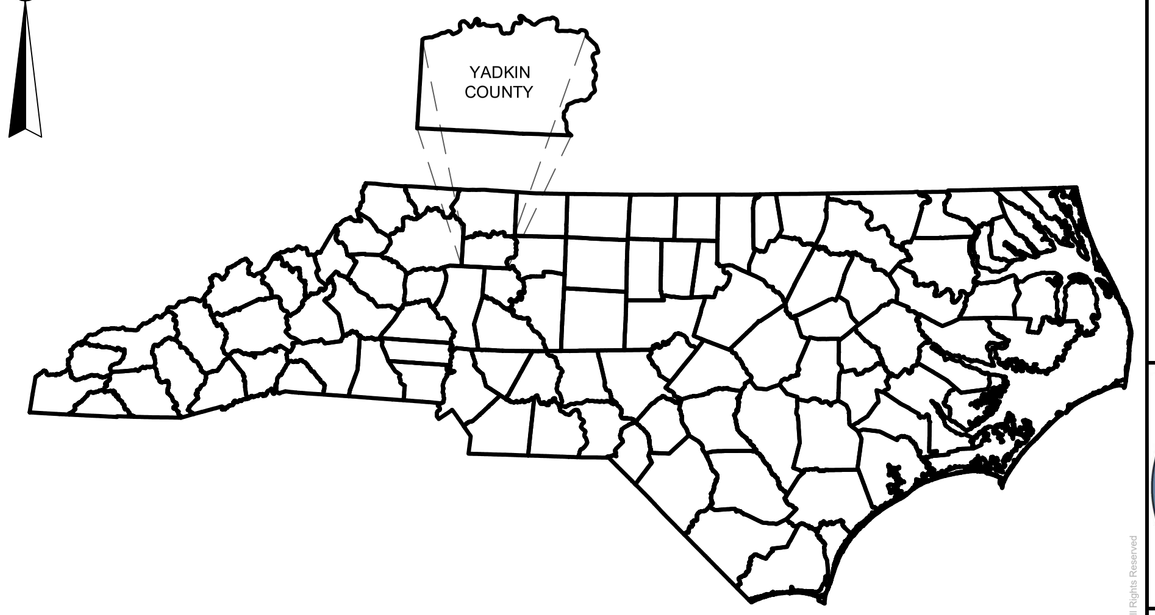


KEY MAP

DESIGNED BY: MRG
DRAWN BY: VWH
CHECKED BY: RAS

MARIDEE ROMERO-GRAVES, P.E.
2023.01.23 15:01:10 -05'00'
DATE:
STATE PROFESSIONAL ENGINEER 042119

NORTH CAROLINA PROFESSIONAL SEAL 042119 ENGINEER MARIDEE ROMERO-GRAVES

REV | DESCRIPTION | DATE

Schnabel ENGINEERING

LICENSE NUMBER C-2599
11A Oak Branch Drive / Greensboro, NC / 27407
T / 336-274-9406 F / 336-274-9486 / schnabel-eng.com

RISER MAINTENANCE REPAIRS
DEEP CREEK WATERSHED, DAM NO. 15B
YADKIN COUNTY, NORTH CAROLINA

COVER SHEET

Established 1850 Yadkin County North Carolina

PROJECT: 22210042.000
DATE: JANUARY 2023
DRAWING NO. G-01
SHEET 01 OF 09

ABBREVIATIONS

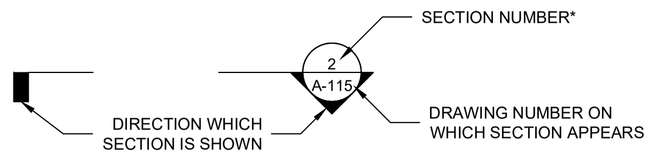
EL	ELEVATION
DIA	DIAMETER
ID	INSIDE DIAMETER
IN	INCHES
INV	INVERT
MAX	MAXIMUM
MIN	MINIMUM
NTS	NOT TO SCALE
OC	ON CENTER
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
SPEC	SPECIFICATION
SS	STAINLESS STEEL
TYP	TYPICAL

LINEWORK AND HATCH

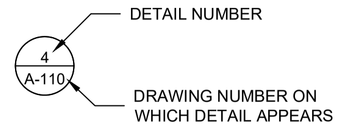
- CONCRETE STRUCTURE - EXISTING
- CONCRETE STRUCTURE - PROPOSED
- EDGE OF WATER
- STAGING AREA

SHEET INDEX

DRAWING SYMBOLS LEGEND

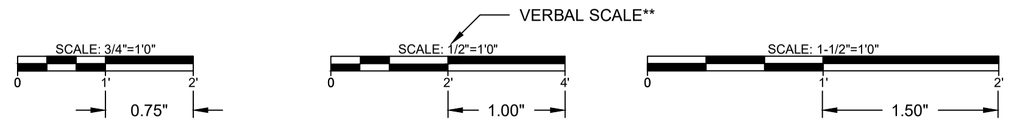


SECTION INDICATOR



DETAIL INDICATOR

PLAN, SECTION OR DETAIL LABEL



SCALE INDICATOR

* SECTION AND ELEVATION INDICATORS ARE SIMILAR. SECTION AND ELEVATION NUMBERS ARE COMBINED AND SEQUENTIAL ON EACH DRAWING.

** VERBAL SCALE IS SHOWN FOR CONVENIENCE. ALL DRAWINGS SHOULD BE CHECKED TO ENSURE THAT THE SCALE BAR ITSELF IS SHOWN AT ACTUAL SIZE. DRAWINGS NOT PLOTTED AT THEIR INTENDED SIZE (ANSI D 22" x 34") WILL NOT SCALE PROPERLY.

DESIGNED BY: MRG
DRAWN BY: VWH
CHECKED BY: RAS

MARIDEE ROMERO-GRAVES, P.E.
2023.01.23 15:02:05 -05'00'
DATE:
STATE PROFESSIONAL ENGINEER 042119

NORTH CAROLINA PROFESSIONAL SEAL 042119 ENGINEER MARIDEE ROMERO-GRAVES

REV | DESCRIPTION | DATE

Schnabel ENGINEERING
LICENSE NUMBER C-2599
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RISER MAINTENANCE REPAIRS
DEEP CREEK WATERSHED, DAM NO. 15B
YADKIN COUNTY, NORTH CAROLINA

STANDARDS LEGEND AND SHEET INDEX

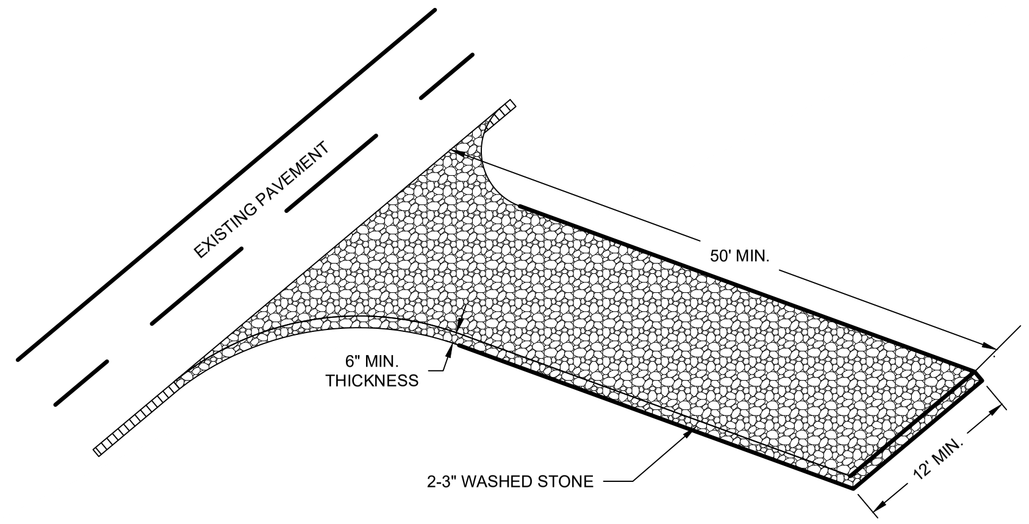
Yadkin County North Carolina Established 1850

PROJECT: 22210042.000
DATE: JANUARY 2023
DRAWING NO. G-02
SHEET 02 OF 09

1 SITE ACCESS AND STAGING PLAN VIEW

SCALE: 1"=150'

0 150' 300'



2 CONSTRUCTION ENTRANCE DETAIL

N.T.S.

CONSTRUCTION NOTES:

1. CLEAR THE ENTRANCE AND EXIT AREA OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL AND GRADE PROPERLY.
2. PLACE GEOTEXTILE OVER CLEARED AREA TO SEPARATE COARSE AGGREGATE FROM SUBGRADE.
3. PLACE WASH STONE TO THE SPECIFIC DIMENSIONS SHOWN ON THE PLANS, AND SMOOTH IT.
4. PROVIDE DRAINAGE TO CARRY WATER TO A SUITABLE OUTLET.
5. COARSE AGGREGATE: 2-3 INCH WASHED STONE
6. MINIMUM THICKNESS: 6 INCHES
7. MINIMUM LENGTH: 50 FEET
8. MINIMUM WIDTH: 12 FEET
9. GEOTEXTILE: WOVEN POLYPROPYLENE FABRIC DESIGNED FOR USE IN SUBGRADE AND BASE COURSE REINFORCEMENT APPLICATIONS SUCH AS TENCATE/MIRAFI HP270, OR APPROVED EQUAL.

MAINTENANCE NOTES:

1. MAINTAIN THE STONE PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH 2-INCH STONE.
2. AFTER EACH RAINFALL, INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT AND CLEAN IT OUT AS NECESSARY.
3. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TRACKED ONTO PUBLIC ROADWAYS.
4. PLACE ADDITIONAL COARSE AGGREGATE AS CONDITIONS DEMAND.

GENERAL NOTES:

1. AERIAL PHOTOGRAPH OBTAINED FROM NC ONE MAP 2022.
2. ACCESS ROUTE TO BE RESTORED TO PRE-CONSTRUCTION CONDITIONS FOLLOWING PROPOSED RISER REPAIRS.
3. DRAINAGE AREA AT DAM IS 1.4 SQUARE MILES (896 ACRES).
4. CONTACT YADKIN COUNTY TO CONFIRM ACCESS ROUTE THAT WAS AGREED UPON WITH LANDOWNERS.

REV	DESCRIPTION	DATE

DESIGNED BY: MRG
DRAWN BY: VWH
CHECKED BY: RAS

MARIDEE ROMERO-GRAVES, P.E.
DATE: 2023.01.23 15:02:44 -05'00'
STATE PROFESSIONAL ENGINEER 042119

NORTH CAROLINA PROFESSIONAL SEAL 042119 ENGINEER MARIDEE ROMERO-GRAVES

Schnabel ENGINEERING
LICENSE NUMBER C-2599
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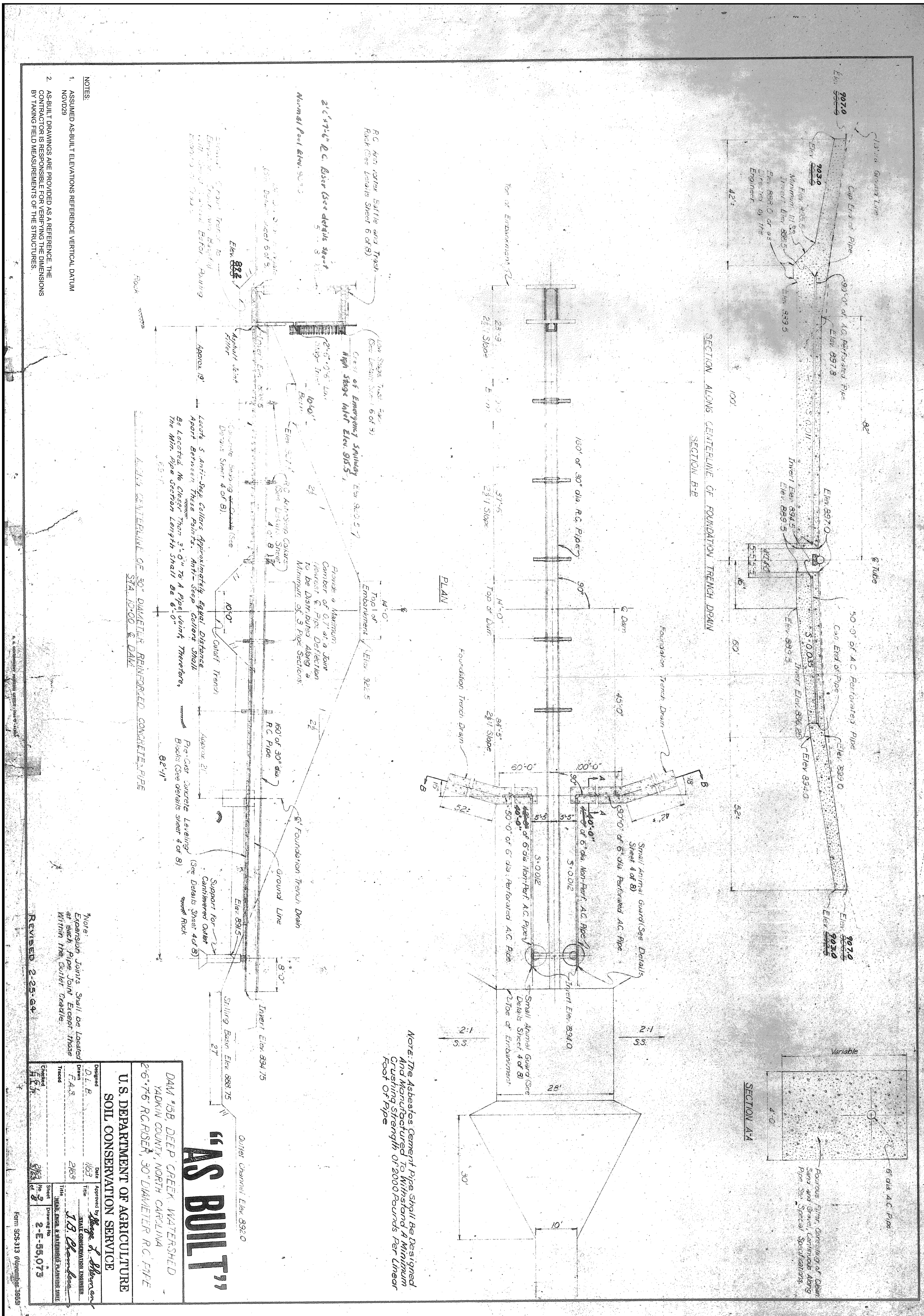
RISER MAINTENANCE REPAIRS
DEEP CREEK WATERSHED, DAM NO. 15B
YADKIN COUNTY, NORTH CAROLINA

SITE ACCESS AND STAGING PLAN

Yadkin County North Carolina Established 1850

PROJECT: 22210042.000
DATE: JANUARY 2023
DRAWING NO. G-03
SHEET 03 OF 09

Last Saved By: WHARRIS SaveDate: 1/17/2023 6:23 PM PlotDate:1/23/2023 8:55 AM
Filename:\\gnw-fs\projects\2022\Greensboro\22210042_000_YadkinCo_DamGateReplacement\03_SE_Products\08-CAD\04-CONTRACT_DWGS\DAM 15B\SITE_ACCESS_STAGING_PLAN.dwg Layout: 03 SITE ACCESS AND STAGING PLAN



PROJECT: 22210042.000
DATE: JANUARY 2023
DRAWING NO. C-01
SHEET 04 OF 09

RISER MAINTENANCE REPAIRS
DEEP CREEK WATERSHED, DAM NO. 15B
YADKIN COUNTY, NORTH CAROLINA

AS-BUILT DRAWINGS - EXISTING RISER LOCATION

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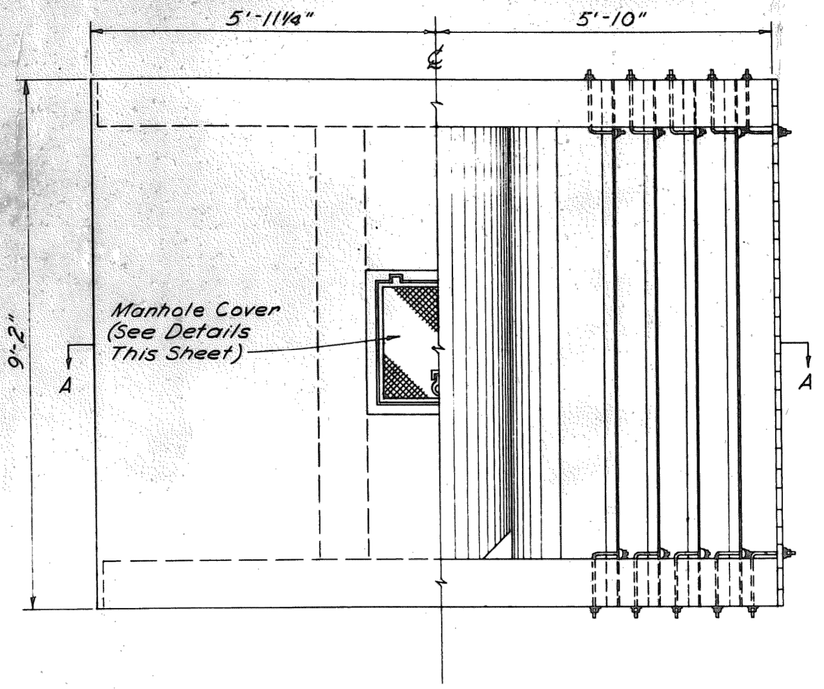
T/ 336-274-9456 F/ 336-274-9486 / schnabel-eng.com

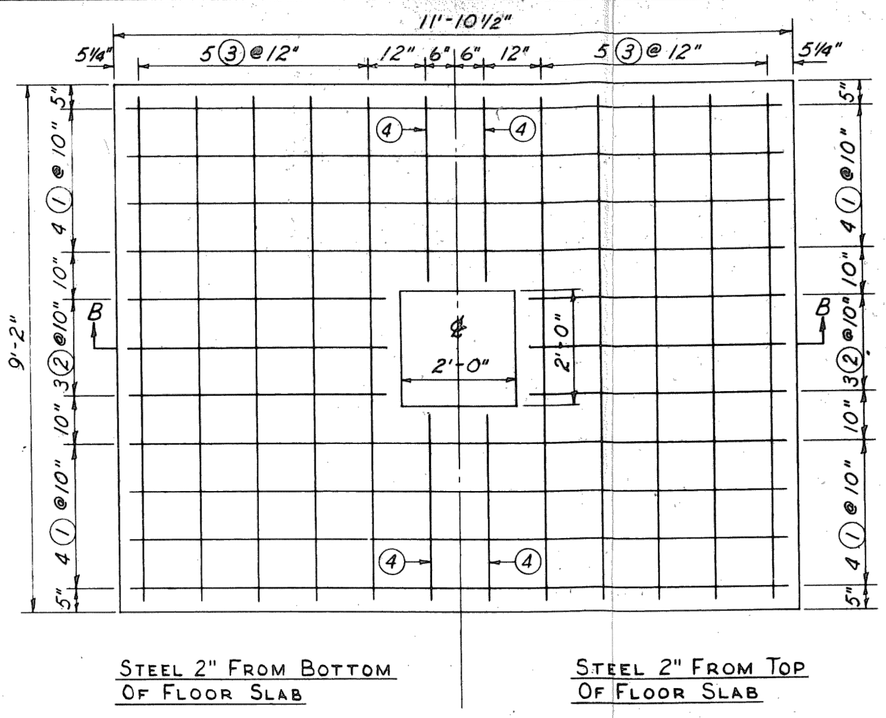
NORTH CAROLINA PROFESSIONAL SEAL 042119 ENGINEER MARIDEE ROMERO-GRAVES

DESIGNED BY:	DRAWN BY:	CHECKED BY:
MRG	WMH	RAS

MARIDEE ROMERO-GRAVES, P.E.
2023.01.23 15:03:25 -05'00'
STATE PROFESSIONAL ENGINEER 042119

REV	DESCRIPTION	DATE





STEEL 2" FROM BOTTOM OF FLOOR SLAB

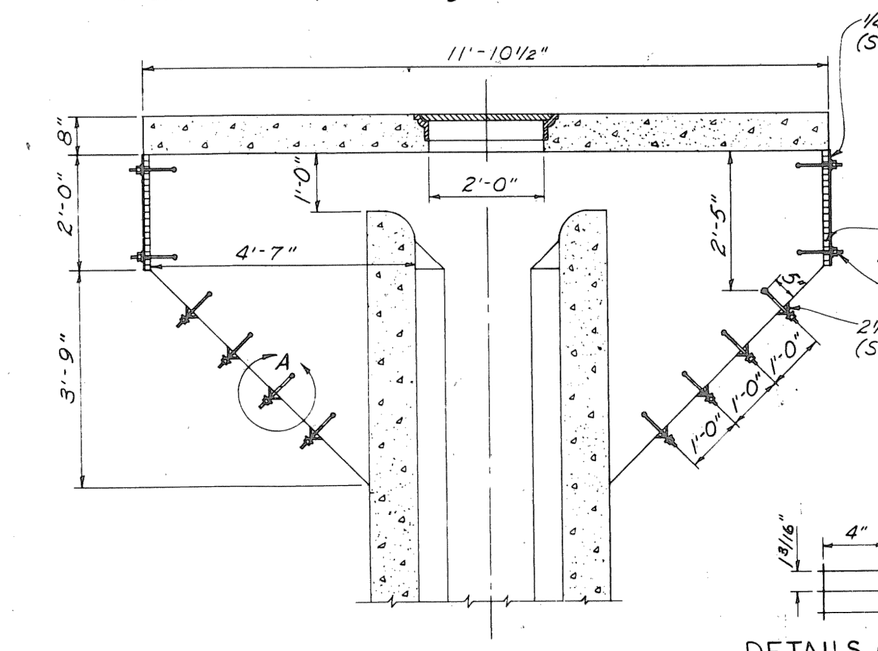
STEEL 2" FROM TOP OF FLOOR SLAB

PLAN

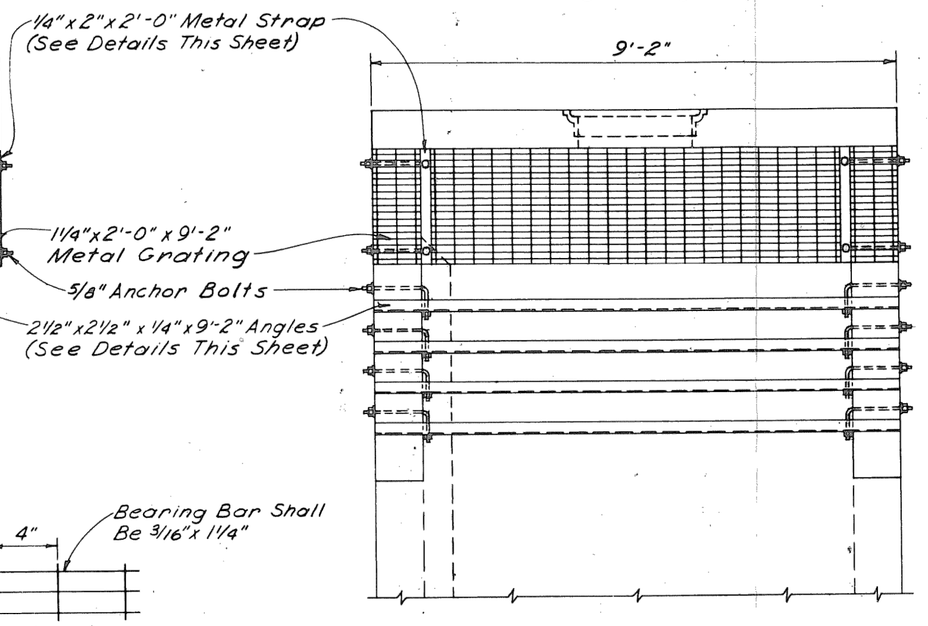
FLOOR PLAN SHOWING STEEL LAYOUT

NOTES: All Concrete Shall Be Poured In Place.
Chamfer All Exposed Edges Of Concrete ¾".

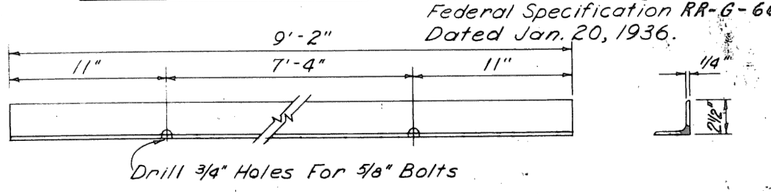
All Nuts Shall Be Hexagonal And Exposed Bolts
Shall Be Cut Off Flush With Nuts After Tightening



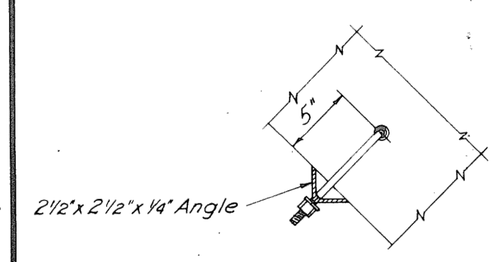
SECTION A - A

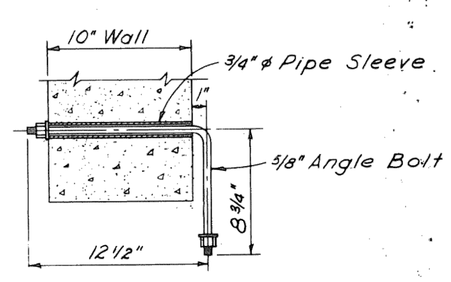


SIDE ELEVATION

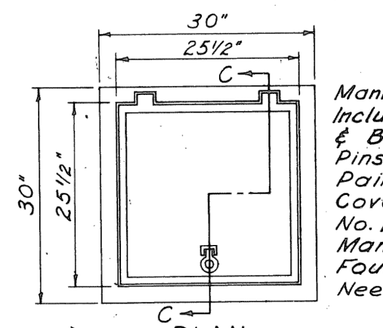


DETAILS OF ANGLES FOR TRASH RACK
8 - Required



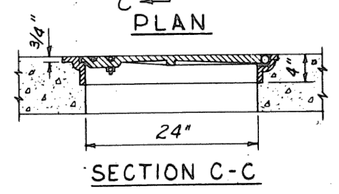


DETAIL - A
24 Angle Bolts Required

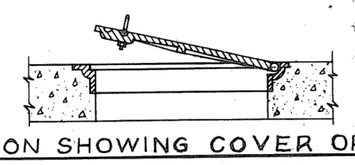


PLAN

Manhole Cover Shall Include Locking Device & Bronze Hinge Pins. Cover Shall Be Painted As Specified. Cover Shall Be Model No. R-6660KH Square Series Manufactured By Neenah Foundry Company, Neenah, Wisconson Or Equal.



SECTION C-C

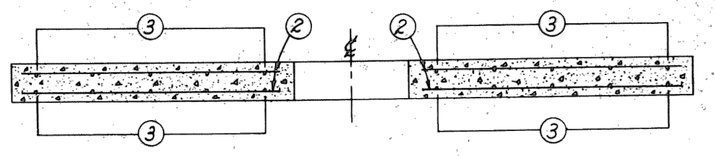


SECTION SHOWING COVER OPEN

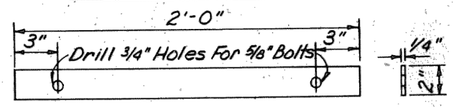
DETAILS OF SQUARE MANHOLE COVER

NOTES:

1. ASSUMED AS-BUILT ELEVATIONS REFERENCE VERTICAL DATUM NGVD29
2. AS-BUILT DRAWINGS ARE PROVIDED AS A REFERENCE. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE DIMENSIONS BY TAKING FIELD MEASUREMENTS OF THE STRUCTURES.



SECTION B-B



DETAILS OF METAL STRAP
4-Required

BAR TYPES

STRAIGHT

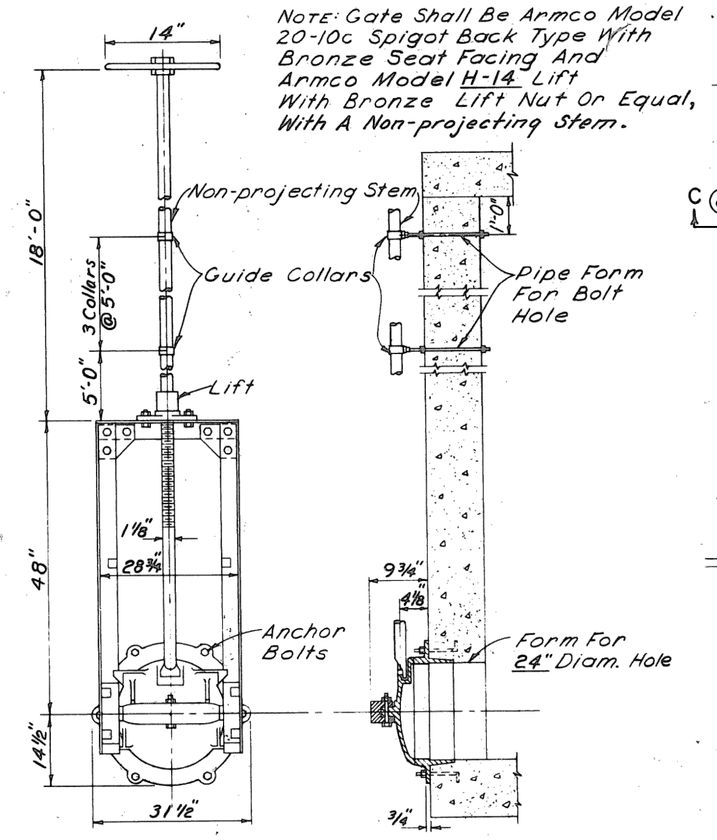
STEEL SCHEDULE FOR ANTI-VORTEX BAFFLE						
LOCATION	MARK	SIZE	QUAN.	LENGTH	TYPE	TOTAL FT.
Floor	D-1	4	16	11'-6"	St.	184'-0"
Floor	D-2	4	12	4'-6"	St.	54'-0"
Floor	D-3	4	20	8'-9"	St.	175'-0"
Floor	D-4	4	8	3'-3"	St.	26'-0"

QUANTITES

Reinforcing Steel #4 Bars 439.0 Lin. Ft. 293.2 Lbs.
Class B Concrete 2.59 Cu. Yds.

BILL OF MATERIAL FOR TRASH RACK AND MANHOLE COVER			
ITEM	QUAN.	LENGTH	TOTAL FT.
2½"x2½"x¼" Angles	8	9'-2"	73'-4"
⅝" Angle Bolts, C.M., ⅝" Washers	24	1'-9¼"	42'-6"
¾" I.D. Pipe	24	0'-10"	20'-0"
1¼"x2'-0" Steel Grating	2	9'-2"	18'-4"
¼"x2" Metal Strap	4	2'-0"	8'-0"
24"x24" Manhole Cover	1		

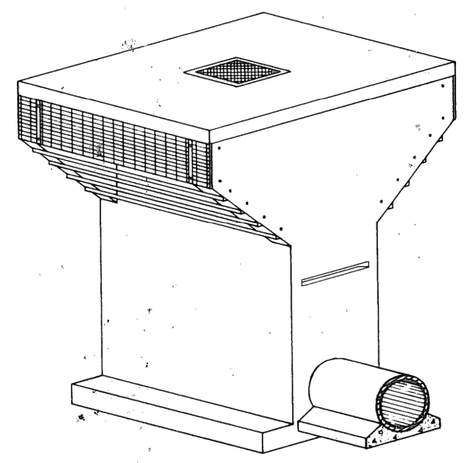
BILL OF MATERIAL FOR LOW STAGE TRASH RACK				
ITEM	MARK	QUAN.	LENGTH	TOTAL FT.
2½"x2½"x¼" Angles	A	4	2'-10"	11'-4"
2½"x2½"x¼" Angles	B	2	13'-6"	27'-0"
2½"x2½"x¼" Angles	C	34	2'-0"	68'-0"
2½"x2½"x¼" Angles	D	17	3'-2½"	54'-6½"
2½"x2½"x¼" Angles	E	2	17'-0"	34'-0"
¾" I.D. Pipe		8	0'-10"	6'-8"
⅝" G.M. Bolts ⅝"nuts & Washers		8	1'-0"	
1¼"x 25⅛" Steel Grating		1	3'-11½"	3'-11½"
1¼"x 25⅛" Steel Grating		2	1'-0"	2'-0"



Note: Gate Shall Be Armco Model 20-10c Spigot Back Type With Bronze Seat Facing And Armco Model H-14 Lift With Bronze Lift Nut Or Equal, With A Non-projecting Stem.

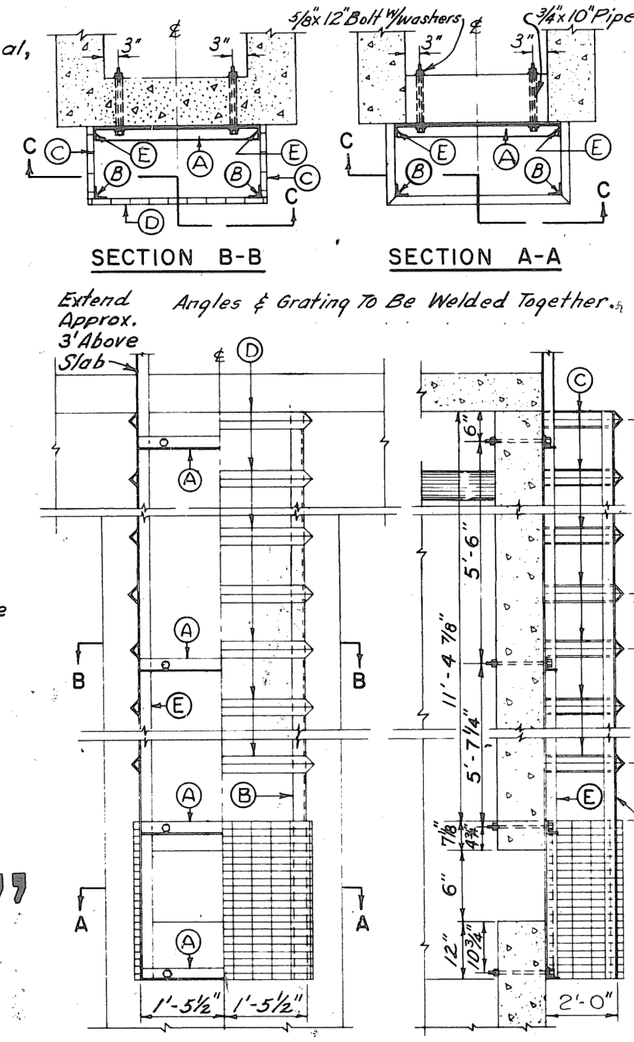
DETAILS OF 24" DIAM. SLIDE GATE

"AS BUILT"



ISOMETRIC VIEW

REVISED 2-25-64



DETAILS OF LOW STAGE TRASH RACK

DAM NO. 15B DEEP CREEK WATERSHED
YADKIN COUNTY, NORTH CAROLINA
DETAILS OF ANTI-VORTEX BAFFLE, TRASH RACK AND HEADGATE

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed W. B. WELLS	Date 3-63	Approved by George L. Sherman	
Drawn J. P. HUGHEY	3-63	Title STATE CONSERVATION ENGINEER	
Traced D. M. WEST	3-63	T. B. Chambers	
Checked H. L. P. & E. O. D	3-63	Title HEAD, ENGR & WATERSHED PLANNING UNIT	
		Sheet No. 6 of 8	Drawing No. 2-E-55,073

DESIGNED BY: MRG
DRAWN BY: WMH
CHECKED BY: RAS

MARIDEE ROMERO-GRAVES, P.E.
2023.01.23
15:03:48 -05'00'

NORTH CAROLINA PROFESSIONAL SEAL 042119 ENGINEER MARIDEE ROMERO-GRAVES

STATE PROFESSIONAL ENGINEER 042119

REV	DESCRIPTION	DATE

Schnabel ENGINEERING

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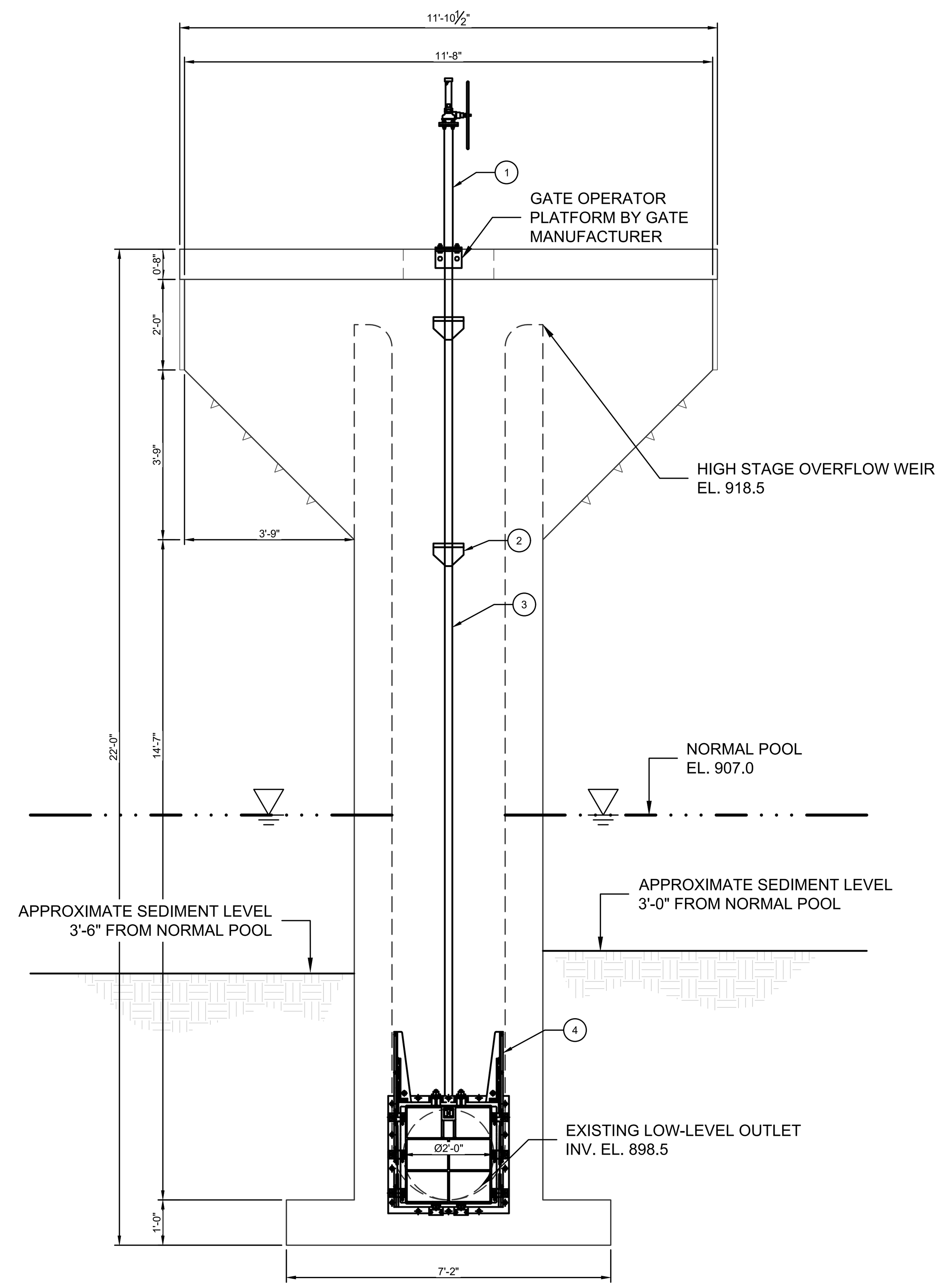
RISER MAINTENANCE REPAIRS
DEEP CREEK WATERSHED, DAM NO. 15B
YADKIN COUNTY, NORTH CAROLINA

AS-BUILT DRAWINGS - EXISTING RISER DETAILS

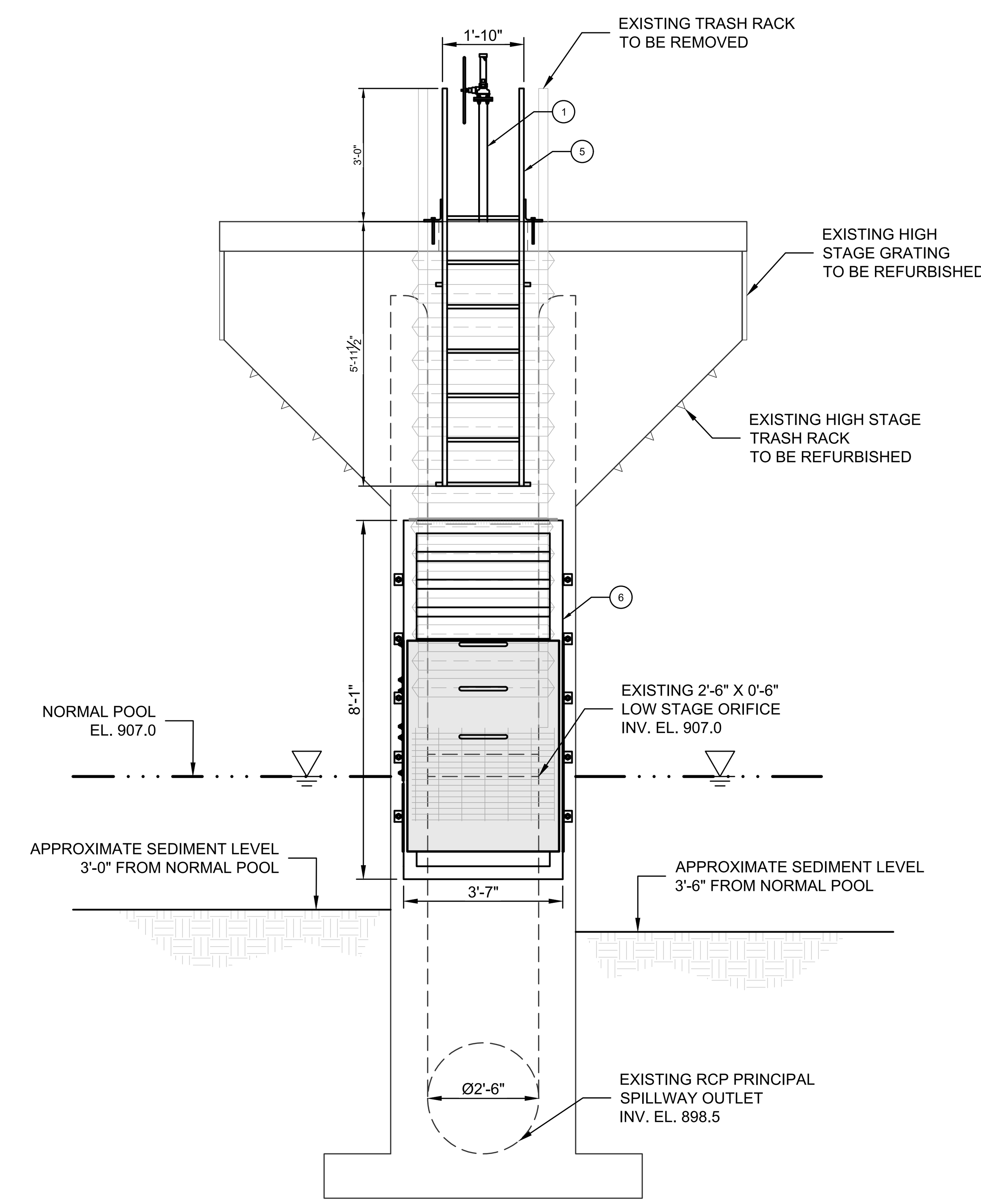
Established 1850 Yadkin County North Carolina

PROJECT: 22210042.000
DATE: JANUARY 2023
DRAWING NO. C-02
SHEET 05 OF 09



1 PROPOSED REPAIRS UPSTREAM WALL

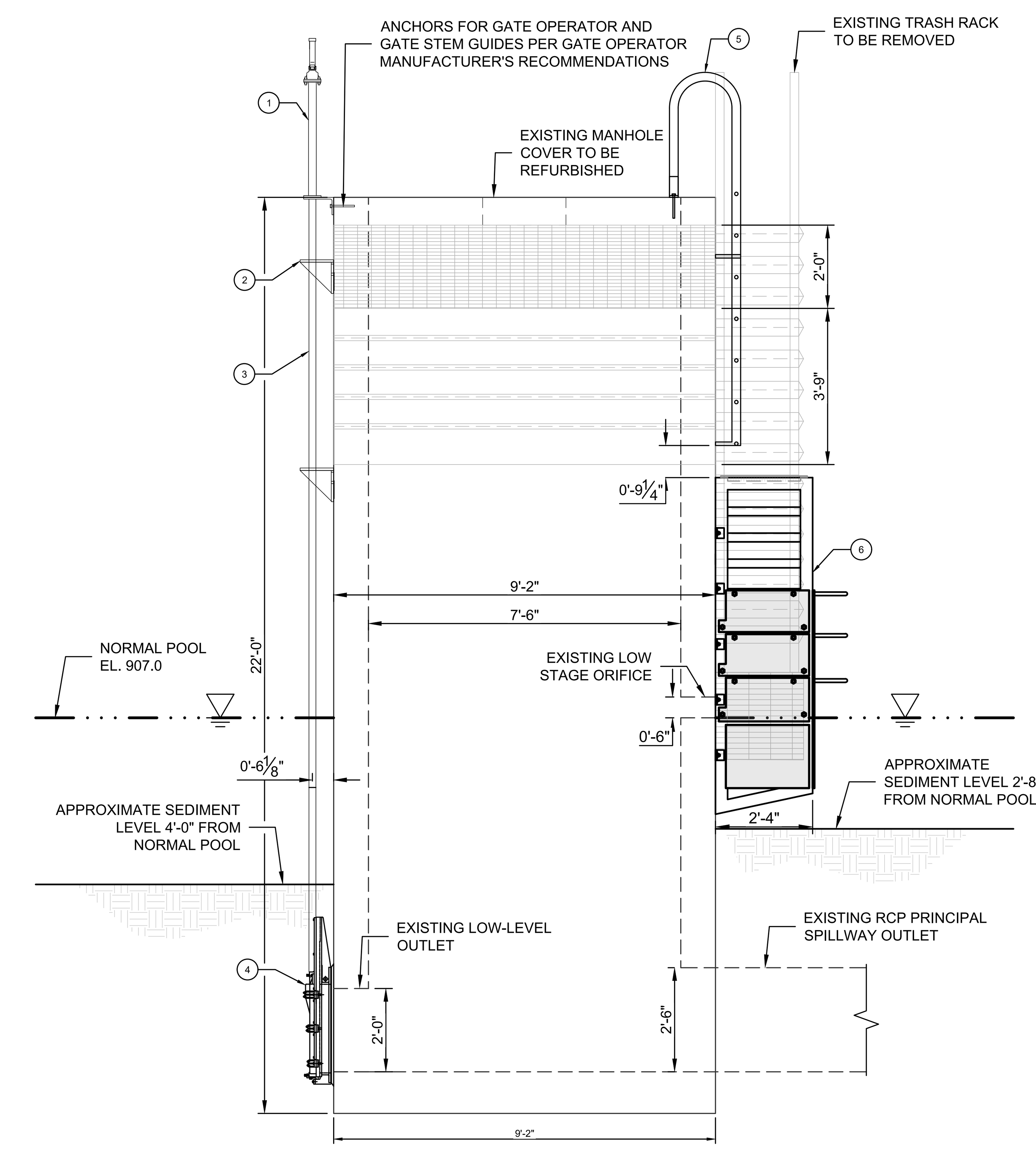
SCALE: 3/8"=1'0"



2 PROPOSED REPAIRS DOWNSTREAM WALL

SCALE: 3/8"=1'0"

FLOW



3 PROPOSED REPAIRS SIDE WALL

SCALE: 3/8"=1'0"

NOTES:

1. SEE DRAWING C-05 FOR CONSTRUCTION SEQUENCE NOTES.
2. EXISTING LOW-LEVEL OUTLET GATE, STEM, AND STEM GUIDES ARE NOT SHOWN FOR CLARITY.
3. ELEVATIONS FROM AS-BUILT ASSUMED TO REFERENCE THE VERTICAL DATUM NGVD29.
4. REMOVE AND REPLACE EXISTING LADDER, LOW-LEVEL GATE SYSTEM, AND LOW STAGE TRASH RACK.
5. REFURBISH EXISTING HIGH STAGE TRASH RACK, HIGH STAGE GRATING AND MANHOLE COVER.

SCHEDULE OF PARTS

KEY NOTE NO.	ITEM DESCRIPTION	MATERIAL
1	OPERATOR / HARDWARE	PER GATE MANUFACTURER SPECIFICATIONS
2	STEM GUIDE	STAINLESS STEEL
3	STEM	STAINLESS STEEL
4	SLIDE GATE	CAST IRON
5	LADDER / HARDWARE	ASTM A36 GALVANIZED STEEL
6	LOW STAGE TRASH RACK	ASTM A36 GALVANIZED STEEL

LEGEND

KEY NOTE (1)

RISER MAINTENANCE REPAIRS
DEEP CREEK WATERSHED, DAM NO. 15B
YADKIN COUNTY, NORTH CAROLINA

OVERALL PROPOSED REPAIRS

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NORTH CAROLINA PROFESSIONAL SEAL 042119 ENGINEER MARIDEE ROMERO-GRAVES

DESIGNED BY: MRG | DRAWN BY: WMH | CHECKED BY: RAS

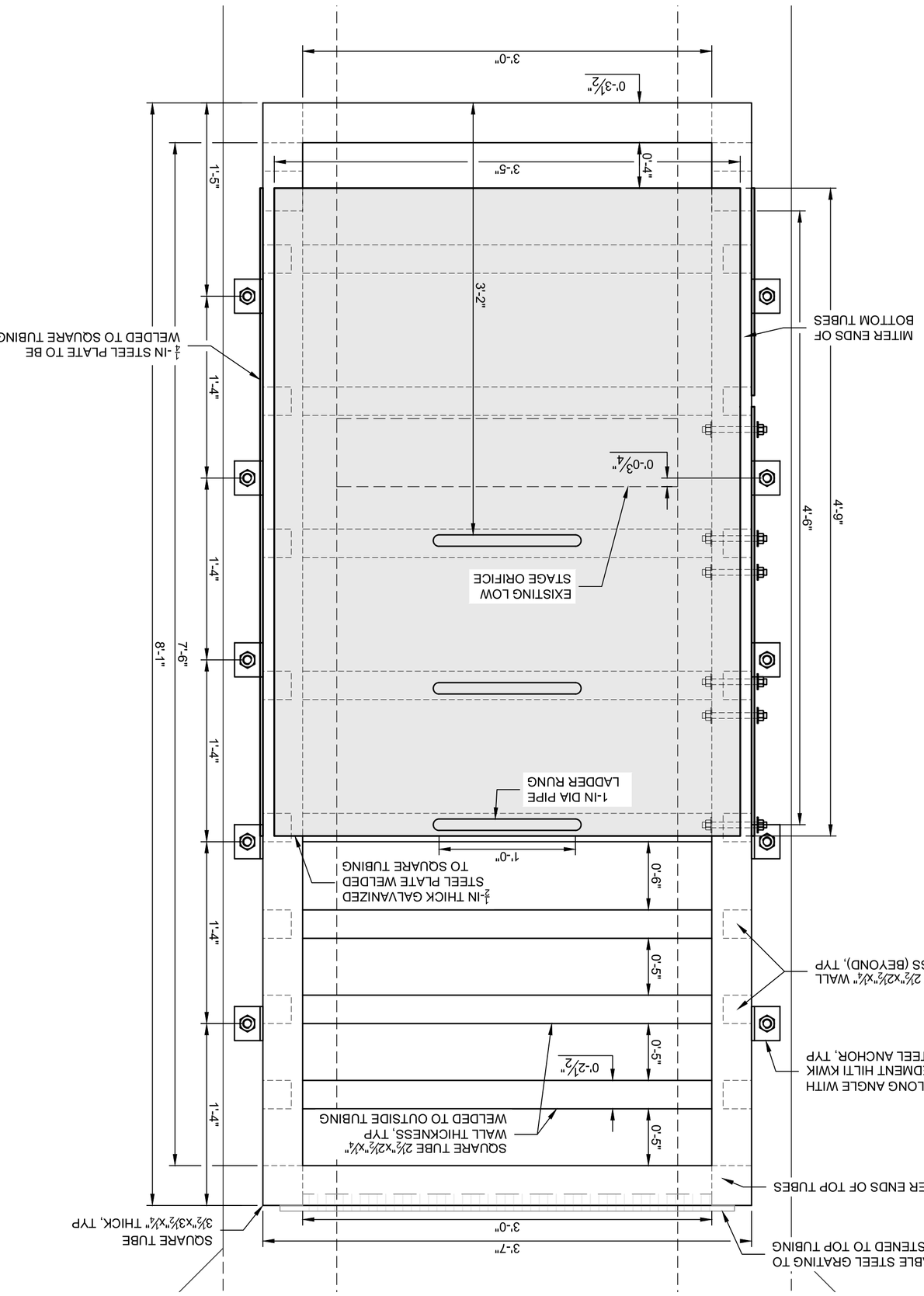
MARIDEE ROMERO-GRAVES, P.E.
2023.01.23
15:04:07 -05'00'
DATE:
STATE PROFESSIONAL ENGINEER 042119

REV	DESCRIPTION	DATE

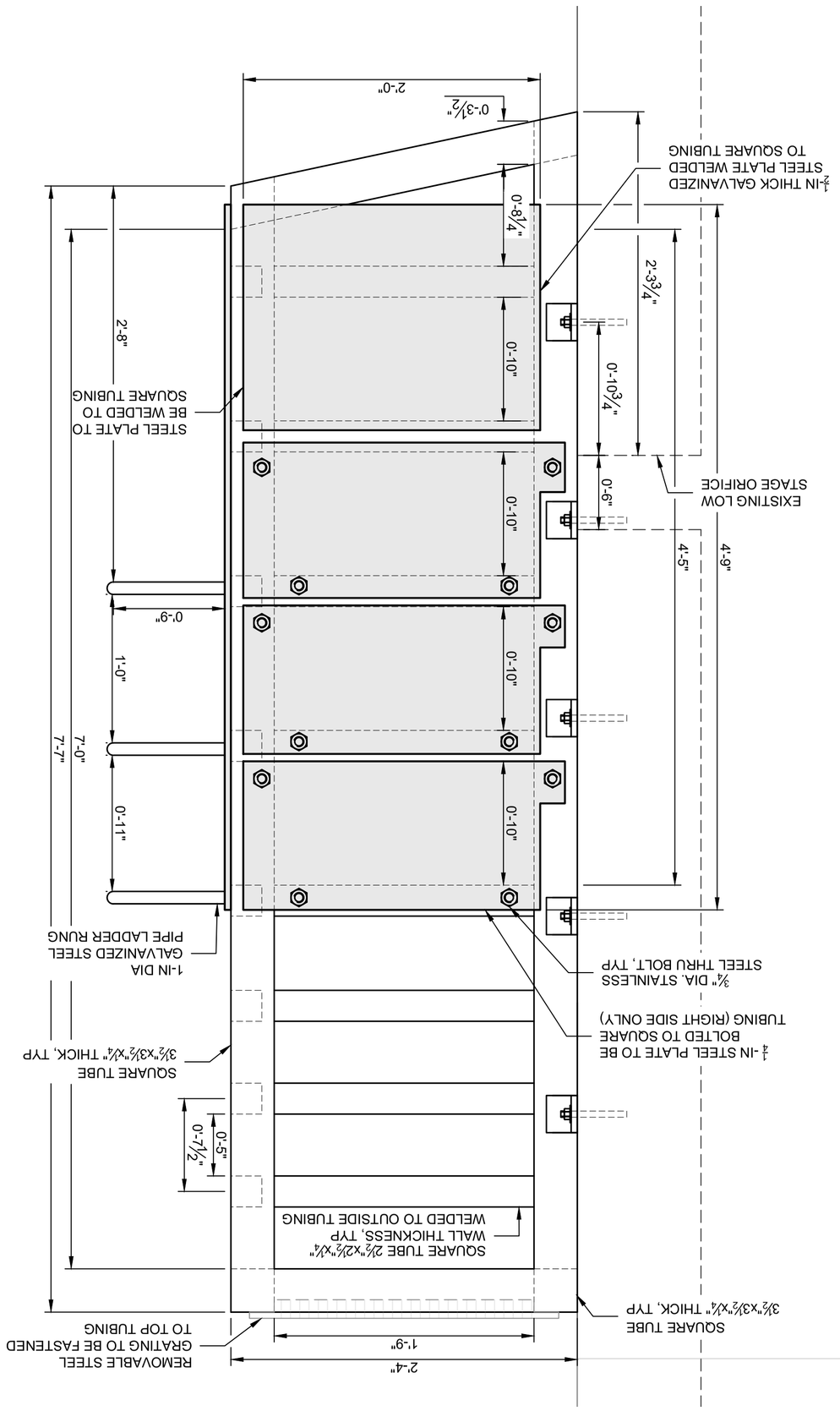
Yadkin County North Carolina, Established 1850

PROJECT: 22210042.000
DATE: JANUARY 2023
DRAWING NO. C-03
SHEET 06 OF 09

1 PROPOSED LOW-STAGE TRASH RACK FRONT ELEVATION



2 PROPOSED LOW-STAGE TRASH RACK SIDE ELEVATION



NOTES:

1. PROVIDE TRASH RACK SHOP DRAWINGS AND INSTALLATION PLAN TO ENGINEER FOR REVIEW AND APPROVAL.
2. ALL WELDING TO BE CONDUCTED IN SHOP BEFORE TRASH RACK IS BROUGHT OUT TO SITE.
3. EXISTING TRASH RACK 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 SQUARE TUBES SHALL BE ASTM A500 GR. B GALVANIZED STEEL.
6. ALL PLATES SHALL BE ASTM A36 GALVANIZED STEEL.
7. ALL ANGLES SHALL BE ASTM A36 GALVANIZED STEEL.
8. ALL BOLTS SHALL BE ASTM F593 STAINLESS STEEL.
9. HILTI HIT-RE 500 V3 ADHESIVE ANCHOR SYSTEM WITH ¾ " DIAMETER HILTI HAS-R STAINLESS STEEL THREADED RODS WITH 8½" MINIMUM EMBEDMENT MAY BE USED AS AN ALTERNATE TO HILTI KWIK BOLT TZ ANCHORS SHOWN ON THE DRAWINGS.
10. RIGHT TOP STEEL PLATE TO BE BOLTED TO STEEL TUBES TO PROVIDE A REMOVABLE PLATE SECTION FOR MAINTENANCE.

RISER MAINTENANCE REPAIRS
DEEP CREEK WATERSHED: DAM NO. 15B
YADKIN COUNTY, NORTH CAROLINA

PROPOSED LOW STAGE TRASH RACK DETAILS

Schnabel ENGINEERING
LICENSE NUMBER C-2559
11A Oak Branch Drive | Greensboro, NC | 27407
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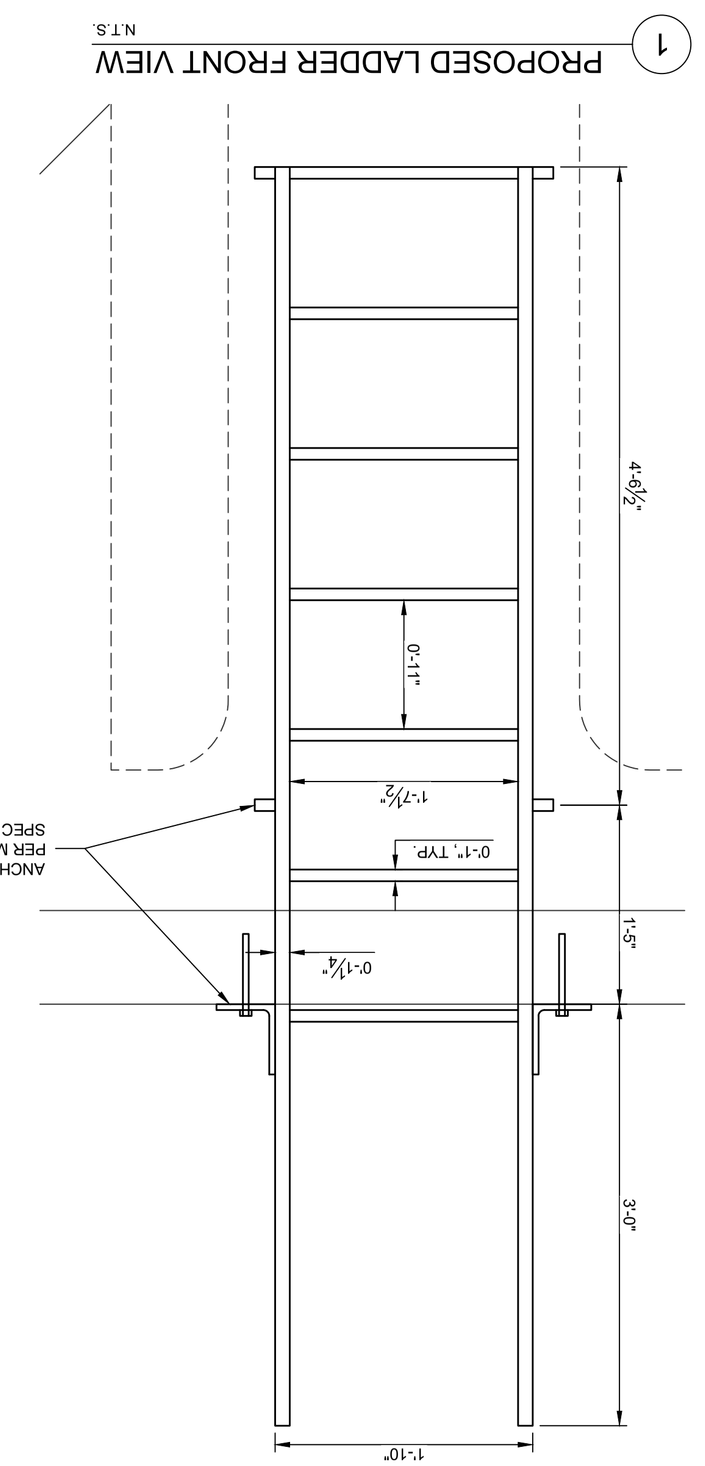
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 042119 MARIDEE ROMERO-GRAVES

MARIDEE ROMERO-GRAVES, P.E.
STATE PROFESSIONAL ENGINEER 042119
DATE: 2023.01.23 15:04:25 -05'00'

DESIGNED BY:	DRAWN BY:	CHECKED BY:
MRG	YMH	RAS

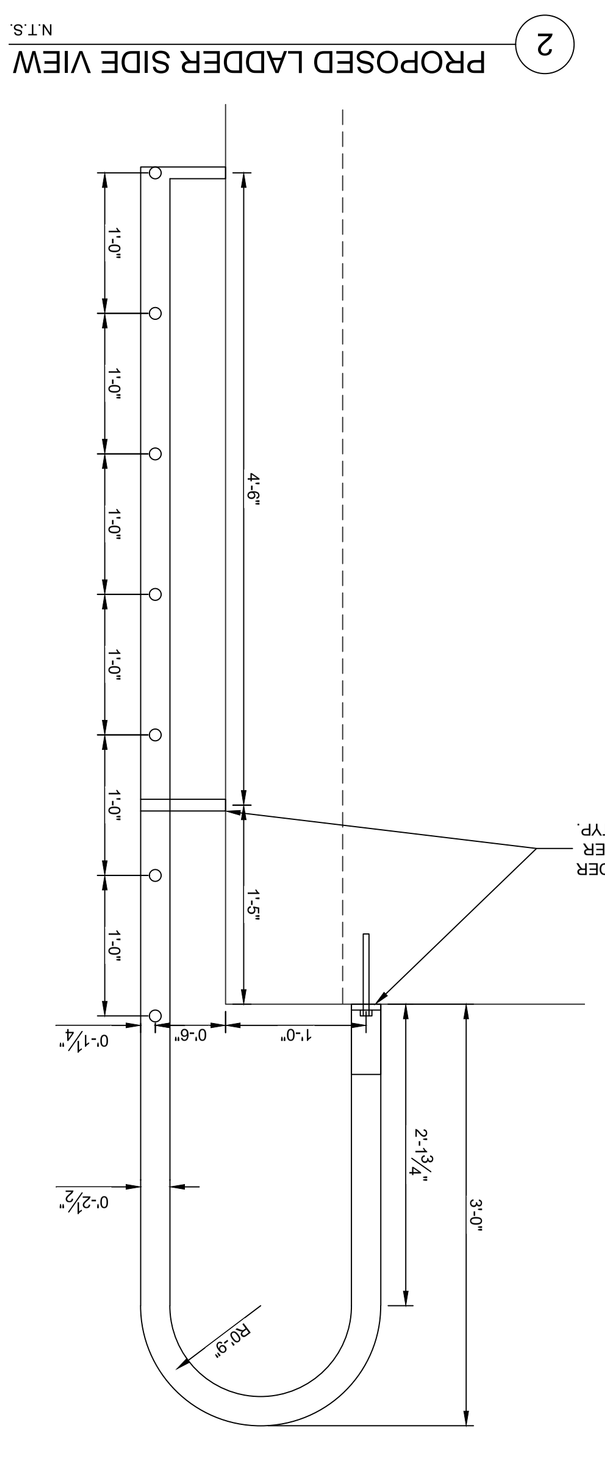
REV	DESCRIPTION	DATE

PROJECT: 222100042.000
DATE: JANUARY 2023
DRAWING NO. C-04
SHEET 07 OF 09



1 PROPOSED LADDER FRONT VIEW
N.T.S.

ANCHOR FOR LADDER PER MANUFACTURER SPECIFICATIONS, TYP.



2 PROPOSED LADDER SIDE VIEW
N.T.S.

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 ⅝" DIAMETER HILTI HAS-R STAINLESS STEEL THREADED RODS WITH 5½" MINIMUM EMBEDMENT MAY BE USED AS AN ALTERNATE TO HILTI KWIK BOLT TZ ANCHORS SHOWN ON THE DRAWINGS.

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 SEQUENCE OF WORK ITEMS IS PROVIDED AS A GENERAL GUIDE AND MAY BE MODIFIED SPECIFICATIONS AND SHOWN ON THE CONSTRUCTION DRAWINGS. THE FOLLOWING 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 DRY. RESERVOIR SHALL BE MAINTAINED IN A DEWATERED CONDITION UNTIL THE PROPOSED REPAIRS ARE COMPLETE.
4. CONTRACTOR SHALL REMOVE SEDIMENT AND MUD 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-IN X 28-IN (NOMINAL OPENING) CAST IRON SLIDE GATE. CARE SHOULD BE TAKEN DURING EXCAVATION ON THE DOWNSTREAM SIDE OF THE RISER TO AVOID DAMAGE TO THE PRINCIPAL SPILLWAY CONDUIT. MINIMUM LIMITS OF SEDIMENT REMOVAL ARE SHOWN ON DRAWING C-06. WORK TO BE ACCOMPLISHED 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 APPURTENANCES.
7. CONTRACTOR SHALL INSTALL THE NEW STEM GUIDES WITH NEW BOLTS/ANCHORS LOCATED AT LEAST 6-IN FROM ANY EXISTING STEM GUIDE BOLT/HOLE. THE CONTRACTOR WILL ALSO INSTALL THE NEW LOW STAGE TRASH RACK, LADDER, AND REFURBISH THE HIGH STAGE TRASH RACK, HIGH STAGE GRATING AND MANHOLE COVER.
8. MANHOLE COVER TO BE REFURBISHED. CONTRACTOR TO VERIFY REFURBISHMENT METHOD IN TECHNICAL SPECIFICATIONS.
9. CONTRACTOR SHALL REMOVE FROM THE SITE ALL ITEMS THAT WERE REMOVED FROM THE RISER, INCLUDING THE OLD STEEL LOW STAGE TRASH RACK ANGLES, 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.

RISER MAINTENANCE REPAIRS
DEEP CREEK WATERSHED: DAM NO. 15B
YADKIN COUNTY, NORTH CAROLINA

PROPOSED REPLACEMENT DETAILS

PROJECT: 222100420.000
DATE: JANUARY 2023
DRAWING NO. C-05
SHEET 08 OF 09

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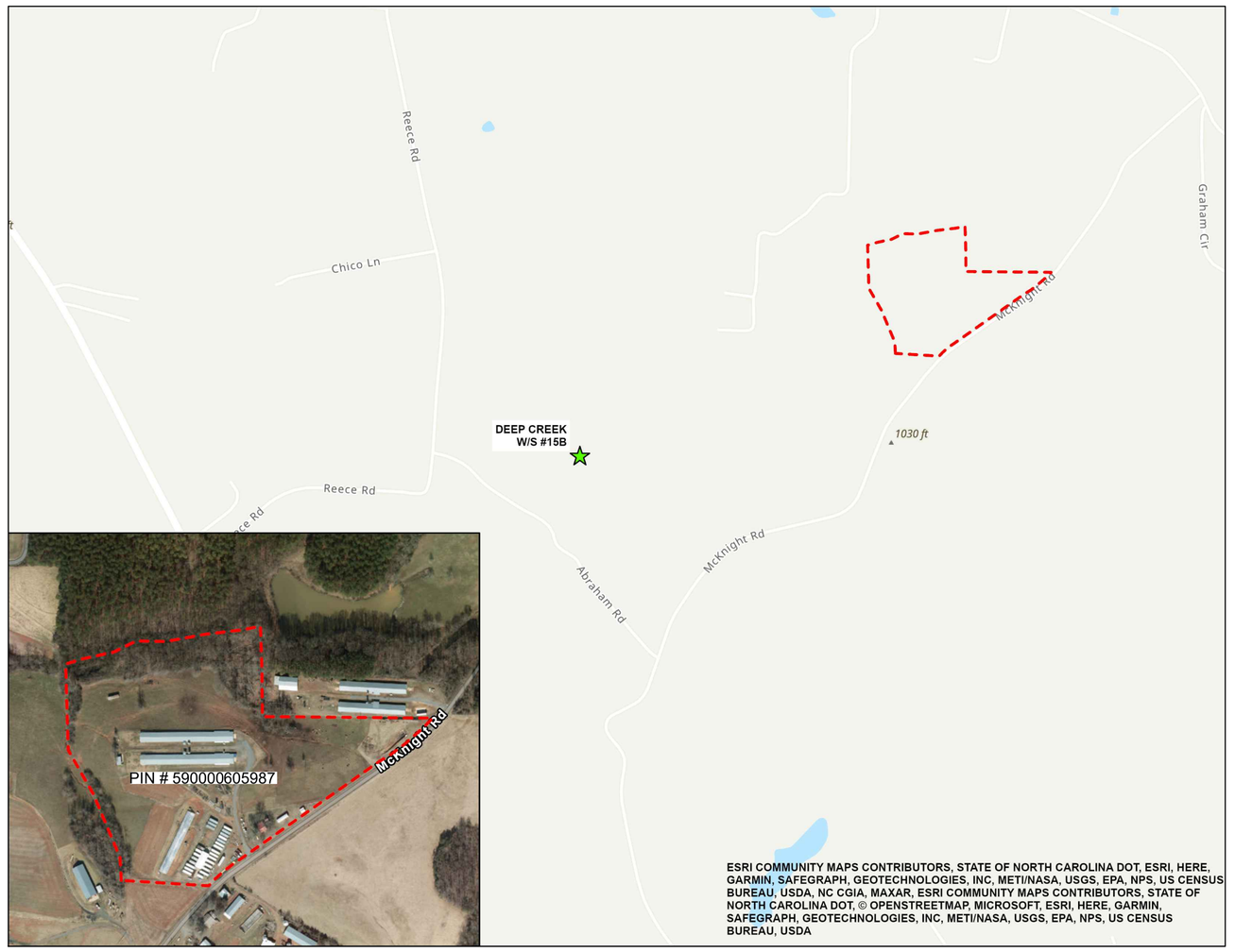
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 042119 MARIDEE ROMERO-GRAVES

MARIDEE ROMERO-GRAVES, P.E.
SEAL 042119
2023.01.23 15:04:43 -05'00'
DATE
STATE PROFESSIONAL ENGINEER 042119

DESIGNED BY: MRG
DRAWN BY: WMH
CHECKED BY: ROS

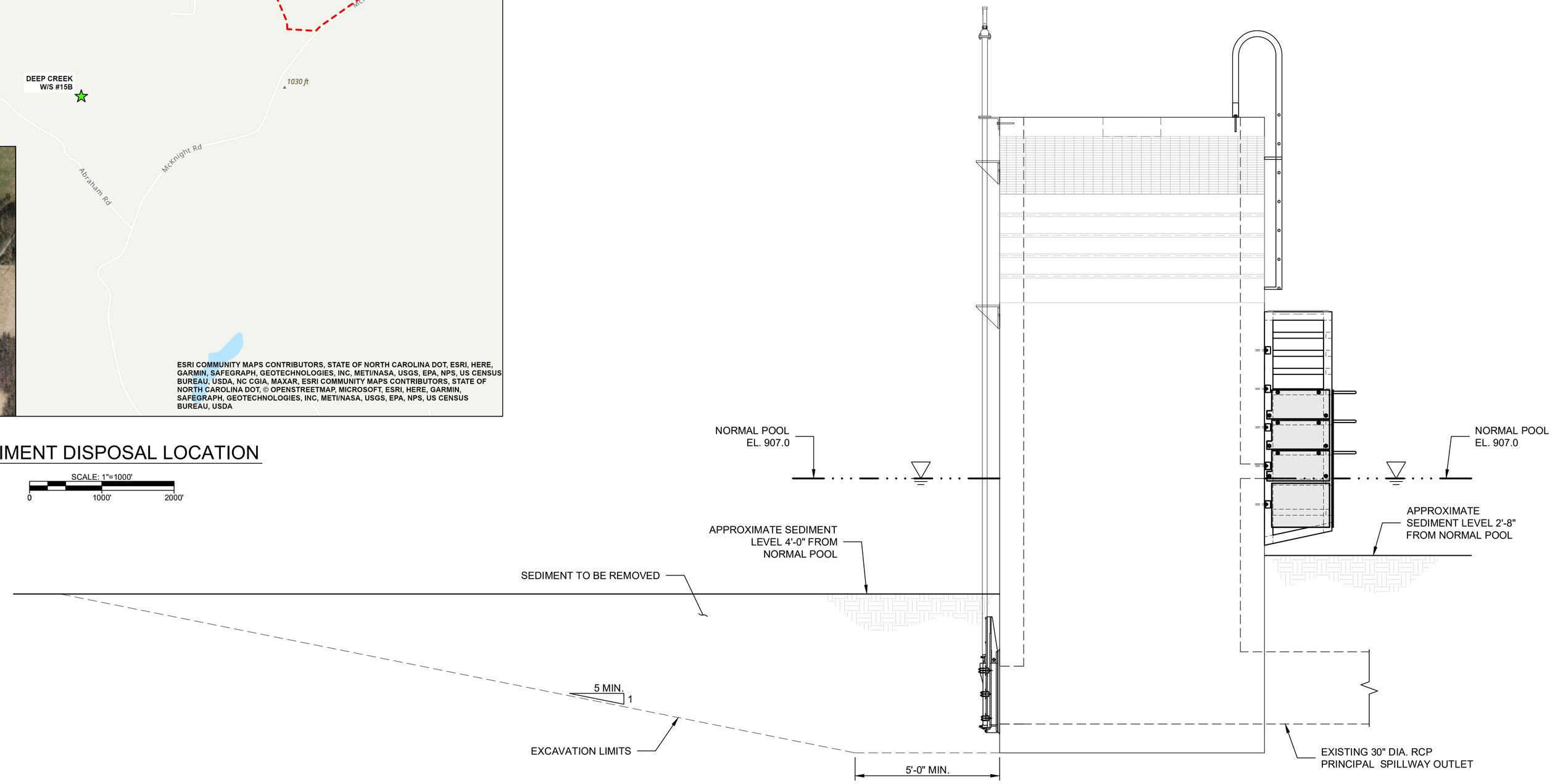
REV.	DESCRIPTION	DATE



2 SEDIMENT DISPOSAL LOCATION

SCALE: 1"=1000'

0 1000' 2000'



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.

DESIGNED BY: MRG
DRAWN BY: WMH
CHECKED BY: RAS

MARIDEE ROMERO-GRAVES, P.E.
2023.01.23 15:05:31 -05'00'
DATE:
STATE PROFESSIONAL ENGINEER 042119

NORTH CAROLINA PROFESSIONAL SEAL 042119 ENGINEER MARIDEE ROMERO-GRAVES

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RISER MAINTENANCE REPAIRS
DEEP CREEK WATERSHED, DAM NO. 15B
YADKIN COUNTY, NORTH CAROLINA

SEDIMENT REMOVAL PLAN AND SECTIONS

Established 1850 Yadkin County North Carolina

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

REV	DESCRIPTION	DATE