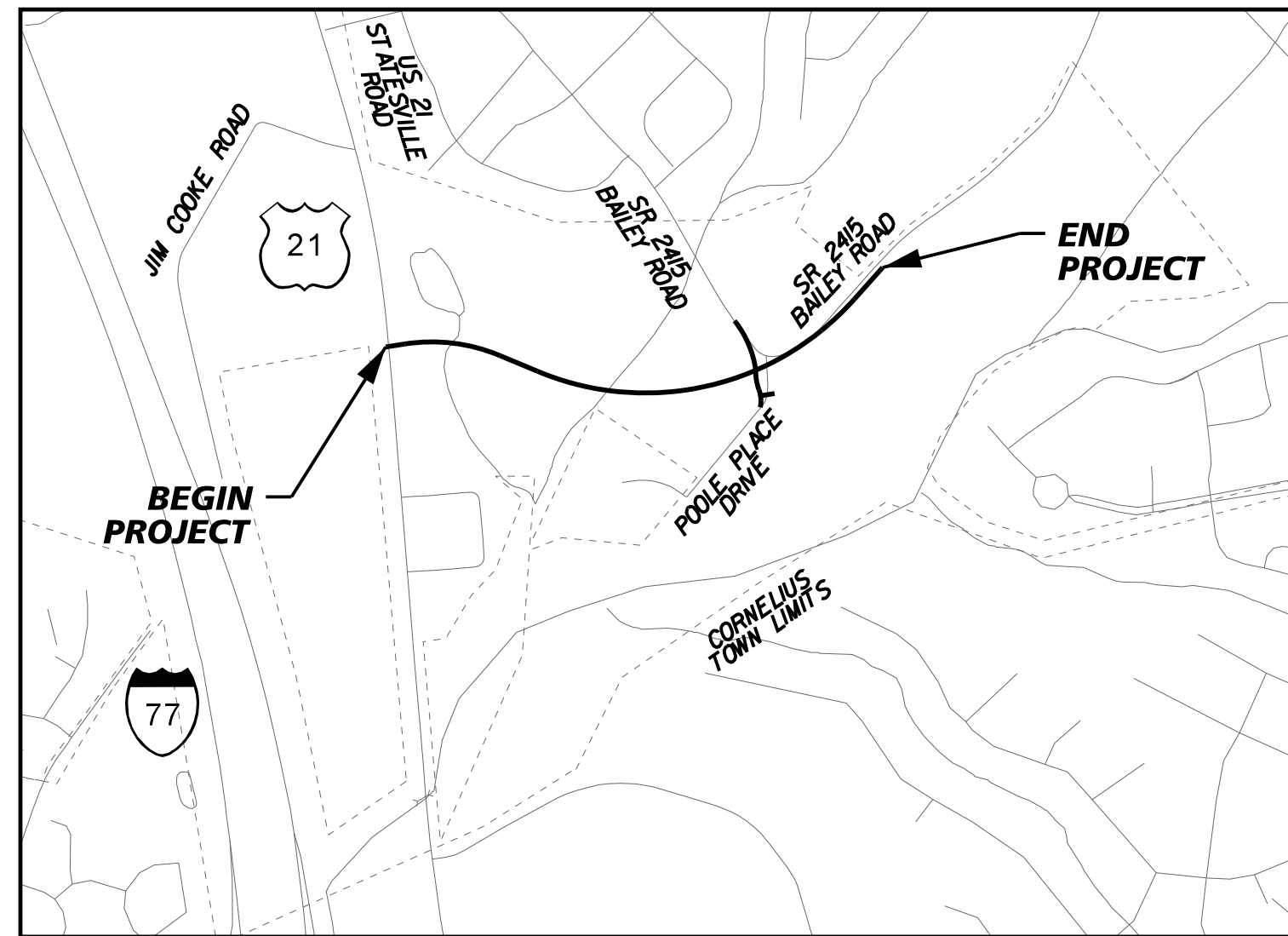


TIP PROJECT: U-6105



VICINITY MAP: NOT TO SCALE

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

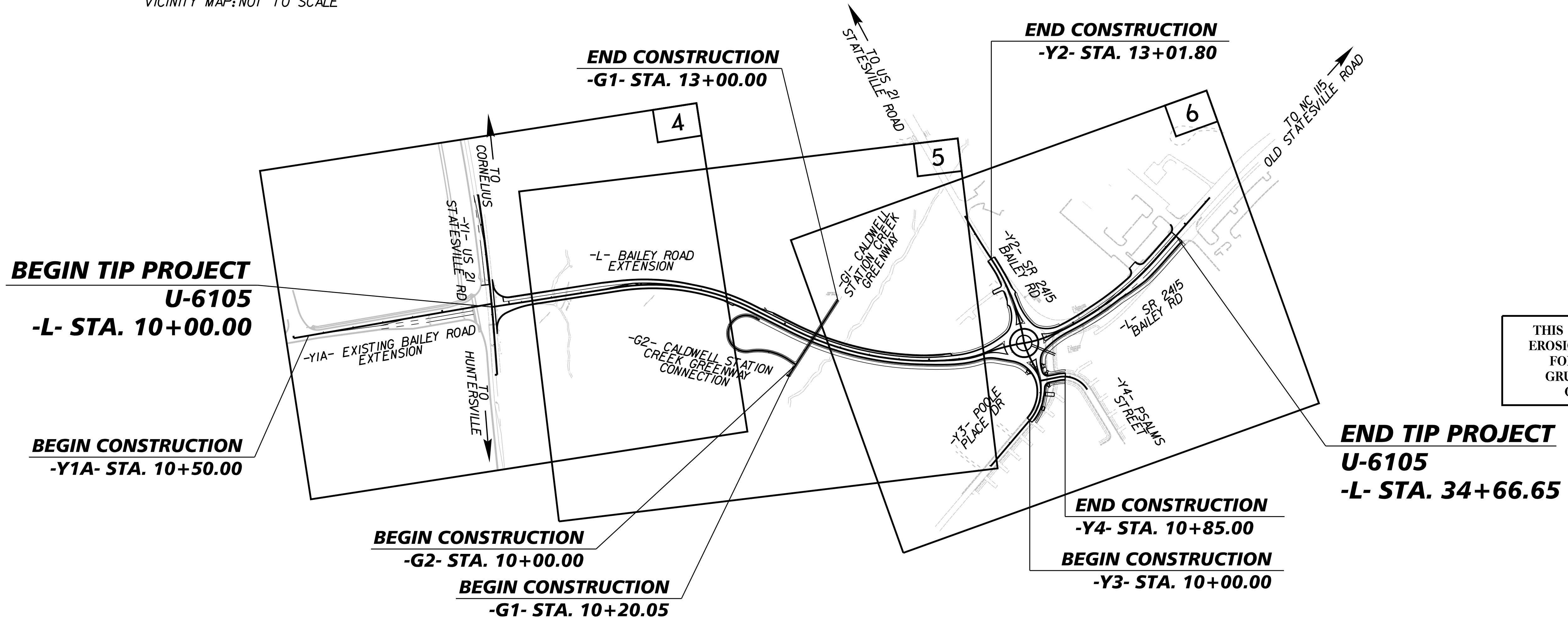
PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

MECKLENBURG COUNTY

LOCATION: SR 2415 (BAILEY ROAD) FROM POOLE PLACE DRIVE TO US 21 (STATESVILLE ROAD) IN CORNELIUS
CONSTRUCT ROADWAY ON NEW LOCATION

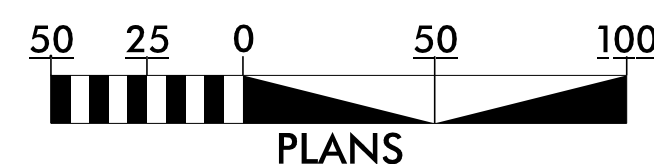
TYPE OF WORK: GRADING, DRAINAGE, AND PAVING

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-6105	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
48173.1.1	STBGDA-2415(001)	PE	
48173.2.1	STBGDA-2415(001)	ROW, UTL	
48173.3.1	STBGDA-2415(001)	CONST	



THIS PROJECT CONTAINS
EROSION CONTROL PLANS
FOR CLEARING AND
GRUBBING PHASE OF
CONSTRUCTION.

GRAPHIC SCALE



THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH
THE REGULATIONS SET FORTH BY THE NCG 010000 GENERAL
STORMWATER CONSTRUCTION PERMIT ISSUED BY THE NORTH
CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION
OF ENERGY, MINERAL, AND LAND RESOURCES.

Kimley » Horn

200 S. TRYON ST. • CHARLOTTE, NC 28202

Prepared In the Office of:
KIMLEY HORN
200 S Tryon St #200
Charlotte, NC 28202

Designed by:

Spencer Green, PE
NAME

4244

LEVEL III CERTIFICATION NO.

Roadway Standard Drawings

The "Roadway Standard Drawings"- Roadway Design Unit - N. C.
Department of Transportation - Raleigh, N. C., dated January 2024
and the latest revision thereto are applicable to this project and by
reference hereby are considered a part of these plans.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

Kimley»Horn

200 S. TRYON ST. • CHARLOTTE, NC 28202

RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.

U-6105

SHEET NO.

EC-2

EROSION & SEDIMENT CONTROL LEGEND

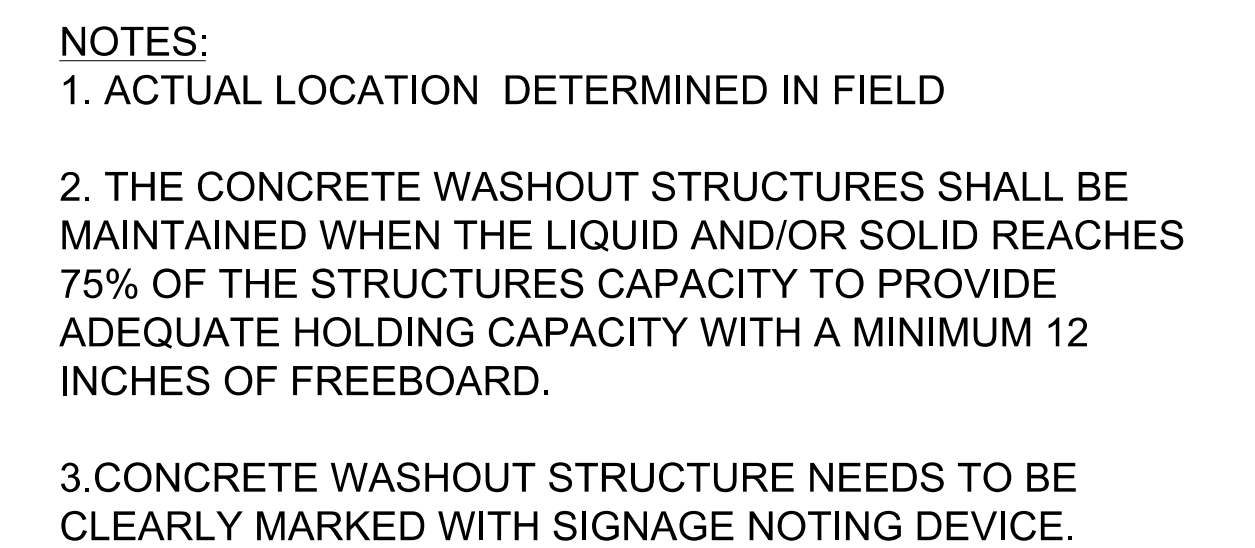
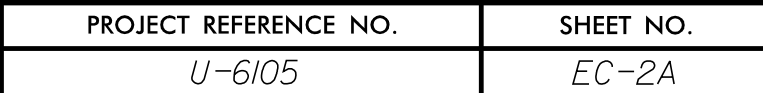
Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	
1630.04	Stilling Basin	
1630.05	Temporary Diversion	
1630.06	Special Stilling Basin	
1630.07	Skimmer Basin	
1630.08	Tiered Skimmer Basin	
1630.09	Earthen Dam with Skimmer	
	Infiltration Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	
1632.02	Type B	
1632.03	Type C	

Std. #	Description	Symbol
1633.01	Temporary Rock Silt Check Type A	
1633.02	Temporary Rock Silt Check Type B	
1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1634.01	Temporary Rock Sediment Dam Type A	
1634.02	Temporary Rock Sediment Dam Type B	
1635.01	Rock Pipe Inlet Sediment Trap Type A	
1635.02	Rock Pipe Inlet Sediment Trap Type B	
1636.01	Excelsior Wattle Check	
1636.01	Excelsior Wattle Check with Flocculant	
1636.01	Coir Fiber Wattle Check	
1636.01	Coir Fiber Wattle Check with Flocculant	
1636.02	Silt Fence Excelsior Wattle Break	
	Silt Fence Coir Fiber Wattle Break	
1636.03	Excelsior Wattle Barrier	
1636.03	Coir Fiber Wattle Barrier	

REVISIONS

8/26/2025 K:\CHL_P\PRJ\01036528 - U-6105 (Bailey Rd. Ext)\Erosion Control\Plan Sheets\U-6105_ec_dsh_02&03.dgn

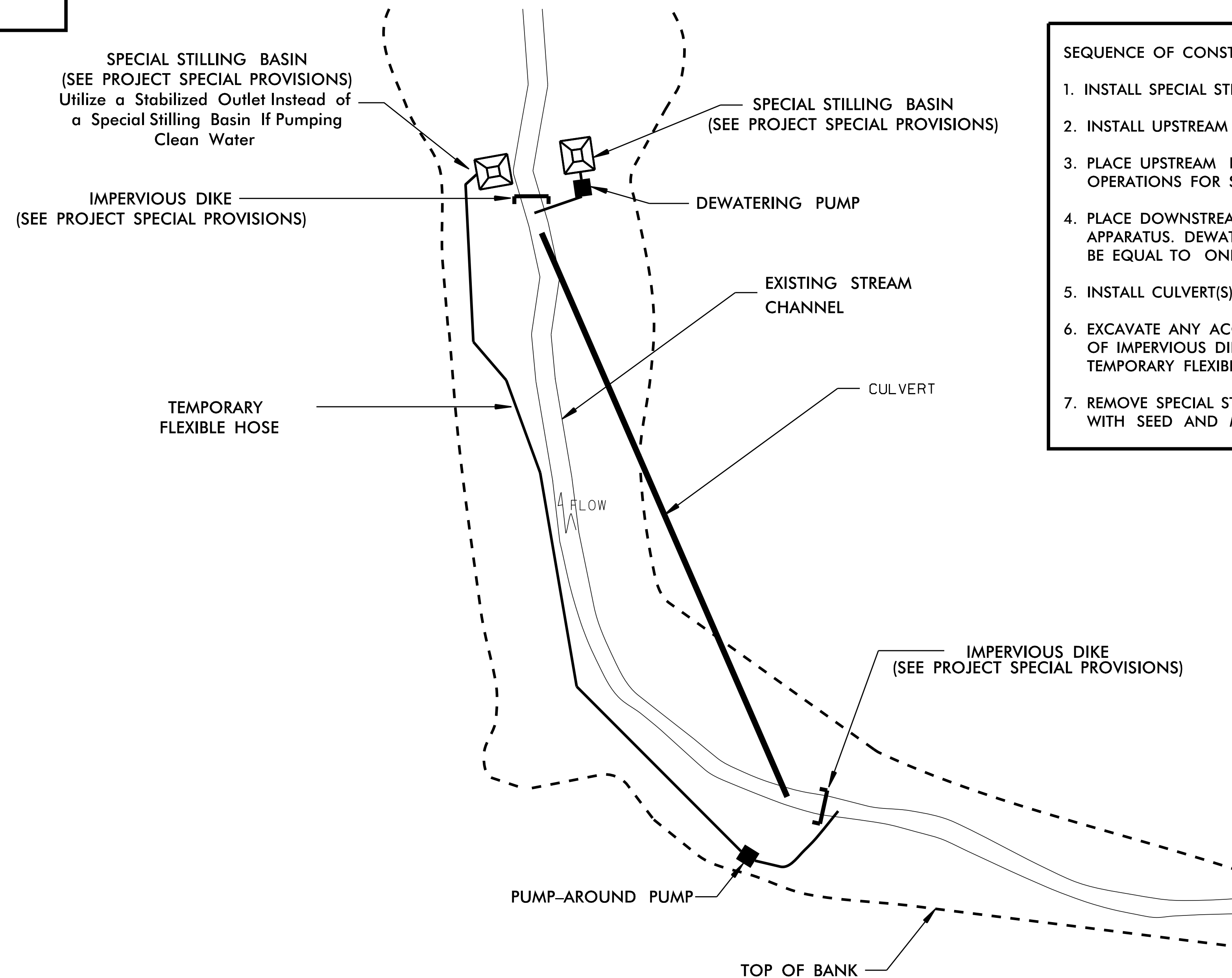
REVISIONS



EXAMPLE OF PUMP-AROUND OPERATION

NOTES:

- 1) All excavation shall be performed in only dry or isolated areas of the work zone.
- 2) Impervious dikes are to be used to isolate work from stream flow when necessary.
- 3) Maintenance of stream flow operations shall be incidental to the work. This includes polyethylene sheeting, diversion pipes, pumps and hoses.
- 4) Pumps and hoses shall be of sufficient size to dewater the work area.
- 5) All erosion control measures for the pump-around must be located within the permitted stream and buffer limits of impact.



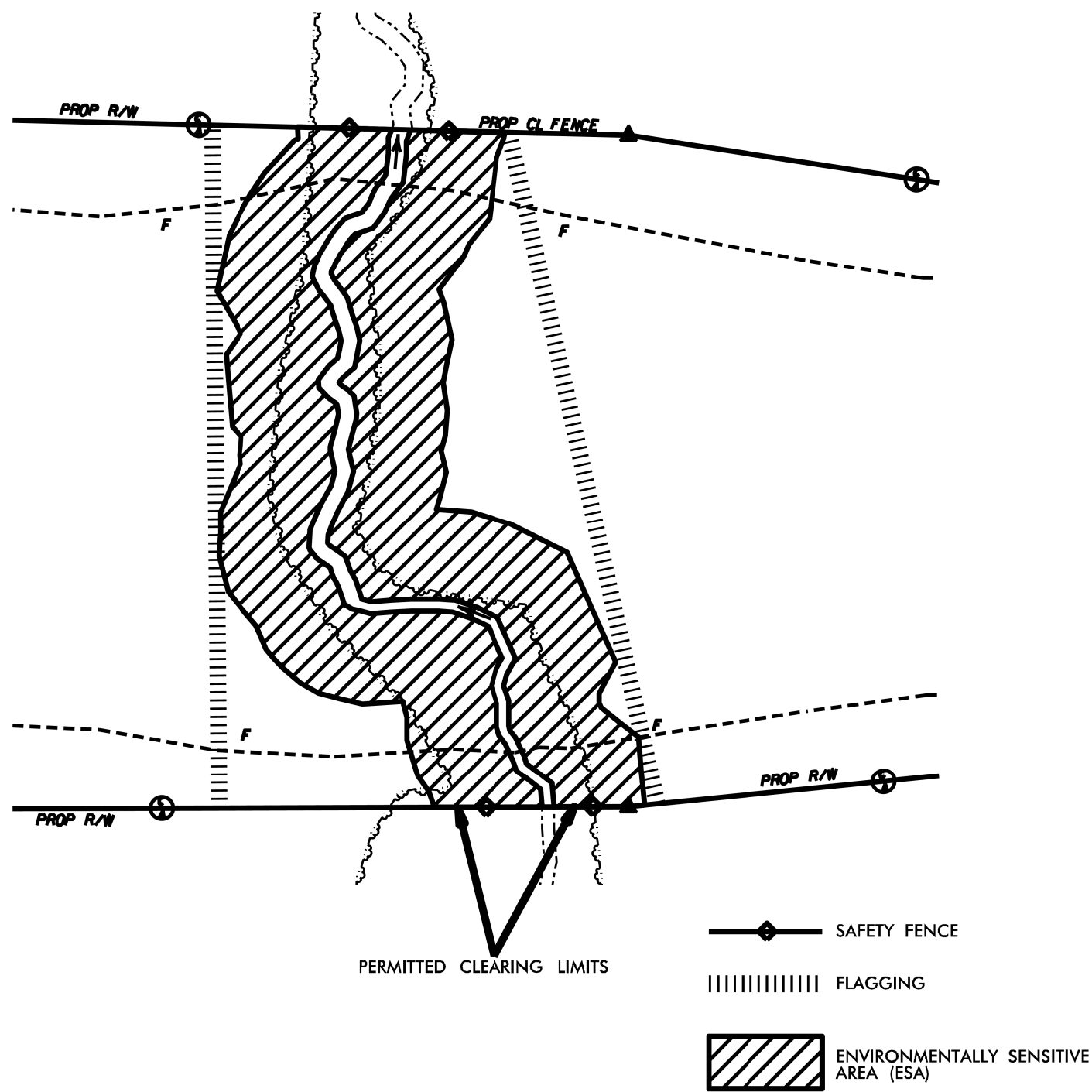
SEQUENCE OF CONSTRUCTION FOR TYPICAL WORK AREA

1. INSTALL SPECIAL STILLING BASIN(S).
2. INSTALL UPSTREAM PUMP AND TEMPORARY FLEXIBLE HOSE.
3. PLACE UPSTREAM IMPERVIOUS DIKE AND BEGIN PUMPING OPERATIONS FOR STREAM DIVERSION.
4. PLACE DOWNSTREAM IMPERVIOUS DIKE AND PUMPING APPARATUS. DEWATER ENTRAPPED AREA. AREA TO BE DEWATERED SHALL BE EQUAL TO ONE DAY'S WORK.
5. INSTALL CULVERT(S) IN ACCORDANCE WITH THE PLANS.
6. EXCAVATE ANY ACCUMULATED SILT AND DEWATER BEFORE REMOVAL OF IMPERVIOUS DIKES. REMOVE IMPERVIOUS DIKES, PUMPS, AND TEMPORARY FLEXIBLE HOSE. (DOWNSTREAM IMPERVIOUS DIKES FIRST).
7. REMOVE SPECIAL STILLING BASIN(S) AND BACKFILL. STABILIZE DISTURBED AREA WITH SEED AND MULCH.

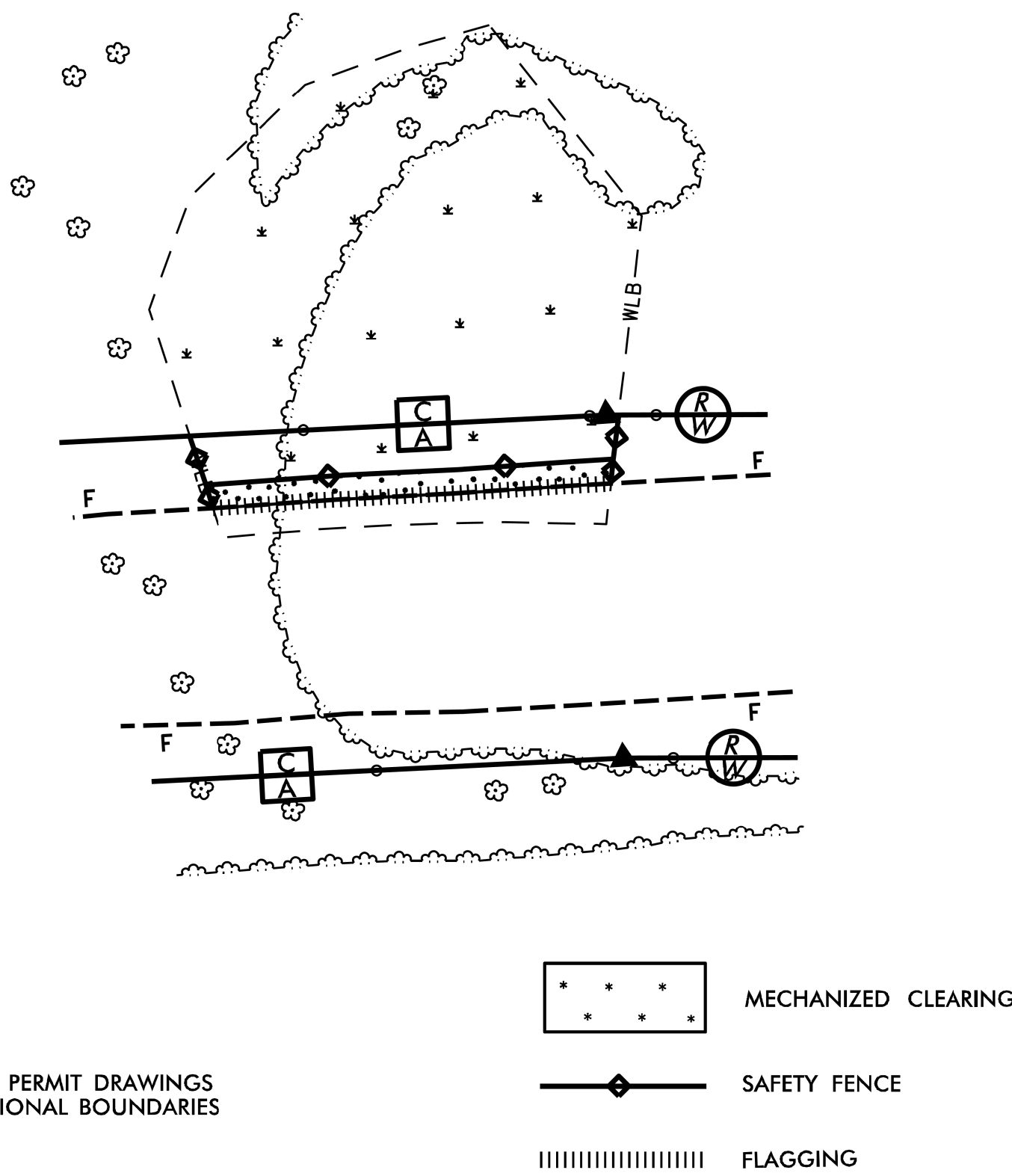
REVISIONS

SAFETY FENCE INSTALLATION DETAILS

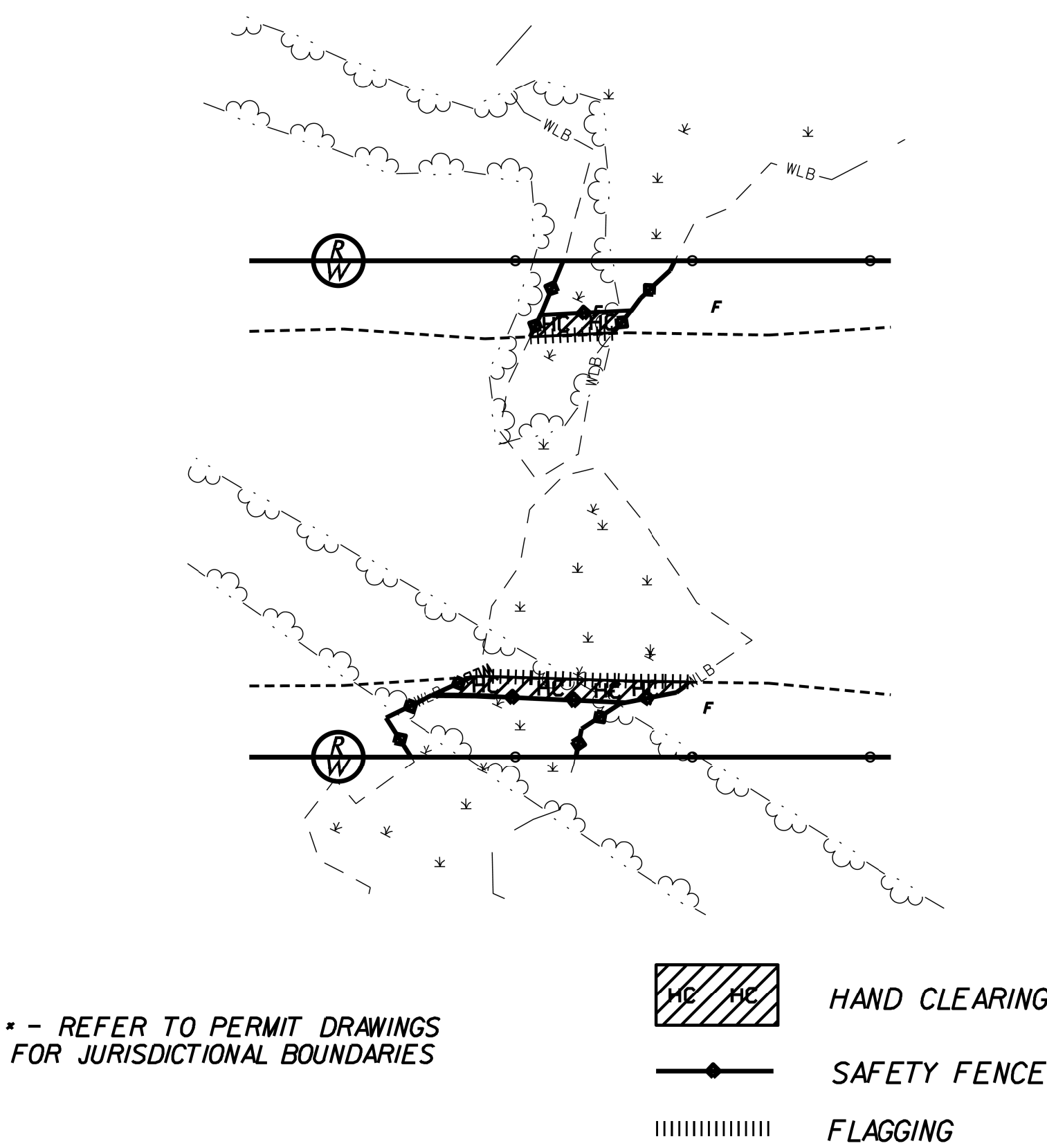
JURISDICTIONAL STREAM – ENVIRONMENTALLY SENSITIVE AREA (ESA) WITHOUT RIPARIAN BUFFERS



WETLAND – MECHANIZED CLEARING*

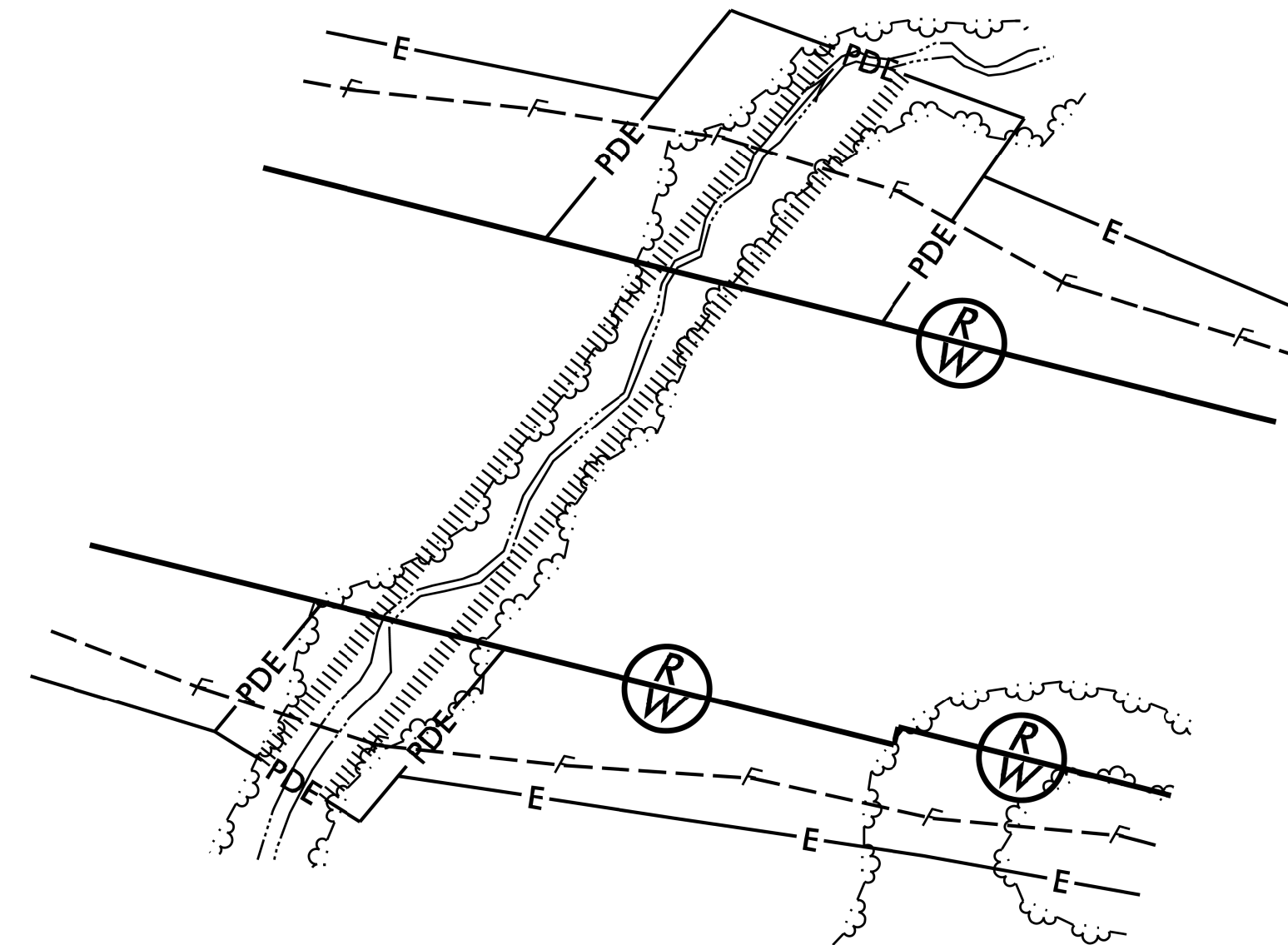


WETLAND – HAND CLEARING*



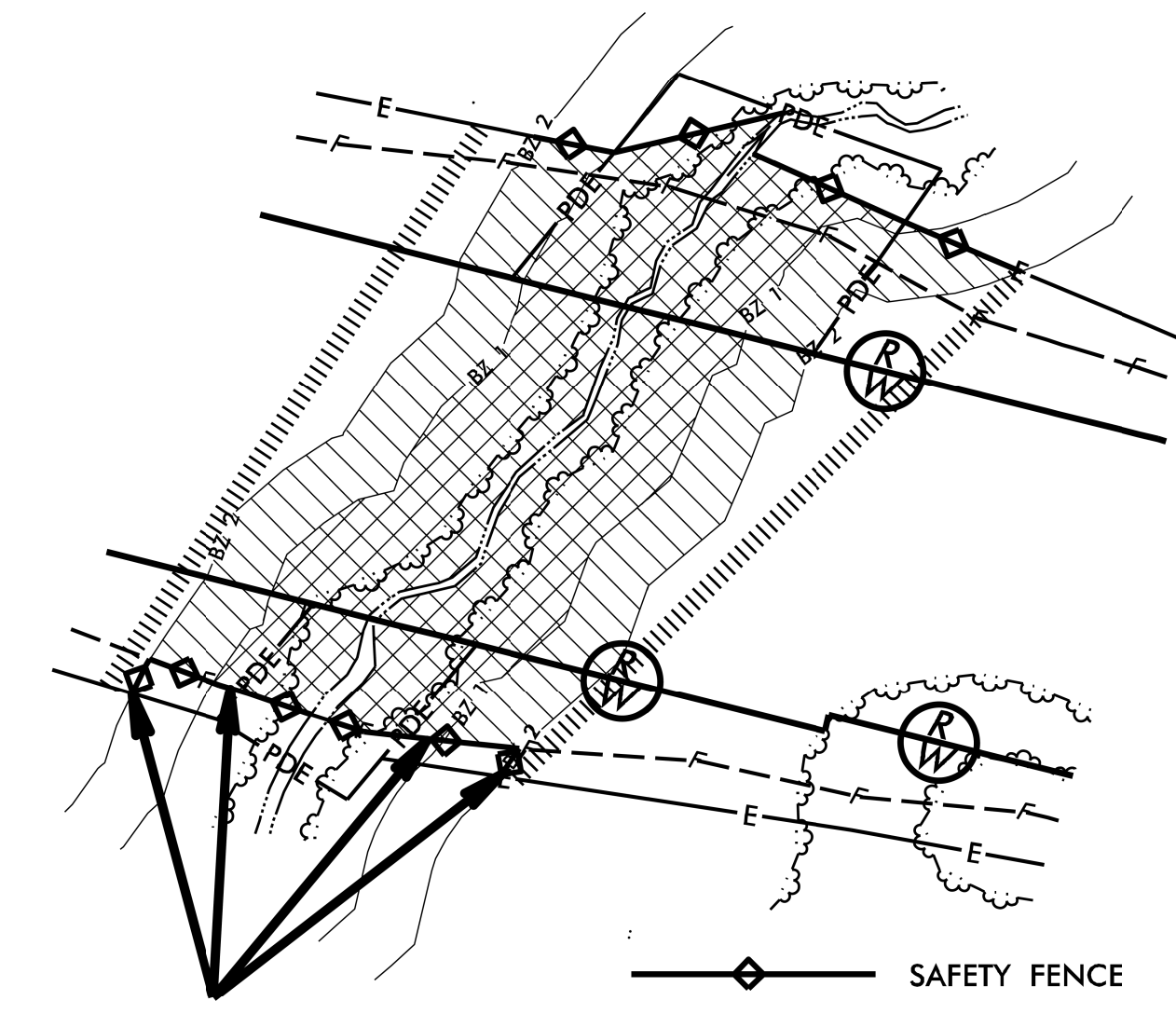
SAFETY FENCE INSTALLATION DETAILS

JURISDICTIONAL STREAM – NO HQW / NO BUFFER



FLAGGING

JURISDICTIONAL STREAM – RIPARIAN BUFFER ZONE*



PERMITTED CLEARING LIMITS

SAFETY FENCE

FLAGGING

ALLOWABLE IMPACTS ZONE 1

ALLOWABLE IMPACTS ZONE 2

* – REFER TO PERMIT DRAWINGS FOR JURISDICTIONAL BOUNDARIES AND BUFFER ZONE IMPACTS

SILT FENCE COIR FIBER WATTLE BREAK DETAIL

NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE AND LENGTH OF 10 FT.

EXCAVATE A 1 TO 2 INCH TRENCH FOR WATTLE TO BE PLACED.

DO NOT PLACE WATTLE ON TOE OF SLOPE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

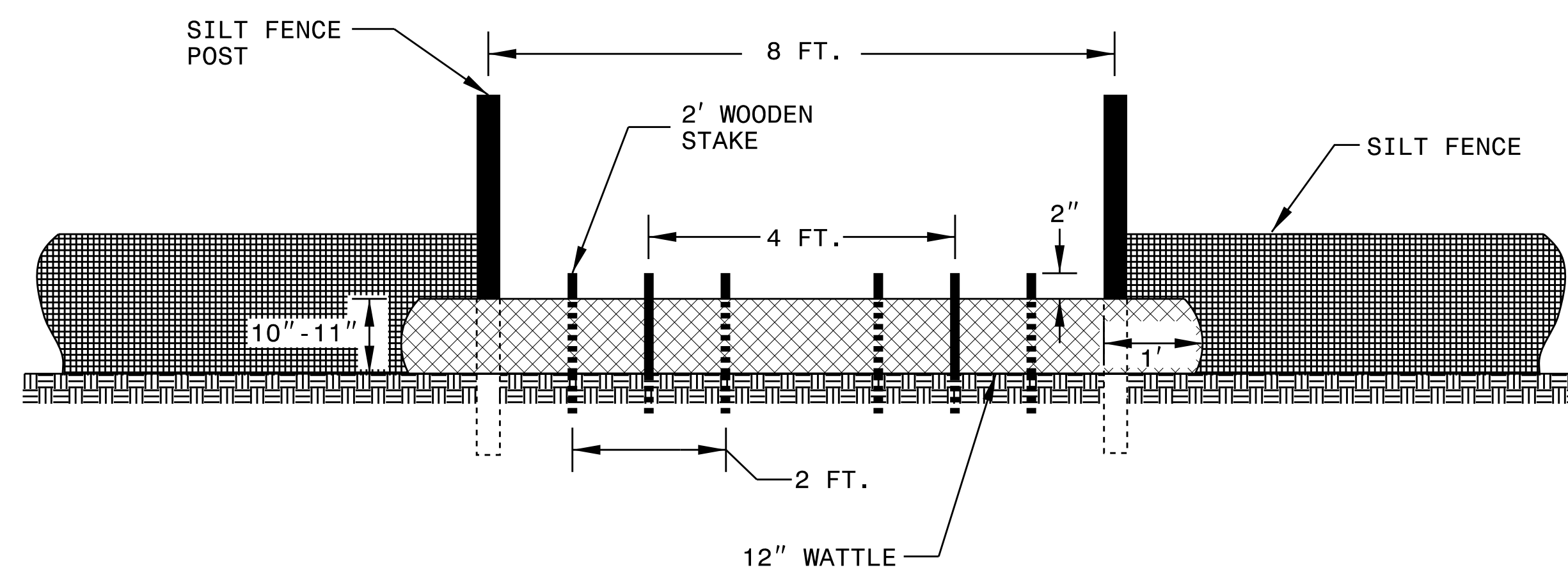
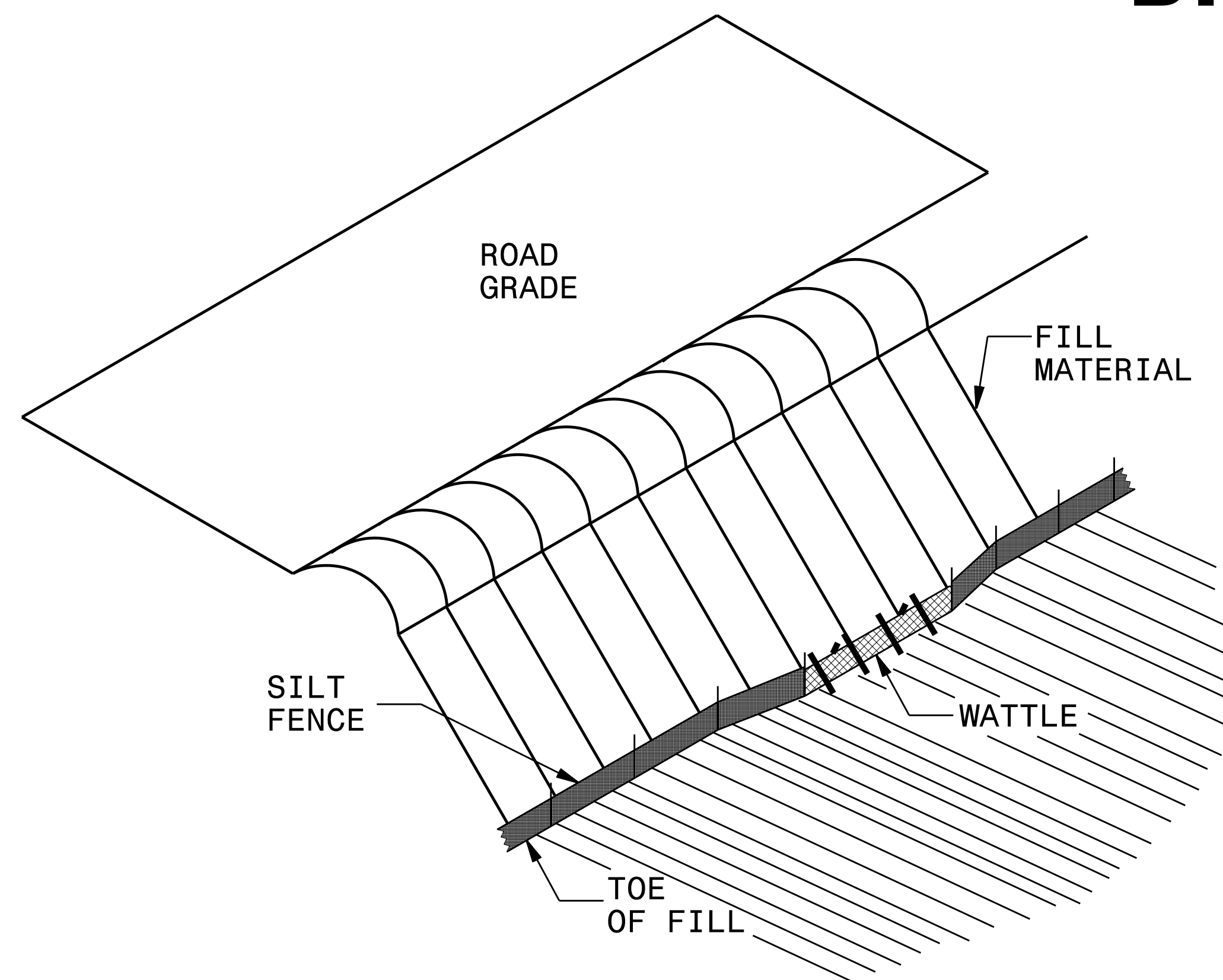
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO GROUND.

PROVIDE STAPLES MADE OF 11 GAUGE STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 6" IN LENGTH.

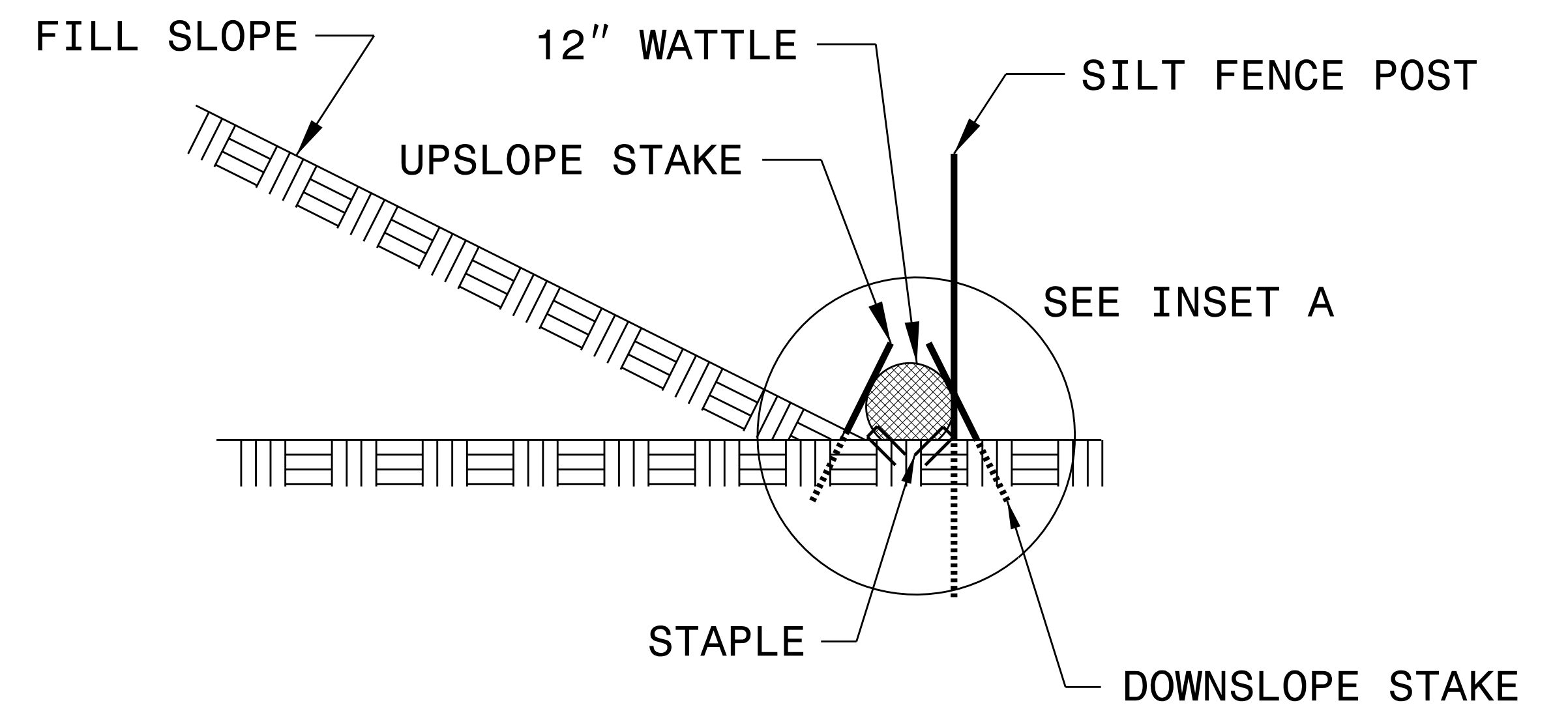
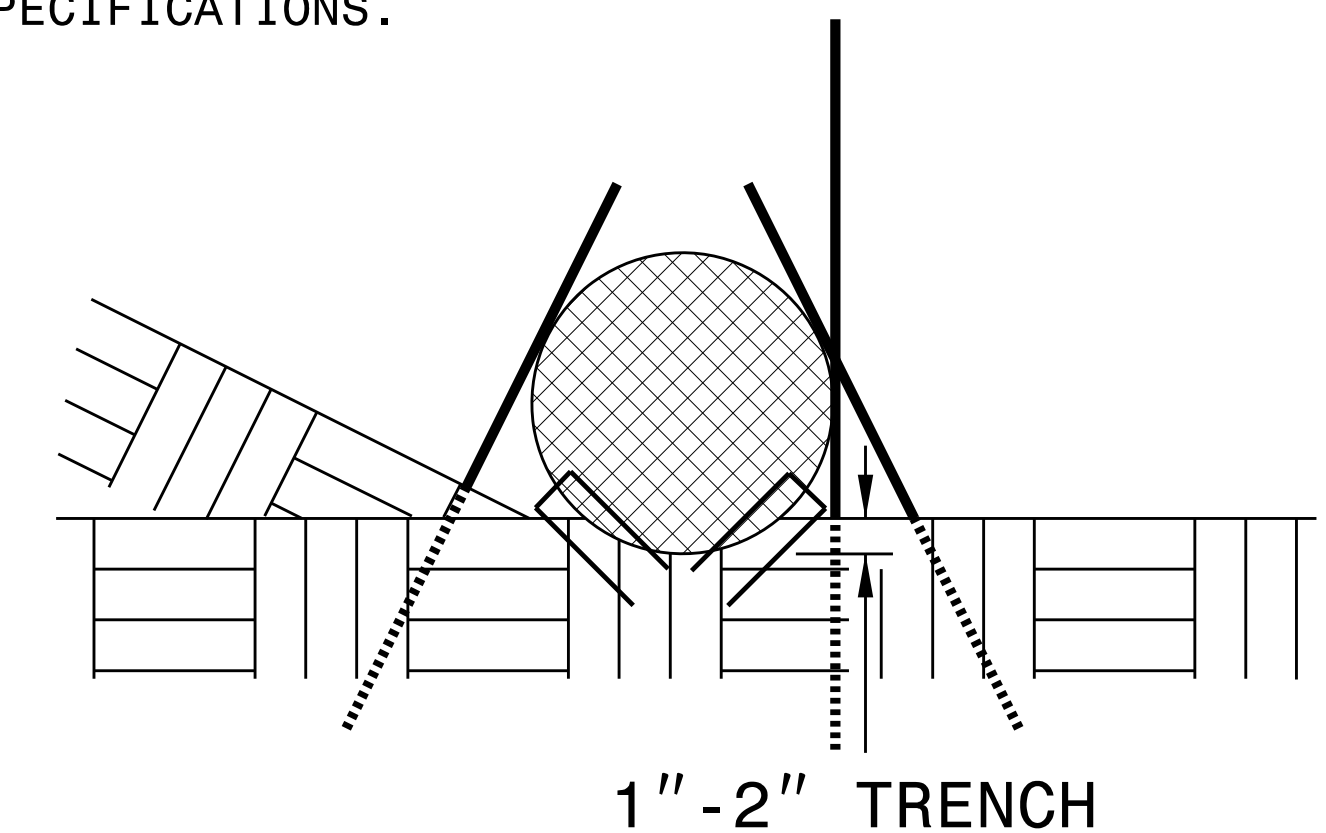
INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

WATTLE INSTALLATION CAN BE ON OUTSIDE OF THE SILT FENCE AS DIRECTED.

INSTALL TEMPORARY SILT FENCE IN ACCORDANCE WITH SECTION 1605 OF THE STANDARD SPECIFICATIONS.



INSET A



[illegible]

8/26/2025 K:\CHL_PRJ\01036528 - U-605 (Bailey Rd. Ext)\Erosion Control\Plan Sheets\U-605_ec_psh_02&03.dgn

EXCELSIOR MATTING FOR EROSION CONTROL (DITCHES)

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-L-	11+00	12+00	RT	85
4	-L-	12+37	14+00	RT	60
4	-L-	13+00	14+00	LT	100
5	-G2-	10+19	11+50	RT	105
5	-G2-	11+50	12+00	RT	40
6	-Y2-	11+37	12+40	LT	80
6	-Y2-	12+50	13+00	RT	40
	EXCELSIOR DITCH TOTAL				510

[illegible]

REVISIONS

8/26/2025 K:\CHL_PR\01036528 - U-6105 (Bailey Rd Ext)\Erosion Control\Plan Sheets\U-6105_ec_psh_02803.dgn

REVISIONS

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

Kimley»Horn

200 S. TRYON ST. • CHARLOTTE, NC 28202

RIGHT-OF-WAY REV.

CONST. REV.

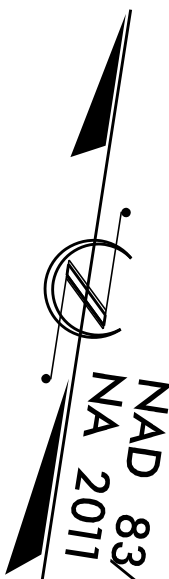
PROJECT REFERENCE NO.

U-6105

SHEET NO.

EC-4/CONST.4

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4



10+00

15+00

15+00

THE CHARLOTTE-MECKLENBURG
HOSPITAL AUTHORITY

INTERNATIONAL CHURCH OF THE
FOURSQUARE GOSPEL

10+00

10+00

15+00

MANAGE STREAM FLOW USING PUMP
AROUND OPERATION DURING
INSTALLATION OF 60" RCP-IV
(SEE DETAIL EC-2B)

KAY DWYER COOKE
DB 32527 PG 264

KAY DWYER COOKE
DB 33338 PG 183

MATCHLINE -L- STA 15+00 (SEE SHEET EC-5)

REVISIONS

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

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RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.

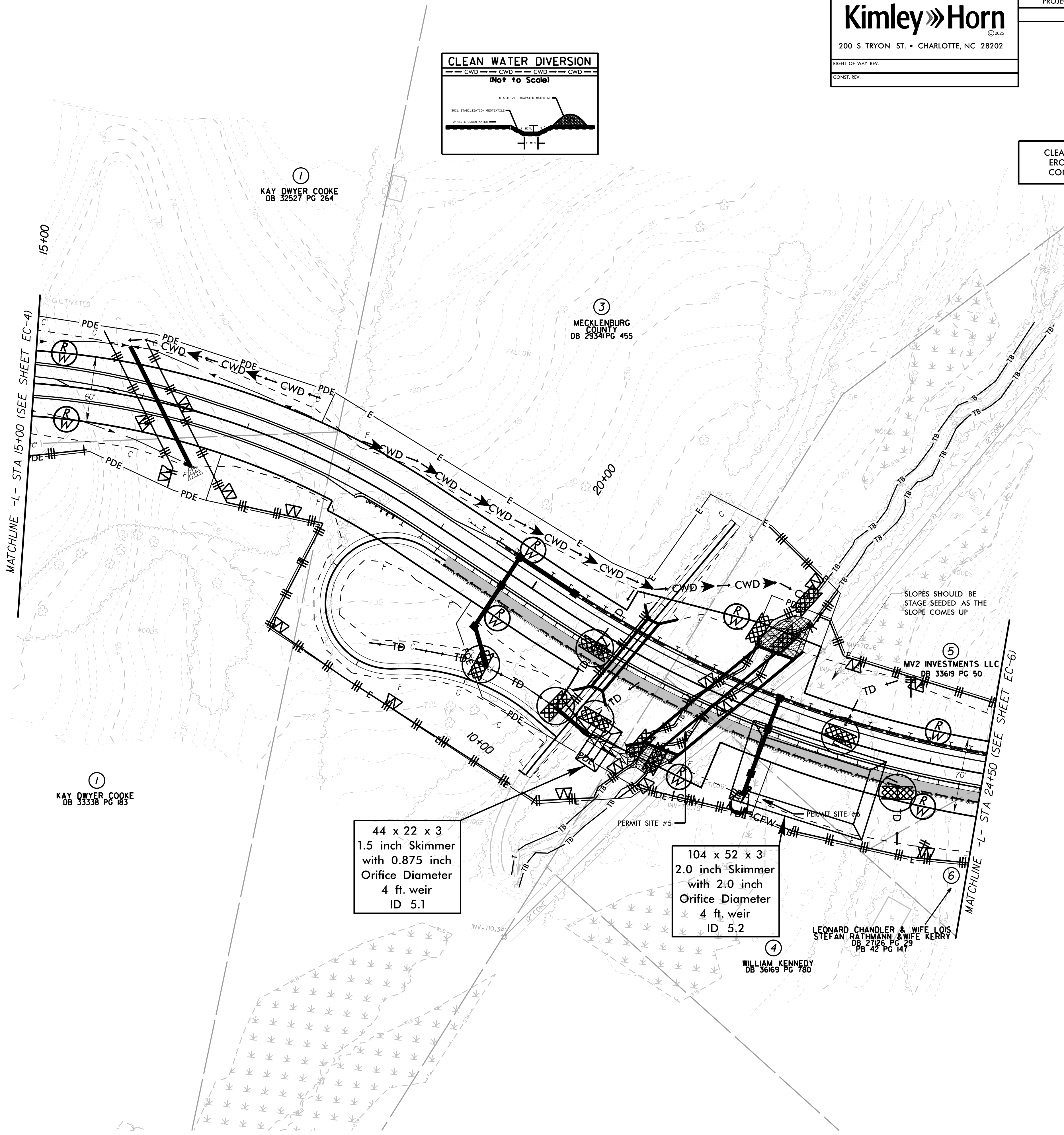
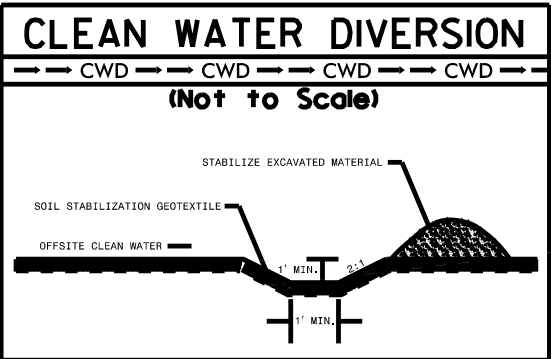
U-6105

SHEET NO.

EC-5/CONST.5

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

NAD 83/
NA 2011



①
KAY DWYER COOKE
DB 32527 PG 264

③
MECKLENBURG
COUNTY
DB 29341 PG 455

①
KAY DWYER COOKE
DB 33338 PG 183

44 x 22 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 5.1

104 x 52 x 3
2.0 inch Skimmer
with 2.0 inch
Orifice Diameter
4 ft. weir
ID 5.2

④
WILLIAM KENNEDY
DB 36169 PG 780

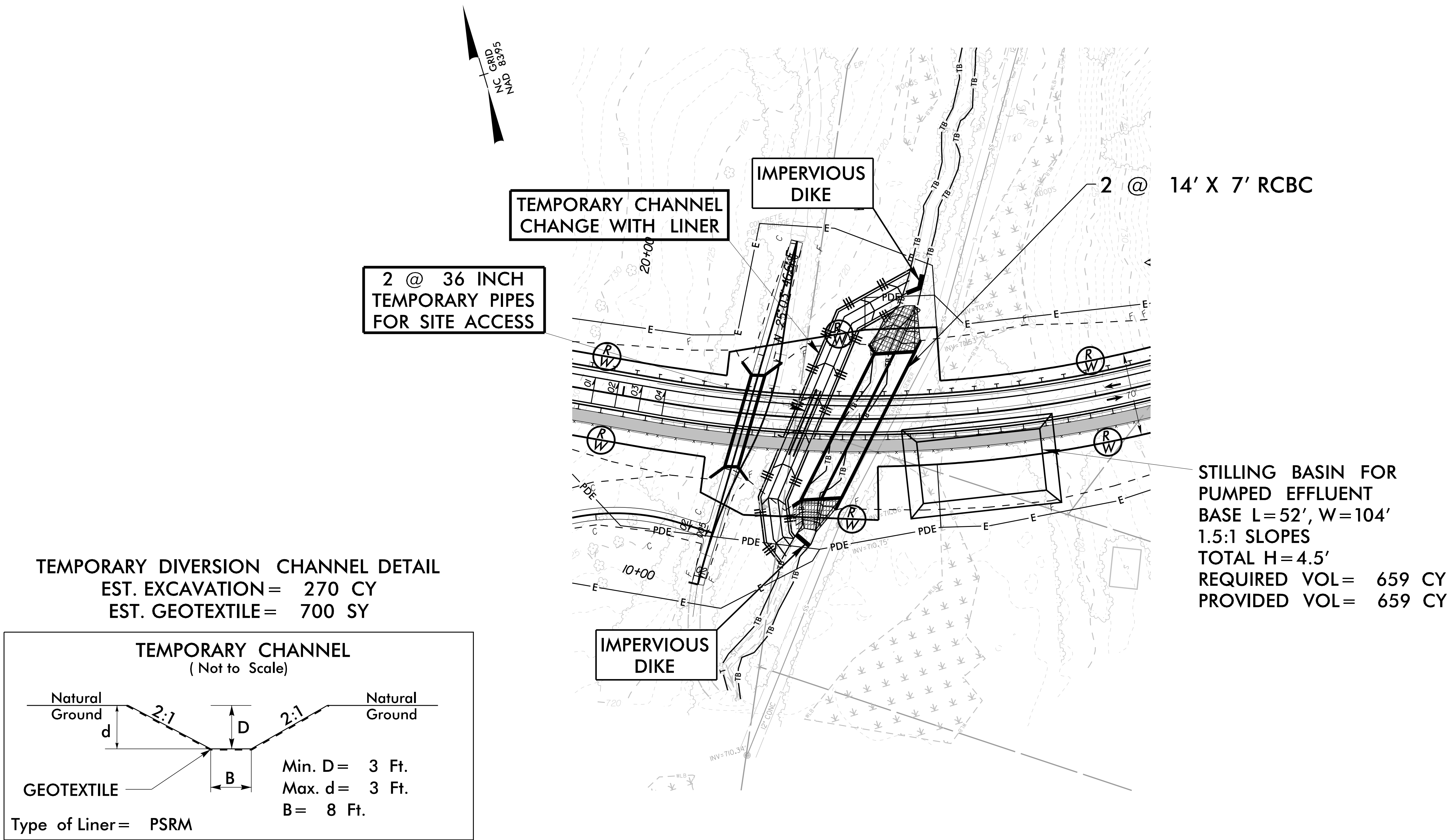
LEONARD CHANDLER & WIFE LOIS
STEFAN RATHMANN & WIFE KERRY
DB 27126 PG 29
DB 42 PG 147

SLOPES SHOULD BE
STAGE SEEDED AS THE
SLOPE COMES UP

⑤
MV2 INVESTMENTS LLC
DB 33619 PG 50

CULVERT CONSTRUCTION SEQUENCE STA. 22 + 02 -L-

- 1.) CONSTRUCT STILLING BASIN PER NCDOT STANDARD DRAWING 1630.04 TO SIZE SPECIFIED AND AT LOCATION SHOWN.
- 2.) CONSTRUCT IMPERVIOUS DIKES AND TEMPORARY DIVERSION CHANNEL AS SHOWN. IF NEEDED FOR SITE ACCESS, USE 2 @ 36" TEMPORARY PIPES FOR CROSSING TEMPORARY DIVERSION CHANNEL.
- 3.) DIVERT CHANNEL FLOW THROUGH TEMPORARY DIVERSION CHANNEL.
- 4.) CONSTRUCT PROPOSED CULVERT AND CHANNEL IMPROVEMENTS.
- 5.) REMOVE IMPERVIOUS DIKES AND ALLOW FLOW THROUGH RCBC.
- 6.) REMOVE STILLING BASIN AND FILL TEMPORARY DIVERSION CHANNEL.
- 7.) COMPLETE PROPOSED ROADWAY CONSTRUCTION.



CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 6

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RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.

SHEET NO.

U-6105

EC-6/CONST.6

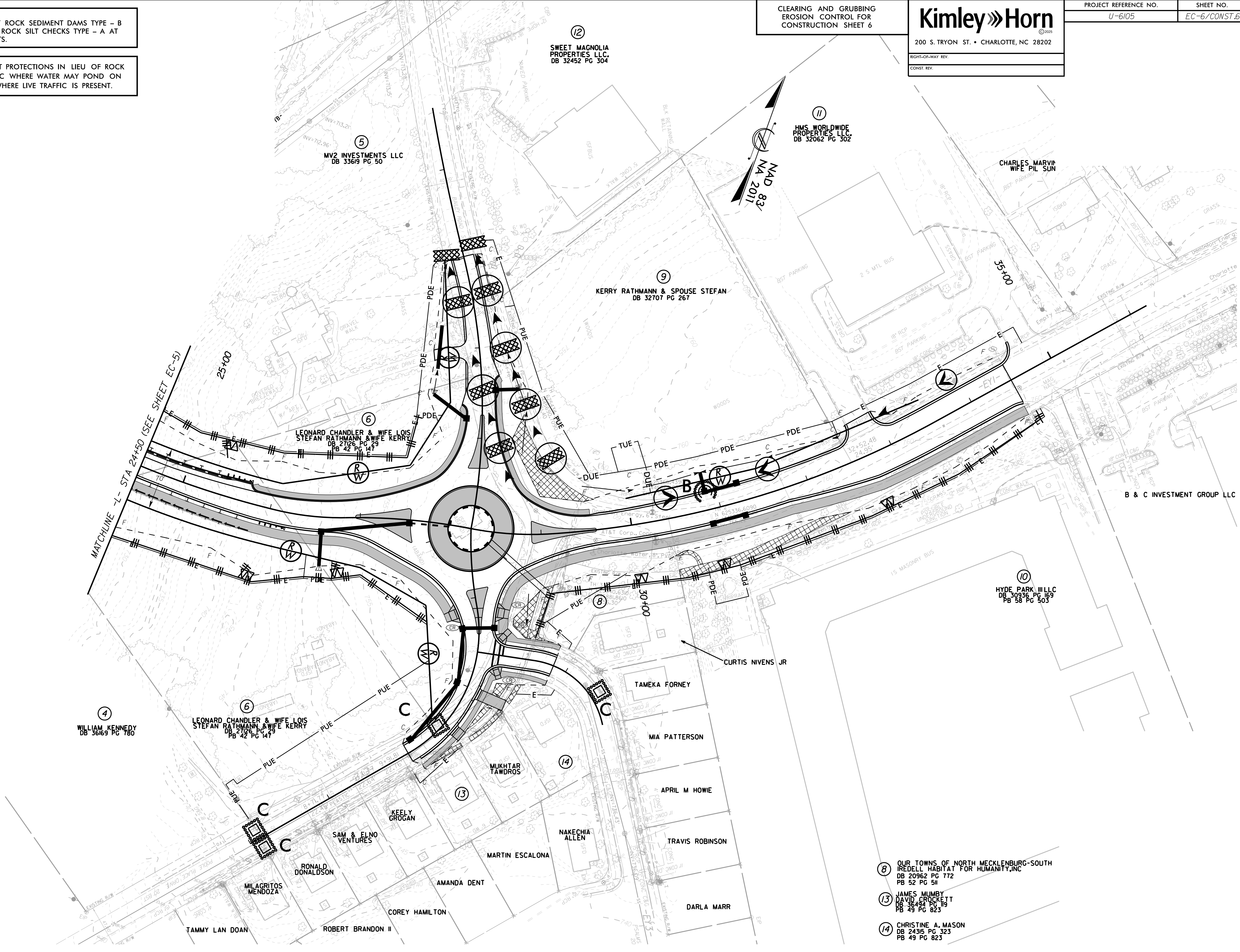
NOTE:

PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

UTILIZE FABRIC INSERT INLET PROTECTIONS IN LIEU OF
INLET SEDIMENT TRAP TYPE C WHERE WATER MAY POND ON
THE ROADWAY IN AREAS WHERE LIVE TRAFFIC IS PRESENT.

REVISIONS

8/26/2025 K:\CHL_PRJ\0101036528 - U-6105 (Bailey Rd Ex)Erosion Control\Plan Sheets\CHGU-6105_ero_psh.dgn



REVISIONS

INSTALL MATTING FOR
EROSION CONTROL IN THE
PROPOSED DITCH LINE.
SEE SHEET EC-3 FOR
STATION RANGES

Place Matting for Erosion Control
on Slope as Work Allows.
See Sheet EC-3 for Station Ranges

Place Matting for Erosion Control
on Slopes Adjacent to Permitted
Wetlands as Work Allows.

Kimley»Horn

200 S. TRYON ST. • CHARLOTTE, NC 28202

RIGHT-OF-WAY REV.

CONST. REV.

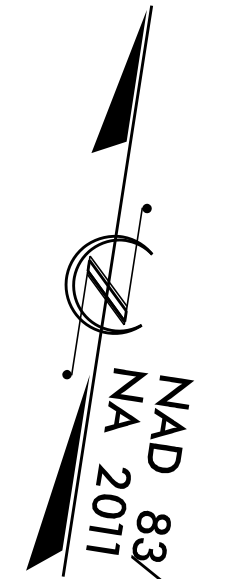
PROJECT REFERENCE NO.

U-6105

SHEET NO.

EC-7/CONST.4

FINAL PHASE
EROSION CONTROL FOR
CONSTRUCTION SHEET 4



10+00

15+00

15+00

THE CHARLOTTE-MECKLENBURG
HOSPITAL AUTHORITY

RETAIN EX 24" RCP

REMOVE 28 LF OF
EX 24" RCP

INTERNATIONAL CHURCH OF THE
FOURSQUARE GOSPEL

10+00

10+00

15+00

MATCHLINE -L- STA 15+00 (SEE SHEET EC-8)

RIP-RAP EMBANKMENT
PROTECTION
CLASS 1 RIP-RAP
EST 4 TONS
EST 8 SY GFD
SEE DETAIL 11, SHEET 2D-1

TIE PROP JB W/MH
TO EX 24" RCP
OUTLET
PROTECTION
CLASS 1 RIP RAP
EST 15 TONS
EST 30 SY GFD

LATERAL 3' BASE DITCH
EST 500 CY DDE
SEE DETAIL 9, SHEET 2D-1

RIP-RAP EMBANKMENT
PROTECTION
CLASS 1 RIP-RAP
EST 2 TONS
EST 4 SY GFD
SEE DETAIL 11, SHEET 2D-1

REMOVE EX 12" RCP
LATERAL 'V' DITCH
EST 30 CY DDE
SEE DETAIL 10, SHEET 2D-1

KAY DWYER COOKE
DB 32527 PG 264

SPECIAL 'V' DITCH
SEE DETAIL 4, SHEET 2D-1

SPECIAL CUT GRASS
SWALE WITH HINGE
SEE DETAIL 2, SHEET 2D-1

SPECIAL 'V' DITCH
SEE DETAIL 4, SHEET 2D-1

SPECIAL CUT GRASS
SWALE WITH HINGE
SEE DETAIL 2, SHEET 2D-1

LATERAL 'V' DITCH
EST 30 CY DDE
SEE DETAIL 10, SHEET 2D-1

OUTLET CHANNEL IMPROVEMENTS
CLASS 1 RIP RAP (KEYED-IN)
EST 15 TONS
EST 10 SY GFD (BANKS ONLY)
SEE DETAIL 12, SHEET 2D-1

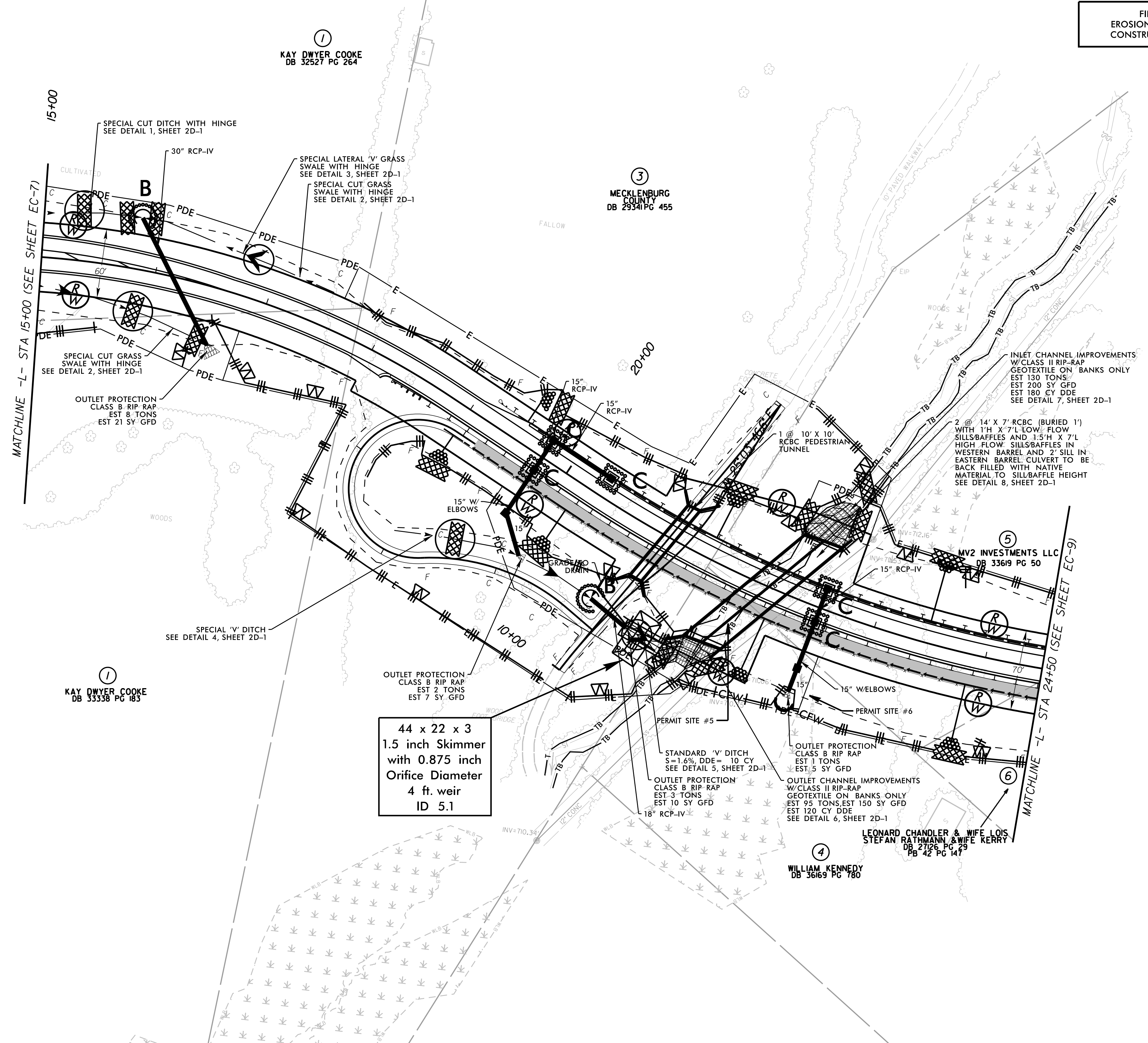
KAY DWYER COOKE
DB 33338 PG 183

UTILIZE FABRIC INSERT INLET PROTECTIONS IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C WHERE WATER MAY POND ON THE ROADWAY IN AREAS WHERE LIVE TRAFFIC IS PRESENT.

8/26/2025 K:\CHL_PRR\01036528 - U-6105 (Bailey Rd Ext)\Erosion Control\Plan Sheets\Final\U-6105_ero_psh_8.dgn

EC-8/CONST.5

NAD 83
NA 2011



INSTALL MATTING FOR
EROSION CONTROL IN THE
PROPOSED DITCH LINE.
SEE SHEET EC-3 FOR
STATION RANGES

Place Matting for Erosion Control
on Slope as Work Allows.
See Sheet EC-3 for Station Ranges

Place Matting for Erosion Control
on Slopes Adjacent to Permitted
Wetlands as Work Allows.

UTILIZE FABRIC INSERT INLET PROTECTIONS IN LIEU OF ROCK
INLET SEDIMENT TRAP TYPE C WHERE WATER MAY POND ON
THE ROADWAY IN AREAS WHERE LIVE TRAFFIC IS PRESENT.

FINAL PHASE
EROSION CONTROL FOR
CONSTRUCTION SHEET 6

Kimley»Horn

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RIGHT-OF-WAY REV.

CONST. REV.

PROJECT REFERENCE NO.

U-6105

SHEET NO.

EC-9/CONST.6

REVISIONS

8/26/2025 K:\CHL_PRJ\0101036528 - U-6105 (Bailey Rd) Ext\NErosion Control\Plan Sheets\Final\U-6105_ero_psh_9.dgn

