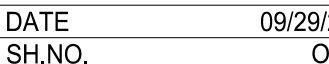




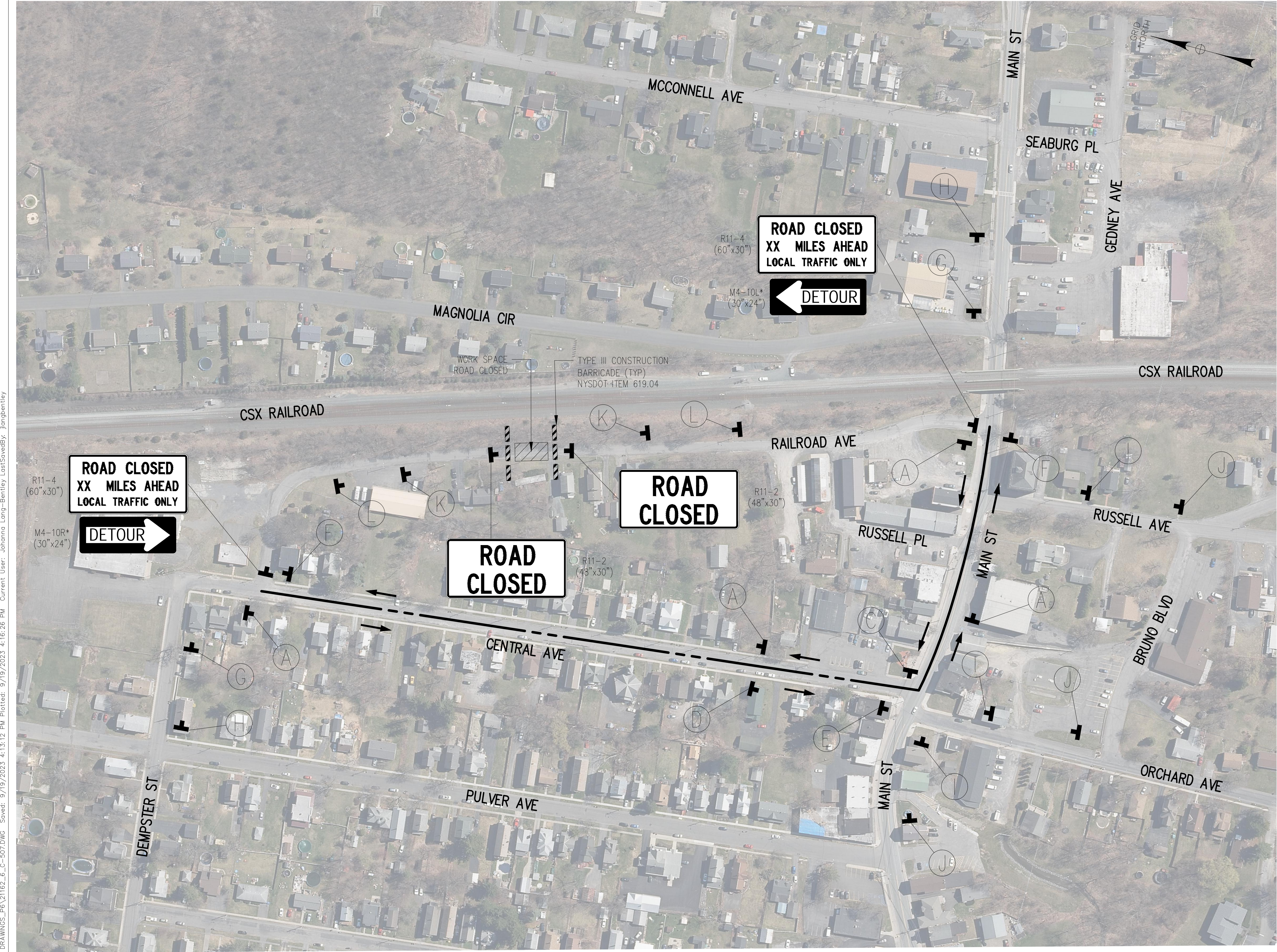
NTS



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RAILROAD AVENUE DETOUR PLAN
NTS

DETOUR SIGN SCHEDULE

<div>A</div> <div>RAILROAD AVE DETOUR ↑</div> <div>D3-1* (30"x8") M4-9* (30"x24")</div>	<div>B</div> <div>RAILROAD AVE DETOUR →</div> <div>D3-1* (30"x8") M4-9R (MOD)* (30"x24")</div>
<div>C</div> <div>RAILROAD AVE DETOUR →</div> <div>D3-1* (30"x8") M4-9R* (30"x24")</div>	<div>D</div> <div>SEABURG PL RAILROAD AVE DETOUR ←</div> <div>D3-1* (30"x8") M4-9L (MOD)* (30"x24")</div>
<div>E</div> <div>RAILROAD AVE DETOUR ←</div> <div>D3-1* (30"x8") M4-9L* (30"x24")</div>	<div>F</div> <div>RAILROAD AVE END DETOUR</div> <div>D3-1* (30"x8") M4-9* (30"x24")</div>
<div>G</div> <div>RAILROAD AVE DETOUR 500 FT</div> <div>D3-1* (30"x8") W20-2* (36"x36")</div>	<div>H</div> <div>RAILROAD AVE DETOUR 1000 FT</div> <div>D3-1* (30"x8") W20-2* (36"x36")</div>
<div>I</div> <div>DETOUR 500 FT</div> <div>W20-2* (36"x36")</div>	<div>J</div> <div>DETOUR 1000 FT</div> <div>W20-2* (36"x36")</div>
<div>K</div> <div>ROAD CLOSED 500 FT</div> <div>W20-3* (36"x36")</div>	<div>L</div> <div>ROAD CLOSED 1000 FT</div> <div>W20-3* (36"x36")</div>

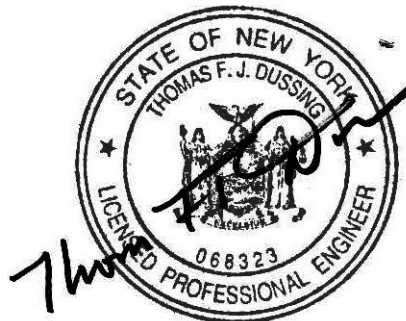
ISSUED FOR
CONSTRUCTION

9/19/2023

LEGEND

- WORK SPACE
- DIRECTION OF TRAFFIC
DETOUR
- SIGN (TEMPORARY)
- *

BLACK ON ORANGE



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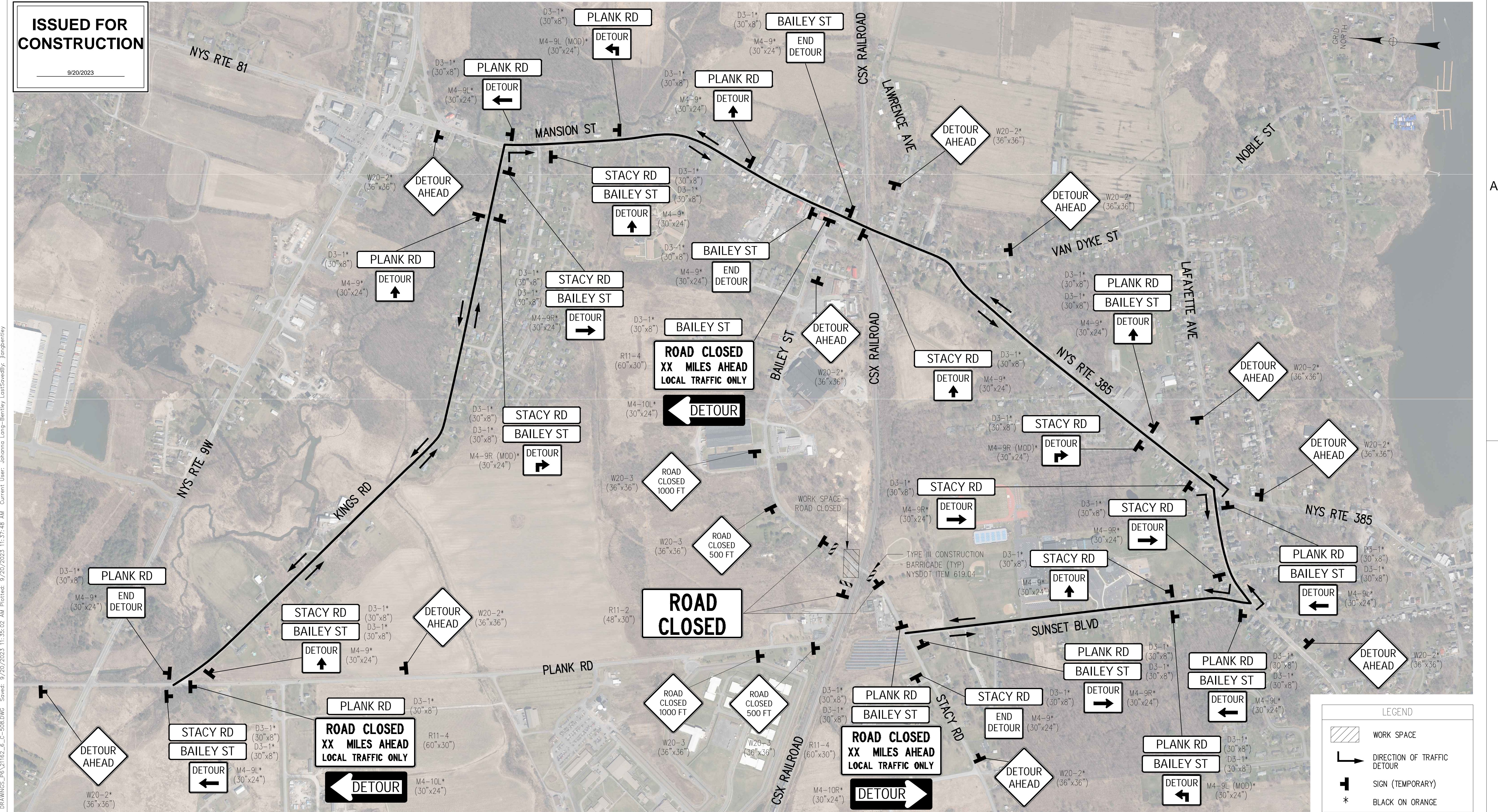
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No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP	

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 10 (PACKAGE 6) - CSX: BETHLEHEM TO CATSKILL
WORK ZONE TRAFFIC CONTROL
RAILROAD AVENUE DETOUR

DRAWN BY:	DESIGNED BY: ZR	APPROVED BY:	SCALE REV. NO.	AS SHOWN	DATE SH. NO.	09/29/2023 XX OF
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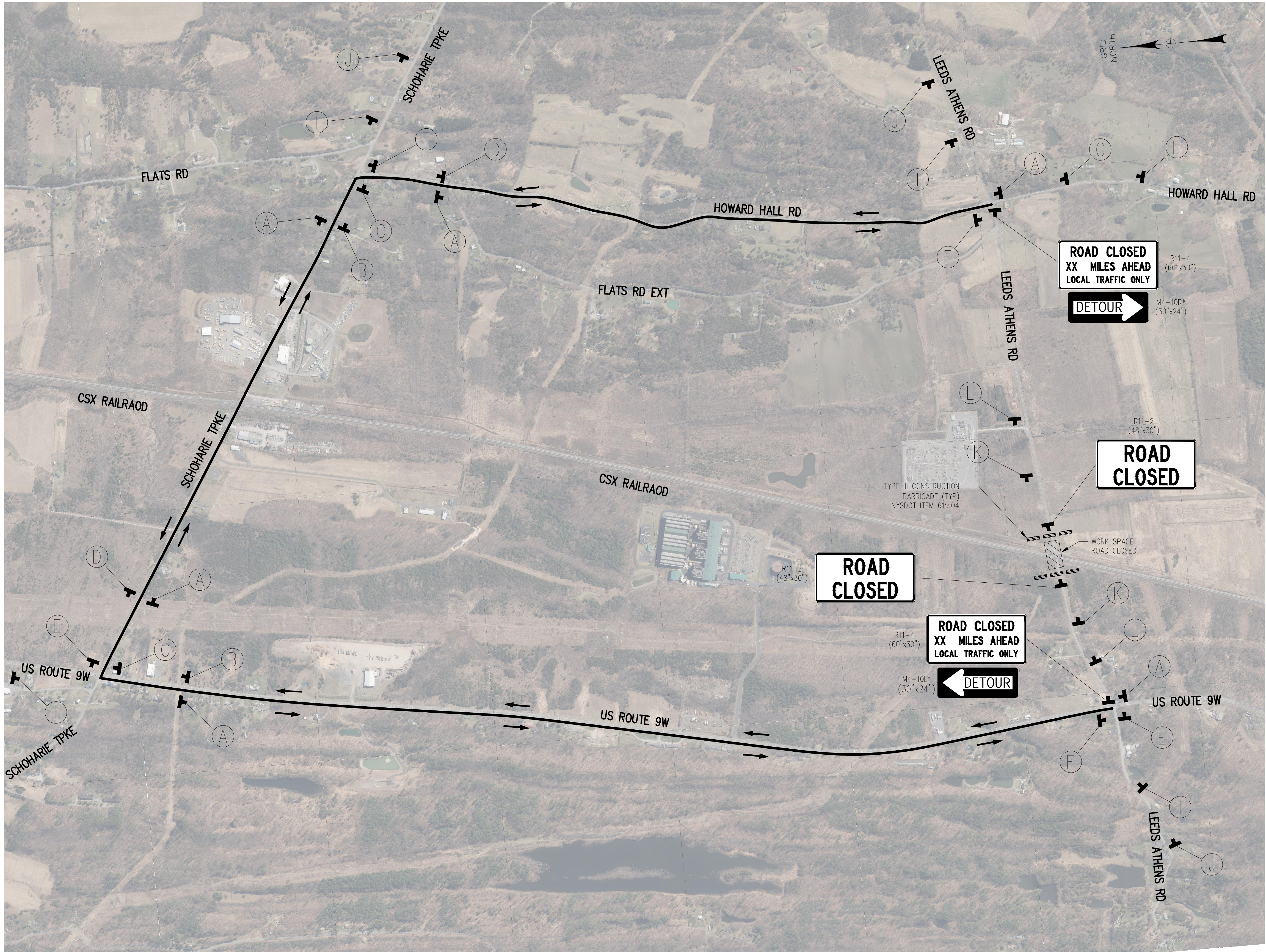
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EDR PROJECT NO.	21075
DRAWING NO.	C-507
DATE	09/29/2023
SH. NO.	XX OF

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BAILEY STREET/SUNSET BOULEVARD DETOUR PLAN
NTS

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LEEDS ATHENS ROAD DETOUR PLAN
NTS

DETOUR SIGN SCHEDULE

<div>A</div> <div><div><div><div><div><div></div><div>GREENE</div><div>74</div><div>COUNTY</div></div></div><div>M1-6 (24"x24")</div></div><div><div>Leeds Athens Rd</div><div>D3-1* (30"x8")</div></div><div><div>DETOUR</div><div>M4-9* (30"x24")</div></div></div></div>	<div>B</div> <div><div><div><div><div><div></div><div>GREENE</div><div>74</div><div>COUNTY</div></div></div><div>M1-6 (24"x24")</div></div><div><div>Leeds Athens Rd</div><div>D3-1* (30"x8")</div></div><div><div>DETOUR</div><div>M4-9R (MOD)* (30"x24")</div></div></div></div>
<div>C</div> <div><div><div><div><div><div></div><div>GREENE</div><div>74</div><div>COUNTY</div></div></div><div>M1-6 (24"x24")</div></div><div><div>Leeds Athens Rd</div><div>D3-1* (30"x8")</div></div><div><div>DETOUR</div><div>M4-9R* (30"x24")</div></div></div></div>	<div>D</div> <div><div><div><div><div><div></div><div>GREENE</div><div>74</div><div>COUNTY</div></div></div><div>M1-6 (24"x24")</div></div><div><div>Leeds Athens Rd</div><div>D3-1* (30"x8")</div></div><div><div>DETOUR</div><div>M4-9L (MOD)* (30"x24")</div></div></div></div>
<div>E</div> <div><div><div><div><div><div></div><div>GREENE</div><div>74</div><div>COUNTY</div></div></div><div>M1-6 (24"x24")</div></div><div><div>Leeds Athens Rd</div><div>D3-1* (30"x8")</div></div><div><div>DETOUR</div><div>M4-9L* (30"x24")</div></div></div></div>	<div>F</div> <div><div><div><div><div><div></div><div>GREENE</div><div>74</div><div>COUNTY</div></div></div><div>M1-6 (24"x24")</div></div><div><div>Leeds Athens Rd</div><div>D3-1* (30"x8")</div></div><div><div>END DETOUR</div><div>M4-9* (30"x24")</div></div></div></div>
<div>G</div> <div><div><div><div><div><div></div><div>GREENE</div><div>74</div><div>COUNTY</div></div></div><div>M1-6 (24"x24")</div></div><div><div>Leeds Athens Rd</div><div>D3-1* (30"x8")</div></div><div><div>DETOUR</div><div>500 FT</div><div>W20-2* (36"x36")</div></div></div></div>	<div>H</div> <div><div><div><div><div><div></div><div>GREENE</div><div>74</div><div>COUNTY</div></div></div><div>M1-6 (24"x24")</div></div><div><div>Leeds Athens Rd</div><div>D3-1* (30"x8")</div></div><div><div>DETOUR</div><div>1000 FT</div><div>W20-2* (36"x36")</div></div></div></div>
<div>I</div> <div><div><div><div><div><div></div><div>GREENE</div><div>74</div><div>COUNTY</div></div></div><div>M1-6 (24"x24")</div></div><div><div>DETOUR</div><div>500 FT</div><div>W20-2* (36"x36")</div></div></div></div>	<div>J</div> <div><div><div><div><div><div></div><div>GREENE</div><div>74</div><div>COUNTY</div></div></div><div>M1-6 (24"x24")</div></div><div><div>DETOUR</div><div>1000 FT</div><div>W20-2* (36"x36")</div></div></div></div>
<div>K</div> <div><div><div><div><div><div></div><div>GREENE</div><div>74</div><div>COUNTY</div></div></div><div>M1-6 (24"x24")</div></div><div><div>ROAD CLOSED</div><div>500 FT</div><div>W20-3* (36"x36")</div></div></div></div>	<div>L</div> <div><div><div><div><div><div></div><div>GREENE</div><div>74</div><div>COUNTY</div></div></div><div>M1-6 (24"x24")</div></div><div><div>ROAD CLOSED</div><div>1000 FT</div><div>W20-3* (36"x36")</div></div></div></div>

ISSUED FOR
CONSTRUCTION

9/19/2023

LEGEND

- WORK SPACE
- DIRECTION OF TRAFFIC
DETOUR
- SIGN (TEMPORARY)
- BLACK ON ORANGE



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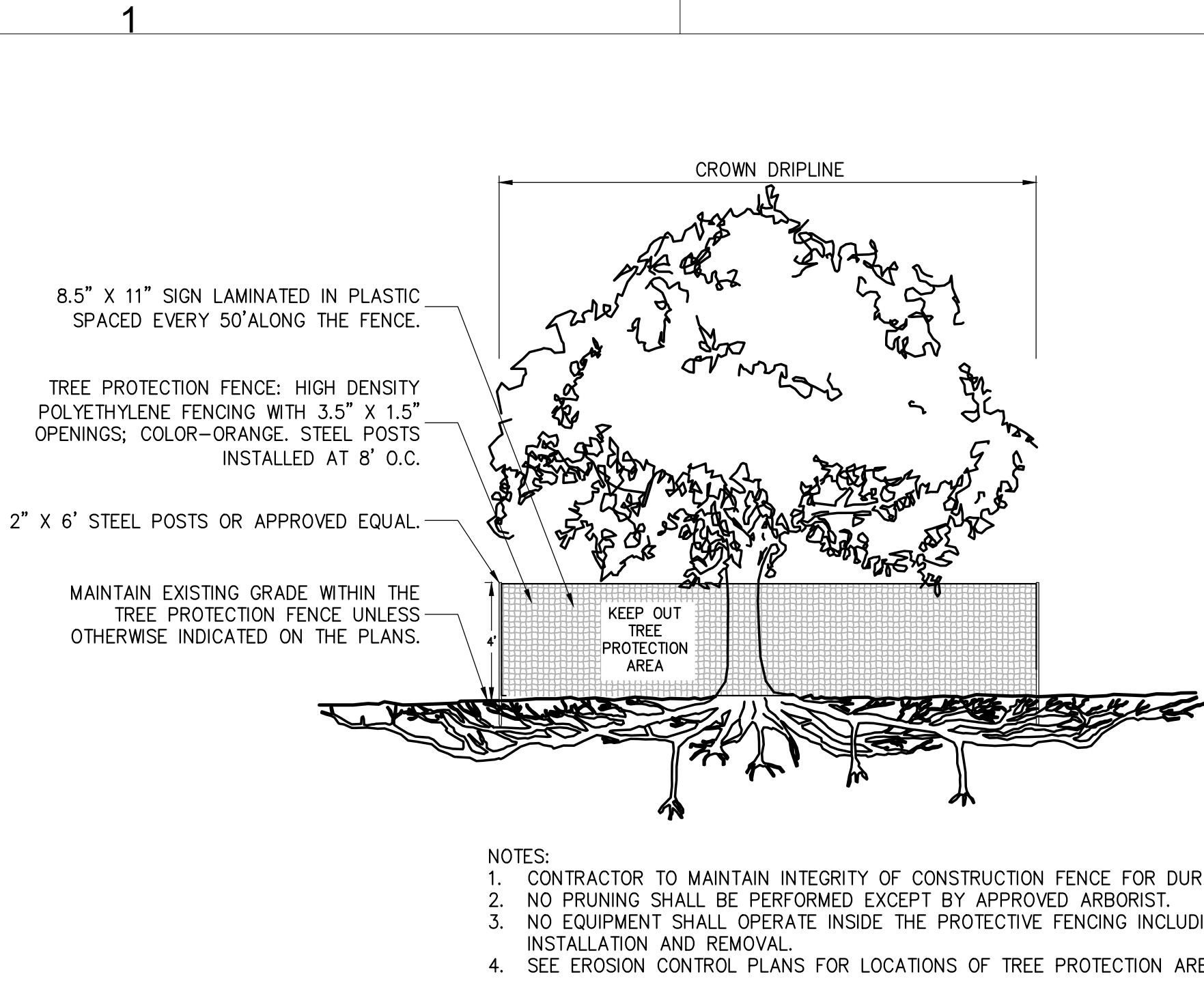
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No.	DATE	SUBMITTAL / REVISION DESCRIPTION					DB	APP	

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 10 (PACKAGE 6) - CSX: BETHLEHEM TO CATSKILL
WORK ZONE TRAFFIC CONTROL
LEEDS ATHENS ROAD DETOUR

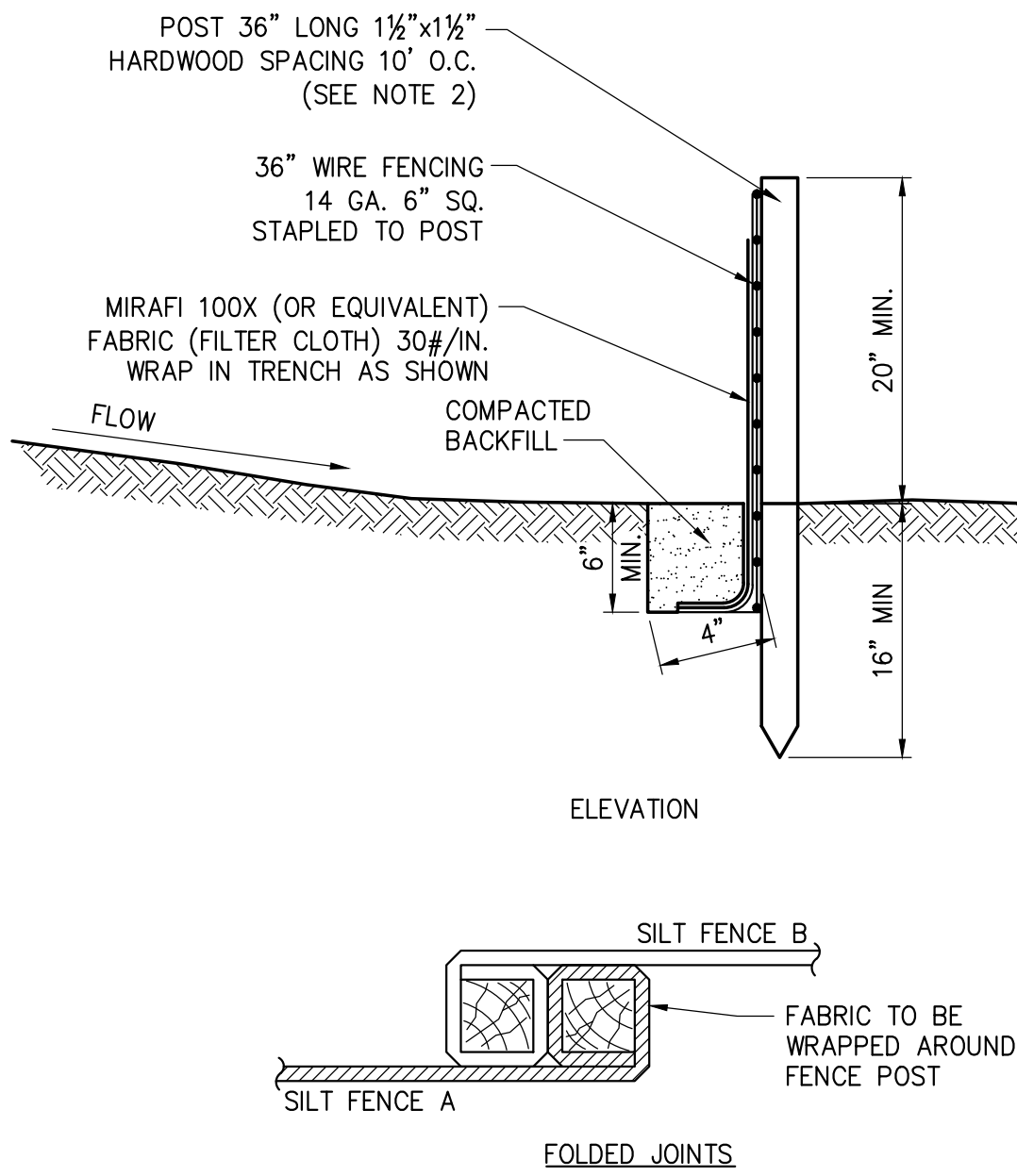
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KIEWIT PROJECT NO.
21162
EDR PROJECT NO.
21075
DRAWING NO.
C-509

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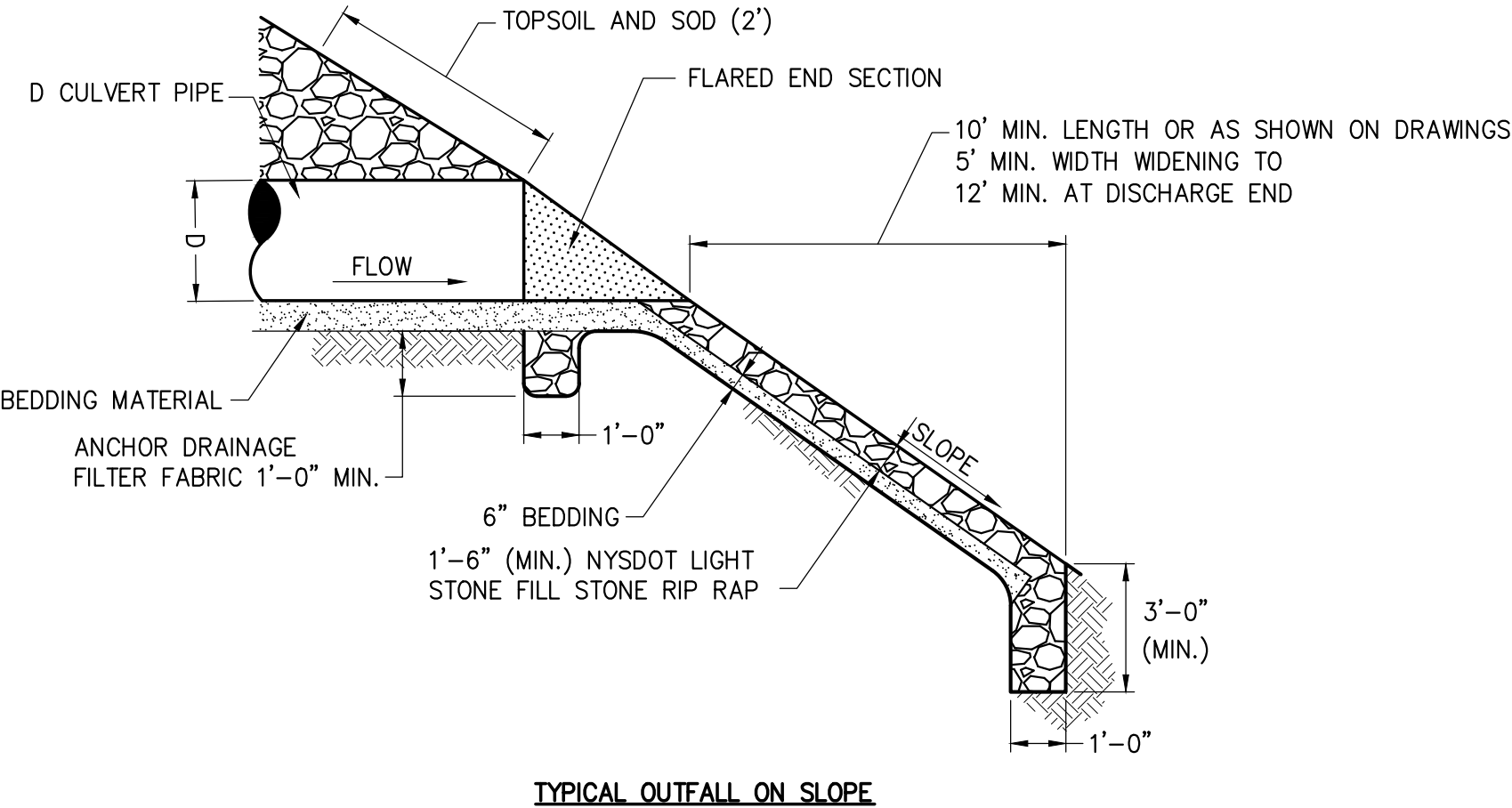
1 TREE PROTECTION
NOT TO SCALE



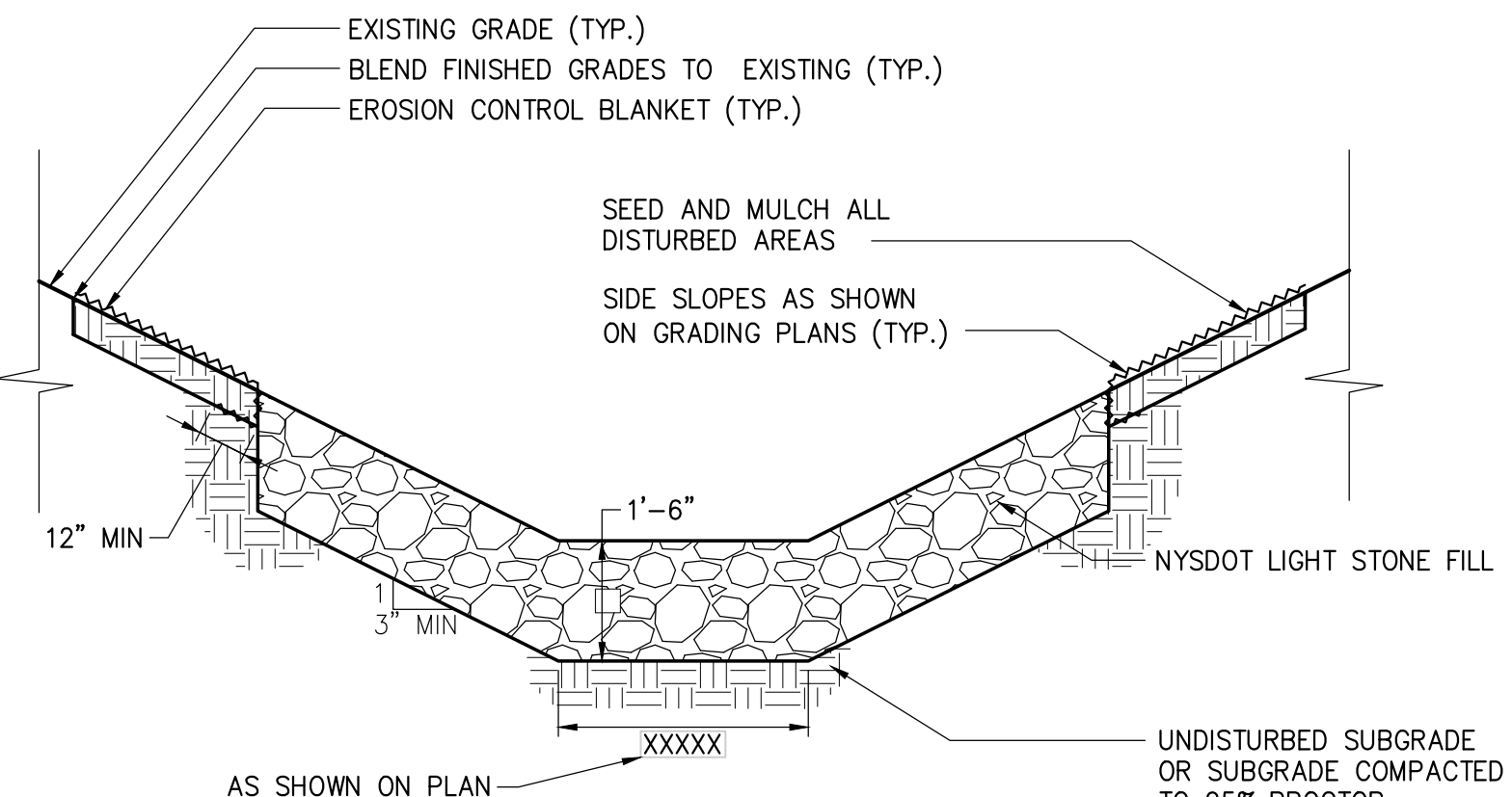
2 COMPOST FILTER SOCK DETAIL
SCALE: N.T.S.

- NOTES:
1. TIE FABRIC TO WIRE FENCE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
 2. IF EXTRA STRENGTH FABRIC (GREATER THAN 50#/INCH) IS USED, WIRE CAN BE DELETED IF POST SPACING IS REDUCED TO 6' O.C.
 3. AT THE ENDS OF THE FENCING THE FIRST 20' SHALL BE TURNED UP THE SLOPE 2'.
 4. POSTS SHOULD BE INCLINED TOWARD THE DIRECTION FLOW CAME FROM.
 5. OVERLAP FABRIC A MINIMUM OF 6" AND FOLDED AT JOINTS. ATTACH FILTER FABRIC TO STAKES ALLOWING EXTENSION INTO TRENCH AS SHOWN; SECURE TO STAKES AS NOTED.
 6. THE MAXIMUM AREA OF RUNOFF PER 100LF. OF FENCE SHALL NOT EXCEED 0.25 ACRES.
 7. MAINTENANCE SHALL BE PERFORMED AS NECESSARY. THE FENCING SHALL BE CHECKED AFTER EVERY STORM TO ENSURE THEIR PROPER FUNCTIONING.
 8. WHEN FENCE IS NO LONGER NEEDED, THE ACCUMULATED SILT, THE POSTS AND FABRIC SHALL BE REMOVED AND TRENCH BACK FILLED WITH TOPSOIL AND SEEDED.
 9. FENCING SHOULD BE PLACED AS SHOWN ON THE DRAWING OR IF NOT SHOWN, 10' BEYOND THE TOE OF THE SLOPE AND AT A SPACING IN ACCORDANCE WITH THE TABLE.
 10. EXCAVATE TRENCH AS PER DETAIL AND SET POSTS AT 10' O.C.
 11. BACKFILL WITH COMPACTED, EXCAVATED SOIL FROM TRENCH.

3 SILT FENCE
SCALE: N.T.S.



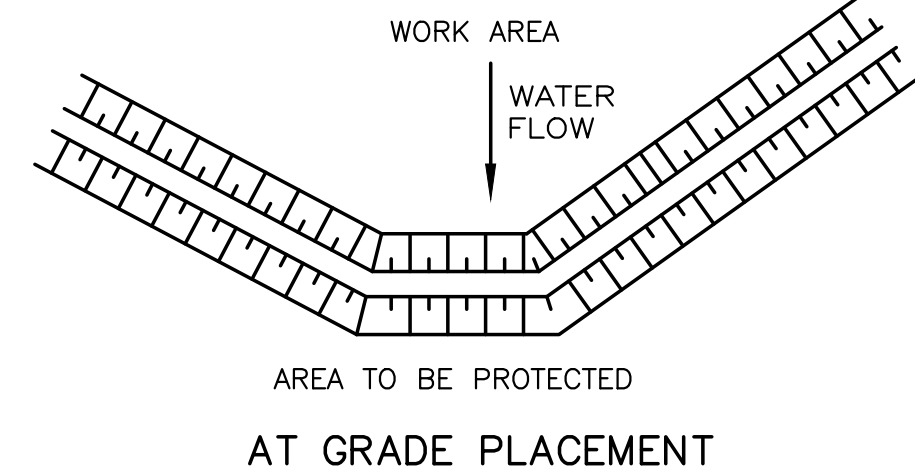
5 TYPICAL GRASS DRAINAGE SWALE
SCALE: N.T.S.



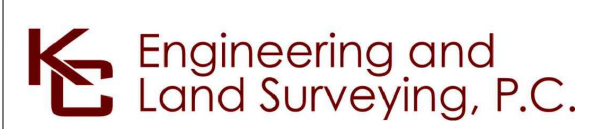
4 TYPICAL CULVERT OUTFALL RIP RAP
SCALE: N.T.S.

6 LIGHT STONE-LINED DRAINAGE CHANNEL
SCALE: N.T.S.

- MAINTENANCE NOTES:
1. TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.
 2. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES $\frac{1}{3}$ OF THE EXPOSED HEIGHT OF THE PRACTICE AND DISPOSED OF IN ACCORDANCE WITH THE SWPPP.
 3. SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED IN THE MANNER REQUIRED BY THE MANUFACTURER OR REPLACED WITHIN 24 HOURS OF INSPECTION NOTIFICATION.
 4. BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTO-DEGRADABLE FILTER SOCKS AFTER 1 YEAR. POLY-PROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
 5. UPON STABILIZATION OF THE AREA CONTRIBUTORY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK SHALL BE REMOVED. FOR REMOVAL THE MESH CAN BE CUT AND COMPOST SPREAD AS AN ADDITIONAL MULCH TO ACT AS A SOIL SUPPLEMENT.



AT GRADE PLACEMENT



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No.	DATE	SUBMITTAL / REVISION DESCRIPTION		DB APP

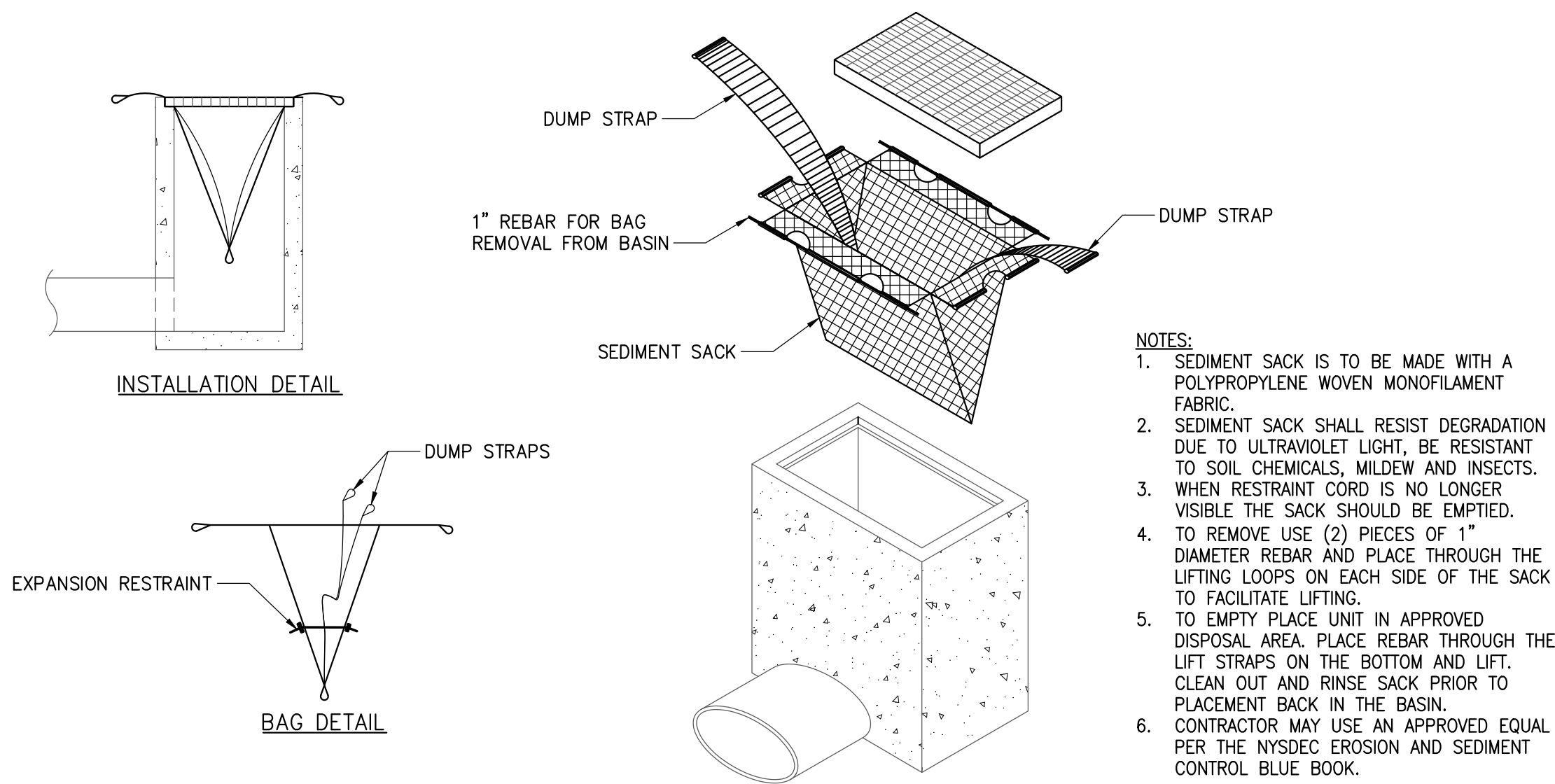
CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 10 (PACKAGE 6) - SELKIRK RAIL YARD BYPASS TO CATSKILL
EROSION AND SEDIMENT CONTROL DETAILS

DRAWN BY:	DESIGNED BY: MK	APPROVED BY: NH	SCALE: AS SHOWN
REV. NO.	0	DATE: 9/29/2023	OF

KIEWIT PROJECT NO.	21162
KC PROJECT NO.	120174
DRAWING NO.	C-601
DATE	9/29/2023
SH.NO.	OF

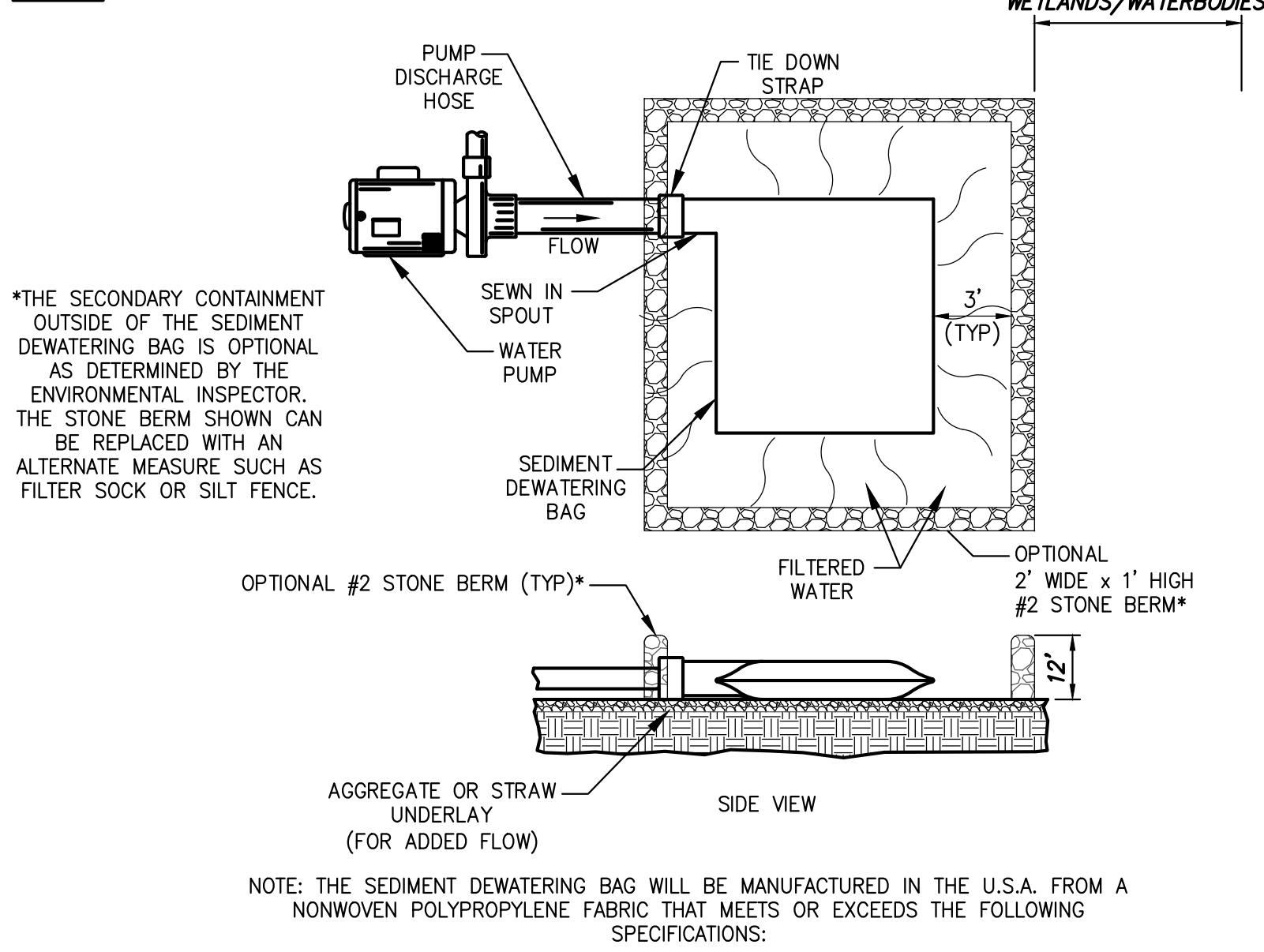
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1



1 INLET PROTECTION

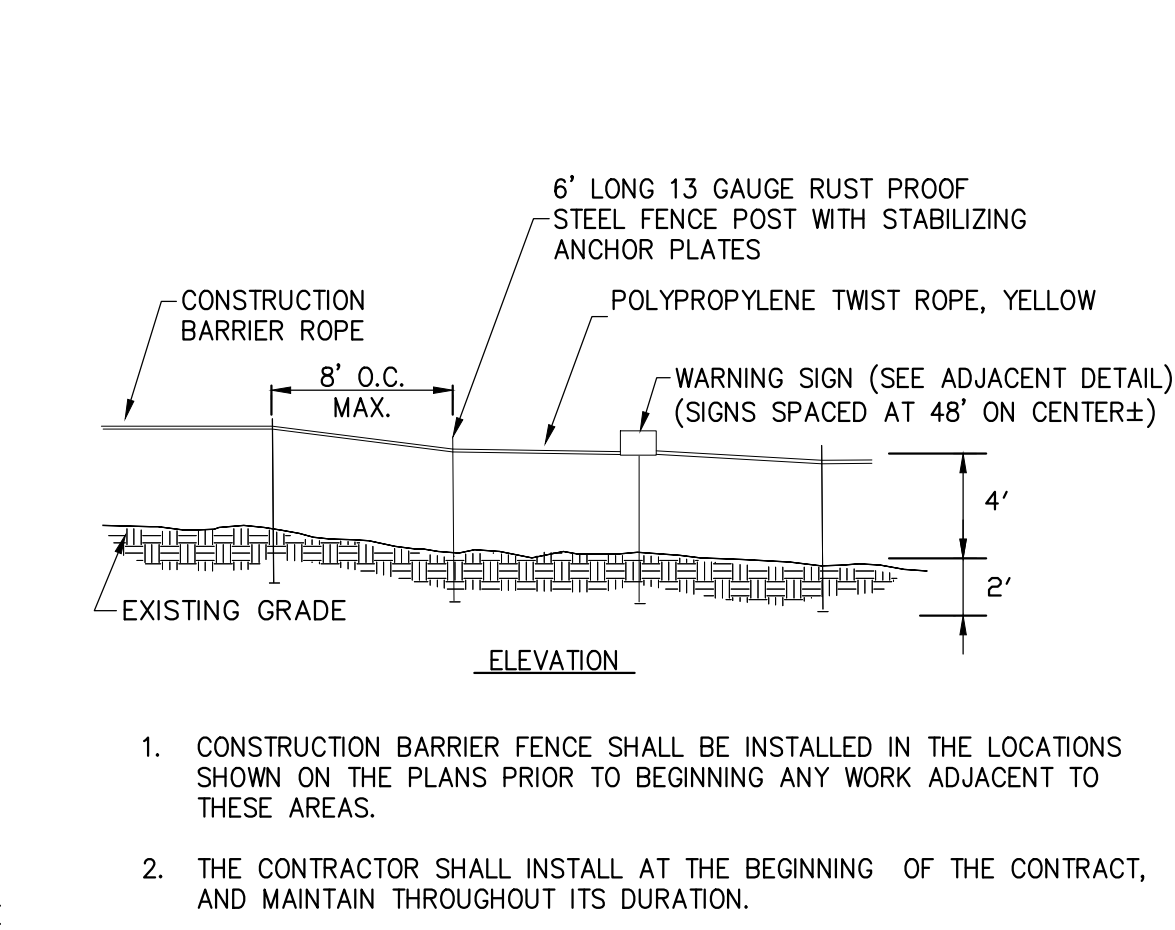
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4 SEDIMENT DEWATERING BAG

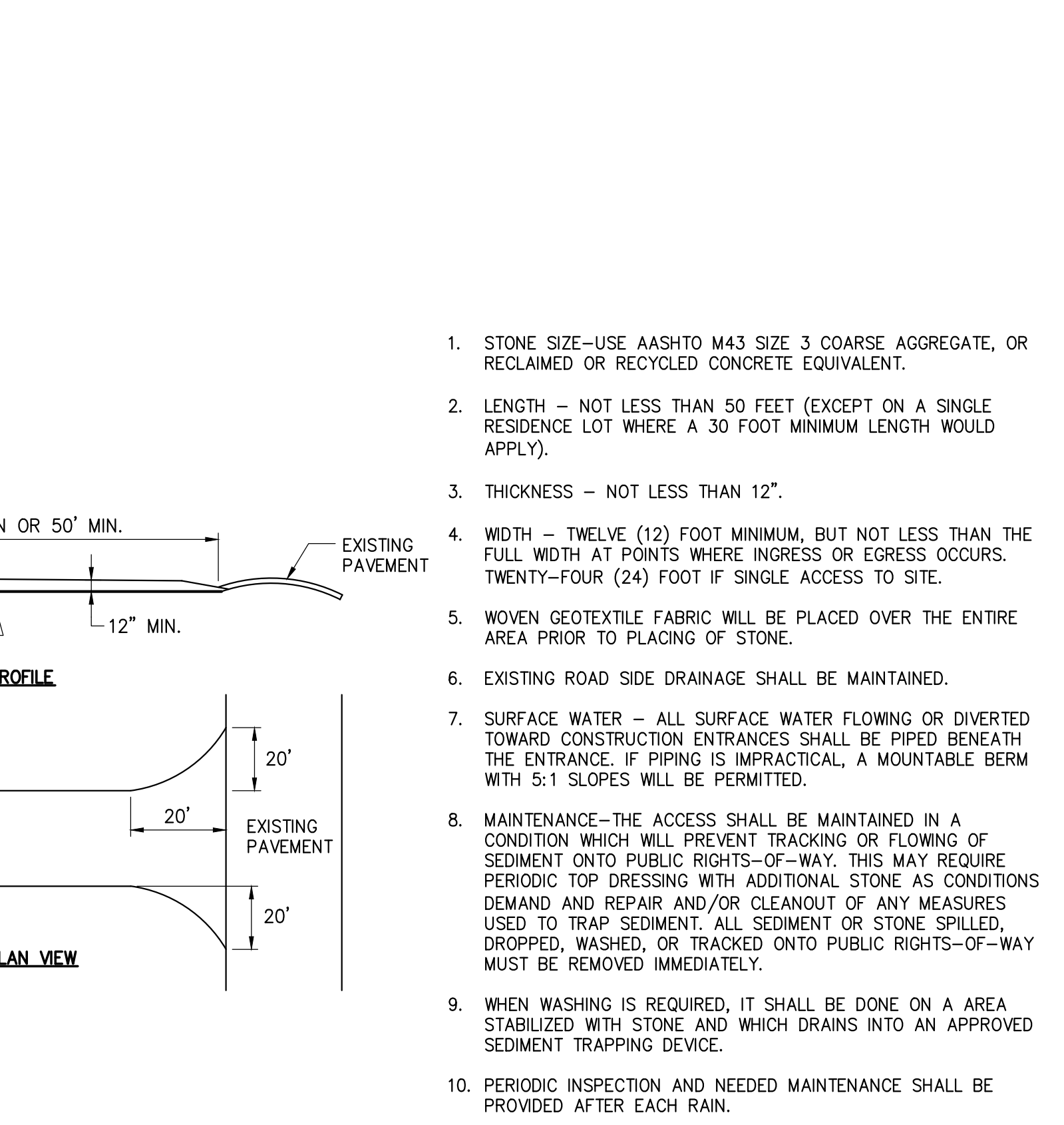
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2



2 WETLAND PROTECTION FENCE

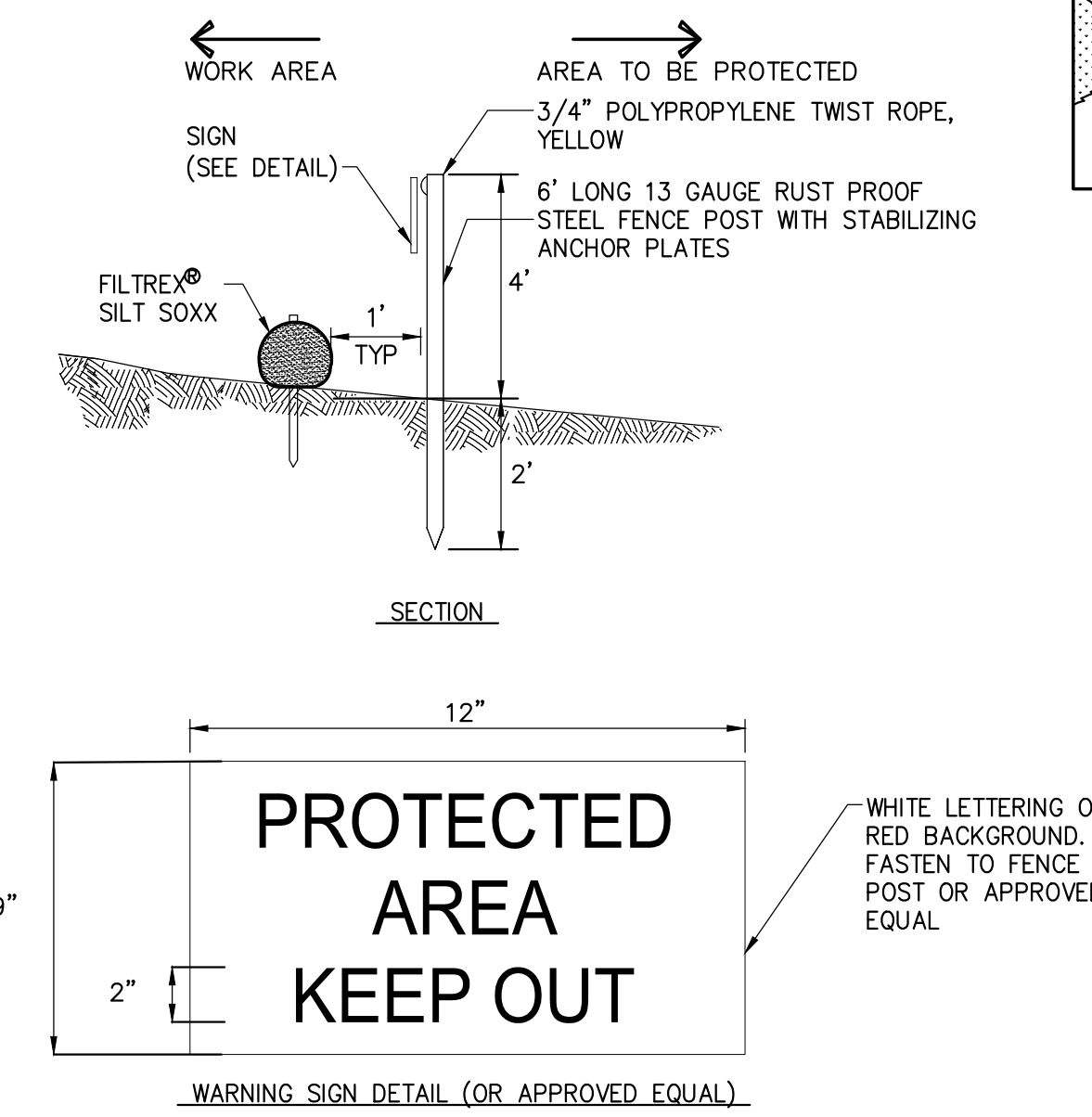
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5 STABILIZED CONSTRUCTION ACCESS

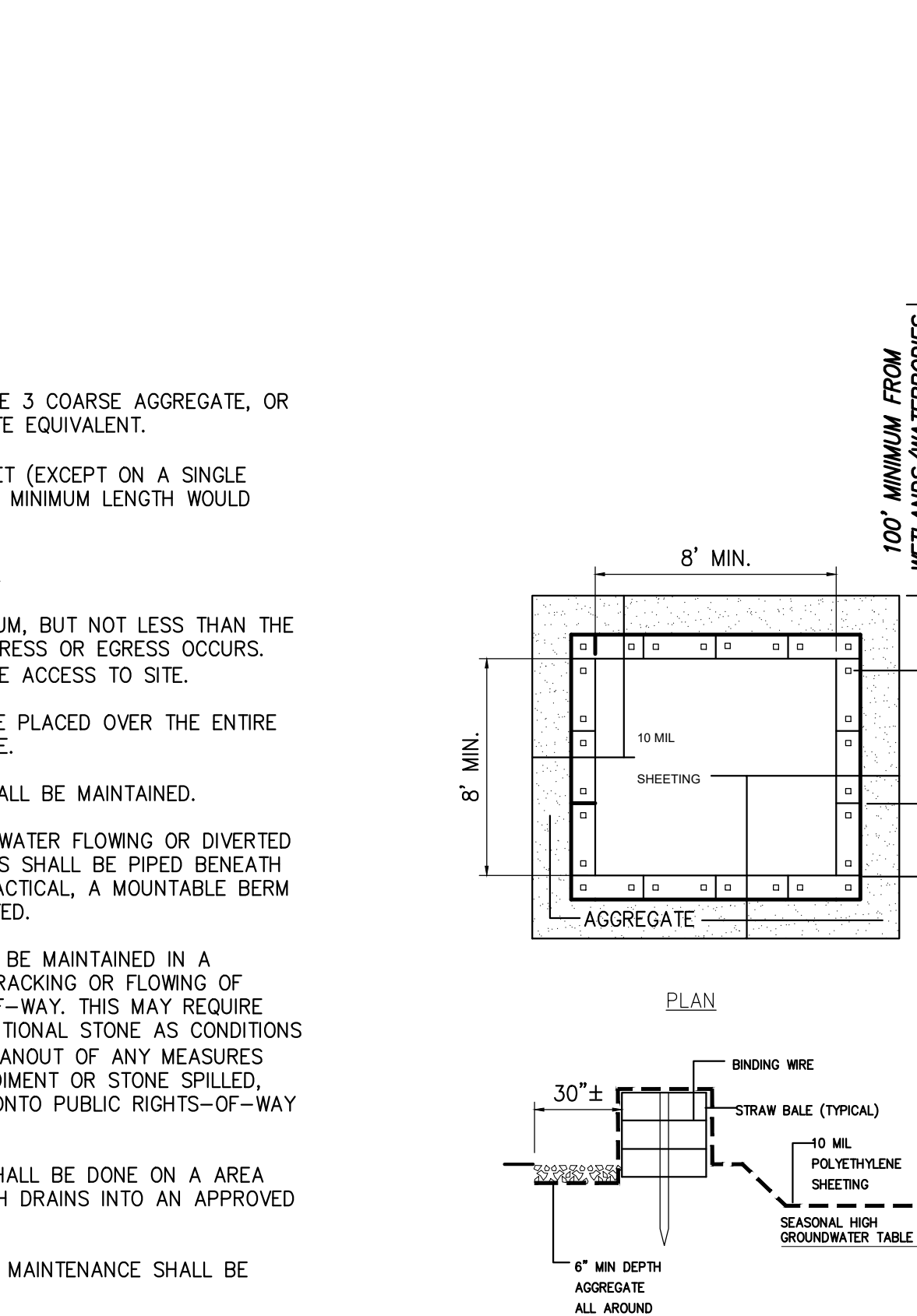
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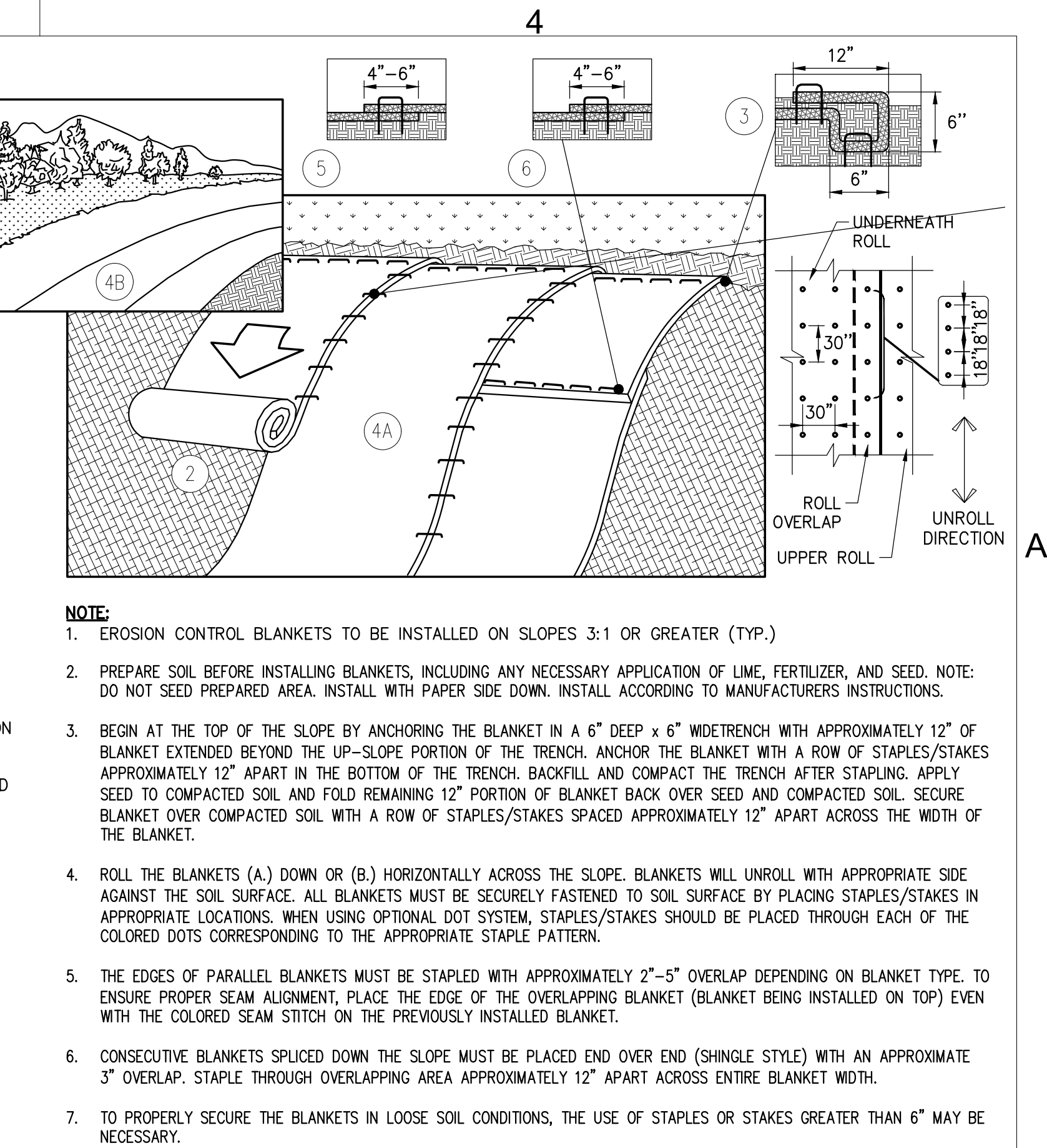
3 EROSION CONTROL BLANKET

SCALE: N.T.S.



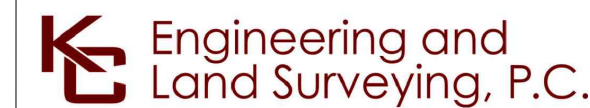
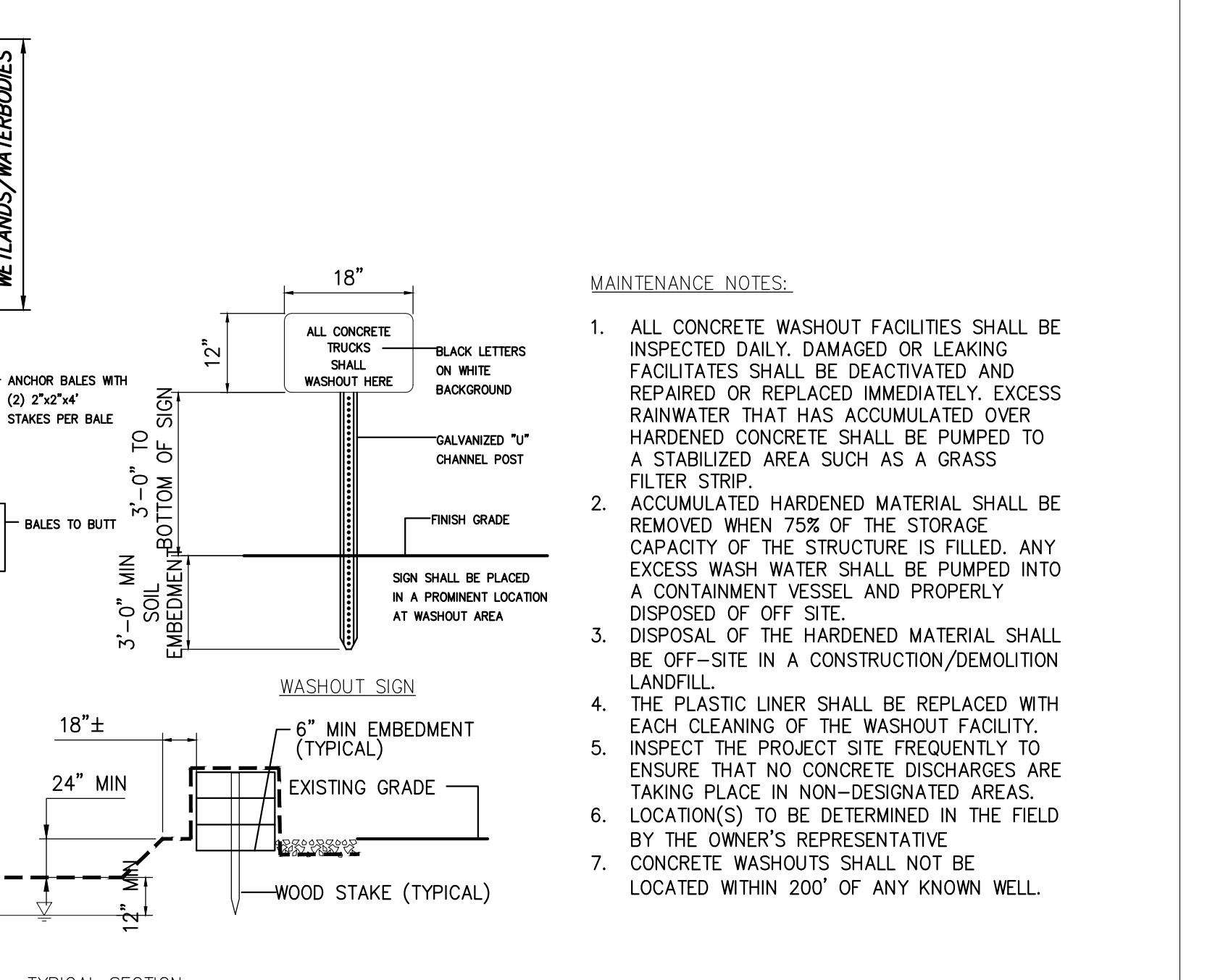
6 CONCRETE WASHOUT AREA

SCALE: N.T.S.



3 EROSION CONTROL BANK STABILIZATION DETAIL

SCALE: N.T.S.



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0	09/29/2023	ISSUED FOR CONSTRUCTION SUBMISSION	MK	NH
No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP

CHAMPLAIN HUDSON POWER EXPRESS SEGMENT 10 (PACKAGE 6) - SELKIRK RAIL YARD BYPASS TO CATSKILL EROSION AND SEDIMENT CONTROL DETAILS

DRAWN BY:	DESIGNED BY: MK	APPROVED BY: NH	SCALE: AS SHOWN	DATE: 9/29/2023
			REV. NO. 0	SH.NO. OF

KIEWIT PROJECT NO.	21162
KC PROJECT NO.	120174
DRAWING NO.	C-602
DATE	9/29/2023
SH.NO.	OF

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DEWATERING PLAN:
CONSTRUCTION ACTIVITY WITHIN THE STREAM SHALL BE PROHIBITED BETWEEN OCTOBER 1 THROUGH MAY 31 FOR ALL STREAMS DESIGNATED AS TROUT WATER OR SUITABLE FOR TROUT SPAWNING.

DEWATERING PROCEDURES:
TRAPPED WATER WITHIN THE TRENCH SHALL BE DISCHARGED INTO A PORTABLE SEDIMENT TANK OR SEDIMENT FILTER BAGS LOCATED AWAY FROM THE WATERBODY TO PREVENT SILT-LADEN WATER FROM FLOWING INTO THE WATERBODY.

DAM AND PUMP CROSSING PROCEDURES:
BEFORE THE INITIATION OF ANY IN-STREAM ACTIVITIES, ALL MATERIAL ASSOCIATED WITH THE DAM AND PUMP SITE SET-UP MUST BE ON-HAND. THESE MATERIALS INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
A) WATER BARRIERS
B) DOWNSTREAM SPLASH PLATE
C) PUMPS (PRIMARY AND SECONDARY) AND HOSES
D) FUEL FOR PUMPS (STORED AT LEAST ONE HUNDRED (100) FEET FROM WATERBODY)
E) SPILL PREVENTION AND CONTROL MATERIALS (INCLUDING SECONDARY CONTAINMENT FOR PUMPS LOCATED WITHIN ONE HUNDRED (100) FEET OF WETLAND OR WATERBODY)

ONCE THE NECESSARY MATERIALS ARE ON-LOCATION, SITE SET-UP MAY BEGIN. THE FIRST STEP IS TO SELECT AN APPROPRIATE LOCATION FOR THE PUMP INTAKE HOSE(S) TO BE POSITIONED. DEPENDING UPON THE CHANNEL CHARACTERISTICS, EITHER A NATURALLY OCCURRING DEEP SPOT OR CHANNEL WILL BE SELECTED AS A 'SUMP' OR A SUMP MAY NEED TO BE CREATED TO PROVIDE SUFFICIENT WATER DEPTH FOR THE SCREENED HOSE INTAKE(S). IF A NATURAL SUMP IS NOT AVAILABLE FOR THE INTAKE HOSE, AN IN-STREAM SUMP WILL BE CREATED BY EXCAVATING WITHIN THE STREAM CHANNEL AND SURROUNDING THE EXCAVATION USING SANDBAGS.

THE FOLLOWING BMPS SHALL BE IMPLEMENTED AT THE INTAKE OR SUMP SITE:
A) ALL EQUIPMENT, MATERIAL, AND CONSTRUCTION PERSONNEL NECESSARY FOR THE CROSSING SHALL BE ON- SITE BEFORE SET-UP BEGINS
B) UPON COMPLETION OF THE WATERBODY CROSSING ANY SANDBAGS UTILIZED FOR A SUMP SHALL BE REMOVED AND THE STREAM CHANNEL RESTORED TO PRE-CONSTRUCTION CONDITION
C) THE SUMP SHALL BE OF SUFFICIENT DEPTH TO PREVENT THE ENTRAINMENT OF EXCESSIVE AMOUNTS OF SEDIMENT INTO THE SUMP INTAKE, HOSE AND PUMP

DURING THE ASSEMBLY OF THE UPSTREAM AND DOWNSTREAM WATER BARRIERS, THE PUMPING NETWORK SHALL BE SETUP TO BEGIN THE TRANSFER OF WATER AROUND THE CONSTRUCTION WORK AREA.

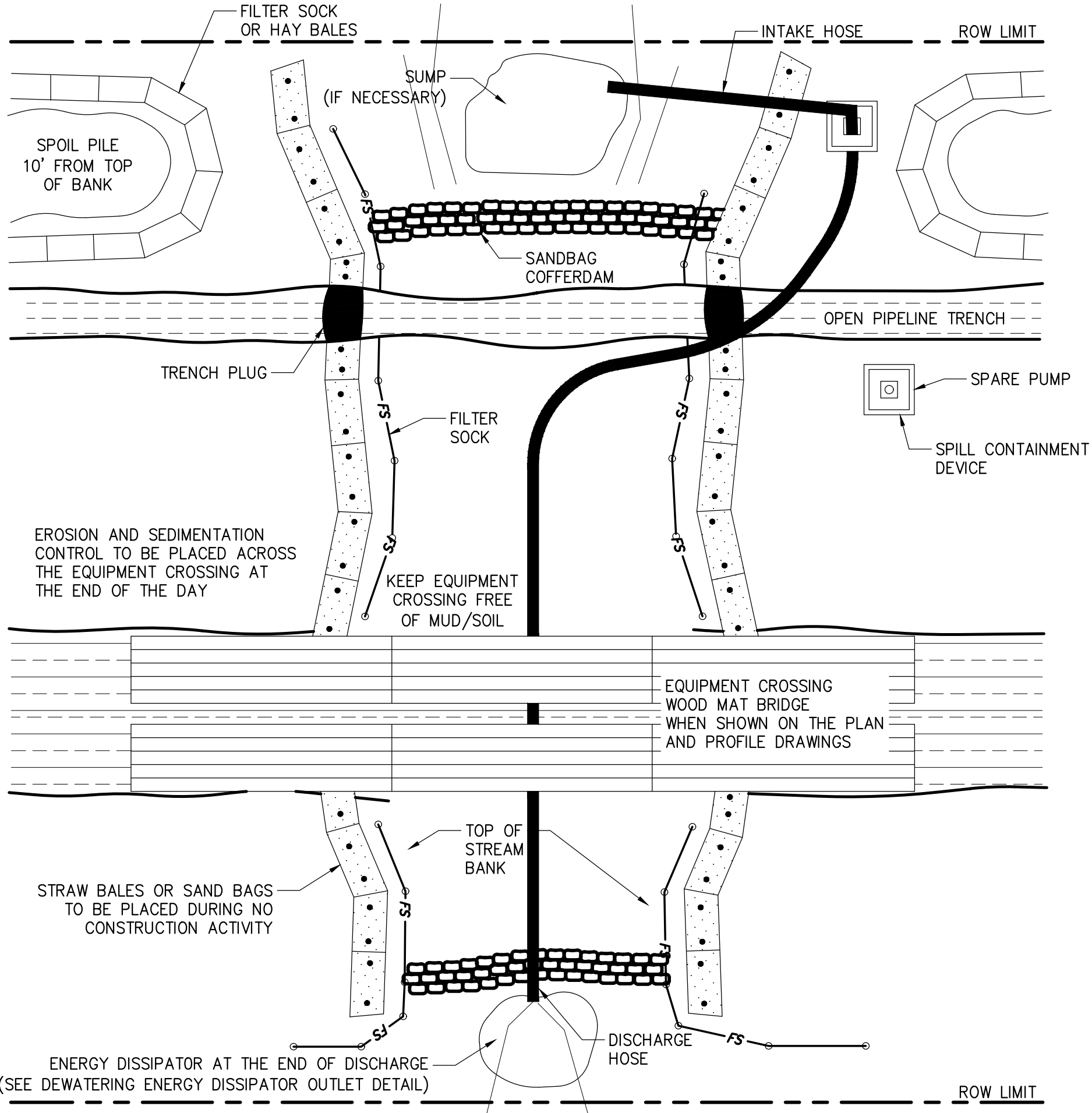
THE PUMP INTAKE AND DISCHARGE HOSES SHALL BE APPROPRIATELY PLACED AND OF SUFFICIENT LENGTH, BASED UPON SITE-SPECIFIC CONDITIONS. THE INTAKE HOSE SHALL BE SCREENED TO PREVENT THE ENTRAINMENT OF FISH. DISCHARGE HOSES SHALL BE PROVIDED WITH SUPPORT OVER THE DITCH-LINE AS NEEDED TO PREVENT EXCESSIVE SAGGING AND REDUCTION OF PUMPING CAPACITY.

THE NUMBER AND SIZES OF PUMPS TO BE USED AT ANY CROSSING SHALL BE DEPENDENT UPON THE VOLUME OF WATER FLOWING AT THE TIME THE CROSSING IS MADE.

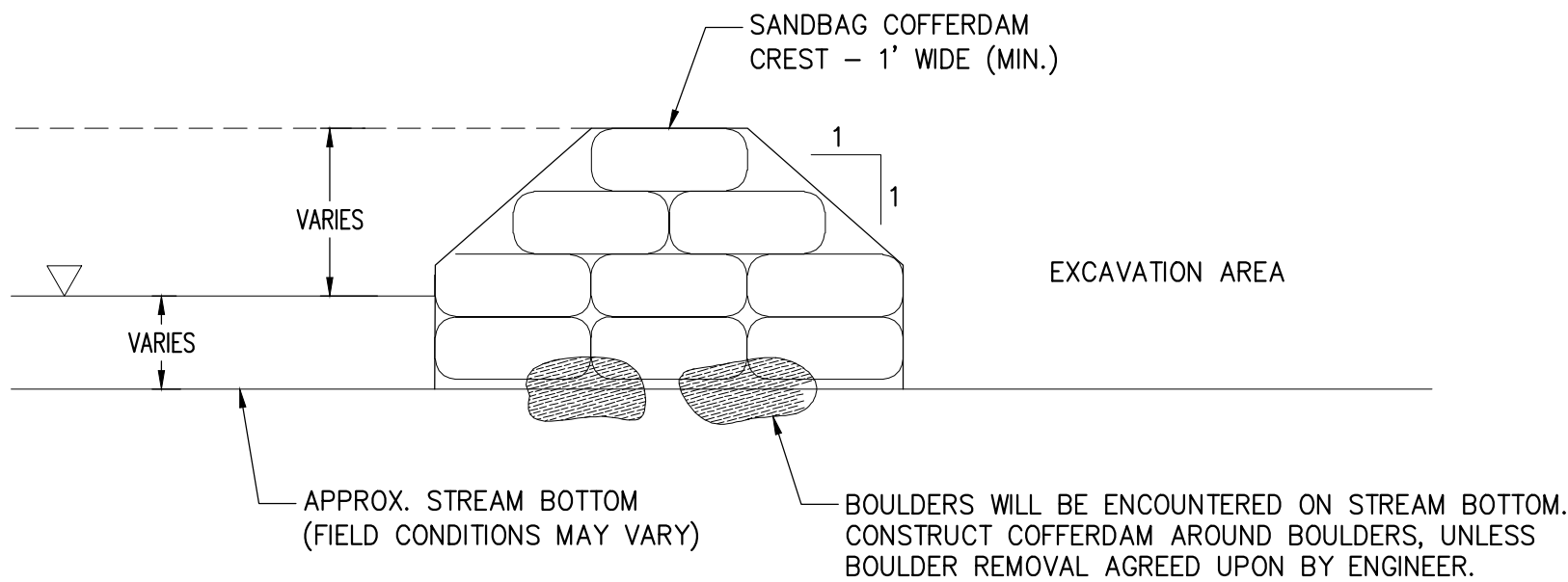
BMPS TO BE IMPLEMENTED DURING PUMP SET-UP INCLUDE:
D) PUMPS SHALL BE FUELED PRIOR TO PLACING THEM IN POSITION
E) IF IT IS NECESSARY TO REFUEL DURING THE PUMP OPERATION, EXTRA CARE SHALL BE TAKEN TO AVOID SPILLAGE AND SPILL CONTROL MATERIALS WILL BE READILY AVAILABLE ON SITE
F) SECONDARY CONTAINMENT SHALL BE PLACED UNDER THE PUMPS AS AN ADDITIONAL PRECAUTIONARY MEASURE TO PROTECT AGAINST ACCIDENTAL LEAKAGE OR SPILL
G) FUEL FOR FILLING THE PUMPS SHALL NOT BE STORED WITHIN ONE HUNDRED (100) FEET OF THE WATERBODY
H) THE INTAKE HOSE SHALL BE SCREENED TO PREVENT THE ENTRAINMENT OF FISH
I) THE END OF THE DISCHARGE HOSE SHALL BE MOUNTED UPON A SPLASH PLATE OR SIMILAR DEVICE OR IN A MANNER THAT WILL DISSIPATE THE ENERGY OF THE DISCHARGING WATER AND REDUCE OR ELIMINATE STREAMBED SCOUR
J) IF HOSES CROSS THE TEMPORARY ACCESS ROAD, THEY SHALL BE PROTECTED FROM TRAVELING EQUIPMENT
K) PUMP(S) SHALL BE OF SUFFICIENT CAPACITY TO TRANSFER TWICE THE CAPACITY OF THE ENTIRE STREAMFLOW AROUND THE CONSTRUCTION WORK AREA
L) RESERVE OR BACKUP PUMP(S) SHALL BE KEPT ON SITE AT ALL TIMES.

WATER BARRIER INSTALLATION:
BETWEEN THE PUMP HOSE INTAKE OR SUMP HOLE AREA AND THE TRENCH, AS WELL AS DOWNSTREAM OF THE TRENCH, DAMS OF RELATIVELY IMPERVIOUS MATERIAL SHALL BE INSTALLED. THE UPSTREAM DAM SHALL BE COMPLETED FIRST. EVERY REASONABLE EFFORT SHALL BE MADE TO CONSTRUCT THE DAMS AS WATER TIGHT AS POSSIBLE.

THE FOLLOWING BMPS WILL BE IMPLEMENTED DURING WATER BARRIER INSTALLATION:
A) DAMS SHALL BE CONSTRUCTED OF EITHER SANDBAGS, WATER BLADDERS, STEEL PLATES, PORTA-DAMS OR EQUIVALENT OR 'JERSEY BARRIERS'AND PLASTIC SHEETING OR A COMBINATION THEREOF
B) THE DAMS SHALL BE CONSTRUCTED OF SUFFICIENT HEIGHT TO ALLOW ADEQUATE FREEBOARD UNDER REASONABLY EXPECTED WATER LEVELS OR FLOWS AND PROVIDE FOR SOME IMPOUNDMENT OF WATER
C) PRIOR TO COMPLETION OF THE DAMS, THE PUMP(S) MUST BE STARTED IN ORDER TO PROVIDE DOWNSTREAM FLOW OF WATER AROUND THE CONSTRUCTION WORK AREA
D) THE RATE OF PUMPING SHALL BE MONITORED TO MINIMIZE DRAINING OF THE INTAKE SUMP AND THE RESULTING CESSATION IN FLOW. ALTERNATIVELY, PUMPING SHALL BE MONITORED AND INCREASED AS NECESSARY TO PREVENT OVERTOPPING OF THE DAMS.

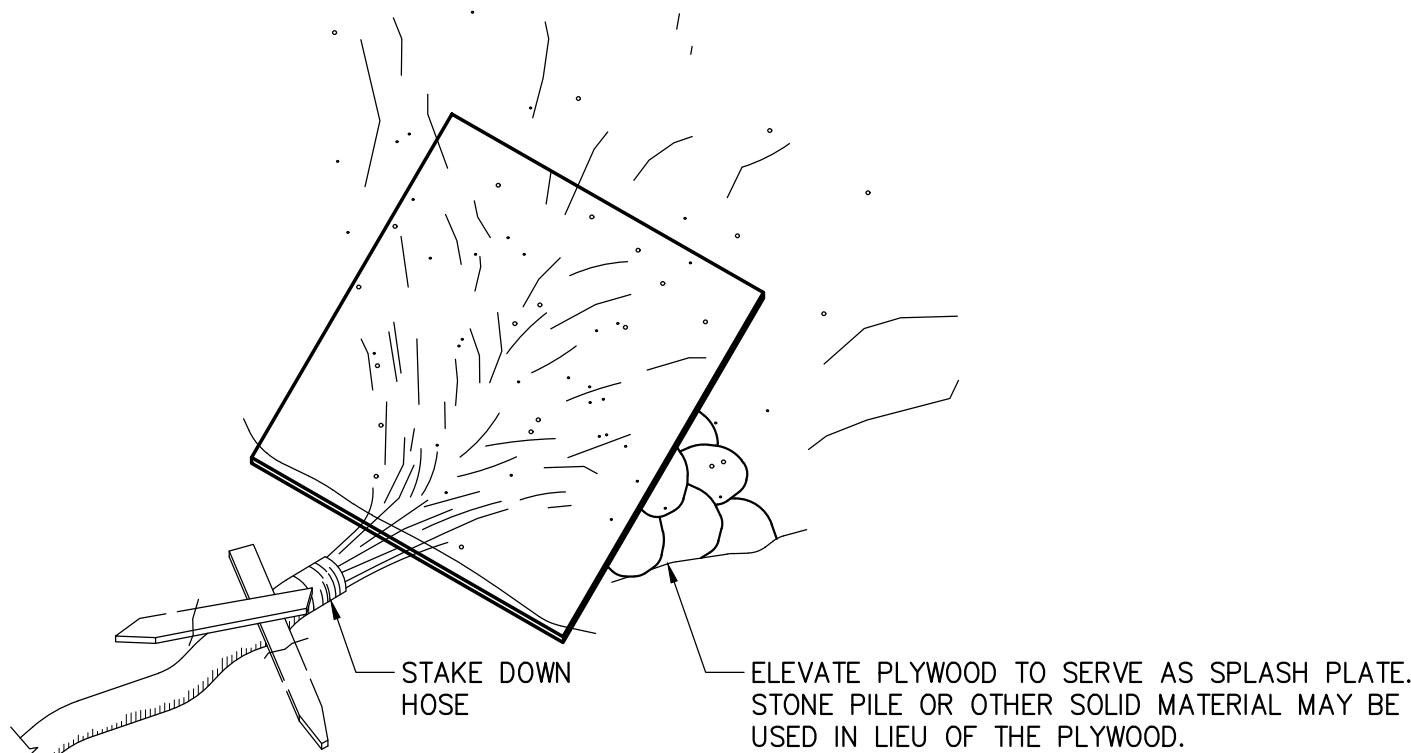


1 DAM AND PUMP AROUND STREAM CROSSING
SCALE: N.T.S.

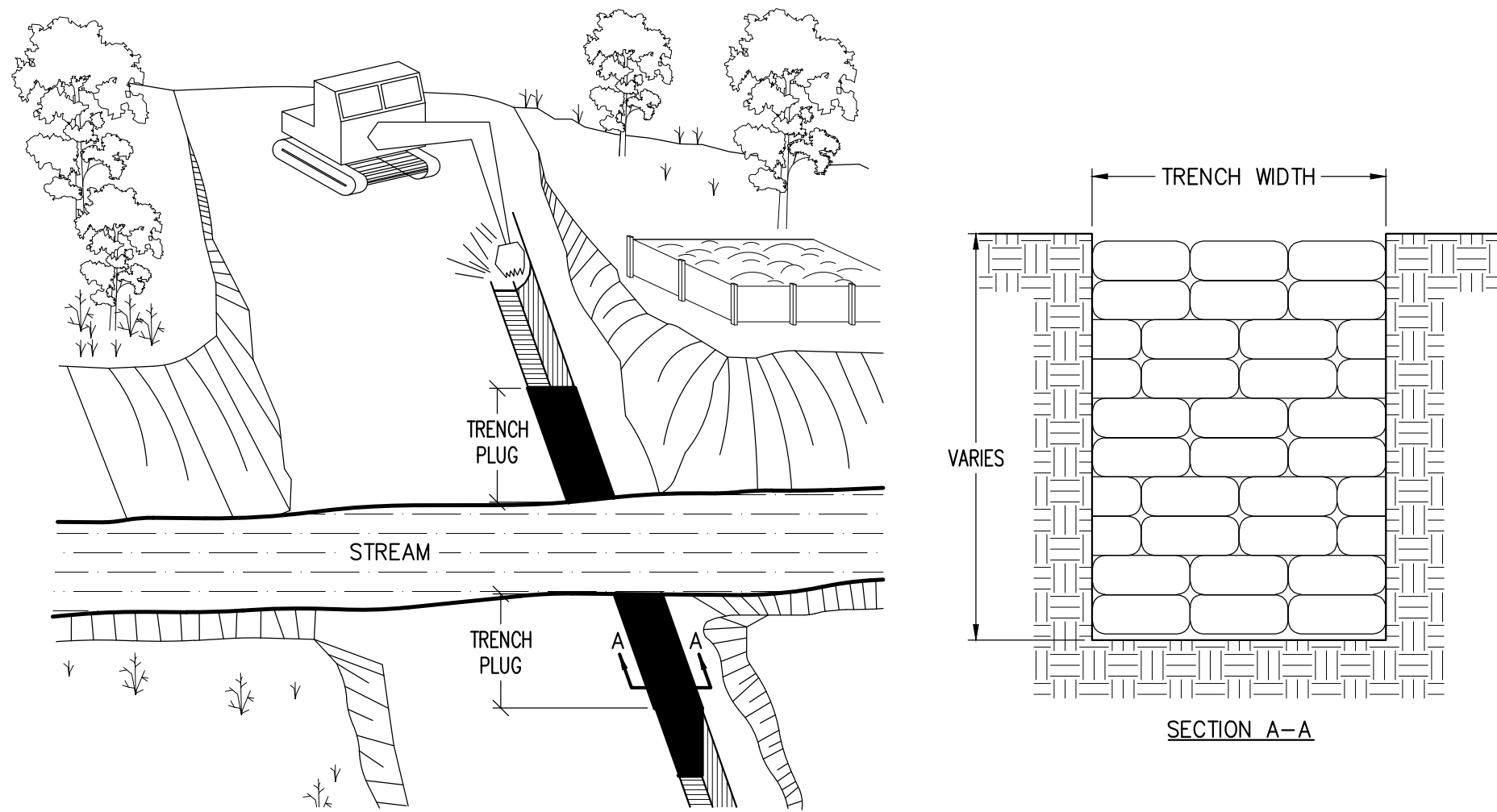


2 SANDBAG COFFERDAM DETAIL
SCALE: N.T.S.

- NOTES:
- SAND BAGS SHALL BE FILTER FABRIC TYPE AND BE DOUBLE BAGGED.
 - PORTADAM, BY PORTADAM, INC. AND AQUADAM, BY AQUADAM, INC. SHALL BE CONSIDERED ACCEPTABLE SUBSTITUTES TO SAND BAGS.



3 DEWATERING ENERGY DISSIPATOR OUTLET DETAIL
SCALE: N.T.S.



4 TRENCH PLUG DETAIL
SCALE: N.T.S.

- NOTES:
- SAND BAGS SHALL BE FILTER FABRIC TYPE AND BE DOUBLE BAGGED.
 - PORTADAM, BY PORTADAM, INC. SHALL BE CONSIDERED ACCEPTABLE SUBSTITUTE TO SAND BAGS.

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 10 (PACKAGE 6) - SELKIRK RAIL YARD BYPASS TO CATSKILL
EROSION AND SEDIMENT CONTROL DETAILS

KIEWIT PROJECT NO.
21162
KC PROJECT NO.
120174
DRAWING NO.
C-603

DRAWN BY:	DESIGNED BY: MK	APPROVED BY: NH	SCALE REV. NO.	AS SHOWN 0	DATE SH.NO.	9/29/2023 OF
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- APPLICATION NOTES:
- THE PRIMARY PURPOSE OF A CHECK DAM IS TO REDUCE EROSION IN A CHANNEL BY REDUCING FLOW VELOCITY IN THE CHANNEL.
 - CHECK DAMS WILL CAPTURE SEDIMENT THAT FALLS OUT OF SUSPENSION BEHIND THE UPSTREAM SIDE OF THE CHECK DAM DUE TO DECREASED VELOCITY.
 - CHECK DAMS ARE NOT INTENDED TO, AND WILL NOT, FILTER SEDIMENT FROM TURBID WATER.
 - SLOPES EXCEEDING 10% SHALL INCLUDE A CHANNEL PROTECTIVE LINING.
 - AVOID PLACEMENT OF STONE CHECK DAMS WITHIN ROADWAY CLEAR ZONES, INSTEAD CONSIDER SEDIMENT FILTER LOG CHECK DAMS OR PREFABRICATED CHECK DAM.
 - CHECK DAMS SHALL BE ANCHORED IN THE CHANNEL BY A CUT OFF TRENCH 1.5 FEET WIDE AND 0.5 FEET DEEP AND LINED WITH FILTER FABRIC TO PREVENT SOIL MIGRATION.
 - THE UPSTREAM DAM TOE SHALL BE AT EQUAL ELEVATION TO THE DOWN STREAM DAM CREST.

- GENERAL NOTES:
- MAXIMUM DRAINAGE AREA CONTRIBUTING TO TEMPORARY STONE CHECK DAM SHALL BE 2 ACRES.
 - MEASURES SHALL BE INSPECTED EVERY (7) CALENDAR DAYS AND SHOULD BE INSPECTED AFTER EACH RUNOFF EVENT. MEASURES SHALL BE CLEANED AND REPAIRED AS REQUIRED.
 - SEDIMENT SHALL BE REMOVED WHEN ACCUMULATION REACHES ONE-HALF OF THE MEASURE HEIGHT. SEDIMENT SHALL BE DISPOSED OF AS UNSUITABLE MATERIAL.
 - COARSE AGGREGATE FACING MATERIAL FOR THE STONE CHECK DAM SHALL MEET THE GRADATION REQUIREMENTS OF SIZE DESIGNATION #1 OR #2 OF TABLE 703-4 FROM SECTION 703-02 OF THE NYS DOT STANDARD SPECIFICATIONS. STONE FILLING CORE MATERIAL FOR THE STONE CHECK DAM SHALL MEET THE GRADATION REQUIREMENTS OF LIGHT STONE FILLING.
 - THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM SHALL BE PROTECTED FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
 - DURING INSPECTIONS ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCE BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.
 - REFER TO SECTION 733-21 OF THE NYS DOT STANDARD SPECIFICATIONS FOR LIGHT STONE FILL GRADATION.

STONE CHECK DAM PLACEMENT INTERVAL *	
DITCH SLOPE	PLACEMENT INTERVAL (I) (BASED ON 2' HEIGHT)
1 %	200'
2 %	100'
3 %	66'
4 %	50'
5 %	40'
6 %	33'
8 %	25'
10 %	20'

* I = H / S

WHERE:

I = CHECK DAM SPACING INTERVAL

H = CHECK DAM HEIGHT

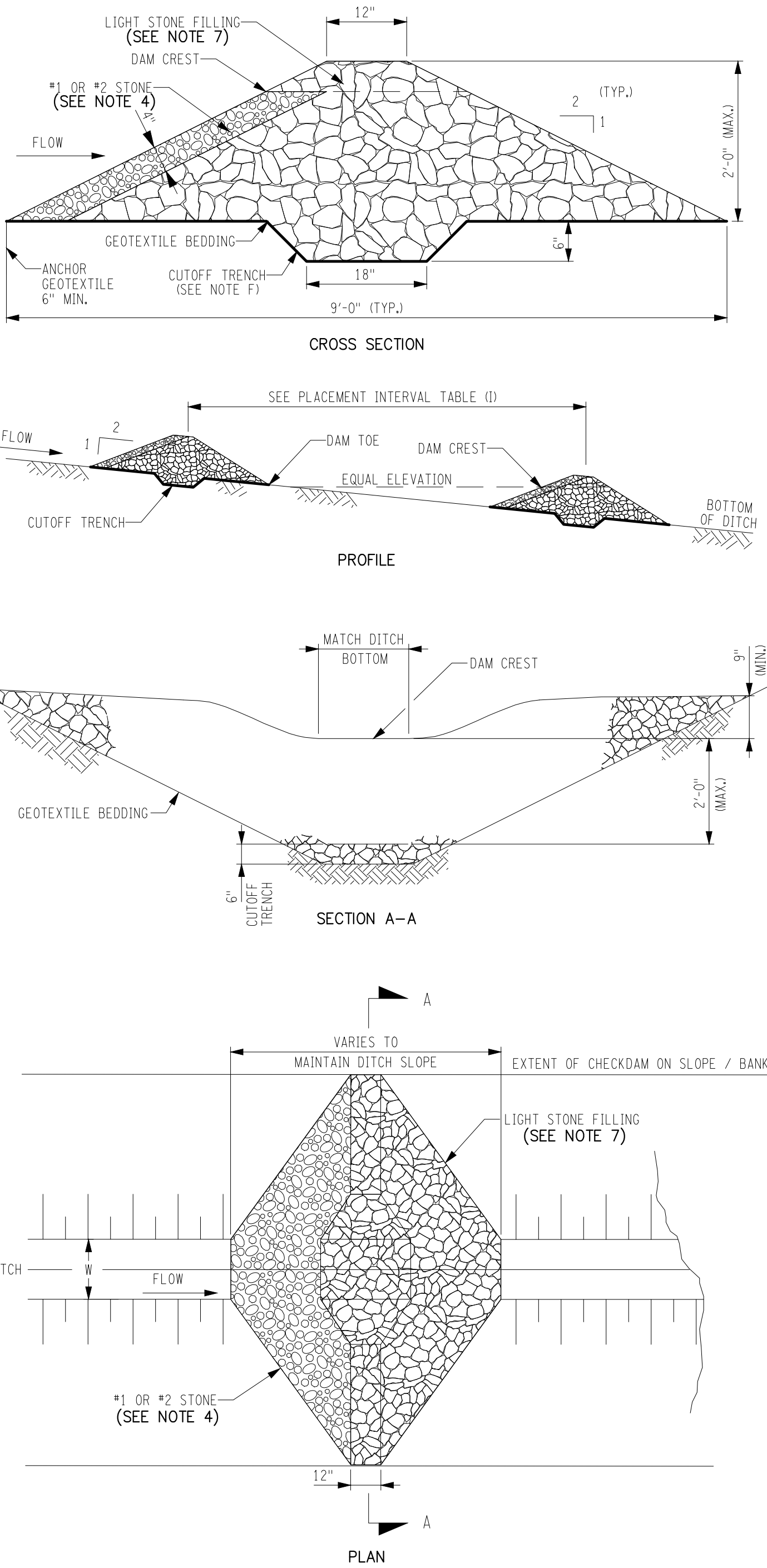
S = CHANNEL SLOPE

TEMPORARY CHECK DAM VOLUMES	
DITCH SIDE SLOPE	VOLUME (CY)
1 : 2	3.45 CY ±
1 : 3	4.25 CY ±
1 : 4	5.43 CY ±
1 : 6	7.81 CY ±

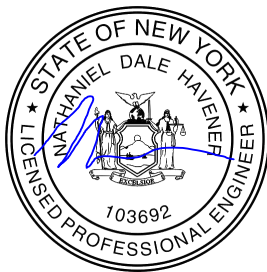
BASED ON V SHAPED DITCH SECTION FOR TRAPEZOIDAL DITCH, ADD 1.70 CUBIC YARD / YARD OF DITCH WIDTH

1 TEMPORARY CHECK DAM DETAIL

SCALE: N.T.S.



Engineering and Land Surveying, P.C.



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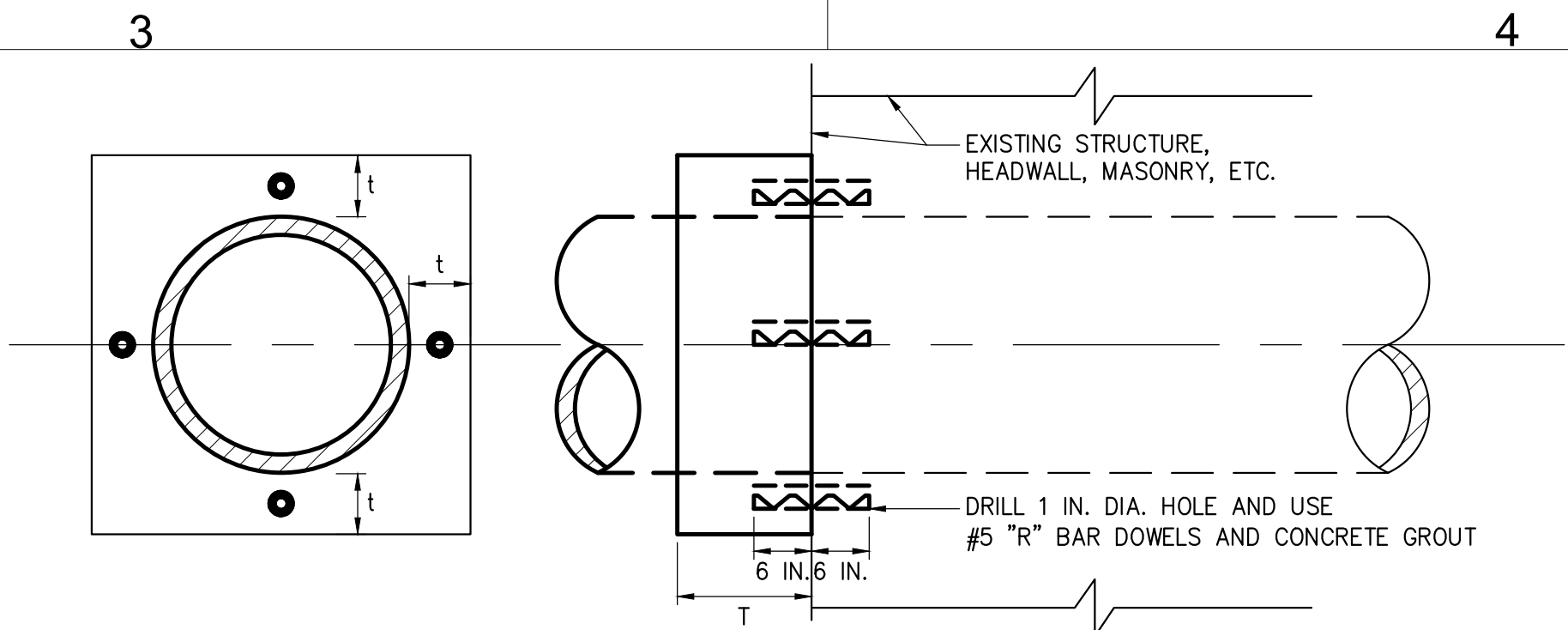
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No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 10 (PACKAGE 6) - SELKIRK RAIL YARD BYPASS TO CATSKILL
EROSION AND SEDIMENT CONTROL DETAILS

KIEWIT PROJECT NO.	21162
KC PROJECT NO.	120174
DRAWING NO.	C-604

DATE	9/29/2023
SH.NO.	OF

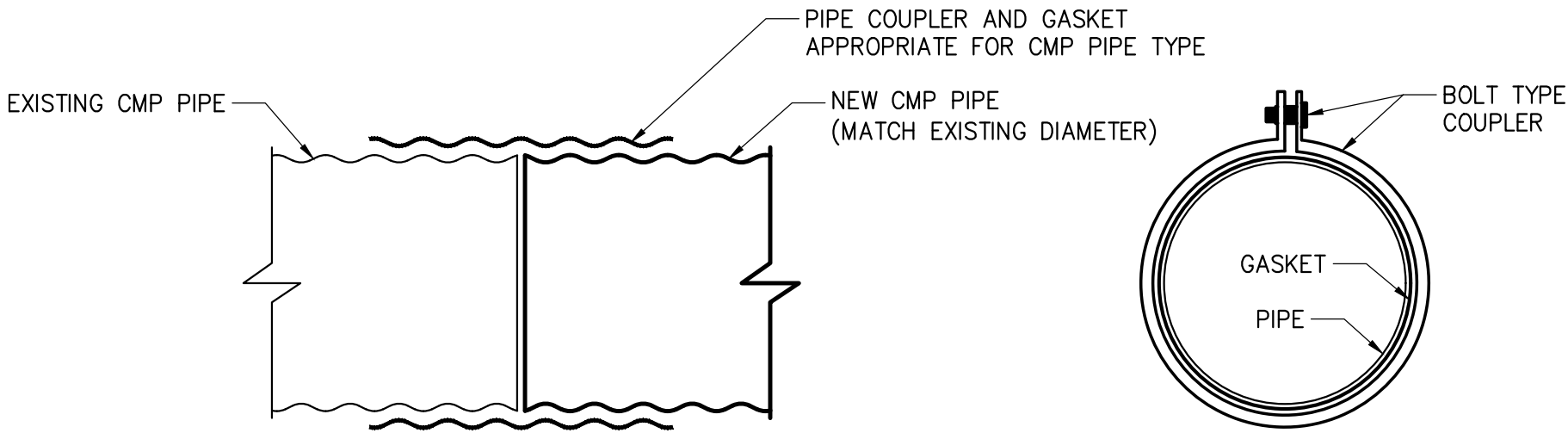
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			REV. NO.	0



INSIDE DIA. IN.	"t" IN.	"T" IN.	NO. DOWELS REQUIRED *
THRU 19	9	12	4
20 - 29	9	12	4
30 - 39	9	12	6
40 - 49	9	12	8
50 - 59	12	18	8
60 - 69	12	18	8
70 - 79	12	18	10
80 - 89	12	18	12

* SPACE EVENLY AROUND PIPE AS INDICATED.

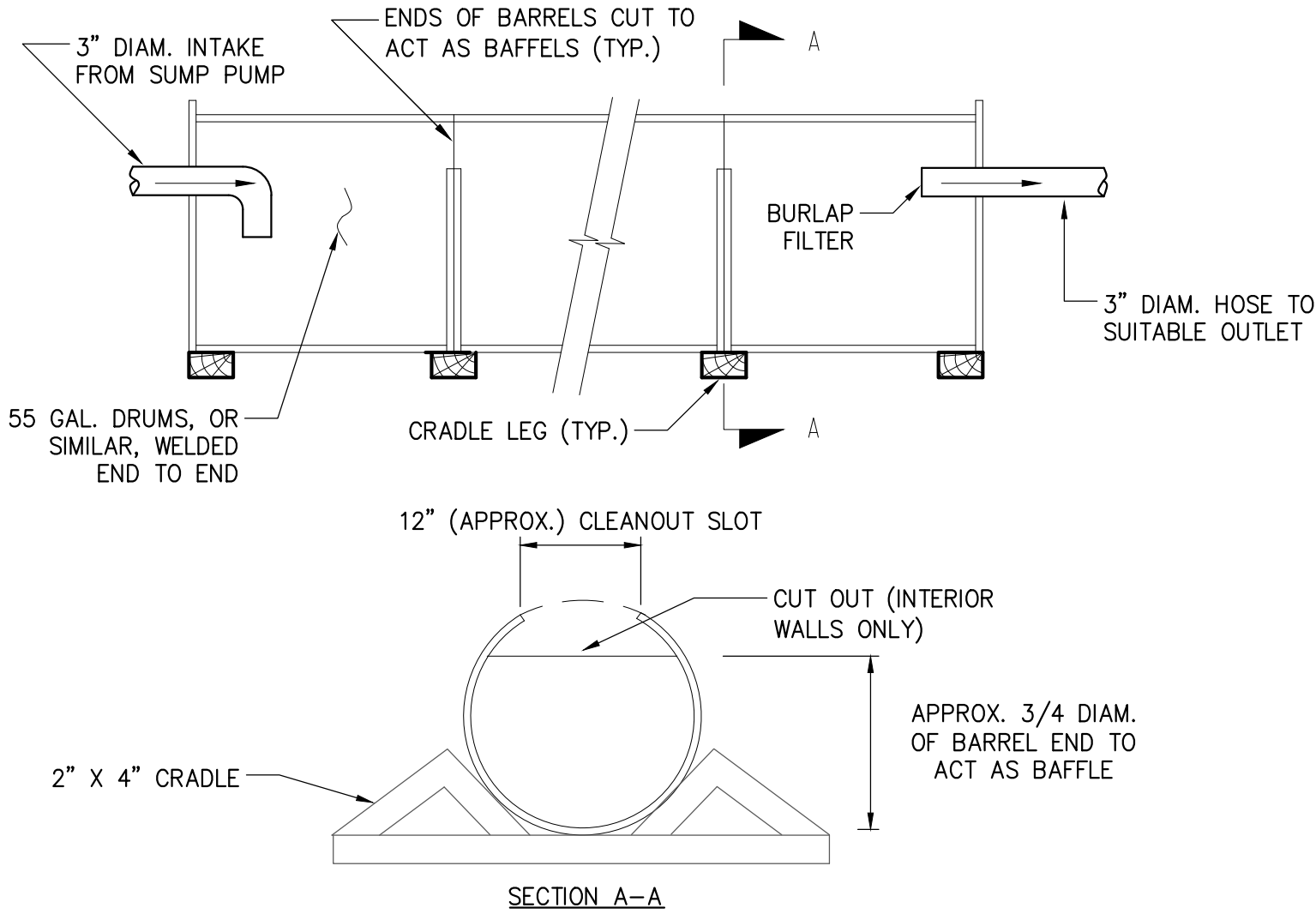
CONCRETE COLLARS FOR PIPE EXTENSIONS



CORRUGATED METAL PIPE EXTENSIONS

2 PIPE EXTENSION DETAIL

SCALE: N.T.S.



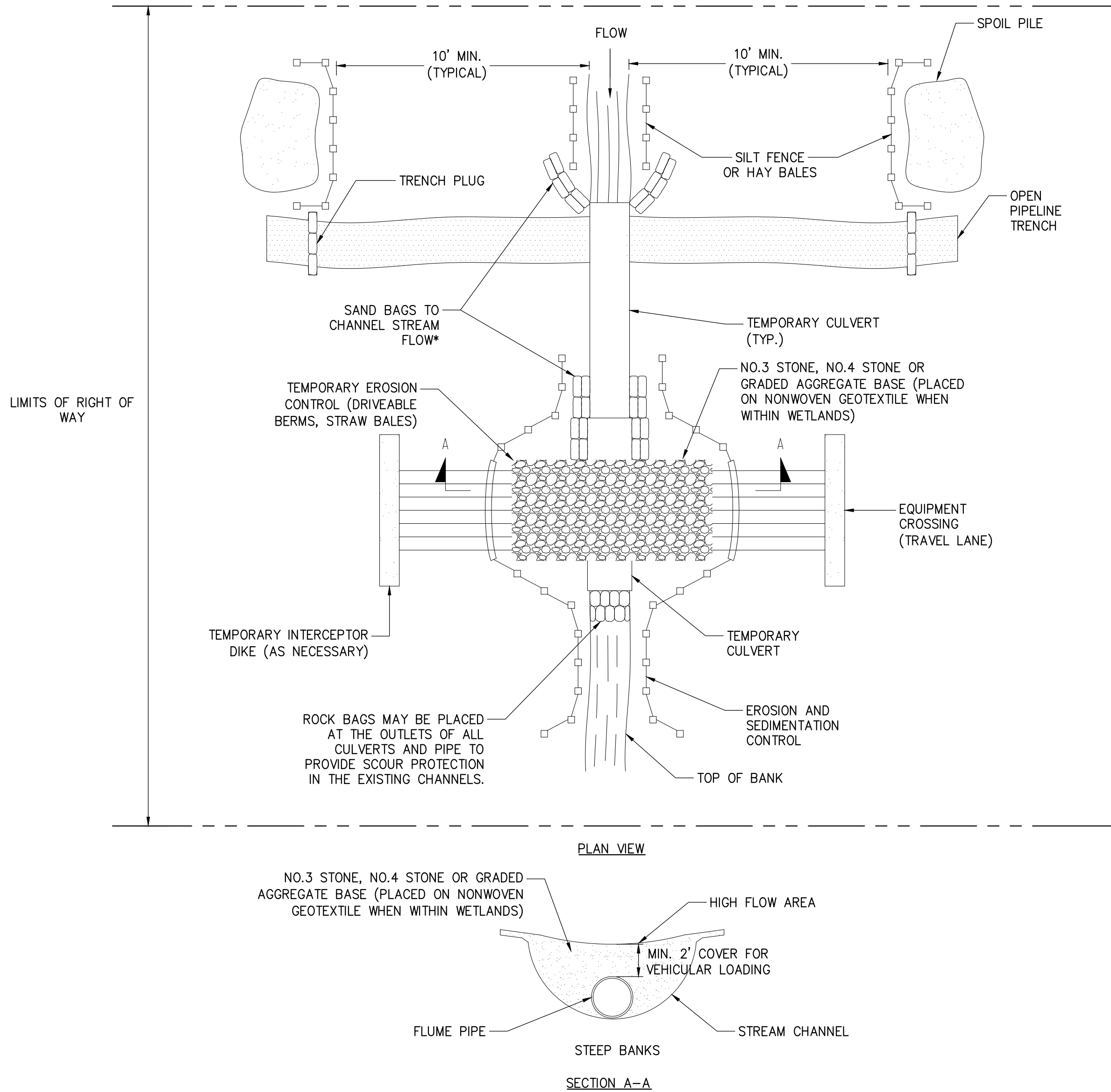
3 PORTABLE SEDIMENT TANK

SCALE: N.T.S.

CONSTRUCTION SPECIFICATIONS

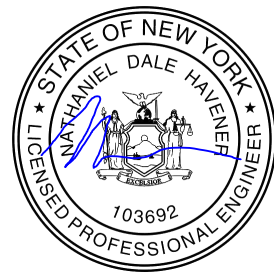
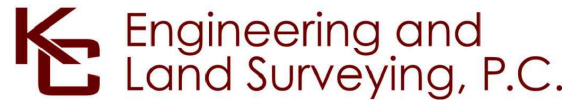
- CLEAN OUT THE SEDIMENT TANK WHEN ONE THIRD (1/3) FILLED WITH SILT.
- STEEL DRUMS ARE USED AS AN EXAMPLE DUE TO THEIR READY AVAILABILITY. ANY TANKS MAY BE USED, PROVIDING THAT THE VOLUME REQUIREMENTS ARE MET.
- ALL SEDIMENT COLLECTED IN THE TANK SHALL BE DISPOSED OF IN A SEDIMENT TRAPPING DEVICE OR AS APPROVED BY THE INSPECTOR.

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1 **FLUMED CROSSING DETAIL**
SCALE: N.T.S.

* IF WELDED PIPE IS USED SAND BAGS AT JOINTS NOT REQUIRED. ACTUAL NUMBERS OF FLUMES AND CULVERT PIPE REQUIRED TO BE DETERMINED BY STREAM WIDTH.



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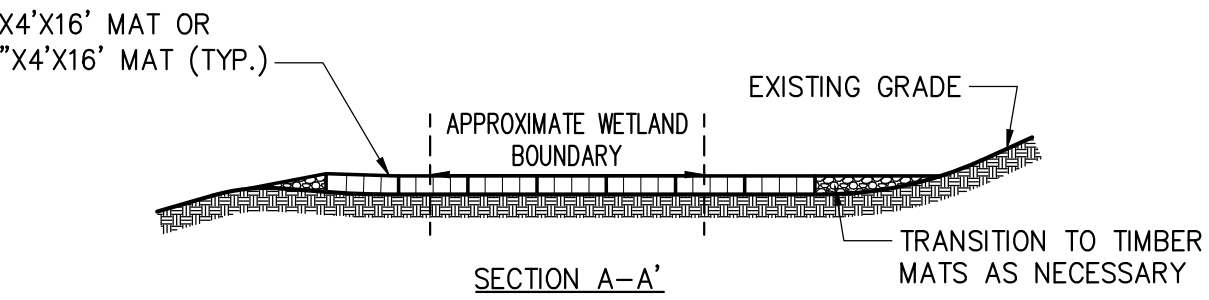
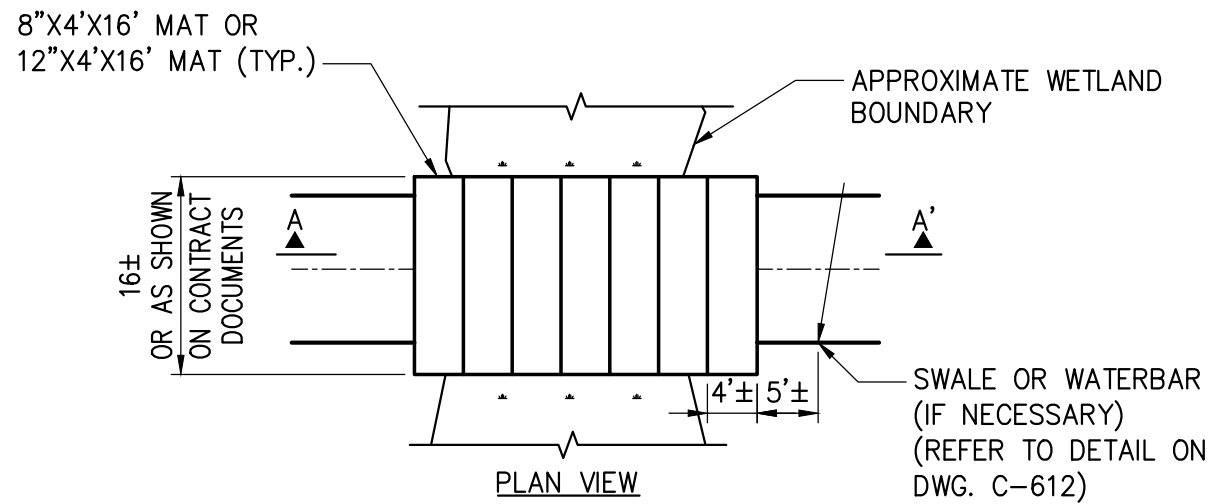
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0	09/29/2023	ISSUED FOR CONSTRUCTION SUBMISSION	MK	NH
No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 10 (PACKAGE 6) - SELKIRK RAIL YARD BYPASS TO CATSKILL
EROSION AND SEDIMENT CONTROL DETAILS

KIEWIT PROJECT NO.	21162
KC PROJECT NO.	120174
DRAWING NO.	C-605
DATE	9/29/2023
SH.NO.	OF

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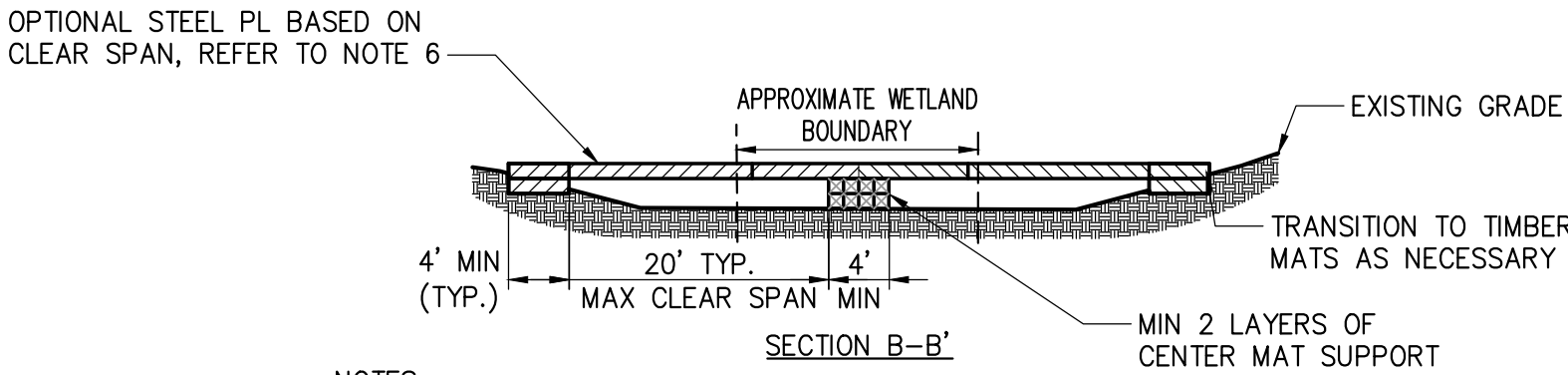
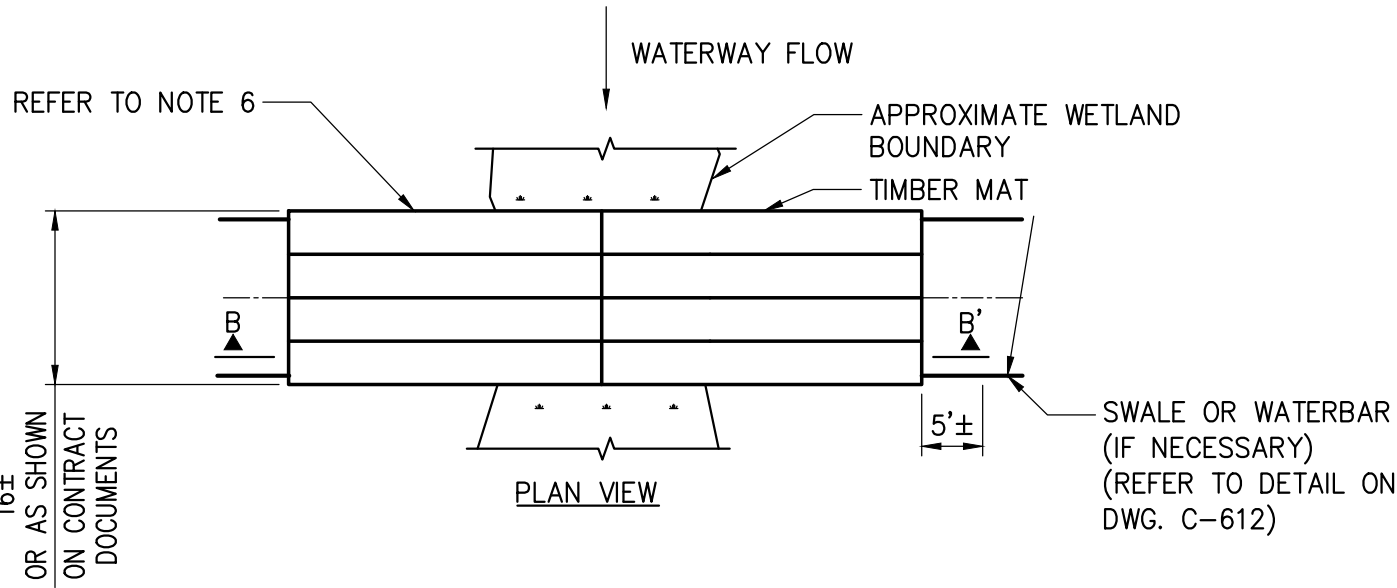
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- NOTES:
1. TIMBER MATS SHOULD BE INSTALLED IN WETLANDS AND OTHER AREAS IF NECESSARY TO PREVENT RUTTING.
 2. FOR CROSSINGS WITH LARGER SPANS THE CONTRACTOR SHALL CONSULT WITH THE TEMPORARY STRUCTURES AND CONSTRUCTION DEVICES ENGINEER.
 3. TIMBER MAT SURFACE SHOULD BE LEVEL TO PREVENT EQUIPMENT AND VEHICLES FROM SLIDING OFF DURING MUDDY OR ICING CONDITIONS, AND PREVENT TIMBERS FROM BREAKING.
 4. SEDIMENT TRACKED ONTO TIMBER MATTING SHOULD BE REMOVED AS NECESSARY TO PREVENT SEDIMENT FROM ENTERING WETLAND DURING RAIN EVENTS. SEDIMENT SHOULD BE REMOVED TO A STABILIZED SOIL STOCKPILE OR OTHER APPROVED LOCATION.
 5. PERIMETER EROSION AND SEDIMENT CONTROLS ARE REQUIRED TO BE INSTALLED PRIOR TO PLACING TIMBER MATTING.
 6. UNLESS PERMITTED FROM REMOVAL, STUMPS WITHIN THE WETLAND SHOULD REMAIN. THIS MAY REQUIRE ADDITIONAL TIMBERS TO BRIDGE ABOVE.
 7. UPON REMOVAL OF TIMBER MATTING ALL SPLINTERED WOOD SHOULD BE REMOVED. IF EXPOSED SOILS ARE PRESENT STRAW MULCH SHOULD BE APPLIED.
 8. ALL EQUIPMENTS SHOULD MAINTAIN A MINIMUM OF 2 FT SETBACK FROM EDGE OF THE MATS WHILE CROSSING.
 9. SINGLE OR MULTIPLE LAYERS OF MATS SHALL BE PLACED BASED ON EXISTING SOIL CONDITIONS.

OPTION "A"
NOT TO SCALE

2



- NOTES:
1. IN-STREAM EXCAVATION SHOULD BE COMPLETED IN ACCORDANCE WITH "TEMPORARY ACCESS WATERWAY CROSSING" ON PAGE 2.32 OF THE 2016 NYSDEC STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (OR NEWEST VERSION) AND IN ACCORDANCE WITH SECTION 9.1 WATER BODIES IN THE PROJECT EM&CP.
 2. THE CONSTRUCTION OF ANY CROSSING SHOULD NOT CAUSE A SIGNIFICANT WATER LEVEL DIFFERENCE BETWEEN THE UPSTREAM AND DOWNSTREAM WATER SURFACE ELEVATIONS. FISH SPAWNING OR MIGRATION DATES CAN VARY ACROSS NEW YORK, AND RESTRICTIONS IMPOSED BY THE NYSDEC MY VARY AND MUST BE VERIFIED. REFER TO CERTIFICATE OF CONDITIONS.
 3. ALL FILL MATERIALS ASSOCIATED WITH THE ROADWAY APPROACH SHOULD BE LIMITED TO A MAXIMUM HEIGHT OF 2 FT ABOVE THE EXISTING FLOOD PLAIN ELEVATION.
 4. A WATER DIVERTING STRUCTURE SUCH AS A SWALE OR WATER BAR SHOULD BE CONSTRUCTED (ACROSS THE ROADWAY ON BOTH ROADWAY APPROACHES) 50 FEET (MAXIMUM) ON EITHER SIDE OF THE WATERWAY CROSSING. THIS WILL PREVENT ROADWAY SURFACE RUNOFF FROM DIRECTLY ENTERING THE WATERWAY. THE 50 FEET MEASURED IS MEASURED FROM THE TOP OF THE WATERWAY BANK. IF THE ROADWAY APPROACH IS CONSTRUCTED WITH A REVERSE GRADE AWAY FROM THE WATERWAY, A SEPARATE DIVERTING STRUCTURE IS NOT REQUIRED.
 5. ALL EQUIPMENTS SHOULD MAINTAIN A MINIMUM OF 2 FT SETBACK FROM EDGE OF THE MATS WHILE CROSSING.
 6. CONTRACTOR SHALL CONSULT WITH TEMPORARY STRUCTURES AND CONSTRUCTION DEVICES ENGINEER FOR APPROPRIATE MATTING SIZES AND LENGTHS AND REQUIRED SOIL BEARING PRESSURES.

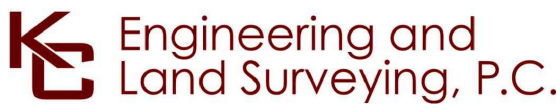
OPTION "B"
NOT TO SCALE

1 TIMBER MATTING (WETLAND CROSSING)

SCALE: N.T.S.

GENERAL NOTES:

1. TIMBER SHALL BE SELECT STRUCTURAL MIXED OAK WITH A MINIMUM BENDING STRESS OF 1250 PSI OR BETTER.
2. CONTRACTOR TO VERIFY ALL DIMENSIONS AND SITE CONDITIONS PRIOR TO COMMENCING WORK. ANY ERRORS, OMISSIONS, OR UNUSUAL CONDITIONS ARE TO BE REPORTED TO THE TEMPORARY STRUCTURES AND CONSTRUCTION DEVICES ENGINEER IMMEDIATELY.



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No.	DATE	SUBMITTAL / REVISION DESCRIPTION	DB	APP

CHAMPLAIN HUDSON POWER EXPRESS
SEGMENT 10 (PACKAGE 6) - SELKIRK RAIL YARD BYPASS TO CATSKILL
WETLAND CROSSING DETAILS

KIEWIT PROJECT NO.	21162
KC PROJECT NO.	120174
DRAWING NO.	C-611
DATE	9/29/2023
SH.NO.	OF

DRAWN BY:	DESIGNED BY: LY	APPROVED BY: LZ	SCALE	AS SHOWN	DATE
			REV. NO.	0	9/29/2023

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