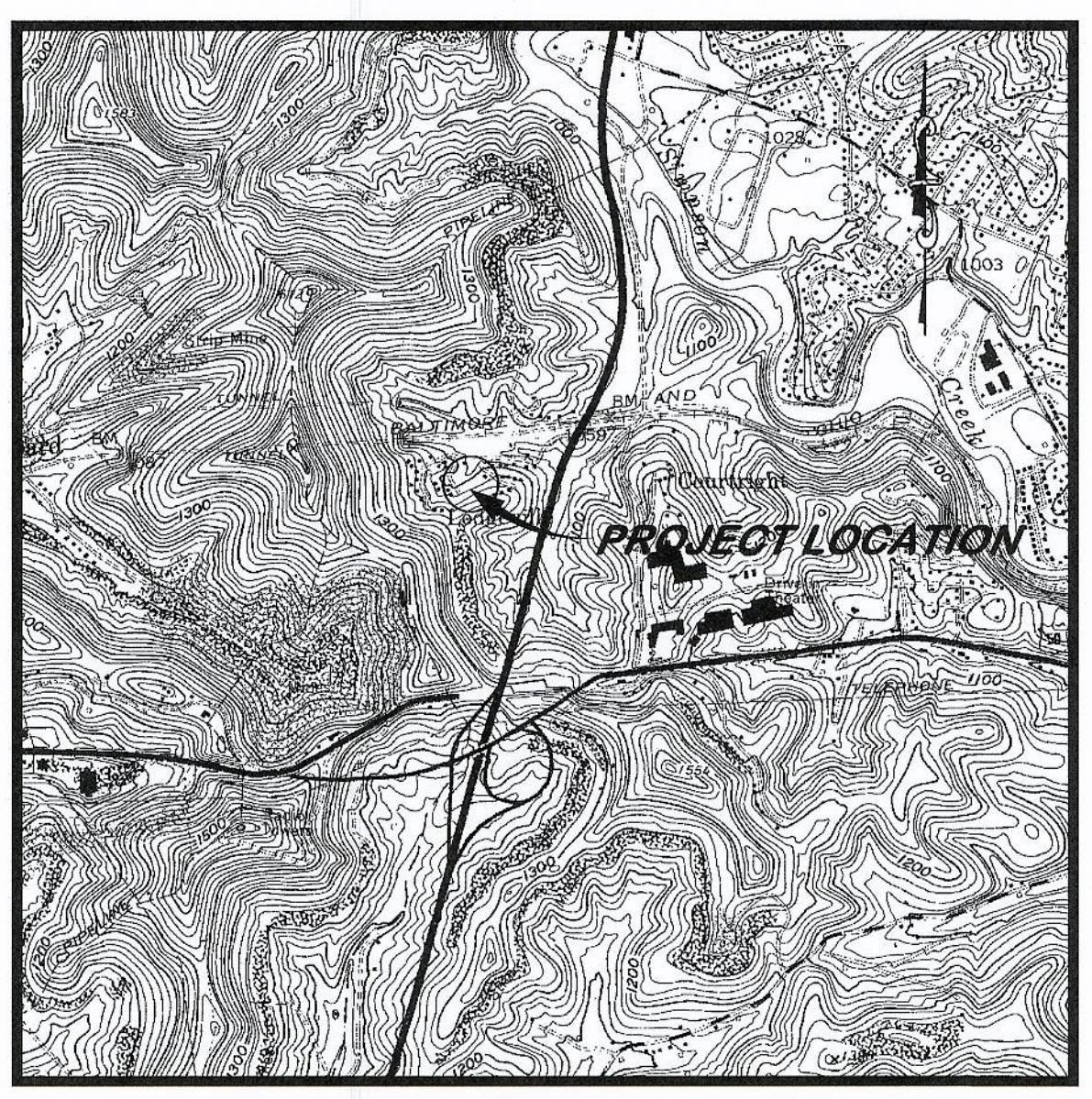


west virginia department of environmental protection

**EARL RAY TOMBLIN, GOVERNOR      RANDY C. HUFFMAN, CABINET SECRETARY**  
**OFFICE OF ABANDONED MINE LANDS AND RECLAMATION**

***LODGEVILLE (POE) DS***  
*AT BRIDGEPORT*  
*HARRISON COUNTY, WEST VIRGINIA*

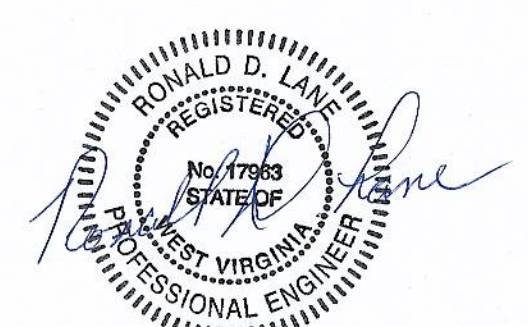
VICINITY MAP



USGS 7.5' QUAD (LOGAN)

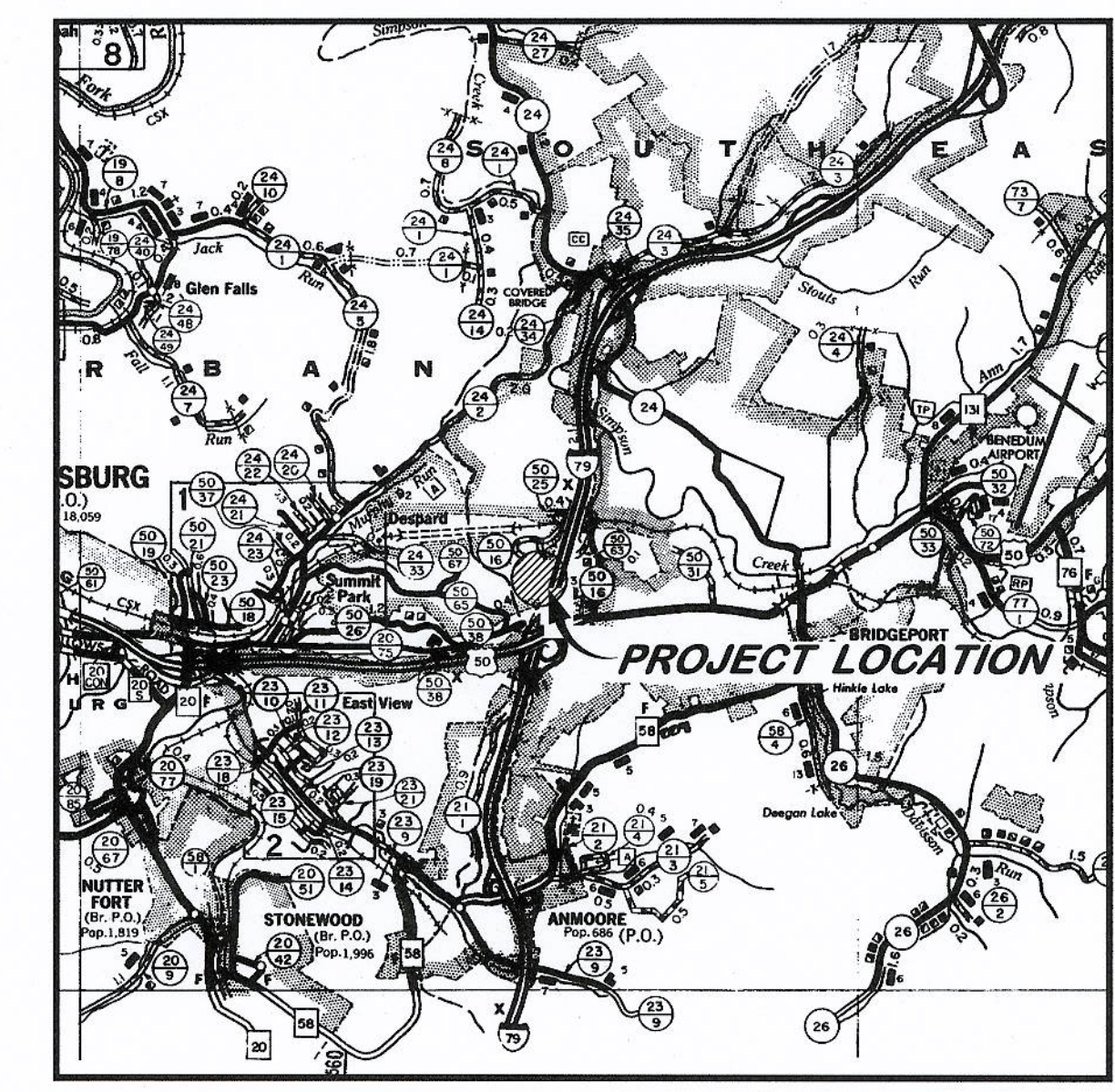
INDEX TO SHEETS	
SHEET NO.	DESCRIPTION
2	EXISTING CONDITIONS AND TAX MAP OVERLAY
3	RECLAMATION PLAN
4	SEDIMENT CONTROL PLAN
5	BASELINE "A" CROSS SECTIONS
6	BASELINE "A" CROSS SECTIONS AND 4"x4' UNDERDRAIN PROFILE
7	BASELINE "B" PROFILE AND CROSS SECTIONS, CHANNEL "B" PROFILE
8	TYPICAL DETAILS (1)
9	TYPICAL DETAILS (2)
10	SEDIMENT CONTROL DETAILS

BID SCHEDULE		
ITEM NO.	DESCRIPTION	QUANTITY
1.0	MOBILIZATION AND DEMOBILIZATION (LIMITED TO 10% OF TOTAL BID)	LS
2.0	CONSTRUCTION LAYOUT (LIMITED TO 5% OF TOTAL BID)	LS
3.0	QUALITY CONTROL (LIMITED TO 3% OF TOTAL BID)	LS
4.1	SITE PREPARATION (LIMITED TO 10% OF TOTAL BID)	LS
4.2	TEMPORARY ACCESS ROAD STONE	130 TONS
4.3	GRAVEL ROAD REHABILITATION	110 TONS
4.4	DEMOLITION OF STRUCTURES AND REMOVAL	LS
5.1	SILT FENCE SEDIMENT CONTROL	610 LF
5.2	12" STRAW WATTLES EROSION CONTROL	1600 LF
5.3	STABILIZED CONSTRUCTION ENTRANCE (2 EA. 70 LF x 12' WIDTH)	50 TONS
5.4	ROCK CHECK DAM	3 EA.
6.0	REVEGETATION	3.75 AC
7.1	6' WIDE GROUTED ROCK RIP RAP "VEE" CHANNEL	505 LF
7.2	6' WIDE GRASS LINED "VEE" CHANNEL	153 LF
7.3	18" HDPE PIPE	70 LF
7.4	GROUTED RIPRAP "VEE" CHANNEL ROAD CROSSING	1 EA.
7.5	3' X 3' UNDERDRAIN	125 LF
7.6	UNDERDRAIN CONVEYANCE PIPE	5 LF
7.7	TYPE "G" INLET	5 VF
7.8	PIEZOMETER ABANDONMENT	1 EA.
7.9	4' WIDE GRASS LINED SWALE	130 LF
8.0	UNCLASSIFIED EXCAVATION	10,400 CY



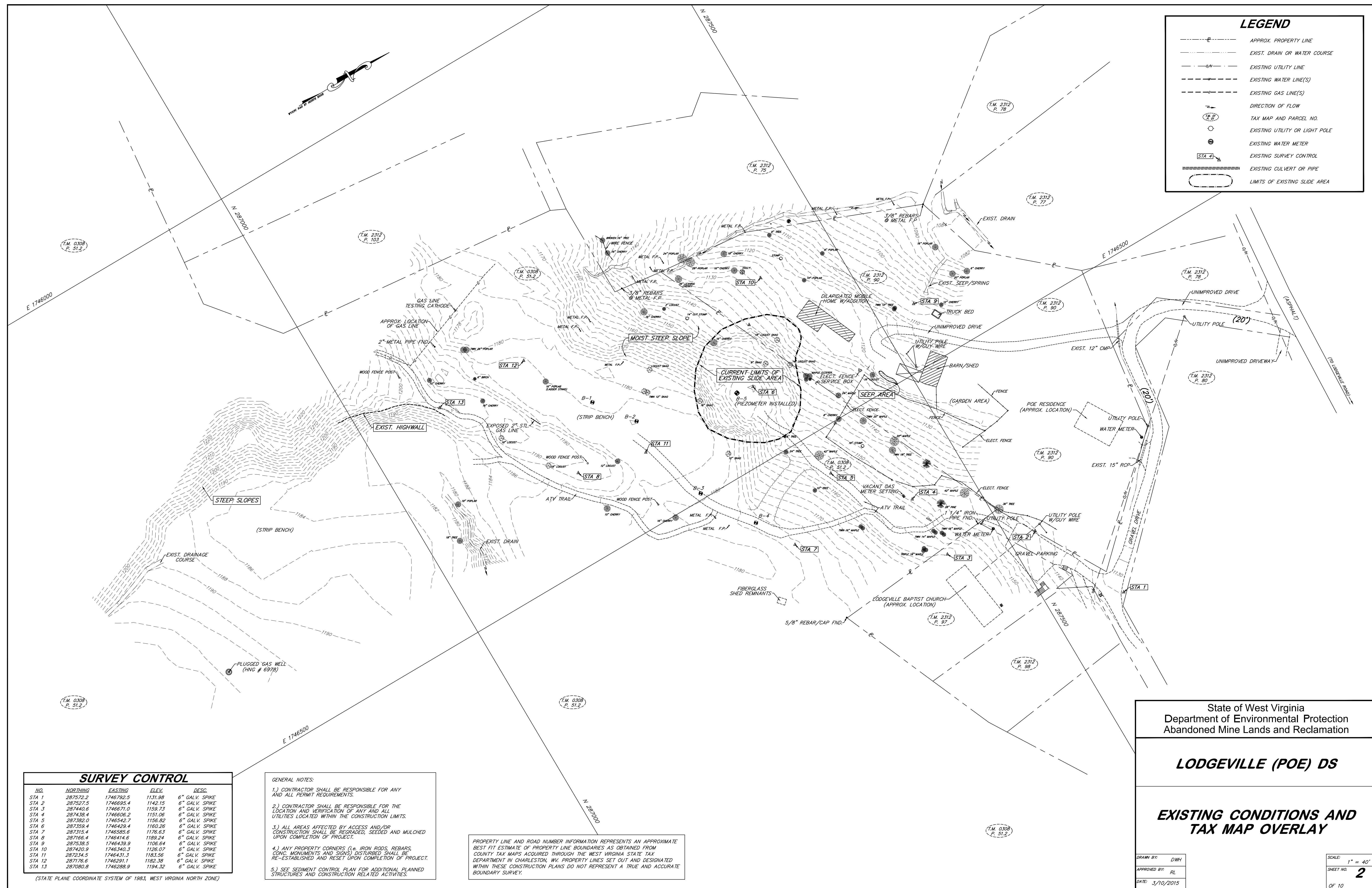
APPROVED  
3/19/15  
DATE

LOCATION MAP



COUNTY HIGHWAY MAP, 1" = 1 MI.







**LEGEND**

- APPROX. PROPERTY LINE
- EXIST. DRAIN OR WATER COURSE
- EXISTING UTILITY LINE
- EXISTING WATER LINE(S)
- EXISTING GAS LINE(S)
- DIRECTION OF FLOW
- TAX MAP AND PARCEL NO.
- EXISTING UTILITY OR LIGHT POLE
- EXISTING WATER METER
- EXISTING SURVEY CONTROL
- EXISTING CULVERT OR PIPE
- LIMITS OF EXISTING SLIDE AREA
- PROPOSED CONSTRUCTION LIMITS
- FINISHED GRADE CONTOUR
- LIMITS OF GRAVEL DRIVE REHABILITATION
- LIMITS OF TEMPORARY ACCESS ROAD STONE
- PROPOSED TYPE "G" INLET
- PROPOSED HDPE PIPE
- PROPOSED CONSTRUCTION ENTRANCE
- PROPOSED ROCK CHECK DAM
- PROPOSED SEEP COLLECTOR
- PROPOSED RIPRAP OR GROUDED RIPRAP CHANNEL
- PROPOSED GRASS LINED CHANNEL/SWALE
- SILT FENCE SEDIMENT CONTROL
- STRAW WATTLE EROSION CONTROL

**SURVEY CONTROL**

NO.	NORTHING	EASTING	ELEV.	DESC.
STA 1	287572.2	1746792.5	1131.98	6" GALV. SPIKE
STA 2	287527.5	1746695.4	1142.15	6" GALV. SPIKE
STA 3	287440.6	1746671.0	1159.73	6" GALV. SPIKE
STA 4	287438.4	1746908.2	1151.06	6" GALV. SPIKE
STA 5	287382.0	1746542.7	1156.82	6" GALV. SPIKE
STA 6	287358.4	1746429.4	1160.26	6" GALV. SPIKE
STA 7	287315.4	1746585.6	1176.63	6" GALV. SPIKE
STA 8	287168.4	1746414.6	1189.24	6" GALV. SPIKE
STA 9	287538.5	1746439.9	1106.64	6" GALV. SPIKE
STA 10	287420.9	1746340.3	1126.07	6" GALV. SPIKE
STA 11	287234.5	1746431.3	1183.56	6" GALV. SPIKE
STA 12	287176.6	1746291.1	1182.39	6" GALV. SPIKE
STA 13	287080.8	1746288.9	1194.32	6" GALV. SPIKE

**GENERAL NOTES:**

- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL PERMIT REQUIREMENTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND VERIFICATION OF ANY AND ALL UTILITIES LOCATED WITHIN THE CONSTRUCTION LIMITS.
- ALL AREAS AFFECTED BY ACCESS AND/OR CONSTRUCTION SHALL BE REGRADED, SEEDED AND MULCHED UPON COMPLETION OF PROJECT.
- ANY PROPERTY CORNERS (i.e. IRON RODS, REBARS, CONC. MONUMENTS AND SIGNS) DISTURBED SHALL BE RE-ESTABLISHED AND RESET UPON COMPLETION OF PROJECT.
- SEE SEDIMENT CONTROL PLAN FOR ADDITIONAL PLANNED STRUCTURES AND CONSTRUCTION RELATED ACTIVITIES.

**PROPERTY LINE AND ROAD NUMBER INFORMATION REPRESENTS AN APPROXIMATE BEST FIT ESTIMATE OF PROPERTY LINE BOUNDARIES AS OBTAINED FROM COUNTY TAX MAPS ACQUIRED THROUGH THE WEST VIRGINIA STATE TAX DEPARTMENT IN CHARLESTON, WV. PROPERTY LINES SET OUT AND DESIGNATED WITHIN THESE CONSTRUCTION PLANS DO NOT REPRESENT A TRUE AND ACCURATE BOUNDARY SURVEY.**

**LODGEVILLE (POE) DS RECLAMATION PLAN**

10/10/2010

## SURVEY CONTROL

NO.	NORTHING	EASTING	ELEV.	DESC.
STA 1	287572.2	1746728.5	1153.89	6" GALV. SPIKE
STA 2	287527.5	1746838.4	1142.15	6" GALV. SPIKE
STA 3	287440.6	1746671.0	1159.73	6" GALV. SPIKE
STA 4	287438.4	1746606.2	1151.06	6" GALV. SPIKE
STA 5	287382.0	1746542.7	1156.82	6" GALV. SPIKE
STA 6	287359.4	1746429.4	1160.26	6" GALV. SPIKE
STA 7	287315.7	1746316.3	1163.65	6" GALV. SPIKE
STA 8	287166.4	1746414.6	1189.24	6" GALV. SPIKE
STA 9	287538.5	1746439.9	1106.64	6" GALV. SPIKE
STA 10	287420.9	1746340.3	1126.07	6" GALV. SPIKE
STA 11	287234.5	1746431.3	1183.56	6" GALV. SPIKE
STA 12	287176.5	1746291.1	1182.39	6" GALV. SPIKE
STA 13	287080.8	1746288.9	1194.32	6" GALV. SPIKE

(STATE PLANE COORDINATE SYSTEM OF 1983, WEST VIRGINIA NORTH ZONE)

GENERAL NOTES:

- 1.) CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL PERMIT REQUIREMENTS.
- 2.) CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND RELOCATION OF ANY AND ALL UTILITIES LOCATED WITHIN THE CONSTRUCTION LIMITS.
- 3.) ALL AREAS AFFECTED BY ACCESS AND/OR CONSTRUCTION SHALL BE GRASSED, SEEDED AND MULCHED UPON COMPLETION OF PROJECT.
- 4.) ANY PROPERTY CORNERS (I.e. IRON RODS, REBARS, CONC. MONUMENTS AND SUCH) DAMAGED SHALL BE RE-ESTABLISHED AND RESET UPON COMPLETION OF PROJECT.
- 5.) SEE SEDIMENT CONTROL PLAN FOR ADDITIONAL PLANNED STRUCTURES AND CONSTRUCTION RELATED ACTIVITIES.

PROPERTY LINE AND ROAD NUMBER INFORMATION REPRESENTS AN APPROXIMATE BEST FIT ESTIMATE OF PROPERTY LINE BOUNDARIES AS OBTAINED FROM COUNTY TAX MAPS ACQUIRED THROUGH THE WEST VIRGINIA STATE TAX DEPARTMENT IN CHARLESTON, WV. PROPERTY LINES SET OUT AND DESIGNATED WITHIN THESE CONSTRUCTION PLANS DO NOT REPRESENT A TRUE AND ACCURATE BOUNDARY SURVEY.

State of West Virginia  
Department of Environmental Protection  
Abandoned Mine Lands and Reclamation

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***LODGEVILLE (POE) DS***

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***RECLAMATION PLAN***

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DRAWN BY:	DWH
APPROVED BY:	RL
DATE:	3/16/2008

SCALE:	1" = 40'
SHEET NO.	<b>3</b>



**LEGEND**

- APPROX. PROPERTY LINE
- EXIST. DRAIN OR WATER COURSE
- EXISTING UTILITY LINE
- EXISTING WATER LINE(S)
- EXISTING GAS LINE(S)
- DIRECTION OF FLOW
- TAX MAP AND PARCEL NO.
- EXISTING UTILITY OR LIGHT POLE
- EXISTING WATER METER
- EXISTING SURVEY CONTROL
- EXISTING CULVERT OR PIPE
- LIMITS OF EXISTING SLIDE AREA
- PROPOSED CONSTRUCTION LIMITS
- FINISHED GRADE CONTOUR
- LIMITS OF GRAVEL DRIVE REHABILITATION
- LIMITS OF TEMPORARY ACCESS ROAD STONE
- PROPOSED TYPE "G" INLET
- PROPOSED HOPE PIPE
- PROPOSED CONSTRUCTION ENTRANCE
- PROPOSED ROCK CHECK DAM
- PROPOSED SEEP COLLECTOR
- PROPOSED RIPRAP OR GROUDED RIPRAP CHANNEL
- PROPOSED GRASS LINED CHANNEL/SWALE
- SILT FENCE SEDIMENT CONTROL
- STRAW WATTLE EROSION CONTROL

**SURVEY CONTROL**

NO.	NORTHING	EASTING	ELEV.	DESC.
STA 1	287572.2	1746792.5	1131.98	6" GALV. SPIKE
STA 2	287527.5	1746695.4	1142.15	6" GALV. SPIKE
STA 3	287440.6	1746671.0	1158.73	6" GALV. SPIKE
STA 4	287438.4	1746606.2	1151.06	6" GALV. SPIKE
STA 5	287382.0	1746542.7	1156.82	6" GALV. SPIKE
STA 6	287359.4	1746429.4	1160.26	6" GALV. SPIKE
STA 7	287315.4	1746585.6	1176.63	6" GALV. SPIKE
STA 8	287166.4	1746414.6	1182.24	6" GALV. SPIKE
STA 9	287538.5	1746439.9	1106.64	6" GALV. SPIKE
STA 10	287420.9	1746340.3	1126.07	6" GALV. SPIKE
STA 11	287234.5	1746431.3	1183.56	6" GALV. SPIKE
STA 12	287176.6	1746291.1	1182.38	6" GALV. SPIKE
STA 13	287080.8	1746288.9	1194.32	6" GALV. SPIKE

**GENERAL NOTES:**

- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL PERMIT REQUIREMENTS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND VERIFICATION OF ANY AND ALL UTILITIES LOCATED WITHIN THE CONSTRUCTION LIMITS.
- ALL AREAS AFFECTED BY ACCESS AND/OR CONSTRUCTION SHALL BE REGRADED, SEEDED AND MULCHED UPON COMPLETION OF PROJECT.
- ANY PROPERTY CORNERS (I.e. IRON RODS, REBARS, CONC. MONUMENTS AND SIGNS) DISTURBED SHALL BE RE-ESTABLISHED AND RESET UPON COMPLETION OF PROJECT.
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**State of West Virginia  
Department of Environmental Protection  
Abandoned Mine Lands and Reclamation**

**LODGEVILLE (POE) DS**

**SEDIMENT CONTROL PLAN**

DRAWN BY: DWH  
APPROVED BY: RL  
DATE: 3/10/2015

SCALE: 1" = 40'  
SHEET NO. 4  
OF 10

<b><u>SURVEY CONTROL</u></b>				
<b><u>NO.</u></b>	<b><u>NORTHING</u></b>	<b><u>EASTING</u></b>	<b><u>ELEV.</u></b>	<b><u>DESC.</u></b>
STA 1	287572.2	1746792.5	1131.98	6" GALV. SPIKE
STA 2	2875727.5	1746695.4	1142.15	6" GALV. SPIKE
STA 3	287440.6	1746671.0	1158.73	6" GALV. SPIKE
STA 4	287438.4	1746806.2	1151.06	6" GALV. SPIKE
STA 5	287392.2	1746802.7	1152.67	6" GALV. SPIKE
STA 6	287359.4	1746429.4	1160.26	6" GALV. SPIKE
STA 7	287315.4	1746585.6	1176.63	6" GALV. SPIKE
STA 8	287166.4	1746414.6	1189.24	6" GALV. SPIKE
STA 9	287538.5	1746439.9	1198.64	6" GALV. SPIKE
STA 10	287440.3	1746403.3	1192.67	6" GALV. SPIKE
STA 11	287234.5	1746431.3	1183.56	6" GALV. SPIKE
STA 12	2870176.6	1746291.1	1182.38	6" GALV. SPIKE
STA 13	287288.9	1746288.9	1194.32	6" GALV. SPIKE

(STATE PLANE COORDINATE SYSTEM OF 1983, WEST VIRGINIA NORTH ZONE)

GENERAL NOTES:

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- 3) ALL AREAS AFFECTED BY ACCESS AND/OR CONSTRUCTION SHALL BE REGRADED, SEEDED AND MULCHED UPON COMPLETION OF PROJECT.
- 4) ANY PROPERTY CORNERS (I.e. IRON RODS, REBARS, CONC. MONUMENTS AND SIGNS) DISTURBED SHALL BE RE-ESTABLISHED AND RESET UPON COMPLETION OF PROJECT.
- 5) SEE SEDIMENT CONTROL PLAN FOR ADDITIONAL PLANNED STRUCTURES AND CONSTRUCTION RELATED ACTIVITIES.

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State of West Virginia  
Department of Environmental Protection  
Abandoned Mine Lands and Reclamation

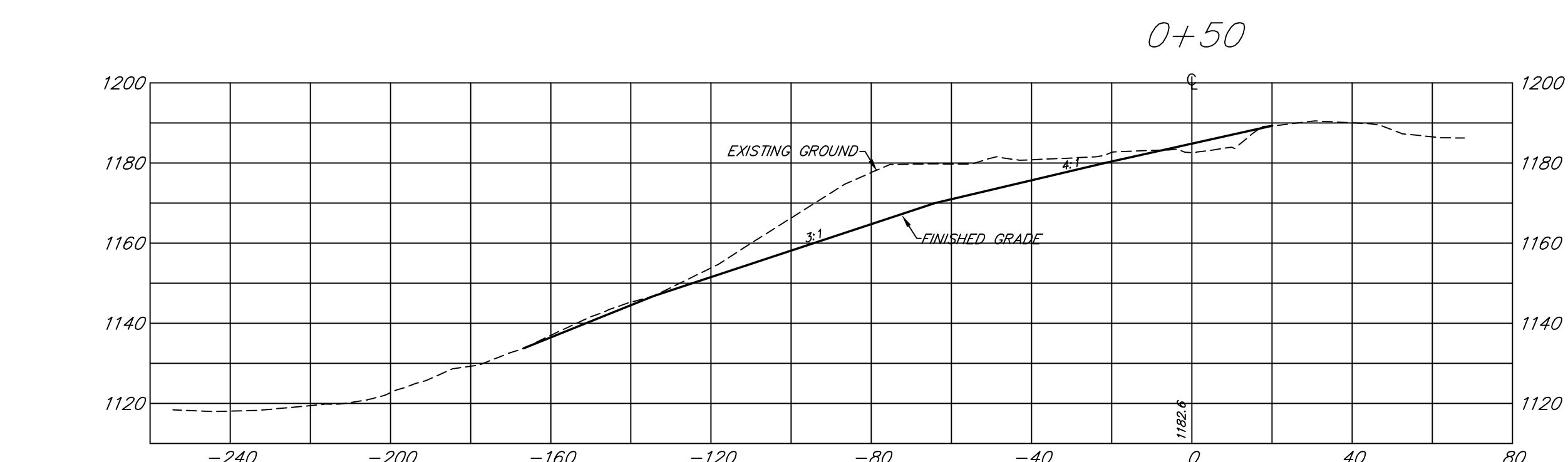
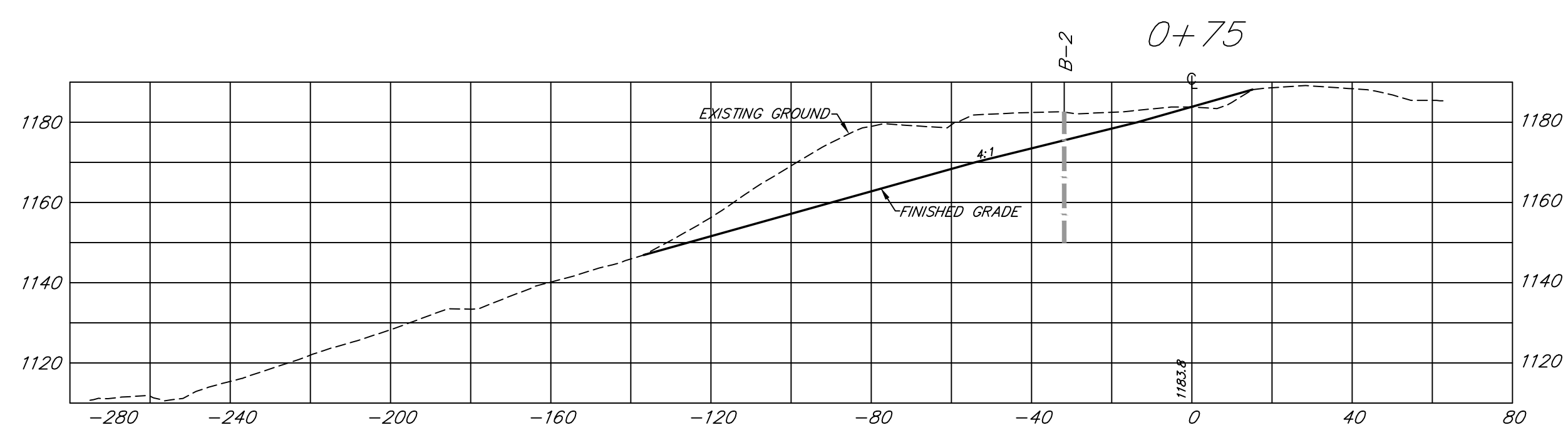
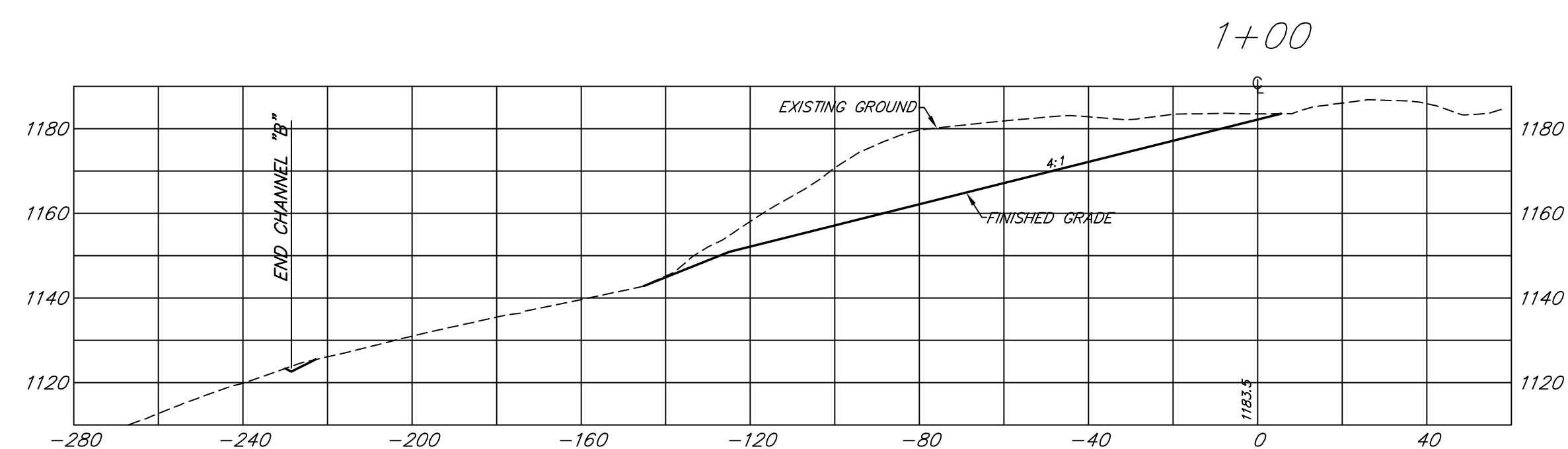
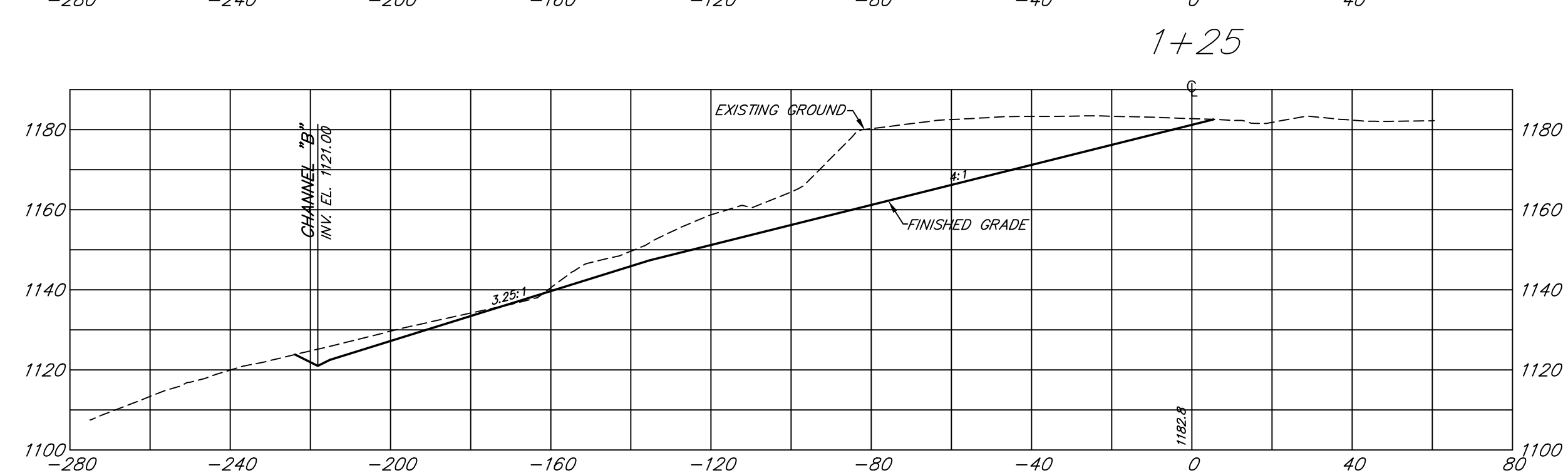
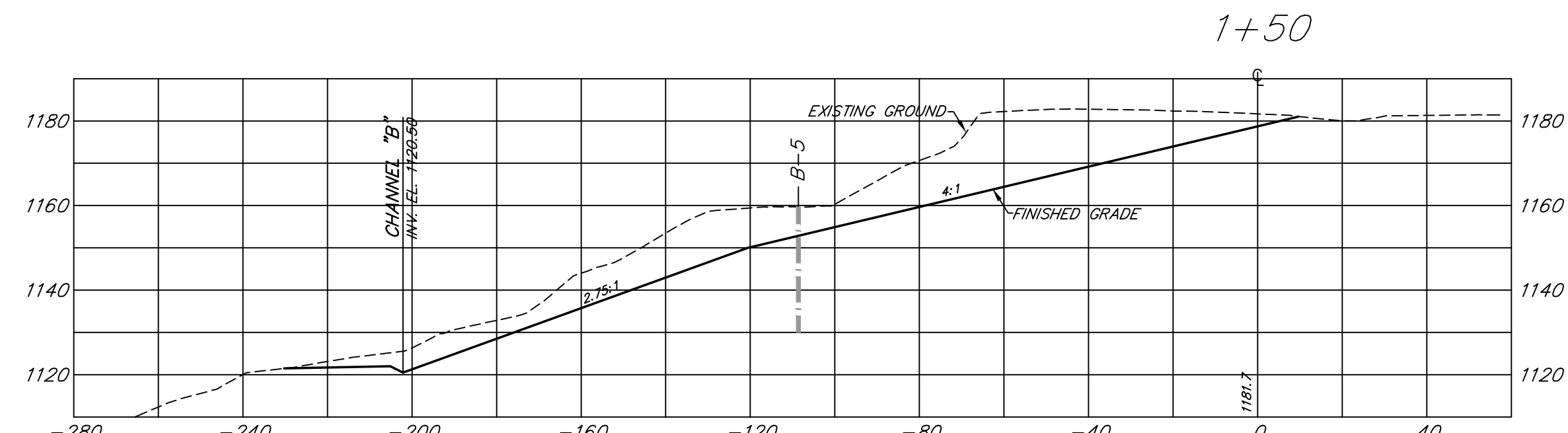
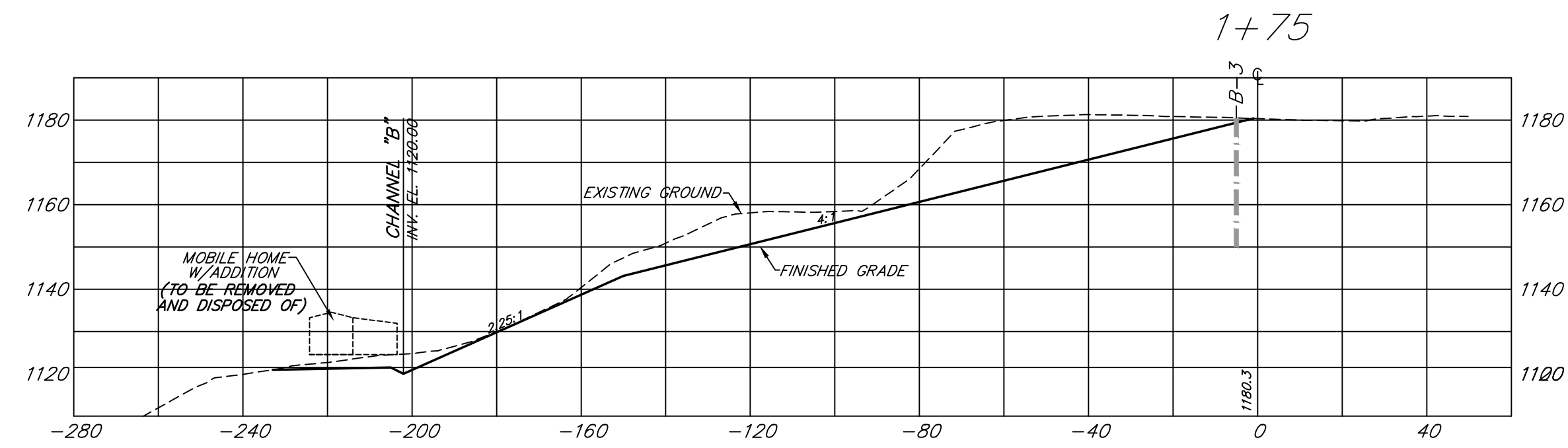
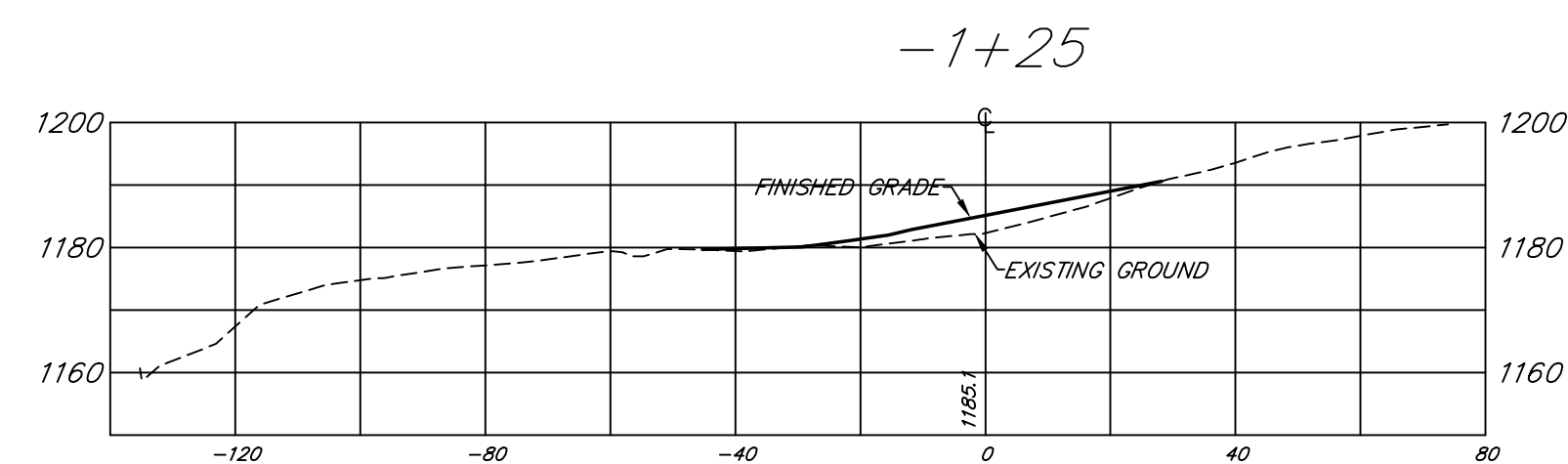
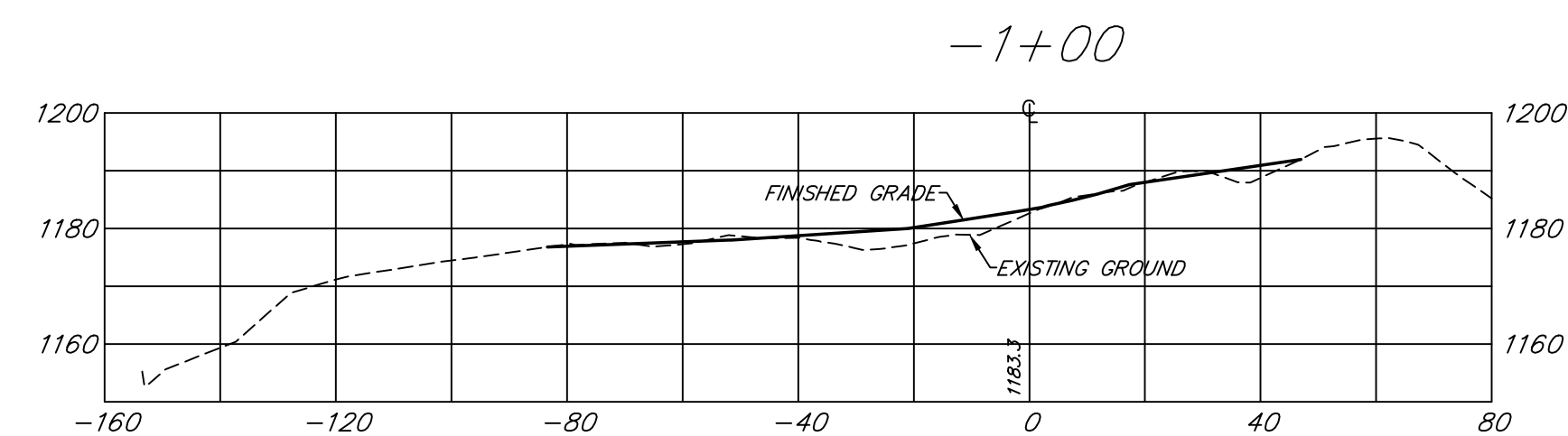
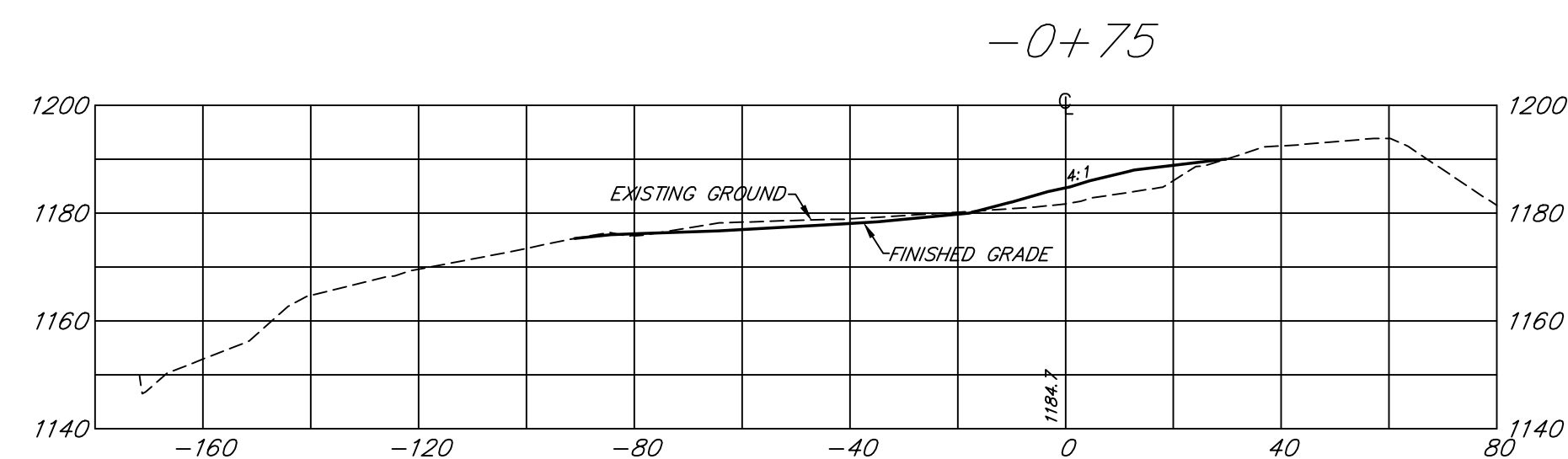
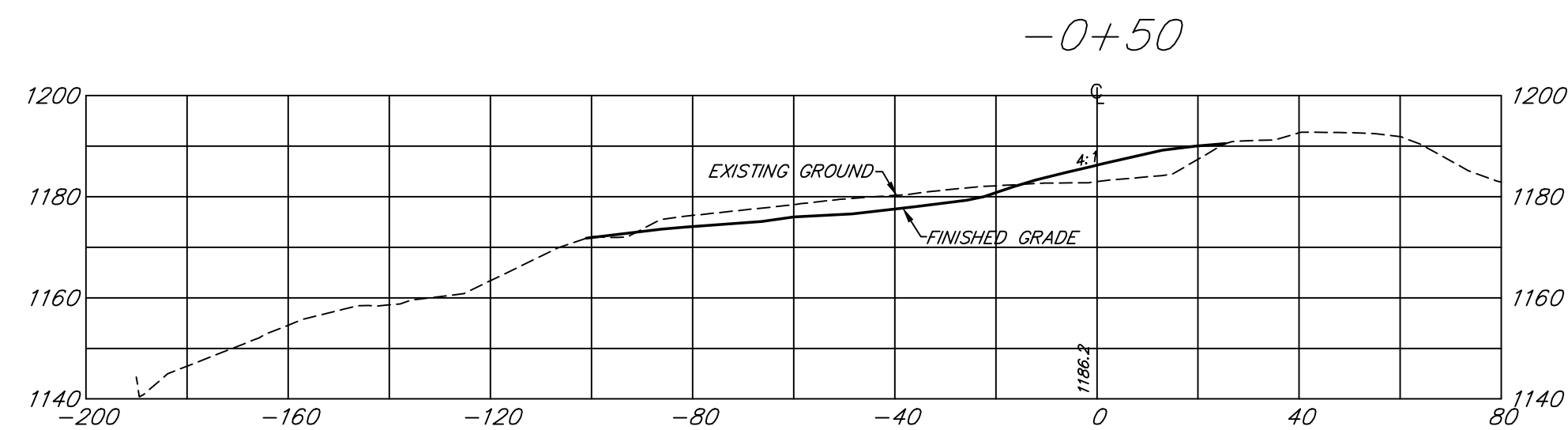
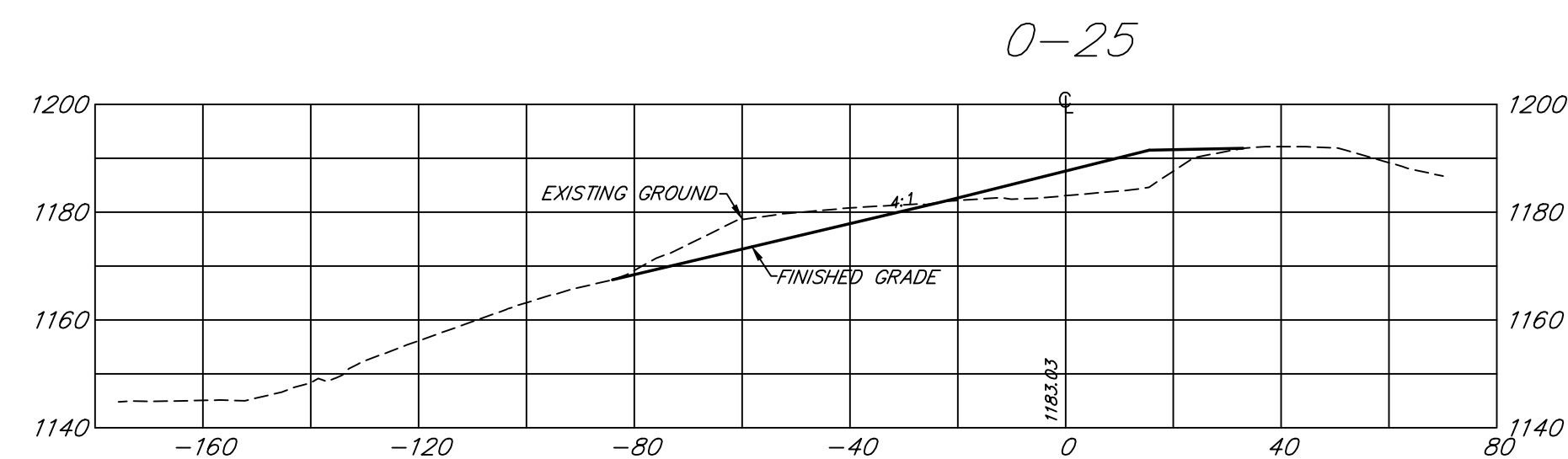
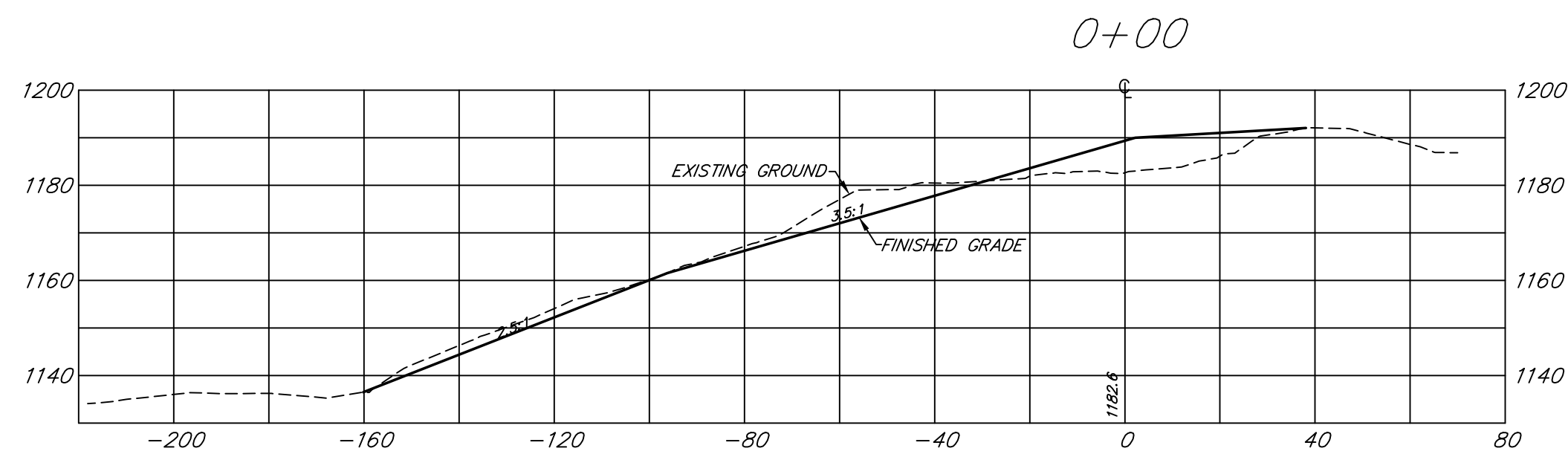
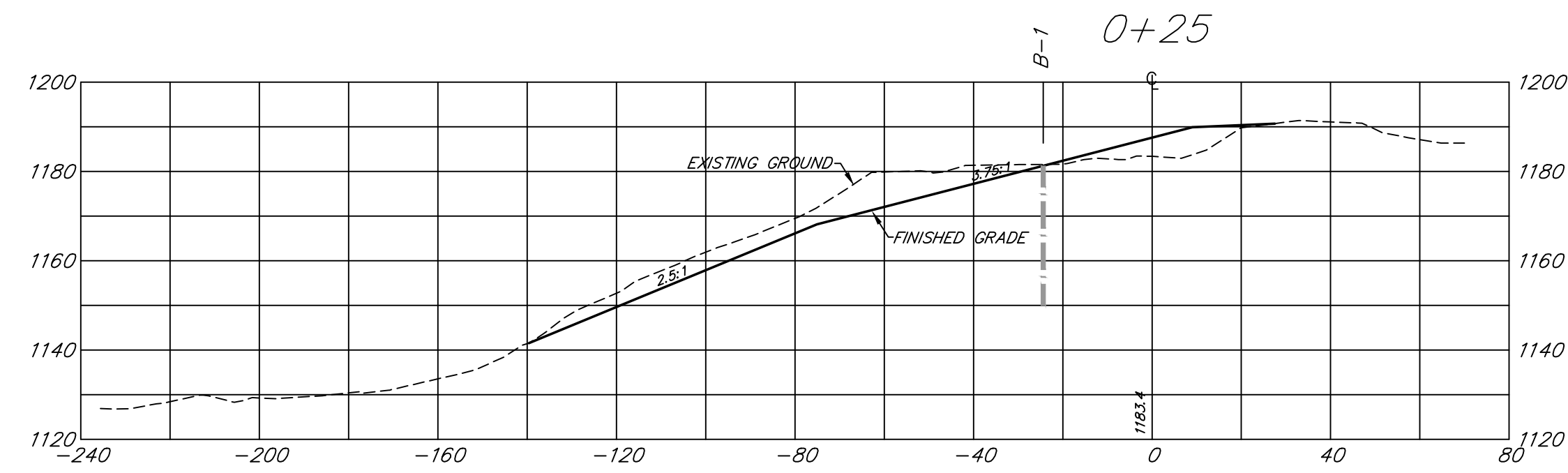
**LODGEVILLE (POE) DS*****SEDIMENT CONTROL PLAN***

DRAWN BY:	DWH
APPROVED BY:	RL
DATE:	3/10/2015

SCALE:  $1" = 40'$

SHEET NO. **4**

OF 10



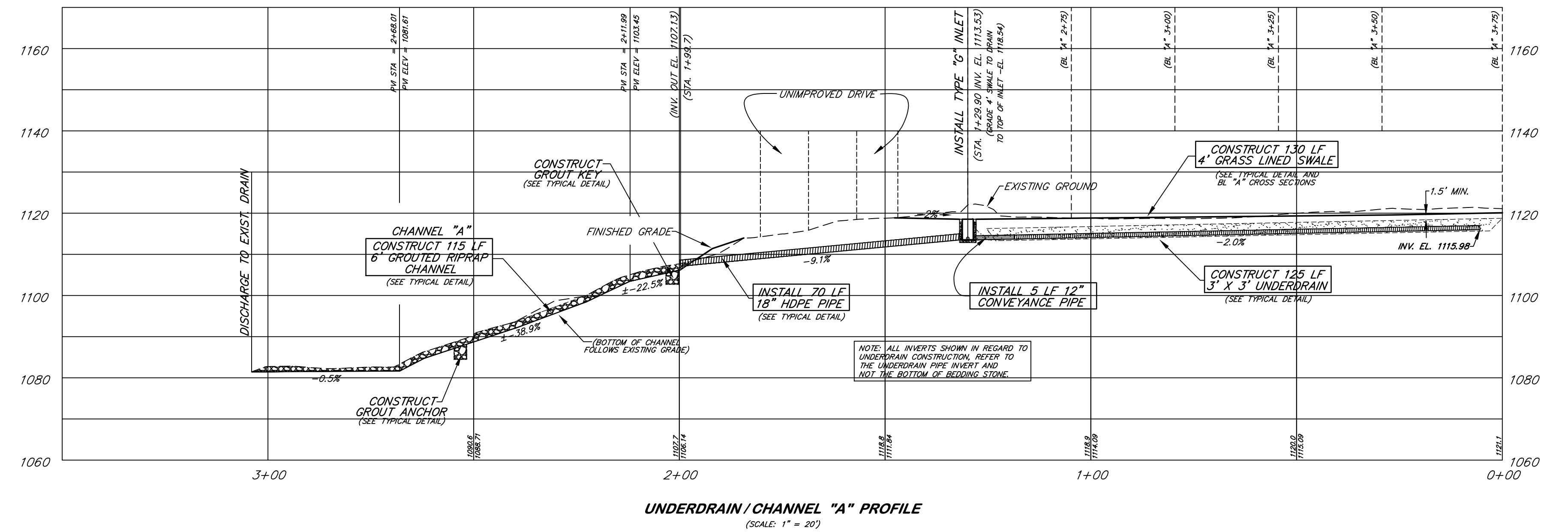
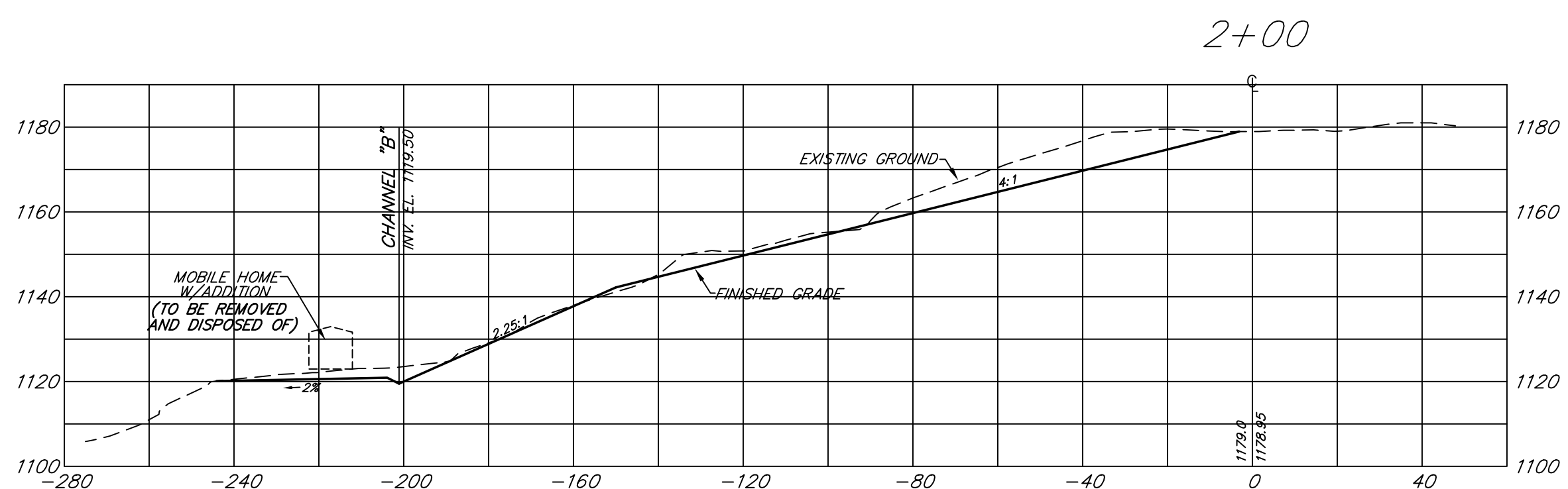
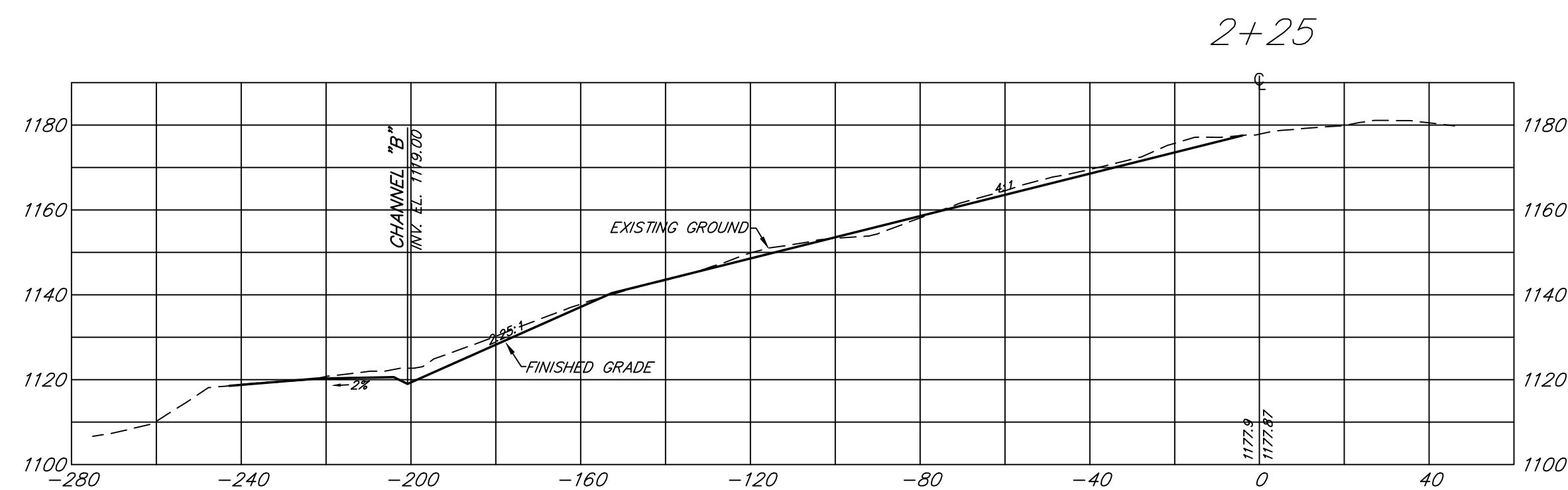
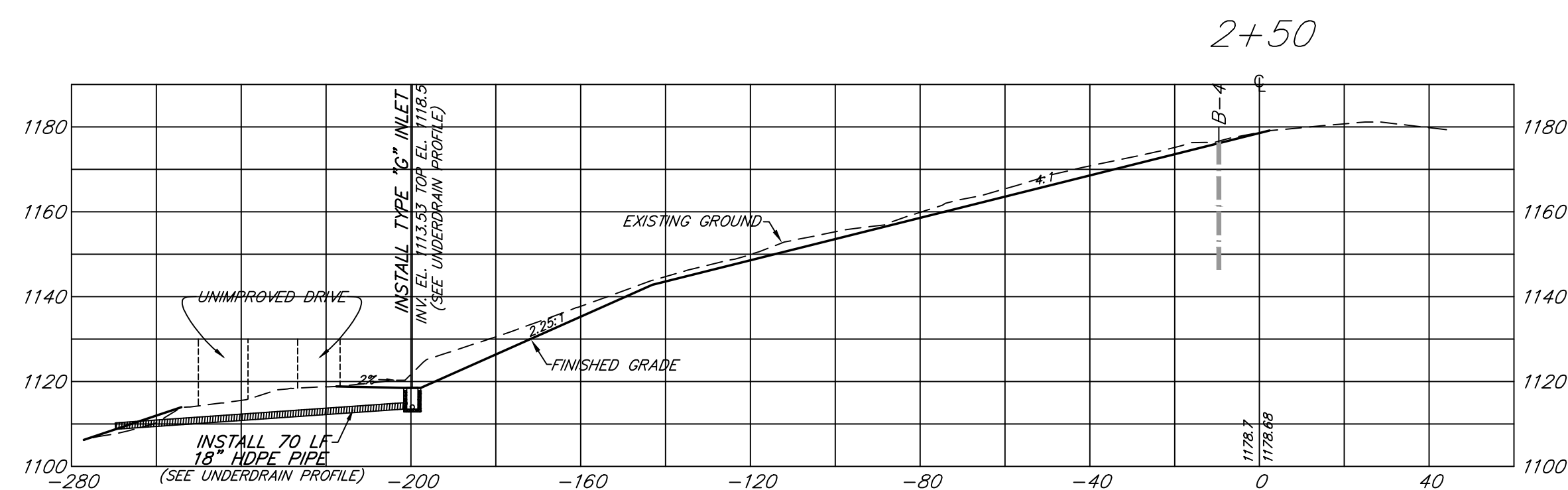
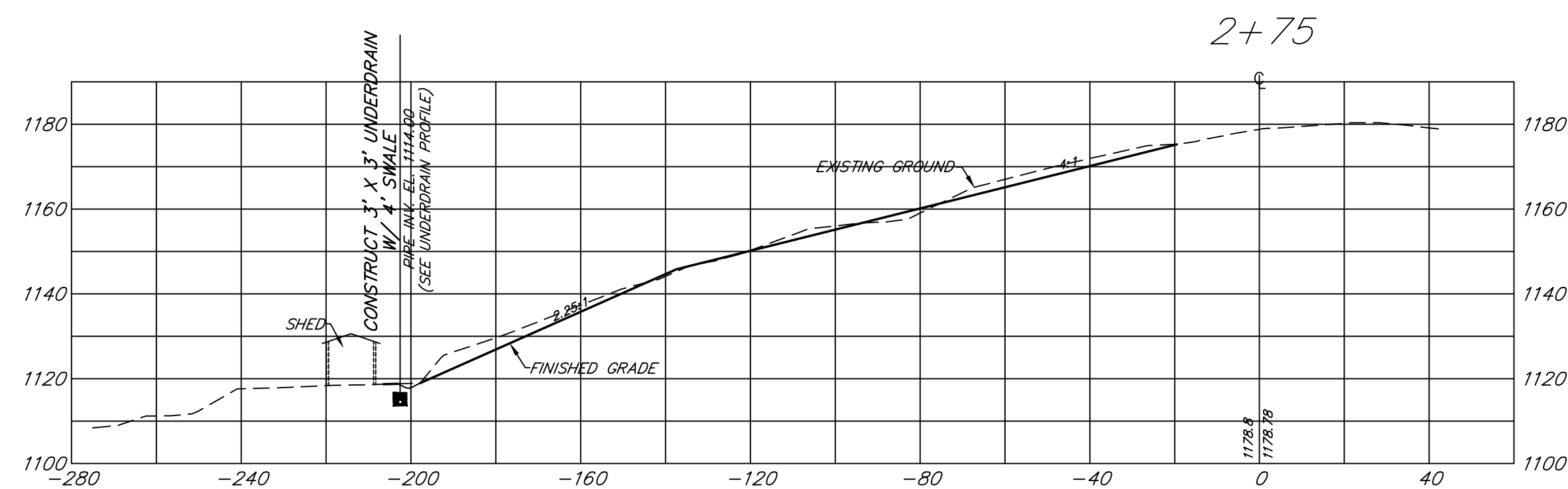
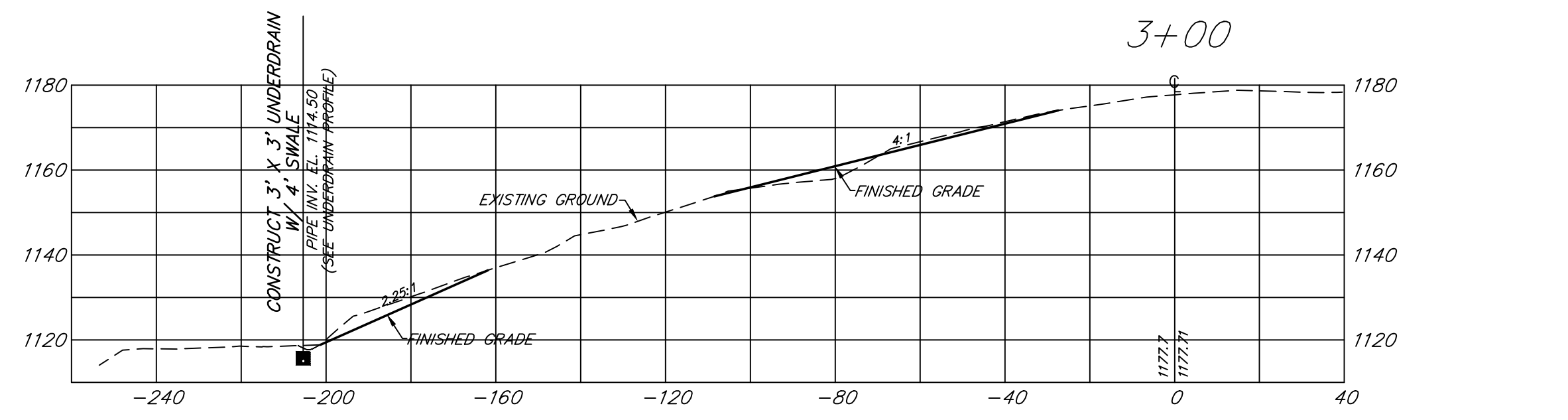
State of West Virginia  
Department of Environmental Protection  
Abandoned Mine Lands and Reclamation

**LODGEVILLE (POE) DS**

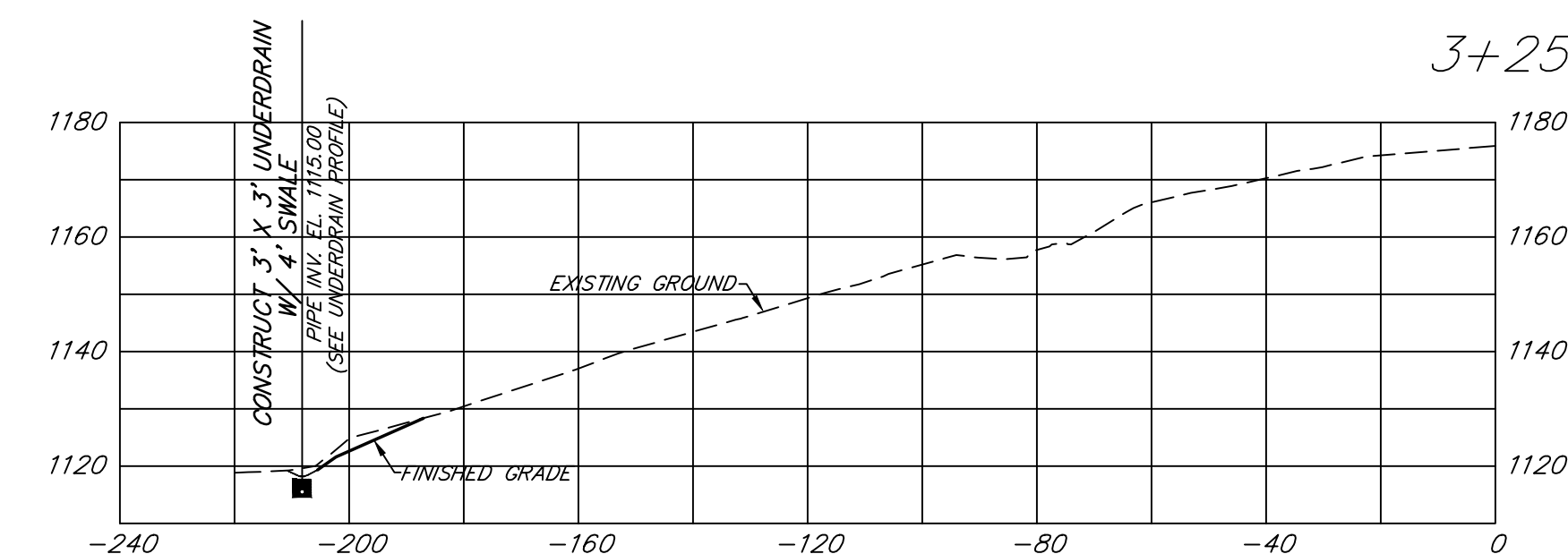
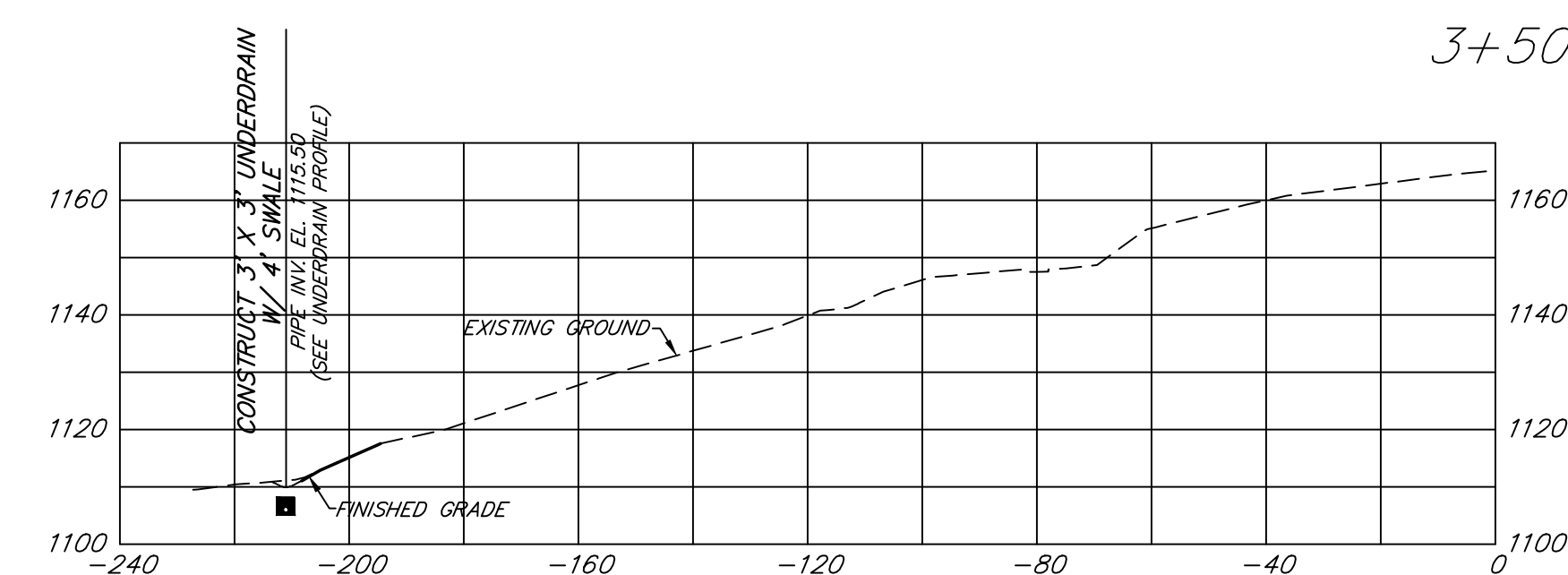
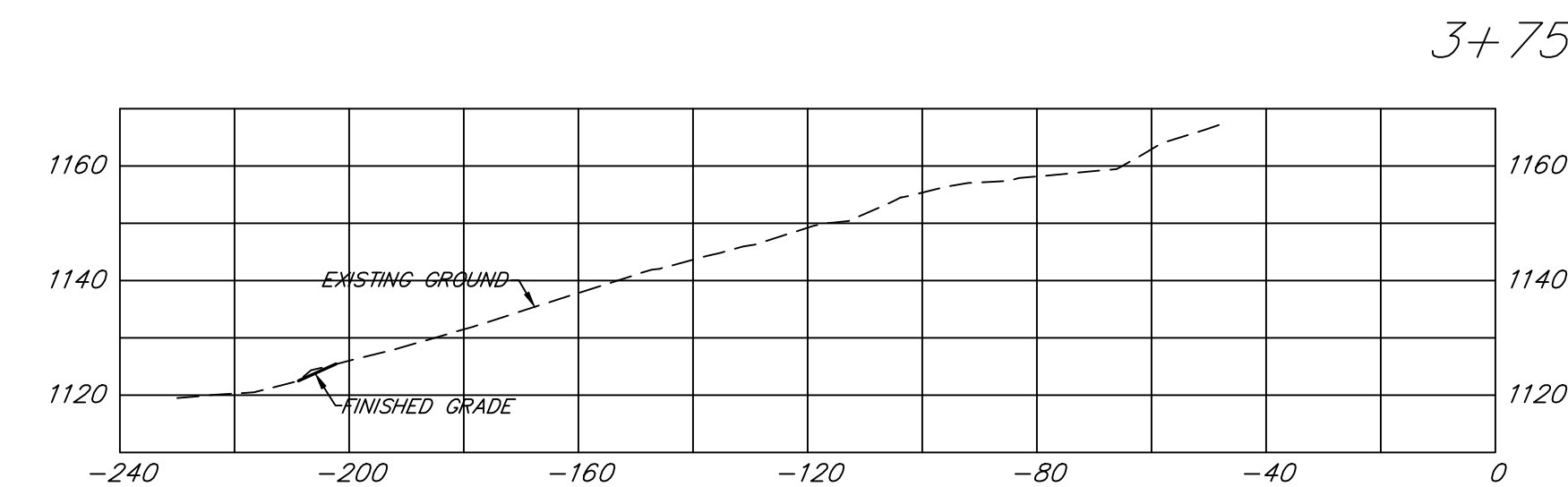
**BASELINE "A"  
CROSS SECTIONS**

DRAWN BY: DWH  
APPROVED BY: RL  
DATE: 3/10/2015

SCALE: 1" = 30'  
SHEET NO. **5**  
OF 10



BASELINE "A" CROSS SECTIONS  
(CONTINUED)



State of West Virginia  
Department of Environmental Protection  
Abandoned Mine Lands and Reclamation

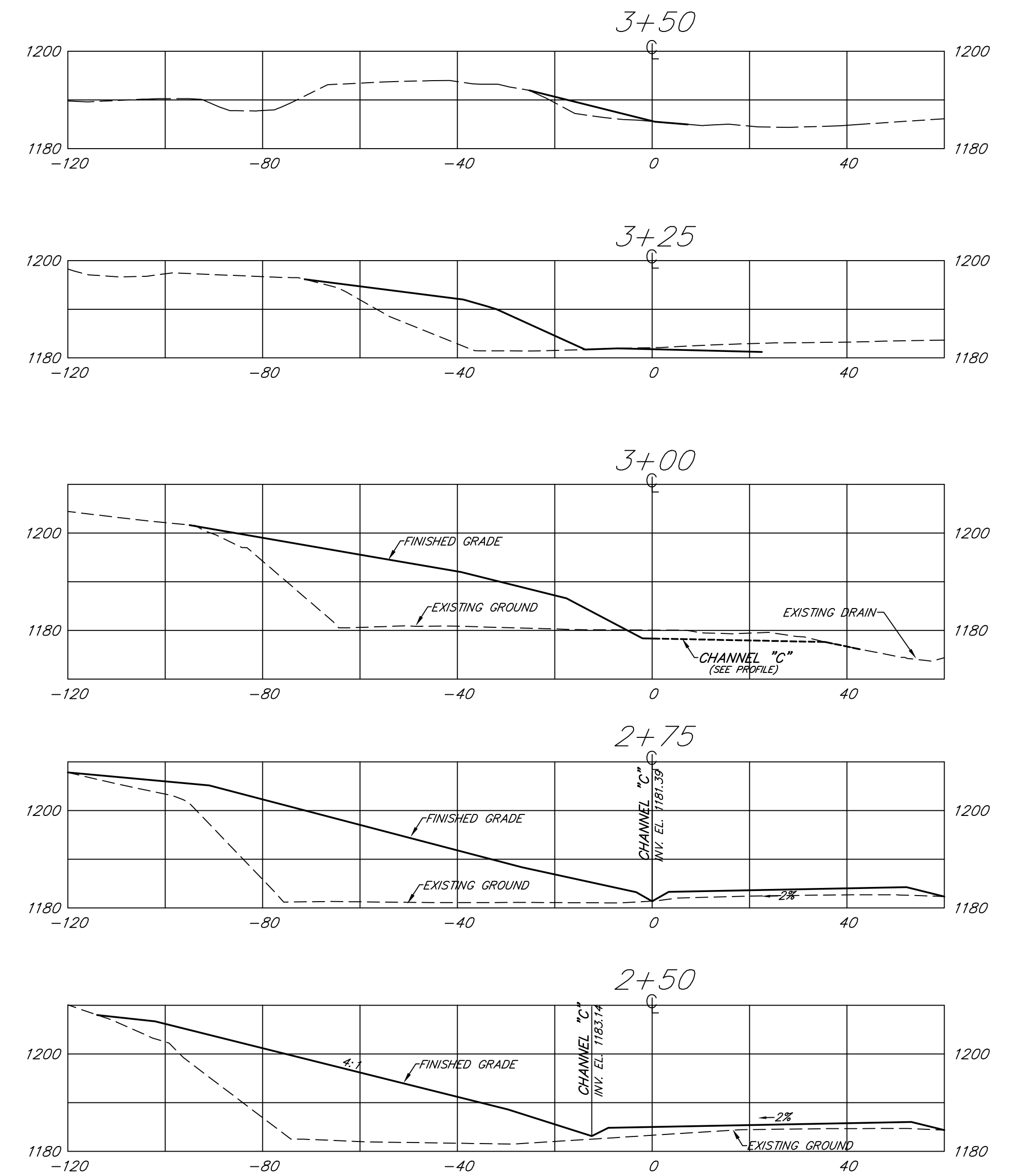
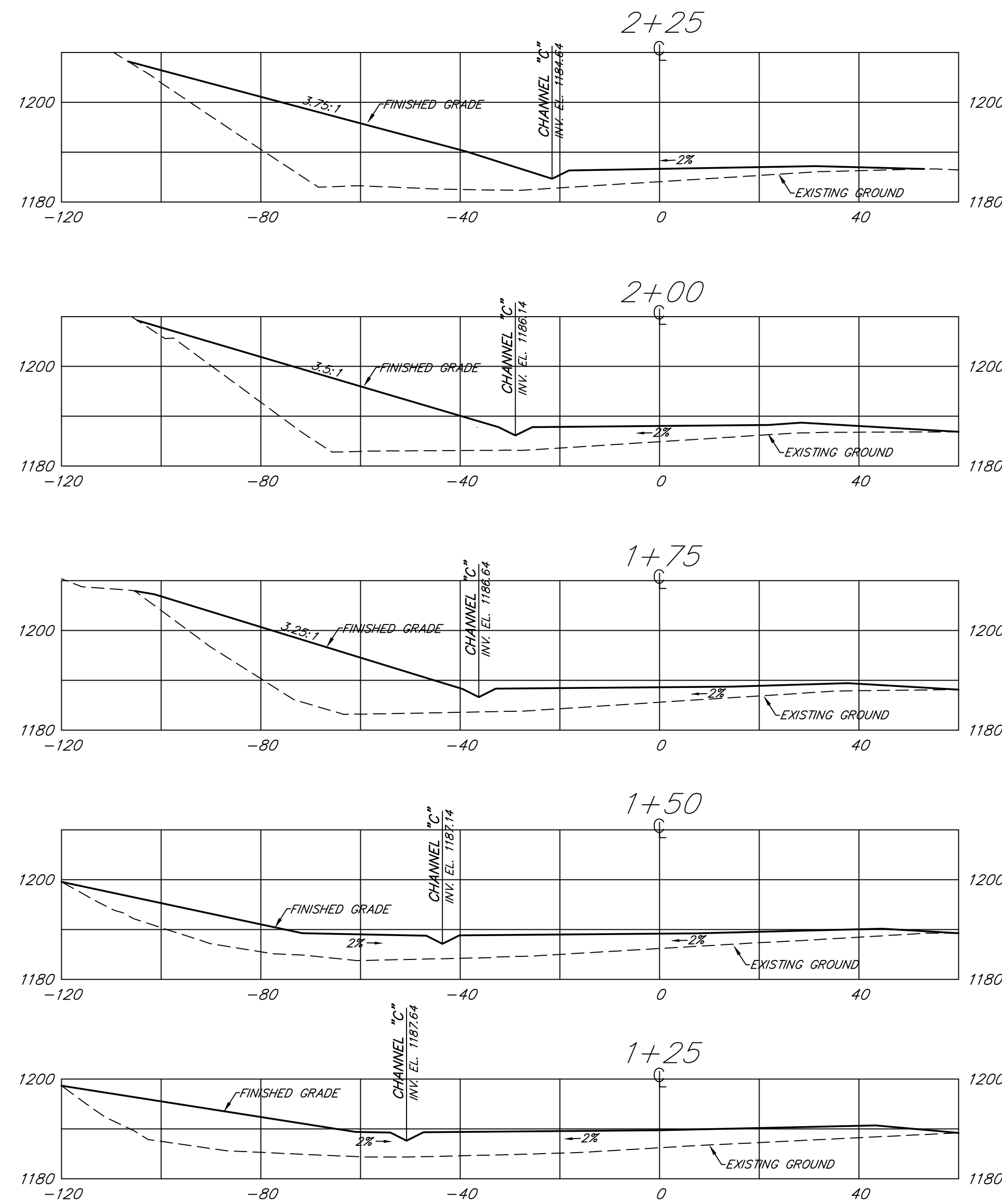
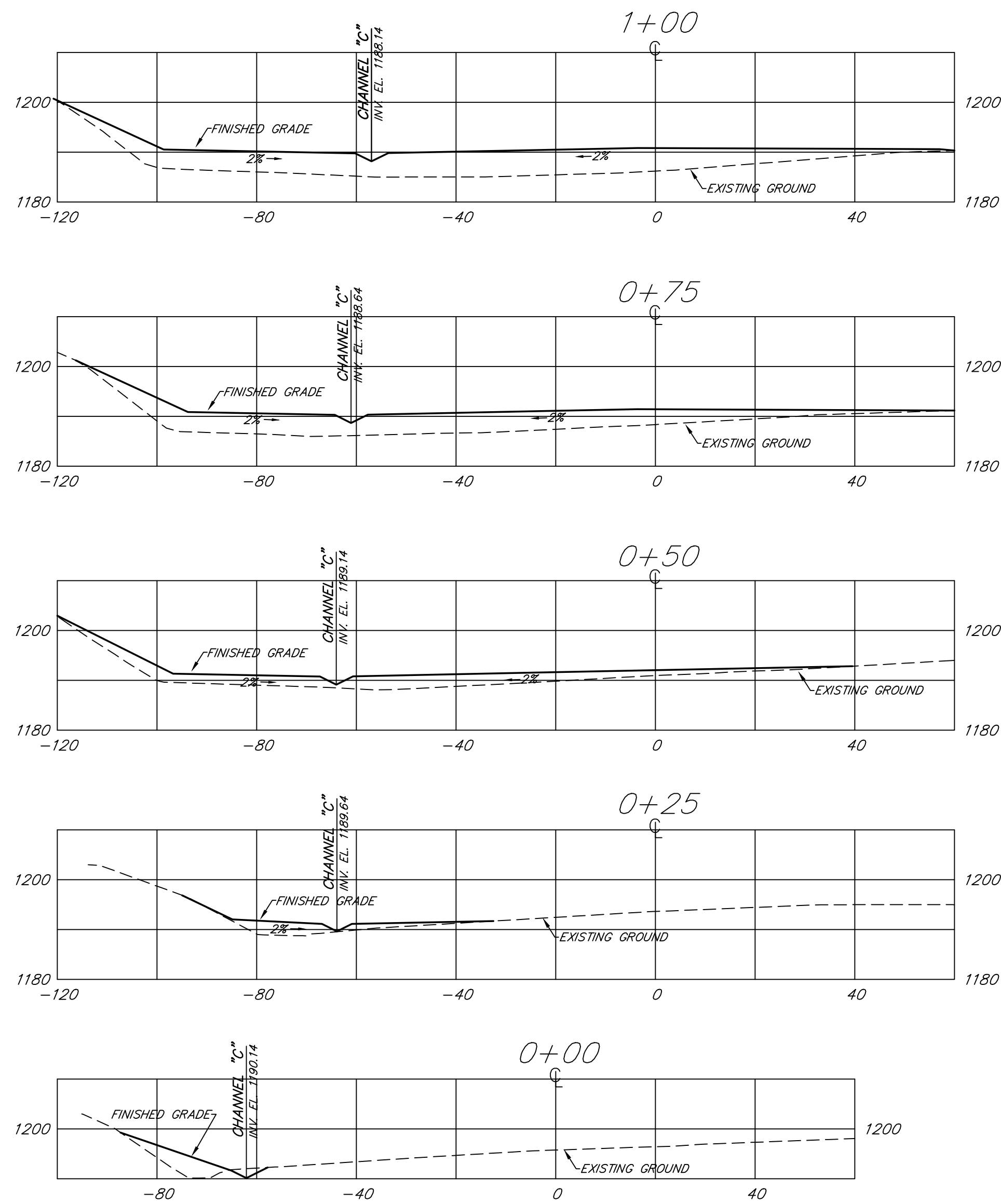
LODGEVILLE (POE) DS

BASELINE "A"  
CROSS SECTIONS AND  
3' X 3' UNDERDRAIN PROFILE

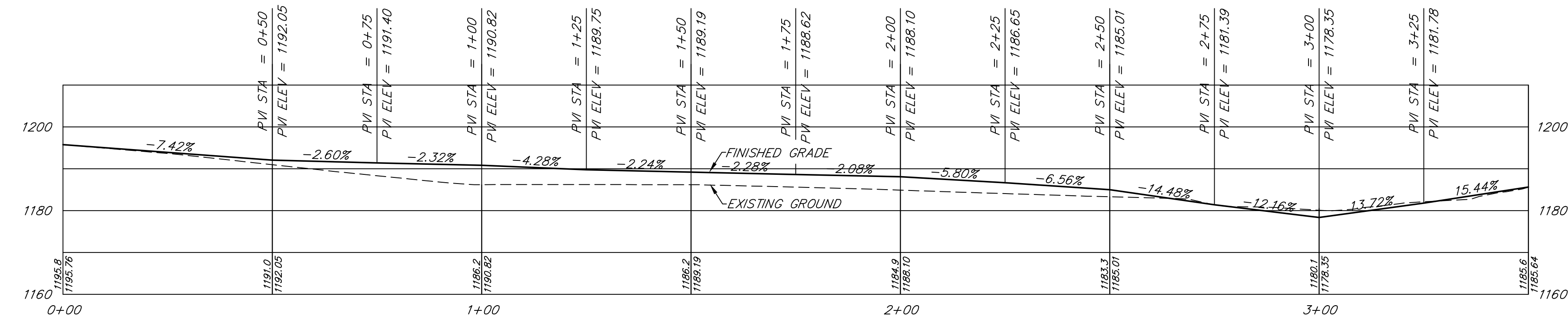
DRAWN BY: DWH  
APPROVED BY: RL  
DATE: 3/10/2015

SCALE: 1" = 30'  
(UNLESS NOTED)  
SHEET NO. 6  
OF 10

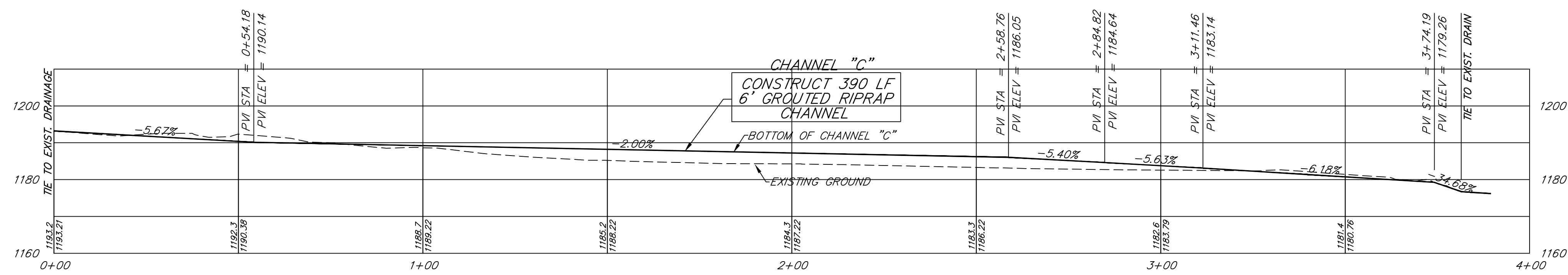




BASELINE "B" CROSS SECTIONS



BASELINE "B" PROFILE



CHANNEL "C" PROFILE

State of West Virginia  
Department of Environmental Protection  
Abandoned Mine Lands and Reclamation

**LODGEVILLE (POE) DS**

**BASELINE "B" PROFILE AND  
CROSS SECTIONS  
AND CHANNEL "C" PROFILE**

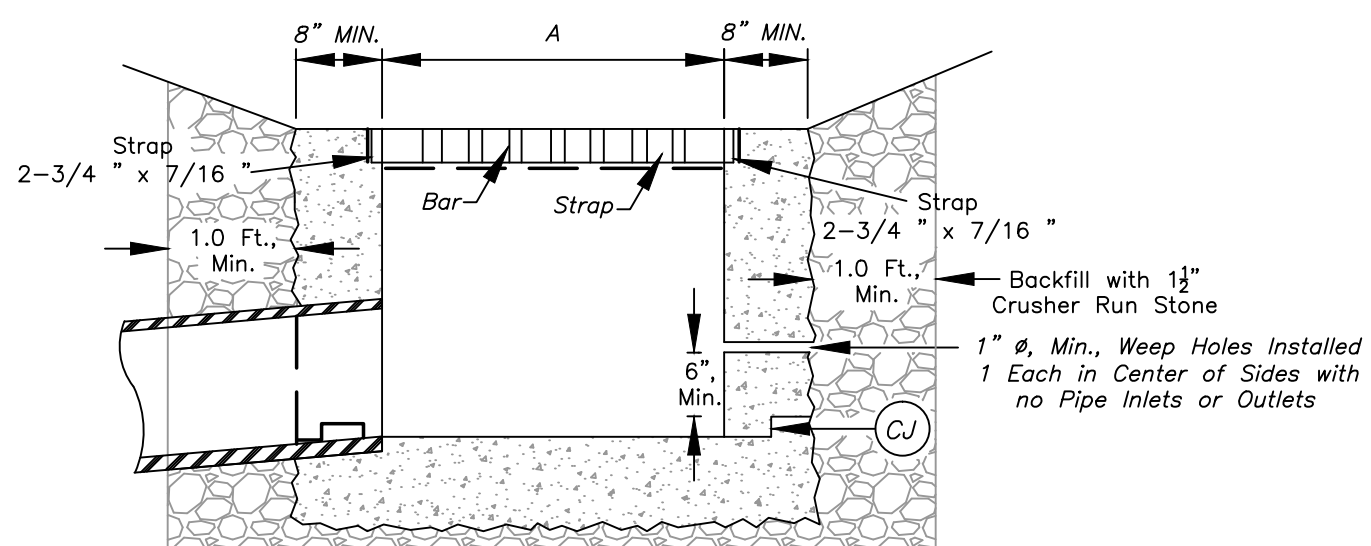
DRAWN BY: DWH  
APPROVED BY: RL  
DATE: 3/10/2015

SCALE: 1" = 20'  
SHEET NO. 7  
OF 10

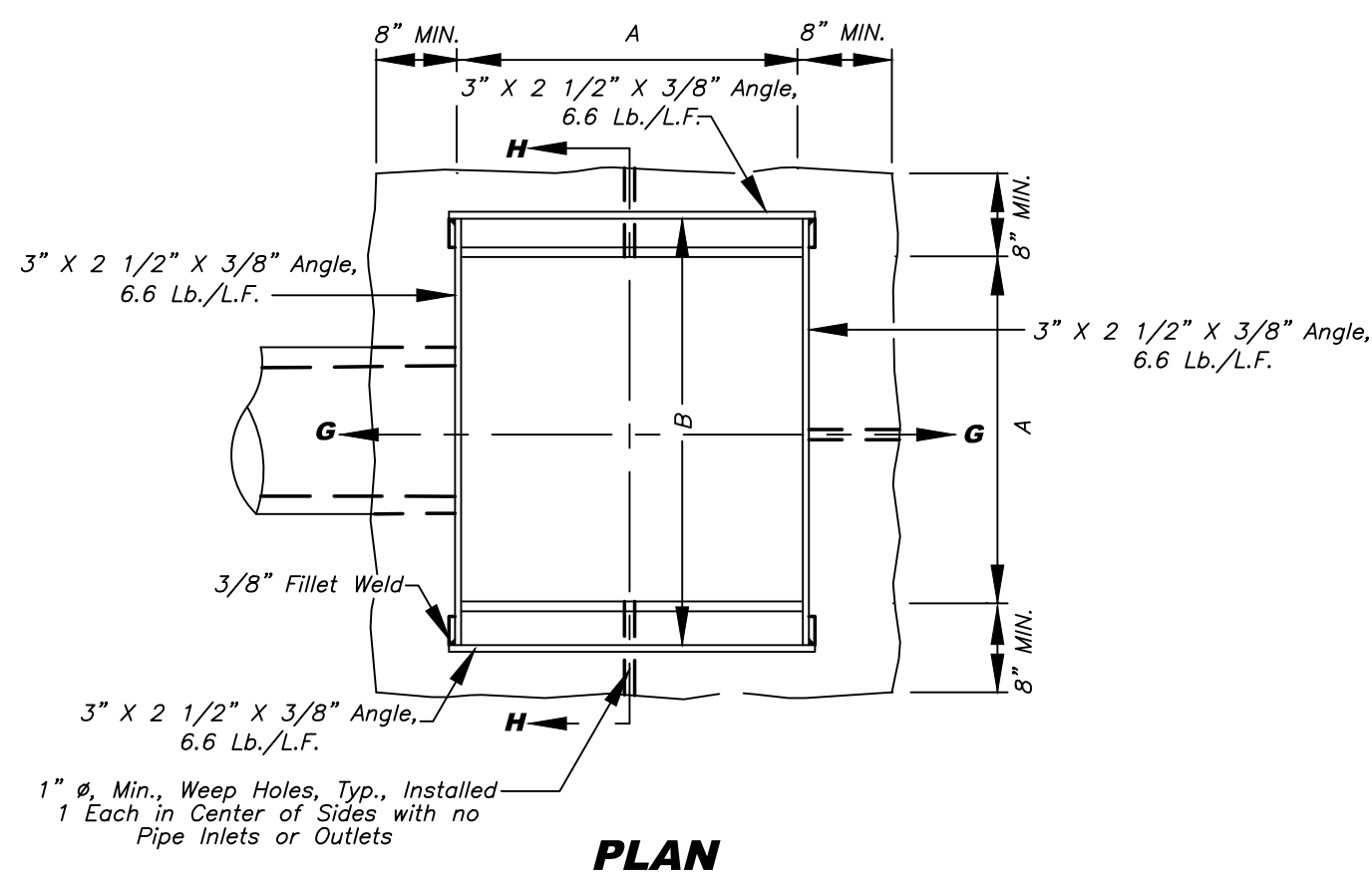
Pipe Size	DIMENSIONS					TYPE 2 GRATE			FRAME			TYPE 1 GRATE		
	A	B	C	D	H(Min)	F	Bars	WT.	F	Bars	WT.	F	Bars	WT.
18"	2'-8"	3'-2"	2'-7 3/4"	3'-1 3/4"	2'-0"	3 3/8"	7	223	62	1 3/8"	15	453		
21"	2'-8"	3'-2"	2'-7 3/4"	3'-1 3/4"	2'-3"	3 3/8"	7	223	62	1 3/8"	15	453		
24"	2'-8"	3'-2"	2'-7 3/4"	3'-1 3/4"	2'-6"	3 3/8"	7	223	62	1 3/8"	15	453		
27"	3'-0"	3'-2"	2'-11 3/4"	3'-5 3/4"	2'-9"	3 3/8"	8	279	69	1 3/8"	17	566		
30"	3'-0"	4'-0"	3'-5 3/4"	3'-11 3/4"	3'-0"	3 3/8"	9	357	80	1 3/8"	21	797		
33"	3'-9"	4'-3"	3'-8 3/4"	4'-2 3/4"	3'-3"	3 7/8"	10	419	85	1 7/8"	21	847		
36"	4'-0"	4'-6"	3'-11 3/4"	4'-5 3/4"	3'-6"	3 7/8"	11	486	90	1 3/8"	23	981		
42"	4'-6"	5'-0"	4'-5 3/4"	4'-11 3/4"	4'-0"	3 3/8"	12	587	101	1 3/8"	27	1277		
48"	5'-0"	5'-6"	4'-11 3/4"	5'-5 3/4"	4'-6"	3 3/8"	14	748	112	1 3/8"	29	1507		

Table Note: Grate and frame weights are for information only and will increase if larger straps and bars are used.  
The following substitutions in dimensions shall be acceptable for fabricating the grate and frame:  
Strap Thickness: 1/2" Strap Depth: 3" Bar Depth: 3"

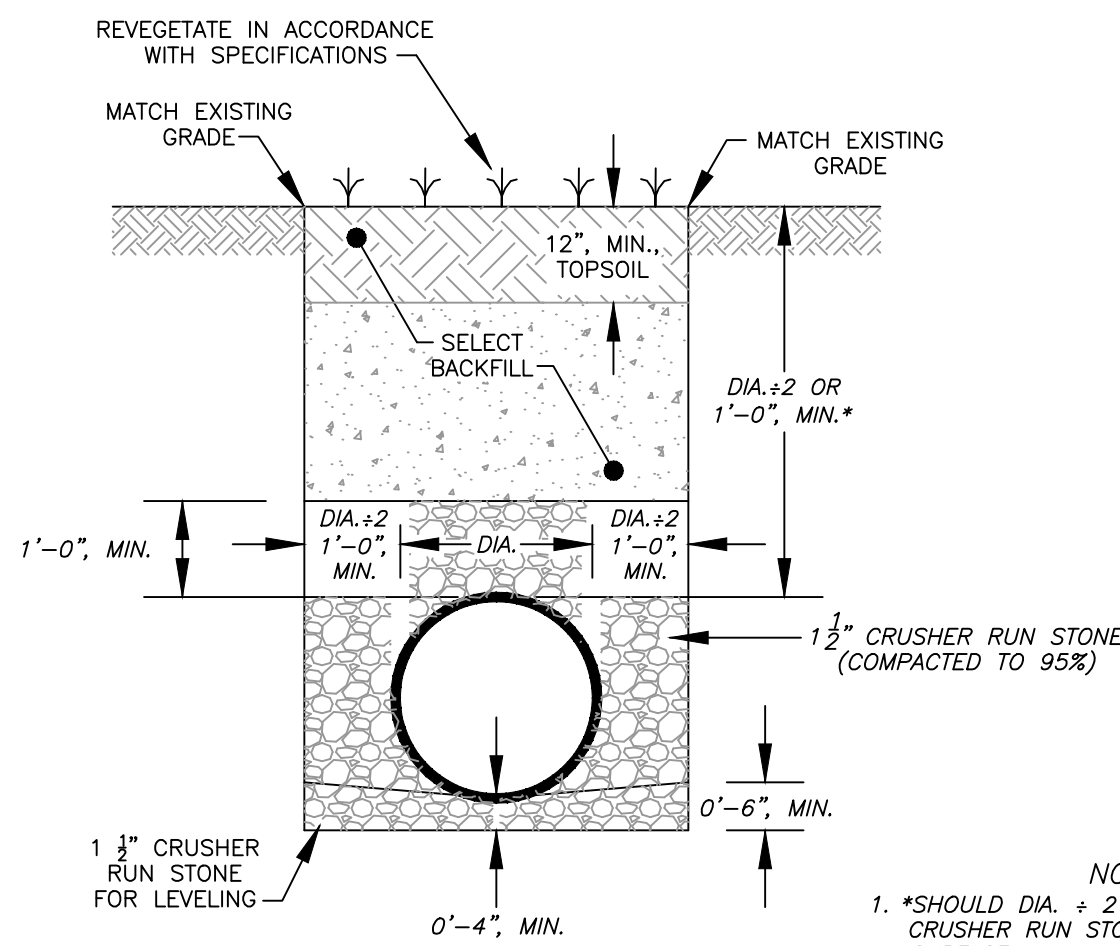
INLET MOUNDING TABLE			
DITCH GRADE (%)	L1, HORIZONTAL LENGTH (FT.)	L2, HORIZONTAL LENGTH (FT.)	
FROM	TO		
0	3	10	15
3	5	9	20
5	7.5	8	40
7.5	UP	SPECIAL DESIGN	SPECIAL DESIGN



**SECTION G - G**  
(Type 2 Grate Shown)

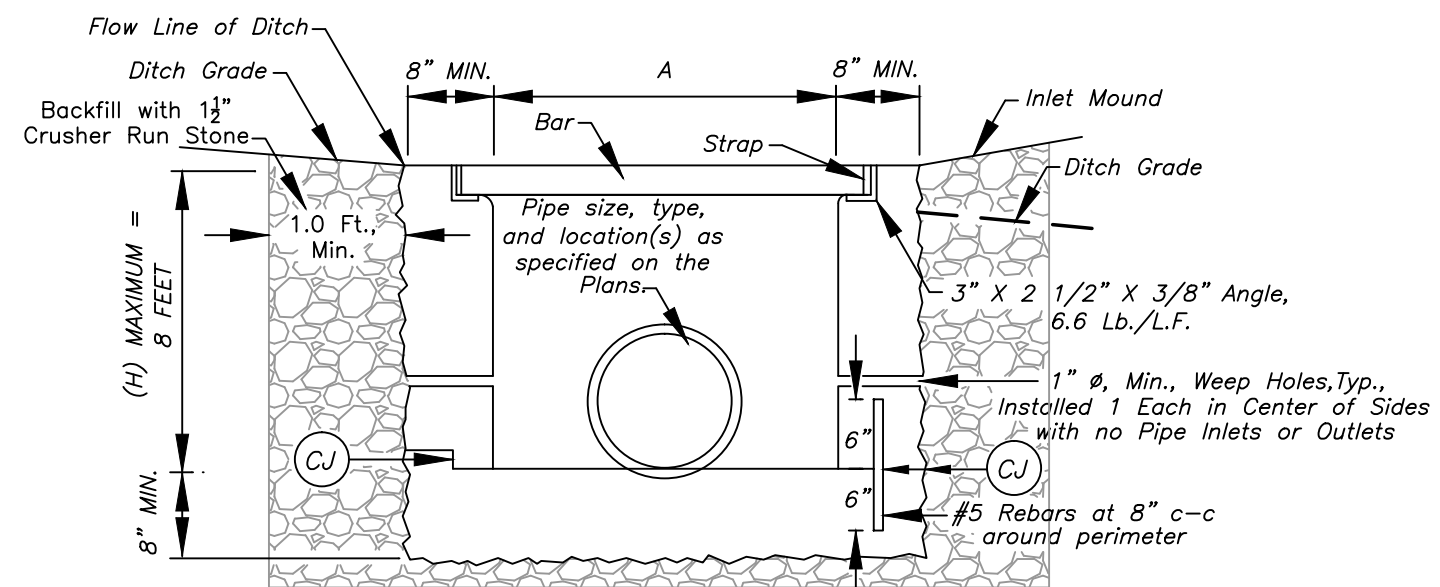
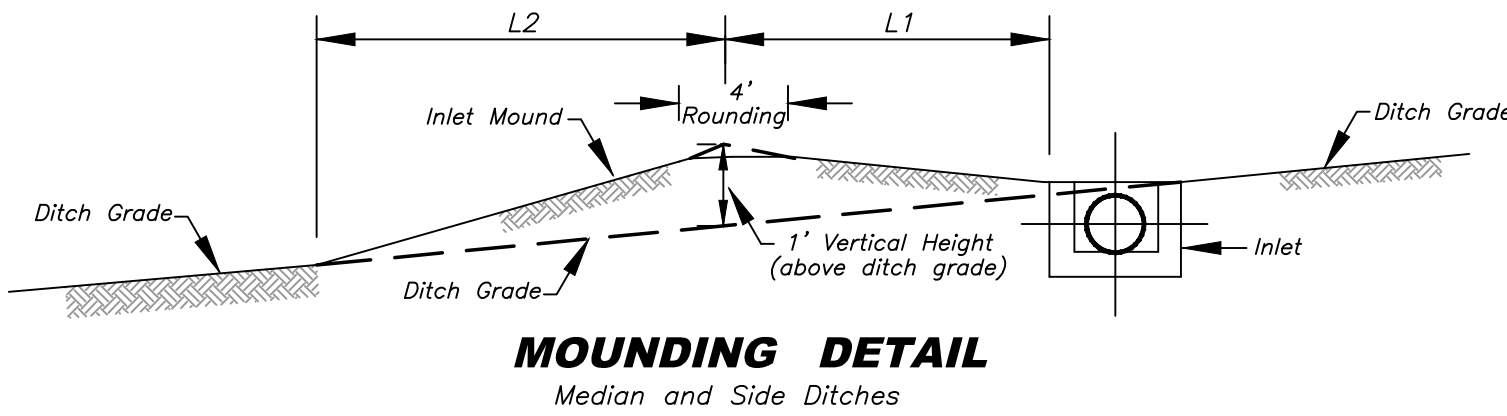


**PLAN**

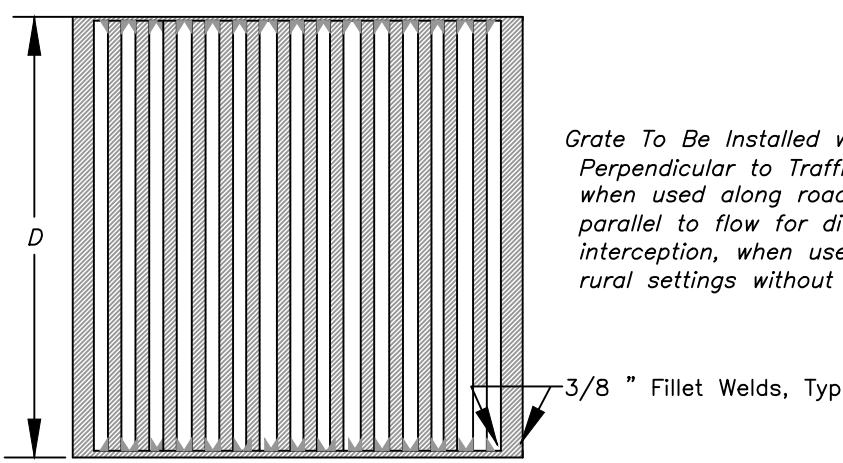


NOTE:  
1. \*SHOULD DIA. + 2 BE EQUAL TO 1'-0", THEN CRUSHER RUN STONE GOES ALL THE WAY TO SURFACE.

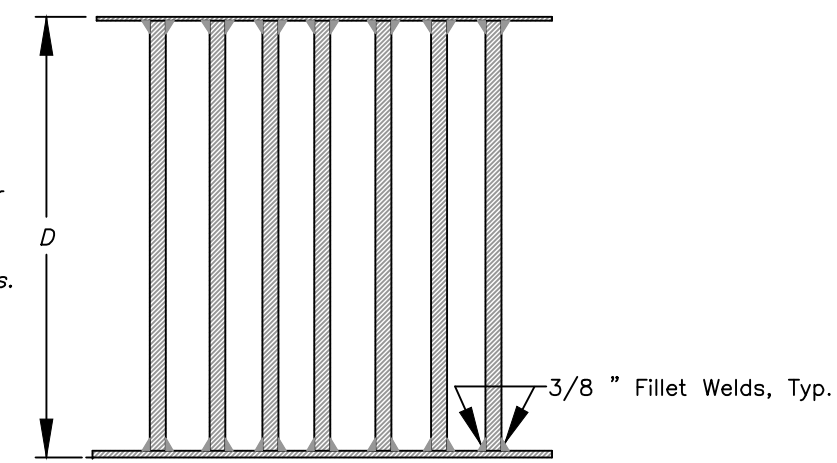
**PIPE TRENCH - VEGETATED SURFACE**



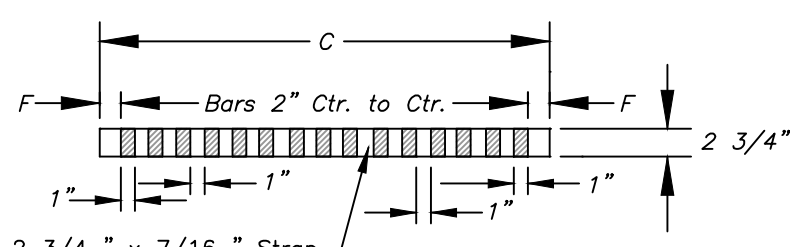
**SECTION H - H**



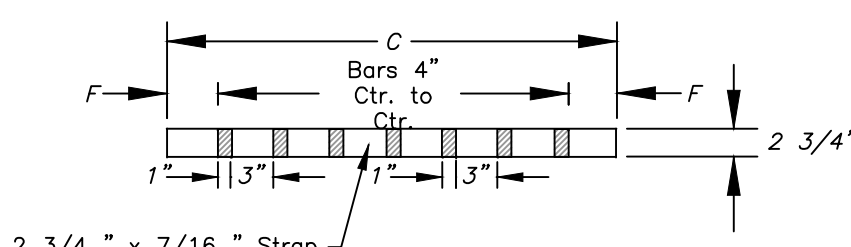
**PLAN VIEW - TYPE 1 GRATE**



**PLAN VIEW - TYPE 2 GRATE**



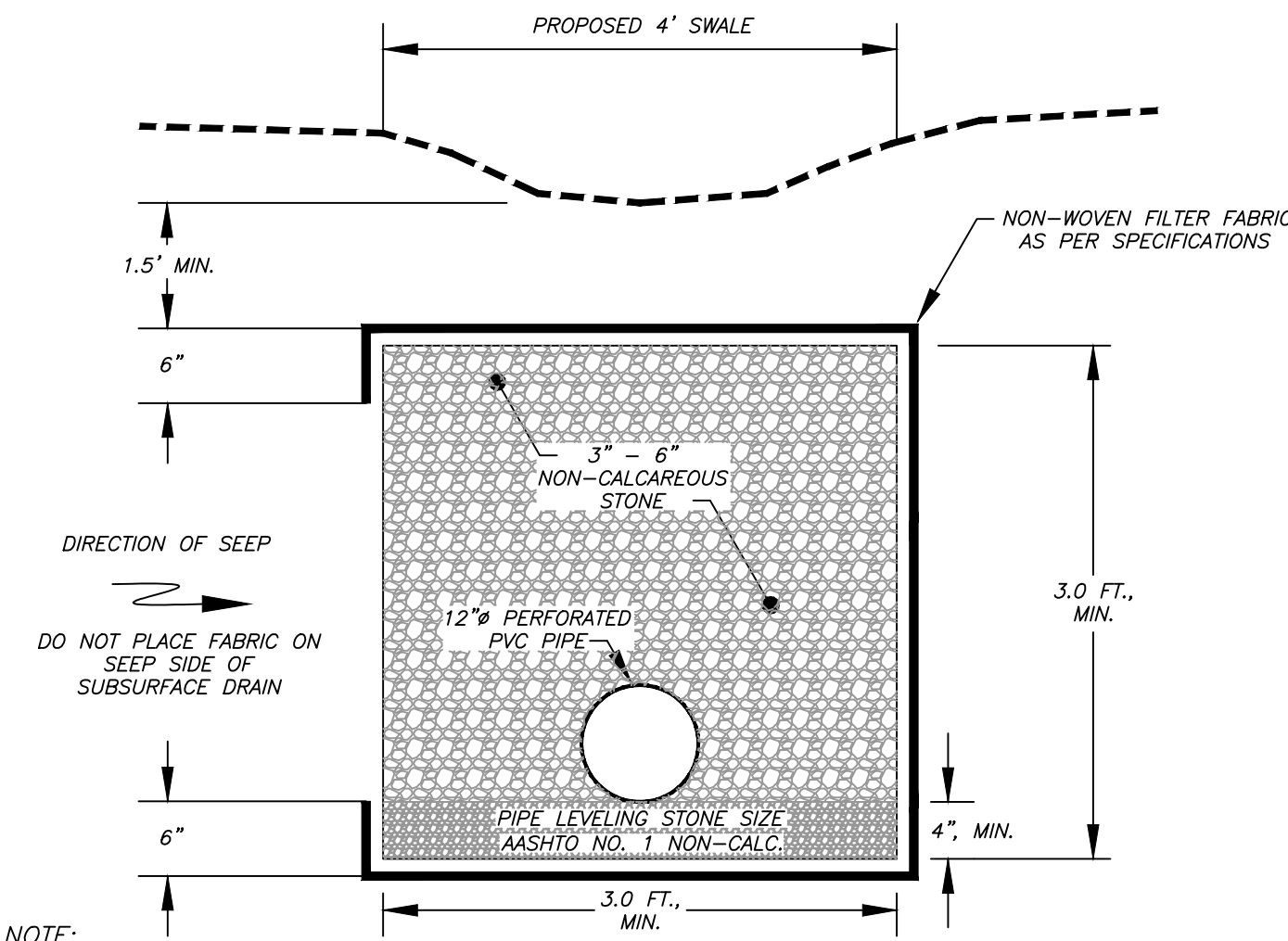
**SECTION THROUGH TYPE 1 GRATE**



**SECTION THROUGH TYPE 2 GRATE**

(USE GRATE TYPE 2 INSTALLATION FOR THIS PROJECT)

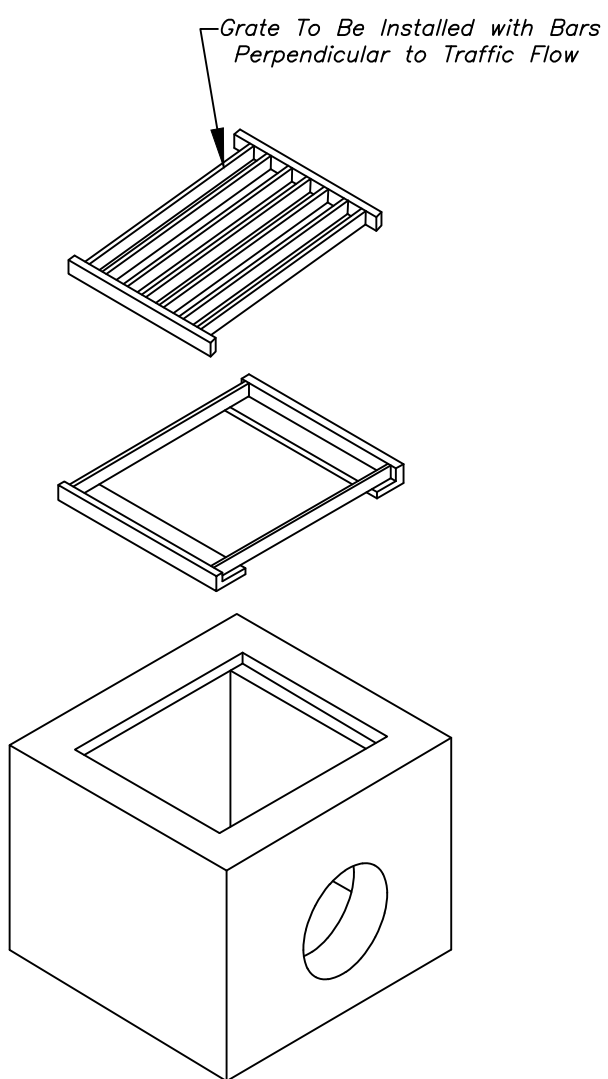
**TYPE "G" INLET**



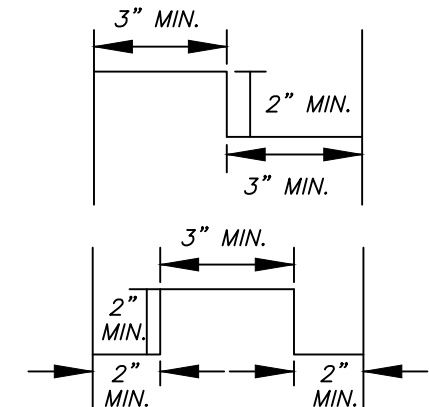
NOTE:  
1. THE FILTER FABRIC SHALL BE OVERLAPPED 1.0' MINIMUM, AT ALL JOINTS.

**UNDERDRAIN DETAIL**

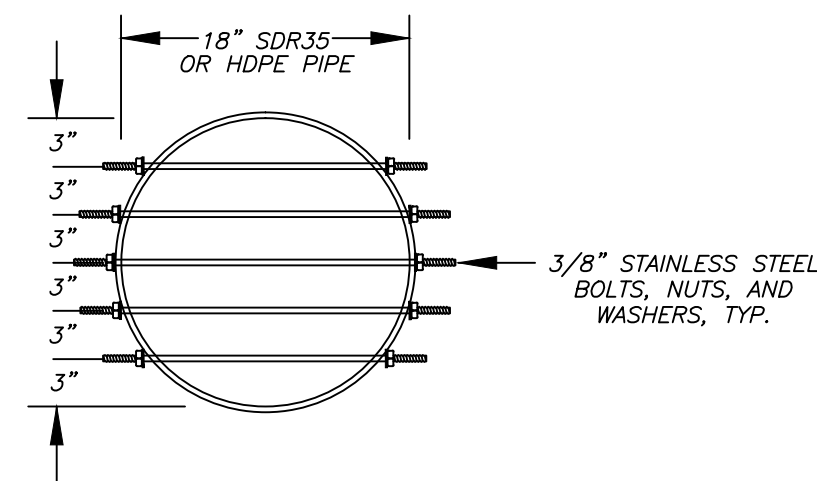
**3' x 3' UNDERDRAIN**



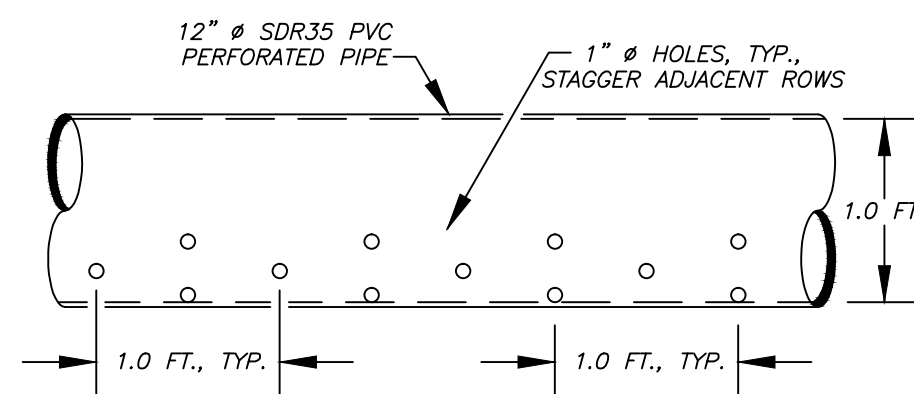
**EXPLODED DETAIL**



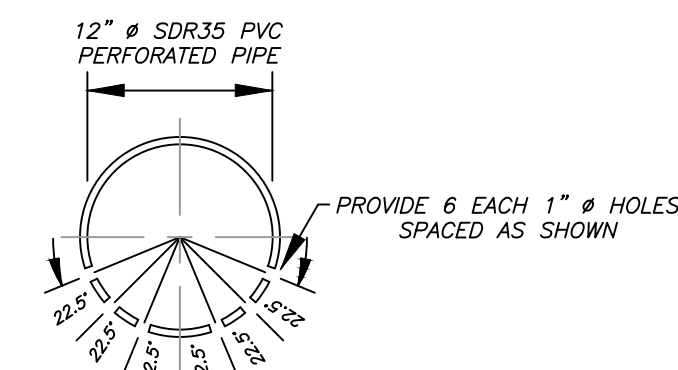
**CONSTRUCTION JOINT DETAILS**



**18" PIPE ANIMAL GUARD CROSS SECTION, TYP.**



**UNDERDRAIN PIPE LONGITUDINAL VIEW, TYP.**



**UNDERDRAIN PIPE CROSS SECTION, TYP.**

**NOTES:**

- The final installed top surface of inlet and grate shall be flush with adjacent finished surfaces, such as pavement, gutters, curbs, and sidewalks. Top of grate elevation, if shown on the plans, is for information only.
- Construction may be cast-in place, precast in one or multiple sections, or any combination of cast-in-place and precast.
- Type 2 Grate shall be used at all locations unless otherwise specified on the Plans. Type 1 Urban Grates shall be used only at specially designated locations as shown on the plans.
- The Contractor, at his option, may omit use of the frame by forming a ledge in the concrete.
- Special care shall be exercised in forming the 2" wide concrete ledge to provide a smooth, even surface for supporting the grates if the shallow frame is not used; no projections shall exist on the bearing surfaces of the ledge or the grates, and the grates shall seat on the ledge without rocking.
- The Mounding Detail as shown is not required when an inlet is placed in a sag.
- Optional construction joints labeled 'CJ' may be roughened concrete, keyed or doweled as per the typical details shown herein or as approved by the Engineer. Non shrink grout meeting the requirements of subsection 715.5 of the specifications may be used to a depth of 1/2" for leveling between precast sections. Thicker depths will be allowed as per the manufacturer's recommendations.
- This inlet is to be installed in roadside or median ditches only. It is not to be placed adjacent to pavement or in the gutter pan of combination curb and gutter.
- The minimum distance from the top of any pipe opening to any construction joint above the opening shall be four (4) inches.
- The number and location of pipe openings shall be as shown in the plans. The contractor at no additional cost, shall be responsible for any temporary bracing required to transport precast inlet sections due to multiple openings.

State of West Virginia  
Department of Environmental Protection  
Abandoned Mine Lands and Reclamation

**LODGEVILLE (POE) DS**

**TYPICAL DETAILS (1)**

DRAWN BY: DWH  
APPROVED BY: RL  
DATE: 3/10/2015

SCALE: NONE  
SHEET NO. 8  
OF 10



NOTES:

PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.

BEGIN AT THE UPSTREAM END OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" ACROSS THE WIDTH OF THE BLANKET.

ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.

PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4" - 6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE BLANKETS.

FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2" - 5" (DEPENDING ON BLANKET TYPE) AND STAPLED.

IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.

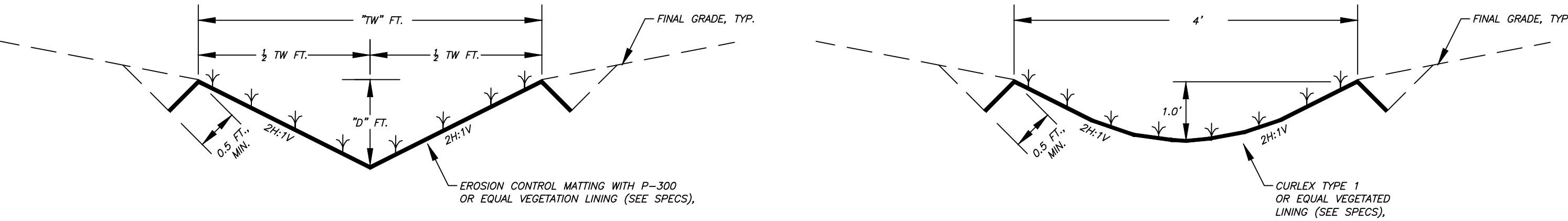
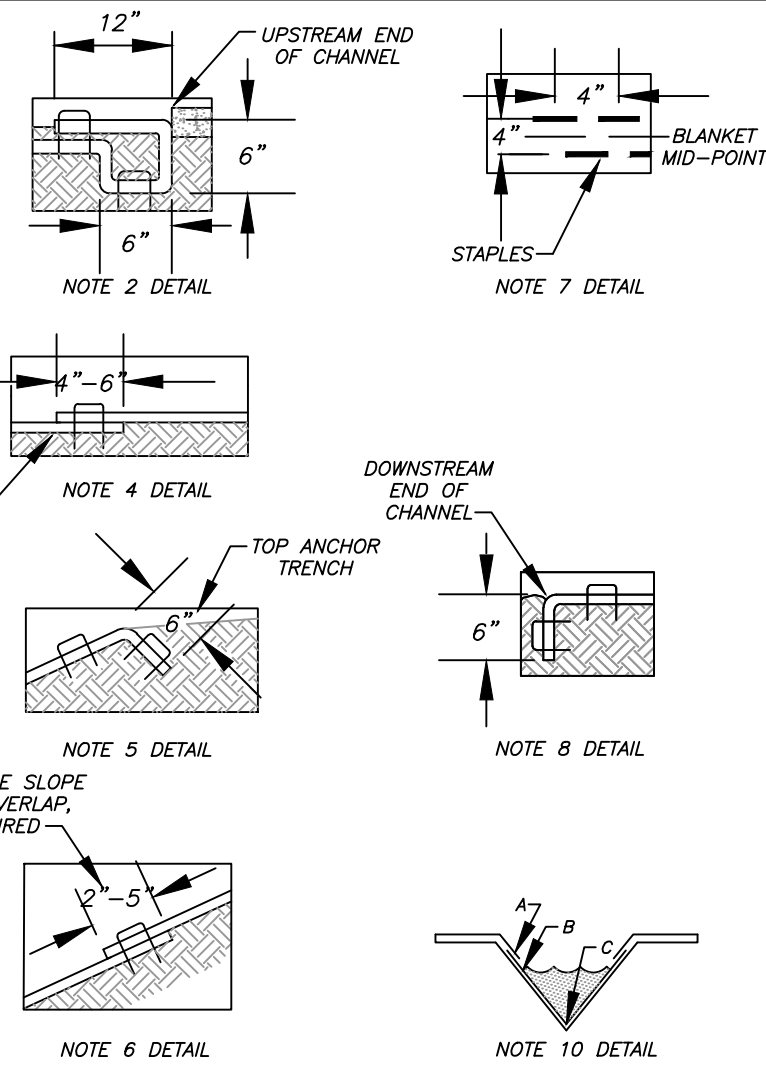
THE DOWNSTREAM END OF THE CHANNEL BLANKET MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

IN LOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE REQUIRED TO PROPERLY ANCHOR THE BLANKET.

HORIZONTAL STAPLE SPACING SHOULD BE ALTERED, IF NECESSARY, TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

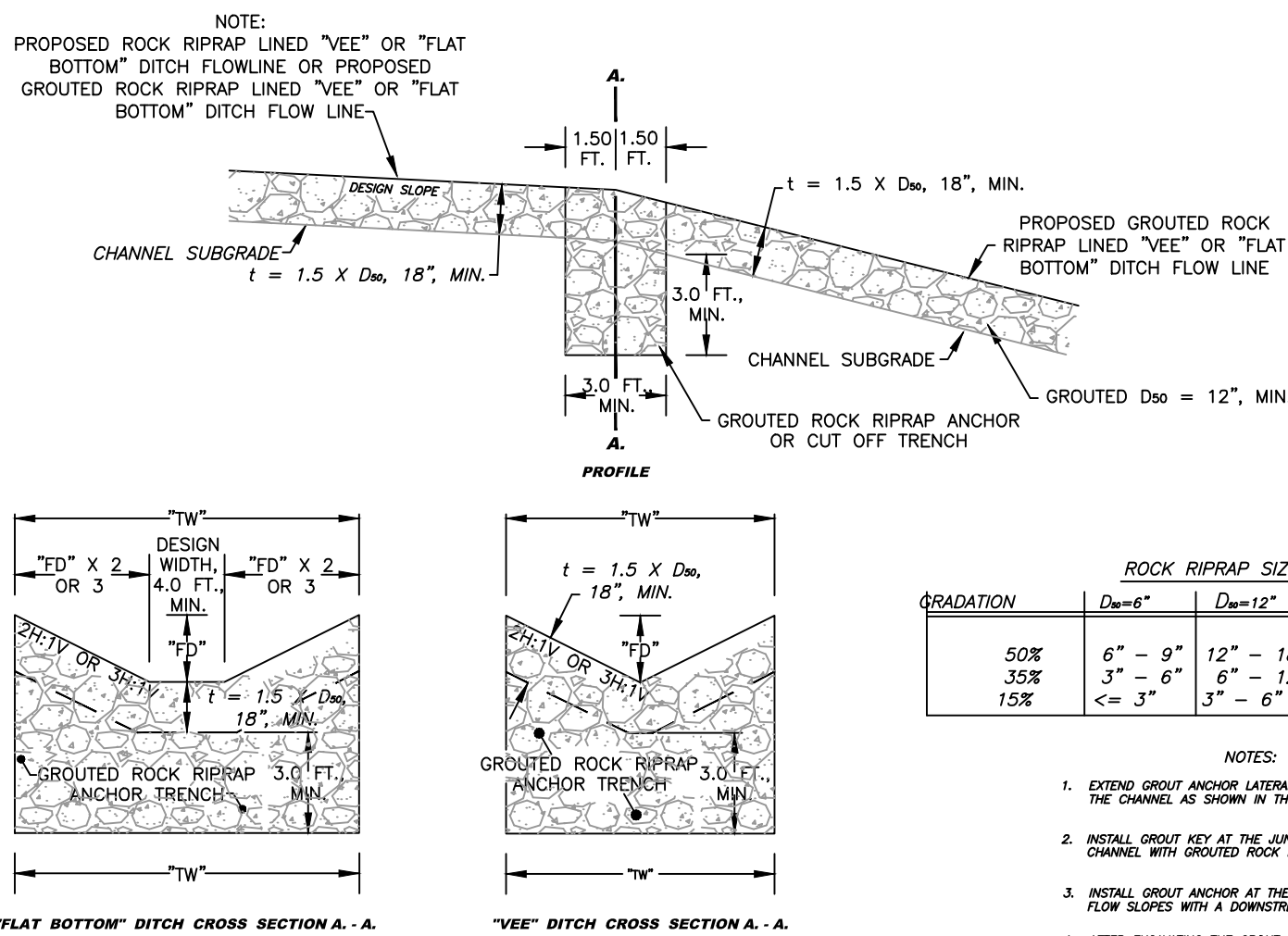
PERMANENT SEED MIXTURE, IN ACCORDANCE WITH THE SPECIFICATIONS, SHALL BE USED FOR VEGETATED CHANNELS EXCEPT CROWN VETCH (CORONILLA VARIA) AT 20 LBS./AC. SHALL BE SUBSTITUTED FOR BIRDSFOOT TREFOIL.

"TW" = TOP WIDTH  
"D" = DEPTH

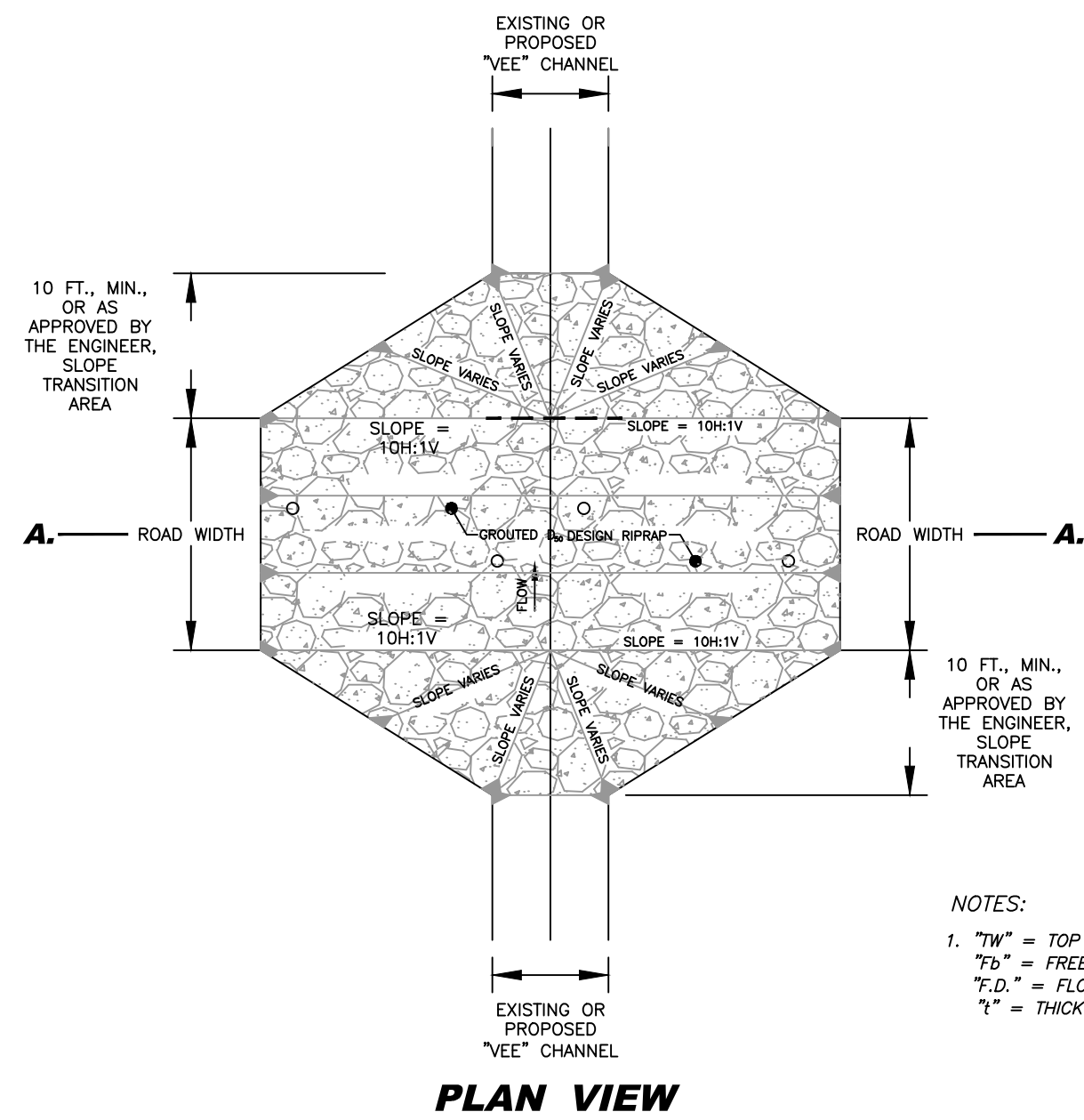


GRASS LINED "V" CHANNEL

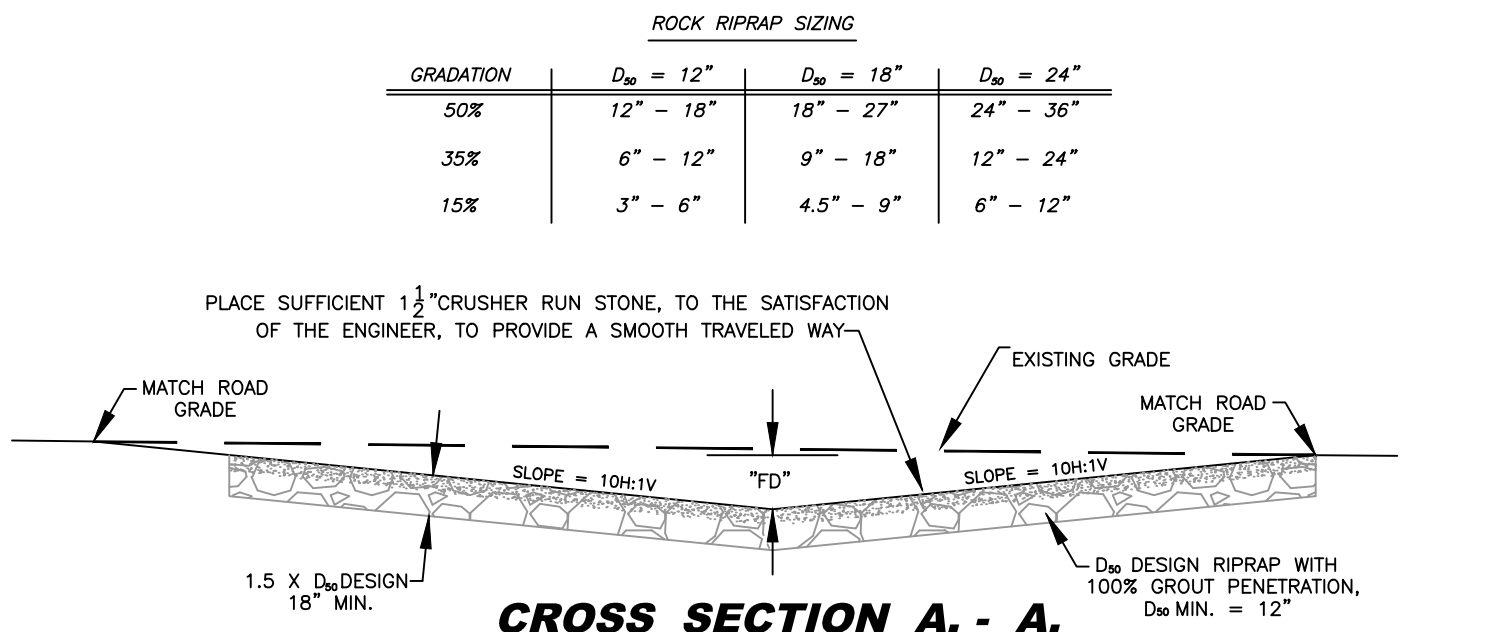
GRASS LINED SWALE



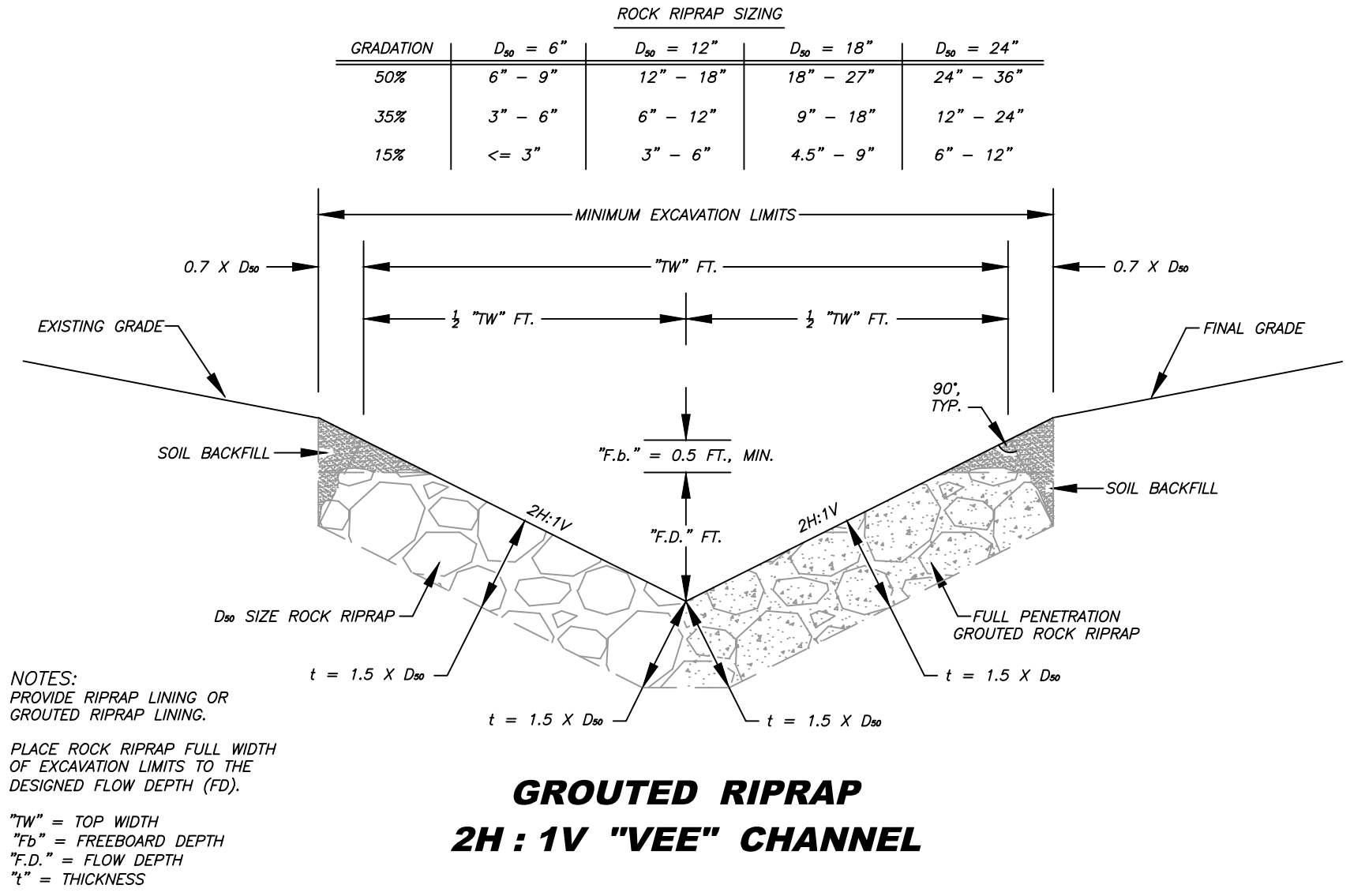
GROUT ANCHOR/KEY DETAIL



PLAN VIEW

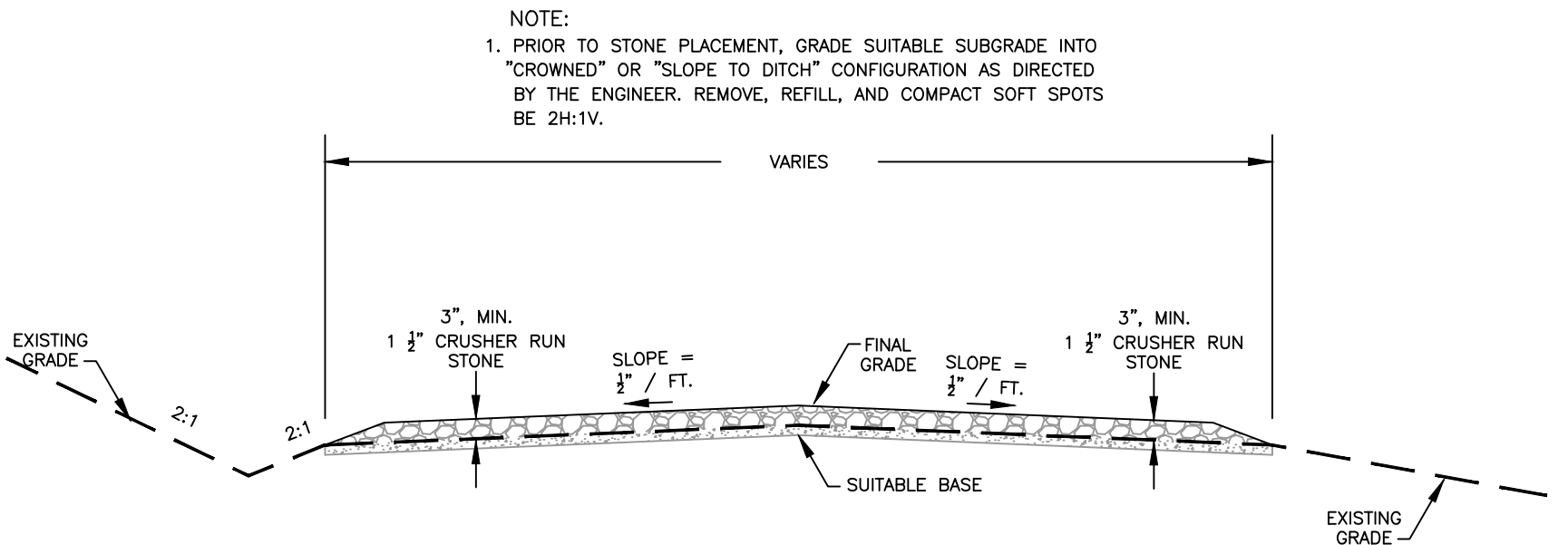


GRouted RIPRAP "V" CHANNEL ROAD CROSSING

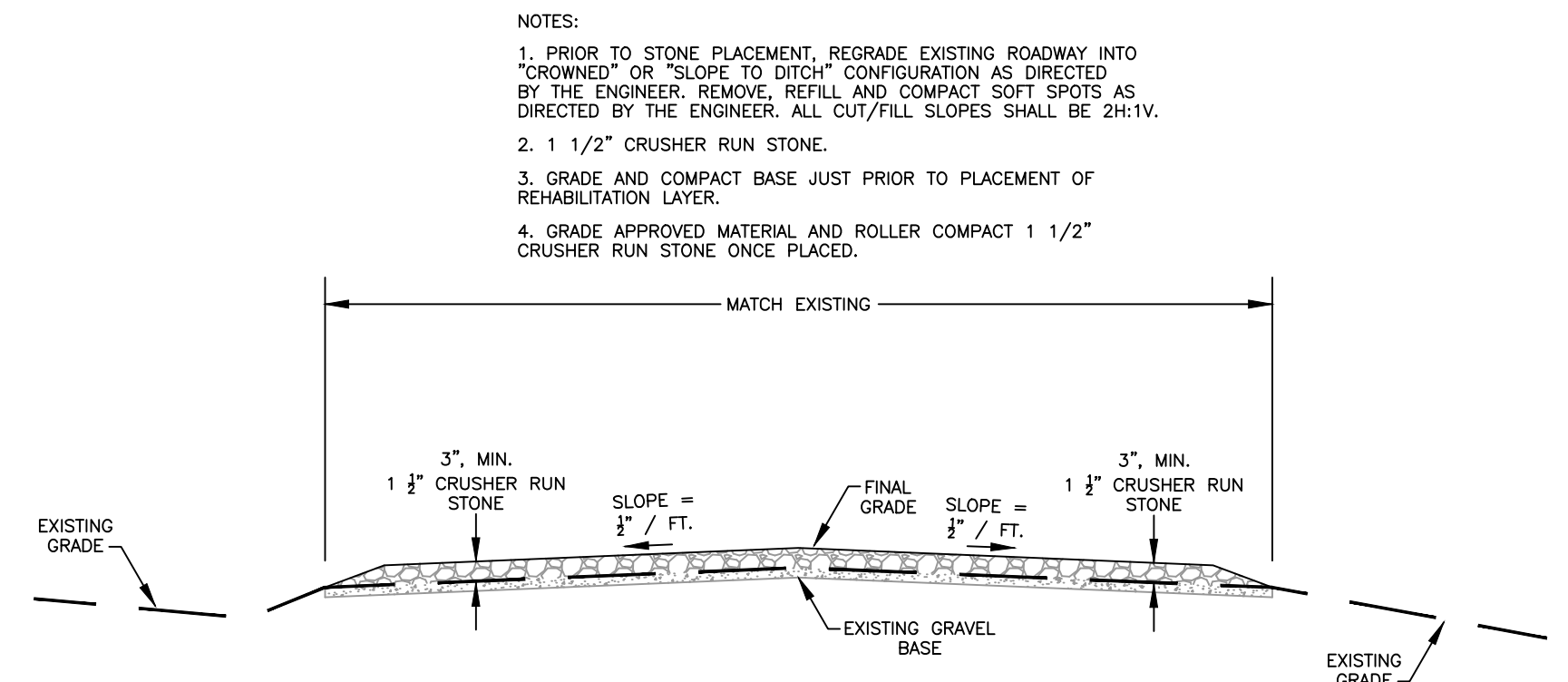


GRouted RIPRAP 2H:1V "V" CHANNEL

GRouted RIPRAP CHANNEL



TEMPORARY ACCESS ROAD CONSTRUCTION



GRAVEL ROAD REHABILITATION, TYP.

State of West Virginia  
Department of Environmental Protection  
Abandoned Mine Lands and Reclamation

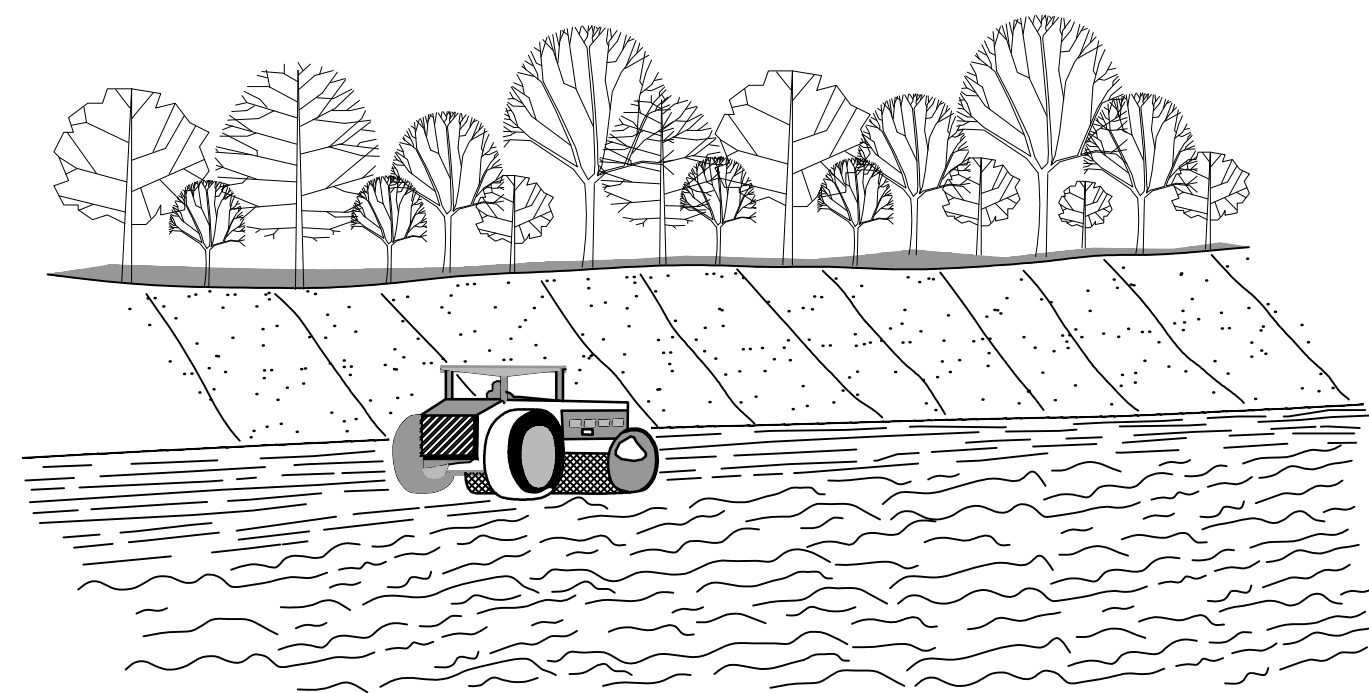
LODGEVILLE (POE) DS

TYPICAL DETAILS (2)

DRAWN BY: DWH  
APPROVED BY: RL  
DATE: 3/10/2015

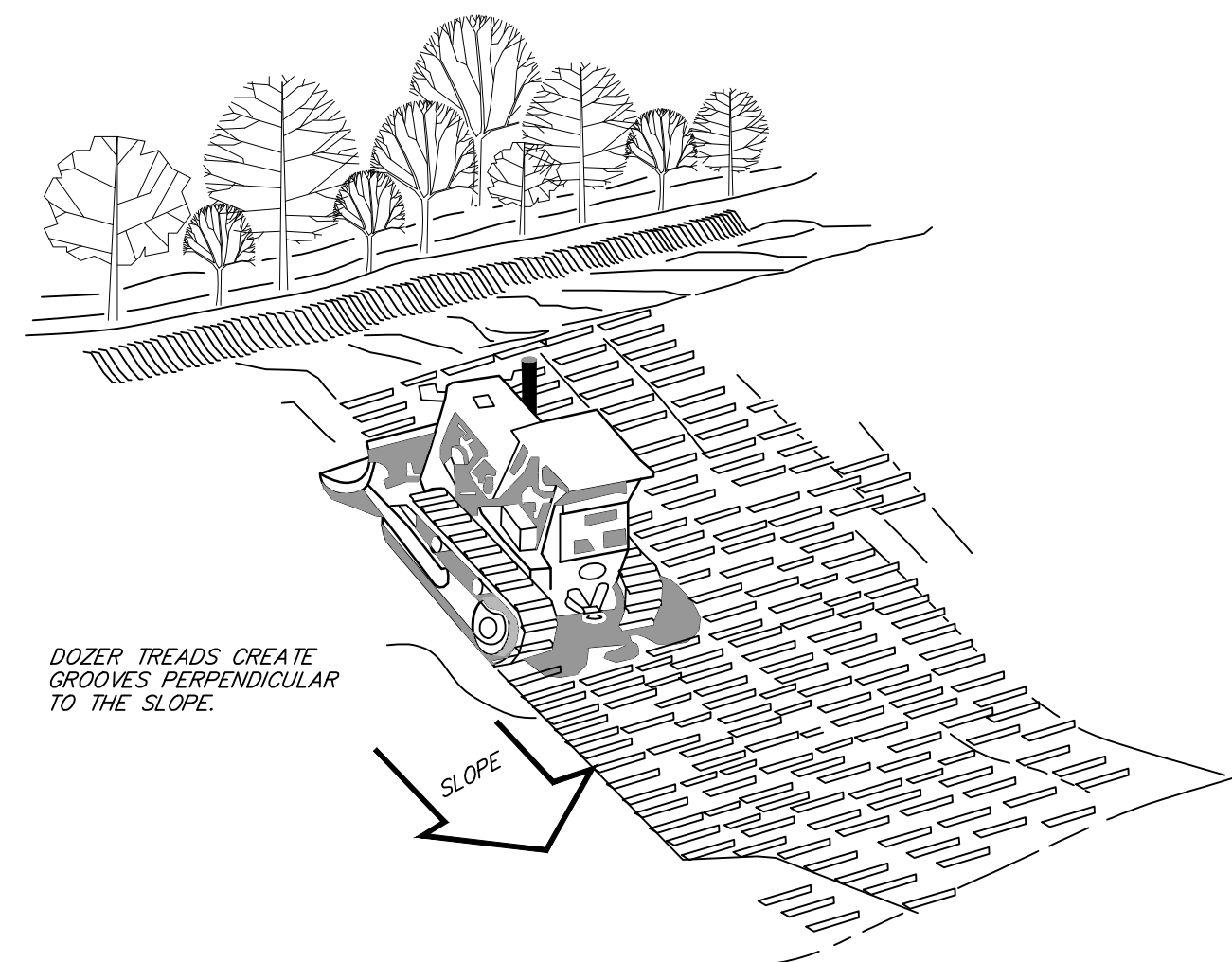
SCALE: NONE  
SHEET NO. 9  
OF 10



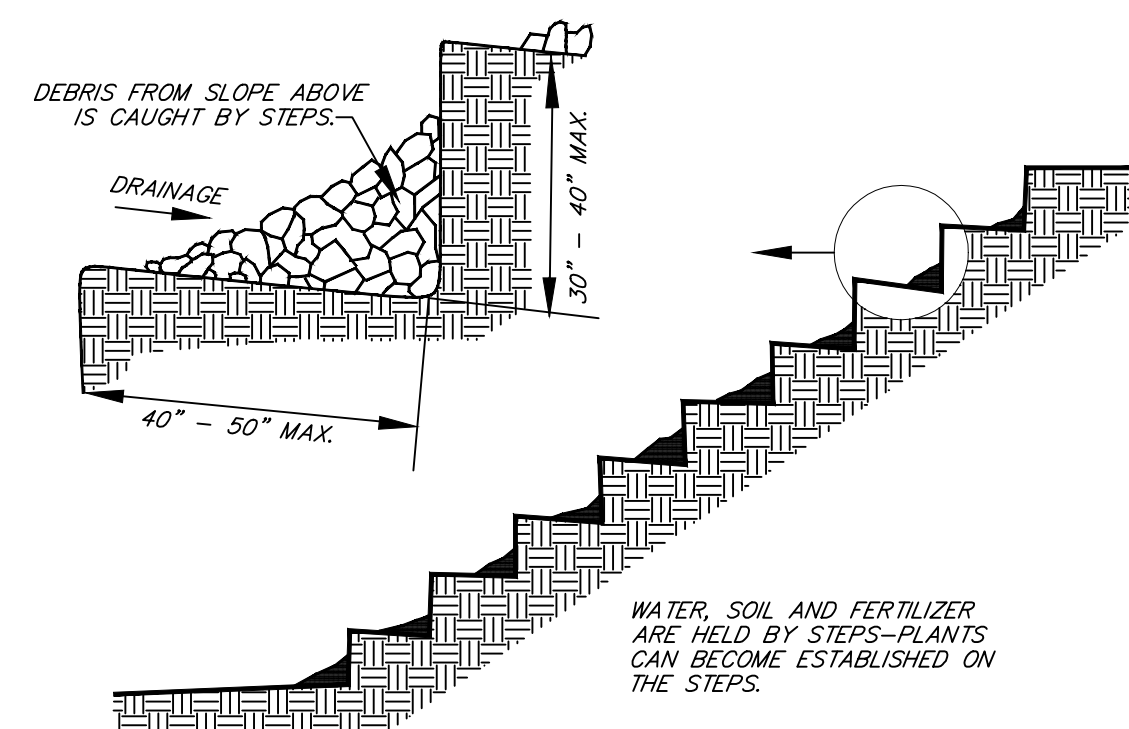


EACH LIFT OF THE FILL IS COMPACTED, BUT THE OUTER FACE OF THE SLOPE IS ALLOWED TO REMAIN LOOSE SO THAT THE ROCKS, CLOUDS, ETC. REACH THE NATURAL ANGLE OF REPOSE.

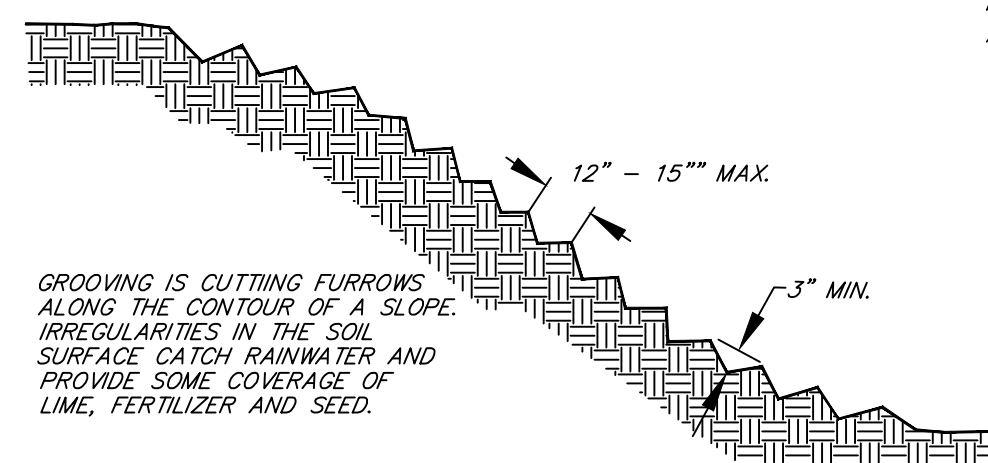
**FILL SLOPE TREATMENT**



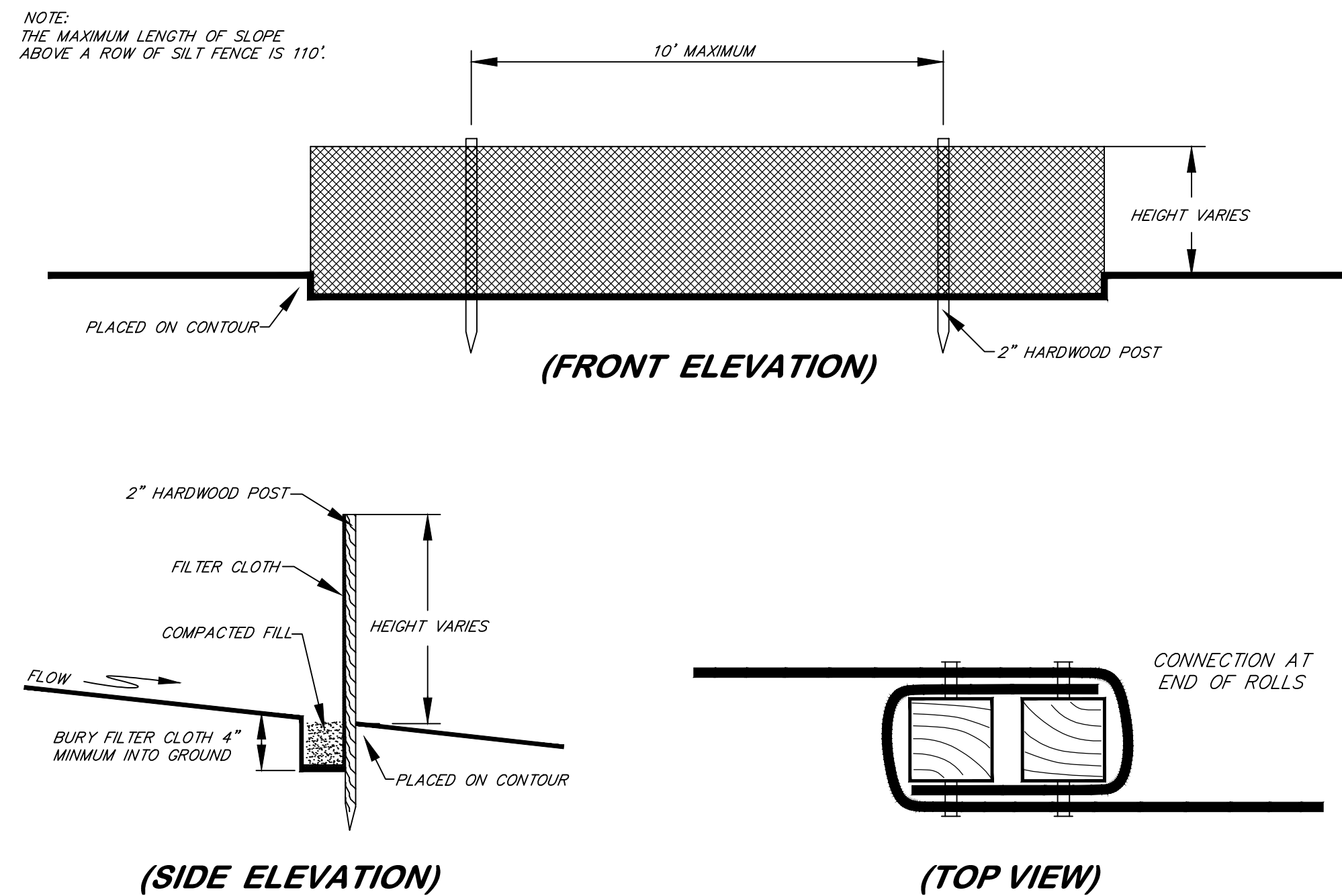
**TRACKING**



**STAIR STEPPING CUT SLOPES**

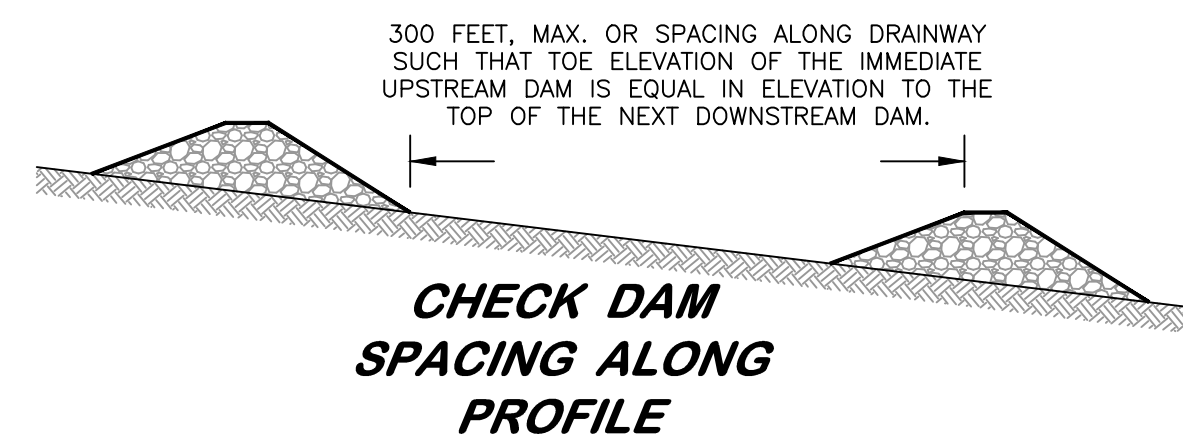
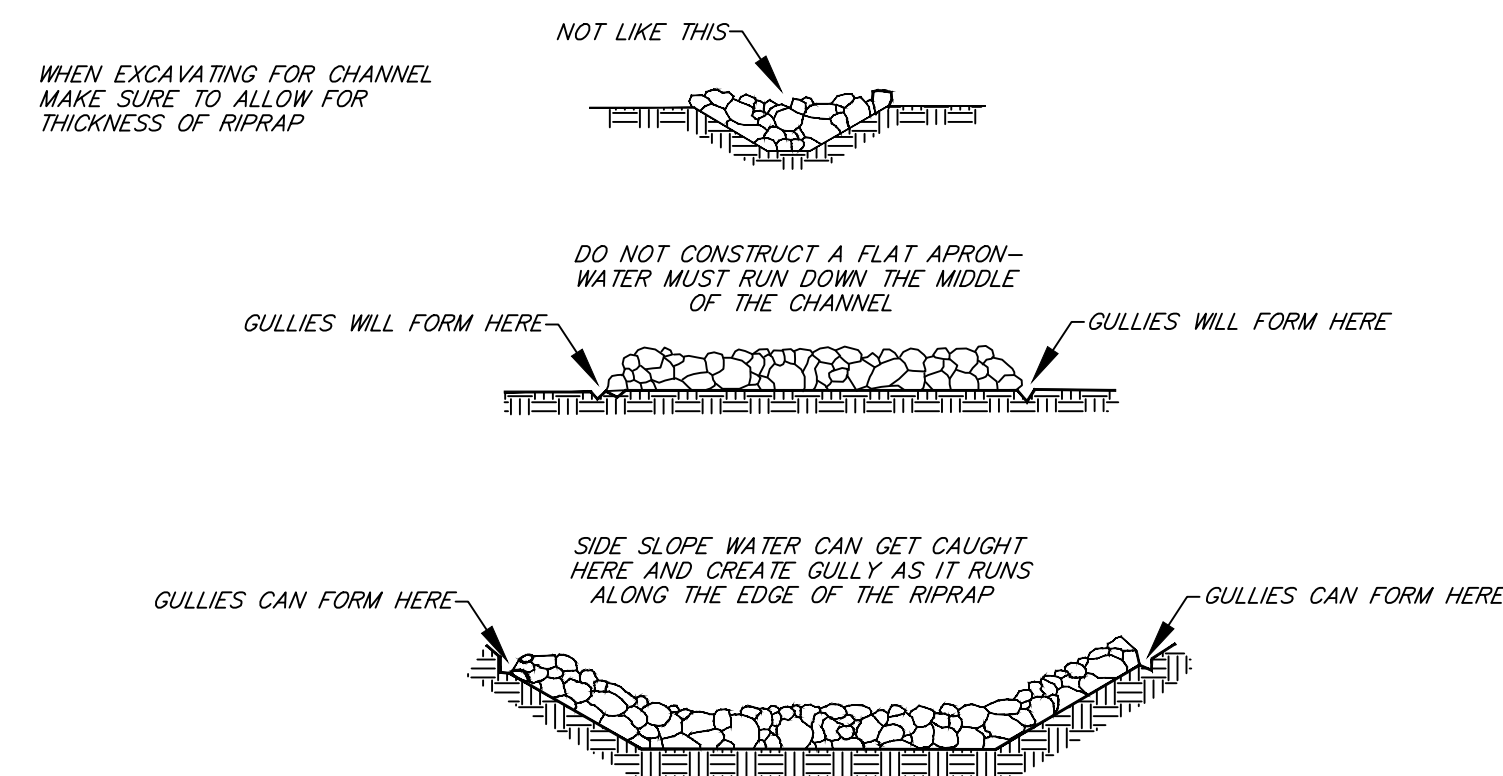


**GROOVING SLOPES**

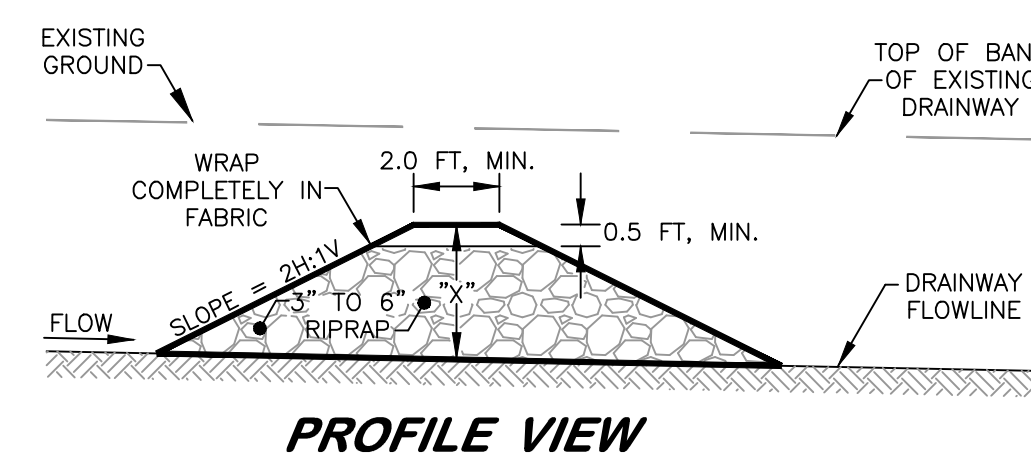


**SILT FENCE**  
(FIG. 3.27.2)

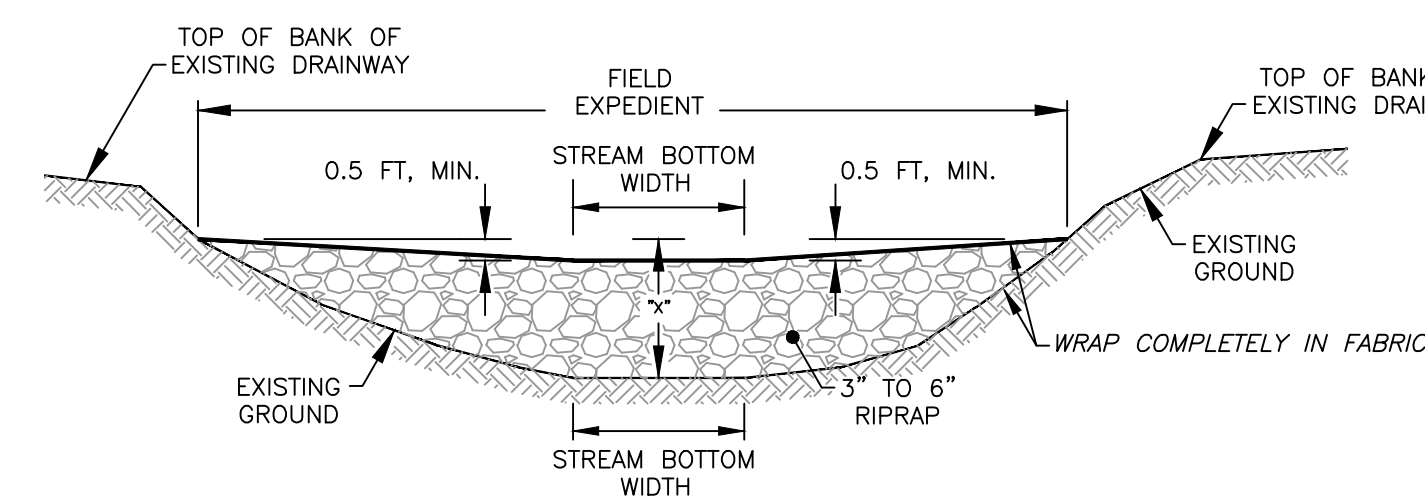
**COMMON PROBLEMS**



**CHECK DAM SPACING ALONG PROFILE**



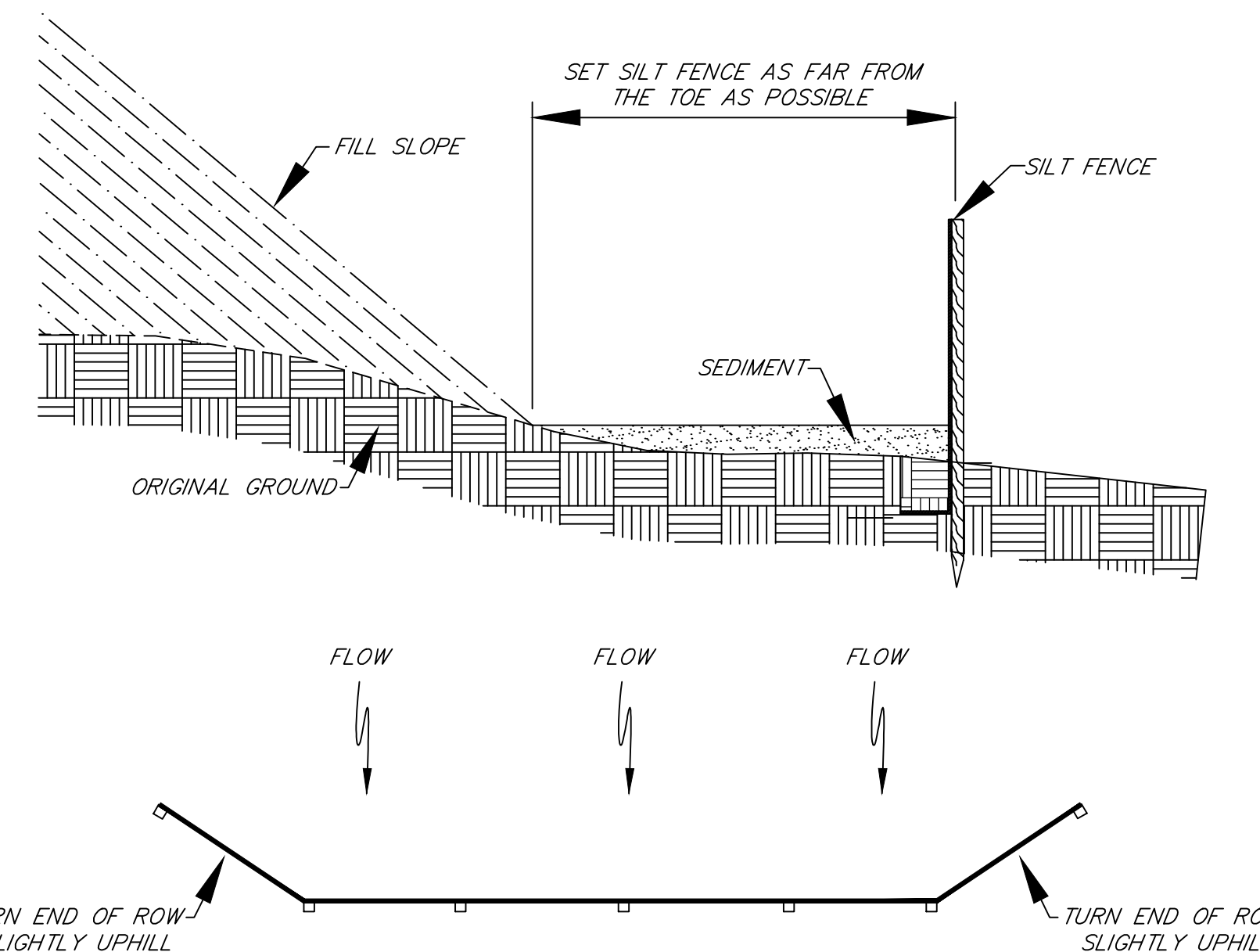
**PROFILE VIEW**



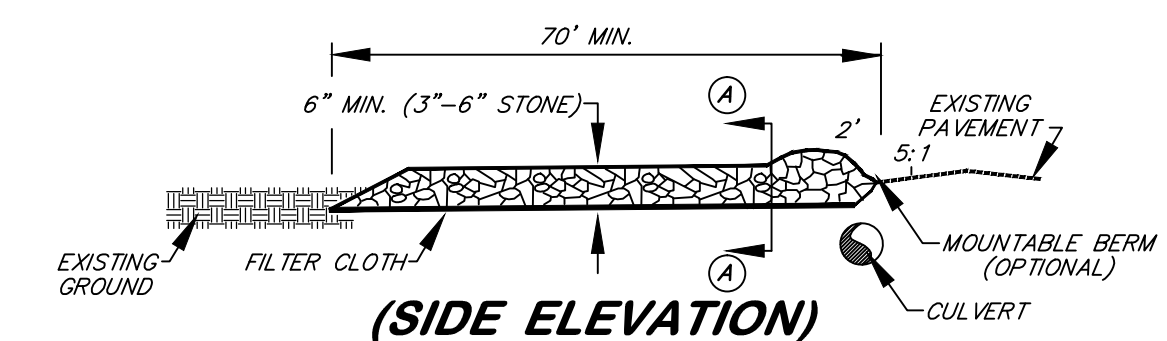
**CROSS SECTION VIEW**

- NOTES:
1. "X" DIMENSION AS DETAILED BY THE SPECIFICATIONS, FOR SEDIMENT CONTROL THE MAXIMUM HEIGHT OF THE ROCK CHECK DAM IS 3 FEET. HOWEVER, ROCK CHECK DAMS CAN BE CONSTRUCTED IN SMALLER DITCHES. THE CENTER OF THE ROCK CHECK DAM SHALL BE 0'-6" LOWER THAN THE OUTER EDGES AS SHOWN.
  2. ROCK CHECK DAMS ARE NORMALLY INSTALLED IN EXISTING DRAINS AND THE TOP CROSS SECTION OF THE DAM SHOULD HAVE A LEVEL CENTER SECTION THE SAME WIDTH AS THE EXISTING CHANNEL BOTTOM AND 0'-6" LOWER THAN THE OUTER EDGES OF THE DAM. ROCK CHECK DAMS PLACED IN PROJECT CONSTRUCTED FLAT-BOTTOM DITCHES SHALL HAVE SIMILAR DIMENSIONS.
  3. THE CENTER OF ROCK CHECK DAMS CONSTRUCTED IN PROJECT CONSTRUCTED "VEE" SHAPED OR EXISTING "VEE" SHAPED DITCHES SHALL BE 0'-6" LOWER THAN AND SLOPED TO THE OUTER TOP EDGES OF THE DITCH SO HIGH FLOWS GO OVER THE TOP OF THE DAM AND NOT AROUND THE EDGES.
  4. ROCK CHECK DAMS SHALL BE REMOVED AFTER THE FIRST GROWING SEASON.

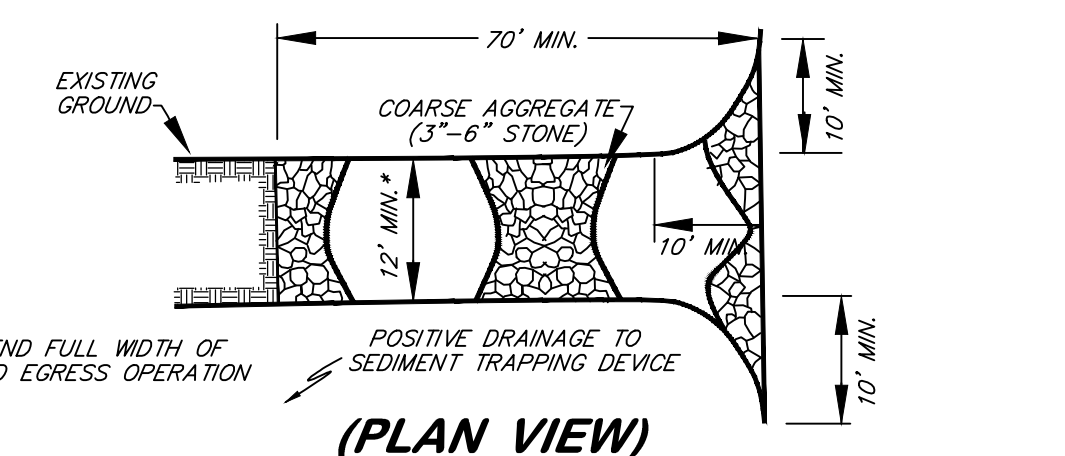
**ROCK CHECK DAM**



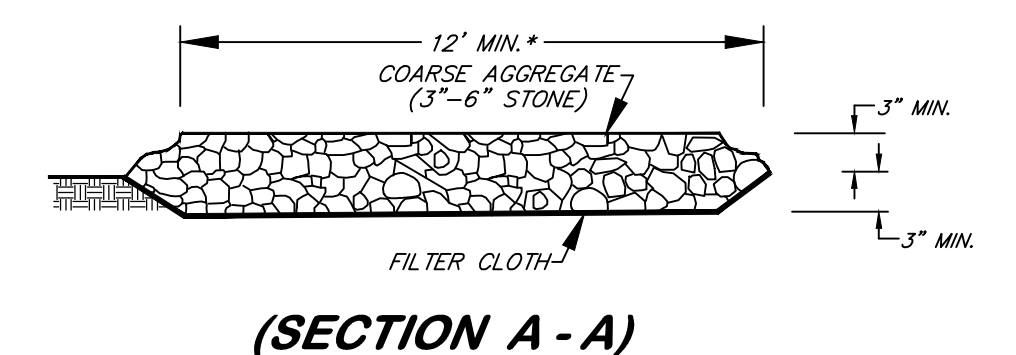
**PLACEMENT OF SILT FENCE**  
(FIG. 3.27.1)



**(SIDE ELEVATION)**



**(PLAN VIEW)**



**(SECTION A-A)**

**STONE CONSTRUCTION ENTRANCE**  
(FIG. 3.02.1)

State of West Virginia  
Department of Environmental Protection  
Abandoned Mine Lands and Reclamation

**LODGEVILLE (POE) DS**

**SEDIMENT CONTROL  
TYPICAL DETAILS**

DRAWN BY: DWH  
APPROVED BY: RL  
DATE: 3/10/2015

SCALE: NONE  
SHEET NO. **10**  
OF 10