



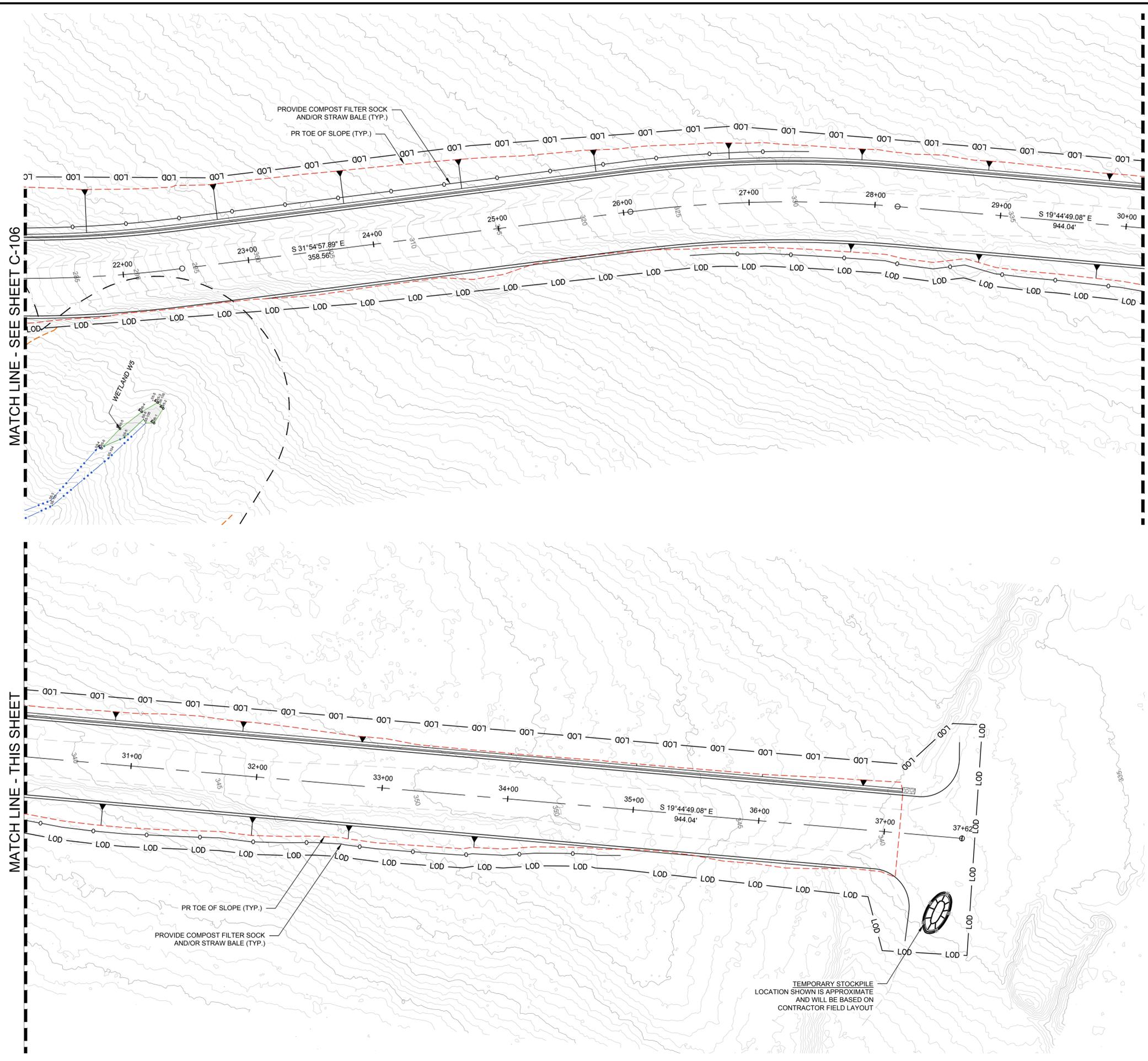








CAD FILE: C:\pwworking\kleinfelder\proj\2022\1383\_Erosion Control Plan.dwg LAYOUT: C-107 PLOTTED: 11/11/2022 3:50 PM BY: kurt.veldete



### EROSION CONTROL LEGEND

- LOD — PROPOSED LIMIT OF DISTURBANCE
- - - PROPOSED GRADING LIMITS
- TEMPORARY COMPOST FILTER SOCK
- ⇒⇒⇒⇒ TEMPORARY DIVERSION DITCH
- TEMPORARY SILT SACK AT CATCH BASINS
- - - TEMPORARY ESC CONTOUR MINOR
- - - TEMPORARY ESC CONTOUR MAJOR
- ▨ TEMPORARY SEDIMENT TRAP
- ▩ EROSION CONTROL MATTING
- ⊗ TEMPORARY STOCKPILE AREA

1500 Main Street, Suite 1506  
PO Box 15511  
Springfield, MA 01115-5511  
Phone: 413-739-1307

11/11/2022

REVISIONS				
REV	DESCRIPTION	DSN DWN	CHK APP	DATE
A	ISSUED FOR PERMITTING	KRV	AGB	4/29/2022
B	ISSUED FOR PERMITTING	KRV	SH	10/25/2022
C	ISSUED FOR PERMITTING	KRV	SH	11/9/2022

**ISSUED FOR PERMITTING**

**SCALE VERIFICATION**

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

SCALE: 1" = 40' SCALE IN FEET  
ORIGINAL DRAWING SIZE IS 22 x 34

**ISSUE FOR PERMIT (IFP) PLANS**

ASMG HAUL ROAD DESIGN  
901 RIVER ROAD  
FRANKLIN COUNTY, MASSACHUSETTS

ALL STATES MATERIALS GROUP  
901 RIVER ROAD  
DEERFIELD, MA 01342

EROSION AND SEDIMENTATION CONTROL PLAN	
PROJECT NO.	20221383.001A
ISSUE DATE	11/09/2022
CURRENT REVISION	C
DESIGNED BY	KRV
DRAWN BY	KRV
CHECKED BY	SH
APPROVED BY	JW

**GENERAL NOTES**

- DATUM USED FOR THE PLANS IS NORTH AMERICAN DATUM OF 1983 (NAD 83), MASSACHUSETTS STATE PLANES, MAINLAND ZONE (US FEET) AND ELEVATIONS SHOWN ON THE PLANS ARE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD-88).
- THE CONTRACTOR MUST NOTIFY THE UTILITY OWNERS AND CALL THE DIG-SAFE CENTER AT 1-888-344-7223 AT MINIMUM OF 72 HOURS PRIOR TO ANY EXCAVATION TO LOCATE UNDERGROUND UTILITIES IN THE FIELD. THE LOCATION OF THE UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE EXACT LOCATION MUST BE DETERMINED BY THE CONTRACTOR DURING CONSTRUCTION.
- IF CONFLICTS WITH EXISTING UTILITIES ARE IDENTIFIED DURING CONSTRUCTION, CONTRACTOR MUST NOTIFY DESIGN ENGINEER, PROJECT OWNER, AND UTILITY OWNER PRIOR TO PERFORMING ANY REMOVAL OR MODIFICATIONS.

**GRADING AND DRAINAGE NOTES**

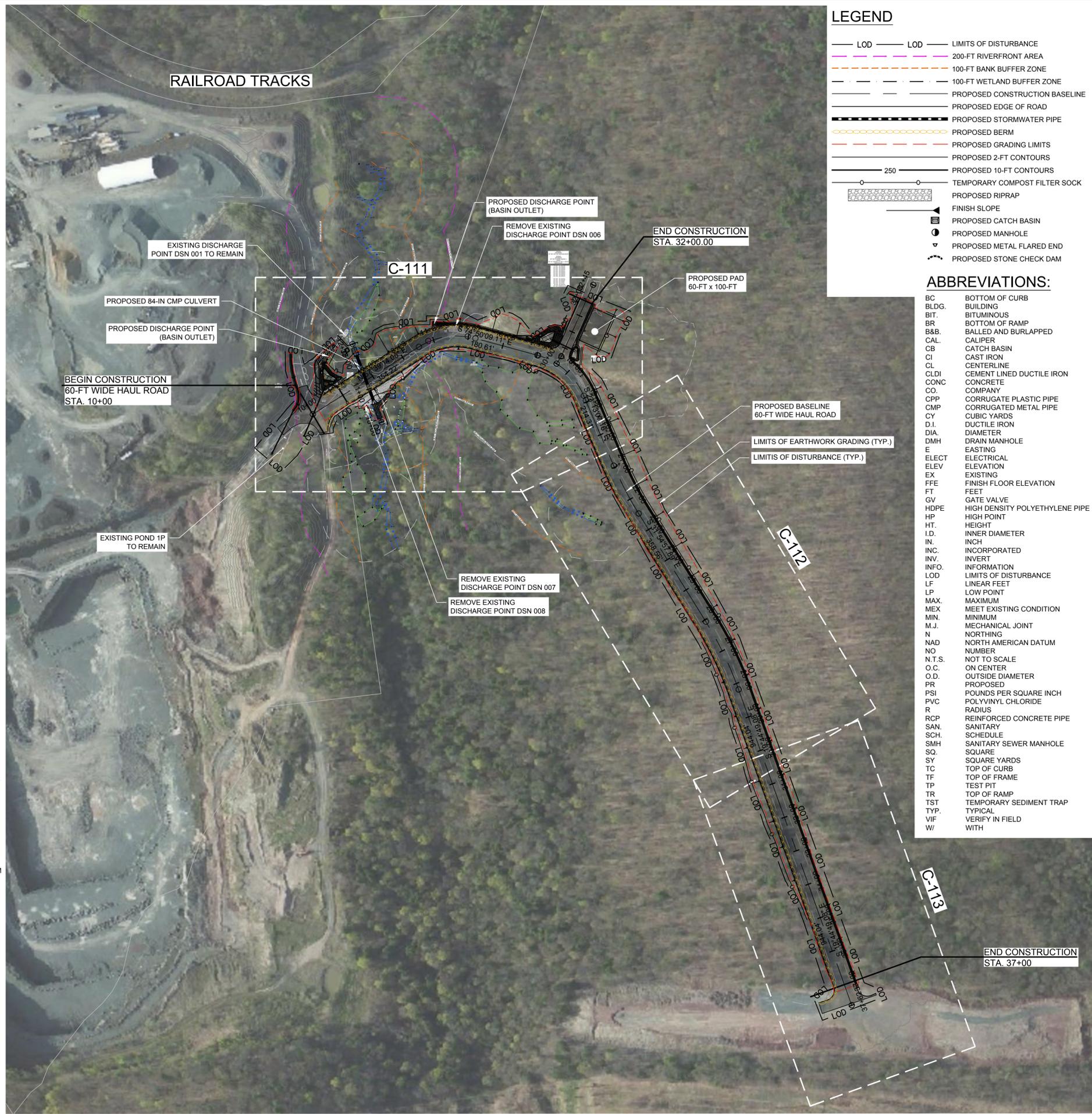
- ALL SITE WORK, MATERIAL OR CONSTRUCTION, AND CONSTRUCTION METHODS FOR EARTHWORK MUST BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND DETAILS.
- ALL DIMENSIONS AND GRADES ON THE PLANS MUST BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR MUST NOTIFY THE OWNER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES.
- TOPSOIL MUST BE STRIPPED AND STOCKPILED ON SITE FOR POSSIBLE REUSE IN FINAL LANDSCAPING.
- ALL SITE GEOLOGY, SOIL COMPACTION, SITE PREPARATION, SUBGRADE PREPARATION, FILL MATERIAL, FILL PLACEMENT, MUST BE IN ACCORDANCE WITH THE PLANS.
- STOCKPILE SATISFACTORY EXCAVATED MATERIALS UNTIL REQUIRED FOR FILL. GRADE AND SHAPE STOCKPILES FOR POSITIVE DRAINAGE.

**STREAM FLOW BYPASS NOTES**

- ANY TEMPORARY BYPASS DURING CONSTRUCTION MUST BE REMOVED ONCE CONSTRUCTION IS COMPLETE.
- DIVERT ALL SURFACE WATER FROM DISTURBED AREAS INTO A STABLE OUTLET AT THE DISCHARGE POINT INTO THE EXISTING STREAM.
- THE CONTRACTOR MUST PROVIDE, OPERATE, AND MAINTAIN ALL DITCHES, BASINS, SUMPS, SITE GRADING, AND PUMPING FACILITIES TO DIVERT, COLLECT, AND REMOVED ALL WATER FROM WORK AREAS. ALL WATER REMOVED MUST BE REMOVED FROM THE IMMEDIATE WORK AREAS AND MUST BE DISPOSED OF IN ACCORDANCE WITH APPLICABLE PERMITS.
- CONTRACTOR TO FULLY DESIGN BYPASS PUMPING AND/OR PIPING, AND ALL REQUIRED AND NECESSARY PIPING SUPPORT, SEQUENCING, EMERGENCY ACTION PLAN, ETC.
- THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, INSTALLATION, OPERATION, MAINTENANCE AND REMOVAL OF ALL EXCAVATION BYPASS EQUIPMENT.
- CONTRACTOR MUST PROVIDE EQUIPMENT ON-SITE TO REMOVE BYPASS AND RE-ESTABLISH FULL STREAM FLOW CAPACITY IF A STORM EVENT IS FORECAST OR OCCURS.
- BYPASS PIPING TO BE SIZED TO CONVEY THE HY-8 CULVERT ANALYSIS 2-YEAR DESIGN FLOW (34 CFS).

**DEWATERING NOTES**

- ALL INSTALLATION WORK SHALL BE PERFORMED IN THE DRY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, INSTALLATION, OPERATION, MAINTENANCE & REMOVAL OF ALL EXCAVATION DEWATERING EQUIPMENT.
- REDUCE HYDROSTATIC PRESSURE TO THE EXTENT THAT WATER LEVEL IN CONSTRUCTION AREA ARE A MINIMUM OF 1 FOOT BELOW EXCAVATION SURFACE AT ALL TIMES.
- DISPOSE OF WATER REMOVED FROM THE EXCAVATIONS IN SUCH A MANNER AS TO NOT ENDANGER PORTIONS OF THE WORK UNDER CONSTRUCTION OR COMPLETED.
- DEWATERING EQUIPMENT SHALL BE PROVIDED TO REMOVE AND DISPOSE OF ALL SURFACE AND GROUND WATER ENTERING EXCAVATIONS, TRENCHES, OR OTHER PARTS OF THE WORK DURING CONSTRUCTION. EACH EXCAVATION SHALL BE KEPT DRY DURING SUBGRADE PREPARATION AND CONTINUALLY THEREAFTER UNTIL THE PIPE TO BE INSTALLED IS COMPLETED TO THE EXTENT THAT NO DAMAGE FROM HYDROSTATIC PRESSURE, FLOTATION, OR OTHER CAUSE WILL RESULT.
- PROVIDE COMPLETE STANDBY PUMPING EQUIPMENT, INSTALLED AND AVAILABLE FOR IMMEDIATE OPERATION, AS MAY BE REQUIRED TO ADEQUATELY MAINTAIN DE-WATERING ON A CONTINUOUS BASIS AND IN THE EVENT THAT ALL OR ANY PART OF THE SYSTEM MAY BECOME INADEQUATE OR FAIL.
- SANDBAGS OR EQUIVALENT SHOULD CONSIST OF MATERIALS WHICH ARE RESISTANT TO ULTRA-VIOLET RADIATION, TEARING, AND PUNCTURE AND SHOULD BE WOVEN TIGHTLY ENOUGH TO PREVENT LEAKAGE OF THE FILL MATERIAL (I.E. SAND, FINE GRAVEL, ETC.).
- IMPERVIOUS SHEETING SHOULD CONSIST OF POLYETHYLENE OR OTHER MATERIALS WHICH ARE IMPERVIOUS AND RESISTANT TO PUNCTURE AND TEARING.
- SHEETING ON THE SANDBAG CHECK DAM SHOULD BE POSITIONED SUCH THAT THE UPSTREAM PORTION COVERS THE DOWNSTREAM PORTION WITH AT LEAST A 18-INCH OVERLAP.



**LEGEND**

- LOD — LOD — LIMITS OF DISTURBANCE
- 200-FT RIVERFRONT AREA
- 100-FT BANK BUFFER ZONE
- 100-FT WETLAND BUFFER ZONE
- PROPOSED CONSTRUCTION BASELINE
- PROPOSED EDGE OF ROAD
- PROPOSED STORMWATER PIPE
- PROPOSED BERM
- PROPOSED GRADING LIMITS
- PROPOSED 2-FT CONTOURS
- PROPOSED 10-FT CONTOURS
- TEMPORARY COMPOST FILTER SOCK
- PROPOSED RIPRAP
- FINISH SLOPE
- PROPOSED CATCH BASIN
- PROPOSED MANHOLE
- PROPOSED METAL FLARED END
- PROPOSED STONE CHECK DAM

**ABBREVIATIONS:**

- BC BOTTOM OF CURB
- BLDG. BUILDING
- BIT. BITUMINOUS
- BR. BOTTOM OF RAMP
- B&B. BALLED AND BURLAPPED
- CAL. CALIPER
- CB. CATCH BASIN
- CI. CAST IRON
- CL. CENTERLINE
- CLDI. CEMENT LINED DUCTILE IRON
- CONC. CONCRETE
- CO. COMPANY
- CPP. CORRUGATE PLASTIC PIPE
- CMP. CORRUGATED METAL PIPE
- CY. CUBIC YARDS
- D.I. DUCTILE IRON
- DIA. DIAMETER
- DMH. DRAIN MANHOLE
- E. EASTING
- ELECT. ELECTRICAL
- ELEV. ELEVATION
- EX. EXISTING
- FFE. FINISH FLOOR ELEVATION
- FT. FEET
- GV. GATE VALVE
- HDPE. HIGH DENSITY POLYETHYLENE PIPE
- HP. HIGH POINT
- HT. HEIGHT
- I.D. INNER DIAMETER
- IN. INCH
- INC. INCORPORATED
- INV. INVERT
- INFO. INFORMATION
- LOD. LIMITS OF DISTURBANCE
- LF. LINEAR FEET
- LP. LOW POINT
- MAX. MAXIMUM
- MEX. MEET EXISTING CONDITION
- MIN. MINIMUM
- M.J. MECHANICAL JOINT
- N. NORTHING
- NAD. NORTH AMERICAN DATUM
- NO. NUMBER
- N.T.S. NOT TO SCALE
- O.C. ON CENTER
- O.D. OUTSIDE DIAMETER
- PR. PROPOSED
- PSI. POUNDS PER SQUARE INCH
- PVC. POLYVINYL CHLORIDE
- R. RADIUS
- RCP. REINFORCED CONCRETE PIPE
- SAN. SANITARY
- SCH. SCHEDULE
- SMH. SANITARY SEWER MANHOLE
- SQ. SQUARE
- SY. SQUARE YARDS
- TC. TOP OF CURB
- TF. TOP OF FRAME
- TP. TEST PIT
- TR. TOP OF RAMP
- TST. TEMPORARY SEDIMENT TRAP
- TYP. TYPICAL
- VIF. VERIFY IN FIELD
- W. WITH



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11/11/2022

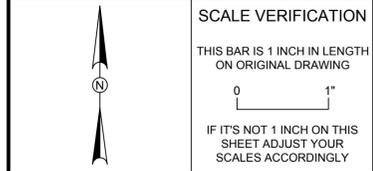
**REVISIONS**

REV	DESCRIPTION	DSN	CHK	DATE
A	ISSUED FOR PERMITTING	KRV	AGB	4/29/2022
B	ISSUED FOR PERMITTING	KRV	JW	10/25/2022
C	ISSUED FOR PERMITTING	KRV	JW	11/9/2022

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**ISSUED FOR PERMITTING**

SCALE VERIFICATION



0 150 300  
SCALE: 1" = 150' SCALE IN FEET  
ORIGINAL DRAWING SIZE IS 22 x 34

**ISSUE FOR PERMIT (IFP) PLANS**

ASMG HAUL ROAD DESIGN  
901 RIVER ROAD  
FRANKLIN COUNTY, MASSACHUSETTS



ALL STATES MATERIALS GROUP  
901 RIVER ROAD  
DEERFIELD, MA 01342

**OVERALL SITE PLAN**

PROJECT NO.	20221383.001A	<b>C-110</b>
ISSUE DATE	11/09/2022	
CURRENT REVISION	C	
DESIGNED BY	KRV	
DRAWN BY	KRV	
CHECKED BY	SH	
APPROVED BY	JW	

PLOTTED: 11/11/2022 3:52 PM BY: kurt.velders  
LAYOUT: C-110  
C:\pwworking\kleinfelder\proj\2022\1383\_Overall Site Plan.dwg LAYOUT: C-110

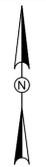


11/11/2022

REVISIONS

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A	ISSUED FOR PERMITTING	KRV	AGB	4/29/2022
B	ISSUED FOR PERMITTING	KRV	SH	10/25/2022
C	ISSUED FOR PERMITTING	KRV	SH	11/9/2022

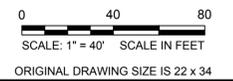
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**ISSUE FOR PERMIT (IFP) PLANS**

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901 RIVER ROAD  
FRANKLIN COUNTY, MASSACHUSETTS

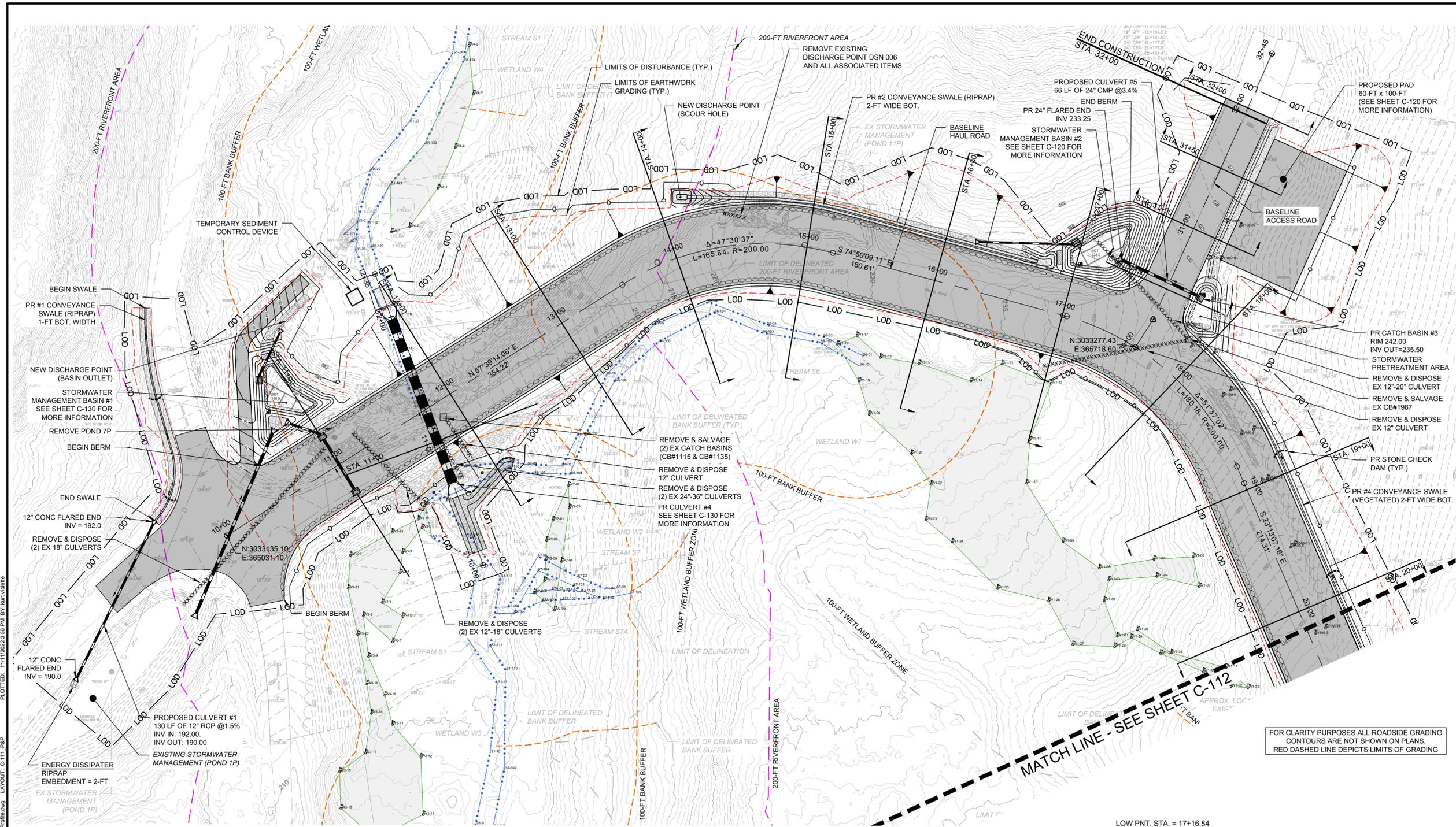


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DEERFIELD, MA 01342

**HAUL ROAD PLAN & PROFILE**

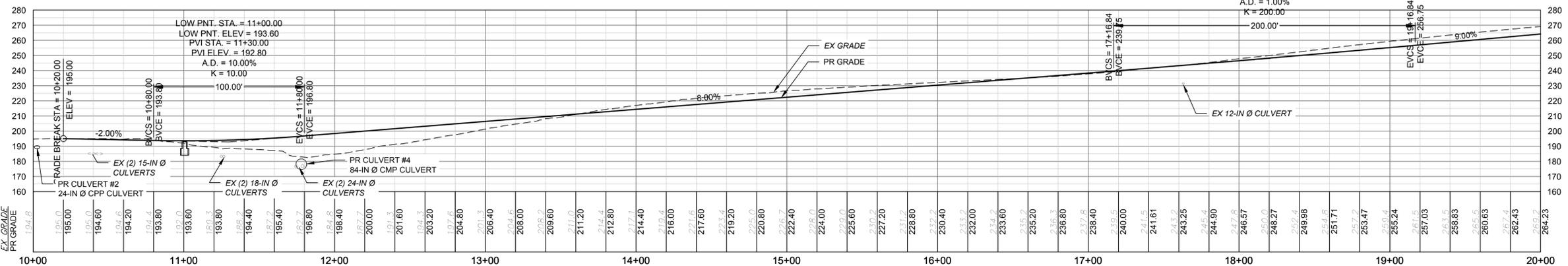
PROJECT NO.	20221383.001A
ISSUE DATE	11/09/2022
CURRENT REVISION	C
DESIGNED BY	KRV
DRAWN BY	KRV
CHECKED BY	SH
APPROVED BY	JW

C-111



FOR CLARITY PURPOSES ALL ROADSIDE GRADING CONTOURS ARE NOT SHOWN ON PLANS. RED DASHED LINE DEPICTS LIMITS OF GRADING.

LOW PNT. STA. = 17+16.84  
LOW PNT. ELEV. = 239.75  
PVI STA. = 18+16.84  
PVI ELEV. = 247.75  
A.D. = 1.00%  
K = 200.00'



**PROFILE - HAUL ROAD**  
SCALE: 1"=40' (H), 1"=40' (V)

CAD FILE: C:\pwworking\kleinfelder\proj\2022\2592\C-111\_C-113\_20221383\_Haul Rd Plan & Profile.dwg LAYOUT: C-111\_P&P PLOTTED: 11/11/2022 3:56 PM BY: burj.vadette

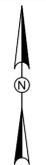


11/11/2022

REVISIONS

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A	ISSUED FOR PERMITTING	KRV	AGB	4/29/2022
B	ISSUED FOR PERMITTING	KRV	SH	10/25/2022
C	ISSUED FOR PERMITTING	KRV	SH	11/9/2022

**ISSUED FOR PERMITTING**



SCALE VERIFICATION

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IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY



SCALE: 1" = 40' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

**ISSUE FOR PERMIT (IFP) PLANS**

ASM G HAUL ROAD DESIGN  
901 RIVER ROAD  
FRANKLIN COUNTY, MASSACHUSETTS

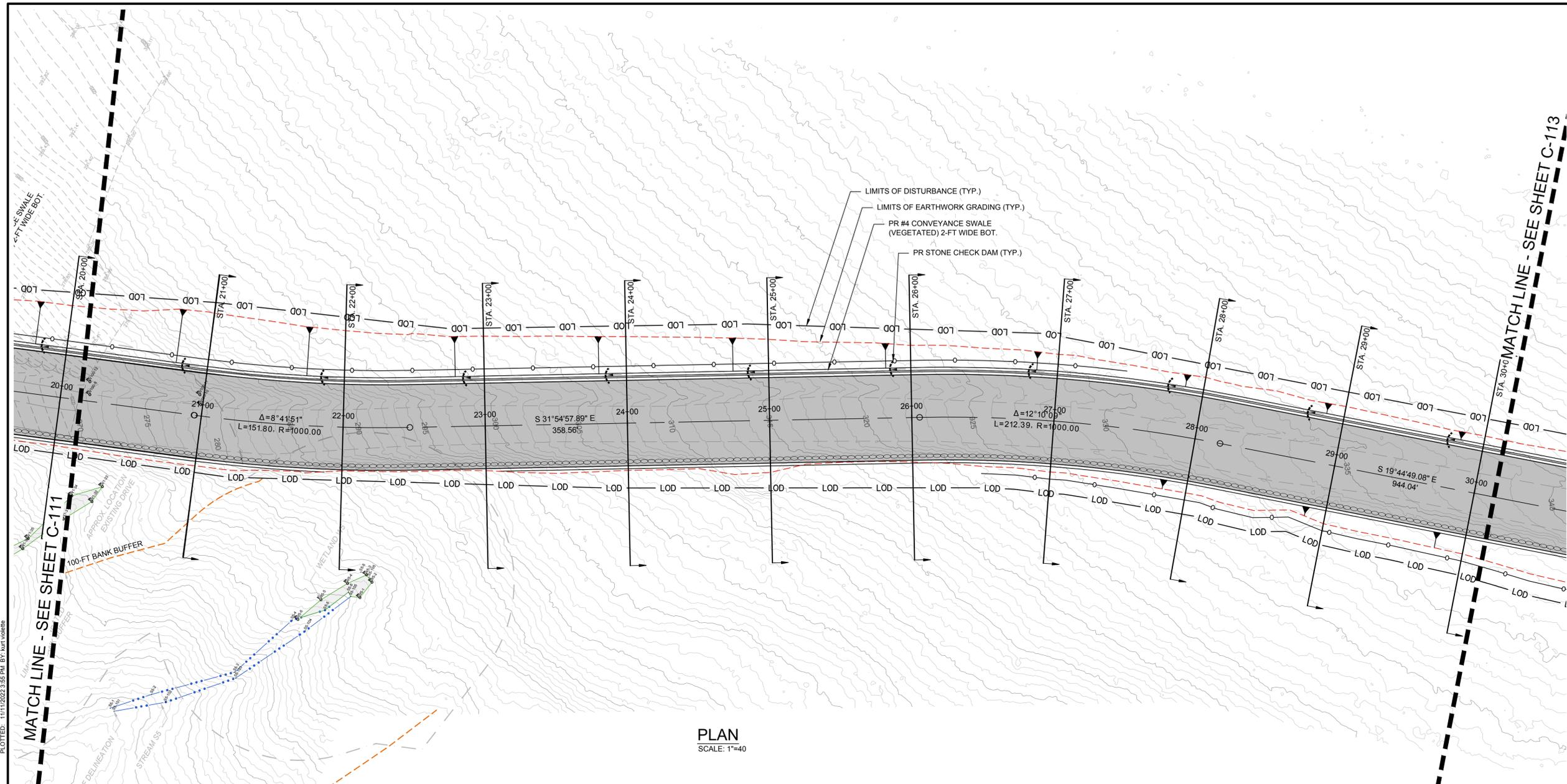


ALL STATES MATERIALS GROUP  
901 RIVER ROAD  
DEERFIELD, MA 01342

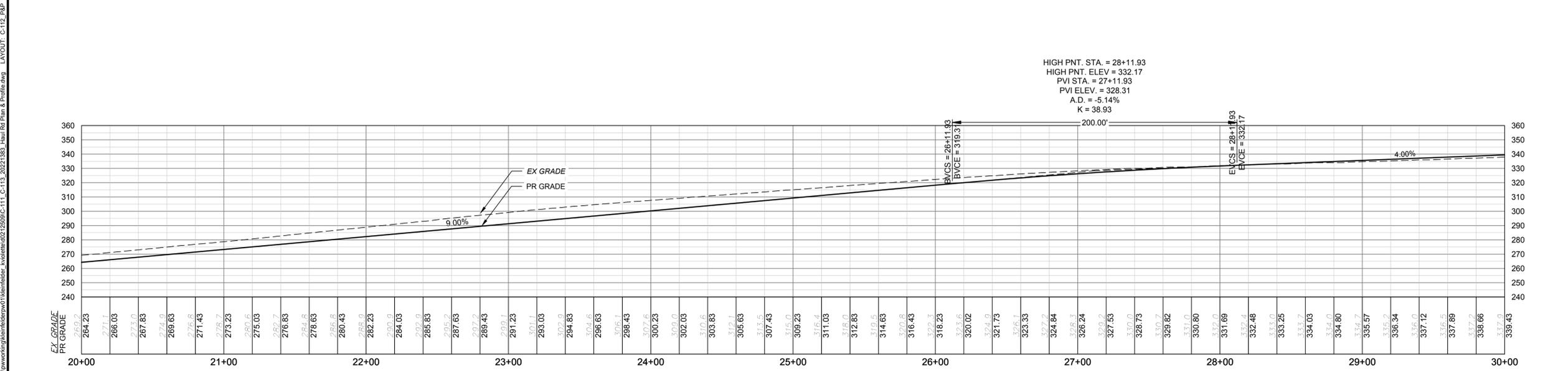
**HAUL ROAD PLAN & PROFILE**

PROJECT NO.	20221383.001A
ISSUE DATE	11/09/2022
CURRENT REVISION	C
DESIGNED BY	KRV
DRAWN BY	KRV
CHECKED BY	SH
APPROVED BY	JW

C-112



PLAN  
SCALE: 1"=40'



PROFILE - HAUL ROAD  
SCALE: 1"=40' (H), 1"=40' (V)

PLOTTED: 11/11/2022 3:55 PM BY: bur volterre  
 CAD FILE: C:\pwworking\kleinfelder\proj\2022\2590\C-111\C-112\_20221383\_Haul Rd Plan & Profile.dwg LAYOUT: C-112\_P&P



11/11/2022

REVISIONS

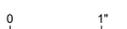
REV	DESCRIPTION	DSN DWN	CHK APP	DATE
A	ISSUED FOR PERMITTING	KRV	AGB JW	4/29/2022
B	ISSUED FOR PERMITTING	KRV	SH JW	10/25/2022
C	ISSUED FOR PERMITTING	KRV	SH JW	11/9/2022

**ISSUED FOR PERMITTING**

SCALE VERIFICATION



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0 40 80  
SCALE: 1" = 40' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

**ISSUE FOR PERMIT (IFP) PLANS**

ASMG HAUL ROAD DESIGN  
901 RIVER ROAD  
FRANKLIN COUNTY, MASSACHUSETTS

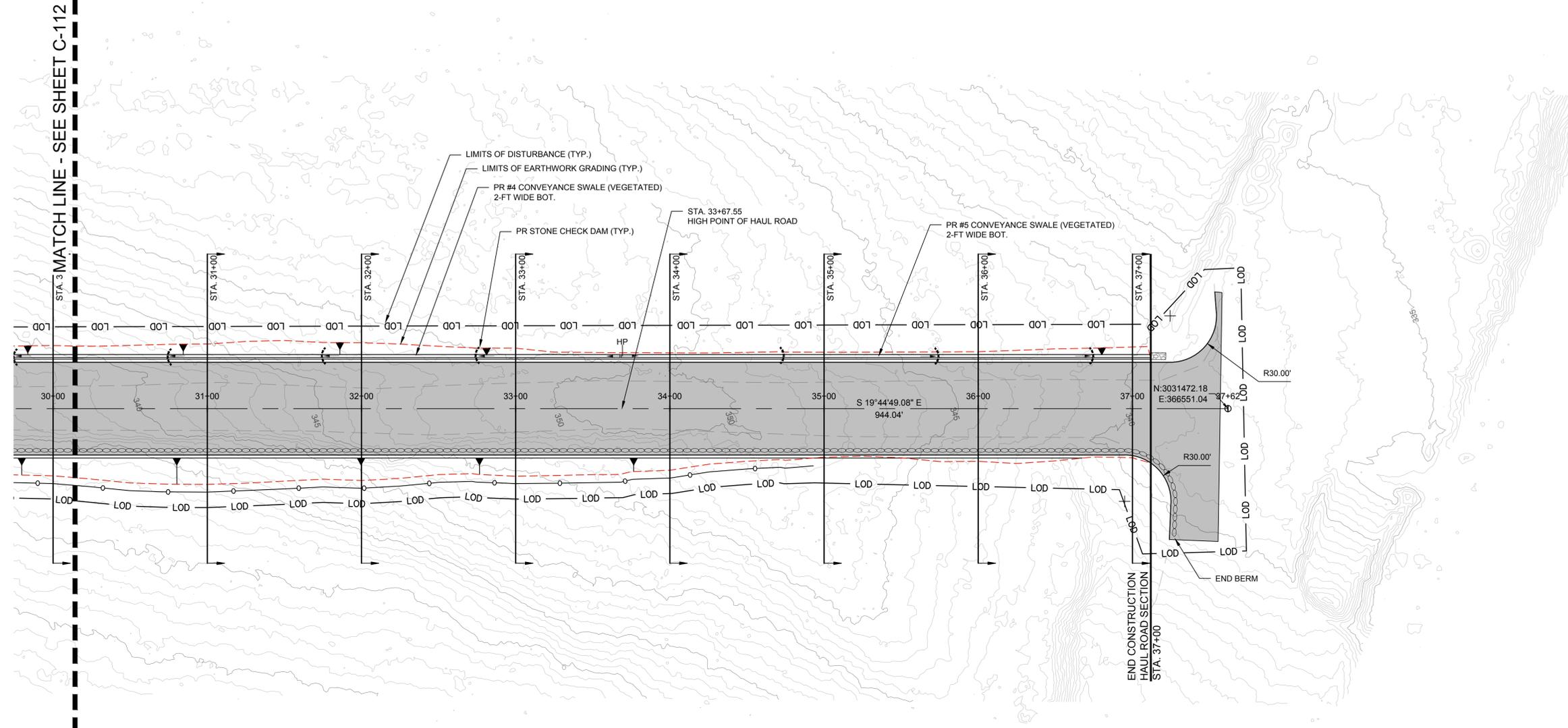


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DEERFIELD, MA 01342

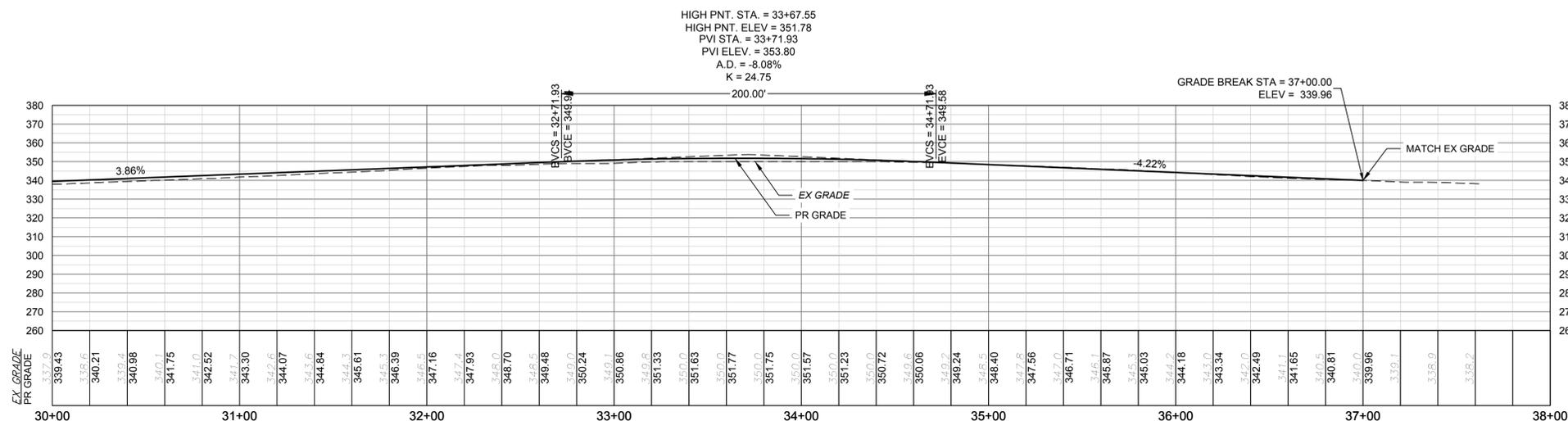
**HAUL ROAD PLAN & PROFILE**

PROJECT NO.	20221383.001A
ISSUE DATE	11/09/2022
CURRENT REVISION	C
DESIGNED BY	KRV
DRAWN BY	KRV
CHECKED BY	SH
APPROVED BY	JW

C-113



PLAN  
SCALE: 1"=40'



PROFILE - HAUL ROAD  
SCALE: 1"=40' (H), 1"=40' (V)

CAD FILE: C:\pwworking\kleinfelder\proj\2022\1383\_Haul Rd Plan & Profile.dwg LAYOUT: C-113\_P&P PLOTTED: 11/11/2022 3:54 PM BY: bur volterre



11/11/2022

REVISIONS

REV	DESCRIPTION	DSN	CHK	DATE
A	ISSUED FOR PERMITTING	KRV	AGB	4/29/2022
B	ISSUED FOR PERMITTING	KRV	SH	10/25/2022
C	ISSUED FOR PERMITTING	KRV	SH	11/9/2022

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SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40  
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

**ISSUE FOR PERMIT (IFP) PLANS**

ASM Haul Road Design  
901 RIVER ROAD  
FRANKLIN COUNTY, MASSACHUSETTS

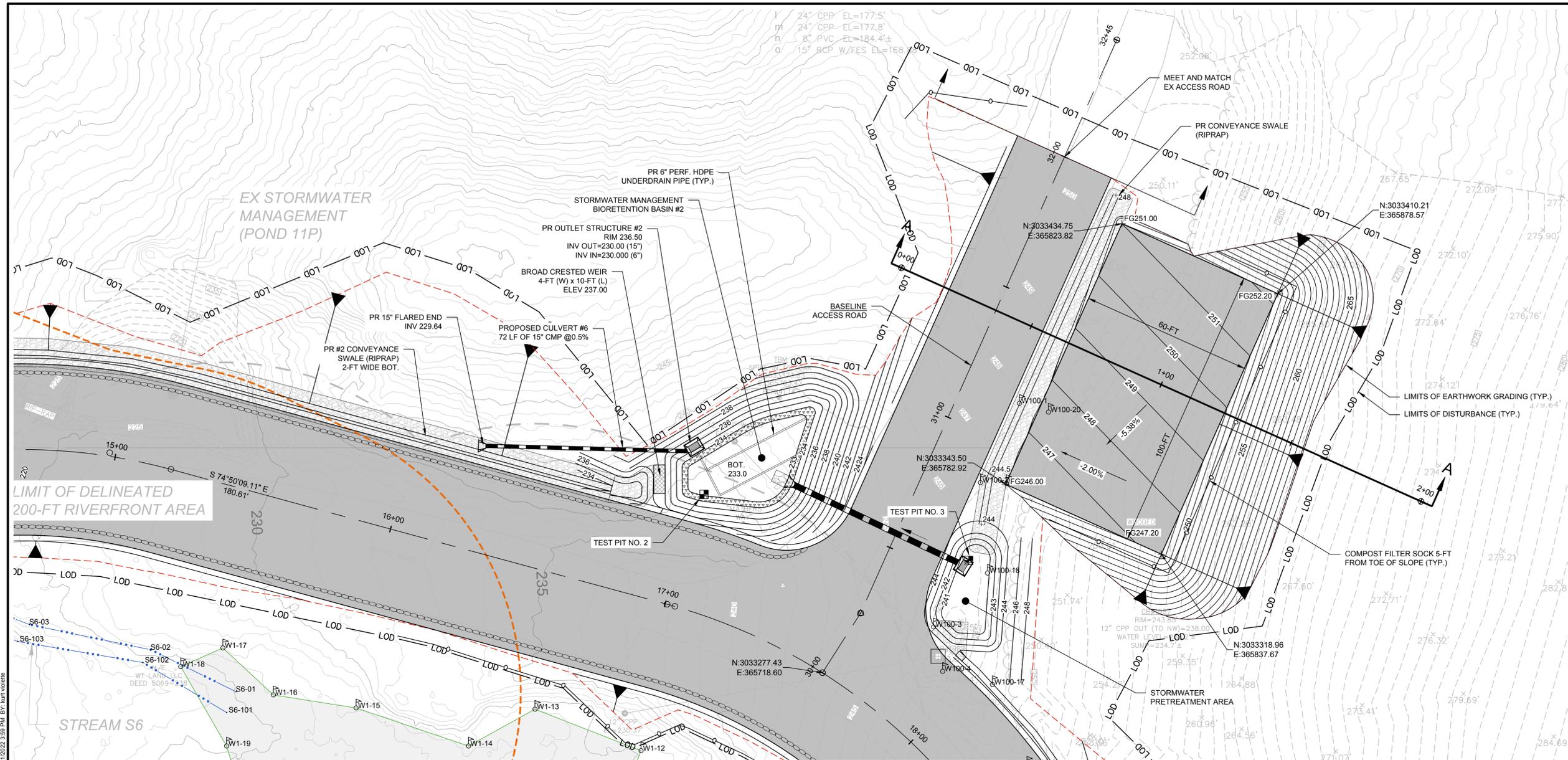


ALL STATES MATERIALS GROUP  
901 RIVER ROAD  
DEERFIELD, MA 01342

**PAD GRADING PLAN**

PROJECT NO.	20221383.001A
ISSUE DATE	11/09/2022
CURRENT REVISION	C
DESIGNED BY	KRV
DRAWN BY	KRV
CHECKED BY	SH
APPROVED BY	JW

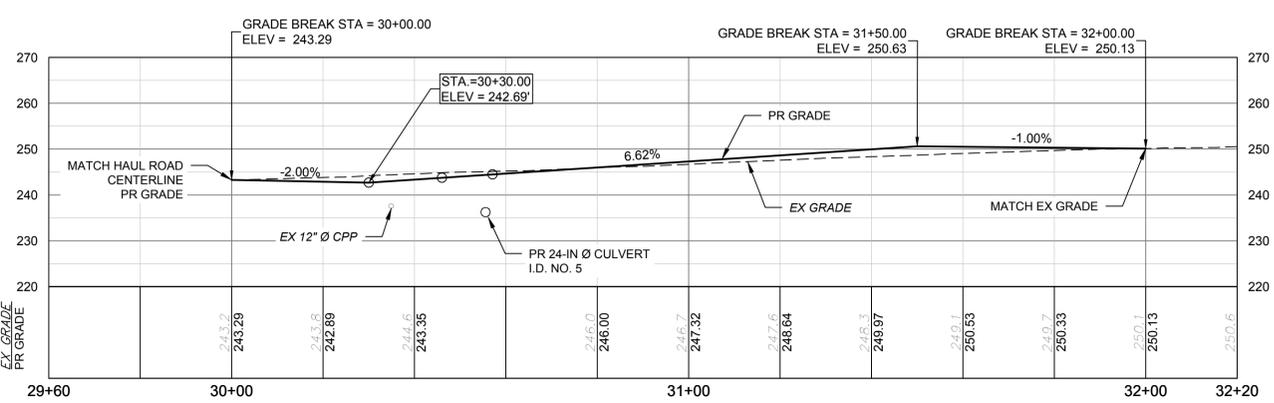
C-120



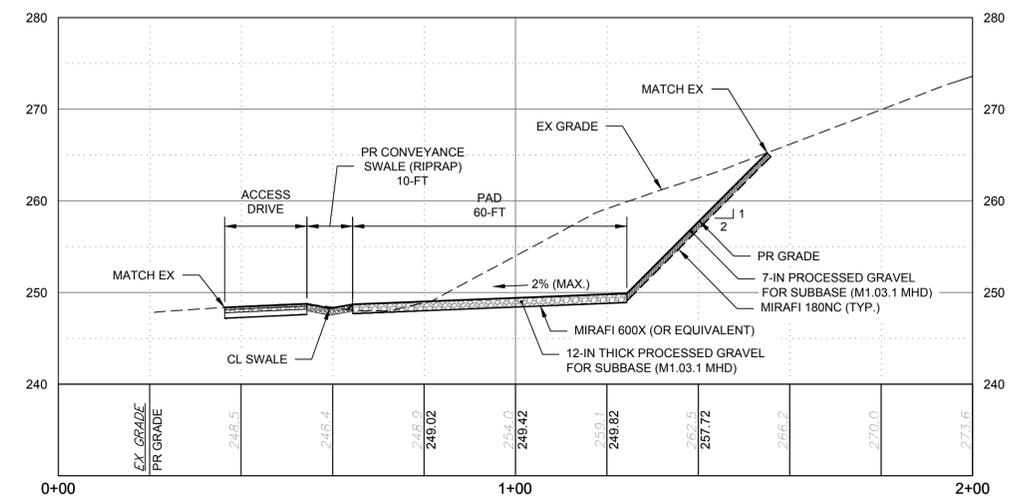
PLAN  
SCALE: 1"=20'

- NOTES:
- SPECIFICATIONS PER COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, LATEST EDITION.
  - SLOPES MUST BE OVERBUILT AND TRIMMED.
  - EXISTING GRADE MUST BE SCARIFIED AND RECOMPACTED TO AT LEAST 90% MAXIMUM DENSITY AT MOISTURE CONTENT AT OR ABOVE 2% OF OPTIMUM PER ASTM D 1557.

FOR CLARITY PURPOSES ALL ROADSIDE GRADING CONTOURS ARE NOT SHOWN ON PLANS. RED DASHED LINE DEPICTS LIMITS OF GRADING



PROFILE - ACCESS ROAD  
SCALE: 1"=20'(H), 1"=20'(V)



PROFILE - PAD (A-A)  
SCALE: 1"=20'(H), 1"=10'(V)

PLOT FILE: C:\pwworking\kleinfelder\proj\20221383\_Pad Grading Plan.dwg LAYOUT: C-120  
PLOTTED: 11/11/2022 3:59 PM BY: kur.vielteich

11/11/2022

REVISIONS				
REV	DESCRIPTION	DSN	CHK	DATE
A	ISSUED FOR PERMITTING	KRV	AGB	4/29/2022
B	ISSUED FOR PERMITTING	KRV	SH	10/25/2022
C	ISSUED FOR PERMITTING	KRV	SH	11/9/2022

**ISSUED FOR PERMITTING**

**SCALE VERIFICATION**  
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IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40  
SCALE: 1" = 20' SCALE IN FEET  
ORIGINAL DRAWING SIZE IS 22 x 34

**ISSUE FOR PERMIT (IFP) PLANS**

ASMG HAUL ROAD DESIGN  
901 RIVER ROAD  
FRANKLIN COUNTY, MASSACHUSETTS

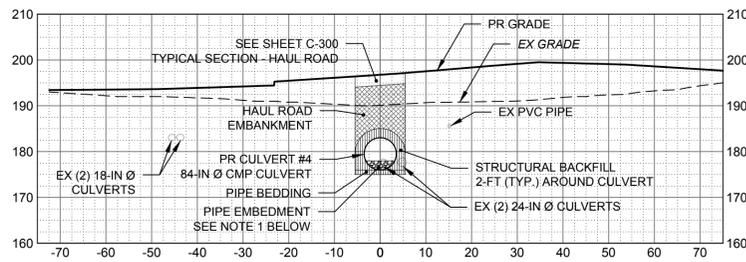
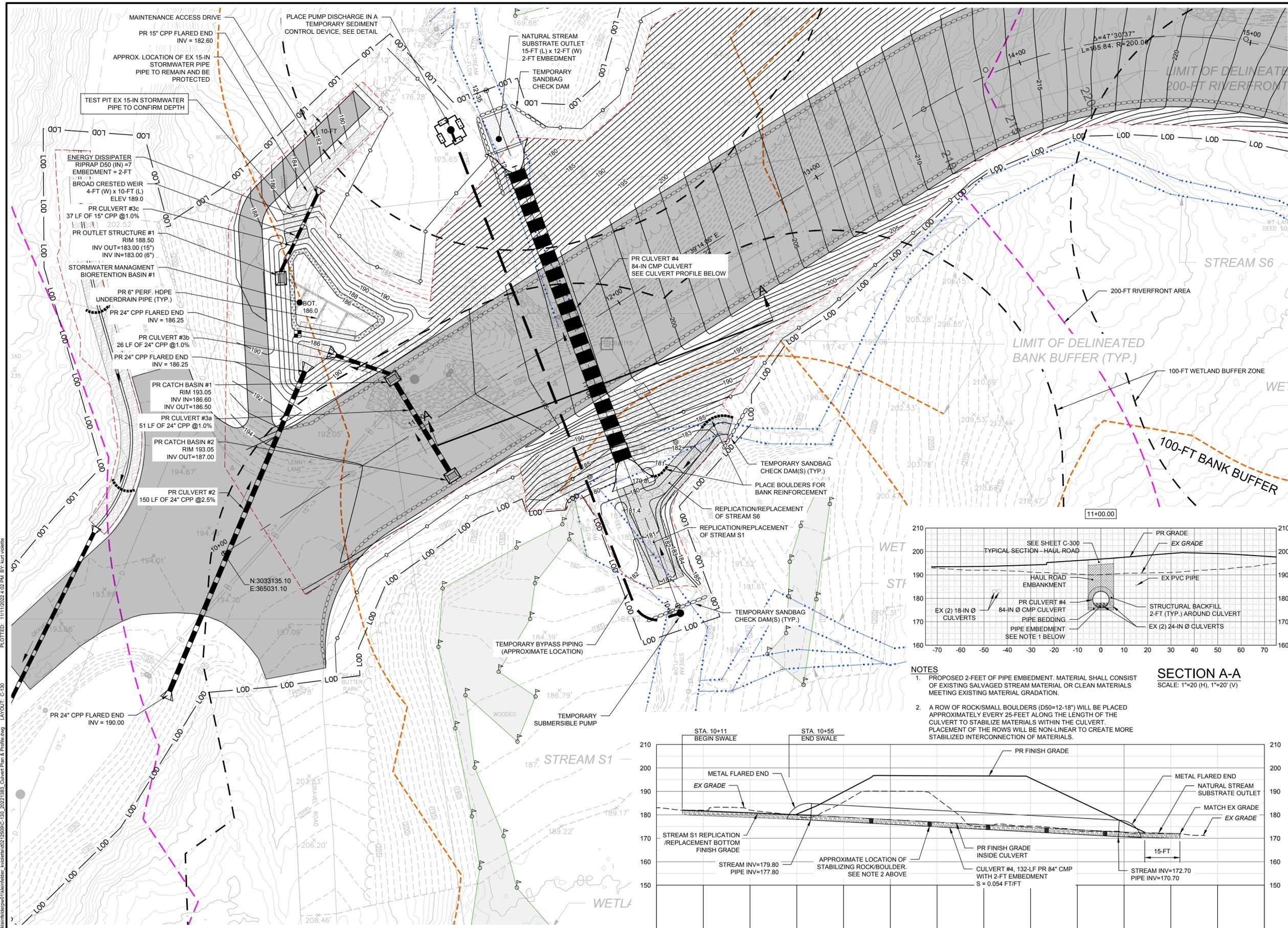


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901 RIVER ROAD  
DEERFIELD, MA 01342

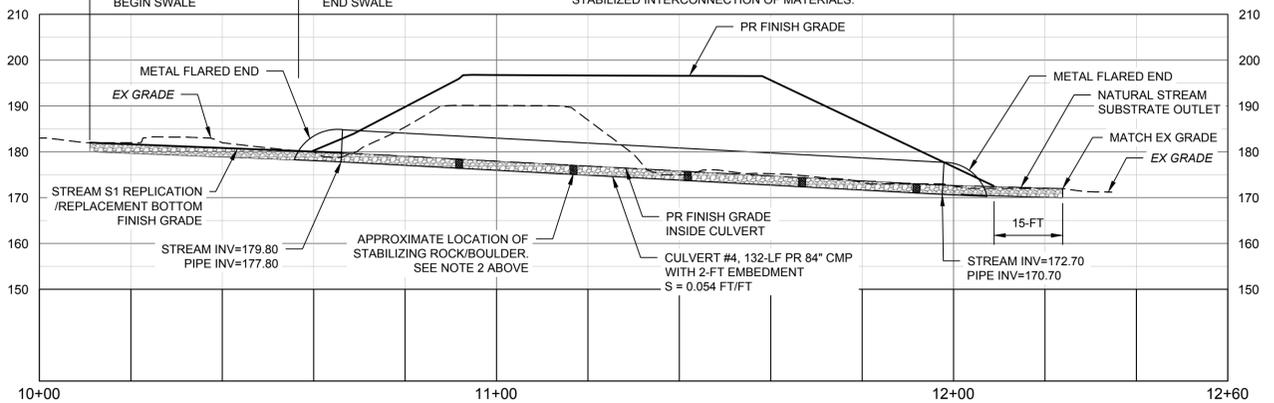
**CULVERT PLAN, PROFILE, & SECTION**

PROJECT NO.	20221383.01A
ISSUE DATE	11/09/2022
CURRENT REVISION	C
DESIGNED BY	KRV
DRAWN BY	KRV
CHECKED BY	SH
APPROVED BY	JW

C-130



**NOTES**  
1. PROPOSED 2-FEET OF PIPE EMBEDMENT. MATERIAL SHALL CONSIST OF EXISTING SALVAGED STREAM MATERIAL OR CLEAN MATERIALS MEETING EXISTING MATERIAL GRADATION.  
2. A ROW OF ROCK/SMALL BOULDERS (D50=12-18") WILL BE PLACED APPROXIMATELY EVERY 25-FEET ALONG THE LENGTH OF THE CULVERT TO STABILIZE MATERIALS WITHIN THE CULVERT. PLACEMENT OF THE ROWS WILL BE NON-LINEAR TO CREATE MORE STABILIZED INTERCONNECTION OF MATERIALS.



**PLAN**  
SCALE: 1"=20'

**CULVERT PROFILE**  
SCALE: 1"=20' (H), 1"=20' (V)

PLOTTED: 11/11/2022 4:02 PM BY: kurt.veldete  
 LAYOUT: C-130  
 CAD FILE: C:\pwworking\kleinfelder\proj\20221383\Culvert Plan & Profile.dwg



11/11/2022

REVISIONS

REV	DESCRIPTION	DSN	CHK	DATE
A	ISSUED FOR PERMITTING	KRV	AGB	4/29/2022
B	ISSUED FOR PERMITTING	KRV	SH	10/25/2022
C	ISSUED FOR PERMITTING	KRV	SH	11/9/2022

**ISSUED FOR PERMITTING**

SCALE VERIFICATION

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IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

ORIGINAL DRAWING SIZE IS 22 x 34

**ISSUE FOR PERMIT (IFP) PLANS**

ASMG HAUL ROAD DESIGN  
901 RIVER ROAD  
FRANKLIN COUNTY, MASSACHUSETTS



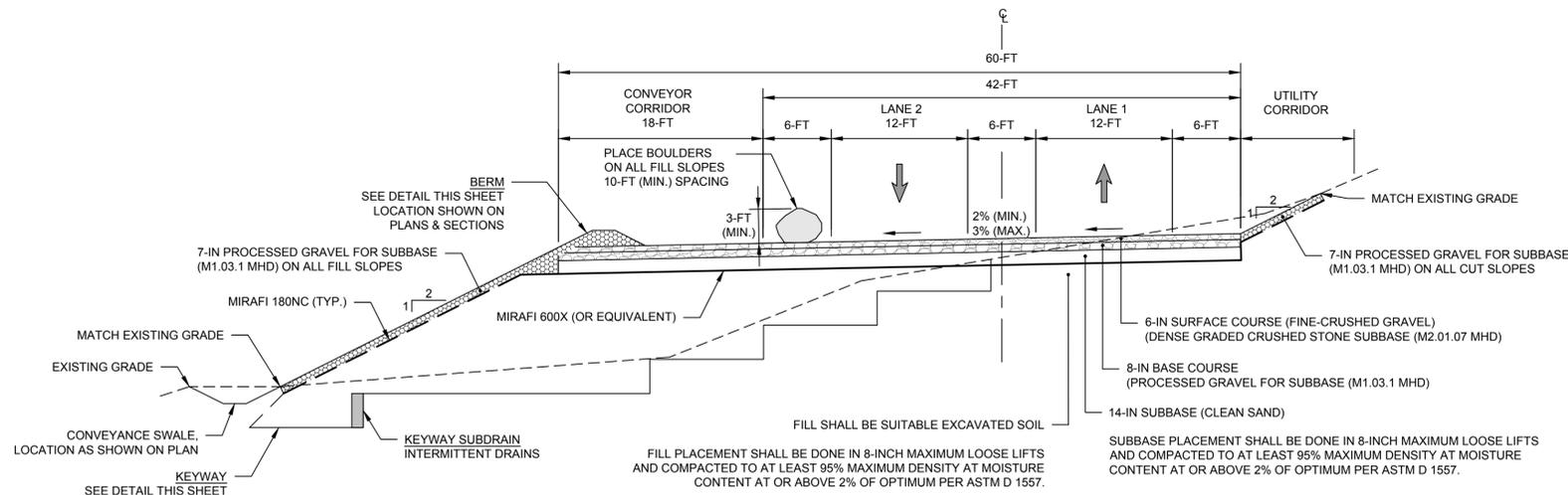
ALL STATES MATERIALS GROUP  
901 RIVER ROAD  
DEERFIELD, MA 01342

TYPICAL SECTIONS

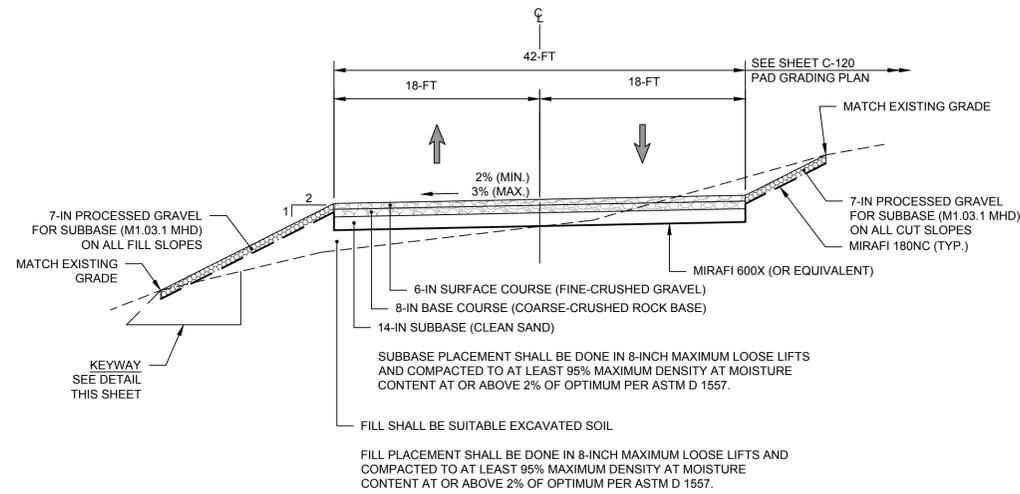
PROJECT NO.	20221383.001A
ISSUE DATE	11/09/2022
CURRENT REVISION	C
DESIGNED BY	KRV
DRAWN BY	KRV
CHECKED BY	SH
APPROVED BY	JW

C-300

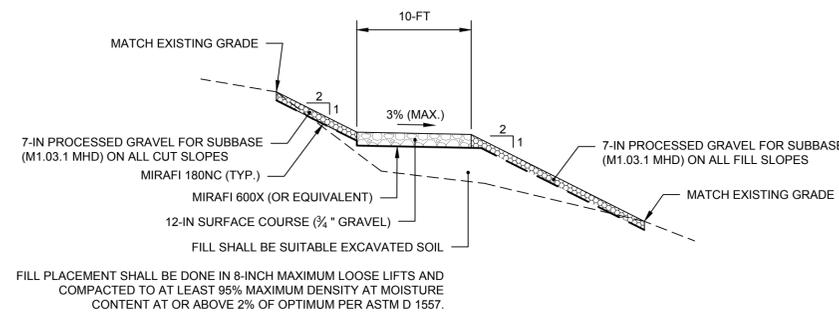
- NOTES:
- SPECIFICATIONS PER COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, LATEST EDITION.
  - SLOPES SHALL BE OVERBUILT AND TRIMMED.
  - EXISTING GRADE SHALL BE SCARIFIED AND RECOMPACTED TO AT LEAST 90% MAXIMUM DENSITY AT MOISTURE CONTENT AT OR ABOVE 2% OF OPTIMUM PER ASTM D 1557.



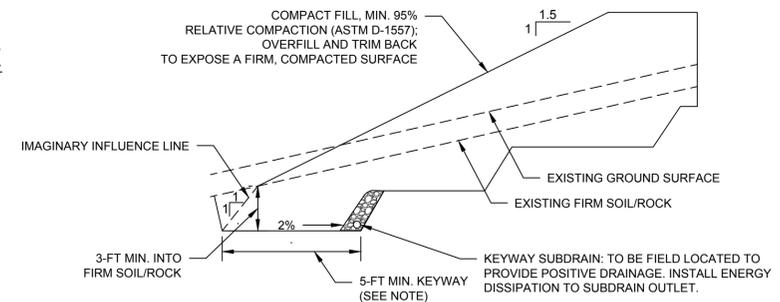
**TYPICAL SECTION - HAUL ROAD**  
SCALE: N.T.S.



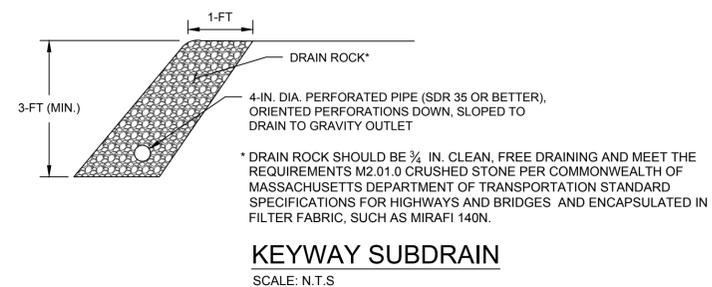
**TYPICAL SECTION - ACCESS ROAD**  
SCALE: N.T.S.



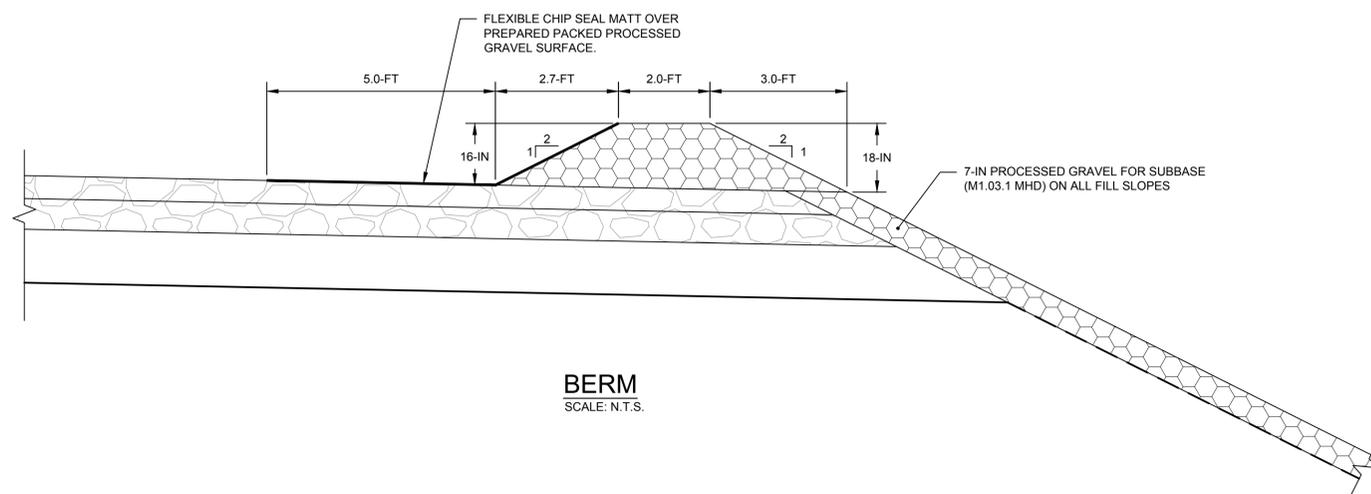
**TYPICAL SECTION - MAINTENANCE ACCESS DRIVE**  
SCALE: N.T.S.



**TYPICAL FILL SECTION - KEYWAY**  
SCALE: N.T.S.



**KEYWAY SUBDRAIN**  
SCALE: N.T.S.



**BERM**  
SCALE: N.T.S.

PLOTTED: 11/11/2022 3:46 PM BY: kurt.vielhaber  
LAYOUT: C-300  
CAD FILE: C:\pwworking\kleinfelder\arow\1\kiefelder\_ks\detail\0212590\C-500\_20221383\_details.dwg



11/11/2022

REVISIONS

REV	DESCRIPTION	DSN DWN	CHK APP	DATE
A	ISSUED FOR PERMITTING	KRV KRV	AGB JW	4/29/2022
B	ISSUED FOR PERMITTING	KRV KRV	SH JW	10/25/2022
C	ISSUED FOR PERMITTING	KRV KRV	SH JW	11/9/2022

**ISSUED FOR PERMITTING**

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING



IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

0 20 40  
SCALE: 1" = 20' SCALE IN FEET

ORIGINAL DRAWING SIZE IS 22 x 34

**ISSUE FOR PERMIT (IFP) PLANS**

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FRANKLIN COUNTY, MASSACHUSETTS

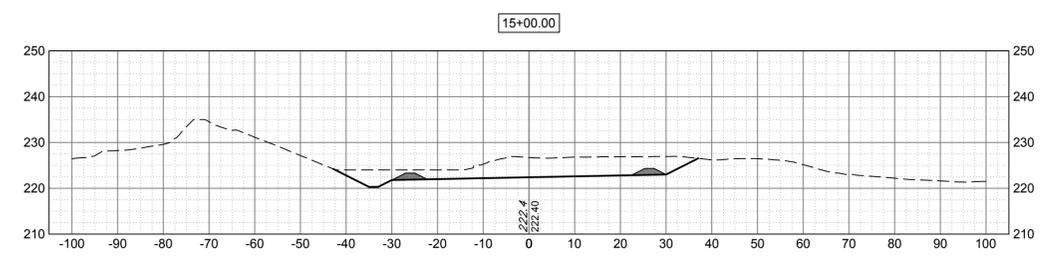
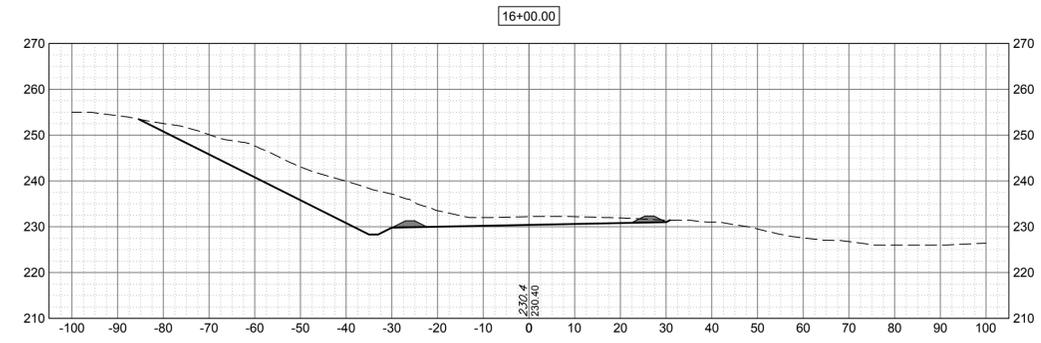
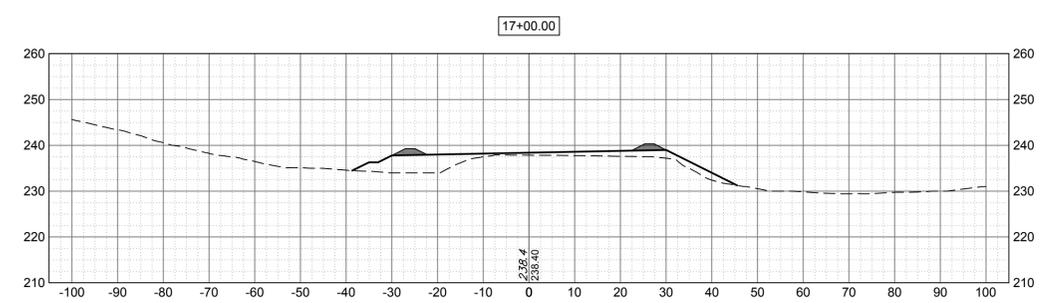
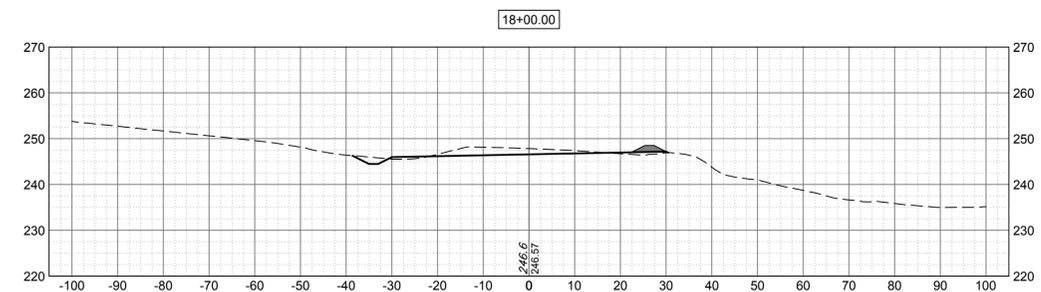
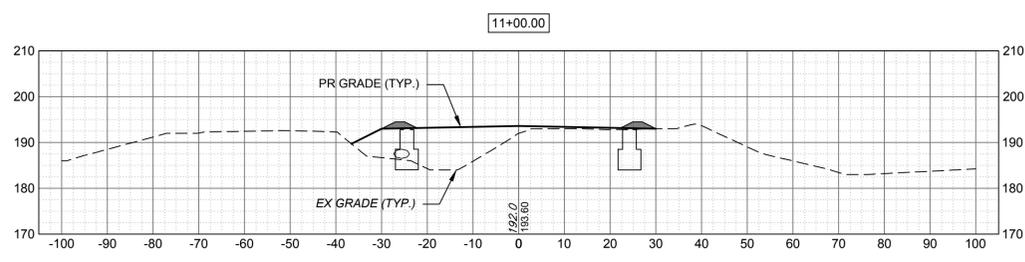
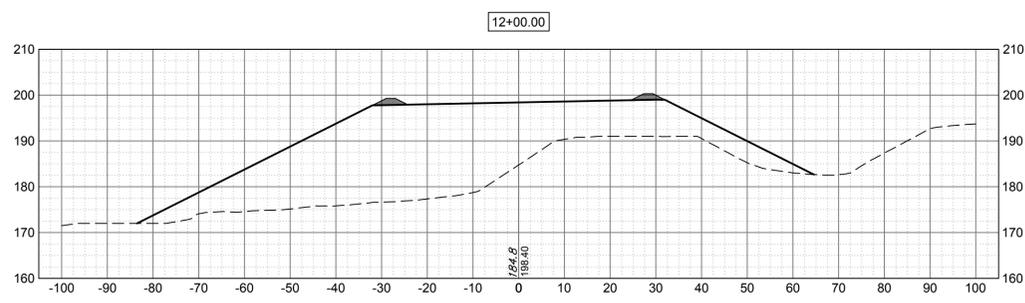
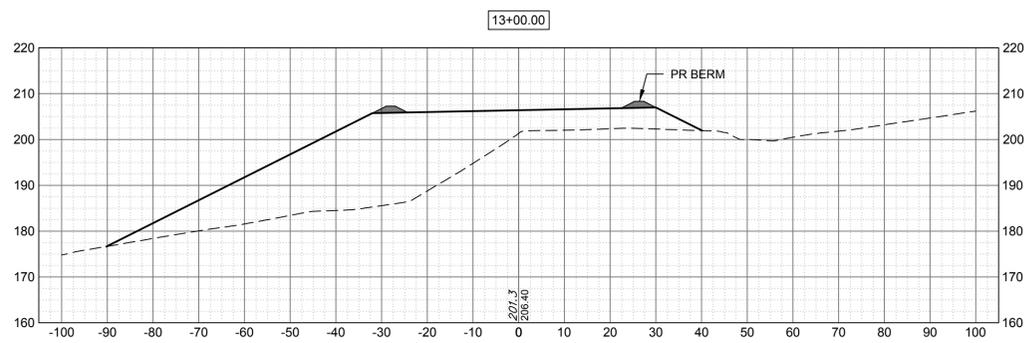
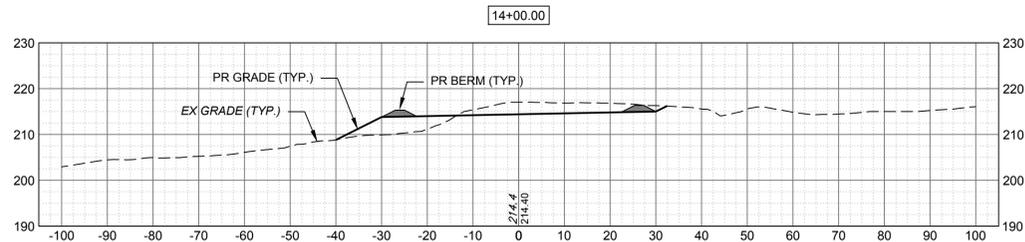


ALL STATES MATERIALS GROUP  
901 RIVER ROAD  
DEERFIELD, MA 01342

CROSS SECTIONS

PROJECT NO.	20221383.001A
ISSUE DATE	11/09/2022
CURRENT REVISION	C
DESIGNED BY	KRV
DRAWN BY	KRV
CHECKED BY	SH
APPROVED BY	JW

C-301





11/11/2022

REVISIONS

REV	DESCRIPTION	DSN DWN	CHK APP	DATE
A	ISSUED FOR PERMITTING	KRV KRV	AGB JW	4/29/2022
B	ISSUED FOR PERMITTING	KRV KRV	SH JW	10/25/2022
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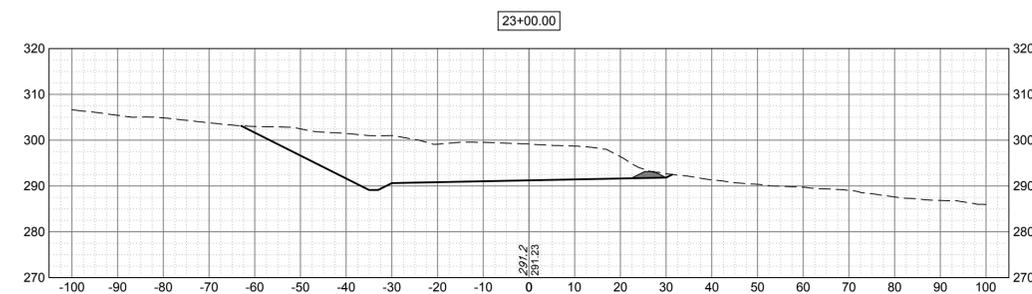
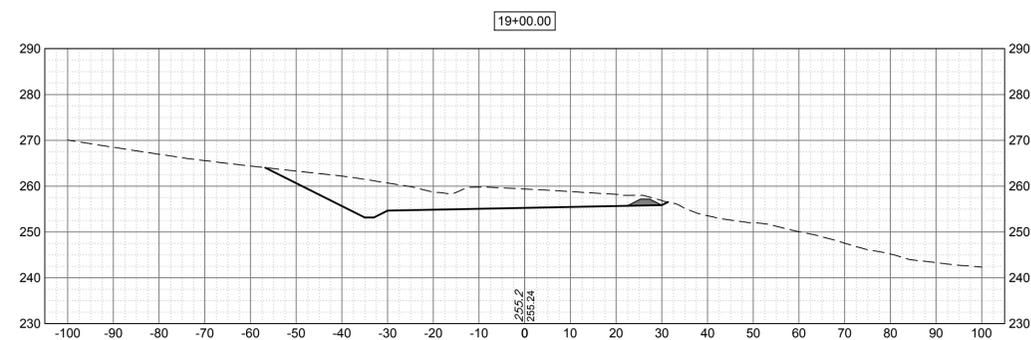
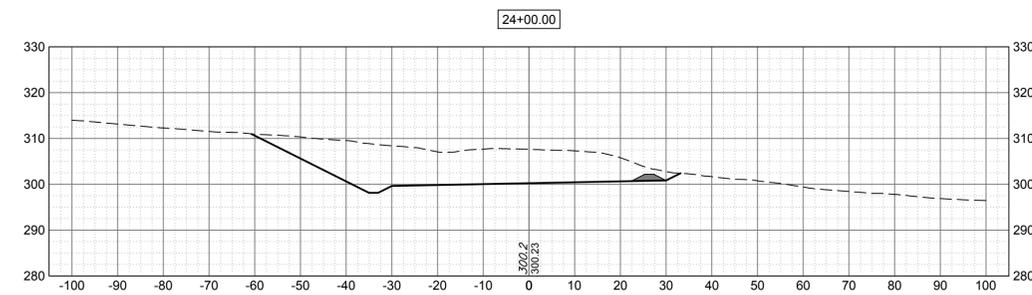
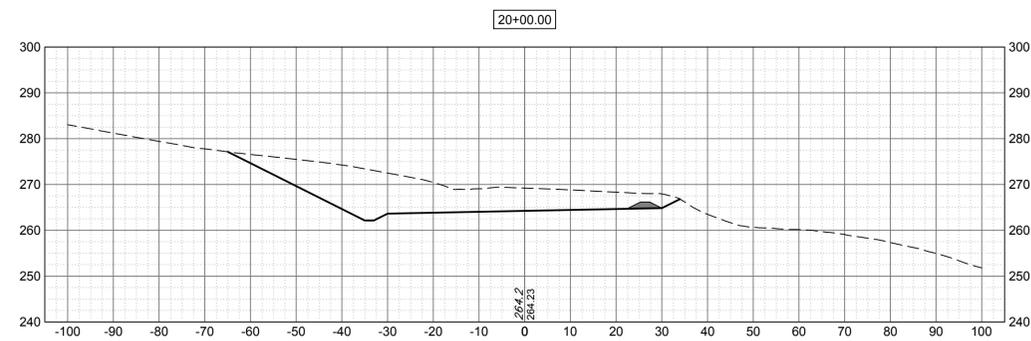
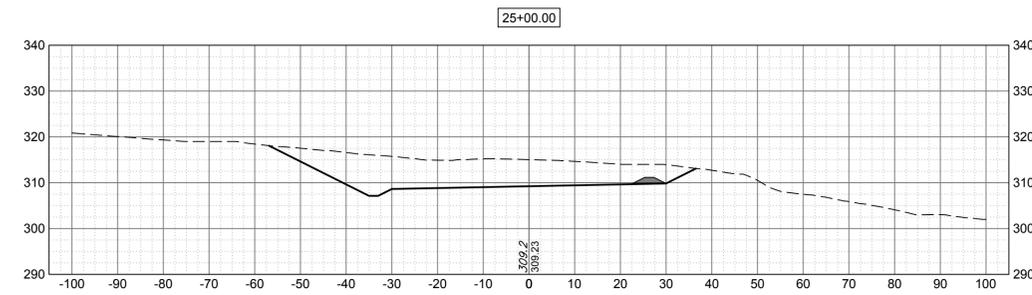
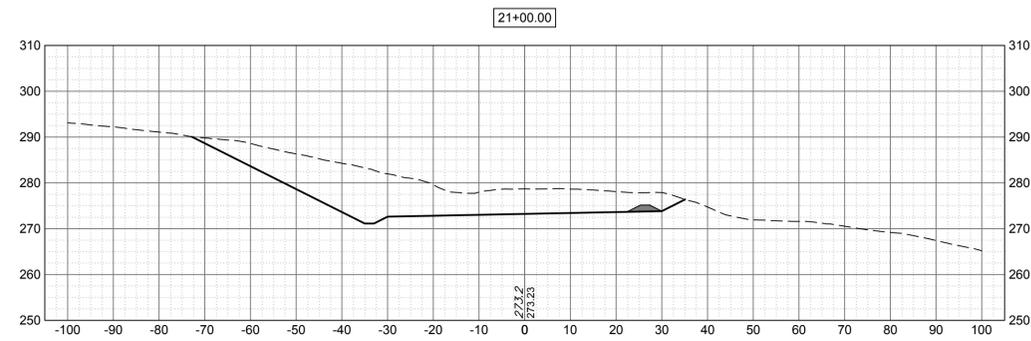
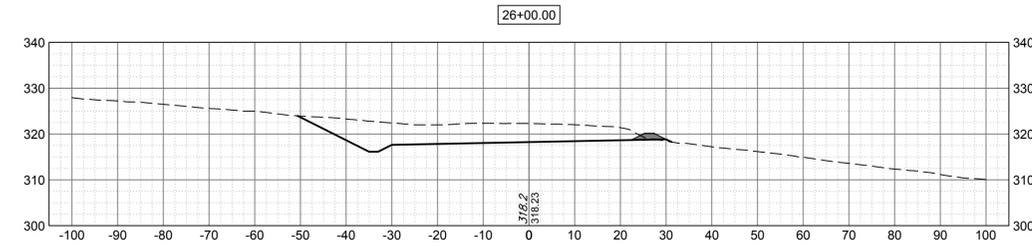
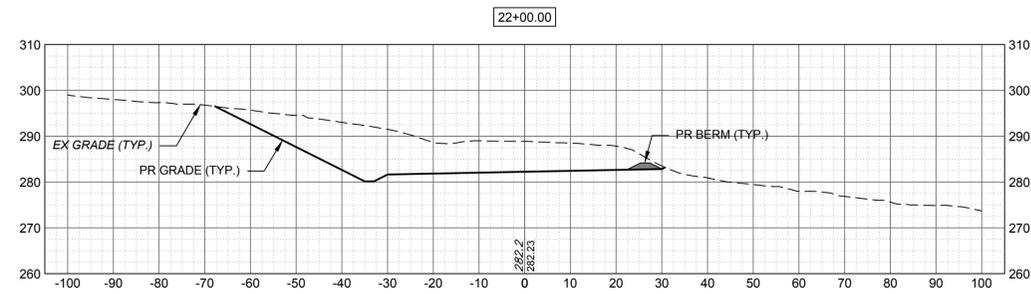


ALL STATES MATERIALS GROUP  
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**CROSS SECTIONS**

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APPROVED BY	JW

C-302





11/11/2022

REVISIONS

REV	DESCRIPTION	DSN DWN	CHK APP	DATE
A	ISSUED FOR PERMITTING	KRV KRV	AGB JW	4/29/2022
B	ISSUED FOR PERMITTING	KRV KRV	SH JW	10/25/2022
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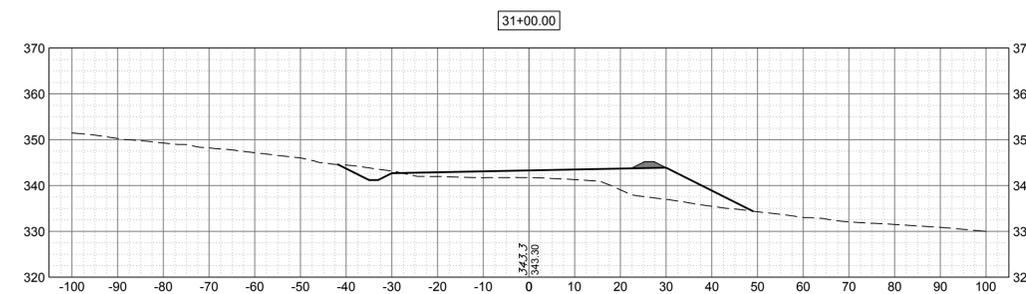
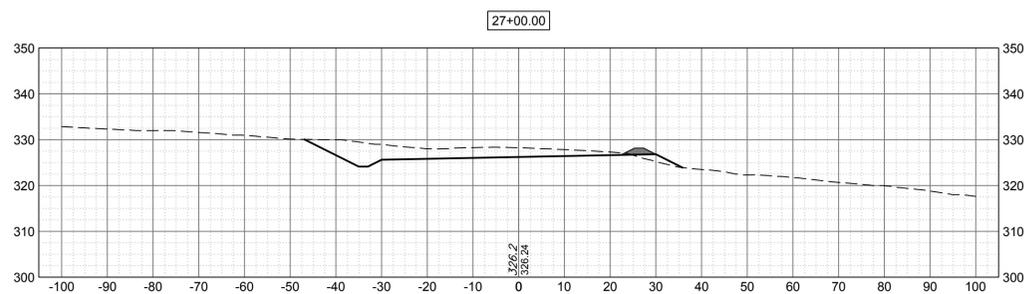
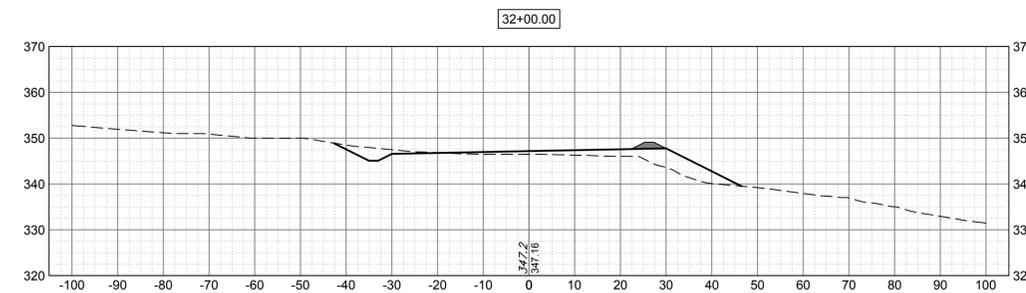
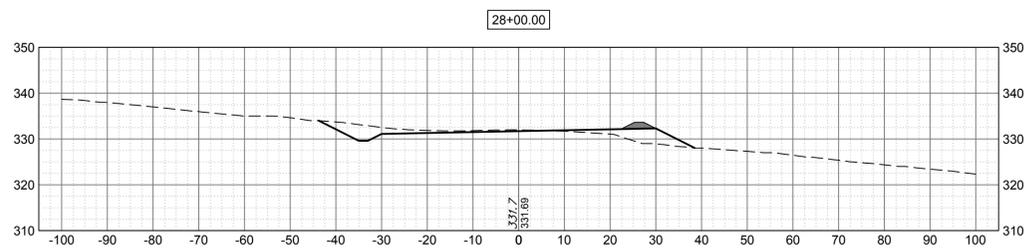
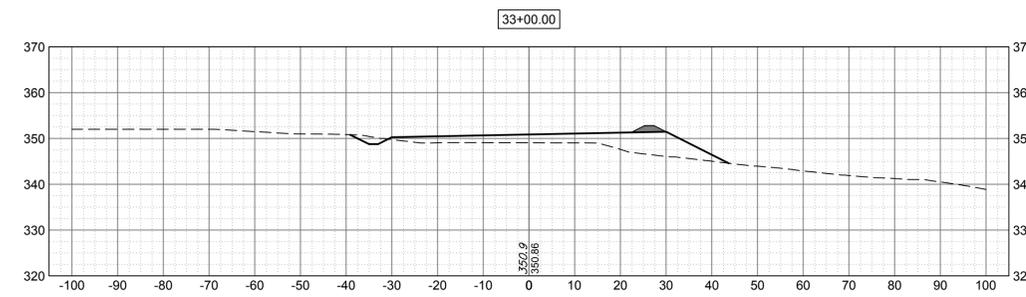
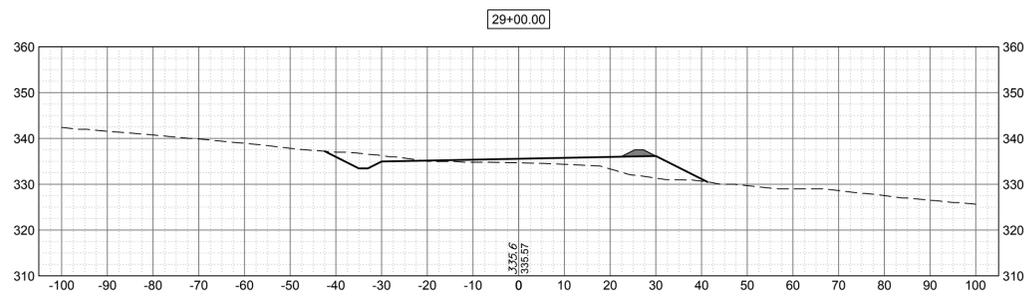
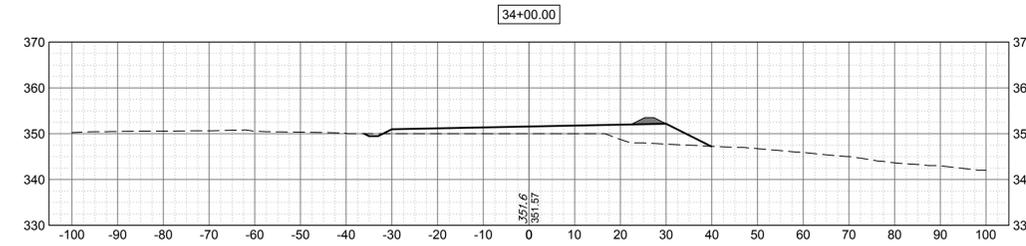
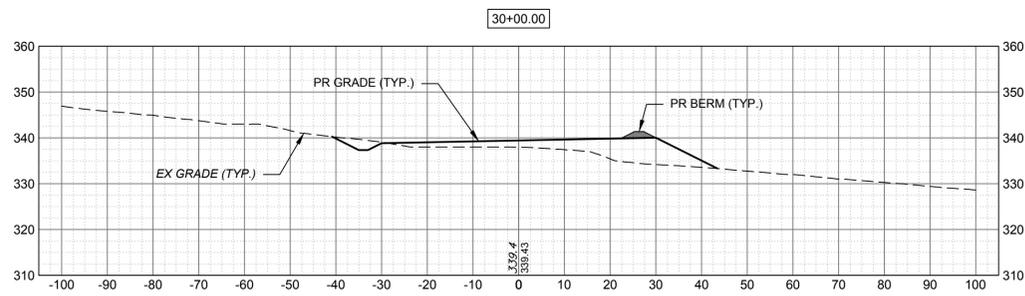


ALL STATES MATERIALS GROUP  
901 RIVER ROAD  
DEERFIELD, MA 01342

CROSS SECTIONS

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CHECKED BY	SH
APPROVED BY	JW

C-303



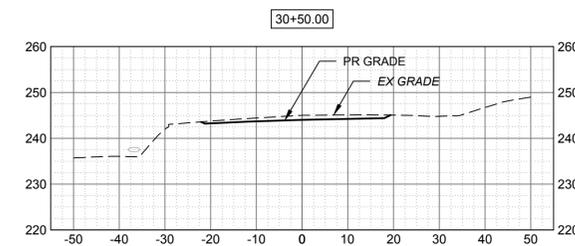
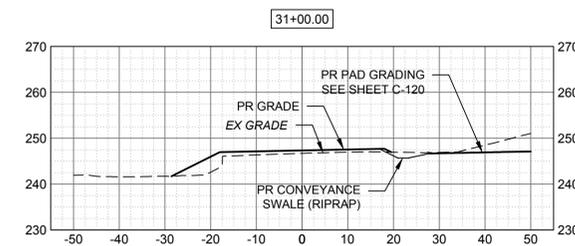
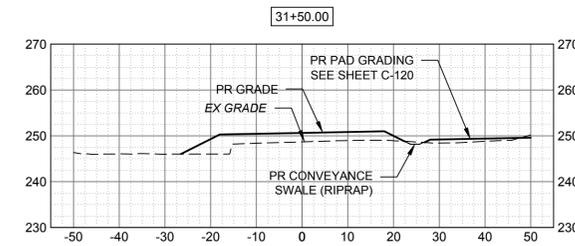
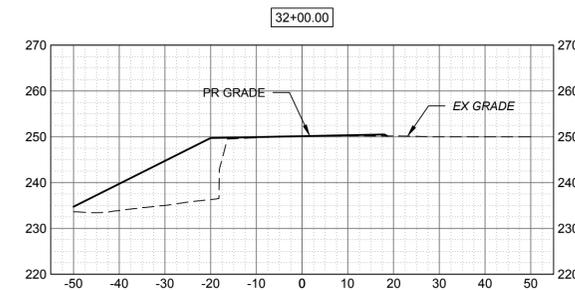
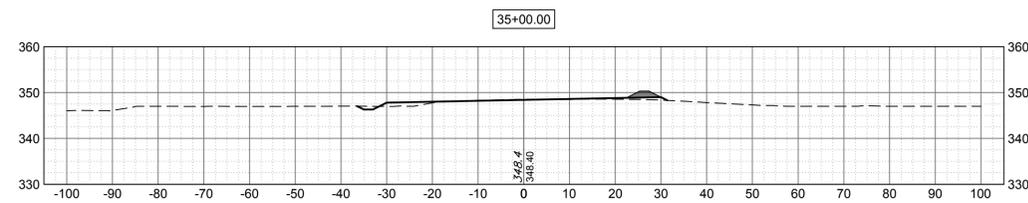
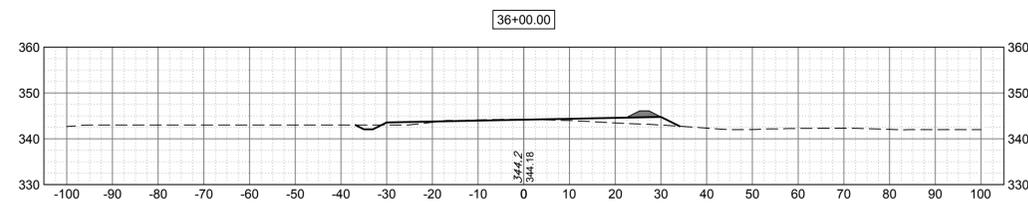
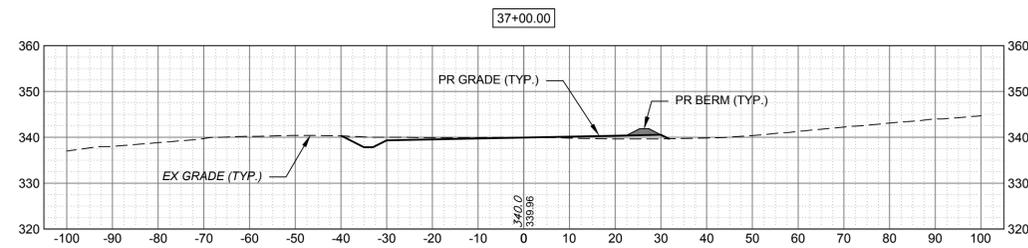


11/11/2022

REVISIONS

REV	DESCRIPTION	DSN DWN	CHK APP	DATE
A	ISSUED FOR PERMITTING	KRV	AGB	4/29/2022
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ACCESS ROAD CROSS SECTIONS



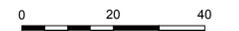
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ISSUE FOR PERMIT (IFP) PLANS

ASMG HAUL ROAD DESIGN  
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ALL STATES MATERIALS GROUP  
901 RIVER ROAD  
DEERFIELD, MA 01342

CROSS SECTIONS

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APPROVED BY	JW

C-304







REVISIONS

REV	DESCRIPTION	DSN	CHK	DATE
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FRANKLIN COUNTY, MASSACHUSETTS



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901 RIVER ROAD  
DEERFIELD, MA 01342

CIVIL DETAILS

PROJECT NO.	20221383.001A
ISSUE DATE	11/09/2022
CURRENT REVISION	C
DESIGNED BY	KRV
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CHECKED BY	SH
APPROVED BY	JW

C-503

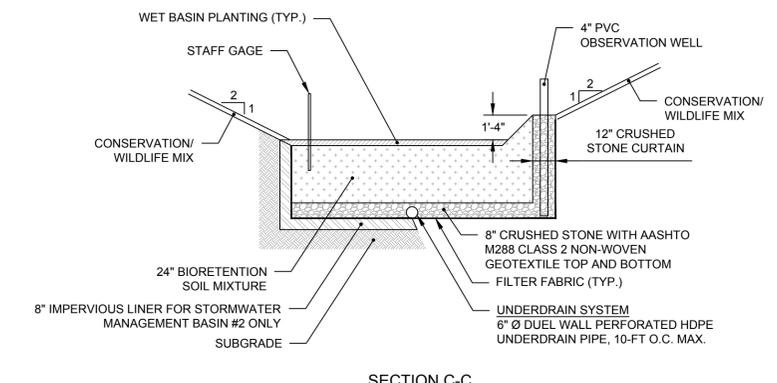
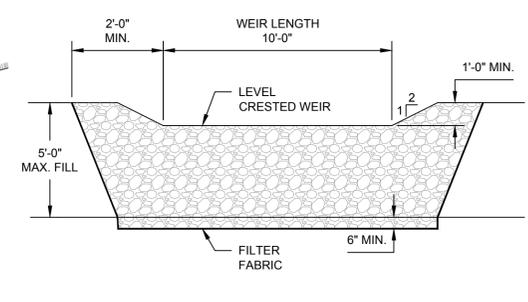
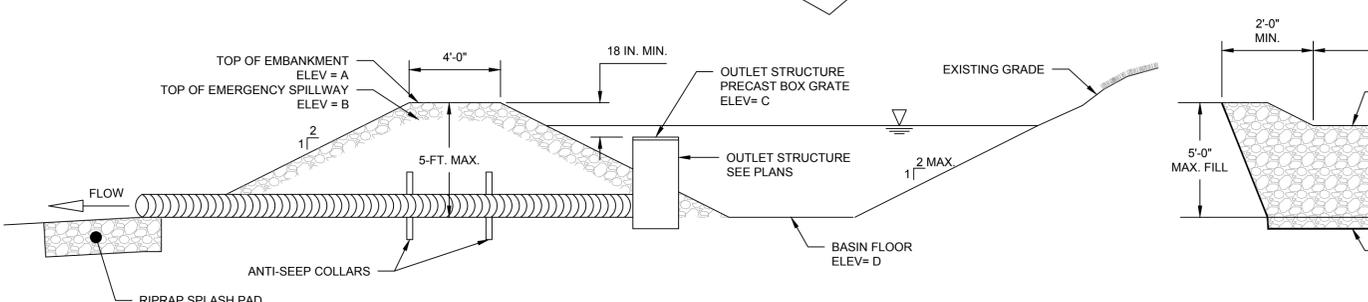
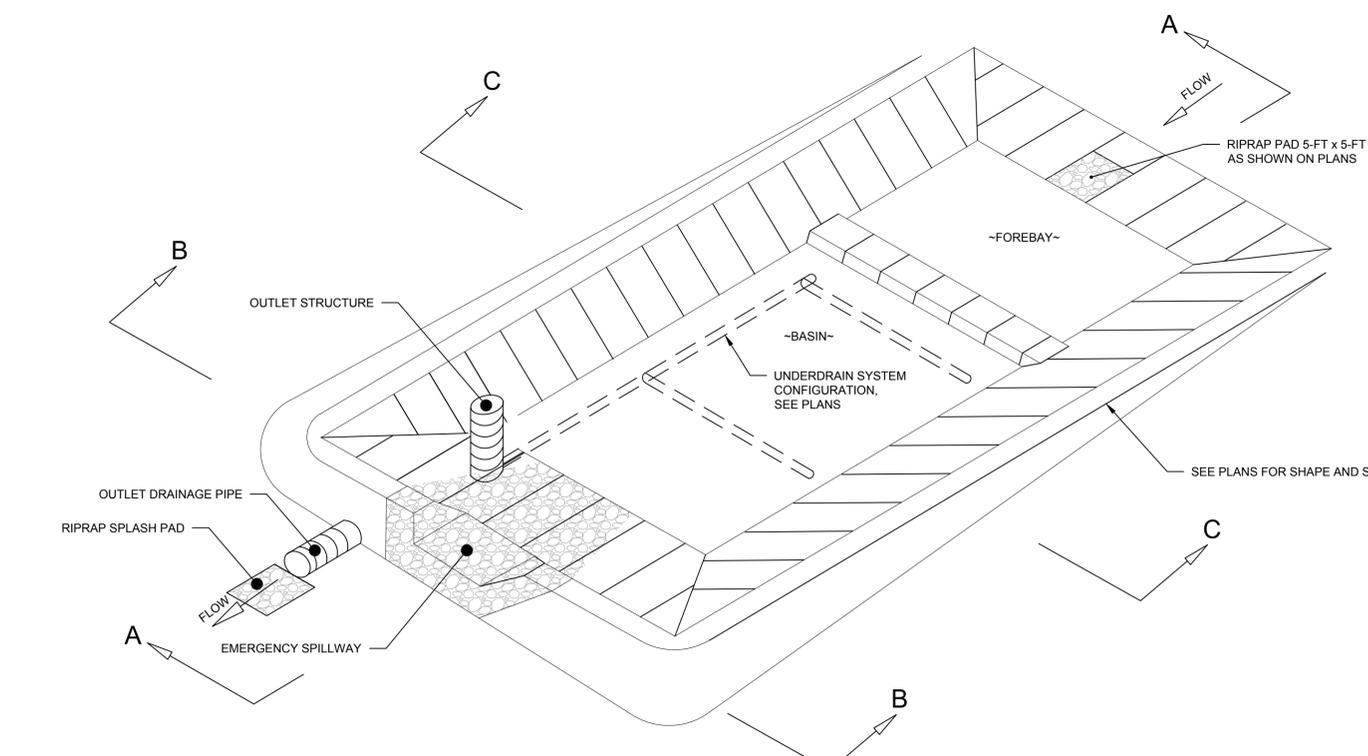
**MAINTENANCE:**

ACTIVITY	FREQUENCY
1. INSPECTION & REMOVE TRASH	MONTHLY
2. MULCH	ANNUALLY (SPRING)
3. REMOVE DEAD VEGETATION	ANNUALLY (FALL OR SPRING)
4. PRUNE	ANNUALLY (FALL OR SPRING)
5. REPLACE ENTIRE MEDIA	AS NEEDED

**CONSTRUCTION SPECIFICATIONS:**

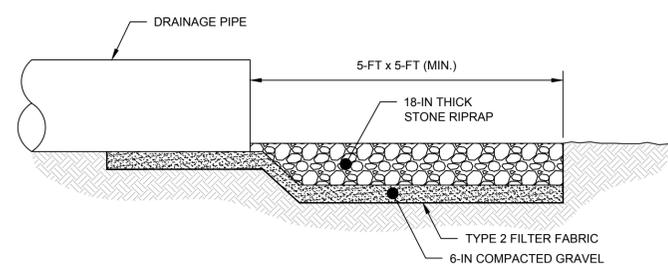
- CLEAR, GRUB AND STRIP THE AREA UNDER THE EMBANKMENT OF ALL VEGETATION AND ROOT MAT. REMOVE ALL SURFACES SOIL CONTAINING HIGH AMOUNTS OF ORGANIC MATTER AND STOCKPILE OR DISPOSE OF IT PROPERLY.
- ENSURE THAT FILL MATERIAL FOR THE EMBANKMENT IS FREE OF ROOTS, WOODY VEGETATION, ORGANIC MATTER AND OTHER OBJECTIONABLE MATERIAL. PLACE THE FILL IN LIFTS NOT TO EXCEED 9 INCHES AND MACHINE COMPACT IT. OVER FILL THE EMBANKMENT 6 INCHES TO ALLOW FOR SETTLEMENT.
- CONSTRUCT THE EMERGENCY SPILLWAY SECTION IN THE EMBANKMENT. PROTECT THE CONNECTION BETWEEN THE RIPRAP AND THE SOIL FROM PIPING BY USING FILTER FABRIC.
- ENSURE THE STONE SECTION OF THE EMBANKMENT HAS A MINIMUM BOTTOM WIDTH OF 3 FEET AND MAXIMUM SIDE SLOPES OF 1:1 THAT EXTEND TO THE BOTTOM OF THE SPILLWAY SECTION.
- CONSTRUCT THE MINIMUM FINISHED STONE SPILLWAY BOTTOM WIDTH, AS SHOWN ON THE PLANS, WITH 2:1 SIDE SLOPES EXTENDING TO THE TOP OF THE OVER FILLED EMBANKMENT. THE WEIR MUST BE LEVEL AND CONSTRUCTED TO GRADE TO ASSURE DESIGN CAPACITY.
- ENSURE EMBANKMENT/SURROUNDING EDGES DO NOT EXHIBIT WATER LEAKAGE OR SEEPAGE.
- AVOID EXCESSIVELY COMPACTING SOILS AROUND THE BIORETENTION AREA. PLACE PLANTING SOILS IN 1-FOOT TO 2-FOOT LIFTS AND COMPACT WITH MINIMAL PRESSURE UNTIL DESIRED ELEVATION IS REACHED.
- SOIL MIX FOR BIORETENTION AREA
  - BE A MIXTURE OF SAND (40%), COMPOST(30-40%) AND TOPSOIL (20-30%).
  - MUST BE FREE OF STONES, STUMPS, ROOTS OR SIMILAR OBJECTS LARGER THAN 2 INCHES. CLAY CONTENT SHOULD NOT EXCEED 5%.
  - SOIL pH SHOULD GENERALLY BE BETWEEN 5.5 - 6.5.
  - SOIL WITH 1.5% TO 3% ORGANIC CONTENT AND MAXIMUM 500-PPM SOLUBLE SALTS.
  - SAND COMPONENT SHOULD BE GENERALLY SAND THAT MEETS ASTM D 422.
 

SIEVE SIZE	PERCENT PASSING
2-INCH	100
3/4-INCH	70-100
1/4-INCH	50-80
NO. 40	15-40
NO. 200	0-3
- THE TOPSOIL COMPONENT SHALL BE SANDY LOAM, LOAMY SAND OR LOAM TEXTURE.
- THE COMPOST COMPONENT MUST BE PROCESSED FROM YARD WASTE IN ACCORDANCE WITH MASSDEP GUIDELINES. THE COMPOST SHALL NOT CONTAIN BIOSOLIDS.

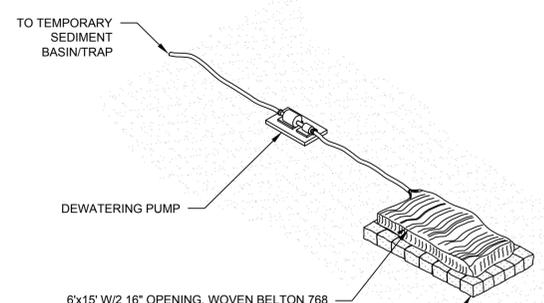


DIMENSIONS	A			
	A	B	C	D
STORMWATER MANAGEMENT BASIN #1	190.0	189.0	188.5	186.0
STORMWATER MANAGEMENT BASIN #2	238.0	237.0	236.5	233.0

**BIORETENTION BASIN**  
SCALE: N.T.S.



**RIPRAP SPLASH PAD**  
SCALE: N.T.S.



STRAW BALES TO BE PLACED UNDER FILTER FABRIC. THE STRAW BALES FOR THIS INSTALLATION DO NOT HAVE TO BE ENTRENCHED, ONLY STAKED

**NOTES:**

- WHEN ATTACHING THE HOSE TO THE FILTER FABRIC BAG, THE CLAMP MUST BE TIGHT AND PREVENT BACK FLOW AROUND THE CONNECTION.
- WHILE IN USE, FILTER FABRIC BAGS WILL BE MONITORED HOURLY TO ASSURE PROPER FUNCTIONING. ANY PROBLEMS SHALL BE REPAIRED IMMEDIATELY AND THE BAGS SHALL BE REPLACED WHEN FULL.
- PUMP SHALL NOT PROVIDE MORE THAN THE MAXIMUM ALLOWABLE FLOW PER ENVIRO-BAG SPECIFICATIONS (110 GPM/FT.)
- CONTRACTOR SHALL PROVIDE SUFFICIENT STORAGE IN DESILTING BAG TO MEET THE FOLLOWING VOLUME EQUIVALENCY: 1 CU.FT./GPM DISCHARGE.
- PLACE FILTER BAG SUCH THAT DRAINAGE FROM THE FILTER WILL DRAIN AWAY FROM THE DISTURBED AREA, INTO A NATURAL SWALE OR INLET PROTECTED FROM EROSION.
- STAKES TO ANCHOR STRAW BALES TO BE PLACED AS TO NOT PUNCTURE SILT BAG

**DESILTING BAG ON BALES**  
SCALE: N.T.S.

PLOTTED: 11/11/2022 3:43 PM BY: kurt.vielhaber  
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 KLEINFELDER