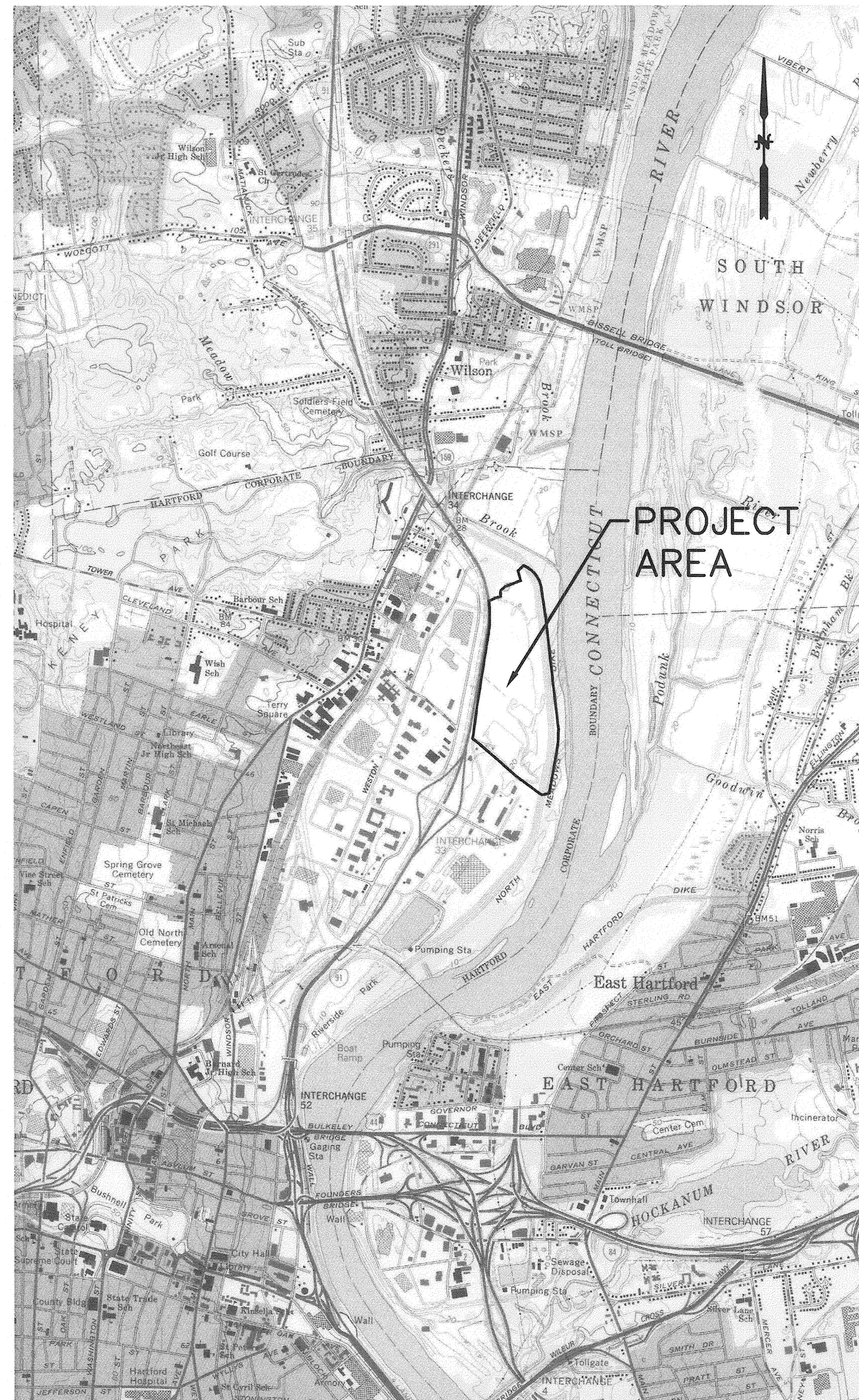


# CONNECTICUT RESOURCES RECOVERY AUTHORITY

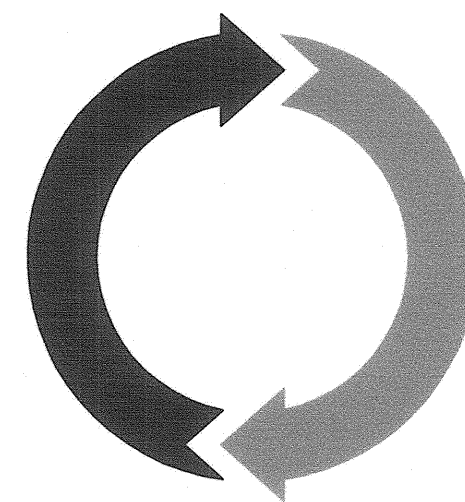
## HARTFORD LANDFILL CLOSURE MSW/INTERIM ASH DISPOSAL AREA LEIBERT ROAD HARTFORD, CT

### SHEET INDEX



LOCATION MAP SCALE:  
1"=2000'

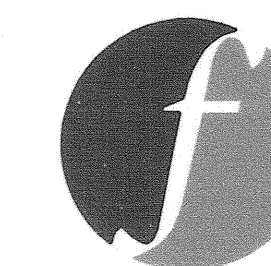
JUNE 2007



CONNECTICUT  
RESOURCES  
RECOVERY  
AUTHORITY

SHEET NO.	TITLE
GI-101	GENERAL NOTES
VF-101 TO VF-102	EXISTING CONDITIONS PLAN
CI-101	PHASING AND ACCESS PLAN
CP-101	ACCESS ROAD PLAN
CU-101	FORCE MAIN RELOCATION PLAN
CU-102 TO CU-103	ELECTRICAL RELOCATION PLAN
CG-101 TO CG-104	SUBGRADE PLANS
CG-111 TO CG-112	FINAL GRADING PLANS
CE-101 TO CE-104	EROSION CONTROL PLANS
CI-501 TO CI-503	COVER SYSTEM AND SITE DETAILS
CP-501	ACCESS ROAD DETAILS
CU-501	FORCE MAIN RELOCATION DETAILS
CU-502	ELECTRICAL DETAILS
CI-511 TO CI-513	DRAINAGE DETAILS
CE-501 TO CE-502	EROSION CONTROL DETAILS

PREPARED BY:



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*Richard D. Jones*  
RICHARD D. JONES, P.E.

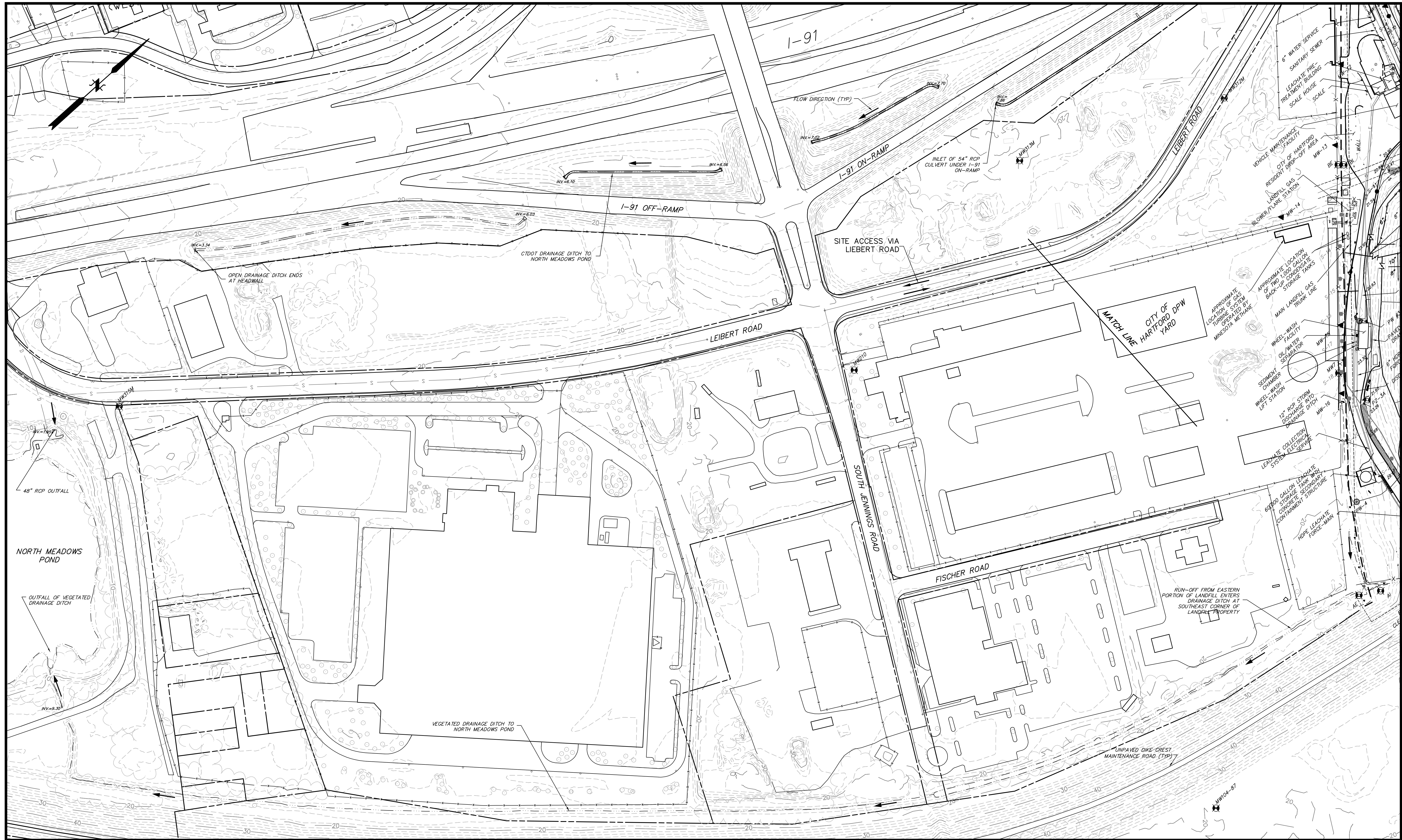
CT P.E. LICENSE No. 19393







LGS: ROT42 | MS VIEW: MS100/ROT48 | LMAN: BASE MAP | CTB: FO\_STANDARD | File Path: J:\DWG\2004\0174\12\Plan\04017412.dwg, 11:58 AM, User: Donald

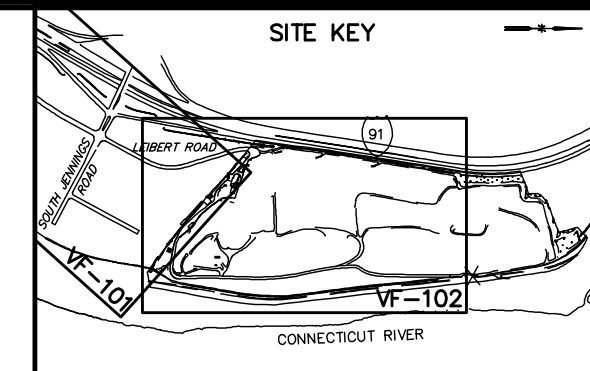
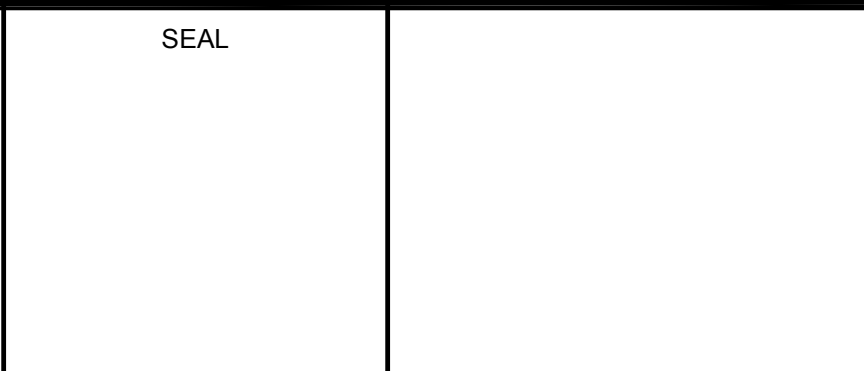


No.	DATE	DESCRIPTION	BY
1.			

PROJ. MANAGER:	CML
CHIEF DESIGNER:	DRL
REVIEWED BY:	DATE

SEAL

SEAL



SCALE:

HORIZ.: 1" = 100'

VERT.:

DATUM:

HORIZ.: NAD 27

VERT.: NGVD 29

GRAPHIC SCALE

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CONNECTICUT RESOURCES RECOVERY AUTHORITY

EXISTING CONDITIONS PLAN

HARTFORD LANDFILL CLOSURE  
MSW/INTERIM ASH DISPOSAL AREA

HARTFORD CONNECTICUT

PROJ. No.: 04-0174.H12  
DATE: JUNE 2007

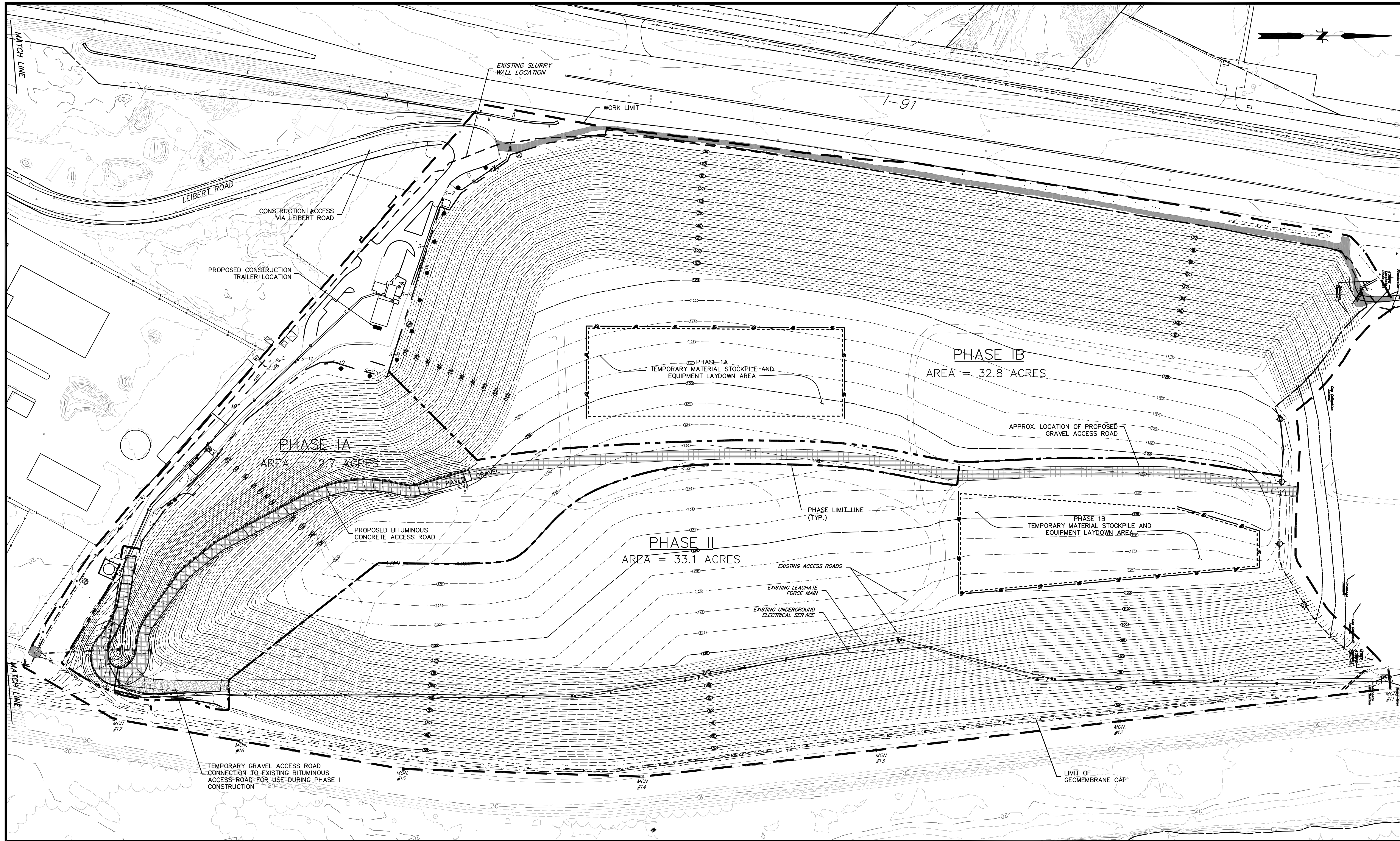
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LGS: ROT90 | LMAN: PHASING | CTB: FO STANDARD | File Path: J:\DWG\2004\0174\H12\Plan\040174H12STP101.dwg, Layout: CI-101 Tue, May 29, 2007 1:30 PM User: Donald

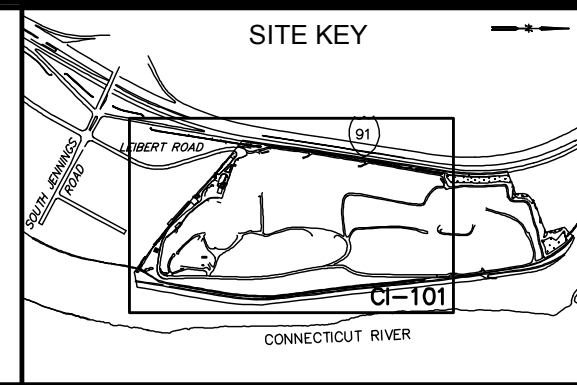


No.	DATE	DESCRIPTION	BY
1.			

PROJ. MANAGER:	CML
CHIEF DESIGNER:	DRL
REVIEWED BY:	DATE

SEAL	SEAL
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SCALE:	HORZ.: 1" = 100'
	VERT.:
DATUM:	HORZ.: NAD 27
	VERT.: NGVD 29
GRAPHIC SCALE	


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CONNECTICUT RESOURCES RECOVERY AUTHORITY  
 PHASING AND ACCESS PLAN  
 HARTFORD LANDFILL CLOSURE  
 MSW/INTERIM ASH DISPOSAL AREA  
 HARTFORD CONNECTICUT

PROJ. No.: 04-0174.H12  
 DATE: JUNE 2007  
**CI-101**











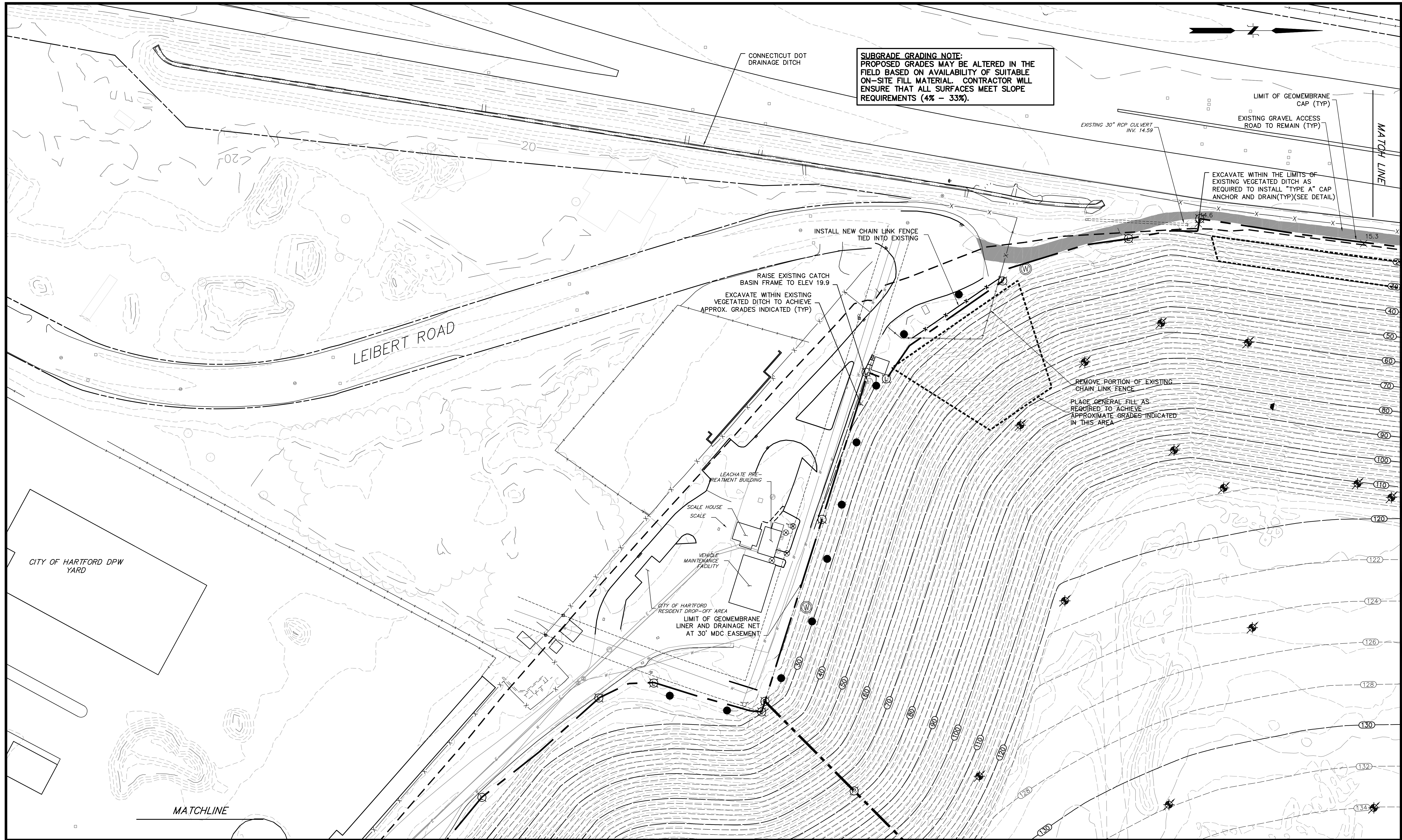








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 MS VIEW: MS50(SW)  
 CTB: F0\_STANDARD  
 LGS: ROT90

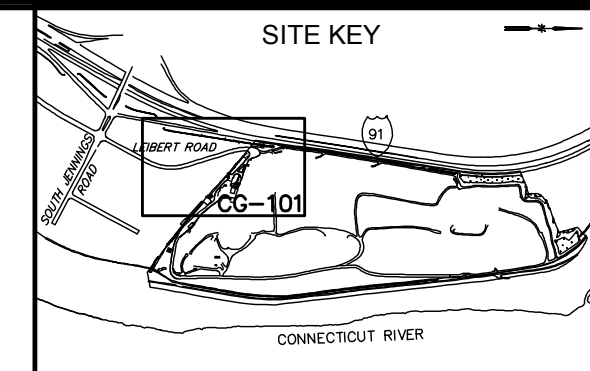


No.	DATE	DESCRIPTION	BY
1.			

PROJ. MANAGER:	CML
CHIEF DESIGNER:	DRL
REVIEWED BY:	DATE

SEAL	SEAL
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SCALE:	HORIZ.: 1" = 50'
	VERT.: 1" = 10'
DATUM:	HORIZ.: NAD 27
	VERT.: NGVD 29

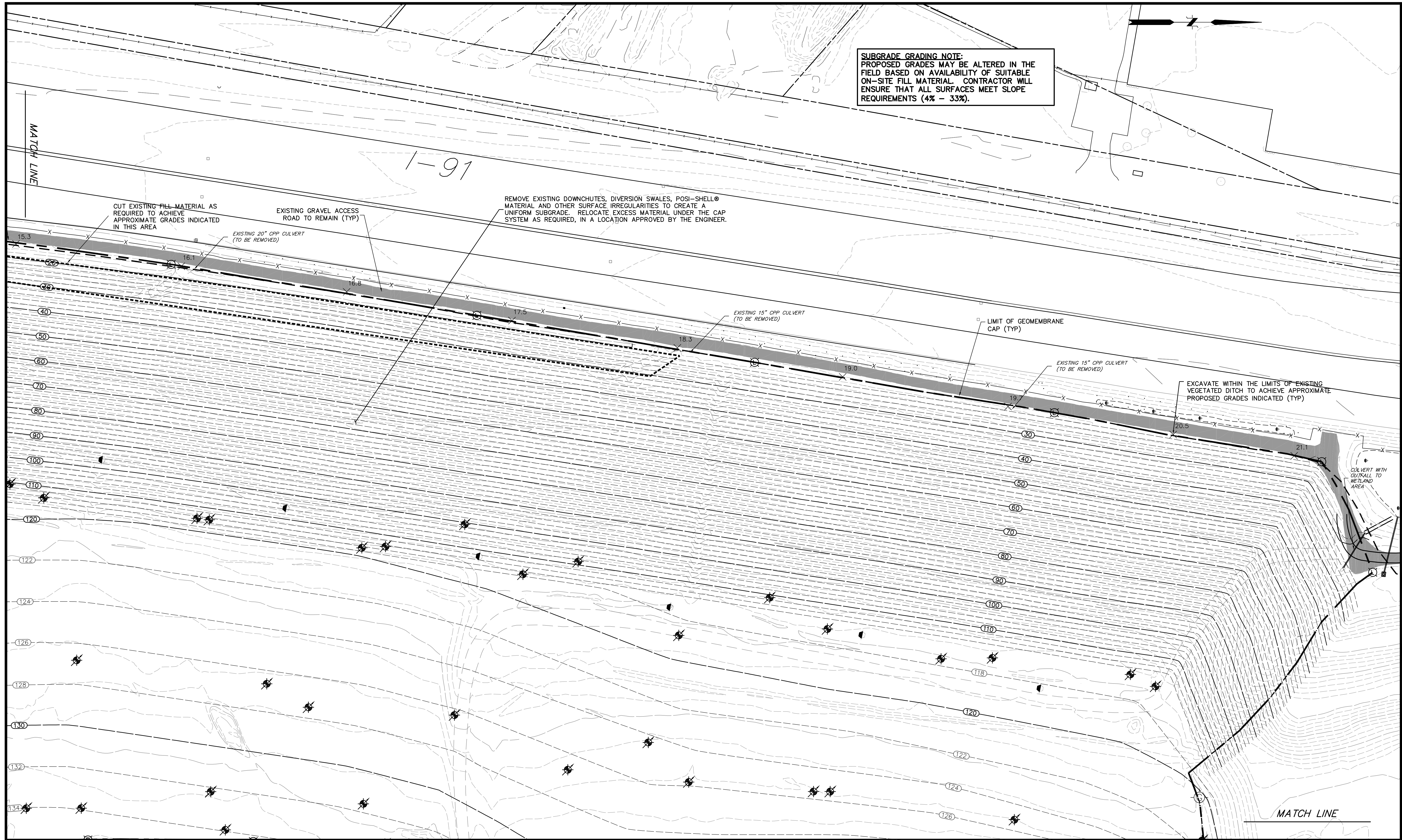

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CONNECTICUT RESOURCES RECOVERY AUTHORITY  
**SUBGRADE PLAN**  
 HARTFORD LANDFILL CLOSURE  
 MSW/INTERIM ASH DISPOSAL AREA  
 HARTFORD CONNECTICUT

PROJ. No.: 04-0174.H12  
 DATE: JUNE 2007  
**CG-101**



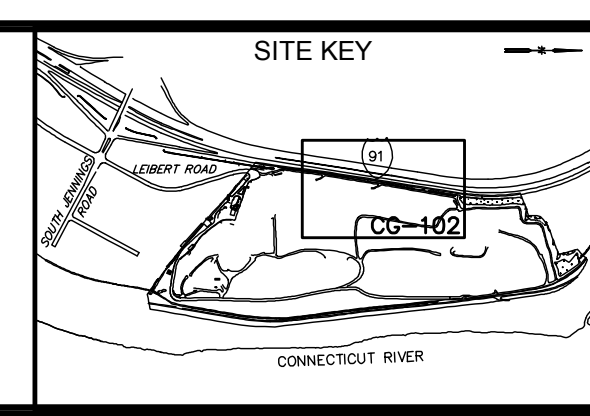
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 CTB: FO\_STANDARD  
 LMAN: SUBGRADE  
 MS VIEW: MS50(NW)  
 LGS: ROT90



No.	DATE	DESCRIPTION	BY
1.			

PROJ. MANAGER:	CML
CHIEF DESIGNER:	DRL
REVIEWED BY:	DATE

SEAL	SEAL
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SCALE:	HORZ.: 1" = 50'
	VERT.:
DATUM:	HORZ.: NAD 27
	VERT.: NGVD 29

50 25 0 50  
GRAPHIC SCALE

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CONNECTICUT RESOURCES RECOVERY AUTHORITY

**SUBGRADE PLAN**

HARTFORD LANDFILL CLOSURE  
 MSW/INTERIM ASH DISPOSAL AREA

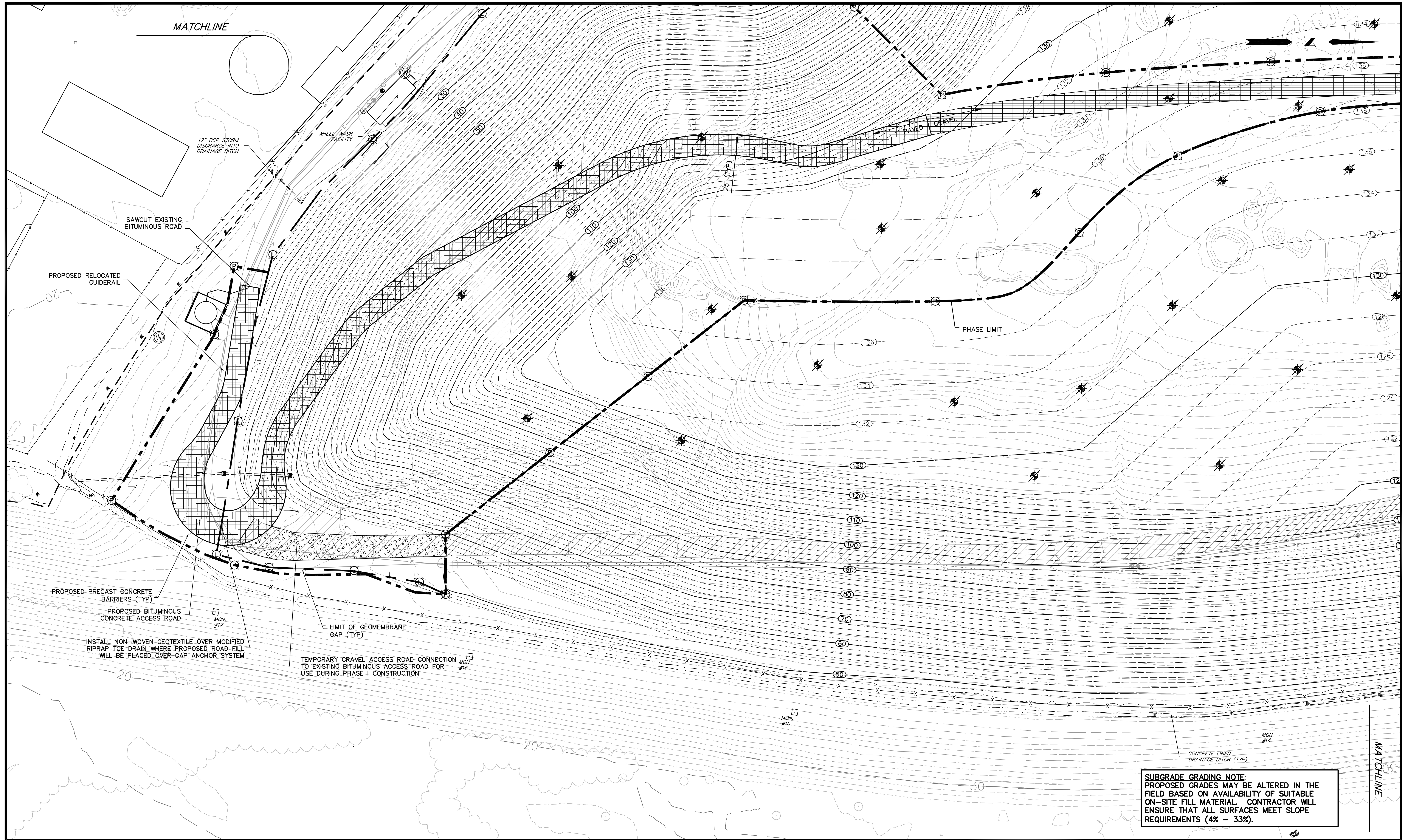
HARTFORD CONNECTICUT

PROJ. No.: 04-0174.H12  
 DATE: JUNE 2007

**CG-102**



File Path: J:\DWG\2004074H12\Plan\04074H12STP202.DWG, Layout: CG-103, Wed, May 30, 2007 - 2:14 PM, User: Donald  
 LGS: ROT90  
 MS VIEW: MS50(USE)  
 LMAN: SUBGRADE  
 CTB: FO\_STANDARD



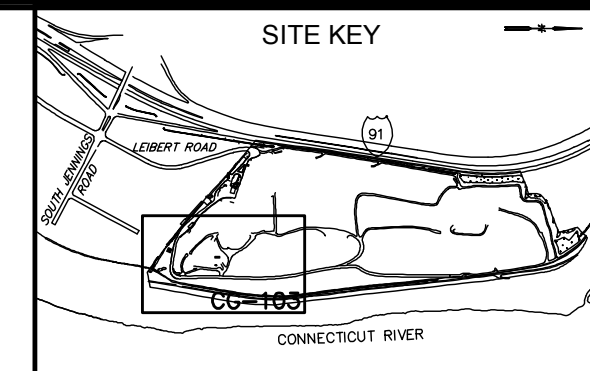
**SUBGRADE GRADING NOTE:**  
 PROPOSED GRADES MAY BE ALTERED IN THE FIELD BASED ON AVAILABILITY OF SUITABLE ON-SITE FILL MATERIAL. CONTRACTOR WILL ENSURE THAT ALL SURFACES MEET SLOPE REQUIREMENTS (4% - 33%).

No.	DATE	DESCRIPTION	BY
1.			

PROJ. MANAGER:	CML
CHIEF DESIGNER:	DRL
REVIEWED BY:	DATE

SEAL	SEAL
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SCALE:	HORZ.: 1" = 50'
	VERT.:
DATUM:	HORZ.: NAD 27
	VERT.: NGVD 29

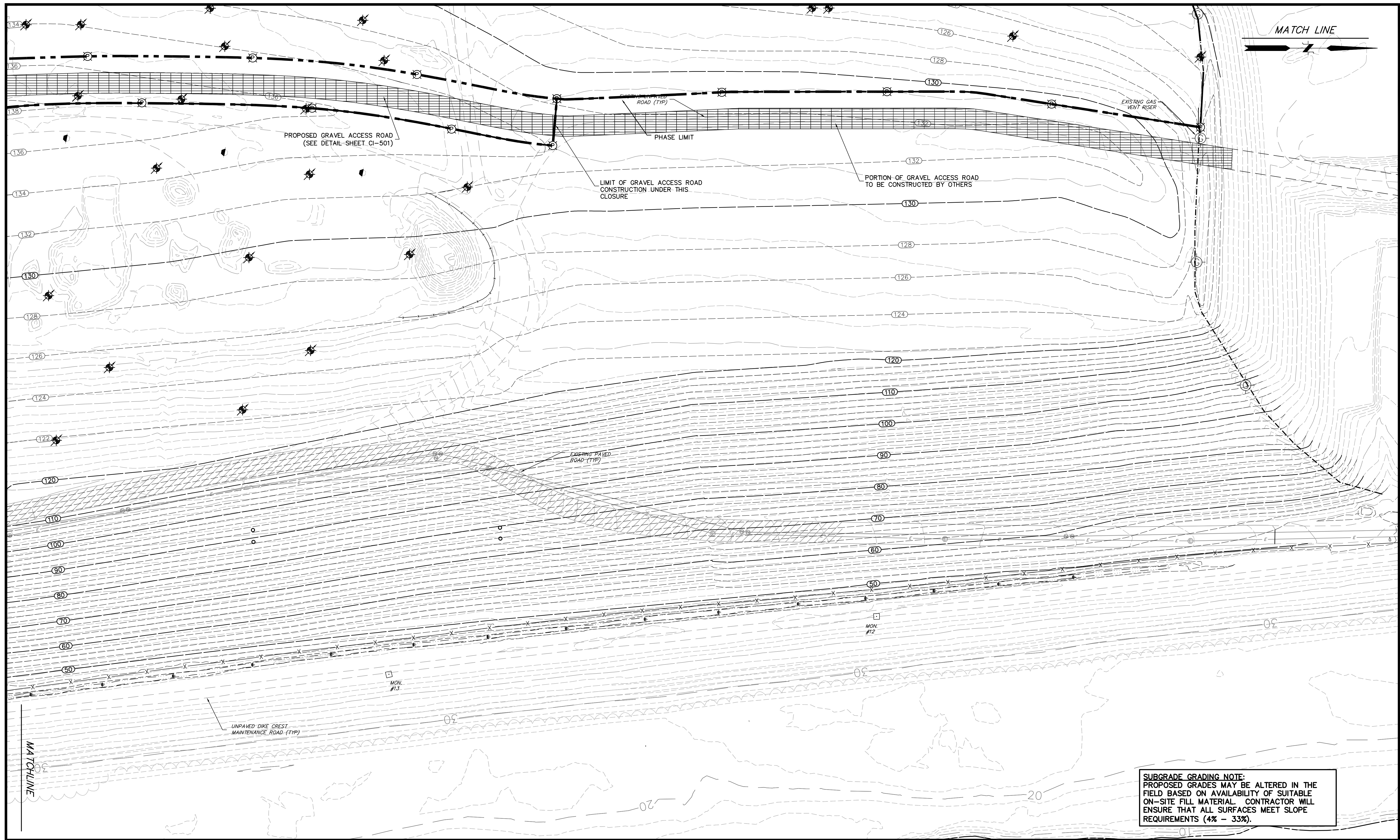
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CONNECTICUT RESOURCES RECOVERY AUTHORITY  
 SUBGRADE PLAN  
 HARTFORD LANDFILL CLOSURE  
 MSW/INTERIM ASH DISPOSAL AREA  
 HARTFORD CONNECTICUT

PROJ. No.: 04-0174.H12  
 DATE: JUNE 2007  
**CG-103**



File Path: J:\DWG\2004074H12\Plan\04074H12STP202.DWG, Layout: CG-104, Wed, May 30, 2007, 2:15 PM, User: Donald  
 CTB: FO\_STANDARD  
 LMAN: SUBGRADE  
 MS VIEW: MS50(NNE)  
 LGS: ROT90



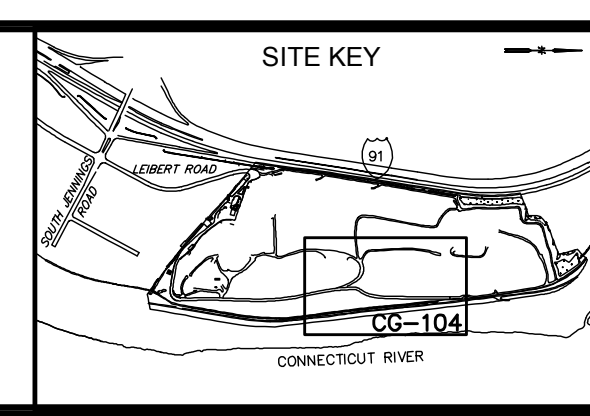
**SUBGRADE GRADING NOTE:**  
 PROPOSED GRADES MAY BE ALTERED IN THE FIELD BASED ON AVAILABILITY OF SUITABLE ON-SITE FILL MATERIAL. CONTRACTOR WILL ENSURE THAT ALL SURFACES MEET SLOPE REQUIREMENTS (4% - 33%).

No.	DATE	DESCRIPTION	BY
1.			

PROJ. MANAGER:	CML
CHIEF DESIGNER:	DRL
REVIEWED BY:	DATE

SEAL	SEAL
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SCALE:	HORZ.: 1" = 50'
	VERT.:
DATUM:	HORZ.: NAD 27
	VERT.: NGVD 29
GRAPHIC SCALE	

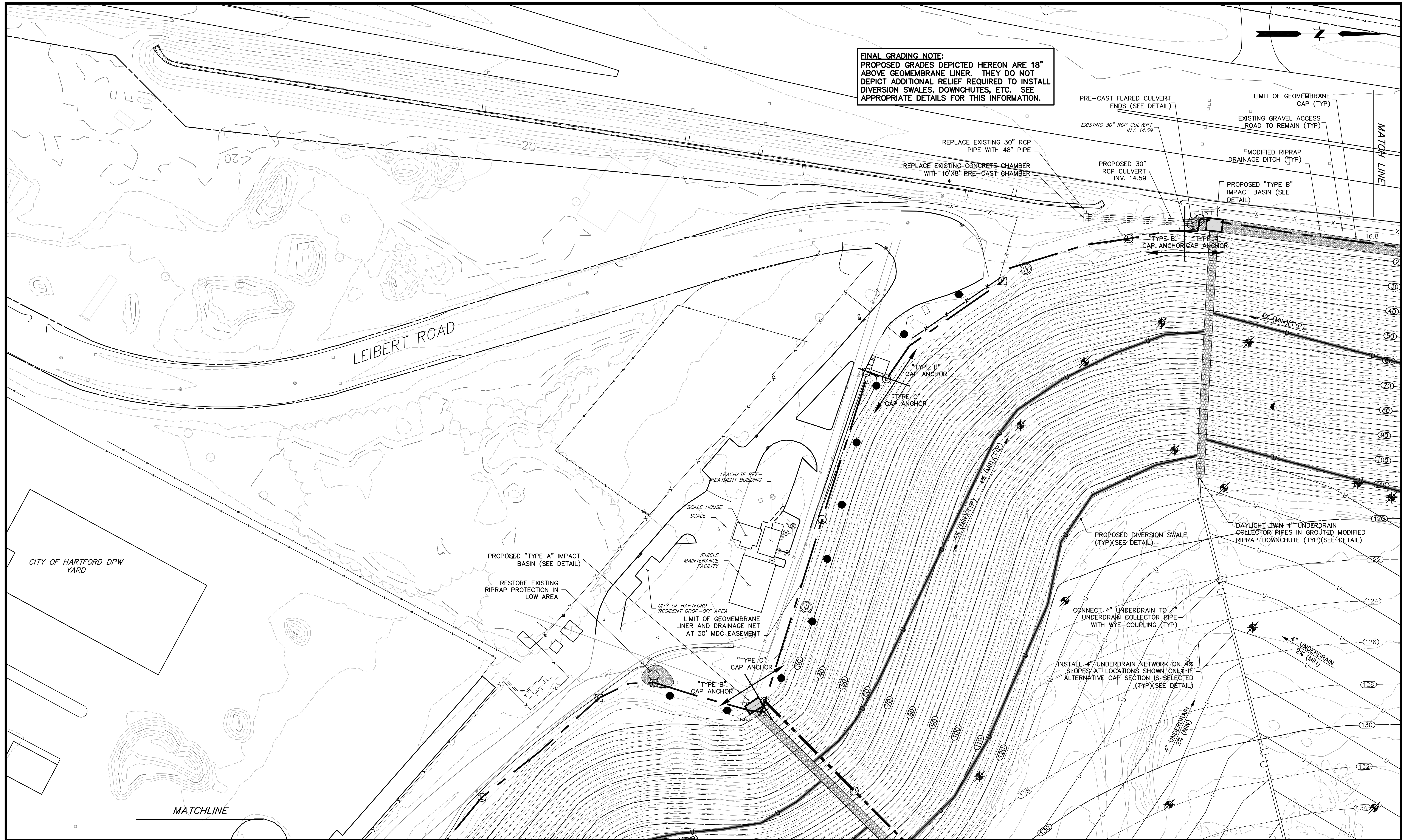
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CONNECTICUT RESOURCES RECOVERY AUTHORITY  
**SUBGRADE PLAN**  
 HARTFORD LANDFILL CLOSURE  
 MSW/INTERIM ASH DISPOSAL AREA  
 HARTFORD CONNECTICUT

PROJ. No.: 04-0174.H12  
 DATE: JUNE 2007  
**CG-104**



File Path: J:\DWG\2004074H12\Plan\04074H12STP202.DWG, Layout: CG-111, Wed, May 30, 2007, 2:19 PM, User: Donald  
 CTB: FO\_STANDARD  
 LMAN: FINAL  
 MS VIEW: MS50(SW)  
 LGS: ROT90

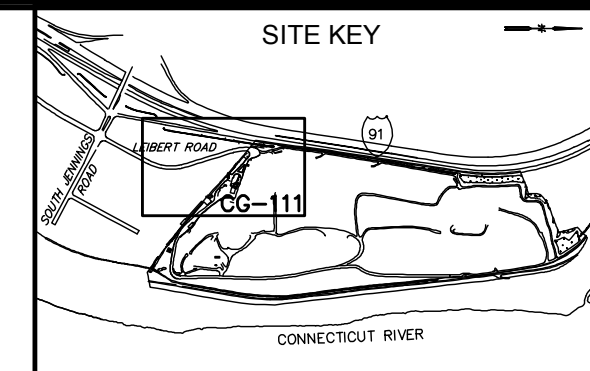


**FINAL GRADING NOTE:**  
 PROPOSED GRADES DEPICTED HEREON ARE 18" ABOVE GEOMEMBRANE LINER. THEY DO NOT DEPICT ADDITIONAL RELIEF REQUIRED TO INSTALL DIVERSION SWALES, DOWNCHUTES, ETC. SEE APPROPRIATE DETAILS FOR THIS INFORMATION.

No.	DATE	DESCRIPTION	BY
1.			

PROJ. MANAGER:	CML
CHIEF DESIGNER:	DRL
REVIEWED BY:	DATE

SEAL	SEAL	
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SCALE:	HORZ.: 1" = 50'
	VERT.:
DATUM:	HORZ.: NAD 27
	VERT.: NGVD 29

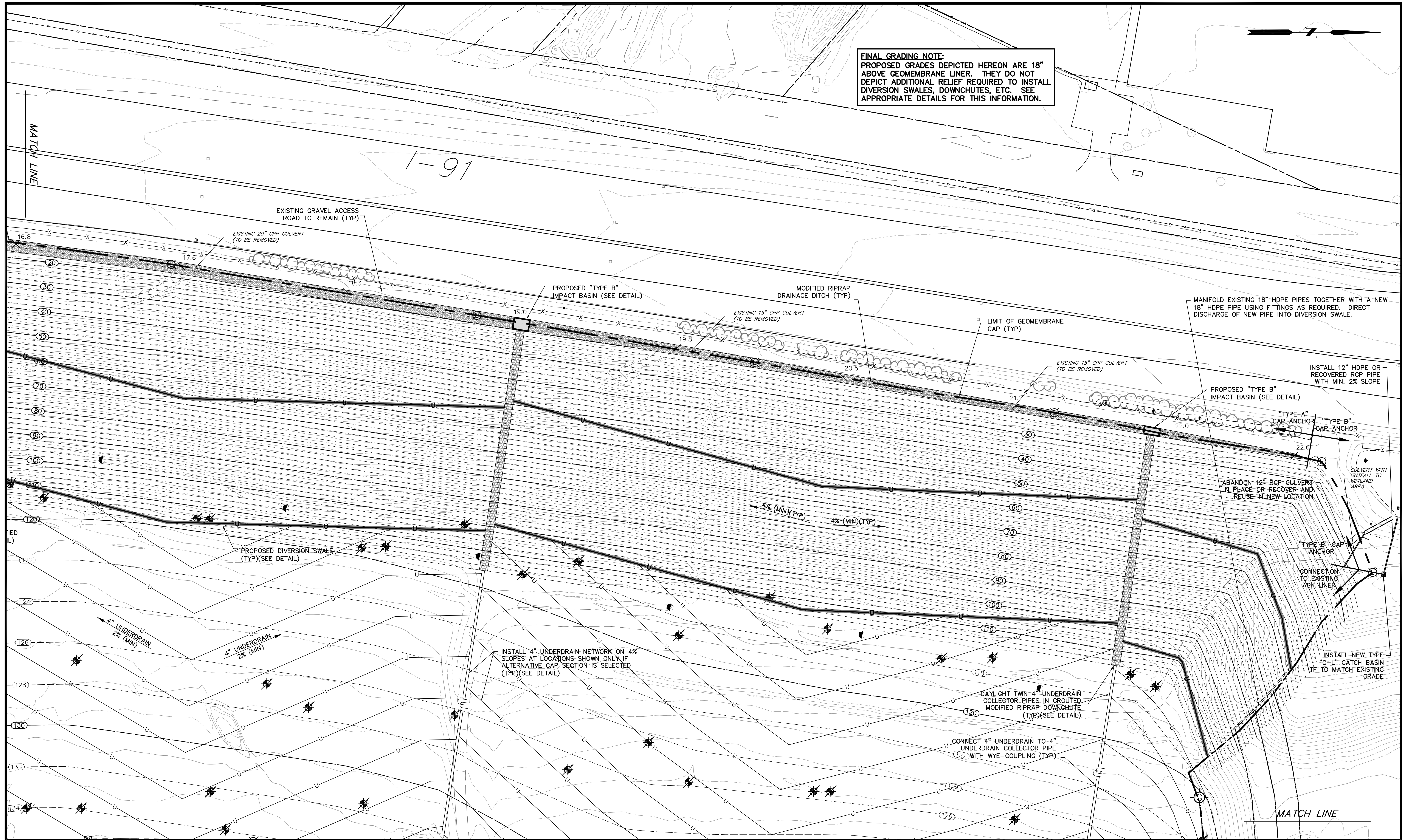

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CONNECTICUT RESOURCES RECOVERY AUTHORITY  
**FINAL GRADING PLAN**  
 HARTFORD LANDFILL CLOSURE  
 MSW/INTERIM ASH DISPOSAL AREA  
 HARTFORD CONNECTICUT

PROJ. No.: 04-0174.H12  
 DATE: JUNE 2007  
**CG-111**



File Path: J:\DWG\2004074H12\Plan\04074H12STP202.DWG, Layout: CG-112, Wed, May 30, 2007, 2:20 PM, User: Donald  
 CTB: FO\_STANDARD  
 LMAN: FINAL  
 LMS VIEW: MS50(NW)  
 LGS: ROT90



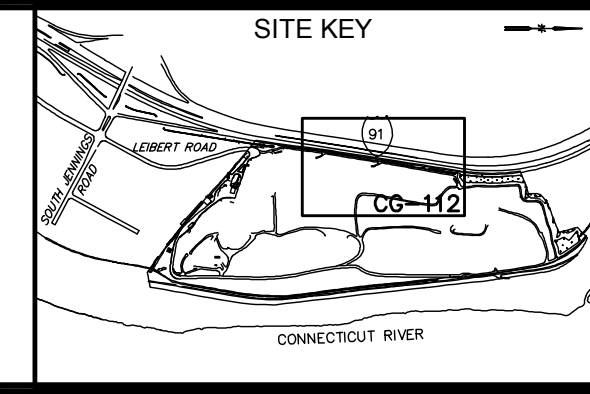
**FINAL GRADING NOTE:**  
 PROPOSED GRADES DEPICTED HEREON ARE 18"  
 ABOVE GEOMEMBRANE LINER. THEY DO NOT  
 DEPICT ADDITIONAL RELIEF REQUIRED TO INSTALL  
 DIVERSION SWALES, DOWNCHUTES, ETC. SEE  
 APPROPRIATE DETAILS FOR THIS INFORMATION.

1-91

No.	DATE	DESCRIPTION	BY
1.			

PROJ. MANAGER:	CML
CHIEF DESIGNER:	DRL
REVIEWED BY:	DATE

SEAL	SEAL	
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SCALE:	HORIZ.: 1" = 50'
	VERT.:
DATUM:	HORIZ.: NAD 27
	VERT.: NGVD 29

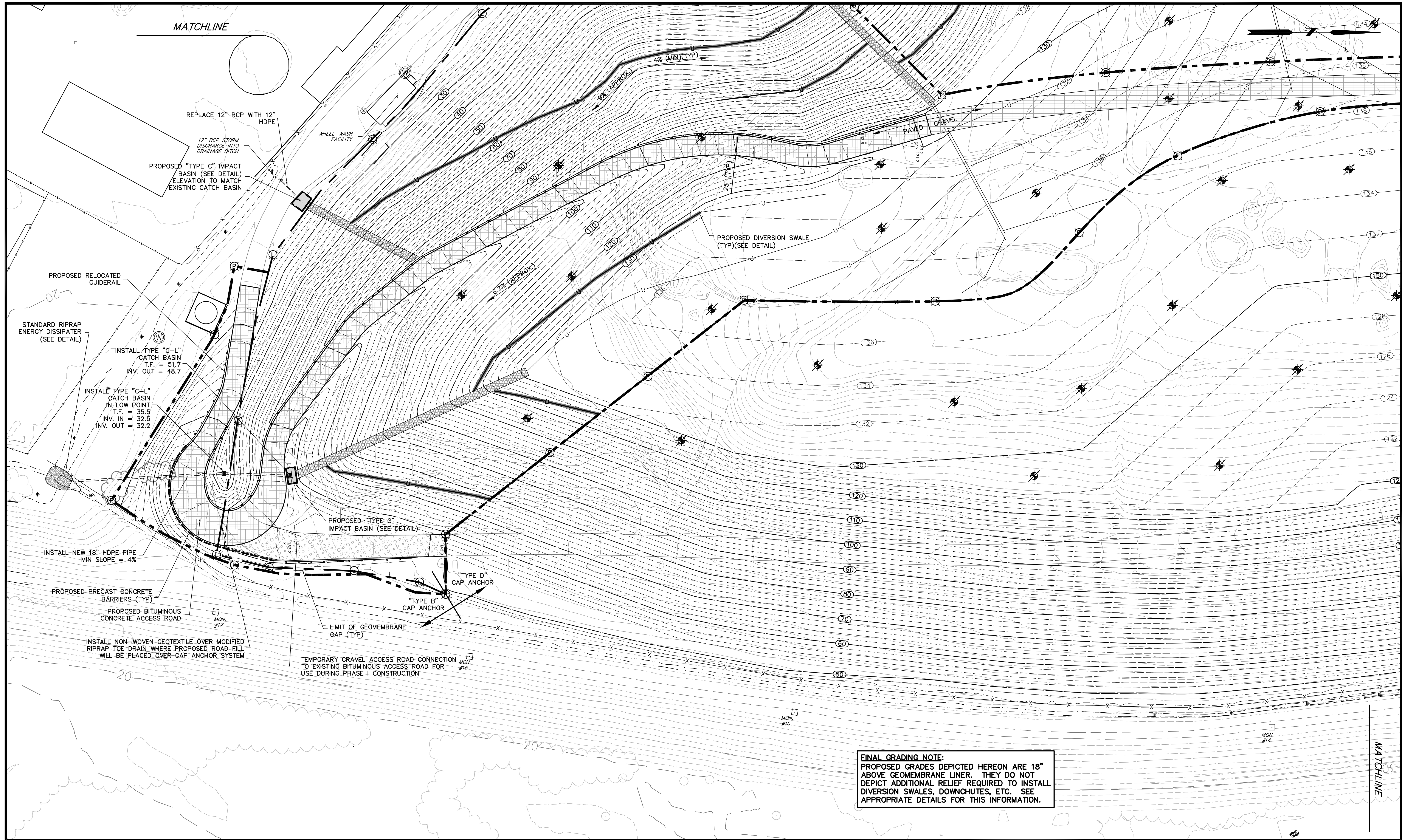

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CONNECTICUT RESOURCES RECOVERY AUTHORITY  
 FINAL GRADING PLAN  
 HARTFORD LANDFILL CLOSURE  
 MSW/INTERIM ASH DISPOSAL AREA  
 HARTFORD CONNECTICUT

PROJ. No.: 04-0174.H12  
 DATE: JUNE 2007  
**CG-112**



File Path: J:\DWG\2004074\H12\Plan\04074H12STP202.DWG, Layout: CG-113 Wed, May 30, 2007 - 2:20 PM User: Donald  
 CTB: FO\_STANDARD  
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 MS VIEW: MS50(5E)  
 LGS: ROT90



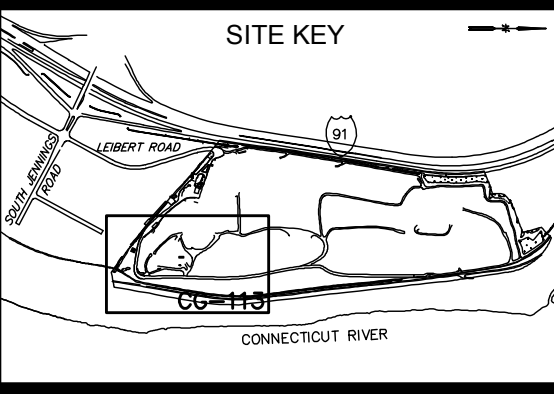
**FINAL GRADING NOTE:**  
 PROPOSED GRADES DEPICTED HEREON ARE 18" ABOVE GEOMEMBRANE LINER. THEY DO NOT DEPICT ADDITIONAL RELIEF REQUIRED TO INSTALL DIVERSION SWALES, DOWNCHUTES, ETC. SEE APPROPRIATE DETAILS FOR THIS INFORMATION.

No.	DATE	DESCRIPTION	BY
1.			

PROJ. MANAGER:	CML
CHIEF DESIGNER:	DRL
REVIEWED BY:	DATE

SEAL	SEAL
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SCALE:	HORZ.: 1" = 50'
	VERT.: NGVD 29
DATUM:	HORZ.: NAD 27
	VERT.: NGVD 29
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GRAPHIC SCALE	

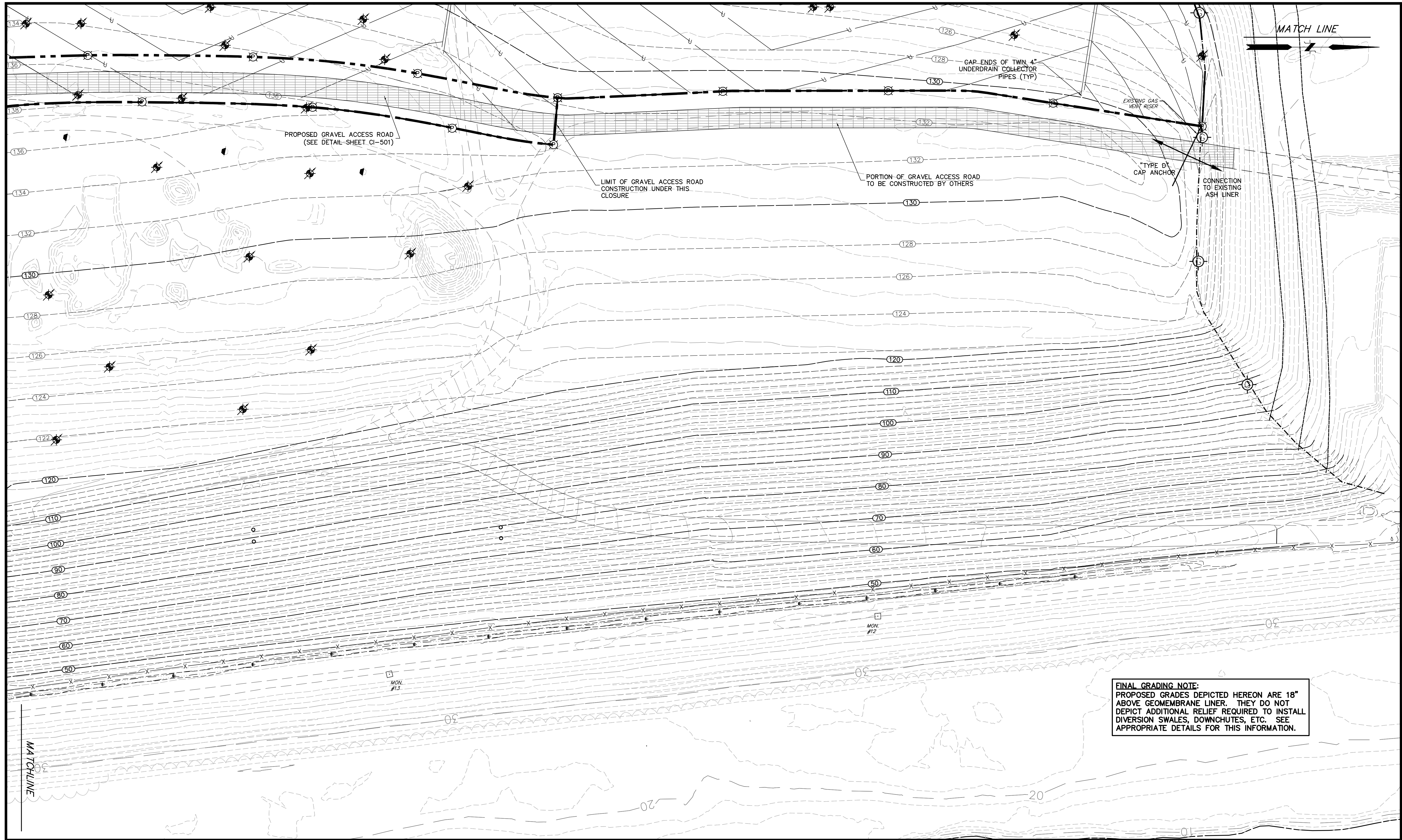

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CONNECTICUT RESOURCES RECOVERY AUTHORITY  
**FINAL GRADING PLAN**  
 HARTFORD LANDFILL CLOSURE  
 MSW/INTERIM ASH DISPOSAL AREA  
 HARTFORD CONNECTICUT

PROJ. No.: 04-0174.H12  
 DATE: JUNE 2007  
**CG-113**



File Path: J:\DWG\2004074H12\Plan\04074H12STP202.DWG, Layout: CG-114, Wed, May 30, 2007, 2:21 PM, User: Donald  
 CTB: FO\_STANDARD  
 LMAN: FINAL  
 MS VIEW: MS50(NNE)  
 LGS: ROT90



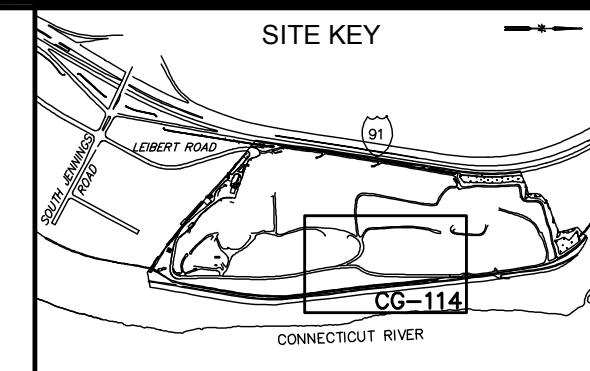
**FINAL GRADING NOTE:**  
 PROPOSED GRADES DEPICTED HEREON ARE 18" ABOVE GEOMEMBRANE LINER. THEY DO NOT DEPICT ADDITIONAL RELIEF REQUIRED TO INSTALL DIVERSION SWALES, DOWNCHUTES, ETC. SEE APPROPRIATE DETAILS FOR THIS INFORMATION.

No.	DATE	DESCRIPTION	BY
1.			

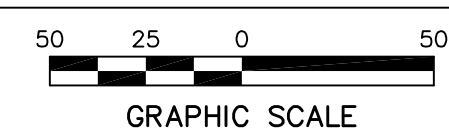
PROJ. MANAGER:	CML
CHIEF DESIGNER:	DRL
REVIEWED BY:	DATE

SEAL	SEAL
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SCALE:	HORZ.: 1" = 50'
	VERT.:
DATUM:	HORZ.: NAD 27
	VERT.: NGVD 29




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CONNECTICUT RESOURCES RECOVERY AUTHORITY  
**FINAL GRADING PLAN**  
 HARTFORD LANDFILL CLOSURE  
 MSW/INTERIM ASH DISPOSAL AREA  
 HARTFORD CONNECTICUT

PROJ. No.: 04-0174.H12  
 DATE: JUNE 2007  
**CG-114**



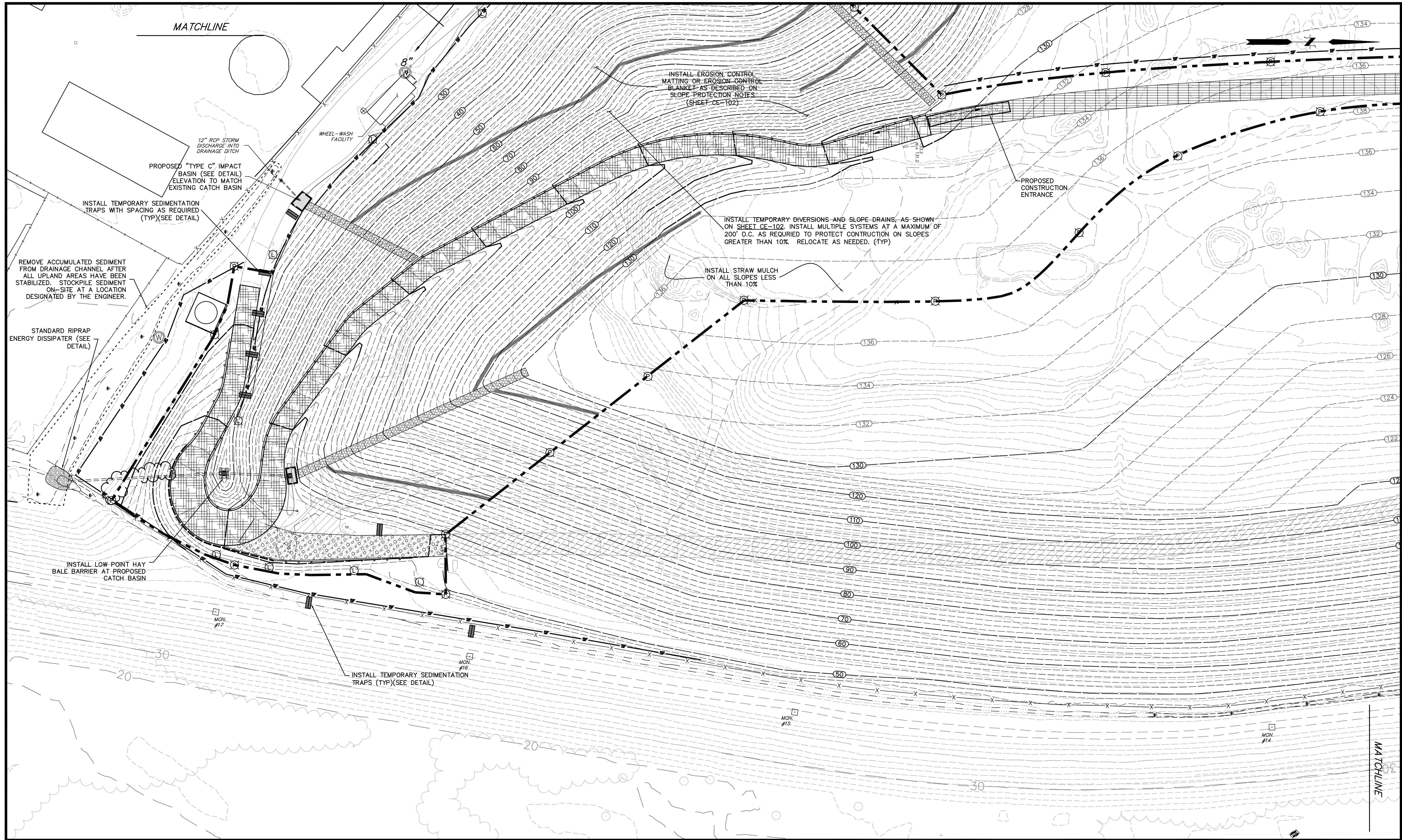








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 MS VIEW: MS50(SE)  
 LMAN: E&SC  
 CTB: FO\_STANDARD

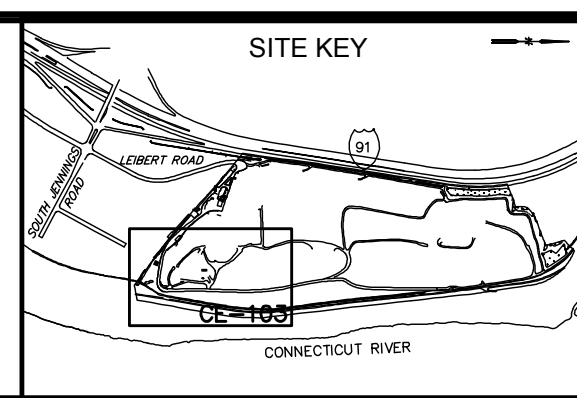


No.	DATE	DESCRIPTION	BY
1.			

PROJ. MANAGER:	CML
CHIEF DESIGNER:	DRL
REVIEWED BY:	DATE

SEAL	SEAL
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SCALE:	HORIZ.: 1" = 50'
	VERT.:
DATUM:	HORIZ.: NAD 27
	VERT.: NGVD 29

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CONNECTICUT RESOURCES RECOVERY AUTHORITY  
**EROSION CONTROL PLAN**  
 HARTFORD LANDFILL CLOSURE  
 MSW/INTERIM ASH DISPOSAL AREA  
 HARTFORD CONNECTICUT

PROJ. No.: 04-0174.H12  
 DATE: JUNE 2007  
**CE-103**



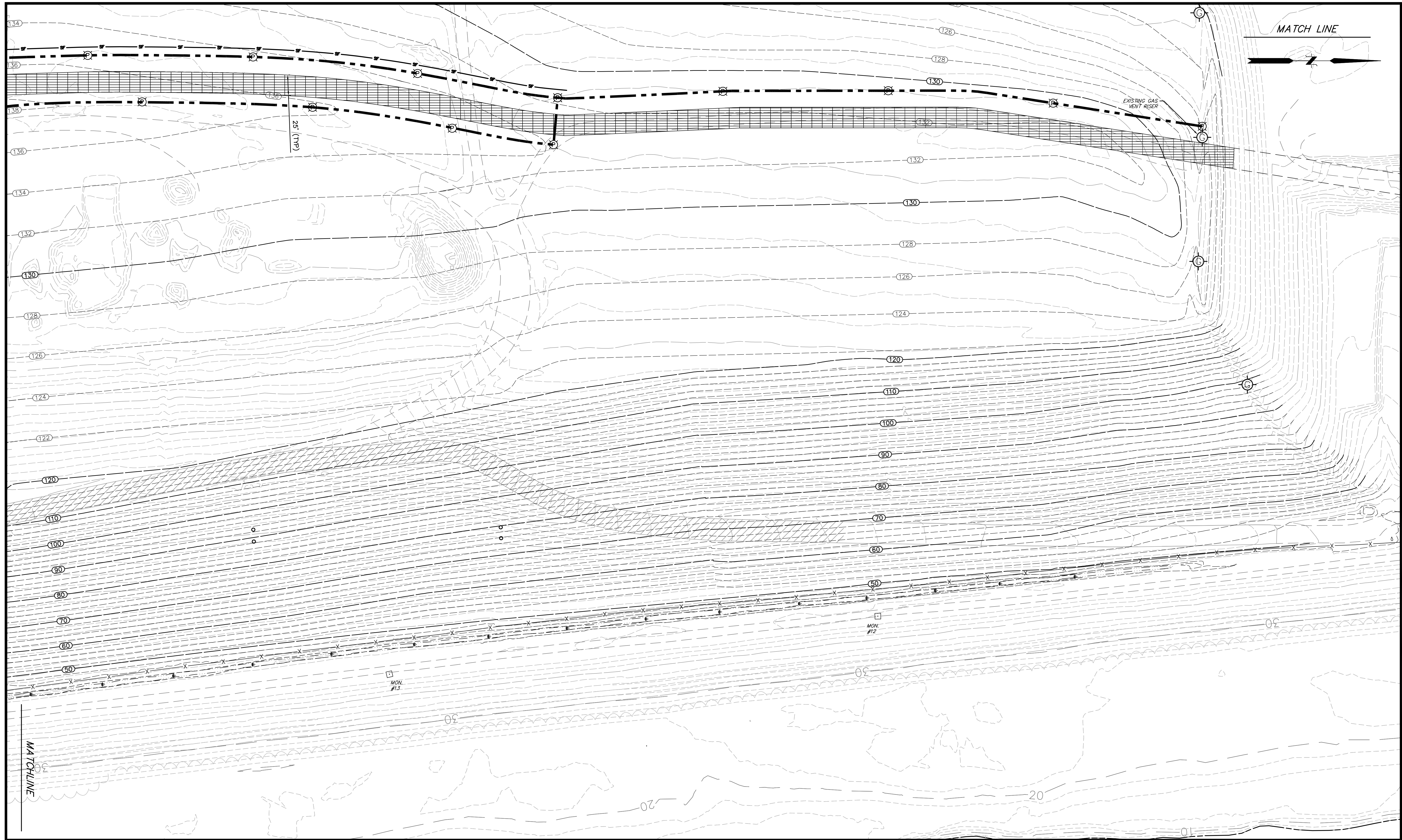
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CTB: FO\_STANDARD

LMAIN: E&S

MS VIEW: MS50(N)

LCS: ROT90

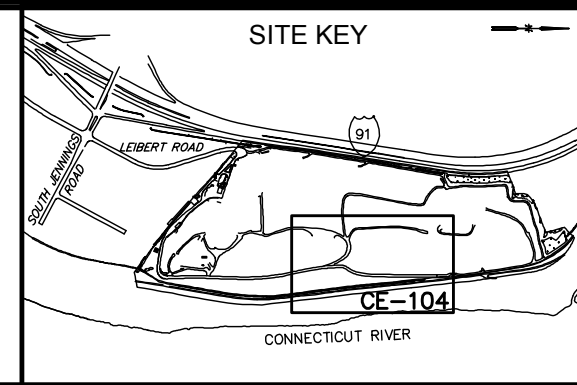


No.	DATE	DESCRIPTION	BY
1.			

PROJ. MANAGER:	CML
CHIEF DESIGNER:	DRL
REVIEWED BY:	DATE

SEAL	SEAL
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SCALE:	HORZ.: 1" = 50'
	VERT.:
DATUM:	HORZ.: NAD 27
	VERT.: NGVD 29

50 25 0 50  
GRAPHIC SCALE

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CONNECTICUT RESOURCES RECOVERY AUTHORITY  
EROSION CONTROL PLAN  
HARTFORD LANDFILL CLOSURE  
MSW/INTERIM ASH DISPOSAL AREA  
HARTFORD CONNECTICUT

PROJ. No.: 04-0174.H12  
DATE: JUNE 2007  
**CE-104**





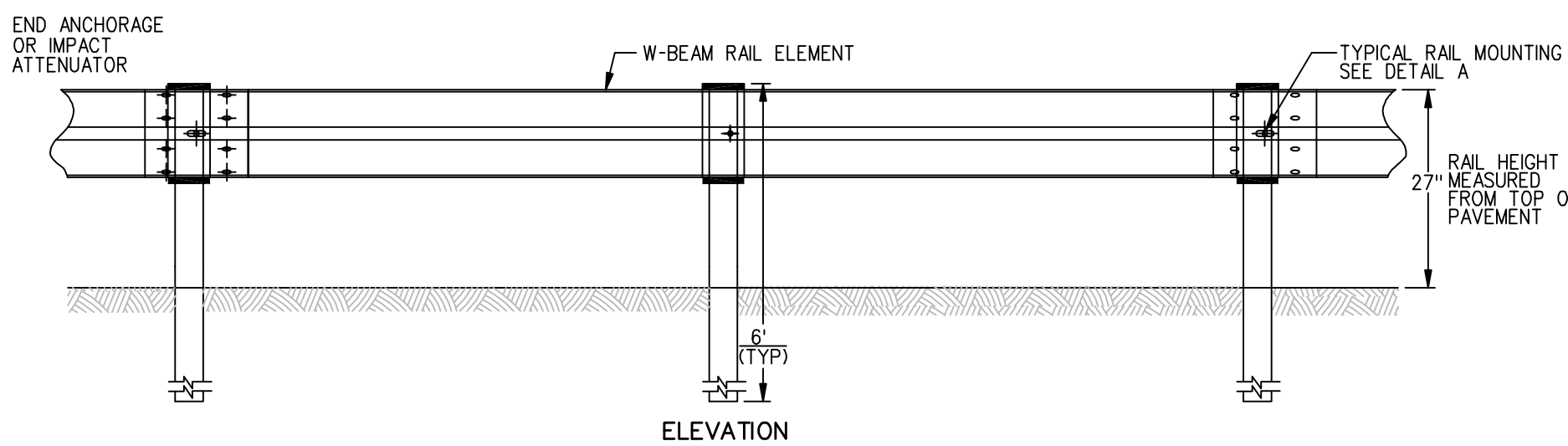
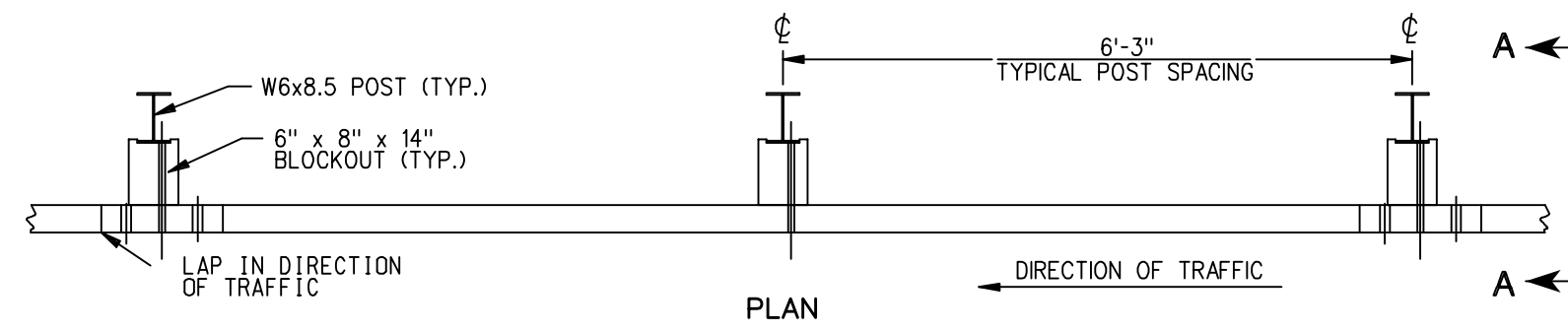
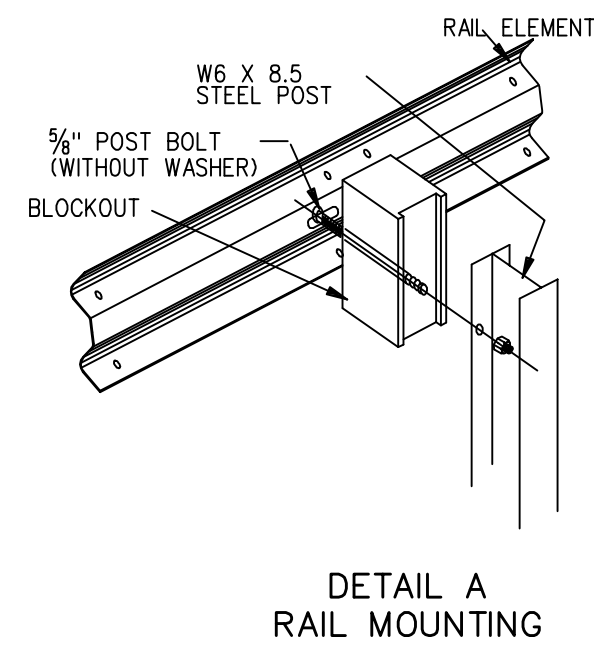
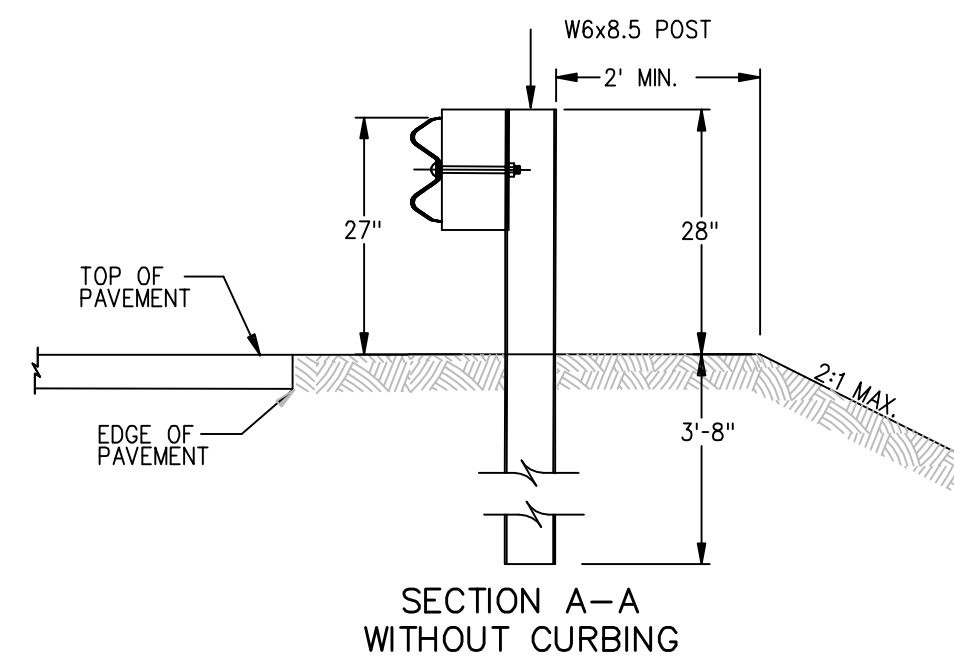




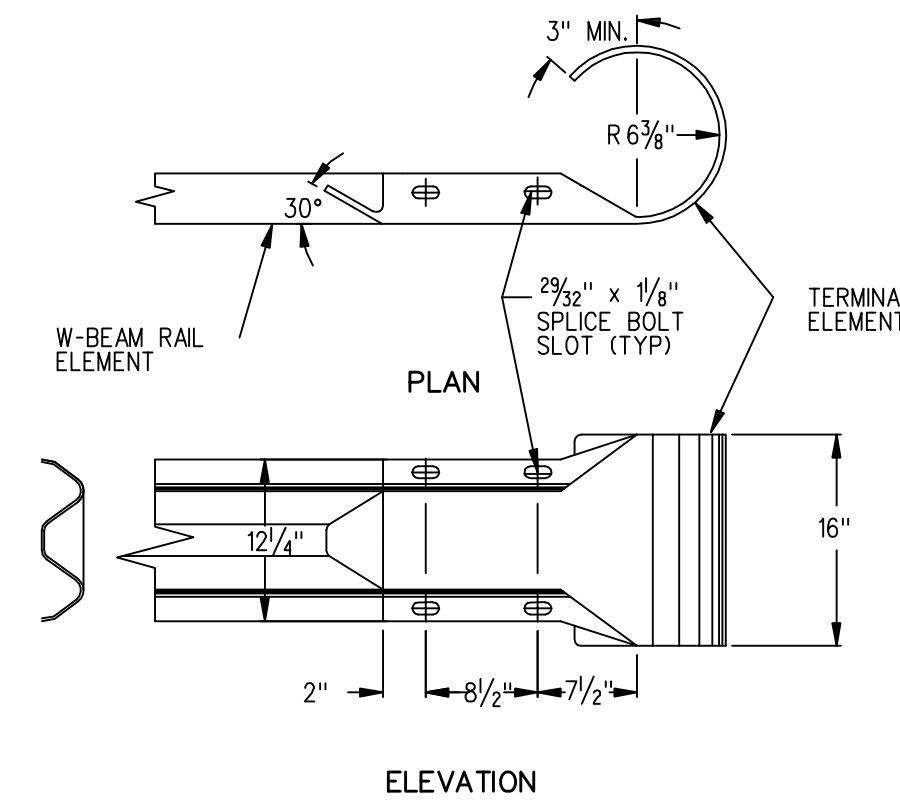








METAL BEAM RAIL DETAIL



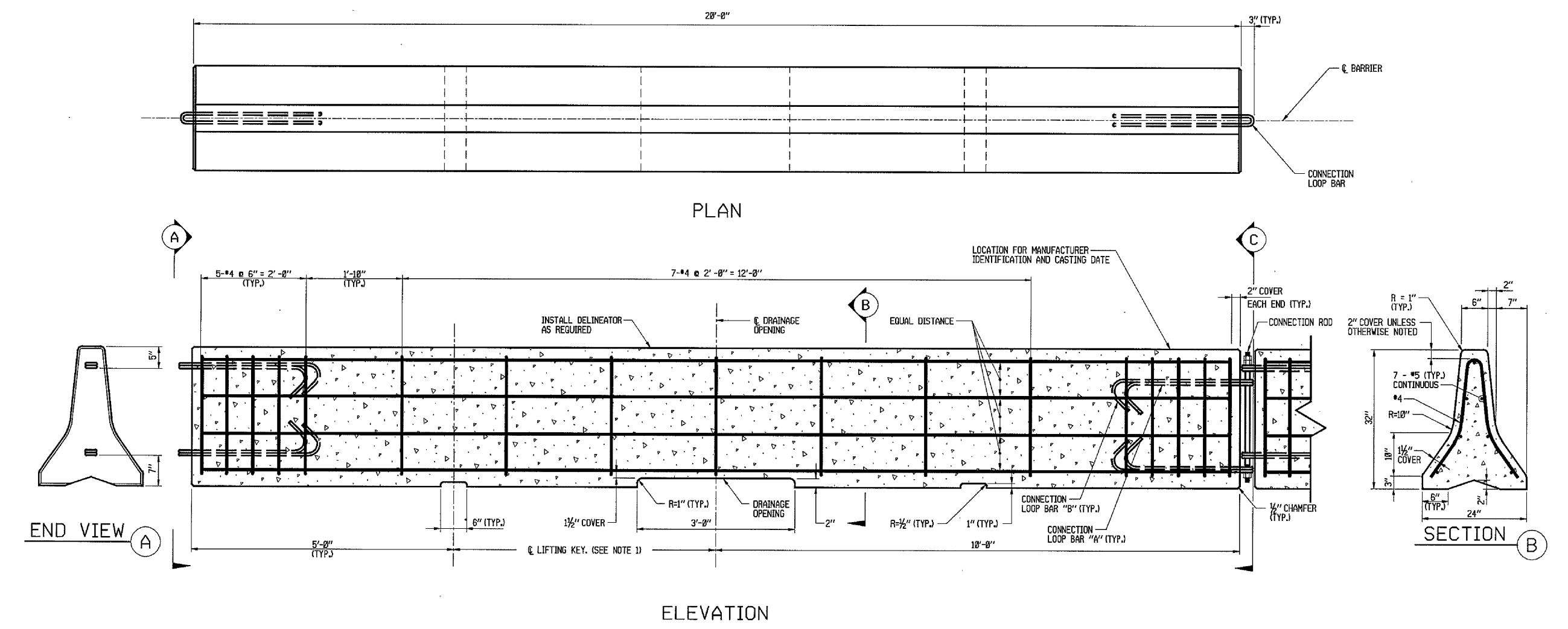
NOTE: THIS END SECTION IS NOT CRASH WORTHY. IT IS INTENDED FOR USE PRIMARILY ON LOW SPEED ROADWAYS, DRIVEWAY ENTRANCES, OR PARKING LOTS WHERE IT CAN NOT BE HIT.

R-B TERMINAL SECTION CLASS A TYPE II

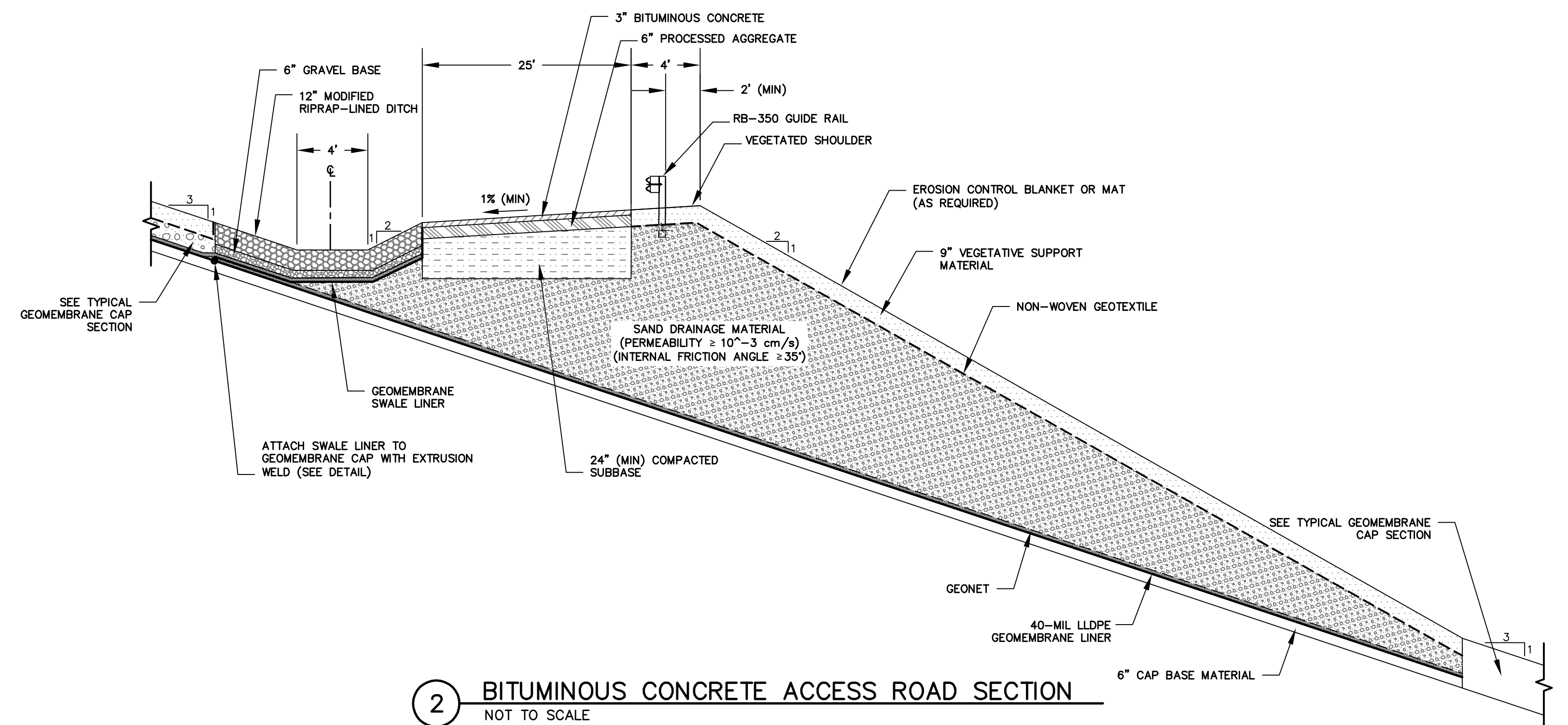
**1 TYPE R-B 350 GUIDERAIL DETAIL**  
NOT TO SCALE

AREA		SIZE		MUTCD #		POSTS		ALUM THK		AREA		SIZE		MUTCD #		POSTS		ALUM THK		AREA		SIZE		CONN. D.O.T. #		POSTS		ALUM THK		AREA		SIZE		CONN. D.O.T. #		POSTS		ALUM THK				
6.25	30 x 30	W7-16	1	100	3	24 x 18	W7-2b	1	100	8.25	30x30	41-4049	2	100	8.25	30x30	41-4048	2	100	5.00	24x30	51-5505	1	100																		

**3 ACCESS ROAD SIGNAGE**  
NOT TO SCALE



**1 PRECAST CONCRETE BARRIER DETAIL**  
NOT TO SCALE



**2 BITUMINOUS CONCRETE ACCESS ROAD SECTION**  
NOT TO SCALE

NOTES:  
1. SWALE LINER GEOMEMBRANE PANELS SHALL BE SHINGLED IN THE DOWNGRADIENT DIRECTION WITH A MINIMUM OVERLAP OF 24 INCHES AND ATTACHED TO ADJACENT PANELS WITH EXTRUSION WELDS.

No.	DATE	DESCRIPTION	BY
1.			

PROJ. MANAGER:	CML
CHIEF DESIGNER:	DRL
REVIEWED BY:	DATE

SEAL	SEAL
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SEAL	SEAL
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SCALE:	HORZ.: NTS
	VERT.:
DATUM:	HORZ.:
	VERT.:

SCALE:	HORZ.: NTS
	VERT.:
DATUM:	HORZ.:
	VERT.:

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CONNECTICUT RESOURCES RECOVERY AUTHORITY

ACCESS ROAD DETAILS  
HARTFORD LANDFILL CLOSURE  
MSW/INTERIM ASH DISPOSAL AREA

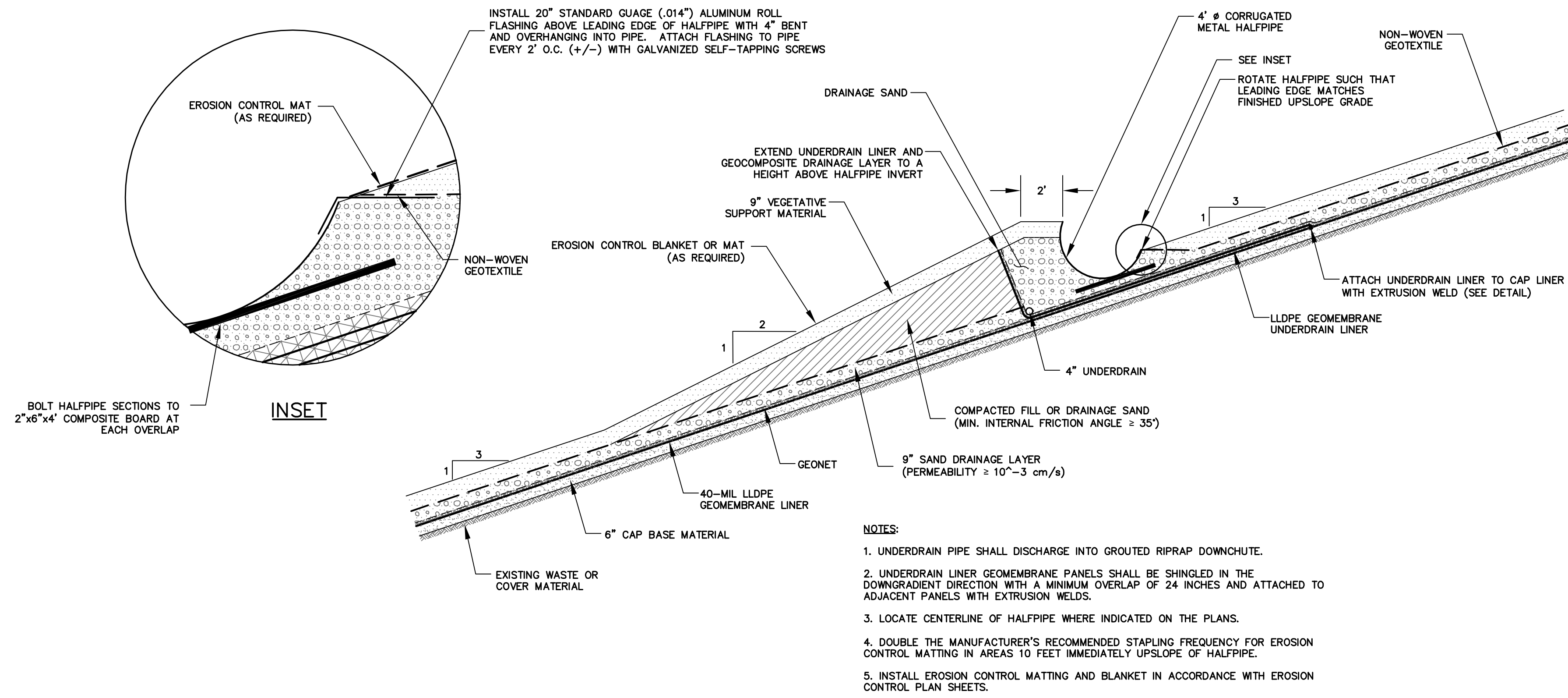
HARTFORD CONNECTICUT

PROJ. No.: 04-0174.H12  
DATE: JUNE 2007

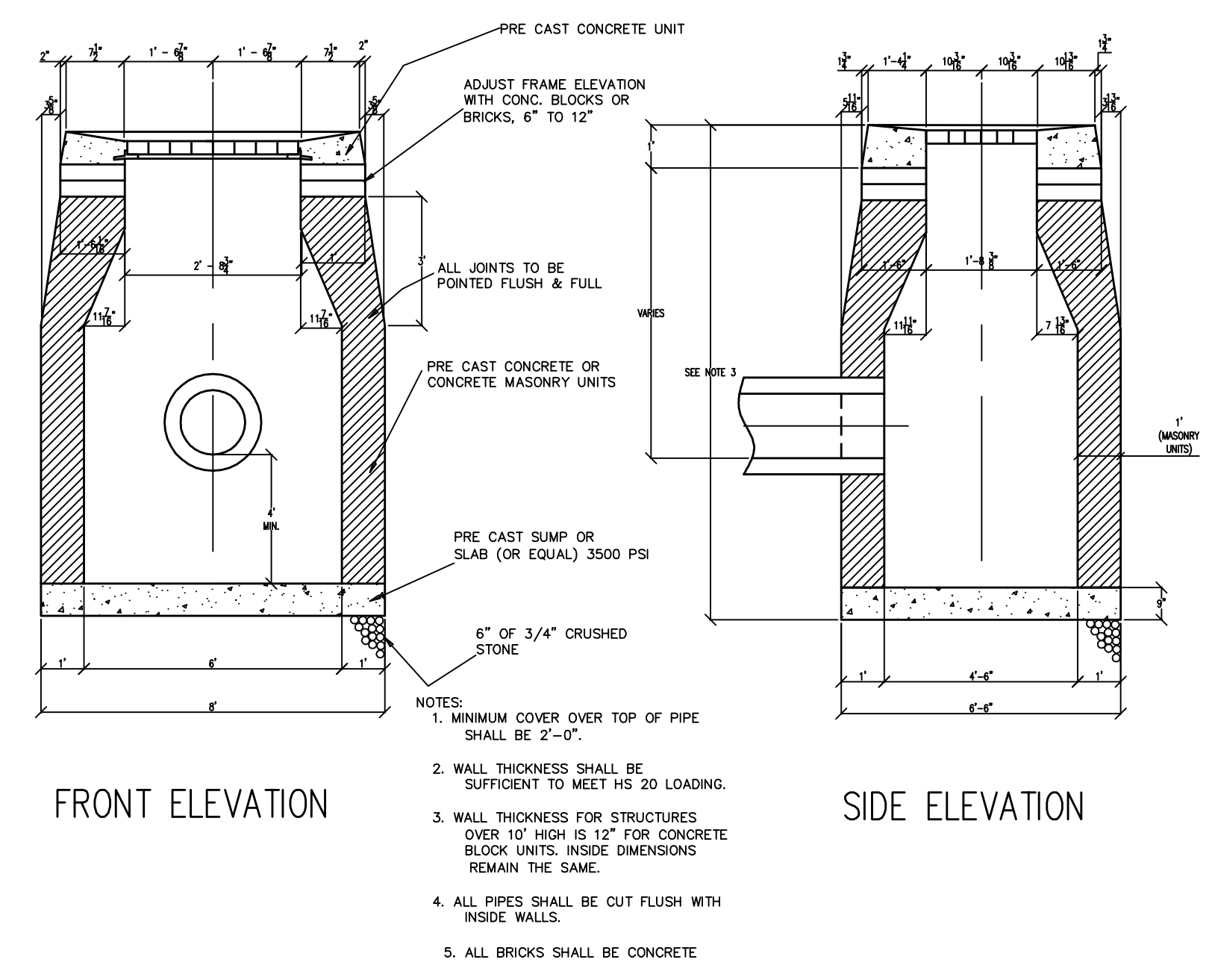
**CP-501**



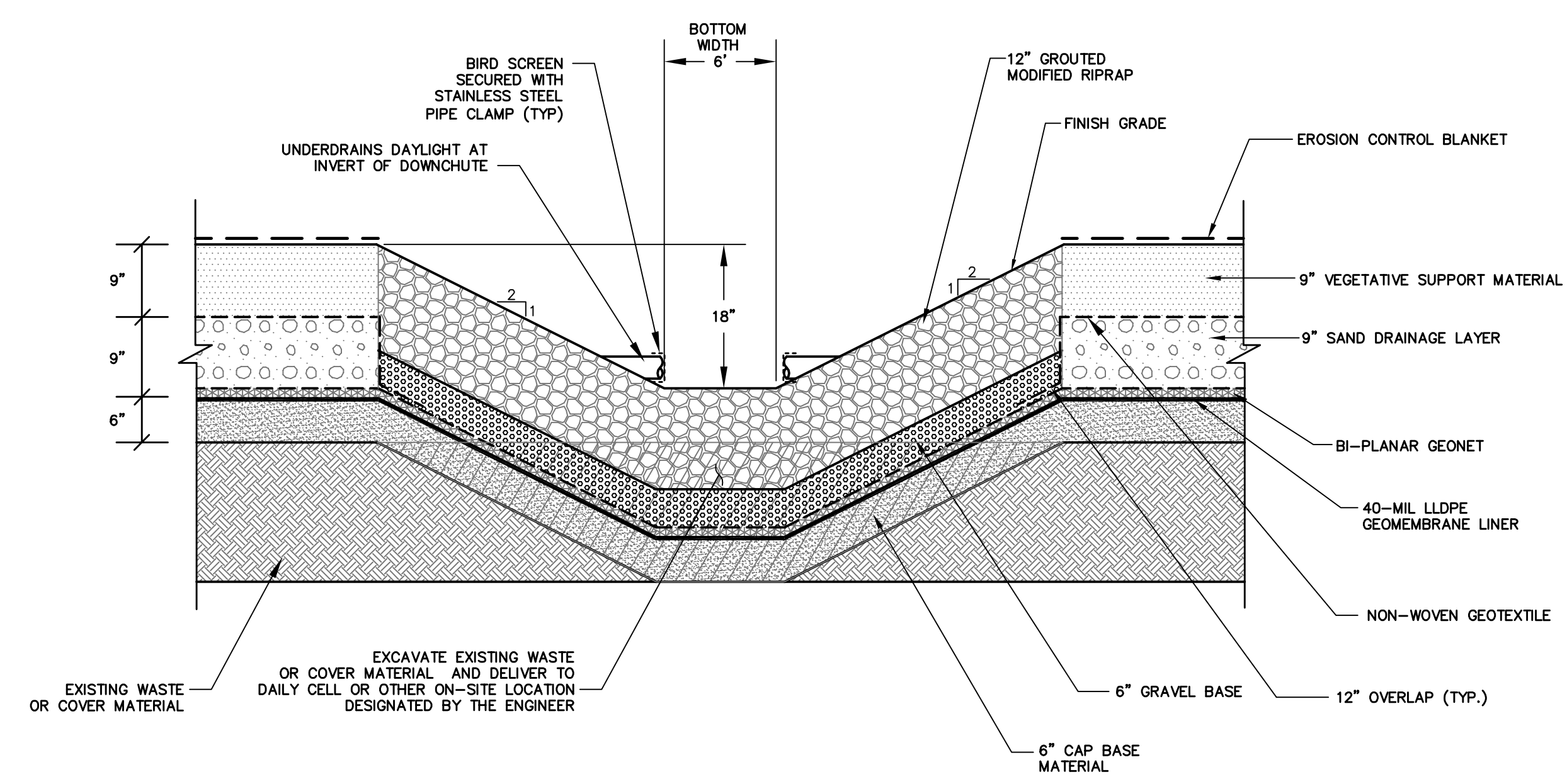
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 LMAN: DETAILS  
 MS VIEW: DRAINAGE-1  
 LGS:



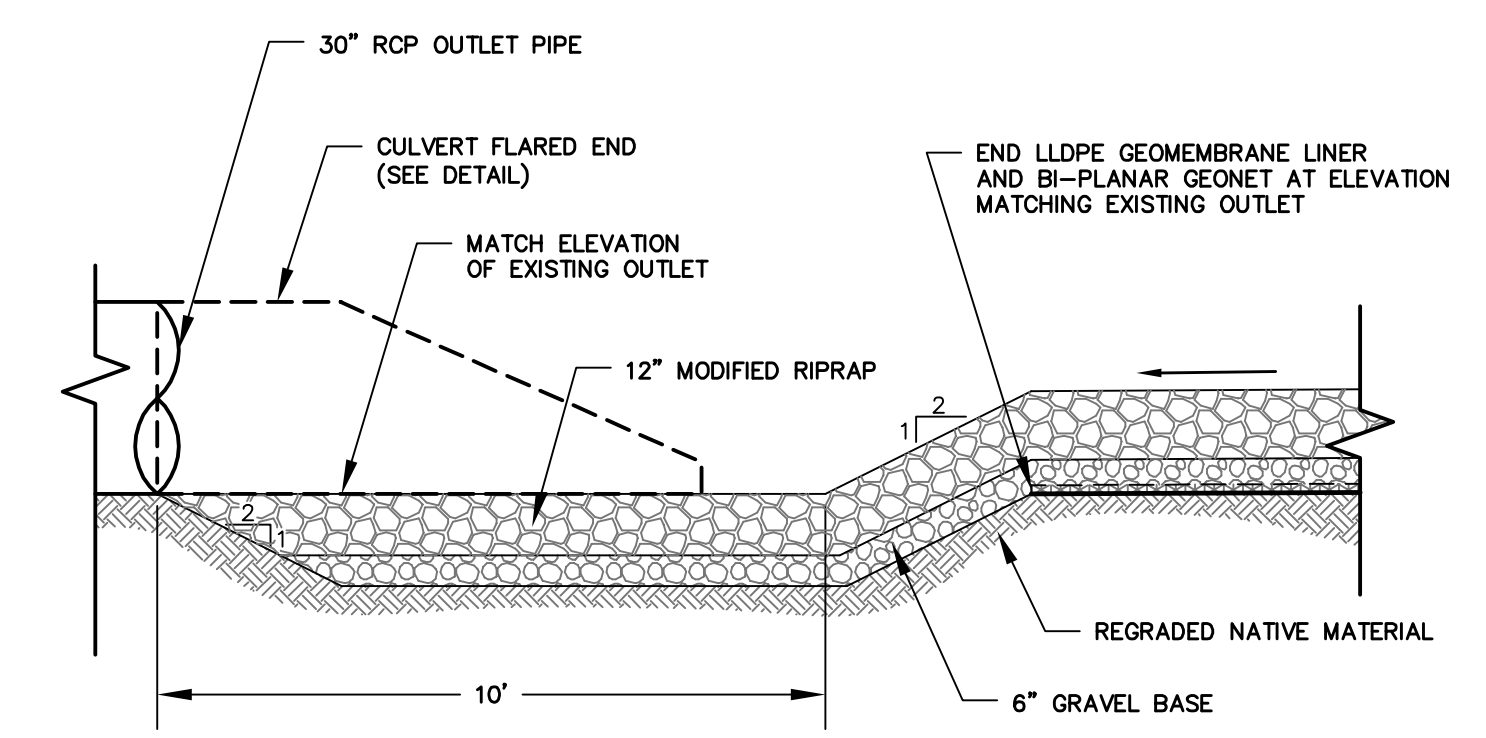
**1 DIVERSION SWALE**  
NOT TO SCALE



**2 TYPE "C-L" CATCH BASIN**  
NOT TO SCALE



**3 GROUTED RIPRAP DOWNCHUTE**  
NOT TO SCALE



**4 DITCH DETAIL AT OUTLET STRUCTURE**  
NOT TO SCALE

No.	DATE	DESCRIPTION	BY
1.			
REVISIONS			

PROJ. MANAGER:	CML	SEAL	
CHIEF DESIGNER:	DRL	SEAL	
REVIEWED BY:	DATE		

SCALE:	HORZ.: NTS
	VERT.:
DATUM:	HORZ.:
	VERT.:

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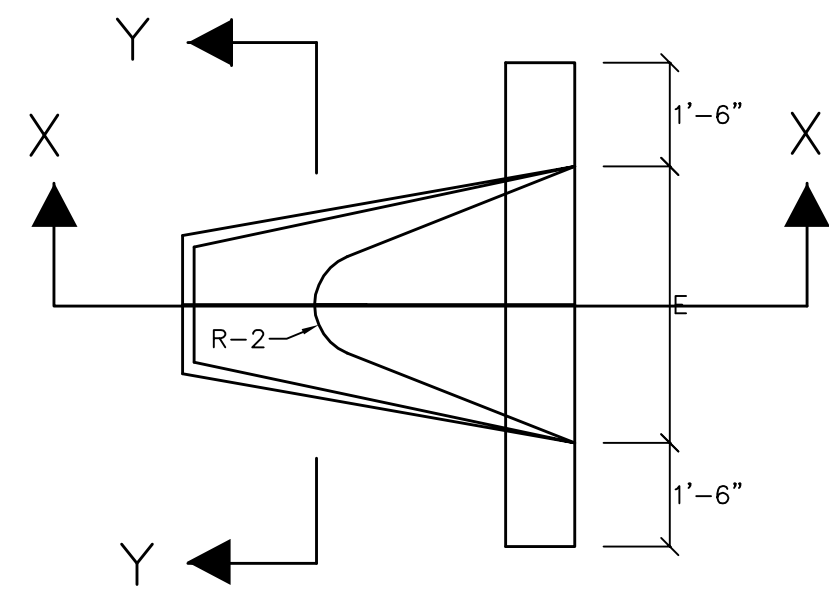
CONNECTICUT RESOURCES RECOVERY AUTHORITY  
**DRAINAGE DETAILS**  
 HARTFORD LANDFILL CLOSURE PLAN  
 MSW/INTERIM ASH DISPOSAL AREA  
 HARTFORD CONNECTICUT

PROJ. No.: 04-0174.H12  
 DATE: JUNE 2007  
**CI-511**

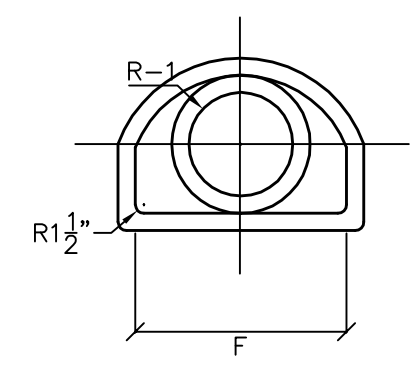


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 LMAN: DETAILS  
 LMS VIEW: DRAINAGE-2  
 LGS:

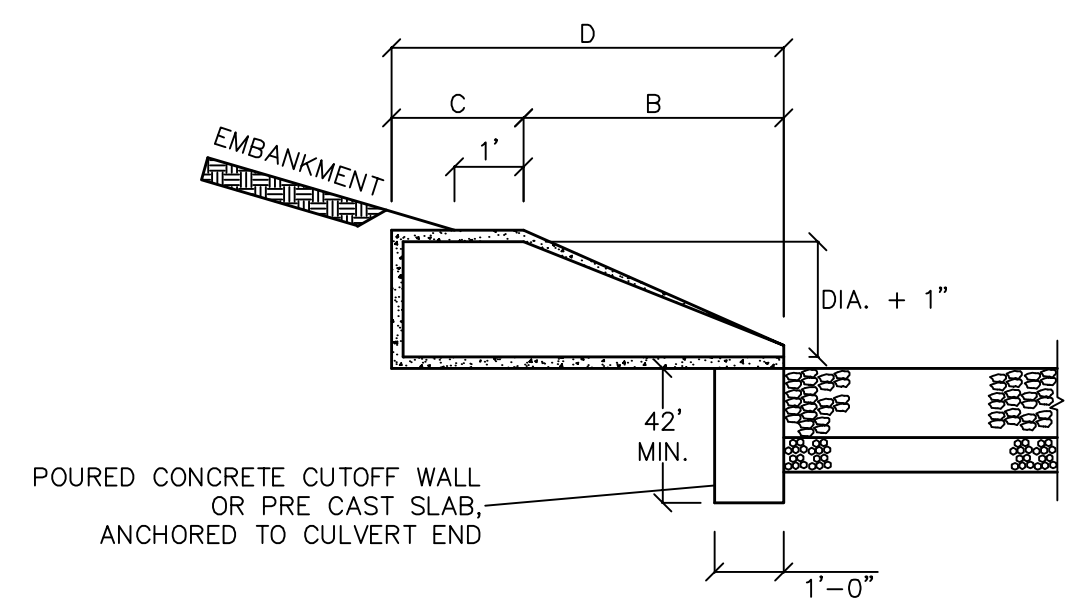
DIMENSIONS								
DIA.	A	B	C	D	E	F	R-1	R-2
12"	4"	2'-0"	6'-0 3/8"	6'-0 3/8"	2'-0"	1'-7 15/16"	1'-0 1/4"	9"
15"	6"	2'-3"	3'-10"	6'-1"	2'-6"	2'-0 5/16"	1'-0 1/2"	11"
18"	9"	2'-3"	3'-10"	6'-1"	3'-0"	2'-5"	1'-3 1/2"	1'-0"
24"	9 1/2"	3'-7 1/2"	2'-6"	6'-1 1/2"	4'-0"	2'-9 3/16"	1'-4 13/16"	1'-2"
30"	1'-0"	4'-6"	1'-7 3/4"	6'-1 3/4"	5'-0"	3'-1"	1'-6 1/2"	1'-3"
36"	1'-3"	5'-3"	2'-10 3/4"	8'-1 3/4"	6'-0"	3'-11 13/16"	2'-0 5/16"	1'-8"
42"	1'-9"	5'-3"	2'-11"	8'-2"	6'-6"	4'-5 7/8"	2'-3 1/2"	1'-10"
48"	2'-0"	6'-0"	2'-2"	8'-2"	7'-0"	4'-8 1/2"	2'-4 1/2"	1'-10"



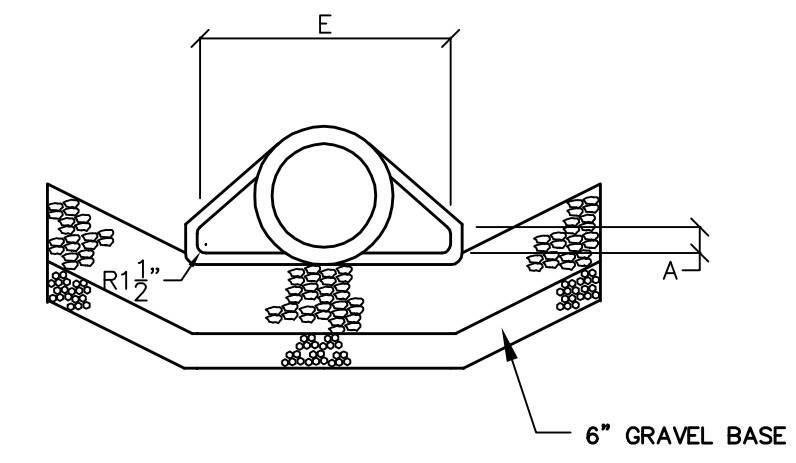
PLAN



SECTION Y-Y



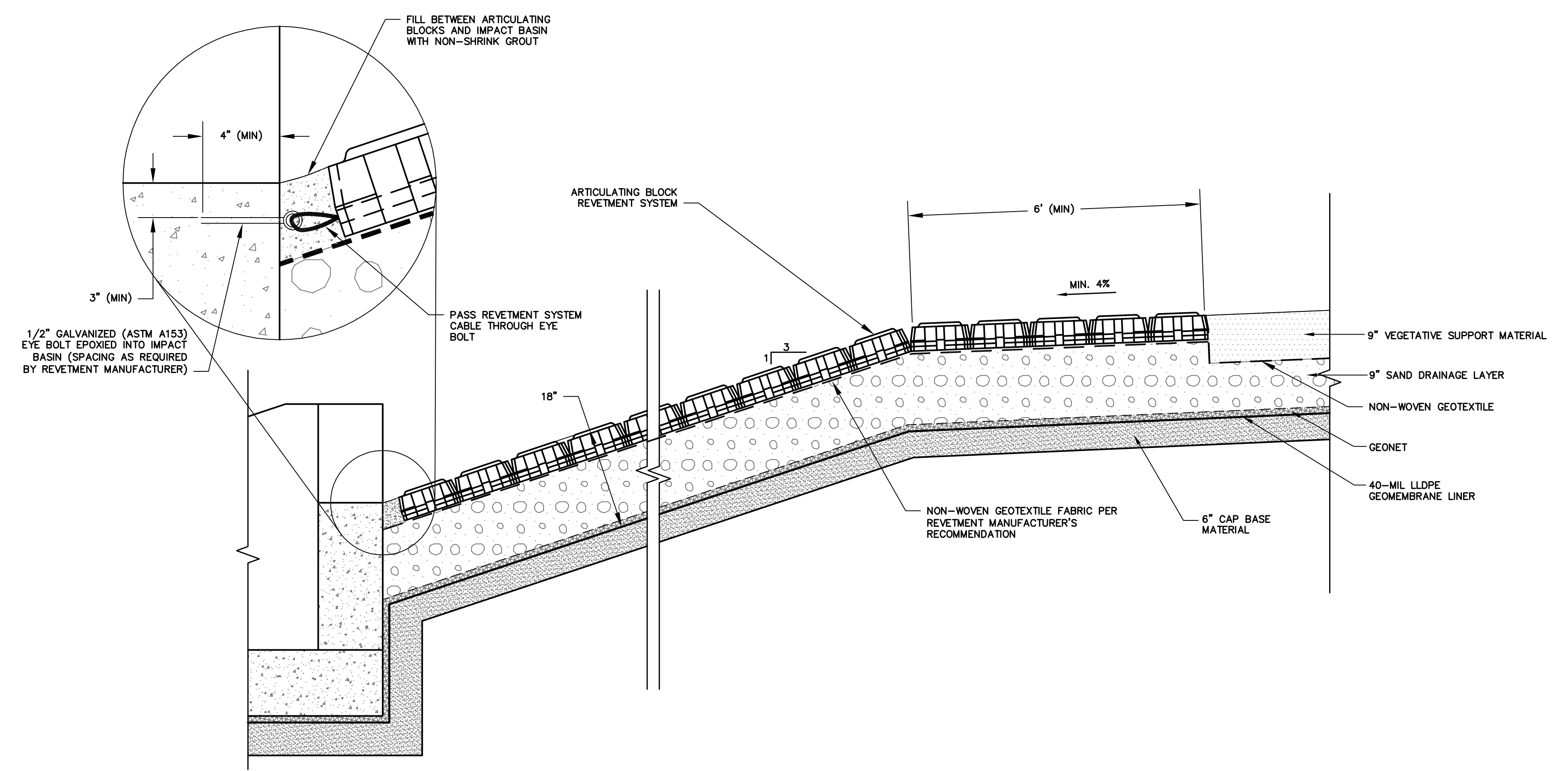
SECTION X-X



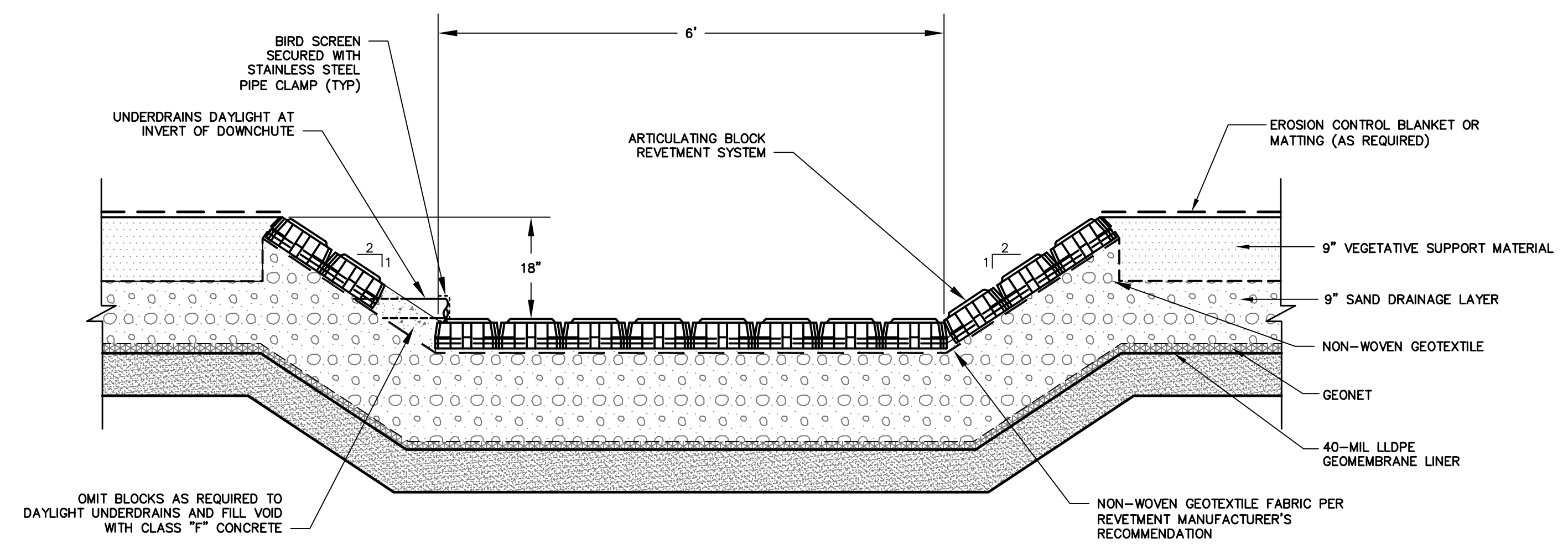
END VIEW

**1 CULVERT FLARED END**  
NOT TO SCALE

NOTES:  
 JOINTS SHALL BE TONGUE AND GROOVE OR BELL AND SPIGOT AS REQUIRED TO CONFORM TO PIPE.  
 WALL THICKNESS SHALL CONFORM TO PIPE THICKNESS.  
 STRUCTURE SHALL BE PLACED ON EXISTING SUITABLE COMPACTED MATERIAL OR 12" GRAVEL BASE.



**2 ALTERNATE DOWNCHUTE PROFILE**  
NOT TO SCALE



**3 ALTERNATE DOWNCHUTE SECTION**  
NOT TO SCALE

No.	DATE	DESCRIPTION	BY
1.			

PROJ. MANAGER:	CML
CHIEF DESIGNER:	DRL
REVIEWED BY:	DATE

SEAL	SEAL

SCALE:	HORIZ.: NTS
	VERT.:
DATUM:	HORIZ.:
	VERT.:

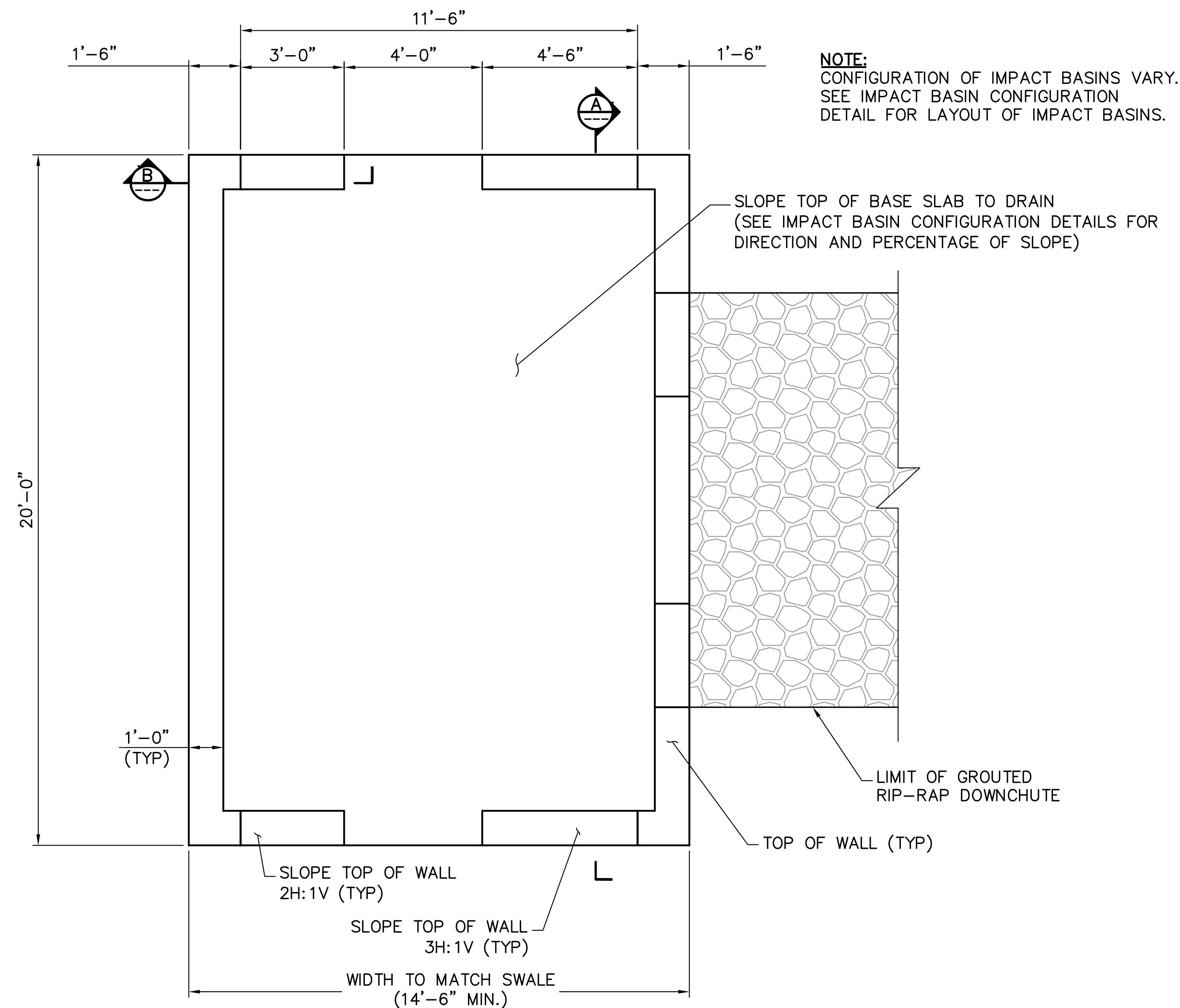

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CONNECTICUT RESOURCES RECOVERY AUTHORITY  
 DRAINAGE DETAILS  
 HARTFORD LANDFILL CLOSURE  
 MSW/INTERIM ASH DISPOSAL AREA  
 HARTFORD CONNECTICUT

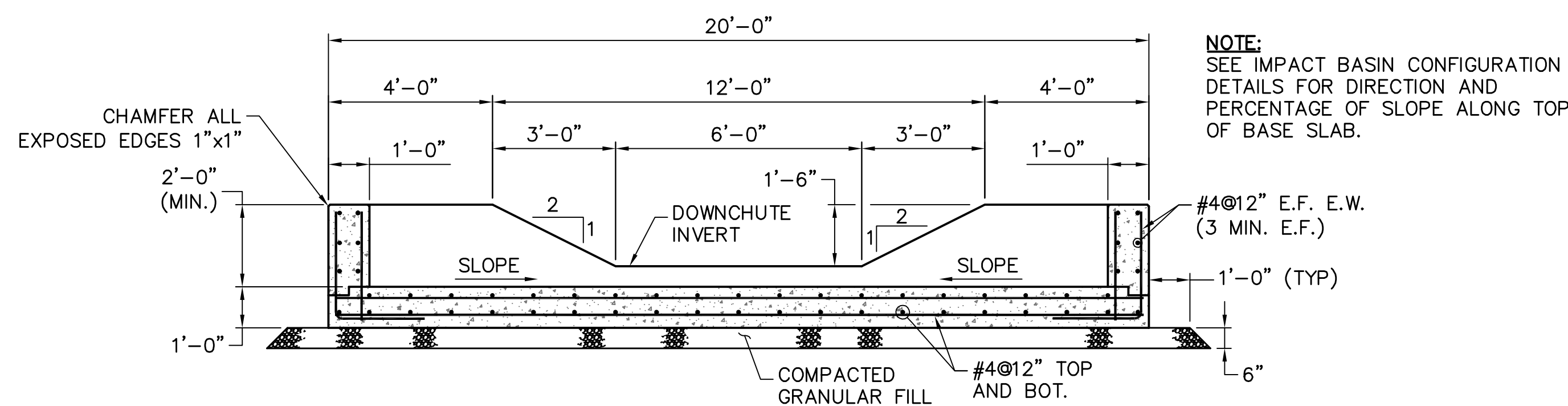
PROJ. No.: 04-0174.H12  
 DATE: JUNE 2007  
**CI-512**



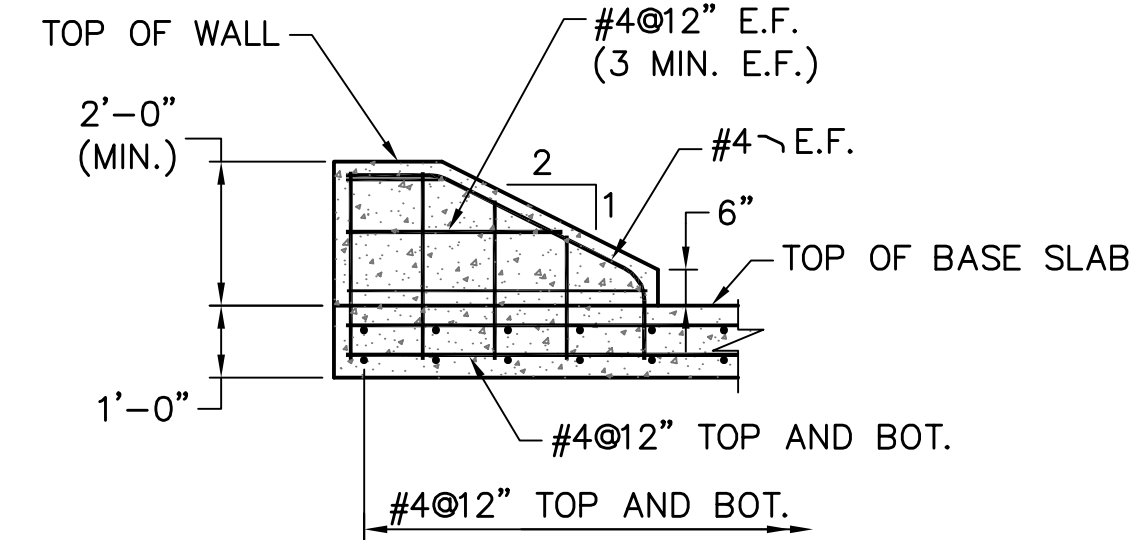
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 LMAN: DETAILS  
 MS VIEW: DRAINAGE-2  
 LGS:



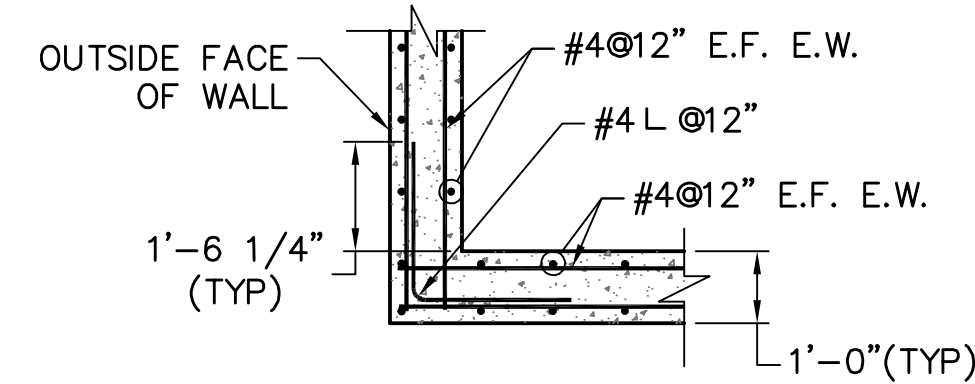
**PLAN**  
SCALE: 3/8"=1'-0"



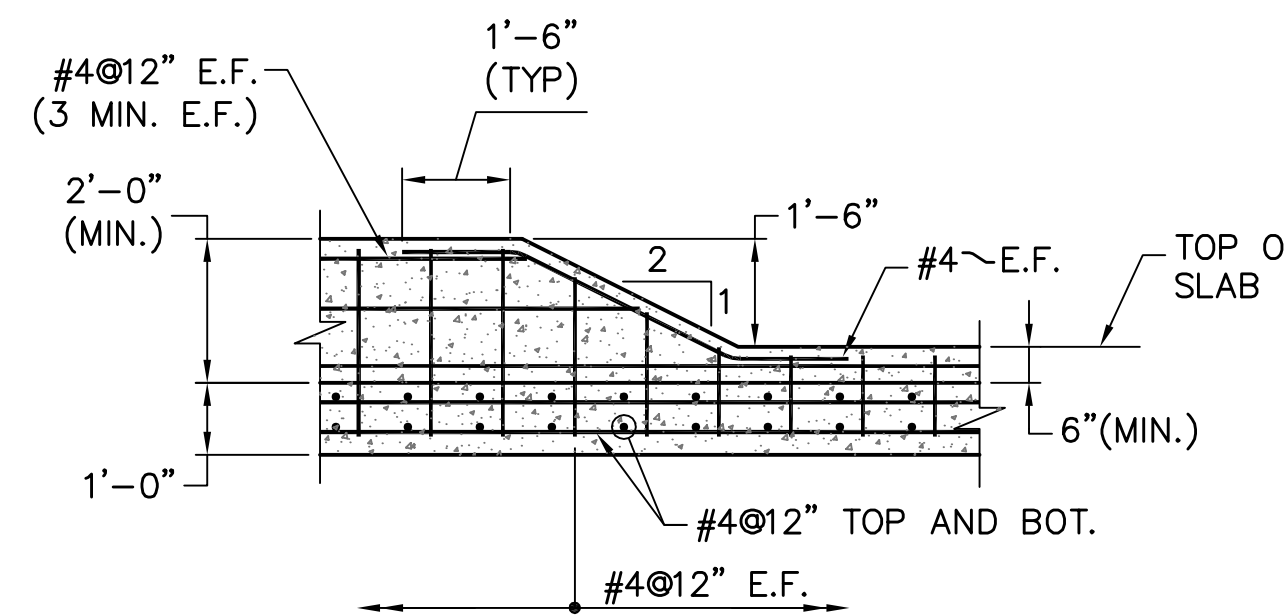
**SECTION A**  
SCALE: 3/8"=1'-0"



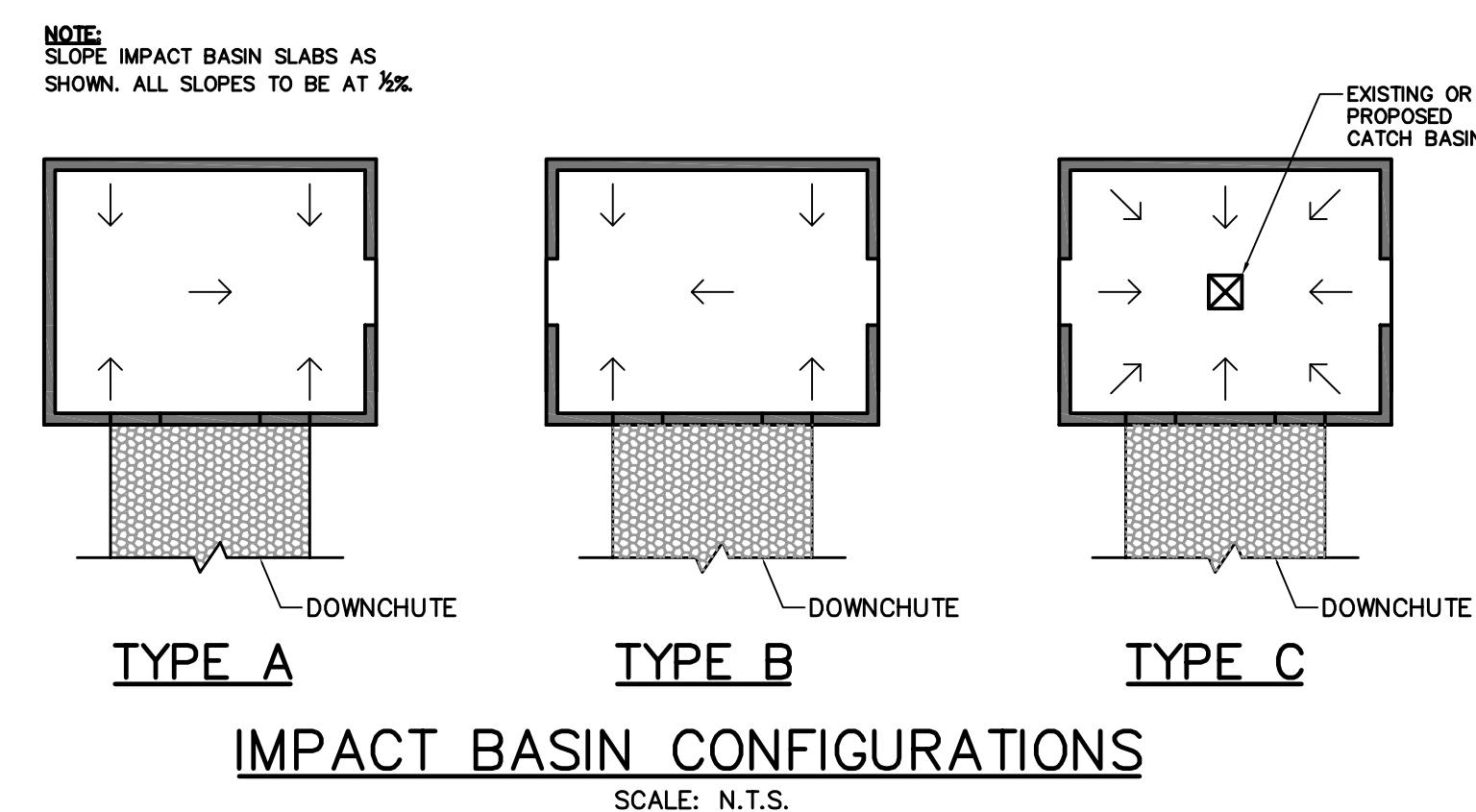
**SECTION B**  
SCALE: 3/8"=1'-0"



**CORNER REINFORCEMENT**  
SCALE: 3/8"=1'-0"



**DOWNCHUTE INVERT REINFORCEMENT**  
SCALE: 3/8"=1'-0"



**STRUCTURAL NOTES:**

THE WORK SHOWN ON THESE DRAWINGS HAS BEEN DESIGNED IN ACCORDANCE WITH THE STRUCTURAL REQUIREMENTS OF THE STATE OF CONNECTICUT 2005 STATE BUILDING CODE, INCLUDING THE 2005 INTERNATIONAL BUILDING CODE EXCEPT AS AMENDED, ALTERED OR DELETED BY THE ADDITIONAL PROVISIONS IN THE CONNECTICUT STATE BUILDING CODE.

**ALLOWABLE DESIGN STRESSES:**

CONCRETE:  $f'_c = 4,000$  PSI  
REINFORCEMENT: ASTM A615 GRADE 60 ( $f_y = 60,000$  PSI)

**DIMENSIONS:**

THE OVERALL DIMENSIONS OF THE IMPACT BASINS SHOWN ON THESE DETAILS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR FOR PROPER FIT AND FINISH OF THE PROPOSED WORK. REQUIRED ADJUSTMENTS IN ANY OVERALL DIMENSION FOR THE PROPER FIT AND FINISH OF THE PROPOSED WORK ARE THE RESPONSIBILITY OF THE CONTRACTOR. IN NO CASE SHALL THE WALL THICKNESS OR SLAB THICKNESS BE CHANGED.

**EXPOSED EDGES:**

EXPOSED EDGES OF CONCRETE SHALL BE BEVELED 1"x1" UNLESS DIMENSIONED OTHERWISE.

**CONCRETE:**

1. 4,000 PSI CONCRETE SHALL BE USED THROUGHOUT.

2. AIR ENTRAINMENT SHALL BE 5% ±1%

3. UNLESS OTHERWISE SHOWN ON THE PLANS, ALL REINFORCING SHALL BE LAPPED ACCORDING TO THE FOLLOWING CHART.

MINIMUM REINFORCING LAPS	
BAR SIZE	LAP
#4	18"

**NOTE:** THE LAPS LISTED ABOVE ARE FOR NON-CRITICAL SPLICES (AASHTO CLASS A SPLICE) WHERE BAR SPACING IS GREATER THAN SIX INCHES. ALL CRITICAL SPLICES SHALL BE AS SHOWN ON THE PLANS.

4. ALL REINFORCING BARS SHALL HAVE THE FOLLOWING MINIMUM COVER:

- COVER CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
- STIRRUPS, TIES AND SPIRALS: 1 1/2"
- ALL OTHER BARS 2"

5. CONSTRUCTION JOINTS OTHER THAN THOSE SHOWN ON PLANS WILL NOT BE PERMITTED WITHOUT A WRITTEN REQUEST BY THE CONTRACTOR AND PRIOR AUTHORIZATION BY THE ENGINEER.

6. ALL METAL TIES OR ANCHORAGES WHICH ARE REQUIRED FOR CONCRETE FORMWORK SHALL BE SO CONSTRUCTED THAT THEY CAN BE REMOVED TO AT LEAST TWO INCHES FROM THE EXPOSED SURFACE OF THE CONCRETE WITHOUT CAUSING DAMAGE TO THE CONCRETE SURFACE. SNAP TIES MAY BE USED ONLY IF APPROVED BY THE ENGINEER. IF A CONTRACTOR PROPOSES TO USE SNAP TIES, A CATALOG CUT AND OTHER NECESSARY INFORMATION MUST BE SUBMITTED TO THE ENGINEER TO DEMONSTRATE THAT THE TIES WILL SNAP-OFF FAR ENOUGH INTO THE CONCRETE TO ALLOW FOR PROPER PATCHING. SNAP TIES MUST PROVIDE ADEQUATE STRENGTH TO SUPPORT THE FORMS. ALL CAVITIES SHALL BE FILLED WITH AN APPROVED CEMENT MORTAR TO THE SATISFACTION OF THE ENGINEER.

**REINFORCEMENT:**

ALL REINFORCEMENT SHALL BE ASTM A615 GRADE 60

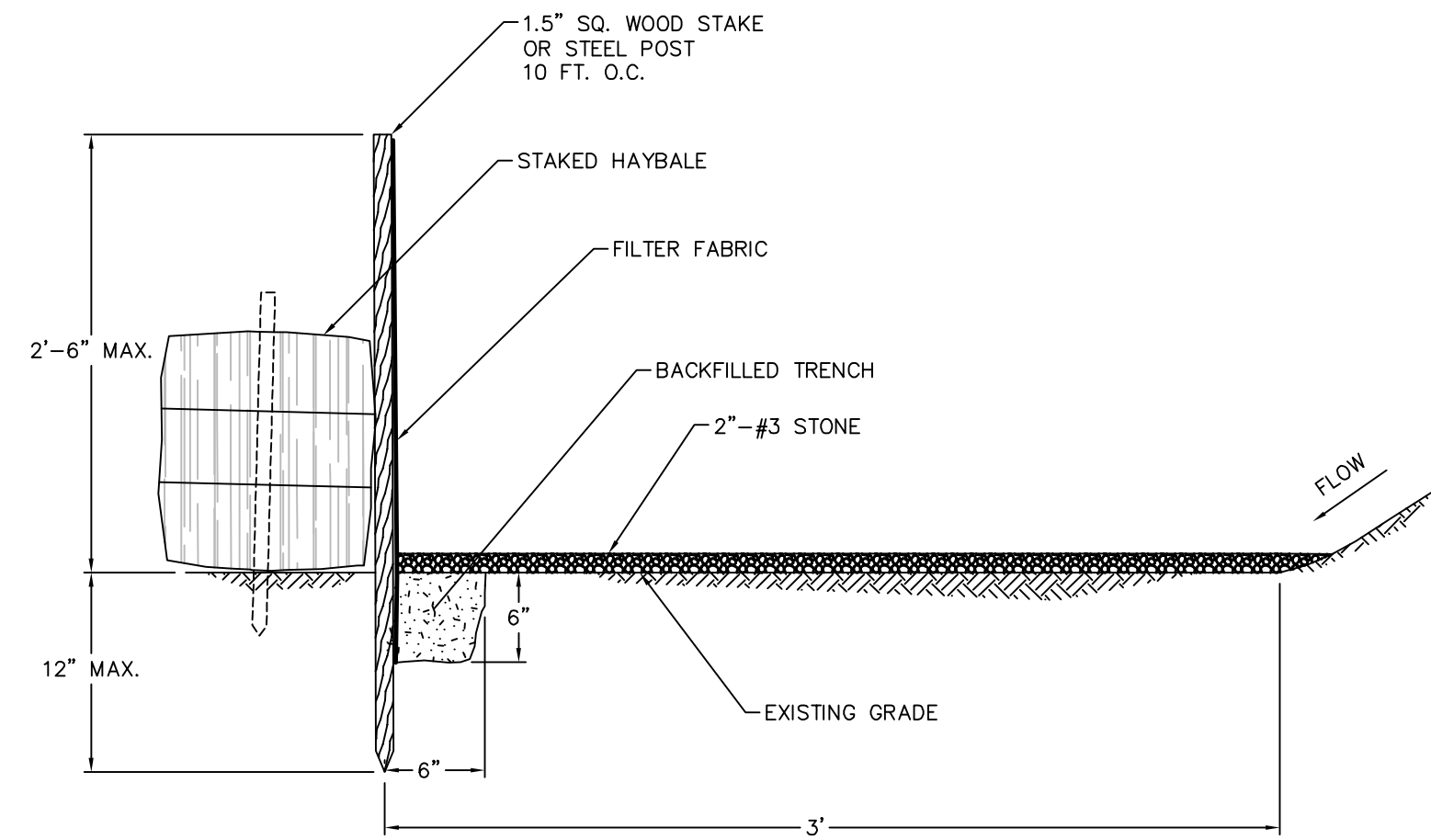
**1 IMPACT BASIN**  
NOT TO SCALE

PROJ. MANAGER: CML		SEAL	SEAL	SCALE:	<p><b>FUSS &amp; O'NEILL</b> Disciplines to Deliver</p> <p>146 HARTFORD RD    MANCHESTER, CT 06040    860.646.2469</p>	<p>WWW.FAND0.COM</p> <p>CONNECTICUT RESOURCES RECOVERY AUTHORITY</p> <p>DRAINAGE DETAILS</p> <p>HARTFORD LANDFILL CLOSURE MSW/INTERIM ASH DISPOSAL AREA</p> <p>HARTFORD      CONNECTICUT</p>	<p>PROJ. No.: 04-0174.H12</p> <p>DATE: JUNE 2007</p> <p><b>CI-513</b></p>
CHIEF DESIGNER: PB				HORIZ.: NTS			
REVIEWED BY: DATE				VERT.:			
				DATUM:			
				HORIZ.:			
				VERT.:			
1. No. DATE DESCRIPTION BY							
REVISIONS							

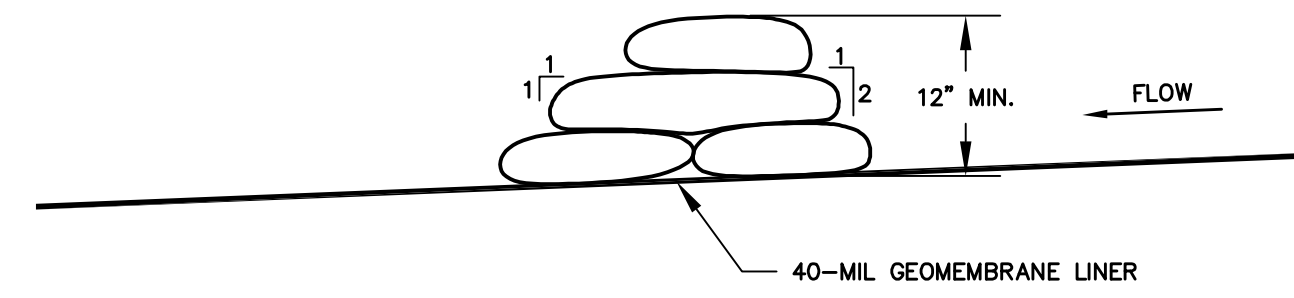






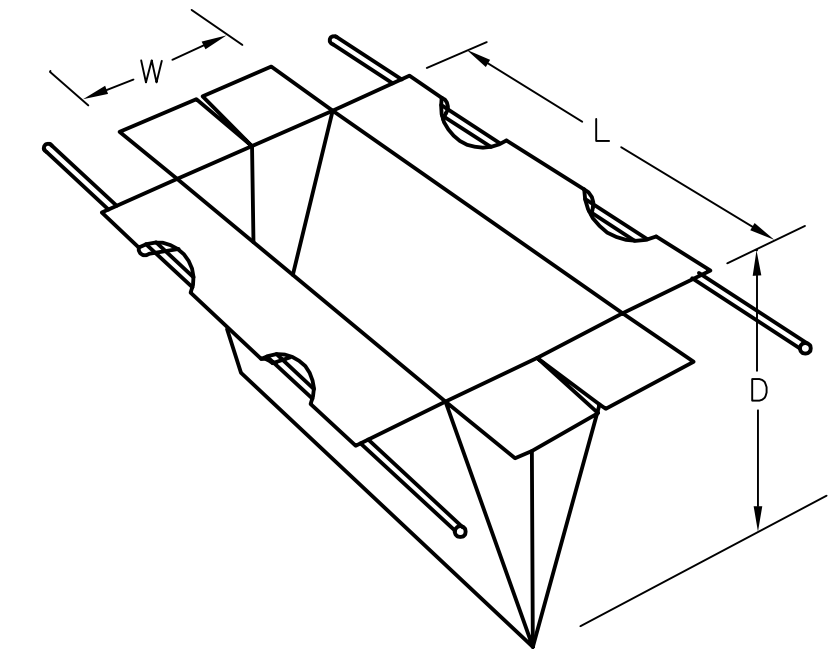


1 TEMPORARY SILT FENCE DIVERSION  
NOT TO SCALE



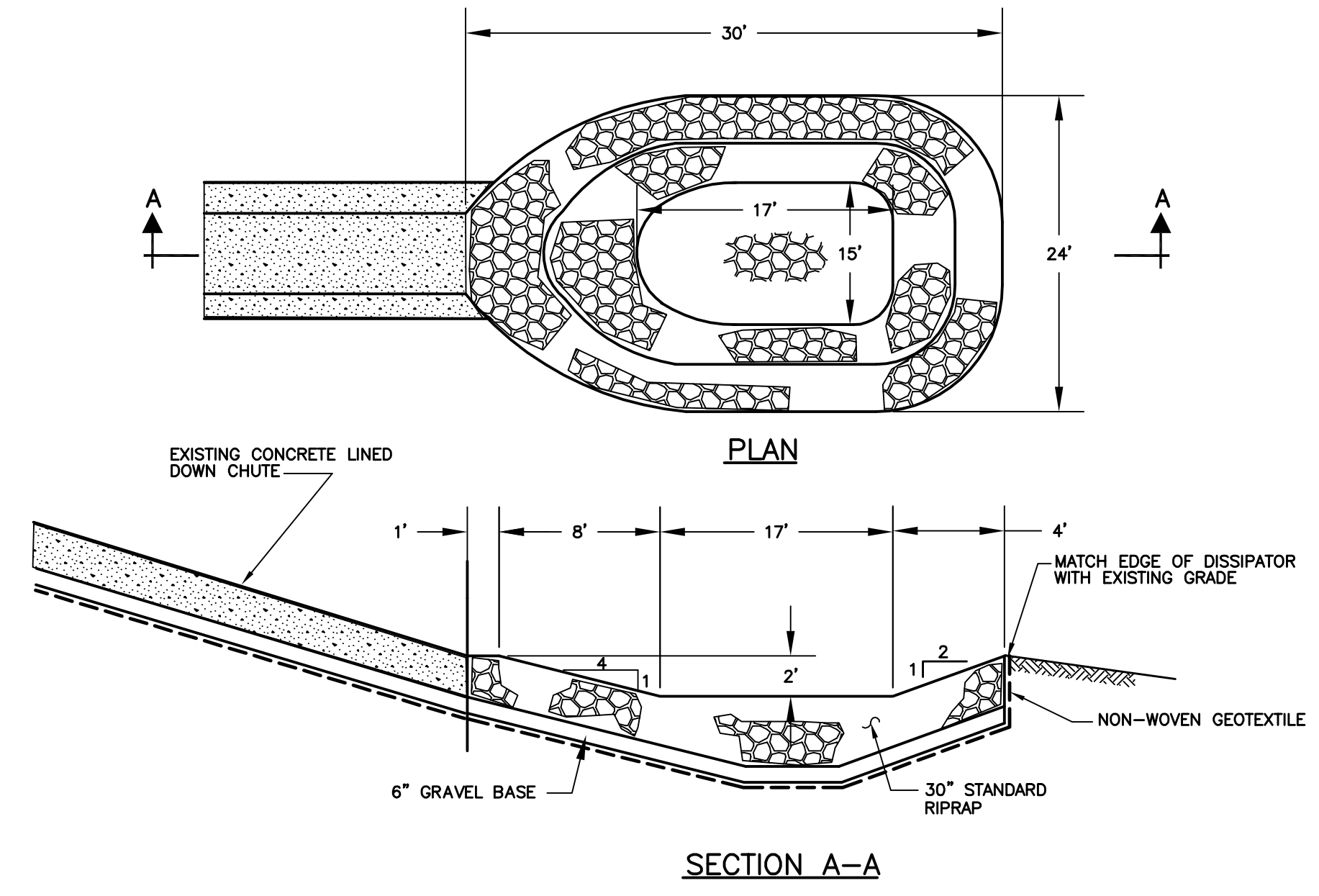
- NOTES:
1. INSTALL MINIMUM OF 3 COURSES OR AS NEEDED TO ACHIEVE 12" MINIMUM DEPTH.
  2. PLACE FIRST COURSE PARALLEL TO LINE OF DIVERSION. ALTERNATE SUBSEQUENT COURSES.
  3. TAMP BAGS INTO PLACE TO ELIMINATE VOIDS AND TO FORM A TIGHT SEAL.

2 TEMPORARY SAND BAG DIVERSION  
NOT TO SCALE

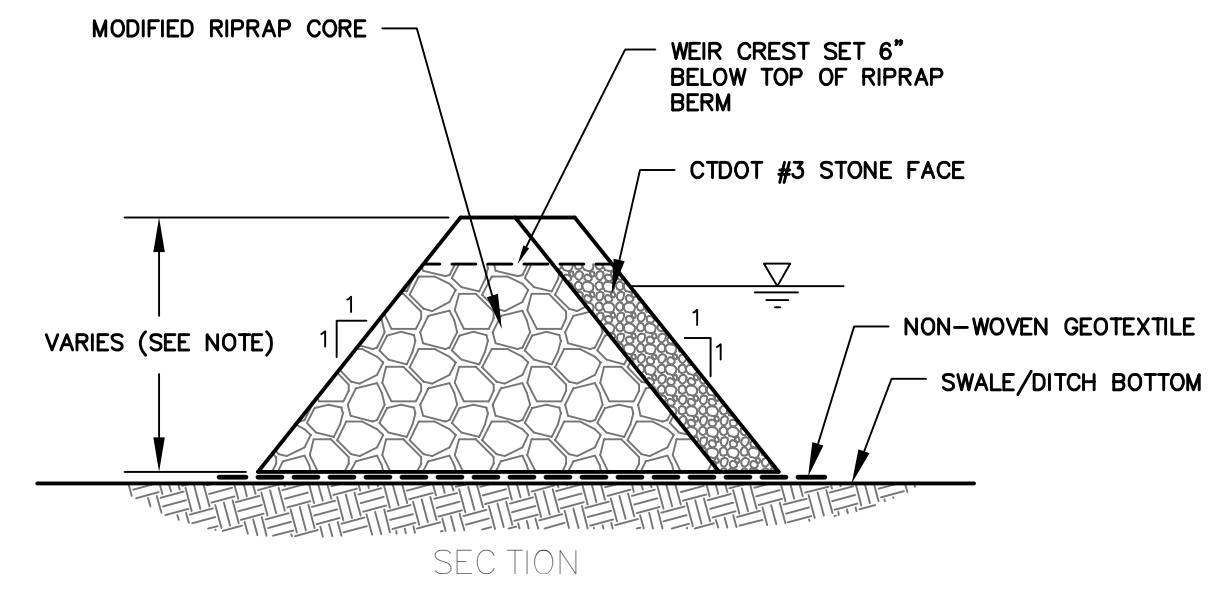


- NOTES:
1. SIZED TO FIT ANY SIZE OR SHAPE CATCH BASIN.
  2. ALL SEAMS DOUBLE STITCHED.
  3. PERMEABILITY:  
REGULAR FLOW SILTSACK: 40 GAL./MIN./SQ. FT.

3 CATCH BASIN INSERT  
NOT TO SCALE

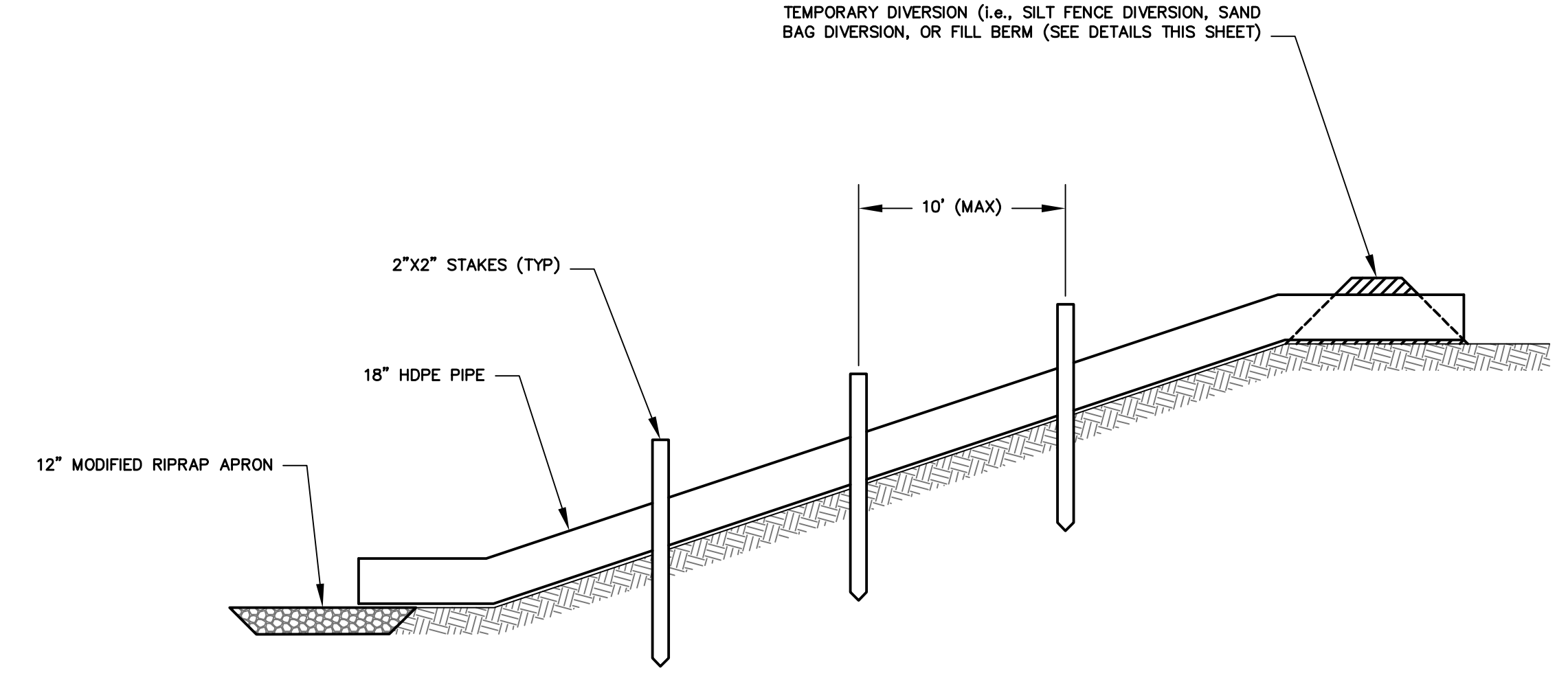


4 ENERGY DISSIPATOR  
NOT TO SCALE



- NOTE:
1. HEIGHT OF RIPRAP BERM SHALL MATCH EXISTING GRADES OUTSIDE OF THE DRAINAGE DITCHES, BUT SHALL NOT EXCEED 3'.
  2. SPACING OF TEMPORARY SEDIMENT TRAPS IN DRAINAGE WAYS SHALL BE 200' O.C. OR AS REQUIRED BY THE 2002 CONNECTICUT E&S GUIDELINES (WHICHEVER IS LESS).

5 TEMPORARY SEDIMENTATION TRAP  
NOT TO SCALE



6 TEMPORARY PIPE SLOPE DRAIN  
NOT TO SCALE

No.	DATE	DESCRIPTION	BY
1.			

PROJ. MANAGER:	CML
CHIEF DESIGNER:	DRL
REVIEWED BY:	DATE

SEAL	SEAL
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SCALE:	
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EROSION CONTROL DETAILS

HARTFORD LANDFILL CLOSURE  
MSW/INTERIM ASH DISPOSAL AREA

HARTFORD CONNECTICUT

PROJ. No.: 04-0174.H12  
DATE: JUNE 2007

**CE-502**