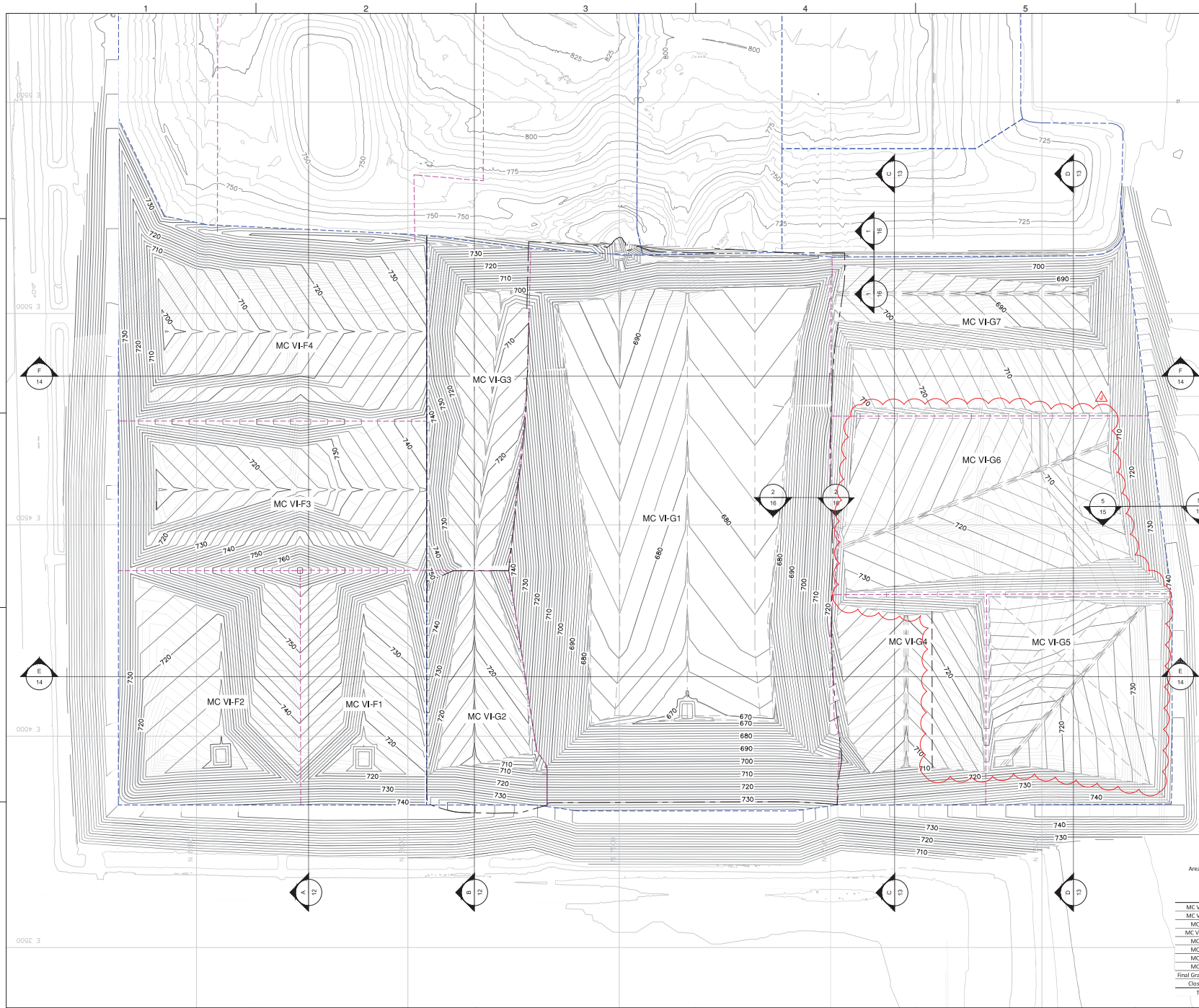




NOTES:
1. THE BASE MAP WAS CREATED USING AN AERIAL DRONE SURVEY PROVIDED BY DRONEVIEW TECHNOLOGIES, DATED DECEMBER 10, 2020. UPDATED WITH DRONE AERIAL SURVEY DATED APRIL 2, 2021.

PROJECT NUMBER 21070017		SCALE 1" = 300'		DRAWING NO 02	
WAYNE DISPOSAL, INC. SITE NO. 2 - MASTER CELL VI-F&G VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN					
GENERAL SITE PLAN					
cti Civil and Associates, Inc. 45377 N. Main Street, Suite 200 Livonia, Michigan 48150 www.cticompanies.com					
DATE: 10/08/21	DESIGNED BY: LEH	DRAWN BY: WBG	CHECKED BY: CAB	APPROVED BY: JLC	



- LEGEND**
- 500 — EXISTING MAJOR CONTOURS
 - EXISTING MAJOR CONTOURS
 - PROPERTY BOUNDARY
 - 500 — MAJOR CONTOURS
 - MASTER CELL VI-F & G
 - MINOR CONTOURS
 - - - GRADE BREAK
 - - - SUBCELL BOUNDARY
 - - - CELL BOUNDARY
 - - - AS-BUILT BOUNDARY

NOTES:

1. THE BASE MAP WAS CREATED USING AN AERIAL DRONE SURVEY PROVIDED BY DRONEVIEW TECHNOLOGIES, DATED DECEMBER 10, 2020. UPDATED WITH DRONE AERIAL SURVEY DATED APRIL 2, 2021.
2. GRADES DEPICTED IN MC VI G4-G7 REPRESENT REDESIGN TOP OF PRIMARY LINER. GRADES DEPICTED IN MC VI G3 AND MC VI F1-F4 REPRESENT PERMITTED TOP OF PRIMARY LINER. GRADES DEPICTED IN MC VI G1 AND G2 REPRESENT AS-BUILT TOP OF PRIMARY LINER.

Area Name	Footprint Area (AC)	2018 Permitted Incremental Volume (CY)	2021 Proposed Revised Incremental Volume (CY)	2021 Volume Adjustment (CY) ±
MC VI-F1&F2	9.3	810,822	779,386	-31,436
MC VI-F3&F4	12.9	1,865,000	1,854,314	-10,686
MC VI-G1	19.9	2,354,444	2,354,444	0
MC VI-G2&G3	7.2	796,778	785,806	-10,972
MC VI-G4	5.3	694,662	674,689	-19,973
MC VI-G5	5.5	490,000	561,933	71,933
MC VI-G6	7.4	3,098,173	3,646,358	50,415
MC VI-G7	5.5	1,129,000	1,129,083	83
Final Grade Changes	-	-	3,874,246	3,874,246
Closure/Turf	-	-	687,764	687,764
Total	73	11,729,879	16,347,247	4,617,368

DATE: 06/18/22
DESIGNED BY: JSC
DRAWN BY: JSC
CHECKED BY: JSC
APPROVED BY: JSC

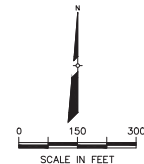
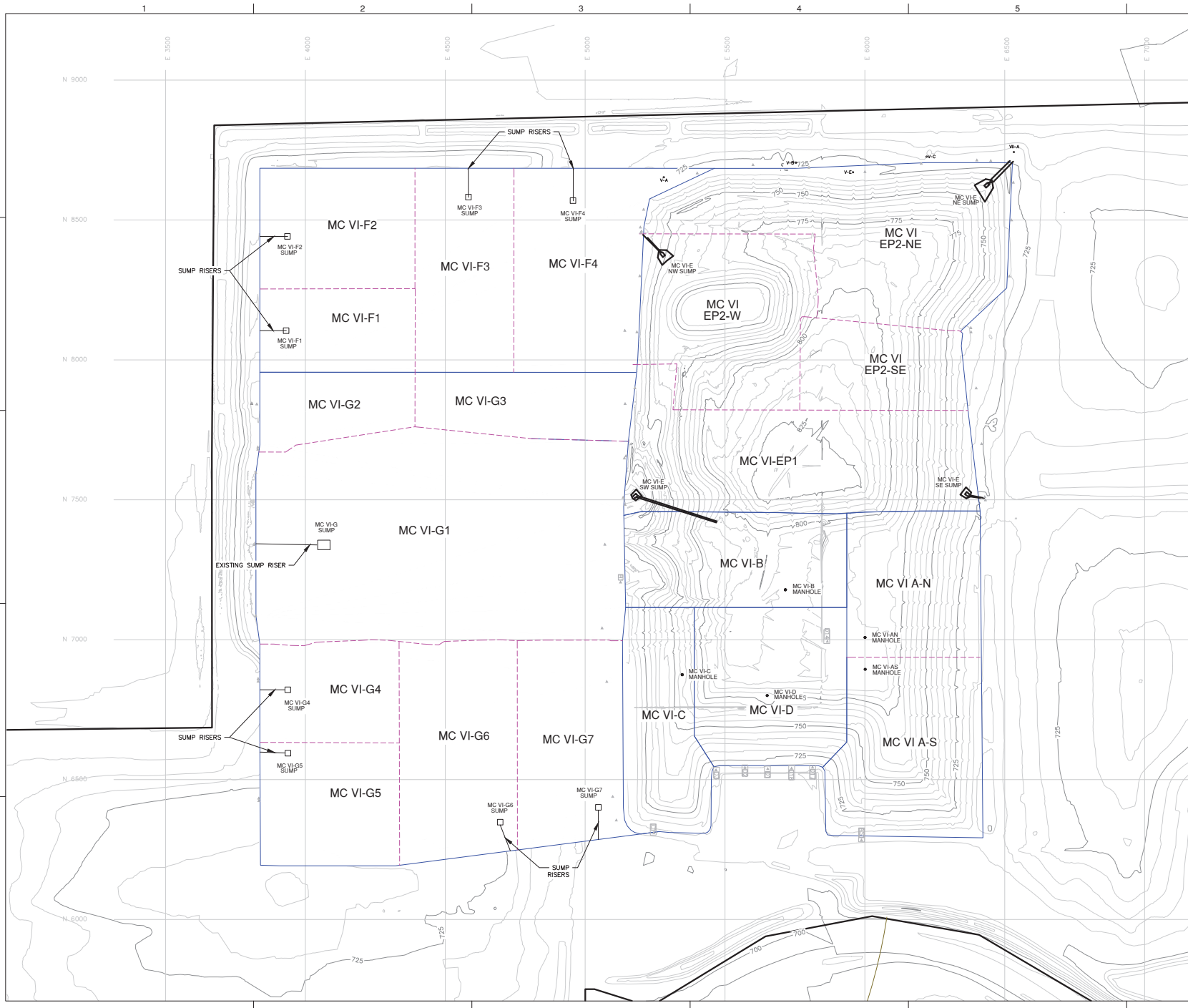
10/18/21 REVISED LINE GRADES IN F3
7/17/21 REVISED LINE GRADES IN F1-F4 AND OTHER MAJOR CONNECTIONS
11/22/20 SUBCELL F1-F4 REVISIONS
11/22/20 SUBCELL G4-G6 REVISIONS

PROJECT NUMBER
1216070017

SCALE
1" = 100'

DRAWING NO
03

CONSTRUCTION PHASING



LEGEND

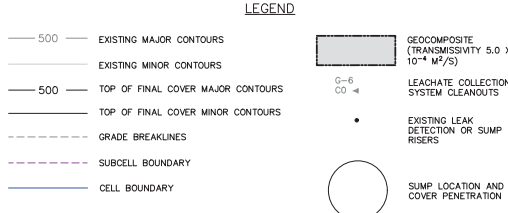
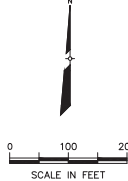
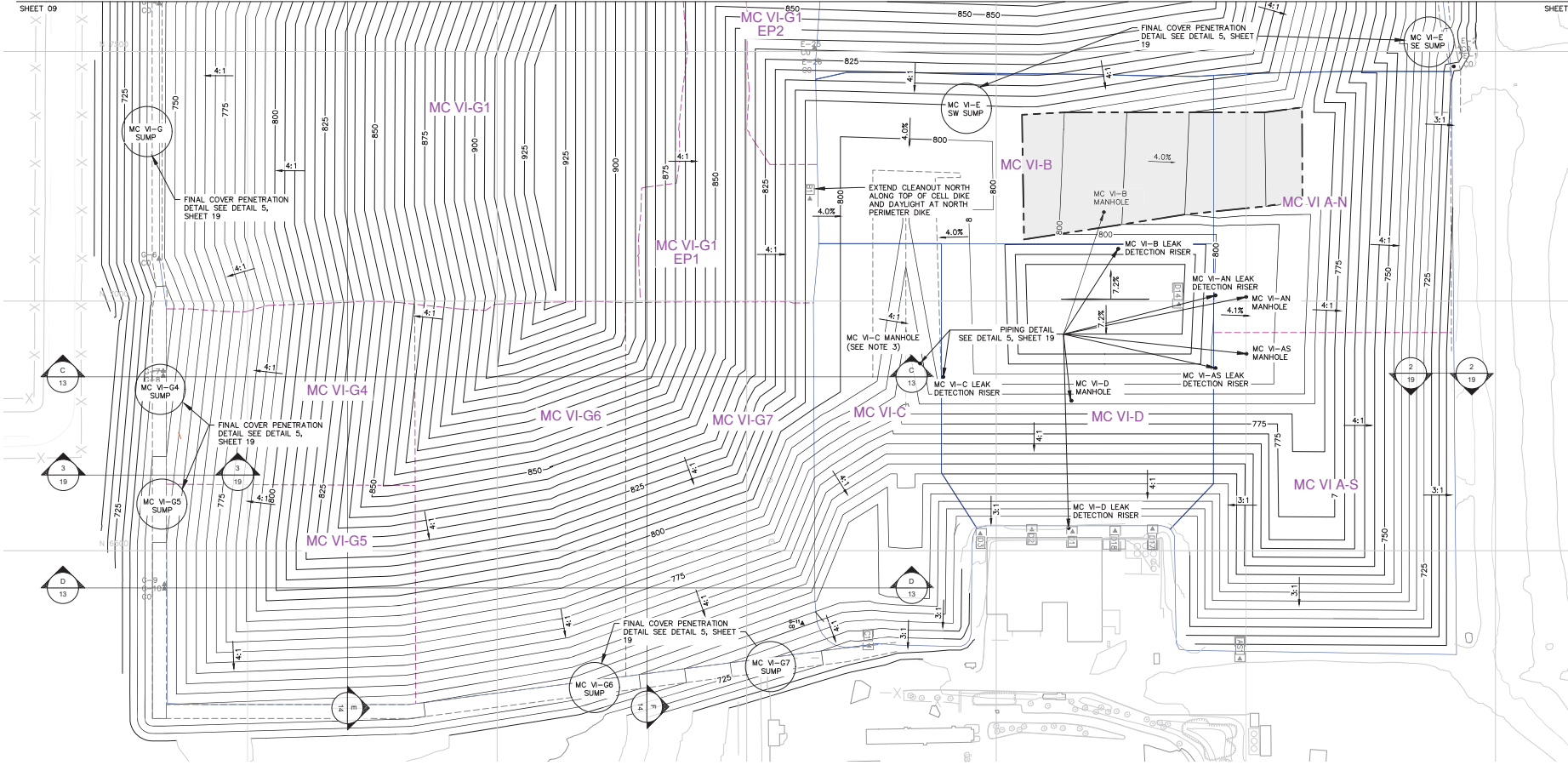
- 500 — EXISTING MAJOR CONTOURS
- — EXISTING MINOR CONTOURS
- - - - - SUBCELL BOUNDARIES
- — — — — CELL BOUNDARIES
- — — — — PROPERTY BOUNDARY

NOTES:
1. THE BASE MAP WAS CREATED USING AN AERIAL DRONE SURVEY PROVIDED BY DRONEVIEW TECHNOLOGIES, DATED DECEMBER 10, 2020. UPDATED WITH DRONE AERIAL SURVEY DATED APRIL 2, 2021.

DATE:	10/08/21	DESIGNED BY:	LEH	DRAWN BY:	CAB	CHECKED BY:	JLC
PROJECT NUMBER:	1218070017	SCALE:	1" = 150'	DRAWING NO:	07		
<div> <div> </div> <div> <p>Wayne Disposal, Inc. Site No. 2 - Master Cell VLF&G Van Buren Township, Wayne County, Michigan</p> <p>LEACHATE MANAGEMENT PLAN</p> </div> </div>							
1	10/08/21	SUBCELLS 04-07 REVISIONS (FINAL GRADE MODIFICATIONS, MISCELLANEOUS CHANGES)	MC VI	XZ			
2	11/12/21	REVISED LINE GRADES IN P1-F4 AND OTHER MAJOR COMMENTS	LEH	XZ			
3	11/22/21	SUBCELLS P1-F4 REVISIONS	MC VI	XZ			
4	11/22/21	REVISIONS REVISIONS	LEH	XZ			
5	01/04/22	REVISIONS REVISIONS	MC VI	XZ			

SHEET 08
SHEET 09

SHEET 08
SHEET 09



- NOTES:**
1. THE BASE MAP WAS CREATED USING AN AERIAL DRONE SURVEY PROVIDED BY DRONEVIEW TECHNOLOGIES, DATED DECEMBER 10, 2020. UPDATED WITH DRONE AERIAL SURVEY DATED APRIL 2, 2021.
 2. CLEANOUTS IN MC VI-AN, AS, B, C, AND D ARE TO BE ABANDONED EXCEPT BY, C1, D1 THROUGH D3, D14, D17, D18, AND AS1.
 3. BEFORE PLACING WASTE AROUND MC VI-C SUMP RISER, A MONITORING PROGRAM SHOULD BE IMPLEMENTED TO MONITOR ITS FUNCTIONALITY.
 4. PRIOR TO PLACING WASTE AROUND CLEANOUTS E-22 THROUGH E-26, THE CLEANOUTS SHOULD BE EVALUATED TO DETERMINE IF THE LEACHATE COLLECTION LINE CAN BE CLEANED BY A SINGLE ACCESS POINT. IF NOT, THE CLEANOUT SHOULD BE EXTENDED.

DATE:	10/08/21	DESIGNED BY:	CTI
LEI:		DRAWN BY:	CTI
WBC:		CAB:	CTI
WBC:		APPROVED BY:	CTI

CTI
Civil & Environmental Engineering
10000 Old Orchard Road, Suite 100
North York, Ontario M3J 1P7
Canada
Tel: 416-491-1111
Fax: 416-491-1112
www.cti-engineers.com

NO.	DATE	DESCRIPTION
1	10/08/21	SUBMITTAL 04-07 REVISIONS: FINAL GRADE MODIFICATIONS, MISCELLANEOUS CHANGES
2	10/22/21	RESPONSE TO DEE COMMENTS
3	11/02/21	RESPONSE TO DEE COMMENTS AND OTHER MAJOR CORRECTIONS
4	11/02/21	RESPONSE TO DEE COMMENTS AND OTHER MAJOR CORRECTIONS
5	11/02/21	RESPONSE TO DEE COMMENTS AND OTHER MAJOR CORRECTIONS
6	11/02/21	RESPONSE TO DEE COMMENTS AND OTHER MAJOR CORRECTIONS
7	11/02/21	RESPONSE TO DEE COMMENTS AND OTHER MAJOR CORRECTIONS
8	11/02/21	RESPONSE TO DEE COMMENTS AND OTHER MAJOR CORRECTIONS
9	11/02/21	RESPONSE TO DEE COMMENTS AND OTHER MAJOR CORRECTIONS
10	11/02/21	RESPONSE TO DEE COMMENTS AND OTHER MAJOR CORRECTIONS
11	11/02/21	RESPONSE TO DEE COMMENTS AND OTHER MAJOR CORRECTIONS
12	11/02/21	RESPONSE TO DEE COMMENTS AND OTHER MAJOR CORRECTIONS
13	11/02/21	RESPONSE TO DEE COMMENTS AND OTHER MAJOR CORRECTIONS
14	11/02/21	RESPONSE TO DEE COMMENTS AND OTHER MAJOR CORRECTIONS
15	11/02/21	RESPONSE TO DEE COMMENTS AND OTHER MAJOR CORRECTIONS
16	11/02/21	RESPONSE TO DEE COMMENTS AND OTHER MAJOR CORRECTIONS
17	11/02/21	RESPONSE TO DEE COMMENTS AND OTHER MAJOR CORRECTIONS
18	11/02/21	RESPONSE TO DEE COMMENTS AND OTHER MAJOR CORRECTIONS
19	11/02/21	RESPONSE TO DEE COMMENTS AND OTHER MAJOR CORRECTIONS
20	11/02/21	RESPONSE TO DEE COMMENTS AND OTHER MAJOR CORRECTIONS

WAYNE DISPOSAL, INC. SITE NO. 2 - MASTER CELL VHP&G
VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN

FINAL COVER GRADING PLAN (2 OF 2)

PROJECT NUMBER: 1218070017
SCALE: 1" = 100'
DRAWING NO: 09



LEGEND

- 500 — EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- 500 — TOP OF FINAL COVER MAJOR CONTOURS
- TOP OF FINAL COVER MINOR CONTOURS
- - - GRADE BREAK
- - - - SUBCELL BOUNDARY
- CELL BOUNDARY
- DIVERSION BERM
- DIVERSION CHANNELS

NOTES:

1. THE BASE MAP WAS CREATED USING AN AERIAL DRONE SURVEY PROVIDED BY DRONEVIEW TECHNOLOGIES, DATED DECEMBER 10, 2020, UPDATED WITH DRONE AERIAL SURVEY DATED APRIL 2, 2021.
2. DIVERSION BERMS ARE SLOPED AT 2% UNLESS OTHERWISE NOTED.

cti

City of Detroit
10000 Woodward Ave., Suite 400
Detroit, MI 48202
www.cticonsultants.com

DATE: 10/08/21
DESIGNED BY: JCD
DRAWN BY: WBC
CHECKED BY: CAB
APPROVED BY: JZC

1	10/08/21	SUBCELLS 04-07 REVISIONS: FINAL GRADE MODIFICATIONS, MISCELLANEOUS CHANGES	WBC	JZC
2	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
3	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
4	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
5	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
6	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
7	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
8	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
9	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
10	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
11	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
12	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
13	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
14	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
15	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
16	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
17	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
18	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
19	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
20	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
21	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
22	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
23	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
24	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
25	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
26	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
27	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
28	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
29	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
30	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
31	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
32	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
33	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
34	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
35	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
36	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
37	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
38	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
39	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
40	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
41	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
42	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
43	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
44	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
45	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
46	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
47	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
48	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
49	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC
50	10/08/21	REVISIONS TO GULCH COMMENTS	LEH	JZC

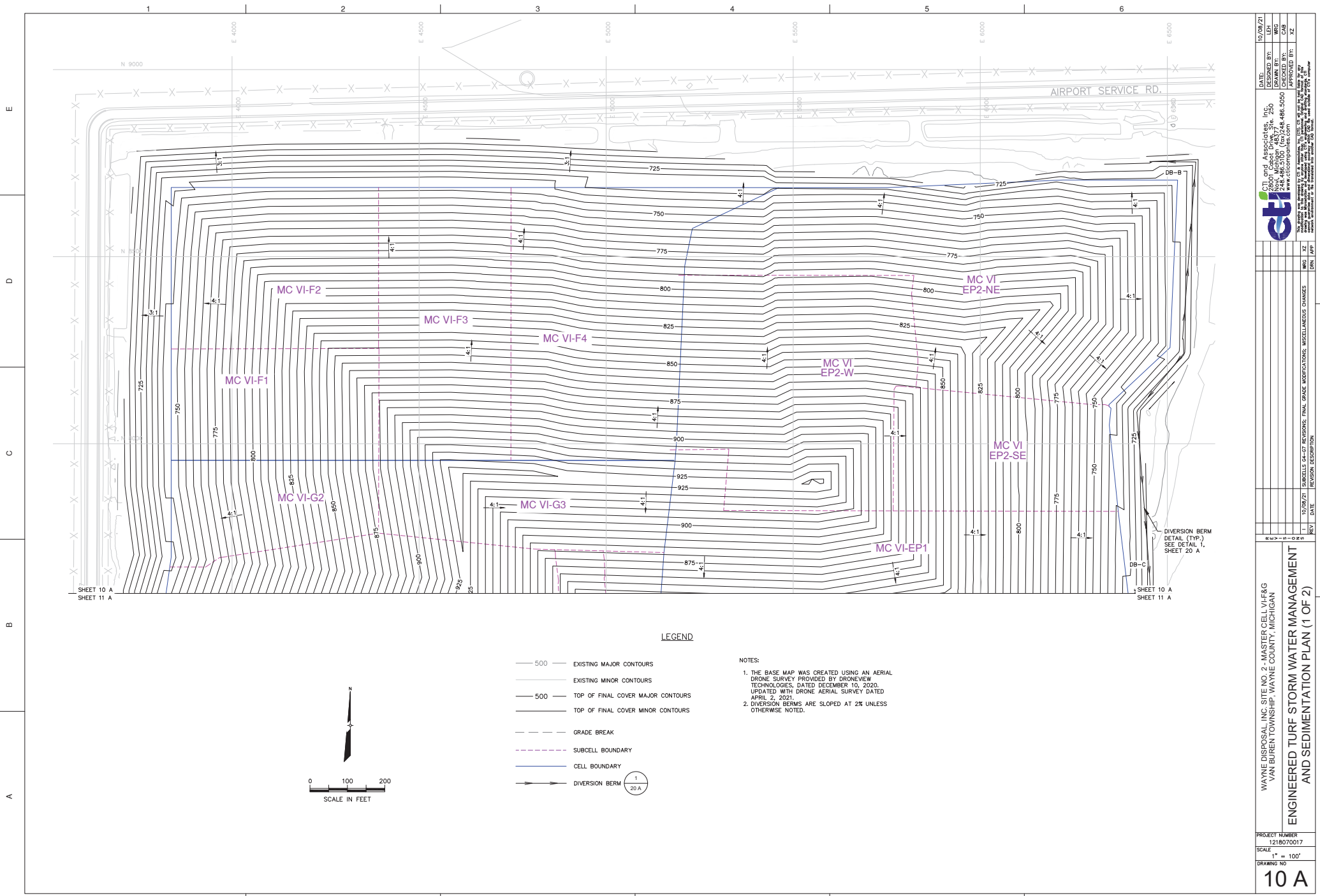
WAYNE DISPOSAL, INC. SITE NO. 2 - MASTER CELL VHP&G
VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN

PROJECT NUMBER
1218070017

SCALE
1" = 100'

DRAWING NO
10

STORM WATER MANAGEMENT AND
SEDIMENTATION PLAN (1 OF 2)



LEGEND

- 500 EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- 500 TOP OF FINAL COVER MAJOR CONTOURS
- TOP OF FINAL COVER MINOR CONTOURS
- GRADE BREAK
- SUBCELL BOUNDARY
- CELL BOUNDARY
- DIVERSION BERM

NOTES:

1. THE BASE MAP WAS CREATED USING AN AERIAL DRONE SURVEY PROVIDED BY DRONEVIEW TECHNOLOGIES, DATED DECEMBER 10, 2020, UPDATED WITH DRONE AERIAL SURVEY DATED APRIL 2, 2021.
2. DIVERSION BERMS ARE SLOPED AT 2% UNLESS OTHERWISE NOTED.

WAYNE DISPOSAL, INC. SITE NO. 2 - MASTER CELL VI-F&G
VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN

ENGINEERED TURF STORM WATER MANAGEMENT
AND SEDIMENTATION PLAN (1 OF 2)

PROJECT NUMBER
1218070017

SCALE
1" = 100'

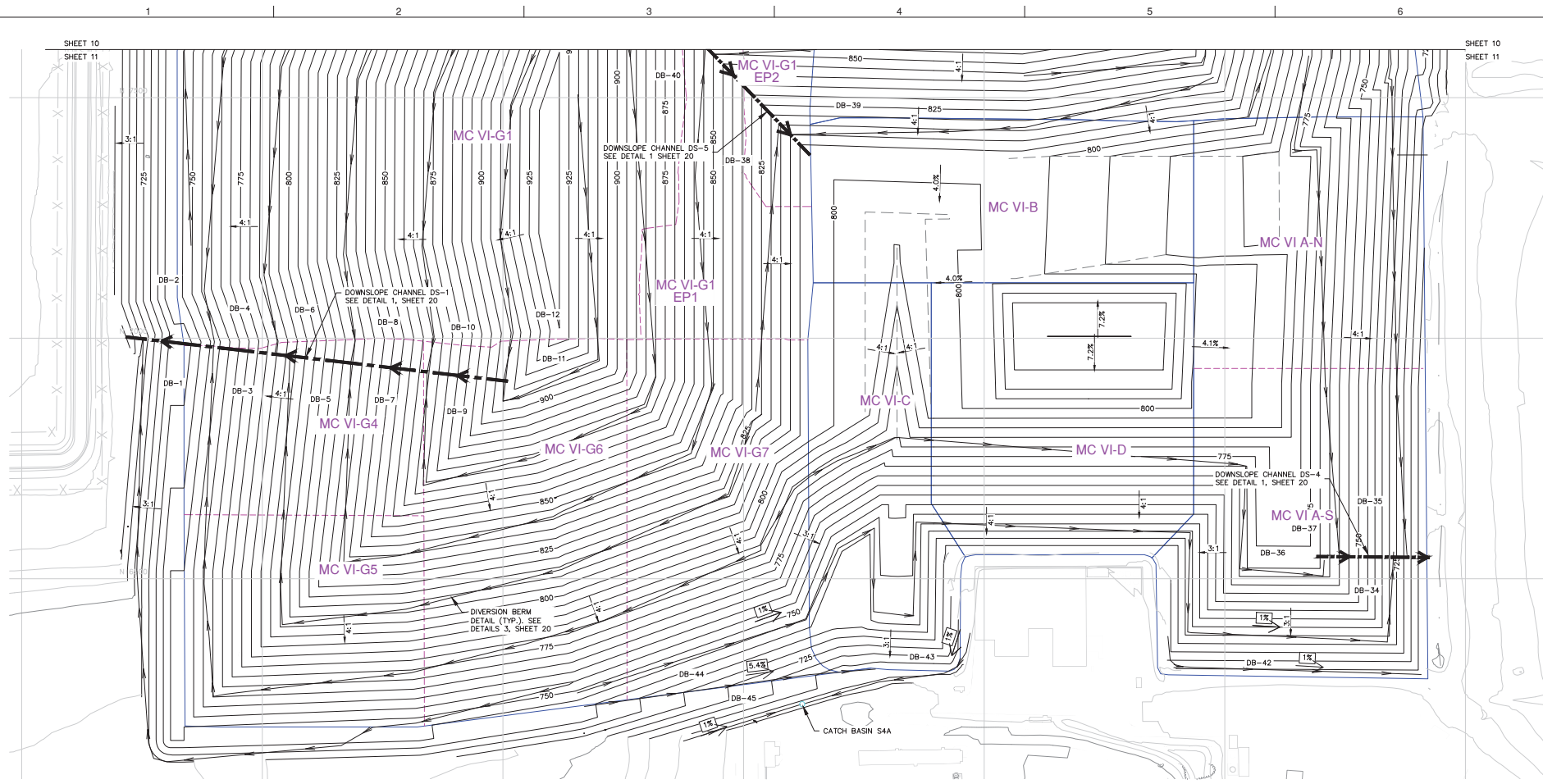
DRAWING NO
10 A

DATE: 10/08/21
DESIGNED BY: JCD
DRAWN BY: WBC
CHECKED BY: CAB
APPROVED BY: JZ

cti
Civil and Associates, Inc.
10000 New Center Road, Suite 200
Livonia, Michigan 48150
Phone: 734.466.5000
www.cticonsultants.com

THIS DRAWING IS THE PROPERTY OF CTI AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF CTI. ANY UNAUTHORIZED REPRODUCTION OR TRANSMISSION OF THIS DRAWING IS STRICTLY PROHIBITED.

A B C D E



LEGEND

- 500 — EXISTING MAJOR CONTOURS
- EXISTING MINOR CONTOURS
- 500 — TOP OF FINAL COVER MAJOR CONTOURS
- TOP OF FINAL COVER MINOR CONTOURS
- - - GRADE BREAK
- - - SUBCELL BOUNDARY
- CELL BOUNDARY
- DIVERSION BERM
- DIVERSION CHANNELS

NOTES:

1. THE BASE MAP WAS CREATED USING AN AERIAL DRONE SURVEY PROVIDED BY DRONEVIEW TECHNOLOGIES, DATED DECEMBER 10, 2020, UPDATED WITH DRONE AERIAL SURVEY DATED APRIL 2, 2021.
2. DIVERSION BERMS ARE SLOPED AT 2% UNLESS OTHERWISE NOTED.

WAYNE DISPOSAL, INC. SITE NO. 2 - MASTER CELL VHP&G
VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN
STORM WATER MANAGEMENT AND
SEDIMENTATION PLAN (2 OF 2)

PROJECT NUMBER
1218070017
SCALE
1" = 100'
DRAWING NO
11

DATE: 10/08/21
DESIGNED BY: LEH
DRAWN BY: WBC
CHECKED BY: CAB
APPROVED BY: JLC

cti
Civil and Associates, Inc.
10000 Old Orchard Road, Suite 100
Livonia, Michigan 48150
Phone: 734.466.5000
www.cticonsultants.com

This drawing is prepared by C.T.I. Associates, Inc. and is the property of C.T.I. Associates, Inc. It is to be used only for the project and location specified on the title block. No part of this drawing may be reproduced or transmitted in any form or by any means electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without written permission from C.T.I. Associates, Inc.

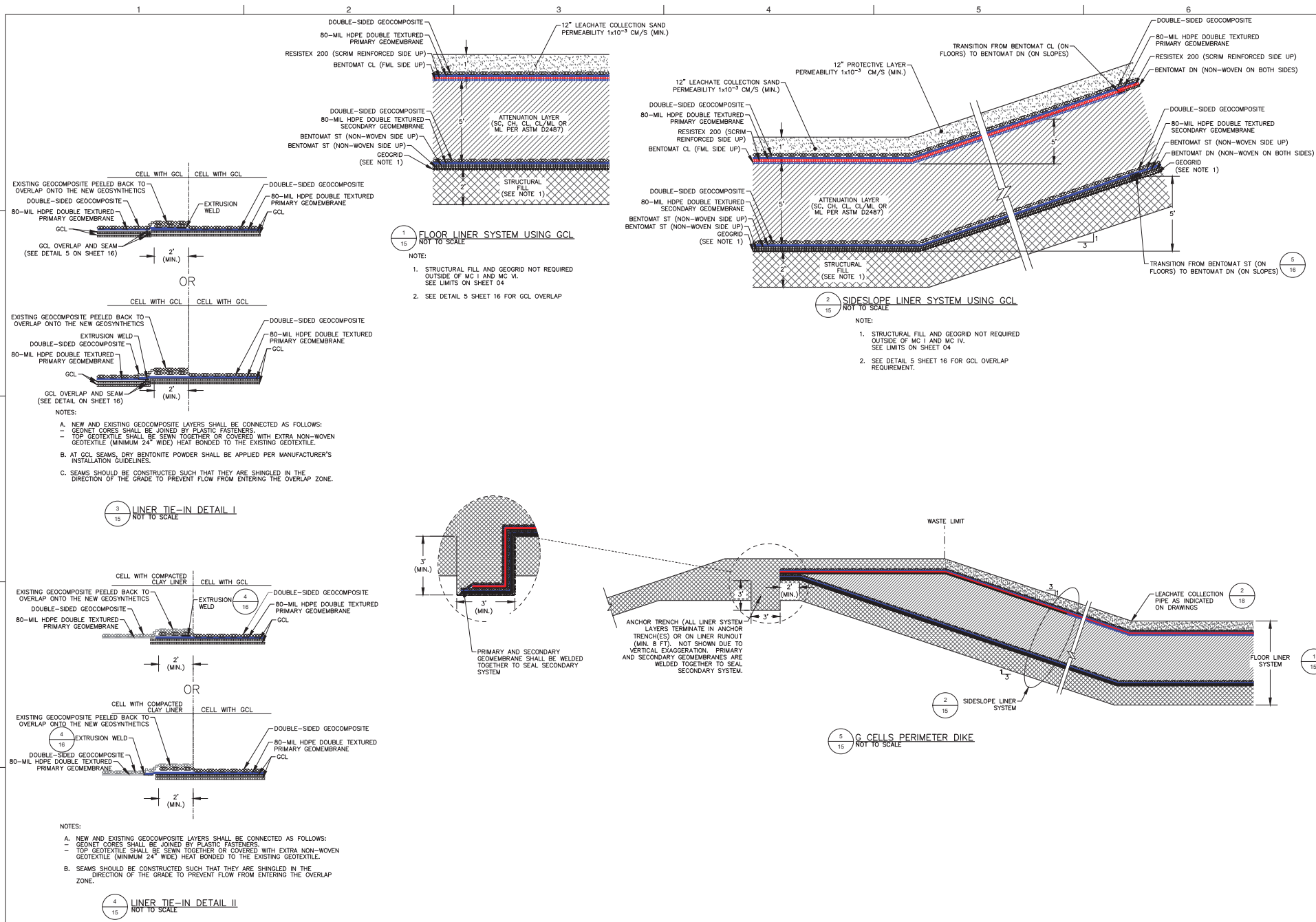
W

D

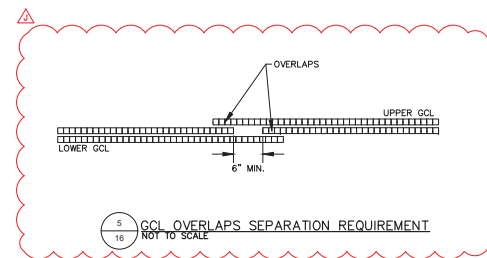
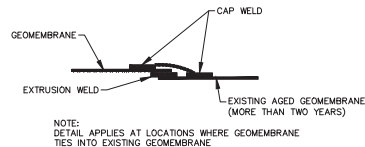
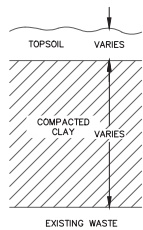
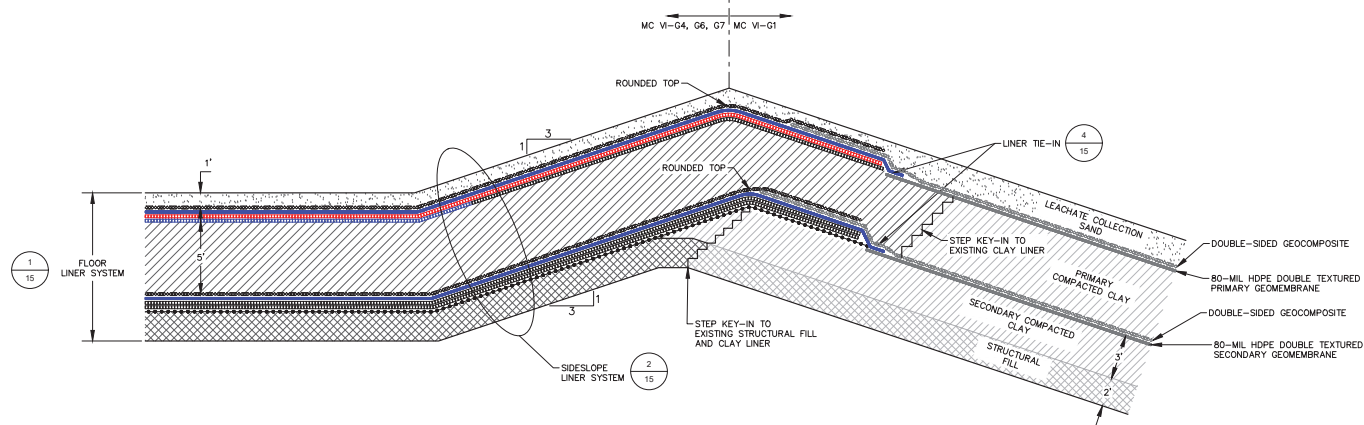
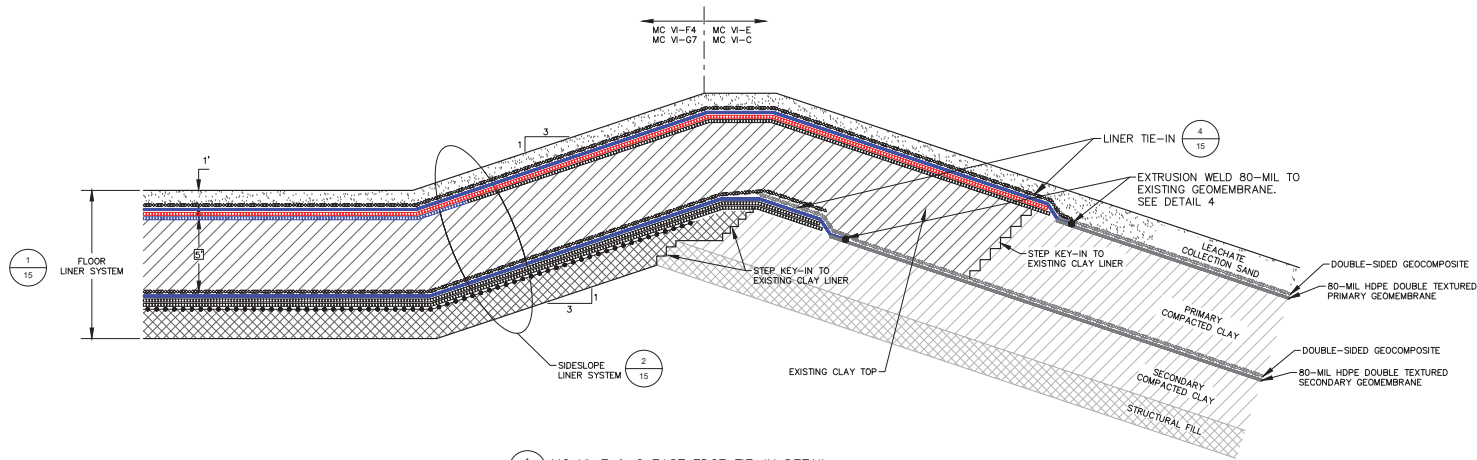
C

B

A



DATE:	10/08/21	DESIGNED BY:	LEH	DRAWN BY:	WBC	CHECKED BY:	WBC	APPROVED BY:	WBC
PROJECT NUMBER	1218070017	SCALE	AS SHOWN	DRAWING NO.	15	PROJECT NAME	WAYNE DISPOSAL, INC. SITE NO. 2 - MASTER CELL VHF&G VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN	PROJECT LOCATION	WAYNE COUNTY, MICHIGAN
REVISIONS	1	DATE	10/08/21	DESCRIPTION	ISSUED FOR PERMITS	REVISIONS	2	DATE	10/08/21
REVISIONS	2	DATE	10/08/21	DESCRIPTION	ISSUED FOR PERMITS	REVISIONS	3	DATE	10/08/21
REVISIONS	3	DATE	10/08/21	DESCRIPTION	ISSUED FOR PERMITS	REVISIONS	4	DATE	10/08/21
REVISIONS	4	DATE	10/08/21	DESCRIPTION	ISSUED FOR PERMITS	REVISIONS	5	DATE	10/08/21
REVISIONS	5	DATE	10/08/21	DESCRIPTION	ISSUED FOR PERMITS	REVISIONS	6	DATE	10/08/21
REVISIONS	6	DATE	10/08/21	DESCRIPTION	ISSUED FOR PERMITS	REVISIONS	7	DATE	10/08/21
REVISIONS	7	DATE	10/08/21	DESCRIPTION	ISSUED FOR PERMITS	REVISIONS	8	DATE	10/08/21
REVISIONS	8	DATE	10/08/21	DESCRIPTION	ISSUED FOR PERMITS	REVISIONS	9	DATE	10/08/21
REVISIONS	9	DATE	10/08/21	DESCRIPTION	ISSUED FOR PERMITS	REVISIONS	10	DATE	10/08/21



DATE: 10/18/22	DESIGNED BY: LEH	DRAWN BY: WBC	CHECKED BY: CAB	APPROVED BY: JZ
PROJECT NUMBER: 1218070017	SCALE: AS SHOWN	DRAWING NO: 16	PROJECT NAME: WAYNE DISPOSAL INC. SITE NO. 2 - MASTER CELL VI-F&G LINER SYSTEM DETAILS (2 OF 2)	PROJECT LOCATION: VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN
REVISION NO.	DATE	DESCRIPTION	BY	APP
1	5/18/22	SUBMITTAL 04-06 REVISIONS	WBC	JZ
2	10/18/22	SUBMITTAL 04-07 REVISIONS: FINAL GRADE MODIFICATIONS, MISCELLANEOUS CHANGES	WBC	JZ
3	7/12/21	REVISED LINER GRADIES IN P1-P4 AND OTHER MINOR CORRECTIONS	WBC	JZ
4	5/17/21	REVISED LINER GRADIES IN P1-P4 AND OTHER MINOR CORRECTIONS	WBC	JZ
5	5/17/21	ADDENDUM 1	WBC	JZ
6	5/17/21	REVISION BASED ON MEET COMMENTS	WBC	JZ
7	5/17/21	SUBMITTAL 02 AND 03 REVISIONS	WBC	JZ

U

D

C

B

A

Geosynthetic Materials

Material	Location	Description	Product	Additional Requirements
80-mil Geomembrane	Primary and secondary liners	80-mil HDPE, textured both sides	GSE HD textured, or equivalent	The CQA Consultant shall manage the direct shear testing of the geomembrane samples, as needed, per the direction of the Design Engineer and in accordance with the design requirements of the project.
40-mil Geomembrane	Final cover	40-mil HDPE, textured both sides	GSE HD textured, or equivalent	
Geosynthetic Clay Liner	Final cover and secondary liner	Sodium bentonite encapsulated between two geotextiles that are needle-punched or stitch-bonded together	CETCO Bentomat ST, or equivalent	The CQA Consultant shall manage the direct shear testing of the GCL samples, as needed, per the direction of the Design Engineer and in accordance with the design requirements of the project.
Geosynthetic Clay Liner	Primary and secondary liners	Sodium bentonite encapsulated between two geotextiles that are needle-punched together	CETCO Bentomat DN, or equivalent	
Geosynthetic Clay Liner	Primary liner	Sodium bentonite encapsulated between two geotextiles that are needle-punched and laminated to a geofilm	CETCO Bentomat CL, or equivalent	
Geosynthetic Clay Liner	Primary Liner	Polymer-modified bentonite	CETCO Resistex 200 FLW9, or equivalent	
Geocomposite	LCS	HDPE, bonded top and bottom to geotextile meeting requirements of geotextile geocomposite transmissivity* (minimum): MC V-1: 1, f3, and F4: 3.2E-04 m2/sec MC V- F2: 4.1E-04 m2/sec MC V- G4, G5, and G6: 4.2E-04 m2/sec MC V- G7: 7.4E-04 m2/sec	GSE FABRINET, or equivalent	Geonet and geotextile shall meet the requirements of the project plans and drawings.
Geocomposite	LDCRS	200-mil HDPE, bonded top and bottom to geotextile meeting requirements below	GSE FABRINET, or equivalent	
Cover Geocomposite	Final cover	Refer to Stormwater Calculation (A.6.8) for minimum geocomposite transmissivity, bonded top and bottom to geotextile meeting requirements below	GSE FABRINET, or equivalent	
Geonet	LCS and LDCRS sumps, and LDCRS collectors	200-mil HDPE	GSE HYPERNET, or equivalent	Transmissivity requirements per the direction of the Design Engineer and in accordance with the design requirements of the project.
Geotextile	All geocomposites, gravel/geotextile envelopes for LCS, and final cover perimeter drain	Nominal 8 oz/yd ² , needle-punched, non-woven polypropylene	Amoco 4508, Synthetic Industries Geotex 801, or equivalent	AASHTO M288-96 requirements for Separation Geotextile (Class 2)
Geogrid	Above structural fill	Biaxial Polymeric Grid	Huesker Fortrac 80-80, or equivalent	None

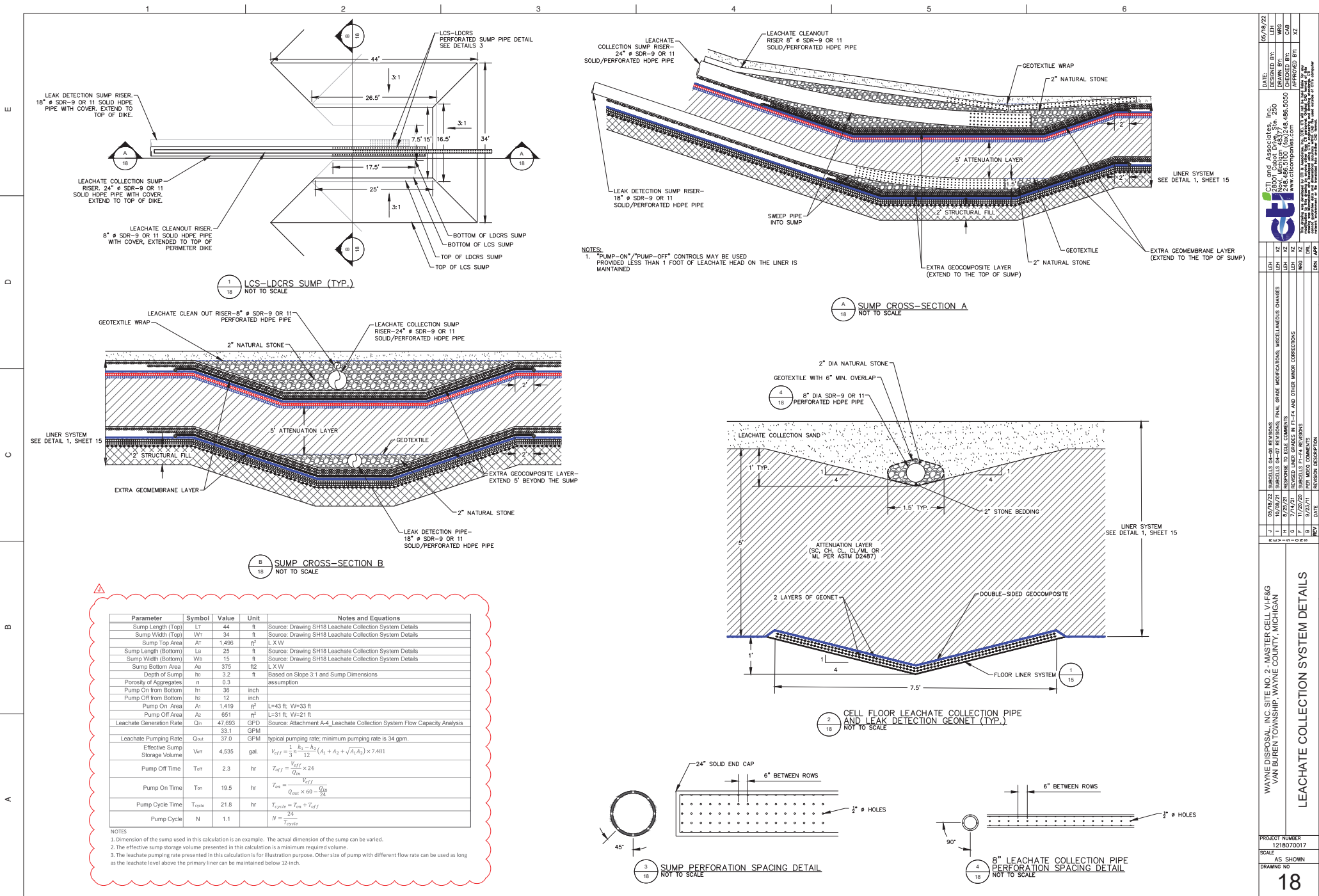
LCS denotes leachate collection system

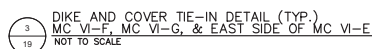
LDCRS denotes leak detection, collection, and removal system.

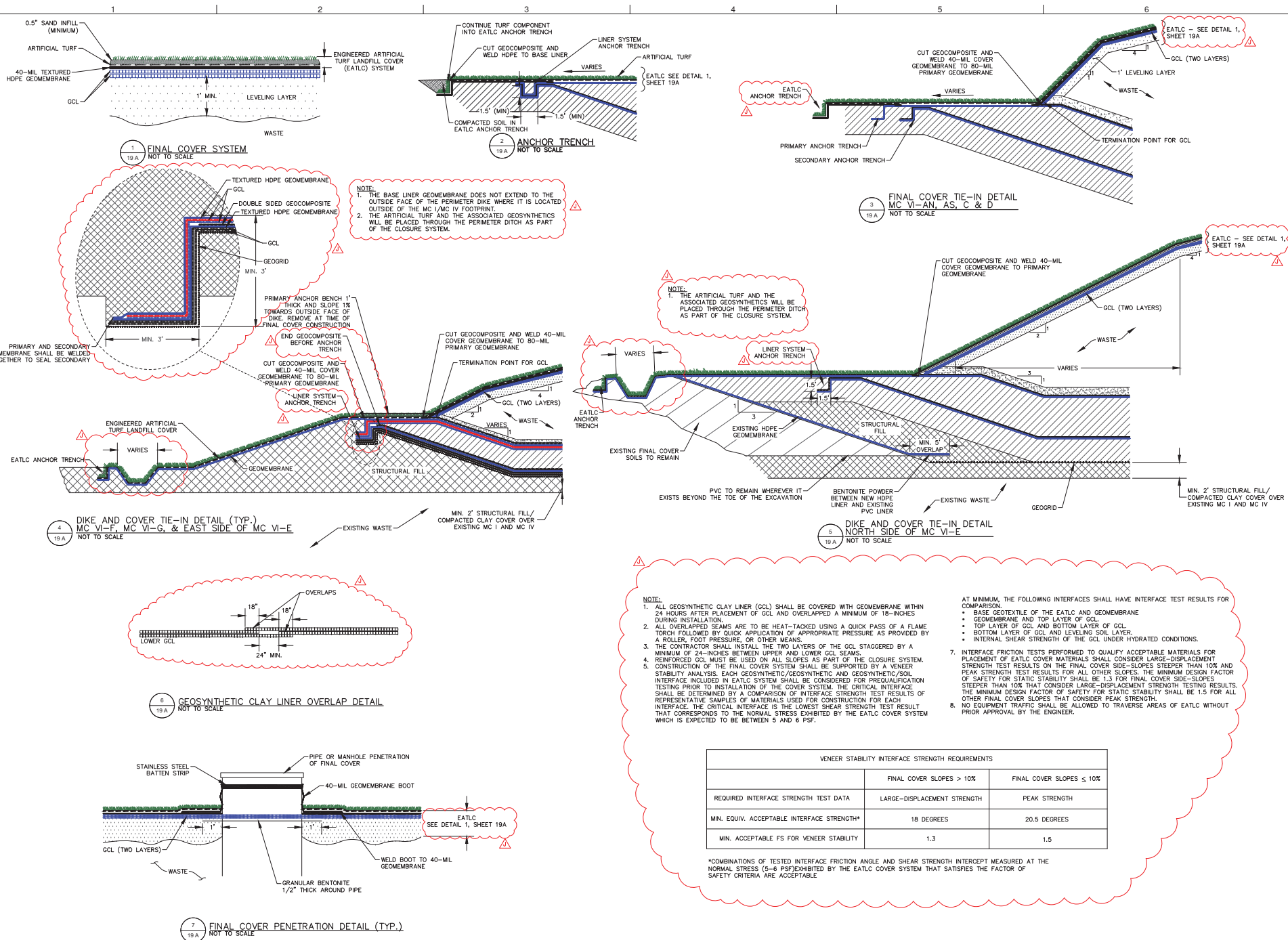
*Geocomposite Transmissivity Test Requirements:

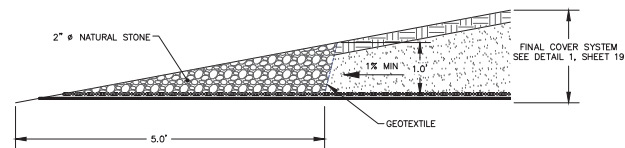
Per ASTM 4716 with a gradient of 0.1, confining pressure of 10,000 psf, boundary conditions of geomembrane/sand; transmissivity test should be run until the sample reaches equilibrium (becomes asymptotic) or 100 hours, whichever comes first.

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



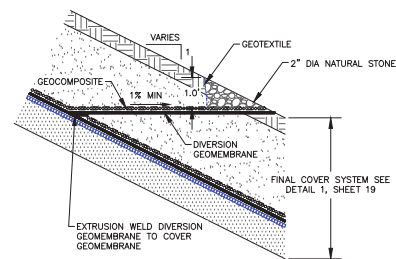






2 PERIMETER TOE DRAIN
20 NOT TO SCALE

1. DIMENSIONS AND CONFIGURATION OF DOWNSLOPE CHANNEL CONTAINMENT BERMS AND CHANNEL WILL BE DETERMINED BY THE EROSION CONTROL CHANNEL LINING CHOSEN. CHANNEL AND OUTLET ENERGY DISSIPATER DESIGN TO BE COMPLETED PRIOR TO CONSTRUCTION.



4
20

GEOCOMPOSITE OUTLET DETAIL (TYP.)
NOT TO SCALE

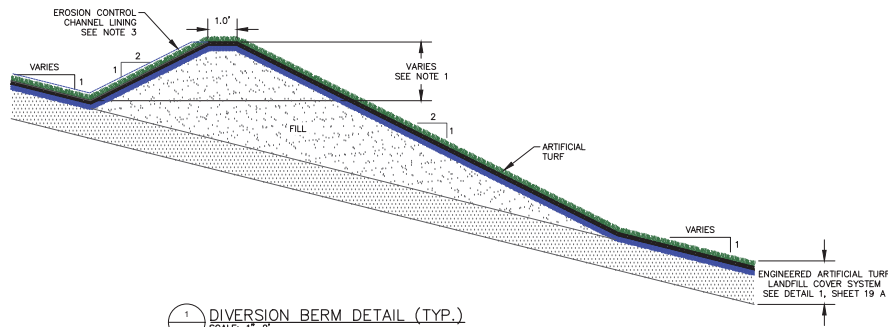
1. ALTERNATE GEOCOMPOSITE OUTLETS SUCH AS PIPE MAY BE USED.

WAYNE DISPOSAL, INC. SITE NO. 2- MASTER CELL V/LF#G VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN		PROJECT NUMBER 1218070017		DATE 10/09/21	
SCALE AS SHOWN		DESIGNED BY: WRG		LEH	
DRAWING NO. 20		DRAWN BY: WRG		CAM	
CHECKED BY: XZ		APPROVED BY: XZ		XZ	


eti & Associates, Inc.
 28001 Carol Drive, Ste. 250
 Novi, Michigan 48275
 Tel: 248.468.5550
 Fax: 248.468.5560
 www.eticonsultants.com

This drawing was prepared by E.T.I. Consultants, Inc. (E.T.I.) under contract to the client. E.T.I. is not responsible for the accuracy of the information provided by the client. E.T.I. is not responsible for the accuracy of the information provided by the client. E.T.I. is not responsible for the accuracy of the information provided by the client.

NO.	REVISION	DATE	BY	DESCRIPTION
1	10/09/21	WRG	XZ	SUBURBS 04-07 REVISIONS: FINAL GRADE MODIFICATIONS, MISCELLANEOUS CHANGES
2	11/23/20	WRG	XZ	SUBURBS 17-14 REVISIONS
3	11/23/20	WRG	XZ	REVISION DESCRIPTION
4	11/23/20	WRG	XZ	REVISION DESCRIPTION



1
20 A DIVERSION BERM DETAIL (TYP.)
SCALE: 1"=2'

- NOTE:
1. ALL DIVERSION BERMS TO BE 2FT HIGH (MINIMUM).
 2. DIVERSION BERM SLOPE TO BE 2% UNLESS NOTED OTHERWISE ON DRAWINGS.
 3. DIMENSIONS AND CONFIGURATION OF DIVERSION BERMS WILL BE DETERMINED BY THE EROSION CONTROL CHANNEL LINING CHOSEN, CHANNEL, AND OUTLET ENERGY DISSIPATER DESIGN TO BE COMPLETED PRIOR TO CONSTRUCTION.

PROJECT NUMBER 1218070017		SCALE AS SHOWN		DRAWING NO 20 A	
WAYNE DISPOSAL, INC. SITE NO. 2 - MASTER CELL VLF&G VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN ENGINEERED TURF STORMWATER MANAGEMENT SYSTEM DETAILS					
CTI and Associates, Inc. 2500 Northway Novi, Michigan 48275 248.466.5100 (tel) 248.466.5050 www.cticompanies.com					
DATE: 10/08/21 DESIGNED BY: LKH DRAWN BY: WBG CHECKED BY: CMB IN CHARGE: JZ					
REVISIONS: FINAL GRADE MODIFICATIONS, MISCELLANEOUS CHANGES					
DATE: 10/08/21					
REVISION DESCRIPTION: JZ					
DATE: 10/08/21					
REVISION DESCRIPTION: JZ					

