

# ***CQM, INC.***

***Engineering – Survey – Material Testing***

**2679 Continental Drive      Green Bay, Wisconsin 54311-6627**

**Phone: (920) 465-3911**

**Fax: (920) 465-3913**

November 16, 2016

Mr. Geoffrey Strack, P.E.  
SKB Environmental  
251 Starkey Street  
St. Paul, Minnesota 55107-1821

RE:    CFR 257.60 Certification  
       Phase 3  
       SKB Lansing Landfill

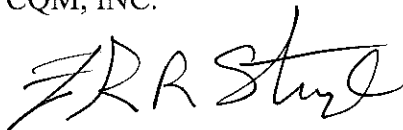
Dear Mr. Strack:

CQM, INC. has provided a design of the base grades for Phase 3 Cell 2, for the SKB Lansing Landfill. The design base grades are illustrated on the attached Drawing No. 1. CQM, INC. has also received a groundwater surface map representing the high water table of the uppermost aquifer (April 13, 2015). The groundwater map was provided by Weaver Consultants Group. The groundwater map is illustrated on the attached Figure 1 prepared by Weaver Consultants Group and on the attached Drawing No. 1 prepared by CQM, INC.

CQM, INC. certifies that Phase 3 Cell 2 was constructed in accordance with the design base grades and that the design base grades comply with the locational requirement in CFR 257.60.

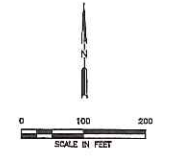
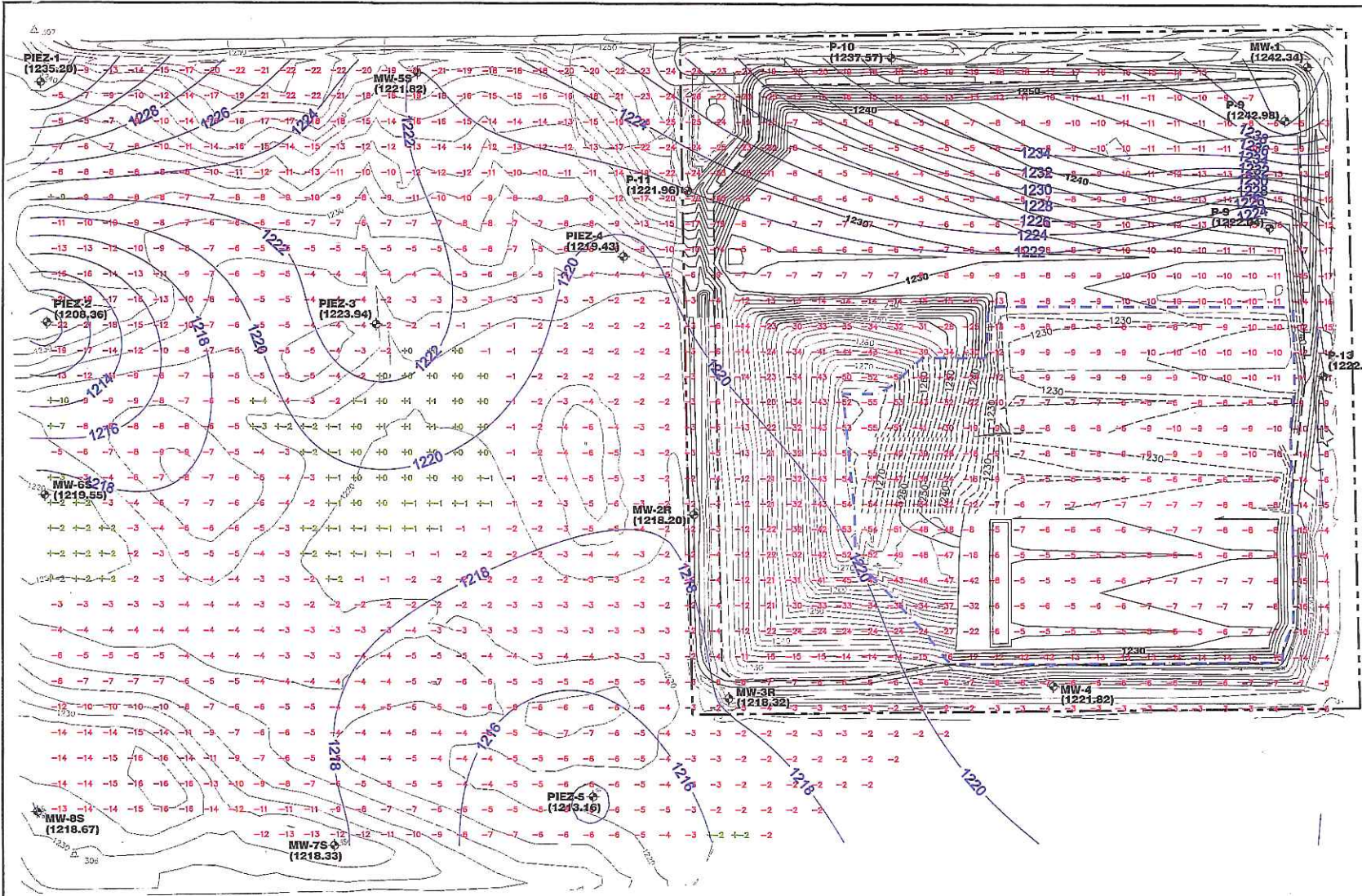
Sincerely,

CQM, INC.



Frank R. (Nick) Sturzl, P.E.  
Project Manager

Attachments:      Drawing Nos. 1 and 2  
                              Figure 1



**LEGEND**

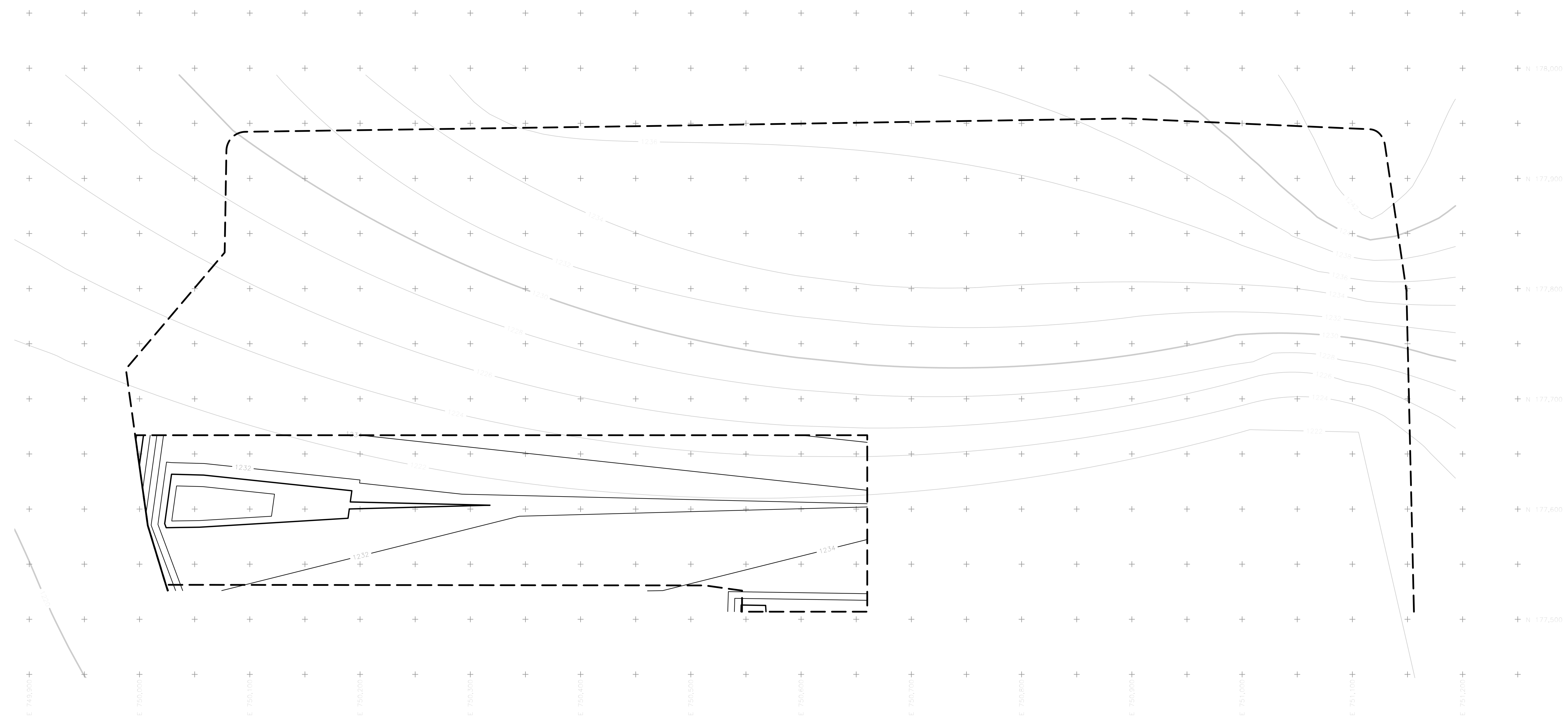
- PROPERTY BOUNDARY
- - - PERMITTED LIMIT OF WASTE
- - - LIMIT OF CONSTRUCTED LINER
- NOVEMBER 2015 TOPOGRAPHY (SEE NOTE 1)
- ROADS
- - - 1230 AS-BUILT TOP OF LINER PLAN
- - - 1230 AS-BUILT TOP OF LINER PLAN
- - - 1222 HIGHEST MEASURED GROUNDWATER
- ⊕ MW-2R (1220.80) MONITOR WELL OR PIEZOMETER WITH APRIL 2015 GROUNDWATER ELEVATION POSTED IN FT-MSL
- - - DEPTH BETWEEN APRIL 2015 MEASURED GROUNDWATER AND TOP OF LINER/2015 TOPOGRAPHY

- NOTES:**
1. EXISTING CONTOURS AND ELEVATIONS PROVIDED BY THE CONTINENTAL MAPPING CONSULTANTS, INC. COMPILED FROM AERIAL PHOTOGRAPHY FLOWN NOVEMBER 2, 2015.
  2. ONLY WATER TABLE MONITOR WELLS AND PIEZOMETERS HAVE BEEN CONSIDERED FOR GROUNDWATER ELEVATIONS.
  3. HIGHEST WATER TABLE GROUNDWATER ELEVATIONS MEASURED ON APRIL 13, 2015.

**DRAFT**

<input type="checkbox"/> DRAFT <input checked="" type="checkbox"/> FOR INFORMATION PURPOSES ONLY <input type="checkbox"/> ISSUED FOR CONSTRUCTION		PREPARED FOR <b>WASTE CONNECTIONS, INC.</b>		SBK LANSING LANDFILL GROUNDWATER SEPARATION									
DATE: 04/2016 FILE: 0601-602-11 CAB: 1-CO2EWA000000		DRAWN BY: SPF DESIGN BY: RSF REVIEWED BY: JAC		LANSING LANDFILL MOWER COUNTY, MINNESOTA									
Weaver Consultants Group		<table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>REVISIONS</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		NO.	DATE	REVISIONS	DESCRIPTION					WWW.WCGRP.COM	
NO.	DATE	REVISIONS	DESCRIPTION										
COPYRIGHT © 2016 WEAVER CONSULTANTS GROUP, LLC. ALL RIGHTS RESERVED.		FIGURE 1		FIGURE 1									

C:\Project Data\Map\GIS\Landfill Job Files\GIS\Groundwater.dwg 11/17/2016 8:41 AM Rick Orthing



**LEGEND**

— 780 — HIGH GROUNDWATER CONTOURS (APRIL 2015)

— 780 — DESIGN BASE CONTOURS (TOP OF LINER)

- - - - - PROPOSED REMAINING LINER LIMITS



RELEASE	DATE:	BY:
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NO.	DATE:	BY:
DESCRIPTION		
REVISIONS		

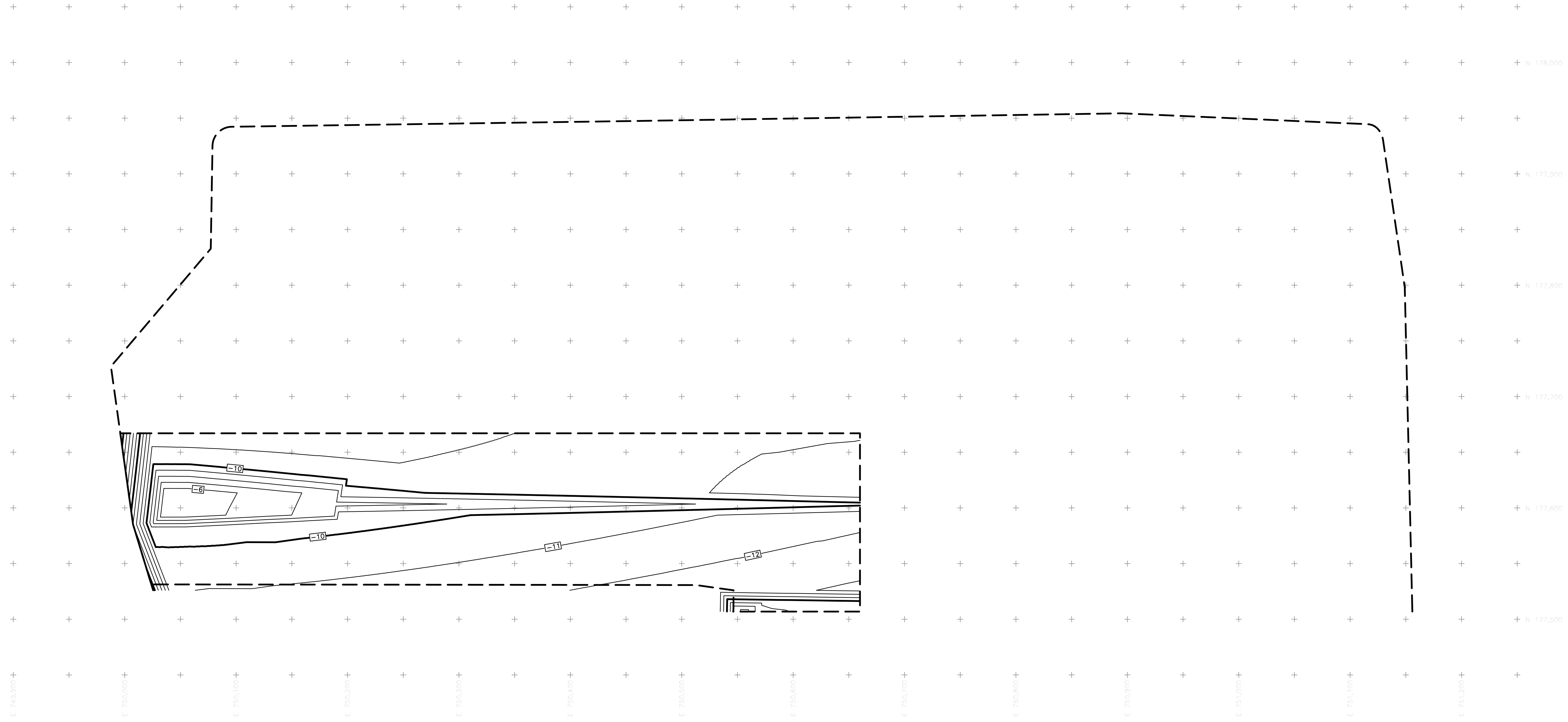


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 Engineering - Surveying - Material Testing  
 2679 Continental Drive  
 Green Bay, WI 54311

**Proposed Base Grades Phases 3 Cell 2**

SKB Lansing Landfill  
 SKB Environmental, INC  
 Lansing Township  
 Mower County, Minnesota

<b>DRAWN BY:</b>	NGG
<b>DATE:</b>	Nov. 2016
<b>SCALE:</b>	1" = 50'
<b>DRAWING NO.</b>	<b>1</b>



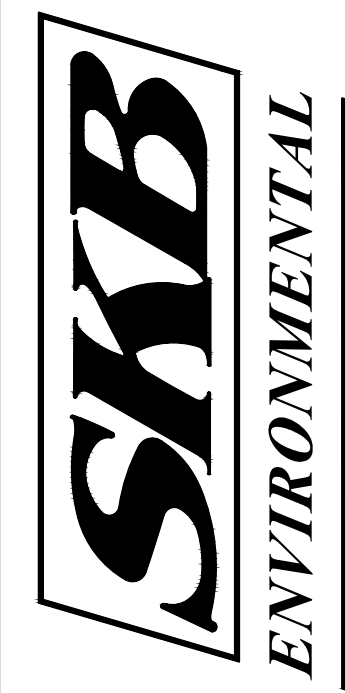
**LEGEND**  
 -10 CUT/FILL (BASE VS HIGH GROUNDWATER)  
 --- PHASE 3 CELL 2 LINER LIMITS



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DESCRIPTION		

REVISIONS



**CQM, INC.**  
 Engineering - Surveying - Material Testing  
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 Green Bay, WI 54311

**Base Grades vs Groundwater Isopach  
 Phase 3 Cell 2**

SKB Lansing Landfill  
 SKB Environmental, INC  
 Lansing Township  
 Mower County, Minnesota

<b>DRAWN BY:</b>	NGG
<b>DATE:</b>	Nov. 2016
<b>SCALE:</b>	1" = 50'
<b>DRAWING NO.</b>	2