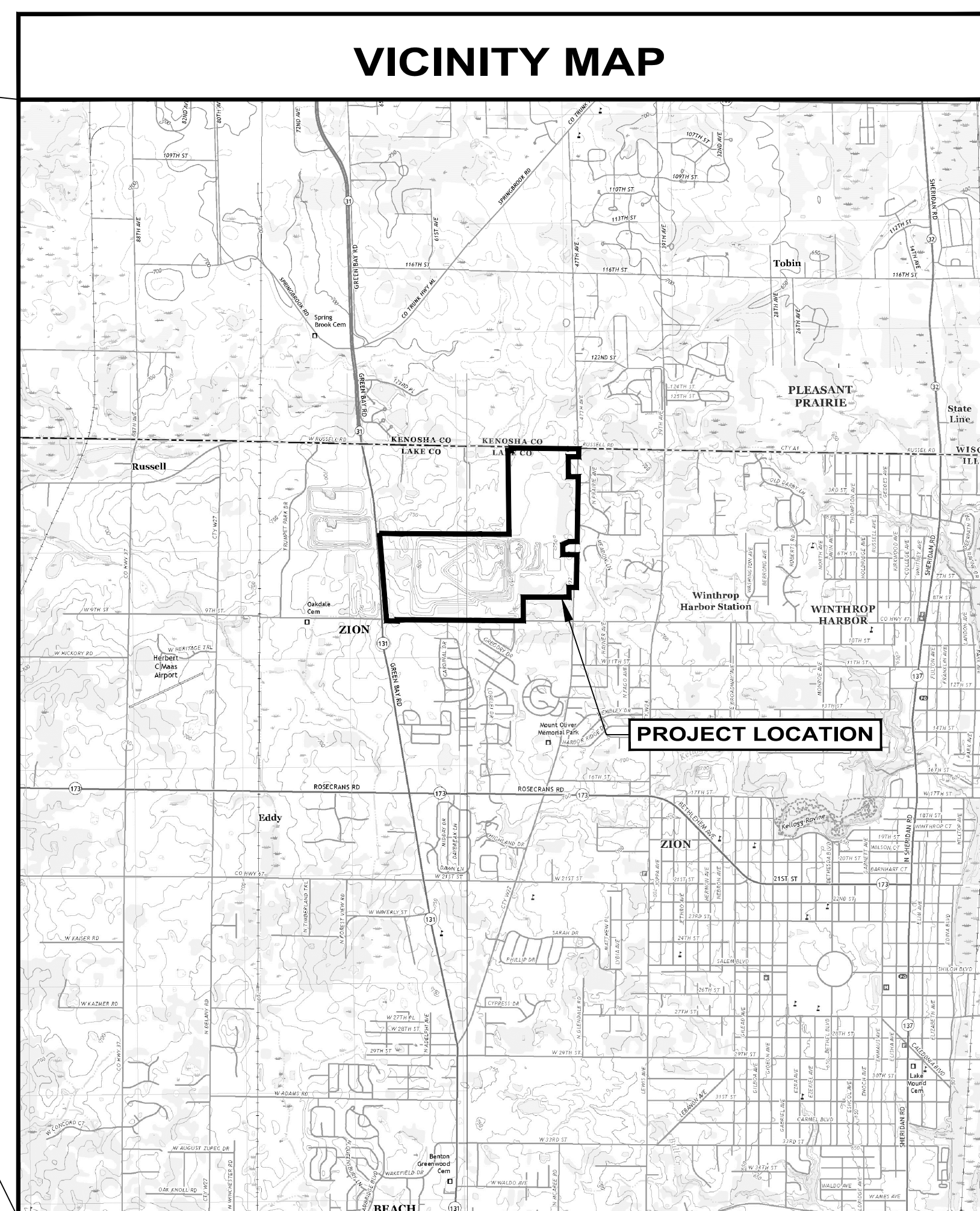
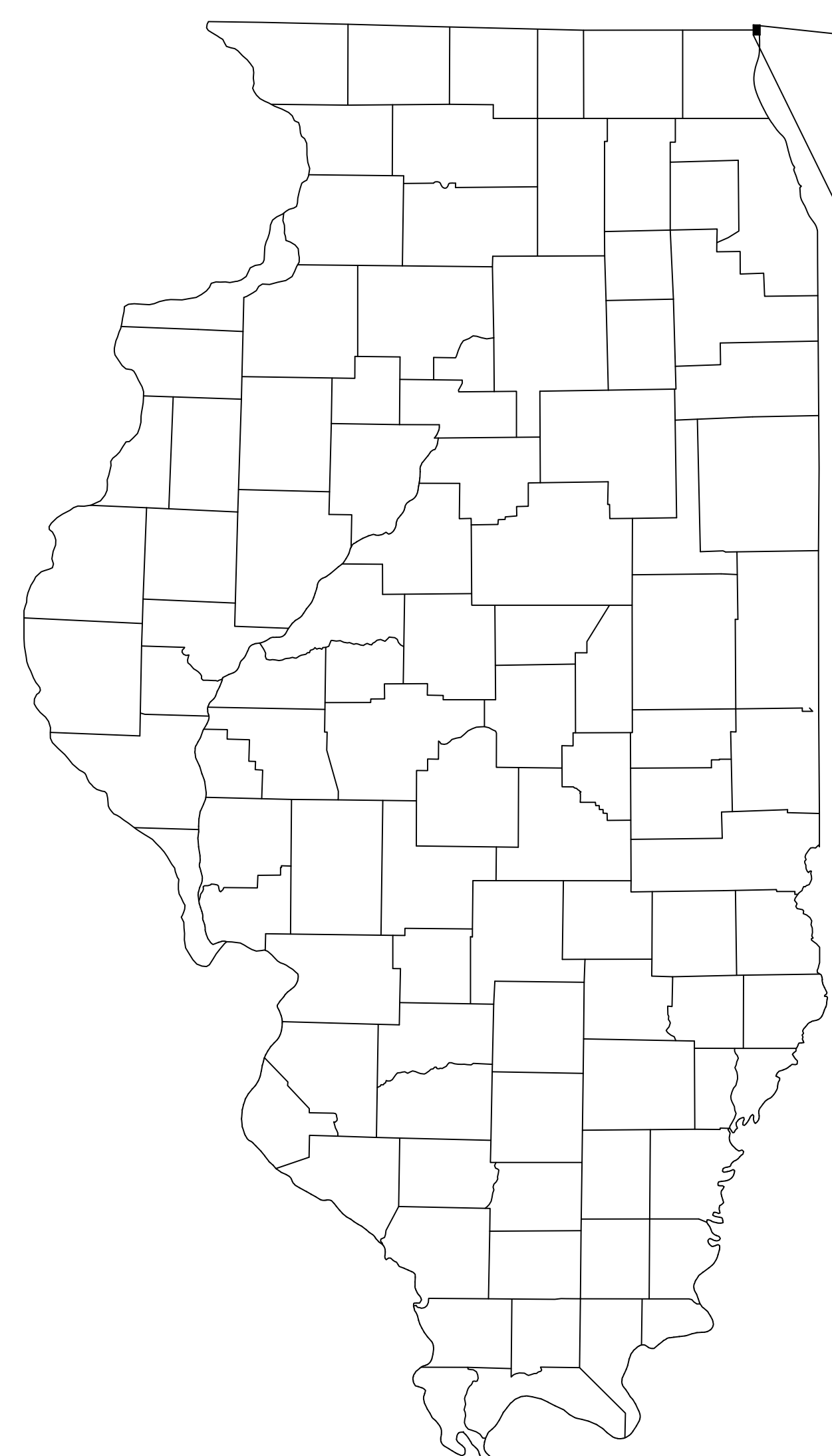


GEOLOGIC DRAWINGS

ZION LANDFILL SITE 2 NORTH EXPANSION APPLICATION FOR IEPA PERMIT APPROVAL



PROJECT LOCATION MAP

SCALE: 1" = 3500'



DRAWING INDEX			
SHEET NUMBER	SHEET TITLE	SHEET NUMBER	SHEET TITLE
G1	TITLE SHEET	G25	POTENTIOMETRIC MAP OF UPPER SHALLOW DRIFT - MAY 2019
G2	WATER WELL LOCATION MAP	G26	POTENTIOMETRIC MAP OF LOWER SHALLOW DRIFT - MAY 2019
G3	CONTINUOUSLY SAMPLED SOIL BORING / PIEZOMETER LOCATION MAP FOR USE IN CROSS SECTION AND ISOPACH DEVELOPMENT	G27	POTENTIOMETRIC MAP OF UPPER SHALLOW DRIFT - JUNE 2019
G4	MONITORING WELL, PIEZOMETER, AND GAS MONITORING PROBE LOCATION MAP	G28	POTENTIOMETRIC MAP OF LOWER SHALLOW DRIFT - JUNE 2019
G5	GEOLOGICAL CROSS SECTION A-A'	G29	POTENTIOMETRIC MAP OF UPPER SHALLOW DRIFT - JULY 2019
G6	GEOLOGICAL CROSS SECTION B-B'	G30	POTENTIOMETRIC MAP OF LOWER SHALLOW DRIFT - JULY 2019
G7	GEOLOGICAL CROSS SECTION C-C'	G31	POTENTIOMETRIC MAP OF UPPER SHALLOW DRIFT - OCTOBER 2019
G8	GEOLOGICAL CROSS SECTION D-D'	G32	POTENTIOMETRIC MAP OF LOWER SHALLOW DRIFT - OCTOBER 2019
G9	GEOLOGICAL CROSS SECTION E-E'	G33	POTENTIOMETRIC MAP OF UPPER SHALLOW DRIFT - FEBRUARY 2020
G10	GEOLOGICAL CROSS SECTION F-F'	G34	POTENTIOMETRIC MAP OF LOWER SHALLOW DRIFT - FEBRUARY 2020
G11	GEOLOGICAL CROSS SECTION G-G'	G35	POTENTIOMETRIC MAP OF UPPER SHALLOW DRIFT - MAY 2020
G12	GEOLOGICAL CROSS SECTION H-H'	G36	POTENTIOMETRIC MAP OF LOWER SHALLOW DRIFT - MAY 2020
G13	GEOLOGICAL CROSS SECTION I-I'	G37	POTENTIOMETRIC MAP OF UPPER SHALLOW DRIFT - AUGUST 2020
G14	GEOLOGICAL CROSS SECTION J-J'	G38	POTENTIOMETRIC MAP OF LOWER SHALLOW DRIFT - AUGUST 2020
G15	GEOLOGICAL CROSS SECTION K-K'	G39	POTENTIOMETRIC MAP OF UPPER SHALLOW DRIFT - OCTOBER 2020
G16	GEOLOGICAL CROSS SECTION L-L'	G40	POTENTIOMETRIC MAP OF LOWER SHALLOW DRIFT - OCTOBER 2020
G17	TOP ELEVATION OF WADSWORTH TILL	G41	POTENTIOMETRIC MAP OF UPPER SHALLOW DRIFT - FEBRUARY 2021
G18	THICKNESS OF WADSWORTH TILL	G42	POTENTIOMETRIC MAP OF LOWER SHALLOW DRIFT - FEBRUARY 2021
G19	TOP ELEVATION OF SHALLOW DRIFT	G43	POTENTIOMETRIC MAP OF UPPER SHALLOW DRIFT - MAY 2021
G20	THICKNESS OF WADSWORTH TILL BELOW EXCAVATION GRADES	G44	POTENTIOMETRIC MAP OF LOWER SHALLOW DRIFT - MAY 2021
G21	POTENTIOMETRIC MAP OF UPPER SHALLOW DRIFT - FEBRUARY 2019	G45	POTENTIOMETRIC MAP OF UPPER SHALLOW DRIFT - AUGUST 2021
G22	POTENTIOMETRIC MAP OF LOWER SHALLOW DRIFT - FEBRUARY 2019	G46	POTENTIOMETRIC MAP OF LOWER SHALLOW DRIFT - AUGUST 2021
G23	POTENTIOMETRIC MAP OF UPPER SHALLOW DRIFT - MARCH 2019	G47	POTENTIOMETRIC MAP OF UPPER SHALLOW DRIFT - NOVEMBER 2021
G24	POTENTIOMETRIC MAP OF LOWER SHALLOW DRIFT - MARCH 2019	G48	POTENTIOMETRIC MAP OF LOWER SHALLOW DRIFT - NOVEMBER 2021
		G49	POTENTIOMETRIC MAP OF UPPER SHALLOW DRIFT - FEBRUARY 2022
		G50	POTENTIOMETRIC MAP OF LOWER SHALLOW DRIFT - FEBRUARY 2022

GENERAL NOTES

1. EXISTING MAP OBTAINED FROM U.S.G.S. 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE MAPS, WADSWORTH (2018), ZION (2018), KENOSHA (2016), PLEASANT PRAIRIE (2016) - LAKE COUNTY, ILLINOIS. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.
2. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.

LEGEND	
SYMBOL	DESCRIPTION
_____	APPROXIMATE PROPOSED FACILITY BOUNDARY

DEVIN A. MOOSE, P.E.
LICENSE NUMBER 062-044472

DATE

MARTIN N. FALLON, P.G.
LICENSE NUMBER 196.001182

DATE

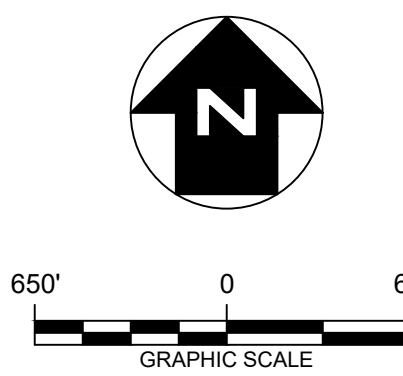
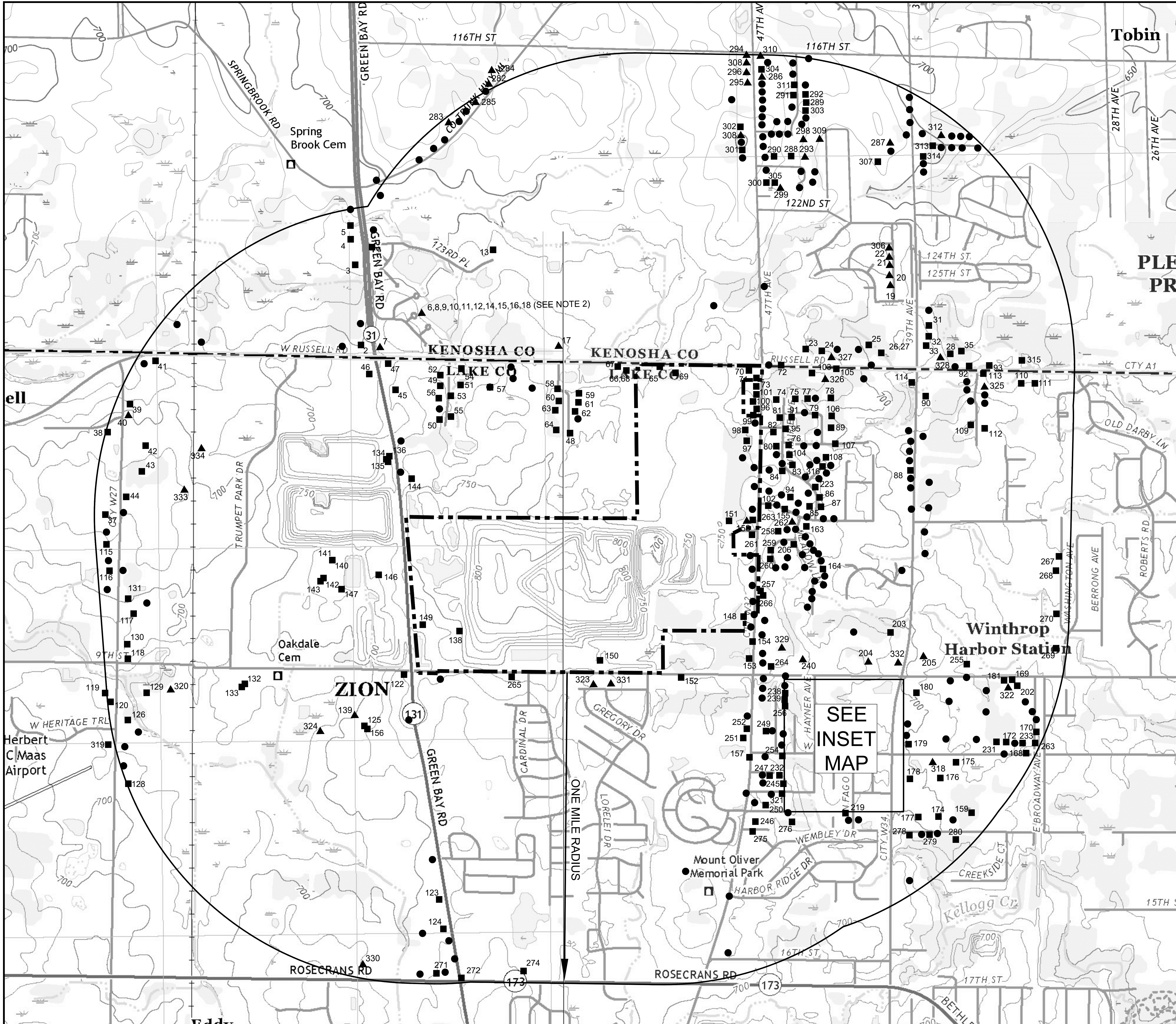
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

TITLE SHEET

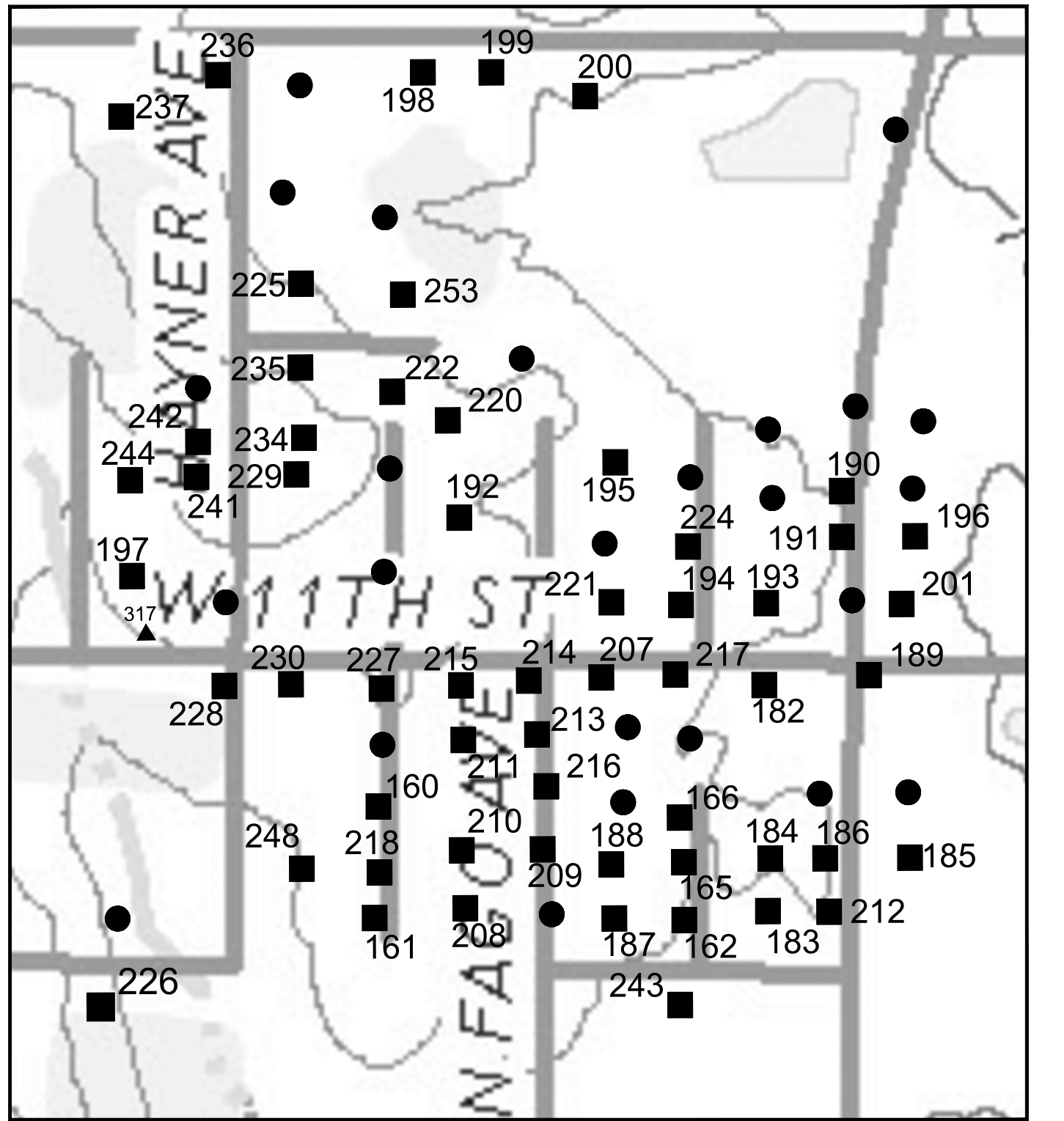
PROJ. NO.: 631020105	DATE: MAY 2022
DESIGNED BY: MNF	DRAWING NO. G1
DRAWN BY: NV	1 OF 50 SHEETS
CHECKED BY: MNF	
APPROVED BY: DAM	



LEGEND

- APPROXIMATE FACILITY BOUNDARY
- APPROXIMATE EXISTING WASTE BOUNDARY
- WATER WELL IDENTIFIED BY ILLINOIS STATE WATER SURVEY, ILLINOIS STATE GEOLOGICAL SURVEY, OR WISCONSIN GEOLOGICAL AND NATURAL HISTORY SURVEY WELL LOGS AND VERIFIED IN THE FIELD
- WATER WELL IDENTIFIED BY ILLINOIS STATE WATER SURVEY, ILLINOIS STATE GEOLOGICAL SURVEY, OR WISCONSIN GEOLOGICAL AND NATURAL HISTORY SURVEY WELL LOG, NOT FIELD VERIFIED
- PROBABLE WATER WELL LOCATION IDENTIFIED IN THE FIELD. NO WELL LOG ON FILE.

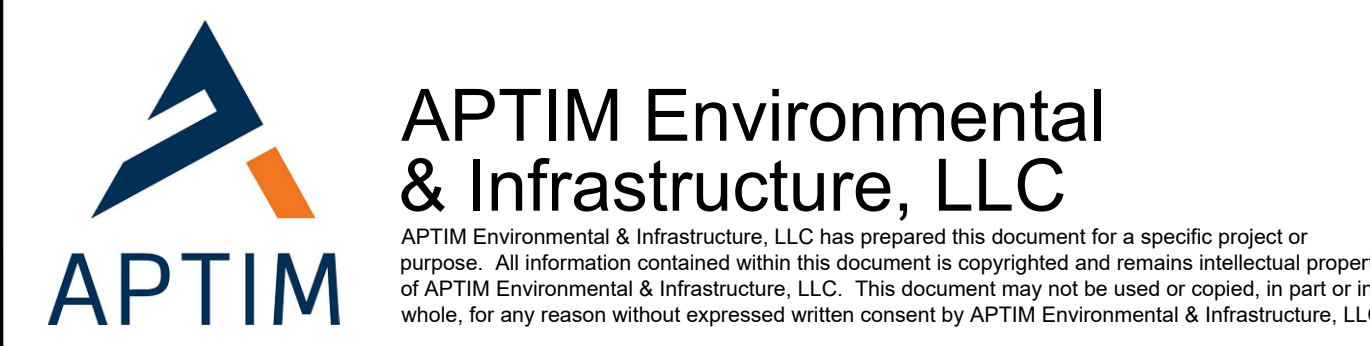
INSET MAP



NOTES

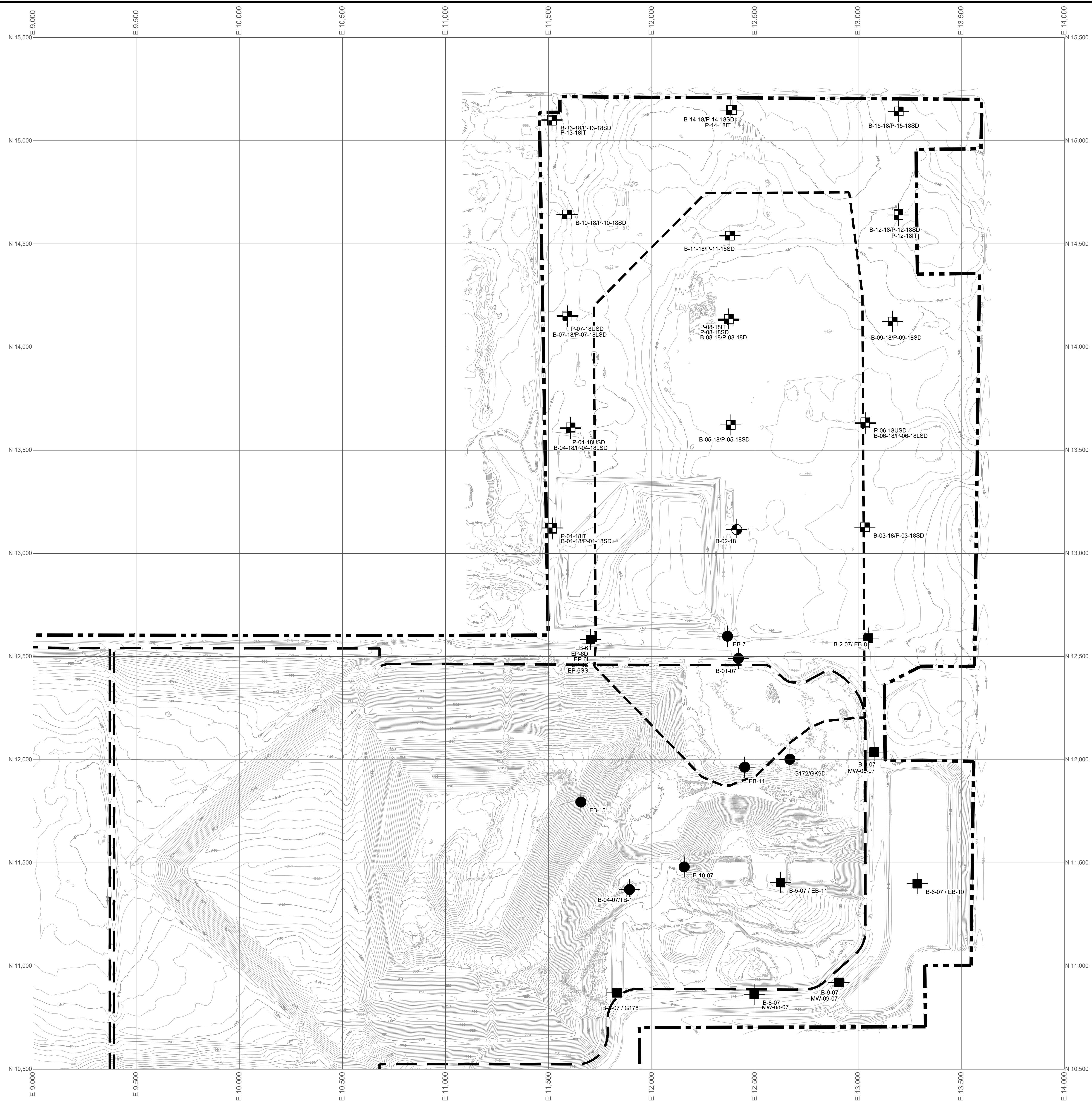
1. TEN WELL LOGS WERE RECEIVED WHICH PLOT IN A SUBDIVISION SOUTHWEST OF BIG OAKS GOLF CLUB. FOR SIMPLICITY, THESE WELLS WERE ILLUSTRATED USING ONE SYMBOL. NONE OF THESE WELLS WERE FIELD VERIFIED AS THIS SUBDIVISION HAS WATER SERVICE.
2. A TOTAL OF 173 PROBABLE WATER WELL LOCATIONS WERE IDENTIFIED IN THE FIELD WITHIN ONE MILE OF THE FACILITY FOR WHICH NO LOG WAS ON FILE WITH ANY STATE OR COUNTY AGENCY. THESE PROBABLE WELL LOCATIONS WERE IDENTIFIED BY ASSUMING THAT EACH RESIDENT LOCATION NOT SERVED BY A PUBLIC WATER SUPPLY HAS A PRIVATE WELL FOR SUPPLYING DRINKING WATER.
3. FOR A COMPLETE DESCRIPTION OF THE WATER WELL LOCATION PROCESS, SEE SECTION 2.2 OF THE APPLICATION.
4. EXISTING MAP OBTAINED FROM U.S.G.S. 7.5 MINUTE SERIES (TOPOGRAPHIC) QUADRANGLE MAPS, WADSWORTH (2018), ZION (2018), KENOSHA (2016), PLEASANT PRAIRIE (2016) - LAKE COUNTY, ILLINOIS.
5. WATER WELL RECORDS WERE OBTAINED FROM THE ILLINOIS STATE WATER SURVEY (ISWS), THE ILLINOIS STATE GEOLOGICAL SURVEY (ISGS) ON FILE AS OF APRIL 2006, AND THE WISCONSIN GEOLOGICAL AND NATURAL HISTORY SURVEY (WGNHS) ON FILE AS MAY 2006.
6. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.

REV. NO.	DATE	DESCRIPTION



ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS
WATER WELL LOCATION MAP

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.:	G2
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		
			2 OF 50 SHEETS



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE EXISTING WASTE BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - PREVIOUSLY ADVANCED SOIL BORING / INSTALLED PIEZOMETER LOCATION
 - PREVIOUSLY ADVANCED SOIL BORING LOCATION
 - EXPANSION SOIL BORING / INSTALLED PIEZOMETER LOCATION
 - EXPANSION SOIL BORING LOCATION

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 3. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.
 4. IT = INTRA TILL
SD = SHALLOW DRIFT
USD = UPPER SHALLOW DRIFT
LSD = LOWER SHALLOW DRIFT
D = DEEP
I = INTERMEDIATE
S = SHALLOW
US = UPPER SHALLOW
 5. FOR LOCATIONS OF PREVIOUSLY ADVANCED BORINGS AT THE EXISTING FACILITY THAT WERE NOT CONTINUOUSLY SAMPLED AND/OR WERE NOT USED IN CROSS SECTION AND ISOPACH DEVELOPMENT FOR SITE 2 NORTH EXPANSION, A BORING LOCATION MAP HAS BEEN PROVIDED IN FRONT OF THOSE BORING LOGS IN APPENDIX G. THAT DRAWING IS ALSO DESIGNATED G3, THOUGH IS DATED FEBRUARY 2010 AS IT WAS PREPARED FOR THE PREVIOUSLY APPROVED SITE 2 EAST EXPANSION.

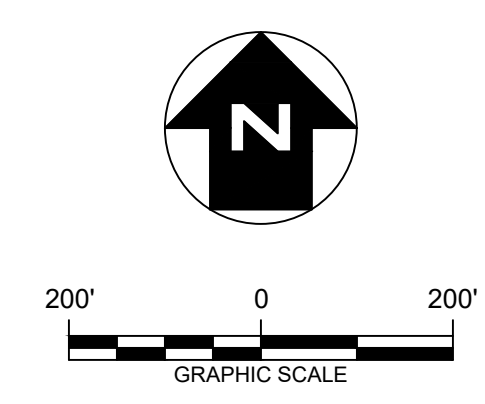
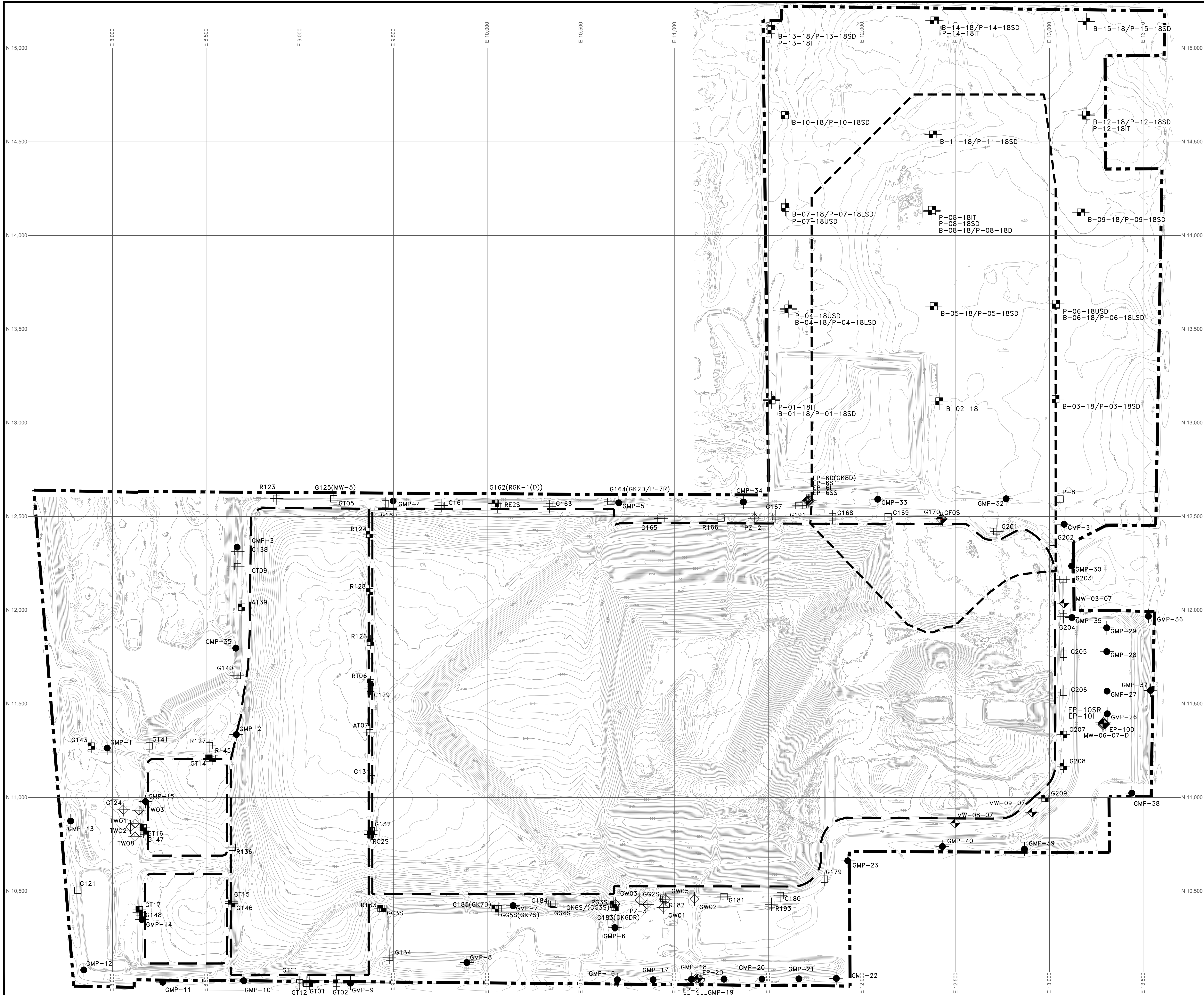
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**CONTINUOUSLY SAMPLED SOIL BORING / PIEZOMETER
LOCATION MAP FOR USE IN CROSS SECTION AND
ISOPACH DEVELOPMENT**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.	G3
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



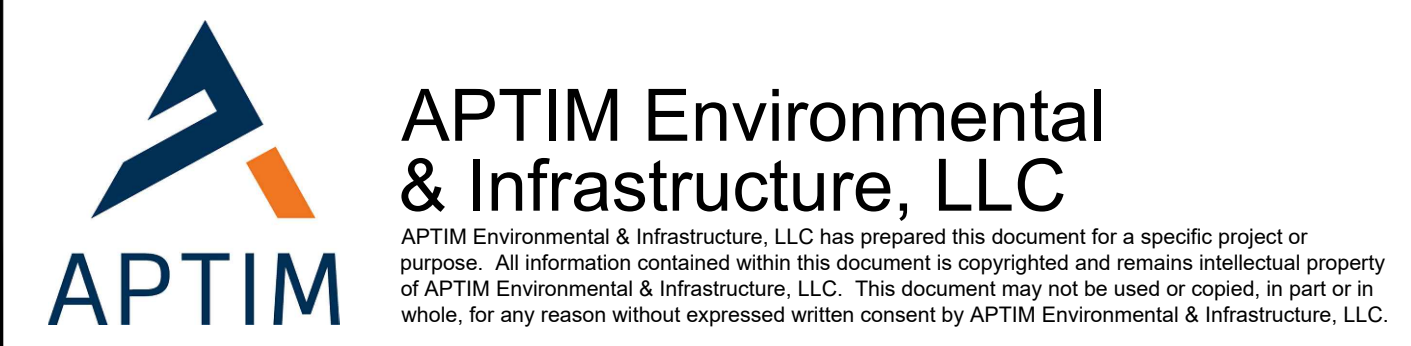
LEGEND

- APPROXIMATE PROPOSED FACILITY BOUNDARY
- APPROXIMATE EXISTING WASTE BOUNDARY
- APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
- MONITORING WELL CONTINUOUSLY SAMPLED BORING LOCATION
- MONITORING WELL NON-CONTINUOUSLY SAMPLED BORING LOCATION
- LANDFILL GAS PROBE / CONTINUOUSLY SAMPLED BORING LOCATION
- PIEZOMETER / CONTINUOUSLY SAMPLED BORING LOCATION
- PIEZOMETER / NON-CONTINUOUSLY SAMPLED BORING LOCATION

NOTES

1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
2. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
3. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.
4. IT = INTRA TILL
SD = SHALLOW DRIFT
USD = UPPER SHALLOW DRIFT
LSD = LOWER SHALLOW DRIFT
D = DEEP
I = INTERMEDIATE
S = SHALLOW
US = UPPER SHALLOW

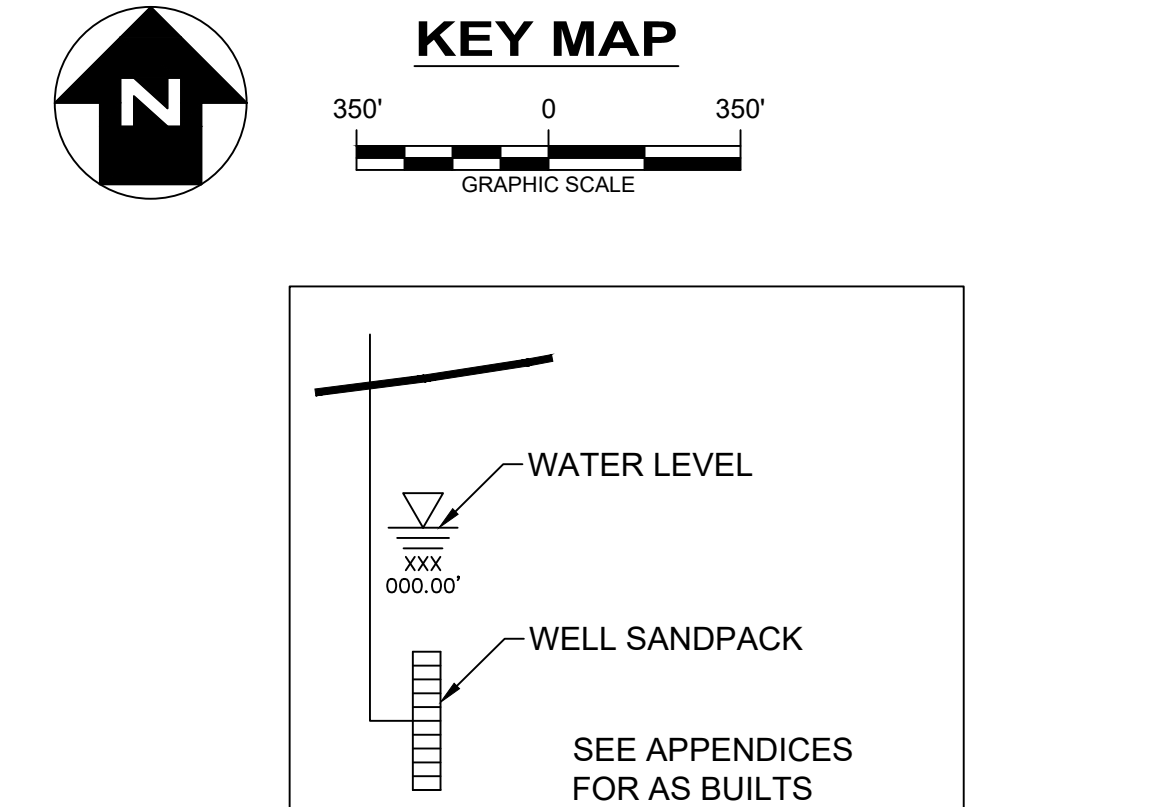
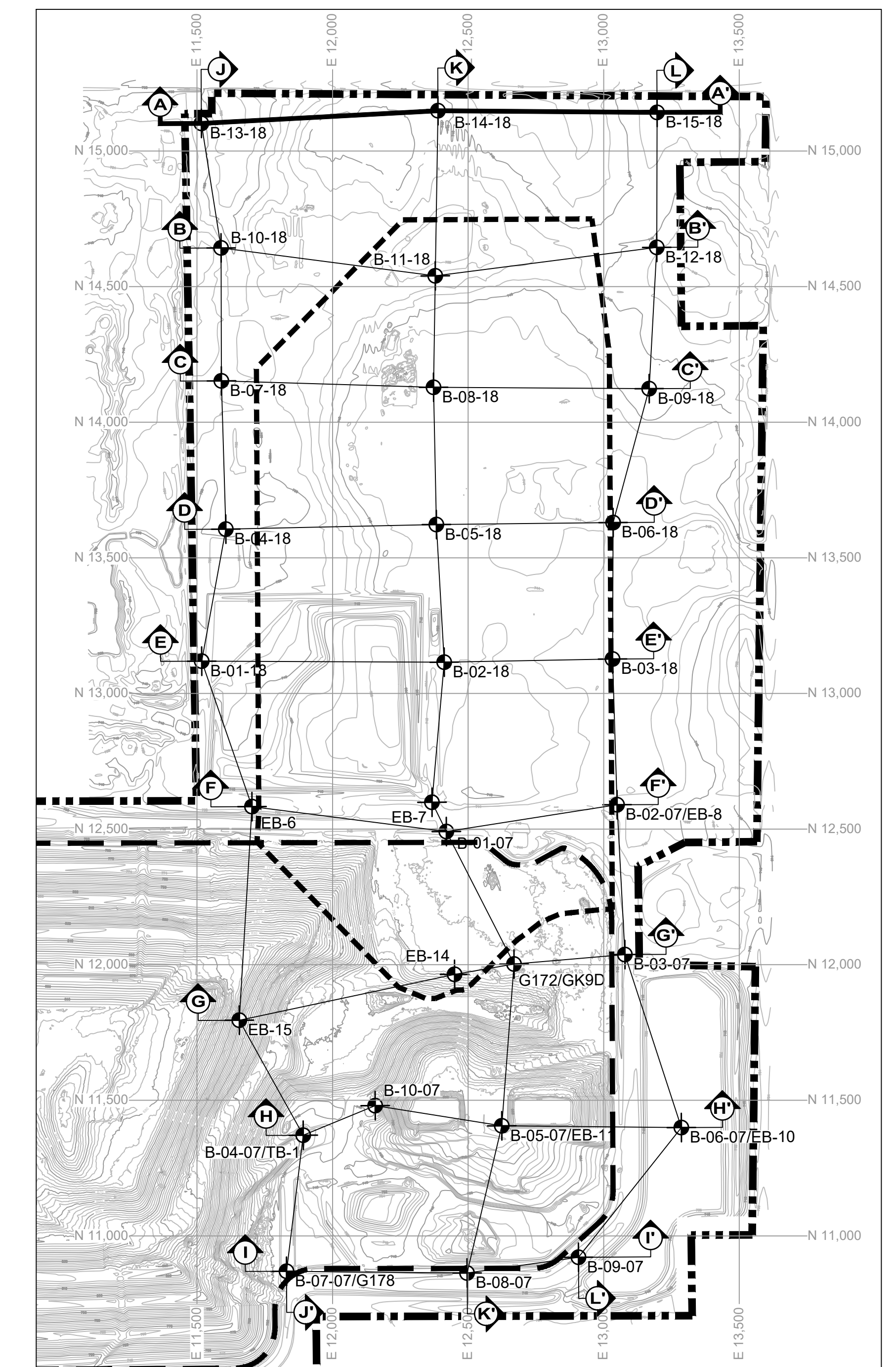
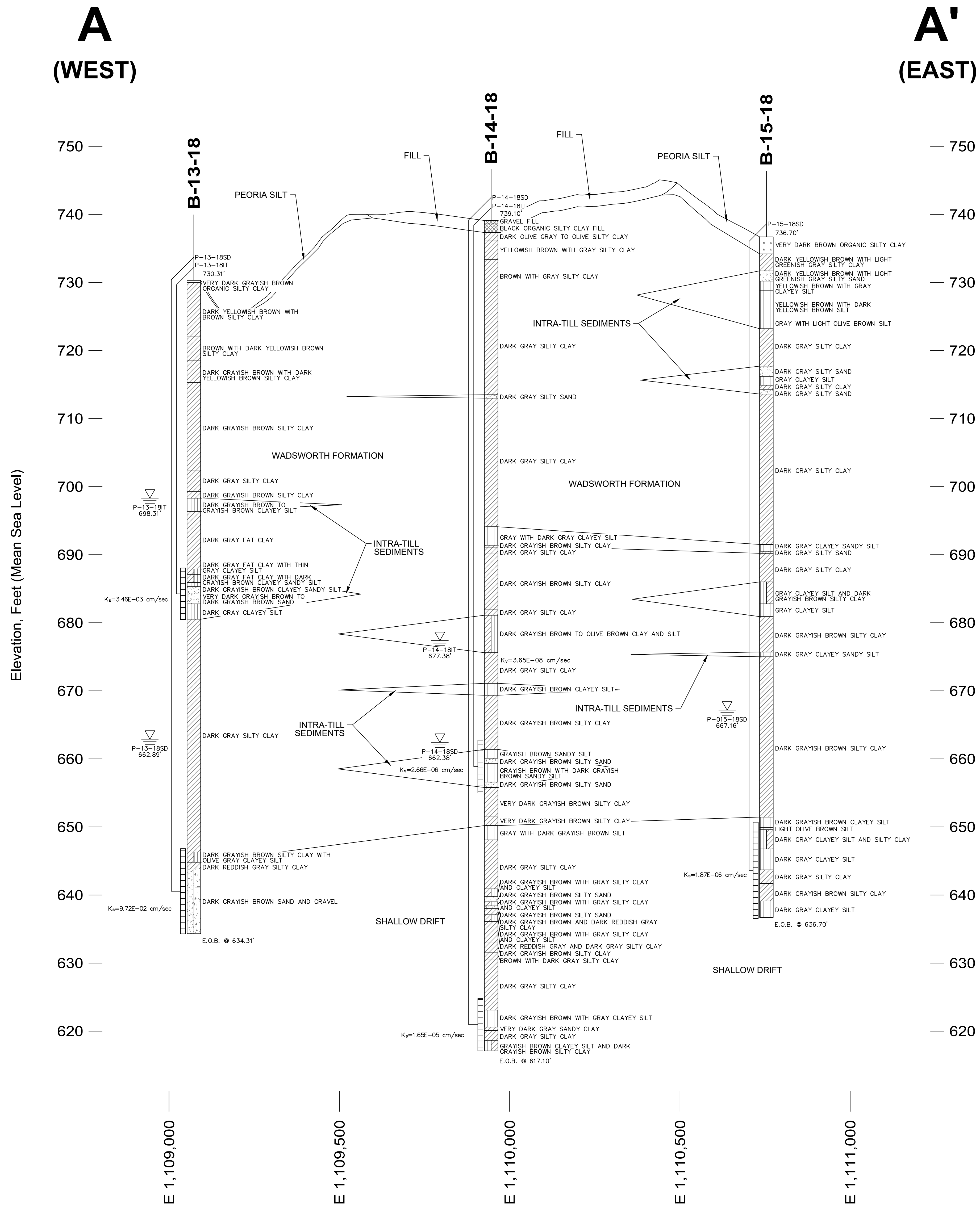
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**EXISTING MONITORING WELL, PIEZOMETER, AND
LANDFILL GAS PROBE LOCATION MAP**

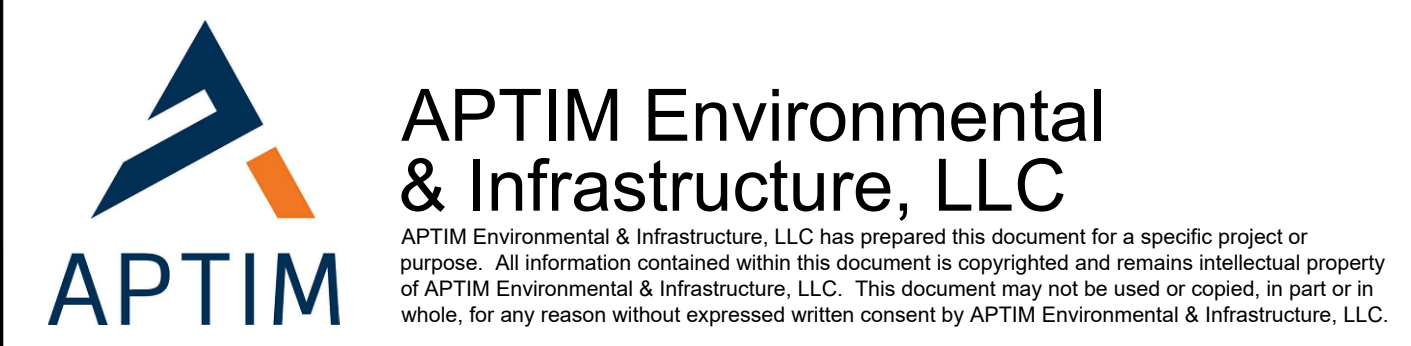
PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.:	G4
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- FILL
 - ORGANIC SILTY CLAY, TOPSOIL
 - CLAY, SILTY CLAY, SANDY CLAY
 - SILT, SANDY SILT, CLAYEY SILT
 - SAND
 - GRAVEL
 - DOLOMITE
 - POTENTIOMETRIC ELEVATION WITH ASSOCIATED WELL DESIGNATION
 - END OF BORING
 - CURRENTLY PERMITTED LIMITS OF EXCAVATION
 - PROPOSED LIMITS OF EXCAVATION
 - K_s HORIZONTAL HYDRAULIC CONDUCTIVITY OBTAINED FROM SLUG TEST
 - K_v VERTICAL HYDRAULIC CONDUCTIVITY OBTAINED FROM LABORATORY TEST

- NOTES**
- LITHOLOGY CONTAINED ON THIS DRAWING IS INTERPOLATED BETWEEN BORING LOCATIONS.
 - DESCRIPTIONS DEPICTED ON THIS DRAWING ARE GENERALIZED. THE COMPLETE DESCRIPTIONS ARE CONTAINED ON THE BORING LOGS.
 - EXISTING TOPOGRAPHY DEVELOPED FROM A SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 - WATER LEVELS COLLECTED 05/23/2019.

REV. NO.	DATE	DESCRIPTION



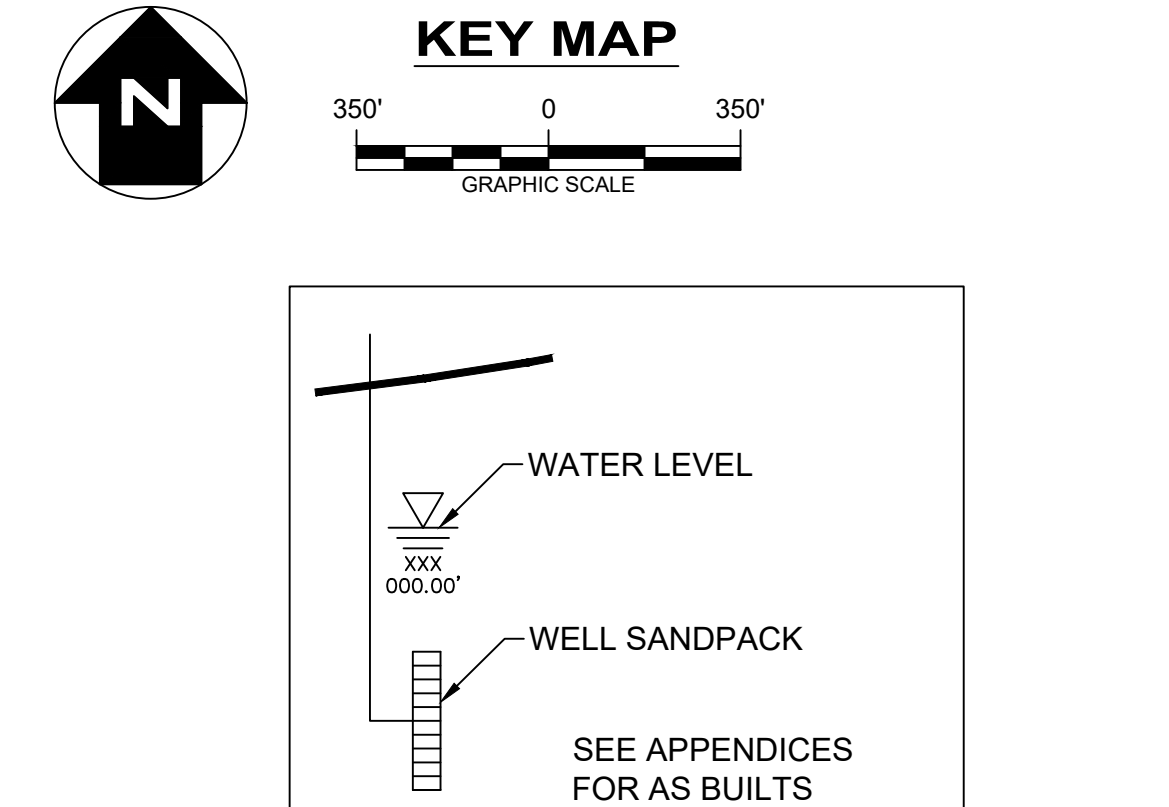
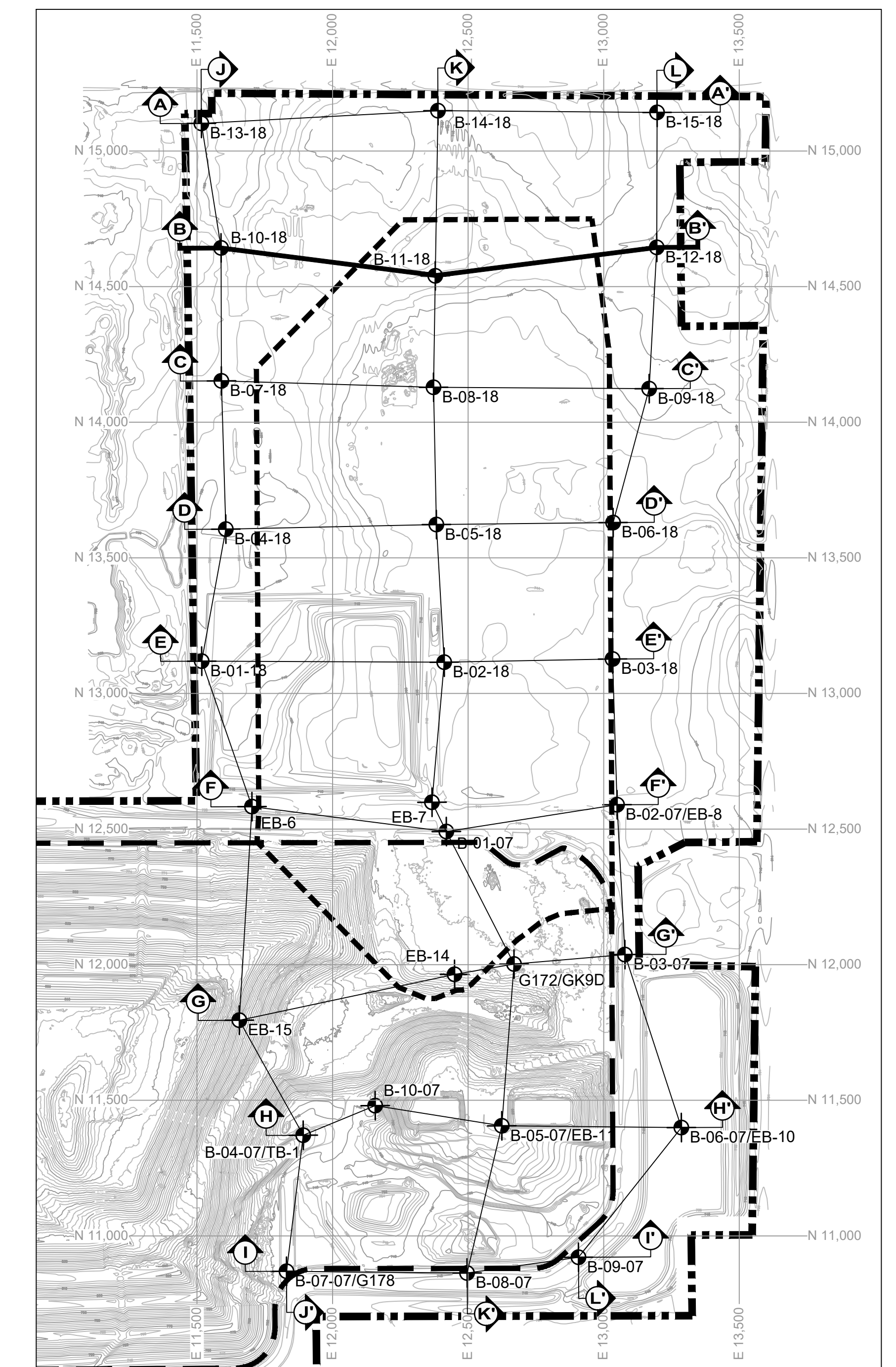
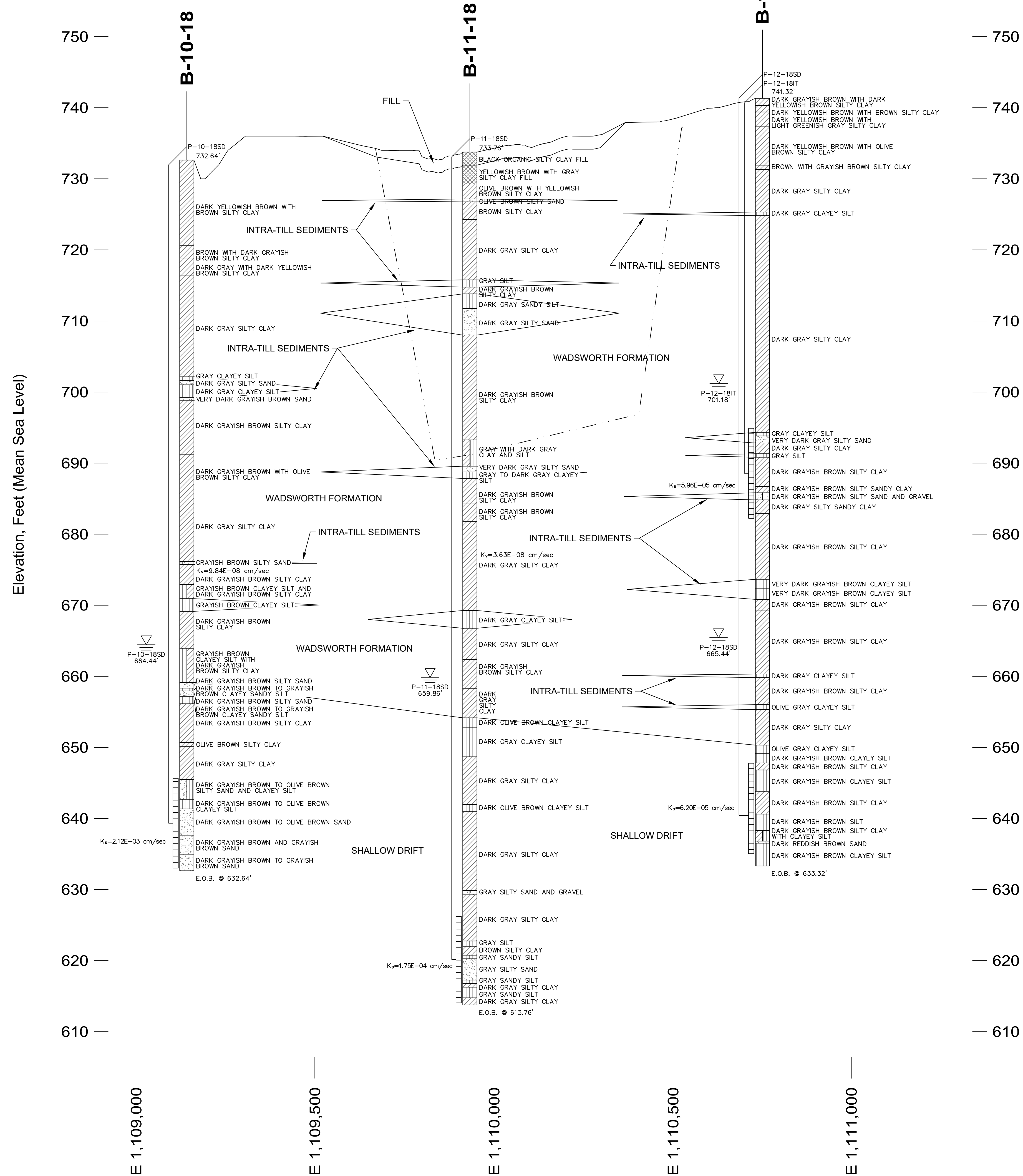
ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS

GEOLOGICAL CROSS SECTION A-A'

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.	G5
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		

B
(WEST)

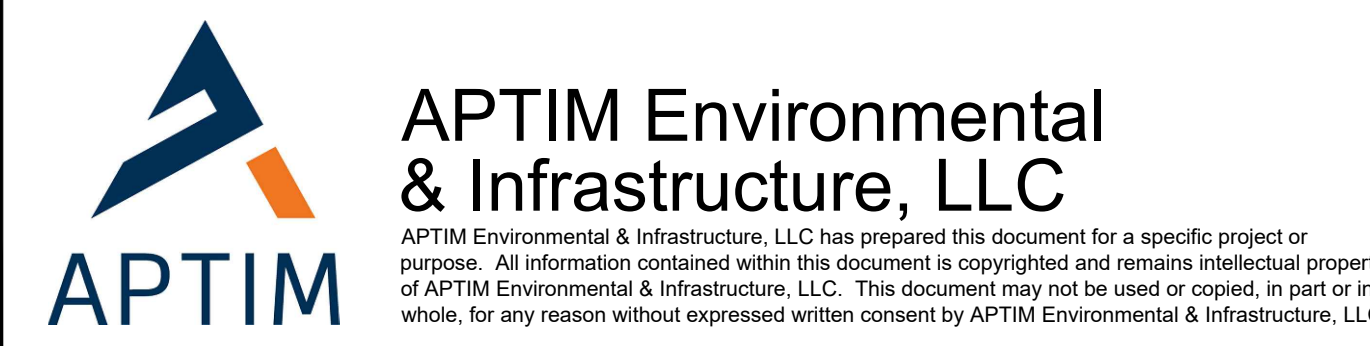
B'
(EAST)



- LEGEND**
- FILL
 - ORGANIC SILTY CLAY, TOPSOIL
 - CLAY, SILTY CLAY, SANDY CLAY
 - SILT, SANDY SILT, CLAYEY SILT
 - SAND
 - GRAVEL
 - DOLOMITE
 - CURRENTLY PERMITTED LIMITS OF EXCAVATION
 - PROPOSED LIMITS OF EXCAVATION
 - K_h HORIZONTAL HYDRAULIC CONDUCTIVITY OBTAINED FROM SLUG TEST
 - K_v VERTICAL HYDRAULIC CONDUCTIVITY OBTAINED FROM LABORATORY TEST
 - ∇ POTENTIOMETRIC ELEVATION WITH ASSOCIATED WELL DESIGNATION
 - E.O.B. END OF BORING

- NOTES**
- LITHOLOGY CONTAINED ON THIS DRAWING IS INTERPOLATED BETWEEN BORING LOCATIONS.
 - DESCRIPTIONS DEPICTED ON THIS DRAWING ARE GENERALIZED. THE COMPLETE DESCRIPTIONS ARE CONTAINED ON THE BORING LOGS.
 - EXISTING TOPOGRAPHY DEVELOPED FROM A SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 - WATER LEVELS COLLECTED 05/23/2019.

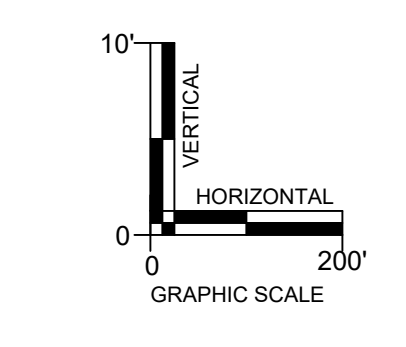
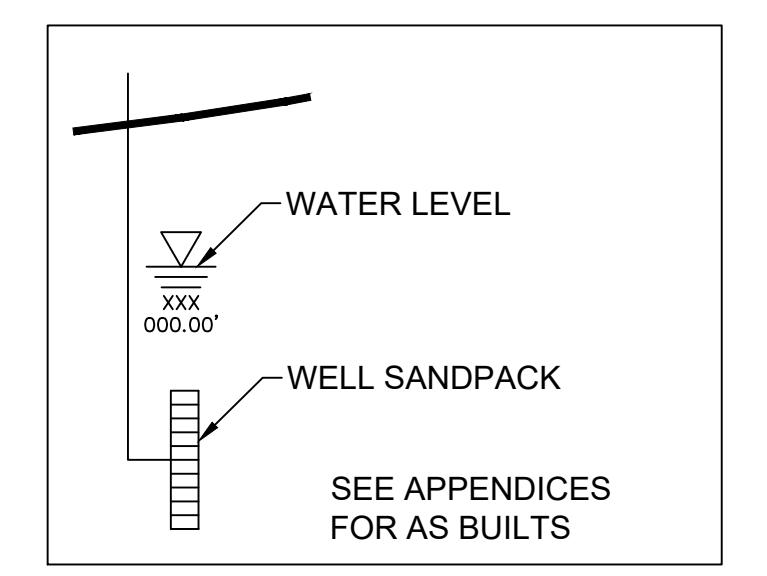
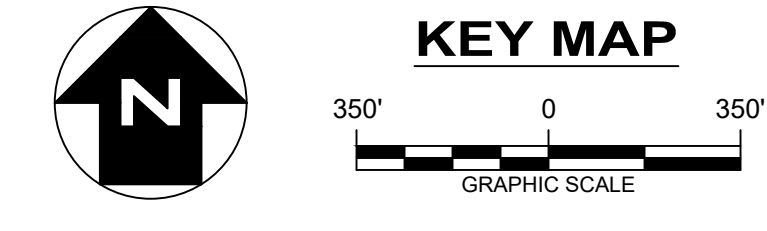
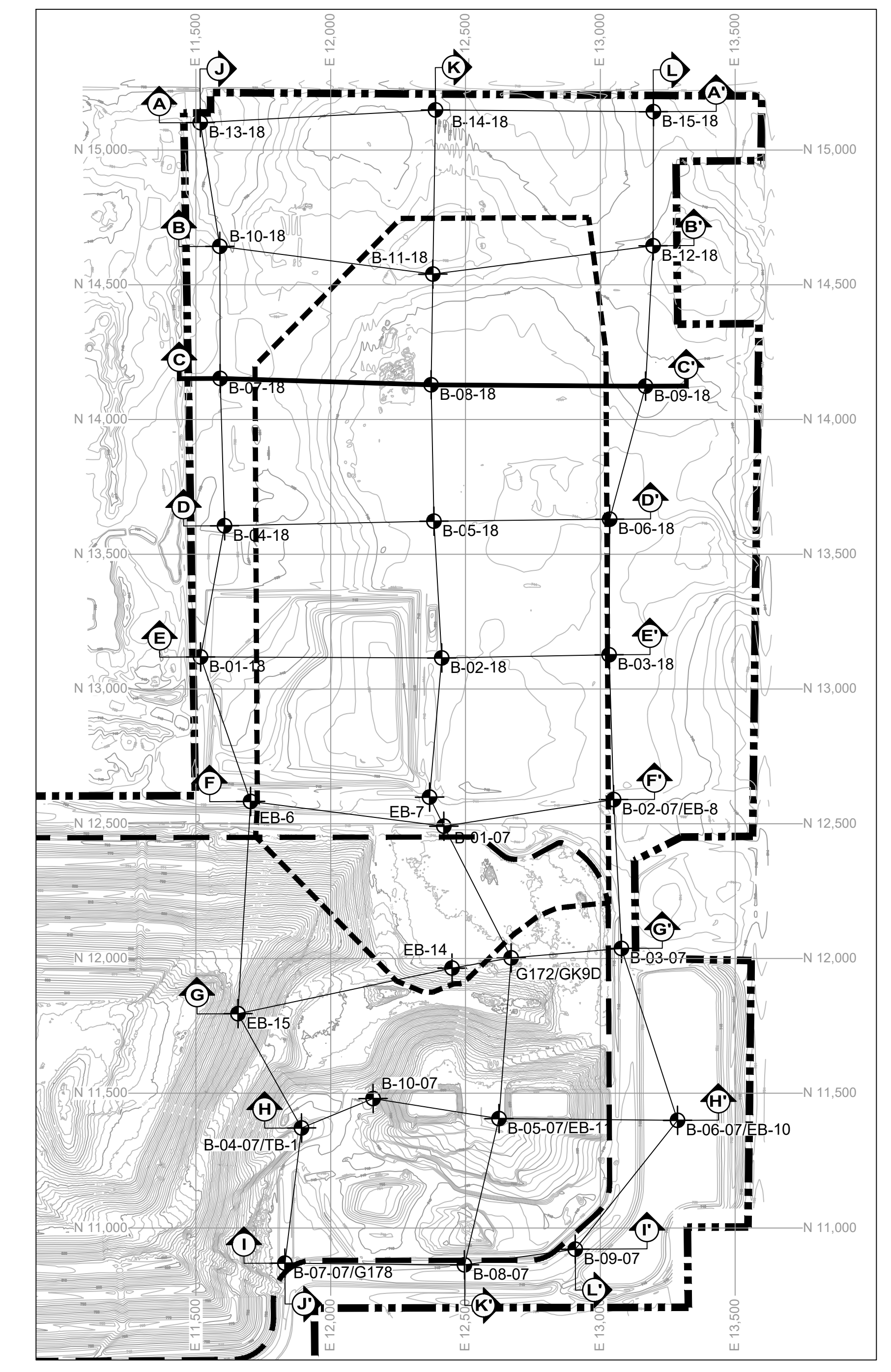
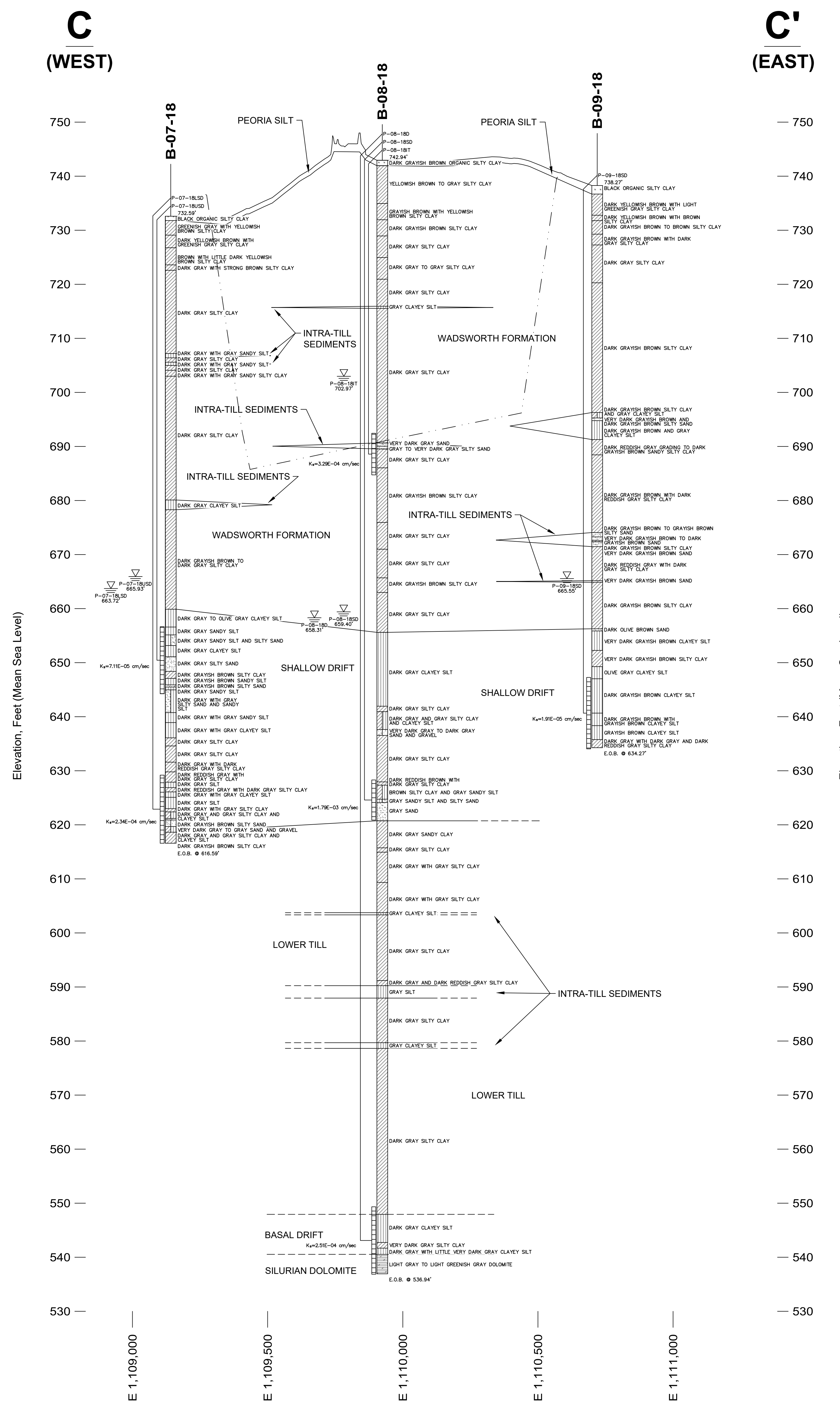
REV. NO.	DATE	DESCRIPTION



ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS

GEOLOGICAL CROSS SECTION B-B'

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.	G6
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



LEGEND

	FILL		CURRENTLY PERMITTED LIMITS OF EXCAVATION
	ORGANIC SILTY CLAY, TOPSOIL		PROPOSED LIMITS OF EXCAVATION
	CLAY, SILTY CLAY, SANDY CLAY	K_s	HORIZONTAL HYDRAULIC CONDUCTIVITY OBTAINED FROM SLUG TEST
	SILT, SANDY SILT, CLAYEY SILT	K_v	VERTICAL HYDRAULIC CONDUCTIVITY OBTAINED FROM LABORATORY TEST
	SAND	∇	POTENTIOMETRIC ELEVATION WITH ASSOCIATED WELL DESIGNATION
	GRAVEL	∇ xxx 000.00'	E.O.B.
	DOLOMITE		END OF BORING

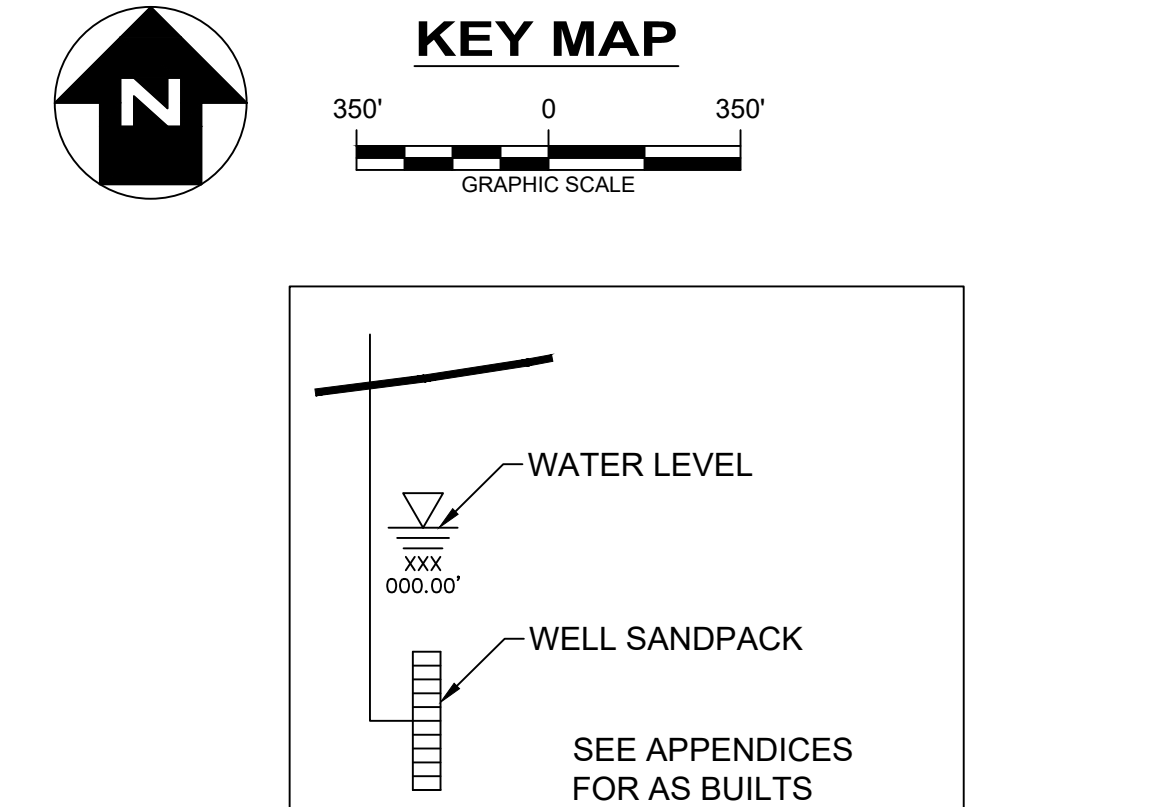
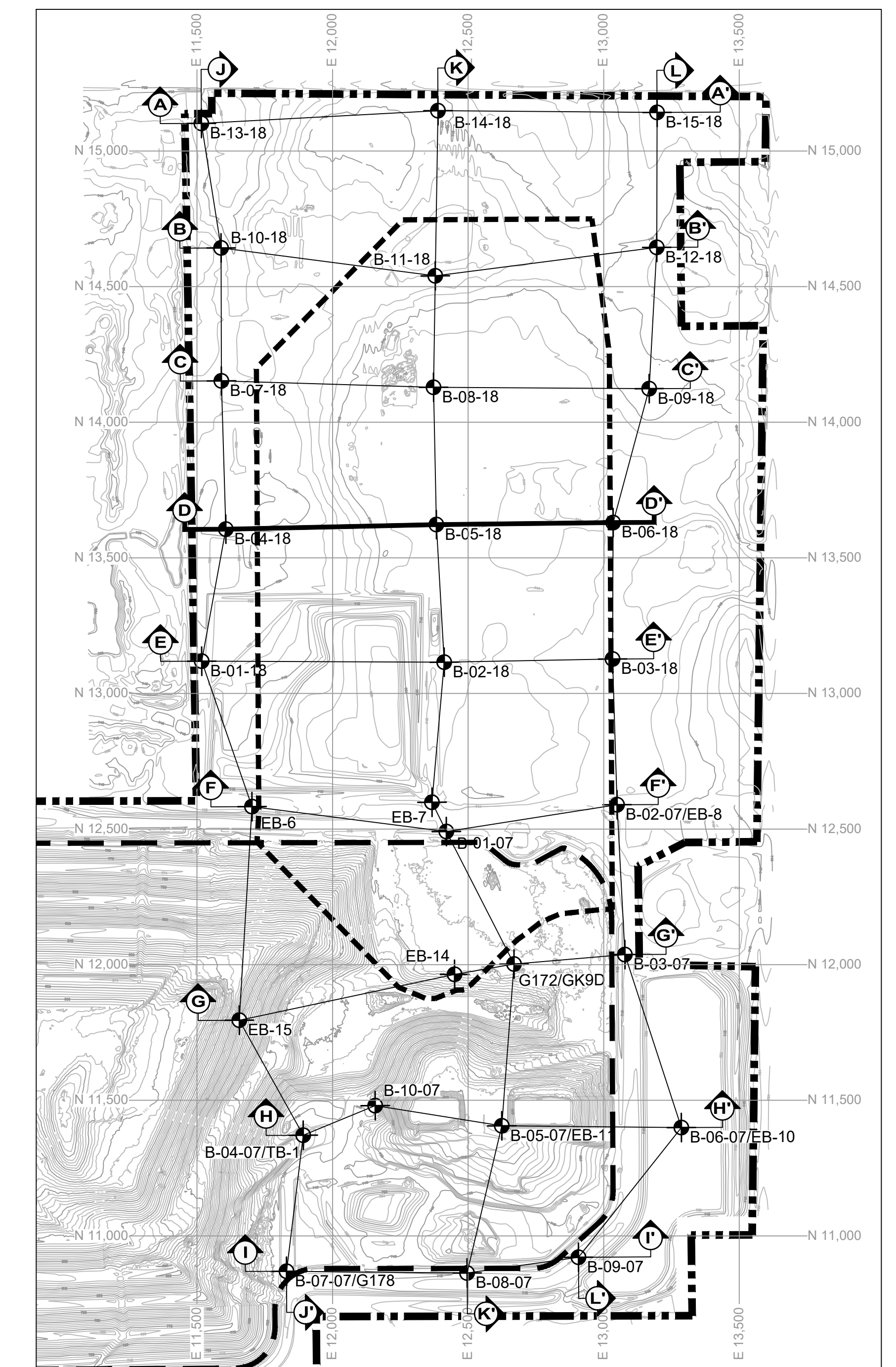
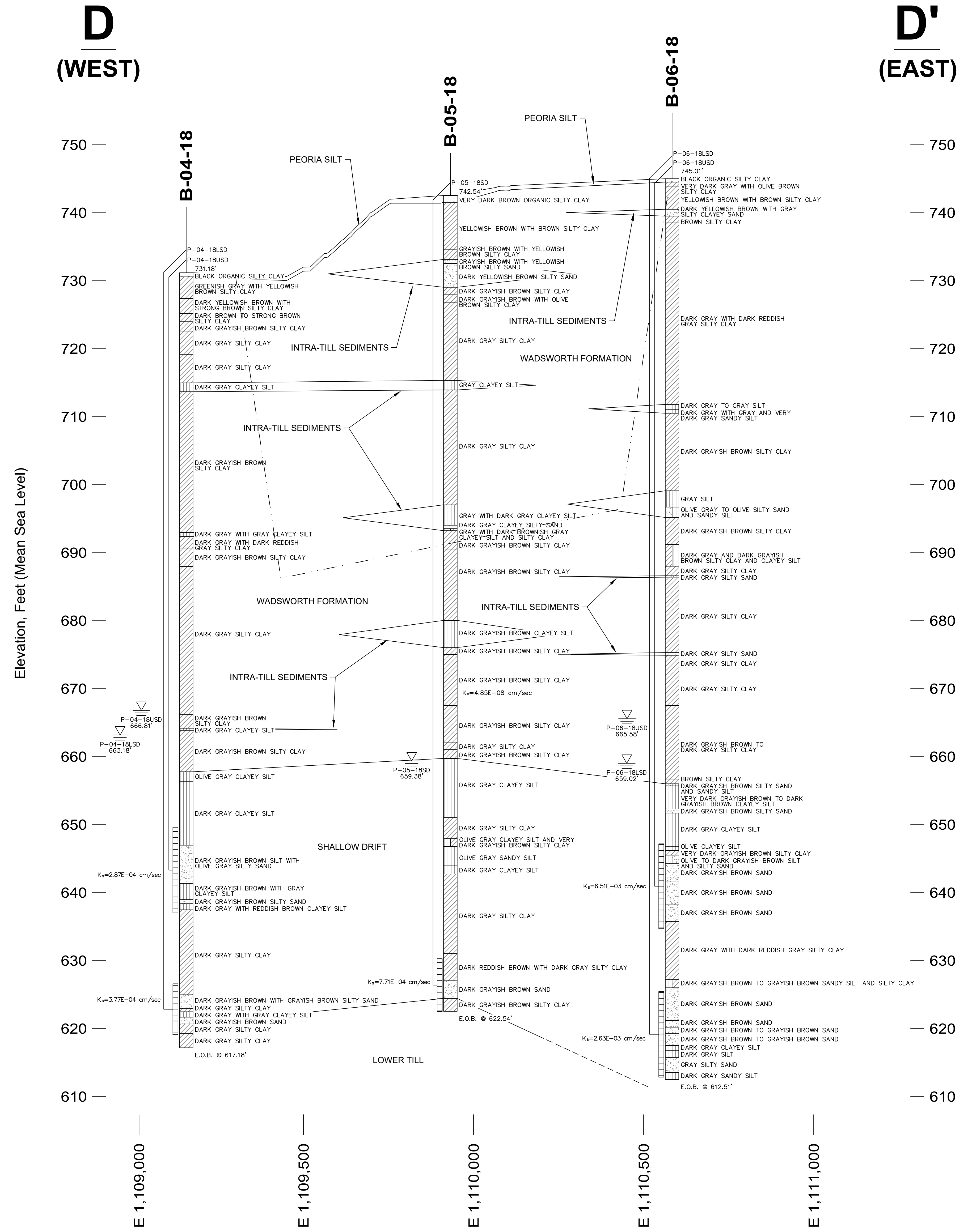
- NOTES**
- LITHOLOGY CONTAINED ON THIS DRAWING IS INTERPOLATED BETWEEN BORING LOCATIONS.
 - DESCRIPTIONS DEPICTED ON THIS DRAWING ARE GENERALIZED. THE COMPLETE DESCRIPTIONS ARE CONTAINED ON THE BORING LOGS.
 - EXISTING TOPOGRAPHY DEVELOPED FROM A SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 - WATER LEVELS COLLECTED 05/23/2019.

REV. NO.	DATE	DESCRIPTION



ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS
GEOLOGICAL CROSS SECTION C-C'

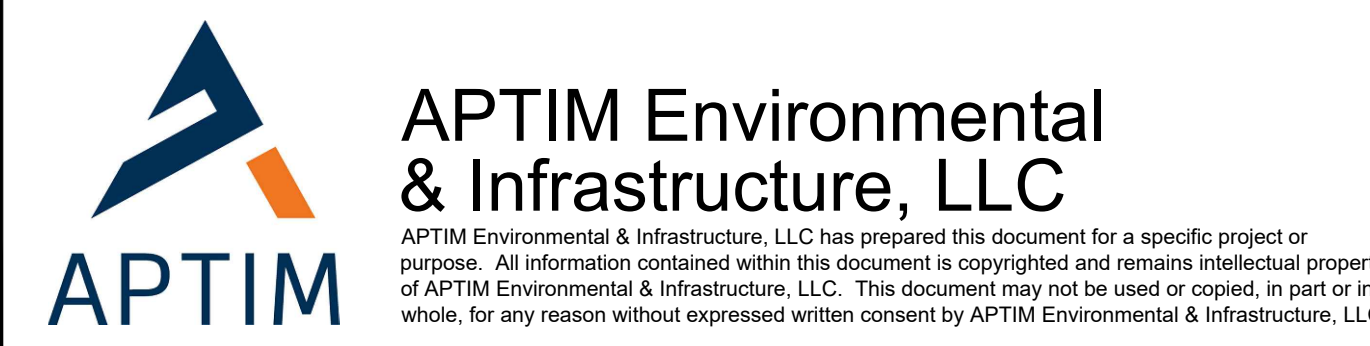
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DESIGNED BY:	MNF	DRAWING NO.:	G7
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- FILL
 - ORGANIC SILTY CLAY, TOPSOIL
 - CLAY, SILTY CLAY, SANDY CLAY
 - SILT, SANDY SILT, CLAYEY SILT
 - SAND
 - GRAVEL
 - DOLOMITE
 - POTENTIOMETRIC ELEVATION WITH ASSOCIATED WELL DESIGNATION
 - END OF BORING
 - HORIZONTAL HYDRAULIC CONDUCTIVITY OBTAINED FROM SLUG TEST
 - VERTICAL HYDRAULIC CONDUCTIVITY OBTAINED FROM LABORATORY TEST
 - CURRENTLY PERMITTED LIMITS OF EXCAVATION
 - PROPOSED LIMITS OF EXCAVATION

- NOTES**
- LITHOLOGY CONTAINED ON THIS DRAWING IS INTERPOLATED BETWEEN BORING LOCATIONS.
 - DESCRIPTIONS DEPICTED ON THIS DRAWING ARE GENERALIZED. THE COMPLETE DESCRIPTIONS ARE CONTAINED ON THE BORING LOGS.
 - EXISTING TOPOGRAPHY DEVELOPED FROM A SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 - WATER LEVELS COLLECTED 05/23/2019.

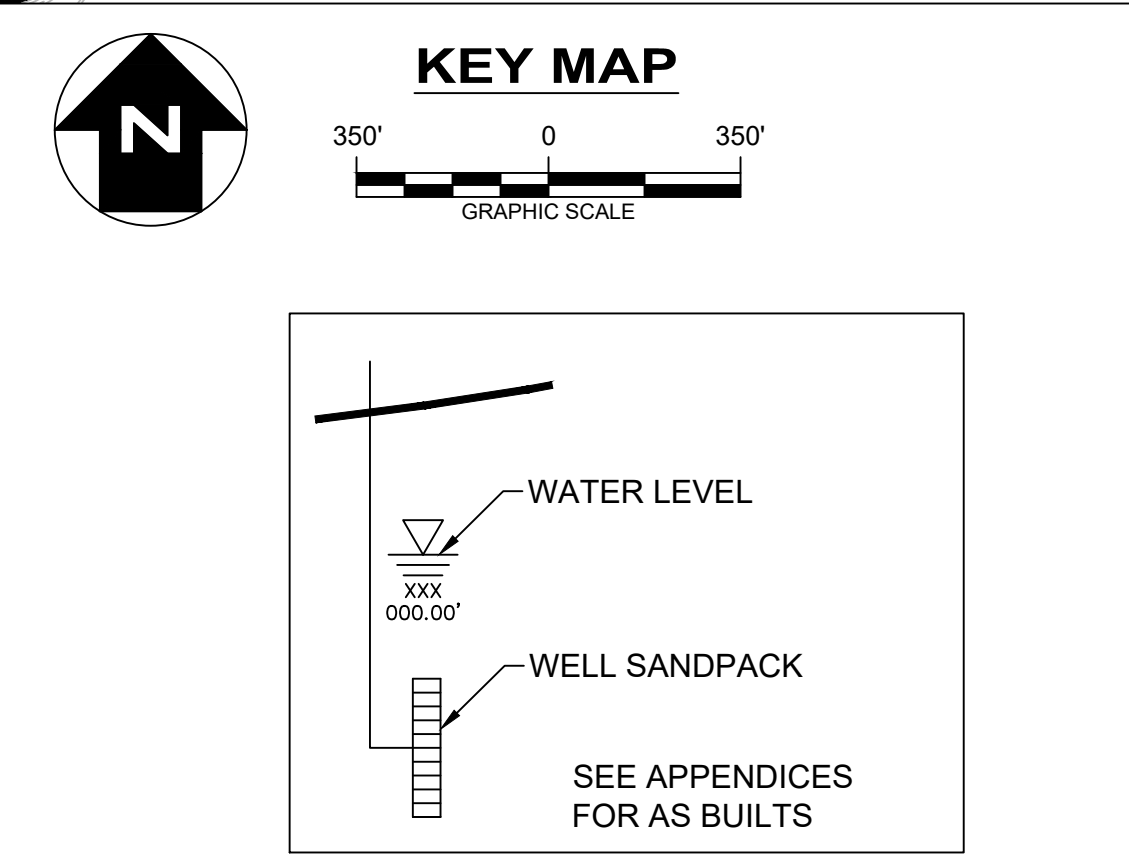
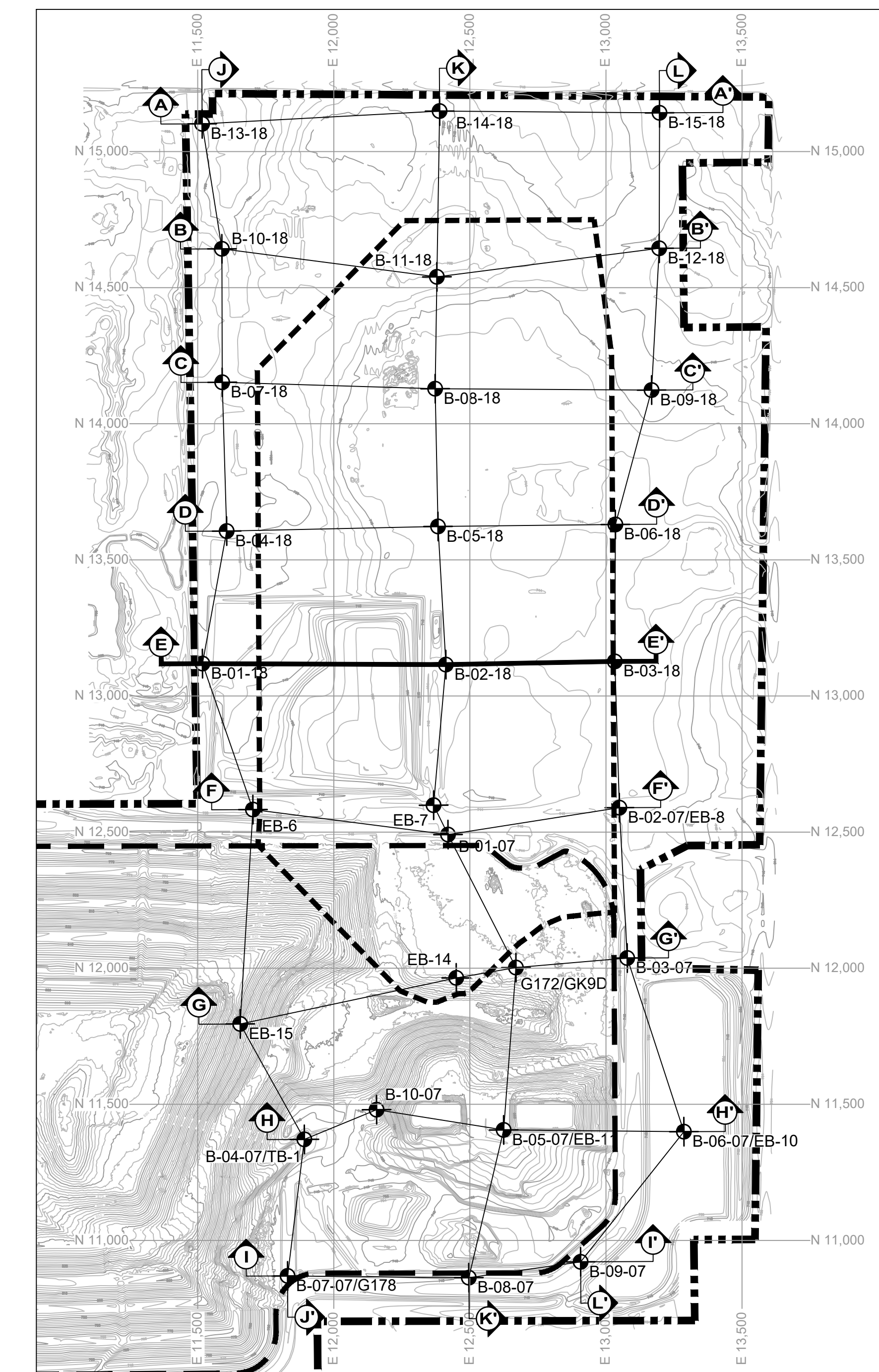
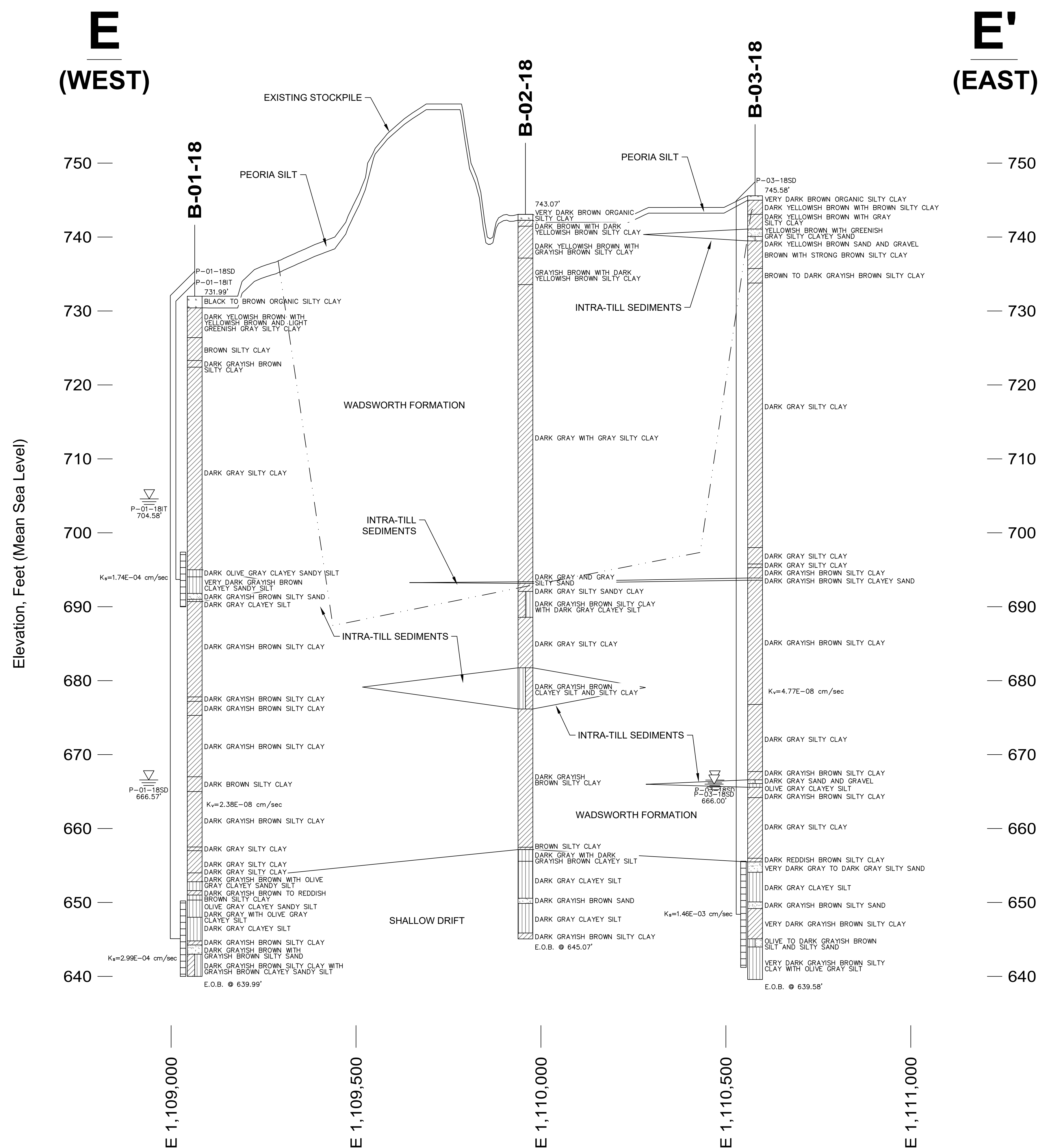
REV. NO.	DATE	DESCRIPTION



ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS

GEOLOGICAL CROSS SECTION D-D'

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.:	G8
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		

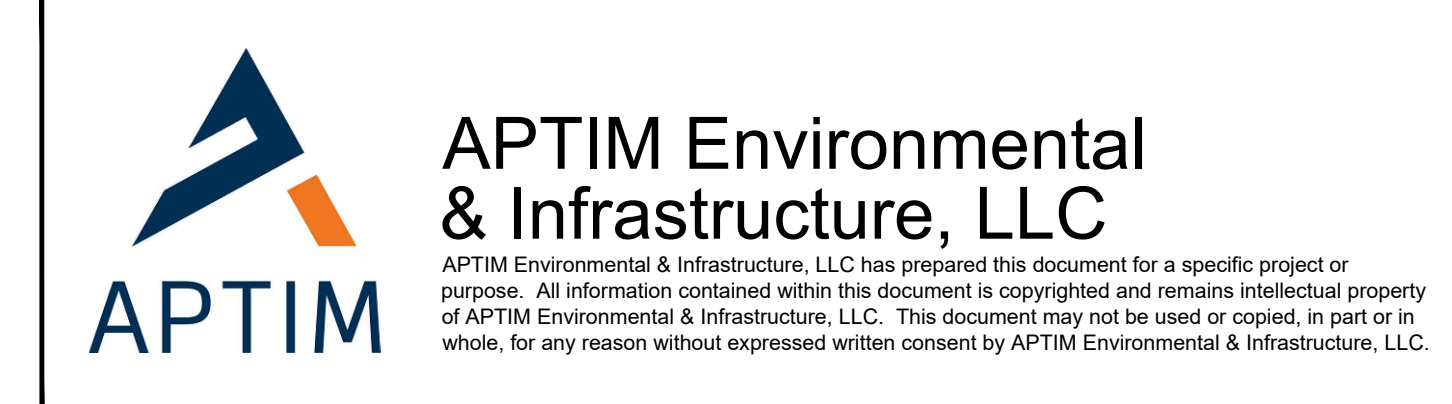


LEGEND

	FILL		CURRENTLY PERMITTED LIMITS OF EXCAVATION
	ORGANIC SILTY CLAY, TOPSOIL		PROPOSED LIMITS OF EXCAVATION
	CLAY, SILTY CLAY, SANDY CLAY	K_h	HORIZONTAL HYDRAULIC CONDUCTIVITY OBTAINED FROM SLUG TEST
	SILT, SANDY SILT, CLAYEY SILT	K_v	VERTICAL HYDRAULIC CONDUCTIVITY OBTAINED FROM LABORATORY TEST
	SAND		POTENTIOMETRIC ELEVATION WITH ASSOCIATED WELL DESIGNATION
	GRAVEL		E.O.B. END OF BORING
	DOLOMITE		

- NOTES**
- LITHOLOGY CONTAINED ON THIS DRAWING IS INTERPOLATED BETWEEN BORING LOCATIONS.
 - DESCRIPTIONS DEPICTED ON THIS DRAWING ARE GENERALIZED. THE COMPLETE DESCRIPTIONS ARE CONTAINED ON THE BORING LOGS.
 - EXISTING TOPOGRAPHY DEVELOPED FROM A SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 - WATER LEVELS COLLECTED 05/23/2019.

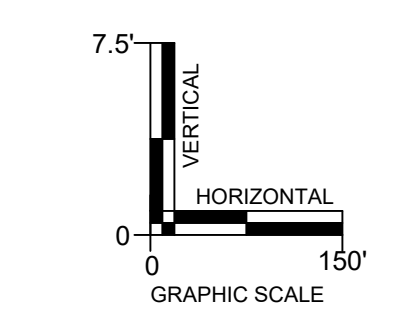
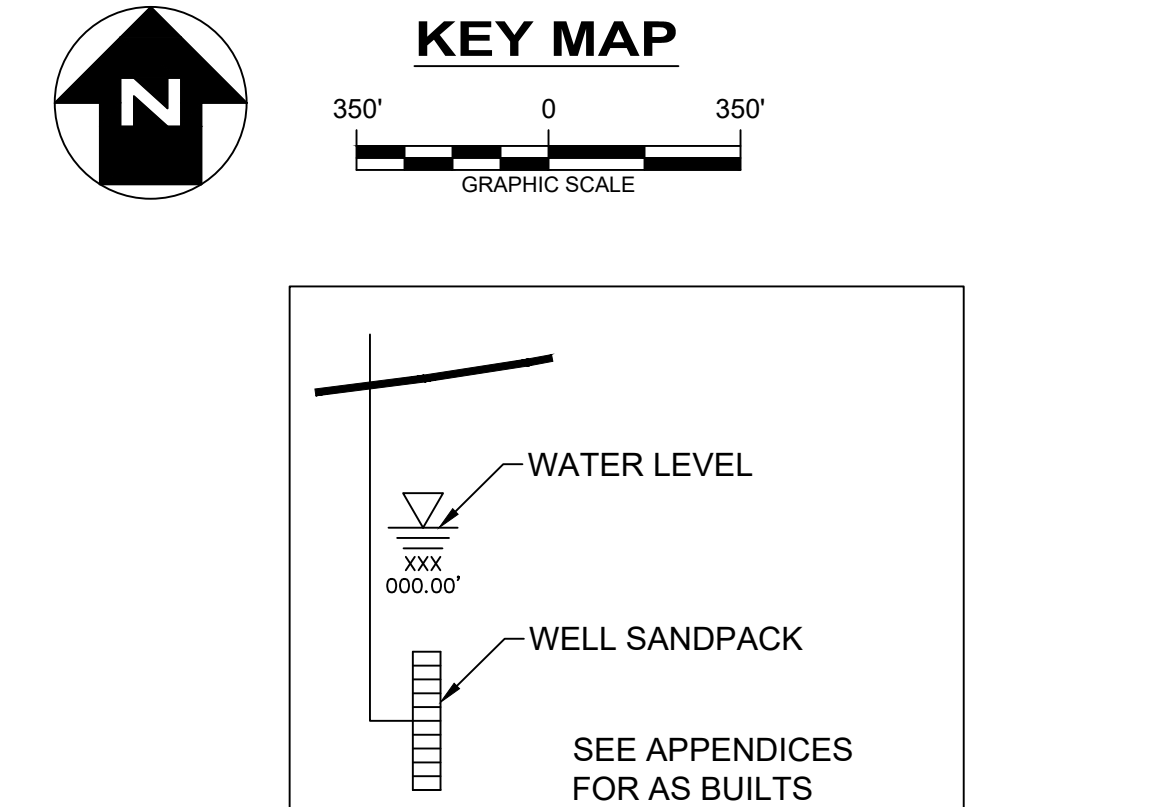
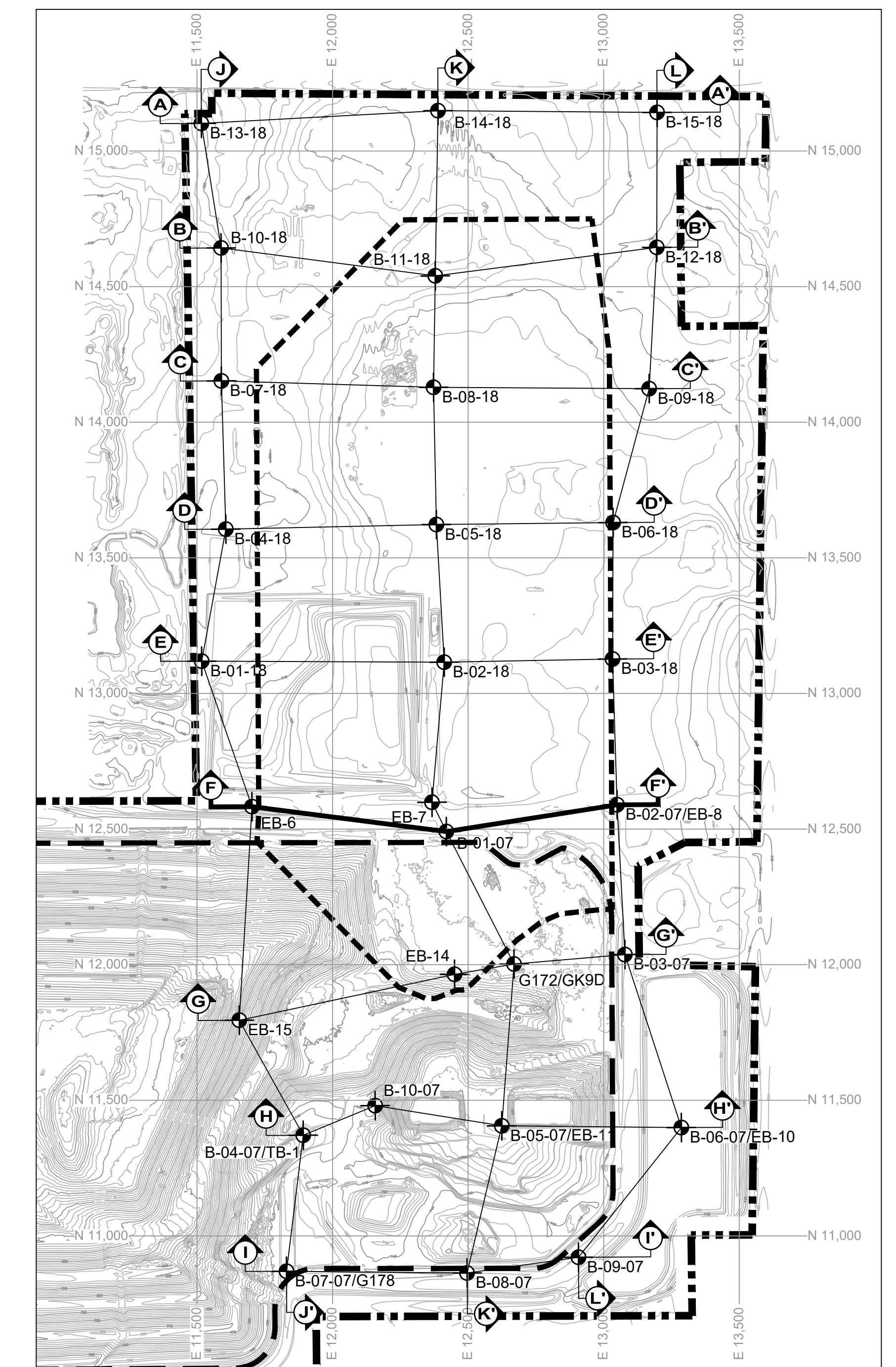
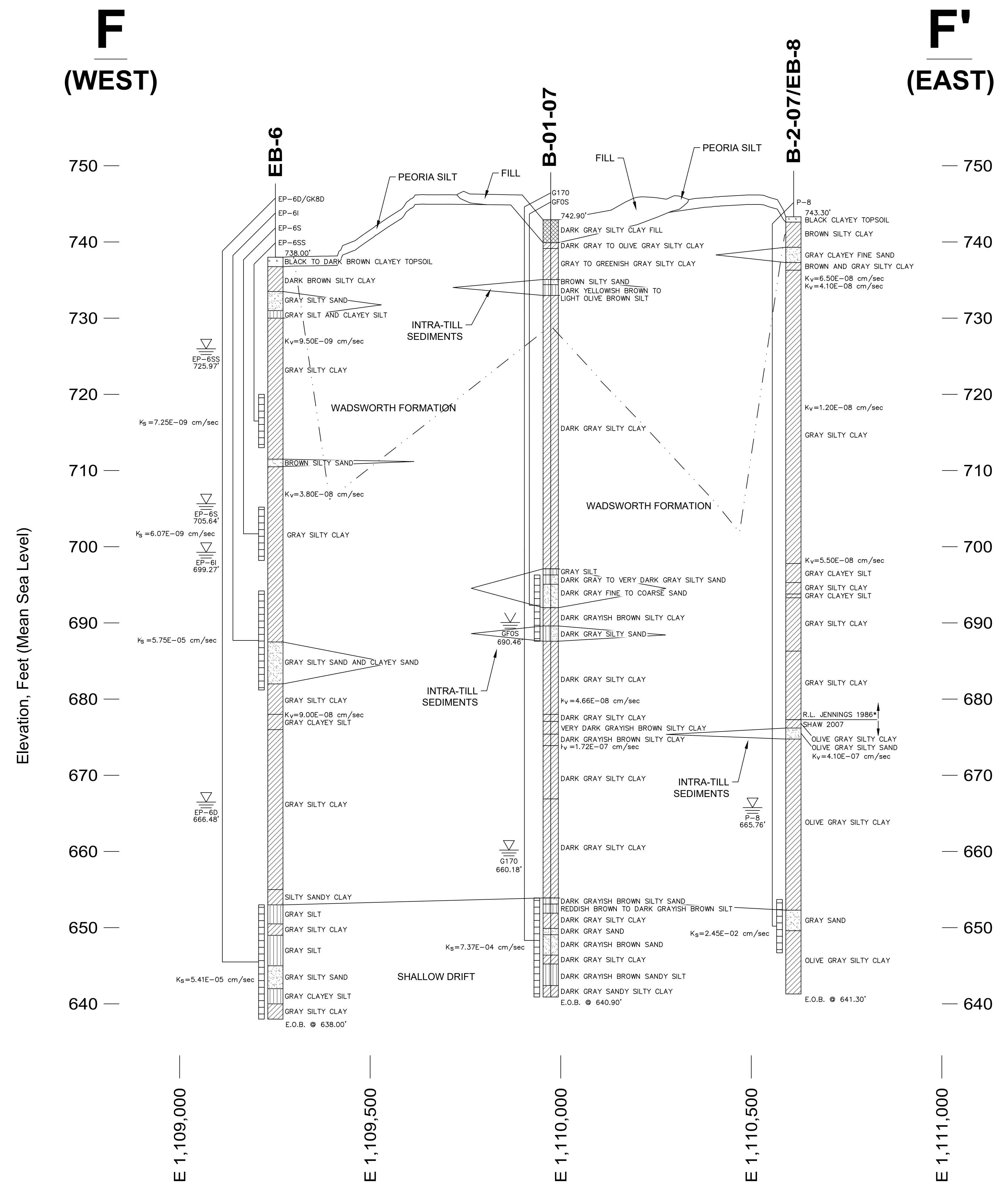
REV. NO.	DATE	DESCRIPTION



ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS

GEOLOGICAL CROSS SECTION E-E'

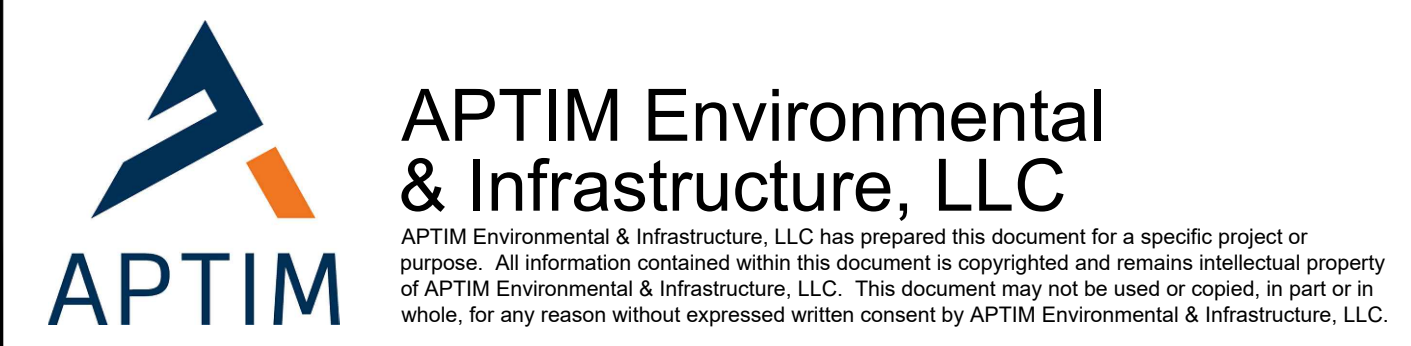
PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.:	G9
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- FILL
 - ORGANIC SILTY CLAY, TOPSOIL
 - CLAY, SILTY CLAY, SANDY CLAY
 - SILT, SANDY SILT, CLAYEY SILT
 - SAND
 - GRAVEL
 - DOLOMITE
 - CURRENTLY PERMITTED LIMITS OF EXCAVATION
 - PROPOSED LIMITS OF EXCAVATION
 - K_s HORIZONTAL HYDRAULIC CONDUCTIVITY OBTAINED FROM SLUG TEST
 - K_v VERTICAL HYDRAULIC CONDUCTIVITY OBTAINED FROM LABORATORY TEST
 - POTENTIOMETRIC ELEVATION WITH ASSOCIATED WELL DESIGNATION
 - E.O.B. END OF BORING

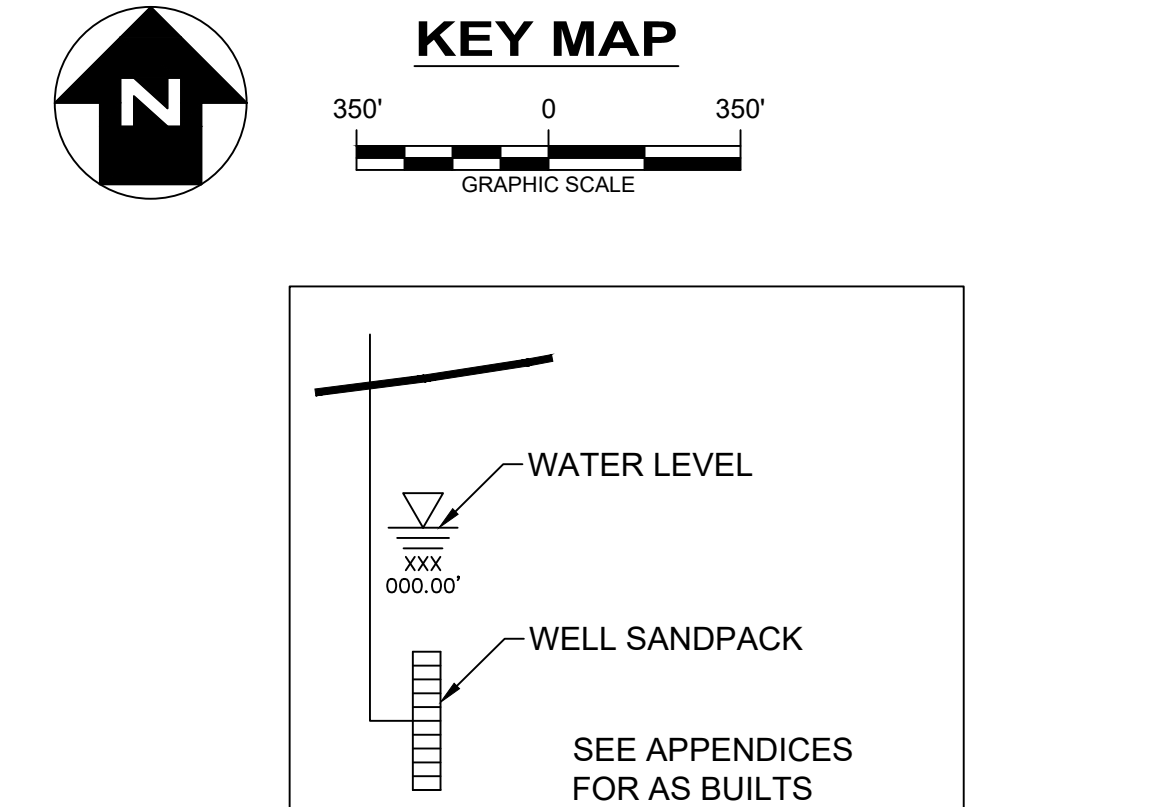
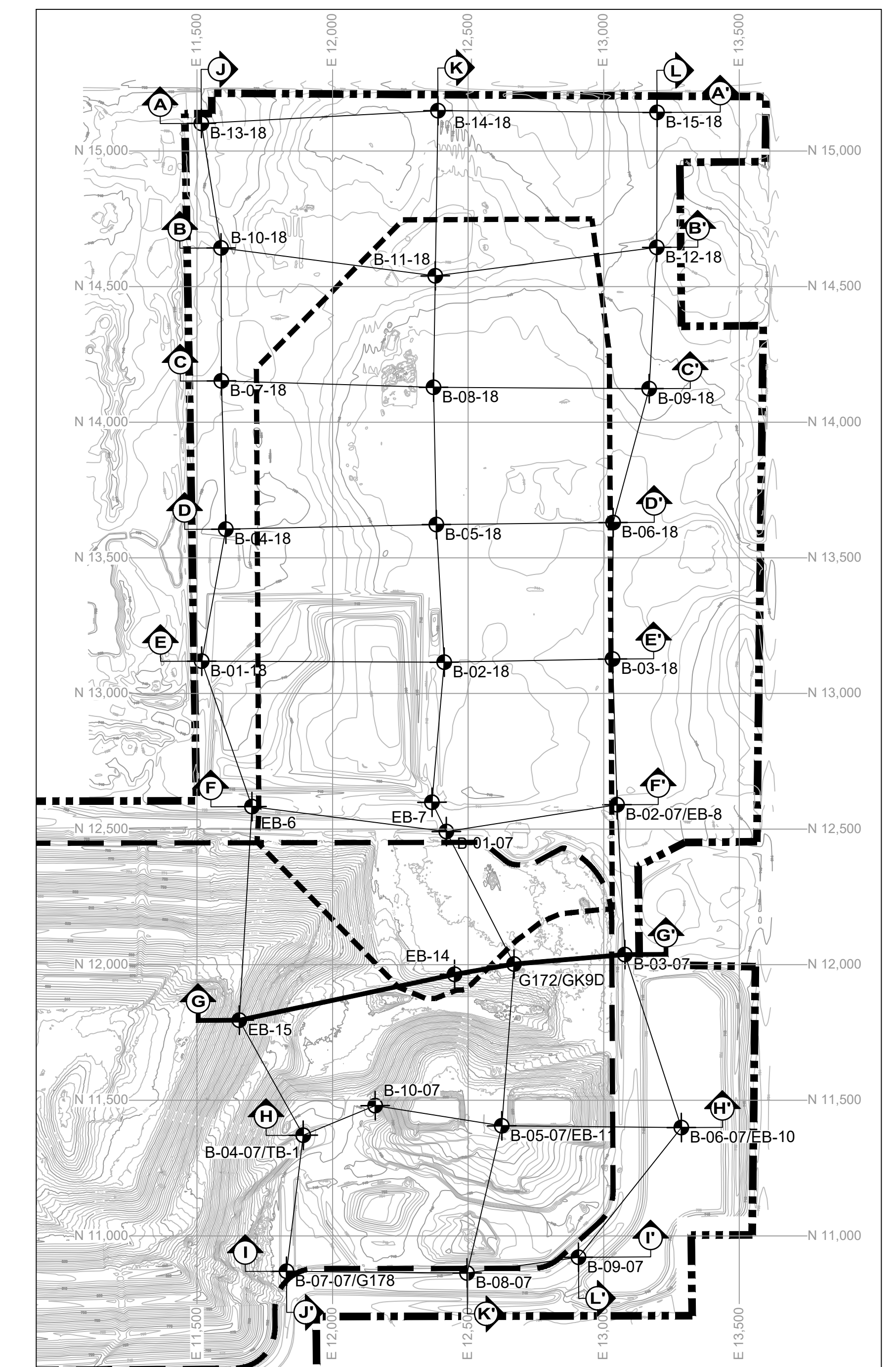
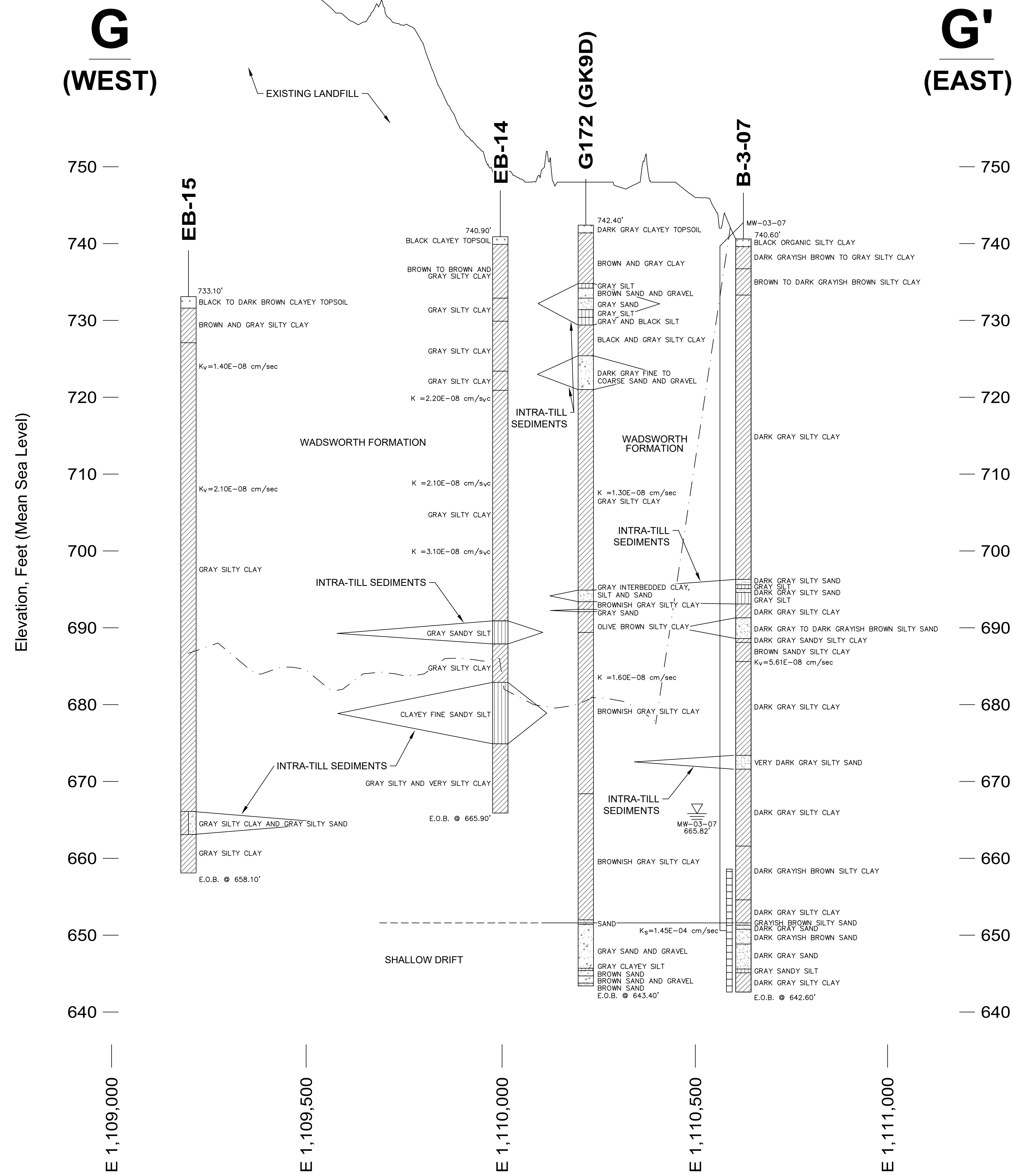
- NOTES**
- LITHOLOGY CONTAINED ON THIS DRAWING IS INTERPOLATED BETWEEN BORING LOCATIONS.
 - DESCRIPTIONS DEPICTED ON THIS DRAWING ARE GENERALIZED. THE COMPLETE DESCRIPTIONS ARE CONTAINED ON THE BORING LOGS.
 - EXISTING TOPOGRAPHY DEVELOPED FROM A SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 - WATER LEVELS COLLECTED 05/23/2019.

REV. NO.	DATE	DESCRIPTION



ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS
GEOLOGICAL CROSS SECTION F-F'

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.:	G10
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- FILL
 - ORGANIC SILTY CLAY, TOPSOIL
 - CLAY, SILTY CLAY, SANDY CLAY
 - SILT, SANDY SILT, CLAYEY SILT
 - SAND
 - GRAVEL
 - DOLOMITE
 - CURRENTLY PERMITTED LIMITS OF EXCAVATION
 - PROPOSED LIMITS OF EXCAVATION
 - K_h HORIZONTAL HYDRAULIC CONDUCTIVITY OBTAINED FROM SLUG TEST
 - K_v VERTICAL HYDRAULIC CONDUCTIVITY OBTAINED FROM LABORATORY TEST
 - POTENTIOMETRIC ELEVATION WITH ASSOCIATED WELL DESIGNATION
 - E.O.B. END OF BORING

- NOTES**
- LITHOLOGY CONTAINED ON THIS DRAWING IS INTERPOLATED BETWEEN BORING LOCATIONS.
 - DESCRIPTIONS DEPICTED ON THIS DRAWING ARE GENERALIZED. THE COMPLETE DESCRIPTIONS ARE CONTAINED ON THE BORING LOGS.
 - EXISTING TOPOGRAPHY DEVELOPED FROM A SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 - WATER LEVELS COLLECTED 05/23/2019.

REV. NO.	DATE	DESCRIPTION

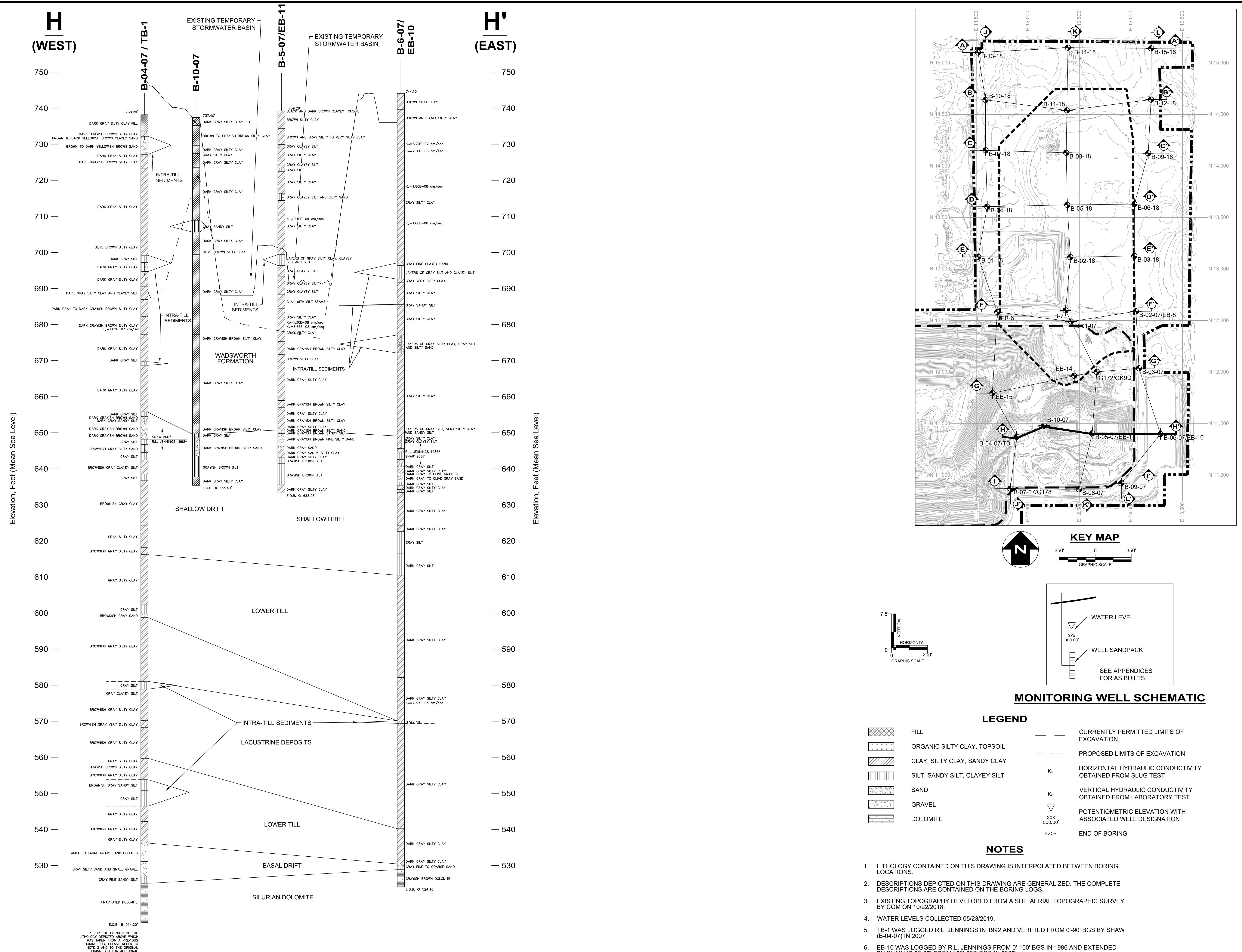


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**ZION LANDFILL - SITE 2 NORTH EXPANSION
 CITY OF ZION, ILLINOIS**

GEOLOGICAL CROSS SECTION G-G'

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.:	G11
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



REV. NO.	DATE	DESCRIPTION

APTIM Environmental & Infrastructure, LLC

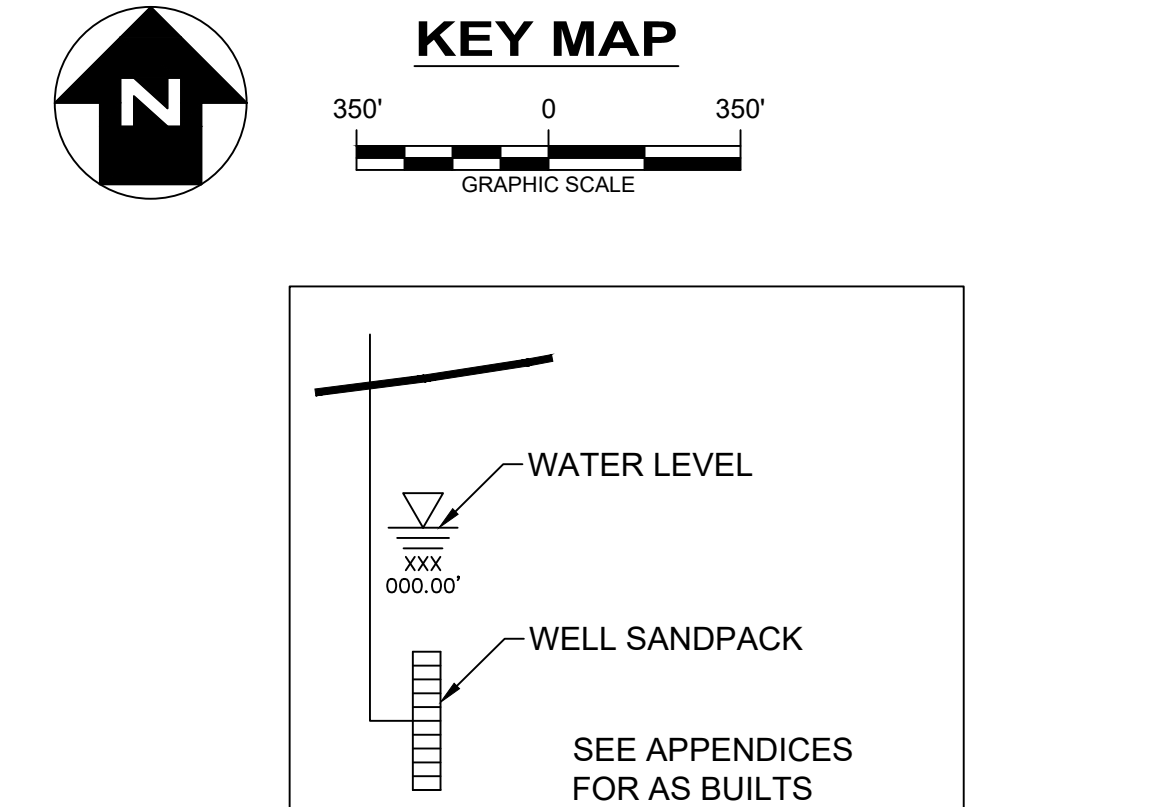
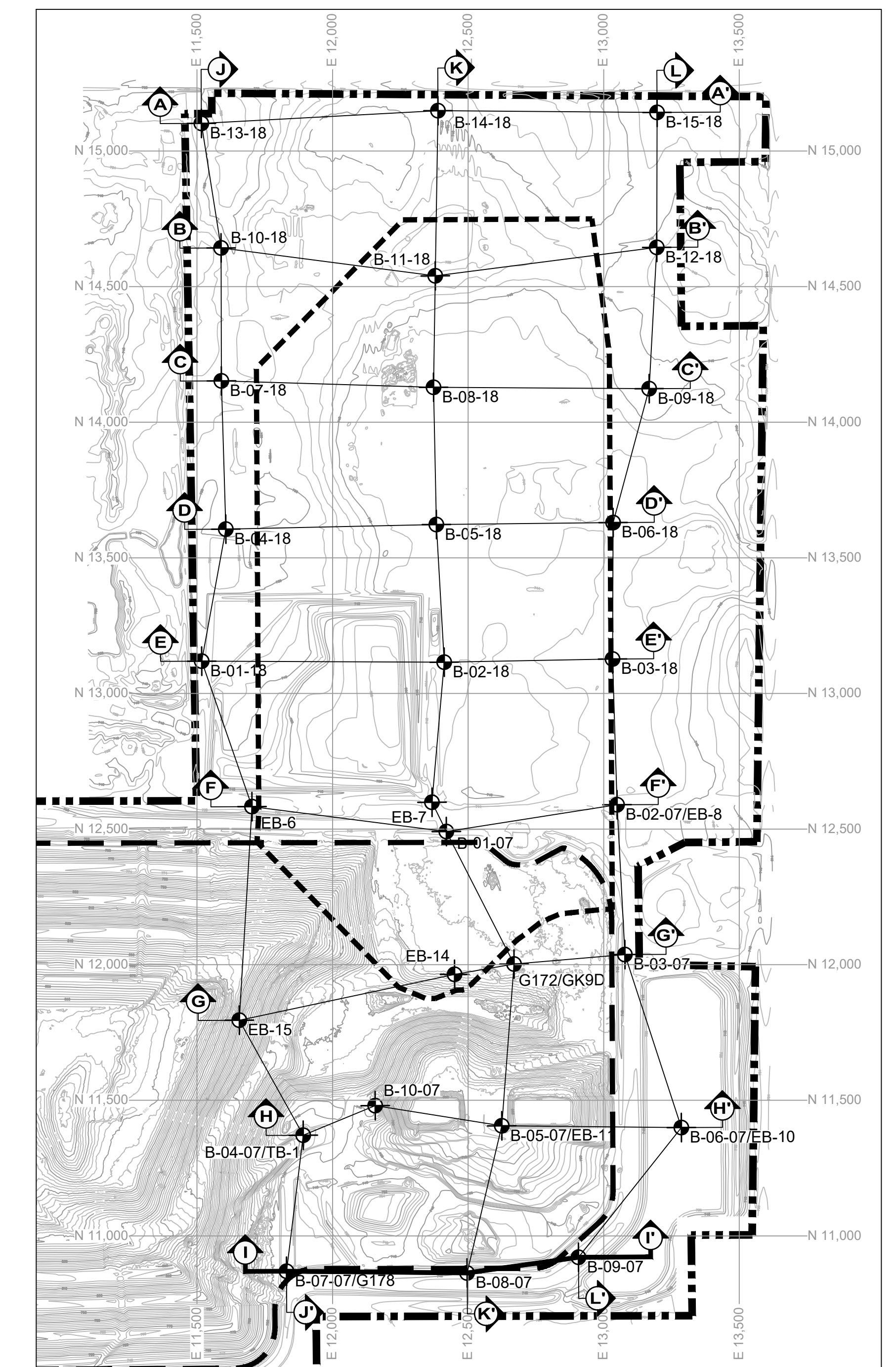
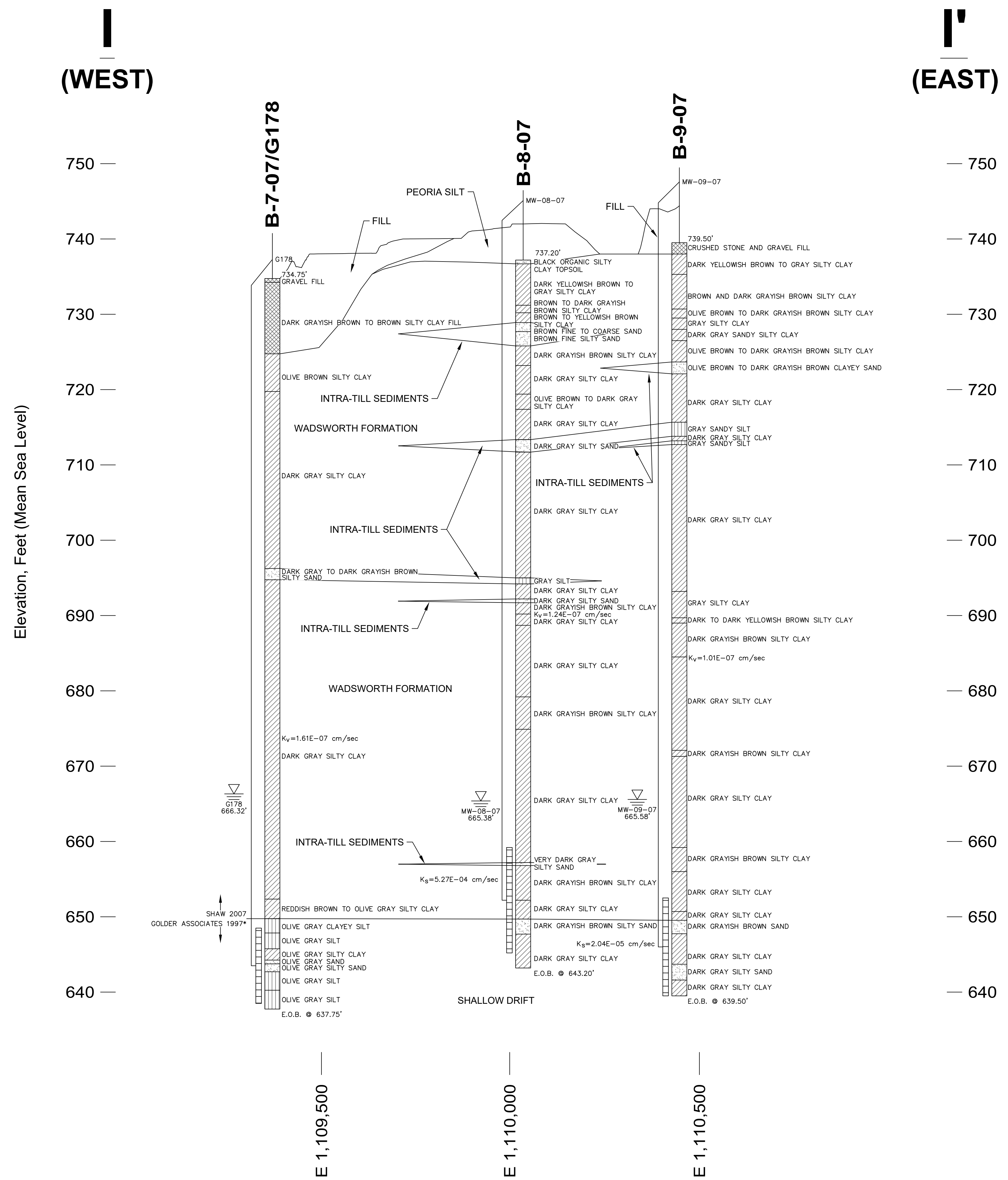
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**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

GEOLOGICAL CROSS SECTION H-H'

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.	G12
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		

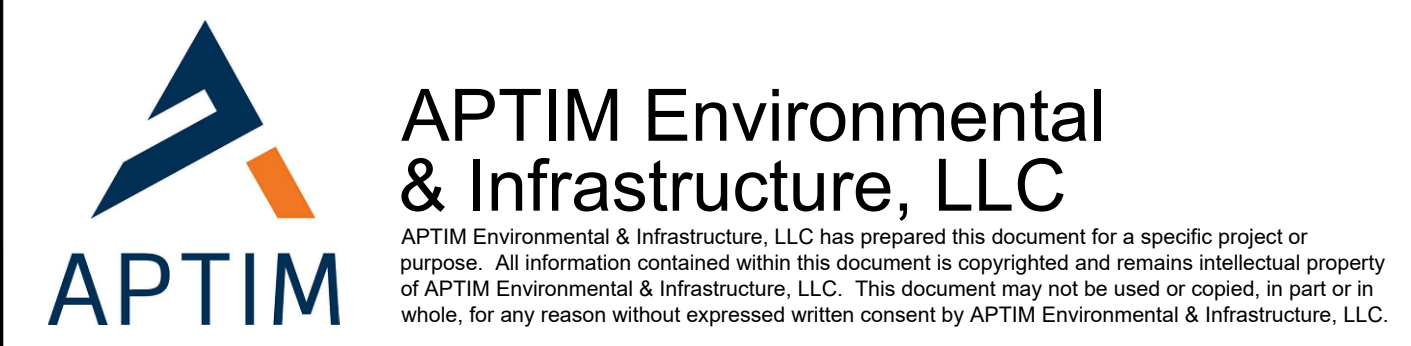
12 OF 50 SHEETS



- LEGEND**
- FILL
 - ORGANIC SILTY CLAY, TOPSOIL
 - CLAY, SILTY CLAY, SANDY CLAY
 - SILT, SANDY SILT, CLAYEY SILT
 - SAND
 - GRAVEL
 - DOLOMITE
 - CURRENTLY PERMITTED LIMITS OF EXCAVATION
 - PROPOSED LIMITS OF EXCAVATION
 - K_h HORIZONTAL HYDRAULIC CONDUCTIVITY OBTAINED FROM SLUG TEST
 - K_v VERTICAL HYDRAULIC CONDUCTIVITY OBTAINED FROM LABORATORY TEST
 - POTENTIOMETRIC ELEVATION WITH ASSOCIATED WELL DESIGNATION
 - E.O.B. END OF BORING

- NOTES**
- LITHOLOGY CONTAINED ON THIS DRAWING IS INTERPOLATED BETWEEN BORING LOCATIONS.
 - DESCRIPTIONS DEPICTED ON THIS DRAWING ARE GENERALIZED. THE COMPLETE DESCRIPTIONS ARE CONTAINED ON THE BORING LOGS.
 - EXISTING TOPOGRAPHY DEVELOPED FROM A SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 - WATER LEVELS COLLECTED 05/23/2019.
 - G178 WAS LOGGED BY GOLDER IN 1997 AND VERIFIED FROM 0'-85' BGS BY SHAW (B-7-07) IN 2007.

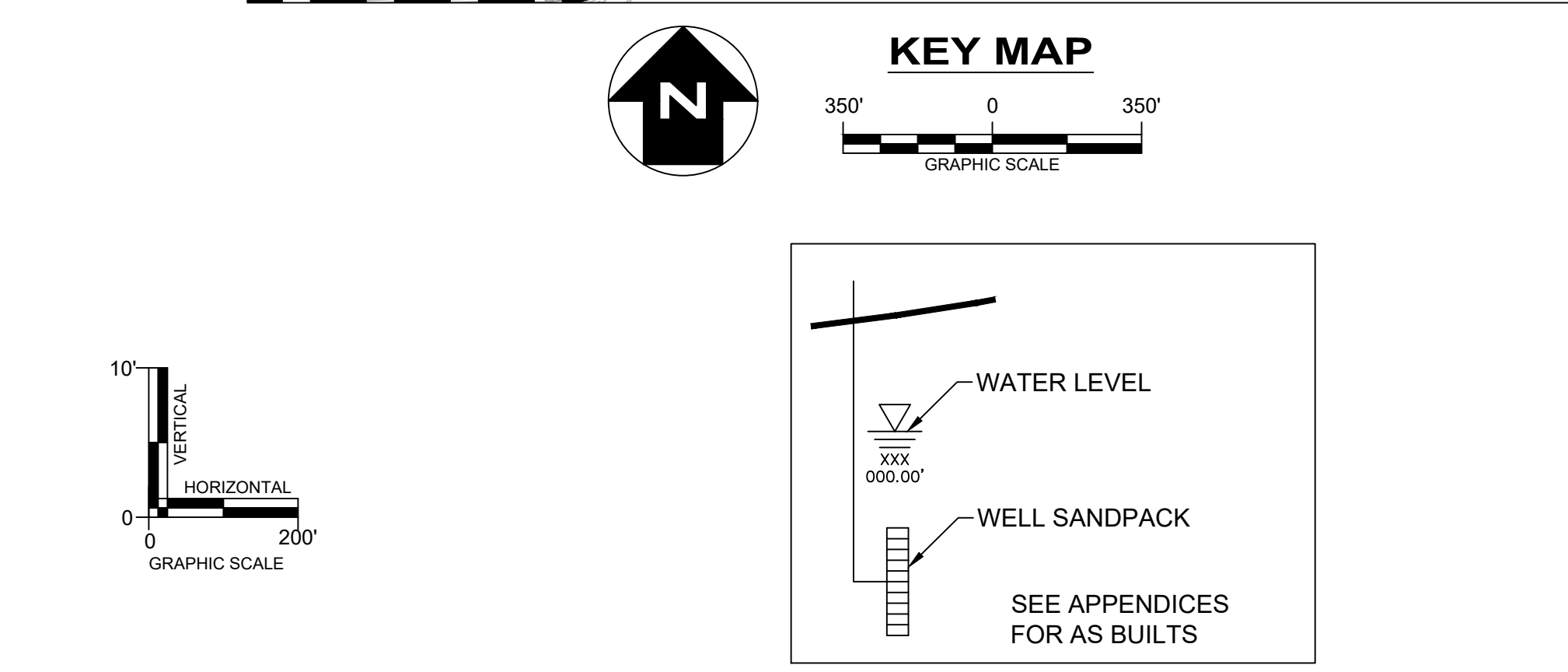
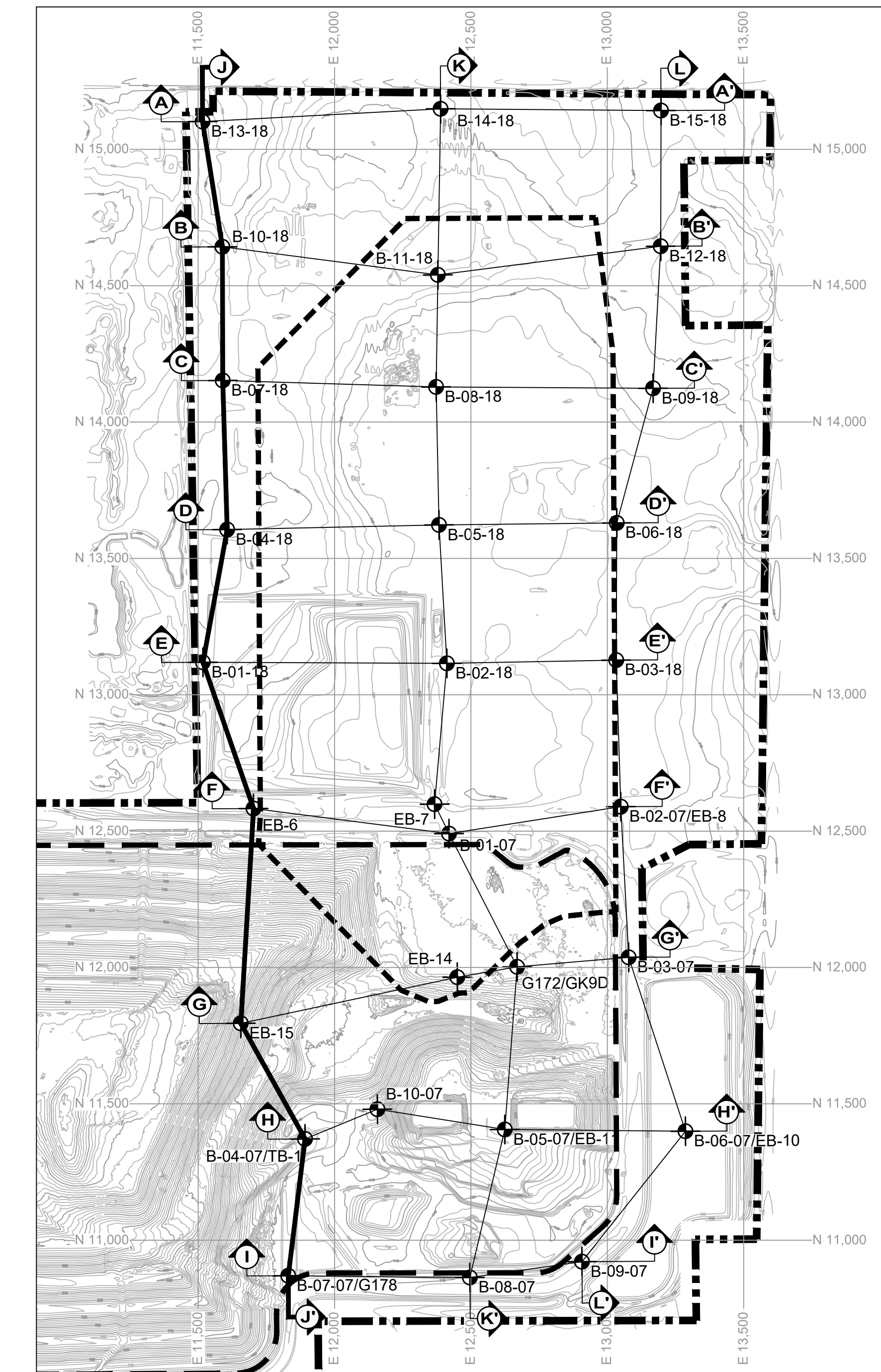
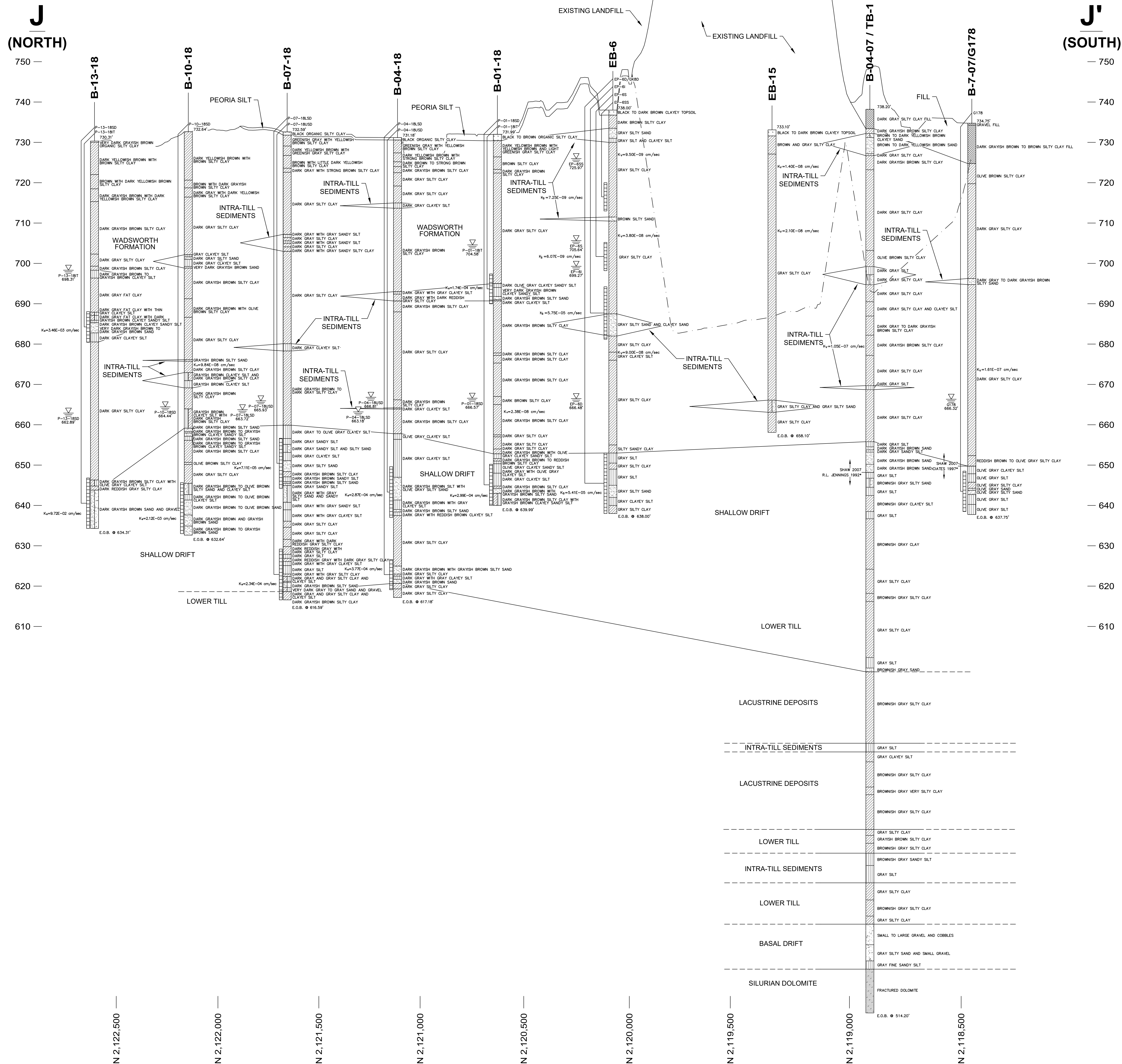
REV. NO.	DATE	DESCRIPTION



ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS

GEOLOGICAL CROSS SECTION I-I'

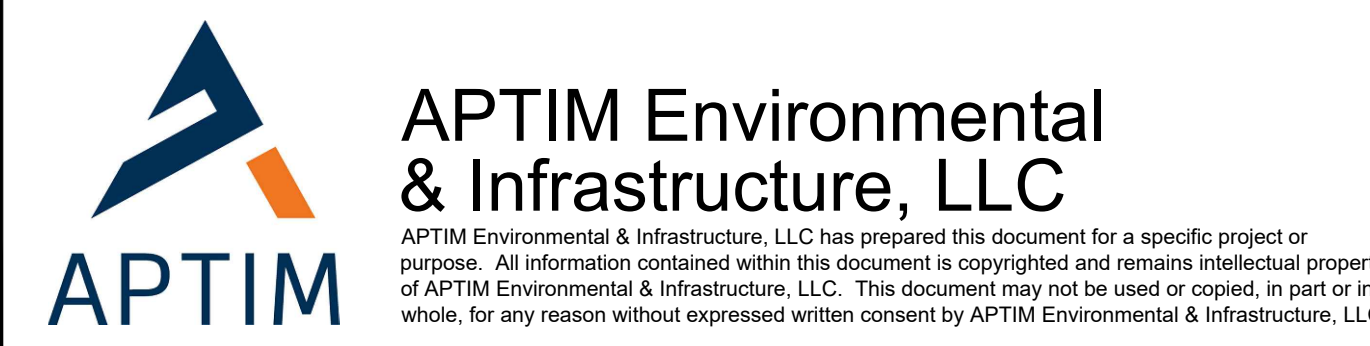
PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.:	G13
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		
			13 OF 50 SHEETS



- MONITORING WELL SCHEMATIC**
- LEGEND**
- FILL
 - ORGANIC SILTY CLAY, TOPSOIL
 - CLAY, SILTY CLAY, SANDY CLAY
 - SILT, SANDY SILT, CLAYEY SILT
 - SAND
 - GRAVEL
 - DOLOMITE
 - CURRENTLY PERMITTED LIMITS OF EXCAVATION
 - PROPOSED LIMITS OF EXCAVATION
 - K_s HORIZONTAL HYDRAULIC CONDUCTIVITY OBTAINED FROM SLUG TEST
 - K_v VERTICAL HYDRAULIC CONDUCTIVITY OBTAINED FROM LABORATORY TEST
 - ∇ POTENTIOMETRIC ELEVATION WITH ASSOCIATED WELL DESIGNATION
 - E.O.B. END OF BORING

- NOTES**
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 - WATER LEVELS COLLECTED 05/23/2019.

REV. NO.	DATE	DESCRIPTION

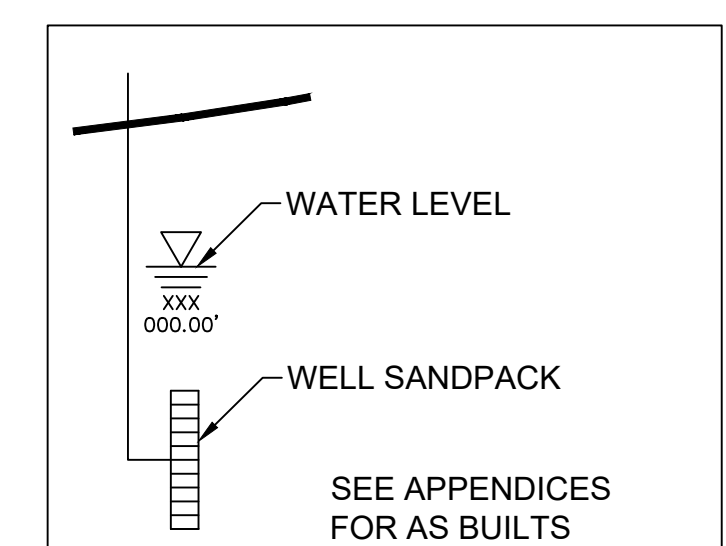
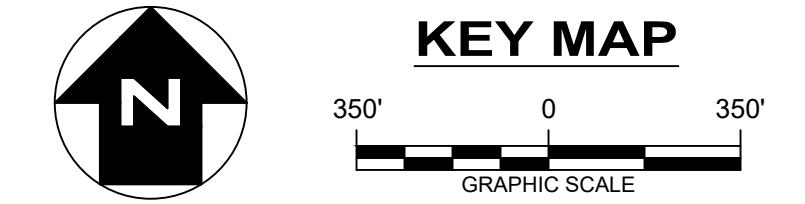
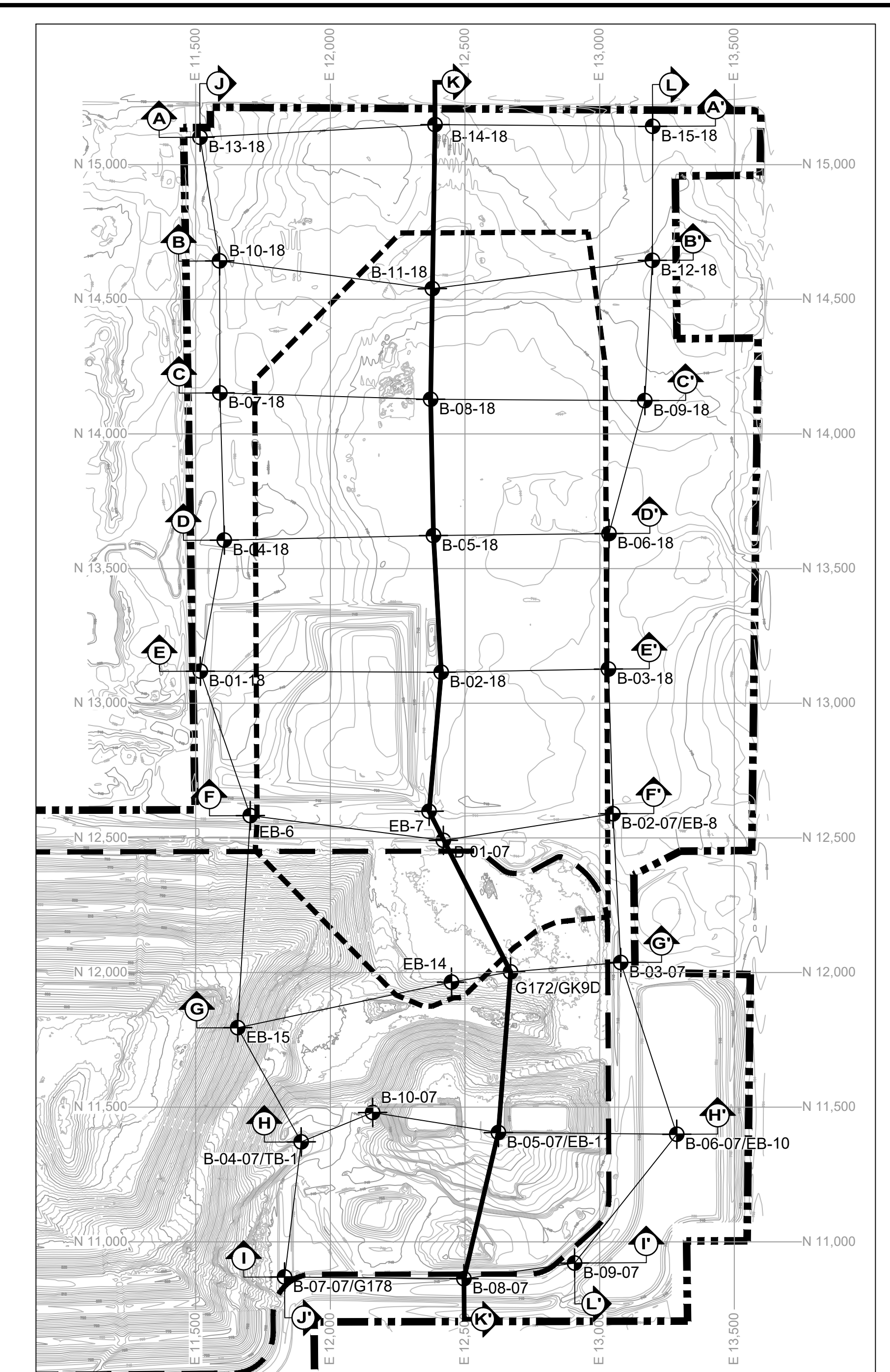
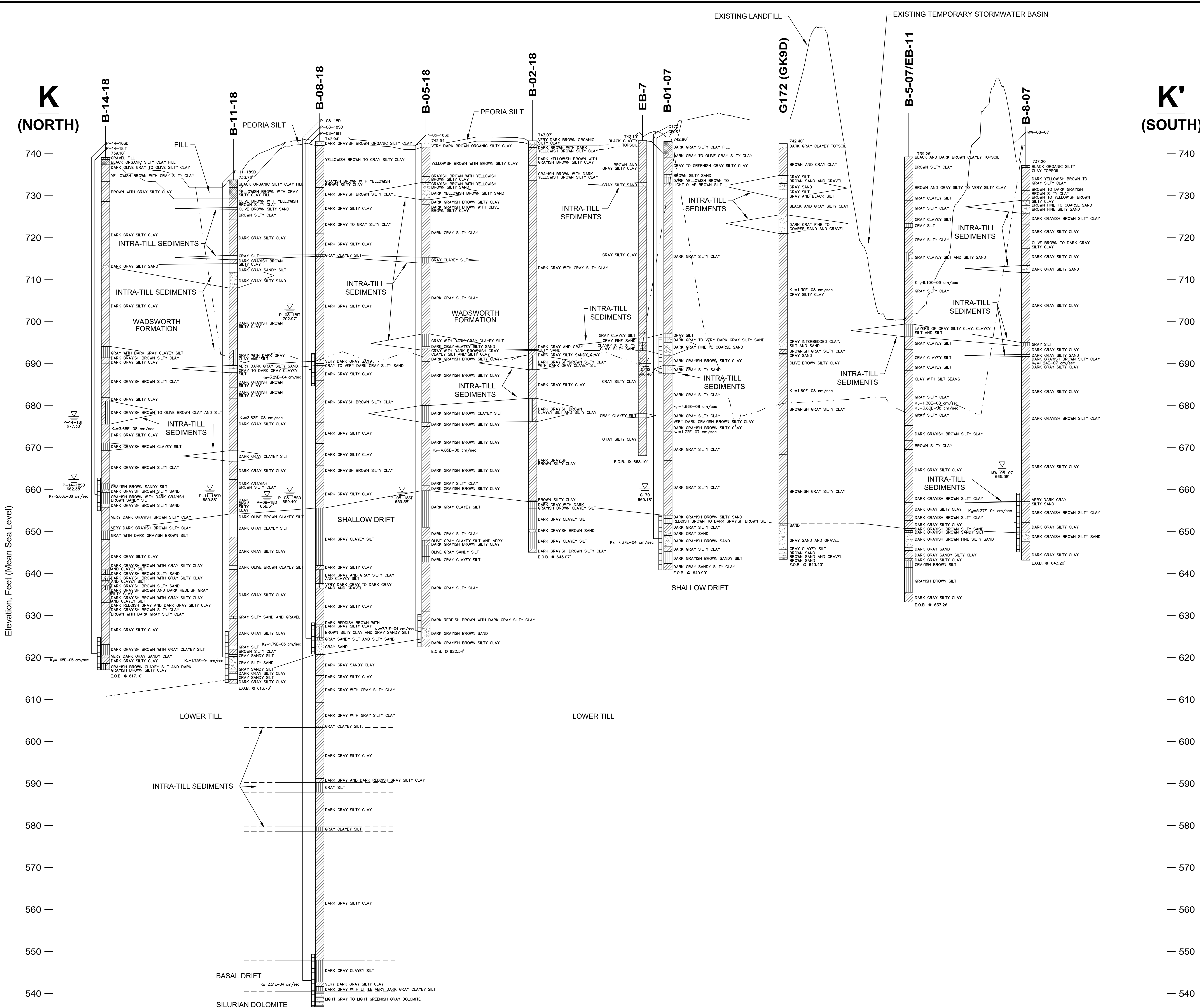


ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS

GEOLOGICAL CROSS SECTION J-J'

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.:	G14
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		

14 OF 50 SHEETS



MONITORING WELL SCHEMATIC

- LEGEND**
- FILL
 - ORGANIC SILTY CLAY, TOPSOIL
 - CLAY, SILTY CLAY, SANDY CLAY
 - SILTY, SANDY SILTY, CLAYEY SILT
 - SAND
 - GRAVEL
 - DOLOMITE
 - CURRENTLY PERMITTED LIMITS OF EXCAVATION
 - PROPOSED LIMITS OF EXCAVATION
 - K_s HORIZONTAL HYDRAULIC CONDUCTIVITY OBTAINED FROM SLUG TEST
 - K_v VERTICAL HYDRAULIC CONDUCTIVITY OBTAINED FROM LABORATORY TEST
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 - E.O.B. END OF BORING

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 - WATER LEVELS COLLECTED 05/23/2019.

REV. NO.	DATE	DESCRIPTION



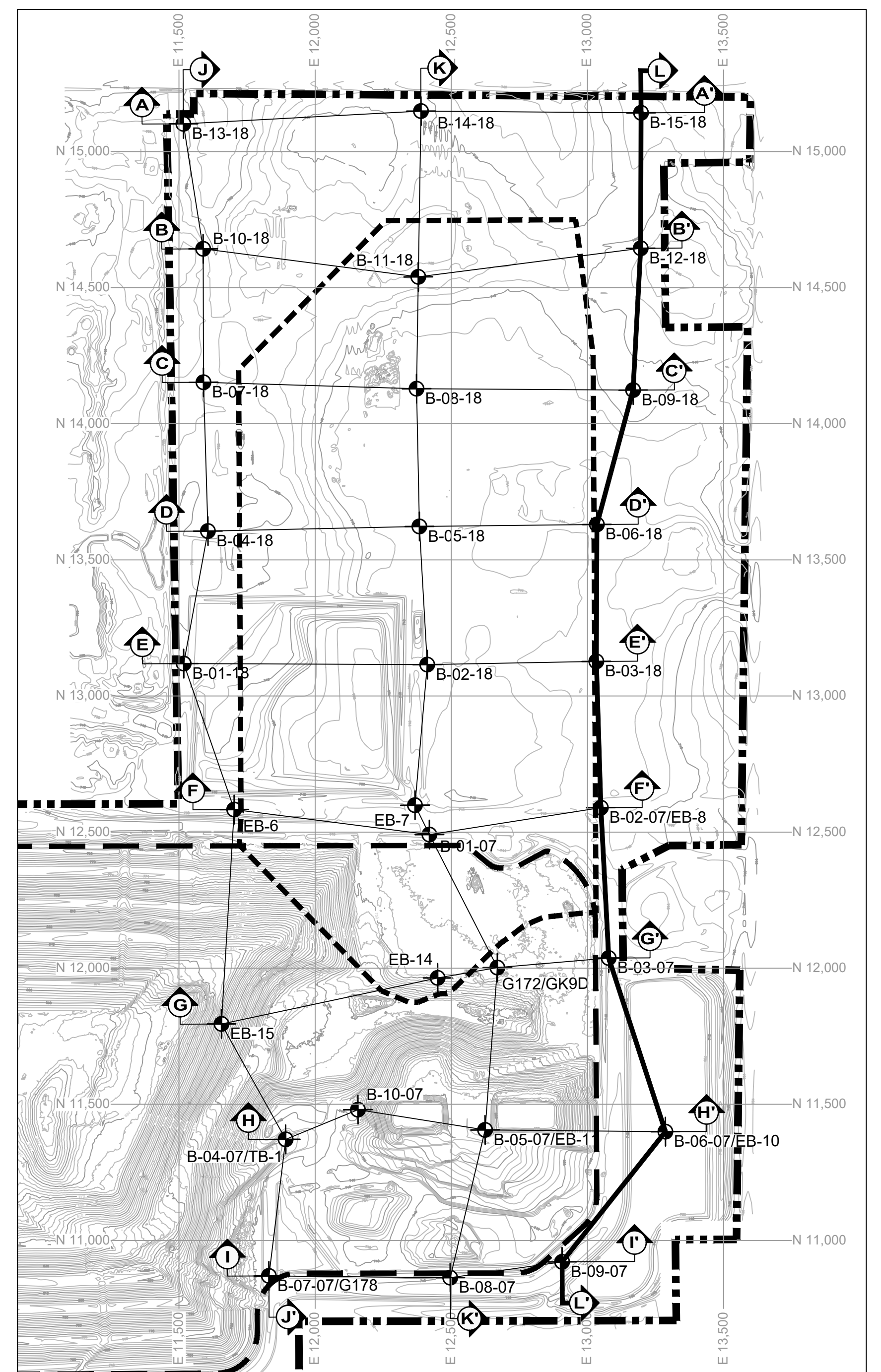
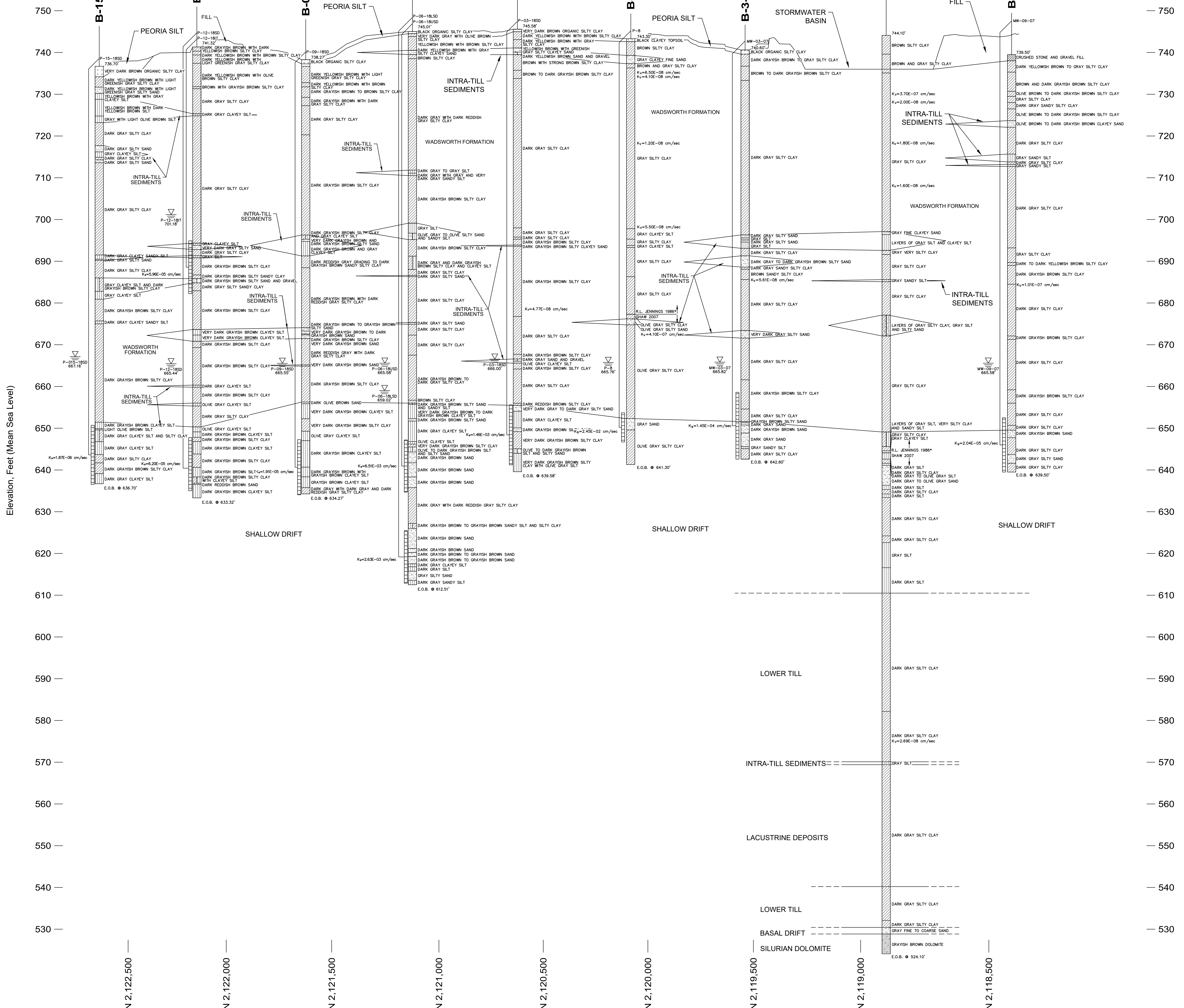
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**ZION LANDFILL - SITE 2 NORTH EXPANSION
 CITY OF ZION, ILLINOIS**

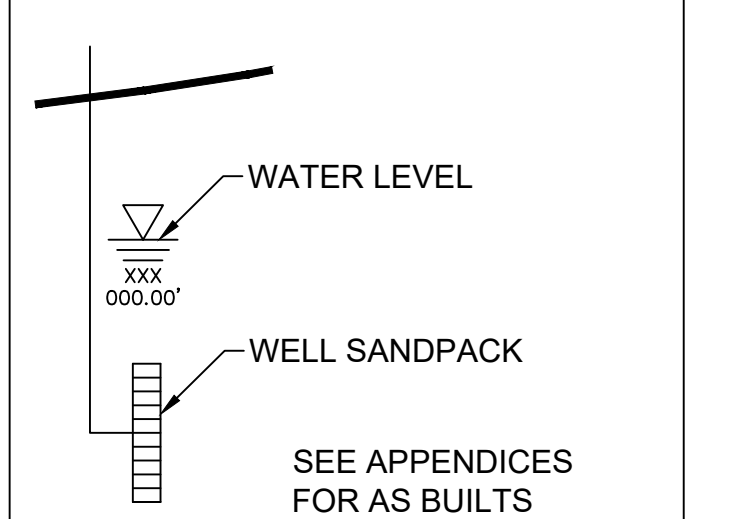
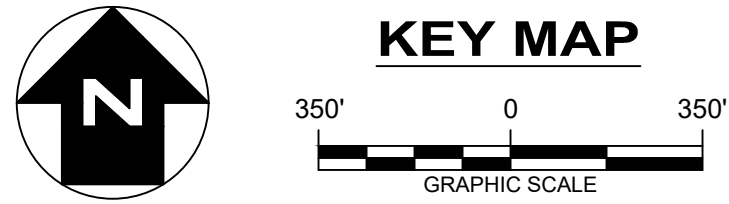
GEOLOGICAL CROSS SECTION K-K'

PROJ. NO.: 631020105	DATE: MAY 2022
DESIGNED BY: MNF	DRAWING NO.
DRAWN BY: NV	G15
CHECKED BY: MNF	
APPROVED BY: DAM	
15 OF 50 SHEETS	

L (NORTH) **L'** (SOUTH)



Elevation, Feet (Mean Sea Level)



MONITORING WELL SCHEMATIC

- LEGEND**
- FILL
 - ORGANIC SILTY CLAY, TOPSOIL
 - CLAY, SILTY CLAY, SANDY CLAY
 - SILT, SANDY SILT, CLAYEY SILT
 - SAND
 - GRAVEL
 - DOLOMITE
 - CURRENTLY PERMITTED LIMITS OF EXCAVATION
 - PROPOSED LIMITS OF EXCAVATION
 - K_h HORIZONTAL HYDRAULIC CONDUCTIVITY OBTAINED FROM SLUG TEST
 - K_v VERTICAL HYDRAULIC CONDUCTIVITY OBTAINED FROM LABORATORY TEST
 - ∇ POTENTIOMETRIC ELEVATION WITH ASSOCIATED WELL DESIGNATION
 - E.O.B. END OF BORING

- NOTES**
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 - DESCRIPTIONS DEPICTED ON THIS DRAWING ARE GENERALIZED. THE COMPLETE DESCRIPTIONS ARE CONTAINED ON THE BORING LOGS.
 - EXISTING TOPOGRAPHY DEVELOPED FROM A SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 - WATER LEVELS COLLECTED 05/23/2019.

REV. NO.	DATE	DESCRIPTION

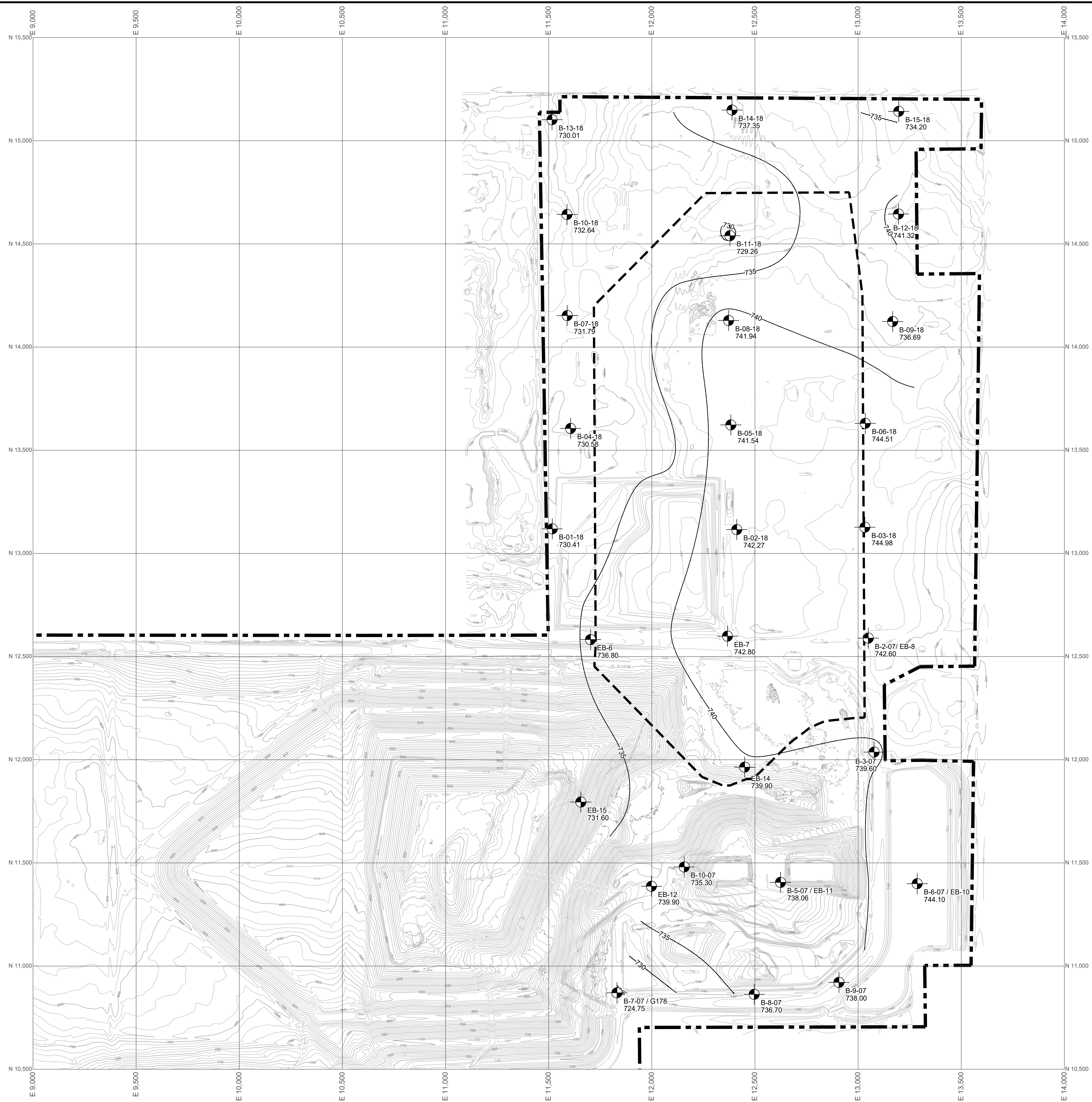


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**ZION LANDFILL - SITE 2 NORTH EXPANSION
 CITY OF ZION, ILLINOIS**

GEOLOGICAL CROSS SECTION L-L'

PROJ. NO.: 631020105	DATE: MAY 2022
DESIGNED BY: MNF	DRAWING NO.
DRAWN BY: NV	G16
CHECKED BY: MNF	
APPROVED BY: DAM	
16 OF 50 SHEETS	



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE EXISTING WASTE BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - INTERPOLATED TOP OF WADSWORTH TILL CONTOUR
 - BORING LOCATION WITH TOP OF WADSWORTH TILL ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 3. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.

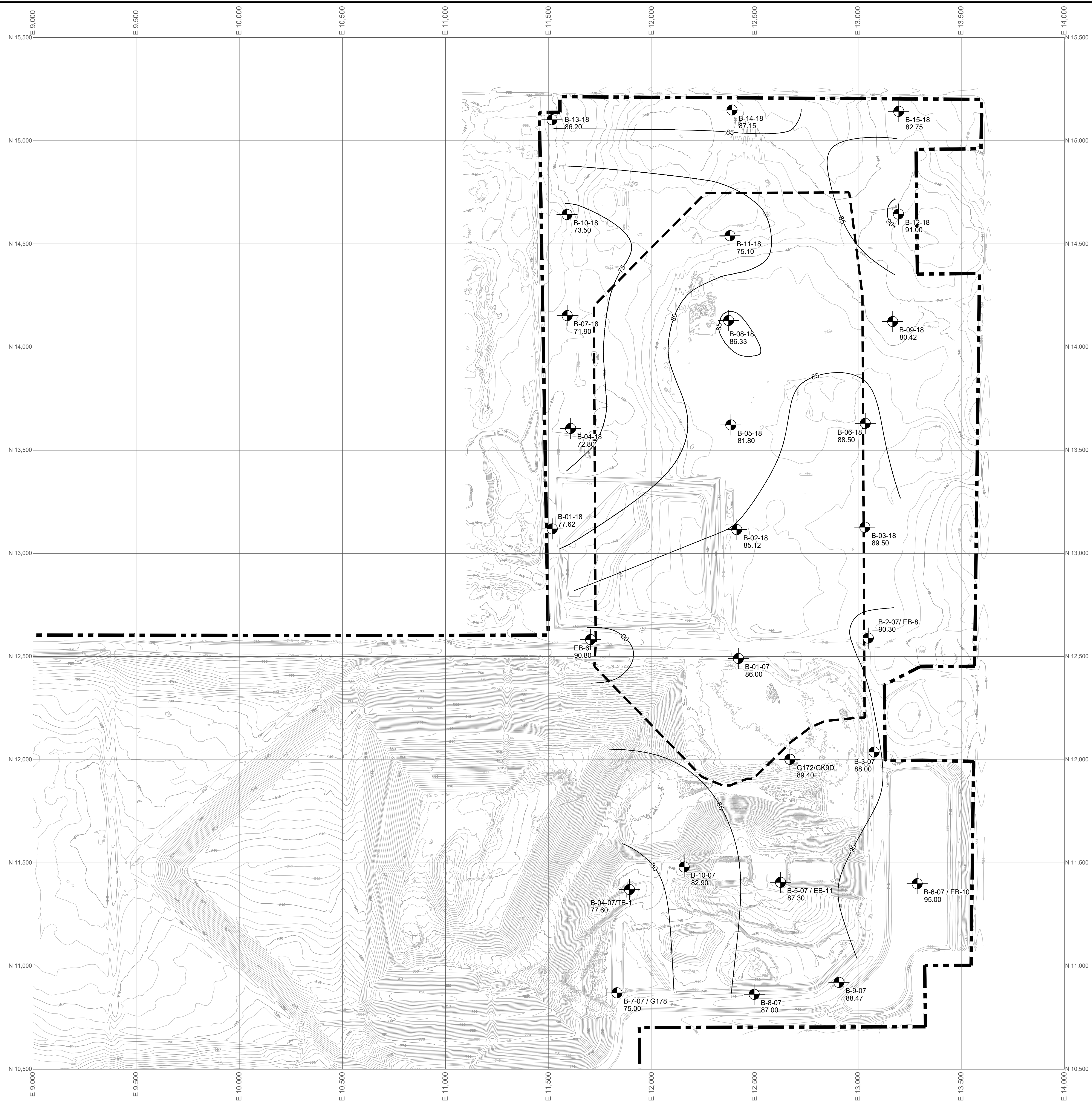
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

TOP ELEVATION OF WADSWORTH TILL

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.:	G17
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE EXISTING WASTE BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - INTERPOLATED TOP OF WADSWORTH TILL CONTOUR
 - BORING LOCATION WITH THICKNESS OF WADSWORTH TILL (FT)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 3. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.

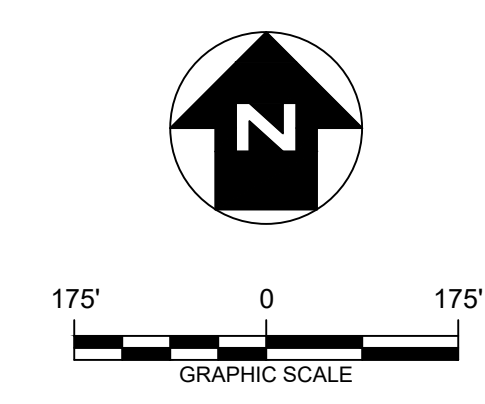
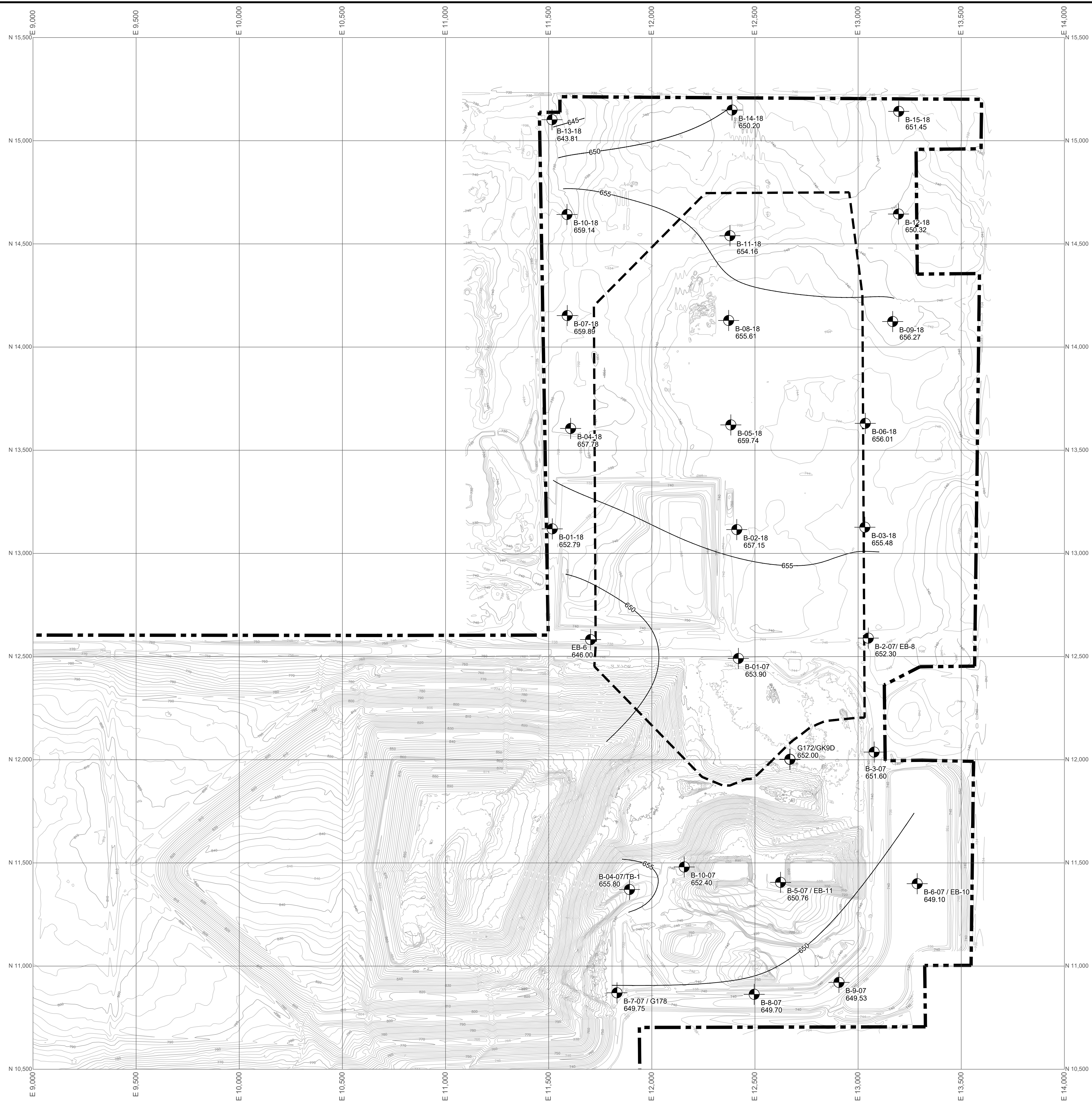
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

THICKNESS OF WADSWORTH TILL

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.:	G18
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE EXISTING WASTE BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - INTERPOLATED TOP OF SHALLOW DRIFT CONTOUR
 - BORING LOCATION WITH TOP OF SHALLOW DRIFT ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 3. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.

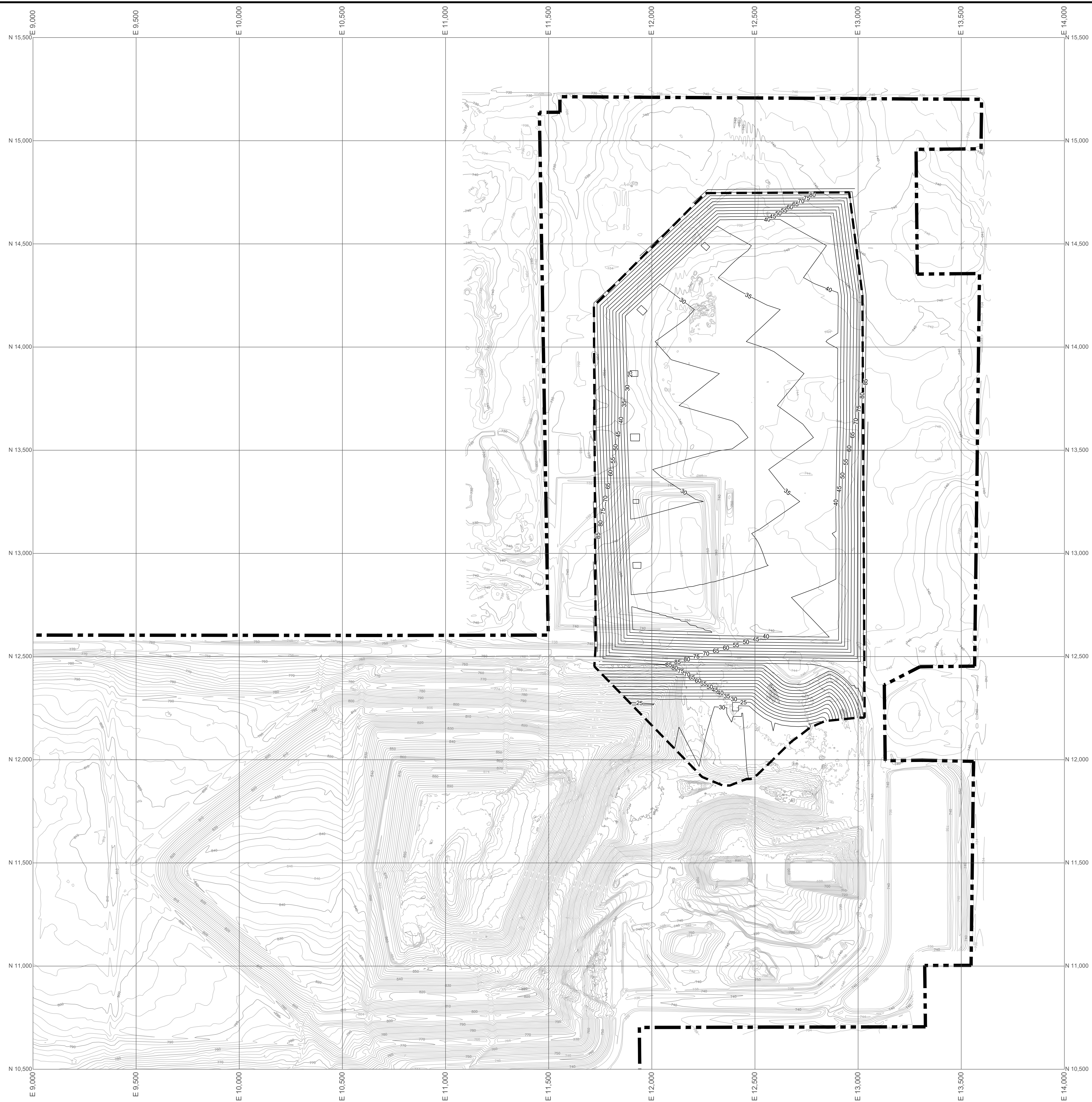
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

TOP ELEVATION OF SHALLOW DRIFT

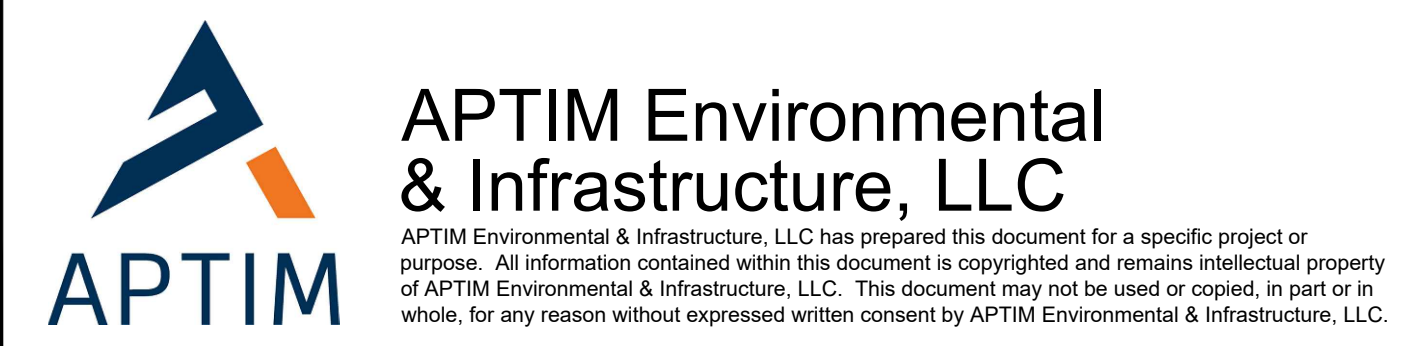
PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.:	G19
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- — — — — APPROXIMATE PROPOSED FACILITY BOUNDARY
 - — — — — APPROXIMATE EXISTING WASTE BOUNDARY
 - — — — — APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - 30 — INTERPOLATED THICKNESS CONTOUR

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 3. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.
 4. THICKNESS OF WADSWORTH TILL BELOW EXCAVATION GRADES DEVELOPED FROM COMPARING THE DESIGN BOTTOM OF LINER/EXCAVATION AND THE TOP ELEVATION OF SHALLOW DRIFT SURFACE.
 5. THICKNESS OF WADSWORTH TILL UNDER LINER FLOOR (EXCLUDES SIDESLOPES)
 MINIMUM THICKNESS = 19.7'
 MAXIMUM THICKNESS = 43.6'
 AVERAGE THICKNESS = 33.7'

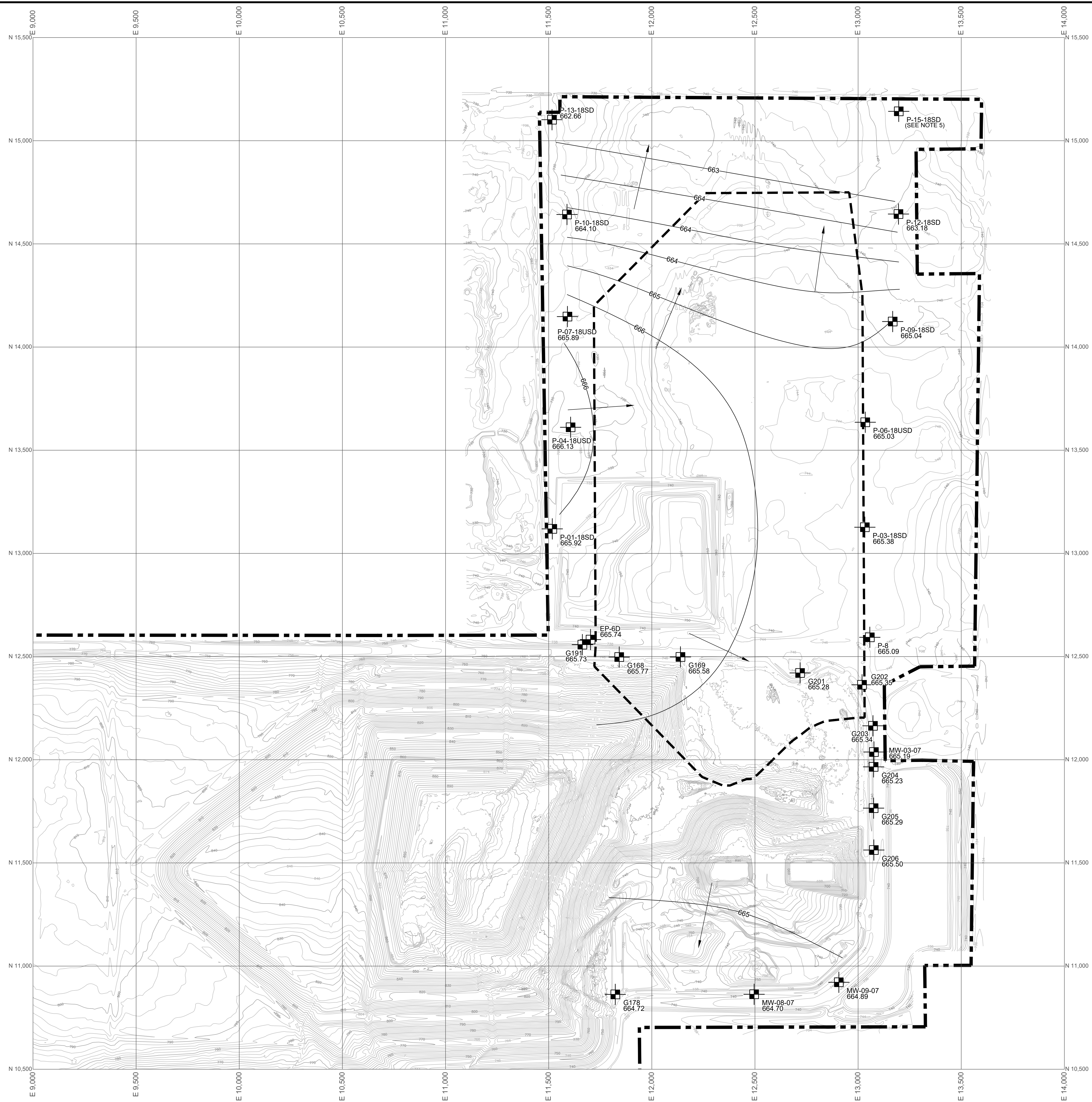
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**THICKNESS OF WADSWORTH TILL
BELOW EXCAVATION GRADES**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.	G20
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 02/26/2019.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.
 5. PIEZOMETER P-15-SD IS SCREENED IN LOW PERMEABILITY SILTS AND CLAYS AND WAS THEREFORE NOT USED IN THE CREATION OF THIS POTENTIOMETRIC MAP.

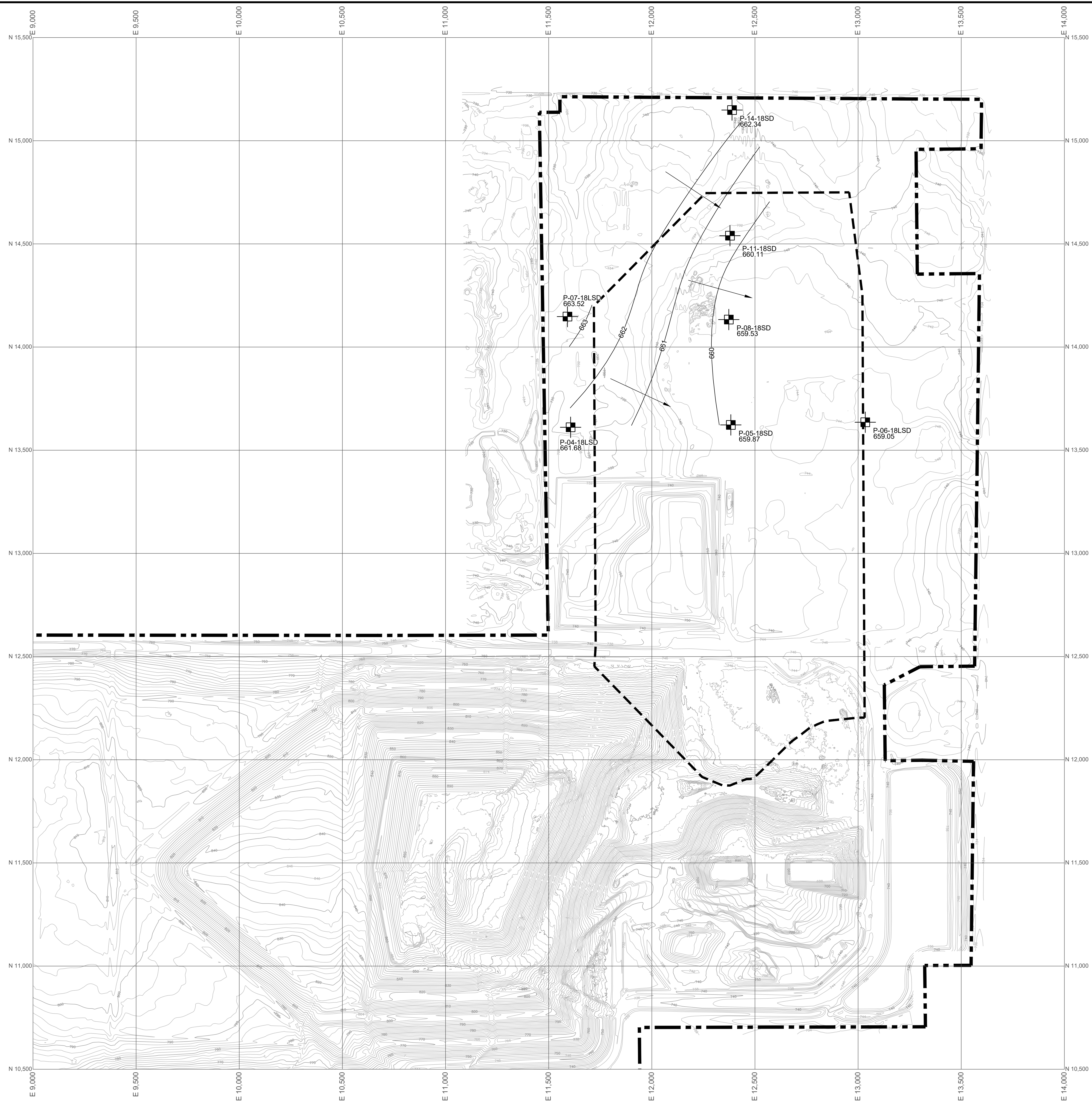
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE UPPER
PORTION OF THE SHALLOW DRIFT
FEBRUARY 2019**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.:	G21
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 02/26/2019.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.

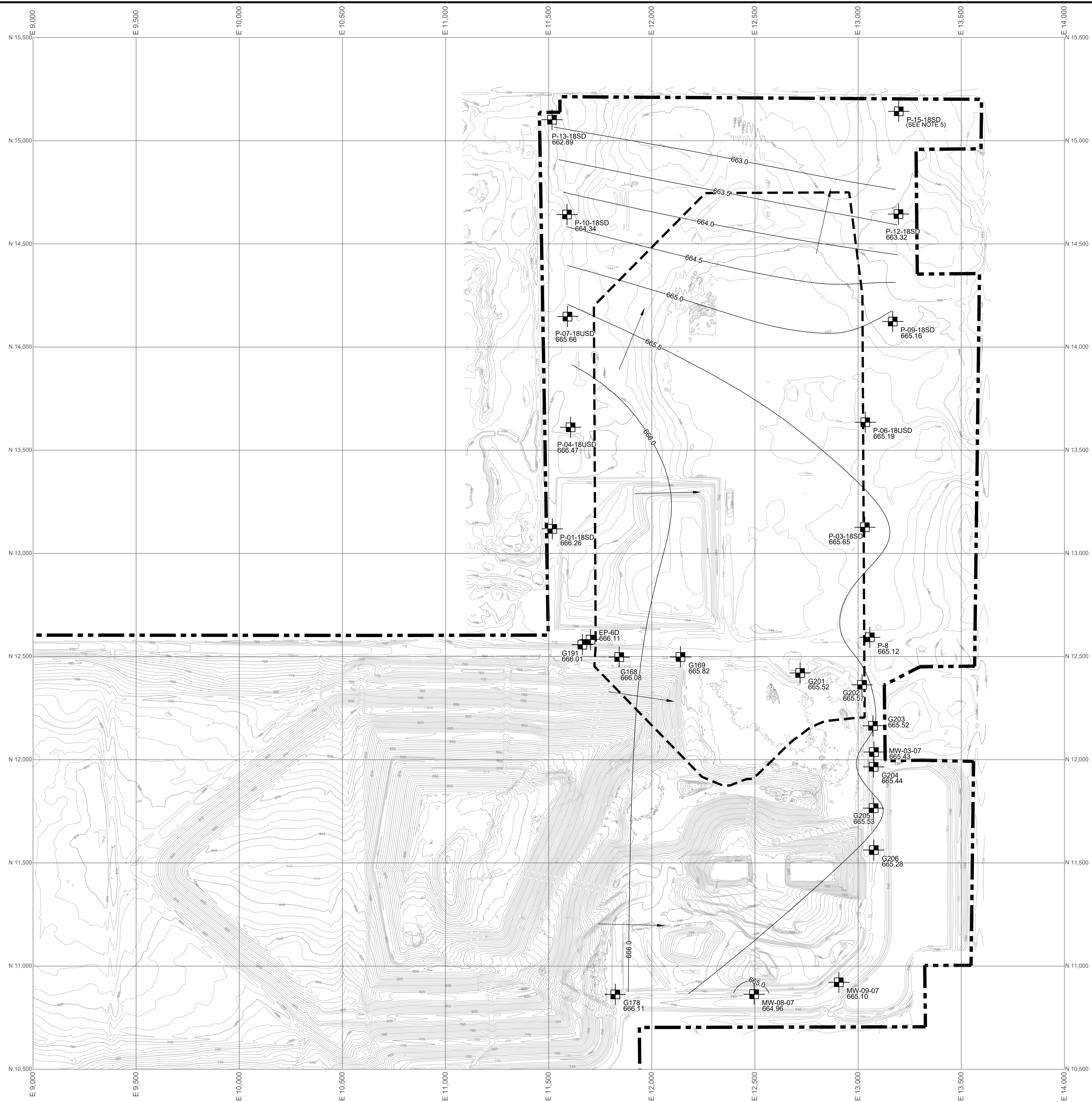
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE LOWER
PORTION OF THE SHALLOW DRIFT
FEBRUARY 2019**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.	G22
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - 665 INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 03/06/2019.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.
 5. PIEZOMETER P-15-SD IS SCREENED IN LOW PERMEABILITY SILTS AND CLAYS AND WAS THEREFORE NOT USED IN THE CREATION OF THIS POTENTIOMETRIC MAP.

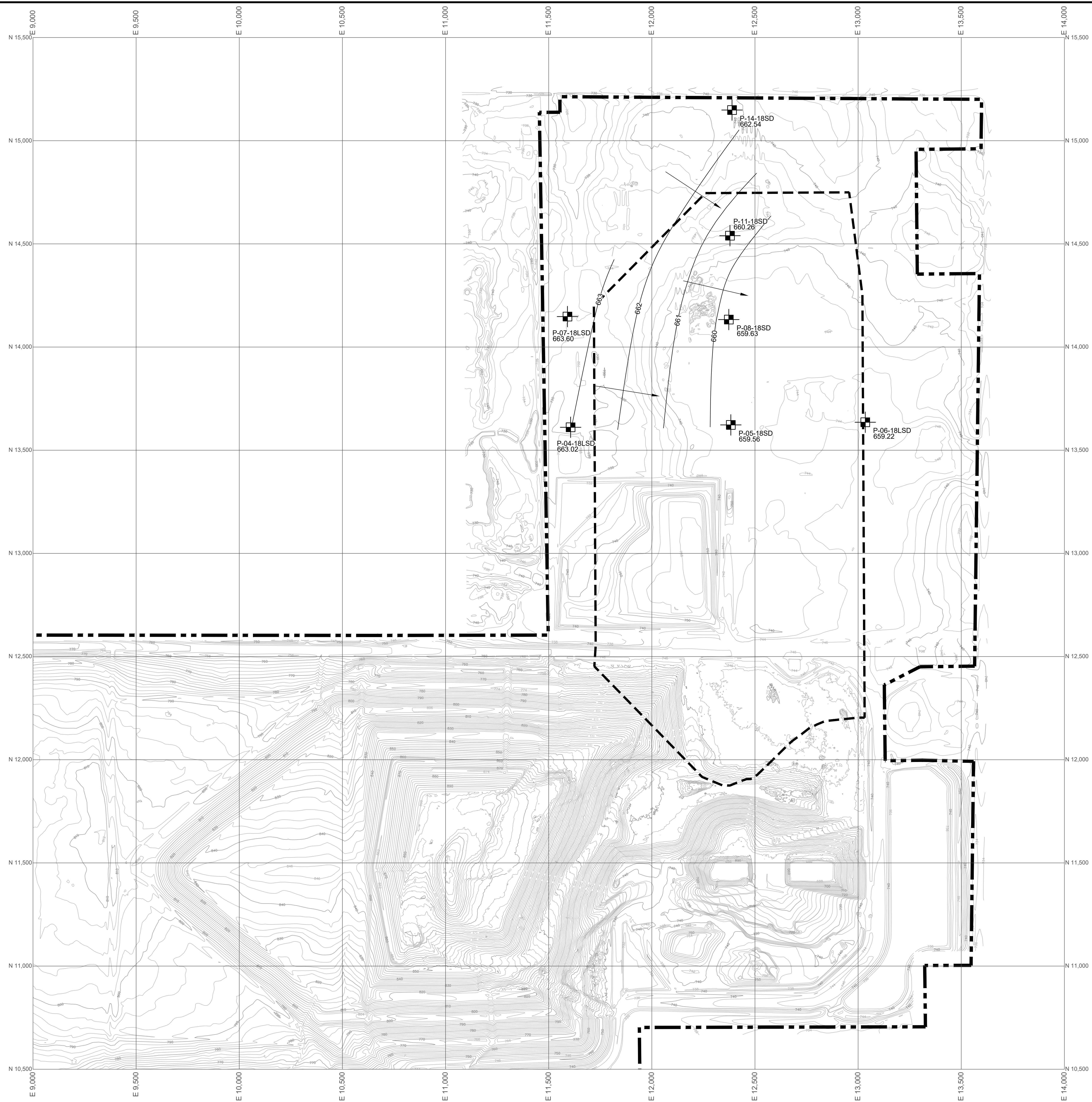
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE UPPER
PORTION OF THE SHALLOW DRIFT
MARCH 2019**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.	G23
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		
			23 OF 50 SHEETS



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 03/06/2019.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.

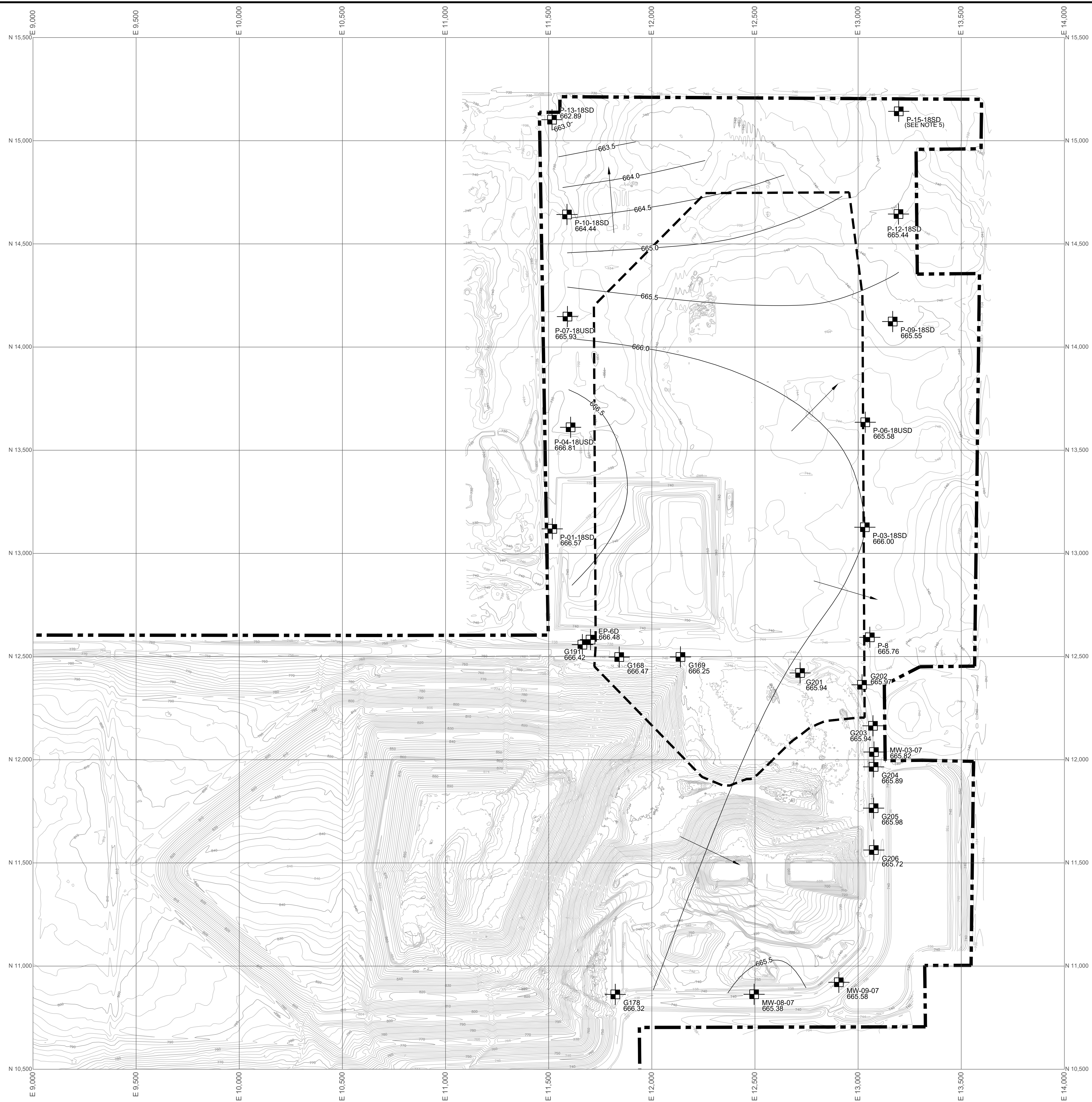
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
 CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE LOWER
 PORTION OF THE SHALLOW DRIFT
 MARCH 2019**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.	G24
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		
			24 OF 50 SHEETS



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 05/23/2019.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.
 5. PIEZOMETER P-15-SD IS SCREENED IN LOW PERMEABILITY SILTS AND CLAYS AND WAS THEREFORE NOT USED IN THE CREATION OF THIS POTENTIOMETRIC MAP.

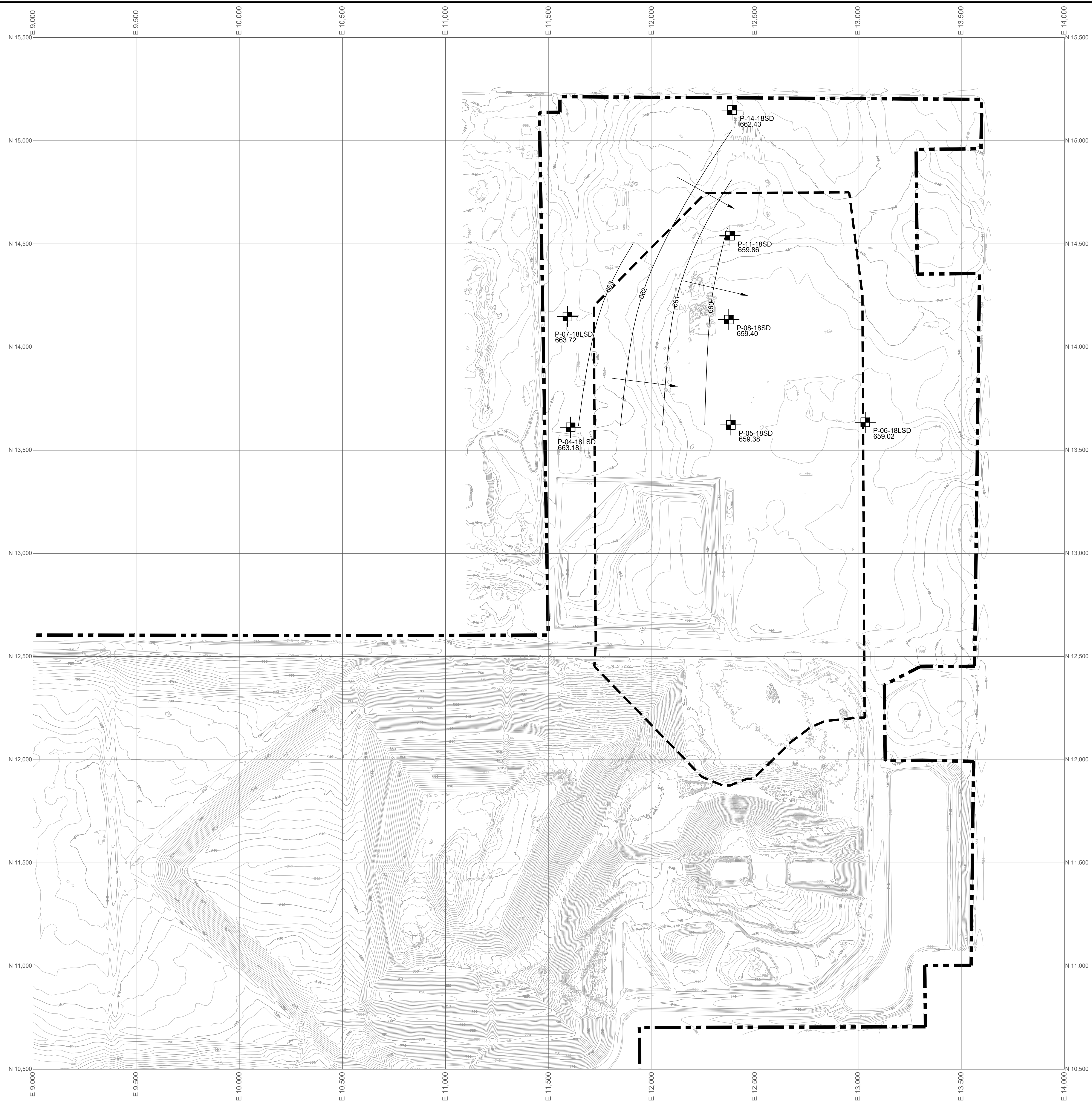
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE UPPER
PORTION OF THE SHALLOW DRIFT
MAY 2019**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.:	G25
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 05/23/2019.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.

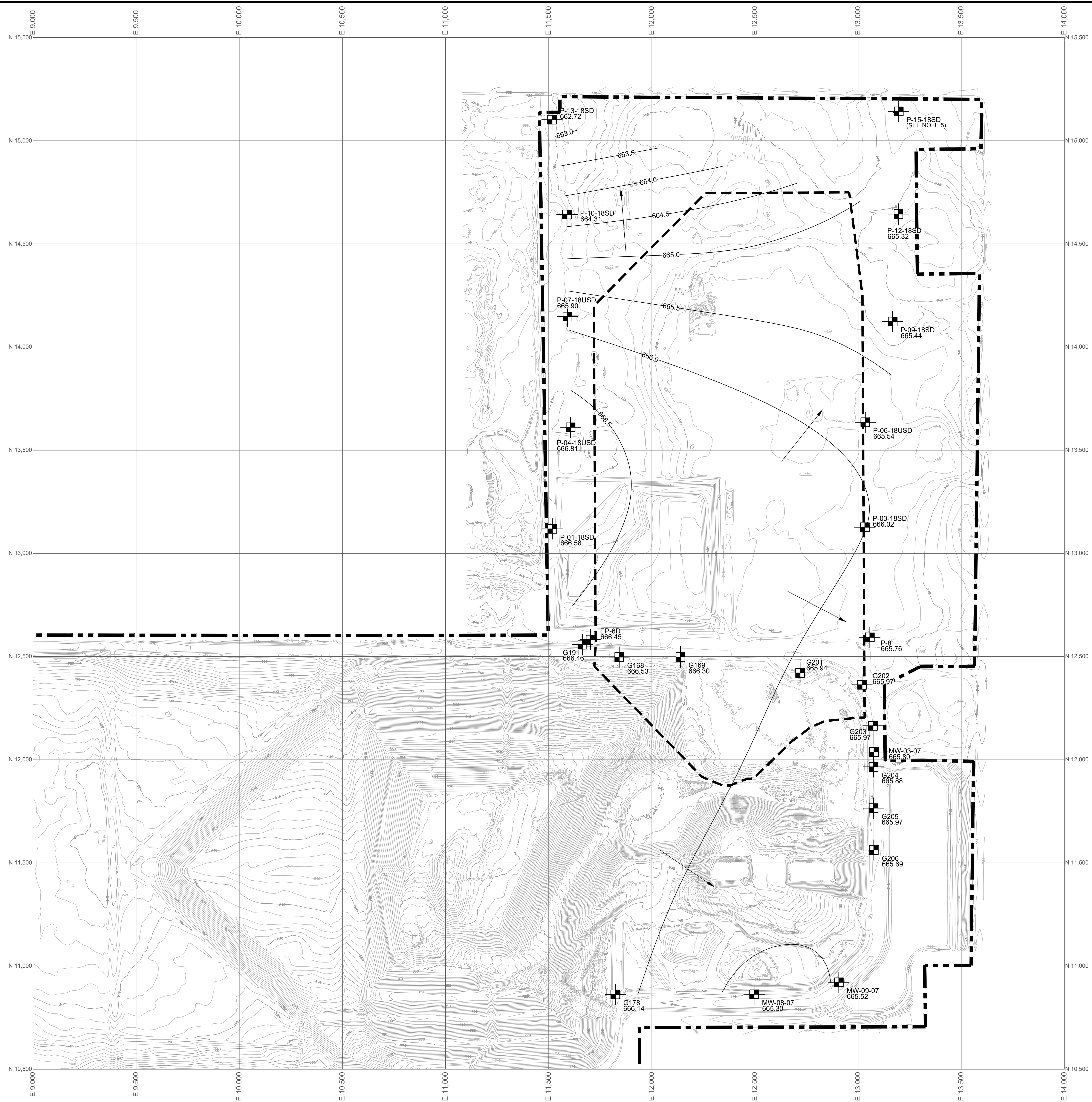
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE LOWER
PORTION OF THE SHALLOW DRIFT
MAY 2019**

PROJ. NO.: 631020105	DATE: MAY 2022
DESIGNED BY: MNF	DRAWING NO.
DRAWN BY: NV	G26
CHECKED BY: MNF	
APPROVED BY: DAM	26 OF 50 SHEETS



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - 665 INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 06/12/2019.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.
 5. PIEZOMETER P-15-SD IS SCREENED IN LOW PERMEABILITY SILTS AND CLAYS AND WAS THEREFORE NOT USED IN THE CREATION OF THIS POTENTIOMETRIC MAP.

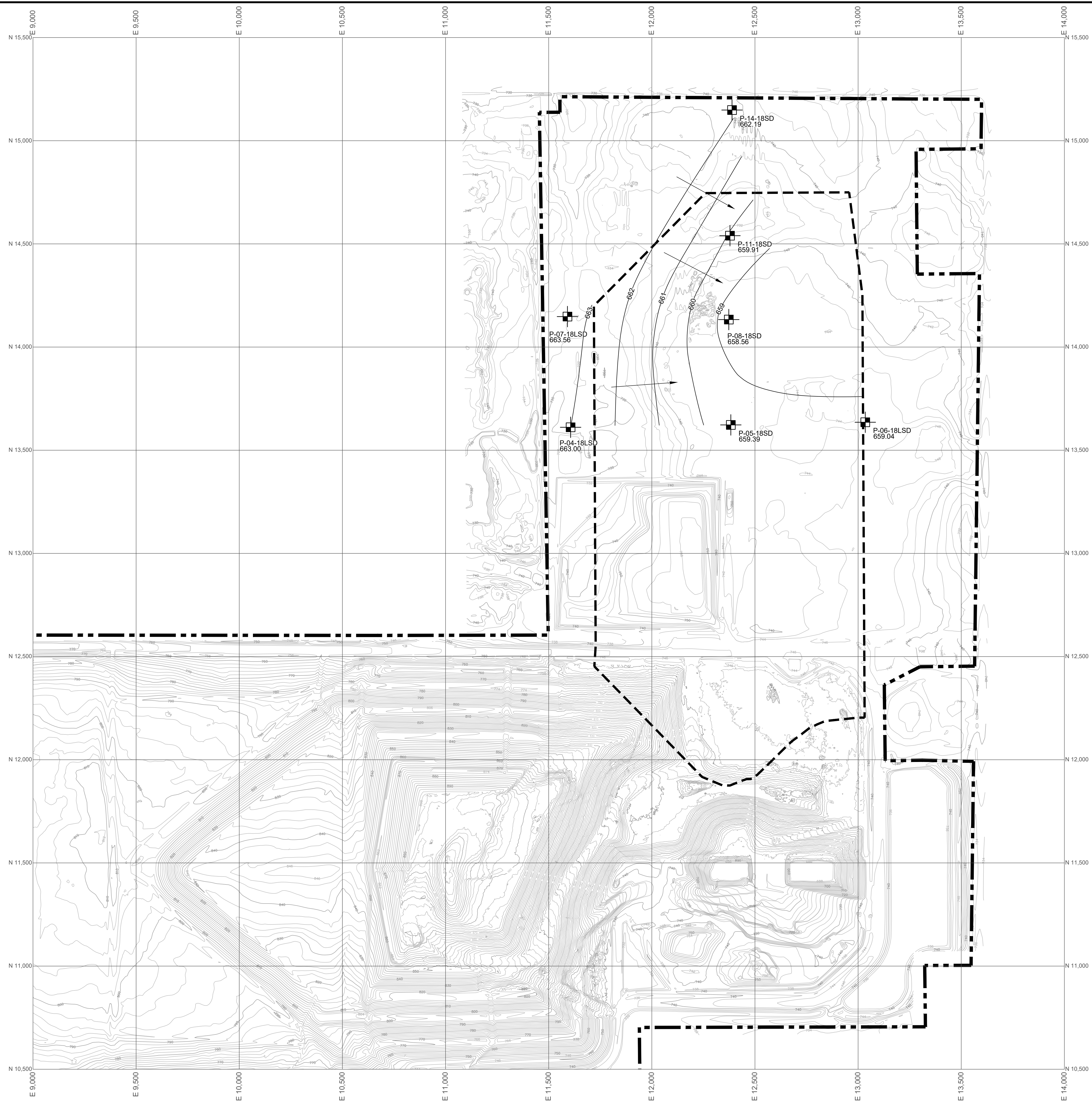
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE UPPER
PORTION OF THE SHALLOW DRIFT
JUNE 2019**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.:	G27
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 06/12/2019.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.

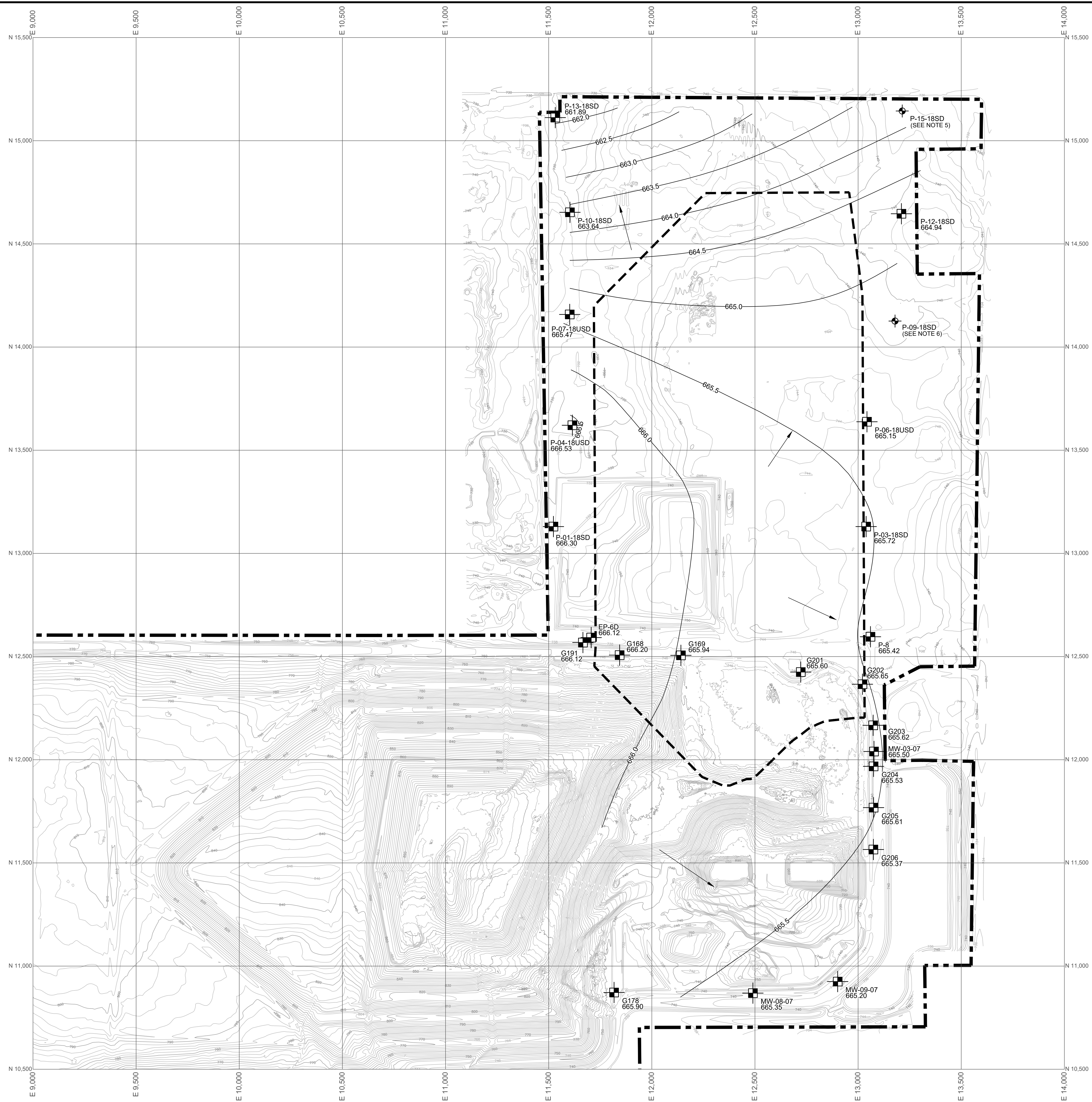
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE LOWER
PORTION OF THE SHALLOW DRIFT
JUNE 2019**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.:	G28
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		
			28 OF 50 SHEETS



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE EXISTING WASTE BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - 665 INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 07/09/2019.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.
 5. PIEZOMETER P-15-SD IS SCREENED IN LOW PERMEABILITY SILTS AND CLAYS AND WAS THEREFORE NOT USED IN THE CREATION OF THIS POTENTIOMETRIC MAP.
 6. PIEZOMETER P-09-18SD HAS A SUSPECTED ERRONEOUS MEASUREMENT AND WAS THEREFORE NOT USED IN THE CREATION OF THIS POTENTIOMETRIC MAP.

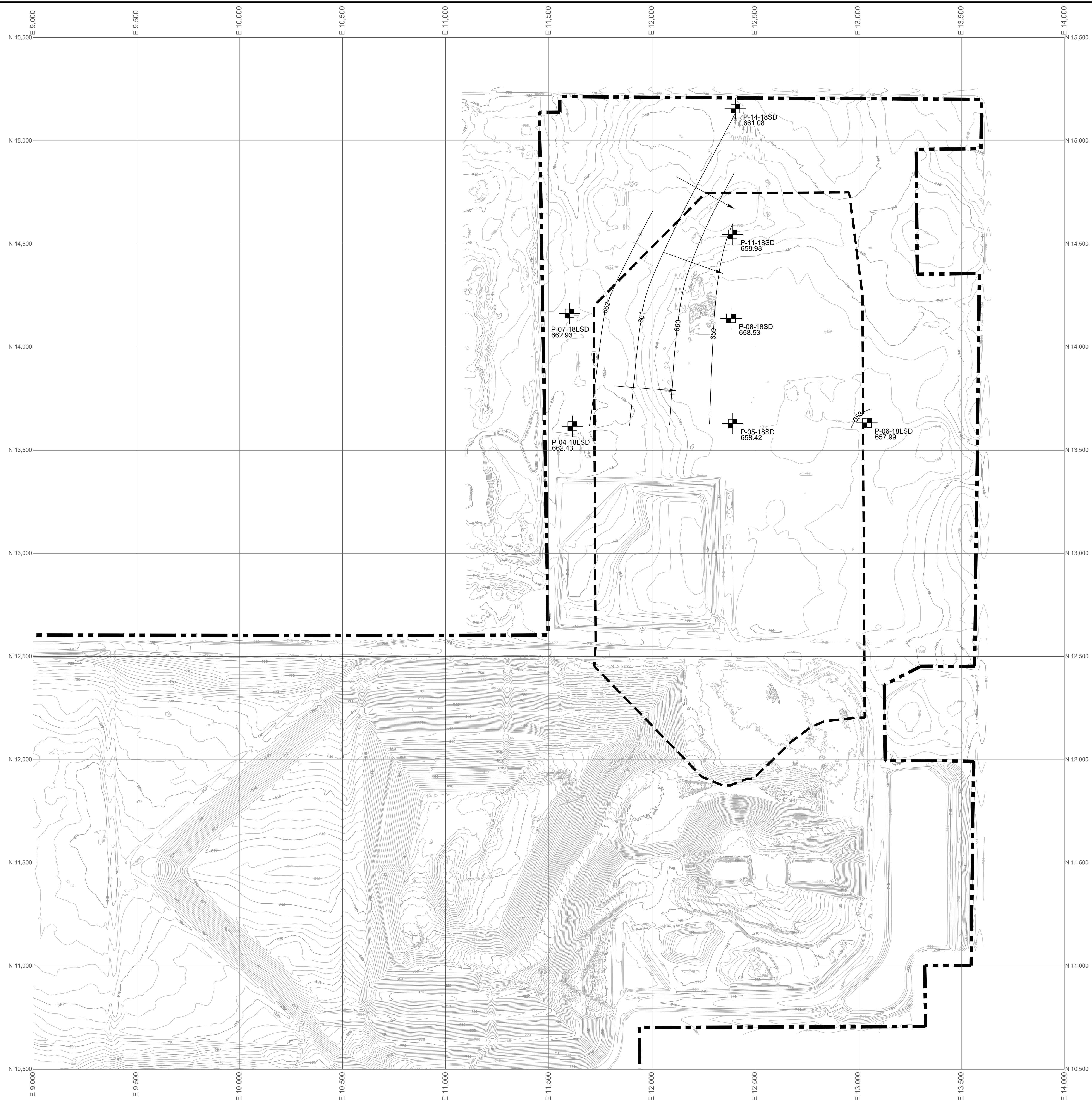
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE UPPER
PORTION OF THE SHALLOW DRIFT
JULY 2019**

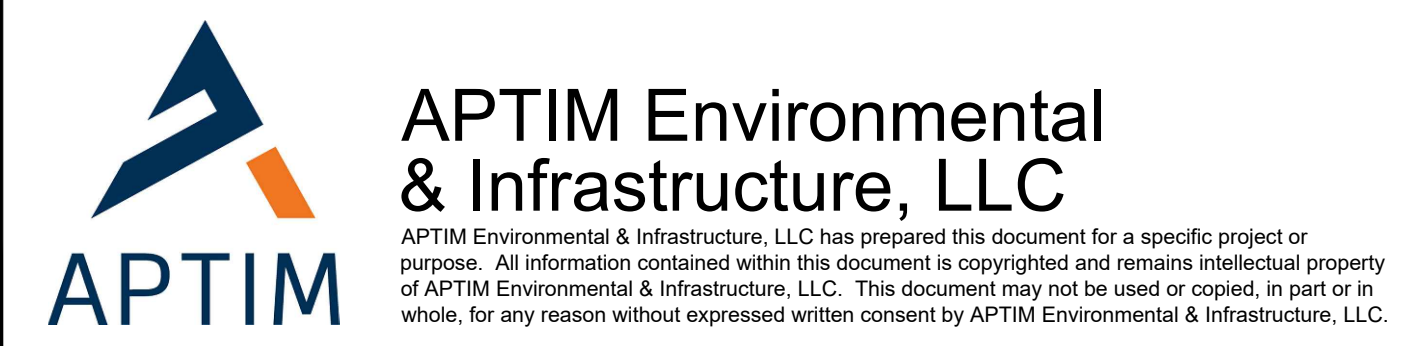
PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.	G29
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE EXISTING WASTE BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 07/09/2019.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.

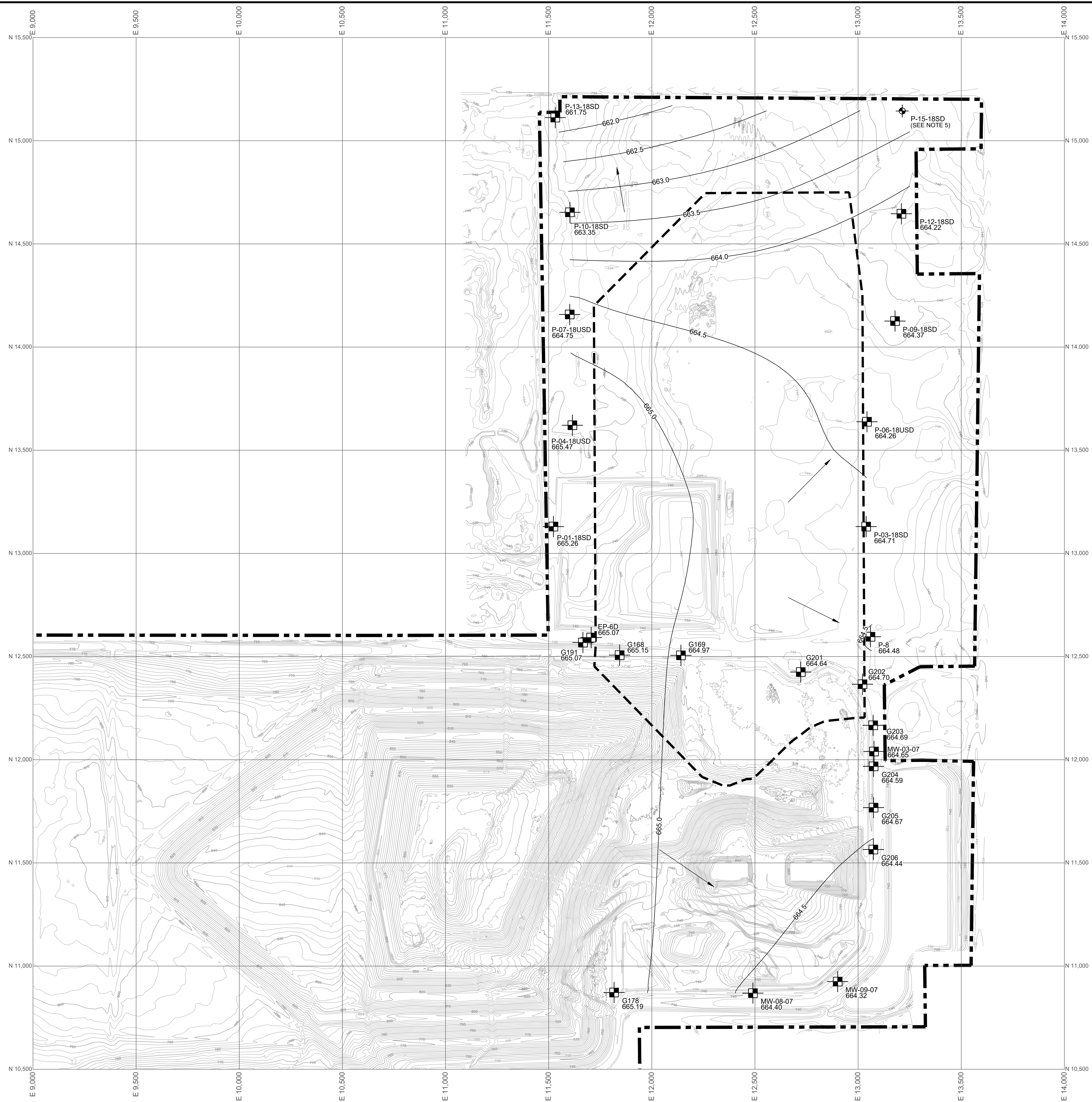
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE LOWER
PORTION OF THE SHALLOW DRIFT
JULY 2019**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.	G30
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE EXISTING WASTE BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - 665 INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 10/09/2019.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.
 5. PIEZOMETER P-15-SD IS SCREENED IN LOW PERMEABILITY SILTS AND CLAYS AND WAS THEREFORE NOT USED IN THE CREATION OF THIS POTENTIOMETRIC MAP.

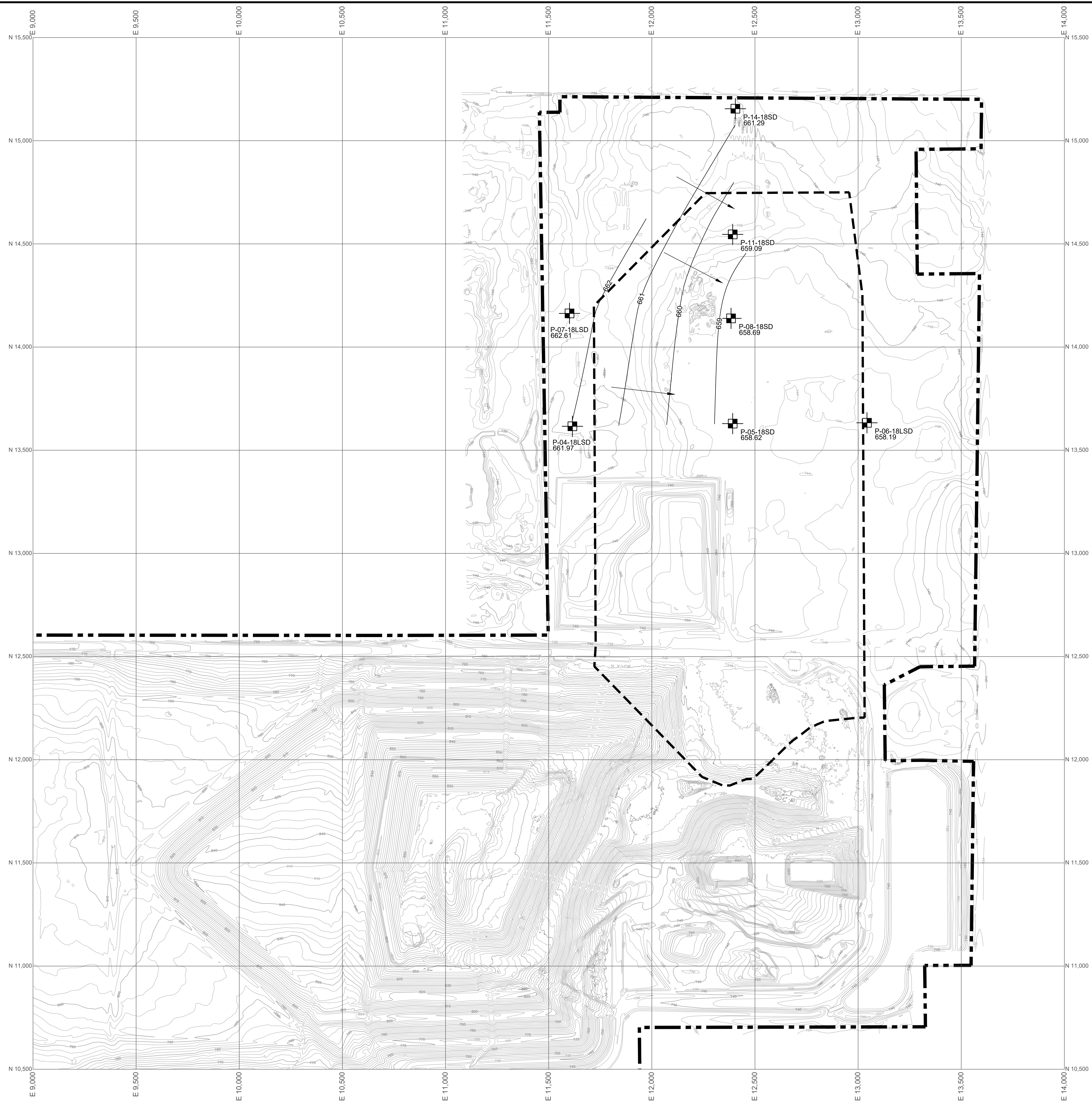
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE UPPER
PORTION OF THE SHALLOW DRIFT
OCTOBER 2019**

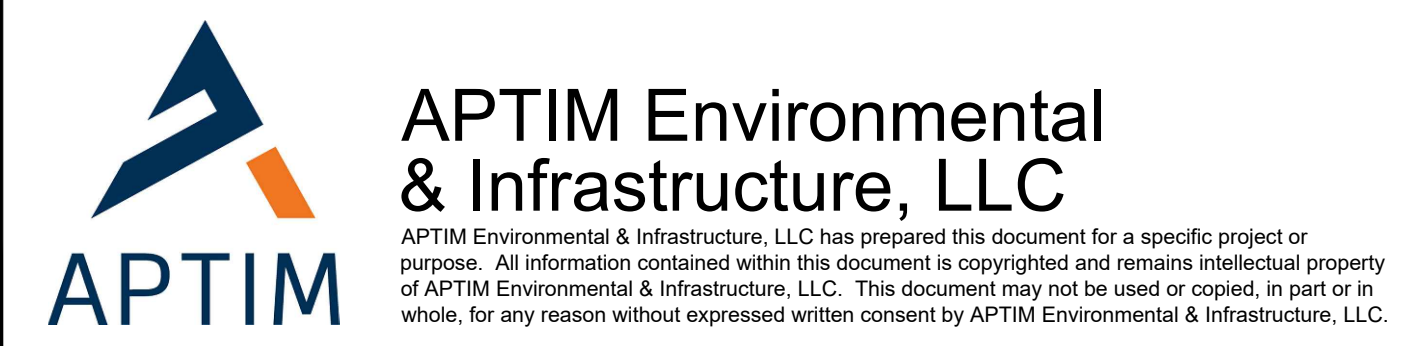
PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.	G31
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE EXISTING WASTE BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 10/09/2019.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.

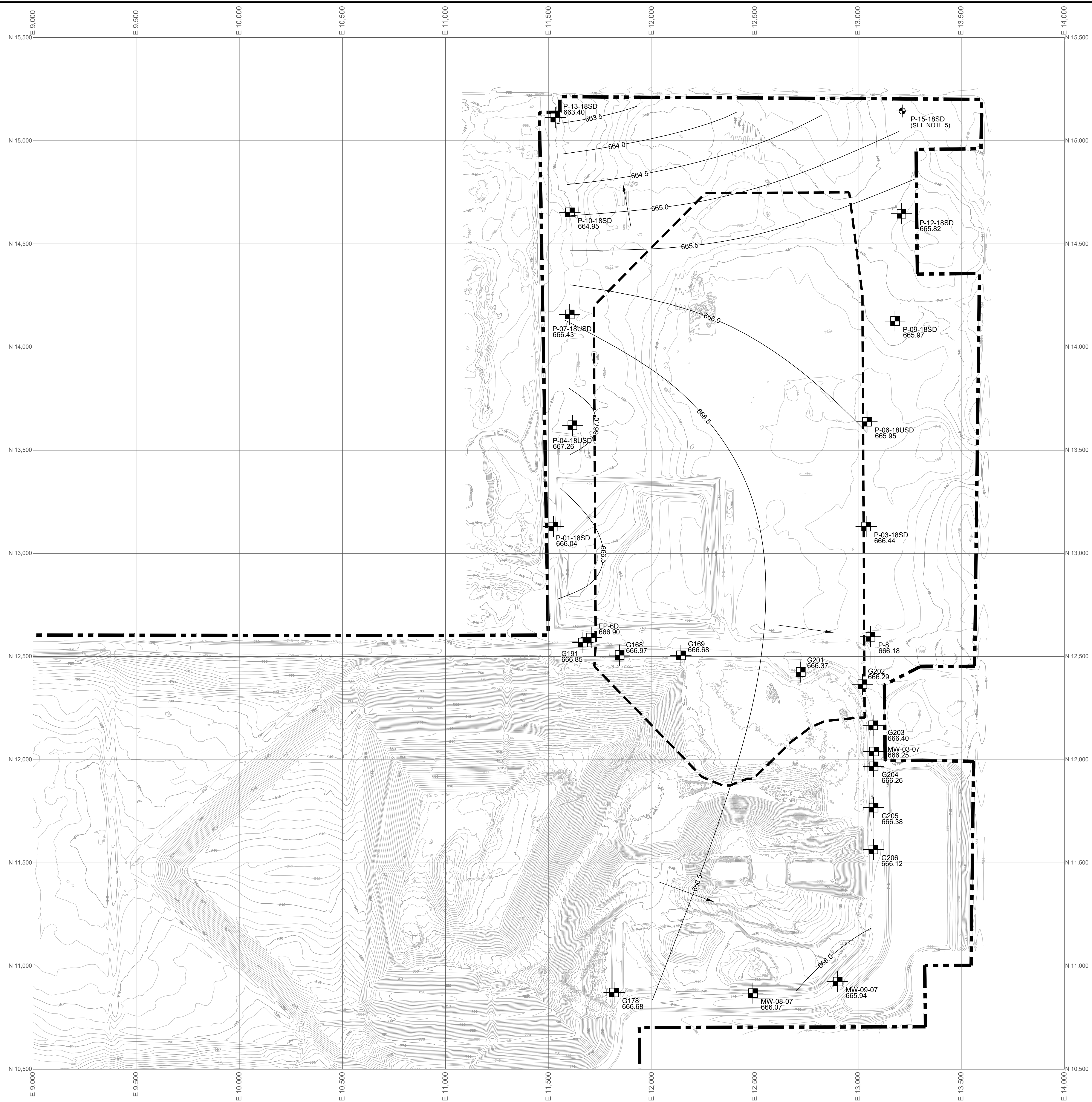
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE LOWER
PORTION OF THE SHALLOW DRIFT
OCTOBER 2019**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.	G32
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE EXISTING WASTE BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - 665 INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 02/27/2020.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.
 5. PIEZOMETER P-15-SD IS SCREENED IN LOW PERMEABILITY SILTS AND CLAYS AND WAS THEREFORE NOT USED IN THE CREATION OF THIS POTENTIOMETRIC MAP.

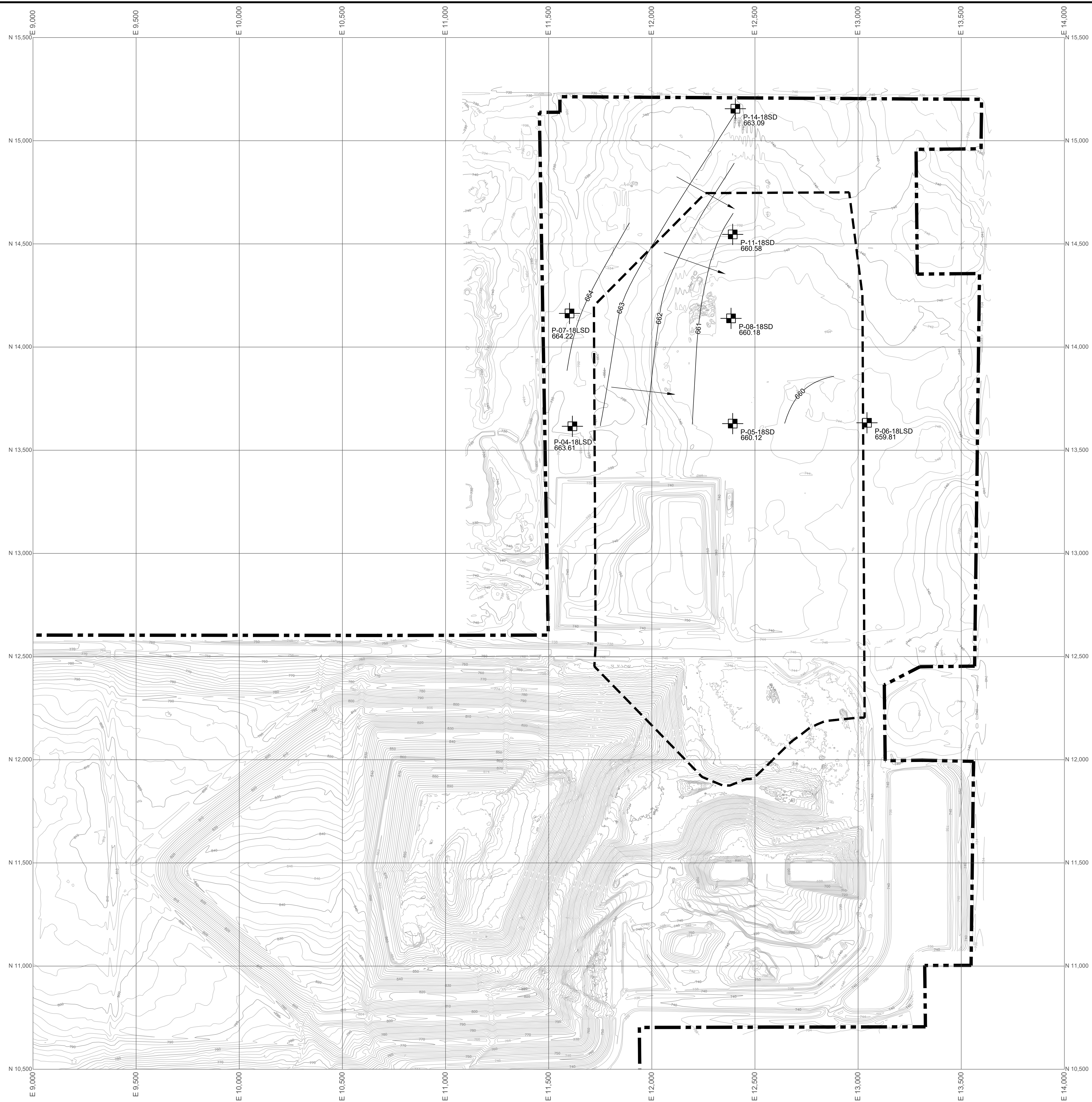
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE UPPER
PORTION OF THE SHALLOW DRIFT
FEBRUARY 2020**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.:	G33
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE EXISTING WASTE BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 02/27/2020.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.

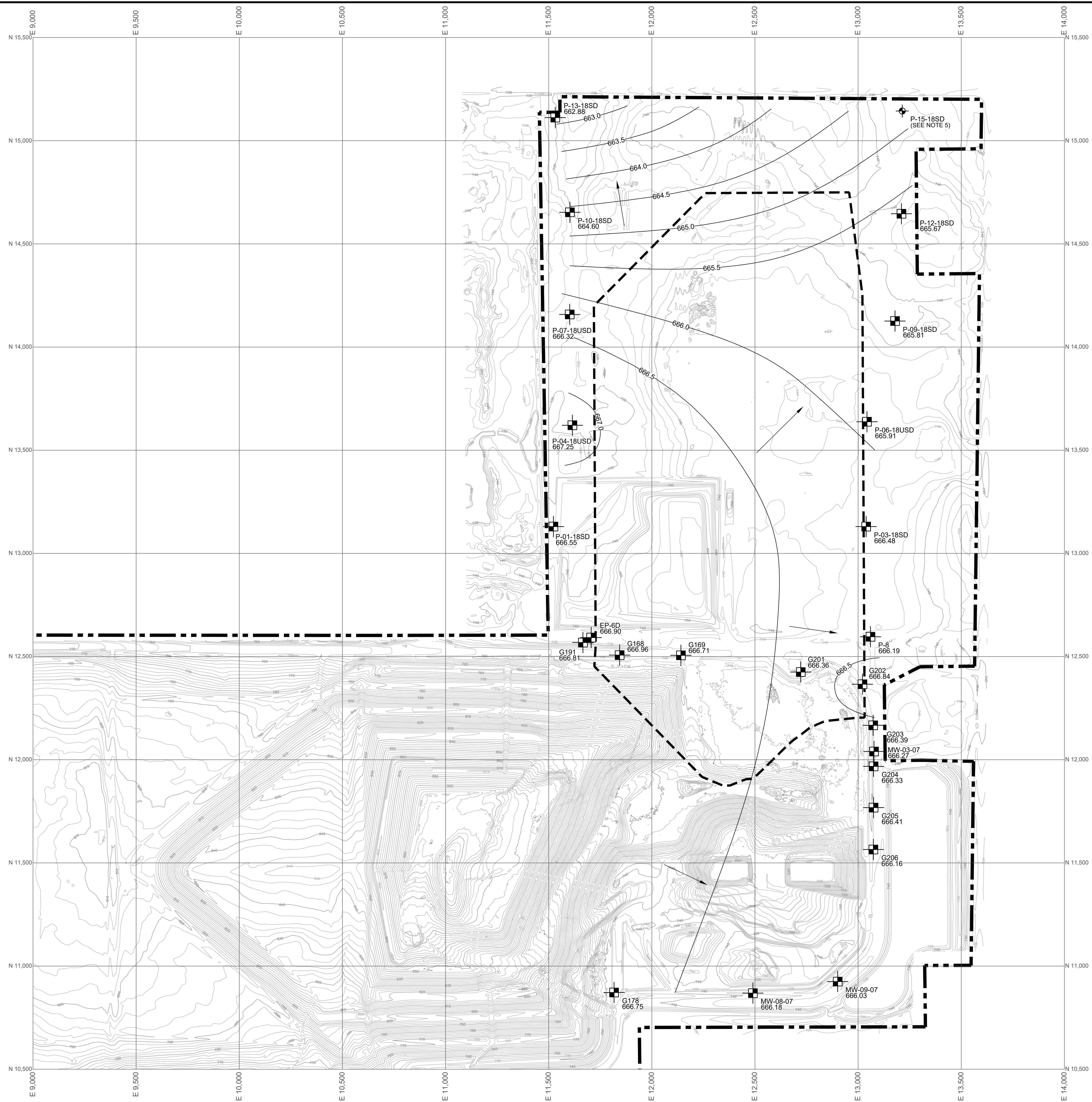
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE LOWER
PORTION OF THE SHALLOW DRIFT
FEBRUARY 2020**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.	G34
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE EXISTING WASTE BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 05/27/2020.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.
 5. PIEZOMETER P-15-SD IS SCREENED IN LOW PERMEABILITY SILTS AND CLAYS AND WAS THEREFORE NOT USED IN THE CREATION OF THIS POTENTIOMETRIC MAP.

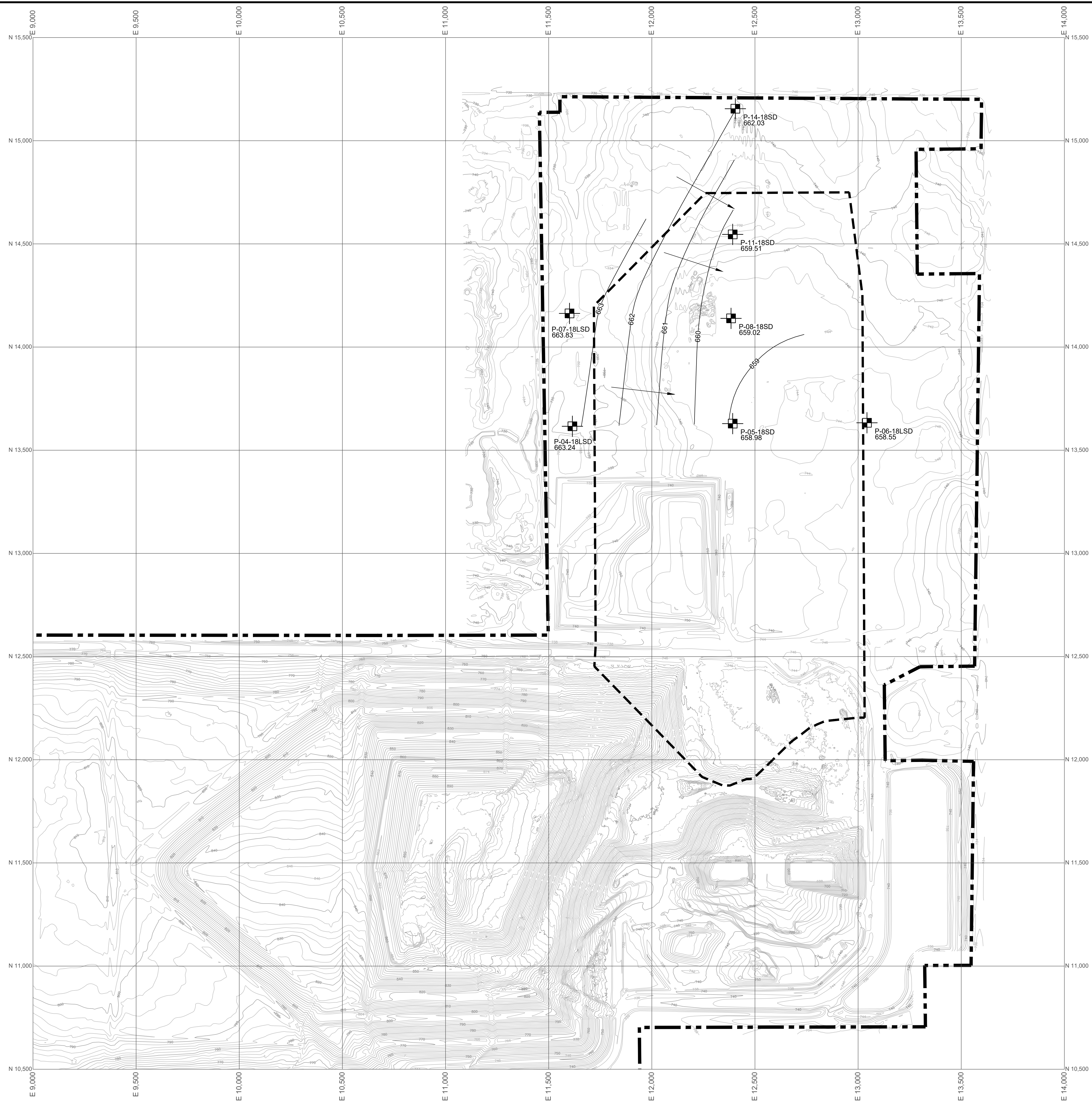
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE UPPER
PORTION OF THE SHALLOW DRIFT
MAY 2020**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.:	G35
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE EXISTING WASTE BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - 660 INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 05/27/2020.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.

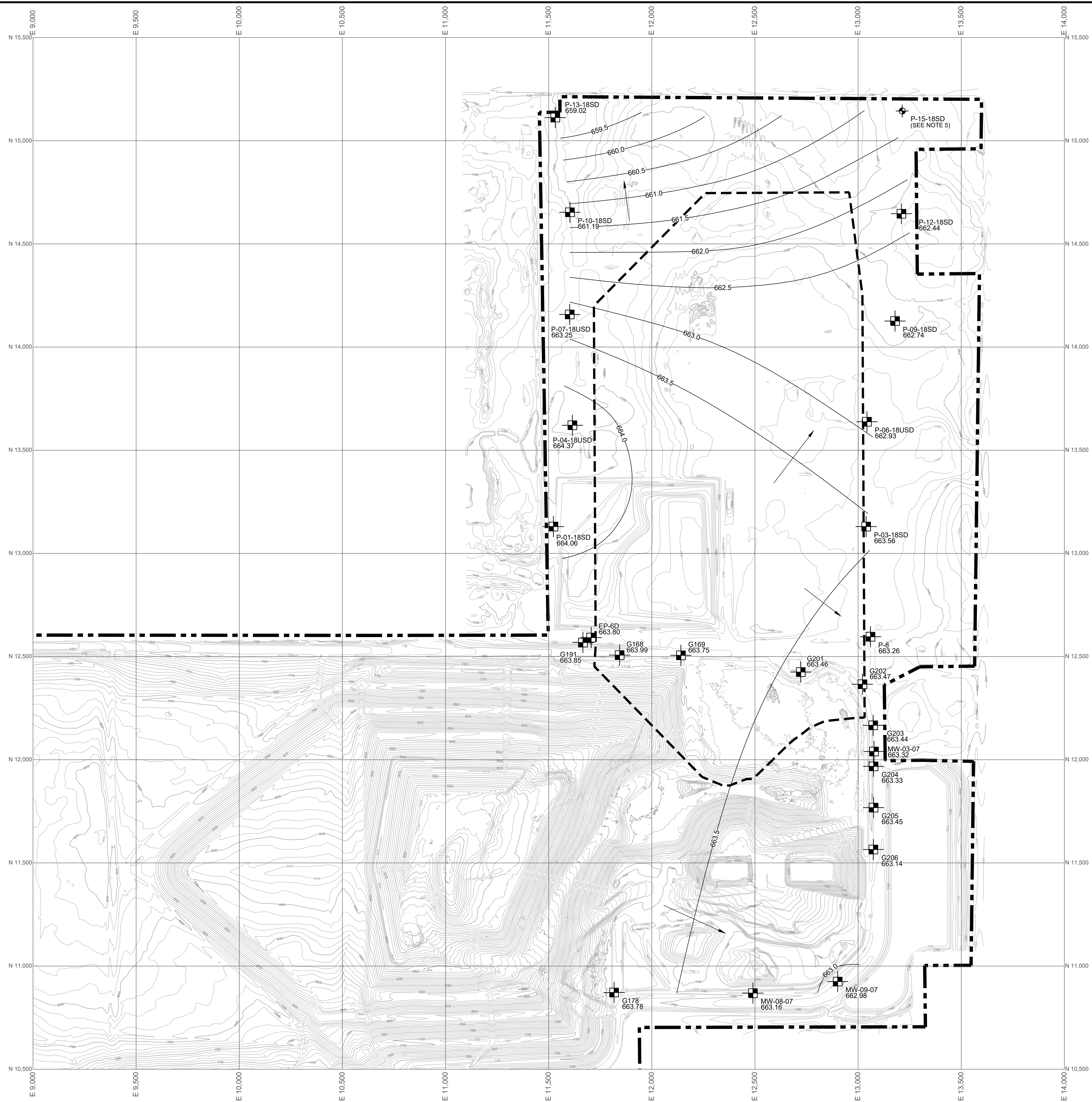
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE LOWER
PORTION OF THE SHALLOW DRIFT
MAY 2020**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.	G36
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE EXISTING WASTE BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - 665 INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 08/27/2019.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.
 5. PIEZOMETER P-15-SD IS SCREENED IN LOW PERMEABILITY SILTS AND CLAYS AND WAS THEREFORE NOT USED IN THE CREATION OF THIS POTENTIOMETRIC MAP.

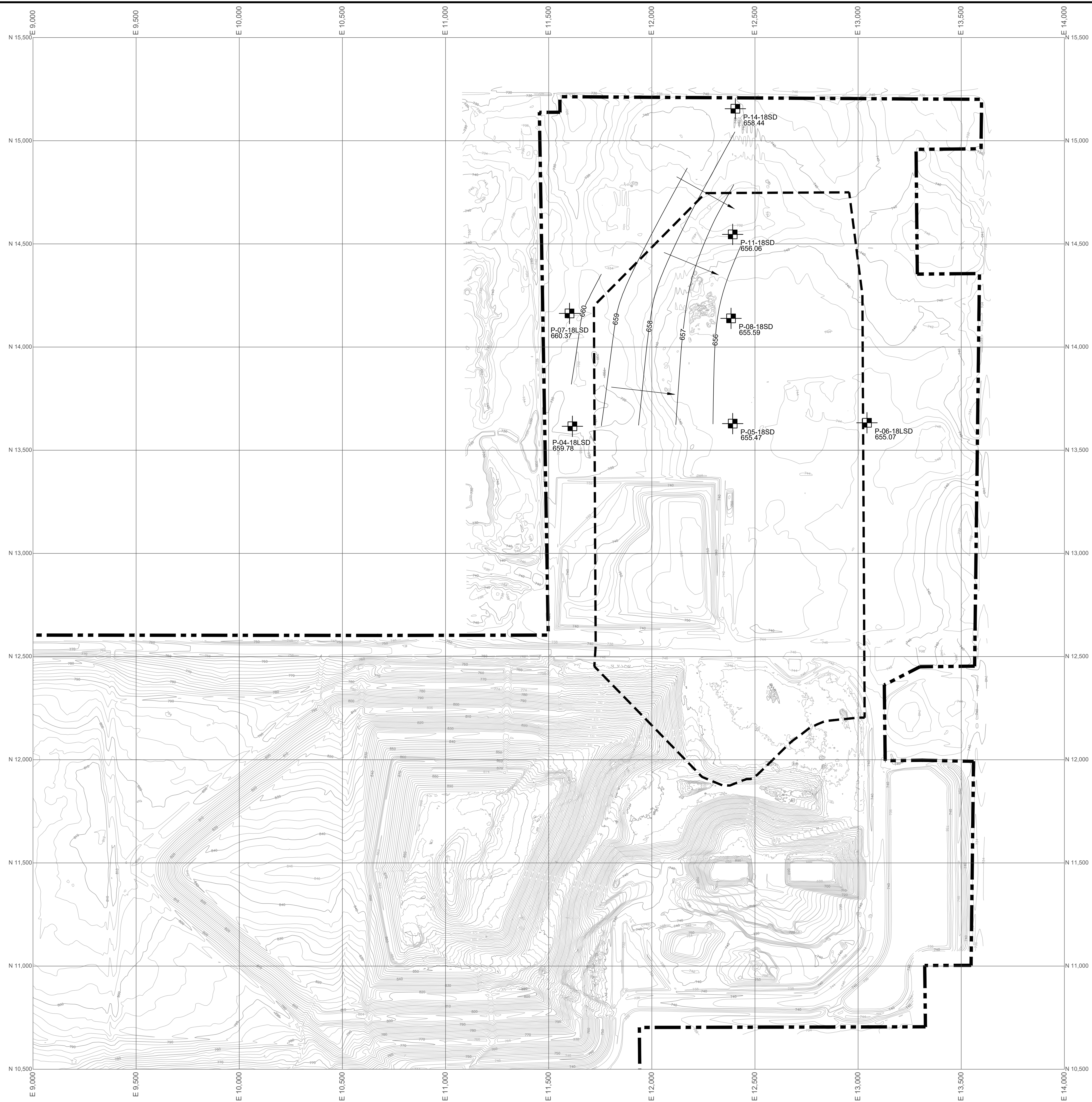
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE UPPER
PORTION OF THE SHALLOW DRIFT
AUGUST 2020**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.:	G37
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE EXISTING WASTE BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - 660 INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 08/27/2020.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.

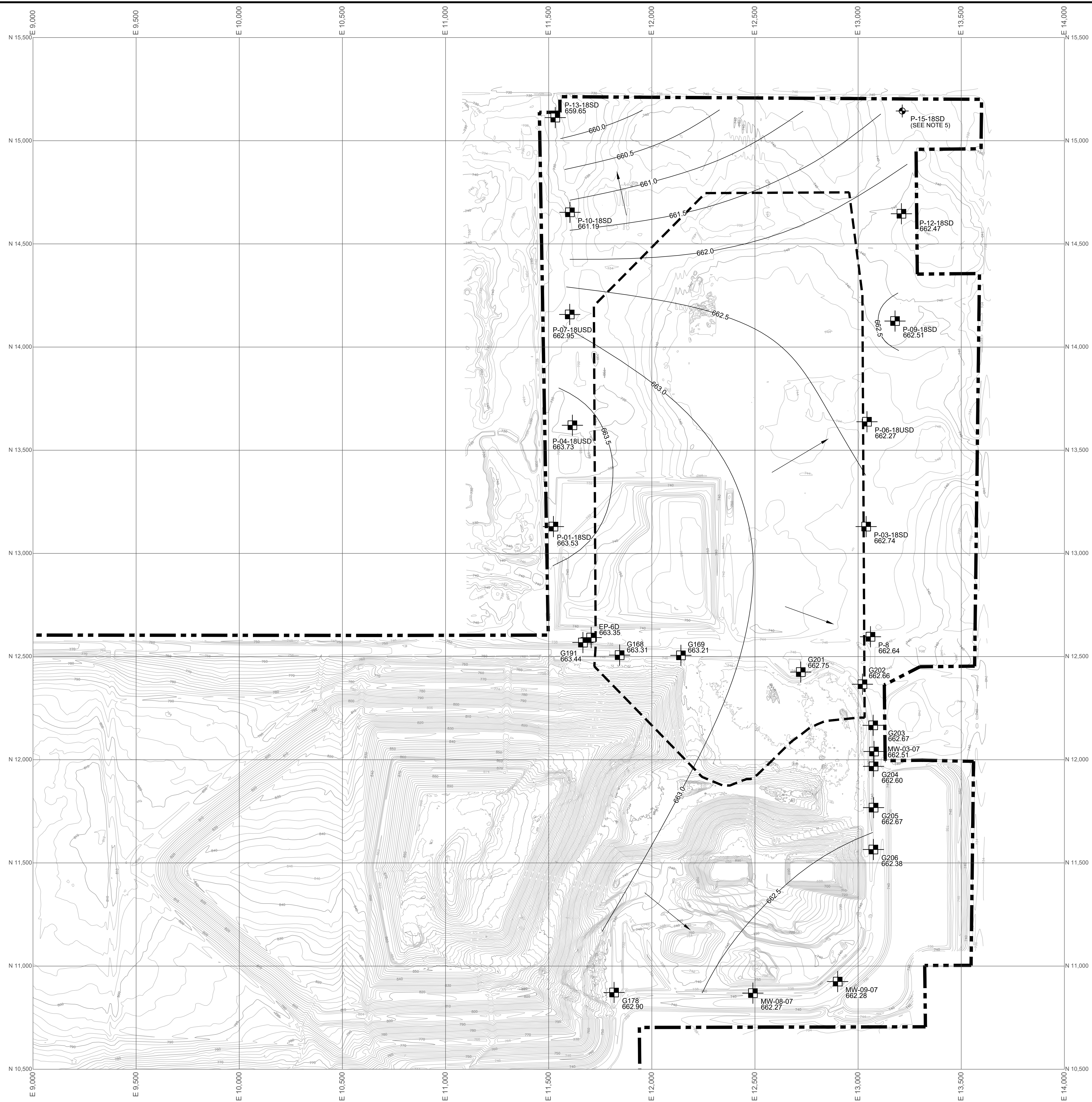
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE LOWER
PORTION OF THE SHALLOW DRIFT
AUGUST 2020**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.	G38
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE EXISTING WASTE BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - 665 INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 10/29/2020.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.
 5. PIEZOMETER P-15-SD IS SCREENED IN LOW PERMEABILITY SILTS AND CLAYS AND WAS THEREFORE NOT USED IN THE CREATION OF THIS POTENTIOMETRIC MAP.

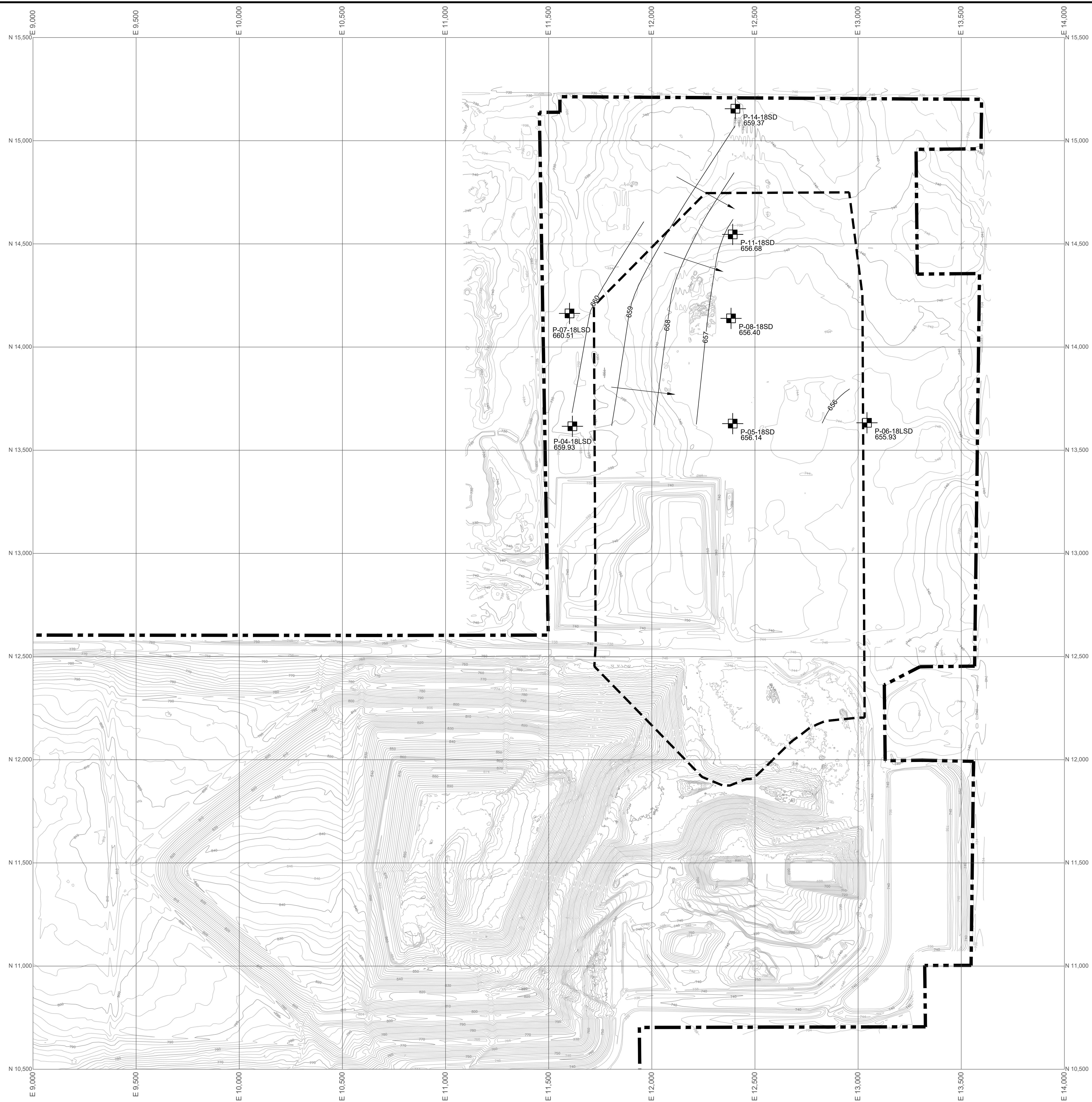
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE UPPER
PORTION OF THE SHALLOW DRIFT
OCTOBER 2020**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.	G39
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM	39 OF 50 SHEETS	



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE EXISTING WASTE BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 10/29/2020.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.

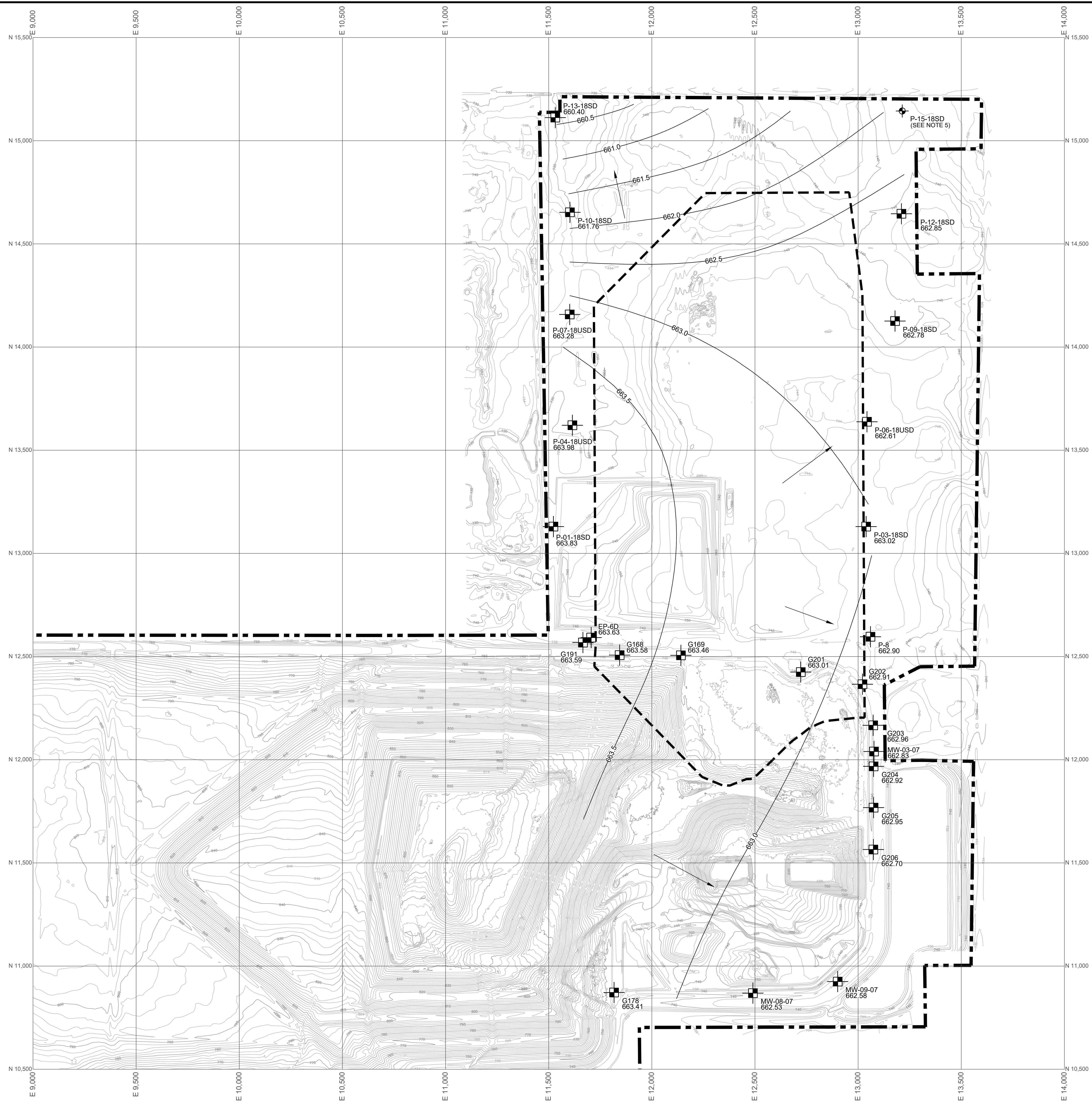
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE LOWER
PORTION OF THE SHALLOW DRIFT
OCTOBER 2020**

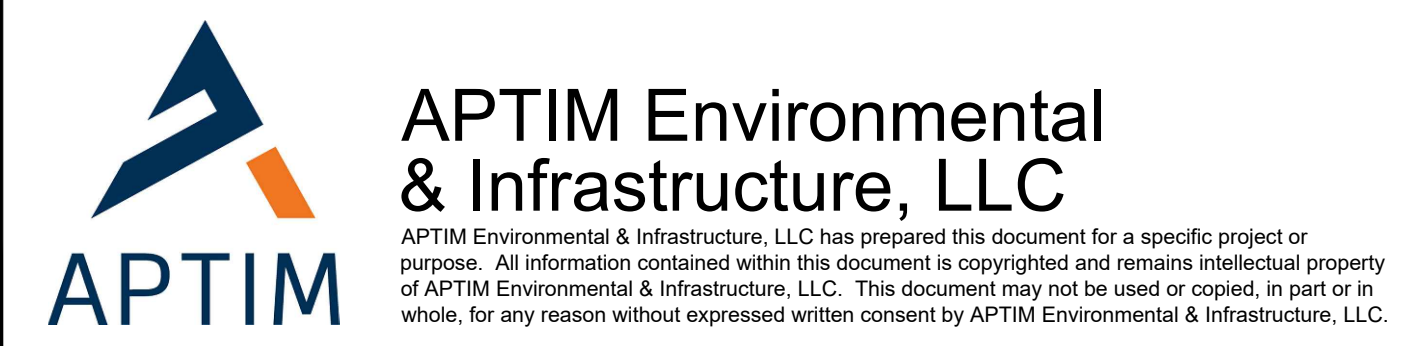
PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.	G40
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		
			40 OF 50 SHEETS



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE EXISTING WASTE BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 02/26/2021.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.
 5. PIEZOMETER P-15-SD IS SCREENED IN LOW PERMEABILITY SILTS AND CLAYS AND WAS THEREFORE NOT USED IN THE CREATION OF THIS POTENTIOMETRIC MAP.

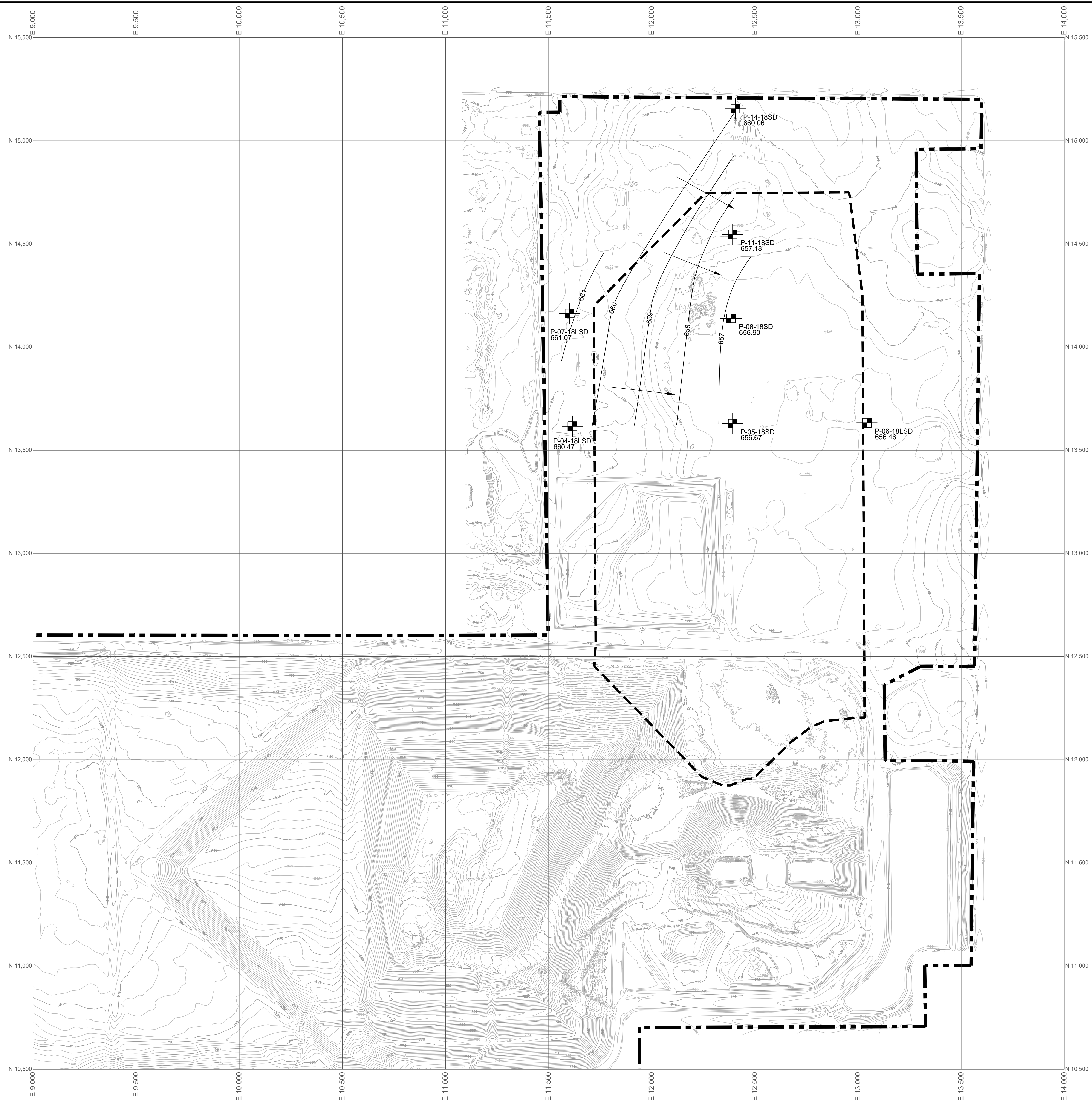
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE UPPER
PORTION OF THE SHALLOW DRIFT
FEBRUARY 2021**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.:	G41
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- — — — — APPROXIMATE PROPOSED FACILITY BOUNDARY
 - - - - - APPROXIMATE EXISTING WASTE BOUNDARY
 - - - - - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - 660 — INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - P-04-18LSD 660.47 GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 02/26/2021.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.

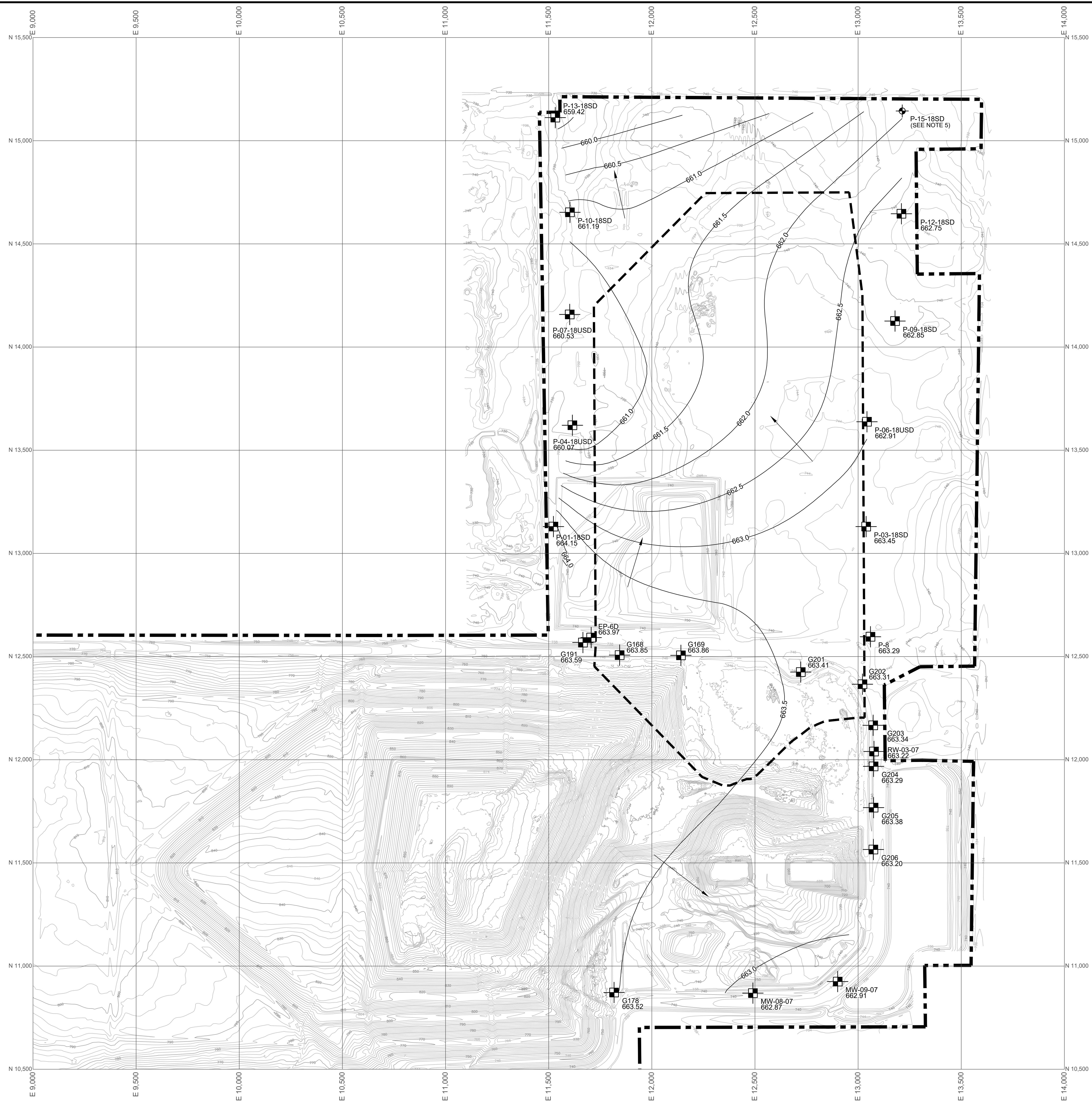
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE LOWER
PORTION OF THE SHALLOW DRIFT
FEBRUARY 2021**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.	G42
DRAWN BY:	NV		
CHECKED BY:	MNF		
APPROVED BY:	DAM	42 OF 50 SHEETS	



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE EXISTING WASTE BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - 665 INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 05/24/2021.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.
 5. PIEZOMETER P-15-SD IS SCREENED IN LOW PERMEABILITY SILTS AND CLAYS AND WAS THEREFORE NOT USED IN THE CREATION OF THIS POTENTIOMETRIC MAP.

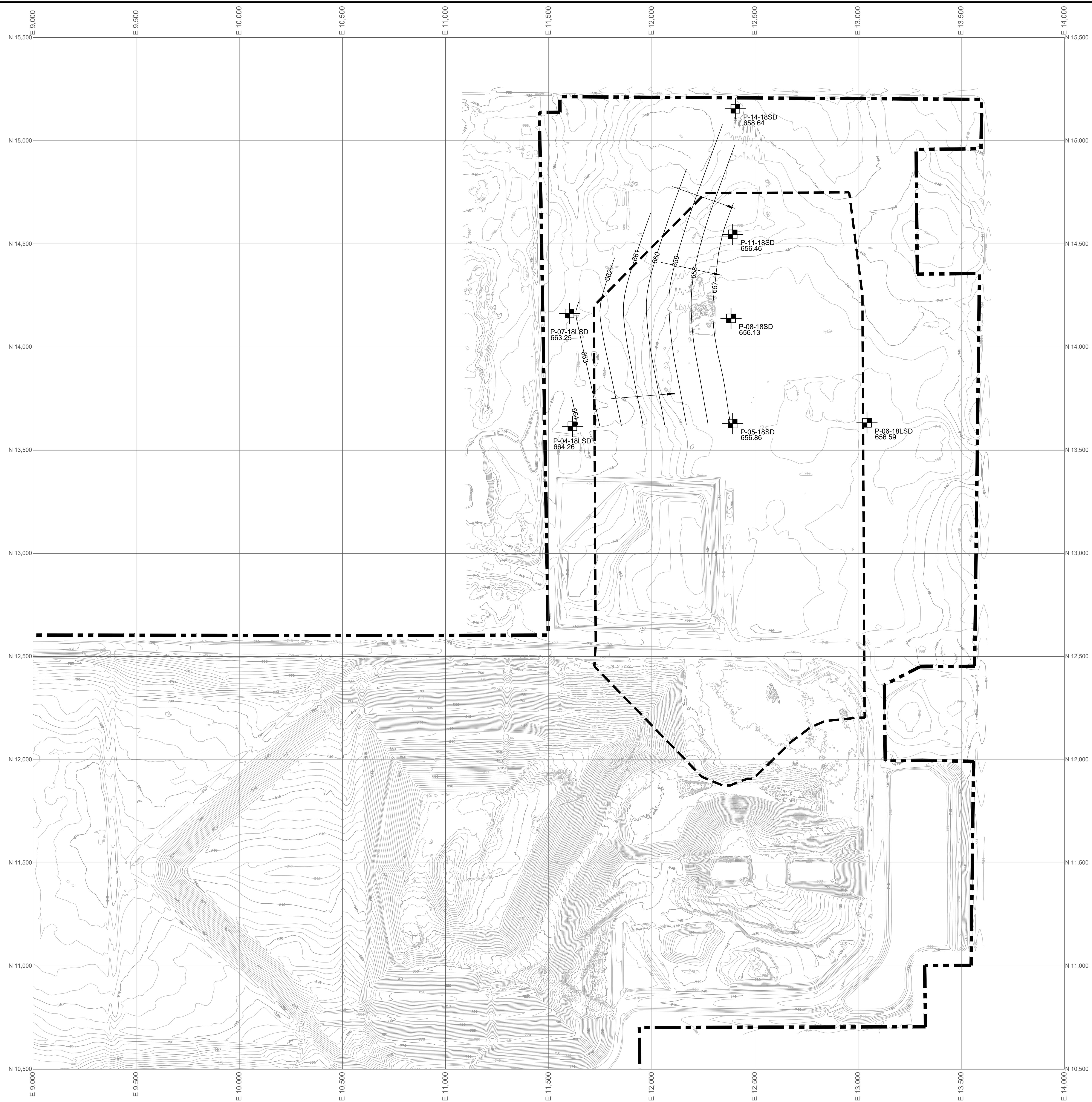
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE UPPER
PORTION OF THE SHALLOW DRIFT
MAY 2021**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.:	G43
DRAWN BY:	MRL		
CHECKED BY:	MNF		
APPROVED BY:	DAM		
			43 OF 50 SHEETS



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE EXISTING WASTE BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - 660 INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 05/24/2021.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.

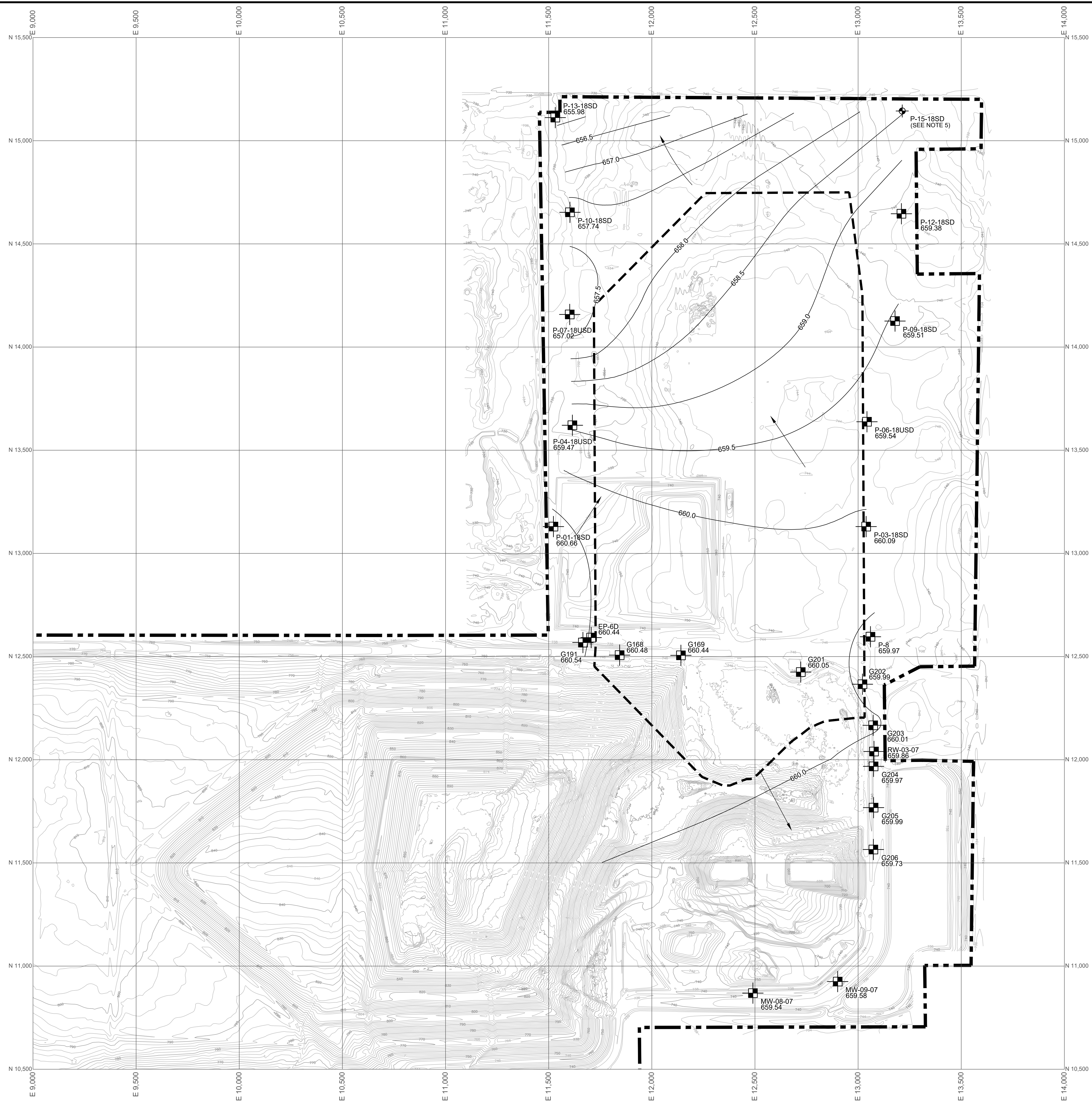
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE LOWER
PORTION OF THE SHALLOW DRIFT
MAY 2021**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.	G44
DRAWN BY:	MRL		
CHECKED BY:	MNF		
APPROVED BY:	DAM	44 OF 50 SHEETS	



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE EXISTING WASTE BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - 665 INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 08/31/2021.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.
 5. PIEZOMETER P-15-SD IS SCREENED IN LOW PERMEABILITY SILTS AND CLAYS AND WAS THEREFORE NOT USED IN THE CREATION OF THIS POTENTIOMETRIC MAP.

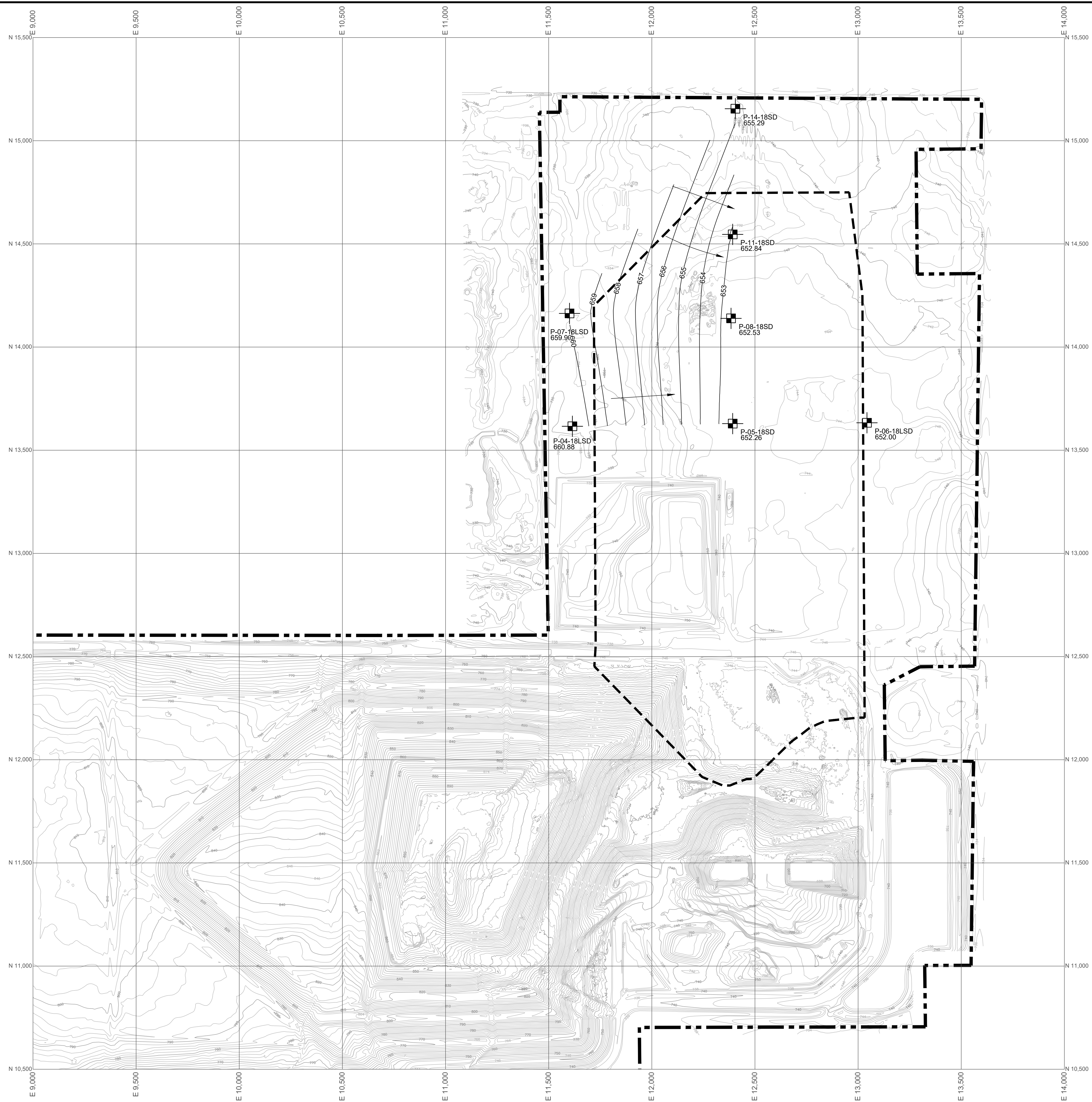
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE UPPER
PORTION OF THE SHALLOW DRIFT
AUGUST 2021**

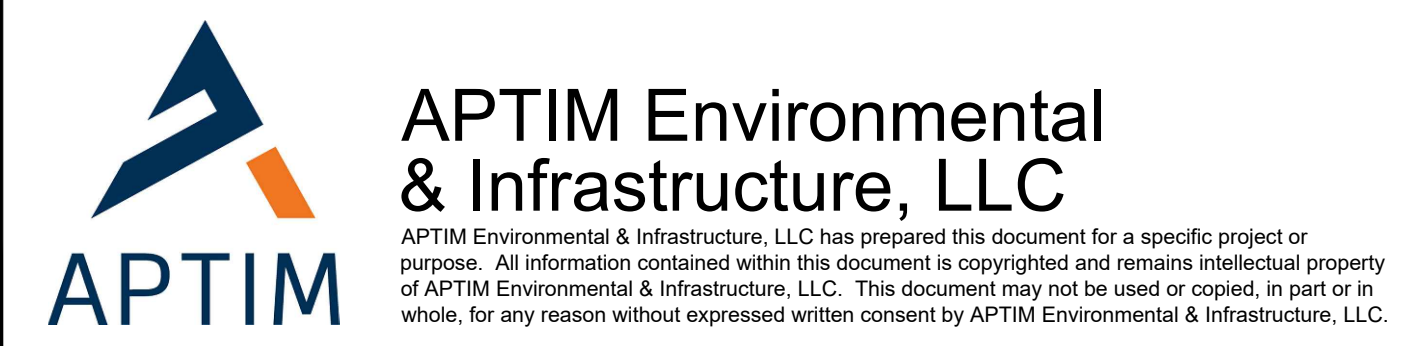
PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.:	G45
DRAWN BY:	MRL		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE EXISTING WASTE BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 08/31/2021.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.

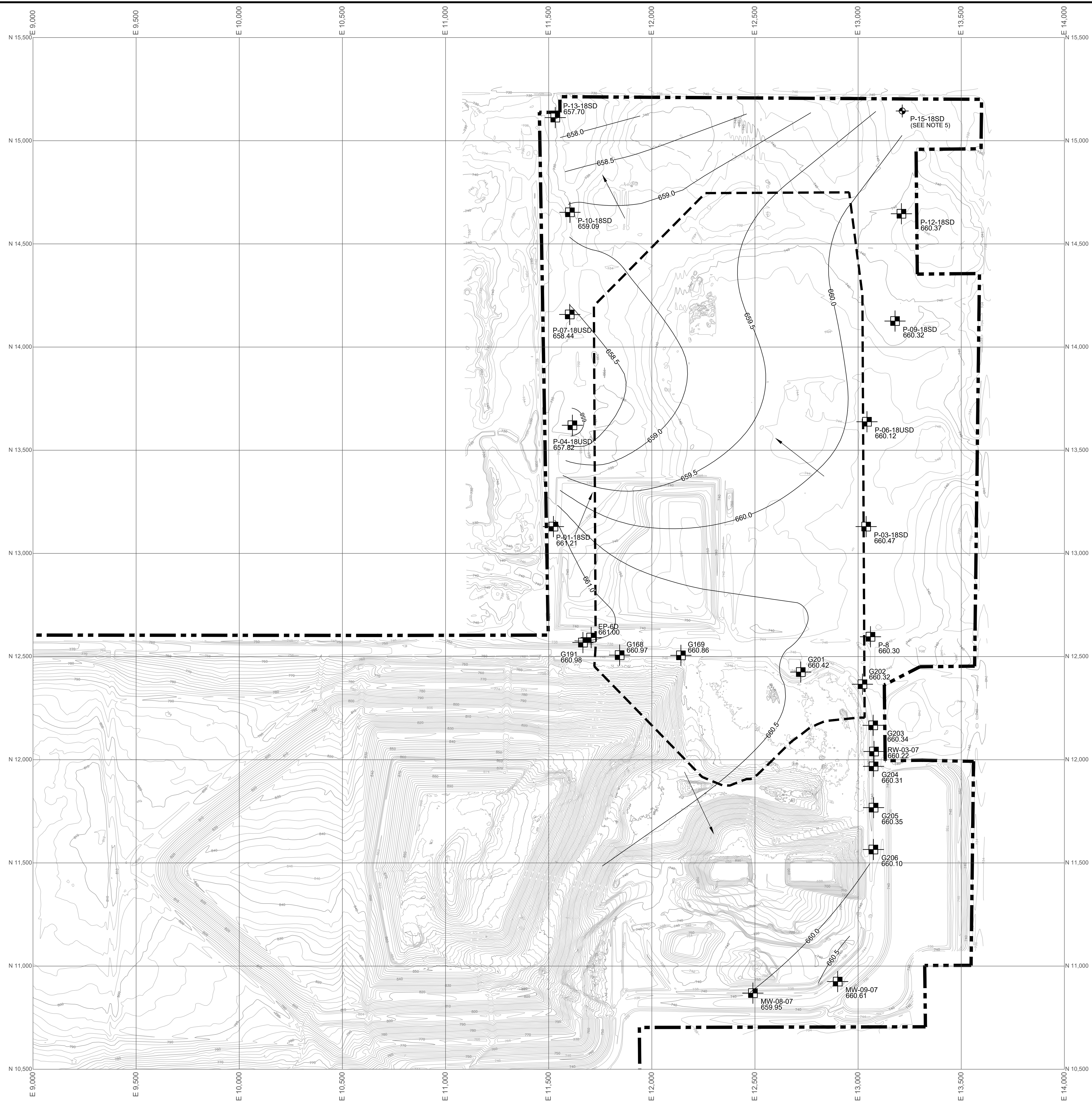
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE LOWER
PORTION OF THE SHALLOW DRIFT
AUGUST 2021**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.	G46
DRAWN BY:	MRL		
CHECKED BY:	MNF		
APPROVED BY:	DAM		
			42 OF 50 SHEETS



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE EXISTING WASTE BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - 665 INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 08/31/2021.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.
 5. PIEZOMETER P-15-SD IS SCREENED IN LOW PERMEABILITY SILTS AND CLAYS AND WAS THEREFORE NOT USED IN THE CREATION OF THIS POTENTIOMETRIC MAP.

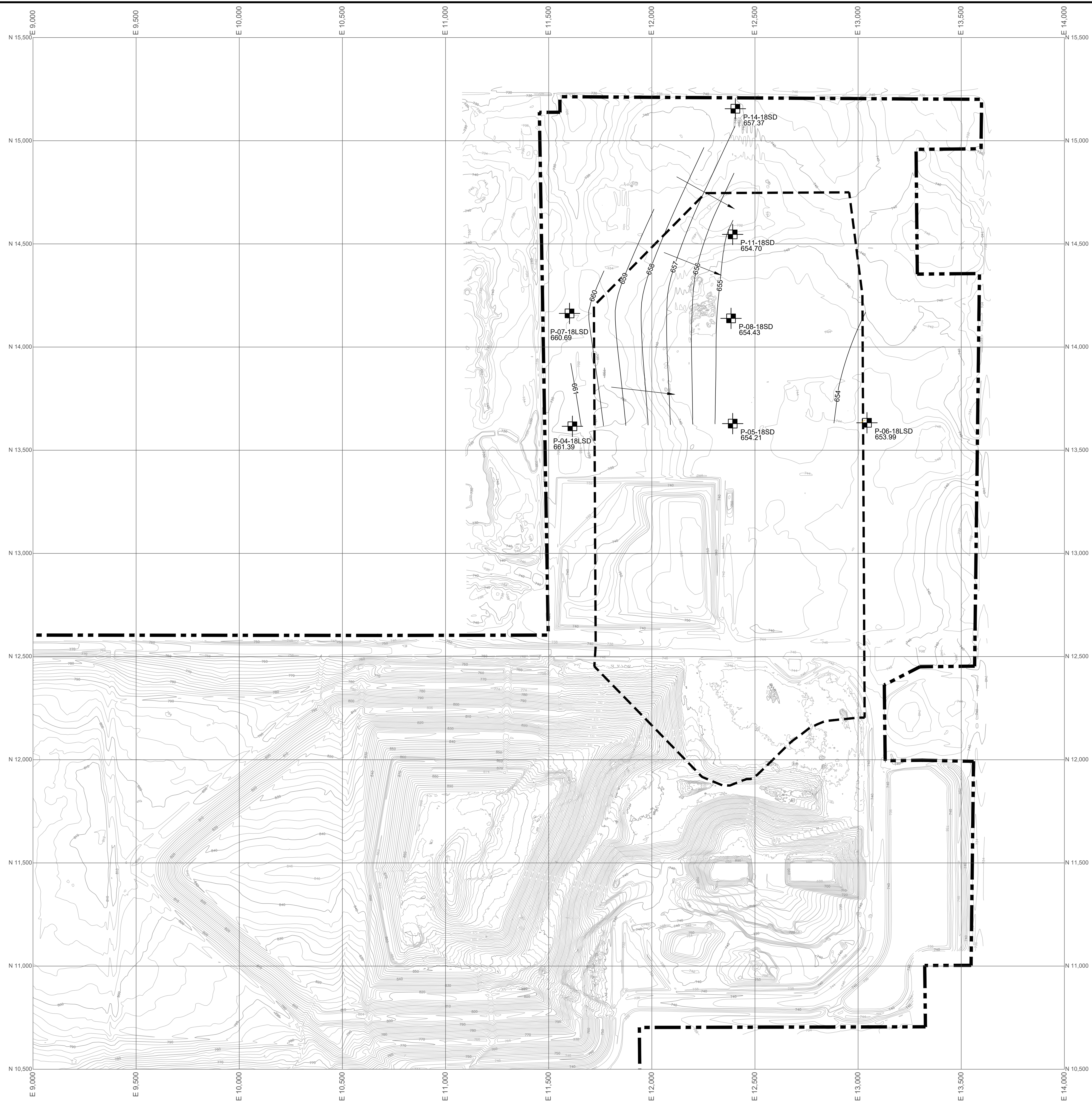
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE UPPER
PORTION OF THE SHALLOW DRIFT
NOVEMBER 2021**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.:	G47
DRAWN BY:	MRL		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE EXISTING WASTE BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 11/30/2021.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.

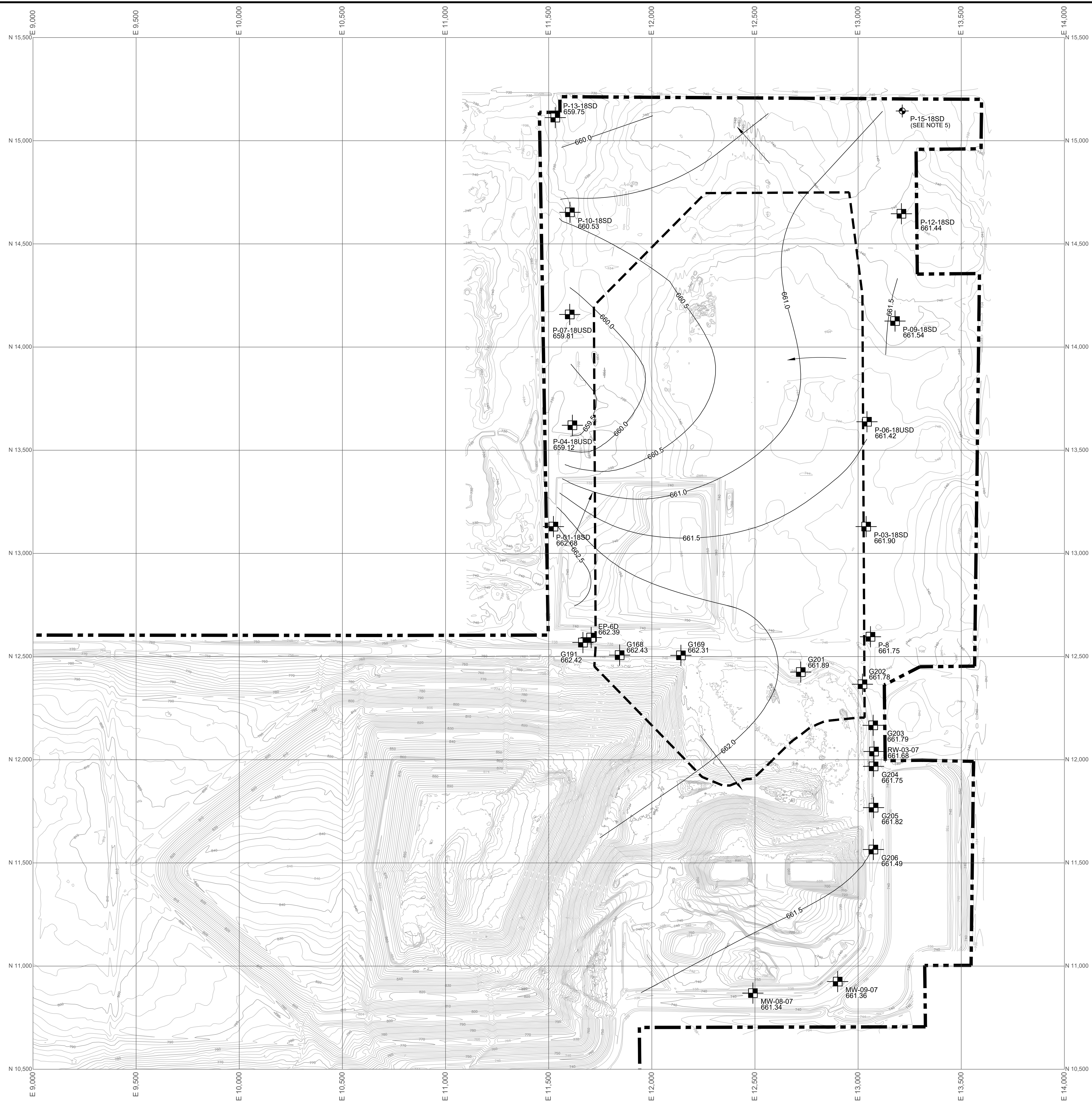
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE LOWER
PORTION OF THE SHALLOW DRIFT
NOVEMBER 2021**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.	G48
DRAWN BY:	MRL		
CHECKED BY:	MNF		
APPROVED BY:	DAM		
			48 OF 50 SHEETS



- LEGEND**
- APPROXIMATE PROPOSED FACILITY BOUNDARY
 - APPROXIMATE EXISTING WASTE BOUNDARY
 - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - 665 INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 02/09/2022.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.
 5. PIEZOMETER P-15-SD IS SCREENED IN LOW PERMEABILITY SILTS AND CLAYS AND WAS THEREFORE NOT USED IN THE CREATION OF THIS POTENTIOMETRIC MAP.

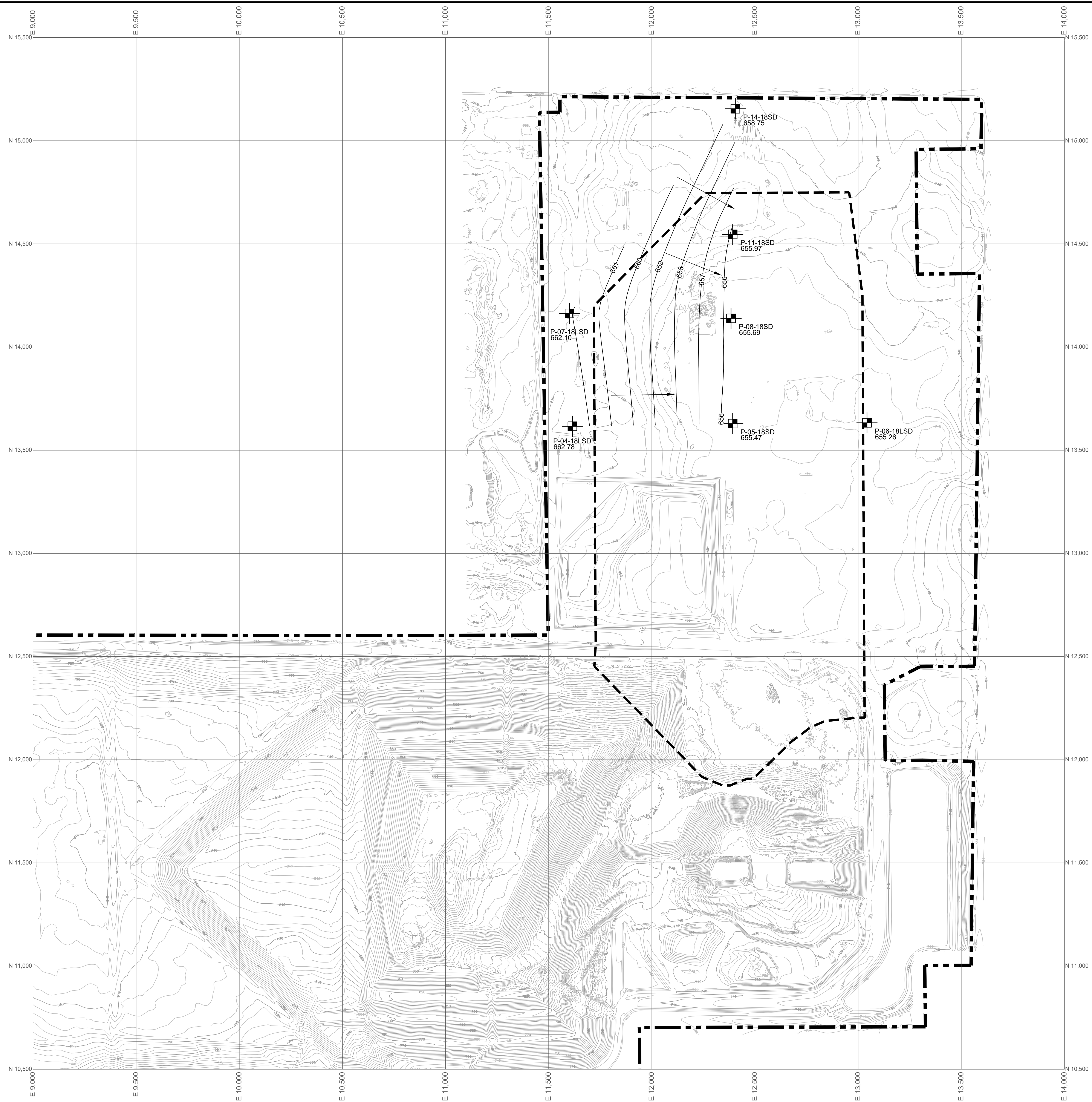
REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE UPPER
PORTION OF THE SHALLOW DRIFT
FEBRUARY 2022**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.:	G49
DRAWN BY:	MRL		
CHECKED BY:	MNF		
APPROVED BY:	DAM		



- LEGEND**
- — — — — APPROXIMATE PROPOSED FACILITY BOUNDARY
 - - - - - APPROXIMATE EXISTING WASTE BOUNDARY
 - - - - - APPROXIMATE PROPOSED EXPANSION WASTE BOUNDARY
 - 660 — INTERPOLATED POTENTIOMETRIC CONTOUR
 - GROUNDWATER FLOW DIRECTION
 - P-04-18LSD 660.47 GROUNDWATER MONITORING WELL / PIEZOMETER WITH POTENTIOMETRIC ELEVATION (FT MSL)

- NOTES**
1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY CQM ON 10/22/2018.
 2. WATER LEVEL MEASUREMENTS WERE COLLECTED ON 02/09/2022.
 3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
 4. CURRENT TOPOGRAPHY MAY DIFFER FROM THAT SHOWN.

REV. NO.	DATE	DESCRIPTION



**ZION LANDFILL - SITE 2 NORTH EXPANSION
CITY OF ZION, ILLINOIS**

**POTENTIOMETRIC MAP OF THE LOWER
PORTION OF THE SHALLOW DRIFT
FEBRUARY 2022**

PROJ. NO.:	631020105	DATE:	MAY 2022
DESIGNED BY:	MNF	DRAWING NO.	G50
DRAWN BY:	MRL		
CHECKED BY:	MNF		
APPROVED BY:	DAM		
			50 OF 50 SHEETS