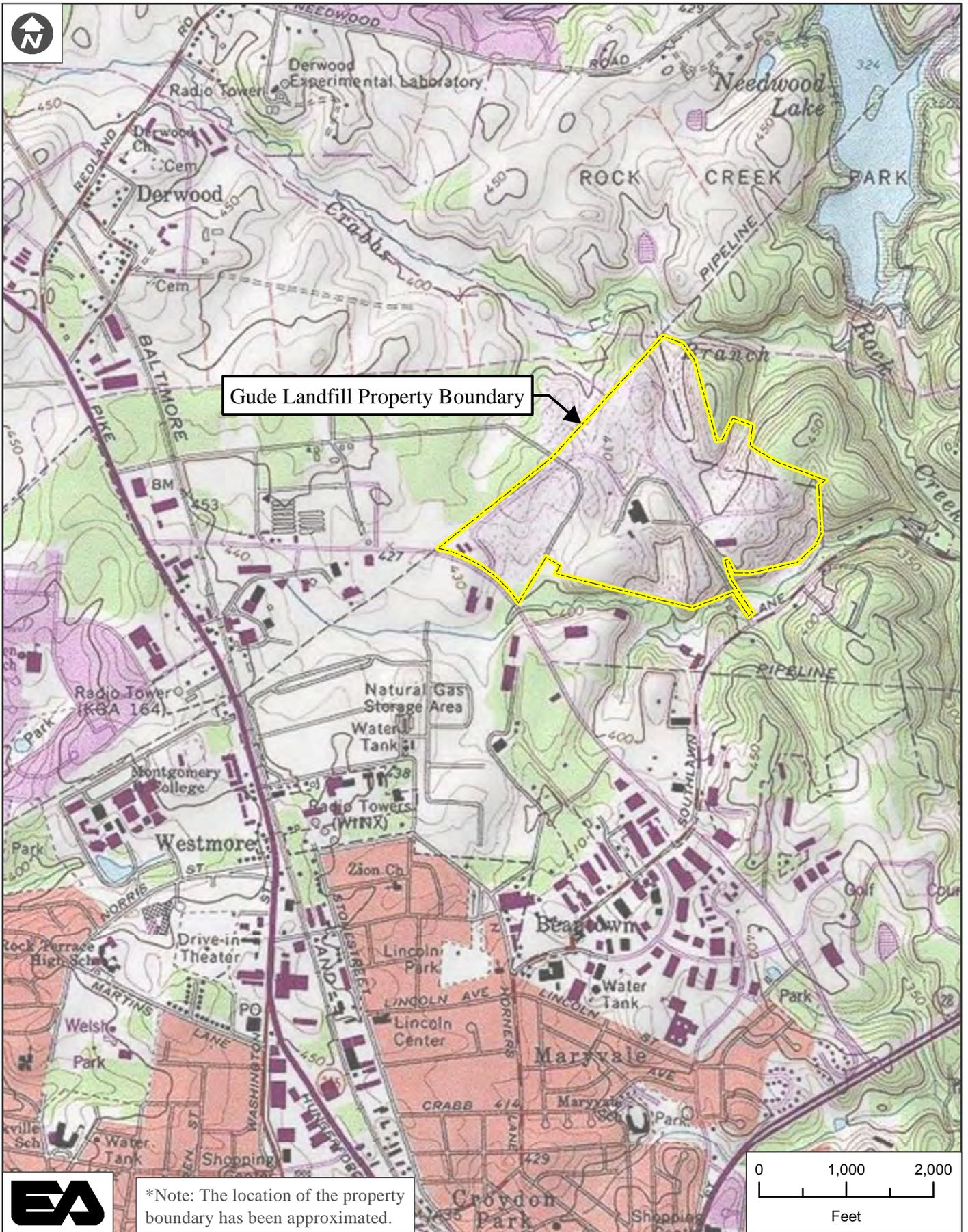


FIGURES



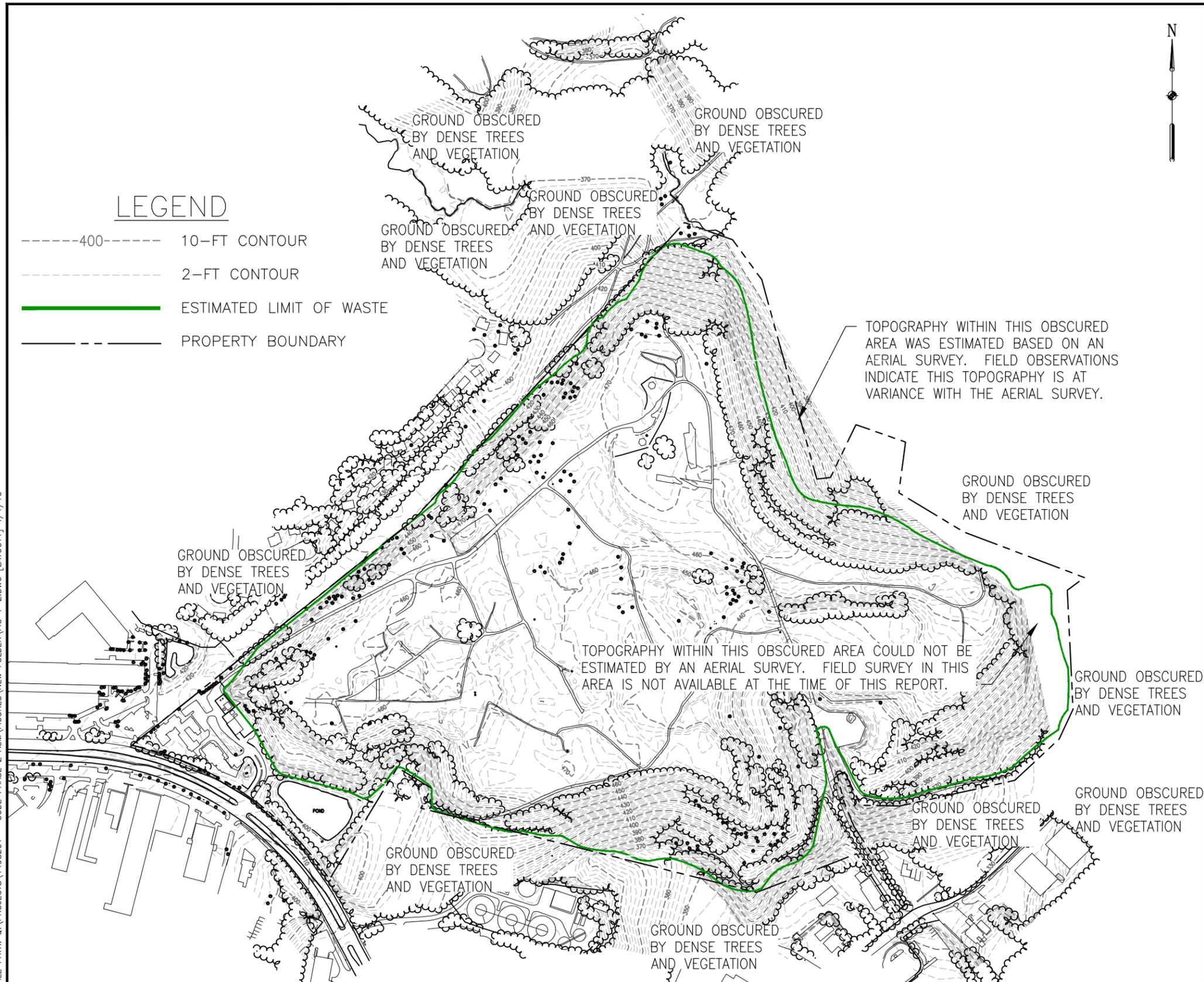
*Note: The location of the property boundary has been approximated.

Gude Landfill
Montgomery County, Maryland

Figure 1-1. Site Location Map

Sources
EDR, 2009
National Geographic Society, 2013

FILE PATH: G:\PROJECTS\1498201 - GUDE PHASE 2 ACM\FIGURES\NEW FOLDER\FIG 1-2.DWG [LAYOUT] 4/1/16



LEGEND

- 400----- 10-FT CONTOUR
- 2-FT CONTOUR
- ESTIMATED LIMIT OF WASTE
- - - - - PROPERTY BOUNDARY



NOTES:

1. TOPOGRAPHY COMPILED BY APPLIED MAPPING SOLUTIONS, INC. USING PHOTOGRAMMETRIC METHODS WITH PHOTOGRAPHY DATED 06/24/09 AND SUPPLEMENTED WITH FIELD SURVEY PERFORMED BY C.C. JOHNSON & MALHOTRA, P.C., OCTOBER 2009.
2. HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983/91 (NAD-83/91). COORDINATE SYSTEM IS MARYLAND STATE PLANE, U.S. SURVEY FEET. VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD-88) WITH ELEVATIONS SHOWN IN FEET.
3. THE PROPERTY BOUNDARY WAS LAID OUT AND THE PLAT THEREOF PREPARED BY A REGISTERED PROPERTY LINE SURVEYOR OF THE STATE OF MARYLAND, IN COMPLIANCE WITH SECTION 3-108 OF THE REAL PROPERTY ARTICLE OF THE ANNOTATED CODE OF MARYLAND, EDITION 2005.
4. THE PROPERTY BOUNDARY REPRESENTS THE LANDS OWNED BY MONTGOMERY COUNTY, MARYLAND KNOWN AS THE GUDE LANDFILL WHICH IS A COMPILATION OF THREE DEEDS, LISTED BELOW, RECORDED IN THE LAND RECORDS OF MONTGOMERY COUNTY, MARYLAND, WITHOUT BENEFIT OF FULL TITLE COMMITMENT.
 LIBER 2975 FOLIO 213
 LIBER 4501 FOLIO 453
 LIBER 5174 FOLIO 309
5. THE HORIZONTAL LIMIT OF WASTE DEPICTED IS ESTIMATED BASED UPON TEST PIT FINDINGS AND SITE TOPOGRAPHY. IN AREAS WHERE A DEFINITIVE LIMIT OF WASTE WAS NOT ESTABLISHED BY EA ENGINEERING, THE LIMIT OF WASTE WAS ESTIMATED BASED UPON COUNTY STAFF KNOWLEDGE.
6. THE PROPERTY BOUNDARY SHOWN REFLECTS A LAND EXCHANGE BETWEEN MONTGOMERY COUNTY AND M-NCPPC WHICH OCCURRED ON 21 OCTOBER 2014.

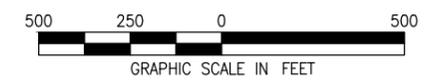
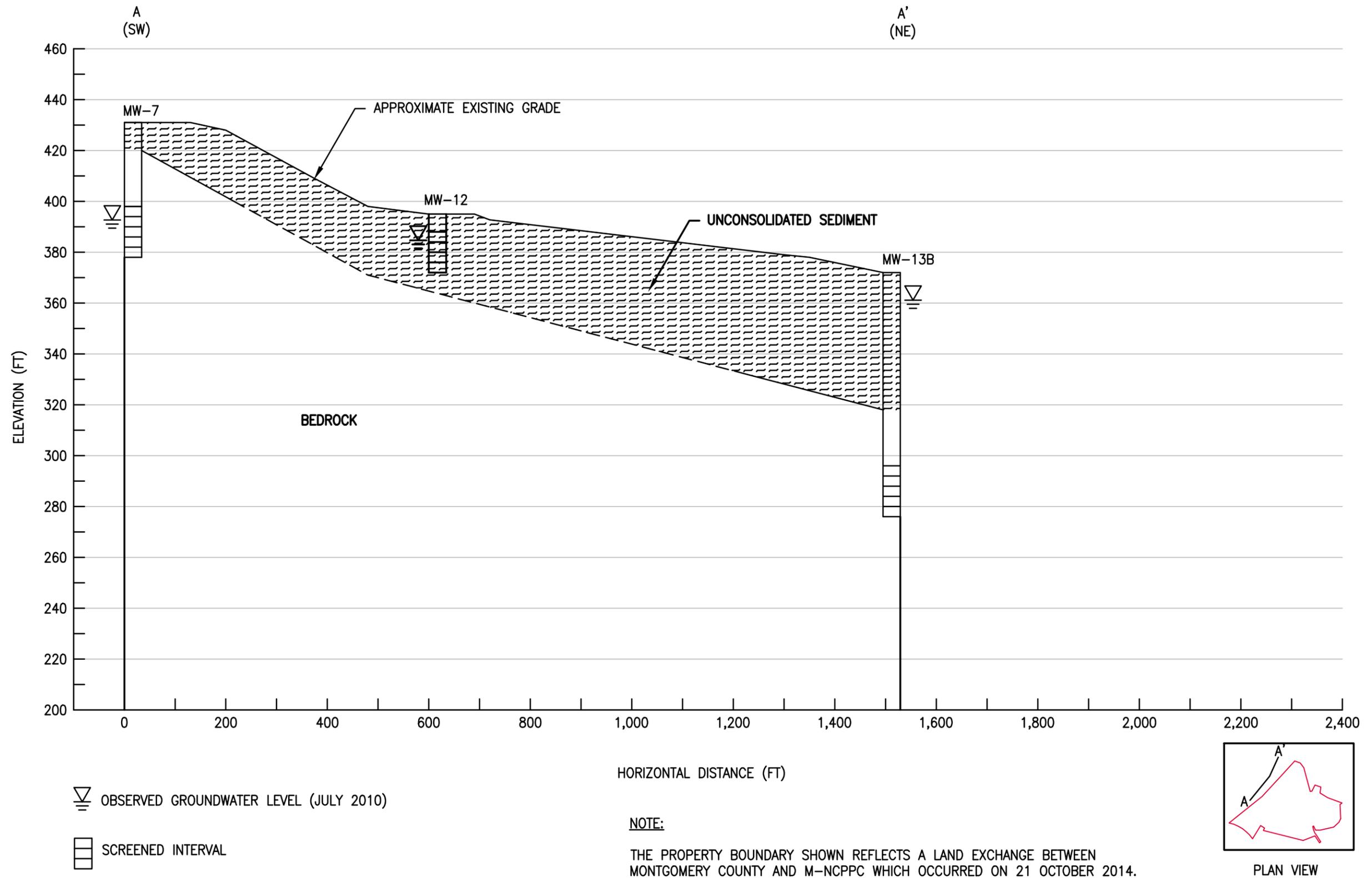


FIGURE 1-2
SITE TOPOGRAPHY AND LIMIT OF WASTE



FILE PATH: G:\PROJECTS\1498201 - GUDE PHASE 2 ACM\FIGURES\FIG 1-3.DWG [LAYOUT] 4/8/16

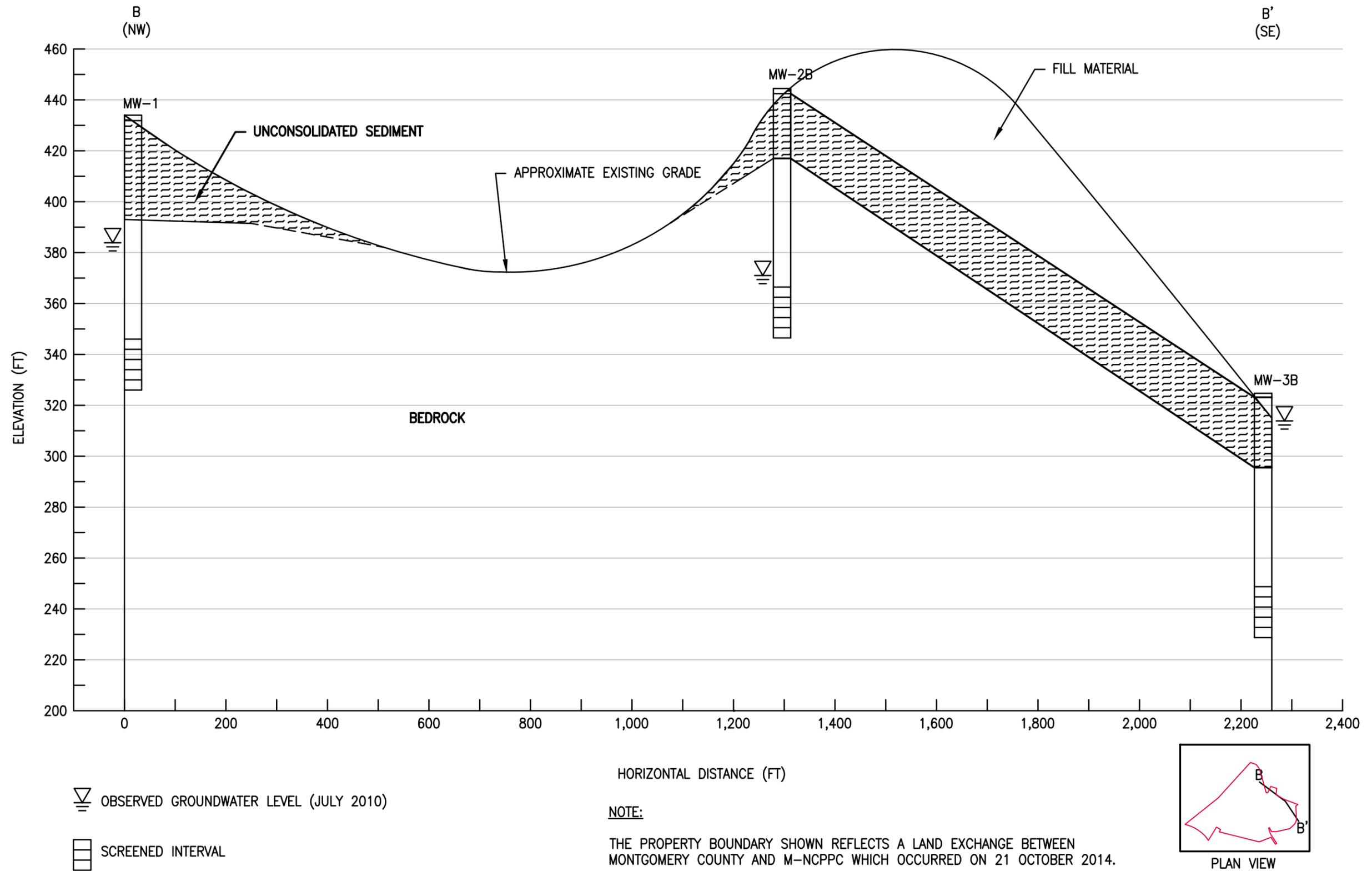


GUDE LANDFILL
ASSESSMENT OF CORRECTIVE MEASURES
MONTGOMERY COUNTY, MARYLAND

FIGURE 1-3
GEOLOGIC CROSS SECTION A-A'

DESIGNED BY -	DRAWN BY RMC	DATE APR. 2016	PROJECT NO. 14982.01
CHECKED BY BR	PROJECT MGR. MJG	DRAWING NO. -	FIGURE 1-3

FILE PATH: G:\PROJECTS\1498201 - GUDE PHASE 2 ACM\FIGURES\FIG 1-4.DWG [LAYOUT] 4/7/16

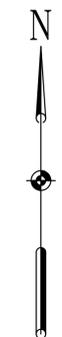
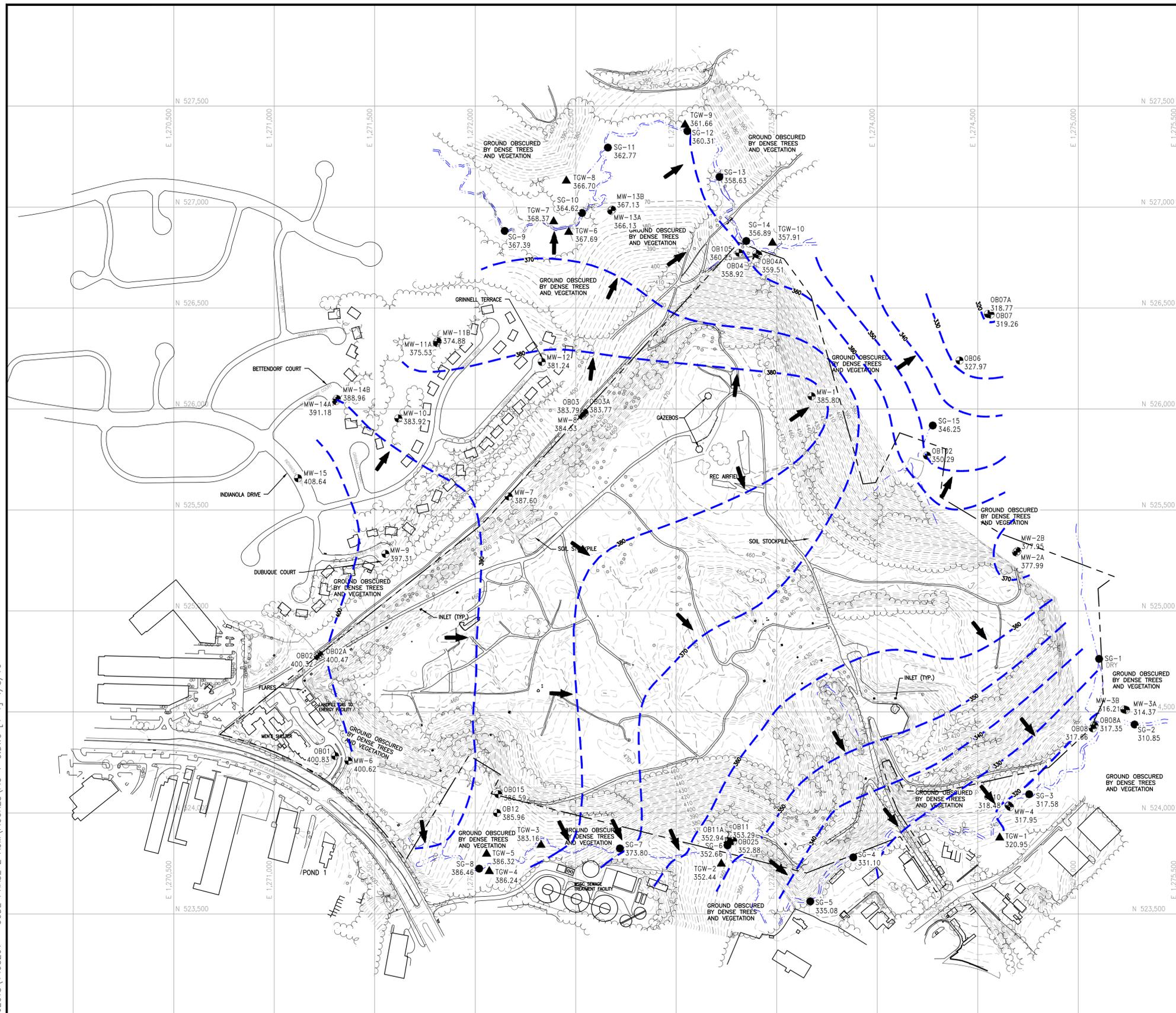


GUDE LANDFILL
ASSESSMENT OF CORRECTIVE MEASURES
MONTGOMERY COUNTY, MARYLAND

FIGURE 1-4
GEOLOGIC CROSS SECTION B-B'

DESIGNED BY -	DRAWN BY RMC	DATE APR. 2016	PROJECT NO. 14982.01
CHECKED BY BR	PROJECT MGR. MJG	DRAWING NO. -	FIGURE 1-4

FILE PATH: G:\PROJECTS\1498201 - GUDE PHASE 2 ACM\FIGURES\FIG 1-5.DWG [4-1] 4/8/16



- NOTES:
1. TOPOGRAPHY COMPILED BY APPLIED MAPPING SOLUTIONS, INC. USING PHOTOGRAMMETRIC METHODS WITH PHOTOGRAPHY DATED 06/24/09 AND SUPPLEMENTED WITH FIELD SURVEY PERFORMED BY C.C. JOHNSON & MALHOTRA, P.C., OCTOBER 2009.
 2. SURVEY OF STREAMS TAKEN FROM 2007 PHOTOGRAMMETRY BY AXIS GEOSPATIAL, LLC.
 3. HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983/91 (NAD-83/91). COORDINATE SYSTEM IS MARYLAND STATE PLANE, U.S. SURVEY FEET. VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD-88) WITH ELEVATIONS SHOWN IN FEET.
 4. TOPOGRAPHY IS APPROXIMATE IN AREAS NOTED "GROUND OBSCURED BY DENSE TREES AND VEGETATION".
 5. FIELD SURVEY OF MW-14A, MW-14B, & MW-15, TEMPORARY GROUNDWATER MONITORING LOCATIONS, AND STREAM GAUGE LOCATIONS PERFORMED BY C.C. JOHNSON & MALHOTRA, P.C., AUGUST 2011.
 6. GROUNDWATER ELEVATION DATA FOR OB102 (350.19') NOT USED IN CONTOURING BECAUSE IT IS INCONSISTENT WITH SURROUNDING DATA.
 7. THE PROPERTY BOUNDARY SHOWN REFLECTS A LAND EXCHANGE BETWEEN MONTGOMERY COUNTY AND M-NCPPC WHICH OCCURRED ON 21 OCTOBER 2014.

LEGEND

---400---	10-FT ELEVATION CONTOUR
---	2-FT ELEVATION CONTOUR
---	PROPERTY BOUNDARY
---	STREAM
---	GROUNDWATER CONTOUR INTERVAL (10 FEET)
●	SG-X TEMPORARY STREAM GAUGE LOCATION (2011)
●	MW-X EXISTING GROUNDWATER MONITORING WELL
▲	TGW-X TEMPORARY GROUNDWATER MONITORING LOCATION (2011)
318.40	GROUNDWATER ELEVATION (FT. MSL.)
→	INFERRED GROUNDWATER FLOW

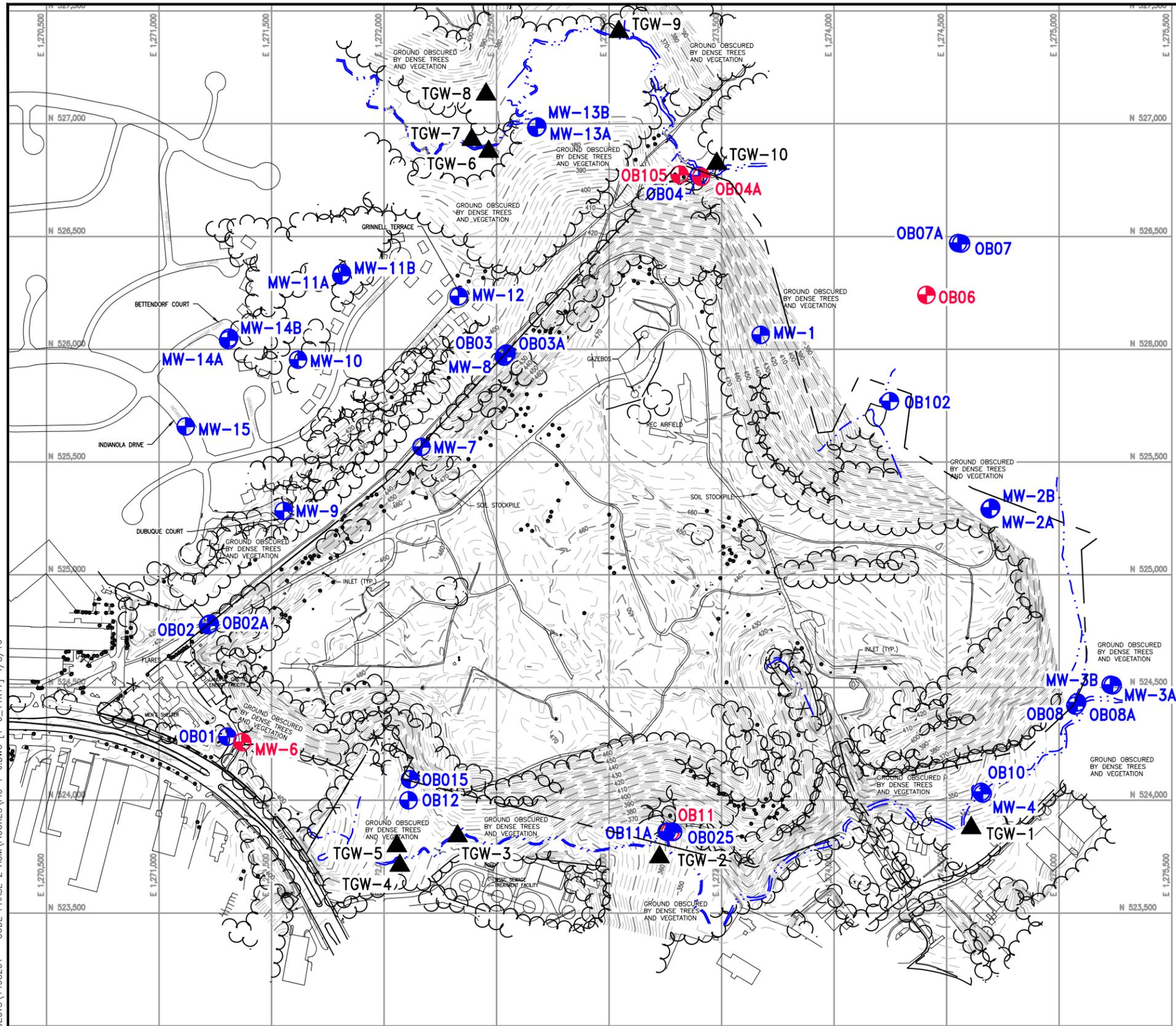


GUDE LANDFILL
ASSESSMENT OF CORRECTIVE MEASURES
MONTGOMERY COUNTY, MARYLAND

FIGURE 1-5
INFERRED GROUNDWATER FLOW MAP
DATA DATE: AUGUST 30, 2011

DESIGNED BY PL/LJO	DRAWN BY TJP	DATE APR. 2016	PROJECT NO. 14982.01
CHECKED BY BR	PROJECT MGR. MJG	DRAWING NO. -	FIGURE 1-5

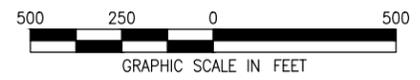
FILE PATH: G:\PROJECTS\1498201 - GUDE PHASE 2 ACM\FIGURES\FIG 1-6.DWG [1-6_11X17] 4/8/16



- NOTES:
1. TOPOGRAPHY COMPILED BY APPLIED MAPPING SOLUTIONS, INC. USING PHOTOGRAMMETRIC METHODS WITH PHOTOGRAPHY DATED 06/24/09 AND SUPPLEMENTED WITH FIELD SURVEY PERFORMED BY C.C. JOHNSON & MALHOTRA, P.C., OCTOBER 2009.
 2. SURVEY OF STREAMS TAKEN FROM 2007 PHOTOGRAMMETRY BY AXIS GEOSPATIAL, LLC.
 3. HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983/91 (NAD-83/91). COORDINATE SYSTEM IS MARYLAND STATE PLANE, U.S. SURVEY FEET. VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD-88) WITH ELEVATIONS SHOWN IN FEET.
 4. TOPOGRAPHY IS APPROXIMATE IN AREAS NOTED "GROUND OBSCURED BY DENSE TREES AND VEGETATION".
 5. FIELD SURVEY OF MW-14A, MW-14B, & MW-15, TEMPORARY GROUNDWATER MONITORING LOCATIONS, AND STREAM GAUGE LOCATIONS PERFORMED BY C.C. JOHNSON & MALHOTRA, P.C., AUGUST 2011.
 6. THE PROPERTY BOUNDARY SHOWN REFLECTS A LAND EXCHANGE BETWEEN MONTGOMERY COUNTY AND M-NCPPC WHICH OCCURRED ON 21 OCTOBER 2014.

LEGEND

- 400--- 10-FT CONTOUR
- 2-FT CONTOUR
- PROPERTY BOUNDARY
- .-.-.-.- STREAM
- MW-X GROUNDWATER MONITORING WELL
- ▲ TGW-X TEMPORARY GROUNDWATER MONITORING LOCATION
- ⊕ OB06 MONITORING WELL SAMPLED AS PART OF ASSESSMENT OF METALS CONCENTRATIONS IN GROUNDWATER

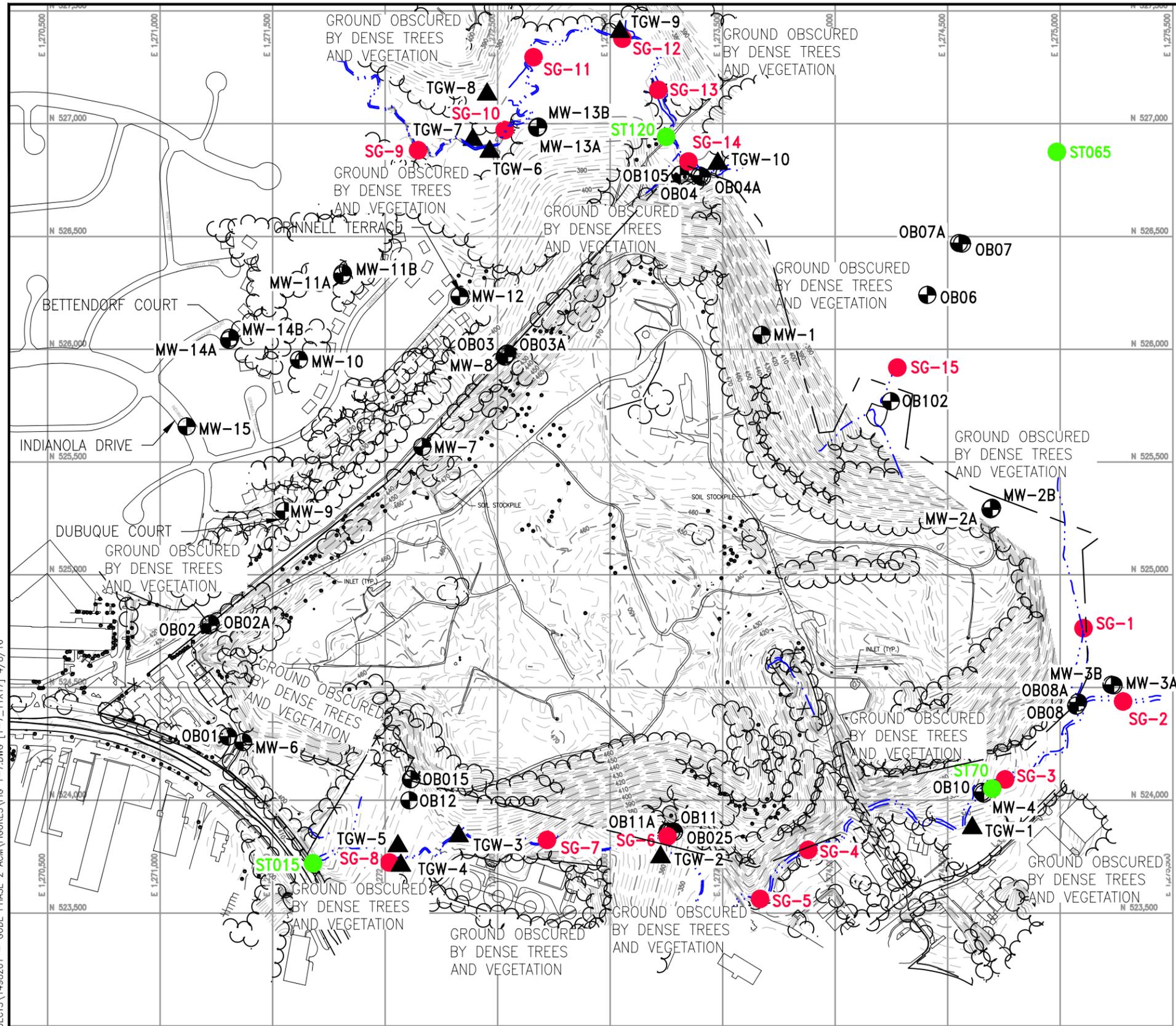


GUDE LANDFILL
ASSESSMENT OF CORRECTIVE MEASURES
MONTGOMERY COUNTY, MARYLAND

FIGURE 1-6
MONITORING WELL LOCATION MAP

DESIGNED BY PL/LJO	DRAWN BY TJP	DATE APR. 2016	PROJECT NO. 62196.08
CHECKED BY BR	PROJECT MGR. MJG	DRAWING NO. -	FIGURE 1-6

FILE PATH: G:\PROJECTS\1498201 - GUDE PHASE 2 ACM\FIGURES\FIG 1-7.DWG [1-7-11X17] 4/8/16



- NOTES:
1. TOPOGRAPHY COMPILED BY APPLIED MAPPING SOLUTIONS, INC. USING PHOTOGRAMMETRIC METHODS WITH PHOTOGRAPHY DATED 06/24/09 AND SUPPLEMENTED WITH FIELD SURVEY PERFORMED BY C.C. JOHNSON & MALHOTRA, P.C., OCTOBER 2009.
 2. SURVEY OF STREAMS TAKEN FROM 2007 PHOTOGRAMMETRY BY AXIS GEOSPATIAL, LLC.
 3. HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983/91 (NAD-83/91). COORDINATE SYSTEM IS MARYLAND STATE PLANE, U.S. SURVEY FEET. VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD-88) WITH ELEVATIONS SHOWN IN FEET.
 4. TOPOGRAPHY IS APPROXIMATE IN AREAS NOTED "GROUND OBSCURED BY DENSE TREES AND VEGETATION".
 5. FIELD SURVEY OF MW-14A, MW-14B, & MW-15, TEMPORARY GROUNDWATER MONITORING LOCATIONS, AND STREAM GAUGE LOCATIONS PERFORMED BY C.C. JOHNSON & MALHOTRA, P.C., AUGUST 2011.
 6. THE PROPERTY BOUNDARY SHOWN REFLECTS A LAND EXCHANGE BETWEEN MONTGOMERY COUNTY AND M-NCPPC WHICH OCCURRED ON 21 OCTOBER 2014.

LEGEND

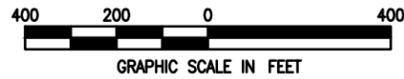
- 400--- 10-FT CONTOUR
- 2-FT CONTOUR
- PROPERTY BOUNDARY
- .-.-.-.- STREAM
- SG-X TEMPORARY STREAM GAUGE LOCATION (2011)
- ST# SURFACE WATER MONITORING LOCATION
- ⊕ MW-X GROUNDWATER MONITORING WELL
- ▲ TGW-X TEMPORARY GROUNDWATER MONITORING LOCATION (2011)



GUDE LANDFILL
ASSESSMENT OF CORRECTIVE MEASURES
MONTGOMERY COUNTY, MARYLAND

FIGURE 1-7
SURFACE WATER MONITORING NETWORK

DESIGNED BY PL/LJO	DRAWN BY TJP	DATE APR. 2016	PROJECT NO. 14982.01
CHECKED BY BR	PROJECT MGR. MJG	DRAWING NO. -	FIGURE 1-7



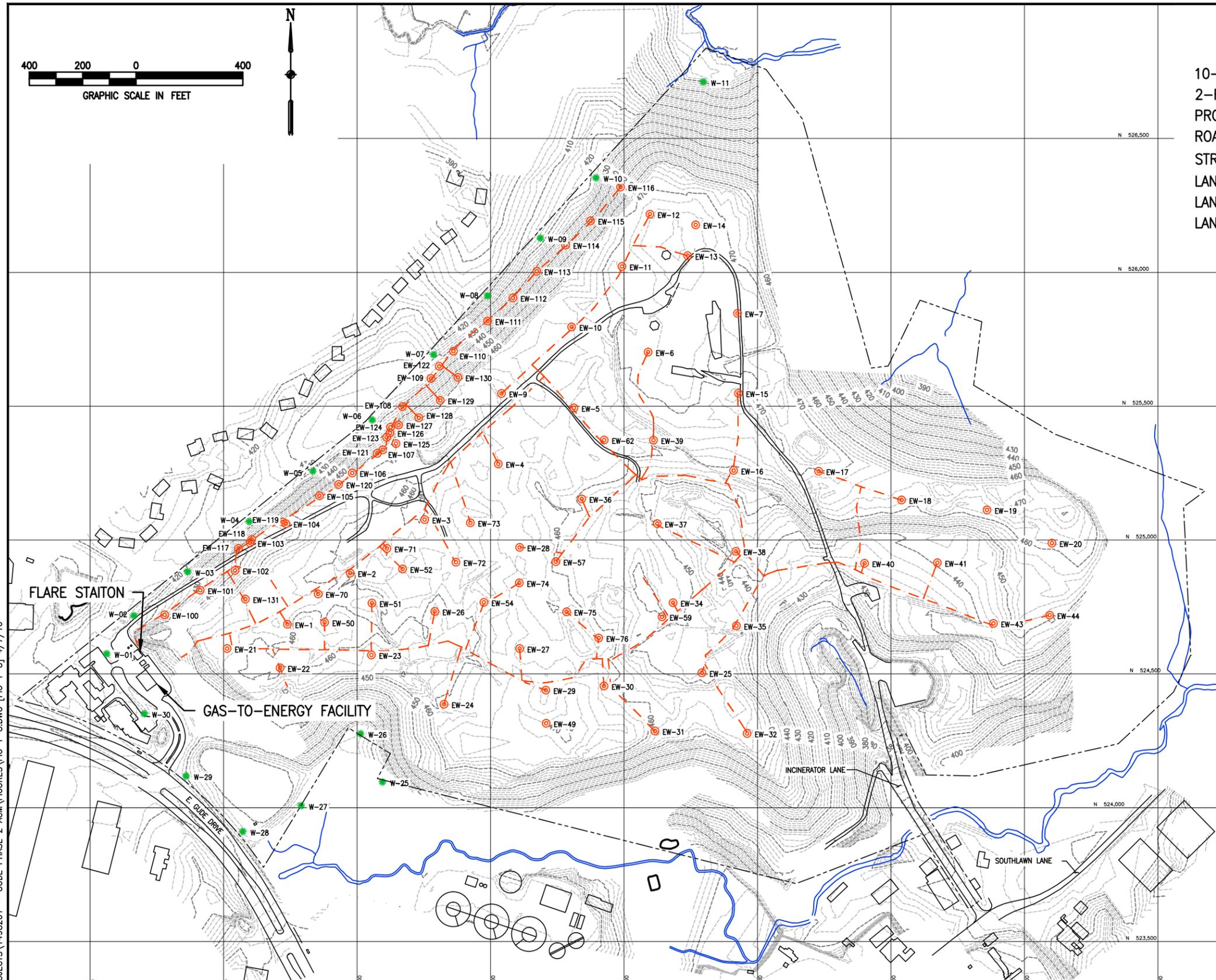
LEGEND

- 10-FT CONTOUR -----400-----
- 2-FT CONTOUR -----
- PROPERTY BOUNDARY -----
- ROADS -----
- STREAM/BODY OF WATER -----
- LANDFILL GAS EXTRACTION PIPING -----
- LANDFILL GAS EXTRACTION WELL ○
- LANDFILL GAS MONITORING WELL ●

NOTES:

1. 2009 TOPOGRAPHY COMPILED BY APPLIED MAPPING SOLUTIONS, INC. USING PHOTOGRAMMETRIC METHODS WITH PHOTOGRAPHY DATED 06/24/09 AND SUPPLEMENTED WITH FIELD SURVEY PERFORMED BY C.C. JOHNSON & MALHOTRA, P.C., OCTOBER 2009.
2. HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983/91 (NAD-83/91). COORDINATE SYSTEM IS MARYLAND STATE PLANE, U.S. SURVEY FEET. VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD-88) WITH ELEVATIONS SHOWN IN FEET.
3. THE PROPERTY BOUNDARY SHOWN REFLECTS A LAND EXCHANGE BETWEEN MONTGOMERY COUNTY AND M-NCPPC WHICH OCCURRED ON 21 OCTOBER 2014.

FILE PATH: G:\PROJECTS\1498201 - GUDE PHASE 2 ACM\FIGURES\FIG 1-8.DWG [FIG 1-8] 4/7/16



GUDE LANDFILL
ASSESSMENT OF CORRECTIVE MEASURES
MONTGOMERY COUNTY, MARYLAND

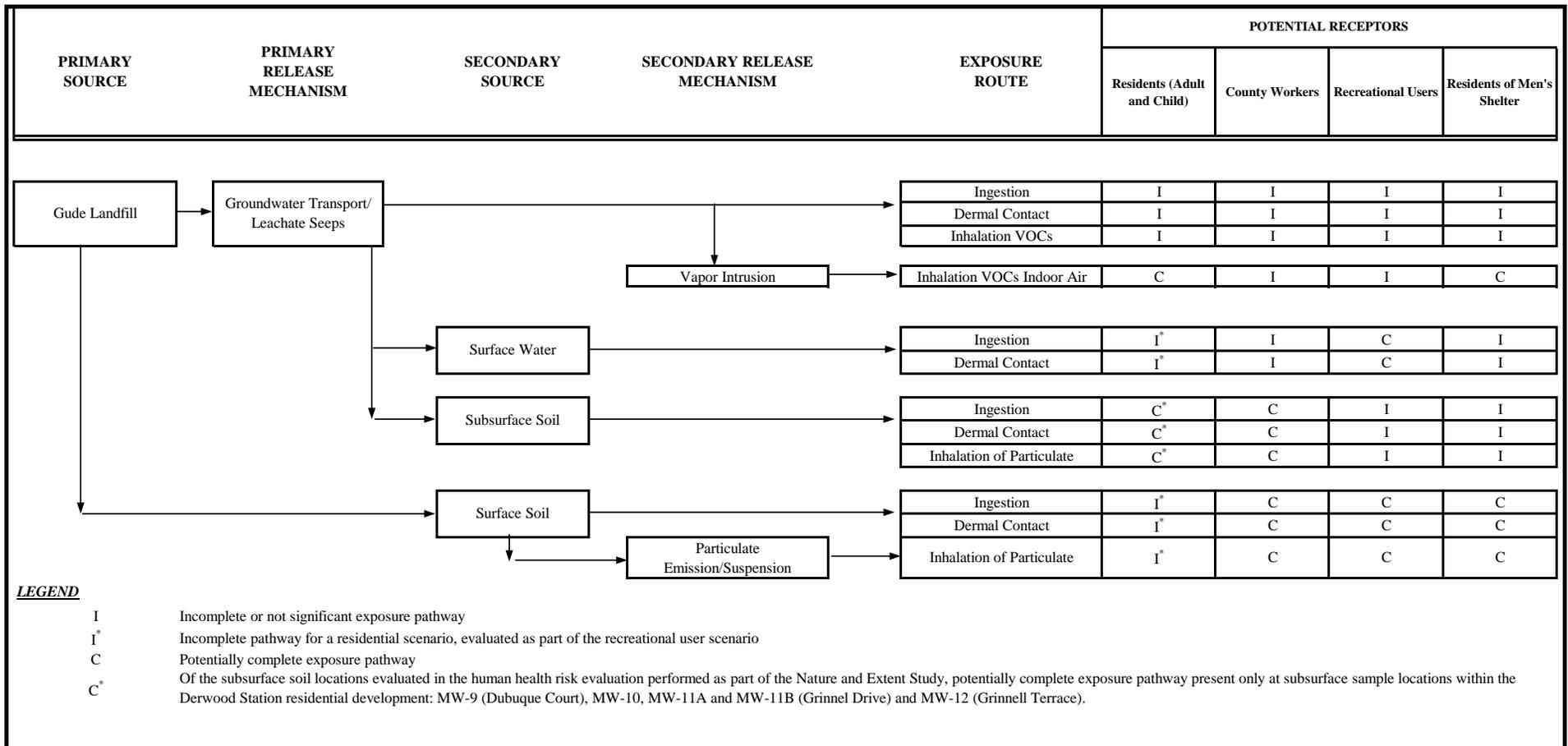
FIGURE 1-8
GUDE LANDFILL GAS EXTRACTION AND MONITORING SYSTEMS

DESIGNED BY PL	DRAWN BY JP	DATE APR. 2016	PROJECT NO. 14982.01
CHECKED BY BR	PROJECT MGR. MJG	DRAWING NO. -	FIGURE 1-8

**FIGURE 2-1
HUMAN HEALTH CONCEPTUAL SITE MODEL
GUDE LANDFILL**

Summary: The risk evaluation determined no potential concerns for human contact with complete exposure pathways. Only complete exposure pathways are evaluated in the risk evaluation. A complete exposure pathway requires the following four components: a source of chemicals, a transport/release mechanism for chemicals, a point for potential human contact, and a route of human exposure. Potential risk to humans from chemicals requires a complete exposure pathway. Incomplete exposure pathways do result in a risk to human receptors.

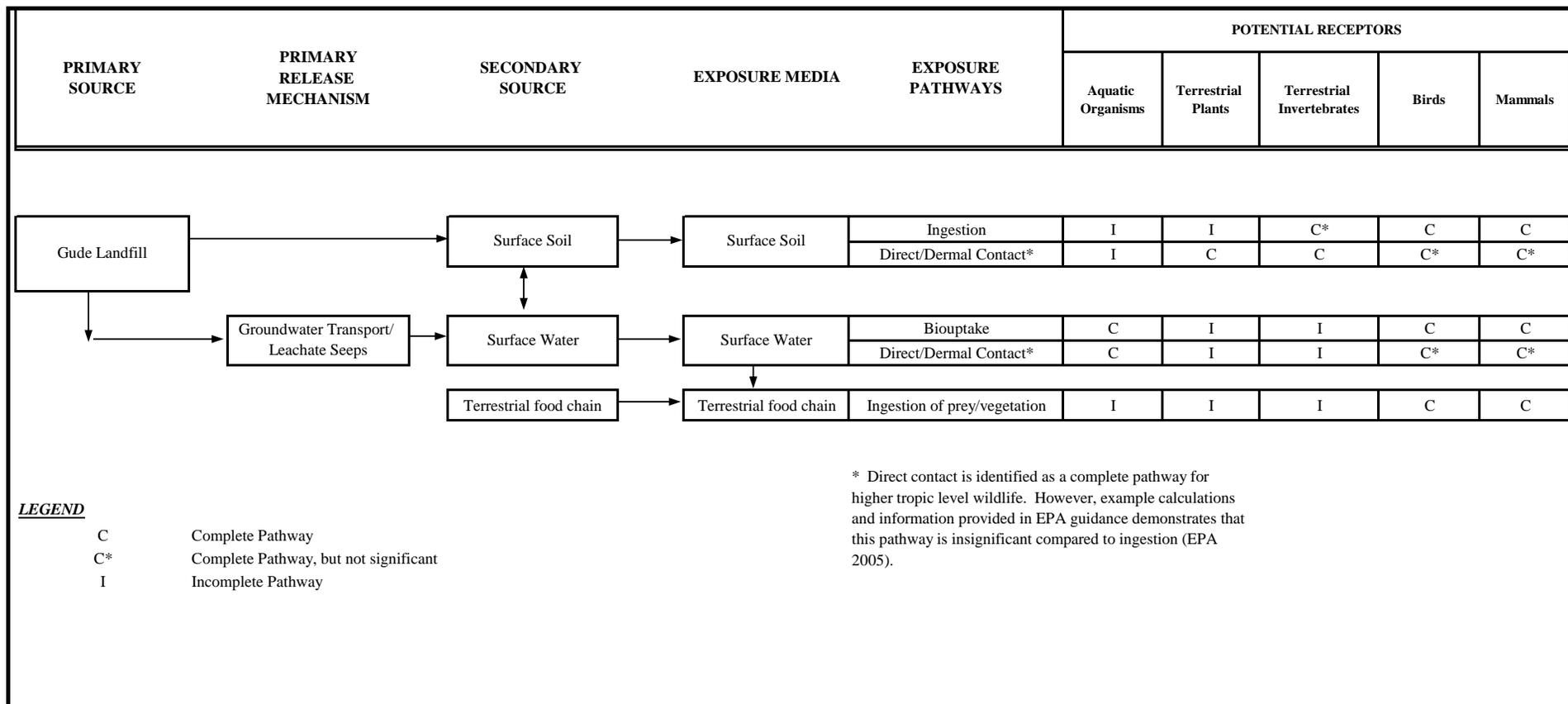
References: EPA. 1989. *Risk Assessment Guidance for Superfund, Volume 1 Human Health Evaluation Manual (Part A)*. EPA/540/1-89/002, December.
 EPA. 2010. *Regional Screening Levels, User's Guide*. May. Available at http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/usersguide.htm.
 MDE. 2008. *Cleanup Standards for Soil and Groundwater*. Interim Final Guidance (Update 2.1). June.



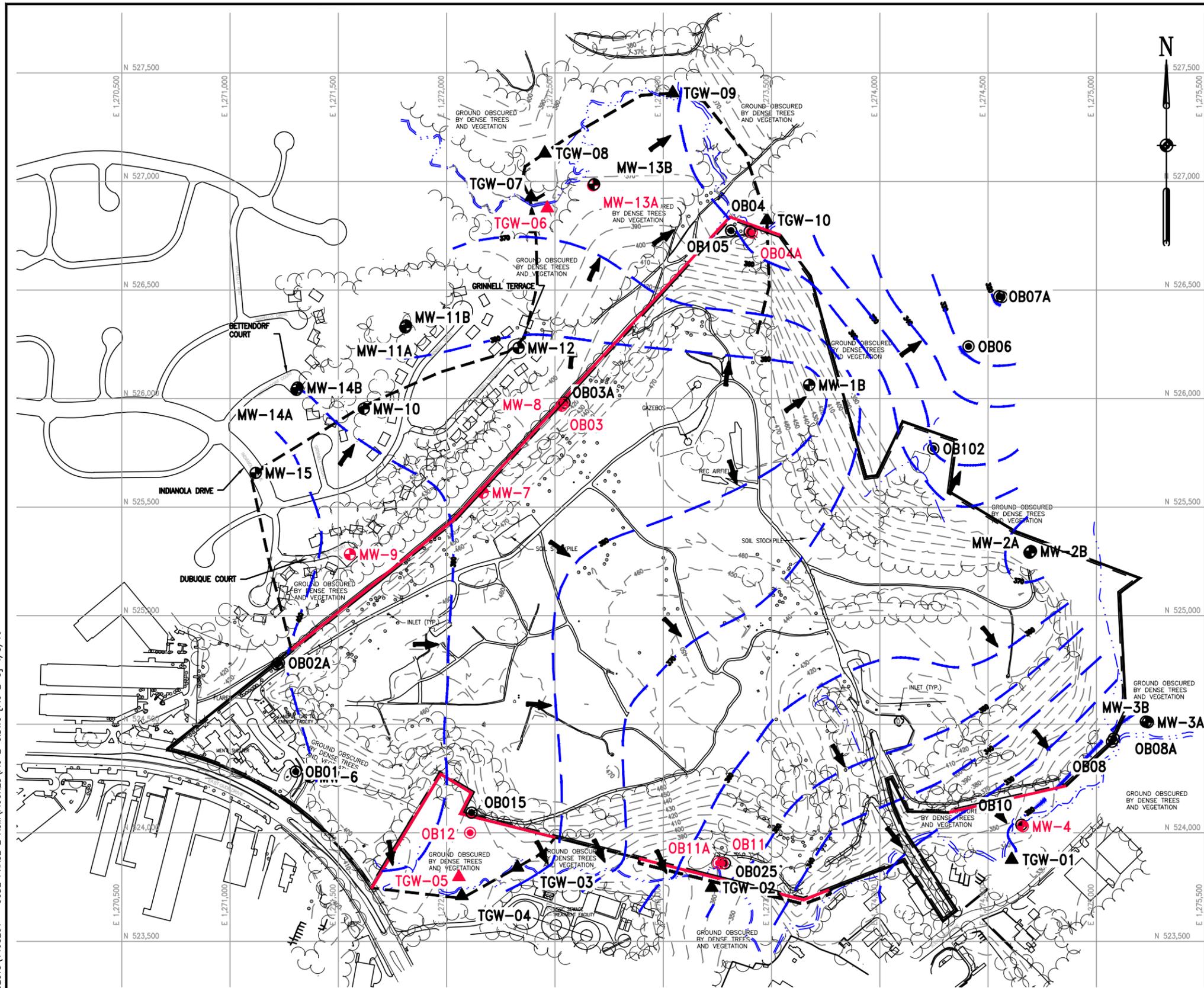
**FIGURE 2-2
ECOLOGICAL CONCEPTUAL SITE MODEL
GUDE LANDFILL**

Summary: The risk evaluation determined no potential concerns for ecological receptors contact with complete exposure pathways. Only complete exposure pathways are evaluated in the risk evaluation. A complete exposure pathway requires the following four components: a source of chemicals, a transport/release mechanism for chemicals, a point for potential ecological contact, and a route of ecological exposure. Potential risk to ecological receptors from chemicals requires a complete exposure pathway. Incomplete exposure pathways do result in a risk to ecological receptors.

References: EPA. 1998. *Guidelines for Ecological Risk Assessment*. EPA/630/R-95/002F. April.
EPA. 2005. *Guidance for Developing Ecological Soil Screening Levels*. OSWER Directive 9285.7-55. Revised February.



FILE PATH: G:\PROJECTS\1498201 - GUDE PHASE 2 ACM\FIGURES\FIG 2-3.DWG [FIG 2-3] 4/8/16



- NOTES:
1. TOPOGRAPHY COMPILED BY APPLIED MAPPING SOLUTIONS, INC. USING PHOTOGRAMMETRIC METHODS WITH PHOTOGRAPHY DATED 06/24/09 AND SUPPLEMENTED WITH FIELD SURVEY PERFORMED BY C.C. JOHNSON & MALHOTRA, P.C., OCTOBER 2009.
 2. HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983/91 (NAD-83/91). COORDINATE SYSTEM IS MARYLAND STATE PLANE, U.S. SURVEY FEET. VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD-88) WITH ELEVATIONS SHOWN IN FEET.
 3. MCL EXCEEDANCES AND INFERRED EXTENT OF POTENTIAL MCL EXCEEDANCES ARE A COMPOSITE OF THE APRIL (COUNTY) AND SEPTEMBER (NES AMENDMENT) 2011 SAMPLING EVENTS. (1,1-DICHLOROETHENE, 1,2-DIBROMOETHANE, 1,2-DICHLOROPROPANE, BENZENE, CADMIUM, CIS-1,2 DICHLOROETHENE, METHYLENE CHLORIDE, NITRATE, TETRACHLOROETHENE, TRICHLOROETHENE, AND VINYL CHLORIDE).
 4. THE PROPERTY BOUNDARY SHOWN REFLECTS A LAND EXCHANGE BETWEEN MONTGOMERY COUNTY AND M-NCPPC WHICH OCCURRED ON 21 OCTOBER 2014.

LEGEND

- 10-FT CONTOUR
- PROPERTY BOUNDARY
- STREAM
- EXISTING GROUNDWATER MONITORING WELL (INSTALLED PRIOR TO 2010)
- NEW GROUNDWATER MONITORING WELL (INSTALLED IN 2010 OR 2011)
- TEMPORARY GROUNDWATER MONITORING LOCATION
- SAMPLING LOCATION WITH ALL PARAMETERS DETECTED BELOW MCLs
- SAMPLING LOCATION WITH PARAMETERS DETECTED AT OR ABOVE MCLs
- COMPLIANCE WITH MCLs AT FUTURE PROPERTY BOUNDARY
- MCL EXCEEDANCES AT FUTURE PROPERTY BOUNDARY
- INFERRED EXTENT OF POTENTIAL MCL EXCEEDANCES
- GROUNDWATER CONTOUR INTERVAL (10 FEET)
- INFERRED GROUNDWATER FLOW

500 250 0 500
GRAPHIC SCALE IN FEET

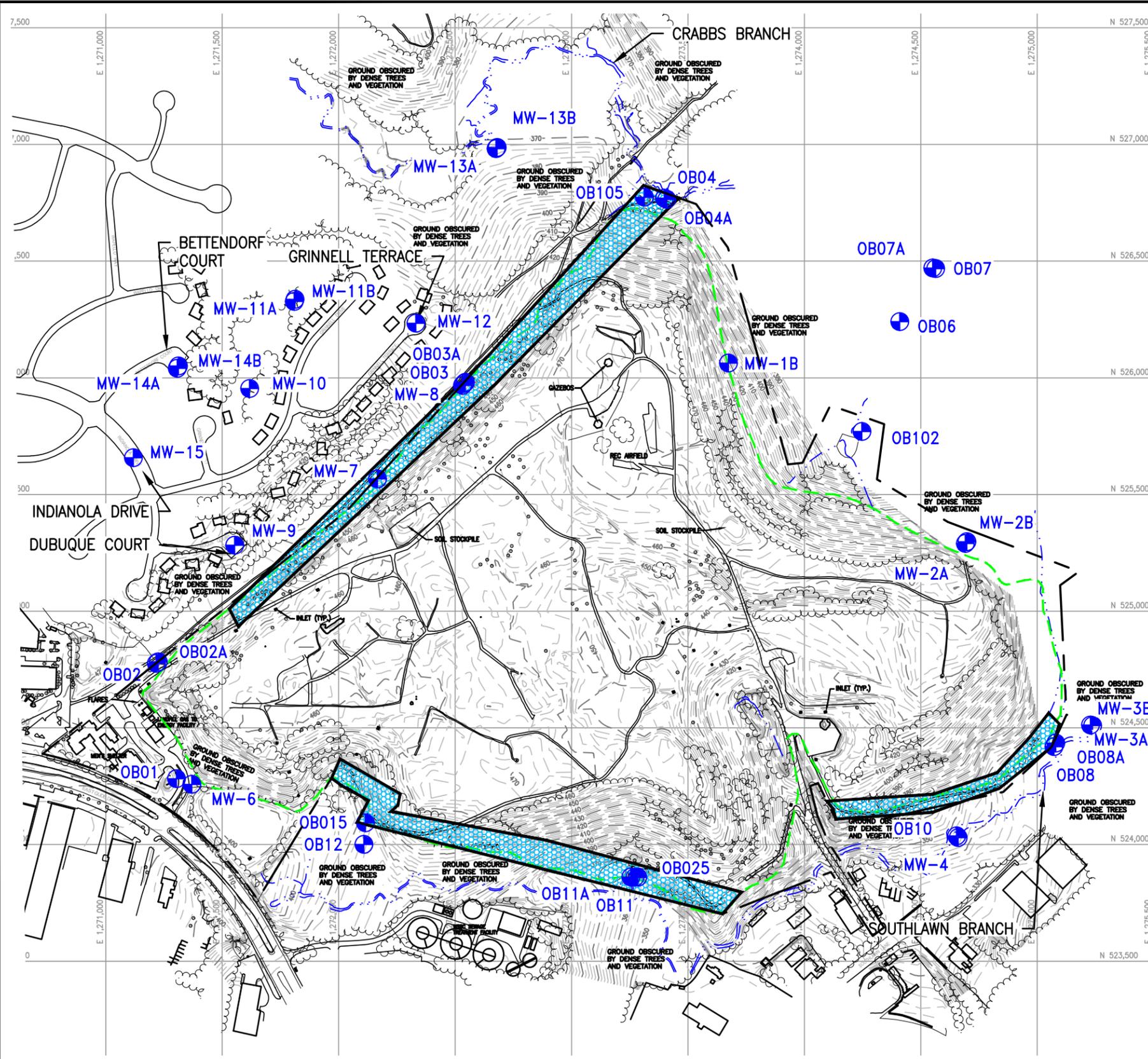


GUDE LANDFILL
ASSESSMENT OF CORRECTIVE MEASURES
MONTGOMERY COUNTY, MARYLAND

FIGURE 2-3
OVERALL MCL COMPLIANCE EXTENT MAP
APRIL AND SEPTEMBER 2011 SAMPLING EVENTS

DESIGNED BY PL/LJO	DRAWN BY AA	DATE APR. 2016	PROJECT NO. 14982.01
CHECKED BY BR	PROJECT MGR. MJG	DRAWING NO. -	FIGURE 2-3

FILE PATH: G:\PROJECTS\1498201 - GUDE PHASE 2 ACM\FIGURES\FIG 2-4.DWG [2-4 11X17] 3/31/16

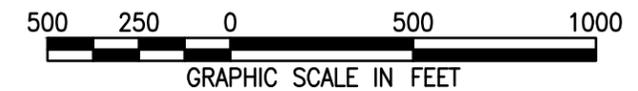


NOTES:

1. TOPOGRAPHY COMPILED BY APPLIED MAPPING SOLUTIONS, INC. USING PHOTOGRAMMETRIC METHODS WITH PHOTOGRAPHY DATED 06/24/09 AND SUPPLEMENTED WITH FIELD SURVEY PERFORMED BY C.C. JOHNSON & MALHOTRA, P.C., OCTOBER 2009.
2. HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983/91 (NAD-83/91). COORDINATE SYSTEM IS MARYLAND STATE PLANE, U.S. SURVEY FEET. VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD-88) WITH ELEVATIONS SHOWN IN FEET.
3. TOPOGRAPHY IS APPROXIMATE IN AREAS NOTED "GROUND OBSCURED BY DENSE TREES AND VEGETATION".
4. THE PROPERTY BOUNDARY SHOWN REFLECTS A LAND EXCHANGE BETWEEN MONTGOMERY COUNTY AND M-NCPPC WHICH OCCURRED ON 21 OCTOBER 2014.
5. MCL = MAXIMUM CONTAMINANT LEVEL. AREAS OF MCL EXCEEDANCES ALONG THE PROPERTY BOUNDARY ARE BASED ON THE OVERALL MCL COMPLIANCE EXTENT MAP" (APRIL AND SEPTEMBER 2011 SAMPLING EVENTS) FROM THE NATURE AND EXTENT STUDY AMENDMENT NO. 1 (2012), WITH MODIFICATIONS TO ALIGN WITH THE PROPOSED FUTURE PROPERTY BOUNDARY.

LEGEND

- 400--- 10-FIT CONTOUR
- 2-FIT CONTOUR
- PROPERTY BOUNDARY
- - - - - LIMIT OF WASTE
- - - - - STREAM
- ~~~~~ TREELINE
- ⊕ MW-X/OBX GROUNDWATER MONITORING WELL
- [Blue Dotted Area] APPROXIMATE AREAS OF CONCERN FOR GROUNDWATER BASED ON MCL EXCEEDANCES

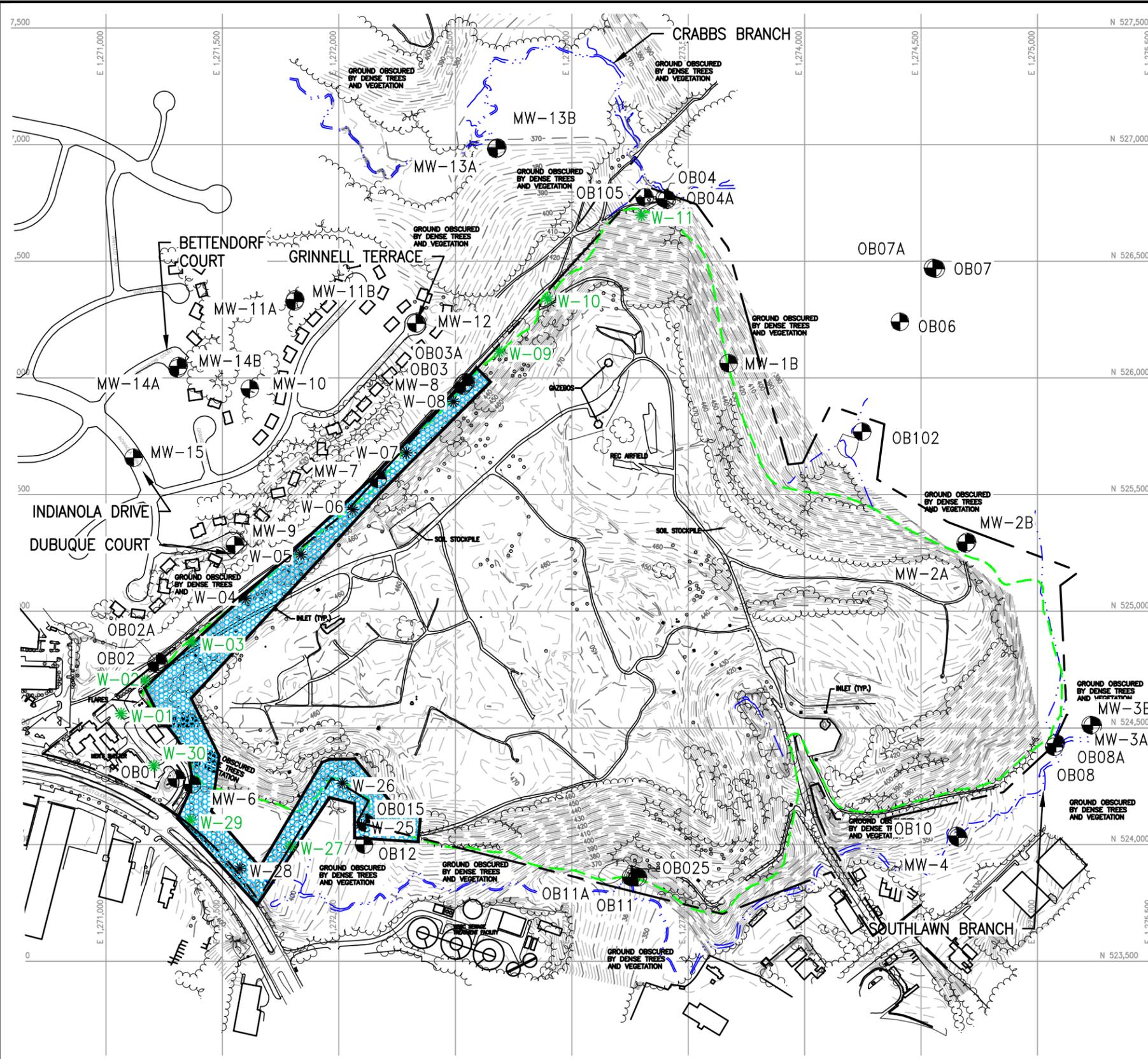


GUDE LANDFILL
ASSESSMENT OF CORRECTIVE MEASURES
MONTGOMERY COUNTY, MARYLAND

FIGURE 2-4
APPROXIMATE AREAS OF CONCERN FOR GROUNDWATER BASED ON MCL EXCEEDANCES ALONG THE PROPERTY BOUNDARY

DESIGNED BY SS	DRAWN BY JSP	DATE APR. 2016	PROJECT NO. 14982.01
CHECKED BY BR	PROJECT MGR. MJG	DRAWING NO. -	FIGURE 2-4

FILE PATH: G:\PROJECTS\1498201 - GUDE PHASE 2 ACM\FIGURES\FIG 2-5.DWG [2-5 11X17] 3/31/16



NOTES:

1. TOPOGRAPHY COMPILED BY APPLIED MAPPING SOLUTIONS, INC. USING PHOTOGRAMMETRIC METHODS WITH PHOTOGRAPHY DATED 06/24/09 AND SUPPLEMENTED WITH FIELD SURVEY PERFORMED BY C.C. JOHNSON & MALHOTRA, P.C., OCTOBER 2009.
2. HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983/91 (NAD-83/91). COORDINATE SYSTEM IS MARYLAND STATE PLANE, U.S. SURVEY FEET. VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD-88) WITH ELEVATIONS SHOWN IN FEET.
3. TOPOGRAPHY IS APPROXIMATE IN AREAS NOTED "GROUND OBSCURED BY DENSE TREES AND VEGETATION".
4. THE PROPERTY BOUNDARY SHOWN REFLECTS A LAND EXCHANGE BETWEEN MONTGOMERY COUNTY AND M-NCPPC WHICH OCCURRED ON 21 OCTOBER 2014.
5. LEL = LOWER EXPLOSIVE LIMIT. EXCEEDANCES INDICATED ARE METHANE CONCENTRATIONS EXCEEDING LEL OF 5 PERCENT DURING WEEKLY MONITORING BY MONTGOMERY COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION IN 2011 AND 2012.

LEGEND

- 400 --- 10-FT CONTOUR
- 2 --- 2-FT CONTOUR
- PROPERTY BOUNDARY
- LIMIT OF WASTE
- STREAM
- TREELINE
- MW-X/OBX GROUNDWATER MONITORING WELL
- ★ W-26 LANDFILL GAS MONITORING WELL (NO LEL EXCEEDANCES 2011-2012)
- ★ W-26 LANDFILL GAS MONITORING WELL (LOCATION OF LEL EXCEEDANCE IN 2011-2012)
- APPROXIMATE AREAS OF CONCERN FOR LANDFILL GAS BASED ON LEL EXCEEDANCES

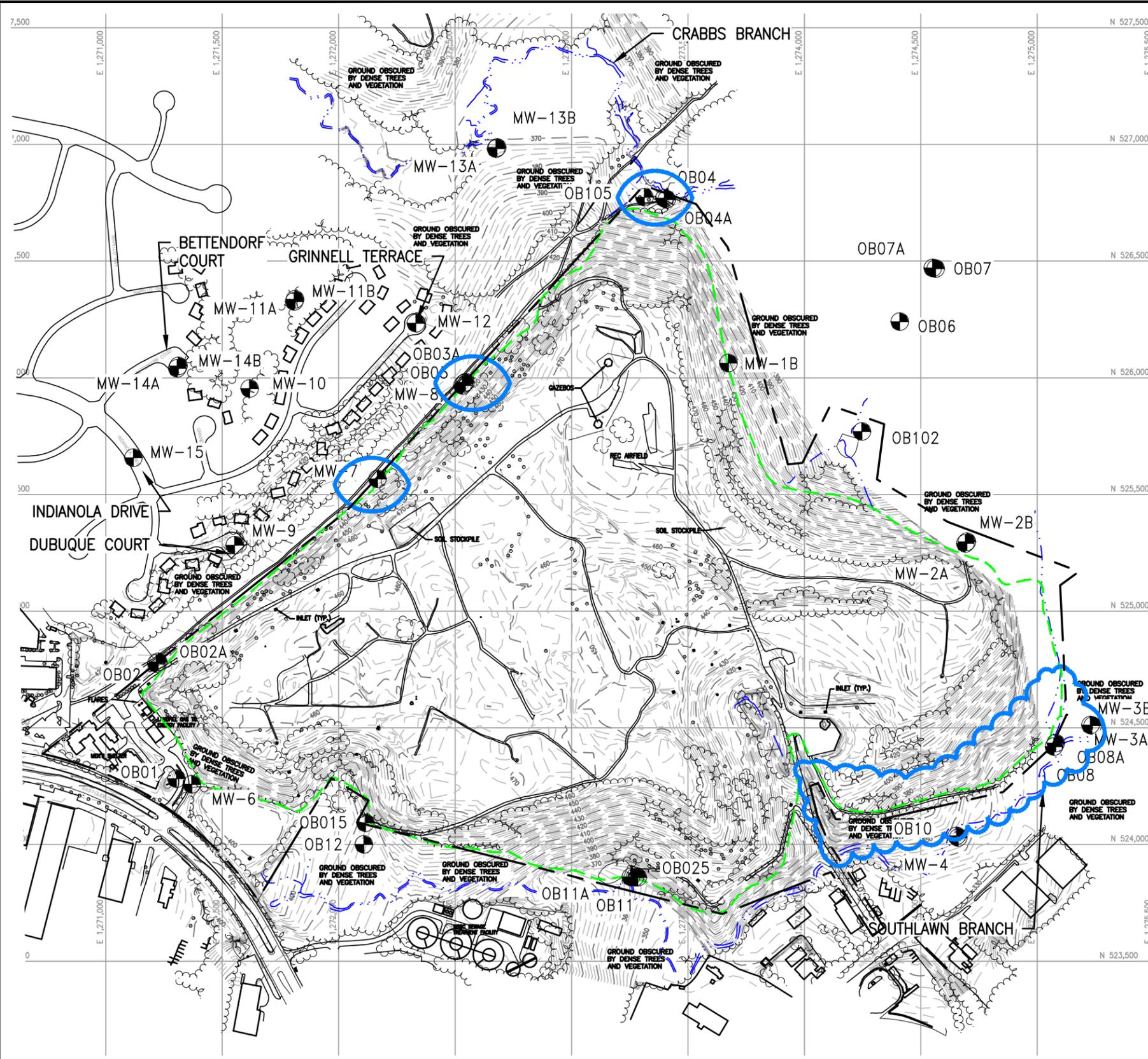


GUDE LANDFILL
ASSESSMENT OF CORRECTIVE MEASURES
MONTGOMERY COUNTY, MARYLAND

FIGURE 2-5
APPROXIMATE AREAS OF CONCERN FOR LANDFILL GAS BASED ON LEL EXCEEDANCES ALONG THE PROPERTY BOUNDARY

DESIGNED BY SS	DRAWN BY JSP	DATE APR. 2016	PROJECT NO. 14982.01
CHECKED BY BR	PROJECT MGR. MJG	DRAWING NO. -	FIGURE 2-5

FILE PATH: G:\PROJECTS\1498201 - GUDE PHASE 2 ACM\FIGURES\FIG 2-6.DWG [2-6 11X17] 3/31/16



- NOTES:
1. TOPOGRAPHY COMPILED BY APPLIED MAPPING SOLUTIONS, INC. USING PHOTOGRAMMETRIC METHODS WITH PHOTOGRAPHY DATED 06/24/09 AND SUPPLEMENTED WITH FIELD SURVEY PERFORMED BY C.C. JOHNSON & MALHOTRA, P.C., OCTOBER 2009.
 2. HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983/91 (NAD-83/91). COORDINATE SYSTEM IS MARYLAND STATE PLANE, U.S. SURVEY FEET. VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD-88) WITH ELEVATIONS SHOWN IN FEET.
 3. TOPOGRAPHY IS APPROXIMATE IN AREAS NOTED "GROUND OBSCURED BY DENSE TREES AND VEGETATION".
 4. THE PROPERTY BOUNDARY SHOWN REFLECTS A LAND EXCHANGE BETWEEN MONTGOMERY COUNTY AND M-NCPPC WHICH OCCURRED ON 21 OCTOBER 2014.
 5. LOCATIONS OF HISTORICAL SEEPS SHOWN WERE IDENTIFIED AND REPAIRED BY MONTGOMERY COUNTY (2007-2010).

LEGEND

- 400--- 10-FT CONTOUR
- 2-FT CONTOUR
- PROPERTY BOUNDARY
- LIMIT OF WASTE
- STREAM
- TREELINE
- MW-X/OBX GROUNDWATER MONITORING WELL
- AREAS OF HISTORICAL NON-STORMWATER DISCHARGE OCCURENCES (LEACHATE SEEPS)
- ☁ PREVIOUS AREA OF NON-STORMWATER DISCHARGE OCCURENCE EVALUATION (NOT LEACHATE SEEP RELATED)

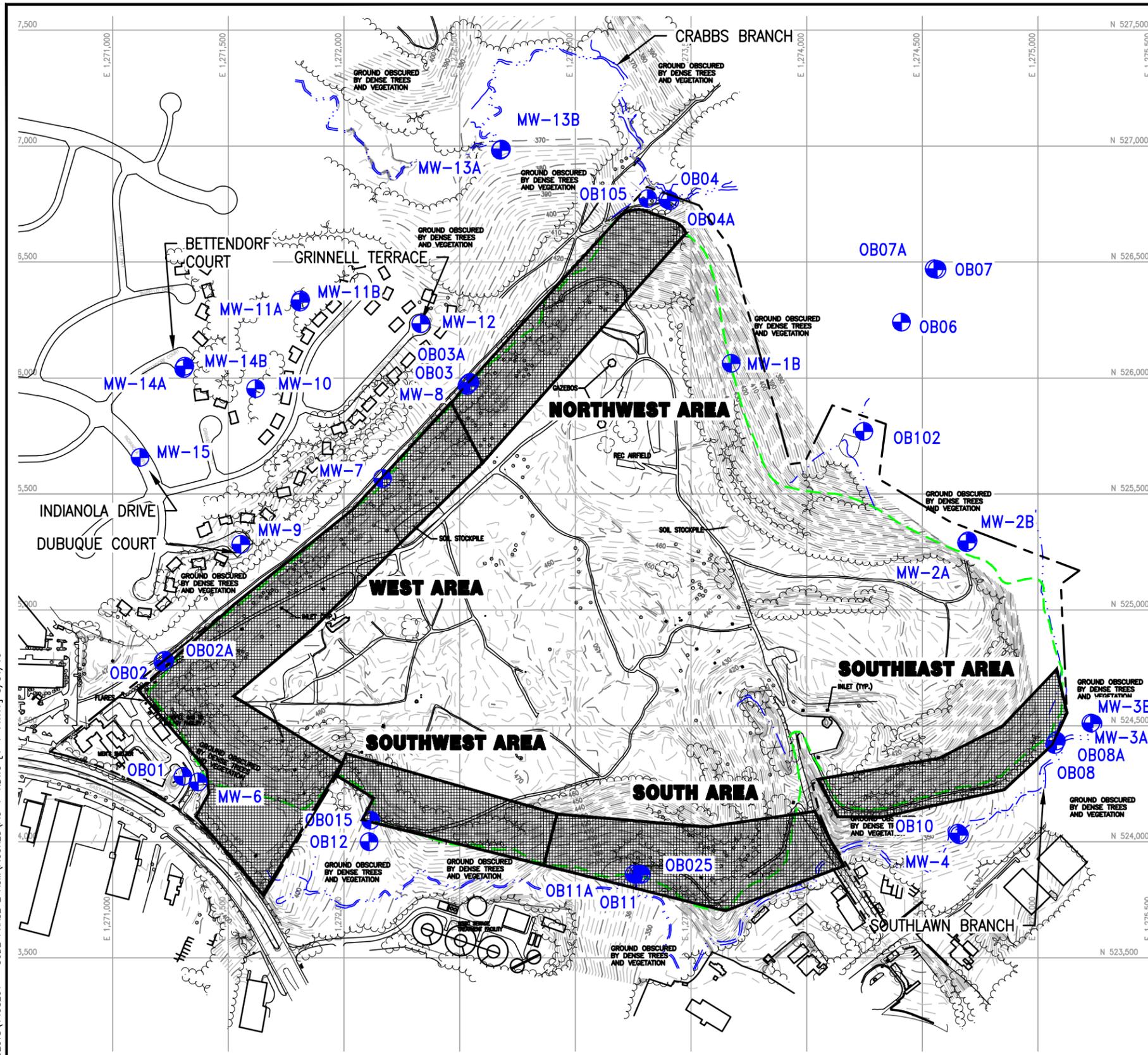


GUDE LANDFILL
ASSESSMENT OF CORRECTIVE MEASURES
MONTGOMERY COUNTY, MARYLAND

FIGURE 2-6
APPROXIMATE AREAS OF CONCERN FOR NON-STORMWATER DISCHARGES BASED ON PAST OCCURRENCES OF LEACHATE SEEPS

DESIGNED BY SS	DRAWN BY JSP	DATE APR. 2016	PROJECT NO. 14982.01
CHECKED BY BR	PROJECT MGR. MJG	DRAWING NO. -	FIGURE 2-6

FILE PATH: G:\PROJECTS\1498201 - GUDE PHASE 2 ACM\FIGURES\FIG 4-1.DWG [4-1 11X17] 3/31/16



- NOTES:**
1. TOPOGRAPHY COMPILED BY APPLIED MAPPING SOLUTIONS, INC. USING PHOTOGRAMMETRIC METHODS WITH PHOTOGRAPHY DATED 06/24/09 AND SUPPLEMENTED WITH FIELD SURVEY PERFORMED BY C.C. JOHNSON & MALHOTRA, P.C., OCTOBER 2009.
 2. HORIZONTAL DATUM IS NORTH AMERICAN DATUM OF 1983/91 (NAD-83/91). COORDINATE SYSTEM IS MARYLAND STATE PLANE, U.S. SURVEY FEET. VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD-88) WITH ELEVATIONS SHOWN IN FEET.
 3. TOPOGRAPHY IS APPROXIMATE IN AREAS NOTED "GROUND OBSCURED BY DENSE TREES AND VEGETATION".
 4. THE PROPERTY BOUNDARY SHOWN REFLECTS A LAND EXCHANGE BETWEEN MONTGOMERY COUNTY AND M-NCPPC WHICH OCCURRED ON 21 OCTOBER 2014.

LEGEND

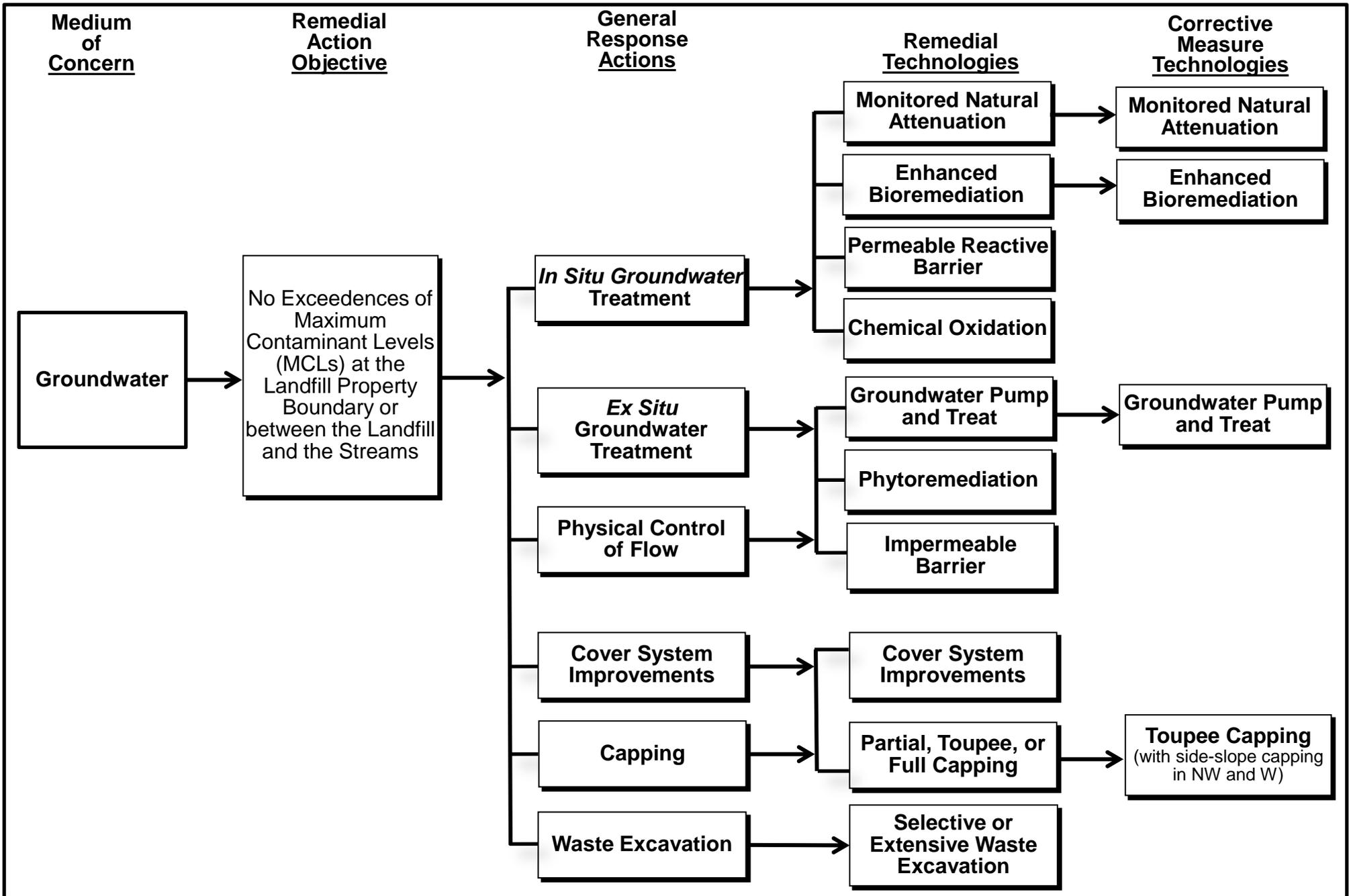
- 400--- 10-FT CONTOUR
- 2-FT CONTOUR
- PROPERTY BOUNDARY
- - - - - LIMIT OF WASTE
- - - - - STREAM
- ~~~~~ TREELINE
- ⊕ MW-X/OBX GROUNDWATER MONITORING WELL
- █ APPROXIMATE REMEDIATION AREAS FOR CORRECTIVE MEASURE ALTERNATIVES ANALYSIS

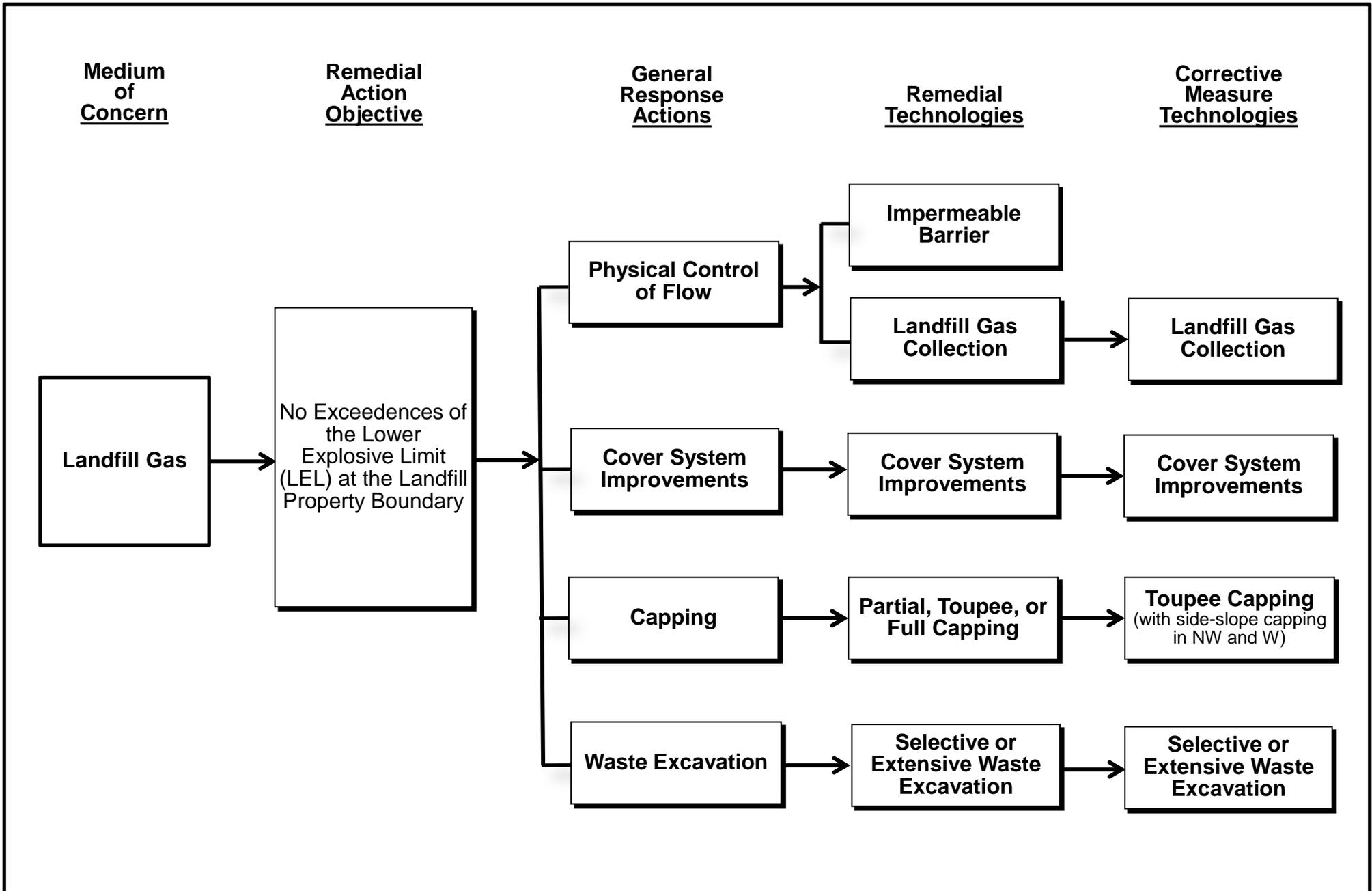


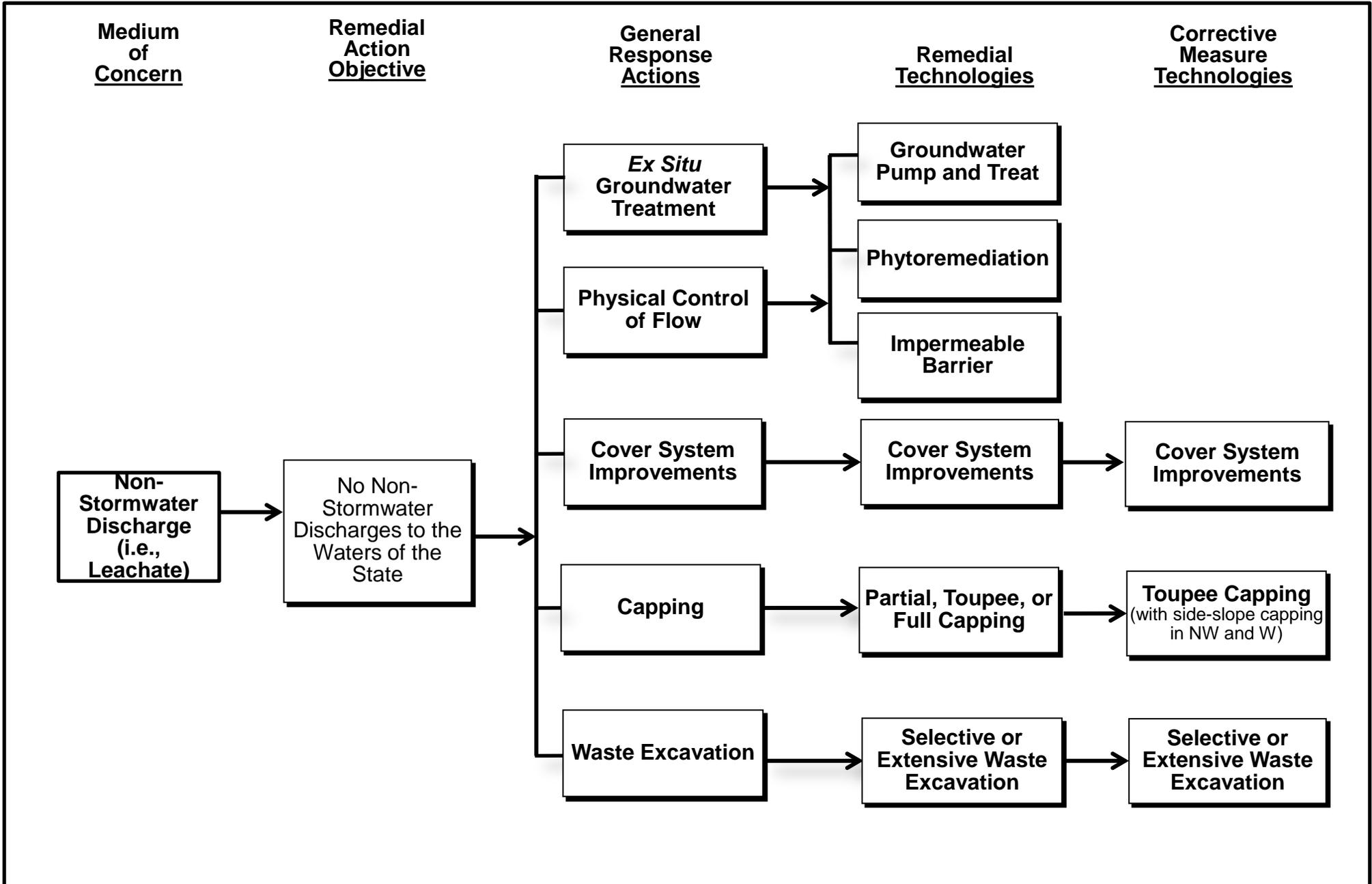
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MONTGOMERY COUNTY, MARYLAND

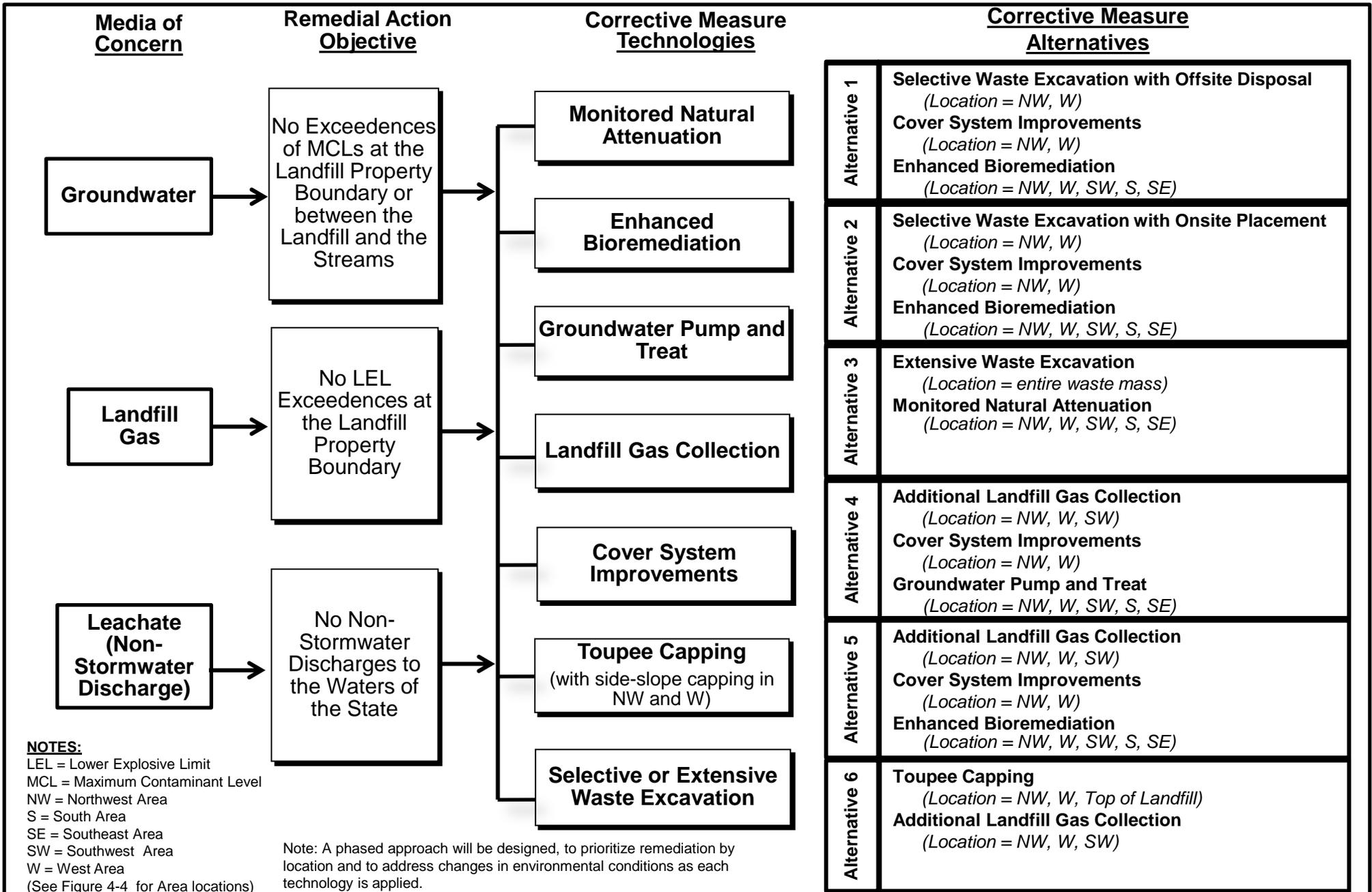
FIGURE 4-1
APPROXIMATE REMEDIAL AREAS FOR
CORRECTIVE MEASURE ALTERNATIVES ANALYSIS

DESIGNED BY SS	DRAWN BY JSP	DATE APR. 2016	PROJECT NO. 14982.01
CHECKED BY BR	PROJECT MGR. MJG	DRAWING NO. -	FIGURE 4-1

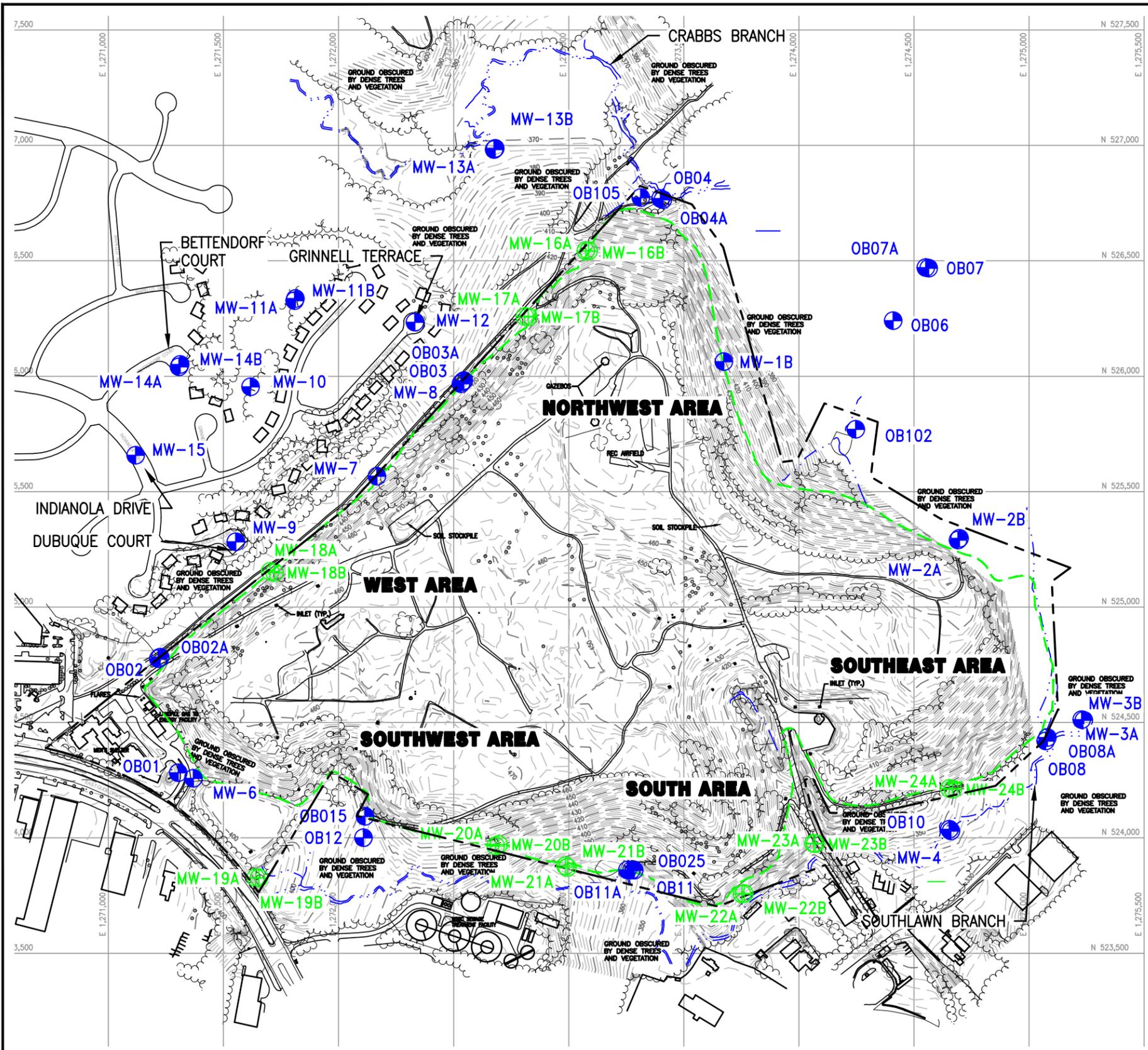








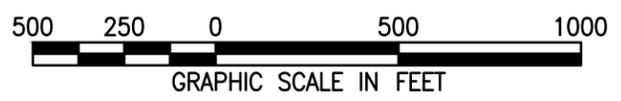
FILE PATH: G:\PROJECTS\1498201 - GUDE PHASE 2 ACM\FIGURES\FIG 4-6.DWG [LAYOUT] 3/31/16



- NOTES:**
1. TOPOGRAPHY COMPILED BY APPLIED MAPPING SOLUTIONS, INC. USING PHOTOGRAMMETRIC METHODS WITH PHOTOGRAPHY DATED 06/24/09 AND SUPPLEMENTED WITH FIELD SURVEY PERFORMED BY C.C. JOHNSON & MALHOTRA, P.C., OCTOBER 2009.
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LEGEND

- 400--- 10-FT CONTOUR
- 2-FT CONTOUR
- PROPERTY BOUNDARY
- LIMIT OF WASTE
- STREAM
- TREELINE
- ⊕ MW-X/OBX GROUNDWATER MONITORING WELL
- ⊕ MW-X PROPOSED GROUNDWATER MONITORING WELL



GUDE LANDFILL
ASSESSMENT OF CORRECTIVE MEASURES
MONTGOMERY COUNTY, MARYLAND

FIGURE 4-6
PROPOSED MONITORING WELL LOCATION MAP

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CHECKED BY BR	PROJECT MGR. MJG	DRAWING NO. -	FIGURE 4-6

FIGURE 5-1
 GUDE LANDFILL REMEDIATION PRELIMINARY PROJECT SCHEDULE

CY	2008				2009				2010				2011				2012				2013				2014				2015				2016				2017				2018				2019				2020				2021				2022	
	Q3	Q4	Q1	Q2																																																						
FY	FY09				FY10				FY11				FY12				FY13				FY14				FY15				FY16				FY17				FY18				FY19				FY20				FY21				FY22					
	Q1	Q2	Q3	Q4																																																						
Project Phase																																																										
Formalize Environmental Monitoring Plans	█																																																									
Remediation Approach	█																																																									
Aerial Survey and Waste Delineation					█																																																					
Nature and Extent Study (NES)					█																																																					
MDE NES Review									█																																																	
NES Amendment 1									█																																																	
MDE NES Amendment 1 Review/Approval													█																																													
ACM Work Plan													█																																													
MDE ACM Work Plan Review/Approval													█																																													
Assessment of Corrective Measures (ACM)													█																																													
MDE ACM Report Review																	█																																									
ACM Revisions in Response to MDE Comments																	█																																									
MDE ACM Report Review/Approval																					█																																					
Procurement/Contracting Activities for Design																																																										
Landfill Cap Design/Permitting Incorporating Re-Use																																																										
Procurement/Contracting Activities for Construction																																																										
Landfill Cap Construction																																																										
Landfill Cap Maintenance*																																																										
*Maintenance for capping will continue in perpetuity																																																										
Remediation Feasibility Memorandum					█																																																					
Consent Order Development									█																																																	
Exchange of Land with M-NCPPC					█																																																					