July 18, 2018

Bharat Patel, Permits Chief
Northeast Regional Office
PA Department of Environmental Protection
2 Public Square
Wilkes-Barre, PA 18701-1906

Re: Slate Belt Heat Recovery Center proposal, Plainfield Twp., Northampton County, PA

Dear Mr. Patel,

Delaware Riverkeeper Network submits the enclosed letter from Michele Adams, P.E., of Meliora Design regarding the definition of the water body on the proposed development site, identified as Sediment Basin #2. We submitted this letter to Plainfield Township Planning Board during their deliberations regarding plan approvals for the proposed project. Meliora's conclusion is that the water body which is planned to be modified must follow all regulations as a "Waters of the Commonwealth" as per Chapter 102 definition of a waterbody. Please see the letter for additional details about the waterbody and proposed project site.

Additionally, the waterbody is directly connected to groundwater within the watershed of Little Bushkill Creek and perhaps Waltz Creek, and is clearly connected to a drainage system that ultimately discharges to the Little Bushkill Creek, and may also discharge to Waltz Creek. Both of these waterways are designated as High Quality streams in Pennsylvania's Special Protection Waters system and, as such, are protected from degradation yet adequate protection is not proposed in the applications to PA Department of Environmental Protection (PADEP) for this project.

We are aware of several applications that have been submitted to PADEP for permits for this project and have received information through the Department's file review process. We are concerned that this project will degrade the groundwater and surface waters of these watersheds and that environmental resources are not adequately protected. Included in our concerns are: the application for an Individual NPDES Permit - Stormwater Runoff from Industrial Activities; the application for a general permit to process biosolids and produce Class A biosolids products; the application for a minor permit amendment for the proposed Slate Belt Heat Recovery Center; all stormwater planning, including compliance with the Act 167 plan for the watershed; the lack of wetlands identification and protection; the proposed handling and processing of sewage sludge and wastewater produced by the sludge drying process; and the claim by the applicant that

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the waterbody (sediment basin #2) is not required to be protected by buffers and other best management practices under PADEP regulations because it has served in the past as a sediment basin for the Grand Central Sanitary Landfill.

Thank you for your consideration.

Sincerely,

Tracy Carluccio
Deputy Director
Delaware Riverkeeper Network

CC: Amy Bellanca, P.E., Environmental Engineer Manager, Department of Environmental Protection, Clean Water Program, Northeast Regional Office, 2 Public Square | Wilkes-Barre, PA

Enclosure: July 16 letter and attachments from Meliora to Delaware Riverkeeper Network

Ms. Tracy Carluccio
Deputy Director
Delaware Riverkeeper Network
925 Canal Street 7th Floor Suite 3701
Bristol, PA 19007

July 16, 2018

RE: Slate Belt Heat Recovery Center
Land Development and Stormwater Management

Dear Ms. Carluccio:

I have reviewed the available information regarding the Slate Belt Heat Recovery Center, and based on my review of the material, the existing waterbody which is proposed to be modified is a Waters of the Commonwealth per the definition of PA Code Title 25, Chapter 102, which is as follows:

> *Waters of this Commonwealth*—Rivers, streams, creeks, rivulets, impoundments, ditches, watercourses, storm sewers, lakes, dammed water, wetlands, ponds, springs and other bodies or channels of conveyance of surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth.

The Township of Plainfield Subdivision and Land Development Ordinance, Chapter 22-1023 defines a Watercourse as follows:

> A watercourse is a channel or conveyance of surface water having defined bed and banks, whether natural or artificial, with perennial or intermittent flow, shown as Hydrology (blue lines) on the latest version of the Plainfield Township Zoning Map. Man-made swales, constructed specifically for stormwater management purposes, are excluded from this definition.

Correspondingly, the proposed site improvements must meet the requirements of the Township of Plainfield Subdivision and Land Development Design Standards, specifically Chapter 22-1023.4.b(1) Riparian and Wetland Buffers, General Design Standards, which states:

"The riparian buffer shall be:

***(1)** One hundred feet from the top of the stream bank of a watercourse."*

The existing waterbody is man-made and is shown as a blue waterbody on the USGS 7.5 minute quadrangle, Wind Gap and Bangor, PA, as included in the applicant's NPDES permit application as Figure 1.

The Drainage Plan, which is Figure 2 in the NPDES application, does not provide a setback or buffer of 100 feet from the existing waterbody. Additionally, the Drainage Plan indicates that the waterbody will be modified and filled as part of the proposed project. The existing water surface elevation and proposed water surface elevation are not provided on the plan.

Existing Waterbody

The current Site Plan as included in the March 2018 "Slate Belt Heat Recovery Center, LLC NPDES Permit Application to Discharge Industrial Stormwater, Figure 2, Drainage Plan" (included with this letter as Attachment A), indicates a proposed regrading of the existing water body from its current configuration, presumably by the placement of fill.

A riparian buffer setback is not provided. A review of historic documents for this site indicates that this waterbody is connected to groundwater and meets the Pa Chapter 102 definition of a waters of the Commonwealth.

The "Final Grade Plan" from the Grand Central Sanitary Landfill, Inc. plan set, dated 08/08/00 and last revised 12/18/07 (and attached to this letter as Attachment B) indicates this waterbody as "Proposed Sediment Basin No. 2, Reclaimed Doney #2 Quarry". This plan indicates proposed grading to create a sediment trap, as well as several stormwater structures to convey runoff to the waterbody. "Proposed Basin No. 2" is located in an existing waterbody in the same location as the current waterbody on the property. The delineation of the waterbody can clearly be seen on the plan. This plan also indicates a storm sewer discharging into the waterbody at elevation 698.83 conveying runoff from the Landfill Gas to Energy Facility Lease Area, and a proposed emergency spillway channel.

The "Existing Site Features" plan sheet from the 08/08/00 plan set indicates the waterbody area as a large depression labeled "Overburden Storage / Stockpile Area" (included with the letter as Attachment C). The bottom of this large excavation is shown as approximate elevation 580 feet. This depiction is consistent with an available 1999 aerial photograph of the site (Attachment D) which shows a large waterbody, presumably as a result of quarry activities, in this location. The same waterbody is visible in the 1993 aerial of the site (Attachment E).

Based on this information, it appears that the current waterbody was created as a result of the earlier quarry excavation and is directly connected to groundwater. It appears that the area and the extent of the waterbody were modified as a result of construction as documented on the 08/08/00 plans, however, the existing waterbody is clearly a remnant of earlier quarrying activity and is supported by groundwater. As such, it meets the current Chapter 102 definition of a waterbody. Correspondingly, this waterbody should be subject to the requirements of the Township of Plainfield SALDO requiring a 100-foot buffer.

Connectivity to Little Bushkill Creek

The proposed Drainage Plan also includes a note that states:

> "Sediment Basin 2: Sediment Basin 2 is an existing zero-discharge sedimentation basin which acts as a stormwater control facility."

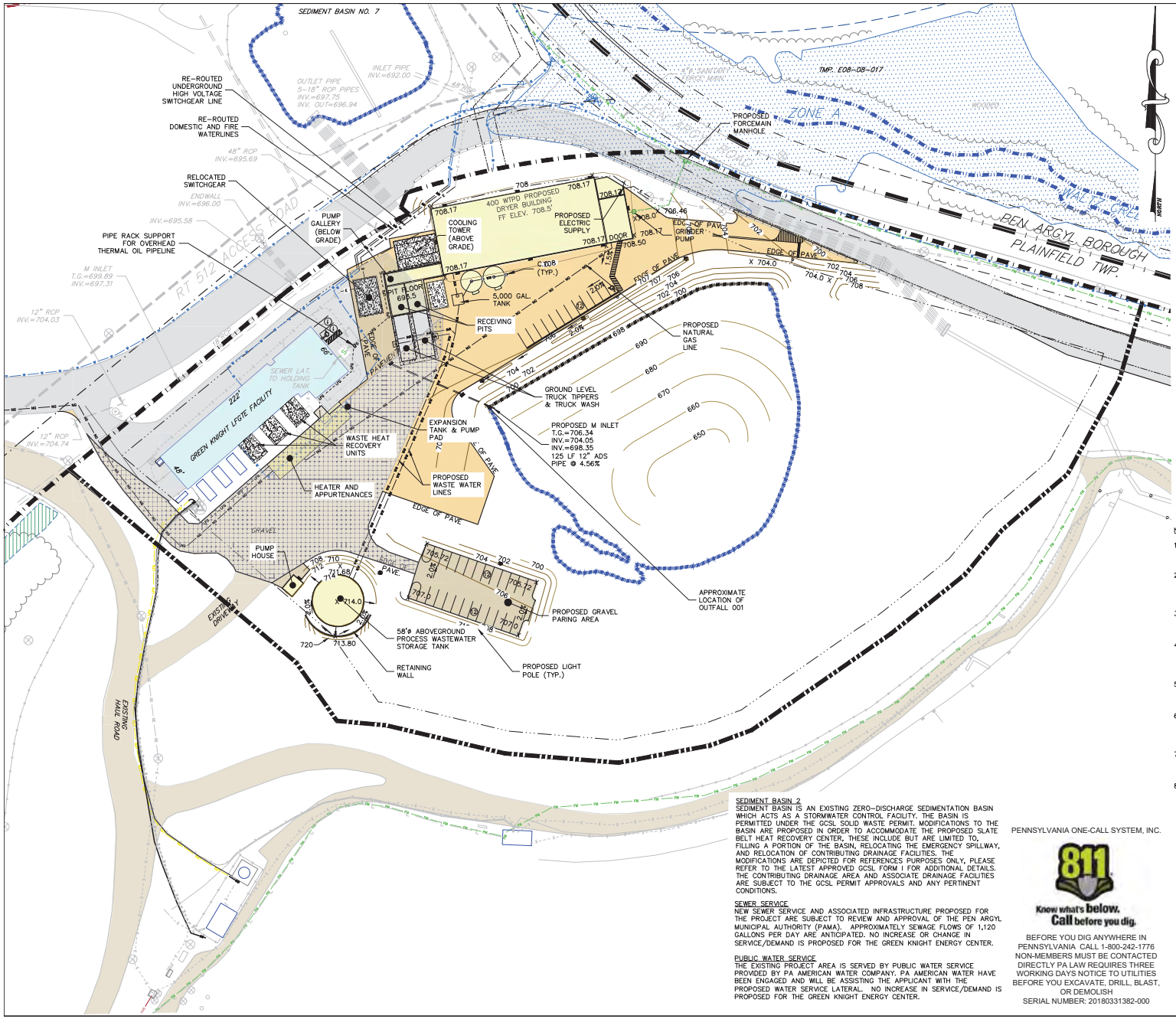
However, the Final Grade Plan from construction in 2000 (Attachment B) indicates an Emergency Spillway for overflows that connects to an existing storm sewer system. On this plan the waterbody is labeled as "Proposed Basin No. 2." Based on this plan, the waterbody is clearly connected to a drainage system that ultimately discharges to the Little Bushkill Creek. Additionally, the waterbody is directly connected to groundwater within he watershed of Little Bushkill Creek.

If you have any questions or concerns, I can be reached at 610-933-0123, or michelea@melioradesign.com

Sincerely yours,

Michele C Adams, PE, LEED AP
President

ATTACHMENT A
3/6/18 SITE PLAN FROM NPDES APPLICATION



LEGEND

- EXISTING HAUL ROAD/GRAVEL AREA
- EXISTING PAVING
- PROPOSED PAVING
- EXISTING GRAVEL TO BE REPLACED WITH PAVEMENT
- APPROXIMATE FLOODPLAIN
- MAPPED WETLANDS
- PROPOSED BUILDING/STRUCTURE
- EXISTING GREEN KNIGHT FACILITY
- PROPOSED CONCRETE PADS
- GCSL PROPERTY-R/W BOUNDARY LINE
- ADJACENT PROPERTY BOUNDARY
- BUILDING SETBACK LINE
- PA DOT ULTIMATE RIGHT OF WAY
- PROPOSED PROPERTY BOUNDARY
- EXISTING WATER LINE (APPROXIMATE)
- PROPOSED WATER LINE (APPROXIMATE)
- PROPOSED WASTE WATER LINE
- EXISTING SEWER LINE (APPROXIMATE)
- EXISTING SANITARY FORCEMAIN
- PROPOSED CONDENSATE FORCEMAIN
- EXISTING LANDFILL GAS UTILITY
- PROPOSED LANDFILL GAS UTILITY
- EXISTING NATURAL GAS UTILITY
- PROPOSED NATURAL GAS UTILITY
- EXISTING UNDERGROUND ELECTRIC UTILITY
- PROPOSED UNDERGROUND ELECTRIC UTILITY
- EXISTING OVERHEAD ELECTRIC UTILITY (APPROXIMATE LOCATION)
- OVERHEAD UTILITIES POLE
- EXISTING STORM PIPE
- EXISTING CHAIN LINK FENCE
- PROPOSED INLET AND PIPE
- EXISTING STREAMS/PONDS
- EXISTING SEDIMENT BASIN
- PROPOSED POND BOUNDARY
- EXISTING CONCRETE JERSEY BARRIER
- 710 EXISTING GRADE 10' ELEV.
- 702 EXISTING GRADE 2' ELEV
- 705 PROPOSED GRADE 10' & 5' ELEV.
- 701 PROPOSED GRADE 1' & 2' ELEV

NOTES:

1. EXISTING GRADE CONTOURS AND SITE FEATURES FROM PHOTOGRAMMETRIC DIGITAL MAPPING BY MID-ATLANTIC PHOTOGRAMMETRIC SERVICES, INC. DATE OF PHOTOGRAPH NOVEMBER 11, 2017.
2. PERIMETER BOUNDARY DEVELOPED FROM SURVEY PERFORMED BY THOMAS MICHAEL ENGLERTH, NOVEMBER 1988; DEED PLOT BY CHARLES SOROKA, PLS, MARCH, 1996; REVIEW OF NORTHAMPTON COUNTY TAX MAPS; AND LEHIGH & NORTHAMPTON DIGITAL GEOGRAPHIC DATA, VERSION 4.0 (10/2005).
3. EVERGREEN CEMETERY LOT LINE ADJUSTMENT INFORMATION TAKEN FROM PEN ARGYL EVERGREEN CEMETERY PRELIMINARY/FINAL RESUBDIVISION LOT LINE ADJUSTMENT PLAN BY EARTHRES GROUP, INC. DATED 06/22/01 AND LAST REVISED 09/07/01.
4. PRIVATE ACCESS ROAD FROM LOT #1 ACROSS LOT #2 TO PEN ARGYL ROAD EXCEEDS TOWNSHIP STANDARDS (CONSISTS OF 12" OF CONCRETE AND CURBING) AND WILL BE MAINTAINED BY GRAND CENTRAL SANITARY LANDFILL, INC. PLAINFIELD TOWNSHIP SHALL NOT BE RESPONSIBLE FOR MAINTENANCE OF THIS PRIVATE ROAD.
5. ZONING INFORMATION OBTAINED FROM PLAINFIELD TOWNSHIP ZONING ORDINANCE (NO. 351) ADOPTED FEBRUARY 9, 2000 AMENDED THROUGH JANUARY 11, 2012 AND PEN ARGYL BOROUGH ZONING ORDINANCE (NO. 528) ADOPTED JULY 8, 1997.
6. SUBDIVISION AND LAND DEVELOPMENT INFORMATION OBTAINED FROM PLAINFIELD TOWNSHIP SUBDIVISION AND LAND DEVELOPMENT ORDINANCE ADOPTED MARCH 6, 1991 AMENDED THROUGH AUGUST 12, 2009 AND PEN ARGYL BOROUGH SUBDIVISION AND LAND DEVELOPMENT ORDINANCE (NO. 628) ADOPTED JANUARY 9, 2007.
7. THE SITE IS LOCATED OUTSIDE THE 100-YEAR FLOODPLAIN AS REFERENCED FROM THE FLOOD INSURANCE RATE MAPS (FIRM) AS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AREA (FEMA). FEMA FIRM #42095C0132E.
8. THE RECLAMATION GRADES FOR THE DONEY II QUARRY HAVE BEEN REFERENCED FROM THE APPROVED RECLAMATION PLAN AS PREPARED BY EARTHRES GROUP, INC. DATED 08/27/2003, DRAWING NO. D-494, PROJECT 951001.075.

SEDIMENT BASIN 2

SEDIMENT BASIN IS AN EXISTING ZERO-DISCHARGE SEDIMENTATION BASIN WHICH ACTS AS A STORMWATER CONTROL FACILITY. THE BASIN IS PERMITTED UNDER THE GCSL SOLID WASTE PERMIT. MODIFICATIONS TO THE BASIN ARE PROPOSED IN ORDER TO ACCOMMODATE THE PROPOSED SLATE BELT HEAT RECOVERY CENTER. THESE INCLUDE BUT ARE LIMITED TO, FILLING A PORTION OF THE BASIN, RELOCATING THE EMERGENCY SPILLWAY, AND RELOCATION OF CONTRIBUTING DRAINAGE FACILITIES. THE MODIFICATIONS ARE DEPICTED FOR REFERENCES PURPOSES ONLY, PLEASE REFER TO THE LATEST APPROVED GCSL FORM I FOR ADDITIONAL DETAILS. THE CONTRIBUTING DRAINAGE AREA AND ASSOCIATE DRAINAGE FACILITIES ARE SUBJECT TO THE GCSL PERMIT APPROVALS AND ANY PERTINENT CONDITIONS.

SEWER SERVICE

NEW SEWER SERVICE AND ASSOCIATED INFRASTRUCTURE PROPOSED FOR THE PROJECT ARE SUBJECT TO REVIEW AND APPROVAL OF THE PEN ARGYL MUNICIPAL AUTHORITY (PAMA). APPROXIMATELY SEWAGE FLOWS OF 1,120 GALLONS PER DAY ARE ANTICIPATED. NO INCREASE OR CHANGE IN SERVICE/DEMAND IS PROPOSED FOR THE GREEN KNIGHT ENERGY CENTER.

PUBLIC WATER SERVICE

THE EXISTING PROJECT AREA IS SERVED BY PUBLIC WATER SERVICE PROVIDED BY PA AMERICAN WATER COMPANY. PA AMERICAN WATER HAVE BEEN ENGAGED AND WILL BE ASSISTING THE APPLICANT WITH THE PROPOSED WATER SERVICE LATERAL. NO INCREASE IN SERVICE/DEMAND IS PROPOSED FOR THE GREEN KNIGHT ENERGY CENTER.

PENNSYLVANIA ONE-CALL SYSTEM, INC.

811 Know what's below. Call before you dig.

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA CALL 1-800-242-1776 NON-MEMBERS MUST BE CONTACTED DIRECTLY PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST, OR DEMOLISH
SERIAL NUMBER: 20180331382-000

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

NO.	DATE	BY	REVISIONS

DWIG F. ALLEN, P.E.
LICENSE NO. 075102

PREPARED FOR: SYNAGRO

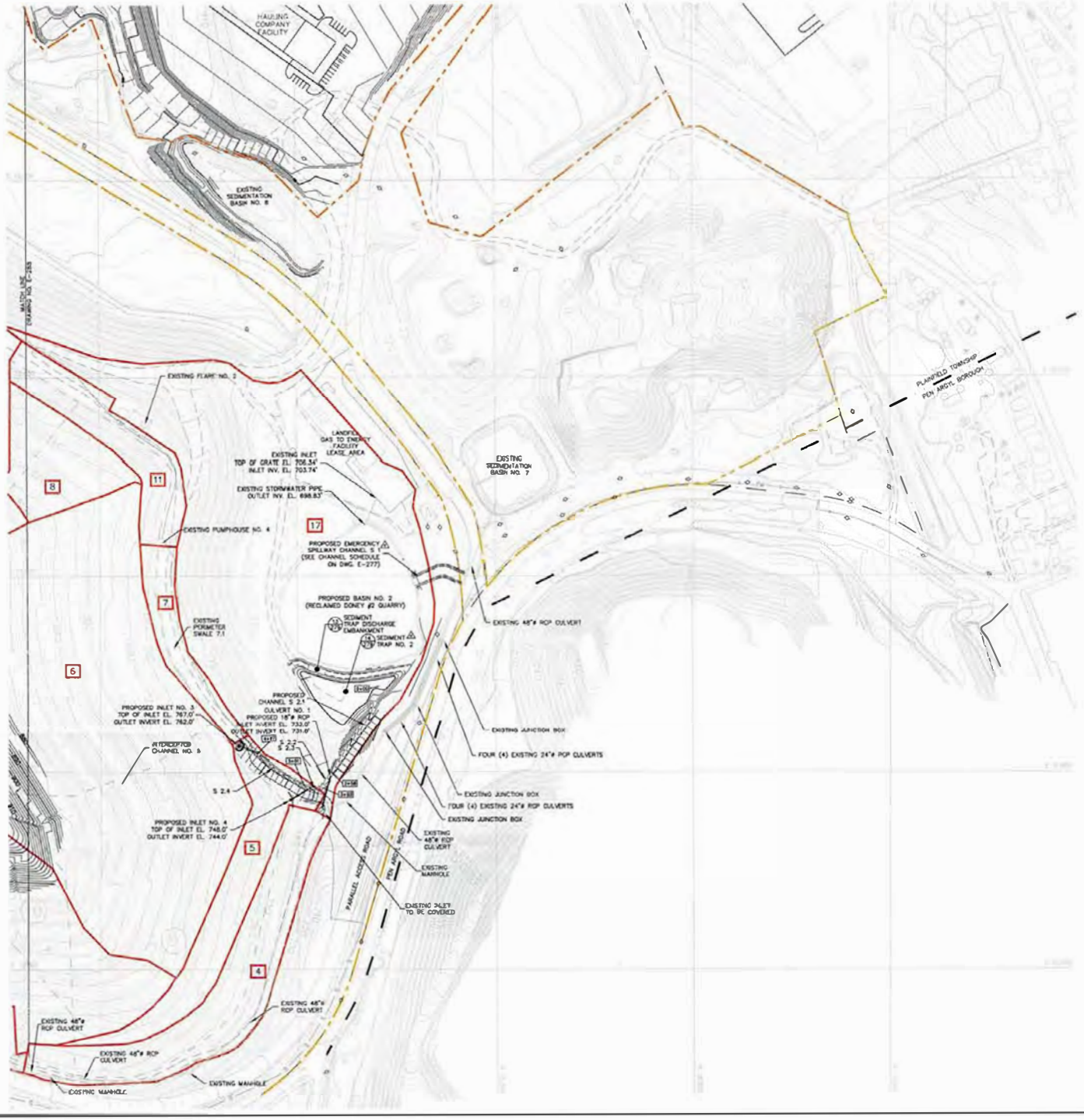
PREPARED BY: EarthRes ENGINEERING AND SCIENCE
6912 Old Easton Road, Pipersville, PA 18947 USA
P.O. Box 764, Morgantown, WV 26505
www.earthres.com
PA office 215.765.1211
WV office 304.292.0806
toll free 800.834.4583

SITE PLAN

SLATE BELT HEAT RECOVERY CENTER
GRAND CENTRAL SANITARY LANDFILL
PLAINFIELD TOWNSHIP, NORTHAMPTON COUNTY, PA.

DRAWN BY: JLD | CHECKED BY: DFA
DATE: 3/6/2018 | PROJECT NO: 151014.004
DRAWING NUMBER: FIGURE 2
SHEET 1 OF 1

ATTACHMENT B
08/08/00 FINAL GRADE PLAN



LEGEND

- LANDFILL PROPERTY BOUNDARY
- MUNICIPALITY BOUNDARY
- EXISTING LANDFILL PERMIT BOUNDARY
- PROPOSED LANDFILL PERMIT BOUNDARY
- CELL LIMIT – EDGE OF LINER
- 17 CELL NUMBER
- EXISTING GRADE CONTOUR
- PROPOSED FINAL GRADE CONTOUR
- 9 DRAINAGE AREA DESIGNATION
- DRAINAGE AREA DIVIDE
- LEACHATE FORCE MAIN TO PAMA (APPROXIMATE)
- SANITARY SEWER TO PAMA (APPROXIMATE)

GRAPHIC SCALE

(IN FEET)
1 inch = 100 ft.

RECEIVED FEB 13 2008

NOTES:

1. EXISTING GRADE CONTOURS FROM PHOTOGRAMMETRIC DIGITAL MAPPING BY LAND & MAPPING SERVICES DATE OF PHOTOGRAPHY DECEMBER 8, 2005.
2. REFER TO DRAWING NO. E-287 FOR CONTINUATION OF THIS DRAWING.
3. SEE DRAWING E-287 FOR DRAINAGE AREA SCHEDULE.
4. TOPOGRAPHY AROUND THE INACTIVE DONEY 2 QUARRY UPDATED BY ERG FIELD SURVEY PERFORMED ON 12/10/07.

NOT FOR CONSTRUCTION

REVISIONS			
NO.	DATE	BY	GENERAL REVISIONS
1	07/24/03	BPB	EXPANSION APPLICATION UPDATE
2	09/27/04	BPB	REVISED PER DEP 07/26/06 COMMENT LETTER
3	10/24/06	HMM	REVISED PER DEP COMMENTS DATED 10/19/07
4	12/18/07	MKA	

JOB & WORKORDER NO.
JOBNO. NO. 1.0.0.0.0.0.0.

PROJECT SITE:
GRAND CENTRAL SANITARY LANDFILL, INC.
FACILITY ID 100263
PLAINFIELD TOWNSHIP, NORTHAMPTON COUNTY
PENNSYLVANIA

PREPARED FOR:
WM

PREPARED BY:
ERG
EARTHRES GROUP
Environmental Consultants and Designers
Earthres Group, Inc.
P.O. Box 468
717 Old Saucon Road
Perkiomenville, Pennsylvania
(www.earthres.com)
215-766-8211

FINAL GRADE PLAN

SOUTHERN EXPANSION
GRAND CENTRAL SANITARY LANDFILL, INC.

DRAWN BY: BPB	CHECKED BY: JCV	PROJECT NO. 97C001.078
DATE: 08/08/00		

DRAWING NUMBER: E-288

ATTACHMENT C
3/6/18 EXISTING FEATURES
PLAN

LANDFILL GAS
FLARE #2
LANDFILL
GAS TO ENERGY
FACILITY
SEDIMENTATION
BASIN #7
D22A
HOUSE
OVERBURDEN
STORAGE/STOCKPILE
AREA
UP
710
720
730
740
750
760
770
790
800
810
700
690
680
670
660
650
640
630
620
610
600
590
580

ATTACHMENT D
1999 SITE AERIAL

Synagro 1999
Legend
Google Earth
Image U.S. Geological Survey
N
500 ft

ATTACHMENT E
1993 SITE AERIAL

Synagro 1993
Legend
Google Earth
Image U.S. Geological Survey
N
500 ft