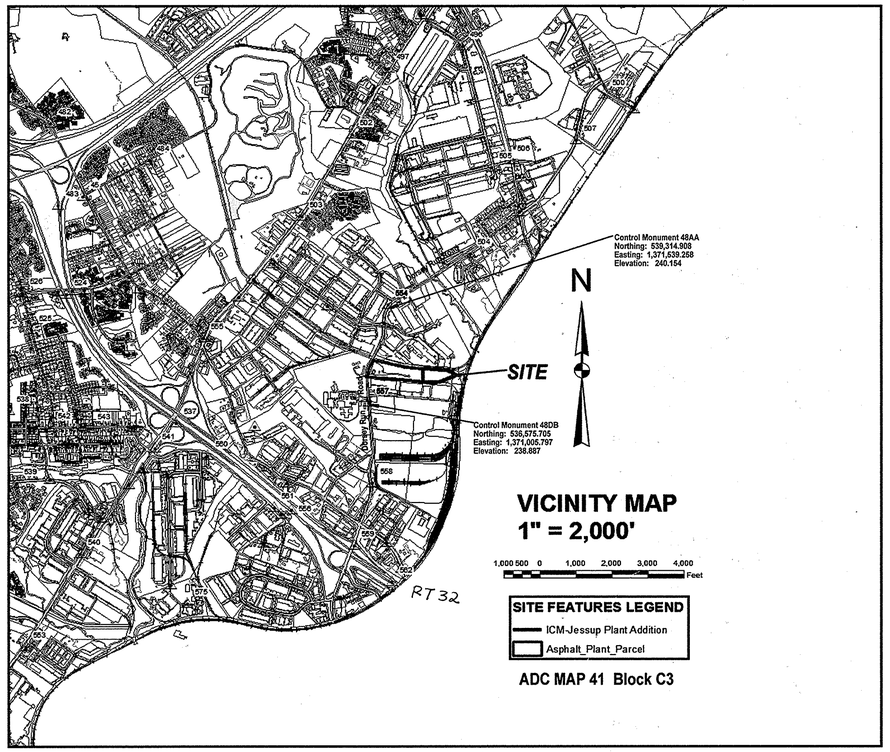
ENVIRONMENTAL CONCEPT PLAN
for
ICM-JESSUP ASPHALT PLANT ADDITION

GENERAL NOTES

(NON-RESIDENTIAL SITE DEVELOPMENT PLAN)

1. All Construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standards and specifications if applicable.
2. The contractor or developer shall notify the Department of Public Works/ Bureau of Engineering, Construction Inspection Division, 24 hours in advance of commencement of work at (410) 313-1880.
3. The contractor shall notify "Miss Utility" at least 48 hours prior to performing any excavation work.
4. Traffic control devices, markings and signing shall be in accordance with the latest edition of the Manual of Uniform Traffic Control Devices (MUTCD). All street and regulatory signs shall be in place prior to the placement of any asphalt.
5. All Plan dimensions are to face of curb unless otherwise noted.
6. The existing topography shown hereon for design purposes was compiled by Quantum Spatial from aerial photography flown 01/08/2014 using procedures that meet accuracy standards for 1" = 50' scale mapping. The base topography datum was reported to be NAD83/NAVD88 and was provided to SECI by our client for use on this project. Additional topography used in conjunction with the Flood Study performed in association with this project was obtained from the Howard County GIS website via direct download.
7. The coordinates shown hereon are based upon the Maryland State Plane Coordinate System, established by Network GPS methods. Howard County monuments Nos. 555 and 557 are closest to the site.
8. Water is public, but is not planned for the site at this time.
9. Sanitary Sewer is public, but is not planned for this site at this time.
10. No utilities, either underground or overhead are known to exist on the site.
11. No permanent structures or buidlings are proposed for this site.
12. Stormwater Management, ESD to the MEP, is provided by two linked Submerged Gravel Wetlands designed in compliance with the Maryland Stormwater Regulations and the Maryland Stormwater Design Manual as amended. The proposed use meets the criteria for a "Hot Spot" designation, and the practices will be lined to minimize infiltration. No additional management is required.
13. The following easements and natural resource features located on the adjoining asphalt plant property to which this site is to be appended and upon which some minor improvements are proposed were obtained by computation using data shown on a Final Plat prepared by Geenman-Pedersen, Inc. (GPI) entitled "Jessup Asphalt Plant, Parcel A, Property of Jessup Asphalt Partners, LP, Liber 10085 Folio 523" recorded among the land records of Howard County as Plat 19398 on 09/20/2007.
    -Public 100-YR Flood Plain, Drainage and Utility Easements;
    -Forest Conservation Easements;
    -Wetland Limits and 25' Buffers;
    -50' Stream Buffers;
    -20' Water Easements;
    -Stormwater Management Easement.
    No attempt was made to field verify the location of any easements per se.
14. The Asphalt Plant Site is also subject to an approved site plan SDP-07-012 of the same name prepared by GPI. Natural Resources shown on the Final Plat and Site Plan were determined by GPI.
15. No Traffic Study is required for this proposed use and access is strictly through other lands of Jessup Asphalt Partners, LP, specifically from Dorsey Run Road via the entrance to and through the travelway within the Asphalt Plant Site.
16. No outdoor lighting is proposed for this project.
17. A water truck shall be available at all times for dust suppression.
18. A new water connection is to be installed to service the addition.
19. Related files: F-08-031, Plat 19398, SDP-07-012.
20. The Asphalt Plant property and this addition are to be consolidated into a single parcel to remedy a flaw in the subdivision of this parcel. As a consequence, the common line between the two parcels will be extinguished.
21. The forest conservation easement labeled "Credited Retention, Forest Conservation Easement #4, 0.18 acres" as it appeares on the referenced Final Plat #19398 prohibits access to the addition parcel and poses a severe hardship for the proposed use. As such, this plan calls for this easement as shown to be relocated within a proposed forest conservation easement, credited retention area designated on the addition parcel in an area of similar forest composition and structure, but mostly higher value within natural resource buffers along the stream.
22. (Reserved)
23. (Reserved)
24. (Reserved)
25. No Wetlands/Wetland buffers are located within the proposed limts of disturbance. The intermittent stream 50' buffer is not located within the proposed LOD. Two small areas designated for grade adjustment and slope protection amounting to less than 15 sq. ft. and 100 sq. ft. respectively intrude into the determined flood plain with no loss in storage volume or retained forest.
26. No parking per se is either required or provided. No buildings are proposed as the purpose of the development is for storage of recycled asphalt product and asphalt shingles.
27. The subject Property is zoned M-2 per the 10/06/2013 Comprehensive Zoning Plan.
28. Approval of this ECP does not constitute any approval of subsequent subdivision plans. Further comments will be generated upon review of applicable development plans in accordance with the Subdivision and Zoning Regulations. The applicant and consultant should expect additional and more detailed review comments including comments that may alter the overall site design as the project progresses through the plan review process.
29. Based on discussions with DPW staff, The low flow orifice locations proposed for each of the Submerged Gravel Wetland BMPs are acceptible at the ECP review stage and are subject to justification to DPZ at the SDP stage as "necessary Disturbances", or a waiver will be required.



VICINITY MAP
1" = 2,000'

1,000 500 0 1,000 2,000 3,000 4,000 Feet

SITE FEATURES LEGEND
- ICM-Jessup Plant Addition
- Asphalt_Plant_Parcel

ADC MAP 41 Block C3

LEGEND-EXISTING, 50-SCALE SURVEY & MAPPING

- Ultimate Development 100YR Flood Plain
- Existing 50' Stream Buffer
- Existing Stream Bank
- ExistingNon-Tidal Wetland Line
- Existing 25' Non-Tidal Wetland Buffer Line
- Intermittent Stream
- 190 Contour-Major
- 190 Contour-Major, approximate
- Contour-Minor
- Contour-Minor, approximate
- Tree Line
- Subcatchment Boundary
- Subwatershed Boundary
- PROPERTY BOUNDARY
- FSD Stand Divisions
- Tc Flow-Path
- UtD USDA NRCS Digital Soils-Imported
- PLOT 1 FSD Stand Plot Location
- HA-1 Soil Borings/Shovel Slices-Wetland Delineation
- A1 Wetland Flag with Label
- 192.5 Spot Elevation
- >15% Slopes Shading

LEGEND-RECORD FEATURES from: Plat 19398/F-08-031

- Forest Conservation Easement (FCE)
- 100 Year Flood Plain
- 25 feet wide Non-Tidal Wetlands Buffer
- 50 feet wide Stream Buffer
- Non-Tidal Wetlands
- Stormwater Easement
- Centerline of Stream-Surveyed (GPI)

LEGEND-PROPOSED, 50-SCALE

- (180) Proposed Contour-Major w/ Label
- (171) Proposed Contour-Minor w/ Label
- Proposed Gravel Access Road
- Proposed RAP/RAS Storage Area(s)
- CL 2.5'x2.5'x5' Integral Concrete Block Wall
- Proposed Curb, 8"
- Proposed LOD
- Proposed Subcatchment
- Proposed SGW Berm Crest (173.5')
- Proposed SGW Pool Crest (172.5')
- Surface Water Flow Direction
- Proposed Tree Line

LEGEND-E & S CONTROL

- Pipe Outlet (for Super Silt Fence)
- SSF Super Silt Fence
- SF Silt Fence
- A-1 Perimeter Dike/Swale
- PDS-1 Temporary Swale
- ST-1 Pipe Outlet Sediment Trap
- TPA / 24RCP Temporary Access Culvert/ Pipe Slope Drain 24" diameter
- SCE SSA Stabilized Construction Entrance

HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

1. A minimum of 48 hours notice must be given to Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (313-1855).
2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
3. Following initial soil disturbance, permanent or temporary stabilization shall be completed within: (a) 3 calendar days for all perimeter sediment control structures, dikes perimeter slopes and all slopes greater than 3:1, (b) 7 days as to all other disturbed or graded areas on the project site.
4. All disturbed areas must be stabilized within the time period specified above in accordance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding (Sec. B-4-5), temporary seeding (Sec. B-4-4) and mulching (Sec. B-4-3). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
5. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
6. Site Analysis:
    Total Site Area.....4.53 acres +/-
    Area Disturbed.....4.05 acres +/-
    Area to be roofed or paved.....3.03 acres +/-
    Area to be vegetatively stabilized.....1.02 acres +/-
    Total Cut.....8,000 cu. yds +/-
    Total Fill.....0 cu. yds. +/-
    Offsite Waste/borrow area location.....(TBD)
7. Any sediment control practice that is disturbed by grading activity for placement of utilities must be repaired onsite the same day of disturbance.
8. Additional sediment control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
9. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
10. Trenches for the construction of utilities is limited to 3 pipe lengths or that which shall be backfilled and stabilized by the end of each workday, whichever is shorter.
11. Any changes or revisions to the sequence of construction must be reviewed and approved by the plan approval authority prior to proceeding with construction.
12. A project is to be sequenced so that grading activities begin on one grading unit (maximum acreage of 20 acres per grading unit) at a time. Work may proceed to a subsequent grading unit when at least 50% of the disturbed area in the proceeding grading unit has been stabilized and approved by the enforcement authority. Unless otherwise specified and approved by the approval authority, no more than 30 acres cumulatively may be disturbed at any given time.

SEQUENCE OF CONSTRUCTION

1. Obtain required permits. [Note: project may require standard timber harvest permit]
2. Locate and stake "Limits of Disturbance" as depicted on the plans for field inspection prior to construction. (2 -3 days)
3. Notify the Howard Soil Conservation District (HSCD) (410-489-7987) and the Maryland Department of the Environment (MDE) Sediment Control Inspector (410-901-4020) at least 48 hours prior to the start of construction as well as Miss Utility (800-257-77777) at least three (3) days prior to the start of any ground disturbing activities. (1 day)
4. Hold a preconstruction meeting with the appropriate agencies, engineer and owner. (1 day)
5. Install SCE, at head of access road as shown (1/2 day)
6. Install silt fence and super silt fence as noted on plan along the LOD, clear brush, trees and vegetation as necessary to set silt fence correctly on grade. Install pipe outlets as shown. (5 days)
7. Stake Stage 1 limits of clearing (see Plan). (2 days)
8. Clear and grub Stage 1 limits. (2 weeks)
9. Stake Sediment traps, Access Road, Diversion devices, temporary soil stockpile area #1 and RAS Storage Area limits and perimeter of SGWs. (1 day)
10. Install sediment trap first, then install the Perimeter dike/swale leading to it, then grade road and stone, place Temporary Access Culvert to intercept flow from pipe outlet at to Sediment Trap #1 and connect to pipe slope drain to bypass SGW-2 area. Stockpile excess soil for removal. Stabilize disturbed areas with temporary vegetative stabilization seed mix. (1 week). Excess soil shall be placed on a site with an active Erosion and Sediment Control Plan.
11. Install the equalization pipe with solid risers to protect from sediment infiltration during construction. (2 days) repair temporary swale protecting SGW-1 area.
12. Remove excess stockpiled soil. (2 days)
13. Final grade and stone RAS storage area and bulb of Access Road, install integral block wall around northern perimeter of RAS Storage Area vegetatively stabilize disturbed open areas.
14. Clear and grub Stage 2 Area. Implement Stage 2. Grade according to plan final grades. Repair/ replace E & S controls as necessary until area is permanently stabilized. (1-2 weeks)
15. Place compacted gravel base in RAP storage area on grade, vegetate/landscape upper slope. Repair Access Road section east of inlet to Sediment Trap #1. (1 week)
16. Construct SGW #1 & #2 while maintaining bypass devices. Remove any excess soil. Vegetatively stabilize both SGWs (1 week).
17. Once both SGWs are permanently stabilized, obtain approval from approval authority to remove diversion devices, complete grading and stone placement of RAP area, and place integral block wall along southerly side of RAS area.
17. Stabilize remaining disturbed areasif any (SGW-1 margin, forest margins, etc. with permanent vegetation. (2 days).
18. Remove sediment and debris from silt fence, swales etc. as needed after any significant storms. (1 day/event)
19. Upon approval by the MDE Sediment Control Inspector, remove any remaining temporary erosion and sediment control devices (silt fence, super silt fence, etc.) (1 week)
20. Note: ECB required on any slopes 3:1 or greater.

DESIGN NARRATIVE

The owner/developer acquired this property in June 2014 for the purpose of utilizing the site for recycled asphalt product (RAP) and recycled asphalt shingles (RAS) storage. The owner/developer owns the adjoining asphalt plant parcel abutting this site on the west. This parcel is landlocked, and the only access is through the asphalt plant. As a consequence, some improvements to the adjoining property are necessary to afford access to this property. Given the physical constraint on access imposed by the existing stormwater management pond on the adjoining asphalt plant site, the only access for truck traffic is around the northern rim of the pond. At the time the asphalt plant site plan was approved, a forest conservation easement was recorded for a 35 feet wide strip of upland woods abutting the property, and also blocking access. The design proposes to relocate this easement to wooded areas to be retained on the new property, and any additional retention required beyond what may be provided on the new property will be provided via an offsite retention bank. A flaw in the subdivision of this property will be remedied by a plat to consolidate both parcels into one, the 0.18-acre existing forest conservation easement as it appears on Plat 19398 will be extinguished along with the common property line, that 0.18-acre of that easement will be absorbed into the retention area on the new parcel, and the recorded easements and natural resource boundaries will be merged along that property line on the consolidation plat.

The acquired property is completely wooded, and has protected natural resources as noted and shown elsewhere on this plan. Topography and constraints imposed by the protected natural resources, including significant backwater condition created by an undersized downstream culvert posed significant design challenges. The proposed design protects all natural resources and accomplishes "ESD to the MEP" by utilizing lined submerged gravel wetland practices for stormwater quality management. The design proposes to line the gravel wetland practices to prevent infiltration of runoff from the developed site, which meets the definition of a "Hot Spot" under the new stormwater regulations.

Also, grading has been designed to accomodate as close as practical the design constraint of 3% base level slope for the owner's use, and curbing or integrated concrete barriers have been employed to direct runoff to the forebay entrance areas, and to force bypass of sheet flow and shallow concetrated flow within areas to remain undisturbed. The grading also minimizes the extent of disturbance beyond the limits of the permanent use. The proposed design will maintain to the extent practicable a contiguous forest stand and riparian corridor along the stream along with some landscape screening. Placement of the access road on the downslope side of the project will minimize "roll-out" of stockpiled RAP that typically occurs in uncontrolled stockpile areas.

The proposed erosion and sediment control design mimics the permanent design. The project will be a single phase, completed in 3 primary stages. The first stage will consist of the installation of perimeter controls, Stage 1 interior controls followed by construction of the Access Road and RAS Storage areas while protecting the site of submerged gravel wetlands practice SGW-1. Stage 1 will be completed and stabilized before Stage 2 is cleared. Stage 2 perimeter dike/swale and sediment trap will be completed with Stage 1 clearing activities but prior to stabilization of the Access Road and RAS area. A temporary swale will bypass flow off the RAS area and protect the SGW-1 site.

Stage 2 will consist of clearing and construction of the RAP storage area while protecting the sites of the Submerged Gravel Wetlands (SGWs) which must be protected from concentrated runoff during construction. The temporary access culvert will connect to a pipe slope drain to accomplish the bypass of SGW-2. Super Silt Fence with pipe outlets will be used along the downslope limit of disturbance, Perimeter Dike/Swales (PDS-1) will direct flow to Sediment trap or bypass flow offsite during construction
until permanent stabilization is completed. During Stage 2, Check Dams will be placed across the "V" in contours in the RAP storage
area to slow concentrated flow and sediment once grading and compaction are complete prior to construction of the SGWs. Following installation of the Access Road the curb and integral concrete barrier to be used to divert runoff to the outlets will be installed, and the PDS-1 can be dimantled. The main RAS storage area can then be cleared and permanently stabilized from the top down.

Construction of the SGWs will be Stage 3, the last major construction activity before removal of E&S Controls. The site is a net cut.

SITE ANALYSIS SUMMARY

NATURAL RESOURCES SUMMARY

Total Site Area.....5.9807 acres +/-
Total Forested Area.....5.9807 acres +/-
Total Area in Flood Plain per report.....1.3143 acres +/-
Total Area of Wetlands and their Buffers.....1.5762 acres +/-
Total Area of Steep Slopes Greater than 15%.....0.2003 acres +/-
Total Area of Steep Slopes greater than 25%.....0 acres.
Total Disturbed Area (includes adjacent parcel).....4.05 acres +/-
Total Protected Resources and Greenspace, new site.....2.9507 acres +/-

Note: Total Greenspace onsite only includes SGWs.

PROPOSED STORMWATER MANAGEMENT SUMMARY

Total Disturbed Area.....4.05 acres +/-
Total ESDv Contributing Area including Offsite.....4.53 acres +/-
Total Onsite Impervious surface existing.....0.00 acres +/-
Total Onsite Impervious Surface Proposed.....3.030 acres +/-
Total offsite contributing Impervious Area.....0.482 acre +/-
Grand Total ESDv contributing Impervious surface.....3.512 acres +/-
Overall % Impervious Surface.....77.44%
Underlying Soils = 20% B (SaB), 80% D (Fa & UtD)

RCN woods.....72.6
Target Pe.....1.88"
ESD Runoff Depth Qe.....1.44"
Total Treatment Volume required for ESD to the MEP.....23,105 cu. ft.
Forebay size.....2,301 cu. ft.

Proposed Practice(s).....Submerged Gravel Wetlands (2)
Total Storage Provided by both SGWs.....29,874 cu.ft.
SGW-1 Forebay, 16.4% of contributing flow required storage.....379 cu. ft.
SGW-1 Forebay storage provided.....1,287 cu. ft.
SGW-2 Forebay 83.6% of contributing area required storage.....1,931 cu. ft.
SGW-2 Forebay storage provided.....1,975 cu. ft.
SGW-1 + SGW-2 manifolded treatment capacity.....29,874 cu. ft.
Has ESD to the MEP been met.....YES!

ECP SHEET INDEX

STEPHENS
Environmental Consulting, Inc.
www.StephensENV.com
P.O. Box 485 P: (302) 286-0406
North East MD 21901 F: (410) 658-7298

ENVIRONMENTAL CONCEPT PLAN FOR ICM-JESSUP ADDITION

B & O RAILROAD ROW LAND-LOCKED COUNCIL DISTRICT 2, HOWARD COUNTY, MARYLAND 20794

SITE DATA

Owner/ Developer:	Jessup Asphalt Partners, LP
Owner/ Developer Address:	638 Lancaster Avenue Malvern, PA 19355
Owner/ Developer Phone #:	1-800-999-1018
Premises Address:	SS B&O Railroad, Land-locked Jessup, MD 20794
Plat #:	None
Plat Reference:	None
Deed Reference:	Liber 15628 Folio 00006
Lot Area:	5.9807 acres +/-
Tax Parcel:	Map 0048 Grid 0008 Parcel 0109 PAR 4
Zoning:	M-2, Heavy Manufacturing
Election District	Sixth
Water Supply:	Public available
Wastewater Disposal:	Public available
Datum:	NAD83/ NAVD88

PROPOSED DEVELOPMENT BASIC DATA

Proposed future use.....Recycled Asphalt Product (RAP) Storage
Proposed Structures/Buildings.....None
Proposed Parking.....None
Proposed water service.....None
Proposed sanitary sewer service.....None
Proposed Stormwater Management.....(2) Submerged Gravel Wetlands
Total Disturbed Area.....4.05 Acres +/-
Total Impervious Area.....3.03 acres +/-
Type of Impervious surface.....compacted gravel base, no pavement

The site is designated a "Hot Spot" for stormwater management purposes.

No disturbance of wetlands/ Waters of the US or associated buffers is proposed.

Access to the property is exclusively through the adjoining asphalt plant, 8375 Dorsey Run Road, Jessup, MD 20794

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF-DEVELOPMENT ENGINEERING DIVISION — DATE 6.19.15

CHIEF-DIVISION OF LAND DEVELOPMENT — DATE 6.18.15

PROJECT BENCH MARKS

Benchmark #1: GPI CIRF El: 204.19 (NAVD 88)
N537203.66 E1371118.59 (NAD83)
Located 5' North and +/- and 66' East of the Bakermark Building #6477

Benchmark #109: CIRF-GPI El: 168.96 (NAVD 88)
N537374.18 E1372280.88 (NAD 83)
located on westerly side of SWM Pond

Benchmark #1209: CIRF El: 169.48 (NAVD 88)
N537296.67 E1373402.29 (NAD 83)
Located at easternmost property corner

Drawn By: WES Reviewed By: MAN Last Updated 12/11/2014

FILENAME: ECP-COVER_SHEET.pcs

FILE PATH: S/2014_PROJECTS/1528/PCS_ECP_REV01

DESIGN PROFESSIONAL'S CERTIFICATION

I Hereby Certify that these plans were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License Number 9780, Expires 03/23/2016

STATE OF MARYLAND — MICHAEL A. NAWROCKI — No. 9780 — REGISTERED PROFESSIONAL ENGINEER

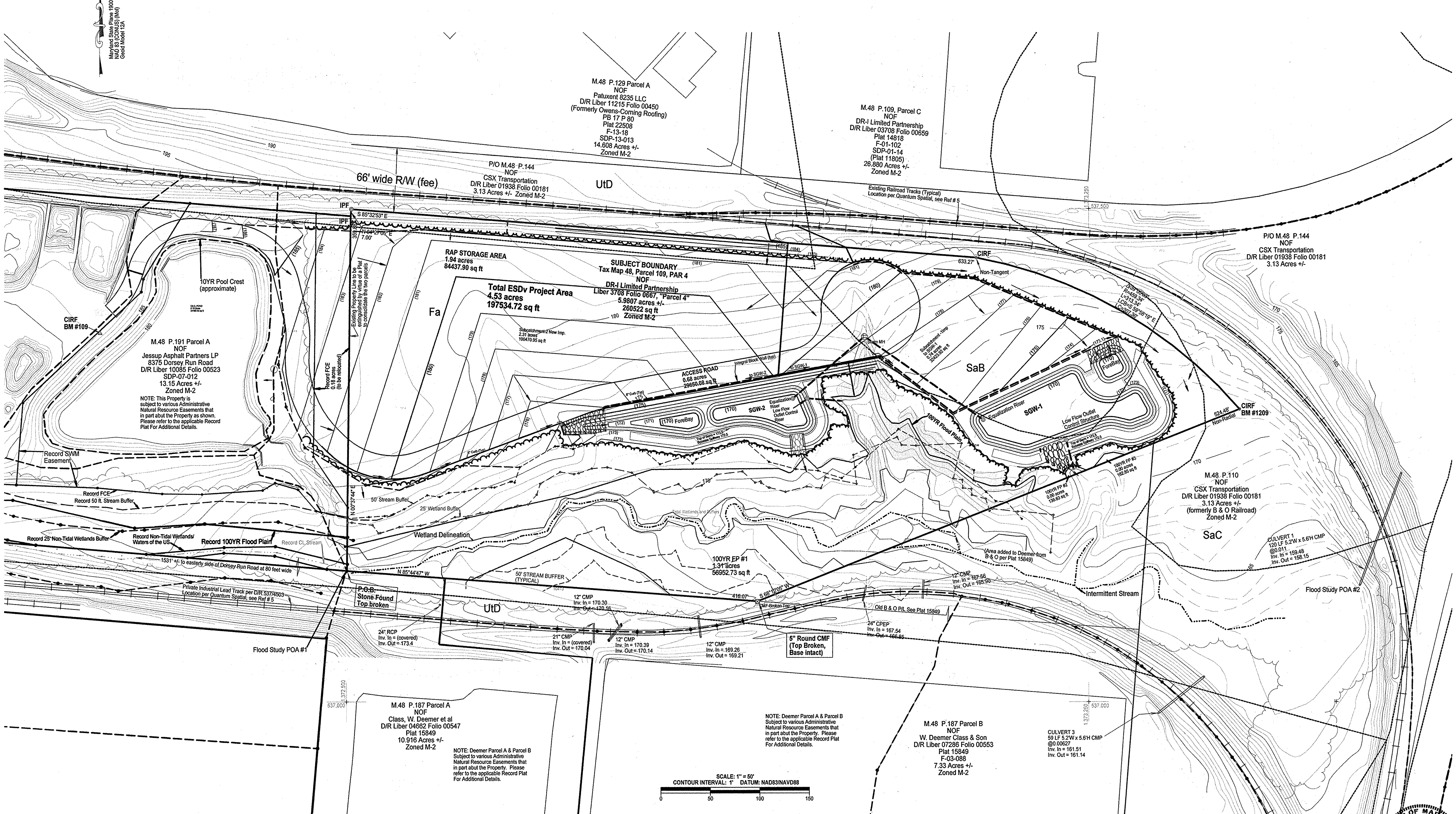
Michael A. Nawrocki, PE #9780 — Date 6/9/2015

REVISIONS

Rev. #	Date	By	Comments/ Reference
#1	12/11/2014	WES	County Comments, ECP

SHEET 1
ECP-1

ECP-15-008



LEGEND-EXISTING, 50-SCALE SURVEY & MAPPING

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- Existing 50' Stream Buffer
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- ExistingNon-Tidal Wetland Line
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- 100 Year Flood Plain
- 25 feet wide Non-Tidal Wetlands Buffer
- 50 feet wide Stream Buffer
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- Stormwater Easement
- Centerline of Stream-Surveyed (GPI)

PROPOSED STORMWATER MANAGEMENT:
2 CONNECTED SUBMERGED GRAVEL WETLANDS (SGW-1 & SGW-2)

SGW-1: FOREBAY STORAGE: 1287 CU. FT +/-
SGW STORAGE: 19,101.21 CU. FT. +/-
TOTAL STORAGE: 20,388 CU. FT. +/-

SGW-2: FOREBAY STORAGE: 1,974 CU. FT. +/-
SGW STORAGE: 7,510 CU. FT. +/-
TOTAL STORAGE: 9,485 CU. FT. +/-

GRAND TOTAL STORAGE/TREATMENT CAPACITY = 29,874 CU. FT.
REQUIRED ESDv = 23,105 CU. FT.
Required ESDv Storage above surface = = 17,329 CU. FT.

ESD to the MEP is met.

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APPROVED: DEPARTMENT OF PLANNING AND ZONING

[signature] 6.19.15
CHIEF-DEVELOPMENT ENGINEERING DIVISION NX DATE

[signature] 6-18-15
CHIEF-DIVISION OF LAND DEVELOPMENT 98 DATE

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Located at easternmost property corner

Drawn By: WES Reviewed By: MAN Last Updated 12/10/2014

FILENAME: ECP-2_Rev01.pcs

FILE PATH: S/2014_PROJECTS/1528/PCS_ECP_REV01

DESIGN PROFESSIONAL's CERTIFICATION

I Hereby Certify that these plans were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License Number 9780, Expires 03/23/2016

STATE OF MARYLAND MICHAEL A. NAWROCKI No. 9780 REGISTERED PROFESSIONAL ENGINEER

[signature] 6/9/2015
Michael A. Nawrocki, PE #9780 Date

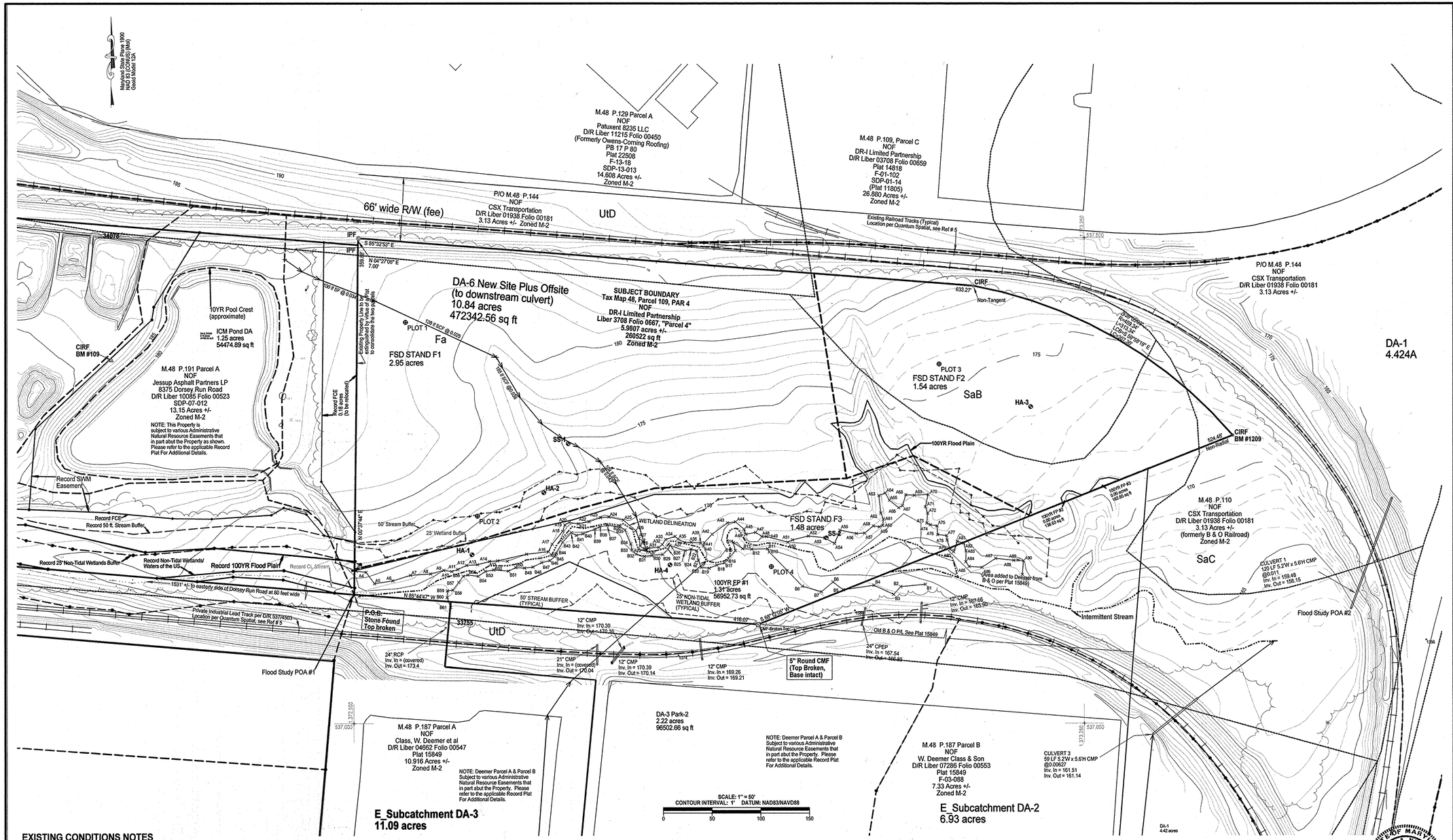
REVISIONS

Rev. #	Date	By	Comments/ Reference
#1	12/10/2014	WES	Per Howard County Comments

SHEET 2

ECP-2

ECP-15-008



EXISTING CONDITIONS NOTES

1. Existing Topography, tree-line and planimetric features were compiled by Quantum Spatial (45180 Business Court, Dulles Virginia 20166-6706) from aerial imagery taken on 01/08/2014. Quantum's plan states that their plan complies with the National Standard for Spatial Data Accuracy (NSSDA) for horizontal mapping scale of 1" = 50', and a contour interval of 1 foot. The datum was reported to be NAD83/NAVD88. SECI makes no warrantee whatsoever regarding the data provided by others.
2. This plan is based on survey work performed by SECI completed between February and June 2014 including natural resources delineated in the field. The boundary shown hereon is based on an ALTA/ACSM survey completed and published by SECI in June 2014 and is the basis for the legal description contained in the current deed referenced hereupon. SECI reserves the right to amend or revise any information contained herein should additional information become available in the future.
3. The wetlands and associated buffers shown hereon are based on a wetland delineation performed by SECI in March 2014, updated July 2014. SECI surveyed the flags in the field by conventional survey methods. Please refer to the accompanying report for further information.
4. The Forest Stands shown hereon are based on a Forest Stand Delineation performed by SECI in July 2014 by a Qualified Professional (Bill Stephens, PG, QP). Please refer to the accompanying report for additional information.
5. The Ultimate 100-YR Flood Plain shown hereon is based on a Flood Study prepared by SECI dated July 31, 2014. Please refer to that report for additional information on the Flood Plain analysis and determination of the 100-YR Flood elevation(s).
6. No Steep Slopes as defined by the Howard County Subdivision Regulations are present onsite. Slopes greater that 15%, as determined manually by scaling the topographic contours, have been shaded in light gray for the purpose of Howard County Conservation District (HCSD) review.
7. Soils shown hereon were converted from the USDA NRCS digital soils file downloaded from the USDA NRCS Geospatial Gateway and were imported directly following a datum conversion to MD State Plane from the native format.
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LEGEND-EXISTING, 50-SCALE SURVEY & MAPPING

- Ultimate Development 100YR Flood Plain
- Existing 50' Stream Buffer
- Existing Stream Bank
- ExistingNon-Tidal Wetland Line
- Existing 25' Non-Tidal Wetland Buffer Line
- Intermittent Stream
- 190 Contour-Major
- 190 Contour-Major, approximate
- Contour-Minor
- Contour-Minor, approximate
- Tree Line
- Subcatchment Boundary
- Subwatershed Boundary
- PROPERTY BOUNDARY
- FSD Stand Divisions
- Tc Flow-Path
- UtD USDA NRCS Digital Soils-Imported

LEGEND-EXISTING, 50-SCALE SURVEY & MAPPING

- PLOT 1 FSD Stand Plot Location
- HA-1 Soil Borings/Shovel Slices-Wetland Delineation
- A1 Wetland Flag with Label
- 120.5 Spot Elevation

STEPHENS
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EXISTING CONDITIONS PLAN FOR ICM-JESSUP ADDITION

B & O RAILROAD ROW LAND-LOCKED
COUNCIL DISTRICT 2,
HOWARD COUNTY, MARYLAND 20794

SITE DATA

Owner/ Developer:	Jessup Asphalt Partners, LP
Owner/ Developer Address:	638 Lancaster Avenue Malvern, PA 19355
Owner/ Developer Phone #:	1-800-999-1018
Premises Address:	SS B&O Railroad, Land-locked Jessup, MD 20794
Plat #:	None
Plat Reference:	None
Deed Reference:	Liber 15628 Folio 00006
Lot Area:	5.9807 acres +/-
Tax Parcel:	Map 0048 Grid 0006 Parcel 0109 PAR 4
Zoning:	M-2, Heavy Manufacturing
Building Setbacks:	Setback:.....10' Max Height:.....50' plus 1 ft/ft setback up to 100'
Water Supply:	Public available
Wastewater Disposal:	Public available
Datum:	NAD83/ NAVD88

PROPOSED DEVELOPMENT BASIC DATA

Proposed future use.....Recycled Asphalt Product (RAP) Storage
Proposed Structures/Buildings.....None
Proposed Parking.....None
Proposed water service.....None
Proposed sanitary sewer service.....None
Proposed Stormwater Management.....(2) Submerged Gravel Wetlands
Total Disturbed Area.....4.05 Acres +/-
Total Impervious Area.....3.03 acres +/-
Type of Impervious surface.....compacted gravel base, no pavement

The site is designated a "Hot Spot" for stormwater management purposes.

No disturbance of wetlands/ Waters of the US or associated buffers is proposed.

Access to the property is exclusively through the adjoining asphalt plant, 8375 Dorsey Run Road, Jessup, MD 20794

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF-DEVELOPMENT ENGINEERING DIVISION — DATE 6/19/15

CHIEF-DIVISION OF LAND DEVELOPMENT — DATE 6-18-15

PROJECT BENCH MARKS

Benchmark #1: GPI CIRF El: 204.19 (NAVD 88)
N537203.68 E1371118.89 (NAD83)
Located 5' North and +/- and 66' East of the Bakermark Building #8477

Benchmark #109: CIRF-GPI El: 188.96 (NAVD 88)
N537374.18 E1372260.88 (NAD 83)
located on westerly side of SWM Pond

Benchmark #1209: CIRF El: 169.48 (NAVD 88)
N537295.67 E1373402.29 (NAD 83)
Located at easternmost property corner

Drawn By: WES Reviewed By: JMM Last Updated 08/18/2014

FILENAME: SP-01-GIS_BASE.pcs

FILE PATH: S/2014_PROJECTS/1528/PCS

DESIGN PROFESSIONAL's CERTIFICATION

I Hereby Certify that these plans were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License Number 9780, Expires 03/23/2016

STATE OF MARYLAND
MICHAEL A. NAWROCKI
No. 9780
REGISTERED
PROFESSIONAL ENGINEER

Michael A. Nawrocki, PE # 9780 — Date 6/9/2015

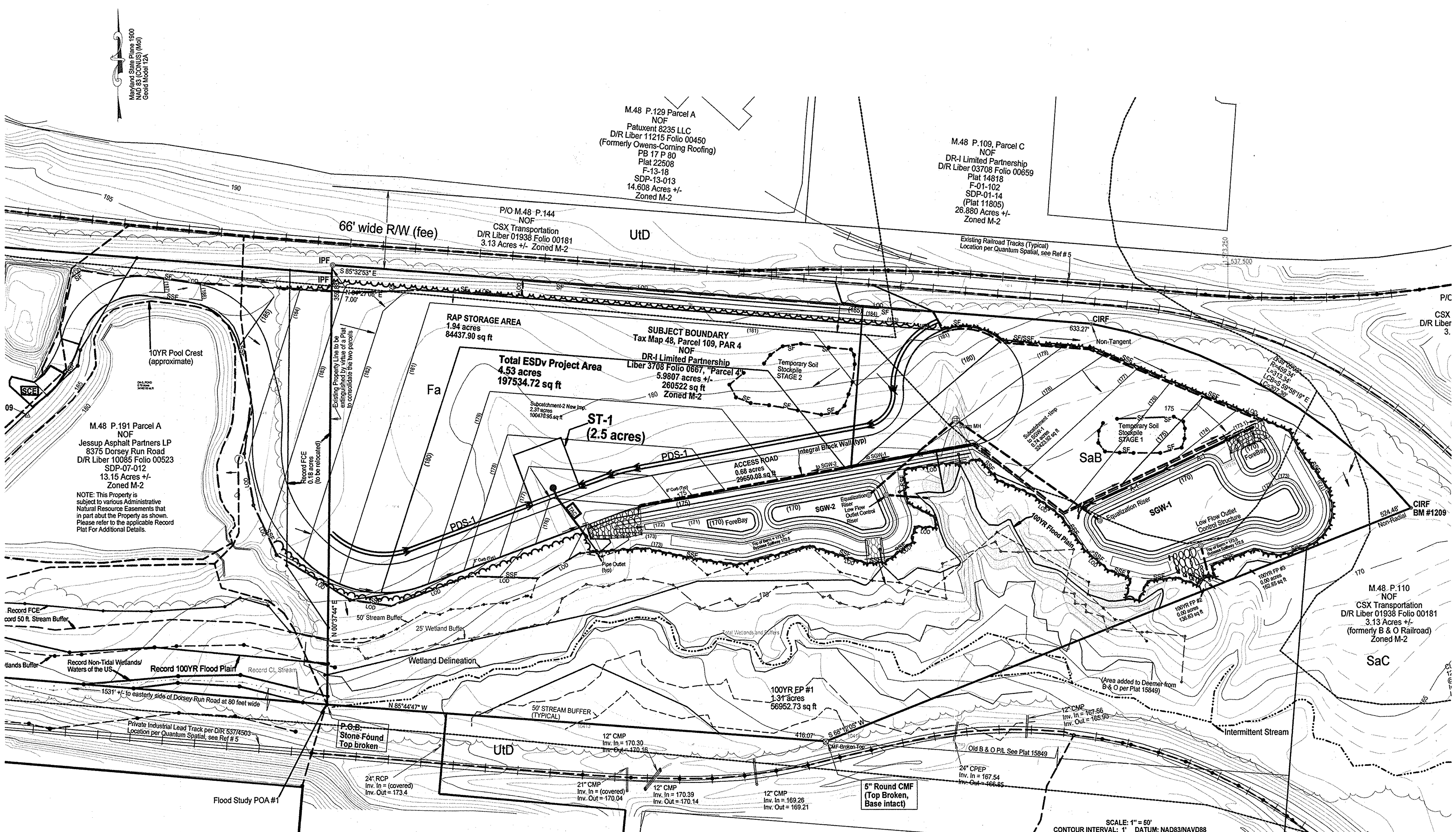
REVISIONS

Rev. #	Date	By	Comments/ Reference
1	12-08-14	WES	per 09/17/14 Comments

SHEET 3

EX-1

ECP-15-008



LEGEND-EXISTING, 50-SCALE SURVEY & MAPPING

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- ExistingNon-Tidal Wetland Line
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- Tc Flow-Path
- USDA NRCS Digital Soils-Imported (UtD)

LEGEND-EXISTING, 50-SCALE SURVEY & MAPPING

- FSD Stand Plot Location
- Soil Borings/Shovel Slices-Wetland Delineation
- Wetland Flag with Label
- Spot Elevation (×190.5)
- >15% Slopes Shading

Howard County, Maryland (MD027) Savage SE 1/4 Quad, Soil Map #25					
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI	HSG	K-Factor
Fa	Fallsington sandy loam, 0 to 2 percent slopes	4.8	78.8%	D	0.2
SaB	Sassafras loam, 2 to 5 percent slopes	1.0	16.7%	B	0.37
SaC	Sassafras loam, 5 to 10 percent slopes	0.1	1.4%	B	0.37
UtD	Urban land-Udorthents complex, 0 to 15 percent slopes	0.2	3.1%	Varies	—
Totals for Area of Interest		6.1	100.0%		

LEGEND-E & S CONTROL

- Pipe Outlet (for Super Silt Fence)
- SSF — Super Silt Fence
- SF — Silt Fence
- A-1 — Perimeter Dike/Swale
- PDS-1 — Temporary Swale
- ST-1 — Pipe Outlet Sediment Trap
- TAC / PSD-24 — Temporary Access Culvert/ Pipe Slope Drain 24" diameter
- SCE — Stabilized Construction Entrance
- LOD — Limit of Disturbance

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HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

1. A minimum of 48 hours notice must be given to Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (313-1855).
2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
3. Following initial soil disturbance, permanent or temporary stabilization shall be completed within: (a) 3 calendar days for all perimeter sediment control structures, dikes perimeter slopes and all slopes greater than 3:1, (b) 7 days as to all other disturbed or graded areas on the project site.
4. All disturbed areas must be stabilized within the time period specified above in accordance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding (Sec. B-4-5), temporary seeding (Sec. B-4-4) and mulching (Sec. B-4-3). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
5. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
6. Site Analysis:
   Total Site Area..........4.53 acres +/-
   Area Disturbed..........4.05 acres +/-
   Area to be roofed or paved..........3.03 acres +/-
   Area to be vegetatively stablized..........1.02 acres +/-
   Total Cut..........8,000 cu. yds +/-
   Total Fill..........0 cu. yds. +/-
   Offsite Waste/borrow area location..........(TBD)
7. Any sediment control practice that is disturbed by grading activity for placement of utilities must be repaired onsite the same day of disturbance.
8. Additional sediment control must be providied, if deemed necessary by the Howard County Sediment Control Inspector.
9. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
10. Trenches for the construction of utilities is limited to 3 pipe lengths or that which shall be backfilled and stabilized by the end of each workday, whichever is shorter.
11. Any changes or revisions to the sequence of construction must be reviewed and approved by the plan approval authority prior to proceeding with construction.
12. A project is to be sequenced so that grading activities begin on one grading unit (maximum acreage of 20 acres per grading unit) at a time. Work may proceed to a subsequent grading unit when at least 50% of the disturbed area in the preceeding grading unit has been stabilized and approved by the enforcement authority. Unless otherwise specified and approved by the approval authority, no more than 30 acres cumulatively may be disturbed at any given time.

SEQUENCE OF CONSTRUCTION

1. Obtain required permits. [Note: project may require standard timber harvest permit]
2. Locate and stake "Limits of Disturbance" as depicted on the plans for field inspection prior to construction. (2 -3 days)
3. Notify the Howard Soil Conservation District (HSCD) (410-489-7987) and the Maryland Department of the Environment (MDE) Sediment Control Inspector (410-901-4020) at least 48 hours prior to the start of construction as well as Miss Utility (800-257-7777) at least three (3) days prior to the start of any ground disturbing activities. (1 day)
4. Hold a preconstruction meeting with the appropriate agencies, engineer and owner. (1 day)
5. Install SCE, at head of access road as shown (1/2 day)
6. Install silt fence and super silt fence as noted on plan along the LOD, clear brush, trees and vegetation as necessary to set silt fence correctly on grade. Install pipe outlets as shown. (5 days)
7. Stake Stage 1 limits of clearing (see Plan). (2 days)
8. Clear and grub Stage 1 limits. (2 weeks)
9. Stake Sediment traps, Access Road, Diversion devices, temporary soil stockpile area #1 and RAS Storage Area limits and perimeter of SGW's. (1 day)
10. Install sediment trap first, then install the Perimeter dike/swale leading to it, then grade road and stone, place Temporary Access Culvert to intercept flow from pipe outlet at to Sediment Trap #1 and connect to pipe slope drain to bypass SGW-2 area. Stockpile excess soil for removal. Stabilize disturbed areas with temporary vegetative stabilization seed mix. (1 week). Excess soil shall be placed on a site with an active Erosion and Sediment Control Plan.
11. Install the equalizion pipe with solid risers to protect from sediment infiltration during construction. (2 days) repair temporary swale protecting SGW-1 area.
12. Remove excess stockpiled soil. (2 days)
13. Final grade and stone RAS storage area and bulb of Access Road, install integral block wall around northern perimeter of RAS Storage Area vegetatively stabilize disturbed open areas.
14. Clear and grub Stage 2 Area. Implement Stage 2. Grade according to plan final grades. Repair/ replace E & S controls as necessary until area is permanently stabilized. (1-2 weeks)
15. Place compacted gravel base in RAP storage area on grade, vegetate/landscape upper slope. Repair Access Road section east of inlet to Sediment Trap #1. (1 week)
16. Construct SGW #1 & #2 while maintaining bypass devices. Remove any excess soil. Vegetatively stabilize both SGWs (1 week).
17. Once both SGWs are permanently stabilized, obtain approval from approval authority to remove diversion devices, complete grading and stone placement of RAP area, and place integral block wall along southerly side of RAS area.
17. Stabilize remaining disturbed areasif any (SGW-1 margin, forest margins, etc. with permanent vegetation. (2 days).
18. Remove sediment and debris from silt fence, swales etc. as needed after any significant storms. (1 day/event)
19. Upon approval by the MDE Sediment Control Inspector, remove any remaining temporary erosion and sediment control devices (silt fence, super silt fence, etc.) (1 week)
20. Note: ECB required on any slopes 3:1 or greater.

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EROSION AND SEDIMENT CONTROL CONCEPT PLAN for ICM-JESSUP ADDITION

B & O RAILROAD ROW LAND-LOCKED COUNCIL DISTRICT 2, HOWARD COUNTY, MARYLAND 20794

SITE DATA

Owner/ Developer:	Jessup Asphalt Partners, LP
Owner/ Developer Address:	638 Lancaster Avenue Malvern, PA 19355
Owner/ Developer Phone #:	1-800-999-1018
Premises Address:	SS B&O Railroad, Land-locked Jessup, MD 20794
Plat #:	None
Plat Reference:	None
Deed Reference:	Liber 15628 Folio 00006
Lot Area:	5.9807 acres +/-
Tax Parcel:	Map 0048 Grid 0008 Parcel 0109 PAR 4
Zoning:	M-2, Heavy Manufacturing
Election Distrtict	Sixth
Water Supply:	Public available
Wastewater Disposal:	Public available
Datum:	NAD83/ NAVD88

PROPOSED DEVELOPMENT BASIC DATA

Proposed future use..........Recycled Asphalt Product (RAP) Storage
Proposed Structures/Buildings..........None
Proposed Parking..........None
Proposed water service..........None
Proposed sanitary sewer service..........None
Proposed Stormwater Management..........(2) Submerged Gravel Wetlands
Total Disturbed Area..........4.05 Acres +/-
Total Impervious Area..........3.03 acres +/-
Type of Impervious surface..........compacted gravel base, no pavement

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Access to the property is exclusively through the adjoining asphalt plant, 8375 Dorsey Run Road, Jessup, MD 20794

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[signature] 6.19.15
CHIEF-DEVELOPMENT ENGINEERING DIVISION NY DATE

[signature] 6.18.15
CHIEF-DIVISION OF LAND DEVELOPMENT DATE

Drawn By: WES Reviewed By: MAN Last Updated 12/11/2014

FILENAME: ES-1_Rev01.pcs

FILE PATH: S/2014_PROJECTS/1528/PCS_ECP_REV01

DESIGN PROFESSIONAL's CERTIFICATION

I Hereby Certify that these plans were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License Number 9780, Expires 03/23/2016

STATE OF MARYLAND — MICHAEL A. NAWROCKI — No. 9780 — REGISTERED PROFESSIONAL ENGINEER

Michael A. Nawrocki [signature] 6/9/2015
Michael A. Nawrocki, PE #9780 Date

REVISIONS

Rev. #	Date	By	Comments/ Reference
#1	12/11/2014	WES	per Howard County and Howard SCD comments

SHEET 4

ES-1

ECP-15-008