

U.S. Army Corps
of Engineers

Public Notice

In Reply to Application Number
CENAB-OP-RMN (MD SHA/FMIS # DO302A21/MD 16 @ Woods
Road/Intersection Improvements (roundabout construction)
2015-61126-M24

PN 15-57

Comment Period: September 22, 2015 to October 20, 2015

THE PURPOSE OF THIS PUBLIC NOTICE IS TO SOLICIT COMMENTS FROM THE PUBLIC ABOUT THE WORK DESCRIBED BELOW. AT THIS TIME, NO DECISION HAS BEEN MADE AS TO WHETHER OR NOT A PERMIT WILL BE ISSUED.

The Baltimore District has received an application for a Department of the Army Permit pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), as described below:

APPLICANT: Mr. Todd Nichols
Maryland State Highway Administration
707 N. Calvert Street
Baltimore, Maryland 21202

WATERWAY AND LOCATION: Nontidal wetlands adjacent to Little Maple Dam Branch, near Cambridge, Dorchester County, Maryland

PROPOSED WORK: The Maryland State Highway Administration (SHA) proposes, in accordance with the attached plans, to replace the existing intersection at MD 16 and Woods Road with a single lane roundabout. A 10-foot shared use bike/pedestrian path will be included behind the curb in all four quadrants of the intersection. A minimum 6-foot shoulder will be provided to accommodate bikes leading to the roundabout. The roadway improvement project will result in a total of 32,229 square feet (SF) of permanent impacts to palustrine emergent and palustrine forested wetlands. The applicant has proposed relocating the existing roadside drainage feature containing palustrine emergent wetlands as in-kind mitigation for project impacts. SHA proposes to mitigate for palustrine forested impacts (4,597 SF) by purchasing credits at the Maple Dam Mitigation Bank in Dorchester County, Maryland. The permanent impacts to palustrine forested wetlands were reduced by relocating stormwater management features and adjusting slopes.

The purpose of the proposed interchange is to construct a roundabout to improve safety for drivers, bicyclists and pedestrians at a dangerous intersection.

All work is to be completed in accordance with the enclosed plan(s). If you have any questions concerning this matter, please contact Mrs. Mary Frazier at 410-962-5679 or Mary.A.Frazier@usace.army.mil.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, and, in general, the needs and welfare of the people.

The evaluation of the impact of the work described above on the public interest will include application of the Clean Water Act Section 404 (b) (1) Guidelines promulgated by the Administrator, U.S. Environmental

Protection Agency, under the authority of the Section 404 of the Clean Water Act.

The Corps of Engineers is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Written comments concerning the work described above related to the factors listed above or other pertinent factors must be received by the District Engineer, U.S. Army Corps of Engineers, Baltimore District, ATTN: Mrs. Mary Frazier, CENAB-OP-RMN, P.O. Box 1715, Baltimore, Maryland 21203-1715, within the comment period specified above.

WATER QUALITY CERTIFICATION: The applicant is required to obtain a water quality certification in accordance with Section 401 of the Clean Water Act from the Maryland Department of the Environment. Any written comments concerning the work described above which relate to water quality certification must be received by the Maryland Department of the Environment, Wetlands and Waterways Program, Montgomery Park Business Center, 1800 Washington Boulevard, Suite 430, Baltimore, Maryland 21230, within the comment period as specified above to receive consideration. The Section 401 certifying agency has a statutory limit of one year from the date of this public notice to make its decision.

COASTAL ZONE MANAGEMENT PROGRAM: The applicant has certified in this application that the proposed activity complies with and will be conducted in a manner consistent with the Maryland Coastal Zone Management (CZM) program. By this public notice, we are requesting the State's concurrence or objection to the applicant's consistency certification statement. Public comments relating to consistency must be received by the Maryland Department of the Environment, Wetlands and Waterways Program, Montgomery Park Business Center, 1800 Washington Boulevard, Suite 430, Baltimore, Maryland 21230-1708 within the comment period as specified above to receive consideration. MDE has a statutory limit of 6 months to concur or object to the applicant's consistency determination.

The applicant must obtain any State or local government permits which may be required.

A preliminary review of this application indicates that the proposed work may affect listed species or their critical habitat pursuant to Section 7 of the Endangered Species Act as amended. The Delmarva fox squirrel is known to occur on or within the immediate vicinity of the project site. As the evaluation of this application continues, additional information may become available which could modify this preliminary determination.

Review of the latest published version of the National Register of Historic Places indicates that no registered properties listed as eligible for inclusion therein are located at the site of the proposed work. Currently unknown archeological, scientific, prehistoric, or historical data may be lost or destroyed by the work to be accomplished under the requested permit.

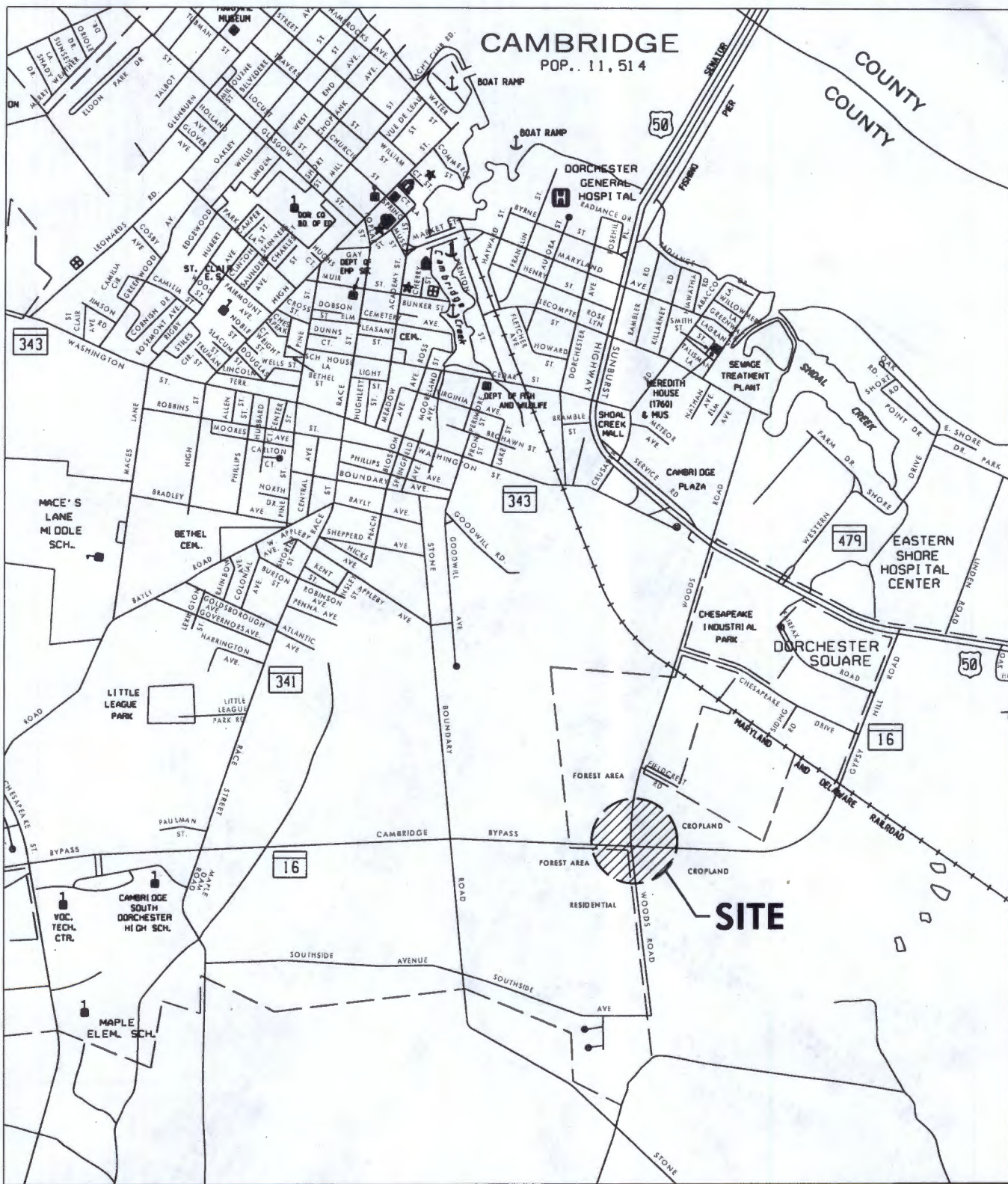
Any person who has an interest which may be adversely affected by the issuance of this permit may request a public hearing. The request, which must be in writing, must be received by the District Engineer, U.S. Army Corps of Engineers, Baltimore District, [Attn: Mrs. Mary Frazier, CENAB-OP-RMN], P.O. Box 1715, Baltimore, Maryland 21203-1715, within the comment period as specified as above to receive consideration. Also, it must clearly state forth the interest which may be adversely affected by this activity and the manner in which the interest may be adversely affected.

It is requested that you communicate the foregoing information concerning the proposed work to any

persons known by you to be interested and not being known to this office, who did not receive a copy of this notice.

FOR THE DISTRICT ENGINEER:

JOSEPH P. DAVIA
Chief, Maryland Section Northern



SHEET 1 OF 13



ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS

936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
FAX: (410) 316-7818

DATE:
JULY 2015

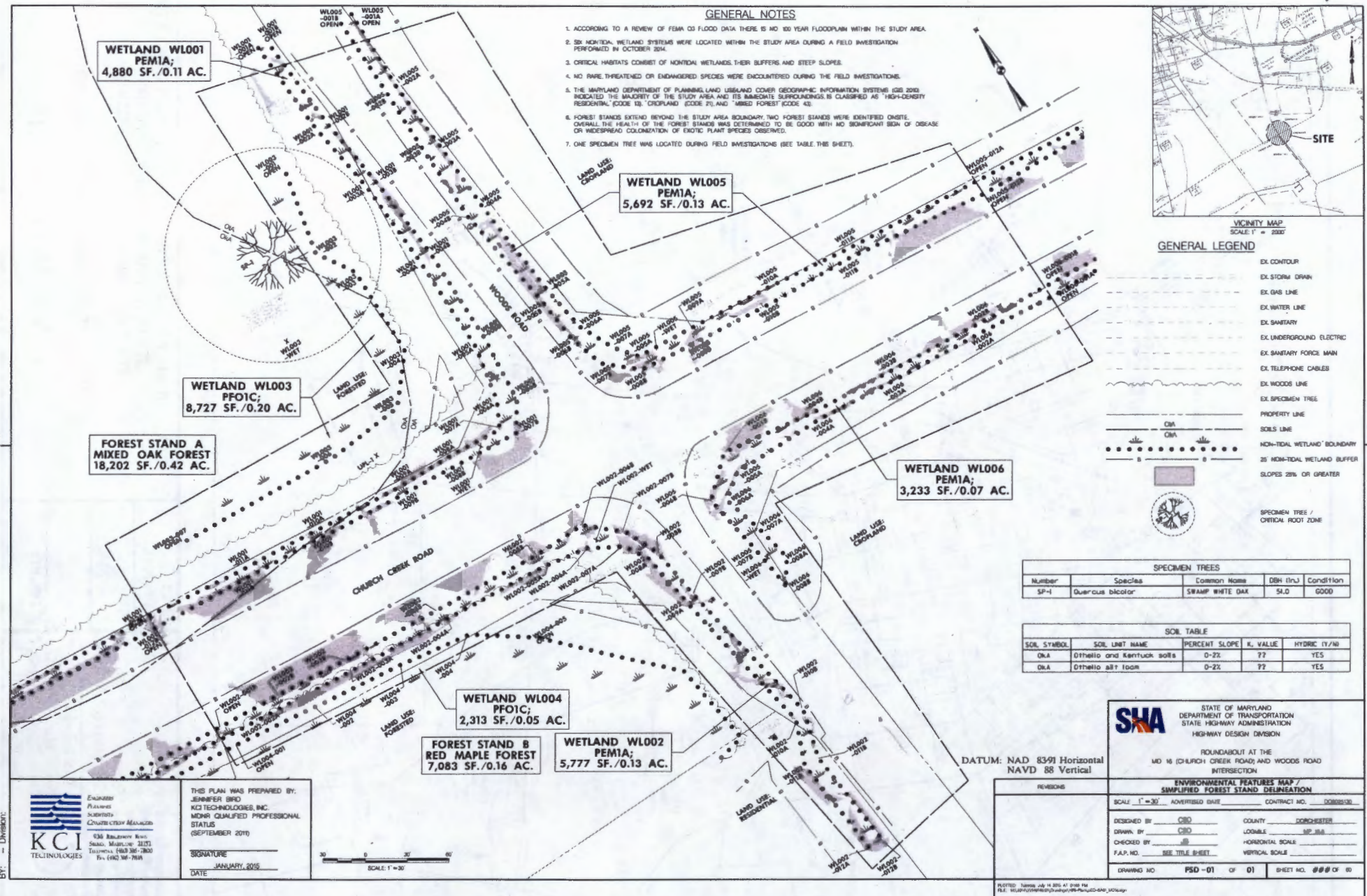
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1" = 2000'

DRAWN BY:
JMS

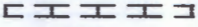




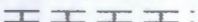



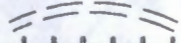
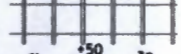
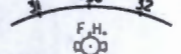












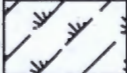
STATE OF MARYLAND-DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF ENVIRONMENTAL DESIGN

MD 16 AT WOODS ROAD ROUNDABOUT

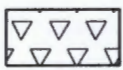
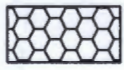

VICINITY MAP



LEGEND

PROPOSED MEDIAN BARRIER	
ELECTRICAL HAND BOX - SIGNALS	
FLOW LINE	
STATE, COUNTY OR CITY LINES	
PROPOSED TRAFFIC BARRIER	
EXISTING TRAFFIC BARRIER	
PROPOSED FENCE LINE	
EXISTING FENCE LINE	
RIGHT OF WAY LINE	
EXISTING ROADWAY	
RAILROAD	
BASE LINE OR SURVEY LINE	
FIRE HYDRANT	
HISTORIC BOUNDARY	
PROPOSED PIPE / CULVERT	
EXISTING PIPE / CULVERT	
EXISTING DROP INLET	
UTILITY POLE	
WETLAND	
WETLAND BOUNDARY	
WETLAND BUFFER	
HEDGE / TREE LINE	
BUSH / TREE	
CONIFEROUS TREE	
PROPOSED DRAINAGE SWALE	

LEGEND FOR IMPACT TYPES

	PERMANENT PEM NON-TIDAL WETLAND IMPACT		PERMANENT 25' NON-TIDAL WETLAND BUFFER IMPACT
	PERMANENT PFO NON-TIDAL WETLAND IMPACT		

SHEET 2 OF 13



ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS

936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
FAX: (410) 316-7818

DATE:
JULY 2015

SCALE:
N/A

DRAWN BY:
JMS

STATE OF MARYLAND-DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF ENVIRONMENTAL DESIGN

MD 16 AT WOODS ROAD ROUNDABOUT

LEGEND



IMPACT 2

IMPACT 1

IMPACT 5

IMPACT 3

IMPACT 4

SHEET 3 OF 13



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SCALE:
1" = 100'

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STATE OF MARYLAND-DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
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MD 16 AT WOODS ROAD ROUNDABOUT

LOCATION MAP

PLOTTED: 02:40 PM on Friday, July 24, 2015
BY: Jeffrey Swanner Division P050 Natural Res Emp
FILE: C:\CADD_Files\MD 16 Roundabout\pwp-F003_MD16.dgn

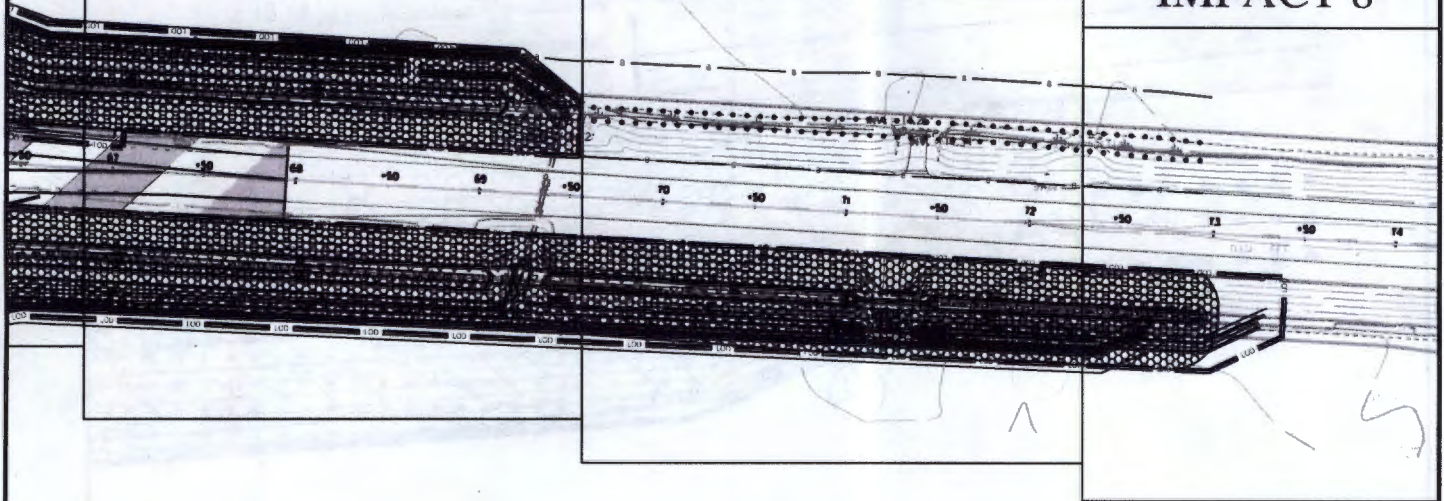


IMPACT 5

IMPACT 6

IMPACT 7

IMPACT 8



SHEET 4 OF 13



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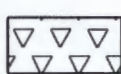
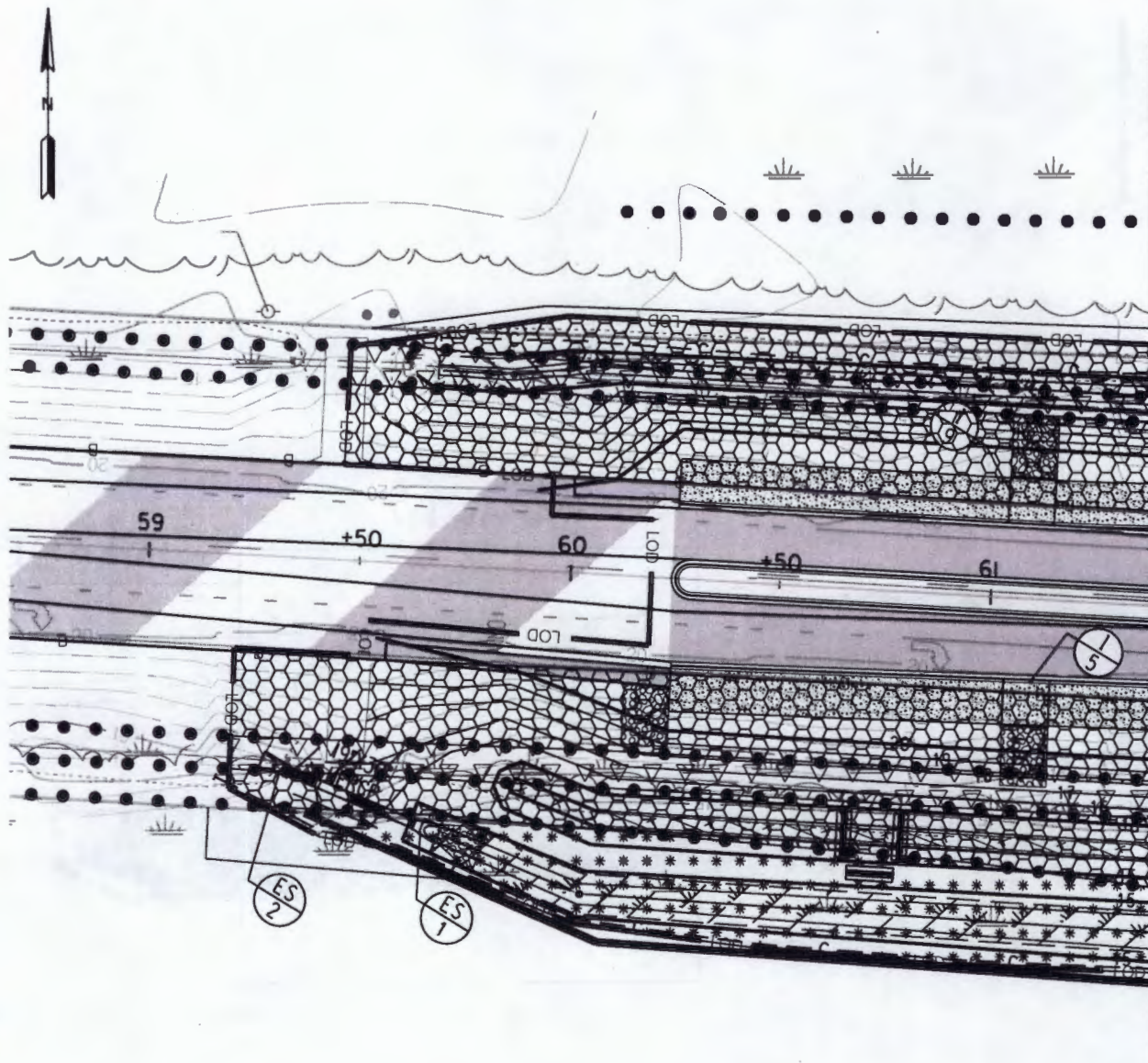
SCALE:
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DRAWN BY:
JMS

STATE OF MARYLAND-DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
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MD 16 AT WOODS ROAD ROUNDABOUT

LOCATION MAP



PERMANENT PEM NON-TIDAL
WETLAND IMPACT
3268 SF/0.075 AC



PERMANENT 25' NON-TIDAL
WETLAND BUFFER IMPACT
12243 SF/0.28 AC



PERMANENT PFO NON-TIDAL
WETLAND IMPACT
4077 SF/0.094 AC

NOTE: PEM WETLANDS WILL BE REPLACED IN KIND, THE IMPACTS ARE SELF-MITIGATING.

SHEET 5 OF 13



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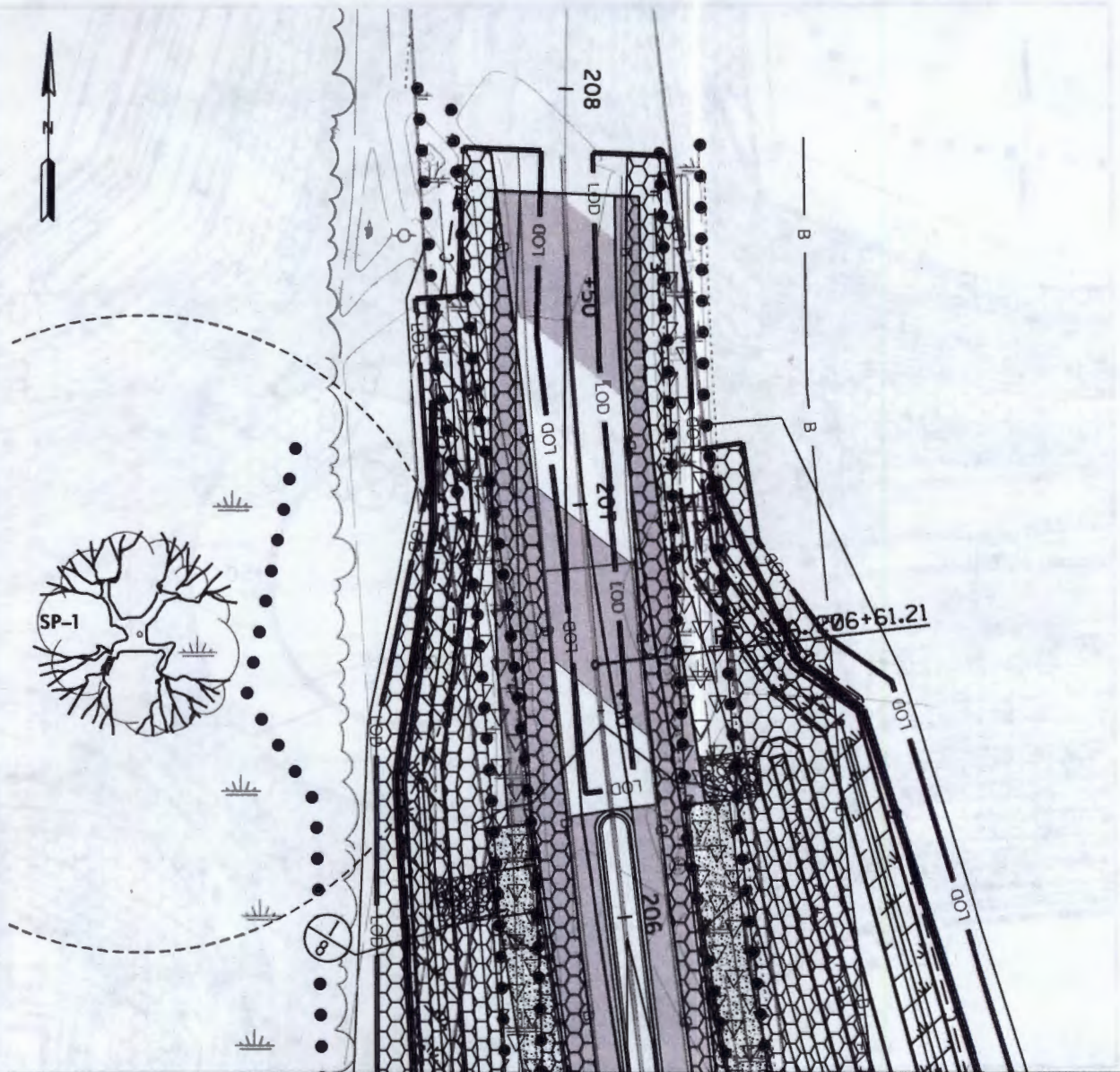
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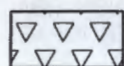
STATE OF MARYLAND-DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF ENVIRONMENTAL DESIGN

MD 16 AT WOODS ROAD ROUNDABOUT

IMPACT 1



MATCHLINE B (SEE SHEET 7 OF 13)



PERMANENT PEM NON-TIDAL
WETLAND IMPACT
3635 SF/0.084 AC



PERMANENT 25' NON-TIDAL
WETLAND BUFFER IMPACT
10995 SF/0.25 AC

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SHEET 6 OF 13



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DATE:
JULY 2015

SCALE:
1" = 40'

DRAWN BY:
JMS

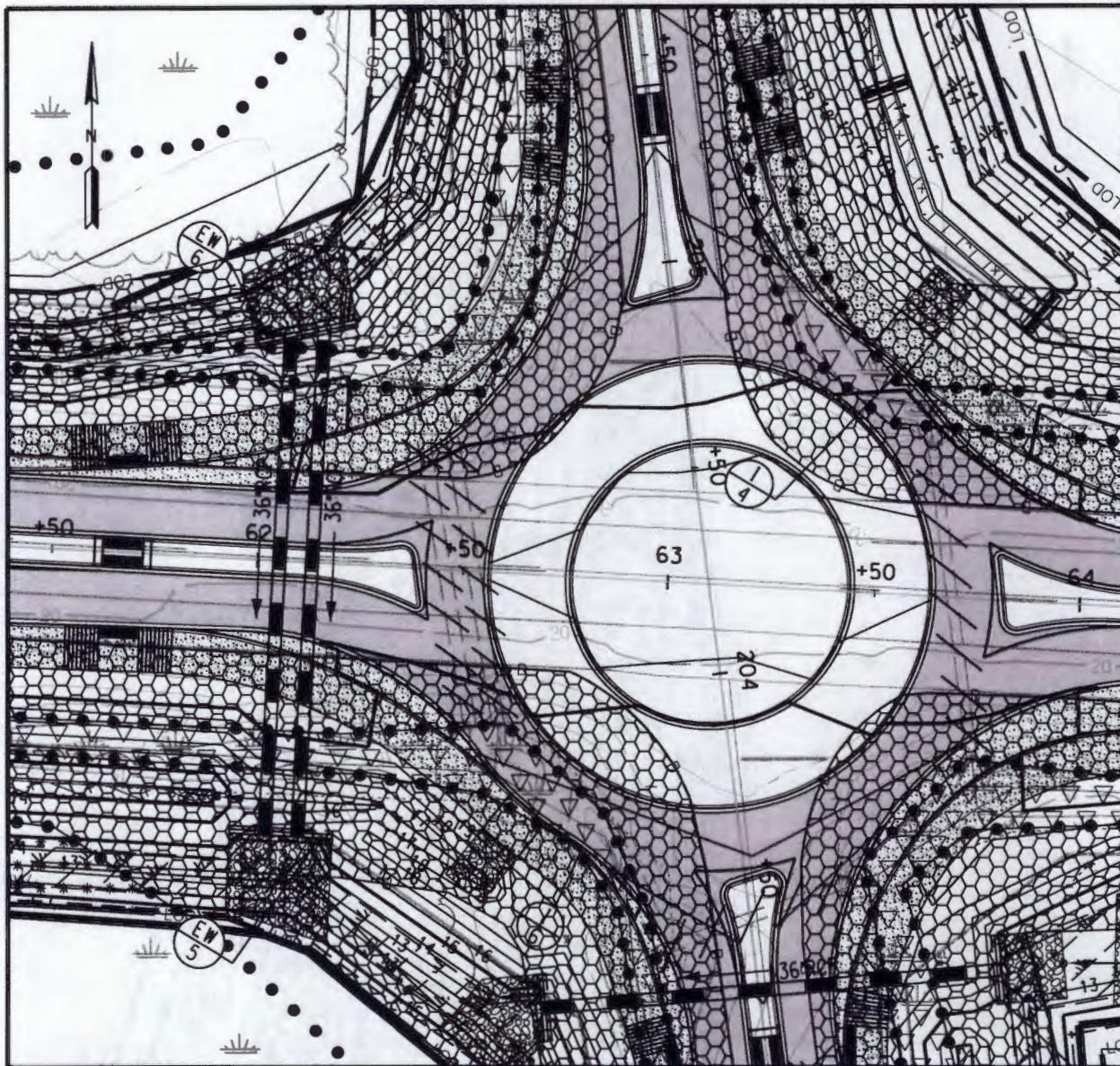
STATE OF MARYLAND-DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF ENVIRONMENTAL DESIGN

MD 16 AT WOODS ROAD ROUNDABOUT

IMPACT 2

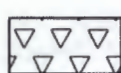
MATCHLINE B (SEE SHEET 6 OF 13)

MATCHLINE A (SEE SHEET 5 OF 13)



MATCHLINE D (SEE SHEET 9 OF 13)

MATCHLINE C (SEE SHEET 8 OF 13)



PERMANENT PEM NON-TIDAL
WETLAND IMPACT
6926 SF/0.16 AC



PERMANENT 25' NON-TIDAL
WETLAND BUFFER IMPACT
28689 SF/0.66 AC



PERMANENT PFO NON-TIDAL
WETLAND IMPACT
520 SF/0.012 AC

NOTE: PEM WETLANDS WILL BE REPLACED IN KIND, THE IMPACTS ARE SELF-MITIGATING.

SHEET 7 OF 13



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DATE:
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SCALE:
1" = 40'

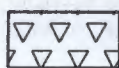
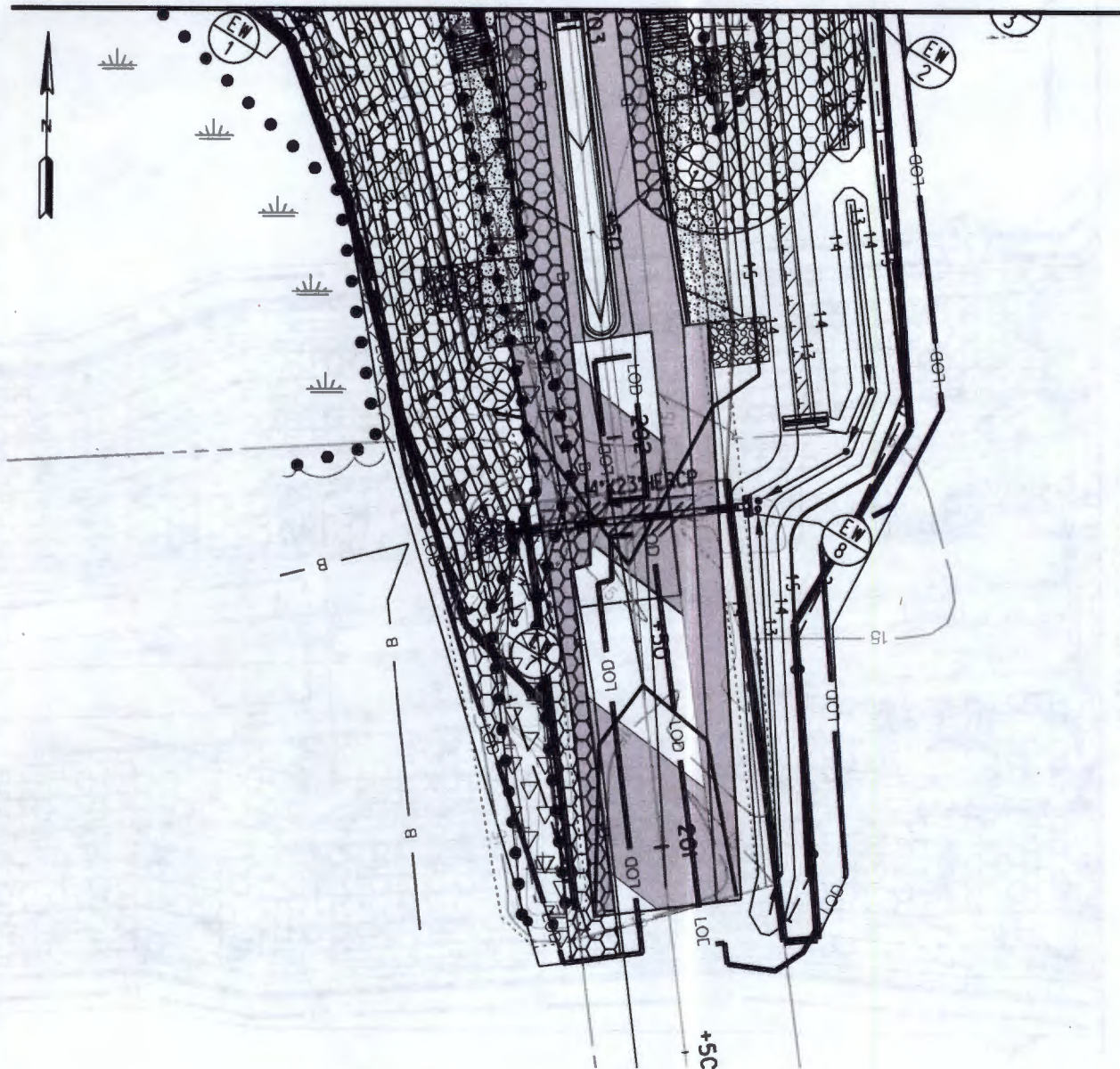
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STATE OF MARYLAND-DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
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MD 16 AT WOODS ROAD ROUNDABOUT

IMPACT 3

MATCHLINE C (SEE SHEET 7 OF 13)



PERMANENT PEM NON-TIDAL
WETLAND IMPACT
2241 SF/0.051 AC



PERMANENT 25' NON-TIDAL
WETLAND BUFFER IMPACT
9247 SF/0.21 AC

NOTE: PEM WETLANDS WILL BE REPLACED IN KIND, THE IMPACTS ARE SELF-MITIGATING.

SHEET 8 OF 13



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SPARKS, MARYLAND 21152
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DATE:
JULY 2015

SCALE:
1" = 40'

DRAWN BY:
JMS

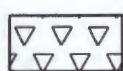
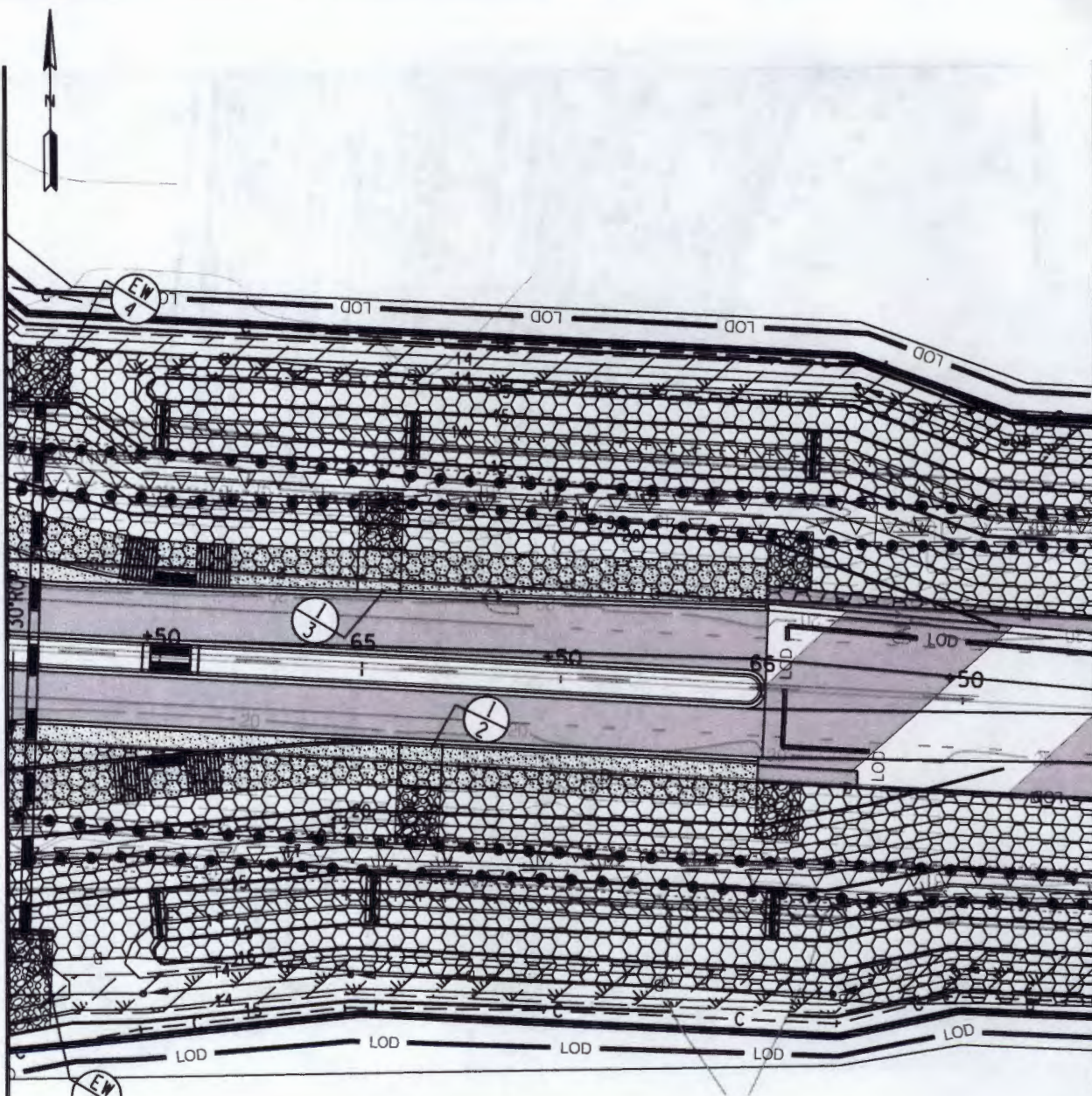
STATE OF MARYLAND-DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF ENVIRONMENTAL DESIGN

MD 16 AT WOODS ROAD ROUNDABOUT

IMPACT 4

MATCHLINE D (SEE SHEET 7 OF 13)

MATCHLINE E (SEE SHEET 10 OF 13)



PERMANENT PEM NON-TIDAL
WETLAND IMPACT
4408 SF/0.10 AC



PERMANENT 25' NON-TIDAL
WETLAND BUFFER IMPACT
23681 SF/0.54 AC

NOTE: PEM WETLANDS WILL BE REPLACED IN KIND, THE IMPACTS ARE SELF-MITIGATING.

SHEET 9 OF 13



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SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
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DATE:
JULY 2015

SCALE:
1" = 40'

DRAWN BY:
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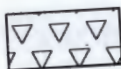
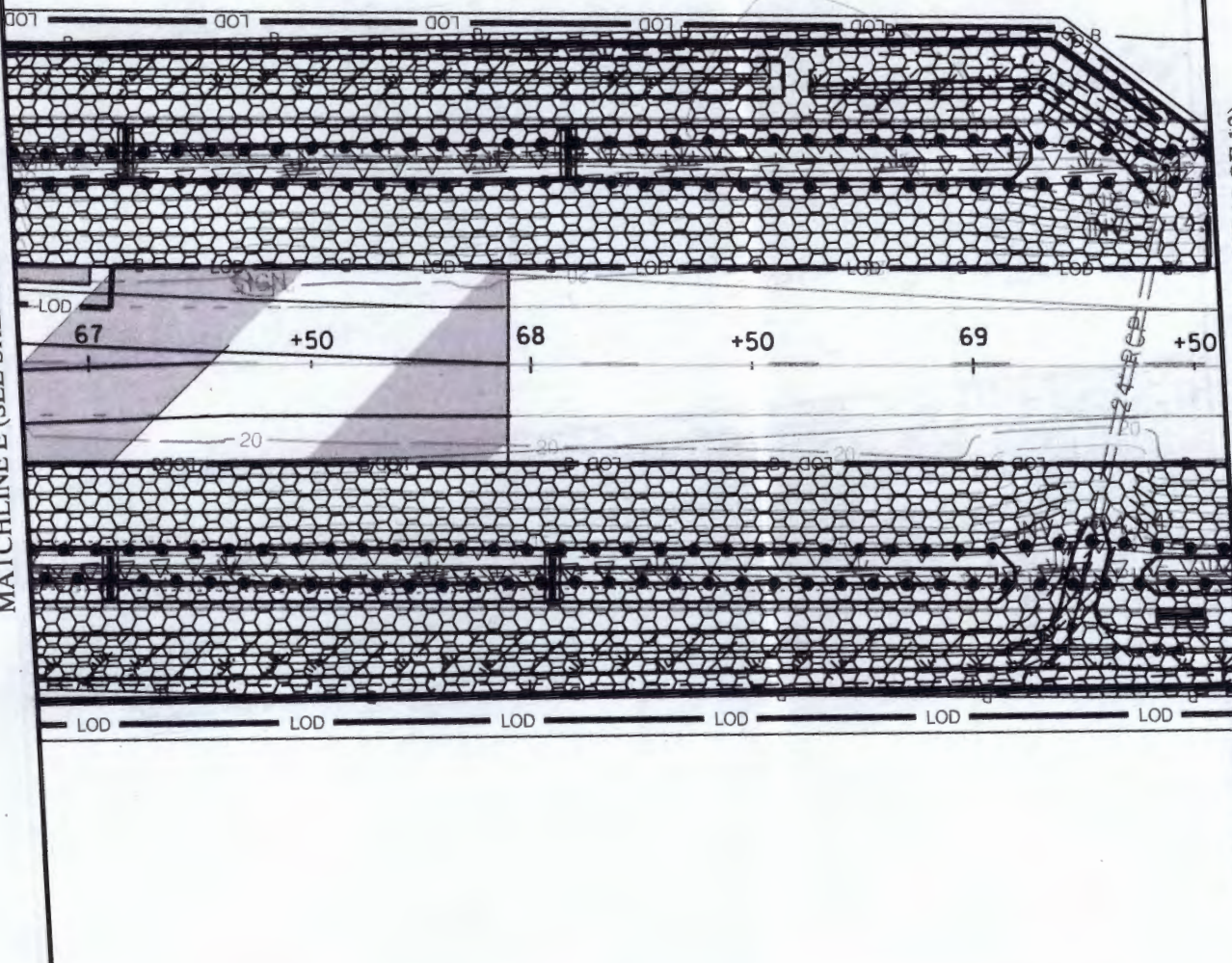
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MD 16 AT WOODS ROAD ROUNDABOUT

IMPACT 5

MATCHLINE E (SEE SHEET 9 OF 13)

MATCHLINE F (SEE SHEET 11 OF 13)



PERMANENT PEM NON-TIDAL
WETLAND IMPACT
4476 SF/0.10 AC



PERMANENT 25' NON-TIDAL
WETLAND BUFFER IMPACT
23463 SF/0.54 AC

NOTE: PEM WETLANDS WILL BE REPLACED IN KIND, THE IMPACTS ARE SELF-MITIGATING.

SHEET 10 OF 13



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DATE:
JULY 2015

SCALE:
1" = 40'

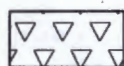
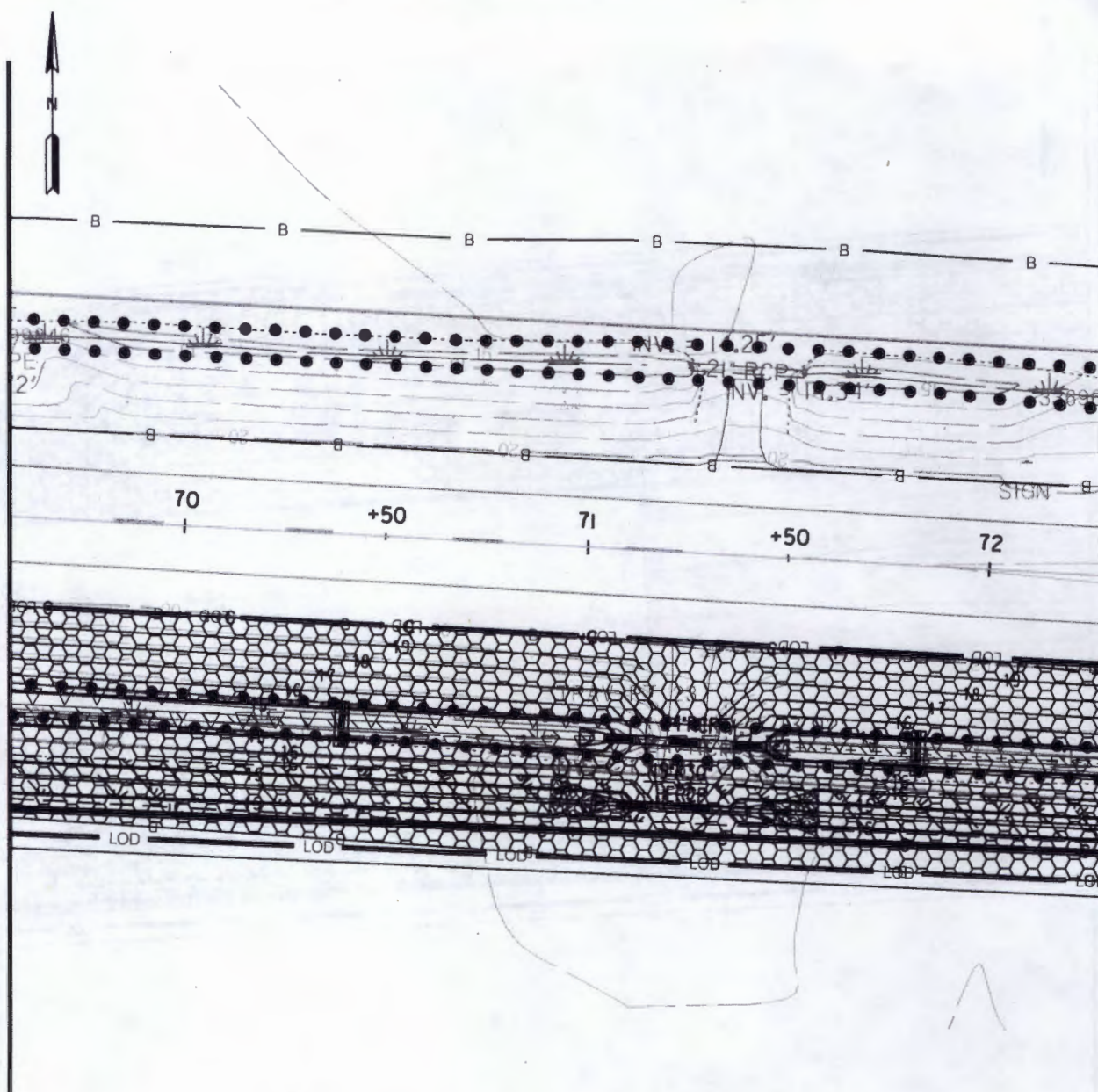
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MD 16 AT WOODS ROAD ROUNDABOUT
IMPACT 6

MATCHLINE F (SEE SHEET 10 OF 13)

MATCHLINE G (SEE SHEET 12 OF 13)



PERMANENT PEM NON-TIDAL
WETLAND IMPACT
2302 SF/0.053 AC



PERMANENT 25' NON-TIDAL
WETLAND BUFFER IMPACT
12179 SF/0.28 AC

NOTE: PEM WETLANDS WILL BE REPLACED IN KIND, THE IMPACTS ARE SELF-MITIGATING.

SHEET 11 OF 13



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936 RIDGEBROOK ROAD
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SCALE:
1" = 40'

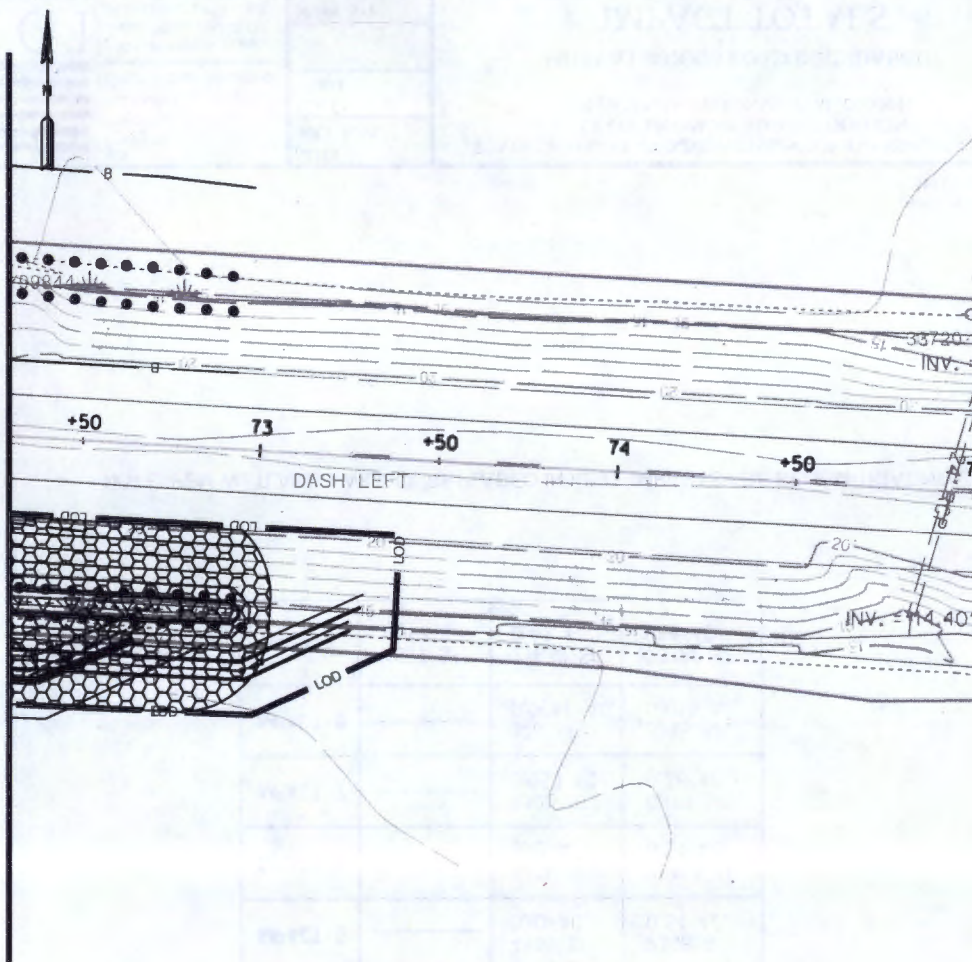
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STATE HIGHWAY ADMINISTRATION
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MD 16 AT WOODS ROAD ROUNDABOUT

IMPACT 7

MATCHLINE F (SEE SHEET 11 OF 13)



PERMANENT PEM NON-TIDAL
WETLAND IMPACT
376 SF/0.0086 AC



PERMANENT 25' NON-TIDAL
WETLAND BUFFER IMPACT
3285 SF/0.075 AC

NOTE: PEM WETLANDS WILL BE REPLACED IN KIND, THE IMPACTS ARE SELF-MITIGATING.

SHEET 12 OF 13



ENGINEERS
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SCIENTISTS
CONSTRUCTION MANAGERS

936 RIDGEBROOK ROAD
SPARKS, MARYLAND 21152
TELEPHONE: (410) 316-7800
FAX: (410) 316-7818

DATE:
JULY 2015
SCALE:
1" = 40'

DRAWN BY:
JMS

STATE OF MARYLAND-DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF ENVIRONMENTAL DESIGN

MD 16 AT WOODS ROAD ROUNDABOUT

IMPACT 8

PLOTTED: 10:42 PM on Friday, July 24, 2015
 BY: Jeffrey Swener, Division P050 Natural Res Emp
 FILE: C:\CADD-Files\MD 16 Roundabout\DWG-F012_M016.dgn

	PERMANENT NON-TIDAL PFO WETLAND IMPACT	PERMANENT NON-TIDAL PEM WETLAND IMPACT	PERMANENT 25' NON-TIDAL WETLAND BUFFER IMPACT
IMPACT 1	4077 SF. 0.094 AC.	3268 SF. 0.075 AC.	12243 SF. 0.28 AC.
IMPACT 2	————	3635 SF. 0.084 AC.	10995 SF. 0.25 AC.
IMPACT 3	520 SF. 0.012 AC.	6926 SF. 0.16 AC.	28689 SF. 0.66 AC.
IMPACT 4	————	2241 SF. 0.051 AC.	9247 SF. 0.21 AC.
IMPACT 5	————	4408 SF. 0.10 AC.	23681 SF. 0.54 AC.
IMPACT 6	————	4476 SF. 0.10 AC.	23463 SF. 0.54 AC.
IMPACT 7	————	2302 SF. 0.053 AC.	12179 SF. 0.28 AC.
IMPACT 8	————	376 SF. 0.0086 AC.	3285 SF. 0.075 AC.
TOTALS	4597 SF. 0.11 AC.	27632 SF. 0.63 AC.	123782 SF. 2.84 AC.

NOTE: PEM WETLANDS WILL BE REPLACED IN KIND. IMPACTS ARE SELF MITIGATING.

SHEET 13 OF 13

PLOTTED: 0242 PM on Friday, July 24, 2015
 FILE: G:\CAD-FILES\MD 16 ROUNDABOUT.dwg
 FILE: G:\CAD-FILES\MD 16 ROUNDABOUT.dwg



ENGINEERS
 PLANNERS
 SCIENTISTS
 CONSTRUCTION MANAGERS

936 RIDGEBROOK ROAD
 SPARKS, MARYLAND 21152
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DATE:
 JULY 2015

SCALE:
 N/A

DRAWN BY:
 JMS

STATE OF MARYLAND-DEPARTMENT OF TRANSPORTATION
 STATE HIGHWAY ADMINISTRATION
 OFFICE OF ENVIRONMENTAL DESIGN

MD 16 AT WOODS ROAD ROUNDABOUT

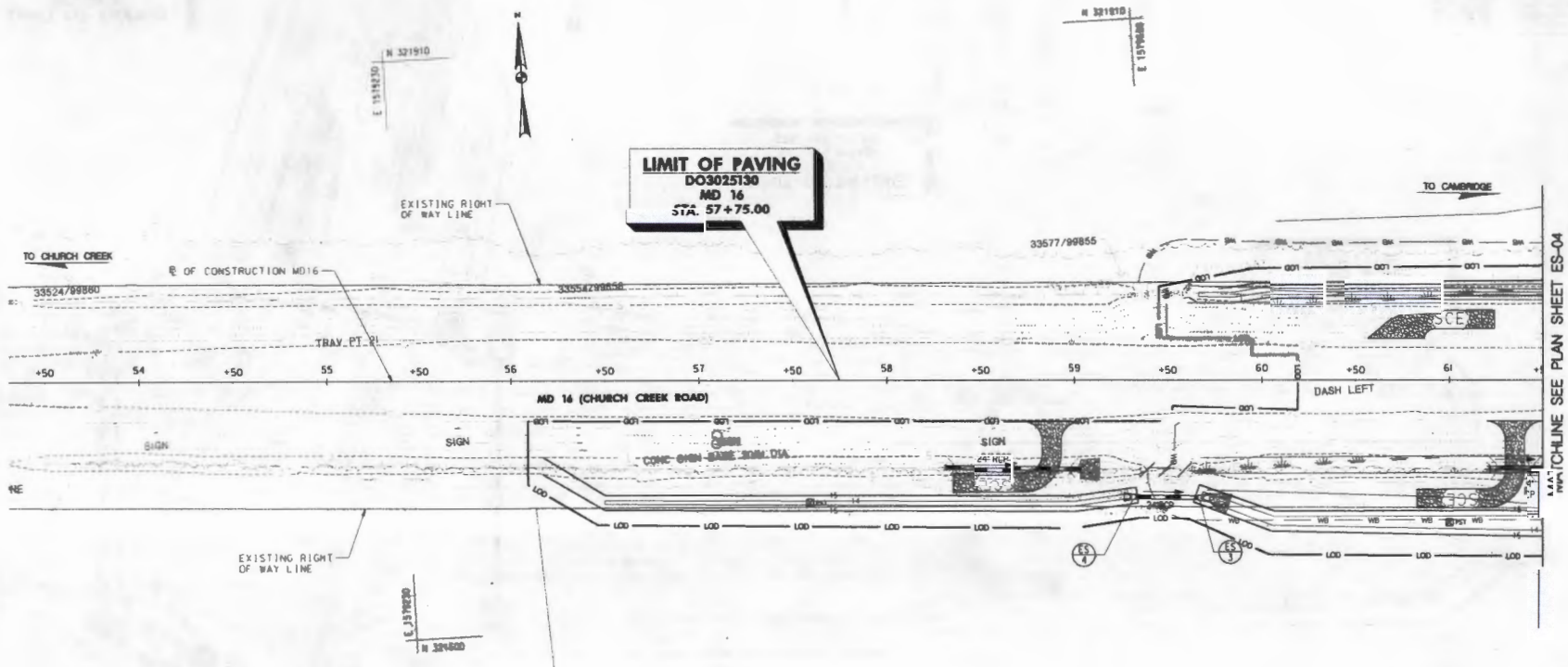
IMPACT TOTALS

BY: SUBSEQUENT DATES, REVISION 27, 1001

DRILL HOLES

DRILL HOLES

DRILL HOLES



E&S CONTROL - PHASE 1

GENERAL NOTES:

1. ALL DISTURBED AREA SHALL BE STABILIZED AT THE END OF EACH WORK DAY.
2. THE COST OF TYPICAL PIPE AND CLASS 1 RIMPAT AT THE SCE IS INCIDENTAL TO THE SCE CONTRACT PRICE.

LEGEND:

- PROPOSED FULL DEPTH ROADWAY PAVING
- PROPOSED 1.5" GRINDING AND OVERLAY
- PROPOSED TRUCK APPROACH/DECK/CENTER ISLAND
- REMOVAL OF EXISTING CURB & PAVEMENT
- DRAINAGE BOUNDARY FOR E&S DEVICES



RJM ENGINEERING
CONSULTING ENGINEERS
4431 UNIVERSITY BLVD, SUITE 290
BILLCOTT CITY, MARYLAND

TEL: 410.730.1001 FAX: 410.730.5403

DATUM: NAD 83/91 Horizontal
NAVD 88 Vertical



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
HIGHWAY HYDRAULICS DIVISION

ROUNDABOUT AT THE
MD 16 (CHURCH CREEK ROAD) AND WOODS ROAD
INTERSECTION

EROSION AND SEDIMENT CONTROL PLAN

SCALE: 1" = 40' ADVERTISED DATE: 11/20/2007 CONTRACT NO.: DO3025130

DESIGNED BY: [blank] COUNTY: DORCHESTER

DRAWN BY: [blank] LOBBLE: [blank] MP: [blank]

CHECKED BY: [blank] HORIZONTAL SCALE: [blank]

P.A.P. NO.: [blank] SEE TITLE SHEET VERTICAL SCALE: [blank]

DRAWING NO.: ES-03 OF 07 SHEET NO.: 28 OF 30

PLATTED, EXAMINED
FILED



BY: \$USER\$

DATE: 10/11/2007

MATCHLINE SEE PLAN SHEET ES-03

MATCHLINE SEE THIS SHEET

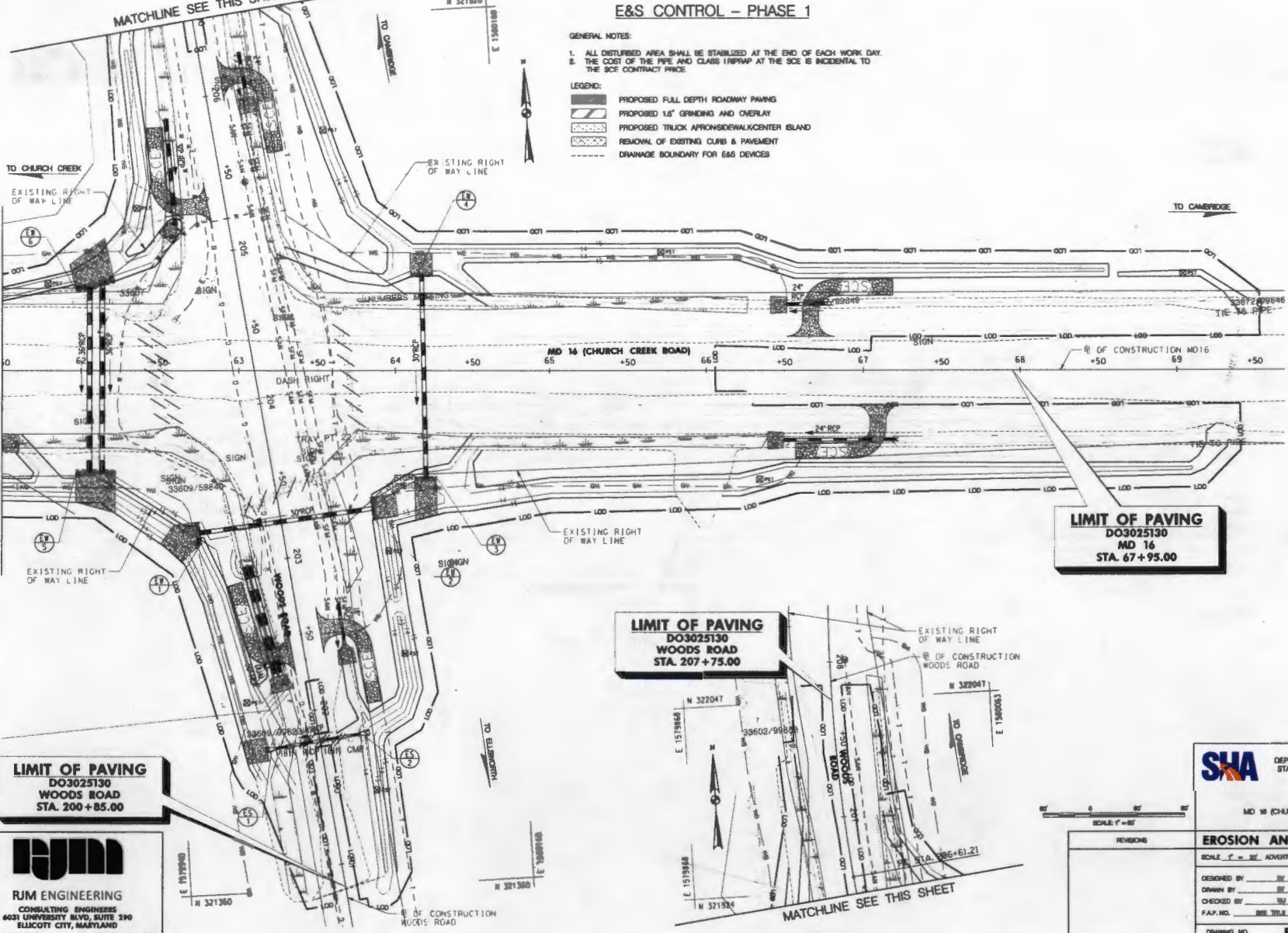
E&S CONTROL - PHASE 1

GENERAL NOTES:

1. ALL DISTURBED AREA SHALL BE STABILIZED AT THE END OF EACH WORK DAY.
2. THE COST OF THE PIPE AND CLASS III RIPRAP AT THE SCE IS INCIDENTAL TO THE SCE CONTRACT PRICE.

LEGEND:

- PROPOSED FULL DEPTH ROADWAY PAVING
- PROPOSED 1.5" GRINDING AND OVERLAY
- PROPOSED TRUCK APRONSIDEWALK/CENTER ISLAND
- REMOVAL OF EXISTING CURB & PAVEMENT
- DRAINAGE BOUNDARY FOR E&S DEVICES



LIMIT OF PAVING
DO3025130
MD 16
STA. 67+95.00

LIMIT OF PAVING
DO3025130
WOODS ROAD
STA. 207+75.00

LIMIT OF PAVING
DO3025130
WOODS ROAD
STA. 200+85.00

RJM
RJM ENGINEERING
CONSULTING ENGINEERS
4031 UNIVERSITY BLVD, SUITE 300
ELICOTT CITY, MARYLAND
TEL: 410.730.1001 FAX: 410.730.5403

DATUM: NAD 83/91 Horizontal
NAVD 88 Vertical

SHA
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
HIGHWAY WORKALONG DIVISION

ROUNDABOUT AT THE
MD 16 (CHURCH CREEK ROAD) AND WOODS ROAD
INTERSECTION

EROSION AND SEDIMENT CONTROL PLAN

SCALE: 1" = 50'	ADVERTISED DATE: 10/11/2007	CONTRACT NO. 2007000000
DESIGNED BY: [blank]	COUNTY: [blank]	DISTRICT: [blank]
DRAWN BY: [blank]	LOBBLE: [blank]	MD SHA: [blank]
CHECKED BY: [blank]	HORIZONTAL SCALE: [blank]	VERTICAL SCALE: [blank]
F.A.P. NO. [blank]	DATE: 10/11/2007	
DRAWING NO. ES-04	OF 07	SHEET NO. 07 OF 08

PLANNED HIGHWAYS
RIP RAP

DRILL HOLES

DRILL HOLES

DRILL HOLES

DESIGNED BY: JRM

BY: JRM



RJM ENGINEERING
CONSULTING ENGINEERS
6031 UNIVERSITY BLVD, SUITE 290
BELLICOTT CITY, MARYLAND

TEL: 410.730.1001 FAX: 410.730.5403

E&S CONTROL - PHASE 2

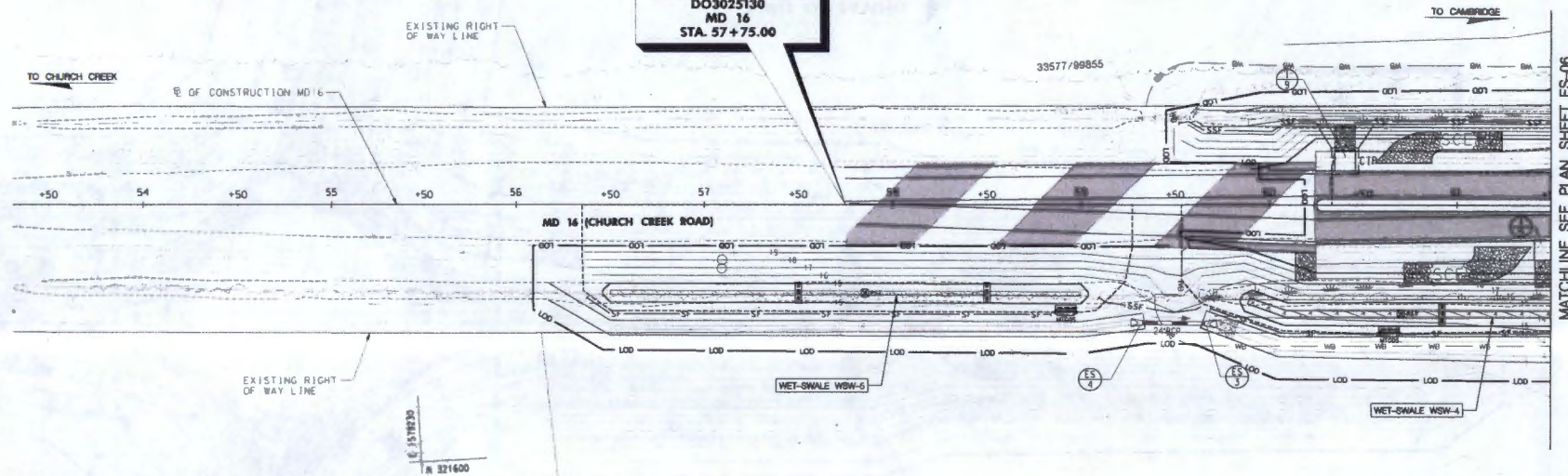
GENERAL NOTES:

1. NO AREA SHALL BE LEFT UNSTABILIZED OVERNIGHT UNLESS RUNOFF IS DIRECTED TO AN ADEQUATE EROSION AND SEDIMENT CONTROL DEVICE.

LEGEND:

- PROPOSED FULL DEPTH ROADWAY PAVING
- PROPOSED 1.5" GRINDING AND OVERLAY
- PROPOSED TRUCK APPROACH/DECK/CENTER ISLAND
- REMOVAL OF EXISTING CURB & PAVEMENT
- DRAINAGE BOUNDARY FOR E&S DEVICES

LIMIT OF PAVING
DO3025130
MD 16
STA. 57+75.00



DATUM: NAD 83/91 Horizontal
NAVD 88 Vertical



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
HIGHWAY HYDRAULICS DIVISION

ROUNDABOUT AT THE
MD 16 (CHURCH CREEK ROAD) AND WOODS ROAD
INTERSECTION

EROSION AND SEDIMENT CONTROL PLAN

SCALE: 1" = 50' ADJUSTED DATE: 11/10/07 CONTRACT NO.: DORC000000

DESIGNED BY: JRM COUNTY: DORCHESTER

DRAWN BY: JRM LOGMILE: 10.0

CHECKED BY: JRM HORIZONTAL SCALE:

F.A.P. NO.: SEE TITLE SHEET VERTICAL SCALE:

DRAWING NO.: ES-05 OF 07 SHEET NO.: 05 OF 09

PLOTTED: 11/10/07
FILE: ES-05

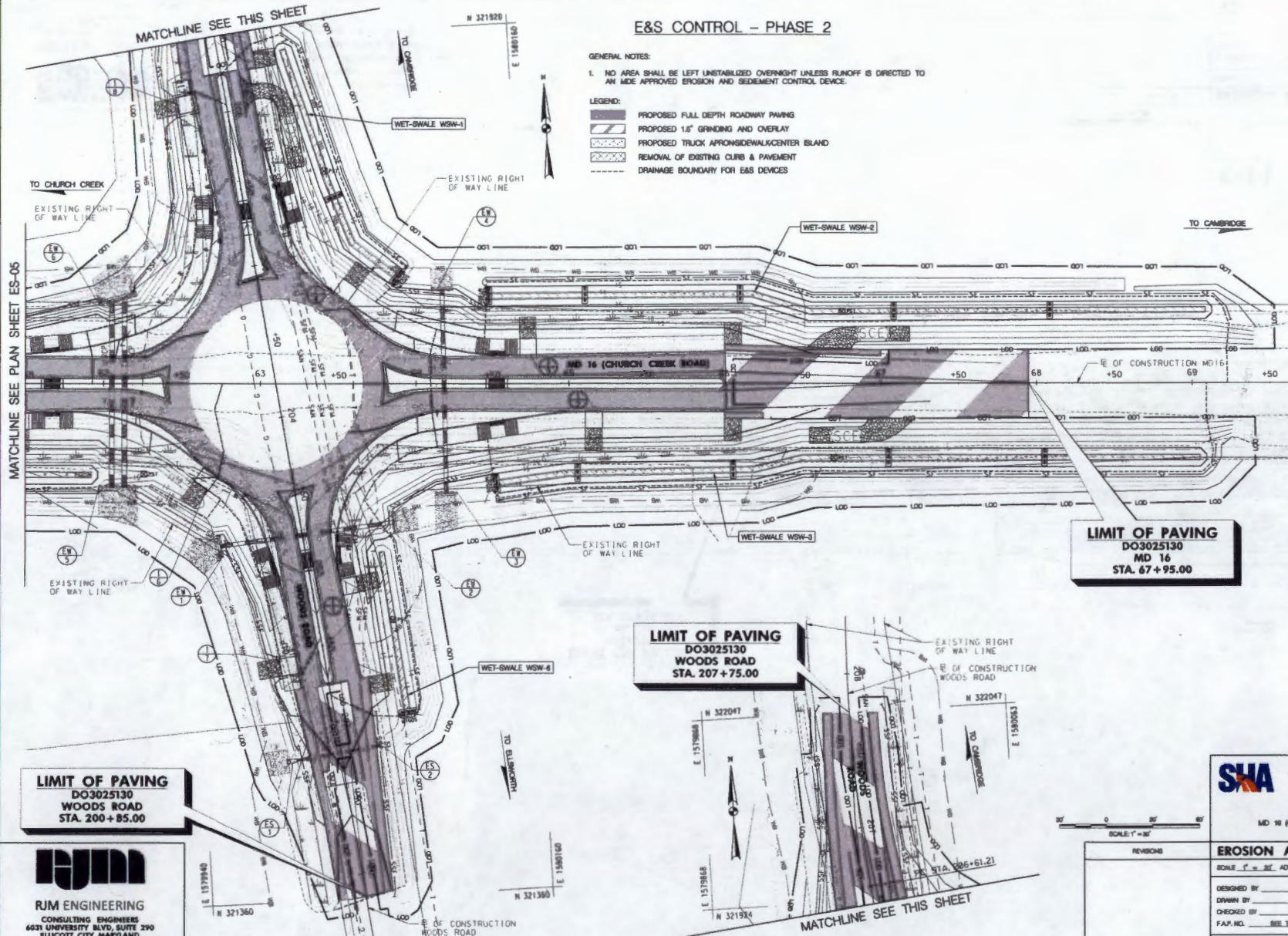
E&S CONTROL - PHASE 2

GENERAL NOTES:

1. NO AREA SHALL BE LEFT UNSTABILIZED OVERNIGHT UNLESS RUNOFF IS DIRECTED TO AN ADE APPROVED EROSION AND SEDIMENT CONTROL DEVICE.

LEGEND:

- PROPOSED FULL DEPTH ROADWAY PAVING
- PROPOSED 1.5" GRINDING AND OVERLAY
- PROPOSED TRUCK APRONSIDEWALK CENTER ISLAND
- REMOVAL OF EXISTING CURBS & PAVEMENT
- DRAINAGE BOUNDARY FOR E&S DEVICES



LIMIT OF PAVING
DO3025130
MD 16
STA. 67+95.00

LIMIT OF PAVING
DO3025130
WOODS ROAD
STA. 207+75.00

LIMIT OF PAVING
DO3025130
WOODS ROAD
STA. 200+85.00



DATUM: NAD 83-91 Horizontal
NAVD 88 Vertical

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
HIGHWAY HYDRAULICS DIVISION

ROUNDABOUT AT THE
MD 16 (CHURCH CREEK ROAD) AND WOODS ROAD
INTERSECTION

EROSION AND SEDIMENT CONTROL PLAN

SCALE: 1" = 30' ADVERTISED DATE: 11/01 CONTRACT NO.: DC00000000

DESIGNED BY: [blank] COUNTY: [blank] DOWNSHIFT

DRAWN BY: [blank] LORNALE: [blank] MP: 1.5

CHECKED BY: [blank] HORIZONTAL SCALE: [blank]

F.A.P. NO.: [blank] VERTICAL SCALE: [blank]

DRAWING NO.: **ES-06** OF **07** SHEET NO. 26 OF 26

PLOTTED: 11/01/01
FILE: 0115

BY: SUSENAMES



RJM ENGINEERING

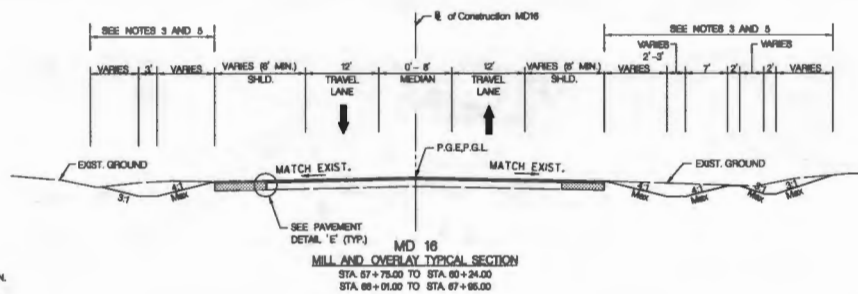
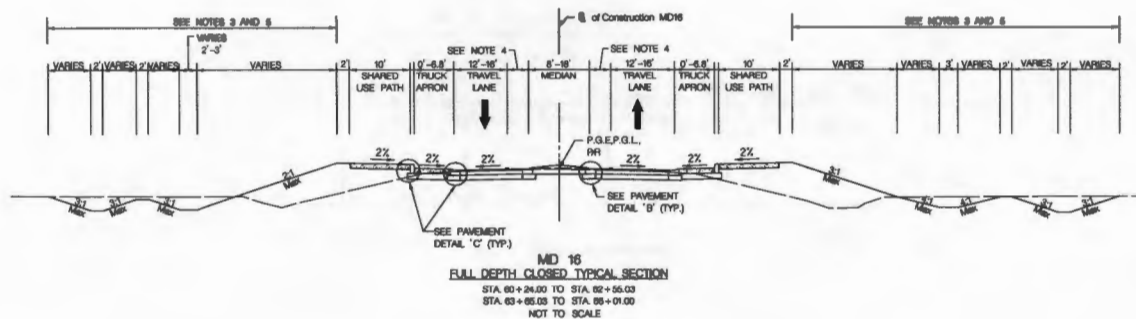
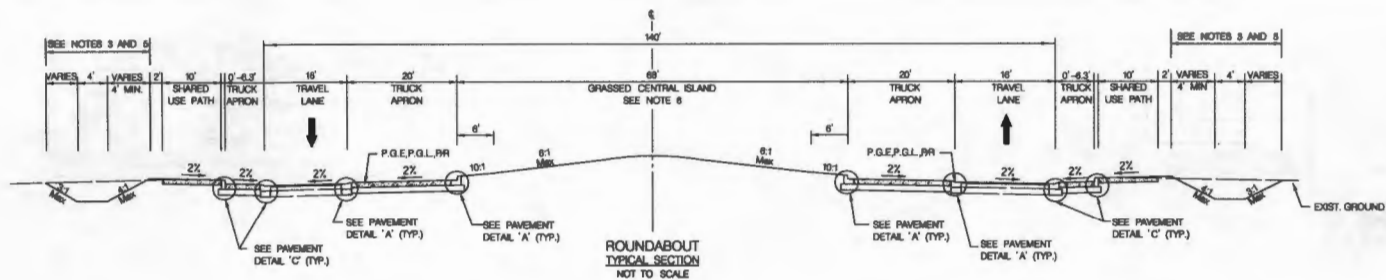
CONSULTING ENGINEERS

6030 UNIVERSITY BLVD., SUITE 200

ELICOTT CITY, MARYLAND

TEL: 410.730.1001

FAX: 410.730.5403



NOTES:

1. 10' SHARED USE PATH SHALL BE CONSTRUCTED OF CONCRETE SIDEWALK.
2. SEE SHEET DE-1 FOR PAVEMENT DETAILS, GRADING DETAILS, AND SUPERELEVATION TRANSITIONS.
3. SEE ROADWAY PLAN FOR DITCH LOCATIONS.
4. SEE PS-1 FOR VARYING SHOULDER WIDTH AT MEDIAN ISLANDS.
5. ROAD SIDE STABILIZATION:
 - PLACE 4" TOPSOIL AND TURF GRASS SOD ESTABLISHMENT ON ALL ROADSIDE AND SLOPED AREAS FLATTER THEN 2:1.
 - PLACE 2" TOPSOIL AND TURF GRASS SOD ESTABLISHMENT ON 2:1 SLOPES OR GREATER.
6. REMOVE EXISTING PAVEMENT TO THE TOP OF SUBGRADE TO BE PAID FOR AS CLASS 1 EXCAVATION. BACKFILL WITH COMMON BORROW TO WITHIN THE 4" TOPSOIL/TURF SOD ESTABLISHMENT. MOUND CENTRAL ISLAND TO ELEV 25.00. PLACE 4" TOPSOIL AND TURF GRASS SOD ESTABLISHMENT.


 KCI
 TECHNOLOGIES
 976 Buckhorn Road
 Smith, Maryland 21152
 Telephone: (410) 545-7800
 Fax: (410) 545-7808

DATUM: NAD 83/91 Horizontal
NAVD 88 Vertical

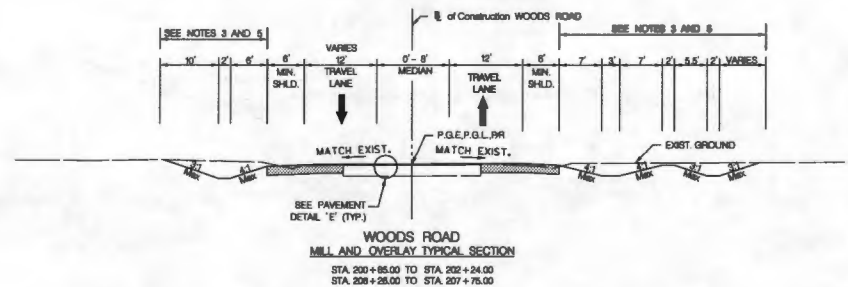
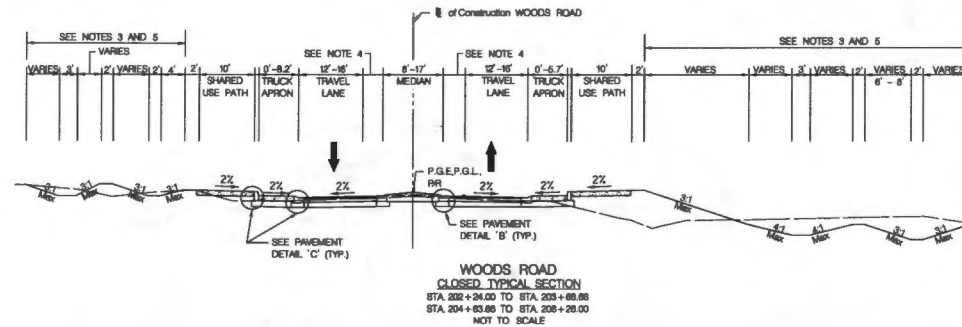
SKA
 STATE OF MARYLAND
 DEPARTMENT OF TRANSPORTATION
 STATE HIGHWAY ADMINISTRATION
 HIGHWAY DESIGN DIVISION

ROUNDABOUT AT THE
 MD 16 (CHURCH CREEK ROAD) AND WOODS ROAD
 INTERSECTION

TYPICAL SECTIONS

REVISIONS	SCALE	N.T.S.	ADMITTED DATE	CONTRACT NO.	DOBBSB
DESIGNED BY	DSD	COUNTY	DORCHESTER		
DRAWN BY	DSD	LOBBLE	MP 35.8		
CHECKED BY	TLK	HORIZONTAL SCALE			
F.A.P. NO.	SEE TITLE SHEET	VERTICAL SCALE			
DRAWING NO.	TS-1	OF 2	SHEET NO.	3	OF 80

PLOTTED: Tuesday, April 26, 2011 AT 04:01 PM
 P.L. 45.000/45.000/45.000/45.000/45.000



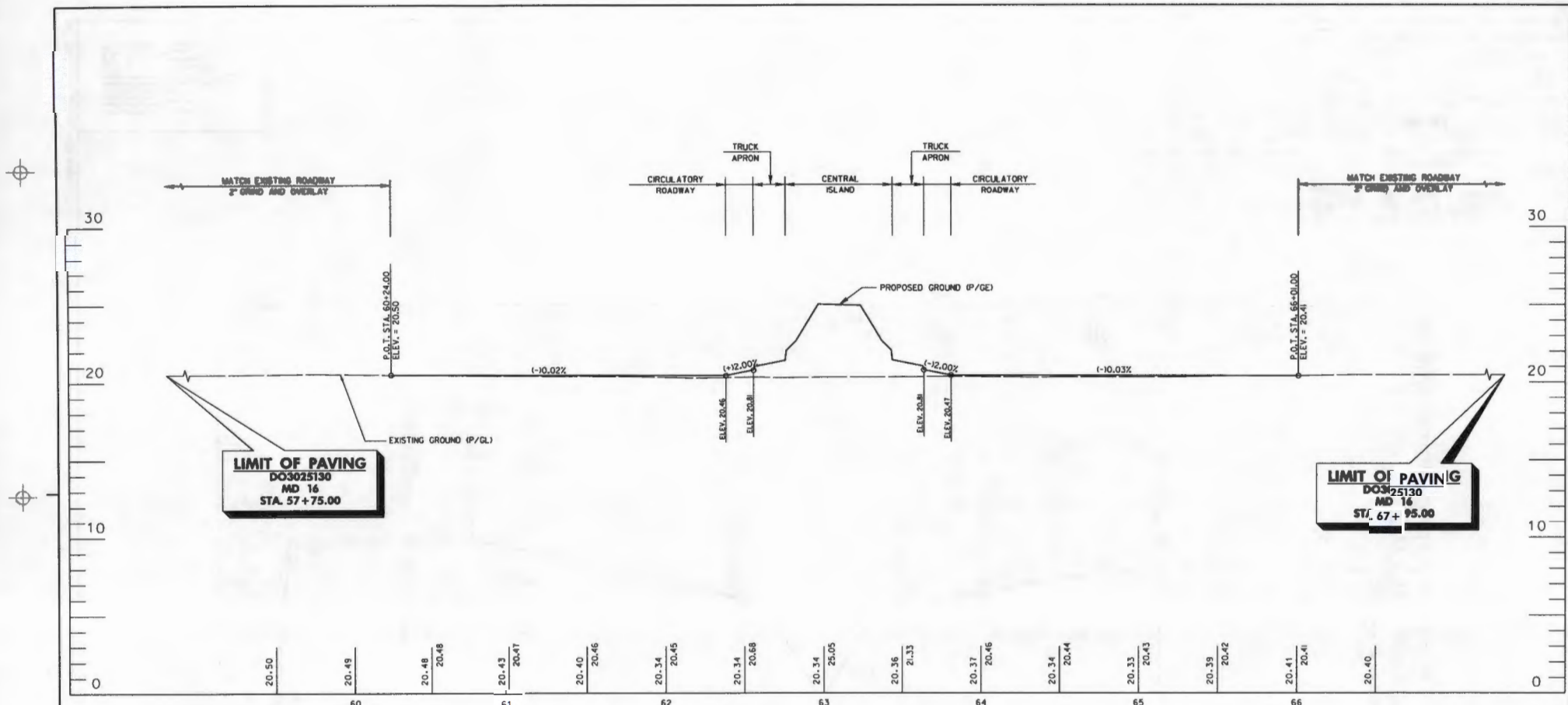
NOTES:

1. 10' SHARED USE PATH SHALL BE CONSTRUCTED OF CONCRETE SIDEWALK.
2. SEE SHEET DE-1 FOR PAVEMENT DETAILS, GRADING DETAILS, AND SUPERELEVATION TRANSITIONS.
3. SEE ROADWAY PLAN FOR DITCH LOCATIONS.
4. SEE PS-1 FOR VARYING SHOULDER WIDTH AT MEDIAN ISLANDS.
5. ROAD SIDE STABILIZATION:
 - PLACE 4" TOPSOIL AND TURF GRASS SOD ESTABLISHMENT ON ALL ROADSIDE AND SLOPED AREAS FLATTER THEN 2:1.
 - PLACE 2" TOPSOIL AND TURF GRASS SOD ESTABLISHMENT ON 2:1 SLOPES OR GREATER.
6. REMOVE EXISTING PAVEMENT TO THE TOP OF SUBGRADE, TO BE PAID FOR AS GLASS EXCAVATION. SHOFPILL WITH COMMON BORROW TO WITHIN THE 4" TOPSOIL/TURF SOD ESTABLISHMENT. MOUND CENTRAL ISLAND TO ELEV 25.00. PLACE 4" TOPSOIL AND TURF GRASS SOD ESTABLISHMENT.

DATUM: NAD 8391 Horizontal
NAVD 88 Vertical

SHA STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION HIGHWAY DESIGN DIVISION		ROUNDABOUT AT THE MD 18 (CHURCH CREEK ROAD) AND WOODS ROAD INTERSECTION	
		TYPICAL SECTIONS	
SCALE: N.T.S. ADVERTISED DATE: CONTRACT NO.: D08026330		DESIGNED BY: DSH COUNTY: DORCHESTER	
DRAWN BY: DSH LOGSILE MP 36.8		CHECKED BY: TLK HORIZONTAL SCALE:	
P.A.P. NO.: SEE TITLE SHEET VERTICAL SCALE:		DRAWING NO.: TS-2 OF 2 SHEET NO. 4 OF 60	





BY: Don Ho - Division P08 Highway Traffic GMA Emp

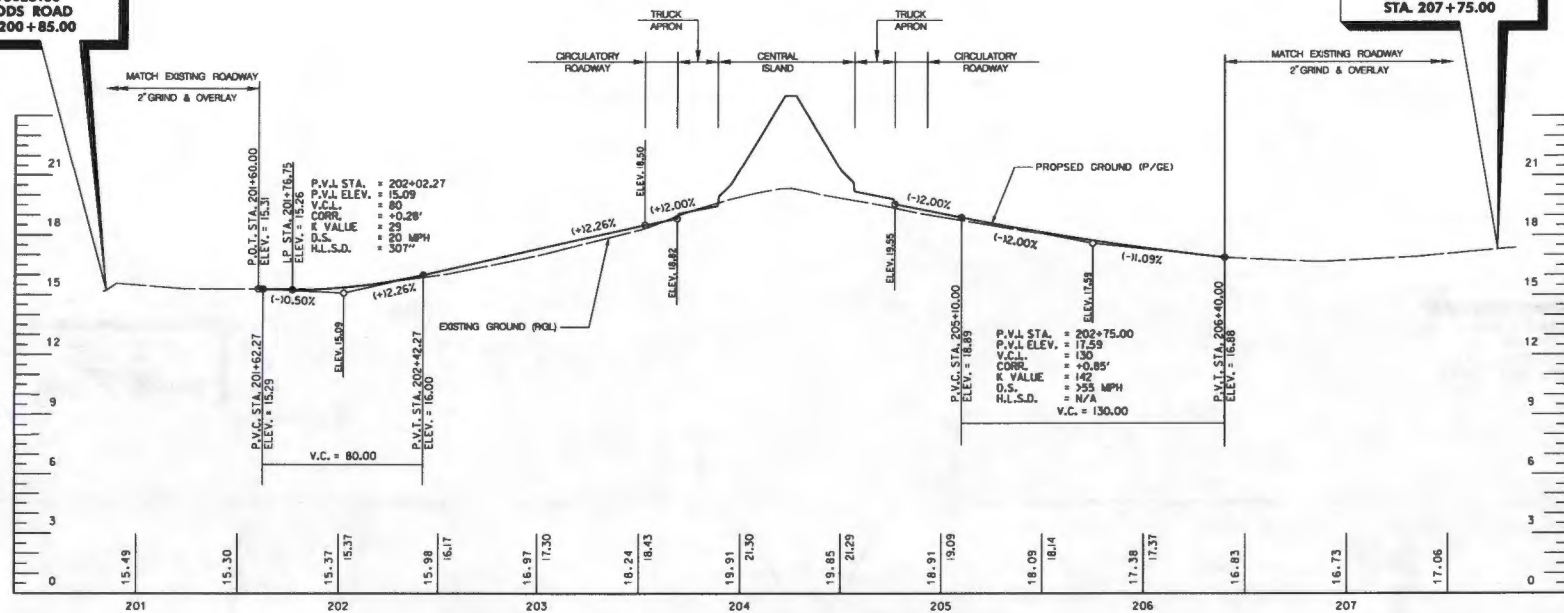
KCI TECHNOLOGIES
 ENGINEERS
 PLANNERS
 SCIENTISTS
 CONSTRUCTION MANAGERS
 9746 Rockwood Road
 Suite, Maryland 21152
 Telephone (410) 365-7800
 Fax (410) 365-7800

DATUM: NAD 8391 Horizontal
 NAVD 88 Vertical

SHA		STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION HIGHWAY DESIGN DIVISION	
ROUNDABOUT AT THE MD 16 (CHURCH CREEK ROAD) AND WOODS ROAD INTERSECTION			
ROADWAY PROFILE - MD 16			
SCALE AS SHOWN ADVERTISED DATE: TBD CONTRACT NO. DORR0802			
DESIGNED BY: DSH	COUNTY: DORCHESTER		
DRAWN BY: BR	LOGSILE: MP 36.8		
CHECKED BY: TLX	HORIZONTAL SCALE:		
F.A.P. NO. SEE TITLE SHEET	VERTICAL SCALE:		
DRAWING NO. PR-1	OF 3	SHEET NO. 11	OF 80

PLOTTED: Tuesday, April 28, 2009 AT 11:38 AM
 FILE: H:\CADD\1616\161600\161600.dwg

LIMIT OF WORK
DO3025130
WOODS ROAD
STA. 200+85.00



LIMIT OF WORK
DO3025130
WOODS ROAD
STA. 207+75.00

PROFILE: WOODS ROAD

SCALE: HORIZONTAL 1" = 30'
VERTICAL 1" = 3'

DATUM: NAD 83/91 Horizontal
NAVD 88 Vertical

SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
HIGHWAY DESIGN DIVISION

ROUNDABOUT AT THE
MD 16 (CHURCH CREEK ROAD) AND WOODS ROAD
INTERSECTION

ROADWAY PROFILE - WOODS ROAD

SCALE AS SHOWN ADVERTISED DATE 11/10 CONTRACT NO. DO3025130

DESIGNED BY DRH COUNTY DOCKHETER

DRAWN BY SH LOGSHEET MP 11.8

CHECKED BY TLK HORIZONTAL SCALE 1" = 30'

P.A.P. NO. SEE TITLE SHEET VERTICAL SCALE 1" = 3'

DRAWING NO. PR-2 OF 3 SHEET NO. 12 OF 80

KCI
TECHNOLOGIES

736 Rockaway Road
Sunnyvale, Maryland 21150
Telephone: (410) 356-7800
Fax: (410) 356-7888

PLotted: Tuesday, April 28, 2009 11:23 AM
FILE: H:\WORK\DO3025130\Drawings\PR-2\PR-2102102.dwg

PLOTTED: Tuesday, April 29, 2014 AT 11:30 AM
FILE: M:\2014\2244548.D\Drawings\csp-wood.mcd