



U.S. Army Corps
of Engineers
Baltimore District

Public Notice

In Reply to Application Number:
NAB-2016-61828-M04 (MCS Edgemere LLC/Shaw's
Discovery/Residential Development)

PN-18-07

Comment Period: February 1, 2018 to February 16, 2018

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

This District has received an application for a Department of the Army permit pursuant to **Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (33. U.S.C. 1344)** as described below:

APPLICANT: Mr. Mark Sapperstein
MCS Edgemere LLC
28 Walker Avenue
Pikesville, Maryland 21208

WATERWAY AND LOCATION OF THE PROPOSED WORK: In Back River and adjacent nontidal wetlands, at 2901 Bauers Farm Road, Edgemere, Baltimore County, Maryland.

PURPOSE: The proposed work is associated with the construction of a planned residential development for the purpose of providing the basic development infrastructure (interior road, stormwater management, and shoreline stabilization).

PROPOSED WORK: Included as part of this residential project is approximately 2,766 linear feet of tidal shoreline restoration to replace the existing failing bulkheads. A stone revetment is to be constructed in three reaches. REACH A, starting at the western end, is 726 linear feet of stone revetment with a maximum channelward extension of 26 feet, 25 linear feet of stone sill with a maximum channelward extension of 30 feet, and 21 cubic yards/1,124 sq. ft. sand fill for beach replenishment. The total area of stone fill for REACH A is 17,160 sq. ft. REACH B is 700 linear feet of stone revetment with a maximum channelward extension of 17 feet, and a 38-foot long land containment groin with a maximum channelward extension of 23 feet, and 5 cubic yards/273 sq. ft. of sand fill for beach replenishment. The total area of stone fill for REACH B is 13,977 sq. ft. REACH C is 1,340 linear feet of stone revetment with a maximum channelward extension of 36 feet. The total area of stone fill for REACH C is 26,122 sq. ft.

Proposed nontidal impacts include (IMPACT AREA 1) 9,650 sq. ft. of emergent

wetland (permanent) for the widening of Bauers Farm Road; (IMPACT AREA 4) 5,295 sq. ft. of forested wetland (permanent) for the alignment of the Bauers Farm Road loop and construction of an associated stormwater management (SWM) level spreader; (IMPACT AREA 4A) 191 sq. ft. of emergent wetlands (temporary) for a construction access road that runs parallel to the shoreline; (IMPACT AREA 5) 605 sq. ft. of forested wetland (permanent) for grading of a roadway connection and along a proposed SWM facility; (IMPACT AREA 6) 4,950 sq. ft. of forested wetland (permanent) for grading of the road connection to Bauers Farm Road; and (IMPACT AREA 7) 1,014 sq. ft. of forested wetland (permanent) for improvements along North Point Boulevard shoulder.

The proposed project has been designed to avoid and minimize impacts to waters of the U.S. to the maximum extent practicable. For those unavoidable impacts, the applicant proposes mitigation to compensate for 11,864 sq. ft. of permanently impacted palustrine, forested (PFO) wetlands and 9,650 sq. ft. of permanently impacted palustrine, emergent (PEM) wetlands. The mitigation site, is proposed to be located on the Celmer Farm property off of Mitchell Drive in the Back River section of Baltimore County, Maryland, and is within an active agricultural field and adjacent to existing tidal wetlands. Both the project development property and the proposed mitigation site are located within the Back River watershed. The permanent loss of PFO wetlands will be replaced with the creation of 23,890 square feet of PFO wetlands (at the minimum required 2:1 ratio for forest wetlands), and the permanent loss of PEM wetlands will be replaced with the creation of 9,650 square feet of PEM wetlands (at the minimum required 1:1 ratio for emergent wetlands) for the creation of a 33,540 square foot forested/emergent wetland complex.

All work will be completed in accordance with the enclosed plan(s). If you have any questions concerning this matter or wish to provide comments, please contact the project manager, Ms. Abbie Hopkins, by phone at 410.962.6080, by e-mail at abbie.hopkins@usace.army.mil, or by mail to Ms. Hopkins' at Department of the Army; Baltimore District, Corps of Engineers; ATTN: Regulatory Branch; 2 Hopkins Plaza; Baltimore, MD 21201.

The decision whether to issue a permit will be based on an evaluation of the probable impacts, 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 reasonable 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, economic, 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, mineral needs, and consideration of property ownership and in general, the needs and welfare of the people.

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 provided will become part of the public record for this action. 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 (Department of the Army; Baltimore District, Corps of Engineers; ATTN: Ms. Abbie Hopkins, Regulatory Branch, CENAB-OPR; 2 Hopkins Plaza; Baltimore, MD 21201) 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 Wetlands and Waterways Program, Maryland Department of the Environment, Montgomery Park Business Center, 1800 Washington Boulevard, Suite 430, Baltimore, Maryland 21230-1708 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 PROGRAMS: Where applicable, the applicant has certified in this application that the proposed activity complies with and will be conducted in a manner consistent with the approved Coastal Zone Management (CZM) Program. By this public notice, we are requesting the State concurrence or objection to the applicant's consistency statement. It should be noted that the CZM Program has a statutory limit of 6 months to make its 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 will not affect Federal listed threatened or endangered species or their critical habitat, pursuant to Section 7 of the Endangered Species Act, as amended. As the evaluation of this application continues, additional information may become available which could modify this preliminary determination.

The Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), as amended by the Sustainable Fisheries Act of 1996 (Public Law 04-267), requires all Federal agencies to consult with the National Marine Fisheries Service (NMFS) on all

actions, or proposed actions, permitted, funded, or undertaken by the agency that may adversely affect Essential Fish Habitat (EFH).

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 request permit.

The evaluation of the impact of this project on the public interest will include application of the guidelines promulgated by the Administrator, U.S. Environmental Protection Agency, under authority of Section 404 of the Clean Water Act.

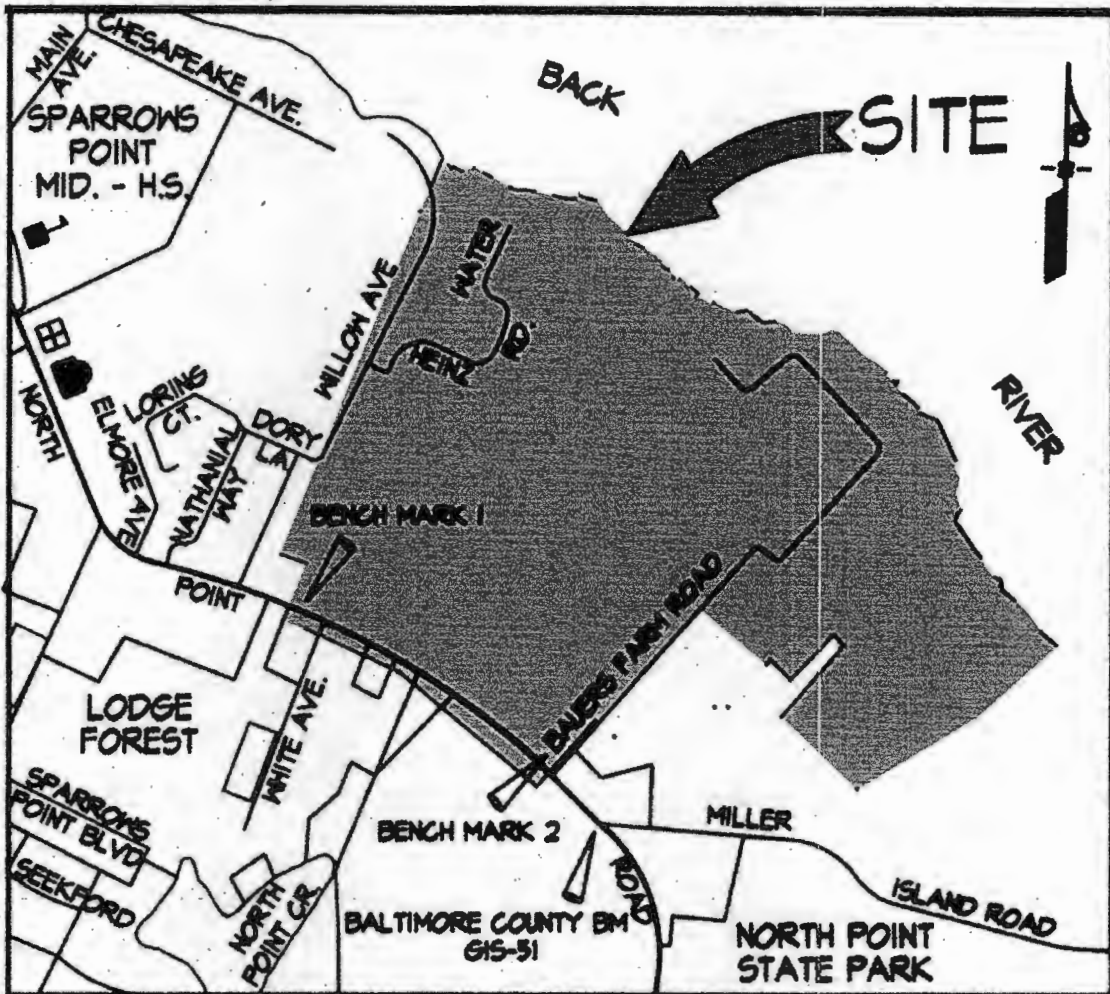
Any person who has an interest which may be adversely affected by the issuance of this permit may request a public hearing. The request, which must be in writing, must be received by the District Engineer (Department of the Army; Baltimore District, Corps of Engineers; ATTN: Ms. Abbie Hopkins, Regulatory Branch, CENAB-OPR; 2 Hopkins Plaza; Baltimore, MD 21201), within the comment period as specified above to receive consideration. Also it must clearly set 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 this 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



VICINITY MAP

SCALE: 1"=1000'

**Eco-Science
Professionals, Inc.**

Consulting Ecologists

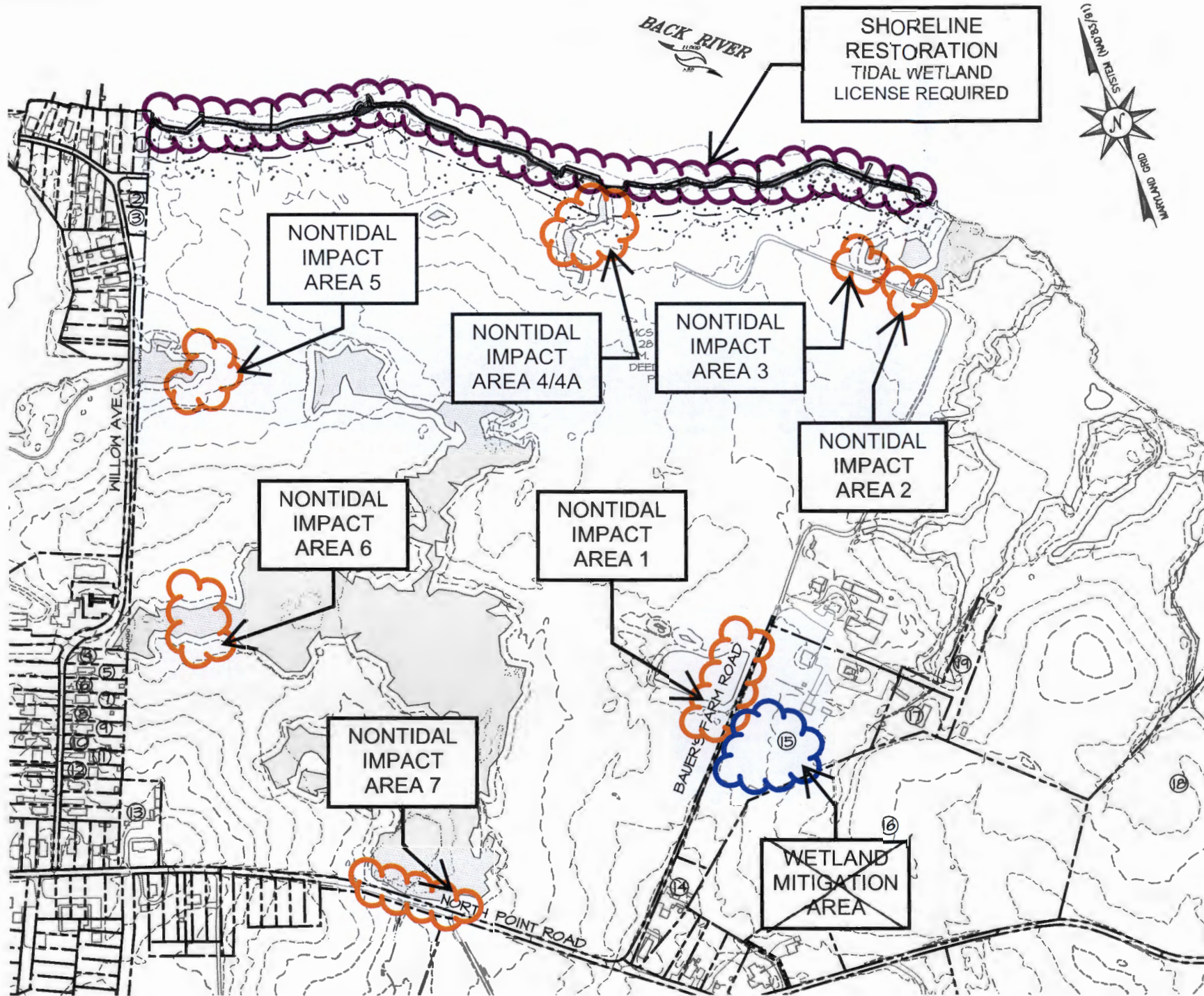
(410) 832-2480

P.O. Box 5006 Glen Arm, MD 21057

Permit Application Impact Figure

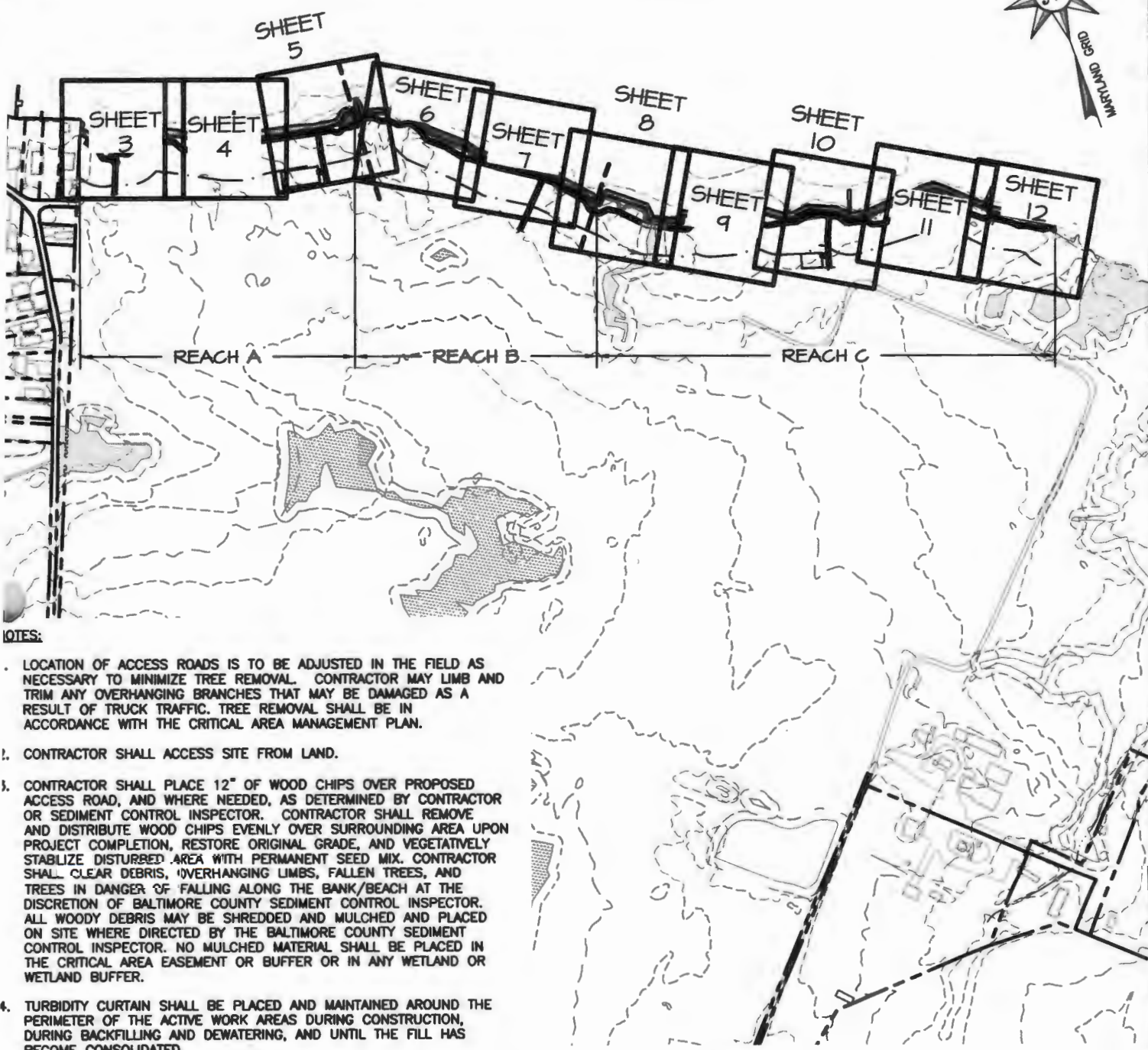
SHAW'S DISCOVERY

October 31, 2016



WETLAND IMPACT LOCATION MAP
SHAW'S DISCOVERY

BACK RIVER



- NOTES:**
- LOCATION OF ACCESS ROADS IS TO BE ADJUSTED IN THE FIELD AS NECESSARY TO MINIMIZE TREE REMOVAL. CONTRACTOR MAY LIMB AND TRIM ANY OVERHANGING BRANCHES THAT MAY BE DAMAGED AS A RESULT OF TRUCK TRAFFIC. TREE REMOVAL SHALL BE IN ACCORDANCE WITH THE CRITICAL AREA MANAGEMENT PLAN.
 - CONTRACTOR SHALL ACCESS SITE FROM LAND.
 - CONTRACTOR SHALL PLACE 12" OF WOOD CHIPS OVER PROPOSED ACCESS ROAD, AND WHERE NEEDED, AS DETERMINED BY CONTRACTOR OR SEDIMENT CONTROL INSPECTOR. CONTRACTOR SHALL REMOVE AND DISTRIBUTE WOOD CHIPS EVENLY OVER SURROUNDING AREA UPON PROJECT COMPLETION, RESTORE ORIGINAL GRADE, AND VEGETATIVELY STABILIZE DISTURBED AREA WITH PERMANENT SEED MIX. CONTRACTOR SHALL CLEAR DEBRIS, OVERHANGING LIMBS, FALLEN TREES, AND TREES IN DANGER OF FALLING ALONG THE BANK/BEACH AT THE DISCRETION OF BALTIMORE COUNTY SEDIMENT CONTROL INSPECTOR. ALL WOODY DEBRIS MAY BE SHREDDED AND MULCHED AND PLACED ON SITE WHERE DIRECTED BY THE BALTIMORE COUNTY SEDIMENT CONTROL INSPECTOR. NO MULCHED MATERIAL SHALL BE PLACED IN THE CRITICAL AREA EASEMENT OR BUFFER OR IN ANY WETLAND OR WETLAND BUFFER.
 - TURBIDITY CURTAIN SHALL BE PLACED AND MAINTAINED AROUND THE PERIMETER OF THE ACTIVE WORK AREAS DURING CONSTRUCTION, DURING BACKFILLING AND DEWATERING, AND UNTIL THE FILL HAS BECOME CONSOLIDATED.

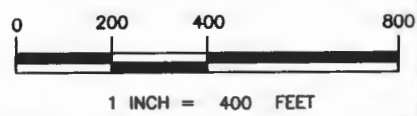
SHORELINE STABILIZATION
 AT
SHAW'S DISCOVERY
 BALTIMORE COUNTY, MD

PREPARED BY: MCS EDGEMERE LLC.
 C/O MR. MARK SAPPERSTEIN
 28 WALKER AVENUE
 BALTIMORE, MD 21208

NOTE: THESE ARE PERMIT DRAWINGS ONLY. DESIGN DRAWINGS ARE TO BE PREPARED SEPARATELY.

KEY SHEET

DATE: October 2016 SHEET 2 OF 16



Hayes and
 Consultants & Designers, Inc.
 "Integrating Engineering and Environment"

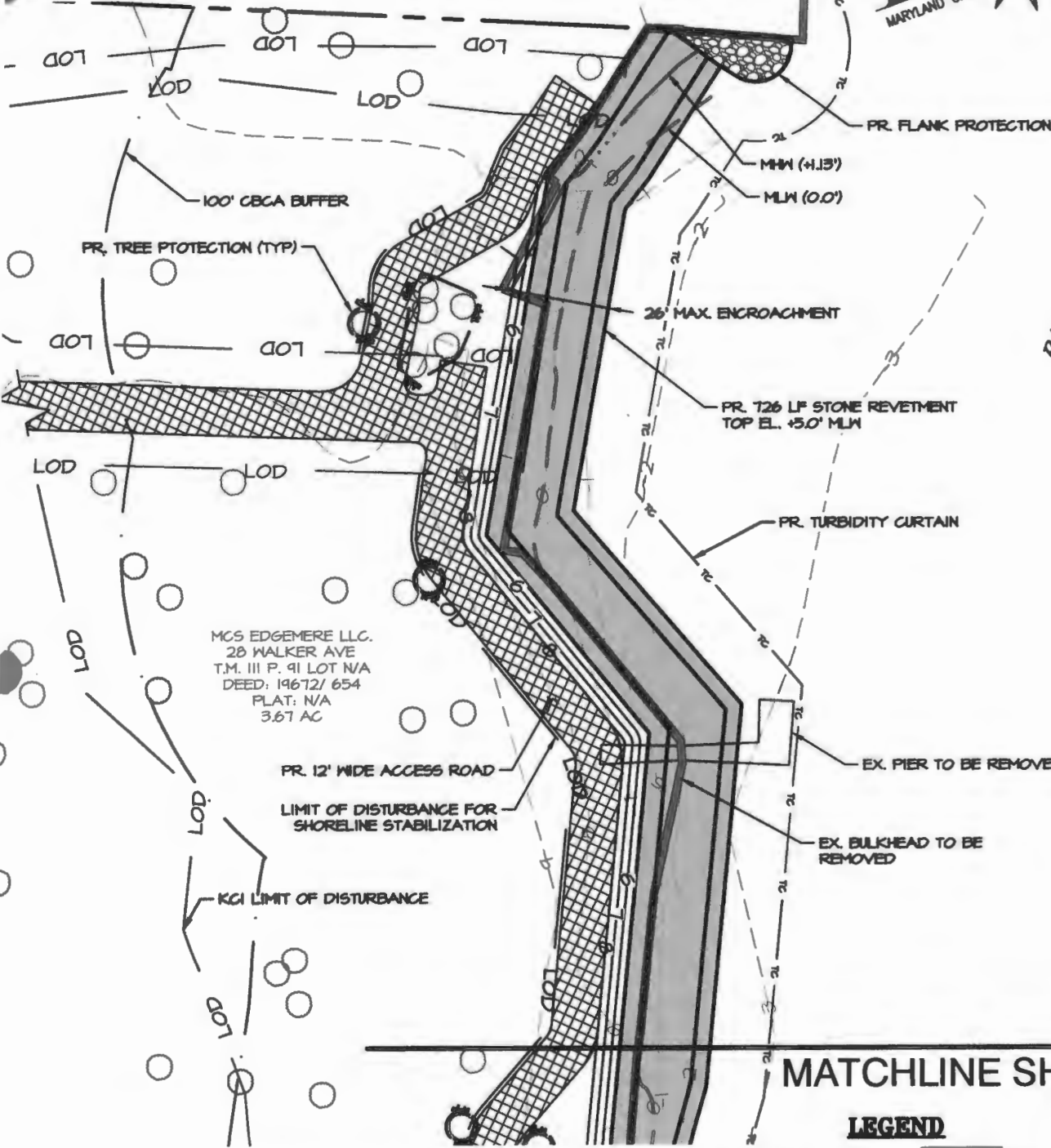
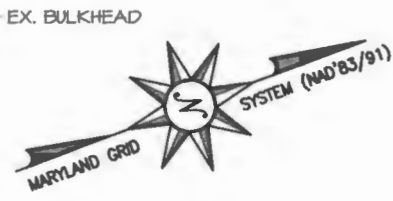
7455 New Ridge Road, Suite T Phone: (410) 694-9401
 Hanover, Maryland 21076 Fax: (410) 694-9405
 Website: www.hayesandinc.com

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BEACH A

PR. 726 LF STONE REVETMENT
 MAX. ENCROACHMENT CHANNEL WARD: 28'
 PR. 25 LF STONE STONE SILL
 MAX. ENCROACHMENT CHANNEL WARD: 30'
 21 CY (1,124 SF) BEACH REPLENISHMENT

LOUIS J. VICARI JR.
 PATRICIA L. VICARI
 7617 CHESAPEAKE AVE.
 T.M. III P. 140 LOT 1
 DEED: 4857/510
 PLAT: 12/23
 0.25 AC



MATCHLINE SHEET 4

**SHORELINE STABILIZATION
 AT
 SHAW'S DISCOVERY
 BALTIMORE COUNTY, MD**

APPL. BY: MCS EDGEMERE LLC.
 C/O MR. MARK SAPPERSTEIN
 28 WALKER AVENUE
 BALTIMORE, MD 21208

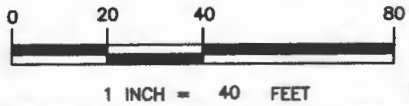
SITE PLAN

DATE: October 2016 SHEET 3 OF 16

LEGEND

	EX. TREE (BAYLAND)		EX. RUBBLE
	EX. TREE (ECO-SCIENCE PROFESSIONALS, INC.)		PR. FLANK PROTECTION
	TREE TO BE REMOVED		PR. BEACH REPLENISHMENT
	MEAN LOW WATER (MLW)		PR. STONE STRUCTURE
	MEAN HIGH WATER (MHW)		
	PR. TURBIDITY CURTAIN		
	PR. GRADING		

NOTE: THESE ARE PERMIT DRAWINGS ONLY. DESIGN DRAWINGS ARE TO BE PREPARED SEPARATELY.



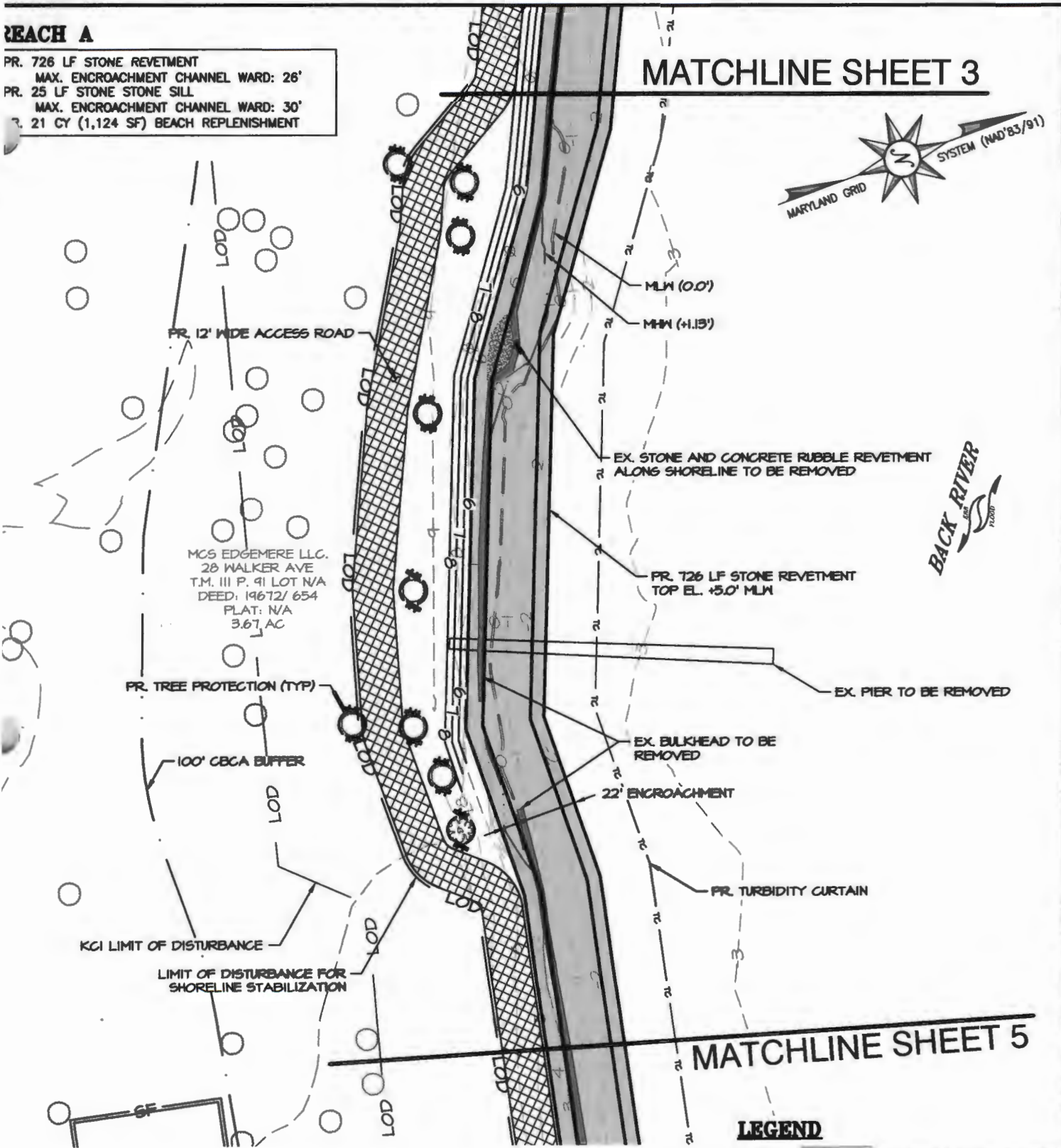
BayLand
 Consultants & Designers, Inc.
"Integrating Engineering and Environment"
 7455 New Ridge Road, Suite T Phone: (410) 694-9401
 Hanover, Maryland 21076 Fax: (410) 694-9405
 Website: www.baylandinc.com

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BEACH A

PR. 726 LF STONE REVETMENT
 MAX. ENCROACHMENT CHANNEL WARD: 26'
 PR. 25 LF STONE STONE SILL
 MAX. ENCROACHMENT CHANNEL WARD: 30'
 PR. 21 CY (1,124 SF) BEACH REPLENISHMENT

MATCHLINE SHEET 3



**SHORELINE STABILIZATION
 AT
 SHAW'S DISCOVERY
 BALTIMORE COUNTY, MD**

PREPARED BY: MCS EDMERE LLC.
 C/O MR. MARK SAPPERSTEIN
 28 WALKER AVENUE
 BALTIMORE, MD 21208

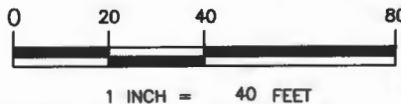
SITE PLAN

DATE: October 2016 SHEET 4 OF 16

LEGEND

- EX. TREE (BAYLAND)
- EX. TREE (ECO-SCIENCE PROFESSIONALS, INC.)
- TREE TO BE REMOVED
- MEAN LOW WATER (MLW)
- MEAN HIGH WATER (MHW)
- PR. TURBIDITY CURTAIN
- PR. GRADING
- EX. RUBBLE TO BE REMOVED
- PR. FLANK PROTECTION
- PR. BEACH REPLENISHMENT
- PR. STONE STRUCTURE

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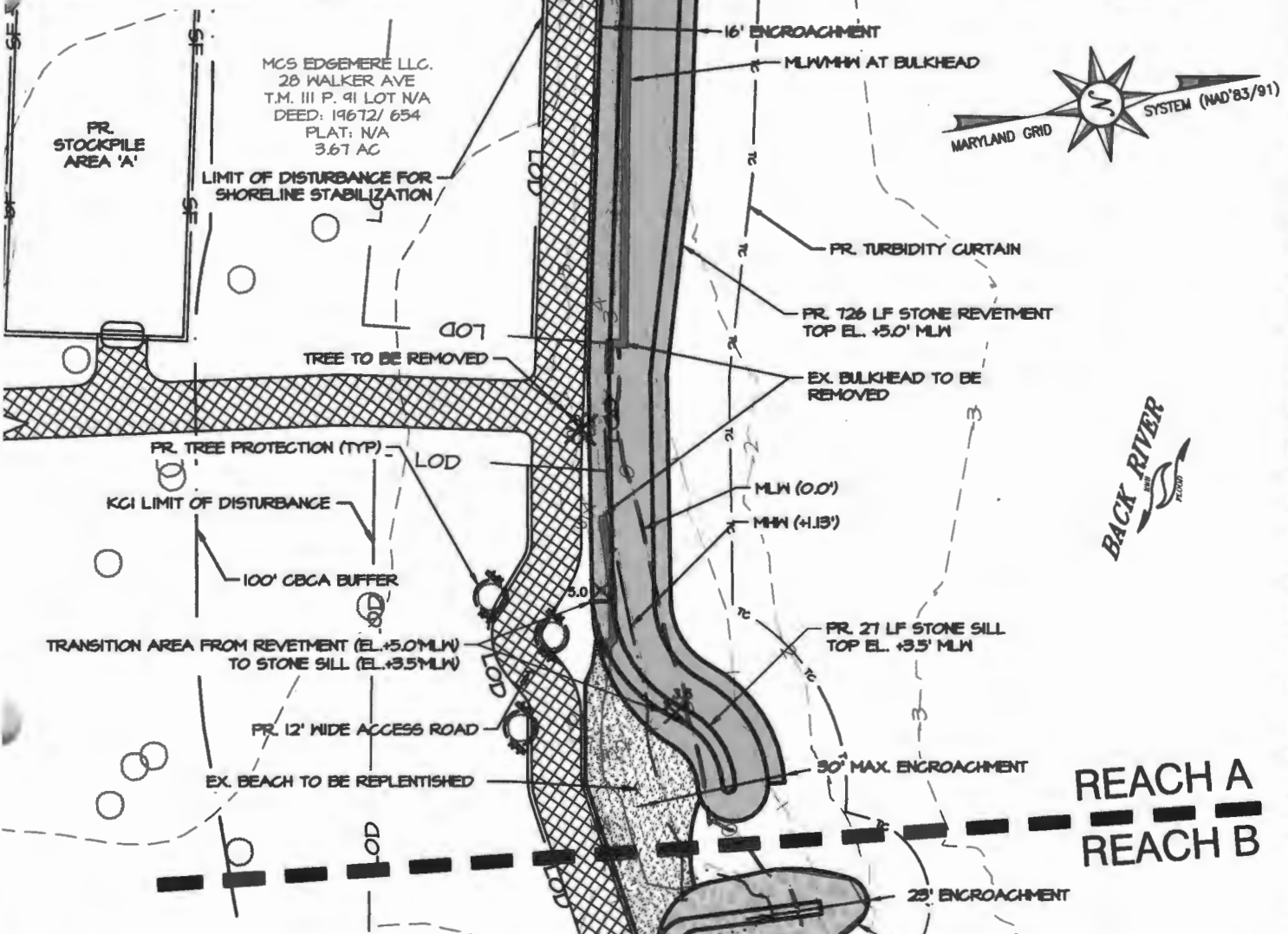


BayLand Consultants & Designers, Inc.
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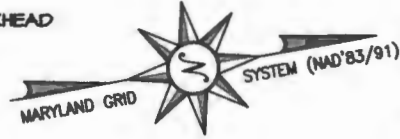
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REACH A

- PR. 726 LF STONE REVETMENT
- MAX. ENCROACHMENT CHANNEL WARD: 26'
- PR. 25 LF STONE SILL
- MAX. ENCROACHMENT CHANNEL WARD: 30'
- PR. 21 CY (1,124 SF) BEACH REPLENISHMENT



MATCHLINE SHEET 4



REACH B

- PR. 700 LF STONE REVETMENT
- MAX. ENCROACHMENT CHANNEL WARD: 17'
- PR. 38 LF LAND CONTAINMENT GROIN
- MAX. ENCROACHMENT CHANNEL WARD: 23'
- PR. 5 CY (273 SF) BEACH REPLENISHMENT

MATCHLINE SHEET 6

**SHORELINE STABILIZATION
AT
SHAW'S DISCOVERY
BALTIMORE COUNTY, MD**

APPL. BY: MCS EDMERRE LLC.
C/O MR. MARK SAPPERSTEIN
28 WALKER AVENUE
BALTIMORE, MD 21208

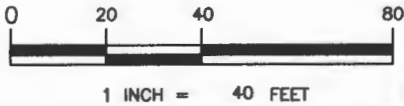
SITE PLAN

DATE: October 2016 SHEET 5 OF 16

LEGEND

	EX. TREE (BAYLAND)		EX. RUBBLE TO BE REMOVED
	EX. TREE (ECO-SCIENCE PROFESSIONALS, INC.)		PR. FLANK PROTECTION
	TREE TO BE REMOVED		PR. BEACH REPLENISHMENT
	MEAN LOW WATER (MLW)		PR. STONE STRUCTURE
	MEAN HIGH WATER (MHW)		
	PR. TURBIDITY CURTAIN		
	PR. GRADING		

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"Integrating Engineering and Environment"

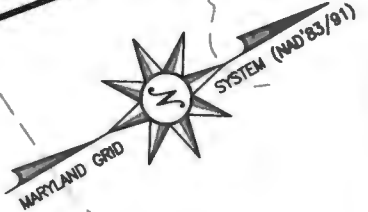
7455 New Ridge Road, Suite T Phone: (410) 694-9401
Hanover, Maryland 21076 Fax: (410) 694-9405
Website: www.baycoandinc.com

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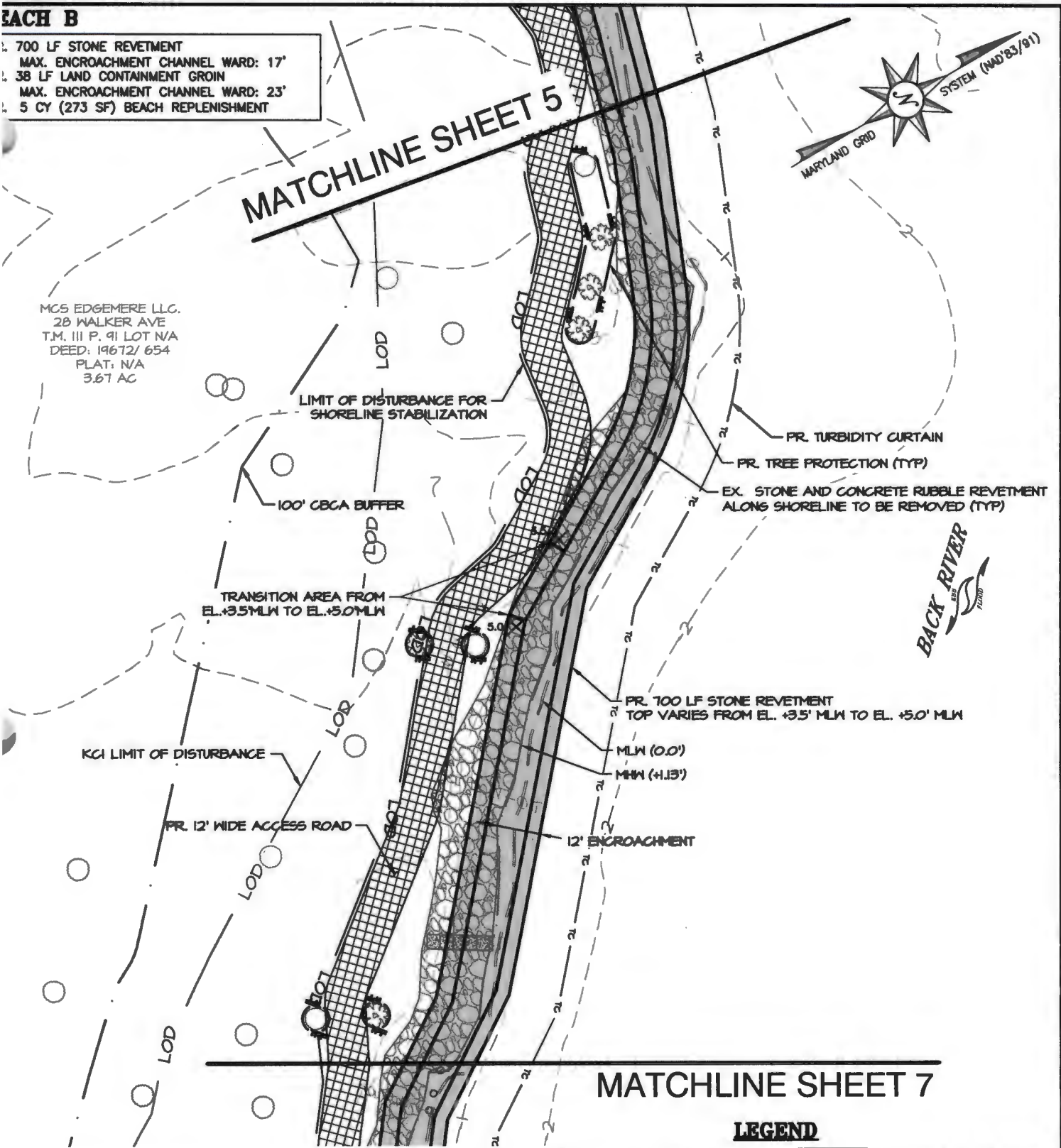
SHEET B

- 1. 700 LF STONE REVETMENT
- 2. MAX. ENCROACHMENT CHANNEL WARD: 17'
- 3. 38 LF LAND CONTAINMENT GROIN
- 4. MAX. ENCROACHMENT CHANNEL WARD: 23'
- 5. 5 CY (273 SF) BEACH REPLENISHMENT

MATCHLINE SHEET 5



MCS EDGEMERE LLC.
28 WALKER AVE
T.M. III P. 91 LOT N/A
DEED: 19672/ 654
PLAT: N/A
3.67 AC



MATCHLINE SHEET 7

**SHORELINE STABILIZATION
AT
SHAW'S DISCOVERY
BALTIMORE COUNTY, MD**

PREPARED BY: MCS EDGEMERE LLC.
C/O MR. MARK SAPPERSTEIN
28 WALKER AVENUE
BALTIMORE, MD 21208

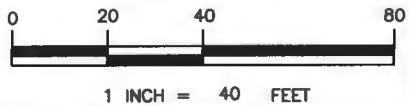
SITE PLAN

DATE: October 2016 SHEET 6 OF 16

LEGEND

	EX. TREE (BAYLAND)		EX. RUBBLE TO BE REMOVED
	EX. TREE (ECO-SCIENCE PROFESSIONALS, INC.)		PR. FLANK PROTECTION
	TREE TO BE REMOVED		PR. BEACH REPLENISHMENT
	MEAN LOW WATER (MLW)		PR. STONE STRUCTURE
	MEAN HIGH WATER (MHW)		
	PR. TURBIDITY CURTAIN		
	PR. GRADING		

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Bay Land Consultants & Designers, Inc.
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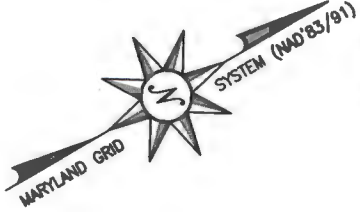
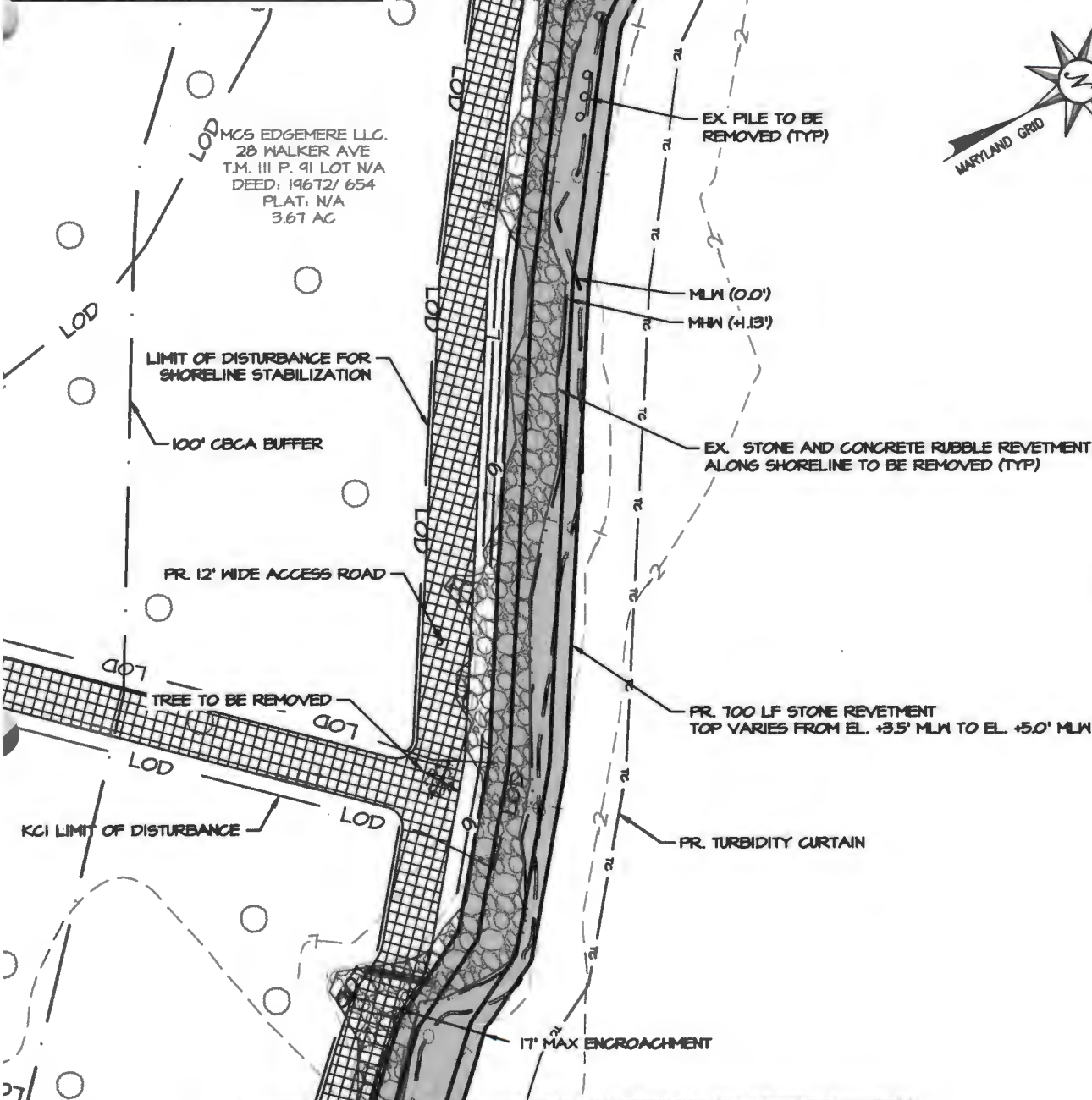
7455 New Ridge Road, Suite T Phone: (410) 694-9401
Hanover, Maryland 21076 Fax: (410) 694-9405
Website: www.baylandinc.com

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B

- 1. 700 LF STONE REVETMENT
- 2. MAX. ENCROACHMENT CHANNEL WARD: 17'
- 3. 38 LF LAND CONTAINMENT GROIN
- 4. MAX. ENCROACHMENT CHANNEL WARD: 23'
- 5. 5 CY (273 SF) BEACH REPLENISHMENT

MATCHLINE SHEET 6



MCS EDGEMERE LLC.
28 WALKER AVE
T.M. III P. 91 LOT N/A
DEED: 196T2/ 654
PLAT: N/A
3.67 AC

LIMIT OF DISTURBANCE FOR SHORELINE STABILIZATION

100' CBGA BUFFER

PR. 12' WIDE ACCESS ROAD

TREE TO BE REMOVED

KCI LIMIT OF DISTURBANCE

EX. PILE TO BE REMOVED (TYP)

MLW (0.0')
MHW (+1.13')

EX. STONE AND CONCRETE RUBBLE REVETMENT ALONG SHORELINE TO BE REMOVED (TYP)

PR. 700 LF STONE REVETMENT TOP VARIES FROM EL. +3.5' MLW TO EL. +5.0' MLW

PR. TURBIDITY CURTAIN

17' MAX ENCROACHMENT

MATCHLINE SHEET 8

SHORELINE STABILIZATION AT SHAW'S DISCOVERY BALTIMORE COUNTY, MD

APPL. BY: MCS EDGEMERE LLC.
C/O MR. MARK SAPPERSTEIN
28 WALKER AVENUE
BALTIMORE, MD 21208

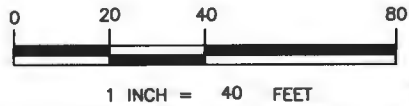
SITE PLAN

DATE: October 2016 SHEET 7 OF 16

LEGEND

- EX. TREE (BAYLAND)
- EX. TREE (ECO-SCIENCE PROFESSIONALS, INC.)
- TREE TO BE REMOVED
- MEAN LOW WATER (MLW)
- MEAN HIGH WATER (MHW)
- PR. TURBIDITY CURTAIN
- PR. GRADING
- EX. RUBBLE TO BE REMOVED
- PR. FLANK PROTECTION
- PR. BEACH REPLENISHMENT
- PR. STONE STRUCTURE

NOTE: THESE ARE PERMIT DRAWINGS ONLY. DESIGN DRAWINGS ARE TO BE PREPARED SEPARATELY.



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"Integrating Engineering and Environment"

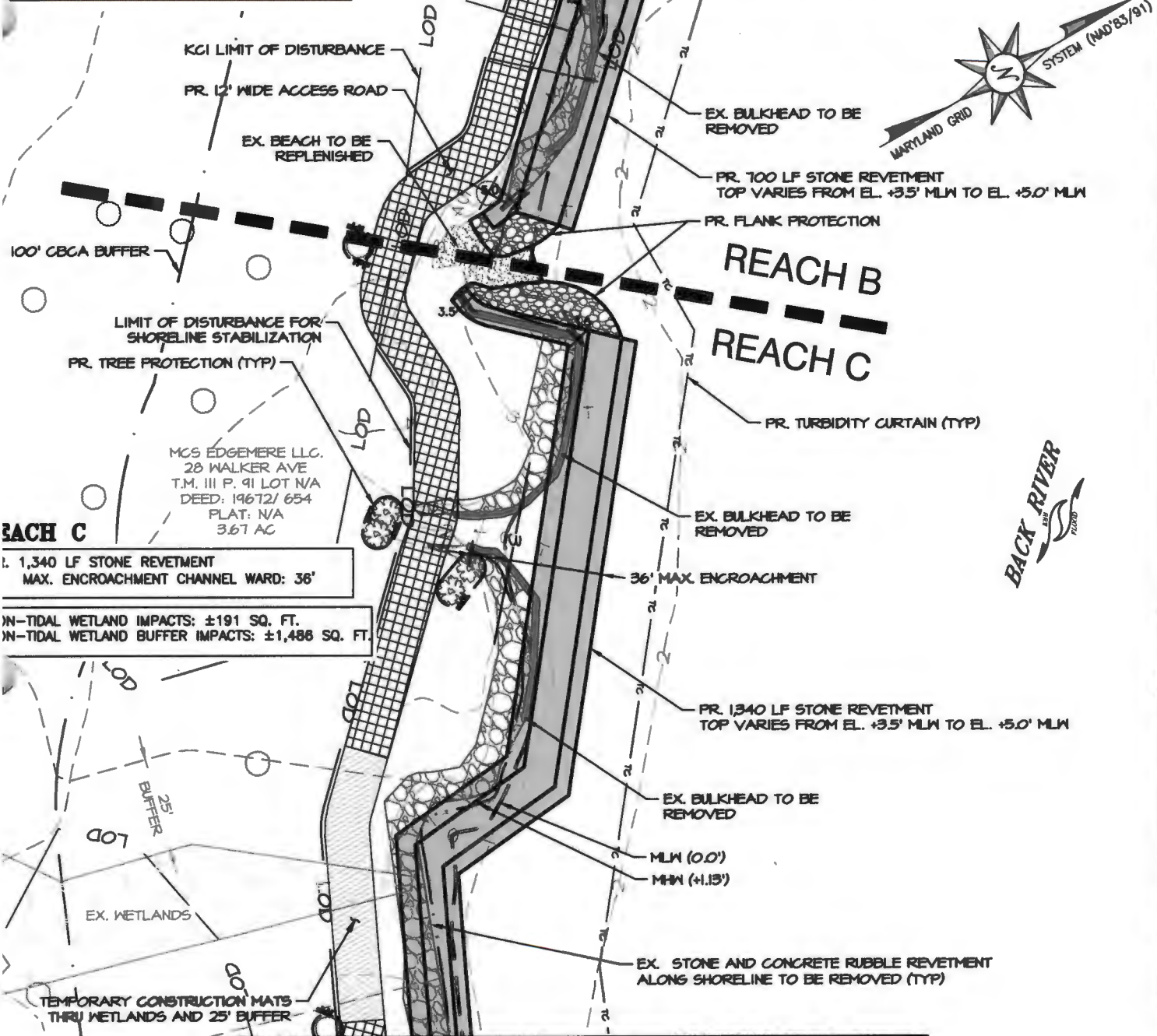
7455 New Ridge Road, Suite T Phone: (410) 694-9401
Hanover, Maryland 21076 Fax: (410) 694-9405
Website: www.baylandinc.com

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REACH B

700 LF STONE REVETMENT
 MAX. ENCROACHMENT CHANNEL WARD: 17'
 38 LF LAND CONTAINMENT GROIN
 MAX. ENCROACHMENT CHANNEL WARD: 23'
 5 CY (273 SF) BEACH REPLENISHMENT

MATCHLINE SHEET 7



REACH C

1,340 LF STONE REVETMENT
 MAX. ENCROACHMENT CHANNEL WARD: 36'

IN-TIDAL WETLAND IMPACTS: ±191 SQ. FT.
 IN-TIDAL WETLAND BUFFER IMPACTS: ±1,486 SQ. FT.

MCS EDGEMERE LLC.
 28 WALKER AVE
 T.M. III P. 91 LOT N/A
 DEED: 19672/ 654
 PLAT: N/A
 3.67 AC

MATCHLINE SHEET 9

**SHORELINE STABILIZATION
 AT
 SHAW'S DISCOVERY
 BALTIMORE COUNTY, MD**

PREPARED BY: MCS EDGEMERE LLC.
 C/O MR. MARK SAPPERSTEIN
 28 WALKER AVENUE
 BALTIMORE, MD 21208

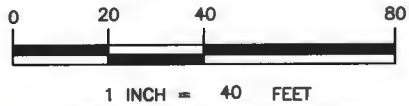
SITE PLAN

DATE: October 2016 SHEET 8 OF 16

LEGEND

	EX. TREE (BAYLAND)		EX. RUBBLE TO BE REMOVED
	EX. TREE (ECO-SCIENCE PROFESSIONALS, INC.)		PR. FLANK PROTECTION
	TREE TO BE REMOVED		PR. BEACH REPLENISHMENT
	MEAN LOW WATER (MLW)		PR. STONE STRUCTURE
	MEAN HIGH WATER (MHW)		
	PR. TURBIDITY CURTAIN		
	PR. GRADING		

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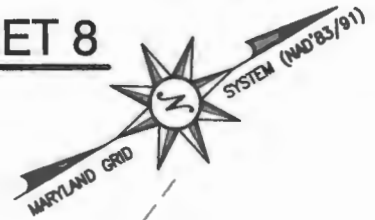


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7455 New Ridge Road, Suite T Phone: (410) 694-9401
 Hanover, Maryland 21076 Fax: (410) 694-9405
 Website: www.baylandinc.com

Z:\23502_SHAW'S_DISCOVERY_TIDAL_PERMITTING\CAD_FILES\SHEET_FILES\PERMITS\23502_PMT08.DWG

MATCHLINE SHEET 8



MCS EDGEMERE LLC,
28 WALKER AVE
T.M. III P. 91 LOT N/A
DEED: 19672/ 654
PLAT: N/A
3.67 AC

LIMIT OF DISTURBANCE FOR
SHORELINE STABILIZATION

PR. 1,340 LF STONE REVETMENT
TOP VARIES FROM EL. +3.5' MLW TO EL. +5.0' MLW

EX. BULKHEAD TO BE
REMOVED

PR. TURBIDITY CURTAIN

EACH C

PR. 1,340 LF STONE REVETMENT
MAX. ENCROACHMENT CHANNEL WARD: 36'

TREE TO BE REMOVED

18' ENCROACHMENT

EX. STONE AND CONCRETE RUBBLE REVETMENT
ALONG SHORELINE TO BE REMOVED (TYP)

100' CBCA BUFFER

PR. 12' WIDE ACCESS ROAD

KCI LIMIT OF DISTURBANCE

PR. TREE PROTECTION (TYP)

MLW (0.0')

MHW (+1.13')

TREE TO BE REMOVED

MATCHLINE SHEET 10

LEGEND

SHORELINE STABILIZATION

AT

SHAW'S DISCOVERY

BALTIMORE COUNTY, MD

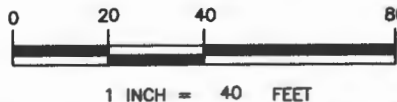
PL. BY: MCS EDGEMERE LLC.
C/O MR. MARK SAPPERSTEIN
28 WALKER AVENUE
BALTIMORE, MD 21208

SITE PLAN

DATE: October 2016 SHEET 9 OF 16

- EX. TREE (BAYLAND)
- EX. TREE (ECO-SCIENCE PROFESSIONALS, INC.)
- TREE TO BE REMOVED
- MEAN LOW WATER (MLW)
- MEAN HIGH WATER (MHW)
- PR. TURBIDITY CURTAIN
- PR. GRADING
- EX. RUBBLE TO BE REMOVED
- PR. FLANK PROTECTION
- PR. BEACH REPLENISHMENT
- PR. STONE STRUCTURE

NOTE: THESE ARE PERMIT DRAWINGS ONLY. DESIGN DRAWINGS ARE TO BE PREPARED SEPARATELY.



Bays and
Consultants & Designers, Inc.
"Integrating Engineering and Environment"

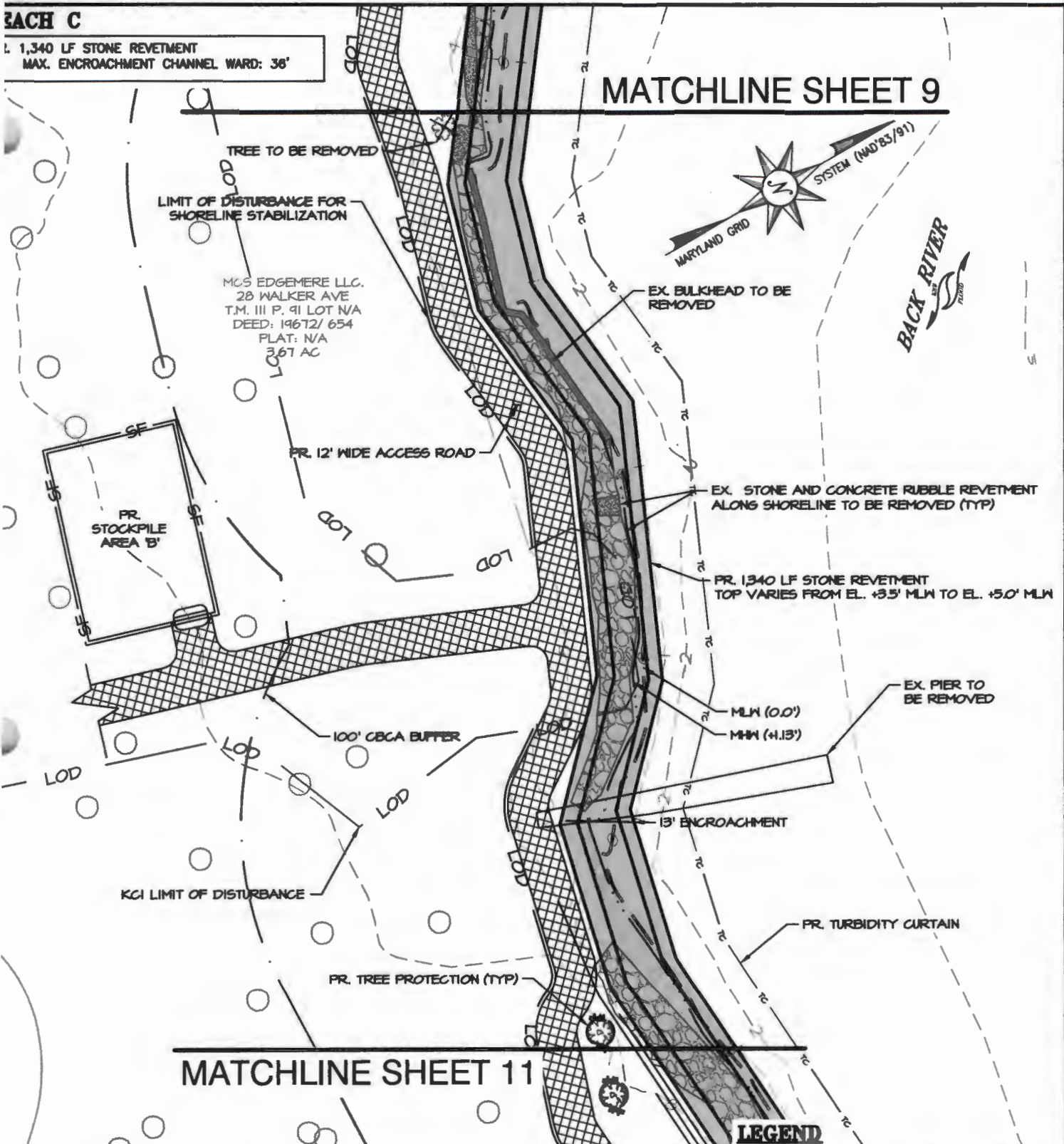
7455 New Ridge Road, Suite T Phone: (410) 694-9401
Hanover, Maryland 21076 Fax: (410) 694-9405
Website: www.baysandinc.com

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SHEET C

1,340 LF STONE REVETMENT
MAX. ENCROACHMENT CHANNEL WARD: 36'

MATCHLINE SHEET 9



MATCHLINE SHEET 11

**SHORELINE STABILIZATION
AT
SHAW'S DISCOVERY
BALTIMORE COUNTY, MD**

PREPARED BY: MCS EDGEMERE LLC.
C/O MR. MARK SAPPERSTEIN
28 WALKER AVENUE
BALTIMORE, MD 21208

SITE PLAN

DATE: October 2016 SHEET 10 OF 16

LEGEND

	EX. TREE (BAYLAND)		EX. RUBBLE TO BE REMOVED
	EX. TREE (ECO-SCIENCE PROFESSIONALS, INC.)		PR. FLANK PROTECTION
	TREE TO BE REMOVED		PR. BEACH REPLENISHMENT
	MEAN LOW WATER (MLW)		PR. STONE STRUCTURE
	MEAN HIGH WATER (MHW)		
	PR. TURBIDITY CURTAIN		
	PR. GRADING		

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"Integrating Engineering and Environment"

7455 New Ridge Road, Suite T Phone: (410) 694-9401
Hanover, Maryland 21076 Fax: (410) 694-9405
Website: www.baylandinc.com

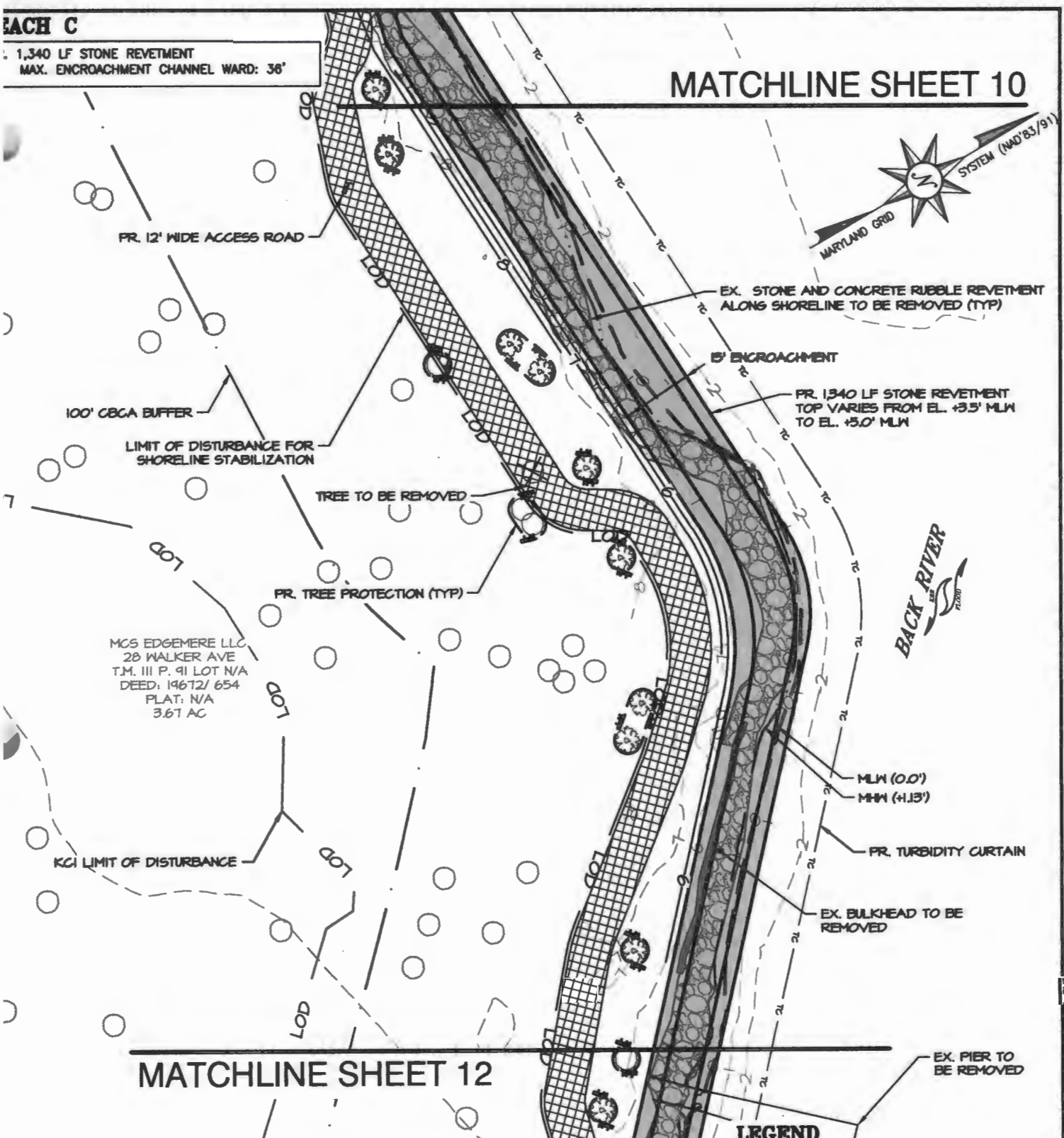
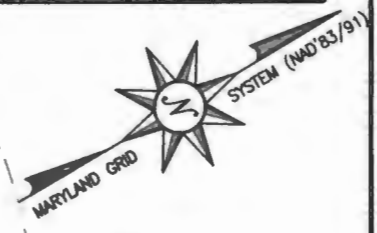
0 20 40 80
1 INCH = 40 FEET

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SHEET C

1,340 LF STONE REVETMENT
MAX. ENCROACHMENT CHANNEL WARD: 36'

MATCHLINE SHEET 10



MATCHLINE SHEET 12

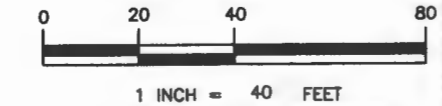
**SHORELINE STABILIZATION
AT
SHAW'S DISCOVERY
BALTIMORE COUNTY, MD**

PREPARED BY: MCS EDGEMERE LLC.
C/O MR. MARK SAPPERSTEIN
28 WALKER AVENUE
BALTIMORE, MD 21208

SITE PLAN

DATE: October 2016 SHEET 11 OF 16

- LEGEND**
- EX. TREE (BAYLAND)
 - EX. TREE (ECO-SCIENCE PROFESSIONALS, INC.)
 - TREE TO BE REMOVED
 - MEAN LOW WATER (MLW)
 - MEAN HIGH WATER (MHW)
 - PR. TURBIDITY CURTAIN
 - PR. GRADING
 - EX. RUBBLE TO BE REMOVED
 - PR. FLANK PROTECTION
 - PR. BEACH REPLENISHMENT
 - PR. STONE STRUCTURE



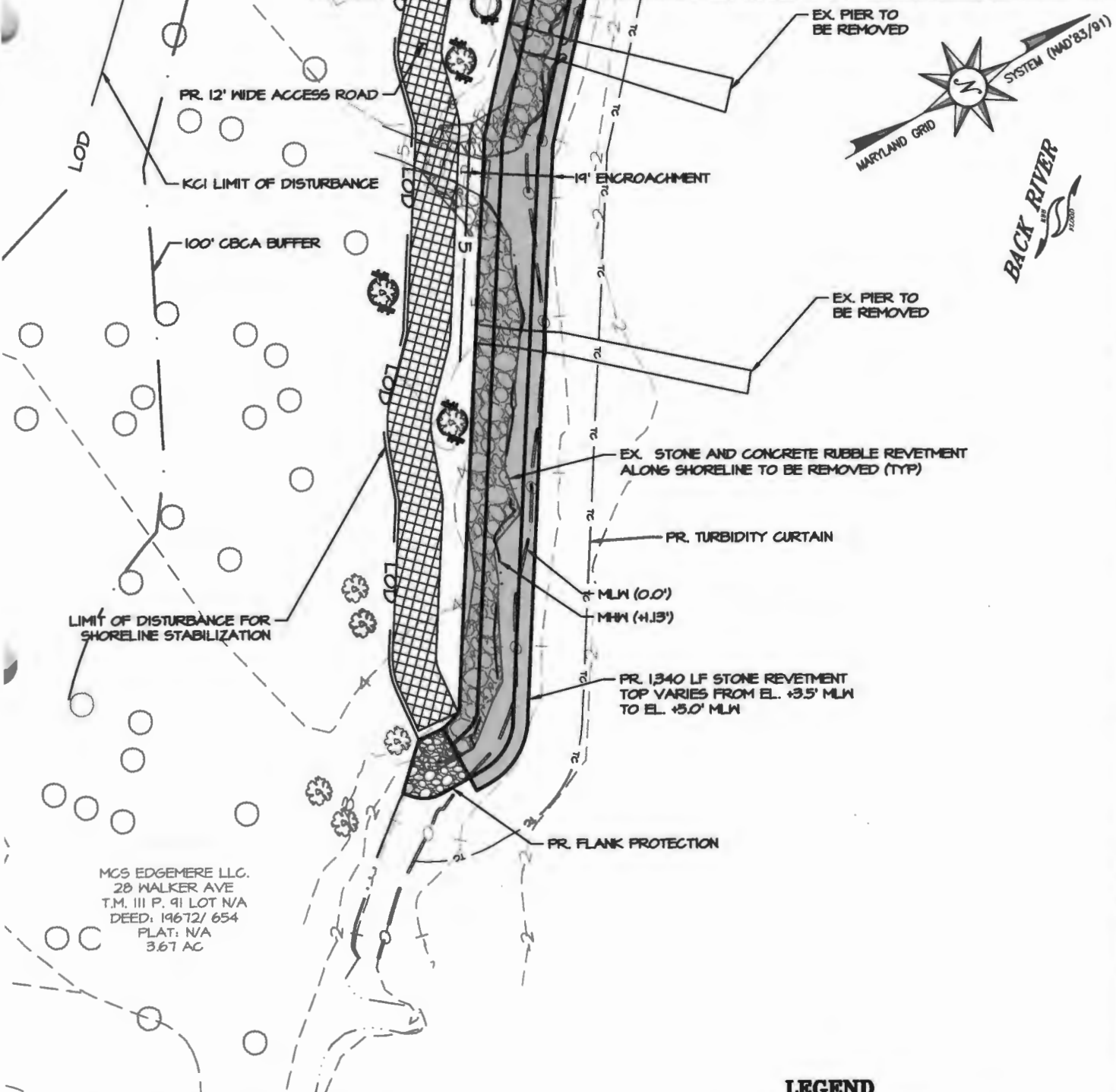
NOTE: THESE ARE PERMIT DRAWINGS ONLY. DESIGN DRAWINGS ARE TO BE PREPARED SEPARATELY.

Bayland Consultants & Designers, Inc.
"Integrating Engineering and Environment"
 7455 New Ridge Road, Suite T Phone: (410) 694-9401
 Hanover, Maryland 21076 Fax: (410) 694-9405
 Website: www.baylandinc.com

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SHEET C
 . 1,340 LF STONE REVETMENT
 MAX. ENCROACHMENT CHANNEL WARD: 38'

MATCHLINE SHEET 11



MCS EDGEMERE LLC.
 28 WALKER AVE
 T.M. III P. 91 LOT N/A
 DEED: 19672/ 654
 PLAT: N/A
 3.67 AC

**SHORELINE STABILIZATION
 AT
 SHAW'S DISCOVERY
 BALTIMORE COUNTY, MD**

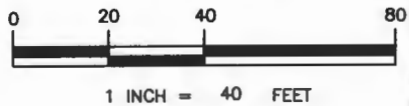
APPL. BY: MCS EDGEMERE LLC.
 C/O MR. MARK SAPPERSTEIN
 28 WALKER AVENUE
 BALTIMORE, MD 21208

SITE PLAN

DATE: October 2016 **SHEET** 12 OF 16

LEGEND

- EX. TREE (BAYLAND)
- EX. TREE (ECO-SCIENCE PROFESSIONALS, INC.)
- TREE TO BE REMOVED
- MEAN LOW WATER (MLW)
- MEAN HIGH WATER (MHW)
- PR. TURBIDITY CURTAIN
- PR. GRADING
- EX. RUBBLE TO BE REMOVED
- PR. FLANK PROTECTION
- PR. BEACH REPLENISHMENT
- PR. STONE STRUCTURE



NOTE: THESE ARE PERMIT DRAWINGS ONLY. DESIGN DRAWINGS ARE TO BE PREPARED SEPARATELY.

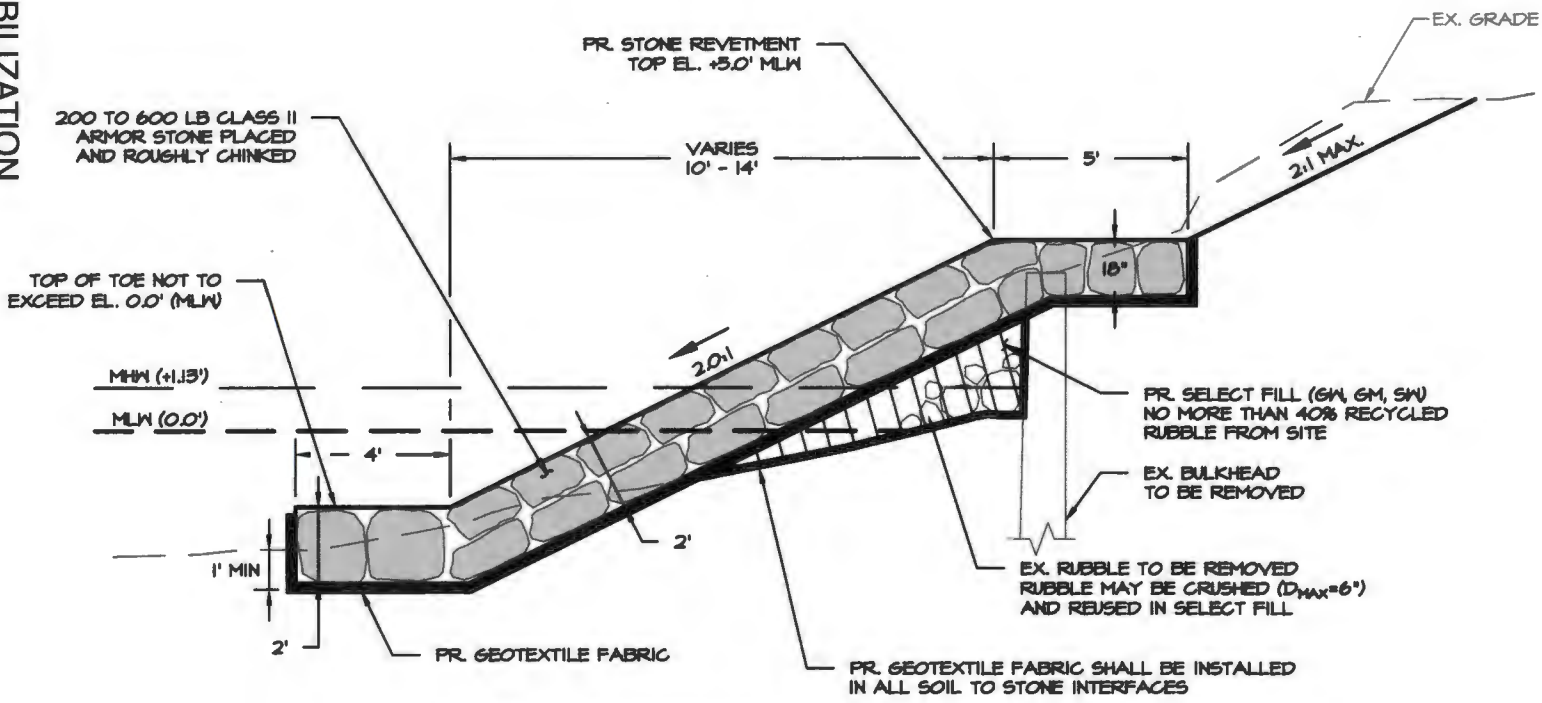
BayLand Consultants & Designers, Inc.
"Integrating Engineering and Environment"
 7455 New Ridge Road, Suite T Phone: (410) 694-9401
 Hanover, Maryland 21076 Fax: (410) 694-9405
 Website: www.baylandinc.com

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REVETMENT DETAIL

RPL BY: MGS EDGEMERE LLC.
 C/O MR. MARK SAPPERSTEIN
 28 WALKER AVENUE
 BALTIMORE, MD 21208

SHORELINE STABILIZATION
 AT
 SHAW'S DISCOVERY
 BALTIMORE COUNTY, MD



NOTE: EXISTING RUBBLE SALVAGED FROM THE SITE MAY BE ADDED UNIFORMLY, (NO MORE THAN 40% BY VOLUME AND $D_{max}=6"$) TO THE SELECT FILL MATERIAL, AVOIDING LARGE VOIDS.

TYPICAL +5'(MLW) REVETMENT DETAIL

SCALE: 1" = 5'

NOTE: THESE ARE PERMIT DRAWINGS
 ONLY. DESIGN DRAWINGS ARE TO BE
 PREPARED SEPARATELY.

Bay
 Consultants & Designers, Inc.
 "Integrating Engineering and Environment"
 7455 New Ridge Road, Suite T Phone: (410) 664-9481
 Hanover, Maryland 21076 Fax: (410) 664-9485
 Website: www.bayinc.com

REVETMENT DETAIL

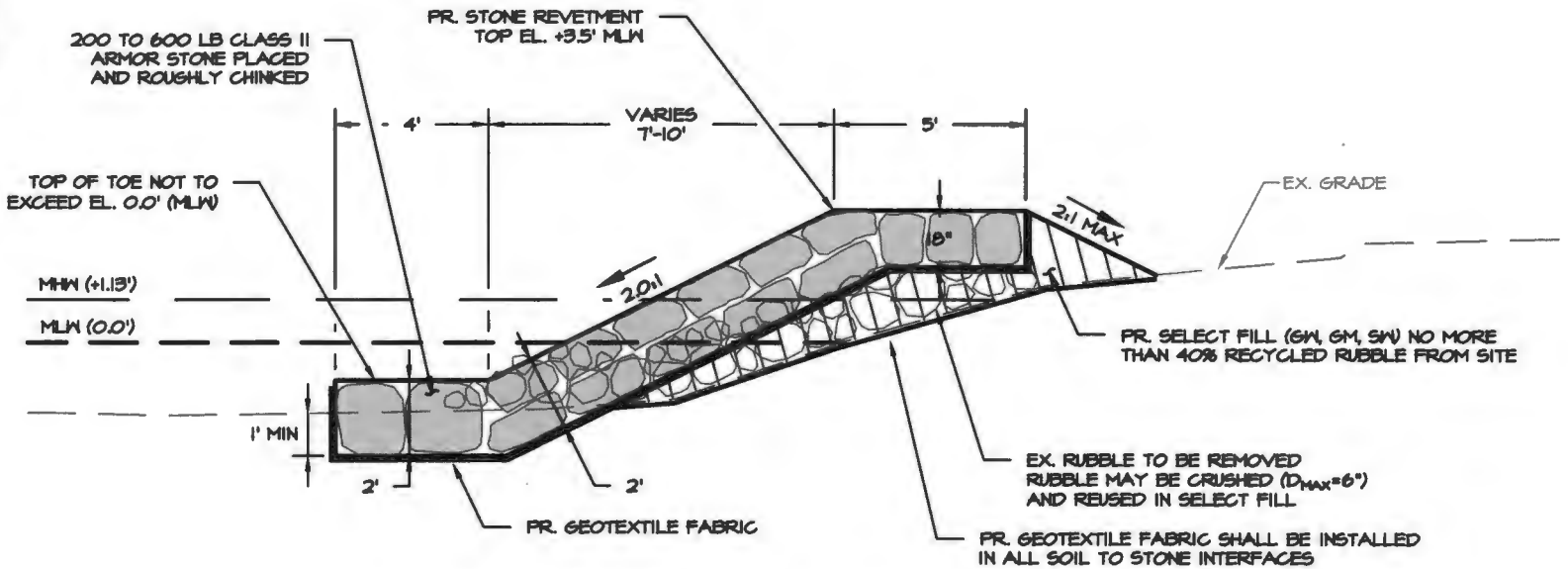
RPL BY: MCS EDGEMERE LLC.
 C/O MR. MARK SAPPERSTEIN
 28 WALKER AVENUE
 BALTIMORE, MD 21208

SHORELINE STABILIZATION

AT

SHAW'S DISCOVERY

BALTIMORE COUNTY, MD



NOTE: EXISTING RUBBLE SALVAGED FROM THE SITE MAY BE ADDED UNIFORMLY, (NO MORE THAN 40% BY VOLUME AND $D_{MAX}=6'$) TO THE SELECT FILL MATERIAL, AVOIDING LARGE VOIDS.

TYPICAL +3.5'(MLW) REVETMENT DETAIL

SCALE: 1" = 5'

NOTE: THESE ARE PERMIT DRAWINGS ONLY. DESIGN DRAWINGS ARE TO BE PREPARED SEPARATELY.

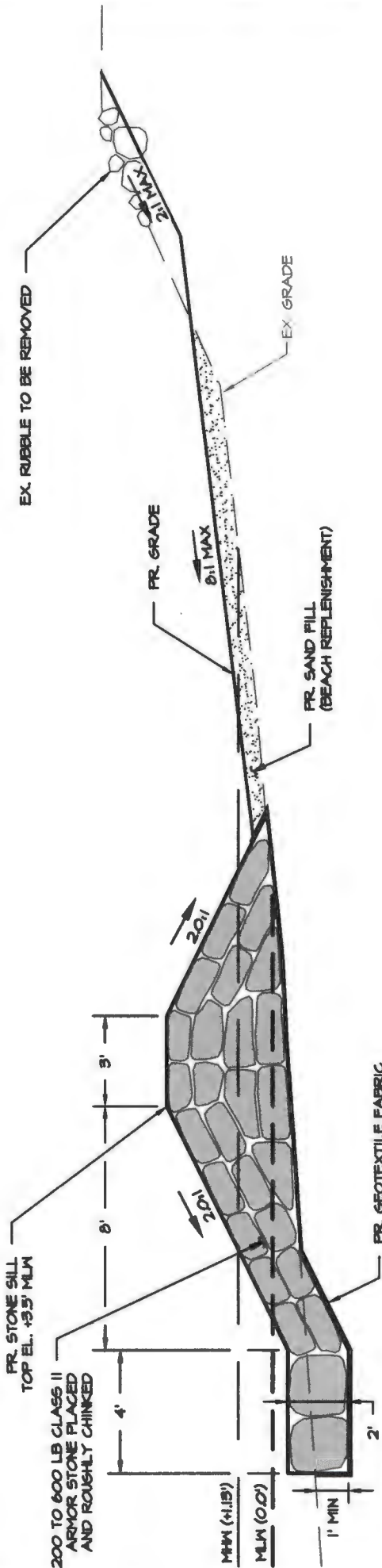
W. Brand
 Consulting Engineers & Designers, Inc.
 "Engineering, Architecture and Environment"
 7455 New Ridge Road, Suite T Phone: (410) 694-4401
 Hanover, Maryland 21076 Fax: (410) 694-4905
 Website: www.brandinc.com

SHORELINE STABILIZATION
AT
SHAW'S DISCOVERY
BALTIMORE COUNTY, MD

PREPARED BY: MCS EDGEMERE LLC.
C/O MR. MARK SAPPERSTEIN
28 WALKER AVENUE
BALTIMORE, MD 21208

SILL DETAIL

DATE: October 2016 SHEET 15 OF 16



TYPICAL SILL DETAIL

SCALE: 1" = 5'

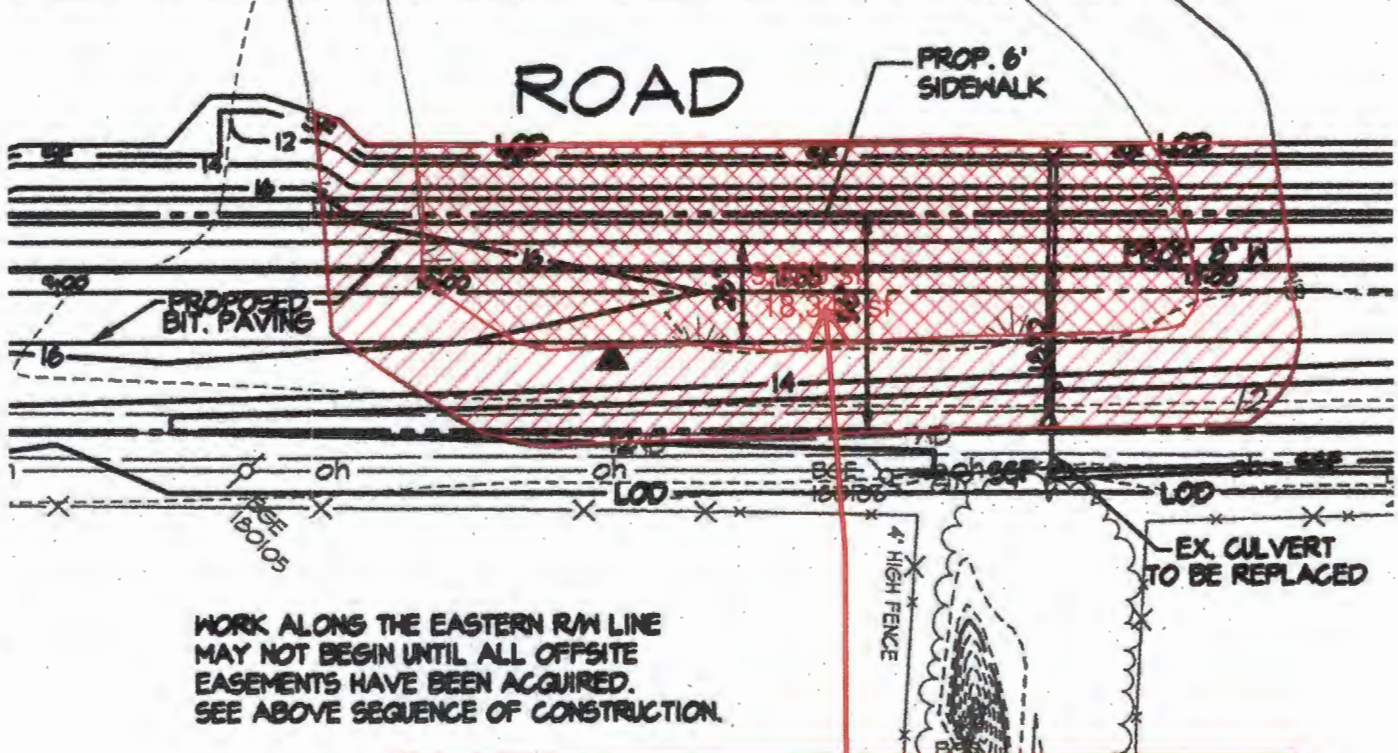
NOTE: THESE ARE PERMIT DRAWINGS ONLY. DESIGN DRAWINGS ARE TO BE PREPARED SEPARATELY.

Bay
Consultants & Designers, Inc.
"Integrating Engineering and Environment"


7455 New Ridge Road, Suite T Phone: (410) 694-9481
Hanover, Maryland 21076 Fax: (410) 694-9485
Website: www.bayinc.com


TO ALL REMAINING SEDIMENT CONTROL DEVICES WITH ESTABLISHED VEGETATION
 LOCAL INSPECTOR, REMOVE ALL REMAINING SEDIMENT CONTROLS AND STABILIZE THOSE

AND SUBMIT FINAL AS-BUILT PLANS TO BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL



IMPACT AREA 1
WETLAND IMPACTS 9,650 SQ.FT.
BUFFER IMPACTS 8,477 SQ.FT
EMERGENT WETLANDS, DISTURBED BUFFER

WETLAND IMPACT AREA: 

BUFFER IMPACT AREA: 

Eco-Science Professionals, Inc.
Consulting Ecologists

(410) 832-2480
 P.O. Box 5006 Glen Arm, MD 21057

Permit Application Impact Figure

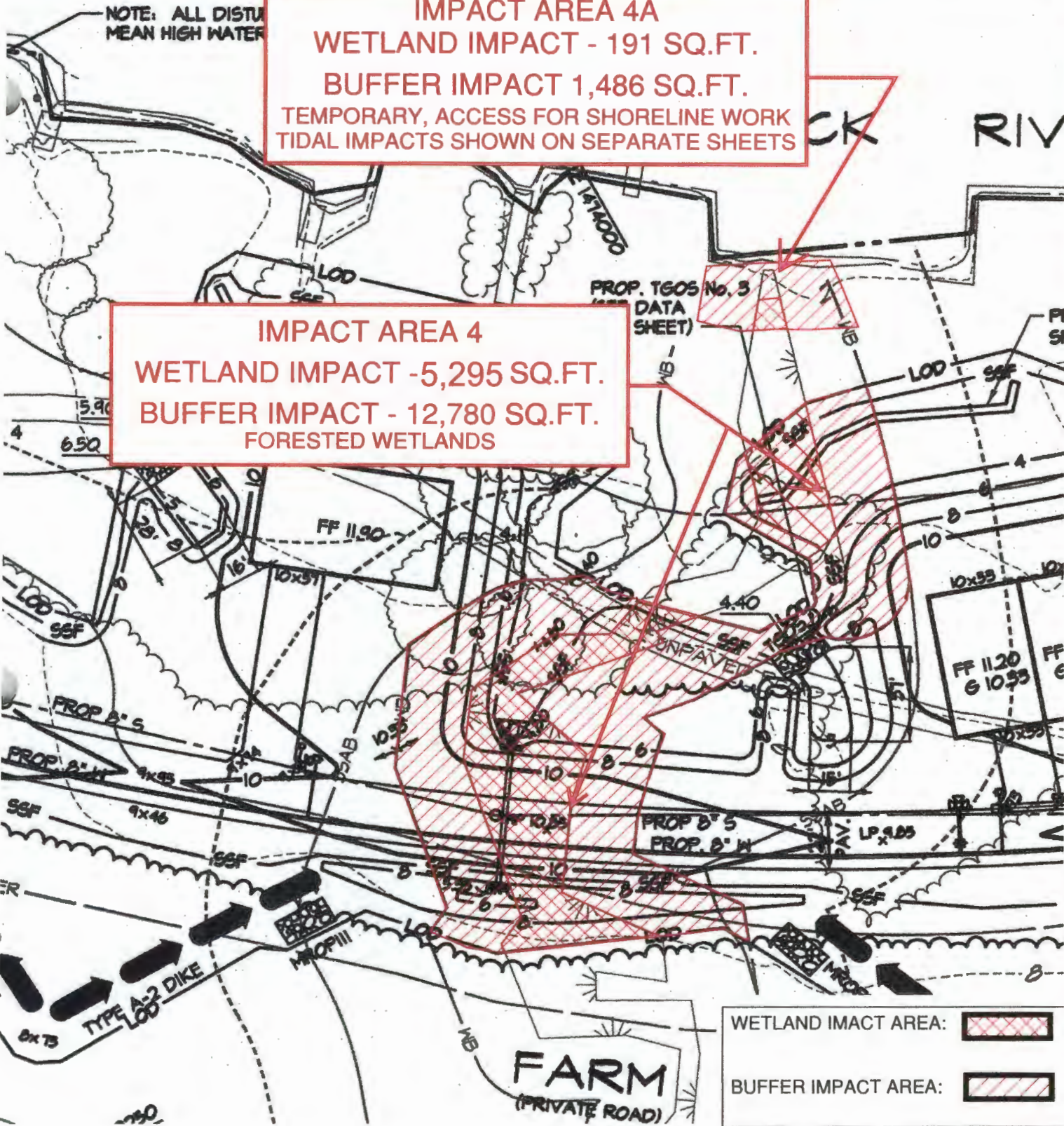
SHAW'S DISCOVERY

October 31, 2016 Scale: 1"= 50'

NOTE: ALL DISTANCE MEASUREMENTS TO MEAN HIGH WATER

IMPACT AREA 4A
WETLAND IMPACT - 191 SQ.FT.
BUFFER IMPACT 1,486 SQ.FT.
TEMPORARY, ACCESS FOR SHORELINE WORK
TIDAL IMPACTS SHOWN ON SEPARATE SHEETS

IMPACT AREA 4
WETLAND IMPACT - 5,295 SQ.FT.
BUFFER IMPACT - 12,780 SQ.FT.
FORESTED WETLANDS



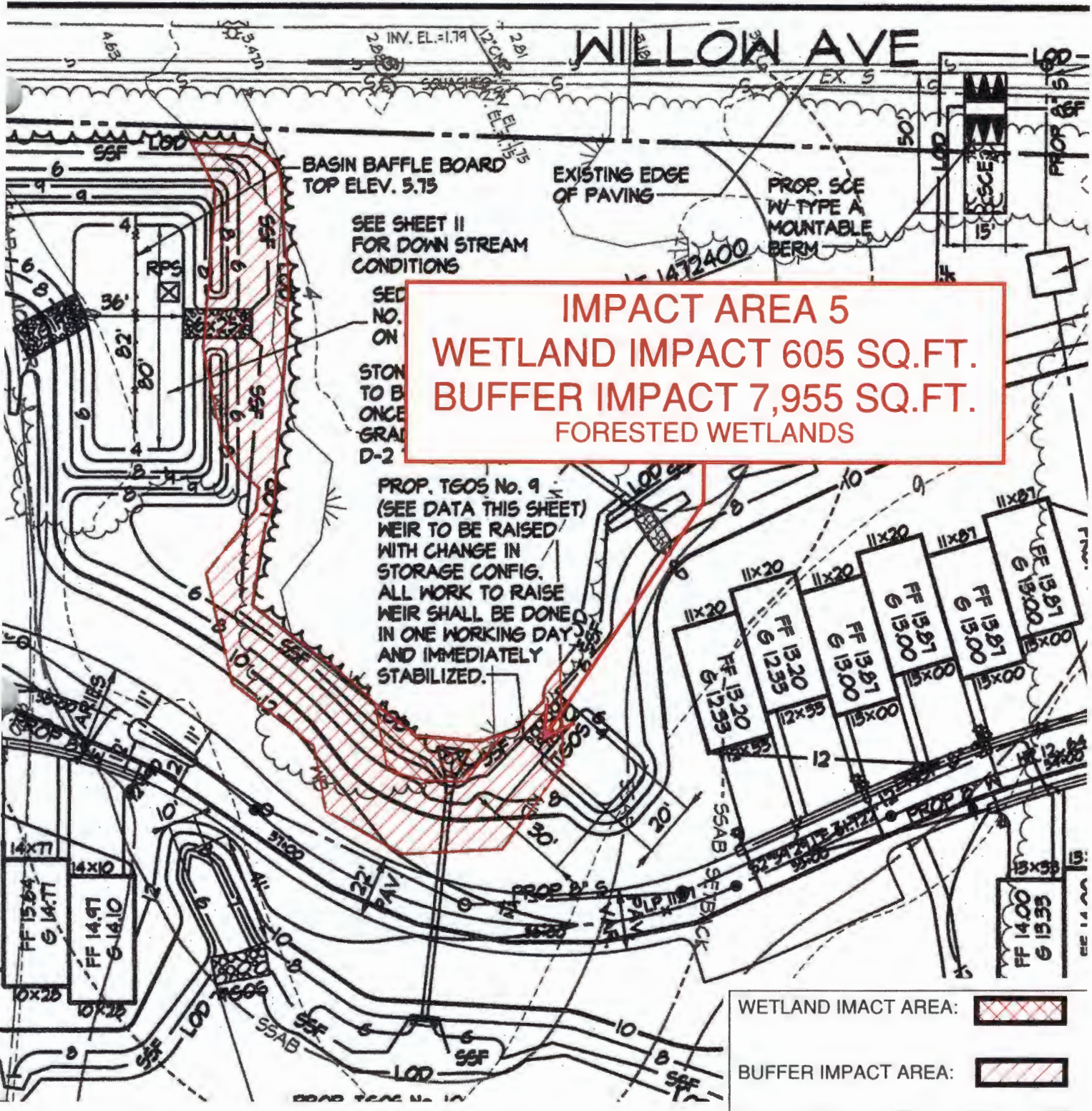
WETLAND IMPACT AREA: [Cross-hatch symbol]
BUFFER IMPACT AREA: [Diagonal line symbol]

Eco-Science Professionals, Inc.
Consulting Ecologists

(410) 832-2480
P.O. Box 5006 Glen Arm, MD 21057

Permit Application Impact Figure
SHAW'S DISCOVERY

October 31, 2016
Scale: 1" = 50'



**Eco-Science
Professionals, Inc.**
Consulting Ecologists

(410) 832-2480

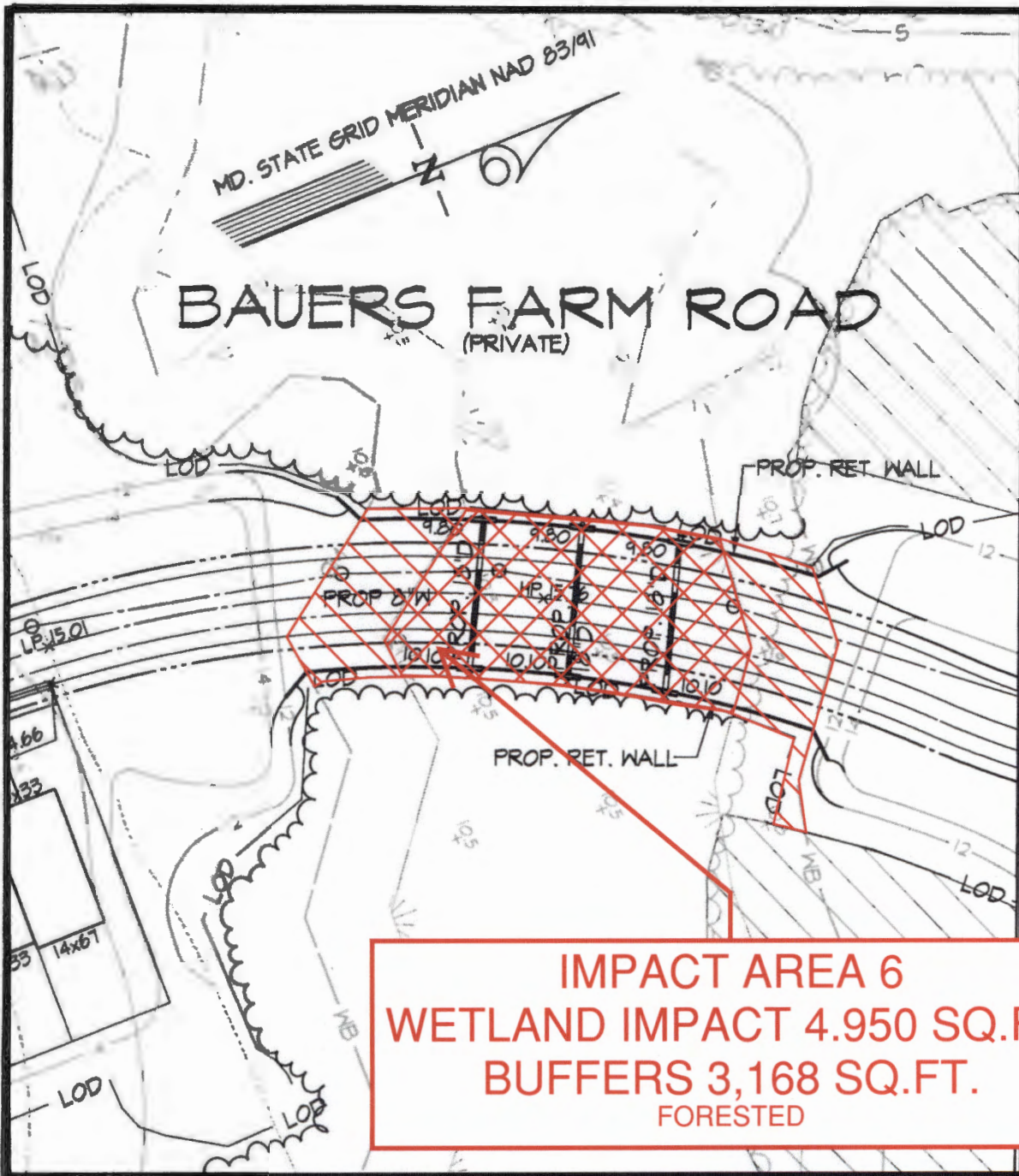
P.O. Box 5006 Glen Arm, MD 21057

Permit Application Impact Figure

SHAW'S DISCOVERY

October 31, 2016

Scale: 1" = 50'



IMPACT AREA 6
WETLAND IMPACT 4.950 SQ.FT.
BUFFERS 3,168 SQ.FT.
 FORESTED

NOTE:
 THIS AREA TO BE
 CONSTRUCTED PER
 PLANS APPROVED
 BY MDE AT A FUTURE
 TIME

FUTURE GRADING AT CULVERT

SCALE: 1" = 50'

WETLAND IMPACT AREA:	
BUFFER IMPACT AREA:	

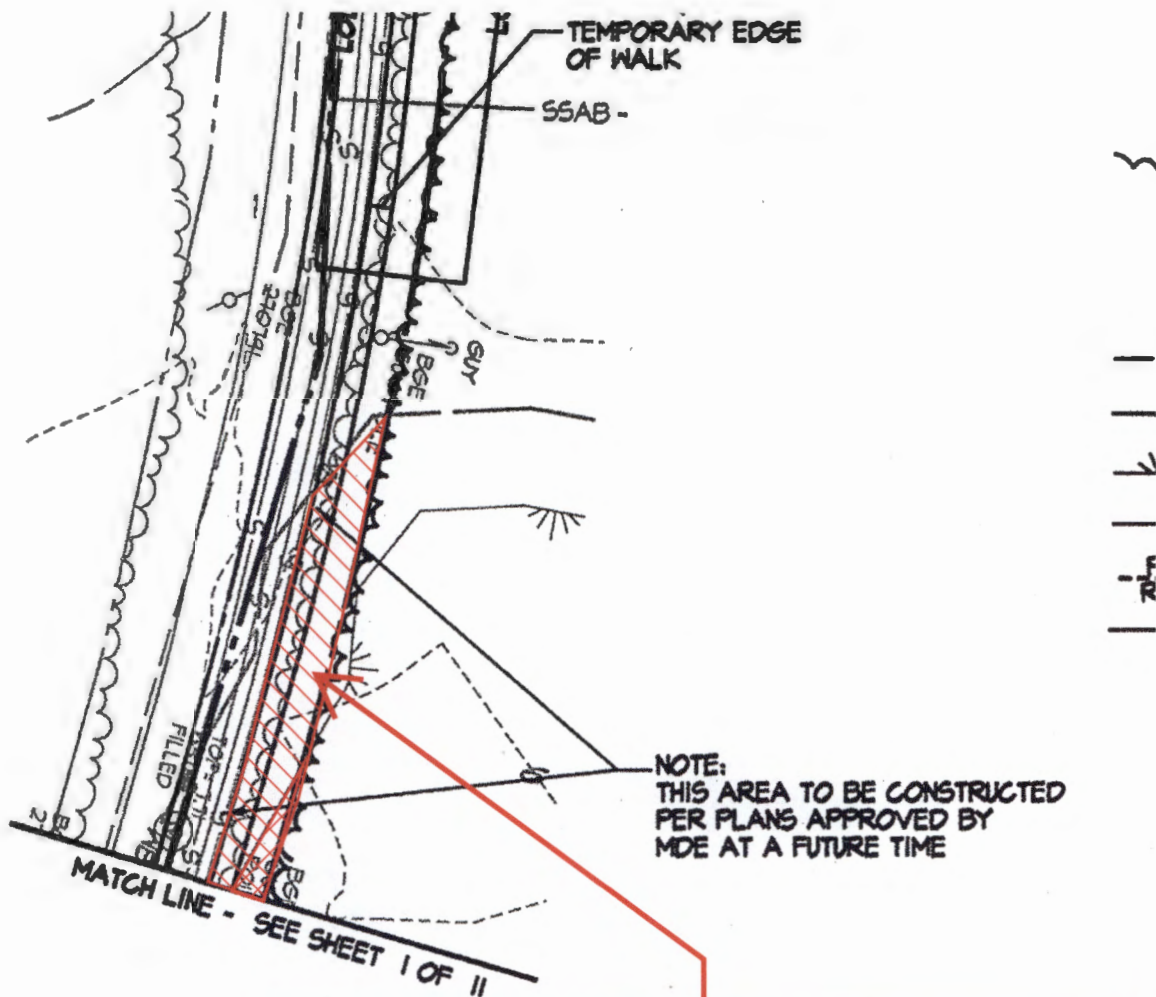
Eco-Science Professionals, Inc.
Consulting Ecologists

(410) 832-2480
 P.O. Box 5006 Glen Arm, MD 21057



Permit Application Impact Figure

SHAW'S DISCOVERY

October 31, 2016 Scale: 1" = 50'



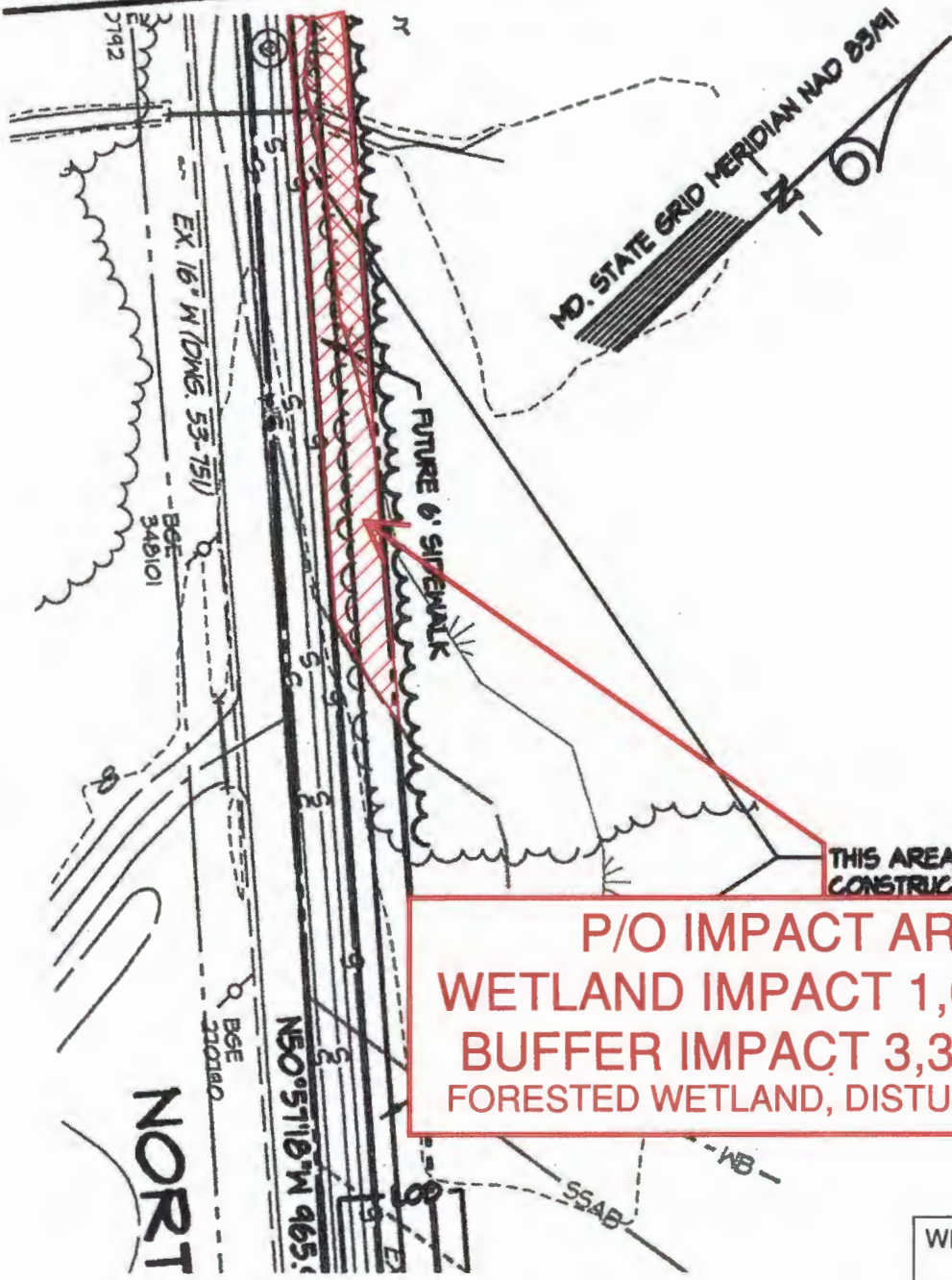
P/O IMPACT AREA 7
WETLAND IMPACT 1,014 SQ.FT.
BUFFER IMPACT 3,363 SQ.FT.
 FORESTED WETLANDS, DISTURBED BUFFERS

WETLAND IMPACT AREA: 
 BUFFER IMPACT AREA: 

Eco-Science Professionals, Inc.
Consulting Ecologists
 (410) 832-2480
 P.O. Box 5006 Glen Arm, MD 21057

Permit Application Impact Figure
SHAW'S DISCOVERY
 October 31, 2016 Scale: 1"= 50'

MATCH LINE - SEE SHEET 5 OF 11



P/O IMPACT AREA 7
WETLAND IMPACT 1,014 SQ.FT.
BUFFER IMPACT 3,363 SQ.FT.
FORESTED WETLAND, DISTURBED BUFFER

WETLAND IMPACT AREA:	
BUFFER IMPACT AREA:	

Eco-Science Professionals, Inc.
Consulting Ecologists



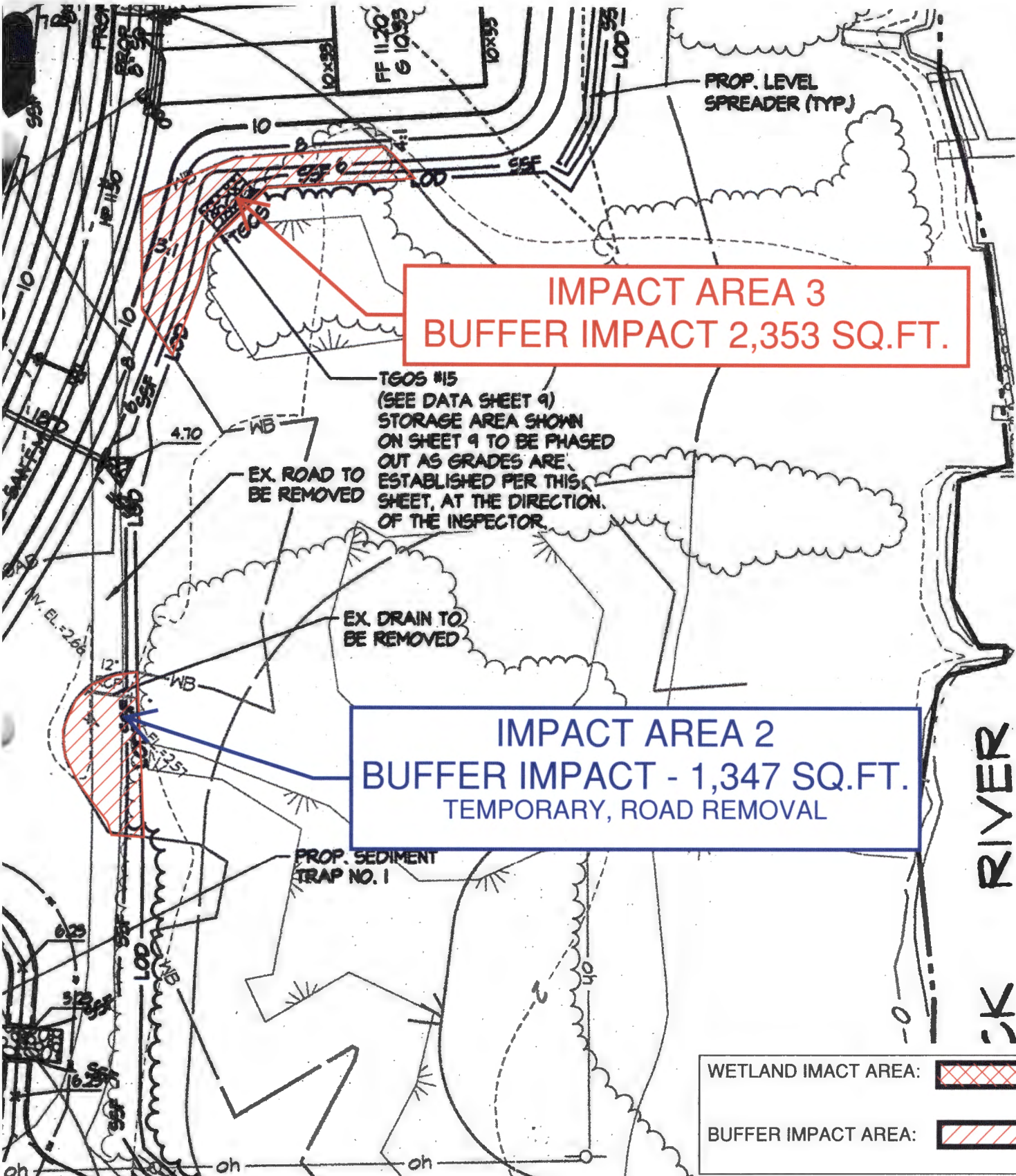
(410) 832-2480
 P.O. Box 5006 Glen Arm, MD 21057

Permit Application Impact Figure

SHAW'S DISCOVERY

October 31, 2016

Scale: 1"= 50'



**IMPACT AREA 3
BUFFER IMPACT 2,353 SQ.FT.**

**IMPACT AREA 2
BUFFER IMPACT - 1,347 SQ.FT.
TEMPORARY, ROAD REMOVAL**

TEOS #15
(SEE DATA SHEET 9)
STORAGE AREA SHOWN
ON SHEET 9 TO BE PHASED
OUT AS GRADES ARE
ESTABLISHED PER THIS
SHEET, AT THE DIRECTION
OF THE INSPECTOR.

EX. ROAD TO
BE REMOVED

EX. DRAIN TO
BE REMOVED

PROP. SEDIMENT
TRAP NO. 1

WETLAND IMACT AREA: 

BUFFER IMPACT AREA: 

**Eco-Science
Professionals, Inc.**
Consulting Ecologists



(410) 832-2480
P.O. Box 5006 Glen Arm, MD 21057

Permit Application Impact Figure

SHAW'S DISCOVERY

October 31, 2016

Scale: 1"= 50'

COVER KEY



Proposed Emergent Wetlands
Proposed Forested Wetlands

Eco-Science Professionals, Inc.

CONSULTING ECOLOGISTS
P.O. BOX 3906, SEVY AVE., MARYLAND 20687

TELEPHONE (410) 832-2000 FAX (410) 832-2000

Installation Notes

Grading Note
The wetland mitigation basin shall be graded to a sub-grade 6 inches below the final grade. The area shall be excavated through from flood-basins before establishment of final grade to ensure proper hydrologic levels are being achieved. Once the sub-grade is prepared, the final grade shall be established by a minimum layer of 6 inches of top soil.

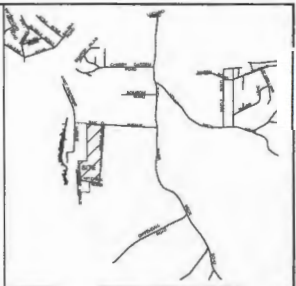
Woody Debris Note
Large woody debris shall be added to the mitigation basin. This material shall cover approximately 8 percent of the basin. This may be in the form of logs, brushwood, 1" and ground, or root mass. The woody debris shall be added to the basin after final grade establishment and prior to planting.

20 Percent Note
20 Percent shall be removed from ground the wetland mitigation site AFTER installation of the plant material and soil addition use BEFORE the end of the 5 year 2002 monitoring period.

Tree Shelter/Tube Note
If tree shelter/tubes are used as part of the plant installation for the mitigation, these shelters shall be removed from the site BEFORE the end of the 5 year monitoring period.

Common Reed Control
Control of the common reed establishment of the wetland mitigation area from the adjacent wetlands must be accomplished. Sprays of herbicides should be applied to the adjacent wetland to control the growth of common reed and control seedling from the ground surface. All control of the common reed shall be accomplished by mowing back the same of the plants within 15 feet of the mitigation basin and treating regularly with herbicide or other herbicide approved for use to and around wetlands.

A common reed control area has been established between the existing wetlands and the mitigation area. This area shall be continually monitored for sprouts and any additional plants shall be removed. Treatment of removal and mowing within this area is recommended. If necessary, a physical barrier can be installed within this area to prevent common reed seedlings into the mitigation area. This can be accomplished using Diaprepes, or comparable, installed in a minimum depth of 2 feet below ground and 8 inches above ground. The dimensions should be installed along the boundary between the mitigation area and adjacent natural areas where removal need to prevent. Disturbed areas should be immediately seeded with appropriate wetland and stabilization site to reduce open soil conditions that are susceptible to invasive species establishment.



VICINITY MAP
SCALE: 1" = 2000'

Critical Area Protection Plan

Table with 3 columns: Species, Size, and Quantity. Lists various plant species like American Sycamore, White Birch, etc.

Table with 3 columns: Species, Size, and Quantity. Lists various tree species like 1.8 In. Eastern White Pine, etc.

Planting Inventory
1. American Sycamore - 10 trees
2. White Birch - 10 trees
3. American Shadbush - 10 trees
4. American Holly - 10 trees
5. American Redstart - 10 trees
6. American Goldfinch - 10 trees
7. American Crows - 10 trees
8. American Robins - 10 trees
9. American Starlings - 10 trees
10. American Chipping Sparrows - 10 trees
11. American Song Sparrows - 10 trees
12. American Meadowlarks - 10 trees
13. American Nuthatches - 10 trees
14. American Woodpeckers - 10 trees
15. American Flickers - 10 trees
16. American Bluebirds - 10 trees
17. American Grackles - 10 trees
18. American Starlings - 10 trees
19. American House Sps - 10 trees
20. American Crows - 10 trees

Planting Specifications
1. American Sycamore - 10 trees
2. White Birch - 10 trees
3. American Shadbush - 10 trees
4. American Holly - 10 trees
5. American Redstart - 10 trees
6. American Goldfinch - 10 trees
7. American Crows - 10 trees
8. American Robins - 10 trees
9. American Starlings - 10 trees
10. American Chipping Sparrows - 10 trees
11. American Song Sparrows - 10 trees
12. American Meadowlarks - 10 trees
13. American Nuthatches - 10 trees
14. American Woodpeckers - 10 trees
15. American Flickers - 10 trees
16. American Bluebirds - 10 trees
17. American Grackles - 10 trees
18. American Starlings - 10 trees
19. American House Sps - 10 trees
20. American Crows - 10 trees

Measurements of Plantings
1. American Sycamore - 10 trees
2. White Birch - 10 trees
3. American Shadbush - 10 trees
4. American Holly - 10 trees
5. American Redstart - 10 trees
6. American Goldfinch - 10 trees
7. American Crows - 10 trees
8. American Robins - 10 trees
9. American Starlings - 10 trees
10. American Chipping Sparrows - 10 trees
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15. American Flickers - 10 trees
16. American Bluebirds - 10 trees
17. American Grackles - 10 trees
18. American Starlings - 10 trees
19. American House Sps - 10 trees
20. American Crows - 10 trees

Submittal Requirements
1. American Sycamore - 10 trees
2. White Birch - 10 trees
3. American Shadbush - 10 trees
4. American Holly - 10 trees
5. American Redstart - 10 trees
6. American Goldfinch - 10 trees
7. American Crows - 10 trees
8. American Robins - 10 trees
9. American Starlings - 10 trees
10. American Chipping Sparrows - 10 trees
11. American Song Sparrows - 10 trees
12. American Meadowlarks - 10 trees
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15. American Flickers - 10 trees
16. American Bluebirds - 10 trees
17. American Grackles - 10 trees
18. American Starlings - 10 trees
19. American House Sps - 10 trees
20. American Crows - 10 trees

Mitigation Proposal

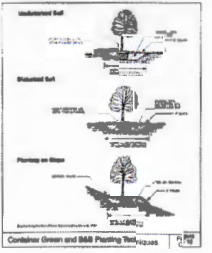
This mitigation plan has been prepared to address the non-tidal wetland mitigation requirements for the Shaw's Discovery project (18-017-DH14201881828). The proposed wetland will include 11,884 sq. ft. of permanent project to forested wetlands and 8,500 sq. ft. of permanent project to emergent wetlands. The proposed mitigation plan will provide a minimum of 2:1 mitigation for the forested wetlands and 1:1 mitigation for impacts to emergent wetlands for a total of 23,540 sq. ft. of wetland mitigation.

Table with 4 columns: Impact Cover Type, Impact sq. ft., Mitigation Obligation, and Mitigation Provided. Rows include Forest, Herbaceous, and Totals.

OFFSITE WETLAND MITIGATION PLAN AT CELMER FARM

SHAW'S DISCOVERY

SCALE 1"=400' DECEMBER 21, 2017



MITCHELL ROAD

ROVERSBIDE AVENUE