

**SITE ANALYSIS**

1. SITE AREA:
  - PARCEL 458: 0.8777 AC
  - PARCEL 691: 0.0854 AC
  - TOTAL SITE = 0.9631 AC
2. DISTURBED AREA (WITHIN THE PARCEL): 0.63 AC
  - ALONG BALTIMORE STREET FOR STORM DRAIN SYSTEM: 0.04 AC
3. EXISTING WOODED LAWN: 0.13 AC
4. THERE ARE NO STREAMS OR WETLANDS OR BUFFERS ON THE SITE.
5. THERE ARE NO FLOODPLAIN, SLOPES, ERODIBLE SOILS, STREAM BUFFERS AND WETLAND BUFFERS PRESENT ON THE SITE.
6. THERE ARE NO SLOPES STEEPER THAN 15 PERCENT.
7. THERE ARE NO HIGHLY ERODIBLE SOILS, AS DEFINED BY THE HOWARD SOIL SURVEY ON SITE.
8. LIMIT OF DISTURBED AREA: 0.63 AC
  - ALONG BALTIMORE STREET FOR STORM DRAIN SYSTEM: 0.04 AC
9. PROPOSED USE: COMMERCIAL RETAIL AND RESIDENTIAL (HOWARD COUNTY ZONING ORDINANCE, SEC 118.0: -B-38)
10. PROPOSED PERVIOUS AREA (ENTIRE SITE): 0.281 AC
11. PROPOSED IMPERVIOUS AREA (ENTIRE SITE): 0.682 AC
12. APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN / PLAT AND / OR SITE DEVELOPMENT PLAN AND / OR RED-LINE REVISION PLAN. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS SHALL OCCUR AT THE SUBDIVISION PLAN / PLAT AND / OR SITE DEVELOPMENT PLAN STAGES AND / OR RED-LINE REVISION PROCESS. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS (INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN) AS THIS PROJECT PROGRESSES THROUGH THE PLAN REVIEW PROCESS.
13. THE ENVIRONMENTAL CONCEPT PLAN IS FOR STORM WATER MANAGEMENT PURPOSES ONLY. APPROVAL OF ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION AND / OR DEVELOPMENT PLAN.
14. A SIMPLIFIED FOREST STAND DELINEATION HAS BEEN PREPARED BY A.D. MARBLE ON MAY 22, 2017 AS REQUIRED BY THE HOWARD COUNTY, MARYLAND CODE OF ORDINANCES, TITLE 16, SUBTITLE 12, AND IS SUBMITTED ALONG WITH THIS PLAN.
15. EXITING TOPOGRAPHY WAS FIELD OBTAINED BY POINT TO POINT LAND SURVEY ON FEB 22, 2017.
16. BOUNDARY WAS SURVEYED BY POINT TO POINT LAND SURVEY ON FEB 22, 2017.
17. THE SOIL INFORMATION WAS OBTAINED FROM USDA, SOIL SURVEY OF HOWARD COUNTY.

**DESIGN NARRATIVE**

The proposed development on the subject parcels 458 and 691 is intended to meet all of goals of environment site design (ESD). The existing parcel 458 has a single family house, commercial retail shops with onsite parking. The existing commercial retail shops on this parcel will remain in developed condition. The existing parcel 691 has one store building with onsite parking and this existing building on this parcel will remain in developed condition. The proposed sediment controls for construction include: super silt fence, silt fence, inlet protection and a stabilized stone construction entrance, these devices will be used to remove sedimentation during construction and dissipate flow velocity.

Most of the proposed site will drain to ESD measure. The ESD measure that is being employed is Bioretention (F-6) device. The bioretention (F-6) device will have an overflow inlet which will allow rainfall from larger storm events, then the ESD design storm, to safely pass discharges to the proposed outfall drain which will discharge to the storm drain system connecting to the existing inlet at the intersection of Baltimore Street & Foundary Street. Bioretention facility will be provided with an under drain connected to the outfall structure. These proposed facility will provide the required ESD volume for the entire project area.

1. Natural Resource Protection: There are no natural resources such as streams, wetlands, floodplain, steep slopes, erodible soils, stream buffers and wetland buffers or similar environmentally sensitive areas to protect. DNR Heritage Letter was requested and obtained confirming no presence of any sensitive species on the proposed site. The letter is included in this submittal. The site contains approximately 0.13 acre of existing wooded lawn, which will require to be cleared for the construction of Bioretention facility as a stormwater management facility for the proposed development. A portion of this cleared area will be maintained as a landscaping lawn. The property has an existing swale, parking lot, a single family house and trees towards the back.

2. Maintenance of Natural Flow Patterns: In existing condition, the parking lot at the existing site drains to the swale at the middle of the site and outfalls to Baltimore Street via 12" CMP. The remaining of the site on the west sheet flows to Baltimore Street. In Proposed condition, all the drainage are conveyed to the proposed micro bioretention facility through a network of downspouts and existing curb opening at the proposed parking lot towards the Baltimore Street, treated and discharged through proposed storm drain network to existing inlet at the intersection of Baltimore Street and Foundary Street. Existing drainage pattern will be maintained in proposed condition.

3. Reduction of Impervious Area: The impervious area has been clustered into the middle of the site preserving the perimeter for landscaping and SWM. A detail parking and traffic analysis shall be done during the site development phase to determine if the existing parking with minimal addition will satisfy the requirement, thereby keeping the impervious area to minimum.

4. Integration of Erosion and Sediment Control into the SWM Strategy: Sediment Control has been integrated into the SWM strategy by implementing Environmental Site Design (ESD) to the Maximum Extent Practicable (MEP). These ESD devices may be utilized for some sediment control as well during construction. Silt fence and super silt fence will enhance sediment control during construction.

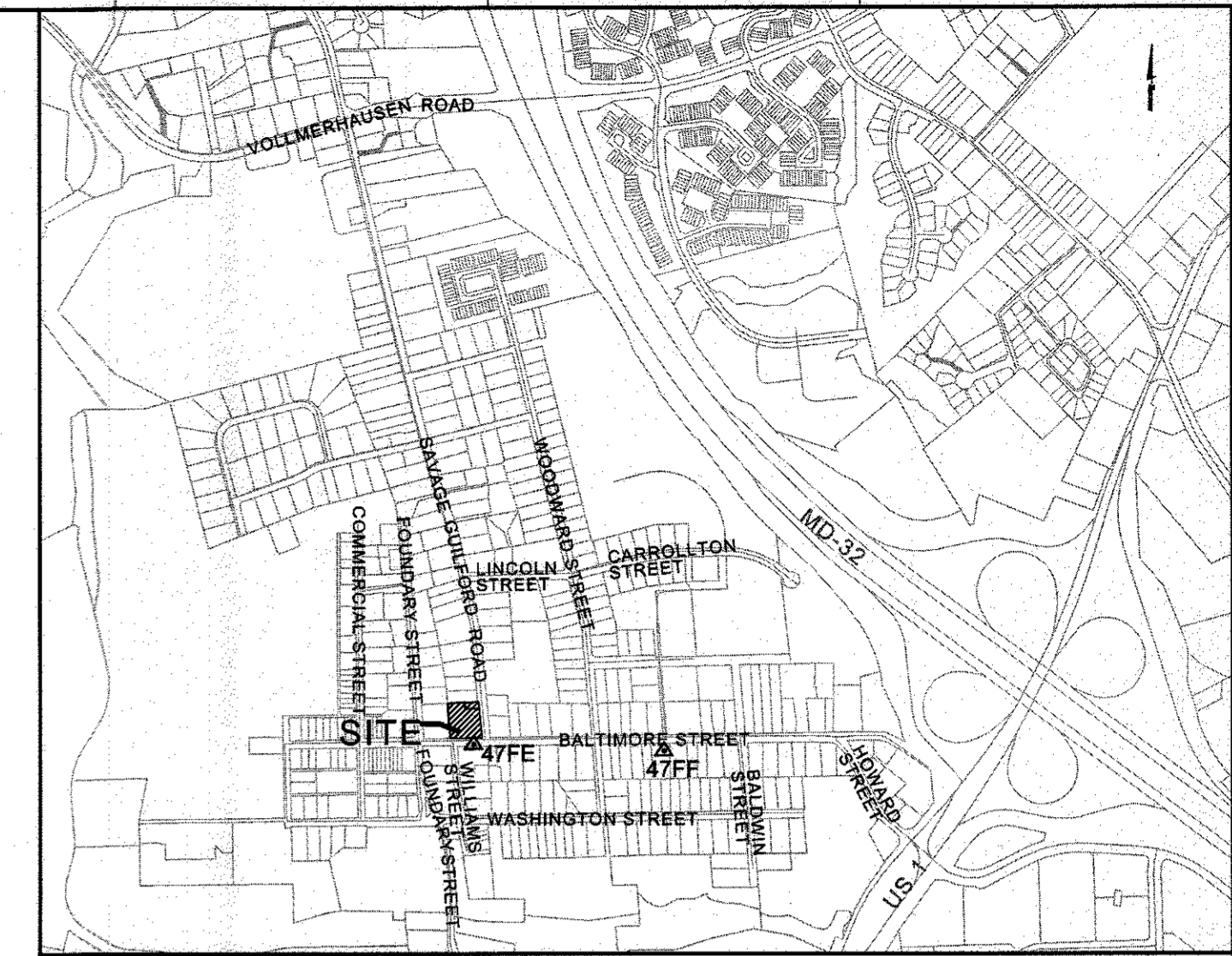
5. Implementation of ESD to the MEP: Bioretention (F-6) facility is proposed to treat the entire impervious area draining to the facility to satisfy ESD to MEP. Conceptual computations are provided demonstrating this.

There are two Capital Improvement Projects that will impact the proposed development at the site: "SAVAGE AREA COMPLETE STREETS IMPROVEMENTS HOWARD COUNTY, DPW, CAPITAL PROJECT NO. J-4248" and "SAVAGE AREA SEWER ALIGNMENT PROJECT NO. S6290" A coordination shall be made with DPW during the design and construction of this proposed development.

# ENVIRONMENTAL CONCEPT PLAN

## SAVAGE STRIP CENTER

PARCEL 458; LIBER16041 FOLIO 62  
(9002 BALTIMORE STREET)  
PARCEL 691; LIBER16041 FOLIO 62  
(8440 SAVAGE GUILFORD RD)



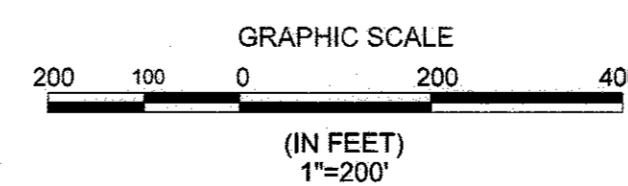
ADC MAP 40, GRID 3E VICINITY MAP SCALE: 1"=2,500'

HOWARD COUNTY GEODETIC COORDINATES

| CONTROL POINT | NORTHING   | EASTING     | ELEVATION (FT) |
|---------------|------------|-------------|----------------|
| △ 47FE        | 535856.186 | 1362155.350 | 208.294        |
| △ 47FF        | 535829.512 | 1363271.437 | 211.601        |



LOCATION MAP SCALE: 1"=200'



**SHEET INDEX**

1. COVER SHEET
2. ENVIRONMENTAL CONCEPT PLAN

**LEGEND**

- EX. SEWER/STORM MANHOLE
- EX. WATER METER
- EX. UTILITY POLE / GUY WIRE / LIGHT POST, WATER METER
- EX. SIGN
- EX. WATER VALVE
- EX. OVERHEAD WIRES
- EXISTING TREE LINE
- PROPOSED TREE LINE
- EX. TREE LOCATION
- IRON PIPE FOUND
- EXISTING CONTOUR
- EXISTING STORM DRAIN
- EXISTING SANITARY SEWER
- PROPOSED NEW SEWER MH (P.NO. S6290)
- PROPOSED NEW SEWER (P.NO. S6290)
- PROPOSED CONTOURS
- PROPERTY LINE
- EX. CHAINLINK / WOOD FENCE
- SOIL LINE
- SOIL LABEL
- UcB "C"
- DRAINAGE DIVIDE
- MICRO BIORETENTION
- L.O.D.
- LIMIT OF DISTURBANCE
- STABILIZED CONSTRUCTION ENTRANCE
- SSF
- SUPER SILT FENCE
- SF
- SILT FENCE
- IP
- INLET PROTECTION
- PAVED AREA
- SIDE WALK (CONCRETE)
- MICRO BIORETENTION
- RECONSTRUCTED AREA
- PROPOSED BUILDING

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division 7-26-17 Date  
 Chief, Division of Land Development 7-25-17 Date

**NU ENGINEERING**  
 10665 Stanhaven Place,  
 Suite 3114  
 White Plains, MD 20695  
 Phone. 240.416.9835  
 www.NUEngineering.net

| NO. | REVISIONS                     | BY | DATE       |
|-----|-------------------------------|----|------------|
| 3   | EPC COMMENTS DATED 07-03-2017 | SD | 07/22/2017 |
| 2   | EPC COMMENTS DATED 04-17-2017 | SD | 08/20/2017 |
| 1   | EPC COMMENTS DATED 07-14-2016 | SD | 03/10/2017 |

DATE: AUGUST 2016 CAD STANDARDS: 2000  
 DESIGNED: SD TECHNICIAN: RP CHECKED: SD

**MISS UTILITY NOTE**

INFORMATION CONCERNING EXISTING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS. THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF ALL EXISTING UTILITIES AND UTILITY CROSSINGS BY DIGGING TEST PITS BY HAND, WELL IN ADVANCE OF THE START OF EXCAVATION. CONTACT "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF EXCAVATION. IF CLEARANCES ARE LESS THAN SHOWN ON THIS PLAN OR TWELVE (12) INCHES, WHICHEVER IS LESS, CONTACT THE ENGINEER AND THE UTILITY COMPANY BEFORE PROCEEDING WITH CONSTRUCTION. CLEARANCES LESS THAN NOTED MAY REQUIRE REVISIONS TO THIS PLAN.

| OWNER/DEVELOPER/APPLICANT  | COPYRIGHT ADC THE MAP PEOPLE PERMITTED USE NUMBER 21001200   | PROFESSIONAL CERTIFICATION   |
|--|--|--|
| OWNER: SHREE HARI KRISHNA LLC<br>9535 N LAUREL RD.<br>LAUREL, MD 20723<br>TEL. NO. (240) 528-4312                | MAP: 0047 GRID: 0011   | I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 39366 EXPIRATION DATE: 8-16-2018 |
| DEVELOPER: MYFORD CONSTRUCTION<br>PO BOX 181<br>YORK SPRINGS, PA 17312<br>717-476-8344<br>CONTACT RICHARD MYFORD | ZONING CATEGORY: B1 TAX MAP: 47<br>PARCEL: 458, 691 GRID: 11 |  |
|  | SITE DATUM: HORIZONTAL: NAD83 VERTICAL: NAVD88               | LIBER / FOLIO: 16041 / 00062   |

**PROFESSIONAL CERTIFICATION**  
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7-22-2017

**COVER SHEET**

ENVIRONMENTAL CONCEPT PLAN  
**SAVAGE STRIP CENTER**  
 9002 BALTIMORE STREET,  
 SAVAGE MARYLAND 20863  
 (III) ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

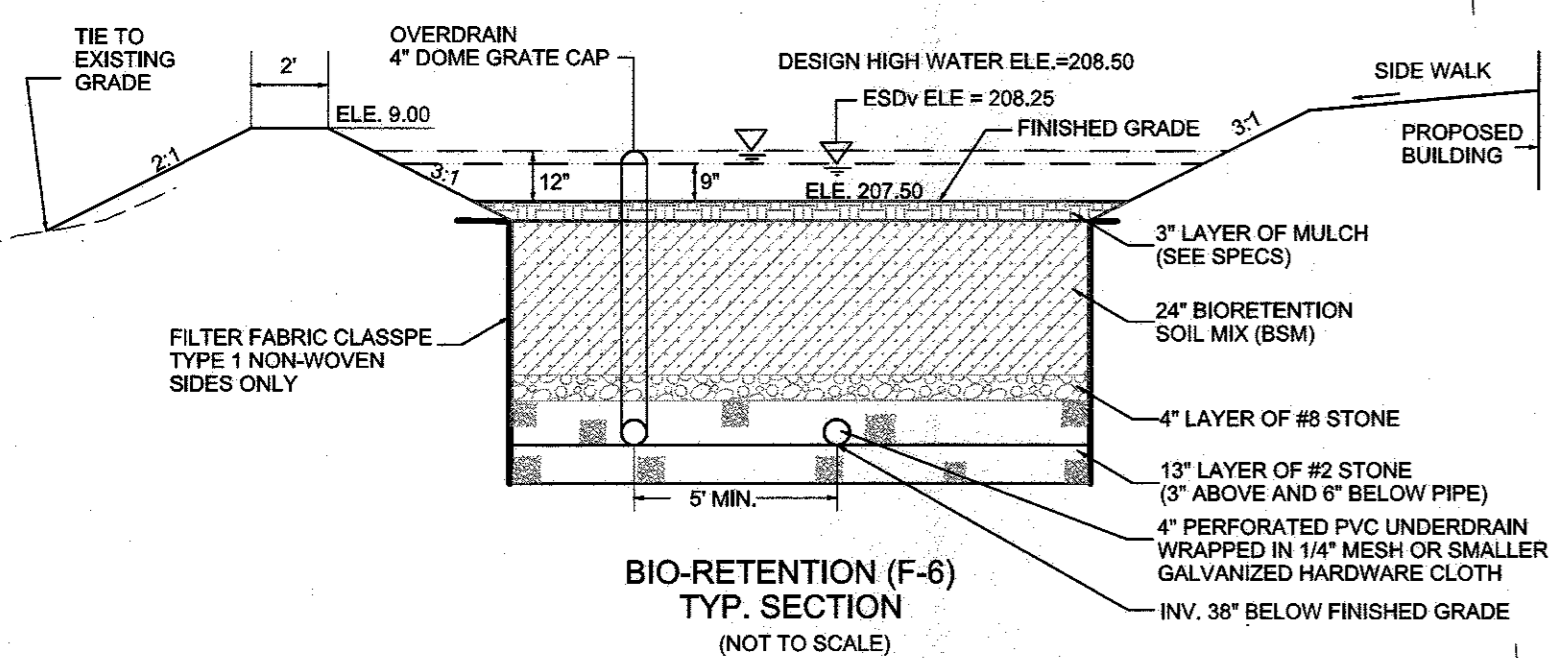
1" = AS SHOWN  
 SHEET 1 OF 2  
 PROJECT NO. 1600115-01

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| ESD FACILITY             | BIO-RETENTION (F-6) |
|--------------------------|---------------------|
| TOTAL DRAINAGE AREA (SF) | 35,758              |
| ESD SURFACE AREA (SF)    | 3,124               |
| NET DRAINAGE AREA (SF)   | 32,634              |
| MIN. ESDv (P=1.00") (CF) | 1,876.5             |
| TOTAL ESDv REQ. (CF)     | 3,549.6             |
| ESDv PROVIDED (CF)       | 4,217.1             |
| BOTTOM ELEVATION         | 207.5               |
| MAXIMUM VOLUME (CF)      | 4,878.8             |
| P.E. REQUIRED            | 2.0                 |
| P.E. PROVIDED            | 2.2                 |
| WQv REQUIRED             | 2,416.6             |
| WQv PROVIDED             | SATISFIED BY ESDv   |
| REV REQUIRED             | 301.6               |
| REV PROVIDED             | 443.0               |

| SOIL TYPES | DESCRIPTION  | HYDROLOGIC SOIL TYPE |
|------------|--|----------------------|
| UcB        | Urban land-Chillum-Beltsville complex, 0 to 5 percent slopes | C                    |

- NOTE:
- ROAD AND SIDEWALK IMPROVEMENTS IS PROPOSED ALONG SAVAGE-GUILFORD ROAD AND BALTIMORE STREET AS PER "SAVAGE AREA COMPLETE STREETS IMPROVEMENTS HOWARD COUNTY DPW, CAPITAL PROJECT NO. J-4248" COORDINATION SHALL BE MADE WITH DPW DURING THE FINAL SITE DESIGN PHASE.
  - COORDINATION SHALL BE MADE WITH THE HOWARD COUNTY REGARDING THE PROPOSED "SAVAGE AREA SEWER ALIGNMENT PROJECT NO. S6290"
  - RECONSTRUCTION OF THE PAVEMENT WITHIN THE COUNTY RIGHT-OF-WAY SHALL MATCH EXISTING PAVEMENT SECTION.
  - PERMISSION TO WORK WITHIN THE COUNTY RIGHT-OF-WAY SHALL BE OBTAINED FROM HOWARD COUNTY PRIOR TO START OF WORK.
  - ANY PERMANENT STRUCTURE WITHIN THE LOD WILL BE REMOVED OR RECONSTRUCTED.



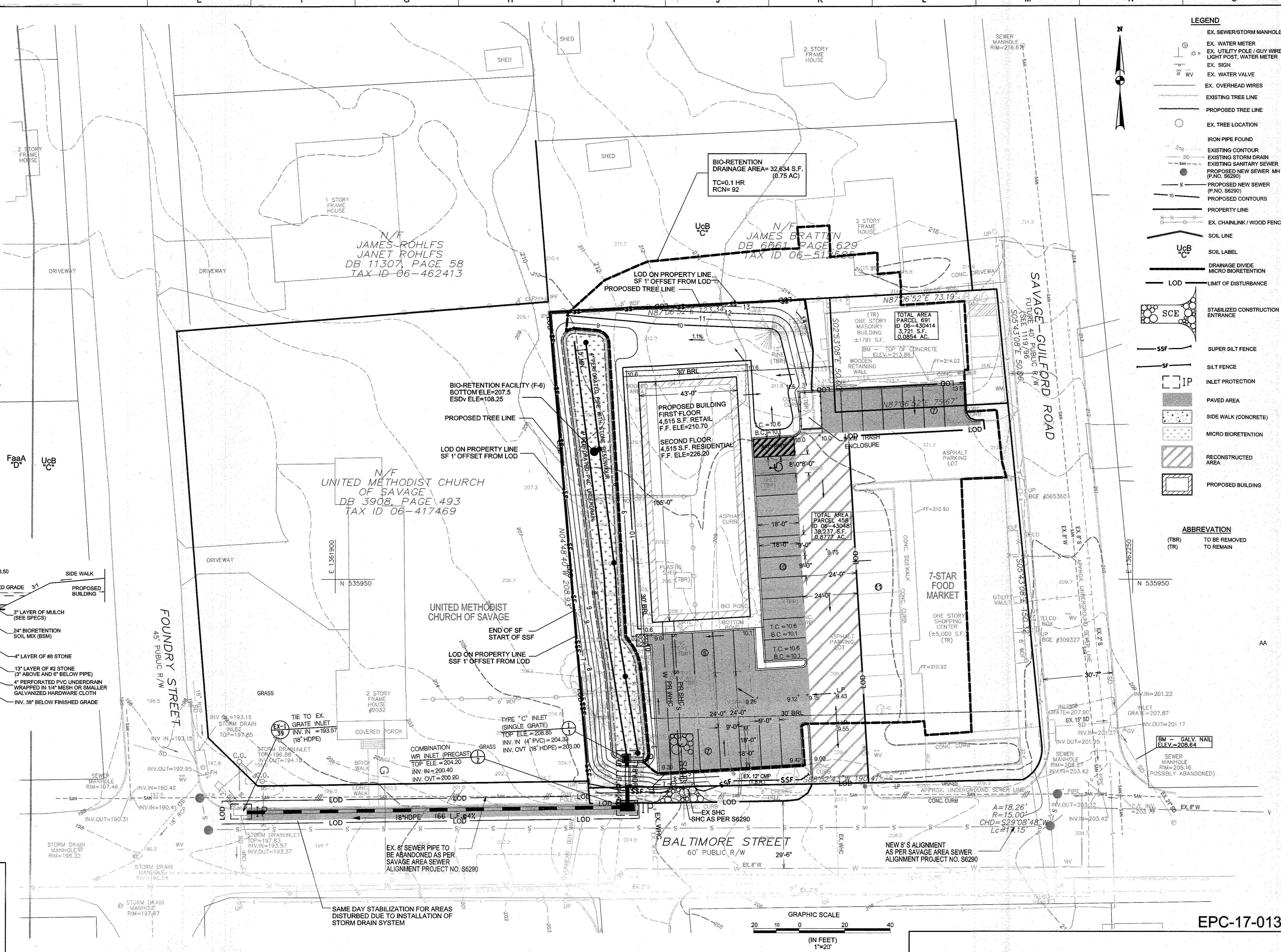
APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Chad...* 7-26-17  
 Chief, Development Engineering Division Date

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Renewable Energy  
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**OWNER/DEVELOPER/APPLICANT**

OWNER  
 SHREE HARI KRISHNA LLC  
 9535 N LAUREL RD.  
 LAUREL MD 20723  
 TEL. NO. (240) 529-4312

DEVELOPER  
 MYFORD CONSTRUCTION  
 PO BOX 181  
 YORK SPRINGS, PA 17312  
 717-476-8344  
 CONTACT RICHARD MYFORD

| COPYRIGHT ADG THE MAP PEOPLE PERMITTED USE NUMBER 21091200 | MAP 0047          | GRID 0011                   |
|--|-------------------|-----------------------------|
| ZONING CATEGORY:   | B1                | TAX MAP 47                  |
| PARCEL:  | 458, 691          | GRID 11                     |
| SITE DATUM:  | HORIZONTAL: NAD83 | LIBER / FOLIO 16041 / 00062 |
| VERTICAL:  | NAVD83            |                             |

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SHEET 2 OF 2

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