

**NOTE:**  
SEE SHEET 13 FOR STRIPING AND SIGNAGE PLAN.

NO.	DESCRIPTION	DATE
1	Add Rip-Rap Channel & Temp Storm Drain And Inlet	6-15-16
REVISIONS		
APPROVED: DEPARTMENT OF PLANNING AND ZONING		
<i>Kate Leonard</i>		7/29/14
CHIEF, DIVISION OF LAND DEVELOPMENT		DATE
<i>Chad Edwards</i>		7-16-14
CHIEF, DEVELOPMENT ENGINEERING DIVISION		DATE
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS		
<i>Holger Seelans</i>		7-8-14
CHIEF, BUREAU OF HIGHWAYS		DATE

**OXFORD SQUARE**  
 "A HOWARD COUNTY GREEN NEIGHBORHOOD"  
**Saint Margarets Boulevard**  
 (Sta. 12+52.60 to Sta. 17+23.98)  
 Zoned: T00  
 Tax Map: 38, Parcel: 761, Grid: 20  
 First Election District - Howard County, Maryland

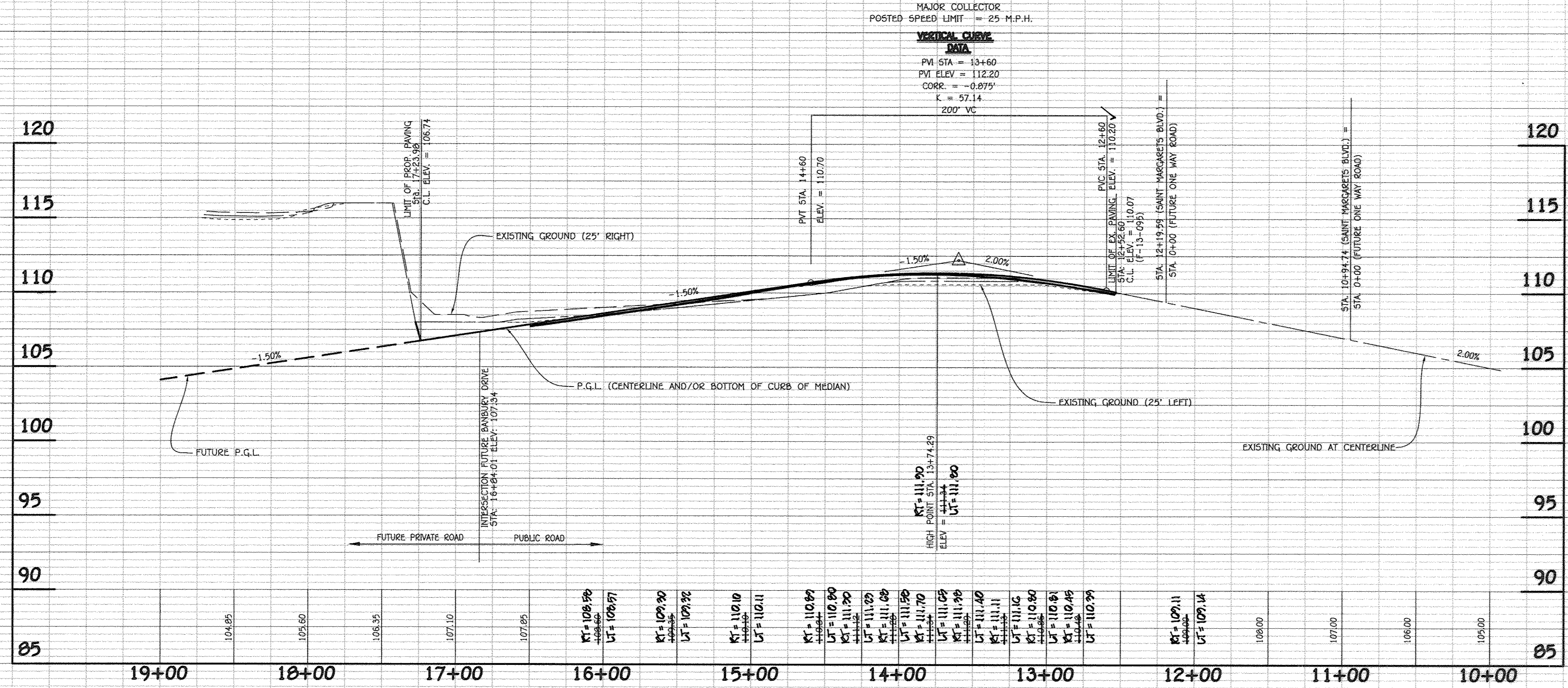
**SAINT MARGARETS BOULEVARD**  
 PLAN AND PROFILE

<b>Owner</b> Kelllogg-COP, LLC c/o David P. Scheffnacker, Jr., Managing Member 2330 West Joppa Road, Suite 190 Lutherville, Maryland 21093-4614 Ph: 410-296-3800	<b>Developer</b> Preston - Scheffnacker Properties 2330 West Joppa Road, Suite 190 Lutherville, Maryland 21093-4614 Ph: 410-296-3800
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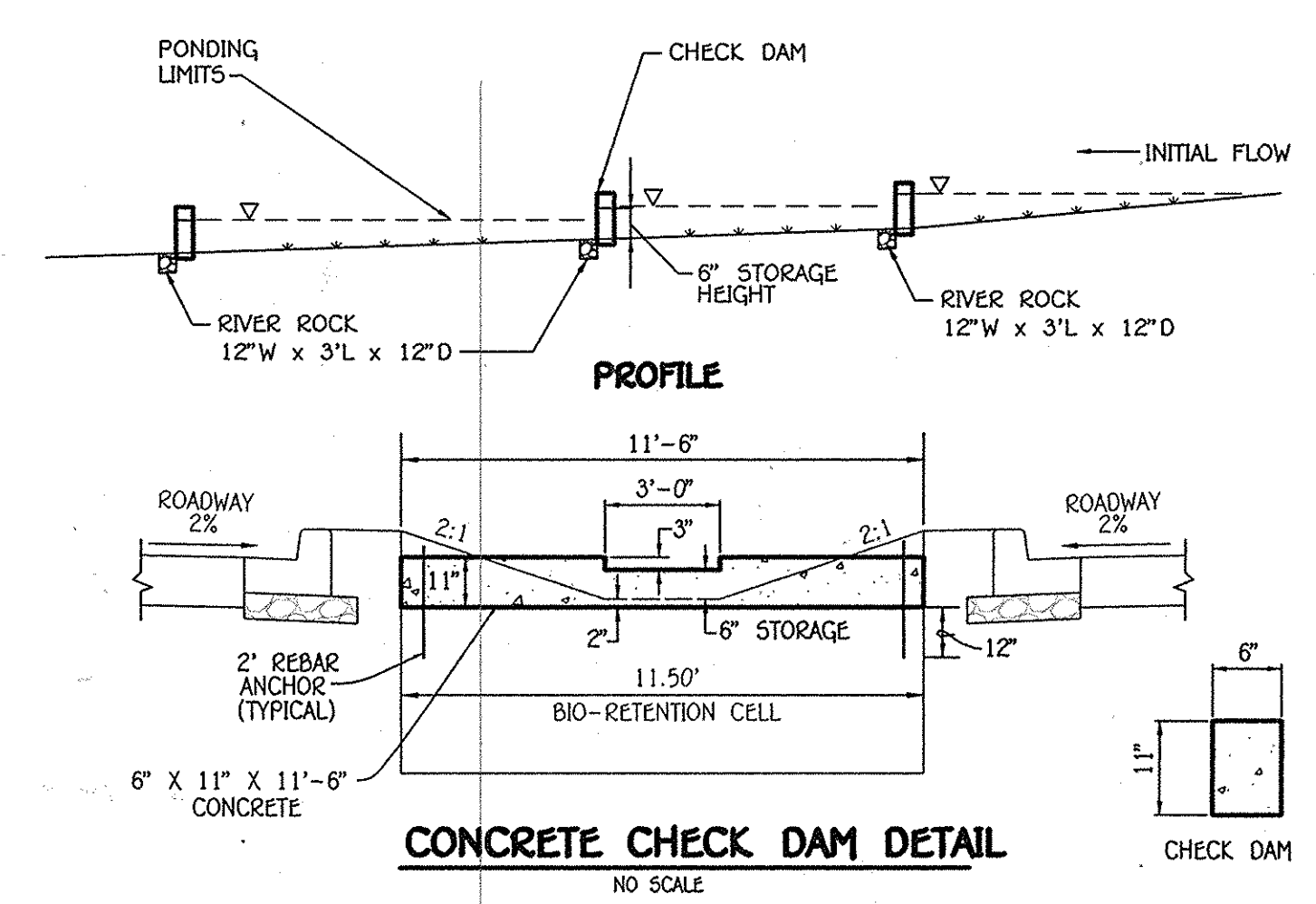
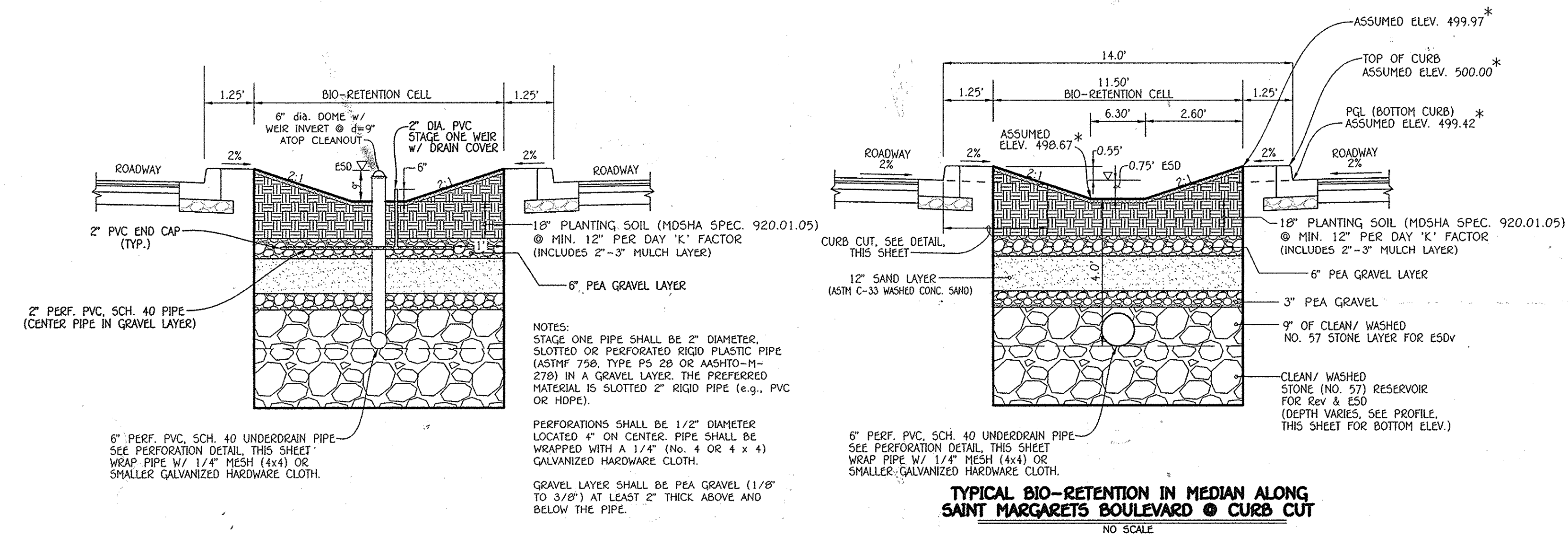
SCALE: AS SHOWN DATE: JUNE 18, 2014 DWG. NO. 2 OF 15  
 DES. R.A.L./A.M.V. DRN. J.C.L. CHK. A.M.V.

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTENNIAL SQUARE OFFICE PARK 10012 BALTIMORE MADISON PIKE  
 ELLSWORTH CITY, MARYLAND 21042  
 (410) 461-2895

**SAINT MARGARETS BOULEVARD**



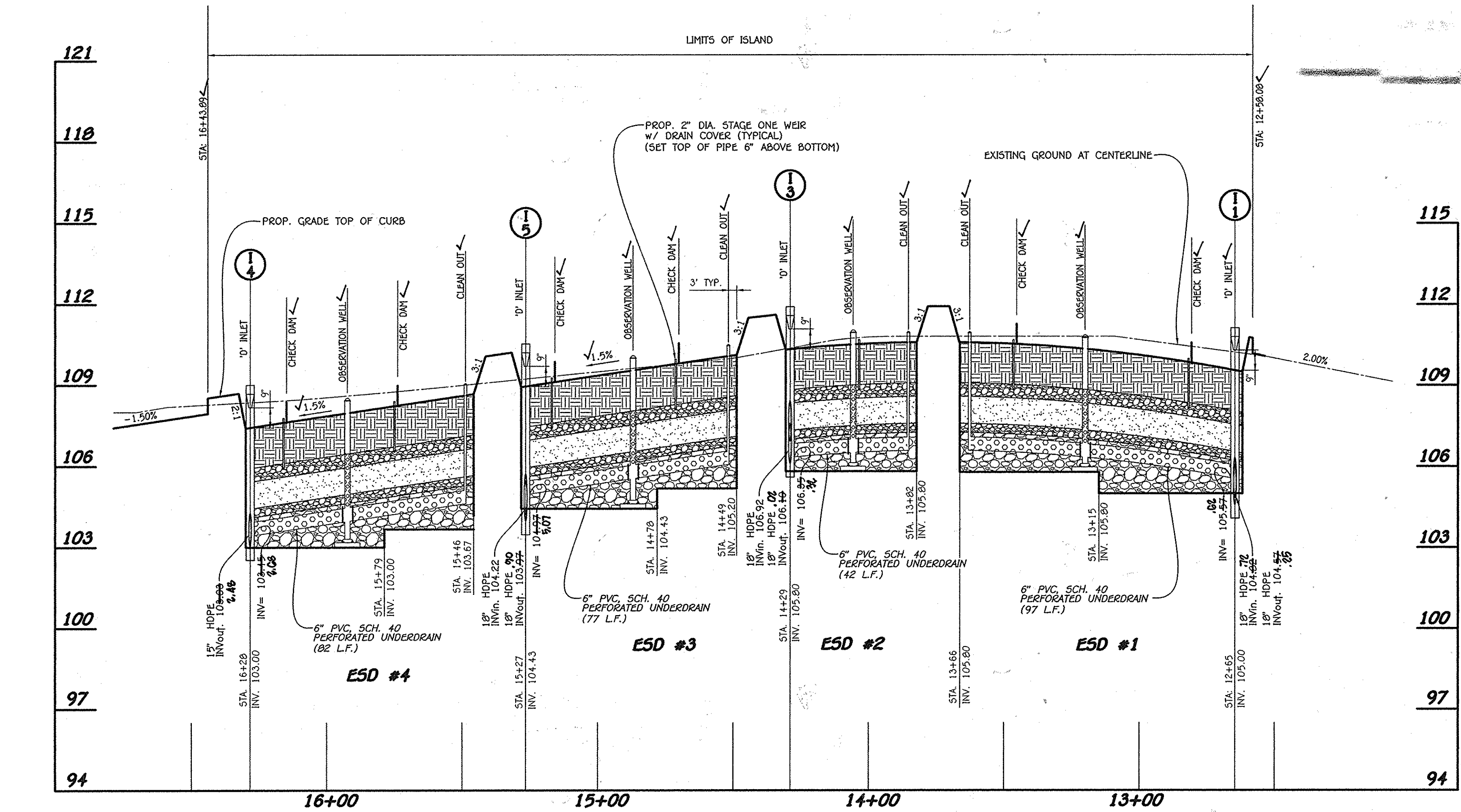
Approved: Department Of Planning And Zoning		
<i>Karl Schuler</i>	7/29/14	Date
Chief, Division Of Land Development		
<i>Chad Smith</i>	7.16.14	Date
Chief, Development Engineering Division		
Approved: Howard County Department Of Public Works		
<i>Walter Seaman</i>	7.8.14	Date
Chief, Bureau Of Highways		
REVISIONS		
NO.	DESCRIPTION	DATE



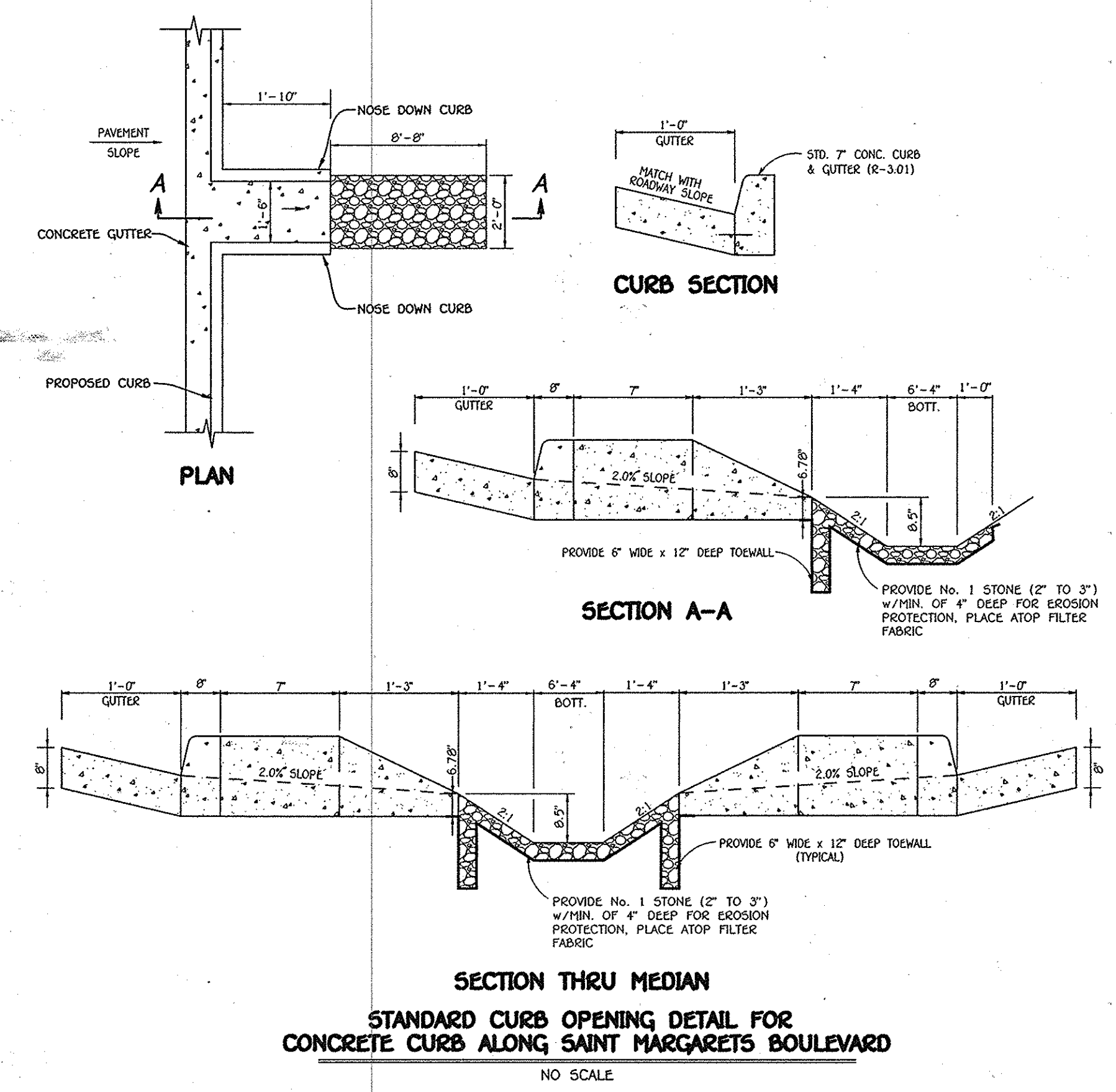
**BIO-RETENTION SECTION IN MEDIAN ALONG SAINT MARGARETS BOULEVARD @ 2<sup>ND</sup> STAGE ONE WEIR**  
NO SCALE

**TYPICAL BIO-RETENTION IN MEDIAN ALONG SAINT MARGARETS BOULEVARD @ CURB CUT**  
NO SCALE

ESDvol. PROVIDED PER LINEAR FOOT  
SURFACE STORAGE = 6.675 SQ.FT./L.F.  
SAND LAYER = 4.60 SQ.FT./L.F.  
STONE RESERVOIR (including Rev) = 11.50 SQ.FT./L.F.  
TOTAL = 22.78 SQ.FT./L.F.



**BIO-RETENTION (M-6) IN MEDIAN SECTION ALONG SAINT MARGARETS BOULEVARD**  
SCALE: HOR. : 1" = 30'  
VER. : 1" = 3'



**SECTION THRU MEDIAN STANDARD CURB OPENING DETAIL FOR CONCRETE CURB ALONG SAINT MARGARETS BOULEVARD**  
NO SCALE

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
ELLSWORTH CITY, MARYLAND 21114  
(410) 461-2295

**Owner**  
Kellogg-COP, LLC  
c/o David P. Scheffenacker, Jr.,  
Managing Member  
2330 West Joppa Road, Suite 190  
Lutherville, Maryland 21093-4614  
Ph: 410-296-3800

**Developer**  
Preston - Scheffenacker Properties  
2330 West Joppa Road, Suite 190  
Lutherville, Maryland 21093-4614  
Ph: 410-296-3800

Professional Engineer Seal for *Walter Seaman*, License No. 20748, Expiration Date 2-22-15.

DATE: 6-22-14

Professional Certification: I hereby certify that these documents were prepared by me, and that I am a duly Licensed Professional Engineer under the laws of the State of Maryland, License No. 20748, Expiration Date 2-22-15.

**STORMWATER MANAGEMENT NOTES & DETAILS**  
**OXFORD SQUARE**  
"A HOWARD COUNTY GREEN NEIGHBORHOOD"  
**Saint Margarets Boulevard**  
(Sta. 12+52.60 to Sta. 17+23.98)  
Zoned: TOD

Tax Map: 38, Parcel: 761, Grid: 20  
First Election District - Howard County, Maryland  
Date: June 18, 2014  
Sheet 3 of 15

I:\2009\09\014\dwg\Finals - Phase Three\09014.dwg\Finals - Phase Three\09014 sheet 3-4 swm plans.dwg, swm sheet 3, 6/19/2014 3:14:17 PM, 1:1

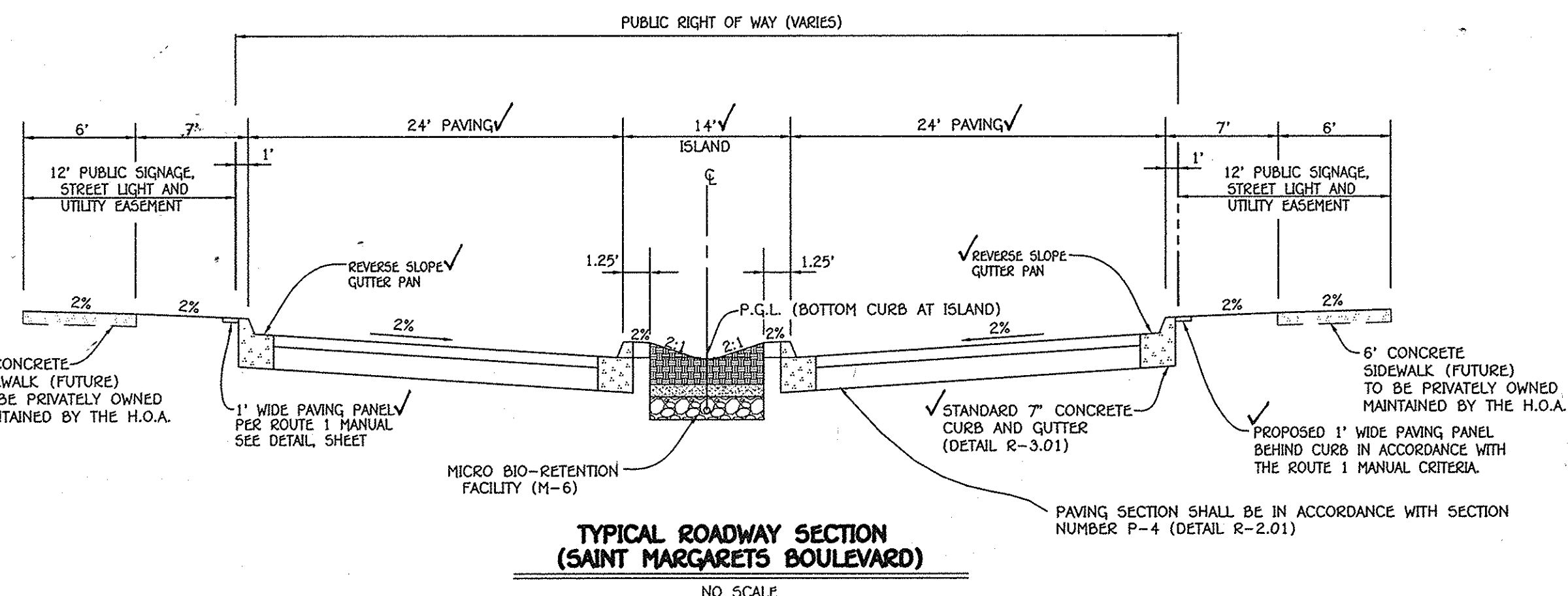


APPROVED: DEPARTMENT OF PUBLIC WORKS  
*John Seamus* 7.8.14  
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*Kat Shubert* 7/29/14  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

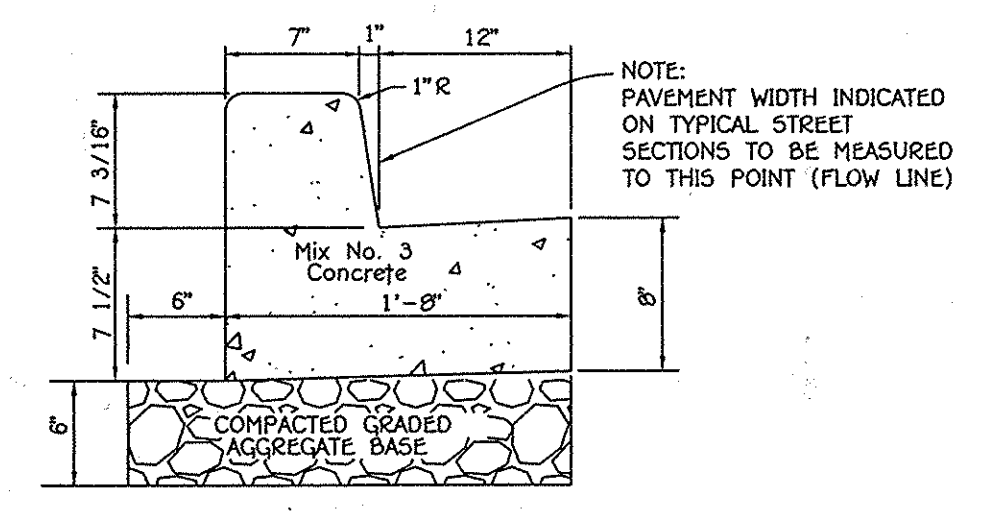
*Chad* 7.16.14  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

REVISIONS		
NO.	DESCRIPTION	DATE



SECTION NUMBER	ROAD AND STREET CLASSIFICATION	CALIFORNIA BEARING RATIO (CBR)						
		3 TO <5	5 TO <7	>7	3 TO <5	5 TO <7	>7	
P-4	MINOR COLLECTORS: NON-RESIDENTIAL MAJOR COLLECTORS:	PAVEMENT MATERIAL (INCHES)		MIN HMA WITH GAB		HMA WITH CONSTANT GAB		
		HMA SUPERPAVE FINAL SURFACE 12.5 MM, PG 64-22, LEVEL 2 (LOW ESAL)		2.0	2.0	2.0	2.0	2.0
		HMA SUPERPAVE INTERMEDIATE SURFACE 12.5 MM, PG 64-22, LEVEL 2 (LOW ESAL)		2.0	2.0	2.0	2.0	2.0
		HMA SUPERPAVE BASE 19.0 MM, PG 64-22, LEVEL 2 (LOW ESAL)		4.0	4.0	3.0	6.0	5.0
* GRADED AGGREGATE BASE (GAB)		13.0	7.0	4.0	6.0	6.0		

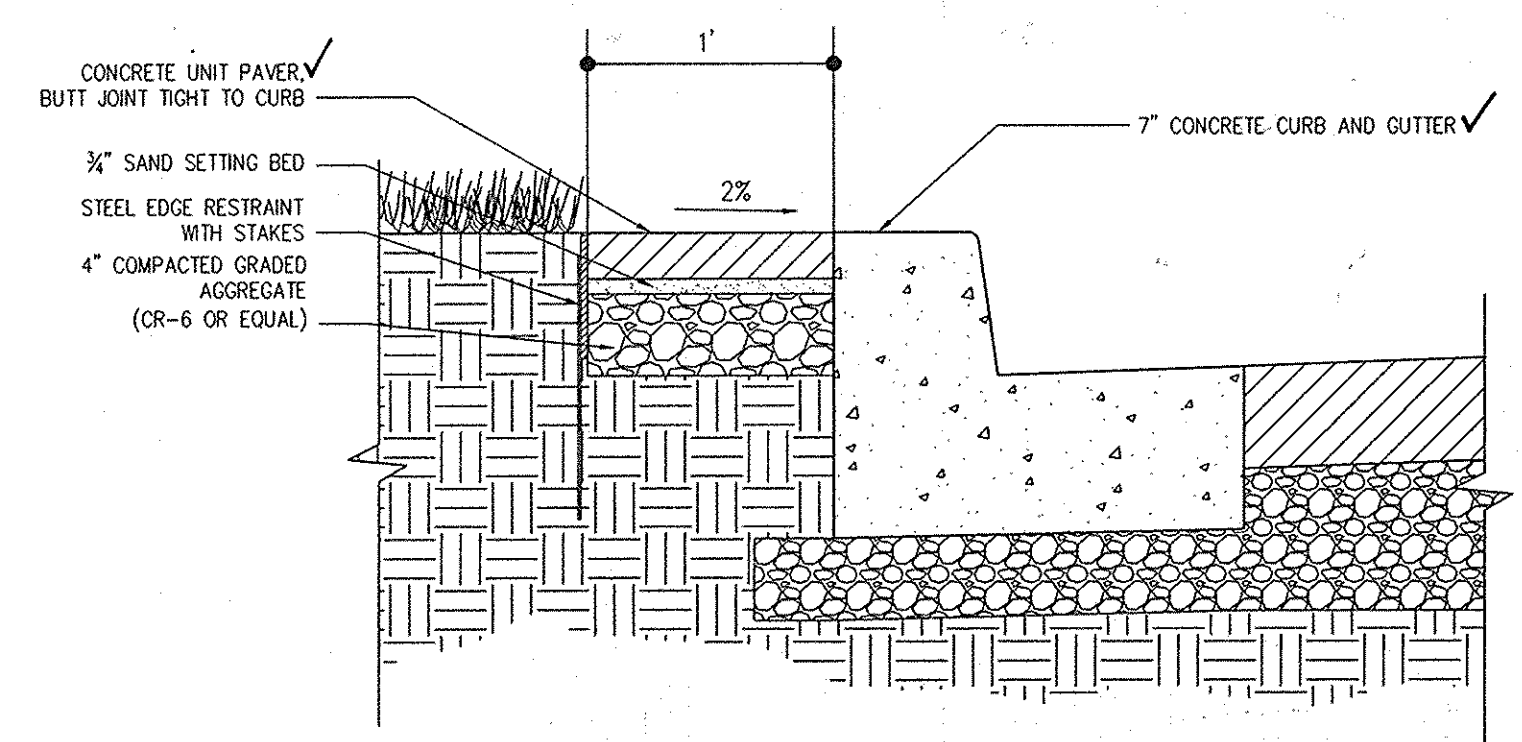
\*GAB NOTE:  
 IN ACCORDANCE WITH THIS PROJECTS GREEN NEIGHBORHOOD SITE PROGRAM, THE GRADED AGGREGATE BASE CAN INCLUDE RECYCLED CONCRETE STONE (RC) THAT MEETS HOWARD COUNTY CRITERIA.



STD. 7" CONC. CURB AND GUTTER  
 NO SCALE R-3.01

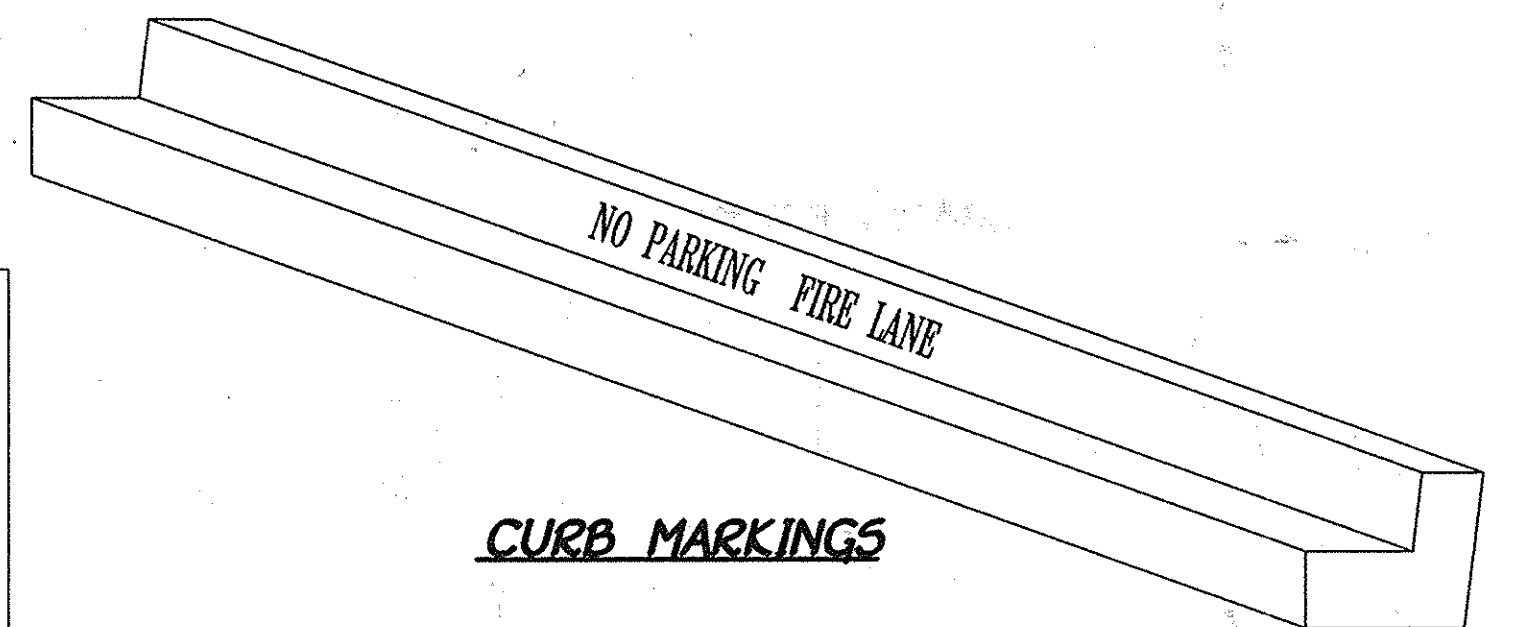
**SAINT MARGARETS BLVD. S.W.M. NOTE:**  
 MICRO BIO-RETENTION FACILITIES AND STORM DRAIN PIPE TO MANHOLE AT MEDIANS SHALL BE PRIVATELY OWNED AND MAINTAINED BY THE OXFORD SQUARE COMMERCIAL ASSOCIATION, INC.

**SIDEWALK NOTE:**  
 FUTURE CONCRETE SIDEWALKS TO BE PRIVATELY OWNED & MAINTAINED BY THE OXFORD SQUARE COMMERCIAL ASSOCIATION, INC. AS RESIDENTIAL AND COMMERCIAL LOTS/PARCELS ARE DEVELOPED, PERIMETER SIDEWALKS ON EACH LOT/PARCEL SHALL BE CONSTRUCTED WITH EACH FUTURE SITE DEVELOPMENT PLAN EXCEPT FOR THE PROPOSED SIDEWALK ON OPEN SPACE LOT 2. ADDITIONALLY, SIDEWALKS FROM RESIDENTIAL LOTS/PARCELS SHALL BE CONTINUED ON AND OVER ADJACENT RESIDENTIAL LOTS/PARCELS TO PROVIDE A CONTINUOUS WALKWAY FROM THE SUBJECT LOT/PARCEL UNDER DEVELOPMENT TO THE PUBLIC SCHOOL SITE.



1' PAVER STRIP AT SAINT MARGARETS BOULEVARD  
 NOT TO SCALE

(IN ACCORDANCE WITH THE ROUTE 1 DESIGN MANUAL CRITERIA)



NOTE:  
 FIRE LANE CURB MARKINGS ARE FOR PRIVATE ROADS ONLY.

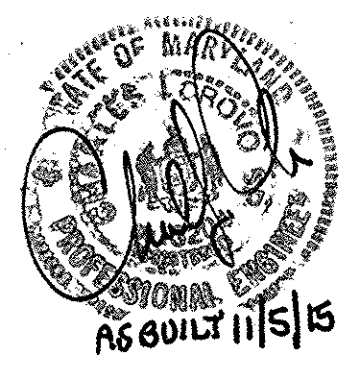


NO PARKING FIRE LANE SIGN

FISHER, COLLINS & CARTER, INC.  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 10725 BALTIMORE NATIONAL PIKE  
 ELICOTT CITY, MARYLAND 21042  
 (410) 461-2095

**Owner**  
 Kellogg-CCP, LLC  
 c/o David P. Scheffacker, Jr.,  
 Managing Member  
 2330 West Joppa Road, Suite 190  
 Lutherville, Maryland 21093-4614  
 Ph# 410-296-3800

**Developer**  
 Preston - Scheffacker Properties  
 2330 West Joppa Road, Suite 190  
 Lutherville, Maryland 21093-4614  
 Ph# 410-296-3800



ALDO M. VITUCCI, P.E.  
 6-20-14 DATE  
 I hereby certify that these documents were prepared by me, and that I am a duly Licensed Professional Engineer under the laws of the State of Maryland, License No. 20740, Expiration Date 2-22-15.

**ROADWAY DETAILS**  
**OXFORD SQUARE**  
 "A HOWARD COUNTY GREEN NEIGHBORHOOD"  
**Saint Margarets Boulevard**  
**(Sta. 12+52.60 to Sta. 17+23.98)**

Zoned: T00  
 Tax Map: 38, Parcel: 761, Grid: 20  
 First Election District - Howard County, Maryland  
 Date: June 18, 2014  
 Sheet 5 of 15

**ENGINEER'S CERTIFICATE**  
 I Herby Certify That This Plan For Erosion And Sediment Control Represents A Reasonable and Workable Plan Based On My Personal Knowledge of the Conditions and That It Was Prepared In Accordance With the Requirements of The Howard Soil Conservation District.  
 Signature of Engineer: *[Signature]* Date: 6-20-14

**CONTRACTOR'S CERTIFICATE**  
 "I/We Certify That All Development And Construction Will Be Done According To This Plan Of Development And Plan For Erosion And Sediment Control And That All Responsible Personnel Involved In The Construction Project Will Have A Certificate Of Attendance At A Department Of Natural Resources Approved Training Program For The Control Of Sediment And Erosion Before Beginning The Project. I Also Authorize Periodic On-Site Inspections By The Howard Soil Conservation District Or Their Authorized Agents, As Deemed Necessary."  
 Signature of Developer: *[Signature]* Date: 6/24/14

Approved: This Development Is Approved For Erosion And Sediment Control By  
 Signature: *[Signature]* Date: 7/2/14  
 District: Howard Soil Conservation District

Approved: Department Of Planning And Zoning  
 Signature: *[Signature]* Date: 7/2/14  
 Chief, Division Of Land Development

Approved: Howard County Department Of Public Works  
 Signature: *[Signature]* Date: 7-8-14  
 Chief, Bureau Of Highways

REVISIONS

NO.	DESCRIPTION	DATE
1	Add Rip-Rap Channel & Temp Storm Drain And Inlet	6-16-14

STONE/RIP-RAP OUTLET SEDIMENT TRAP ST-II, TRAP NO. 1	ACRES
DRAINAGE AREA - INITIAL	4.77
DRAINAGE AREA - INTERIM	---
DRAINAGE AREA - FINAL	4.75
TOTAL STORAGE REQUIRED	17,172
TOTAL STORAGE PROVIDED	39,582
NET STORAGE REQUIRED	8,596
NET STORAGE PROVIDED	12,256
DRY STORAGE REQUIRED	8,596
DRY STORAGE PROVIDED	18,422
ADDITIONAL DRY STORAGE PROVIDED FOR 1 YEAR TEMPORARY SURF	12,892
EXISTING GROUND ELEVATION AT OUTLET (WET STORAGE ELEVATION)	97.0
TRAP BOTTOM ELEVATION	94.5
TRAP BOTTOM DIMENSIONS	50 x 100
WEIR LENGTH	30
WEIR CREST (DRY STORAGE) ELEVATION	99.00
CLEANOUT ELEVATION	94.70
TOP OF EMBANKMENT ELEVATION	100.00
SIDE SLOPE	2:1
EMBANKMENT TOP WIDTH	9.5
OUTLET PROTECTION - LENGTH	20
OUTLET PROTECTION - DEPTH	19

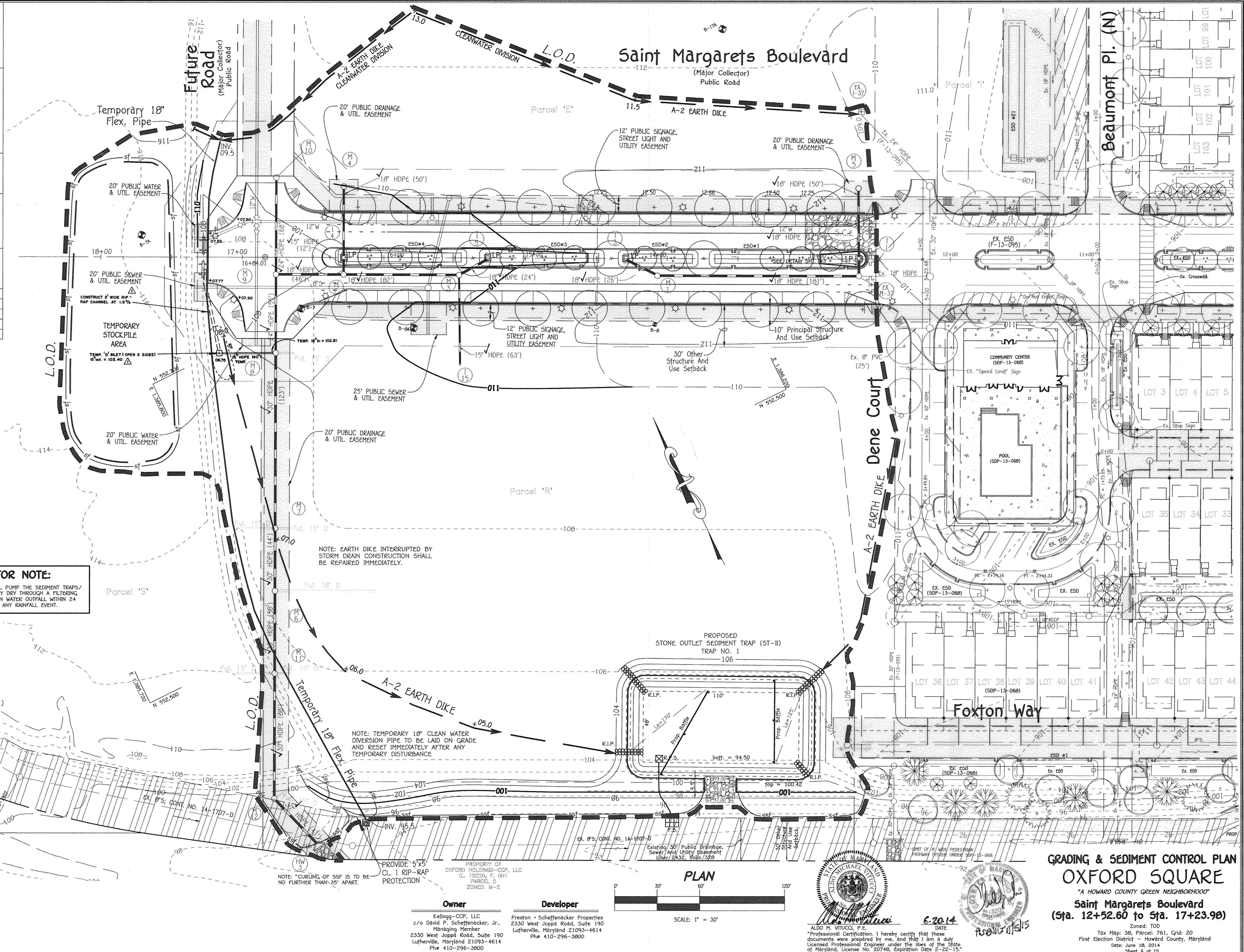
**SEDIMENT CONTROL LEGEND**

- SSF - SUPER-SILT FENCE
- S.C.E. - STABILIZED CONSTRUCTION ENTRANCE
- TYPE A-2 - EARTH DIKE
- L.O.D. - LIMIT OF DISTURBANCE
- R.P.P. - RIP-RAP INFLOW PROTECTION
- R.P.S. - REMOVEABLE PUMPING STATION
- F.B. - FILTER BAG

**CONTRACTOR NOTE:**  
 1. CONTRACTOR SHALL PUMP THE SEDIMENT TRAPS/BASINS COMPLETELY DRY THROUGH A FILTERING DEVICE TO A CLEAN WATER OUTFALL WITHIN 24 HOURS FOLLOWING ANY RAINFALL EVENT.

**LEGEND**

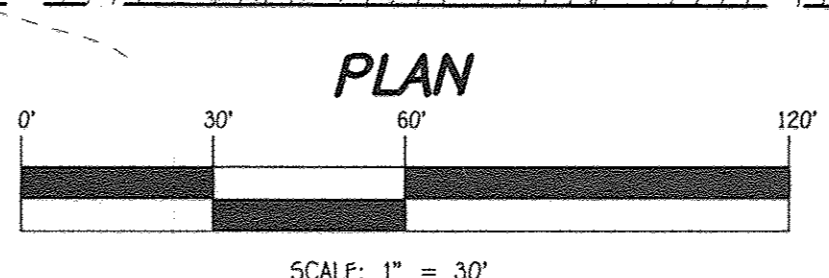
SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
-102	PROPOSED CONTOUR 2' INTERVAL
-100	PROPOSED CONTOUR 10' INTERVAL
—SF—SF—	SILT FENCE
---	DRAINAGE LIMITS
L.O.D.	LIMIT OF DISTURBANCE
G	EXISTING GASMAIN
---	EXISTING TREELINE
---	WETLANDS BUFFER
---	WETLANDS LIMITS
FP	FLOODPLAIN LIMITS
ESD #21	STORMWATER MANAGEMENT DEVICE
—	STORM DRAIN
B-33	BORING LOCATION
○	PROPOSED STREET TREE
○	EXISTING STREET TREE
○	PROPOSED STREET LIGHT
○	EXISTING STREET LIGHT



**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE PARK #100 - 10722 BALDWIN NATIONAL PIKE  
 ELLSWORTH CITY, MARYLAND 21046  
 (410) 461-2895

**Owner**  
 Kellogg - CCP, LLC  
 c/o David P. Scheffnacker, Jr.,  
 Managing Member  
 2330 West Joppa Road, Suite 190  
 Lutherville, Maryland 21093-4614  
 Ph# 410-296-3800

**Developer**  
 Preston - Scheffnacker Properties  
 2330 West Joppa Road, Suite 190  
 Lutherville, Maryland 21093-4614  
 Ph# 410-296-3800



DATE: 6-20-14  
 Signature: *[Signature]*

**GRADING & SEDIMENT CONTROL PLAN**  
**OXFORD SQUARE**  
 "A HOWARD COUNTY GREEN NEIGHBORHOOD"  
 Saint Margarets Boulevard  
 (Sta. 12+52.60 to Sta. 17+23.90)  
 Zoned: TOD  
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 Sheet 6 of 15



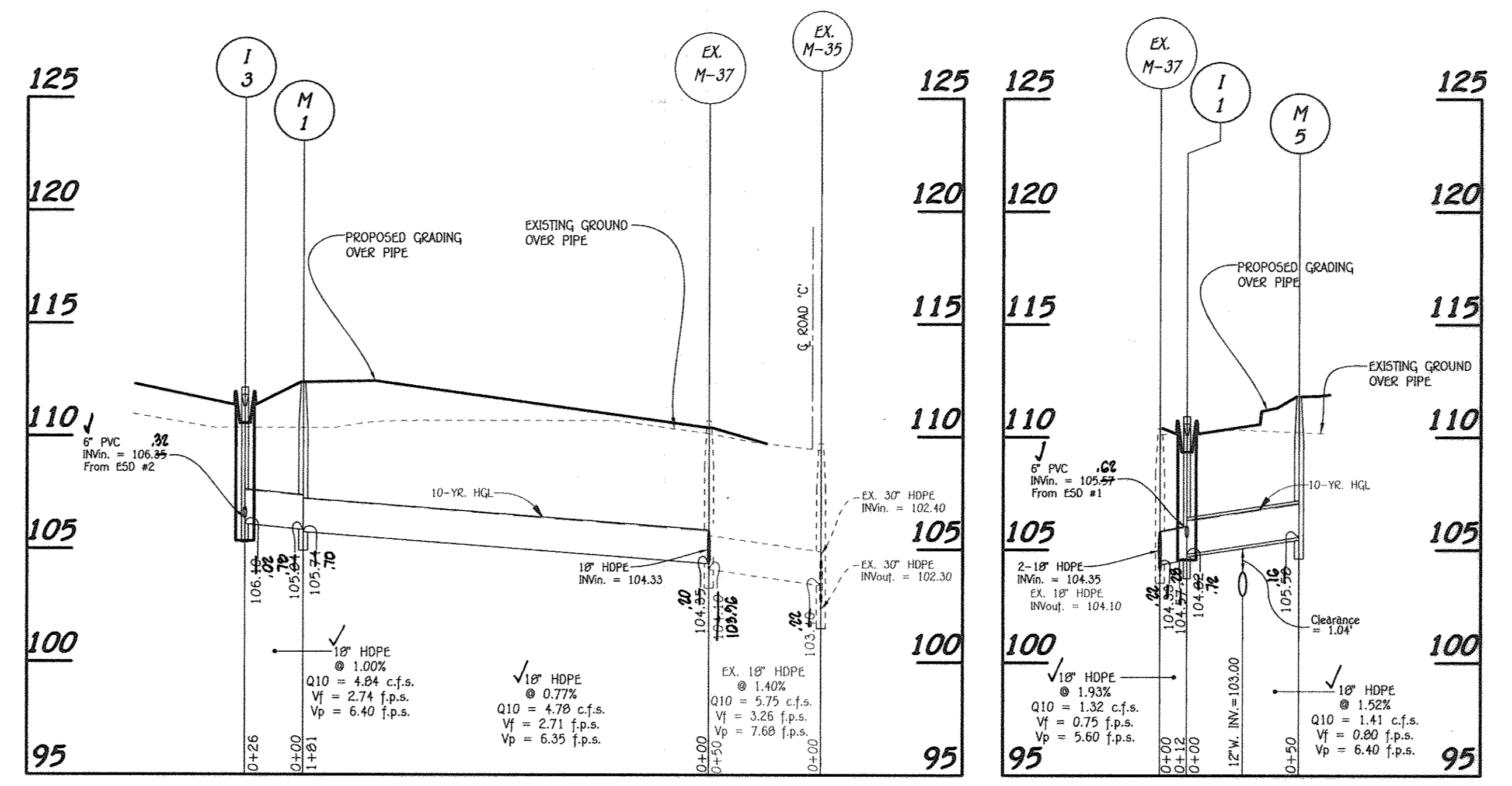




STRUCTURE SCHEDULE								
STRUCTURE NO.	TOP ELEVATION	INV. IN	INV. OUT	LOCATION	ROAD STA./COORDINATE	OFFSET	TYPE AND WIDTH	REMARKS
I-1	* 110.88.26	104.86 (18")	105.95 (6")	SANT MARGARETS BOULEVARD	√12+64.61	---	TYPE 'D' INLET	D - 4.10
I-3	* 111.10.07	106.36 (6")	106.16 (18")	SANT MARGARETS BOULEVARD	√14+29.24	---	TYPE 'D' INLET	D - 4.10
I-4	* 108.00.00	102.82 (6")	102.75 (18")	SANT MARGARETS BOULEVARD	√16+28.48	---	TYPE 'D' INLET	D - 4.10
I-5	* 109.96.75	104.27 (6")	103.15 (18")	SANT MARGARETS BOULEVARD	√15+26.79	---	TYPE 'D' INLET	D - 4.10
I-15	* 111.95.76	FUTURE 106.53 (6")	104.28 (15")	√ N 552616.97 E 1386000.93	---	---	15" BASIN	NYLOPLAST OR EQUAL
M-1	118.00.16	105.84 (18")	105.44 (18")	SANT MARGARETS BOULEVARD	√14+06.89	12.0' L	4" DIA. MANHOLE	G - 5.12
M-2	108.00.27	106.25 (18")	106.11 (18")	SANT MARGARETS BOULEVARD	√16+28.46	12.0' L	4" DIA. MANHOLE	G - 5.12
M-3	109.46.95	103.70 (18")	103.57 (18")	SANT MARGARETS BOULEVARD	√15+46.93	12.0' L	4" DIA. MANHOLE	G - 5.12
M-4	110.00.10	FUTURE	104.21 (18")	SANT MARGARETS BOULEVARD	√16+28.60	49.8' R	4" DIA. MANHOLE	G - 5.12
M-5	111.00.91	FUTURE	105.95 (18")	SANT MARGARETS BOULEVARD	√12+65.08	49.8' R	4" DIA. MANHOLE	G - 5.12
M-6	107.99.90	FUTURE 18"	99.75 (30")	√ N 552531.74 E 1385813.66	---	---	4" DIA. MANHOLE	G - 5.12
M-7	109.70.08	(2) FUTURE 15"	97.52 (30")	√ N 552571.03 E 1385833.04	---	---	4" DIA. MANHOLE	G - 5.12
M-8	108.50.70	102.81 (Temp. 18")	100.85 (24")	√ N 552681.38 E 1385807.47	---	---	4" DIA. MANHOLE	G - 5.12
M-9	107.00.00	99.03 (18")	98.16 (30")	√ N 552730.83 E 1385911.86	---	---	4" DIA. MANHOLE	G - 5.12
M-10	108.99.06	(2) FUTURE 15"	97.45 (30")	√ N 552791.69 E 1385941.80	---	---	4" DIA. MANHOLE	G - 5.12
M-11	108.77.02	(2) FUTURE 15"	97.45 (30")	√ N 552479.82 E 1385788.06	---	---	4" DIA. MANHOLE	G - 5.12
M-12	107.00.72	FUTURE 15"	96.82 (30")	√ N 552400.99 E 1385749.17	---	---	4" DIA. MANHOLE	G - 5.12
EX. M-37	110.00.47	104.33 (18")	104.10 (18")	SANT MARGARETS BOULEVARD	12+64.58	12.0' L	4" DIA. MANHOLE	G - 5.12
HW-3	99.05.92.70	94.85 (30")	---	√ N 552359.18 E 1385762.25	---	---	TYPE 'A' HEADWALL	D - 5.11

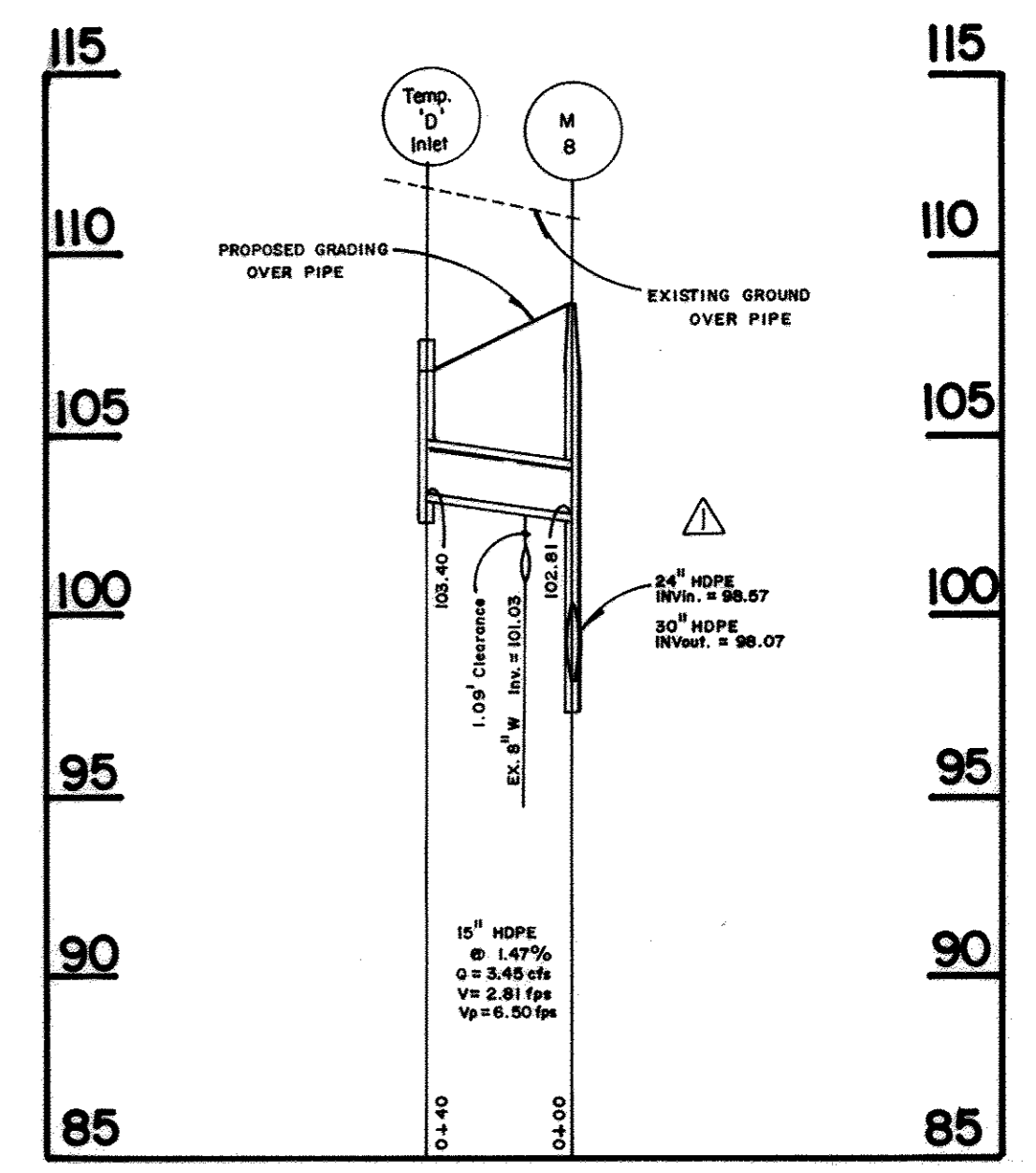
\* - DENOTES THROAT ELEVATION  
 \*\* - A.D.S. FLARED END SECTION OR EQUAL

PIPE SCHEDULE		
SIZE	CLASS	LENGTH
6"	PVC SCH. 40 (PERFORATED)	298 L.F.
15"	HOPE	125 L.F.
18"	HOPE	421 L.F.
24"	HOPE	123 L.F.
30"	HOPE	350 L.F.

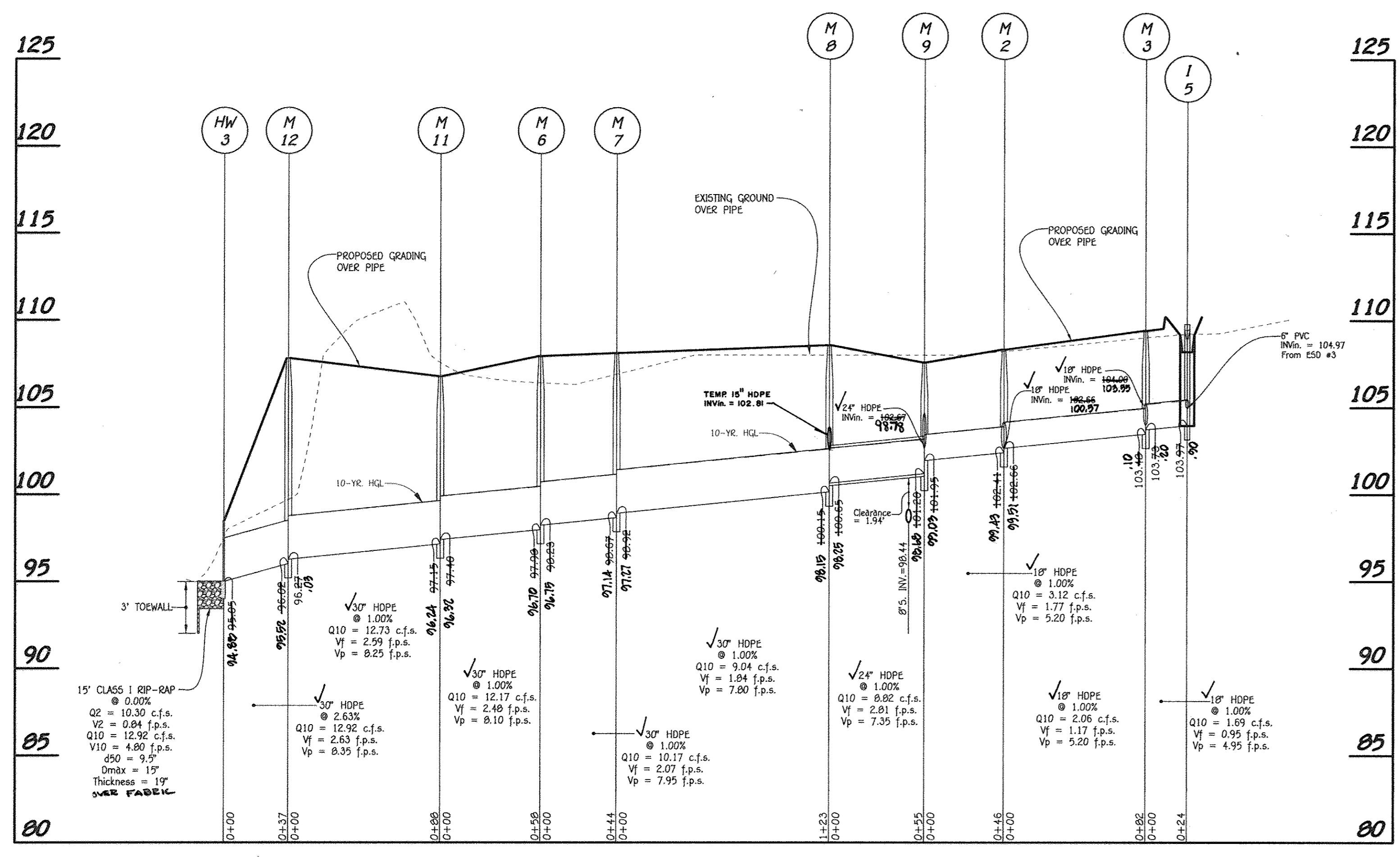


PROFILE  
 SCALE: HORIZ. : 1" = 50'  
 VERT. : 1" = 5'

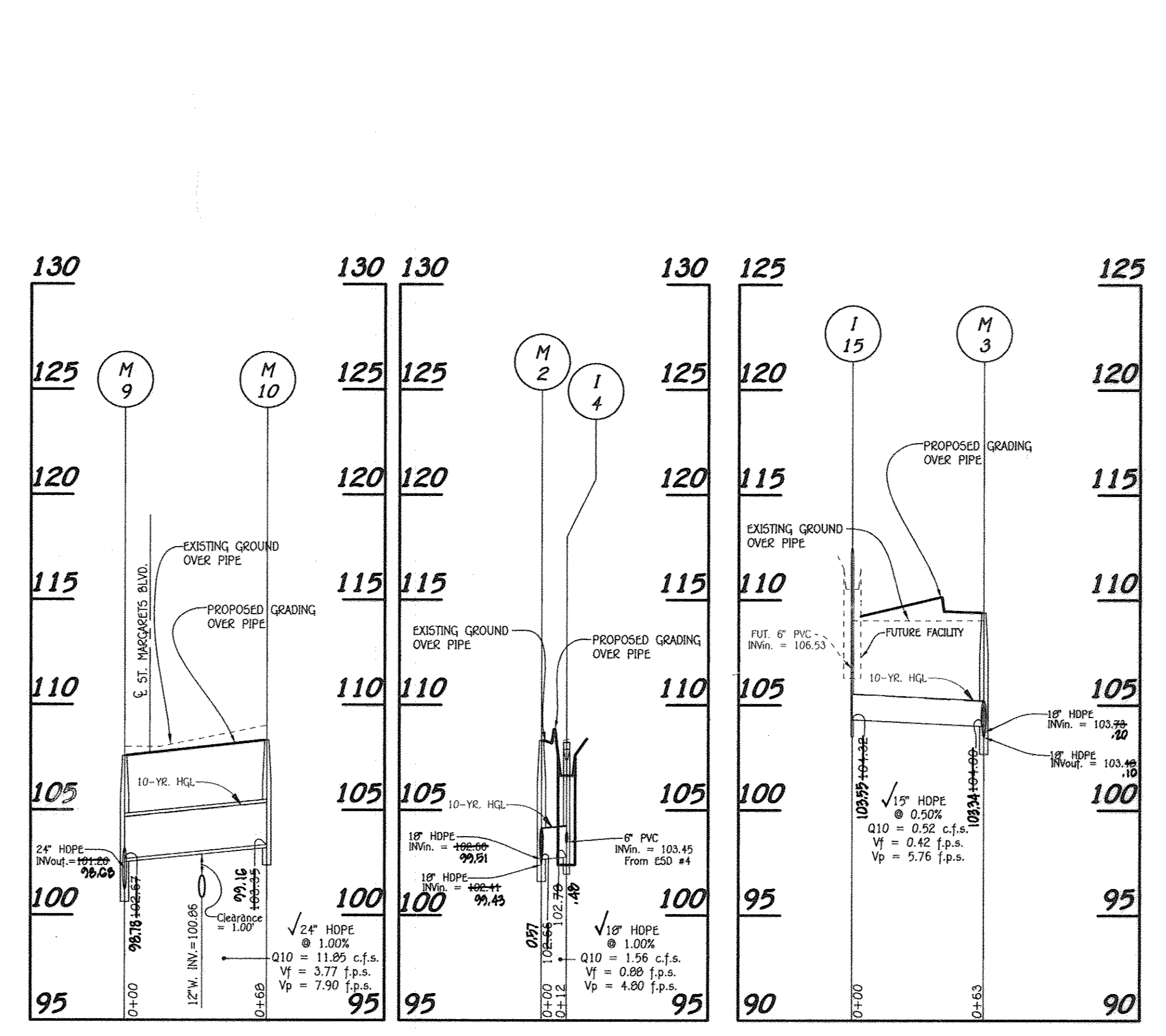
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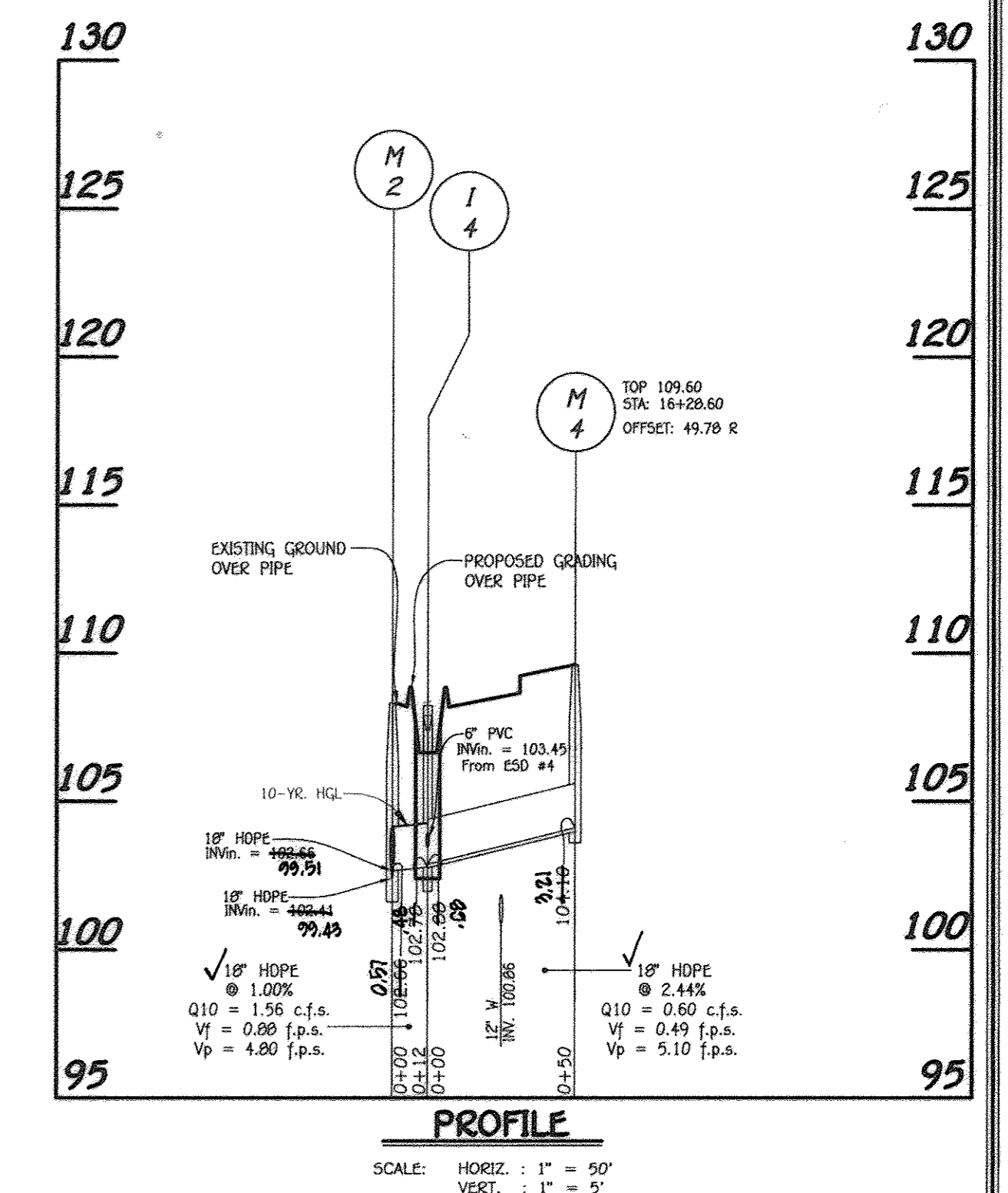
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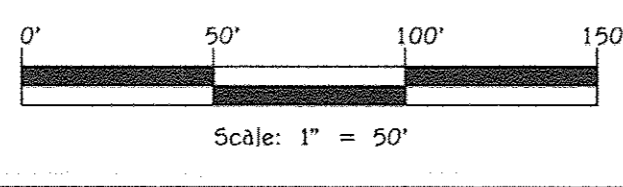
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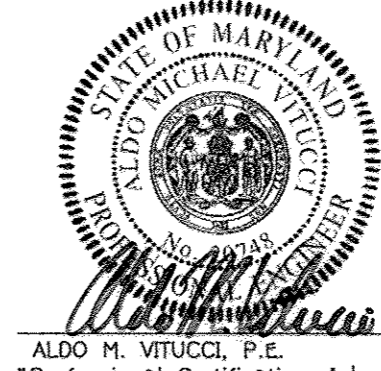
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FISHER, COLLINS & CARTER, INC.  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
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 ELKLOFF CITY, MARYLAND 21042  
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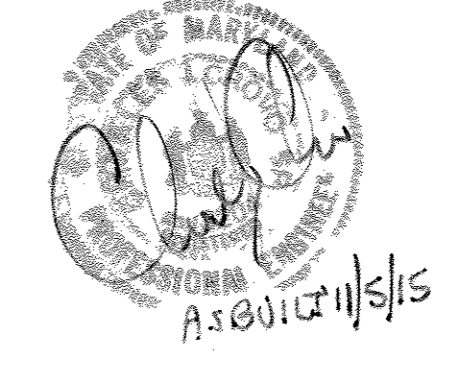


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Developer: Preston • Scheffacker Properties  
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 Ph: 410-296-3800



ALDO M. VITUCCI, P.E.  
 DATE: 6-2014  
 "Professional Certification. I hereby certify that these documents were prepared by me, and that I am a duly Licensed Professional Engineer under the laws of the State of Maryland, License No. 20748, Expiration Date 2-22-15."



STORM DRAIN PROFILES  
**OXFORD SQUARE**  
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Zoned: T00  
 Tax Map: 3B, Parcel: 761, Grid: 20  
 First Election District - Howard County, Maryland  
 Date: June 18, 2014  
 Sheet 9 of 15

AS-BUILT

F-14-01T

Approved: Department Of Planning And Zoning  
 Chief, Division Of Land Development  
 Date: 7/29/14

Approved: Chief, Development Engineering Division  
 Date: 7.16.14

Approved: Howard County Department Of Public Works  
 Chief, Bureau Of Highways  
 Date: 7.28.14

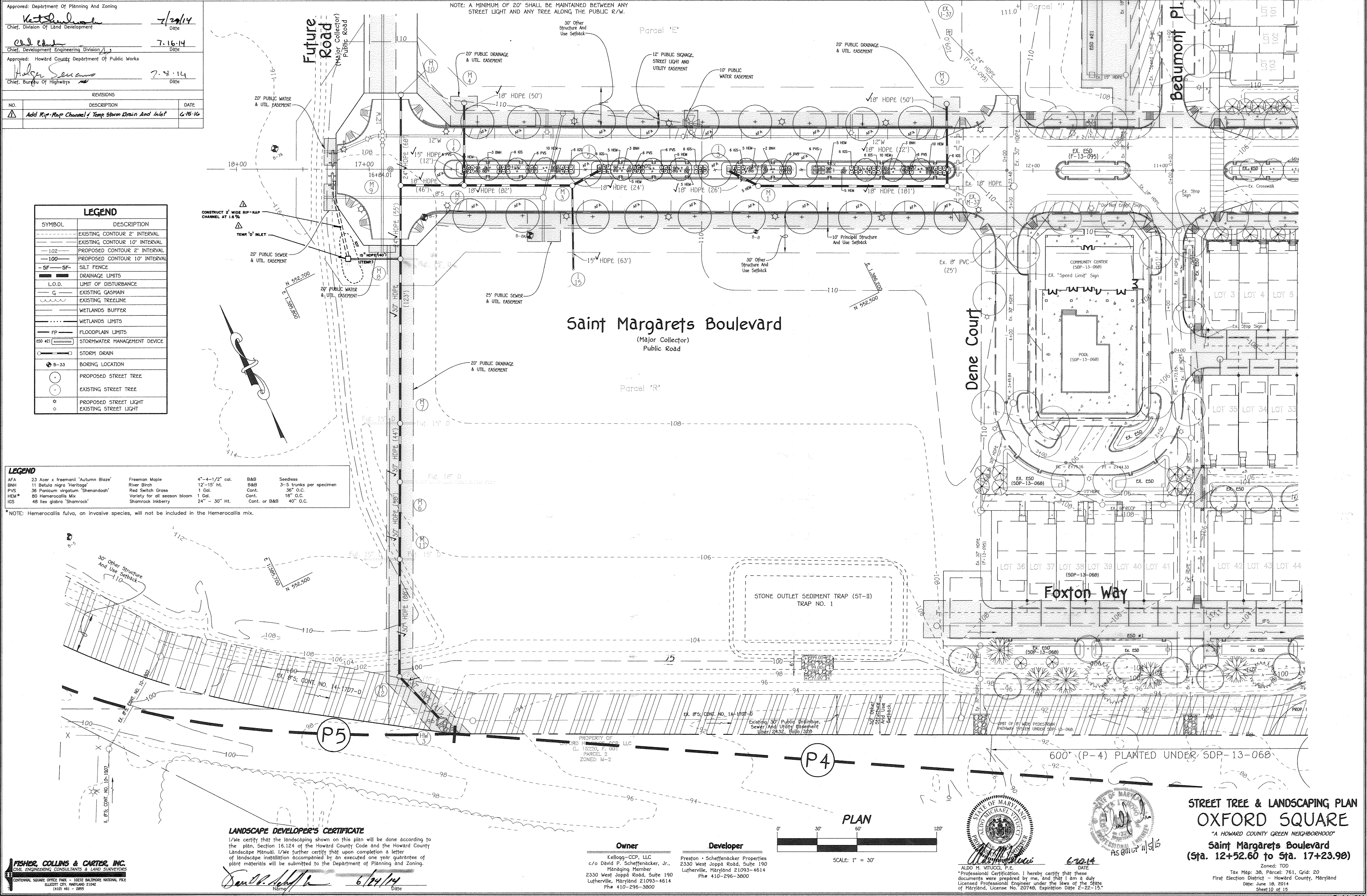
NO.	REVISIONS	DATE
1	Add Rip-Rap Channel, Temp Storm Drain And Inlet	6-15-14

NOTE: A MINIMUM OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE ALONG THE PUBLIC R/W.

SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
SF	SILT FENCE
---	DRAINAGE LIMITS
L.O.D.	LIMIT OF DISTURBANCE
G	EXISTING GASMAIN
---	EXISTING TREELINE
---	WETLANDS BUFFER
---	WETLANDS LIMITS
FP	FLOODPLAIN LIMITS
ESD #2	STORMWATER MANAGEMENT DEVICE
---	STORM DRAIN
B-33	BORING LOCATION
○	PROPOSED STREET TREE
○	EXISTING STREET TREE
○	PROPOSED STREET LIGHT
○	EXISTING STREET LIGHT

LEGEND	DESCRIPTION	PLANT SPECIES	SIZE	CONT.	PLANTING
AFA	23 Acer x freemanii 'Autumn Blaze'	Freeman Maple	4"-4-1/2" cal.	B&B	Seedless
BNH	11 Betula nigra 'Heritage'	River Birch	12"-15" ht.	B&B	3-5 trunks per specimen
PVS	36 Panicum virgatum 'Shenandoah'	Red Switch Grass	1 Gal.	Cont.	36" O.C.
HEM*	36 Hemerocallis Mix	Variety for all season bloom	1 Gal.	Cont.	18" O.C.
IGS	48 Ilex glabra 'Shamrock'	Shamrock Inkberry	24" - 30" Ht.	Cont. of B&B	40" O.C.

\*NOTE: Hemerocallis fulva, an invasive species, will not be included in the Hemerocallis mix.

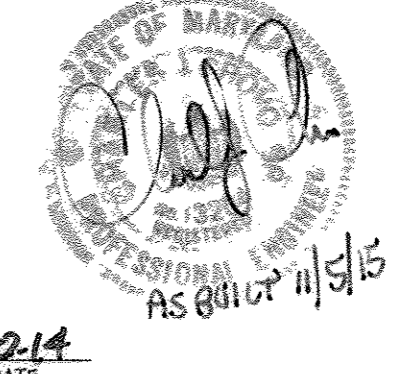
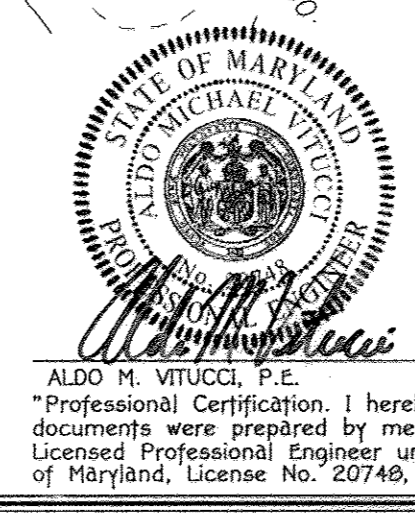
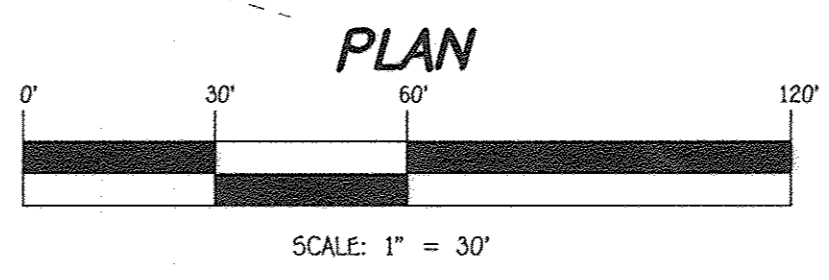


**LANDSCAPE DEVELOPER'S CERTIFICATE**  
 I/We certify that the landscaping shown on this plan will be done according to the plan, Section 16.124 of the Howard County Code and the Howard County Landscape Manual. I/We further certify that upon completion a letter of landscape installation accompanied by an executed one year guarantee of plant materials will be submitted to the Department of Planning and Zoning.

*Sanjiv K. Mittal* 6/24/14  
 Name Date

**Owner**  
 Kellogg-CCP, LLC  
 c/o David P. Scheffnacker, Jr.,  
 Managing Member  
 2330 West Joppa Road, Suite 190  
 Lutherville, Maryland 21093-4614  
 Ph# 410-296-3800

**Developer**  
 Preston - Scheffnacker Properties  
 2330 West Joppa Road, Suite 190  
 Lutherville, Maryland 21093-4614  
 Ph# 410-296-3800



**STREET TREE & LANDSCAPING PLAN**  
**OXFORD SQUARE**  
 "A HOWARD COUNTY GREEN NEIGHBORHOOD"  
 Saint Margarets Boulevard  
 (Sta. 12+52.60 to Sta. 17+23.98)

Zoned: TOD  
 Tax Map: 38, Parcel: 761, Grid: 20  
 First Election District - Howard County, Maryland  
 Date: June 18, 2014  
 Sheet 10 of 15

Approved: Department Of Planning And Zoning  
 Chief, Division Of Land Development  
 Date: 7/29/14

Approved: Chief, Development Engineering Division  
 Date: 7-16-14

Approved: Howard County Department Of Public Works  
 Chief, Bureau Of Highways  
 Date: 7-8-14

REVISIONS		
NO.	DESCRIPTION	DATE

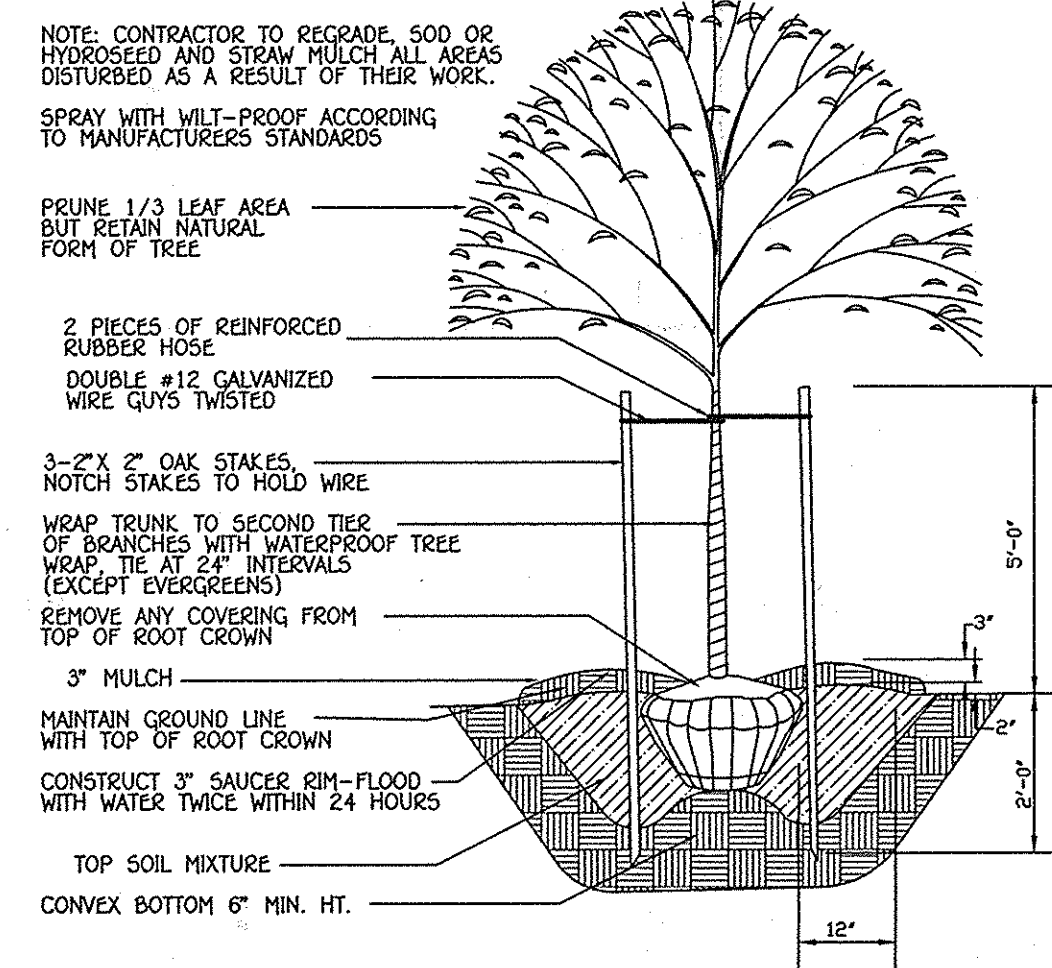
### PLANTING SPECIFICATIONS

Plants, related material, and operations shall meet the detailed description as given on the plans and as described herein. All plant material, unless otherwise specified, shall be nursery grown, uniformly branched, have a vigorous root system, and shall conform to the species, size, root and shape shown on the plant list and the American Association of Nurserymen (AAN) Standards. Plant material shall be healthy, vigorous, free from defects, decay, defoliating roots, sun scald injuries, abrasions of the bark, plant disease, insect pest eggs, borers and all forms of insect infestations or objectionable disfigurements. Plant material that is weak or which has been cut back from larger grades to meet specified requirements will be rejected. Trees with forked leaders will not be accepted. All plants shall be freshly dug and not stored in cold storage for more than 30 days. Unless otherwise specified, all general conditions, planting operations, details and planting specifications shall conform to "Landscape Specification Guidelines for Baltimore-Washington Metropolitan Area", hereinafter "Landscape Guidelines" approved by the Landscape Contractors Association of Metropolitan Washington and the Potomac Chapter of the American Society of Landscape Architects, latest edition, including all agenda. Contractor shall be required to guarantee all plant material for a period of one year after date of acceptance in accordance with the appropriate section of the Landscape Guidelines. Contractor's attention is directed to the maintenance requirements found within the one year specifications including watering and replacement of specified plant material. Contractor shall be responsible for notifying utility companies, utility contractors and "Miss Utility" a minimum of 48 hours prior to beginning any work. Contractor may make minor adjustments in spacing and location of plant material to avoid conflicts with utilities. Damage to existing structure and utilities shall be repaired at the expense of the Contractor. Protection of existing vegetation to remain shall be accomplished by the temporary installation of 4 foot high snow fence or blaze orange safety fence at the drip line. Contractor is responsible for installing all material in the proper planting season for each plant type. All planting is to be completed within the growing season of completion of site construction. Bid shall be based on actual site conditions. No extra payment shall be made for work arising from site conditions differing from those indicated on drawings and specifications. Plant quantities are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on plan and those shown on the plant list, the quantities on the plant list precedence. All shrubs shall be planted in continuous trenches or prepared planting beds and mulched with composted hardwood mulch as details and specified except where noted on plans. Positive drainage shall be maintained in planting beds 2 percent slope. Planting mix shall be as follows: Deciduous Plants - Two parts topsoil, one part well-rotted cow or horse manure, Add 3 lbs. of standard fertilizer per cubic yard of planting mix. Evergreen Plants - Two parts topsoil, one part humus or other approved organic material. Add 3 lbs. of evergreen grade fertilizer per cubic yard of planting mix. Topsoil shall conform to the Landscape Guidelines. Weed Control - Incorporate a pre-emergent herbicide into the planting bed following recommended rates on the label. Caution - Be sure to carefully check the chemical used to assure its adaptability to the specific ground cover to be treated. All areas within contract limits disturbed during or prior to construction not designated to receive plants and mulch shall be graded and seeded. This plan is intended for landscape use only. See other plan sheets for more information on grading, sediment control, layout, etc.

### NOTES:

Should any tree designated for preservation for which landscaping credit is given, die prior to release of bonds, the owner will be required to replace the tree with the equivalent species or with a tree which will obtain the same height, spread and growth characteristics. The replacement tree must be a minimum of 3 inches in caliper and installed as required in the Howard County landscape manual. At the time of plant installation, all trees listed and approved on the Landscape Plan, shall comply with the proper height requirement in accordance with the Howard County Landscape Manual. In addition, no substitutions or relocations of the required plantings may be made without prior review and approval from the Department of Planning and Zoning. Any deviations from the approved Landscape Plan may result in denial or delay in the release of landscape surety until such time as all required materials are planted and/or revisions are made to the road drawing plans.

The Owner, tenants and/or their agents shall be responsible for maintenance of the required perimeter landscaping. All plant materials shall be maintained in good growing condition, and when necessary, replaced with new materials to ensure continued compliance with applicable regulations. All the other required landscaping shall be permanently maintained in good condition, and when necessary, repaired or replaced.



SHADE TREE PLANTING DETAIL  
NO SCALE

PLANT MATERIAL-BIO-RETENTION ESD No. 1		
QUANTITY	NAME	MAXIMUM SPACING (FT.)
25	MIXED PERENNIALS	18"-36" o.c.
30	SHRUBS	40" o.c.

PLANT MATERIAL-BIO-RETENTION ESD No. 2		
QUANTITY	NAME	MAXIMUM SPACING (FT.)
10	MIXED PERENNIALS	18"-36" o.c.
12	SHRUBS	40" o.c.

PLANT MATERIAL-BIO-RETENTION ESD No. 3		
QUANTITY	NAME	MAXIMUM SPACING (FT.)
20	MIXED PERENNIALS	18"-36" o.c.
24	SHRUBS	40" o.c.

PLANT MATERIAL-BIO-RETENTION ESD No. 4		
QUANTITY	NAME	MAXIMUM SPACING (FT.)
20	MIXED PERENNIALS	18"-36" o.c.
24	SHRUBS	40" o.c.

NOTES:  
 Plant Material Must Cover At Least 50% Of The Surface Area Of The Bio-retention  
 See Plant Material Charts For Quantities And Spacing

PERIMETER CATEGORY	SCHEDULE A PERIMETER LANDSCAPE EDGE (PER F-12-026)							
	P1	P2	P3	P4	P5	P6	P7	P8
LANDSCAPE TYPE	Front To Roadway (residential)	Adjacent To Roadway (non-residential)	Non-Res. Adjacent To Non-Res.	Non-Res. Adjacent To Non-Res.	Non-Res. Adjacent To Non-Res.	Non-Res. Adjacent To Non-Res.	Non-Res. Adjacent To Non-Res.	Non-Res. Adjacent To Non-Res.
LINEAR FEET OF PERIMETER	N/A	B	C	C	C	C	C	C
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	-	NO	NO	NO	NO	YES-350'	100% CREDIT	YES-225'
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE IF NEEDED)	-	NO	NO	NO	NO	NO	NO	NO
NUMBER OF PLANTS REQUIRED								
SHADE TREES	0	10	12	30	23	32	0	46
EVERGREEN TREES	0	13	24	60	47	64	0	91
SHRUBS	-	-	-	-	-	-	-	-
NUMBER OF PLANTS PROVIDED								
SHADE TREES	0	-	-	-	-	-	0	-
EVERGREEN TREES	0	-	-	-	-	-	-	-
OTHER TREES (2:1 SUBSTITUTION)	-	-	-	-	-	-	-	-
SHRUBS (10:1 SUBSTITUTION)	-	-	-	-	-	-	-	-
(DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	-	-	-	-	-	-	-	-

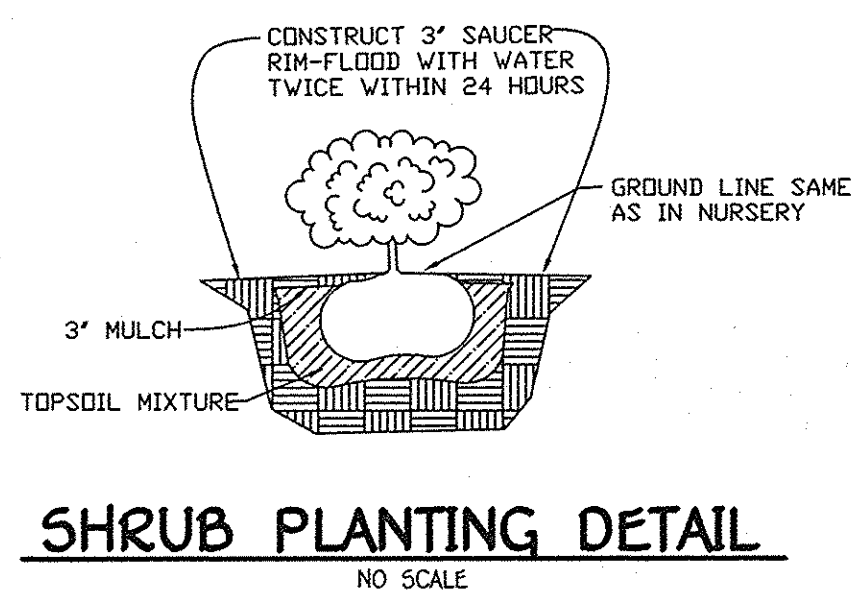
NOTE: SCHEDULE 'A' LANDSCAPING SHALL BE DEFERRED UNTIL SITE PLAN STAGE.

STREET TREE SCHEDULE			
QTY. REQUIRED	BOTANICAL AND COMMON NAME	SIZE	COMMENTS
1/40 LF. = 471/40 x 2 = 24 trees	Betula Nigra 'heritage' River Birch Acer x Frémontii 'Autumn Blaze' Autumn Blaze Freeman Maple (seedless only)	10'-12' HT. 3 Trunks (min.) 4" - 4 1/2" CAL.	ALONG PUBLIC R/W SAINT MARGARETS BLVD. (SEE PLAN)

NOTE: FINAL PLACEMENT OF STREET TREES WILL OCCUR IN THE FIELD AND BE PLACED A MINIMUM OF 30 FEET FROM ALL SIGNS AND INTERSECTIONS WHEN PLANTED BETWEEN SIDEWALK AND CURB, BE LOCATED WITH CONSIDERATION OF UNDERGROUND UTILITIES AND STRUCTURES AND MAINTAIN A MINIMUM 5 FEET DISTANCE ON CENTER FROM A DRAIN INLET STRUCTURE, 5 FEET FROM AN OPEN SPACE ACCESS STRIP AND 10 FEET FROM A DRIVEWAY.

STREET TREE PLANT LIST			
SYMBOL	QTY.	BOTANICAL AND COMMON NAME	SIZE
(B)	11	Betula Nigra 'heritage' River Birch	10'-12' HT. 3 Trunks (min.)
(A)	23	Acer x Frémontii 'Autumn Blaze' Autumn Blaze Freeman Maple (seedless only)	4" - 4 1/2" CAL.

FINANCIAL SURETY FOR THE REQUIRED 24 STREET TREES AND 10 ADDITIONAL TREES PROVIDED TO MEET GN CREDIT E-1 HAS SHALL BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$10,000.00



SHRUB PLANTING DETAIL  
NO SCALE

### LANDSCAPE DEVELOPER'S CERTIFICATE

I/We certify that the landscaping shown on this plan will be done according to the plan, Section 16.124 of the Howard County Code and the Howard County Landscape Manual. I/We further certify that upon completion a letter of landscape installation accompanied by an executed one year guarantee of plant materials will be submitted to the Department of Planning and Zoning.

David P. Scheffacker 6/24/14  
 Name Date

**Owner**  
 Kellogg-CCP, LLC  
 c/o David P. Scheffacker, Jr.,  
 Managing Member  
 2330 West Joppa Road, Suite 190  
 Lutherville, Maryland 21093-4614  
 Ph: 410-296-3800

**Developer**  
 Preston • Scheffacker Properties  
 2330 West Joppa Road, Suite 190  
 Lutherville, Maryland 21093-4614  
 Ph: 410-296-3800



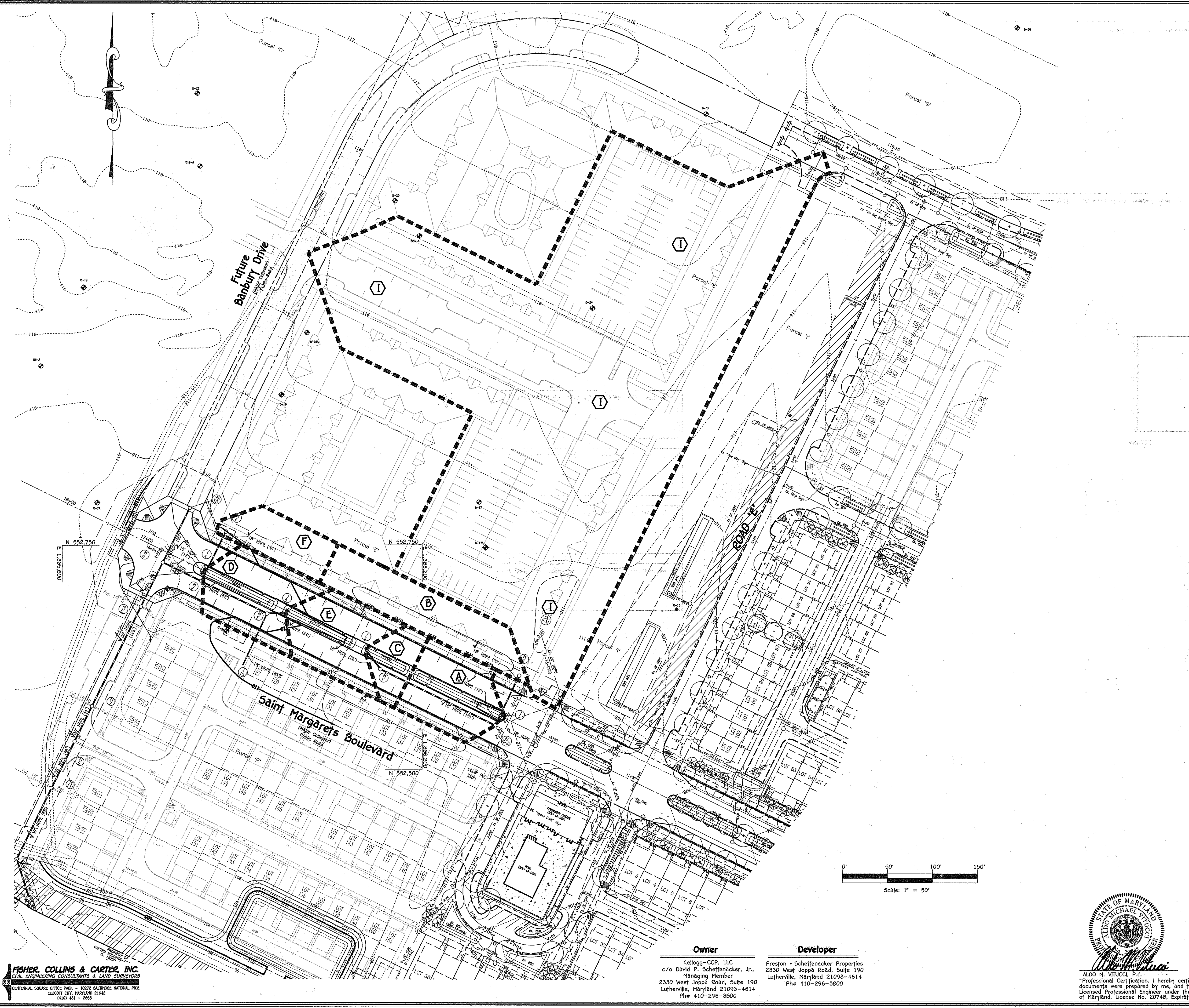
ALDO H. VITUCCI, P.E.  
 DATE: 6-20-14  
 Professional Certification. I hereby certify that these documents were prepared by me, and that I am a duly Licensed Professional Engineer under the laws of the State of Maryland, License No. 20746, Expiration Date 2-22-15.

LANDSCAPING NOTES  
**OXFORD SQUARE**  
 "A HOWARD COUNTY GREEN NEIGHBORHOOD"  
 Saint Margarets Boulevard  
 (Sta. 12+52.60 to Sta. 17+23.98)

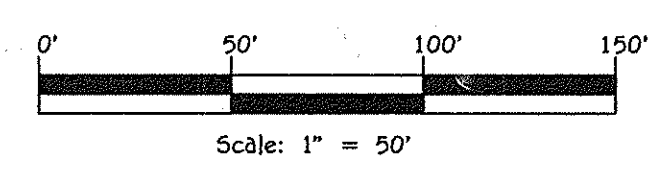
Zoned: T00  
 Tax Map: 38, Parcel: 761, Grid: 20  
 First Election District - Howard County, Maryland  
 Date: June 18, 2014  
 Sheet 11 of 15

THERE IS NO AS-BUILT INFORMATION ON THIS SHEET

APPROVED: DEPARTMENT OF PUBLIC WORKS	<i>Helen Serano</i>	7.8.14
CHIEF, BUREAU OF HIGHWAYS		DATE
APPROVED: DEPARTMENT OF PLANNING AND ZONING	<i>Katherine</i>	7/29/14
CHIEF, DIVISION OF LAND DEVELOPMENT		DATE
APPROVED: DEPARTMENT OF PUBLIC WORKS	<i>Paul Edman</i>	7.16.14
CHIEF, DEVELOPMENT ENGINEERING DIVISION		DATE
REVISIONS		
NO.	DESCRIPTION	DATE



DRAINAGE AREA DATA						
STRUCTURE NO.	DRAINAGE AREA	ESD No.	AREA	'C'	ZONED	% IMP.
I-1	A	1	0.20 AC.	0.72	T.O.D.	68%
M-5	B	-	0.26 AC.	0.84	T.O.D.	84%
I-3	C	2	0.08 AC.	0.78	T.O.D.	76%
I-4	D	3	0.22 AC.	0.74	T.O.D.	71%
I-5	E	4	0.20 AC.	0.72	T.O.D.	67%
M-4	F	-	0.11 AC.	0.75	T.O.D.	72%
EX. I-37	I	-	2.72 AC.	0.85	T.O.D.	85%

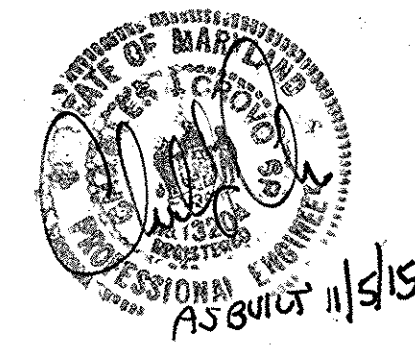


**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE PARK - 10272 BALDORRE NATIONAL PIKE  
 ELIZABETH CITY, MARYLAND 21042  
 (410) 461-2295

**Owner**  
 Kellogg-CCP, LLC  
 c/o David P. Scheffnacker, Jr.,  
 Managing Member  
 2330 West Joppa Road, Suite 190  
 Lutherville, Maryland 21093-4614  
 Ph# 410-296-3800

**Developer**  
 Preston • Scheffnacker Properties  
 2330 West Joppa Road, Suite 190  
 Lutherville, Maryland 21093-4614  
 Ph# 410-296-3800

STATE OF MARYLAND  
 ALDO M. VITUCI, P.E.  
 PROFESSIONAL ENGINEER  
 DATE: 6-20-14  
 \*Professional Certification. I hereby certify that these documents were prepared by me, and that I am a duly Licensed Professional Engineer under the laws of the State of Maryland, License No. 20748, Expiration Date 2-22-15.\*



STORM DRAIN DRAINAGE AREA MAP  
**OXFORD SQUARE**  
 "A HOWARD COUNTY GREEN NEIGHBORHOOD"  
 Saint Margarets Boulevard  
 (Sta. 12+52.60 to Sta. 17+23.98)  
 Zoned: TOD  
 Tax Map: 38, Parcel: 761, Grid: 20  
 First Election District - Howard County, Maryland  
 Date: June 18, 2014  
 Sheet 12 of 15

I:\2009\09014\dwg\Finals - Phase Three\09014 sheet 12 Storm Drain DA Map.dwg, SD MAP, 6/20/2014 7:43:40 AM, 1:1

MARKING LEGEND	
Item	Description
1	Install 5 in. solid white line.
2	Install 5 in. wide solid white dotted pavement marking for lane line. (2 ft. segment - 6 ft. gap.)

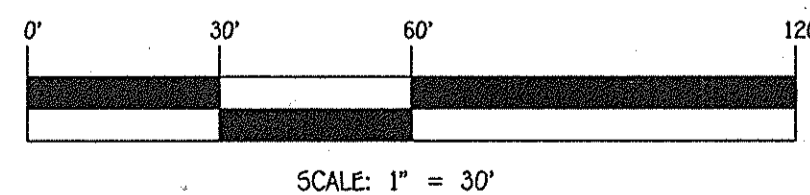
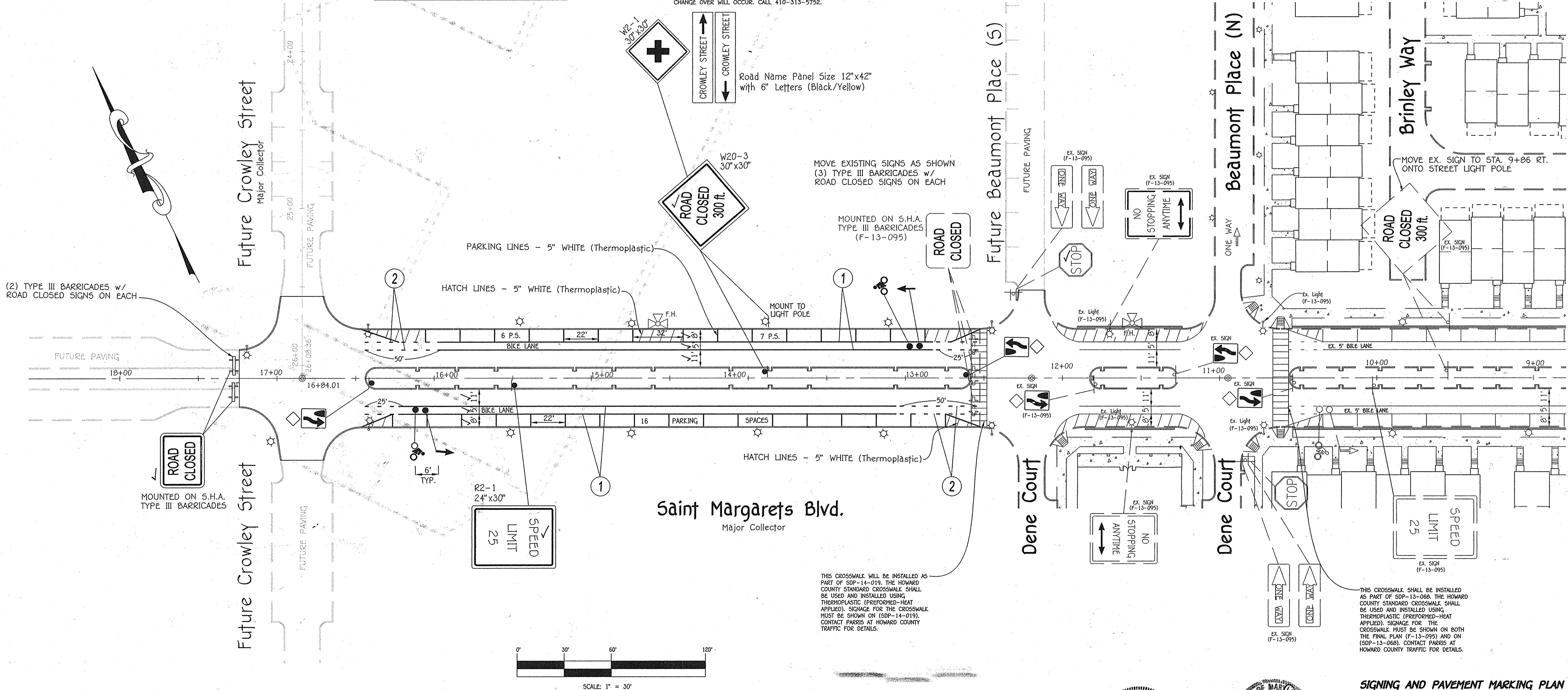
SIGNING LEGEND			
Description	Size	Color	
	R4-7	24" x 30"	Black/White
	OM-1(1)	18" x 18"	Yellow
	W20-3	30" x 30"	Black/Orange
	R2-1	24" x 30"	Black/White
	W2-1	30" x 30"	Black/Yellow

NOTES:

- 1) ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, (QUICK PUNCH) SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) - 3' LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
- 2) ALL SIGN LOCATIONS AND ALL PAVEMENT MARKINGS SHALL BE APPROVED BY HOWARD COUNTY TRAFFIC PRIOR TO ANY SIGNING OR PAVEMENT MARKING INSTALLATIONS.

APPROVED: DEPARTMENT OF PUBLIC WORKS	<i>John Serrano</i>	7-8-14
CHIEF, BUREAU OF HIGHWAYS		DATE
APPROVED: DEPARTMENT OF PLANNING AND ZONING	<i>Victor Shubert</i>	7/29/14
CHIEF, DIVISION OF LAND DEVELOPMENT		DATE
APPROVED: DEPARTMENT OF ENGINEERING	<i>Paul Rant</i>	7-16-14
CHIEF, DEVELOPMENT ENGINEERING DIVISION		DATE
REVISIONS		
NO.	DESCRIPTION	DATE

NOTE: THESE SIGNS WILL BE PLACED AT THE SAME LOCATION AS THE "ROAD CLOSED" WARNING SIGNS ARE INSTALLED. TRAFFIC ENGINEERING WILL DETERMINE WHEN THE SIGN CHANGE OVER WILL OCCUR. CALL 410-313-5752.

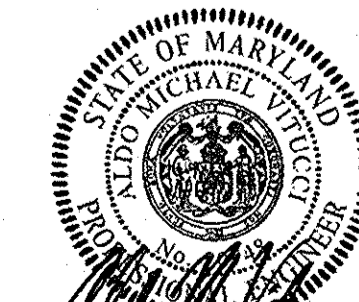


Call "MISS UTILITY" at 1-800-257-7777, 48 hours prior to the start of work the excavator must notify all public utility companies with underground facilities in the area of proposed excavation and have those facilities located by the utility companies prior to commencing excavation. The excavator is responsible for compliance with requirements of Chapter 35a of the Montgomery County Code.

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
 ELICOTT CITY, MARYLAND 21042  
 (410) 461-2992

**Owner**  
 Kellogg-CCP, LLC  
 c/o David P. Scheffnacker, Jr.,  
 Managing Member  
 2330 West Joppa Road, Suite 190  
 Lutherville, Maryland 21093-4614  
 Ph# 410-296-3800

**Developer**  
 Preston • Scheffnacker Properties  
 2330 West Joppa Road, Suite 190  
 Lutherville, Maryland 21093-4614  
 Ph# 410-296-3800



ALDO N. VITULLI, P.E.  
 \*Professional Certification. I hereby certify that these documents were prepared by me, and that I am a duly Licensed Professional Engineer under the laws of the State of Maryland, License No. 20748, Expiration Date 2-22-15.\*



**SIGNING AND PAVEMENT MARKING PLAN**  
**Saint Margarets Boulevard**  
**OXFORD SQUARE**  
 "A HOWARD COUNTY GREEN NEIGHBORHOOD"  
**Saint Margarets Boulevard**  
 (Sta. 12+52.60 to Sta. 17+23.98)

Zoned: TOU  
 Tax Map: 3B, Parcel: 761, Grid: 20  
 First Election District - Howard County, Maryland  
 Date: June 18, 2014  
 Sheet 13 of 15

AS-BUILT

F-14-011

I:\2009\09014\dwg\Finals - Phase Three\Three\09014 sheet 13 Saint Margarets striping.dwg, sheet 13, 6/20/2014 7:56:56 AM, 1:1



**GREEN NEIGHBORHOOD NOTES:**

A-2 THE DESIGN AND DEVELOPMENT TEAM INCLUDES A LEED AP (MATTHEW FITZSIMMONS-HORD COPLAN MACHT), ENVIRONMENTAL PROFESSIONAL (JOHN CANOLES- ECO-SCIENCE PROFESSIONALS, INC.), LANDSCAPE ARCHITECT (JOSE KILRAIN-HORD COPLAN MACHT) AND AN ENGINEER (ALDO VITUCCI-FISHER, COLLINS & CARTER INC.)

A-3 THE THIRD PARTY CERTIFICATION IS PROVIDED BY CHARLES ALEXANDER, LEED-AP OF ALEXANDER DESIGN STUDIOS.

B-1a THE 111.1 ACRES GREEN NEIGHBORHOOD BOUNDARY AREA CONSISTS OF 28.4 ACRES OF PREVIOUSLY DEVELOPED LAND (25.6% OF THE OXFORD SQUARE DEVELOPMENT).

B-3a OXFORD SQUARE WILL PROVIDE TWO TRANSIT STOPS FOR THE PROPOSED PRIVATE SHUTTLE SERVICE CONNECTING OXFORD SQUARE TO THE DORSEY MARC COMMUTER RAIL STATION. THE STOPS WILL BE WITHIN 1/4 WALKING DISTANCE TO ALL DWELLING UNITS.

B-3b OXFORD SQUARE WILL PROVIDE ONE SHELTER AT ONE OF THE PRIVATE SHUTTLE STOPS. THE SHELTER WILL COMPLY WITH COUNTY APPROVED CRITERIA INCLUDING BENCHES AND LIGHTING.

C-1 OXFORD SQUARE WILL PROVIDE THREE DIVERSE USES OTHER THAN RESIDENTIAL: INSTITUTIONAL (MIDDLE SCHOOL BUILDING AND OUTDOOR CLASSROOM SPACE, ELEMENTARY SCHOOL) AND CIVIC (SCHOOL'S RECREATIONAL PLAYING FIELDS AND SHARED-USE PATH) AND OFFICE.

C-2 OXFORD SQUARE IS LOCATED WITHIN THE EXISTING PLANNED WATER AND SEWER SERVICE AREA.

C-3c OXFORD SQUARE WILL PROVIDE A MINIMUM OF TWO PEDESTRIAN SYSTEM AMENITY EXPERIENCES: 1) SHARED USE PATH AND NATURE TRAIL (TRAIL SIGNS AND MARKERS, BENCHES, LITTER RECEPTACLES, INFORMATIONAL SIGNS, BIKE RACKS), 2) THE LAWN (BENCHES, EXTERIOR LIGHTING, SHADE TREES, INFORMATIONAL SIGNS), 3) RESIDENTIAL COURTYARDS AND MEWS (BENCHES), AND 4) SCHOOL SITES (PLAYING FIELDS, BENCHES, BIKE RACKS)

D-8b OXFORD SQUARE WILL PROVIDE A MINIMUM 75 FT ENHANCED STREAM BUFFER.

E-3 OXFORD SQUARE WILL NOT PLANT INVASIVE PLANTS.

E-4 OXFORD SQUARE WILL NOT PLANT TURF IN DENSELY SHADED AREAS.

F-3b OXFORD SQUARE WILL PROVIDE AT LEAST 51% WATER QUALITY VOLUME STORED AND INFILTRATED/RE-USED ON-SITE.

**GREEN NEIGHBORHOOD CALCULATIONS & TABLES:**

**A-4b Priority Parking for Low-Emitting and Fuel Efficient Vehicles**

Total Number of Off-Street Parking Spaces:	3,459 Spaces
Total Number of Proposed Preferred Parking Spaces:	173 Spaces
<b>Percent of Preferred Parking Spaces:</b>	<b>5.0%</b>

**A-4c Compact Development**

Total Dwelling Units:	1,492 DU
Residential Land Area:	41.0 AC
<b>Residential Density:</b>	<b>36.39 DU/AC</b>

**A-4d Walkable Streets**

Length of Buildings Frontage Oriented Towards the Public Space:	10,135 FT
Total Length of Building Frontage:	11,426 FT
<b>% of Building Frontage Oriented Towards the Public Spaces:</b>	<b>88.7%</b>
Length of Building Frontage with Service or Garage Openings:	754 FT
Total Length of Building Frontage Oriented Towards Public Spaces (Including Service and Garage openings):	10,889 FT
<b>% of Building Frontage with Service or Garage Openings:</b>	<b>6.9%</b>

**B-1a Redevelopment Site**

Gross Site Area:	111.1 Acres
Area of Existing Development (Impervious Area):	28.4 Acres
<b>Percent of Previously Developed:</b>	<b>25.6%</b>

**B-3a Transit Access & Amenities for Reduced Auto Dependence (Stop)**

Residential Buildings within 1/4 Mile	Total Number of Qualifying Units	Percent of all Units
All Buildings	1,492 DU	100%

**C-1 Diversity of Uses**

Residential Uses	Number of Units	Percent of Total Units
<b>Apartments and Townhouses</b>	<b>1,492 DU</b>	<b>100%</b>
Nonresidential Uses	Area	SF per Dwelling Unit
Office	154,000 SF	103 SF/DU
Institutional:		
Middle School <sup>1</sup>	95,747 SF	
Middle School Outdoor Classroom Space <sup>1</sup>	2,500 SF	
Elementary School	101,014 SF	
<b>Institutional Subtotal:</b>	<b>199,261 SF</b>	<b>134 SF/DU</b>
Civic:		
Recreational Playing Fields (School Site) <sup>1</sup>	236,139 SF	
Northern Loop Shared-Use Path (8 FT wide) <sup>2</sup> and Trail heads <sup>2</sup>	19,504 SF	
Southern Loop Shared-Use Path (8 FT wide) and Trail heads <sup>2</sup>	9,240 SF	
<b>Civic Subtotal:</b>	<b>264,883 SF</b>	<b>178 SF/DU</b>

<sup>1</sup> Revised per the approved Middle School SDP (SDP-12-075)  
<sup>2</sup> 12,801 SF of Shared-Use Path will be constructed on Middle School site (SDP-12-075)

**C-3a Pedestrian System (Paths and Trails)**

Northern Shared Use Path:	Width of Path: 8 FT Length: 2,438 FT (0.46 Miles)
Northern Shared Use Path:	Width of Path: 8 FT Length: 1,155 FT (0.22 Miles)
Mulch Nature Trail	Width of Path: 5 FT Length: 595 FT

**C-4 Street Connections**

Street Name / ID	Street Length	Qualifying Street
Saint Margarets Boulevard	1,684 FT	Yes
Banbury Drive	2,589 FT	Yes
Road A	220 FT	No
Road B	514 FT	No
Road C	228 FT	No
Road D	740 FT	Yes
Road E (North and South)	1,450 FT	Yes
Road F	1,016 FT	Partial
Road G	228 FT	No
Road H	228 FT	No
Road J	465 FT	Yes
Road I	245 FT	No

**Summary**

Total Street Length:	9,607 FT
Total Connected Street Length:	7,393 FT
<b>Percent Connected Streets:</b>	<b>77.0%</b>

(F-14-011)  
 Note: Final Plan (F-14-011) contributes 471 linear feet of Saint Margarets Boulevard to the complete build out (per Sketch Plan (S-14-001))  
 Street Names are based on the submitted Sketch Plan (S-14-001).

**C-5 Parking Does Not Exceed Required Minimum**

	Complete Build-Out	F-Plan
Number of Surface Parking Required:	3,647 spaces	0 spaces
Number of Spaces Provided:	4,592 spaces	29 spaces
Number of Shared Spaces (Public On-Street):	99 spaces	29 spaces
Number of Shared Spaces (Private On-Street):	370 spaces	0 spaces
Number of Spaces within a Common Parking Structure:	2,759 spaces	0 spaces
Number of Spaces within Private / Integral Garages:	470 spaces	0 spaces
Number of Spaces in Surface Parking Lots:	700 spaces	0 spaces
Number of Driveway Spaces:	394 spaces	0 spaces

Note: Complete Build Out Calculations are based on the submitted Sketch Plan (S-14-001).

**C-6 Exceed Minimum Open Space**

Net Acreage:	101.6 AC
Required Amenity Space (TOD: 10% of Net Acreage):	10.2 AC
Provided Amenity Space:	15.7 AC
<b>Percent Increase above the Minimum Required:</b>	<b>53.9 %</b>

**C-7 Green Spaces and Amenity Areas**

Parcel	Road Frontage	Amenity Type	Amenity Area
Open Space 1: The Nature Trail (Future SDP)	160 FT	Nature Trail, Benches, Trail Signage, Educational Signage	31,266 SF (0.72 AC)
Open Space 2: Pool House and Pool (SDP-13-068)	47-138 FT (length along Private Road 'B')	Pool house, Pool, Fitness Room, and Warming Kitchen	11,282 SF (0.26 AC)

**D-4 15% Slope Preservation**

	Complete Build Out
Total Area of Slopes 15-24.9%:	504,072 SF
Area of Undisturbed Slopes 15-24.9%:	289,178 SF
<b>Percent of Undisturbed Slopes:</b>	<b>57.4 %</b>

Notes:  
 The area of undisturbed slopes is the summation of slopes impacted by the greatest extent of LODs accumulated from the entire development.

Complete Build Out includes Approved Sketch Plan (S-14-001), Approved Final Plan (F-12-026), Approved Middle School SDP (SDP-12-075) and future environmental restoration work.

F Plan submission land area is located within the Complete Build Out LOD therefore there are no impacts to undisturbed areas.

**D-5 Minimize Grading and Site Disturbance**

	Complete Build Out	F-Plan <sup>1</sup>
Gross Area of Site (GN Boundary)	111.1 AC	
Existing Impervious Cover	28.4 AC	
Area of Site	82.7 AC	
Area of Site to Remain Undisturbed	28.4 AC	
<b>Percent of Site to Remain Undisturbed:</b>	<b>34.3 %</b>	
Ratio of Cut to Fill:	1.13 Ratio	0.78 Ratio <sup>2</sup>
Retaining Wall:	0 FT	

Note: Complete Build Out Calculations are based on the aggregate greatest extent of LOD's from the submitted Sketch Plan (S-14-001), Approved Final Plan (F-12-026) and Approved Middle School SDP (SDP-12-075).

<sup>1</sup> F Plan submission land area is located within the Complete Build Out LOD therefore there are no impacts to undisturbed areas.

<sup>2</sup> Excess fill dirt will be utilized on future SDP submission and will not be hauled off site.

APPROVED  
 HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
 GREEN NEIGHBORHOOD PLAN FOR SITES

*Pete Perry* 7-24-14  
 CHIEF, RESOURCE CONSERVATION DIVISION DATE

LEED ACCREDITED PROFESSIONAL CERTIFICATE  
 GREEN NEIGHBORHOOD PLAN FOR SITES

I hereby certify that this plan represents a practical and workable plan for achieving the targeted credits and point total shown on the Green Neighborhood for Sites Compliance Checklist.

*Matthew J. Fitzsimmons* 10007912 6-24-14  
 MATTHEW J. FITZSIMMONS, LEED AP LEED ACCREDITATION NUMBER DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Kevin Hendon* 7/29/14  
 Chief, Division of Land Development Date

*Al M. Vitucci* 7-16-14  
 Chief, Development Engineering Division Date

*A/A*  
 Director - Department of Planning and Zoning Date

REVISIONS		
NO.	DESCRIPTION	DATE

**D-6 Exceed Minimum Forest Conservation Requirements**

Afforestation Obligation:	3.50 AC
Afforestation Provided in Excess of Obligation:	1.75 AC
<b>Percentage of Provided in Excess of Obligation:</b>	<b>50.00 %</b>

**D-8b Exceed Minimum Stream Buffer Requirements**

Total Stream Buffer Width:	150 FT
Width of Buffer Exceeding Requirements:	75 FT
Total Length of Stream Buffer:	1,984.2 FT
Length of Stream Buffer Outside Other Buffers:	1,352.3 FT
<b>Percent of Stream Buffer Outside Other Buffers:</b>	<b>68.2 %</b>

**E-1 Landscaping**

Plants Required	Shade Trees	Evergreen	Shrubs	Total	Percent
Number of Plants Required by Landscape Manual	24	0	0	24	
Number Excess Plants Required for GN Credit	5	0	0	5	20.8
Landscape Manual and GN Requirements	29	0	0	29	

**Plants Provided**

	Shade Trees	Evergreen	Other Trees (Substitute)	Shrub (Substitute)	Total
Number of Plants Provided to Meet Landscape Manual Requirements	24	0	0	0	24
Number of Plants Provided to Meet GN Credits	10	0	0	0	10
<b>Total Number of Plants Provided</b>	<b>34</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>34</b>

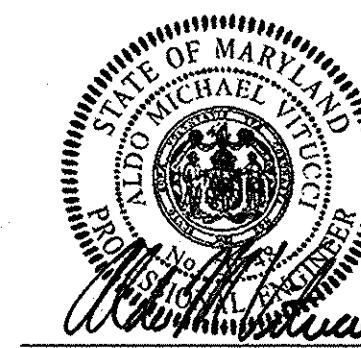
Note:  
 1. Excess Native Shade Trees (bonded): (10 BNH)  
 2. This plan provides 5 additional "Excess Native Shade Trees" to satisfy the 20% Goal.  
 The additional "Excess Native Shade Trees" will supplement shortages on other plan submissions.

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL, ENGINEERING, CONSULTANTS & LAND SURVEYORS  
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**Developer**  
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 Lutherville, Maryland 21093-4614  
 Ph# 410-296-3800



*Aldo M. Vitucci* 6-23-14  
 ALDO M. VITUCCI, P.E. DATE  
 Professional Certification: I hereby certify that these documents were prepared by me, and that I am a duly Licensed Professional Engineer under the laws of the State of Maryland, License No. 20748, Expiration Date 2-22-15.

GREEN NEIGHBORHOOD PLAN  
**OXFORD SQUARE**  
 "A HOWARD COUNTY GREEN NEIGHBORHOOD"  
 Saint Margarets Boulevard  
 (Sta. 12+52.60 to Sta. 17+23.98)

Zoned: TOD  
 Tax Map: 3B, Parcel: 761, Grid: 20  
 First Election District - Howard County, Maryland  
 Date: June 18, 2014  
 Sheet 15 of 15

THERE IS NO AS-BUILT INFORMATION ON THIS SHEET