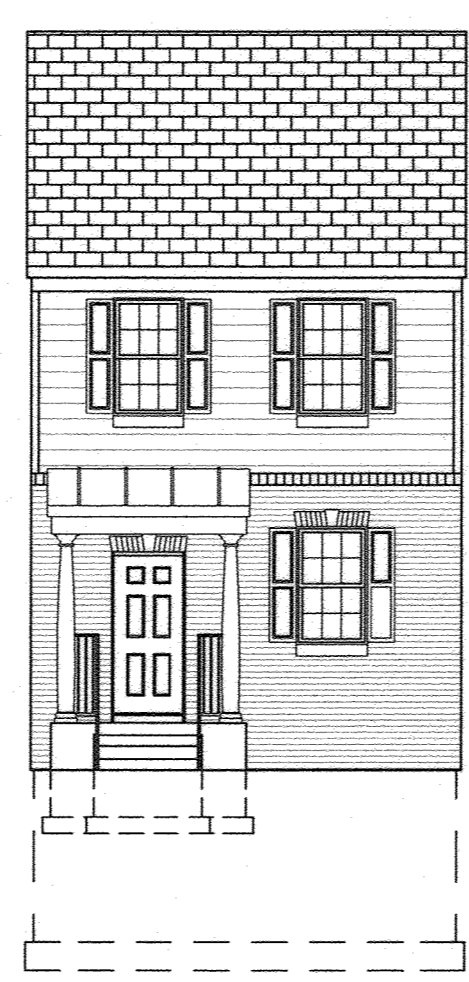


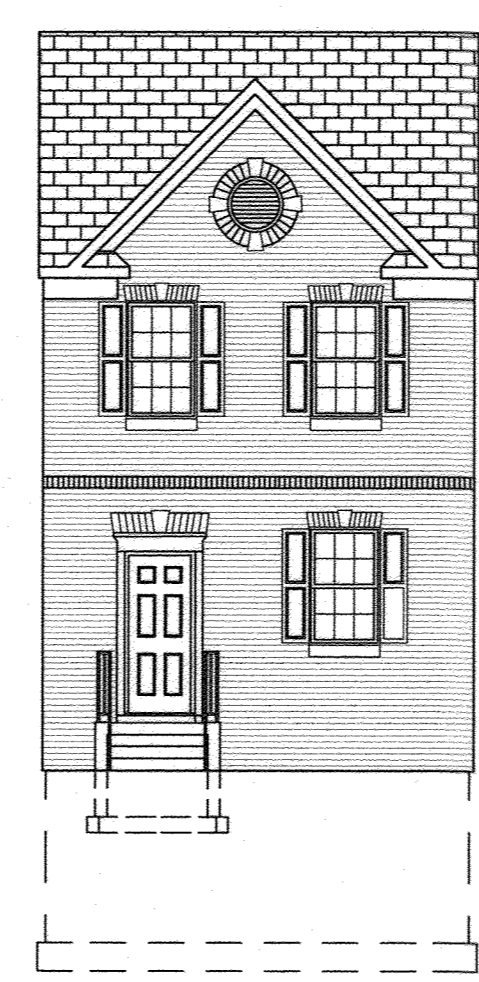
FRONT ELEVATION (SIDING)
NO SCALE



FRONT ELEVATION (BRICK WATER TABLE (1))
NO SCALE

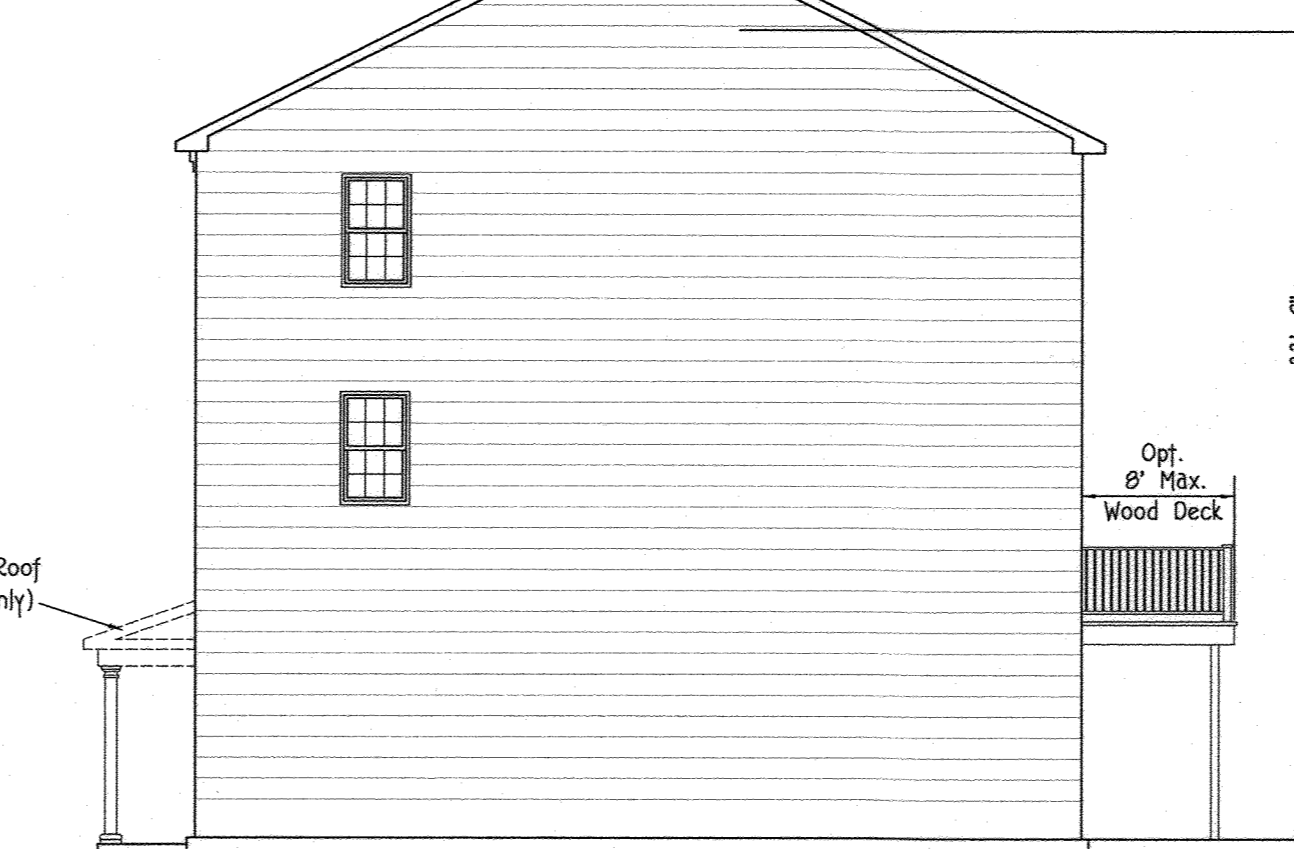
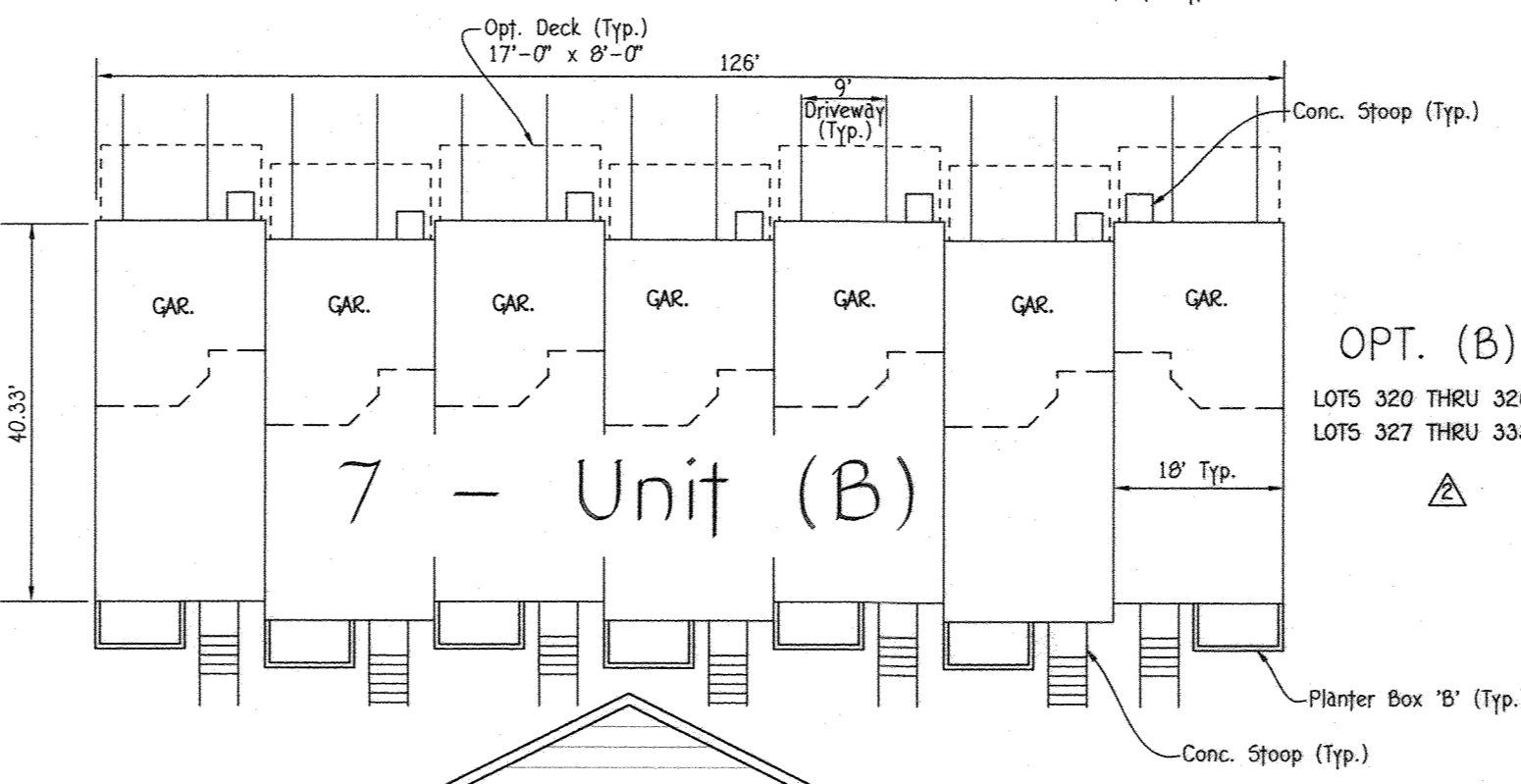
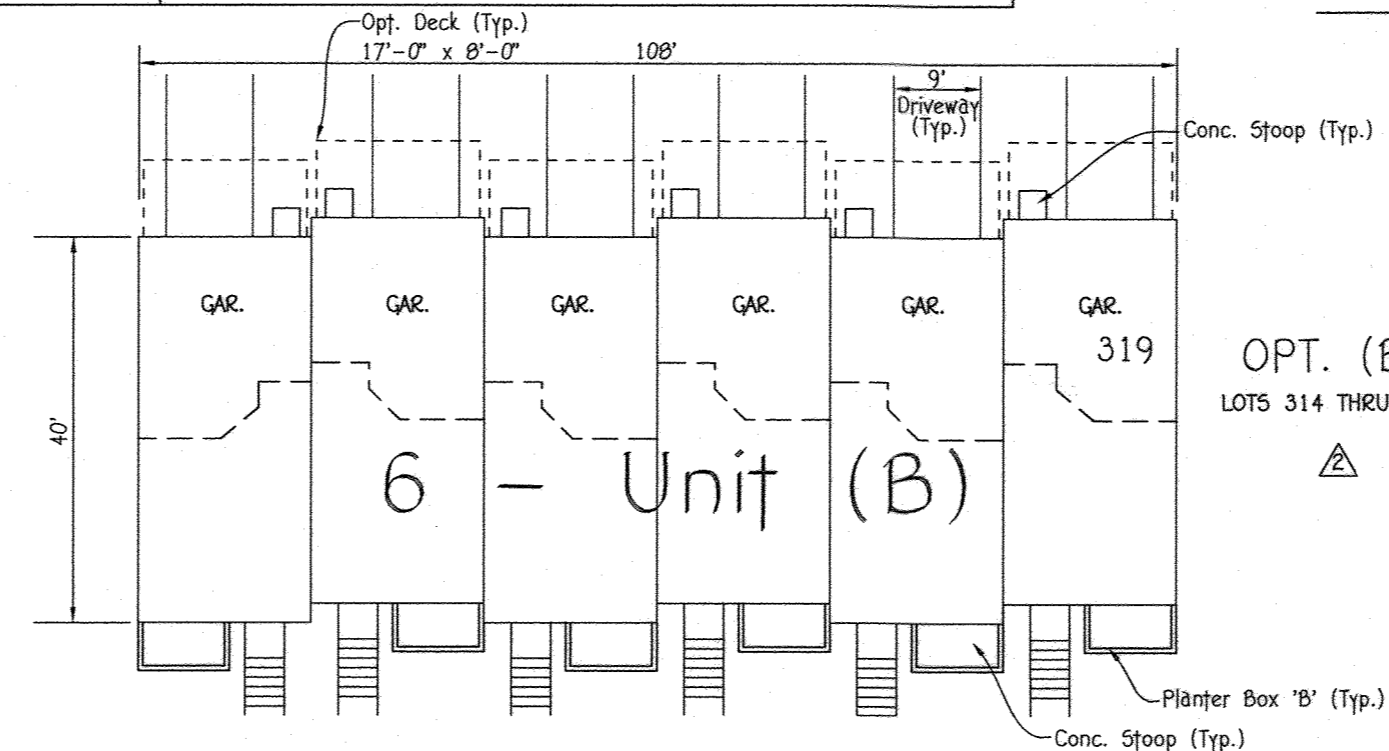
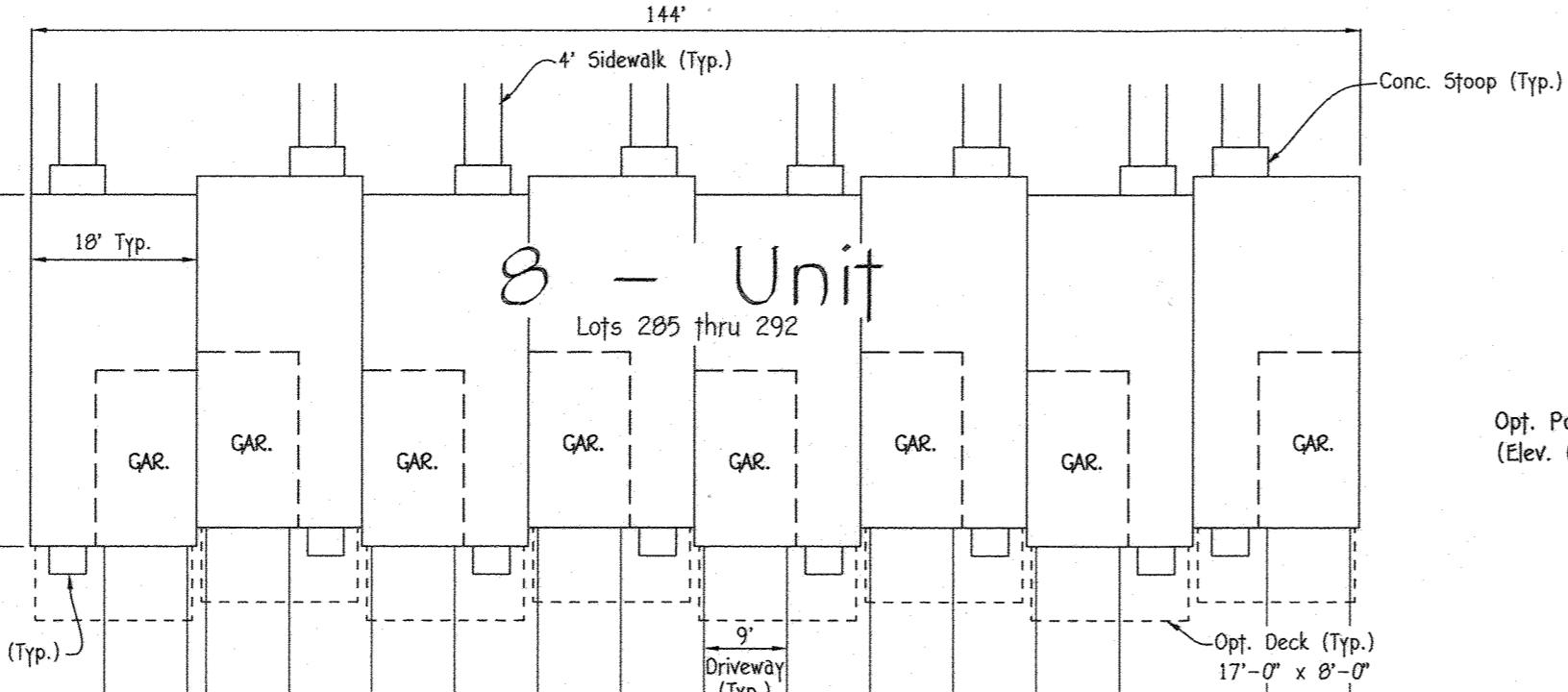
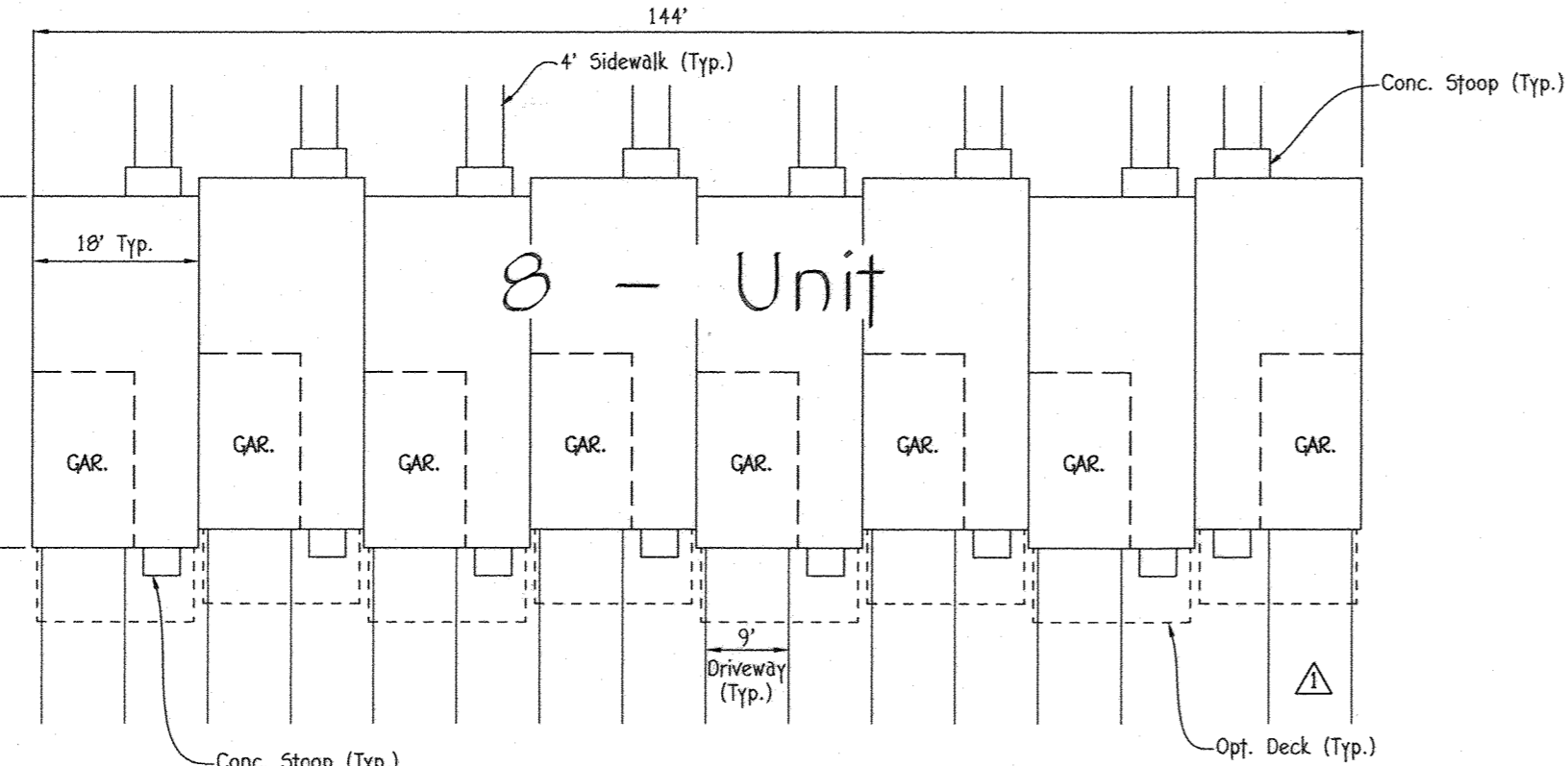
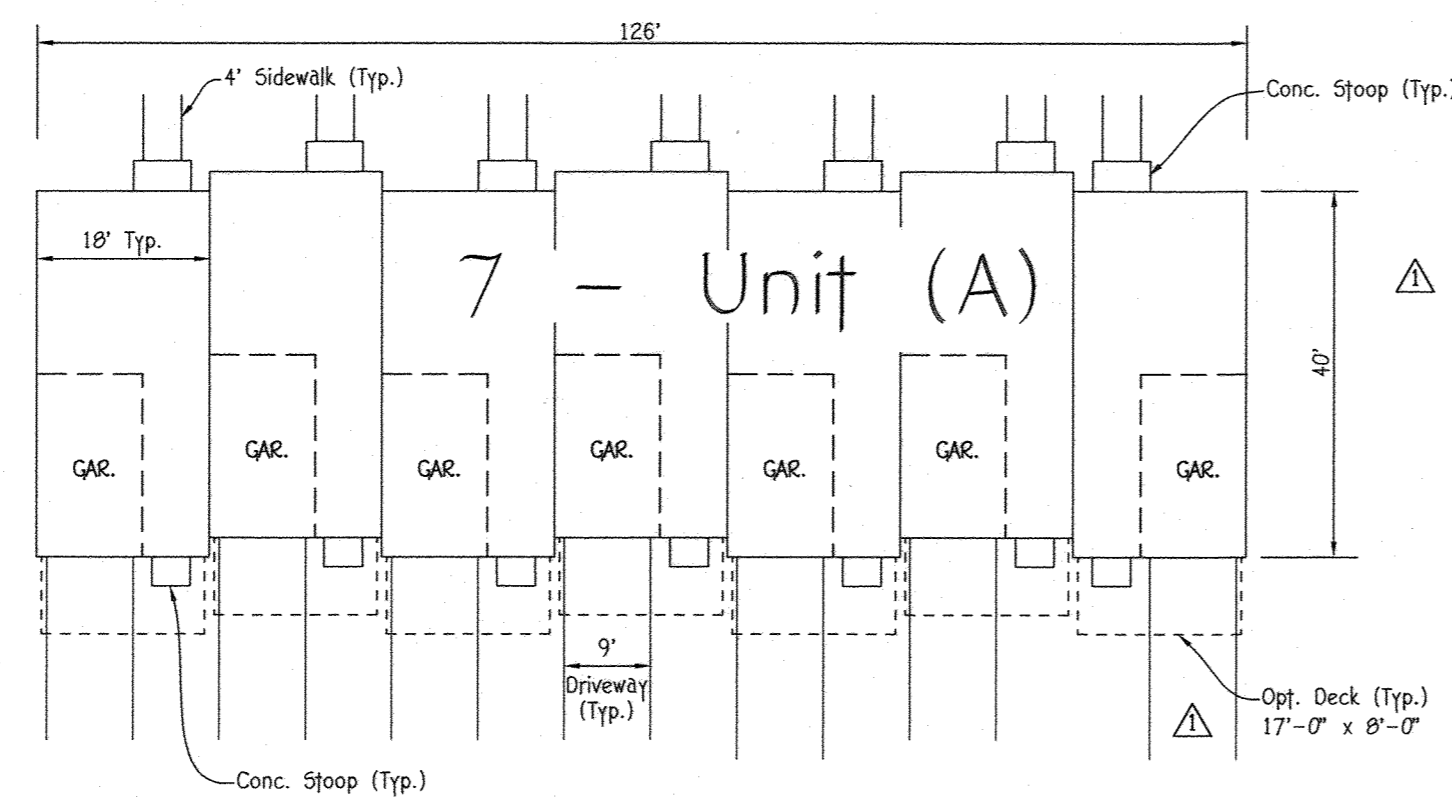


FRONT ELEVATION (BRICK WATER TABLE (2))
NO SCALE



FRONT ELEVATION (FULL BRICK)
NO SCALE

LOT Nos. 314 THRU 333

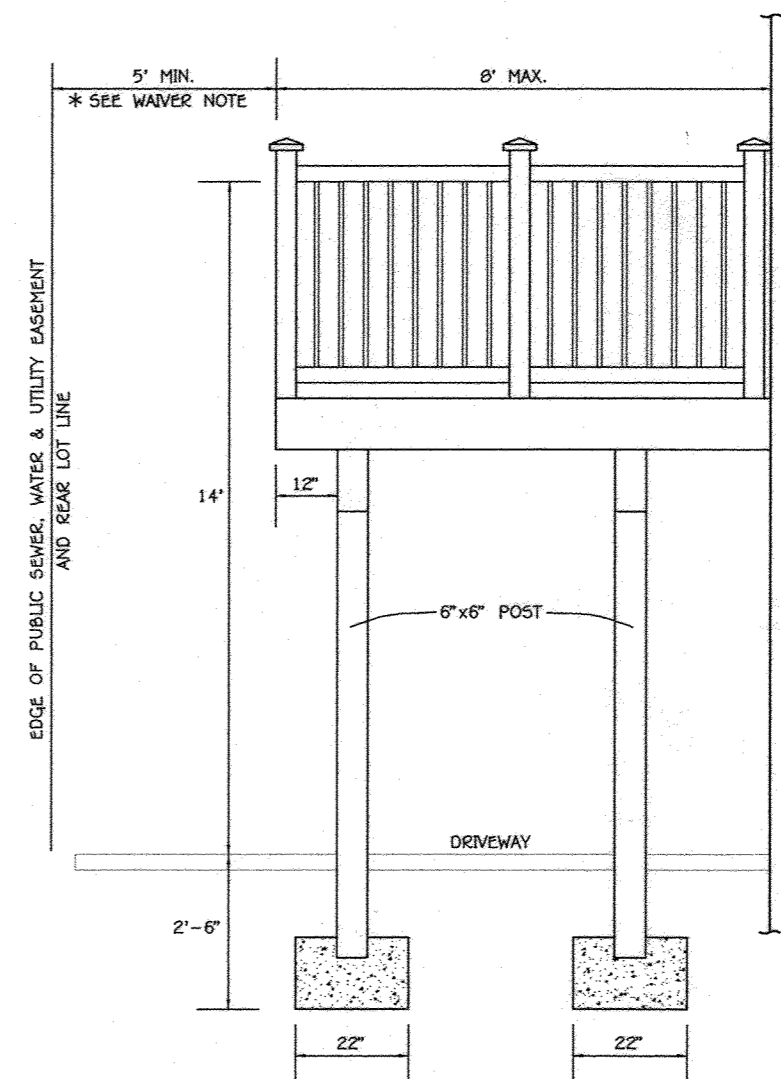


TYPICAL FRONT ELEVATION
NO SCALE

* FRONT PORCH RESTRICTION NOTE:
NOT AVAILABLE FOR LOTS 286 THRU 289



TYPICAL REAR ELEVATION
NO SCALE



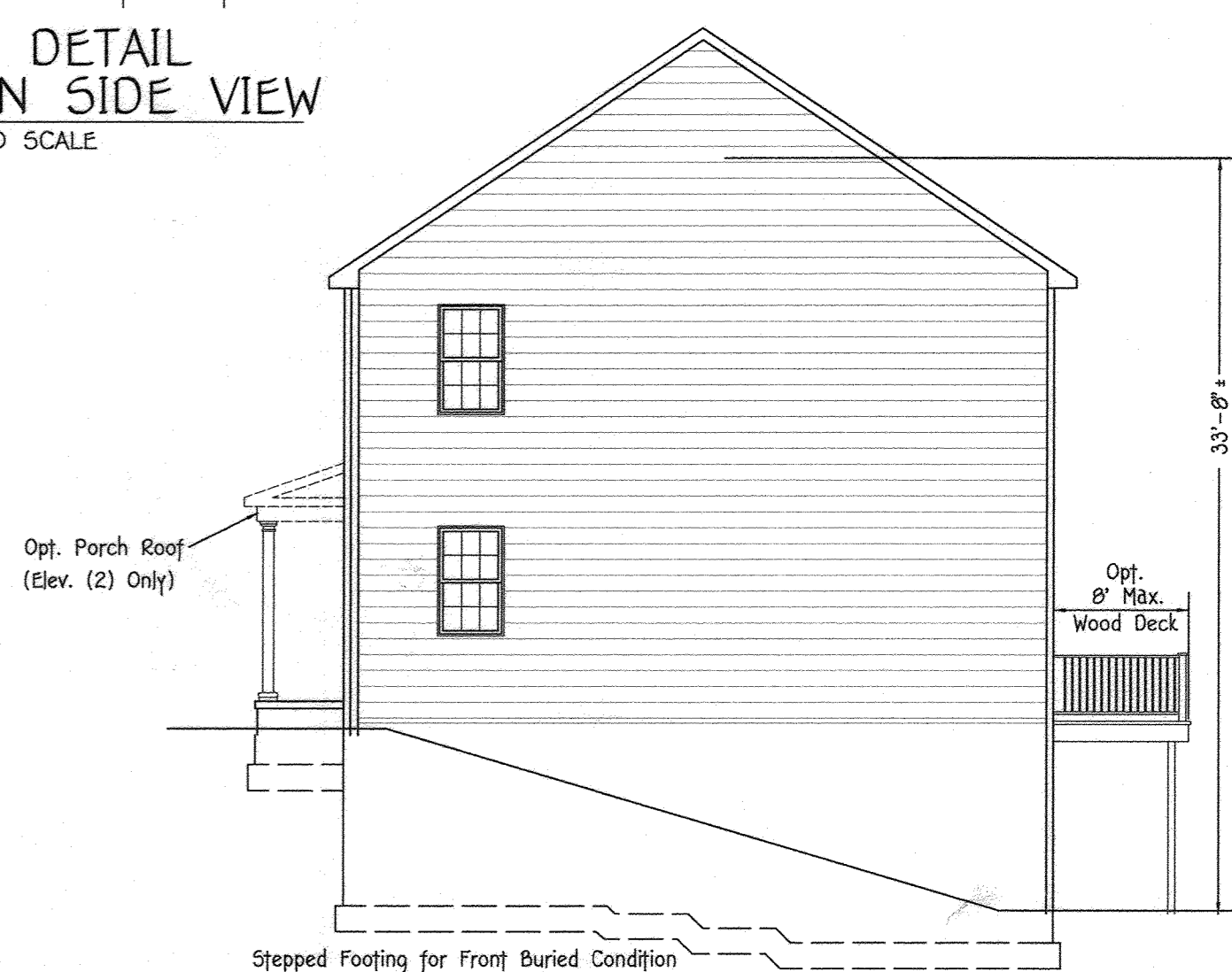
DECK DETAIL ELEVATION SIDE VIEW
NO SCALE

* DECK NOTE: A WAIVER IS APPROVED, DATED NOVEMBER 17, 2016, ALLOWING DECKS WITHIN 10- FEET OF A PUBLIC UTILITY EASEMENT PER THE FOLLOWING CONDITIONS:

1. PROPOSED DECK SHALL BE A MAXIMUM SIZE OF 8 FEET DEEP FROM THE UNIT.
2. THE FOUNDATION FOR EACH DECK POST SHALL BE A MINIMUM OF 5 FEET FROM ANY WATER METER, SEWER CLEANOUT OR PUBLIC WATER/SEWER APPURTENANCE.
3. THE CONSTRUCTION OF ACCESS STEPS, FROM/TO EXTERIOR GRADE, FOR THE DECKS SHALL NOT BE PERMITTED.

HIGH VISIBILITY NOTE: CORNER UNITS THAT ARE DEEMED "HIGH VISIBILITY" WILL BE CLADDED WITH BRICK IN ORDER TO ENHANCE THE FRONT AND SIDE ELEVATIONS AND TO FOLLOW THE SAME "HIGH VISIBILITY TREATMENTS."

NOTE: THE APPLICANT WILL EXPLORE FURTHER THE DESIGN OF THE ELEVATIONS AS RECOMMENDED BY THE DAP. CARE WILL BE TAKEN TO ENSURE THAT THE SMALLER TOWNHOME PRODUCT PROPOSED IN THIS SECTION FOLLOWS THE SAME HIGH QUALITY DESIGN AS PREVIOUS SECTIONS OF TOWNHOMES.

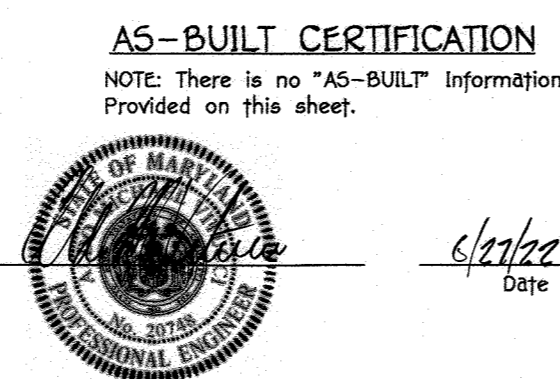


TYPICAL SIDE ELEVATION
NO SCALE

(In Ground Condition)

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALDWIN NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21142
(410) 461-2299

NO.	REVISION	DATE
1	REVISE ALL 36" UNITS TO 40"	9/9/19
2	REVISED TYPICAL UNIT DIMENSION FROM 36" TYP. TO 38" & 40"	1/18/18
3	REVISED END UNIT DRIVEWAY LOCATIONS.	



AS-BUILT CERTIFICATION
NOTE: There is no "AS-BUILT" information provided on this sheet.

Owner
Lellogg-CCP, LLC
c/o David P. Scheffacker, Jr.,
Managing Member
100 West Road, Suite 304
Towson, Maryland 21204
Ph: 410-296-3800

Developer
Preston + Scheffacker Properties
100 West Road, Suite 304
Towson, Maryland 21204
Ph: 410-296-3800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development
Chief, Development Engineering Division
Director, Department of Planning and Zoning

5/21/20
5-29-20
Date

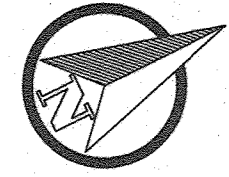
SUBDIVISION	SECTION/AREA	LOT Nos.
OXFORD SQUARE		246 - 371
PLAT No.	BLOCK NO.	ZONE
24357-24362		TOD
TAX/ZONE	ELEC. DIST.	CENSUS TR.
	38	1st
		601101

REVISED
TYPICAL BUILDING ELEVATIONS
OXFORD SQUARE
"A Howard County Green Neighborhood"
"RIVER OVERLOOK"
Lots 246 Thru 371 & Open Space Lots 372 Thru 375 and Open Space Lot 376
(Being A Resubdivision Of Parcels "Z", "E-E" & Open Space Lot 376, As Shown On Revision Plat Entitled "Green Neighborhood" Parcels "Z", "E-E" And Open Space Lot 376 Recorded Among The Land Records Of Howard County, Maryland As Plat Nos. 23896 Thru 23897) Zoned: TOD

Tax Map No.: 38 Grid No.: 20 Parcel No.: 1003
First Election District: Howard County, Maryland
Scale: As Shown
Date: Sept. 9, 2019
Sheet 2 of 40

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET

SDP-16-052



SWM PLANTER BOX NOTE:
 PLANTER BOX STORMWATER MANAGEMENT FACILITIES SHALL BE OWNED & MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.

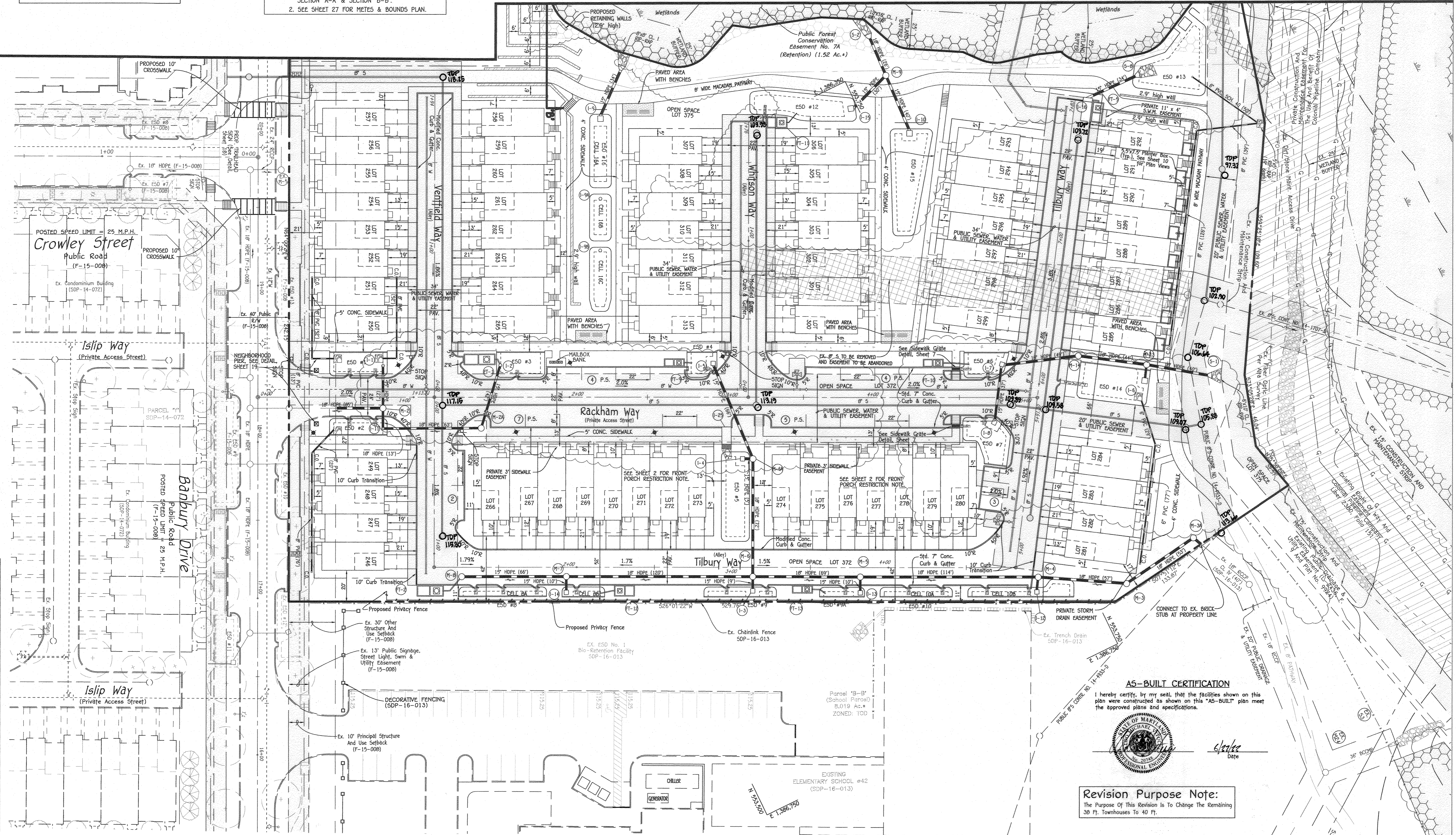
NOTES: 1. SEE SHEET 24 FOR RETAINING WALL DETAILS AND SECTION 'A-A' & SECTION 'B-B'.
 2. SEE SHEET 27 FOR METES & BOUNDS PLAN.

MATCH LINE SEE SHEET 4

RESERVED FOR LOW EMISSION AND FUEL EFFICIENT VEHICLES

LE & FE SIGN DETAIL
 NOT TO SCALE

LEGEND	
SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
---	SILT FENCE
---	DRAINAGE LIMITS
---	L.O.D. LIMIT OF DISTURBANCE
---	EXISTING TREELINE
---	WETLANDS BUFFER
---	WETLANDS LIMITS
---	FLOODPLAIN LIMITS
---	STORMWATER MANAGEMENT DEVICE
---	STORM DRAIN
---	STREET LIGHT (proposed)
---	STREET LIGHT (existing)
---	STREET TREE (proposed)
---	STREET TREE (existing)
---	PROPOSED GARDEN BENCH
---	PROPOSED BRICK PEIR & SITE WALL
---	PROPOSED MAILBOX BANK
---	BORING LOCATION
---	PROPOSED 1-1/2" WHC
---	PROPOSED 4" SHC
---	FILTERRA SWM DEVICE

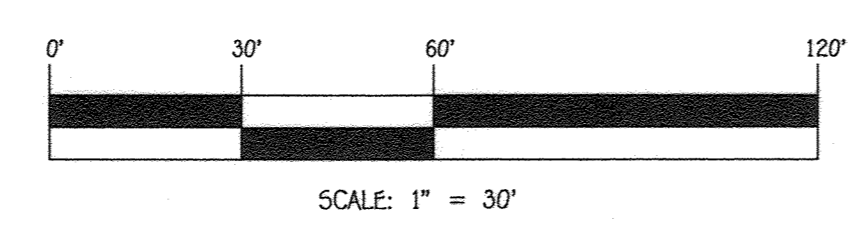


AS-BUILT CERTIFICATION
 I hereby certify, by my seal, that the facilities shown on this plan were constructed as shown on this "AS-BUILT" plan meet the approved plans and specifications.

[Signature]
 Date

Revision Purpose Note:
 The Purpose of This Revision Is To Change The Remaining 38 Ft. Townhouses To 40 Ft.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLETTTS CITY, MARYLAND 21142
 (410) 461-3292



Owner
 Kellogg-CCP, LLC
 c/o David P. Scheffacker, Jr.,
 Managing Member
 100 West Road, Suite 304
 Towson, Maryland 21204
 Ph: 410-296-3800

Developer
 Preston - Scheffacker Properties
 100 West Road, Suite 304
 Towson, Maryland 21204
 Ph: 410-296-3800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development *[Signature]*
 Chief, Development Engineering Division *[Signature]*

Director, Department of Planning and Zoning *[Signature]*

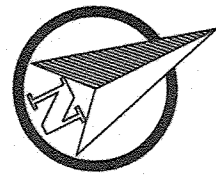
SUBDIVISION: OXFORD SQUARE
 SECTION/AREA: ---
 LOT Nos.: 246 - 371

PLAT Nos.: 24357-24362
 BLOCK NO.: ---
 ZONE: TOD
 TAX/ZONE: 3B
 ELEC. DIST.: 1st
 CENSUS TR.: 601101

REVISED GEOMETRY PLAN
OXFORD SQUARE
 "A Howard County Green Neighborhood"
 "RIVER OVERLOOK"
 Lots 246 Thru 371 & Open Space Lots 372 Thru 375 and Open Space Lot 376
 (Being A Resubdivision of Parcels "Z", "E-E" & Open Space Lot 376, As Shown On Revision Plan Entitled "Green Neighborhood" Parcels "Z", "E-E" And Open Space Lot 376 Recorded Among The Land Records Of Howard County, Maryland As Plat Nos. 23896 Thru 23897)

Tax Map No.: 3B
 First Election District
 Grid No.: 20
 Parcel No.: 1003
 Howard County, Maryland
 Scale: As Shown
 Date: Sept. 9, 2019
 Sheet 3 of 40

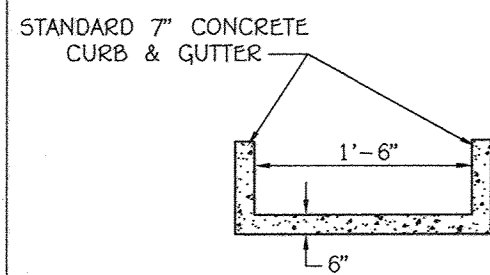
NO.	REVISION	DATE
1	REVISE ALL 38' UNITS TO 40'	9/9/19
2	REVISED 38' TOWNHOUSE UNITS TO 40' (WHERE POSSIBLE) & FLIPPED END UNIT DRIVEWAY LOCATIONS WHERE POSSIBLE.	1/18/18



RESERVED FOR LOW EMISSION AND FUEL EFFICIENT VEHICLES

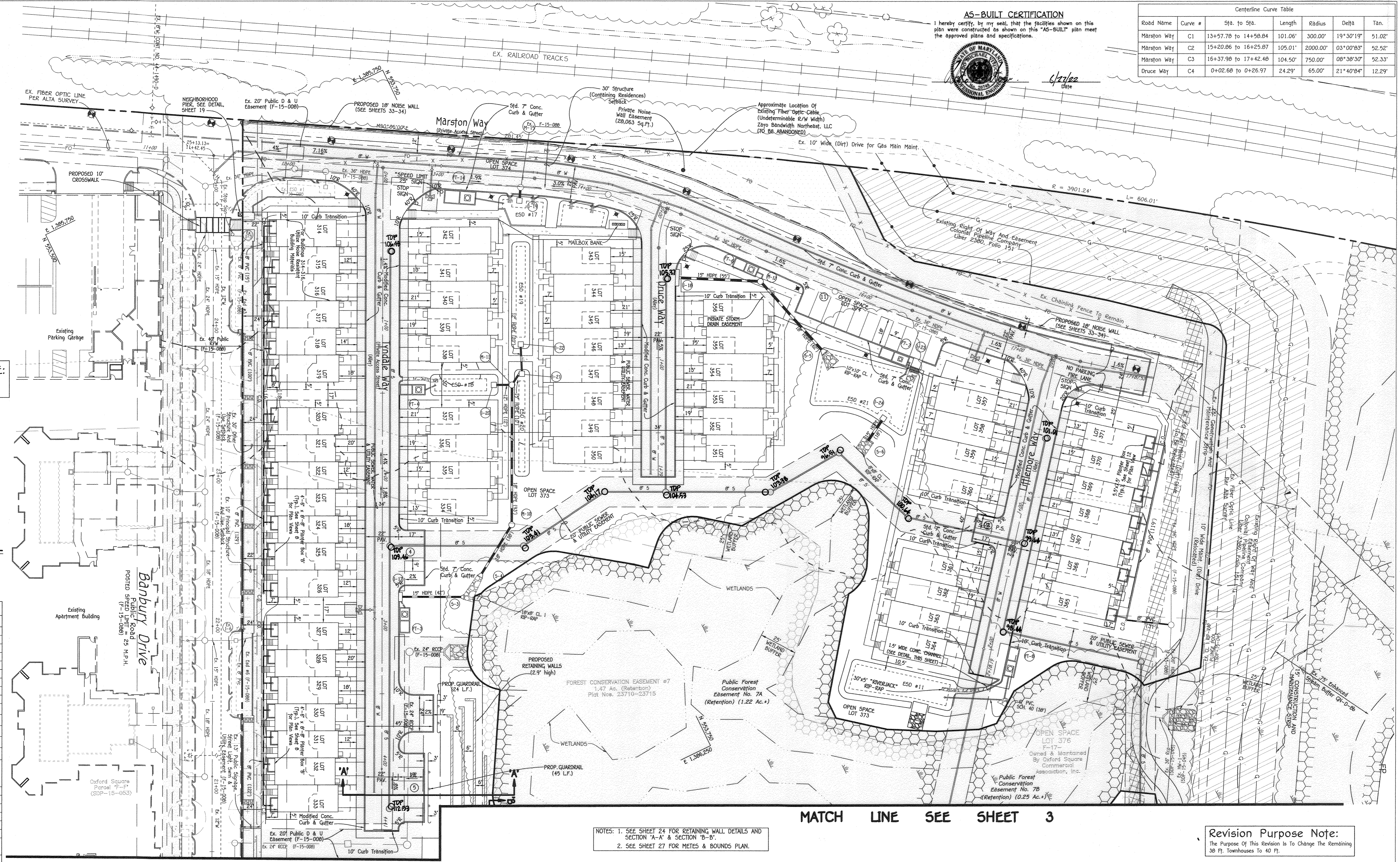
LE & FE SIGN DETAIL
NOT TO SCALE

SWM PLANTER BOX NOTE:
PLANTER BOX STORMWATER MANAGEMENT FACILITIES SHALL BE OWNED & MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.



CONCRETE CHANNEL DETAIL
NOT TO SCALE

LEGEND	
SYMBOL	DESCRIPTION
-102-	EXISTING CONTOUR 2' INTERVAL
-100-	EXISTING CONTOUR 10' INTERVAL
-102	PROPOSED CONTOUR 2' INTERVAL
-100	PROPOSED CONTOUR 10' INTERVAL
-SF-	SILT FENCE
---	DRAINAGE LIMITS
L.O.D.	LIMIT OF DISTURBANCE
---	EXISTING TREELINE
---	WETLANDS BUFFER
---	WETLANDS LIMITS
FP	FLOODPLAIN LIMITS
ESD	STORMWATER MANAGEMENT DEVICE
---	STORM DRAIN
---	STREET LIGHT (proposed)
---	STREET LIGHT (existing)
---	STREET TREE (proposed)
---	STREET TREE (existing)
---	PROPOSED GARDEN BENCH
---	PROPOSED BRICK PIER & SITE WALL
---	PROPOSED MAILBOX BANK
---	BORING LOCATION
---	PROPOSED 1-1/2" WHC
---	PROPOSED 4" SHC
---	FILTERRA SWM DEVICE



AS-BUILT CERTIFICATION
I hereby certify, by my seal, that the facilities shown on this plan were constructed as shown on this "AS-BUILT" plan meet the approved plans and specifications.

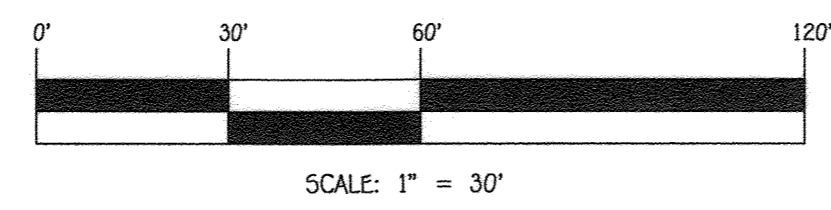
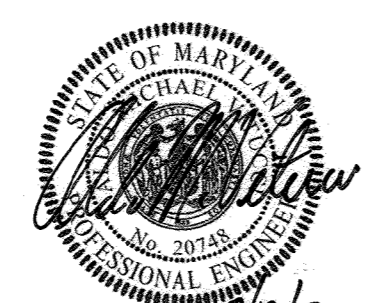


W. Hill
Date

Centerline Curve Table						
Road Name	Curve #	Sft. to Sft.	Length	Radius	Delta	Tan.
Marston Way	C1	13+57.78 to 14+58.84	101.06'	300.00'	19°30'19"	51.02'
Marston Way	C2	15+20.86 to 16+25.87	105.01'	2000.00'	03°00'43"	52.52'
Marston Way	C3	16+37.98 to 17+42.48	104.50'	750.00'	08°38'30"	52.33'
Druce Way	C4	0+02.68 to 0+26.97	24.29'	65.00'	21°40'84"	12.29'

1:2020/09/01/04/SWP - Parcel A-A and 2: reading 2017 - unavailability redline 2019/09/01/4 Sheet 3.4 Geometry Plans.dwg, C-04_NEW_MYLAR, 1:1

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 WATMORE NATIONAL PIKE
ELLCOTT CITY, MARYLAND 21142
(410) 461-2929



SCALE: 1" = 30'

NOTES: 1. SEE SHEET 24 FOR RETAINING WALL DETAILS AND SECTION "A-A" & SECTION "B-B".
2. SEE SHEET 27 FOR METES & BOUNDS PLAN.

MATCH LINE SEE SHEET 3

Revision Purpose Note:
The Purpose Of This Revision Is To Change The Remaining 38 Ft. Townhouses To 40 Ft.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development *W. Hill* 5/20/20
Chief, Development Engineering Division *W. Hill* 5/20/20
Director, Department of Planning and Zoning *W. Hill* 5/29/20

REVISED GEOMETRY PLAN
OXFORD SQUARE
"A Howard County Green Neighborhood"
"RIVER OVERLOOK"
Lots 246 Thru 371 & Open Space Lots 372 Thru 375 and Open Space Lot 378
(Being A Resubdivision Of Parcels "Z", "E-E" & Open Space Lot 376, As Shown On Revision Plat Entitled "Green Neighborhood" Parcels "Z", "E-E" And Open Space Lot 376 Recorded Among The Land Records Of Howard County, Maryland As Plat Nos. 23896 Thru 23897)
Zoned: TOD
Tax Map No.: 38 Grid No.: 20 Parcel No.: 1003
First Election District: Howard County, Maryland
Scale: As Shown
Date: Sept. 9, 2019
Sheet 4 of 40

Owner
Kelllogg-CCP, LLC
c/o David P. Scheffacker, Jr.,
Managing Member
100 West Road, Suite 304
Towson, Maryland 21284
Ph: 410-296-3800

Developer
Preston - Scheffacker Properties
100 West Road, Suite 304
Towson, Maryland 21284
Ph: 410-296-3800

NO.	REVISION	DATE
1	REVISE ALL 38' UNITS TO 40'	9/9/19
2	ADDED NOISE WALL ACCESS & MAINTENANCE EASEMENT, REVISED 38' TOWNHOUSE UNITS TO 40' (WHERE POSSIBLE) & FLIPPED END UNIT DRIVEWAY LOCATIONS (WHERE POSSIBLE).	1/18/18

SUBDIVISION	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
OXFORD SQUARE	---	TOD	38	1st.	601101

NOTE: THE COUNTY SHALL BEAR ABSOLUTELY NO RESPONSIBILITY FOR THE RECONSTRUCTION, REPAIR OR REPAIR MAINTENANCE REQUIRED DUE TO ANY CHANGE TO THE PRIVATE UTILITIES INCLUDING, BUT NOT LIMITED TO STORM DRAINS, STORM DRAIN STRUCTURES (E.G. INLETS AND MANHOLES), MICRO BIO-RETENTION FACILITIES AND OTHER PRIVATE SYSTEMS OR FEATURES RESULTING FROM OR INCURRED DURING MAINTENANCE AND/OR REPAIR OF THE PUBLIC WATER SERVICE OR UTILITIES. ANY COSTS INCURRED BY THE COUNTY THAT IS ASSOCIATED WITH RECONSTRUCTION OF PRIVATE UTILITIES, BY THE COUNTY, SHALL BE THE RESPONSIBILITY OF THE OWNER OR ITS SUCCESSORS OR ASSIGNS. THE AFORESAID INCLUDES PRIVATE UTILITIES AND OR STRUCTURES PERMITTED WITHIN THE EASEMENT OR WITHIN THE 10 FOOT EASEMENT SETBACK VIA APPROVED WORK FROM THE DEPARTMENT OF PUBLIC WORKS.

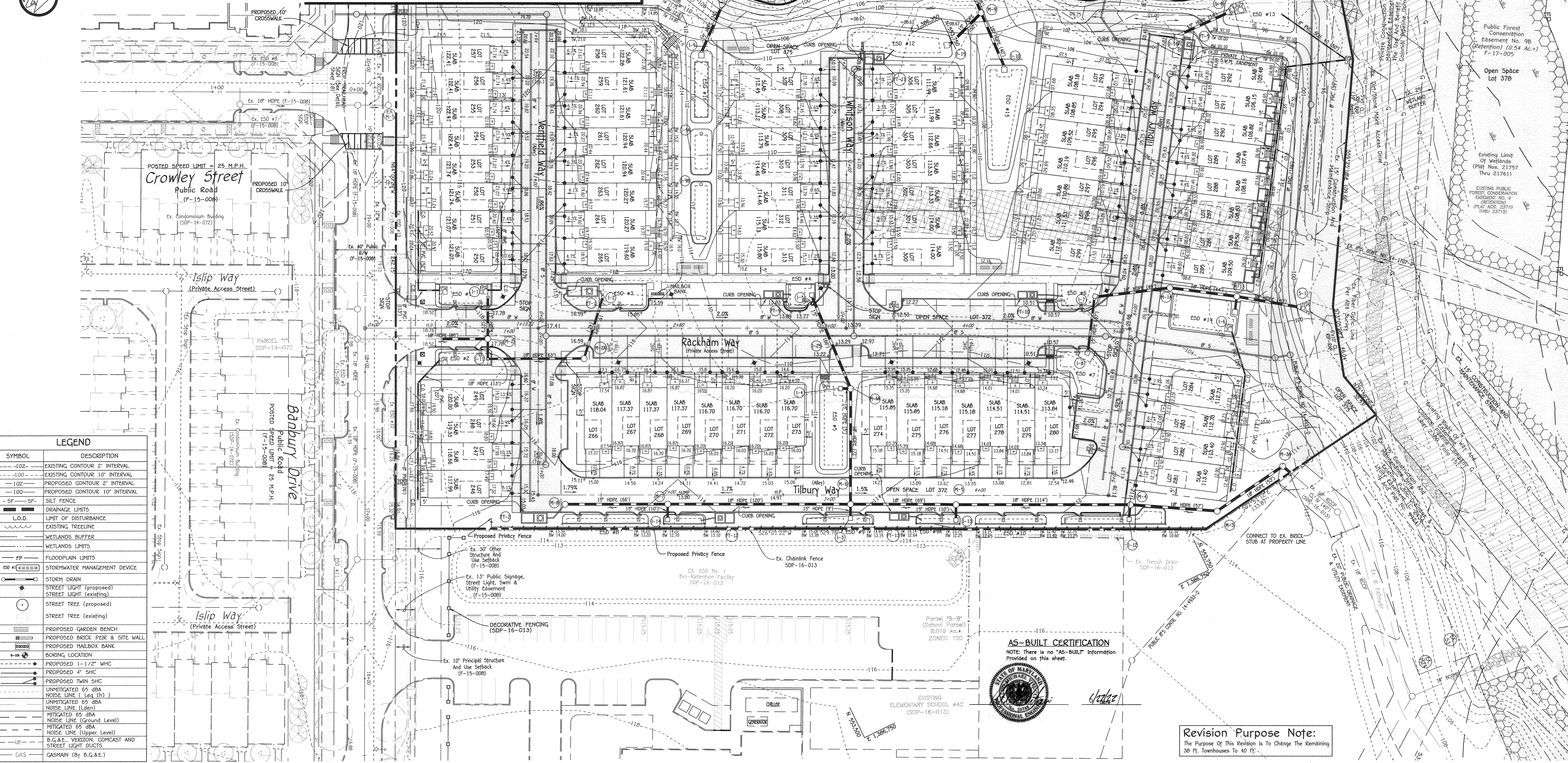
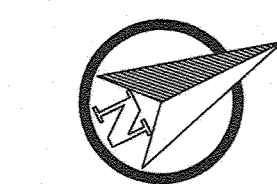
NOTES: 1. ALL WATER HOUSE CONNECTIONS ARE 1-1/2".
2. ALL SEWER HOUSE CONNECTIONS ARE 4".
SEE SHEETS 17 & 18 FOR LABELS

BUILDING FOUNDATION NOTE:
BUILDER SHALL VERIFY THE DEPTH OF THE BUILDING FOUNDATION WITH THE GEOTECHNICAL AND STRUCTURAL ENGINEERS IN RELATION TO ADJACENT UTILITIES AND STORMWATER MANAGEMENT (ES) FACILITIES.

SWM PLANTER BOX NOTE:
PLANTER BOX STORMWATER MANAGEMENT FACILITIES SHALL BE OWNED & MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.

MATCH LINE SEE SHEET 6

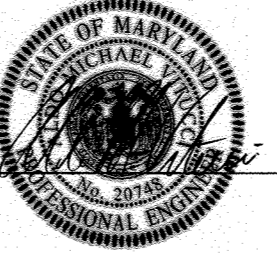
NOTE: SEE GEOMETRY PLANS, SHEETS 3 AND 4 FOR DIMENSIONS AND ADDITIONAL EASEMENT LABELS.



LEGEND

SYMBOL	DESCRIPTION
-102	EXISTING CONTOUR 2' INTERVAL
-100	EXISTING CONTOUR 10' INTERVAL
-102	PROPOSED CONTOUR 2' INTERVAL
-100	PROPOSED CONTOUR 10' INTERVAL
SF	SILT FENCE
---	DRAINAGE LIMITS
---	L.O.D. LIMIT OF DISTURBANCE
---	EXISTING TREELINE
---	WETLANDS BUFFER
---	WETLANDS LIMITS
FP	FLOODPLAIN LIMITS
ESD #1	STORMWATER MANAGEMENT DEVICE
---	STORM DRAIN
---	STREET LIGHT (proposed)
---	STREET LIGHT (existing)
---	STREET TREE (proposed)
---	STREET TREE (existing)
---	PROPOSED GARDEN BENCH
---	PROPOSED BRICK PEIR & SITE WALL
---	PROPOSED MAILBOX BANK
---	BORING LOCATION
---	PROPOSED 1-1/2" WHC
---	PROPOSED 4" SHC
---	PROPOSED TWIN SHC
---	UNMITIGATED 65 dBA NOISE LINE (Leq 1h)
---	UNMITIGATED 65 dBA NOISE LINE (Leq)
---	MITIGATED 65 dBA NOISE LINE (Ground Level)
---	MITIGATED 65 dBA NOISE LINE (Upper Level)
---	B.G.&E., VERIZON, COMCAST AND STREET LIGHT DUCTS
---	GAS (By B.G.&E.)

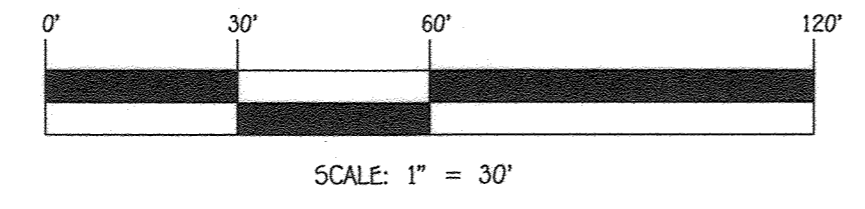
AS-BUILT CERTIFICATION
NOTE: There is no "AS-BUILT" information provided on this sheet.



Revision Purpose Note:
The Purpose of This Revision is To Change The Remaining 38 Ft. Townhouses To 40 Ft.

NO.	REVISION	DATE
1	REVISE ALL 38' UNITS TO 40'	9/9/19
2	REVISED 38' TOWNHOUSE UNITS TO 40' (WHERE POSSIBLE) & FLIPPED END UNIT DRIVEWAY LOCATIONS WHERE POSSIBLE.	1/18/20

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
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Owner
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c/o David P. Scheffacker, Jr.,
Managing Member
100 West Road, Suite 304
Towson, Maryland 21204
Ph: 410-296-3800

Developer
Preston + Scheffacker Properties
100 West Road, Suite 304
Towson, Maryland 21204
Ph: 410-296-3800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development *[Signature]* 5/20/20 Date

Chief, Development Engineering Division *[Signature]* 5-29-20 Date

Director, Department of Planning and Zoning *[Signature]*

SUBDIVISION	SECTION/AREA	LOT Nos.
OXFORD SQUARE		246 - 371

PLAT No.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
24357-24362		TOD	38	1st	601101

REVISED
SITE DEVELOPMENT PLAN
OXFORD SQUARE
"A Howard County Green Neighborhood"
"RIVER OVERLOOK"
Lots 246 Thru 371 & Open Space Lots 372 Thru 375 and Open Space Lot 378
(Being A Resubdivision Of Parcels "Z", "E-E" & Open Space Lot 376, As Shown On Revision Plat Entitled "Green Neighborhood" Parcels "Z", "E-E" And Open Space Lot 376 Recorded Among The Land Records Of Howard County, Maryland As Plat Nos. 23896 Thru 23897) Zone: TOD

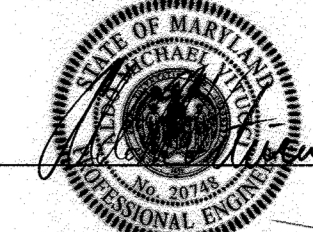
Tax Map No.: 38 Grid No.: 2D Parcel No.: 1003
First Election District Howard County, Maryland
Scale: As Shown
Date: Sept. 9, 2019
Sheet 5 of 40

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET

NOTE: THE COUNTY SHALL BEAR ABSOLUTELY NO RESPONSIBILITY FOR THE RECONSTRUCTION, REPAIR OR PERMANENT MAINTENANCE REQUIRED DUE TO ANY DAMAGE TO THE PRIVATE UTILITIES INCLUDING, BUT NOT LIMITED TO STORM DRAINS, STORM DRAIN STRUCTURES (E.G. INLETS AND MANHOLES), MICRO BIO-RETENTION FACILITIES AND OTHER PRIVATE SYSTEMS OR FEATURES RESULTING FROM OR INCURRED DURING MAINTENANCE AND/OR REPAIR OF THE PUBLIC WATER, SEWER OR UTILITIES. ANY COSTS INCURRED BY THE COUNTY THAT IS ASSOCIATED WITH RECONSTRUCTION OF PRIVATE UTILITIES BY THE COUNTY SHALL BE THE RESPONSIBILITY OF THE OWNER OR ITS SUCCESSORS OR ASSIGNEES. THE AFORESAID INCLUDES PRIVATE UTILITIES AND OR STRUCTURES PERMITTED WITHIN THE EASEMENT OR WITHIN THE 10 FOOT EASEMENT SETBACK VIA APPROVED WATER FROM THE DEPARTMENT OF PUBLIC WORKS.

A5-BUILT CERTIFICATION

NOTE: There is no "A5-BUILT" Information Provided on this sheet.



5/20/20
Date

SWM PLANTER BOX NOTE:
PLANTER BOX STORMWATER MANAGEMENT FACILITIES SHALL BE OWNED & MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.

SYMBOL	DESCRIPTION
-102-	EXISTING CONTOUR 2' INTERVAL
-100-	EXISTING CONTOUR 10' INTERVAL
-102-	PROPOSED CONTOUR 2' INTERVAL
-100-	PROPOSED CONTOUR 10' INTERVAL
-SF-	SILT FENCE
---	DRAINAGE LIMITS
L.O.D.	LIMIT OF DISTURBANCE
---	EXISTING TREELINE
---	WETLANDS BUFFER
---	WETLANDS LIMITS
FP	FLOODPLAIN LIMITS
ESD	STORMWATER MANAGEMENT DEVICE
---	STORM DRAIN
---	STREET LIGHT (proposed)
---	STREET LIGHT (existing)
---	STREET TREE (proposed)
---	STREET TREE (existing)
---	PROPOSED GARDEN BENCH
---	PROPOSED BRICK PERI & SITE WALL
---	PROPOSED MAILBOX BANK
---	BORING LOCATION
---	PROPOSED 1-1/2" WHC
---	PROPOSED 4" SHC
---	PROPOSED TWIN SHC
---	UNMITIGATED 65 dBA NOISE LINE (Leq (h))
---	UNMITIGATED 65 dBA NOISE LINE (Lden)
---	MITIGATED 65 dBA NOISE LINE (Ground Level)
---	MITIGATED 65 dBA NOISE LINE (Upper Level)
---	B.G.&E., VERIZON, COMCAST AND STREET LIGHT DUCTS
---	GAS
---	GASMAN (By B.G.&E.)



MATCH LINE SEE SHEET 5

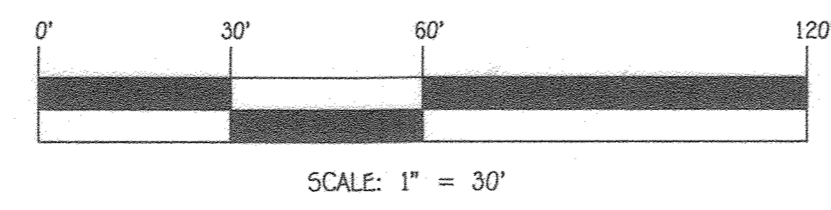
NOTES: 1. ALL WATER HOUSE CONNECTIONS ARE 1-1/2".
2. ALL SEWER HOUSE CONNECTIONS ARE 4".
SEE SHEETS 17 & 18 FOR LABELS

BUILDING FOUNDATION NOTE:
BUILDER SHALL VERIFY THE DEPTH OF THE BUILDING FOUNDATION WITH THE GEOTECHNICAL AND STRUCTURAL ENGINEERS IN RELATION TO ADJACENT UTILITIES AND STORMWATER MANAGEMENT (ES0) FACILITIES.

Revision Purpose Note:
The Purpose Of This Revision Is To Change The Remaining 38 Ft. Townhouses To 40 Ft.

NOTE: SEE GEOMETRY PLANS, SHEETS 3 AND 4 FOR DIMENSIONS AND ADDITIONAL EASEMENT LABELS.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELCOTT CITY, MARYLAND 21142
(410) 461-2292



Owner
Lellogg-CCP, LLC
c/o David P. Scheffacker, Jr.,
Managing Member
100 West Road, Suite 304
Towson, Maryland 21204
Ph: 410-296-3800

Developer
Preston • Scheffacker Properties
100 West Road, Suite 304
Towson, Maryland 21204
Ph: 410-296-3800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development
Chief, Development Engineering Division
Director, Department of Planning and Zoning

5/20/20
Date
5-20-20
Date
5-27-20
Date

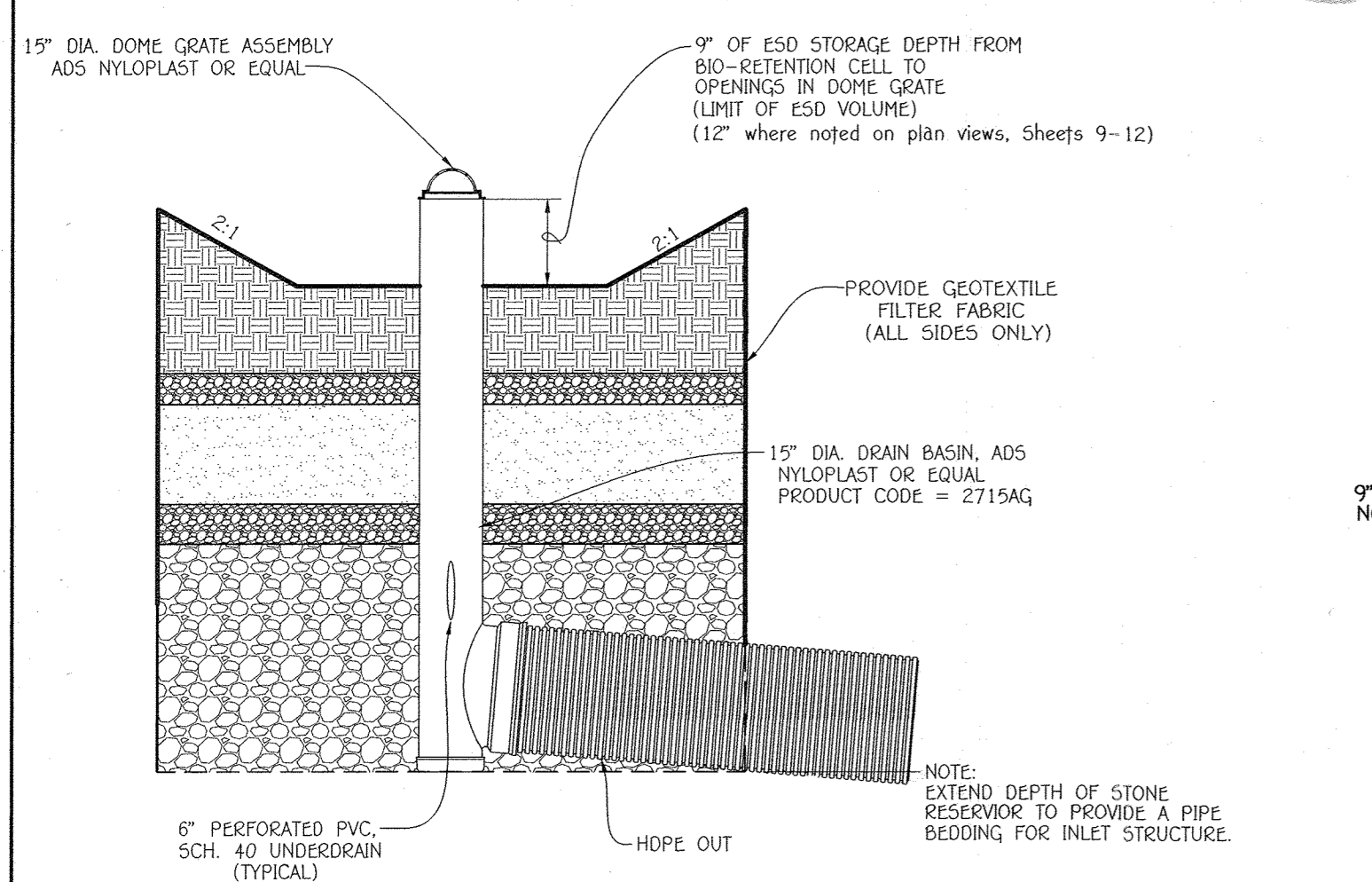
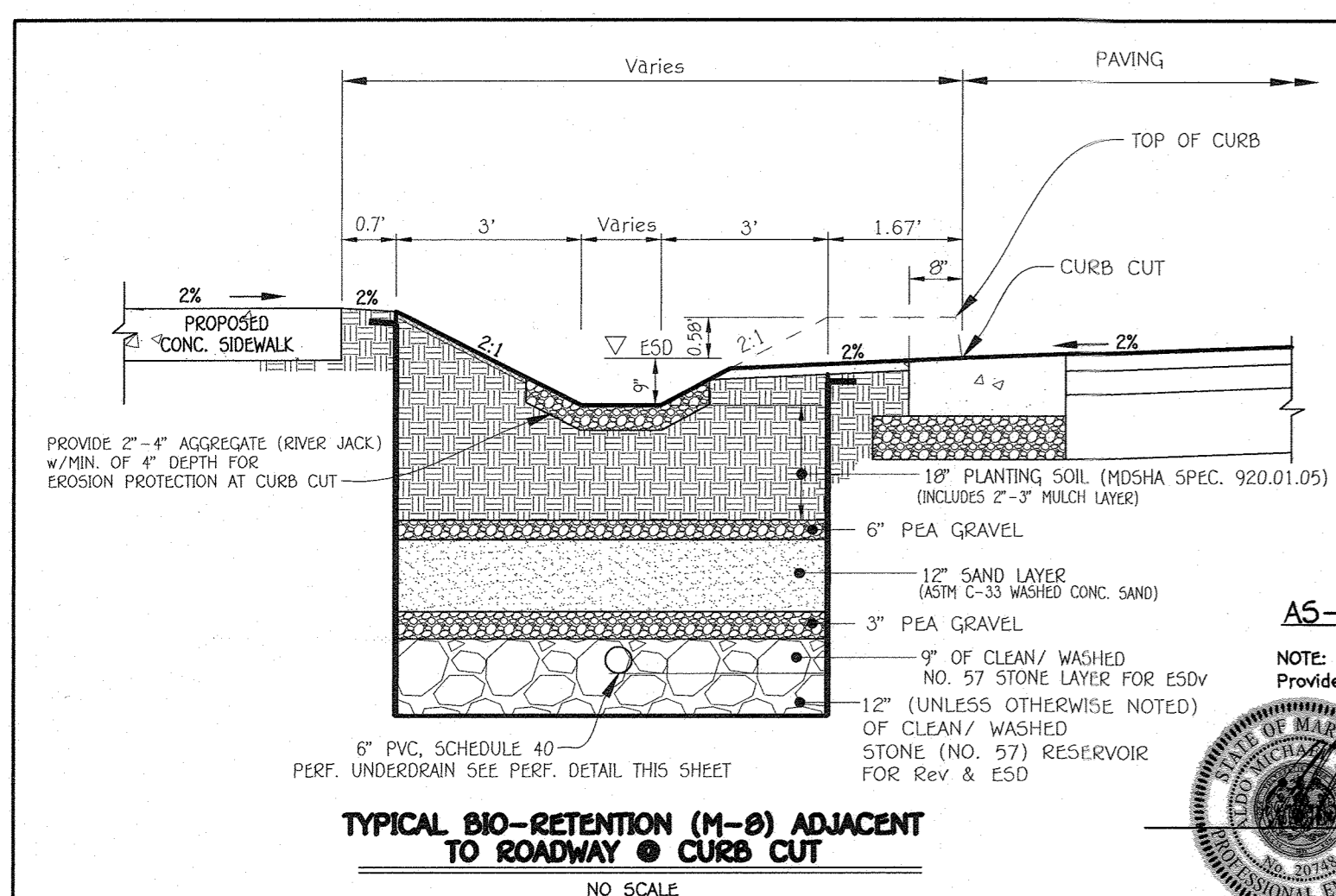
SUBDIVISION	SECTION/AREA	LOT Nos.
OXFORD SQUARE		246 - 371
PLAT Nos.	BLOCK NO.	ZONE
24357-24362		TOO
	TAX/ZONE	ELEC. DIST.
	38	1st
	CENSUS TR.	
	601101	

REVISED SITE DEVELOPMENT PLAN
OXFORD SQUARE
"A Howard County Green Neighborhood"
"RIVER OVERLOOK"

Lots 246 Thru 371 & Open Space Lots 372 Thru 375 and Open Space Lot 378
(Being A Re subdivision of Parcels "Z", "E-C" & Open Space Lot 376, As Shown On Revision Plan Entitled "Green Neighborhood" Parcels "Z", "E-C" & Open Space Lot 376
Recorded Among The Land Records Of Howard County, Maryland As Plat Nos. 23896 Thru 23897)

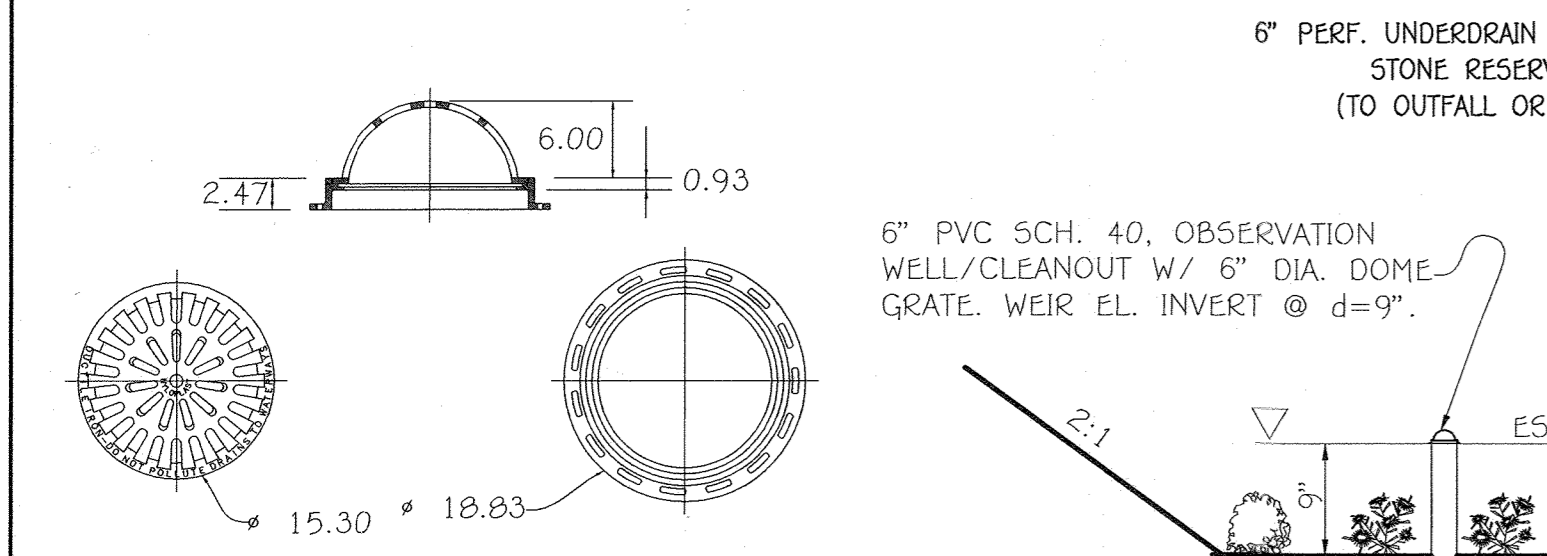
Tax Map No.: 38 Grid No.: 20 Parcel No.: 1003
First Election District: Howard County, Maryland
Scale: As Shown
Date: Sept. 9, 2019
Sheet 6 Of 40

THERE IS NO "A5-BUILT" INFORMATION PROVIDED ON THIS SHEET



TYPICAL 15\"/>

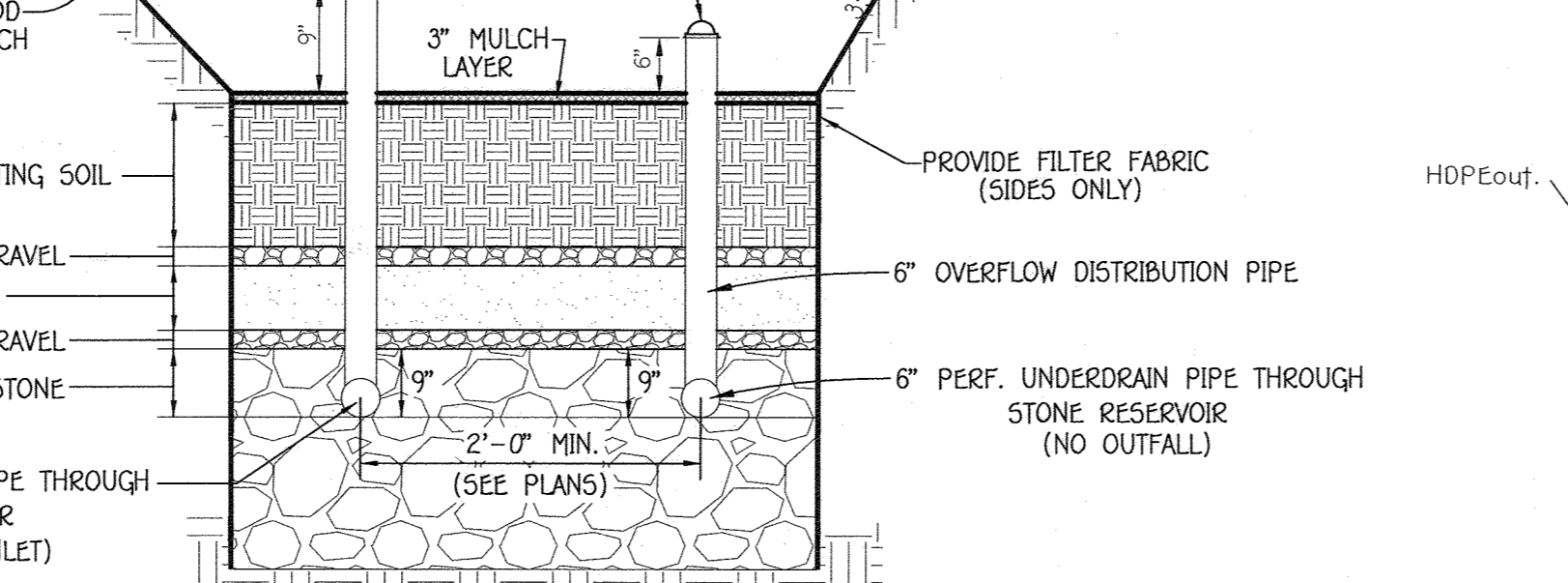
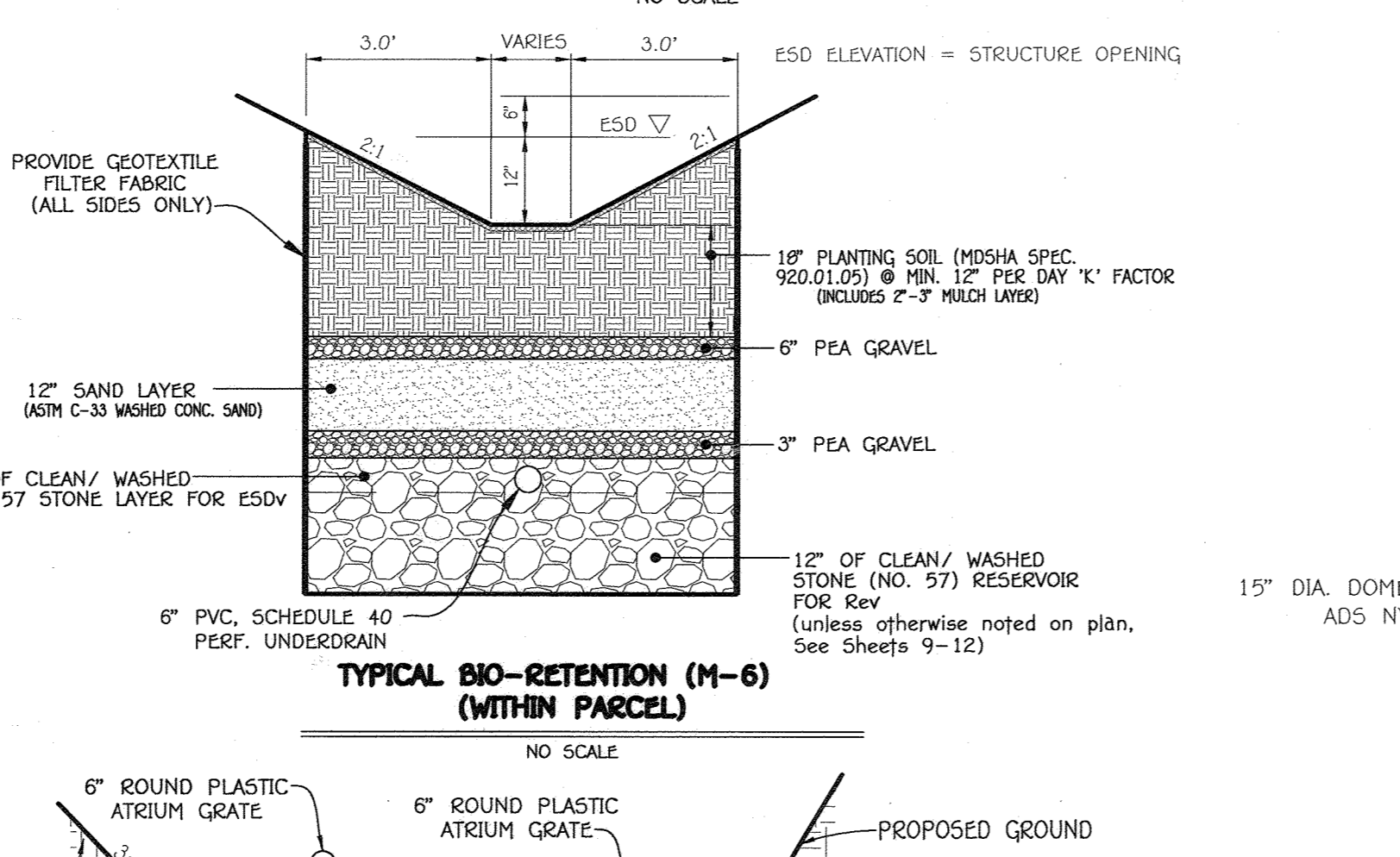
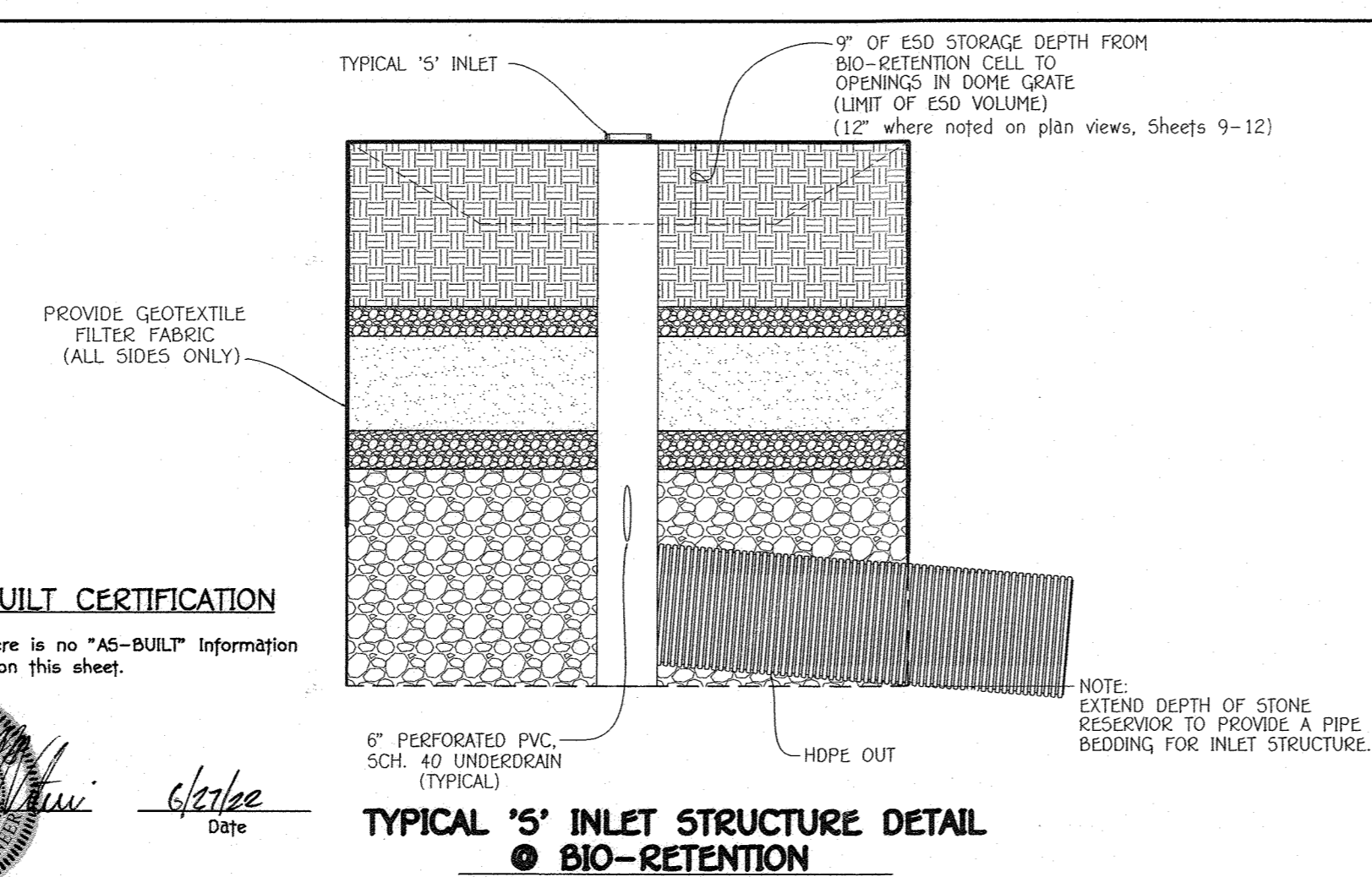
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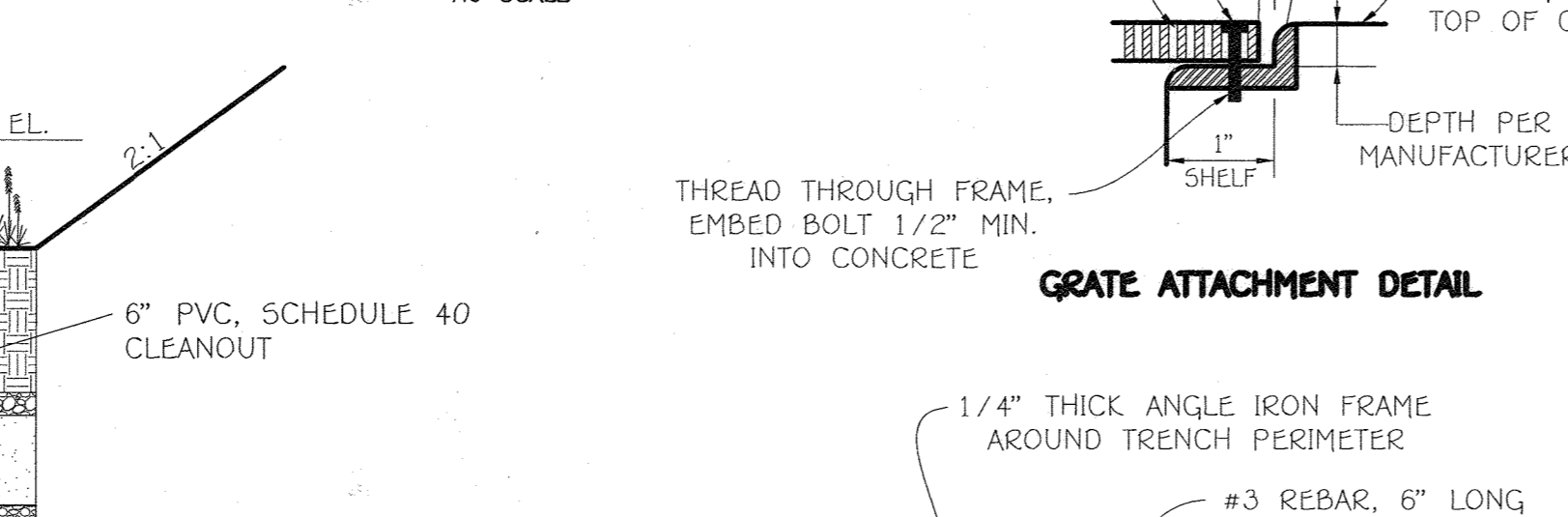
ALL DIMENSIONS IN INCHES UNLESS NOTED OTHERWISE
 QUALITY: MATERIAL SHALL CONFORM TO ASTM A536 GRADE 70-50-05
 PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT LOCKING DEVICE AVAILABLE UPON REQUEST
 SEE DRAWING NO. 7001-110-230

Nyloplast
 3130 VERONA AVE
 BUFORD, GA 30518
 PHN (770) 932-2443
 FAX (770) 932-2490
 www.nyloplast-us.com

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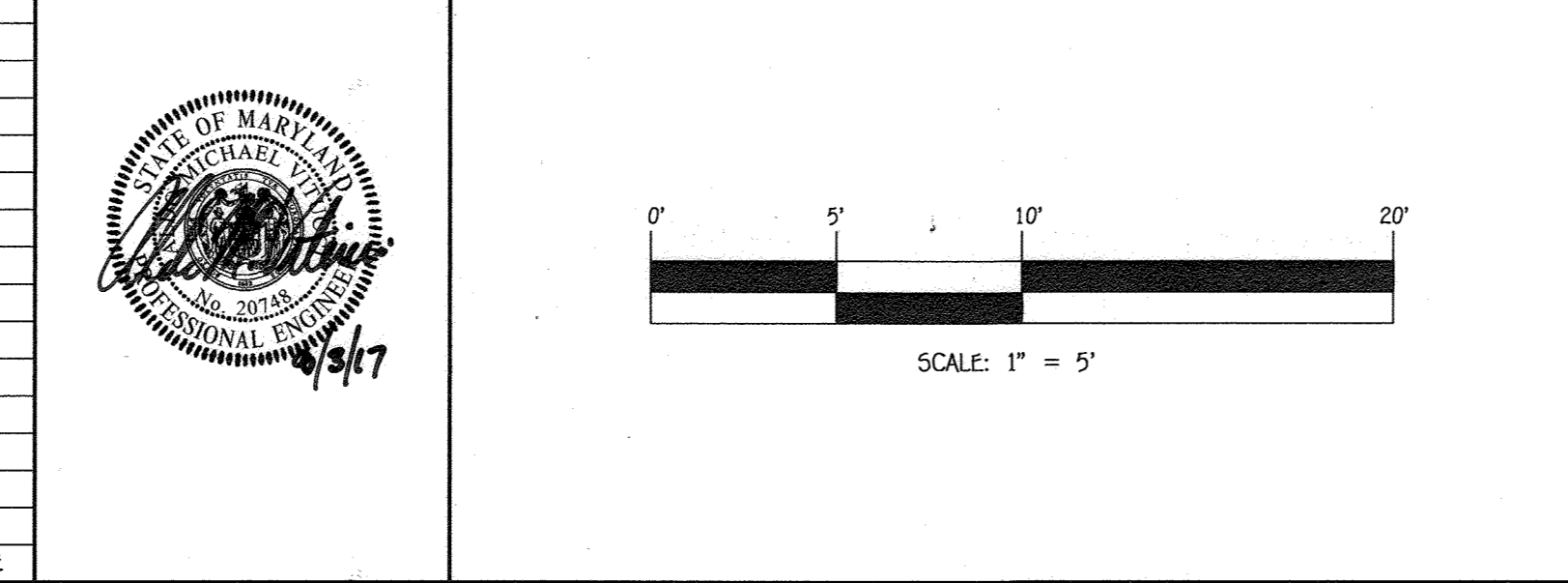


MICRO BIO-RETENTION SECTION WITH 6\"/>

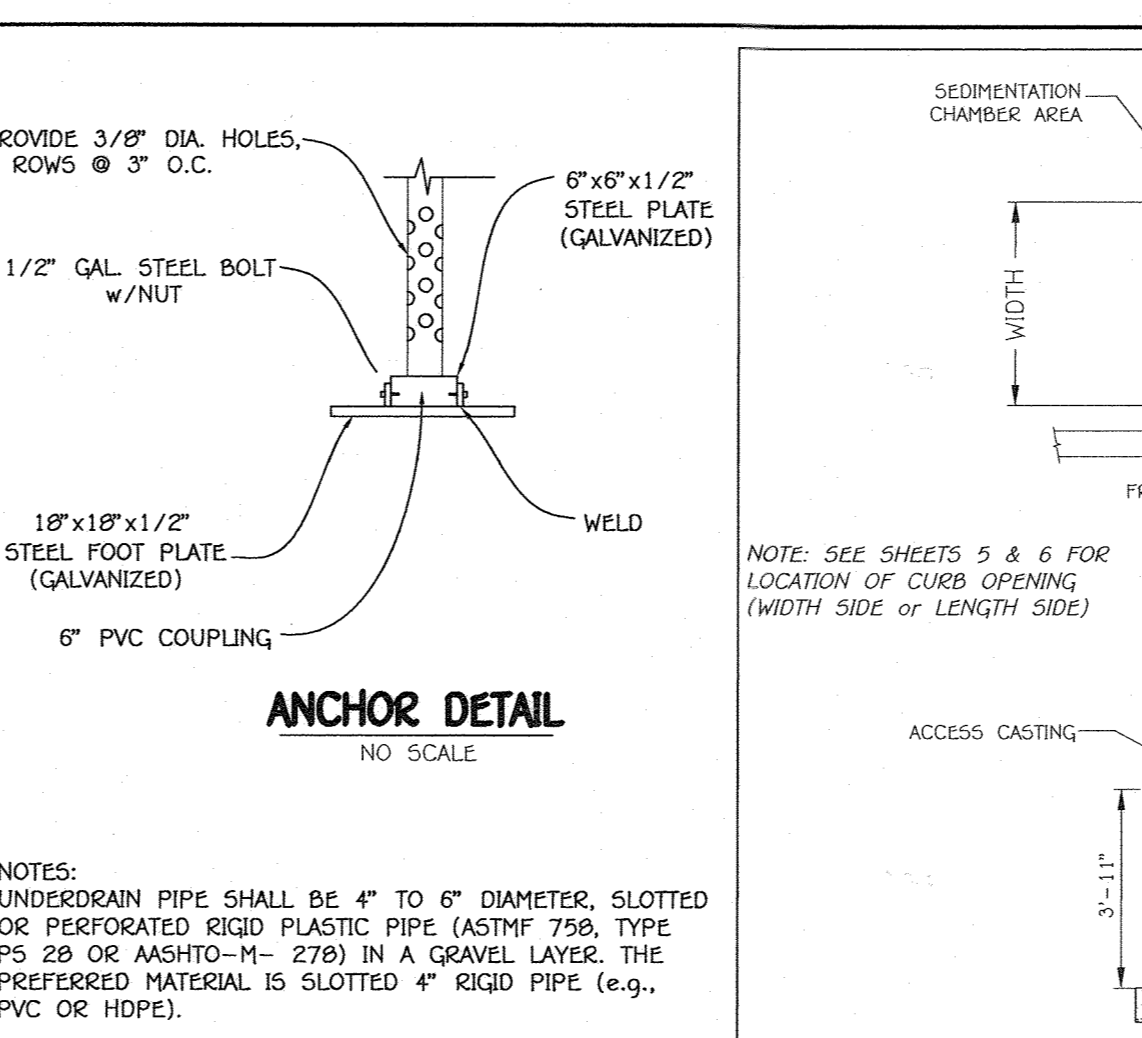


SECTION @ OBSERVATION WELL LOCATION
 NOT TO SCALE

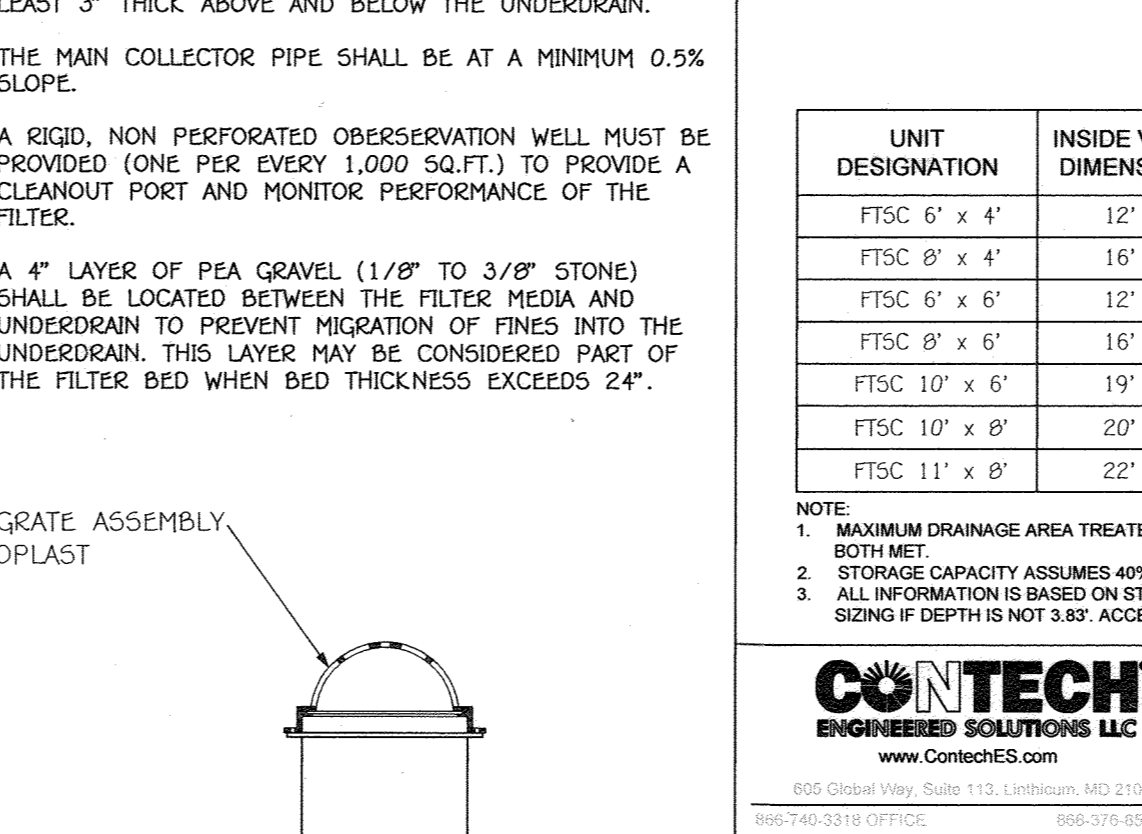
GRATE ATTACHMENT DETAIL
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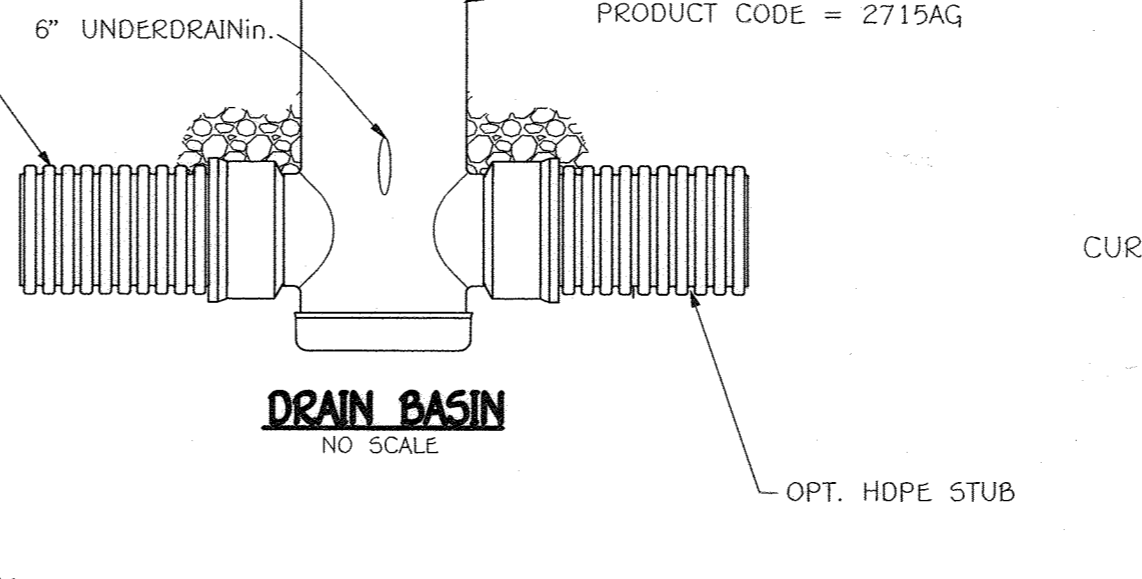
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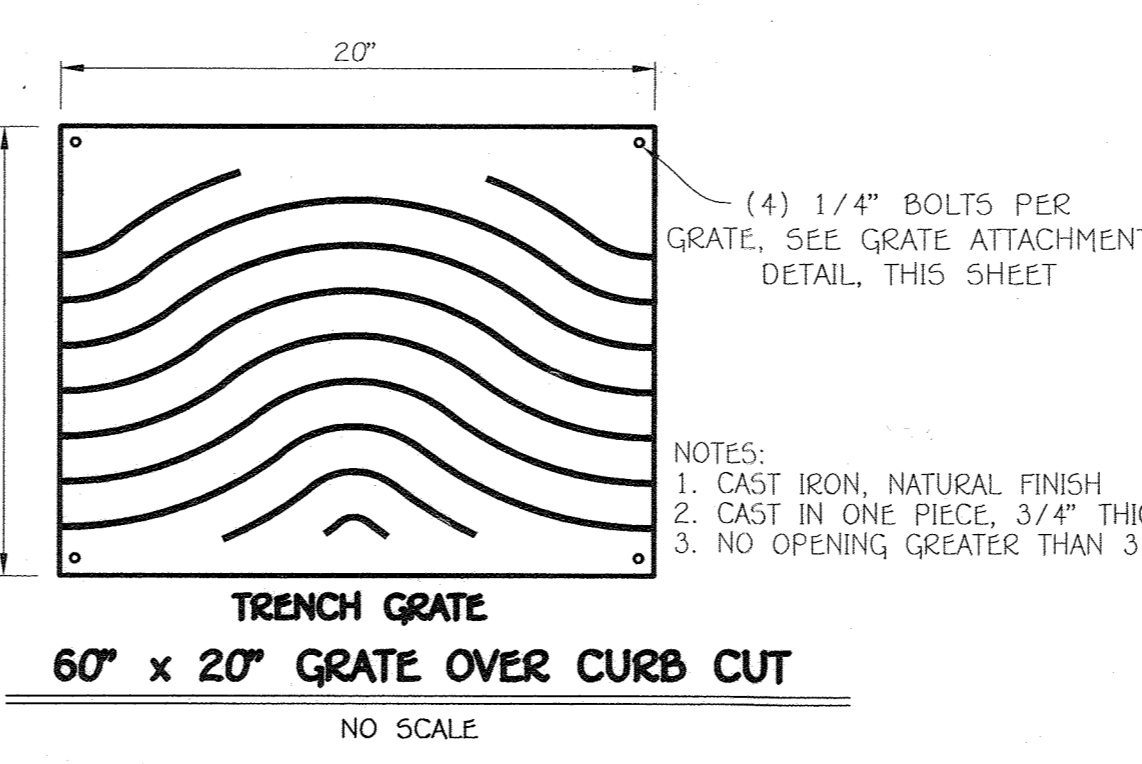
ANCHOR DETAIL
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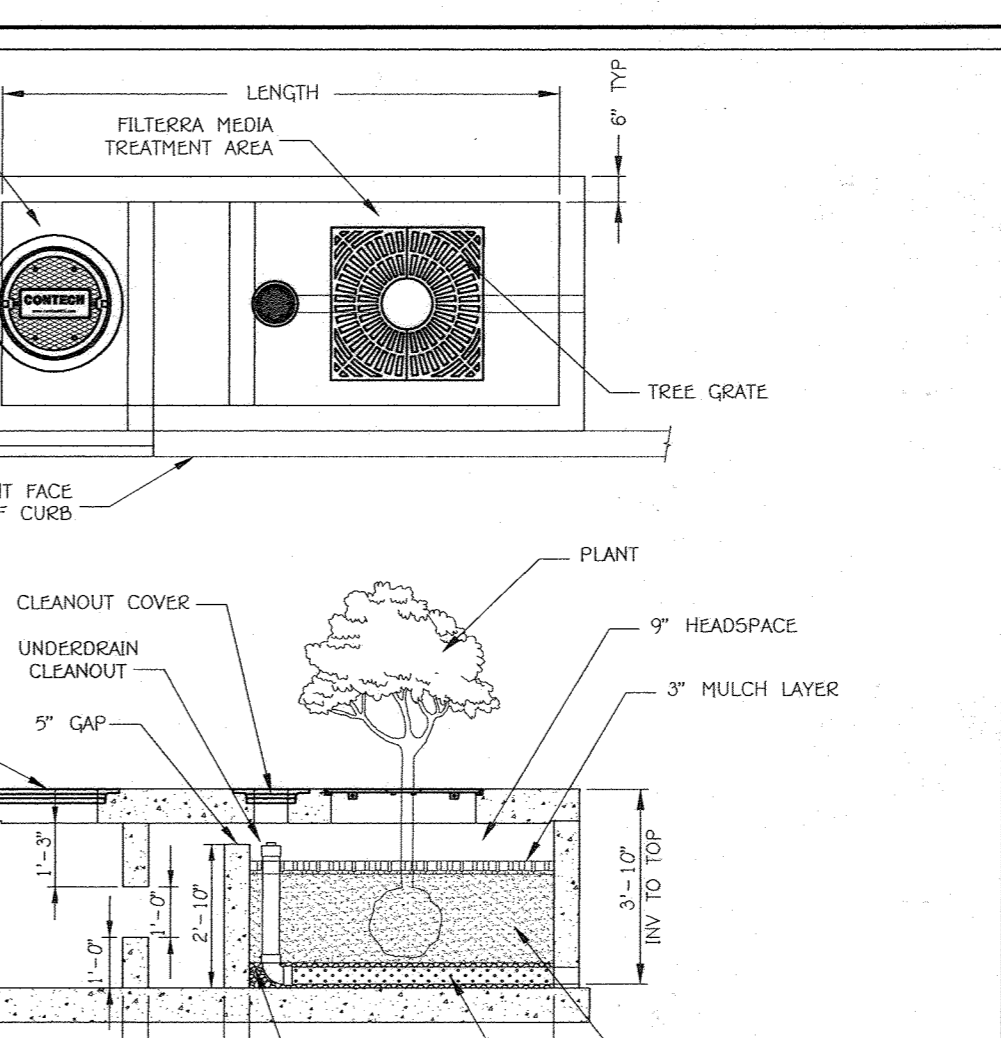
DRAIN BASIN
 NO SCALE



TRENCH GRATE
 NO SCALE



CURB OPENING DETAIL FOR CONCRETE CURB UNDER SIDEWALK @ ESD #6 & #7
 NO SCALE



FILTRERA STANDARD PLAN NOTES

UNIT DESIGNATION	INSIDE VAULT DIMENSIONS	FILTRERA TREATMENT AREA	MAXIMUM DRAINAGE AREA TREATED (SF)	WVW STORAGE CAPACITY (CF)	
FTSC 6' x 4'	12' x 4'	6' x 4'	5,216	103	FT-9, FT-10, FT-13
FTSC 8' x 4'	12' x 4'	8' x 4'	7,141	141	FT-11, FT-12
FTSC 6' x 6'	12' x 6'	6' x 6'	7,947	155	FT-2, FT-3, FT-4
FTSC 8' x 6'	16' x 6'	8' x 6'	10,734	212	FT-1, FT-7, FT-8
FTSC 10' x 6'	19' x 6'	10' x 6'	12,639	250	FT-14
FTSC 10' x 8'	20' x 8'	10' x 8'	18,178	360	
FTSC 11' x 8'	22' x 8'	11' x 8'	20,000	398	

FILTRERA® WITH SEDIMENTATION CHAMBER

SECTION A-A

PLAN

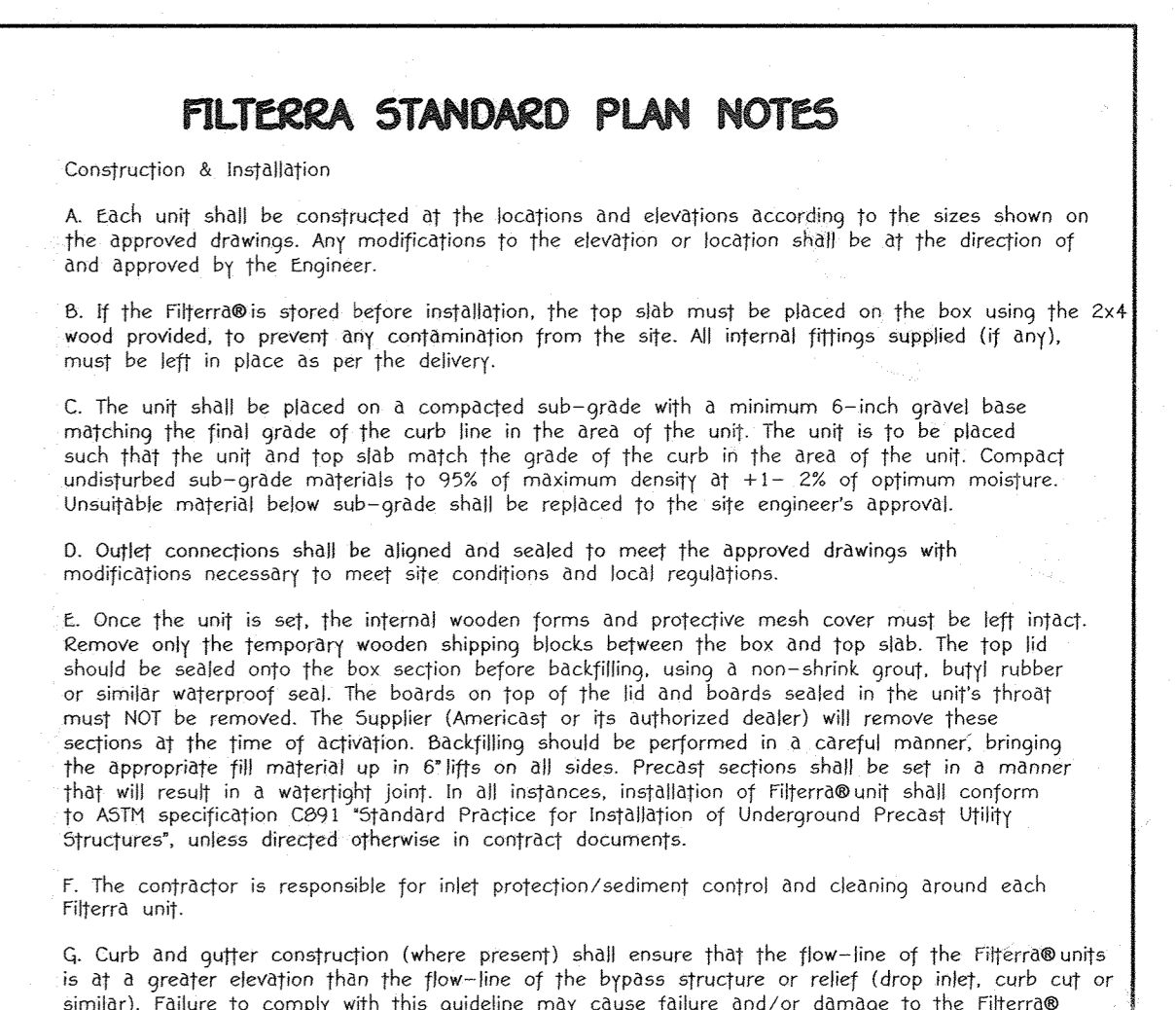
CURB OPENING DETAIL FOR CONCRETE CURB UNDER SIDEWALK @ ESD #6 & #7
 NO SCALE

DESIGN GUIDELINES FOR USING FILTRERA

- Do not place in a sump condition. The standard Filtrera® cannot be used as a stand alone inlet - it will not effectively bypass during higher intensity rainfall events. For sump conditions please contact Filtrera®.
- Plans MUST show Filtrera® Top Curb (TC) and Flow Line (FL) spot elevations and also bypass TC (where applicable) and bypass FL spot elevations.
- The Filtrera® TC and FL elevations MUST be higher than the bypass TC and FL elevations for effective bypass. Use Drawing FLP-2 (p.24) as a detail on the project plans.
- For proper trash collection ensure a minimum 4" and maximum 6" Filtrera® throat opening depth and use Drawing CGT-5 (p.25) as a detail on the project plans.
- Do not direct surface flow to the standard Filtrera® in a "head-on" configuration. Refer to Guidelines GQ1-A (p.13) and GQ2 (p.18) for grading design that encourages flow to enter a Filtrera® in a cross linear flow -left-to-right or right-to-left in the gutter in front of the throat, as per a wet curb which prevents system damage. During extreme storm events the excess flow should continue past the Filtrera® to a bypass inlet or other means of relief. Guideline GQ3, Parking Lot Corners, shows common situations (p.19).
- To calculate which size Filtrera® is required, use Table 1, Filtrera® Quick Sizing Table. Appropriate to the project's geographical region and target treatment regime (p.13). The entire contributing drainage area to the Filtrera® should be considered and the minimum allowable C factor noted. The maximum contributing drainage area will vary with site conditions. For further information relating to sizing please contact Filtrera®.
- To ensure correct installation, include the Standard Filtrera® Plan Notes (p.26-27) on your Filtrera® detail project sheet, as well as detailed drawings FLP-2 and CGT-5 (p.24,25).
- Positive drainage of each Filtrera® unit's effluent treatment pipe is required to prevent free standing water from accumulating in the system or underdrain. This could occur due to tidal influences or improper connection of Filtrera's effluent pipe to a bypass structure or other outfall.

FILTRERA: Operation and Maintenance

- Annual maintenance consists of a maximum of (2) scheduled visits. The visits are scheduled seasonally; the spring visit aims to clean up after winter loads including salts and sands. The fall visit helps the system by removing excessive leaf litter.
- Each maintenance inspection consists of the following tasks:
 - Filtrera® unit inspection
 - Foreign debris, silt, mulch and trash removal
 - Filter media evaluation and recharge as necessary
 - Plant health evaluation and pruning or replacement as necessary
 - Replacement of mulch
 - Disposal of all maintenance refuse items
 - Maintenance records updated and stored



STORMWATER MANAGEMENT NOTES & DETAILS

OXFORD SQUARE
 "A Howard County Green Neighborhood"
 "RIVER OVERLOOK"

Lots 246 Thru 371 & Open Space Lots 372 Thru 375 and Open Space Lot 376
 (Being A Re subdivision Of Parcels "Z", "E-C" & Open Space Lot 376, As Shown On Revision #141 Entitled "Green Neighborhood" Parcels "Z", "E-C" And Open Space Lot 376 Recorded Among The Land Records Of Howard County, Maryland As Plat No. 23896 Tr. 23897)

Tax Map No.: 38 Grid No.: 20 Parcel No.: 1003
 First Election District Howard County, Maryland
 Scale: As Shown
 Date: August 1, 2017
 Sheet 7 of 40

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Walter S. ... 9-28-17
 Chief, Division of Land Development

... 9-15-17
 Chief, Development Engineering Division

Nadine J. ... 10-10-17
 Director - Department of Planning and Zoning

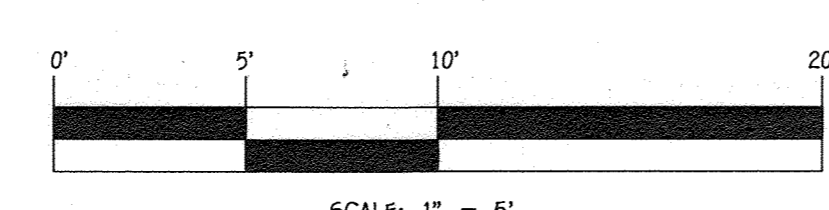
Owner
 Kelloog-CCP, LLC
 c/o David P. Scheffner, Jr.,
 Managing Member,
 100 West Road, Suite 304
 Towson, Maryland 21204
 Ph: 410-296-3800

Developer
 Preston • Scheffner Properties
 100 West Road, Suite 304
 Towson, Maryland 21204
 Ph: 410-296-3800

SUBDIVISION
 OXFORD SQUARE SECTION/AREA LOT Nos.
 246 - 371

PLAT NO. 24357-24362 **BLOCK NO.** --- **ZONE** TOD **TAX/ZONE** 38 **ELEC. DIST.** 1st **CENSUS TR.** 601101

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 461-3099



Infiltration and Filter System Construction Specifications

Infiltration and filter systems either take advantage of existing permeable soils or create a permeable medium such as sand for infiltration and filter. In some instances where permeability is great, these facilities may be used for up to 24 hours. The most common systems include infiltration trenches, infiltration basins, sand filters, and organic filters.

When properly planned, vegetation will thrive and enhance the functioning of these systems. For example, pre-treatment filters will trap sediments that often are bound with phosphorus and metals. Vegetation planted in the facility will aid in nutrient uptake and water storage. Additionally, plant roots will provide aeration for stormwater to permeate soil for groundwater recharge. Finally, successful plantings provide aesthetic value and wildlife habitat making these facilities more desirable to the public.

- Design Constraints:**
- Planting strips of at least 20 feet will cause sediments to settle out before reaching the facility. Therefore, the facility shall be designed with a minimum 20-foot planting strip.
 - Determine areas that will be saturated with water and water table depth so that appropriate plants may be selected (hydrology will be similar to bioretention facilities, see Figure A.5 and Table A.4 for planting material guidelines).
 - Plants known to send down deep taproots should be avoided in systems where fabric is used as a filter medium.
 - Test soil conditions to determine if soil amendments are necessary.
 - Plants shall be located on their access to the facility for maintenance.
 - Stable heavy foot areas with erosion control mats or sod.
 - Temporary divert flows from seeded areas until vegetation is established.
 - See Table A.5 for additional design considerations.

Soil Bed Characteristics

The characteristics of the soil for the bioretention facility are perhaps as important as the facility location, size, and treatment volume. The soil must be permeable enough to allow runoff to filter through the media, while having characteristics suitable to promote and maintain a robust vegetative cover. In addition, much of the nutrient pollutant uptake (nitrogen and phosphorus) is accomplished through chemical and microbial activity within the soil profile. Therefore, soils must harbor their chemical and physical properties to support this community above and below ground.

The planting soil should be a sandy loam, loamy sand, loam (USDA), or a loam/clay loam (soil with less than 25% by volume (Environmental Quality Resources (EQE), 1996; Engineering Technology Institute, Inc. 2000) clay content). The clay content for these soils should be less than 25% by volume (Environmental Quality Resources (EQE), 1996; Engineering Technology Institute, Inc. 2000) clay content). The clay content for these soils should be less than 25% by volume (Environmental Quality Resources (EQE), 1996; Engineering Technology Institute, Inc. 2000) clay content).

Parameter	Value
pH range	5.2 to 7.00
Organic matter	1.5 to 4.0% (by weight)
Nitrogen	35 lbs. per acre, minimum
Phosphorus (phosphate - P2O5)	75 lbs. per acre, minimum
Potassium (potash - K2O)	85 lbs. per acre, minimum
Soluble salts	500 ppm
Clay	0 to 25%
Sand	35 to 55%

Mulch Layer

The mulch layer plays an important role in the performance of the bioretention system. The mulch layer helps maintain moisture and avoids surface sealing, which reduces permeability. Mulch helps prevent erosion, and provides a microenvironment suitable for soil biota at the media/soil interface. It also allows a permanent layer, trapping the finer sediments, which remain suspended after the primary pretreatment.

The mulch layer should be standard landscape type, single or double shredded hardwood mulch or chips. The mulch layer should be well aged (composted or stored for at least 12 months), uniform in color, and free of other materials such as weed seeds, soil, roots, etc. The mulch should be applied to a minimum depth of three inches. Grass clippings should not be used as a mulch material.

Planting Guidance

Plant material selection should be based on the goal of simulating a terrestrial forested community of native species. Bioretention simulates an upland-wooded ecosystem. The community should be dominated by trees, but have a distinct community of understorey trees, shrubs and herbaceous materials. By creating a diverse, dense plant cover, a bioretention facility will be able to treat stormwater runoff and withstand urban stresses from insects, drought, temperature, wind, and exposure.

The proper selection and installation of plant materials is key to a successful system. There are essentially three zones within a bioretention facility (Figure A.5). The lowest elevation supports plant species adapted to standing and fluctuating water levels. The middle elevation supports plants that like drier soil conditions, but can still tolerate occasional inundation by water. The upper slope is the highest elevation and generally supports plants adapted to drier conditions. For appropriate plant material for bioretention facilities, refer to MHA Approved Species List. The list of plant material should be flexible, but should follow the general principles described in Table A.5. The objective is to have a system, which resembles a random, and natural plant layer, while maintaining optimal conditions for plant establishment and growth. For a more extensive bioretention plan, consult E168, 1993 or Clayton and Schuler, 1997.

Operation And Maintenance Schedule For Commercial Association Owned & Maintained Bio-Retention Areas (M-6)

- The owner shall maintain the plant material, mulch layer and soil layer annually, maintenance of mulch and soil is limited to correcting areas of erosion or wash out. Any such replacement shall be done in the spring. Plant material shall be checked for disease and insect infestation and maintenance will address dead material and pruning. Acceptable replacement plant material is limited to the following: 2000 Maryland stormwater design manual volume II, table A.4.1 and 2.
- The owner shall perform a plant in the spring and in the fall each year. During the inspection, the owner shall remove dead and diseased vegetation considered beyond treatment, replace dead plant material with acceptable replacement plant material. Treat diseased trees and shrubs and replace all deficient stakes and wires.
- The owner shall inspect the mulch each spring. The mulch shall be replaced every two to three years. The previous mulch layer shall be removed before the new layer is applied.
- The owner shall correct soil erosion on an as needed basis, with a minimum of once per month and after each heavy storm.
- The owner shall maintain all observation wells, clean-outs and perforated underdrains.
- Filter material must be replaced when water remains on the surface of the filter bed for more than 24 hours following a 1 or 2 year storm event or more than 48 hours following a 10 year storm event.

B.4.C Specifications for Micro-Bioretenion. Rain Gardens, Landscape Infiltration & Infiltration Berms

- Material Specifications**
The allowable materials to be used in these practices are detailed in Table B.4.1.
- Filtering Media or Planting Soil**
The soil shall be a uniform mix, free of stones, stumps, roots or other similar objects larger than two inches. No other materials or substances shall be mixed or dumped within the micro-bioretenion practice that may be harmful to plant growth, or prove a hazard to the plant or maintenance operations. The planting soil shall be free of kermesid mites, Quedryella, Johnson grass, or other noxious weeds as specified under CORV 15.06.01.05.

The planting soil shall be tested and shall meet the following criteria:
Soil Component - Loamy Sand or Sandy Loam (USDA Soil Texture Classification)
Organic Content - Minimum 10% by dry weight (ASTM D 2974). In general, this can be met with a mixture of loamy sand (60%-65% and compost (15% to 40%) or sand/loam (20%), coarse sand (30%), and compost (40%).
pH Content - Media shall have a pH content of less than 5.5.
City Range - Media should be between 5.5 - 7.0. Amendments (e.g., lime, iron sulfate plus sulfur) may be mixed into the soil to increase or decrease pH.

There shall be at least one soil test per project. Each test shall consist of both the standard soil test for pH, and additional tests of organic matter, and soluble salts. Further analysis is required from the site specified below. If tested is required, then a texture analysis shall be performed for each location where the topsoil was excavated.

Compaction
It is very important to minimize compaction of both the base of bioretention practices and the required bedding. When possible, use excavation holes to remove original soil. If practices are excavated using a loader, the contractor should use wide tread or marsh track equipment, or high equipment with turf type tires. Use of equipment with narrow tracks or narrow tires, rather than wide tread, or high-pressure tires will cause excessive compaction resulting in reduced infiltration rates and is not acceptable. Compaction will significantly contribute to design failure.

Compaction can be alleviated at the base of the bioretention facility by using a primary tillage operation such as a chisel plow, ripper, or subsoiler. These tillage operations are to restructure the soil profile through the 12 inch compaction zone. Subsoiler methods must be approved by the engineer. Subsoilers typically do not till deep enough to reduce the effects of compaction from heavy equipment.
Rototill 2 to 3 inches of sand into the base of the bioretention facility before backfilling the optional sand layer. Pump any ponded water before preparing (rototilling) base.

When backfilling the sand layer over the sand filter, first place 3 to 4 inches of topsoil over the sand, then rototill the sand/topsoil to create a gradation zone. Backfill the remainder of the topsoil to final grade.
When backfilling the bioretention facility, place soil in lifts 12" to 18". Do not use heavy equipment within the bioretention basin. Heavy equipment can be used around the perimeter of the basin to supply soils and sand. Grade bioretention materials with light equipment such as a compact loader or a dozer/loader with marsh tracks.

Plant Material
Recommended plant material for micro-bioretenion practices can be found in Appendix A Section A.2.3.

Plant Installation
Compost is a better organic material source, is less likely to float, and should be placed in the inner and outer low areas. Mulch should be placed in proportion to a uniform thickness of 2" to 3". Shredded or chipped hardwood mulch is the only accepted mulch. Fine mulch and wood chips will float and move to the perimeter of the bioretention area during a storm event and are not acceptable. Shredded mulch must be well aged (6 to 12 months) for acceptance.

Rootstock of the plant material shall be kept moist during transport and on-site storage. The plant root ball should be planted so 1/3 of the ball is above final grade surface. The diameter of the planting ball shall be at least six inches larger than the diameter of the planting ball. Set and maintain the plant straight during the entire planting process. Thorough water ground level cover after installation.

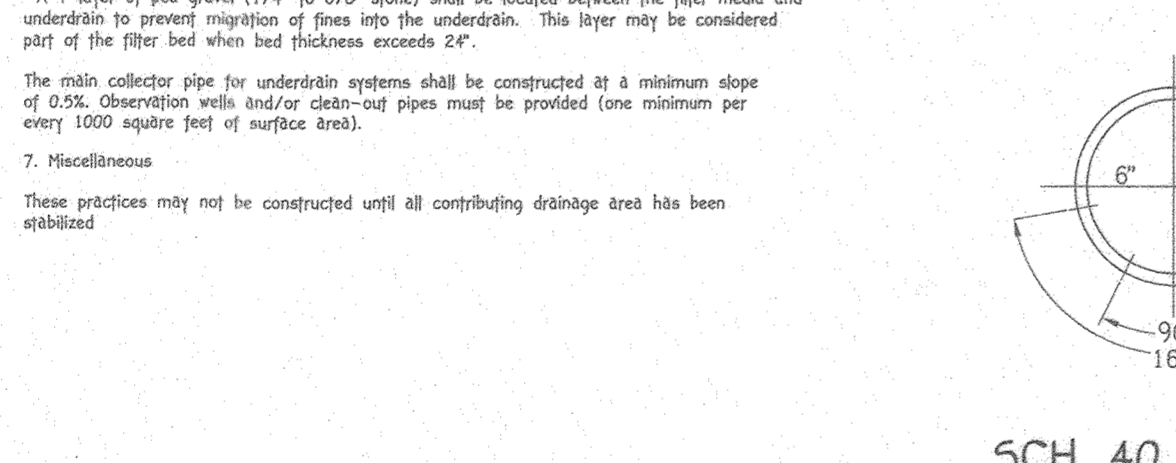
Trees shall be labeled using 2" by 2" flags only as necessary and for the first growing season only. Stakes are to be equally spaced on the outside of the tree ball.
Grasses and legume seed should be drilled into the soil to a depth of at least one inch. Grass and legume plants shall be planted following the non-grass cover over planting specifications.

The typical specifications provide enough organic material to adequately supply nutrients from natural cycling. The primary function of the bioretention structure is to improve water quality. Adding fertilizers, pesticides, or at a minimum, impedes this goal. Only add fertilizer if wood chips or mulch are used to amend the soil. Rototill used fertilizer at a rate of 2 pounds per 1000 square feet.

Underdrains
Underdrains should meet the following criteria:
Pipe - Should be 479 6/16" diameter, slotted or perforated rigid plastic pipe (ASTM F756, Type PS 20, or AASHTO-M-278) in a gravel layer. The preferred material is slotted, 4" rigid pipe (e.g., PVC or HDPE).
Perforations - If perforated pipe is used, perforations should be 3/16" diameter (incl. 6" on center with a minimum of four holes per row. Pipe shall be wrapped with a 1/4" (4" x 4") galvanized hardware cloth.

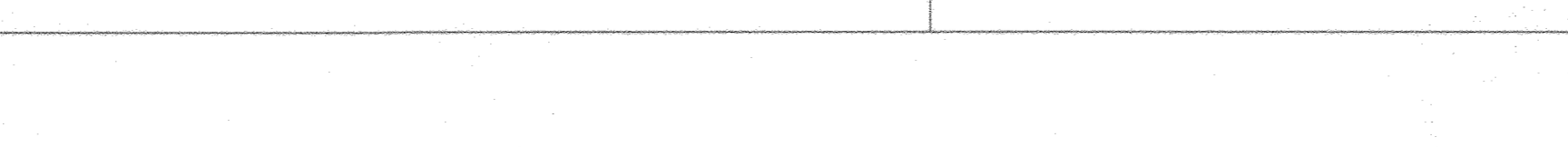
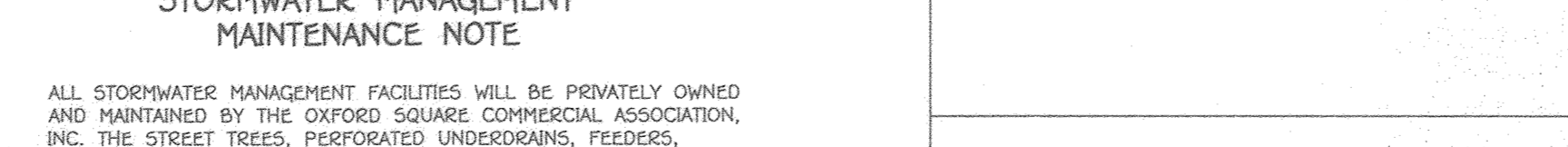
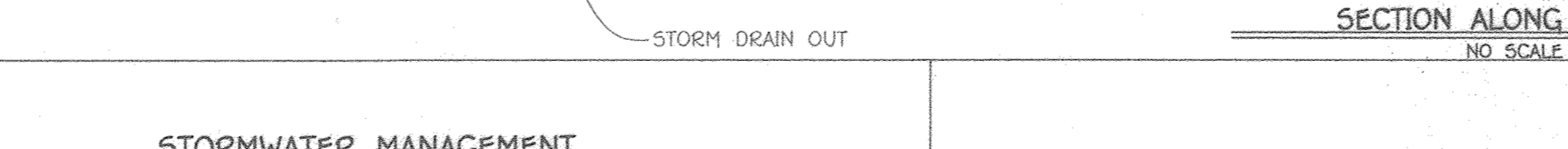
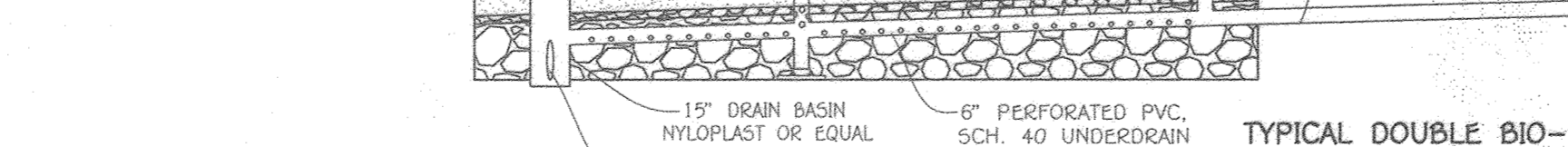
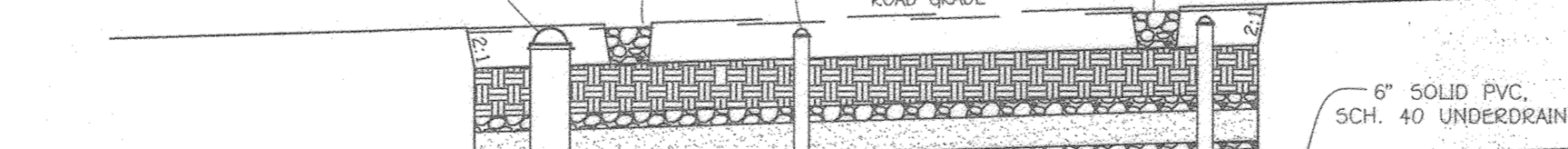
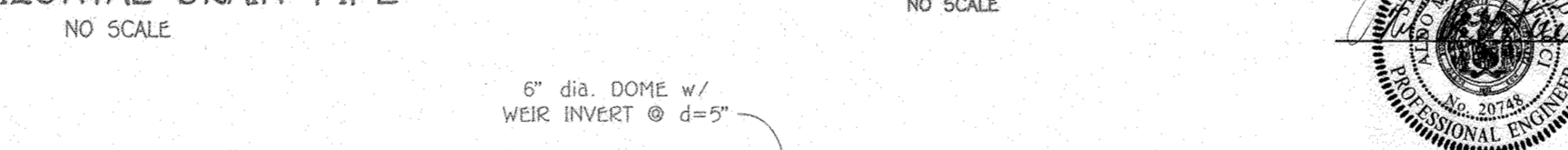
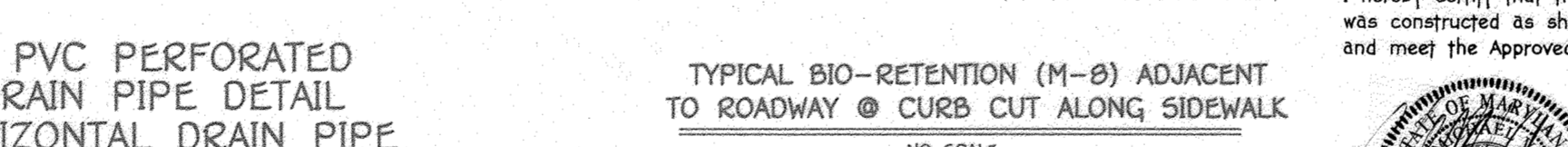
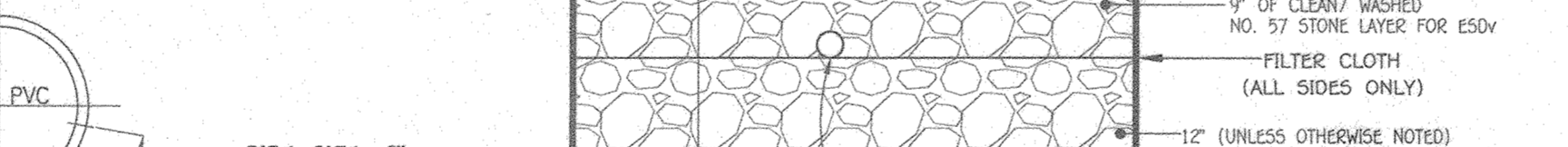
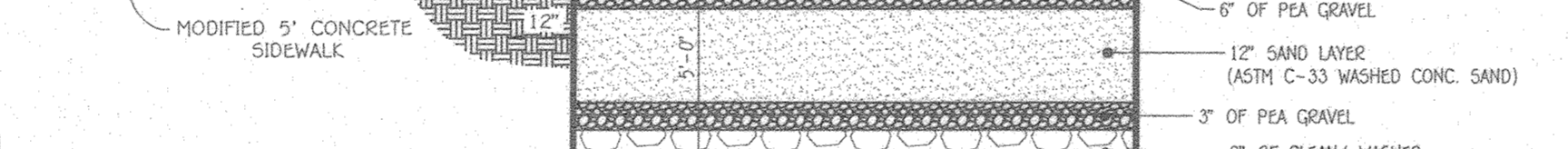
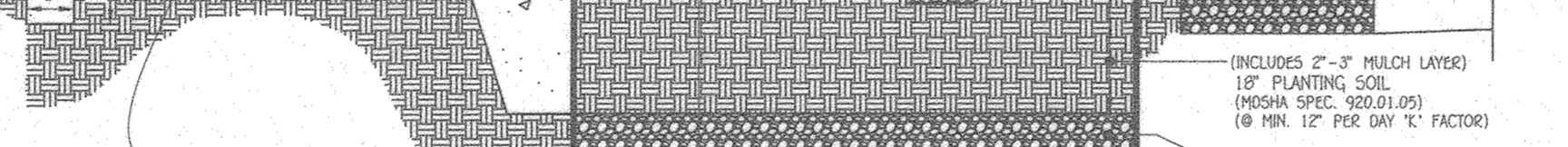
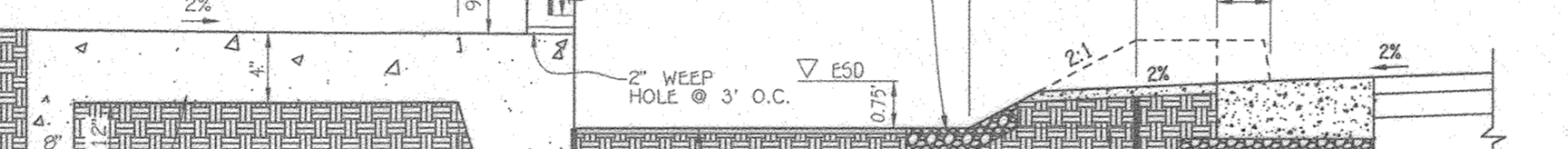
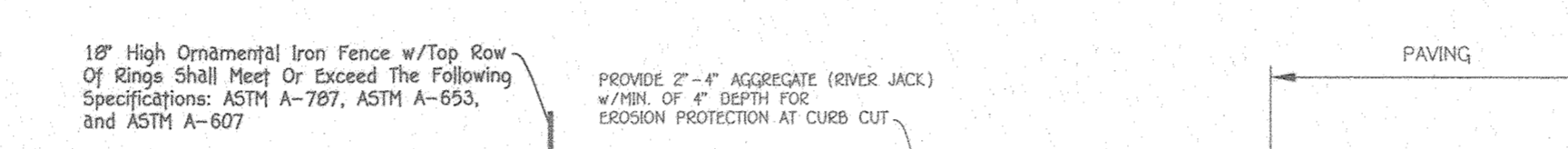
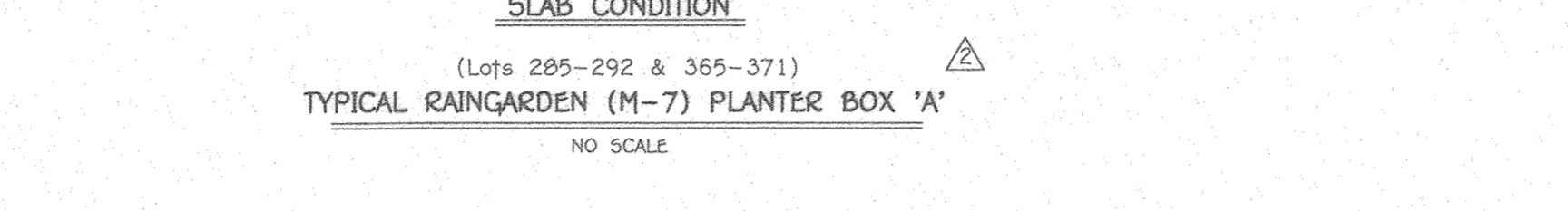
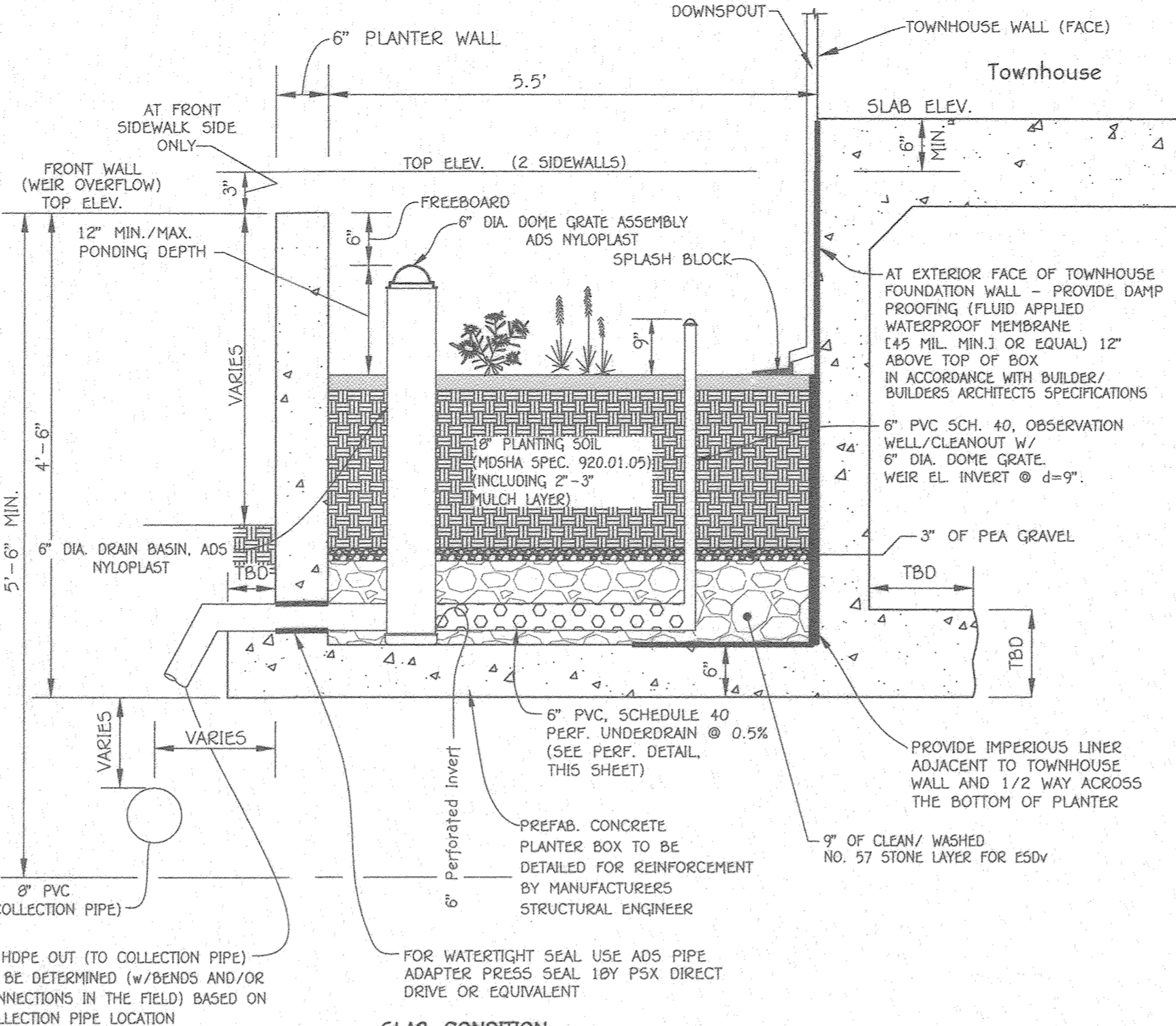
Gravel - The gravel layer (No. 57 stone preferred) shall be at least 3" thick above and below the underdrain.
The main collector pipe shall be at a minimum 0.5% slope.
A rigid, non-perforated observation well must be provided (one per every 1,000 square feet) to provide a clean-out port and monitor performance of the filter.
A 4" layer of pea gravel (1/4" to 3/8" stone) shall be located between the filter media and underdrain to prevent migration of fines into the underdrain. This layer may be considered part of the filter bed when bed thickness exceeds 24".
The main collector pipe for underdrain systems shall be constructed at a minimum slope of 0.5%. Observation wells and/or clean-out pipes must be provided (one minimum per every 1,000 square feet of surface area).

These practices may not be constructed until all contributing drainage area has been stabilized.



Operation And Maintenance Schedule For Privately Owned & Maintained Rain Garden Planter Boxes (M-7)

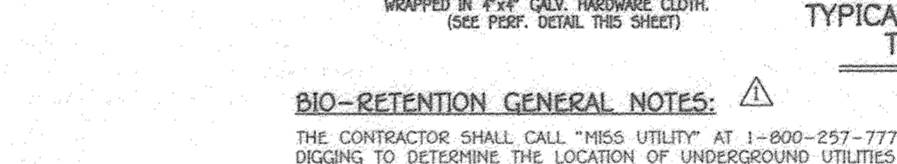
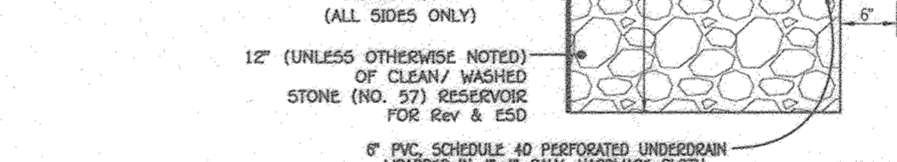
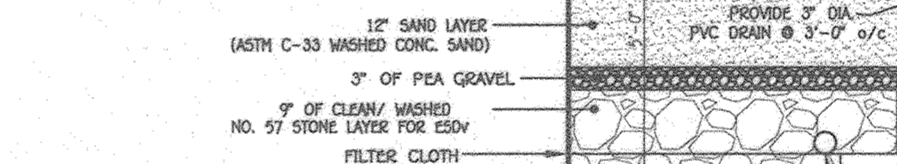
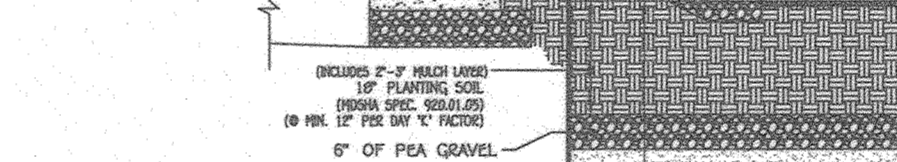
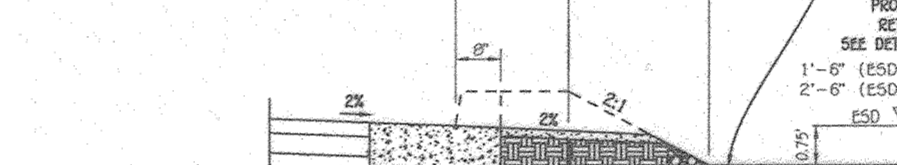
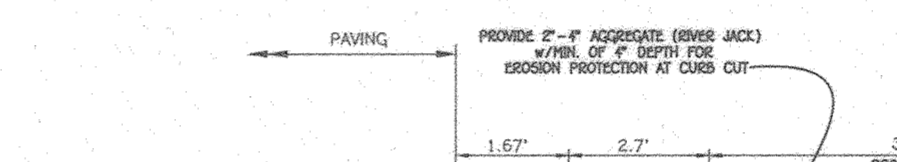
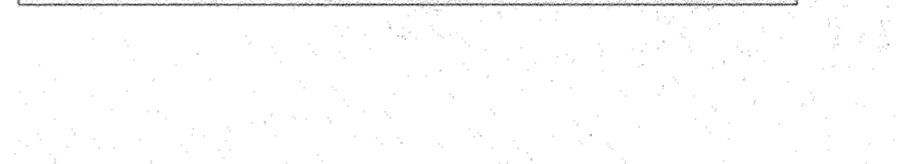
- The owner shall maintain the plant material, mulch layer and soil layer annually, maintenance of mulch and soil is limited to correcting areas of erosion or wash out. Any such replacement shall be done in the spring. Plant material shall be checked for disease and insect infestation and maintenance will address dead material and pruning. Acceptable replacement plant material is limited to the following: 2000 Maryland stormwater design manual volume II, table A.4.1 and 2.
- The owner shall perform a plant in the spring and in the fall each year. During the inspection, the owner shall remove dead and diseased vegetation considered beyond treatment, replace dead plant material with acceptable replacement plant material. Treat diseased trees and shrubs and replace all deficient stakes and wires.
- The owner shall inspect the mulch each spring. The mulch shall be replaced every two to three years. The previous mulch layer shall be removed before the new layer is applied.
- The owner shall correct soil erosion on an as needed basis, with a minimum of once per month and after each heavy storm.
- The owner shall maintain all observation wells, clean-outs and perforated underdrains.
- Filter material must be replaced when water remains on the surface of the filter bed for more than 24 hours following a 1 or 2 year storm event or more than 48 hours following a 10 year storm event.

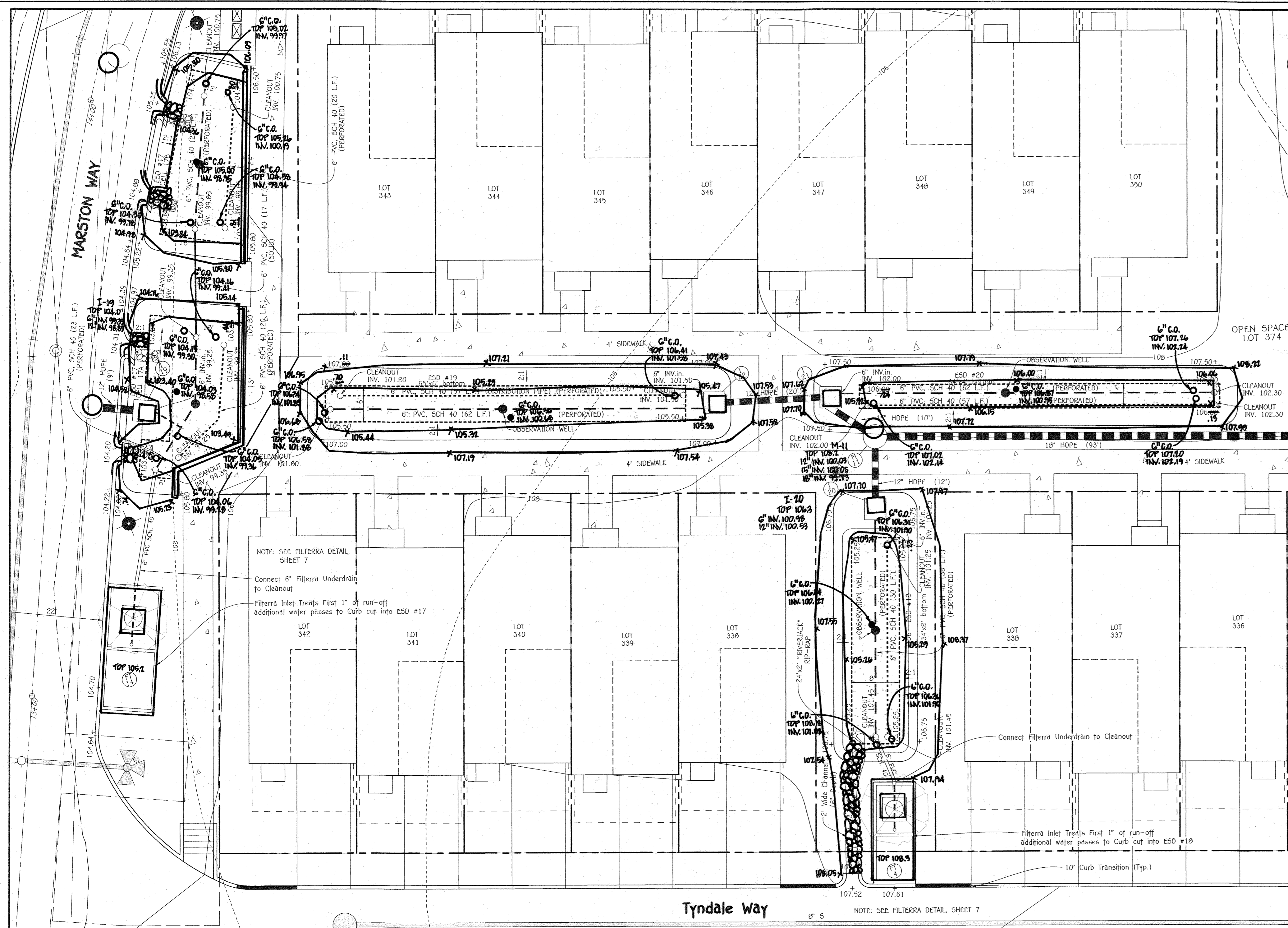


NOTE: THE BIO-RETENTION PLANTER SHALL BE OWNED BY THE H.O.A. & JOINTLY MAINTAINED BY THE HOMEOWNER & H.O.A. THE H.O.A. SHALL BE RESPONSIBLE FOR THE CONCRETE BIO BOX, THE OVERFLOW INLET AND IMPERVIOUS LINER. THE HOMEOWNER SHALL ONLY BE RESPONSIBLE FOR THE PLANTS AND SOIL.

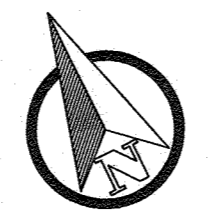
Lot No.	Top Elev. FRONT WALL	Top Elev. BACK WALLS	6" Dome Top	6" Invert (Perforated)
295	107.00	107.00	108.75	104.25
296	107.00	107.00	108.75	104.25
297	107.00	107.00	108.75	104.25
298	107.00	107.00	108.75	104.25
299	107.00	107.00	108.75	104.25
300	107.00	107.00	108.75	104.25
301	107.00	107.00	108.75	104.25
302	107.00	107.00	108.75	104.25
303	107.00	107.00	108.75	104.25
304	107.00	107.00	108.75	104.25
305	107.00	107.00	108.75	104.25
306	107.00	107.00	108.75	104.25
307	107.00	107.00	108.75	104.25
308	107.00	107.00	108.75	104.25
309	107.00	107.00	108.75	104.25
310	107.00	107.00	108.75	104.25
311	107.00	107.00	108.75	104.25
312	107.00	107.00	108.75	104.25
313	107.00	107.00	108.75	104.25
314	107.00	107.00	108.75	104.25
315	107.00	107.00	108.75	104.25
316	107.00	107.00	108.75	104.25
317	107.00	107.00	108.75	104.25
318	107.00	107.00	108.75	104.25
319	107.00	107.00	108.75	104.25
320	107.00	107.00	108.75	104.25
321	107.00	107.00	108.75	104.25
322	107.00	107.00	108.75	104.25
323	107.00	107.00	108.75	104.25
324	107.00	107.00	108.75	104.25
325	107.00	107.00	108.75	104.25
326	107.00	107.00	108.75	104.25
327	107.00	107.00	108.75	104.25
328	107.00	107.00	108.75	104.25
329	107.00	107.00	108.75	104.25
330	107.00	107.00	108.75	104.25
331	107.00	107.00	108.75	104.25
332	107.00	107.00	108.75	104.25
333	107.00	107.00	108.75	104.25

Lot No.	Top Elev. FRONT WALL	Top Elev. BACK WALLS	6" Dome Top	6" Invert (Perforated)
314	111.00	111.00	112.75	108.25
315	111.00	111.00	112.75	108.25
316	111.00	111.00	112.75	108.25
317	111.00	111.00	112.75	108.25
318	111.00	111.00	112.75	108.25
319	111.00	111.00	112.75	108.25
320	111.00	111.00	112.75	108.25
321	111.00	111.00	112.75	108.25
322	111.00	111.00	112.75	108.25
323	111.00	111.00	112.75	108.25
324	111.00	111.00	112.75	108.25
325	111.00	111.00	112.75	108.25
326	111.00	111.00	112.75	108.25
327	111.00	111.00	112.75	108.25
328	111.00	111.00	112.75	108.25
329	111.00	111.00	112.75	108.25
330	111.00	111.00	112.75	108.25
331	111.00	111.00	112.75	108.25
332	111.00	111.00	112.75	108.25
333	111.00	111.00	112.75	108.25

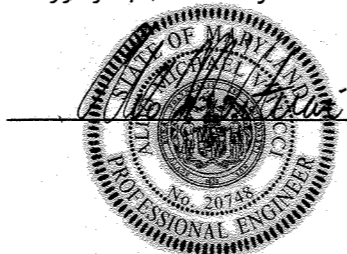




**PROPOSED MICRO BIO-RETENTION (M-6)
ESD Nos. 17 thru 20 PLAN VIEW**
SCALE: 1" = 10'

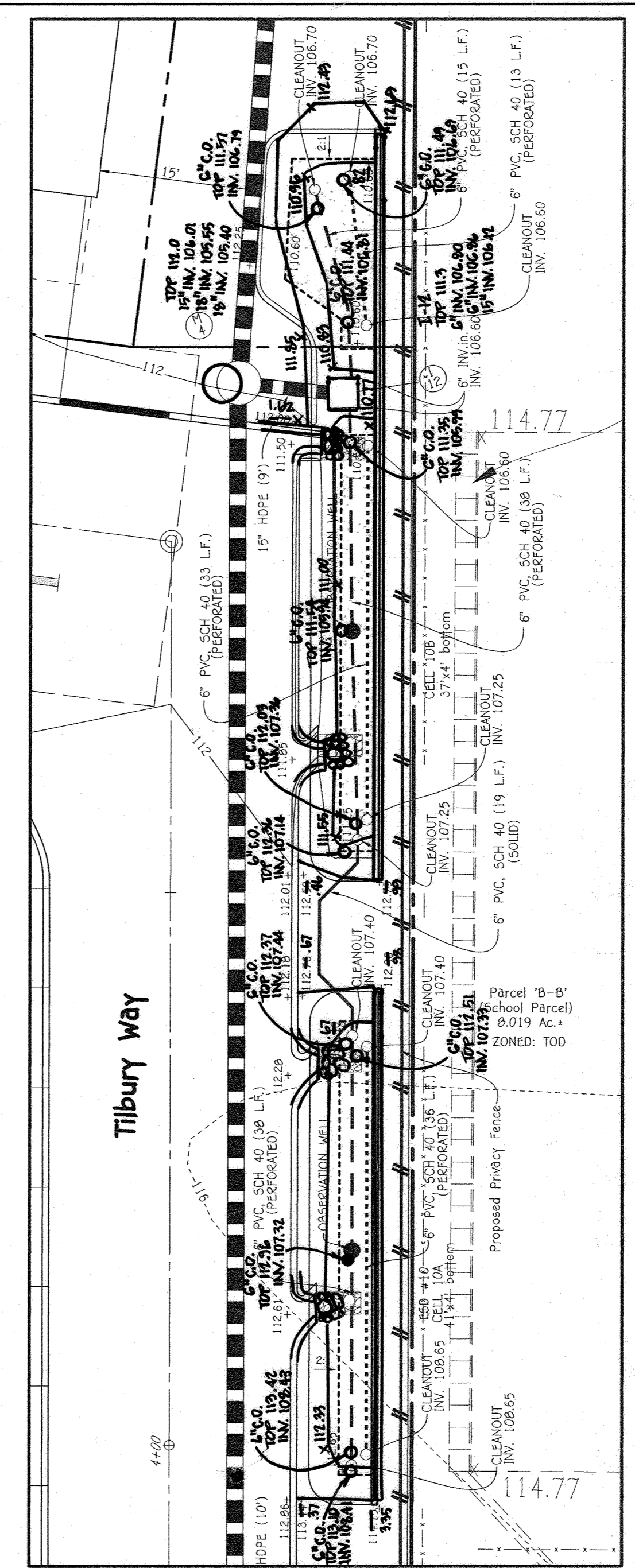
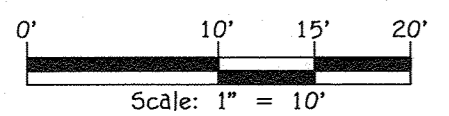


AS-BUILT CERTIFICATION FOR PSWM
I hereby certify that the facility shown on the plan was constructed as shown on the "AS-BUILT" plans and complies with the approved plans and specifications. I have verified the contributing drainage area is sufficiently stabilized to prevent clogging of the underground SWM facility.

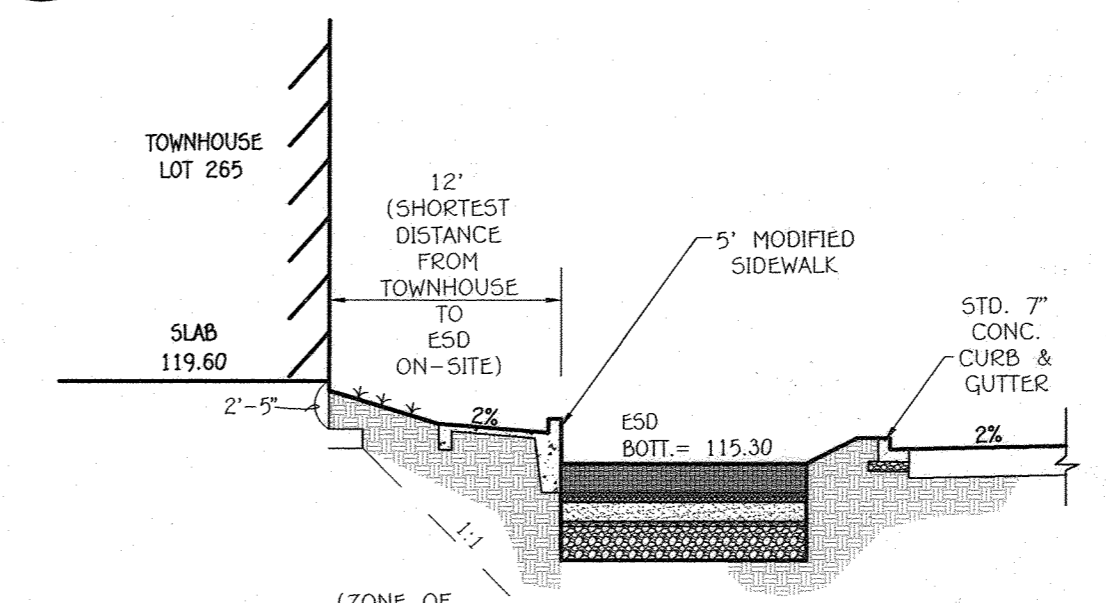
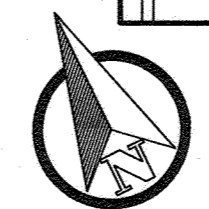


6/27/22
Date

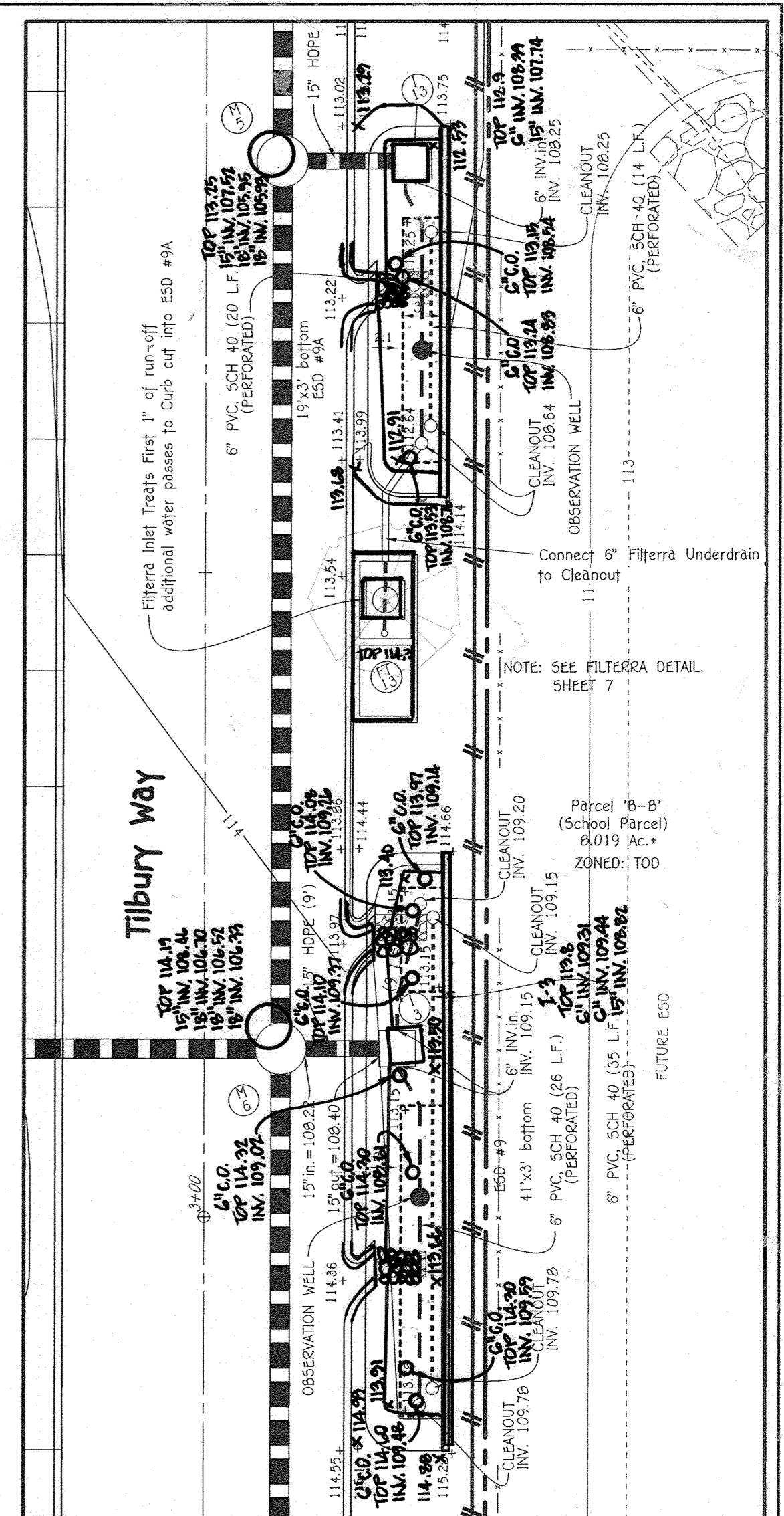
BUILDING FOUNDATION NOTE:
BUILDER SHALL VERIFY THE DEPTH OF THE BUILDING FOUNDATION WITH THE GEOTECHNICAL AND STRUCTURAL ENGINEERS IN RELATION TO ADJACENT UTILITIES AND STORMWATER MANAGEMENT (ESD) FACILITIES.



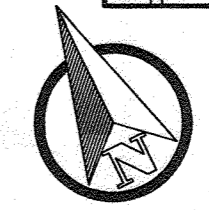
**PROPOSED MICRO BIO-RETENTION (M-6)
ESD No. 10 PLAN VIEW**
SCALE: 1" = 10'



**GEO-TECHNICAL EXHIBIT FOR
FOUNDATION TO ESD**
SCALE: 1" = 10'



**PROPOSED MICRO BIO-RETENTION (M-6)
ESD No. 9 PLAN VIEW**
SCALE: 1" = 10'

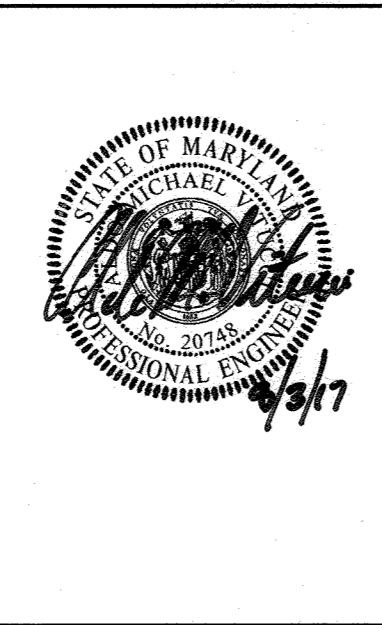


STORMWATER MANAGEMENT LEGEND

- - DENOTES TYPE 'S' INLET (MAIN OVERFLOW INLET)
- - DENOTES DRAIN BASIN (MAIN OVERFLOW INLET)
- - DENOTES CLEANOUT
- - DENOTES OBSERVATION WELL
- - DENOTES 6" PVC SCH 40 UNDERDRAIN (PERFORATED) (OUTFALLS TO STORM DRAIN)
- - DENOTES 6" PVC SCH 40 DISTRIBUTION PIPE (OUTFALLS INTO STONE LAYER)
- ▨ - DENOTES FILTER BED AREA
- SEDI-MENTATION CHAMBER
- PLANT
- TREATMENT CHAMBER
- - DENOTES FILTERRA INLET
- - DENOTES 6" UNDERDRAIN

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461-1200

NO.	REVISION	DATE



STORMWATER MANAGEMENT MAINTENANCE NOTE
ALL STORMWATER MANAGEMENT FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED BY THE OXFORD SQUARE COMMERCIAL ASSOCIATION, INC. THE STREET TREES, PERFORATED UNDERDRAINS, FEEDERS, PLANTINGS AND SWALES WILL ALSO BE PRIVATELY OWNED AND MAINTAINED BY THE OXFORD SQUARE COMMERCIAL ASSOCIATION. HOWARD COUNTY WILL ONLY MAINTAIN THE INLET STRUCTURE WITHIN THE MICRO BIO-RETENTION FACILITIES ADJACENT TO PUBLIC RIGHT-OF-WAYS.

Owner	Developer
Kellogg-CCP, LLC c/o David P. Scheffacker, Jr. Managing Member 100 West Road, Suite 304 Towson, Maryland 21204 Ph: 410-296-3800	Preston • Scheffacker Properties 100 West Road, Suite 304 Towson, Maryland 21204 Ph: 410-296-3800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

<i>Keith L. Quinn</i> Chief, Division of Land Development	9-25-17 Date
<i>W. J. Quinn</i> Chief, Development Engineering Division	9-15-17 Date
<i>William J. Quinn</i> Director - Department of Planning and Zoning	10-10-17 Date

SUBDIVISION	SECTION/AREA	LOT Nos.			
OXFORD SQUARE	---	246 - 371			
PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
24357-24362	---	TOD	3B	1st.	601101

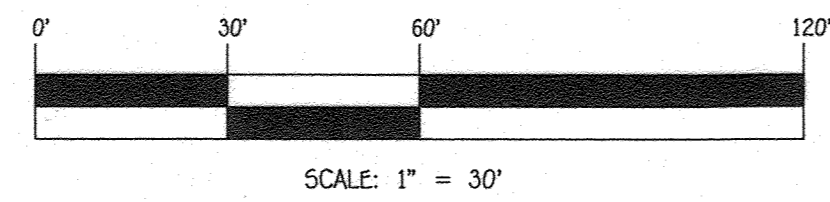
STORMWATER MANAGEMENT PLAN VIEWS
OXFORD SQUARE
"A Howard County Green Neighborhood"
"RIVER OVERLOOK"
Lots 246 Thru 371 & Open Space Lots 372 Thru 375 and Open Space Lot 376
(Being A Resubdivision Of Parcels "Z", "E-1" & Open Space Lot 376, As Shown On Revision Plat Entitled "Green Neighborhood" Parcels "Z", "E-1" And Open Space Lot 376 Recorded Among The Land Records Of Howard County, Maryland As Plat Nos. 23896 Thru 23997)
Zone: TOD
Tax Map No.: 3B Grid No.: 20 Parcel No.: 1003
First Election District: Howard County, Maryland
Scale: As Shown
Date: August 1, 2017
Sheet 11 of 40

AS-BUILT SDP-16-052

STONE/RIPRAP OUTLET SEDIMENT TRAP ST-II		
TRAP No.	S.O.S.T. No. 1	S.O.S.T. No. 2
DRAINAGE AREA - INITIAL	1.6 ACRES	1.5 ACRES
DRAINAGE AREA - INTERIM	1.5 ACRES	2.0 ACRES
DRAINAGE AREA - FINAL	1.5 ACRES	2.0 ACRES
TOTAL STORAGE REQUIRED	5,760 CF	7,200 CF
TOTAL STORAGE PROVIDED	7,591 CF	9,344 CF
WET STORAGE REQUIRED	2,060 CF	2,600 CF
WET STORAGE PROVIDED	3,179 CF	3,904 CF
DRY STORAGE REQUIRED	2,060 CF	3,600 CF
DRY STORAGE PROVIDED	4,412 CF	5,440 CF
EXISTING GROUND ELEVATION AT OUTLET (WET STORAGE ELEVATION)	97.0	100.0
TRAP BOTTOM ELEVATION	95.0	98.0
TRAP BOTTOM DIMENSIONS	50' x 25'	80' x 20'
WEIR LENGTH	13'	12'
WEIR CREST (DRY STORAGE) ELEVATION	99.00	102.00
CLEANOUT ELEVATION	96.1	99.2
TOP OF EMBANKMENT ELEVATION	100.00	103.00
SIDE SLOPE	2:1	2:1
EMBANKMENT TOP WIDTH	5'	5'
OUTLET PROTECTION - LENGTH	5'	5'
OUTLET PROTECTION - DEPTH	18"	18"

CONTRACTOR NOTES:

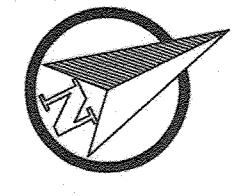
- CONTRACTOR SHALL PUMP THE SEDIMENT TRAPS/ BASINS COMPLETELY DRY THROUGH A FILTERING DEVICE TO A CLEAN WATER OUTFALL WITHIN 24 HOURS FOLLOWING ANY RAINFALL EVENT.
- CONTRACTOR SHALL REMOVE ANY AND ALL JUNK, DEBRIS AND TRASH FROM WITHIN THE FLOODPLAIN, STREAMS, WETLANDS & THEIR BUFFERS.



MATCH LINE SEE SHEET 14

WITHIN THESE LIMITS, THE 8" WATER MAIN SHALL BE INSTALLED BY HORIZONTAL DIRECTIONAL DRILLING. PIPE SHALL BE 8" HDPE S&D-11, PE 3408, PRESSURE CLASS 160. (SEE CONTRACT NO. 14-4970-D)

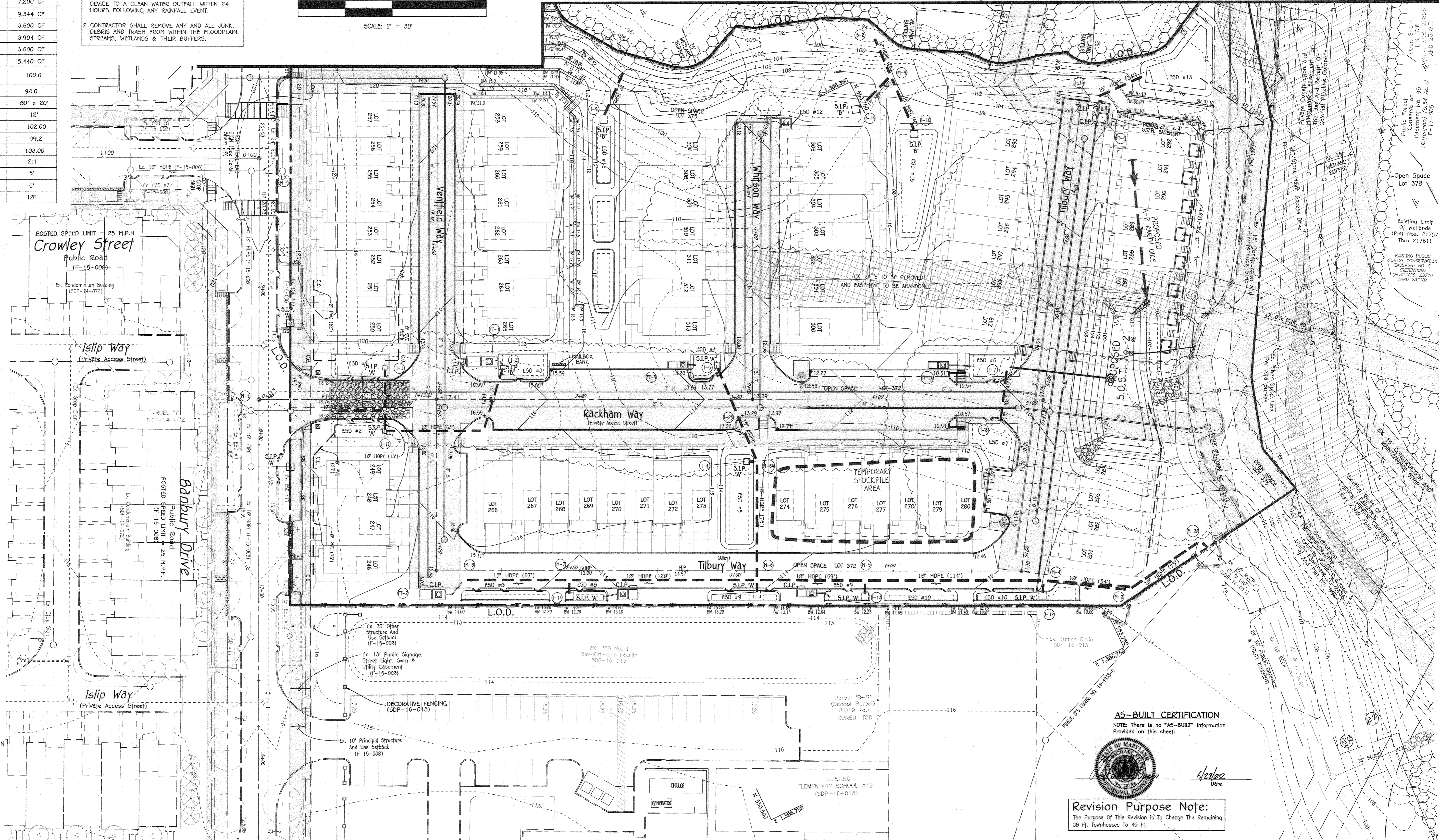
NOTE:
DOUBLE ROW SUPER SILT FENCE/ TREE PROTECTION FENCE AROUND ENTIRE WETLAND/ FCE AREA



LEGEND	
SYMBOL	DESCRIPTION
-102-	EXISTING CONTOUR 2' INTERVAL
-100-	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
---	EXISTING TREELINE
---	WETLANDS BUFFER
---	WETLANDS LIMITS
FP	FLOODPLAIN LIMITS
ESD #1	STORMWATER MANAGEMENT DEVICE
---	STORM DRAIN
☆	STREET LIGHT (proposed)
☆	STREET LIGHT (existing)
○	STREET TREE (proposed)
○	STREET TREE (existing)
---	PROPOSED GARDEN BENCH
---	PROPOSED BRICK PIER & SITE WALL
---	PROPOSED MAILBOX BANK
---	BORING LOCATION
---	PROPOSED 1-1/2" WHC
---	PROPOSED 4" SHC

SEDIMENT CONTROL LEGEND	
SSS-SFS-SFS	SUPER-SILT FENCE
SF-SF-SF	SILT FENCE
SCS	STABILIZED CONSTRUCTION ENTRANCE
C.I.P.	CURB INLET PROTECTION
S.I.P. 'A' or 'B'	STANDARD INLET PROTECTION TYPE
TYPE A-2	EARTH DIKE
L.O.D.	LIMIT OF DISTURBANCE
ECM	EROSION CONTROL MATTING
R.P.S.	REMOVEABLE PUMPING STATION
F.B.	FILTER BAG

NOTE: SEE SHEET 16 FOR TYPICAL BIO-RETENTION CELL DURING INITIAL CONSTRUCTION PHASE DETAIL.



AS-BUILT CERTIFICATION
NOTE: There is no "AS-BUILT" information provided on this sheet.



Revision Purpose Note:
The Purpose of this Revision is to change the Remaining 38 Ft. Townhouses to 40 Ft.

NO.	REVISION	DATE
1	REVISE REMAINING 38' UNITS TO 40' UNITS	9/9/19
2	ADD NEW RAINGARDEN PLANTER BOX FOR Lots 295-292 & 365-371 AND REVISE PLANTER BOX FOR LOTS 314-333	9/9/19
3	REVISED 38' TOWNHOUSE UNITS TO 40' (WHERE POSSIBLE) & FLIPPED END UNIT DRIVEWAY LOCATIONS WHERE POSSIBLE.	1/18/18

ENGINEER'S CERTIFICATE
I certify that this plan and erosion control represents a practical and workable plan based on my knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
Signature of Engineer: *[Signature]* Date: 9/19/19

DEVELOPER'S CERTIFICATE
I/We certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.
Signature of Developer: *[Signature]* Date: 9-26-19

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
Signature of SCD: *[Signature]* Date: 5/6/20

Owner
Kelllogg-CCP, LLC
c/o David P. Scheffenecker, Jr., Managing Member
100 West Road, Suite 304
Towson, Maryland 21204
Ph: 410-296-3800

Developer
Preston • Scheffenecker Properties
100 West Road, Suite 304
Towson, Maryland 21204
Ph: 410-296-3800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development: *[Signature]* Date: 5/20/20

Chief, Development Engineering Division: *[Signature]* Date: 5-27-20

Director, Department of Planning and Zoning: *[Signature]*

SUBDIVISION	SECTION/AREA	LOT Nos.
OXFORD SQUARE	---	246 - 371

PLAT Nos.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
24357-24362	---	TOD	3B	1st.	601101

REVISED SEDIMENT & EROSION CONTROL PLAN
OXFORD SQUARE
"A Howard County Green Neighborhood"
"RIVER OVERLOOK"
Lots 246 Thru 371 & Open Space Lots 372 Thru 375 and Open Space Lot 376
(Being A Resubdivision of Parcels "Z", "E-E" & Open Space Lot 376, As Shown On Revision Plan Entitled "Green Neighborhood" Parcels "Z", "E-E" And Open Space Lot 376 Recorded Among The Land Records Of Howard County, Maryland As Plat Nos. 23896 Thru 23997)

Tax Map No.: 3B Grid No.: 20 Parcel No.: 1003
First Election District: Towson, Maryland
Scale: As Shown
Date: Sept. 9, 2019
Sheet 13 of 40

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET

SDP-16-052

I:\2009\0501\0501\SDP-16-052\13-14_Sed Con Plans\0501\13-14_Sed Con Plans.dwg, C-13_SDP-16-052, 11

CONTRACTOR NOTES:

- 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.
- CONTRACTOR SHALL REMOVE ANY AND ALL JUNK, DEBRIS AND TRASH FROM WITHIN THE FLOODPLAIN, STREAMS, WETLANDS & THEIR BUFFERS.

SEDIMENT CONTROL LEGEND

- SSF—SSF—SSF— SUPER-SILT FENCE
- SF—SF—SF— SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- C.I.P. CURB INLET PROTECTION
- S.I.P. STANDARD INLET PROTECTION 'TYPE'
- TYPE A-2 EARTH DIKE
- L.O.D.— LIMIT OF DISTURBANCE
- EROSION CONTROL MATTING
- REMOVABLE PUMPING STATION
- FILTER BAG

NOTE: SEE SHEET 16 FOR TYPICAL BIO-RETENTION CELL DURING INITIAL CONSTRUCTION PHASE DETAIL.

AS-BUILT CERTIFICATION

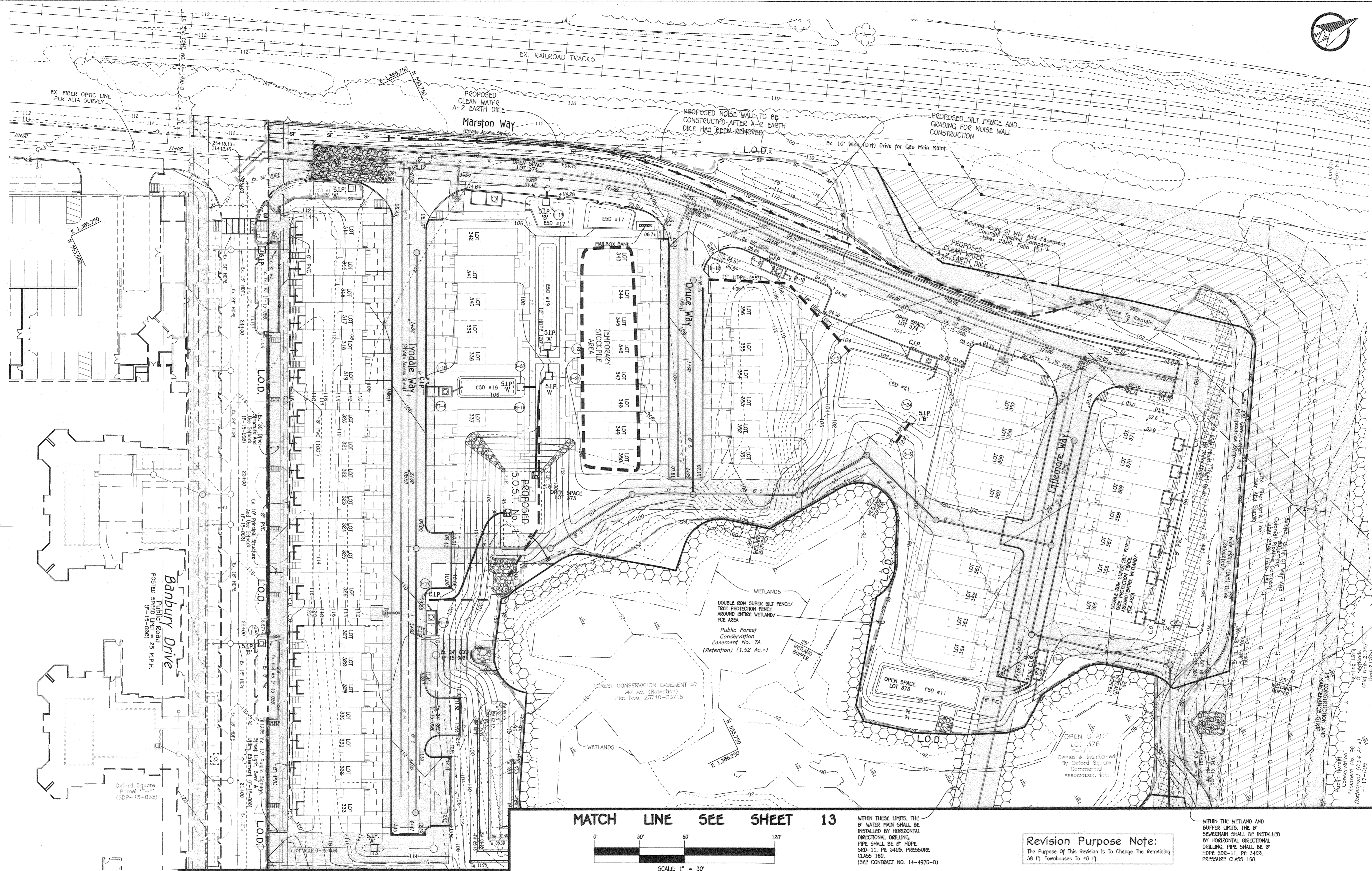
NOTE: There is no "AS-BUILT" information provided on this sheet.



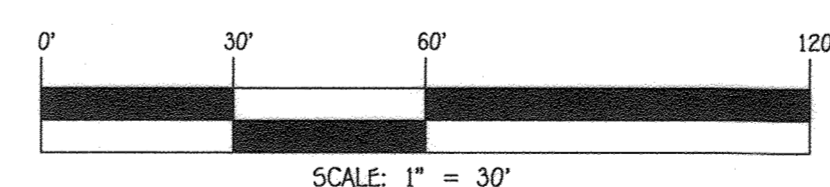
4/21/20 Date

LEGEND

SYMBOL	DESCRIPTION
---102---	EXISTING CONTOUR 2' INTERVAL
---100---	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
---	EXISTING TREELINE
---	WETLANDS BUFFER
---	WETLANDS LIMITS
---	FLOODPLAIN LIMITS
ES# #	STORMWATER MANAGEMENT DEVICE
---	STORM DRAIN
☆	STREET LIGHT (proposed)
☆	STREET LIGHT (existing)
○	STREET TREE (proposed)
○	STREET TREE (existing)
---	PROPOSED GARDEN BENCH
---	PROPOSED BRICK PIER & SITE WALL
---	PROPOSED MAILBOX BANK
○	BORING LOCATION
○	PROPOSED 1-1/2" WHC
○	PROPOSED 4" SHC



MATCH LINE SEE SHEET 13



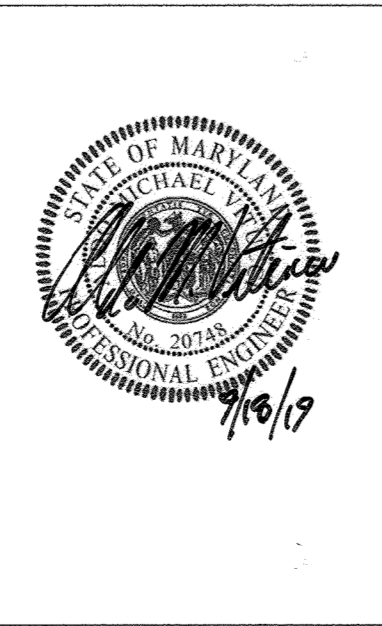
WITHIN THESE LIMITS, THE 8" WATER MAIN SHALL BE INSTALLED BY HORIZONTAL DIRECTIONAL DRILLING. PIPE SHALL BE 8" HOPE SDR-11, PE 3408, PRESSURE CLASS 160. (SEE CONTRACT NO. 14-4970-0)

Revision Purpose Note:
The Purpose Of This Revision Is To Change The Remaining 38 Ft. Townhouses To 40 Ft.

WITHIN THE WETLAND AND BUFFER LIMITS, THE 8" SEWERMAIN SHALL BE INSTALLED BY HORIZONTAL DIRECTIONAL DRILLING. PIPE SHALL BE 8" HOPE SDR-11, PE 3408, PRESSURE CLASS 160.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 461-2099

NO.	REVISION	DATE
Δ	REVISE REMAINING 38' UNITS TO 40' UNITS	9/9/19
Δ	ADD NEW RAINGARDEN PLANTER BOX FOR LOTS 295-292 & 365-371 AND REVISE PLANTER BOX FOR LOTS 314-333	9/9/19
Δ	REVISED 38' TOWNHOUSE UNITS TO 40' (WHERE POSSIBLE) & FLIPPED END UNIT DRIVEWAY LOCATIONS WHERE POSSIBLE.	1/18/18



ENGINEER'S CERTIFICATE
"I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."
Signature of Engineer (print name below signature) *John P. Reuter* 9/19/19 Date

DEVELOPER'S CERTIFICATE
"I/we certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."
Signature of Developer (print name below signature) *David P. Scheffacker* 9-24-19 Date

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
John P. Reuter 5/16/20 Date
Howard SCD

Owner
Kelllogg-COP, LLC
c/o David P. Scheffacker, Jr.,
Managing Member
100 West Road, Suite 304
Towson, Maryland 21284
Ph: 410-296-3800

Developer
Preston + Scheffacker Properties
100 West Road, Suite 304
Towson, Maryland 21204
Ph: 410-296-3800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development *[Signature]* 5-20-20 Date

Chief, Development Engineering Division *[Signature]* 5-21-20 Date

Director, Department of Planning and Zoning *[Signature]*

PLAT Nos.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
24357-24362	---	TOD	38	1st.	601101

REVISED
SEDIMENT & EROSION CONTROL PLAN
OXFORD SQUARE
"A Howard County Green Neighborhood"
"RIVER OVERLOOK"
Lots 246 Thru 371 & Open Space Lots 372 Thru 375 and Open Space Lot 376
(Being A Resubdivision Of Parcels "Z", "E-C" & Open Space Lot 376, As Shown On Revision #001 Entitled "Green Neighborhood" Parcels "Z", "E-C" And Open Space Lot 376 Recorded Among The Land Records Of Howard County, Maryland As Plat Nos. 23896 Thru 23897)

Tax Map No.: 38 Grid No.: 20 Parcel No.: 1003
First Election District: Howard County, Maryland
Scale: As Shown
Date: Sept. 9, 2019
Sheet 14 Of 40

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET SDP6-16-052

SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS (B-4-2)

- A. Soil Preparation**
- Temporary Stabilization
 - Seeded preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or ripers mounted on construction equipment. After the soil is loosened, it must be rolled or dragged smooth both left to right in the roughened condition. Slopes 3:1 or flatter are to be tracked with ridges running parallel to the contour of the slope.
 - Apply fertilizer and lime as prescribed on the plans.
 - Permanent Stabilization
 - A soil test is required for any earth disturbance of 5 acres or more. The minimum soil conditions required for permanent vegetative establishment are:
 - Soil pH between 6.0 and 7.0.
 - Soil soluble salts less than 500 parts per million (ppm).
 - Soil contains less than 40 percent clay but enough fine grained material (greater than 30 percent all plus clay) to provide the ability to hold a moderate amount of moisture. An exception: if loesslike soil will be planted, then a sandy soil (less than 30 percent all plus clay) would be acceptable.
 - Soil contains 1.5 percent minimum organic matter by weight.
 - Soil contains sufficient pore space to permit adequate root penetration.
 - Application of amendments or topsoil is required for on-site soils do not meet the above conditions.
 - Graded areas must be maintained in a true and even grade as specified on the approved plan, then scarified or otherwise loosened to a depth of 3 to 5 inches.
 - Apply soil amendments as specified on the approved plan or as indicated by the results of a soil test.
 - For soil amendments into the top 3 to 5 inches of soil by disking or other suitable means. Rake lawn areas to smooth the surface, remove large objects like stumps and branches, and ready the area for seed application. Loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface where site conditions will not permit normal seeded preparation. Track slopes 3:1 or flatter with tracked equipment leaving the soil in a rougher condition with ridges running parallel to the contour of the slope. Leave the top 3 to 5 inches of soil loose and friable. Seeded loosening may be unnecessary on newly disturbed areas.

- B. Topsoiling**
- Topsoil is placed over prepared subsoil prior to establishment of permanent vegetation. The purpose is to provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.
 - Topsoil salvaged from an existing site may be used provided it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the soil survey published by USDA-NRCS.
 - Topsoiling is limited to areas having 2:1 or flatter slopes where:
 - The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supply of moisture and plant nutrients.
 - The original soil to be vegetated contains material toxic to plant growth.
 - The soil is so acidic that treatment with limestone is not feasible.
 - Areas having slopes steeper than 2:1 require special consideration and design.
 - Topsoil Specifications: Soil to be used as topsoil must meet the following criteria:
 - Topsoil must be a loam, sandy loam, clay loam, silty loam, sandy clay loam, or loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Topsoil must not be a mixture of contrasting textured subsoils and must contain less than 5 percent by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, or other materials larger than 1 1/2 inches in diameter.
 - Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack grass, Johnson grass, and/or poison ivy, thistle, or other areas as specified.
 - Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
 - Topsoil Application
 - Erosion and sediment control practices must be maintained when applying topsoil.
 - Uniformly distribute topsoil in a 5 to 8 inch layer and lightly compact to a minimum thickness of 4 inches. Spreading is to be performed in such a manner that seeding or sodding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations must be corrected in order to prevent the formation of depressions or water pockets.
 - Topsoil must not be placed if the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seeded preparation.

- C. Soil Amendments (Fertilizer and Lime Specifications)**
- Soil tests may be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas of 5 acres or more. Soil analysis may be performed by a recognized private or commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.
 - Fertilizers must be uniform in composition, free flowing and suitable for accurate application by appropriate equipment. Fertilizers may be substituted for fertilizers with prior approval from the appropriate approval authority. Fertilizers must all be delivered to the site fully banded according to the applicable laws and must bear the name, trade name or trademark and warranty of the producer.
 - Lime materials must be ground limestone (hydrated or burnt lime may be substituted except when hydroxydized) which contains at least 50 percent total oxidized calcium (total lime plus magnesium oxide). Limestone must be ground to such fineness that at least 50 percent will pass through a #100 mesh sieve and 98 to 100 percent will pass through a #20 mesh sieve.
 - Lime and fertilizer are to be evenly distributed and incorporated into the top 3 to 5 inches of soil by disking or other suitable means.
 - Where the subsoil is either highly acidic or composed of heavy clays, spread ground limestone at the rate of 4 to 8 tons/acre (200-400 pounds per acre) in addition to the placement of topsoil.

TEMPORARY SEEDING NOTES (B-4-4)

Definition
To stabilize disturbed soils with vegetation for up to 6 months.

Purpose
To use fast growing vegetation that provides cover on disturbed soils.

Conditions Where Practice Applies
Exposed soils where ground cover is needed for a period of 6 months or less. For longer duration of time, permanent stabilization practices are required.

Criteria
1. Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardness Zone (from Figure B.3) and enter them in the Temporary Seeding Summary below along with application rates, seeding dates and seeding depths. If this Summary is not put on the plans and completed, then Table B.1 plus fertilizer and lime rates must be put on the plans.

2. For sites having soil tests performed, use and show the recommended rates by the testing agency. Soil tests are not required for temporary seeding.

3. When amending soils in preparation of a seeding season, apply seed and mulch or straw mulch alone as prescribed in Section B-4-3.A.1.B and maintain until the next seeding season.

Temporary Seeding Summary

Hardness Zone (from Figure B.3):	Seed Mixture (from Table B.1):		Fertilizer Rate (10-20-20)	Lime Rate
	Species	Application Rate (lb/acre)		

Maintenance

The stockpile area must continuously meet the requirements for Adequate Vegetative Establishment in accordance with Section B-4-3. Vegetative Stabilization. Slope slopes must be maintained at no steeper than a 2:1 ratio. The stockpile area must be kept free of erosion. If the vertical height of a stockpile exceeds 20 feet for 2:1 slopes, 30 feet for 3:1 slopes, or 40 feet for 4:1 slopes, benching must be provided in accordance with Section B-3 Land Grading.

NOTE: There is no "AS-BUILT" information provided on this sheet.

PERMANENT SEEDING NOTES (B-4-5)

- A. Seed Mixtures**
- General Use
 - Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardness Zone (from Figure B.3) and based on the site conditions or previous plantings on Table B.2 (enter selected mixtures), application rates, and seeding dates in the Permanent Seeding Summary. The Summary to be placed on the plan.
 - Additional planting specifications for special areas such as shorelines, stream banks, or dunes or for special purposes such as wildlife or aesthetic treatment may be found in USDA-NRCS Technical Field Office Guide, Section 342 - Critical Area Planting.
 - For sites having disturbed areas over 5 acres, use and show the rates recommended by the soil testing agency. 4. For areas receiving low maintenance, apply urea from fertilizer (46-0-0) @ 1/2 pounds per 1000 square feet (150 pounds per acre) at the time of seeding in addition to the soil amendments shown in the Permanent Seeding Summary.
 - Turfgrass Mixtures
 - Areas where turfgrasses may be desired include lawns, parks, playgrounds, and commercial sites which will receive a medium to high level of maintenance.
 - Select one or more of the species or mixtures listed below based on the site conditions or purpose. Enter selected mixtures, application rates, and seeding dates in the Permanent Seeding Summary. The summary is to be placed on the plan.
 - Kentucky Bluegrass: Full Sun Mixture: For use in areas that receive intensive maintenance (irrigation required in the areas of central Maryland and Eastern Shore). Recommended Certified Kentucky Bluegrass Cultivars Seeding Rate: 1.5 to 2.0 pounds per 1000 square feet. Choose a minimum of three Kentucky Bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.
 - Kentucky Bluegrass/Perennial Ryegrass: Full Sun Mixture: For use in full sun areas where rapid establishment is necessary and where turf will receive medium to intensive maintenance. Certified Perennial Ryegrass Cultivars/Certified Kentucky Bluegrass Seeding Rate: 2 pounds mixture per 1000 square feet. Choose a minimum of three Kentucky Bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.
 - Tall Fescue/Certified Kentucky Bluegrass: Full Sun Mixture: For use in drought prone areas and/or for areas receiving low to medium maintenance in full sun to medium shade. Recommended mixture includes: Certified Tall Fescue Cultivars 90 to 100 percent and Certified Kentucky Bluegrass Cultivars 0 to 9 percent. Seeding Rate: 5 to 8 pounds per 1000 square feet. One or more cultivars may be blended.
 - Kentucky Bluegrass/Fine Fescue: Shade Mixture: For use in areas with shade in Bluegrass lawns. For establishment in high quality, intensively managed turf areas. Mixture includes: Certified Kentucky Bluegrass Cultivars 30 to 40 percent and Certified Fine Fescue and 60 to 70 percent. Seeding Rate: 1 1/2 to 3 pounds per 1000 square feet.

- Notes:**
Select turfgrass varieties from those listed in the most current University of Maryland Publication, Agronomy Memo #77, "Turfgrass Cultural Recommendations for Maryland".
- Choose certified material. Certified material is the best guarantee of cultivar purity. The certification program of the Maryland Department of Agriculture, Turf and Seed Section, provides a reliable means of consumer protection and assures a pure genetic line.
- Soil Test Results of Seeding for Turf Grasses:** Western MD: March 15 to June 1, August 1 to October 1 (Hardness Zone: 6a) Central MD: March 1 to May 15, August 15 to October 15 (Hardness Zone: 6b) Southern MD: Eastern Shore: March 1 to May 15, August 15 to October 15 (Hardness Zone: 7a, 7b)
4. Till areas to receive seed by disking or other approved methods to a depth of 2 to 4 inches, level and rake the areas to prepare a proper seedbed. Remove stones and debris over 1 1/2 inches in diameter. The seedbed must be in such a condition that future mowing of grasses will pose no difficulty.
5. If soil moisture is deficient, supply new seedings with adequate water for slant growth (1 1/2 to 1 inch every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedings are made in the planting season, in abnormally dry or hot seasons, or on adverse sites.

Permanent Seeding Summary

Hardness Zone (from Figure B.3):	Seed Mixture (from Table B.3):		Fertilizer Rate (10-20-20)	Lime Rate
	No. Species	Application Rate (lb/acre)		

STANDARD STABILIZATION NOTE:
FOLLOWING INITIAL SOIL DISTURANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:
A. THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DICES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1), AND
B. SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.

STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREA (B-4-8)

Definition
The mound or pile of soil protected by appropriately designed erosion and sediment control measures.

Purpose
To provide a designated location for the temporary storage of soil that controls the potential for erosion, sedimentation, and changes to drainage patterns.

Conditions Where Practice Applies
Stockpile areas are utilized when it is necessary to salvage and store soil for later use.

Criteria
1. The stockpile location and all related sediment control practices must be clearly indicated on the erosion and sediment control plan.
2. The footprint of the stockpile must be sized to accommodate the anticipated volume of material and based on a side slope ratio no steeper than 2:1. Benching must be provided in accordance with Section B-3 Land Grading.
3. Runoff from the stockpile area must drain to a suitable sediment control practice.
4. Access to the stockpile area from the upgrade side.
5. Clear water runoff into the stockpile area must be minimized by use of a diversion device such as an earth curb, temporary swale or diversion fence. Provisions must be made for discharging concentrated flow in a non-erosive manner.
6. Where runoff concentrates along the top of the stockpile fill, an appropriate erosion/sediment control practice must be used to intercept the discharge.
7. Stockpiles must be stabilized in accordance with the 3/7 day stabilization requirement as well as Standard B-4-1 Incremental Stabilization and Standard B-4-4 Temporary Stabilization.
8. If the stockpile is located on an impervious surface, a liner should be provided below the stockpile to facilitate cleanup. Stockpiles containing contaminated material must be covered with impermeable sheeting.

AS-BUILT CERTIFICATION
NOTE: There is no "AS-BUILT" information provided on this sheet.

STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING (B-4-3)

Definition
The application of seed and mulch to establish vegetative cover.

Purpose
To protect disturbed soils from erosion during and at the end of construction.

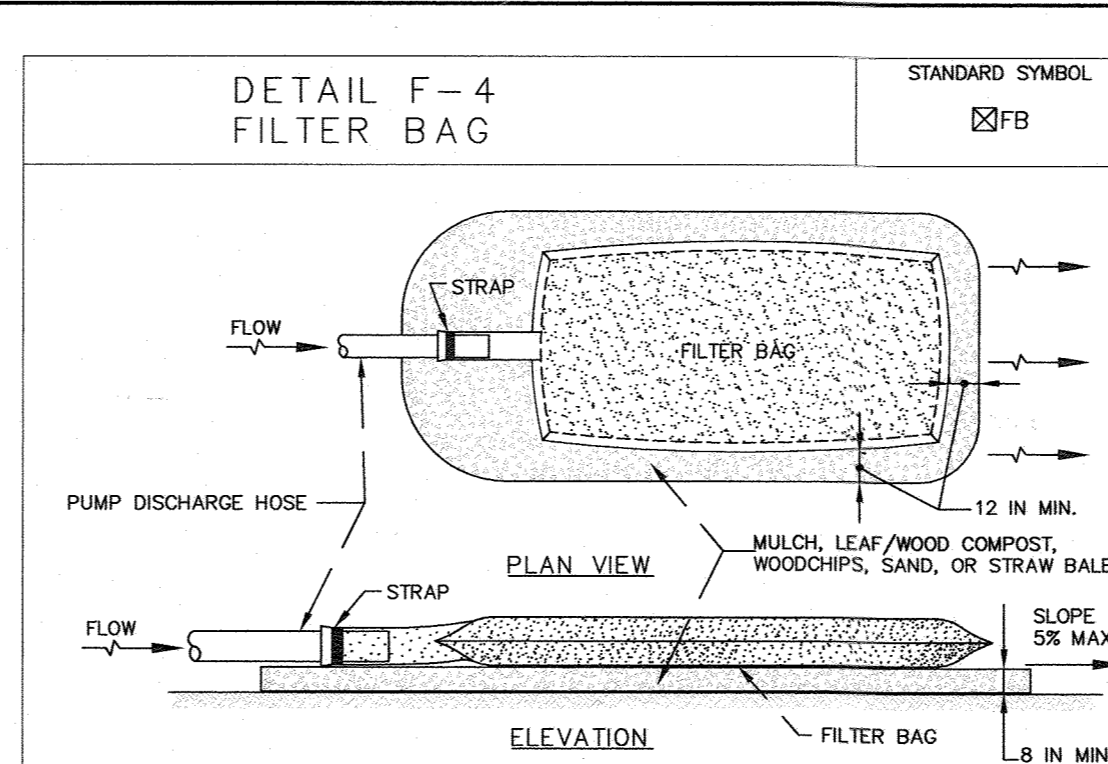
Conditions Where Practice Applies
To the surface of all perimeter controls, slopes, and any disturbed area not under active grading.

Criteria

- A. Seeding**
- Specifications
 - All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory. All seed used must have been tested within the 6 months immediately preceding the date of sowing such material on any project. Refer to Table B.4 regarding the quality of seed. Seed tags must be available upon request to the inspector to verify the type of seed and seeding rate.
 - Mulch alone may be applied between the fall and spring seeding dates only if the ground is frozen. The appropriate seeding mixture must be applied when the ground thaws.
 - Inoculants: The inoculant for treating legume seed in the seed mixtures must be a pure culture of nitrogen fixing bacteria prepared specifically for the species. Inoculants must not be used later than the date indicated on the container. Add fresh inoculants as directed on the package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until used. Temperatures above 75 to 80 degrees Fahrenheit can weaken bacteria and make the inoculant less effective.
 - Soil or seed must not be placed on soil which has been treated with soil sterilants or chemicals used for weedcontrol until sufficient time has elapsed (14 days minimum) to permit dissipation of phytotoxic materials.
 - Application
 - Dry Seeding: This includes use of conventional drop or broadcast spreaders.
 - Incorporate seed into the subsoil at the rates prescribed on Temporary Seeding Table B.1, Permanent Seeding Table B.3, or site-specific seeding summaries as directed on the package. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction. Roll the seeded area with weighted roller to provide good soil to soil contact.
 - Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction.
 - Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer).
 - If fertilizer is being applied at the time of seeding, the application rates should not exceed the following nitrogen, 100 pounds per acre total of soluble nitrogen; P O (phosphorus), 200 pounds per acre; K O (potassium), 200 pounds per acre.
 - Lime: Use only ground agricultural limestone (up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding.
 - Mix seed and fertilizer on site and seed immediately and without interruption.
 - When hydroseeding, do not incorporate seed into the soil.

- B. Mulching**
- Materials (In order of preference)
 - Straw consisting of thoroughly threshed wheat, rye, oat, or barley and reasonably bright in color. Straw is to be free of noxious weed seeds as specified in the Maryland Seed Law and not musty, moldy, caked, decayed, or excessively dirty. Note: Use only sterile straw mulch in areas where one species of grass is desired.
 - Wood Cellulose Fiber Mulch (WCFM) consisting of specially prepared wood cellulose processed into uniform fibrous physical state.
 - WCFM including dye, must contain no germination or growth inhibiting factors.
 - WCFM materials only to be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material must form a batter-like ground cover, on application, having moisture absorption and percolation properties and must cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.
 - WCFM material must not contain elements or compounds at concentration levels that will by phytotoxic.
 - WCFM must conform to the following physical requirements: fiber length of approximately 10 millimeters, diameter approximately 1 millimeter, pH range: 4.0 to 8.5, ash content of 1.6 percent maximum and water holding capacity of 90 percent minimum.

- Application
 - Apply mulch to all seeded areas immediately after seeding.
 - When straw mulch is used, spread it over seeded areas at the rate of 2 tons per acre to a uniform base depth of 1 to 2 inches. Apply mulch to achieve a uniform distribution and depth so that the soil surface is not exposed. When using a mulch anchoring tool, increase the application rate to 2.5 tons per acre.
 - Wood cellulose fiber mulch as mulch must be applied to a net dry weight of 1500 pounds per acre. Mix the wood cellulose fiber with water to attain a mixture with a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
- Anchoring
 - Perform mulch anchoring immediately following application of mulch to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon the size of the area and erosion hazard.
 - A mulch anchoring tool is a trowel hand implement designed to punch and anchor mulch into the soil surface a minimum of 2 inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should follow the contour of the slope.
 - Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder at a net dry weight of 750 pounds per acre. Mix the wood cellulose fiber with water at a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
 - Synthetic binders such as Acrylic DLR (Ago-Tack), DCA-70, Patrosol, Terra Tax II, Terra Tack All or other approved equal may be used. Follow application rates as specified by the manufacturer. Application of liquid binders needs to be heavier at the edges where wind catches much, such as in valleys and on crests of banks. Use of asphalt binders is strictly prohibited.
 - Lightweight plastic netting may be stapled over the mulch according to manufacturer recommendations. Netting is usually available in rolls 4-15 feet wide and 300 to 3,000 feet long.

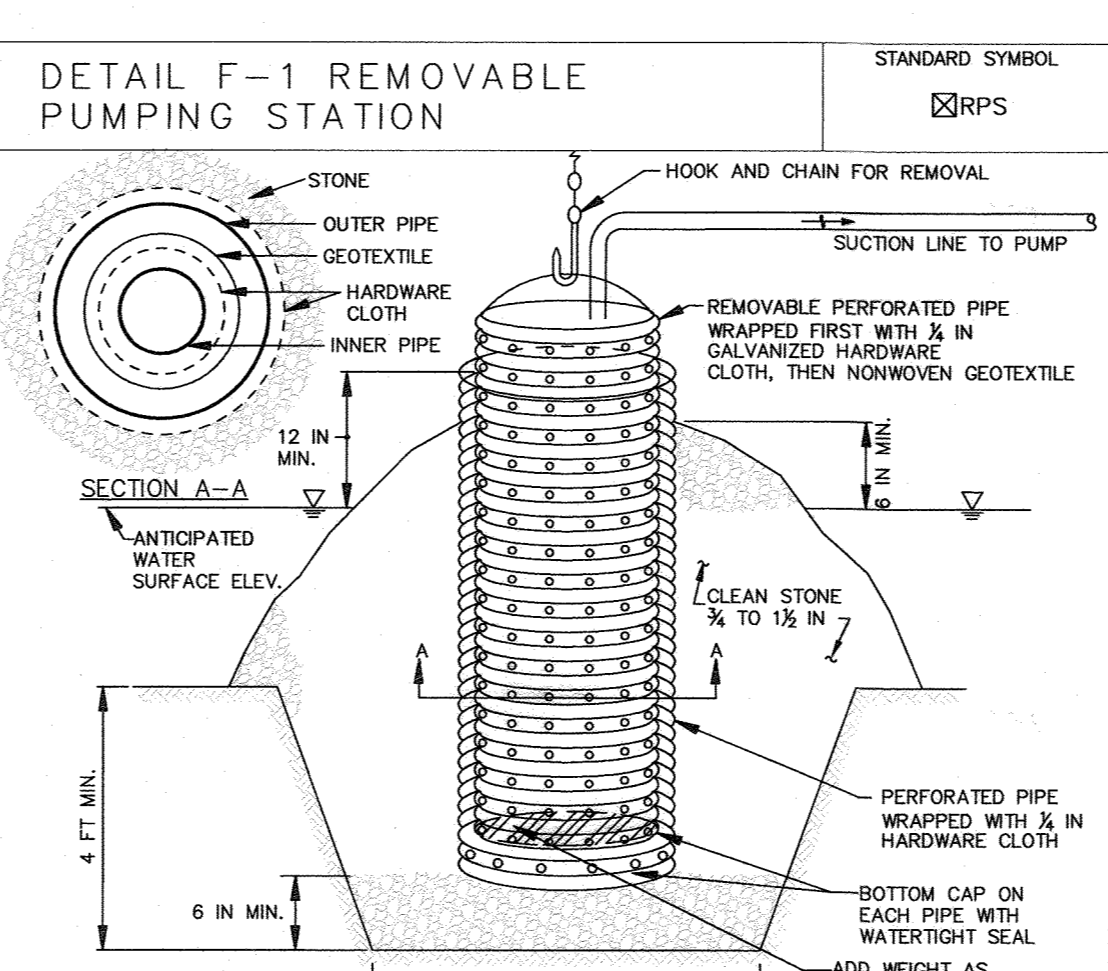


- CONSTRUCTION SPECIFICATIONS**
- TIGHTLY SEAL SLEEVE AROUND THE PUMP DISCHARGE HOSE WITH A STRAP OR SIMILAR DEVICE.
 - PLACE FILTER BAG ON SUITABLE BASE (E.G., MULCH, LEAF/WOOD COMPOST, WOODCHIPS, SAND, OR STRAW BALES) LOCATED ON A LEVISED OR 5% MAXIMUM SLOPING SURFACE. DISCHARGE TO A STABILIZED AREA. EXTEND BASE A MINIMUM OF 12 INCHES FROM EDGES OF BAG.
 - CONTROL PUMPING RATE TO PREVENT EXCESSIVE PRESSURE WITHIN THE FILTER BAG IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS. AS THE BAG FILLS WITH SEDIMENT, REDUCE PUMPING RATE.
 - REMOVE AND PROPERLY DISPOSE OF FILTER BAG UPON COMPLETION OF PUMPING OPERATIONS OR AFTER BAG HAS REACHED CAPACITY. WHEELCHERS OCCURS FIRST. SPREAD THE DETERMINED SEDIMENT FROM THE BAG IN AN APPROVED UPLAND AREA AND STABILIZE WITH SEED AND MULCH BY THE END OF THE WORK DAY. RESTORE THE SURFACE AREA BENEATH THE BAG TO ORIGINAL CONDITION UPON REMOVAL OF THE DEVICE.
 - USE NONWOVEN GEOTEXTILE WITH DOUBLE STITCHED SEAMS USING HIGH STRENGTH THREAD. SIZE SLEEVE TO ACCOMMODATE A MAXIMUM 4 INCH DIAMETER PUMP DISCHARGE HOSE. THE BAG MUST BE MANUFACTURED FROM A NONWOVEN GEOTEXTILE THAT MEETS OR EXCEEDS MINIMUM AVERAGE ROLL VALUES (MARV) FOR THE FOLLOWING:

GRAB TENSILE	250 LB	ASTM D-4632
PUNCTURE	150 LB	ASTM D-4833
FLOW RATE	70 GAL/MIN/FT ²	ASTM D-4491
PERMITTIVITY (SEC ⁻²)	1.2 SEC ⁻²	ASTM D-4491
UV RESISTANCE	70% STRENGTH @ 500 HOURS	ASTM D-4355
APARENT OPENING SIZE (AOS)	0.15-0.18 MM	ASTM D-4751
SEAM STRENGTH	90%	ASTM D-4632
 - REPLACE FILTER BAG IF BAG CLOSURE OR HAS RIPS, TEARS, OR PUNCTURES. DURING OPERATION KEEP CONNECTION BETWEEN PUMP HOSE AND FILTER BAG WATER TIGHT. REPLACE BEDDING IF IT BECOMES DISPLACED.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
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- CONSTRUCTION SPECIFICATIONS**
- USE CORRUGATED METAL OR PLASTIC PIPE WITH 1 INCH DIAMETER PERFORATIONS 6 INCHES ON CENTER.
 - USE A MINIMUM 12 INCH DIAMETER INNER PIPE WITH AN OUTER PIPE A MINIMUM 6 INCHES LARGER IN DIAMETER. BOTTOM OF EACH PIPE MUST BE CAPPED WITH WATER TIGHT SEAL.
 - WRAP EACH PIPE WITH 3/4 INCH GALVANIZED HARDWARE CLOTH. ON INNER PIPE, WRAP NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, OVER THE HARDWARE CLOTH.
 - EXCAVATE 8 FEET X 8 FEET X 4 FEET DEEP PIT FOR PIPE PLACEMENT. PLACE CLEAN 3/4 TO 1 1/2 INCH STONE OR EQUIVALENT RECYCLED CONCRETE, 6 INCHES IN DEPTH PRIOR TO PIPE PLACEMENT.
 - SET TOP OF INNER AND OUTER PIPES MINIMUM 12 INCHES ABOVE ANTICIPATED WATER SURFACE ELEVATION (OR RISE RESPECT ELEVATION WHEN DETERMINING A BASIN).
 - BACKFILL PIT AROUND THE OUTER PIPE WITH 3/4 TO 1 1/2 INCH CLEAN STONE OR EQUIVALENT RECYCLED CONCRETE AND EXTEND STONE A MINIMUM OF 6 INCHES ABOVE ANTICIPATED WATER SURFACE ELEVATION.
 - DISCHARGE TO A STABLE AREA AT A NONEROSIVE RATE.
 - A REMOVABLE PUMPING STATION REQUIRES FREQUENT MAINTENANCE. IF SYSTEM CLOGS, PULL OUT INNER PIPE AND REPLACE GEOTEXTILE. KEEP TOP OF DISCHARGE FREE OF EROSION.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
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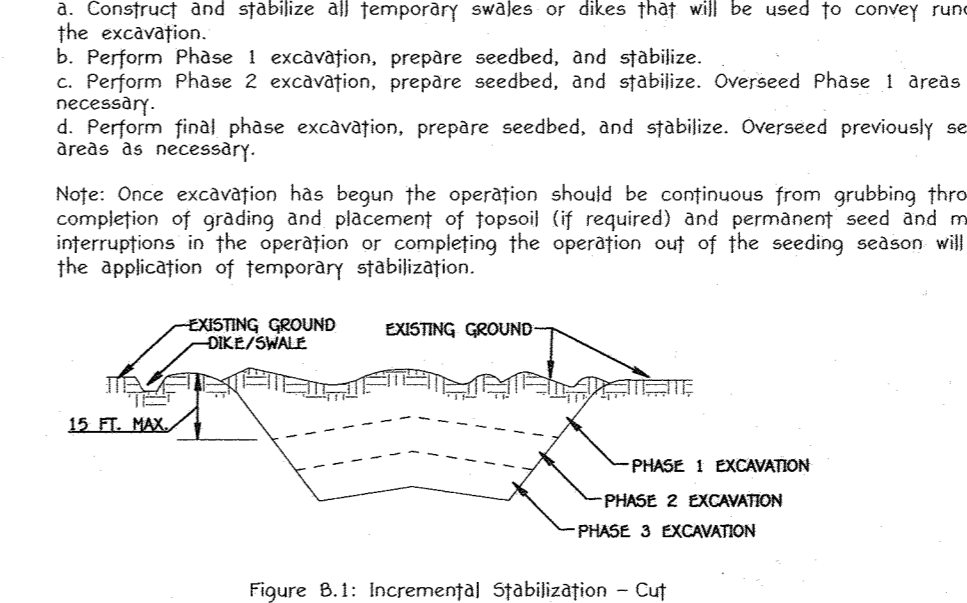
B-4-1 STANDARDS AND SPECIFICATIONS FOR INCREMENTAL STABILIZATION

Definition
Establishment of vegetative cover on cut and fill slopes.

Purpose
To provide timely vegetative cover on cut and fill slopes as work progresses.

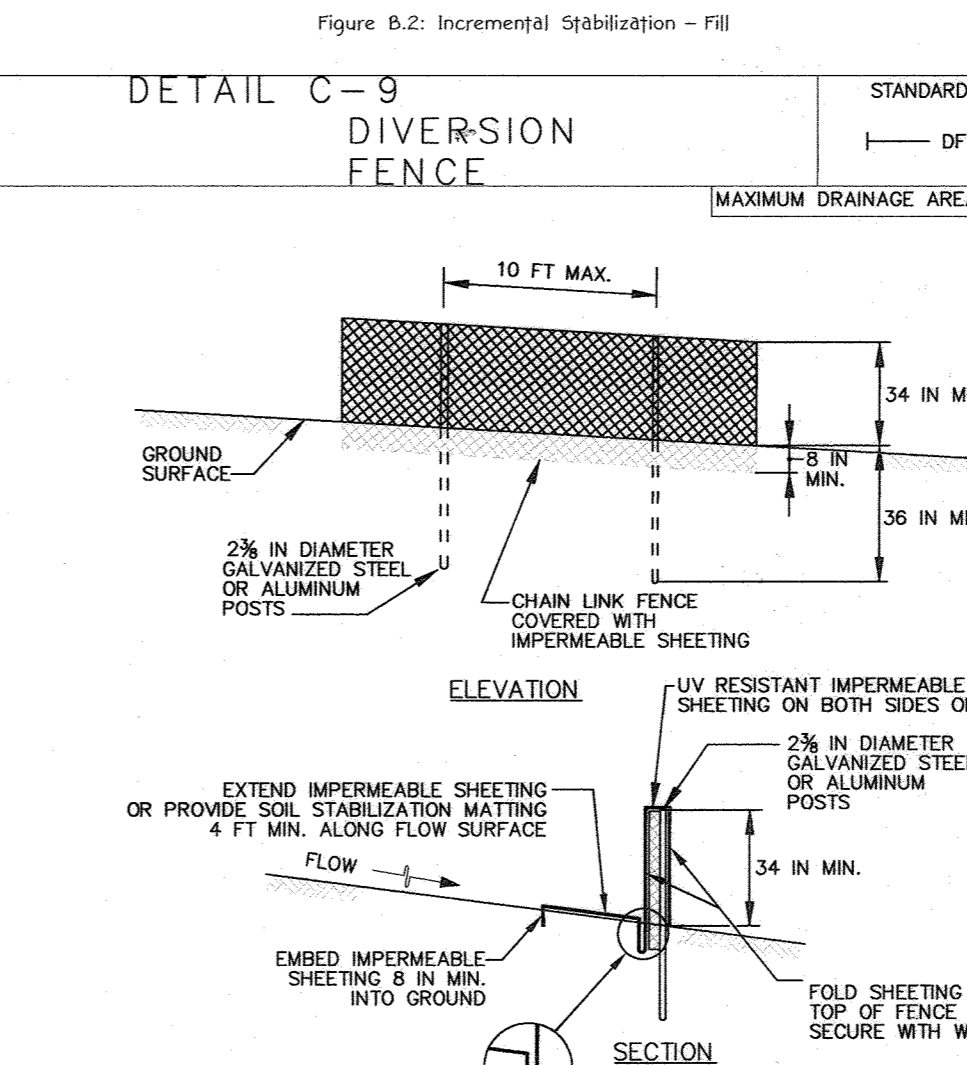
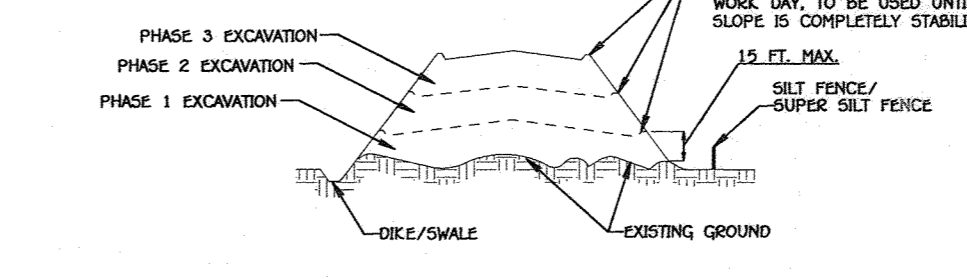
Conditions Where Practice Applies
Any cut or fill slope greater than 15 feet in height. This practice also applies to stockpiles.

Criteria



- B. Incremental Stabilization - Fill Slopes**
- Construct and stabilize fill slopes in increments not to exceed 15 feet in height. Prepare seedbed and apply seed and mulch on all slopes as the work progresses.
 - Stabilize slopes immediately when the vertical height of a lift reaches 15 feet, or when the grading operation ceases as prescribed in the plans.
 - At the end of each day, install temporary water conveyance practices, as necessary, to intercept surface runoff and convey it down the slope in a non-erosive manner.
 - Construction sequence example (Refer to Figure B.2):
 - Construct a fill slope to a height of fill unless other methods shown on the plans address this area.
 - At the end of each day, install temporary water conveyance practices, as necessary, to intercept surface runoff and convey it down the slope in a non-erosive manner.
 - Place Phase 1 fill, prepare seedbed, and stabilize.
 - Place Phase 2 fill, prepare seedbed, and stabilize.
 - Place final phase fill, prepare seedbed, and stabilize. Overseed previously seeded areas as necessary.

Note: Once the placement of fill has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization.



- CONSTRUCTION SPECIFICATIONS**
- USE 42 INCH HIGH, 6 GAUGE OR THICKER CHAIN LINK FENCING (2 1/2 INCH MAXIMUM OPENING).
 - USE 2 1/2 INCH DIAMETER GALVANIZED STEEL POSTS OF 0.95 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. THE POSTS DO NOT NEED TO BE SET IN CONCRETE.
 - FASTEN CHAIN LINK FENCE SECURELY TO THE FENCE POSTS WITH WIRE TIES.
 - SECURE 10 MIL OR THICKER U.V. RESISTANT, IMPERMEABLE SHEETING TO CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT TOP, MID SECTION, AND BELOW GROUND SURFACE.
 - EXTEND SHEETING A MINIMUM OF 4 FEET ALONG FLOW SURFACE AND EMBED END A MINIMUM OF 8 INCHES INTO GROUND. SOIL STABILIZATION MATTING MAY BE USED IN LIEU OF IMPERMEABLE SHEETING ALONG FLOW SURFACE.
 - WHEN TWO SECTIONS OF SHEETING ADJOIN EACH OTHER, OVERLAP BY 6 INCHES AND FOLD WITH SEAM FACING DOWNWARD.
 - KEEP FLOW SURFACE ALONG DIVERSION FENCE AND POINT OF DISCHARGE FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. MAINTAIN POSITIVE DRAINAGE. REPLACE IMPERMEABLE SHEETING IF TORN, IF UNDERMINING OCCURS, REINSTATE FENCE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
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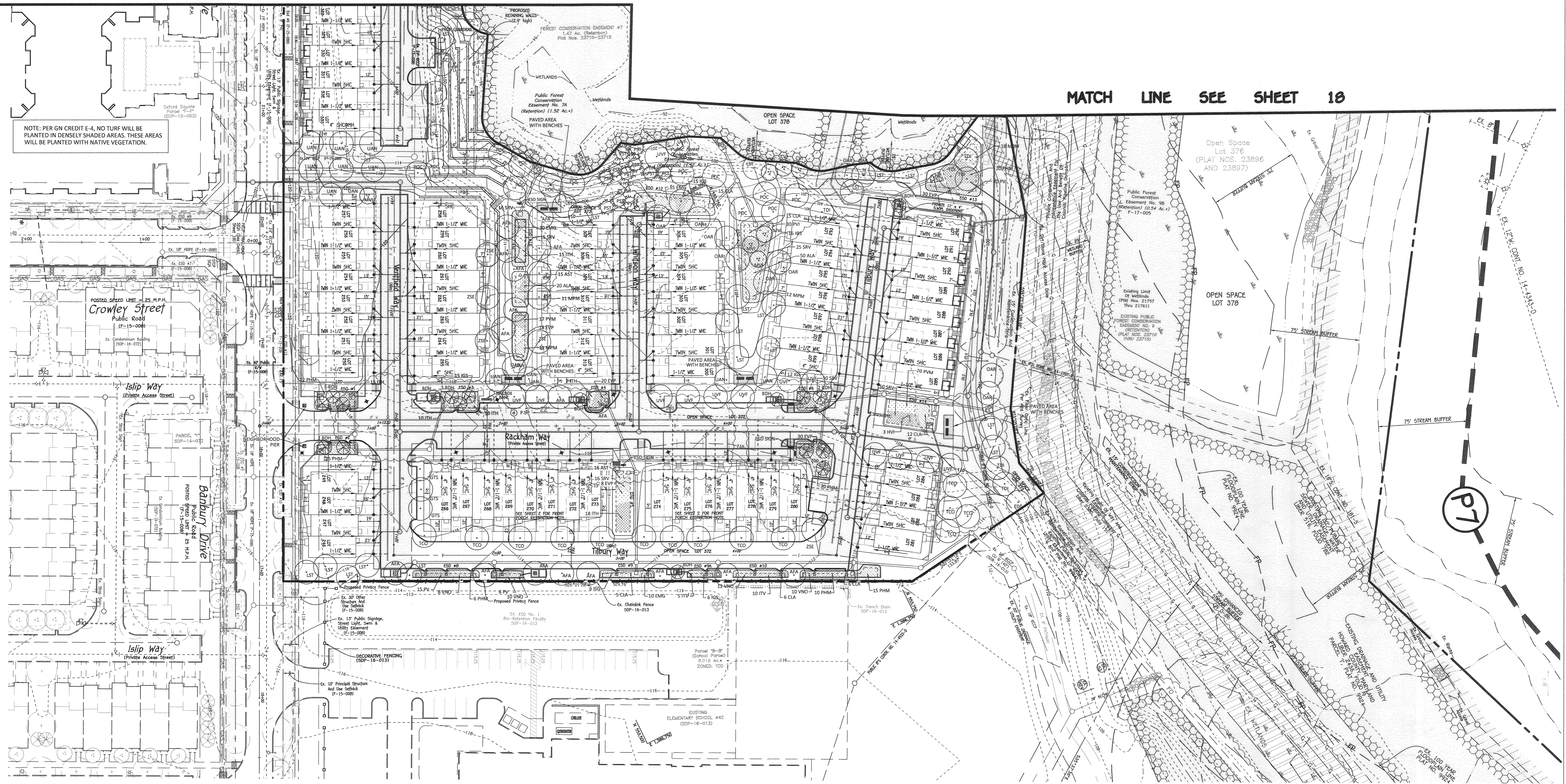
SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMITS. (2 WEEKS)
- NOTIFY "HIS UTILITY AT LEAST 48 HOURS BEFORE ANY WORK AT 1-800-257-7777. NOTIFY HOWARD COUNTY OFFICE OF CONSTRUCTION/INSPECTION DIVISION AT 410-313-1070 AT LEAST 24 HOURS BEFORE STARTING ANY WORK.
- INSTALL THE STABILIZED CONSTRUCTION ENTRANCE. PERIMETER SUPER SILT AS SHOWN ON THE PLANS. CLEAN AND GRUB SITE. (7 DAYS)
- GRADE SITE TO PASS GRADING CONTROLS FOR THE PRIVATE ROADS AND BUILDING PADS. THE CONTRACTOR SHALL MAKE THE OPTION TO GRADE SLOPE AREAS PRIOR TO GRUBS TO ALLOW FOR FLEXIBILITY ON WHICH PORTION OF THE PRIVATE ROADS TO BE CONSTRUCTED FIRST. OBTAIN PERMISSION FROM THE SEGMENT CONTROL INSPECTOR BEFORE PROCEEDING. (5 WEEKS)
- INSTALL THE PROPOSED STORM DRAIN SYSTEMS INCLUDING THE INLETS WITHIN EACH SWM ESD FACILITY. (20 FOR THE CONSTRUCTION OF THE FILTER MEDIA, STONE LAYERS, UNDERDRAIN AND PLANTERS FOR EACH FACILITY. THEY SHALL BE DELAYED UNTIL THE CONTRIBUTING DRAINAGE AREA FOR EACH FACILITY IS FULLY STABILIZED (6 WEEKS). (INSTALL LIFT PROTECTION ON THE ESD SWM INLETS.)
- INSTALL THE PROPOSED SEWER AND WATER MAINS IN CONJUNCTION WITH THE ABOVE STORM DRAIN SYSTEMS AND PLANTERS.
- UPON PERMISSION FROM THE SEGMENT CONTROL INSPECTOR TO PROCEED, INSTALL CONCRETE CURB AND GUTTER. BASE COURSE PAVING. (3 WEEKS)
- BEGIN CONSTRUCTION OF THE TOWNHOUSES. (SEE THE CONTRIBUTING DRAINAGE AREA TO THE PERIMETER DITCHES IS CONSTRUCTED AND STABILIZED AND WITH PERMISSION FROM THE SEGMENT CONTROL INSPECTOR, THE SURFACE SILT FENCE CAN BE REMOVED.)
- STABILIZE ALL REMAINING AREAS DISTURBED AREAS ON SITE WITH PERMANENT SEEDING OR OPTIONAL SOODING. THE FINAL CONSTRUCTION OF THE BIO-RETENTION FACILITIES CAN BE COMPLETED WITHIN THE PERMITTED TIME FRAME.
- REMOVE THE REMAINING SEDIMENT & EROSION CONTROLS WITH THE INSPECTOR'S PERMISSION.

STANDARD NOTE: THE CONTRACTOR SHALL COORDINATE WITH THE INSPECTOR IN REGARDS TO THE REQUIREMENT THAT NO MORE THAN 20-ACRES OF "OPEN" GROUND SHALL BE DISTURBED AT ANY ONE TIME IF REQUIRED, THE PROPOSED L.O.D. IS 9.5 ACRES IN SIZE.

NOTE: ALL CONSTRUCTION WASTE MUST BE MANAGED IN ACCORDANCE WITH THE CONSTRUCTION WASTE MANAGEMENT PLAN PER GREEN NEIGHBORHOOD CREDIT H-3.

- HOWARD COUNTY GREEN NEIGHBORHOOD DISTRICT (HSCD) STANDARD SEDIMENT CONTROL NOTES**
- A pre-construction meeting must occur with the Howard County Department of Public Works, Construction Inspection Division (CID) 410-313-1070 after the future L.O.D. and protected areas are marked clearly in the field. A minimum of 48 hour notice to CID must be given at the following stages: a. Prior to the start of earth disturbance, b. Upon completion of the installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or earth stabilization, c. Prior to the start of another phase of construction or opening of another grading unit, d. Prior to the removal or modification of sediment control practices. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made. Other related state and federal permits shall be referenced, to ensure coordination and to avoid conflicts with the plan.
 - All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereof.
 - Following initial soil disturbance or re-disturbance, permanent or temporary stabilization is required within three (3) calendar days as to the surface of all perimeter controls, dikes, embankments, ditches, perimeter slopes, and all slopes steeper than 3:1 horizontal to 1 vertical (3:1), and seven (7) calendar days as to all other disturbed areas on the project site except for those areas under active grading.
 - All disturbed areas must be stabilized within the time frame specified above in accordance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for Topsoil (Sec. B-4-2), Permanent Seeding (Sec. B-4-5), Temporary Seeding (Sec. B-4-4) and Mulching (Sec. B-4-3).
 - Temporary stabilization with mulch alone can only be applied between the fall and spring seeding dates if the ground is frozen. Incremental stabilization (Sec. B-4-1) specifications shall be enforced in areas with >15' of cut and stockpiles (Sec. B-4-8) must be handled with stable outlet. All concentrated flow, steep slope, and highly erodible areas shall receive soil stabilization matting (Sec. B-4-6).
 - All sediment control structures are to remain in place, and are to be maintained in operative condition until permission for their removal has been obtained from the CID.
 - Site Analysis:
 - Total Area of Site: 21,735 Acres (Existing Parcel "E", "Z" And Open Space Lot 244)
 - Area Disturbed: 5.7 Acres
 - Area to be vegetatively stabilized: 3.5 Acres
 - Total Cut: 6,800 Cu. Yds.
 - Total Fill: 42,000 Cu. Yds.
 - Water/borrow area location: OXFORD SQUARE SITE
 - Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
 - Additional sediment control must be provided, if deemed necessary by the CID. The site and all controls shall be inspected by the contractor weekly; and the next day after each rain event. A written report to the contractor, made in triplicate, pre-empt, is part of every inspection and should include:
 - Inspection date
 - Inspection time (morning, pre-mid, event, during rain event)
 - Name and title of inspector
 - Weather information (current conditions, as well as time and amount of last recorded precipitation)
 - Brief description of project's status (e.g., percent complete) and/or current activities
 - Evidence of sediment discharge
 - Identification of plan deficiencies
 - Evidence of sediment control that requires maintenance
 - Identification of missing or improperly installed sediment controls
 - Corrections/updates regarding the sequence of construction and stabilization requirements
 - Photographs
 - Maintaining/repairing
 - Maintenance and/or corrective action performed
 - Other inspection items as required by the General Permit for Stormwater Associated with Construction Activities (NPDES, MS4)
 - Trenches for the construction of utilities is limited to three pipe lengths or that which can and shall be back-filled and stabilized by the end of each workday, whichever is shorter.
 - Any major changes or revisions to the plan or sequence of construction must be reviewed and approved by the HSCD prior to proceeding with construction. Minor revisions may be authorized by the CID per the list of HSCD-approved field changes.
 - Disturbance shall not occur outside the L.O.D. A project is to be sequenced so that grading activities begin on one grading unit (minimum acreage of 20 ac. per grading unit) at a time. Work may proceed to a subsequent grading unit when at least 50 percent of the disturbed area in the preceding grading unit has been stabilized and approved by the HSCD. Unless otherwise specified and approved by the HSCD, no more than 30 acres cumulatively may be disturbed at a given time.
 - Wash water from any equipment, vehicles, wheels, pavement, and other sources must be

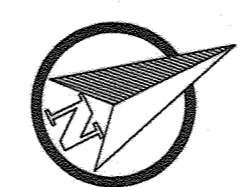
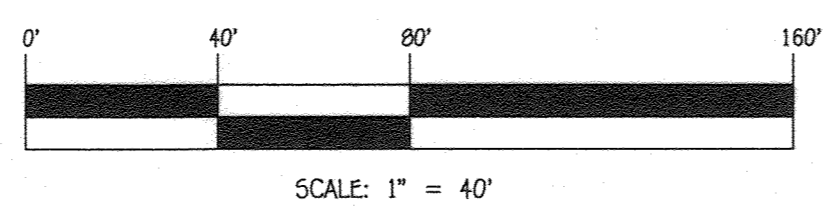


NOTE: PER GN CRUIT E-4, NO TURF WILL BE PLANTED IN DENSELY SHADED AREAS. THESE AREAS WILL BE PLANTED WITH NATIVE VEGETATION.

Open Space Lot 376 (PLAT NOS. 23896 AND 23897)

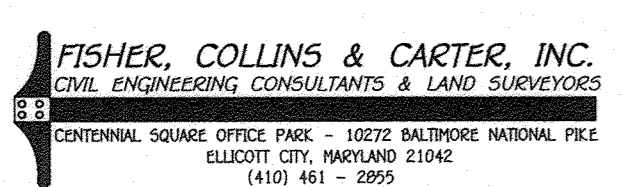
Open Space Lot 378

P7

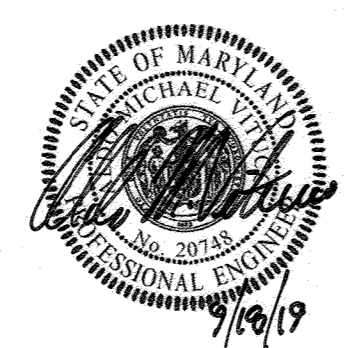


LANDSCAPE DEVELOPER'S CERTIFICATE
 I/We certify that the landscaping shown on this plan will be done according to the plan, Section 16.124 of the Howard County Code and the Howard County Landscape Manual. I/We further certify that upon completion a letter of landscape installation accompanied by an executed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

David P. Scheffacker
 Name: David P. Scheffacker Date: 9-24-19



NO.	REVISION	DATE
1	REVISE REMAINING 38' UNITS TO 40' UNITS	9/9/19
2	ADD NEW RAINGARDEN PLANTER BOX FOR LOTS 295-292 & 365-371 AND REVISE PLANTER BOX FOR LOTS 314-333	9/9/19
3	REVISED 38' TOWNHOUSE UNITS TO 40' (WHERE POSSIBLE) & FLIPPED END UNIT DRIVEWAY LOCATIONS WHERE POSSIBLE.	1/18/18



AS-BUILT CERTIFICATION
 NOTE: There is no "AS-BUILT" Information Provided on this sheet.

 Date: 9/19/19

Owner
 Kellogg-CCP, LLC
 c/o David P. Scheffacker, Jr.,
 Managing Member
 100 West Road, Suite 304
 Towson, Maryland 21284
 Ph: 410-296-3800

Developer
 Preston • Scheffacker Properties
 100 West Road, Suite 304
 Towson, Maryland 21204
 Ph: 410-296-3800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development: 5/20/20 Date

Chief, Development Engineering Division: 5/20/20 Date

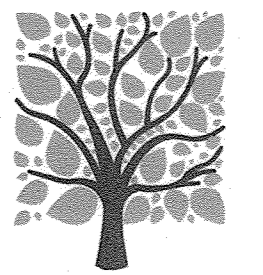
Director, Department of Planning and Zoning: 5-21-20 Date

SUBDIVISION	SECTION/AREA	LOT Nos.
OXFORD SQUARE	---	246 - 371

PLAT Nos.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
24357-24362	---	TOD	38	1st	601101

REVISED STREET TREE & LANDSCAPE PLAN
OXFORD SQUARE
 "A Howard County Green Neighborhood"
 "RIVER OVERLOOK"
 Lots 246 Thru 371 & Open Space Lots 372 Thru 375 and Open Space Lot 378
 (Being A Resubdivision Of Parcels "Z", "E-E" & Open Space Lot 376, As Shown On Revision P141 Entitled "Green Neighborhood" Parcels "Z", "E-E" And Open Space Lot 378 Recorded Among The Land Records Of Howard County, Maryland As Plat Nos. 23896 Thru 23997)

Tax Map No.: 38 Grid No.: 20 Parcel No.: 1003
 First Election District: Howard County, Maryland
 Scale: As Shown
 Date: Sept. 9, 2019
 Sheet 17 Of 40



OXFORD SQUARE

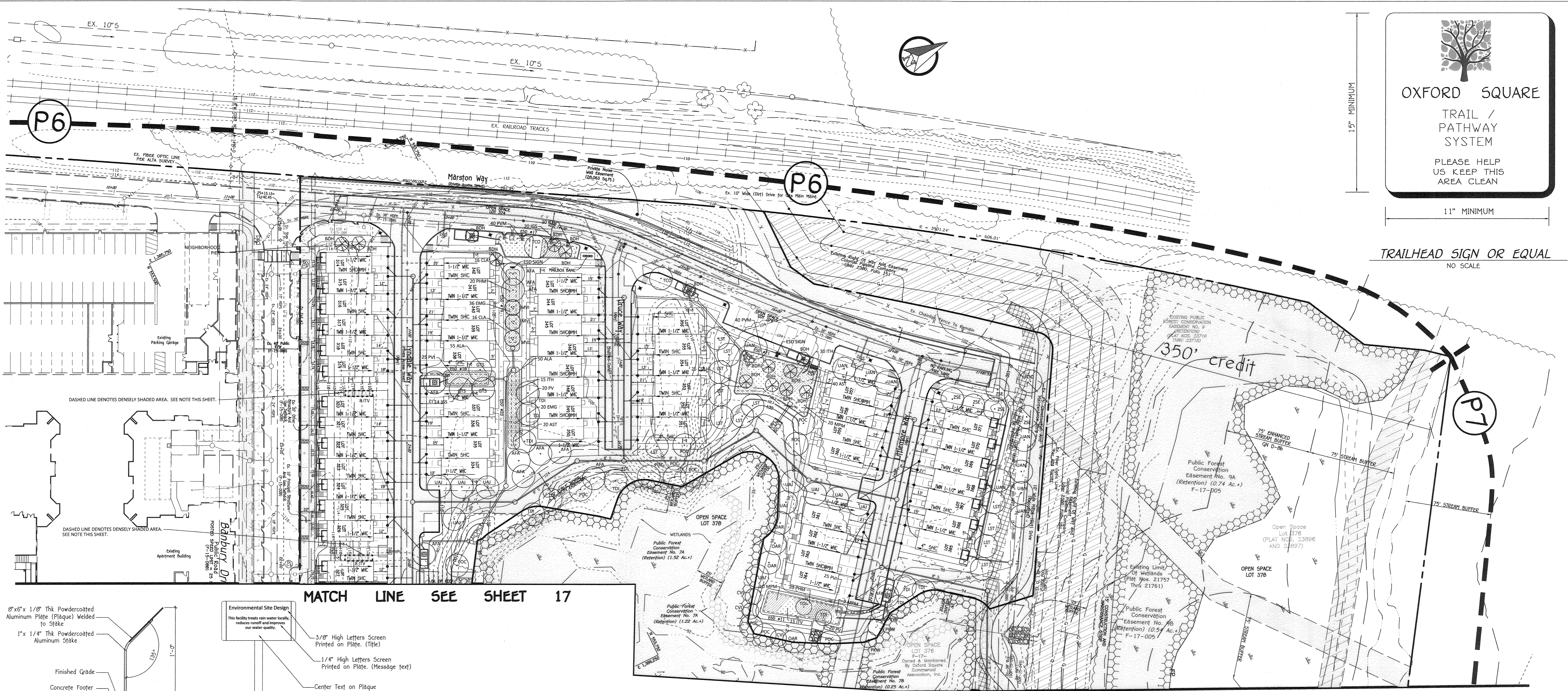
TRAIL / PATHWAY SYSTEM

PLEASE HELP US KEEP THIS AREA CLEAN

11" MINIMUM

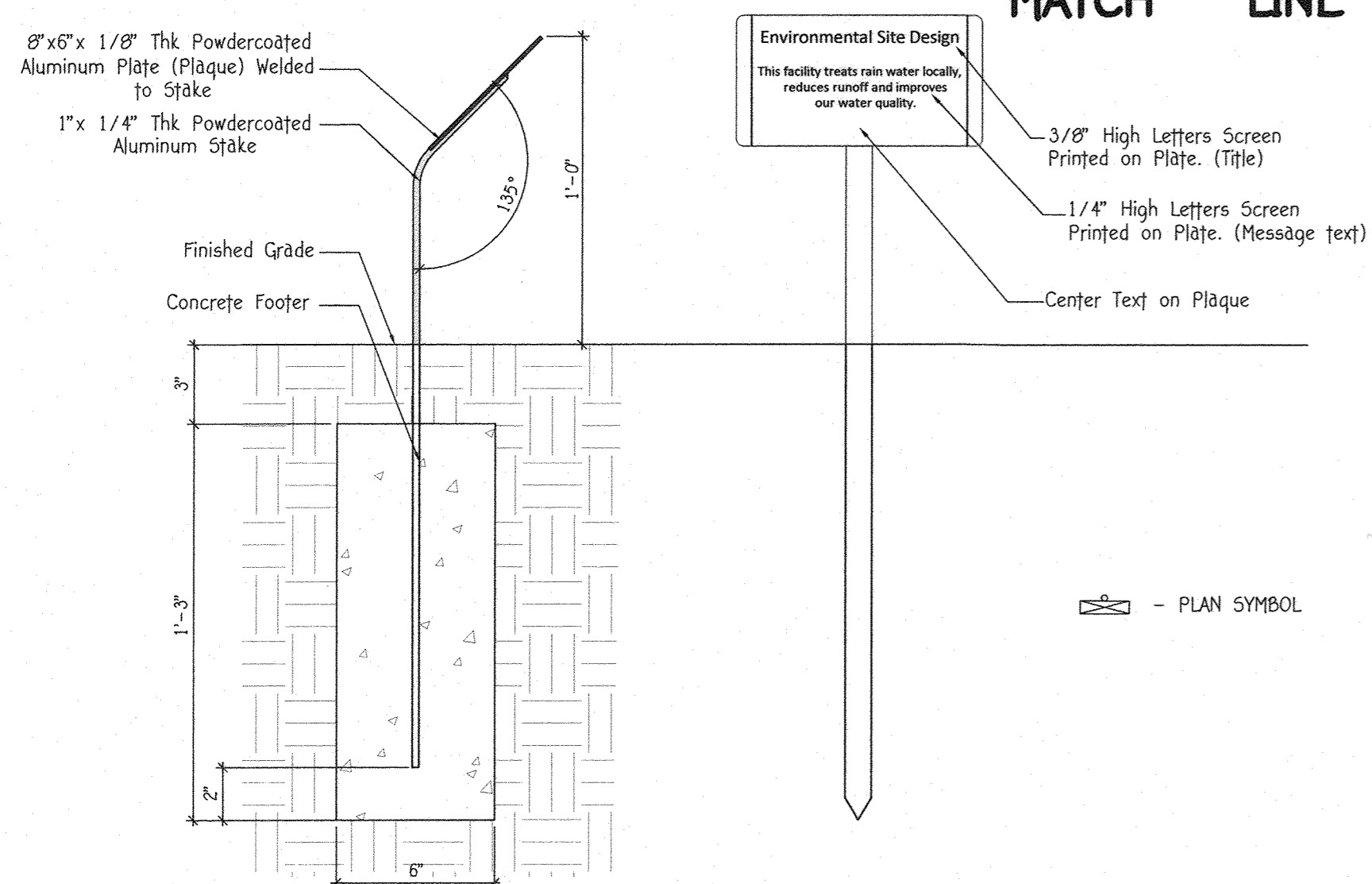
TRAILHEAD SIGN OR EQUAL

NO SCALE



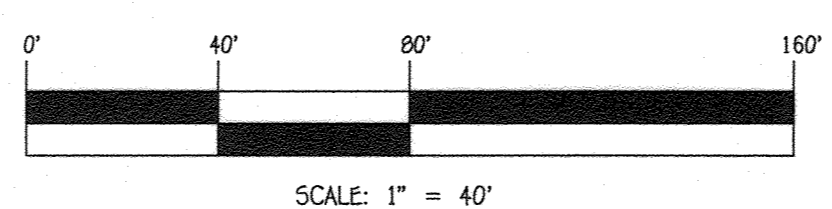
MATCH LINE SEE SHEET 17

MATCH LINE SEE SHEET 17



ESD INTERPRETIVE SIGN DETAIL NO SCALE

*NOTE: PER GN CREDIT E-4, NO TURF WILL BE PLANTED IN DENSELY SHADED AREAS. THESE AREAS WILL BE PLANTED WITH NATIVE VEGETATION.



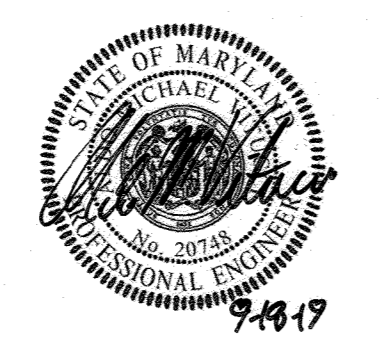
SCALE: 1" = 40'

LANDSCAPE DEVELOPER'S CERTIFICATE I/we certify that the landscaping shown on this plan will be done according to the plan, Section 18.124 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.

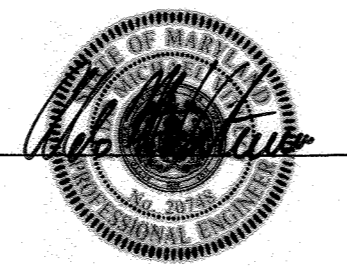
Signature: David B. Schreffler Date: 9-24-19

FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

Revision table with columns for NO., REVISION, and DATE.



AS-BUILT CERTIFICATION NOTE: There is no "AS-BUILT" information provided on this sheet.



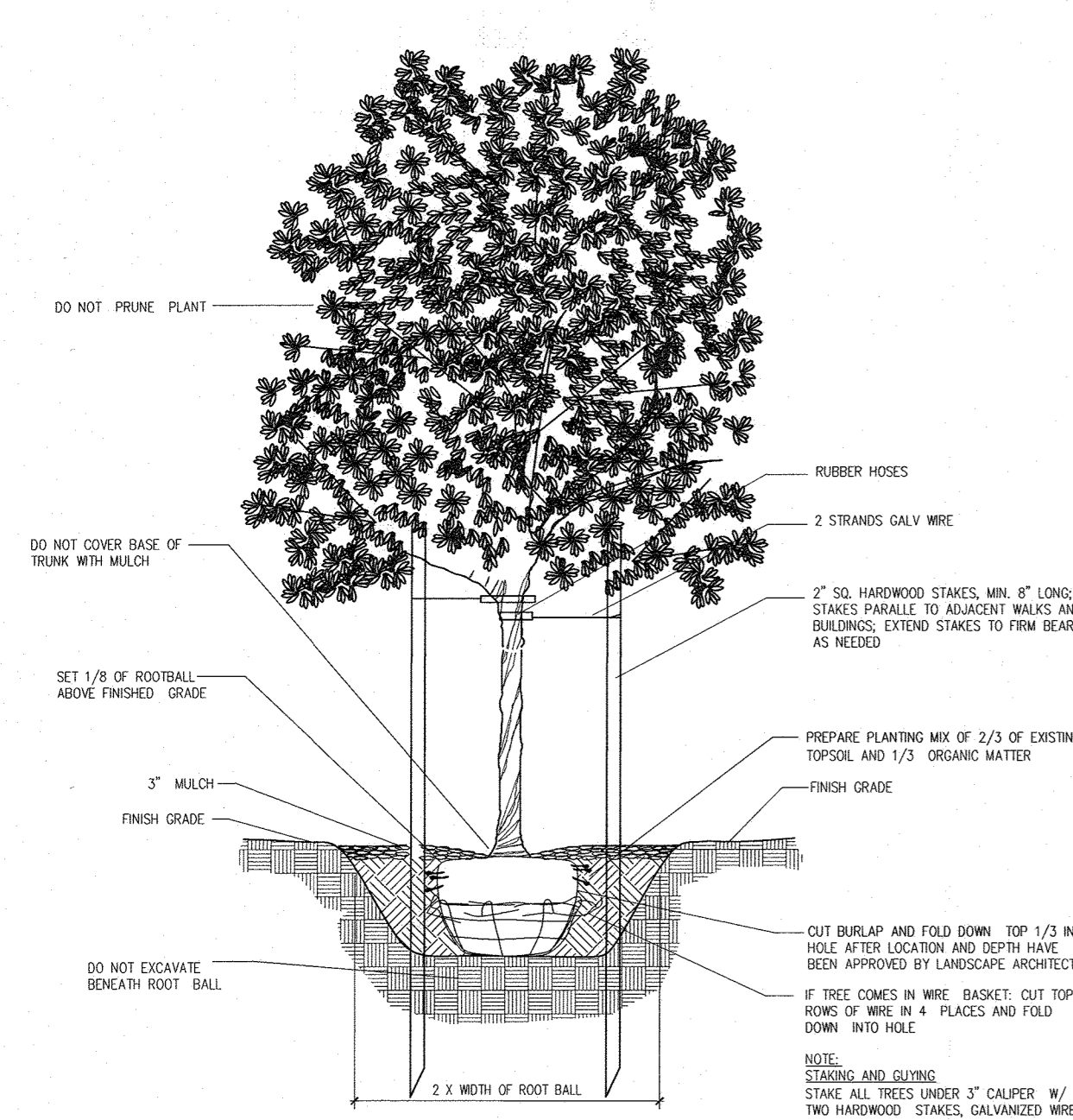
Owner: Kelllogg-CCP, LLC

Developer: Preston + Scheffnacker Properties

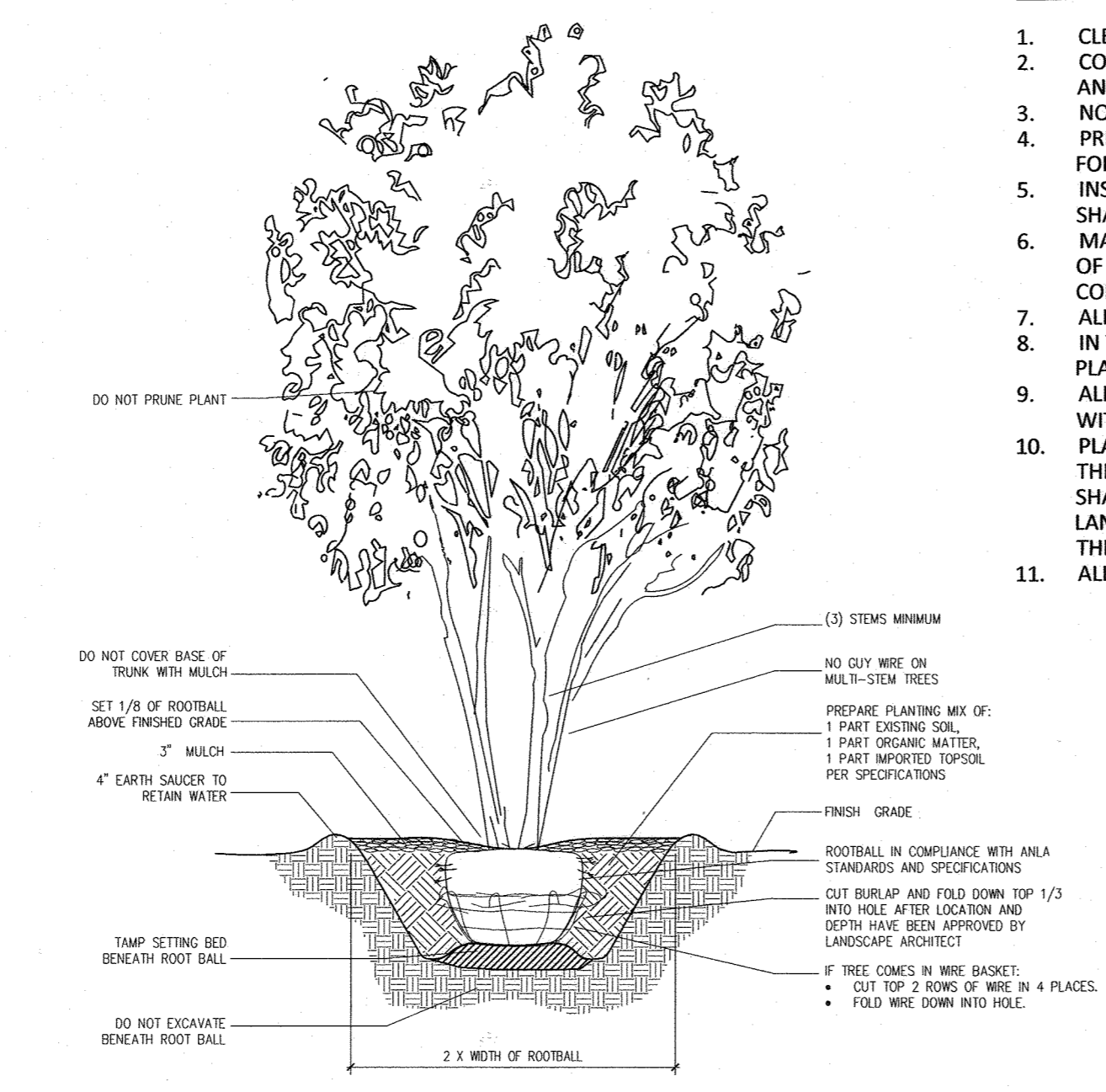
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING. Includes signatures and dates for Chief of Land Development, Development Engineering Division, and Director of Planning and Zoning.

REVISED STREET TREE & LANDSCAPE PLAN OXFORD SQUARE "A Howard County Green Neighborhood" "RIVER OVERLOOK"

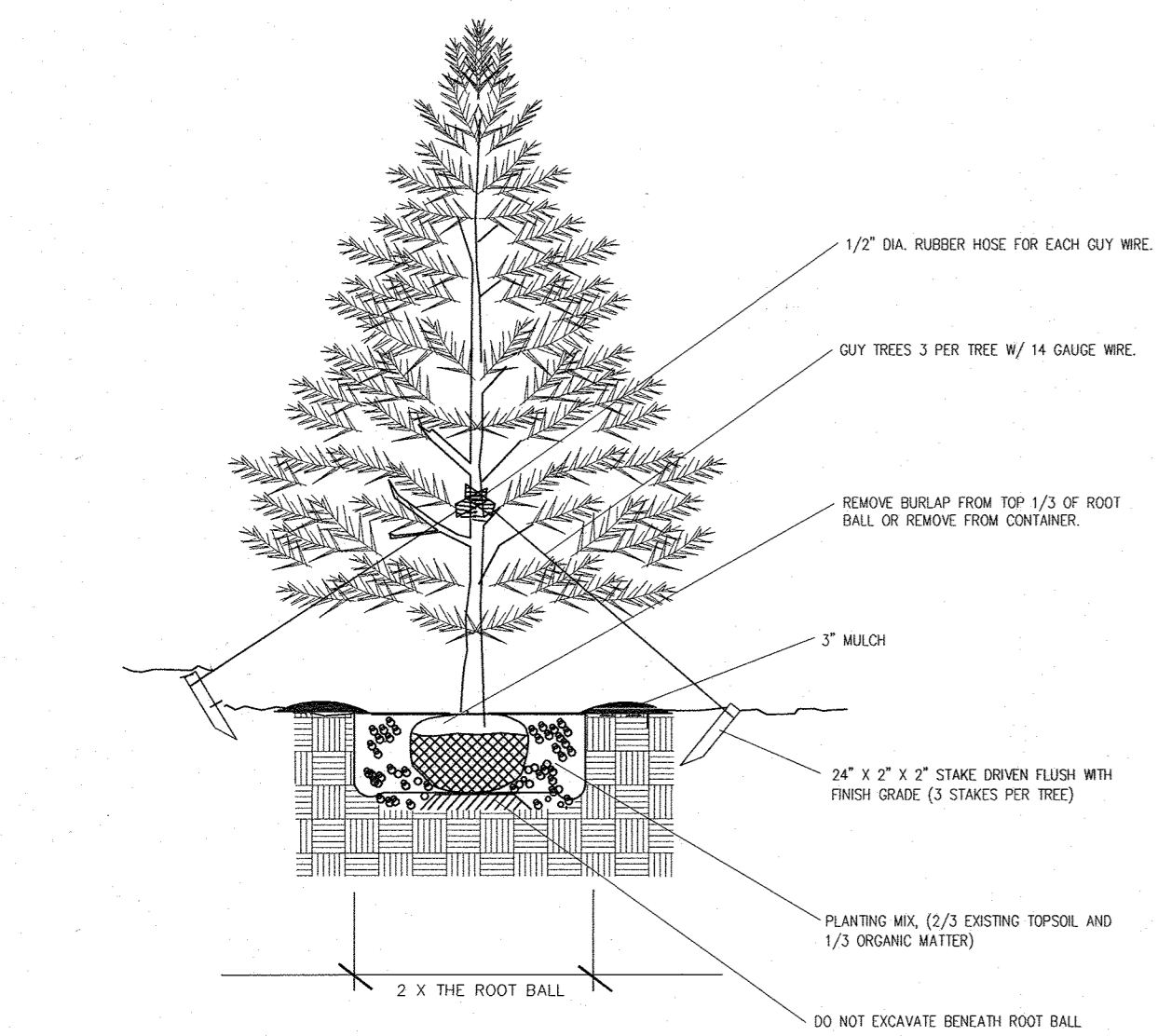
THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET



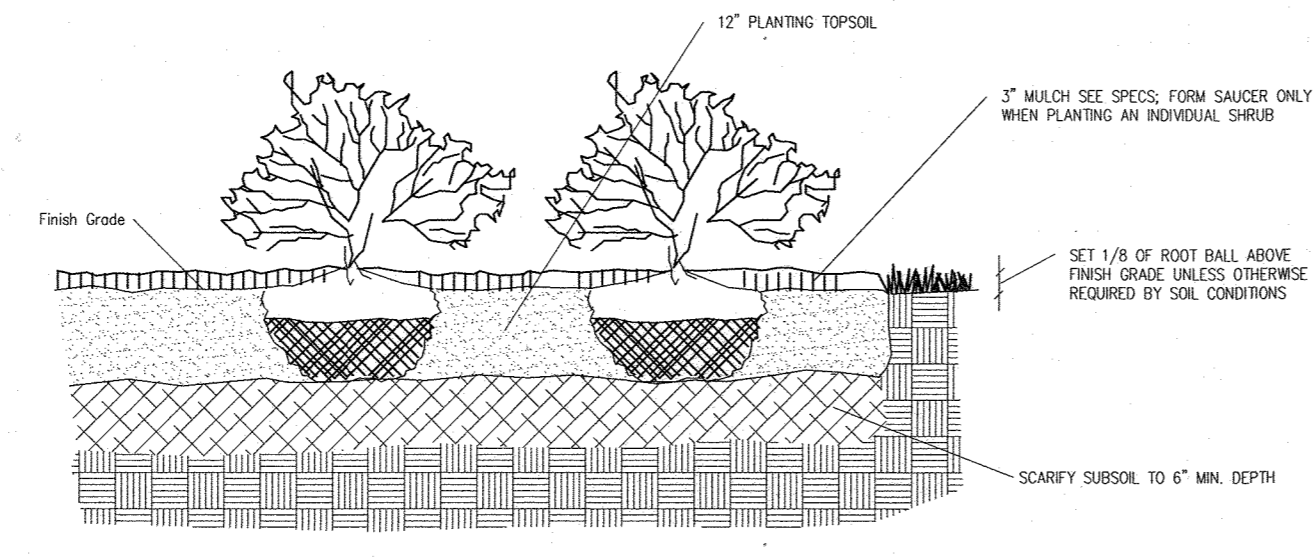
DECIDUOUS TREE - TYPICAL PLANTING DETAIL



MULTISTEM TREE - TYPICAL PLANTING DETAIL



EVERGREEN TREE - TYPICAL PLANTING DETAIL



SHRUB AND HEDGEROW - TYPICAL PLANTING DETAIL

PLANTING SPECIFICATIONS

- CLEAR & GRUB ALL PLANTING AREAS AS INDICATED ON THE DRAWINGS.
- PROVIDE PROTECTION FOR TREES, SHRUBS, AND PERENNIALS/GROUND COVERS THAT ARE TO BE PRESERVED.
- CONTRACTOR SHALL VERIFY THE CORRECT LOCATION OF ALL UNDERGROUND UTILITIES IN THE FIELD PRIOR TO INSTALLATION OF ANY PLANT MATERIALS.
- ALL PLANTING SHALL BE DONE AS PER PLANTING DETAILS AND SPECIFICATIONS.
- NO CHANGES SHALL BE MADE WITHOUT WRITTEN CONSENT OF THE OWNER OR LANDSCAPE ARCHITECT.
- PRIOR TO CONSTRUCTION OF PLANTING BEDS, THE CONTRACTOR SHALL STAKE OUT PLANTING BED LINES IN THE FIELD FOR REVIEW BY THE LANDSCAPE ARCHITECT. LANDSCAPE ARCHITECT SHALL MAKE ADJUSTMENTS IN THE FIELD AS NECESSARY. ALL FINAL PLANTING BED LOCATIONS ARE TO BE APPROVED BY THE LANDSCAPE ARCHITECT. FOR LAYOUT REVIEW, CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT A MINIMUM OF THREE DAYS IN ADVANCE.
- INSTALL ALL REQUIRED PLANTING AND LAWN SOILS AS PER DETAILS AND SPECIFICATIONS, AND ALL SHRUBS, GROUND COVERS, AND PERENNIALS SHALL BE PLANTED IN PLANTING BEDS PREPARED AS REQUIRED BY THE DETAILS AND SPECIFICATIONS.
- MAINTAIN POSITIVE DRAINAGE OUT OF PLANTING BEDS AT A MINIMUM 2% SLOPE AND MAINTAIN POSITIVE DRAINAGE OF ALL LAWN AREAS, UNLESS OTHERWISE NOTED ON DRAWINGS. ALL GRADES, DIMENSIONS, AND EXISTING CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR ON SITE BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT OR OWNER.
- ALL PLANT BEDS SHALL BE CONTAINED WITH A SPADED EDGE UNLESS OTHERWISE NOTED ON DRAWINGS.
- IN THE EVENT OF A DISCREPANCY BETWEEN QUANTITIES SHOWN ON THE DRAWINGS AND QUANTITIES SHOWN ON THE PLANT LIST, THE QUANTITIES ON THE DRAWINGS SHALL APPLY. REPORT DISCREPANCIES TO THE LANDSCAPE ARCHITECT FOR CLARIFICATION PRIOR TO BIDDING.
- ALL PLANTS SHALL CONFORM TO THE SIZES GIVEN IN THE PLANT LIST AND SHALL BE NURSERY GROWN IN ACCORDANCE WITH THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1), LATEST EDITION.
- PLANTS SHALL BE LOCATED AS SHOWN ON THE DRAWINGS. PRIOR TO PLANTING, THE CONTRACTOR SHALL STAKE OUT THE LOCATIONS OF ALL PLANTS IN THE FIELD FOR REVIEW BY THE LANDSCAPE ARCHITECT. LANDSCAPE ARCHITECT SHALL MAKE ADJUSTMENTS IN THE FIELD AS NECESSARY. ALL FINAL PLANT LOCATIONS ARE TO BE APPROVED BY THE LANDSCAPE ARCHITECT. FOR LAYOUT REVIEW, CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT A MINIMUM OF THREE DAYS IN ADVANCE.
- ALL DISTURBED AREAS SHALL BE FINE GRADED AND SEEDED OR SODDED; SEE PLAN FOR LOCATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING AND MAINTAINING ALL PLANTS DURING THE WARRANTY PERIOD; REFER TO SPECIFICATIONS.

GENERAL PLANTING NOTES:

- CLEAR & GRUB ALL PLANTING AREAS.
- CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES IN THE FIELD PRIOR TO INSTALLATION OF ANY PLANT MATERIAL.
- NO CHANGES SHALL BE MADE WITHOUT WRITTEN CONSENT OF THE OWNER OR LANDSCAPE ARCHITECT.
- PRIOR TO CONSTRUCTION OF PLANTING BEDS, THE CONTRACTOR SHALL STAKE OUT PLANTING BED LINES IN THE FIELD FOR REVIEW BY THE LANDSCAPE ARCHITECT.
- INSTALL ALL REQUIRED PLANTING AND LAWN SOILS AS PER DETAILS. ALL SHRUBS, GROUND COVERS, AND PERENNIALS SHALL BE PLANTED IN PLANTING BEDS PREPARED AS REQUIRED BY THE DETAILS.
- MAINTAIN POSITIVE DRAINAGE OUT OF PLANTING BEDS AT A MINIMUM 2% SLOPE AND MAINTAIN POSITIVE DRAINAGE OF ALL LAWN AREAS, UNLESS OTHERWISE NOTED ON DRAWINGS. ALL GRADES, DIMENSIONS, AND EXISTING CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR ON SITE BEFORE CONSTRUCTION BEGINS.
- ALL PLANT BEDS SHALL BE CONTAINED WITH A SPADED EDGE UNLESS OTHERWISE NOTED ON DRAWINGS.
- IN THE EVENT OF A DISCREPANCY BETWEEN QUANTITIES SHOWN ON THE DRAWINGS AND QUANTITIES SHOWN ON THE PLANT LIST, THE QUANTITIES ON THE DRAWINGS SHALL APPLY.
- ALL PLANTS SHALL CONFORM TO THE SIZES GIVEN IN THE PLANT LIST AND SHALL BE NURSERY GROWN IN ACCORDANCE WITH THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1), LATEST EDITION.
- PLANTS SHALL BE LOCATED AS SHOWN ON THE DRAWINGS. PRIOR TO PLANTING, THE CONTRACTOR SHALL STAKE OUT THE LOCATIONS OF ALL PLANTS IN THE FIELD FOR REVIEW BY THE LANDSCAPE ARCHITECT. LANDSCAPE ARCHITECT SHALL MAKE ADJUSTMENTS IN THE FIELD AS NECESSARY. ALL FINAL PLANT LOCATIONS ARE TO BE APPROVED BY THE LANDSCAPE ARCHITECT. FOR LAYOUT REVIEW, CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT A MINIMUM OF THREE DAYS IN ADVANCE.
- ALL DISTURBED AREAS SHALL BE FINE GRADED AND SEEDED OR SODDED.

STREET TREE REQUIREMENTS & NOTES:

- MARSTON WAY HAS A STREET LENGTH OF 584 LINEAR FEET WHICH REQUIRES APPROXIMATELY 30 SHADE TREES. RACKHAM WAY HAS A STREET LENGTH OF 500 LINEAR FEET WHICH REQUIRES APPROXIMATELY 24 SHADE TREES. TOTAL REQUIRED STREET TREES = 54 SHADE TREES.
- 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.

FINANCIAL SURETY:

- FINANCIAL SURETY FOR THE 54 STREET TREES SHALL BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$16,200.00.
- FINANCIAL SURETY FOR THE 126 SHADE TREES SHALL BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$37,800.00.
- IN ADDITION, FINANCIAL SURETY FOR 68 SHADE TREES SHALL BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$20,400.00 TO MEET GN CREDIT E-1.

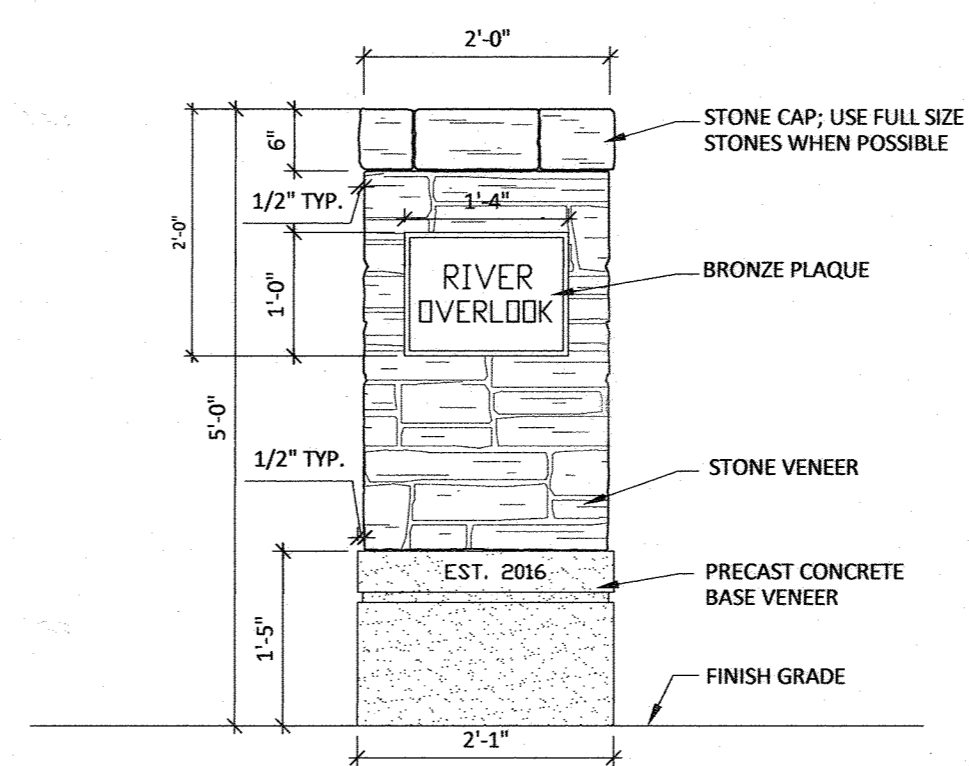
NUMBER OF TREES REQUIRED (SCHEDULE 'A', 'C' & STREET TREES)

SHADE TREES:	180
EVERGREEN TREES:	0
TOTAL:	180

NUMBER OF TREES PROVIDED:

SHADE TREES:	233
EVERGREEN TREES:	11
ORNAMENTAL TREES:	16
TOTAL:	260

SHADE TREES:	233
ORNAMENTAL/EVERGREEN:	27 / 2 = 13.5
SHRUBS:	16/10 = 1.5
248 TREES TOTAL	



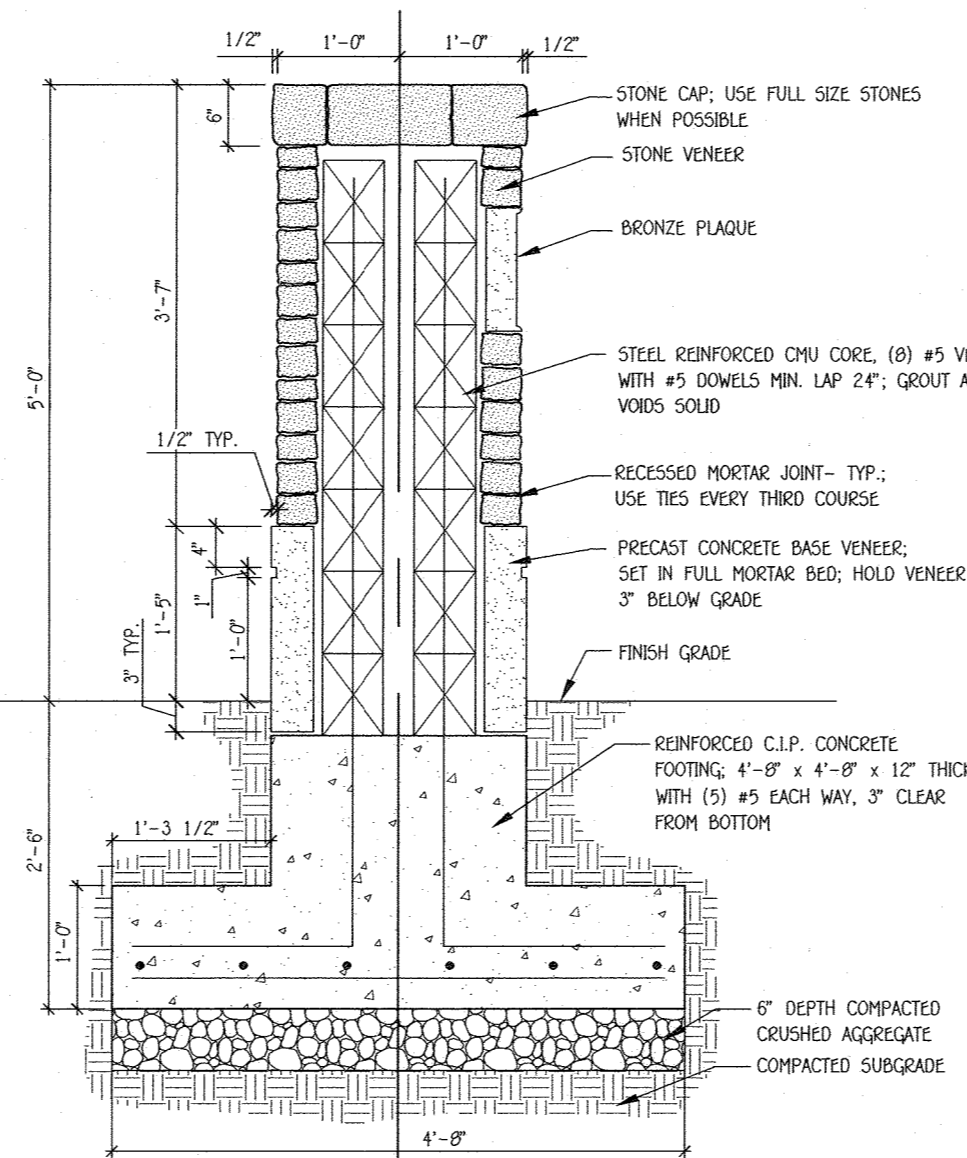
NEIGHBORHOOD PIER - TYPICAL ELEVATION

NUMBER OF DWELLING UNITS	126
NUMBER OF TREES REQUIRED (1:0U SFA)	126
NUMBER OF TREES PROVIDED	
SHADE TREES	115
EVERGREEN TREES	11
ORNAMENTAL	11
TOTAL	115 + (22/2 = 11) = 126

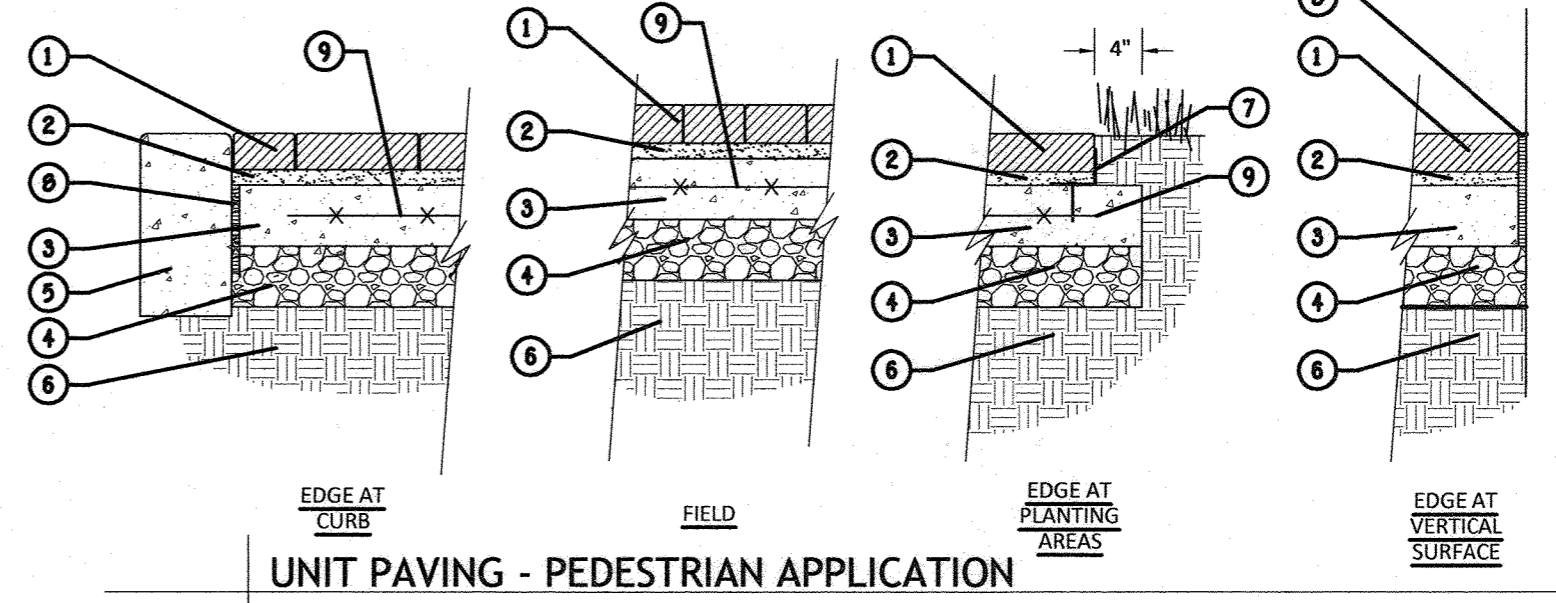
PERIMETER	P6 (F-12-026)		P7 (F-12-026)	
	Res. Adjacent to Non-Res.	Non-Res. Adjacent to Non-Res.	Res. Adjacent to Non-Res.	Non-Res. Adjacent to Non-Res.
LANDSCAPE TYPE	A	C	A	C
TOTAL LINEAR FEET OF PERIMETER	1630.70'	1500.13'	1630.70'	1500.13'
LINEAR FEET OF PERIMETER w/ THIS SDP	1025'	649'	1025'	649'
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	YES 350'	100% CREDIT	YES 350'	100% CREDIT
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE IF NEEDED)	YES (10' HIGH NOISE WALL) 675'	NO	YES (10' HIGH NOISE WALL) 675'	NO
NUMBER OF PLANTS REQUIRED W/THIS SDP				
SHADE TREES	12**	0	12**	0
EVERGREEN TREES	0	0	0	0
NUMBER OF PLANTS PROVIDED W/THIS SDP				
SHADE TREES	0	-	0	-
EVERGREEN TREES	-	-	-	-
OTHER TREES (2:1 SUBSTITUTION)	-	-	-	-
SHRUBS (10:1 SUBSTITUTION)	-	-	-	-
(DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	-	-	-	-

* - DENOTES TREES REQUIRED FOR TOTAL P-6 PERIMETER BEFORE CREDITS (1630.70' [total perimeter] - 350' [existing vegetation] - 675' [noise wall] = 905.70') 905.70/60 = 15 TREES REQUIRED WITH FUTURE SDP(S)

** THIS SDP WILL PROVIDE A NOISE WALL TO SUBSTITUTE FOR THE REQUIRED 12 SHADE TREES ALONG THE P-6 PERIMETER.



NEIGHBORHOOD PIER - TYPICAL SECTION



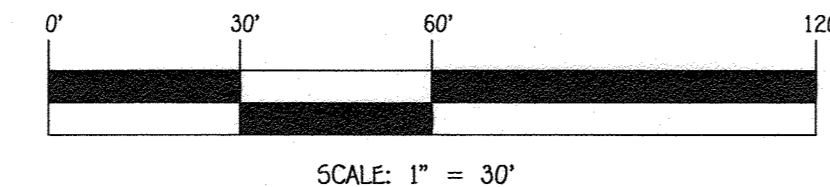
UNIT PAVING - PEDESTRIAN APPLICATION

- HAND TIGHT UNIT PAVERS W/ SAND SWEEP JOINTS. REFER TO PLAN FOR PATTERN.
 - 3/4" SAND SETTING BED (3 PARTS SAND TO 1 PART MORTAR)
 - 4" THICK CONCRETE BASE, 4" DEPTH COMPACTED GRADED AGGREGATE BASE
 - CONC. CURB - REFER TO CIVIL DWGS.
 - COMPACTED SUBGRADE
 - PAVER EDGE RESTRAINT SYSTEM AT ALL PLANTED EDGES
 - SEALED 1/2" EXPANSION JOINT
 - 6x6 W2.1/W2.1 WELDED WIRE MESH
- NOTE:
 * PROVIDE JOINT SAND STABILIZER, SANDLOCK OR APPROVED EQUAL, PER MANUFACTURER'S RECOMMENDATIONS FOR ALL JOINTS.
 * PROVIDE 2" DIAMETER WEEP HOLES IN CONC. BASE, LOCATED AT LOWEST ELEVATIONS OF THE PAVERS AND AT HIGH SIDE OF ALL TREE PITS. DO NOT COVER WITH SETTING BED AND FILL WITH PEA GRAVEL.

LANDSCAPE DEVELOPER'S CERTIFICATE

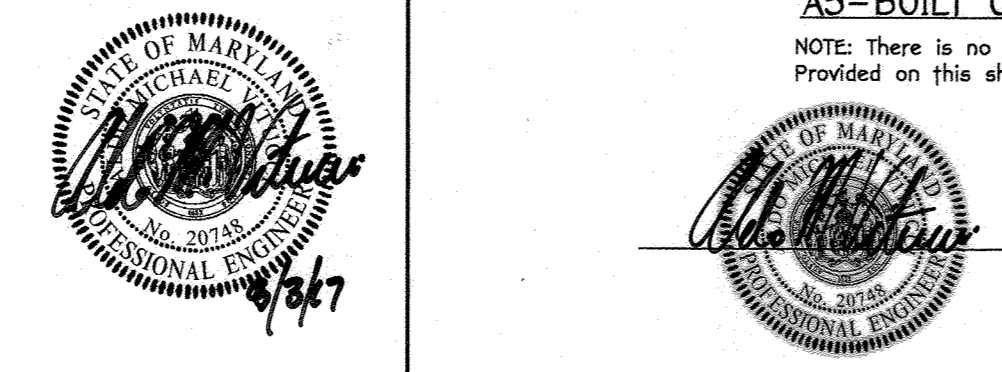
I/we certify that the landscaping shown on this plan will be done according to the plan, Section 16.124 of the Howard County Code and the Howard County Landscape Manual. I/we further certify that upon completion a letter of landscape installation accompanied by an executed one year guarantee of plant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

David B. Schiller 8/13/17
 Name Date



AS-BUILT CERTIFICATION

NOTE: There is no "AS-BUILT" information provided on this sheet.



Owner: Kelllogg-COP, LLC
 c/o David P. Scheffnacker, Jr., Managing Member
 100 West Road, Suite 304
 Towson, Maryland 21204
 Phe 410-296-3800

Developer: Preston + Scheffnacker Properties
 100 West Road, Suite 304
 Towson, Maryland 21204
 Phe 410-296-3800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Keith Schaefer 9-25-17
 Chief, Division of Land Development KB for DB Date

John Schaefer 9-15-17
 Chief, Development Engineering Division Date

Nancy J. Jolly 10-10-17
 Director - Department of Planning and Zoning Date

LANDSCAPE NOTES & DETAILS

OXFORD SQUARE
 "A Howard County Green Neighborhood"
 "RIVER OVERLOOK"
 Lots 246 Thru 371 & Open Space Lots 372 Thru 375 and Open Space Lot 378
 (Being A Re subdivision Of Parcels 2, 1, 1-C & Open Space Lot 376 As Shown On Revision #14 Entitled "Green Neighborhood" Parcels 2, 1, 1-C & Open Space Lot 376 Recorded Among The Land Records Of Howard County, Maryland As Plat Nos. 23096 Thru 23097)
 Zoned: TOD
 Tax Map No.: 36 Grid No.: 20 Parcel No.: 1003
 First Election District: Howard County, Maryland
 Scale: As Shown
 Date: August 1, 2017
 Sheet 19 of 46

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET SDP-16-052

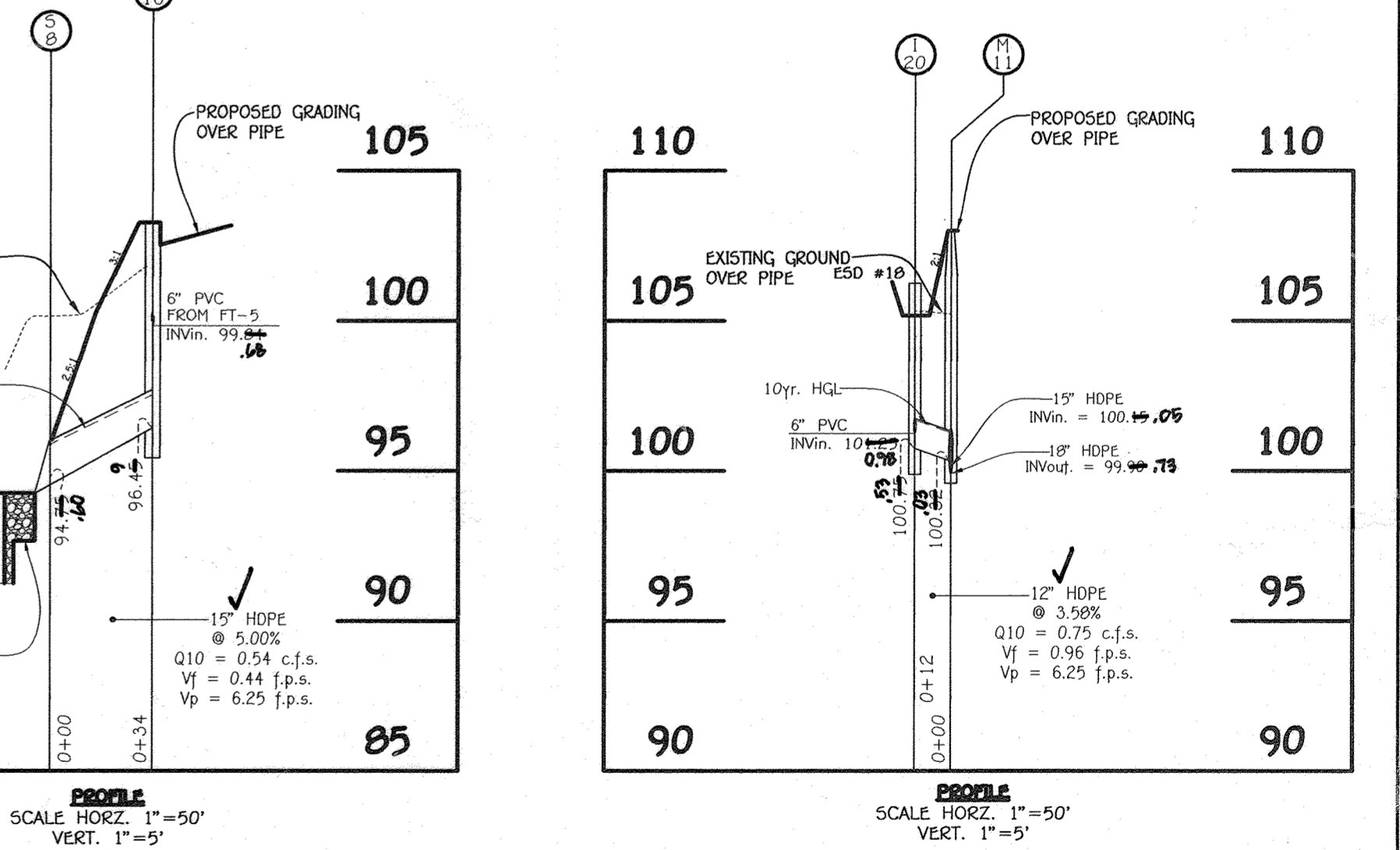
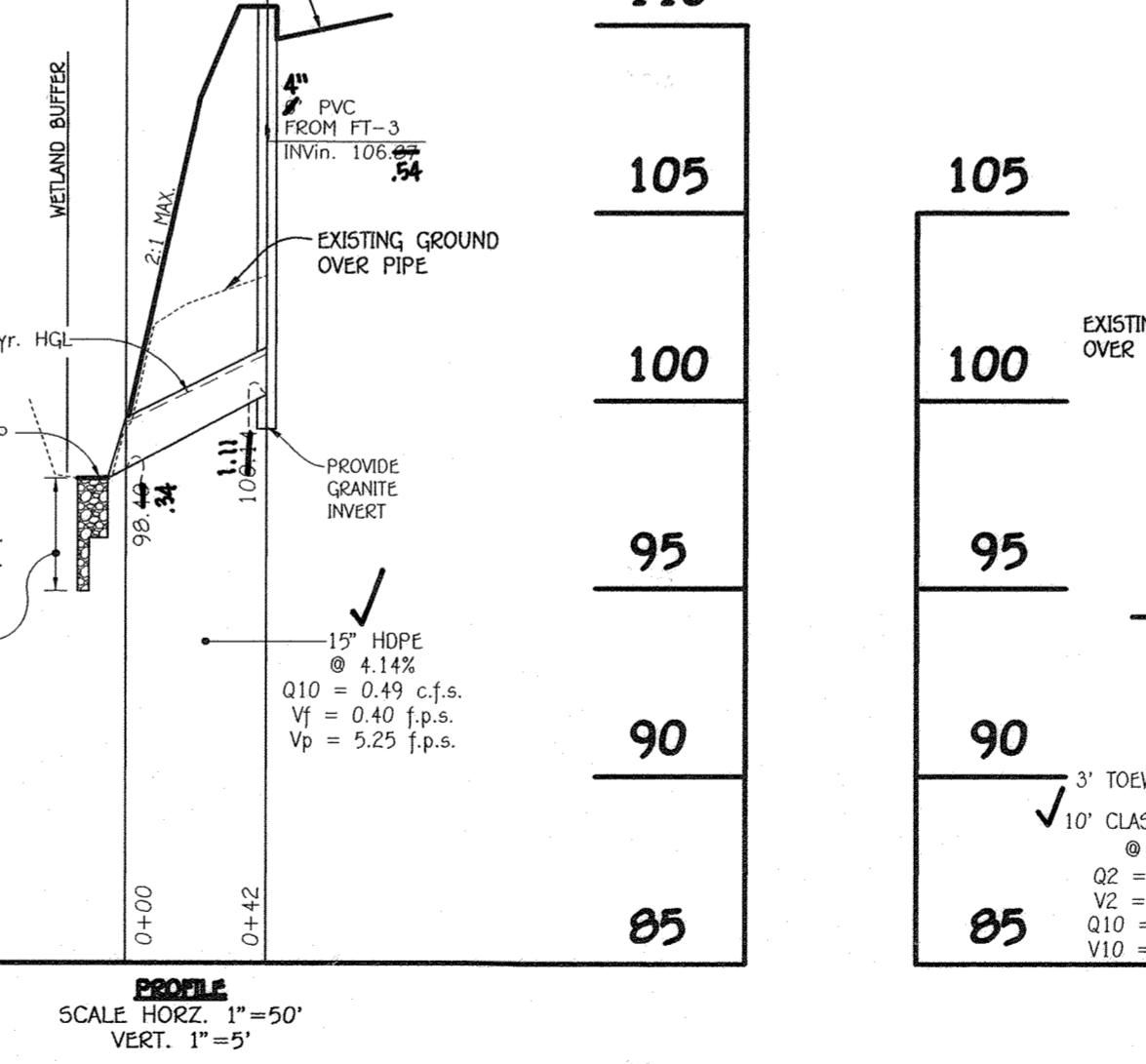
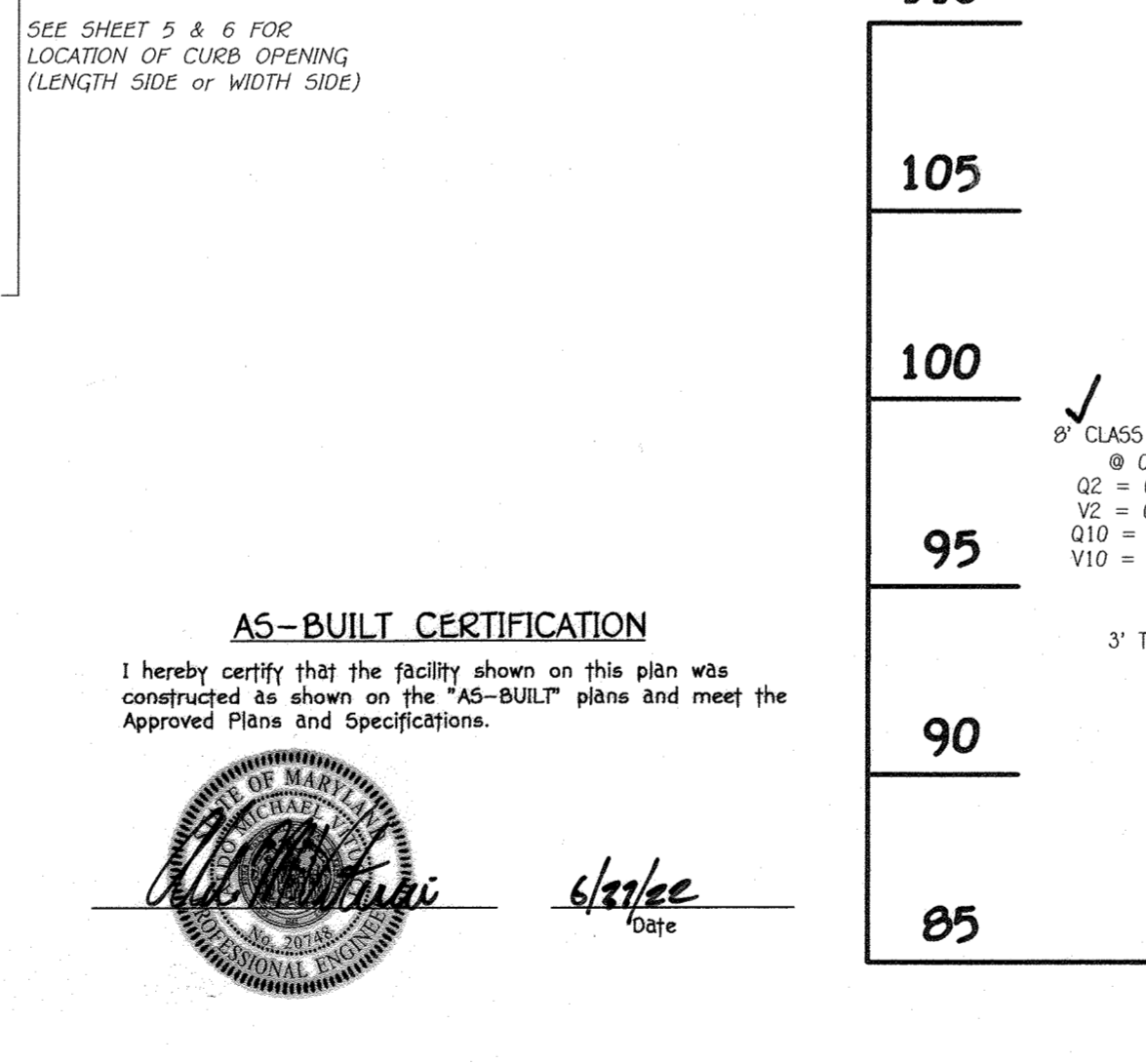
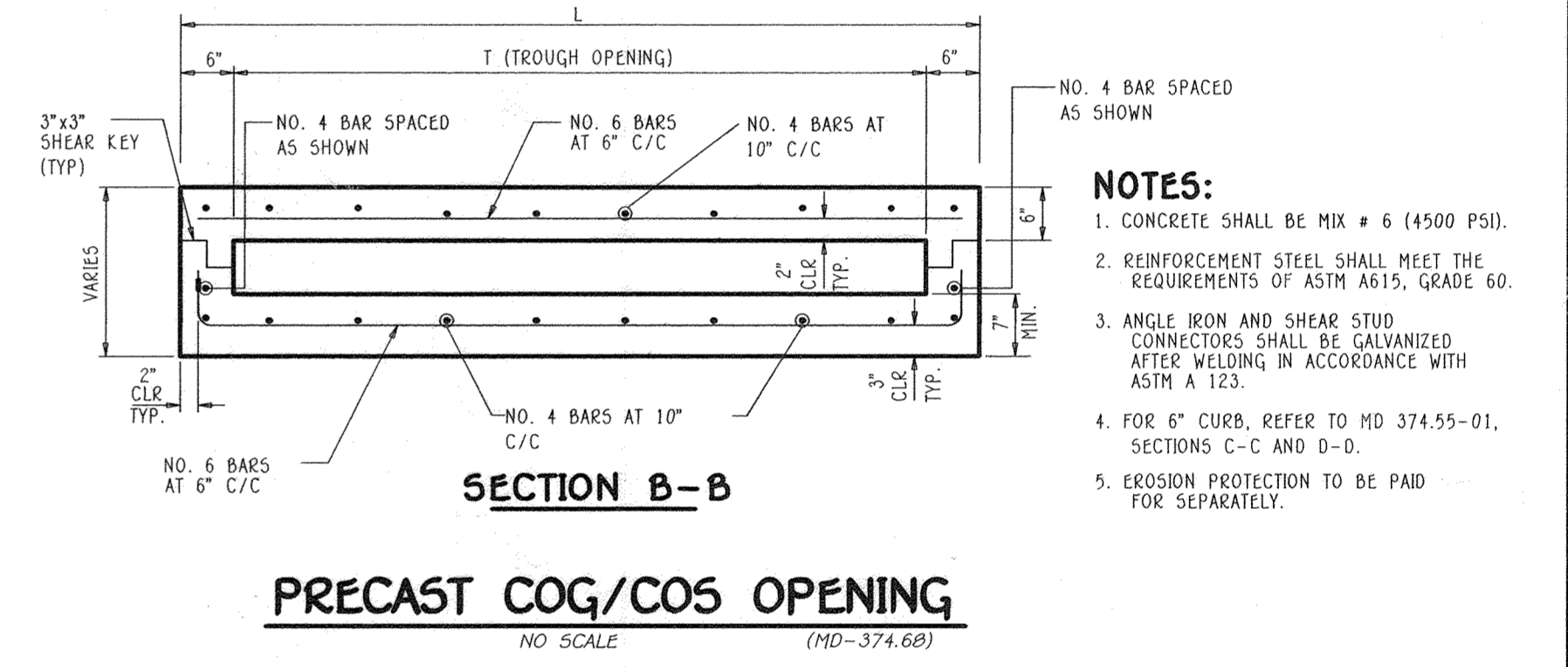
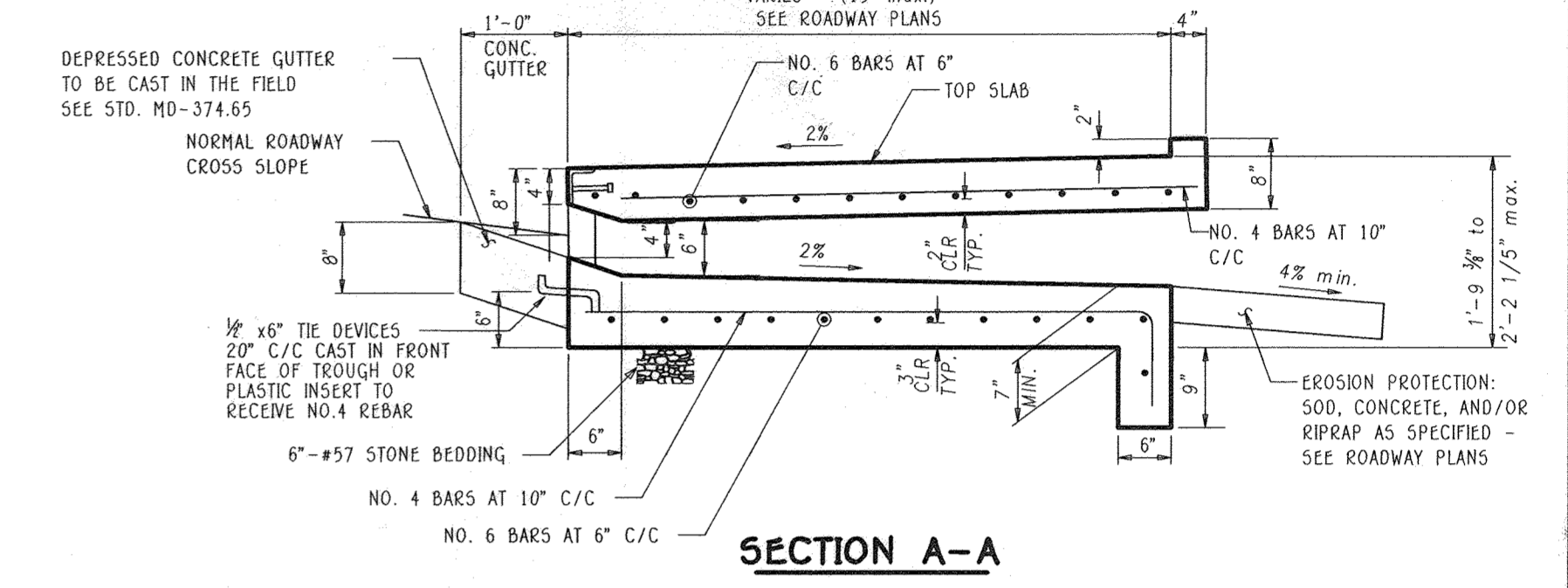
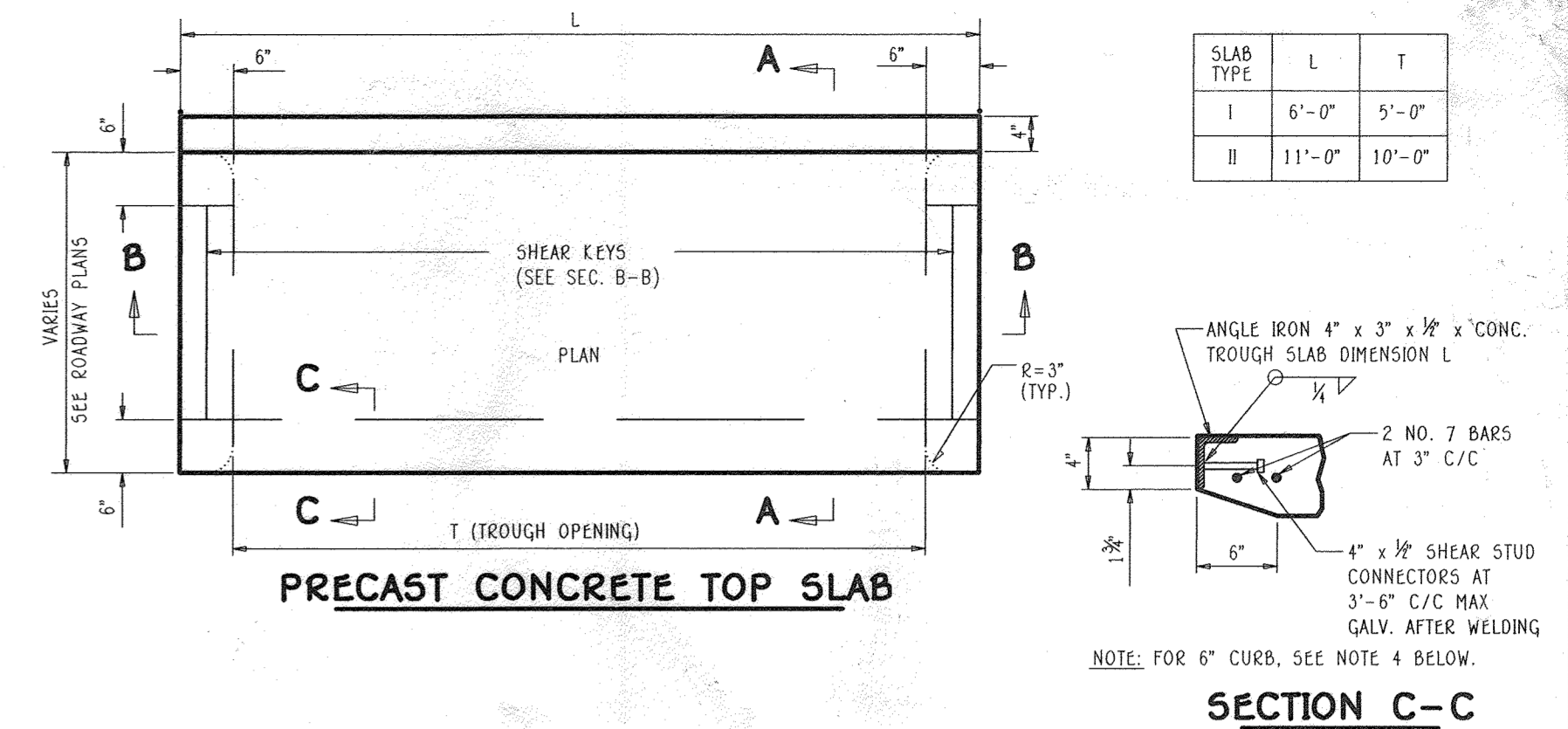
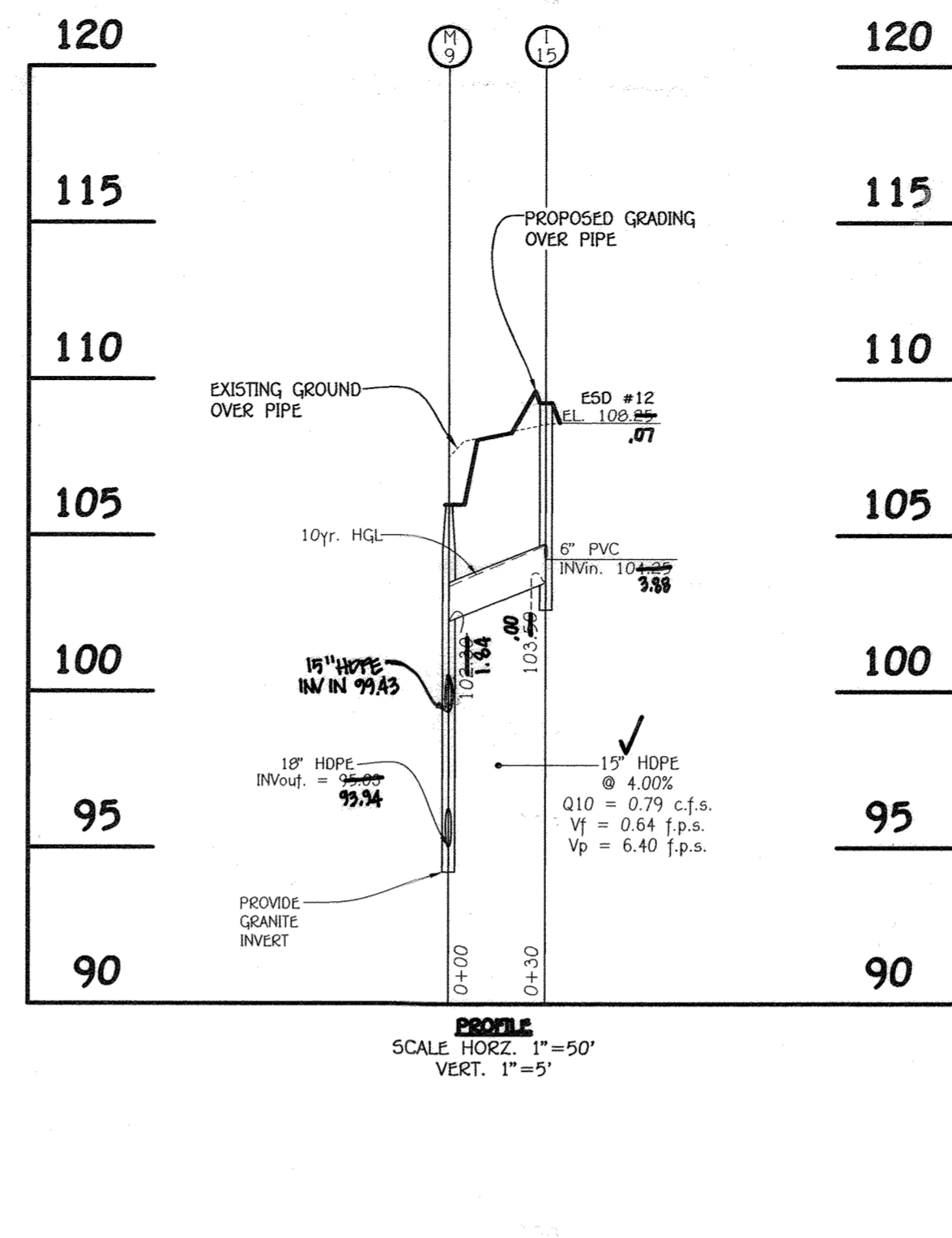
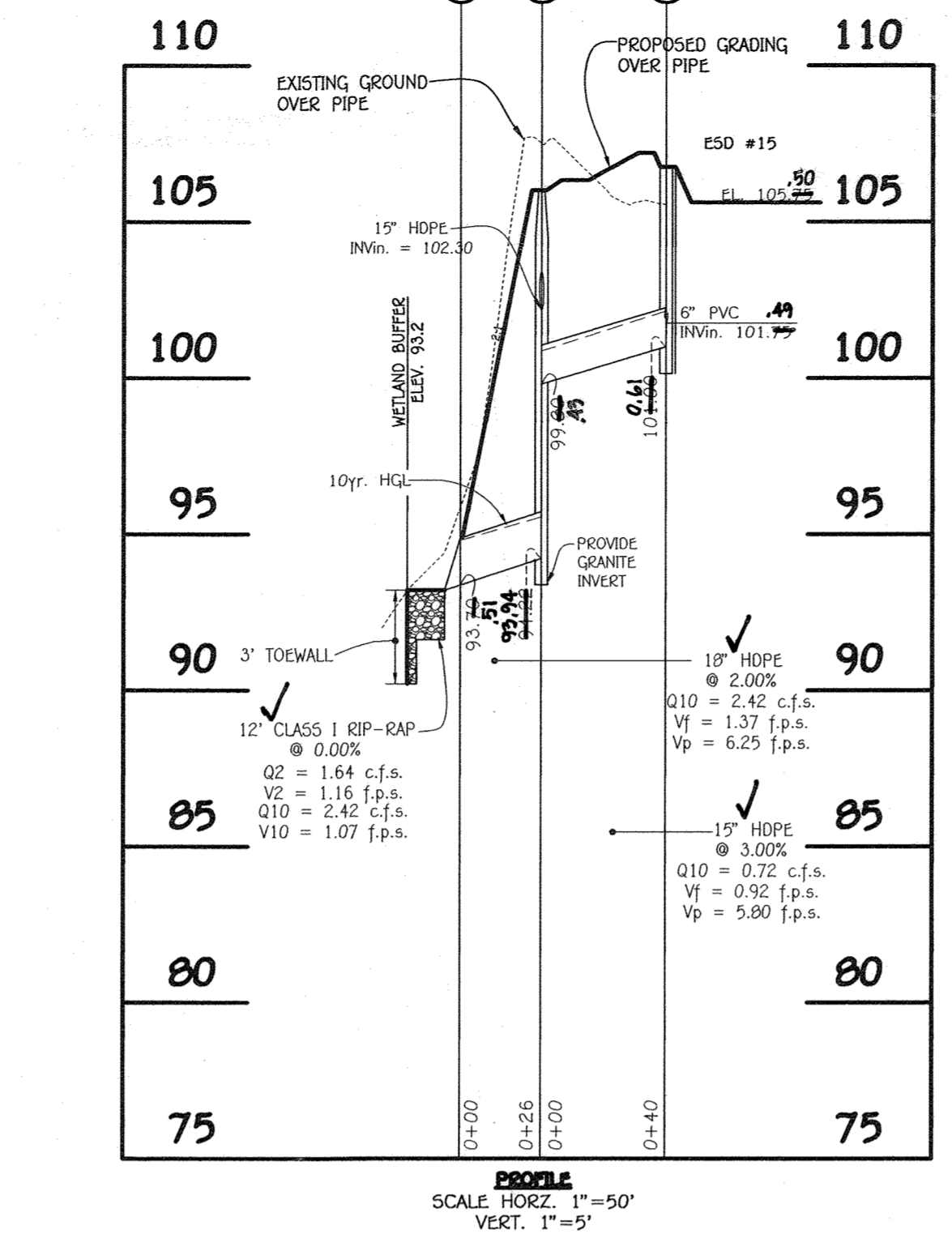
STRUCTURE SCHEDULE

STRUCTURE NO.	TOP ELEVATION	INV. IN	INV. OUT	LOCATION	ROAD STA.	OFFSET	TYPE AND WIDTH	REMARKS
I-1	117.44	111.75 (6")	112.25 (18")	RACKHAM WAY	0+80	20' L	15" DRAIN BASIN	ADS NYLOPLAST
I-2	116.66	111.75 (6")	111.20 (18")	RACKHAM WAY	1+55.5	20.4' L	15" DRAIN BASIN	ADS NYLOPLAST
I-3	113.90	107.21 (6")	107.21 (6")	TILBURY WAY	3+13	15' R	"S" INLET	D-4.22
I-4	113.45	107.21 (6")	107.21 (6")	RACKHAM WAY	3+11	39.4' R	"S" INLET	D-4.22
I-5	113.45	107.21 (6")	107.21 (6")	RACKHAM WAY	2+92	22' L	"S" INLET	D-4.22
I-6	109.45	107.21 (6")	107.21 (6")	N 553,839.12 E 1,386,606.45	---	---	"S" INLET	D-4.22
I-7	109.45	107.21 (6")	107.21 (6")	RACKHAM WAY	4+77	21.2' L	"S" INLET	D-4.22
I-8	109.45	107.21 (6")	107.21 (6")	RACKHAM WAY	4+72	15.9' R	"S" INLET	D-4.22
I-9	109.45	107.21 (6")	107.21 (6")	---	---	---	"S" INLET	D-4.22
I-9A	111.45	107.21 (6")	107.21 (6")	N 553,575.30 E 1,386,350.66	---	---	12" DRAIN BASIN	ADS NYLOPLAST
I-9B	111.45	107.21 (6")	107.21 (6")	N 553,560.84 E 1,386,380.28	---	---	12" DRAIN BASIN	ADS NYLOPLAST
I-10	106.45	107.21 (6")	107.21 (6")	N 553,772.61 E 1,386,397.85	---	---	"S" INLET	D-4.22
I-11	117.44	111.75 (6")	112.25 (18")	RACKHAM WAY	0+80	20' R	15" DRAIN BASIN	ADS NYLOPLAST
I-12	111.35	106.66 (6")	106.66 (6")	N 553,716.93 E 1,386,699.14	---	---	"S" INLET	D-4.22
I-13	111.35	106.66 (6")	106.66 (6")	TILBURY WAY	3+81.9	16' R	"S" INLET	D-4.22
I-14	113.45	107.21 (6")	107.21 (6")	TILBURY WAY	1+93.4	16' R	"S" INLET	D-4.22
I-15	106.45	107.21 (6")	107.21 (6")	N 553,745.76 E 1,386,367.20	---	---	"S" INLET	D-4.22
I-16	103.45	99.45 (6")	99.45 (6")	TILBURY WAY	7+83.44	8' R	A-5 INLET	D-4.01
I-17	110.45	106.45 (6")	106.45 (6")	TYNDALE WAY	2+95.5	11' L	A-5 INLET	D-4.01
I-18	105.45	102.45 (6")	102.45 (6")	ORUCE WAY	0+50	11' L	A-10 INLET	D-4.03
I-19	104.00	99.45 (6")	99.45 (6")	MARSTON WAY	13+48.8	15' R	"S" INLET	D-4.22
I-20	106.45	102.45 (6")	102.45 (6")	N 553,725.08 E 1,385,970.84	---	---	"S" INLET	D-4.22
I-21	107.00	102.45 (6")	102.45 (6")	N 553,745.10 E 1,385,972.55	---	---	"S" INLET	D-4.22
I-22	106.45	102.45 (6")	102.45 (6")	N 553,756.52 E 1,385,949.19	---	---	"S" INLET	D-4.22
I-23	103.45	99.45 (6")	99.45 (6")	MARSTON WAY	16+40.9	29' R	COG/COS OPENING	MD-374.68
I-24	101.45	97.45 (6")	97.45 (6")	N 553,948.82 E 1,386,104.49	---	---	"S" INLET	D-4.22
I-25	113.89	---	---	RACKHAM WAY	3+00.6	19' R	COG/COS OPENING	MD-374.68
EX-M-1	118.00	107.93 (18")	107.68 (18")	BANBURY DRIVE	18+21.68	5' L	5" DIA. MANHOLE	G - 5.13
M-2	117.93	111.54 (12"), 109.27 (18")	109.02 (18")	RACKHAM WAY	0+80	7' R	5" DIA. MANHOLE	G - 5.13
M-2A	117.93	111.54 (12"), 109.27 (18")	110.41 (18")	RACKHAM WAY	1+43	20' R	4" DIA. MANHOLE	G - 5.12
M-3	117.93	111.54 (12"), 109.27 (18")	109.02 (18")	N 553,771.91 E 1,386,717.92	---	---	4" DIA. MANHOLE	G - 5.12
M-3A	117.93	111.54 (12"), 109.27 (18")	109.02 (18")	N 553,823.11 E 1,386,710.34	---	---	4" DIA. MANHOLE	G - 5.12
M-4	112.00	107.21 (6")	107.21 (6")	N 553,722.76 E 1,386,609.35	---	---	5" DIA. MANHOLE	G - 5.13
M-5	113.45	107.21 (6")	107.21 (6")	TILBURY WAY	3+81.9	6' R	5" DIA. MANHOLE	G - 5.13
M-6	114.18	107.21 (6")	107.21 (6")	TILBURY WAY	3+13.4	6' R	5" DIA. MANHOLE	G - 5.13
M-6A	113.45	107.21 (6")	107.21 (6")	RACKHAM WAY	3+18	39' R	5" DIA. MANHOLE	G - 5.13
M-7	113.45	107.21 (6")	107.21 (6")	TILBURY WAY	1+93.4	6' R	5" DIA. MANHOLE	G - 5.13
M-8	115.45	107.21 (6")	107.21 (6")	TILBURY WAY	1+26.4	6' R	4" DIA. MANHOLE	G - 5.12
M-9	106.45	102.45 (6")	102.45 (6")	N 553,775.17 E 1,386,357.94	---	---	5" DIA. MANHOLE	G - 5.13
M-10	106.00	102.45 (6")	102.45 (6")	N 553,695.06 E 1,386,059.69	---	---	4" DIA. MANHOLE	G - 5.12
M-11	108.45	102.45 (6")	102.45 (6")	N 553,735.90 E 1,385,976.11	---	---	5" DIA. MANHOLE	G - 5.13
M-12	105.45	101.45 (6")	101.45 (6")	MARSTON WAY	15+25	20' R	4" DIA. MANHOLE	G - 5.12
M-13	108.45	102.45 (6")	102.45 (6")	TILBURY WAY	6+21	66.8' R	4" DIA. MANHOLE	G - 5.12
M-14	108.75	102.45 (6")	102.45 (6")	TILBURY WAY	6+21	22.7' R	4" DIA. MANHOLE	G - 5.12
EX. MH	104.23	97.96 (Fut. 36"), 98.57 (12")	97.71 (Fut. 36")	MARSTON WAY	13+48.8	7' R	5" DIA. MANHOLE	G - 5.13
S-1	100.45	94.45 (6")	---	N 553,876.75 E 1,386,620.84	---	---	FLARED END SECTION	ADS OR EQUAL
S-2	95.45	93.45 (6")	---	N 553,776.20 E 1,386,330.83	---	---	FLARED END SECTION	ADS OR EQUAL
S-3	99.45	93.45 (6")	---	N 553,644.50 E 1,386,088.41	---	---	FLARED END SECTION	ADS OR EQUAL
S-4	99.45	93.45 (6")	---	N 553,656.47 E 1,386,084.22	---	---	FLARED END SECTION	ADS OR EQUAL
S-5	102.39	100.89 (18")	---	N 553,931.79 E 1,386,045.38	---	---	FLARED END SECTION	ADS OR EQUAL
S-6	98.45	96.60 (15")	---	N 553,933.27 E 1,386,113.31	---	---	TYPE "C" ENDWALL	D - 5.21
S-7	101.45	94.45 (6")	---	N 553,624.55 E 1,386,279.63	---	---	FLARED END SECTION	ADS OR EQUAL
S-8	98.45	94.45 (6")	---	N 553,920.23 E 1,386,428.85	---	---	FLARED END SECTION	ADS OR EQUAL
FT-1	117.44	---	113.75 (4")	VENTFIELD WAY	0+24	18.58' R	FTSC 6' x 6' (Outside Dims: 13' x 7')	
FT-2	115.44	---	111.78 (4")	TILBURY WAY	1+09	11.58' R	FTSC 8' x 6' (Outside Dims: 17' x 7')	
FT-3	110.44	---	107.03 (4")	TYNDALE WAY	3+07	11.58' L	FTSC 8' x 6' (Outside Dims: 17' x 7')	
FT-4	108.44	---	104.45 (4")	TYNDALE WAY	1+47	11.58' L	FTSC 8' x 6' (Outside Dims: 17' x 7')	
FT-5	103.44	---	99.96 (4")	WHITSON WAY	1+81	11.58' R	FTSC 6' x 6' (Outside Dims: 13' x 7')	
FT-6	106.44	---	102.18 (4")	MARSTON WAY	15+11	11.58' R	FTSC 6' x 6' (Outside Dims: 13' x 7')	
FT-7	108.44	---	100.13 (4")	MARSTON WAY	16+18	29.58' R	FTSC 10' x 6' (Outside Dims: 20' x 9')	
FT-8	98.44	---	94.89 (4")	LITTLEMORE WAY	0+93	11.58' L	FTSC 8' x 6' (Outside Dims: 17' x 7')	
FT-9	114.44	---	110.35 (4")	RACKHAM WAY	2+62	19.58' L	FTSC 6' x 4' (Outside Dims: 13' x 5')	
FT-10	111.44	---	107.57 (4")	RACKHAM WAY	4+28	19.58' L	FTSC 6' x 4' (Outside Dims: 13' x 5')	
FT-11	110.44	---	106.52 (4")	WHITSON WAY	1+76	11.58' R	FTSC 6' x 6' (Outside Dims: 13' x 7')	
FT-12	114.44	---	110.93 (4")	TILBURY WAY	2+35	11.58' R	FTSC 6' x 6' (Outside Dims: 13' x 7')	
FT-13	114.44	---	110.29 (4")	TILBURY WAY	3+50	11.58' R	FTSC 6' x 6' (Outside Dims: 13' x 7')	
FT-14	105.44	---	101.45 (4")	MARSTON WAY	3+02	11.58' R	FTSC 10' x 8' (Outside Dims: 21' x 9')	

* AS-BUILT UNDER F-15-008 (M-10)

15" DRAIN BASIN (TOP ELEVATION) IS TOP OF STRUCTURE BEFORE THE DOME CAP IS INSTALLED.
"S" INLET (TOP ELEVATION) IS TOP OF STRUCTURE BEFORE GRATE IS INSTALLED.
SEE SHEET 7 FOR FILTERRA DETAIL.

SIZE	CLASS	LENGTH
6"	PVC, SCH. 40 (PERFORATED)	1,986'
6"	PVC, SCH. 40 (SOLID)	372'
8"	PVC, SCH. 40 (SOLID)	759'
12"	HDPE	32'
15"	HDPE	554'
18"	HDPE	1,003'



AS-BUILT CERTIFICATION
I hereby certify that the facility shown on this plan was constructed as shown on the "AS-BUILT" plans and meet the Approved Plans and Specifications.
[Signature] 6/27/17
Date

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL FLD
ELLSWORTH CITY, MARYLAND 21042
(410) 461 - 2895

SEAL
STATE OF MARYLAND
Professional Engineer
No. 20745
Date 6/27/17

Owner
Kelllogg-CCF, LLC
c/o David P. Schefflenacker, Jr.
Managing Member
100 West Road, Suite 304
Towson, Maryland 21284
Ph: 410-296-3800

Developer
Preston - Schefflenacker Properties
100 West Road, Suite 304
Towson, Maryland 21284
Ph: 410-296-3800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 9-25-17
Chief, Division of Land Development **KS for DC** Date

[Signature] 9-15-17
Chief, Development Engineering Division **A** Date

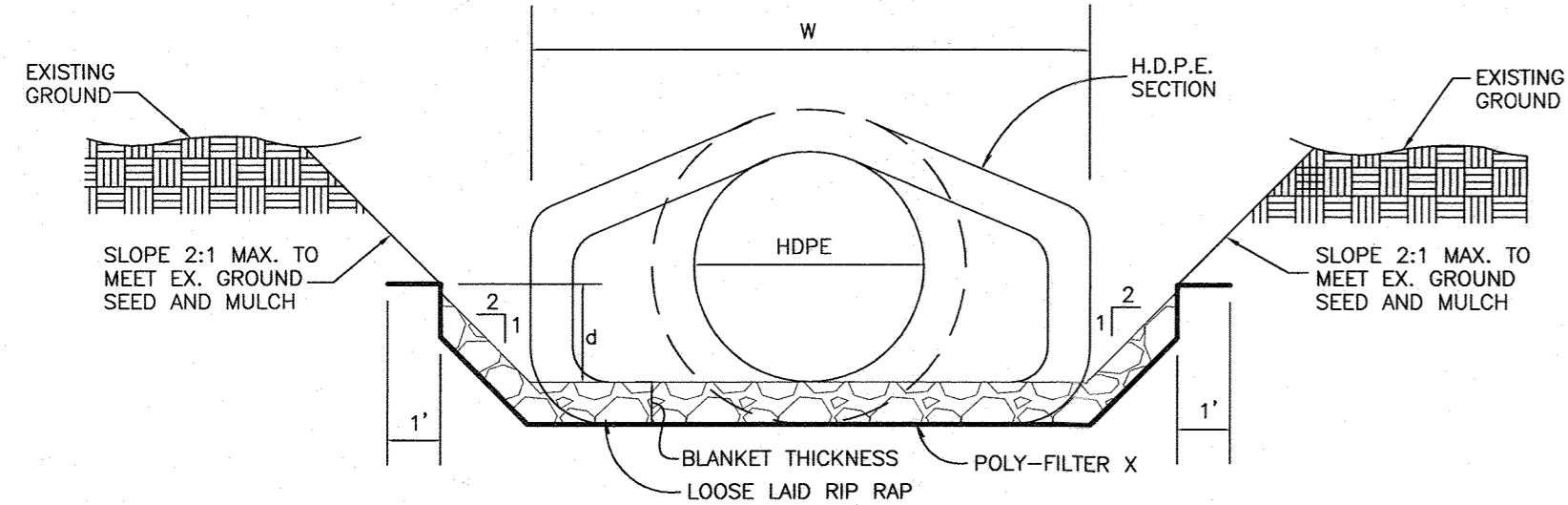
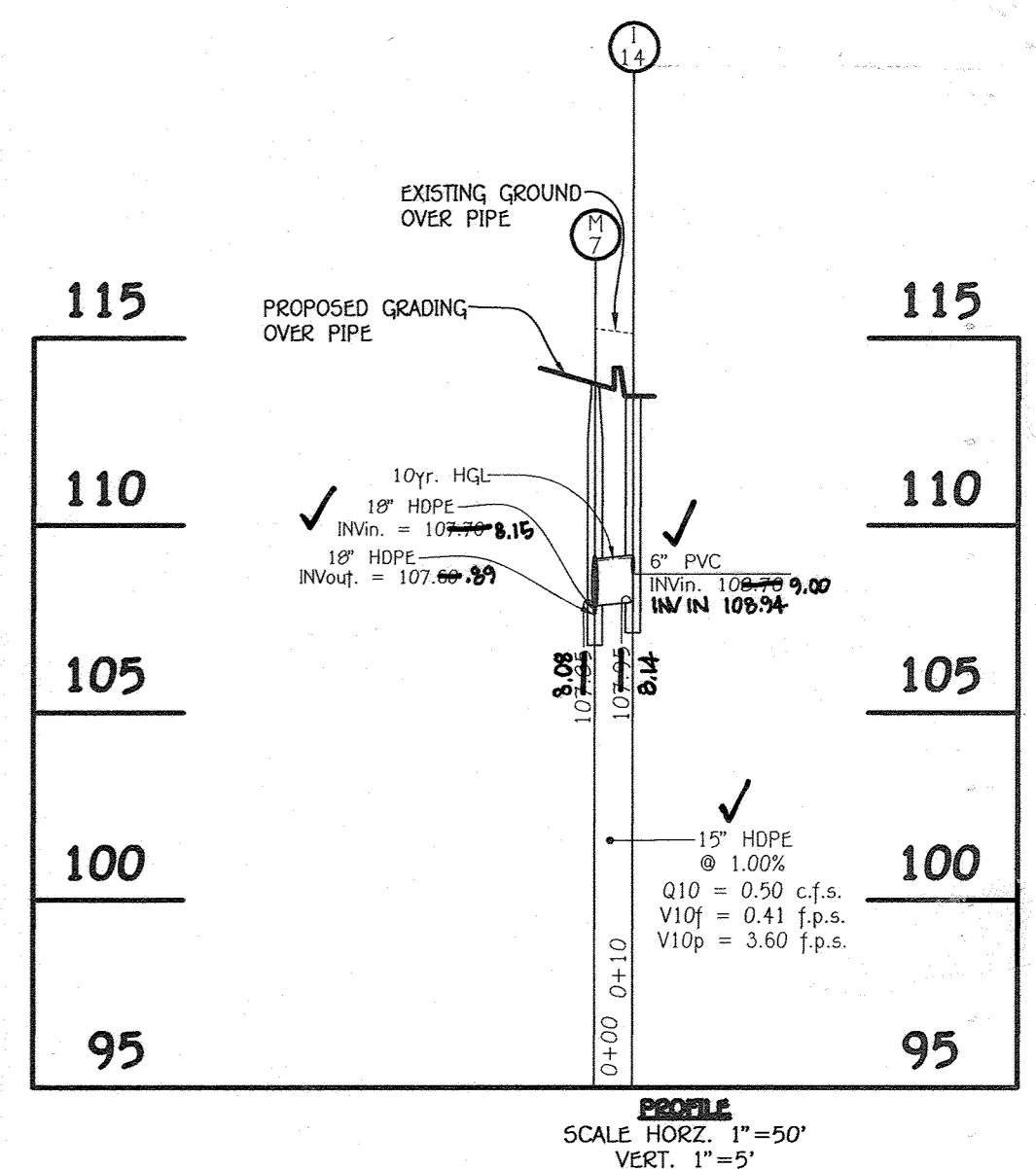
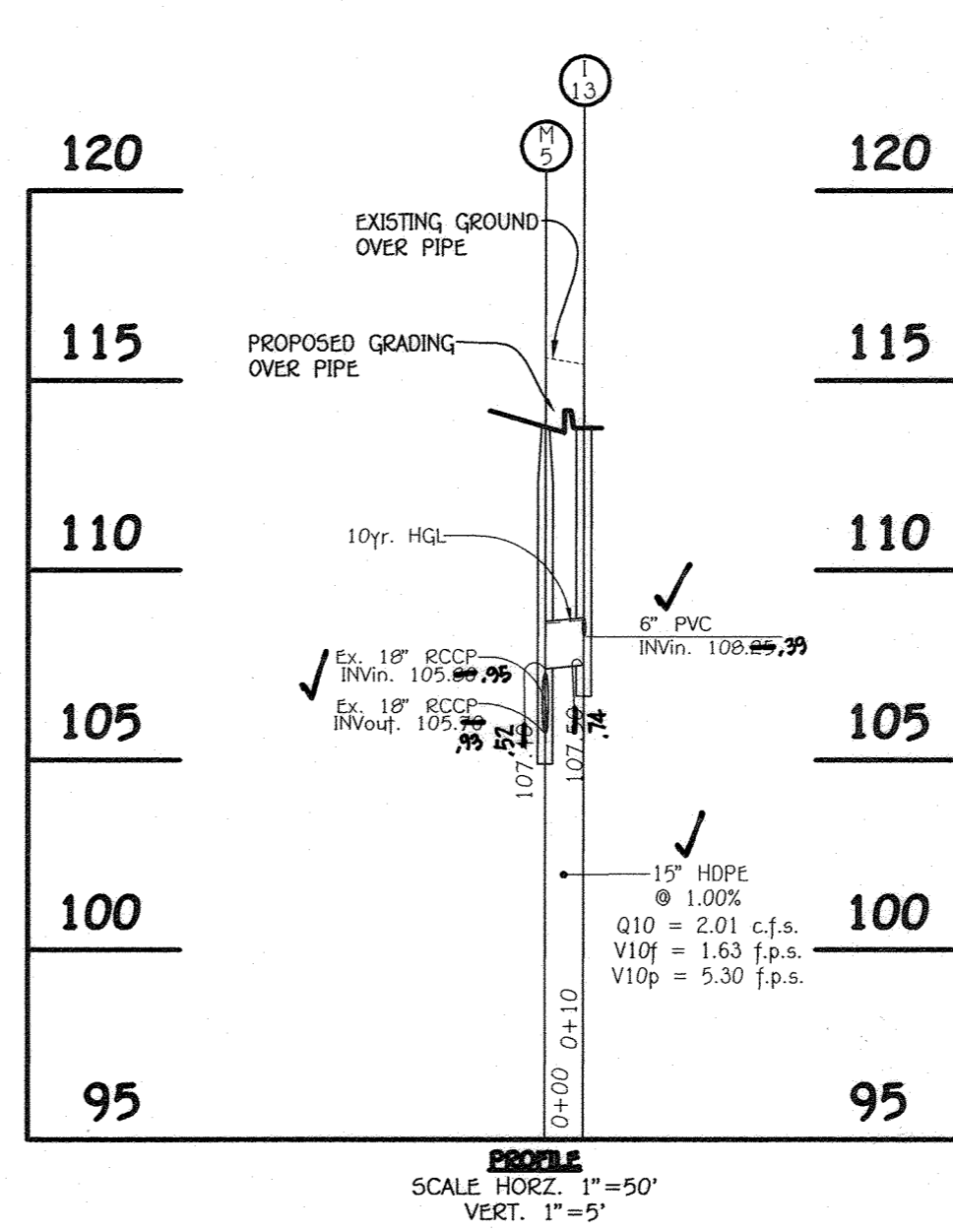
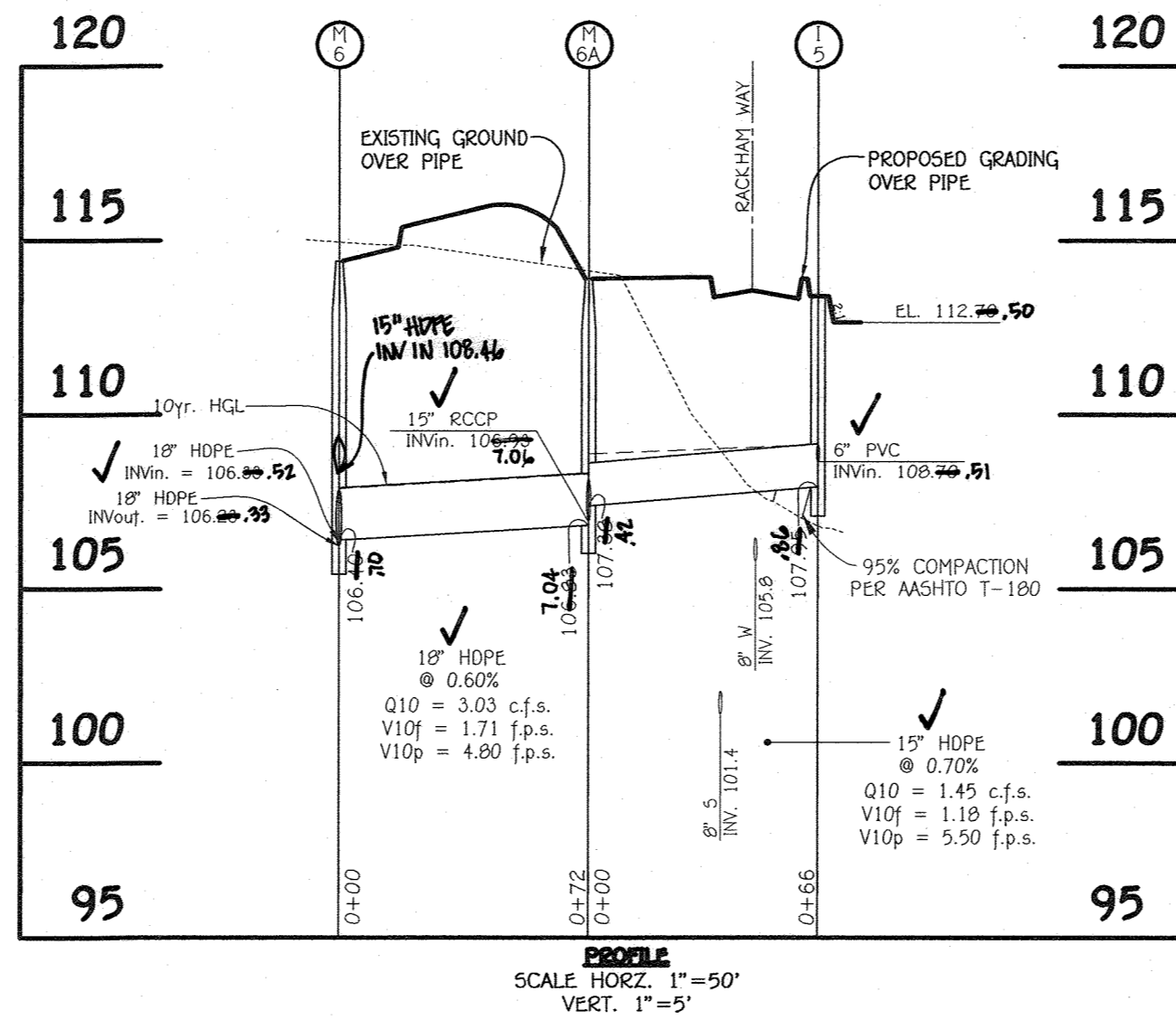
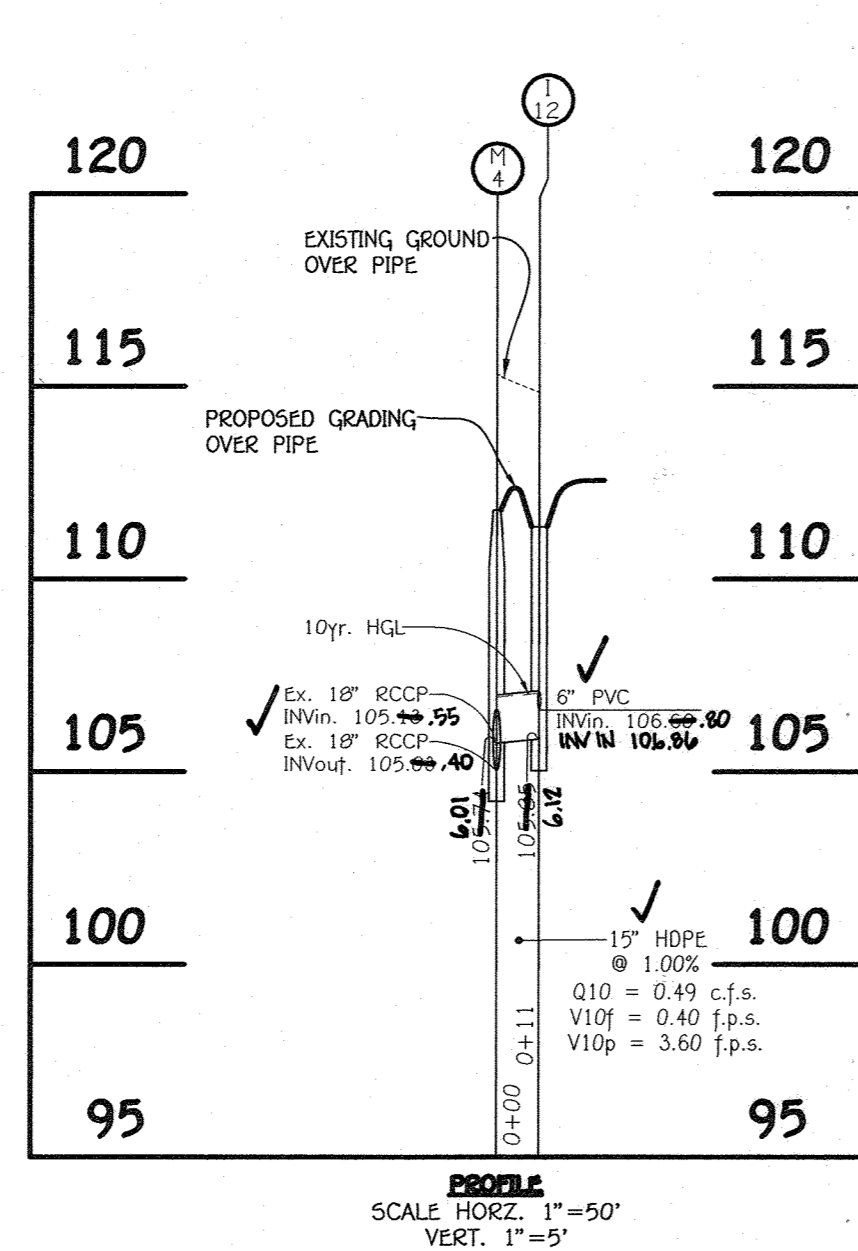
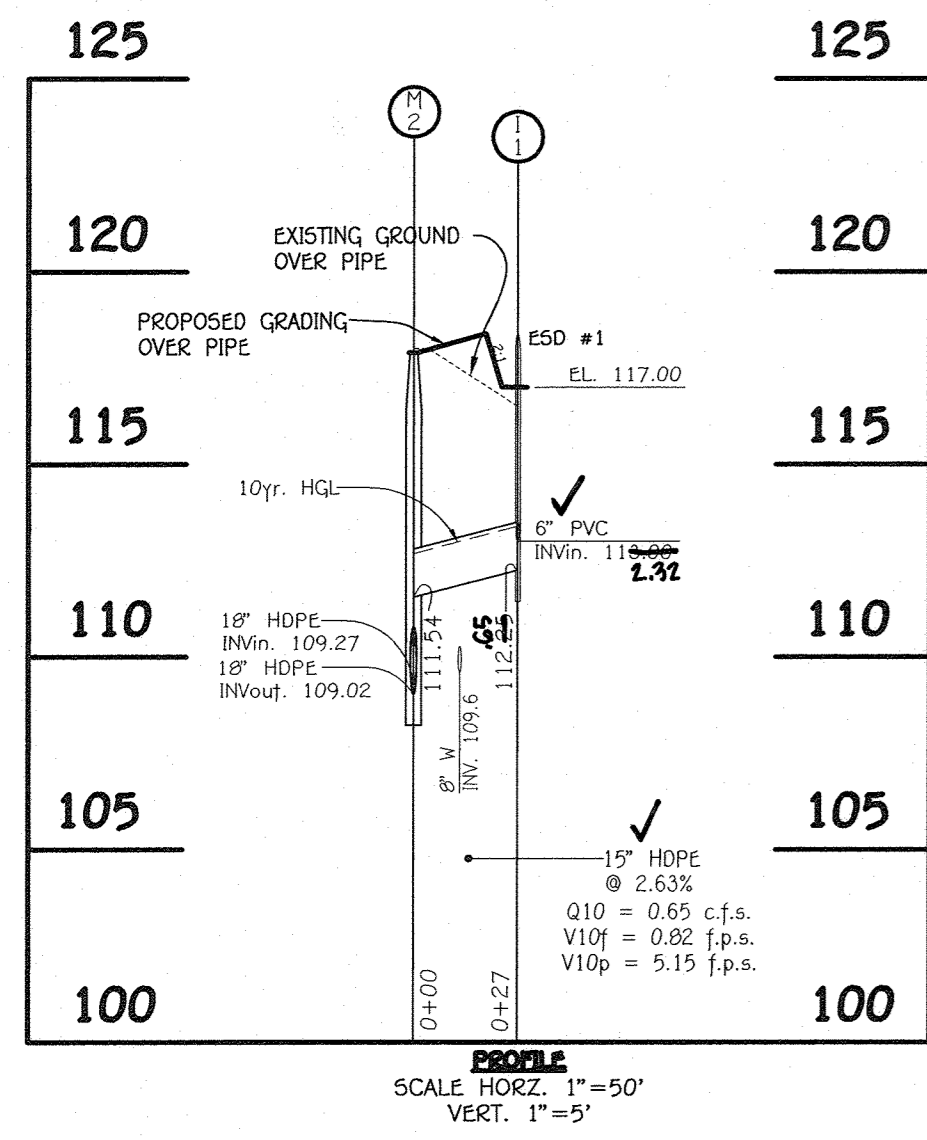
[Signature] 10-10-17
Director - Department of Planning and Zoning Date

PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
24357-24362	---	TOD	38	1st	601101

STORM DRAIN PROFILES
OXFORD SQUARE
"A Howard County Green Neighborhood"
"RIVER OVERLOOK"
Lots 246 Thru 371 & Open Space Lots 372 Thru 375 and Open Space Lot 378
(Being A Resubdivision Of Parcels "Z", "E-E" & Open Space Lot 376, As Shown On Revision P181 Entitled "Green Neighborhood" Parcels "Z", "E-E" And Open Space Lot 376
Recorded Among The Land Records Of Howard County, Maryland As Plat No. 23898 (23897))

Zoned: TOD
Tax Map No.: 38 Grid No.: 20 Parcel No.: 1003
First Election District
Scale: As Shown
Date: August 1, 2017
Sheet 20 of 40

"AS-BUILT" SDP-16-052

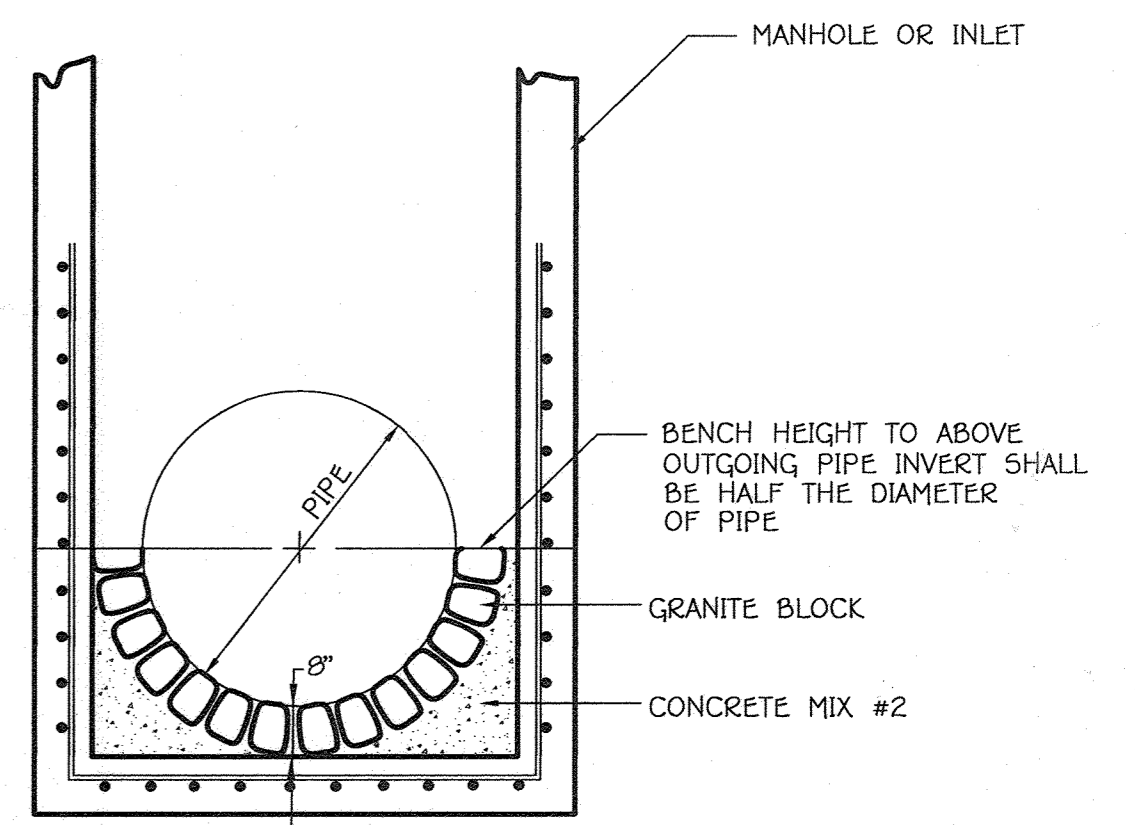
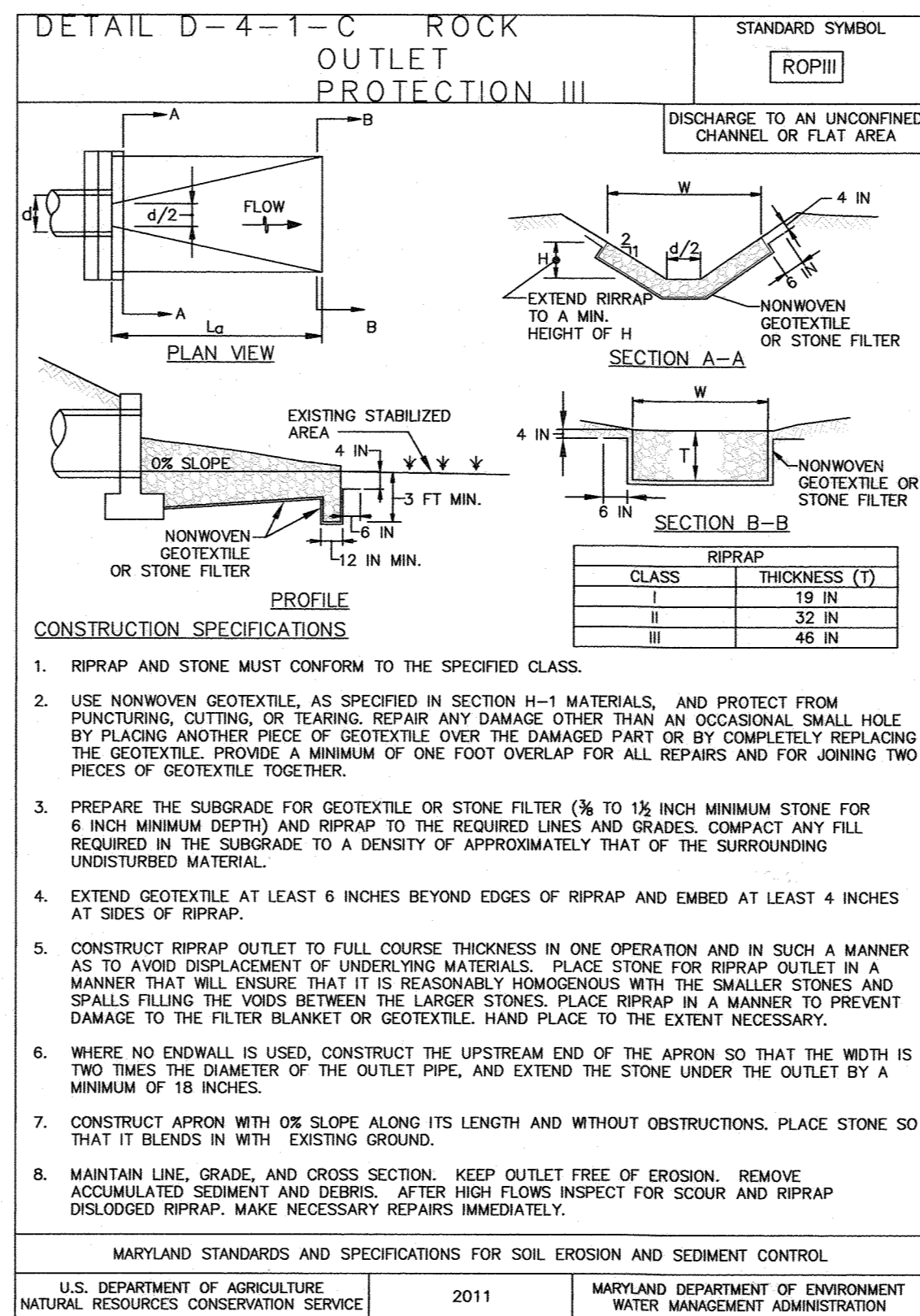


RIP RAP CHANNEL DETAIL
NO SCALE

CONSTRUCTION SPECIFICATIONS FOR RIP-RAP OUTFALLS

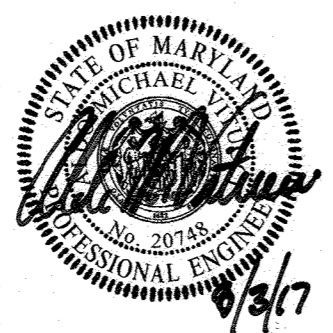
- The subgrade for the filter, riprap or gabion shall be prepared to the required lines and grades. Any fill required in the subgrade shall be compacted to a density of approximately that of the surrounding undisturbed material.
- The rock or gravel shall conform to the specified grading limits when installed respectively in the riprap or filter.
- Filter cloth shall be protected from punching, cutting or tearing. Any damage other than an occasional small hole shall be repaired by placing another piece of cloth over the damaged part or by completely replacing the cloth. All overlaps whether for repairs or for joining two pieces of cloth shall be a minimum of one foot.
- Stone for the riprap or gabion outlets may be placed by equipment. Both shall each be constructed to the full course thickness in one operation and in such a manner as to avoid displacement of underlying materials. The stone for riprap or gabion outlets shall be delivered and placed in a manner that will insure that it is reasonably homogeneous with the smaller stones and spalls filling the voids between the larger stones. Riprap shall be placed in a manner to prevent damage to the filter blanket or filter cloth. Hand placement will be required to the extent necessary to prevent damage to the permanent works.

STRUCTURE	AREA (sq.ft.)	WETTED PERIMETER (ft.)	R	R ^{2/3}	S	S ^{1/2}	W (ft.)	d (ft.)	N	V ₁₀ (f.p.s.)	Q ₁₀ (c.f.s.)	RRAP SIZE D ₅₀	RRAP SIZE D _{MAX}	BLANKET THICKNESS	PIPE SIZE
S-1	3.52	9.79	0.3996	0.5039	0.0090	0.0707	8.0	0.40	0.04	1.33	4.53	9.5"	15"	19"	18"
S-2	3.42	9.74	0.3911	0.4960	0.0090	0.0707	8.0	0.39	0.04	1.31	4.34	9.5"	15"	19"	18"
S-3	2.40	9.25	0.2596	0.4051	0.0090	0.0707	8.0	0.28	0.04	1.07	3.32	9.5"	15"	19"	18"
S-4	2.40	9.25	0.2596	0.4051	0.0090	0.0707	8.0	0.28	0.04	1.07	2.15	9.5"	15"	19"	18"
S-5	2.58	9.34	0.2762	0.4223	0.0090	0.0707	8.0	0.30	0.04	1.11	2.85	9.5"	15"	19"	18"
S-6	2.76	9.43	0.2927	0.4390	0.0090	0.0707	8.0	0.32	0.04	1.16	3.19	9.5"	15"	19"	18"
S-7	2.31	9.21	0.2508	0.3959	0.0090	0.0707	8.0	0.27	0.04	1.04	2.31	9.5"	15"	19"	18"
S-8	2.76	9.43	0.2927	0.4390	0.0090	0.0707	8.0	0.32	0.04	1.16	3.19	9.5"	15"	19"	18"



GRANITE BLOCK DETAIL
NOT TO SCALE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 461-2995



AS-BUILT CERTIFICATION
I hereby certify that the facility shown on this plan was constructed as shown on the "AS-BUILT" plans and meet the Approved Plans and Specifications.
[Signature]
Date: 8/22/22

Owner
Kellogg-CCP, LLC
c/o David P. Scheffenecker, Jr.,
Managing Member,
100 West Road, Suite 304
Towson, Maryland 21204
Ph: 410-296-3800

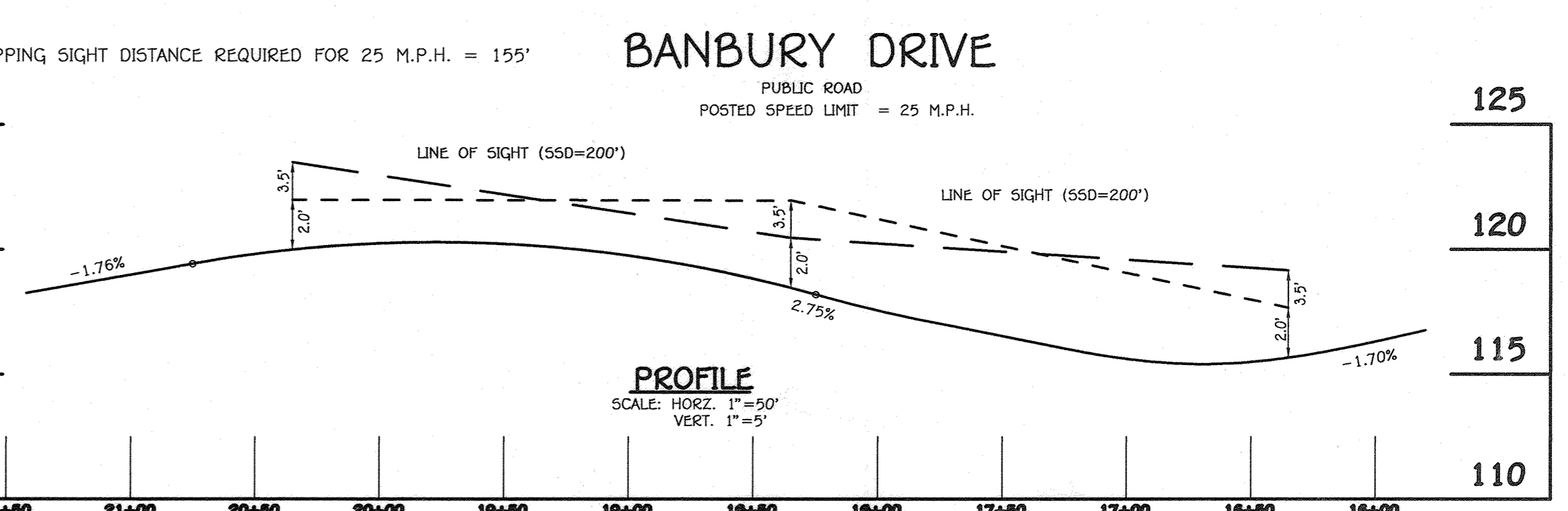
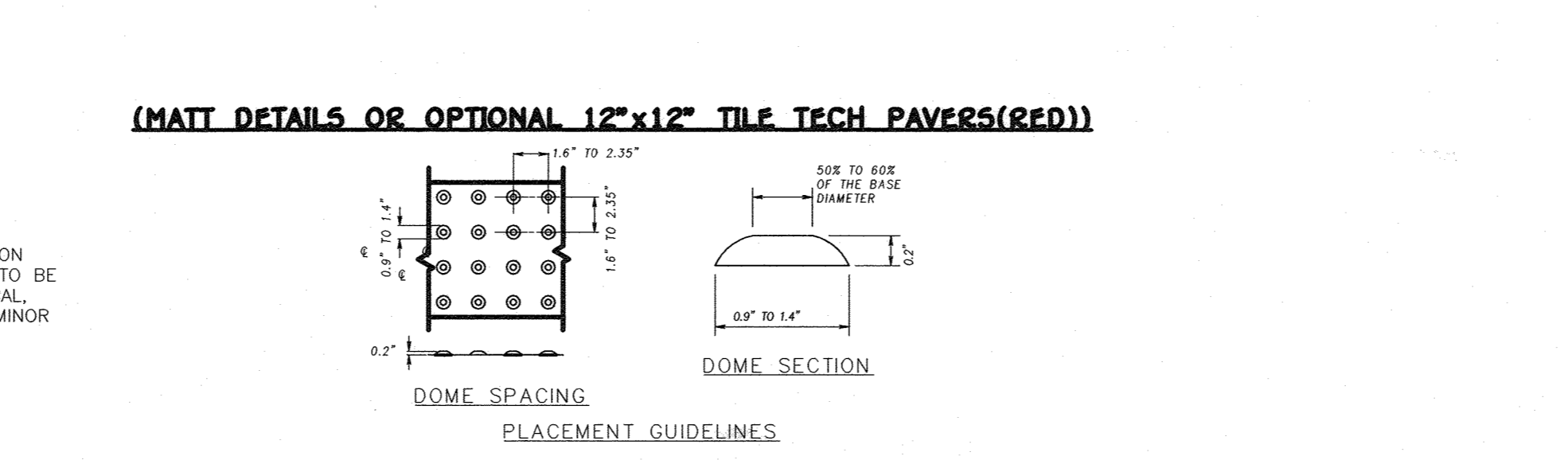
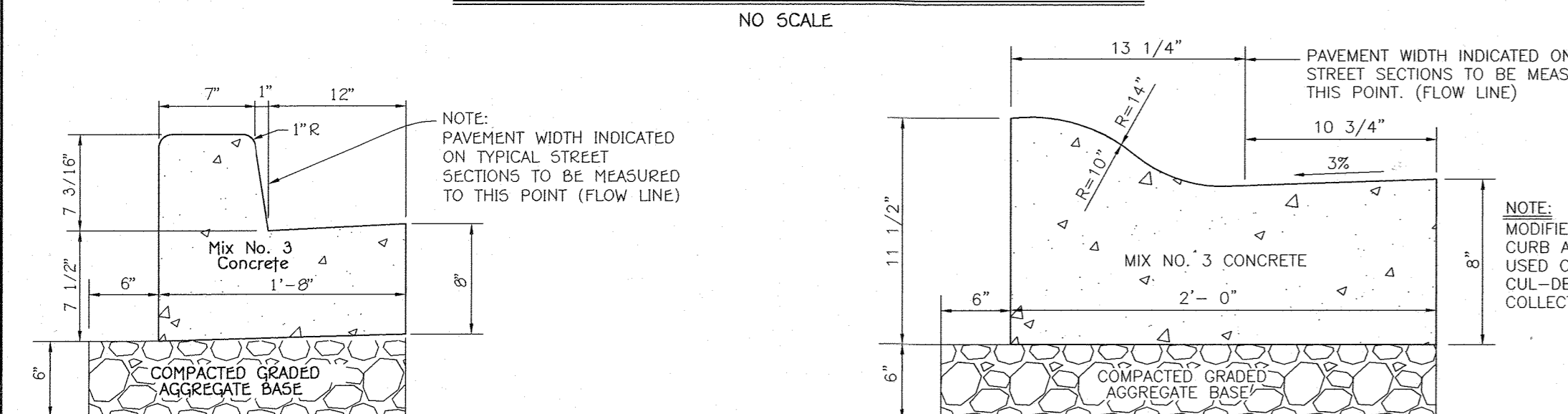
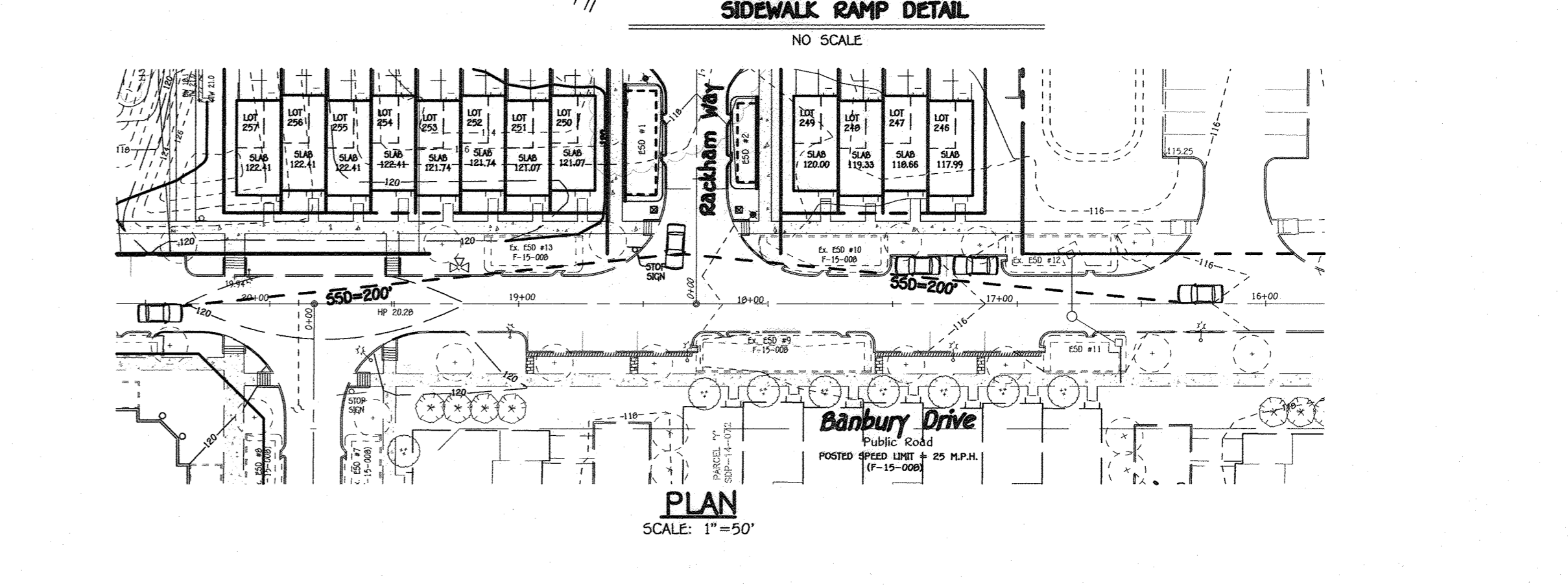
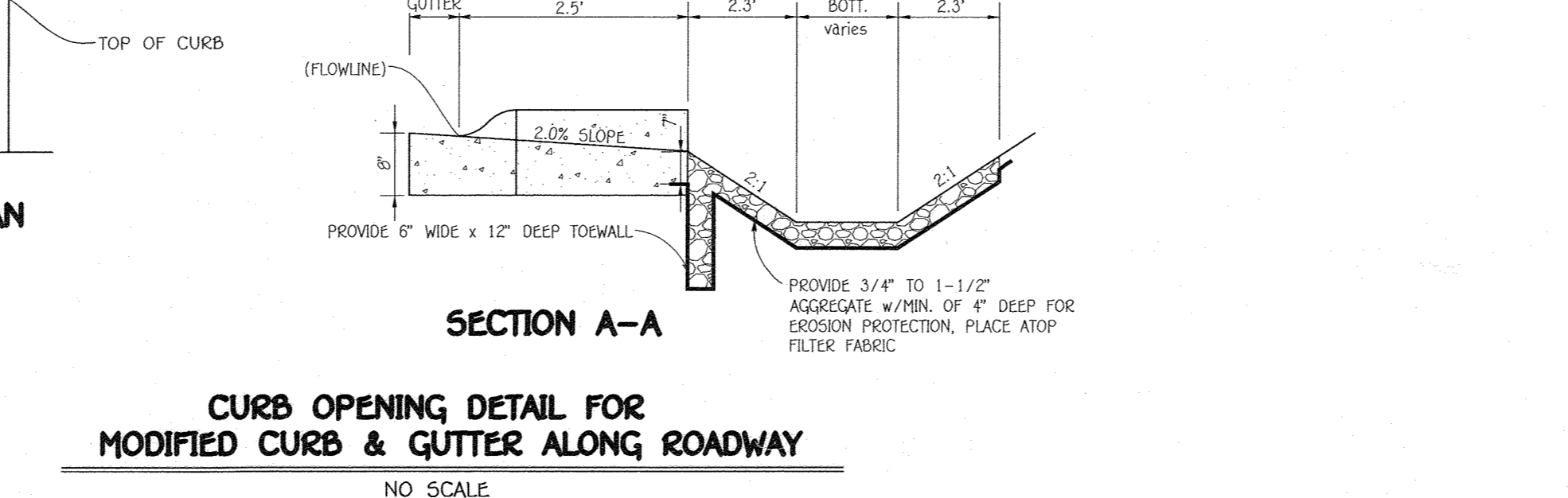
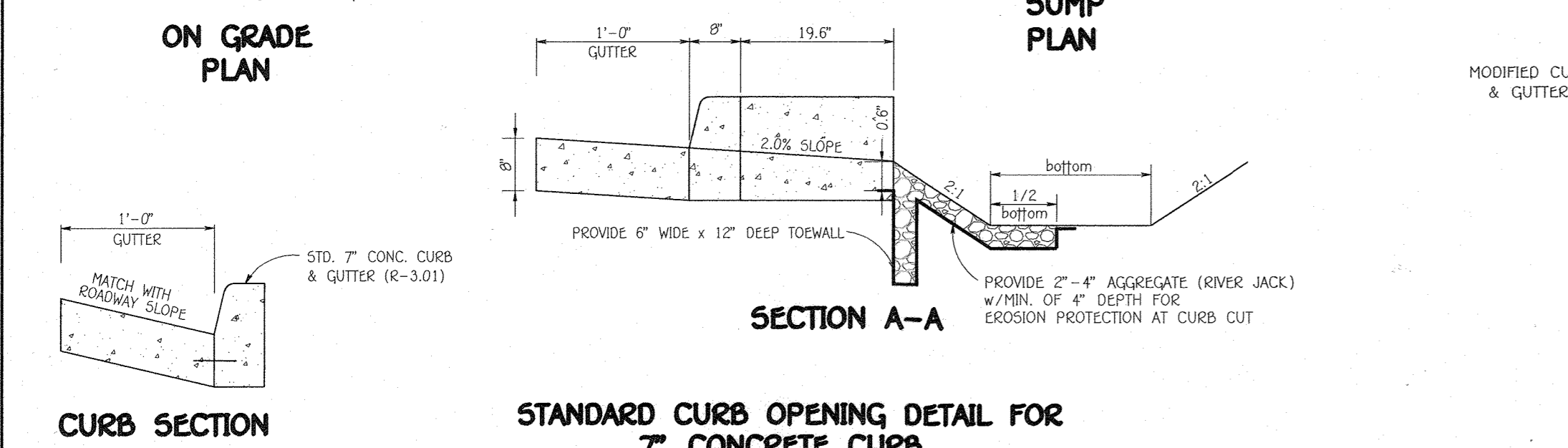
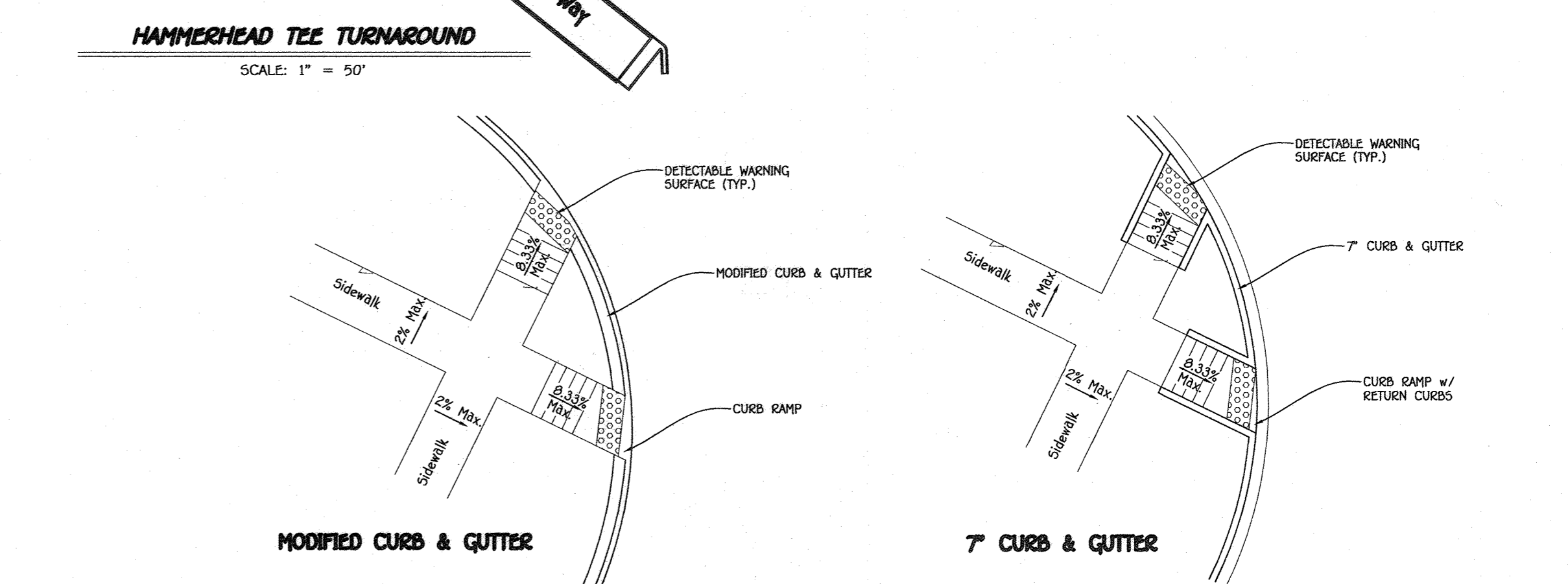
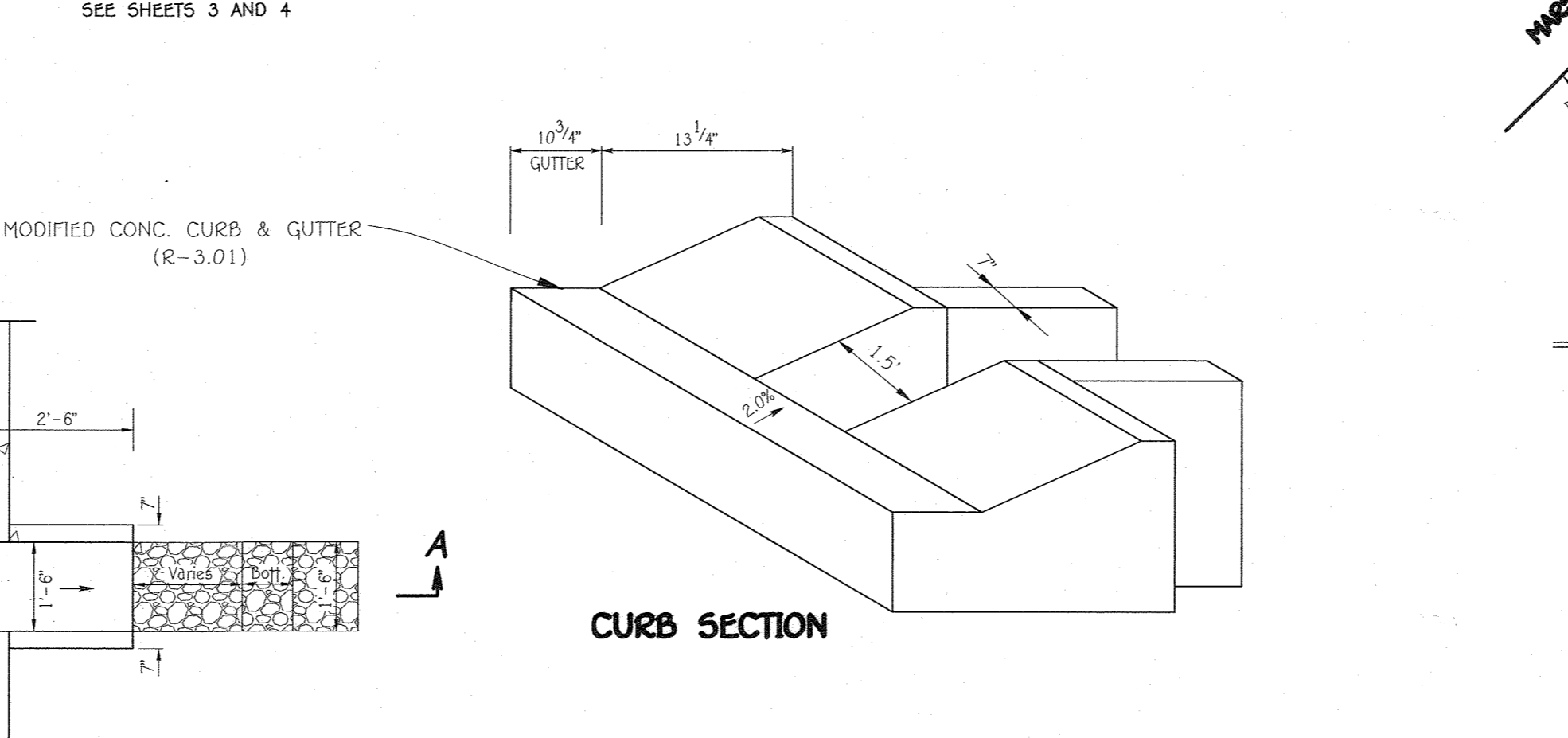
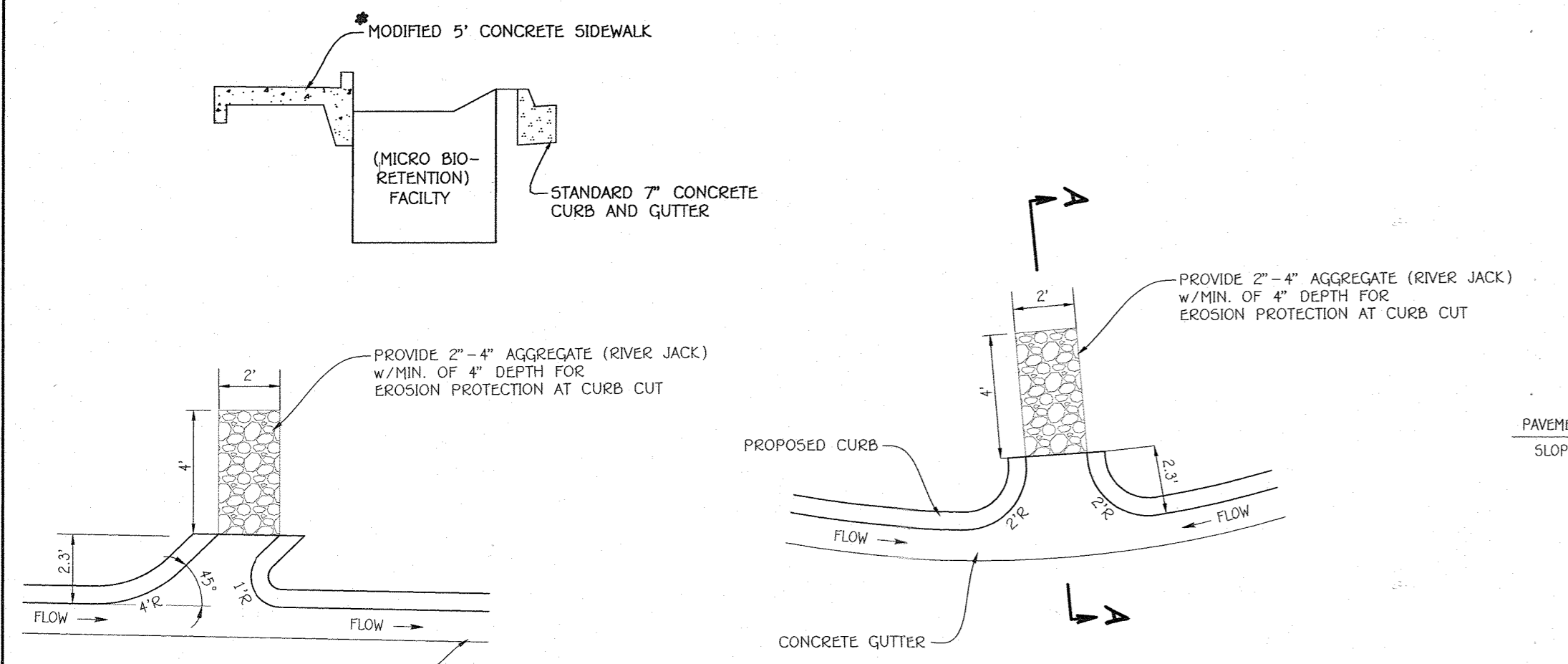
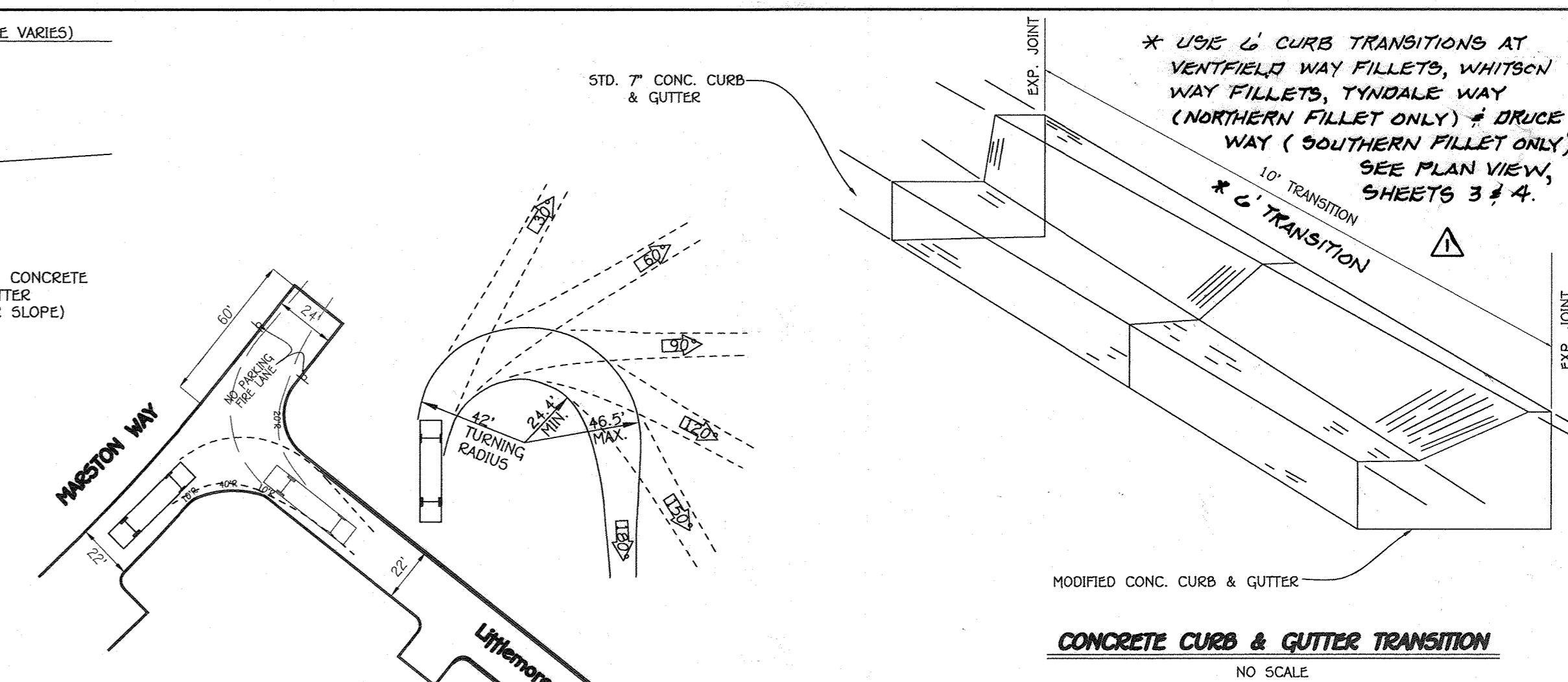
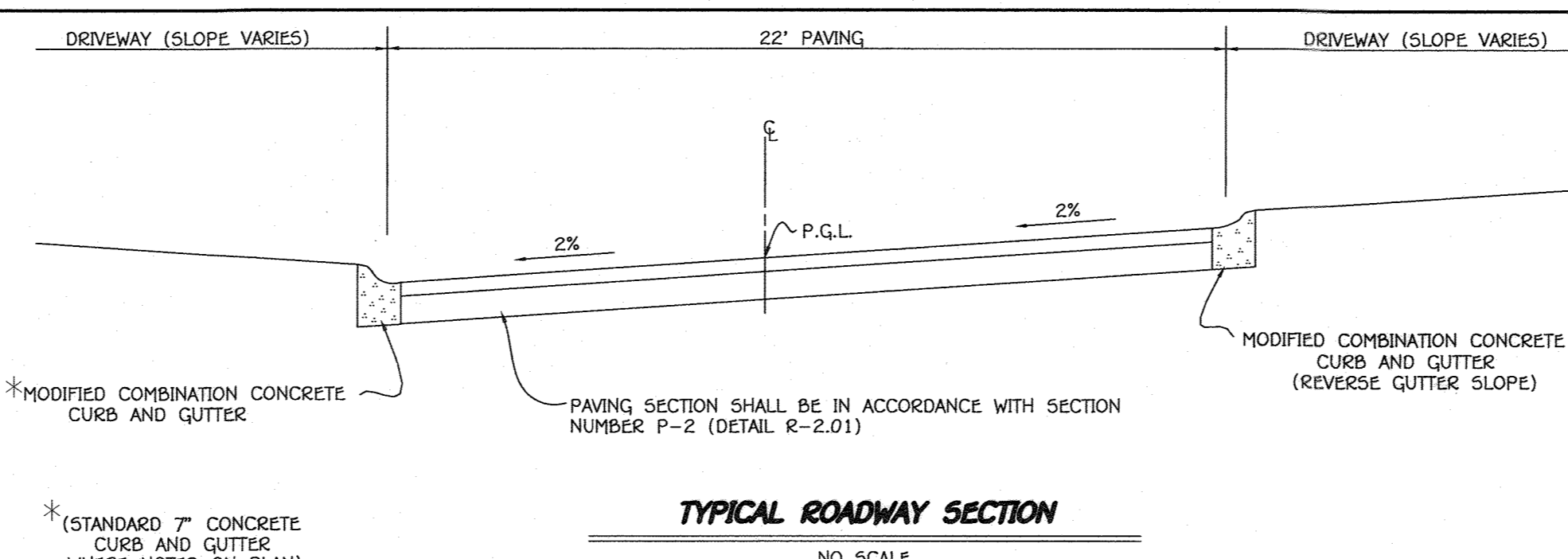
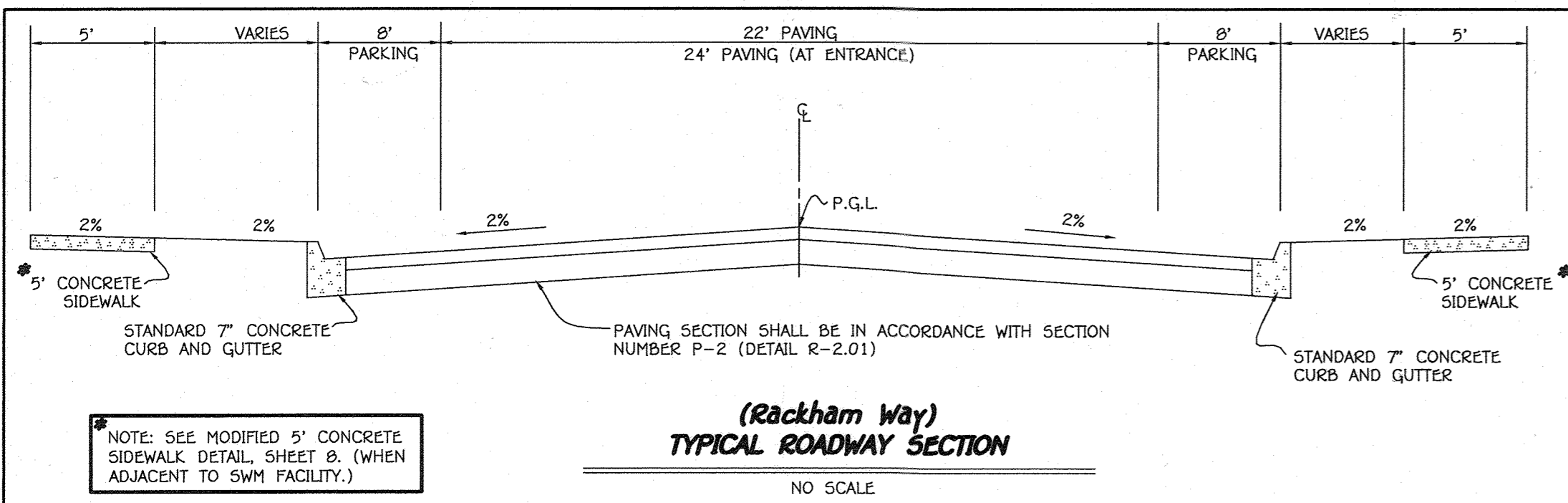
Developer
Preston • Scheffenecker Properties
100 West Road, Suite 304
Towson, Maryland 21204
Ph: 410-296-3800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
[Signature] 7-25-17
Chief, Division of Land Development LG for DE Date
[Signature] 9-15-17
Chief, Development Engineering Division A Date
[Signature] 10-10-17
Director - Department of Planning and Zoning Date

SUBDIVISION: OXFORD SQUARE SECTION/AREA: --- LOT Nos.: 246 - 371
PLAT NO.: 24357-24362 BLOCK NO.: --- ZONE: TOD TAX/ZONE: 30 ELEC. DIST.: 1st. CENSUS TR.: 601101

STORM DRAIN PROFILES
OXFORD SQUARE
"A Howard County Green Neighborhood"
"RIVER OVERLOOK"
Lots 246 Thru 371 & Open Space Lots 372 Thru 375 and Open Space Lot 378
(Being A Resubdivision Of Parcels "Z", "E-E" & Open Space Lot 376, As Shown On Revision #141 Entitled "Green Neighborhood" Parcels "Z", "E-E" And Open Space Lot 376 Recorded Among The Land Records Of Howard County, Maryland As Plat Nos. 23896 Thru 23897)
Zoned: TOD
Tax Map No.: 30 Grid No.: 20 Parcel No.: 1003
First Election District: Howard County, Maryland
Scale: As Shown
Date: August 1, 2017
Sheet 22 of 40

AS-BUILT #SDP-16-052



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

MODIFIED COMBINATION CURB AND GUTTER
NO SCALE DETAIL R-3.01

SECTION NUMBER	ROAD AND STREET CLASSIFICATION	CALIFORNIA BEARING RATIO (CBR)				PAVEMENT MATERIAL (INCHES)			
		3 TO <5	5 TO <7	>7		MIN HMA WITH GAB	HMA WITH CONSTANT GAB		
P-1	PARKING BAYS: RESIDENTIAL AND NON-RESIDENTIAL PARKING DRIVE ARSLES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 2 HEAVY TRUCKS PER DAY	HMA SUPERPAVE FINAL SURFACE	1.5	1.5	1.5	1.5	1.5	1.5	1.5
		9.5 MM. PG. 64-22, LEVEL 1 (ESAL)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		HMA SUPERPAVE INTERMEDIATE SURFACE	2.0	2.0	2.0	3.5	3.0	2.5	
P-2	PARKING DRIVE ARSLES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY LOCAL ROADS: ACCESS PLACE, ACCESS STREET CUL-DE-SACS: RESIDENTIAL	HMA SUPERPAVE FINAL SURFACE	1.5	1.5	1.5	1.5	1.5	1.5	1.5
		9.5 MM. PG. 64-22, LEVEL 1 (ESAL)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
		HMA SUPERPAVE INTERMEDIATE SURFACE	2.0	2.0	2.0	3.5	2.0	2.0	
		HMA SUPERPAVE BASE	2.0	2.0	2.0	3.5	2.0	2.0	2.0
		19.0 MM. PG. 64-22, LEVEL 1 (ESAL)	8.0	4.0	3.0	4.0	4.0	4.0	4.0
		GRADED AGGREGATE BASE (GAB)	8.0	4.0	3.0	4.0	4.0	4.0	4.0

NO.	REVISION	DATE
1	REVISE CURB TRANSITION DETAIL	1/18/18

AS-BUILT CERTIFICATION
NOTE: There is no "AS-BUILT" information provided on this sheet.

Owner
Kellogg-CCP, LLC
c/o David P. Scheffacker, Jr.,
Managing Member
100 West Road, Suite 304
Towson, Maryland 21284
Ph: 410-296-3800

Developer
Preston + Scheffacker Properties
100 West Road, Suite 304
Towson, Maryland 21284
Ph: 410-296-3800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

U. J. O. Jones
Chief, Division of Land Development
Date: 9-25-17

David Edmund
Chief, Development Engineering Division
Date: 9-15-17

N. J. J. J.
Director - Department of Planning and Zoning
Date: 10-10-17

ROADWAY DETAILS
OXFORD SQUARE
"A Howard County Green Neighborhood"
"RIVER OVERLOOK"
Lots 246 Thru 371 & Open Space Lots 372 Thru 375 and Open Space Lot 378
(Being A Resubdivision Of Parcels "Z", "E-E" & Open Space Lot 376, As Shown On Revision Plat Entitled "Green Neighborhood" Parcels "Z", "E-E" And Open Space Lot 376
Recorded Among The Land Records Of Howard County, Maryland As Plat Nos. 23896 Thru 23897)

Subdivision: OXFORD SQUARE
Section/Area: ---
Lot Nos.: 246 - 371

PLAT NO. 24357-24362
BLOCK NO. ---
ZONE TOD
TAX/ZONE 3B
ELEC. DIST. 1st.
CENSUS TR. 601101

Scale: As Shown
Date: August 1, 2017
Sheet 23 of 40

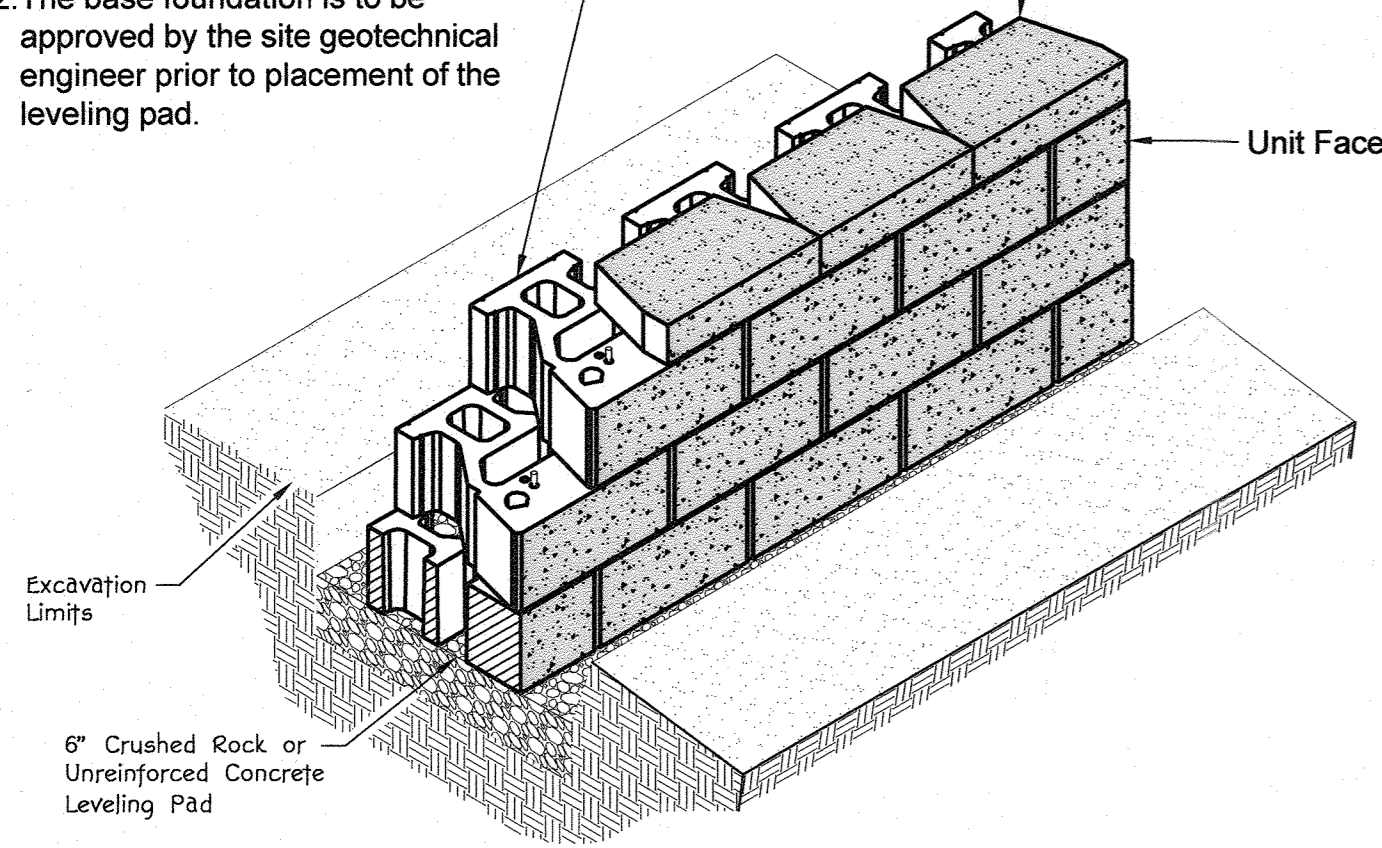
Tax Map No.: 3B
Grid No.: 20
Parcel No.: 1003
First Election District: Howard County, Maryland

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET

Base Leveling Pad Notes:

- The leveling pad is to be constructed of crushed stone or 2,000 psi unreinforced concrete
- The base foundation is to be approved by the site geotechnical engineer prior to placement of the leveling pad.

Standard Unit		Cap Unit	
*Width:	18"	*Width:	18"
*Depth:	18"	*Depth:	10 1/2"
*Height:	8"	*Height:	4"
*Weight:	108 lbs	*Weight:	50 lbs

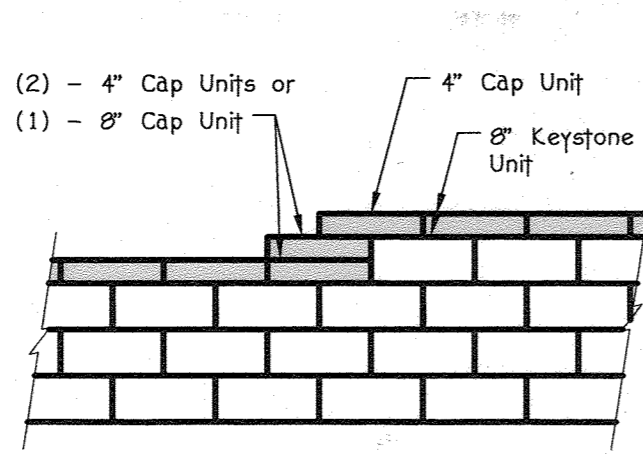


Standard Unit/Base Pad Isometric Section View

* Dimensions & Weight May Vary by Region

Construction Notes:

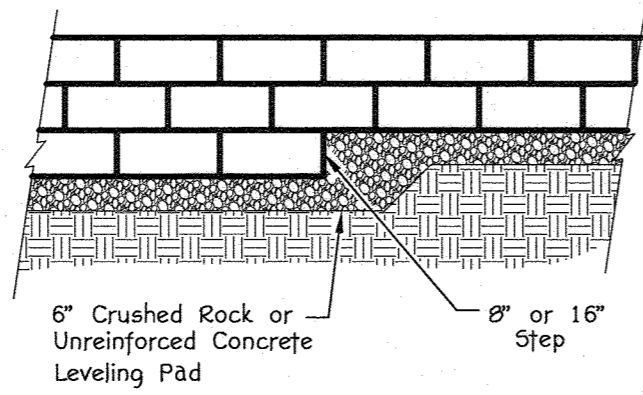
- Retaining walls shall only be constructed under the observation of a Registered Professional Engineer and a (NICET, WACEL or equivalent) certified soils technician
- The required bearing pressure beneath the footing of the wall shall be verified in the field by a certified spoils technician. Testing documentation shall be provided to the Howard County Inspector prior to the start of construction. The required test procedure shall be the Dynamic Cone Penetrometer Test ASTM 51P-399
- The suitability of fill material shall be confirmed by the onsite soils technician. Each eight (8) inch lift shall be compacted to a minimum of 95% Standard Proctor Density and the testing report shall be made available to the Howard County Inspector upon completion of construction
- For "CRITICAL" walls, one soil boring shall be required every 100' along the entire length of the wall. Copies of all boring reports shall be provided to the Howard County Inspector prior to the start of construction
- "THIS WALL IS NOT DESIGNED FOR SURCHARGE LOADS"



Note:

- Secure all cap units with Keystone Kapsel or equal.

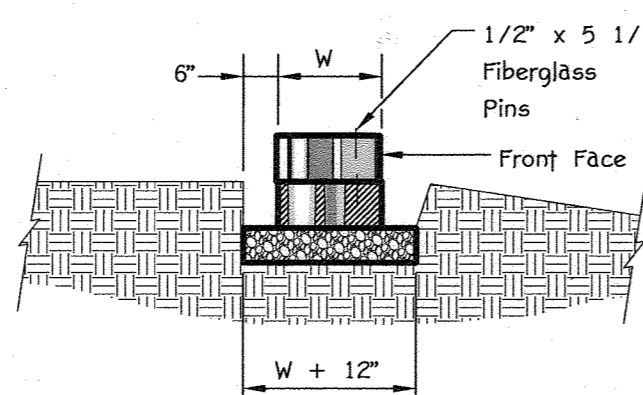
Top of Wall Steps



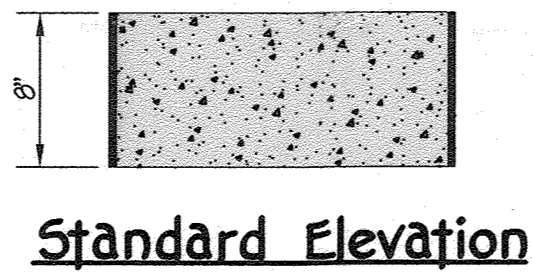
Elevation

Note:

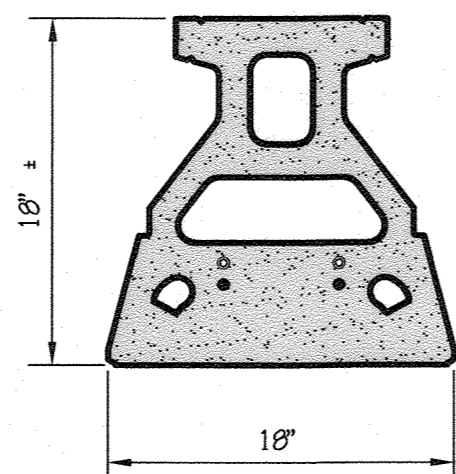
- The leveling pad is to be constructed of crushed stone or 2000 psi unreinforced concrete.



Section Leveling Pad Detail



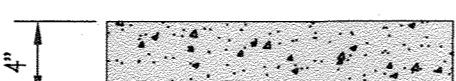
Standard Elevation



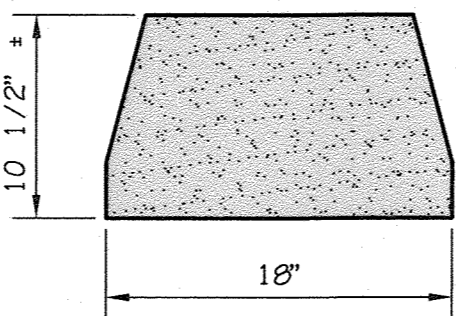
Standard Plan

Standard Unit

* Dimensions May Vary by Region



Cap Unit Elevation



Cap Unit Plan

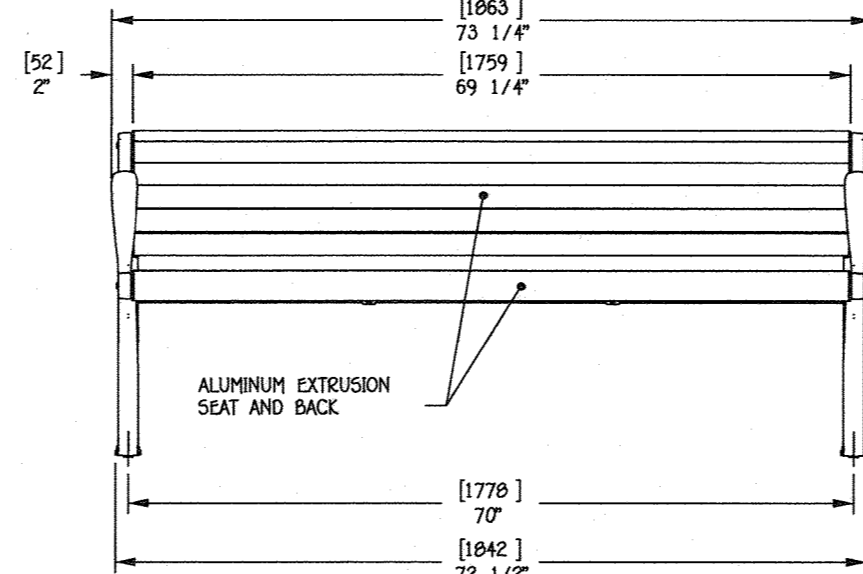
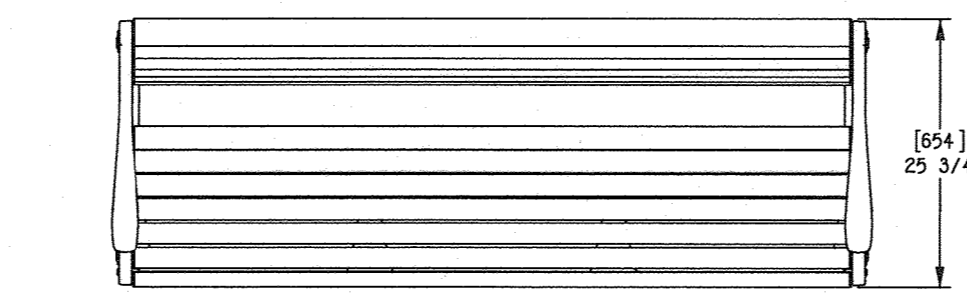
Straight Split Cap Unit Option

* Dimensions & Availability Will Vary by Region

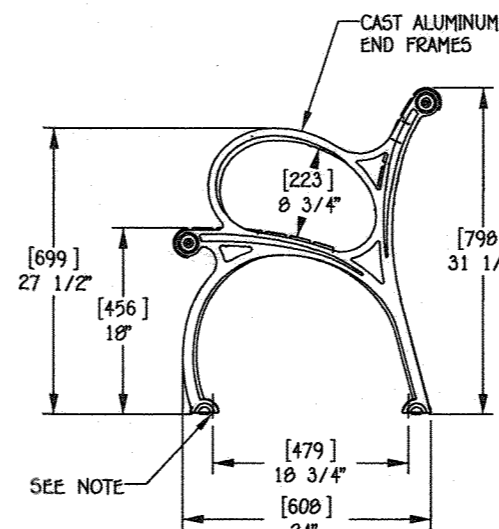
Plainwell™ Product Drawing

Bench, 72" Length, with Aluminum Seat, Freestanding / Surface Mount

landscapeforms®
www.landscapeforms.com Ph: 800.521.2546

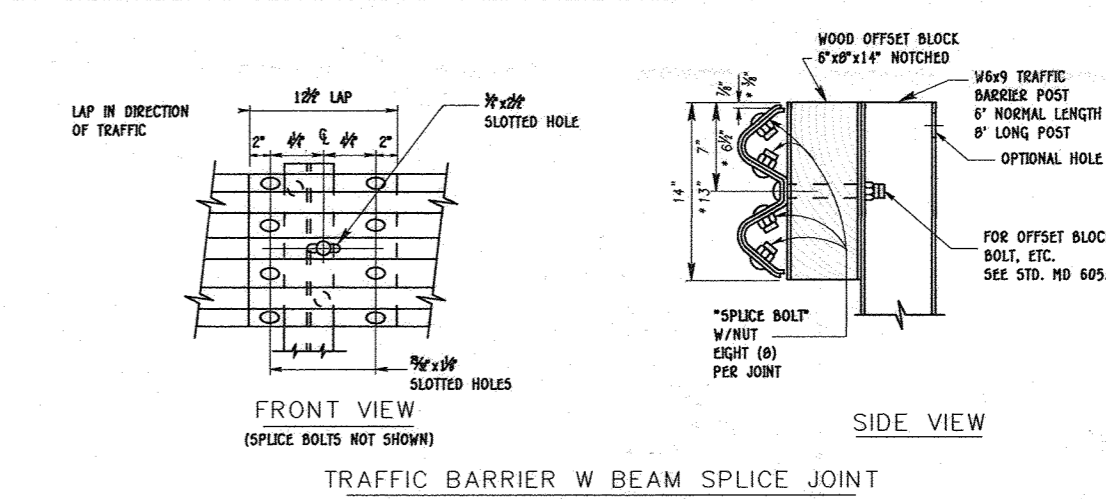


NOTE: FREESTANDING OR SURFACE MOUNT OPTIONS. CORROSION-RESISTANT ANCHORING HARDWARE SUPPLIED BY OTHERS. 0.13/0.02" HOLES WITH COUNTERBORE PROVIDED FOR SOCKET HEAD CAP SCREWS.

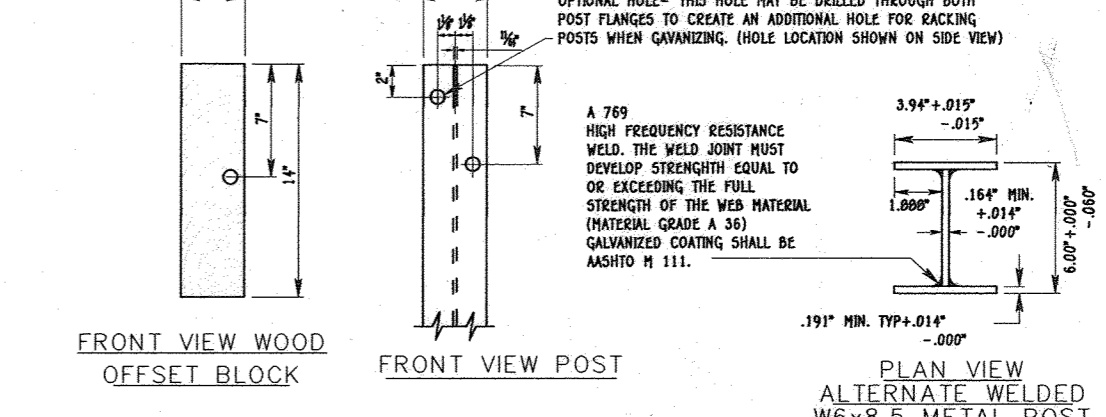


Drawing: PL271-01
Date: 4/9/2010
Dimensions are in inches (mm)
U.S. Patent No. 6,419,341

CONFIDENTIAL DRAWING INFORMATION CONTAINED HEREIN IS THE PROPERTY OF LANDSCAPE FORMS, INC. INTENDED USE IS LIMITED TO DESIGN PROFESSIONALS SPECIFYING LANDSCAPE FORMS, INC. PRODUCTS AND THEIR DIRECT CLIENTS. DRAWING IS NOT TO BE COPIED OR DISCLOSED TO OTHERS WITHOUT THE CONSENT OF LANDSCAPE FORMS, INC. © 2010 LANDSCAPE FORMS, INC. ALL RIGHTS RESERVED.



TRAFFIC BARRIER W BEAM SPLICE JOINT



FRONT VIEW WOOD OFFSET BLOCK

FRONT VIEW POST

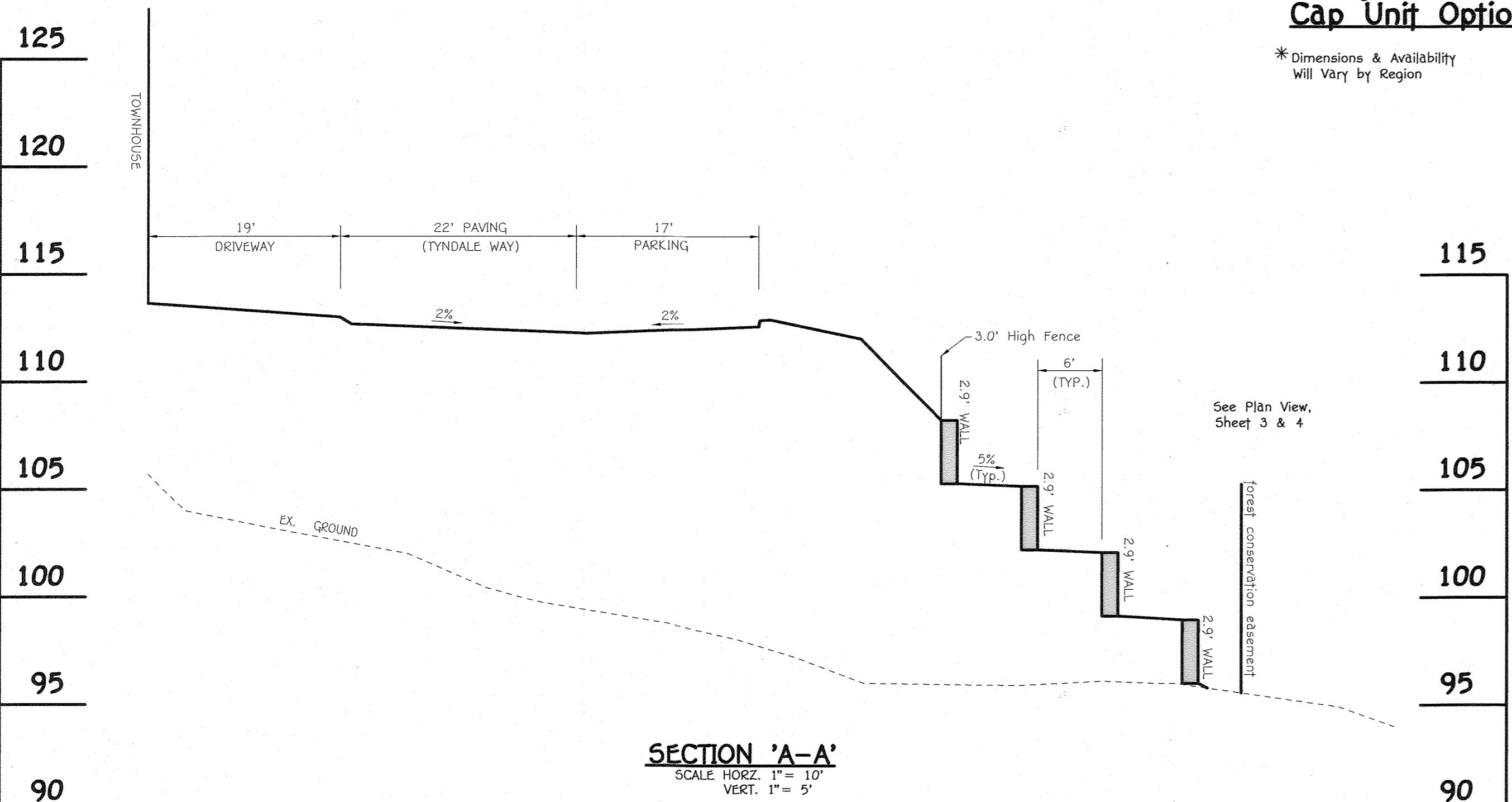
PLAN VIEW ALTERNATE WELDED W6x8.5 METAL POST

TRAFFIC BARRIER W BEAM METAL POST, W BEAM SPLICE AND WOOD OFFSET BLOCK

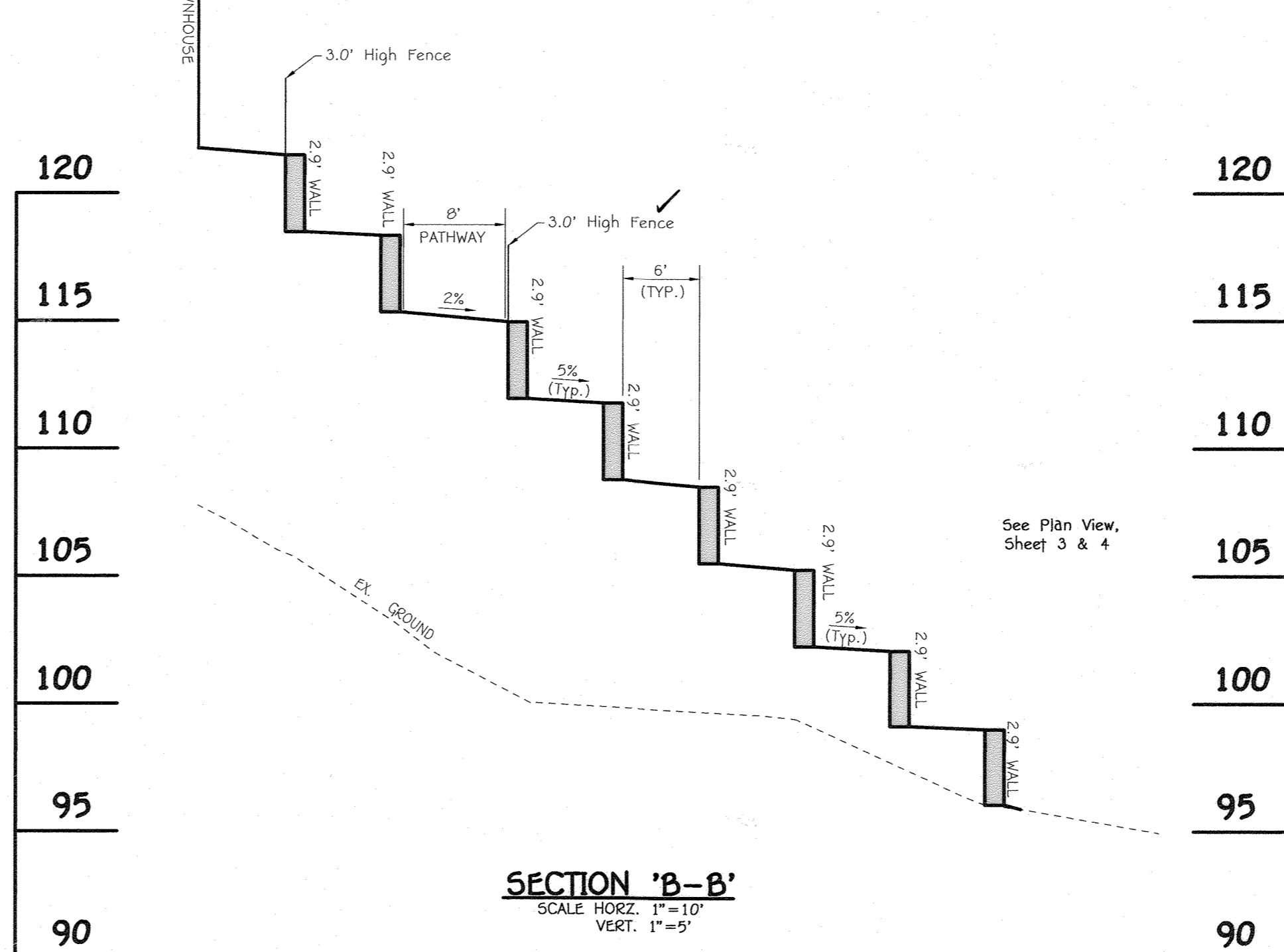
TRAFFIC BARRIER - END SECTION

NOTES:
1. EXCEPT FOR THE DIMENSIONS SHOWN ON THE ALTERNATE WELDED W6x8.5 METAL POST PLAN VIEW, ALL DIMENSIONS FOR HOLES, HOLES SPACING, LENGTHS, ETC. WILL REMAIN THE SAME AS THEY ARE FOR THE W6x8.5 METAL POST AND WOOD OFFSET BLOCKS.
2. FOR COMPRESSIVE OFFSET BLOCKS SEE NOTE 3 ON PD 605.23
3. POSTS SHALL BE SPACED 8'-0" C/C, UNLESS OTHERWISE STATED ON THE PLANS OR DIRECTED BY THE ENGINEER.

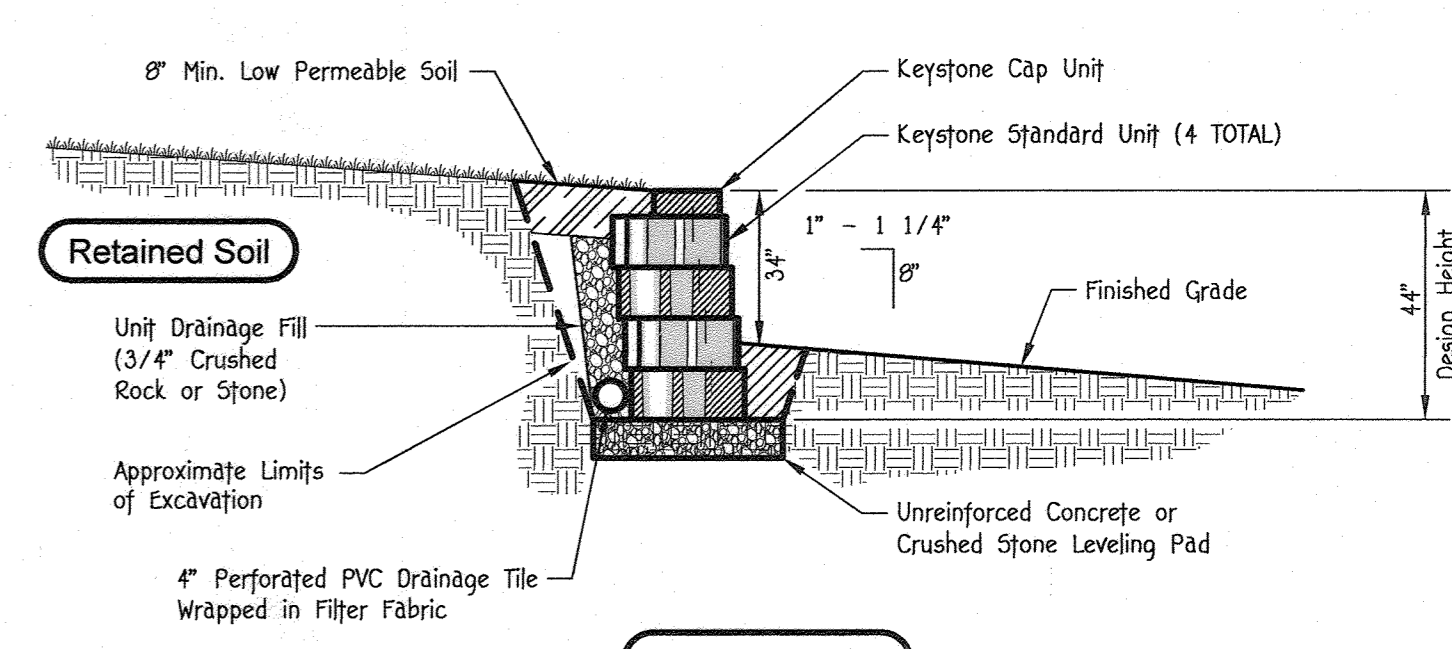
NOTE: THE END SECTION SHOWN IS INCIDENTAL TO THE PAY ITEMS TRAFFIC BARRIER W BEAM USING 6 FT POSTS OR TRAFFIC BARRIER W BEAM USING 8 FT POSTS.



SECTION 'A-A'
SCALE: HORIZ. 1"=10'
VERT. 1"=5'



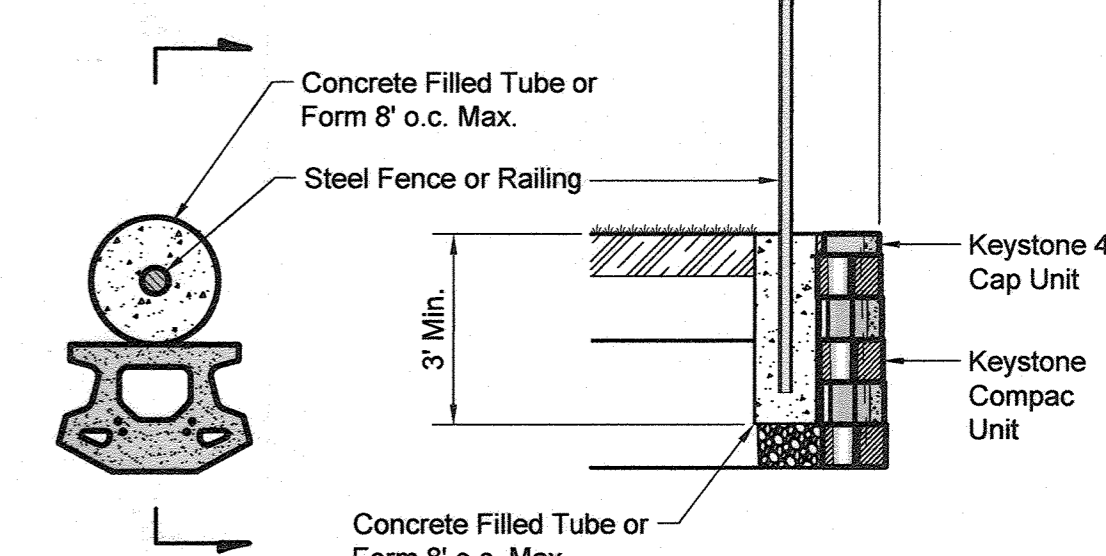
SECTION 'B-B'
SCALE: HORIZ. 1"=10'
VERT. 1"=5'



Typical Gravity Wall Section

Standard Unit - 1" Setback

Note: Concrete filled tube or form to be set during the wall construction, when directly behind units.



Fence Section & Plan Detail

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SOURCE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
410.461.3000

NO.	REVISION	DATE

STATE OF MARYLAND
Professional Engineer
No. 20748
Date: 9/25/17

AS-BUILT CERTIFICATION
NOTE: There is no "AS-BUILT" information provided on this sheet.

Owner: Kellogg-CCP, LLC
c/o David P. Scheffner, Jr., Managing Member
100 West Road, Suite 304
Towson, Maryland 21284
Ph: 410-296-3800

Developer: Preston + Scheffner Properties
100 West Road, Suite 304
Towson, Maryland 21204
Ph: 410-296-3800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development: *KB for PB* 9-25-17 Date

Chief, Development Engineering Division: *AS* 9-15-17 Date

Director - Department of Planning and Zoning: *W. J. J. J.* 10-10-17 Date

SUBDIVISION: OXFORD SQUARE SECTION/AREA: --- LOT Nos.: 246 - 371

PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
24357 - 24362	---	TOD	3B	1st.	601101

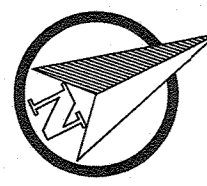
SITE DETAILS

OXFORD SQUARE

"A Howard County Green Neighborhood"
"RIVER OVERLOOK"

Lots 246 Thru 371 & Open Space Lots 372 Thru 375 and Open Space Lot 378
(Being A Resubdivision of Parcels "Z", "E-E" & Open Space Lot 376, As Shown On Revision Plat Entitled "Green Neighborhood" Parcels "Z", "E-E" And Open Space Lot 376
Recorded Among The Land Records Of Howard County, Maryland As Plat Nos. 23896 Thru 23897)

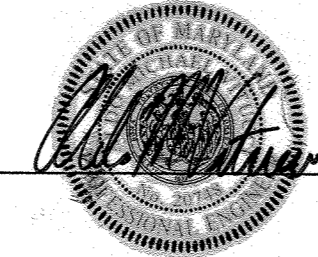
Zone: TOD
Tax Map No.: 3B Grid No.: 20 Parcel No.: 1003
First Election District: Howard County, Maryland
Scale: As Shown
Date: August 1, 2017
Sheet 24 of 40



Note: This Sheet is For Drainage Area Information Only.

AS-BUILT CERTIFICATION

NOTE: There is no "AS-BUILT" Information Provided on this sheet.

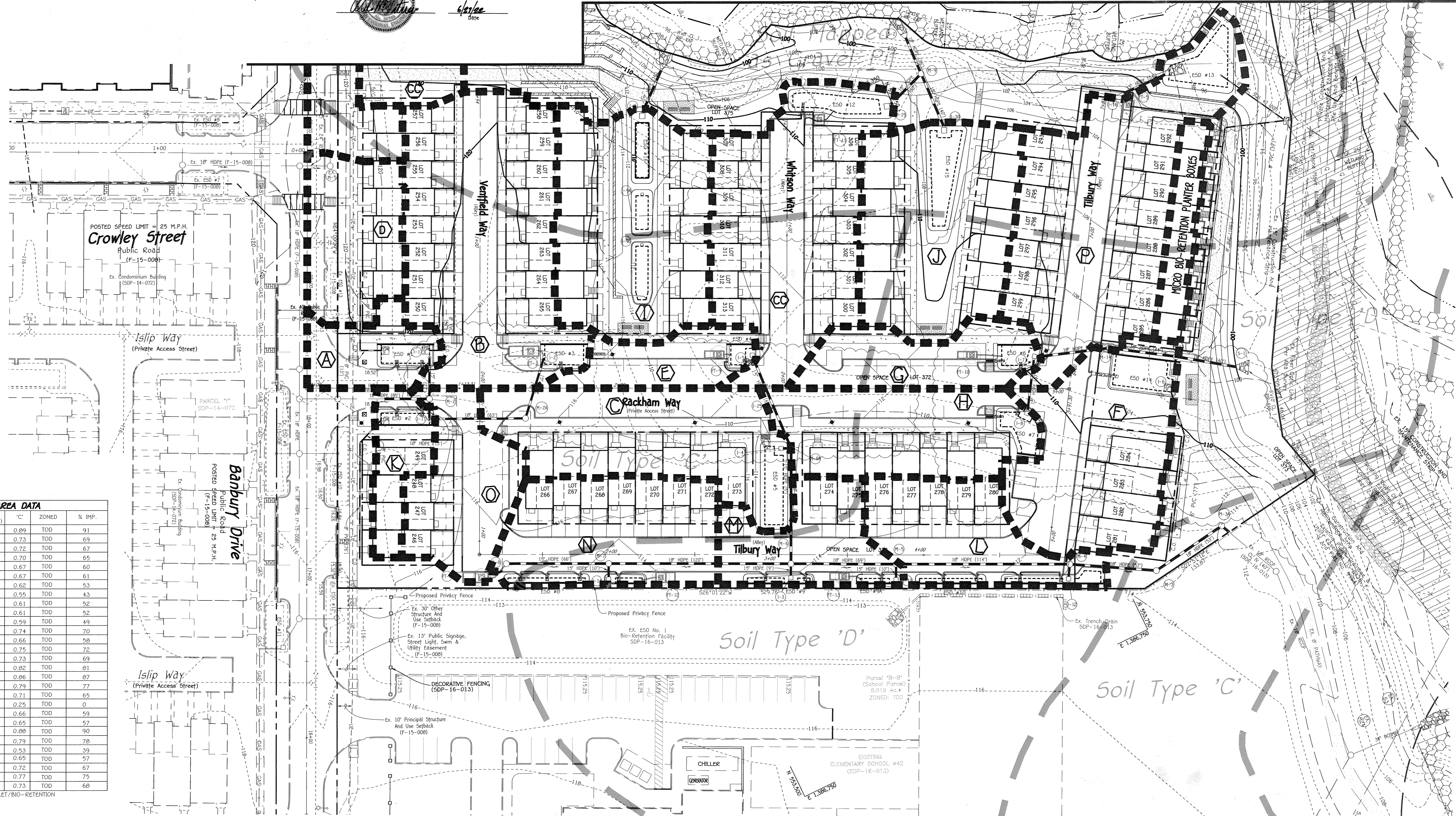


Date

MATCH LINE SEE SHEET 26

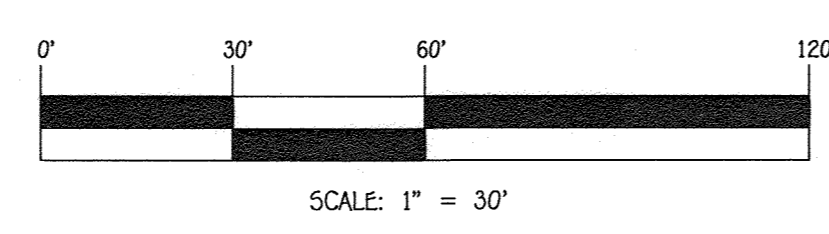
DRAINAGE AREA DATA					
STRUCTURE NO.	DRAINAGE AREA	AREA (Sq. Ft.)	C'	ZONED	% IMP.
I-1	A	3777	0.89	TOD	91
I-2/FT-1	B	18368	0.73	TOD	69
I-3	C	12063	0.72	TOD	67
EX. INLET	D	6582	0.70	TOD	65
I-5	E	4306	0.67	TOD	60
I-6	F	12229	0.67	TOD	61
I-7	G	5677	0.62	TOD	53
I-8	H	9469	0.55	TOD	43
I-9	I	14274	0.61	TOD	52
I-10	J	13345	0.61	TOD	52
I-11	K	3122	0.59	TOD	49
I-12	L	7540	0.74	TOD	70
I-13	M	5934	0.66	TOD	58
I-14	N	9515	0.75	TOD	72
FT-2	O	6804	0.73	TOD	69
I-16/FT-5	P	18765	0.82	TOD	81
I-17/FT-3	Q	9577	0.86	TOD	87
FT-4	R	12620	0.79	TOD	77
I-19	S	21273	0.71	TOD	65
I-20	T	1380	0.25	TOD	0
I-21	U	6521	0.66	TOD	59
I-22	V	7131	0.65	TOD	57
I-24	W	19150	0.88	TOD	90
FT-8	X	26737	0.79	TOD	78
I-18	Y	14062	0.53	TOD	39
EX. INLET	Z	9515	0.65	TOD	57
EX. INLET	AA	12178	0.72	TOD	67
EX. INLET	BB	4587	0.77	TOD	75
I-15/FT-11	CC	16425	0.73	TOD	68

FT-1 - DENOTES FILTERKA SWM INLET/BIO-RETENTION



FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21142
 (410) 461-2299

NO.	REVISION	DATE
1	Added Note	1/8/18



Owner
 Kellogg-CCP, LLC
 c/o David P. Scheffener, Jr.,
 Managing Member
 100 West Road, Suite 304
 Towson, Maryland 21204
 Ph: 410-296-3800

Developer
 Preston + Scheffener Properties
 100 West Road, Suite 304
 Towson, Maryland 21204
 Ph: 410-296-3800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Kathleen
 Chief, Division of Land Development KB for DB
 9-25-17
 Date

John
 Chief, Development Engineering Division
 9-15-17
 Date

Nathan
 Director - Department of Planning and Zoning
 10-10-17
 Date

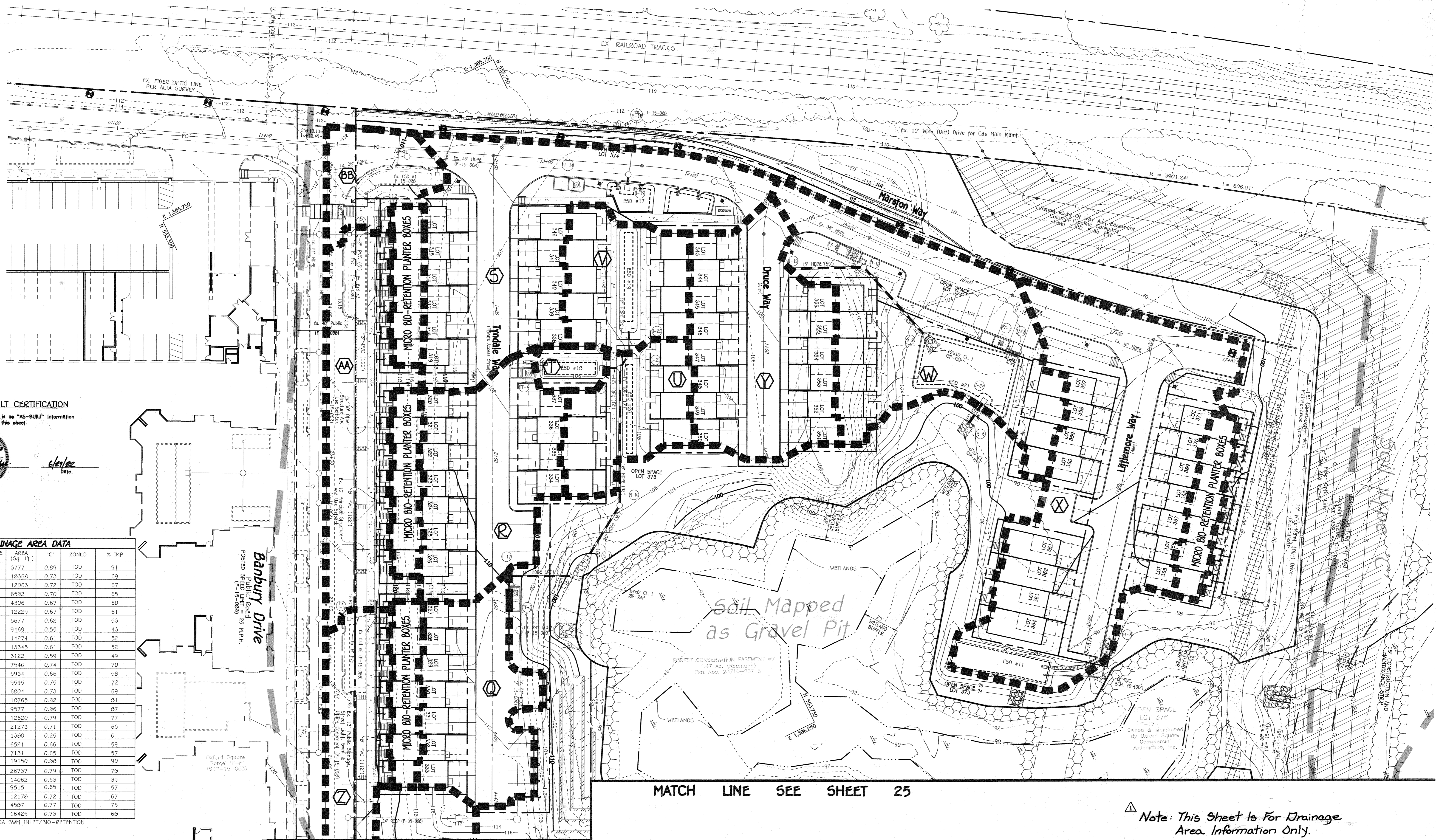
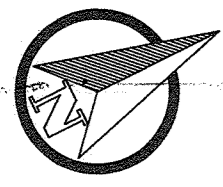
PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
24357-24362	---	TOD	3B	1st	601101

DRAINAGE AREA MAP

OXFORD SQUARE
 "A Howard County Green Neighborhood"
 "RIVER OVERLOOK"
 Lots 246 Thru 371 & Open Space Lots 372 Thru 375 and Open Space Lot 378
 (Being A Resubdivision Of Parcels "Z", "E-E" & Open Space Lot 376, As Shown On Revision Plat Entitled
 "Green Neighborhood" Parcels "Z", "E-E" And Open Space Lot 376
 Recorded Among The Land Records Of Howard County, Maryland As Plat Nos. 23896 Thru 23897)

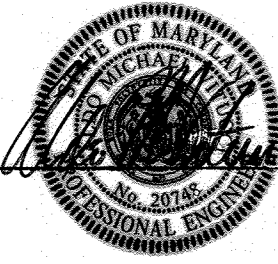
Tax Map No.: 3B Grid No.: 20 Parcel No.: 1003
 First Election District: Howard County, Maryland
 Scale: As Shown
 Date: August 1, 2017
 Sheet 25 of 40

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET



AS-BUILT CERTIFICATION

NOTE: There is no "AS-BUILT" information provided on this sheet.



1/18/18
Date

DRAINAGE AREA DATA

STRUCTURE NO.	DRAINAGE AREA	AREA (Sq. Ft.)	"C"	ZONED	% IMP.
I-1	A	3777	0.89	TOD	91
I-2/FT-1	B	18368	0.73	TOD	69
I-3	C	12063	0.72	TOD	67
EX. INLET	D	6582	0.70	TOD	65
I-5	E	4306	0.67	TOD	60
I-6	F	12229	0.67	TOD	61
I-7	G	5677	0.62	TOD	53
I-8	H	9469	0.55	TOD	43
I-9	I	14274	0.61	TOD	52
I-10	J	13345	0.61	TOD	52
I-11	K	3122	0.59	TOD	49
I-12	L	7540	0.74	TOD	70
I-13	M	5934	0.66	TOD	58
I-14	N	9515	0.75	TOD	72
I-16/FT-5	P	18765	0.82	TOD	81
I-17/FT-3	Q	9577	0.86	TOD	87
FT-4	R	12620	0.79	TOD	77
I-19	S	21273	0.71	TOD	65
I-20	T	1380	0.25	TOD	0
I-21	U	6521	0.66	TOD	59
I-22	V	7131	0.65	TOD	57
I-24	W	19150	0.80	TOD	90
FT-8	X	26737	0.79	TOD	78
I-18	Y	14062	0.53	TOD	39
EX. INLET	Z	9515	0.65	TOD	57
EX. INLET	AA	12178	0.72	TOD	67
EX. INLET	BB	4587	0.77	TOD	75
I-15/FT-11	CC	16425	0.73	TOD	68

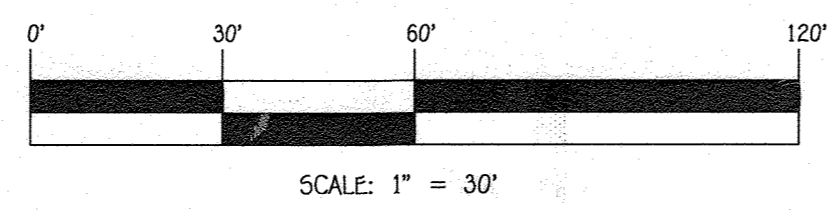
FT-1 - DENOTES FILTERRA SWM INLET/BIO-RETENTION

Soil Mapped as Gravel Pit

MATCH LINE SEE SHEET 25

Note: This Sheet is For Drainage Area Information Only.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PARK
ELLCOTT CITY, MARYLAND 21042
4100 461 - 2095



Owner
Kellogg-CCP, LLC
c/o David P. Scheffnacker, Jr.,
Managing Member
100 West Road, Suite 304
Towson, Maryland 21204
Ph: 410-296-3800

Developer
Preston + Scheffnacker Properties
100 West Road, Suite 304
Towson, Maryland 21204
Ph: 410-296-3800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Kevin Rose
Chief, Division of Land Development *Ks for DB* 9-25-17
Date

David Schaefer
Chief, Development Engineering Division 9-15-17
Date

Nancy Jaffe
Director - Department of Planning and Zoning 10-10-17
Date

DRAINAGE AREA MAP
OXFORD SQUARE
"A Howard County Green Neighborhood"
"RIVER OVERLOOK"
Lots 246 Thru 371 & Open Space Lots 372 Thru 375 and Open Space Lot 378
(Being A Resubdivision Of Parcels Z, "E-E" & Open Space Lot 376, As Shown On Revision Plat Entitled
"Green Neighborhood" Parcels Z, "E-E" And Open Space Lot 376
Recorded Among The Land Records Of Howard County, Maryland As Plat Nos. 23896 Thru 23897)

Tax Map No.: 38 Grid No.: 20 Parcel No.: 1003
First Election District: Howard County, Maryland
Scale: As Shown
Date: August 1, 2017
Sheet 26 Of 40

PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
24357-24362	---	TOD	38	1st	601101

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET

FOREST RETENTION AREA
 MACHINERY, DUMPING, MATERIAL STORAGE AND SITE DISTURBANCE PROHIBITED!
 VIOLATORS SUBJECT TO FINES SPECIFIED BY STATE AND LOCAL LAWS
 TREES FOR YOUR FUTURE

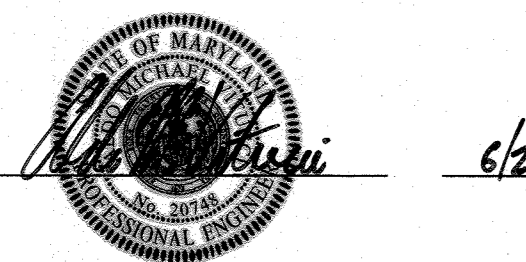
1" MINIMUM

ON-SITE SIGNAGE

- ▲ - DENOTES PROPOSED SIGN LOCATION
- ✕ - DENOTES EXISTING SIGN TO BE REMOVED

AS-BUILT CERTIFICATION

NOTE: There is no "AS-BUILT" Information Provided on this sheet.



Construction Period Protection Program

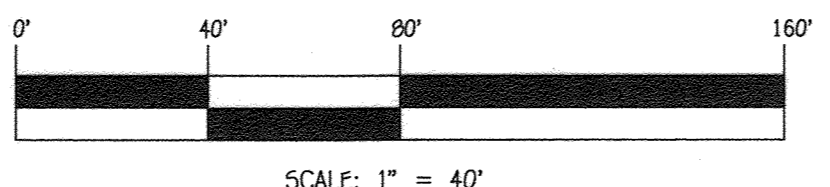
- A. Forest Protection Techniques**
- 1. Soil Protection Area (Critical Root Zone)**
 The soil protection area, or critical root zone, of a tree is that portion of the soil column where most of its roots are located. The majority of roots responsible for water and nutrient uptake are located just below the soil surface.
 The limit of disturbance (LOD) for a tree is the radius of the soil protection area. The LOD is to be established by the developer, or another qualified professional designated by the developer, in consultation with the County. The LOD is to be established by the developer, or another qualified professional, in accordance with the In-Situ Edge Information Guidelines in Appendix B. The LOD is to be established by the developer, or another qualified professional, in accordance with the In-Situ Edge Information Guidelines in Appendix B. The LOD is to be established by the developer, or another qualified professional, in accordance with the In-Situ Edge Information Guidelines in Appendix B.
- 2. Erosion and Sedimentation**
 All forest retention areas will be protected from unauthorized intrusion by appropriate signage and fencing. Signage and fencing will be installed prior to any construction activity. Installation of these devices will be supervised by Eco-Science Professionals or another qualified professional designated by the developer. The LOD is to be established by the developer, or another qualified professional, in accordance with the In-Situ Edge Information Guidelines in Appendix B. The LOD is to be established by the developer, or another qualified professional, in accordance with the In-Situ Edge Information Guidelines in Appendix B. The LOD is to be established by the developer, or another qualified professional, in accordance with the In-Situ Edge Information Guidelines in Appendix B.
- B. Pre-Construction Meeting**
 Upon signing of final subdivision and installation of all signage, a pre-construction meeting will be held between the developer, contractor and appropriate County inspectors. The purpose of the meeting will be to verify that all pre-protection measures outlined in the PCP are in place, that all signage is in place, and to verify the contractor's schedule for non-compliance with the PCP.
- C. Storage Facilities/Equipment Cleaning**
 All equipment storage, staging, assembly facilities, material stockpiles, etc. associated with construction of the project will be restricted to those areas within the limit of disturbance. Washing of equipment will be prohibited from all forest retention areas. Washwater resulting from equipment cleaning will be contained to prevent runoff into wetlands, streams and other environmentally sensitive areas.
- D. Sequence of Construction**
 The following timetable represents the proposed schedule for construction of the proposed project. The construction start date for this project has not been finalized. The actual project start date is indicated on the invoice of all necessary permits and approvals for the project. The items outlined in the Forest Conservation Plan will be initiated upon commencement of the project.
- E. Construction Monitoring**
 Eco-Science Professionals, or another qualified professional designated by the developer, will monitor construction of the project to ensure that all activities are in compliance with the Forest Conservation Plan. This will include inspections to ensure that signage is properly maintained and that no unauthorized activities have been made into forest retention areas.
- F. Activities Permitted During Construction**
 The forest conservation plan will show the following activities within forest reserves during the construction phase of the project:
1. Passive recreation (hiking, etc.)
 2. Field pre-construction meeting between developer, contractor and County inspector.
 3. Guide site and compact improvements. Stabilize all disturbed areas in accordance with grading plans.
 4. Remove sediment controls. Replace any forest retention signage in poor condition.
 5. Hold post-construction meeting with County inspectors to ensure compliance with PCP.
- G. Post-Construction Meeting**
 Upon completion of construction, Eco-Science Professionals, or another qualified professional designated by the developer, will verify the County that construction has been completed and signage for a post-construction meeting to review the project site. The meeting will allow the County inspectors to verify that all forest retention areas have been properly restored and that all post-construction protection measures (permanent signage) have been installed.
- Post-Construction Management Plan**
 The post-construction management plan will further ensure that all Forest Conservation Element Areas are maintained. The developer will be responsible for implementation of the post-construction management plan.
- The following items will be incorporated into the plan for the subject property:
- A. Signage**
 Signage indicating the limits of the forest retention areas shall be installed.



Eco-Science Professionals, Inc.
 CONSULTING ECOLOGISTS

MD DNR Qualified Professional
 USACOE Wetland Delineator
 Certification # WDC993MD06100448

JOHN P. CANOLES



FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELKLOTT CITY, MARYLAND 21242
 (410) 461-3295

NO.	REVISION	DATE
1	REVISE REMAINING 38' UNITS TO 40' UNITS	9/9/19
2	ADD NEW RAINGARDEN PLANTER BOX FOR LOTS 285-292 & 365-371 AND REVISE PLANTER BOX FOR LOTS 314-333	9/9/19
3	REVISED 38' TOWNHOUSE UNITS TO 40' (WHERE POSSIBLE) & FLIPPED END UNIT DRIVEWAY LOCATIONS WHERE POSSIBLE.	1/18/18

Owner
 Kellogg-CCP, LLC
 c/o David P. Scheffner, Jr.,
 Managing Member
 100 West Road, Suite 304
 Towson, Maryland 21204
 Ph: 410-296-3800

Developer
 Preston - Scheffner Properties
 100 West Road, Suite 304
 Towson, Maryland 21204
 Ph: 410-296-3800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development
 Chief, Development Engineering Division
 Director, Department of Planning and Zoning

5/20/20
 5/29/20
 Date

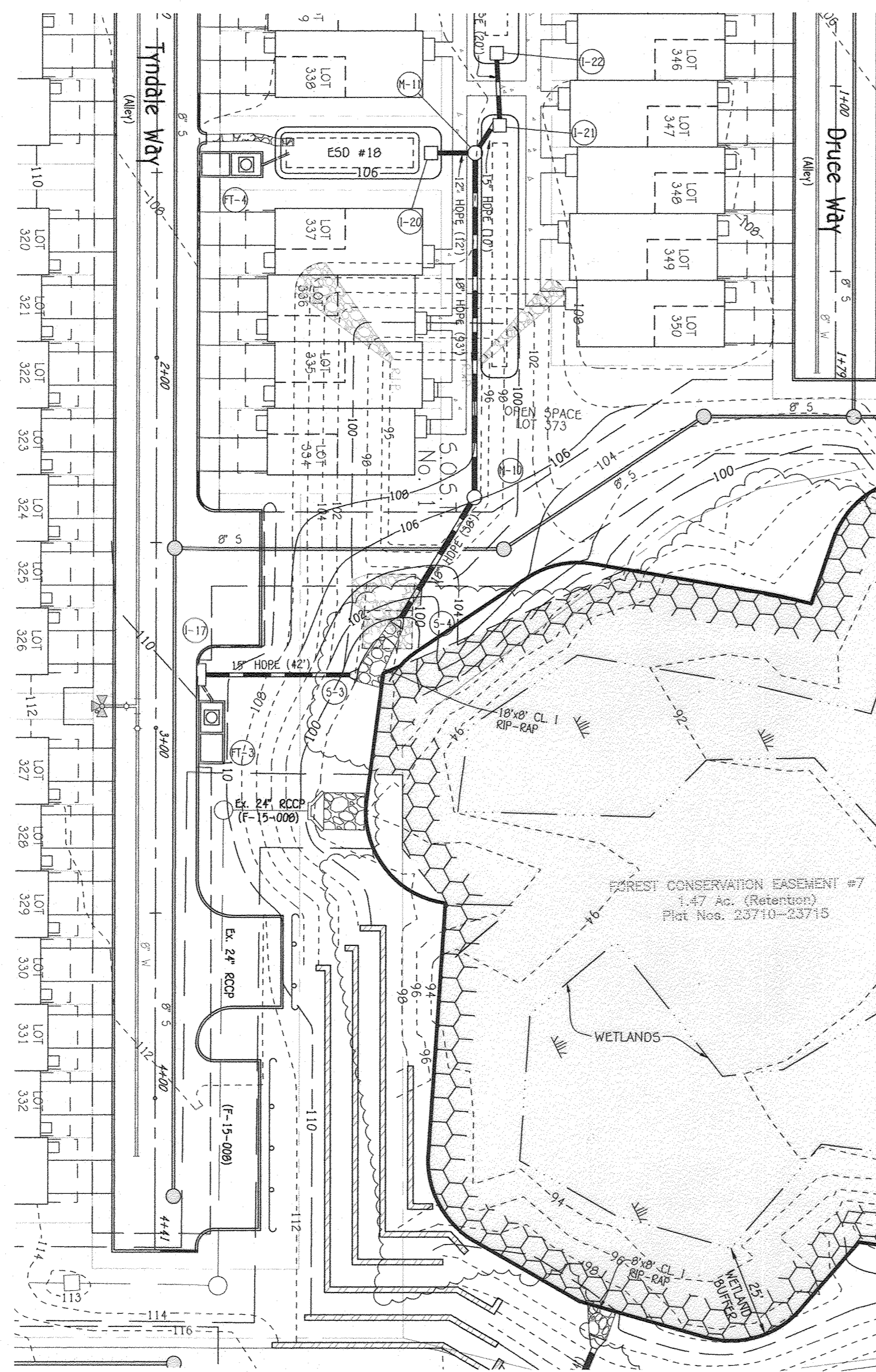
SUBDIVISION	SECTION/AREA	LOT Nos.
OXFORD SQUARE	---	246 - 371
PLAT Nos.	BLOCK NO.	ZONE
24357-24362	---	TOD
TAX/ZONE	ELEC. DIST.	CENSUS TR.
38	1st	601101

REVISED
FOREST CONSERVATION PLAN
OXFORD SQUARE
 "A Howard County Green Neighborhood"
 "RIVER OVERLOOK"
 Lots 246 Thru 371 & Open Space Lots 372 Thru 375 and Open Space Lot 376
 (Being A Resubdivision of Parcels "Z", "E-E" & Open Space Lot 376, As Shown On Revision Plat Entitled "Green Neighborhood" Parcels "Z", "E-E" And Open Space Lot 376
 Recorded Among The Land Records Of Howard County, Maryland As Plat Nos. 23896 Thru 23997)

Tax Map No.: 38
 First Election District
 Scale: As Shown
 Date: Sept. 9, 2019
 Sheet 28 Of 40

Zone: TOD
 Grid No.: 20
 Parcel No.: 1003
 Howard County, Maryland

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET



FINAL GRADING @ 5.0 S.T. No. 1



FINAL GRADING @ 5.0 S.T. No. 2

NOISE MITIGATION BY HOME CONSTRUCTION

WINDOW AND DOOR STC RATING REQUIREMENTS ARE PRESENTED IN TABLE 7 BY LOT NUMBER. REQUIREMENTS ARE PRESENTED FOR EACH LOT LOCATION'S NOISE IMPACT LEVEL AND APPLY TO EITHER OF THE TWO TOWNHOUSE MODELS (AVAILABLE FOR THE DEVELOPMENT) CHOSEN FOR THAT PARTICULAR LOT.

TABLE 7: WINDOW AND DOOR STC RATING REQUIREMENTS BY LOT NUMBER

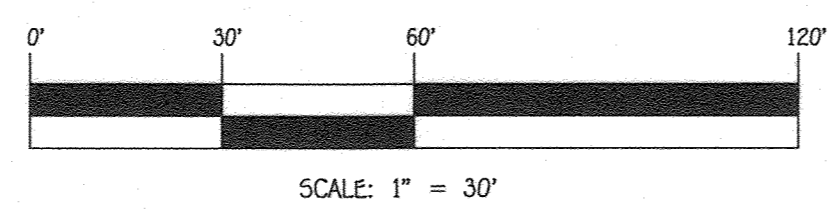
LEVEL OF NOISE IMPACT (dba DNL)	TOWNHOUSE LOT NUMBER	BUILDING ELEMENT STC RATING			
		SINGLE HUNG OPERATING WINDOWS	FIXED WINDOWS	SLIDING GLASS DOORS	FOYER DOORS
65 - 67	318-320, 337, 338, 346-349, 351-353	28 (Standard)	28 (Standard)	27 (Standard)	22 (Standard)
68 - 69	316, 317, 339-341, 344, 345, 354, 355	33	33	29	30
70 - 73	314, 315, 342, 343, 356, 357, 371	36	36	34	30

TOWNHOUSES IMPACTED BY NOISE LEVELS BETWEEN 70-73 dba DNL ALSO REQUIRE RESILIENT CHANNEL TO BE INCLUDED IN THE CONSTRUCTION OF THEIR EXTERIOR WALL ASSEMBLY WHEN BUILT WITH A VINYL SIDING EXTERIOR. RESILIENT CHANNEL MUST BE INCLUDED IN THE CONSTRUCTION OF ALL EXTERIOR WALLS OF A TOWNHOME WITH VINYL SIDING. THE VINYL SIDING EXTERIOR WALL SHOULD BE OF THE FOLLOWING CONSTRUCTION:

- ONE LAYER 1/2" DRYWALL
- 1/2" RESILIENT CHANNEL SPACED 24" ON-CENTER
- R-19 INSULATION
- 2x6 WOOD STUDS
- 3/4" EXTERIOR OSB SHEATHING
- VINYL SIDING

ALTERNATIVELY, IF TOWNHOUSES IMPACTED BY NOISE LEVELS BETWEEN 70-73 dba DNL ARE BUILT WITH A BRICK FACADE EXTERIOR, RESILIENT CHANNEL DOES NOT NEED TO BE INCLUDED IN THE ASSEMBLY. IF TOWNHOUSES ARE CONSTRUCTED WITH THE SPECIFIED STC RATINGS AND PROPER EXTERIOR WALL CONSTRUCTION TECHNIQUES, INTERIOR NOISE LEVELS WILL BE MAINTAINED AT 45 dba DNL AS REQUIRED BY HUD.

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
---	EXISTING TREELINE
---	WETLANDS BUFFER
---	WETLANDS LIMITS
---	FLOODPLAIN LIMITS
E50 #	STORMWATER MANAGEMENT DEVICE
---	STORM DRAIN
○	STREET LIGHT (proposed)
○	STREET LIGHT (existing)
○	STREET TREE (proposed)
○	STREET TREE (existing)
---	PROPOSED GARDEN BENCH
---	PROPOSED BRICK PIER & SITE WALL
---	PROPOSED MAILBOX BANK
○	BORING LOCATION
---	PROPOSED 1-1/2" WHC
---	PROPOSED 4" SHC



AS-BUILT CERTIFICATION

NOTE: There is no "AS-BUILT" information provided on this sheet.

[Signature]
Date

Revision Purpose Note:
The Purpose of This Revision is To Change the Remaining 38 Ft. Townhouses to 40 Ft.

NO.	REVISION	DATE
1	REVISE UNITS ON LOTS 285-292 FROM 38' UNITS TO 40' UNITS & ADD NEW RAINGARDEN PLANTER BOXES	9/9/19
2	REVISED 38' TOWNHOUSE UNITS TO 40' (WHERE POSSIBLE) & FLIPPED END UNIT DRIVEWAY LOCATIONS WHERE POSSIBLE.	1/18/18

ENGINEER'S CERTIFICATE
"I certify that the development and erosion control represents a practical and workable plan based on the knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."
Signature: *[Signature]* Date: 9/10/19

DEVELOPER'S CERTIFICATE
"I/we certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance of a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."
Signature: *[Signature]* Date: 9-24-19

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
[Signature] 9/10/19
Howard SCD

Owner
Kelllogg-CCP, LLC
c/o David P. Scheffnacker, Jr.
Managing Member
100 West Road, Suite 304
Towson, Maryland 21204
Ph: 410-296-3800

Developer
Preston + Scheffnacker Properties
100 West Road, Suite 304
Towson, Maryland 21204
Ph: 410-296-3800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development *[Signature]* 5/20/20 Date
Chief, Development Engineering Division *[Signature]* 5-20-20 Date
Director, Department of Planning and Zoning *[Signature]* 5-22-20 Date

SUBDIVISION: OXFORD SQUARE
SECTION/AREA: ---
LOT Nos.: 246 - 371

PLAT Nos.: 24357-24362
BLOCK NO.: ---
ZONE: TOD
TAX/ZONE: 38
ELEC. DIST.: 1st
CENSUS TR.: 601101

REVISED FINAL GRADING PLAN AND NOISE MITIGATION REQUIREMENTS
OXFORD SQUARE
"A Howard County Green Neighborhood"
"RIVER OVERLOOK"
Lots 246 Thru 371 & Open Space Lots 372 Thru 375 and Open Space Lot 378
(Being A Resubdivision Of Parcels "Z", "E-E" & Open Space Lot 376, As Shown On Revision Plat Entitled "Green Neighborhood" Parcels "Z", "E-E" And Open Space Lot 376 Recorded Among The Land Records Of Howard County, Maryland As Plat Nos. 23896 Thru 23897)

Tax Map No.: 38 Grid No.: 20 Parcel No.: 1003
First Election District: Towson, Maryland
Scale: As Shown
Date: Sept. 9, 2019
Sheet 29 Of 40

GREEN NEIGHBORHOOD CHECKLIST:

Credit No.	Credit	Champion (Name, Role)	Requirement	Site Development Plan Strategies	Documentation Location	Points	Points
A Innovative / Integrated Design Process							
A-1	Green Development Plan	HCM/Planners	Show how plans meet criteria, includes checklist, natural resource inventory and energy analysis	Provide documentation	GN Report GN Plan	4	4
A-2	Interdisciplinary Project Team	HCM/Planners	Includes U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) Accredited professional, ecologist / environmental professional / landscape architect, and engineer	The design team includes a LEED AP professional, an ecologist, a civil engineer, an architect and landscape architect	GN Plan	4	4
A-3	Third Party Certification	HCM/Planners	Confirmation of credits by independent LEED accredited professional	Alexander Design Studio	GN Report GN Plan	4	4
A-4a	Innovative Design A	HCM/Planners	Green Streets	Green Streets	GN Report SDR-16-052 Sheet 3, 4	1	1
A-4b	Innovative Design B	HCM/Planners	Priority Parking for Fuel Efficient Cars	Reserve 5% for Priority Parking for Fuel Efficient Cars	GN Report GN Plan SDR-16-052 Sheet 3, 4	1	1
A-4c	Innovative Design C	HCM/Planners	Compact Development	Residential Development w/ it exceed 20 DU/AC	GN Report GN Plan	1	1
A-4d	Innovative Design D	HCM/Planners	Walkable Streets	More than 80% building frontage oriented towards public spaces;	GN Report GN Plan	1	1
B Location, Linkages & Community Context							
B-1a	Redevelopment Site (Brownfield)	HCM/Planners	Reuse of previously developed site (minimum 25% existing impervious, with sliding scale for credits based on amount of % impervious)	More than 25% area previously developed (former sand and gravel operation)	GN Plan Reference: Sketch Plan (S-15-001)	4	2
B-1b	Redevelopment Site (Brownfield)	NA	Brown field cleanup of redevelopment site	NA	NA	6	0
B-2	Historic Buildings	NA	Preserve, restore or rehabilitate historic properties	NA	NA	4	0
B-3a	Transit Access & Amenities for Reduced Auto Dependence (Stop)	HCM/Planners	Site is served by transit stop within 1/2 mile (1 point) or 1/4 mile (2 points) walk from property	Private Shuttle Service w/ 2 stops (80% DU within 1/4 mile walking distance)	GN Plan Reference: Sketch Plan (S-15-001) F-15-008	2	2
B-3b	Transit Access & Amenities for Reduced Auto Dependence (Other)	HCM/Planners	Provide county specified transit shelter w/ benches and lighting at transit stop within 1/2 mile of property and provided pedestrian link to stop if none currently exists	Provide H&C transit approved shelter for private shuttle service	GN Plan Reference: SDR-13-068	4	4
B-4	Proximity to Community Resources	NA	Quest for 1/2 mile proximity to existing or proposed community resources such as schools, parks, library, post office, etc.	NA	NA	5	0
C Compact, Complete & Connected Development							
C-1	Diversity of Uses	HCM/Planners	1 point per different landuse; minimum 100 of for each non-residential per DU. Minimum of 130,000SF each of office, institutional and civic use, per 1,306 DU	Provide 3 Uses: Institutional, Civic and Office	GN Plan SDR-16-052 Sheet 5-6 References: Sketch Plan (S-15-001)	3	3
C-2	Planned Service Area	HCM/Planners	Locate the project within the Planned Service Area	The project is within the Planned Service Area	GN Plan	5	5
C-3a	Pedestrian System (Path)	HCM/Planners	Provide an off-site path w/ trail system with 2 connections to internal or external sidewalk, with minimal environmental impacts, long-term maintenance	Provide a shared use path system	GN Plan GN Report SDR-16-052 Sheet 5-6 References: Sketch Plan (S-15-001)	2	2
C-3b	Pedestrian System (Connections)	NA	Provide an off-site path w/ trail connection	NA	NA	2	0
C-3c	Pedestrian System (Amenities)	HCM/Planners	Provide at least 10 different pedestrian experience features	Provide pedestrian amenities at trailheads, the lawn, school and residential areas	GN Plan SDR-16-052 Sheet 17-19 References: Sketch Plan (S-15-001)	2	2
C-4	Connected On-site Street Network	HCM/Planners	Provide a gridded street network	More than 75% connected streets	GN Plan GN Report	2	2
C-5	Parking does not exceed Required Minimum	HCM/Planners	Surface parking lots do not exceed required parking ratio (1 point); plan takes advantage of shared parking provisions parking structure provided (in deck or beneath building, does not include garages w/ in individual units) (4 points)	Provide common parking structures (4 points)	GN Plan Reference: Sketch Plan (S-15-001)	4	4
C-6	Exceed Minimum Open Space Requirements	HCM/Planners	1 point for every 5% above required minimum open space for the TOD zone; 1 point for every 10% of non-bulkable H&C parcels above 50% of the site (up to 3 points)	Provide more than 25% increase in amenity space above the required minimum amenity space (TOD zoning regulations)	GN Plan GN Report SDR-16-052 Sheets 5, 6, 31 Reference: Sketch Plan (S-15-001)	5	5
C-7	Green Spaces and Amenity Areas	HCM/Planners	Open space along public/private roads available for public use	Publicly accessible open space w/ it be provided at the Lawn and Farm community building on Parcel 1 and the community poolhouse and pool on OS Lot #107.	GN Plan Reference: Sketch Plan (S-15-001) SDR-13-068 SDR-15-074	2	2

D Stream Restoration or Wetland Creation or Restoration	EcoScience	Restoration of degraded on-site stream channel on-site restoration of degraded wetlands (sliding scale based on % of length of stream restored and % of acres of wetland created or restored)	Provide wetland restoration for Wetland 17 (41-77,005 SF)	References: Sketch Plan (S-15-001) SDR-15-045	16	16	
D-2	Habitat Management Plan	EcoScience	Prepare and implement plan that identifies, conserves and enhances natural resources and ecological communities (may include clean up of debris, removal of invasives, etc.)	Provide Habitat Management Plan	References: Sketch Plan (S-15-001) SDR-15-045	4	4
D-3	25% Steep Slope Preservation	NA	Protect all existing steep slopes as defined by County regulations; provide 25' minimum buffer at top of 25% slope (2 points)	NA	NA	2	0
D-4	15% Slope Preservation	FOCOv/ HCM/Planners	Protect existing 15%+ slopes (protect minimum 1/2 acre, with sliding scale based on area or % protected)	Preserve between 26-50% of 15%-24.9% slopes	GN Plan	4	2
D-5	Minimize Grading and Site Disturbance	FOCOv/ HCM/Planners	Minimize limit of disturbance: leave at least 20% of site undisturbed (1 point), 30% (2 points), 40% (3 points); balance cut and fill on site (2 points); retaining walls 3-5.9' (deduct 1 point) retaining walls 6-8.9' (deduct 2 points), walls 9' and higher (deduct 3 points), no new created steep slopes over 25% (1 point); amend soil nutrients in turf and planting areas (1 point)	Balance Cut and Fill on entire site-- 2 points Minimize Retaining Walls-- 0 points Leave more than 20% of site undisturbed -- 1 point	GN Plan GN Report	5	4
D-6	Exceed Minimum Forest Conservation Requirements	EcoScience FOCOv/ HCM/Planners	1 point for every 10% of existing forest retained above break even point; 1 point for every 10% of on-site forest planted in excess of afforestation obligation	NA	NA	5	0
D-7	Save Trees above 12" Minimum Caliper	NA	1 point for protecting each 25% of all specimen trees (does not include specimen trees within forest conservation area or within forests that are being cleared)	NA	NA	4	0
D-8a	Exceed Minimum Stream Buffer Requirements	FOCOv/ HCM/Planners	75' buffer required for perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA	75' buffer required for perennial and intermittent streams inside PSA, 100' buffer required for perennial and intermittent streams outside PSA	GN Plan Reference: Sketch Plan (S-15-001) F-15-008	RECD	RECD
D-8b	Exceed Minimum Stream Buffer Requirements	EcoScience FOCOv/ HCM/Planners	2 points for each additional 25' of buffer provided in excess of requirements in D-8a outside wetland buffer or floodplain	Provide 150 FT Stream Buffer (75 FT enhanced buffer) - 6 points	GN Plan Reference: Sketch Plan (S-15-001) F-15-008	6	6
D-9	Exceed Minimum Wetland Buffer Requirements	EcoScience FOCOv/ HCM/Planners	2 points for each additional 25' of wetland buffer buffer outside stream buffer or floodplain	NA	NA	4	0
D-10	Floodplain Buffer	NA	1 point for each 25' of buffer to floodplain outside required or provided wetland or stream buffer	NA	NA	2	0
E Site Landscape Improvements							
E-1	Landscape exceeds Minimum Requirements and Reduces Heat Island Effect	NA	1 point for each 10% increase in number of plants (must be native plants) provided above total minimum required in Landscape Manual; retain or plant trees on south and west sides of buildings and increase trees within parking areas and along sidewalks and paths	Provide 20% increase in Landscape Requirements	GN Report SDR-16-052 Sheets 17-19	5	2
E-2	Native Plants	NA	1 point for 80%, 2 points for 90%, 3 points for 100% of all plants native to within 200 miles of site	NA	NA	3	0
E-3	No Invasive Plants	HCM/Planners	No plants that are on DNR, USDA or Cooperative Extension Service lists of invasive plants	Will not plant invasive plants	GN Plan SDR-16-052 Sheets 17-19	RECD	RECD
E-4	Limit Turf	HCM/Planners	Turf does not exceed 30% of unpaved site (1 point); no turf on new created steep slopes 25%+ or in densely shaded areas (1 point); non-turf areas must be planted in native vegetation	Will not plant conventional turf in densely shaded areas and on newly created >25% steep slopes	GN Plan GN Report SDR-16-052 Sheets 17-19	2	1

F Water Conservation / Efficiency / Management	FOCOv/ HCM/Planners	Collect and make use of water runoff from minimum 50% of roof area; provide absorption system and monitoring device and maintenance / management program <th>Provide rainwater harvesting for school and recreational fields <th>Reference: Sketch (S-15-001) SDR-12-075</th> <th>5</th> <th>5</th> </th>	Provide rainwater harvesting for school and recreational fields <th>Reference: Sketch (S-15-001) SDR-12-075</th> <th>5</th> <th>5</th>	Reference: Sketch (S-15-001) SDR-12-075	5	5	
F-1	Rainwater Harvesting System	Straughan	Collect and make use of water runoff from minimum 50% of roof area; provide absorption system and monitoring device and maintenance / management program	Provide rainwater harvesting for school and recreational fields	Reference: Sketch (S-15-001) SDR-12-075	5	5
F-2	Water-Permeable Walkways	NA	Use water permeable materials in 50% or more of pathways; provide maintenance program	NA	NA	4	0
F-3a	Low Impact Development (LID) Stormwater Treatment	FOCOv/ HCM/Planners	Meets minimum Design Manual requirements; no dry ponds allowed	No dry ponds	GN Plan SDR-16-052 Sheets 7-12	RECD	RECD
F-3b	Low Impact Development (LID) Stormwater Treatment	FOCOv/ HCM/Planners	Exceeds Design Manual requirements; maximize use of bioretention (esp. for parking lots), rain gardens, rain barrels, stormwater wetlands, green roof, etc.	Will provide 51% water quality volume stored and infiltrated on-site	GN Plan GN Report SDR-16-052 Sheets 7-12	8	6
G Energy Efficiency							
G-1	Light Pollution Reduction	FOCOv/ HCM/Planners	Shield all site lighting fixtures to reduce light and spillover below county code requirements; install sensors or timers on all exterior site lighting fixtures	NA	NA	4	0
G-2	Solar Orientation	NA	Orient 50% (1 point) or 75% (2 points) or 100% (3 points) of buildings to make available for solar strategies	NA	NA	3	0
G-3	Infrastructure Energy Efficiency	NA	Select high efficiency fixtures for parking lot and other site light fixtures	Prepare Structured Parking Garages to be Photovoltaic (PV) Ready	GN Report (SDR-15-053)	6	0
H Materials Beneficial to the Environment / Waste Management							
H-1	Environmentally Preferable Site Products	Straughan FOCOv/ HCM/Planners	Select products from a list including recycled materials (concrete, asphalt, trees, plastic, etc.); materials with recycled content, salvaged or engineered materials;	NA	NA	8	0
H-2	Reduce Heat Island Effect of Paving	NA	Use light-colored or high albedo materials and/or porous paving with a minimum Solar Reflectance Index of 0.6 or over for at least 30% of the site hardscape	NA	NA	2	0
H-3	Site Construction Waste Management	Straughan	Develop and implement a construction waste management plan to divert, reuse, recycle or reduce the amount of site material sent to the landfill by 25% (2 points) or 50% (3 points) or 75% (4 points)	Divert 75% or more site construction waste	GN Report	4	4
H-4	Regionally Provided Materials	Straughan FOCOv/ HCM/Planners	20% of common and public infrastructure materials from within 200 miles	Use regionally produced materials for 20% of total site materials	GN Report	3	3
I Operations and Maintenance Education							
I-1	HOA Documents	Straughan	Includes information about green site features and maintenance requirements in HOA documents	Provide HOA document	Reference: SDR-15-053	RECD	RECD
I-2	Maintenance Manual for Owner / HOA / Manager	Straughan	Provide a manual that includes information on how to maintain the green features of the site, including paving materials, landscaping and stormwater management LID and encourages additional green activities such as recycling, gardening, etc.	Provide manual	Reference: SDR-15-053	RECD	RECD
I-3	Public Awareness of Sustainable Community	Straughan; HCM	Develop a program to advise the environmental benefits of the community	Implement public awareness strategy	GN Report SDR-16-052 Sheets 17-19 Reference: SDR-13-068	RECD	RECD
TOTAL GREEN NEIGHBORHOOD SITE POINTS					167	90	
Number of points required to obtain Green Neighborhood Allocations					90		

Third Party Certification
By affixing my signature below, the undersigned does hereby declare and affirm to Howard County that the targeted Green Neighborhood Site credits and point total, as specified in this Green Neighborhood Site Compliance Checklist, are reasonable and achievable.

Signature: Charles Alexander Title: Alexander Design Studio Date: 8-29-17
Name: Charles Alexander Organization: Alexander Design Studio
Submission (mark "X" where applicable): Site Development Plan (SDP-16-052)

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

Beth Burgeon
CHIEF, RESOURCE CONSERVATION DIVISION
DATE: **10-10-17**

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.

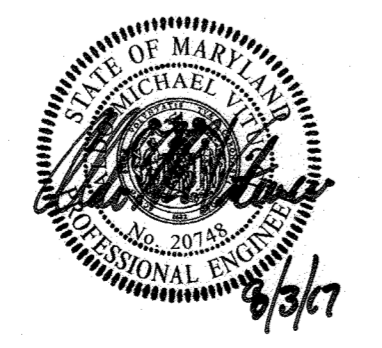
Math J. Frizzimmons **10007912** **8/31/17**
MATTHEW J. FRIZZIMMONS, LEED AP LEED ACCREDITATION NUMBER DATE

A5-BUILT CERTIFICATION
NOTE: There is no "A5-BUILT" information provided on this sheet.

[Signature] *[Signature]*
Date: 8/31/17

hord | coplan | macth
750 E. Pratt Street, Suite 1100 Baltimore MD 21202
410.837.7311 | www.hcm2.com
Hord Coplan Macth, Inc. 2014

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 461-2295



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] **7-25-17**
Date: 7-25-17
Chief, Division of Land Development **KB for DB**

[Signature] **9/5/17**
Date: 9/5/17
Chief, Development Engineering Division

[Signature] **10-10-17**
Date: 10-10-17
Director - Department of Planning and Zoning

GREEN NEIGHBORHOOD PLAN
OXFORD SQUARE
"A Howard County Green Neighborhood"
"RIVER OVERLOOK"
Lots 246 Thru 371 & Open Space Lots 372 Thru 375 and Open Space Lot 378
(Being A Resubdivision Of Parcels "Z", "E-E" & Open Space Lot 376, As Shown On Revision Plat Entitled "Green Neighborhood" Parcels "Z", "E-E" And Open Space Lot 376 Recorded Among The Land Records Of Howard County, Maryland As 20946 Thru 23997)
Zoned: TOD

Tax Map No.: 30 Grid No.: 2D Parcel No.: 1003
First Election District: Howard County, Maryland
Scale: As Shown
Date: August 1, 2017
Sheet 30 of 40

SUBDIVISION	SECTION/AREA	LOT Nos.
OXFORD SQUARE	---	246 - 371
PLAT NO.	BLOCK NO.	ZONE
24357 - 24362	---	TOD
TAX/ZONE	ELEC. DIST.	CENSUS TR.
30	1st	601101

THERE IS NO "A5-BUILT" INFORMATION PROVIDED ON THIS SHEET

I:\2009\0501\0501\SDP - Parcel "A-A" and "Z" 09/04 Sheet 30-31 GN Sheets.dwg, C-30_SDP-16-052, 8/29/2017 7:34:46 AM, 1:1

GREEN NEIGHBORHOOD NOTES:

- A-2 THE DESIGN AND DEVELOPMENT TEAM INCLUDES A LEED AP (MATTHEW FITZSIMMONS- HORD COPLAN MACTH), ENVIRONMENTAL PROFESSIONAL (JOHN CANOLES- ECO-SCIENCE PROFESSIONALS, INC.), LANDSCAPE ARCHITECT (JOSH KILRAIN- HORD COPLAN MACTH) AND AN ENGINEER (ALDO VITUCCI PE- FISHER COLLINS & CARTER)
- A-3 THE THIRD PARTY CERTIFICATION IS PROVIDED BY CHARLES ALEXANDER, LEED-AP OF ALEXANDER DESIGN STUDIOS.
- B-1a THE 118.5 ACRE DEVELOPMENT CONSISTS OF 30.4 ACRES OF PREVIOUSLY DEVELOPED LAND (25.7% 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, EXCEPT FOR THE FURTHEST UNITS LOCATED ON PARCELS 'E-E' AND 'Z'.
- 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), 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 (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

	Overall Development	SDP
Total Number of Off-Street Parking Spaces:	1,226 Spaces	25 Spaces
Total Number of Proposed Preferred Parking Spaces:	65 Spaces	2 Spaces
Percent of Preferred Parking Spaces:	5.3%	8.0%

Note: Overall Development calculations summarize all filed Site Development Plans. This plan provides 25 perpendicular off-street parking spaces.

A-4c Compact Development

	Complete Build-Out	SDP
Total Dwelling Units:	1,306 DU	51.2 AC
Residential Land Area:	51.2 AC	25.50 DU/AC

Note: This SDP proposes constructing 126 townhouses.

A-4d Walkable Streets

	Complete Build-Out	SDP
Length of Buildings Frontage Oriented Towards the Public Space:	13,882 FT	2,268 FT
Total Length of Building Frontage:	15,866 FT	2,268 FT
% of Building Frontage Oriented Towards the Public Spaces:	87.5%	100.0%
Length of Building Frontage with Service or Garage Openings:	1,420 FT	0 FT
Length of Building Frontage Oriented Towards Public Spaces (Including Service and Garage openings):	15,302 FT	2,268 FT
% of Building Frontage with Service or Garage Openings:	9.3%	0.0%

B-1a Redevelopment Site

Gross Site Area:	118.5 Acres
Area of Existing Development (Acres):	30.4 Acres
Percent of Previously Developed:	25.7%

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

	Total Number of Qualifying Units	Percent of all Units
Residential Buildings within 1/4 Mile (<1,320 FT)	1,267 DU	97%

All Buildings except the most distant building on Parcels 'Z' and 'E-E'.

Note: This SDP will build 19 DU further than 1/4 mile walk from the bus stop on Crowley Street.

C-1 Diversity of Uses

Residential Uses	Number of Units	Percent of Total Units
Apartments and Townhouses	1,306 DU	100%
Nonresidential Uses		
Office:	166,000 SF	127 SF/DU
Institutional:	95,747 SF	
Middle School Outdoor Classroom Space	2,500 SF	
Elementary School	117,222 SF	
Institutional Subtotal:	215,469 SF	165 SF/DU
Civic:	236,139 SF	
Recreational Playing Fields (School Site)	22,096 SF	
Northern Shared-Use Path (8 FT wide)	8,016 SF	
Southern Shared-Use Path (8 FT wide)	8,016 SF	
Civic Subtotal:	266,251 SF	204 SF/DU

Note: This SDP will contribute 6,982 SF of the Northern Shared Use Path. (This is 288 SF more than recorded at Sketch Plan), however only 5,776 SF of pathway counts towards this credit.

C-3a Pedestrian System (Paths and Trails)

Northern Shared Use Path:	Width of Path: 8 FT	Length: 2,762 FT (0.52 Miles)
Southern Shared Use Path:	Width of Path: 8 FT	Length: 1,002 FT (0.19 Miles)

Note: This SDP will construct 866 linear feet of the Northern Shared Use Path (36 feet longer than recorded at Sketch Plan), however only 722 linear feet of pathway counts towards this credit.

Street Name / ID	Street Length	Qualifying Street Length
Saint Margarets Boulevard	1,684 FT	1,684 FT
Banbury Drive	2,491 FT	2,491 FT
Southmoor Street	960 FT	960 FT
Dene Court	514 FT	514 FT
Crowley Street	1,136 FT	947 FT
Danvers Street	465 FT	465 FT
Beaumont Place	1,450 FT	1,450 FT
Dunstead Street	240 FT	- FT
Headley Street	120 FT	- FT
Pattison Street	120 FT	- FT
Road I	736 FT	736 FT
Alden Way	554 FT	554 FT
Marston Way	1,512 FT	928 FT
Road A	500 FT	- FT

Summary	
Total Street Length:	12,482 FT
Total Connected Street Length:	10,215 FT
Percent Connected Streets:	81.8%

Note: This development will extend Marston Way and build Road A.

C-5 Parking Does Not Exceed Required Minimum

Number of Spaces within a Common Parking Structure: 1,743 spaces

C-6 Exceed Minimum Open Space

Net Acreage:	107.41 AC
Required Amenity Space (TOD: 10% of Net Acreage):	10.74 AC
Provided Amenity Space:	16.77 AC
Percent Increase above the Minimum Required:	56.1%

Note: This SDP provides 53,915 SF of Amenity Space.

C-7 Green Spaces and Amenity Areas

Parcel	Road Frontage	Amenity Type	Amenity Area
Open Space 1: Lawn and Barn Parcel 'Y' (SDP-15-074)	4,108 FT (length along Banbury Drive)	Plaza: outdoor gathering and event space Barn: learning, meeting and performance space	9,148 SF (0.21 AC)
Open Space 2: Pool House and Pool O.S. Lot #107 (SDP-13-068)	4,138 FT (length along Dene Court)	Pool house, Pool, Fitness Room, and Warming Kitchen	11,282 SF (0.26 AC)

D-4 15% Slope Preservation

	GN Boundary
Total Area of Slopes 15-24.9%:	506,841 SF
Area of Undisturbed Slopes 15-24.9%:	200,866 SF
Percent of Undisturbed Slopes:	39.6%

Note 1: The area of undisturbed slopes is the summation of slopes impacted by the greatest extent of LOD's accumulated from the entire development.
2: Includes area of development per Sketch Plan and future environmental restoration work.

D-5 Minimize Grading and Site Disturbance

	Complete Build Out
Gross Area of Site:	118.5 AC
Existing Impervious Cover:	30.4 AC
Area of Site:	88.1 AC
Area of Site to Remain Undisturbed:	24.2 AC
Percent of Site to Remain Undisturbed:	27.5%
Ratio of Cut to Fill:	1.16 Ratio
Retaining Wall:	< 3 FT

Note 1: Complete Build Out Calculations are based on the aggregate greatest extent of LOD's from entire development.
2: No dirt will be imported or exported from Oxford Square.

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
Percent of Stream Buffer Outside Other Buffers:	68.2%

Beth Berger 10-10-17
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 8/31/17
MATTHEW J. FITZSIMMONS, LEED AP LEED ACCREDITATION NUMBER DATE

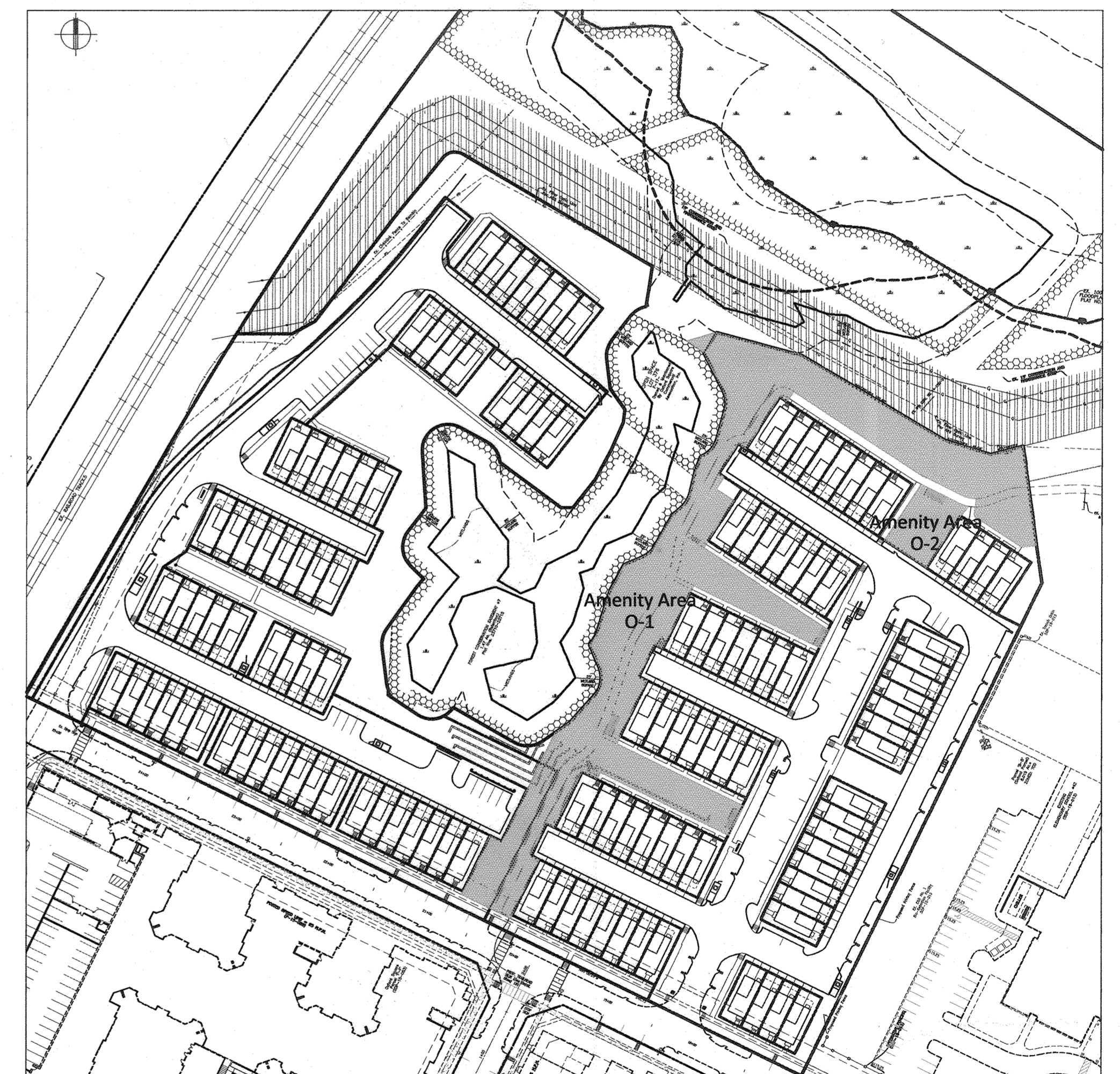
E-1 Landscaping

Plants Required	Shade Trees	Evergreen	Shrubs	Total	Percent
Number of Plants Required by Landscape Manual ¹	180	0	0	180	21.7
Number Excess Plants Required for GN Credit ²	39	0	0	39	
Landscape Manual and GN Requirements	219	0	0	219	

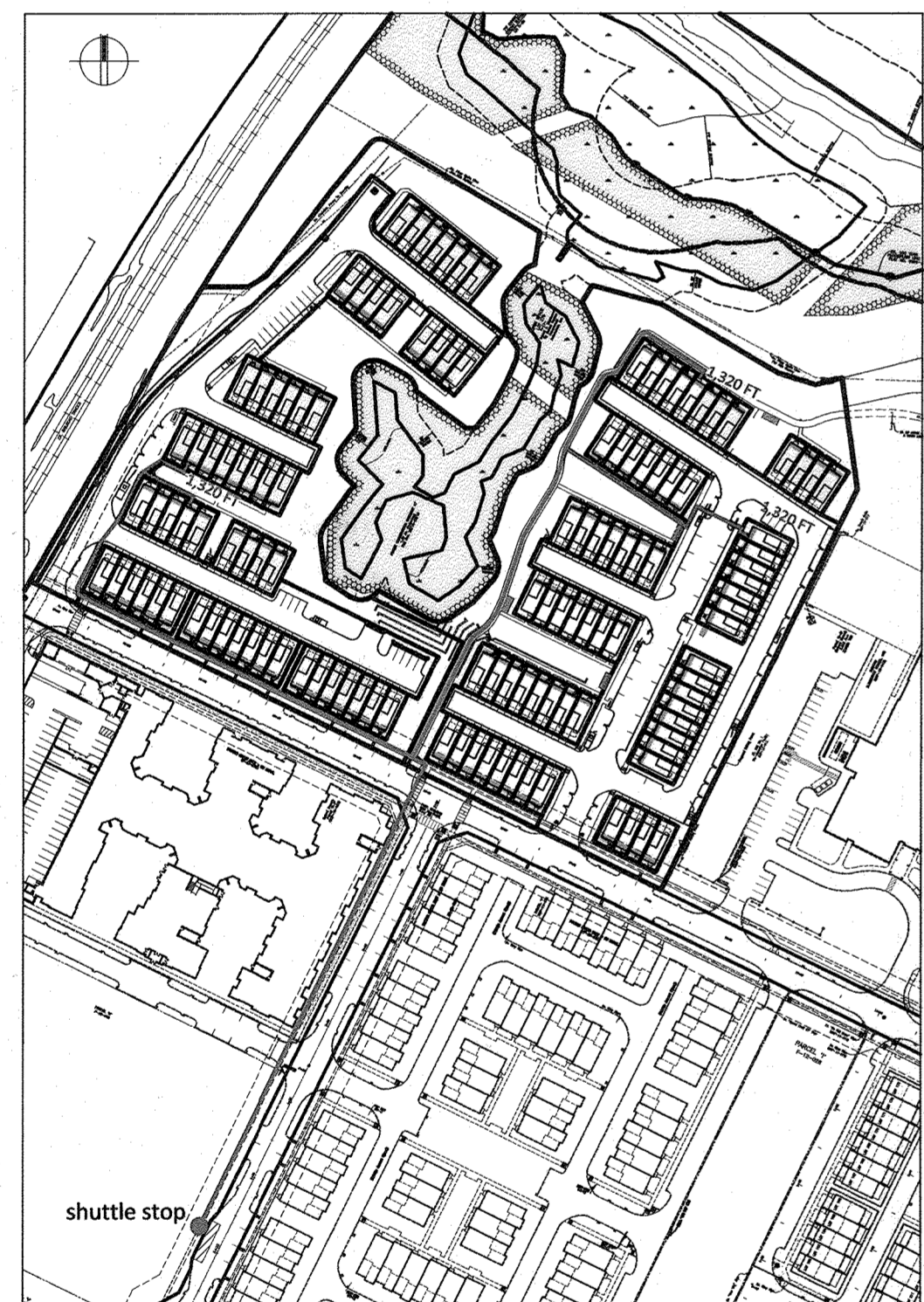
Plants Provided	Shade Trees	Shade Tree (Substitute)	Evergreen (Substitute)	Other Trees (Substitute)	Shrub (Substitute)	Total
Number of Plants Provided to Meet Landscape Manual	165	13.5	0	0	1.5	180
Number of Plants Provided to Meet GN Credit ³	68	0	0	0	0	68
Total Number of Plants Provided	233	13.5	0	0	1.5	248

Notes: 1. Number of Plants Required by Landscape Manual (Schedule A) excludes 12 trees credited by perimeter noise wall.
2. Number of Excess Plants Required for GN Credit includes 12 (Schedule A) + 126 (Schedule C) + 54 (Street Trees) = 192 Trees x 20% = 39 Shade Trees.
3. Required Shade Trees (27 AFA + 6 GTS + 12 ZSE + 3 USC + 36 TOD) = 66 shade trees.
4. Required Shade Trees (native) (31 LST + 6 OAR + 18 TDI + 22 UAN + 34 UVF/2 = 135 shade trees.
5. Shade Tree Substitute (11 PST + 7 MW + 6 CW + 3 PKW/2 = 13.5 shade trees.
6. Shrub Substitute (16 FW/30 = 1.5 shade tree.
7. Excess Native Trees (32 RBN + 29 POC + 9 OAR) = 68 native shade trees.
8. This plan provides 29 additional native shade trees over the project's 20% goal.
9. *Vimus americana* 'Jefferson' (UAJ) is a cultivar that does not qualify as a native shade tree to satisfy the Green Neighborhood Program.

C-6 Green Spaces & Amenity Area (Scale: 1" = 100')



B-3a & B-3b VICINITY MAP (Scale: 1" = 200')



GREEN NEIGHBORHOOD PLAN

OXFORD SQUARE

"A Howard County Green Neighborhood"
"RIVER OVERLOOK"
Lots 246 Thru 371 & Open Space Lots 372 Thru 375 and Open Space Lot 378
(Being A Resubdivision Of Parcels 'Z', 'E-E' & Open Space Lot 376, As Shown On Revision Plat Entitled "Green Neighborhood" Parcels 'Z', 'E-E' And Open Space Lot 376
Recorded Among The Land Records Of Howard County, Maryland As Plat Nos. 23896 Thru 23897)
Zoned: TOD

Tax Map No.: 38 Grid No.: 20 Parcel No.: 1003
First Election District: Howard County, Maryland
Scale: As Shown
Date: August 1, 2017
Sheet 31 of 40

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

KB for DB 9-25-17
Chief, Division of Land Development Date

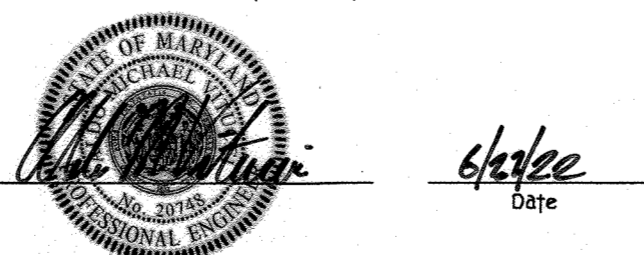
Chief 9-15-17
Chief, Development Engineering Division Date

Director 10-10-17
Director - Department of Planning and Zoning Date

SUBDIVISION	SECTION/AREA	LOT Nos.
OXFORD SQUARE	----	246 - 371
PLAT NO.	BLOCK NO.	ZONE
24357 - 24362	---	TOD
TAX/ZONE	ELEC. DIST.	CENSUS TR.
38	1st	601101

AS-BUILT CERTIFICATION

NOTE: There is no "AS-BUILT" information provided on this sheet.



Owner

Kellogg-CCP, LLC
c/o David P. Scheffnacker, Jr.,
Managing Member
100 West Road, Suite 304
Towson, Maryland 21204
Ph: 410-296-3800

Developer

Preston + Scheffnacker Properties
100 West Road, Suite 304
Towson, Maryland 21204
Ph: 410-296-3800

NO.	REVISION	DATE

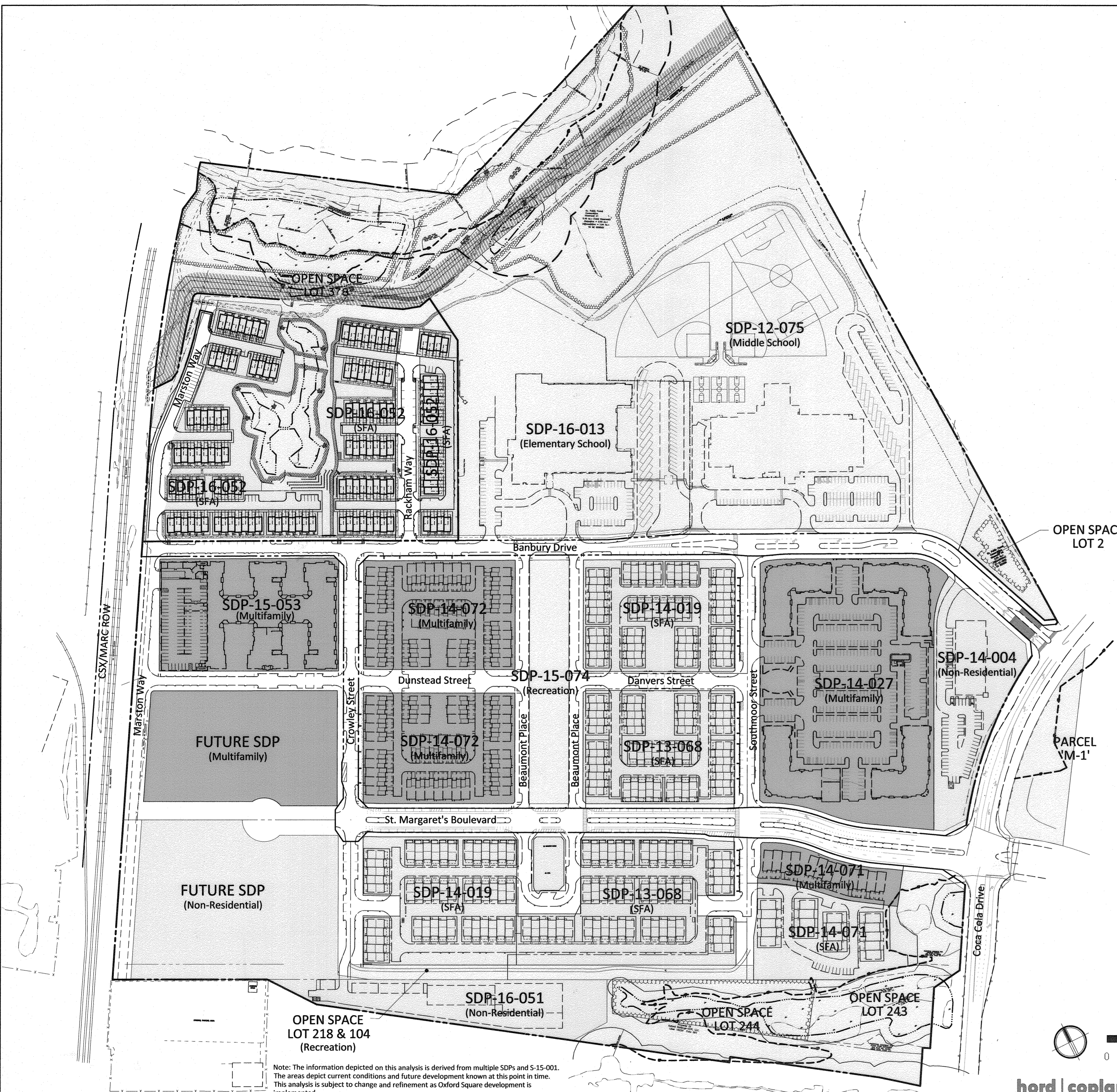
RESIDENTIAL DEVELOPMENT AREA CALCULATION

Gross Acre	129.53 Acres
Developable Acreage (Net Acre)	107.51 Acres
Permitted Residential Development Area (RDA) (50% of Developable Acreage)	53.76 Acres
Permitted Single-Family Attached Development Area (SFA) (40% of Permitted Residential Development Area)	21.50 Acres

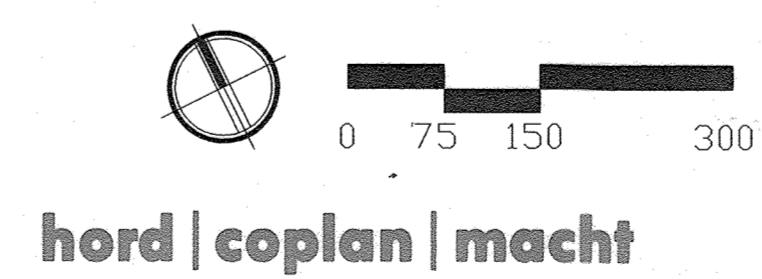
Residential Developments	Residential Development Area
SDP-14-027: Woodfield (Multifamily)	7.31 Acres
SDP-14-071: Lennar (Multifamily)	0.86 Acres
SDP-14-072: Lennar (Multifamily)	5.38 Acres
SDP-15-053: Preston (Multifamily)	3.26 Acres
FUTURE SDP: Parcel 'W' (Multifamily)	3.50 Acres
Total Multifamily Development Area:	20.31 Acres
SDP-13-068: Lennar (Single Family Attached)	6.63 Acres
SDP-14-019: Lennar (Single Family Attached)	5.80 Acres
SDP-14-071: Lennar (Single Family Attached)	2.06 Acres
SDP-16-052: Lennar (Single Family Attached)	6.70 Acres
Total Single Family Attached Development Area:	21.19 Acres
% of Permitted RDA:	39.4%
Total Residential Development Area:	41.50 Acres
% of Developable Acreage:	38.6%

ANALYSIS ASSUMPTIONS

- Residential Development Area:** Land area of which "no more than 50% of developable acreage excluding road right-of-way and open space devoted to residential buildings, parking and amenity spaces." (Section 127.4.F.2.b)
- Single-Family Attached Development Area:** Land area devoted to single-family attached (SFA) and shall "not occupy more than 40% of the residential land area within the project." (Section 127.4.B.8)
- Developable Acreage:** "Net Acre: An acre of land that includes no 100-year floodplain and no steep slopes existing at the time of subdivision." (Section 103.0)
- Right-of-Way:** "A strip or parcel of land designated for use as a street, highway, driveway, alley or walkway, or for any drainage or public utility purpose or other similar uses. For public streets, the right-of-way width shall be as required by the State for State roads and the Howard County Design Manual for County Roads." (Section 103.0)
Oxford Square clarifies the definition of Right-of-Way to include both private and public streets between the outer edge of associated walkways (sidewalks). Oxford Square excludes alleys and driveways from right-of-way as they functionally support residential parking.
- Open Space:** "A separate lot or area which provides for protection of the environment, for recreation or for public use, including public facilities such as schools, libraries, fire stations and parks as shown on the General Plan or hiking, biking and equestrian trails. Parking areas may be included within open space if accessory to an open space use." (Section 103.0)
Oxford Square clarifies the definition of Open Space to include land reserved for the protection of the environment and for general public use and recreation, such as the lawn space at Beaumont Place and the shared use path network.



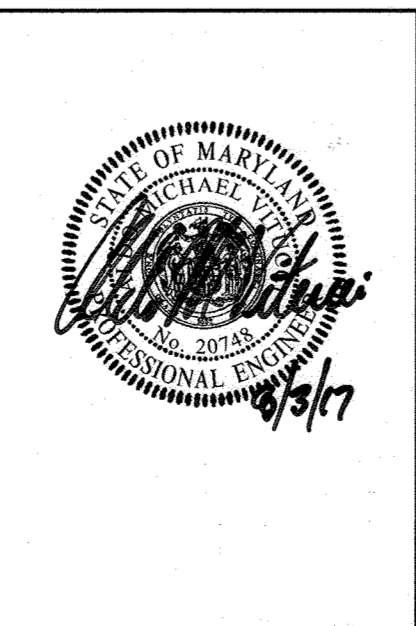
Note: The information depicted on this analysis is derived from multiple SDPs and S-15-001. The areas depict current conditions and future development known at this point in time. This analysis is subject to change and refinement as Oxford Square development is implemented.



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FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 461-1295

NO.	REVISION	DATE



AS-BUILT CERTIFICATION
 NOTE: There is no "AS-BUILT" information provided on this sheet.

[Signature]
 Date: 6/15/17

Owner
 Kellogg-CCP, LLC
 c/o David P. Scheffner, Jr.,
 Managing Member
 100 West Road, Suite 304
 Towson, Maryland 21284
 Ph# 410-296-3800

Developer
 Preston + Scheffner Properties
 100 West Road, Suite 304
 Towson, Maryland 21204
 Ph# 410-296-3800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 9-25-17
 Chief, Division of Land Development

[Signature] 4-15-17
 Chief, Development Engineering Division

[Signature] 10-10-17
 Director - Department of Planning and Zoning

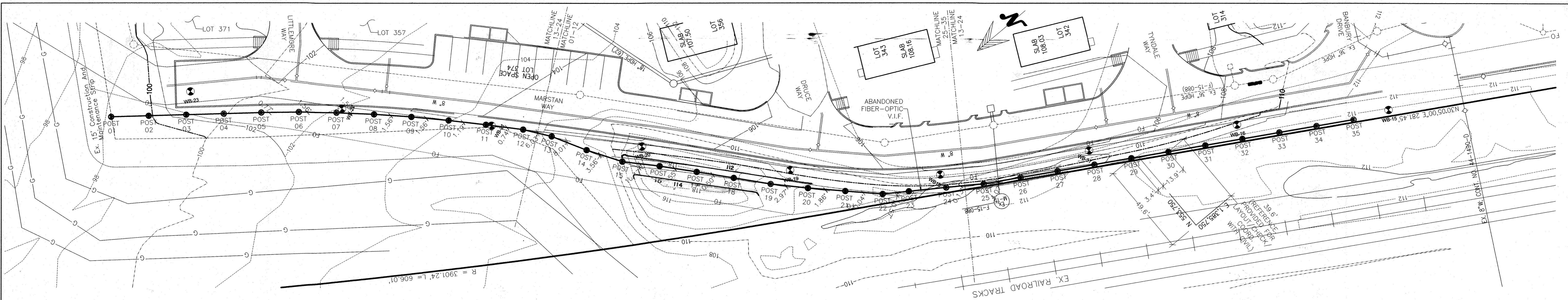
SUBDIVISION	SECTION/AREA	LOT Nos.
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PLAT NO.	BLOCK NO.	ZONE
24357-24362	---	TOD
TAX/ZONE	ELEC. DIST.	CENSUS TR.
38	1st	601101

RESIDENTIAL DEVELOPMENT AREA

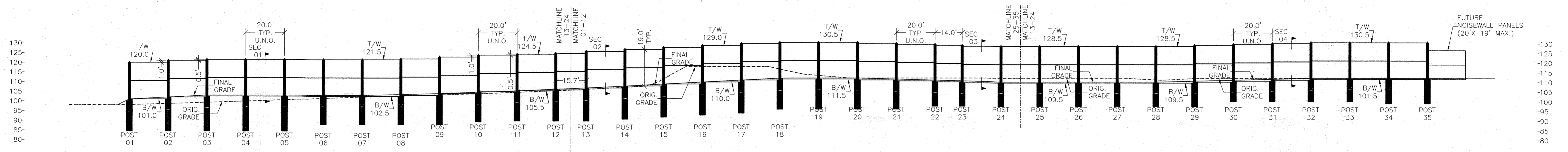
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Zoned: TOD
 Tax Map No.: 38 Grid No.: 20 Parcel No.: 1003
 First Election District: Howard County, Maryland
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 Sheet 32 Of 40

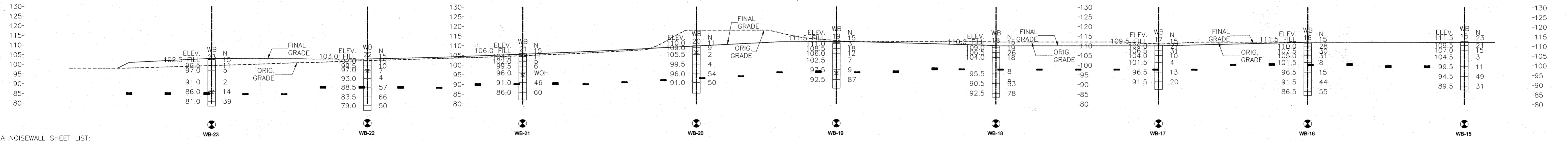
THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET SDP-16-052



OVERALL NOISEWALL PLAN VIEW



OVERALL NOISEWALL ELEVATION VIEW



ELEVATION OF SOIL BORINGS PROFILE

SOIL PROFILE/BORING INFO ABOVE IS SOLELY TO ILLUSTRATE THE BASIS OF DESIGN. FURTHER INVESTIGATION AND/OR REFERENCE TO PROJECT GEOTECHNICAL REPORTS SHOULD BE USED FOR CONSTRUCTION PLANNING. OBTAIN PROFESSIONAL ADVICE AS NEEDED.

HCEA NOISEWALL SHEET LIST:

- (33): OVERALL PLAN AND PROFILE, SOIL PROFILE, AND NOTES
- (34): PLAN AND PROFILE, NOISEWALL POSTS 01-12
- (35): PLAN AND PROFILE, NOISEWALL POSTS 13-24
- (36): PLAN AND PROFILE, NOISEWALL POSTS 25-35
- (37): NOISEWALL SECTIONS 1, 2, 3, AND 4
- (38): NOISEWALL DATA TABLE AND CONSTRUCTION SEQUENCE
- (39): NOISEWALL SHAFT AND POST CONSTRUCTION DETAILS
- (40): NOISEWALL PANEL CONSTRUCTION DETAILS

FOUNDATION AND NOISEWALL NOTES:

1. CONSTRUCTION TO COMPLY WITH CURRENT IBC, ACI, LOCAL CODES, RAILROAD CRITERIA (IF APPLICABLE), AND ALL PROJECT REQ'S.
2. GEOMETRY SHOWN IS BASED ON INFORMATION PROVIDED BY OTHERS. VERIFY CRITICAL DIMENSIONS (FOUNDATION LOCATIONS, ELEVATIONS, GRADES, ADJACENT UTILITIES, AND IMPROVEMENTS). RESOLVE ANY DISCREPANCY BEFORE PROCEEDING.
3. LOADS: DEAD, (COMPONENT WEIGHT). LIVE 100 PSF (SURCHARGE). GROUND SNOW LOAD 35 PSF. WIND DESIGN: 115 MPH, EXP. CAT. B. WIND 40 PSF MAX.

NOTES (CONT.):

SEISMIC DESIGN:
RISK CATEGORY, II (STANDARD, NON-CRITICAL STRUCTURE)
SEISMIC IMPORTANCE FACTOR, 1.0
MAPPED SPECTRAL RESPONSE ACC, $SS = 0.124$, $SI = 0.051$
SITE CLASS, D.
SPECTRAL RESPONSE COEFFICIENTS, $SDS = 0.132$, $SD1 = 0.081$.
SEISMIC DESIGN CATEGORY, B
BASIC SEISMIC FORCE RESISTING SYSTEM, NONBUILDING STRUCTURE
SIGN AND BILLBOARD
SHEAR $0.044 \times W$
SEISMIC RESPONSE COEFFICIENT $CS, 0.044$
RESPONSE MODIFICATION COEFFICIENT $R, 3$
ANALYSIS PROCEDURE USED, EQUIVALENT LATERAL FORCE.

NOTES (CONT.):

4. FOUNDATION SOILS; SPECIFIED DEPTHS ARE BASED ON THE HCEA SUBSURFACE INVESTIGATION AND BORE LOGS OBTAINED FOR THIS NOISEWALL. SOIL CONDITIONS TO BE VERIFIED AS FOUNDATIONS ARE EXCAVATED. WHERE FIELD CONDITIONS REVEAL UNACCEPTABLE (SOFT) SOILS AT THE SPECIFIED BEARING DEPTH, UNDERCUT TO A SUITABLE (2000 PSF, EQUIV.) BEARING LAYER AND REPLACE UNDERCUT MATERIAL WITH THE SHAFT CONCRETE MIX.
5. DRILLED SHAFTS: CONSTRUCT PER ACI 336.1-01 SPECIFICATION AND 336.3R-14 RECOMMENDATIONS. SHAFT INSTALLED DEPTHS MAY BE BELOW GROUNDWATER. USE CASING, DEWATERING, AND TREMIE PLACEMENT AS COUNTERMEASURES TO MAINTAIN QUALITY IN POOR SOIL CONDITIONS.
DRILLED SHAFT/CAFE POSITION TOLERANCE 3" AND MAINTAIN MIN. 3" COVER. DRILLED SHAFT CONCRETE SHALL BE 3500 PSI AT 28 DAYS

NOTES (CONT.):

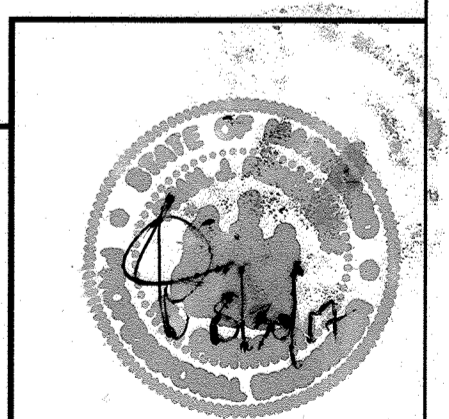
6. SUPERSTRUCTURE / PRECAST CONCRETE, CONSTRUCT PER CURRENT ACI REQUIREMENTS. NOISEWALL POST CONCRETE SHALL BE 5000 PSI AT 28 DAYS, AIR-ENTRAINED. NOISEWALL PANEL CONCRETE SHALL BE 4000 PSI AT 28 DAYS, AIR-ENTRAINED. (NO CHLORIDES IN CONCRETE). PLACE AND CURE CONCRETE IN ACCORDANCE WITH CURRENT ACI RECOMMENDATIONS. REINFORCING STEEL SHALL CONFORM TO ASTM-615 GRADE 60. REINFORCING SPLICES PER ACI TO DEVELOP FULL STRENGTH OF THE BAR.
7. MISC. NEOPRENE: 60 DUROMETER, CONSTRUCTION GRADE.
8. SPECIFIC QUALITY CONTROL REQUIREMENTS:

NOTES (CONT.):

NOISEWALL POST POSITION TOLERANCE 1".
CONCRETE MEMBER POSITIONS, DIMENSIONS, AND SURFACE QUALITY PER ACI UNLESS OTHERWISE NOTED.
CONCRETE SAMPLING: ONE SET OF (6) 4X8 CYLINDERS FOR:
-EACH 50 YDS. PLACED.
-EACH DAY CONCRETE IS PLACED (<50 YDS.)
-EACH MIX DESIGN PLACED PER DAY (WHEN PLACING MORE THAN 1 MIX).
PROVIDE MILL CERTS FOR REINFORCING STEEL.
MIX DESIGNS WITH MATERIAL AND ADMIXTURE SPECS, BATCH TICKETS FOR ALL CONCRETE PLACED.
INCORPORATE PROJECT-SPECIFIC QC AS REQ'D BY CONTRACT / OWNER.

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 0028925
EXPIRATION DATE: 1/15/2018



HILLIS-CARNES
ENGINEERING ASSOCIATES
10975 Guilford Road, Suite A Annapolis Junction, Maryland
Ph: (410) 880-4788 WWW.HCEA.COM Fax: (410) 880-4098

OXFORD SQUARE NOISEWALL
ELKRIDGE, HOWARD COUNTY, MD

OVERALL PLAN AND PROFILE, SOIL PROFILE, AND NOTES

REVISIONS:	8/7/17 - CONSTRUCTION BID, COUNTY SUBMITTAL MYLARS
JOB NUMBER:	16422A
SCALE:	AS SHOWN
DATE:	9/28/16
DESIGNED BY:	PR
DRAWN BY:	PR
APPROVED BY:	PR

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELKLOTT CITY, MARYLAND 21042
(410) 461-2855

NO.	REVISION	DATE

AS-BUILT CERTIFICATION
NOTE: There is no "AS-BUILT" information provided on this sheet.

Owner: Kellogg-COP, LLC
c/o David P. Scheflenacker, Jr., Managing Member
100 West Road, Suite 304
Towson, Maryland 21204
Ph: 410-296-3800

Developer: Preston + Scheflenacker Properties
100 West Road, Suite 304
Towson, Maryland 21204
Ph: 410-296-3800

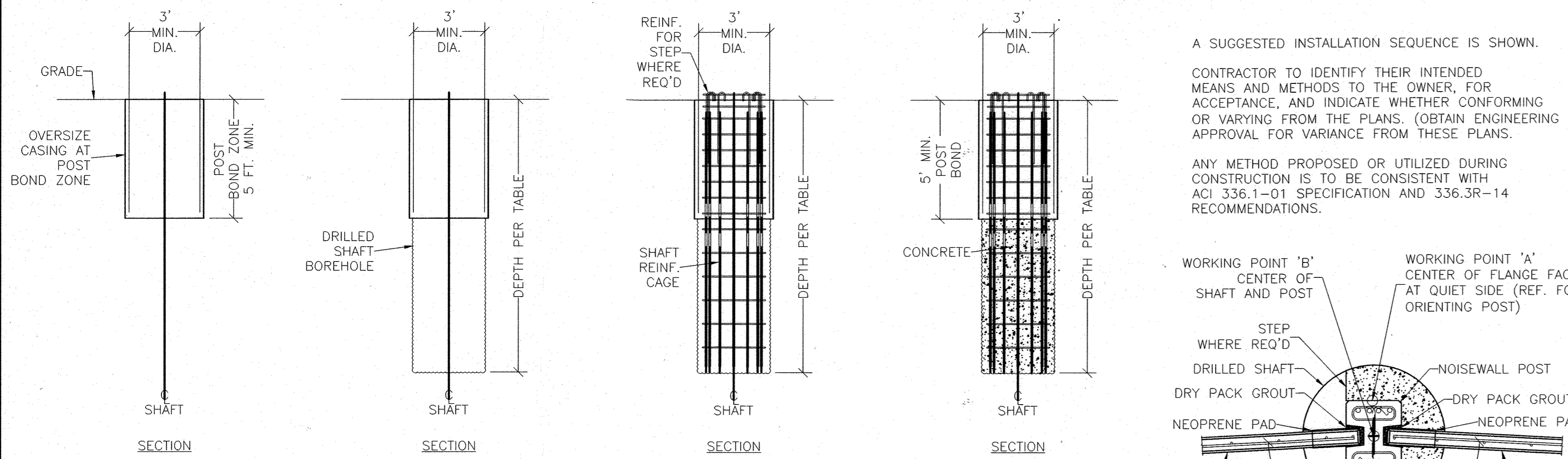
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Director - Department of Planning and Zoning

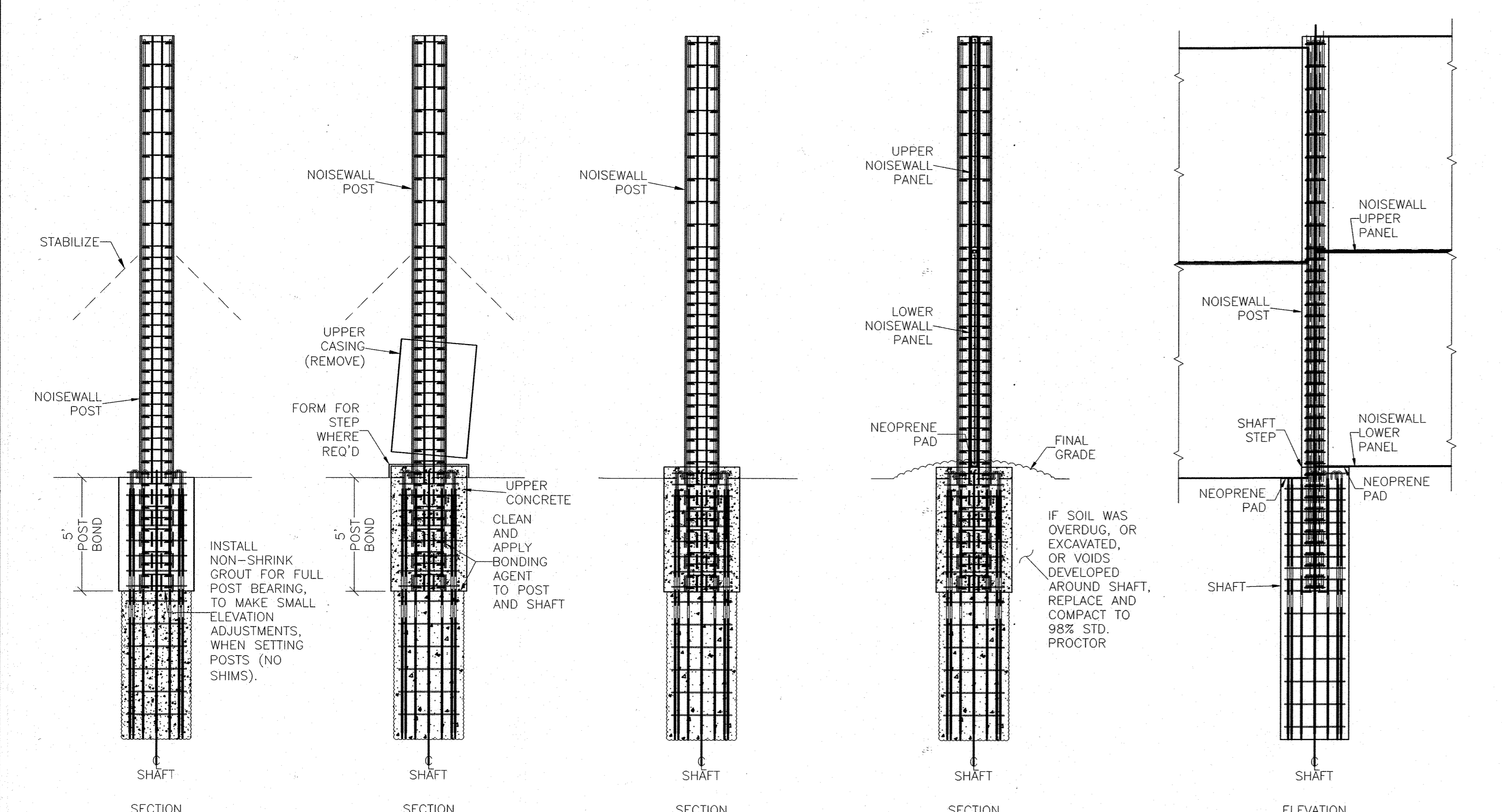
9-25-17
9-15-17
10-10-17

SUBDIVISION		SECTION/AREA		LOT Nos.	
OXFORD SQUARE		---		246 - 371	
PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
24357-24362	---	TOD	38	1st.	601101

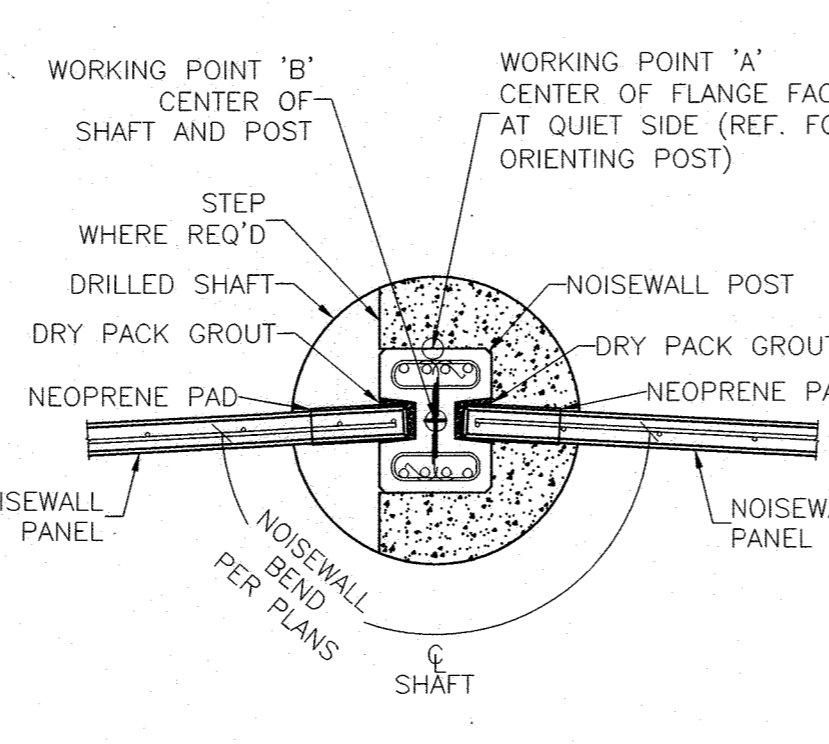
OXFORD SQUARE
"A Howard County Green Neighborhood"
"RIVER OVERLOOK"
Lots 246 Thru 371 & Open Space Lots 372 Thru 375 & 378
(Being A Resubdivision Of Parcels "Z", "E-E" & Open Space Lot 376, As Shown On Revision Plat Entitled "Green Neighborhood" Parcels "Z", "E-E" And Open Space Lot 376
Recorded Among The Land Records Of Howard County, Maryland As Plat Nos. 23996 Thru 23997)
Zoned: TOD
Tax Map No.: 38 Grid No.: 20 Parcel No.: 1003
First Election District: Howard County, Maryland
Scale: As Shown
Date: September 28, 2016
Sheet 33 of 40



A SUGGESTED INSTALLATION SEQUENCE IS SHOWN.
 CONTRACTOR TO IDENTIFY THEIR INTENDED MEANS AND METHODS TO THE OWNER, FOR ACCEPTANCE, AND INDICATE WHETHER CONFORMING OR VARYING FROM THE PLANS. (OBTAIN ENGINEERING APPROVAL FOR VARIANCE FROM THESE PLANS.)
 ANY METHOD PROPOSED OR UTILIZED DURING CONSTRUCTION IS TO BE CONSISTENT WITH ACI 336.1-01 SPECIFICATION AND 336.3R-14 RECOMMENDATIONS.



5) CENTER AND PLUMB POST. PLACE GROUT TO CORRECT ELEVATION (IF NEEDED). STABILIZE IN POSITION.
 6) FORM FOR 6" OR 12" STEP AS REQ'D. CLEAN AND DRY HOLE. APPLY BONDING AGENT TO POST AND CONCRETE SHAFT BELOW. PLACE UPPER CONCRETE. CONSOLIDATE (VIBRATE) AND RAISE UPPER CASING.
 7) REMOVE STABILIZERS. REMOVE UPPER CASING. REMOVE STEP FORM.
 8) INSTALL NEOPRENE PAD. INSTALL LOWER NOISEWALL PANEL. INSTALL UPPER NOISEWALL PANEL. DRY-PACK GROUT BETWEEN POST AND NOISEWALL PANELS. PLACE FINAL GRADE. BERM TO ELIMINATE SOUND GAPS ALONG BASE.



Post No.	WORKING POINT A (POST FACE, QUIET SIDE, FOR ORIENTING)		WORKING POINT B (CENTER OF POST/SHAFT)		WP 'B' c/c (Back- Sta.)	Panel ht. nom		Post embed		Brg. Pad thk.		Dsn. Shaft Btm. elev.					
	NORTHING	EASTING	NORTHING	EASTING		Ahd. Sta. Top of Panel	Ahd. Sta. Btm. of Panel	Top of Post elev.	Nom. Post Ht. (ft.)	Total Post lgth. (ft.)	Top of Shaft elev.		Shaft Step (ft.)				
BEG.	0				CHK	119.00	100.00										
POST	01	534155.46	1385333.55	534155.93	1385334.14	20.00	120.00	101.00	120.00	20.02	25.02	99.98	1.0	Ahd.	WB23	15.5	84.5
POST	02	534139.79	1385345.97	534140.25	1385346.56	20.00	121.00	102.00	121.00	20.02	25.02	100.98	1.0	Ahd.	WB23	16.5	84.5
POST	03	534124.11	1385358.39	534124.58	1385358.98	20.00	121.50	102.50	121.50	19.52	24.52	101.98	0.5	Ahd.	WB23	17.5	84.5
POST	04	534108.44	1385370.81	534108.90	1385371.40	20.00	121.50	102.50	121.50	19.02	24.02	102.48			WB23	18.0	84.5
POST	05	534092.76	1385383.24	534093.23	1385383.82	20.00	121.50	102.50	121.50	19.02	24.02	102.48			WB23	18.0	84.5
POST	06	534077.24	1385395.88	534077.72	1385396.45	20.00	121.50	102.50	121.50	19.02	24.02	102.48			WB22	14.5	88.0
POST	07	534062.07	1385408.94	534062.57	1385409.50	20.00	121.50	102.50	121.50	19.02	24.02	102.48			WB22	14.5	88.0
POST	08	534047.26	1385422.41	534047.77	1385422.96	20.00	122.00	103.00	122.00	19.52	24.52	102.48	0.5	Ahd.	WB22	14.5	88.0
POST	09	534032.82	1385436.28	534033.35	1385436.81	20.00	123.00	104.00	123.00	20.02	25.02	102.98	1.0	Ahd.	WB22	15.0	88.0
POST	10	534018.76	1385450.54	534019.30	1385451.06	20.00	124.00	105.00	124.00	20.02	25.02	103.98	1.0	Ahd.	WB21	14.5	89.5
POST	11	534005.01	1385465.07	534005.56	1385465.59	20.00	124.50	105.50	124.50	19.52	24.52	104.98	0.5	Ahd.	WB21	15.0	90.0
POST	12	533991.43	1385479.82	533992.01	1385480.29	20.00	125.00	106.00	125.00	19.52	24.52	105.48	0.5	Ahd.	WB21	15.5	90.0
POST	13	533982.03	1385492.46	533982.66	1385492.87	15.67	126.00	107.00	126.00	20.02	25.02	105.98	1.0	Ahd.	WB21	16.0	90.0
POST	14	533972.43	1385510.04	533973.07	1385510.42	20.00	127.00	108.00	127.00	20.02	25.02	106.98	1.0	Ahd.	WB20	16.0	91.0
POST	15	533961.82	1385526.89	533962.42	1385527.35	20.00	128.00	109.00	128.00	20.02	25.02	107.98	1.0	Ahd.	WB20	16.0	92.0
POST	16	533948.31	1385541.55	533948.87	1385542.05	20.00	129.00	110.00	129.00	20.02	25.02	108.98	1.0	Ahd.	WB20	16.0	93.0
POST	17	533935.15	1385556.63	533935.72	1385557.12	20.00	130.00	111.00	130.00	20.02	25.02	109.98	1.0	Ahd.	WB20	16.0	94.0
POST	18	533922.13	1385571.82	533922.70	1385572.30	20.00	130.50	111.50	130.50	19.52	24.52	110.98	0.5	Ahd.	WB19	15.0	96.0
POST	19	533909.12	1385586.98	533909.68	1385587.49	20.00	130.50	111.50	130.50	19.02	24.02	111.48			WB19	15.5	96.0
POST	20	533895.36	1385601.45	533895.89	1385601.97	20.00	130.00	111.00	130.50	19.52	24.52	110.98	0.5	Back	WB19	15.0	96.0
POST	21	533881.11	1385615.47	533881.64	1385616.01	20.00	129.50	110.50	130.00	19.52	24.52	110.48	0.5	Back	WB19	14.5	96.0
POST	22	533866.92	1385629.47	533867.40	1385630.05	20.00	129.00	110.00	129.50	19.52	24.52	109.98	0.5	Back	WB18	12.5	97.5
POST	23	533855.38	1385637.26	533855.80	1385637.85	14.00	128.50	109.50	129.00	19.52	24.52	109.48	0.5	Back	WB18	12.0	97.5
POST	24	533838.80	1385648.45	533839.22	1385649.08	20.00	128.50	109.50	128.50	19.02	24.02	109.48			WB18	12.0	97.5
POST	25	533822.27	1385659.67	533822.67	1385660.30	20.00	128.50	109.50	128.50	19.02	24.02	109.48			WB18	12.0	97.5
POST	26	533804.99	1385669.68	533805.36	1385670.33	20.00	128.50	109.50	128.50	19.02	24.02	109.48			WB17	12.0	97.5
POST	27	533787.68	1385679.71	533788.06	1385680.36	20.00	128.50	109.50	128.50	19.02	24.02	109.48			WB17	12.0	97.5
POST	28	533770.38	1385689.73	533770.75	1385690.38	20.00	128.50	109.50	128.50	19.02	24.02	109.48			WB17	12.0	97.5
POST	29	533753.07	1385699.76	533753.45	1385700.41	20.00	129.00	110.00	129.00	19.52	24.52	109.48	0.5	Ahd.	WB17	12.0	97.5
POST	30	533735.77	1385709.78	533736.14	1385710.43	20.00	129.50	110.50	129.50	19.52	24.52	109.98	0.5	Ahd.	WB16	10.0	100.0
POST	31	533718.46	1385719.81	533718.84	1385720.46	20.00	130.00	111.00	130.00	19.52	24.52	110.48	0.5	Ahd.	WB16	10.5	100.0
POST	32	533701.15	1385729.83	533701.53	1385730.48	20.00	130.50	111.50	130.50	19.52	24.52	110.98	0.5	Ahd.	WB16	11.0	100.0
POST	33	533683.85	1385739.86	533684.22	1385740.51	20.00	130.50	111.50	130.50	19.02	24.02	111.48			WB16	11.5	100.0
POST	34	533666.54	1385749.88	533666.92	1385750.53	20.00	130.50	111.50	130.50	19.02	24.02	111.48			WB15	12.5	99.0
POST	35	533649.24	1385759.91	533649.61	1385760.56	20.00	130.50	111.50	130.50	19.02	24.02	111.48			WB15	12.5	99.0

TYPICAL CONSTRUCTION SEQUENCE - EMBEDDED POST

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
 LICENSE NO. 0028925
 EXPIRATION DATE: 1/15/2018

HILLIS-CARNES
 ENGINEERING ASSOCIATES
 10975 Guilford Road, Suite A Annapolis Junction, Maryland
 Ph: (410) 880-4788 WWW.HCEA.COM Fax: (410) 880-4098

OXFORD SQUARE NOISEWALL
ELKRIDGE, HOWARD COUNTY, MD

NOISEWALL DATA TABLE AND
 PROPOSED CONSTRUCTION SEQUENCE

REVISIONS: 8/7/17 - CONSTRUCTION BID, COUNTY SUBMITTAL MYLARS

JOB NUMBER: 16422A DESIGNED BY: PR
 SCALE: AS SHOWN DRAWN BY: PR
 DATE: 9/28/16 APPROVED BY: PR

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELKOTTS CITY, MARYLAND 21042
 (410) 461-2855

AS-BUILT CERTIFICATION
 NOTE: There is no "AS-BUILT" information provided on this sheet.

Owner: Kellogg-CDP, LLC
 c/o David P. Scheffacker, Jr., Managing Member
 100 West Road, Suite 304
 Towson, Maryland 21204
 Ph: 410-296-3800

Developer: Preston - Scheffacker Properties
 100 West Road, Suite 304
 Towson, Maryland 21204
 Ph: 410-296-3800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 9-28-17
 Chief, Division of Land Development

[Signature] 9-15-17
 Chief, Development Engineering Division

[Signature] 10-10-17
 Director - Department of Planning and Zoning

SUBDIVISION: OXFORD SQUARE SECTION/AREA: 246 - 371 LOT Nos. ---
 PLAT NO. 24357-24362 BLOCK NO. --- ZONE TOD TAX/ZONE 38 ELEC. DIST. 1st. CENSUS TR. 601101

OXFORD SQUARE
 "A Howard County Green Neighborhood"
 "RIVER OVERLOOK"
 Lots 246 Thru 371 & Open Space Lots 372 Thru 375 & 378
 (Being A Resubdivision Of Parcels "Z", "E-E" & Open Space Lot 376, As Shown On Revision Plat Entitled "Green Neighborhood" Parcels "Z", "E-E" And Open Space Lot 376
 Recorded Among The Land Records Of Howard County, Maryland As Plat Nos. 23896 Thru 23897)
 Zoned: TOD
 Tax Map No.: 38 Grid No.: 20 Parcel No.: 1003
 First Election District: Howard County, Maryland
 Scale: As Shown
 Date: September 28, 2016
 Sheet 38 Of 40

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET

