

- LEGEND**
- 1 Contour Interval 2 ft.
 - 2 Existing Contour
 - 3 Proposed Contour
 - 4 Proposed Spot Elevation +80±
 - 5 Direction of Drainage
 - 6 Existing Paving
 - 7 Firelane

GENERAL NOTES

1. All materials and construction to be in accordance with Howard County Road Construction Code and Specifications.
2. Coordinates are based on the Maryland State Plane as projected by Howard County monument # 2344005-R.
3. All driveways and parking to be privately owned and maintained.
4. Any damage to County owned rights-of-way to be corrected at the contractor's expense.
5. Installation of traffic control devices shall be in accordance with the latest edition of the "Manual of Uniform Traffic Control".
6. Topography was compiled from actual field survey.
7. The area shown is located on tax map No. 37, Parcel 168.
8. Trench bedding for storm drainage shall be in accordance with Howard County Std. S.D. G-2.01.
9. Information concerning underground utilities was obtained from available records, but the contractor must determine the exact location by digging test pits, by hand, at all utility crossings; well in advance of construction.
10. The contractor or developer shall contact the Construction Inspection / Survey Division 24 hours in advance of work at 992-2417 or 792-7272.
11. All downspout drains shall be connected to storm drains.
12. The developer agrees to work with the Dept. of Licenses & Inspections to resolve any problems caused by roof water discharge.
13. Handicap parking details shall be in accordance with the "Maryland Building Code for the Handicapped", Section 501-705 and details on sheet 2.
14. Recording reference: Liber 252, Folio 456.
15. UPON REVIEW AND APPROVAL OF THE UNPAID FOR COMPLIANCE WITH ZONING AND SUBDIVISION AND DEVELOPMENT REGULATIONS SHALL OCCUR WITHIN THE DEVELOPMENT PLAN AND IS SUBJECT TO ADDITIONAL AND MORE DETAILED COMMENTS AS THIS PLAN PROCEEDS THROUGH THE DEVELOPMENT PROCESS.
16. ON DECEMBER 16, 2010, THE COUNTY COUNCIL GRANTED A VARIANCE TO REGULATIONS NO. 167-003 FOR SECTIONS 16.001 AND 16.002 OF THE HOWARD COUNTY CODE FOR THE MAINTENANCE OF A BUFFER AREA BETWEEN THE PROPERTY AND THE 16.001 ZONING DISTRICT.
17. THIS PLAN IS SUBJECT TO WALKER PERMIT NO. 14-004. THE PLANNING DIRECTOR ON NOVEMBER 22, 2010 GRANTED APPROVAL TO WALKER SECTION 16.001 (M) AND 16.002 (M) BASED ON THE STANDARD FOREST PRESERVATION OBLIGATION CALCULATION OF THE NET TRACT AREA TO BE DEFINED BY THE LIMIT OF DISTURBANCE (LOD) FOR THE AREA OF THE PROPOSED SITE EXPANSION AND NOT COVERED BY THE EXISTING AREA OF THE SITE WINDING FLOORPLAN & UTILITIES APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
 - A. THE FOREST PRESERVATION OBLIGATION FOR THE PROPOSED EXPANSION OF THIS SITE SHALL BE LIMITED TO THE AREA OF DISTURBANCE. THE FOREST PRESERVATION OBLIGATION SHALL BE SATISFIED BY CREATING AN ON-SITE FOREST PRESERVATION RETENTION ELEMENT AS SHOWN ON THE WALKER PLAN EXHIBIT TO ADDRESS THE FOREST PRESERVATION OBLIGATION REQUIREMENT THAT IS CALCULATED BY USING THE LIMIT OF DISTURBANCE AS THE NET AREA OR AN OTHER ACCEPTABLE METHOD TO ADDRESS THE FOREST PRESERVATION OBLIGATION.
 - B. ANY FURTHER OR FURTHER DEVELOPMENT OF THIS SITE OVER THE CURRENT LOD WILL BE REQUIRED TO COMPLY WITH APPROVAL OF THE FOREST PRESERVATION ACT.
 - C. COMPLIANCE WITH ALL SDCS APPLICABLE TO THIS PROJECT WITHIN THE WALKER PLAN FOR REVIEW AND APPROVAL BY OPZ AND AS PART OF THE FOREST PRESERVATION PLAN SUBMISSION AND APPROVAL FOR THE PROPOSED EXPANSION OF FOREST PRESERVATION. THIS OBLIGATION WILL BE MET THROUGH OBSERVANCE OF RETENTION ON-SITE.
 - D. SECTION 16.002 OF THE HOWARD COUNTY CODE AND THE FOREST PRESERVATION ACT REQUIREMENTS FOR THE SITE EXPANSION UNDER 201-002-002 (M) HAVE BEEN MET THROUGH THE CREATION OF AN 0.03 ACRE ON-SITE FOREST PRESERVATION RETENTION ELEMENT WHICH IS WITHIN THE PROPOSED LIMIT OF DISTURBANCE (LOD). THIS 0.03 ACRE RETENTION ELEMENT HAS BEEN ESTABLISHED TO FULFILL THE 0.03 ACRE FOREST PRESERVATION OBLIGATION CALCULATED FROM THE 47 ACRES OF THE NET TRACT AREA (M) UNDER THE AREA OF THE FORE PRESERVATION OBLIGATION WILL RESULT IN A 0.01 ACRE INCREASE IN PROTECTED FOREST RESOURCES WHICH CAN BE USED IN SATISFYING FC REGULATIONS AND IN THE REDUCTION OF THE 11.5 ACRES OF THE NET TRACT AREA WHICH MAY BE IMPACTED AT THE TIME OF ANY FURTHER OR FURTHER DEVELOPMENT OF THIS SITE.

DEVELOPER'S/BUILDER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources 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 or their authorized agents, as are deemed necessary."

Signature of Developer/Builder

ADDRESS CHART

Subdivision Name	Block	Zone	Tax Map No.	Elec. Dist.	Consensus
DEEP RUN ELEMENTARY SCHOOL	168	168	37	1	GO11
Plot No.	Block No.	Zone	Tax Map No. <td>Elec. Dist. <td>Consensus</td> </td>	Elec. Dist. <td>Consensus</td>	Consensus
2.252 F546	81	RSA-8	37	1	GO11
Water Code	D 06		Sewer Code	2500000	

ENGINEER'S CERTIFICATE

I hereby certify that this plan for Erosion and Sediment 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.

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA, MD. 21045 • (301) 381-7500 - BALTO. • (301) 621-8100 - WASH.

DESIGNED	JME	SCALE	1" = 30'
DRAWN	CCM PER JLM	DRAWING	1 OF 20
CHECKED	JME	JOB NO.	88-089
DATE	1-31-89	FILE NO.	88-089X

FOR: HOWARD COUNTY DEPT. OF EDUCATION
10301 ROUTE 108
ELLICOTT CITY, MARYLAND 21043

B96E #478333 TO BE RELOCATED BY OTHERS

REMOVE GRATE, CONSTRUCT BRICK WALLS TO EL. 292.7. PROVIDE 4" TOP SLAB PER HO. CO. STD. D - INLET

NOTE: SHEETS 7-30 OF THIS PLAN SET WERE REVISED UNDER RL #1.

- SHEET INDEX**
1. SITE DEVELOPMENT PLAN
 2. WATER, SEWER & STORM DRAIN PROFILES
 3. SITE DIAGRAM & PAVING DETAILS
 4. SEWAGEMENT & EROSION CONTROL PLAN
 5. SEWAGEMENT & EROSION CONTROL PLAN
 6. LANDSCAPE PLAN
 7. DEMOLITION PLAN
 8. DEMOLITION PLAN
 9. SITE IMPROVEMENT PLAN
 10. SITE IMPROVEMENT PLAN
 11. SEWAGEMENT & EROSION CONTROL PLAN
 12. SEWAGEMENT & EROSION CONTROL PLAN
 13. DRAINAGE AREA MAP & LANDSCAPE PLAN
 14. DRAINAGE AREA MAP & LANDSCAPE PLAN
 15. DETAIL SHEET
 16. DETAIL SHEET
 17. SOIL BORINGS & SEWAGEMENT CONTROL DETAILS
 18. SEWAGEMENT CONTROL NOTES
 19. PROFILES
 20. ROAD PROFILES
 21. FIRE HYDRANT PLAN BY A.P.O.
 22. HANDICAP PARKING RAMP & STAIRWAY ENLARGEMENT
 23. FOREST CONSERVATION PLAN
 24. FOREST CONSERVATION PLAN
 25. FOREST CONSERVATION NOTES & DETAILS
 26. FOREST CONSERVATION PLAN
 27. FOREST CONSERVATION PLAN
 28. FOREST CONSERVATION PLAN
 29. FOREST CONSERVATION PLAN
 30. FOREST CONSERVATION PLAN

APPROVED
DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT
HOWARD COUNTY
DATE: 2-17-89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER: *John Paul* 3-15-89
DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR: *David U. Smith* 3-21-89
DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR: *James* 2/9/89
DATE

CHIEF BUREAU OF ENGINEERING
DATE: 2-9-89

1	ADDED SHEET INDEX, GENERAL NOTES & REVISED SHEET NUMBERS	2/16/84
2	REVISION	DATE

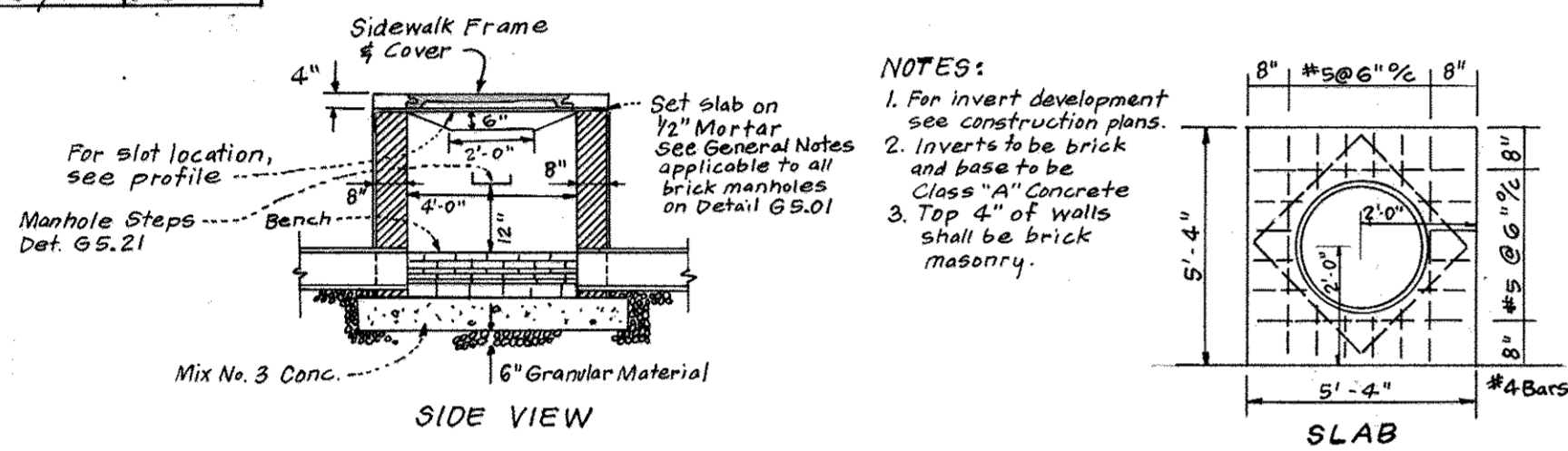
NOTE: Contractor to provide level access to all sides of modular const. outside of the conventional construction. Temporary grading to achieve access and a 30' x 30' level work area for a crane is to be provided at no additional cost to the owner.

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET 89-98

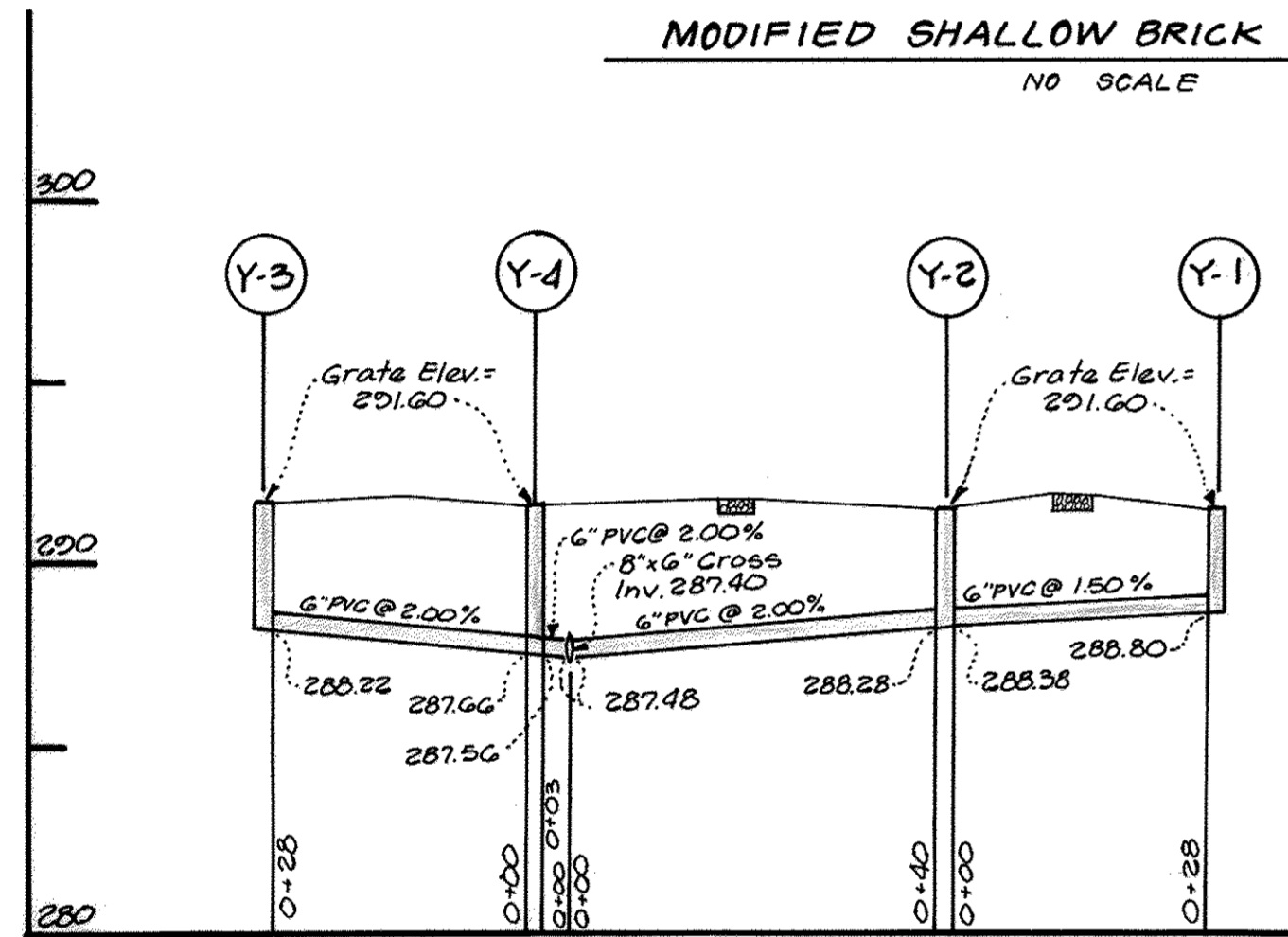
STRUCTURE SCHEDULE							
No.	TYPE	INV. IN	INV. OUT	TOP ELEVATION		REMARKS	LOCATION
				UPPER	LOWER		
I-1	S-Inlet	264.50	264.50	269.8		Ho. Co. Std. S.D.422 32" Sq	See Plan
S-2	Metal End Section	254.35	254.00			Ho. Co. Std. S.D.561 18" Dia.	
I-3	Mod. Shallow Brick MH	261.54	260.00	269.13		Ho. Co. Std. G. 5.05 48" Sq	Slot west side only
I-4	"	260.17	268.00	272.93		Ho. Co. Std. G. 5.05 48" Sq	Slot north side only
S-5	Metal End Section	276.90	274.76	281.20		Ho. Co. Std. G. 5.61 18" Dia.	
I-6	A-S Inlet w/ Def.	281.60	279.50	284.63	284.14	Ho. Co. Std. S.D. 4.02 W=2'-6"	
I-7	A-S Inlet	287.00	287.00	290.00		Ho. Co. Std. S.D. 4.01 W=2'-6"	
I-8	"	275.76	275.50	279.20	279.45	Ho. Co. Std. S.D. 4.01 W=2'-6"	
M-9	Manhole	287.97	281.50	290.00		Ho. Co. Std. G. 5.01 48" Dia.	
M-10	"	286.79	284.55	290.00		Ho. Co. Std. G. 5.01 48" Dia.	
M-11	"	285.48	285.02	291.00		Ho. Co. Std. G. 5.01 48" Dia.	
Y-1	Yard Inlet	288.80	288.80	291.60		Ho. Co. Std. S.D. 4.14 24" Dia.	
Y-2	"	288.38	288.28	291.60		Ho. Co. Std. S.D. 4.14 24" Dia.	
Y-3	"	288.22	288.22	291.60		Ho. Co. Std. S.D. 4.14 24" Dia.	
Y-4	"	287.66	287.56	291.60		Ho. Co. Std. S.D. 4.14 24" Dia.	

* Provide 4" top slab & 6" slot per D-inlet. Note: All inverts are to be fully developed.
 o Ho. Co. Std. S.D.-4.11.
 † Provide Reticular Grate Ho. Co. Std. S.D.4.93.

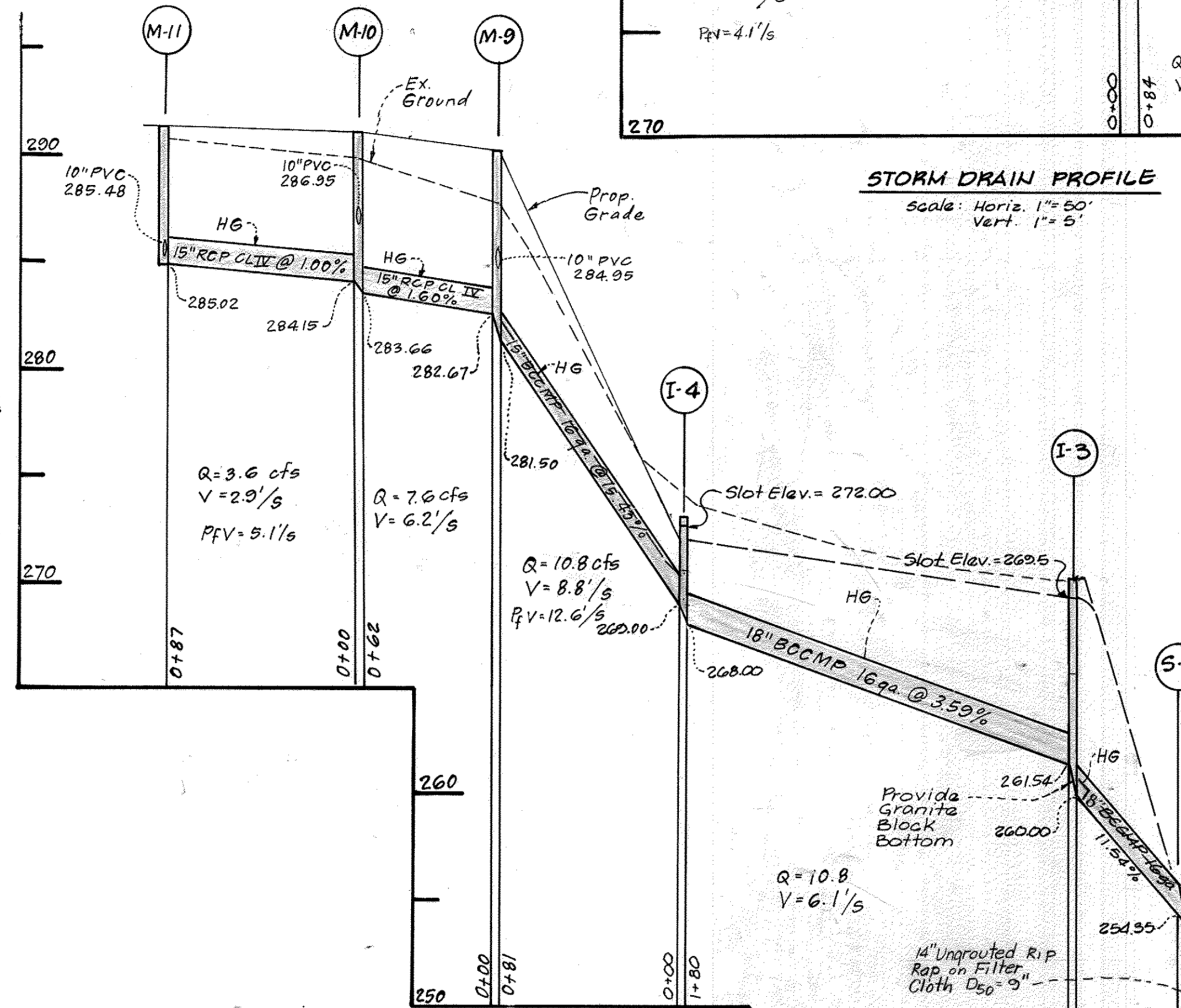
PIPE SCHEDULE		
SIZE	TYPE	LENGTH
6"	PVC	90 L.F.
8"	Perf. PVC	193 L.F.
10"	PVC	165 L.F.
12"	BCCMP 16 ga.	280 L.F.
15"	RCP CL. IV	149 L.F.
15"	BCCMP 16 ga.	84 L.F.
18"	BCCMP 16 ga.	303 L.F.



MODIFIED SHALLOW BRICK MANHOLE DETAIL
NO SCALE



YARD INLET PROFILE
Scale: Horiz. 1"=20'
Vert. 1"=5'



STORM DRAIN PROFILE
Scale: Horiz. 1"=50'
Vert. 1"=5'

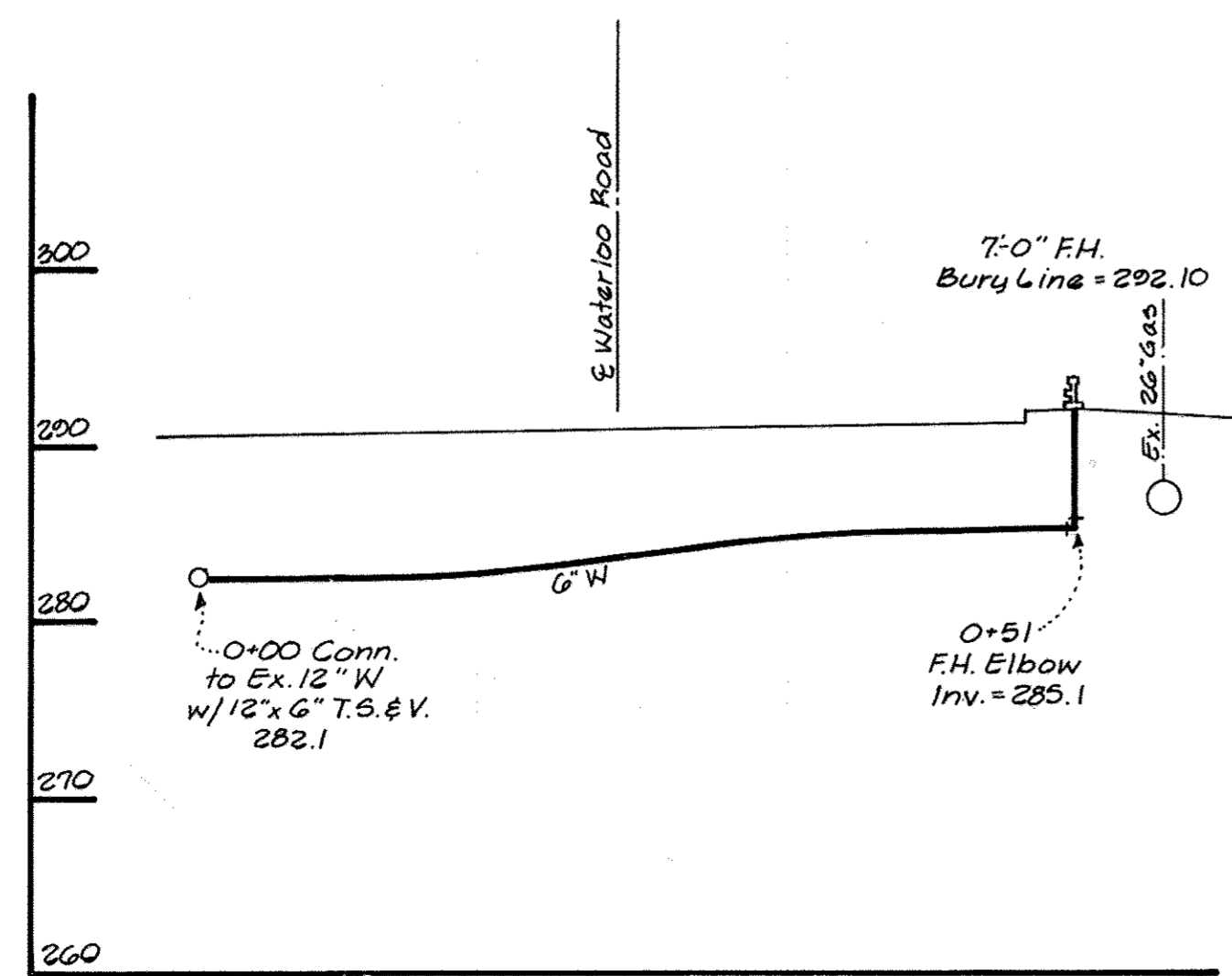
APPROVED
 DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT
 HOWARD COUNTY, MARYLAND
 DATE: 2-17-89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: [Signature] DATE: 3-15-89

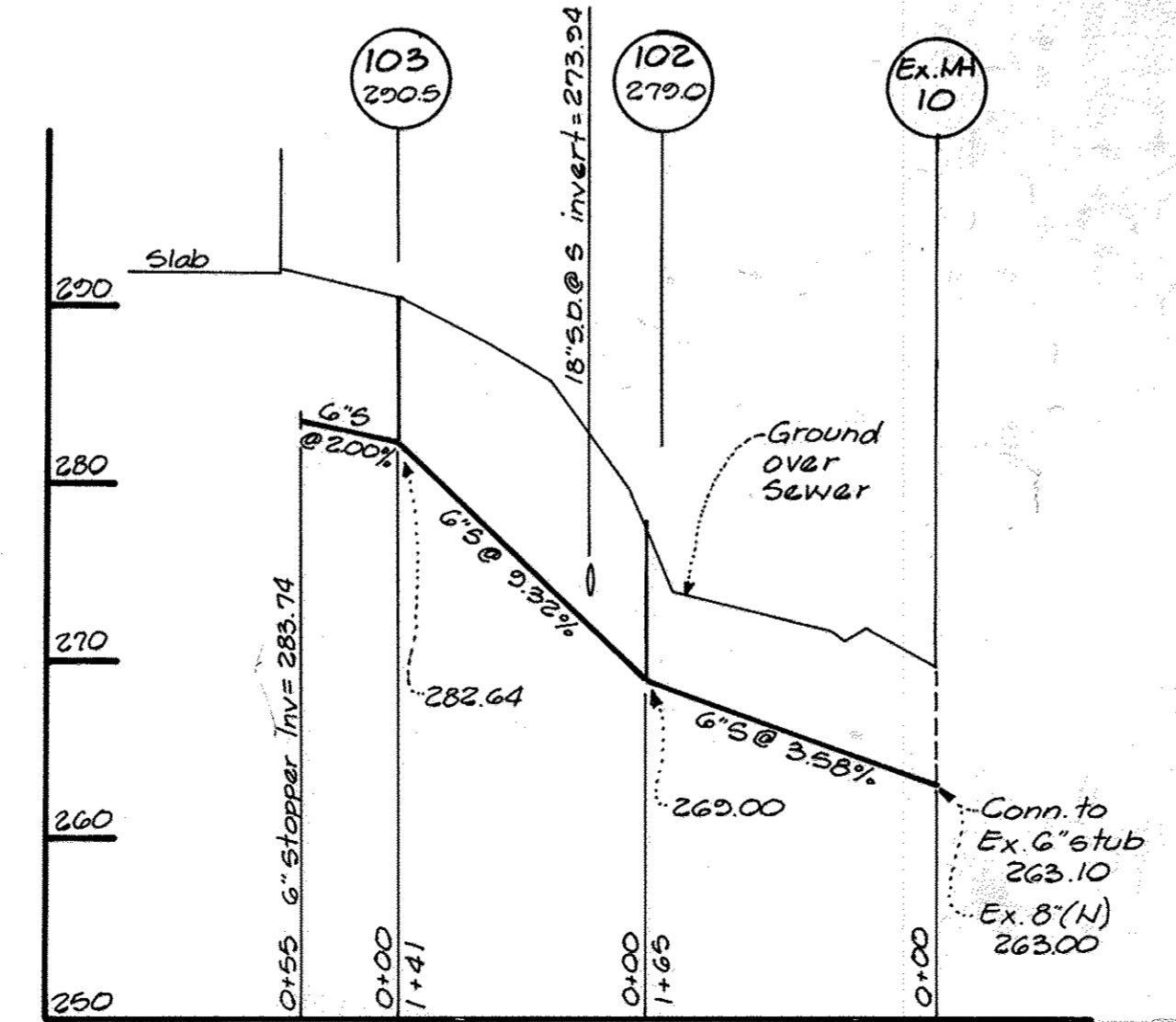
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 PLANNING DIRECTOR: [Signature] DATE: 3-31-89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: [Signature] DATE: 2/9/89

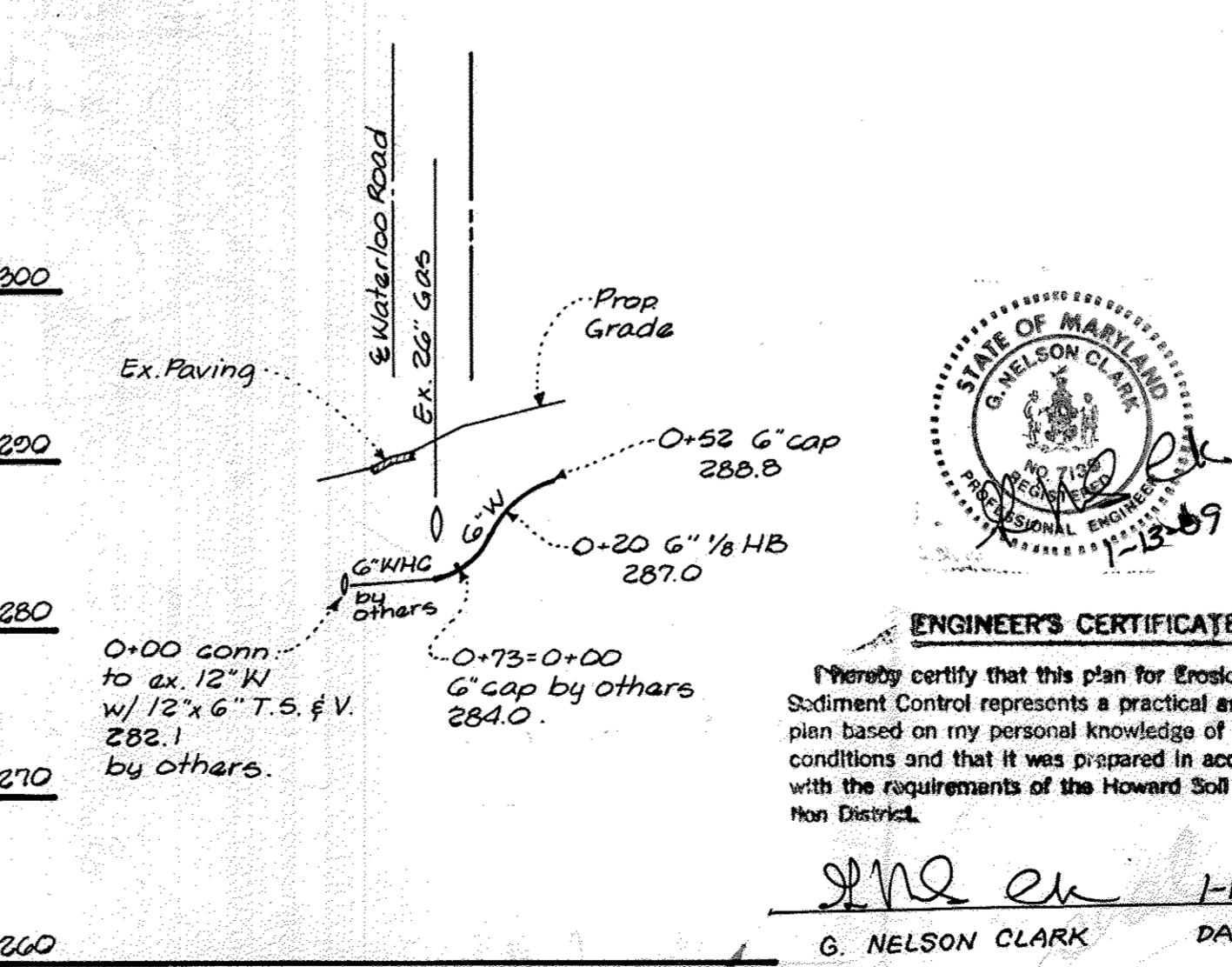
APPROVED: CHIEF BUREAU OF ENGINEERING
 CHIEF BUREAU OF ENGINEERING: [Signature] DATE: 2-9-89



FIRE HYDRANT INSTALLATION
Scale: Horiz. 1"=10'
Vert. 1"=10'



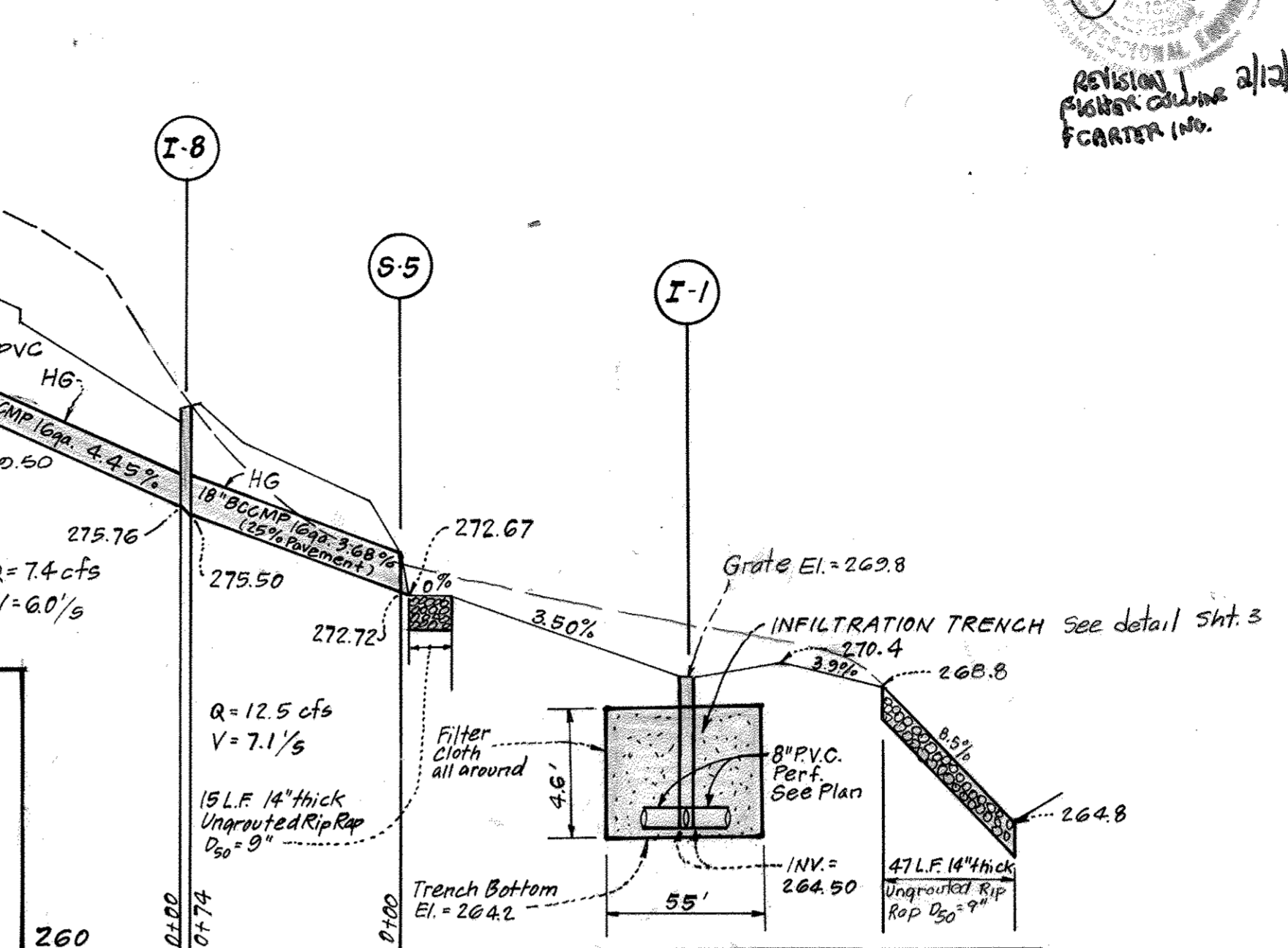
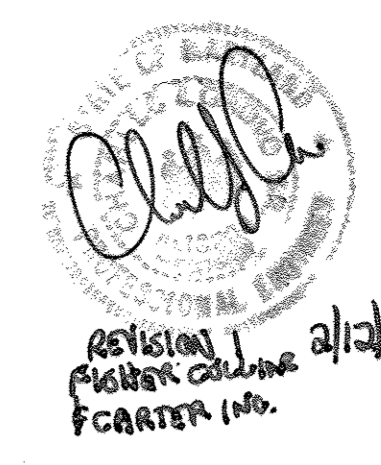
SEWER PROFILE
Scale: Horiz. 1"=100'
Vert. 1"=10'



WATER PROFILE
Scale: Horiz. 1"=100'
Vert. 1"=10'

PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NO. 10004, EXPIRATION DATE: NOVEMBER 3, 2014.
 CHARLES J. ORDO, SR., P.E. DATE: 2/12/14

NO.	REVISION	DATE
1	REVISED SITE ANALYSIS AND SHEET NUMBER	2/14



DEVELOPER'S/BUILDER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources 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 or their authorized agents, as are deemed necessary."

Sydney L. Cousin / cey 1/13/89
 Signature of Developer/Builder Date

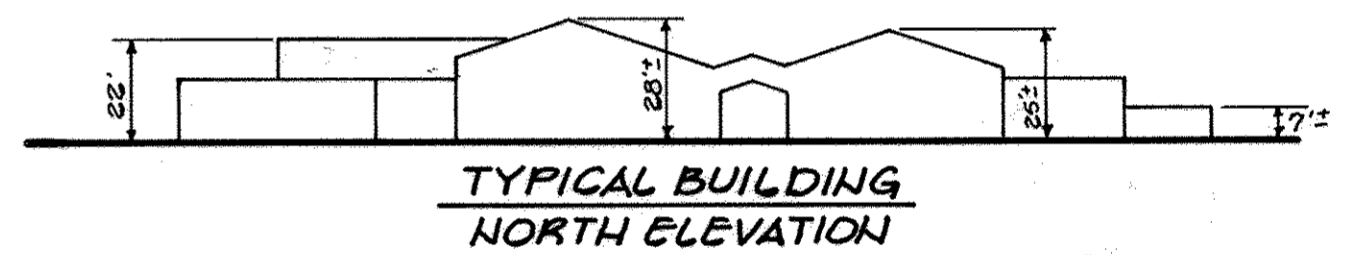
AS-BUILT CERTIFICATION FOR PSWM

Note: There is no "AS BUILT" information provided on this sheet.
 CHARLES J. ORDO, SR., P.E. 5/10/14 Date

Reviewed for: HOWARD, S.C.D. Name and meets Technical Requirements
 Signature: [Signature] Date: [Date]
 U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: [Signature] DATE: 3/1/89



TYPICAL BUILDING NORTH ELEVATION

SITE ANALYSIS

- Land Area = 11.67 Acres
- Zoning = R-5A-B
- Proposed Use = Public Elementary School
- Floor Area = 89,670 sq ft (incl. Alt. Classrooms)
- Building Height = 1 story - 28'±
- Parking Spaces Provided = 108 spaces
110 std. spaces (9' wide)
9 handicap spaces
- Bus Loading Spaces Provided = 18 (12' x 44')
- Building Coverage = 17.6%
- Vehicular Area = 12.0%
- Open Space = 74.8%
- PREPARED AREA = 0.6 ACRES
- PREVIOUS USE PLUS NOB: 507-97-91, WF-14-00A, RESOLUTION NO. 107-2013

WATER AND SEWER NOTES

- All sewer mains shall be PVC, C.S.P.X. or V.C.P.X.
- All construction methods and materials for on-site private water & sewer systems shall follow the current edition of the Howard Co. Plumbing Code, supplemented by the Howard Co. Std. Details & Specs. where necessary.
- All 6" water mains shall have a minimum of 3.5' cover.
- All water mains shall be D.I.P.
- Sewer House connections shall be built to within 10' of buildings, at a 2.0% slope.
- Block all fittings with concrete.



ENGINEER'S CERTIFICATE

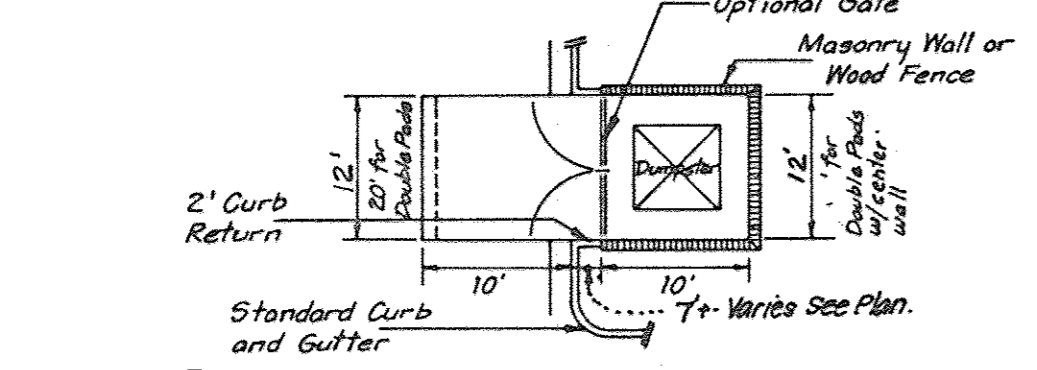
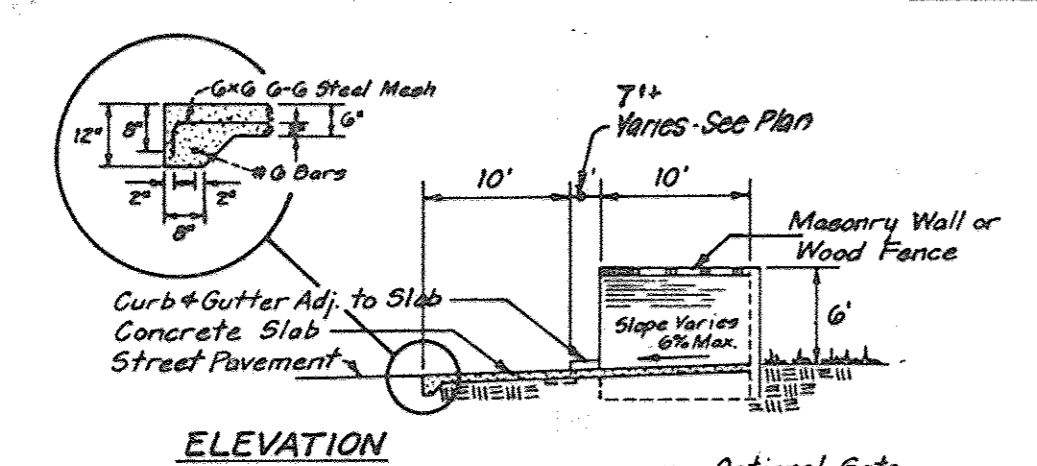
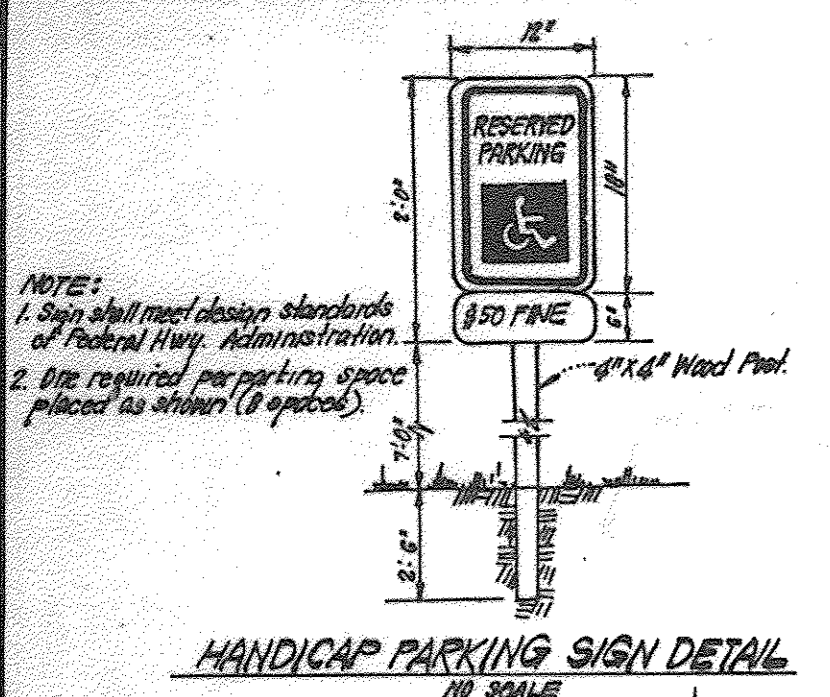
"I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

G. NELSON CLARK 1-13-89
 DATE

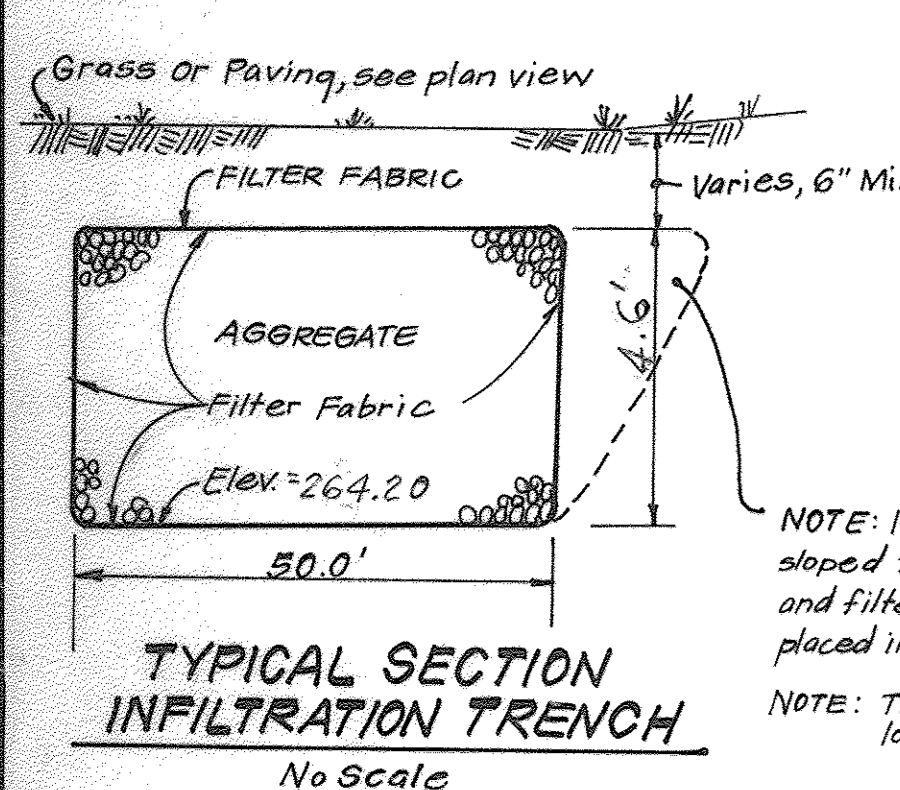
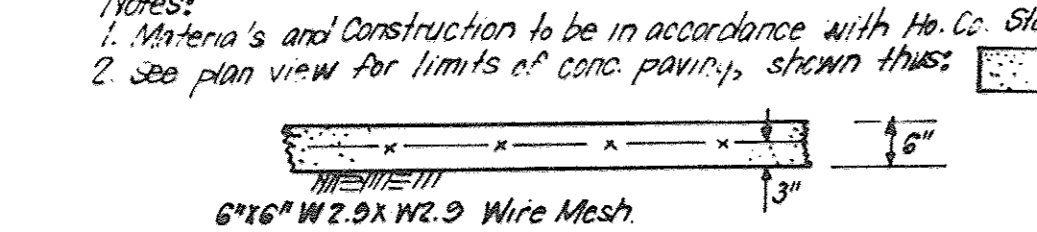
CLARK • FINEFROCK & SACKETT, INC.
 ENGINEERS • PLANNERS • SURVEYORS
 7135 MINSTREL WAY • COLUMBIA, MD. 21045 • (301) 381-7500 - BALTO. • (301) 621-8100 - WASH.

DESIGNED DAB	WATER, SEWER & STORM DRAIN PROFILES DEEP RUN ELEMENTARY SCHOOL PART OF PARCEL 108, LIBER 252 FOLIO 546 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE As Shown
DRAWN PER.		DRAWING 2 of 10
CHECKED DAB		JOB NO. 88-089
DATE 1-31-89		FILE NO. 88-089X

FOR: HOWARD COUNTY DEPT. OF EDUCATION
 10901 ROUTE 108
 ELLIGOTT CITY, MARYLAND 21045



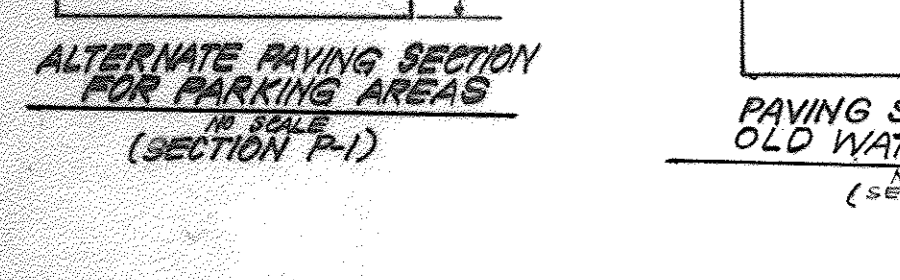
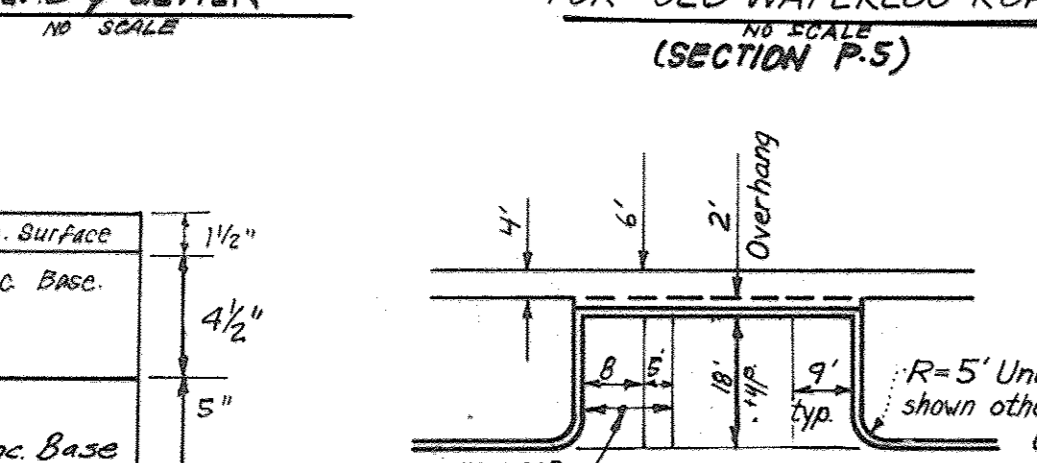
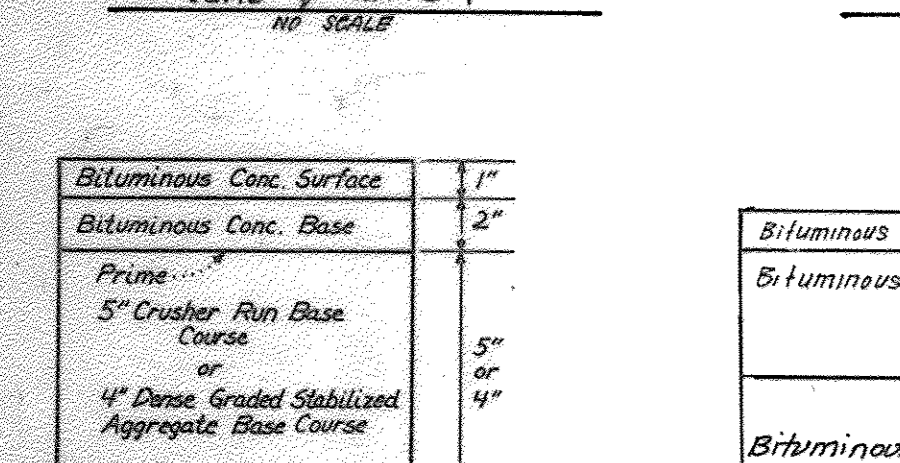
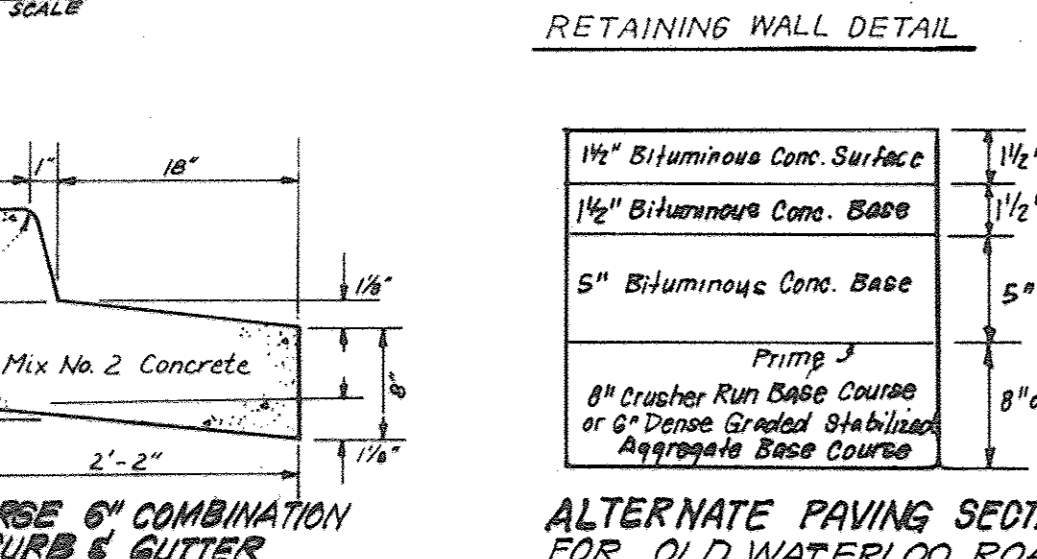
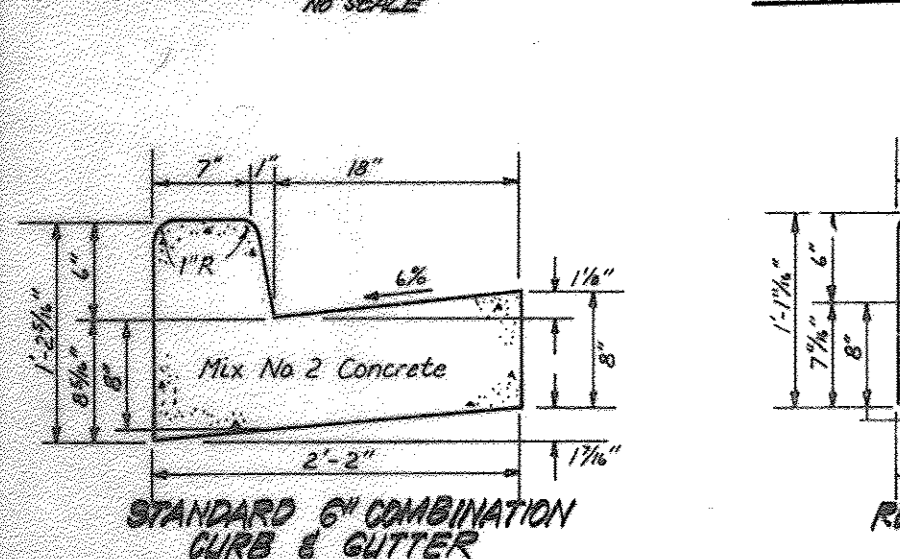
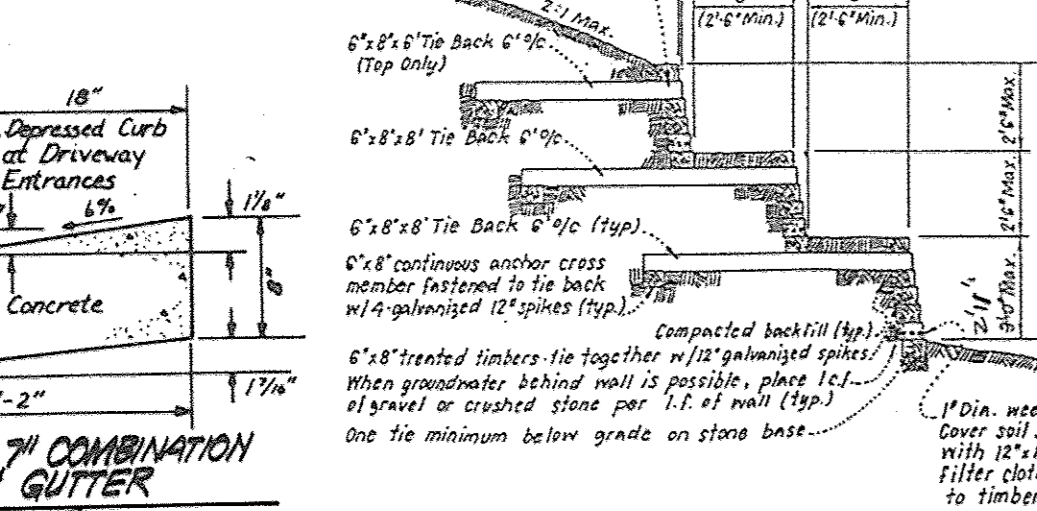
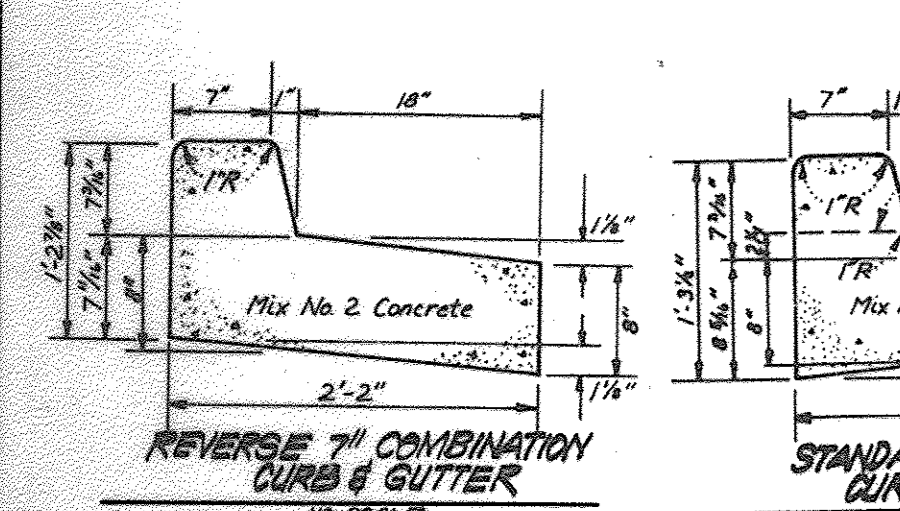
DUMPSTER PAD & ENCLOSURE
NO SCALE



Note: Aggregates to be clean with a max diameter of 3" and a min dia. of 1/2". Filter fabric shall completely surround aggregate. Stone surface shall be 2" washed stones. Contractor shall observe all requirements of State Safety Regulations in constructing the trenches.

NOTE: 1. Materials and construction to be in accordance with Hb. Co. Stats & Specs
2. See plan view for limits of conc. paving, shown thus:

NOTE: If sides must be sloped for stability, stone and filter cloth shall be placed in the sloped areas.
NOTE: Trench is 70 feet long.



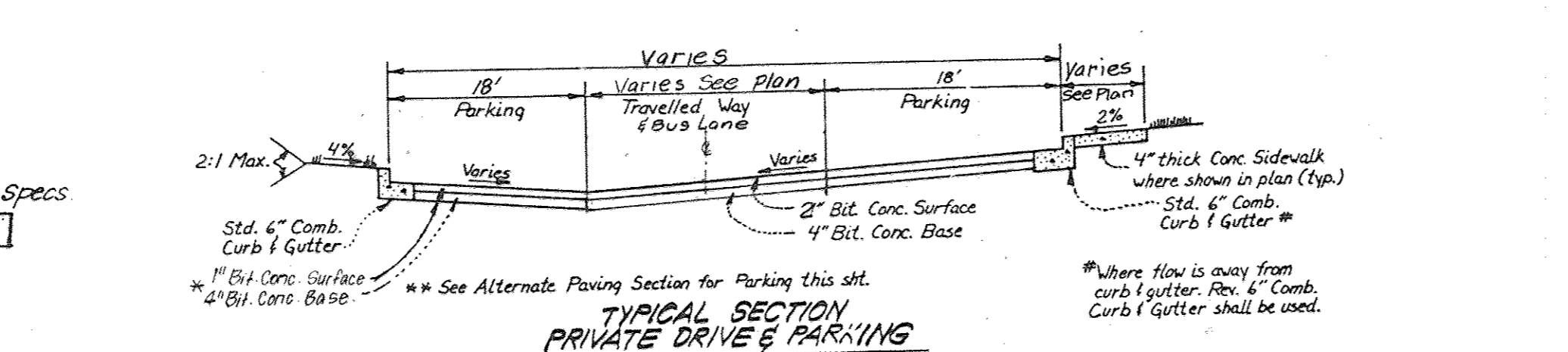
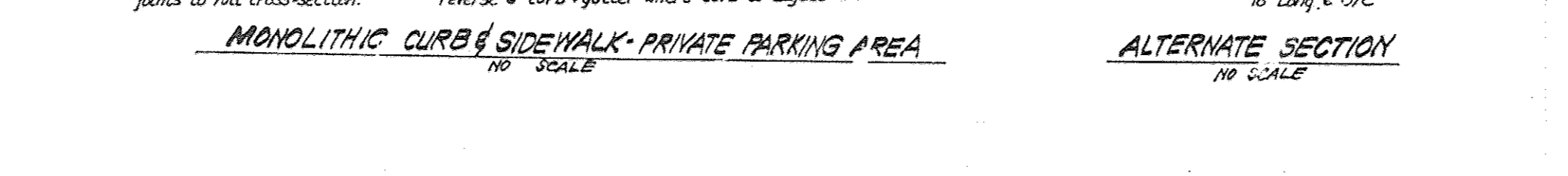
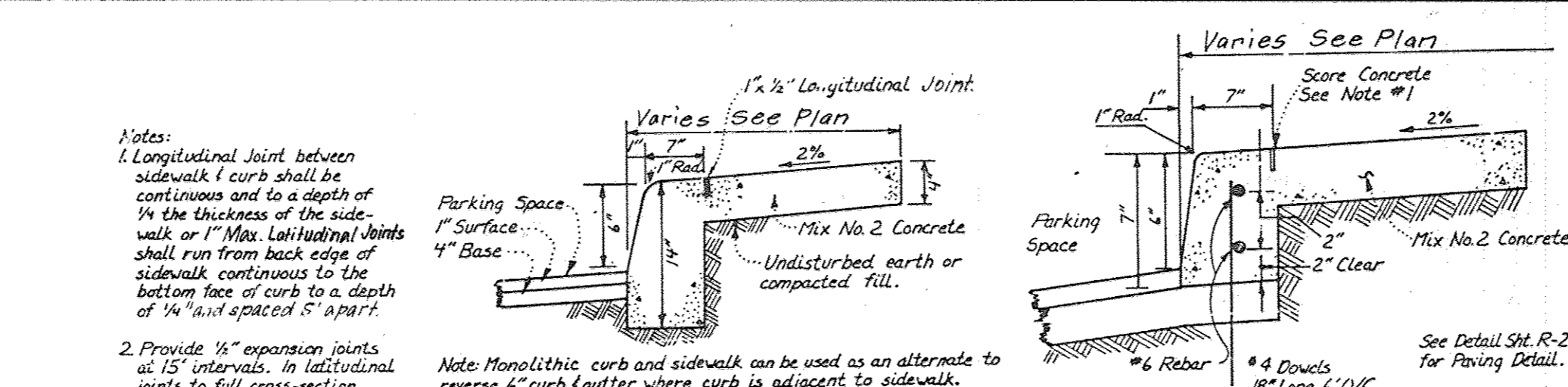
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER: *[Signature]* 3-15-89
DATE: 3-15-89

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR: *[Signature]* 3-21-89
DATE: 3-21-89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR: *[Signature]* 3-18-89
DATE: 3-18-89

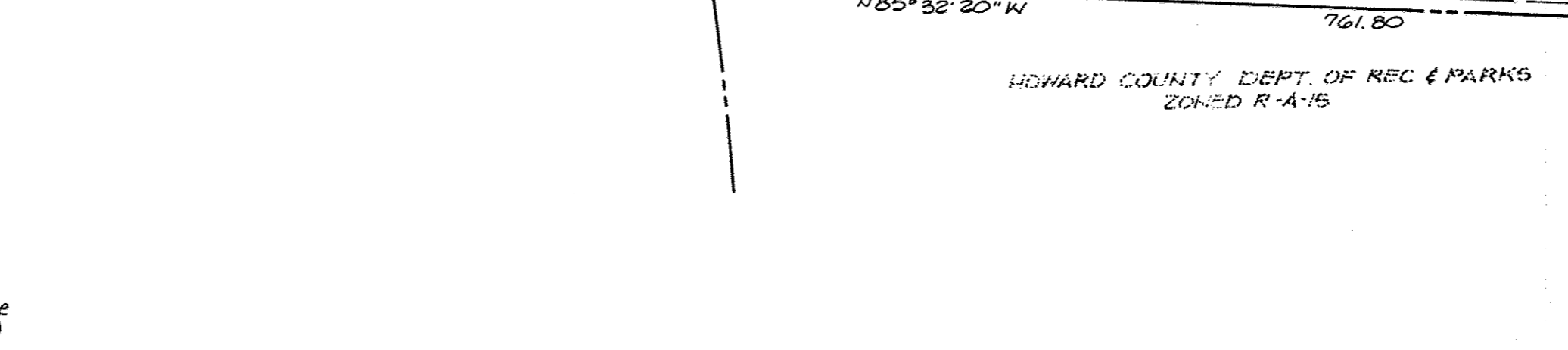
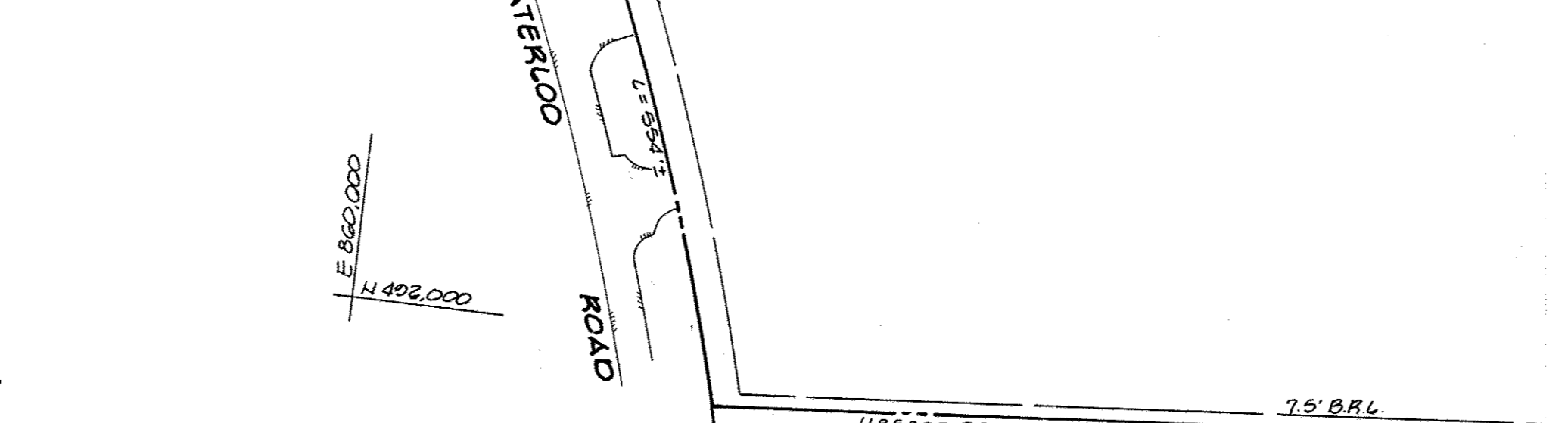
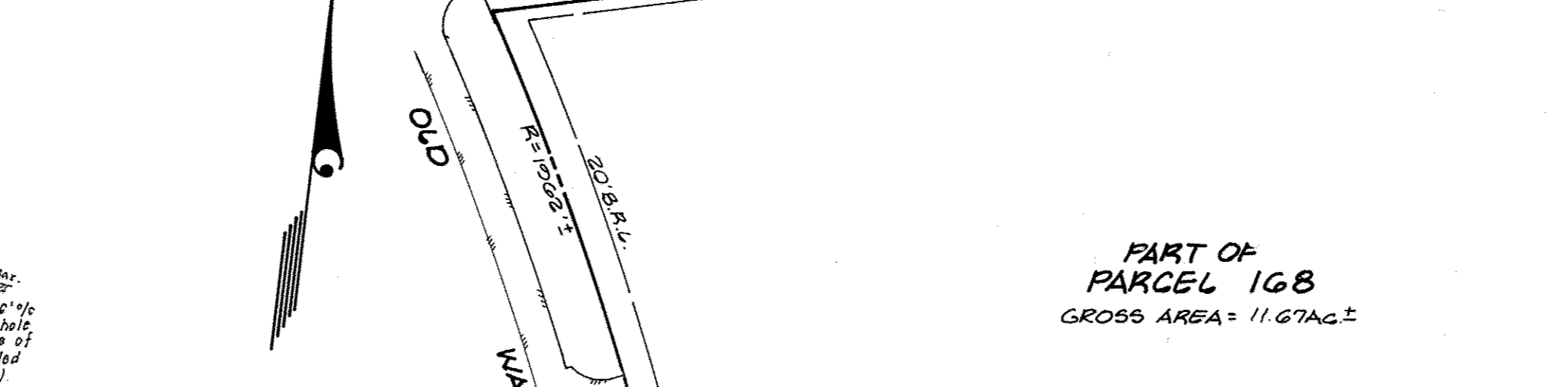
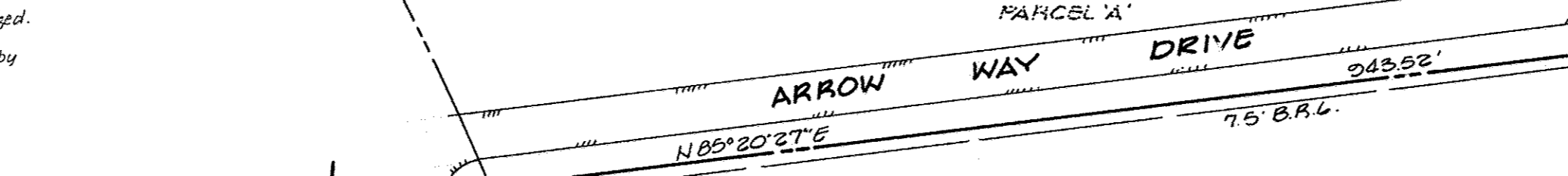
CHIEF BUREAU OF ENGINEERING: *[Signature]* 3-9-89
DATE: 3-9-89

APPROVED: DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT, HOWARD COUNTY, MARYLAND
DATE: 2-17-89



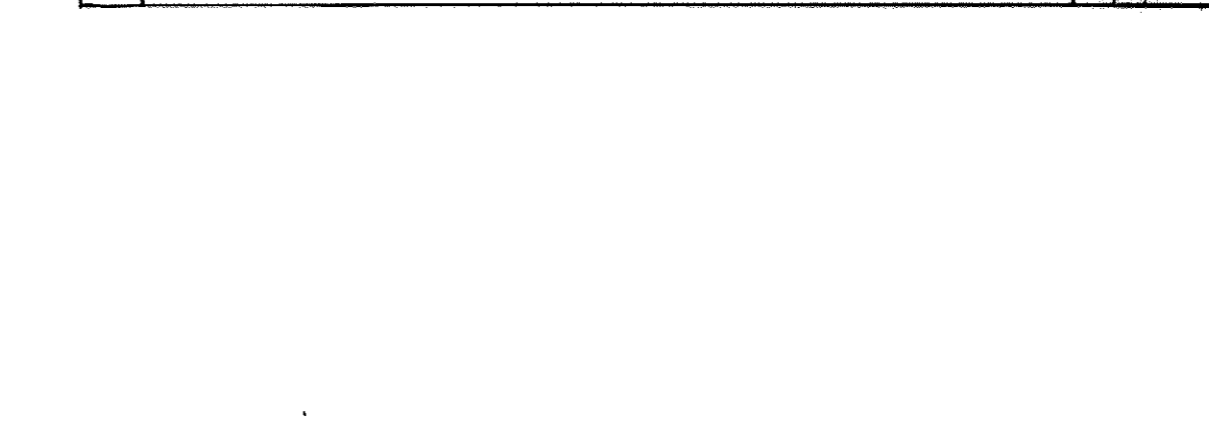
NOTE: 1. Longitudinal joint between sidewalk & curb shall be continuous and to a depth of 1/4 the thickness of the sidewalk or 1" Max. Longitudinal joints shall run from back edge of sidewalk continuous to the bottom face of curb to a depth of 1/4 the thickness of sidewalk.
2. Provide 1/2" expansion joints at 15' intervals in longitudinal joints to full cross-section.

NOTE: 1. Timbers shall be either:
a) Creosote treated railroad ties.
b) OCA treated landscaping timbers (40 lb/ft retention)
2. Hardware shall be hot dipped galvanized.
3. Weepholes with or without gravel drain are minimum measures for groundwater. For any substantial amount of groundwater, a drain system should be designed and utilized.
4. Design shall be verified for site specific soil condition by a Professional Geotechnical Engineer.



NOTE: There is no "AS-BUILT" information provided on this sheet.
CHARLES, CRAND, SR., P.E. 6/17/89 Date

DEVELOPER'S/BUILDER'S CERTIFICATE
I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources 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 or their authorized agents, as are deemed necessary.
[Signature] 1/13/89 Date



AS-BUILT CERTIFICATION FOR PSWM
Note: There is no "AS-BUILT" information provided on this sheet.
CHARLES, CRAND, SR., P.E. 6/17/89 Date

ENGINEER'S CERTIFICATE
I hereby certify that this plan for Erosion and Sediment 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] 1-13-89 DATE
G. NELSON CLARK

PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 19204, EXPIRATION DATE: NOVEMBER 2, 2014.
[Signature] 1-13-89 DATE
CHARLES, CRAND, SR., P.E.

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER: *[Signature]* 3-15-89
DATE: 3-15-89

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR: *[Signature]* 3-21-89
DATE: 3-21-89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR: *[Signature]* 3-18-89
DATE: 3-18-89

CHIEF BUREAU OF ENGINEERING: *[Signature]* 3-9-89
DATE: 3-9-89

3.3.6.1. Timing
An infiltration trench shall not be constructed or placed in service until all of the contributing drainage area has been stabilized and approved by the responsible inspector.

3.3.6.2. Trench Preparation
Excavate the trench to the design dimensions. Excavated materials shall be placed away from the trench sides to enhance trench wall stability. Large tree roots must be trimmed flush with the trench sides in order to prevent fabric puncturing or tearing during subsequent installation procedures. The side walls of the trench shall be roughened where sheared and sealed by heavy equipment.

3.3.6.3. Fabric Laydown
The filter fabric roll must be cut to the proper width prior to installation. The cut width must include sufficient material to conform to trench perimeter irregularities and for a 6-inch minimum top overlap. Place the fabric roll over the trench and unroll a sufficient length to allow placement of the fabric down into the trench. Stones or other anchoring objects should be placed on the fabric at the edge of the trench to keep the lined trench open during windy periods. When overlaps are required between rolls, the upstream roll should lap a minimum of 2 feet over the downstream roll in order to provide a shingled effect. The overlap ensures fabric continuity or to ensure that the fabric conforms to the excavation surface during aggregate placement and compaction.

3.3.6.4. Stone Aggregate Placement and Compaction
The stone aggregate should be placed in lifts and compacted using plate compactors. As a rule of thumb, a maximum loose lift thickness of 12 inches is recommended. The compaction process ensures fabric conformity to the excavation sides, thereby reducing the potential for soil piping, fabric clogging, and settlement problems.

3.3.6.5. Overlapping and Covering
Following the stone aggregate placement, the filter fabric shall be folded over the stone aggregate to form a 6" minimum longitudinal lap. The desired fill soil or stone aggregate shall be placed over the lap at sufficient intervals to maintain the lap during subsequent backfilling.

3.3.6.6. Contamination
Care shall be exercised to prevent natural or fill soils from intermixing with the stone aggregate. All contaminated stone aggregate shall be removed and replaced with uncontaminated stone aggregate.

3.3.6.7. Voids Behind Fabric
Voids can be created between the fabric and excavation sides and shall be avoided. Removing boulders or other obstacles from the trench walls is one source of such voids. Natural soils should be placed in these voids at the most convenient time during construction to ensure fabric conformity to the excavation sides. Soil piping, fabric clogging, and possible surface subsidence will be avoided by this remedial process.

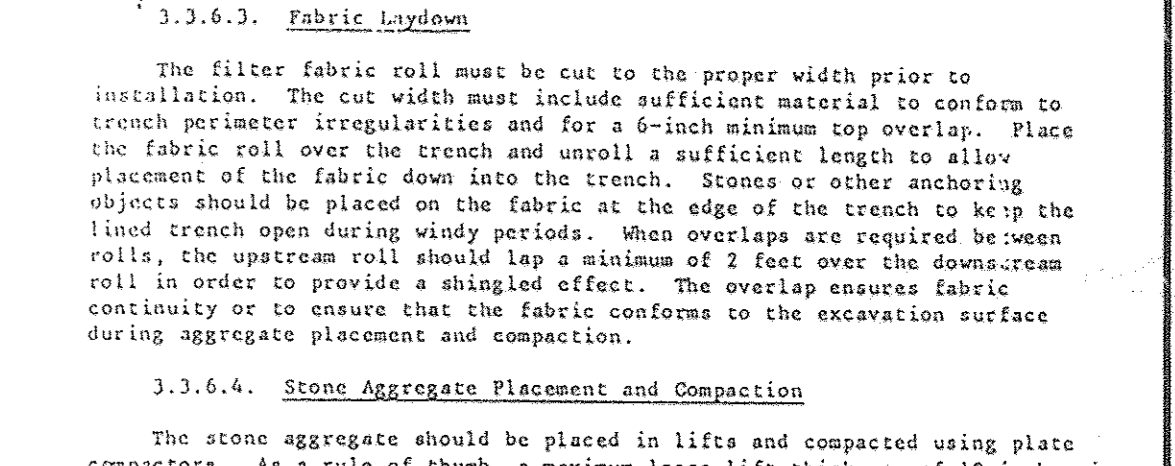
3.3.6.8. Unstable Excavation Sides
Vertically excavated walls may be difficult to maintain in areas where the soil moisture is high or where soft cohesive or cohesionless soils predominate. These conditions may require laying back of the side slopes to maintain stability; trapezoidal rather than rectangular cross sections may result.

3.3.6.9. Vegetative Buffer
A vegetative buffer of at least 20 feet (wider, if possible) shall be used to intercept surface runoff from all impervious areas.

3.3.6.10. Traffic Control
Heavy equipment and traffic shall be restricted from traveling over the infiltration areas to minimize compaction of the soil.

3.3.6.11. Observation Well
An observation well, as described in subsection 3.3.4.8 and Figure 3-5 shall be provided. The depth of the well at the time of installation will be clearly marked on the well cap.

3.3.7. Maintenance
Infiltration trenches shall be designed to minimize maintenance. However, it is recognized that all infiltration facilities are subject to clogging by sediment, oil, grease, grit and other debris. In addition, the performance and longevity of these structures is not well documented. Consequently, a monitoring observation well is required for all infiltration structures.
The observation well shall be monitored periodically. For the first year after completion of construction, the well should be monitored on a quarterly basis and after every large storm. It is recommended that a log book be maintained indicating the rate at which the facility devers after large storms and the depth of the well for each observation. Once the performance characteristics of the structure have been verified, the monitoring schedule can be reduced to an annual basis, unless the performance data indicate that a more frequent schedule is required.
Sediment build-up in the top foot of stone aggregates or the surface inlet should be monitored on the same schedule as the observation well. A monitoring well in the top foot of stone aggregate will be required when the trench has a stone surface. Sediment deposited shall not be allowed to build up to the point where it will reduce the rate of infiltration into the trench.



Remove Ex-paving as necessary for Curb & Gutter Const. or Alt. P-5
Paving Sect. P-5
Standard 7" Curb & Gutter (Typical)

NOTE: See Hb. Co. Std. R 10.01 for details not shown.

Cut neat, clean joint in ex-paving

SEALING & COORDINATION

PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 19204, EXPIRATION DATE: NOVEMBER 2, 2014.
[Signature] 1-13-89 DATE
CHARLES, CRAND, SR., P.E.

ENGINEER'S CERTIFICATE
I hereby certify that this plan for Erosion and Sediment 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] 1-13-89 DATE
G. NELSON CLARK

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER: *[Signature]* 3-15-89
DATE: 3-15-89

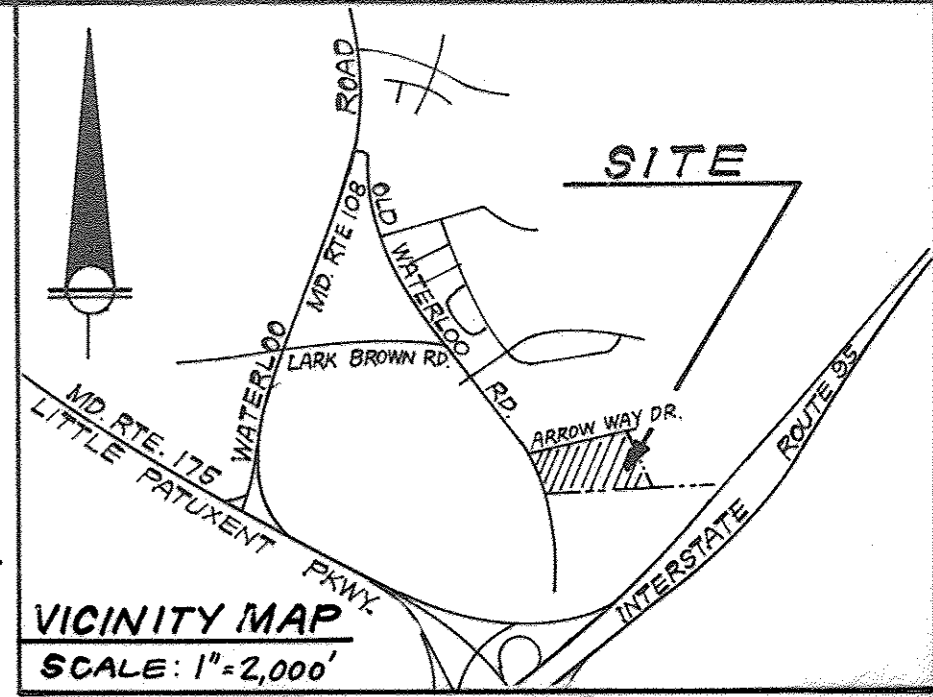
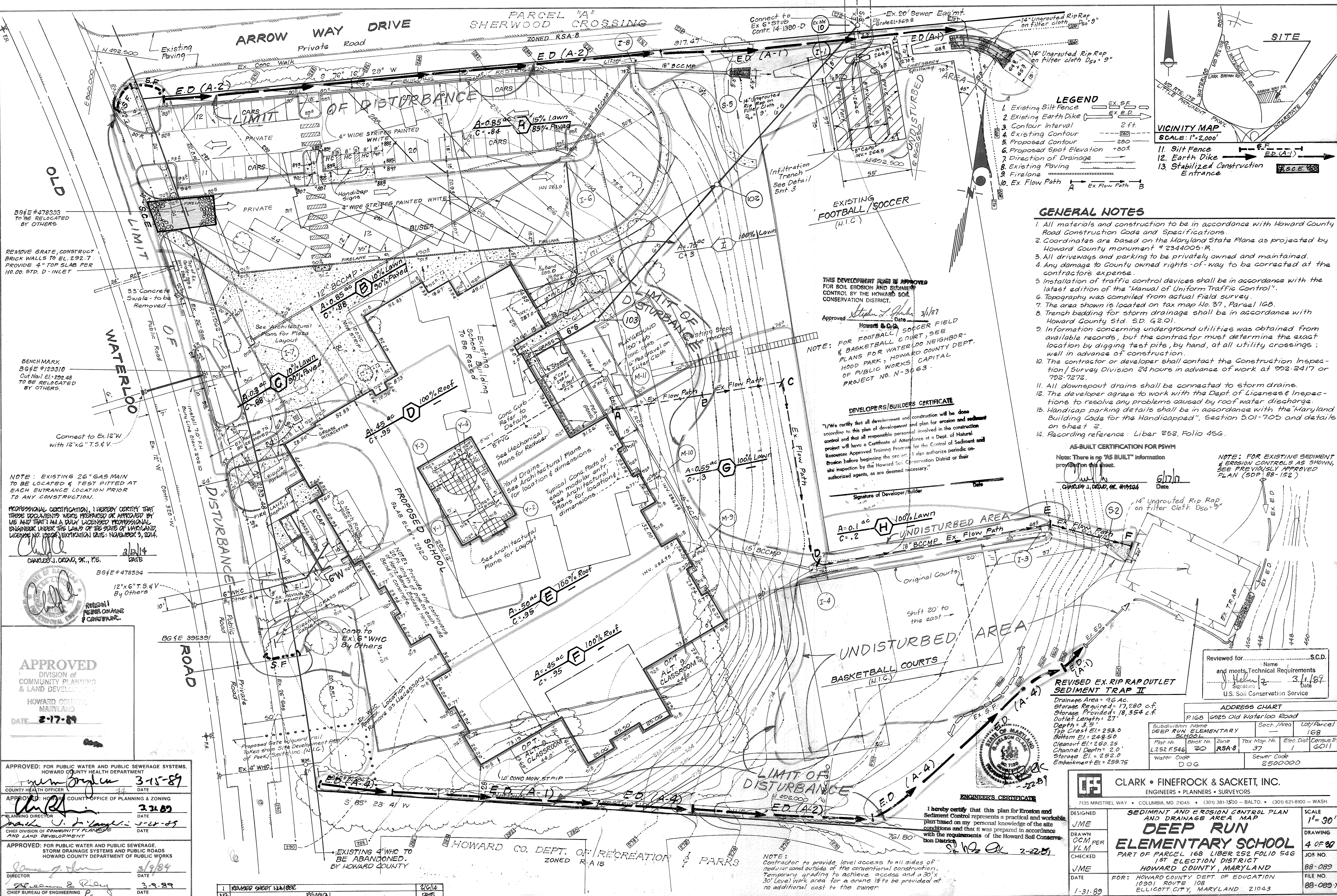
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR: *[Signature]* 3-21-89
DATE: 3-21-89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR: *[Signature]* 3-18-89
DATE: 3-18-89

CHIEF BUREAU OF ENGINEERING: *[Signature]* 3-9-89
DATE: 3-9-89

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 381-7530 - BALTO • (301) 621-8100 - WASH.

DESIGNED	JME	SCALE	AS SHOWN
DRAWN	JME	DRAWING	3 OF 30
PER	PER	JOB NO.	88-089
CHECKED	JME	FILE NO.	88-080-X
DATE	1-31-89	FOR: HOWARD COUNTY DEPT. OF EDUCATION 109A ROUTE 108 ELLCOTT CITY, MARYLAND 21043	



- LEGEND**
- 1. Existing Silt Fence
 - 2. Existing Earth Dike
 - 3. Contour Interval 2 ft.
 - 4. Existing Contour
 - 5. Proposed Contour
 - 6. Proposed Spot Elevation +0.0±
 - 7. Direction of Drainage
 - 8. Existing Paving
 - 9. Firelane
 - 10. Ex Flow Path

GENERAL NOTES

1. All materials and construction to be in accordance with Howard County Road Construction Code and Specifications.
2. Coordinates are based on the Maryland State Plane as projected by Howard County monument # 2344005-R.
3. All driveways and parking to be privately owned and maintained.
4. Any damage to County owned rights-of-way to be corrected at the contractor's expense.
5. Installation of traffic control devices shall be in accordance with the latest edition of the "Manual of Uniform Traffic Control".
6. Topography was compiled from actual field survey.
7. The area shown is located on tax map No. 37, Parcel 1GB.
8. Trench bedding for storm drainage shall be in accordance with Howard County Std. S.D. G2.01.
9. Information concerning underground utilities was obtained from available records, but the contractor must determine the exact location by digging test pits, by hand, at all utility crossings; well in advance of construction.
10. The contractor or developer shall contact the Construction Inspection/Survey Division 24 hours in advance of work at 992-2417 or 792-7272.
11. All downspout drains shall be connected to storm drains.
12. The developer agrees to work with the Dept. of Licenses & Inspections to resolve any problems caused by roof water discharge.
13. Handicap parking details shall be in accordance with the Maryland Building Code for the Handicapped, Section 5.01-7.05 and details on sheet 2.
14. Recording reference: Liber 252, Folio 456.

THIS DEVELOPMENT **IS** APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Approved: *Stephen L. Spitzer* 3/1/87
 Date: 3/1/87
 Name: *Spitzer & Co.*

NOTE: FOR FOOTBALL COURT, SEE PLANS FOR WATERLOO NEIGHBORHOOD PARK, HOWARD COUNTY DEPT. OF PUBLIC WORKS CAPITAL PROJECT NO. N-3063.

DEVELOPERS/BUILDERS CERTIFICATE

"I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources 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 or their authorized agents, as are deemed necessary."

Signature of Developer/Builder _____ Date _____

AS-BUILT CERTIFICATION FOR PSWM

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

NOTE: FOR EXISTING SEDIMENT & EROSION CONTROLS AS SHOWN, SEE PREVIOUSLY APPROVED PLAN (SDP 88-152)

Signature: *Charles J. Oring* 6/17/84
 Date: 6/17/84
 Name: *Charles J. Oring, P.E., #11104*

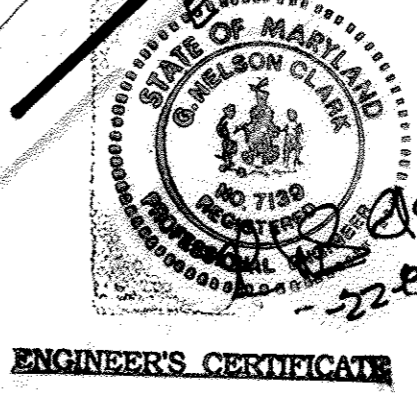
Reviewed for _____ S.C.D. and meets Technical Requirements
 Signature: *John J. ...* 3/1/89
 Date: 3/1/89
 U.S. Soil Conservation Service

ADDRESS CHART

Subdivision Name	DEEP RUN ELEMENTARY	Section	168
Plot No.	L252 F546	Zone	RS4-B
Water Code	DOG	Sewer Code	2500000

REVISED EX. RIP RAP OUTLET SEDIMENT TRAP II

Drainage Area = 96 Ac.
 Storage Required = 17,280 c.f.
 Storage Provided = 18,354 c.f.
 Outlet Length = 27'
 Depth = 3.5'
 Top Crest El. = 253.0
 Bottom El. = 249.50
 Channel El. = 250.25
 Channel Depth = 2.0'
 Storage El. = 252.0
 Embankment El. = 259.75



I hereby certify that this plan for Erosion and Sediment 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: *Clark • Finerock & Sackett, Inc.* 2-22-89
 Date: 2-22-89

REMOVE GRATE, CONSTRUCT BRICK WALLS TO EL. 292.7 PROVIDE 4" TOP SLAB PER HO.00 STD. D-INLET

BENCHMARK 86#E #123310 Out Nail EL. 292.48 TO BE RELOCATED BY OTHERS

NOTE: EXISTING 26" GAS MAIN TO BE LOCATED & TEST PITTED AT EACH ENTRANCE LOCATION PRIOR TO ANY CONSTRUCTION.

PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NO. 12004 EXPIRATION DATE: NOVEMBER 3, 2014.

Signature: *Charles J. Oring* 2/17/89
 Date: 2/17/89
 Name: *Charles J. Oring, P.E.*

APPROVED
 DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT
 HOWARD COUNTY, MARYLAND
 DATE: 2-17-89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: *John J. ...* 3-15-89
 DATE: 3-15-89

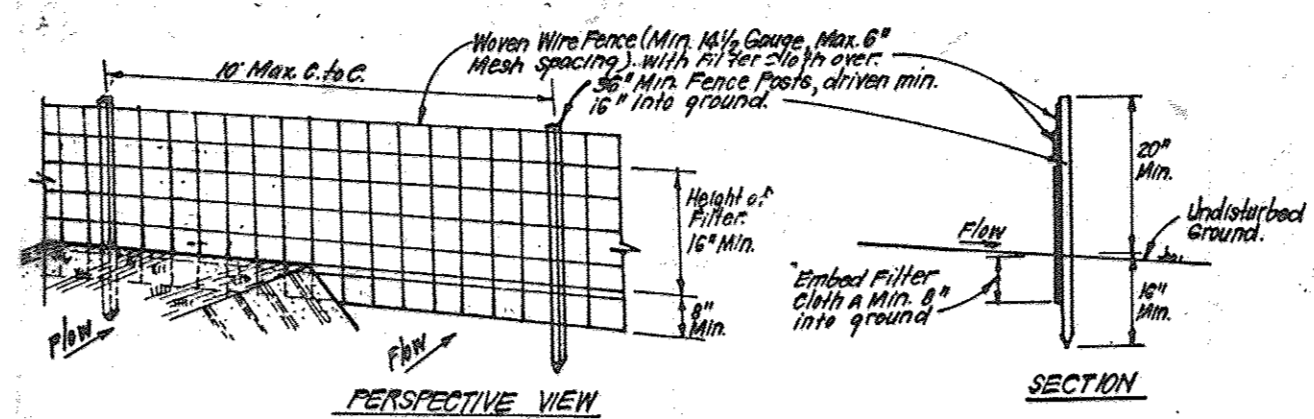
APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 PLANNING DIRECTOR: *John J. ...* 3-21-89
 DATE: 3-21-89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: *John J. ...* 3-9-89
 DATE: 3-9-89

1	REVISED SHEET NUMBER	2/1/84
102	REVISION	DATE

NOTE: Contractor to provide level access to all sides of modular construct outside of the conventional construction. Temporary grading to achieve access and a 30' x 30' level work area for a crane 18' to be provided at no additional cost to the owner.

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET SDP 89-98

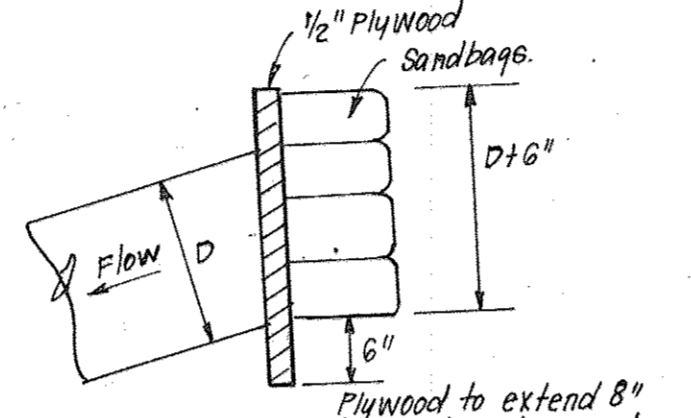


CONSTRUCTION SPECIFICATIONS:

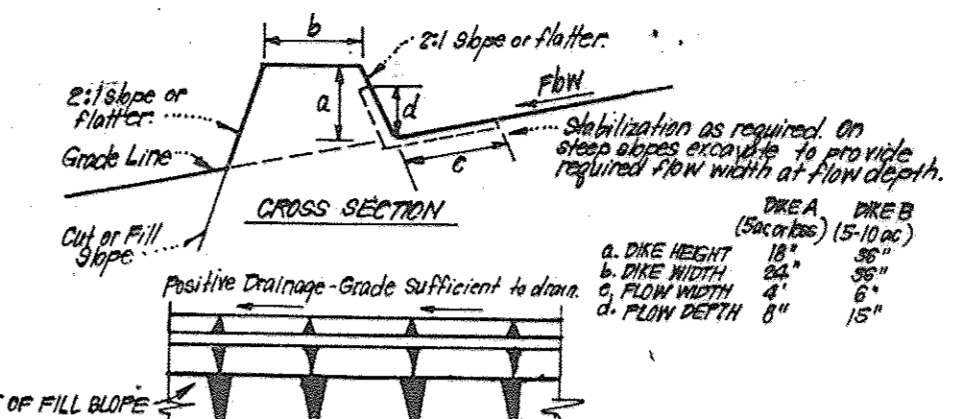
1. When wire fence to be fastened securely to fence posts with wire ties or staples.
2. Filter cloth to be fastened securely to woven wire fence with ties spaced every 30" at top and mid section.
3. When 2 sections of filter cloth adjoin each other they shall be overlapped by 6" and stapled.
4. Maintenance shall be performed as needed and material removed when "blowups" develop in silt fence.

POSTS: Steel, either T or U Type or 2" x 4" hardwood
 FENCE: Woven Wire, 1 1/2" gauge
 FILTER CLOTH: Filter A, Miraflex, Stablinks, TWIN or approved equal.
 PREFABRICATED UNIT: Geotex, Erosion Control, or approved equal.

SILT FENCE DETAIL (S)
NO SCALE



PIPE BLOCKING DETAIL
NO SCALE



CONSTRUCTION SPECIFICATIONS:

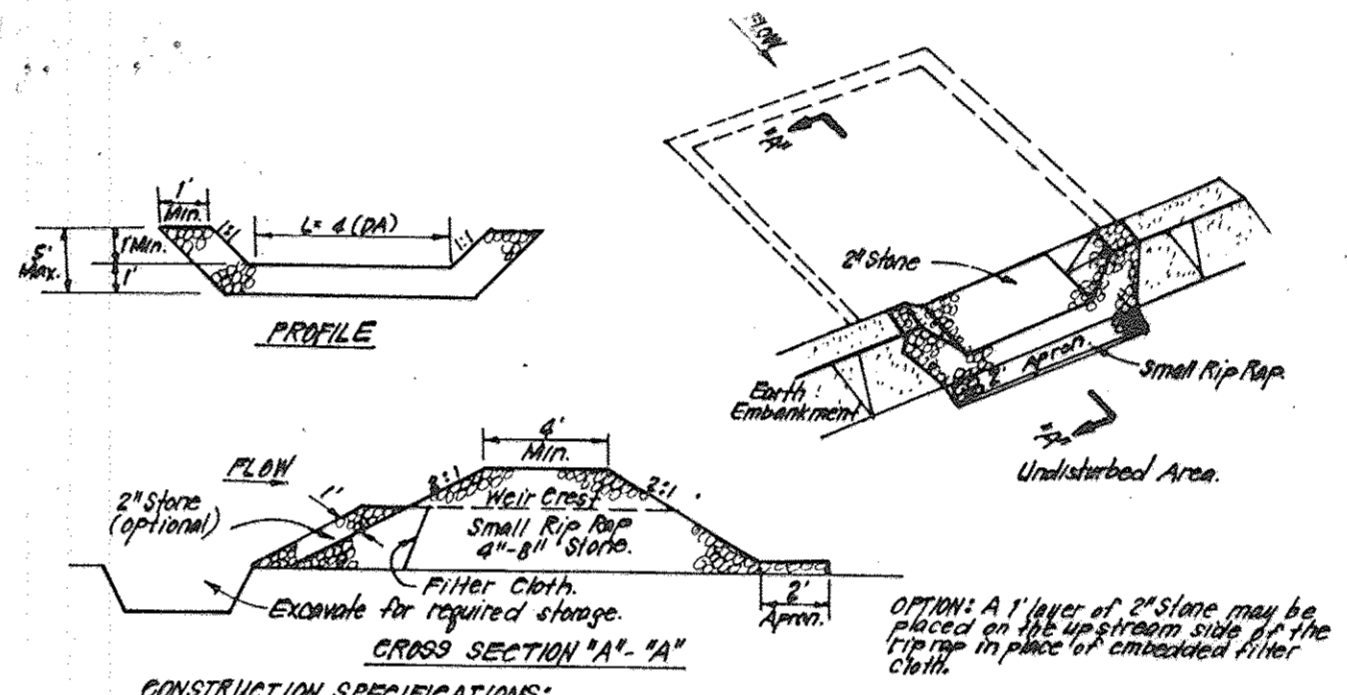
1. All dikes shall be compacted by earth-moving equipment.
2. All dikes shall have positive drainage to an outlet.
3. Top width may be wider and side slopes may be flatter if desired, to facilitate crossing by construction traffic.
4. Prior to dike construction, the area to be stabilized shall be prepared with a minimum of erosion control. Runoff shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin where either, the dike channel or the drainage area above the dike are not adequately stabilized.
5. Stabilization shall be: (A) in accordance with standard specifications for seed and straw mulch or straw mulch if not in seeding season, (B) flow channel as per chart below.

FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	0.5 - 3.0%	Seed & Straw Mulch	Seed or Straw Mulch
2	3.1 - 5.0%	Seed & Straw Mulch	Seed & Straw Mulch or Excelsior; Sed. 2' Stone
3	5.1 - 8.0%	Seed & Straw Mulch or Sed. 2' Stone	Limed Rip Rap 4'-6" Stone
4	8.1 - 20.0%	Limed Rip Rap 4'-6" Stone	Engineering Design

A. Stone to be 2" stone, or recycled concrete equivalent, in a layer at least 3" thick and be pressed into soil with construction equipment.
 B. Rip Rap to be 4" in a layer at least 8" thick, pressed into soil.
 C. After each application can be substituted for any of the above materials.
 7. Periodic inspection and required maintenance must be provided after each rain.

EARTH DIKE DETAIL (E.D.)
NO SCALE



CONSTRUCTION SPECIFICATIONS:

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The soil area shall be compacted.
2. The fill material for the embankment shall be free of roots and other woody vegetation as well as over sized stones, rock, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment with 12" or better tires.
3. All cut and fill slopes shall be 2:1 or flatter.
4. The stone used in the outlet shall be small rip rap 4'-6" stone with 1" thickness of 2" aggregate placed on the up-grade side on the small rip rap or equivalent filter cloth in the rip rap.
5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to the stream bottom of the trap.
6. The structure shall be inspected after each rain and repairs made as needed.
7. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
8. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

STONE OUTLET SEDIMENT TRAP (S.O.S.T.) ST.V.
NO SCALE

CONSTRUCTION SEQUENCE

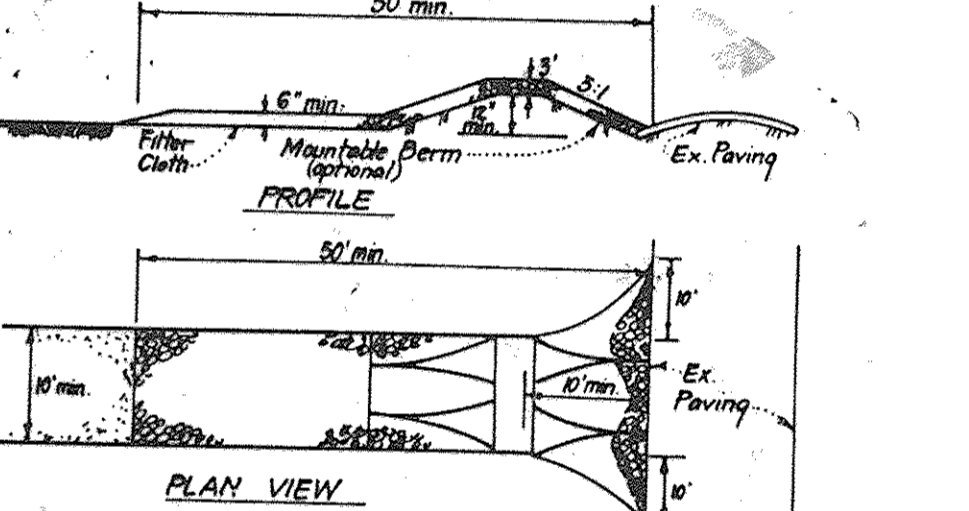
	# OF DAYS
1. Obtain Grading Permit	2
2. Install sediment & erosion control measures	7
3. Clear & rough grade site	21
4. Construct utilities & all storm drains except Str. I-1	90
5. Fine grade & construct paving & building	180
6. Stabilize all other disturbed areas on site in accordance with standards and specs.	14
7. Upon approval of the sediment control inspector remove sediment & erosion control measures and stabilize	14
8. After all areas on site are stabilized, construct infiltration trench and storm drainage Str. I-1 and stabilize area disturbed.	5

Note: Existing trap as shown must be installed in accordance with SDP 88-152 prior to any grading per this plan.

SEDIMENT CONTROL NOTES

1. A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (992-2437)
2. All vegetation and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
3. Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter control structures, dikes, perimeter slopes and all slopes greater than 3:1; b) 14 days as to all other disturbed or graded areas on the project site.
4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) sod (Sec. 54), temporary seeding (Sec. 50) and mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
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 Howard County Sediment Control Inspector.
7. Site Analysis:

Total Area of Site	11.6 Acres
Area Disturbed	4.0 Acres
Area to be roofed or paved	3.0 Acres
Area to be vegetatively stabilized	1.9 Acres
Total Cut	6,200 Cu. yds
Total Fill	14,600 Cu. yds
Offsite waste/borrow area location	N/A
8. Any sediment control practice which is disturbed by grading same day of disturbance.
9. Additional sediment control must be provided, if deemed necessary by the Howard County DEW sediment control inspector.
10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
11. If houses are to be constructed on "as-built" basis, at random, single lot Sediment Control as shown below shall be implemented. N/A
12. All pipes to be blocked at the end of each day (see detail below).
13. The total amount of straw bale dikes/silt fence equals 80 L.F.



CONSTRUCTION SPECIFICATIONS:

1. Stone size - Use 2" stone or recycled or recycled concrete equivalent.
2. Length - As required, but not less than 50' (except on a single residence lot where a 30' minimum length would apply).
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
6. Surface Water - All surface water flowing or diverted toward construction entrance shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slope will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment into public rights-of-way. This may require periodic top dressing with additional stone. No conditions deemed development related, graded, washed or tracked onto public rights-of-way must be removed immediately.
8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE (SCE)
NO SCALE

APPROVED
DIVISION OF
COMMUNITY PLANNING
& LAND DEVELOPMENT
HOWARD COUNTY,
MARYLAND
DATE **2-17-89**

AS-BUILT CERTIFICATION FOR PSWM
 Note: There is no "AS BUILT" information provided on this sheet.
 Signature: *[Signature]* Date: **5/17/89**
 CHARLES J. KRONO, JR. #191204

Reviewed for... **HOWARD**... S.C.D.
 Name
 and meets Technical Requirements
 Signature: *[Signature]* Date: **3/1/89**
 U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Signature: *[Signature]* Date: **2/1/89**
 Approved

DEVELOPER'S/BUILDERS CERTIFICATE

"I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources 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 or their authorized agents, as are deemed necessary."

Signature: *[Signature]* Date: **11/11/88**
 Signature of Developer/Builder

ENGINEER'S CERTIFICATE

"I hereby certify that this plan for Erosion and Sediment 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: *[Signature]* Date: **11-10-88**
 G. Nelson Clark

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 Signature: *[Signature]* Date: **3-15-89**
 COUNTY HEALTH OFFICER

APPROVED, HOWARD COUNTY OFFICE OF PLANNING & ZONING
 Signature: *[Signature]* Date: **3-31-89**
 PLANNING DIRECTOR

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Signature: *[Signature]* Date: **3-9-89**
 CHIEF BUREAU OF ENGINEERING

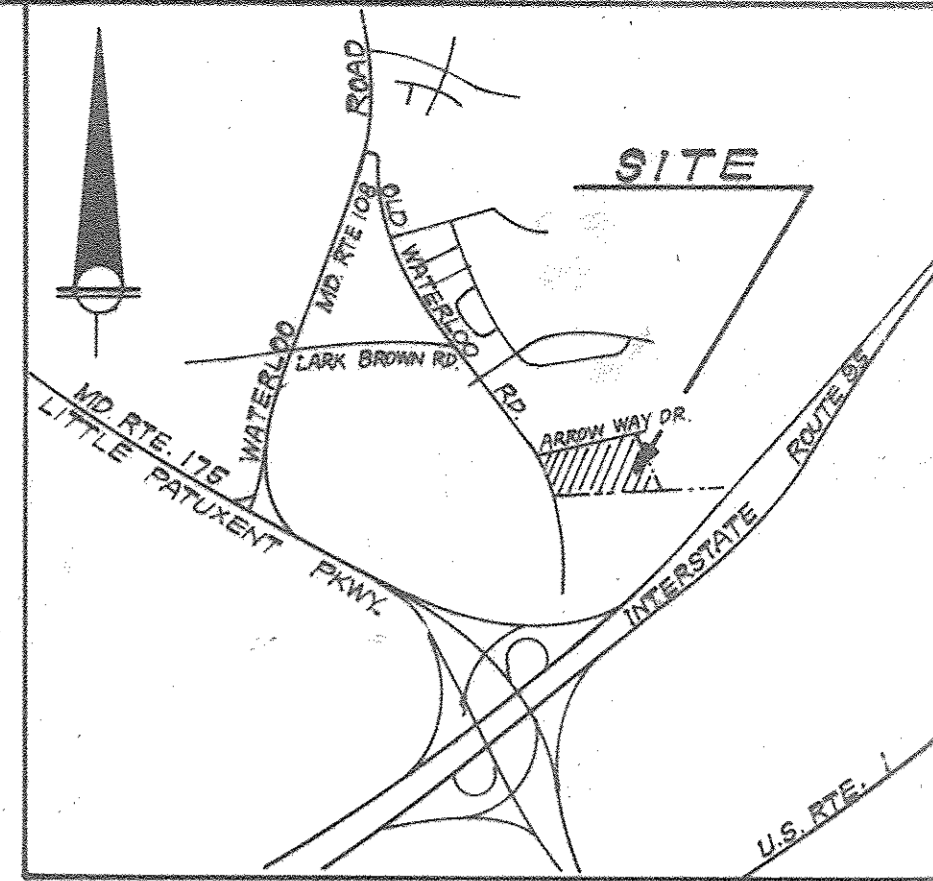
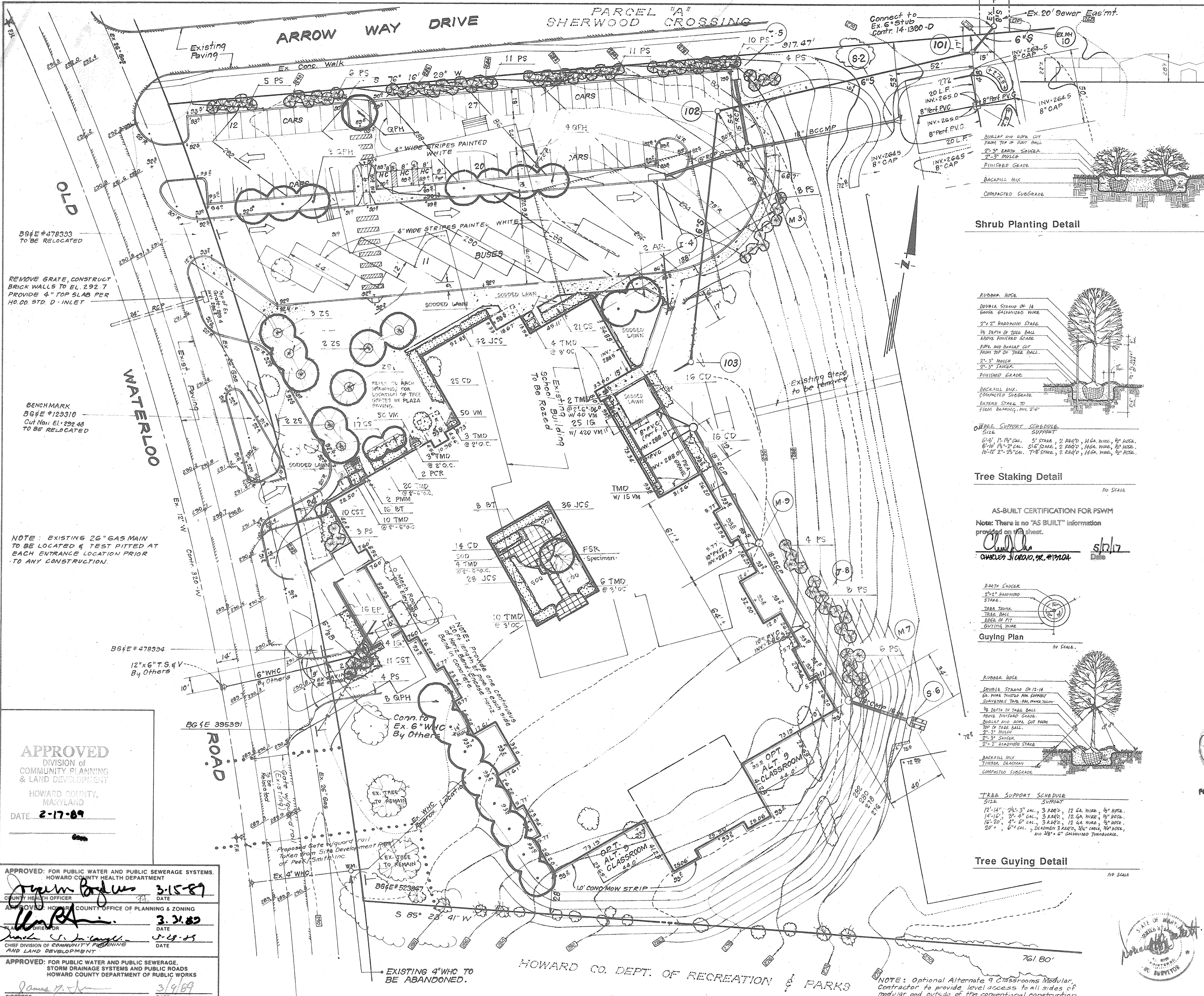
PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 19004, EXPIRATION DATE: NOVEMBER 3, 2014.
 Signature: *[Signature]* Date: **2/13/14**
 CHARLES J. KRONO, JR., P.E.

CLARK • FINEFROCK & SACKETT, INC.
 ENGINEERS • PLANNERS • SURVEYORS
 7135 MINSTREL WAY • COLUMBIA, MD. 21045 • (301) 381-7500 - BALTO. • (301) 621-8100 - WASH.

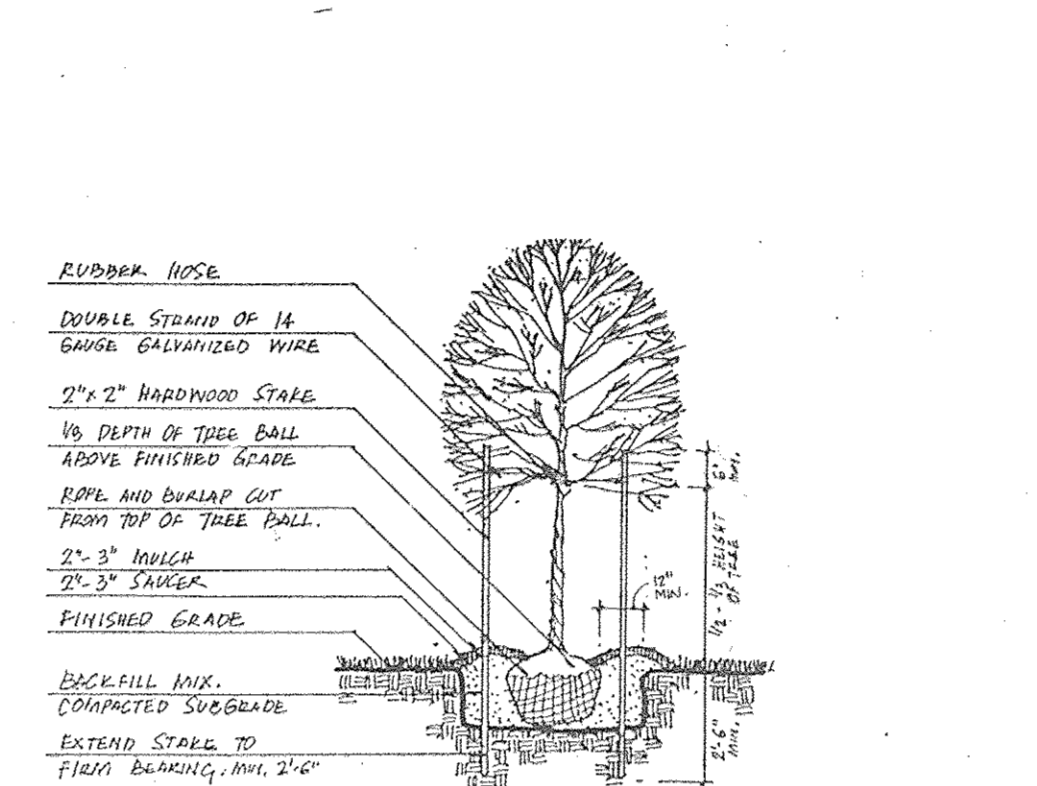
DESIGNED: **DAB**
 DRAWN: **OCM**
 CHECKED: **YLM**
 DATE: **DAB**
 1-31-89

SEDIMENT AND EROSION CONTROL PLAN
DEEP RUN
ELEMENTARY SCHOOL
 PART OF PARCEL 16B LIBER 252 FOLIO 546
 1ST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 FOR: HOWARD COUNTY DEPT. OF EDUCATION
 10901 ROUTE 108
 ELLICOTT CITY, MARYLAND 21043

SCALE: **1" = 30'**
 DRAWING: **5 OF 20**
 JOB NO.: **88-083**
 FILE NO.: **88-083X**



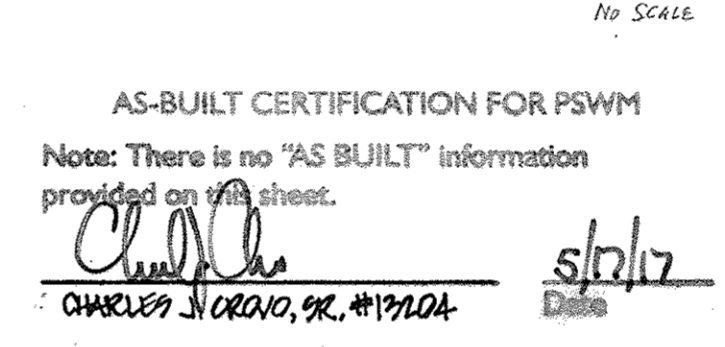
Shrub Planting Detail



Plant List

KEY	QTY.	BOTANICAL/COMMON NAME	SIZE & CONDITION	REMARKS
AR	2	Acer rubrum 'Red Sunset'	3 1/2"-4" Cal.	B&B
CK		Cornus stolonifera 'Dogwood'	8-10' Ht.	B&B Treeform
CST	21	Cornus stolonifera 'Red Dogwood'	2'-3' Ht.	CONT. @3' OC
CD	79	Cotoneaster dameri 'Skosholmen'	18"-24" Spd.	CONT. @3' OC
CS	76	Cotoneaster salicifolia 'Repandens'	18"-24" Spd.	CONT. @3' OC
FSR	1	Fagus sylvatica 'Riversii'	4"-4 1/2" Cal.	B&B Specimen
IG	29	Ilex glabra 'Compacta'	18"-24" Spd.	B&B @2' OC Hedge
JCS	106	Juniperus chinensis 'Sargentii'	18"-24" Spd.	CONT. @2' 6" OC
PS	20	Pinus strobus/White Pine	7'-8" Ht.	B&B
PCR	2	Pyrus calleryana 'Redspire'	2 1/2"-3" Cal.	B&B
QPH	16	Quercus phellos/Willow Oak	3"-3 1/2" Cal.	B&B Spacing varies:
TMD	29	Taxus cuspidata 'Densiformis'	24"-30" Ht.	B&B see Plan
VM	575	Vinca minor/Periwinkle	1 yr. plants; 2 1/2" PP	@6" OC

Tree Staking Detail

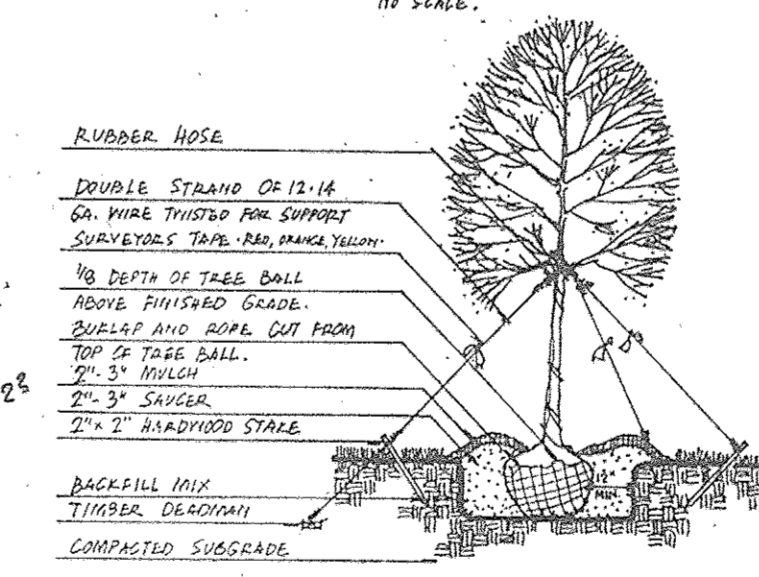


AS-BUILT CERTIFICATION FOR PSWM

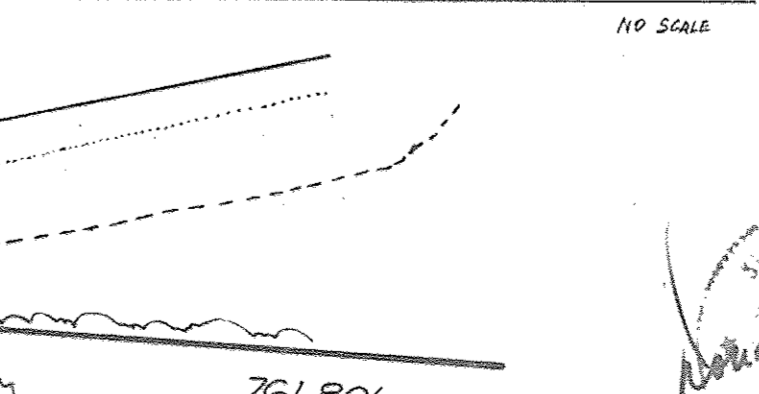
Note: There is no "AS BUILT" information provided on this sheet.

Charles J. Ordo, Jr. *slh/lz*
 CHARLES J. ORDO, JR., #19204 Date

Guying Plan



Tree Guying Detail



Planting Notes

- All plant material installed shall be full and heavy and conform to A.A.N. specifications and be installed in full conformance with project specifications.
- All areas disturbed by construction activities but not otherwise planted or paved shall be hydroseeded as per project specifications.
- All trees shall be matched within groups.
- Plant quantities are provided for the convenience of the contractor only - if discrepancies exist between the plan and the plant list, the quantities shown on the plan shall take precedence, and contractor shall notify Architect of the discrepancies.
- THIS PLAN IS TO BE USED FOR PLANTING ONLY!

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A FULLY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NO. 18204, EXPIRATION DATE: NOVEMBER 2, 2024.

Charles J. Ordo, Jr.
 CHARLES J. ORDO, JR., P.L.C. DATE

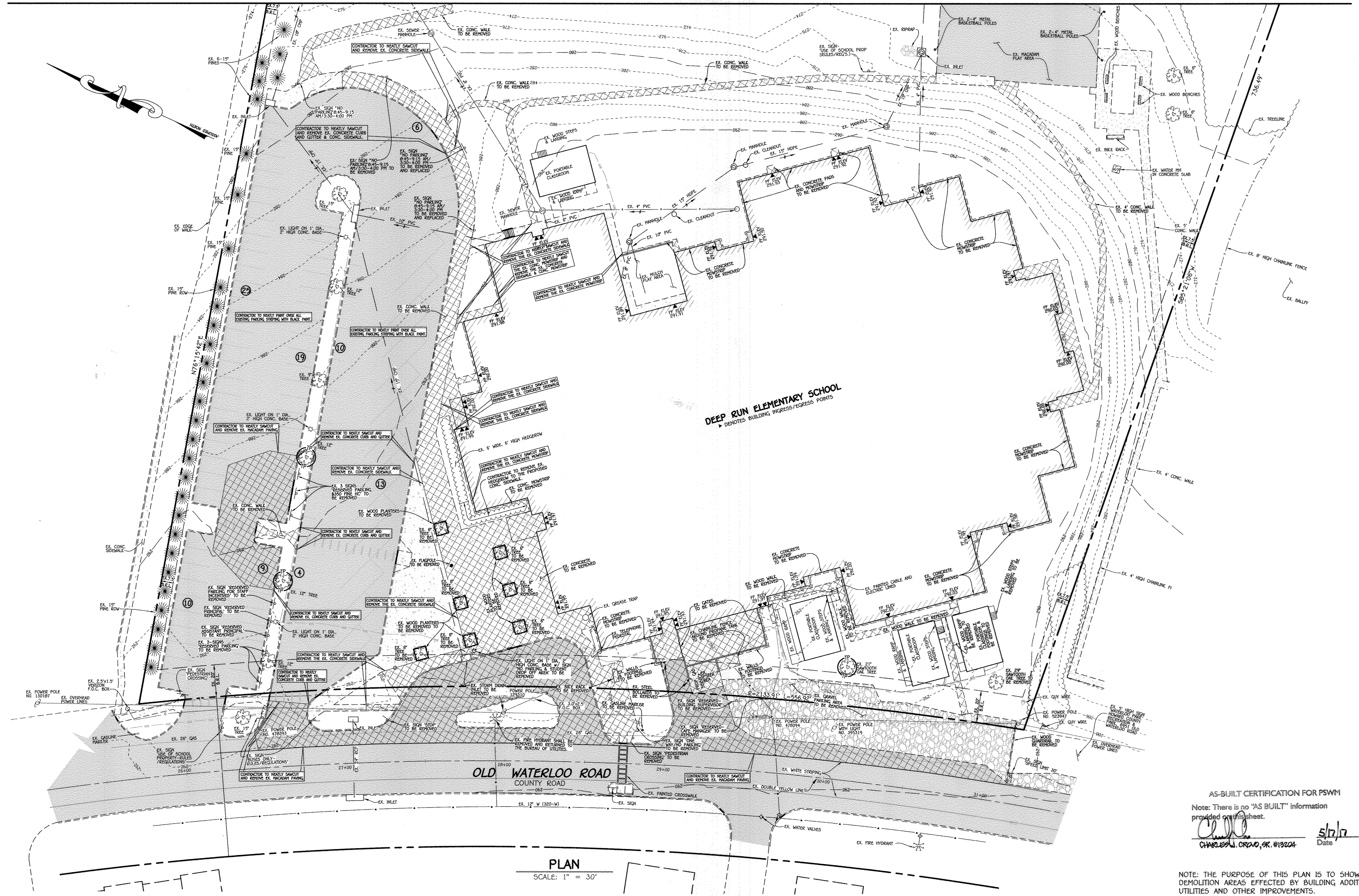
APPROVED
 DIVISION of
 COMMUNITY PLANNING
 & LAND DEVELOPMENT
 HOWARD COUNTY,
 MARYLAND
 DATE: 2-17-89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER DATE: 3-15-89
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 PLANNING DIRECTOR DATE: 3-31-89
 CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 DATE: 3-29-89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR DATE: 3-19-89
 CHIEF BUREAU OF ENGINEERING DATE: 3-9-89

NO.	REVISION	DATE
1	REVISED SHEET NUMBER	4/14

MATCHLINE SEE SHEET 8



DEEP RUN ELEMENTARY SCHOOL
 * DENOTES BUILDING INGRESS/EGRESS POINTS

PLAN
 SCALE: 1" = 30'

LEGEND	
SYMBOL	DESCRIPTION
--- 2B2 ---	EXISTING CONTOUR 2' INTERVAL
--- 2B0 ---	EXISTING CONTOUR 10' INTERVAL
---	EXISTING SAN. SEWER LINE
---	EXISTING STORM DRAIN LINE
---	EXISTING WATER LINE
---	EXISTING ELECTRIC LINE
---	EXISTING CABLE LINE
---	EXISTING GAS LINE
X	EXISTING FENCE
---	EXISTING CONCRETE WALK
---	EXISTING MACADAM PAVING
---	EXISTING TREES
---	EXISTING TREELINE
---	APPROXIMATE DEMOLITION AREA

AS-BUILT CERTIFICATION FOR PSWM
 Note: There is no "AS BUILT" information provided on this sheet.
 Charles J. Crovo, Sr. #13204
 Date: 3/17/14

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE DEMOLITION AREAS EFFECTED BY BUILDING ADDITIONS, UTILITIES AND OTHER IMPROVEMENTS.

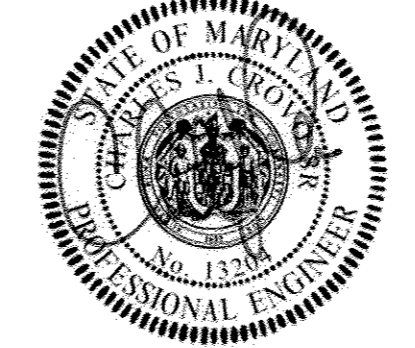
FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 461-2000

"Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 13204, Expiration Date: November 3, 2014."

Charles J. Crovo, Sr., P.E.
 3/17/14
 DATE

DATE	DESCRIPTION	REVISION BLOCK
	APPROVED: DEPARTMENT OF PLANNING AND ZONING	
	Director - Department of Planning and Zoning	
	Chief, Division of Land Development	
	Chief, Development Engineering Division	

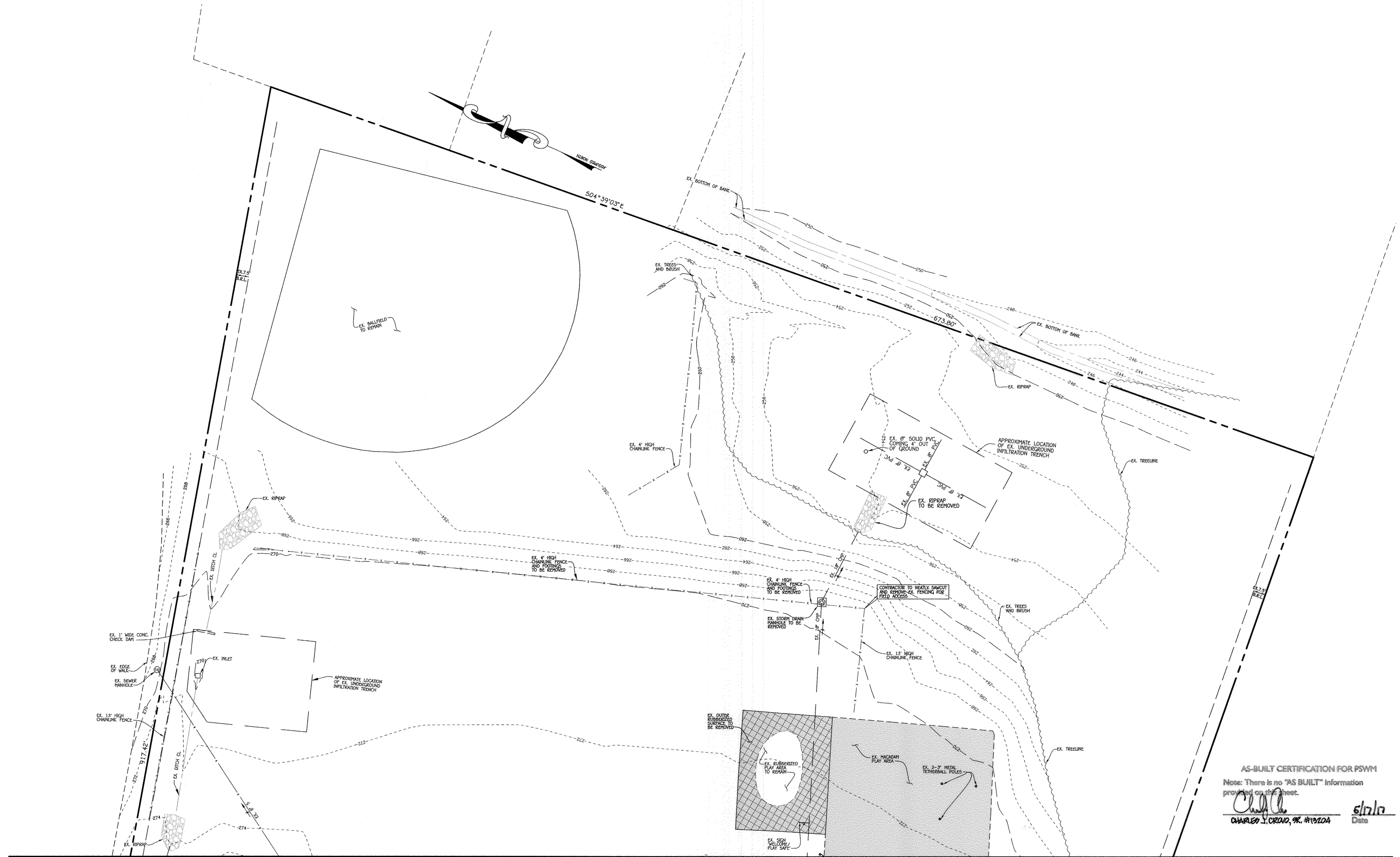
PREPARED FOR
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Clarksville Pike
 Ellicott City, Maryland 21042
 Attention: Bruce Gist
 410-313-6798



ADDRESS CHART			
LOT/PARCEL#	STREET ADDRESS		
P. 168	6925 OLD WATERLOO ROAD ELKRIDGE, MARYLAND 21075		
PERMIT INFORMATION CHART			
SUBMISSION NAME	SECTION/AREA	LOT/PARCEL NO.	
DEEP RUN ELEM. SCHOOL	N/A	P. 168	
PLAT# OR L/F	GRID#	ZONING	TAX MAP#
L.252 F.546	21	RSA-B	37
		ELECT. DISTR.	CENSUS TRACT
		FIRST	6011

DEMOLITION PLAN	
"REVISED SITE DEVELOPMENT PLAN" DEEP RUN ELEMENTARY SCHOOL	
ZONED RSA-B TAX MAP No.: 37	GRID No.: 21
FIRST ELECTION DISTRICT	HOWARD COUNTY, MARYLAND
SCALE: 1" = 30'	DATE: FEBRUARY 10, 2014
SHEET 7 OF 30	

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET SDP-89-98



MATCHLINE SEE SHEET 7

PLAN
SCALE: 1" = 30'

AS-BUILT CERTIFICATION FOR PSWM
Note: There is no "AS BUILT" information provided on this sheet.
Charles J. Crow, P.E.
CHARLES J. CROW, P.E. #19204 Date: 2/10/14

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE DEMOLITION AREAS EFFECTED BY BUILDING ADDITIONS, UTILITIES AND OTHER IMPROVEMENTS.

LEGEND	
SYMBOL	DESCRIPTION
-202-	EXISTING CONTOUR 2' INTERVAL
-200-	EXISTING CONTOUR 10' INTERVAL
-	EXISTING SAN. SEWER LINE
-	EXISTING STORM DRAIN LINE
-	EXISTING WATER LINE
-	EXISTING ELECTRIC LINE
-	EXISTING CABLE LINE
-	EXISTING GAS LINE
-	EXISTING FENCE
-	EXISTING CONCRETE WALK
-	EXISTING MACADAM PAVING
-	EXISTING TREES
-	EXISTING TREELINE
-	APPROXIMATE DEMOLITION AREA

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10275 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
(410) 451-2895

"Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 13204, Expiration Date: November 3, 2014."
Charles J. Crow, Sr., P.E.
CHARLES J. CROW, SR., P.E. DATE: 2/10/14

DATE	DESCRIPTION	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Harold J. Laughlin
Director - Department of Planning and Zoning DATE: 2/10/14
Kent Sheehy
Chief, Division of Land Development DATE: 2/10/14
Chad Edmund
Chief, Development Engineering Division DATE: 2-23-14

PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Clarksville Pike
Ellicott City, Maryland 21042
Attention: Bruce Gist
410-313-6798



ADDRESS CHART	
LOT/PARCEL#	STREET ADDRESS
P. 168	6925 OLD WATERLOO ROAD ELKRIDGE, MARYLAND 21075

PERMIT INFORMATION CHART		
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
DEEP RUN ELEM. SCHOOL	N/A	P. 168
PLAT# OR L/F	GRID#	ZONING
L252 F.546	21	RSA-8
TAX MAP#	ELECT. DISTR.	CENSUS TRACT
37	FIRST	6011

DEMOLITION PLAN	
"REVISED SITE DEVELOPMENT PLAN" DEEP RUN ELEMENTARY SCHOOL	
ZONED RSA-8 TAX MAP No.: 37 GRID No.: 21 PARCEL No.: 168	FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' DATE: FEBRUARY 10, 2014	
SHEET 8 OF 30	

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET SDP-89-98

I:\2013\03\09\09\ADDITIONS 2013\03\09 SDP DEMO PLAN 7-8.dwg, DEMO PLAN-2, 2/12/2014 7:58:04 AM, 1:1

MATCHLINE SEE SHEET 10



DEEP RUN ELEMENTARY SCHOOL
 * DENOTES BUILDING INGRESS/EGRESS POINTS
 NOTE: SEE ARCH DRAWINGS FOR
 SCHEDULED SCORING PATTERN AT ENTRY.

OLD WATERLOO ROAD
 COUNTY ROAD

PLAN
 SCALE: 1" = 30'

LEGEND	
SYMBOL	DESCRIPTION
--- 292 ---	EXISTING CONTOUR 2' INTERVAL
--- 280 ---	EXISTING CONTOUR 10' INTERVAL
---	EXISTING SAN SEWER LINE
---	EXISTING STORM DRAIN LINE
---	EXISTING WATER LINE
---	EXISTING ELECTRIC LINE
---	EXISTING CABLE LINE
---	EXISTING GAS LINE
X	EXISTING FENCE
--- 292 ---	PROPOSED CONTOUR 2' INTERVAL
--- 280 ---	PROPOSED CONTOUR 10' INTERVAL
+ 291.80	SPOT ELEVATION
---	PROPOSED CONCRETE WALK
---	PROPOSED MACADAM PAVING
---	EXISTING TREES
---	EXISTING TREELINE
---	PROPOSED TREELINE
---	PROPOSED WATER
---	PROPOSED STORMDRAIN
---	PROPOSED CHAINLINK FENCE
---	PROPOSED FCE SIGNAGE

AS-BUILT CERTIFICATION FOR PSWM
 Note: There is no "AS-BUILT" information provided on this sheet.
 Charles J. Crovo, Sr. #19204
 5/12/17
 Date

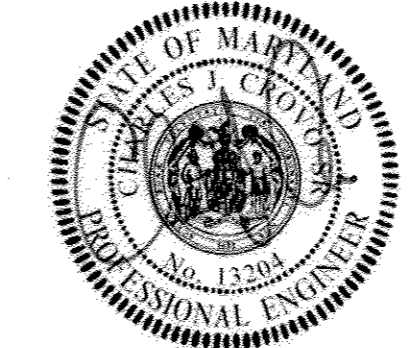
NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE BUILDING ADDITIONS, UTILITIES AND OTHER IMPROVEMENTS.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PKCE
 ELICOTT CITY, MARYLAND 21042
 (410) 401-2995

"Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 138204. Expiration Date: November 3, 2014."
 Charles J. Crovo, Sr., P.E.
 5/12/17
 Date

DATE	DESCRIPTION
	REVISION BLOCK
	APPROVED: DEPARTMENT OF PLANNING AND ZONING
	Director - Department of Planning and Zoning
	Chief, Division of Land Development
	Chief, Development Engineering Division

PREPARED FOR
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Clarksville Pike
 Ellicott City, Maryland 21042
 Attention: Bruce Gist
 410-313-6798



ADDRESS CHART			
LOT/PARCEL#	STREET ADDRESS		
P. 168	6925 OLD WATERLOO ROAD ELKRIDGE, MARYLAND 21075		
PERMIT INFORMATION CHART			
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.	
DEEP RUN ELEM. SCHOOL	N/A	P. 168	
PLAT# OR L/F	GRID#	ZONING	TAX MAP#
L.252 F.546	21	RSA-8	37
		ELECT. DISTR.	CENSUS TRACT
		FIRST	6011

SITE IMPROVEMENT PLAN	
"REVISED SITE DEVELOPMENT PLAN" DEEP RUN ELEMENTARY SCHOOL	
ZONED RSA-8 TAX MAP No.: 37	GRID No.: 21
FIRST ELECTION DISTRICT	HOWARD COUNTY, MARYLAND
SCALE: 1" = 30'	DATE: FEBRUARY 10, 2014
SHEET 9 OF 30	

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET SDP-89-98

I:\2003\03009\dwg\ADDITIONS 2013\03009 SDP SITE PLAN 1-12\2014 8:07:54 AM, 1:1

**DEEP RUN ELEMENTARY SCHOOL
BEST MANAGEMENT PRACTICES - BMP SUMMARY TABLE**

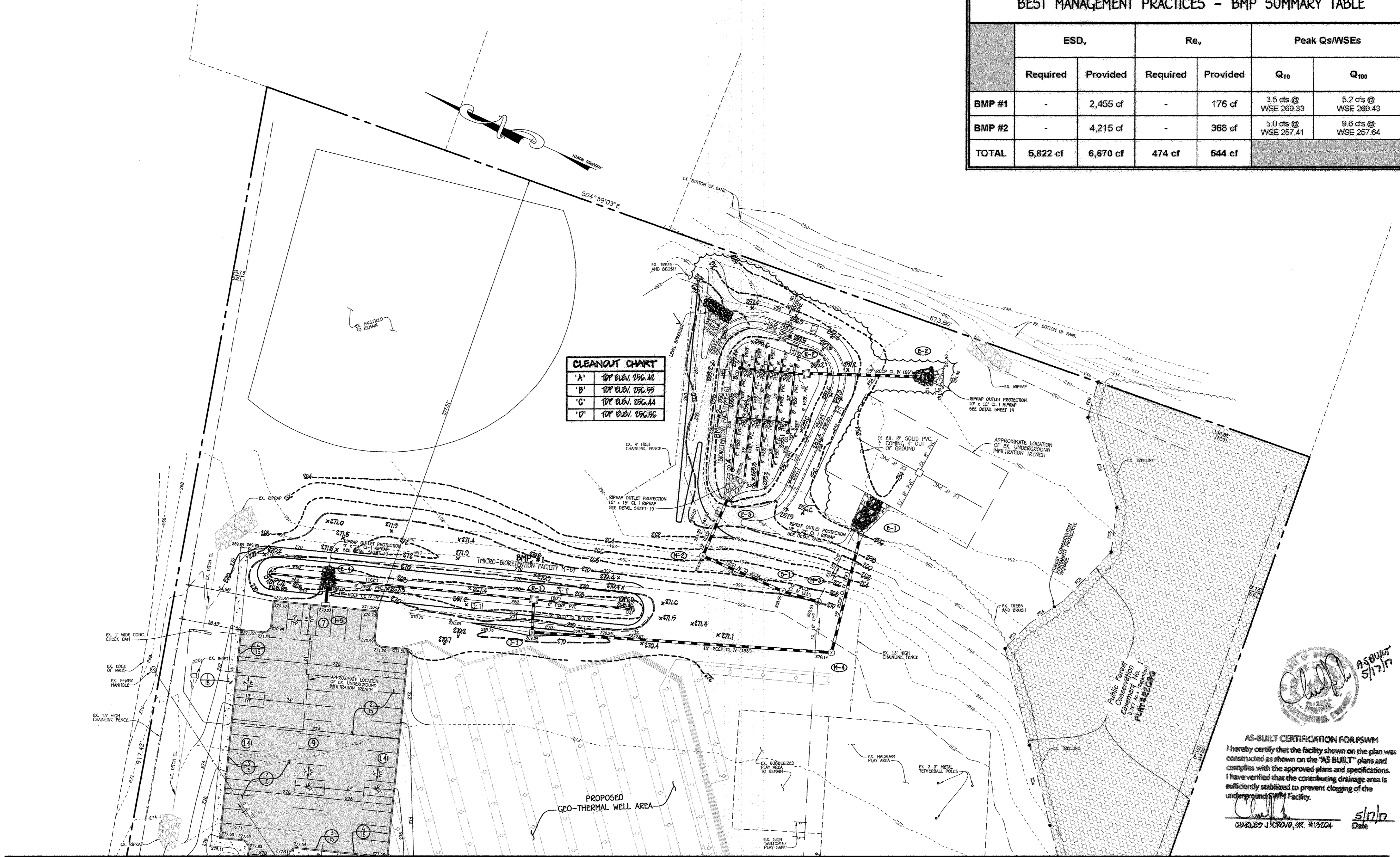
BMP #	ESD _v		Re _v		Peak Qs/WSEs	
	Required	Provided	Required	Provided	Q ₁₀	Q ₁₀₀
BMP #1	-	2,455 cf	-	176 cf	3.5 cfs @ WSE 269.33	5.2 cfs @ WSE 269.43
BMP #2	-	4,215 cf	-	368 cf	5.0 cfs @ WSE 257.41	9.6 cfs @ WSE 257.64
TOTAL	5,822 cf	6,670 cf	474 cf	544 cf		

CLEANOUT CHART

A'	TOP ELEV. 256.42
B'	TOP ELEV. 256.99
C'	TOP ELEV. 256.44
D'	TOP ELEV. 256.56

LEGEND

SYMBOL	DESCRIPTION
--- 282 ---	EXISTING CONTOUR 2' INTERVAL
--- 280 ---	EXISTING CONTOUR 10' INTERVAL
---	EXISTING SAN. SEWER LINE
---	EXISTING STORM DRAIN LINE
---	EXISTING WATER LINE
---	EXISTING ELECTRIC LINE
---	EXISTING CABLE LINE
---	EXISTING GAS LINE
---	EXISTING FENCE
--- 282 ---	PROPOSED CONTOUR 2' INTERVAL
--- 280 ---	PROPOSED CONTOUR 10' INTERVAL
+ 291.80	SPOT ELEVATION
---	PROPOSED CONCRETE WALK
---	PROPOSED MACADAM PAVING
---	EXISTING TREES
---	EXISTING TREELINE
---	PROPOSED TREELINE
---	PROPOSED WATER
---	PROPOSED STORMDRAIN
---	PROPOSED CHAINLINK FENCE
---	PROPOSED PCE SIGNAGE



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 that the contributing drainage area is sufficiently stabilized to prevent clogging of the underground SWM Facility.

Charles J. Cravo 5/17/17
Date

PLAN
SCALE: 1" = 30'

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE BUILDING ADDITIONS, UTILITIES AND OTHER IMPROVEMENTS.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 461-2899

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 13204. Expiration Date: November 3, 2014.

Charles J. Cravo 3/23/14
DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Mark A. Gagliardi 3/14/14
Director - Department of Planning and Zoning

John J. Schaefer 3/14/14
Chief, Division of Land Development

John J. Schaefer 2-27-14
Chief, Development Engineering Division

DATE	DESCRIPTION
	REVISION BLOCK

PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Clarksville Pike
Ellicott City, Maryland 21042
Attention: Bruce Gist
410-313-6798

STATE OF MARYLAND
PROFESSIONAL ENGINEER
No. 13204

ADDRESS CHART	
LOT/PARCEL#	STREET ADDRESS
P. 16B	6925 OLD WATERLOO ROAD ELKRIDGE, MARYLAND 21075

PERMIT INFORMATION CHART			
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.	
DEEP RUN ELEM. SCHOOL	N/A	P. 16B	
PLAT# OR L/F	GRID#	TAX MAP#	ELECT. DISTR.
L.252 F.546	21	R5A-B 37	FIRST
		CENSUS TRACT	
		6011	

SITE IMPROVEMENT PLAN

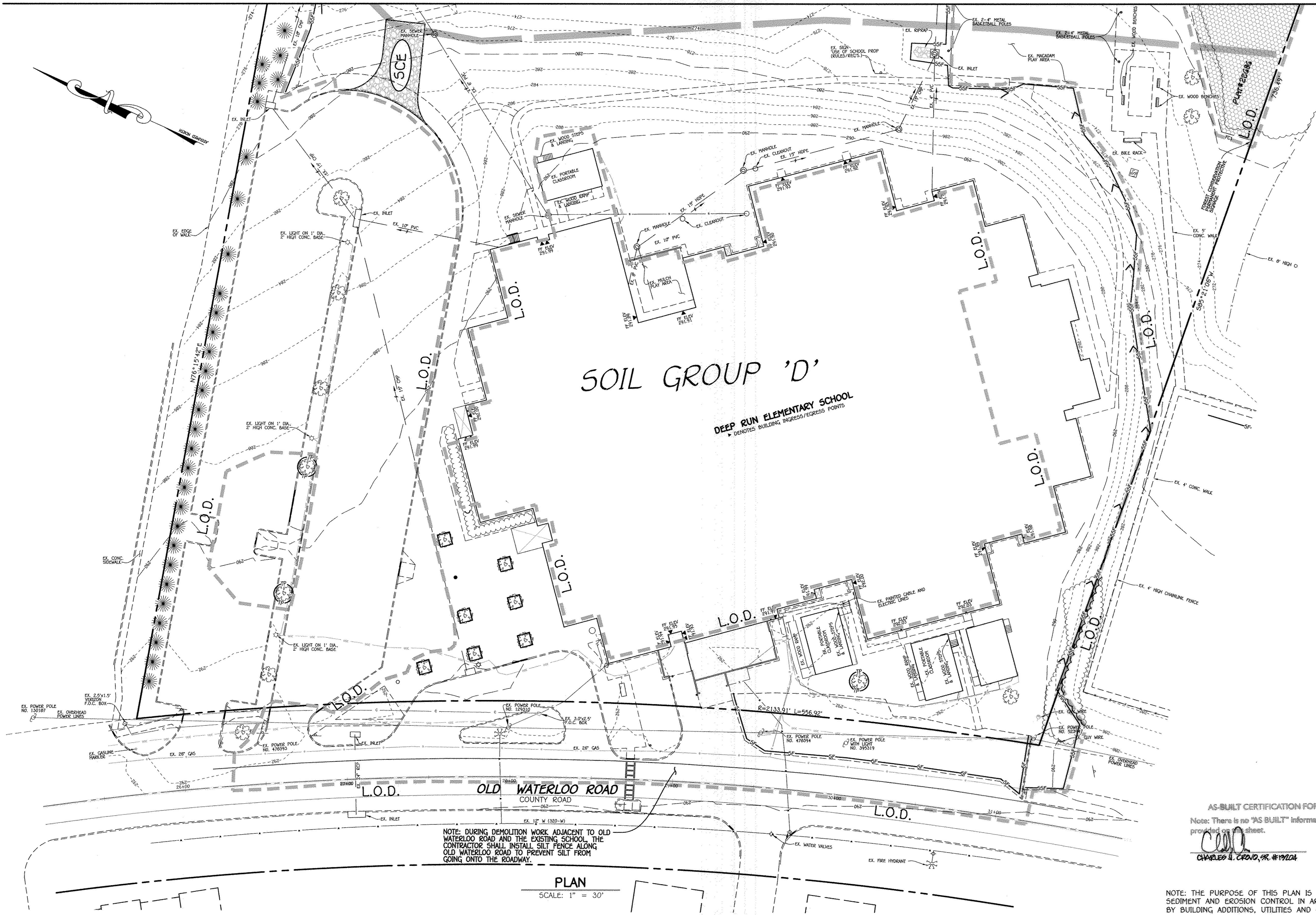
"REVISED SITE DEVELOPMENT PLAN"
DEEP RUN ELEMENTARY SCHOOL

ZONED R5A-B TAX MAP No.: 37 GRID No.: 21 PARCEL No.: 16B
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' DATE: FEBRUARY 10, 2014

SHEET 10 OF 30

"AS BUILT" 50P-89-98

I:\2003\03009\dwg\ADDITIONS 2013\03009 SDP SITE PLAN 9-10.dwg, SITE PLAN 2, 2/12/2014 8:11:15 AM, 1:1



SOIL GROUP 'D'

DEEP RUN ELEMENTARY SCHOOL
 * DENOTES BUILDING INGRESS/EGRESS POINTS

NOTE: DURING DEMOLITION WORK ADJACENT TO OLD WATERLOO ROAD AND THE EXISTING SCHOOL, THE CONTRACTOR SHALL INSTALL SILT FENCE ALONG OLD WATERLOO ROAD TO PREVENT SILT FROM GOING ONTO THE ROADWAY.

PLAN
 SCALE: 1" = 30'

LEGEND	
SYMBOL	DESCRIPTION
--- 2'00' ---	EXISTING CONTOUR 2' INTERVAL
--- 10'00' ---	EXISTING CONTOUR 10' INTERVAL
---	EXISTING SAN. SEWER LINE
---	EXISTING STORM DRAIN LINE
---	EXISTING WATER LINE
---	EXISTING ELECTRIC LINE
---	EXISTING CABLE LINE
---	EXISTING GAS LINE
X	EXISTING FENCE
○	EXISTING TREES
---	EXISTING TREELINE
---	PROPOSED TREELINE
---	L.O.D. LIMIT OF DISTURBANCE
---	SSF SUPER SILT FENCE
---	TP TREE PROTECTION FENCE
---	STABILIZED CONSTRUCTION ENTRANCE

AS-BUILT CERTIFICATION FOR PSWM
 Note: There is no "AS BUILT" information provided on this sheet.
 CHARLES J. CRAYO, SR. #19224

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE SEDIMENT AND EROSION CONTROL IN AREAS AFFECTED BY BUILDING ADDITIONS, UTILITIES AND OTHER IMPROVEMENTS.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 (410) 461-2000

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: *Charles J. Crayo, Sr.* Date: 2/11/14

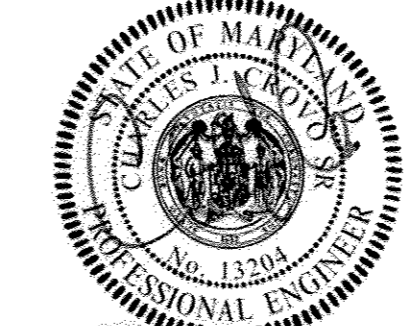
"Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 13204, Expiration Date: November 3, 2014."
 Signature: *Charles J. Crayo, Sr.* Date: 2/11/14
 CHARLES J. CRAYO, SR., P.E.

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: *John E. Roberts* Date: 2/11/14

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
 Signature: *John E. Roberts* Date: 2/11/14
 John E. Roberts
 Howard SCD

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Director - Department of Planning and Zoning: *Kevin S. DeLoach* Date: 2/12/14
 Chief, Division of Land Development: *Kevin S. DeLoach* Date: 2/11/14
 Chief, Development Engineering Division: *Chris Edwards* Date: 2-27-14

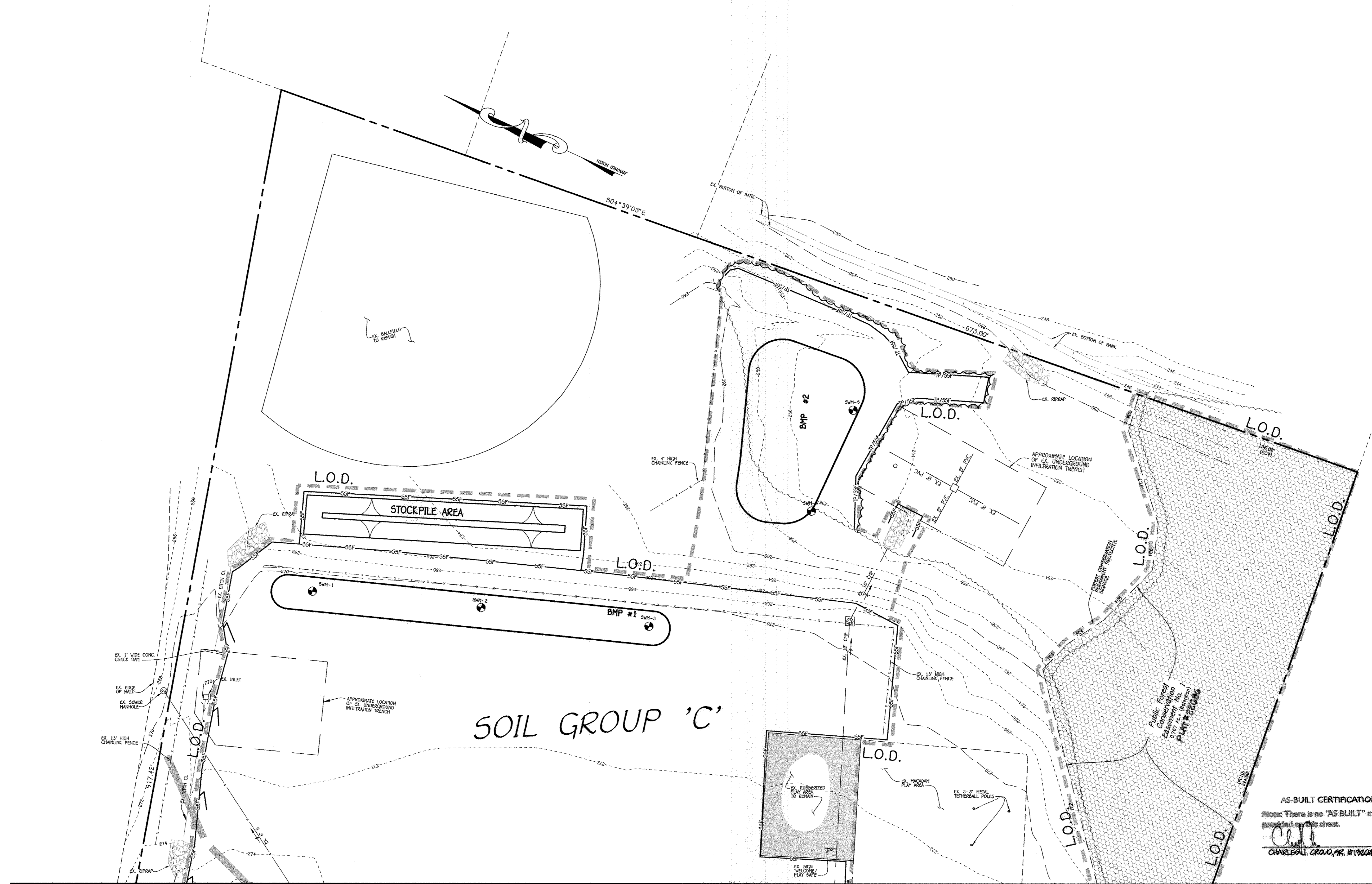
PREPARED FOR
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Clarksville Pike
 Ellicott City, Maryland 21042
 Attention Bruce Gist
 410-313-6798



ADDRESS CHART	
LOT/PARCEL#	STREET ADDRESS
P. 168	6925 OLD WATERLOO ROAD ELKBRIDGE, MARYLAND 21075

PERMIT INFORMATION CHART				
SUBMISSION NAME		SECTION/AREA	LOT/PARCEL NO.	
DEEP RUN ELEM. SCHOOL		N/A	P. 168	
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.
L252 F.546	21	RSA-B	37	FIRST
CENSUS TRACT		6011		

SEDIMENT AND EROSION CONTROL PLAN
"REVISED SITE DEVELOPMENT PLAN"
DEEP RUN ELEMENTARY SCHOOL
 ZONED RSA-B TAX MAP No.: 37 GRID No.: 21 PARCEL No.: 168
 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1" = 30' DATE: FEBRUARY 10, 2014
 SHEET 11 OF 30



LEGEND	
--- 2'00' ---	EXISTING CONTOUR 2' INTERVAL
--- 10'00' ---	EXISTING CONTOUR 10' INTERVAL
---	EXISTING SAN. SEWER LINE
---	EXISTING STORM DRAIN LINE
---	EXISTING WATER LINE
---	EXISTING ELECTRIC LINE
---	EXISTING CABLE LINE
---	EXISTING GAS LINE
---	EXISTING FENCE
---	EXISTING TREES
---	EXISTING TREELINE
---	PROPOSED TREELINE
---	L.O.D. LIMIT OF DISTURBANCE
---	SSP SUPER SILT FENCE
---	TP TREE PROTECTION FENCE
---	STABILIZED CONSTRUCTION ENTRANCE

SOIL GROUP 'C'

MATCHLINE SEE SHEET 11

PLAN
SCALE: 1" = 30'

AS-BUILT CERTIFICATION FOR PSWM
Note: There is no "AS BUILT" information provided on this sheet.
CHARLES J. CRONO, P.E. #19024

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE SEDIMENT AND EROSION CONTROL IN AREAS AFFECTED BY BUILDING ADDITIONS, UTILITIES AND OTHER IMPROVEMENTS.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
(410) 481-2295

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: *Charles J. Crono*
Date: 2/11/14

"Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 13204, Expiration Date: November 3, 2014."
Signature: *Charles J. Crono*
Date: 2/11/14
CHARLES J. CRONO, SR., P.E.

DATE	DESCRIPTION	REVISION BLOCK

PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Clarksville Pike
Ellicott City, Maryland 21042
Attention: Bruce Gist
410-313-6798



APPROVED: DEPARTMENT OF PLANNING AND ZONING
Director - Department of Planning and Zoning: *David M. Gwilt*
Chief, Division of Land Development: *Ventura*
Chief, Development Engineering Division: *David*
Date: 2/22/14

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: *Bruce Gist*
Date: 2/11/14

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
Signature: *John R. Robertson*
Date: 2/11/14
Howard SCD

ADDRESS CHART	
LOT/PARCEL#	STREET ADDRESS
P. 168	6925 OLD WATERLOO ROAD ELKRIDGE, MARYLAND 21075

PERMIT INFORMATION CHART				
SUBDIVISION NAME	DEEP RUN ELEM. SCHOOL	SECTION/AREA	N/A	LOT/PARCEL NO.
PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.
L.252	F.546	21	RSA-8	37
CENSUS TRACT		6011		

SEDIMENT AND EROSION CONTROL PLAN
"REVISED SITE DEVELOPMENT PLAN"
DEEP RUN ELEMENTARY SCHOOL

ZONED RSA-8 TAX MAP No.: 37 GRID No.: 21 PARCEL No.: 168
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' DATE: FEBRUARY 10, 2014

SHEET 12 OF 30

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET SDP-89-98

I:\2003\03009\dwg\ADDITIONS 2013\03009 SDP SED CONT PLAN 11-12.dwg, SED CONT PLAN-2, 2/10/2014, 1:04:22 PM, 1:1

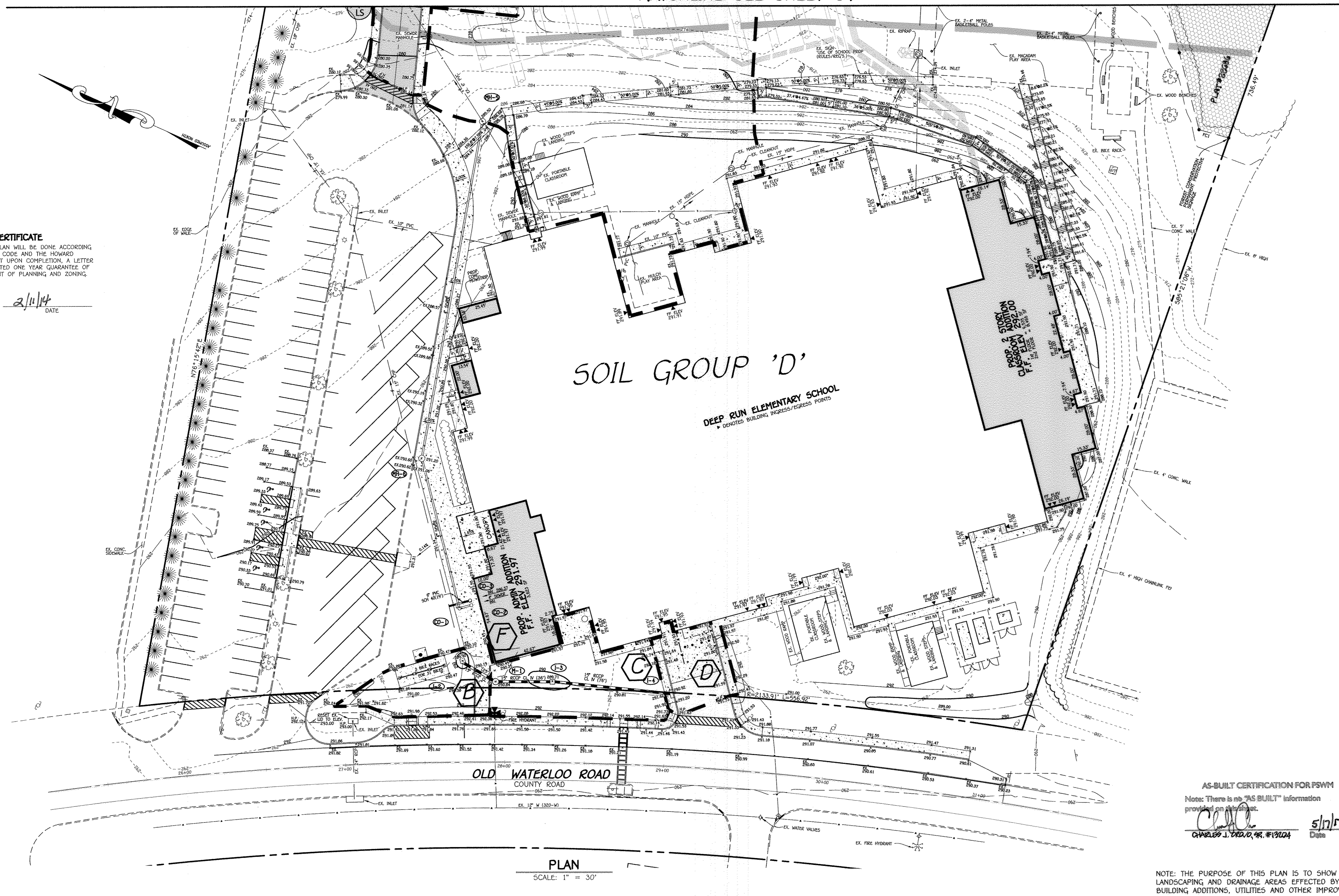
MATCHLINE SEE SHEET 14

DRAINAGE AREA DATA			
DRAINAGE AREA	STRUCTURE NO.	AREA (AC.)	% IMP.
A	1-1	1.40	0.29
B	1-2	0.07	0.46
C	1-3	0.12	0.36
D	1-4	0.05	0.61
E	1-5	0.62	0.57
F	CO-3	0.08	0.36

DEVELOPER'S / BUILDER'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.

NAME Bm Ut DATE 2/11/14



PLAN
SCALE: 1" = 30'

AS-BUILT CERTIFICATION FOR FSWM

Note: There is no "AS BUILT" information provided on this sheet.
 Signature: *Charles J. Cravo, Sr.* Date: 5/17/17
 CHARLES J. CRAVO, SR. #13204

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE LANDSCAPING AND DRAINAGE AREAS EFFECTED BY THE BUILDING ADDITIONS, UTILITIES AND OTHER IMPROVEMENTS.

LEGEND	
SYMBOL	DESCRIPTION
---282---	EXISTING CONTOUR 2' INTERVAL
---280---	EXISTING CONTOUR 10' INTERVAL
---	EXISTING SAN. SEWER LINE
---	EXISTING STORM DRAIN LINE
---	EXISTING WATER LINE
---	EXISTING ELECTRIC LINE
---	EXISTING CABLE LINE
---	EXISTING GAS LINE
---	EXISTING FENCE
---282---	PROPOSED CONTOUR 2' INTERVAL
---280---	PROPOSED CONTOUR 10' INTERVAL
+ 291.00	SPOT ELEVATION
---	PROPOSED CONCRETE WALK
---	EXISTING TREES
---	EXISTING TREELINE
---	PROPOSED TREELINE
---	DRAINAGE AREA LINES
---	PROPOSED WATER
---	PROPOSED STORMDRAIN
---	PROPOSED CHAINLINK FENCE

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10775 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 461-2895

"Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 13204, Expiration Date: November 3, 2014."

Signature: *Charles J. Cravo, Sr.* DATE: 2/11/14
 CHARLES J. CRAVO, SR., P.E.

DATE	DESCRIPTION	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Signature: *Mark J. Grogan* DATE: 2/11/14
 Director - Department of Planning and Zoning
 Signature: *Vest Studebaker* DATE: 2/11/14
 Chief, Division of Land Development
 Signature: *Chief Edward* DATE: 2/27/14
 Chief, Development Engineering Division

PREPARED FOR
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Clarksville Pike
 Ellicott City, Maryland 21042
 Attention Bruce Gist
 410-313-6798



ADDRESS CHART	
LOT/PARCEL#	STREET ADDRESS
P. 168	6925 OLD WATERLOO ROAD ELKRIDGE, MARYLAND 21075

PERMIT INFORMATION CHART			
SUBMISSION NAME	SECTION/AREA	LOT/PARCEL NO.	
DEEP RUN ELEM. SCHOOL	N/A	P. 168	
PLAT# OR L/F	GRID#	ZONING	TAX MAP#
L.252 F.546	21	RSA-8	37
		ELECT. DISTR.	CENSUS TRACT
		FIRST	6011

DRAINAGE AREA MAP AND LANDSCAPE PLAN

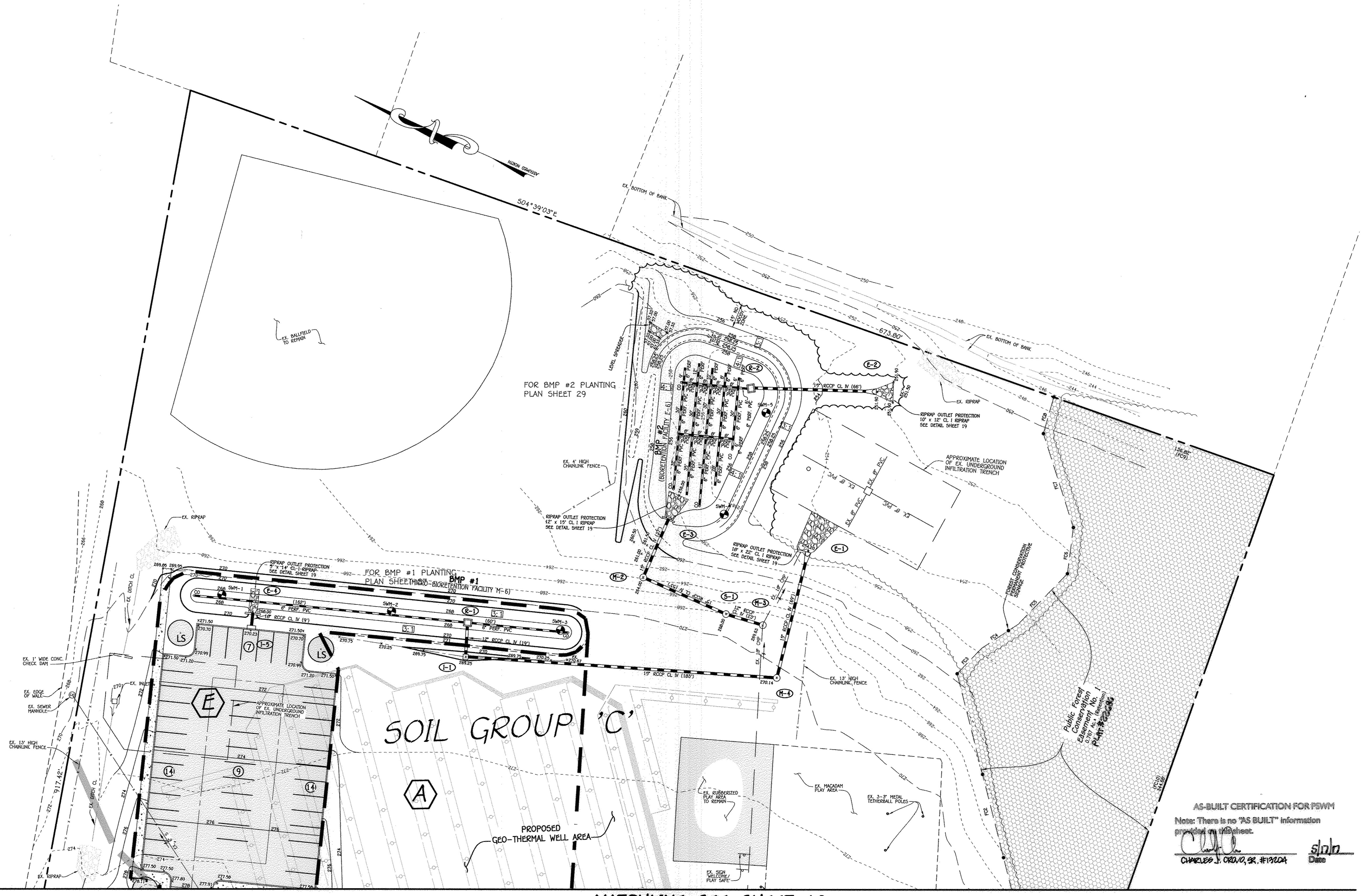
"REVISED SITE DEVELOPMENT PLAN" DEEP RUN ELEMENTARY SCHOOL

ZONED RSA-8 TAX MAP No.: 37 GRID No.: 21 PARCEL No.: 168
 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1" = 30' DATE: FEBRUARY 10, 2014

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET SDP-89-98

I:\2003\03009\dwg\ADDITIONS 2013\03009 SDP DA MAPS 13-14.dwg, DA MAP-1, 2/12/2014 8:16:31 AM, 1:1

DRAINAGE AREA DATA				
DRAINAGE AREA	STRUCTURE NO.	AREA (AC.)	'C'	% IMP.
A	I-1	1.40	0.29	7
B	I-2	0.07	0.46	31
C	I-3	0.12	0.36	14
D	I-4	0.05	0.61	57
E	I-5	0.62	0.57	66
F	CO-3	0.08	0.36	100



DEVELOPER'S / BUILDER'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.

NAME: Burch DATE: 2/10/14

SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	EXISTING SAN. SEWER LINE
---	EXISTING STORM DRAIN LINE
---	EXISTING WATER LINE
---	EXISTING ELECTRIC LINE
---	EXISTING CABLE LINE
---	EXISTING GAS LINE
---	EXISTING FENCE
---	PROPOSED CONTOUR 2' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
+	SPOT ELEVATION
---	PROPOSED CONCRETE WALK
---	EXISTING TREES
---	EXISTING TREELINE
---	PROPOSED TREELINE
---	DRAINAGE AREA LINES
---	PROPOSED WATER
---	PROPOSED STORMDRAIN
---	PROPOSED CHAINLINK FENCE

SOIL GROUP 'C'

SOIL GROUP 'A'

MATCHLINE SEE SHEET 13

PLAN
 SCALE: 1" = 30'

AS-BUILT CERTIFICATION FOR P8W1
 Note: There is no "AS BUILT" information provided on this sheet.
 Charles J. Cravo, Sr. #12004 Date

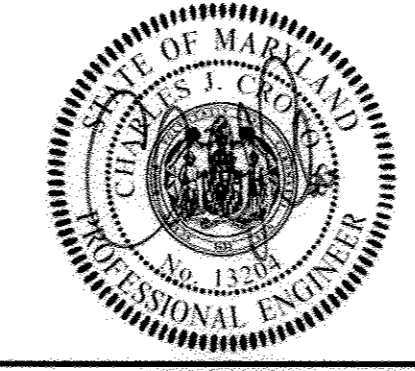
NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE LANDSCAPING AND DRAINAGE AREAS EFFECTED BY THE BUILDING ADDITIONS, UTILITIES AND OTHER IMPROVEMENTS.

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

"Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 13204. Expiration Date: November 3, 2014."
 Charles J. Cravo, Sr., P.E. DATE: 2/10/14

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Director - Department of Planning and Zoning
 Chief, Division of Land Development
 Chief, Development Engineering Division

PREPARED FOR
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Clarksville Pike
 Ellicott City, Maryland 21042
 Attention: Bruce Gist
 410-313-6798

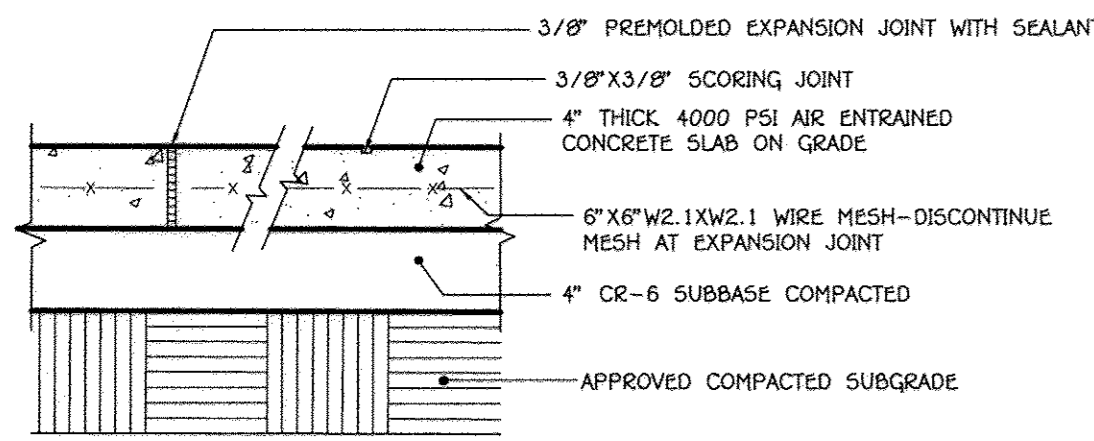


ADDRESS CHART	
LOT/PARCEL#	STREET ADDRESS
P. 168	6925 OLD WATERLOO ROAD ELKRIDGE, MARYLAND 21075

PERMIT INFORMATION CHART			
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.	
DEEP RUN ELEM. SCHOOL	N/A	P. 168	
PLAT# OR L/F	GRID#	TAX MAP#	ELECT. DIST. CENSUS TRACT
L.252 F.546	21	RSA-8 37	FIRST 6011

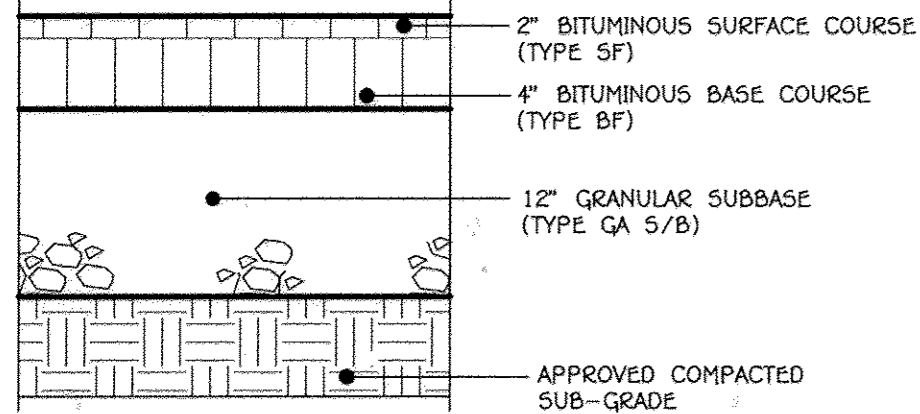
DRAINAGE AREA MAP AND LANDSCAPE PLAN
"REVISED SITE DEVELOPMENT PLAN"
DEEP RUN ELEMENTARY SCHOOL
 ZONED RSA-8 TAX MAP No.: 37 GRID No.: 21 PARCEL No.: 168
 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1" = 30' DATE: FEBRUARY 10, 2014
 SHEET 14 OF 30

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET 5DP-89-98

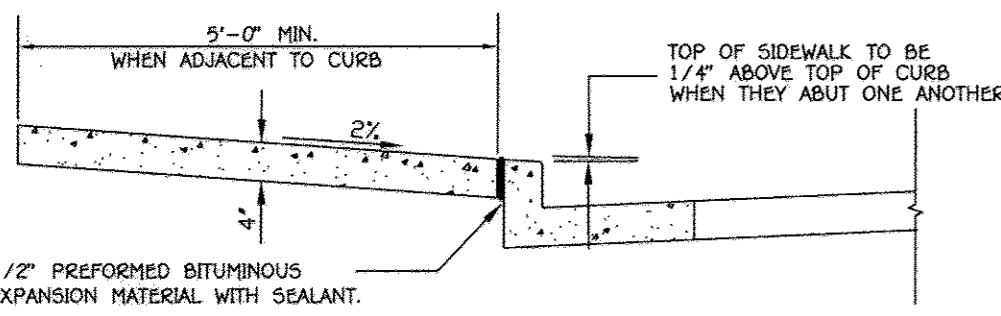


NOTE: INSTALL EXPANSION JOINTS AT MAX. 15'-0" O.C. AND INSTALL SCORING JOINTS AT MAX. 9'-0" O.C.
SLOPE ACROSS SIDEWALK SHALL BE MIN. 1/8"'/FT.

1 CONCRETE WALK DETAIL
NO SCALE

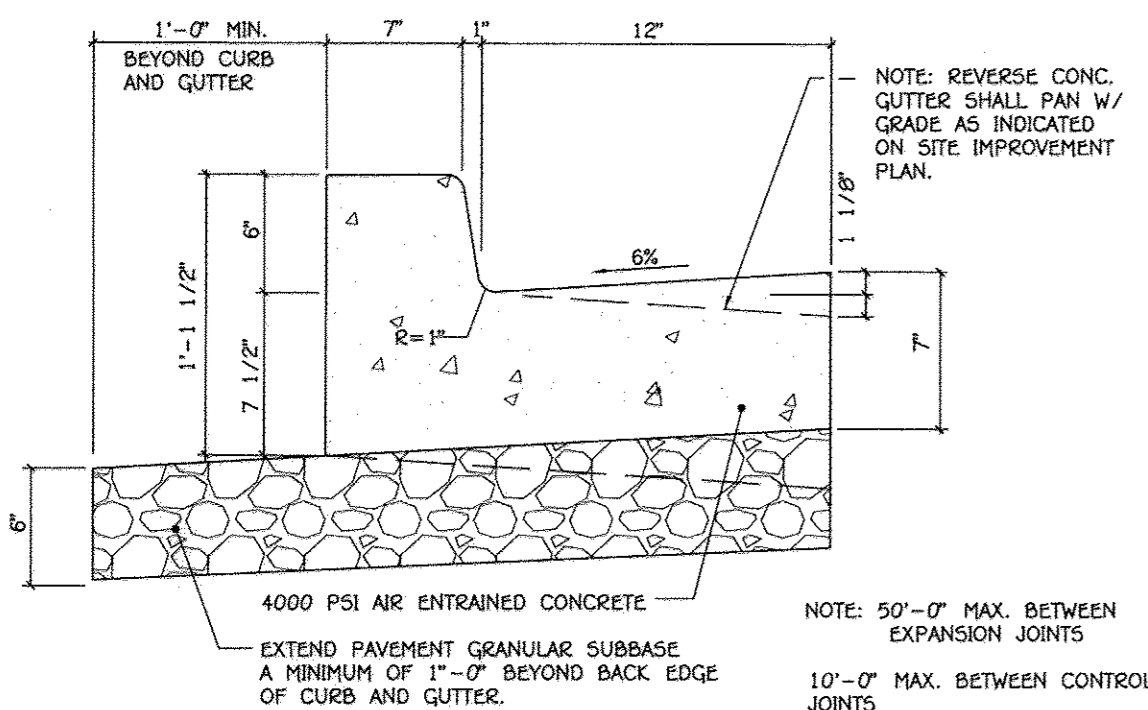


2 HEAVY DUTY ASPHALTIC PAVING DETAIL
NO SCALE

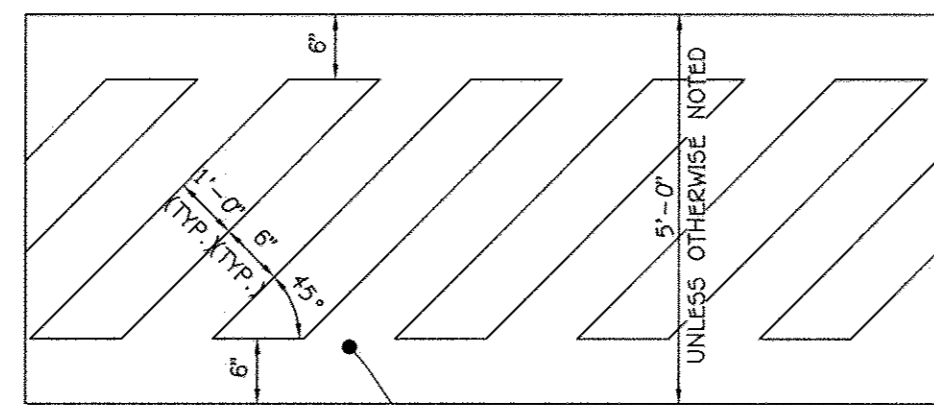


3 CONCRETE SIDEWALK DETAIL
NO SCALE

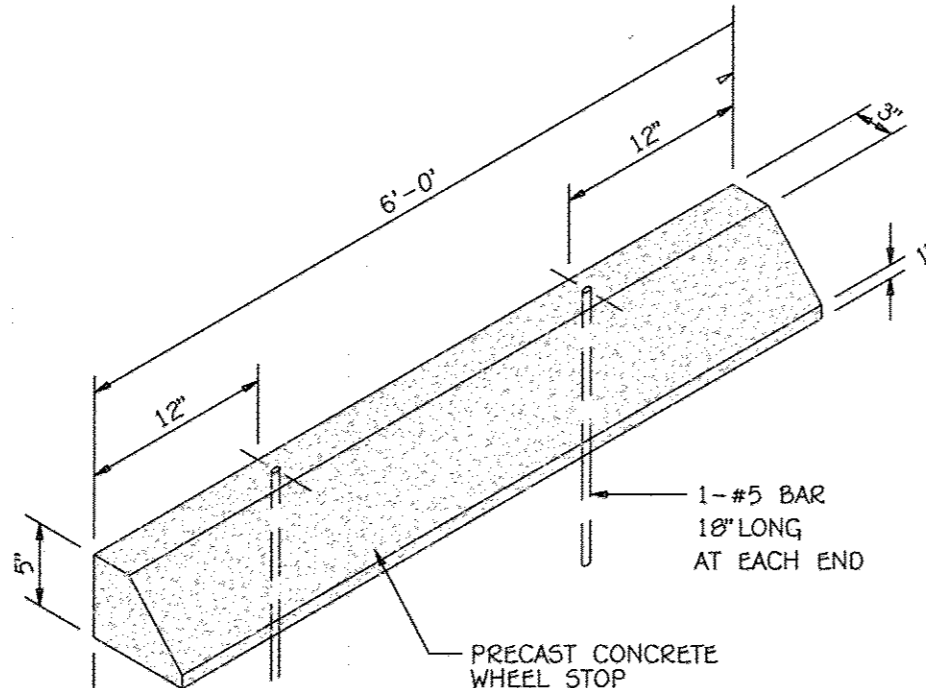
- NOTES:
- SIDEWALK TO BE SCRIBED IN EQUALLY 5'-0" MAXIMUM SQUARES.
 - EXPANSION JOINTS ACROSS THE SIDEWALK NOT TO MORE THAN 15' APART.
 - 1/2" PREFORMED BITUMINOUS EXPANSION MATERIAL IN EXPANSION JOINTS TO BE KEPT 1/4" BELOW SURFACE OF SIDEWALK. FILL WITH SEALANT.
 - 4000 PSI AIR ENTRAINMENT CONCRETE SHALL BE USED.
 - WHEN SIDEWALK ABUTS CURB, WALK SHALL BE 1/4" ABOVE CURB WITH 1/2" PREFORMED BITUMINOUS EXPANSION MATERIAL BETWEEN SIDEWALK AND CURB.
 - ON LONGITUDINAL SIDEWALK GRADES OF 5% OR GREATER, A CONCRETE HEADER, 6" THICK AND 6" DEEP BELOW THE NORMAL 4" SIDEWALK THICKNESS SHALL BE CONSTRUCTED FOR THE FULL WIDTH OF THE SIDEWALK AT INTERVALS OF 40 FEET. THE HEADERS SHALL BE PLACED AT EXPANSION JOINT LOCATIONS AND SHALL BE MONOLITHIC WITH THE SIDEWALK.
 - SIDEWALK WIDTH ADJACENT TO CURB SHALL BE 5'-0" MIN.
 - SIDEWALK LOCATED 2' OR MORE FROM CURB MAY BE 4'-0" IN WIDTH WITH A 5' X 5' PAVED SECTION PLACED 200' APART.
 - PROVIDE 1/2" EXPANSION JOINT WHERE WALKS ABUT EXISTING CONCRETE SURFACES TO REMAIN.



4 STANDARD 6" COMB. CONC. CURB AND GUTTER
NO SCALE

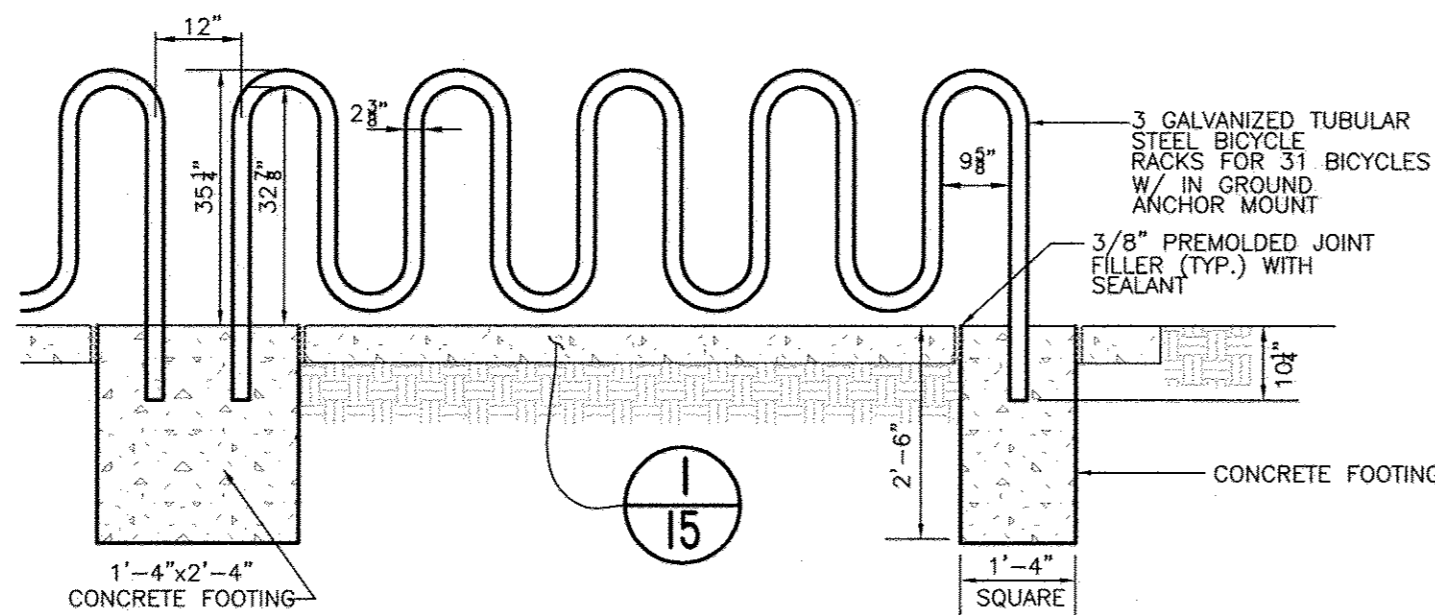


5 CROSSWALK DETAIL
NO SCALE

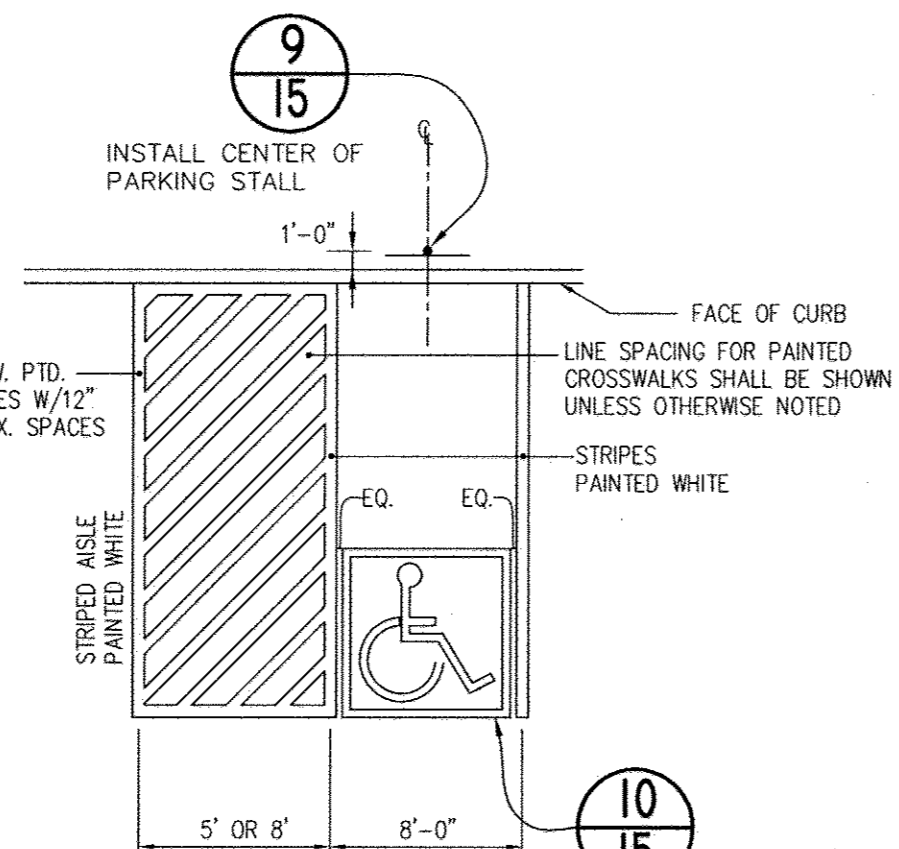


6 WHEEL STOP DETAIL
NO SCALE

- NOTES:
- WHEEL STOP FORM SIZES MAY VARY DEPENDING ON MANUFACTURER
 - CONCRETE STRENGTH SHALL BE 4,000 P.S.I. AIR ENTRAINMENT



7 BICYCLE RACK DETAIL
NO SCALE



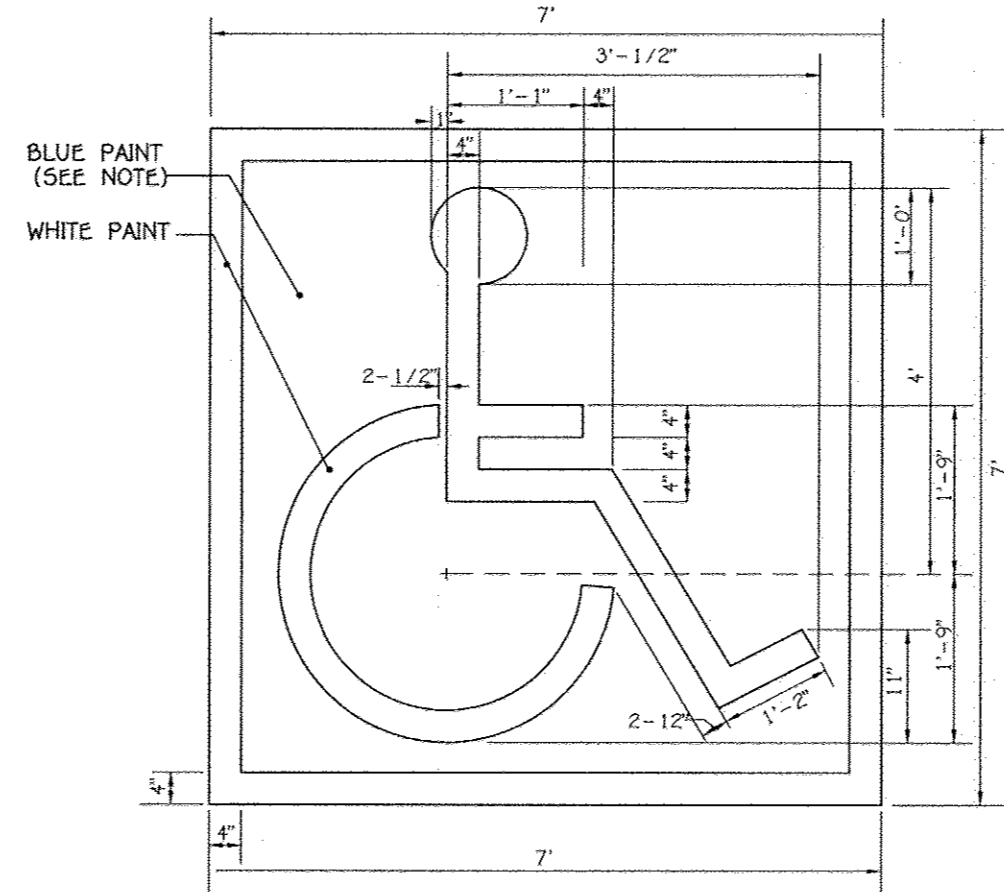
8 ACCESSIBLE SPACE LAYOUT
NO SCALE



- GENERAL NOTES:
- SIGNS SHALL MEET DESIGN STANDARDS OF THE FEDERAL HIGHWAY ADMINISTRATION AND CONFORM TO THE STATE OF MARYLAND STANDARD HIGHWAY SIGN BOOKLET DETAIL R7-8.
 - ONE SIGN IS REQUIRED PER SPACE PLACED AS SHOWN ON SITE IMPROVEMENT PLAN.
 - SIGNS SHALL BE POLE MOUNTED WITH HOT DIPPED GALVANIZED COUNTY APPROVED PERFORATED CHANNEL POSTS W/TOP OF SIGNS 9'-1" ABOVE FINISHED GRADE OR AS INDICATED ON SITE DRAWINGS.
 - SIGN SHALL BE ATTACHED TO FLANGED SIDE OF POST. POST SHALL EXTEND INTO GROUND 2'-6" MIN.
 - COLORS: LEGEND AND BORDER-GREEN SYMBOL-WHITE ON BLUE BACKGROUND BACKGROUND-WHITE
 - CONTRACTOR SHALL COORDINATE ARROW DIRECTION WITH LOCATION OF ADJACENT AISLE.
 - SPACES INDICATED ON SITE DEVELOPMENT PLANS AS "VAN ACCESSIBLE" SHALL BE SIGNED ACCORDINGLY.

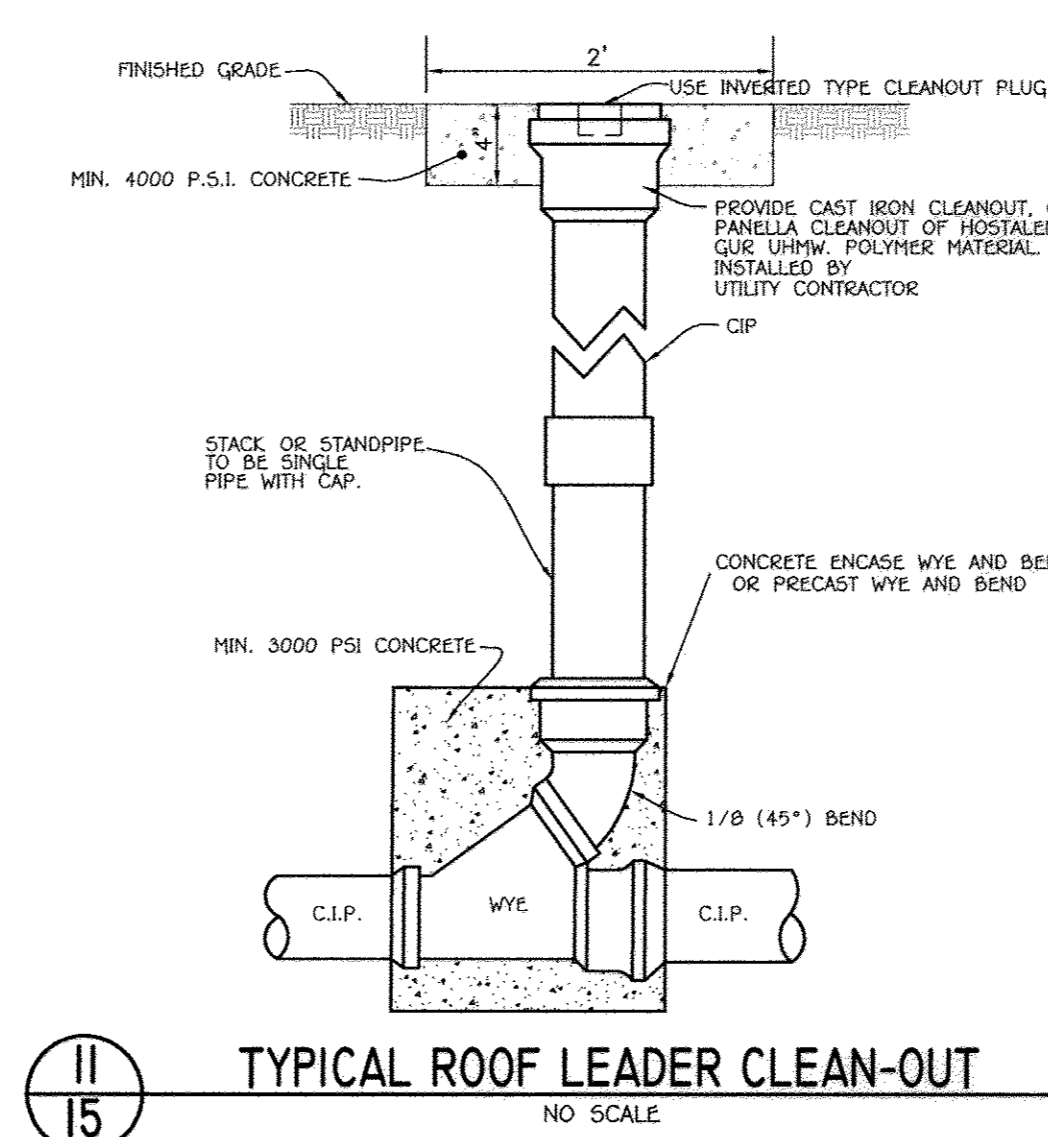
1. SIGNS SHALL MEET DESIGN STANDARDS OF THE FEDERAL HIGHWAY ADMINISTRATION AND CONFORM TO THE STATE OF MARYLAND STANDARD HIGHWAY SIGN BOOKLET DETAIL R7-8.
2. ONE SIGN IS REQUIRED PER SPACE PLACED AS SHOWN ON SITE IMPROVEMENT PLAN.
3. SIGNS SHALL BE POLE MOUNTED WITH HOT DIPPED GALVANIZED COUNTY APPROVED PERFORATED CHANNEL POSTS W/TOP OF SIGNS 9'-1" ABOVE FINISHED GRADE OR AS INDICATED ON SITE DRAWINGS.
4. SIGN SHALL BE ATTACHED TO FLANGED SIDE OF POST. POST SHALL EXTEND INTO GROUND 2'-6" MIN.
5. COLORS: LEGEND AND BORDER-GREEN SYMBOL-WHITE ON BLUE BACKGROUND BACKGROUND-WHITE
6. CONTRACTOR SHALL COORDINATE ARROW DIRECTION WITH LOCATION OF ADJACENT AISLE.
7. SPACES INDICATED ON SITE DEVELOPMENT PLANS AS "VAN ACCESSIBLE" SHALL BE SIGNED ACCORDINGLY.

9 HANDICAP PARKING SIGN DETAIL
NOT TO SCALE



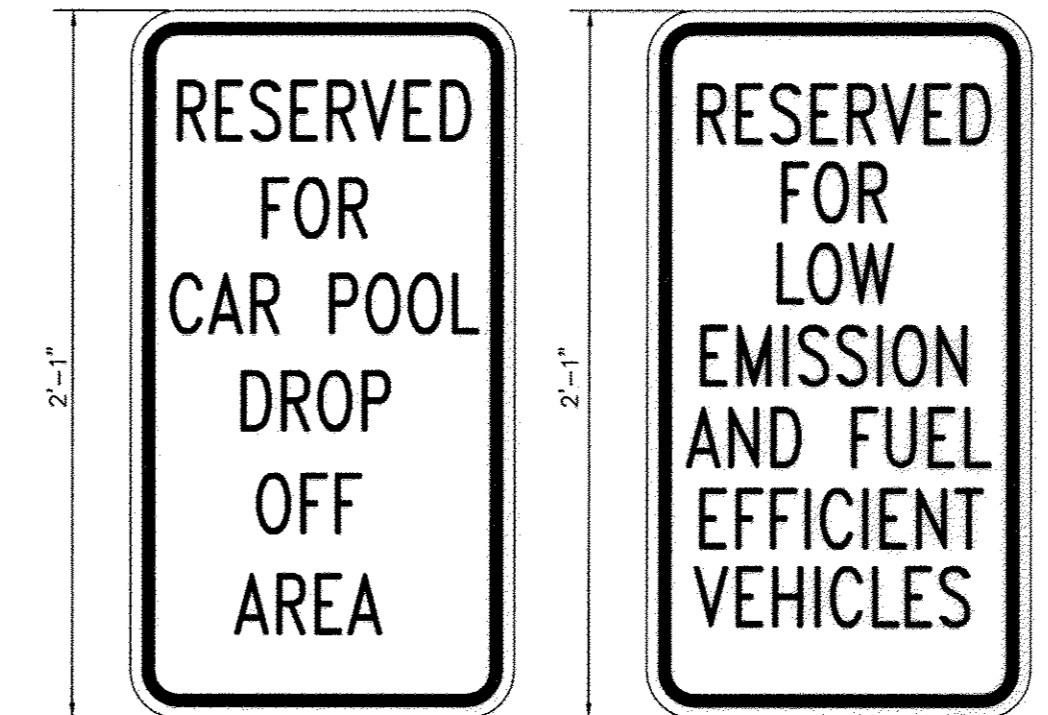
10 HANDICAP SPACE STENCIL LAYOUT
SCALE: 1" = 20"

NOTE: SYMBOL IS REQUIRED TO CONTRAST WITH BACKGROUND (WHITE ON BLUE; COLOR NO. 105090 IN FED. STANDARD 5952-DOUBLE COAT TYP.)

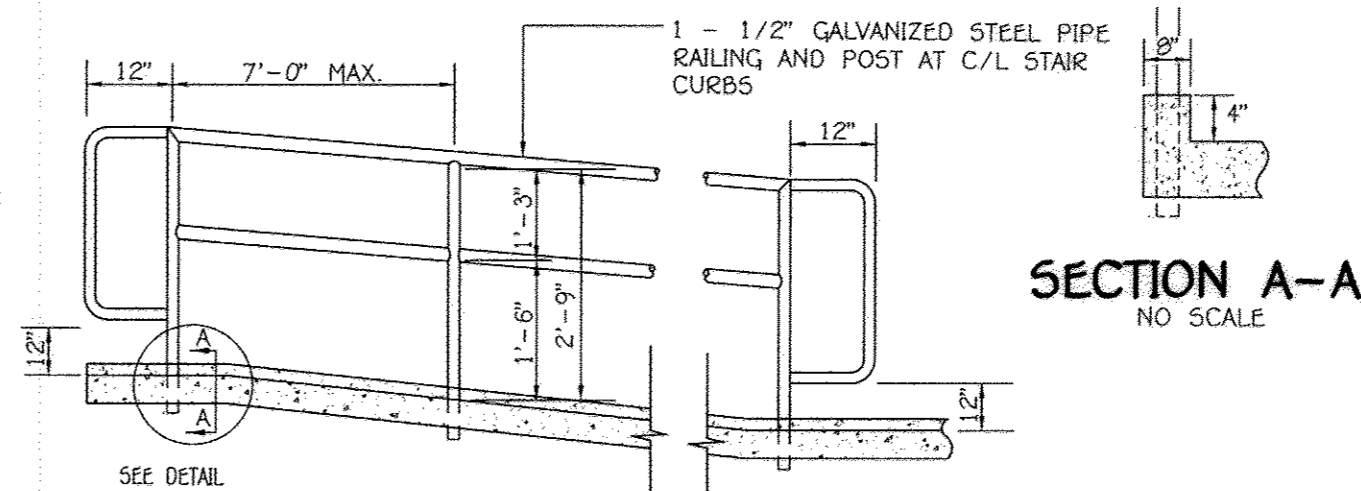


11 TYPICAL ROOF LEADER CLEAN-OUT
NO SCALE

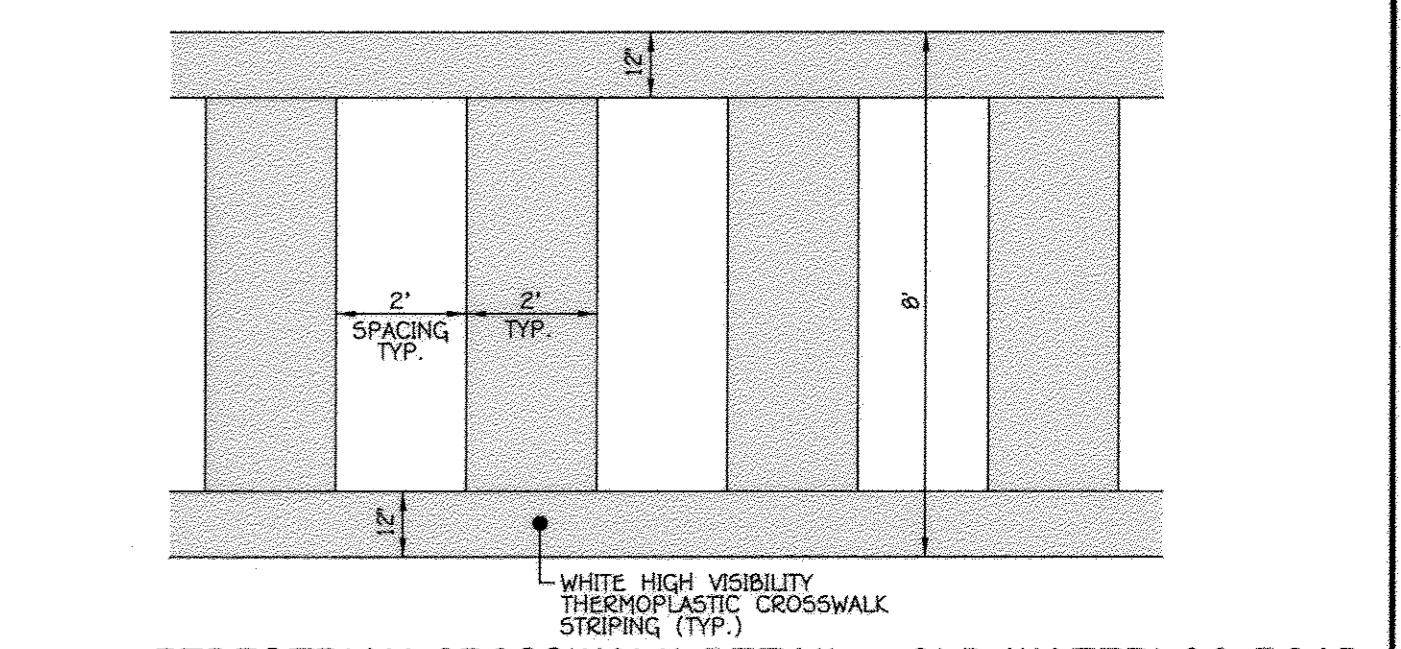
- SIGNAGE AND PAVEMENT MARKING NOTES:
- ALL SIGN LOCATIONS AND PAVEMENT MARKINGS TO BE INSTALLED IN THE COUNTY RIGHT-OF-WAY OR AT A COUNTY INTERSECTION MUST BE APPROVED BY THE HOWARD COUNTY TRAFFIC DIVISION (410-313-2430).
 - ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED ("QUICK PUNCH"), SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) 3' LONG. THE ANCHOR SHALL NOT EXTEND MORE THAN TWO "QUICK PUNCH" HOLES ABOVE GROUND LEVEL. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
 - SIGNAGE ALONG HESPERUS DRIVE SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF THE PARKING LOT PAVING.
 - ALL PAINT FOR PARKING STRIPING, BUS LOOP STRIPING, HANDICAPPED SYMBOLS AND CROSSWALKS TO BE ACRYLIC OR LATEX PAINT ESPECIALLY FORMULATED AND MANUFACTURED FOR USE ON ASPHALTIC CONCRETE UNDER TRAFFIC CONDITIONS. ACCEPTABLE STRIPING PAINTS ARE "NON-REFLECTIONIZED" BY SHERWIN WILLIAMS OR "IRON-CLAD" BY BENJAMIN MOORE. PARKING STRIPES SHALL BE 4" WIDE WHITE UNLESS OTHERWISE NOTED. ACCESSIBLE SPACE STENCIL SHALL BE PAINTED BLUE IN ACCORDANCE WITH FEDERAL STANDARD 5952.



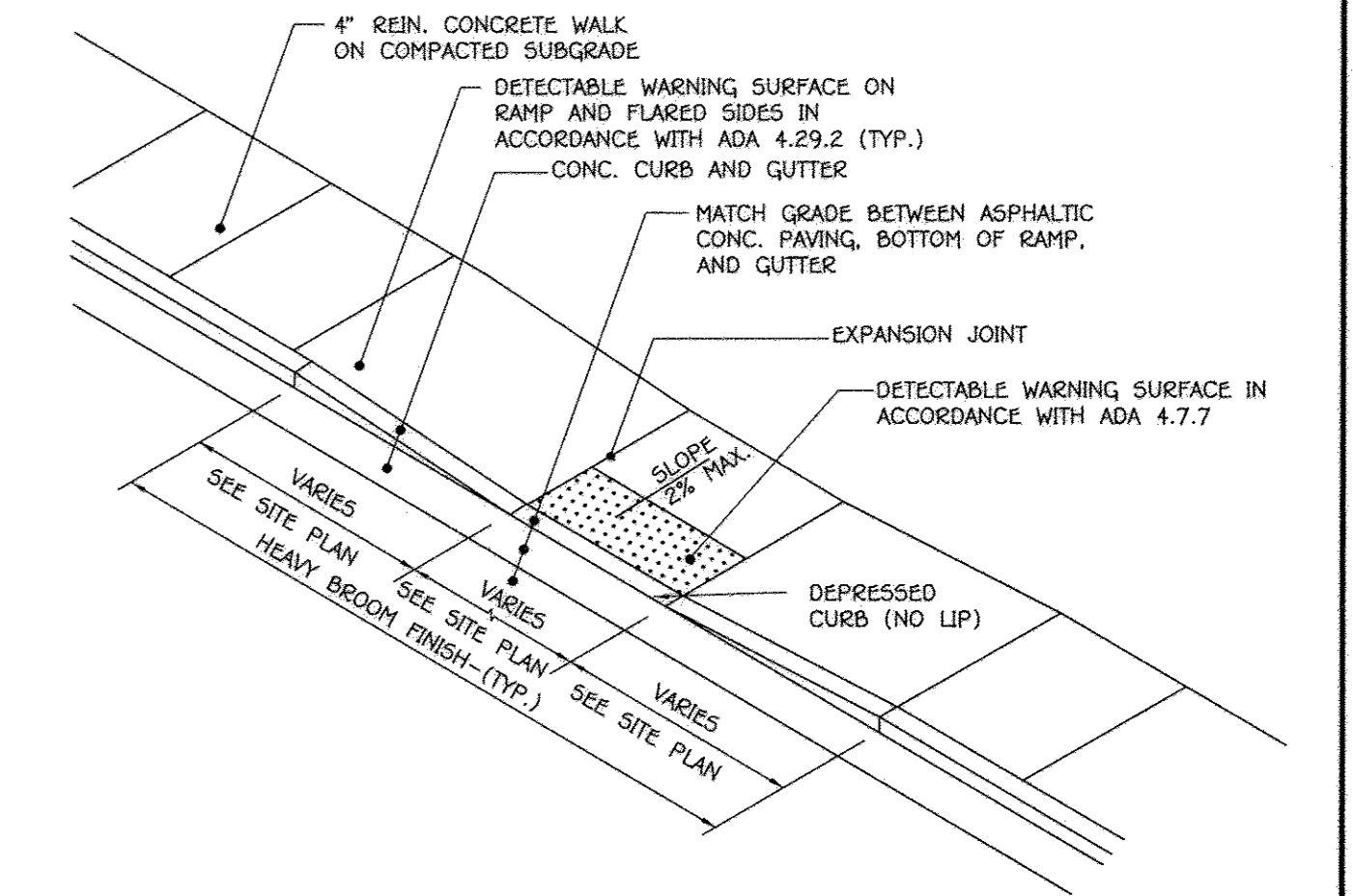
12 LE & FE SIGN DETAIL
NOT TO SCALE



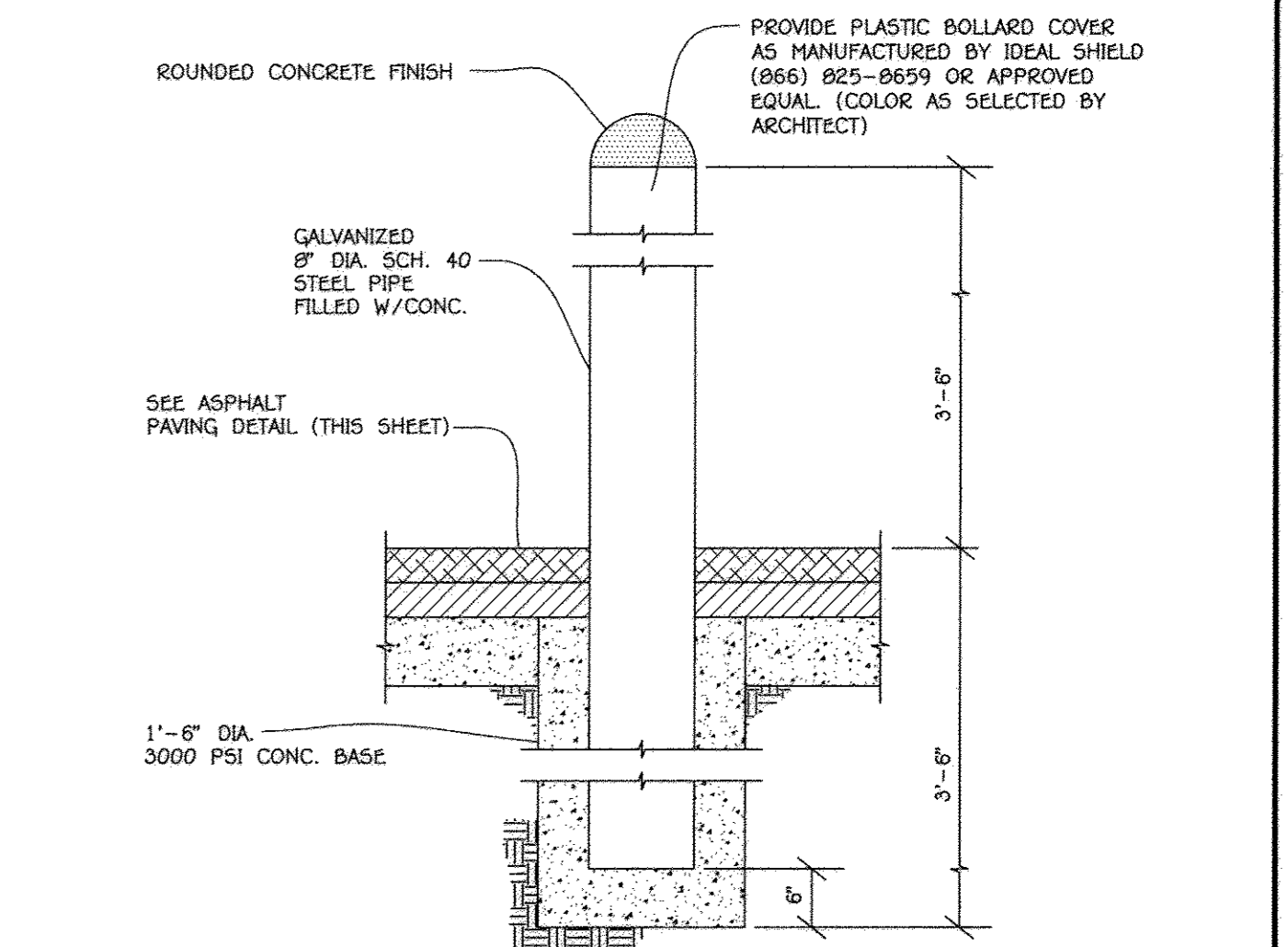
13 HANDRAIL DETAIL
NO SCALE



14 PEDESTRIAN CROSSWALK DETAIL - OLD WATERLOO ROAD
HOWARD COUNTY STANDARD DETAIL T-7.03
NO SCALE



15 HANDICAP CURB RAMP DETAIL
NO SCALE



16 BOLLARD DETAIL
NO SCALE

AS-BUILT CERTIFICATION FOR PSWM

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

CHARLES J. GROVO, SR., P.E. 5/17/17
Date

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW DETAILS FOR THE BUILDING ADDITIONS, UTILITIES AND OTHER IMPROVEMENTS.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10775 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
(410) 461-2895

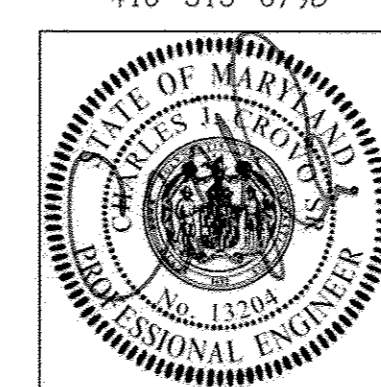
"Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 13204, Expiration Date: November 3, 2014."

CHARLES J. GROVO, SR., P.E. 5/17/17
Date

DATE	DESCRIPTION	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Director - Department of Planning and Zoning
Chief, Division of Land Development
Chief, Development Engineering Division

PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Clarksville Pike
Ellicott City, Maryland 21042
Attention: Bruce Gist
410-313-6798

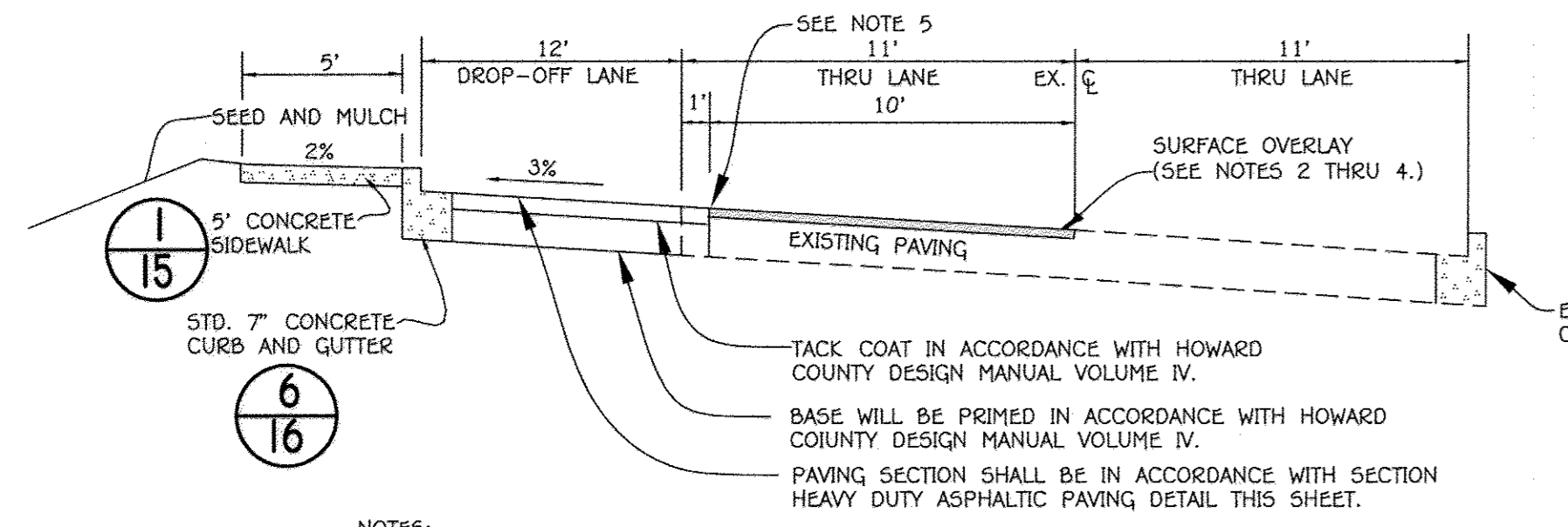


ADDRESS CHART	
LOT/PARCEL#	STREET ADDRESS
P. 168	6925 OLD WATERLOO ROAD ELK RIDGE, MARYLAND 21075

PERMIT INFORMATION CHART			
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.	
DEEP RUN ELEM. SCHOOL	N/A	P. 168	
PLAT# OR L/F	GRID#	ZONING	TAX MAP#
L.252 F.546	21	RSA-8	37
ELECT. DIST.	CENSUS TRACT		
FIRST	6011		

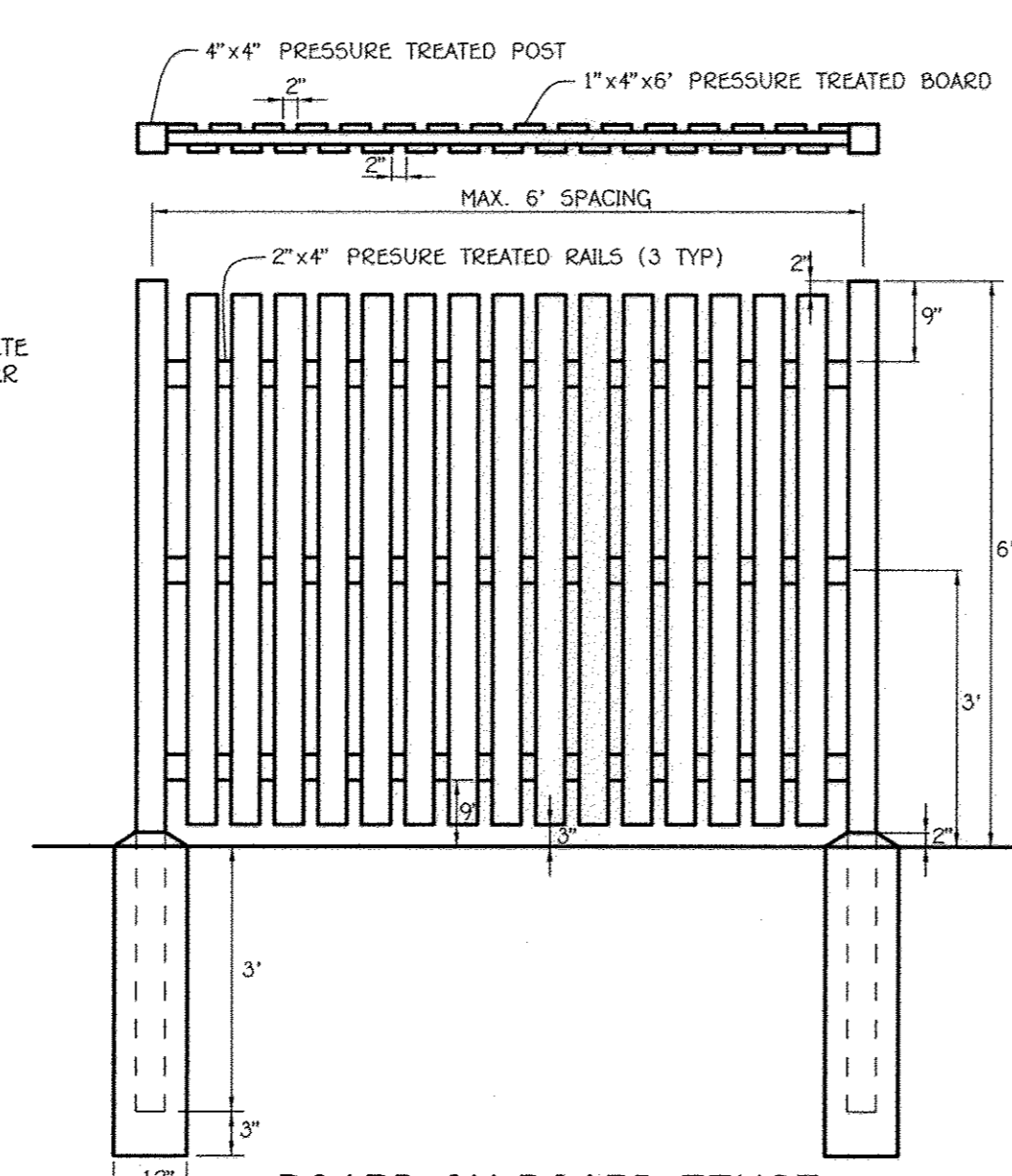
DETAIL SHEET	
"REVISED SITE DEVELOPMENT PLAN" DEEP RUN ELEMENTARY SCHOOL	
ZONED RSA-8	TAX MAP No.: 37
FIRST ELECTION DISTRICT	HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN	DATE: FEBRUARY 10, 2014
SHEET 15 OF 30	

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET SDP-89-98

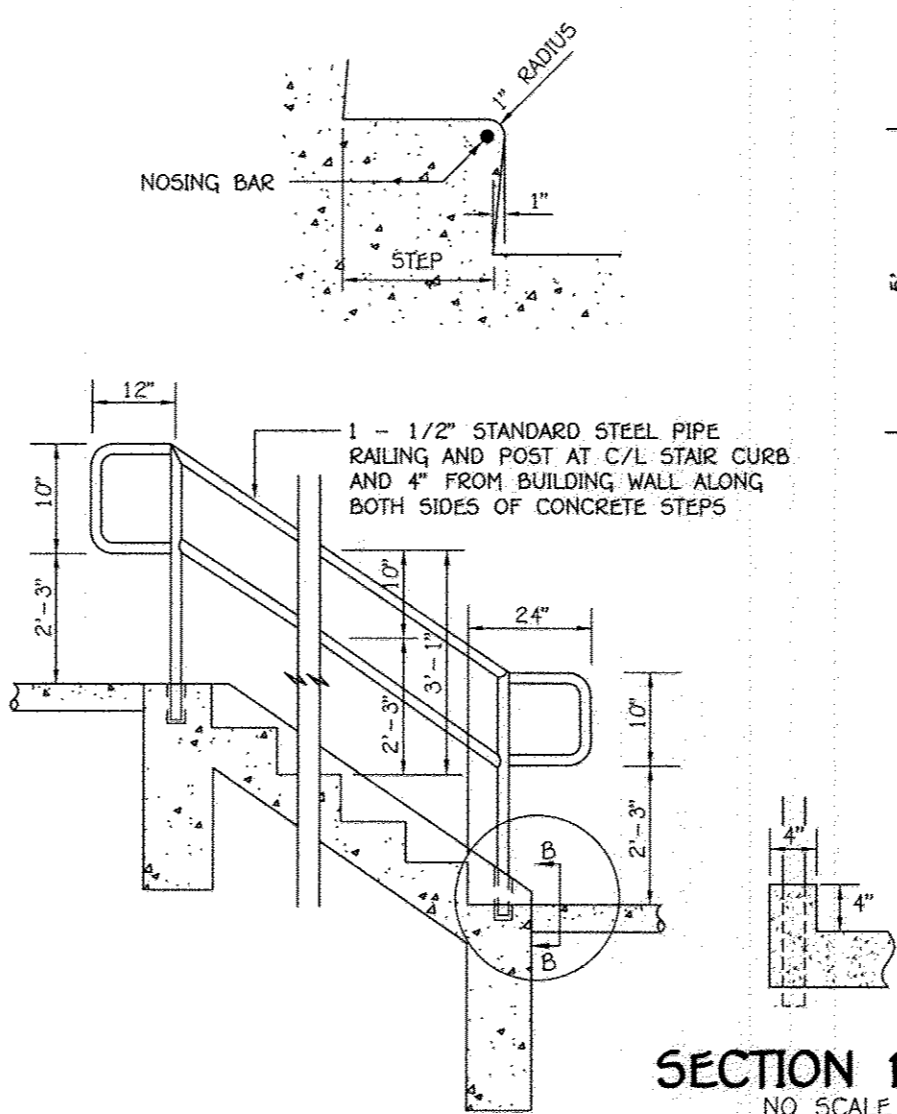


- NOTES:
1. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL VOLUME IV, STANDARD SPECIFICATION AND DETAILS FOR CONSTRUCTION.
 2. THE EXISTING PAVEMENT TO BE RESURFACED SHALL BE MILLED AT DEPTH OF 1 1/2" (MINIMUM).
 3. THE RESURFACING SHALL BE PLACED TO THE CENTERLINE OF THE ROADWAY.
 4. RESURFACING COURSE TO BE EQUAL TO THE SURFACE COURSE OF THE TYPICAL PAVEMENT SECTION.
 5. CONTRACTOR TO NEATLY SAWCUT AND REMOVE 1 FOOT OF THE EXISTING PAVING FOR THE ENTIRE LENGTH OF WIDENING.

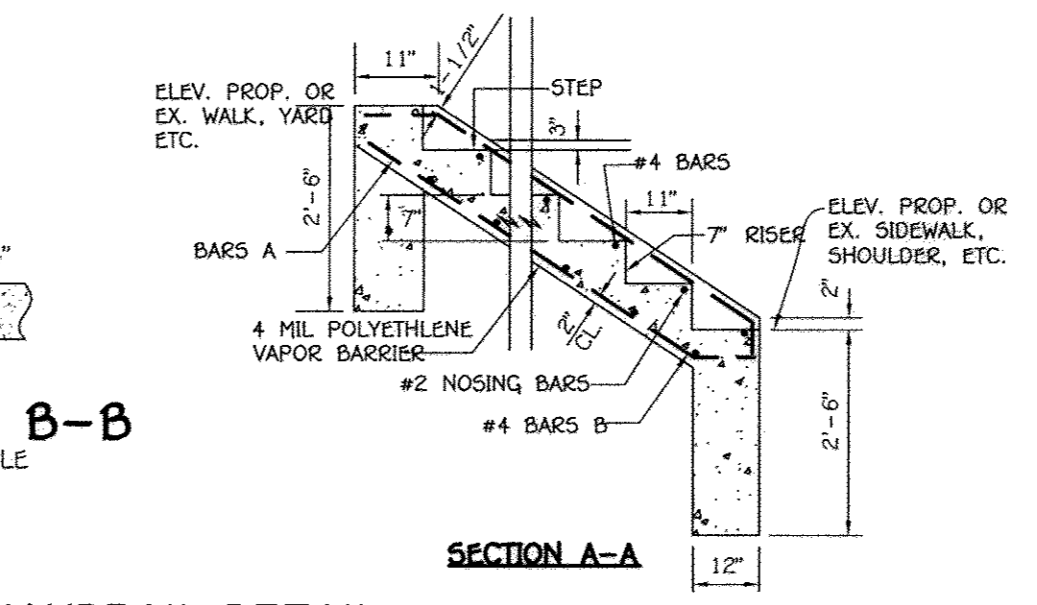
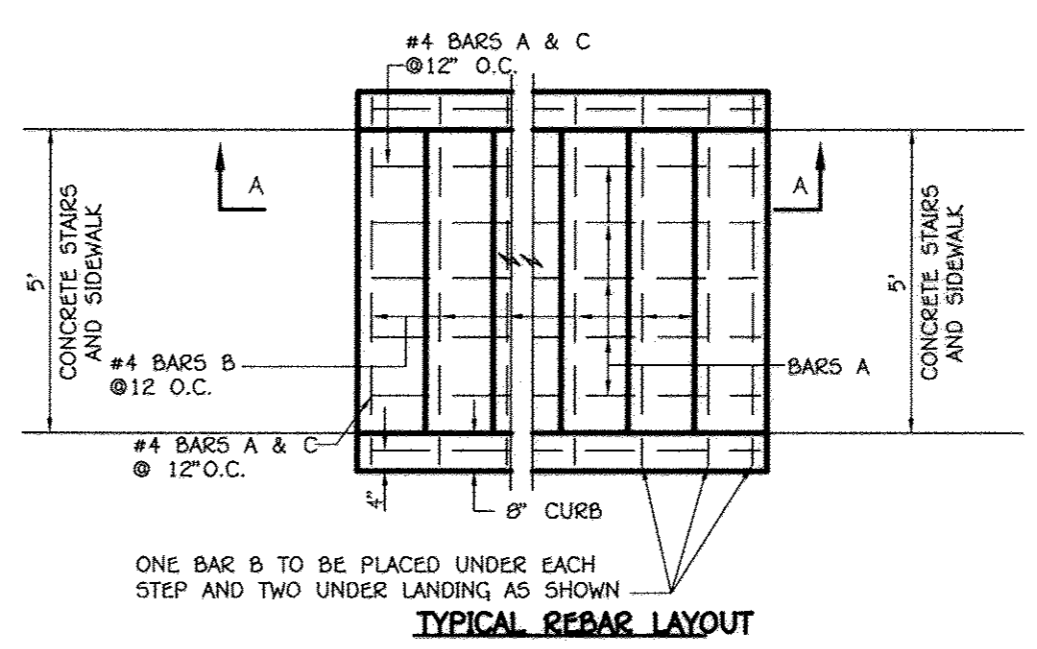
1
16
TYPICAL ROADWAY SECTION
HOWARD COUNTY STANDARD DETAIL R-1.08
NO SCALE



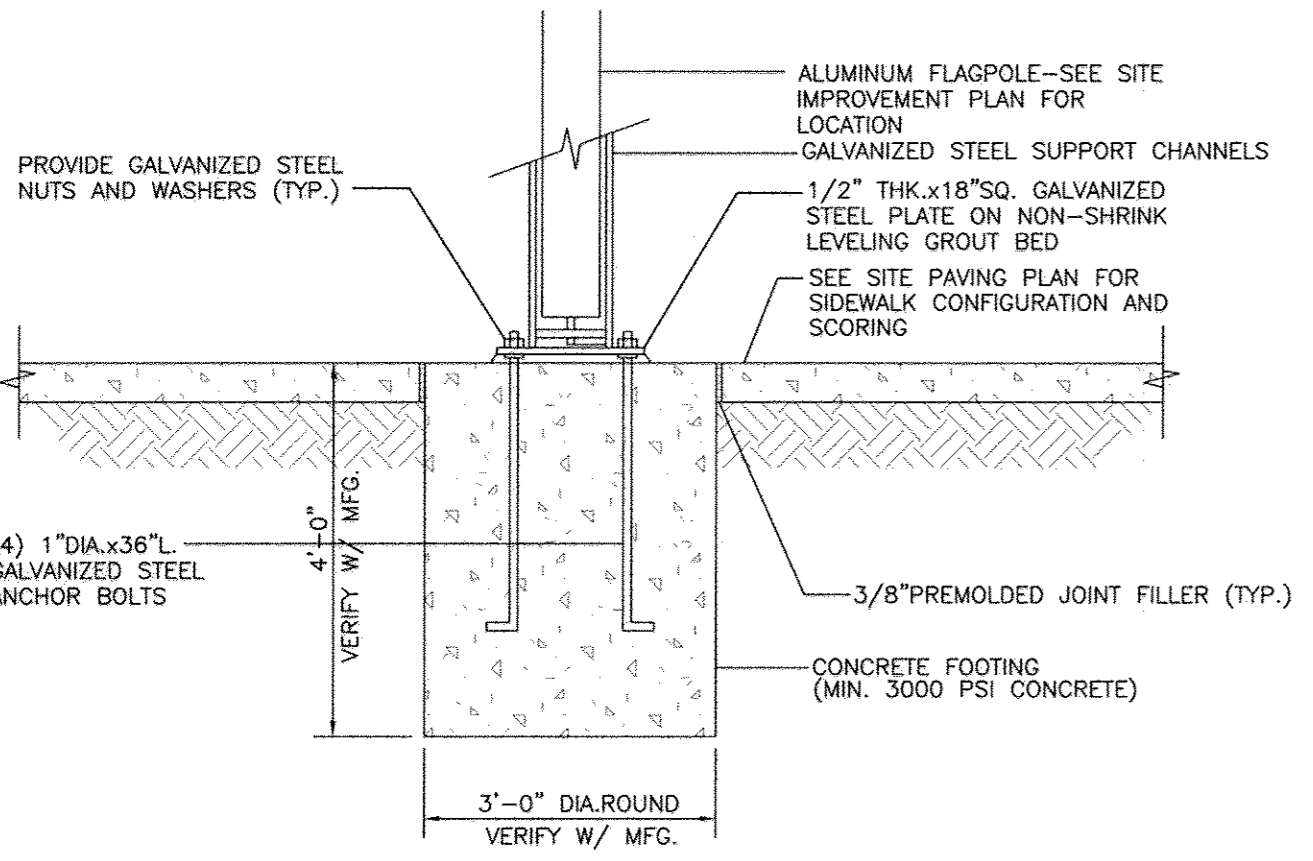
4
16
BOARD ON BOARD FENCE FOR DUMPSTER ENCLOSURE
NO SCALE
1. ALL WOOD FENCING TO BE PRESSURE TREATED.
2. CONCRETE TO BE MIX NO. 1



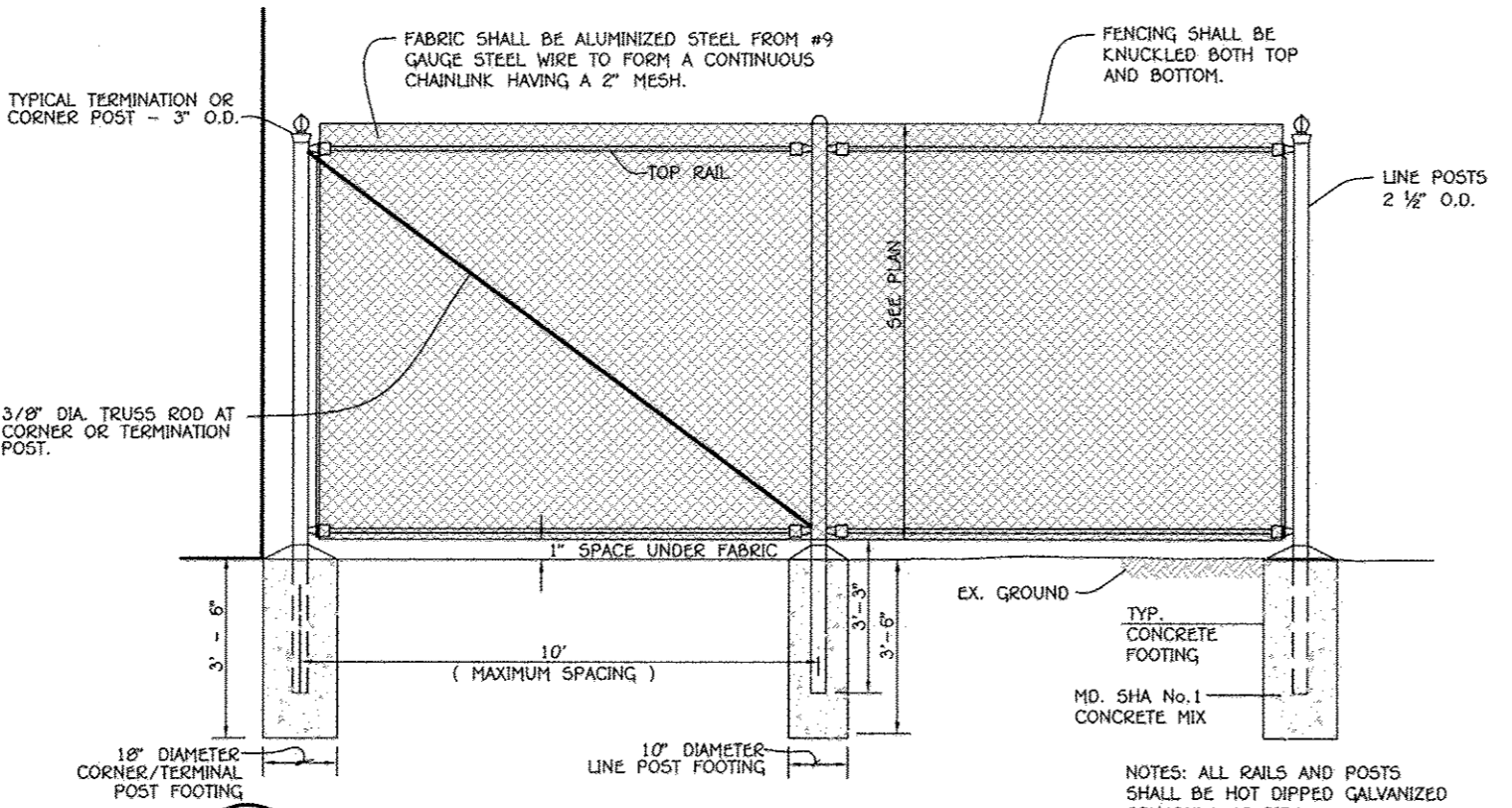
7
16
CONCRETE STEPS AND HANDRAIL DETAIL
NO SCALE



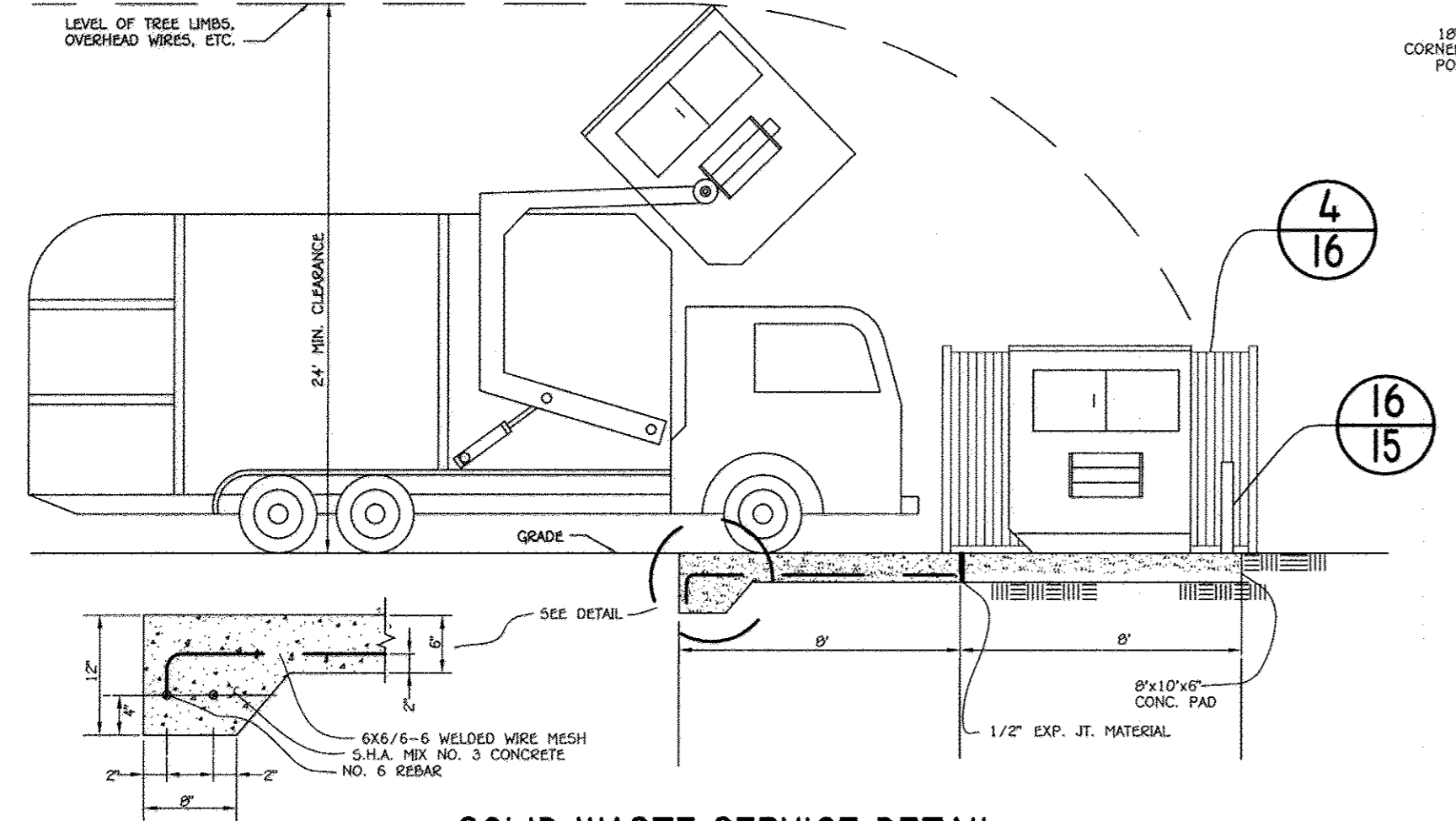
SECTION A-A
NO SCALE



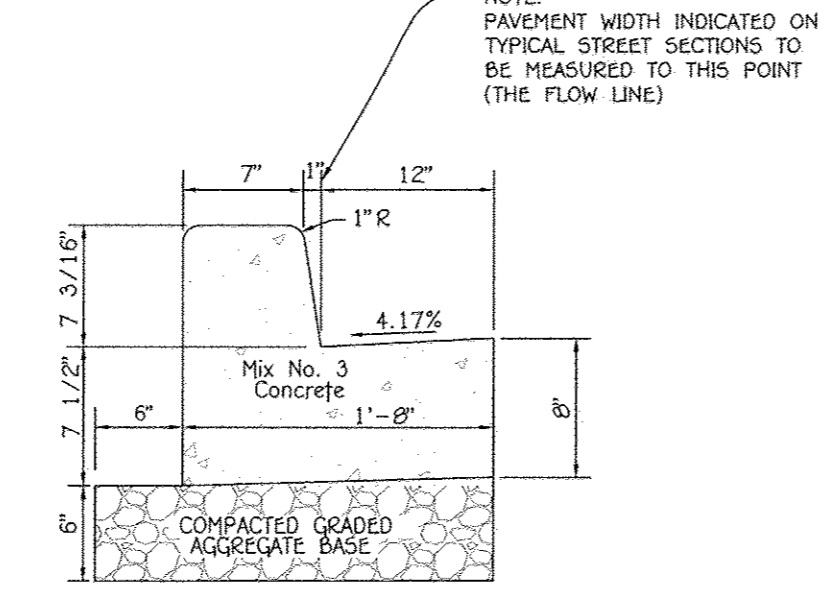
2
16
TILT FLAGPOLE DETAIL
NO SCALE



5
16
CHAIN LINK FENCE DETAIL
NO SCALE



3
16
SOLID WASTE SERVICE DETAIL
HOWARD COUNTY STANDARD DETAIL R-8.03
NO SCALE



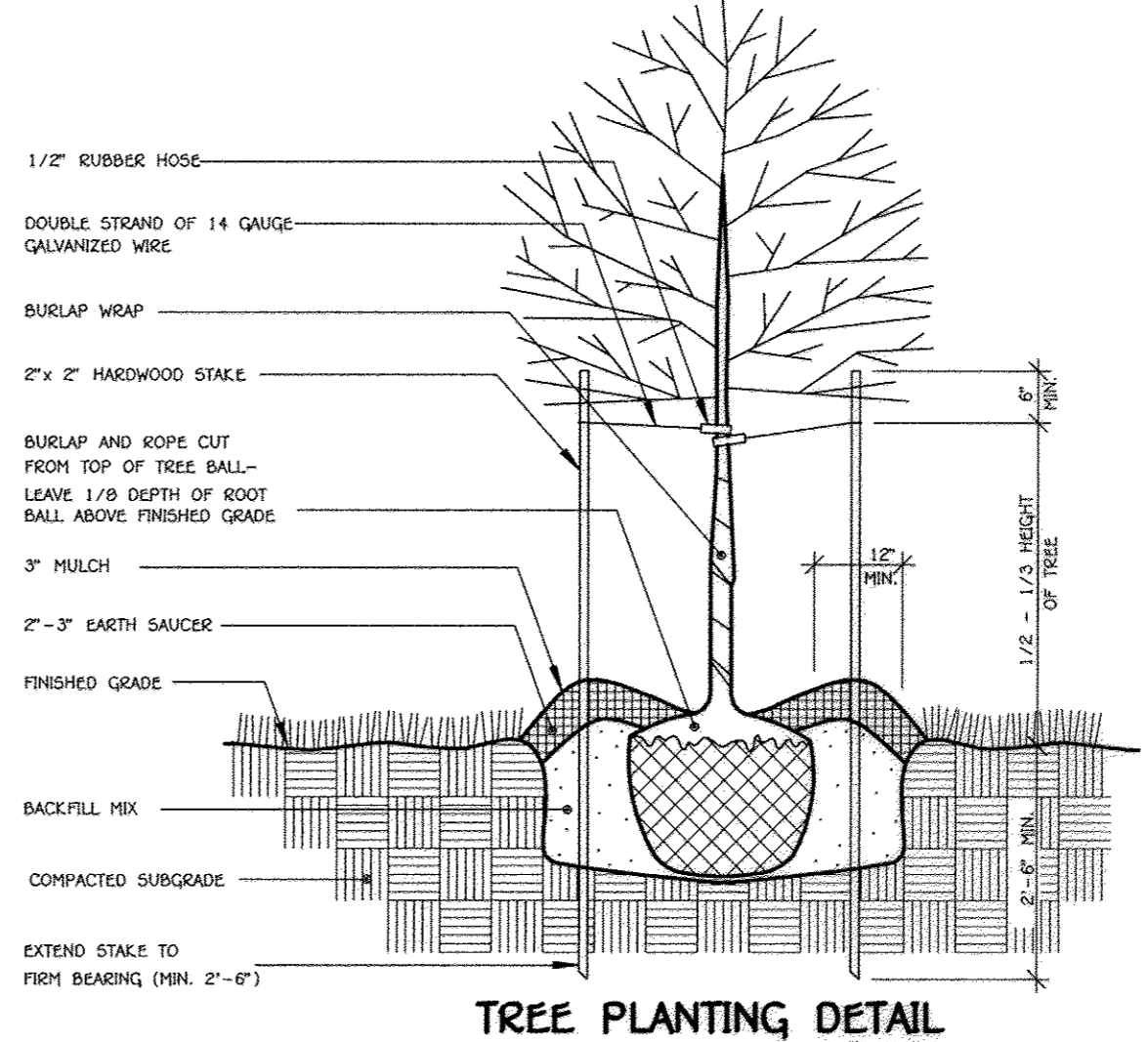
6
16
7" COMBINATION CONCRETE CURB AND GUTTER
NO SCALE

SCHEDULE B
PARKING LOT INTERNAL LANDSCAPING

NUMBER OF PROPOSED PARKING SPACES	44
NUMBER OF TREES REQUIRED (1/20 SP)	3
NUMBER OF TREES PROVIDED	
SHADE TREES	3
OTHER TREES (2:1 SUBSTITUTION)	0

PLANT LIST

QTY.	KEY	BOTANICAL NAME COMMON NAME	SIZE	CONT.	REMARKS
3	LS	Acer rubrum 'October Glory' October Glory Red Maple	2-1/2" - 3" cal.	B & B	



TREE PLANTING DETAIL

DEVELOPER'S / BUILDER'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.

NAME: *Bruce Gist* DATE: *2/11/14*

PLANTING NOTES:

1. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF HOWARD COUNTY CODE AND LANDSCAPE MANUAL AND IS TO BE USED FOR PLANTING ONLY. LANDSCAPING SHALL BE PROVIDED AS SHOWN ON THIS PLAN SHEET. NO SURETY IS REQUIRED SINCE THIS IS A HOWARD COUNTY BOARD OF EDUCATION PROJECT.
2. CONTRACTOR SHALL NOTIFY ALL UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK. ALL GENERAL NOTES FROM SHEET 1, SHALL APPLY.
3. FIELD VERIFY UNDERGROUND UTILITY LOCATIONS AND EXISTING CONDITIONS BEFORE STARTING PLANTING WORK. EVEN WHERE PLANT LOCATIONS ARE DIMENSIONED, CONTACT CONSTRUCTION MANAGER IF ANY RELOCATION ARE REQUIRED.
4. PLANT QUANTITIES SHOWN ON PLANT LIST ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. IF DISCREPANCIES EXIST BETWEEN QUANTITIES SHOWN ON THE PLAN AND THOSE SHOWN ON THE PLANT LIST, THE QUANTITIES ON THE PLAN SHALL TAKE PRECEDENCE.
5. ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL, CONFORM TO THE A.A.N. SPECIFICATIONS, AND BE INSTALLED IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
6. ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES BUT NOT OTHERWISE PLANTED, PAVED OR MULCHED SHALL BE SEEDED IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
7. ALL EXPOSED EARTH WITHIN THE LIMITS OF THE PLANTING BEDS SHALL BE MULCHED WITH SHREDDED HARDWOOD MULCH PER PLANTING DETAILS.
8. THE CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING IF SOIL OR DRAINAGE CONDITIONS ARE ENCOUNTERED WHICH MAY BE DETRIMENTAL TO THE GROWTH OF PLANTS.
9. NO SUBSTITUTION SHALL BE MADE WITHOUT WRITTEN CONSENT OF THE OWNER OR HIS REPRESENTATIVE.
10. REFER TO OTHER SITE DWGS. FOR ADDITIONAL SEEDING REQUIREMENTS.

Note: THERE IS NO LANDSCAPING SURETY FOR THE LANDSCAPE PLAN.

NOTE: TREE AND SHRUB TYPES ARE ONLY AN RECOMMENDATION, THESE MAY BE REVISED TO A COUNTY APPROVED EQUIVALENT FROM THE HOWARD COUNTY LANDSCAPE MANUAL. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.

PLANTING SPECIFICATIONS

PLANTS, RELATED MATERIAL AND OPERATIONS SHALL MEET THE DETAILED DESCRIPTION AS GIVEN ON THE PLANS AND AS DESCRIBED HEREIN.

ALL PLANT MATERIAL, UNLESS OTHERWISE SPECIFIED, SHALL BE NURSERY GROWN, UNIFORMLY BRANCHED, HAVE A VIGOROUS ROOT SYSTEM, AND SHALL CONFORM TO THE SPECIES, SIZE, ROOT AND SHAPE SHOWN ON THE PLANT LIST AND THE AMERICAN ASSOCIATION OF NURSERYMEN (A.A.N.) STANDARDS. PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, FREE FROM DEFECTS, DECAY, DISFIGURING ROOTS, SUN SCALD INJURIES, ABRASIONS OF THE BARK, PLANT DISEASE, INSECT PEST EGGS, BORERS AND ALL FORMS OF INSECT INFESTATIONS OR OBJECTIONABLE DISFIGUREMENTS. PLANT MATERIAL THAT IS WEAK OR WHICH HAS BEEN CUT BACK FROM LARGER GRADES TO MEET SPECIFIED REQUIREMENTS WILL BE REJECTED. TREES WITH FORKED LEADERS WILL NOT BE ACCEPTED. ALL PLANTS SHALL BE FRESHLY DUG, NO HEALED-IN PLANTS FROM COLD STORAGE WILL BE ACCEPTED.

UNLESS OTHERWISE SPECIFIED, ALL GENERAL CONDITIONS, PLANTING OPERATIONS, DETAILS AND PLANTING SPECIFICATION SHALL CONFORM TO "LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE-WASHINGTON METROPOLITAN AREA", (HEREINAFTER "LANDSCAPE GUIDELINES") APPROVED BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF METROPOLITAN WASHINGTON AND THE POTOMAC CHAPTER OF THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECT, LATEST EDITION, INCLUDING ALL AGENDA.

CONTRACTOR SHALL BE REQUIRED TO GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR AFTER DATE OF ACCEPTANCE IN ACCORDANCE WITH THE APPROPRIATE SECTION OF THE LANDSCAPE GUIDELINES. CONTRACTOR'S ATTENTION IS DIRECTED TO THE MAINTENANCE REQUIREMENTS FOUND WITHIN THE ONE YEAR SPECIFICATIONS INCLUDING WATERING AND REPLACEMENT OF SPECIFIED PLANT MATERIAL.

BID SHALL BE BASE ON ACTUAL SITE CONDITIONS. NO EXTRA PAYMENT SHALL BE MADE FOR WORK ARISING FROM SITE CONDITIONS DIFFERING FROM THOSE INDICATED ON DRAWINGS AND SPECIFICATIONS.

ALL SHRUBS SHALL BE PLANTED IN CONTINUOUS TRENCHES OR PREPARED PLANTING BEDS AND MULCHED WITH COMPOSTED HARDWOOD MULCH AS DETAILS AND SPECIFIED EXCEPT WHERE NOTED ON PLANS.

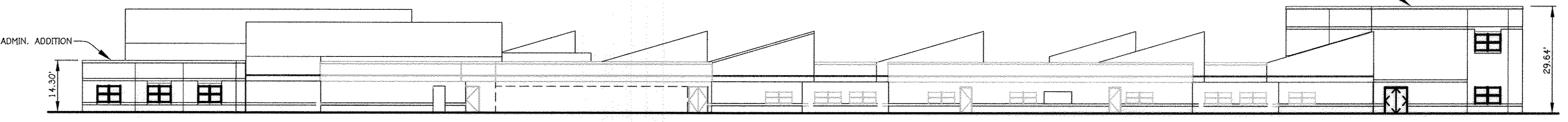
POSITIVE DRAINAGE SHALL BE MAINTAINED IN PLANTING BEDS 2 PERCENT SLOPE).

PLANTING MIX SHALL BE AS FOLLOWS: DECIDUOUS PLANTS - TWO PARTS TOPSOIL, ONE PART WELL-ROTTED COW OR HORSE MANURE. ADD 3 LBS. OF STANDARD FERTILIZER PER CUBIC YARD OF PLANTING MIX. EVERGREEN PLANTS - TWO PARTS TOPSOIL, ONE PART HUMUS OR OTHER APPROVED ORGANIC MATERIAL. ADD 3 LBS. OF EVERGREEN (ACIDIC) FERTILIZER PER CUBIC YARD OF PLANTING MIX. TOPSOIL SHALL CONFORM TO THE LANDSCAPE GUIDELINES.

WEED CONTROL: INCORPORATE A PRE-EMERGENT HERBICIDE INTO THE PLANTING BED FOLLOWING RECOMMENDED RATES ON THE LABEL. CAUTION: BE SURE TO CAREFULLY CHECK THE CHEMICAL USED TO ASSURE ITS ADAPTABILITY TO THE SPECIFIC GROUND COVER TO BE TREATED.

ALL AREAS WITHIN CONTRACT LIMITS DISTURBED DURING OR PRIOR TO CONSTRUCTION NOT DESIGNATED TO RECEIVE PLANTS AND MULCH SHALL BE FINE GRADED AND SEEDED.

AS-BUILT CERTIFICATION FOR PSWM
Note: There is no "AS-BUILT" information provided on this sheet.
Charles J. Govo, Sr. 2/11/14
DATE



BUILDING ELEVATION
SCALE: 1" = 20'

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW DETAILS FOR THE BUILDING ADDITIONS, UTILITIES AND OTHER IMPROVEMENTS.

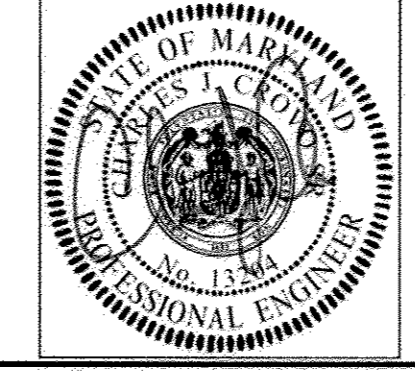
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10275 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 461 - 0295

"Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 13204, Expiration Date: November 3, 2014."

Charles J. Govo, Sr. 2/11/14
DATE
CHARLES J. GOVO, SR., P.E.

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Bruce Gist 2/11/14
Director - Department of Planning and Zoning
Charles J. Govo, Sr. 2/27/14
Chief, Development Engineering Division

PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Clarksville Pike
Ellicott City, Maryland 21042
Attention: Bruce Gist
410-313-6798



ADDRESS CHART

LOT/PARCEL#	STREET ADDRESS
P. 168	6925 OLD WATERLOO ROAD ELKRIDGE, MARYLAND 21075

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
DEEP RUN ELEM. SCHOOL	N/A	P. 168
PLAT# OR L/F	GRID#	ZONING
L252 F.546	21	RSA-8
TAX MAP#	ELECT. DIST.	CENSUS TRACT
37	FIRST	6011

DETAIL SHEET
"REVISED SITE DEVELOPMENT PLAN"
DEEP RUN ELEMENTARY SCHOOL
ZONED RSA-8 TAX MAP No.: 37 GRID No.: 21 PARCEL No.: 168
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: FEBRUARY 10, 2014
SHEET 16 OF 30

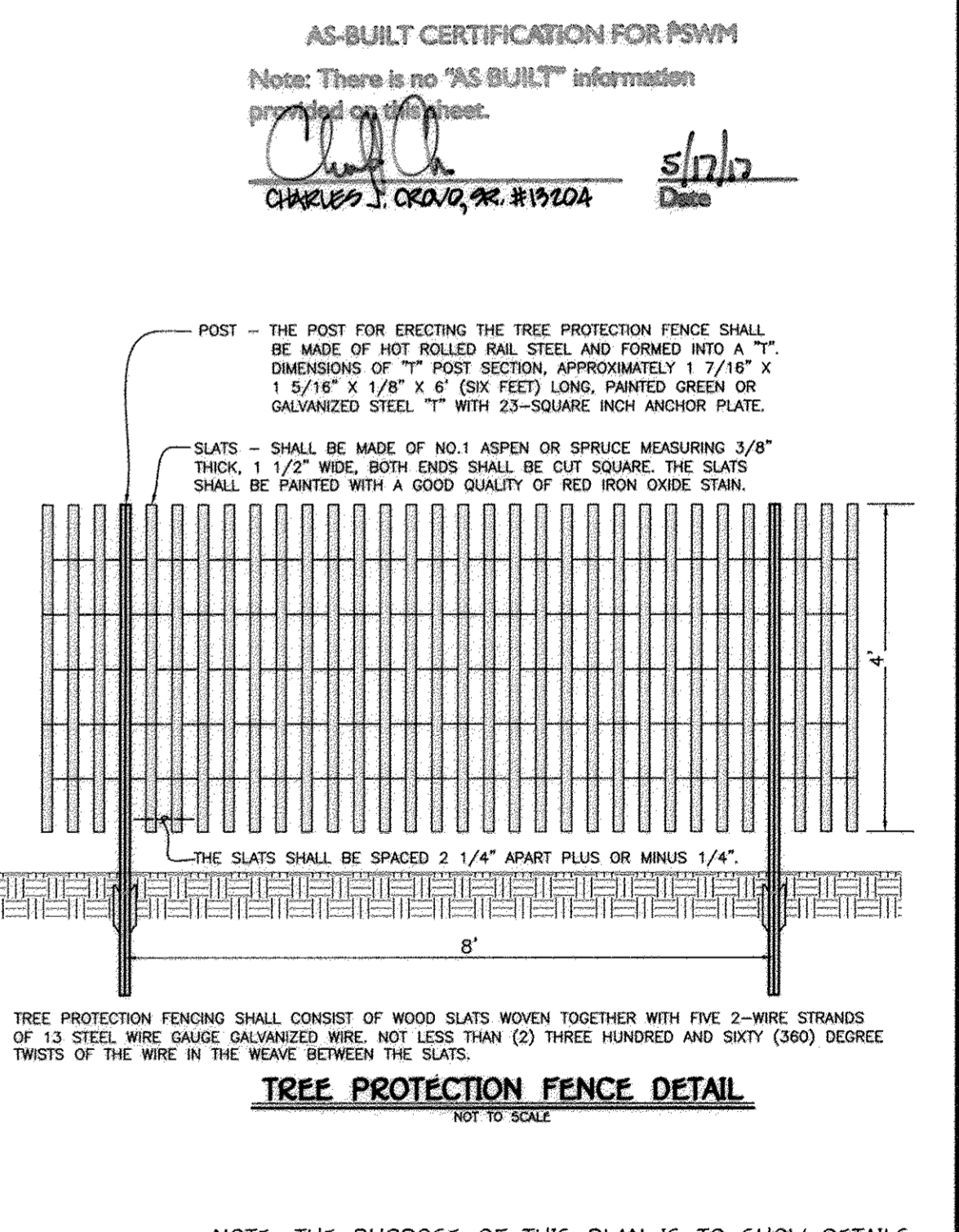
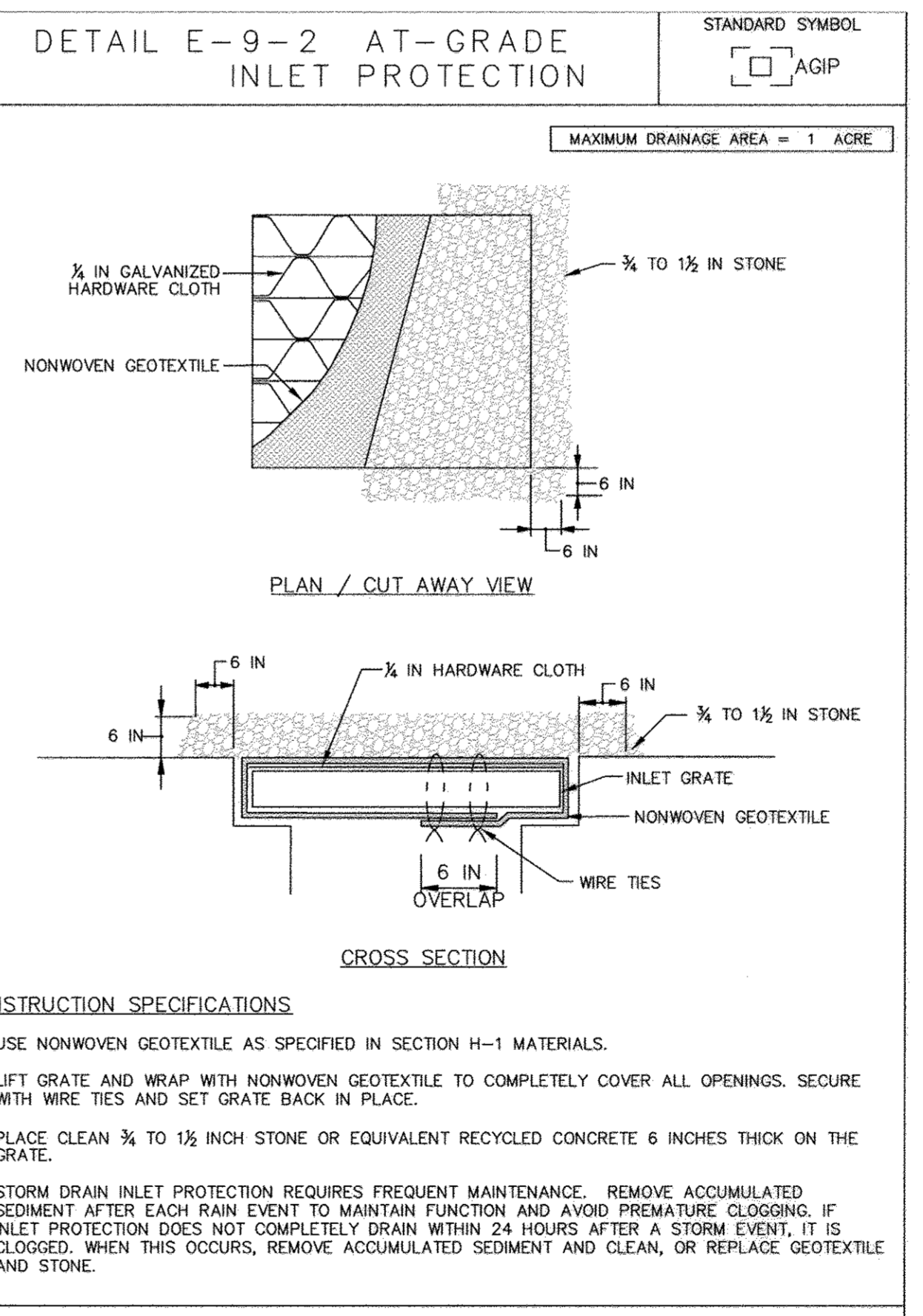
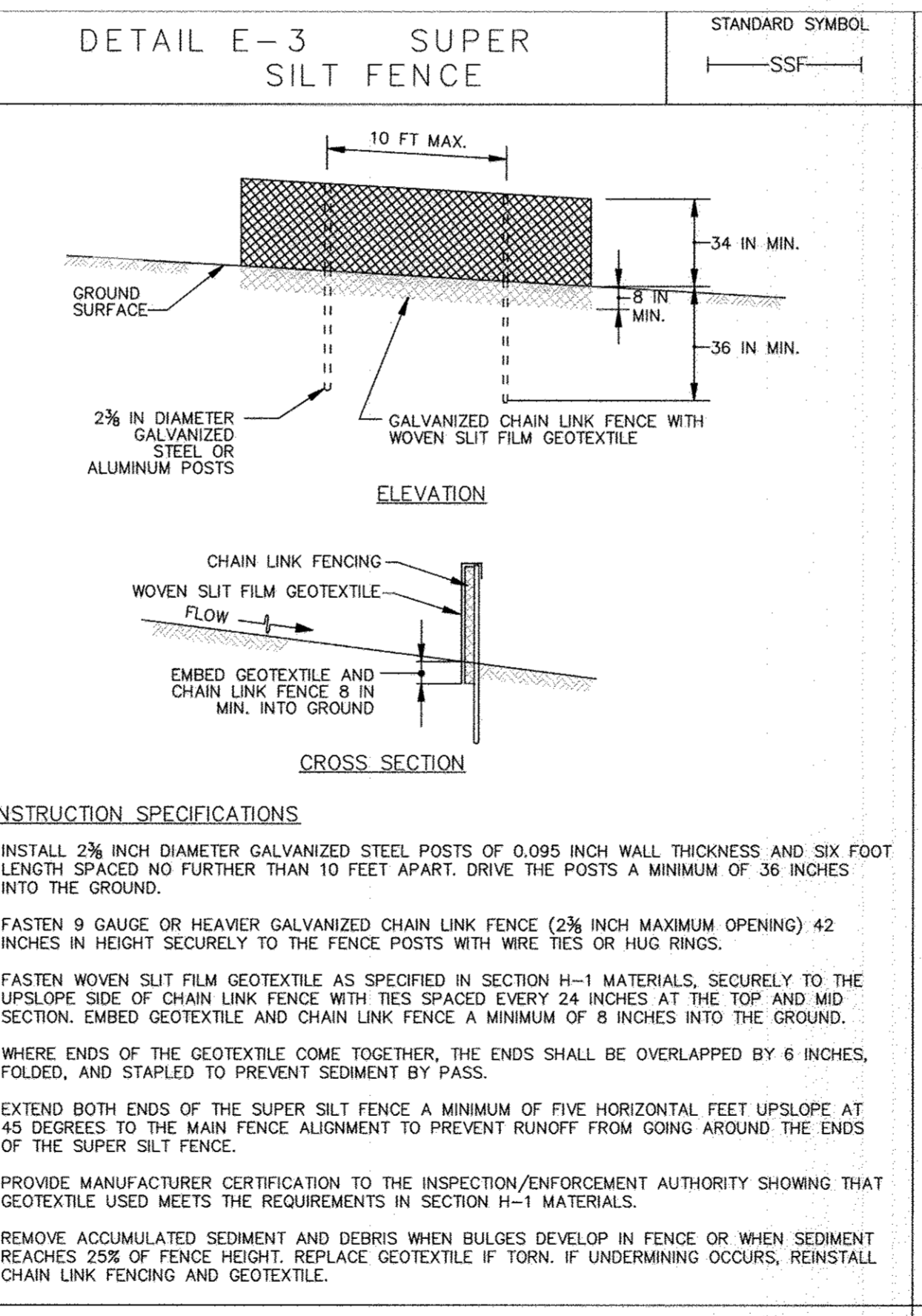
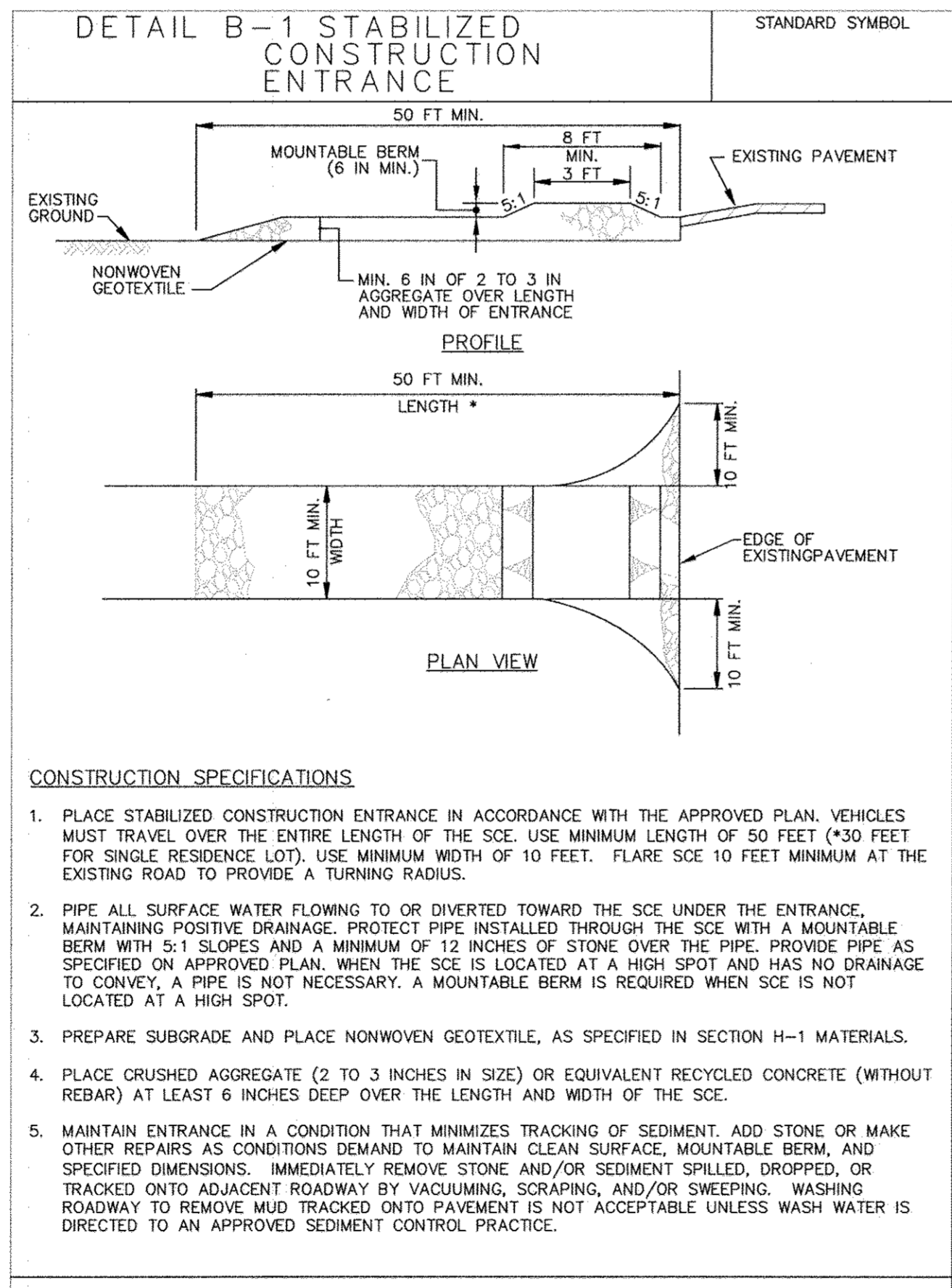
BORING LOG		Boring: SWM-1 (1 of 1)	
Project No: 75R3034 Client: Howard County Public Schools Project: Deep Run Elementary School City/State: Ellicott City, MD			
Elevation: 270.4 ± Total Depth: 15.0' Boring Location: Field to the East of School			
Drilling Method: HSA Hammer Type: Automatic Date Drilled: 8/22/13 Driller: JSH/SH			
Elevation	Depth	Description of Materials (Classification)	Remarks
270.1	0.3	Surficial Soils Brown, damp, of SAND, and silt Medium Dense SM Sandy Loam	12-13-11 REC=17%
267.4	3.0	Brown to light brown, moist, poorly graded of SAND, trace rock fragments, trace silt, trace clay Very Loose to Loose SP Sand	4-4-5 REC=89%
	6.0		3-2-2 REC=89%
	7.5		3-3-4 REC=100%
	10.0		
258.4	12.0	Brown, moist to very moist, of SAND, little silt, trace rock fragments Medium Dense SP-SM Sandy Sand	2-8-13 REC=78%
255.4	15.0		Boring Terminated at 15'
*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the second and third increments of penetration is termed the standard penetration resistance, N-Value.			

BORING LOG		Boring: SWM-2 (1 of 1)	
Project No: 75R3034 Client: Howard County Public Schools Project: Deep Run Elementary School City/State: Ellicott City, MD			
Elevation: 270.4 ± Total Depth: 15.0' Boring Location: Field to the East of School			
Drilling Method: HSA Hammer Type: Automatic Date Drilled: 8/22/13 Driller: JSH/SH			
Elevation	Depth	Description of Materials (Classification)	Remarks
270.0	0.4	Surficial Soils Brown, damp, of SAND, little silt, trace rock fragments Medium Dense FLL (SM)	6-8-9 REC=67%
267.4	3.0	Brown, moist, of SAND, some clayey silt, trace gravel Very Loose FLL (SM)	3-2-1 REC=83%
264.4	6.0	Brown to tan, moist, of SAND, some clay, some rock fragments / gravel, little silt Medium Dense SC Sandy Clay Loam	3-5-6 REC=61%
262.4	8.0	Brown to greenish gray, moist, micaceous of SAND, some silt, little clay Medium Dense SM Sandy Loam	5-7-10 REC=61%
258.4	12.0	Gray to light gray, moist to wet, clayey SILT, some silt sand Hard ML Loam	7-12-20 REC=89%
255.4	15.0		Boring Terminated at 15'
*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the second and third increments of penetration is termed the standard penetration resistance, N-Value.			

BORING LOG		Boring: SWM-3 (1 of 1)	
Project No: 75R3034 Client: Howard County Public Schools Project: Deep Run Elementary School City/State: Ellicott City, MD			
Elevation: 270.4 ± Total Depth: 15.0' Boring Location: Field to the East of School			
Drilling Method: HSA Hammer Type: Automatic Date Drilled: 8/22/13 Driller: JSH/SH			
Elevation	Depth	Description of Materials (Classification)	Remarks
270.0	0.4	Surficial Soils Brown to gray, damp, of SAND, little silt, trace rock fragments Medium Dense FLL (SM)	9-7-7 REC=78%
267.4	3.0	Brown, moist, of SAND, trace silt, with reddish brown clay / silt clods Loose FLL (SC)	5-4-3 REC=78%
264.4	6.0	Brown to brown-red to gray, moist, fat CLAY, some of sand, little silt, trace rock fragments Firm CH Clay	3-3-5 REC=94%
262.4	8.0	Orange-brown to brown-gray, moist, fat CLAY, some of sand, little silt, few rounded rock fragments Stiff CH Clay	3-4-5 REC=67%
258.4	12.0	Brown to greenish gray, moist, mf SAND, and silt Medium Dense SM	6-7-3A REC=94%
255.4	15.0		Boring Terminated at 15'
*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the second and third increments of penetration is termed the standard penetration resistance, N-Value.			

BORING LOG		Boring: SWM-4 (1 of 1)	
Project No: 75R3034 Client: Howard County Public Schools Project: Deep Run Elementary School City/State: Ellicott City, MD			
Elevation: 256.1 Total Depth: 15.0' Boring Location: Field to the East of School			
Drilling Method: HSA Hammer Type: Automatic Date Drilled: 8/22/13 Driller: JSH/SH			
Elevation	Depth	Description of Materials (Classification)	Remarks
255.5	0.5	Surficial Soils Orange-brown to gray, moist, SILT / CLAY, and silt sand Stiff MH Loam	5-4-7 REC=78%
253.0	3.0	Brown, moist to wet, SILT / CLAY, little mf sand, trace rock fragments Stiff MH Clay Loam	5-6-6 REC=83%
250.0	6.0	Light greenish gray, moist to wet, elastic SILT, some sand, little clay Very Stiff MH Silty Loam	7-10-13 REC=83%
248.0	8.0	Orange-brown to gray to red-gray, moist to wet, elastic SILT, some of sand, some clay Very Stiff MH Loam	6-9-10 REC=78%
244.0	12.0	Brown to gray, moist to wet, of SAND, and silt / silt sand Medium Dense SC-SM Sandy Loam	8-10-12 REC=89%
241.0	15.0		Boring Terminated at 15'
*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the second and third increments of penetration is termed the standard penetration resistance, N-Value.			

BORING LOG		Boring: SWM-5 (1 of 1)	
Project No: 75R3034 Client: Howard County Public Schools Project: Deep Run Elementary School City/State: Ellicott City, MD			
Elevation: 254.7 ± Total Depth: 15.0' Boring Location: Field to the East of School			
Drilling Method: HSA Hammer Type: Automatic Date Drilled: 8/22/13 Driller: JSH/SH			
Elevation	Depth	Description of Materials (Classification)	Remarks
254.4	0.3	Surficial Soils Brown, moist, CLAY / SILT, little of sand, trace gravel Firm CL Clay Loam	3-3-4 REC=67%
251.7	3.0	Brown to orange-brown to gray, moist, CLAY / SILT, little of sand Stiff MH Clay Loam	6-7-8 REC=56%
248.7	6.0	Orange-brown to gray-brown to light greenish gray, moist to wet, elastic SILT, some of sand, some clay, trace rock fragments Stiff MH Clay Loam	5-6-9 REC=89%
	8.5		4-5-8 REC=89%
	10.0		
242.7	12.0	Greenish gray, moist to wet, mf SAND, little silt, low clay, trace rock fragments Medium Dense SM Sandy Loam	5-4-7 REC=89%
239.7	15.0		Boring Terminated at 15'
*Number of blows required for a 140 lb hammer dropping 30" to drive 2" O.D., 1.375" I.D. sampler a total of 18 inches in three 6" increments. The sum of the second and third increments of penetration is termed the standard penetration resistance, N-Value.			



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 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALDWIN NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 441-2099

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: *[Signature]* Date: 2/11/14

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: 2/11/14

"Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 13204, Expiration Date: November 3, 2014."

Signature: *[Signature]* Date: 2/11/14
 CHARLES J. CROVO, SR., P.E.

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

Signature: *[Signature]* Date: 2/11/14
 Howard SCD

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Signature: *[Signature]* Date: 2/11/14
 Director - Department of Planning and Zoning

Signature: *[Signature]* Date: 2/11/14
 Chief, Division of Land Development

Signature: *[Signature]* Date: 2/11/14
 Chief, Development Engineering Division

PREPARED FOR:
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Clarksville Pike
 Ellicott City, Maryland 21042
 Attention: Bruce Gist
 410-313-6798

ADDRESS CHART

LOT/PARCEL#	STREET ADDRESS
P. 16B	6925 OLD WATERLOO ROAD ELLCOTT CITY, MARYLAND 21075

PERMIT INFORMATION CHART

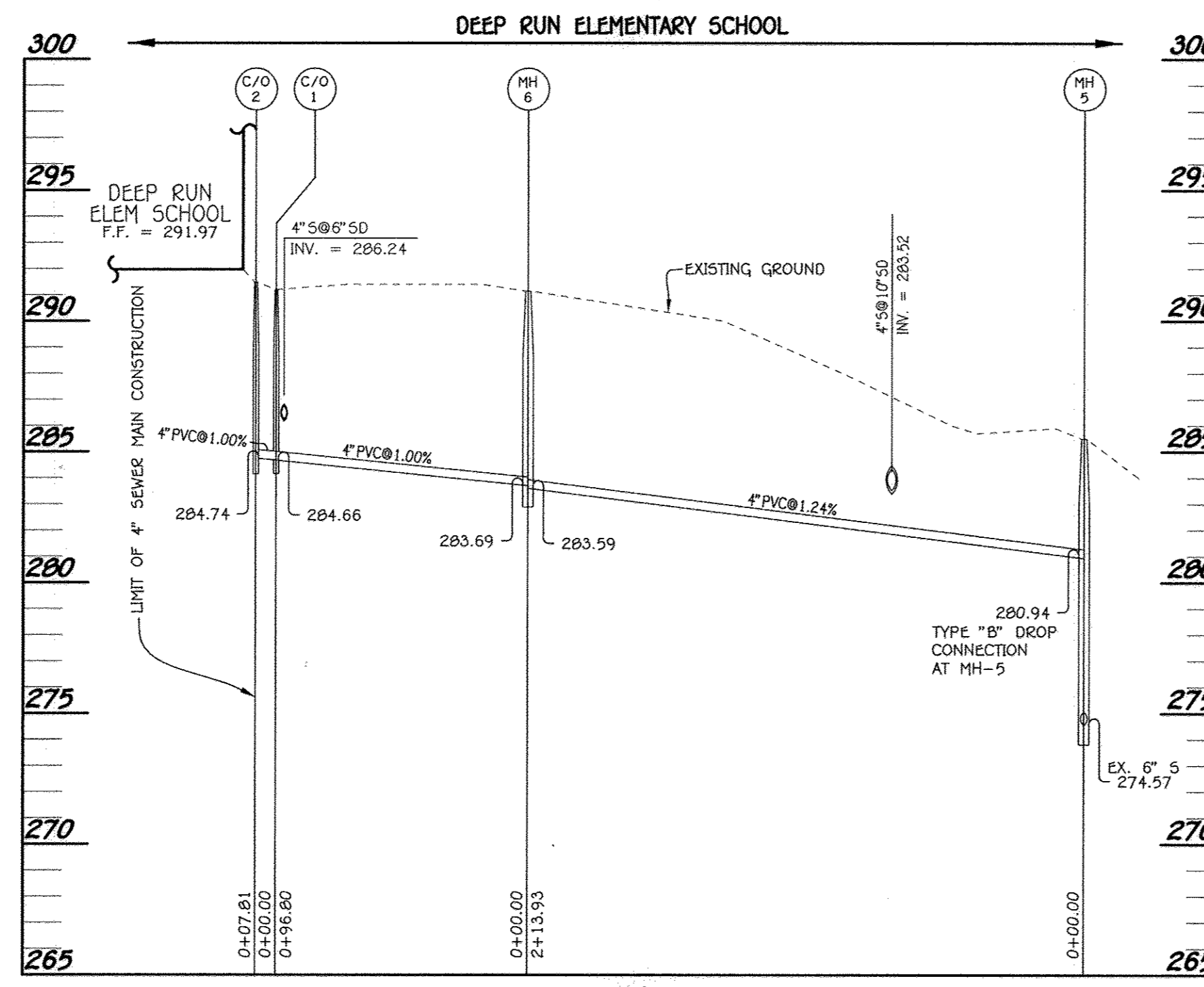
SUBMISSION NAME	SECTION/AREA	LOT/PARCEL NO.
DEEP RUN ELEM. SCHOOL	N/A	P. 16B
PLAT# OR L/F	GRID#	ZONING
L.252 F.546	21	RSA-B
TAX MAP#	ELECT. DISTR.	CENSUS TRACT
37	FIRST	6011

SOIL BORINGS AND SEDIMENT CONTROL DETAILS

"REVISED SITE DEVELOPMENT PLAN"
 DEEP RUN ELEMENTARY SCHOOL

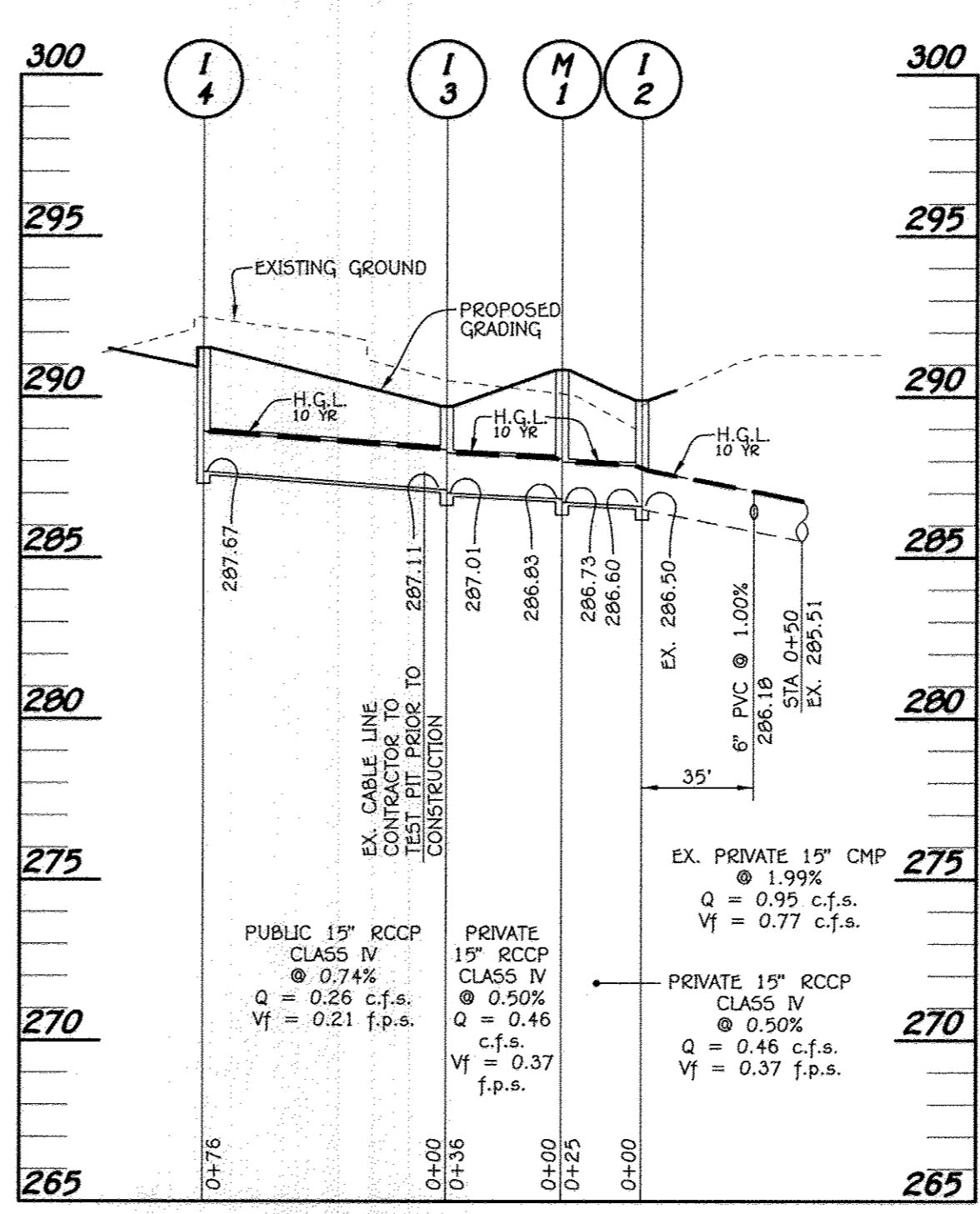
ZONED RSA-B TAX MAP No.: 37 GRID No.: 21 PARCEL No.: 16B
 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: FEBRUARY 10, 2014

SHEET 17 OF 30



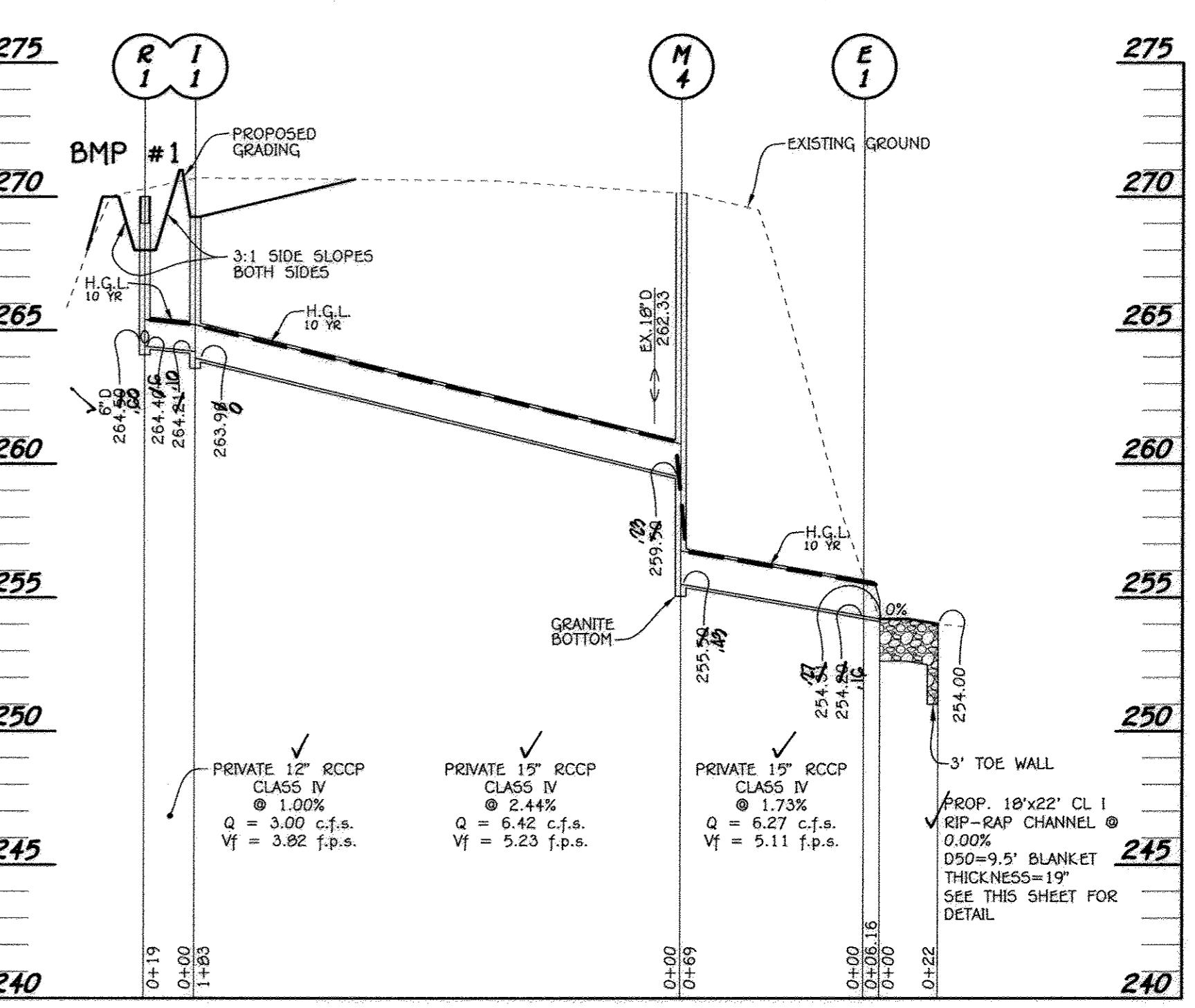
4" SEWER MAIN PROFILE

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



STORM DRAIN PROFILE

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



PROFILE

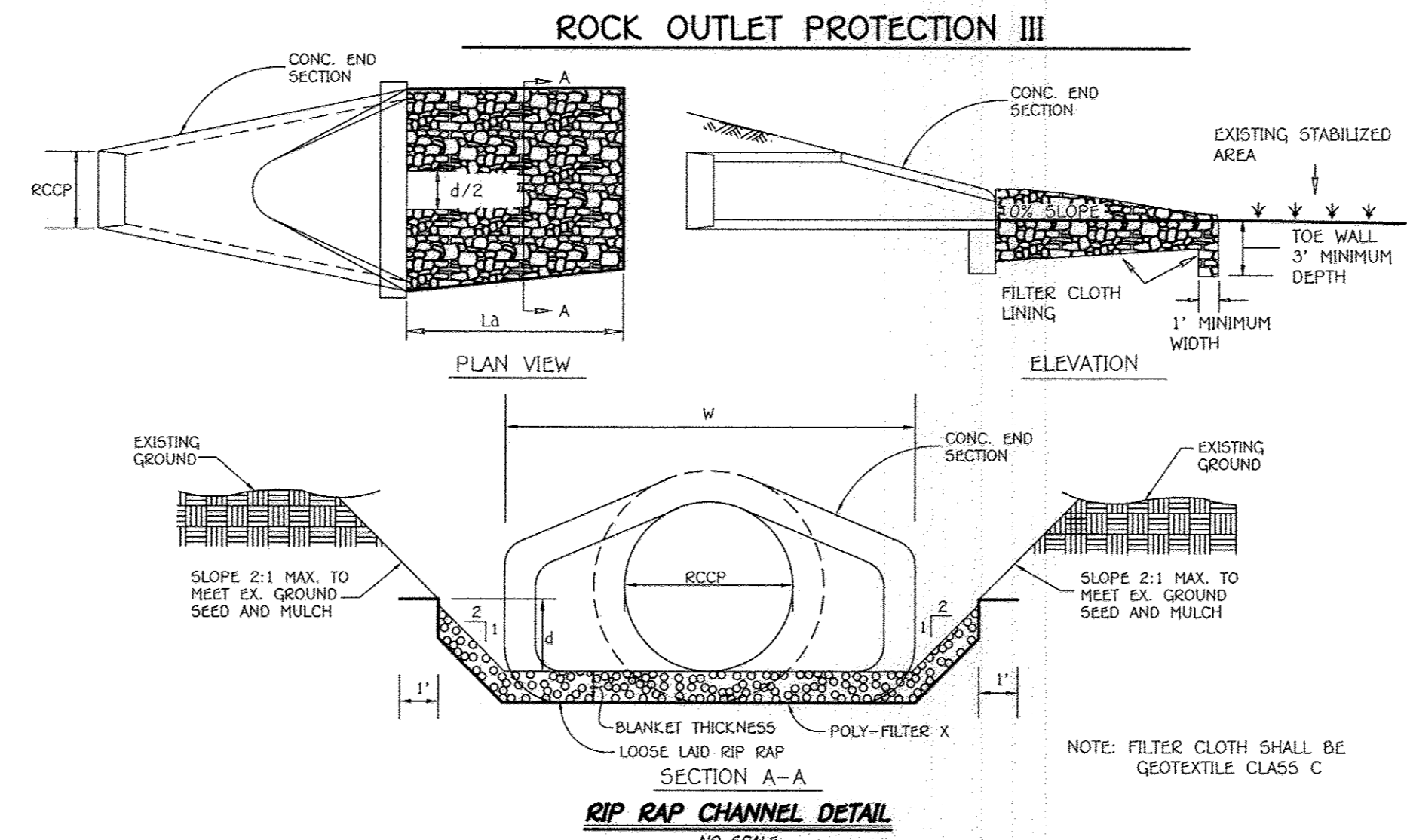
SCALE: HORIZ. : 1" = 50'
VERT. : 1" = 5'

SEWER MANHOLE TABULATION CHART			
NO.	NORTHING	EASTING	RIM ELEVATION
MH-5	5287.82	5167.95	289.50
MH-6	5251.88	4957.06	291.20
C/O 1	5197.63	4876.89	291.18
C/O 2	5191.23	4881.37	291.27

NOTE: SET MH RIMS FLUSH W/EXISTING GROUND OR PROPOSED GRADE AS APPLICABLE.

PIPE SCHEDULE (PRIVATE)		
SIZE	CLASS	LENGTH
6"	PERF PVC	630 L.F.
4"	PVC, SCH. 40	319 L.F.
12"	RCCP, CLASS IV	42 L.F.
15"	RCCP, CLASS IV	406 L.F.
18"	RCCP, CLASS IV	9 L.F.

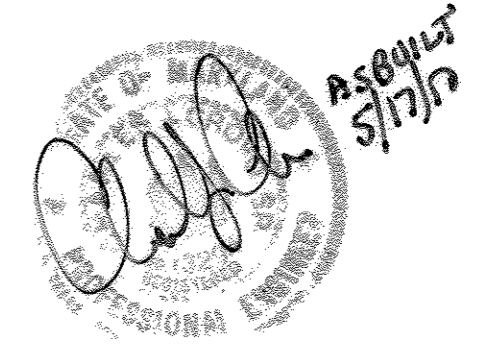
STRUCTURE SCHEDULE								
STRUCTURE NO.	OWNERSHIP AND MAINTENANCE	TOP ELEVATION	INV. IN	INV. OUT	COORDINATES	WIDTH	TYPE	REMARKS
I-1	PRIVATE	289.25	284.25 (12")	283.50 (15")	N 5185.29 E 5419.37	2.50'	S INLET	D-4.22 & D-4.93
I-2	PRIVATE	289.90	286.60 (15")	286.50 (15")	N 5184.48 E 4846.75	2.50'	S INLET	D-4.22 & D-4.93
I-3	PRIVATE	289.71	287.11 (15")	287.01 (15")	N 5126.93 E 4853.73	2.50'	S INLET	D-4.22 & D-4.93
I-4	PUBLIC	291.52	-	287.67 (15")	N 5092.73 E 4872.89	2.5'	A-5	D - 4.01
I-5	PRIVATE	270.80	-	268.83 (18")	N 5378.84 E 5372.27	2.5'	A-5	D - 4.01
M-1	PRIVATE	290.84	286.83 (15")	286.73 (15")	N 5160.94 E 4841.61	4'	STD. MANHOLE	G - 5.12
M-2	PRIVATE	284.80	281.79 (15")	281.69 (15")	N 5173.49 E 5479.79	4'	STD. MANHOLE	G - 5.12
M-3	PRIVATE	289.63	281.26 (18")	280.18 (18")	N 5098.09 E 5477.73	4'	STD. MANHOLE	G - 5.12
M-4	PRIVATE	278.11	259.33 (15")	259.23 (15")	N 5079.88 E 5451.68	4'	STD. MANHOLE	G - 5.12
M-5	PRIVATE	285.50	280.94 (4")	274.57 (6")	N 5287.82 E 5167.95	4'	STD. MANHOLE WITH TYPE 'B' DROP CONNECTION	G-5.14 & S-1.32
M-6	PRIVATE	291.15	283.69 (4")	283.59 (4")	N 5251.88 E 4957.06	4'	STD. MANHOLE	G - 5.12
S-1	PRIVATE	288.07	259.54 (12")	259.27 (15")	N 5120.58 E 5476.36	4'	STORMCEPTOR INSIDE BOTTOM ELEVATION 254.89	SEE SHEET 29
R-1	PRIVATE	269.80	264.40 (6")	264.40 (6")	N 5280.98 E 5419.76	3'	MOD. I INLET	SEE SHEET 26
R-2	PRIVATE	281.80	252.20 (6")	252.40 (12")	N 5192.07 E 5604.96	3'	MOD. I INLET	SEE SHEET 28
E-1	PRIVATE	259.56	254.54 (15")	254.54 (15")	N 5087.17 E 5520.57	D - 5.51	CONC. END SECTION	
E-2	PRIVATE	252.81	251.54 (15")	251.44 (15")	N 5069.97 E 5632.41	D - 5.51	CONC. END SECTION	
E-3	PRIVATE	258.00	-	257.76 (15")	N 5171.23 E 5516.95	D - 5.21	TYPE C HEADWALL	
E-4	PRIVATE	270.80	-	268.00 (18")	N 5381.28 E 5381.84	D - 5.21	TYPE C HEADWALL	



- 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.

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 that the contributing drainage area is sufficiently stabilized to prevent clogging of the underground SWM facility.

CHARLES J. BRON, P.E. #19204 Date: 2/10/14



NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW PROFILES FOR THE BUILDING ADDITIONS, UTILITIES AND OTHER IMPROVEMENTS.

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

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 13204, Expiration Date: November 3, 2014.

CHARLES J. BRON, P.E. Date: 2/10/14

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Director of Planning and Zoning
Chief, Division of Land Development
Chief, Development Engineering Division

DATE: 2/10/14

PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Clarksville Pike
Ellicott City, Maryland 21042
Attention: Bruce Gist
410-313-6798

STATE OF MARYLAND PROFESSIONAL ENGINEER

ADDRESS CHART	
LOT/PARCEL#	STREET ADDRESS
P. 168	6925 OLD WATERLOO ROAD ELK RIDGE, MARYLAND 21075

PERMIT INFORMATION CHART		
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
DEEP RUN ELEM. SCHOOL	N/A	P. 168

PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DIST.	CENSUS TRACT
L.252 F.546	21	RSA-8	37	FIRST	6011

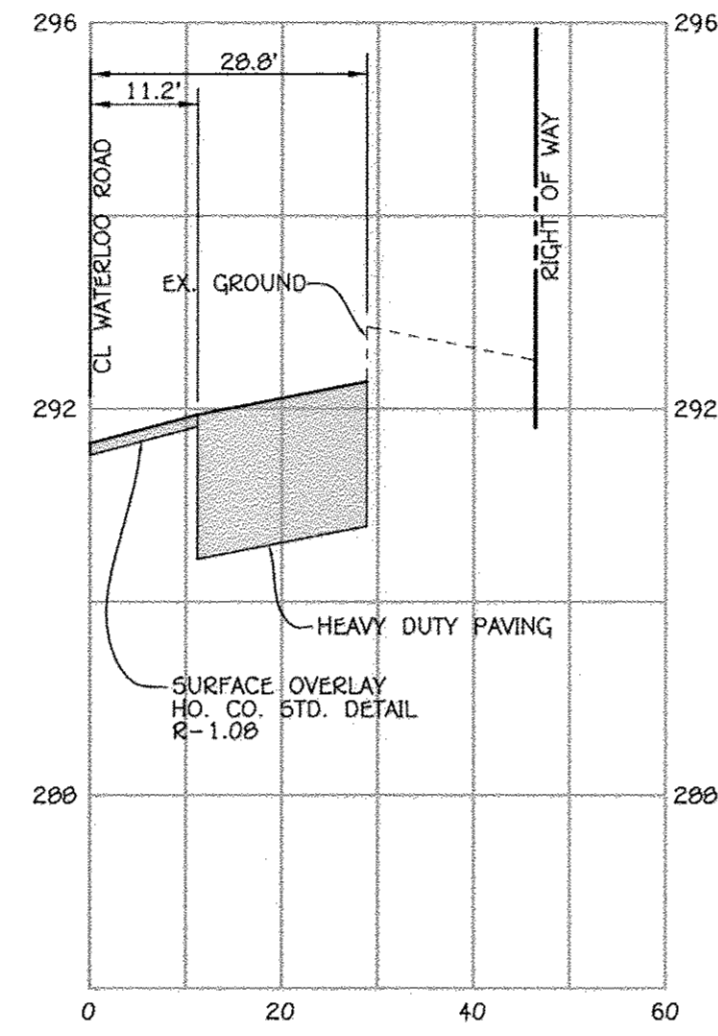
PROFILES

"REVISED SITE DEVELOPMENT PLAN"
DEEP RUN ELEMENTARY SCHOOL

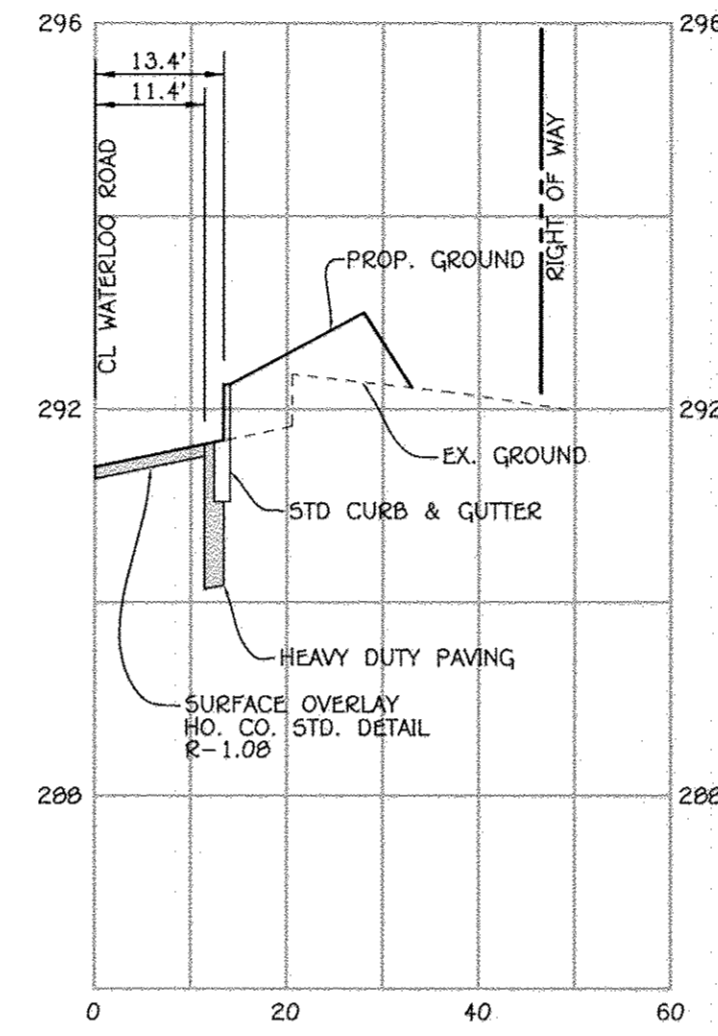
ZONED RSA-8 TAX MAP No.: 37 GRID No.: 21 PARCEL No.: 168
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: FEBRUARY 10, 2014

SHEET 19 OF 30

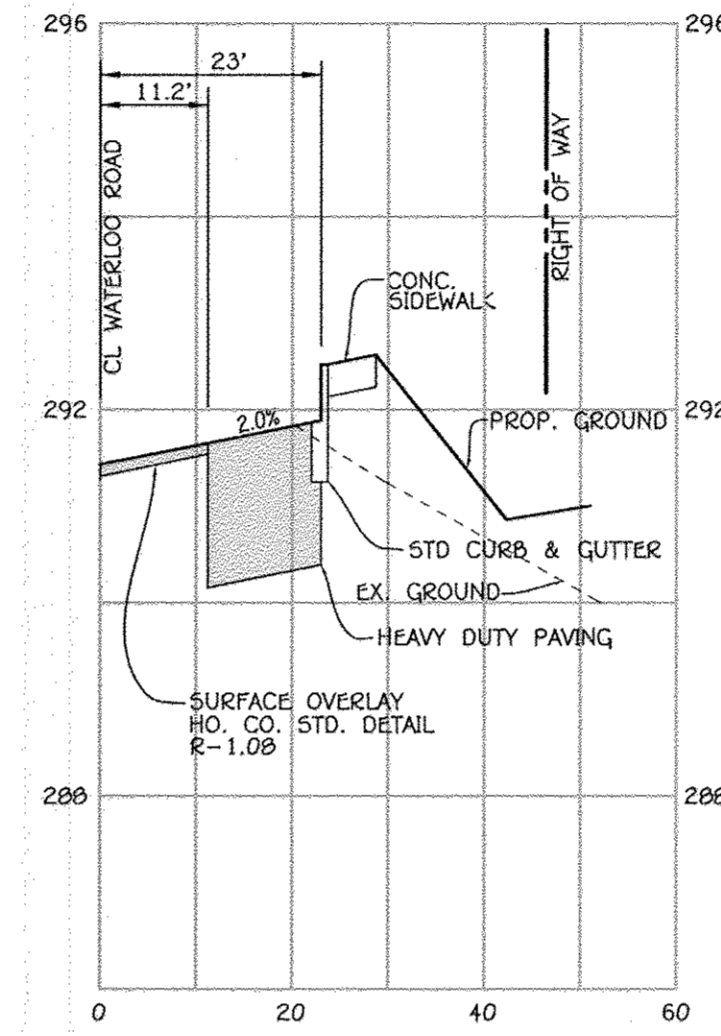
I:\2003\030909\ADDITONS 2013\030909 SDP PROFILES 19-20.dwg, PROFILE SHEET 20, 2/12/2014 8:35:57 AM, 1:1



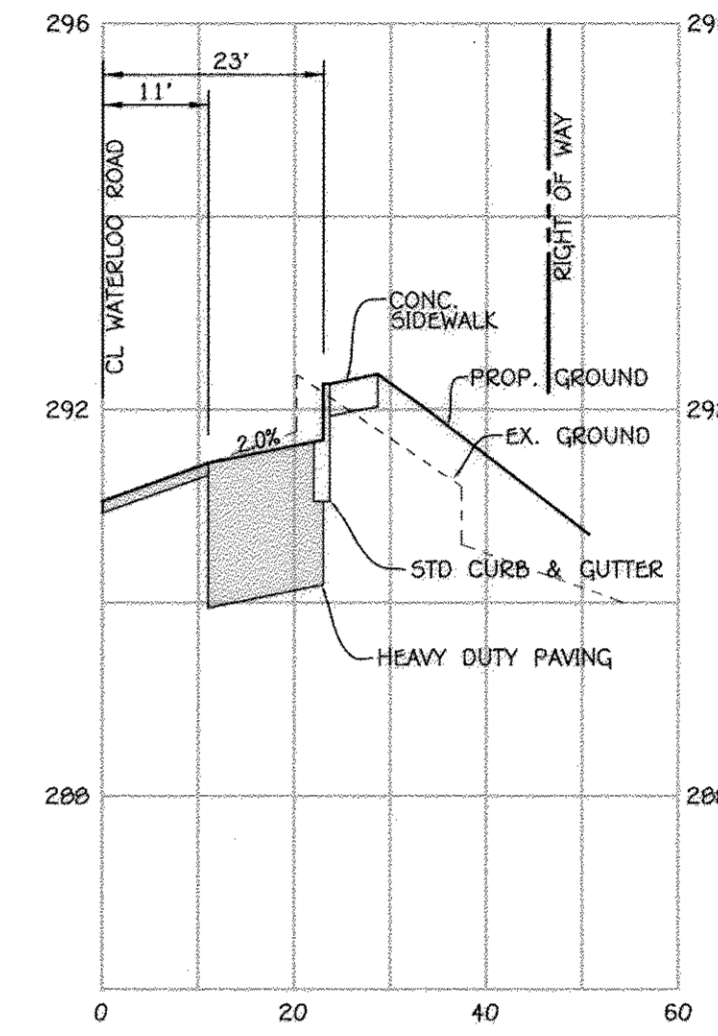
STA 26+50



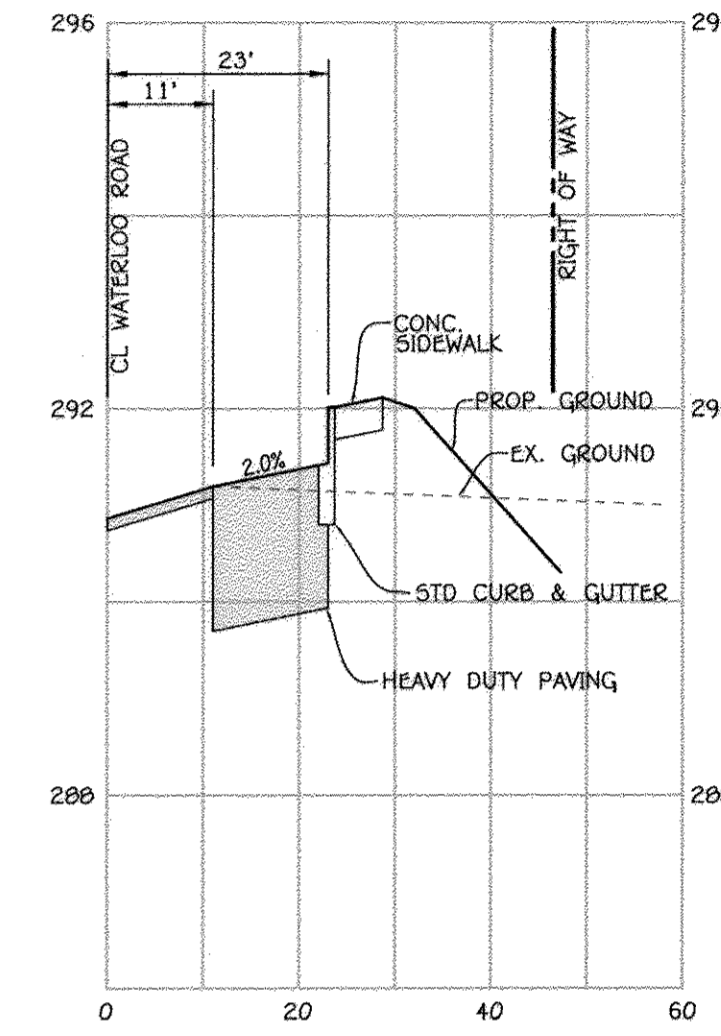
STA 27+00



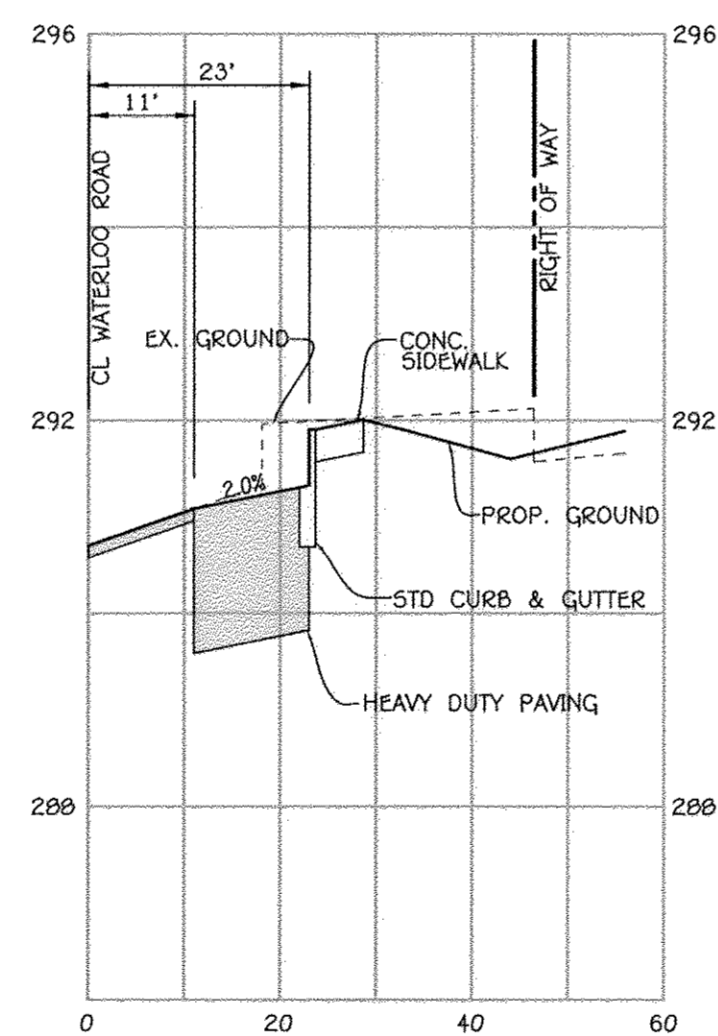
STA 27+50



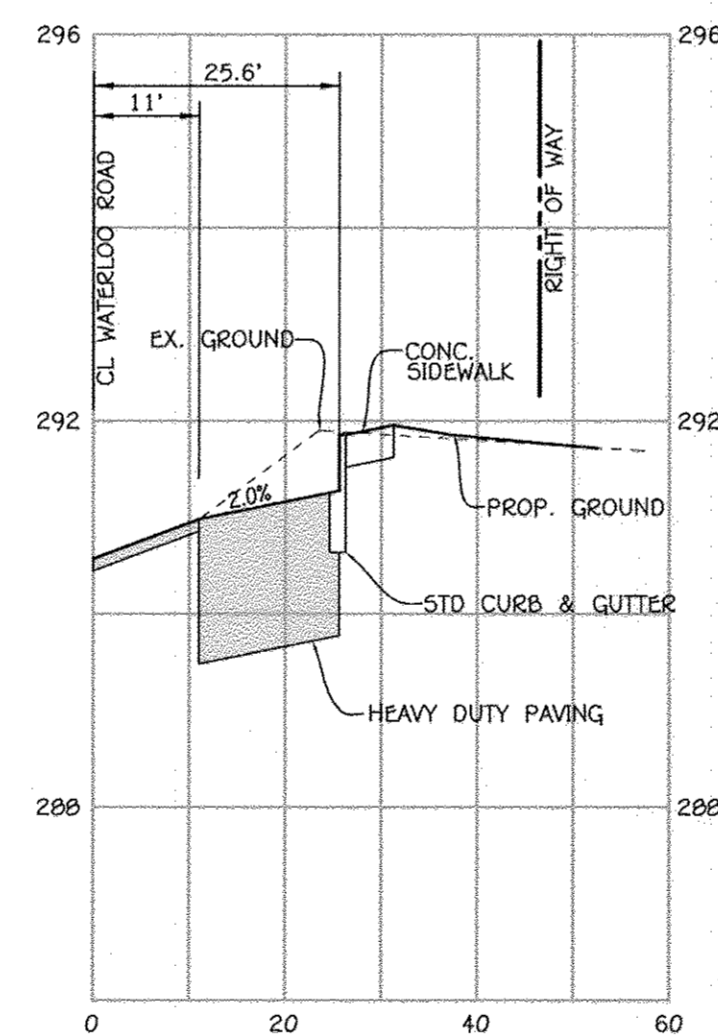
STA 28+00



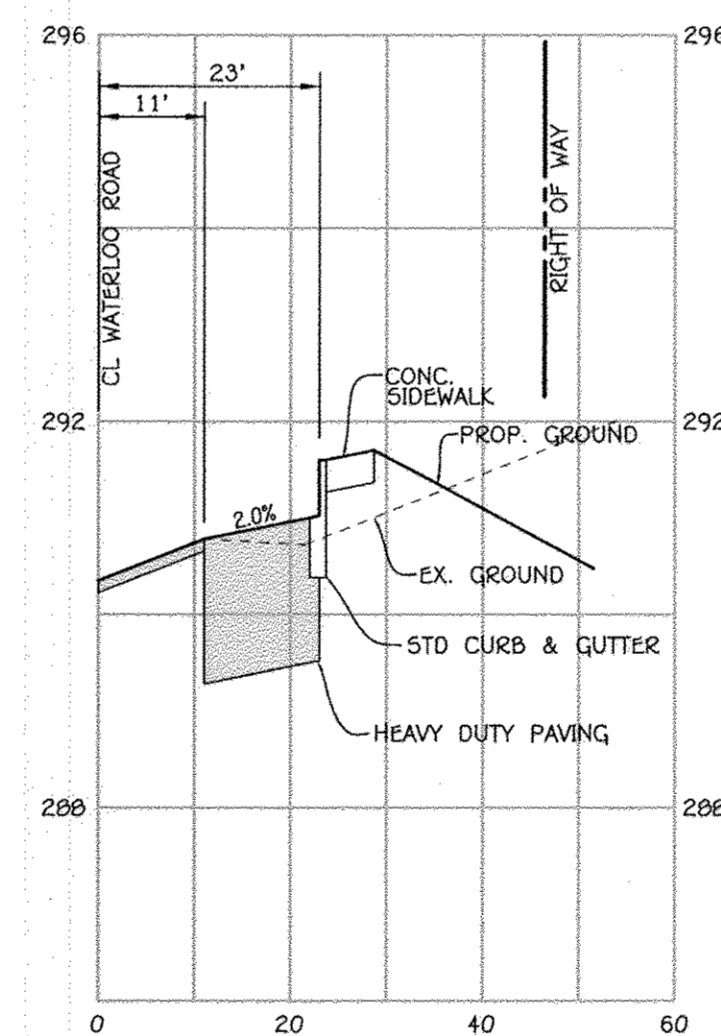
STA 28+50



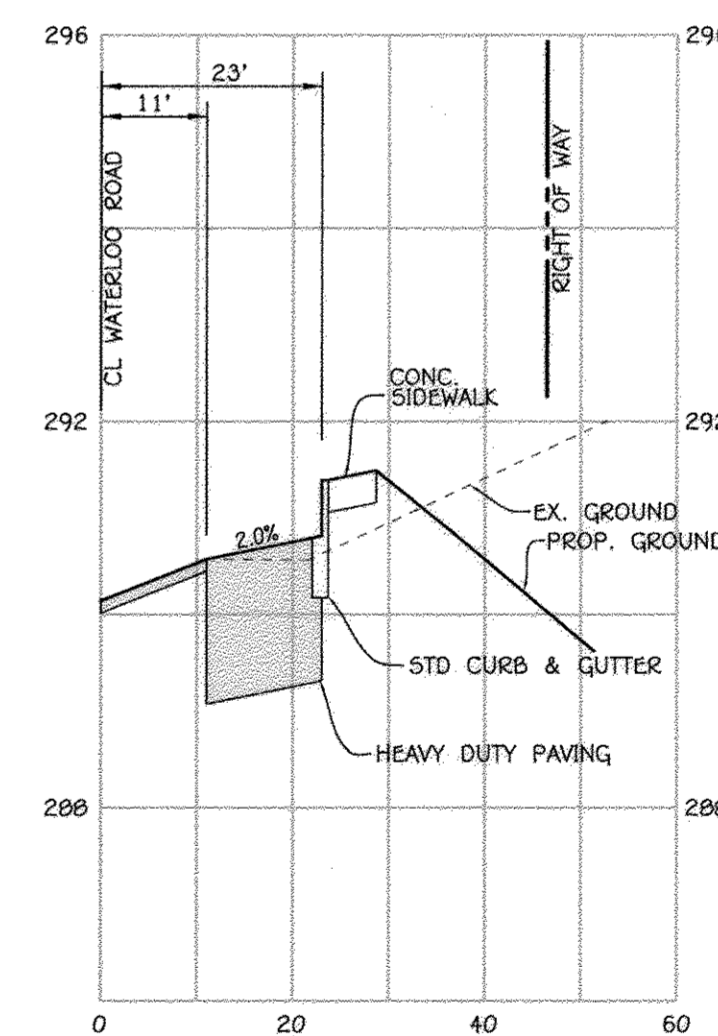
STA 29+00



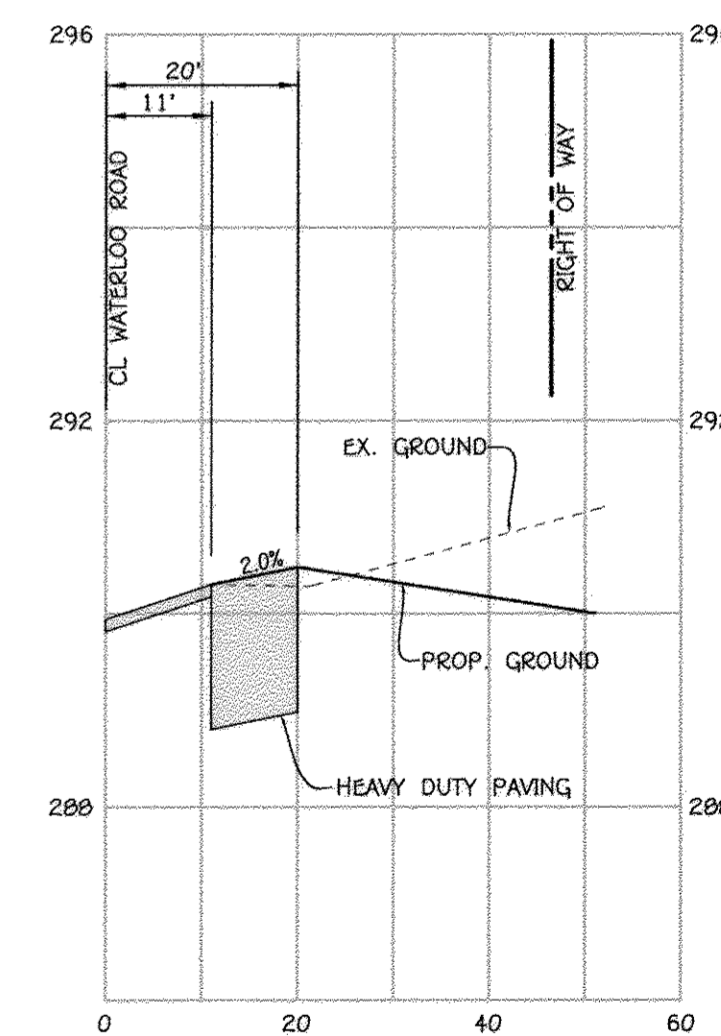
STA 29+50



STA 30+00



STA 30+50



STA 31+00

ROAD WIDENING SECTIONS

SCALE: HORIZ. : 1" = 20'
VERT. : 1" = 2'

AS-BUILT CERTIFICATION FOR PSWM

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

CHARLES J. GROVO, SR., P.E. Date

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW PROFILES FOR THE ROAD WIDENING.

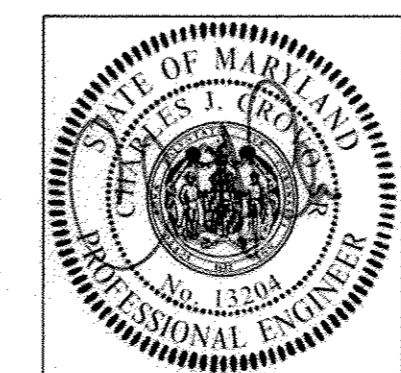
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
(410) 441-2999

"Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 13204, Expiration Date: November 3, 2014."

CHARLES J. GROVO, SR., P.E. Date

DATE	DESCRIPTION
	REVISION BLOCK
	APPROVED: DEPARTMENT OF PLANNING AND ZONING
	Director - Department of Planning and Zoning
	Chief, Division of Land Development
	Chief, Development Engineering Division

PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Clarksville Pike
Ellicott City, Maryland 21042
Attention: Bruce Giesj
410-313-6798

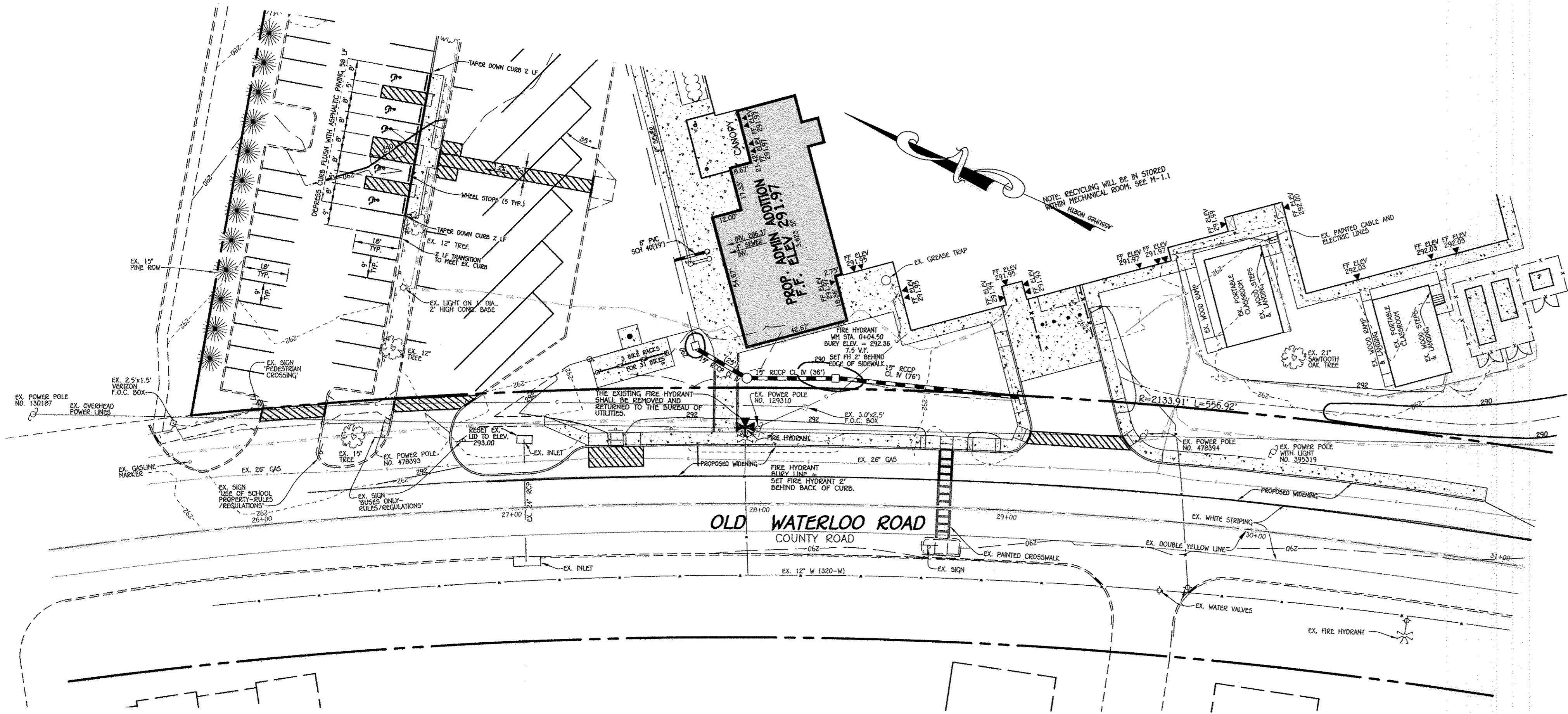


ADDRESS CHART	
LOT/PARCEL#	STREET ADDRESS
P. 168	6925 OLD WATERLOO ROAD ELKRIDGE, MARYLAND 21075

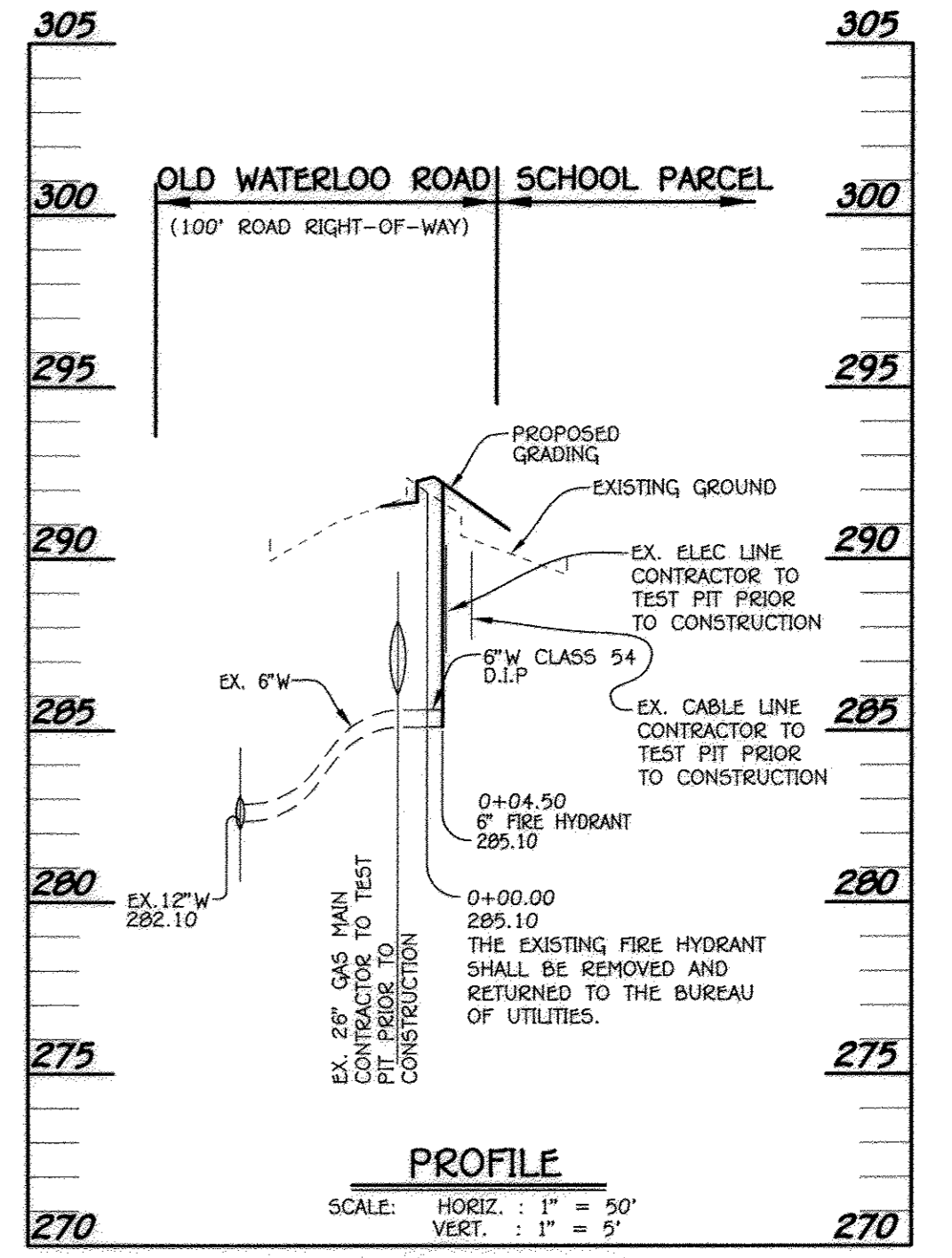
PERMIT INFORMATION CHART		
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
DEEP RUN ELEM. SCHOOL	N/A	P. 168
PLAT# OR L/F	GRID#	ZONING
L.252 F.546	21	RSA-Ø
TAX MAP#	ELECT. DISTR.	CENSUS TRACT
37	FIRST	6011

ROAD SECTION PROFILES	
"REVISED SITE DEVELOPMENT PLAN"	
DEEP RUN ELEMENTARY SCHOOL	
ZONED RSA-Ø TAX MAP No.: 37	GRID No.: 21
FIRST ELECTION DISTRICT	HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN	DATE: FEBRUARY 10, 2014
SHEET 20 OF 30	

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET SDP-Ø9-9Ø



PLAN
SCALE: 1" = 30'



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

NOTES:
1. THE A.D.O. CONSTRUCTION WORK MUST BE PERFORMED UNDER THE CONTINUOUS INSPECTION OF THE HOWARD COUNTY BUREAU OF UTILITIES. THE CONTRACTOR SHALL NOTIFY THE A.D.O. INSPECTOR AT 410-313-4942 OR 410-313-1438 AT LEAST FIVE (5) DAYS PRIOR TO THE START OF ANY CONSTRUCTION FOR THIS A.D.O.
2. THE 6" FIRE HYDRANT LEAD SHALL BE CLASS 54 D.I.P.

WATER MAIN TABULATION CHART			
W.M. STA.	APPURTENANCE	NORTHING	EASTING
6" WATER MAIN			
0+00.00	REMOVE EX. FIRE HYDRANT	5152.95	4818.72
0+04.50	FIRE HYDRANT	5154.48	4822.95

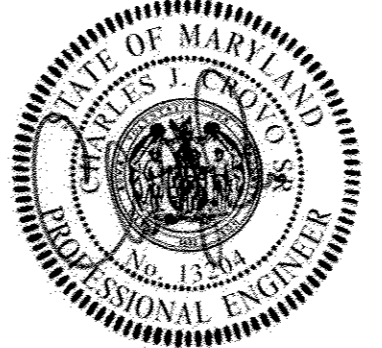
LEGEND	
SYMBOL	DESCRIPTION
--- 2' ---	EXISTING CONTOUR 2' INTERVAL
--- 10' ---	EXISTING CONTOUR 10' INTERVAL
---	EXISTING SAN. SEWER LINE
---	EXISTING STORM DRAIN LINE
---	EXISTING WATER LINE
---	EXISTING ELECTRIC LINE
---	EXISTING CABLE LINE
---	EXISTING GAS LINE
---	EXISTING FENCE
--- 2' ---	PROPOSED CONTOUR 2' INTERVAL
--- 10' ---	PROPOSED CONTOUR 10' INTERVAL
---	PROPOSED CONCRETE WALK
---	EXISTING TREES
---	PROPOSED WATER
---	PROPOSED STORM DRAIN
---	PROPOSED CHAINLINK FENCE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
1000 NATIONAL SQUARE OFFICE PARK - 10276 BALTIMORE NATIONAL FIRE
ELICOTT CITY, MARYLAND 21042
(410) 481 - 2895

"Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 132204, Expiration Date: November 3, 2014."
Charles J. Grovo, Sr., P.E.
DATE: 2/12/14

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Paul J. ...
Director - Department of Planning and Zoning
...
Chief, Division of Land Development
...
Chief, Development Engineering Division

PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Clarksville Pike
Ellicott City, Maryland 21042
Attention: Bruce Gist
410-313-6798

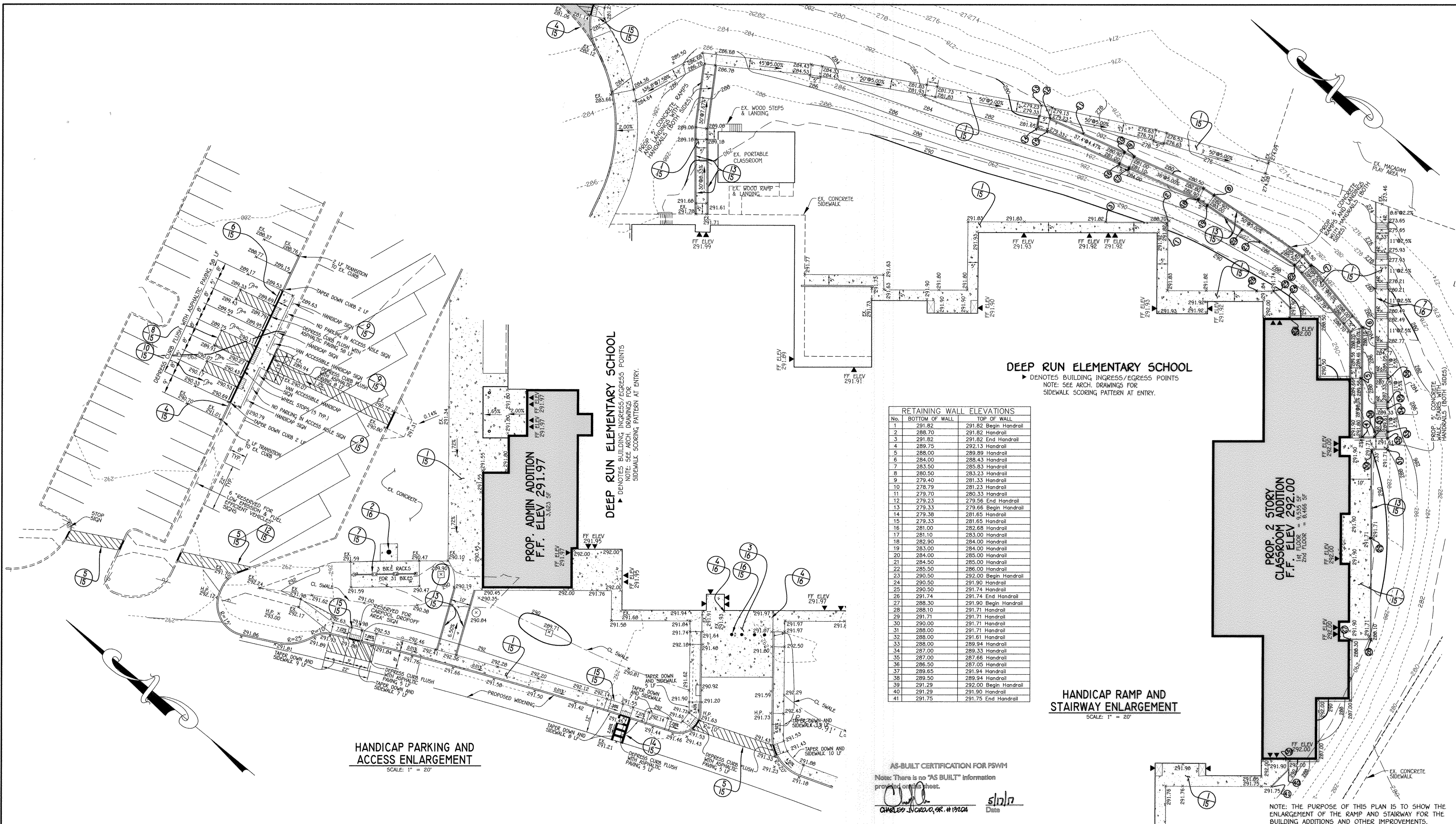


ADDRESS CHART	
LOT/PARCEL#	STREET ADDRESS
P. 168	6925 OLD WATERLOO ROAD ELKRIDGE, MARYLAND 21075

PERMIT INFORMATION CHART			
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.	
DEEP RUN ELEM. SCHOOL	N/A	P. 168	
PLAT# OR L/F	GRID#	TAX MAP#	ELECT. DISTR. CENSUS TRACT
L252 F.546	21	RSA-8 37	FIRST 6011

FIRE HYDRANT PLAN BY A.D.O.
"REVISED SITE DEVELOPMENT PLAN"
DEEP RUN ELEMENTARY SCHOOL
ZONED RSA-8 TAX MAP No.: 37 GRID No.: 21 PARCEL No.: 168
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' DATE: FEBRUARY 10, 2014
SHEET 21 OF 30

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET SDP-89-98



DEEP RUN ELEMENTARY SCHOOL
 ▶ DENOTES BUILDING INGRESS/EGRESS POINTS
 NOTE: SEE ARCH. DRAWINGS FOR SIDEWALK SCORING PATTERN AT ENTRY.

RETAINING WALL ELEVATIONS		
No.	BOTTOM OF WALL	TOP OF WALL
1	291.82	291.82 Begin Handrail
2	288.70	291.82 Handrail
3	291.82	291.82 End Handrail
4	289.75	292.33 Handrail
5	288.00	289.89 Handrail
6	284.00	288.43 Handrail
7	283.50	285.83 Handrail
8	280.50	283.23 Handrail
9	279.40	281.33 Handrail
10	278.79	281.23 Handrail
11	279.70	280.33 Handrail
12	279.23	279.56 End Handrail
13	279.33	279.66 Begin Handrail
14	279.38	281.65 Handrail
15	279.33	281.65 Handrail
16	281.00	282.68 Handrail
17	281.10	283.00 Handrail
18	282.90	284.00 Handrail
19	283.00	284.00 Handrail
20	284.00	285.00 Handrail
21	284.50	285.00 Handrail
22	285.50	286.00 Handrail
23	290.50	292.00 Begin Handrail
24	290.50	291.90 Handrail
25	290.50	291.74 Handrail
26	291.74	291.74 End Handrail
27	288.30	291.90 Begin Handrail
28	288.10	291.71 Handrail
29	291.71	291.71 Handrail
30	290.00	291.71 Handrail
31	288.00	291.71 Handrail
32	288.00	291.61 Handrail
33	288.00	289.94 Handrail
34	287.00	289.33 Handrail
35	287.00	287.66 Handrail
36	286.50	287.05 Handrail
37	289.65	291.94 Handrail
38	289.50	289.94 Handrail
39	291.29	292.00 Begin Handrail
40	291.29	291.90 Handrail
41	291.75	291.75 End Handrail

HANDICAP RAMP AND STAIRWAY ENLARGEMENT
 SCALE: 1" = 20'

HANDICAP PARKING AND ACCESS ENLARGEMENT
 SCALE: 1" = 20'

AS-BUILT CERTIFICATION FOR PSWM

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

Charles J. Govo, Sr.
 CHARLES J. GOVO, SR., #19204
 Date: 2/27/14

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE ENLARGEMENT OF THE RAMP AND STAIRWAY FOR THE BUILDING ADDITIONS AND OTHER IMPROVEMENTS.

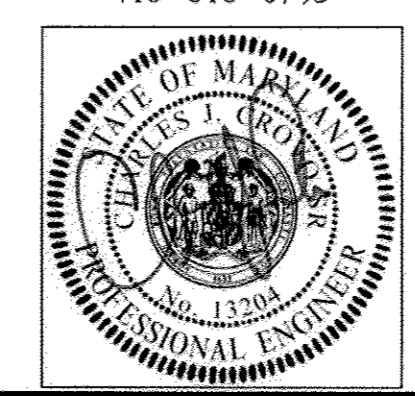
FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 100 NATIONAL SQUARE, OFFICE PARK - 10275 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 461-2899

"Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 13204, Expiration Date: November 3, 2014."

Charles J. Govo, Sr.
 CHARLES J. GOVO, SR., P.E.
 DATE: 2/27/14

DATE	DESCRIPTION
	REVISION BLOCK
	APPROVED: DEPARTMENT OF PLANNING AND ZONING
	<i>Paul S. Gove</i> 2/27/14 Director - Department of Planning and Zoning
	<i>Keith L. Lunde</i> 3/16/14 Chief, Division of Land Development
	<i>Phil Coleman</i> 2-27-14 Chief, Development Engineering Division

PREPARED FOR
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Clarksville Pike
 Ellicott City, Maryland 21042
 Attention: Bruce Gist
 410-313-6790



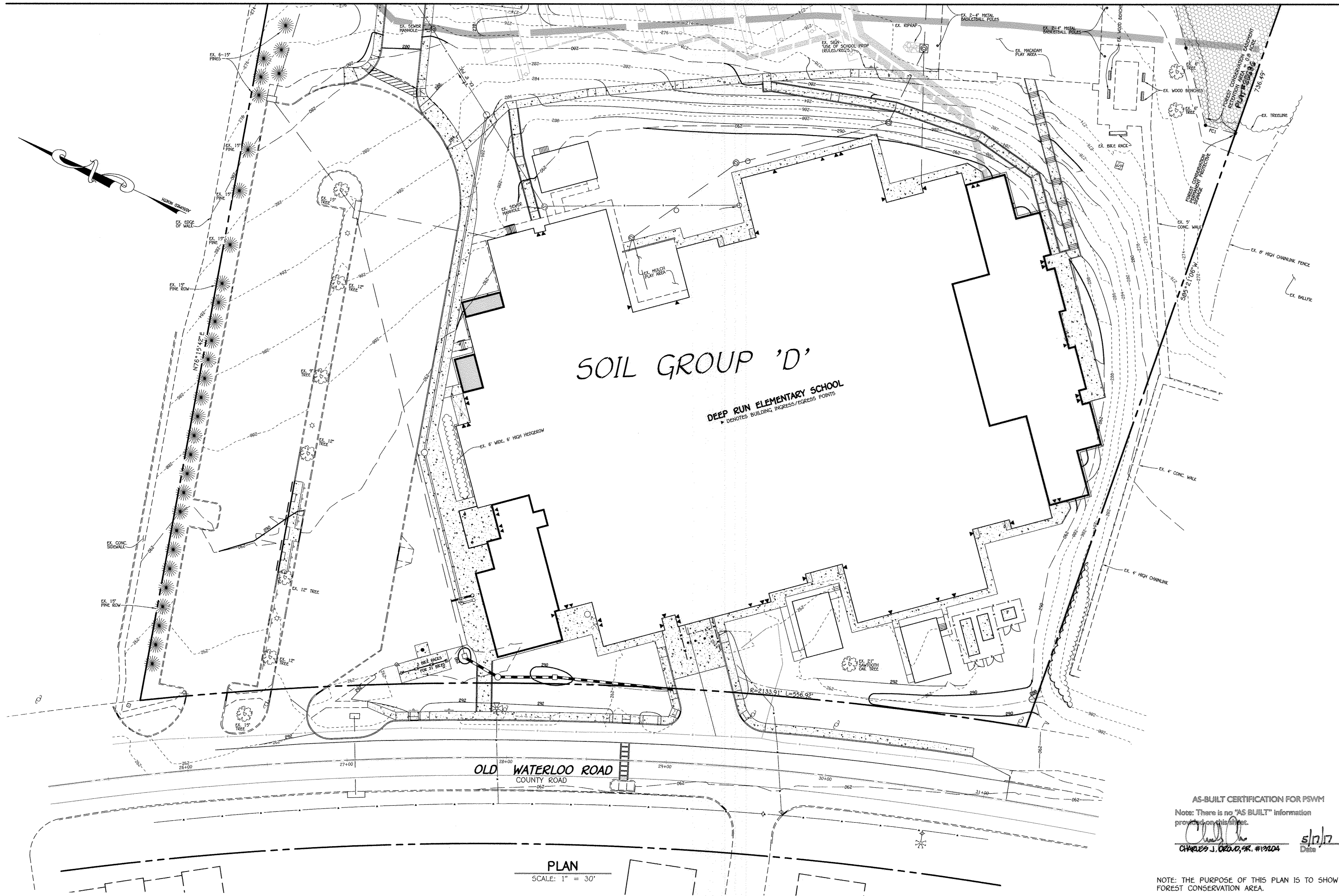
ADDRESS CHART	
LOT/PARCEL#	STREET ADDRESS
P. 160	6925 OLD WATERLOO ROAD ELKRIDGE, MARYLAND 21075

PERMIT INFORMATION CHART			
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.	
DEEP RUN ELEM. SCHOOL	N/A	P. 160	
PLAT# OR L/F	GRID#	ZONING	TAX MAP#
L.252 F.546	21	RSA-0	37
		ELECT. DIST.	CENSUS TRACT
		FIRST	6011

HANDICAP PARKING, RAMP AND STAIRWAY ENLARGEMENT
"REVISED SITE DEVELOPMENT PLAN"
DEEP RUN ELEMENTARY SCHOOL
 ZONED RSA-0 TAX MAP No.: 37 GRID No.: 21 PARCEL No.: 160
 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1" = 20' DATE: FEBRUARY 10, 2014
 SHEET 22 OF 30

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET SDP-89-98

MATCHLINE SEE SHEET 24



LEGEND	
SYMBOL	DESCRIPTION
-282-	EXISTING CONTOUR 2' INTERVAL
-280-	EXISTING CONTOUR 10' INTERVAL
-	EXISTING SAN SEWER LINE
-	EXISTING STORM DRAIN LINE
-	EXISTING WATER LINE
-	EXISTING ELECTRIC LINE
-	EXISTING CABLE LINE
-	EXISTING GAS LINE
-	EXISTING FENCE
-282	PROPOSED CONTOUR 2' INTERVAL
-280	PROPOSED CONTOUR 10' INTERVAL
+ 291.80	SPOT ELEVATION
-	PROPOSED CONCRETE WALK
-	PROPOSED MACADAM PAVING
-	EXISTING TREES
-	EXISTING TREELINE
-	PROPOSED TREELINE
-	PROPOSED WATER
-	PROPOSED STORMDRAIN
-	PROPOSED CHAINLINK FENCE
-	PROPOSED FCE SIGNAGE

AS-BUILT CERTIFICATION FOR PSWM
 Note: There is no "AS BUILT" information provided on this sheet.
 Charles J. Grovo, Sr. #13204
 Date: 5/10/14

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE FOREST CONSERVATION AREA.

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

"Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 13204, Expiration Date: November 3, 2014."
 Charles J. Grovo, Sr., P.E.
 Date: 5/10/14

DATE	DESCRIPTION
	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Director - Department of Planning and Zoning
 Chief, Division of Land Development
 Chief, Development Engineering Division

PREPARED FOR
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Clarksville Pike
 Ellicott City, Maryland 21042
 Attention: Bruce Gist
 410-313-6798



ADDRESS CHART	
LOT/PARCEL#	STREET ADDRESS
P. 168	6925 OLD WATERLOO ROAD ELK RIDGE, MARYLAND 21075

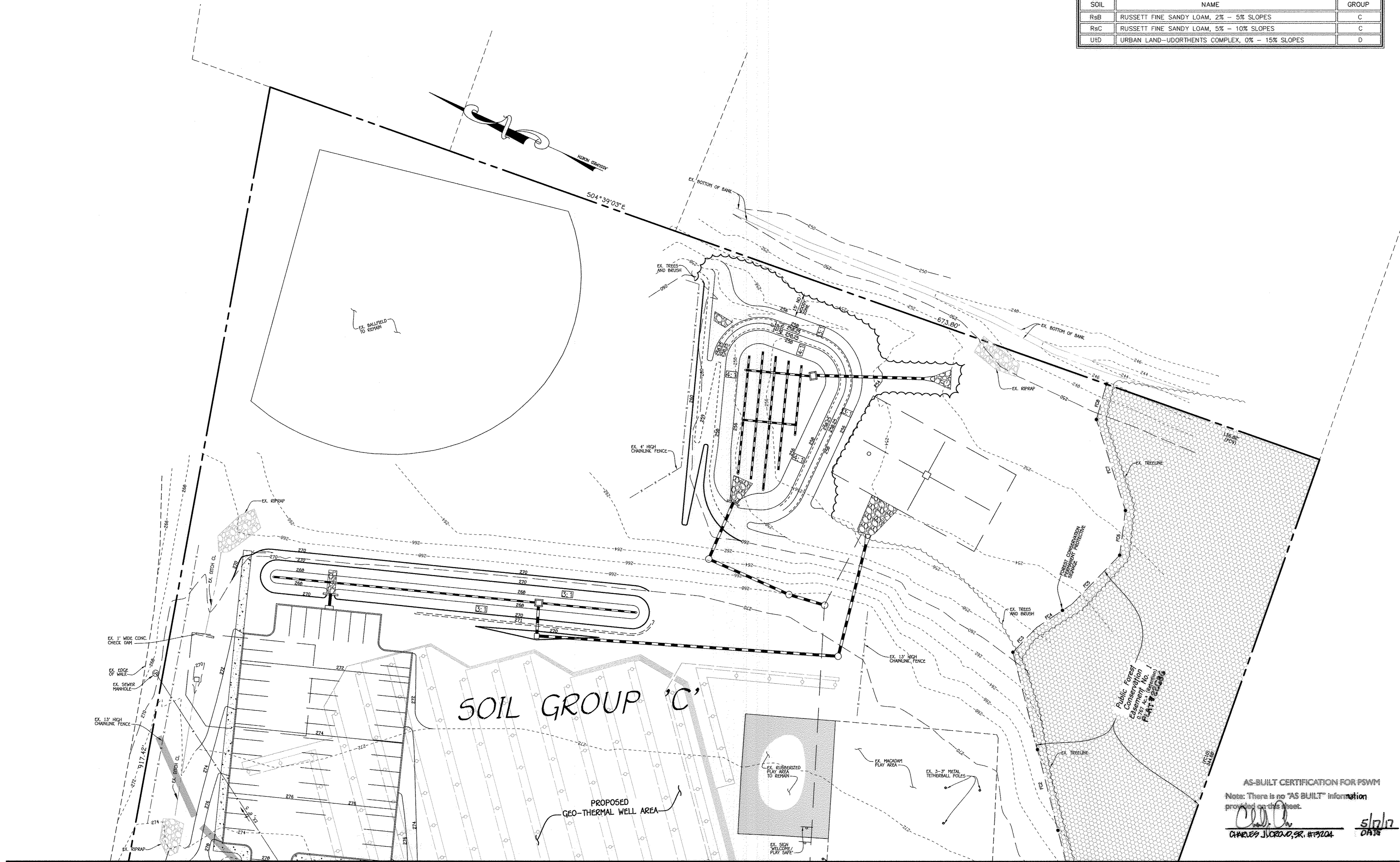
PERMIT INFORMATION CHART			
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.	
DEEP RUN ELEM. SCHOOL	N/A	P. 168	
PLAT# OR L/F	GRID#	ZONING	TAX MAP#
L.252 F.546	21	RSA-B	37
		ELECT. DIST.	CENSUS TRACT
		FIRST	6011

FOREST CONSERVATION PLAN	
"REVISED SITE DEVELOPMENT PLAN" DEEP RUN ELEMENTARY SCHOOL	
ZONED RSA-B TAX MAP No.: 37	GRID No.: 21 PARCEL No.: 168
FIRST ELECTION DISTRICT	HOWARD COUNTY, MARYLAND
SCALE: 1" = 30'	DATE: FEBRUARY 10, 2014
SHEET 23 OF 30	

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET 5DP-89-98

I:\2003\03009\dwg\ADDITIONS 2013\03009 SDP FOREST PLAN 23-24.dwg, FCE PLAN-1, 2/12/2014 8:45:10 AM, 1:1

SOILS LEGEND		
SOIL	NAME	GROUP
RsB	RUSSETT FINE SANDY LOAM, 2% - 5% SLOPES	C
RsC	RUSSETT FINE SANDY LOAM, 5% - 10% SLOPES	C
UD	URBAN LAND-UDORTHERENTS COMPLEX, 0% - 15% SLOPES	D



LEGEND	
SYMBOL	DESCRIPTION
---282---	EXISTING CONTOUR 2' INTERVAL
---280---	EXISTING CONTOUR 10' INTERVAL
---	EXISTING SAN SEWER LINE
---	EXISTING STORM DRAIN LINE
---	EXISTING WATER LINE
---	EXISTING ELECTRIC LINE
---	EXISTING CABLE LINE
---	EXISTING GAS LINE
---	EXISTING FENCE
---282---	PROPOSED CONTOUR 2' INTERVAL
---280---	PROPOSED CONTOUR 10' INTERVAL
+ 291.80	SPOT ELEVATION
---	PROPOSED CONCRETE WALK
---	PROPOSED MACADAM PAVING
---	EXISTING TREES
---	EXISTING TREELINE
---	PROPOSED TREELINE
---	PROPOSED WATER
---	PROPOSED STORMDRAIN
---	PROPOSED CHAINLINK FENCE
---	PROPOSED FCE SIGNAGE

SOIL GROUP 'C'

MATCHLINE SEE SHEET 23

PLAN
SCALE: 1" = 30'

AS-BUILT CERTIFICATION FOR PSWM
Note: There is no "AS BUILT" information provided on this sheet.
[Signature] 5/17/17
CHARLES J. CROVO, SR., #135204 DATE

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE BUILDING ADDITIONS, UTILITIES AND OTHER IMPROVEMENTS.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 441 - 2999

"Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 135204, Expiration Date: November 3, 2014."
[Signature]
CHARLES J. CROVO, SR., P.E. DATE

DATE	DESCRIPTION	REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature] 3/16/14
 Director - Department of Planning and Zoning Date
[Signature] 3/16/14
 Chief, Division of Land Development Date
[Signature] 2-27-14
 Chief, Development Engineering Division Date

PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Clarksville Pike
Ellicott City, Maryland 21042
Attention: Bruce Gist
410-313-6798



ADDRESS CHART	
LOT/PARCEL#	STREET ADDRESS
P. 168	6925 OLD WATERLOO ROAD ELKRIDGE, MARYLAND 21075

PERMIT INFORMATION CHART		
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
DEEP RUN ELEM. SCHOOL	N/A	P. 168
PLAT# OR L/F	GRID#	ZONING
L252 F.546	21	RSA-8
TAX MAP#	ELECT. DISTR.	CENSUS TRACT
37	FIRST	6011

FOREST CONSERVATION PLAN
"REVISED SITE DEVELOPMENT PLAN"
DEEP RUN ELEMENTARY SCHOOL
ZONED RSA-8 TAX MAP No.: 37 GRID No.: 21 PARCEL No.: 168
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' DATE: FEBRUARY 10, 2014
SHEET 24 OF 30

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET SDP-89-98

I:\2003\03009\dwg\ADDITIONS 2013\03009 SDP FOREST PLAN 23-24.dwg, FCE PLAN-2, 2/17/2014 8:46:33 AM, 1:1

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 may be found. The majority of roots responsible for water and nutrients uptake are located just below the soil surface. Temporary fencing shall be placed around the critical root zone of the forest in areas where the forest limits occur within 25 feet of the limit of disturbance.

2. Fencing and Signage

Existing forest limits occurring within 25 feet of the limits of disturbance shall be protected using temporary protective fencing. Permanent signage shall be placed around the afforestation area prior to plant installation, as shown on the plan.

B. Pre-Construction Meeting

Upon staking of limits of disturbance a pre-construction meeting will be held between the developer, contractor and appropriate County inspector. The purpose of the meeting will be to verify that all sediment control is in order, and to notify the contractor of possible penalties for non-compliance with the FCP.

C. Storage Facilities/Equipment Cleaning

All equipment storage, parking, sanitary facilities, material stockpiling, etc. associated with the construction of the project will be restricted to those areas outside of the proposed Forest Conservation Easement. Cleaning of equipment will be limited to area within LOD of the proposed homesites. Wastewater resulting from equipment cleaning will be controlled to prevent runoff into environmentally sensitive areas.

D. Sequence of Construction

The following timetable represents the proposed timetable for development of the subject property. The items outlined in the Forest Conservation Plan will be enacted within two (2) years of subdivision approval.

Below find a proposed sequence of construction.

1. Install all signage and sediment control devices.
2. Hold pre-construction meeting between developer, contractor and County inspector.
3. Build access roads, install water and sewer, and construct houses. Stabilize all disturbed areas accordingly.
4. Remove sediment control.
5. Hold post-construction meeting with County inspectors to assure compliance with FCP. Submit Certification of Retention.

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.

F. Post-Construction Meeting

Upon completion of construction, Eco-Science Professionals, or another qualified professional designated by the developer, will notify the County that construction has been completed and arrange for a post-construction meeting to review the project site. The meeting will allow the County inspector to verify that forest retention requirements have been met.

POST-CONSTRUCTION MANAGEMENT PLAN

Howard County requires a two year post-construction management plan be prepared as part of the Forest Conservation Plan. The plan goes into effect upon acceptance of the construction certification of completion by the County. Eco-Science Professionals, or another qualified professional designated by 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. Fencing and Signage

Permanent signage indicating the limits of the retention/planting area shall be maintained.

B. General Site Inspections

Site inspections will be performed to insure that retention of the forest is met in accordance with this plan and that the forest edge remains healthy and stable.

C. Education

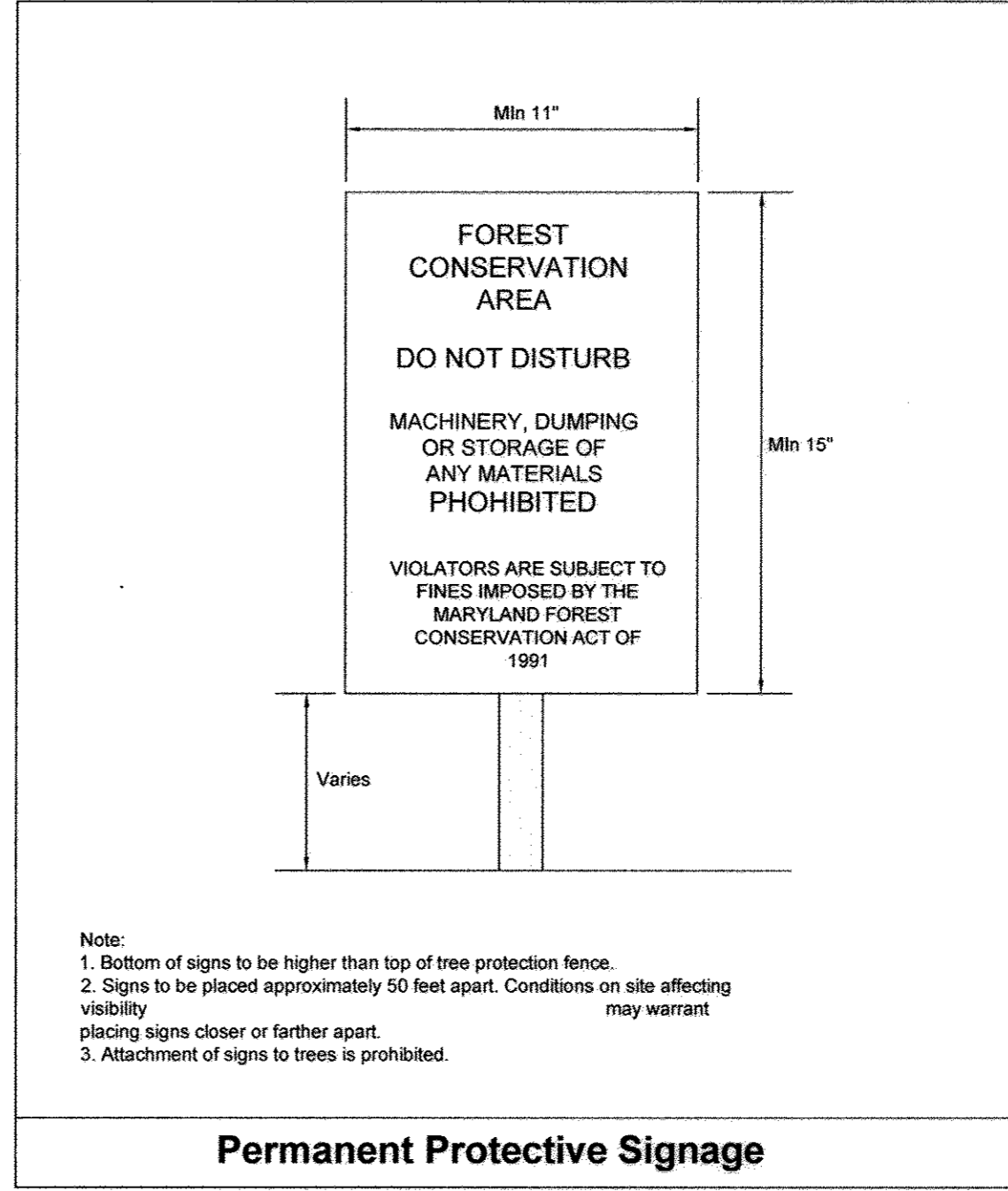
The developer will provide appropriate materials to property owners informing them of the location and purpose of the forest conservation easement. Materials may include site plans and information explaining the intent of the forest conservation law.

D. Final Inspection

At the end of the two year post-construction management period, Eco-Science Professionals, or another qualified professional will submit to the administrator of the Howard County Forest Conservation Program certification that all retention/afforestation requirements have been met. Upon acceptance of this certification, the County will release the developer from all future obligations and release the developer's bond.

FOREST CONSERVATION EASEMENTS

Easements are a legal means of providing permanent protection of forest, farmland and open space. In accordance with the criteria outlined in the Howard County Forest Conservation Manual, a forest conservation easement will be recorded for the retention areas of the subject property. Submission of the easements for recordation will occur prior to commencement of construction activities.



- FCP NOTES**
1. Any Forest Conservation Easement (FCE) area shown hereon is subject to protective covenants which may be found in the Land Records of Howard County which restrict the disturbance and use of these areas.
 2. Limits of disturbance shall be restricted to areas outside the limit of temporary fencing.
 3. There shall be no clearing, grading, construction or disturbance of vegetation beyond the depicted limits of disturbance, except as permitted by Howard County DPZ.
 4. No Stockpiles, parking areas, equipment clearing areas etc. shall occur within areas designated as non-disturbance areas.
 5. The Forest Conservation Act requirements for this project require 0.8 acres of forest retention. This obligation will be met through 0.8 acres of retention on-site.

FOREST CONSERVATION WORKSHEET
Version 1.0

Project: Deep Run Elementary School
Date: October 14, 2013

NET TRACT AREA	Acres
A. Total Tract Area	11.5
B. Area within 100 Year Floodplain	0
C. Area of proposed Limit of Disturbance	4.7
D. Net Tract Area	4.7*

LAND USE CATEGORY: (from table 3.2.1, page 40, Manual ARA MDR IDA HDR MPD CIA)

Category	Percentage	Acres
E. Afforestation Threshold	15%	0.7
F. Conservation Threshold	20%	0.9

EXISTING FOREST COVER:

Category	Acres
G. Existing forest cover (excluding floodplain)	0.8
H. Area of forest above afforestation threshold	0.1
I. Area of forest above conservation threshold	0

BREAK EVEN POINT N/A

Category	Acres
J. Forest retention above threshold with no mitigation	
K. Clearing permitted without mitigation	

PROPOSED FOREST CLEARING

Category	Acres
L. Total area of forest to be Cleared or Retained Outside FCE	0
M. Total area of forest to be Retained in FCE	0.8

PLANTING REQUIREMENTS

Category	Acres
N. Reforestation for clearing above Conservation Threshold	0
P. Reforestation for clearing below Conservation Threshold	0
Q. Credit for retention above Conservation Threshold	0
R. Total reforestation required	0
S. Total afforestation required	0
T. Total reforestation and afforestation required	0

* waiver required to base NTA on LOD

NOTES

1. SECTION 16.1200 OF THE HOWARD COUNTY CODE AND THE FOREST CONSERVATION ACT REQUIREMENTS FOR THE SITE EXPANSION UNDER SDP-89-098 RL#1 HAVE BEEN MET THROUGH THE CREATION OF AN 0.8 ACRE ON-SITE FOREST CONSERVATION RETENTION EASEMENT WHICH IS WITHIN THE PROPOSED LIMIT OF DISTURBANCE (LOD). THIS 0.8 ACRE RETENTION EASEMENT HAS BEEN ESTABLISHED TO FULFILL THE 0.7 ACRE AFFORESTATION OBLIGATION CALCULATED USING THE 4.7 ACRE LOD AS THE "NET TRACT AREA" (WP-14-044). THE AREA OF THE FCE BEING CREATED WILL RESULT IN A 0.1 ACRE INCREASE IN PROTECTED FOREST RESOURCES WHICH CAN BE USED IN SATISFYING FC OBLIGATIONS FOR THE REMAINDER OF THIS 11.5 ACRES SITE WHICH MAY BE IMPOSED AT THE TIME OF ANY FUTURE AND FURTHER DEVELOPMENT OF THIS SITE.
2. THE FOREST STAND DELINEATION FOR THIS PROJECT WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. DATED OCTOBER 2, 2013 AND WAS APPROVED UNDER THE SIMPLIFIED ENVIRONMENTAL CONCEPT PLAN FOR THE SITE EXPANSION UNDER SDP-89-098 PL#1 WHICH IS TO ADD TWO (2) BUILDING ADDITIONS, A DROP-OFF LANE, ADDITIONAL PARKING AND TWO (2) SWM BMP'S ALONG WITH THEIR UTILITIES.
3. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.

AS-BUILT CERTIFICATION FOR PSWM

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

Charles J. Crovo, Sr. 5/17/12
CHARLES J. CROVO, SR., #19224 Date

"Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 13204, Expiration Date: November 3, 2014."

Charles J. Crovo, Sr. 2/1/14
CHARLES J. CROVO, SR., P.E. DATE

DATE	DESCRIPTION	REVISION BLOCK
5/17/12	AS-BUILT CERTIFICATION FOR PSWM	
3/1/14	Professional Certification	

APPROVED: DEPARTMENT OF PLANNING AND ZONING

David M. Lovell 5/17/12
Director - Department of Planning and Zoning Date

Veronica 3/1/14
Chief, Division of Land Development Date

Charles J. Crovo, Sr. 2/1/14
Chief, Development Engineering Division Date

PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Clarksville Pike
Ellicott City, Maryland 21042
Attention: Bruce Giesj
410-313-6798

ADDRESS CHART

LOT/PARCEL#	STREET ADDRESS
P. 168	6925 OLD WATERLOO ROAD ELKRIDGE, MARYLAND 21075

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
DEEP RUN ELEM. SCHOOL	N/A	P. 168

PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
L252 F.546	21	RSA-B	37	FIRST	6011

FOREST CONSERVATION NOTES AND DETAILS

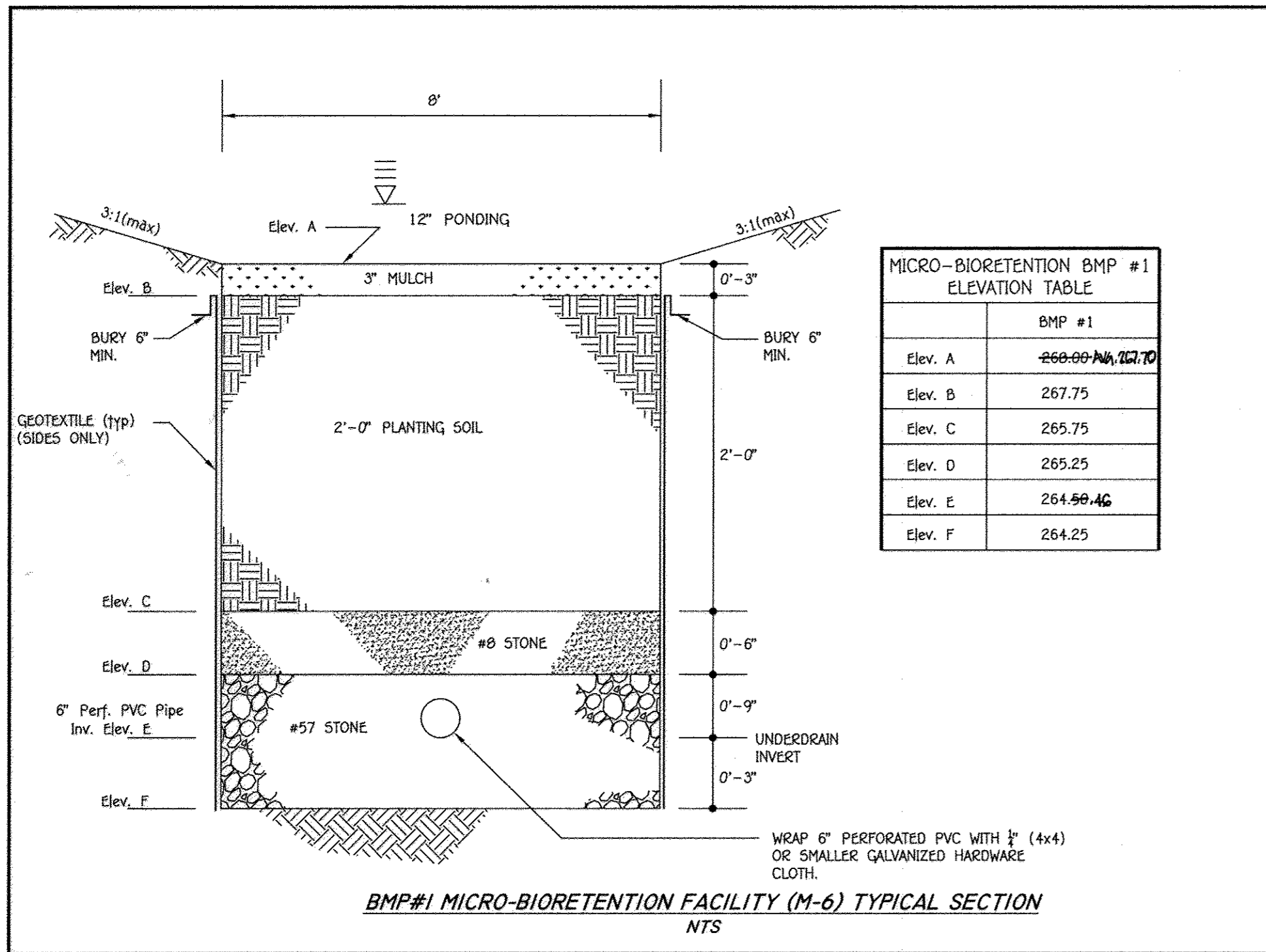
"REVISED SITE DEVELOPMENT PLAN" DEEP RUN ELEMENTARY SCHOOL

ZONED RSA-B TAX MAP No.: 37 GRID No.: 21 PARCEL No.: 168
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: FEBRUARY 10, 2014

SHEET 25 OF 30

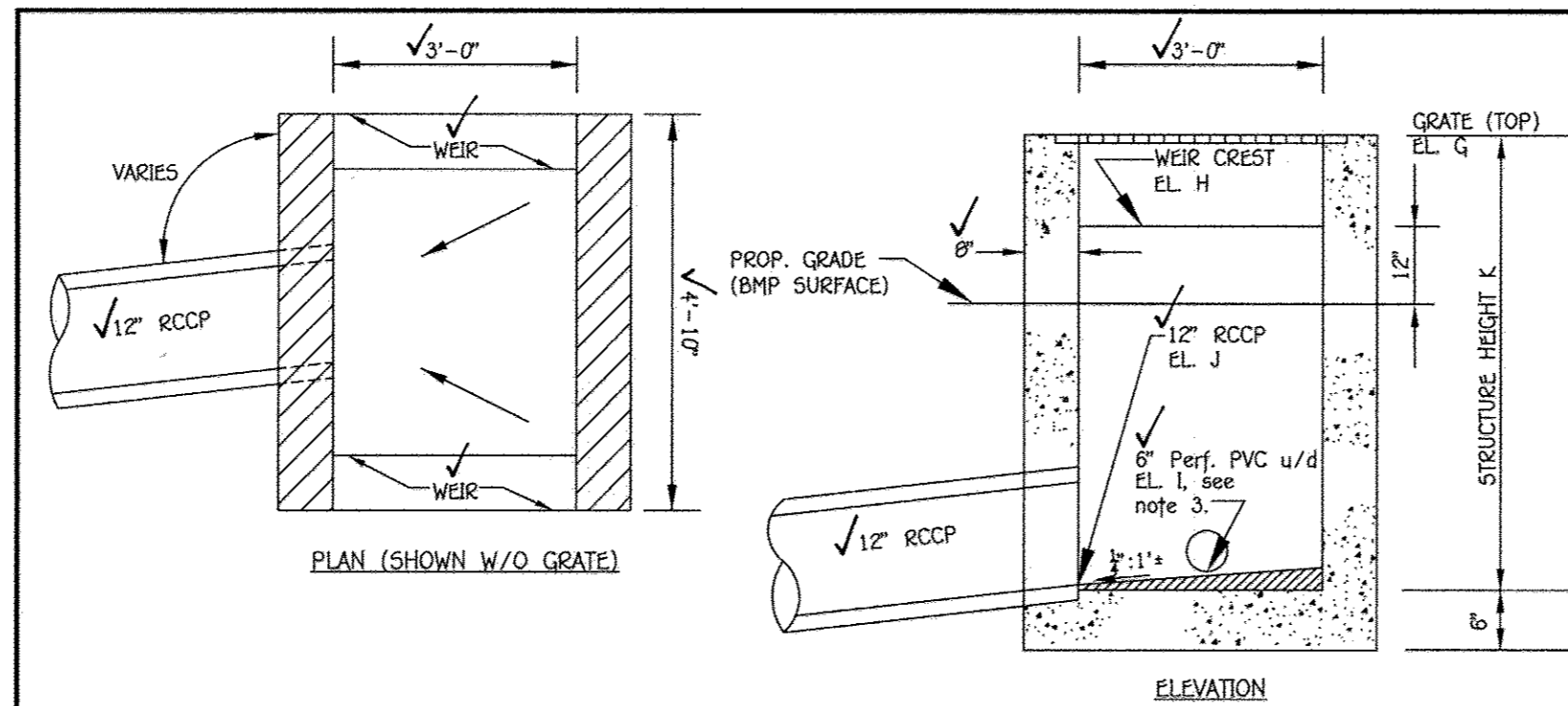
THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET SDP-89-98

I:\2003\030909\ADDITIONS 2013\030909 SDP FOREST DETAILS 25.dwg, DETAILS, 2/12/2014 8:47:52 AM, 1:1



MICRO-BIORETENTION BMP #1 ELEVATION TABLE

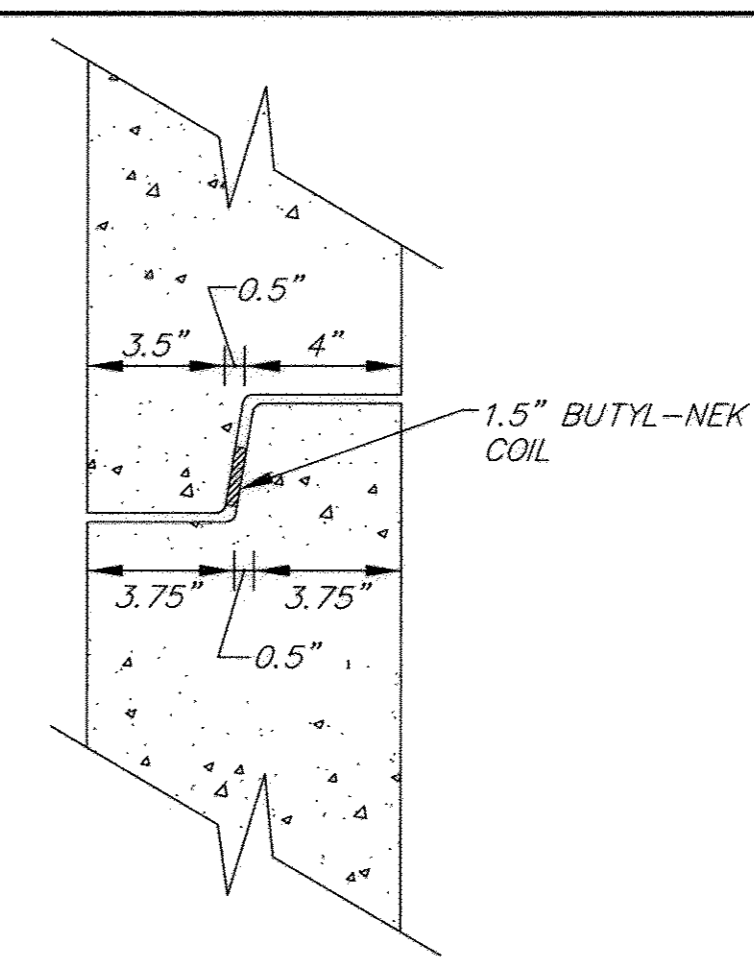
	BMP #1
Elev. A	268.00
Elev. B	267.75
Elev. C	267.75
Elev. D	265.25
Elev. E	264.46
Elev. F	264.25



R-1 ELEVATION TABLE (BMP #1)

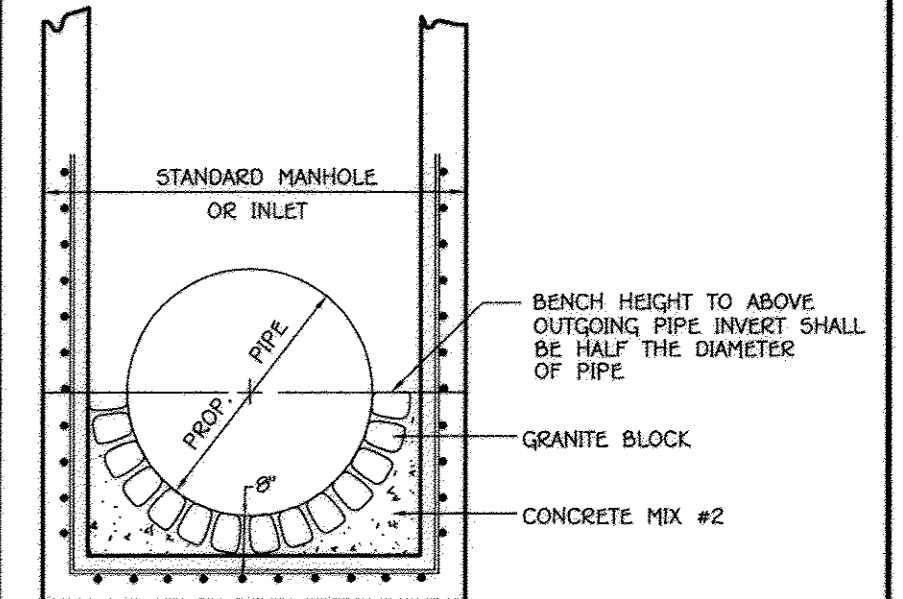
ELEV. G	269.99
ELEV. H	269.00
ELEV. I	264.99
ELEV. J	264.46
ELEV. K	264.25

- NOTES:
- SEE MSHA STD DETAIL MD-378.11 FOR DETAILS NOT SHOWN ABOVE.
 - SEE MSHA STD DETAIL MD-378.05 FOR GRATE DETAIL.
 - USE DOUBLE OPENING WITH NO CONCRETE GUTTER APPROACHES.
 - PVC UNDERDRAIN MAY ENTER INLET AT AN ANGLE TO MAINTAIN IN CENTER OF BMP. SEE PLAN FOR UNDERDRAIN ENTRANCE WALL LOCATION.
 - SLOPE RISER INVERT 1:1 TOWARD RCCP OUTFALL.
 - THIS STRUCTURE SHALL BE CONSTRUCTED WITH TWO (2) 3' WIDE WEIR OPENINGS LOCATED ON OPPOSITE SIDES.



RISER JOINT DETAIL
NTS

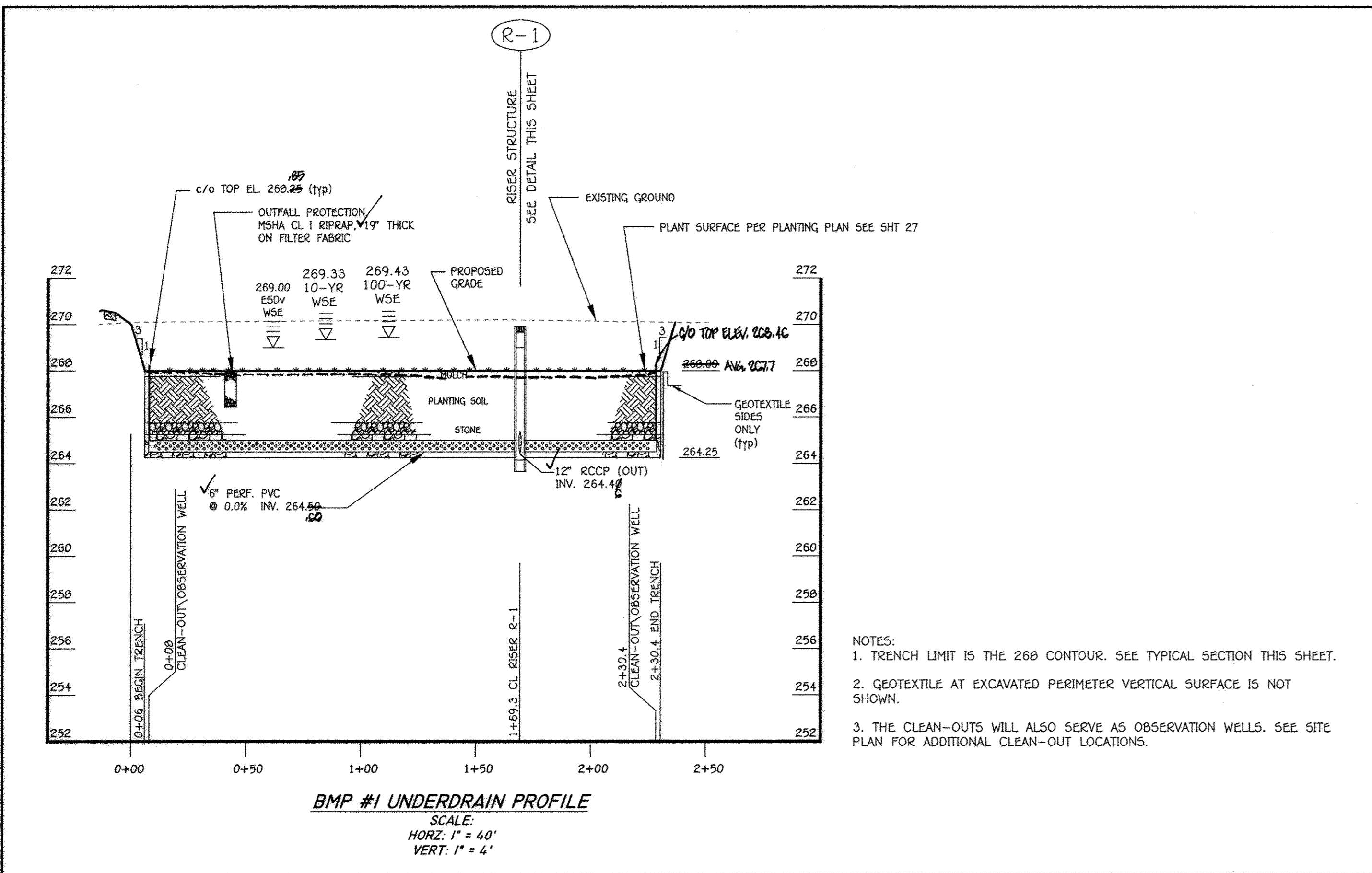
- NOTES:
- Riser joints shall join evenly and be watertight. Parge joints after installation.
 - The referenced joint and joint sealant material is used by Frederick Precast, Inc. Similar joints may be used with shop drawing approval by the engineer.



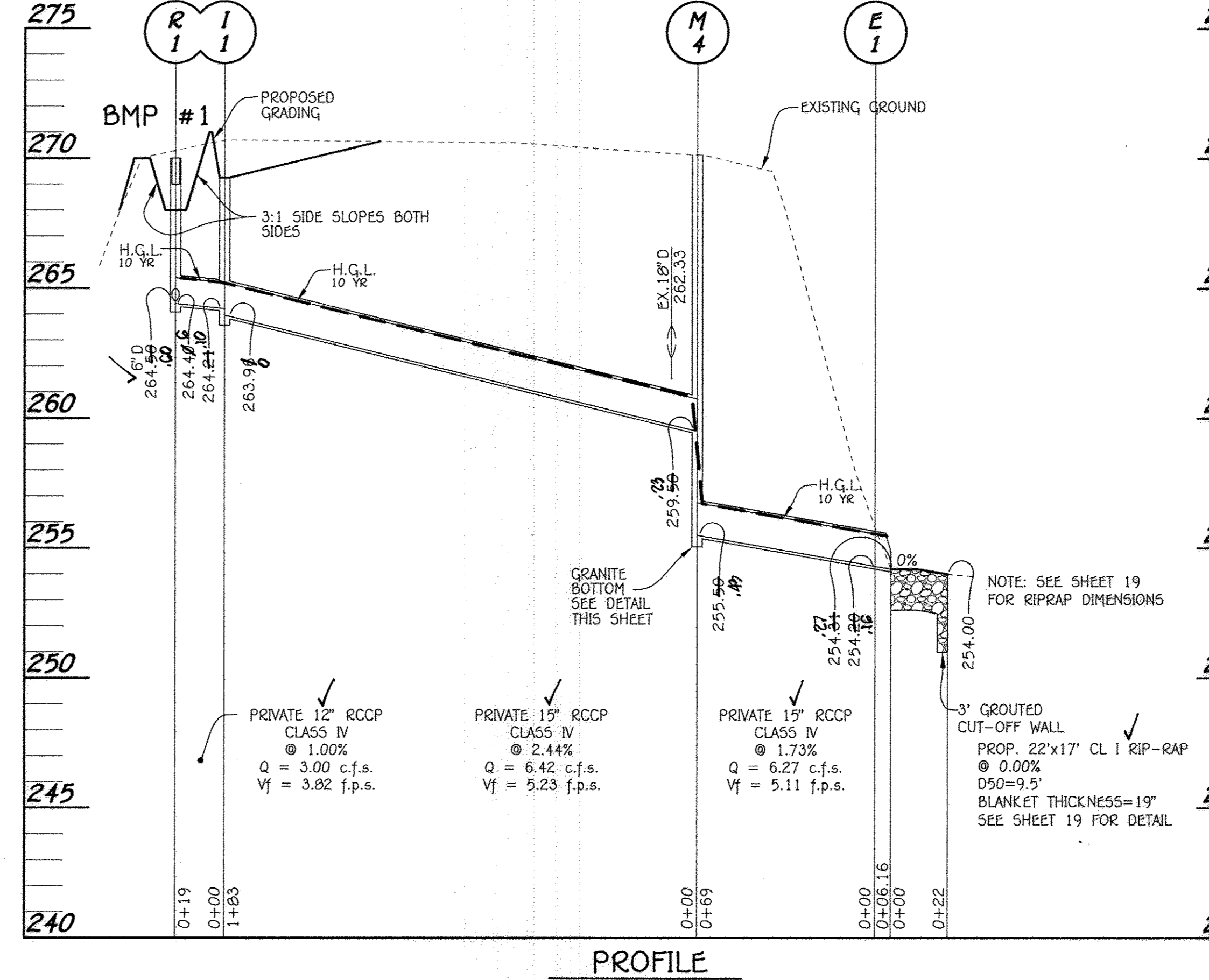
GRANITE BLOCK DETAIL
NO SCALE

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 that the contributing drainage area is sufficiently stabilized to prevent clogging of the underground SWM Facility.

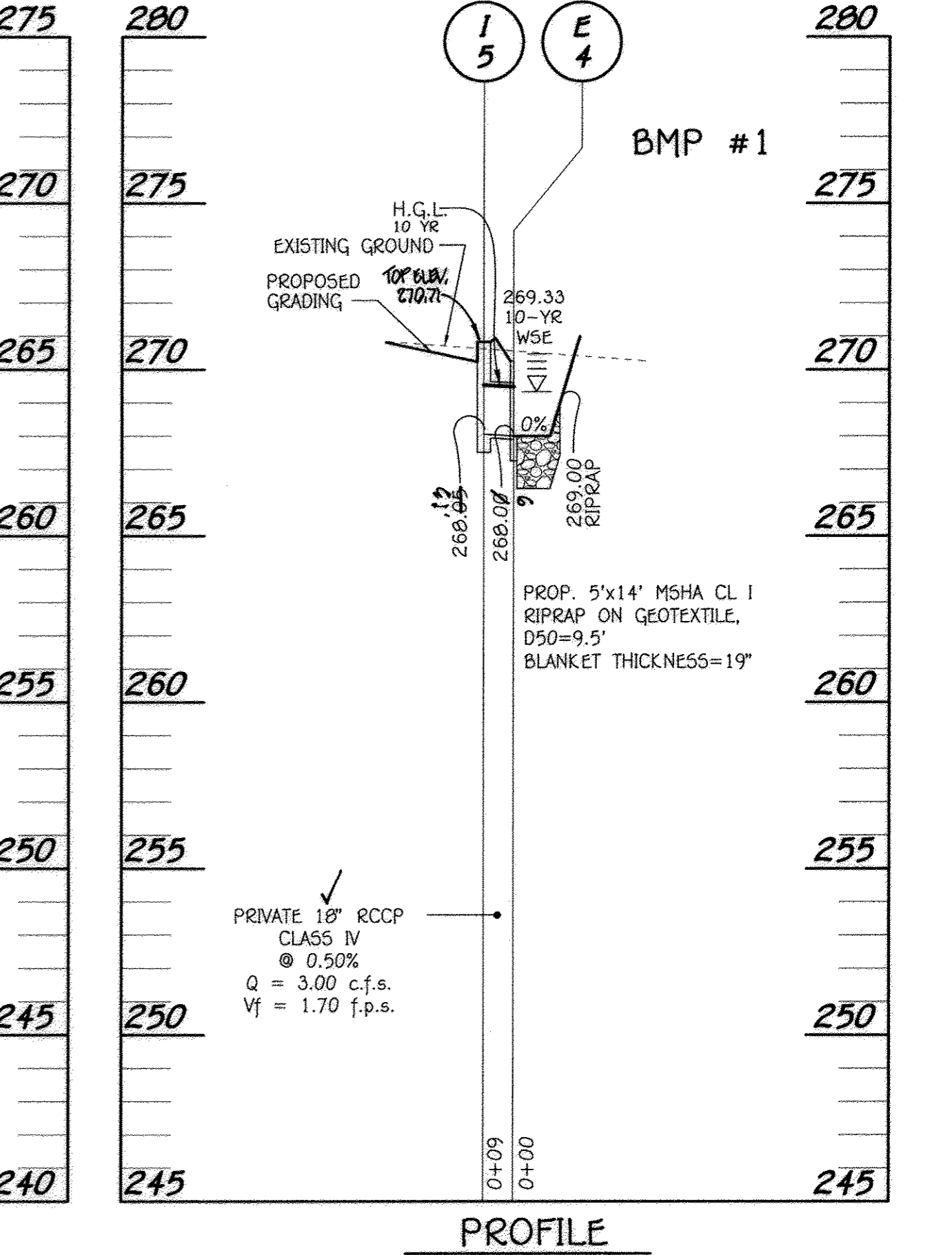
CHARLES J. DEVO, SR. #19204 Date: 5/17/17



- NOTES:
- TRENCH LIMIT IS THE 268 CONTOUR. SEE TYPICAL SECTION THIS SHEET.
 - GEOTEXTILE AT EXCAVATED PERIMETER VERTICAL SURFACE IS NOT SHOWN.
 - THE CLEAN-OUTS WILL ALSO SERVE AS OBSERVATION WELLS. SEE SITE PLAN FOR ADDITIONAL CLEAN-OUT LOCATIONS.



PROFILE
SCALE: HORIZ. : 1" = 40'
VERT. : 1" = 4'



PROFILE
SCALE: HORIZ. : 1" = 40'
VERT. : 1" = 4'

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE BMP DETAILS AND PROFILES.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10722 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
410.461.2000

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 13204, Expiration Date: November 3, 2014.

CHARLES J. DEVO, SR., P.E. Date: 5/17/17

APPROVED: DEPARTMENT OF PLANNING AND ZONING

David A. Lovell
Director - Department of Planning and Zoning

Chief, Division of Land Development

Chief, Development Engineering Division

Date: 5/17/17

PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Clarksville Pike
Ellicott City, Maryland 21042
Attention Bruce Gist
410-313-6798

ADDRESS CHART

LOT/PARCEL#	STREET ADDRESS
P. 168	6925 OLD WATERLOO ROAD ELKRIDGE, MARYLAND 21075

PERMIT INFORMATION CHART

SUBMISSION NAME	SECTION/AREA	LOT/PARCEL NO.
DEEP RUN ELEM. SCHOOL	N/A	P. 168

PLAT# OR L/F	GRID#	ZONING	TAX MAP#	ELECT. DISTR.	CENSUS TRACT
L.252 F.546	21	RSA-8	37	FIRST	6011

STORMWATER MANAGEMENT BMP#1 PROFILES & DETAILS

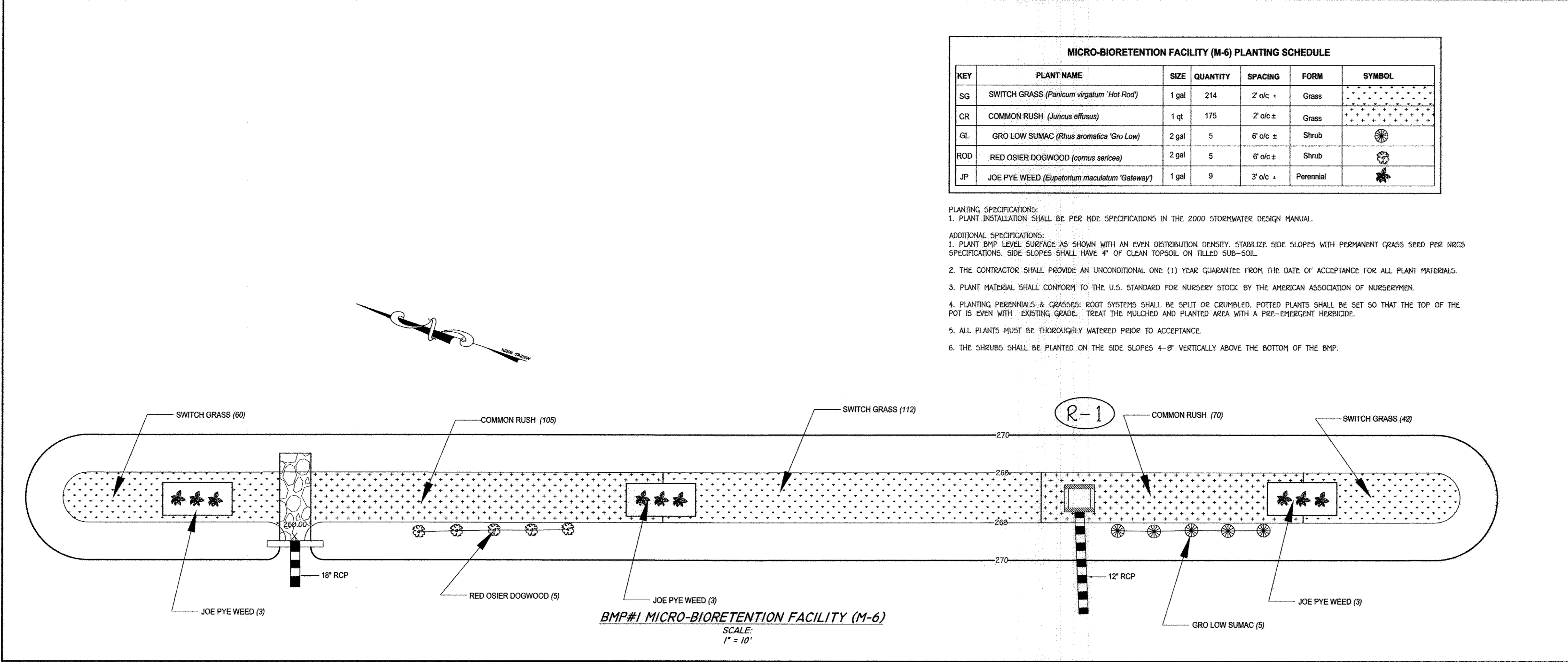
"REVISED SITE DEVELOPMENT PLAN"
DEEP RUN ELEMENTARY SCHOOL
SITE IMPROVEMENT PLAN

ZONED RSA-8 TAX MAP No.: 37 GRID No.: 21 PARCEL No.: 168
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: FEBRUARY 10, 2014

SHEET 26 OF 30

MICRO-BIORETENTION FACILITY (M-6) PLANTING SCHEDULE						
KEY	PLANT NAME	SIZE	QUANTITY	SPACING	FORM	SYMBOL
SG	SWITCH GRASS (<i>Panicum virgatum</i> 'Hot Rod')	1 gal	214	2' o/c ±	Grass	
CR	COMMON RUSH (<i>Juncus effusus</i>)	1 qt	175	2' o/c ±	Grass	
GL	GRO LOW SUMAC (<i>Rhus aromatica</i> 'Gro Low')	2 gal	5	6' o/c ±	Shrub	
ROD	RED OSIER DOGWOOD (<i>Cornus sericea</i>)	2 gal	5	6' o/c ±	Shrub	
JP	JOE PYE WEED (<i>Eupatorium maculatum</i> 'Gateway')	1 gal	9	3' o/c ±	Perennial	

- PLANTING SPECIFICATIONS:
 1. PLANT INSTALLATION SHALL BE PER MDE SPECIFICATIONS IN THE 2000 STORMWATER DESIGN MANUAL.
- ADDITIONAL SPECIFICATIONS:
 1. PLANT BMP LEVEL SURFACE AS SHOWN WITH AN EVEN DISTRIBUTION DENSITY. STABILIZE SIDE SLOPES WITH PERMANENT GRASS SEED PER NRCS SPECIFICATIONS. SIDE SLOPES SHALL HAVE 4" OF CLEAN TOPSOIL ON TILLED SUB-SOIL.
 2. THE CONTRACTOR SHALL PROVIDE AN UNCONDITIONAL ONE (1) YEAR GUARANTEE FROM THE DATE OF ACCEPTANCE FOR ALL PLANT MATERIALS.
 3. PLANT MATERIAL SHALL CONFORM TO THE U.S. STANDARD FOR NURSERY STOCK BY THE AMERICAN ASSOCIATION OF NURSEYMEN.
 4. PLANTING PERENNIALS & GRASSES: ROOT SYSTEMS SHALL BE SPLIT OR CRUMBLED. POTTED PLANTS SHALL BE SET SO THAT THE TOP OF THE POT IS EVEN WITH EXISTING GRADE. TREAT THE MULCHED AND PLANTED AREA WITH A PRE-EMERGENT HERBICIDE.
 5. ALL PLANTS MUST BE THOROUGHLY WATERED PRIOR TO ACCEPTANCE.
 6. THE SHRUBS SHALL BE PLANTED ON THE SIDE SLOPES 4-8' VERTICALLY ABOVE THE BOTTOM OF THE BMP.



AS-BUILT CERTIFICATION FOR PSWM
 Note: There is no "AS-BUILT" information provided on this sheet.
 Charles J. Grovo, Sr. #19204 5/12/17
 Date

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE BMP PLANTINGS.

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

"Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 13204, Expiration Date: November 3, 2014."
 Charles J. Grovo, Sr., P.E. 2/14/17
 DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Director - Department of Planning and Zoning 2/14/17
 Chief, Division of Land Development 3/1/17
 Chief, Development Engineering Division 2-22-17
 DATE

PREPARED FOR
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Clarksville Pike
 Ellicott City, Maryland 21042
 Attention: Bruce Gist
 410-313-6798



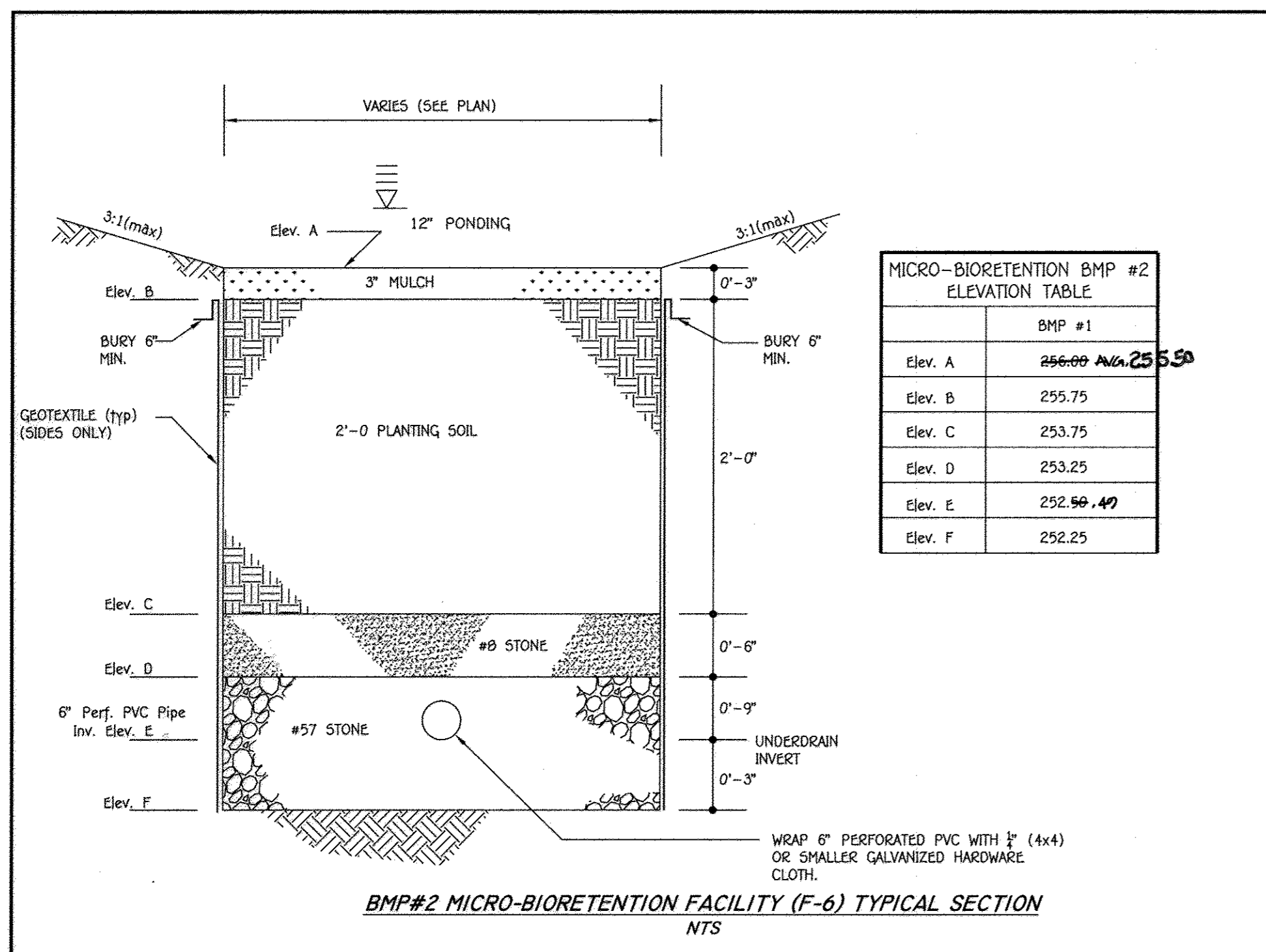
ADDRESS CHART	
LOT/PARCEL#	STREET ADDRESS
P. 16B	6925 OLD WATERLOO ROAD ELKRIDGE, MARYLAND 21075

PERMIT INFORMATION CHART			
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.	
DEEP RUN ELEM. SCHOOL	N/A	P. 16B	
PLAT# OR L/F	GRID#	ZONING	TAX MAP#
L252 F.546	21	RSA-8	37
		ELECT. DISTR.	CENSUS TRACT
		FIRST	6011

STORMWATER MANAGEMENT BMP#1 PLANTING PLAN
 "REVISED SITE DEVELOPMENT PLAN"
 DEEP RUN ELEMENTARY SCHOOL
 SITE IMPROVEMENT PLAN
 ZONED RSA-8 TAX MAP No.: 37 GRID No.: 21 PARCEL No.: 16B
 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: FEBRUARY 10, 2014
 SHEET 27 OF 30

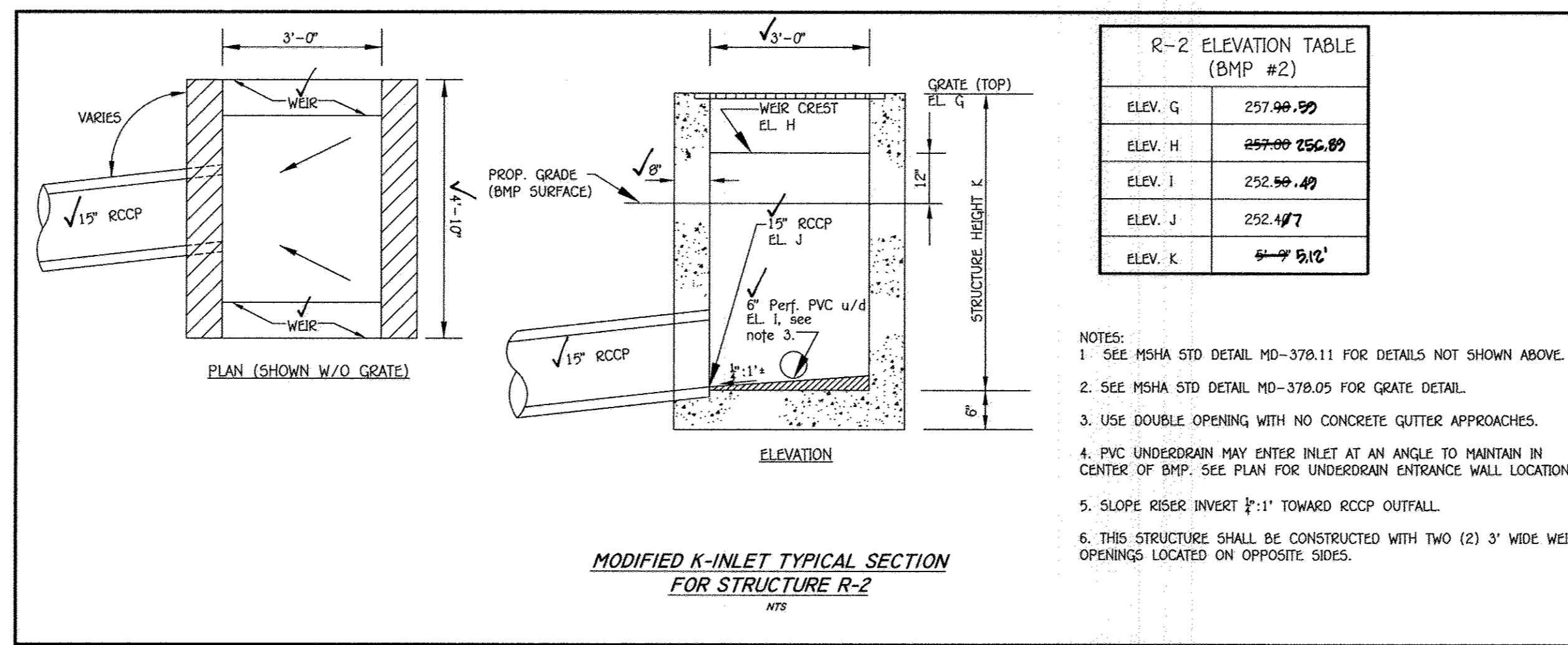
THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET 50P-89-98

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MICRO-BIORETENTION BMP #2 ELEVATION TABLE

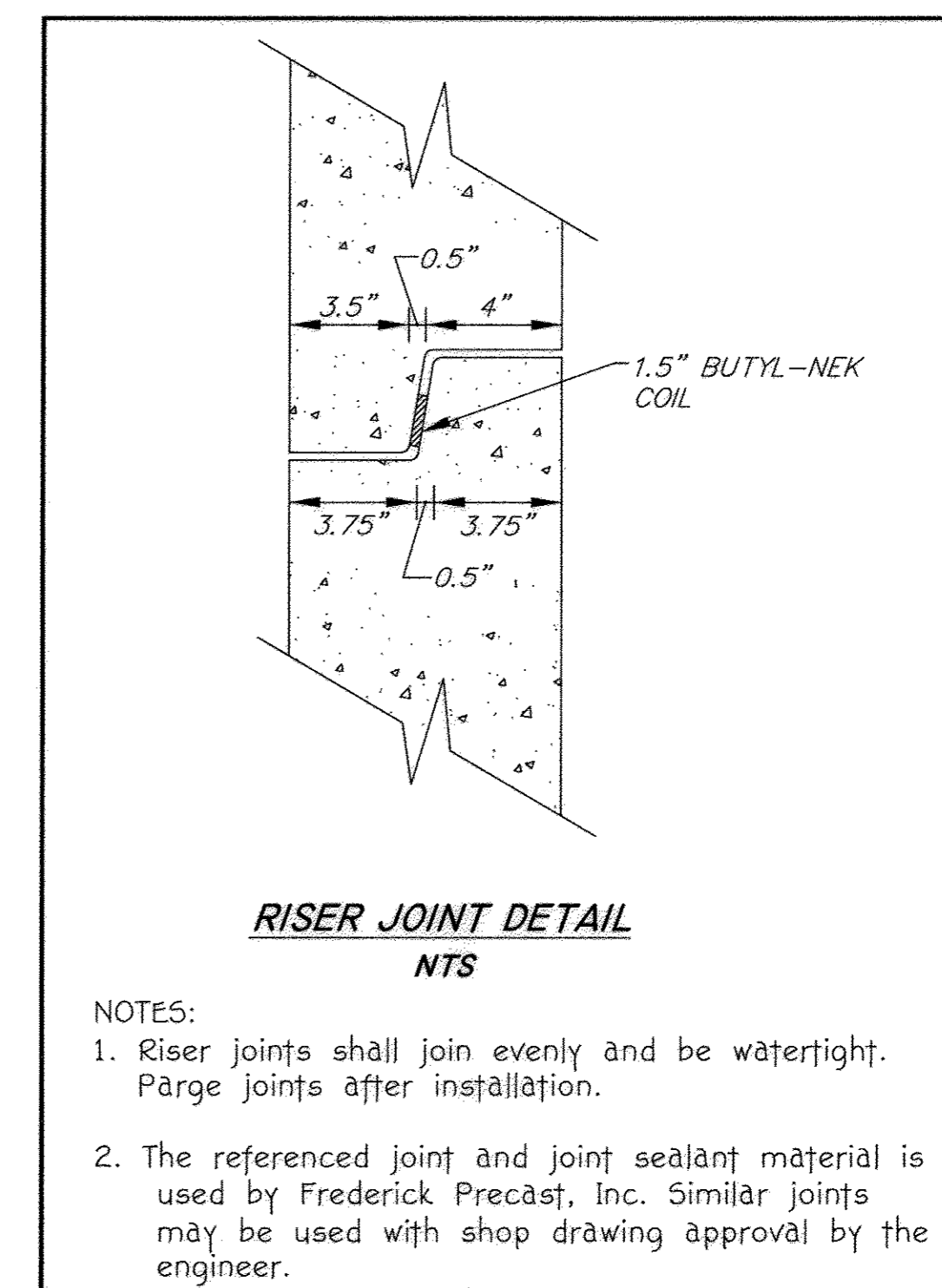
	BMP #1
Elev. A	256.00 255.50
Elev. B	255.75
Elev. C	253.75
Elev. D	253.25
Elev. E	252.50 252.47
Elev. F	252.25



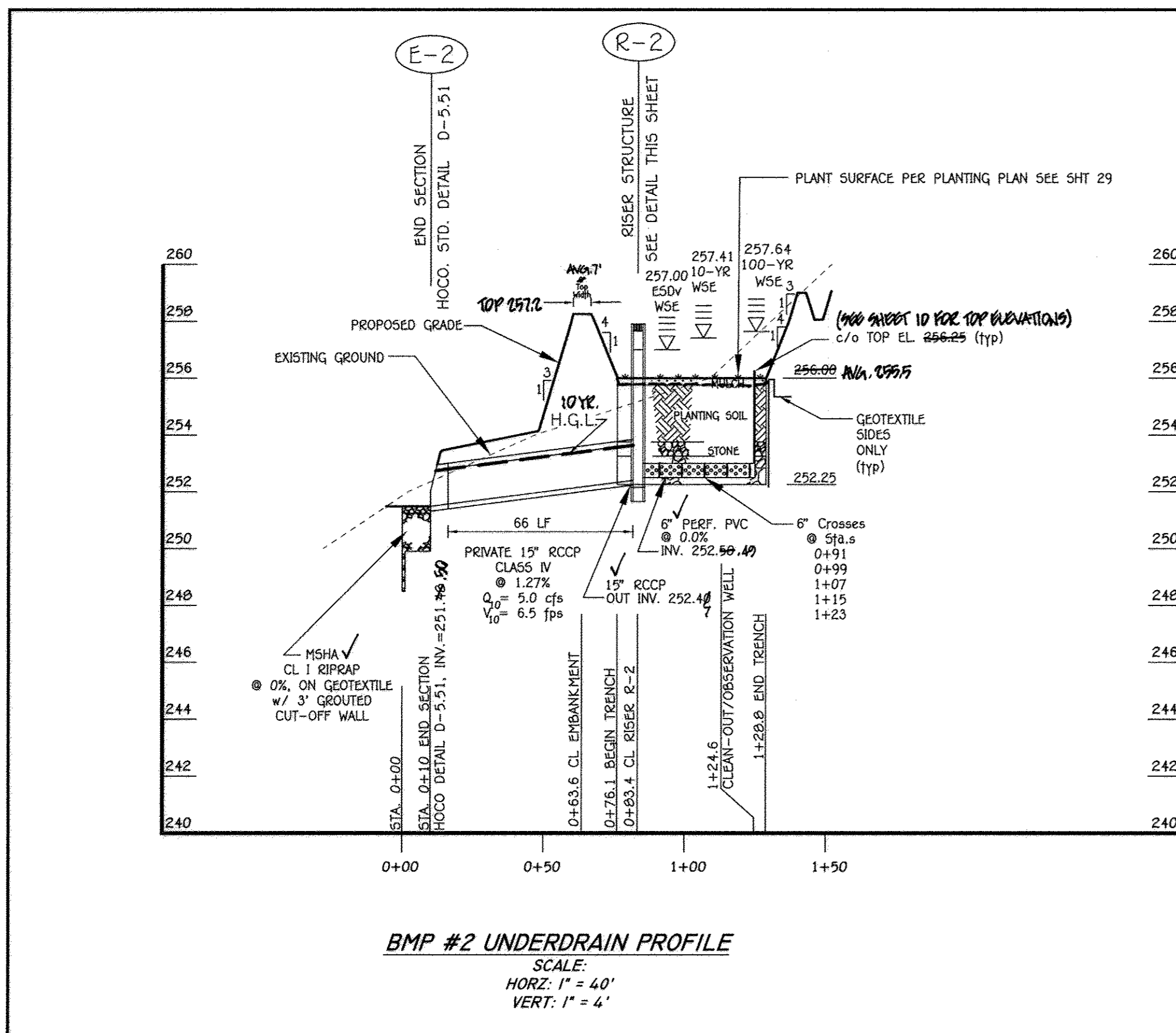
R-2 ELEVATION TABLE (BMP #2)

ELEV. G	257.90 257.89
ELEV. H	257.00 256.89
ELEV. I	252.50 252.49
ELEV. J	252.47
ELEV. K	252.50 252.47

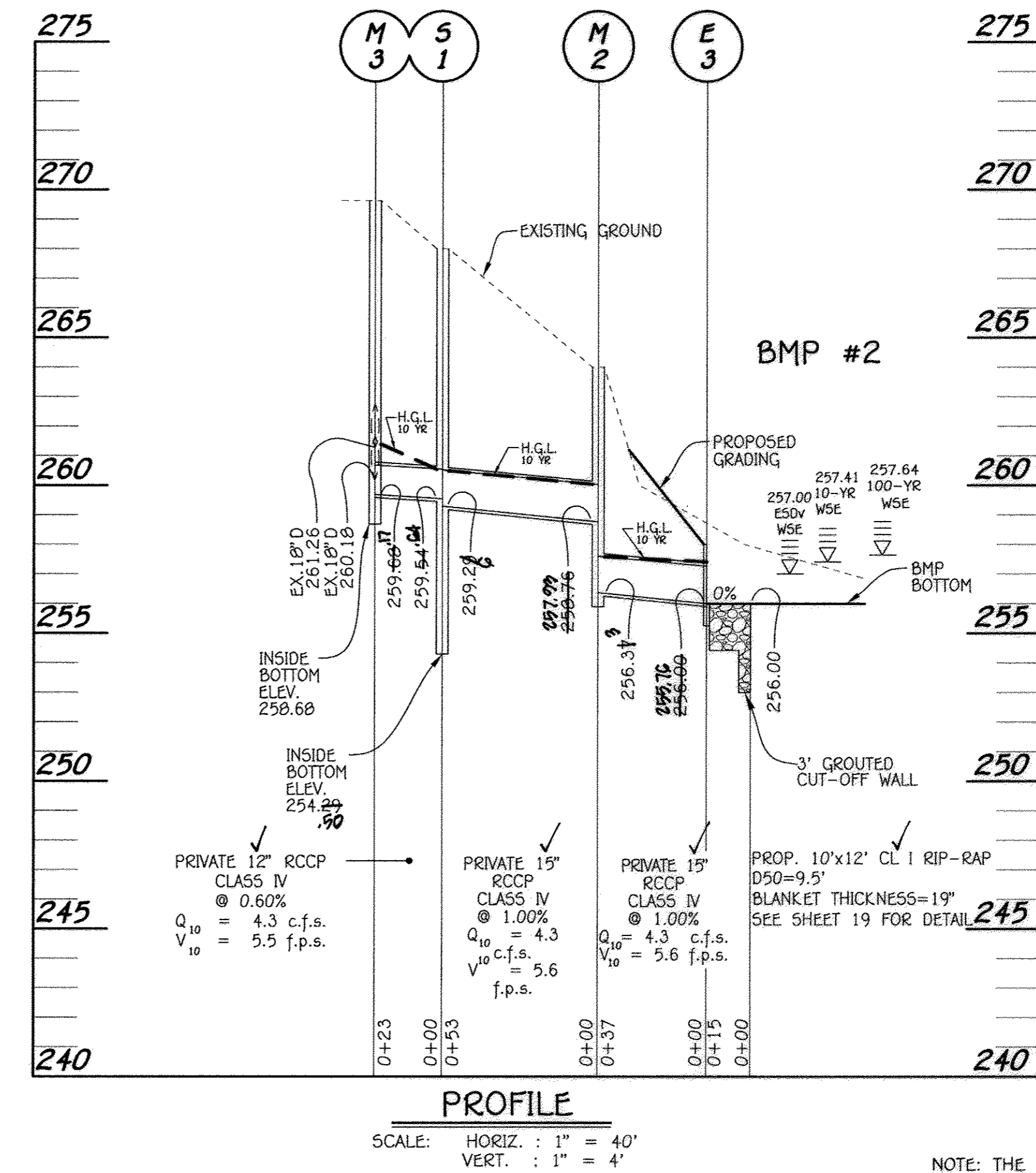
- NOTES:
- SEE MSHA STD DETAIL MD-378.11 FOR DETAILS NOT SHOWN ABOVE.
 - SEE MSHA STD DETAIL MD-378.05 FOR GRATE DETAIL.
 - USE DOUBLE OPENING WITH NO CONCRETE GUTTER APPROACHES.
 - PVC UNDERDRAIN MAY ENTER INLET AT AN ANGLE TO MAINTAIN IN CENTER OF BMP. SEE PLAN FOR UNDERDRAIN ENTRANCE WALL LOCATION.
 - SLOPE RISER INVERT 1:1 TOWARD RCCP OUTFALL.
 - THIS STRUCTURE SHALL BE CONSTRUCTED WITH TWO (2) 3' WIDE WEIR OPENINGS LOCATED ON OPPOSITE SIDES.



- NOTES:
- Riser joints shall join evenly and be watertight. Parge joints after installation.
 - The referenced joint and joint sealant material is used by Frederick Precast, Inc. Similar joints may be used with shop drawing approval by the engineer.



- NOTES:
- TRENCH LIMIT IS THE 256 CONTOUR. SEE TYPICAL SECTION THIS SHEET.
 - GEOTEXTILE AT EXCAVATED PERIMETER VERTICAL SURFACE IS NOT SHOWN.
 - THE CLEAN-OUTS WILL ALSO SERVE AS OBSERVATION WELLS. SEE PLAN FOR ADDITIONAL CLEAN-OUT LOCATIONS.
 - CONSTRUCT EMBANKMENT PER MD-378 STANDARDS, SEE SPECIFICATIONS ON SHEET 30.

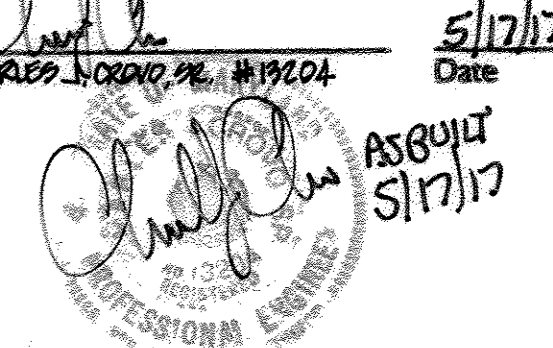


MANHOLE M-3 NOTES:
The 12" RCP invert to 5-1 shall be exactly 6" below the ex. 18" CMP out invert. Also, maintain design pipe grades (0.1%+) and if necessary, adjust down stream inverts to M-2 to maintain designed pipe slopes. Contact engineer for any questions.

Construct the 12" RCP exit pipe in M-3 with 1:1 beveled edges. Edges shall be smooth and rounded. Do not construct "square edge" pipe exit condition.

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 that the contributing drainage area is sufficiently stabilized to prevent clogging of the underground SWM Facility.

CHARLES J. PROVO, P.E. #19204
Date: 5/17/17



NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE BMP DETAILS AND PROFILES.

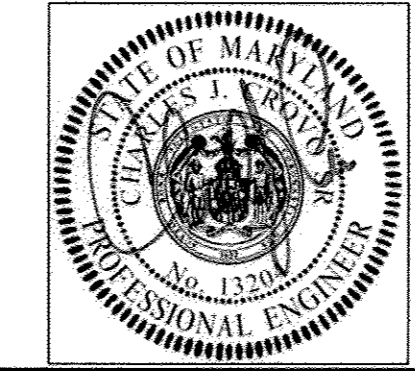
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
12712 BALTIMORE NATIONAL PIKE
ELLCOTT CITY, MARYLAND 21042
(410) 461-2995

"Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 13204, Expiration Date: November 3, 2014."

Charles J. Provo, Sr., P.E. 5/18/14

DATE	DESCRIPTION
	REVISION BLOCK
	APPROVED: DEPARTMENT OF PLANNING AND ZONING
3/16/14	Director - Department of Planning and Zoning
3/16/14	Chief, Division of Land Development
1-27-14	Chief, Development Engineering Division

PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Clarksville Pike
Ellicott City, Maryland 21042
Attention: Bruce Gist
410-313-6798



ADDRESS CHART	
LOT/PARCEL#	STREET ADDRESS
P. 168	6925 OLD WATERLOO ROAD ELKRIDGE, MARYLAND 21075

PERMIT INFORMATION CHART		
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.
DEEP RUN ELEM. SCHOOL	N/A	P. 168
PLAT# OR L/F	ZONING	TAX MAP#
L252 F.546	21	37
ELECT. DISTR.	CENSUS TRACT	
FIRST	6011	

STORMWATER MANAGEMENT BMP#2 PROFILES & DETAILS

"REVISED SITE DEVELOPMENT PLAN" DEEP RUN ELEMENTARY SCHOOL SITE IMPROVEMENT PLAN

ZONED RSA-8 TAX MAP No.: 37 GRID No.: 21 PARCEL No.: 168
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: FEBRUARY 10, 2014

SHEET 28 OF 30

"AS BUILT" SDP-89-98

STORMCEPTOR® QUOTATION AND ORDER FORM

Quotation No: _____
 Date: November 29, 2013

Project Information:
 Project Number: FCC 03009
 Project Name: Deep Run Elementary School
 Closing Date: _____
 Jobsite Address: 6925 Old Waterloo Road, Ellicott City, MD 21075
 Municipality: _____

Contractor Information:
 Contact Name: _____
 Company: TBD
 Phone No: _____
 Fax No: _____
 E-mail: _____

Consultant Information:
 Contact Name: Mr. Dale Medairy
 Company: Fisher, Collins & Carter, Inc.
 Phone No: 410-461-2855
 Fax No: dmedairy@fcc-eng.com
 E-mail: _____

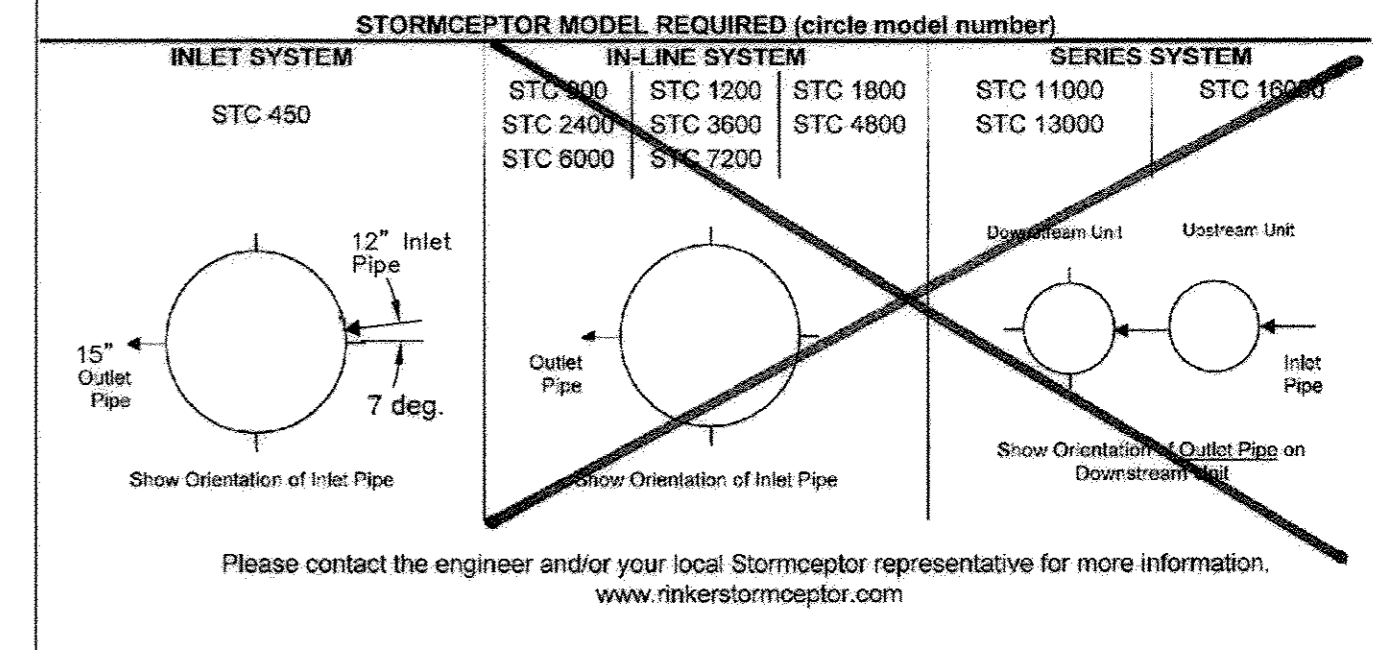
Owner Information (Required for Maintenance):
 Contact Name: See Title Sheet
 Company: _____
 Phone No: _____
 Fax No: _____
 E-mail: _____

Land Use (Check one):
 Commercial Gas Station Government Industrial Military
 Street Residential Transportation Other _____

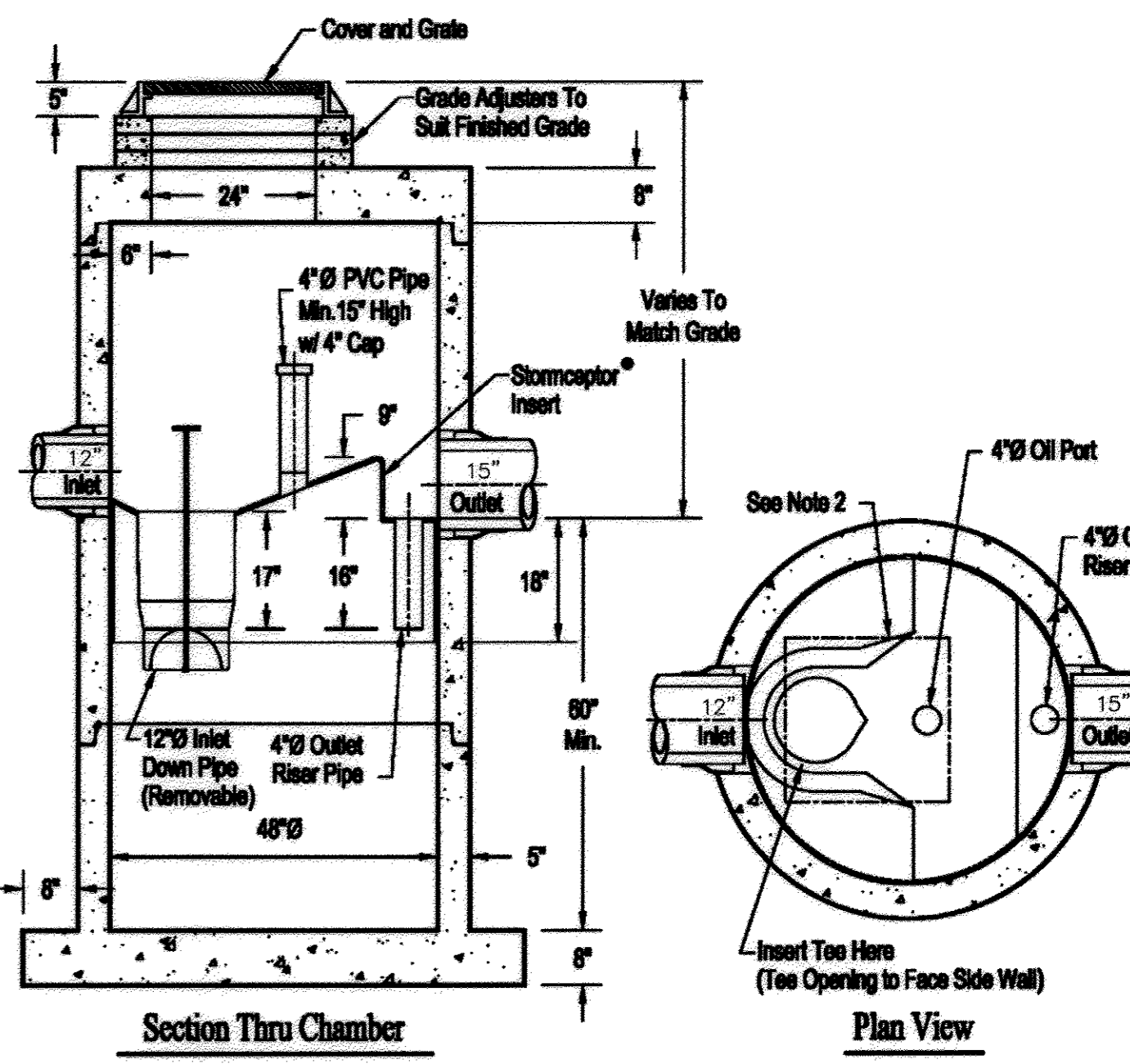
STORMCEPTOR INFORMATION

Structure No.: S-1
 Top of Grate Elev.: MH RIM = 268.00
 Outlet Invert Elev.: 259.29
 Inlet Invert Elev.: 259.54

Outlet Pipe Material: RCP (15")
 Inlet Pipe Material: RCP (12")

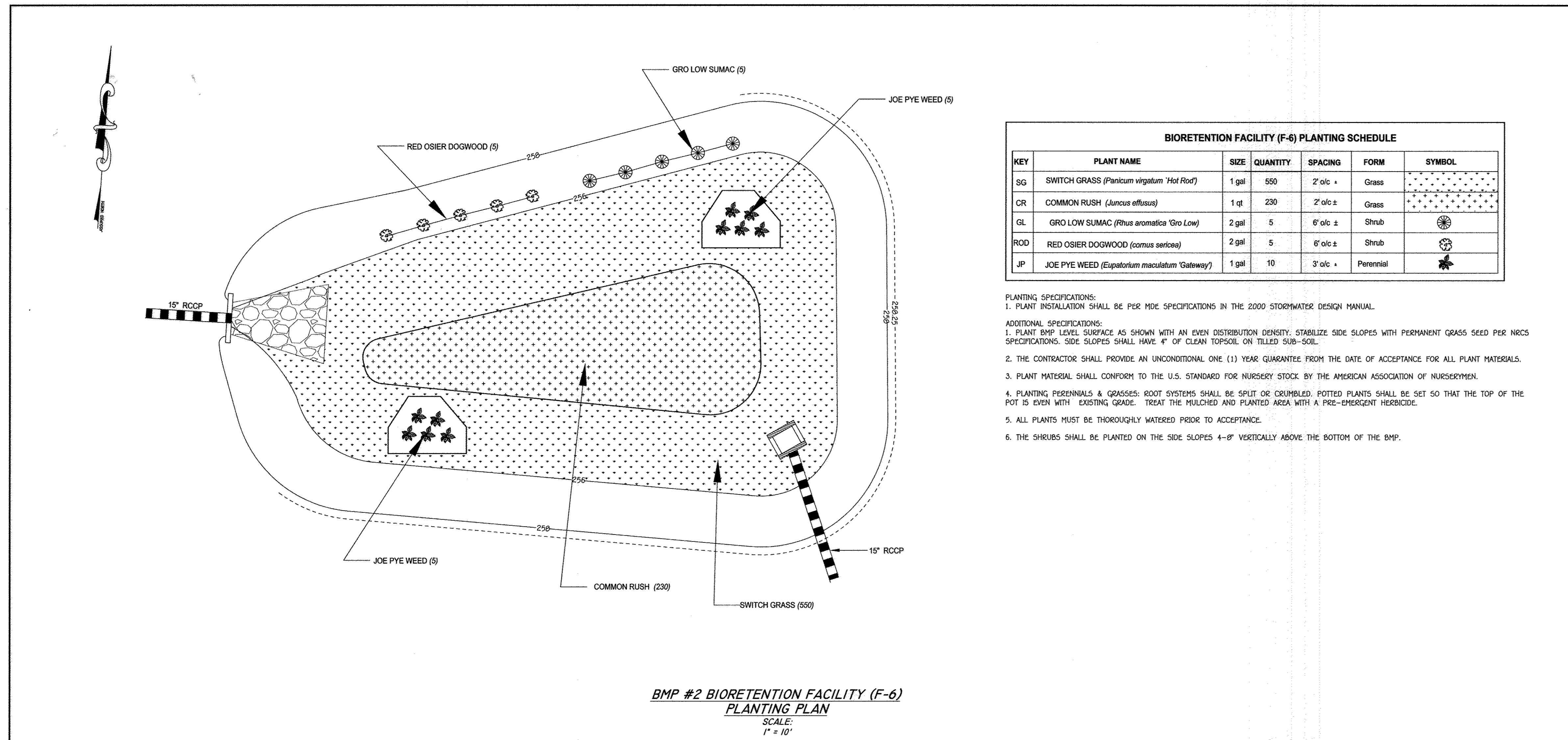


STC 450I Precast Concrete Stormceptor® (450 U.S. Gallon Capacity)



- Notes:**
- The Use Of Flexible Connection is Recommended at The Inlet and Outlet Where Applicable.
 - The Cover Should be Positioned Over The Inlet Drop Pipe and The Oil Port.
 - The Stormceptor System is protected by one or more of the following U.S. Patents: #4985148, #5498331, #5725760, #5753115, #5849181, #6068765, #6371690.
 - Contact a Concrete Pipe Division representative for further details not listed on this drawing.

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE BMP PLANTINGS AND DETAILS.



BIORETENTION FACILITY (F-6) PLANTING SCHEDULE

KEY	PLANT NAME	SIZE	QUANTITY	SPACING	FORM	SYMBOL
SG	SWITCH GRASS (<i>Panicum virgatum</i> 'Hot Rod')	1 gal	550	2' o/c ±	Grass	[Symbol]
CR	COMMON RUSH (<i>Juncus effusus</i>)	1 qt	230	2' o/c ±	Grass	[Symbol]
GL	GRO LOW SUMAC (<i>Rhus aromatica</i> 'Gro Low')	2 gal	5	6' o/c ±	Shrub	[Symbol]
ROD	RED OSIER DOGWOOD (<i>Cornus sericea</i>)	2 gal	5	6' o/c ±	Shrub	[Symbol]
JP	JOE PYE WEED (<i>Eupatorium maculatum</i> 'Gateway')	1 gal	10	3' o/c ±	Perennial	[Symbol]

- PLANTING SPECIFICATIONS:**
- PLANT INSTALLATION SHALL BE PER MDE SPECIFICATIONS IN THE 2000 STORMWATER DESIGN MANUAL.
- ADDITIONAL SPECIFICATIONS:**
- PLANT BMP LEVEL SURFACE AS SHOWN WITH AN EVEN DISTRIBUTION DENSITY; STABILIZE SIDE SLOPES WITH PERMANENT GRASS SEED PER NRCS SPECIFICATIONS. SIDE SLOPES SHALL HAVE 4" OF CLEAN TOPSOIL ON TILLED SUB-SOIL.
 - THE CONTRACTOR SHALL PROVIDE AN UNCONDITIONAL ONE (1) YEAR GUARANTEE FROM THE DATE OF ACCEPTANCE FOR ALL PLANT MATERIALS.
 - PLANT MATERIAL SHALL CONFORM TO THE U.S. STANDARD FOR NURSERY STOCK BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
 - PLANTING PERENNIALS & GRASSES: ROOT SYSTEMS SHALL BE SPLIT OR CRUMBLED. POTTED PLANTS SHALL BE SET SO THAT THE TOP OF THE POT IS EVEN WITH EXISTING GRADE. TREAT THE MULCHED AND PLANTED AREA WITH A PRE-EMERGENT HERBICIDE.
 - ALL PLANTS MUST BE THOROUGHLY WATERED PRIOR TO ACCEPTANCE.
 - THE SHRUBS SHALL BE PLANTED ON THE SIDE SLOPES 4'-8" VERTICALLY ABOVE THE BOTTOM OF THE BMP.

BMP #2 BIORETENTION FACILITY (F-6) PLANTING PLAN
 SCALE: 1" = 10'

AS-BUILT CERTIFICATION FOR PSWM

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

Charles J. Cravo, Sr. 5/17/14
 CHARLES J. CRAVO, SR. #13204 Date

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 100 NATIONAL SQUARE OFFICE PARK - 10712 BALTIMORE NATIONAL Pk.
 ELICOTT CITY, MARYLAND 21042
 (410) 461-2855

"Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 13204, Expiration Date: November 3, 2014."

Charles J. Cravo, Sr. 5/17/14
 CHARLES J. CRAVO, SR., P.E. DATE

DATE	DESCRIPTION	REVISION BLOCK
2/12/14	APPROVED: DEPARTMENT OF PLANNING AND ZONING	
3/4/14	Director - Department of Planning and Zoning	
2-27-14	Chief, Division of Land Development	
	Chief, Development Engineering Division	

PREPARED FOR
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Clarksville Pike
 Ellicott City, Maryland 21042
 Attention Bruce Gist
 410-313-6798

ADDRESS CHART	
LOT/PARCEL#	STREET ADDRESS
P. 16B	6925 OLD WATERLOO ROAD ELK RIDGE, MARYLAND 21075

PERMIT INFORMATION CHART			
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NO.	
DEEP RUN ELEM. SCHOOL	N/A	P. 16B	
PLAT# OR L/F	GRID#	ZONING	TAX MAP#
L252 F.546	21	RSA-8	37
		ELECT. DISTR.	CENSUS TRACT
		FIRST	6011

STORMWATER MANAGEMENT BMP#2 PLANTING PLAN & MANHOLE S-1 DETAIL

"REVISED SITE DEVELOPMENT PLAN" DEEP RUN ELEMENTARY SCHOOL SITE IMPROVEMENT PLAN

ZONED RSA-8 TAX MAP No.: 37 GRID No.: 21 PARCEL No.: 16B
 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: FEBRUARY 10, 2014

SHEET 29 OF 30

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