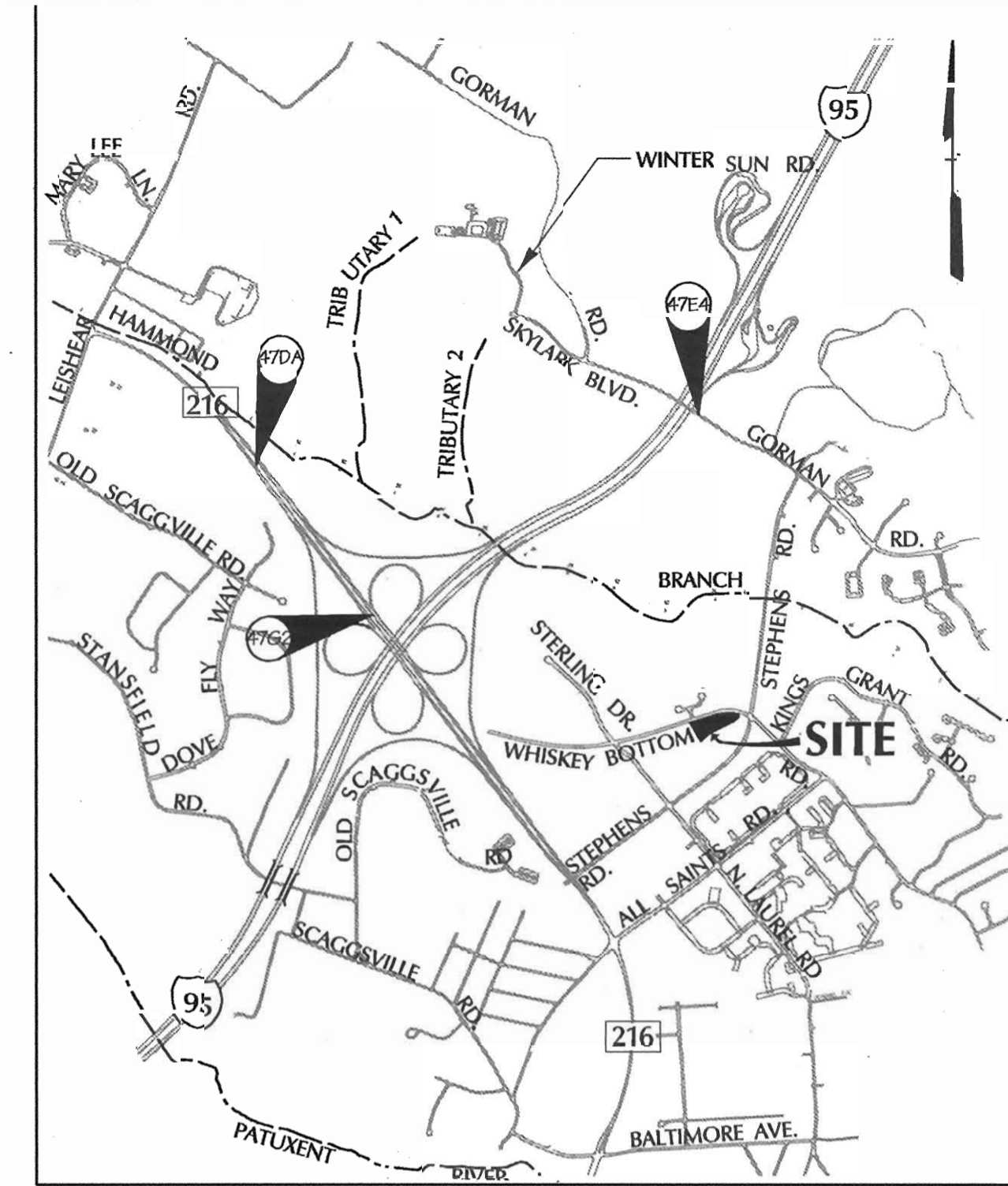


Sheet Index

SHEET	DESCRIPTION
1	COVER SHEET
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4	EROSION & SEDIMENT CONTROL DETAILS
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Site Development Plan for Emerson Corporate Commons Parcel 'A' (Revitz Property)

Howard County Maryland



VICINITY MAP

SCALE: 1"=2000'

BENCHMARK

DESCRIPTION

COORDINATES IN MARYLAND NAD83(91) (HORIZONTAL) AND NGVD29 (VERTICAL) DATUMS.

47DA NORTHING: 163191.9104 47E4 NORTHING: 163326.2295
EASTING: 4112665759 EASTING: 413136.2550
ELEVATION: 315905 ft. ELEVATION: 338.909ft.

47G2 NORTHING: 162440.1212
EASTING: 4118532729
ELEVATION: 364.210ft.

ADDRESS CHART

PARCEL NUMBERS	STREET ADDRESS
PARCEL A	8920 STEPHENS ROAD

General Notes

- All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standards and specifications if applicable.
- The contractor shall notify the Department of Public Works/Bureau of Engineering/Construction Inspection division at 410-313-1880 at least five (5) working days prior to the start of work.
- The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work being done.
- Traffic control devices, markings and signing shall be in accordance with the latest edition of the Manual of Uniform Traffic Control Devices (MUTCD). All streets and regulatory signs be in place prior to the placement of any asphalt.
- All plan dimensions are to face of curb unless otherwise noted.
- The existing topography is taken from field run survey with two foot contour intervals prepared by Daft McCune Walker, dated July, 2005. Boundary information shown hereon is based upon a plat prepared by Daft McCune Walker, Inc. (Plat 15785)
- The courses and coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System. Howard County monument Nos. 47DA, 47E4 and 47G2 were used for this project.
- Water is public.
- Sewer is public.
- Stormwater Management quality for this project will be met via a private perimeter stormwater management facility. Stormwater Management for quality is provided per F-02-111. The BMP will be owned and maintained by the owner, successor, or assignee.
- Any evidence of above ground utilities shown hereon is based solely on field location. No comparison to, or enhancement has been made from any utility drawings or plans. The location of any underground utility shown hereon is approximate and must be verified.
- There is no floodplain or wetlands on this site.
- Traffic study for this project was prepared by The Traffic Group.
- Project background information:
Subdivision Name: Revitz Property Parcel 'A'
Tax Map: 47
Lot/Parcel: 165
Zoning: PEC
Election District: 6
Total Parcel Area: 2.834 AC.
File Numbers: PLAT # 15785, F-02-111, SP-01-12, BA-02-17V
- All outdoor lighting shall comply with the requirements of Zoning Section 13.4.
- The existing utilities were located from available records and field survey prepared by Daft McCune Walker, Inc. Contractor must test pit, by hand, at all utility crossings and connection points at least 5 days prior to starting work to verify exact locations.
- Soils analysis report prepared by Hillis-Carnes dated, February 5, 2004.
- Handicap parking details shall be in accordance with "MD Building Code for the Handicapped" section 5.01-7.05.
- Any damage to county owned right-of-way shall be corrected at the contractor's expense.
- All sidewalks shall be cross sloped at 1/4 inch per foot.
- Trench bedding for storm drainage structures shall be in accordance with Howard County Standard G2.01.
- All inlets shall be constructed in accordance with Howard County standards or MSHA standards as specified on structure schedule.
- All materials and construction shall be in strict accordance with the Howard County Design Manual, Volume IV.
- Building setback restrictions from property lines and right-of-way lines of any public road shall be in accordance with the PEC Zoning Regulations and Record Plat.
- All on site driveways and parking areas to be privately maintained.
- All curb radii are 5 foot unless otherwise labeled and all curbs are to be 6" in height.
- All equipment and tools to be placed so as not to interfere with vehicular or pedestrian movement unless specified.
- Contractor shall be responsible for any damage to existing property which may occur as a result of his negligence during the execution of work.
- All proposed HC ramps shall be in accordance with current ADA standards.
- This property is located within the Metropolitan District.
- Electric, gas, cable, telephone, and lighting lines designed by others.
- Landscape shall be provided in accordance with the Landscape Plan and financial surety in the amount of \$18,480 (36 shade trees, 15 evergreen trees, 180 shrubs)-is part of the developers agreement.
- The Forest Conservation requirements for this subdivision were addressed with the Final Plans, F-02-111 with a 31.62 acre obligation provided by 26.24 acres of forest retention and 5.2 acres of on-site reforestation planting.
- This SDP is subject to the Amended Fifth Edition of the Subdivision and Land Development Regulations per Council Bill No. 45-2003, and the Amended Zoning Regulations per Council Bill No. 75-2003. Development or construction on this property must comply with setback and buffer regulations in effect at the time of submission of the site development plan, waiver petition application or building/grading permit applications.

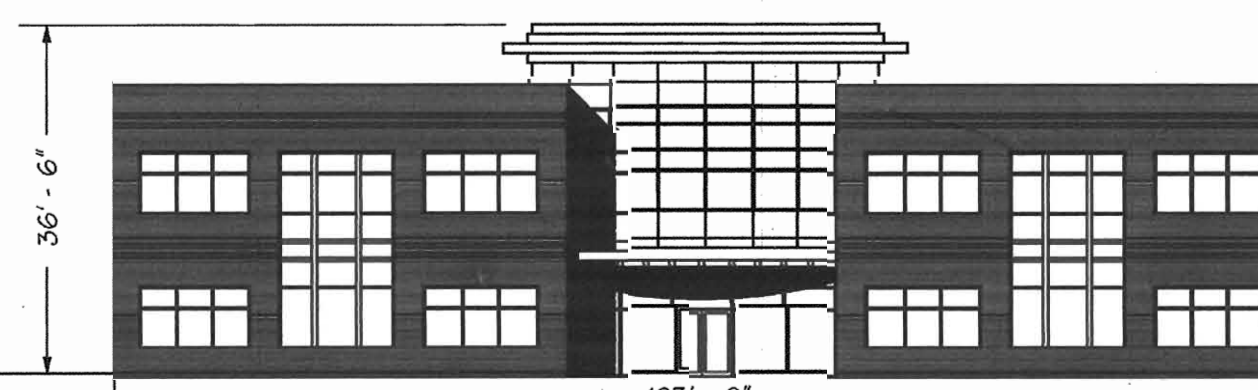


OVERALL SITE PLAN

Scale: 1"=600'

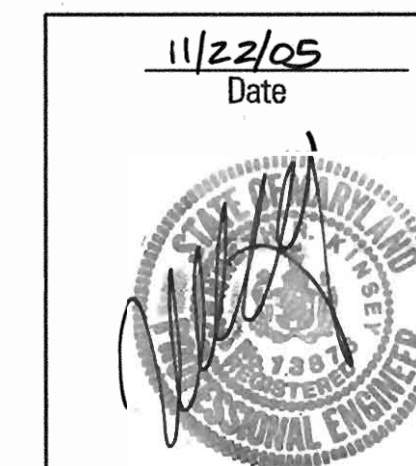
Site Analysis Data Chart

- General Site Data
 - Present Zoning: PEC per the 02/02/04 Comprehensive Zoning Plan.
 - Applicable DPZ File References: Plat # 15785, F-02-111, SP-01-12, BA-02-17V
 - Proposed Use of Site or Structure(s): commercial office building
 - Proposed Water and Sewer Systems: Public Private (well and septic)
 - Any other relevant information: N/A
- Area tabulation
 - Total Project Area: 2.834 Acres (123,449 SF)
 - Area of this Plan Submission: 2.834 Acres (123,449 SF)
 - Limits of Disturbed Area: 2.7 Acres
 - Building Coverage of Site: 0.35 Acres and 12.3% of Gross Area (Proposed)
 - Area of floodplain: 0 Acres
 - Area of steep slopes: 0 Acres
 - Net area of site: 2.834 Acres
- Parking Space Data
 - Floor spaces: 30,260
 - Maximum number of employees, tenants on-site per use: N/A
 - Number of Parking Spaces Required by Zoning Regulations and Criteria: 30,260 SF Office @ 3.3/1000 = 100 spaces
 - Total Number of Parking Spaces Provided On-Site: 116
 - Number of Handicapped Parking Spaces Provided: 5 (HC included in total)
 - Proposed building is two stories.
- No grading, removal of vegetative cover or trees, paving and new structures shall be permitted within the required wetlands, stream(s) or their buffers, forest conservation easement areas and 100 year floodplain.



FRONT BUILDING ELEVATION

Scale: 1"=20'



11/22/05
Date

Professional Engr. No. 13876

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
 [Signature] 12/23/05
 CHIEF DEVELOPMENT ENGINEERING DIVISION
 [Signature] 12/23/05
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 12/23/05
 DIRECTOR

Date	No.	Revision Description
		TWO-STORY OFFICE BUILDING

EMERSON
CORPORATE COMMONS
Parcel 'A' (Revitz Property)

OWNER:
EMERSON LAND
BUSINESS TRUST
8920 STEPHENS ROAD
LAUREL, MD 20732

DEVELOPER:
MATSON, LLC
CO. INC.
5650 STERRETT PLACE
SUITE 306
COLUMBIA, MD 21044

DMW
Daft McCune Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4706

A Team of Land Planners,
Landscape Architects,
Engineers, Surveyors &
Environmental Professionals

SECTION NAME	SECTION/AREA	N/A	PARCEL #
REVITZ PROPERTY			A
PLAT NO. 15785	BOOK & PAGE	TAX/ZONE MAP	FILE # DISTRICT
2/1/01	PEC	6th	6069-02
WATER CODE	SEWER CODE		

TITLE

COVER SHEET

Des. By	MJP	Scale	As Shown	Proj. No.	95054N
Dim. By	MSS	Date	10/18/05		
Chk. By		Approved			1 of 10



- UTILITY CONSTRUCTION
OUTSIDE SEDIMENT CONTROL MEASURES**
- Excavated trench material shall be placed on upstream side of trench.
 - Immediately following pipe installation, the trench shall be backfilled, compacted and immediately stabilized (mulched, seeded, and/or sodded mechanical stabilization) at the end of each work day.
 - Silt fence shall be placed immediately downstream of any disturbed area intended to remain disturbed longer than one (1) working day. (silt fence as per SCS standard drawing E-10-3).
 - The contractor shall disturb and open trench only the minimum practical area required to accomplish the work designated for each day.
 - All sediment and erosion control practices and vegetative stabilization shall be in accordance with the standards and specifications for Soil Erosion and Sediment Control in Developing Areas. Any erosion and sediment control practices damaged by utility construction are to be repaired immediately.

NOTE:
IMBRICATE SECTIONS OF SF / SSF SHALL BE TURNED UP SLOPE A MINIMUM OF 2" IN ELEVATION ON BOTH ENDS

LEGEND

- PROPERTY LINE
- EASEMENT LINE
- EX. CONTOURS
- EX. FIRE HYDRANT
- EX. UTILITIES
- EX. BUILDING
- EX. FENCE
- EX. TREE LINE
- EX. TREE
- EX. CURB & GUTTER
- EX. TELEPHONE POLE
- PROP. CURB & GUTTER
- PROP. CONC. WALK
- PROP. CONTOURS
- PROP. BUILDING
- + 230.0 PROP. SPOT ELEVATION
- SSF SUPER SILT FENCE
- SCE STABILIZED CONSTRUCTION ENTRANCE
- 18" D. INLET PROTECTION
- PROP. STORM DRAIN
- 8" S. PROP. SEWER
- 8" W. PROP. WATER
- LIMIT OF DISTURBANCE
- TEMPORARY STOCKPILE AREA
- OH EXISTING BGE OVERHEAD ELECTRIC UTILITY LINE
- TREE PROTECTION FENCE



APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

[Signature] 12/23/05
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 12/23/05
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 12/23/05
DIRECTOR DATE

Date	No.	Revision Description
		TWO-STORY OFFICE BUILDING
		EMERSON
		CORPORATE COMMONS
		Parcel 'A' (Revitz Property)
OWNER:		DEVELOPER:
EMERSON LAND BUSINESS TRUST 8820 STEPHENS ROAD LAUREL, MD 20732		MATSON, LLC CO BEB, INC. 5550 FERRETT PLACE SUITE 306 COLUMBIA, MD 21044

DMW
Duff McCune-Walkers, Inc.
200 East Pennsylvania Avenue
Pawson, Maryland 21086
(410) 296-3333
Fax 296-4705

A Team of Land Planners,
Landscape Architects,
Engineers, Surveyors &
Environmental Professionals

DEVELOPERS CERTIFICATE:

I/we certify that all development and/or construction will be done according to these plans and that any responsible personnel involved in the construction project will have a certificate of attendance as a Department of Environment approved training program for the control of sediment and erosion before beginning the project. I shall engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District.

[Signature] 11/22/05
Signature of developer Date
Print name below signature

ENGINEERS CERTIFICATE:

I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he/she must engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion.

[Signature] 11/22/05
Signature of engineer Date
Print name below signature
KEANEY R. KINSEY

Reviewed for Howard S.C.D. and meets technical requirements

[Signature] 12/18/05
U.S. Natural Resource Conservation Service Date

This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

[Signature] 12/18/05
Howard S.C.D. Date

11/22/05
Date

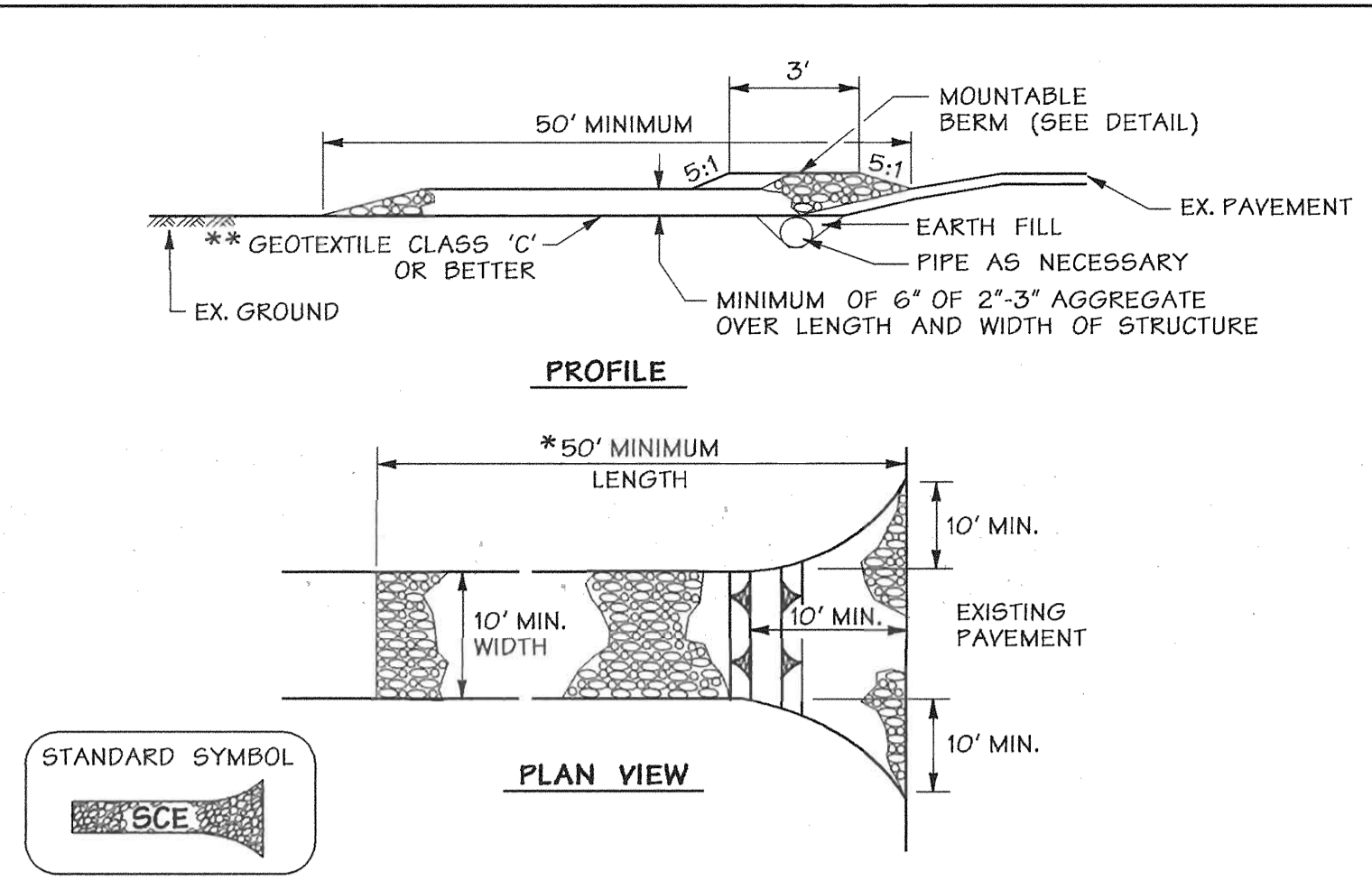
Professional Engr. No. 13876

AREA: TAX MAP 47 PARCEL 12
6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND

TITLE: **GRADING and EROSION & SEDIMENT CONTROL PLAN**

Des. By: KAD	Scale: 1"=30'	Proj. No. 95054N
Dim. By: M55	Date: 10/18/05	3 of 10
Chk. By:	Approved:	

SDP-06-29

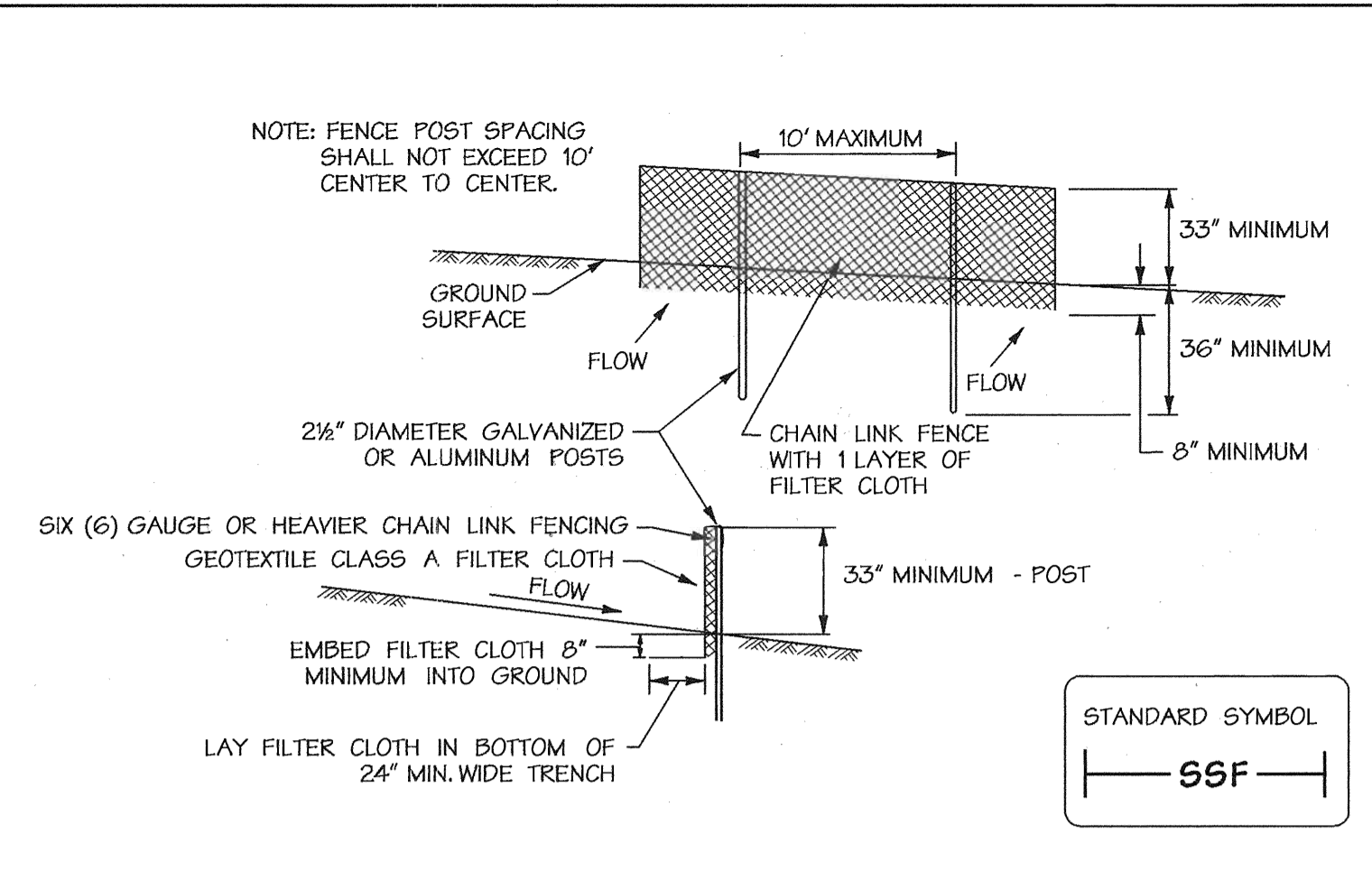


CONSTRUCTION SPECIFICATIONS

- LENGTH - MINIMUM OF 50' (*30' FOR SINGLE RESIDENCE LOT).
- WIDTH - 10' MINIMUM, SHOULD BE FLARED AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
- GEOTEXTILE FABRIC CLASS C (FILTER CLOTH) SHALL BE PLACED OVER THE EXISTING GROUND PRIOR TO PLACING STONE. **THE PLAN APPROVAL AUTHORITY MAY NOT REQUIRE SINGLE FAMILY RESIDENCES TO USE GEOTEXTILE.
- STONE - CRUSHED AGGREGATE (2" TO 3") OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT SHALL BE PLACED AT LEAST 6" DEEP OVER THE LENGTH AND WIDTH OF THE ENTRANCE.
- SURFACE WATER - ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED THROUGH THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PIPE INSTALLED THROUGH THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROTECTED WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 6" OF STONE OVER THE PIPE. PIPE HAS TO BE SIZED ACCORDING TO THE DRAINAGE. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY A PIPE WILL NOT BE NECESSARY. PIPE SHOULD BE SIZED ACCORDING TO THE AMOUNT OF RUNOFF TO BE CONVEYED. A 6" MINIMUM WILL BE REQUIRED.
- LOCATION - A STABILIZED CONSTRUCTION ENTRANCE SHALL BE LOCATED AT EVERY POINT WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES A CONSTRUCTION SITE. VEHICLES LEAVING THE SITE MUST TRAVEL OVER THE ENTIRE LENGTH OF THE STABILIZED CONSTRUCTION ENTRANCE.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE F-17-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Stabilized Construction Entrance Not To Scale

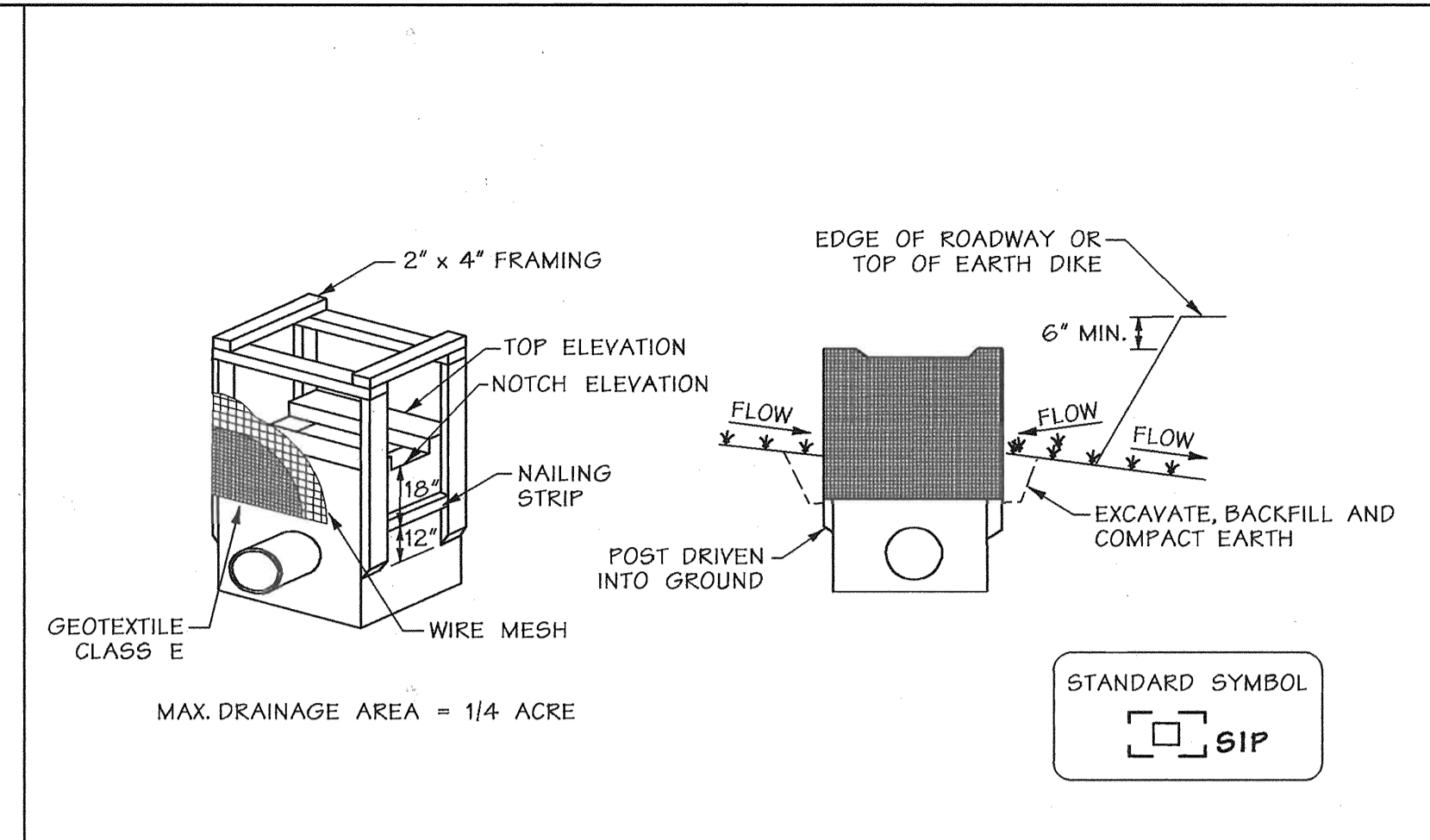


CONSTRUCTION SPECIFICATIONS

- FENCING SHALL BE 42 INCHES IN HEIGHT AND CONSTRUCTED IN ACCORDANCE WITH THE LATEST MARYLAND STATE HIGHWAY (SHA) DETAILS FOR CHAIN LINK FENCING. THE SHA SPECIFICATIONS FOR A 6 FOOT FENCE SHALL BE USED, SUBSTITUTING 42" FABRIC AND 6 FOOT LENGTH POSTS.
- THE POSTS DO NOT NEED TO BE SET IN CONCRETE.
- CHAIN LINK FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIES OR STAPLES. THE LOWER TENSION WIRE, BRACE AND TRUSS RODS, DRIVE ANCHORS AND POST CAPS ARE NOT REQUIRED EXCEPT ON THE ENDS OF THE FENCE. THE CHAIN LINK FENCING SHALL BE SIX (6) GAUGE OR HEAVIER CHAIN LINK FENCING.
- FILTER CLOTH SHALL BE FASTENED SECURELY TO THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24" AT THE TOP AND MID SECTION.
- FILTER CLOTH SHALL BE EMBEDDED A MINIMUM OF 8" INTO THE GROUND.
- WHEN TWO SECTIONS OF GEOTEXTILE FABRIC ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SILT BUILDBUPS REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE, OR WHEN SILT REACHES 50% OF FENCE HEIGHT.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE MODIFIED MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Super Silt Fence Not To Scale



CONSTRUCTION SPECIFICATIONS

- EXCAVATE COMPLETELY AROUND THE INLET TO A DEPTH OF 18" BELOW THE NOTCH ELEVATION.
- DRIVE THE 2" x 4" CONSTRUCTION GRADE LUMBER POSTS 1" INTO THE GROUND AT EACH CORNER OF THE INLET. PLACE NAIL STRIPS BETWEEN THE POSTS ON THE ENDS OF THE INLET. ASSEMBLE THE TOP PORTION OF THE 2" x 4" FRAME USING THE OVERLAP JOINT SHOWN ON DETAIL. THE TOP OF THE FRAME (WEIR) MUST BE 6" BELOW ADJACENT ROADWAYS WHERE FLOODING AND SAFETY ISSUES MAY ARISE.
- STRETCH THE 1/2" x 1/2" WIRE MESH TIGHTLY AROUND THE FRAME AND FASTEN SECURELY. THE ENDS MUST MEET AND OVERLAP AT A POST.
- STRETCH THE GEOTEXTILE CLASS E TIGHTLY OVER THE WIRE MESH WITH THE GEOTEXTILE EXTENDING FROM THE TOP OF THE FRAME TO 18" BELOW THE INLET NOTCH ELEVATION. FASTEN THE GEOTEXTILE FIRMLY TO THE FRAME. THE ENDS OF THE GEOTEXTILE MUST MEET AT A POST, BE OVERLAPPED AND FOLDED, THEN FASTENED DOWN.
- BACKFILL AROUND THE INLET IN COMPACTED 6" LAYERS UNTIL THE LAYER OF EARTH IS LEVEL WITH THE NOTCH ELEVATION ON THE ENDS AND TOP ELEVATION ON THE SIDES.
- IF THE INLET IS NOT IN A SUMP, CONSTRUCT A COMPACTED EARTH DIKE ACROSS THE DITCH LINE DIRECTLY BELOW IT. THE TOP OF THE EARTH DIKE SHOULD BE AT LEAST 6" HIGHER THAN THE TOP OF THE FRAME.
- THE STRUCTURE MUST BE INSPECTED PERIODICALLY AND AFTER EACH RAIN AND THE GEOTEXTILE REPLACED WHEN IT BECOMES CLOGGED.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE E-16-5 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Standard Inlet Protection Not To Scale

1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).

2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.

3. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:

- SEVEN CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1.
- FOURTEEN DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

4. ALL SEDIMENT TRAP/BASING 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 "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" FOR PERMANENT SEEDINGS (SEC. 51), SODS (SEC. 54), TEMPORARY SEEDING (SEC. 50), AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH 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 OR SITE:	2.8 ACRES
AREA DISTURBED:	2.7 ACRES
AREA TO BE ROOFED OR PAVED:	1.2 ACRES
AREA TO BE VEGETATIVELY STABILIZED:	1.5 ACRES
TOTAL CUT:	8,700 CUBIC YARDS
TOTAL FILL:	8,700 CUBIC YARDS

OFF-SITE WASTE/BORROW AREA LOCATION WASTE *

* TO BE DETERMINED BY CONTRACTOR WITH PRE-APPROVAL OF THE SEDIMENT CONTROL INSPECTOR WITH AN APPROVED AND ACTIVE GRADING PERMIT.

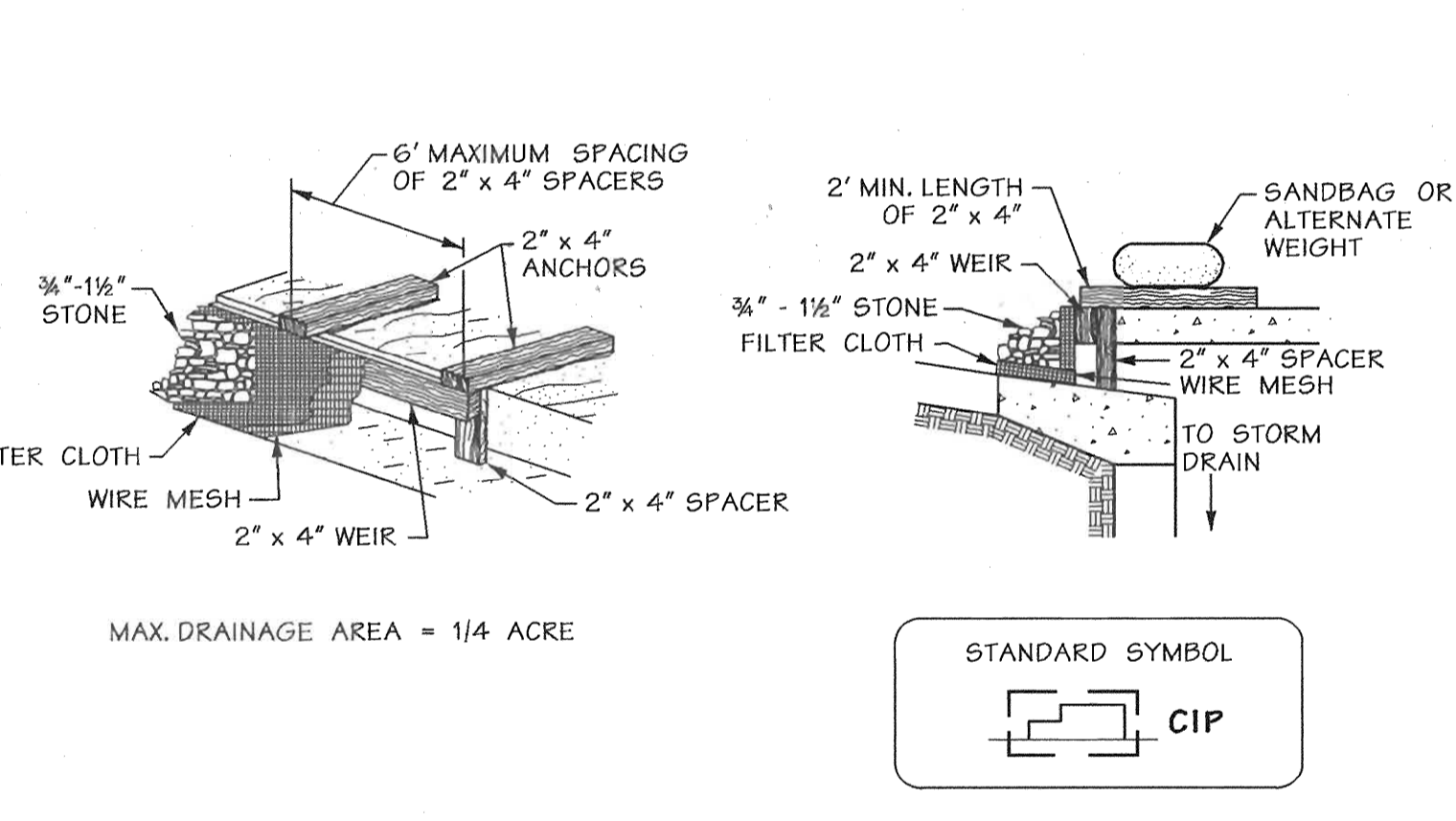
8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.

9. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY 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. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

Sediment Control General Notes

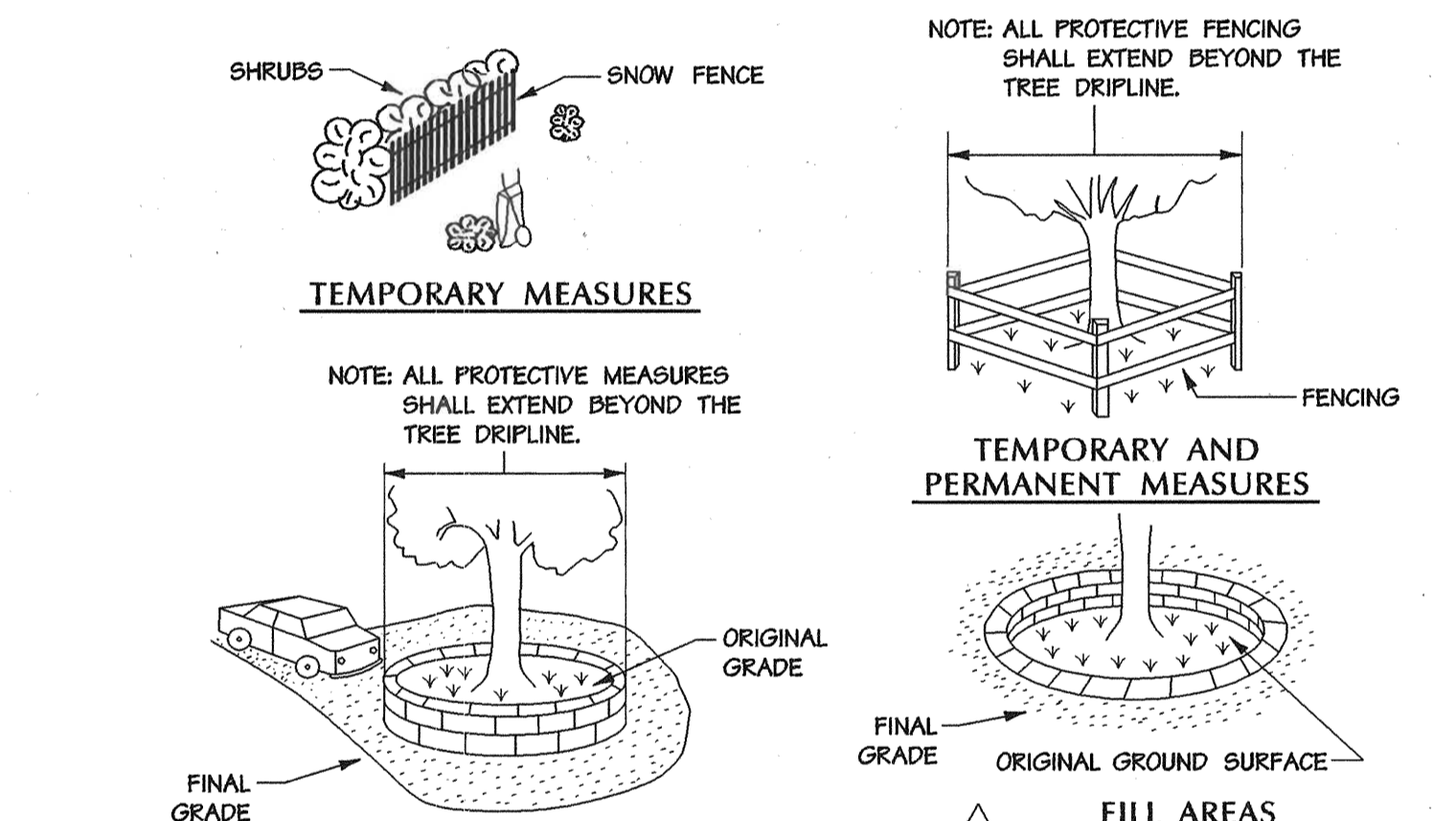


CONSTRUCTION SPECIFICATIONS

- ATTACH A CONTINUOUS PIECE OF 1/2" x 1/2" WIRE MESH (30" MINIMUM WIDTH BY THROAT LENGTH PLUS 4") TO THE 2" x 4" WEIR (MEASURING THROAT LENGTH PLUS 2") AS SHOWN ON THE STANDARD DRAWING.
- PLACE A CONTINUOUS PIECE OF GEOTEXTILE CLASS E THE SAME DIMENSIONS AS THE WIRE MESH OVER THE WIRE MESH AND SECURELY ATTACH IT TO THE 2" x 4" WEIR.
- SECURELY NAIL THE 2" x 4" WEIR TO A 9" LONG VERTICAL SPACER TO BE LOCATED BETWEEN THE WEIR AND THE INLET FACE (MAX. 4" APART).
- PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL (MINIMUM 2' LENGTHS OF 2" x 4" TO THE TOP OF THE WEIR AT SPACER LOCATIONS). THESE 2" x 4" ANCHORS SHALL EXTEND ACROSS THE INLET TOP AND BE HELD IN PLACE BY SANDBAGS OR ALTERNATE WEIGHT.
- THE ASSEMBLY SHALL BE PLACED SO THAT THE END SPACERS ARE A MINIMUM 1' BEYOND BOTH ENDS OF THE THROAT OPENING.
- FORM THE 1/2" x 1/2" WIRE MESH AND THE GEOTEXTILE FABRIC TO THE CONCRETE GUTTER AND AGAINST THE FACE OF THE CURB ON BOTH SIDES OF THE INLET. PLACE CLEAN 3/4" x 1 1/2" STONE OVER THE WIRE MESH AND GEOTEXTILE IN SUCH A MANNER TO PREVENT WATER FROM ENTERING THE INLET UNDER OR AROUND THE GEOTEXTILE.
- THIS TYPE OF PROTECTION MUST BE INSPECTED FREQUENTLY AND THE FILTER CLOTH AND STONE REPLACED WHEN CLOGGED WITH SEDIMENT.
- ASSURE THAT STORM FLOW DOES NOT BYPASS THE INLET BY INSTALLING A TEMPORARY EARTH OR ASPHALT DIKE TO DIRECT THE FLOW OF THE INLET.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE E-16-55 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Curb Inlet Protection (COG or COS Inlets) Not To Scale



TEMPORARY MEASURES

NOTE: ALL PROTECTIVE FENCING SHALL EXTEND BEYOND THE TREE DRIFLINE.

TEMPORARY AND PERMANENT MEASURES

NOTE: ALL PROTECTIVE MEASURES SHALL EXTEND BEYOND THE TREE DRIFLINE.

CUT AREAS

FILL AREAS

IMPROPER PROCEDURE

PROPER PROCEDURE

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE G-23-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Tree Protection Not To Scale

TEMPORARY METHODS:

- MULCHES - SEE STANDARDS FOR VEGETATIVE STABILIZATION WITH MULCHES ONLY. MULCH SHOULD BE CRIMPED OR TACKED TO PREVENT BLOWING.
- VEGETATIVE COVER - SEE STANDARDS FOR TEMPORARY VEGETATIVE COVER.
- TILLAGE - TO ROUGHEN SURFACE AND BRING CLDS TO THE SURFACE. THIS IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN FLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.
- IRRIGATION - THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS MOIST. REPEAT AS NEEDED. AT NO TIME SHOULD THE SITE BE IRRIGATED TO THE POINT THE RUNOFF BEGINS TO FLOW.
- BARRIERS - SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, STRAW BALES, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 10 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING SOIL BLOWING.
- CALCIUM CHLORIDE - APPLY AT A RATE THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

PERMANENT METHODS:

- PERMANENT VEGETATION - SEE STANDARDS FOR PERMANENT VEGETATIVE COVER, AND PERMANENT STABILIZATION WITH SODS. EXISTING TREES OR LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE.
- TOPSOILING - COVERING WITH LESS EROSION SOIL MATERIALS. SEE STANDARDS FOR TOPSOILING.
- STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

DUST CONTROL SPECIFICATIONS

Reviewed for Howard S.C.D. and meets technical requirements

John Myers 12/14/05
U.S. Natural Resource Conservation Service Date

This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

John R. Kenney 12/14/05
Howard S.C.D. Date

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE H-16-5 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Dust Control Specifications

DEVELOPERS CERTIFICATE:

I/we certify that all development and/or construction will be done according to these plans and that any responsible personnel involved in the construction project will have a certificate of attendance at a Department of Environment approved training program for the control of sediment and erosion before beginning the project. I shall engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District.

Edward O'Byrne 11/22/05
Signature of developer Date
Print name below signature

ENGINEERS CERTIFICATE:

I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he/she must engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion.

John R. Kenney 11/22/05
Signature of engineer Date
Print name below signature
KENNETH R. KENNEY

11/22/05 Date

John R. Kenney 11/22/05
Professional Engr. No. 13876

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

John R. Kenney 12/23/05
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Windy Hamont 12/23/05
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

John R. Kenney 12/23/05
DIRECTOR DATE

Date	No.	Revision Description
		TWO-STORY OFFICE BUILDING
		EMERSON CORPORATE COMMONS
		Parcel 'A' (Revitz Property)

OWNER: EMERSON LAND BUSINESS TRUST 8920 STEPHENS ROAD LAURIEL, MD 20733

DEVELOPER: MATSON, LLC CO BQ, INC. 5550 STERRETT PLACE SUITE 304 COLUMBIA, MD 21044

DMW
Duff-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4705

A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

AREA: TAX MAP 47 PARCEL 12
6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND

TITLE: **EROSION and SEDIMENT CONTROL DETAILS**

Des. By	KAD	Scale	As Shown	Proj. No.	95054N
Dm. By	MSS	Date	10/18/05		
Chk. By		Approved			4 of 10

SDP-06-29

STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS

A. SITE PREPARATION

- Install erosion and sediment control structures (either temporary or permanent) such as diversions, grade stabilization structures, berms, waterways, or sediment control basins.
- Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.
- Schedule required soil test to determine soil amendment composition and application rates for sites having disturbed areas over 5 acres.

B. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS)

- Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analysis.
- Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers shall be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warranty of the producer.
- Lime materials shall be ground limestone (hydrated or burnt lime may be substituted) which contains at least 50% total oxides (calcium oxide plus magnesium oxide). Limestone shall be ground to such fineness that at least 50% will pass through a #100 mesh sieve and 95 - 100% will pass through a #20 mesh sieve.
- Incorporate lime and fertilizer into the top 3 - 5 inches of soil by disking or other suitable means.

C. SEEDBED PREPARATION

I. TEMPORARY SEEDING

- Seedbed preparation shall consist of loosening soil to a depth of 3 inches to 5 inches by means of suitable agricultural or construction equipment, such as a disc harrow or chisel plow or rippers mounted on construction equipment. After the soil is loosened it should not be rolled or dragged smooth but left in the roughened condition. Sloped areas (greater than 3%) should be tracked leaving the surface in an irregular condition with ridges running parallel to the contour of the slope.
- Apply fertilizer and lime as prescribed on the plans.
- Incorporate lime and fertilizer into the top 3 - 5 inches of soil by disking or other suitable means.

II. PERMANENT SEEDING

- Minimum soil conditions required for permanent vegetative establishment:
 - Soil pH shall be between 6.0 and 7.0.
 - Soluble salts shall be less than 500 parts per million (PPM).
 - The soil shall contain less than 40% clay but enough fine grained material (> 30% silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception is if *Loeagras* or *Sericia Lespedeza* is to be planted. Then a sandy soil (c. 30% silt plus clay) would be acceptable.
 - Soil shall contain 1.5% minimum organic matter by weight.
 - Soil must contain sufficient pore space to permit adequate root penetration.
 - If these conditions cannot be met by the soils on site, adding topsoil is required in accordance with Section 21 - Standard and Specification for Topsoil.
- Areas previously graded in conformance with the drawings shall be maintained in a true and even grade, then scarified or otherwise loosened to a depth of 3 - 5 inches to permit bonding of the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from sliding down a slope.
- Apply soil amendments as per soil test or as included on the plans.
- Mix soil amendments into the top 3 - 5 inches of topsoil by disking or other suitable means. Lawn areas should be raked to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Where site conditions will not permit normal seedbed preparation, loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 3%) should be tracked by a dozer leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 1 - 3 inches of soil should be loose and friable. Seedbed loosening may not be necessary on newly disturbed areas.

D. SEED SPECIFICATIONS

- All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to re-testing by a recognized seed laboratory. All seed used shall have been tested within the 6 months immediately preceding the date of sowing such material on this job.
Note: Seed tags shall be made available to the inspector to verify type and rate of seed used.
- Inoculant - The inoculant for treating legume seed in the seed mixtures shall be a pure culture of nitrogen-fixing bacteria prepared specifically for the species. Inoculants shall not be used later than the date indicated on the container. Add fresh inoculant as directed on package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until used. Temperatures above 75-80° F. can weaken bacteria and make the inoculant less effective.

E. METHODS OF SEEDING

- Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer), broadcast or drop seeder, or cultipacker seeder.
 - If fertilizer is being applied at the time of seeding, the application rates amounts will not exceed the following:
Nitrogen: maximum of 100 pounds per acre total of soluble Nitrogen; F225 (phosphorous): 200 pounds per acre; K20 (potassium): 200 pounds per acre.
 - Lime: Use only ground agricultural limestone, (up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding.
 - Seed and fertilizer shall be mixed on site and seeding shall be done immediately and without interruption.
 - Dry Seeding: This includes use of conventional drop or broadcast spreaders.
 - Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the temporary or permanent seeding summaries or tables 25 or 26. The seeded area shall then be rolled with a weighed roller to provide good seed soil contact.
 - Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.
- Drill or cultipacker seeding: Mechanized seeders that apply and cover seed with soil.
 - Cultipacker seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering.
Seedbed must be firm after planting.
 - Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.

F. MULCH SPECIFICATIONS (IN ORDER OF PREFERENCE)

- Straw shall consist of thoroughly threshed wheat, rye or oat straw, reasonably bright in color, and shall not be musty, moldy, caked, decayed, or excessively dusty and shall be free of noxious weeds seeds as specified in the Maryland Seed Law.
- Wood cellulose fiber mulch (WCFM)
 - WCFM shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state.
 - WCFM shall be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread slurry.
 - WCFM, including dye shall contain no germination or growth inhibiting factors.
 - WCFM materials shall be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material shall form a blotter-like ground cover, on application, having moisture absorption and percolation properties and shall cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedings.
 - WCFM material shall contain no elements or compounds at concentration levels that will be phytotoxic.
 - WCFM must conform to the following physical requirements:
Fiber length to approximately 10 mm, diameter approximately 1mm, pH range of 4.0 to 8.5, ash content of 1.6% maximum and water holding capacity of 30% minimum.
Note: Only sterile straw mulch should be used in areas where one species of grass is desired.

G. MULCHING SEEDED AREAS - Mulch shall be applied to all seeded areas immediately after seeding.

- If grading is completed outside of the seeding season, mulch alone shall be applied as prescribed in this section and maintained until the seeding season returns and seeding can be performed in accordance with these specifications.
- When straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tons per acre. Mulch shall be applied in a uniform loose depth of between 1/2 and 2 inches. Mulch applied shall achieve a uniform distribution and depth so that the surface is not exposed. If a mulch anchoring tool is to be used, the rate should be increased to 2.5 tons per acre.
- Wood cellulose fiber used as a mulch shall be applied at a net dry weight of 1,500 pounds per acre. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.

H. SECURING STRAW MULCH - Mulch anchoring shall be performed immediately following mulch application to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon size of area and erosion hazard:

- A mulch anchoring tool is a tractor drawn implement design to punch and anchor mulch into the soil surface a minimum of two (2) inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should be used on the contour if possible.
- Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 pounds per acre. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
- Application of liquid binders should be heavier at the edges where wind catches mulch, such as in valleys or on crest of banks. The remainder of area should appear uniform after binder application. Synthetic binders - such as Acrylic DLR (agro-pack), DCA-70, Petrosel, Terra Tex II, Terra Tack AR or other approved equal may be used at rates recommended by the manufacturer to anchor mulch.
- Lightweight plastic netting may be stapled over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4' to 15' feet wide and 300 to 3,000 feet long.

SECTION II - TEMPORARY SEEDING

VEGETATION - Annual grass or grain used to provide cover on disturbed areas for up to 12 months. For longer duration of vegetative cover, permanent seeding is required.

Seed Mixture (Hardiness Zone 7A)					Fertilizer Rate (10-10-10)	Lime Rate
No.	Species	Application Rate (Lb./Ac.)	Seeding Dates	Seeding Depth		
1	Annual Ryegrass	50	2/1 - 4/30 8/15 - 1/11	1/4" - 3/8"	600 Lbs./Ac. (15 Lbs./1000 SF)	2 Tons/Ac. (100 Lbs./1000 SF)
2	Weeping Lovegrass	4	5/1 - 8/14	1/4" - 3/8"		

SECTION III - PERMANENT SEEDING

Seeding grass and legumes to establish ground cover for a minimum of one year on disturbed areas generally requiring low maintenance.

Seed Mixture No. 3 (Hardiness Zone 7A)					Fertilizer Rate (10-20-20)			Lime Rate
%	Species	Application Rate (Lb./Ac.)	Seeding Dates	Seeding Depth	N	P2O5	K2O	
85	Rebel II Tall Fescue	125			90	175	175	2 Tons/Ac. (100 Lb./1000 Sq.Ft.)
10	Perennial Ryegrass	15	3/1 - 5/15 8/15 - 1/11	1/4" - 3/8"	2 Lb./1000 Sq.Ft.	4 Lb./1000 Sq.Ft.	4 Lb./1000 Sq.Ft.	
5	Kenblue Kentucky Bluegrass	10						

* For 5-16 through 8-14 add two (2) pounds of Weeping Lovegrass per acre or ten (10) pounds of Millet per acre to seed mixture (i.e. Mix #3 shown).

** At time of fine grading, fertilizer and lime rates will be based on soil test results; (see section 1.B.1). Copy of recommended rates to be supplied to the Sediment Control Inspector.

SECTION IV - SOD

To provide quick cover on disturbed areas (2:1 grade or flatter)

A. GENERAL SPECIFICATIONS

- Class of turfgrass sod shall be Maryland or Virginia State certified or approved. Sod labels shall be made available to the job foreman and inspector.
- Sod shall be machine cut at a uniform soil thickness of 3/4" plus or minus 1/8", at the time of cutting. Measurement for thickness shall exclude top growth and thatch. Individual pieces of sod shall be cut to the suppliers width length. Maximum allowable deviation from standard widths and lengths shall be 5 percent. Broken pads and torn or uneven ends will not be acceptable.
- Standard size sections of sod shall be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section.
- Sod shall not be harvested or transplanted when moisture content (excessively dry or wet) may adversely affect its survival.
- Sod shall be harvested, delivered, and installed within a period of 36 hours. Sod not transplanted within this period shall be approved by an agronomist or soil scientist prior to its installation.

B. SOD INSTALLATION

- During periods of excessively high temperature or in areas having dry subsoil, the subsoil shall be lightly irrigated immediately prior to laying the sod.
- The first row of sod shall be laid in a straight line with subsequent rows placed parallel to and tightly wedged against each other. Lateral joints shall be staggered to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which air drying of the roots.
- Wherever possible, sod shall be laid with the long edges parallel to the contour and with staggering joints. Sod shall be rolled and tamped, pegged or otherwise secured to prevent slippage on slopes and to ensure solid contact between sod roots and the underlying soil surface.
- Sod shall be watered immediately following rolling or tamping until the underside of the new sod pad and soil surface below the sod are thoroughly wet. The operations of laying, tamping and irrigating for any piece of sod shall be completed within eight hours.

C. SOD MAINTENANCE

- In the absence of adequate rainfall, watering shall be performed daily or as often as necessary during the first week and in sufficient quantities to maintain moist soil to a depth of 4 inches. Watering should be done during the heat of the day to prevent wilting.
- After the first week, sod watering is required as necessary to maintain adequate moisture content.
- The first mowing of sod should not be attempted until the sod is firmly rooted. No more than 1/3 of the grass leaf shall be removed by the initial cutting or subsequent cuttings. Grass height shall be maintained between 2 inches and 3 inches unless otherwise specified.

SECTION V - TURFGRASS ESTABLISHMENT

Areas where turfgrass may be desired may include lawns, parks, playgrounds, and commercial sites which will receive a medium high level of maintenance. Areas to receive seed shall be tilled by disking or other approved methods to a depth of 2 to 4 inches, leveled and raked to prepare a proper seedbed. Stones and debris over 1/2 inches in diameter shall be removed. The resulting seedbed shall be in such condition that future mowing of grasses will pose no difficulty.

Note: Choose certified material. Certified material is the best guarantee of cultivar purity. The certification program of the Maryland Department of Agriculture, Turf and Seed Section, provides a reliable means of consumer protection and assures a pure genetic line.

A. TURFGRASS MIXTURES

- Kentucky Bluegrass - Full sun mixture - For use in areas that receive intensive management. Irrigation required in the areas of central Maryland and Eastern Shore. Recommended certified Kentucky Bluegrass cultivars seeding rate: 15 to 2.0 pounds per 1000 square feet. A minimum of three Bluegrass cultivars should be chosen ranging from a minimum of 10% to a maximum of 35% of the mixture by weight.
- Kentucky Bluegrass/Perennial Rye - Full sun mixture - For use in full sun areas where rapid establishment is necessary and when turf will receive medium to intensive management. Certified Perennial Ryegrass cultivars/certified Kentucky Bluegrass seeding rate: 2 pounds mixture per 1000 square feet. A minimum of 3 Kentucky Bluegrass cultivars must be chosen, with each cultivar ranging from 10% to 35% of the mixture by weight.
- Tall Fescue/Kentucky Bluegrass - Full sun mixture - For use in drought prone areas and/or for areas receiving low to medium management in full sun to medium shade. Recommended mixture includes: certified Tall Fescue cultivars 95-100%, certified Kentucky Bluegrass cultivars 0 - 5%, seeding rate: 5 to 8 pounds per 1000 square feet. One or more cultivars may be blended.
- Kentucky Bluegrass/Fine Fescue - Shade mixture - For use in areas with shade in Bluegrass lawns. For establishment in high quality, intensively managed turf areas. Mixture includes: certified Kentucky Bluegrass cultivars 30-40% and certified Fine Fescue and 60-70%. Seeding rate: 1 1/2 - 3 pounds per 1000 square feet. A minimum of 3 Kentucky Bluegrass cultivars must be chosen. With each cultivar ranging from a minimum of 10% to a maximum of 35% of the mixture by weight.

Note: Turfgrass varieties should be selected from those listed in the most current University of Maryland publication, agronomy mimeo number 77, "Turfgrass Cultivar Recommendations for Maryland".

B. IDEAL TIMES OF SEEDING

- Western Maryland: March 15 - June 1, August 1 - October 1 (hardiness zones - 5B, 6A).
- Central Maryland: March 1 - May 15, August 15 - October 15 (hardiness zone - 6B).
- Southern Maryland, Eastern Shore: March 1 - May 15, August 15 - October 15 (hardiness zones - 7A, 7B).

C. IRRIGATION

If soil moisture is different, supply new seedlings with adequate water for plant growth (1/2" - 1" every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedlings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.

D. REPAIRS AND MAINTENANCE

Inspect all seeded areas for failures and make necessary repairs, replacements, and reseeding within the planting season.

- Once the vegetation is established, the site shall have 95% groundcover to be considered adequately stabilized.
- If the stand provides less than 40% ground coverage, re-establish following original lime, fertilizer, seedbed preparation and seeding recommendations.
- If the stand provides between 40% and 94% ground coverage, overseeding and fertilizing using half of the rates originally applied may be necessary.
- Maintenance fertilizer rates for permanent seedings are shown in Table 24, for lawns and other medium high maintenance turfgrass areas, refer to the University of Maryland publication "Lawn Care in Maryland" bulletin number 171.

21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

DEFINITION

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

PURPOSE

To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

CONDITIONS WHERE PRACTICE APPLIES

- This practice is limited to areas having 2:1 or flatter slopes where:
 - The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
 - The original soil to be vegetated contains material toxic to plant growth.
 - The soil is so acidic that treatment with limestone is not feasible.
- For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

- Topsoil salvages from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experimental Station.
- Topsoil Specifications - Soil to be used as topsoil must meet the following:
 - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1" in diameter.
 - Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnsongrass, nutgrass, poison ivy, thistle, or others as specified.
 - Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.
- For sites having disturbed areas under 5 acres:
 - On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
 - pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
 - Organic content of topsoil shall be not less than 1.5 percent by weight.
 - Topsoil having soluble salt content greater than 500 parts per million shall not be used.
 - No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min) to permit dissipation of phytotoxic materials.
 - Note: Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
 - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
- Topsoil Application
 - When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins.
 - Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4' - 8" higher in elevation.
 - Topsoil shall be uniformly distributed in a 4" - 8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.

SEQUENCE OF CONSTRUCTION

- Obtain grading permit
- Notify Howard County Department of Inspection, License and Permits Sediment Control Division at least 24 hours prior to the start of construction (410.333.1830)
- Construct stabilized construction entrance.
- Install silt fence, super silt fence and tree protection fence. 10 days
- With the permission of the Sediment Control Inspector clear and grade site.
- Construct the building. 2 weeks
- Construct the storm drain system, and stone trench for water quality. Provide inlet protection. 4 weeks
- Install curb, gutter and paving. 1 week
- Install landscaping and stabilize all remaining disturbed areas. 1 day
- Flush storm drains.
- Upon stabilization of all disturbed areas and with the approval of the Howard County Sediment Control Inspector, remove all remaining sediment control devices and stabilize the disturbance. Open inlets. 1 week

- Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seeded preparation.

- Alternative for Permanent Seeding - Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below:
 - Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to provide amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:
 - Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.
 - Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a pH of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use.
 - Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.
 - Composted sludge shall be amended with a potassium fertilizer applied at a rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate.

References: Guidelines Specifications, Soil Preparation and Sodding, MD-VIA, Pub. #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institutes, Revised 1973.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

[Signature] 12/23/05
CHIEF, DEVELOPMENT ENGINEERING DIVISION

[Signature] 12/23/05
CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 12/23/05
DIRECTOR

Revision Description

Date No.

TWO-STORY OFFICE BUILDING

EMERSON

CORPORATE COMMONS

Parcel 'A' (Revitz Property)

OWNER: EMERSON LAND BUSINESS TRUST
8820 STEPHENS ROAD
LAUREL, MD 20732

DEVELOPER: MATSON LLC
CO BCS, INC.
5550 STERRETT PLACE
SUITE 306
COLUMBIA, MD 21044

DMW

Draft-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 286-3333
Fax 286-4706

A Team of Land Planners,
Landscape Architects,
Engineers, Surveyors &
Environmental Professionals

AREA

TAX MAP 47 PARCEL 12

6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND

TITLE

EROSION and SEDIMENT CONTROL SPECIFICATIONS

Des. By KAD Scale As Shown Proj. No. 95054N

Dm. By MSS Date 10/18/05

Chk. By Approved

5 of 10

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[Signature] 11/22/05
Signature of developer
Print name below signature

ENGINEERS CERTIFICATE:

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[Signature] 11/23/05
Signature of engineer
Print name below signature
KENNETH R. KUSBY

Reviewed for Howard S.C.D. and meets technical requirements

[Signature] 12/23/05
U.S. Natural Resource Conservation Service

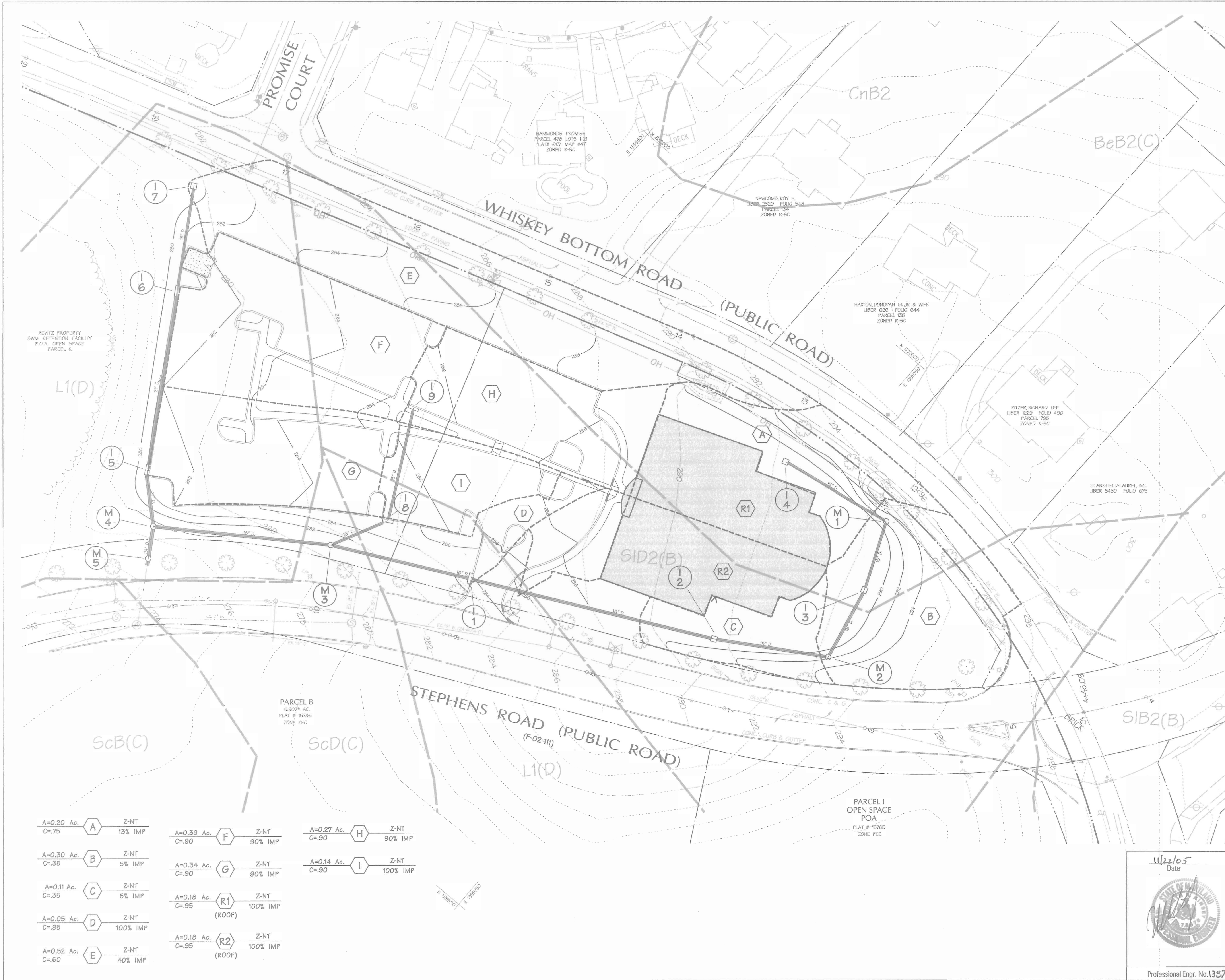
This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

[Signature] 12/23/05
Howard S.C.D.

11/23/05
Date

[Signature]

Professional Engr. No. 13876



LEGEND

- PROPERTY LINE
- - - EASEMENT LINE
- EX. CONTOURS
- EX. FIRE HYDRANT
- EX. UTILITIES
- EX. BUILDING
- EX. TREE LINE
- EX. TREE
- EX. CURB & GUTTER
- EX. TELEPHONE POLE
- OH EX. BGE OVERHEAD ELECTRIC UTILITY LINE
- CnB2 SOIL TYPE AND BOUNDARY
- BeB2(C) SOIL TYPE AND BOUNDARY
- DRAINAGE AREA BOUNDARY
- 284 PROP. CONTOURS



APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

[Signature] 12/23/05
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 12/23/05
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 12/23/05
 DIRECTOR DATE

Date	No.	Revision Description
		TWO-STORY OFFICE BUILDING
		EMERSON
		CORPORATE COMMONS
		Parcel 'A' (Revitz Property)
OWNER:		DEVELOPER:
EMERSON LAND BUSINESS TRUST 8920 STEPHENS ROAD LAUREL, MD 20732		MATSON, LLC CO BCS, INC. 5550 STERRETT PLACE SUITE 306 COLUMBIA, MD 21044

DMW
 Daft-McCune-Walker, Inc.
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 296-3353
 Fax 296-4705

A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

11/22/05
 Date

Professional Engr. No. 13576

A=0.20 Ac. C=.75	A	Z-NT 13% IMP	A=0.39 Ac. C=.90	F	Z-NT 90% IMP	A=0.27 Ac. C=.90	H	Z-NT 90% IMP
A=0.30 Ac. C=.35	B	Z-NT 5% IMP	A=0.34 Ac. C=.90	G	Z-NT 90% IMP	A=0.14 Ac. C=.90	I	Z-NT 100% IMP
A=0.11 Ac. C=.35	C	Z-NT 5% IMP	A=0.18 Ac. C=.95	R1	Z-NT 100% IMP (ROOF)			
A=0.05 Ac. C=.95	D	Z-NT 100% IMP	A=0.18 Ac. C=.95	R2	Z-NT 100% IMP (ROOF)			
A=0.52 Ac. C=.60	E	Z-NT 40% IMP						

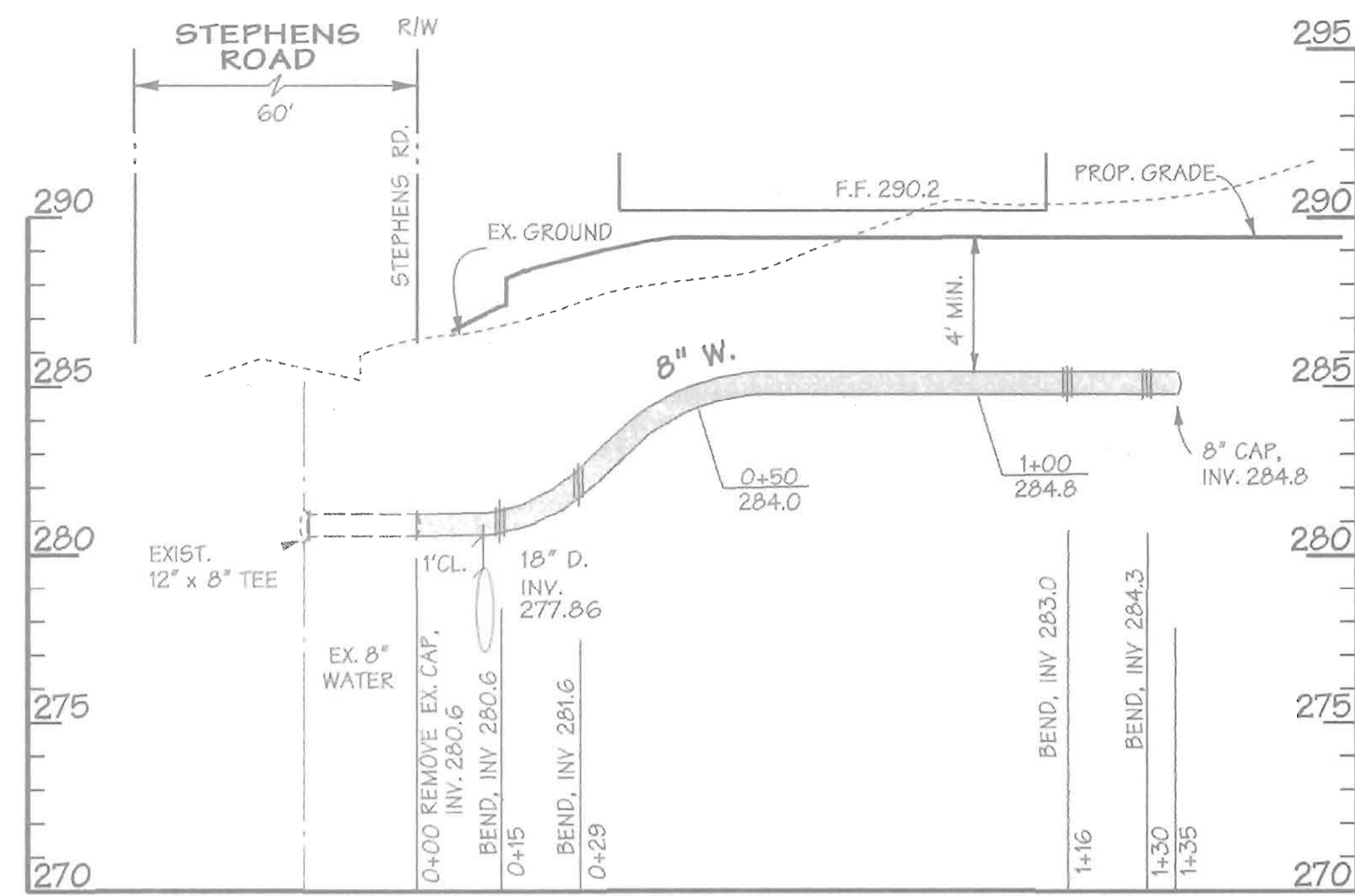
Mon No. 210924-3 2005
 11/22/05 11:05 AM 5:01

AREA: TAX MAP 47 PARCEL A
 6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND

TITLE: **DRAINAGE AREA MAP AND SOILS MAP**

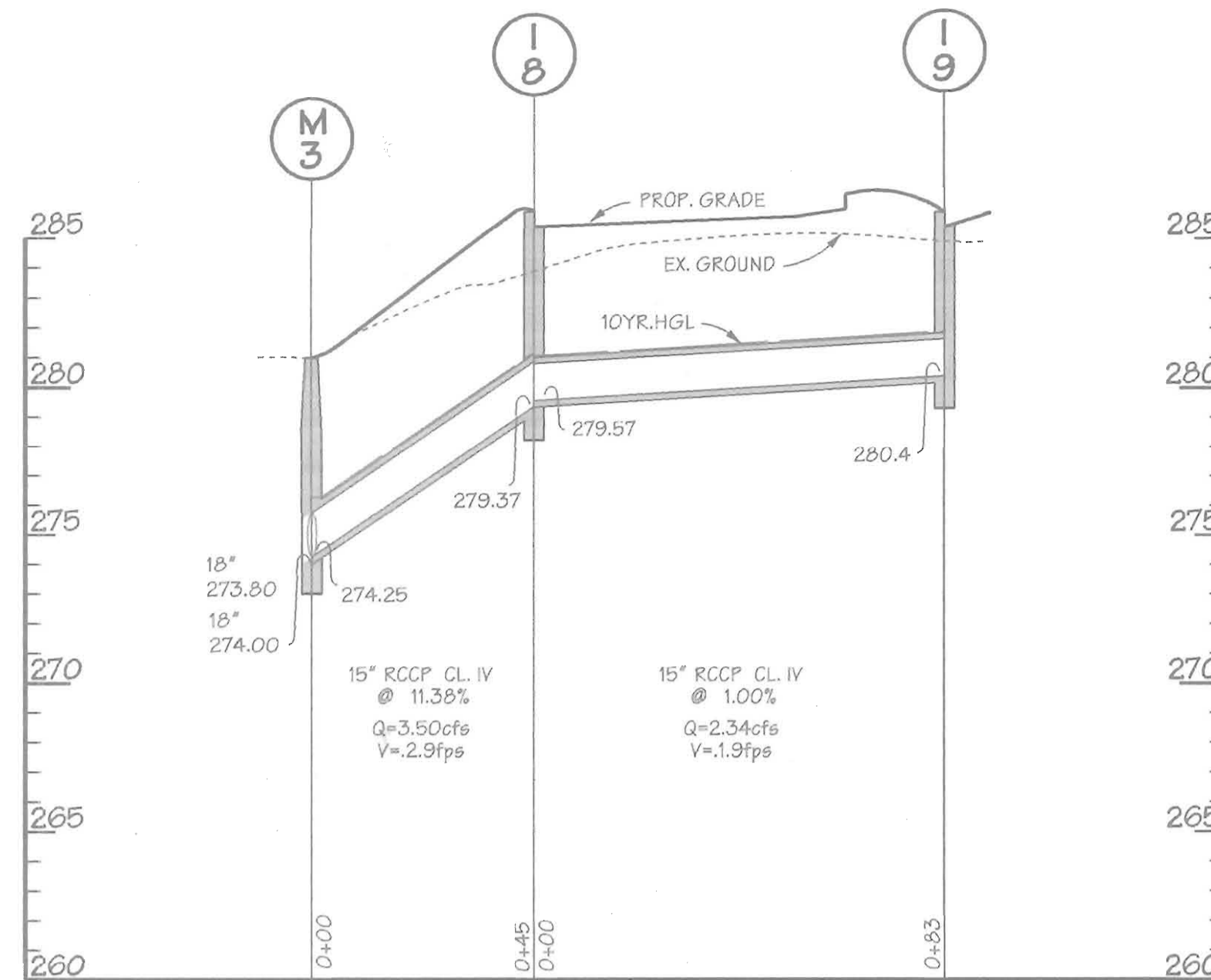
Des. By	Scale 1"=30'	Proj. No. 95054N
Dim. By M55	Date 10/18/05	6 of 10
Chk. By	Approved	

SDP-06-29



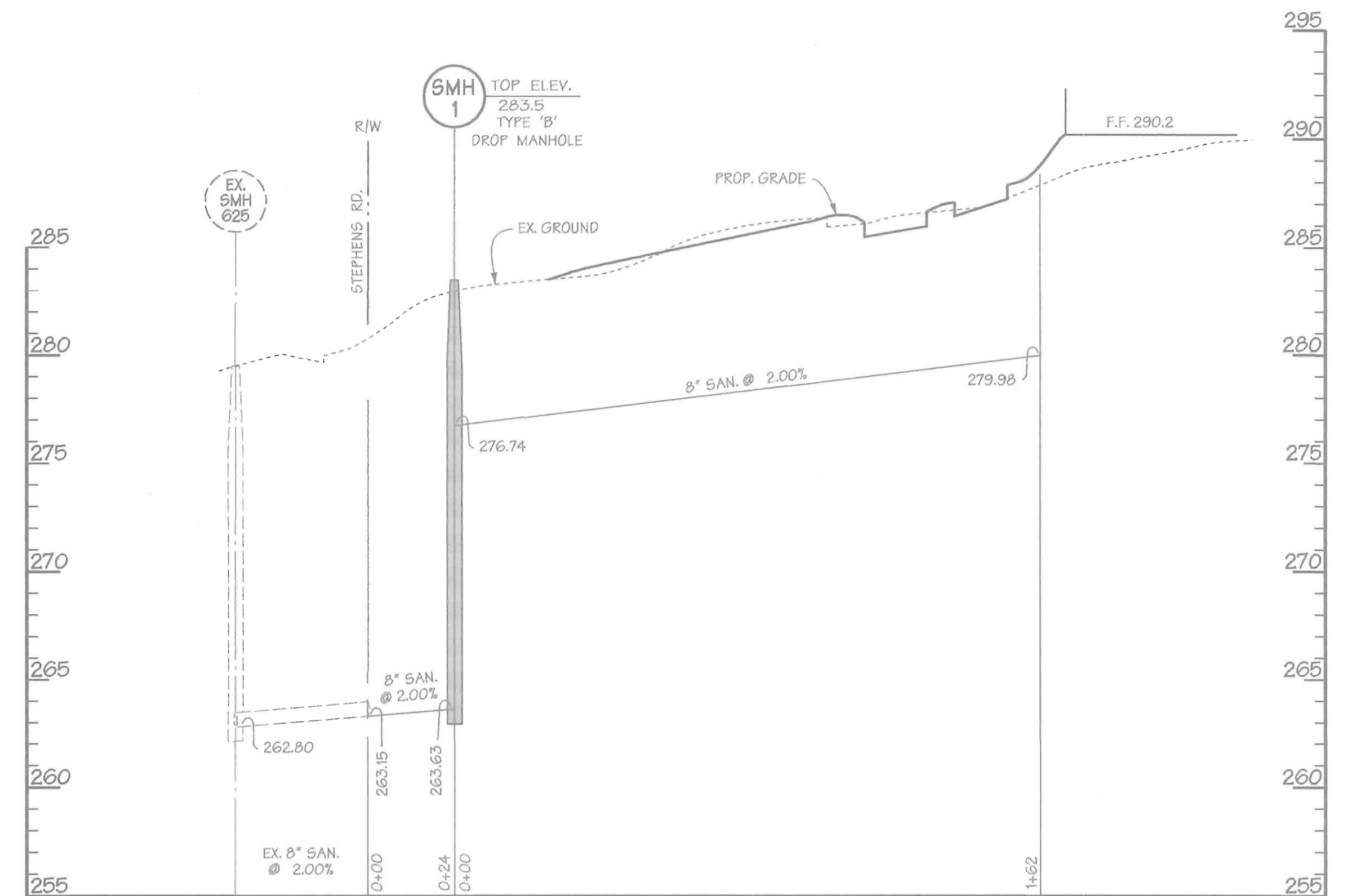
WATER MAIN PROFILE

SCALE: HORIZ. 1"=30'
VERT. 1"=5'



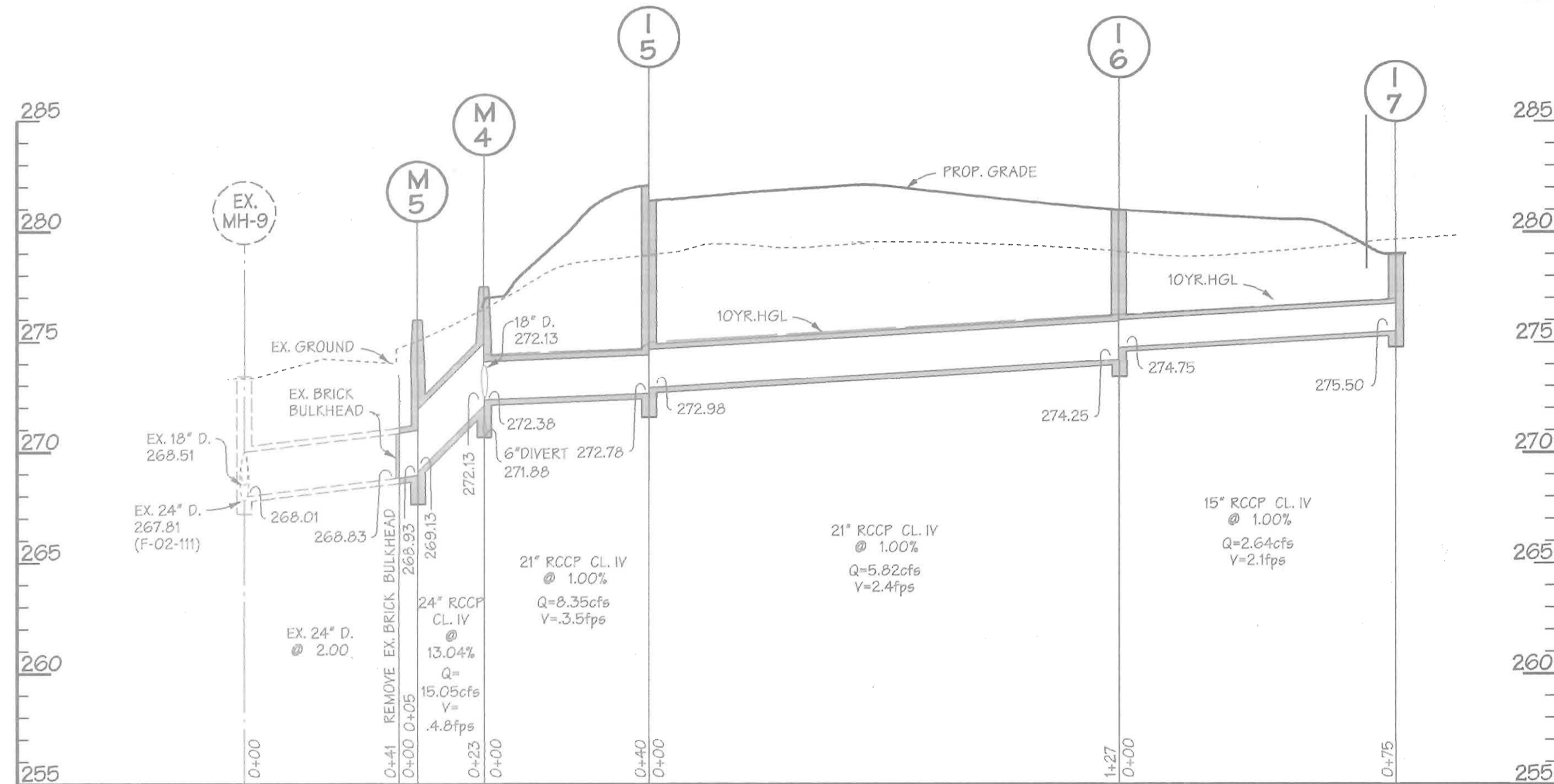
STORM DRAIN PROFILE

SCALE: HORIZ. 1"=30'
VERT. 1"=5'



SANITARY SEWER PROFILE

SCALE: HORIZ. 1"=30'
VERT. 1"=5'



STORM DRAIN PROFILE

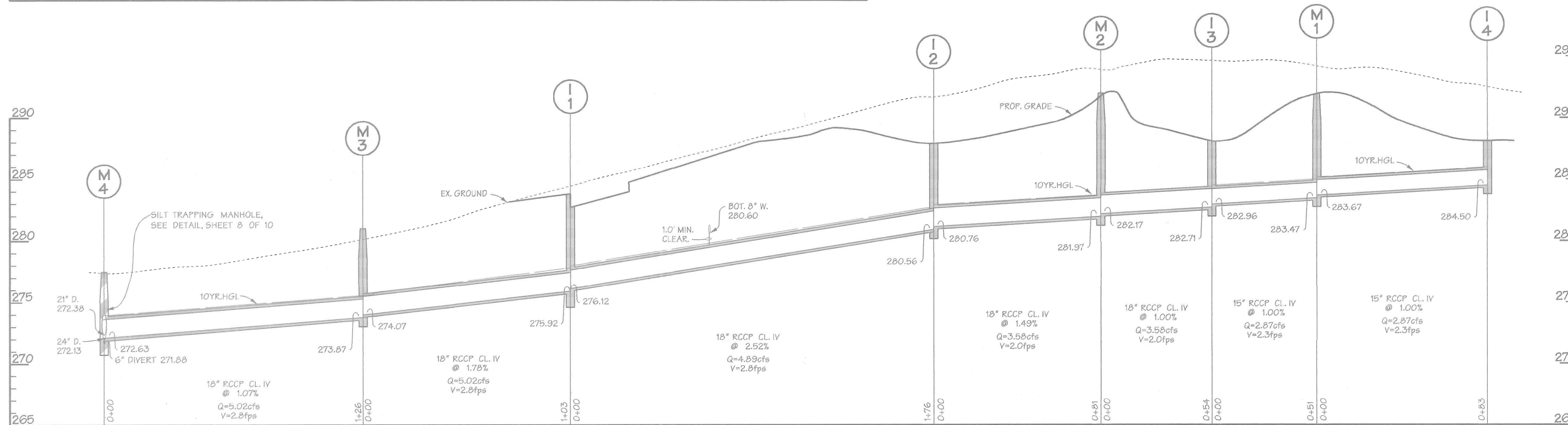
SCALE: HORIZ. 1"=30'
VERT. 1"=5'

MANHOLE SCHEDULE

NO.	SIZE	TYPE	TOP ELEV.
M-1	48"	STD.MH-HO.CO.STD.SD.4.02	292.00
M-2	48"	STD.MH-HO.CO.STD.SD.4.02	292.00
M-3	48"	STD.MH-HO.CO.STD.SD.4.02	281.00
M-4	48"	STD.MH-HO.CO.STD.SD.4.02	277.50
M-5	48"	STD.MH-HO.CO.STD.SD.4.02	275.00

INLET SCHEDULE

NO.	TYPE	HO.CO.STD. SD-4.01	TOP ELEV.
I-1	A-5	HO.CO.STD. SD-4.01	284.00 BC
I-2	TYPE 'S'	HO.CO.STD. SD-4.22	288.00
I-3	TYPE 'S'	HO.CO.STD. SD-4.22	288.00
I-4	TYPE 'S'	HO.CO.STD. SD-4.22	288.00
I-5	A-10	HO.CO.STD. SD-4.41	281.5 BC
I-6	A-10	HO.CO.STD. SD-4.41	281.00 BC
I-7	TYPE 'S'	HO.CO.STD. SD-4.22	279.00
I-8	A-5	HO.CO.STD. SD-4.01	284.9 BC
I-9	A-5	HO.CO.STD. SD-4.01	285.4 BC



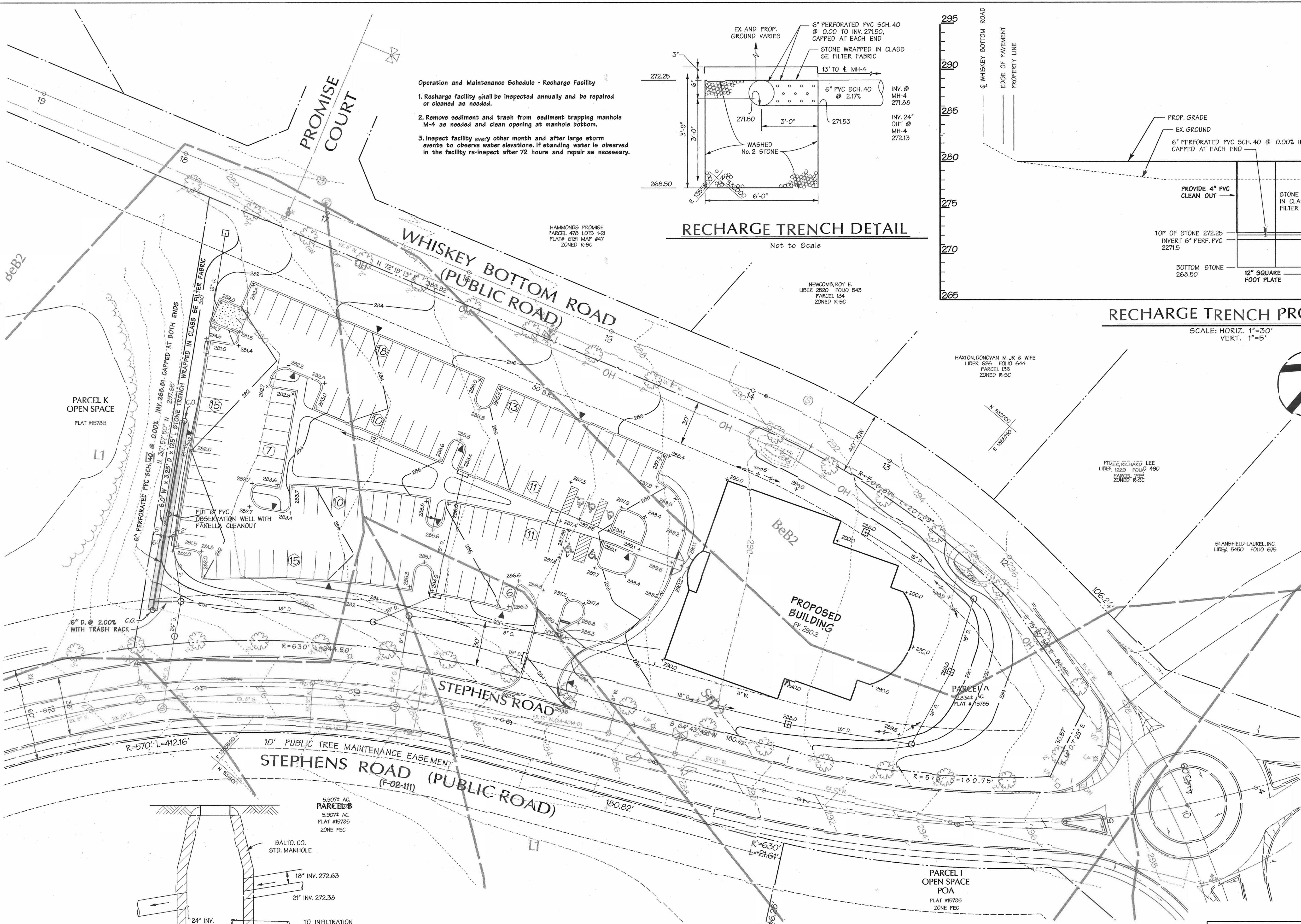
APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
 [Signature] 12/23/05
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 12/23/05
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 12/23/05
 DIRECTOR

Revision Description
 TWO-STORY OFFICE BUILDING
EMERSON CORPORATE COMMONS
 Parcel 'A' (Revitz Property)
 OWNER: EMERSON LAND BUSINESS TRUST
 DEVELOPER: MATSON LLC CO BC3 INC.
 5550 STERRETT PLACE SUITE 308 COLUMBIA, MD 21044

DMW
 Daft-McCune-Walker, Inc.
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 296-3353
 Fax 296-4708
 A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

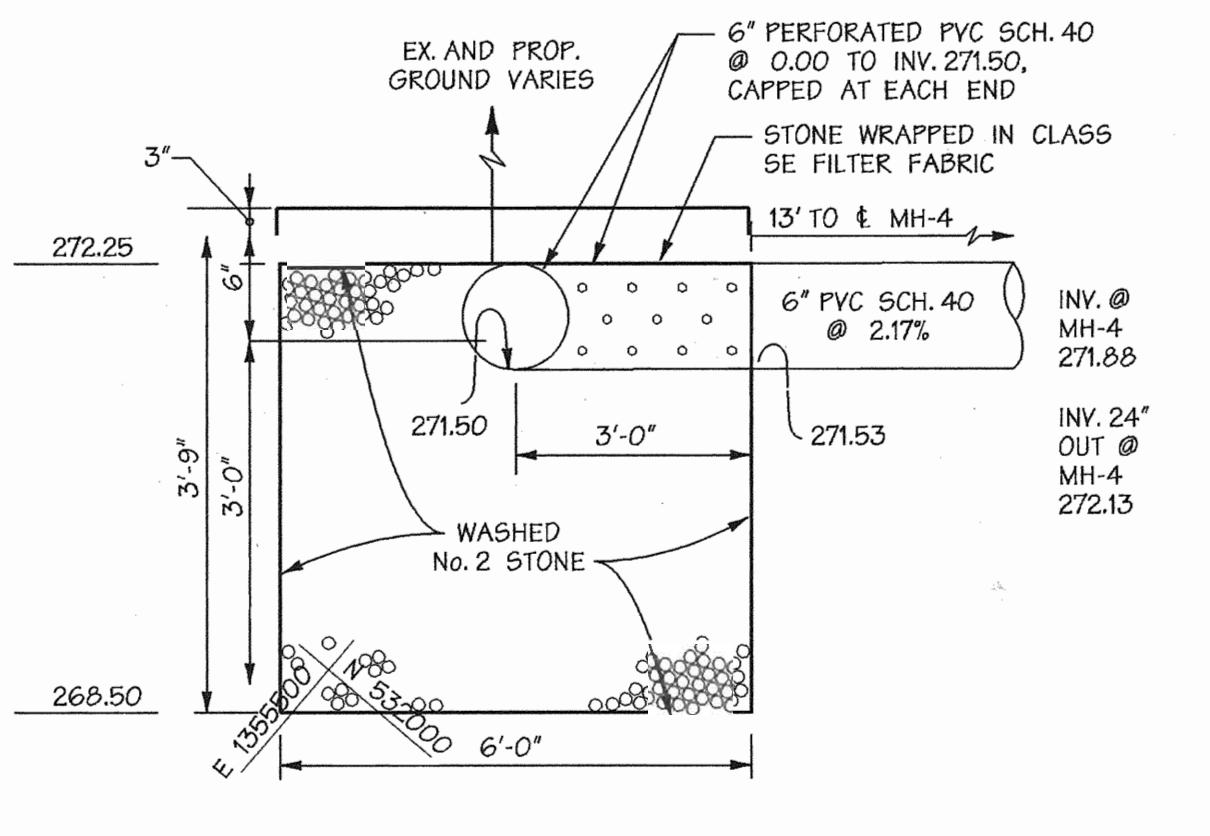
AREA: TAX MAP 47 PARCEL A
 6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND
 TITLE: **SANITARY SEWER, STORM DRAIN and WATER PROFILES**
 Des. By: KAD Scale: As Shown Proj. No. 95054N
 Dm. By: M55 Date: 10/18/05
 Chk. By: Approved

Professional Engr. No. 13872
 Date: 11/22/05
 7 of 10
 SDP-06-29

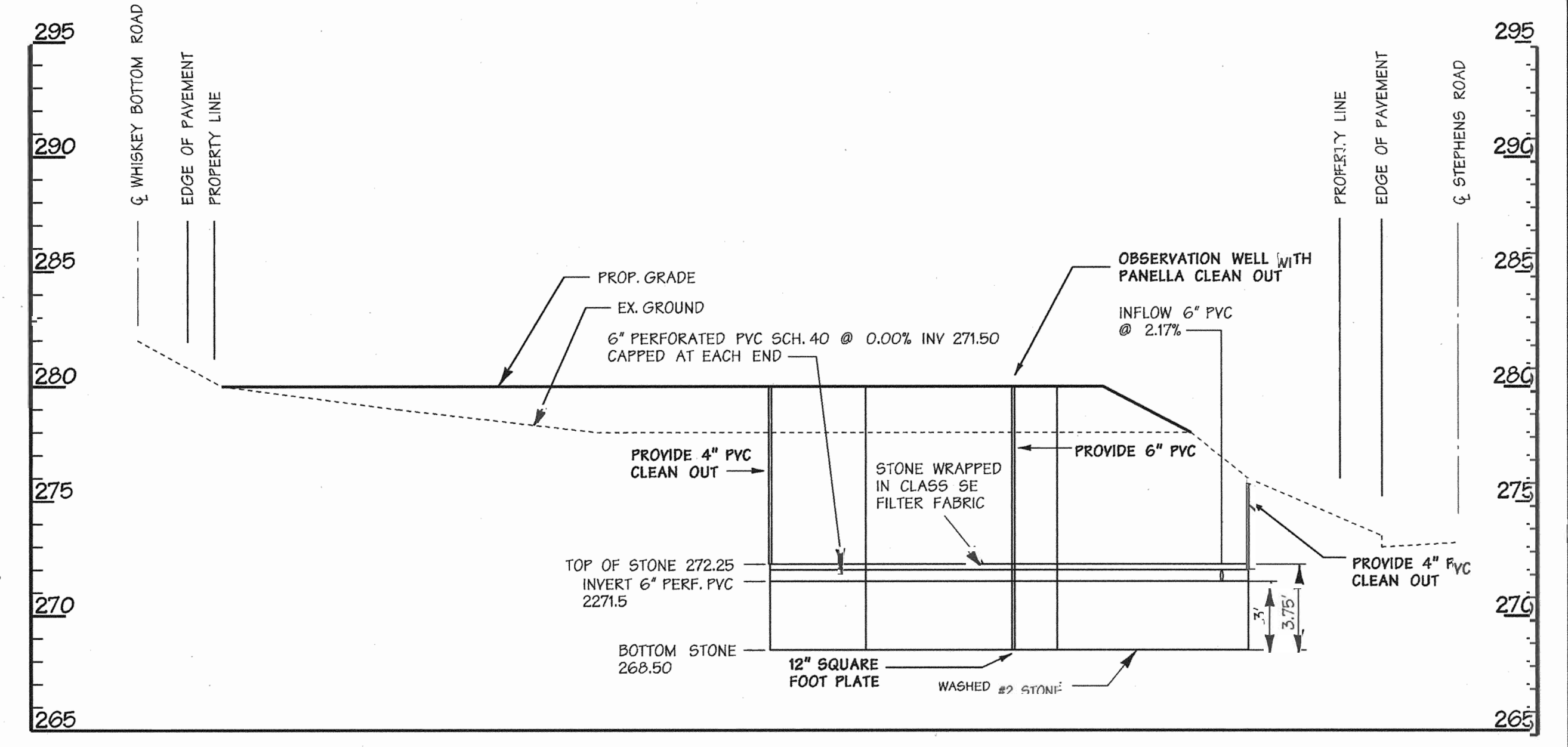


Operation and Maintenance Schedule - Recharge Facility

1. Recharge facility shall be inspected annually and be repaired or cleaned as needed.
2. Remove sediment and trash from sediment trapping manhole M-4 as needed and clean opening at manhole bottom.
3. Inspect facility every other month and after large storm events to observe water elevations. If standing water is observed in the facility re-inspect after 72 hours and repair as necessary.



RECHARGE TRENCH DETAIL
Not to Scale



RECHARGE TRENCH PROFILE
SCALE: HORIZ. 1"=30'
VERT. 1"=5'

LEGEND

- PROPERTY LINE
- - - EASEMENT LINE
- - - EX. CONTOURS
- - - EX. UTILITIES
- - - EX. BUILDING
- - - EX. FENCE
- - - EX. TREE LINE
- - - EX. TREE
- - - EX. CURB & GUTTER
- - - EX. TELEPHONE POLE
- - - PROP. CURB & GUTTER
- - - PROP. CONC. WALK
- - - PROP. CONTOURS
- - - PROP. BUILDING
- - - PROP. LIGHT (BY LIGHTING CONSULTANT)
- + 290.0 - - - R.O.P. SPOT ELEVATION
- - - OH - - - EXISTING BGE OVERHEAD
- - - C.O. - - - CLEAN OUT

DATA SOURCES
Boundary information taken from a record plat prepared by DMW, Inc.
Topography taken from a field run survey by DMW, Inc.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

[Signature] 12/15/05
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 12/23/05
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 12/23/05
DIRECTOR DATE

Date: _____ No. _____ Revision Description: _____

TWO-STORY OFFICE BUILDING

EMERSON

CORPORATE COMMONS

Parcel 'A' (Revitz Property)

OWNER: EMERSON LAND BUSINESS TRUST
8820 STEPHENS ROAD
LAUREL, MD 20732

DEVELOPER: MATSON, LLC
CO BLC, INC.
8550 SPERRETT PLACE
SUITE 306
COLLEGE PARK, MD 21044

DMW
Duff McCune-Walker, Inc.
210 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3318
Fax 296-4706

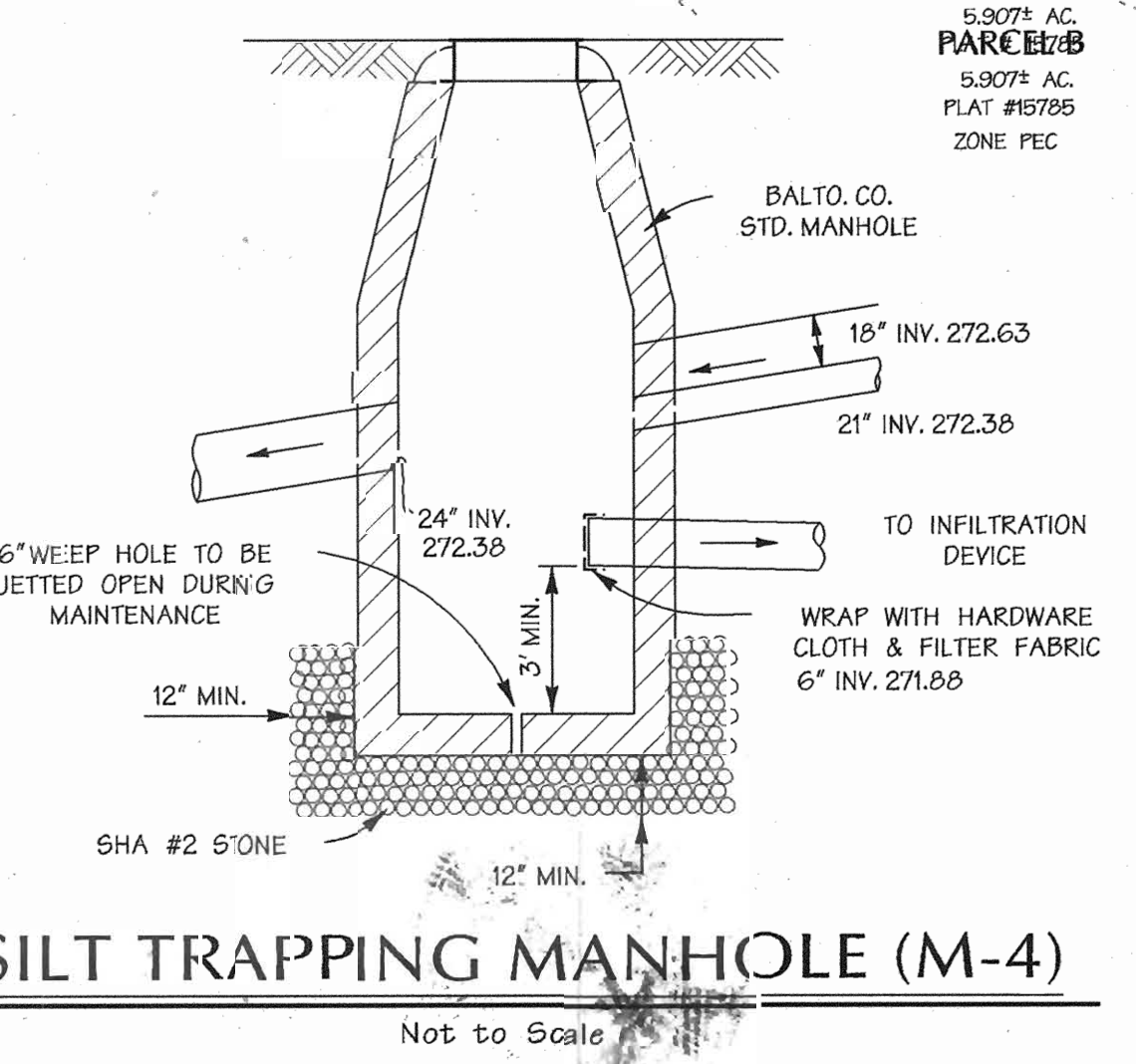
A Team of Land Planners, Landscape Architects, Engineers, Surveyors, Environmental Planners

AREA: TAX MAP 47 PARCEL 12
6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND

TITLE: **STORMWATER MANAGEMENT WATER QUALITY RECHARGE PLAN**

Des. By: CRW Scale: 1"=30' Proj. No.: 95054N
Dm. By: M55 Date: 10/18/05
Chk. By: Approved

Professional Engr. No. 13876



SILT TRAPPING MANHOLE (M-4)
Not to Scale

DEVELOPERS CERTIFICATE:
I/we certify that all developments and/or construction will be done according to these plans and that any responsible personnel involved in the construction projects will have a certificate of attendance at a Department of Environment approved training program for the control of sediment and erosion before beginning the project. I shall engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District.

[Signature] 11/22/05
Signature of developer Date
Print name below signature

ENGINEERS CERTIFICATE:
I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he/she must engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion.

[Signature] 12/15/05
Signature of engineer Date
Print name below signature
KENNETH R. KIMSEY

Reviewed for Howard S.C.D. and meets technical requirements.

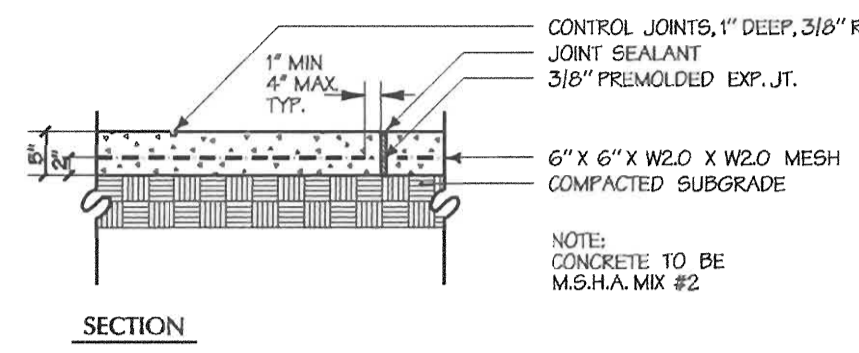
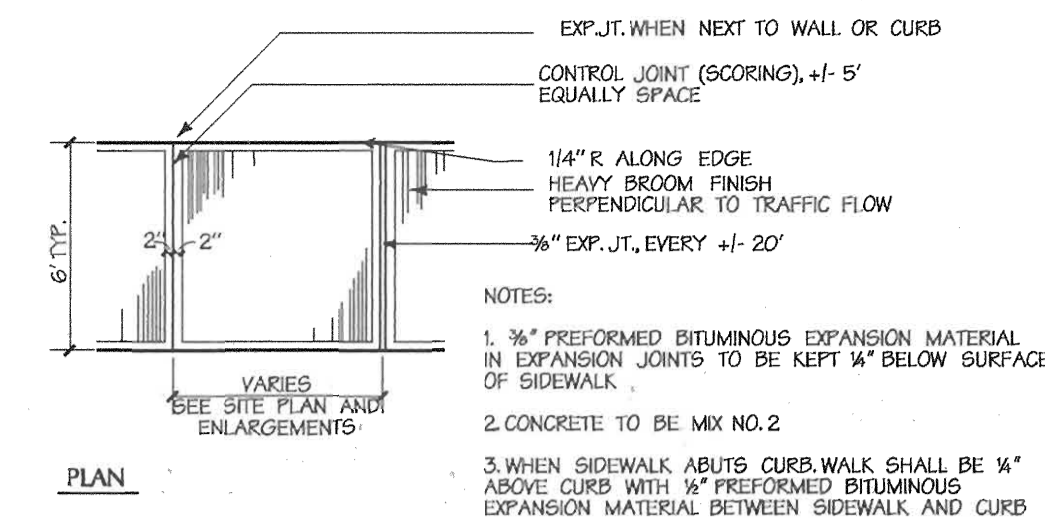
U.S. Natural Resource Conservation Service Date

This development plan is approved for collection and sediment control by the Howard Soil Conservation District.

Howard S.C.D. Date

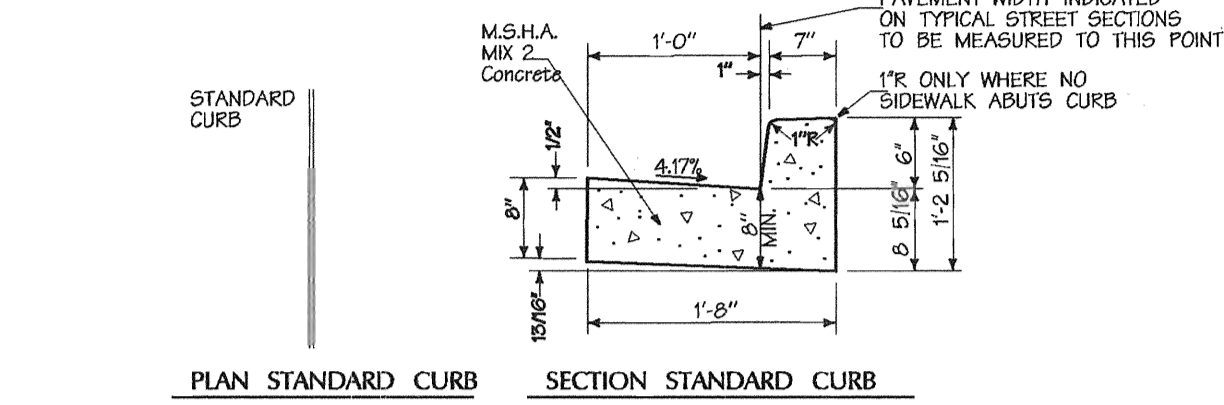
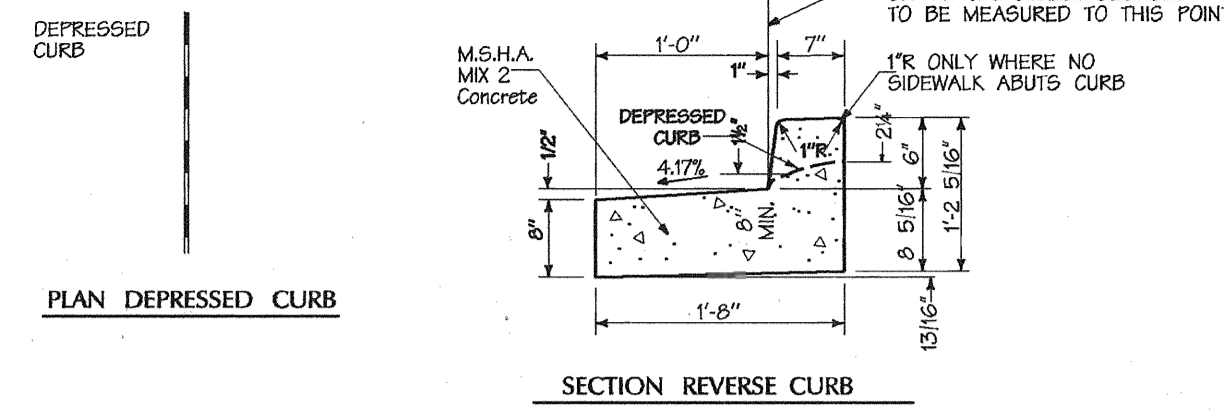
12/15/05
Date

Map Doc # 2005-001



Concrete Walk

Not to Scale

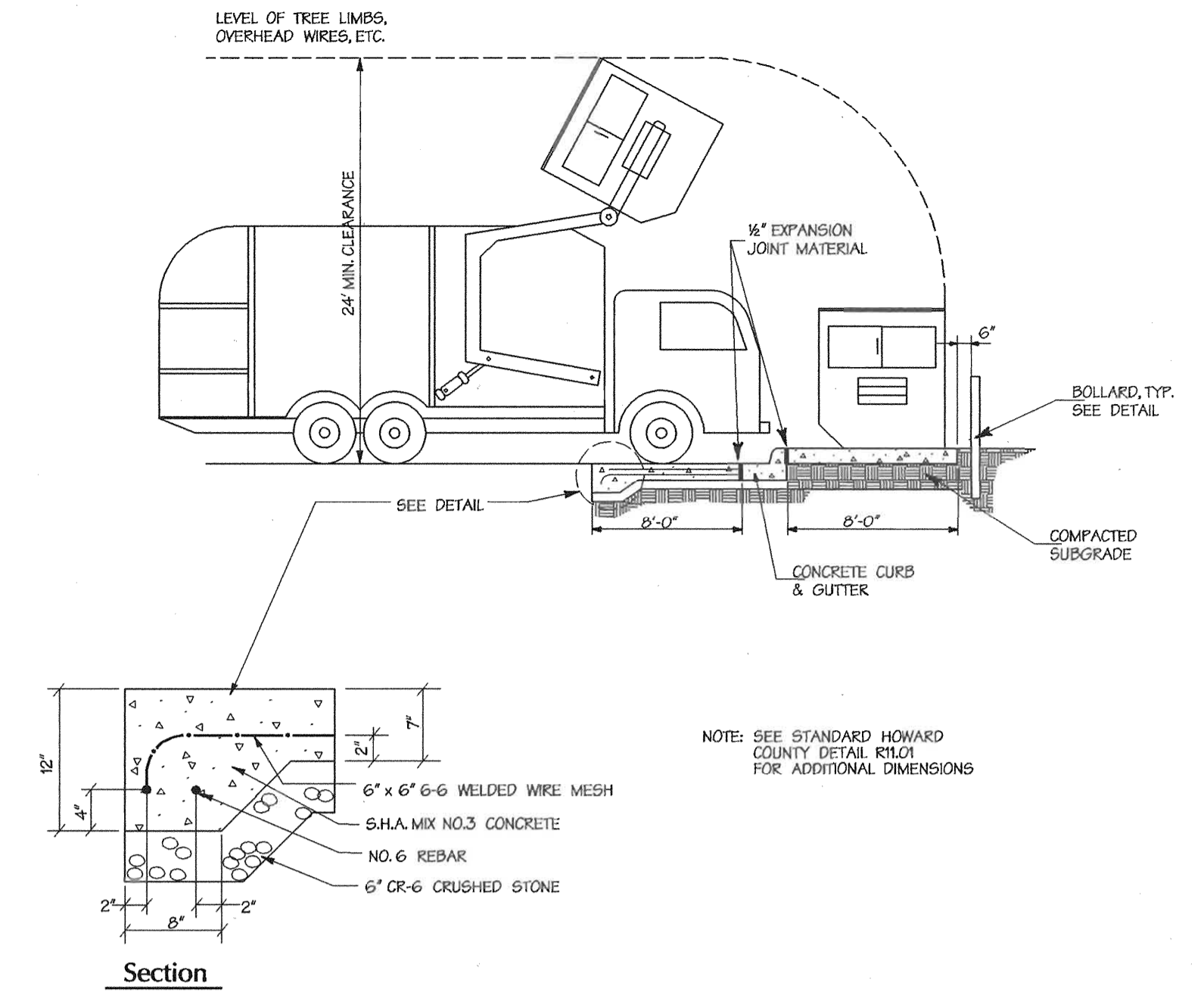


6" Combination Curb & Gutter

Not to Scale

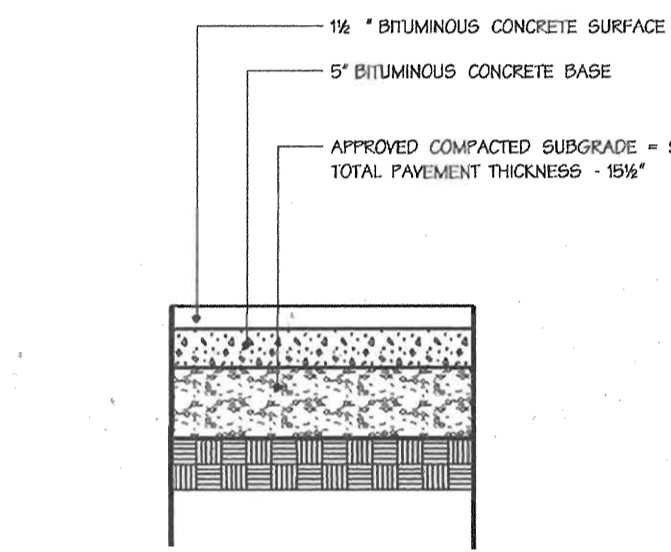
General Notes

- The Contractor shall be governed by the standards and requirements of the following publications:
- Manual on Uniform Traffic Control Devices (MUTCD), 1989 Edition and subsequent revisions.
- AASHTO - Specifications for the Design and Construction of Structural Supports for Highway Signs, April 1975 Edition.
- AASHTO - Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, April 1985 Edition.
- Standard sign panel layouts shall be based on the MUTCD.
- Signs shall be located as shown on the plans. Any required changes in the locations of signs necessary due to field conditions shall have the prior approval of the Engineer.
- It shall be the responsibility of the Contractor to locate and protect all existing facilities that may be affected by this work.
- All new signs shown on this plan shall have Non Reflective (Black Copy) or High Intensity Reflective Sheeting (All Other Colors) background and copy. Reflective Sheeting shall be Type III-A Encapsulated Lens Reflective Element Material.
- All new sheet aluminum signs shall have Non-Demountable Copy.
- The following minimum thicknesses shall be used for the appropriate size of Sheet aluminum sign blanks:
Longest Dimension (Inches) - Minimum Thickness
Up to 12" - 0.040"
12" to 24" - 0.063"
24" to 36" - 0.080"
36" to 48" - 0.100"
Over 48" - 0.125"
- All traffic control signs shall be mounted on Howard County standard posts. A single post shall be provided for signs with an area of 3.0 square feet or less. For signs with an area of greater than 3.0 square feet, two (2) posts shall be provided. Sign posts shall be installed in the ground to a minimum depth of 3.0 feet and the sign post shall extend to the top of the sign panel.
- Signs shall be mounted such that the clearance to the bottom edge of the sign panel is a minimum of six (6) feet above finished grade.



Service Pad and Dumpster Bin

Not to Scale

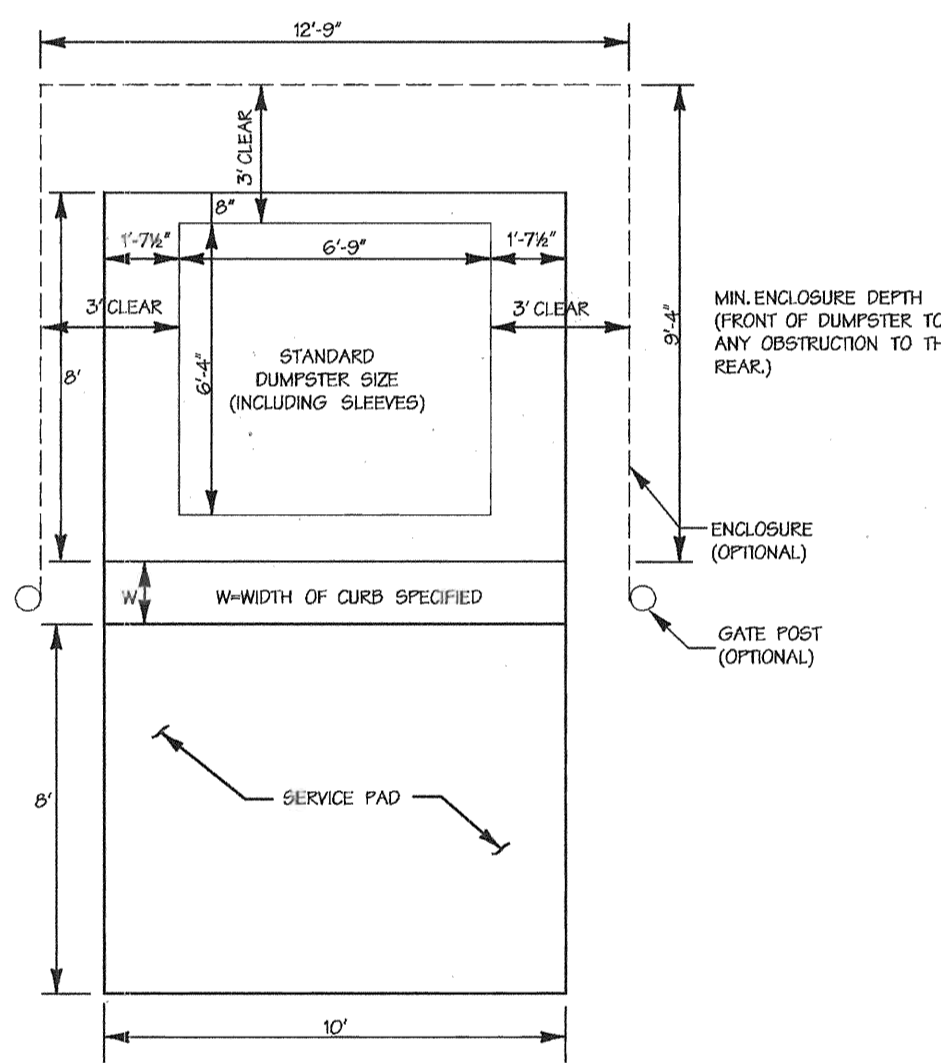


P-2 BITUMINOUS FOR PARKING AREAS

Paving Detail

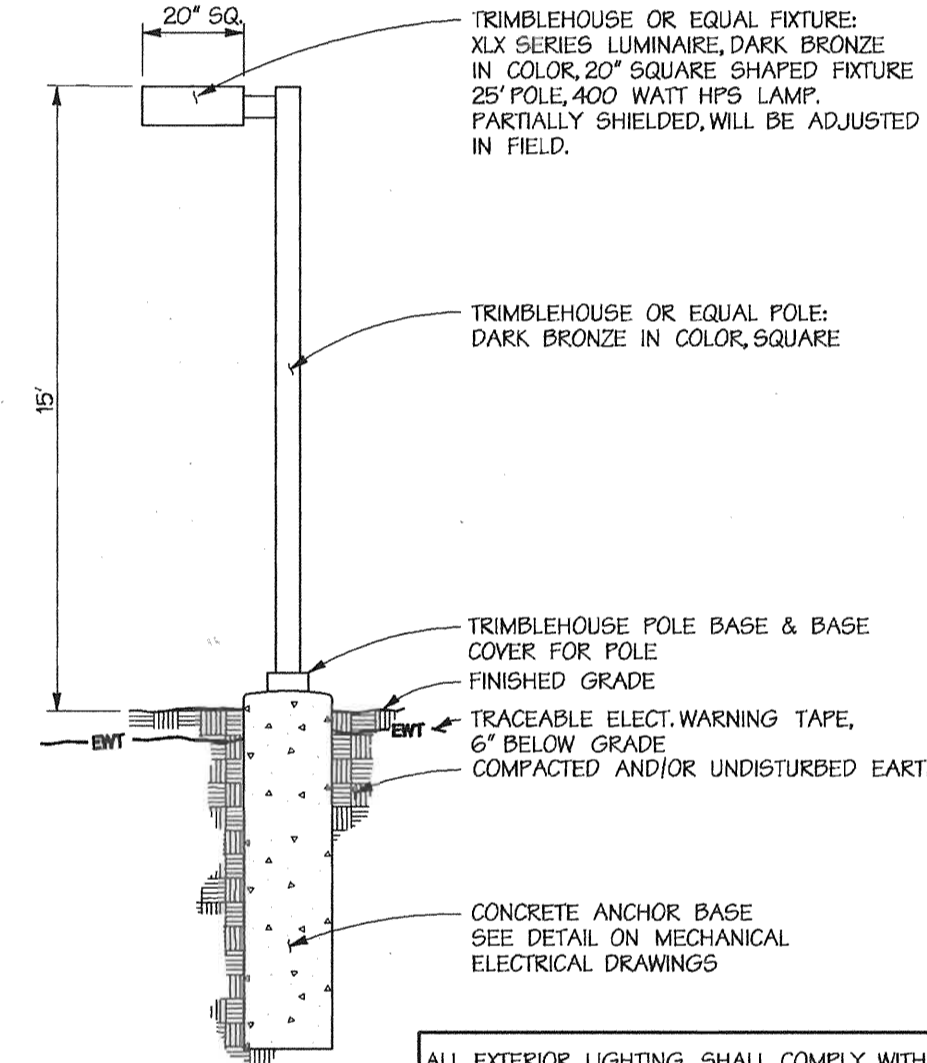
Not to Scale

NOTE: PAVING SECTION TO BE APPROVED BY GEO-TECHNICAL ENGINEER



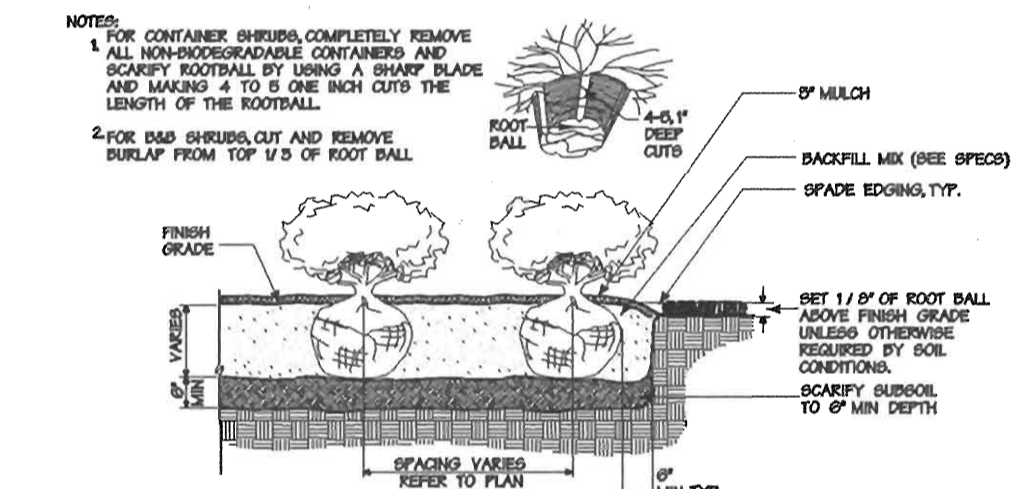
Dumpster Enclosure

Not to Scale



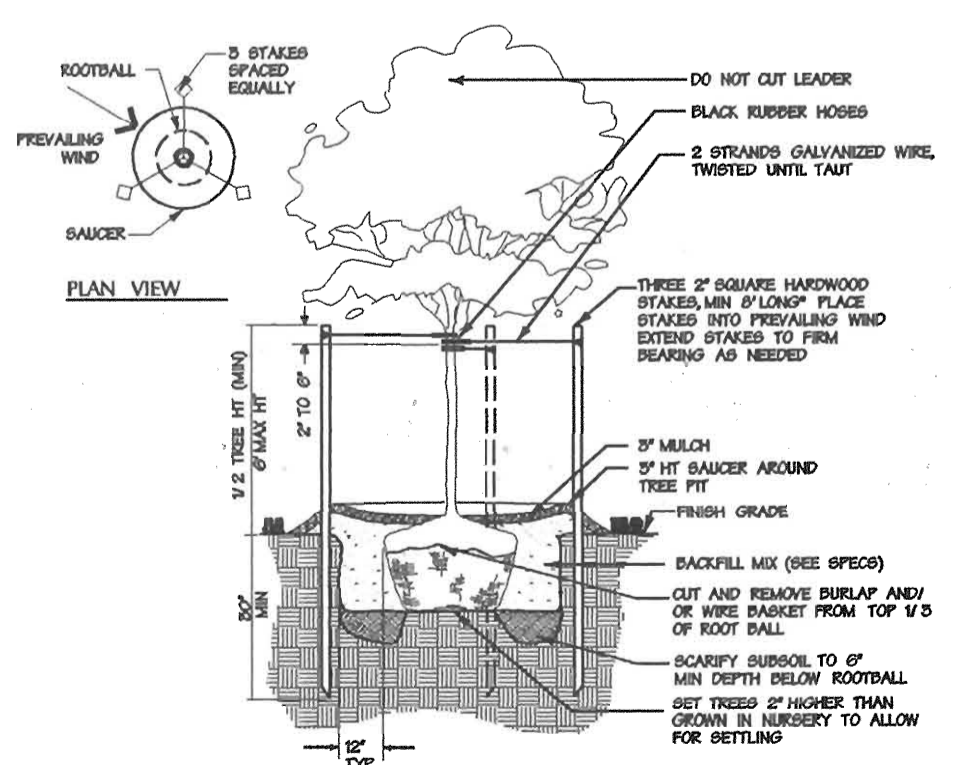
Sharp Cut off Area Light

Not to Scale



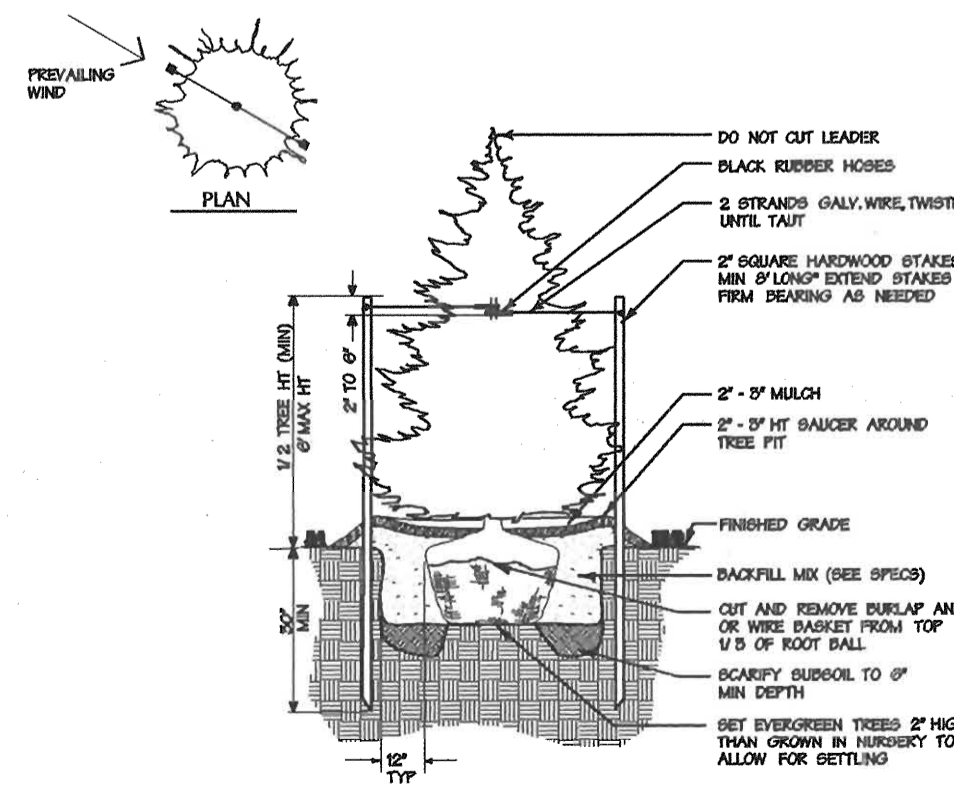
Shrub Bed Planting Detail

Not to Scale



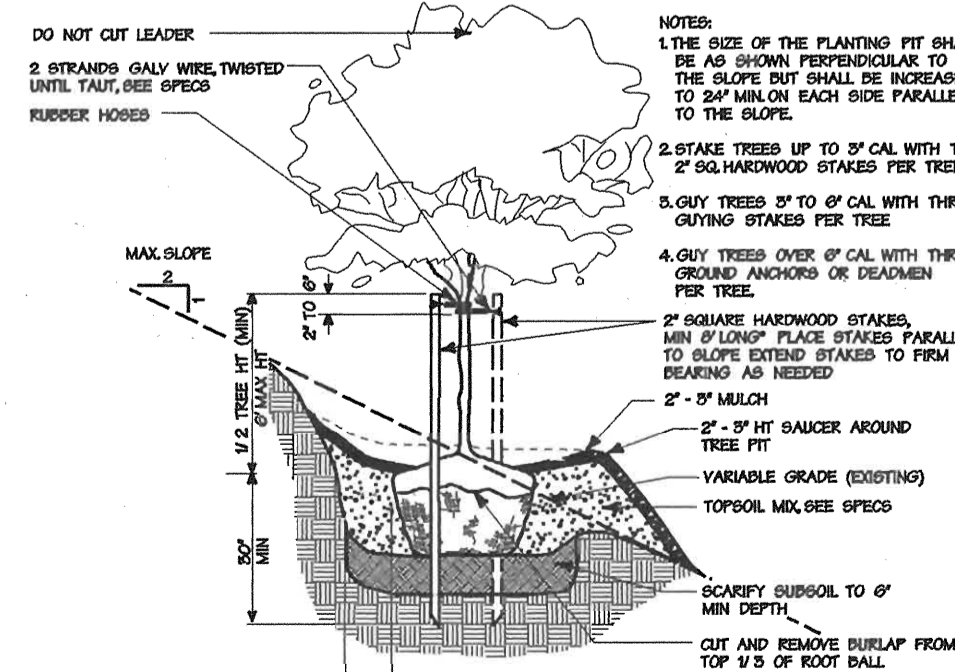
Deciduous Tree Planting Detail

Not to Scale



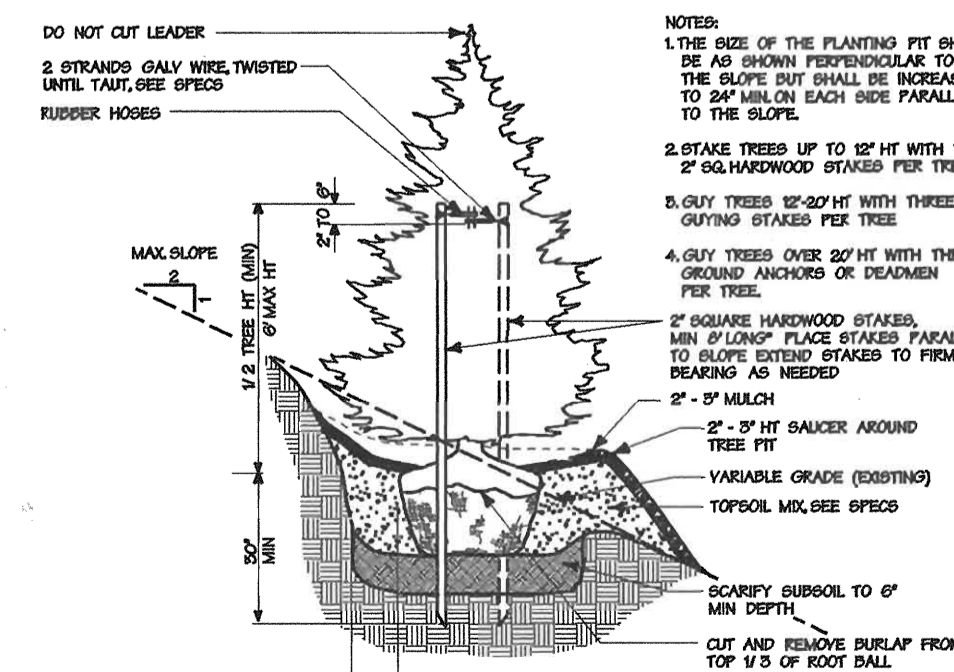
Evergreen Tree Planting Detail

Not to Scale



Deciduous Tree Planting on Slope

Not to Scale



Evergreen Tree Planting on Slope

Not to Scale

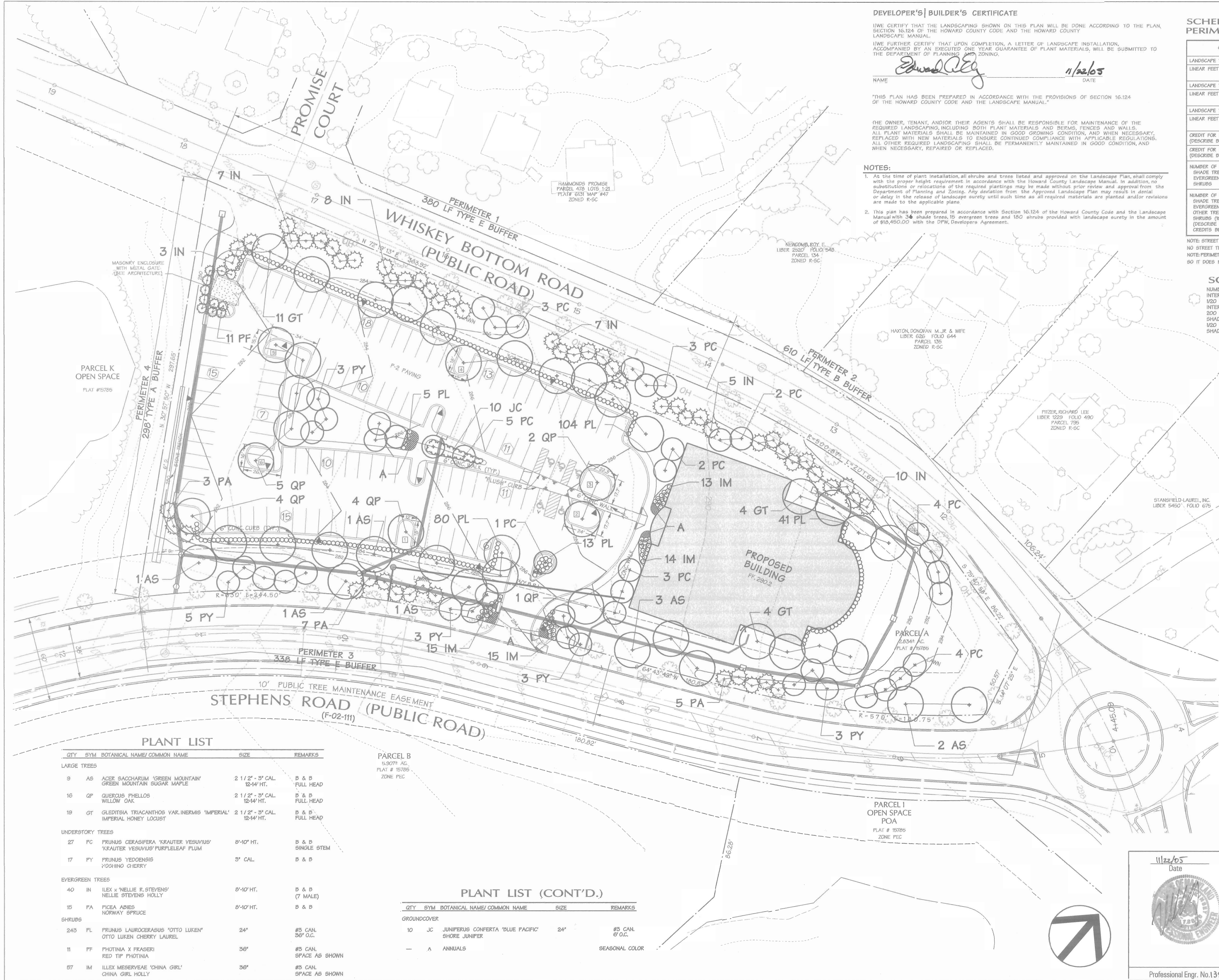
APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING	
<i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	12/22/05 DATE
<i>[Signature]</i> CHIEF, DIVISION OF LAND DEVELOPMENT	12/23/05 DATE
<i>[Signature]</i> DIRECTOR	12/23/05 DATE

Date	No.	Revision Description
		TWO-STORY OFFICE BUILDING
		EMERSON
		CORPORATE COMMONS
		Parcel 'A' (Revitz Property)
		OWNER: EMERSON LAND BUSINESS TRUST 3890 STEPHENS ROAD LAUREL, MD 20732
		DEVELOPER: MATSON, LLC CO. BCS, INC. 5550 STERRETT PLACE SUITE 306 COLUMBIA, MD 21044
		DMW Darr-McCune-Walker, Inc. 200 East Pennsylvania Avenue Pikesville, Maryland 21208 (410) 296-3333 Fax 296-4706
		A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
AREA	TAX MAP 47	PARCEL A
	6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND	
SITE DETAILS		
Des. By KAD	Scale As Shown	Proj. No. 95054N
Dim. By M55	Date 10/18/05	9 of 10
Chk. By	Approved	

11/22/05
Date

Professional Engr. No. 13876

11/22/05 09:22:23



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.

Edward Kelly 11/22/05
 NAME DATE

"THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL."

THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.

NOTES:

- At the time of plant installation, all shrubs and trees listed and approved on the Landscape Plan, shall comply with the proper height requirement in accordance with the Howard County Landscape Manual. In addition, no substitutions or relocations of the required plantings may be made without prior review and approval from the Department of Planning and Zoning. Any deviation from the Approved Landscape Plan may result in denial or delay in the release of landscape surety until such time as all required materials are planted and/or revisions are made to the applicable plans.
- This plan has been prepared in accordance with Section 16.124 of the Howard County Code and the Landscape Manual with 36 shade trees, 15 evergreen trees and 180 shrubs provided with landscape surety in the amount of \$18,450.00 with the DPW, Developers Agreement.

SCHEDULE A PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO RIGHT OF WAY	ADJACENT TO PERIMETER PROP.
LANDSCAPE TYPE "A"		4
LINEAR FEET OF PERIMETER		298
LANDSCAPE TYPE "B"	2	
LINEAR FEET OF PERIMETER	610	
LANDSCAPE TYPE "E"	1	3
LINEAR FEET OF PERIMETER	390	338
CREDIT FOR EXISTING VEGETATION (DESCRIBE BELOW IF NEEDED)		
CREDIT FOR FENCE (DESCRIBE BELOW IF NEEDED)		
NUMBER OF PLANTS REQUIRED		
SHADE TREES	10	12
EVERGREEN TREES	15	8
SHRUBS	95	85
NUMBER OF PLANTS PROVIDED*		
SHADE TREES	11	13
EVERGREEN TREES	26	17
OTHER TREES (2:1 SUBSTITUTION)	8	14
SHRUBS (10:1 SUBSTITUTION) (DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	104	110

NOTE: STREET TREES FOR THIS SITE WERE PROVIDED UNDER F-02-111. NO STREET TREES WILL BE PROVIDED FOR THIS PLAN. NOTE: PERIMETER 4 IS AN INTERIOR LOY LANE IN THE SAME SUBDIVISION, SO IT DOES NOT GENERATE ANY LANDSCAPE REQUIREMENTS.

SCHEDULE B

NUMBER OF PARKING SPACES...116
 INTERNAL ISLANDS REQUIRED...6
 1/20 SPACES
 INTERNAL ISLANDS PROVIDED...6
 200 SQ. FT./ISLAND
 SHADE TREES REQUIRED...6
 1/20 SPACES
 SHADE TREES PROVIDED...6*

LEGEND

- PROPERTY LINE
- EASEMENT LINE
- EX. CONTOURS
- EX. FIRE HYDRANT
- EX. UTILITIES
- EX. BUILDING
- EX. FENCE
- EX. TREE LINE
- EX. TREE
- EX. CURB & GUTTER
- EX. TELEPHONE POLE
- PROP. CURB & GUTTER
- PROP. CONC. WALK
- PROP. CONTOURS
- PROP. BUILDING
- PROP. LIGHT (BY LIGHTING CONSULTANT)
- PARKING LOT ISLAND PER LANDSCAPE MANUAL
- OH EXISTING BGE OVERHEAD ELECTRIC UTILITY LINE

DATA SOURCES

Boundary information taken from a record plat prepared by DMW, Inc.
 Topography taken from a field run survey by DMW, Inc.

APPROVED HOWARD COUNTY DEPT. OF PLANNING AND ZONING
[Signature] 12/08/05
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
[Signature] 12/23/05
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
[Signature] 12/23/05
 DIRECTOR DATE

Date	No.	Revision Description
		TWO-STORY OFFICE BUILDING
		EMERSON CORPORATE COMMONS
		Parcel 'A' (Revitz Property)
		OWNER: EMERSON LAND BUSINESS TRUST 8920 STEPHENS ROAD LAUREL, MD 20702
		DEVELOPER: MATSON LLC CO BCS INC. 5550 STERRETT PLACE SUITE 308 COLUMBIA, MD 21044
		DMW Darr-McCune-Walker, Inc. 200 East Pennsylvania Avenue Towson, Maryland 21286 (410) 236-3353 Fax 296-4705
		A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
		AREA: TAX MAP 47 PARCEL 12 6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND
		TITLE: LANDSCAPE PLAN
Des. By	MJP	Scale 1"=30'
Drn. By	MSS	Date 10/18/05
Chk. By	Approved	Proj. No. 95054.N
		10 of 10
		SDP-06-29

PLANT LIST

QTY	SYM	BOTANICAL NAME/COMMON NAME	SIZE	REMARKS
LARGE TREES				
9	AS	ACER SACCHARUM 'GREEN MOUNTAIN'	2 1/2" - 3" CAL. 12-14" HT.	D & B FULL HEAD
16	QP	QUERCUS PHELLOS WILLOW OAK	2 1/2" - 3" CAL. 12-14" HT.	D & B FULL HEAD
19	GT	GLEDITSIA TRIACANTHOS VAR. INERMIS 'IMPERIAL'	2 1/2" - 3" CAL. 12-14" HT.	D & B FULL HEAD
UNDERSTORY TREES				
27	PC	PRUNUS CERASIFERA 'KRAUTER YESUVIUS'	8'-10" HT.	D & B SINGLE STEM
17	PY	PRUNUS YEDOENSIS MOHINO CHERRY	3" CAL.	D & B
EVERGREEN TREES				
40	IN	ILEX x 'NELLIE R. STEVENS'	8'-10" HT.	D & B (7 MALE)
15	FA	PICEA ADIES NORWAY SPRUCE	8'-10" HT.	D & B
SHRUBS				
243	PL	PRUNUS LAUROCERASUS 'OTTO LUKEN'	24"	#3 CAN. 36" O.C.
11	PF	PHOTINIA X FRASERI RED TIF PHOTINIA	36"	#3 CAN. SPACE AS SHOWN
87	IM	ILEX MESERVEAE 'CHINA GIRL'	36"	#3 CAN. SPACE AS SHOWN

PLANT LIST (CONT'D.)

QTY	SYM	BOTANICAL NAME/COMMON NAME	SIZE	REMARKS
GROUND COVER				
10	JC	JUNIPERUS CONFERTA 'BLUE PACIFIC'	24"	#5 CAN. 6" O.C.
	A	ANNUALS		SEASONAL COLOR

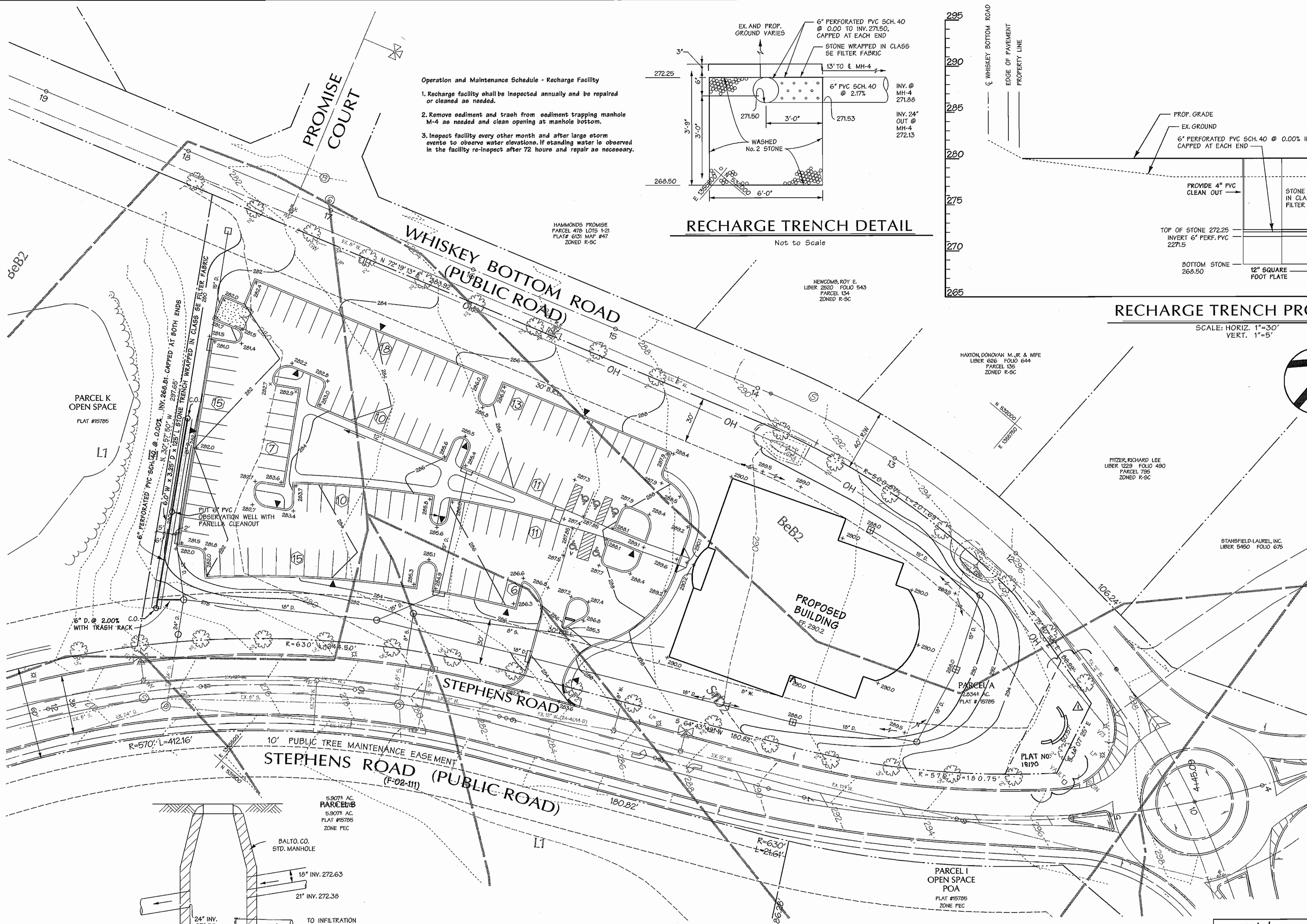
PARCEL B
 15,907 SQ. FT.
 PLAT # 15785
 ZONE PEG

PARCEL I
 OPEN SPACE
 POA
 PLAT # 15785
 ZONE PEG

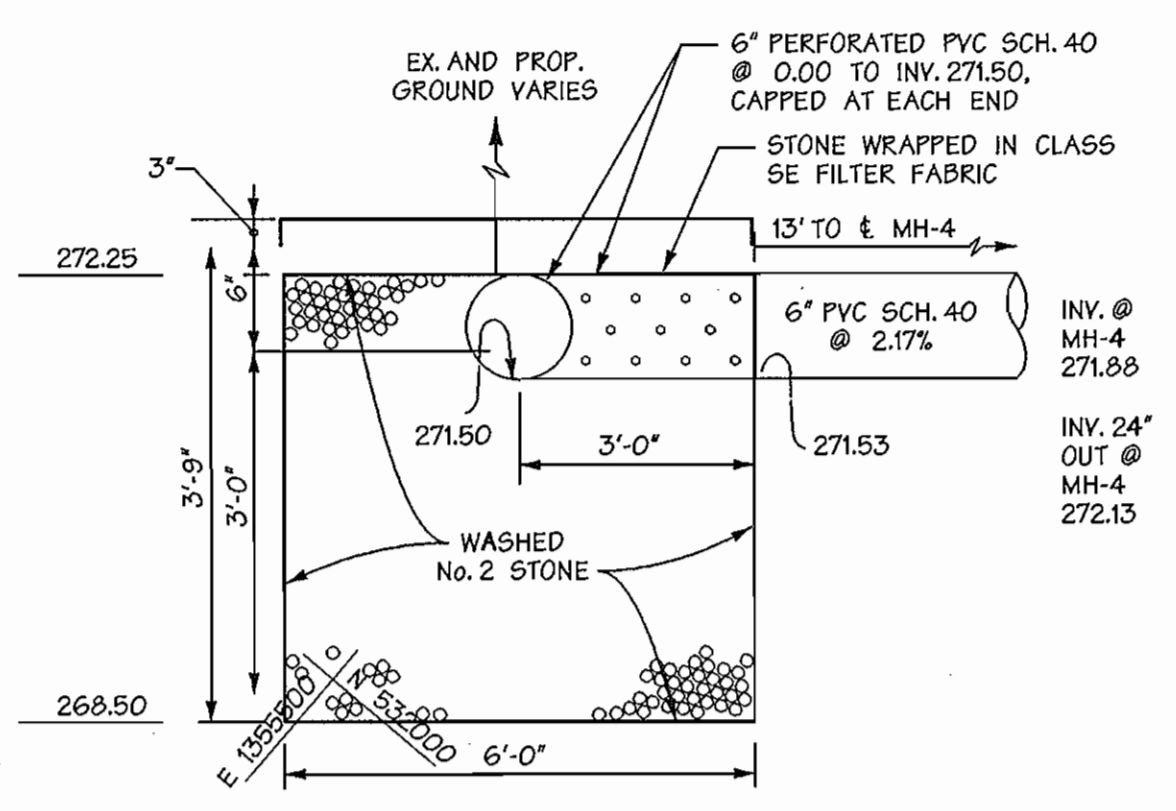
11/22/05
 Date



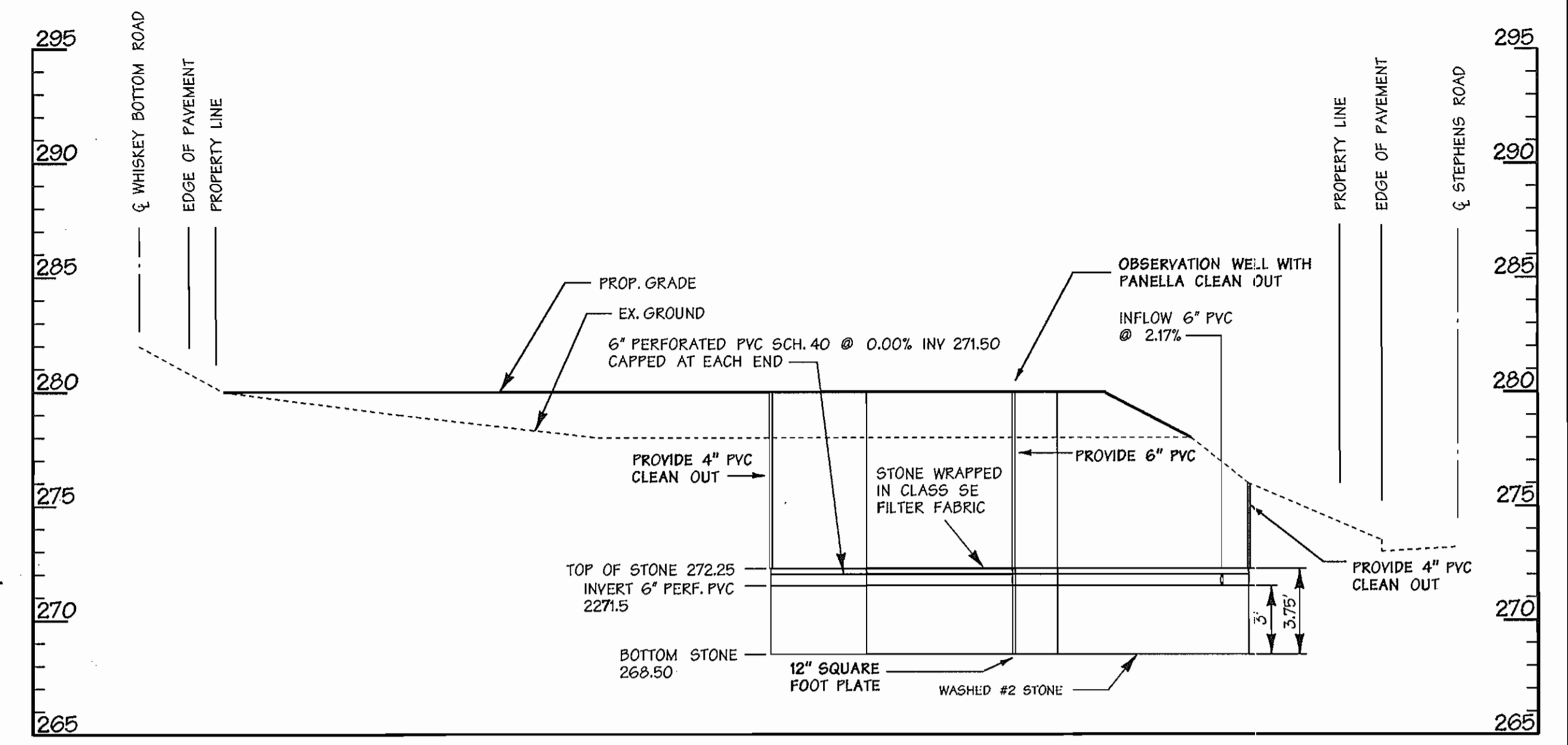
Professional Engr. No. 13676



- Operation and Maintenance Schedule - Recharge Facility**
1. Recharge facility shall be inspected annually and be repaired or cleaned as needed.
 2. Remove sediment and trash from sediment trapping manhole M-4 as needed and clean opening at manhole bottom.
 3. Inspect facility every other month and after large storm events to observe water elevations. If standing water is observed in the facility re-inspect after 72 hours and repair as necessary.



RECHARGE TRENCH DETAIL
Not to Scale



RECHARGE TRENCH PROFILE
SCALE: HORIZ. 1"=30'
VERT. 1"=5'

LEGEND

---	PROPERTY LINE
---	EASEMENT LINE
---	EX. CONTOURS
---	EX. UTILITIES
---	EX. BUILDING
---	EX. FENCE
---	EX. TREE LINE
---	EX. TREE
---	EX. CURB & GUTTER
---	EX. TELEPHONE POLE
---	PROP. CURB & GUTTER
---	PROP. CONC. WALK
---	PROP. CONTOURS
---	PROP. BUILDING
---	PROP. LIGHT (BY LIGHTING CONSULTANT)
+	PROP. SPOT ELEVATION
OH	EXISTING BGE OVERHEAD ELECTRIC UTILITY LINE
O.C.	CLEAN OUT

DATA SOURCES
Boundary information taken from a record plat prepared by DMW, Inc.
Topography taken from a field run survey by DMW, Inc.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

[Signature] 12/23/05
 CHIEF DEVELOPMENT ENGINEERING DIVISION DATE
 [Signature] 12/23/05
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
 [Signature] 12/23/05
 DIRECTOR DATE

7-06-00	Added Entrance Sign + Easement Line
Date	No. Revision Description

TWO-STORY OFFICE BUILDING
EMERSON
CORPORATE COMMONS
Parcel 'A' (Revitz Property)

OWNER: EMERSON LAND BUSINESS TRUST 8920 STEPHENS ROAD LAUREL, MD 20732

DEVELOPER: MATSON, LLC CO. BLDG. INC. 850 STERRETT PLACE SUITE 306 COLUMBIA, MD 21044

DMW
Duff McConne Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4706

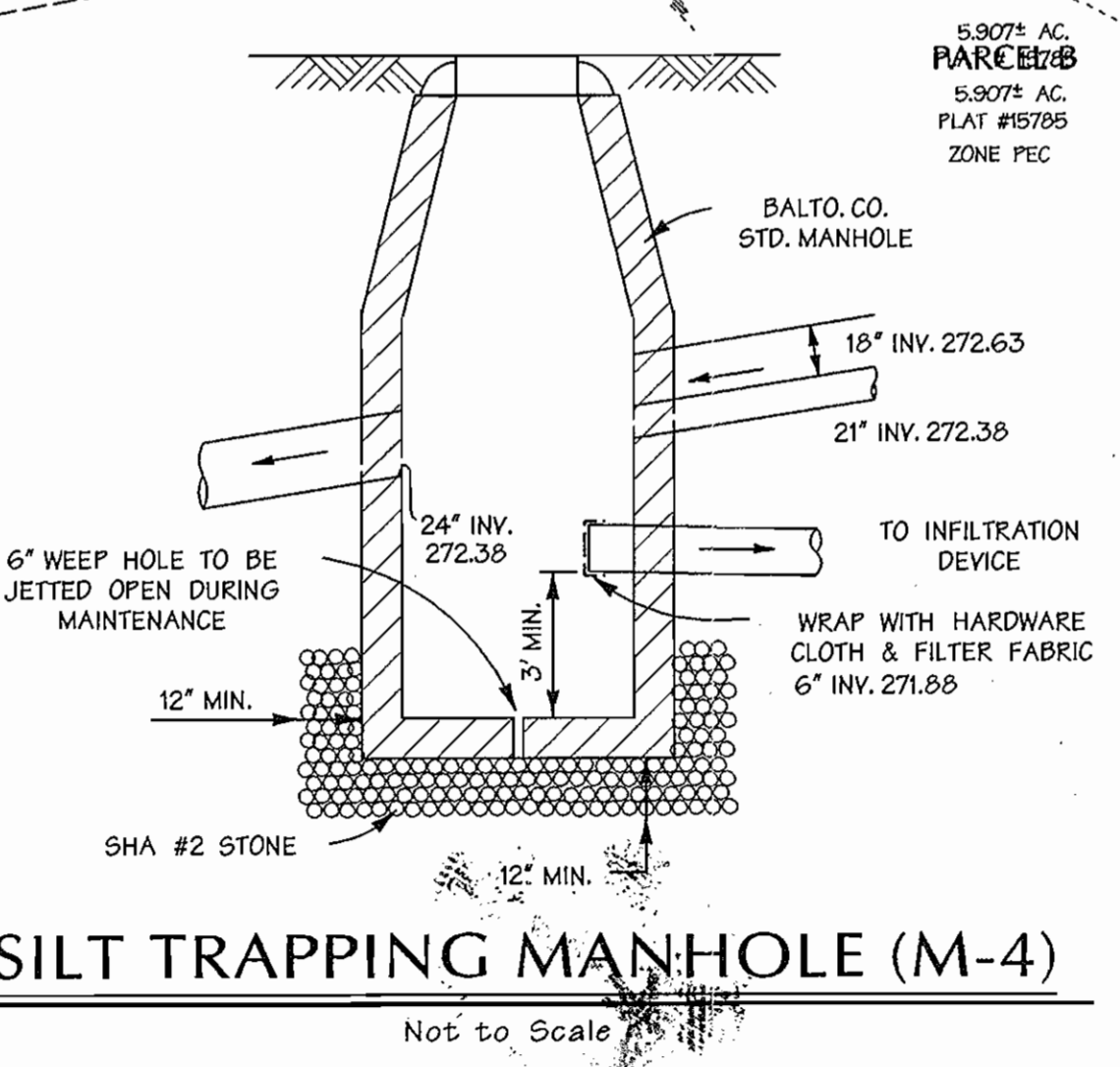
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

AREA: TAX MAP 47 PARCEL 12
6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND

TITLE: **STORMWATER MANAGEMENT WATER QUALITY RECHARGE PLAN**

Des. By: CRW Scale: 1"=30' Proj. No.: 95054N
Dm. By: MSS Date: 10/18/05
Chk. By: Approved

8 of 10
SDP-06-29



SILT TRAPPING MANHOLE (M-4)
Not to Scale

DEVELOPERS CERTIFICATE:
I/we certify that all development and/or construction will be done according to these plans and that any responsible personnel involved in the construction project will have a certificate of attendance at a Department of Environment approved training program for the control of sediment and erosion before beginning the project. I shall engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District.

[Signature] 11/22/05
Signature of developer Date
Print name below signature

ENGINEERS CERTIFICATE:
I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he/she must engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion.

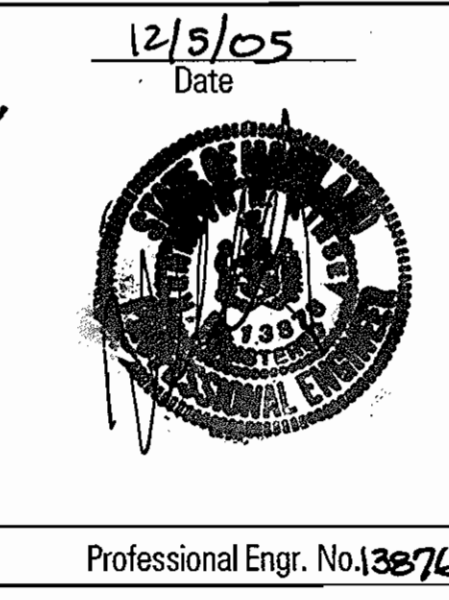
[Signature] 12/5/05
Signature of engineer Date
Print name below signature
KENNETH R. KIMSEY

Reviewed for Howard S.C.D. and meets technical requirements

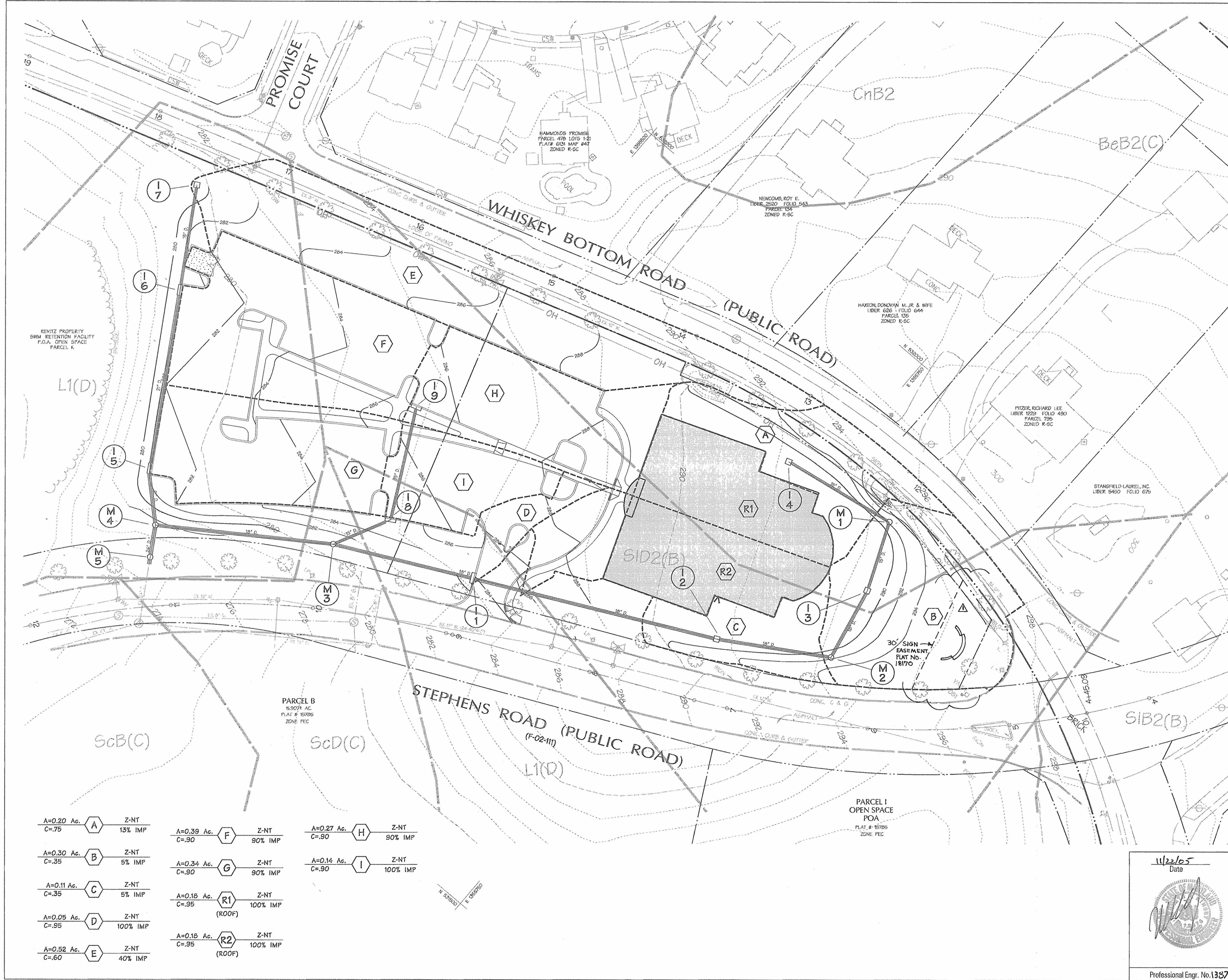
U.S. Natural Resource Conservation Service Date

This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

Howard S.C.D. Date

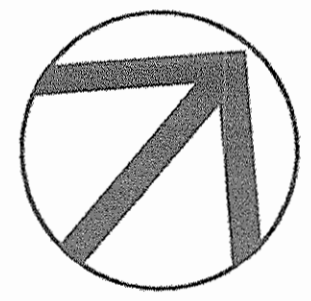


138905418054N.M01



LEGEND

- PROPERTY LINE
- - - EASEMENT LINE
- EX. CONTOURS
- EX. FIRE HYDRANT
- EX. UTILITIES
- EX. BUILDING
- EX. TREE LINE
- EX. TREE
- EX. CURB & GUTTER
- EX. TELEPHONE POLE
- EX. BGE OVERHEAD ELECTRIC UTILITY LINE
- CnB2 BeB2(C) SOIL TYPE AND BOUNDARY
- DRAINAGE AREA BOUNDARY
- 284 PROP. CONTOURS



APPROVED: HOWARD COUNTY, DEPT. OF PLANNING AND ZONING

[Signature] 12/23/05
 CHIEF DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 12/23/05
 CHIEF DIVISION OF LAND DEVELOPMENT DATE

[Signature] 12/23/05
 DIRECTOR DATE

7-01-06	▲	Add Entrance Sign + Easement Lines
Date	No.	Revision Description

TWO-STORY OFFICE BUILDING
EMERSON
CORPORATE COMMONS
 Parcel 'A' (Revitz Property)

OWNER: EMERSON LAND BUSINESS TRUST
 8920 STEPHENS ROAD
 LAUREL, MD 20752

DEVELOPER: MATSON LLC
 CO BCS, INC.
 6550 STERRETT PLACE
 SUITE 306
 COLUMBIA, MD 21044

DMW
 Dan McCune-Walker, Inc.
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 296-3353
 Fax 296-4705

A Team of Land Planners,
 Landscape Architects,
 Engineers, Surveyors &
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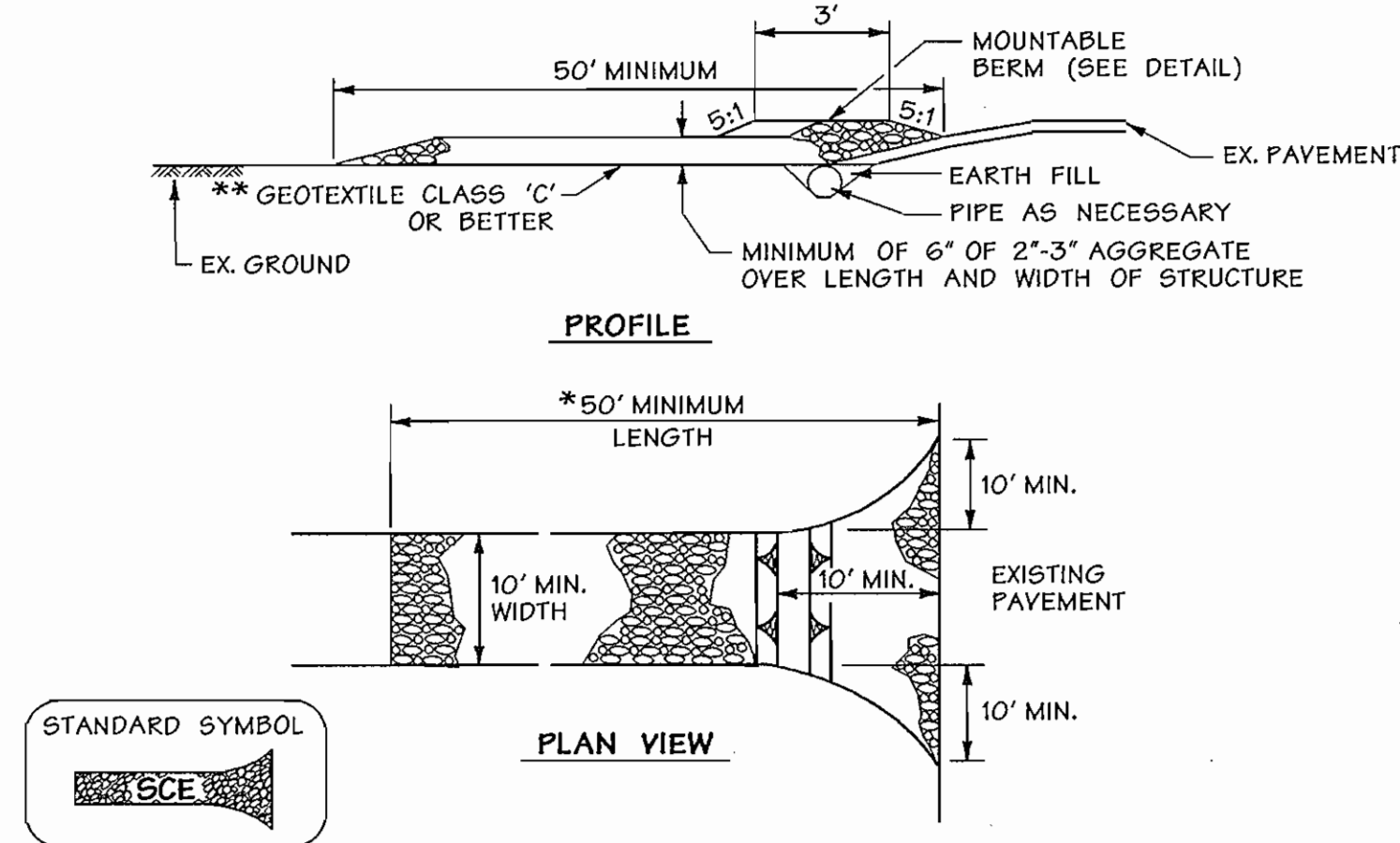
11/22/05
 Date

Professional Engr. No. 13376

AREA	TAX MAP 47	PARCEL A
	6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND	
TITLE	DRAINAGE AREA MAP AND SOILS MAP	
Des. By	Scale 1"=30'	Proj. No. 95054N
Dim. By M55	Date 10/18/05	6 of 10
Chk. By	Approved	

A=0.20 Ac. A Z-NT C=75 13% IMP	A=0.39 Ac. F Z-NT C=90 90% IMP	A=0.27 Ac. H Z-NT C=90 90% IMP
A=0.30 Ac. B Z-NT C=35 5% IMP	A=0.34 Ac. G Z-NT C=90 90% IMP	A=0.14 Ac. I Z-NT C=90 100% IMP
A=0.11 Ac. C Z-NT C=35 5% IMP	A=0.18 Ac. R1 Z-NT C=95 100% IMP (ROOF)	
A=0.05 Ac. D Z-NT C=95 100% IMP	A=0.18 Ac. R2 Z-NT C=95 100% IMP (ROOF)	
A=0.52 Ac. E Z-NT C=60 40% IMP		

MD 95054N 10/18/05 11:22 AM
 Man No. 21 0252445 2005

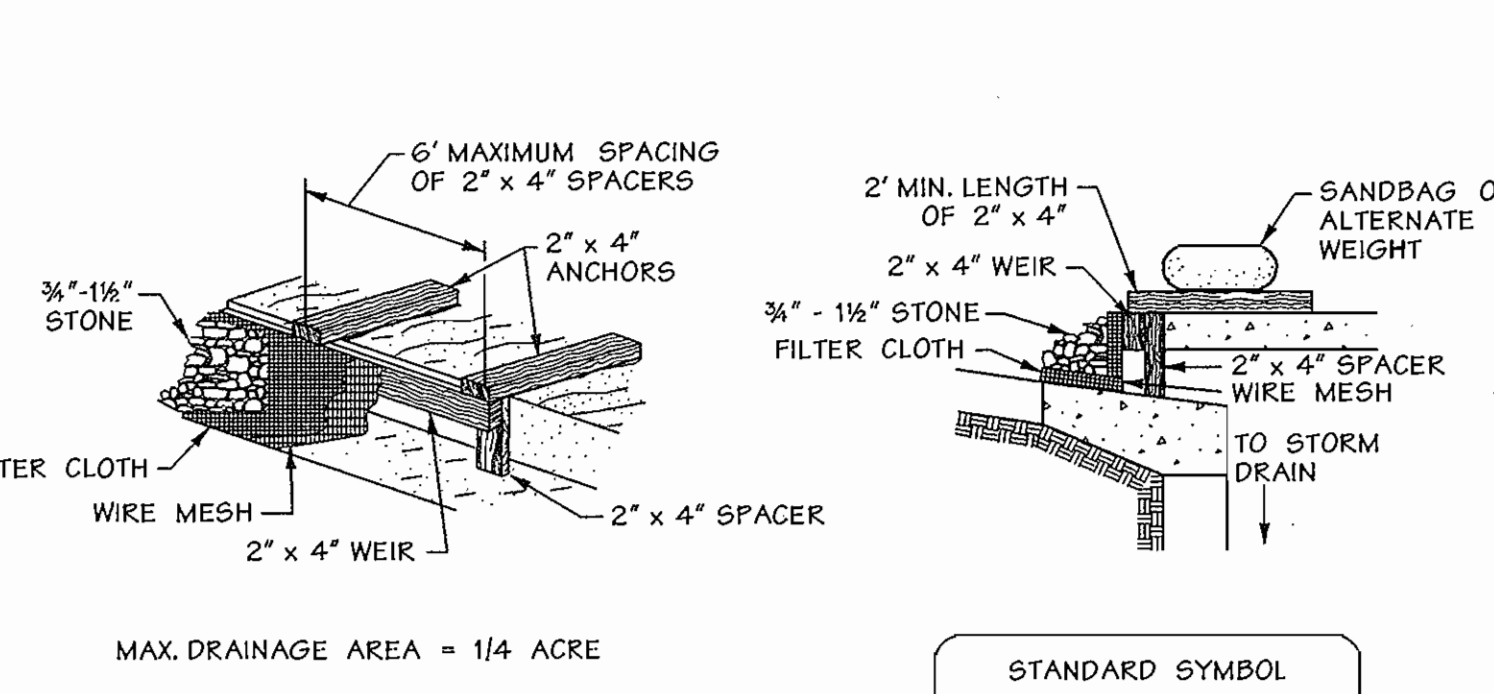


CONSTRUCTION SPECIFICATIONS

1. LENGTH - MINIMUM OF 50' (*50' FOR SINGLE RESIDENCE LOT).
2. WIDTH - 10' MINIMUM, SHOULD BE FLARED AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
3. GEOTEXTILE FABRIC CLASS C (FILTER CLOTH) SHALL BE PLACED OVER THE EXISTING GROUND PRIOR TO PLACING STONE. **THE PLAN APPROVAL AUTHORITY MAY NOT REQUIRE SINGLE FAMILY RESIDENCES TO USE GEOTEXTILE.
4. STONE - CRUSHED AGGREGATE (2" TO 3") OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT SHALL BE PLACED AT LEAST 6" DEEP OVER THE LENGTH AND WIDTH OF THE ENTRANCE.
5. SURFACE WATER - ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED THROUGH THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PIPE INSTALLED THROUGH THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROTECTED WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 6" OF STONE OVER THE PIPE. PIPE HAS TO BE SIZED ACCORDING TO THE DRAINAGE. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY A PIPE WILL NOT BE NECESSARY. PIPE SHOULD BE SIZED ACCORDING TO THE AMOUNT OF RUNOFF TO BE CONVEYED. A 6" MINIMUM WILL BE REQUIRED.
6. LOCATION - A STABILIZED CONSTRUCTION ENTRANCE SHALL BE LOCATED AT EVERY POINT WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES A CONSTRUCTION SITE. VEHICLES LEAVING THE SITE MUST TRAVEL OVER THE ENTIRE LENGTH OF THE STABILIZED CONSTRUCTION ENTRANCE.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE F - 17 - 5 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Stabilized Construction Entrance Not To Scale

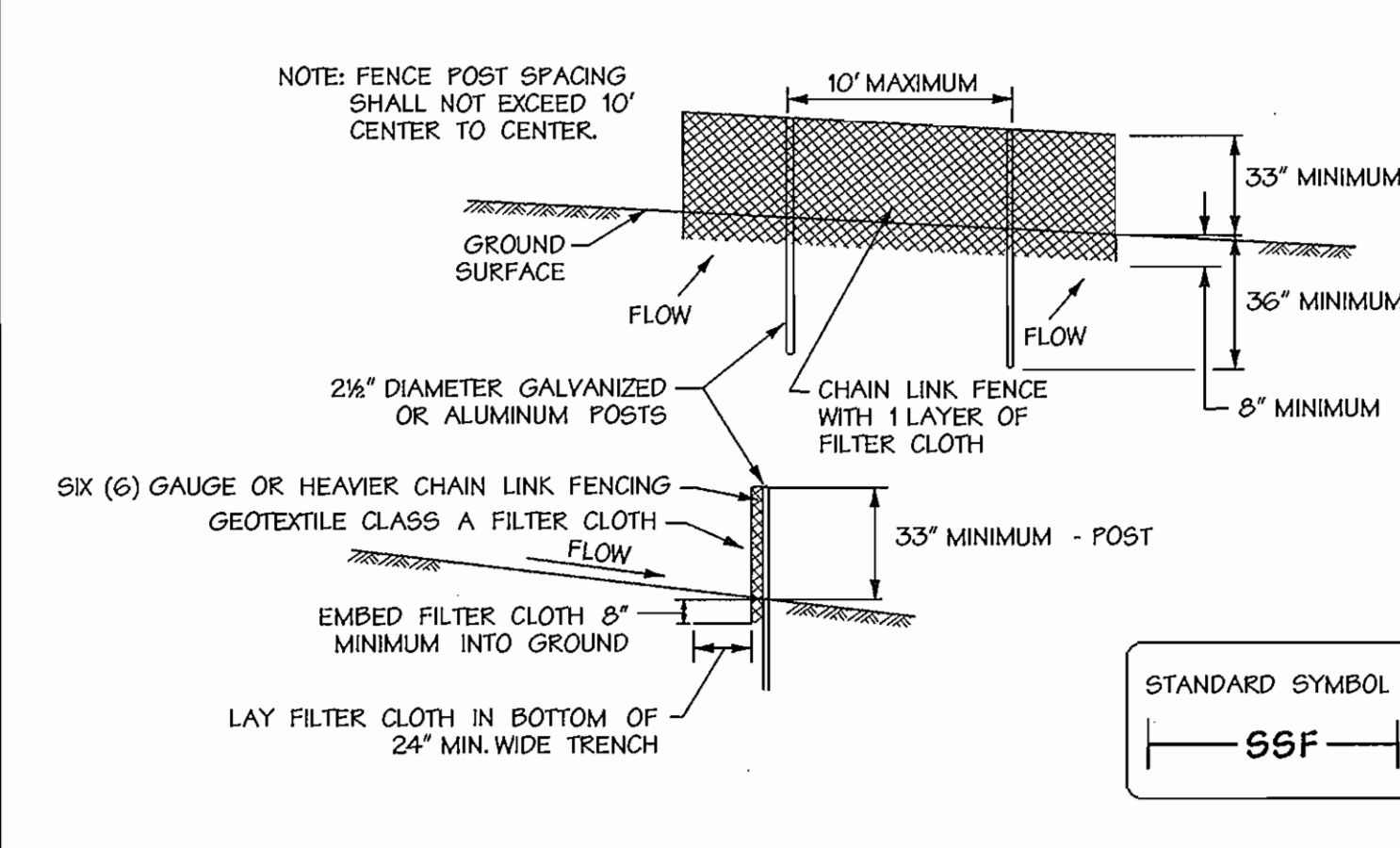


CONSTRUCTION SPECIFICATIONS

1. ATTACH A CONTINUOUS PIECE OF 1/2" x 1/2" WIRE MESH (30" MINIMUM WIDTH BY THROAT LENGTH PLUS 4") TO THE 2" x 4" WEIR (MEASURING THROAT LENGTH PLUS 2") AS SHOWN ON THE STANDARD DRAWING.
2. PLACE A CONTINUOUS PIECE OF GEOTEXTILE CLASS E THE SAME DIMENSIONS AS THE WIRE MESH OVER THE WIRE MESH AND SECURELY ATTACH IT TO THE 2" x 4" WEIR.
3. SECURELY NAIL THE 2" x 4" WEIR TO A 9" LONG VERTICAL SPACER TO BE LOCATED BETWEEN THE WEIR AND THE INLET FACE (MAX. 4' APART).
4. PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL (MINIMUM 2' LENGTHS OF 2" x 4" TO THE TOP OF THE WEIR AT SPACER LOCATIONS). THESE 2" x 4" ANCHORS SHALL EXTEND ACROSS THE INLET TOP AND BE HELD IN PLACE BY SANDBAGS OR ALTERNATE WEIGHT.
5. THE ASSEMBLY SHALL BE PLACED SO THAT THE END SPACERS ARE A MINIMUM 1' BEYOND BOTH ENDS OF THE THROAT OPENING.
6. FORM THE 1/2" x 1/2" WIRE MESH AND THE GEOTEXTILE FABRIC TO THE CONCRETE GUTTER AND AGAINST THE FACE OF THE CURB ON BOTH SIDES OF THE INLET. PLACE CLEAN 3/4" x 1 1/2" STONE OVER THE WIRE MESH AND GEOTEXTILE IN SUCH A MANNER TO PREVENT WATER FROM ENTERING THE INLET UNDER OR AROUND THE GEOTEXTILE.
7. THIS TYPE OF PROTECTION MUST BE INSPECTED FREQUENTLY AND THE FILTER CLOTH AND STONE REPLACED WHEN CLOGGED WITH SEDIMENT.
8. ASSURE THAT STORM FLOW DOES NOT BYPASS THE INLET BY INSTALLING A TEMPORARY EARTH OR ASPHALT DIKE TO DIRECT THE FLOW OF THE INLET.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE E - 16 - 5B MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Curb Inlet Protection (COG or COS Inlets) Not To Scale

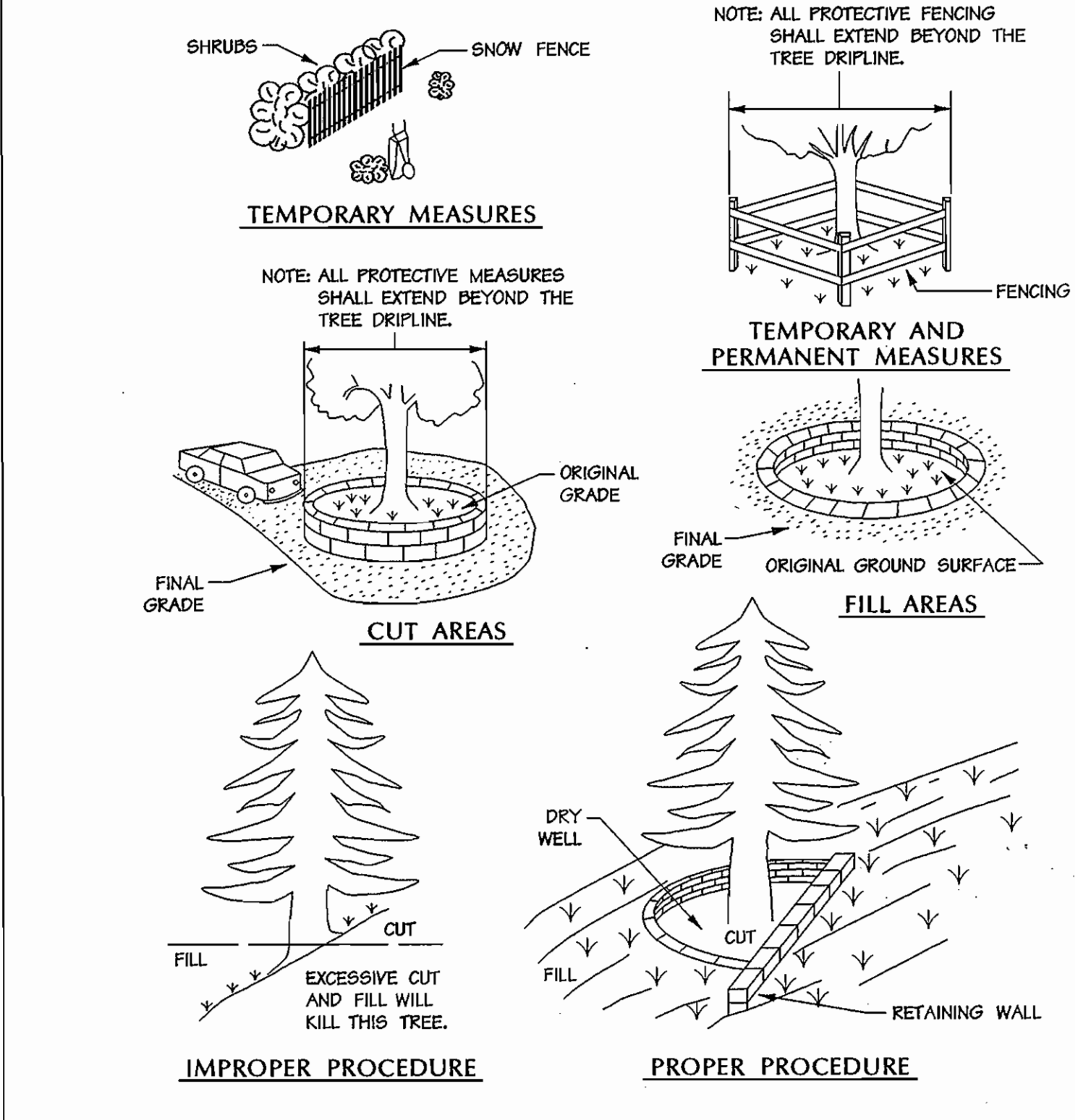


CONSTRUCTION SPECIFICATIONS

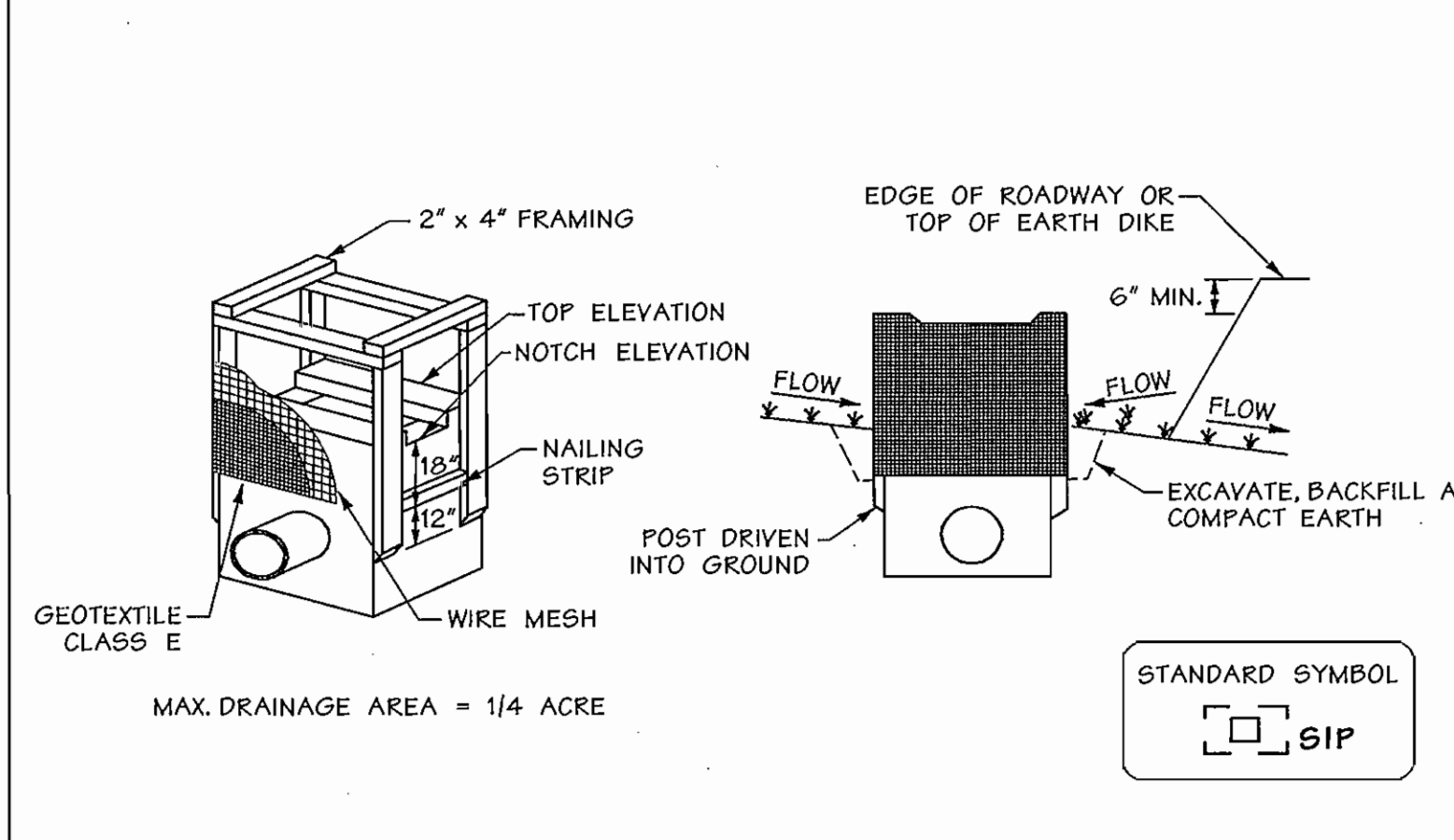
1. FENCING SHALL BE 42 INCHES IN HEIGHT AND CONSTRUCTED IN ACCORDANCE WITH THE LATEST MARYLAND STATE HIGHWAY (SHA) DETAILS FOR CHAIN LINK FENCING. THE SHA SPECIFICATIONS FOR A 6 FOOT FENCE SHALL BE USED, SUBSTITUTING 42" FABRIC AND 6 FOOT LENGTH POSTS.
2. THE POSTS DO NOT NEED TO BE SET IN CONCRETE.
3. CHAIN LINK FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIES OR STAPLES. THE LOWER TENSION WIRE, BRACE AND TRUSS RODS, DRIVE ANCHORS AND POST CAPS ARE NOT REQUIRED EXCEPT ON THE ENDS OF THE FENCE. THE CHAIN LINK FENCING SHALL BE SIX (6) GAUGE OR HEAVIER.
4. FILTER CLOTH SHALL BE FASTENED SECURELY TO THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24" AT THE TOP AND MID SECTION.
5. FILTER CLOTH SHALL BE EMBEDDED A MINIMUM OF 8" INTO THE GROUND.
6. WHEN TWO SECTIONS OF GEOTEXTILE FABRIC ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
7. MAINTENANCE SHALL BE PERFORMED AS NEADED AND SILT BUILDUPS REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE, OR WHEN SILT REACHES 50% OF FENCE HEIGHT.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE MODIFIED MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Super Silt Fence Not To Scale



Tree Protection Not To Scale



CONSTRUCTION SPECIFICATIONS

1. EXCAVATE COMPLETELY AROUND THE INLET TO A DEPTH OF 18" BELOW THE NOTCH ELEVATION.
2. DRIVE THE 2" x 4" CONSTRUCTION GRADE LUMBER POSTS 1' INTO THE GROUND AT EACH CORNER OF THE INLET. PLACE NAIL STRIPS BETWEEN THE POSTS ON THE ENDS OF THE INLET. ASSEMBLE THE TOP PORTION OF THE 2" x 4" FRAME USING THE OVERLAP JOINT SHOWN ON DETAIL. THE TOP OF THE FRAME (WEIR) MUST BE 6" BELOW ADJACENT ROADWAYS WHERE FLOODING AND SAFETY ISSUES MAY ARISE.
3. STRETCH THE 1/2" x 1/2" WIRE MESH TIGHTLY AROUND THE FRAME AND FASTEN SECURELY. THE ENDS MUST MEET AND OVERLAP AT A POST.
4. STRETCH THE GEOTEXTILE CLASS E TIGHTLY OVER THE WIRE MESH WITH THE GEOTEXTILE EXTENDING FROM THE TOP OF THE FRAME TO 18" BELOW THE INLET NOTCH ELEVATION. FASTEN THE GEOTEXTILE FIRMLY TO THE FRAME. THE ENDS OF THE GEOTEXTILE MUST MEET AT A POST. BE OVERLAPPED AND FOLDED, THEN FASTENED DOWN.
5. BACKFILL AROUND THE INLET IN COMPACTED 6" LAYERS UNTIL THE LAYER OF EARTH IS LEVEL WITH THE NOTCH ELEVATION ON THE ENDS AND TOP ELEVATION ON THE SIDES.
6. IF THE INLET IS NOT IN A SUMP, CONSTRUCT A COMPACTED EARTH DIKE ACROSS THE DITCH LINE DIRECTLY BELOW IT. THE TOP OF THE EARTH DIKE SHOULD BE AT LEAST 6" HIGHER THAN THE TOP OF THE FRAME.
7. THE STRUCTURE MUST BE INSPECTED PERIODICALLY AND AFTER EACH RAIN AND THE GEOTEXTILE REPLACED WHEN IT BECOMES CLOGGED.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE E - 16 - 5 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

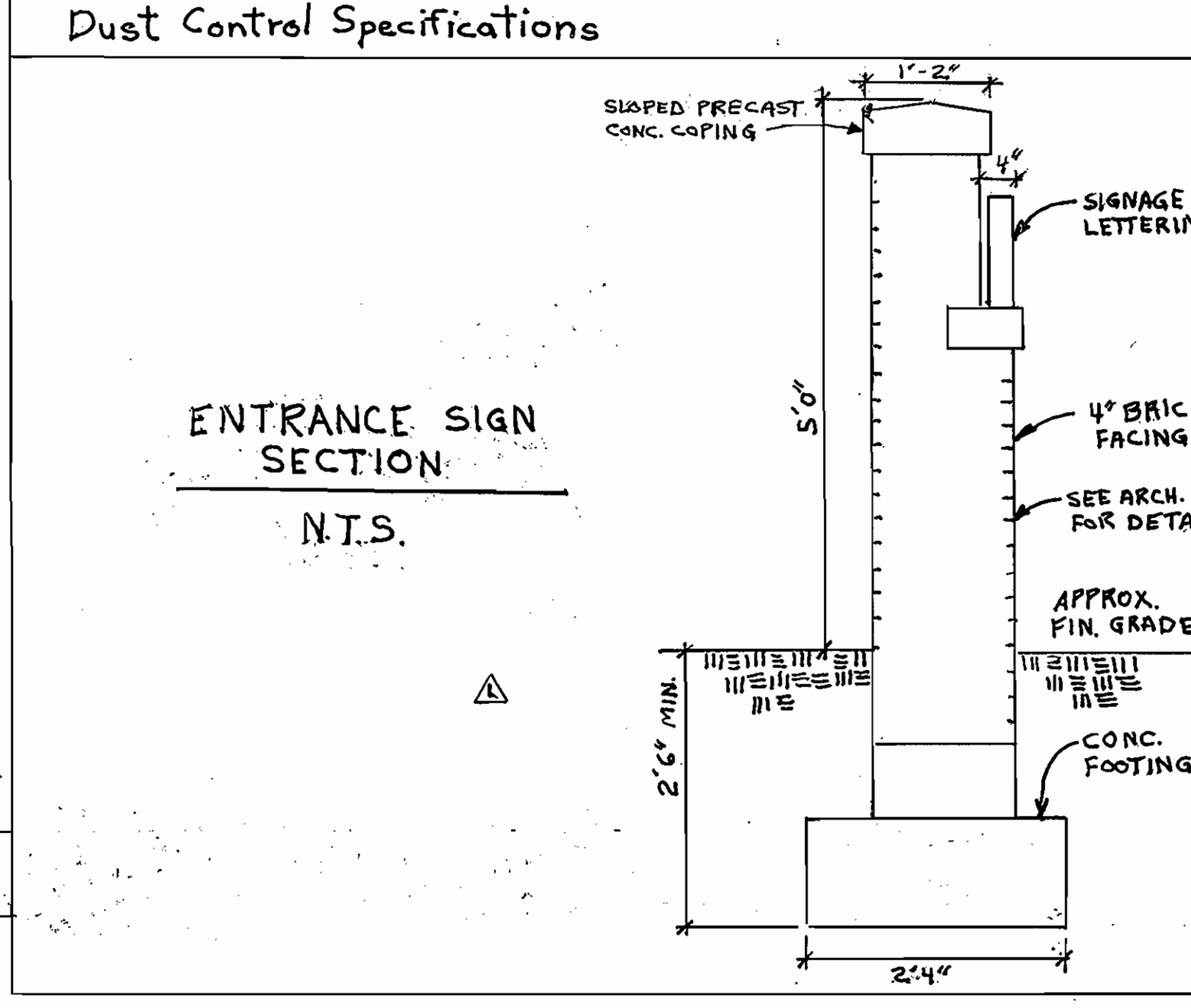
Standard Inlet Protection Not To Scale

TEMPORARY METHODS:

1. MULCHES - SEE STANDARDS FOR VEGETATIVE STABILIZATION WITH MULCHES ONLY. MULCH SHOULD BE CRIMPED OR TACKED TO PREVENT BLOWING.
2. VEGETATIVE COVER - SEE STANDARDS FOR TEMPORARY VEGETATIVE COVER.
3. TILLAGE - TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.
4. IRRIGATION - THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS MOIST. REPEAT AS NEEDED. AT NO TIME SHOULD THE SITE BE IRRIGATED TO THE POINT THE RUNOFF BEGINS TO FLOW.
5. BARRIERS - SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, STRAW BALES, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 10 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING SOIL BLOWING.
6. CALCIUM CHLORIDE - APPLY AT A RATE THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

PERMANENT METHODS:

1. PERMANENT VEGETATION - SEE STANDARDS FOR PERMANENT VEGETATIVE COVER, AND PERMANENT STABILIZATION WITH SOO. EXISTING TREES OR LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT PLACE.
2. TOPSOILING - COVERING WITH LESS EROSION SOIL MATERIALS. SEE STANDARDS FOR TOPSOILING.
3. STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.



ENTRANCE SIGN SECTION
N.T.S.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

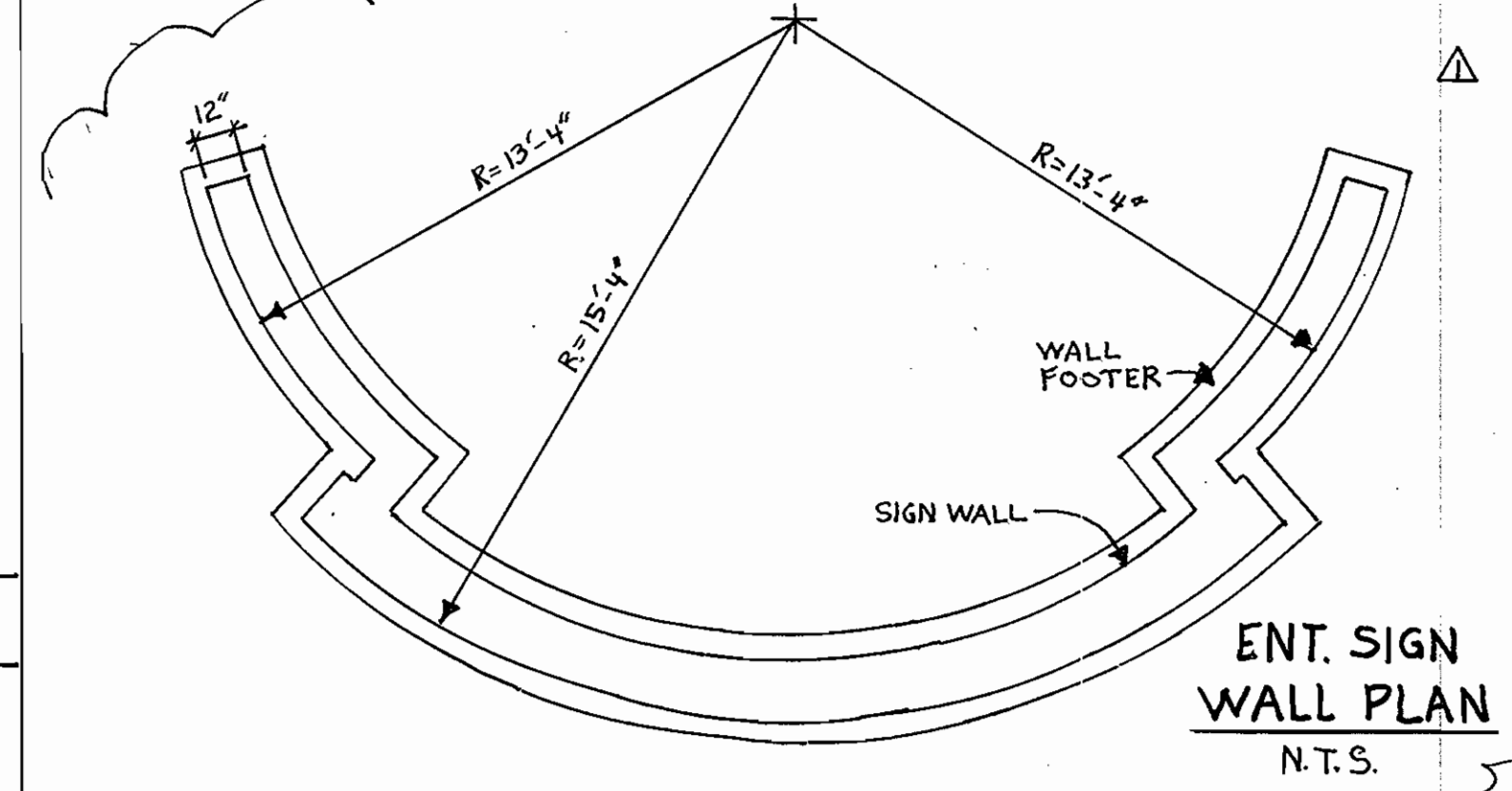
1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).
2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.
3. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 - A. SEVEN CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1.
 - B. FOURTEEN 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 "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" FOR PERMANENT SEEDINGS (SEC. 51), SOOS (SEC. 54), TEMPORARY SEEDING (SEC. 50), AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH 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 OR SITE:	2.8 ACRES
AREA DISTURBED:	2.7 ACRES
AREA TO BE ROOFED OR PAVED:	1.2 ACRES
AREA TO BE VEGETATIVELY STABILIZED:	1.5 ACRES
TOTAL CUT:	8,700 CUBIC YARDS
TOTAL FILL:	8,700 CUBIC YARDS

OFF-SITE WASTE/BORROW AREA LOCATION WASTE *

* TO BE DETERMINED BY CONTRACTOR WITH PRE-APPROVAL OF THE SEDIMENT CONTROL INSPECTOR WITH AN APPROVED AND ACTIVE GRADING PERMIT.
8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
9. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY 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. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

Sediment Control General Notes



APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

[Signature] 12/23/05
CHIEF DEVELOPMENT ENGINEERING DIVISION MK DATE

[Signature] 12/23/05
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 12/23/05
DIRECTOR DATE

7-06-06 Δ Added Entrance Sign Plan + Section
Revision Description

TWO-STORY OFFICE BUILDING
EMERSON CORPORATE COMMONS
Parcel 'A' (Revitz Property)

OWNER: EMERSON LAND BUSINESS TRUST 8920 STEPHENS ROAD LAUREL, MD 20732

DEVELOPER: MATSON, LLC CO B&E, INC. 5550 STEWART PLACE SUITE 306 COLUMBIA, MD 21044

DMW
Dan McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 596-3333
Fax 296-4705

A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

11/22/05 Date

AREA: TAX MAP 47 PARCEL 12
6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND

TITLE: **EROSION and SEDIMENT CONTROL DETAILS**

Des. By	KAD	Scale	As Shown	Proj. No.	95054N
Dm. By	MSS	Date	10/18/05		
Chk. By		Approved			

Professional Engr. No. 13876

4 of 10
SDP-06-29

DEVELOPERS CERTIFICATE:

I/we certify that all developments and/or construction will be done according to these plans and that any responsible personnel involved in the construction project will have a certificate of attendance at a Department of Environment approved training program for the control of sediment and erosion before beginning the project. I shall engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 90 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District.

[Signature] 11/22/05
Signature of developer Date

ENGINEERS CERTIFICATE:

I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he/she must engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 90 days of completion.

[Signature] 11/22/05
Signature of engineer Date

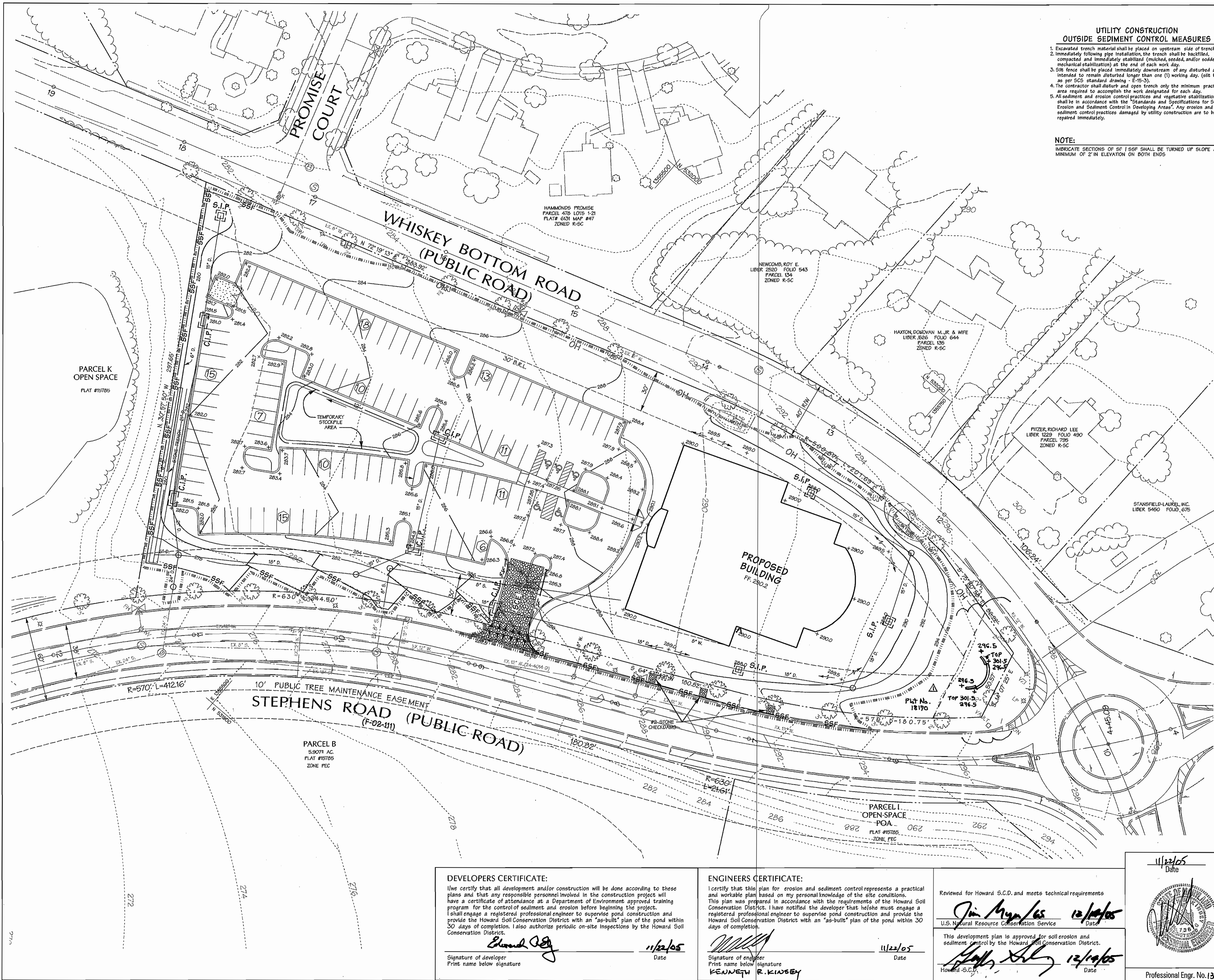
KENNETH R. KLOSS

Reviewed for Howard S.C.D. and meets technical requirements

[Signature] 12/14/05
U.S. Natural Resource Conservation Service Date

This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

[Signature] 12/14/05
Howard S.C.D. Date



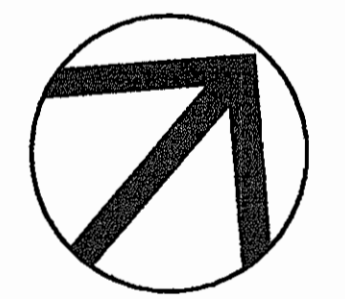
**UTILITY CONSTRUCTION
OUTSIDE SEDIMENT CONTROL MEASURES**

- Excavated trench material shall be placed on upstream side of trench.
- Immediately following pipe installation, the trench shall be backfilled, compacted and immediately stabilized (mulched, seeded, and/or sodded mechanical stabilization) at the end of each work day.
- Site fences shall be placed immediately downstream of any disturbed area intended to remain disturbed longer than one (1) working day. (silt fence as per SCS standard drawing - E-10-3).
- The contractor shall disturb and open trench only the minimum practical area required to accomplish the work designated for each day.
- All sediment and erosion control practices and vegetative stabilization shall be in accordance with the "Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas". Any erosion and sediment control practices damaged by utility construction are to be repaired immediately.

NOTE:
IMBRICATE SECTIONS OF SF / SGP SHALL BE TURNED UP SLOPE A MINIMUM OF 2' IN ELEVATION ON BOTH ENDS

LEGEND

- PROPERTY LINE
- EASEMENT LINE
- - - EX CONTOURS
- EX. 8" W. 8" S. EX UTILITIES
- EX. 8" W. 8" S. EX. FIRE HYDRANT
- EX. BUILDING
- EX. FENCE
- EX. TREE LINE
- EX. TREE
- EX. CURB & GUTTER
- EX. TELEPHONE POLE
- PROP. CURB & GUTTER
- PROP. CONC. WALK
- PROP. CONTOURS
- PROP. BUILDING
- PROP. SPOT ELEVATION
- SSF SUPER SILT FENCE
- GCE STABILIZED CONSTRUCTION ENTRANCE
- 10" D. PROP. STORM DRAIN
- 8" S. PROP. SEWER
- 8" W. PROP. WATER
- LIMIT OF DISTURBANCE
- TEMPORARY STOCKPILE AREA
- OH EXISTING BGE OVERHEAD ELECTRIC UTILITY LINE
- TREE PROTECTION FENCE



APPROVED HOWARD COUNTY DEPT. OF PLANNING AND ZONING	
<i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	12/23/05 DATE
<i>[Signature]</i> CHIEF, DIVISION OF LAND DEVELOPMENT	12/23/05 DATE
<i>[Signature]</i> DIRECTOR	12/23/05 DATE

7-06-06	Added Entrance Sign + Easement Line
Date	Revision Description

**TWO-STORY OFFICE BUILDING
EMERSON
CORPORATE COMMONS
Parcel 'A' (Revitz Property)**

OWNER:
EMERSON LAND
BUSINESS TRUST
8920 STEPHENS ROAD
LAUREL, MD 20732

DEVELOPER:
MATSON LLC
CO. B&A, INC.
5550 STERRETT PLACE
SUITE 306
COLUMBIA, MD 21044

DMW
Duff McCune Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax: 296-4706

*A Team of Land Planners,
Landscape Architects,
Engineers, Surveyors &
Environmental Professionals*

AREA	TAX MAP 47	PARCEL 12
	6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND	
TITLE GRADING and EROSION & SEDIMENT CONTROL PLAN		
Des. By KAD	Scale 1"=30'	Proj. No. 95054N
Dim. By MSS	Date 10/18/05	3 of 10
Chk. By	Approved	

DEVELOPERS CERTIFICATE:
I/we certify that all development and/or construction will be done according to these plans and that any responsible personnel involved in the construction project will have a certificate of attendance at a Department of Environment approved training program for the control of sediment and erosion before beginning the project. I shall engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District.

[Signature]
Signature of developer
Print name below signature

11/22/05
Date

ENGINEERS CERTIFICATE:
I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he/she must engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion.

[Signature]
Signature of engineer
Print name below signature
KEENEY R. KINSEY

11/22/05
Date

Reviewed for Howard S.C.D. and meets technical requirements

[Signature]
U.S. Natural Resource Conservation Service

12/14/05
Date

This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.

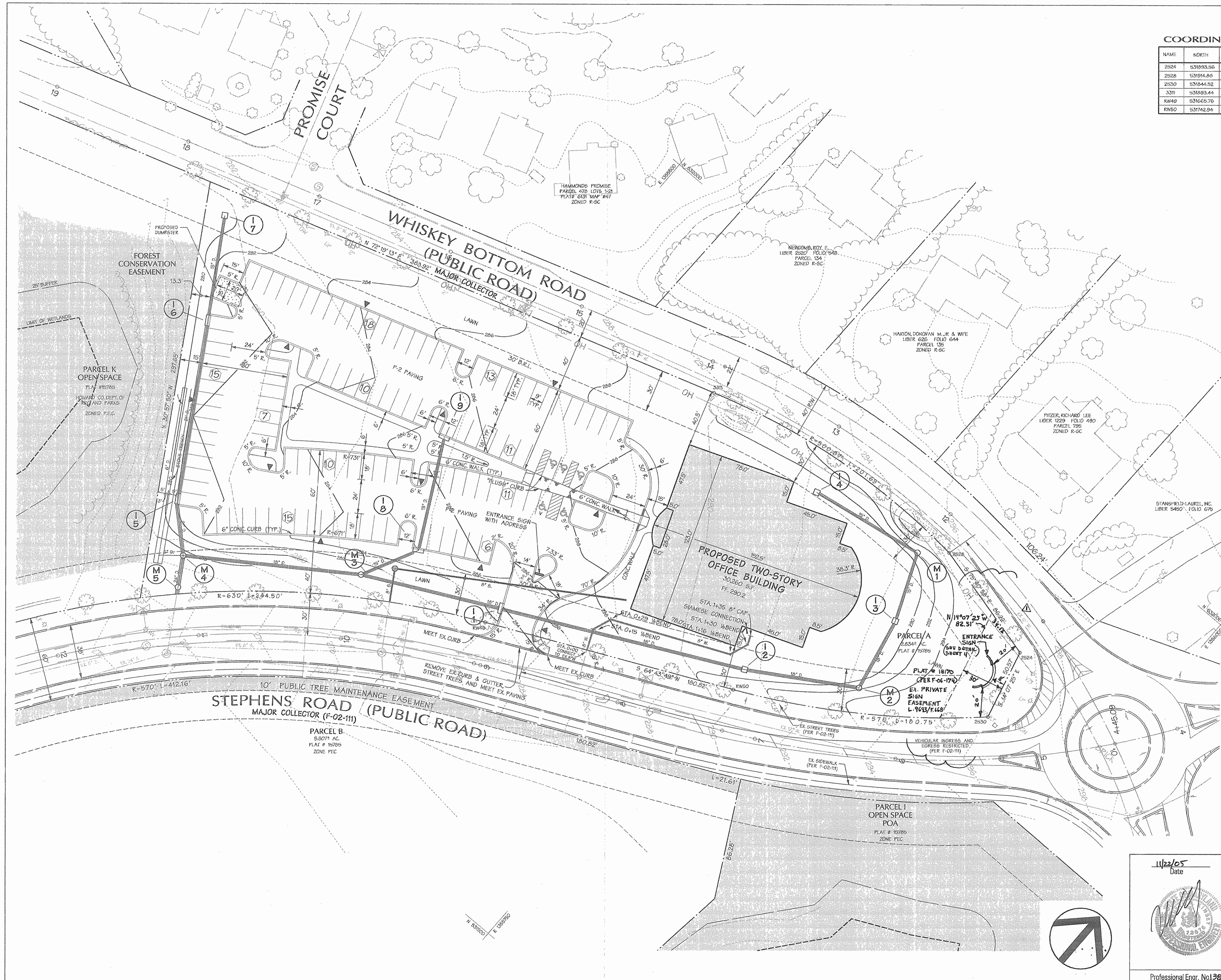
[Signature]
Howard S.C.D.

12/14/05
Date

11/22/05
Date

Professional Engr. No. 13876

Twp. No. 22 082229 2008
11/18/05 04:19:05 41.51



COORDINATES

NAME	NORTH	EAST
2824	531893.96	1391905.60
2828	531914.80	1391922.06
2830	531844.82	1391917.95
3311	531893.44	1391922.06
KW49	531668.76	1391905.63
KW50	531742.94	1391909.35

LEGEND

- PROPERTY LINE
- - - EASEMENT LINE
- EX. CONTOURS
- EX. FIRE HYDRANT
- EX. UTILITIES
- EX. BUILDING
- EX. FENCE
- EX. TREE LINE
- EX. TREE (PER F-02-11)
- EX. CURB & GUTTER
- EX. TELEPHONE POLE
- PROP. CURB & GUTTER
- PROP. CONC. WALK
- PROP. CONTOURS
- PROP. BUILDING
- PROP. LIGHT (BY LIGHTING CONSULTANT)
- OH --- EXISTING BGE OVERHEAD ELECTRIC UTILITY LINE

DATA SOURCES
 Boundary information taken from a record plat prepared by DMW, Inc.
 Topography taken from a field run survey by DMW, Inc.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
 Chief Development Engineering Division *[Signature]* 12/23/05
 Chief, Division of Land Development *[Signature]* 12/23/05
 Director *[Signature]* 12/23/05

Date	No.	Revision Description
7-06-06	A	Added Entrance Sign & Easement

TWO-STORY OFFICE BUILDING
EMERSON
CORPORATE COMMONS
 Parcel 'A' (Revitz Property)

OWNER:
 EMERSON LAND
 BUSINESS TRUST
 8920 STEPHENS ROAD
 LAUREL, MD 20732

DEVELOPER:
 MATSON, LLC
 CO 245 INC.
 5550 STERRETT PLACE
 SUITE 306
 COLUMBIA, MD 21044

DMW
 Dan McCune-Walken, Inc.
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 296-3333
 Fax 296-4765

A Team of Land Planners,
 Landscape Architects,
 Engineers, Surveyors &
 Environmental Professionals

11/22/05
 Date
[Signature]
 Professional Engr. No. 13876

AREA	TAX MAP 47	PARCEL A
	6th ELECTION DISTRICT OF HOWARD COUNTY, MARYLAND	
TITLE	SITE DEVELOPMENT PLAN	
Des. By MJP	Scale 1"=30'	Proj. No. 95054N
Drn. By MGS	Date 10/18/05	2 of 10
Chk. By	Approved	