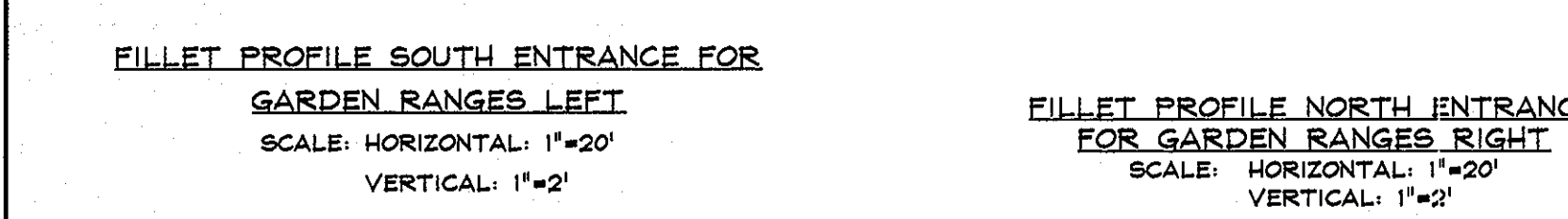
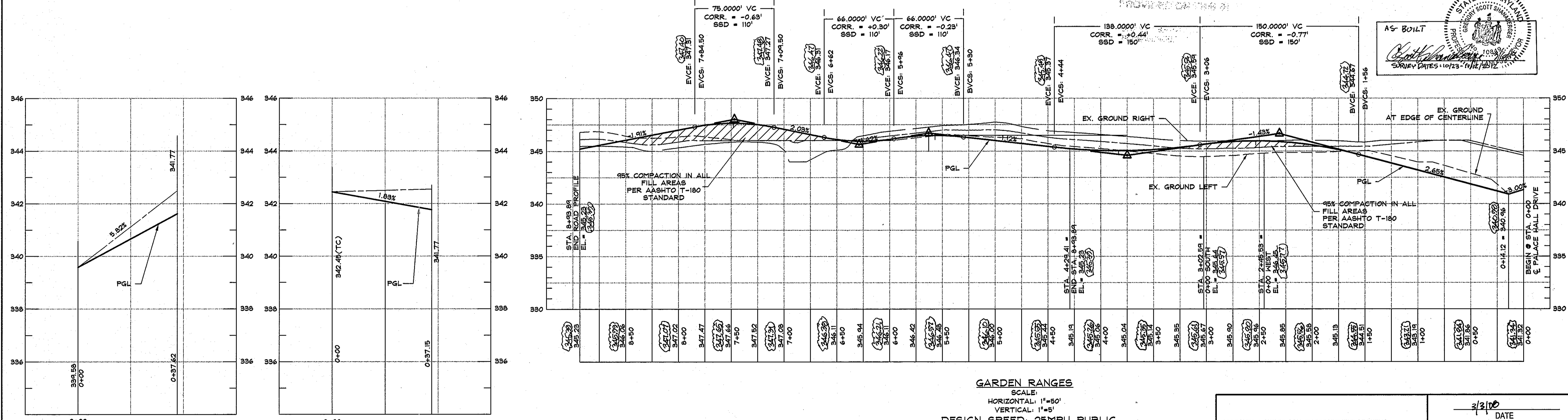


HIGH POINT ELEV = 347.66 HIGH POINT STA = 7+48.07 PVI STA = 7+47 PVI ELEV = 348.03	LOW POINT ELEV = 345.94 LOW POINT STA = 6+25.34 PVI STA = 6+29 PVI ELEV = 345.64	HIGH POINT ELEV = 346.49 HIGH POINT STA = 5+57 PVI STA = 5+63 PVI ELEV = 346.71	LOW POINT ELEV = 345.03 LOW POINT STA = 3+83.83 PVI STA = 3+75 PVI ELEV = 344.60	HIGH POINT ELEV = 345.96 HIGH POINT STA = 2+53.41 PVI STA = 2+51 PVI ELEV = 346.66
---	---	--	---	---



**NOTES:**

- STORM DRAINS 1-8 TO M-4 AND 1-11 TO 1-10 TO BE PRIVATELY MAINTAINED. FOR CENTERLINE GEOMETRY, LIGHT, SIGNAGE AND M.O.T. PLAN SEE SHEET 3 OF 9.
- ALL SIDEWALK RAMPS TO HAVE SURFACE WARNING TRUNCATED DOME PADS PER DETAIL SHA.MD-655.40

**GARDEN RANGES**  
SCALE: HORIZONTAL: 1"=50' VERTICAL: 1"=5'  
DESIGN SPEED: 25MPH PUBLIC ACCESS STREET

**AS-BUILT CERTIFICATION**  
I HEREBY CERTIFY, BY SEAL, THAT THE PLANNING, SURVEYING AND ENGINEERING WORK SHOWN ON THIS PLAN WERE CONDUCTED PERSONALLY BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE EXPIRES DATE 12/31/2014.

*Scott Shannaberger*  
SCOTT SHANNABERGER  
PROFESSIONAL LAND SURVEYOR  
LICENSE EXPIRES DATE 12/31/2014  
SHANNABERGER & LANE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.  
*Mark Thayer*  
3-12-08  
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
*Chris Hester*  
3-12-08  
DATE

Professional Certification:  
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 25429, Expiration Date: 02-29-08.

*Mark Thayer*  
MARK THAYER, P.E.

**DATA SOURCES:**  
LOCATIONS OF TIE LINES, STREAMS, TOPOGRAPHY, WETLANDS, AND FOREST CONSERVATION AREA DERIVED FROM F-01-187, F-02-59 AND F-04-127.  
BOUNDARY SURVEY PER BOUNDARY SURVEY DATED JUNE, 1999, PREPARED BY DAFT-MAGNIE-WALKER, INC. SOILS (IF SHOWN) TAKEN FROM HOWARD COUNTY SOIL SURVEY, 1968. ADDITIONAL TOPO PROVIDED BY SHANNABERGER & LANE, DATED JANUARY, 2007.

**DeMario Design Consultants, Inc.**  
193 East Main Street  
Westminster, MD 21157  
http://www.demariodesign.com

Phone: (410) 386-6560  
Fax: (410) 386-6564  
eMail: dco@demariodesign.com

**OWNER:** EMERSON LAND BUSINESS TRUST  
10275 LITTLE PATENT PKWY  
COLUMBIA, MD 21044  
410-892-6000

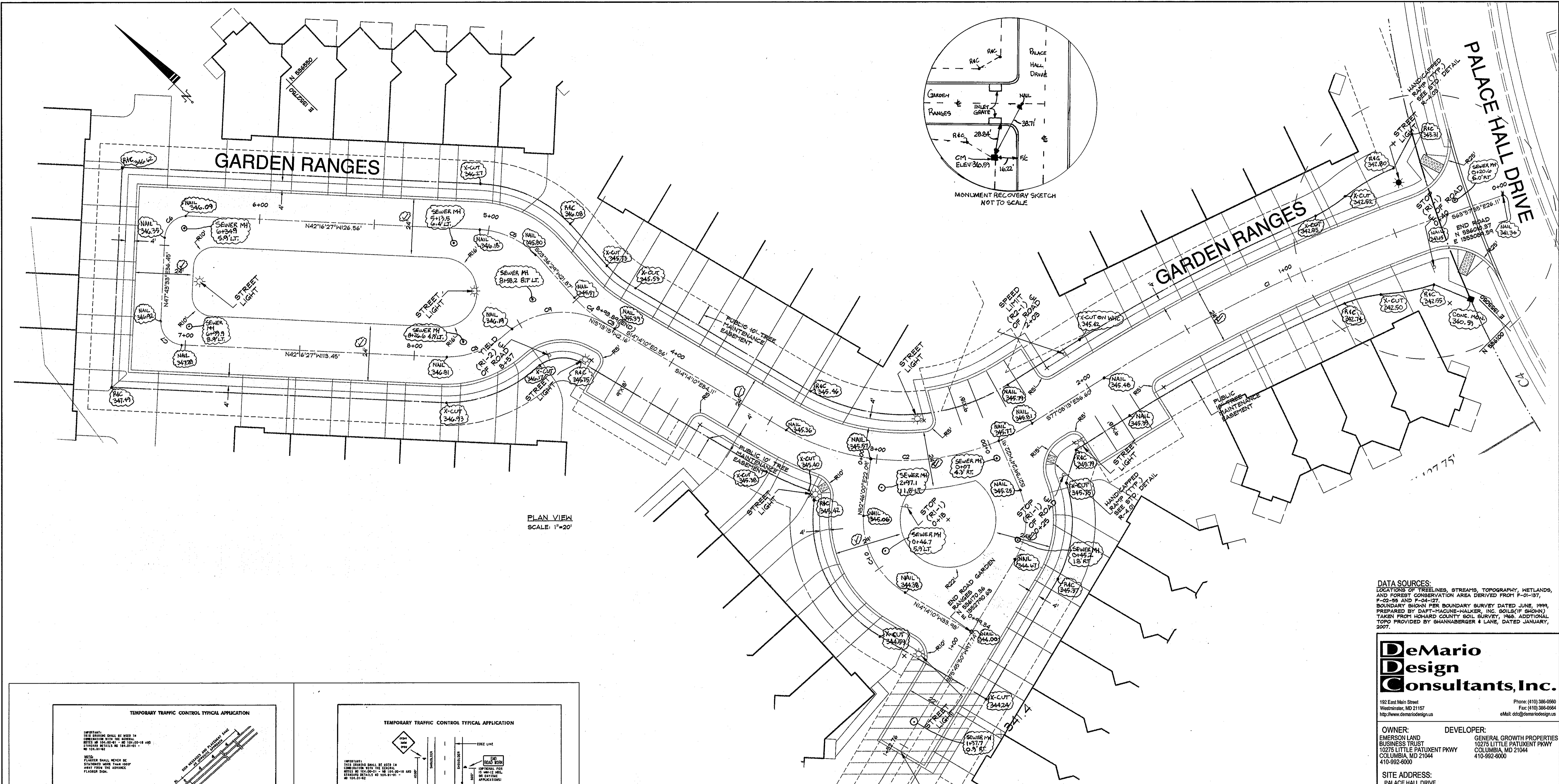
**DEVELOPER:** GENERAL GROWTH PROPERTIES  
10275 LITTLE PATENT PKWY  
COLUMBIA, MD 21044  
410-892-6000

**SITE ADDRESS:** PALACE HALL DRIVE

**EMERSON SECTION 2 PHASE 3**  
LOTS 1 THRU 45 AND OPEN SPACE  
LOTS 46 THRU 50  
**FINAL ROAD CONSTRUCTION PLAN AND PROFILE**

6TH ELECTION DISTRICT HOWARD COUNTY

NO.	DESCRIPTION OF CHANGES	DRN.	REV.	DATE
1	AS-BUILT			
CO. FILE #:	F-07-169	DES. BY:	JCO	
TAX ACC. #:	N/A	DRN. BY:	TPM/SDS	
TAX MAP:	47	CHK. BY:	JCO	
BLOCK / GRID:	8	DATE:	4-09-2007	
PARCEL #:	3	DDC JOB#:	06127.1	
ZONE / USE:	PEC-MXD-3	SHEET NUMBER:		
DWG. SCALE:	1"=50'			2 of 9



PLAN VIEW  
SCALE: 1"=20'

**DATA SOURCES:**  
 LOCATIONS OF TREELINES, STREAMS, TOPOGRAPHY, WETLANDS, AND FOREST CONSERVATION AREA DERIVED FROM F-01-137, F-02-99 AND F-04-127.  
 BOUNDARY SHOWN PER BOUNDARY SURVEY DATED JUNE, 1999, PREPARED BY DAFT-MAGNIE-WALKER, INC. SOILS (IF SHOWN) TAKEN FROM HOWARD COUNTY SOIL SURVEY, 1968. ADDITIONAL TOPO PROVIDED BY SHANNABERGER & LANE, DATED JANUARY, 2007.

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 Westminster, MD 21157  
 http://www.demariodesign.com  
 Phone: (410) 386-6560  
 Fax: (410) 386-6564  
 Email: ddc@demariodesign.com

**OWNER:** EMERSON LAND BUSINESS TRUST  
 10275 LITTLE PATUXENT PKWY  
 COLUMBIA, MD 21044  
 410-992-6000

**DEVELOPER:** GENERAL GROWTH PROPERTIES  
 10275 LITTLE PATUXENT PKWY  
 COLUMBIA, MD 21044  
 410-992-6000

**SITE ADDRESS:**  
 PALACE HALL DRIVE

EMERSON SECTION 2 PHASE 3  
 LOTS 1 THRU 45 AND OPEN SPACE  
 LOTS 46 THRU 50  
**Q ROAD GEOMETRY,  
 LIGHT, SIGNAGE  
 AND M.O.T. PLAN**  
 6TH ELECTION DISTRICT HOWARD COUNTY

REVISIONS		
NO.	DESCRIPTION OF CHANGES	DRN. REV. DATE
1	(AS-BUILT)	(AS-BUILT)

NO.	DESCRIPTION OF CHANGES	DRN.	REV. DATE
CO. FILE #:	F-07-169	DES. BY:	JCO
TAX ACC. #:	N/A	DRN. BY:	SDS
TAX MAP:	47	CHK. BY:	JCO
BLOCK / GRID:	8	DATE:	4-09-2007
PARCEL #:	3	DDC JOB#:	06127.1
ZONE / USE:	PEC-MXD-3	SHEET NUMBER:	
DWG. SCALE:	1"=20'		3 of 9

STREET LIGHT CHART		
SYMBOL	TYPE	LOCATION
*	150 WATT HIGH PRESSURE SODIUM (HPS) VAPOR PREMIER	GARDEN RANGES Q STA. 0+44 20' RT.
*	100 WATT HIGH PRESSURE SODIUM (HPS) VAPOR PREMIER	GARDEN RANGES Q STA. 2+20 18' LT.
*	100 WATT HIGH PRESSURE SODIUM (HPS) VAPOR PREMIER	GARDEN RANGES Q STA. 2+91 18' RT.
*	100 WATT HIGH PRESSURE SODIUM (HPS) VAPOR PREMIER	GARDEN RANGES C STA. 3+20 20' LT.
*	100 WATT HIGH PRESSURE SODIUM (HPS) VAPOR PREMIER	GARDEN RANGES Q STA. 4+93 18' LT.
*	100 WATT HIGH PRESSURE SODIUM (HPS) VAPOR PREMIER	GARDEN RANGES Q STA. 5+05 27' LT.
*	100 WATT HIGH PRESSURE SODIUM (HPS) VAPOR PREMIER	GARDEN RANGES Q STA. 6+65 16' LT.
*	100 WATT HIGH PRESSURE SODIUM (HPS) VAPOR PREMIER	GARDEN RANGES Q STA. 1+12 15' RT.

**AS-BUILT CERTIFICATION**  
 I HEREBY CERTIFY, BY SEAL, THAT THE REVISIONS SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS PLAN MEET THE CURRENT APPROVED PLANS AND SPECIFICATIONS.

*Scott Shanaberger*  
 G. SCOTT SHANNABERGER  
 PROFESSIONAL L.S. #10849  
 SHANNABERGER & LANE  
 LICENSE EXPIRATION DATE 4/22/14

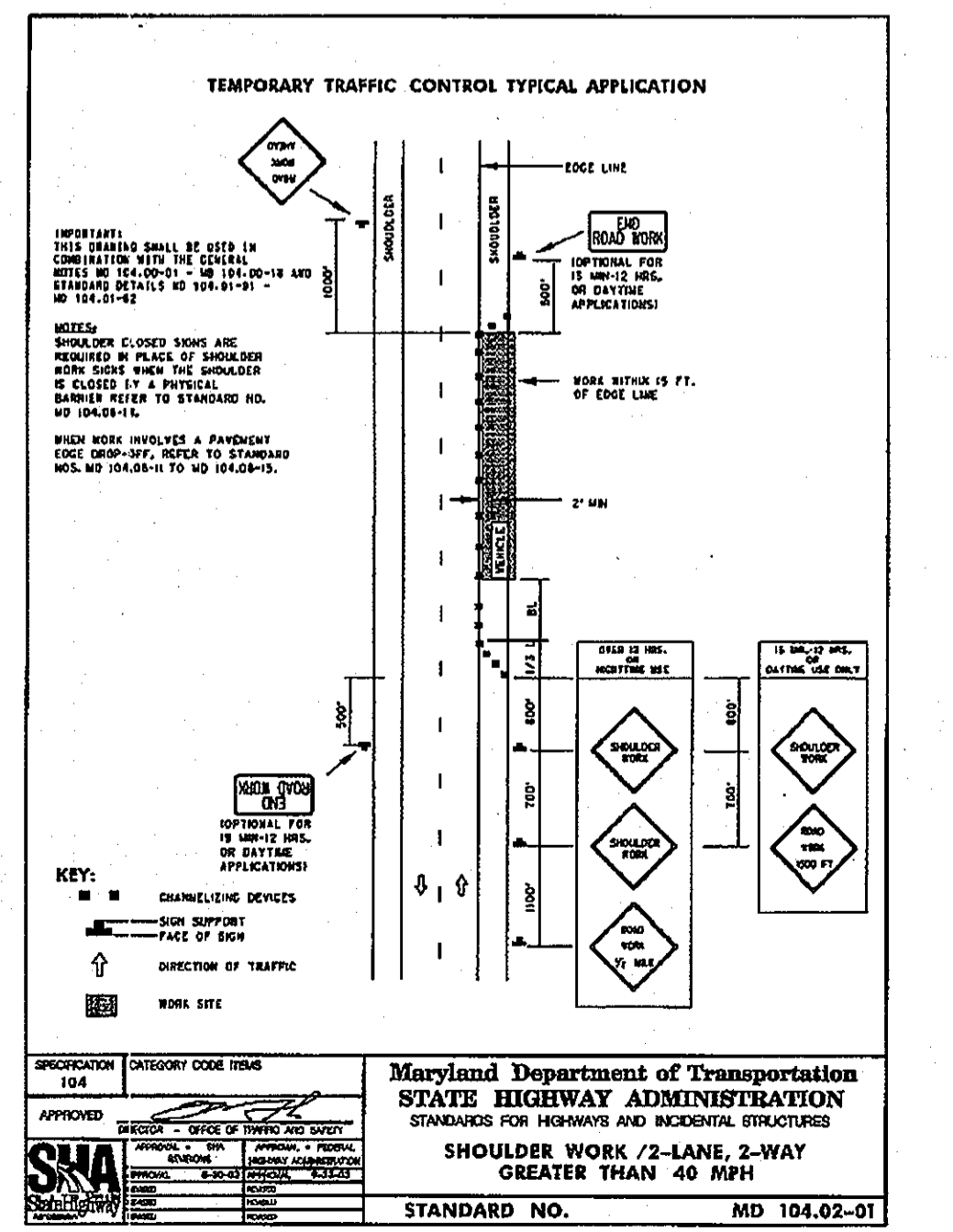
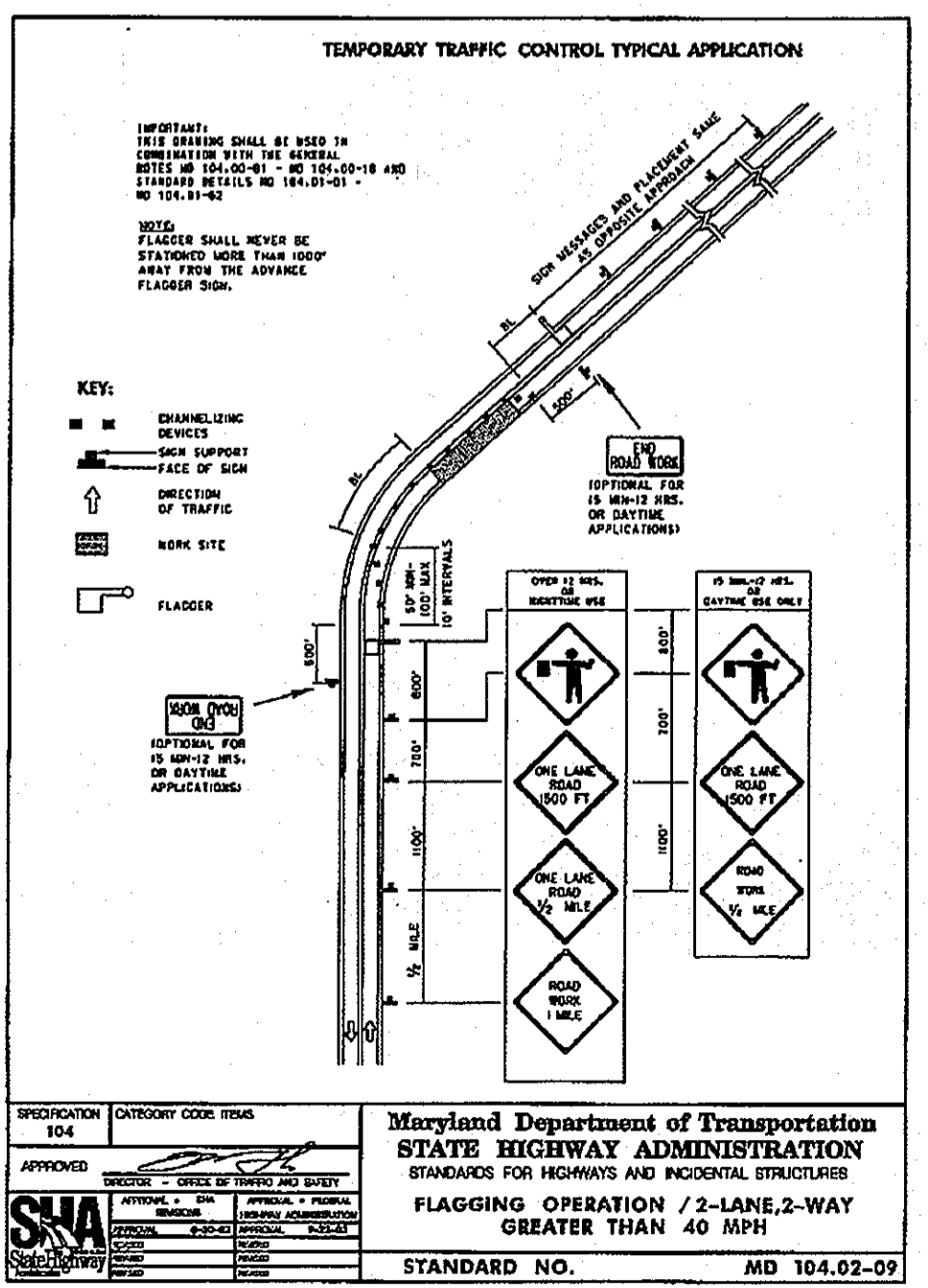
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.  
*Walter D. White*  
 WALTER D. WHITE  
 CHIEF, BUREAU OF HIGHWAYS  
 DATE: 3-12-08

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
*Christy Stant*  
 CHRISTY STANT  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE: 3/21/08

*Mark Thayer*  
 MARK THAYER, P.E.  
 DATE: 3/16/08

AS-BUILT  
 DATE: 3/3/08  
 Professional Certification.  
 I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 25629, Expiration Date: 07-28-08.

*Mark Thayer*  
 MARK THAYER, P.E.



Maryland Department of Transportation  
 STATE HIGHWAY ADMINISTRATION  
 STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES  
 FLAGGING OPERATION / 2-LANE, 2-WAY  
 GREATER THAN 40 MPH  
 STANDARD NO. MD 104.02-01

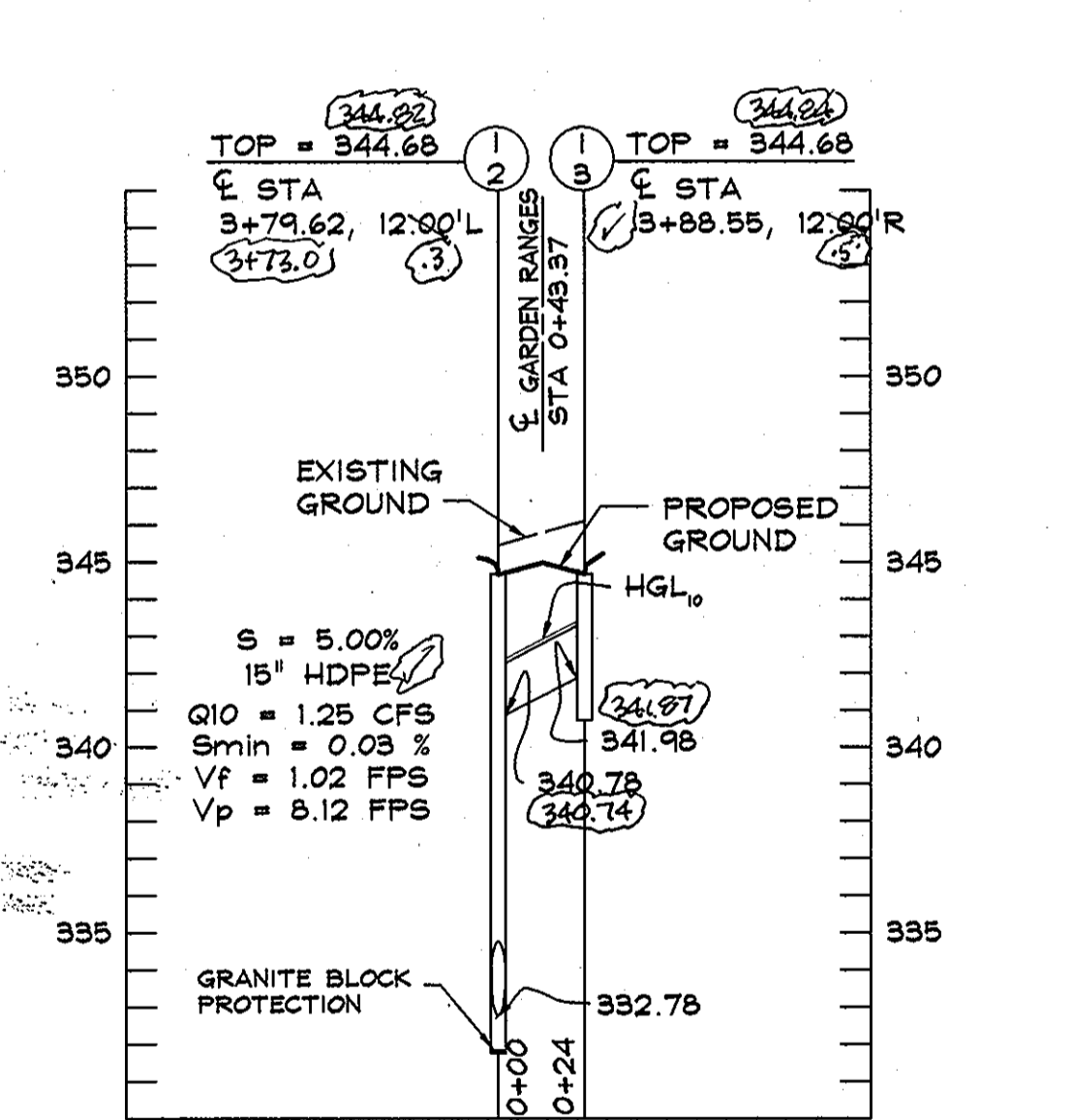
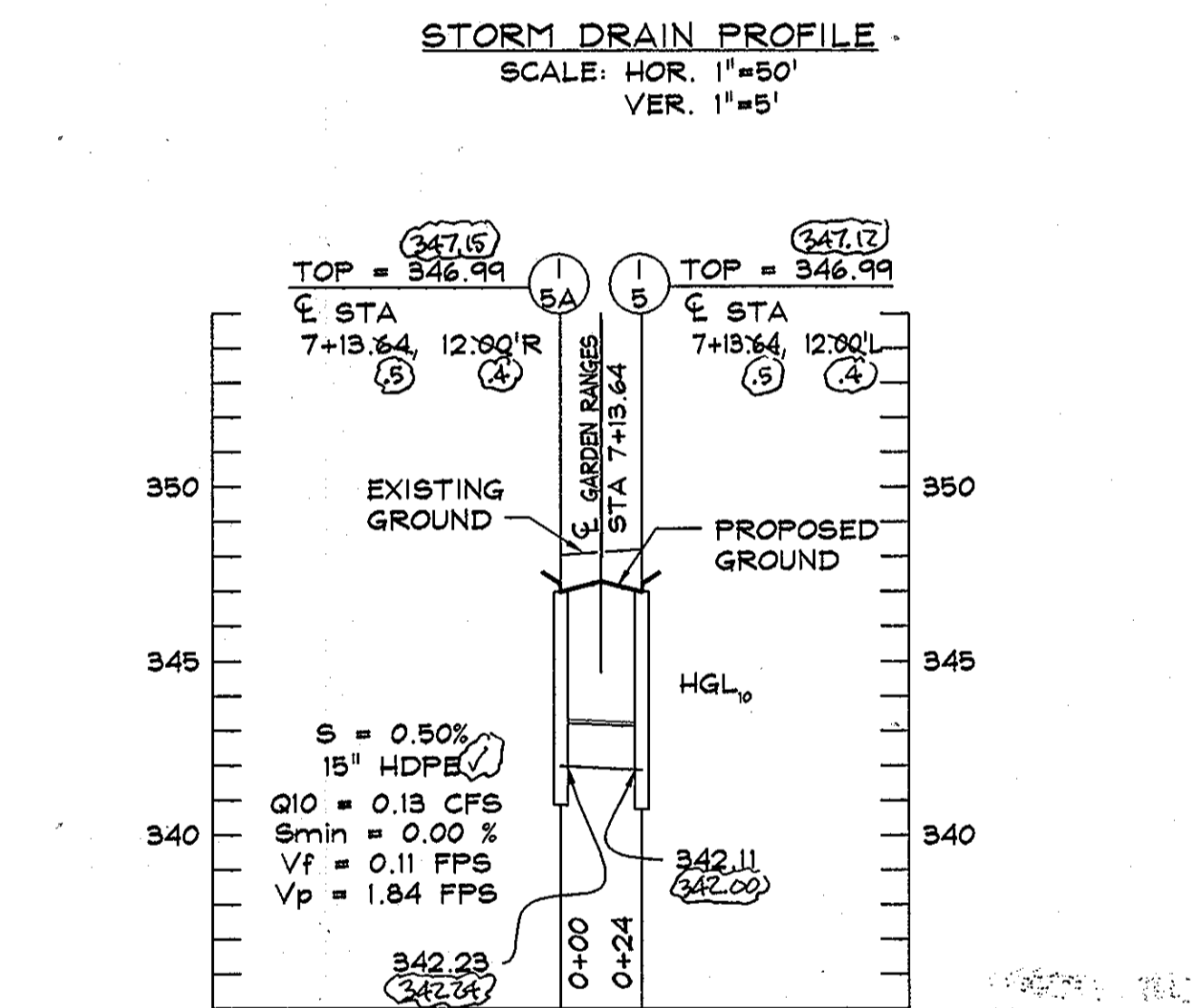
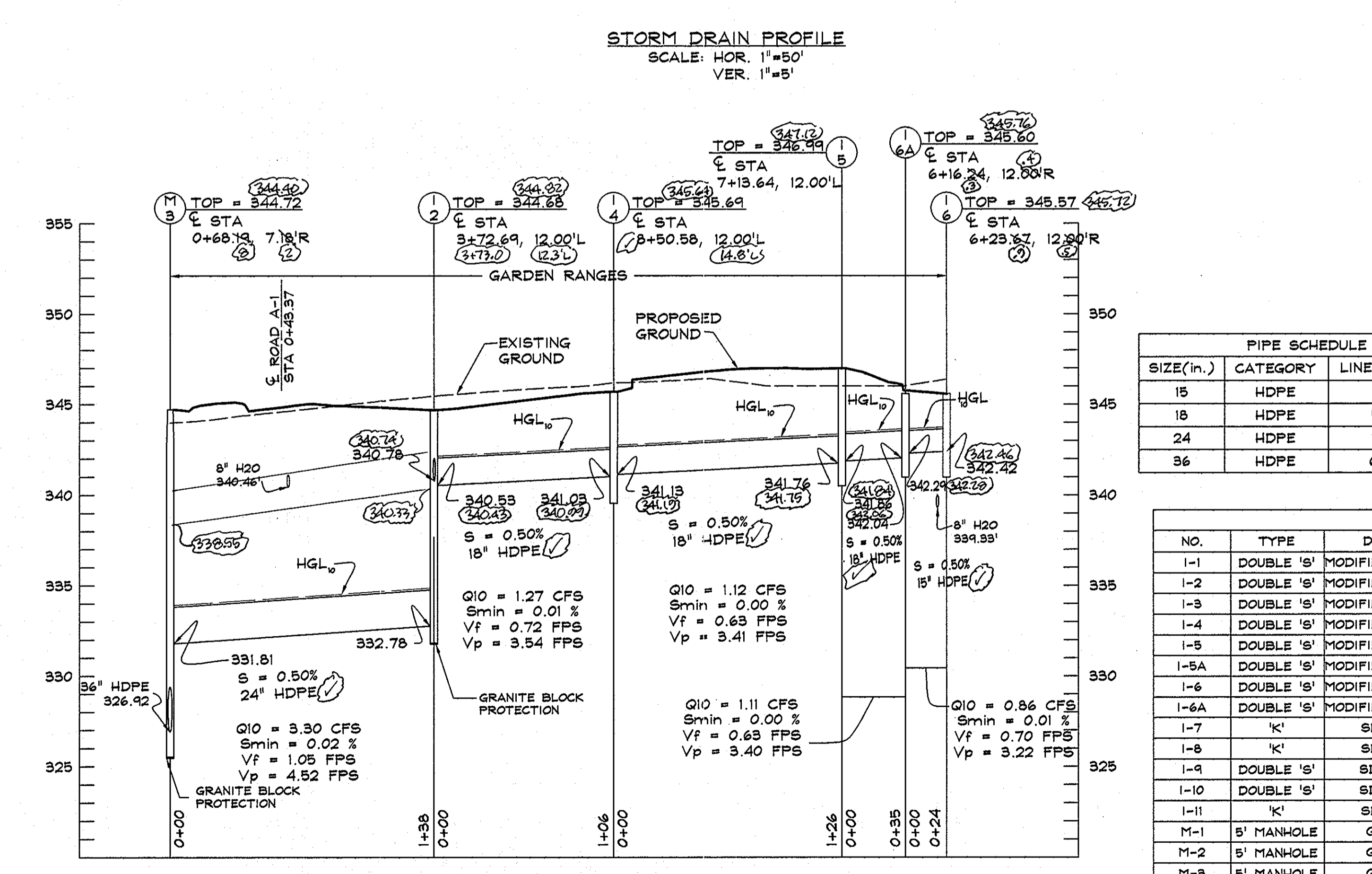
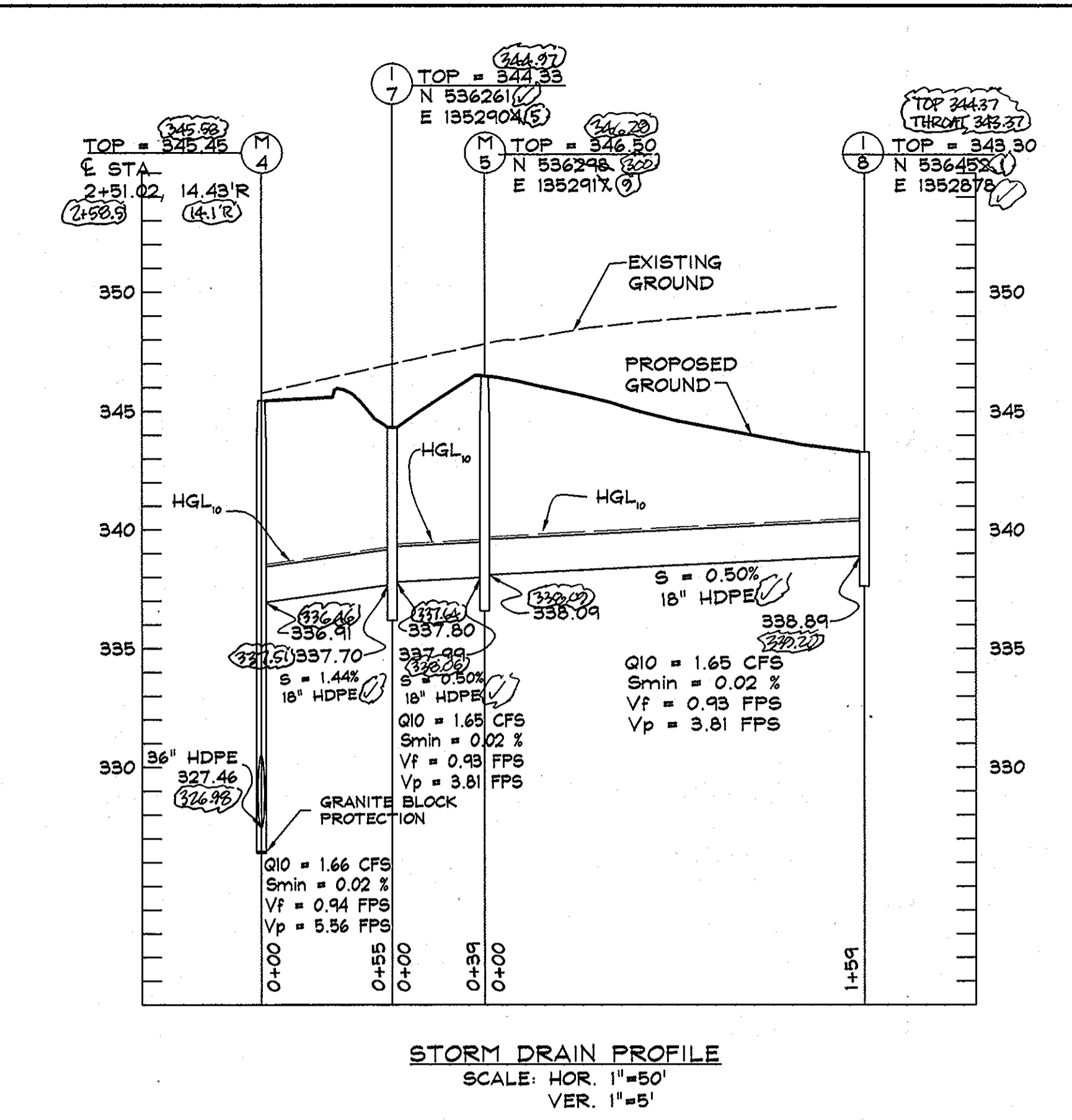
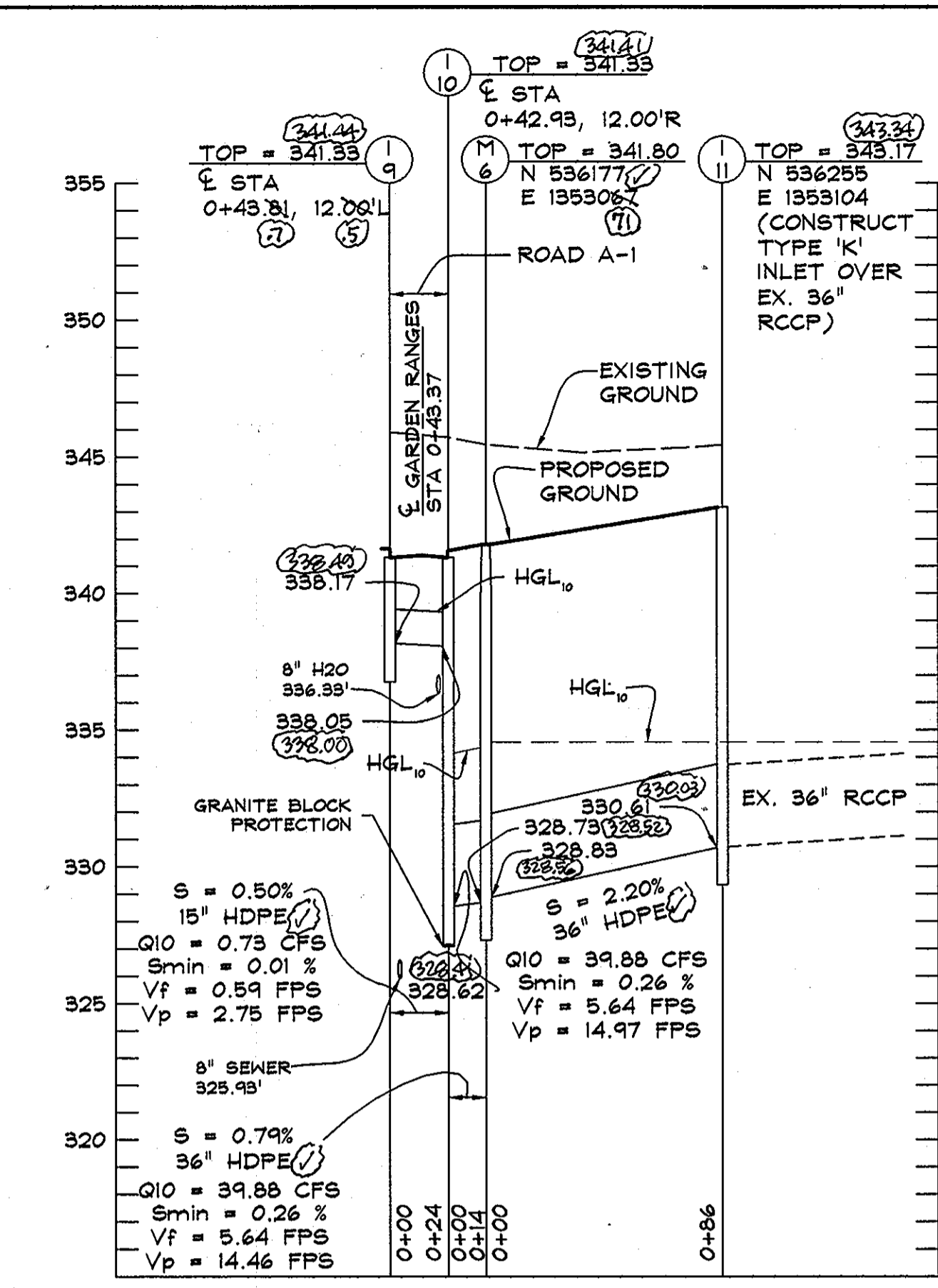
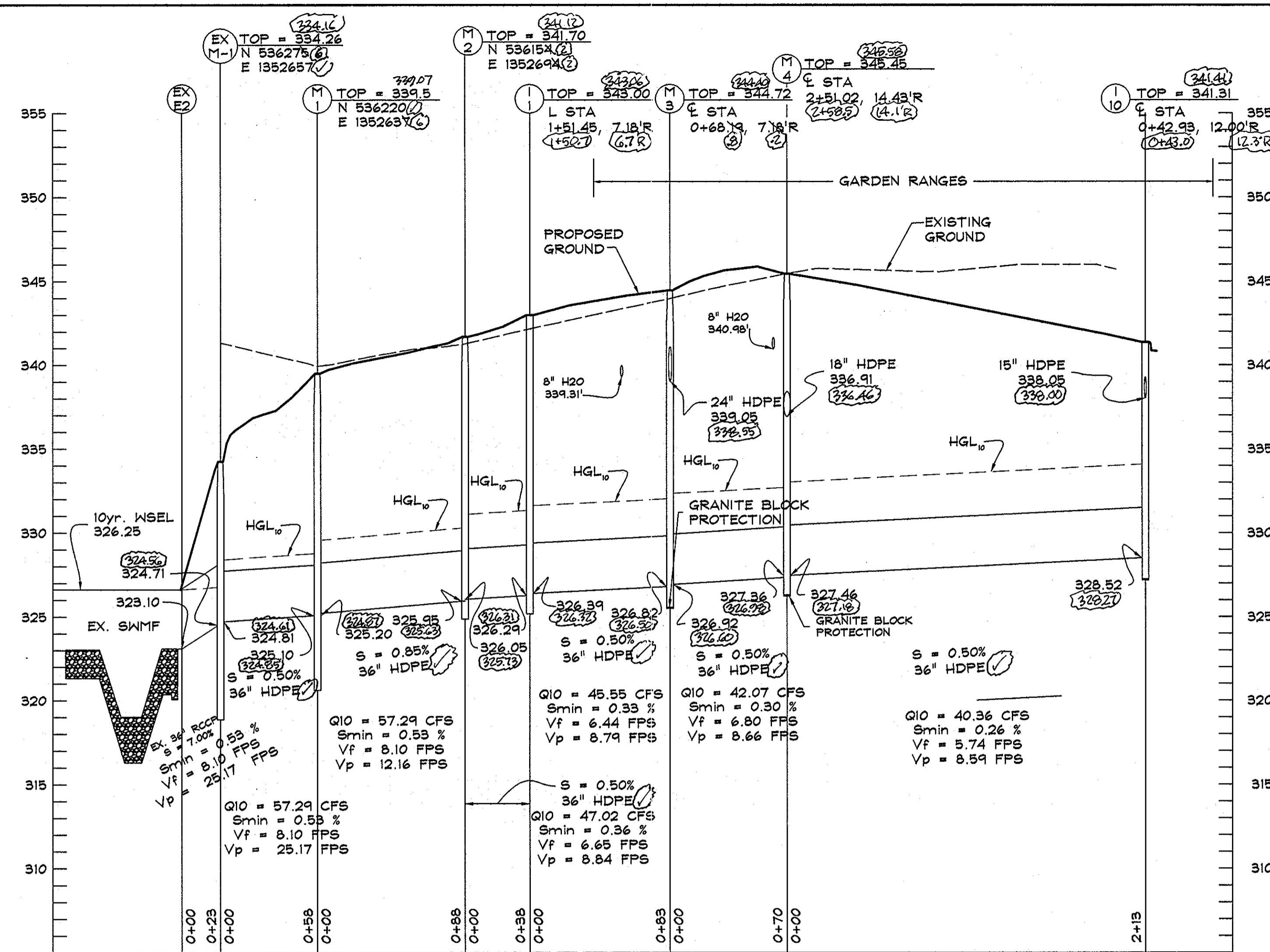
Maryland Department of Transportation  
 STATE HIGHWAY ADMINISTRATION  
 STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES  
 SHOULDER WORK / 2-LANE, 2-WAY  
 GREATER THAN 40 MPH  
 STANDARD NO. MD 104.02-01











**PIPE SCHEDULE**

SIZE (in.)	CATEGORY	LINEAR (ft.)
15	HDPE	96
18	HDPE	513
24	HDPE	145
36	HDPE	650

**STORM DRAIN STRUCTURE SCHEDULE**

NO.	TYPE	DETAIL	INV. IN	INV. OUT	RIM	LOCATION
I-1	DOUBLE 'S'	MODIFIED SD 4.34	326.39	326.29	349.00	GARDEN RANGES 1+58.25
I-2	DOUBLE 'S'	MODIFIED SD 4.34	340.78	332.78	344.88	GARDEN RANGES 3+72.62
I-3	DOUBLE 'S'	MODIFIED SD 4.34	341.98	341.98	344.88	GARDEN RANGES 3+88.55
I-4	DOUBLE 'S'	MODIFIED SD 4.34	341.78	341.78	346.62	GARDEN RANGES 8+50.14
I-5	DOUBLE 'S'	MODIFIED SD 4.34	342.31	341.78	346.62	GARDEN RANGES 7+13.64
I-5A	DOUBLE 'S'	MODIFIED SD 4.34	342.23	342.23	348.88	GARDEN RANGES 7+13.64
I-6	DOUBLE 'S'	MODIFIED SD 4.34	342.23	342.23	348.88	GARDEN RANGES 6+23.87
I-6A	DOUBLE 'S'	MODIFIED SD 4.34	342.23	342.23	348.88	GARDEN RANGES 6+16.24
I-7	'K'	SD 4.12	337.84	337.78	344.38	N 536261(E) E 135290(S)
I-8	'K'	SD 4.12	-	-	349.30	N 536498(E) E 135297(S)
I-9	DOUBLE 'S'	SD 4.23	338.79	338.79	341.33	GARDEN RANGES 0+43.81
I-10	DOUBLE 'S'	SD 4.23	338.08	328.52	341.33	GARDEN RANGES 0+42.93
I-11	'K'	SD 4.12	330.31	330.31	330.31	N 536255(E) E 135310(S)
M-1	5' MANHOLE	G 5.19	325.24	325.24	339.50	N 536220(E) E 135263(S)
M-2	5' MANHOLE	G 5.19	326.95	325.95	341.70	N 536154(E) E 135269(S)
M-3	5' MANHOLE	G 5.19	326.95	326.95	344.72	GARDEN RANGES 0+43.81
M-4	5' MANHOLE	G 5.19	327.46	327.36	345.36	GARDEN RANGES 2+41.12
M-5	4' MANHOLE	G 5.12	337.94	337.94	336.94	N 536255(E) E 135291(S)
M-6	5' MANHOLE	G 5.19	328.88	328.78	341.80	N 536177(E) E 135308(S)
EX M	-	-	324.31	324.74	334.24	N 536274(E) E 135265(S)

\* ALL INLETS LOCATED WITHIN PUBLIC ROADS SHALL HAVE GRATES WHICH ARE TRAVEL SAFE FOR BICYCLES. TOP ELEVATIONS FOR 'K' INLET ARE AT THE THROAT OPENING. TOP ELEVATIONS FOR DOUBLE 'S' INLET ARE AT TOP OF GRATE.

**AS-BUILT CERTIFICATION**  
I HEREBY CERTIFY, BY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED ACCORDING TO THIS PLAN MEET THE CURRENT RECORD PLANS AND SPECIFICATIONS.

*Mark Thayer*  
Professional Engineer  
Professional License No. 15348  
Shannaberger & Lane  
Professional Land Surveyors  
License Expiration Date 12/1/2014

**DATA SOURCES:**  
LOCATIONS OF TIE LINES, STREAMS, TOPOGRAPHY, WETLANDS, AND FOREST CONSERVATION AREA DERIVED FROM F-01-137, F-02-55 AND F-04-127.  
BOUNDARY SHOWN PER BOUNDARY SURVEY DATED JUNE, 1999, PREPARED BY DAFT-MAGUIRE-WALKER, INC. SOILS (IF SHOWN) TAKEN FROM HOWARD COUNTY SOIL SURVEY, 1968. ADDITIONAL TOPO PROVIDED BY SHANNABERGER & LANE, DATED JANUARY, 2007.

**DeMario Design Consultants, Inc.**  
102 East Main Street  
Westminster, MD 21157  
http://www.demariodesign.com

Phone: (410) 386-6560  
Fax: (410) 386-6564  
eMail: dco@demariodesign.com

**OWNER:** EMERSON LAND BUSINESS TRUST  
10275 LITTLE PATUXENT PKWY  
COLUMBIA, MD 21044  
410-992-6000

**DEVELOPER:** GENERAL GROWTH PROPERTIES  
10275 LITTLE PATUXENT PKWY  
COLUMBIA, MD 21044  
410-992-6000

**SITE ADDRESS:** PALACE HALL DRIVE

EMERSON SECTION 2 PHASE 3  
LOTS 1 THRU 45 AND OPEN SPACE  
LOTS 46 THRU 50

**STORM DRAIN PROFILES**

6TH ELECTION DISTRICT HOWARD COUNTY

REVISIONS

NO.	DESCRIPTION OF CHANGES	DRN.	REV.	DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.  
*Wade R. M... 3-12-08*  
DATE: 3-12-08  
CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
*... 3/10/08*  
DATE: 3/10/08  
CHIEF, DIVISION OF LAND DEVELOPMENT

Professional Certification:  
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 25420, Expiration Date: 07-28-08.

*Mark Thayer*  
MARK THAYER, P.E.

CO. FILE #:	F-07-169	DES. BY:	JCO
TAX ACC. #:	N/A	DRN. BY:	SDS
TAX MAP:	47	CHK. BY:	JCO
BLOCK / GRID:	8	DATE:	4-09-2007
PARCEL #:	3	DDC JOB#:	06127.1
ZONE / USE:	PEC-MXD-3	SHEET NUMBER:	8 of 9
DWG. SCALE:	1"=50'		





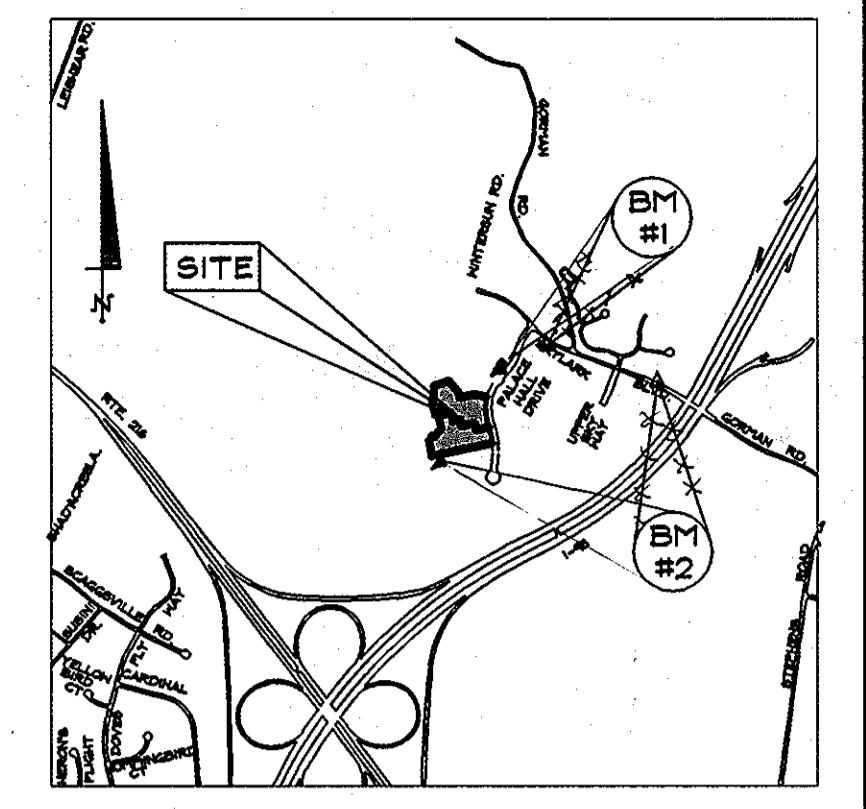
**GENERAL NOTES**

- Existing Zoning: PEC-MXD-3 per April 2004 Comprehensive Zoning Plan and ZB Case No. 97474.
- Deed Reference: M.D.R. 5289, FOLIO 330; M.D.R. 5548, FOLIO 334.
- Plat Reference: 17382.
- Gross Area of Tract: 8.1295 ac.
- Area of 100 Year Floodplain: N/A.
- Area of Steep Slopes: 0.00 ac.
- Net Area of Tract: 8.1295 ac.
- Number of Proposed Lots/Parcels: 85.
- Area of Proposed Lots/Parcels: 6.5350 ac.
- Buildable Lots: 75.
- Open Space: 1.5945 ac (31.4% of This Resubdivision).
- 38.5% Provided Under F-03-19.
- Minimum open space required is 35%.
- Area of proposed public roads: 1.5945 ac.
- Land for a Public Road will be dedicated under this final plan.
- This project is in conformance with the latest Howard County Standards unless waivers have been approved.
- The existing topography shown hereon is based on a field survey prepared by DeMario Design Consultants, Inc., dated March, 2006.
- Landscaping for this development and landscaping surety is provided as part of the Developers Agreement. Final plan shall be in accordance with the latest edition of the Howard County Landscape Manual and the approved Emerson Landscape and Street Tree Design criteria. 15 shade trees, 30 evergreen trees are required and \$4,000 surety to be paid with a DPW (Developer's Agreement).
- The Forest Conservation Easement has been established to fulfill the requirements of section 16.1200 of the Howard County Code and Forest Conservation Act. No clearing, grading or construction is permitted within the Forest Conservation Easement; however, Forest Management Practices as defined in the deed of Forest Conservation Easement are allowed. This project complies with the requirements of Section 16.1200 of the Howard County Code for Forest Conservation. Forest Conservation Act compliance for Emerson Section 2 Phases 1, 2 and 3, was previously addressed under F-01-197, F-01-145 and F-02-55 and for Phase 5B under F-02-55. The total Forest Conservation area is 1.7531 acres and area J-1 (2.329 acres). The total Forest Conservation surety amount is \$52,533.36 paid under F-05-049. The coordinates shown hereon are based upon the Howard County Geodetic Control, which is based upon the Maryland State Coordinate System. Howard County Monument No. 47DC & 47EB were used for this project.
- This property is within the Metropolitan District.
- Stormwater management for this development is provided under F-02-55 & F-01-145. Quality & quantity stormwater management for section 2, phase 2 is provided by one wet pond facility. The wet pond facility will be provided by said HOA. Access to the storm facility is via Palace Hall Drive. The subdivision in the Patuxent River sub-basin and is a class one watershed.
- Existing utilities shown hereon are based on field surveys and record drawings.
- There are no floodplain onsets, there are no steep slopes, streams or buffers onsite.
- There are no wetlands onsite based on Plat 17382, recorded July 28, 2009.
- Final plan shall be in accordance with the latest edition of the Howard County Landscape Manual and the approved Emerson Landscape and Street Tree Design criteria. 15 shade trees, 30 evergreen trees are required and \$4,000 surety to be paid with a DPW (Developer's Agreement).
- The geotechnical study for this project was prepared by Hillis Carnes Engineering Associates, Inc. in February, 2006.
- Project Background Information:
  - Subdivision Name: Emerson Parcels D3/AA-1.
  - Tax Map/Block/Parcel: 47/6/3 & 837
  - Zoning: PEC-MXD-3
  - Election District: 6th
  - Total (Gross) Tract Area: 8.1295 ac.
  - Number of Proposed Lots/Parcels: 85
  - Applicable District of Planning & Zoning File No.'s: S-99-12(Key Property), F-03-19, F-02-15, WP-03-46, WP-99-46, PB-339, PB354,ZB-9741, SP-06-05,F-05-49, F-07-164.
- There are no existing dwellings on the site.
- The proposed access streets shall be public.
- BRU denotes the Building Restriction Utility.
- Sediment and erosion control measures are provided on the final plan in accordance with the 1994 Maryland Standards and Specifications for Soil Erosion and Sediment Control.
- Street trees are provided on the access street in accordance with Section 16.124 of the Howard County Subdivision Regulations.
- Sidewalks are provided in accordance with Section 16.134 of the Howard County Subdivision Regulations.
- A Community Input Meeting is not required in the MXD zone.
- The minimum building setback restrictions from property lines and public road right-of-way lines for the SFA residential lots shall be in accordance with the comprehensive Sketch Plan Development Criteria approved under S-99-12, PB-339 and PB-354.
- Phasing for this project is in accordance with the Decision and Order for Zoning Board Case No. 475-M and the Decision and Order approved for PB-339 (Comprehensive Sketch Plan, S-99-12).
- There are no historic structures or cemeteries located on the subject property.
- No grading, removal of vegetative cover or trees, paving and new structures shall be permitted within the wetlands, stream or their required buffers, flood plain and forest conservation easement.
- 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)-213-1850 at least (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 work being done.
- Traffic control devices, markings and signs shall be in accordance with the latest edition of the Manual of Uniform Traffic Control Devices (MUTCD). All street and regulatory signs shall be in place prior to placement of any asphalt.
- All sign posts used for traffic control signs installed in the County. Right-of-way shall be mounted on a 2" galvanized steel, perforated, square tube post (14 gauge) inserted into a 2-1/2" galvanized steel, perforated, square tube sleeve (12 gauge)-5' long. A galvanized steel pole cap shall be mounted on top of each post.
- Street light placement and the type of fixture and pole shall be in accordance with the Howard County Design Manual, Volume III (1993) and as modified by "Guidelines for Street Lights in Residential Development June (1993)". A minimum spacing of 20' shall be maintained between any streetlight and any tree.
- Water is public. Contract # 24-4493-D
- Sewer is public. Contract # 24-4493-D
- Parcel D-3 & AA-1 use each allocated 34 units with the recordation of F-05-49, Plat No. 17381 through 17383.
- Provide sidewalk ramps at all intersections with truncated dome pad per current ADA standards.
- WP-04-14, Emerson 2/3, Bulk Parcel D-1 approved on September 10, 2003 Section 16.1106.h.(2) establishes the milestone date by which a sketch plan/preliminary equivalent sketch plan (for fee-simple lots) or a site plan (for condominium development or non-residential development) must be submitted when a bulk parcel is recorded on a record plat; and Section 16.144.(a), which provides that when a milestone date is not complied with, the plan shall be voided and all previous approvals and housing unit allocations rescinded.

# FINAL ROAD CONSTRUCTION PLANS for EMERSON SECTION 2, PHASE 5, LOTS 1 thru 39 and OPEN SPACE LOTS 40 thru 42, A RESUBDIVISION OF PARCEL 'D-3' and EMERSON, SECTION 2, PHASE 5B, LOTS 1 thru 39 and OPEN SPACE LOTS 40 thru 49, A RESUBDIVISION OF PARCEL AA-1 TAX MAP 47, GRID 8, PARCELS 3 & 837 6TH ELECTION DISTRICT HOWARD COUNTY, MD

**BENCHMARK**

DESCRIPTION		BENCHMARK #1		BENCHMARK #2	
N	536615.0157	N	536615.0157	N	536615.0157
E	1255479.1226	E	1255479.1226	E	1255479.1226
B.M.	47DC	B.M.	47EB	B.M.	47EB
ELEV.	348.249	ELEV.	348.249	ELEV.	348.249

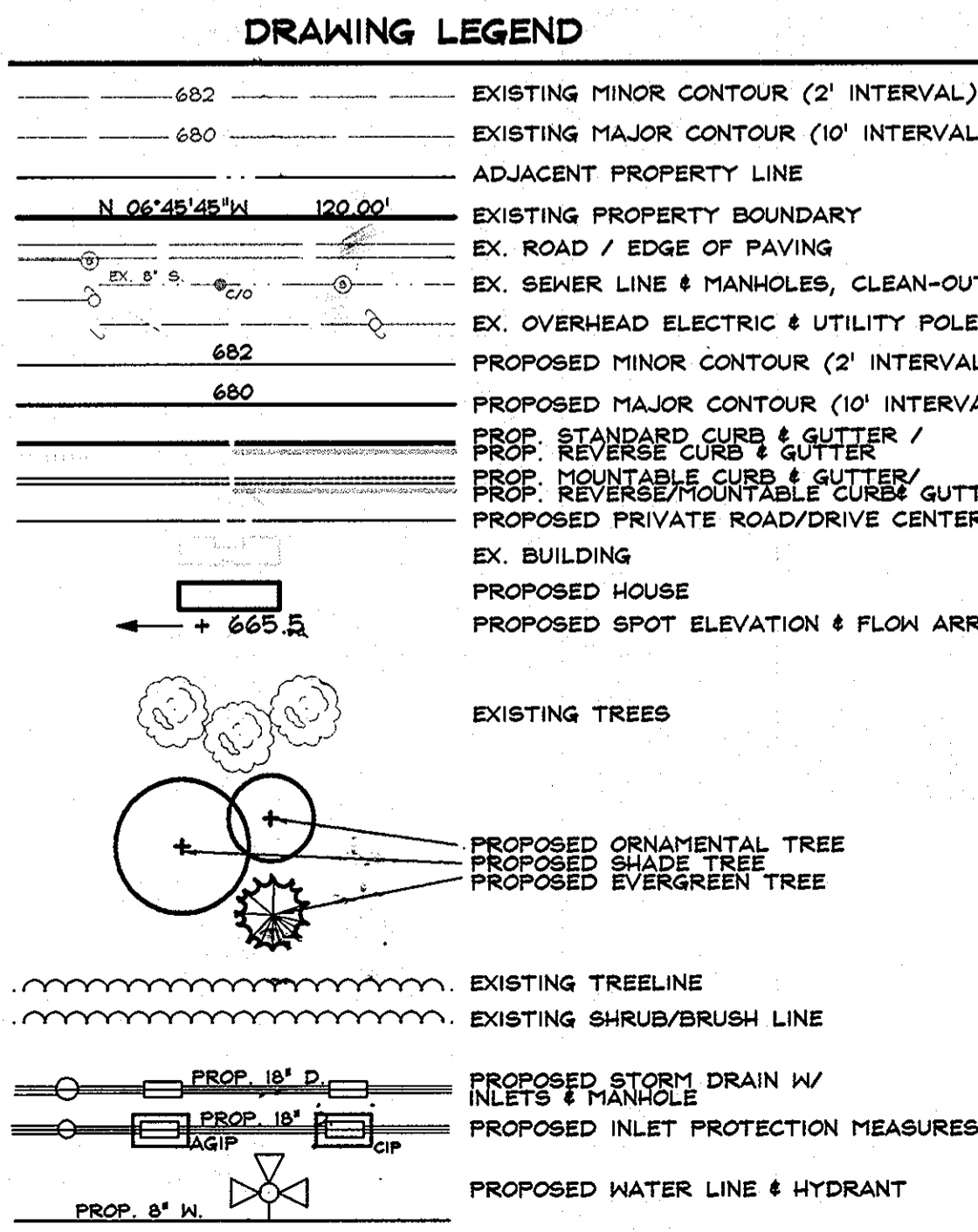
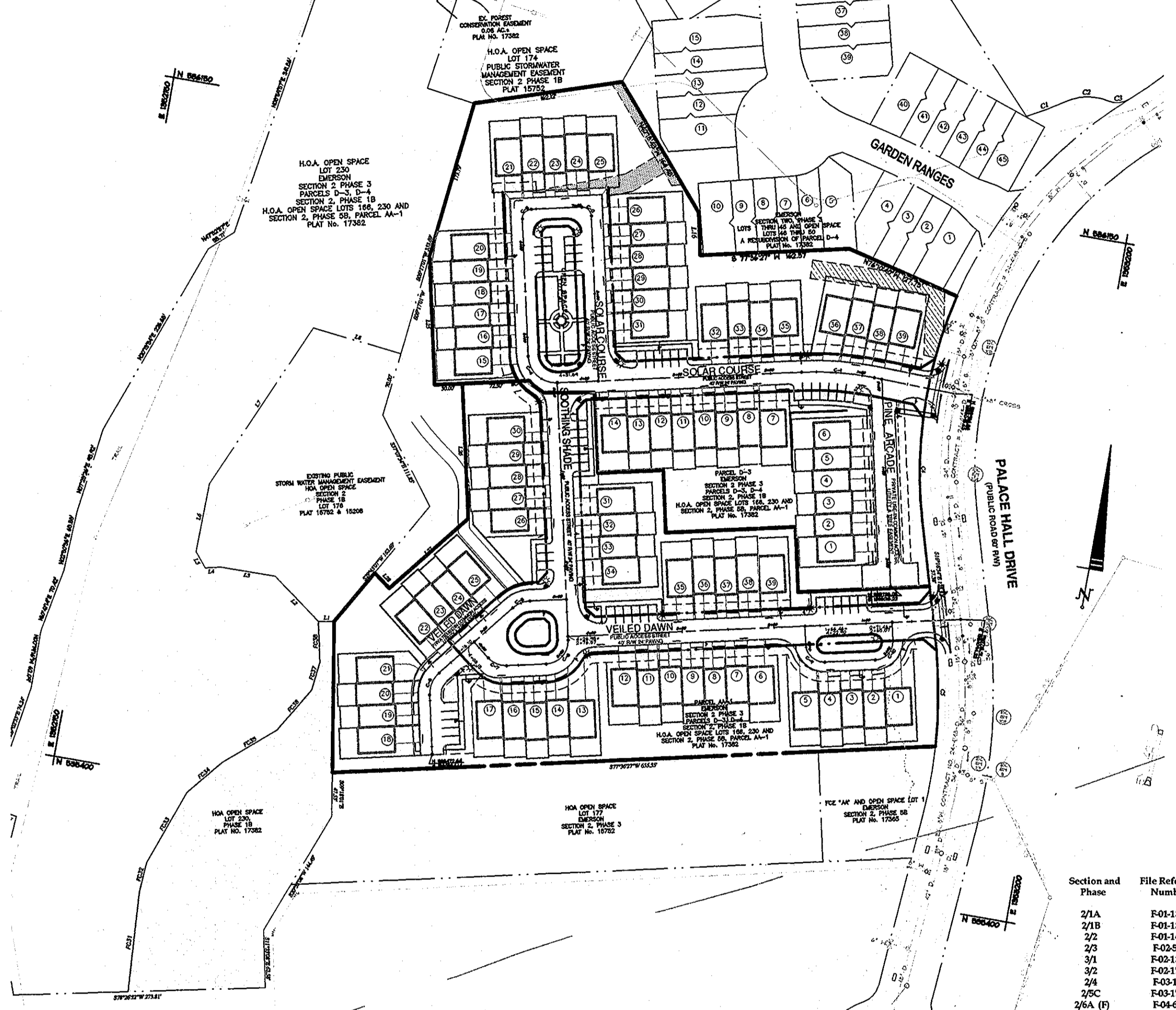


**Site Analysis Data Chart**

- General Site Data
  - Present Zoning: PEC MXD-3
  - Applicable DPA File References: S-99-12, PB-339, ZB-974-1, F-03-16, F-04-176, F-03-115, F-01-137, F-02-55, PB-354, F-04-127, F-01-17, WP-01-22, F-05-49, WP-01-14, WP-03-154, F-03-16, WP-04-14, SP-06-05, F-07-164.
  - Proposed Use of Site or Structure(s): SFA RESIDENTIAL. Proposed Water and Sewer Systems: Public - Private. Any Other Information Which May be Relevant: N/A.
- Area Tabulation
  - Total Area of Site 8.1295 Ac.
    - Parcel D-3 = 4.1908 Ac +/-
    - Parcel AA-1 = 3.9887 Ac +/-
  - Approximate Area of 100 Year Floodplain: 0 Acres
  - Approximate Area of Steep Slopes (25% or Greater): 0 Acres
  - Net Area of Site 8.1295 Ac +/-
  - Area of Proposed Building Lots: 3.9850 Acres
  - Area of Proposed Open Space Lots: 2.5480 Acres
  - Area of Bulk Parcels: 0 Acres
  - Area of Proposed Public Roads: 1.5945 Ac +/-
  - Area of Proposed Private Roads: 0.273 Ac (Included in proposed open space).
- Unit/Lot Tabulation
  - Total Number of Residential Units/Lots Allowed for Project by Project: 20 units per gross acre allowed for individual parcels per Emerson Development criteria in the OR zone with the overall density not to exceed 12.1 units per gross acre for entire OR zone.
    - Parcel D-3/AA-1 = 78 Units
  - Total Number of Residential Units/Lots Proposed on this Submission
    - Parcel D-3 = 39
    - Parcel AA-1 = 39
  - Density of Project Per Gross Acre: 9.5 units
  - Total number of Open Space lots proposed: 7
  - Total Number of Non-Buildable Bulk Parcels Proposed: 0
  - Total Number of Lots/Parcels Proposed: 85
- Open Space Tabulation
  - Open Space Required: 35%
  - Open Space Provided:
    - F-02-55, Parcel D-A=6.5 acres (35.1%)
    - F-04-127, Parcel AA-A=6.5 acres (29.9%)
    - This Plan A=2.54 acres (31.4%)
- Parking Tabulation
  - Parking Required: 156 spaces (78 Units x 2.0 spaces/unit = 156 spaces)
  - Parking Provided: 203 spaces (47 over/flow spaces)

**DRAWING INDEX**

SHEET	DESCRIPTION
1	COVER SHEET
2	FINAL ROAD PLAN & PROFILE
3	FINAL ROAD PLAN & PROFILE
4	FINAL ROAD PLAN & PROFILE
5	GRADING & SEDIMENT CONTROL PLAN
6	SEDIMENT CONTROL DETAILS AND SITE DETAILS
7	SEDIMENT EROSION CONTROL NOTES
8	STORM DRAIN DRAINAGE AREA MAP
9	STORM DRAIN DRAINAGE AREA MAP PROFILE
10	LANDSCAPE PLAN DETAILS, NOTES AND STREET TREE PLAN



**COORDINATE TABLE**

POINT	NORTH	EAST
300	536061.7242	1255023.3361
301	536092.2481	1252908.2819
302	536057.4023	1252746.6980
303	536103.2474	1252756.6106
304	536228.7220	1252630.1974
348	535940.0634	1253017.3566
349	535925.0776	1253016.0130
350	535813.4955	1253034.6485
351	535745.2067	1253054.5867
352	535714.5786	1252915.1960
353	535783.3245	1252949.9858
354	535763.6577	1252762.2482
355	535820.5647	1252747.5474
356	535805.3325	1252678.2016
357	535883.4220	1252661.0433
358	535890.7743	1252659.4278
359	535881.1991	1252605.0441
360	535883.7649	1252491.8137
361	535891.2315	1252587.1324
362	535888.6765	1252575.9121
363	535869.2443	1252487.0206
364	536005.7063	1252457.0473
365	536178.4822	1252476.0686
366	535957.5985	1252009.0911
367	535949.0643	1252958.9258
368	535941.9267	1252881.7935
369	535912.8592	1252862.1668
370	536088.2217	1252823.5281
371	536112.9667	1252635.8394
372	535947.5451	1252674.3981
373	535924.6244	1252686.2562
374	535970.9448	1252875.2092
375	535979.0442	1252956.3111
376	535977.8400	1253003.4901
377	535912.7791	1252608.2638
378	535916.5889	1252602.3045
379	536052.5928	1252572.2740
380	536083.5416	1252676.0810
381	536084.2169	1252600.4766
382	536060.4092	1252606.4925
383	536024.0781	1252636.3881
384	535918.1215	1252632.5777
385	535917.8794	1252460.3462
386	535763.5925	1252494.2260



**CURVE TABLE**

CURVE	RADIUS	LENGTH	DELTA	CHD. BRG.	CHD. DIST.	TANGENT
C1	475.10'	251.17'	90°06'01"	S 01°13'54" E	248.29'	128.55'
C2	534.58'	117.11'	12°33'22"	N 02°19'53" W	16.87'	59.79'
C3	25.00'	5.35'	13°24'51"	N 03°18'49" E	5.84'	2.94'
C4	34.00'	14.82'	21°46'17"	S 59°25'00" E	14.73'	7.50'
C5	310.00'	74.66'	19°47'55"	S 84°30'25" W	74.48'	87.51'
C6	50.00'	27.84'	31°54'26"	S 28°22'46" E	27.49'	14.29'
C7	350.00'	84.29'	19°47'55"	S 84°30'25" W	84.09'	42.35'
C8	16.00'	16.28'	58°17'01"	S 48°27'56" W	15.58'	8.92'
C9	45.00'	45.78'	58°17'01"	N 48°27'56" E	43.88'	25.09'
C10	45.00'	40.09'	50°58'02"	S 78°41'29" E	38.72'	21.45'
C11	50.00'	34.06'	39°01'51"	S 58°05'32" W	33.41'	17.72'
C12	17.00'	16.88'	56°53'45"	N 40°50'26" W	16.20'	9.21'
C13	50.00'	21.78'	24°57'19"	S 56°48'39" E	21.61'	11.06'
C14	12.00'	23.52'	140°58'09"	S 31°54'29" E	22.62'	33.86'
C15	10.00'	6.81'	39°01'51"	S 58°05'32" W	6.68'	3.54'
C16	31.00'	48.69'	90°00'00"	N 32°36'27" E	48.88'	31.00'
C17	31.00'	48.69'	90°00'00"	S 57°29'33" E	48.84'	31.00'
C18	43.00'	29.31'	39°03'01"	S 07°07'57" W	28.74'	15.25'

**G. OF ROAD CURVE TABLE**

CURVE	RADIUS	LENGTH	DELTA	CHORD BRG.	CHORD DIST.	TANGENT
C-1	590.00'	79.47'	19°47'55"	S84°30'25"W	79.28'	39.93'
C-2	10.00'	15.71'	90°00'00"	S87°23'39"E	14.14'	10.00'
C-3	10.00'	15.71'	90°00'00"	N82°36'27"E	14.14'	10.00'
C-4	30.00'	47.12'	90°00'00"	N57°23'39"W	42.43'	30.00'
C-5	30.00'	20.47'	39°03'01"	S58°05'30"W	20.08'	10.65'
C-6	30.00'	26.65'	50°54'05"	S13°09'30"W	25.78'	14.28'
C-7	25.00'	22.21'	50°54'06"	N76°56'30"W	21.49'	11.90'
C-8	25.00'	39.27'	90°00'00"	S32°36'27"W	35.36'	25.00'
C-9	20.00'	31.42'	90°00'00"	N57°29'39"W	28.28'	20.00'
C-10	20.00'	31.42'	90°00'00"	S32°36'27"W	28.28'	20.00'

**EMERSON SECTION 2 & 3 OVERALL DEVELOPMENT TRACKING CHART**

Section and Phase	File Reference Number	Gross Acreage	SFD Density (A)	Other Res. Units (B)	Employment Ac. (C)	Open Space (D)	SFD Units (E)	SFD Density (F)	Other Res. Units (G)	Other Res. Density (H)
2/1A	F-01-136	8.4	16.6(99%)	-	-	4.8(57%)	-	-	-	-
2/1B	F-01-137	97.8	49.7(50.8%)	8.0(8.2%)	-	40.1(41%)	160	3.2	80 SFA	10.0 DU/Ac.
2/2	F-01-145	12.7	-	12.7(100%)	-	-	-	-	120 SFA	9.4 DU/Ac.
2/3	F-03-55	18.5	-	12.0(64.9%)	-	6.5(35.1%)	-	-	120 SFA	10.0 DU/Ac.
3/1	F-03-131	69.5	-	-	22.0(31.7%)	47.5(68.3%)	-	-	-	-
3/2	F-03-178	12.3	-	-	8.9(72.4%)	3.4(27.6%)	-	-	-	-
3/4	F-03-133	44.5	27.0(60.6%)	-	0.2(0.7%)	2.1(70%)	120	4.4	-	-
2/5C	F-03-175	3.0	0.7(23.3%)	-	0.2(6.7%)	2.1(70%)	-	-	-	-
2/6A (F)	F-04-68	10.4	-	9.4(90.4%)	-	1.0(9.6%)	-	-	100 SFA	10.6 DU/Ac.
2/6A (S)	F-04-63	29.2	22.2(77.7%)	-	3.9(13.6%)	2.6(8.9%)	87	3.9	60 Apt (EMF) 33 SFA (OR)	11.4 DU/Ac.
2/5B & 3/4	F-04-127	23.9	-	2.8(12.7%)	14.1(59.9%)	6.9(28.9%)	-	-	-	-
2/7	F-05-59	6.2	4.9(79.0%)	-	-	1.3(21.0%)	20	4.1	-	-
2/8	F-05-93	8.5	-	8.5(100%)	-	-	-	-	73 Apt 47 SFA	14.1 DU/Ac.
2/9A (G)	F-07-123	0.0	-	-	-	-	3	-	-	-
2/9B	F-07-141	28.8	-	8.5(29.5%)	12.2(44.2%)	7.58(26.3%)	-	-	117 Apt 13.8 DU/Ac.	-
TOTAL		373.7	109.69(29.2%)	62.16(16.6%)	61.82(16.5%)	140.9(37.7%)	390	3.6	250 Apt 500 SFA 750 Total	12.0 DU/Ac.

**Overall Density Tabs**

Overall SFD Density	(B) Proposed	(B) Allowed	Land Use Acreages	Proposed	Allowed	Max. Res. Units Proposed	Max. Res. Units Allowed
Overall SFD Density	3.6	3.8	SFA	109	117	28979 M	59912
Overall OR Density	12.0	12.1	EMP	62	63	450 (37.5%)	395 (34.5%)
Overall Project Density	2.21	2.32	OR	61.82	154.9	250 (20.8%)	500 (21.8%)
			Open Space	140.9	183	500 (41.7%)	500 (43.7%)
			TOTAL	373.7	516.9	1200	1145

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.  
*Michelle J. Zuber* 5-13-08  
CHIEF, BUREAU OF HIGHWAYS

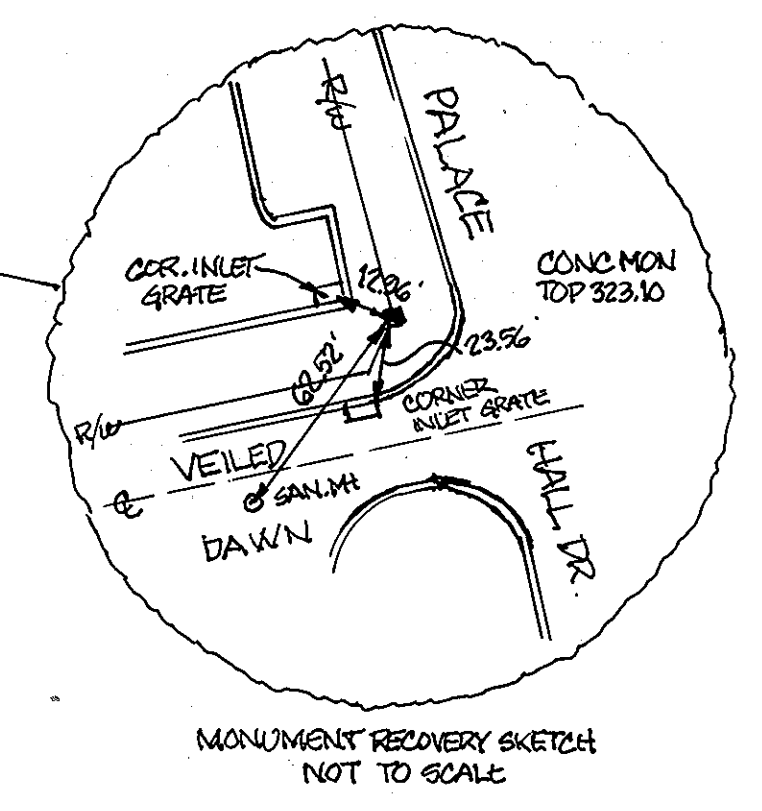
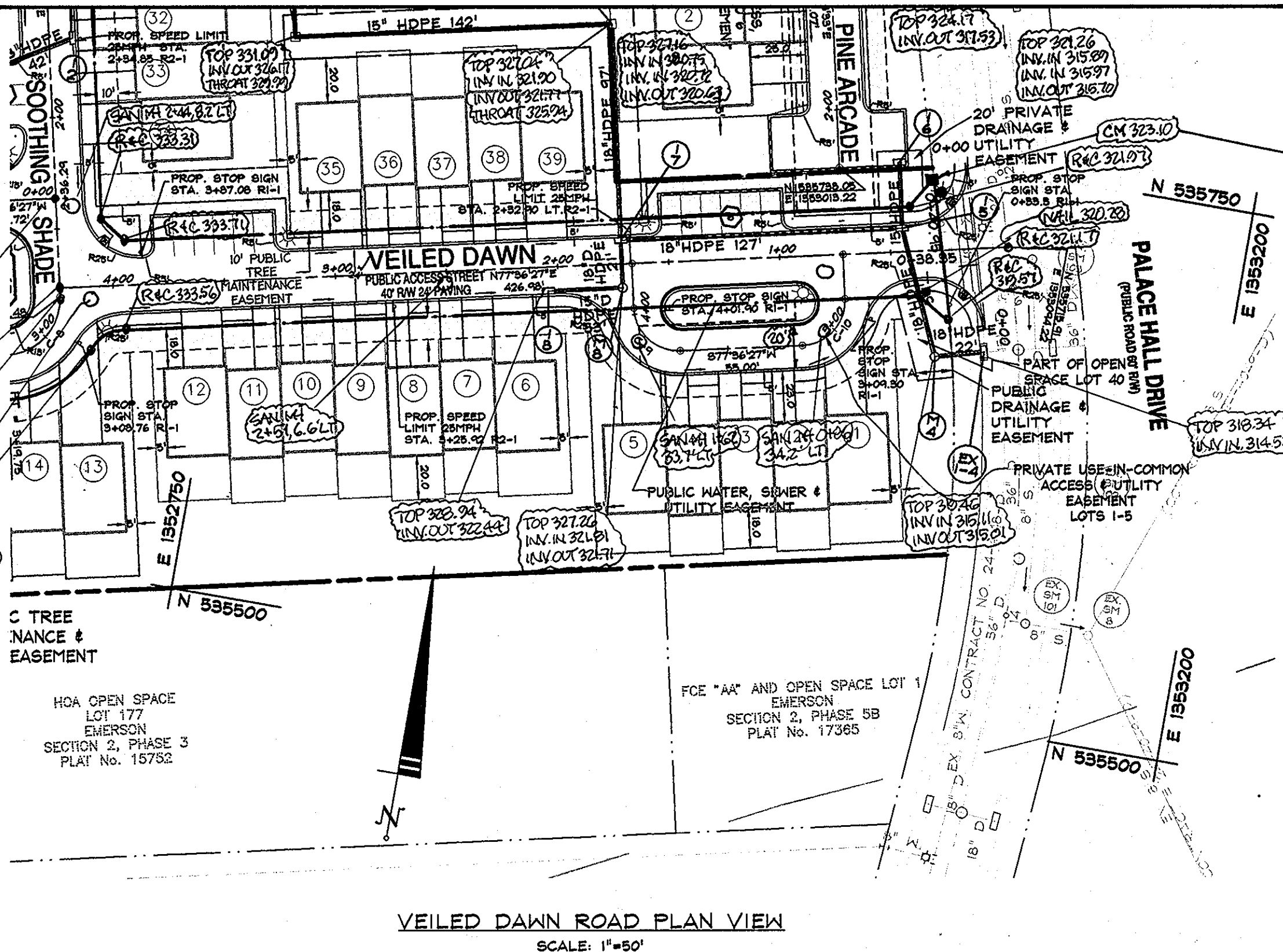
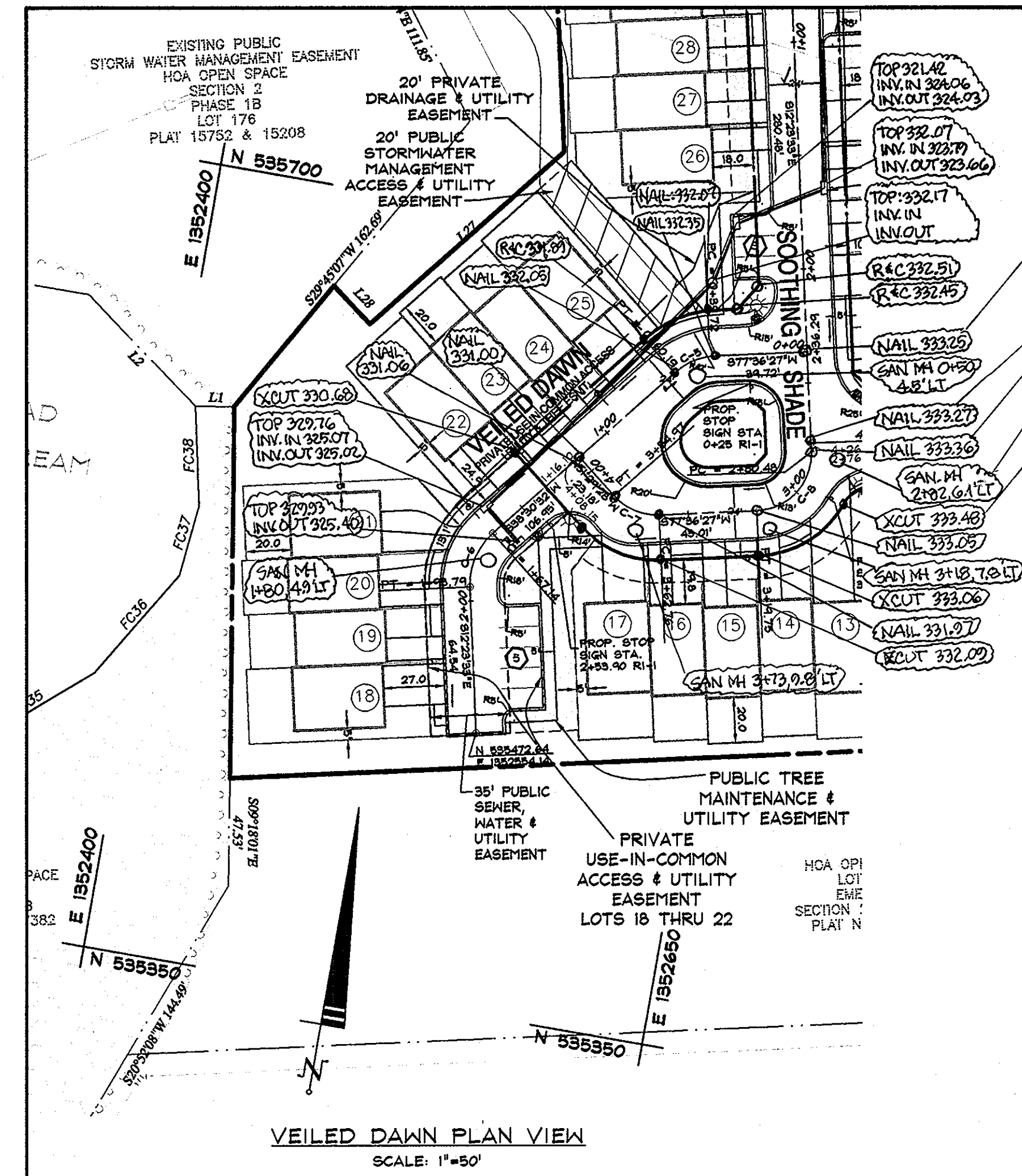
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
*Chris Hamilton* 5/20/08  
CHIEF DIVISION OF LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF ENGINEERING DESIGN DIVISION.  
*Chris Hamilton* 5/16/08  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE: 5/16/08

Professional Certification:  
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 2542, Expiration Date: 7/31/08.

AS-BUILT  
*Chris Hamilton* 5/16/08  
SURVEY DATES: 10/23/02-11/02/02

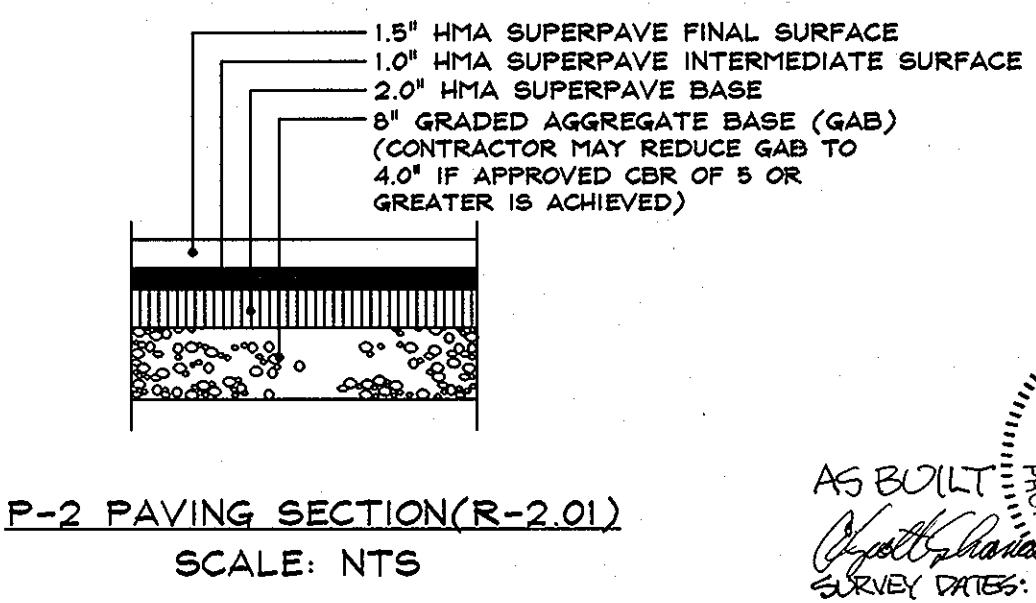
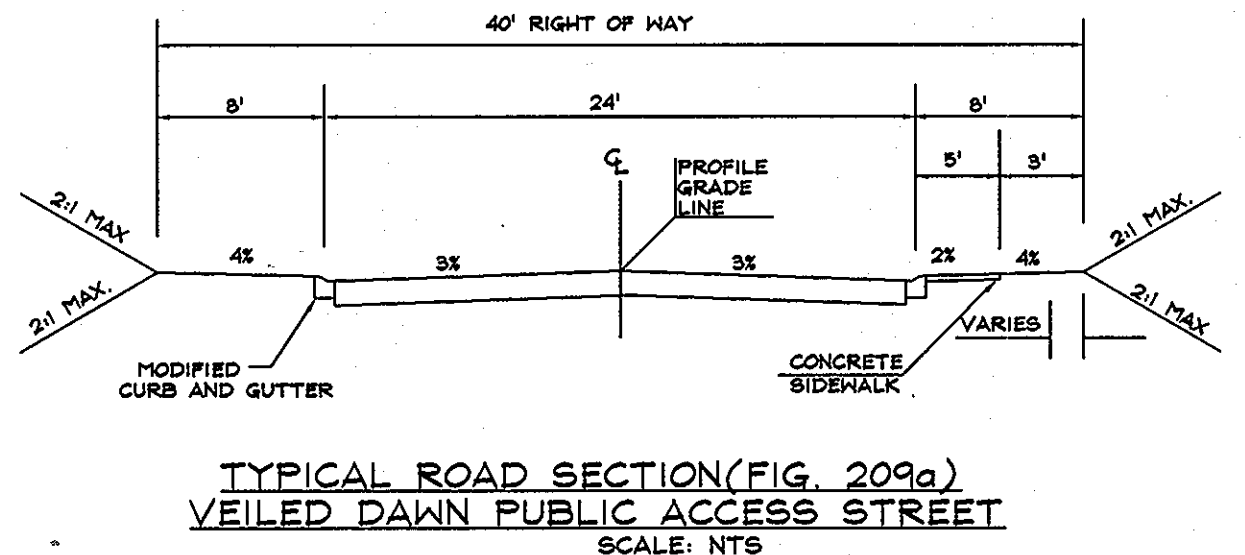
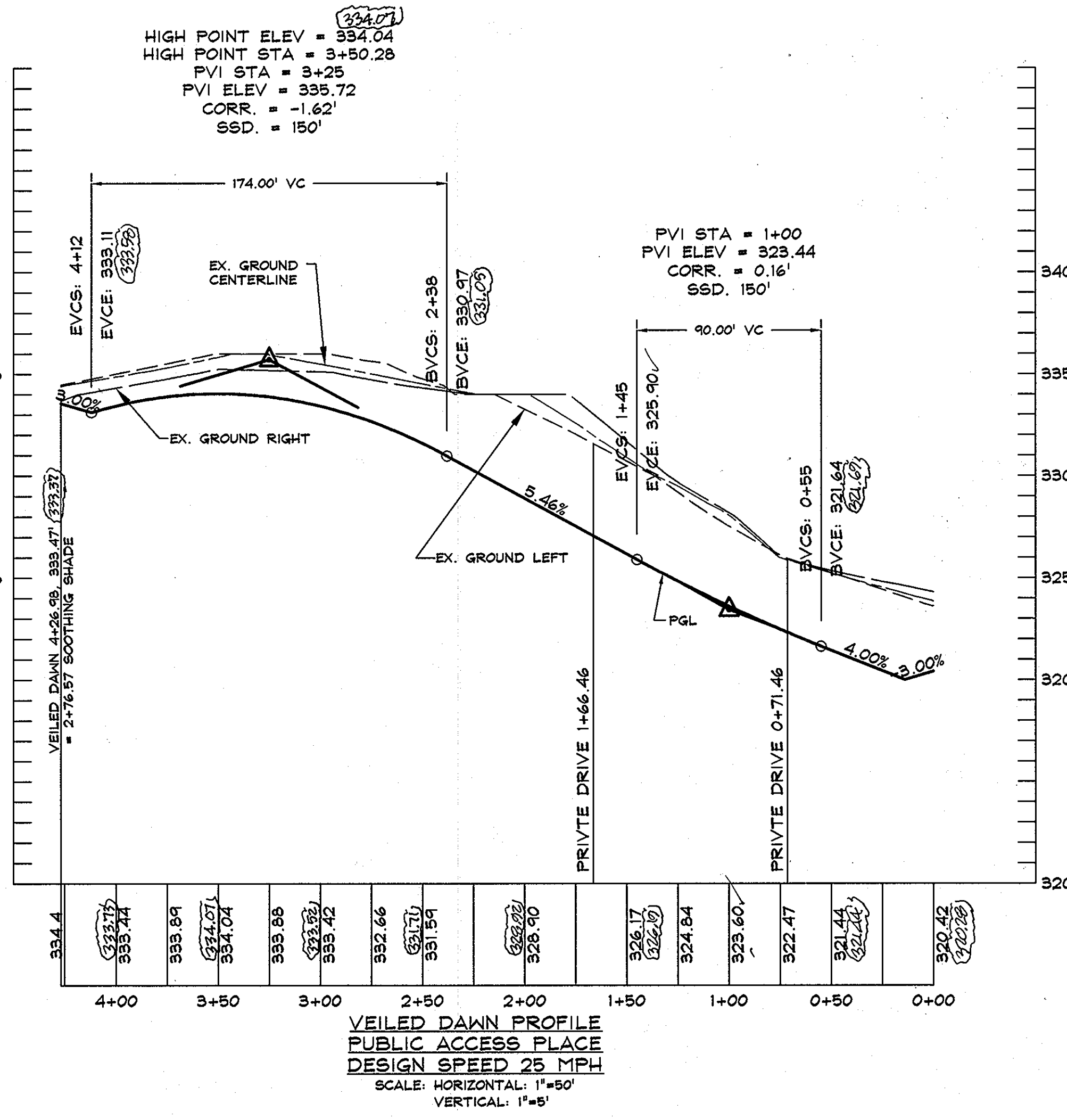
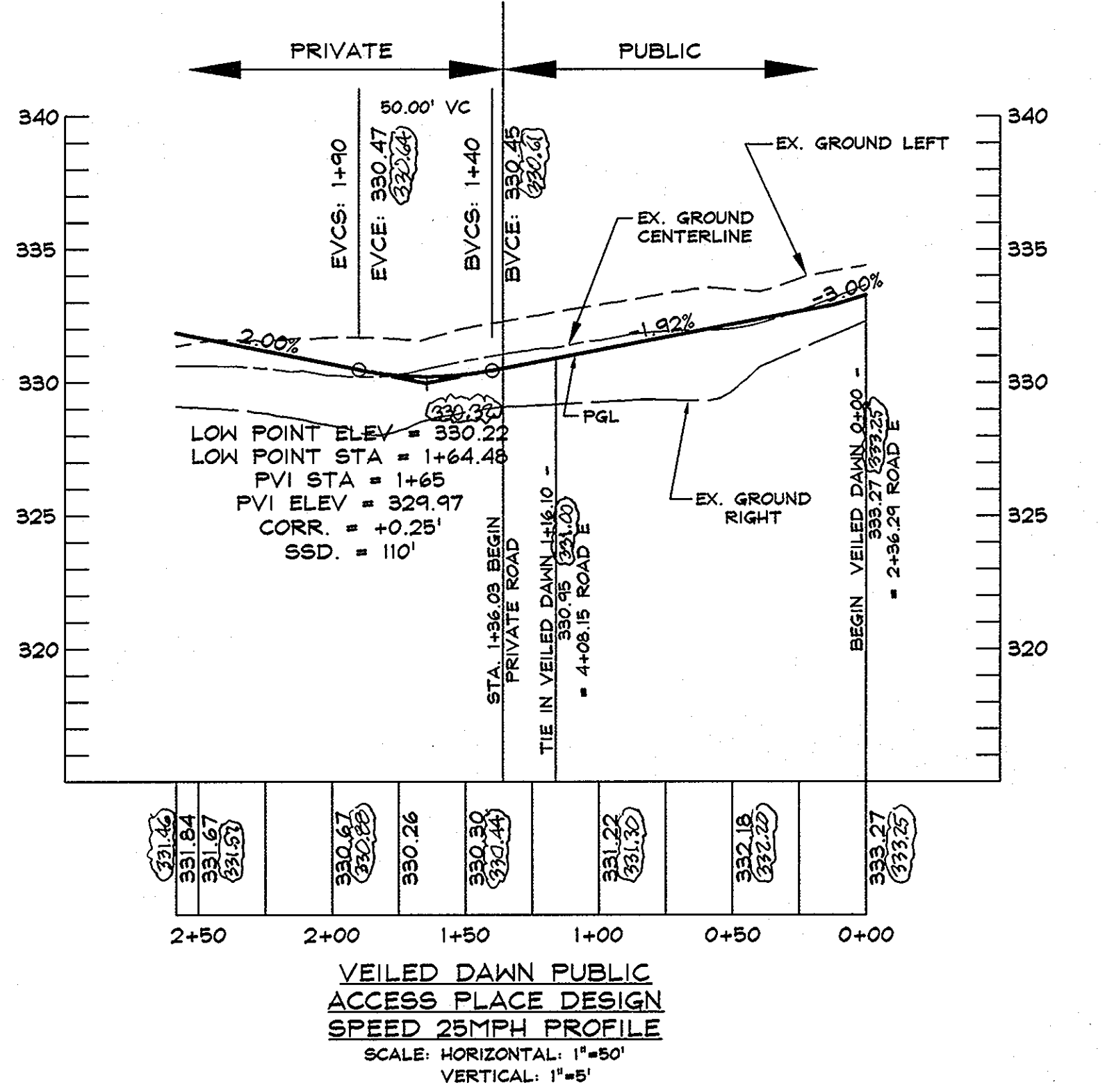


STREET LIGHT CHART		
SYMBOL	TYPE	LOCATION
*	150 WATT PREMIER	VEILED DAWN & STA. 0+29, 26' RT.
*	100 WATT PREMIER	VEILED DAWN & STA. 0+98, 16' LT.
*	100 WATT PREMIER	VEILED DAWN & STA. 1+63, 19' RT.
*	100 WATT PREMIER	VEILED DAWN & STA. 3+25, 19' RT.
*	100 WATT PREMIER	VEILED DAWN & STA. 4+06, 20' LT.
*	150 WATT PREMIER	SOLAR COURSE & STA. 0+20, 28' RT.
*	100 WATT PREMIER	SOLAR COURSE & STA. 0+97, 16' LT.
*	100 WATT PREMIER	SOLAR COURSE & STA. 1+63, 19' RT.
*	100 WATT PREMIER	SOLAR COURSE & STA. 3+65, 18' RT.
*	100 WATT PREMIER	SOLAR COURSE & STA. 6+20, 19' RT.
*	100 WATT PREMIER	SOLAR COURSE & STA. 7+35, 17' RT.
*	100 WATT PREMIER	SOOTHING SHADE & STA. 0+20, 20' RT.
*	100 WATT PREMIER	SOOTHING SHADE & STA. 2+16, 22' RT.
*	100 WATT PREMIER	SOOTHING SHADE & STA. 3+90, 21' LT.

PROVIDE TYPICAL SIDEWALK RAMPS AT ALL INTERSECTIONS WITH TRUNCATED DOME PAD PER CURRENT ADA STANDARDS

**AS-BUILT CERTIFICATION**  
 I HEREBY CERTIFY, BY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS AS-BUILT PLAN MEETING ALL APPLICABLE PLANS AND SPECIFICATIONS.

*Scott Shanaberger*  
 SCOTT SHANABERGER  
 PROFESSIONAL L.S. ENGINEER  
 SHANABERGER & LANE  
 LICENSE EXPIRATION DATE 4/1/2014



**DATA SOURCES:**  
 LOCATIONS OF TREELINES, STREAMS, TOPOGRAPHY, WETLANDS, AND FOREST CONSERVATION AREA DERIVED FROM F-01-187, F-02-85 AND F-04-127.  
 BOUNDARY SHOWN PER BOUNDARY SURVEY DATED JUNE, 1999, PREPARED BY DAFT-MACUNE-WALKER, INC. SOILS (IF SHOWN) TAKEN FROM HOWARD COUNTY SOIL SURVEY, 1968. ADDITIONAL TOPO PROVIDED BY SHANABERGER & LANE, DATED JANUARY, 2007.

**DeMario Design Consultants, Inc.**  
 182 East Main Street  
 Westchester, MD 21157  
 Phone: (410) 385-0500  
 Fax: (410) 385-0564  
 http://www.demariodesign.us  
 eMail: ddc@demariodesign.us

**OWNER:** EMERSON LAND BUSINESS TRUST  
**DEVELOPER:** GENERAL GROWTH PROPERTIES  
 10275 LITTLE PATUXENT PKWY  
 COLUMBIA, MD 21044  
 410-892-6000

**SITE ADDRESS:** PALACE HALL DRIVE  
 LAUREL, MD 20723

EMERSON, SECTION 2 PHASE 3, LOTS 1 thru 34 and OPEN SPACE LOTS 40 thru 42; A RESUBDIVISION OF PARCEL D-3 and EMERSON, SECTION 2, PHASE 5B, LOTS 1 thru 34 and OPEN SPACE LOTS 40 thru 48; A RESUBDIVISION OF PARCEL AA-1

**FINAL ROAD CONSTRUCTION PLAN AND PROFILE FOR VEILED DAWN**  
 6TH ELECTION DISTRICT HOWARD COUNTY, MD

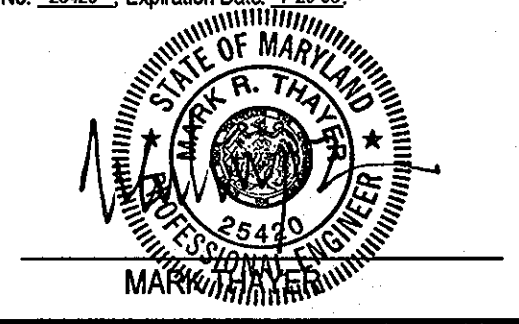
REVISIONS	
NO.	DESCRIPTION OF CHANGES
1	(AS-BUILT)
2	(AS-BUILT)
3	(AS-BUILT)
4	(AS-BUILT)

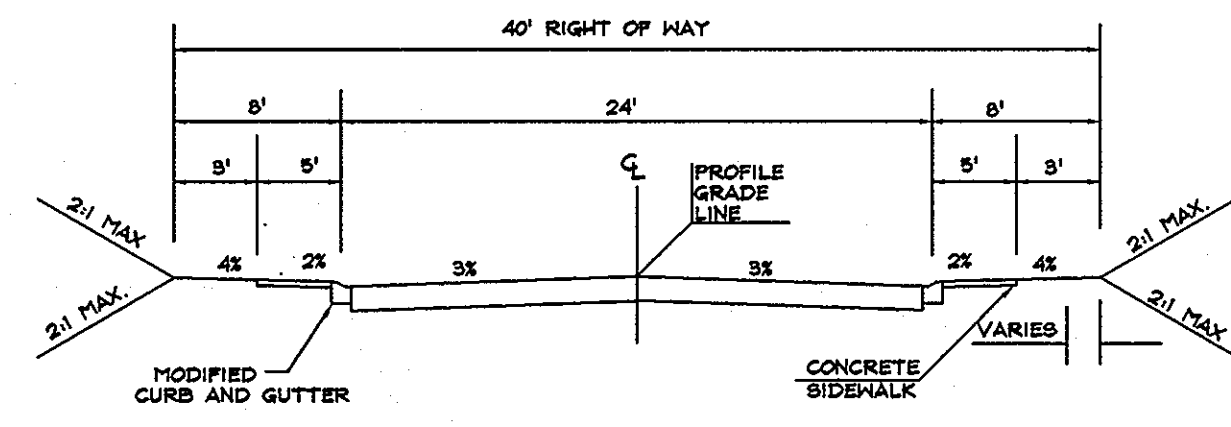
NO.	DESCRIPTION OF CHANGES	DRN.	REV.	DATE
CO. FILE #	F-07-182	DES. BY:	JCO	
TAX ACC. #		DRN. BY:	TPM/SDS	
TAX MAP:	47	CHK. BY:	WRD	
BLOCK / GRID:	8	DATE:	5-2-2008	
PARCEL #:	3 & 837	DDC JOB#:	08128.1	
ZONE / USE:	PEC-MXD-3	SHEET NUMBER:		
DWG. SCALE:	1"=50'			2 of 10

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.  
*Walter J. ...*  
 CHIEF, BUREAU OF HIGHWAYS  
 DATE: 5-13-08

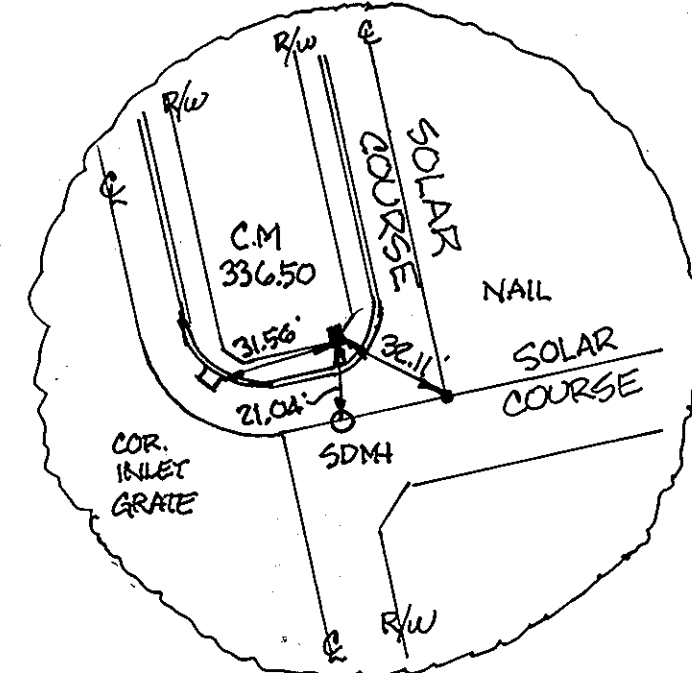
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
*Cinda ...*  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE: 5/16/08

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
*Scott Shanaberger*  
 PROFESSIONAL L.S. ENGINEER  
 DATE: 5/16/08

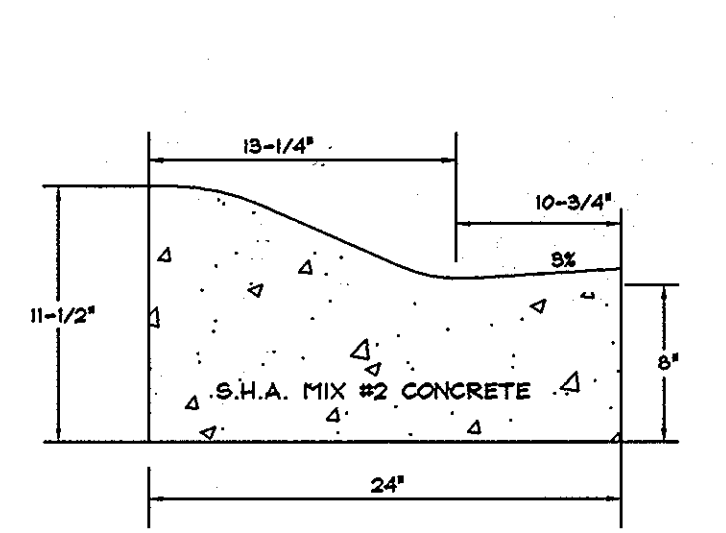




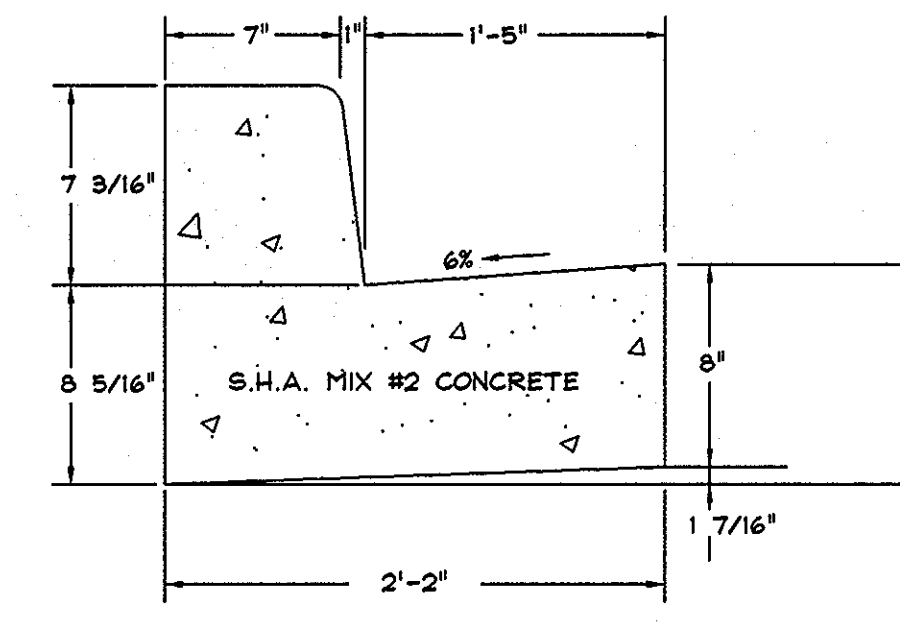
TYPICAL ROAD SECTION (FIG. 209a)  
SOLAR COURSE PUBLIC ACCESS STREET  
SCALE: NTS



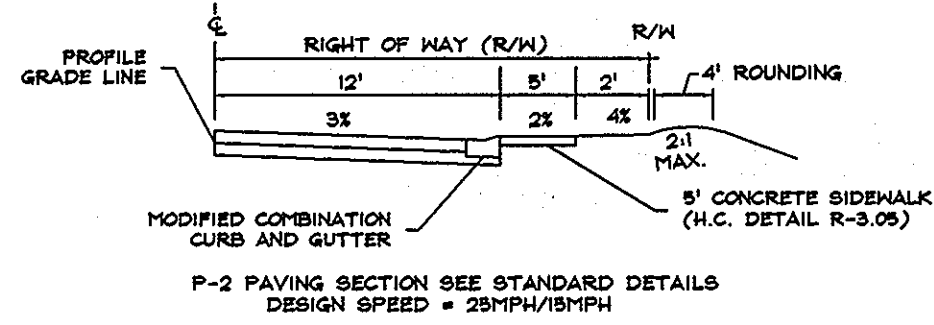
MONUMENT RECOVERY SKETCH  
NOT TO SCALE



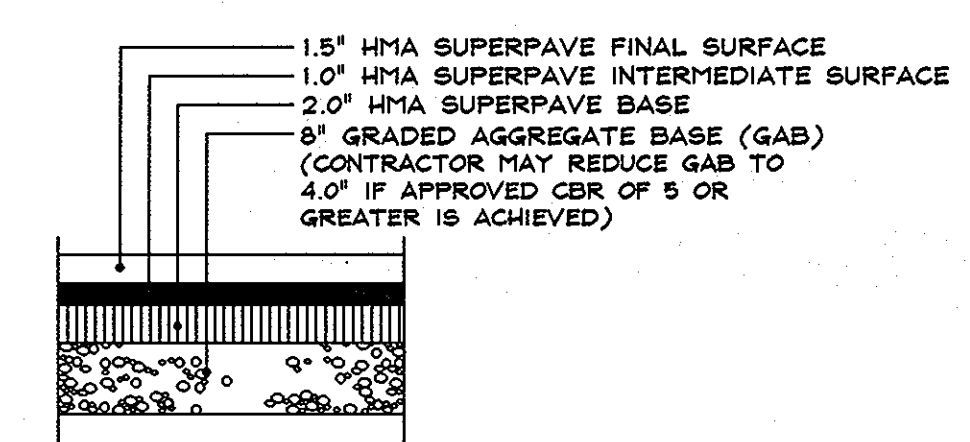
MODIFIED CURB & GUTTER (R-3.01)  
SCALE: NTS



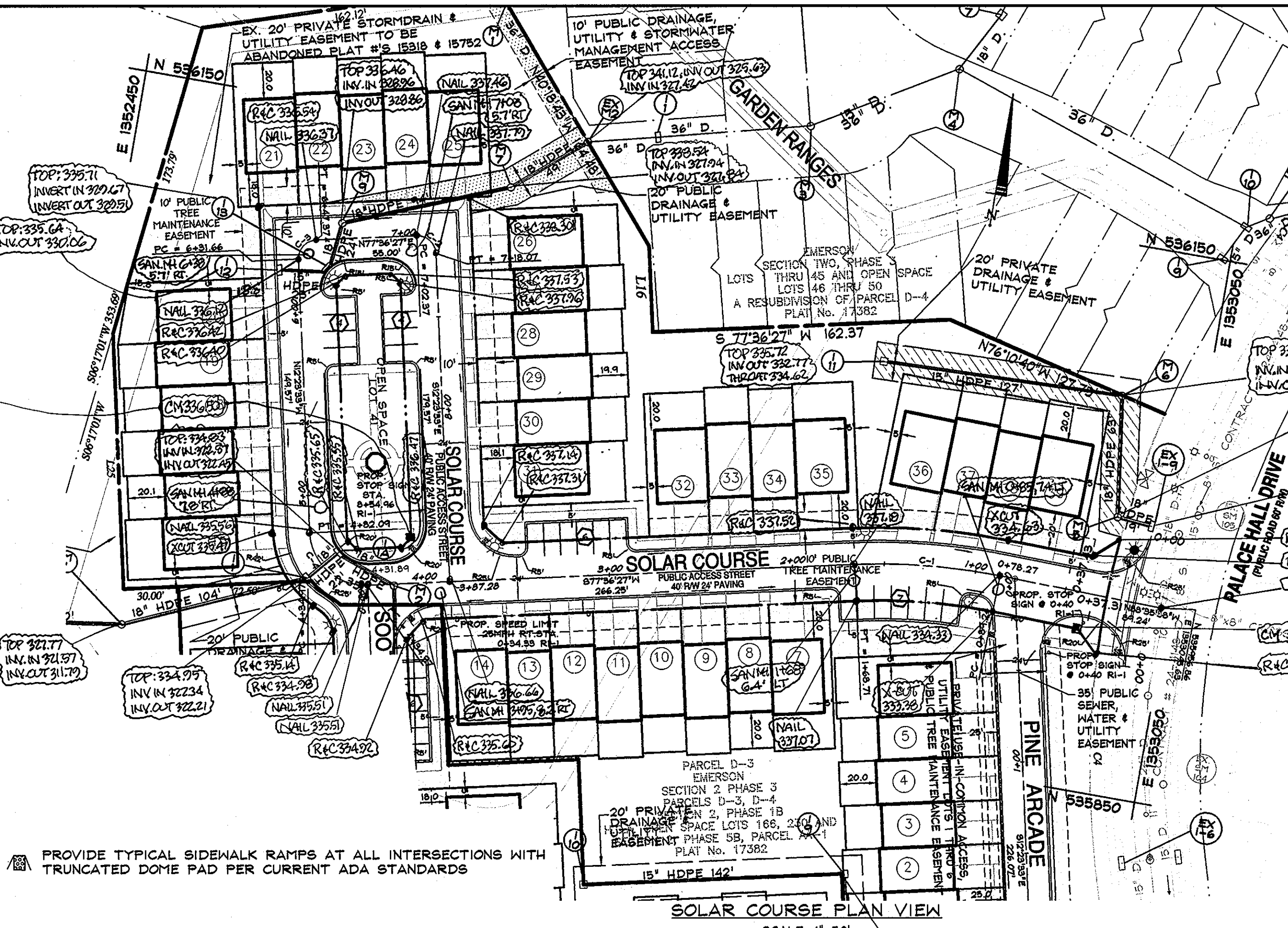
STANDARD CURB & GUTTER (R-3.01)  
SCALE: NTS



TYPICAL SECTION WITHOUT PARKING  
SCALE: NTS



P-2 PAVING SECTION (R-2.01)  
SCALE: NTS

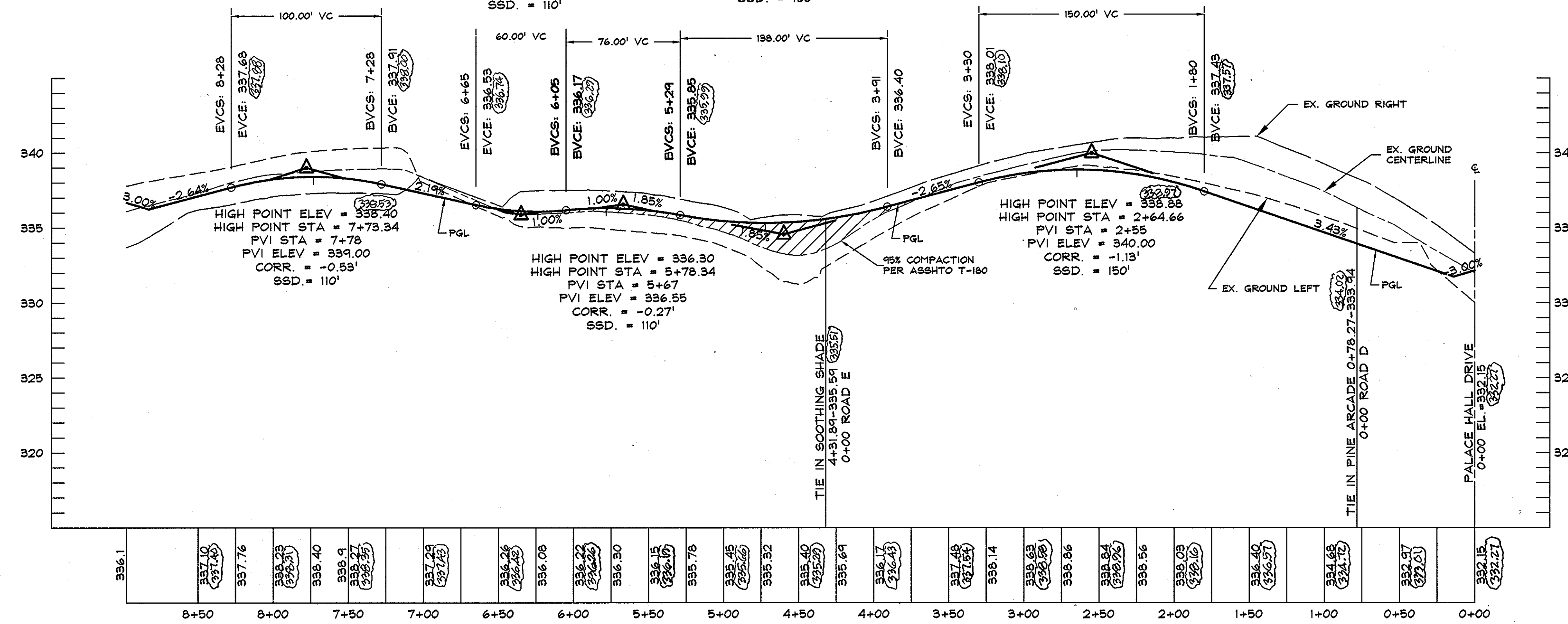


SOLAR COURSE PLAN VIEW  
SCALE: 1"=50'

PROVIDE TYPICAL SIDEWALK RAMPS AT ALL INTERSECTIONS WITH TRUNCATED DOME PAD PER CURRENT ADA STANDARDS

LOW POINT ELEV = 335.08  
LOW POINT STA = 6+23.82  
PVI STA = 6+35  
PVI ELEV = 335.87  
CORR. = +0.24'  
SSD. = 110'

LOW POINT ELEV = 335.22  
LOW POINT STA = 4+72.24  
PVI STA = 4+60  
PVI ELEV = 334.57  
CORR. = -0.76'  
SSD. = 150'



SOLAR COURT PUBLIC ACCESS  
DESIGN SPEED 25 MPH  
PROFILE  
SCALE: HORIZONTAL: 1"=50'  
VERTICAL: 1"=5'

**AS-BUILT CERTIFICATION**  
I HEREBY CERTIFY, BY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THE AS-BUILT PLAN MOST CURRENTLY APPROVED PLANS AND SPECIFICATIONS.  
*Scott Shanaberger*  
SCOTT SHANABERGER  
PROFESSIONAL L.S. ENGINEER  
SHANABERGER & LANE  
LICENSE EXPIRATION DATE 4/2/2014

**DATA SOURCES:**  
LOCATIONS OF TIE LINES, STREAMS, TOPOGRAPHY, WETLANDS, AND FOREST CONSERVATION AREA DERIVED FROM F-01-157, F-02-55 AND F-04-127. BOUNDARY SHOWN PER BOUNDARY SURVEY DATED JUNE, 1999, PREPARED BY DAFT-MAGNIE-WALKER, INC. SOILS (IF SHOWN) TAKEN FROM HOWARD COUNTY SOIL SURVEY, 1966. ADDITIONAL TOPO PROVIDED BY SHANABERGER & LANE, DATED JANUARY, 2007.

**DeMario Design Consultants, Inc.**  
192 East Main Street  
Westminster, MD 21157  
http://www.demariodesign.com  
Phone: (410) 386-5500  
Fax: (410) 386-5564  
eMail: dds@demariodesign.com

**OWNER:** EMERSON LAND BUSINESS TRUST  
10275 LITTLE PATUXENT PKWY  
COLUMBIA, MD 21044  
410-992-6000

**DEVELOPER:** GENERAL GROWTH PROPERTIES  
10275 LITTLE PATUXENT PKWY  
COLUMBIA, MD 21044  
410-992-6000

**SITE ADDRESS:** PALACE HALL DRIVE  
LAUREL, MD 20723

EMERSON, SECTION 2 PHASE 3, LOTS 1 thru 39 and OPEN SPACE LOTS 40 thru 42; A RESUBDIVISION OF PARCEL D-3 and EMERSON, SECTION 2, PHASE 5B, LOTS 1 thru 39 and OPEN SPACE LOTS 40 thru 42; A RESUBDIVISION OF PARCEL AA-1

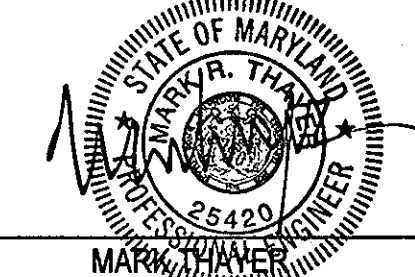
**FINAL ROAD CONSTRUCTION PLAN AND PROFILE SOLAR COURSE**  
6TH ELECTION DISTRICT HOWARD COUNTY, MD

REVISIONS	
1	AS-BUILT

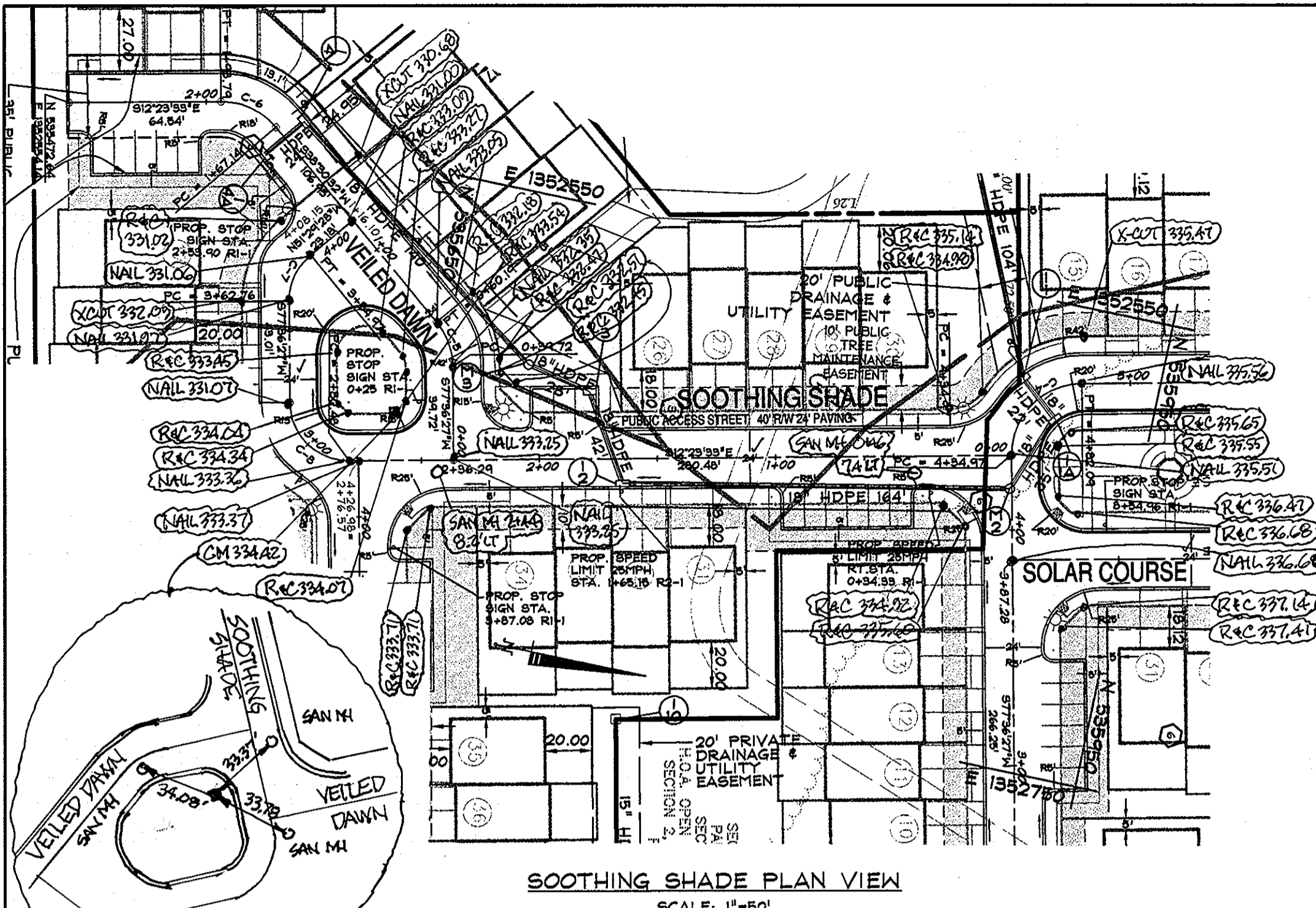
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.  
*Michael J. ...*  
CHIEF, BUREAU OF HIGHWAYS  
DATE: 5-13-08

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
*...*  
CHIEF DIVISION OF LAND DEVELOPMENT  
DATE: 5/16/08

DATE: 5/16/08  
Professional Certification:  
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 25420, Expiration Date: 7/30/08.



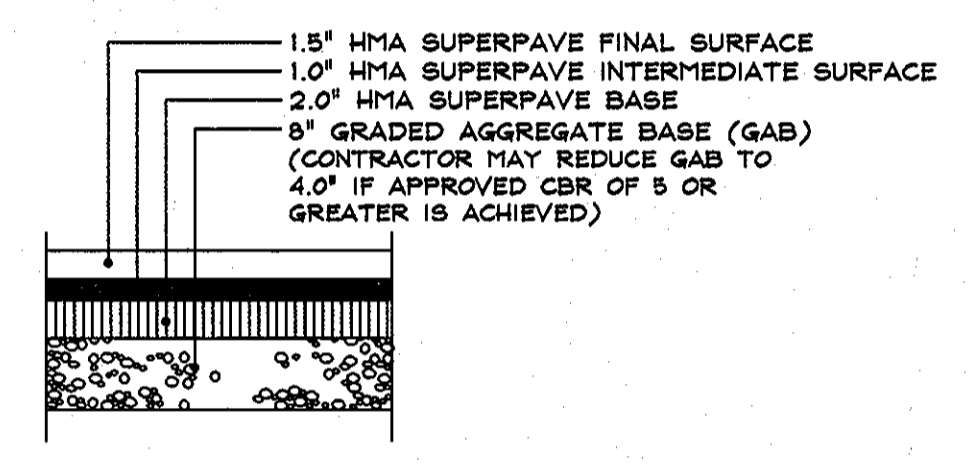
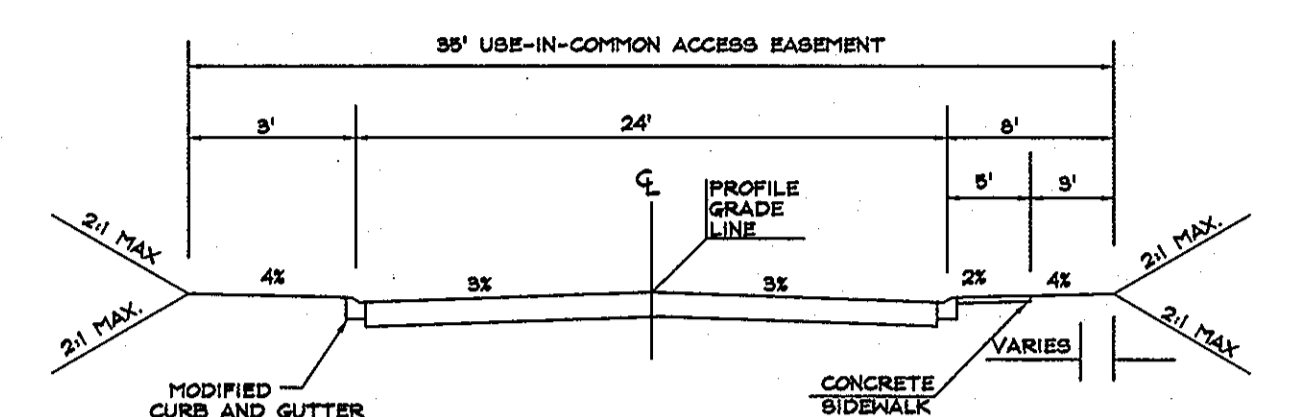
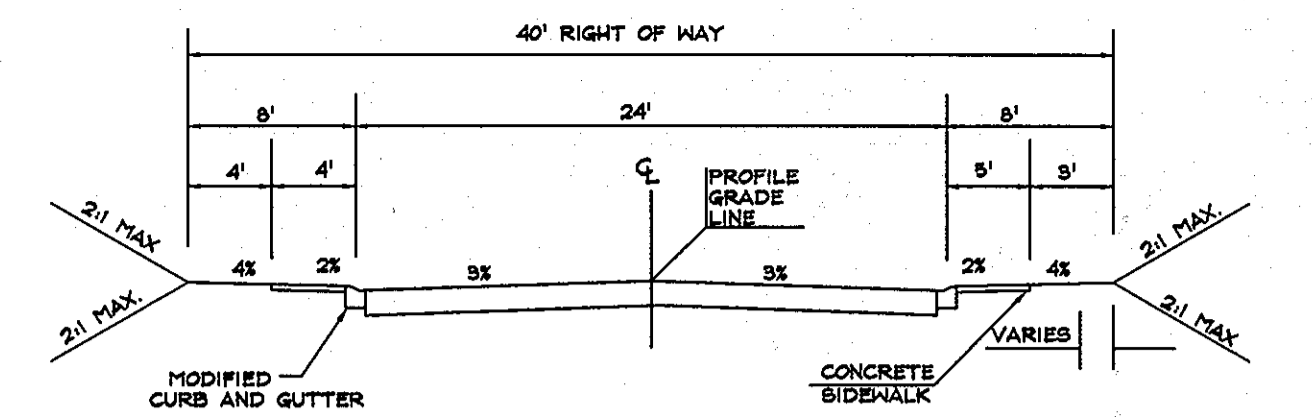
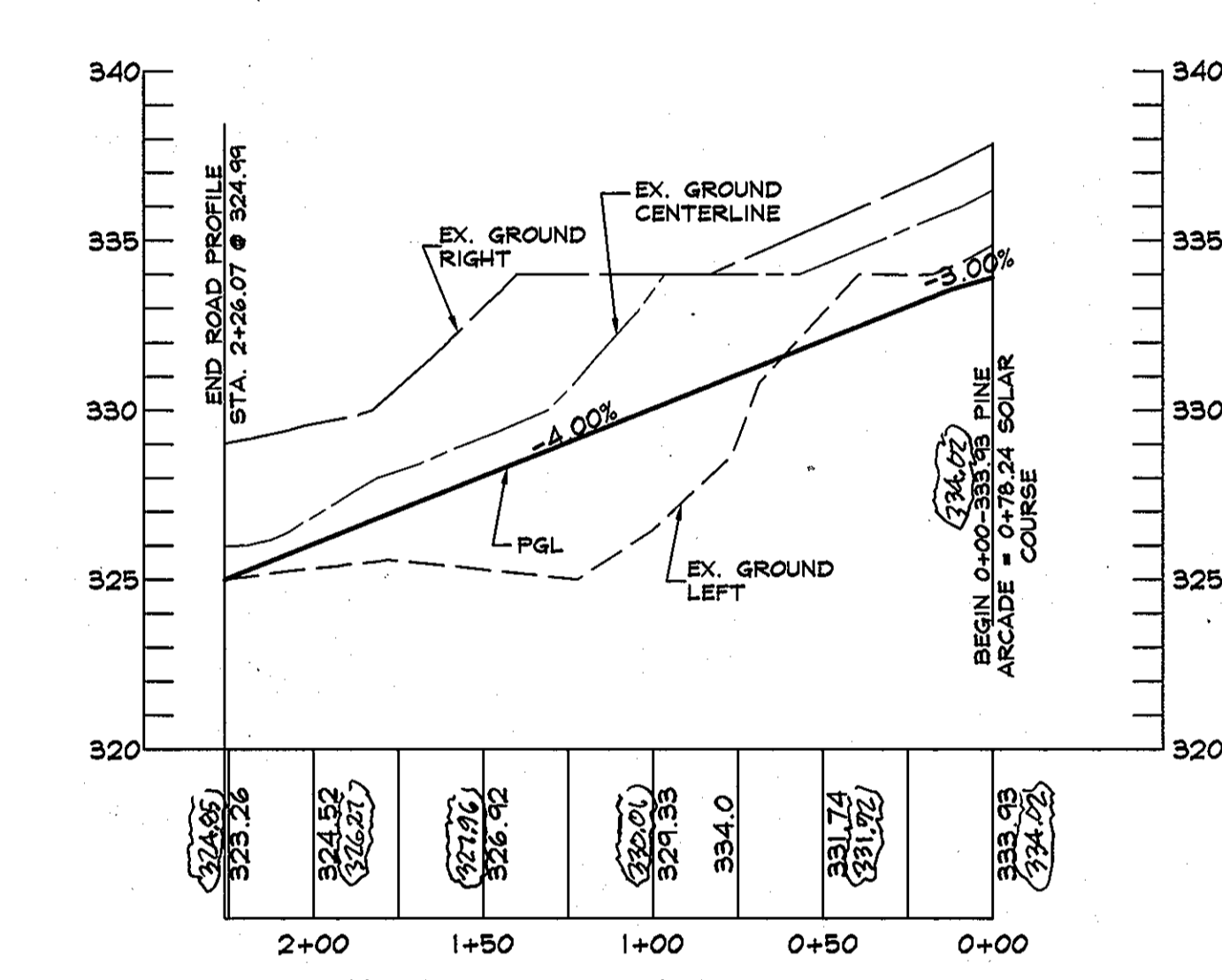
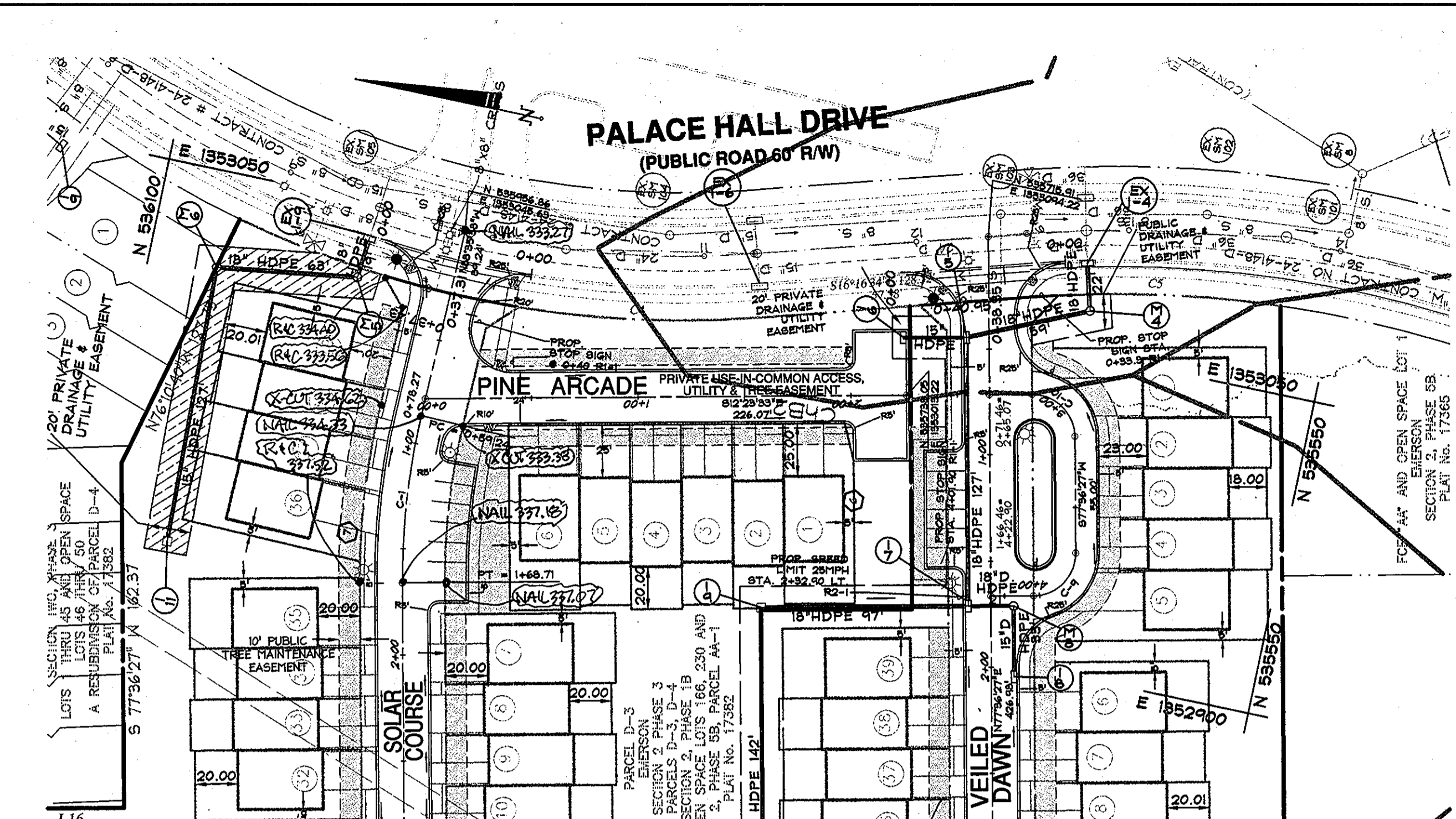
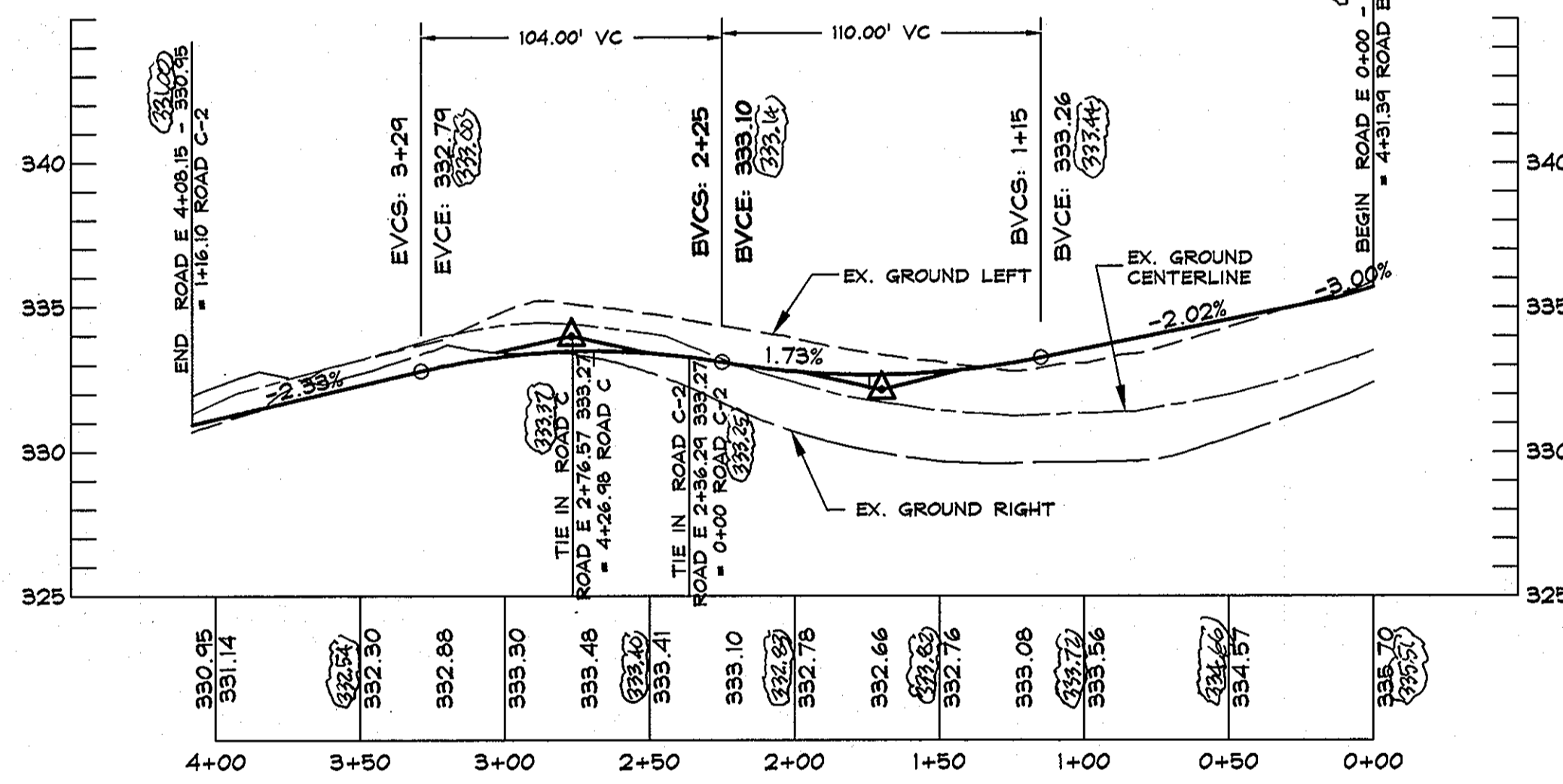
NO.	DESCRIPTION OF CHANGES	DRN.	REV.	DATE
CO. FILE #	F-07-182	DES. BY:	JCO	
TAX ACC. #		DRN. BY:	SDS	
TAX MAP:	47	CHK. BY:	WRD	
BLOCK / GRID:	8	DATE:	5-2-2008	
PARCEL #:	3 & 837	DDC JOB#:	06128.1	
ZONE / USE:	PEC-MXD-3	SHEET NUMBER:		
DWG. SCALE:	1"=50'		3 of 10	



PROVIDE TYPICAL SIDEWALK RAMPS AT ALL INTERSECTIONS WITH TRUNCATED DOME PAD PER CURRENT ADA STANDARDS

MONUMENT RECOVERY SKETCH NOT TO SCALE

HIGH POINT ELEV = 333.48 LOW POINT ELEV = 332.66  
 HIGH POINT STA = 2+69.35 LOW POINT STA = 1+74.26  
 PVI STA = 2+77 PVI STA = 1-70  
 PVI ELEV = 334.00 PVI ELEV = 332.15  
 CORR = -0.53' CORR = +0.52'  
 SSD = 150' SSD = 150'



**DATA SOURCES:**  
 LOCATIONS OF TREELINES, STREAMS, TOPOGRAPHY, WETLANDS, AND FOREST CONSERVATION AREA DERIVED FROM F-01-87, F-02-88 AND F-04-127.  
 BOUNDARY SHOWN PER BOUNDARY SURVEY DATED JUNE, 1994, PREPARED BY DAFT-MACINE-WALKER, INC. SOILS (IF SHOWN) TAKEN FROM HOWARD COUNTY SOIL SURVEY, 1968. ADDITIONAL TOPO PROVIDED BY SHANNABERGER & LANE, DATED JANUARY, 2007.

**DeMario Design Consultants, Inc.**  
 182 East Main Street  
 Westminster, MD 21157  
 Phone: (410) 386-0660  
 Fax: (410) 386-0664  
 http://www.demariodesign.us  
 eMail: ddc@demariodesign.us

**OWNER:** EMERSON LAND BUSINESS TRUST  
 10275 LITTLE PATUXENT PKWY  
 COLUMBIA, MD 21044  
 410-992-6000

**DEVELOPER:** GENERAL GROWTH PROPERTIES  
 10275 LITTLE PATUXENT PKWY  
 COLUMBIA, MD 21044  
 410-992-6000

**SITE ADDRESS:** PALACE HALL DRIVE  
 LAUREL, MD 20723

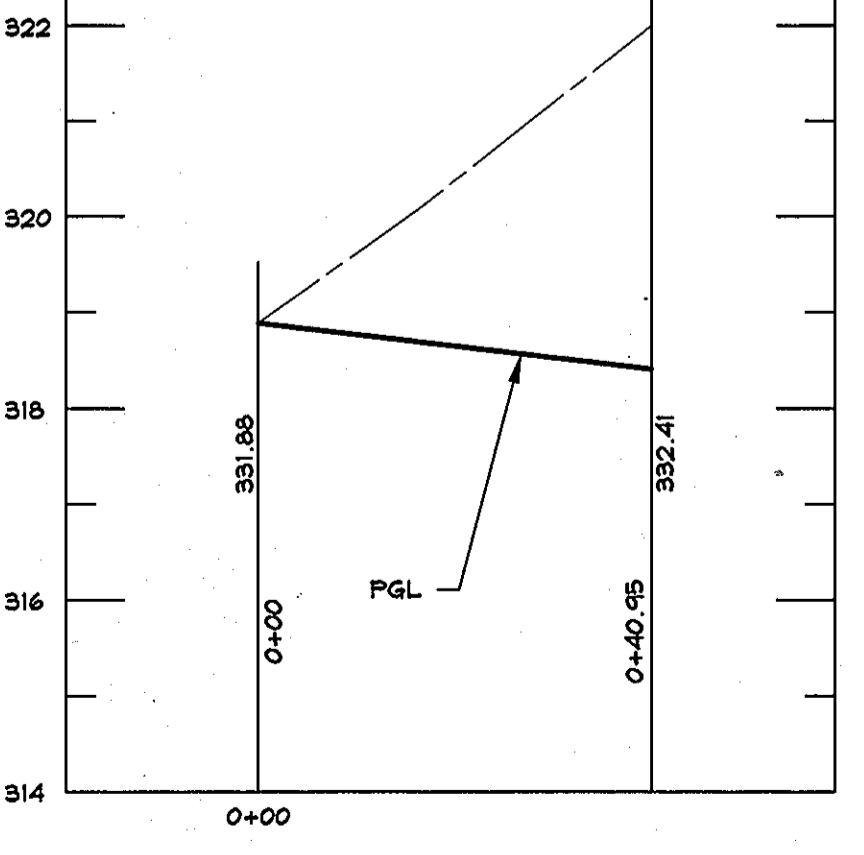
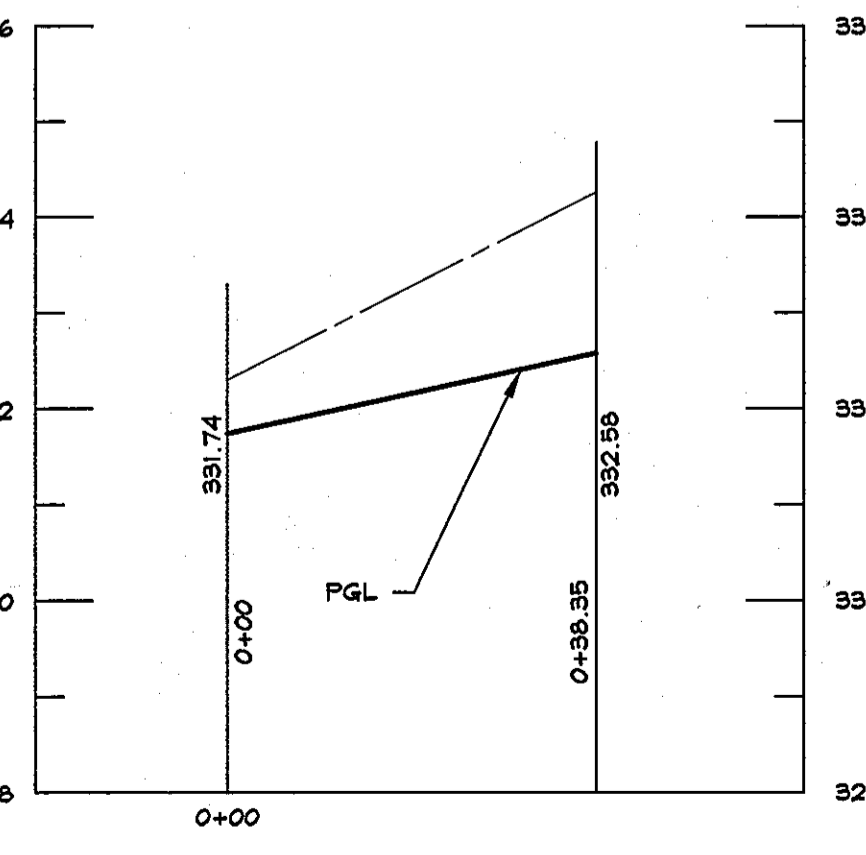
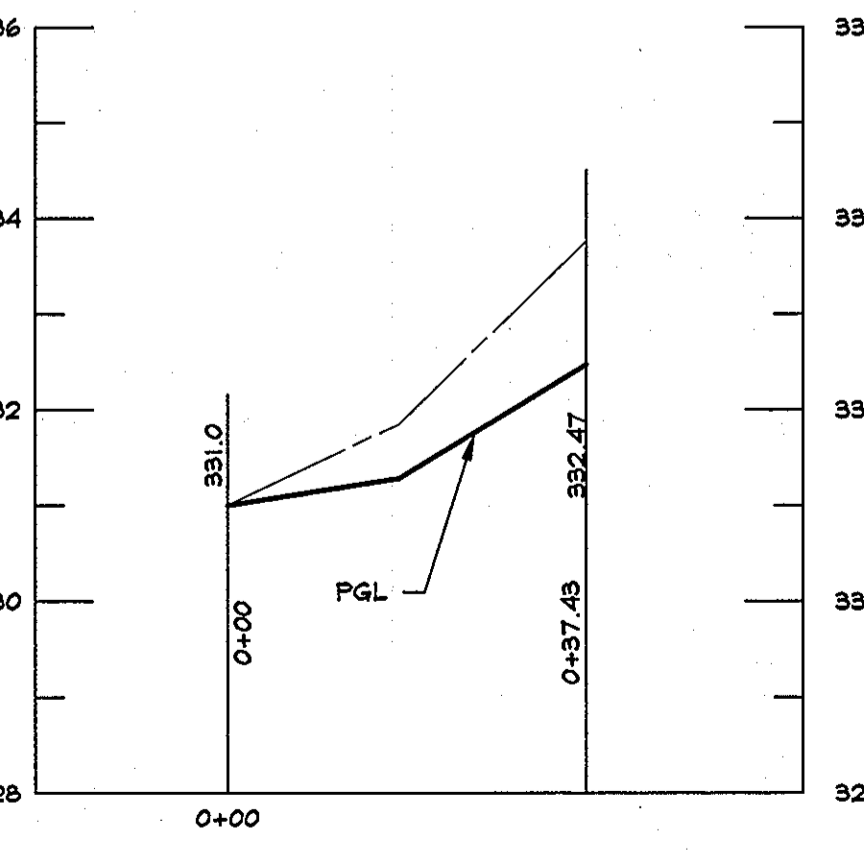
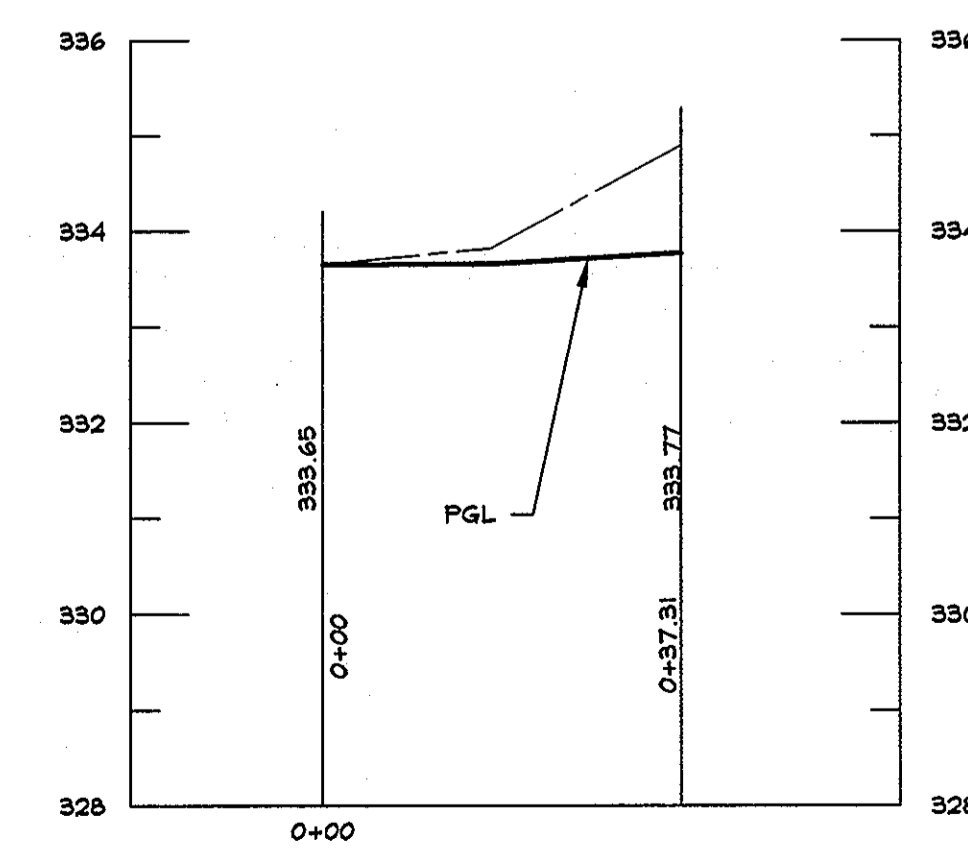
EMERSON, SECTION 2 PHASE B, LOTS 1 thru 94 and OPEN SPACE LOTS 40 thru 42, A REBUDIVISION OF PARCEL D-3 and EMERSON, SECTION 2, PHASE B3, LOTS 1 thru 94 and OPEN SPACE LOTS 40 thru 42, A REBUDIVISION OF PARCEL D-3

**FINAL ROAD CONSTRUCTION PLAN & PROFILE SOOTHING SHADE & PINE ARCADE**  
 6TH ELECTION DISTRICT HOWARD COUNTY, MD

REVISIONS  
 (1) AS-BUILT

**AS-BUILT CERTIFICATION**  
 I HEREBY CERTIFY, BY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS AS-BUILT PLAN MEETING CURRENT APPROVED PLANS AND SPECIFICATIONS.

*Scott Shanaberger*  
 SCOTT SHANABERGER  
 PROFESSIONAL L.G.# 10044  
 SHANABERGER & LANE  
 LICENSE EXPIRATION DATE 4/2/2014



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.  
*William A. Adams*  
 CHIEF, BUREAU OF HIGHWAYS  
 DATE: 5-13-08

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
*Cynthia Hunt*  
 CHIEF DIVISION OF LAND DEVELOPMENT  
 DATE: 4/20/08

*David Williams*  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE: 5/16/08

5/6/08  
 DATE

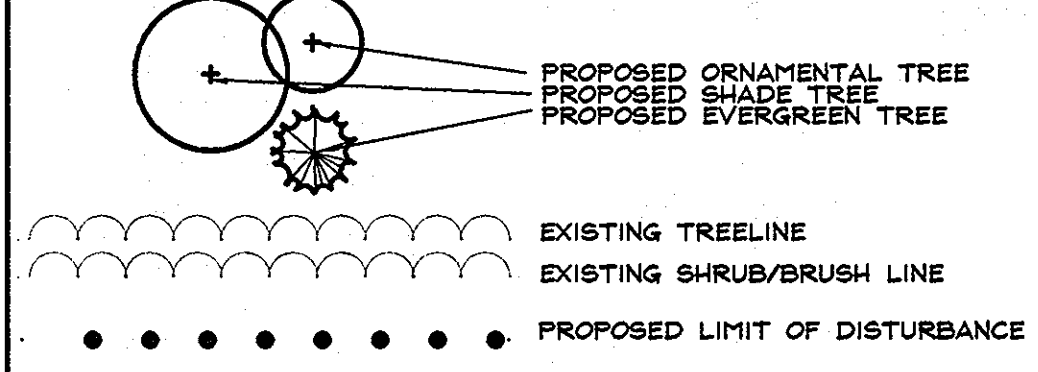
Professional Certification.  
 I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 25423, Expiration Date: 7-30-08.

**STATE OF MARYLAND**  
 PROFESSIONAL ENGINEER  
 3440  
 MARYLAND

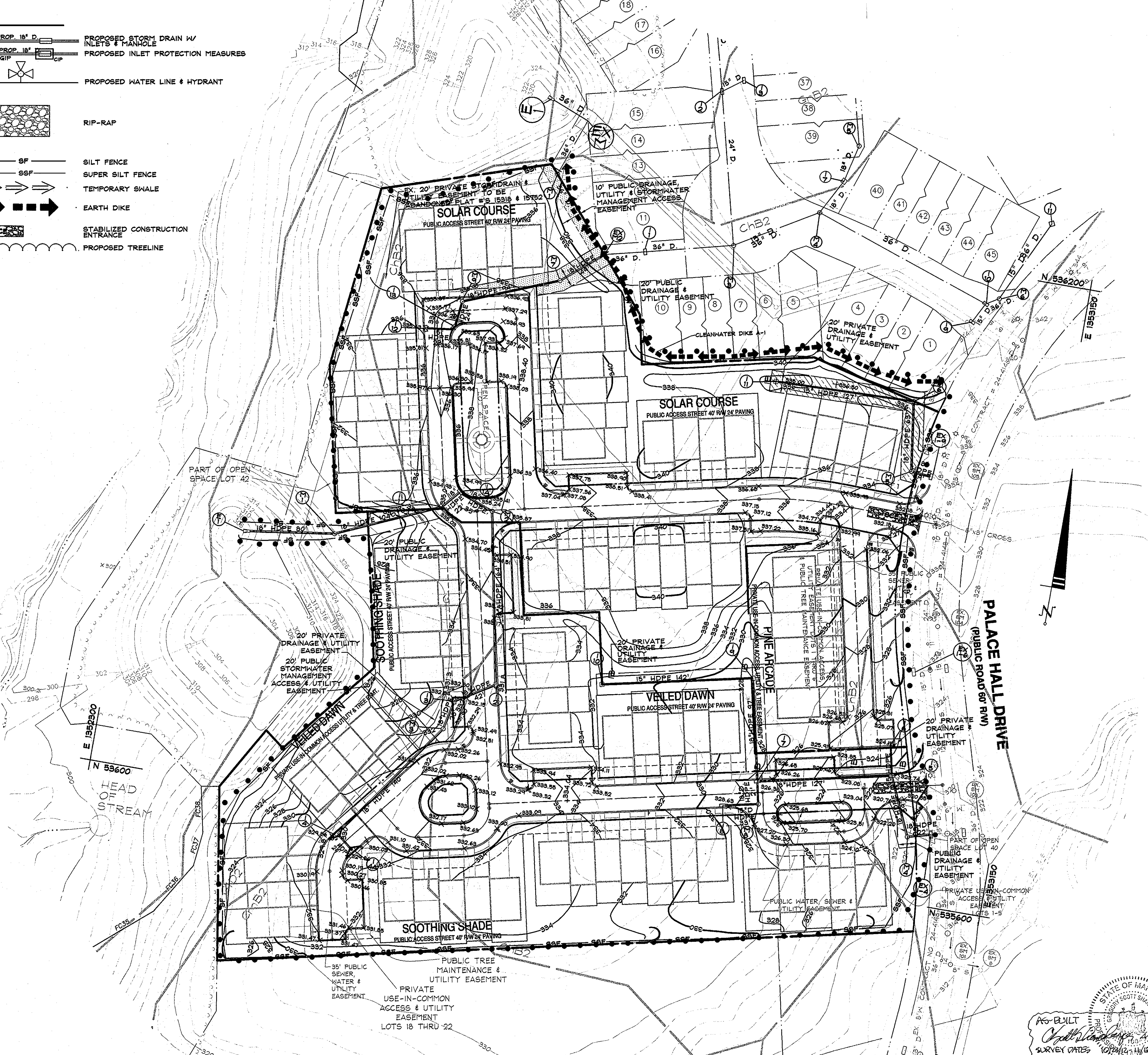
NO.	DESCRIPTION OF CHANGES	DRN.	REV.	DATE
CO. FILE #	F-07-182	DES. BY:	JCO	
TAX ACC. #		DRN. BY:	SDS	
TAX MAP:	47	CHK. BY:	WRD	
BLOCK / GRID:	8	DATE:	5-2-2008	
PARCEL #:	3 & 837	DDC JOB#:	08128.1	
ZONE / USE:	PEC-MXD-3	SHEET NUMBER:		
DWG. SCALE:	1"=50'		4 of 10	

**DRAWING LEGEND**

- 682 --- EXISTING MINOR CONTOUR (2' INTERVAL)
- 680 --- EXISTING MAJOR CONTOUR (10' INTERVAL)
- ADJACENT PROPERTY LINE
- N 06°45'45" W 120.00' EXISTING PROPERTY BOUNDARY
- EX. ROAD / EDGE OF PAVING
- EX. SEWER LINE & MANHOLES, CLEAN-OUTS
- EX. OVERHEAD ELECTRIC & UTILITY POLES
- 682 --- PROPOSED MINOR CONTOUR (2' INTERVAL)
- 680 --- PROPOSED MAJOR CONTOUR (10' INTERVAL)
- PROP. STANDARD CURB & GUTTER / PROP. REVERSE CURB & GUTTER / PROP. MOUNTABLE CURB & GUTTER / PROP. REVERSE/MOUNTABLE CURB & GUTTER
- EX. BUILDING
- PROPOSED PRIVATE ROAD/DRIVE CENTERLINE
- EX. BUILDING
- PROPOSED HOUSE
- PROPOSED SPOT ELEVATION & FLOW ARROW
- EXISTING TREES
- PROPOSED ORNAMENTAL TREE
- PROPOSED SHADE TREE
- PROPOSED EVERGREEN TREE
- EXISTING TREELINE
- EXISTING SHRUB/BRUSH LINE
- PROPOSED LIMIT OF DISTURBANCE



NOTE: STOCK PILING WILL BE PERMITTED ON THIS SITE.



NOTE: THERE IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET.

DATA SOURCES:  
 LOCATIONS OF TREELINES, STREAMS, TOPOGRAPHY, WETLANDS, AND FOREST CONSERVATION AREA DERIVED FROM F-01-137, F-02-55 AND F-04-127. BOUNDARY SHOWN PER BOUNDARY SURVEY DATED JUNE, 1999, PREPARED BY DAFT-MACINE-WALKER, INC. SOILS (IF SHOWN) TAKEN FROM HOWARD COUNTY SOIL SURVEY, 1968. ADDITIONAL TOPO PROVIDED BY SHANNABERGER & LANE, DATED JANUARY, 2007.

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OWNER: EMERSON LAND BUSINESS TRUST  
 10275 LITTLE PATUXENT PKWY  
 COLUMBIA, MD 21044  
 410-992-6000

DEVELOPER: GENERAL GROWTH PROPERTIES  
 10275 LITTLE PATUXENT PKWY  
 COLUMBIA, MD 21044  
 410-992-6000

SITE ADDRESS:  
 PALACE HALL DRIVE  
 LAUREL, MD 20723

EMERSON, SECTION 3 PHASE 3, LOTS 1 thru 39 and OPEN SPACE LOTS 40 thru 42, A RESUBDIVISION OF PARCEL D-3 and EMERSON, SECTION 3, PHASE 3B, LOTS 1 thru 38 and OPEN SPACE LOTS 40 thru 48, A RESUBDIVISION OF PARCEL AA-1

**GRADING & SEDIMENT CONTROL PLAN**

6TH ELECTION DISTRICT HOWARD COUNTY, MD

NO.	DESCRIPTION OF CHANGES	DRN.	REV.	DATE
1	AS-BUILT			5/5/08

CO. FILE #	F-07-182	DES. BY:	JCO
TAX ACC. #		DRN. BY:	SDS
TAX MAP:	47	CHK. BY:	JCO
BLOCK / GRID:	8	DATE:	5-2-2008
PARCEL #	3 & 837	DDC JOB#:	06128.1
ZONE / USE:	PEC-MXD-3	SHEET NUMBER:	5 of 10
DWG. SCALE:	1"=50'		

ENGINEER  
 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.

*John R. DeMario* 5/5/08  
 HOWARD SOIL CONSERVATION DISTRICT

BY THE DEVELOPER  
 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 THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

*Paul G. Canavan* 5/5/08  
 DEVELOPER

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.  
*William F. ...* 5-13-08  
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
*...* 5/16/08  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.  
*...* 5-13-08  
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
*...* 5/16/08  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

Professional Certification:  
 I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 2659, Expiration Date: 2/28/08.

*...* 5/5/08  
 STATE OF MARYLAND  
 PROFESSIONAL ENGINEER







SOILS CHART			
CODE(CLASS)	NAME	HYDRIC (Y/N/INCL.)	K VALUE
ChB2(B)	CHESTER SILT LOAM, 3%-8% SLOPES, MODERATELY ERODED	N	0.32
GlB2(B)	GLENELG LOAM, 3%-8% SLOPES, MODERATELY ERODED	N	0.32
GlD2(B)	GLENELG LOAM 18%-26% SLOPES, SEVERELY ERODED	N	0.32
GmB2(C)	GLENVILLE SILT LOAM, 3%-8% SLOPES, MODERATELY ERODED	INCLUSIONS	0.32
CmB2( )	CHILLUM SILT LOAM 18%-26% SLOPES, MODERATELY ERODED	N	0.24
CmC2( )	CHILLUM SILT LOAM 5%-10% SLOPES, MODERATELY ERODED	N	0.24

DRAINAGE AREA COMPS			
D.A.	"C" FACTOR	% IMPERVIOUS	ACRES
INLET 1	0.48	73	0.15
INLET 1A	0.54	66	0.46
INLET 2	0.48	73	0.50
INLET 3	0.52	75	0.19
INLET 4	0.46	71	0.75
INLET 5	0.44	71	0.22
INLET 6	0.42	72	0.52
INLET 7	0.49	73	0.22
INLET 8	0.44	71	0.26
INLET 9	0.30	65	0.53
INLET 10	0.30	65	0.36
INLET 11	0.30	65	0.65
INLET 12	0.49	46	.13
INLET 13	0.45	29	0.37
EX. 1-4	0.47	71	0.52
EX. 1-6	0.49	71	0.70

NOTE: THERE IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET

*G. Scott Shanaberger*  
 G. SCOTT SHANABERGER  
 SHANABERGER & LANE

DATA SOURCES:  
 LOCATIONS OF TREELINES, STREAMS, TOPOGRAPHY, WETLANDS, AND FOREST CONSERVATION AREA DERIVED FROM F-01-137, F-02-35 AND F-04-127. BOUNDARY SHOWN PER BOUNDARY SURVEY DATED JUNE, 1999, PREPARED BY DAVID MACGREGOR-WALKER, INC. SOILS (IF SHOWN) TAKEN FROM HOWARD COUNTY SOIL SURVEY, 1968. ADDITIONAL TOPO PROVIDED BY SHANABERGER & LANE, DATED JANUARY, 2007.

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 Fax: (410) 386-0554  
 eMail: ds@demariodesignus.com

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 10275 LITTLE PATUENT PKWY  
 COLUMBIA, MD 21044  
 410-992-6000

DEVELOPER: GENERAL GROWTH PROPERTIES  
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 410-992-6000

SITE ADDRESS:  
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**STORMDRAIN DRAINAGE AREA MAP**

6TH ELECTION DISTRICT HOWARD COUNTY, MD

NO.	DESCRIPTION OF CHANGES	DRN.	REV.	DATE
1	AS-BUILT			10/22/08

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.  
*William J. Marshall*  
 CHIEF, BUREAU OF HIGHWAYS  
 DATE: 5-13-08

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
*Condy Hantz*  
 CHIEF DIVISION OF LAND DEVELOPMENT  
 DATE: 5/20/08

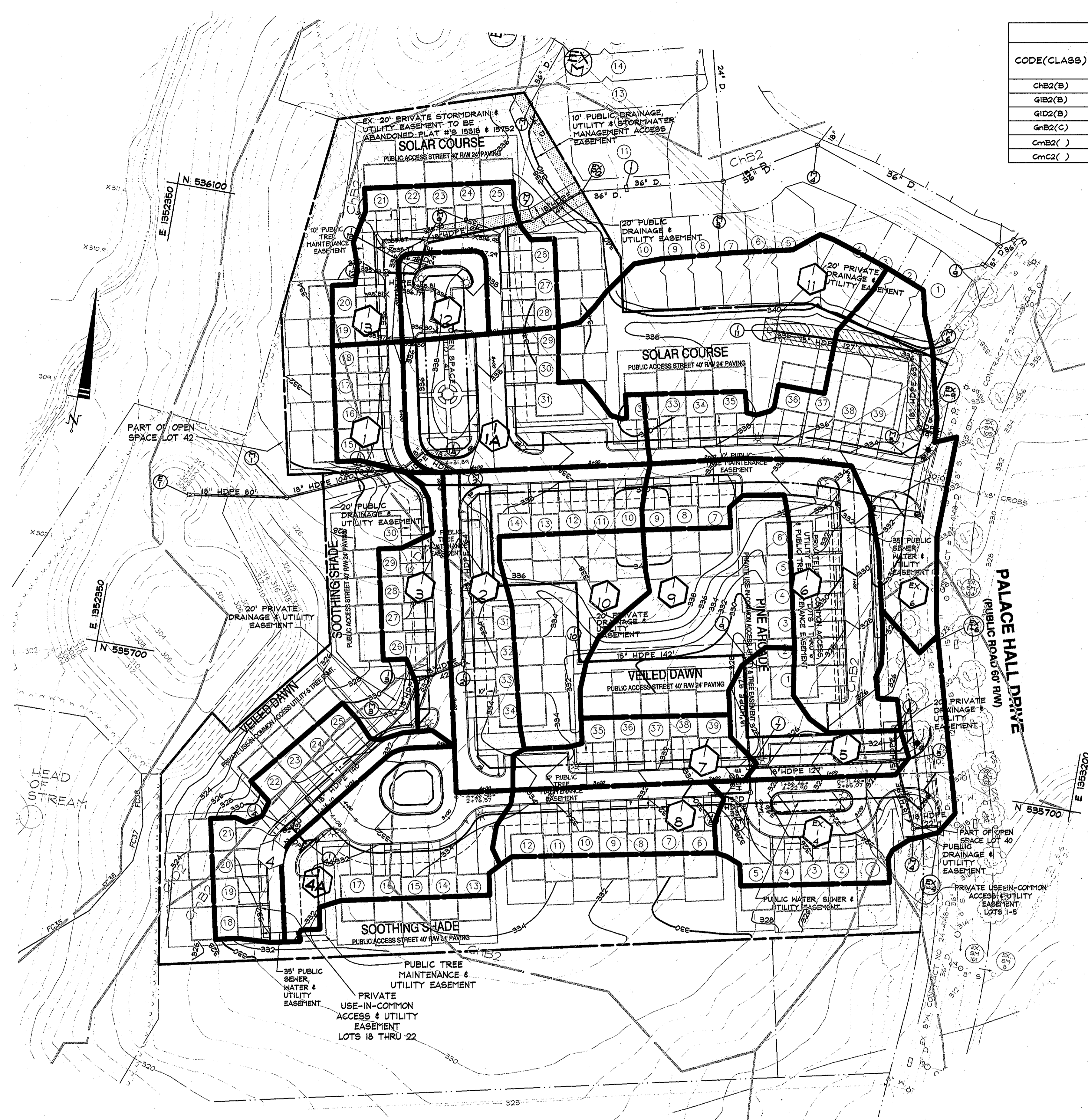
*Mark Williams*  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE: 5/16/08

Professional Certification  
 I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 26500, Expiration Date: 7-20-08.

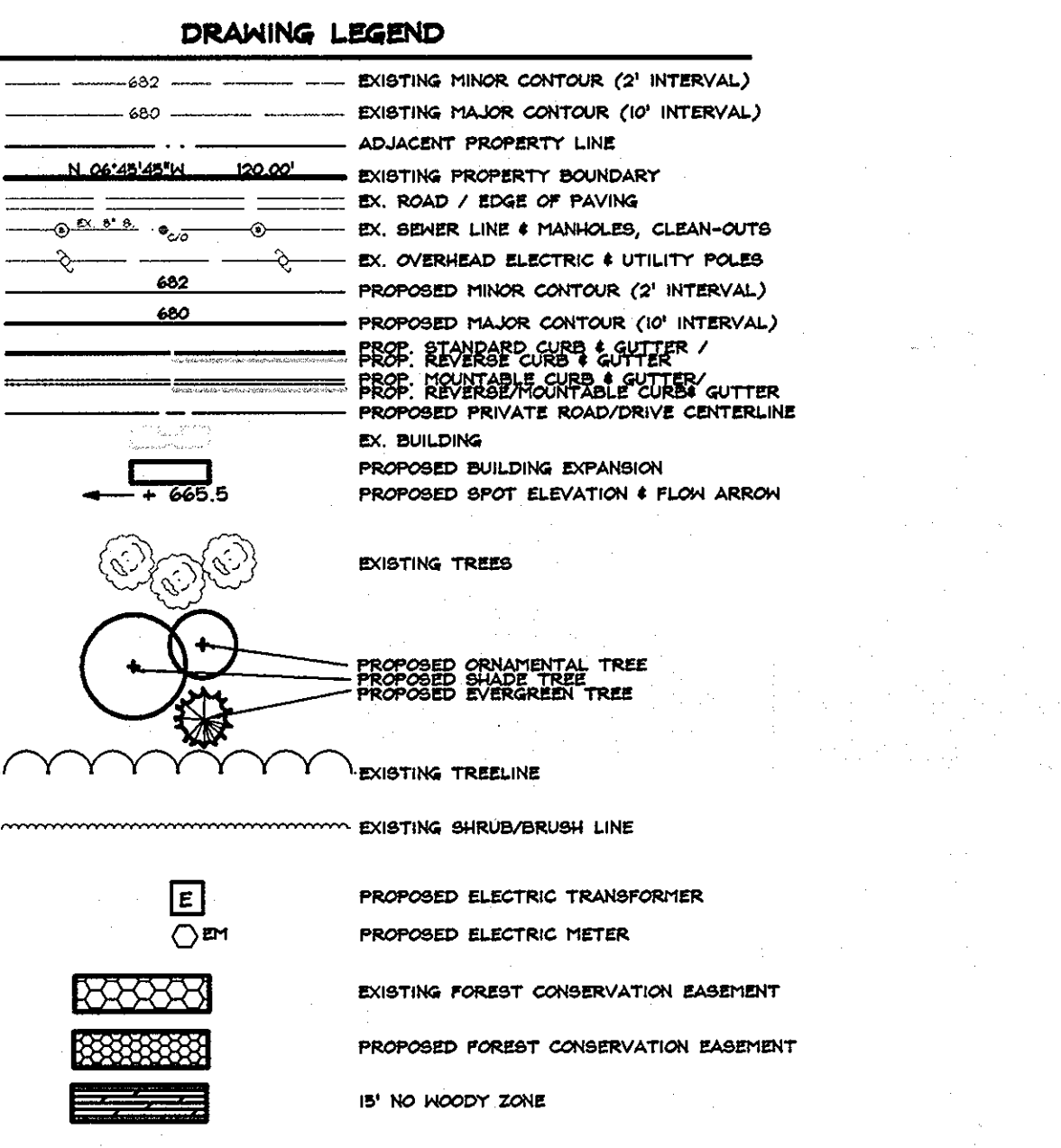
*Mark Williams*  
 MARYLAND PROFESSIONAL ENGINEER

**DRAWING LEGEND**

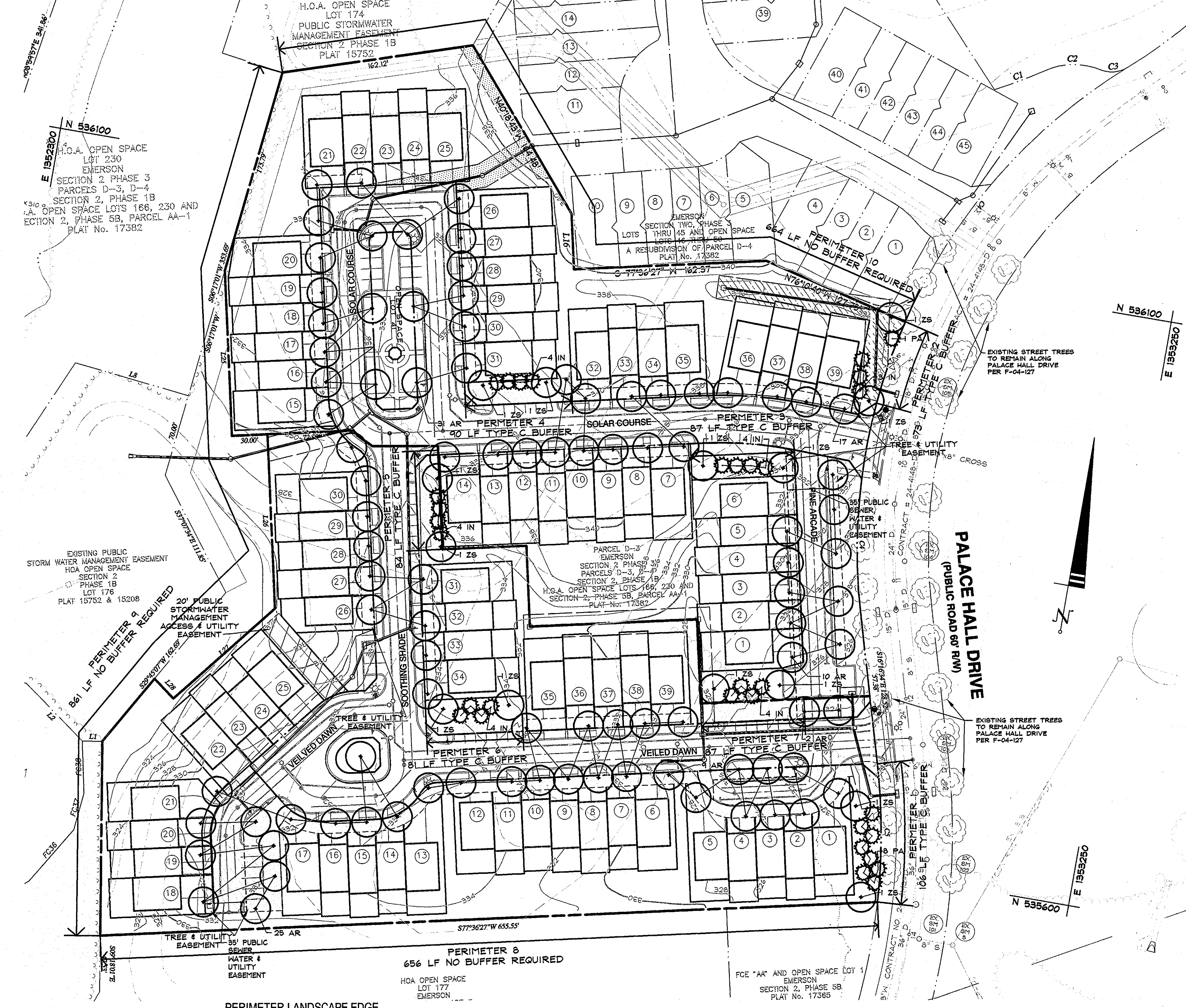
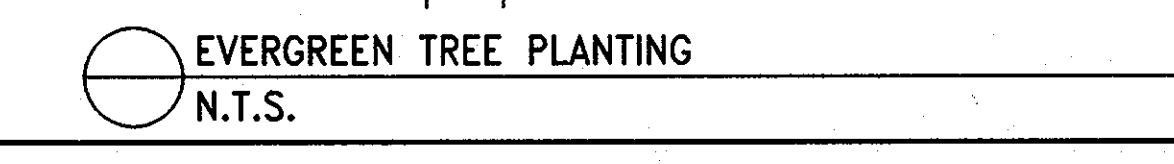
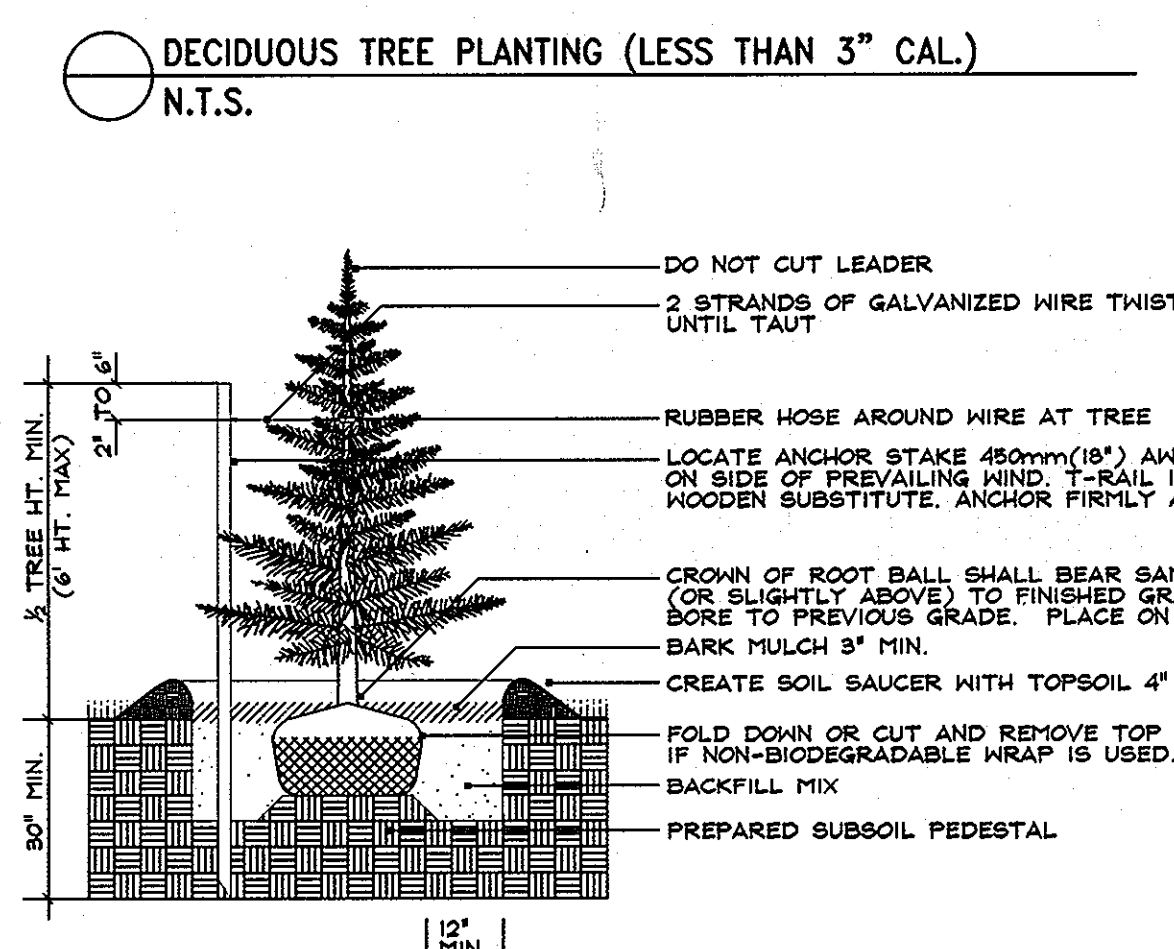
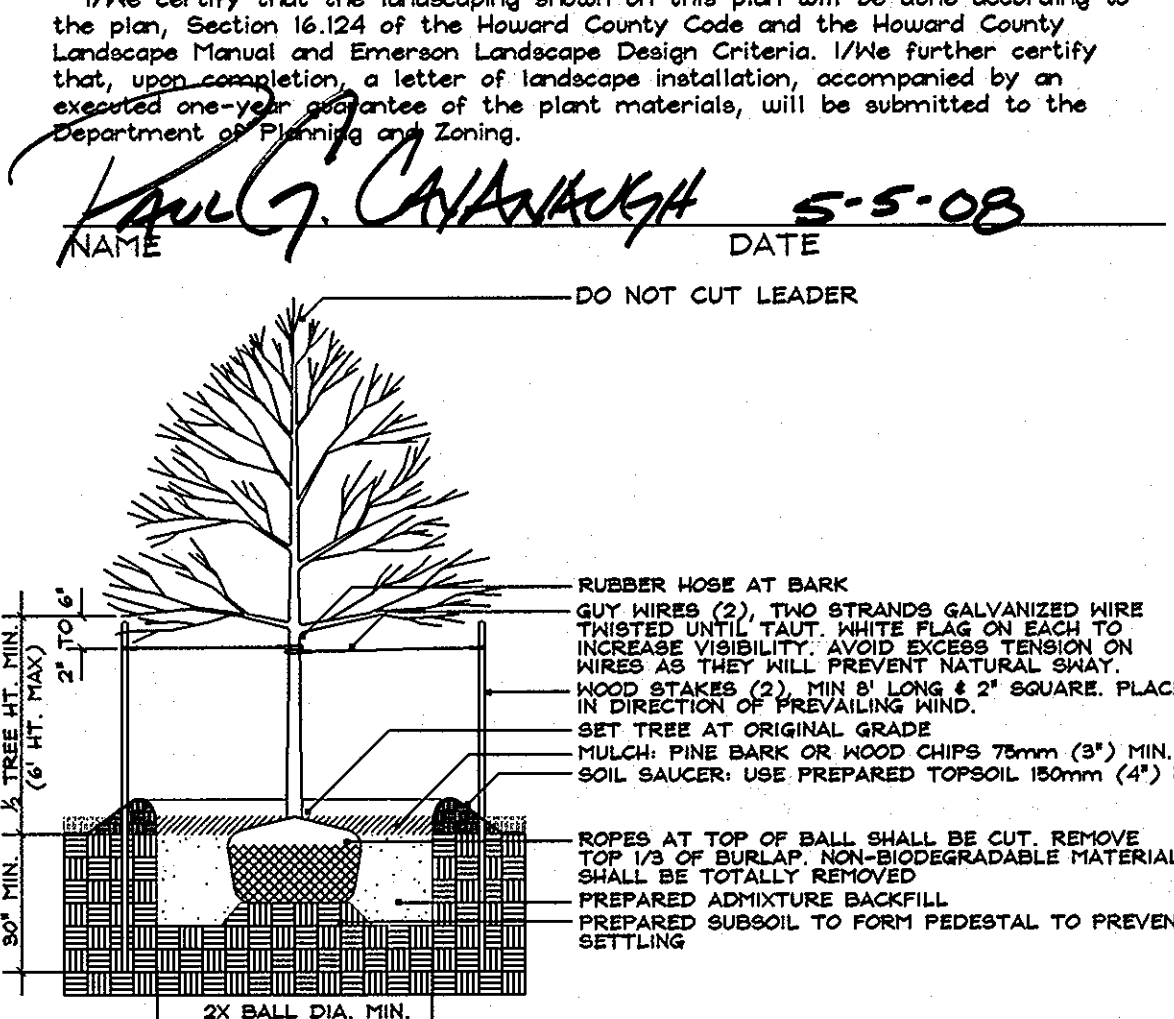
---	EXISTING MINOR CONTOUR (2' INTERVAL)
---	EXISTING MAJOR CONTOUR (10' INTERVAL)
---	ADJACENT PROPERTY LINE
---	EXISTING PROPERTY BOUNDARY
---	EX. ROAD / EDGE OF PAVING
---	EX. SEWER LINE & MANHOLES, CLEAN-OUTS
---	EX. OVERHEAD ELECTRIC & UTILITY POLES
---	PROPOSED MINOR CONTOUR (2' INTERVAL)
---	PROPOSED MAJOR CONTOUR (10' INTERVAL)
---	PROP. REARSPREAD CURB & GUTTER /
---	PROP. REARSPREAD CURB & GUTTER
---	PROPOSED PRIVATE ROAD/DRIVE CENTERLINE
---	EX. BUILDING
---	PROPOSED BUILDING EXPANSION
---	PROPOSED SPOT ELEVATION & FLOX ARROW
---	EXISTING TREES
---	PROPOSED ORNAMENTAL TREE
---	PROPOSED SHADE TREE
---	PROPOSED EVERGREEN TREE
---	EXISTING TREELINE
---	EXISTING SHRUB/BURSH LINE
---	PROPOSED STORM DRAIN W/
---	PROPOSED INLET PROTECTION MEASURES
---	PROPOSED WATER LINE & HYDRANT
---	PROPOSED SIBER AND MANHOLES
---	PROPOSED ELECTRIC TRANSFORMER
---	PROPOSED ELECTRIC METER
---	EXISTING FOREST CONSERVATION EASEMENT
---	PROPOSED FOREST CONSERVATION EASEMENT







- #### General Planting Notes
- All plant materials to meet A.N.L.A. Standards.
  - The Contractor to follow specification guidelines for Baltimore & Washington Metropolitan Area as approved by the L.C.A. of Maryland, Washington D.C., & Virginia and described in the latest edition of "Landscape Specification Guidelines."
  - No substitutions are to be made without the consent of the Landscape Architect and/or the Owner.
  - All beds are to be topped with three (3) inches of hardwood mulch.
  - Contractor shall notify Hanes Utility at 1 (800) 257-7777, at least 72 hours prior to construction and verify the location of all utilities with the Owner before planting.
  - Landscape Architect/Owner shall select, verify, and/or approve all plant material. At the Owner's discretion, specimen and other plant material may be selected.
  - The Landscape Contractor shall coordinate with the general, lighting, & irrigation contractors regarding timing and installation of plant material. At the time of final inspection with acceptance, all electric, water & drainage utilities, as well as plant material, shall remain undamaged. Likewise, the Landscape Contractor and utilities contractors shall coordinate efforts to ensure that surface utilities are at the proper elevation relative to final grades.
  - 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.
  - This plan has been prepared in accordance with the provisions of Section 16.124 of the Ho. Co. Code. Financial surety for the required landscaping in the amount of \$4,000.00 must be posted as part of the Developer's Agreement (15 shade trees, 30 evergreen trees).
  - Developer/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 and Emerson Landscape Design Criteria. I/We further certify that, upon completion, a letter of landscape installation, accompanied by an expanded one-year guarantee of the plant materials, will be submitted to the Department of Planning & Zoning.
- NAME: *Kenneth Chavakoff* DATE: *5-5-08*



### PLANT LIST

QTY	SYM	BOTANICAL NAME/ COMMON NAME	SIZE	REMARKS
94	AR	ACER RUBRUM 'OCTOBER GLORY'	2 1/2 -3" CAL.	B # B
14	ZS	OCTOBER GLORY MAPLE		
14	ZS	ZELKOVA SERRATA 'VILLAGE GREEN'	2 1/2 -3" CAL.	B # B
		VILLAGE GREEN JAPANESE ZELKOVA		
<b>EVERGREEN TREES</b>				
28	IN	ILEX X NELLIE R STEVENS	6' HT.	B # B
		NELLIE STEVENS HOLLY		
9	PA	PICEA ABIES	6' HT.	B # B
		NORWAY SPRUCE		

### STREET TREE TABULATION

STREET TREES REQUIRED: 94 TOTAL

1600 L.F. @ (1 TREE/40 L.F.)=40 (SOLAR COURSE)

720 L.F. @ (1 TREE/40 L.F.)=18 (VEILED DAWN)

400 L.F. @ (1 TREE/40 L.F.)=10 (PINE ARCADE)

1040 L.F. @ (1 TREE/40 L.F.)=26 (SOOTHING SHADE)

STREET TREES PROVIDED: 94 TOTAL

NOTE: ALL STREET TREES PROVIDED SHALL BE MAJOR/SHADE TREES.

\* EXISTING STREET TREES ALONG PALACE HALL DRIVE WERE PROVIDED UNDER PLAN F-04-127.

STREET TREES WILL BE BONDED WITH A DPW DEVELOPER'S AGREEMENT.

NOTE: THERE IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET.

*Scott Shanaberger*

G. SCOTT SHANABERGER

SHANABERGER & LANE

DATA SOURCES:  
LOCATIONS OF TREETYPES, STREAMS, TOPOGRAPHY, WETLANDS, AND FOREST CONSERVATION AREA DERIVED FROM F-01-197, F-02-59 AND F-04-127.  
BOUNDARY SHOWN BY SURVEY DATED JUNE, 1994, PREPARED BY DAFT-MACUNE-WALKER, INC. SOILS (IF SHOWN) TAKEN FROM HOWARD COUNTY SOIL SURVEY, 1968. ADDITIONAL TOPO PROVIDED BY SHANABERGER & LANE, DATED JANUARY, 2007.

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### LANDSCAPE PLAN DETAILS & NOTES \$ STREET TREE PLAN

6TH ELECTION DISTRICT HOWARD COUNTY, MD

REVISIONS

NO.	DESCRIPTION OF CHANGES	DRN.	REV. DATE
1	AS-BUILT		5/13/08

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 re-locations 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.

CATEGORY	ADJACENT TO ROADWAYS							ADJACENT TO PERIMETER PROPERTIES			TOTAL
	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	106 L.F.	73 L.F.	80 L.F.	78 L.F.	78 L.F.	80 L.F.	78 L.F.	656 L.F.	861 L.F.	664 L.F.	
CREDIT FOR EXISTING VEGETATION (DESCRIBE BELOW IF NEEDED)	0 L.F.	0 L.F.	0 L.F.	0 L.F.	0 L.F.	0 L.F.	0 L.F.	N/A	N/A	N/A	N/A
CREDIT FOR BERM (DESCRIBE BELOW IF NEEDED)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NUMBER OF PLANTS REQUIRED											
SHADE TREES	3	2	2	2	2	2	2	0	0	0	15
EVERGREEN TREES	0	0	0	0	0	0	0	0	0	0	0
SHRUBS	0	0	0	0	0	0	0	0	0	0	0
NUMBER OF PLANTS PROVIDED											
SHADE TREES	2	2	2	2	2	2	2	0	0	0	14
EVERGREEN TREES	0	0	0	0	0	0	0	0	0	0	0
OTHER TREES (2-1 SUBSTITUTION) SHRUBS	0	0	0	0	0	0	0	0	0	0	0
(DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)											

NOTES

\* ONE(1) SHADE TREE WAS SUBSTITUTED BY TWO(2) EVERGREEN TREES TO PROVIDE MORE SCREENING ALONG PALACE HALL DRIVE.

\*\* NO BUFFER REQUIRED FOR P8, P9 AND P10 BECAUSE ADJACENT PROPERTIES ARE ALSO EMERSON SUBDIVISION.

INTERNAL LANDSCAPING FOR ALL UNITS WILL BE ADDRESSED AT THE SITE DEVELOPMENT STAGE. PERIMETER LANDSCAPING AND STREET TREES WILL BE PROVIDED AT THE FINAL PLAN STAGE OF DEVELOPMENT IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE. THE LANDSCAPE MANUAL AND THE APPROVED EMERSON LANDSCAPE DESIGN CRITERIA.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.  
*W. J. ...* 5-13-08  
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.  
*...* 5/13/08  
DATE

APPROVED: *Andrew J. Stine* 5/13/08  
DATE

DATE: 5.6.2008

ANDREW J. STINE  
LANDSCAPE ARCHITECT NO. 3222

NO.	DESCRIPTION OF CHANGES	DRN.	REV. DATE
CO. FILE #	F-07-182	DES. BY:	CVL
TAX ACC. #		DRN. BY:	CVL/SDS
TAX MAP:	47	CHK. BY:	AJS
BLOCK / GRID:	8	DATE:	5-2-2008
PARCEL #	3 & 837	DDC JOB#:	06128.1
ZONE / USE:	PEC-MXD-3	SHEET NUMBER:	
DWG. SCALE:	1"=50'		10 of 10