

GENERAL SITE DATA

LOCATION: TAX MAP 37, BLOCK 18, PARCELS 196, 198, & 199
1ST ELECTION DISTRICT
EXISTING/PRESENT ZONING: CAC
SUBDIVISION: BELMONT STATION
DPZ REFERENCES: S-04-10, WP-04-152, P-05-17, WP-06-79, F-06-169, F-07-093

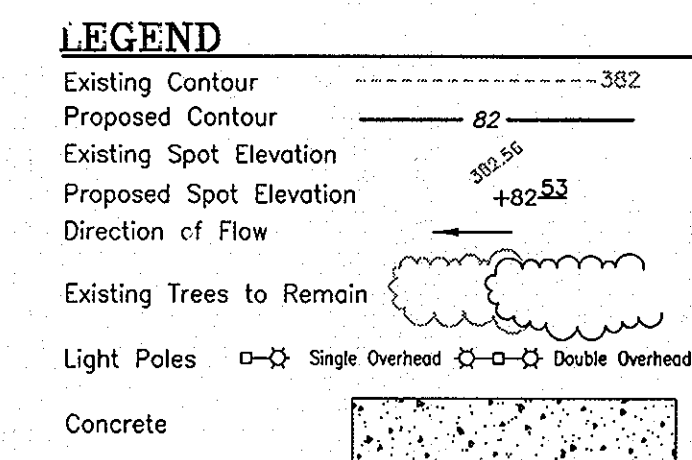
GENERAL NOTES

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST DETAILS, STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY...
2. THE CONTRACTOR SHALL NOTIFY 'MISS UTILITY' AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK...
3. THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK ON THESE DRAWINGS...

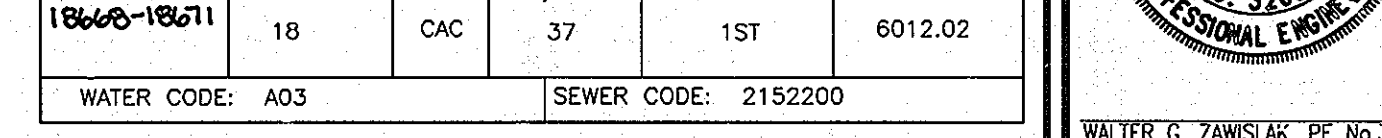
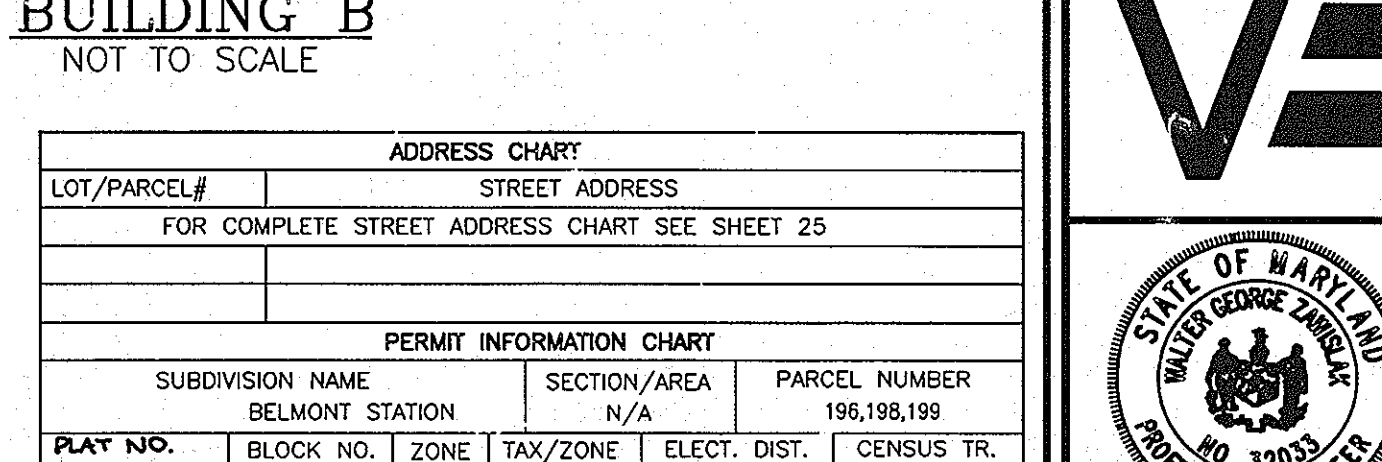
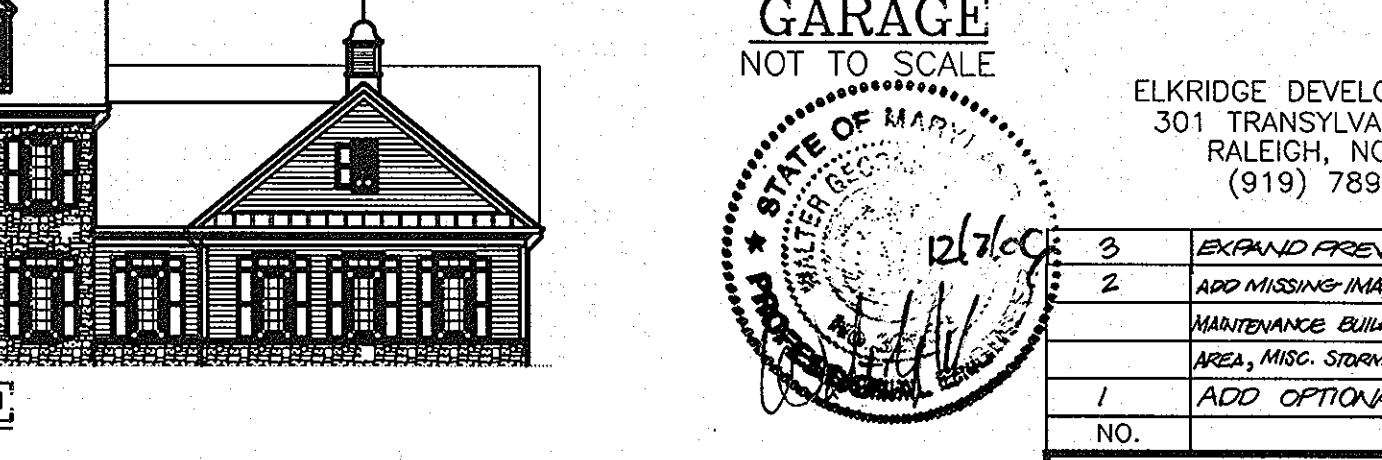
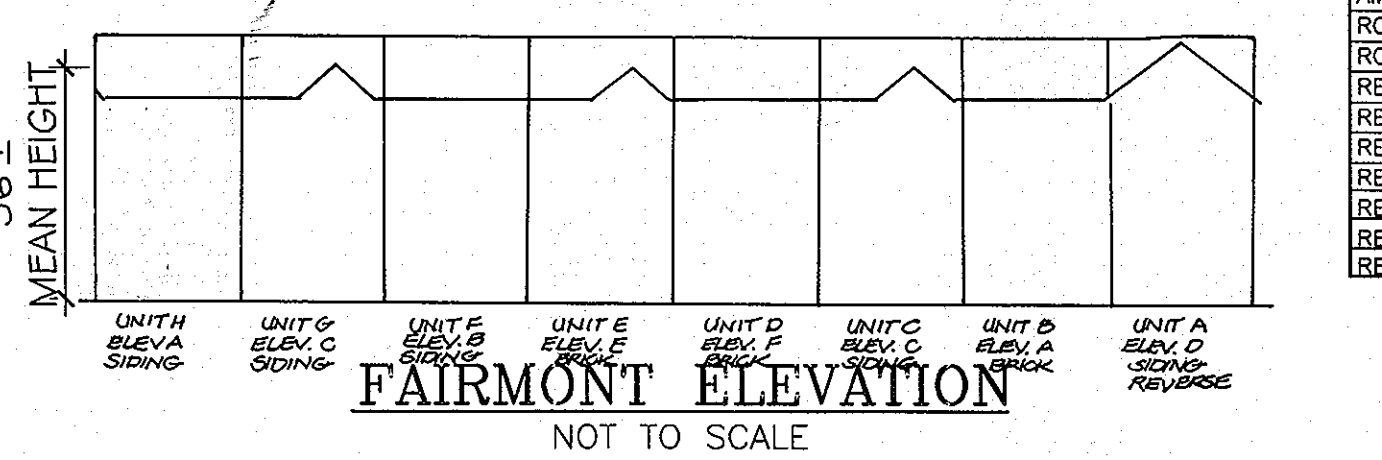
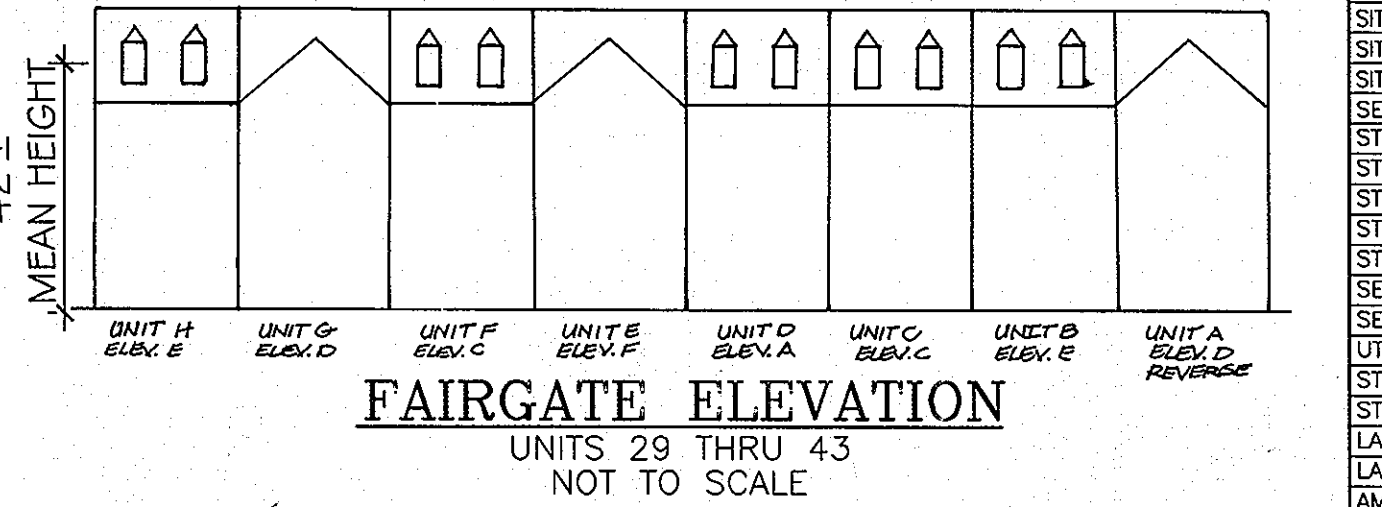
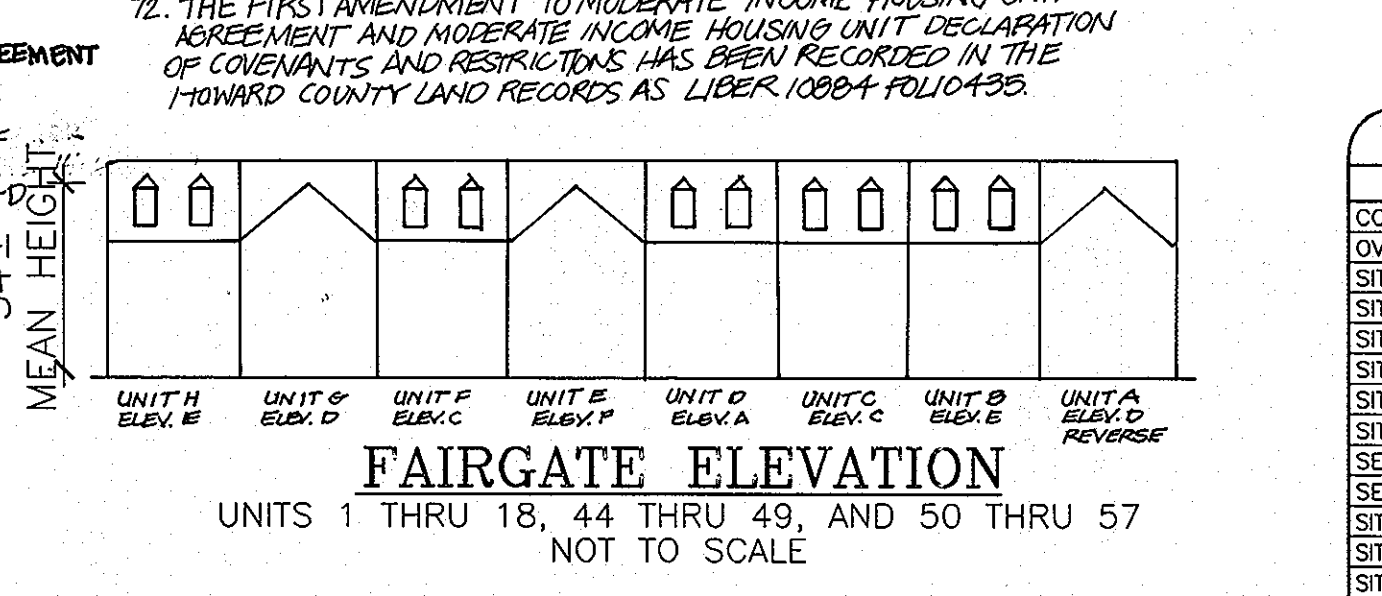
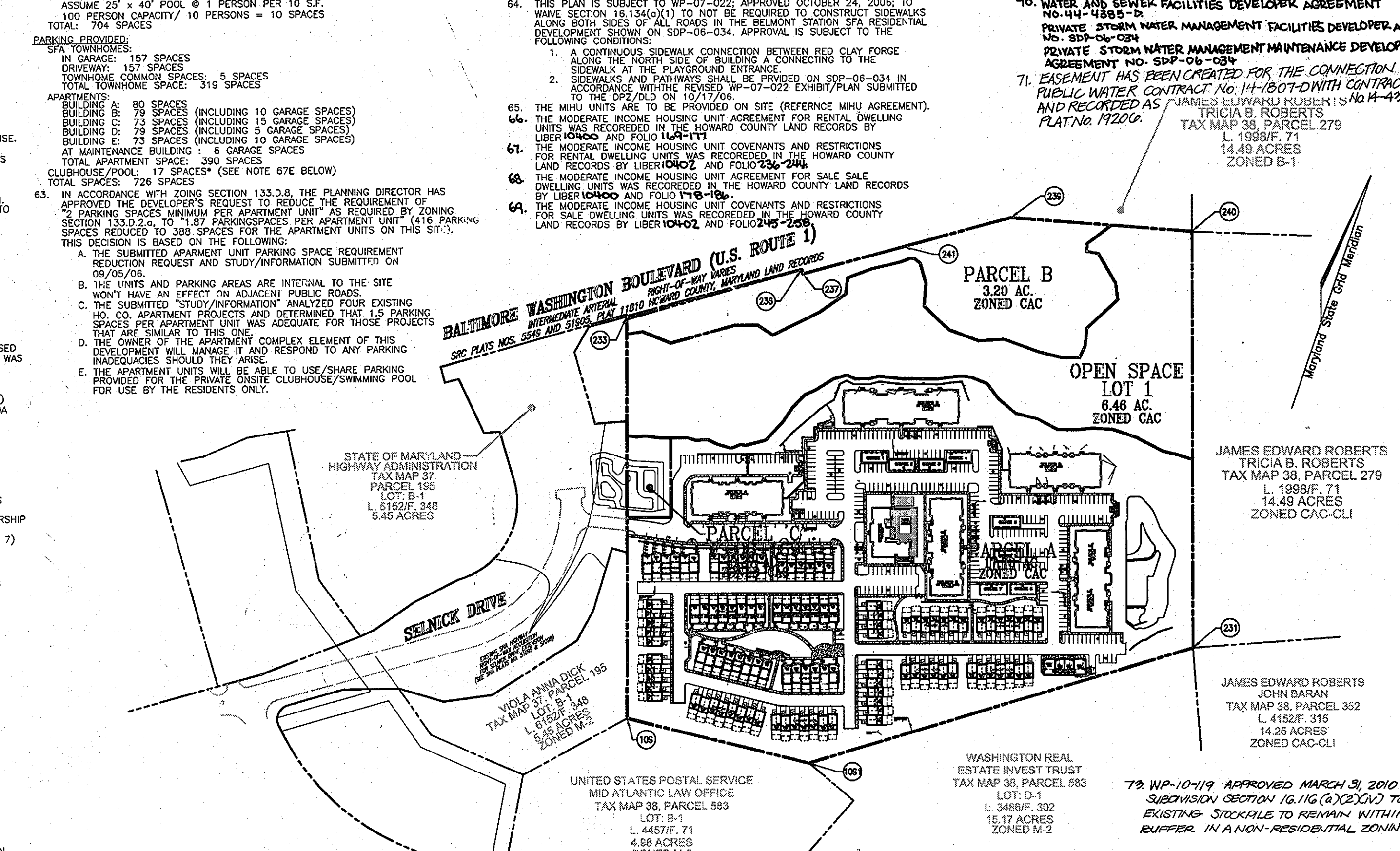
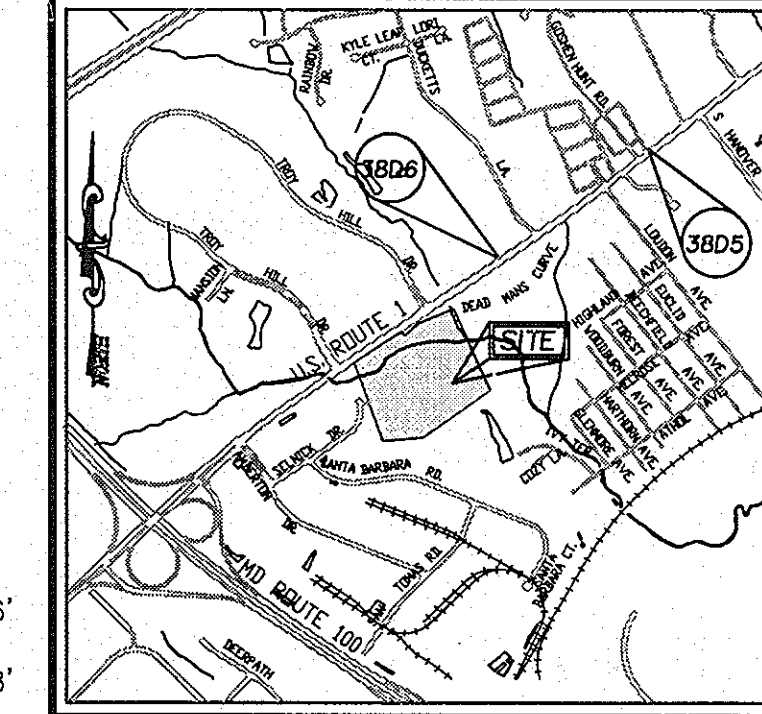
UNIT/PARKING TABULATION

Table with columns: UNIT, PERMITTED, TOTAL UNITS. Rows include: UNITS PERMITTED: 30.44 x 25 DU/NET AC. 811 UNITS; TOTAL UNITS (15% OF THE UNITS SHALL BE MHU'S): 110 UNITS; UNIT TYPES: 42 UNITS, 42 UNITS, 38 UNITS, 42 UNITS, 39 UNITS.

BELMONT STATION TOWNHOUSE AND CONDOMINIUM COMMUNITY HOWARD COUNTY, MARYLAND SITE DEVELOPMENT PLAN PARCELS 'A', 'B', 'C' AND OPEN SPACE LOT 1



BENCHMARKS table with columns: BENCHMARK, ELEVATION. Rows include: HOWARD COUNTY BENCHMARK 38D5, HOWARD COUNTY BENCHMARK 38D6.



SHEET INDEX table with columns: SHEET NO., DESCRIPTION. Lists various sheets from COVER SHEET to RETAINING WALL PROFILES.

COORDINATE CHART table with columns: NO., NORTHING, EASTING. Lists coordinate points for the site.

OWNER/DEVELOPER information for ELKRIDGE DEVELOPMENT, LLC, including address and contact details.

REVISIONS table with columns: NO., REVISION, DATE. Lists changes to the site development plan.

Professional seal and contact information for ROBERT H. VOGEL ENGINEERING, INC., including address, phone, and fax numbers.

PHASING CHART table with columns: PHASE, UNITS, YEAR, BUILDINGS. Details the construction schedule for Buildings A, B, C, D, and E.

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

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS. Includes signature and date for the County Health Officer.

ADDRESS CHART and PERMIT INFORMATION CHART. The address chart lists lot/parcel numbers and street addresses. The permit information chart details subdivision name, section/area, parcel number, and other permit-related data.

STORMWATER MANAGEMENT FACILITY PRIVATELY OWNED AND MAINTAINED

JAMES EDWARD ROBERTS
TRICIA B. ROBERTS
TAX MAP 38, PARCEL 279
L. 1998/F. 71
14.49 ACRES
ZONED B-1

VIOLA ANNA DICK
TAX MAP 37, PARCEL 195
LOT: B-1
6.52/F. 348
3.45 ACRES
ZONED M-2

STATE OF MARYLAND
HIGHWAY ADMINISTRATION
TAX MAP 37
PARCEL 195
LOT: B-1
L. 6152/F. 348
3.45 ACRES

BALTIMORE WASHINGTON BOULEVARD (U.S. ROUTE 1)
INTERMEDIATE ARTERIAL
RIGHT-OF-WAY VARIES

PARCEL B
3.20 AC.
ZONED CAC

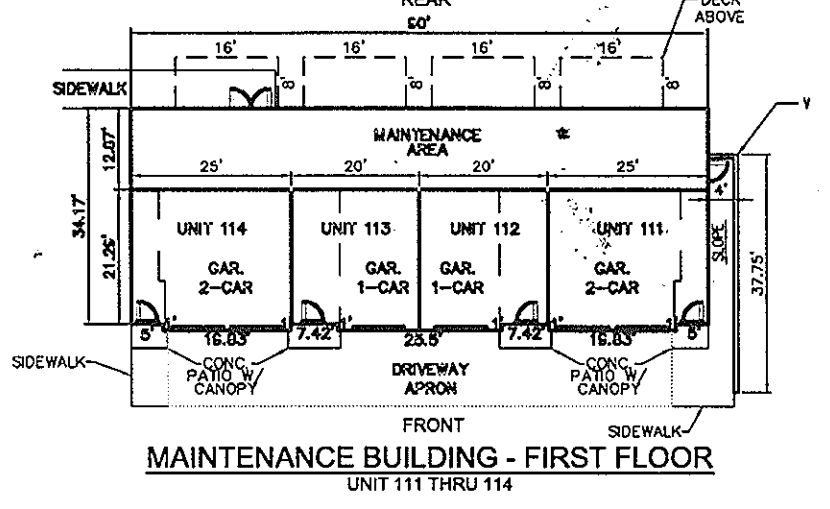
OPEN SPACE
LOT 1
6.16 AC.
ZONED CAC

JAMES EDWARD ROBERTS
TRICIA B. ROBERTS
TAX MAP 38, PARCEL 279
L. 1998/F. 71
14.49 ACRES
ZONED CAC-CL1

JAMES EDWARD ROBERTS
JOHN BARAN
TAX MAP 38, PARCEL 352
L. 4152/F. 315
14.25 ACRES
ZONED CAC-CL1

WASHINGTON REAL ESTATE INVEST TRUST
TAX MAP 38, PARCEL 583
LOT D-1
L. 3486/F. 302
15.17 ACRES
ZONED M-2

UNITED STATES POSTAL SERVICE
MID ATLANTIC LAW OFFICE
TAX MAP 38, PARCEL 583
LOT: B-1
L. 4457/F. 71
4.98 ACRES
ZONED M-2



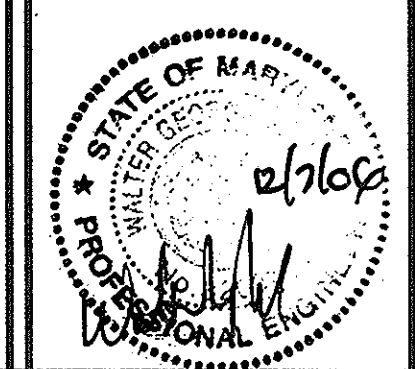
NO.	REVISION	DATE
1	ADD OPTIONAL 18"X10" DECK TO FAIRGATE MODEL	11/28/07

SITE DEVELOPMENT PLAN
OVERALL SITE PLAN

BELMONT STATION (PHASES I, II, AND III)
REF: S-04-10, WP-04-152, WP-05-79, P-05-17, F-05-169, PLAT 18658-71
TAX MAP 37, BLOCK 18 PARCEL 195, 198, 199
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELLIOTT CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8961

DESIGN BY: <u>WJZ</u>	DATE: <u>12/10/06</u>
DRAWN BY: <u>OZ</u>	DATE: <u>12/10/06</u>
CHECKED BY: <u>WJZ</u>	DATE: <u>12/10/06</u>
SCALE: <u>1"=100'</u>	W.O. NO.: <u>04-08</u>



SECTION	WSEL	SECTION	WSEL
TRIB D-6 350	111.49	TRIB 3+77	108.79
TRIB D-6 280	110.21	TRIB 2+53	108.21
---	---	TRIB 1+30	108.81
TRIB D 11100	122.57	18+53	120.30
TRIB D 10870	122.36	16+64	118.82
TRIB D 10650	118.67	14+64	116.32
---	---	---	113.82
---	---	12+63	111.71
---	---	11+49	110.66
TRIB D 10320	116.93	8+84	109.54
TRIB D 10100	113.44	7+01	105.10
---	---	4+79	105.01
---	---	3+18	105.59
---	---	2+85	104.27
TRIB D 9410	105.51	2+05	104.37
---	---	0+00	104.27*

LINE TABLE	LINE TABLE
L1 N70+40'03"E 35.40	L18 N70+37'29"E 30.00
L2 N87+44'55"E 20.00	L19 N66+13'24"E 20.00
L3 N67+04'44"E 25.00	L20 N77+09'20"E 43.35
L4 S82+18'21"E 19.25	L21 N72+54'33"E 81.58
L5 N85+09'09"E 32.65	L22 N64+46'33"E 59.82
L6 N49+37'27"E 23.10	L23 S89+47'04"E 50.03
L7 N84+50'54"E 10.00	L24 S10+03'40"E 59.74
L8 N58+09'14"E 45.00	L25 S14+44'05"E 13.31
L9 N24+21'24"E 55.00	L26 S54+39'41"E 36.43
L10 N14+02'09"E 35.00	L27 S73+27'39"E 60.00
L11 N21+02'05"E 13.86	L28 N69+13'47"E 50.00
L12 N27+02'18"E 26.18	L29 N54+50'40"E 79.87
L13 N46+34'09"E 45.00	L30 N82+29'39"E 50.15
L14 N39+23'19"E 38.57	L31 S09+30'28"E 44.83
L15 N45+01'13"E 5.38	L32 S66+50'22"E 85.00
L16 N60+17'01"E 24.84	L33 S54+39'44"E 20.00
L17 N89+22'39"E 20.39	L34 N86+28'08"E 49.90
L39 N62+40'51"E 33.62	L56 S53+59'02"E 45.00
L40 S86+10'09"E 55.00	L57 N73+44'41"E 20.00
L41 N55+37'59"E 140.00	L58 N70+10'12"E 75.00
L42 N69+47'31"E 50.00	L59 N86+11'04"E 60.00
L43 S75+13'20"E 40.00	L60 S85+04'29"E 30.00
L44 N40+07'05"E 110.00	L61 N81+38'14"E 50.00
L45 N35+22'09"E 70.00	L62 S54+39'41"E 36.43
L46 N10+20'18"W 35.00	L63 S54+39'44"E 20.00
L47 N50+23'16"E 55.00	L64 N13+24'47"W 40.00
L48 N58+19'04"E 45.00	L65 N28+25'28"E 20.00
L49 N58+19'56"E 20.00	L66 N25+44'38"W 35.00
L50 N48+50'25"E 20.00	L67 N48+16'40"W 75.00
L51 N12+02'58"E 10.00	L68 S70+54'41"E 20.00
L52 S69+59'14"E 15.00	L69 N15+08'17"W 17.00
L53 S34+47'03"E 45.00	L70 N34+08'11"E 64.86
L54 S1+41'13"E 50.00	L71 N81+16'00"E 26.36

LEGEND:

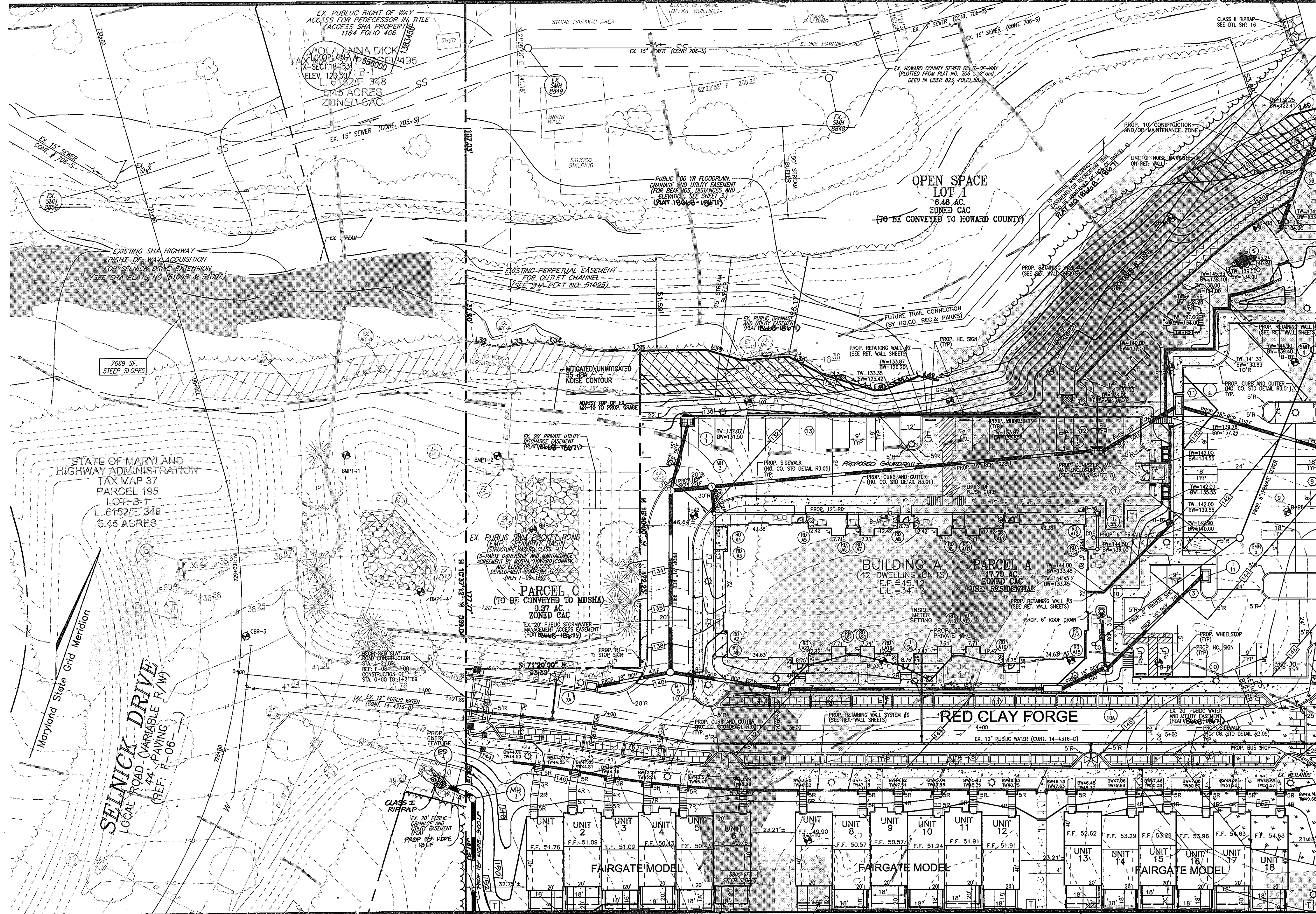
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING MAILBOX
- EXISTING SIGN
- EXISTING SANITARY MANHOLE
- EXISTING CLEANOUT
- EXISTING FIRE HYDRANT
- EXISTING WATER LINE
- PROPOSED STORM DRAIN
- PROPOSED STORM DRAIN INLET
- EXISTING TREES (FIELD LOCATED)
- EXISTING TREELINE (FIELD LOCATED)
- EXISTING VEGETATION (APPROXIMATE LOCATION)
- EXISTING FENCE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- SOILS BOUNDARY
- PROPOSED SIDEWALK
- MODERATE SLOPES (1% - 24.95%)
- STEEP SLOPE (>25%)
- PUBLIC 100 YR FLOODPLAIN
- MITIGATED NOISE LINE
- UNMITIGATED NOISE LINE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
[Signature]
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
[Signature]
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DIRECTOR

*APPROXIMATE CORRELATION BETWEEN STUDIES
 HOWARD COUNTY DEEP RUN WATERSHED STUDY 0-1094 CROSS SECTION 92+00
 BELMONT STATION FLOODPLAIN STUDY 0-1094 CROSS SECTION 92+00
 A FLOODPLAIN ANALYSIS WAS PERFORMED BY ROBERT H. VOGEL ENGINEERING, JULY 2006 TO SUPPLEMENT THE DEEP RUN WATERSHED STUDY 0-1094. THE RESULTING 100-YEAR WATER SURFACE ELEVATIONS ARE LOWER THAN THE HOWARD COUNTY STUDY. THEREFORE THE COUNTY'S ELEVATION ARE UTILIZED TO DETERMINE THE FLOODPLAIN LIMITS.

OWNER/DEVELOPER
 ELKRIDGE DEVELOPMENT NO.2, LLC ELKRIDGE DEVELOPMENT NO.2, LLC
 301 TRANSYLVANIA AVENUE 301 TRANSYLVANIA AVENUE
 RALEIGH, NC 27609 RALEIGH, NC 27609
 (919) 789-9289 (919) 789-9289

MATCHLINE (SHEET 8)

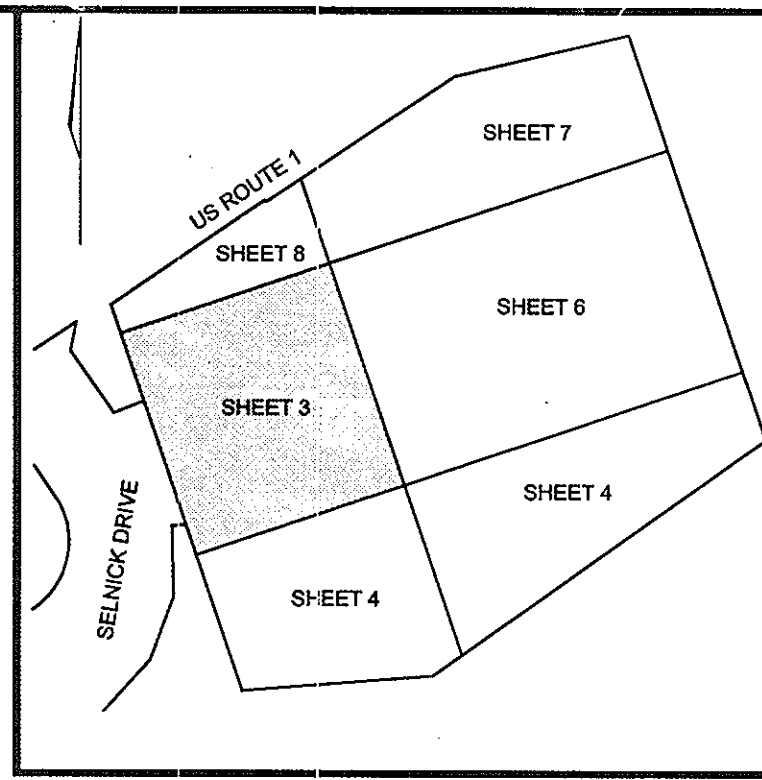


MATCHLINE (SHEET 6)

MATCHLINE (SHEET 4)

THE EXISTING SWMF TO BE OWNED BY MDSA AND MAINTAINED BY H.O.A.

NOTE:
ALL STRUCTURES, PARKING AND OTHER IMPERVIOUS AREAS WITHIN THE RECORDED FLOODPLAIN AND STREAM BUFFERS SHALL BE REMOVED AND STABILIZED UNDER FUTURE SFP FOR BULK PARCEL B, IF NOT SPECIFICALLY CALLED OUT ON THESE PLANS.



LEGEND:

	WAVER AREA, SEE NOTE 53 ON SHEET 1
	EXISTING CONTOUR
	PROPOSED CONTOUR
	EXISTING SPOT ELEVATION
	EXISTING CURB AND GUTTER
	PROPOSED CURB AND GUTTER
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING MAILBOX
	EXISTING SIGN
	EXISTING SANITARY MANHOLE
	EXISTING CLEANOUT
	EXISTING FIRE HYDRANT
	EXISTING WATER LINE
	PROPOSED STORM DRAIN
	PROPOSED STORM DRAIN INLET
	EXISTING TREES (FIELD LOCATED)
	EXISTING TREE LINE (FIELD LOCATED)
	EXISTING VEGETATION (APPROXIMATE LOCATION)
	EXISTING FENCE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	SOILS BOUNDARY
	PROPOSED SIDEWALK
	MODERATE SLOPES (1:50)
	STEEP SLOPE (1:25)
	PUBLIC 100 YR FLOODPLAIN
	PROP. TRANSFORMER
	PROP. CONDENSERS
	PROP. DUMPSTER AREA
	BORING LOCATION
	PROP. SITE LIGHT
	PROP. CONCRETE PAVER (SEE SHIT 4 FOR TYP. SECT.)

NO.	REVISION	DATE
2	ADD MISSING IMAGES, STORM DRAIN, REVISE WHC TO UNITS 978 90	1-28-07
1	ADD SHC TO MAINTENANCE BLDG, REVISE WHC TO MAINTENANCE BLDG; ADD DRAINS TO POOL AREA; MISC. STORM DRAIN CHANGES	11-28-07
1	ADD OPTIONAL 10' X 10' DECK TO FAIRGATE MODEL	11-28-07

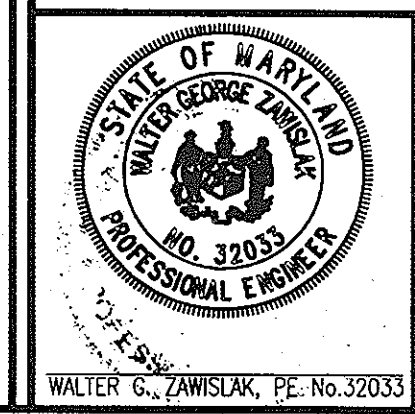
SITE DEVELOPMENT PLAN
SITE LAYOUT PLAN
BELMONT STATION (PHASES I, II, AND III)
PARCELS A, C AND OPEN SPACE LOT 1
REF: S-04-10, WP-04-152, WP-06-79, P-05-17, F-05-198, PLAT 18658-71
TAX MAP 37 BLOCK 16 PARCEL 195, 198, 199
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET ELIGOTT CITY, MD 21043 TEL: 410.461.7666 FAX: 410.461.8961

DESIGN BY: WJZ	OWNER/DEVELOPER
DRAWN BY: DZ	ELKRIDGE DEVELOPMENT NO.2, LLC
CHECKED BY: WJZ	301 TRANSYLVANIA AVENUE
DATE: DECEMBER 7, 2006	RALEIGH, NC 27609
SCALE: 1"=32'	(919) 789-9289
W.O. NO.: 04-01	

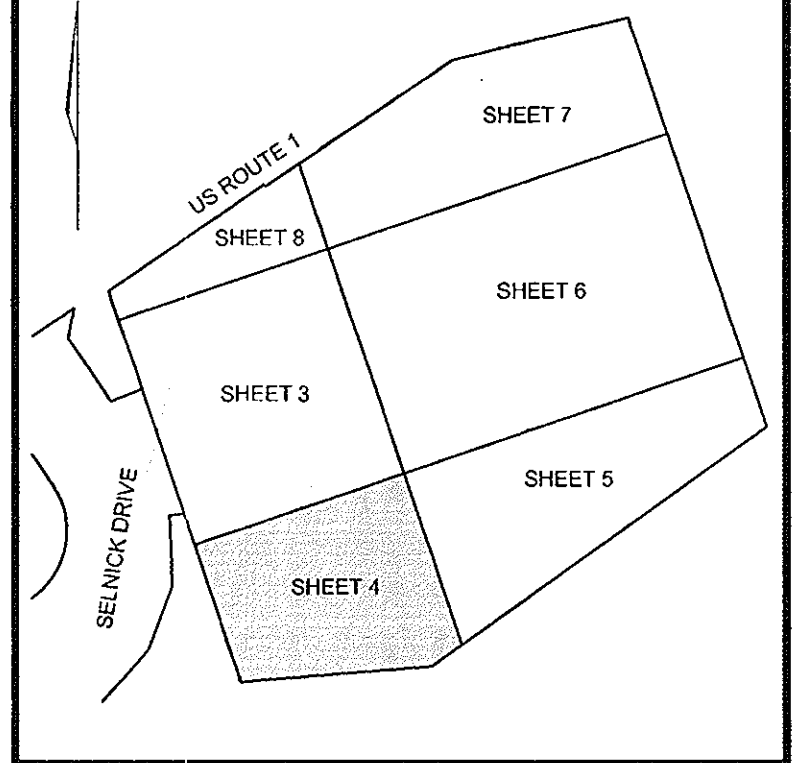
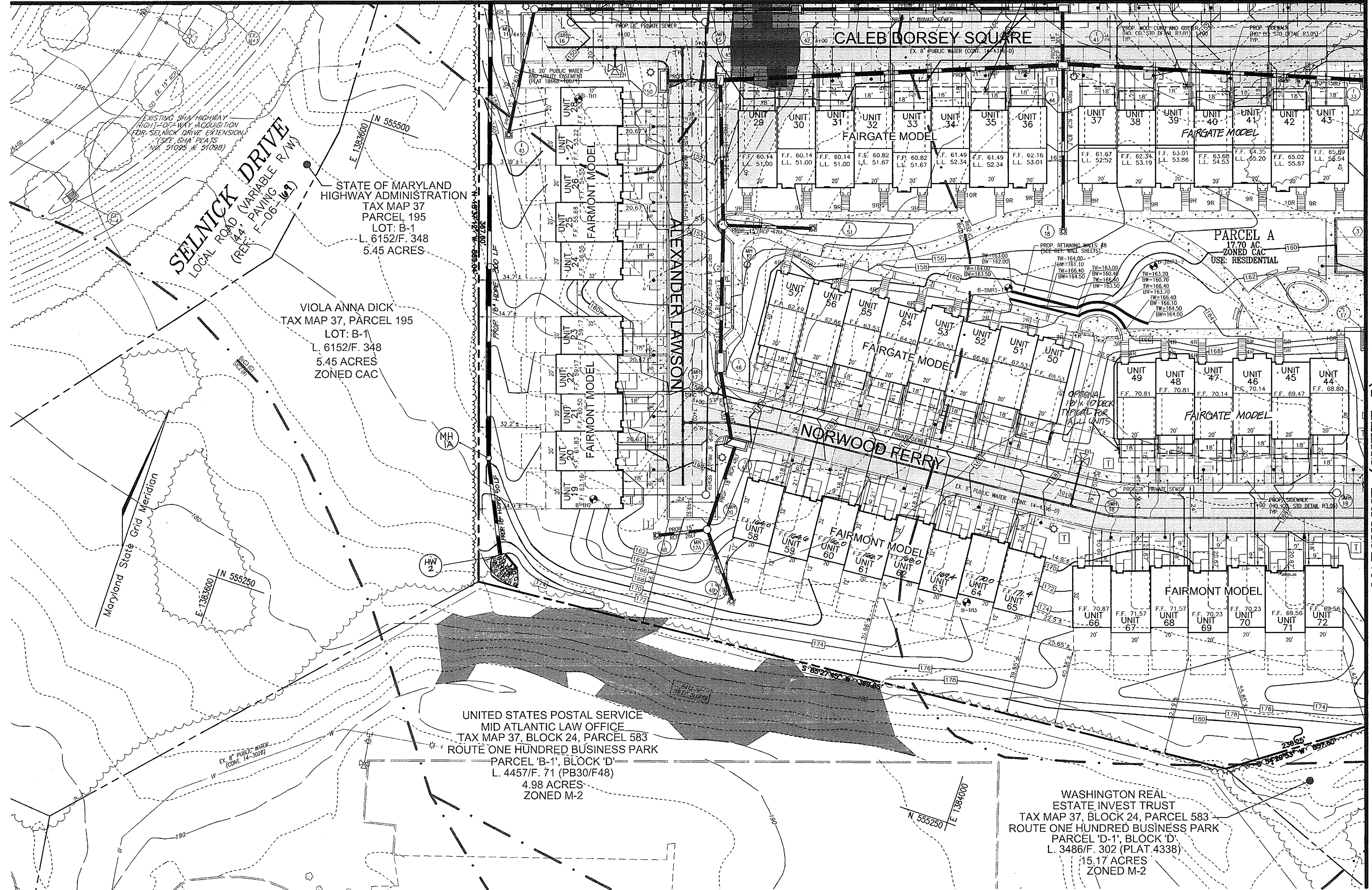
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] 12/8/06
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 12/18/06
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 12/14/06
 DIRECTOR

OWNER/DEVELOPER
ELKRIDGE DEVELOPMENT NO.2, LLC
301 TRANSYLVANIA AVENUE
RALEIGH, NC 27609
(919) 789-9289



MATCHLINE (SHEET 3)

OPTIONAL 10'x10' DECK TYPICAL FOR ALL UNITS



KEY MAP
NOT TO SCALE

LEGEND:

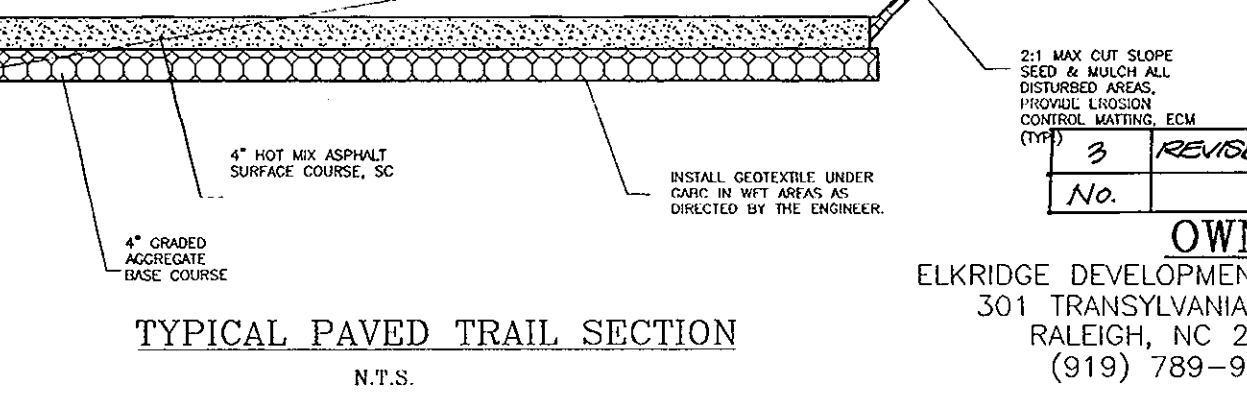
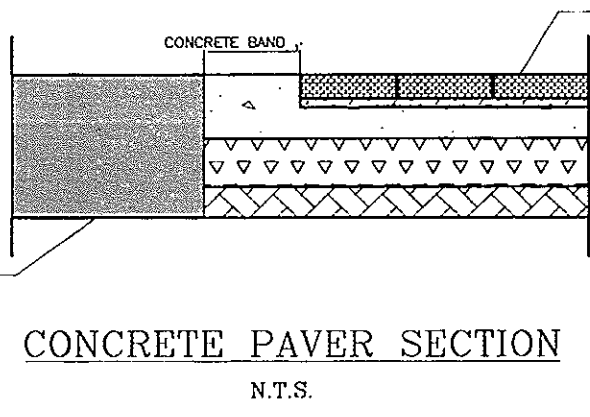
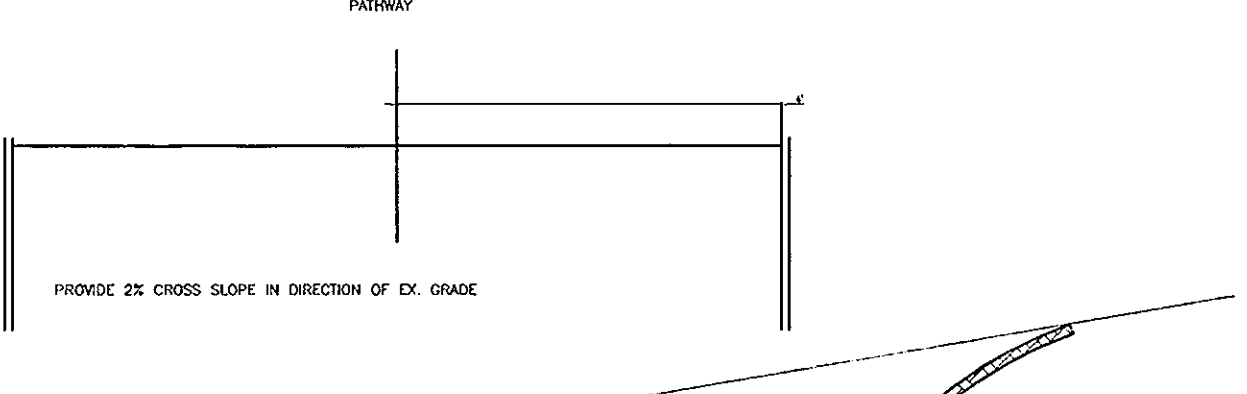
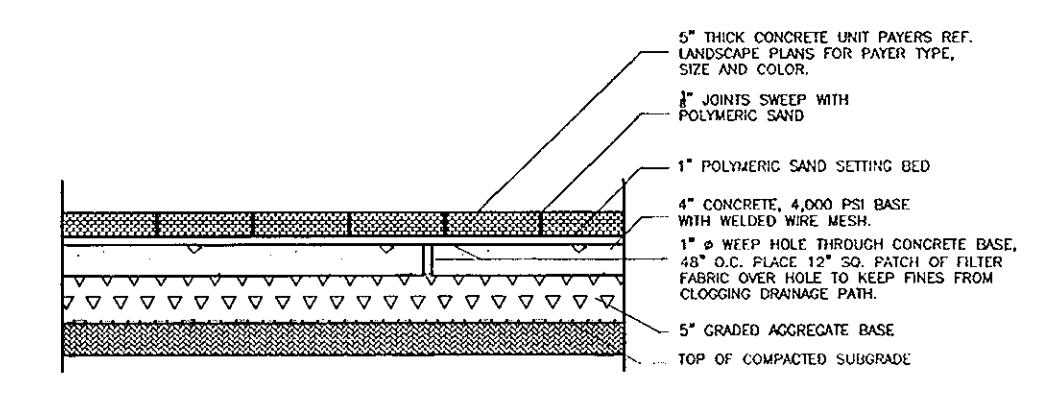
	EXISTING CONTOUR
	PROPOSED CONTOUR
	EXISTING SPOT ELEVATION
	EXISTING CURB AND GUTTER
	PROPOSED CURB AND GUTTER
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING MAILBOX
	EXISTING SIGN
	EXISTING SANITARY MANHOLE
	EXISTING SANITARY LINE
	EXISTING CLEANOUT
	EXISTING FIRE HYDRANT
	EXISTING WATER LINE
	PROPOSED STORM DRAIN
	PROPOSED STORM DRAIN INLET
	EXISTING TREES (FIELD LOCATED)
	EXISTING TREE LINE (FIELD LOCATED)
	EXISTING VEGETATION (APPROXIMATE LOCATION)
	EXISTING FENCE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	SOILS BOUNDARY
	PROPOSED SIDEWALK
	MODERATE SLOPES (15% - 24.99%)
	STEEP SLOPE (>25%)
	PUBLIC 100 YR FLOODPLAIN
	PROP. TRANSFORMER
	PROP. CONDENSERS
	PROP. DUMPSTER AREA
	BORING LOCATION
	PROP. SITE LIGHT
	PROP. CONCRETE POWER (SEE SHEET 4 FOR TYP. SECT.)

MATCHLINE (SHEET 5)

UNITED STATES POSTAL SERVICE
MID ATLANTIC LAW OFFICE
TAX MAP 37, BLOCK 24, PARCEL 583
ROUTE ONE HUNDRED BUSINESS PARK
PARCEL 'B-1', BLOCK 'D'
L. 4457/F. 71 (PB30/F48)
4.98 ACRES
ZONED M-2

WASHINGTON REAL ESTATE INVEST TRUST
TAX MAP 37, BLOCK 24, PARCEL 583
ROUTE ONE HUNDRED BUSINESS PARK
PARCEL 'D-1', BLOCK 'D'
L. 3486/F. 302 (PLAT 4338)
15.17 ACRES
ZONED M-2

IMPORTANT NOTE (POLYMER SAND):
REFERENCE DIRECTIONS PROVIDED BY THE MANUFACTURER TO INSURE PROPER INSTALLATION AND BREWING OF PRODUCT. PRIOR TO MIXING POLYMER SAND, BE SURE REMOVE EXCESS JOINT SAND FROM THE SURFACE OF ALL UNITS. WHEN WETTING SAND USE A FINE MESH TO PREVENT DISPERGMENT OF SAND OR EROSION OF BINDER.



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 12/15/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 12/19/06
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 12/19/06
DIRECTOR DATE

2	ADD MISSING IMAGES; STORM DRAIN; REVISE W/C TO UNITS 91 & 92; 1/28/06	
	ADD S/C TO MAINTENANCE BLDG; REVISE W/C TO MAINTENANCE BLDG; ADD DRAINS TO POOL AREA; MISC STORM DRAIN CHANGES	
1	ADD OPTIONAL 10'x10' DECK TO FAIRGATE MODEL	11/29/07
NO.	REVISION	DATE

SITE DEVELOPMENT PLAN
SITE LAYOUT PLAN
BELMONT STATION (PHASES I, II, AND III)
PARCELS A, C AND OPEN SPACE LOT 1
REF: S-04-10, WP-04-152, WP-06-79, P-05-17, F-06-169, PLAT 18668-71
TAX MAP 37 BLOCK 18 PARCEL 196, 198, 199
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET TEL: 410.461.7666
ELLCOTT CITY, MD 21043 FAX: 410.461.8961

DESIGN BY: WJZ
DRAWN BY: DZ
CHECKED BY:
DATE: DECEMBER 7, 2006
SCALE: 1"=30'
W.O. NO.: 04-08

4 SHEET OF 39

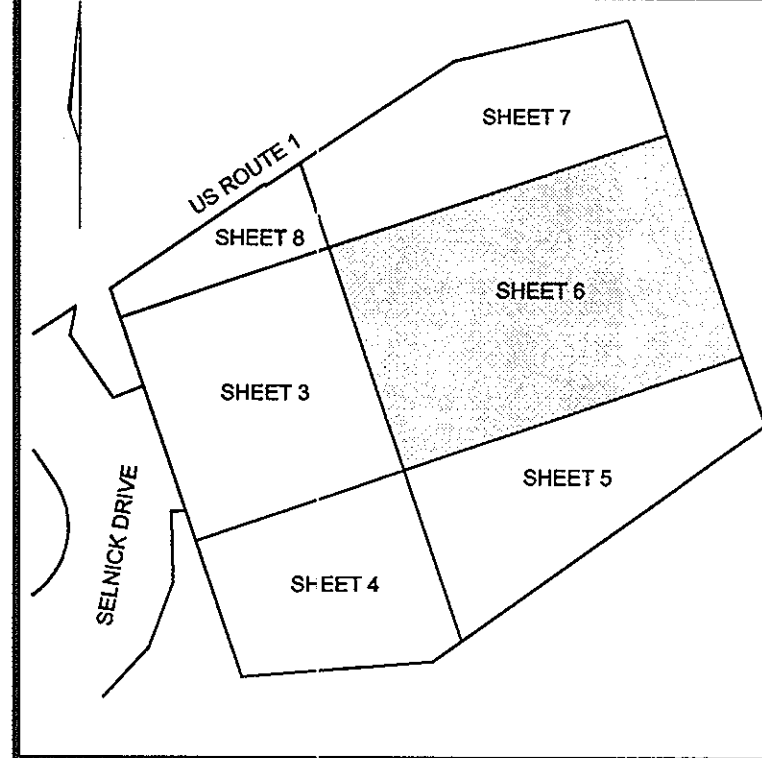
OWNER/DEVELOPER
ELKRIDGE DEVELOPMENT NO.2, LLC ELKRIDGE DEVELOPMENT NO.2, LLC
301 TRANSYLVANIA AVENUE RALEIGH, NC 27609
(919) 789-9289

REVISION 3 REVISE FF ELEVATIONS UNITS 90-95 TO ASBUILT 11/21/09

STORMWATER MANAGEMENT FACILITY TO BE PRIVATELY OWNED AND MAINTAINED

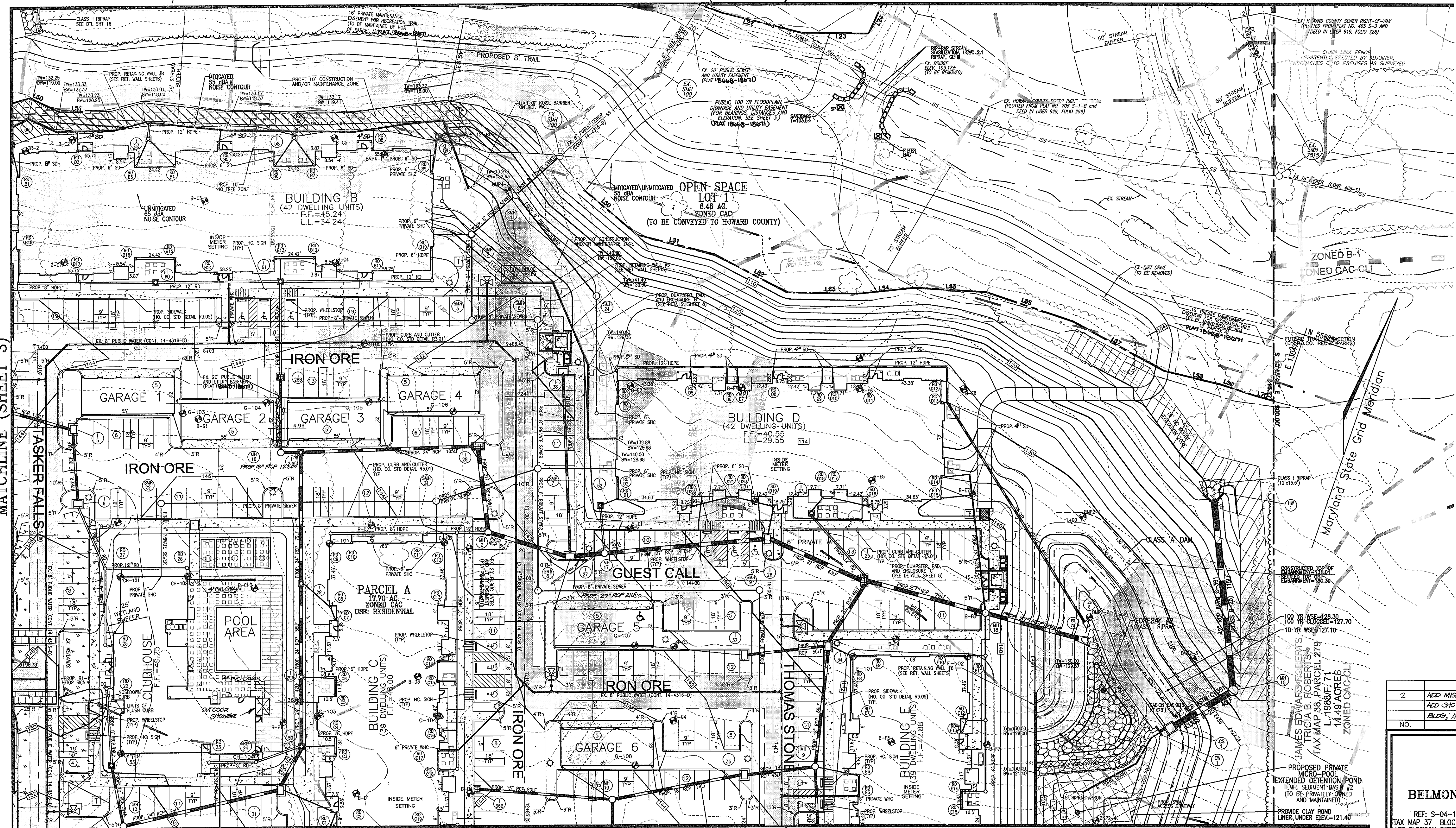
MATCHLINE (SHEET 7)

NOTE:
ALL STRUCTURES, PARKING AND OTHER IMPERVIOUS AREAS WITHIN THE RECORDED FLOODPLAIN AND STREAM BUFFERS SHALL BE REMOVED AND STABILIZED UNDER FUTURE SDP FOR BULK PARCEL B, IF NOT SPECIFICALLY CALLED OUT ON THESE PLANS.



KEY MAP
NOT TO SCALE

- LEGEND:**
- WAVER AREA, SEE NOTE 53 ON SHEET 1
 - EXISTING CONTOUR
 - PROPOSED CONTOUR
 - PROPOSED SPOT ELEVATION
 - EXISTING SPOT ELEVATION
 - EXISTING CURB AND GUTTER
 - PROPOSED CURB AND GUTTER
 - EXISTING UTILITY POLE
 - EXISTING LIGHT POLE
 - EXISTING MAILBOX
 - EXISTING SIGN
 - EXISTING SANITARY MANHOLE
 - EXISTING SANITARY LINE
 - EXISTING CLEANOUT
 - EXISTING FIRE HYDRANT
 - EXISTING WATER LINE
 - PROPOSED STORM DRAIN
 - PROPOSED STORM DRAIN INLET
 - EXISTING TREES (FIELD LOCATED)
 - EXISTING TREELINE (FIELD LOCATED)
 - EXISTING VEGETATION (APPROXIMATE LOCATION)
 - EXISTING FENCE
 - PROPERTY LINE
 - RIGHT-OF-WAY LINE
 - SOILS BOUNDARY: M1B2, M1D3
 - PROPOSED SIDEWALK
 - MODERATE SLOPES (1% - 24.99%)
 - STEEP SLOPE (>25%)
 - PUBLIC 100 YR FLOODPLAIN
 - PROP. TRANSFORMER
 - PROP. CONDENSORS
 - PROP. DUMPSTER AREA
 - BORING LOCATION
 - PROP. SITE LIGHT
 - PROP. CONCRETE PAVEMENT (SEE SHEET 4 FOR TYP. SECT.)



MATCHLINE (SHEET 5)

2	ADD MISSING IMAGES, STORM DRAIN, REVISE WHC TO UNITS 97-98 TO 1-28-08	
	ADD SHC TO MAINTENANCE BLDG, REVISE WHC TO MAINTENANCE BLDG, ADD DRAINS TO POOL AREA, MISC. STORM DRAIN	
NO.	REVISION	DATE

SITE DEVELOPMENT PLAN
SITE LAYOUT PLAN
BELMONT STATION (PHASES I, II, AND III)
PARCELS A, C AND OPEN SPACE LOT 1
REF: S-04-10, WP-04-152, WP-05-79, P-05-17, F-05-168, PLAT 18568-71
TAX MAP 37, BLOCK 18, PARCEL 195, 198, 199
1ST ELECTION DISTRICT

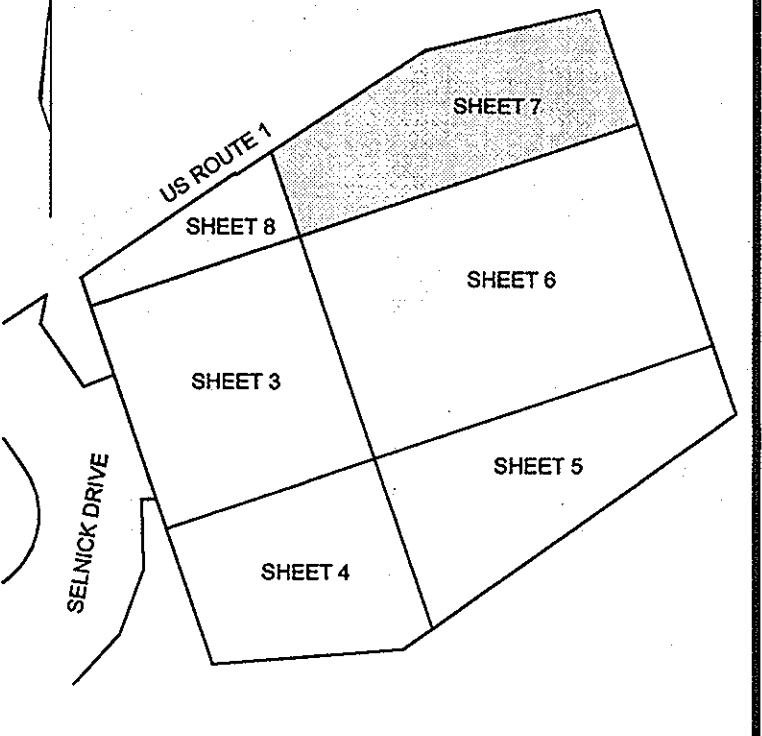
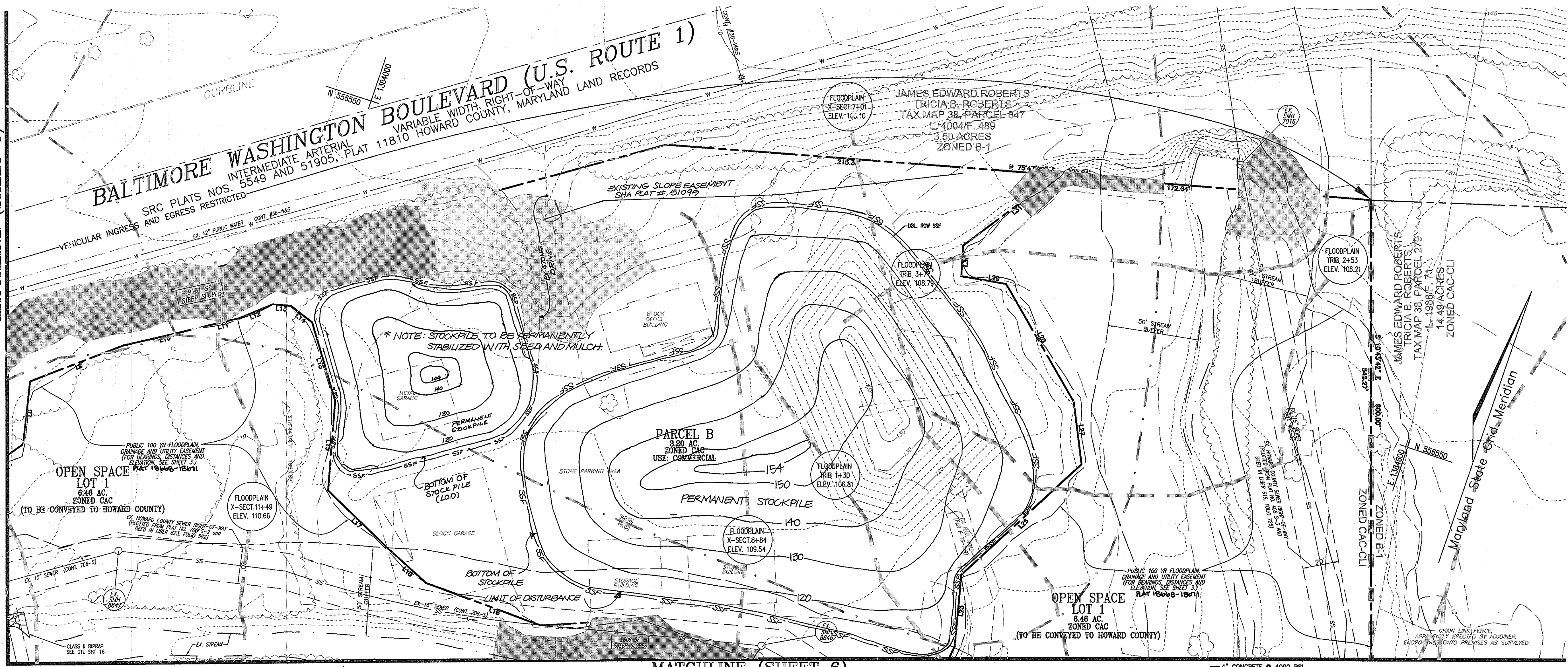
ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET, ELICOTT CITY, MD 21043
TEL: 410.481.7666
FAX: 410.481.8961

DESIGN BY: WJZ	OWNER/DEVELOPER
DRAWN BY: DJZ	ELKRIDGE DEVELOPMENT NO.2, LLC
CHECKED BY: WJZ	301 TRANSYLVANIA AVENUE, RALEIGH, NC 27609
DATE: DECEMBER 7, 2006	ELKRIDGE DEVELOPMENT NO.2, LLC
SCALE: 1"=30'	301 TRANSYLVANIA AVENUE, RALEIGH, NC 27609
W.O. NO.: 04-08	(919) 789-9289

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] 12/8/06
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 12/15/06
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 12/15/06
 DIRECTOR

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MATCHLINE (SHEET 8)

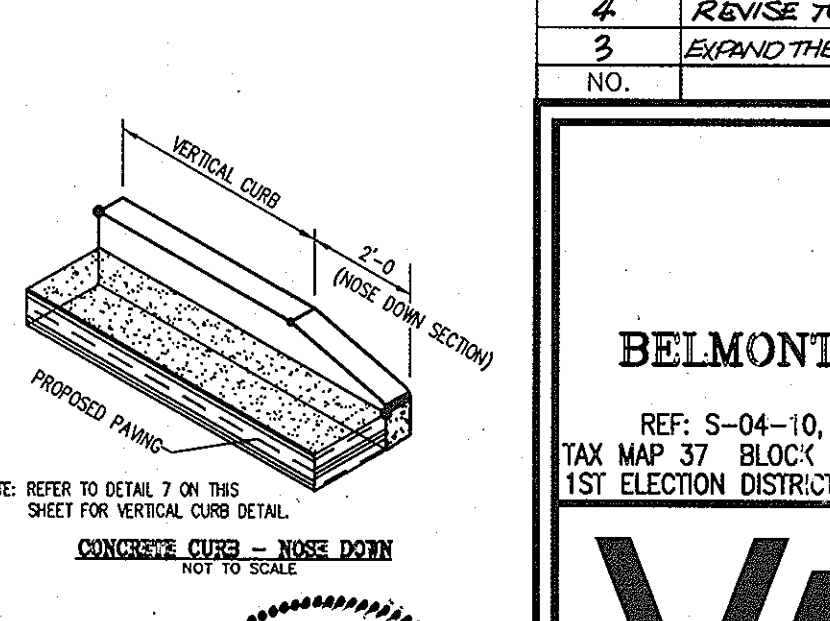
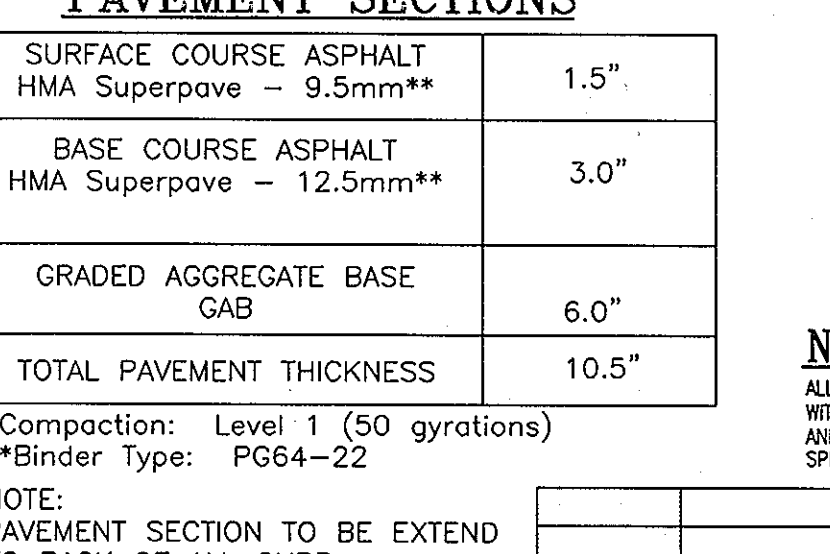
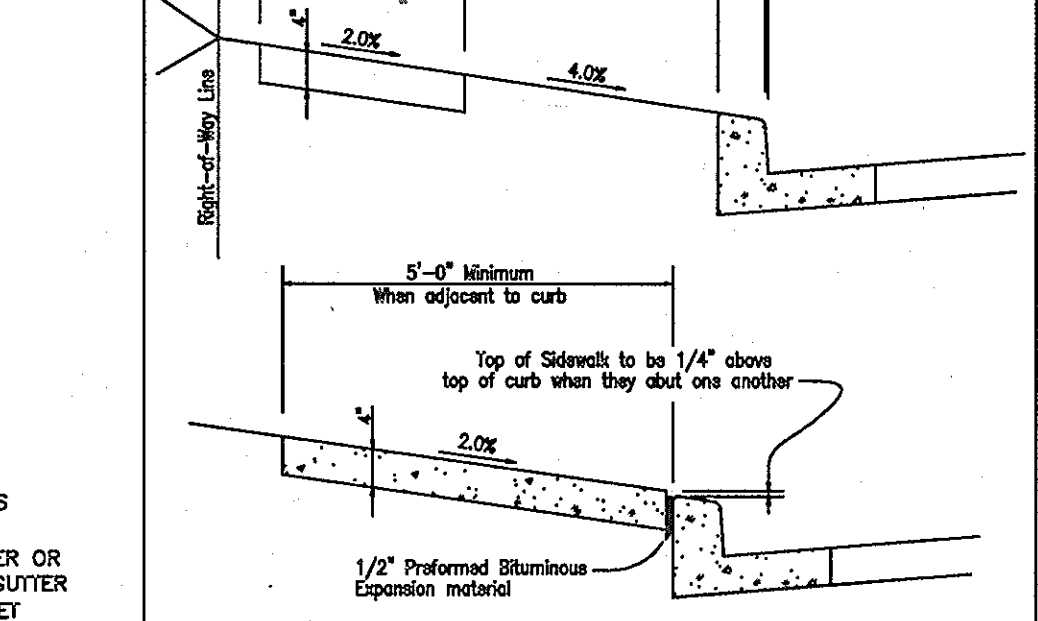
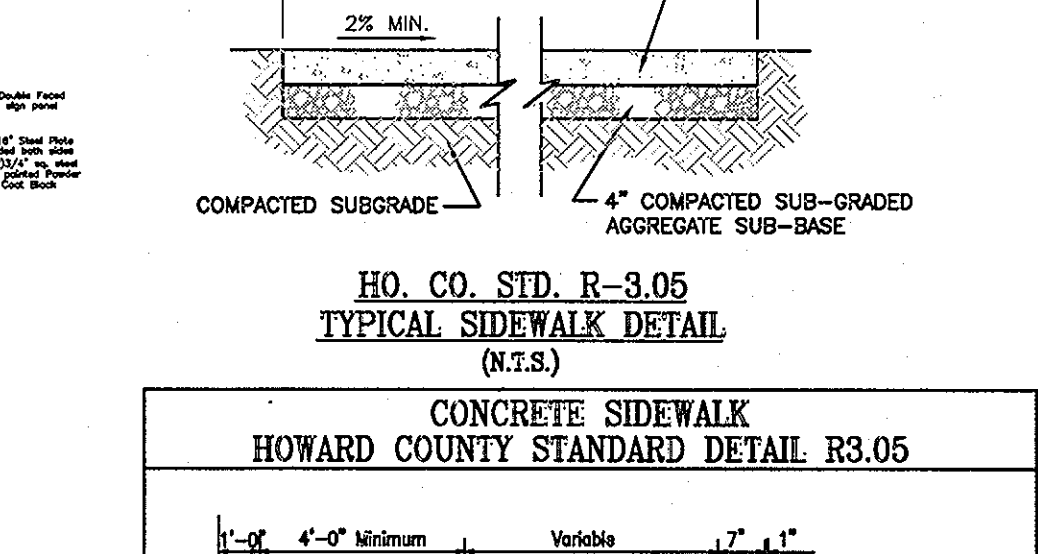
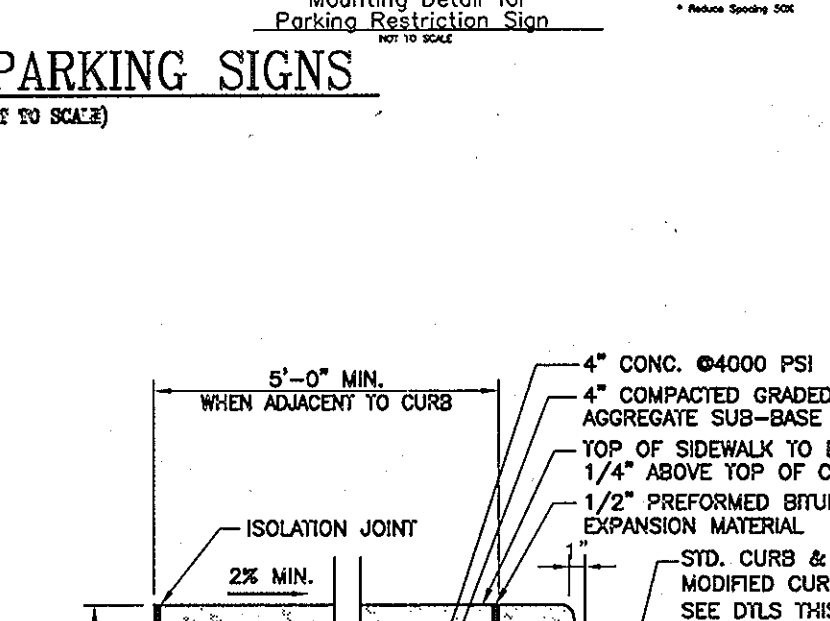
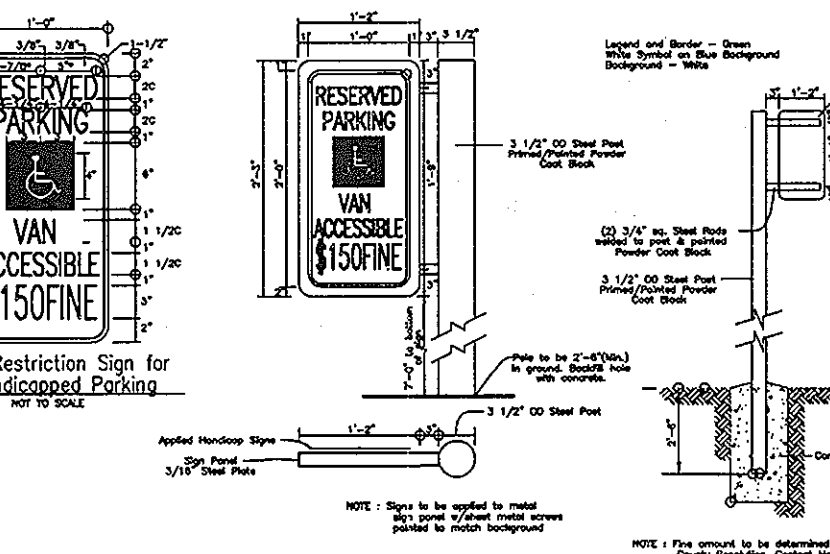
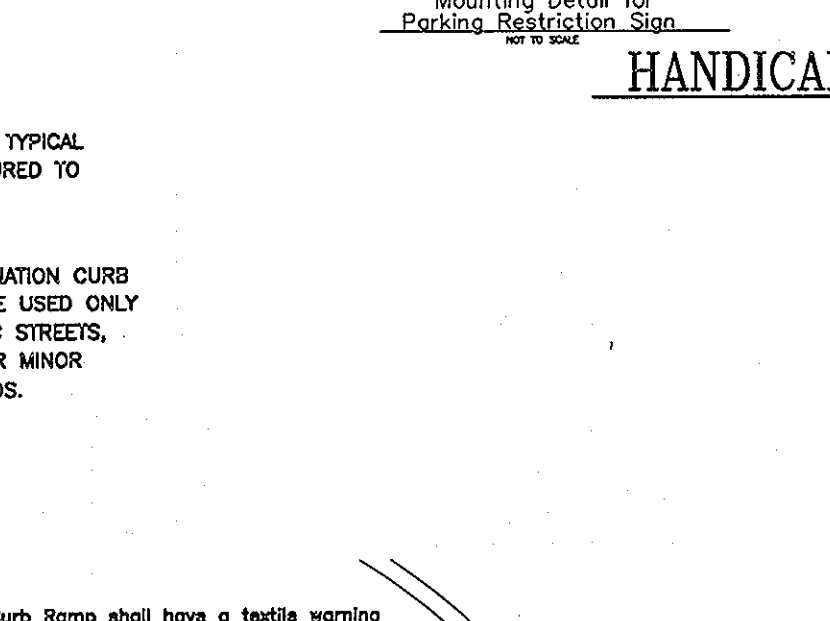
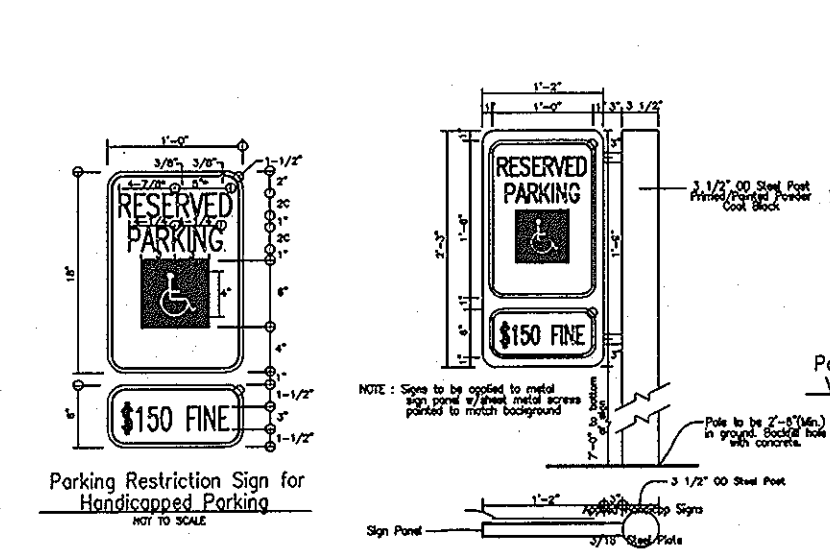
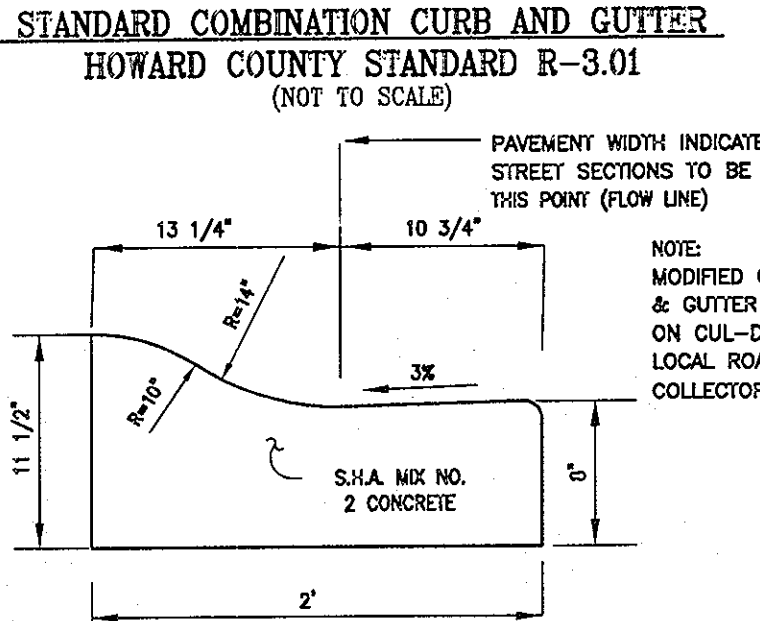
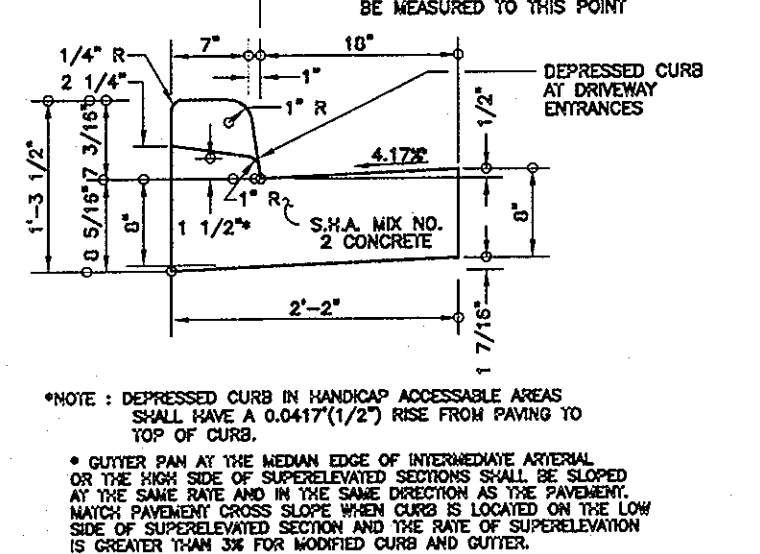
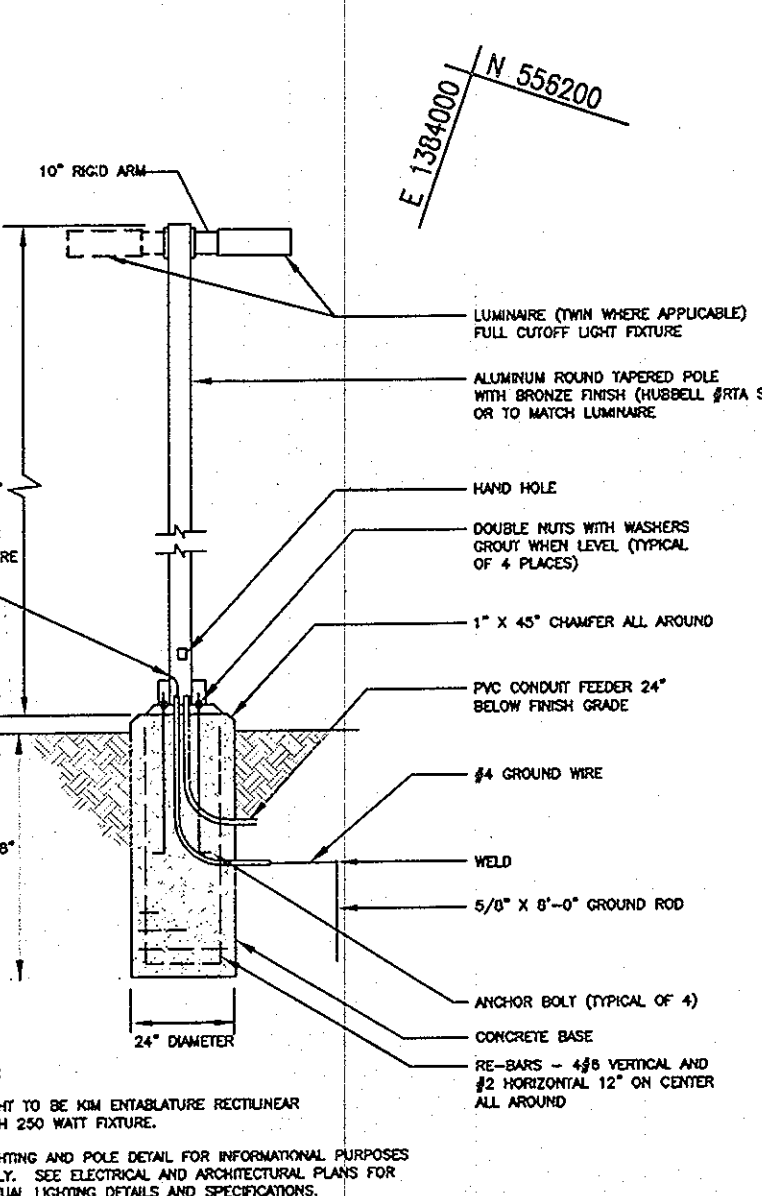


KEY MAP
NOT TO SCALE

LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- EXISTING CURB AND CUTTER
- PROPOSED CURB AND CUTTER
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING LIGHT POLE
- PROPOSED LIGHT POLE
- EXISTING MALBOX
- PROPOSED MALBOX
- EXISTING SIGN
- PROPOSED SIGN
- EXISTING SANITARY MANHOLE
- PROPOSED SANITARY MANHOLE
- EXISTING SANITARY LINE
- PROPOSED SANITARY LINE
- EXISTING CLEANOUT
- PROPOSED CLEANOUT
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING WATER LINE
- PROPOSED WATER LINE
- PROPOSED STORM DRAIN
- PROPOSED STORM DRAIN INLET
- EXISTING TREES (FIELD LOCATED)
- PROPOSED TREES (FIELD LOCATED)
- EXISTING VEGETATION (APPROXIMATE LOCATION)
- PROPOSED VEGETATION (APPROXIMATE LOCATION)
- EXISTING FENCE
- PROPOSED FENCE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- SOILS BOUNDARY
- PROPOSED SIDEWALK
- MODERATE SLOPES (1% - 24.5%)
- STEEP SLOPE (>25%)
- PUBLIC 100 YR FLOODPLAIN
- PROP. TRANSFORMER
- PROP. CONDENSERS
- PROP. DUMPSTER AREA
- BORING LOCATION

MATCHLINE (SHEET 6)



NOTE:
ALL STRUCTURES, PARKING AND OTHER IMPERVIOUS AREAS WITHIN THE RECORDED FLOODPLAIN AND STREAM BUFFERS SHALL BE REMOVED AND STABILIZED UNDER FUTURE SDP FOR BULK PARCEL B, IF NOT SPECIFICALLY CALLED OUT ON THESE PLANS.

NO.	REVISION	DATE
4	REVISE TO ADD A PERMANENT STOCKPILE TO PARCEL B	02/15/13
3	EXPAND THE PREVIOUS STOCKPILE LIMITS AND LABEL AS PERMANENT	4/27/10

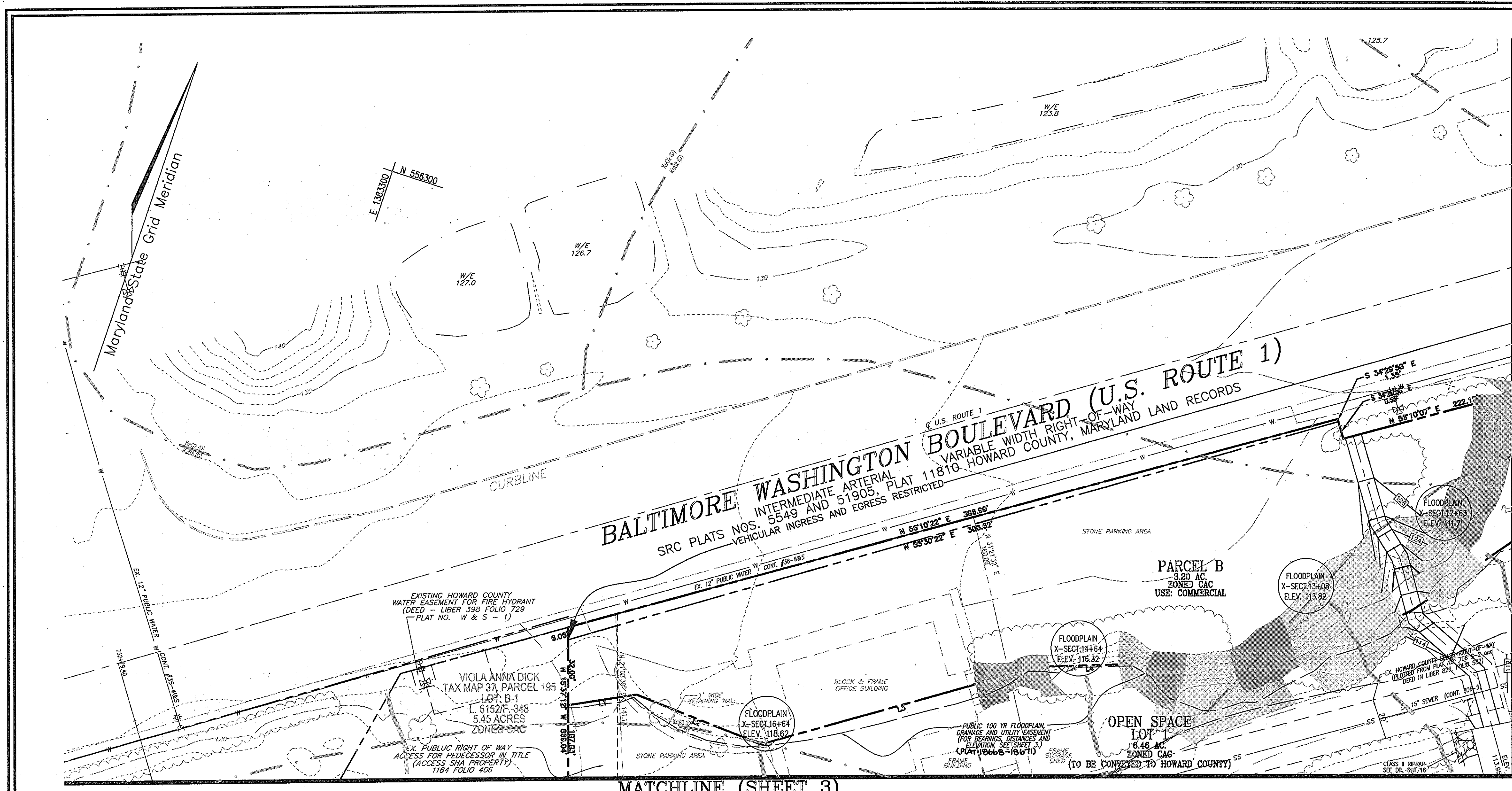
SITE DEVELOPMENT PLAN
SITE LAYOUT PLAN
BELMONT STATION (PHASES I, II, AND III)
 PARCELS A, C AND OPEN SPACE LOT 1
 REF: S-04-10, WP-04-152, WP-06-75, P-05-17, F-06-168, PLAT 18588-71
 PARCEL 155, 158, 159
 TAX MAP 37, BLOCK 18
 1ST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET ELLICOTT CITY, MD 21043 TEL: 410.461.7666 FAX: 410.461.8961

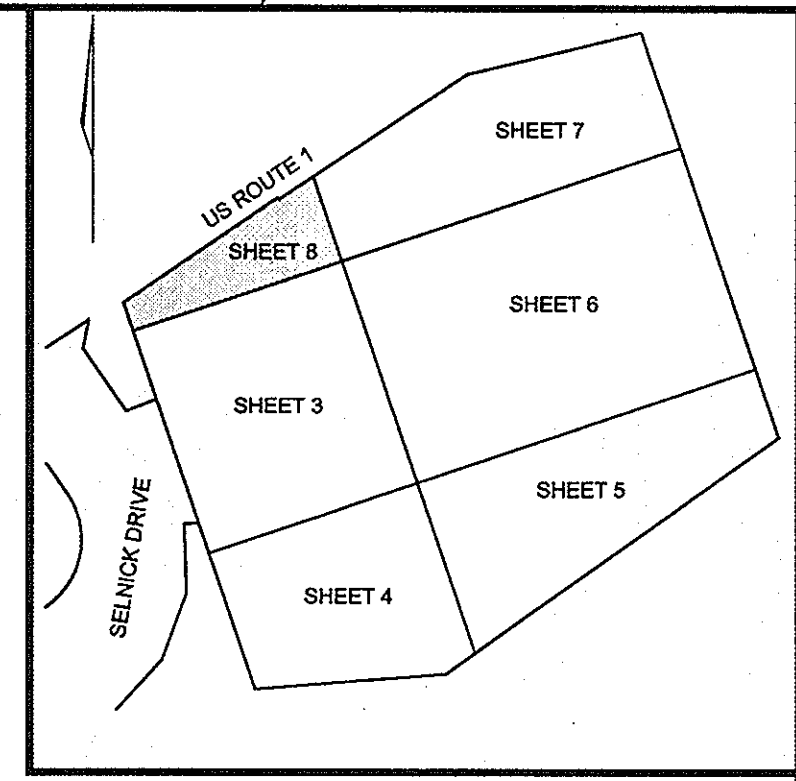
DESIGN BY: WJZ
DRAWN BY: DZ
CHECKED BY: WSZ
DATE: DECEMBER 7, 2008
SCALE: 1"=30'
W.O. NO.: 04-08

7 SHEET OF 39

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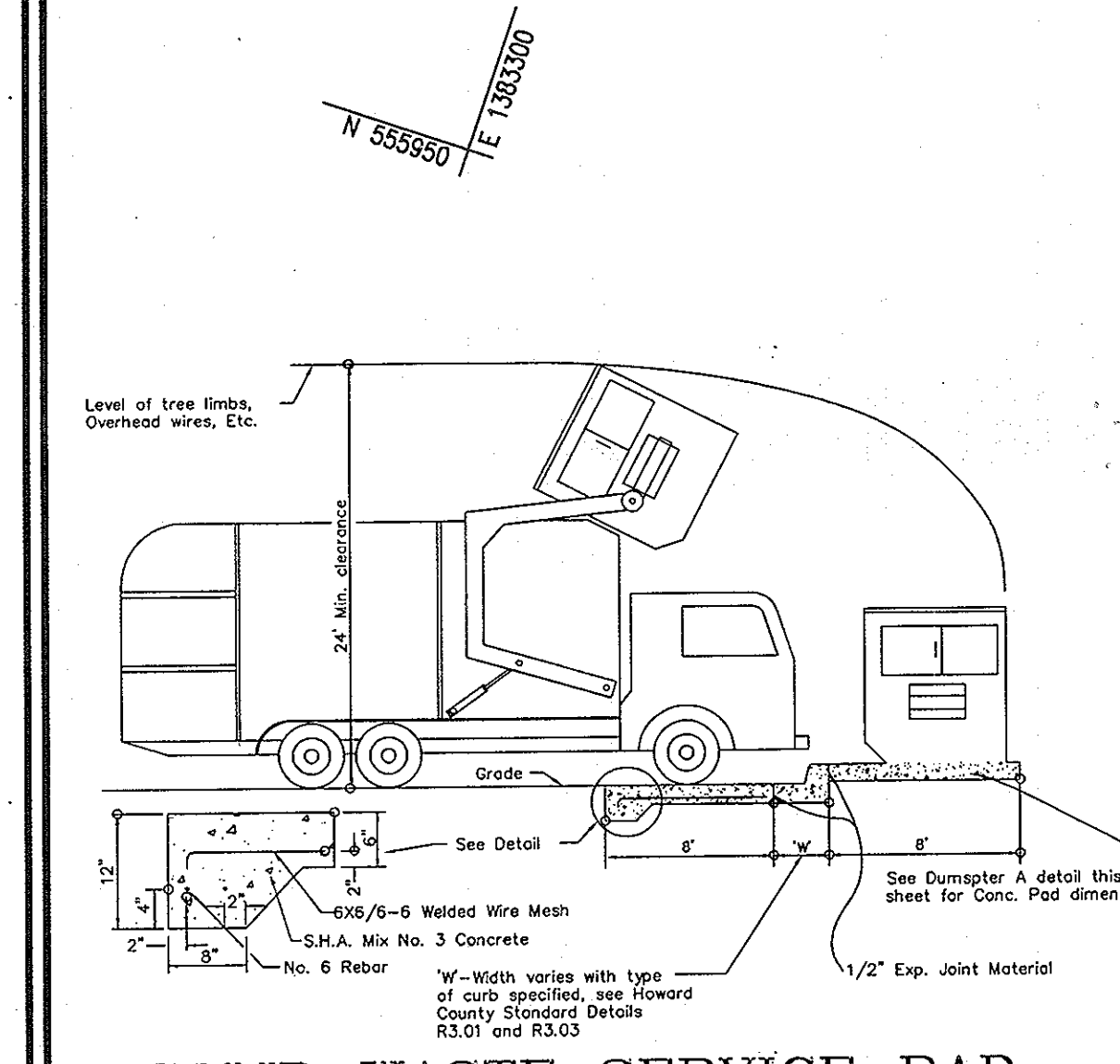
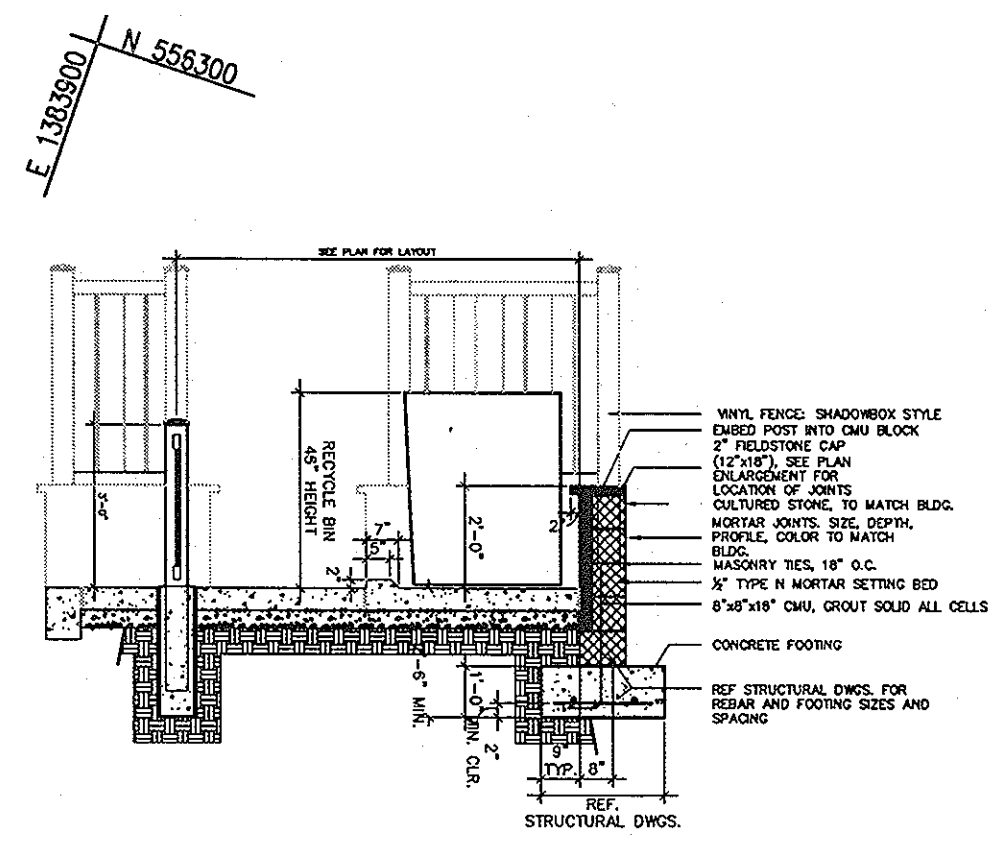


NOTE:
 ALL STRUCTURES, PARKING AND OTHER IMPERVIOUS AREAS WITHIN THE RECORDED FLOODPLAIN AND STREAM BUFFERS SHALL BE REMOVED AND STABILIZED UNDER FUTURE SDP FOR BULK PARCEL B, IF NOT SPECIFICALLY CALLED OUT ON THESE PLANS.

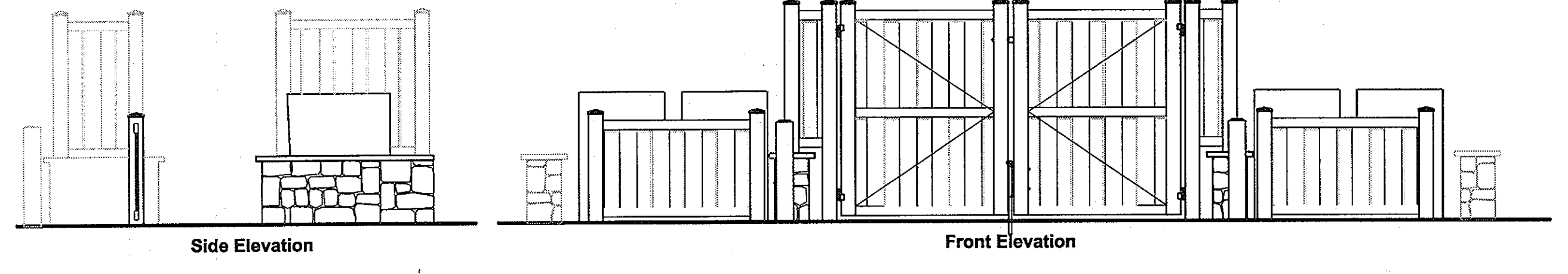
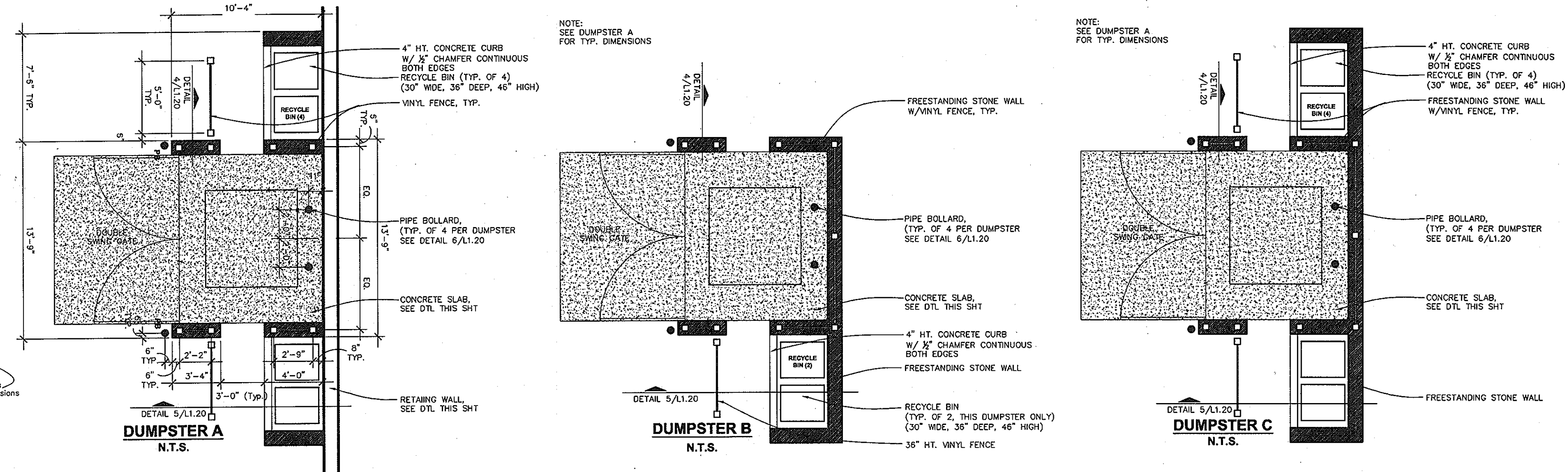


KEY MAP
 NOT TO SCALE

- LEGEND:**
- EXISTING CONTOUR
 - PROPOSED CONTOUR
 - EXISTING SPOT ELEVATION
 - PROPOSED SPOT ELEVATION
 - EXISTING CURB AND GUTTER
 - PROPOSED CURB AND GUTTER
 - EXISTING UTILITY POLE
 - EXISTING LIGHT POLE
 - EXISTING MAILBOX
 - EXISTING SIGN
 - EXISTING SANITARY MANHOLE
 - EXISTING CLEAFOUT
 - EXISTING FIRE HYDRANT
 - EXISTING WATER LINE
 - PROPOSED STORM DRAIN
 - PROPOSED STORM DRAIN INLET
 - EXISTING TREES (FIELD LOCATED)
 - EXISTING TREELINE (FIELD LOCATED)
 - EXISTING VEGETATION (APPROXIMATE LOCATION)
 - EXISTING FENCE
 - PROPERTY LINE
 - RIGHT-OF-WAY LINE
 - SOILS BOUNDARY
 - PROPOSED SIDEWALK
 - MODERATE SLOPES (15% - 24.99%)
 - STEEP SLOPE (>25%)
 - PUBLIC 100 YR FLOODPLAIN
 - PROP. TRANSFORMER
 - PROP. CONDENSORS
 - PROP. DUMPSTER AREA
 - BORING LOCATION



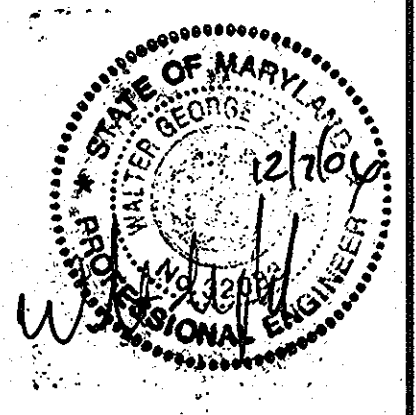
SOLID WASTE SERVICE PAD
 HOWARD COUNTY STD. R 11.01
 NOT TO SCALE



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DIRECTOR

DATE: 12/15/06
 DATE: 12/15/06
 DATE: 12/15/06

OWNER/DEVELOPER
 ELKRIDGE DEVELOPMENT NO.2, LLC
 301 TRANSYLVANIA AVENUE
 RALEIGH, NC 27609
 (919) 789-9289



NO.	REVISION	DATE

SITE DEVELOPMENT PLAN
SITE LAYOUT PLAN
BELMONT STATION (PHASES I, II, AND III)
 PARCELS A, C AND OPEN SPACE LOT 1
 REF: S-04-10, WP-04-152, WP-06-79, P-05-17, F-05-169, PLAT 18658-71
 TAX MAP 37 BLOCK 18 PARCEL 195, 198, 199
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET ELLICOTT CITY, MD 21043
 TEL: 410.461.7666 FAX: 410.461.8961

DESIGN BY: WJZ
 DRAWN BY: DZ
 CHECKED BY: WGZ
 DATE: DECEMBER 7, 2006
 SCALE: 1"=30'
 W.O. NO.: 04-08

8 SHEET OF 39



PLAN VIEW
SCALE: 1"=50'

LEGEND:

--- 10' ---	EXISTING CONTOUR	--- 10' ---	EXISTING CLEANOUT
--- 10' ---	PROPOSED PHASE 1 ESC CONTOUR	--- 10' ---	EXISTING FIRE HYDRANT
--- 10' ---	PROPOSED SPOT ELEVATION	--- 10' ---	EXISTING WATER LINE
--- 10' ---	EXISTING CURB AND GUTTER	--- 10' ---	EXISTING TREES (FIELD LOCATED)
--- 10' ---	EXISTING UTILITY POLE	--- 10' ---	EXISTING IREELINE (FIELD LOCATED)
--- 10' ---	EXISTING LIGHT POLE	--- 10' ---	EXISTING VEGETATION (APPROXIMATE LOCATION)
--- 10' ---	EXISTING MAILBOX	--- 10' ---	
--- 10' ---	EXISTING SIGN	--- 10' ---	
--- 10' ---	EXISTING SANITARY MANHOLE	--- 10' ---	
--- 10' ---	EXISTING SANITARY LINE	--- 10' ---	

---	EXISTING FENCE	---	SILT FENCE
---	PROPERTY LINE	---	SUPER SILT FENCE
---	RIGHT-OF-WAY LINE	---	LIMIT OF DISTURBANCE
---	SOILS BOUNDARY	---	STABILIZED CONSTRUCTION ENTRANCE
---	MODERATE SLOPES (1% - 24.95%)	---	PROPOSED PHASE 2 ESC CONTOURS
---	STEEP SLOPE (>25%)	---	
---	PUBLIC 100 YR FLOODPLAIN	---	

---	EXISTING CLEANOUT	---	SILT FENCE
---	EXISTING FIRE HYDRANT	---	SUPER SILT FENCE
---	EXISTING WATER LINE	---	LIMIT OF DISTURBANCE
---	EXISTING TREES (FIELD LOCATED)	---	STABILIZED CONSTRUCTION ENTRANCE
---	EXISTING IREELINE (FIELD LOCATED)	---	PROPOSED PHASE 2 ESC CONTOURS
---	EXISTING VEGETATION (APPROXIMATE LOCATION)	---	

NOTE:

1. ANY PRE-EXISTING AND/OR NEW JUNK, DEBRIS, TRASH, STRUCTURES OR OTHER MANMADE MATERIALS SHOULD BE REMOVED FROM THE FLOODPLAIN, STREAM AND WETLAND BUFFERS. DEBRIS IS TO BE KEPT OUT OF STORMWATER MANAGEMENT FACILITIES DURING AND AFTER CONSTRUCTION.
2. ALL SF AND SSF ENDS SHALL BE CURLED UPHILL BY 2' IN ELEVATION.
3. CONVERSION OF SEDIMENT BASIN #1 TO PERMANENT SWM FACILITY, INCL. FOREDAYS TO TAKE PLACE AFTER CONTRIBUTING UPSTREAM DRAINAGE AREA IS STABILIZED AND WITH APPROVAL OF SEDIMENT CONTROL INSPECTOR.

EX SEDIMENT BASIN #1
REF: F-06-169

PROPOSED D.A. =	6.45 AC
EXISTING D.A. =	2.33 AC
STORAGE REQUIRED (SEDIMENT) =	26392 CF
STORAGE PROVIDED (SEDIMENT) =	77374 CF
TOP OF DAM =	123.86
WEIR CREST EL. =	126.8
BOTTOM EL. =	121.75
C/O EL. =	122.88
SIDE SLOPES =	3:1
WEIR WIDTH =	3.5'
WET VOLUME REQUIRED =	176.76
WET VOLUME PROVIDED =	13176
NET STORAGE EL. =	123.68
DRY STORAGE PROVIDED =	13176
DRY STORAGE EL. =	123.09
Q ₁ (TSM) =	0.63 CFS
Q ₂ (TSM) =	18.37 CFS
Q ₃ (TSM) =	32.90 CFS

ST-II STONE OUTLET SEDIMENT TRAP #1

PROPOSED D.A. =	0.00 AC
EXISTING D.A. =	4.41 AC
WET STORAGE REQUIRED =	7938 CF
WET STORAGE PROVIDED =	7938 CF
DRY STORAGE EL. =	123.71
DRY STORAGE PROVIDED =	7938 CF
TOP OF DAM =	124.08
WEIR CREST EL. =	124.84
BOTTOM TRAP DIM. =	117.00
WEIR CREST EL. =	123.00
TOTAL STORAGE DEPTH =	6'
SIDE SLOPES =	2:1
C/O EL. =	119.21

ST-II STONE OUTLET SEDIMENT TRAP #2

PROPOSED D.A. =	0.73 AC
EXISTING D.A. =	4.90 AC
WET STORAGE REQUIRED =	8820 CF
WET STORAGE PROVIDED =	8820 CF
DRY STORAGE EL. =	122.02
DRY STORAGE PROVIDED =	8820 CF
TOP OF DAM =	123.00
WEIR CREST EL. =	122.00
BOTTOM TRAP DIM. =	119.17
WEIR CREST EL. =	119.17
TOTAL STORAGE DEPTH =	2.1'
SIDE SLOPES =	2:1
C/O EL. =	119.17

ST-II STONE OUTLET SEDIMENT TRAP #3

PROPOSED D.A. =	0.62 AC
EXISTING D.A. =	5.66 AC
WET STORAGE REQUIRED =	10188 CF
WET STORAGE PROVIDED =	10188 CF
DRY STORAGE EL. =	115.08
DRY STORAGE PROVIDED =	20274 CF
TOP OF DAM =	118.00
BOTTOM TRAP DIM. =	307.00
WEIR CREST EL. =	114.00
TOTAL STORAGE DEPTH =	3'
SIDE SLOPES =	2:1
C/O EL. =	114.48

SEDIMENT BASIN #2

PROPOSED D.A. =	13.07 AC
EXISTING D.A. =	11.48 AC
STORAGE REQUIRED (SEDIMENT) =	47052 CF
STORAGE PROVIDED (SEDIMENT) =	184070 CF
TOP OF DAM =	130.50
BOTTOM EL. =	128.60
WEIR CREST EL. =	124.50
C/O EL. =	119.96
SIDE SLOPES =	2:1
WEIR WIDTH =	22.7'
WET VOLUME REQUIRED =	23226 CF
WET VOLUME PROVIDED =	23226 CF
NET STORAGE EL. =	120.76
DRY STORAGE REQUIRED =	23226 CF
DRY STORAGE PROVIDED =	186544 CF
TOP OF DAM =	124.50
WEIR CREST EL. =	124.50
BOTTOM TRAP DIM. =	119.96
WEIR CREST EL. =	119.96
TOTAL STORAGE DEPTH =	0.76 CFS
SIDE SLOPES =	2:1
C/O EL. =	119.17

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 12/15/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE

[Signature] 12/15/06
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE

[Signature] 12/15/06
DIRECTOR
DATE

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

BY THE DEVELOPER:
[Signature] 12/15/06
USDA - NATURAL RESOURCES CONSERVATION SERVICE
DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

[Signature] 12/15/06
HOWARD S.C.D.
DATE

BY THE ENGINEER:
I HEREBY CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE 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. 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.

[Signature] 12/12/06
SIGNATURE OF DEVELOPER
DATE

BY THE ENGINEER:
I HEREBY CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, 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] 12/15/06
SIGNATURE OF ENGINEER
DATE

OWNER/DEVELOPER
ELKRIDGE DEVELOPMENT NO.2, LLC
301 TRANSYLVANIA AVENUE
RALEIGH, NC 27609
(919) 789-9289

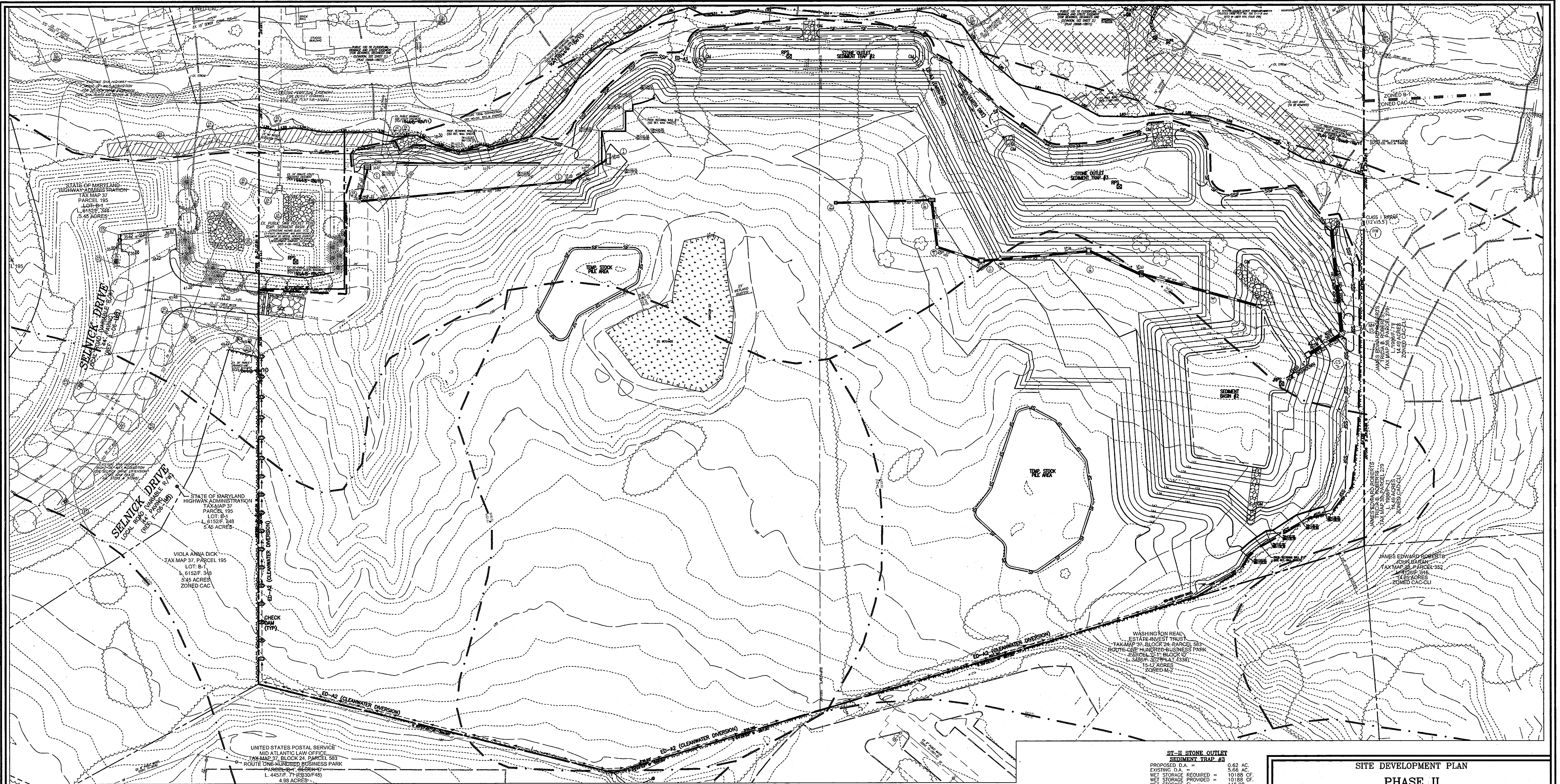
OWNER/DEVELOPER
ELKRIDGE DEVELOPMENT NO.2, LLC
301 TRANSYLVANIA AVENUE
RALEIGH, NC 27609
(919) 789-9289

SITE DEVELOPMENT PLAN
PHASE I
SEDIMENT AND EROSION CONTROL
BELMONT STATION (PHASES I, II, AND III)
PARCELS A, C AND OPEN SPACE LOT 1
REF: S-04-10, WP-04-152, WP-06-79, P-05-17, F-06-169, PLAT 18668-71
TAX MAP 37 BLOCK 18 PARCEL 196, 198, 199
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELICOTT CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8961

DESIGN BY: WJZ
DRAWN BY: DZ
CHECKED BY: WSZ
DATE: DECEMBER 7, 2006
SCALE: AS SHOWN
W.O. NO.: 04-08

9 SHEET OF 39



PLAN VIEW
SCALE: 1"=50'

LEGEND:

<p>EXISTING CONTOUR</p> <p>PROPOSED PHASE 1 ESC CONTOUR</p> <p>PROPOSED SPOT ELEVATION</p> <p>EXISTING CURB AND GUTTER</p> <p>EXISTING UTILITY POLE</p> <p>EXISTING LIGHT POLE</p> <p>EXISTING MAILBOX</p> <p>EXISTING SIGN</p> <p>EXISTING SANITARY MANHOLE</p> <p>EXISTING SANITARY LINE</p>	<p>EXISTING CLEANOUT</p> <p>EXISTING FIRE HYDRANT</p> <p>EXISTING WATER LINE</p> <p>EXISTING TREES (FIELD LOCATED)</p> <p>EXISTING TREE LINE (FIELD LOCATED)</p> <p>EXISTING VEGETATION (APPROXIMATE LOCATION)</p>	<p>EXISTING FENCE</p> <p>PROPERTY LINE</p> <p>RIGHT-OF-WAY LINE</p> <p>SOILS BOUNDARY</p> <p>MODERATE SLOPES (1% - 24.95%)</p> <p>STEP SLOPE (>25%)</p> <p>PUBLIC 100 YR FLOODPLAIN</p>	<p>SILT FENCE</p> <p>SUPER SILT FENCE</p> <p>LIMIT OF DISTURBANCE</p> <p>STABILIZED CONSTRUCTION ENTRANCE</p> <p>PROPOSED PHASE 2 ESC CONTOUR</p>
--	--	--	---

- NOTE:
1. ANY PRE EXISTING AND/OR NEW JUNK, DEBRIS, TRASH, STRUCTURES OR OTHER MANMADE MATERIALS SHOULD BE REMOVED FROM THE FLOODPLAIN, STREAM AND WETLAND BUFFERS. DEBRIS IS TO BE KEPT OUT OF STORMWATER MANAGEMENT FACILITIES DURING AND AFTER CONSTRUCTION.
 2. ALL SF AND SSF ENDS SHALL BE CURLED UPHILL BY 2' IN ELEVATION.

EX SEDIMENT BASIN #1
REF: F-06-169

PROPOSED D.A. =	6.45 AC.
EXISTING D.A. =	2.33 AC.
STORAGE REQUIRED (SEDIMENT) =	26392 CF.
STORAGE PROVIDED (SEDIMENT) =	77374 CF.
TOP OF DAM =	130.86
TOP OF RISER =	129.36
WEIR CREST EL. =	128.8
BOTTOM EL. =	121.75
C/O EL. =	122.88
SIDE SLOPES =	3:1
WEIR WIDTH =	3.5'
WET VOLUME REQUIRED =	13176
WET STORAGE EL. =	123.68
DRY STORAGE PROVIDED =	13176
DRY STORAGE EL. =	64198
Q ₁ (TSM) =	125.09
Q ₂ (TSM) =	0.89 CFS.
Q ₃ (TSM) =	18.37 CFS.
Q ₄ (TSM) =	32.90 CFS.

ST-II STONE OUTLET
SEDIMENT TRAP #2

PROPOSED D.A. =	0.73 AC.
EXISTING D.A. =	4.90 AC.
STORAGE REQUIRED (SEDIMENT) =	8820 CF.
STORAGE PROVIDED (SEDIMENT) =	8820 CF.
TOP OF DAM =	123.00
TOP OF RISER =	122.23'
WEIR CREST EL. =	122.00
BOTTOM EL. =	118.00
C/O EL. =	119.17
SIDE SLOPES =	2:1
WEIR WIDTH =	119.17
WET VOLUME REQUIRED =	10300 CF.
WET STORAGE EL. =	123.00
DRY STORAGE PROVIDED =	123.00
DRY STORAGE EL. =	122.00
TOTAL STORAGE DEPTH =	4.00
Q ₁ (TSM) =	2.1
Q ₂ (TSM) =	119.17
Q ₃ (TSM) =	0.16 CFS.
Q ₄ (TSM) =	42.84 CFS.

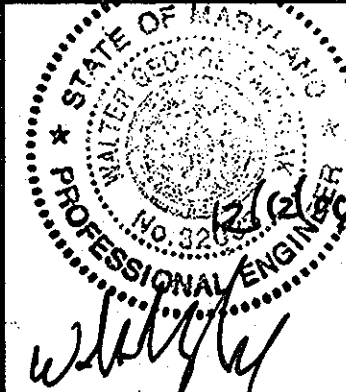
ST-II STONE OUTLET
SEDIMENT TRAP #3

PROPOSED D.A. =	0.62 AC.
EXISTING D.A. =	5.66 AC.
STORAGE REQUIRED (SEDIMENT) =	47052 CF.
STORAGE PROVIDED (SEDIMENT) =	194070 CF.
TOP OF DAM =	130.50
TOP OF RISER =	128.60
WEIR CREST EL. =	124.50
BOTTOM EL. =	114.00
C/O EL. =	117.00
SIDE SLOPES =	3:1
WEIR WIDTH =	114.48
WET VOLUME REQUIRED =	39192
WET STORAGE EL. =	131.00
DRY STORAGE PROVIDED =	20224 CF.
DRY STORAGE EL. =	118.00
TOTAL STORAGE DEPTH =	13.00
Q ₁ (TSM) =	3.17
Q ₂ (TSM) =	114.48
Q ₃ (TSM) =	0.16 CFS.
Q ₄ (TSM) =	42.84 CFS.

SITE DEVELOPMENT PLAN
PHASE II
SEDIMENT AND EROSION CONTROL

BELMONT STATION (PHASES I, II, AND III)
PARCELS A, C AND OPEN SPACE LOT 1
REF: S-04-10, WP-04-152, WP-06-79, P-05-17, F-06-169, PLAT 18668-71
TAX MAP 37, PARCEL 188
1ST ELECTION DISTRICT
PARCEL 196, 198, 199
HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELICOTT CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8961



DESIGN BY:	WJZ
DRAWN BY:	DZ
CHECKED BY:	
DATE:	DECEMBER 7, 2006
SCALE:	AS SHOWN
W.O. NO.:	04-08

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

John Pannone 12/15/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE

Cindy Harter 12/18/06
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE

William M. Laughton 12/18/06
DIRECTOR
DATE

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

Jim Murray 12/15/06
USDA-NATURAL RESOURCES CONSERVATION DISTRICT
DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Andrew W. Schmitz 12/15/06
HOWARD S.C.D.
DATE

BY THE DEVELOPER:

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE 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. 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."

Chiff H. Z 12/12/06
SIGNATURE OF DEVELOPER
DATE

BY THE ENGINEER:

"I HEREBY CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, 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 NOTICED 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."

Walter H. Vogel 12/12/06
SIGNATURE OF ENGINEER
DATE

OWNER/DEVELOPER
ELKRIDGE DEVELOPMENT NO.2, LLC
301 TRANSYLVANIA AVENUE
RALEIGH, NC 27609
(919) 789-9289

ELKRIDGE DEVELOPMENT NO.2, LLC
301 TRANSYLVANIA AVENUE
RALEIGH, NC 27609
(919) 789-9289

MATCHLINE (SHEET 16)



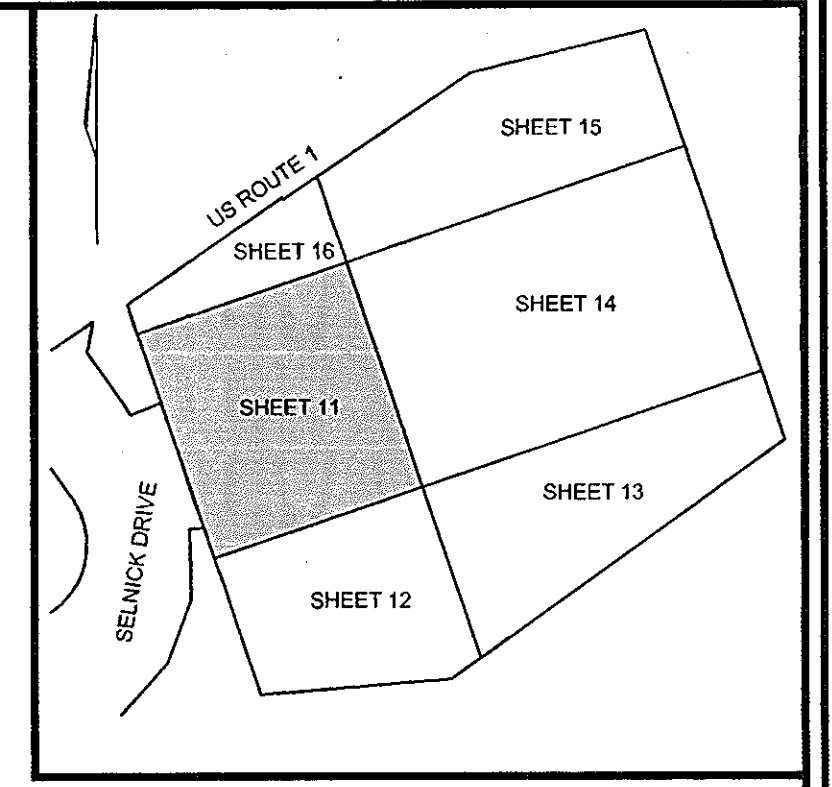
MATCHLINE (SHEET 14)

MATCHLINE (SHEET 11)

THE EXISTING SWMF TO BE OWNED BY MDSA AND MAINTAINED BY H.O.A.

LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING MAILBOX
- EXISTING SIGN
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY LINE
- EXISTING CLEANOUT
- EXISTING FIRE HYDRANT
- EXISTING WATER LINE
- PROPOSED STORM DRAIN
- PROPOSED STORM DRAIN INLET
- EXISTING TREES (FIELD LOCATED)
- EXISTING TREE LINE (FIELD LOCATED)
- EXISTING VEGETATION (APPROXIMATE LOCATION)
- EXISTING FENCE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- SOILS BOUNDARY
- PROPOSED SIDEWALK
- MODERATE SLOPES (10% - 24.99%)
- STEEP SLOPE (>25%)
- PUBLIC 100 YR FLOODPLAIN
- SILT FENCE
- SUPER SILT FENCE
- LIMIT OF DISTURBANCE
- CURB INLET PROTECTION
- AT GRADE INLET PROTECTION
- STABILIZED CONSTRUCTION ENTRANCE
- PROP. TRANSFORMER
- PROP. CONDENSERS
- PROP. DUMPSTER AREA
- BORING LOCATION
- PROVIDE EROSION CONTROL AND PERMANENT SEED STABILIZATION PER THE SEDIMENT CONTROL INSPECTOR.



KEY MAP
NOT TO SCALE

NOTE: DEBRIS IS TO BE KEPT OUT OF STORMWATER MANAGEMENT FACILITIES DURING AND AFTER CONSTRUCTION.

NO.	REVISION	DATE
2	ADD MISSING IMAGES, STORM DRAIN, REVISE WHIC TO UNITS 97 & 101	11/28/07
1	ADD SHC TO MAINTENANCE BLDG.; REVISE WHIC TO MAINTENANCE BLDG. ADD DRAINS TO POOL AREA, MISC STORM DRAIN CHANGES	11/28/07
1	ADD OPTIONAL 10'X10' DECK TO FAIRGATE MODEL	11/28/07

**SITE DEVELOPMENT PLAN
SITE GRADING, SEDIMENT AND
EROSION CONTROL PLAN
PHASE III**
BELMONT STATION (PHASES I, II, AND III)
PARCELS A, C AND OPEN SPACE LOT 1
REF: S-04-10, WP-04-152, WP-06-79, P-05-17, F-06-169, PLAT 18668-71
TAX MAP 37, BLOCK 18, PARCEL 196, 198, 199
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**ROBERT H. VOGEL
ENGINEERING, INC.**
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET ELICOTT CITY, MD 21043
TEL: 410.461.7666 FAX: 410.461.8961

DESIGN BY: WJZ
DRAWN BY: DZ
CHECKED BY: _____
DATE: DECEMBER 7, 2006
SCALE: 1"=30'
W.O. NO.: 04-08

11 SHEET OF 39

NOTE:
1. ALL STRUCTURES, PARKING AND OTHER IMPERVIOUS AREAS WITHIN THE FLOORED FLOODPLAIN AND STREAM BUFFERS SHALL BE REMOVED AND STABILIZED UNDER FUTURE SDP FOR BULK PARCEL B, IF NOT SPECIFICALLY CALLED OUT ON THESE PLANS.
2. DEBRIS IS TO BE KEPT OUT OF STORMWATER MANAGEMENT FACILITIES DURING AND AFTER CONSTRUCTION.
3. CONTRACTOR TO REFER TO BEST MANAGEMENT PRACTICES FOR WORKING IN NONFLOOD WETLANDS, WETLAND BUFFERS, WATERWAYS AND 100YR FLOODPLANS LOCATED ON SHEET 27. WETLAND SEED MIX SPECIFICATIONS TO BE USED IN ALL BARE-SOIL AREAS WITHIN THE FLOODPLAIN. PROVIDE EROSION CONTROL AND PERMANENT SEED STABILIZATION PER THE SEDIMENT CONTROL INSPECTOR.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 12/15/06

 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 12/14/06

 DIRECTOR

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

 PROFESSIONAL ENGINEER TO SUPERSEDE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.
 DATE: 12/15/06

BY THE DEVELOPER:
 I HEREBY CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE 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. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERSEDE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

 SIGNATURE OF DEVELOPER
 DATE: 12/12/06

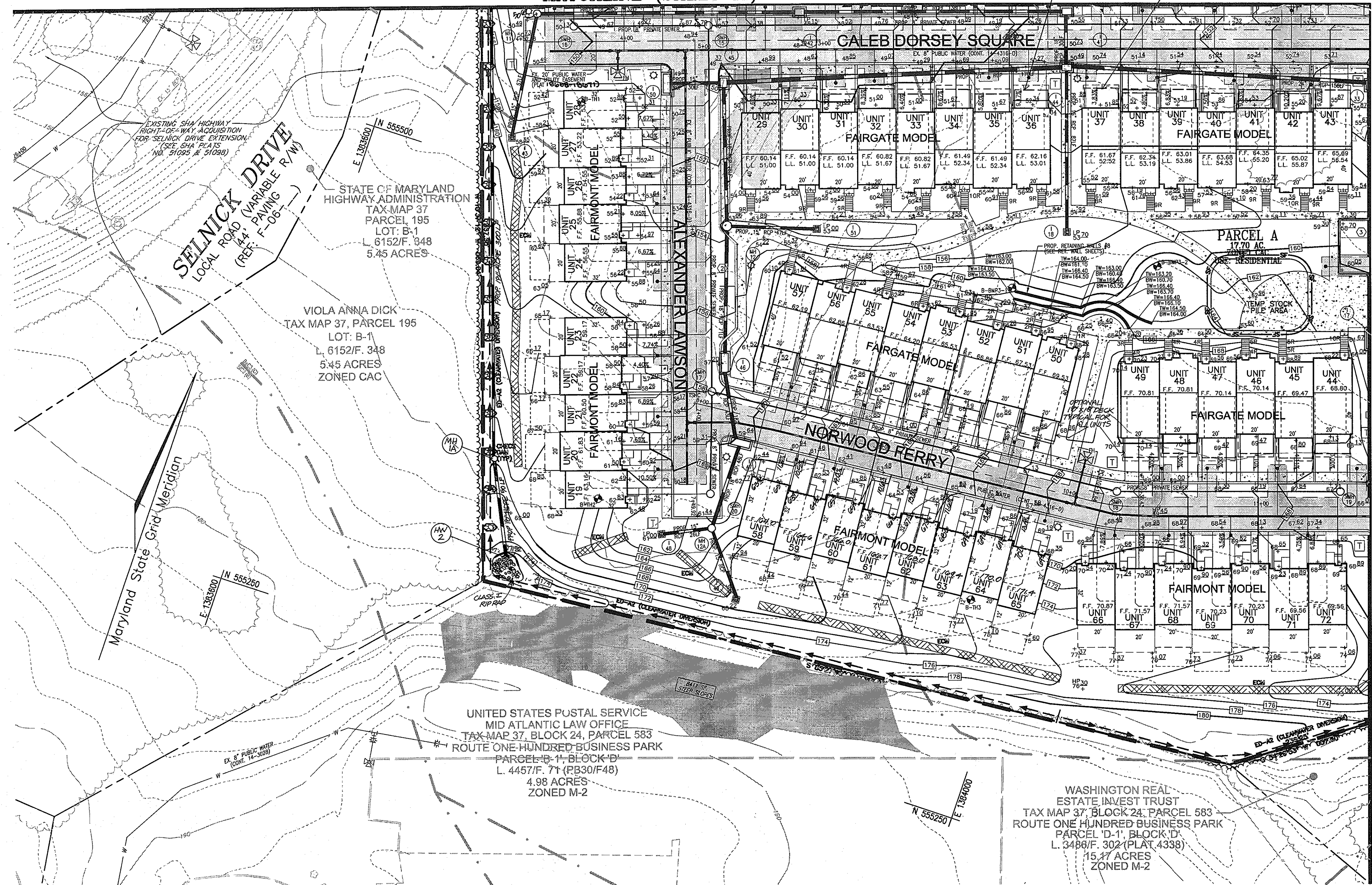
BY THE ENGINEER:
 I HEREBY CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERSEDE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

 SIGNATURE OF ENGINEER
 DATE: 12/12/06

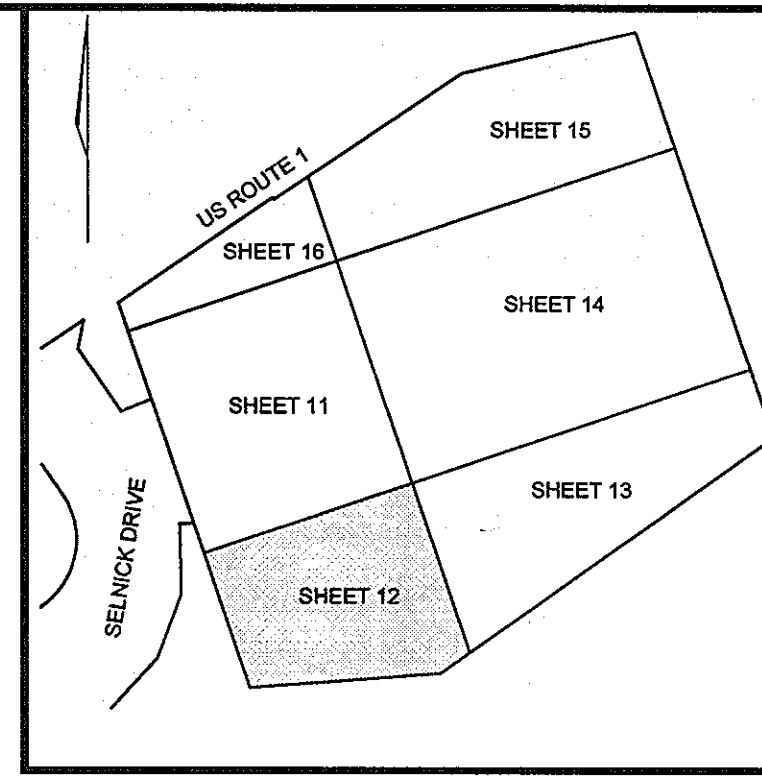
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MATCHLINE (SHEET 11)

OPTIONAL 18'x10' DECK TYPICAL FOR ALL UNITS



- LEGEND:**
- EXISTING CONTOUR
 - PROPOSED CONTOUR
 - PROPOSED SPOT ELEVATION
 - EXISTING SPOT ELEVATION
 - EXISTING CURB AND GUTTER
 - PROPOSED CURB AND GUTTER
 - EXISTING UTILITY POLE
 - EXISTING LIGHT POLE
 - EXISTING MAILBOX
 - EXISTING SIGN
 - EXISTING SANITARY MANHOLE
 - EXISTING SANITARY LINE
 - EXISTING CLEANOUT
 - EXISTING FIRE HYDRANT
 - EXISTING WATER LINE
 - PROPOSED STORM DRAIN
 - PROPOSED STORM DRAIN INLET
 - EXISTING TREES (FIELD LOCATED)
 - EXISTING TREE LINE (FIELD LOCATED)
 - EXISTING VEGETATION (APPROXIMATE LOCATION)
 - EXISTING FENCE
 - PROPERTY LINE
 - RIGHT-OF-WAY LINE
 - SOILS BOUNDARY
 - PROPOSED SIDEWALK
 - MODERATE SLOPES (15% - 24.99%)
 - STEEP SLOPE (>25%)
 - PUBLIC 100 YR FLOODPLAIN
 - SILT FENCE
 - SUPER SILT FENCE
 - LIMIT OF DISTURBANCE
 - CURB INLET PROTECTION
 - AT GRADE INLET PROTECTION
 - STABILIZED CONSTRUCTION ENTRANCE
 - PROP. TRANSFORMER
 - PROP. CONDENSERS
 - PROP. DUMPSTER AREA
 - BORING LOCATION



KEY MAP
NOT TO SCALE

MATCHLINE (SHEET 13)

STATE OF MARYLAND
HIGHWAY ADMINISTRATION
TAX MAP 37
PARCEL 195
LOT: B-1
L. 6152/F. 348
5.45 ACRES

VIOLA ANNA DICK
TAX MAP 37, PARCEL 195
LOT: B-1
L. 6152/F. 348
5.45 ACRES
ZONED CAC

UNITED STATES POSTAL SERVICE
MID ATLANTIC LAW OFFICE
TAX MAP 37, BLOCK 24, PARCEL 583
ROUTE ONE HUNDRED BUSINESS PARK
PARCEL B-1, BLOCK D
L. 4457/F. 71 (PB30/F48)
4.98 ACRES
ZONED M-2

WASHINGTON REAL
ESTATE INVEST TRUST
TAX MAP 37, BLOCK 24, PARCEL 583
ROUTE ONE HUNDRED BUSINESS PARK
PARCEL D-1, BLOCK D
L. 3486/F. 302 (PLAT 4338)
15.17 ACRES
ZONED M-2

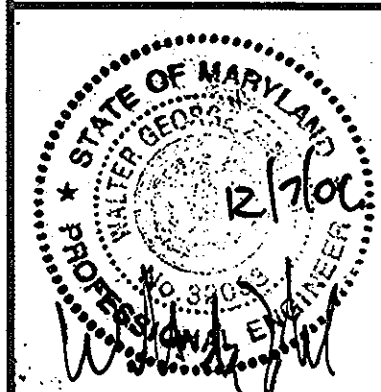
NOTE: DEBRIS IS TO BE KEPT OUT OF STORMWATER MANAGEMENT FACILITIES DURING AND AFTER CONSTRUCTION.

NO.	REVISION	DATE
2	ADD MISSING IMAGES, STORM DRAIN, REVISE WMC TO UNITS 91-95 1-28-06	
	ADD SHC TO MAINTENANCE BLDG, REVISE MAINTENANCE BLDG WMC	
	ADD DRAINS TO POOL AREA, MISC STORM DRAIN CHANGES	
1	ADD OPTIONAL 18'x10' DECK TO FAIRGATE MODEL	11-28-07

**SITE DEVELOPMENT PLAN
SITE GRADING, SEDIMENT AND
EROSION CONTROL PLAN
PHASE II
BELMONT STATION (PHASES I, II, AND III)**

REF: S-04-10, WP-04-152, WP-05-79, P-05-17, F-05-169, PLAT 18658-71
TAX MAP 37, BLOCK 18 PARCEL 195, 198, 159'
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**ROBERT H. VOGEL
ENGINEERING, INC.**
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET TEL: 410.461.7666
ELICOTT CITY, MD 21043 FAX: 410.461.8961



DESIGN BY: WJZ
DRAWN BY: DZ
CHECKED BY:
DATE: DECEMBER 7, 2006
SCALE: 1"=30'
W.O. NO.: 04-08

12 SHEET OF 39

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 12/10/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION

[Signature] 12/10/06
CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 12/10/06
DIRECTOR

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

[Signature] 12/15/06
USDA - NATURAL RESOURCES CONSERVATION SERVICE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

[Signature] 12/15/06
HOWARD S.C.D.

BY THE DEVELOPER:

I HEREBY CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE 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. 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.

[Signature] 12/7/06
SIGNATURE OF DEVELOPER

BY THE ENGINEER:

I HEREBY CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, 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.

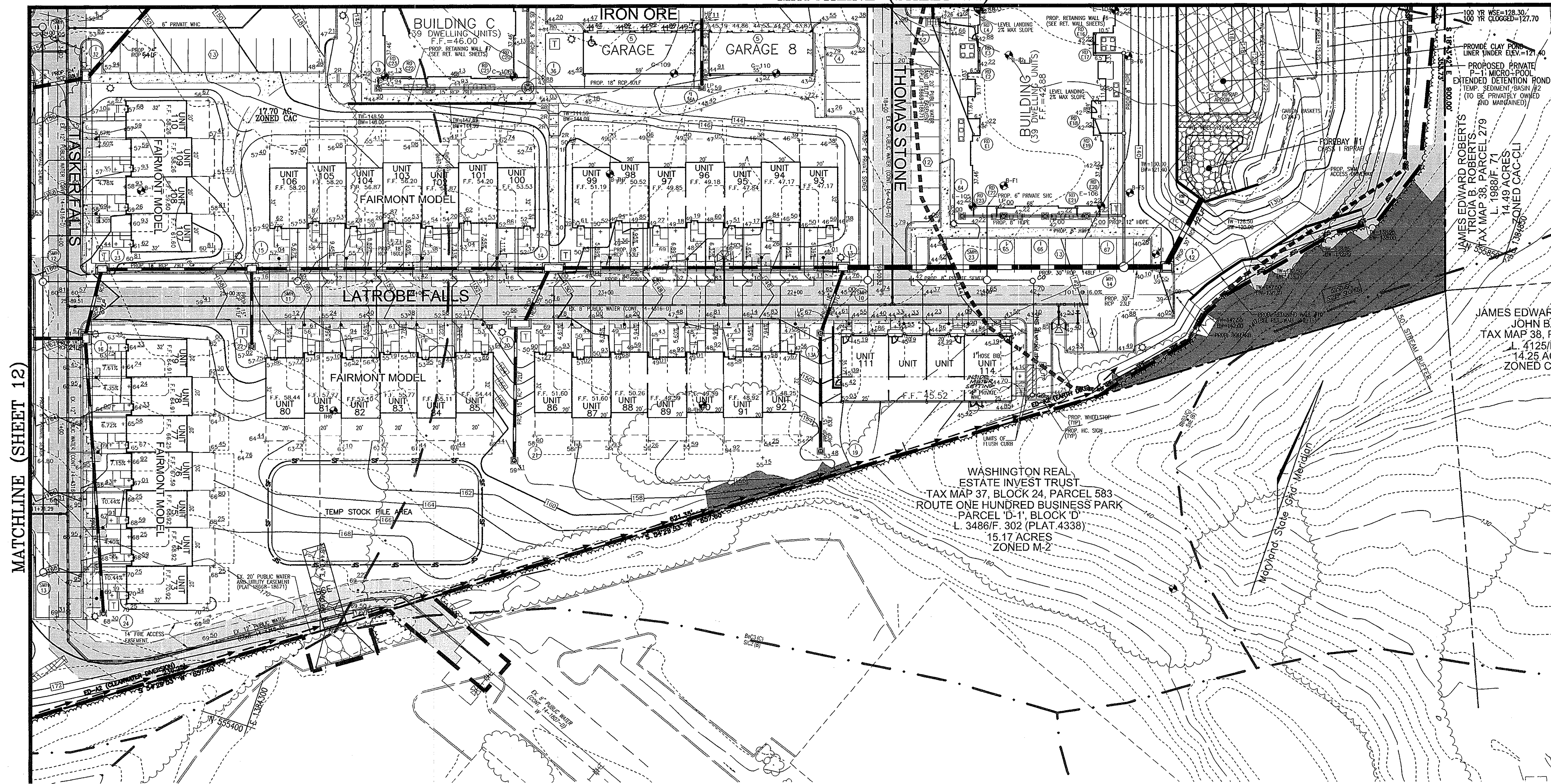
[Signature] 12/10/06
SIGNATURE OF ENGINEER

NO.	REVISION	DATE
3	REVISE FIRST FLOOR ELEVATIONS UNITS 96-98 AS-BUILT 4/21/09	

OWNER/DEVELOPER
ELKRIDGE DEVELOPMENT NO.2, LLC ELKRIDGE DEVELOPMENT NO.2, LLC
301 TRANSYLVANIA AVENUE 301 TRANSYLVANIA AVENUE
RALEIGH, NC 27609 RALEIGH, NC 27609
(919) 789-9289 (919) 789-9289

E 1384300 N 555850

MATCHLINE (SHEET 14)



LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING SPOT ELEVATION
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING MAILBOX
- EXISTING SIGN
- EXISTING SANITARY MANHOLE
- EXISTING CLEANOUT
- EXISTING FIRE HYDRANT
- EXISTING WATER LINE
- PROPOSED STORM DRAIN
- PROPOSED STORM DRAIN INLET
- EXISTING TREES (FIELD LOCATED)
- EXISTING TREELINE (FIELD LOCATED)
- EXISTING VEGETATION (APPROXIMATE LOCATION)
- EXISTING FENCE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- SOILS BOUNDARY
- PROPOSED SIDEWALK
- MODERATE SLOPES (15% - 24.99%)
- STEEP SLOPE (>25%)
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- LIMIT OF DISTURBANCE
- CURB INLET PROTECTION
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- STABILIZED CONSTRUCTION ENTRANCE
- PROP. TRANSFORMER
- PROP. CONDENSERS
- PROP. DUMPSTER AREA
- BORING LOCATION

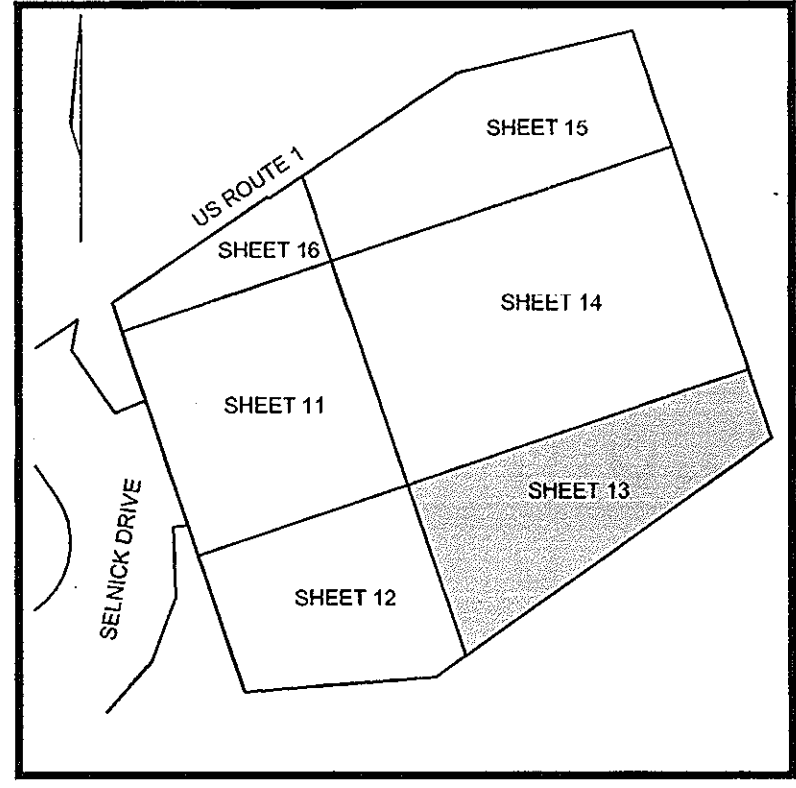
JAMES EDWARD ROBERTS
JOHN BARAN
TAX MAP 38, PARCEL 352
L. 4125/F. 315
14.25 ACRES
ZONED CAC-CL1

WASHINGTON REAL
ESTATE INVEST TRUST
TAX MAP 37, BLOCK 24, PARCEL 583
ROUTE ONE HUNDRED BUSINESS PARK
- PARCEL 'D-1', BLOCK 'D'
L. 3486/F. 302 (PLAT 4338)
15.17 ACRES
ZONED M-2

STORMWATER MANAGEMENT
FACILITY TO BE PRIVATELY
OWNED AND MAINTAINED

- NOTE:
- ALL STRUCTURES, PARKING AND OTHER IMPERVIOUS AREAS WITHIN THE RECORDED FLOODPLAIN AND STREAM BUFFERS TO BE REMOVED AND STABILIZED UNDER FUTURE SDP FOR BULK PARCEL B, IF NOT SPECIFICALLY CALLED OUT ON THESE PLANS.
 - DEBRIS IS TO BE KEPT OUT OF STORMWATER MANAGEMENT FACILITIES DURING AND AFTER CONSTRUCTION.

2	ADD MISSING IMAGES, STORM DRAIN, REVISE W/L TO UNITS 97-98, 1-20-00	
	ADD SHC TO MAINTENANCE BUILDING, REVISE MAINTENANCE BLDG/W/HC	
	ADD DRAINS TO POOL AREA, MISC STORM DRAIN CHANGES	
NO.	REVISION	DATE



KEY MAP
NOT TO SCALE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chris D... 12/15/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE

Cathy... 12/18/06
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE

David... 12/18/06
DIRECTOR
DATE

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

Jim... 12/17/06
USDA-NATURAL RESOURCES CONSERVATION SERVICE
DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

David... 12/15/06
HOWARD S.C.D.
DATE

BY THE DEVELOPER:

I HEREBY CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE 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. 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.

Christopher... 12/12/06
SIGNATURE OF DEVELOPER
DATE

BY THE ENGINEER:

I HEREBY CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, 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.

Walt... 12/12/06
SIGNATURE OF ENGINEER
DATE

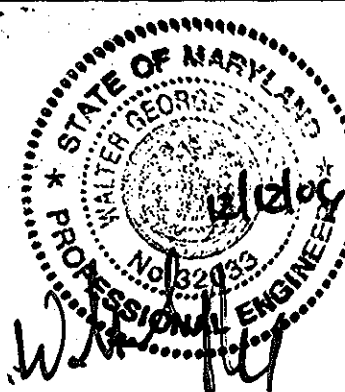
OWNER/DEVELOPER

ELKRIDGE DEVELOPMENT NO.2, LLC ELKRIDGE DEVELOPMENT NO.2, LLC
301 TRANSYLVANIA AVENUE 301 TRANSYLVANIA AVENUE
RALEIGH, NC 27609 RALEIGH, NC 27609
(919) 789-9289 (919) 789-9289

SITE DEVELOPMENT PLAN
SITE GRADING, SEDIMENT AND
EROSION CONTROL PLAN
PHASE III
BELMONT STATION (PHASES I, II, AND III)

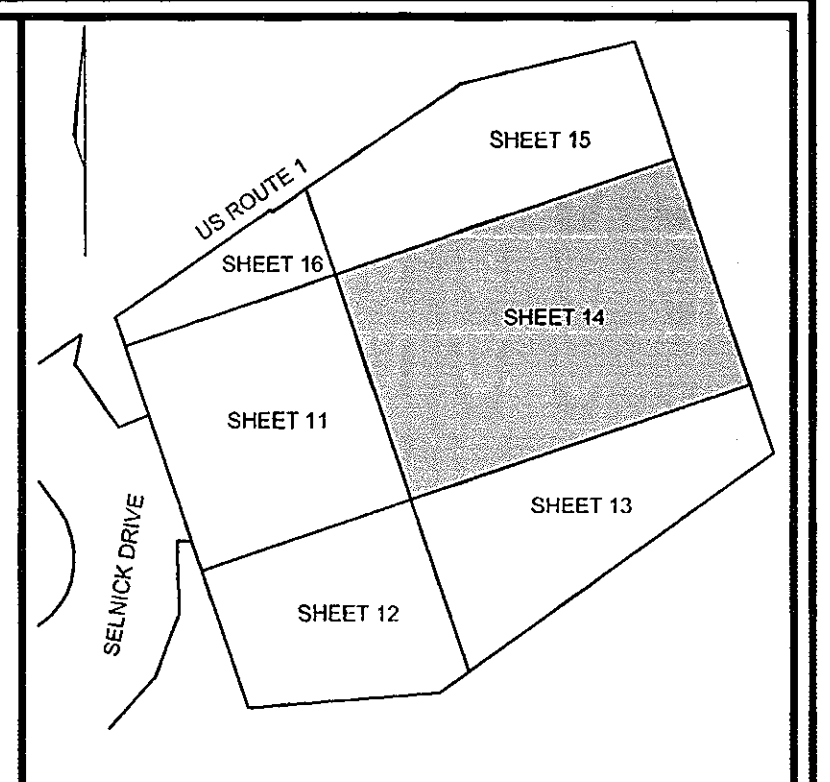
PARCELS A, C AND OPEN SPACE LOT 1
REF: S-04-10, WP-04-152, WP-06-79, P-05-17, F-06-169, PLAT 18668-71
TAX MAP 37 BLOCK 18 PARCEL 186 PARCEL 196, 198, 199
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET TEL: 410.461.7666
ELICOTT CITY, MD 21043 FAX: 410.461.8961



DESIGN BY: WJZ
DRAWN BY: DZ
CHECKED BY:
DATE: DECEMBER 7, 2006
SCALE: 1"=30'
W.O. NO.: 04-08

MATCHLINE (SHEET 15)

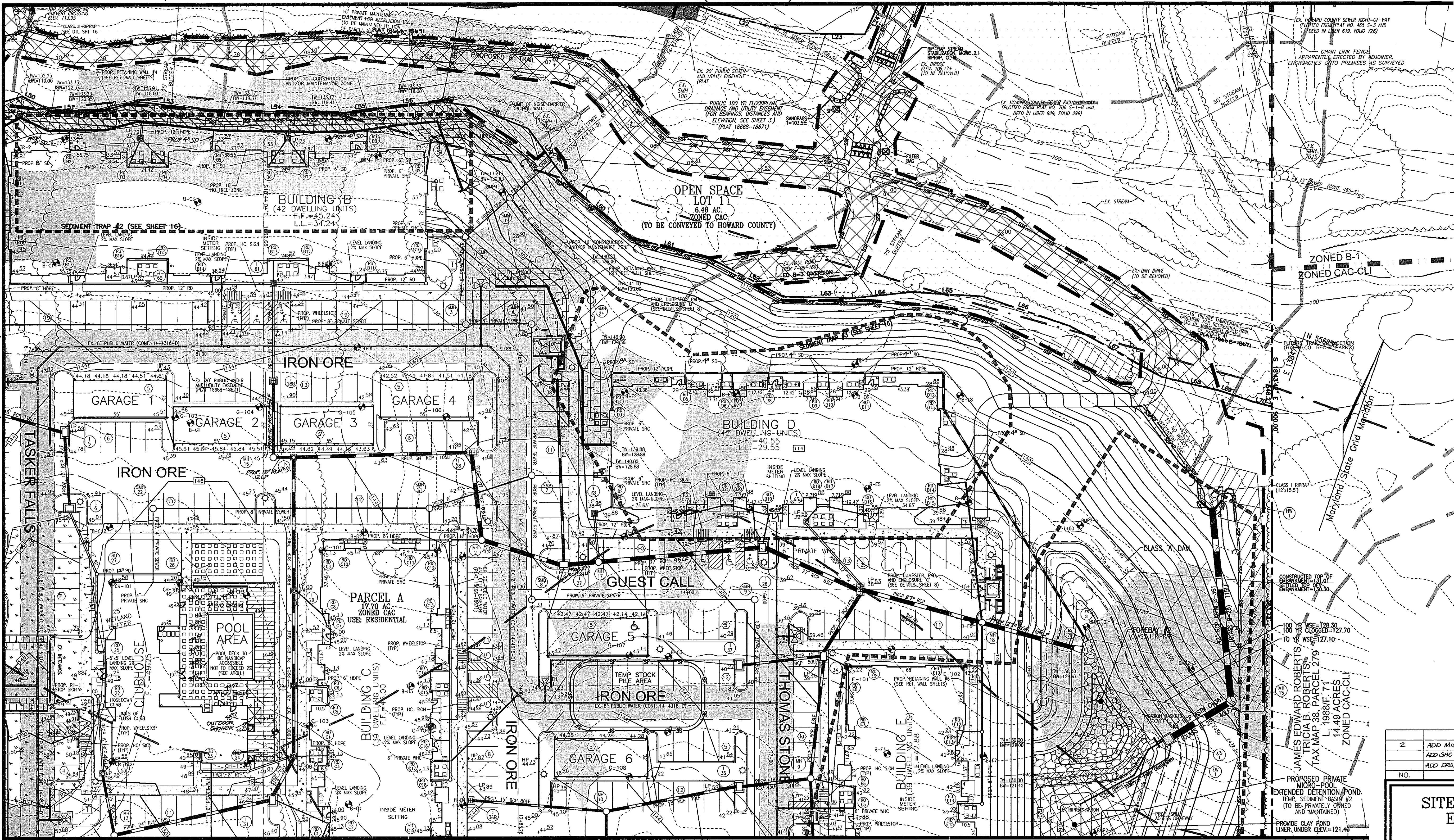


KEY MAP
NOT TO SCALE

LEGEND:

	EXISTING CONTOUR
	PROPOSED CONTOUR
	EXISTING SPOT ELEVATION
	PROPOSED SPOT ELEVATION
	EXISTING CURB AND GUTTER
	PROPOSED CURB AND GUTTER
	EXISTING UTILITY POLE
	PROPOSED UTILITY POLE
	EXISTING LIGHT POLE
	PROPOSED LIGHT POLE
	EXISTING MAILBOX
	PROPOSED MAILBOX
	EXISTING SIGN
	PROPOSED SIGN
	EXISTING SANITARY MANHOLE
	PROPOSED SANITARY MANHOLE
	EXISTING SANITARY LINE
	PROPOSED SANITARY LINE
	EXISTING CLEANOUT
	PROPOSED CLEANOUT
	EXISTING WATER LINE
	PROPOSED WATER LINE
	EXISTING STORM DRAIN
	PROPOSED STORM DRAIN
	EXISTING STORM DRAIN INLET
	PROPOSED STORM DRAIN INLET
	EXISTING TREES (FIELD LOCATED)
	PROPOSED TREES (FIELD LOCATED)
	EXISTING TREE LINE (FIELD LOCATED)
	PROPOSED TREE LINE (FIELD LOCATED)
	EXISTING VEGETATION (APPROXIMATE LOCATION)
	PROPOSED VEGETATION (APPROXIMATE LOCATION)
	EXISTING FENCE
	PROPOSED FENCE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	SOILS BOUNDARY
	PROPOSED SIDEWALK
	MODERATE SLOPES (15% - 24.99%)
	STEEP SLOPE (25%+)
	PUBLIC 100 YR FLOODPLAIN
	SILT FENCE
	SUPER SILT FENCE
	LIMIT OF DISTURBANCE
	CURB INLET PROTECTION
	AT GRADE INLET PROTECTION
	STABILIZED CONSTRUCTION ENTRANCE
	PROP. TRANSFORMER
	PROP. CONDENSERS
	PROP. DUMPSTER AREA
	BORING LOCATION
	PROVIDE EROSION CONTROL AND PERMANENT SEED STABILIZATION PER THE SEDIMENT CONTROL INSPECTOR

MATCHLINE (SHEET 11)



MATCHLINE (SHEET 13)

NOTE:
 1. ALL STRUCTURES, PARKING AND OTHER IMPERVIOUS AREAS WITHIN THE RECORDED FLOODPLAIN AND STREAM BUFFERS SHALL BE REMOVED AND STABILIZED UNDER FUTURE SDP FOR BULK PARCEL B, IF NOT SPECIFICALLY CALLED OUT ON THESE PLANS.
 2. DRAINAGE IS TO BE KEPT OUT OF SEWERTREATMENT FACILITIES DURING AND AFTER CONSTRUCTION.
 3. CONTRACTOR TO REFER TO "BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS AND 100YR FLOODPLAINS" LOCATED ON SHEET 27. WETLAND SEED MIX SPECIFICATIONS TO BE USED IN ALL DUNE-SOIL AREAS WITHIN THE FLOODPLAIN. PROVIDE EROSION CONTROL AND PERMANENT SEED STABILIZATION PER THE SEDIMENT CONTROL INSPECTOR.

TEMP. SEDIMENT BASIN #2

D.A. =	13.07 AC.
STORAGE REQUIRED (SEDIMENT) =	47052 CF.
STORAGE PROVIDED (SEDIMENT) =	129020 CF.
TOP OF DAM =	130.00
TOP OF RISER =	128.00
WEIR CREST EL. =	127.40
BOTTOM EL. =	117.00
C/O EL. =	119.87
SIDE SLOPES =	3:1
WEIR WIDTH =	2.7
WET VOLUME REQUIRED =	23526 CF.
WET VOLUME PROVIDED =	23526 CF.
WET STORAGE EL. =	121.19
DRY VOLUME REQUIRED =	105494 CF.
DRY STORAGE PROVIDED =	105494 CF.
DRY STORAGE EL. =	128.00
Q ₁ (TSWM) =	6.21 CFS.
Q ₁₀ (TSWM) =	6.21 CFS.

STORMWATER MANAGEMENT FACILITY TO BE PRIVATELY OWNED AND MAINTAINED

OWNER/DEVELOPER
 ELKRIDGE DEVELOPMENT NO.2, LLC ELKRIDGE DEVELOPMENT NO.2, LLC
 301 TRANSYLVANIA AVENUE RALEIGH, NC 27609 (919) 789-9289
 301 TRANSYLVANIA AVENUE RALEIGH, NC 27609 (919) 789-9289

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] 12/15/06
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 12/18/06
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 12/18/06
 DIRECTOR

BY THE DEVELOPER:
 [Signature] 12/15/06
 USA NATURAL RESOURCES CONSERVATION SERVICE
 THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

BY THE ENGINEER:
 [Signature] 12/12/06
 I HEREBY CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, 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.

BY THE ENGINEER:
 [Signature] 12/12/06
 I HEREBY CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, 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.

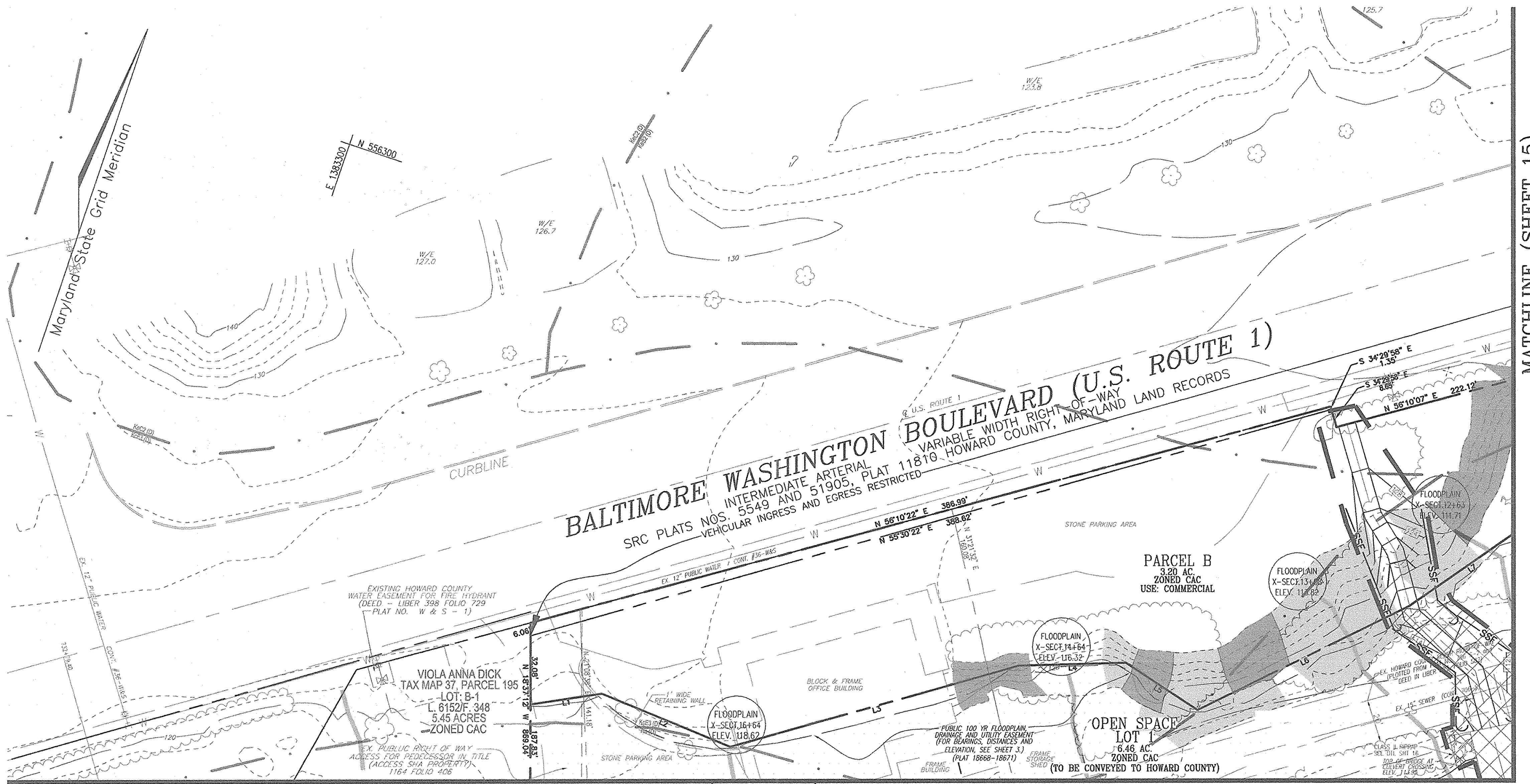
NO.	REVISION	DATE
2	ADD MISSING IMAGES, STORM DRAIN, REVISE WHIC TO UNITS 9704B / 1-RB-00 ADD SHG TO MAINTENANCE BLDG, REVISE MAINTENANCE BLDG WHIC ADD DRAINS TO POOL AREA, MISC STORM DRAIN CHANGES	

**SITE DEVELOPMENT PLAN
 SITE GRADING, SEDIMENT AND
 EROSION CONTROL PLAN
 PHASE III
 BELMONT STATION (PHASES I, II, AND III)**
 PARCELS A, C AND OPEN SPACE LOT 1
 REF: S-04-10, WP-04-152, WP-06-79, P-05-17, F-06-169, PLAT 18668-71
 TAX MAP 37 BLOCK 18 PARCEL 198, 198, 199
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**ROBERT H. VOGEL
 ENGINEERING, INC.**
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET TEL: 410.461.7666
 ELLICOTT CITY, MD 21043 FAX: 410.461.8961



DESIGN BY: WJZ
 DRAWN BY: DZ
 CHECKED BY: [Signature]
 DATE: DECEMBER 7, 2006
 SCALE: 1"=30'
 W.O. NO.: 04-08
 14 SHEET OF 39



MATCHLINE (SHEET 15)

MATCHLINE (SHEET 11)

LEGEND:

	EXISTING CONTOUR
	PROPOSED CONTOUR
	EXISTING SPOT ELEVATION
	PROPOSED SPOT ELEVATION
	EXISTING CURB AND GUTTER
	PROPOSED CURB AND GUTTER
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING MAILBOX
	EXISTING SIGN
	EXISTING SANITARY MANHOLE
	EXISTING SANITARY LINE
	EXISTING CLEANOUT
	EXISTING FIRE HYDRANT
	EXISTING WATER LINE
	PROPOSED STORM DRAIN
	PROPOSED STORM DRAIN INLET
	EXISTING TREES (FIELD LOCATED)
	EXISTING TREE LINE (FIELD LOCATED)
	EXISTING VEGETATION (APPROXIMATE LOCATION)
	EXISTING FENCE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	SOILS BOUNDARY
	PROPOSED SIDEWALK
	MODERATE SLOPES (1% - 24.99%)
	STEEP SLOPE (25%+)
	PUBLIC 100 YR FLOODPLAIN
	SILT FENCE
	SUPER SILT FENCE
	LIMIT OF DISTURBANCE
	CURB INLET PROTECTION
	AT GRADE INLET PROTECTION
	STABILIZED CONSTRUCTION ENTRANCE
	PROP. TRANSFORMER
	PROP. CONDENSERS
	PROP. DUMPSTER AREA
	BORING LOCATION
	PROVIDE EROSION CONTROL AND PERMANENT SEED STABILIZATION PER THE SEDIMENT CONTROL INSPECTOR.

MGWC 2.1.1: RIPRAP

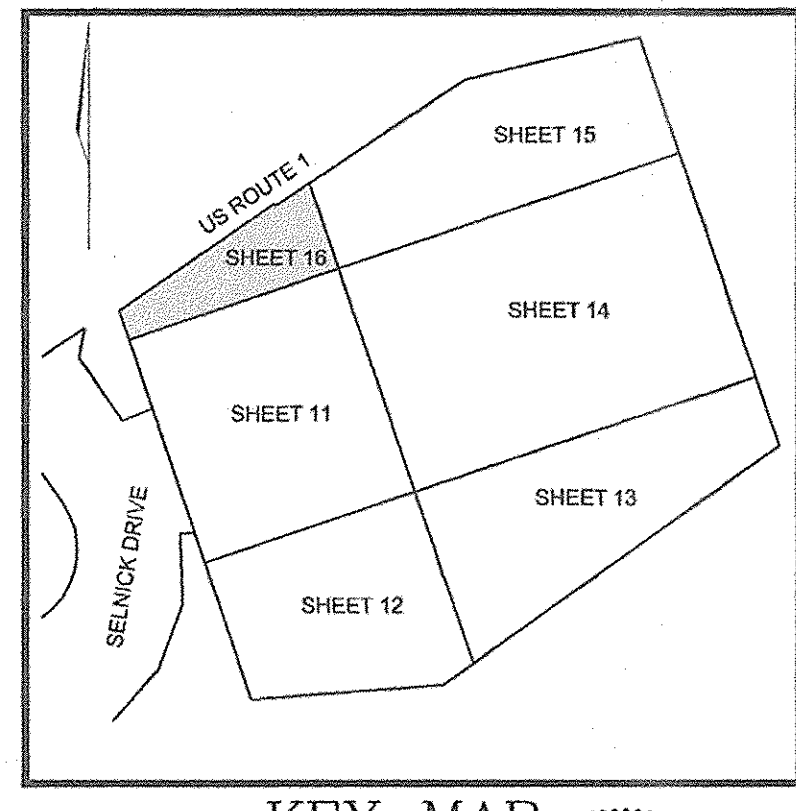
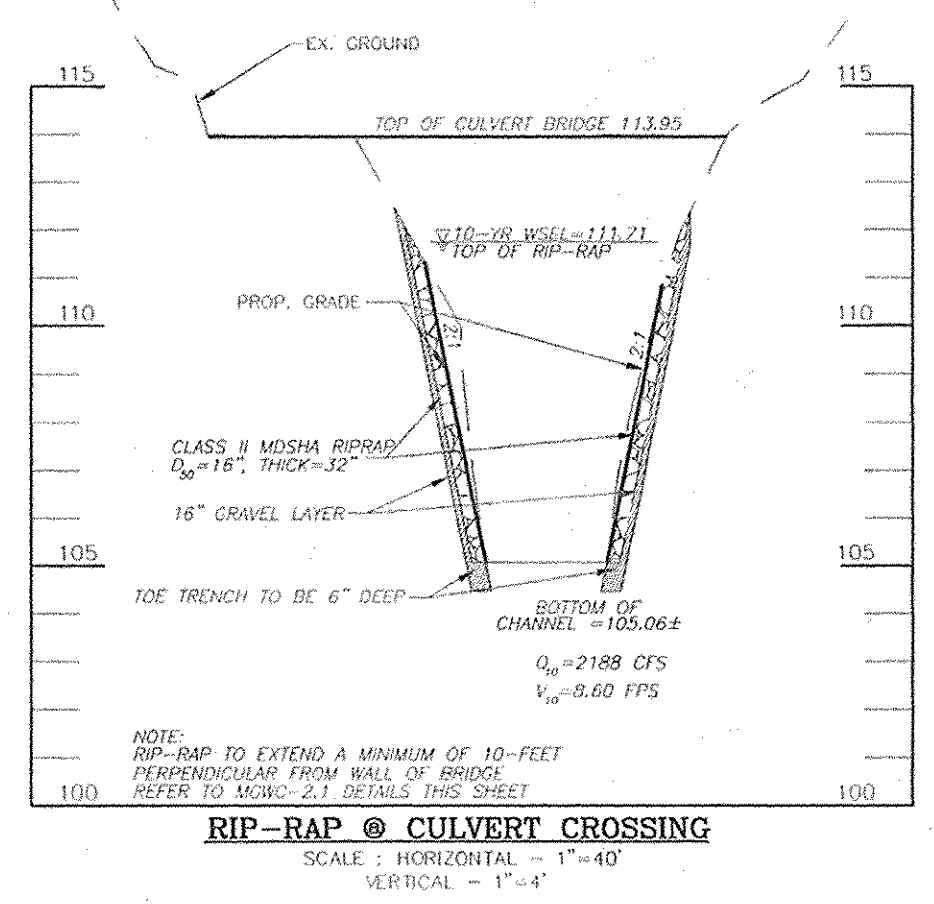
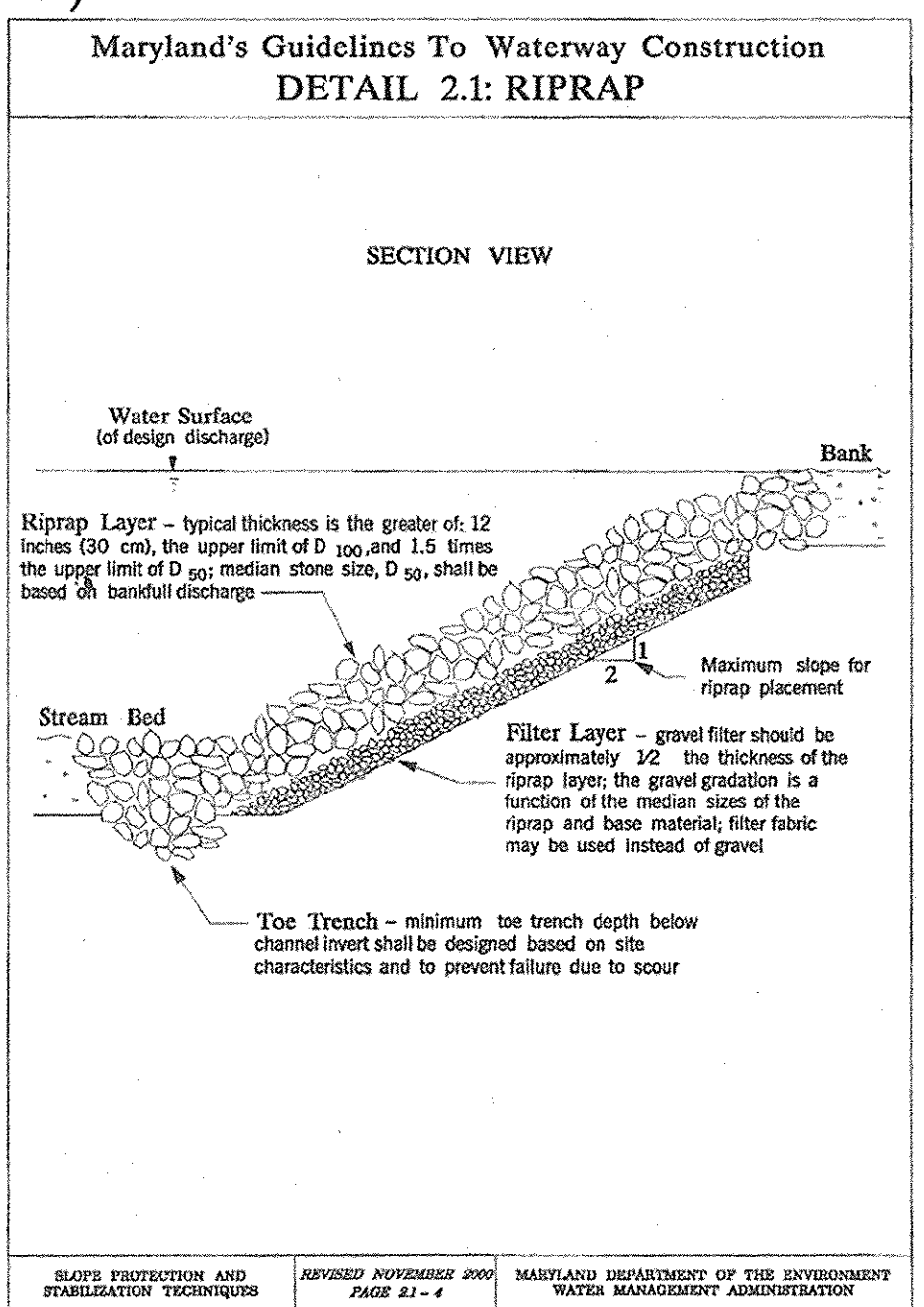
Riprap engineering technique for bank stabilization

DESCRIPTION
Riprap is used to protect and stabilize embankment soils from the erosive forces of flowing water and piping forces resulting from groundwater seepage. A well-engineered riprap system should consist of the following:
• a filter layer of gravel or cloth designed to prevent soil movement from occurring through the riprap layer while allowing water to drain from the embankment; and
• a stone layer of appropriate gradation and thickness to resist the shearing forces of channelized water.

MGWC 2.1.1: RIPRAP

Table 3.1b. Stone Gradations for Riprap Stone Classes

Class	Size Range	% Total Weight < Given Size
I	150 to 170 kg 2.5 to 4 kg	100 max
II	300 to 320 kg 20 to 40 kg	100 max
III	2000 to 4900 kg 80 to 120 kg	100 max



- NOTE:**
- ALL STRUCTURES, PARKING AND OTHER IMPERVIOUS AREAS WITHIN THE RECORDED FLOODPLAIN AND STREAM BUFFERS SHALL BE REMOVED AND STABILIZED UNDER FUTURE SDP FOR BULK PARCEL B, IF NOT SPECIFICALLY CALLED OUT ON THESE PLANS.
 - DEBRIS IS TO BE KEPT OUT OF STORMWATER MANAGEMENT FACILITIES DURING AND AFTER CONSTRUCTION.
 - CONTRACTOR TO REFER TO "BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS AND TOWNS FLOODPLAINS" LOCATED ON SHEET 27. WETLAND SEED MIX SPECIFICATIONS TO BE USED IN ALL BARE-SOIL AREAS WITHIN THE FLOODPLAIN. PROVIDE EROSION CONTROL AND PERMANENT SEED STABILIZATION PER THE SEDIMENT CONTROL INSPECTOR.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

John Demas 12/15/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION

Cindy Harris 12/18/06
CHIEF, DIVISION OF LAND DEVELOPMENT

Debra P. Knight 12/18/06
DIRECTOR

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

Jim Moran 12/15/06
USDA-NATURAL RESOURCES CONSERVATION SERVICE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Robert W. Schmitt 12/15/06
HOWARD S.C.D.

BY THE DEVELOPER:

I HEREBY CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE 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. 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.

Chiph D. ... 12/12/06
SIGNATURE OF DEVELOPER

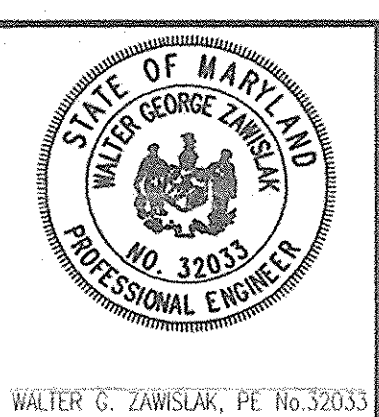
BY THE ENGINEER:

I HEREBY CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, 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.

W. ... 12/21/06
SIGNATURE OF ENGINEER

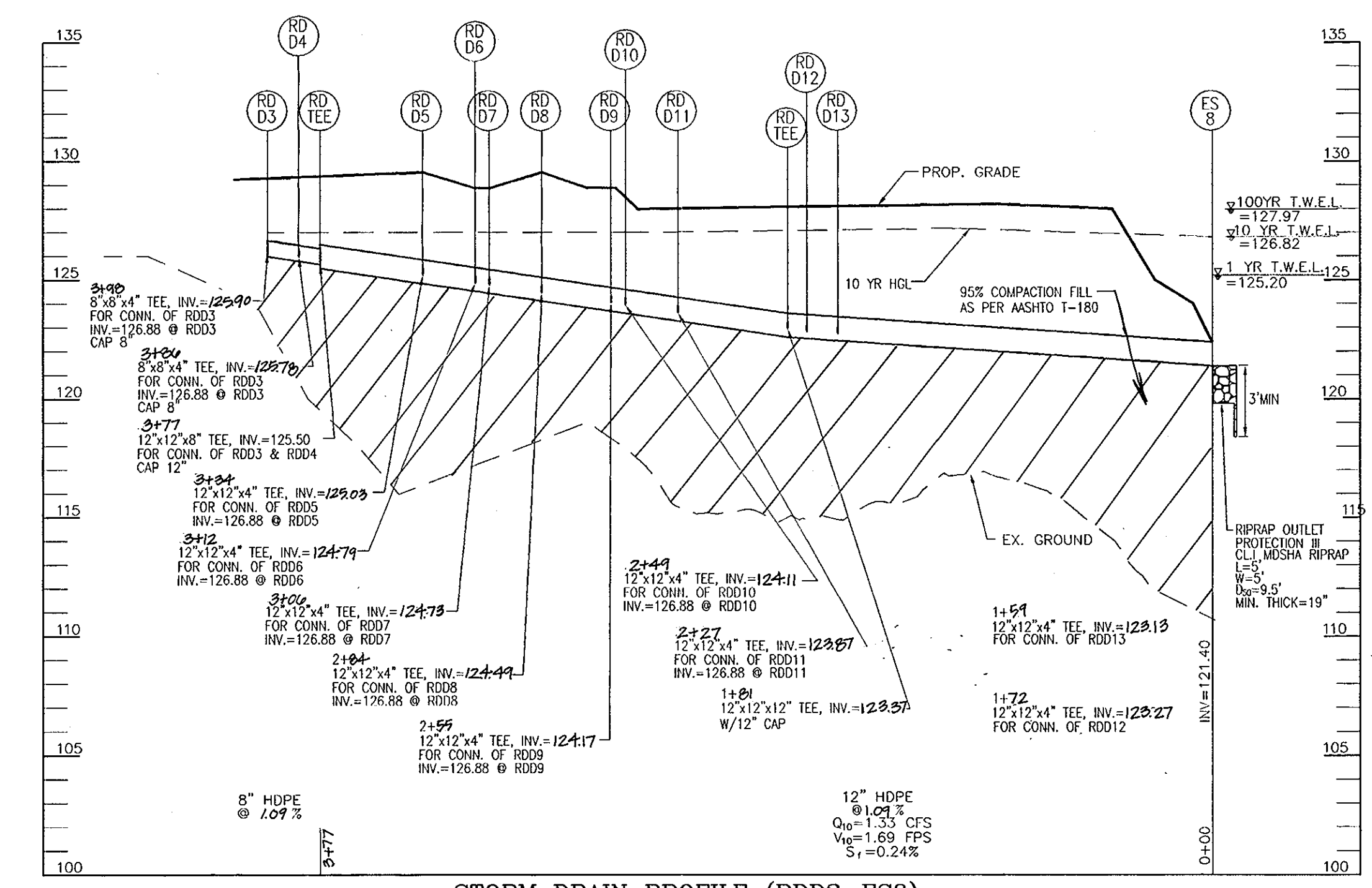
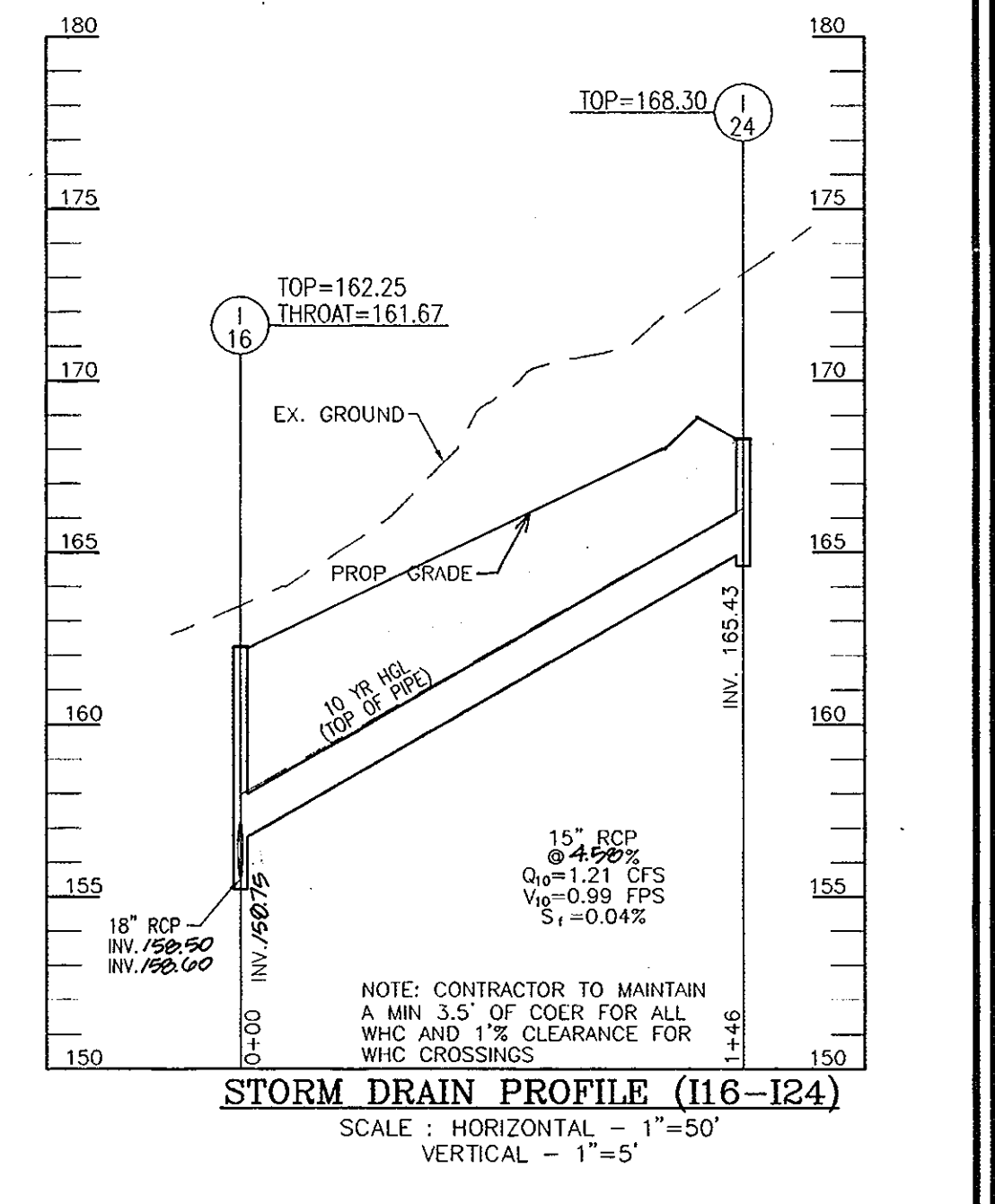
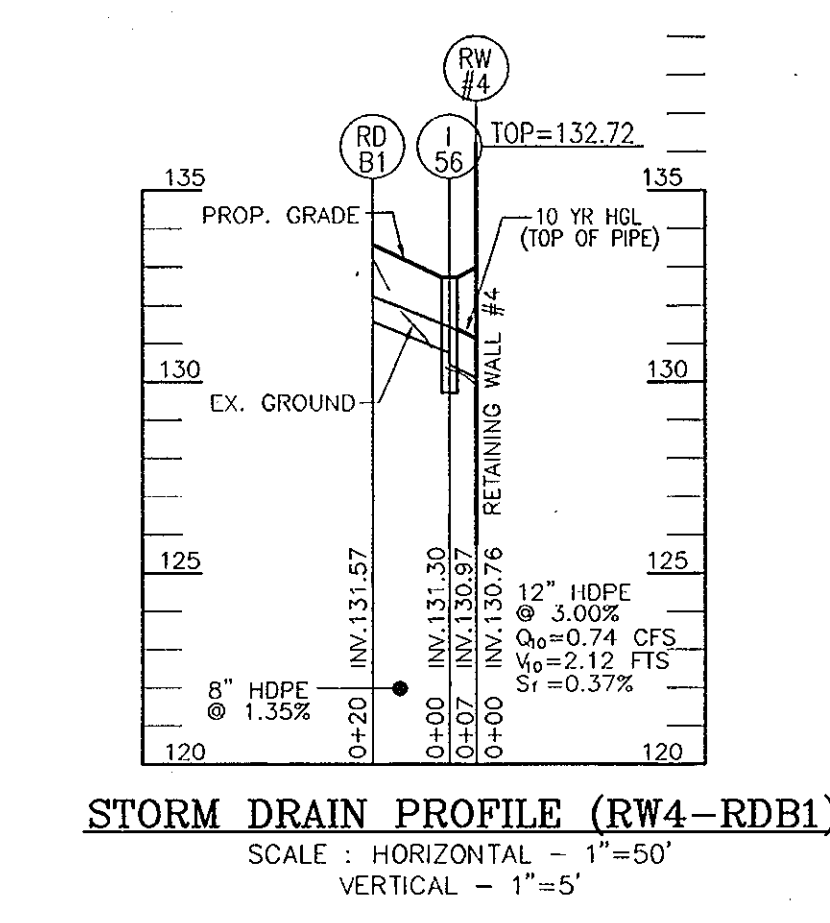
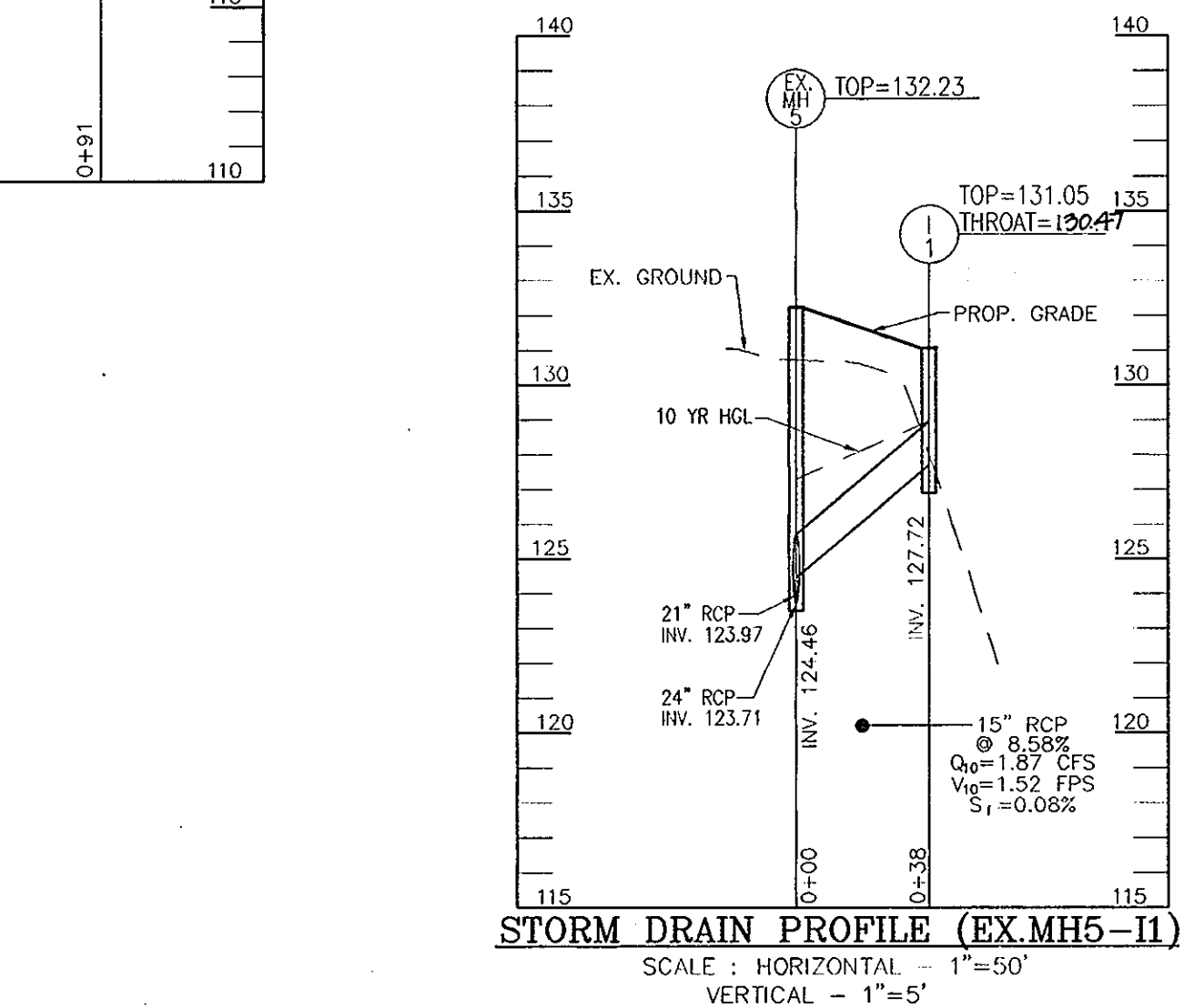
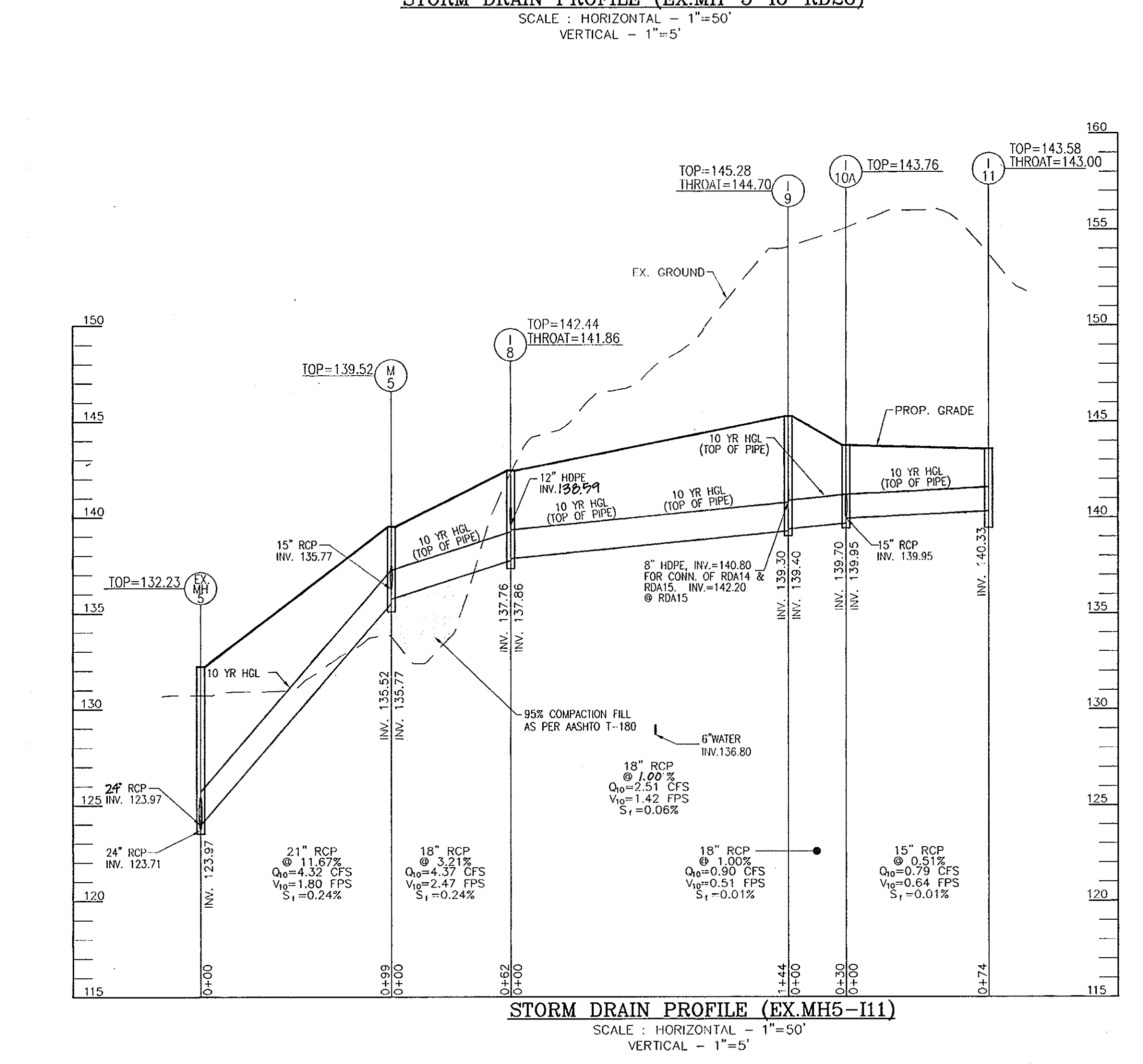
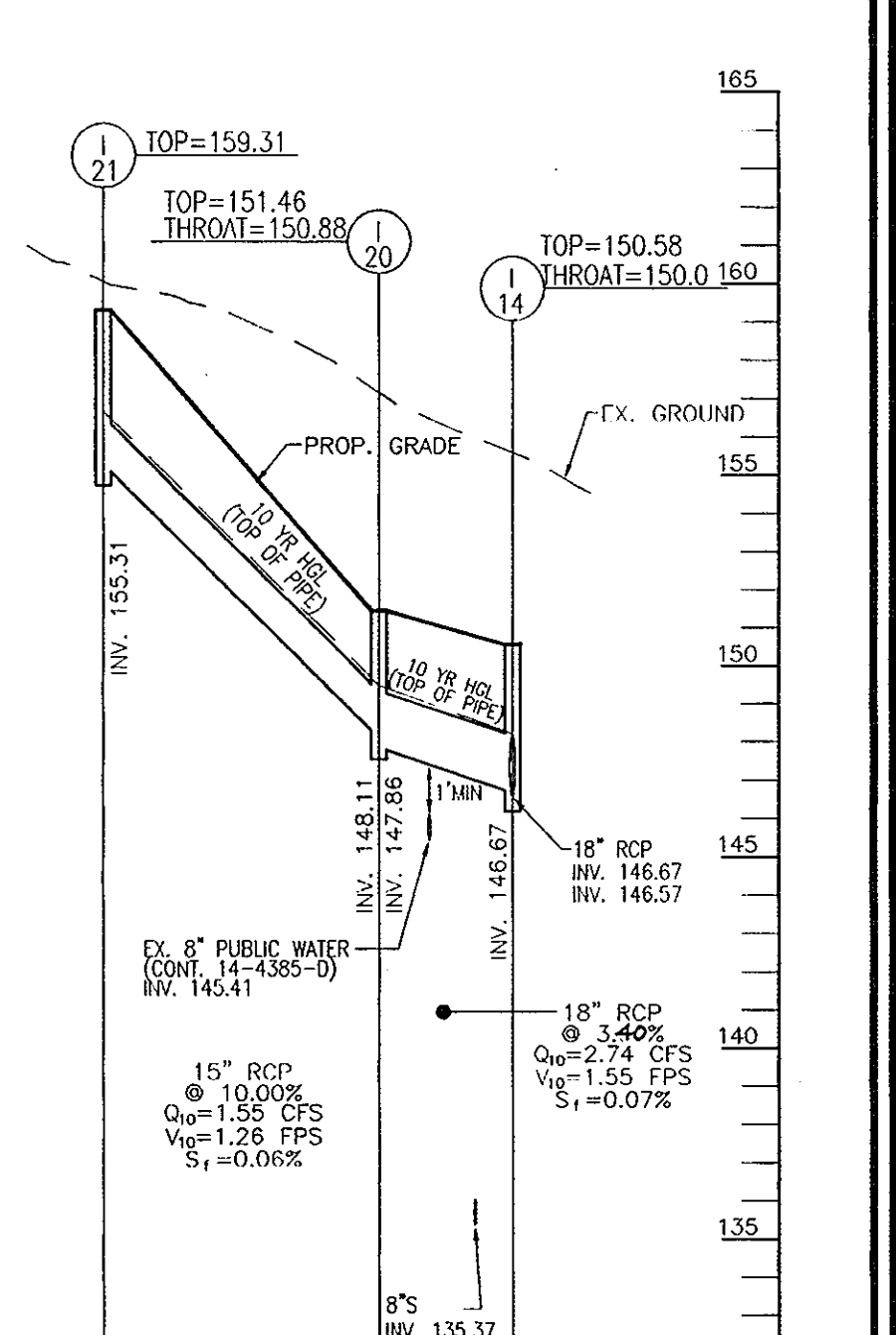
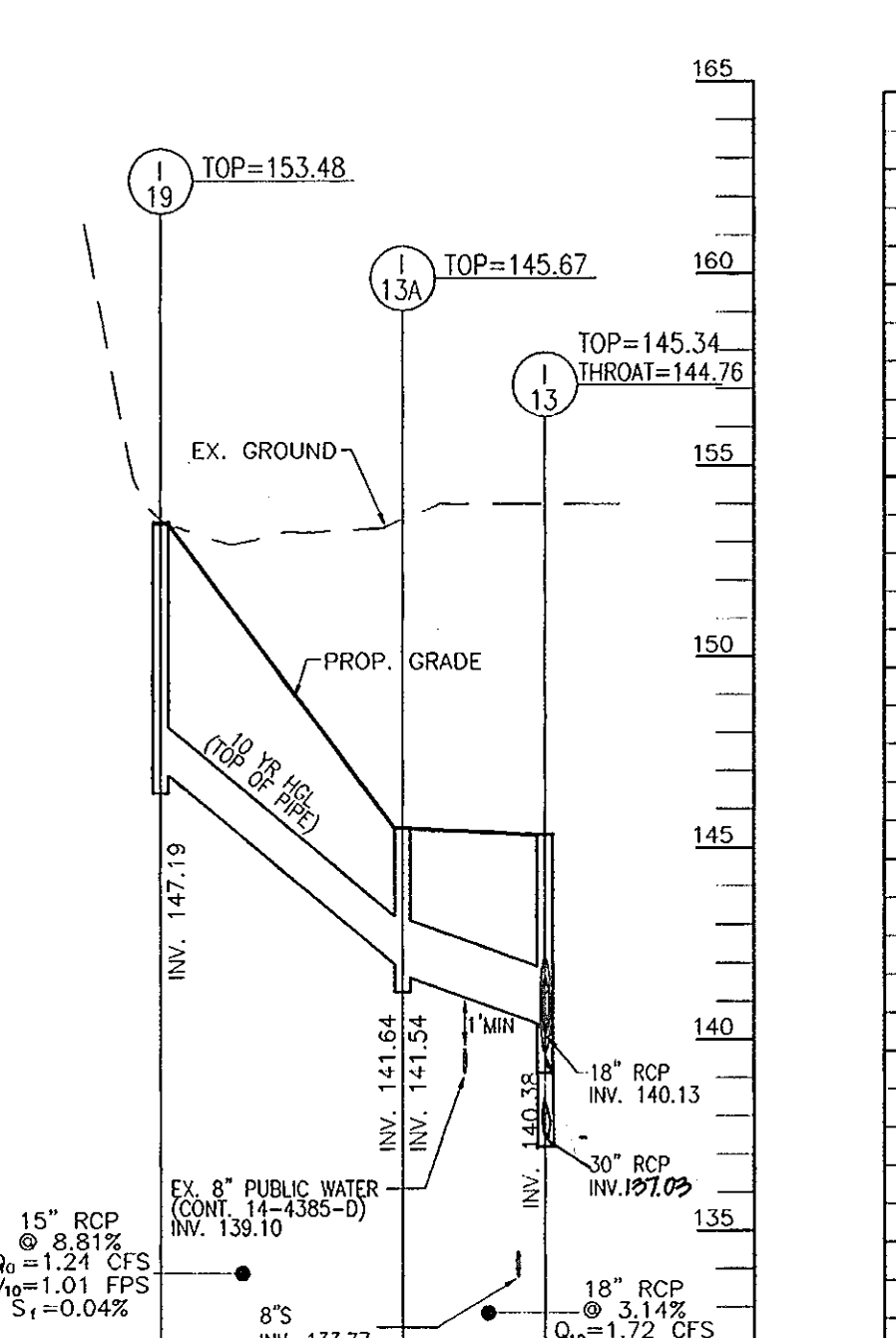
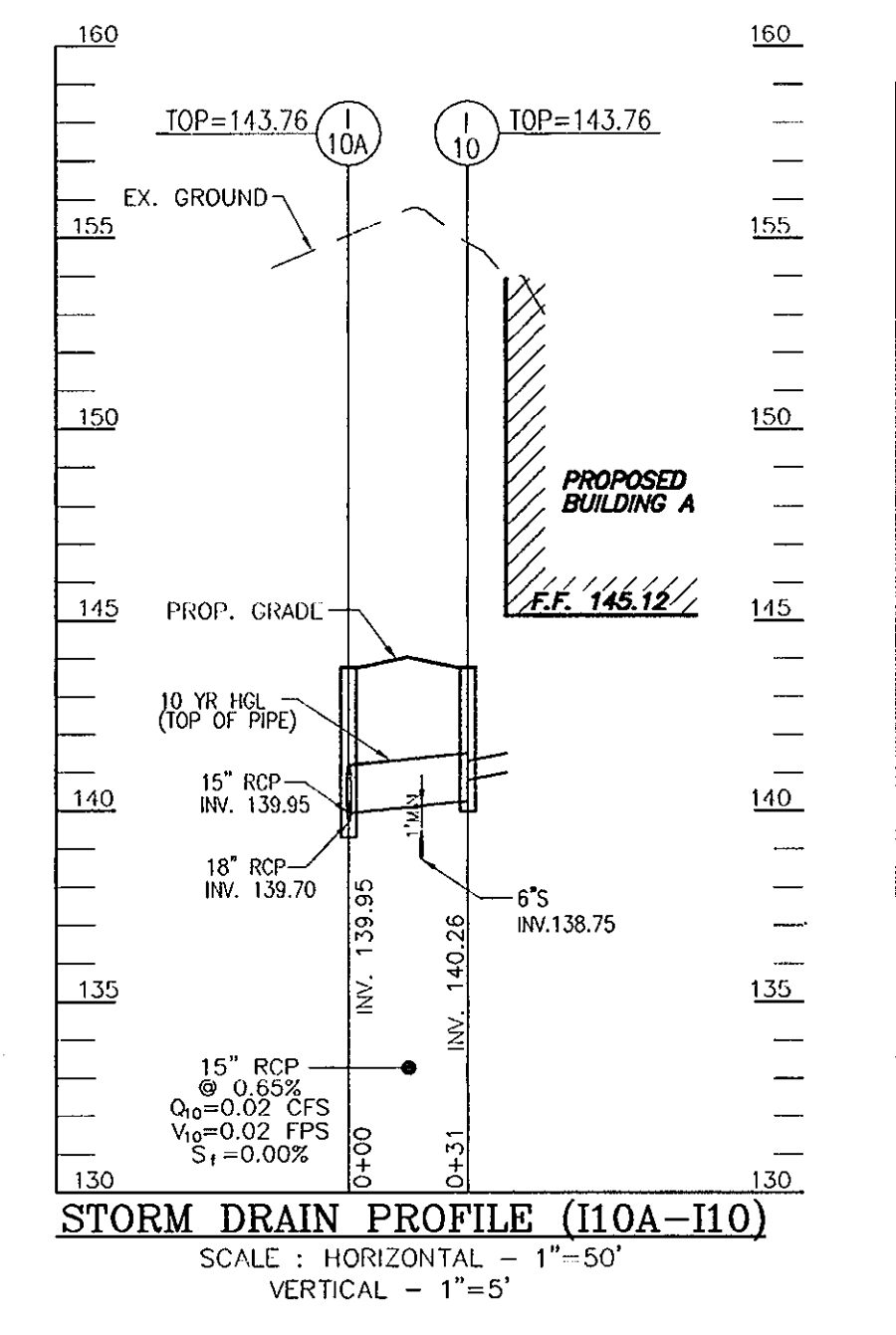
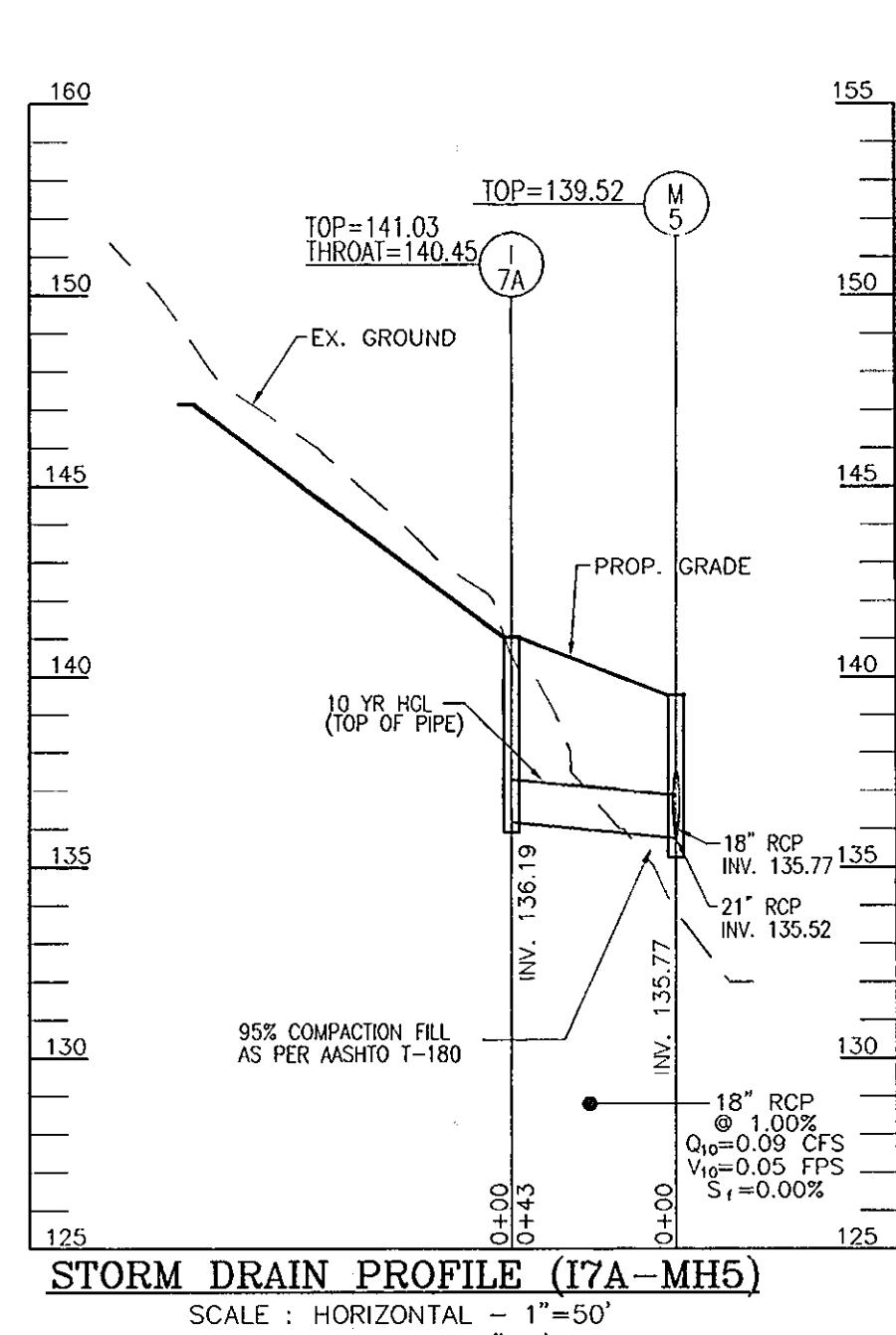
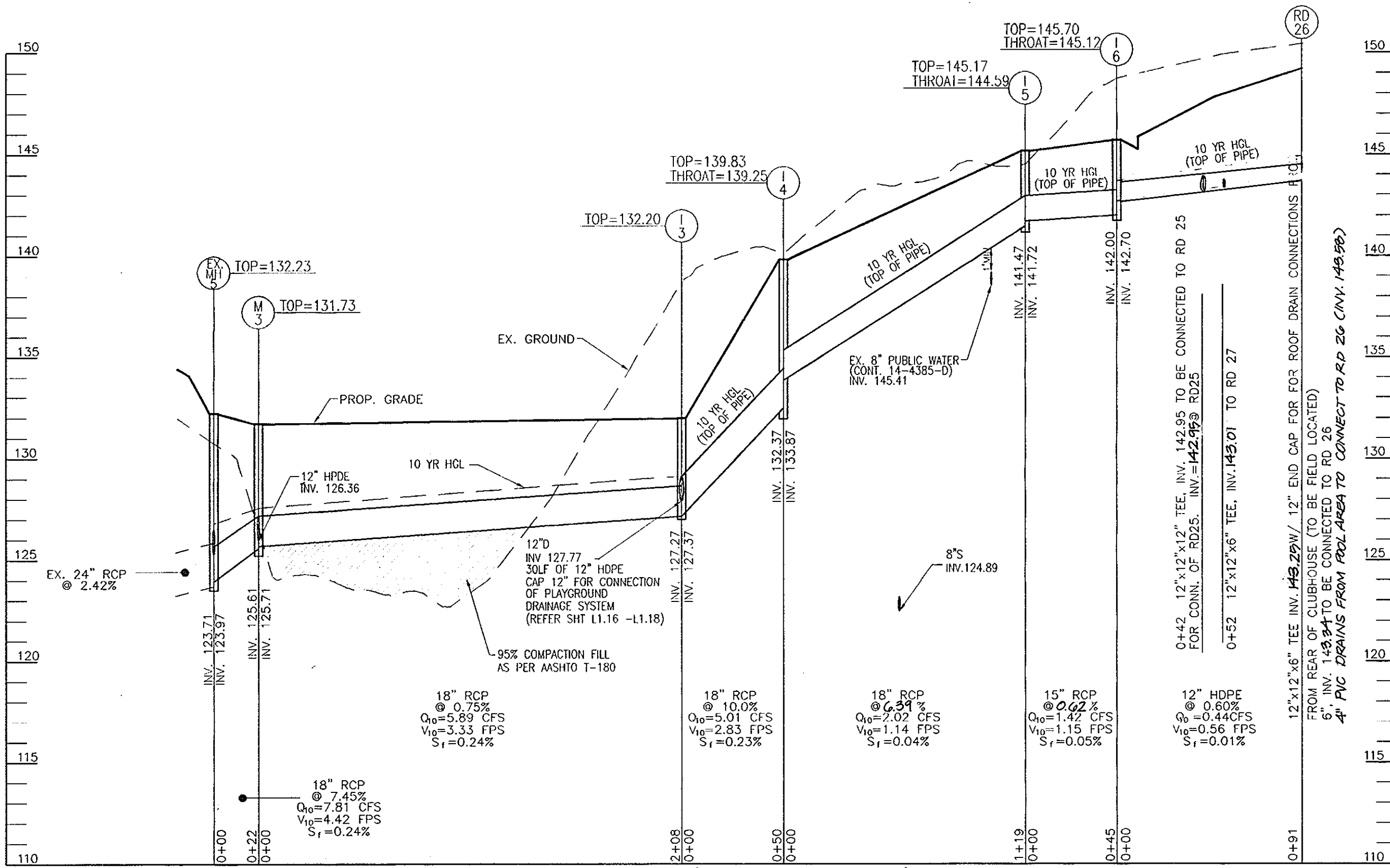
OWNER/DEVELOPER

ELKRIDGE DEVELOPMENT NO.2, LLC ELKRIDGE DEVELOPMENT NO.2, LLC
301 TRANSYLVANIA AVENUE 301 TRANSYLVANIA AVENUE
RALEIGH, NC 27609 RALEIGH, NC 27609
(919) 789-9289 (919) 789-9289



DESIGN BY: WJZ
CHECKED BY: DZ
DATE: DECEMBER 7, 2006
SCALE: 1"=30'
W.O. NO.: 04-08

16 SHEET OF 39



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Michael J. ... 12/15/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Judy ... 12/18/06
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Paul ... 12/18/06
DIRECTOR DATE

OWNER/DEVELOPER
ELKRIDGE DEVELOPMENT NO.2, LLC ELKRIDGE DEVELOPMENT NO.2, LLC
301 TRANSYLVANIA AVENUE 301 TRANSYLVANIA AVENUE
RALEIGH, NC 27609 RALEIGH, NC 27609
(919) 789-9289 (919) 789-9289

2	ADD MISSING IMAGES, STORM DRAIN, REVISE WHC TO UNITS 91&9B	1/28/06
	ADD SHC TO MAINTENANCE BLDG, REVISE MAINTENANCE BLDG WHC	
	ADD DRAINS TO POOL AREA, MISC. STORM DRAIN CHANGES	
NO.	REVISION	DATE

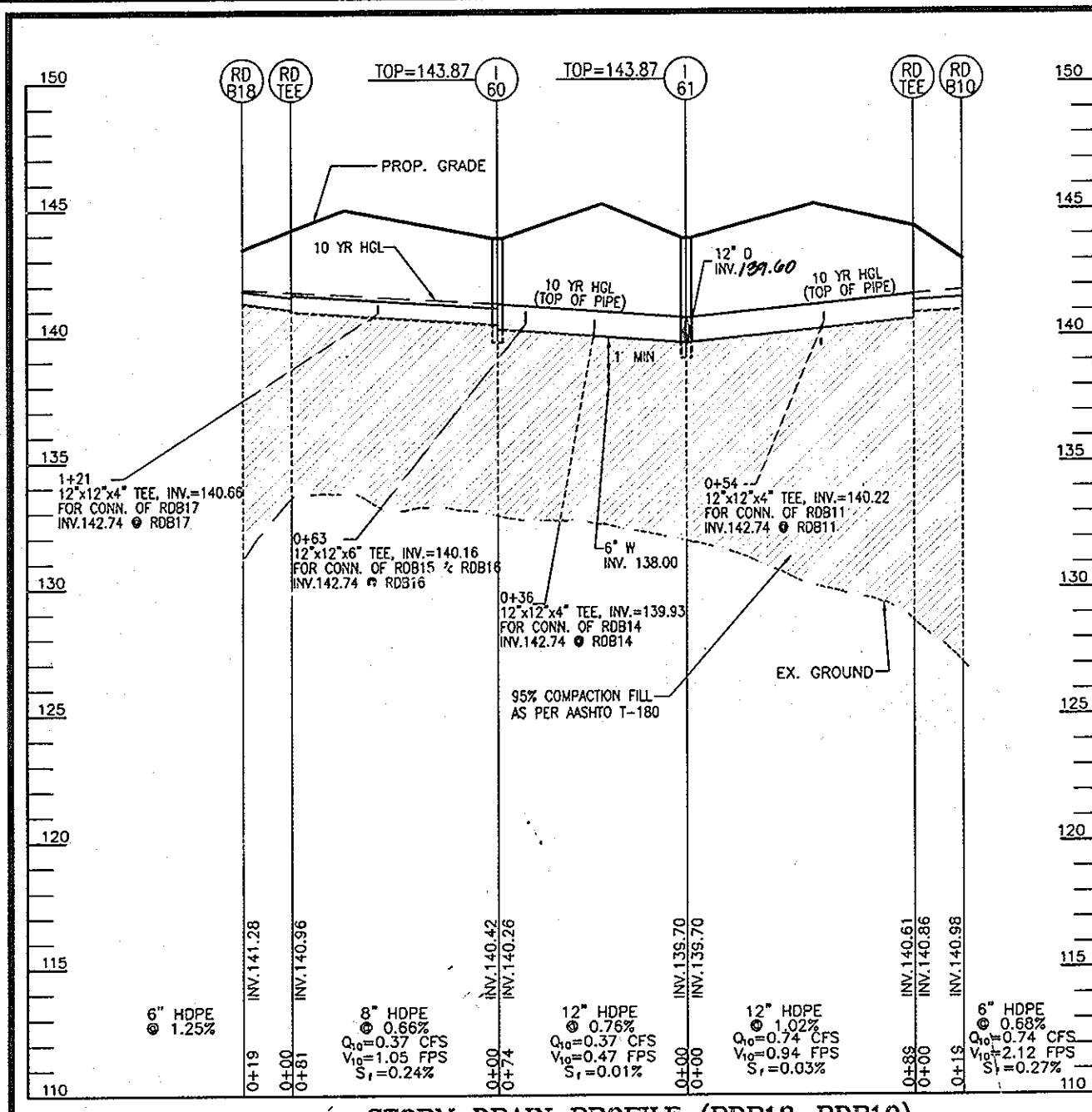
SITE DEVELOPMENT PLAN
STORM DRAIN PROFILES

BELMONT STATION (PHASES I, II, AND III)
PARCELS A, C AND OPEN SPACE LOT 1
REF: S-04-10, WP-04-152, WP-06-79, P-05-17, F-06-169, PLAT 18668-71
TAX MAP 37 BLOCK 18 PARCEL 196, 198, 199
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

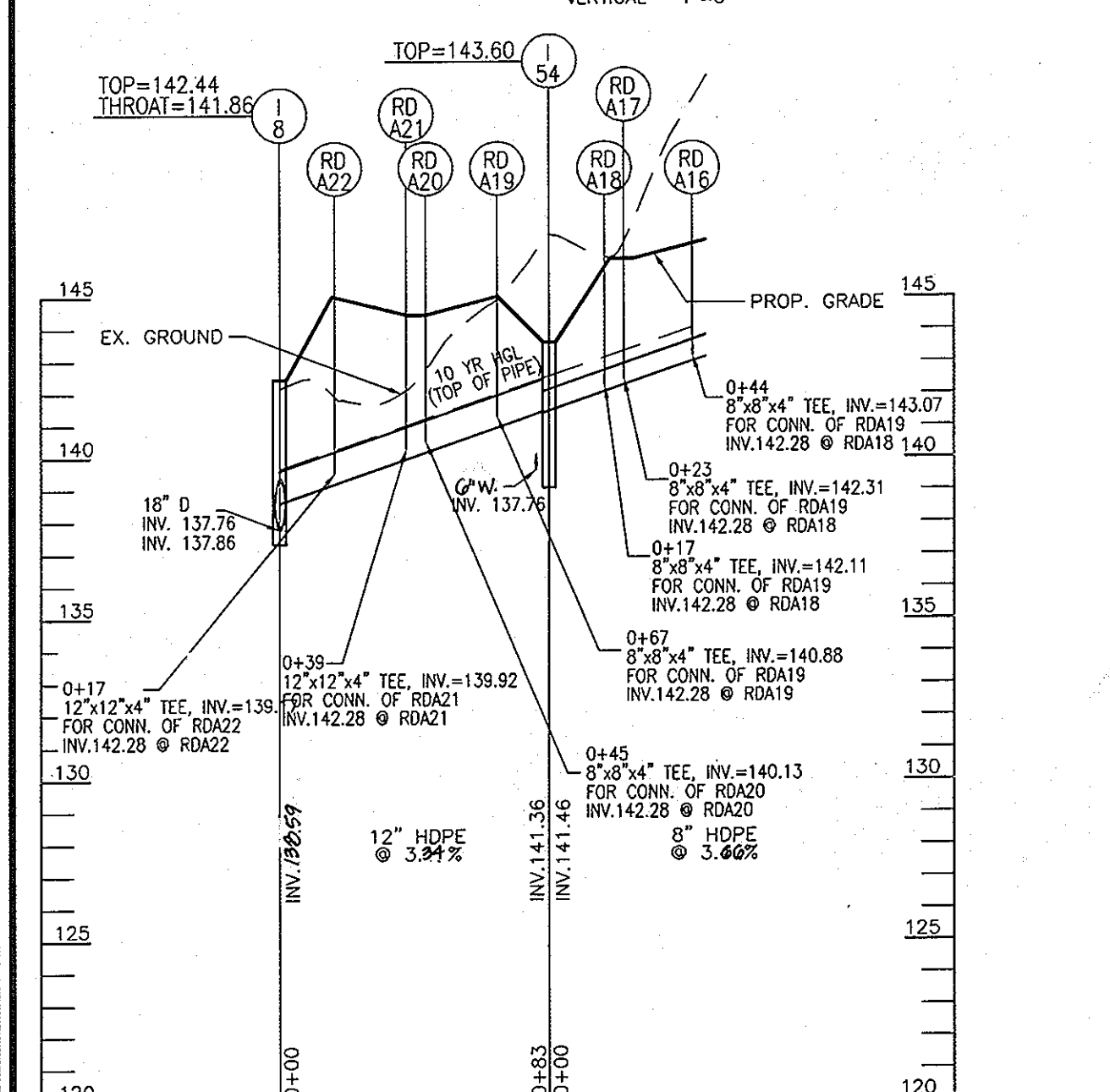
ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET TEL: 410.461.7666
ELICOTT CITY, MD 21043 FAX: 410.461.8961

DESIGN BY: WJZ
DRAWN BY: DZ
CHECKED BY:
DATE: DECEMBER 7, 2006
SCALE: AS SHOWN
W.O. NO.: 04-08

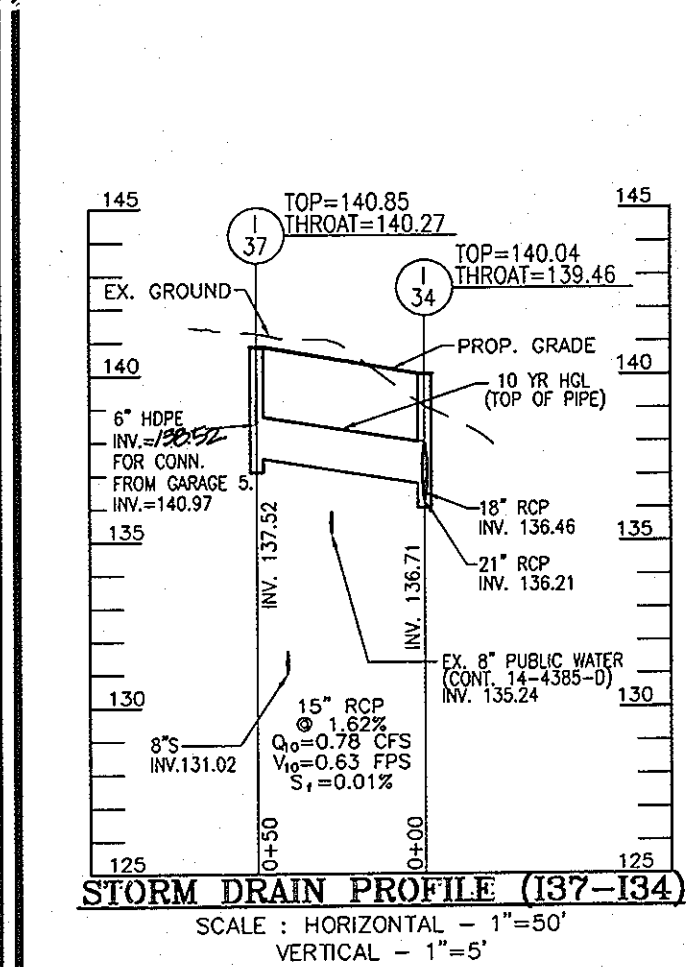
18 SHEET OF 39



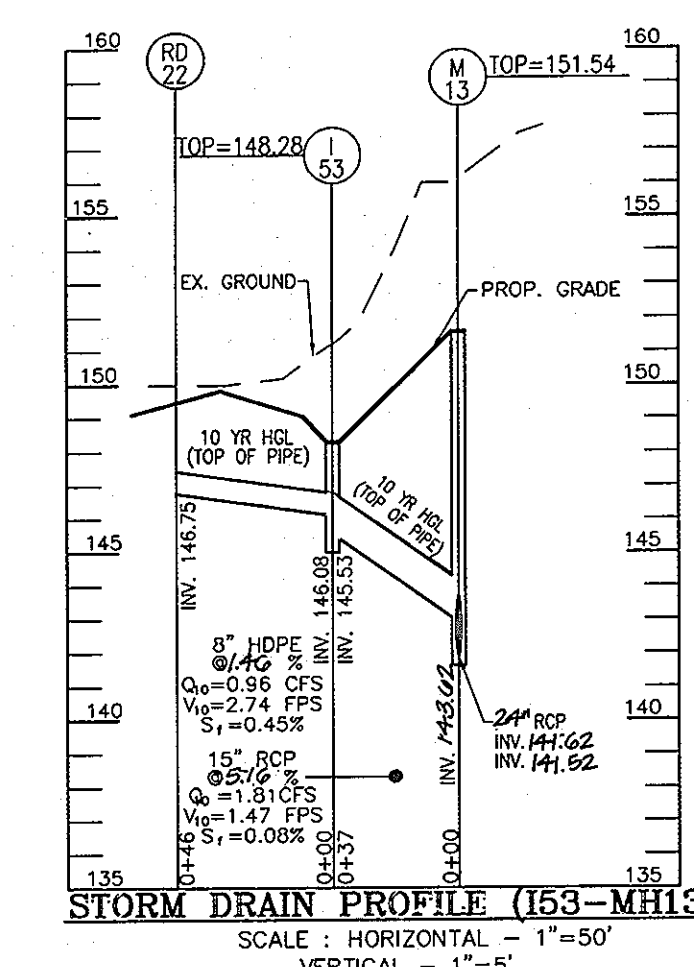
STORM DRAIN PROFILE (RDB16-RDB10)
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'



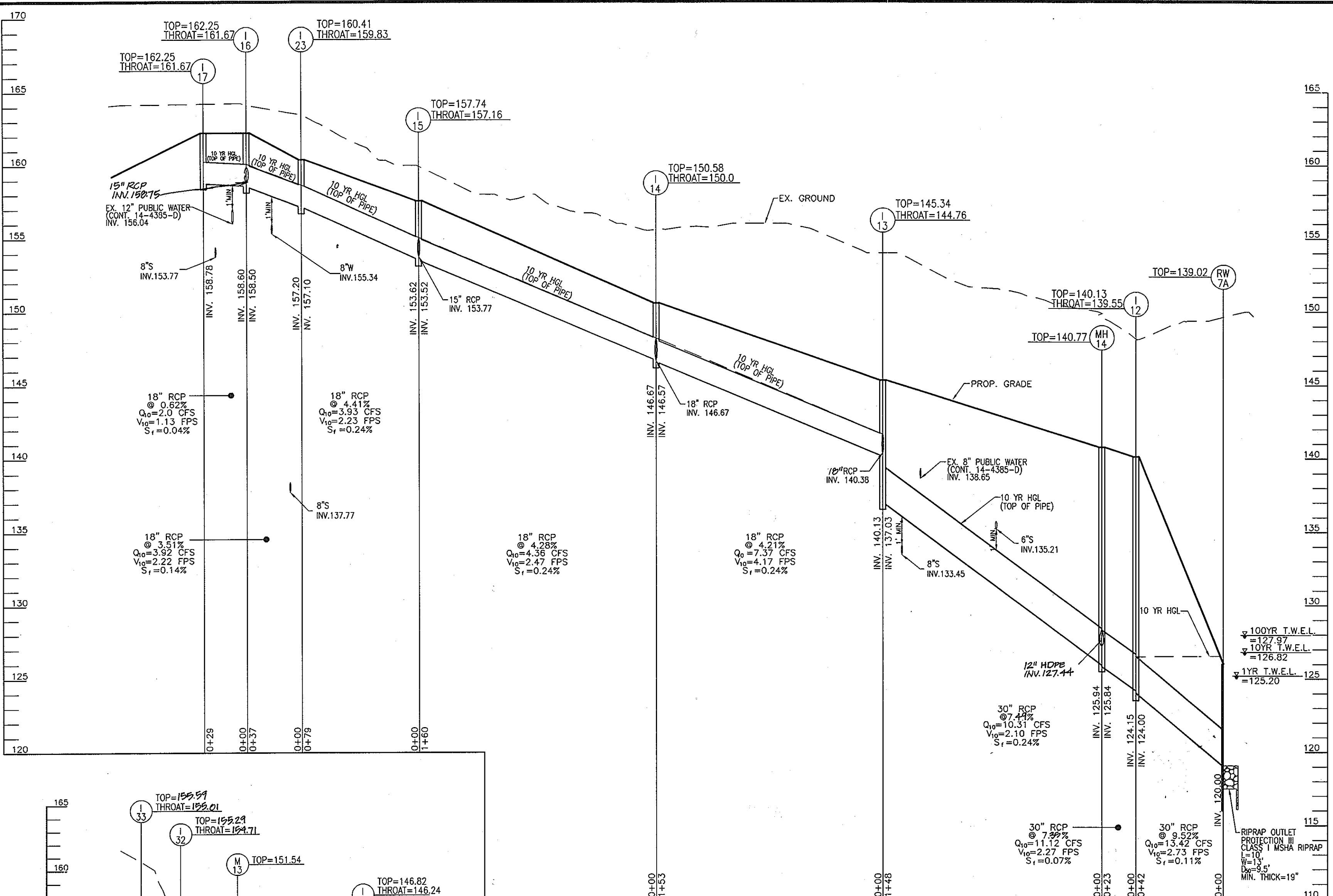
STORM DRAIN PROFILE (18-154-RDA16)
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'



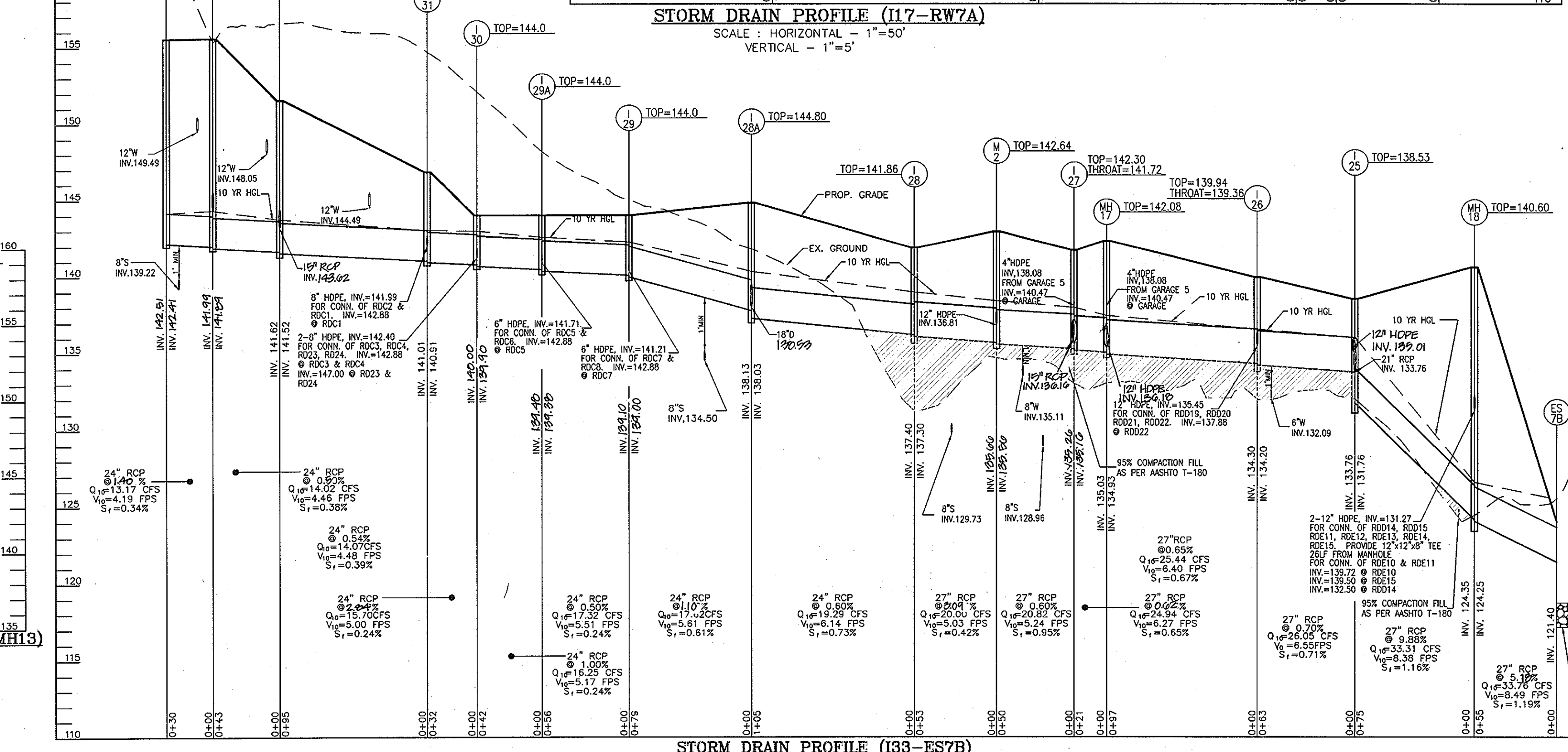
STORM DRAIN PROFILE (137-134)
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'



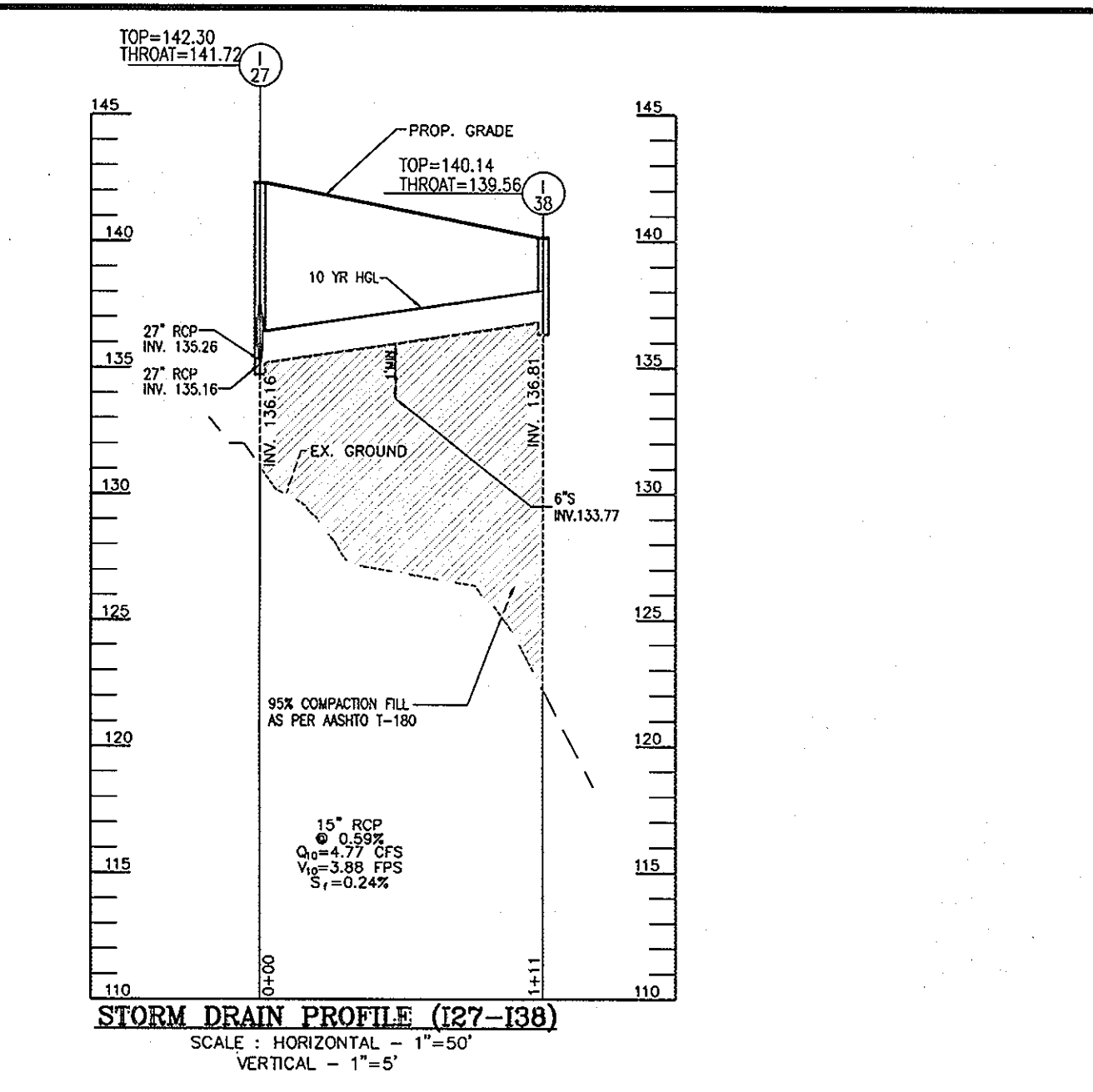
STORM DRAIN PROFILE (153-MH13)
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'



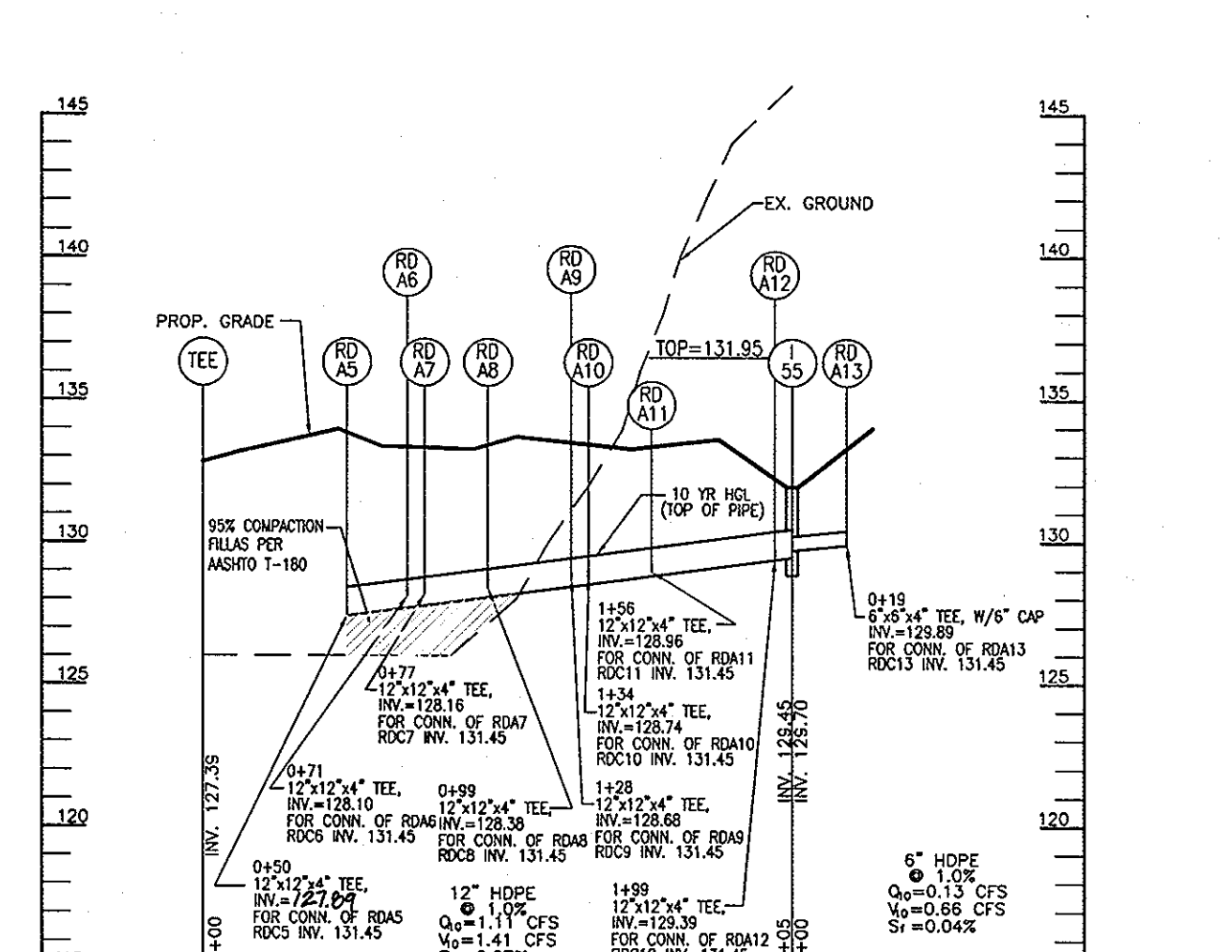
STORM DRAIN PROFILE (117-RW7A)
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'



STORM DRAIN PROFILE (133-ES7B)
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'



STORM DRAIN PROFILE (127-138)
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'



STORM DRAIN PROFILE (RDA5-RDA13)
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] 12/8/09
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 12/10/09
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 12/10/09
 DIRECTOR

OWNER/DEVELOPER
 ELKRIDGE DEVELOPMENT NO.2, LLC ELKRIDGE DEVELOPMENT NO.2, LLC
 301 TRANSYLVANIA AVENUE 301 TRANSYLVANIA AVENUE
 RALEIGH, NC 27609 RALEIGH, NC 27609
 (919) 789-9289 (919) 789-9289

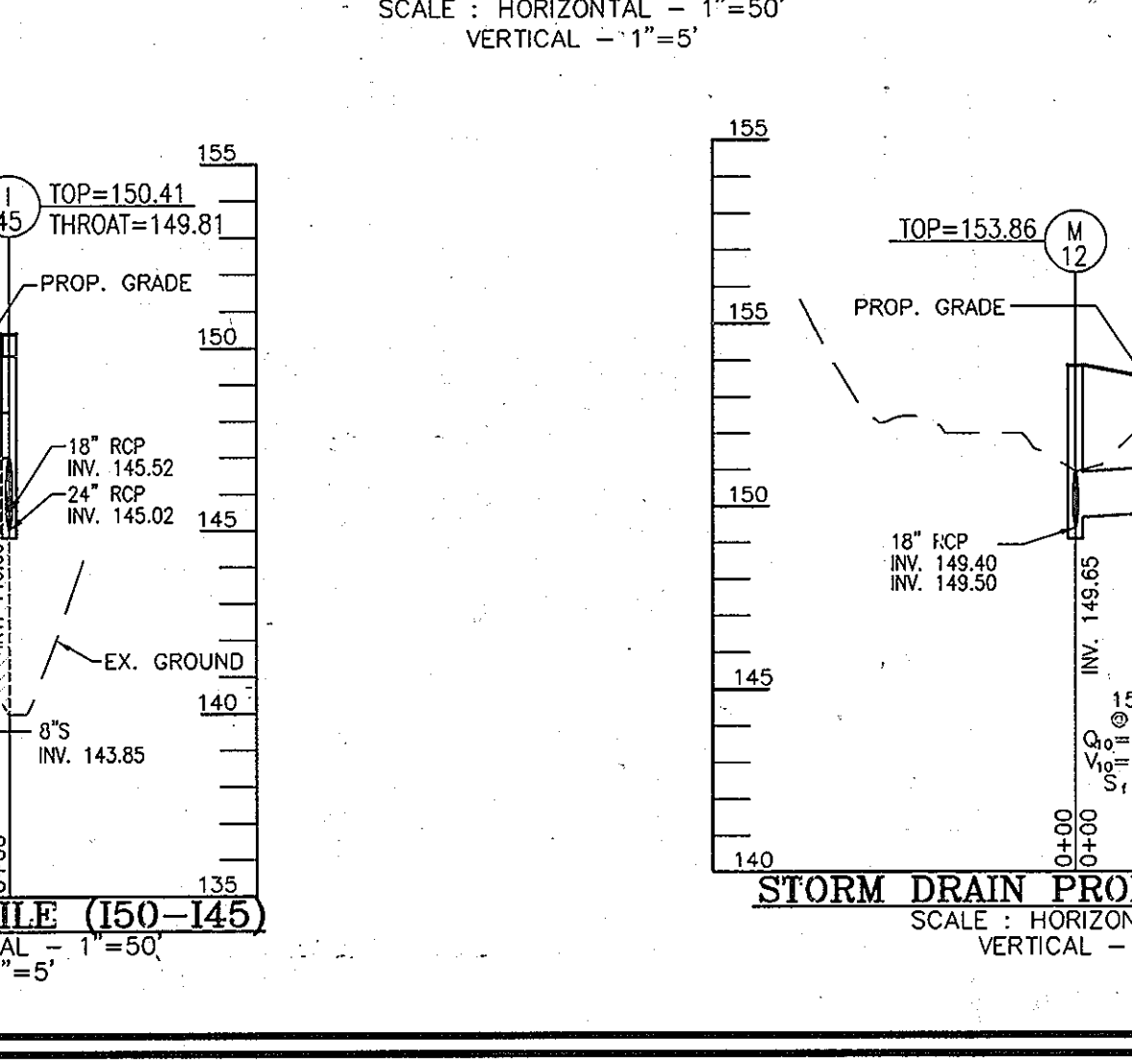
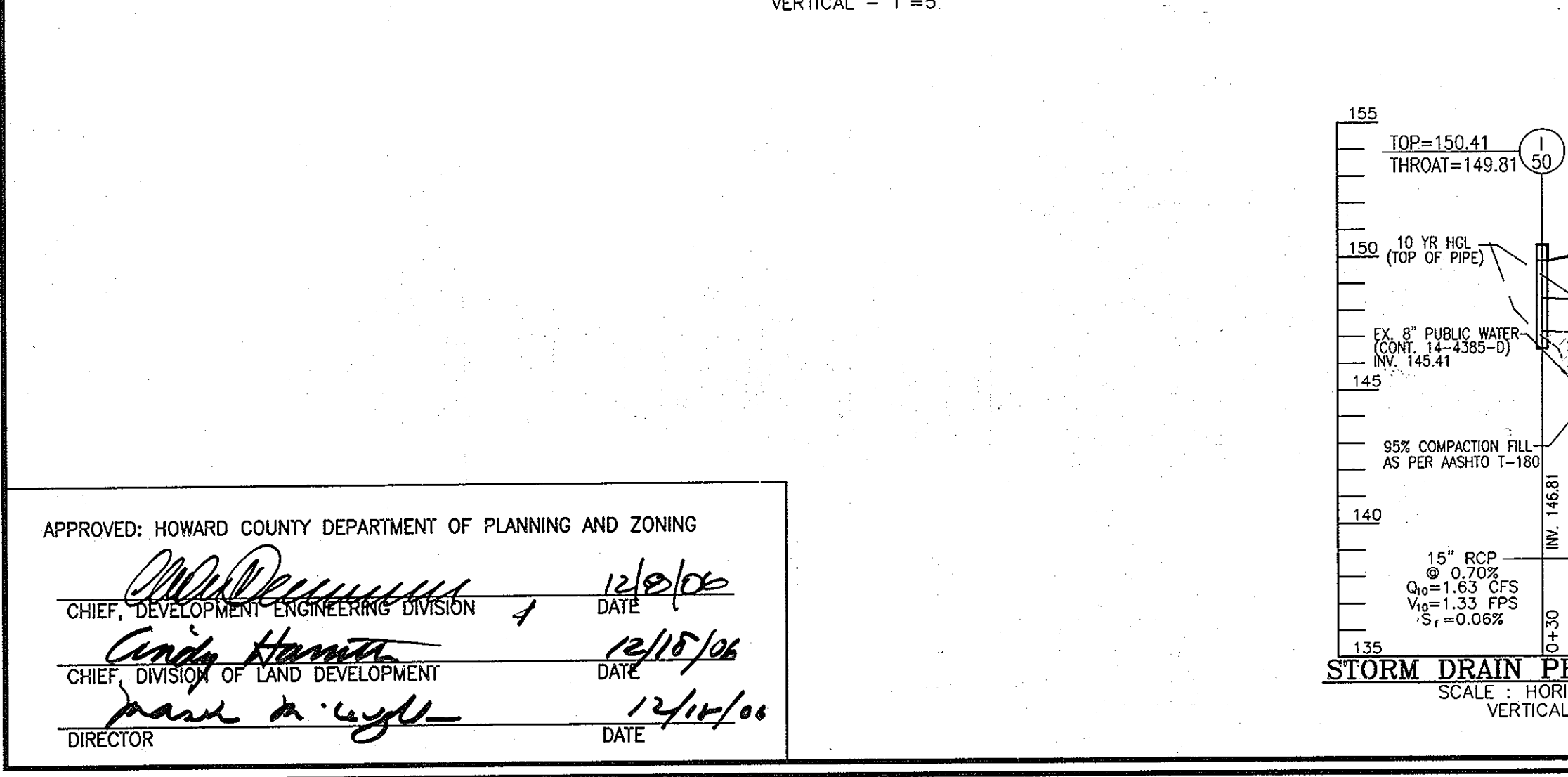
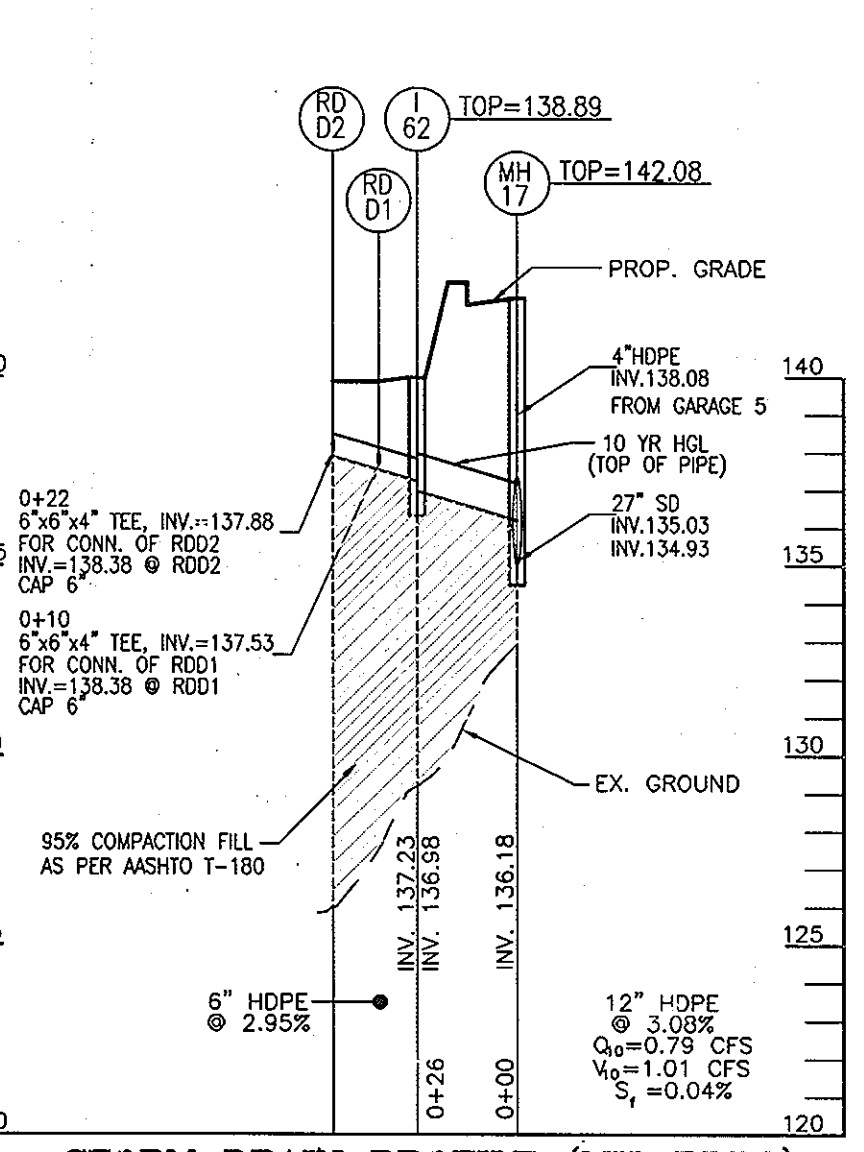
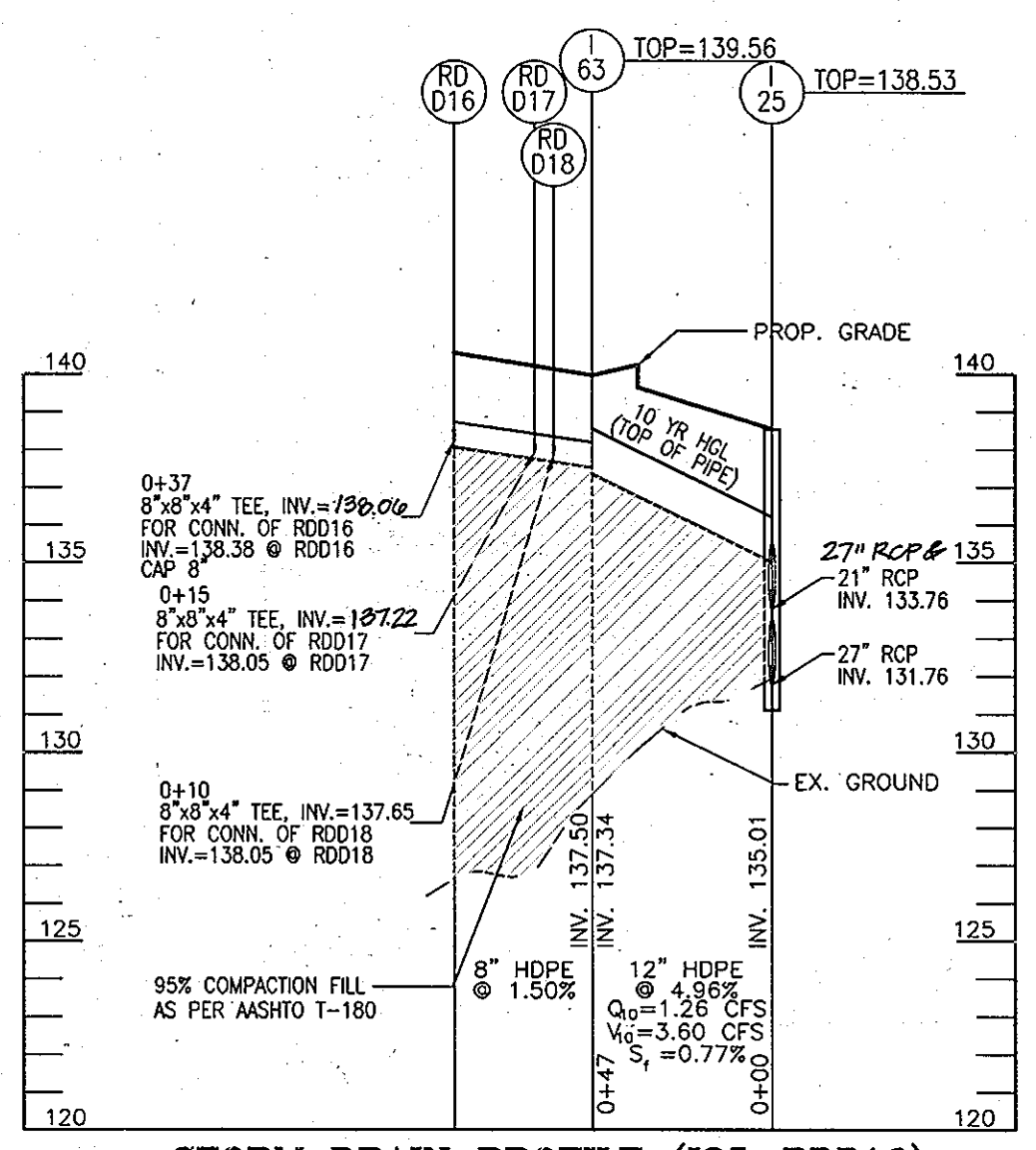
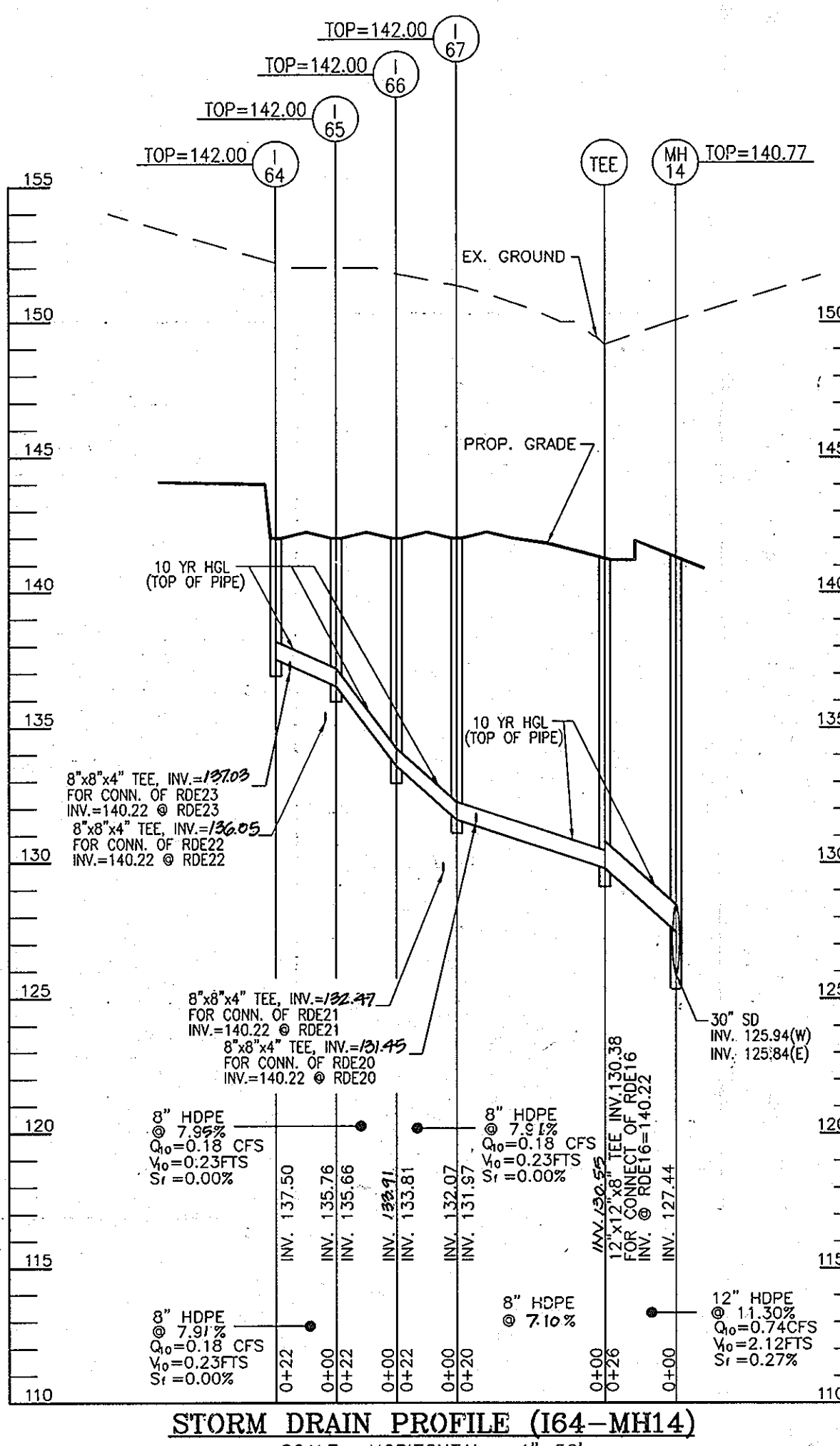
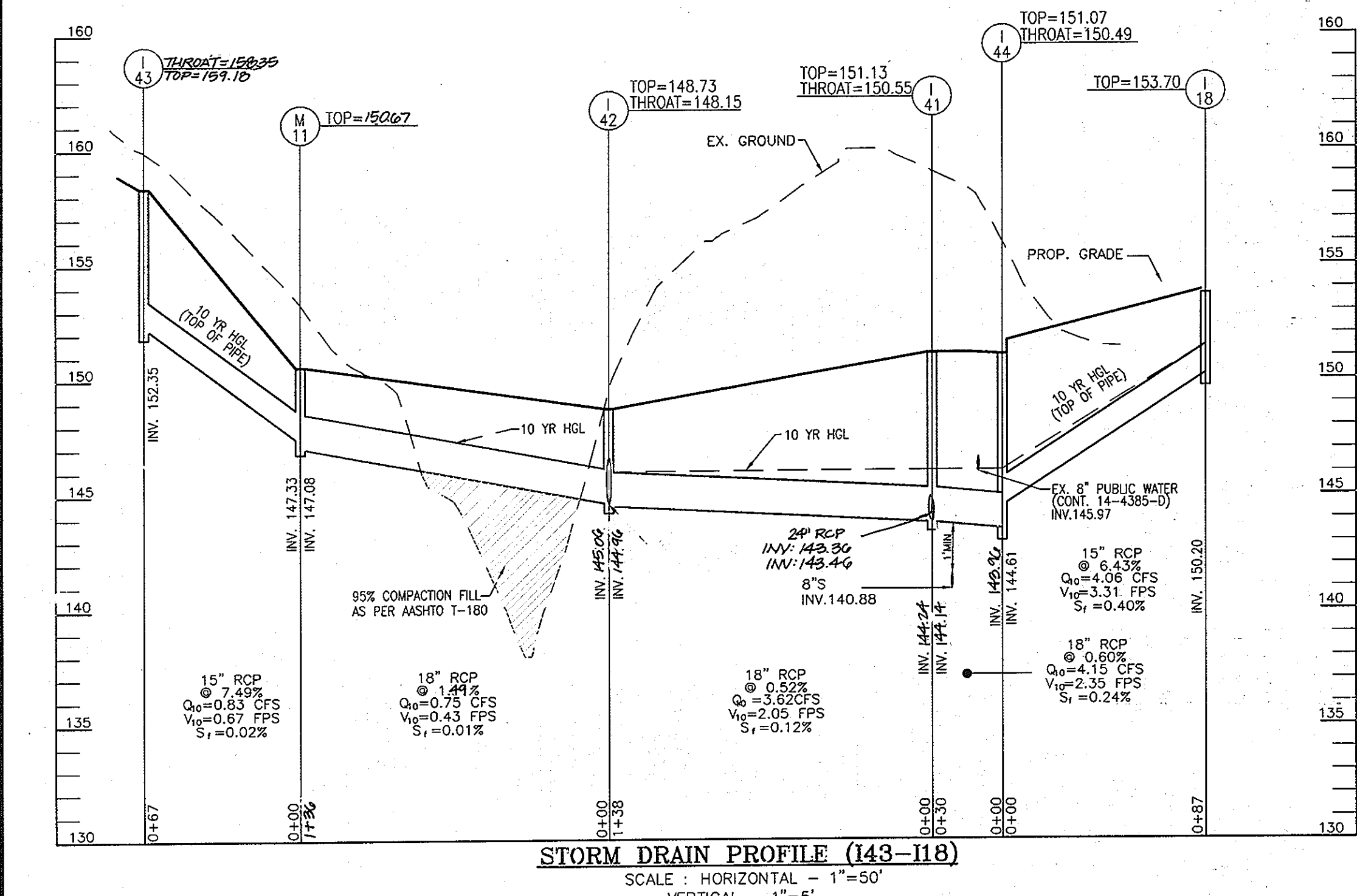
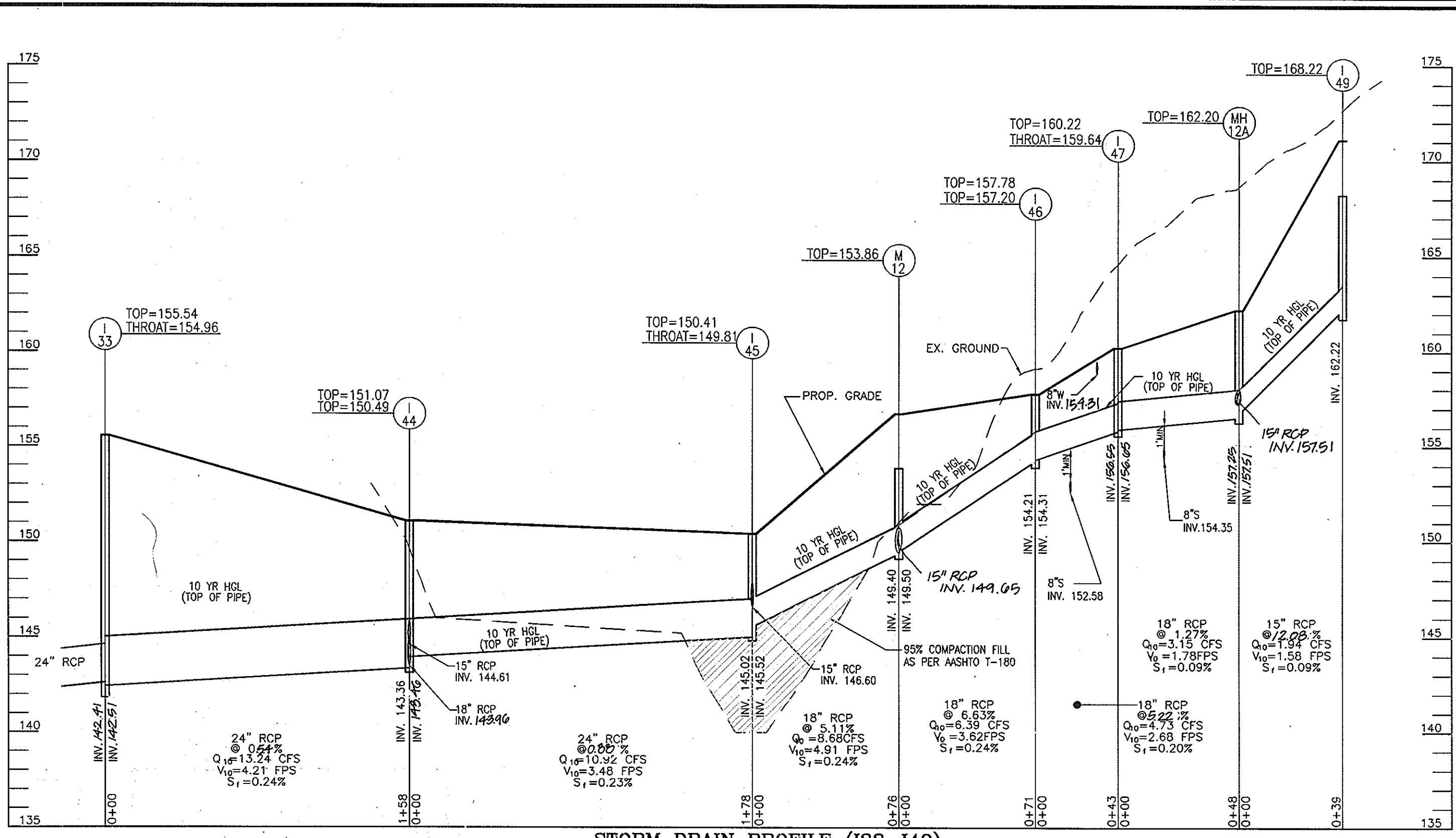
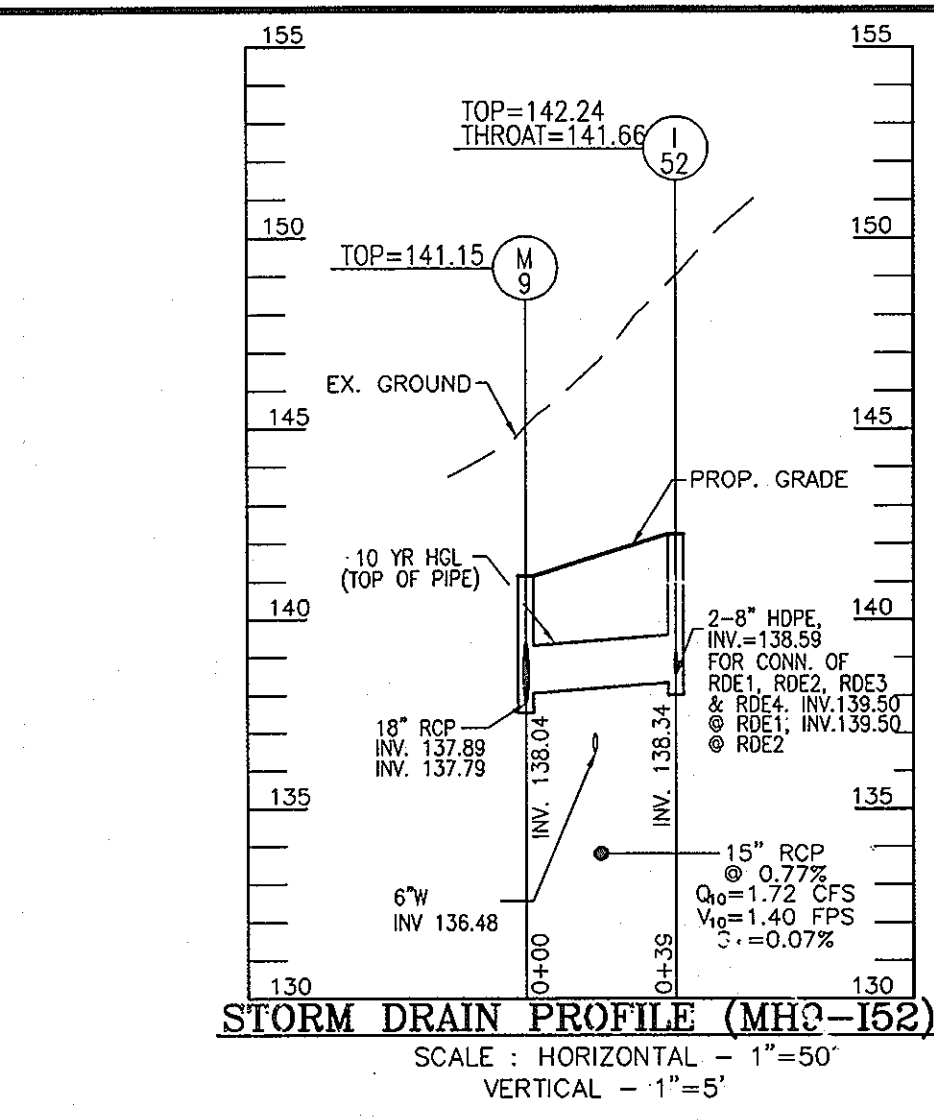
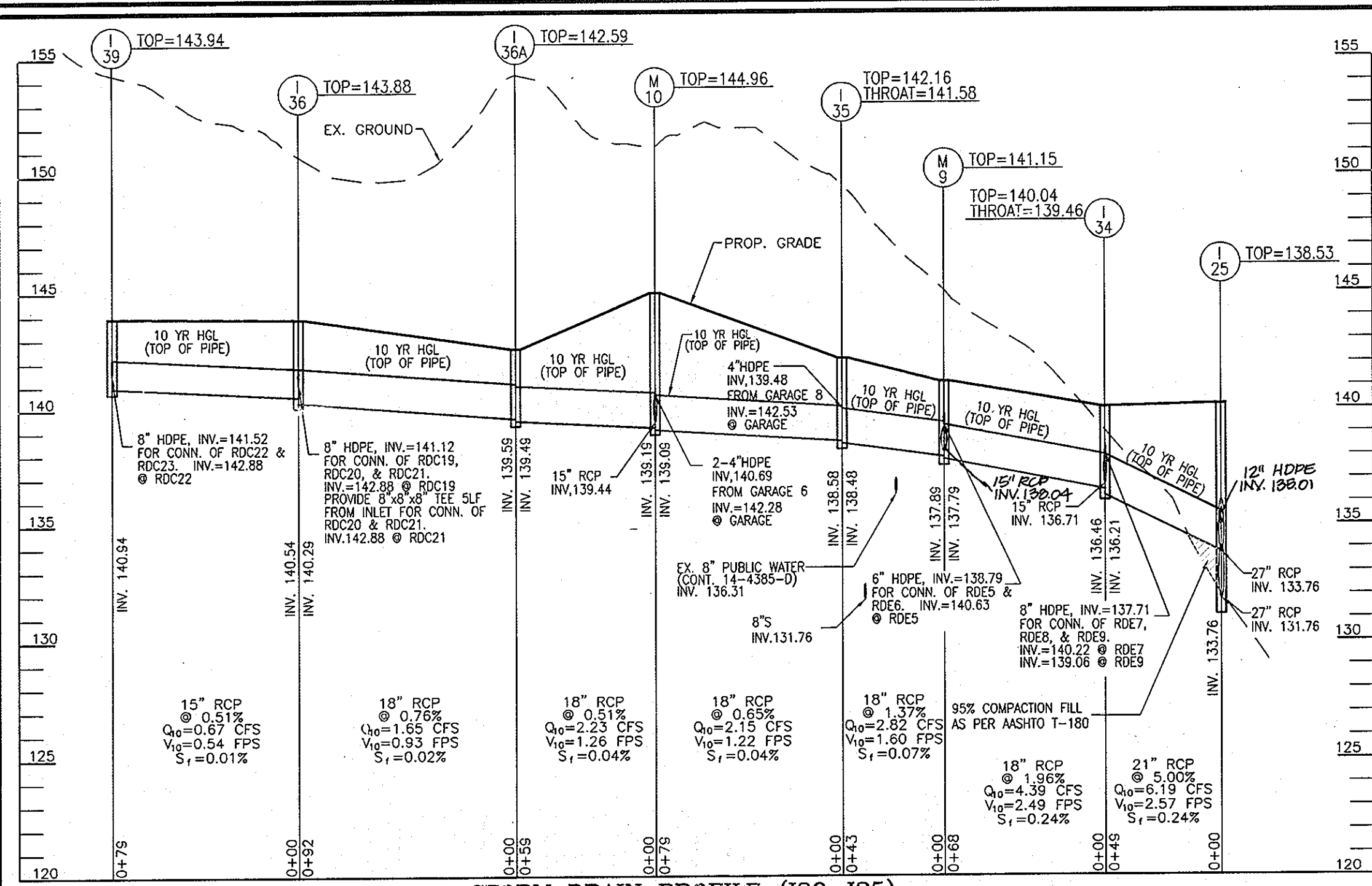
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	ADD SHC TO MAINTENANCE BLDG; REVISE MAINTENANCE BLDG W/10	
	ADD DRAINS TO POOL AREA, MISD. STORM DRAIN CHANGES	

SITE DEVELOPMENT PLAN
STORM DRAIN PROFILES
BELMONT STATION (PHASES I, II, AND III)
 REF: S-04-10, WP-04-152, WP-06-79, P-05-17, F-06-169, PLAT 18568-71
 TAX MAP 37, BLOCK 18 PARCEL 155, 168, 169'
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET TEL: 410.461.7666
 ELICOTT CITY, MD 21043 FAX: 410.461.8961

DESIGN BY: WJZ
DRAWN BY: DZ
CHECKED BY:
DATE: DECEMBER 7, 2006
SCALE: AS SHOWN
W.O. NO.: 04-08

19 SHEET OF 39



2	ADD MISSING IMAGES, STORM DRAIN, REVISE WHC TO UNITS 97.690	1-20-08
	ADD SHC TO MAINTENANCE BUILDING; REVISE MAINTENANCE BLDG WHC;	
	ADD DRAINS TO POOL AREA; MISC STORM DRAIN CHANGES	
NO.	REVISION	DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 12/10/08
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 12/10/08
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 12/10/08
 DIRECTOR

SITE DEVELOPMENT PLAN
STORM DRAIN PROFILES

BELMONT STATION (PHASES I, II, AND III)

REF: S-04-10, WP-04-152, WP-06-75, P-05-17, F-05-168, PLAT 18668-71
 TAX MAP 37 BLOCK 18 PARCELS A, C AND OPEN SPACE LOT 1
 1ST ELECTION DISTRICT PARCEL 198, 198, 199 HOWARD COUNTY, MARYLAND

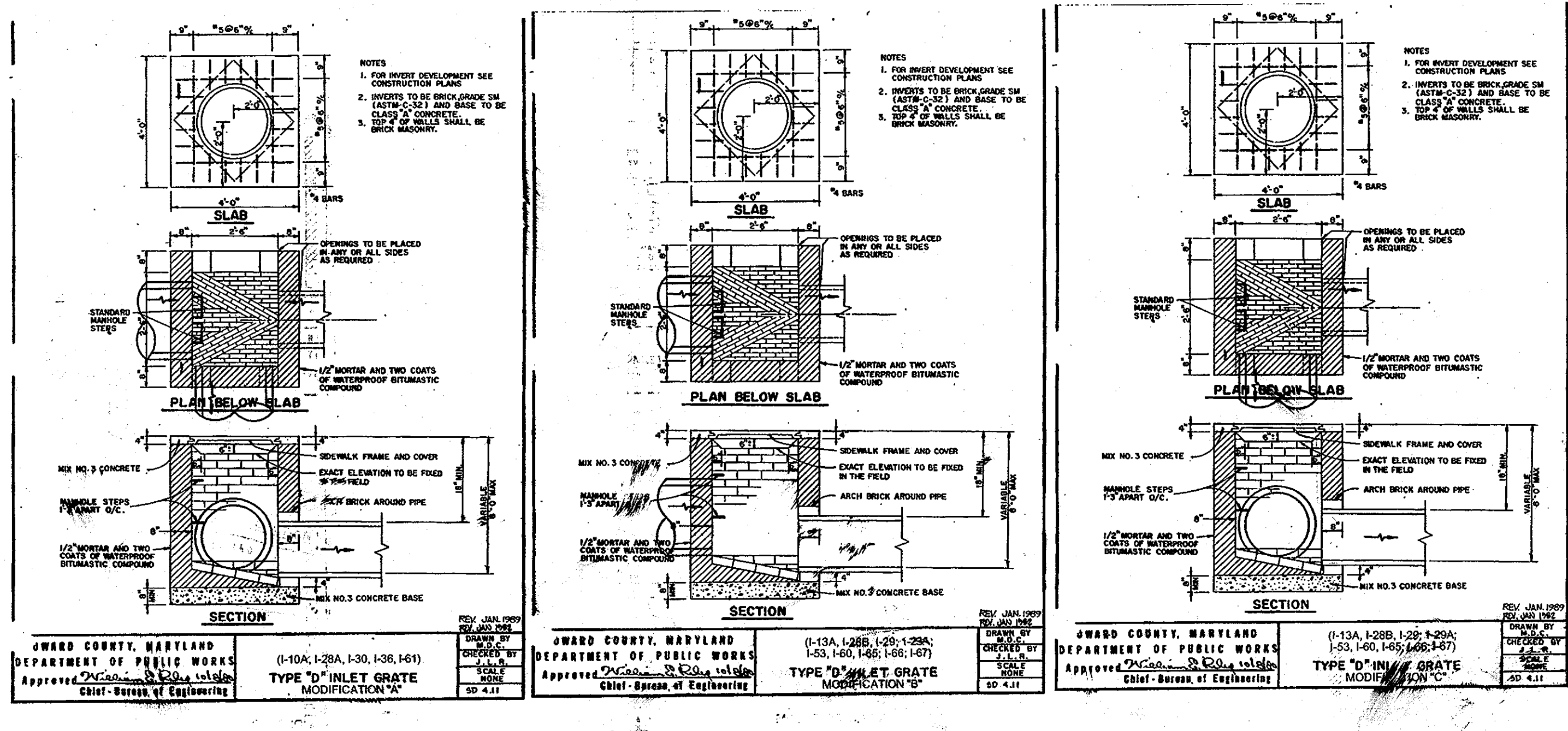
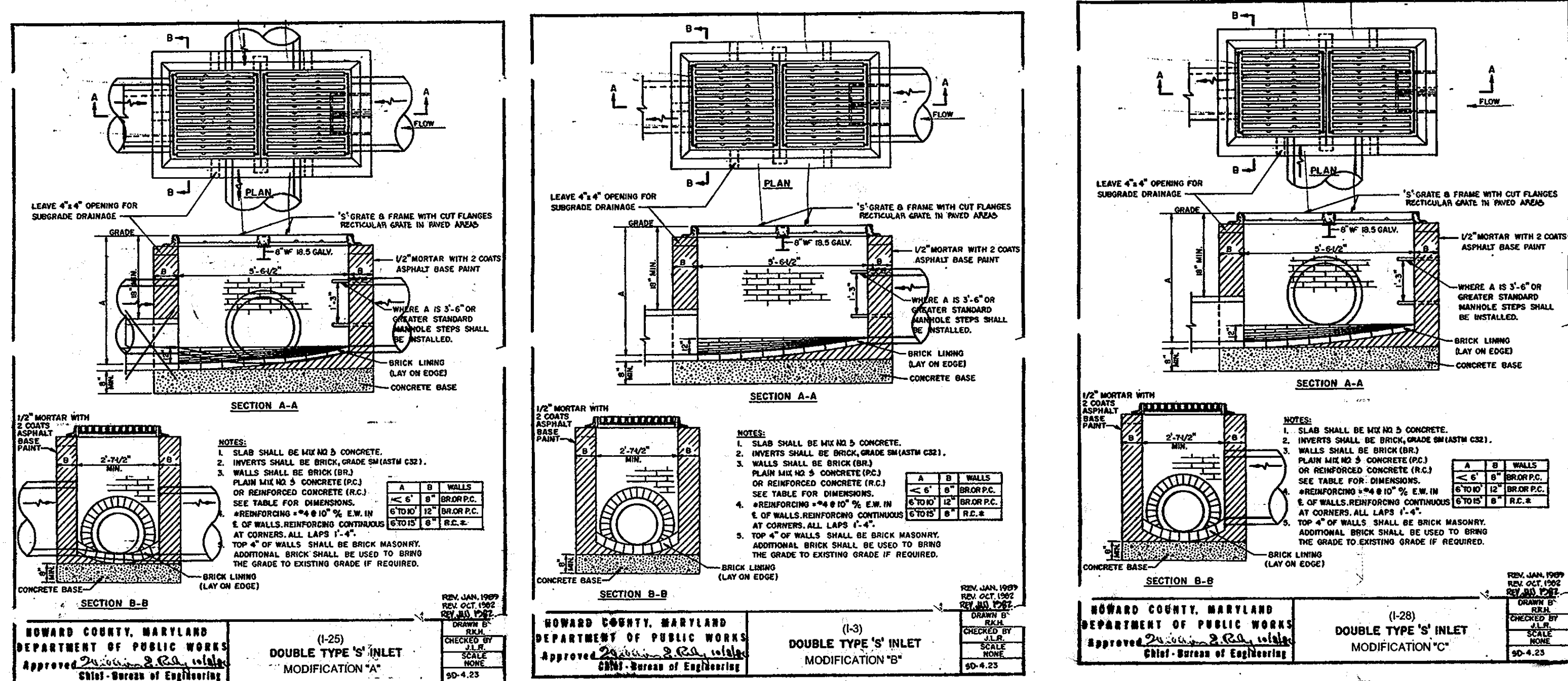
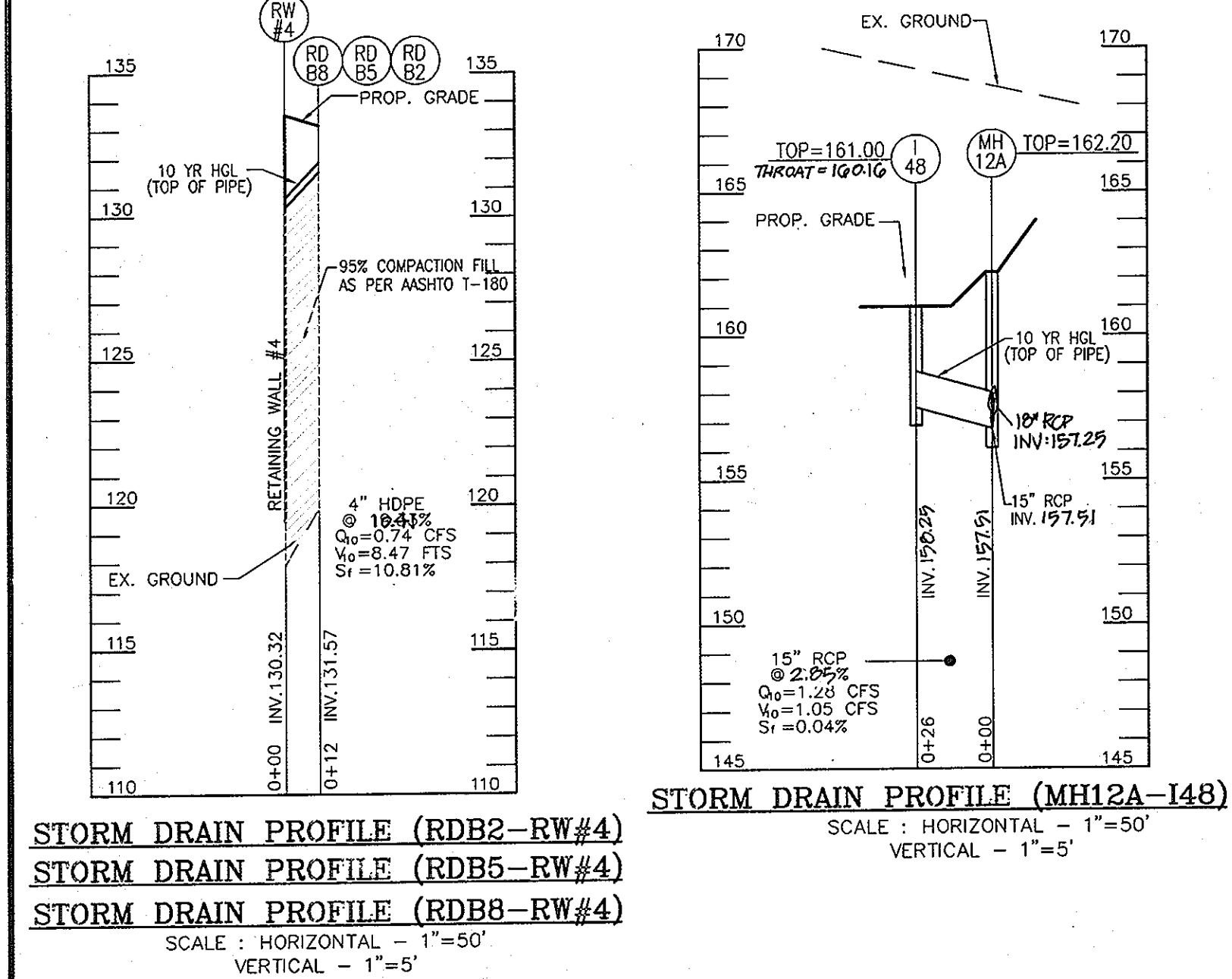
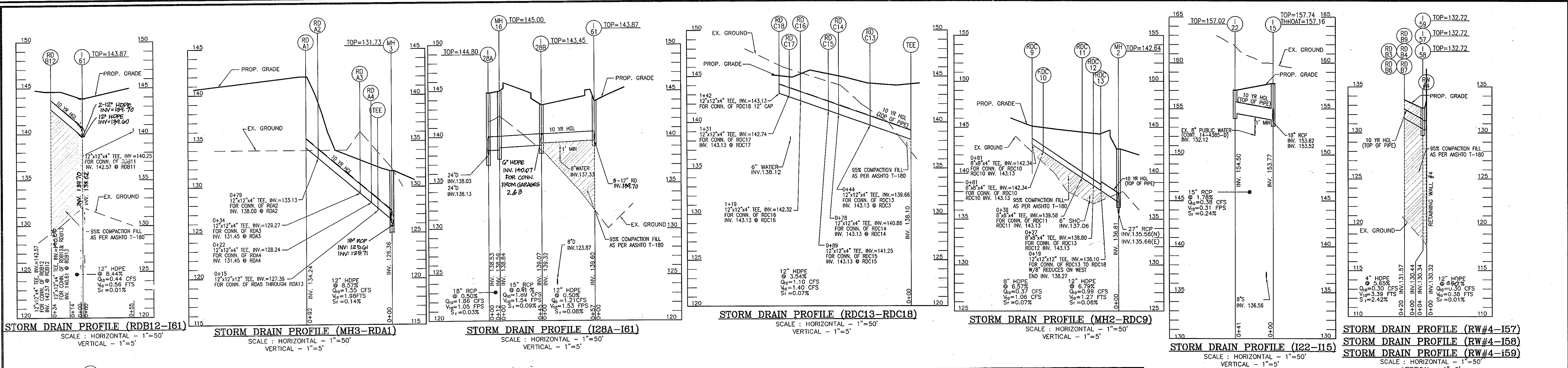
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OWNER/DEVELOPER
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 301 TRANSYLVANIA AVENUE RALEIGH, NC 27609 (919) 789-9289
 301 TRANSYLVANIA AVENUE RALEIGH, NC 27609 (919) 789-9289

DESIGN BY: WJZ
 DRAWN BY: DZ
 CHECKED BY:
 DATE: DECEMBER 7, 2008
 SCALE: AS SHOWN
 W.O. NO.: 04-08

20 SHEET OF 39

K:\Projects\04-08\ENGR\dwg\SDP\PHASE 1&2\CAD18-19-20-21_SDP\PROFILES.dwg, 17/6/2008 4:29:21 PM



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 12/10/06

CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 12/14/06

DIRECTOR

OWNER/DEVELOPER
ELKRIDGE DEVELOPMENT NO.2, LLC
301 TRANSYLVANIA AVENUE
RALEIGH, NC 27609
(919) 789-9289

2	ADD MISSING IMAGES, STORM DRAIN, REVISE WHO TO UNITS 97&98	1-26-00
	ADD SHK TO MAINTENANCE BUILDING, REVISE MAINTENANCE BLDG WHO	
	ADD DRAINS TO POOL AREA, MISC. STORM DRAIN CHANGES	
NO.	REVISION	DATE

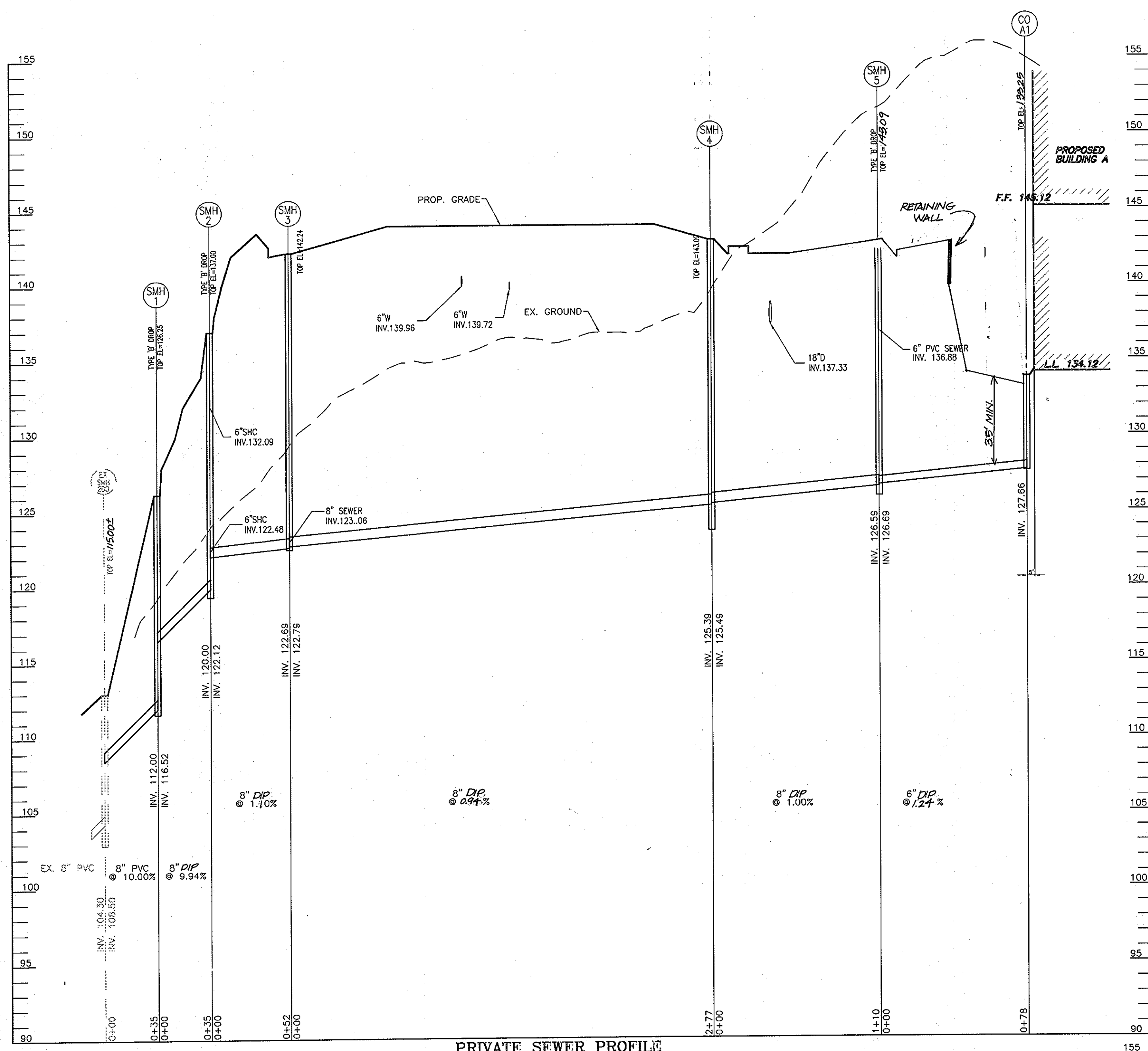
SITE DEVELOPMENT PLAN

BELMONT STATION (PHASES I, II, AND III)
PARCELS A, C AND OPEN SPACE LOT 1
REF: S-04-10, WP-04-152, WP-06-75, P-05-17, F-06-166, PLAT 18668-71
TAX MAP 37 BLOCK 18 PARCEL 196, 198, 199
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

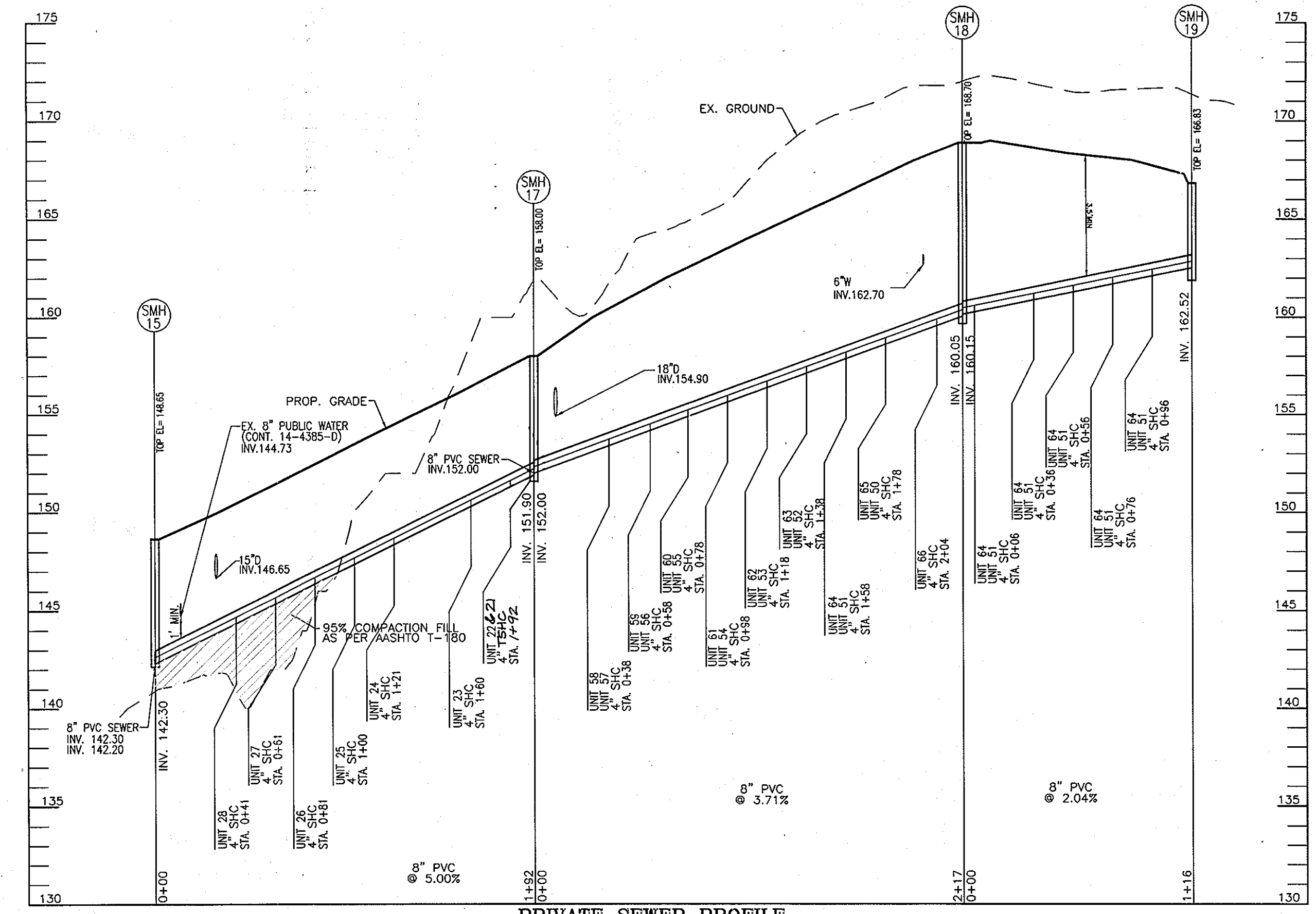
ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET ELLICOTT CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8961

DESIGN BY: WJZ
DRAWN BY: DZ
CHECKED BY: [Signature]
DATE: DECEMBER 7, 2006
SCALE:
W.O. NO.: 04-08

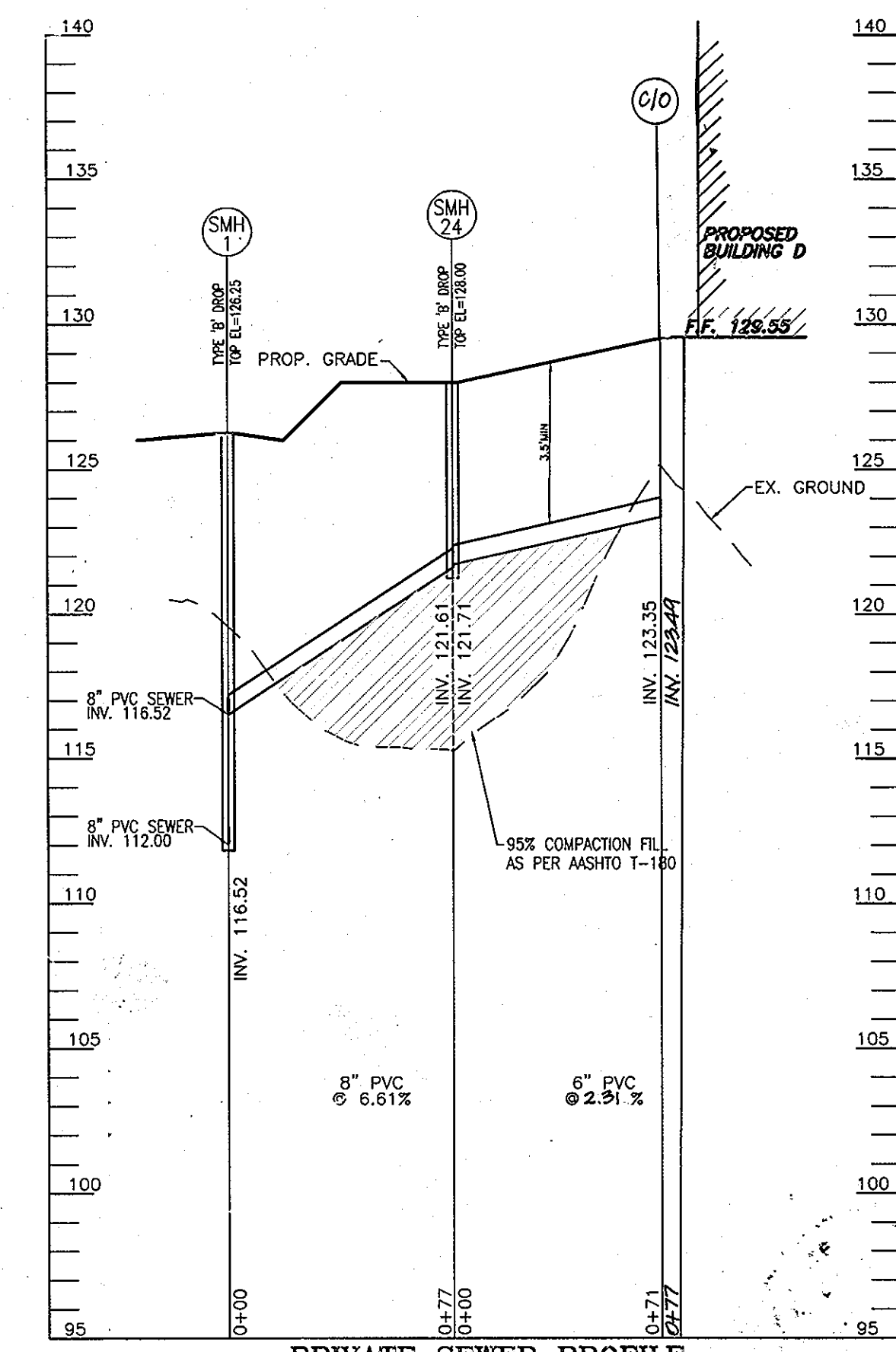
21 SHEET OF 39



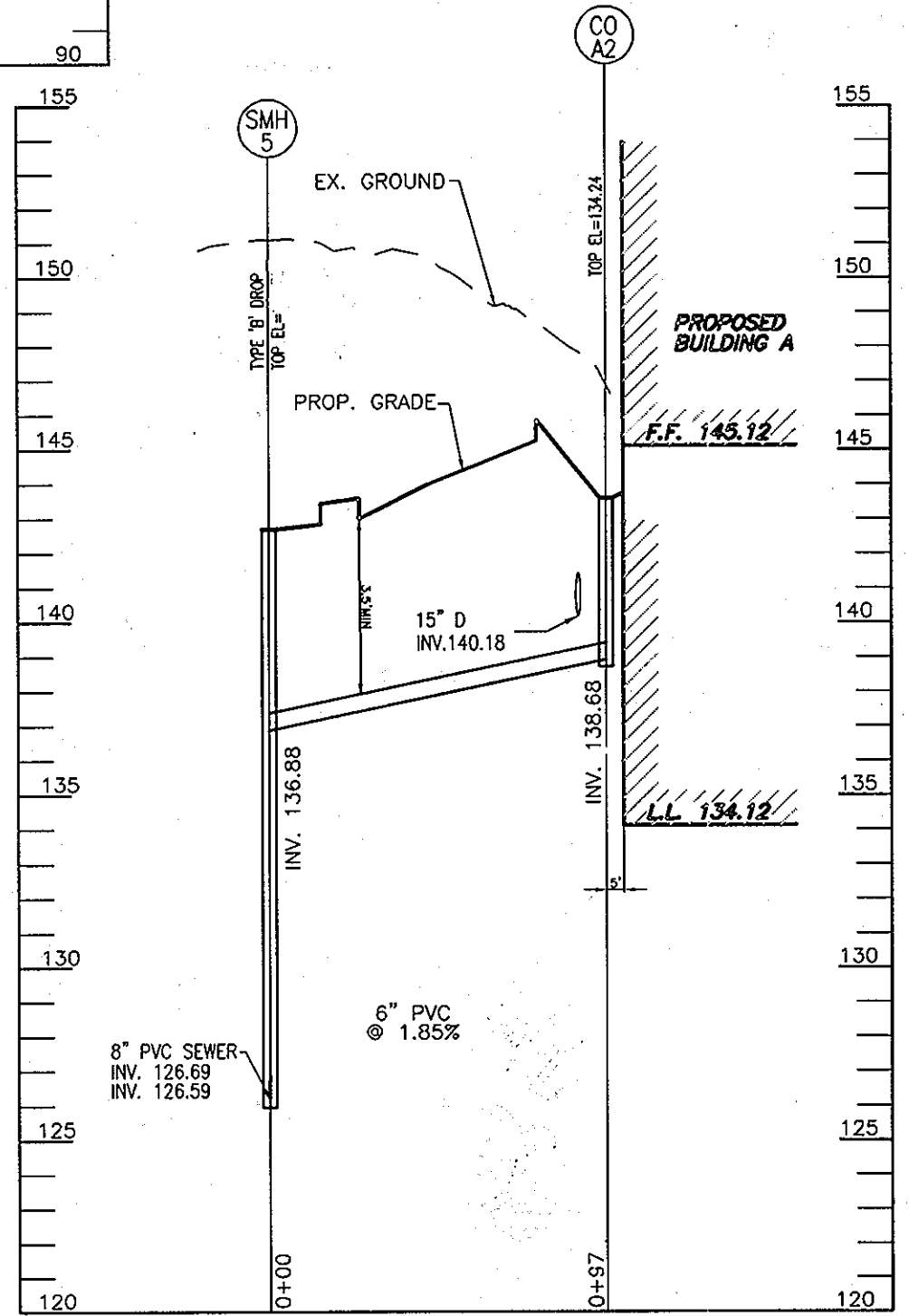
PRIVATE SEWER PROFILE
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'



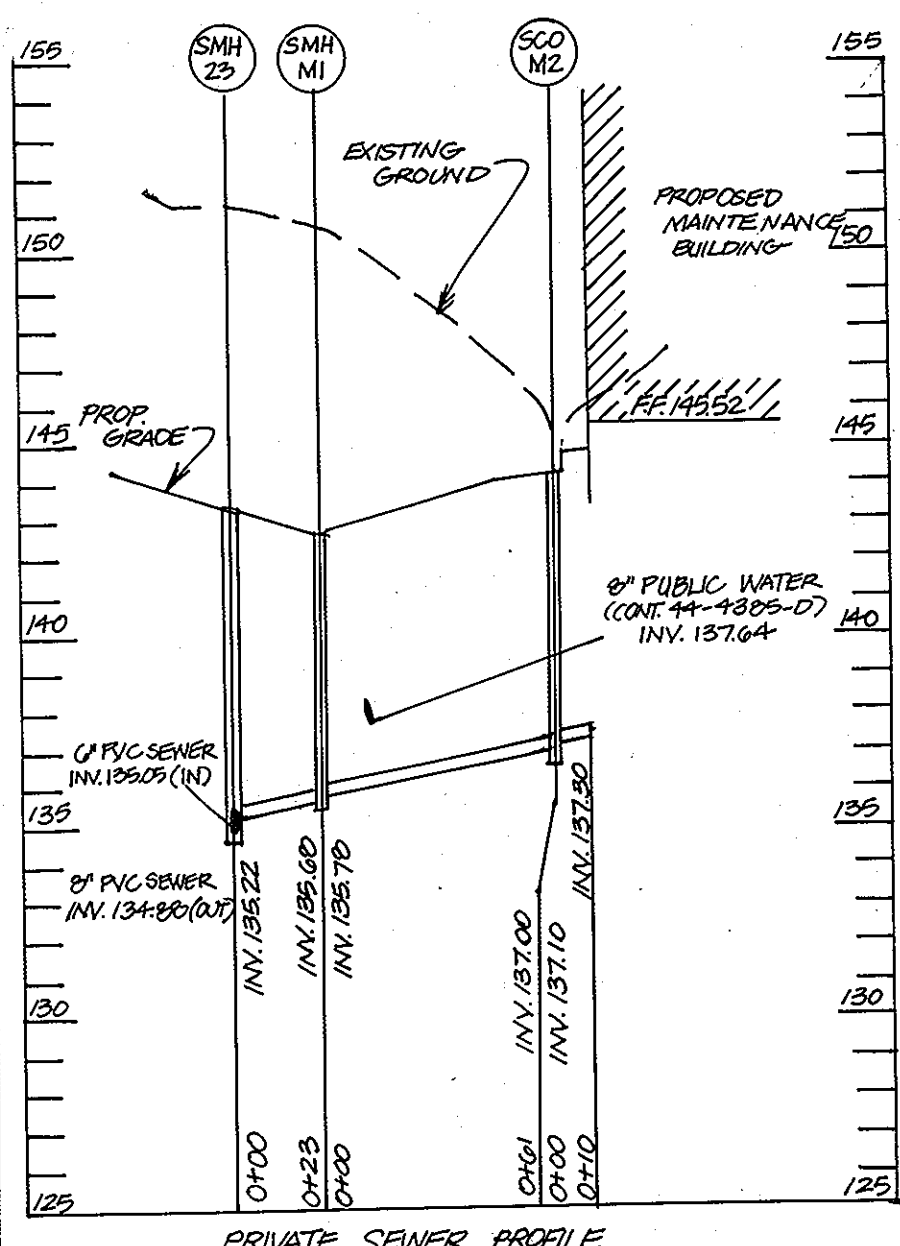
PRIVATE SEWER PROFILE
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'



PRIVATE SEWER PROFILE
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'

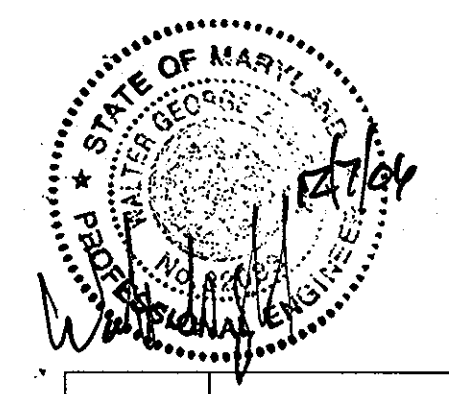


PRIVATE SEWER PROFILE
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'



PRIVATE SEWER PROFILE
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] 12/18/06
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 12/18/06
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 12/18/06
 DIRECTOR



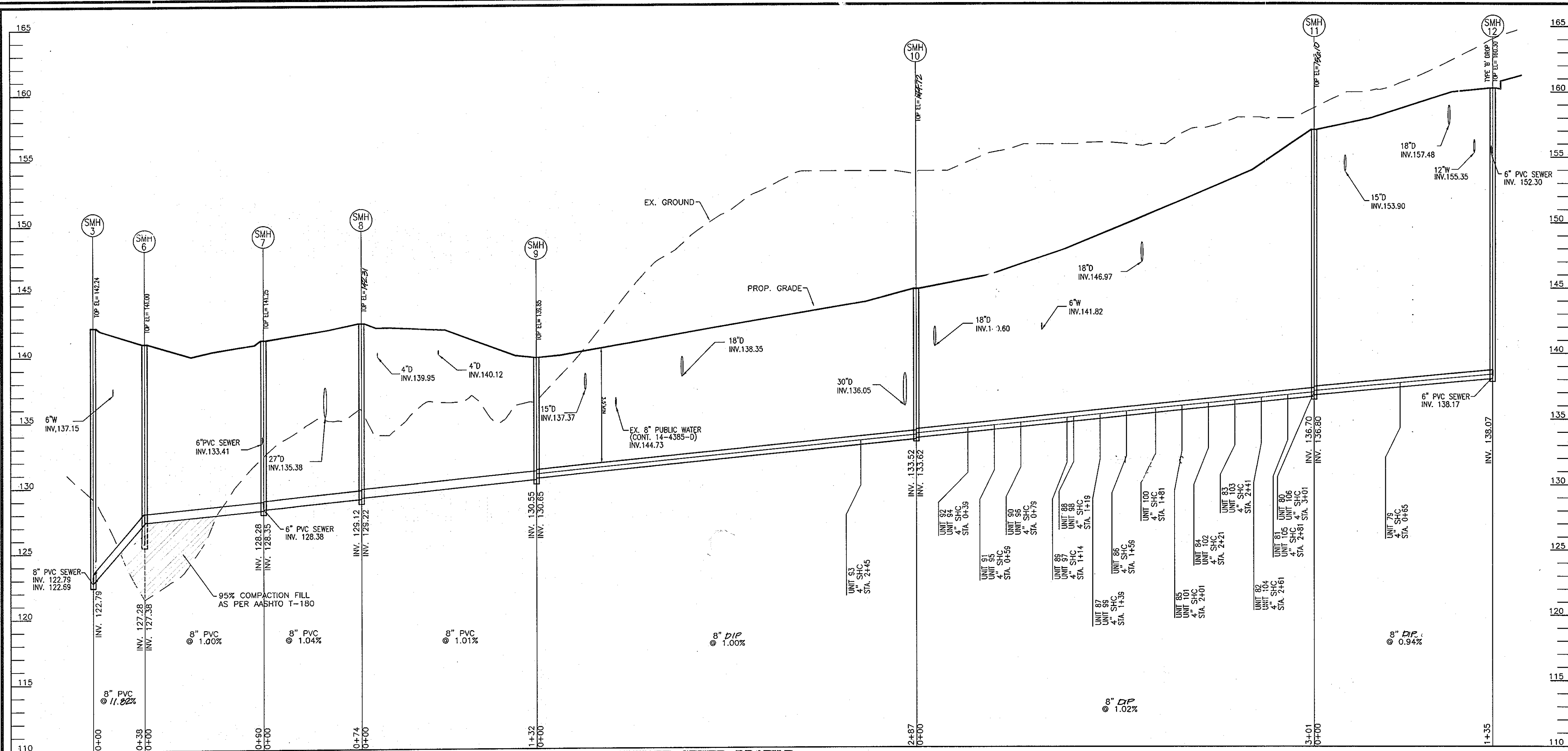
NO.	REVISION	DATE
2	ADD MISSING IMAGES, STORM DRAIN, REVISE WHC TO UNITS 97&98	1-28-08
	ADD SHC TO MAINTENANCE BLDG; REVISE MAINTENANCE BLDG WHO;	
	ADD DRAINS TO ROOL AREA; MISC STORM DRAIN CHANGES	

SITE DEVELOPMENT PLAN
 SEWER PROFILES
 BELMONT STATION (PHASES I, II, AND III)
 REF: S-04-10, WP-04-152, WP-06-79, P-05-17, F-05-169, PLAT 18688-71
 TAX MAP 37 BLOCK 18 PARCEL 196, 198, 199
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

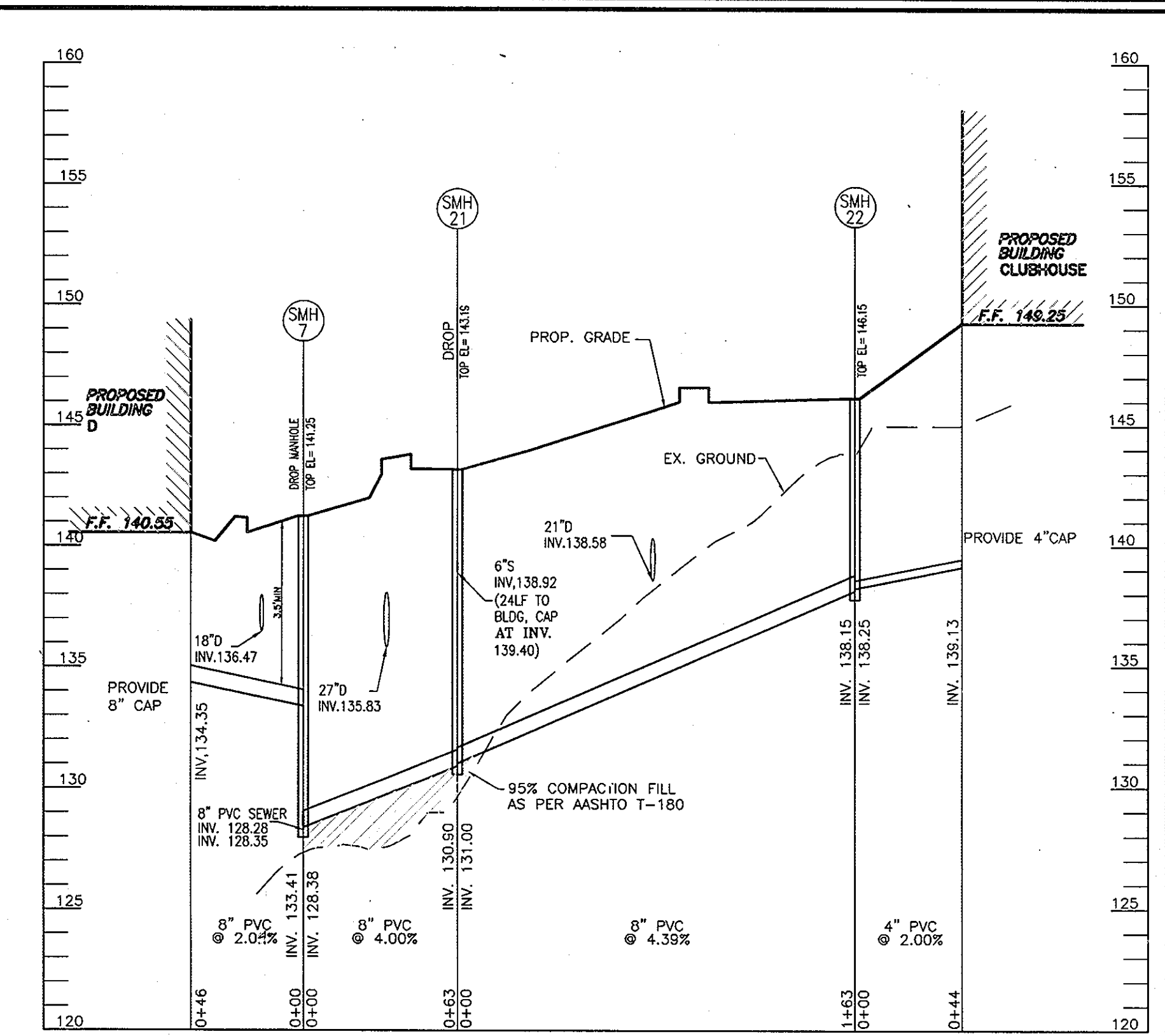
ROBERT H. VOGEL
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET TEL: 410.461.2666
 ELIGOTT CITY, MD 21043 FAX: 410.461.8961



DESIGN BY: WJZ
 DRAWN BY: DZ
 CHECKED BY: WJZ
 DATE: DECEMBER 7, 2006
 SCALE: AS SHOWN
 W.O. NO.: 04-08



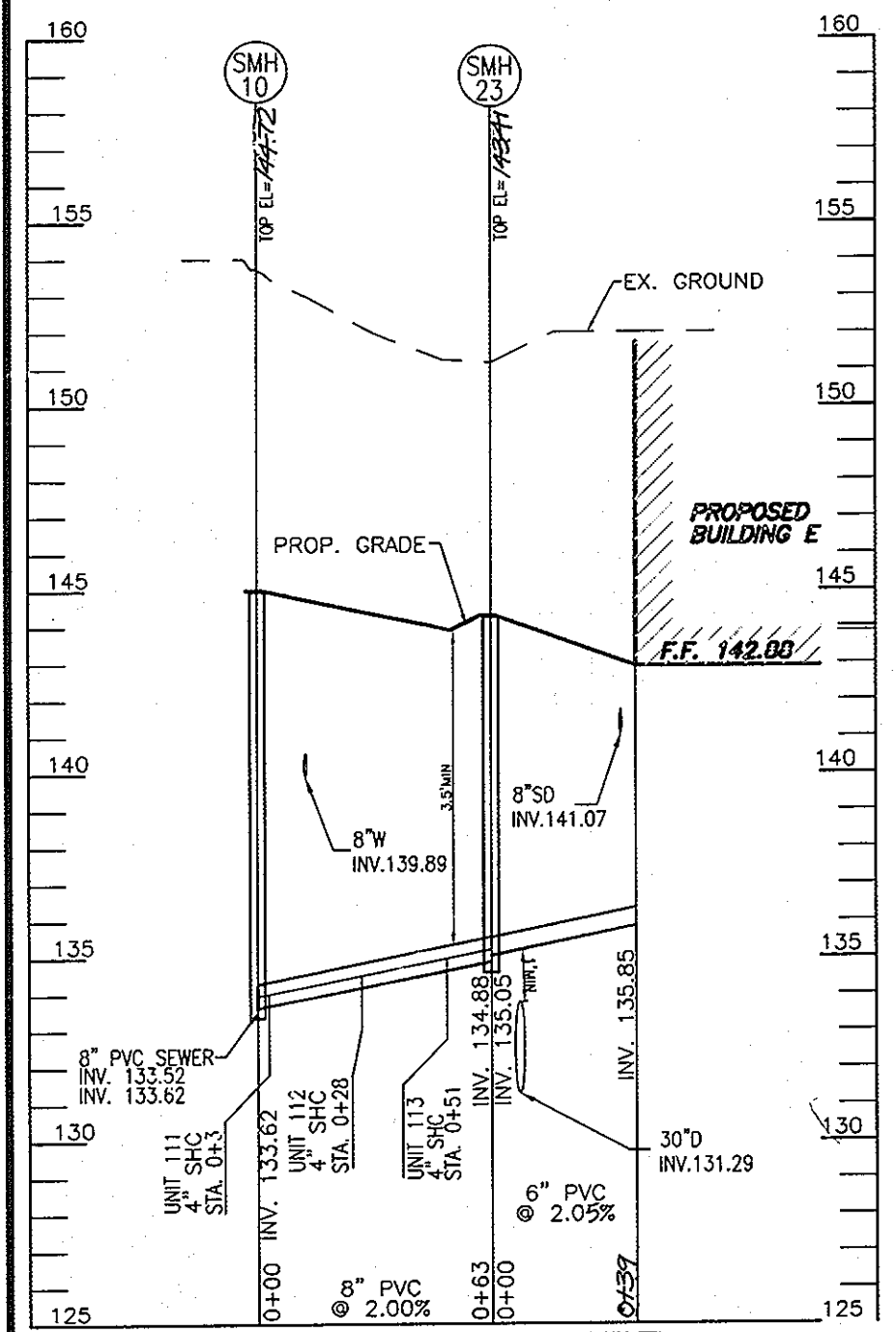
PRIVATE SEWER PROFILE
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'



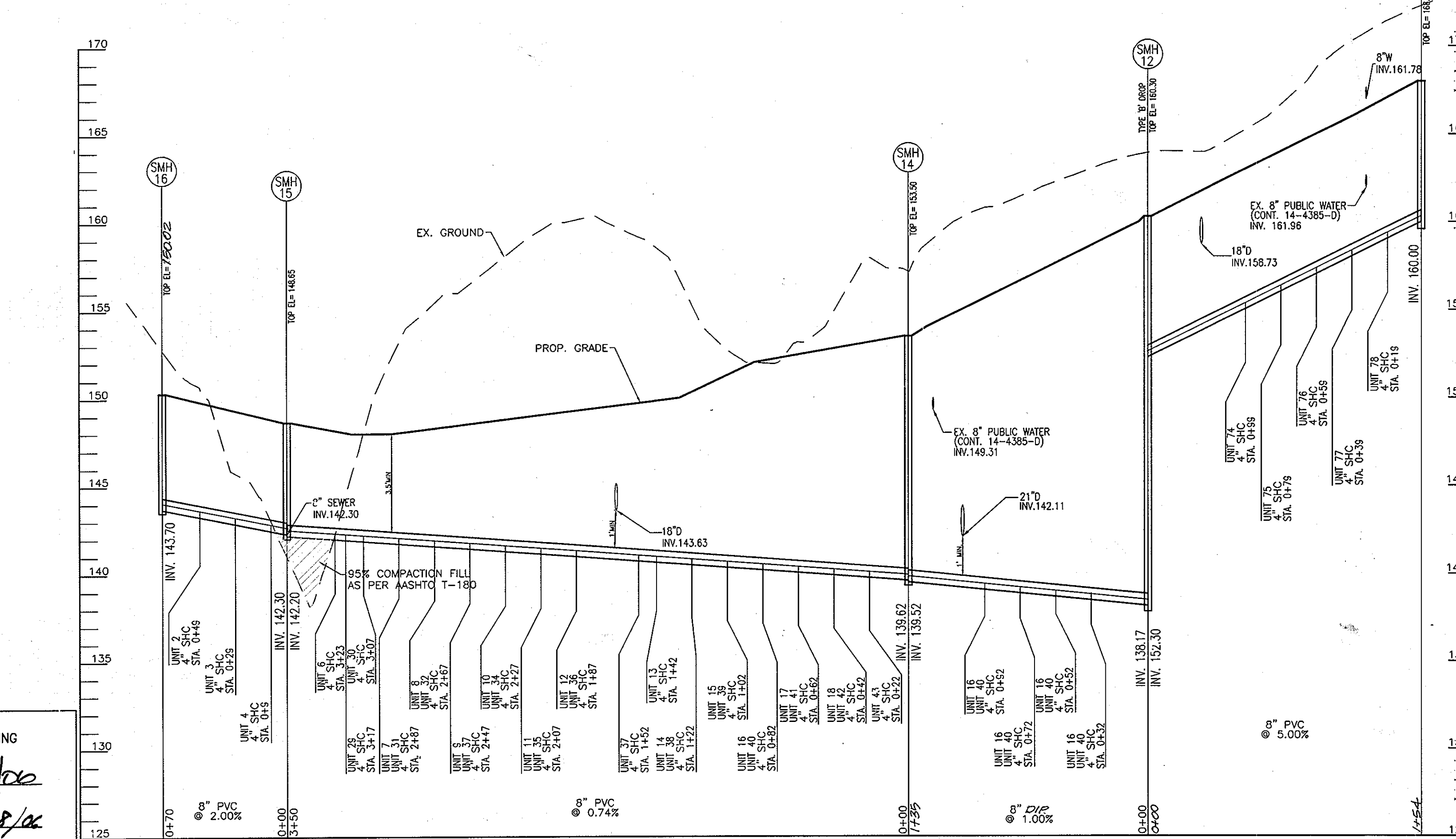
PRIVATE SEWER PROFILE
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'

STRUCTURE SCHEDULE							
NO.	TYPE	LOCATION	TOP ELEV.	INV. IN	INV. OUT	HO. CO. STD	COMMENTS
SMH-1	TYPE 'B' DROP	N 556179 E 1384230	126.25	116.52	112.00	HO. CO. STD S-1.32	
SMH-2	TYPE 'B' DROP	N 556149 E 1384213	137.00	127.25	120.00	HO. CO. STD S-1.32	
SMH-3		N 556100 E 1384229	142.24	132.79	122.69	HO. CO. STD G-5.12	
SMH-4		N 556011 E 1383966	143.00	125.49	125.39	HO. CO. STD G-5.12	
SMH-5	TYPE 'B' DROP	N 555902 E 1383961	143.00	138.88	128.59	HO. CO. STD S-1.32	
SMH-6		N 556113 E 1384266	141.00	127.38	127.28	HO. CO. STD G-5.12	
SMH-7	TYPE 'B' DROP	N 556028 E 1384295	141.25	138.34	128.28	HO. CO. STD S-1.32	
SMH-8		N 555958 E 1384318	142.21	129.22	129.12	HO. CO. STD. G-5.12	
SMH-9		N 556001 E 1384443	139.85	130.65	130.55	HO. CO. STD. G-5.12	
SMH-10		N 555729 E 1384535	144.72	133.62	133.52	HO. CO. STD. G-5.12	
SMH-11		N 555632 E 1384250	140.10	136.80	136.70	HO. CO. STD. G-5.12	
SMH-12	TYPE 'B' DROP	N 555589 E 1384122	160.30	152.30	138.07	HO. CO. STD. S-1.32	
SMH-13		N 555443 E 1384172	168.00	---	160.00	HO. CO. STD. G-5.12	
SMH-14		N 555717 E 1384079	153.50	139.62	139.52	HO. CO. STD. G-5.12	
SMH-15		N 555605 E 1383748	148.65	142.35	142.20	HO. CO. STD. G-5.12	
SMH-16		N 555582 E 1383682	150.30	---	143.70	HO. CO. STD. G-5.12	
SMH-17		N 555423 E 1383810	159.00	152.80	151.90	HO. CO. STD. G-5.12	
SMH-18		N 555440 E 1384027	169.70	160.15	160.05	HO. CO. STD. G-5.12	
SMH-19		N 555477 E 1384137	166.83	---	162.52	HO. CO. STD. G-5.12	
SMH-20		N 555372 E 1383827	160.80	---	153.08	HO. CO. STD. G-5.12	
SMH-21	TYPE 'B' DROP	N 548613 E 1361731	143.19	131.50	130.90	HO. CO. STD. S-1.32	
SMH-22		N 555938 E 1384090	146.15	138.25	138.15	HO. CO. STD. G-5.12	
SMH-23		N 555749 E 1384595	143.41	135.05	134.88	HO. CO. STD. G-5.12	
SMH-24		N 556137 E 1384295	128.00	121.71	121.61	HO. CO. STD. G-5.12	

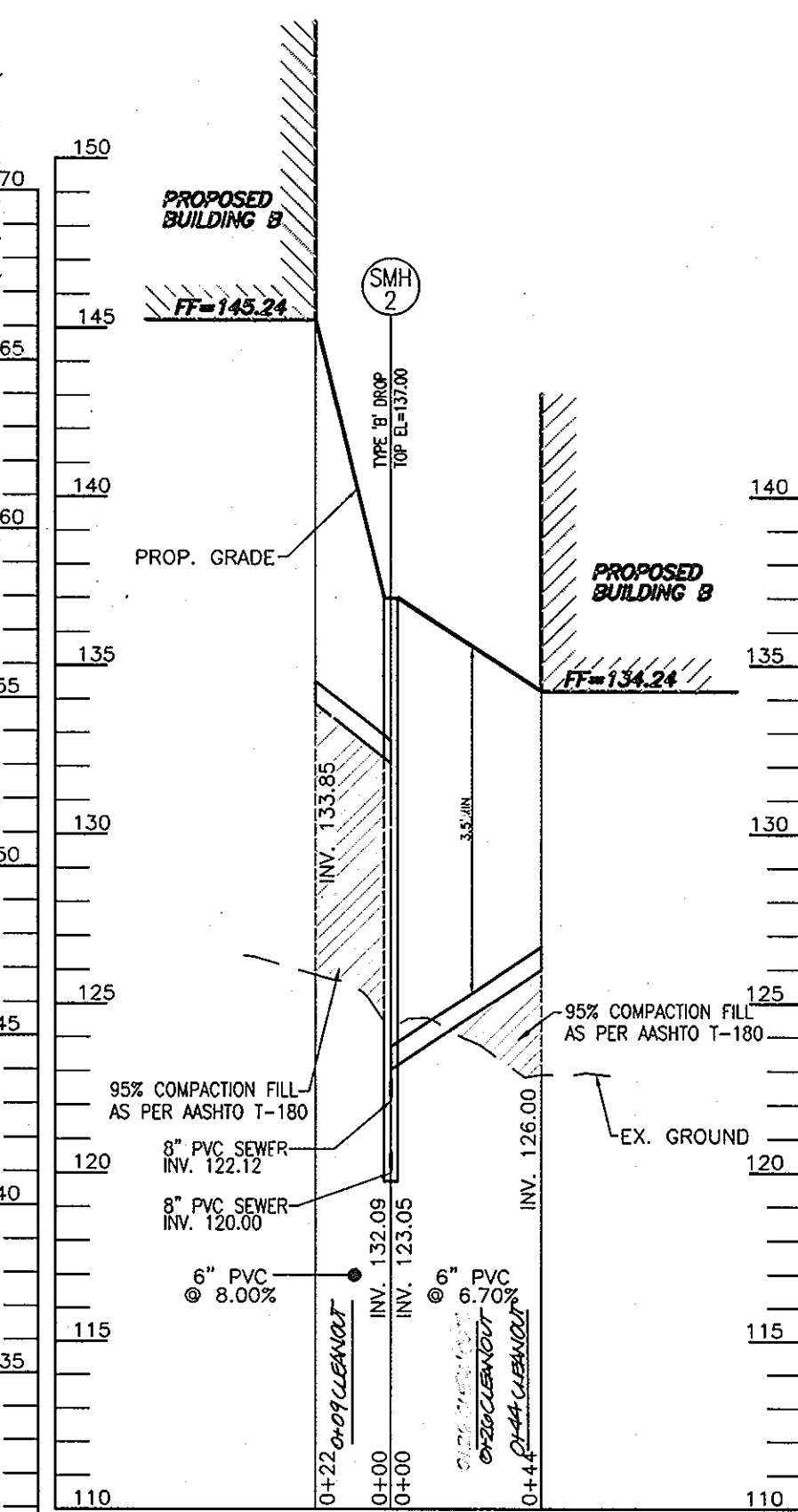
NOTE: 1. Top elevations are top of Manhole cover for Precast Manholes.
2. For top slab slopes see grading plan.
3. All custom structures, to be designed by a structural engineer.



PRIVATE SEWER PROFILE
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'



PRIVATE SEWER PROFILE
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'



PRIVATE SEWER PROFILE
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 12/18/06
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE 12/18/06
 DIRECTOR DATE 12/18/06

NO.	REVISION	DATE
1	ADD MISSING IMAGES, STORM DRAIN, REVERSE W/P TO UNITS 97 & 98	11/17/06
	ADD S&C TO MAINTENANCE BUILDING, REVERSE MAINTENANCE BUILDING	
	W/P, ADD DRAINS TO POOL AREA, MISC. STORM DRAIN CHANGES	

SITE DEVELOPMENT PLAN
SEWER PROFILES
BELMONT STATION (PHASES I, II, AND III)
 REF: S-04-10, WP-04-152, WP-06-79, P-05-17, F-06-169, PLAT 18668-71
 PARCELS A, C AND OPEN SPACE LOT 1
 TAX MAP 37 BLOCK 18 PARCEL 158, 159, 159'
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET TEL: 410.461.7666
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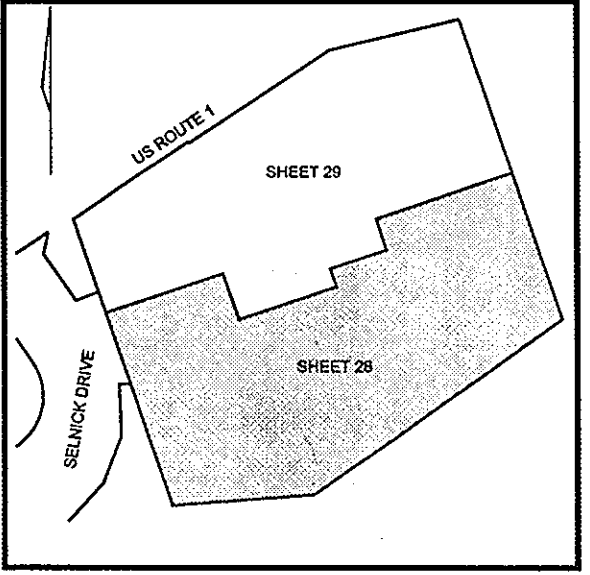
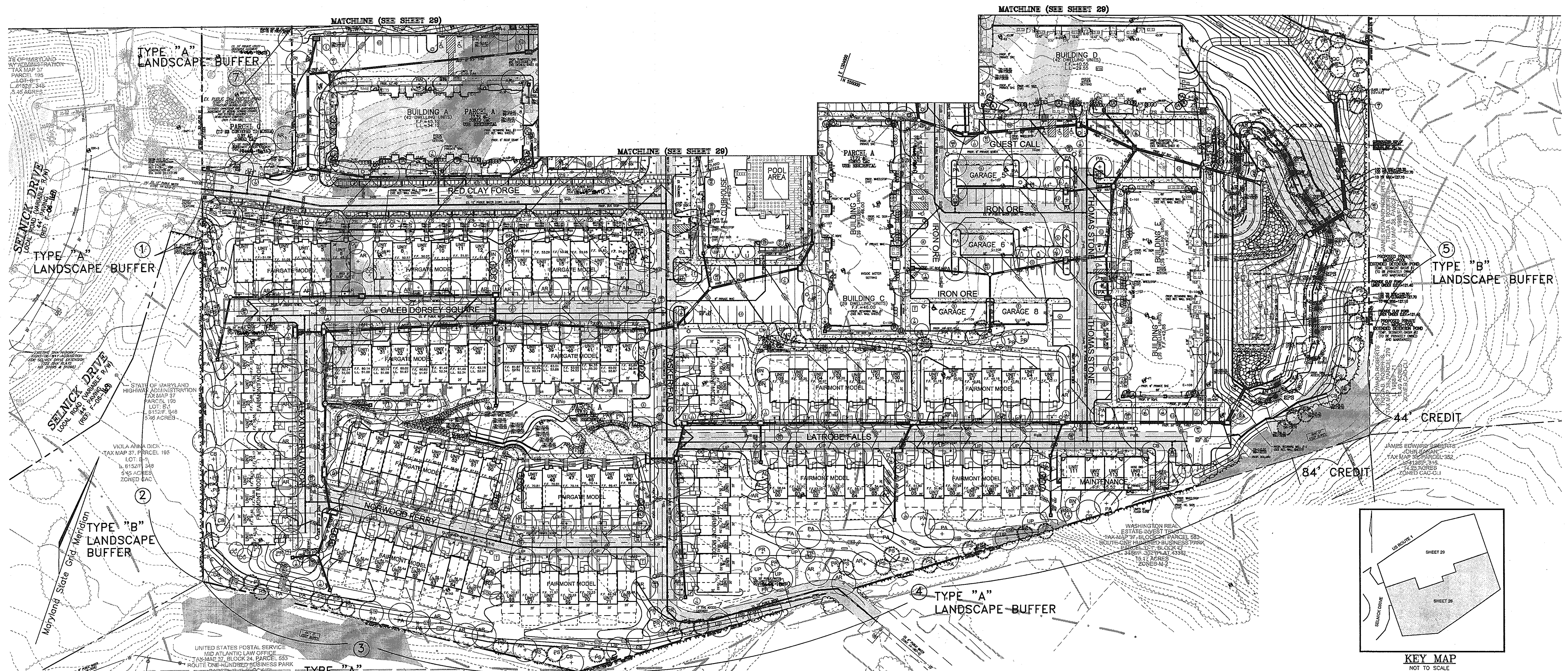
DESIGN BY: WJZ
 DRAWN BY: DZ
 CHECKED BY: WJZ
 DATE: DECEMBER 7, 2006
 SCALE: AS SHOWN
 W.C. NO.: 04-08

SEWER HOUSE CONNECTION SCHEDULE											
UNIT NO.	TYPE	ELEV. @ MAIN	CO INV. IN	CO INV. OUT	MCE	UNIT NO.	TYPE	ELEV. @ MAIN	CO INV. IN	CO INV. OUT	MCE
1	SHC	144.14	-	-	147.58	58	SHC	153.44	-	-	157.06
2	SHC	143.56	-	-	146.96	59	SHC	154.16	-	-	157.80
3	SHC	143.16	-	-	146.60	60	SHC	154.92	-	-	158.54
4	SHC	142.76	-	-	146.16	61	SHC	155.66	-	-	159.28
5	SHC	142.74	-	-	146.18	62	SHC	156.40	-	-	160.02
6	SHC	142.26	-	-	145.66	63	SHC	157.14	-	-	160.76
7	SHC	141.81	-	-	145.23	64	SHC	157.88	-	-	161.50
8	SHC	141.66	-	-	145.08	65	SHC	158.61	-	-	162.23
9	SHC	141.51	-	-	144.93	66	SHC	159.58	160.15	160.05	163.24
10	SHC	141.36	-	-	144.78	67	SHC	160.27	-	-	163.89
11	SHC	141.20	-	-	144.62	68	SHC	160.89	-	-	164.51
12	SHC	141.05	-	-	144.47	69	SHC	161.30	-	-	164.92
13	SHC	140.71	-	-	144.13	70	SHC	161.71	-	-	165.33
14	SHC	140.56	-	-	143.98	71	SHC	162.11	-	-	165.73
15	SHC	140.40	-	-	143.82	72	SHC	162.52	-	-	166.14
16	SHC	140.25	-	-	143.67	73	SHC	163.11	-	-	166.81
17	SHC	140.10	-	-	143.52	74	SHC	162.09	-	-	165.79
18	SHC	139.95	-	-	143.37	75	SHC	161.07	-	-	164.77
19	SHC	154.80	-	-	158.50	76	SHC	160.06	-	-	163.76
20	SHC	153.46	-	-	157.16	77	SHC	159.04	-	-	162.74
21	SHC	152.41	-	-	156.11	78	SHC	158.02	-	-	161.72
22	SHC	151.29	-	-	154.99	79	SHC	137.46	-	-	140.76
23	SHC	150.30	-	-	154.00	80	SHC	136.70	-	-	140.30
24	SHC	148.36	-	-	152.06	81	SHC	136.50	-	-	140.10
25	SHC	147.36	-	-	151.06	82	SHC	136.29	-	-	139.89
26	SHC	146.37	-	-	150.07	83	SHC	136.09	-	-	139.69
27	SHC	145.37	-	-	149.07	84	SHC	135.88	-	-	139.48
28	SHC	144.38	-	-	148.08	85	SHC	135.68	-	-	139.28
29	SHC	142.04	-	-	145.82	86	SHC	135.25	-	-	138.85
30	SHC	141.97	-	-	145.75	87	SHC	135.04	-	-	138.64
31	SHC	141.81	-	-	145.59	88	SHC	134.84	-	-	138.44
32	SHC	141.66	-	-	145.44	89	SHC	134.79	-	-	138.39
33	SHC	141.51	-	-	145.29	90	SHC	134.43	-	-	138.03
34	SHC	141.36	-	-	145.14	91	SHC	134.22	-	-	137.82
35	SHC	141.20	-	-	144.98	92	SHC	134.02	-	-	137.62
36	SHC	141.05	-	-	144.83	93	SHC	133.08	-	-	136.10
37	SHC	140.79	-	-	144.57	94	SHC	134.02	-	-	137.44
38	SHC	140.56	-	-	144.34	95	SHC	134.22	-	-	137.64
39	SHC	140.40	-	-	144.18	96	SHC	134.43	-	-	137.85
40	SHC	140.25	-	-	144.03	97	SHC	134.79	-	-	138.21
41	SHC	140.10	-	-	143.88	98	SHC	134.84	-	-	138.26
42	SHC	139.95	-	-	143.73	99	SHC	135.04	-	-	138.46
43	SHC	139.79	-	-	143.57	100	SHC	135.47	-	-	138.89
44	SHC	162.52	-	-	166.02	101	SHC	135.68	-	-	139.10
45	SHC	162.11	-	-	165.61	102	SHC	135.88	-	-	139.30
46	SHC	161.71	-	-	165.21	103	SHC	136.09	-	-	139.51
47	SHC	161.30	-	-	164.80	104	SHC	136.29	-	-	139.71
48	SHC	150.89	-	-	164.39	105	SHC	136.50	-	-	139.92
49	SHC	150.27	-	-	163.77	106	SHC	136.70	-	-	140.12
50	SHC	158.61	-	-	162.09	107	SHC	138.51	-	-	142.21
51	SHC	157.88	-	-	161.36	108	SHC	138.71	-	-	142.41
52	SHC	157.14	-	-	160.62	109	SHC	138.91	-	-	142.61
53	SHC	156.40	-	-	159.88	110	SHC	139.11	-	-	142.81
54	SHC	155.66	-	-	159.14	111	SHC	227.74	-	-	231.34
55	SHC	154.92	-	-	158.40	112	SHC	228.27	-	-	231.67
56	SHC	154.18	-	-	157.66	113	SHC	230.52	-	-	233.50
57	SHC	153.44	-	-	156.92	114	SHC	231.06	-	-	234.50

STRUCTURE SCHEDULE						
NO.	TYPE	LOCATION	TOP ELEV.	INV. IN	INV. OUT	COMMENTS
1-1	DOUBLE TYPE 'S' COMB INLET		131.05	-	127.72	HO. CO. STD SD-4.24
1-3	DOUBLE TYPE 'S' INLET		132.20	127.20	127.20	HO. CO. STD SD-4.24
1-4	TYPE 'A-10' INLET		133.83	133.83	133.83	HO. CO. STD SD-4.41
1-5	TYPE 'A-5' INLET		146.17	141.72	141.47	HO. CO. STD SD-4.40
1-6	TYPE 'A-5' INLET		146.76	144.84	144.84	HO. CO. STD SD-4.40
1-7A	TYPE 'A-5' INLET		141.03	136.14	136.14	HO. CO. STD SD-4.40
1-8	TYPE 'A-5' INLET		141.06	137.24	137.24	HO. CO. STD SD-4.40
1-9	TYPE 'A-10' INLET		144.70	144.82	144.82	HO. CO. STD SD-4.41
1-10	YARD INLET		143.76	-	140.28	HO. CO. STD SD-4.14
1-10A	TYPE 'D' INLET - 4 OPENINGS		143.76	138.24	138.24	HO. CO. STD SD-4.24
1-11	TYPE 'A-5' INLET		149.00	-	140.24	HO. CO. STD SD-4.40
1-12	TYPE 'A-5' INLET		140.13	134.84	134.84	HO. CO. STD SD-4.40
1-13	TYPE 'A-5' INLET		145.34	137.04	137.04	HO. CO. STD SD-4.40
1-13A	TYPE 'D' INLET - 2 OPENINGS		145.67	141.64	141.64	HO. CO. STD SD-4.24
1-14	TYPE 'A-10' INLET		150.58	146.57	146.57	HO. CO. STD SD-4.41
1-15	TYPE 'A-5' INLET		157.74	155.56	155.56	HO. CO. STD SD-4.40
1-16	TYPE 'A-5' INLET		162.23	158.80	158.80	HO. CO. STD SD-4.40
1-17	TYPE 'A-10' INLET		162.23	158.28	158.28	HO. CO. STD SD-4.41
1-18	TYPE 'D' INLET - 4 OPENINGS		153.70	150.28	150.28	HO. CO. STD SD-4.24
1-19	TYPE 'D' INLET - 4 OPENINGS		153.48	147.16	147.16	HO. CO. STD SD-4.24
1-20	TYPE 'A-10' INLET		151.46	148.11	147.88	HO. CO. STD SD-4.41
1-21	TYPE 'D' INLET - 4 OPENINGS		159.31	155.31	155.31	HO. CO. STD SD-4.24
1-22	YARD INLET		152.09	-	154.54	HO. CO. STD SD-4.14
1-23	TYPE 'A-5' INLET		160.41	157.20	157.20	HO. CO. STD SD-4.40
1-24	TYPE 'S' INLET		166.30	-	165.44	HO. CO. STD SD-4.22
1-25	DEL. TYPE 'S' INLET		138.53	138.11	137.74	HO. CO. STD SD-4.22
1-26	TYPE 'A-5' INLET		139.94	138.26	138.26	HO. CO. STD SD-4.40
1-27	TYPE 'A-5' INLET		142.30	138.18	138.18	HO. CO. STD SD-4.40
1-28	DOUBLE TYPE 'S' INLET		141.86	139.40	139.40	HO. CO. STD SD-4.23
1-28A	TYPE 'S' INLET		143.43	138.20	138.20	HO. CO. STD SD-4.22
1-28B	TYPE 'S' INLET		144.80	138.79	138.64	HO. CO. STD SD-4.22
1-29	TYPE 'S' INLET		144.00	138.20	138.04	HO. CO. STD SD-4.22
1-29A	TYPE 'S' INLET		144.00	138.79	138.64	HO. CO. STD SD-4.22
1-30	TYPE 'S' INLET		144.00	138.79	138.64	HO. CO. STD SD-4.22
1-31	TYPE 'A-5' INLET		146.81	141.94	141.94	HO. CO. STD SD-4.40
1-32	TYPE 'A-5' INLET		152.94	141.81	141.81	HO. CO. STD SD-4.40
1-33	TYPE 'A-5' INLET		155.84	142.51	142.51	HO. CO. STD SD-4.40
1-34	TYPE 'A-5' INLET		140.04	138.44	138.44	HO. CO. STD SD-4.40
1-35	TYPE 'A-5' INLET		142.16	139.40	139.40	HO. CO. STD SD-4.40
1-36	YARD INLET		143.80	-	140.28	HO. CO. STD SD-4.22
1-36A	YARD INLET		142.58	139.58	139.58	HO. CO. STD SD-4.40
1-37	TYPE 'A-5' INLET		140.81	137.82	137.82	HO. CO. STD SD-4.40
1-38	TYPE 'A-5' INLET		140.14	136.81	136.81	HO. CO. STD SD-4.40
1-39	YARD INLET		143.94	-	140.54	HO. CO. STD SD-4.14
1-41	TYPE 'A-5' INLET		151.13	144.24	144.14	HO. CO. STD SD-4.40
1-42	TYPE 'A-5' INLET		148.73	144.00	144.00	HO. CO. STD SD-4.40
1-43	TYPE 'D' INLET - 4 OPENINGS		158.30	152.28	152.28	HO. CO. STD SD-4.24
1-44	TYPE 'A-5' INLET		159.07	143.28	143.28	HO. CO. STD SD-4.40
1-45	TYPE 'A-5' INLET		158.41	142.51	142.51	HO. CO. STD SD-4.40
1-46	TYPE 'A-10' INLET		157.78	154.21	154.21	HO. CO. STD SD-4.41
1-47	TYPE 'A-10' INLET		160.23	156.65	156.65	HO. CO. STD SD-4.41
1-48	TYPE 'D' INLET - 4 OPENINGS		161.00	156.28	156.28	HO. CO. STD SD-4.24
1-49	TYPE 'D' INLET - 4 OPENINGS		168.22	148.22	148.22	HO. CO. STD SD-4.24
1-50	TYPE 'A-10' INLET		160.41	148.81	148.81	HO. CO. STD SD-4.41
1-51	TYPE 'D' INLET - 2 OPENINGS		153.00	150.06	150.06	HO. CO. STD SD-4.24
1-52	DOUBLE TYPE 'S' COMB INLET		142.24	138.94	138.94	HO. CO. STD SD-4.23
1-53	YARD INLET		148.28	146.08	145.58	HO. CO. STD SD-4.14
1-54	YARD INLET		143.80	141.46	141.36	HO. CO. STD SD-4.14
1-55	YARD INLET		131.95	129.70	129.48	HO. CO. STD SD-4.14
1-56	YARD INLET		132.72	131.30	130.94	HO. CO. STD SD-4.14
1-57	YARD INLET		132.72	130.40	130.34	HO. CO. STD SD-4.14
1-58	YARD INLET		132.72	130.40	130.34	HO. CO. STD SD-4.14
1-59	YARD INLET		132.72	130.40	130.34	HO. CO. STD SD-4.14
1-60	YARD INLET		143.87	140.42	140.34	HO. CO. STD SD-4.14
1-61	YARD INLET		143.87	139.78	139.70	HO. CO. STD SD-4.14
1-62	YARD INLET		138.88	137.23	136.84	HO. CO. STD SD-4.14
1-63	YARD INLET		138.28	137.50	137.34	HO. CO. STD SD-4.14
1-64	YARD INLET		142.00	-	137.54	HO. CO. STD SD-4.14
1-65	YARD INLET		142.00	135.76	135.64	HO. CO. STD SD-4.14
1-66	YARD INLET		142.00	135.91	134.81	HO. CO. STD SD-4.14
1-67	YARD INLET		142.00	132.27	131.87	HO. CO. STD SD-4.14
M-1	4'-0" STANDARD PRECAST MANHOLE		162.50	162.50	162.50	HO. CO. STD G-5.12
M-2	4'-0" STANDARD PRECAST MANHOLE		142.84	142.84	142.84	HO. CO. STD G-5.12
M-3	4'-0" STANDARD PRECAST MANHOLE		131.73	131.73	131.73	HO. CO. STD G-5.12
M-4	4'-0" STANDARD PRECAST MANHOLE		139.52	139.52	139.52	HO. CO. STD G-5.12
M-5	4'-0" STANDARD PRECAST MANHOLE		141.15	141.15	141.15	HO. CO. STD G-5.12
M-6	4'-0" STANDARD PRECAST MANHOLE		144.94	144.94	144.94	HO. CO. STD G-5.12
M-7	4'-0" STANDARD PRECAST MANHOLE		150.27	150.27	150.27	HO. CO. STD G-5.12
M-8	4'-0" STANDARD PRECAST MANHOLE		138.88	138.88	138.88	HO. CO. STD G-5.12
M-9	4'-0" STANDARD PRECAST MANHOLE		138.28	138.28	138.28	HO. CO. STD G-5.12
M-10	4'-0" STANDARD PRECAST MANHOLE		140.71	140.71	140.71	HO. CO. STD G-5.12
M-11	4'-0" STANDARD PRECAST MANHOLE		140.71	140.71	140.71	HO. CO. STD G-5.12
M-12	4'-0" STANDARD PRECAST MANHOLE		140.71	140.71	140.71	HO

SEWER HOUSE CONNECTION SCHEDULE											
UNIT NO.	TYPE	ELEV. @ MAIN	CO INV. IN	CO INV. OUT	MCE	UNIT NO.	TYPE	ELEV. @ MAIN	CO INV. IN	CO INV. OUT	MCE
1	SHC	144.14	-	-	147.58	58	SHC	153.44	-	-	157.06
2	SHC	143.56	-	-	146.96	59	SHC	154.18	-	-	157.80
3	SHC	143.16	-	-	146.60	60	SHC	154.92	-	-	158.54
4	SHC	142.76	-	-	146.16	61	SHC	155.66	-	-	159.28
5	SHC	142.74	-	-	146.18	62	SHC	156.40	-	-	160.02
6	SHC	142.26	-	-	145.66	63	SHC	157.14	-	-	160.76
7	SHC	141.81	-	-	145.23	64	SHC	157.88	-	-	161.50
8	SHC	141.66	-	-	145.08	65	SHC	158.62	-	-	162.24
9	SHC	141.51	-	-	144.93	66	SHC	159.36	160.15	160.05	163.24
10	SHC	141.36	-	-	144.78	67	SHC	160.27	-	-	163.89
11	SHC	141.20	-	-	144.62	68	SHC	160.89	-	-	164.51
12	SHC	141.05	-	-	144.47	69	SHC	161.30	-	-	164.92
13	SHC	140.71	-	-	144.13	70	SHC	161.71	-	-	165.33
14	SHC	140.56	-	-	143.98	71	SHC	162.11	-	-	165.73
15	SHC	140.40	-	-	143.82	72	SHC	162.52	-	-	166.14
16	SHC	140.25	-	-	143.67	73	SHC	163.11	-	-	166.81
17	SHC	140.10	-	-	143.52	74	SHC	162.09	-	-	166.79
18	SHC	139.95	-	-	143.37	75	SHC	161.07	-	-	166.77
19	SHC	154.80	-	-	158.50	76	SHC	160.06	-	-	163.76
20	SHC	153.46	-	-	157.16	77	SHC	159.04	-	-	162.74
21	SHC	152.41	-	-	156.11	78	SHC	158.02	-	-	161.72
22	SHC	151.29	-	-	154.99	79	SHC	137.46	-	-	140.76
23	SHC	150.30	-	-	154.00	80	SHC	136.70	-	-	140.30
24	SHC	148.36	-	-	152.06	81	SHC	136.50	-	-	140.10
25	SHC	147.36	-	-	151.06	82	SHC	136.29	-	-	139.89
26	SHC	146.37	-	-	150.07	83	SHC	136.09	-	-	139.69
27	SHC	145.37	-	-	149.07	84	SHC	135.88	-	-	139.48
28	SHC	144.38	-	-	148.08	85	SHC	135.68	-	-	139.28
29	SHC	142.04	-	-	145.82	86	SHC	135.25	-	-	138.85
30	SHC	141.97	-	-	145.75	87	SHC	135.04	-	-	138.64
31	SHC	141.81	-	-	145.59	88	SHC	134.84	-	-	138.44
32	SHC	141.66	-	-	145.44	89	SHC	134.79	-	-	138.39
33	SHC	141.51	-	-	145.29	90	SHC	134.43	-	-	138.03
34	SHC	141.36	-	-	145.14	91	SHC	134.22	-	-	137.82
35	SHC	141.20	-	-	144.98	92	SHC	134.02	-	-	137.62
36	SHC	141.05	-	-	144.83	93	SHC	133.08	-	-	136.10
37	SHC	140.79	-	-	144.57	94	SHC	134.02	-	-	137.44
38	SHC	140.56	-	-	144.34	95	SHC	134.22	-	-	137.64
39	SHC	140.40	-	-	144.18	96	SHC	134.43	-	-	137.85
40	SHC	140.25	-	-	144.03	97	SHC	134.79	-	-	138.21
41	SHC	140.10	-	-	143.88	98	SHC	134.84	-	-	138.26
42	SHC	139.95	-	-	143.73	99	SHC	135.04	-	-	138.46
43	SHC	139.79	-	-	143.57	100	SHC	135.47	-	-	138.89
44	SHC	162.52	-	-	166.02	101	SHC	135.66	-	-	139.10
45	SHC	162.11	-	-	165.81	102	SHC	135.88	-	-	139.30
46	SHC	161.71	-	-	165.21	103	SHC	136.09	-	-	139.51
47	SHC	161.30	-	-	164.80	104	SHC	136.29	-	-	139.71
48	SHC	160.89	-	-	164.39	105	SHC	136.50	-	-	139.92
49	SHC	160.27	-	-	163.77	106	SHC	136.70	-	-	140.12
50	SHC	158.61	-	-	162.09	107	SHC	138.51	-	-	142.21
51	SHC	157.88	-	-	161.36	108	SHC	138.71	-	-	142.41
52	SHC	157.14	-	-	160.62	109	SHC	138.91	-	-	142.61
53	SHC	156.40	-	-	159.88	110	SHC	139.11	-	-	142.81
54	SHC	155.66	-	-	159.14	111	SHC	227.74	-	-	231.34
55	SHC	154.92	-	-	158.40	112	SHC	228.27	-	-	231.67
56	SHC	154.18	-	-	157.66	113	SHC	230.52	-	-	233.50
57	SHC	153.44	-	-	156.92	114	SHC	231.06	-	-	234.50

STRUCTURE SCHEDULE						
NO.	TYPE	LOCATION	TOP ELEV.	INV. IN	INV. OUT	COMMENTS
I-1	DOUBLE TYPE 'S' COMB INLET		131.05	-	-	127.72 HO. CO. STD SD-4.23
I-3	DOUBLE TYPE 'S' INLET		132.20	132.20	127.27	HO. CO. STD SD-4.23
I-4	TYPE 'A-10' INLET		139.83	132.37	132.37	HO. CO. STD SD-4.02
I-5	TYPE 'A-5' INLET		145.17	141.72	141.47	HO. CO. STD SD-4.02
I-6	TYPE 'A-5' INLET		145.70	142.70	142.60	HO. CO. STD SD-4.02
I-7A	TYPE 'A-5' INLET		141.03	136.19	136.19	HO. CO. STD SD-4.02
I-8	TYPE 'A-5' INLET		142.44	137.46	137.46	HO. CO. STD SD-4.02
I-9	TYPE 'A-10' INLET		145.28	139.20	139.20	HO. CO. STD SD-4.02
I-10	YARD INLET		143.76	-	-	HO. CO. STD SD-4.14
I-10A	TYPE 'D' INLET - 4 OPENINGS		143.76	139.70	139.70	HO. CO. STD SD-4.11
I-11	TYPE 'A-5' INLET		143.59	140.33	140.33	HO. CO. STD SD-4.02
I-12	TYPE 'A-5' INLET		140.13	124.15	124.05	HO. CO. STD SD-4.02
I-13	TYPE 'A-5' INLET		145.34	137.63	137.63	HO. CO. STD SD-4.02
I-13A	TYPE 'D' INLET - 2 OPENINGS		145.67	141.64	141.64	HO. CO. STD SD-4.11
I-14	TYPE 'A-10' INLET		150.58	144.87	144.87	HO. CO. STD SD-4.02
I-15	TYPE 'A-5' INLET		157.74	151.72	151.52	HO. CO. STD SD-4.02
I-16	TYPE 'A-5' INLET		162.23	156.60	156.30	HO. CO. STD SD-4.02
I-17	TYPE 'A-10' INLET		162.23	157.00	157.00	HO. CO. STD SD-4.02
I-18	TYPE 'D' INLET - 4 OPENINGS		153.70	-	-	HO. CO. STD SD-4.11
I-19	TYPE 'D' INLET - 4 OPENINGS		153.48	-	-	HO. CO. STD SD-4.11
I-20	TYPE 'A-10' INLET		151.48	148.11	147.68	HO. CO. STD SD-4.02
I-21	TYPE 'D' INLET - 4 OPENINGS		156.31	-	-	HO. CO. STD SD-4.11
I-22	YARD INLET		157.02	-	-	HO. CO. STD SD-4.11
I-23	TYPE 'A-5' INLET		160.41	157.20	157.10	HO. CO. STD SD-4.02
I-24	TYPE 'S' INLET		168.30	-	-	HO. CO. STD SD-4.11
I-25	TYPE 'A-10' INLET		138.53	131.78	131.78	HO. CO. STD SD-4.02
I-26	TYPE 'A-5' INLET		139.84	134.23	134.23	HO. CO. STD SD-4.02
I-27	TYPE 'A-5' INLET		142.30	136.16	136.16	HO. CO. STD SD-4.02
I-28	DOUBLE TYPE 'S' INLET		141.86	137.24	137.24	HO. CO. STD SD-4.23
I-28B	TYPE 'S' INLET		143.45	139.87	139.87	HO. CO. STD SD-4.11
I-28A	TYPE 'S' INLET		144.80	138.13	138.03	HO. CO. STD SD-4.22
I-29	YARD INLET		144.00	139.48	139.38	HO. CO. STD SD-4.11
I-30A	YARD INLET		144.00	139.88	139.88	HO. CO. STD SD-4.11
I-30	TYPE 'S' INLET		144.00	140.44	140.44	HO. CO. STD SD-4.11
I-31	TYPE 'A-5' INLET		141.01	140.61	140.61	HO. CO. STD SD-4.02
I-32	TYPE 'A-5' INLET		155.98	141.08	141.08	HO. CO. STD SD-4.23
I-33	TYPE 'A-5' INLET		155.94	142.61	142.61	HO. CO. STD SD-4.34
I-34	TYPE 'A-5' INLET		136.48	136.21	136.21	HO. CO. STD SD-4.02
I-35	TYPE 'A-5' INLET		142.16	138.58	138.48	HO. CO. STD SD-4.02
I-36	YARD INLET		143.80	140.28	140.28	HO. CO. STD SD-4.11
I-36A	YARD INLET		142.29	139.59	139.48	HO. CO. STD SD-4.11
I-37	TYPE 'A-5' INLET		140.80	137.25	137.25	HO. CO. STD SD-4.02
I-38	TYPE 'A-5' INLET		140.14	136.81	136.81	HO. CO. STD SD-4.02
I-39	TYPE 'D' INLET - 4 OPENINGS		143.94	-	-	HO. CO. STD SD-4.11
I-41	TYPE 'A-5' INLET		151.13	143.79	143.68	HO. CO. STD SD-4.02
I-42	TYPE 'A-5' INLET		148.73	144.81	144.51	HO. CO. STD SD-4.02
I-43	TYPE 'D' INLET - 4 OPENINGS		158.35	-	-	HO. CO. STD SD-4.11
I-44	TYPE 'A-5' INLET		151.07	143.30	143.30	HO. CO. STD SD-4.02
I-45	TYPE 'A-5' INLET		150.41	145.02	145.02	HO. CO. STD SD-4.02
I-46	TYPE 'A-10' INLET		157.28	154.31	154.24	HO. CO. STD SD-4.02
I-47	TYPE 'A-10' INLET		160.22	155.91	155.81	HO. CO. STD SD-4.02
I-48	TYPE 'D' INLET - 4 OPENINGS		161.00	156.77	156.50	HO. CO. STD SD-4.11
I-49	TYPE 'D' INLET - 4 OPENINGS		168.22	-	-	HO. CO. STD SD-4.11
I-50	TYPE 'A-10' INLET		156.41	-	-	HO. CO. STD SD-4.02
I-51	TYPE 'D' INLET - 2 OPENINGS		153.86	-	-	HO. CO. STD SD-4.11
I-53	YARD INLET		148.28	146.08	145.53	HO. CO. STD SD-4.14
I-54	YARD INLET		143.60	141.46	141.36	HO. CO. STD SD-4.14
I-55	YARD INLET		131.95	129.70	129.49	HO. CO. STD SD-4.14
I-56	YARD INLET		132.72	131.30	130.91	HO. CO. STD SD-4.14
I-57	YARD INLET		135.72	130.44	130.34	HO. CO. STD SD-4.14
I-58	YARD INLET		132.72	130.44	130.34	HO. CO. STD SD-4.14
I-59	YARD INLET		132.72	130.44	130.34	HO. CO. STD SD-4.14
I-60	YARD INLET		143.87	140.42	140.26	HO. CO. STD SD-4.14
I-61	YARD INLET		143.87	139.70	139.50	HO. CO. STD SD-4.14
I-62	YARD INLET		138.80	137.23	136.96	HO. CO. STD SD-4.14
I-63	YARD INLET		138.56	137.50	137.34	HO. CO. STD SD-4.14
I-64	YARD INLET		142.00	-	-	HO. CO. STD SD-4.14
I-65	YARD INLET		142.00	135.76	135.66	HO. CO. STD SD-4.14
I-66	YARD INLET		142.00	135.91	134.81	HO. CO. STD SD-4.14
I-67	YARD INLET		142.00	132.07	131.97	HO. CO. STD SD-4.14
M-1	4'-0" STANDARD PRECAST MANHOLE		132.33	123.64	123.74	HO. CO. STD G-5.12
M-2	4'-0" STANDARD PRECAST MANHOLE		145.84	136.88	136.88	HO. CO. STD G-5.12
M-3	4'-0" STANDARD PRECAST MANHOLE		131.73	126.38	126.38	HO. CO. STD G-5.12
M-5	4'-0" STANDARD PRECAST MANHOLE		139.02	135.82	135.77	HO. CO. STD G-5.12
M-9	4'-0" STANDARD PRECAST MANHOLE		141.15	136.26	137.79	HO. CO. STD G-5.12
M-10	4'-0" STANDARD PRECAST MANHOLE		144.96	139.19	139.68	HO. CO. STD G-5.12
M-11	4'-0" STANDARD PRECAST MANHOLE		150.90	147.35	147.08	HO. CO. STD G-5.13
M-12	5'-0" STANDARD PRECAST MANHOLE		153.88	149.90	149.42	HO. CO. STD G-5.12
M-13	4'-0" STANDARD PRECAST MANHOLE		151.54	142.89	141.52	HO. CO. STD G-5.12
M-14	6'-0" STANDARD PRECAST MANHOLE		140.77	132.24	132.25	MD 384.05
M-17	5'-0" STANDARD PRECAST MANHOLE		142.00	135.03	134.83	HO. CO. STD G-5.13
M-18	5'-0" STANDARD PRECAST MANHOLE		140.60	124.50	124.50	HO. CO. STD G-5.13
M17A	4'-0" STANDARD PRECAST MANHOLE		162.20	156.77	156.52	HO. CO. STD G-5.12
ES7B	27" CONC. END SECTION		-	-	-	HO. CO. STD SD-5.52
ES8	12" CONC. END SECTION		-	-	-	HO. CO. STD SD-5.52



- LANDSCAPE SCHEDULE NOTES:**
1. ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL, CONFORM TO THE MOST CURRENT AAM SPECIFICATIONS AND BE INSTALLED IN ACCORDANCE WITH LCAWM PLANTING SPECIFICATIONS.
 2. MAINTENANCE TO INCLUDE MONITORING AND HAND WATERING AS NEEDED FOR THE FIRST TWO GROWING SEASONS TO ESTABLISH WOODY PLANTS. SPECIALIZED PLANTING AREAS INCLUDING FOUNDATION PLANTING OR ANNUAL BEDS MAY REQUIRE REGULAR HAND WATERING OR IRRIGATION.
 3. CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
 4. CONTRACTOR SHALL VERIFY PLANT QUANTITIES PRIOR TO BIDDING. IF PLAN DIFFERS FROM LANDSCAPE SCHEDULE, THE PLAN SHALL GOVERN.

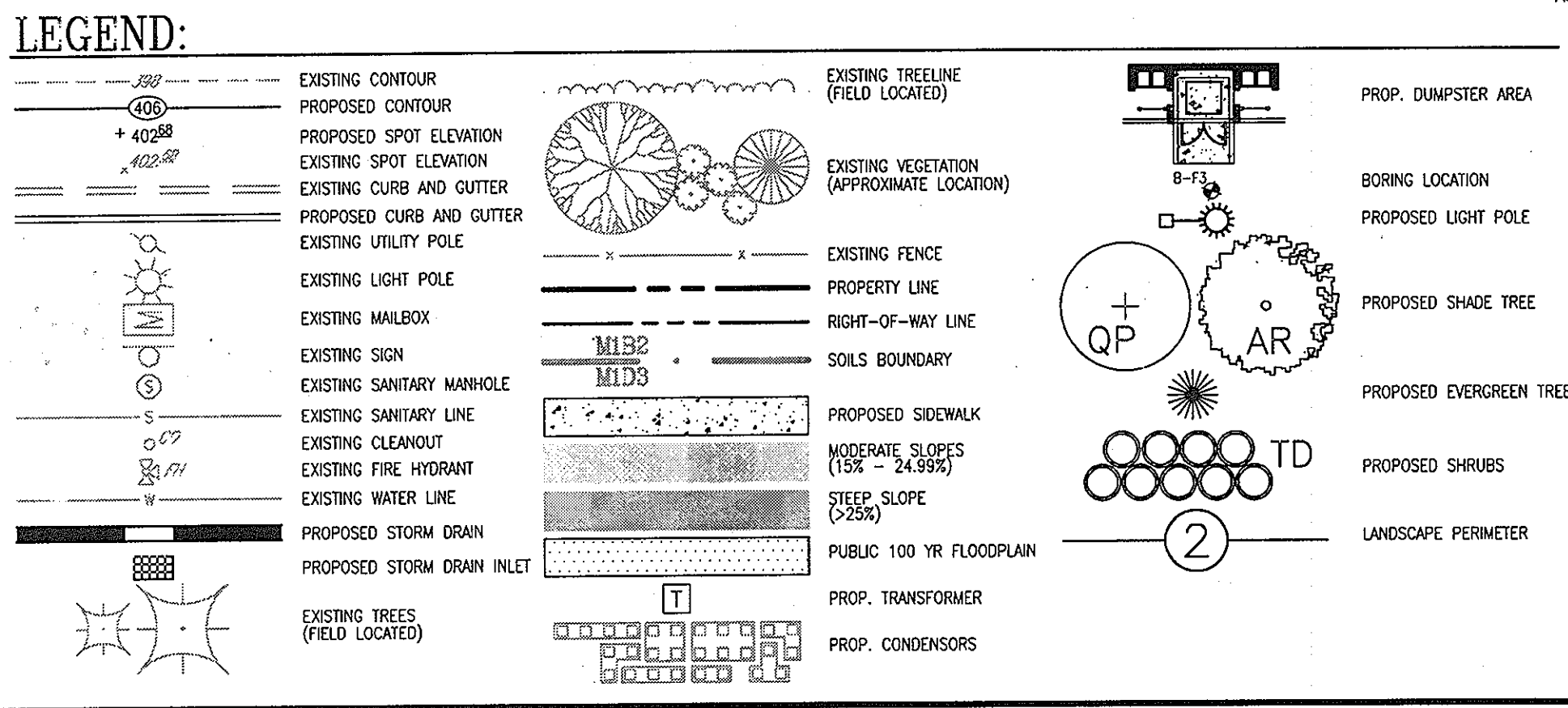
- GENERAL NOTES:**
1. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. THE LANDSCAPING SHOWN ON THIS PLAN IS SUBJECT TO CHANGE WITH THE SITE DEVELOPMENT PLANS FOR THE BULK PARCELS.
 2. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING WILL BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$101,100.00 FOR THE REQUIRED 305 SHADE TREES, 64 EVERGREENS.
 3. FINANCIAL SURETY FOR THE REQUIRED STREET TREES WILL BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$28,800.00 FOR THE REQUIRED 96 SHADE TREES.
 4. THE TOTAL LANDSCAPE SURETY AMOUNT OF \$129,900.00 FOR THE REQUIRED LANDSCAPE PLANTS AND THE PRIVATE ROADS STREET TREES HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT.

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 CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE (1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

Signature of Developer 12/7/06
 SIGNATURE OF DEVELOPER DATE

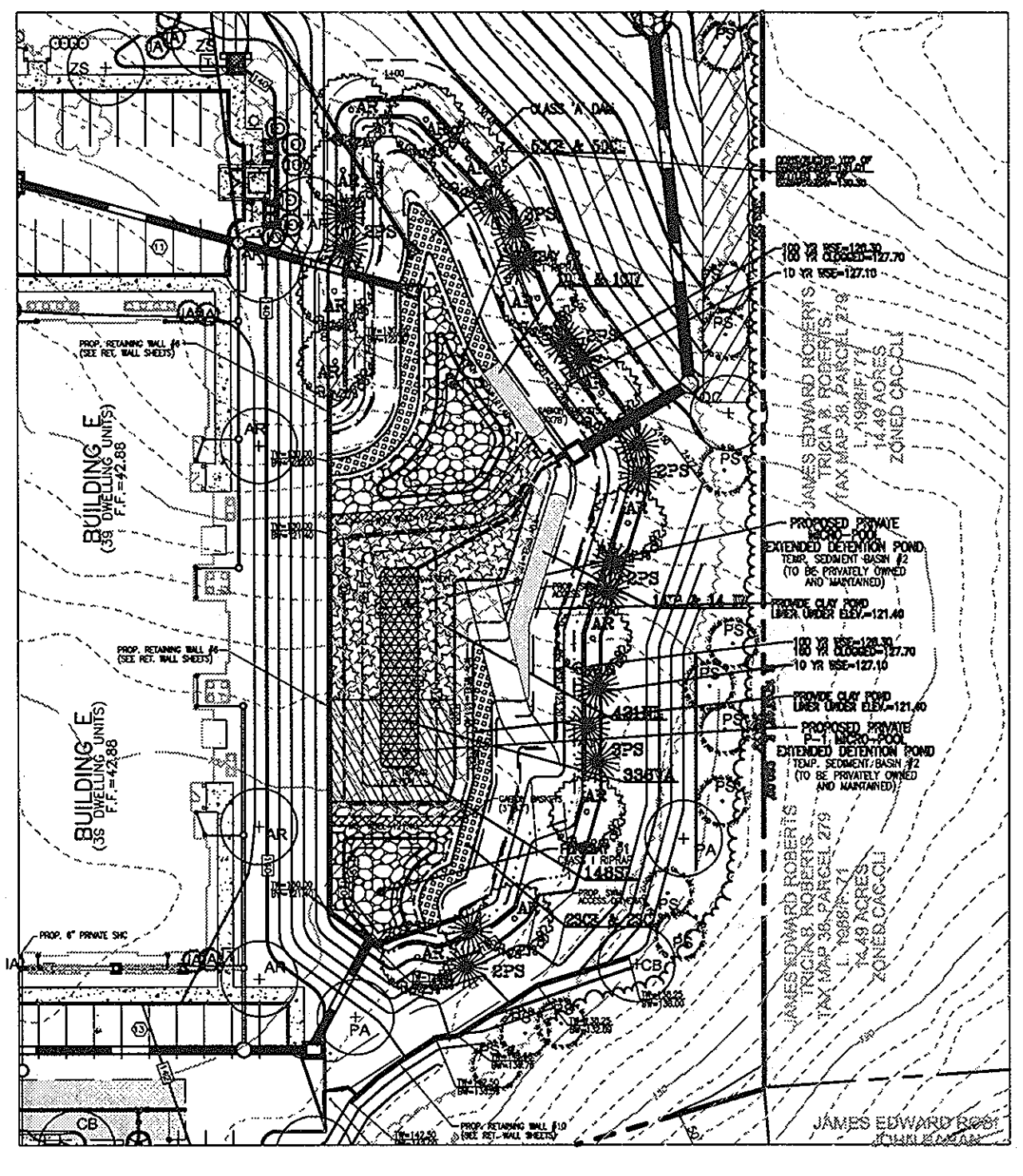
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Signature of Chief 12/8/06
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
Signature of Chief 12/15/06
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
Signature of Director 12/14/06
 DIRECTOR DATE



2' DEEP STORMWATER POND HERBACEOUS LANDSCAPE SCHEDULE

KEY QUAN.	BOTANICAL NAME	SIZE	REMARKS
IP 24	Iris pseudacorus Yellow Water Iris	plug 1.5' oc	
IV 24	Iris versicolor Blue Flag	plug 1.5' oc	(wear gloves)
CE 73	Cyperus rotundus Yellow Nut Sedge	plug 2' oc	
CL 73	Carex lacustris Lake Sedge	plug 2' oc	
SL 148	Sagittaria latifolia Oxalis Petaloides (do not plant tubers)	plug 4' oc	
VA 338	Valisneria spiralis Wild Celery	plug 2' oc	
NL 420	Najas Lignum Spotteddock	plug 1.5' oc	

PRIOR TO INSTALLATION OF PLANT MATERIALS, ADD THREE INCHES OF TOPSOIL TO PLANTING AREA. STABILIZE WITH 40 POUNDS PER ACRE OF A HYDROSED MIX (WET MIX AND MEADOW MIX) FROM SYLVIA NATIVE NURSERY OR EQUAL. ALL PLANT MATERIALS TO CONFORM TO THE MOST CURRENT AAM SPECIFICATIONS AND BE INSTALLED IN ACCORDANCE WITH LCAWM SPECIFICATIONS.



OWNER/DEVELOPER
 ELKRIDGE DEVELOPMENT NO.2, LLC ELKRIDGE DEVELOPMENT NO.2, LLC
 301 TRANSYLVANIA AVENUE 301 TRANSYLVANIA AVENUE
 RALEIGH, NC 27609 RALEIGH, NC 27609
 (919) 789-9289 (919) 789-9289

SITE DEVELOPMENT PLAN

SITE LANDSCAPE PLAN

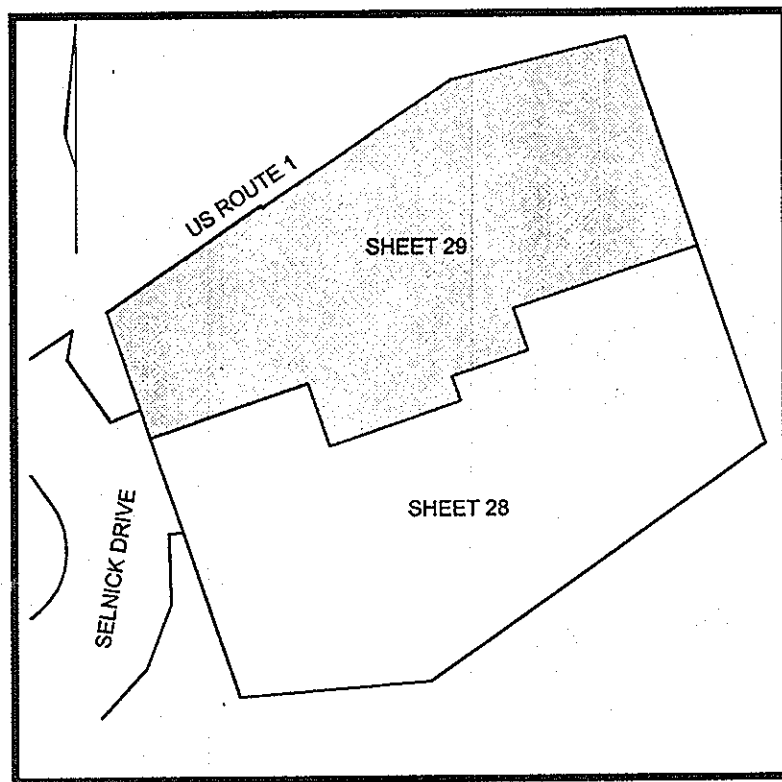
BELMONT STATION (PHASES I, II, AND III)

REF: S-04-10, WP-04-152, WP-06-79, P-05-17, F-05-168 PLAT 18569-71
 TAX MAP 37 BLOCK 18 PARCELS A, C AND OPEN SPACE LOT 1
 1ST ELECTION DISTRICT PARCEL 195, 198, 199 HOWARD COUNTY, MARYLAND

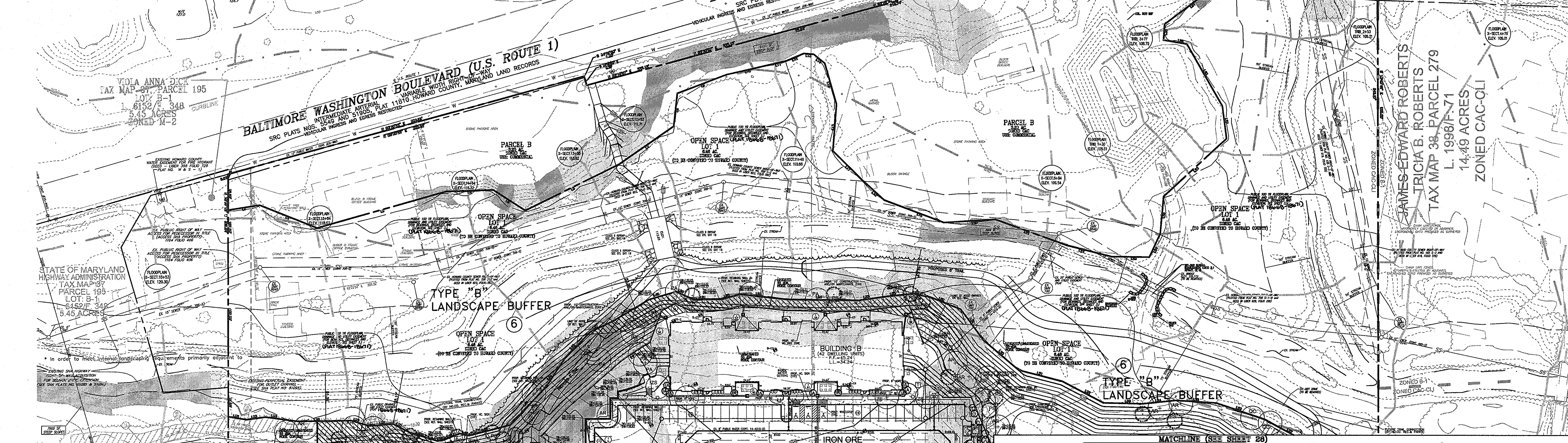
ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET ELLICOTT CITY, MD 21043 TEL: 410.461.7666
 FAX: 410.461.8966

DESIGN BY: WJZ
 DRAWN BY: DZ
 CHECKED BY: _____
 DATE: DECEMBER 7, 2006
 SCALE: 1"=50'
 W.O. NO.: 04-08

28 SHEET OF 39



KEY MAP
NOT TO SCALE



MATCHLINE (SEE SHEET 28)

**SCHEDULE B
PARKING LOT INTERNAL LANDSCAPING**

Number of parking spaces	402
Number of trees required	41
Number of trees provided	33
Shade Trees (2:1 Substitution)	19

**SCHEDULE C
RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING**

Number of dwelling units	110 SFA	208 APTS
Number of trees required	110	70
Number of trees provided	100	79
Shade Trees	37	---
Other Trees (2:1 Substitution)	---	157
*Shrubs (10:1 Substitution)	---	---

the apartments the use of shrubs was applied at a ratio of 10:1 in lieu of shade trees.

**SCHEDULE A
PERIMETER LANDSCAPE EDGE**

CATEGORY	ADJACENT TO PERIMETER AND ROADWAYS							ADJACENT TO DUMPFISTER
	1	2	3	4	5	6	7	
Perimeter/Frontage Designation	A	B	A	B	A	B	A	D
Linear Feet of Roadway Frontage/Perimeter	45	368	400	850	406	1228	265	108
Credit for Existing Vegetation (Yes, No, Linear Feet Describe below if needed)	No	No	No	84'	44'	No	No	No
Credit for Wall, Fence or Berm (Yes, No, Linear Feet Describe below if needed)	No	No	No	No	No	No	No	No
Number of Plants Required	1:60	1:50	1:60	1:60	1:50	1:50	1:60	2:110
Shade Trees	---	---	---	---	---	---	---	---
Evergreen Trees	---	---	---	---	---	---	---	---
Number of Plants Provided	---	---	---	---	---	---	---	---
Shade Trees	---	---	---	---	---	---	---	---
Evergreen Trees	---	---	---	---	---	---	---	---
Other Trees (2:1 Substitution)	---	---	---	---	---	---	---	---
Shrubs (10:1 Substitution)	---	---	---	---	---	---	---	---
Describe Plant Substitution Credits Below if needed								

LANDSCAPE SCHEDULE

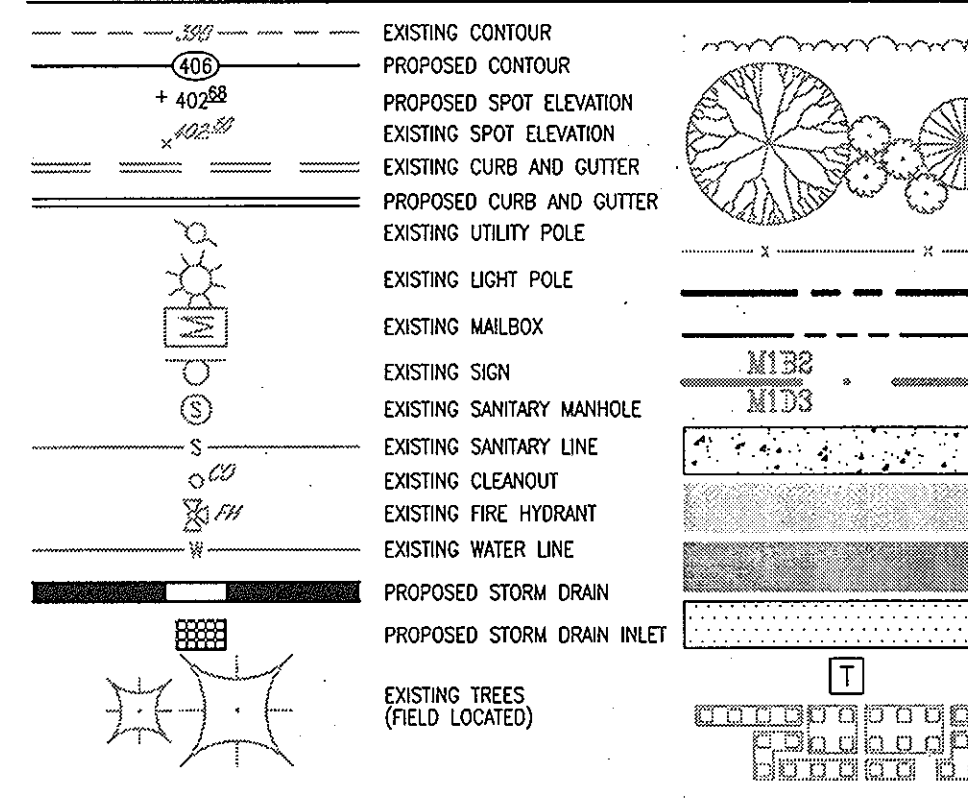
KEY	QUAN.	BOTANICAL NAME	SIZE	CAT	KEY	QUAN.	BOTANICAL NAME	SIZE	CAT
AR	55	ACER RUBRUM	2-3 1/2" CAL.	B & B	CC	7	EASTERN REDBUD	8' HT	B & B
BN	20	BETULA NIGRA 'HERITAGE'	10'-12' HT.	B & B	AL	2	AMELANCHIER LAEVIS	6' HT	B & B
CB	17	CORNUS FLORIDA	1 1/2-2" CAL.	B & B	AZ	23	AZALEA 'DELWARE VALLEY WHITE'	10" SPREAD	CONTAINER
ZS	15	ZELKOVA SERRATA 'VILLAGE GREEN'	2-3 1/2" CAL.	B & B	IV	10	IVEA VIRGINICA 'LITTLE HENRY'	24" SPREAD	CONTAINER
PA	60	PLATANUS X ACERIFOLIA 'BLOODGOOD'	2-3 1/2" CAL.	B & B	IB	13	IBEA VIRGINICA 'LITTLE HENRY'	24" HEIGHT	CONTAINER
QC	1	QUERCUS COCCINEA	2-3 1/2" CAL.	B & B	ND	24	NANDINA DOMESTICA 'HARBOR DWARF'	10" HEIGHT	CONTAINER
UP	14	ULMUS PARVIFOLIA 'EMER II'	2-3 1/2" CAL.	B & B	PO	47	PRUNUS LAUROCARPUS 'OTTO LUTKEN'	30" SPREAD	CONTAINER
IA	55	ILEX OPACA 'MISS HELEN'	5-6' HT.	B & B	PL	2	PRUNUS LAUROCARPUS 'SCHIPKANENSIS'	24" HEIGHT	CONTAINER
JO	32	JUNIPERUS HORIZONTALIS 'MISS HELEN AMERICAN HOLLY'	5-6' HT.	B & B	TD	38	TAXUS X MEDIA 'DENSIFORMIS'	30" SPREAD	CONTAINER
PS	70	PINUS STROBUS	6-8' HT.	B & B					
HC	2	HALESIA CAROLINA	1 1/2-2" CAL.	B & B					
LI	21	LAGERSTRÖMIA INDICA 'NACHEZ'	5' HT.	B & B					
MG	8	MAGNOLIA GRANDIFLORA	2-3 1/2" CAL.	B & B					
PR	29	PRUNUS SUBBREVATA VAR. AUTUMNALIS ROSEA	8-10' HT.	B & B					

**SCHEDULE D
STORMWATER MANAGEMENT AREA LANDSCAPING**

Linear feet of perimeter	643
Number of trees required	13
Shade Trees (1:50)	16
Evergreen Trees (1:40)	---
Credit for existing vegetation	NO
Credit for other landscaping	NO
Number of trees provided	13
Shade Trees	---
Other Trees (2:1 Substitution)	16

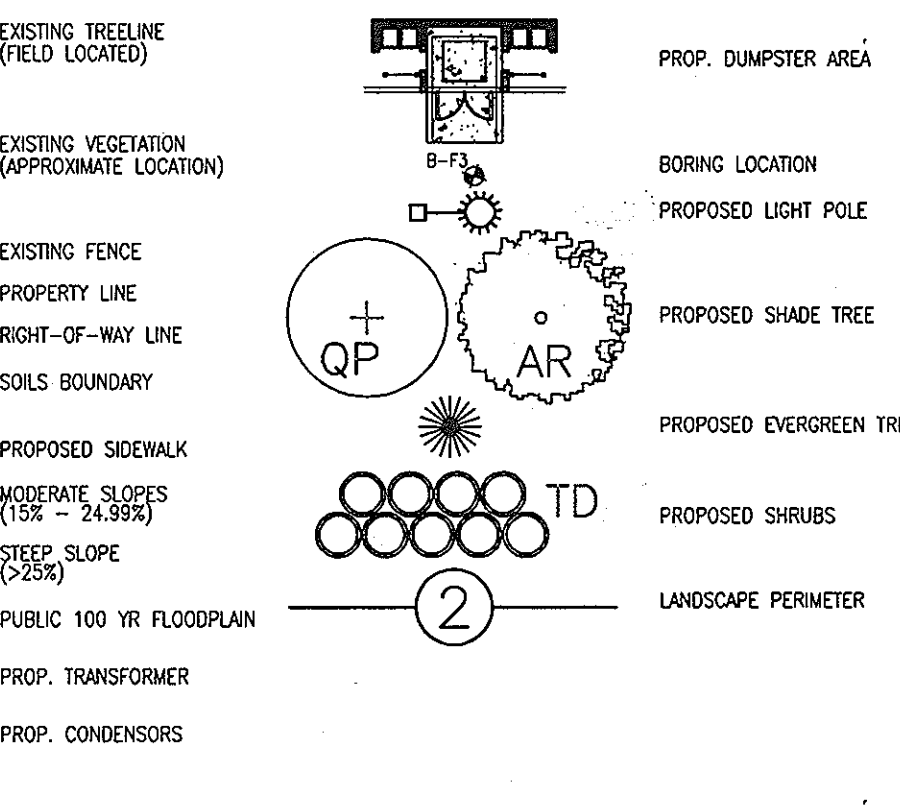
STREET TREE PLANT SCHEDULE

KEY	QUAN.	BOTANICAL NAME	SIZE	CAT
AR	40	ACER RUBRUM	2-3 1/2" CAL.	B & B
ZS	21	ZELKOVA SERRATA 'VILLAGE GREEN'	2-3 1/2" CAL.	B & B
UP	31	ULMUS PARVIFOLIA 'EMER II'	2-3 1/2" CAL.	B & B
CC	4	CERCIS CANADENSIS	8' HT	B & B



STREET TREE CALCULATIONS

STREET NAME	TOTAL LINEAR FEET	REQUIRED	PROVIDED
RED CLAY FORGE	476	12	21
CALEB DORSEY SQUARE	452	12	18
ALEXANDER LAWSON	250	7	6
NORWOOD FERRY	371	10	17
TASKER FALLS	612	16	14
LATROBE FALLS	590	15	20
THOMAS STONE	300	8	0
GUEST CALL	275	7	0
IRON ORE	573	15	0
U.S. ROUTE 1*	660	22	22
TOTAL		102	96**



OWNER/DEVELOPER
ELKRIDGE DEVELOPMENT NO.2, LLC
301 TRANSYLVANIA AVENUE
RALEIGH, NC 27609
(919) 789-9289

NO.	REVISION	DATE

SITE DEVELOPMENT PLAN

SITE LANDSCAPE PLAN

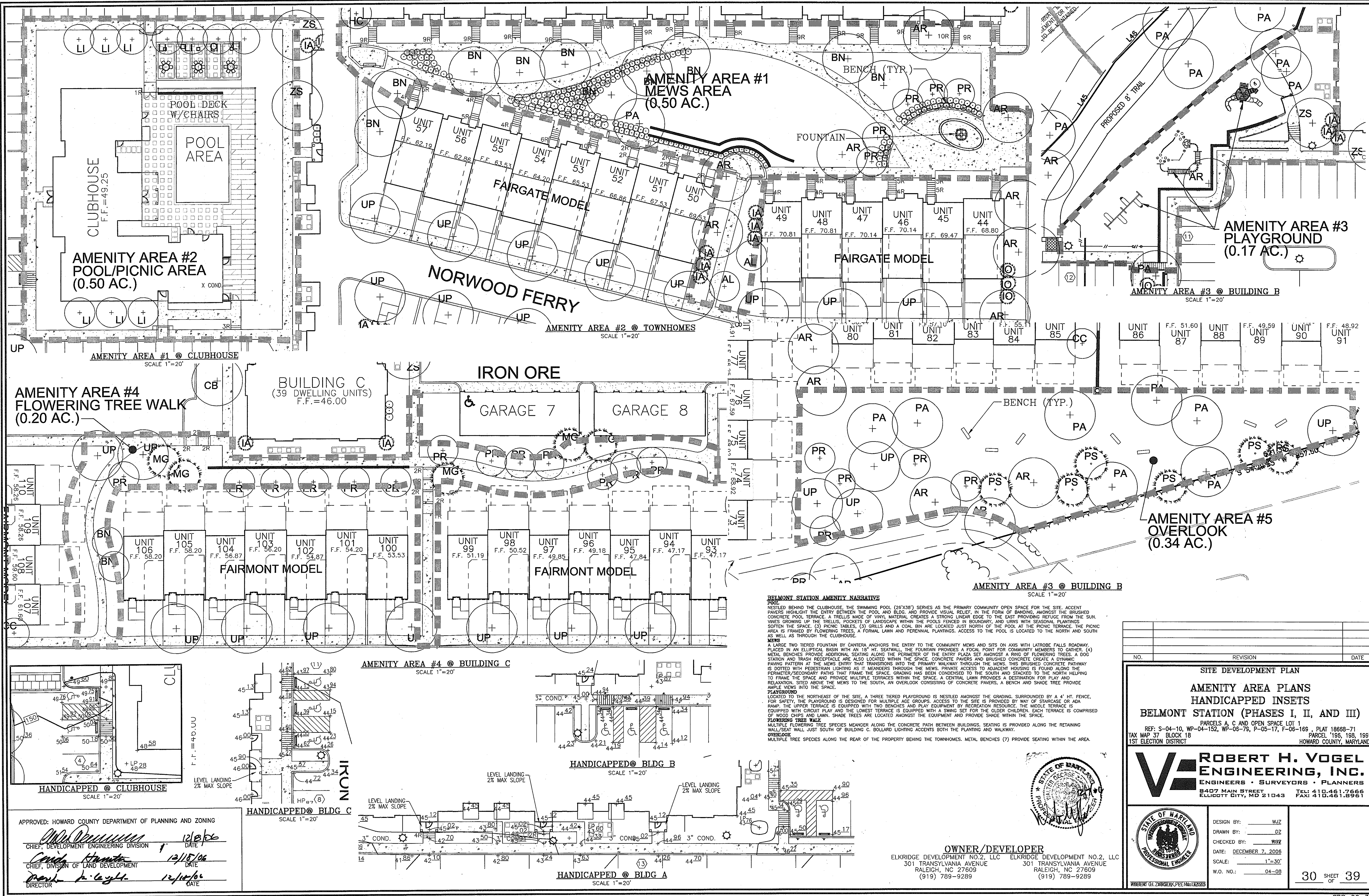
BELMONT STATION (PHASES I, II, AND III)

REF: S-04-10, WP-04-152, WP-05-75, P-05-17, F-06-168, PLAT 18668-71
TAX MAP 37, BLOCK 18, PARCEL 155, 158, 195
1ST ELECTION DISTRICT

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELICOTT CITY, MD 21043
TEL: 410-461-7666
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AMENITY AREA #1 @ CLUBHOUSE
SCALE 1"=20'

AMENITY AREA #2 @ TOWNHOMES
SCALE 1"=20'

AMENITY AREA #3 @ BUILDING B
SCALE 1"=20'

AMENITY AREA #4
FLOWERING TREE WALK
(0.20 AC.)

BUILDING C
(39 DWELLING UNITS)
F.F.=46.00

IRON ORE
& GARAGE 7 GARAGE 8

AMENITY AREA #3 @ BUILDING B
SCALE 1"=20'

AMENITY AREA #5
OVERLOOK
(0.34 AC.)

AMENITY AREA #4 @ BUILDING C
SCALE 1"=20'

HANDICAPPED @ BLDG B
SCALE 1"=20'

HANDICAPPED @ BLDG A
SCALE 1"=20'

BELMONT STATION AMENITY NARRATIVE

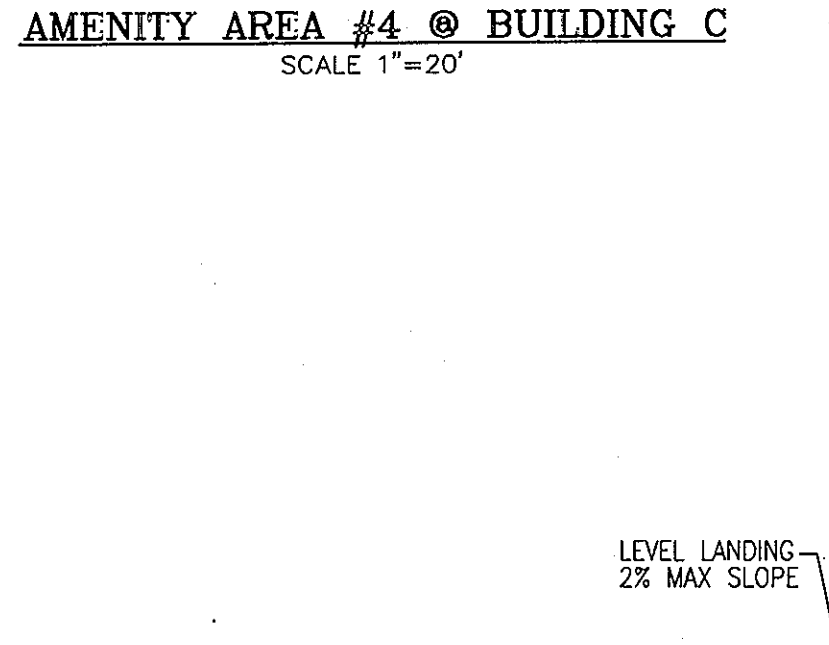
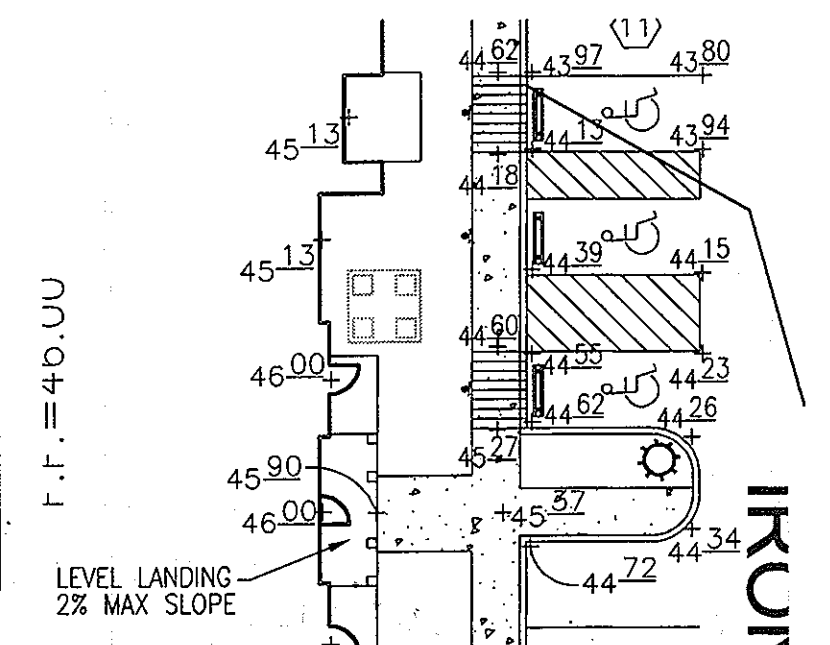
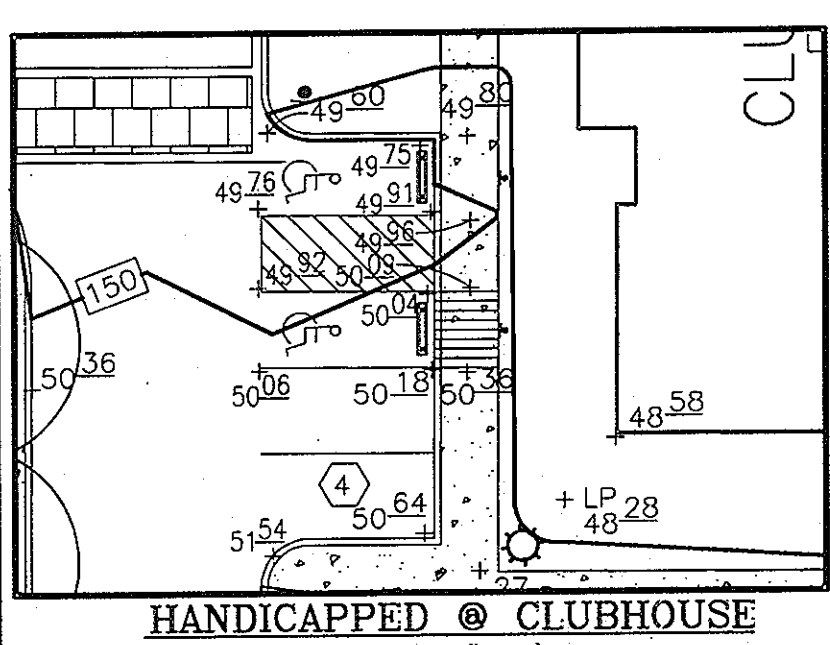
POOL: NESTLED BEHIND THE CLUBHOUSE, THE SWIMMING POOL (26'x38') SERVES AS THE PRIMARY COMMUNITY OPEN SPACE FOR THE SITE. ACCENT LIGHTERS HIGHLIGHT THE ENTRY BETWEEN THE POOL AND BLDG. AND PROVIDE VISUAL RELIEF. IN THE FORM OF BANDING, AMONGST THE BRUSHED CONCRETE POOL TERRACE. A TRELLIS MADE OF VINYL MATERIAL CREATES A STRONG LINEAR EDGE TO THE EAST PROVIDING REFUGE FROM THE SUN. VINES GROWING UP THE TRELLIS, POCKETS OF LANDSCAPE WITHIN THE POOL'S FENCED IN BOUNDARY, AND URNS WITH SEASONAL PLANTINGS SOFTEN THE SPACE. (3) PICNIC TABLES, (3) GRILLS AND A COAL BIN ARE LOCATED JUST NORTH OF THE POOL AT THE PICNIC TERRACE. THE PICNIC AREA IS FRAMED BY FLOWERING TREES; A FORMAL LAWN AND PERENNIAL PLANTINGS. ACCESS TO THE POOL IS LOCATED TO THE NORTH AND SOUTH AS WELL AS THROUGH THE CLUBHOUSE.

MEWS: A LARGE TIERED FOUNTAIN BY CANTERA ANCHORS THE ENTRY TO THE COMMUNITY MEWS AND SITS ON AXIS WITH LATROBE FALLS ROADWAY. PLACED IN AN ELLIPTICAL BASIN WITH AN 18" HT. SEATWALL, THE FOUNTAIN PROVIDES A FOCAL POINT FOR COMMUNITY MEMBERS TO GATHER. (4) METAL BENCHES PROVIDE ADDITIONAL SEATING ALONG THE PERIMETER OF THE ENTRY PLAZA SET AMONGST A RING OF FLOWERING TREES. A DOG STATION AND TRASH RECEPTACLE ARE ALSO LOCATED WITHIN THE SPACE. CONCRETE PAVERS AND BRUSHED CONCRETE CREATE A DYNAMIC PAVING PATTERN AT THE MEWS ENTRY THAT TRANSITIONS INTO THE PRIMARY WALKWAY THROUGH THE MEWS. THIS BRUSHED CONCRETE PATHWAY IS DOTTED WITH PEDESTRIAN LIGHTING AS IT MEANDERS THROUGH THE MEWS. PRIVATE ACCESS TO ADJACENT HOUSING IS FOUND ALONG THE PERIMETER/SECONDARY PATHS THAT FRAME THE SPACE. GRASSING HAS BEEN CONSIDERED TO THE SOUTH AND STAGED TO THE NORTH HELPING TO FRAME THE SPACE AND PROVIDE MULTIPLE TERRACES WITHIN THE SPACE. A CENTRAL LAWN PROVIDES A DESTINATION FOR PLAY AND RELAXATION. SITED ABOVE THE MEWS TO THE SOUTH, AN OVERLOOK CONSISTING OF CONCRETE PAVERS, A BENCH AND SHADE TREE PROVIDE AMPLE MEWS INTO THE SPACE.

PLAYGROUND: LOCATED TO THE NORTHEAST OF THE SITE, A THREE TIERED PLAYGROUND IS NESTLED AMONGST THE GRADING, SURROUNDED BY A 4' HT. FENCE. FOR SAFETY, THE PLAYGROUND IS DESIGNED FOR MULTIPLE AGE GROUPS. ACCESS TO THE SITE IS PROVIDED BY WAY OF STAIRCASE OR ADA RAMP. THE UPPER TERRACE IS EQUIPPED WITH TWO BENCHES AND PLAY EQUIPMENT BY RECREATION RESOURCE. THE MIDDLE TERRACE IS EQUIPPED WITH CROQUET PLAYS AND THE LOWEST TERRACE IS EQUIPPED WITH A SWING SET FOR THE OLDER CHILDREN. EACH TERRACE IS COMPRISED OF WOOD CHIPS AND LAWN. SHADE TREES ARE LOCATED AMONGST THE EQUIPMENT AND PROVIDE SHADE WITHIN THE SPACE.

FLOWERING TREE WALK: MULTIPLE FLOWERING TREE SPECIES MEANDER ALONG THE CONCRETE PATH BETWEEN BUILDINGS. SEATING IS PROVIDED ALONG THE RETAINING WALL/SEAT WALL JUST SOUTH OF BUILDING C. BOLLARD LIGHTING ACCENTS BOTH THE PLANTING AND WALKWAY.

OVERLOOK: MULTIPLE TREE SPECIES ALONG THE REAR OF THE PROPERTY BEHIND THE TOWNHOMES. METAL BENCHES (7) PROVIDE SEATING WITHIN THE AREA.



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 12/8/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 12/15/06
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 12/16/06
DIRECTOR DATE

OWNER/DEVELOPER
ELKRIDGE DEVELOPMENT NO.2, LLC ELKRIDGE DEVELOPMENT NO.2, LLC
301 TRANSYLVANIA AVENUE 301 TRANSYLVANIA AVENUE
RALEIGH, NC 27609 RALEIGH, NC 27609
(919) 789-9289 (919) 789-9289

NO.	REVISION	DATE

SITE DEVELOPMENT PLAN

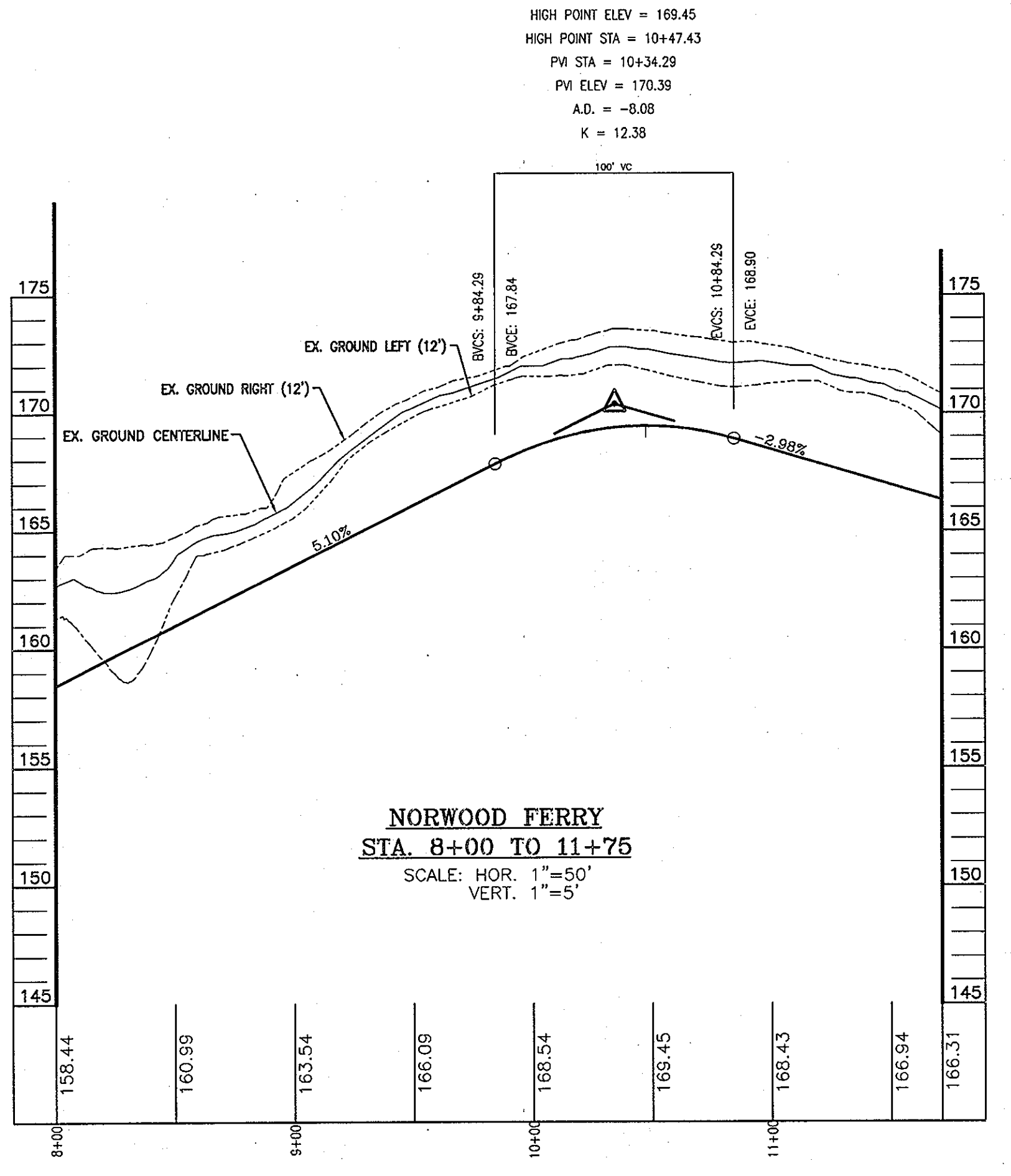
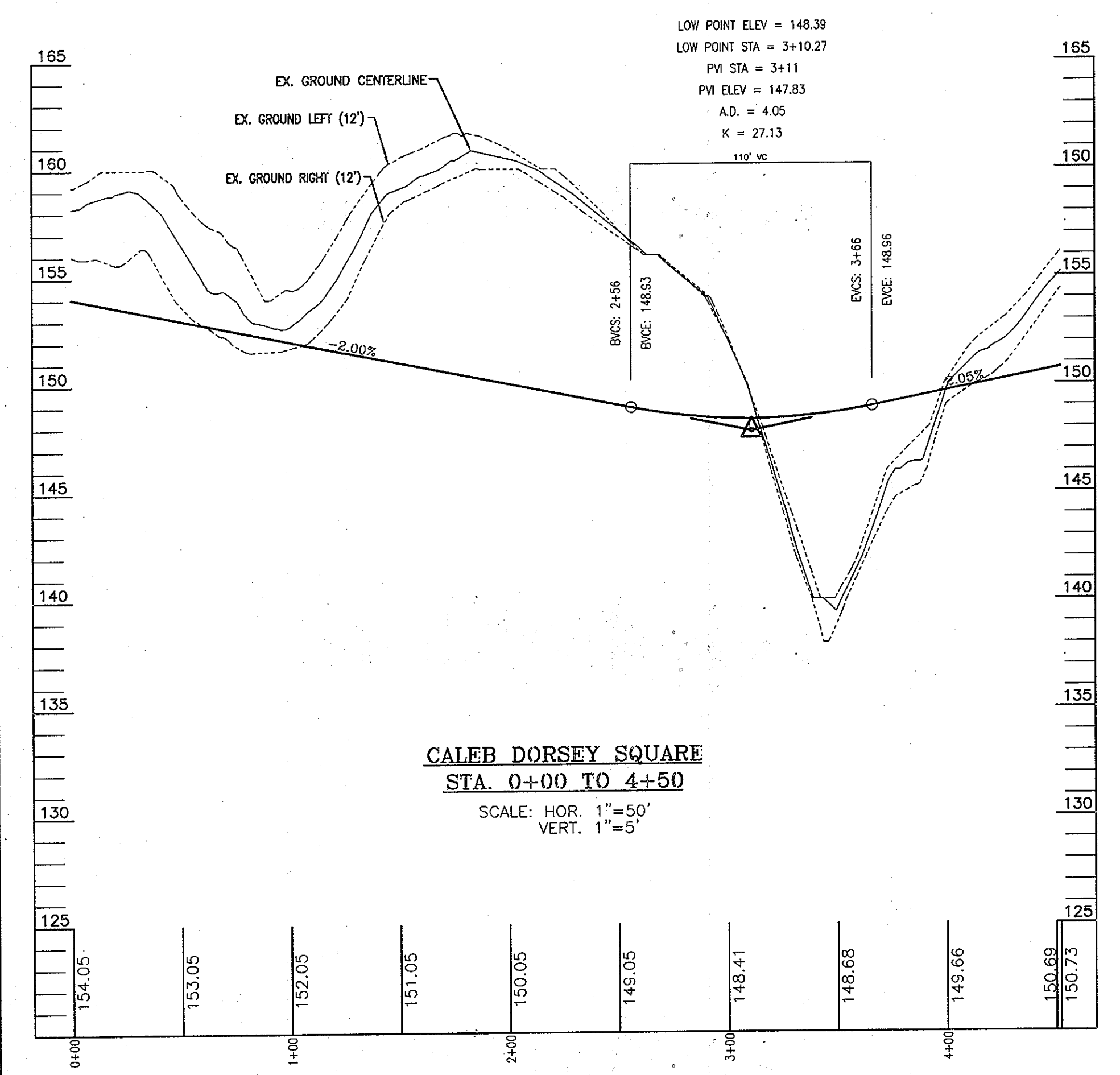
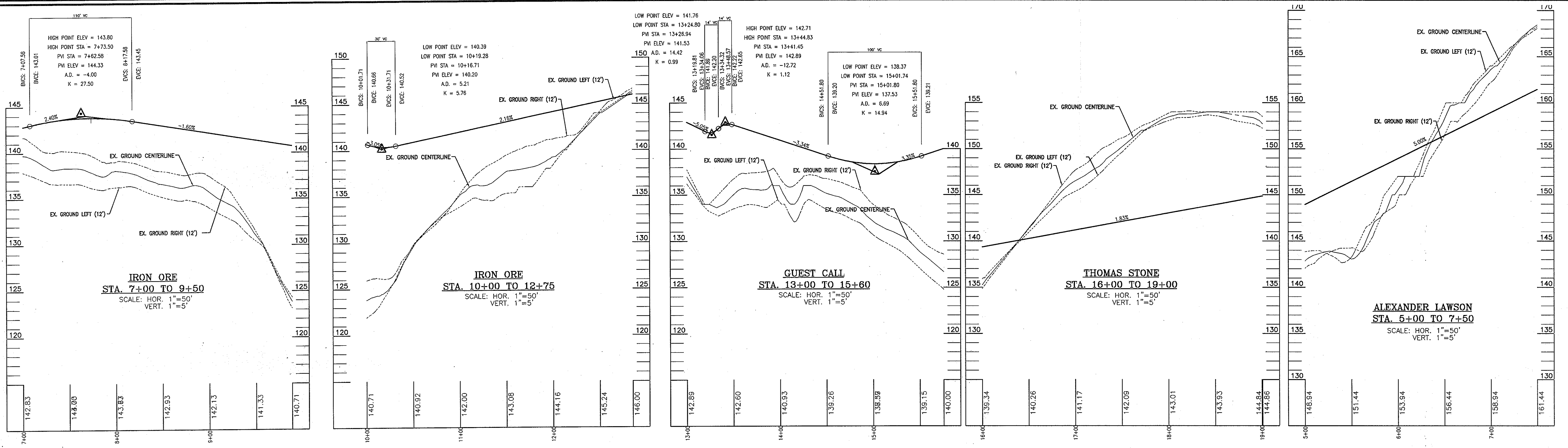
AMENITY AREA PLANS
HANDICAPPED INSETS
BELMONT STATION (PHASES I, II, AND III)

REF: S-04-10, WP-04-152, WP-05-79, P-05-17, F-08-168 PLAT 18668-71
TAX MAP 37 BLOCK 18 PARCEL 155, 158, 159'
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET ELLICOTT CITY, MD 21043 TEL: 410-461-7666 FAX: 410-461-8961

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W.O. NO.: 04-08

30 SHEET OF 39



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

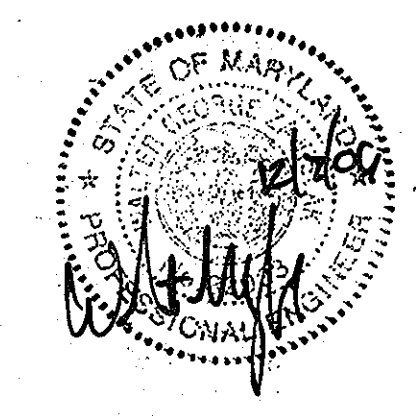
[Signature]
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 12/15/06

[Signature]
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 12/15/06

[Signature]
 DIRECTOR
 DATE: 12/15/06

OWNER/DEVELOPER
 ELKRIDGE DEVELOPMENT NO.2, LLC
 301 TRANSYLVANIA AVENUE
 RALEIGH, NC 27609
 (919) 789-9289

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 301 TRANSYLVANIA AVENUE
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NO.	REVISION	DATE

SITE DEVELOPMENT PLAN

PRIVATE ROAD PROFILES

BELMONT STATION (PHASES I, II, AND III)

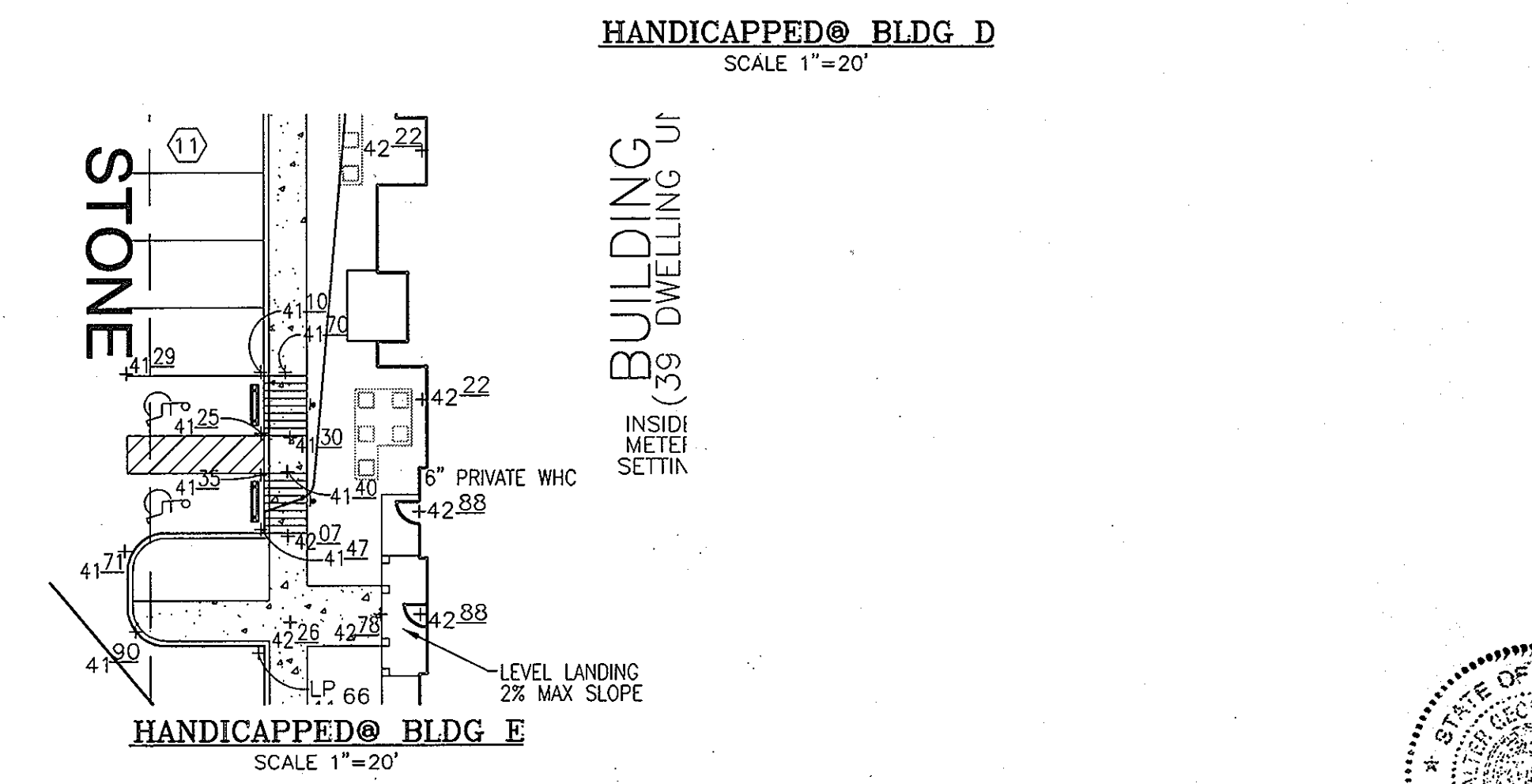
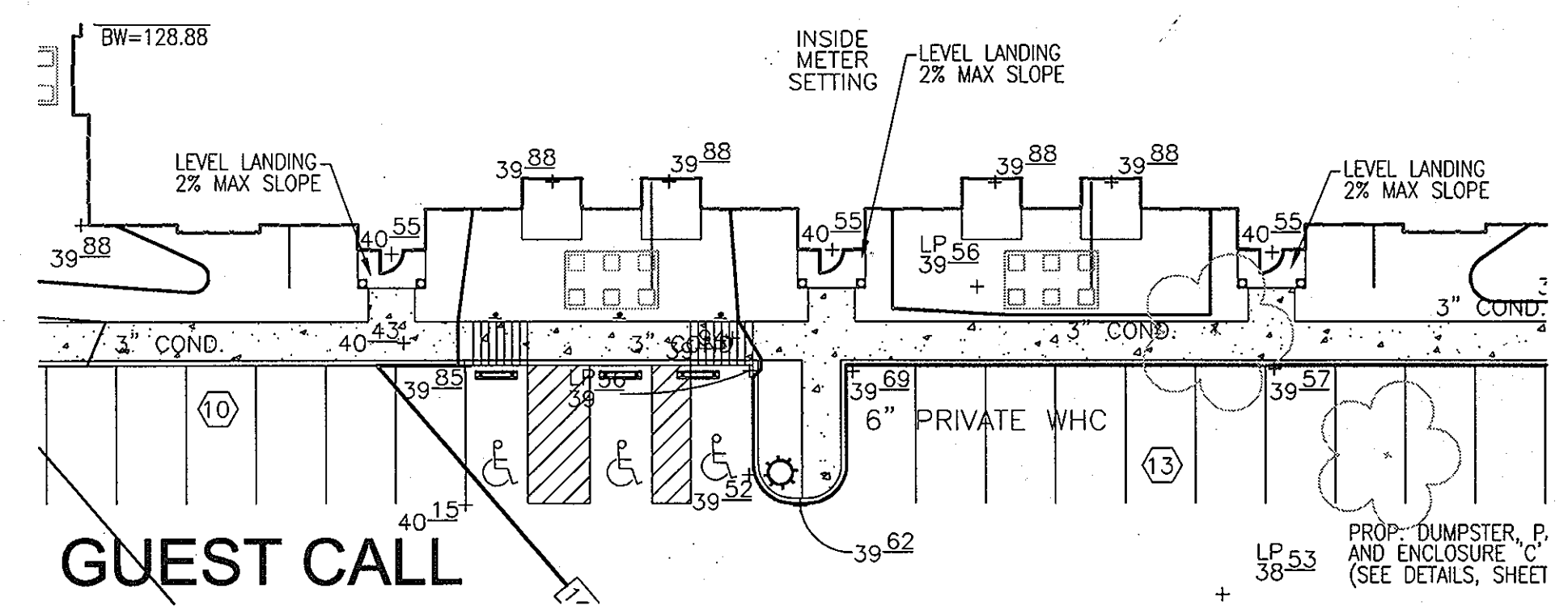
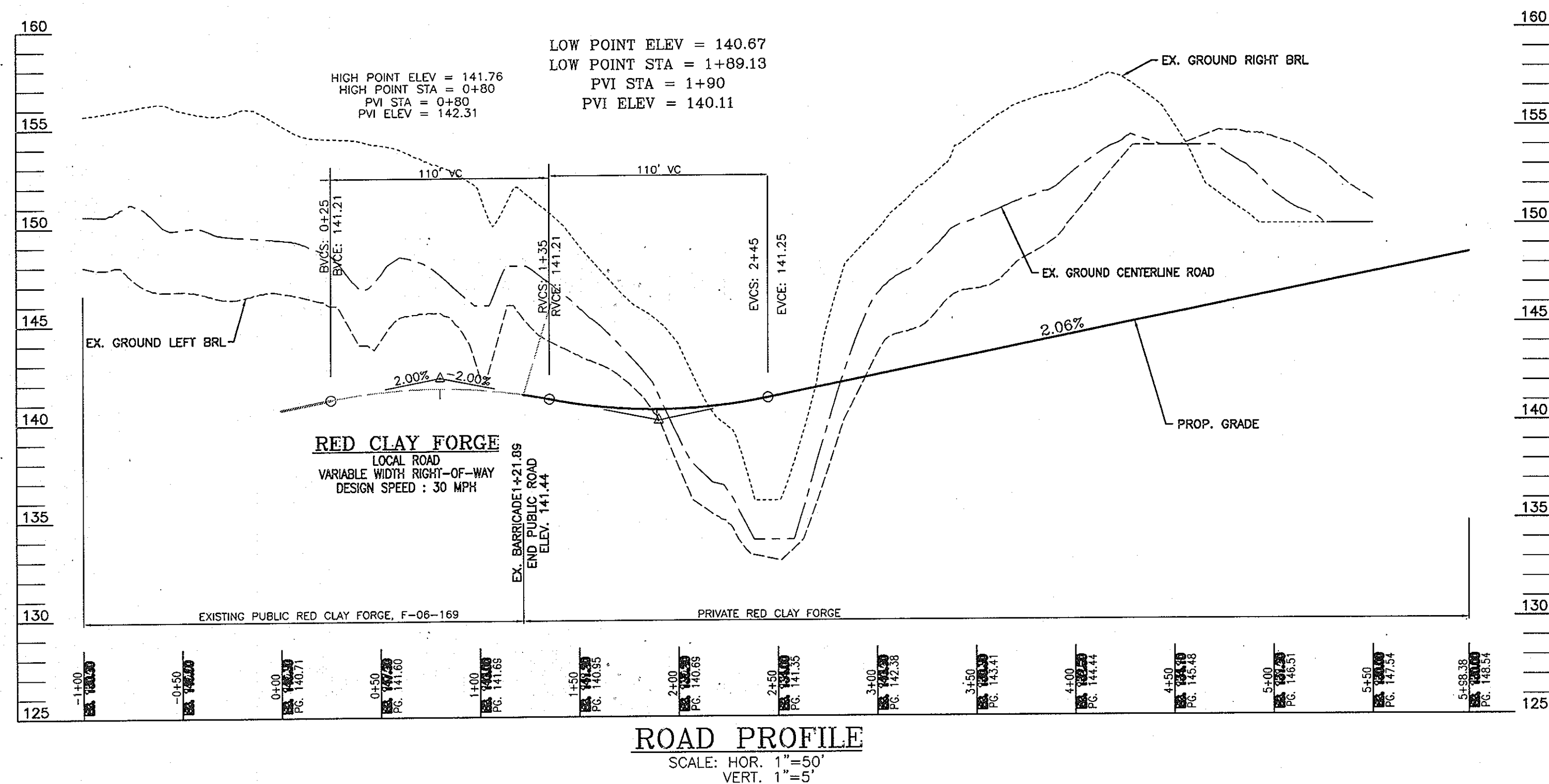
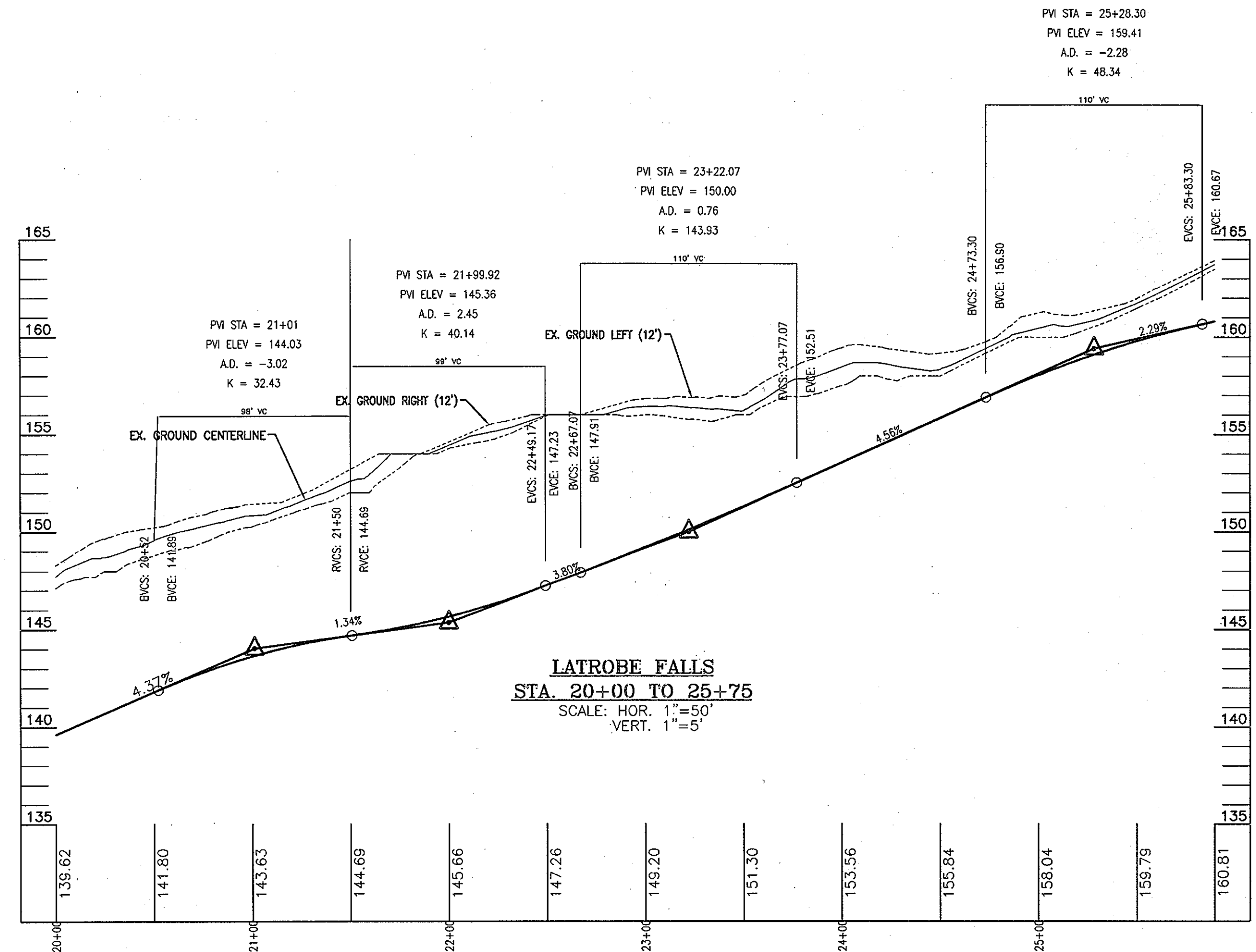
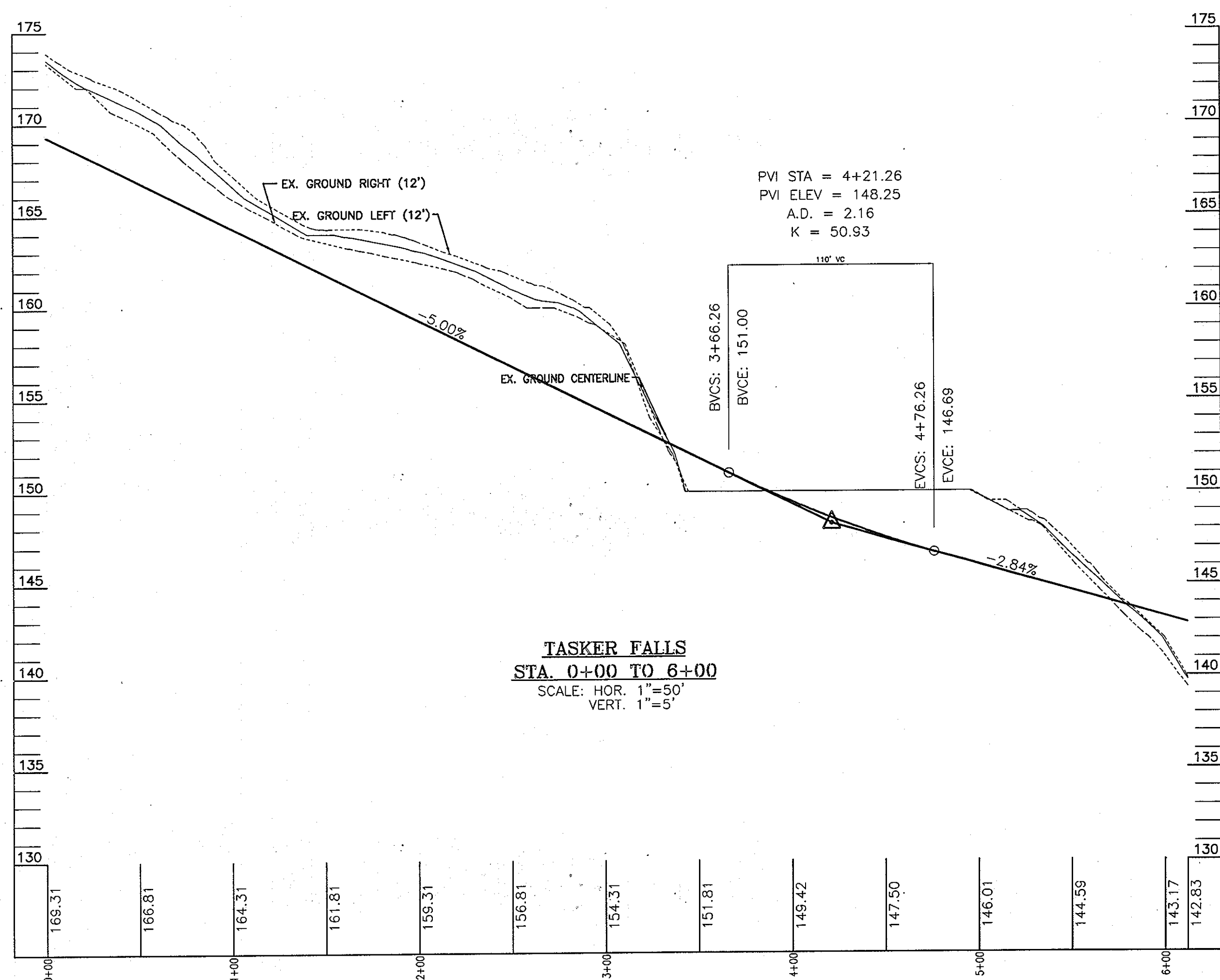
PARCELS A, C AND OPEN SPACE LOT 1
 REF: S-04-10, WP-04-152, WP-05-79, P-05-17, F-05-165, PLAT 18668-71
 TAX MAP 37 BLOCK 16 PARCEL 155, 158, 159
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL
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 8407 MAIN STREET TEL: 410.461.7666
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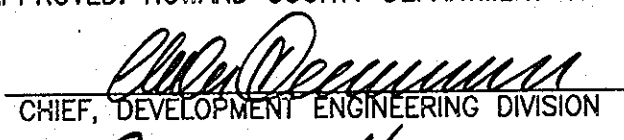
DESIGN BY: WJZ
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 CHECKED BY: WJZ
 DATE: DECEMBER 7, 2006
 SCALE: 1"=30'
 W.O. NO.: 04-08


31 SHEET OF 39


WALTER C. ZAWISLAK, PE No. 32033



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

 DATE: 12/18/06
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

 DATE: 12/14/06
 CHIEF, DIVISION OF LAND DEVELOPMENT

 DATE:

OWNER/DEVELOPER


ELKRIDGE DEVELOPMENT NO.2, LLC ELKRIDGE DEVELOPMENT NO.2, LLC
 301 TRANSYLVANIA AVENUE 301 TRANSYLVANIA AVENUE,
 RALEIGH, NC 27609 RALEIGH, NC 27609
 (919) 789-9289 (919) 789-9289

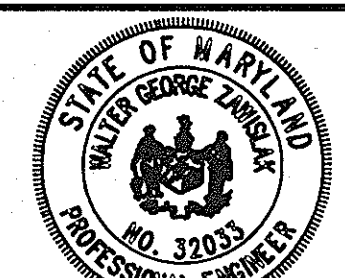


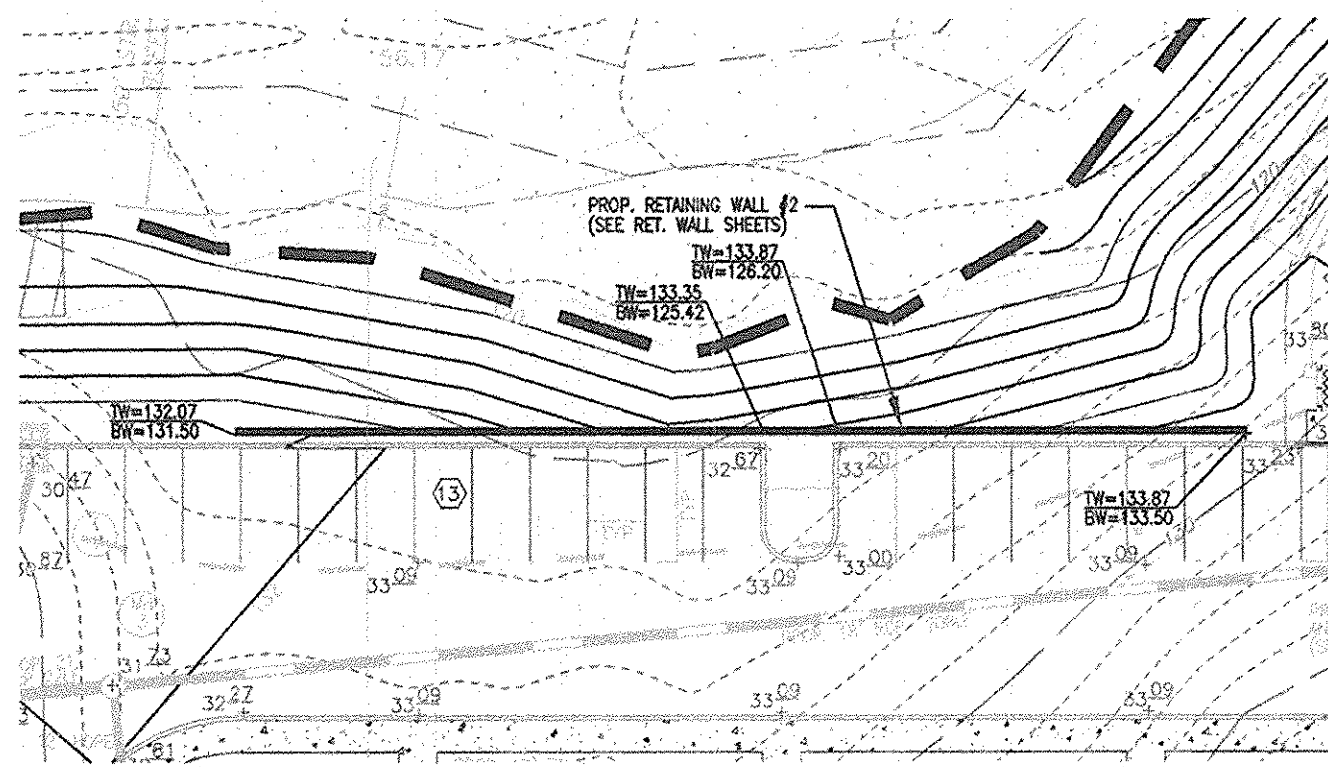
NO.	REVISION	DATE

SITE DEVELOPMENT PLAN
PRIVATE ROAD PROFILES &
HC SPOT INSETS
BELMONT STATION (PHASES I, II, AND III)

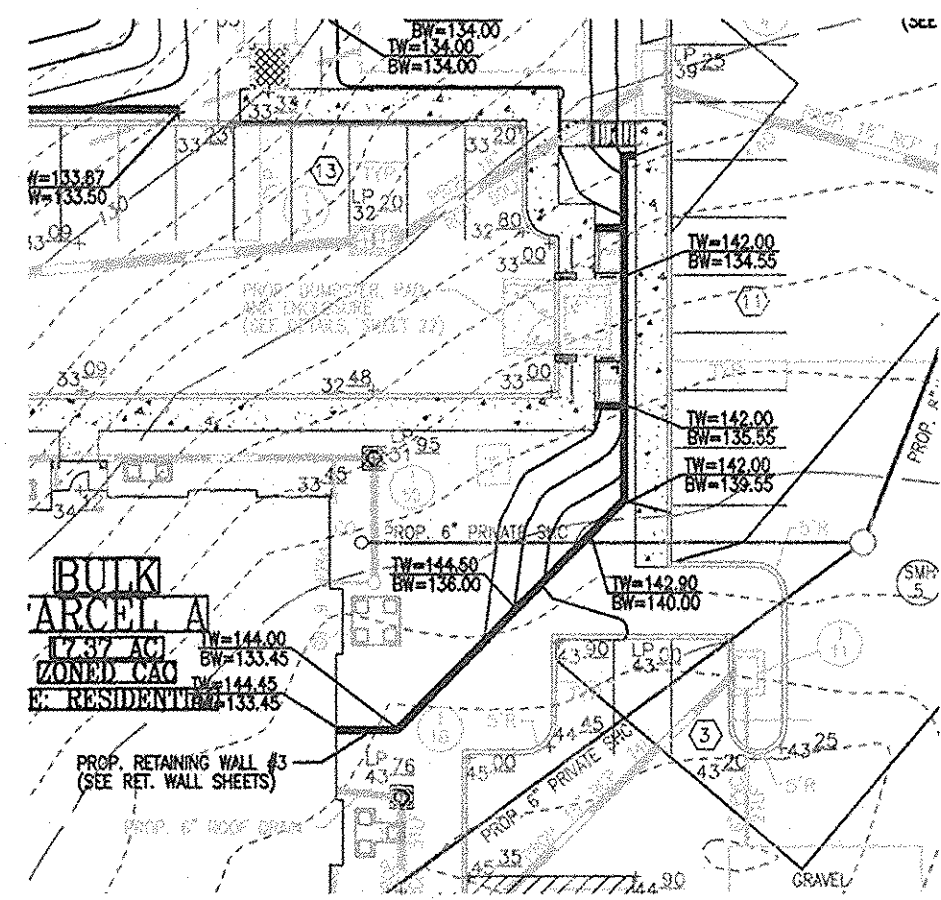
REF: S-04-10, WP-04-152, WP-05-78, P-05-17, F-08-169, PLAT 18668-71
 TAX MAP 37, BLOCK 18 PARCEL 196, 198, 199
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND


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 8407 MAIN STREET TEL: 410-461-7666
 ELLICOTT CITY, MD 21043 FAX: 410-461-8961

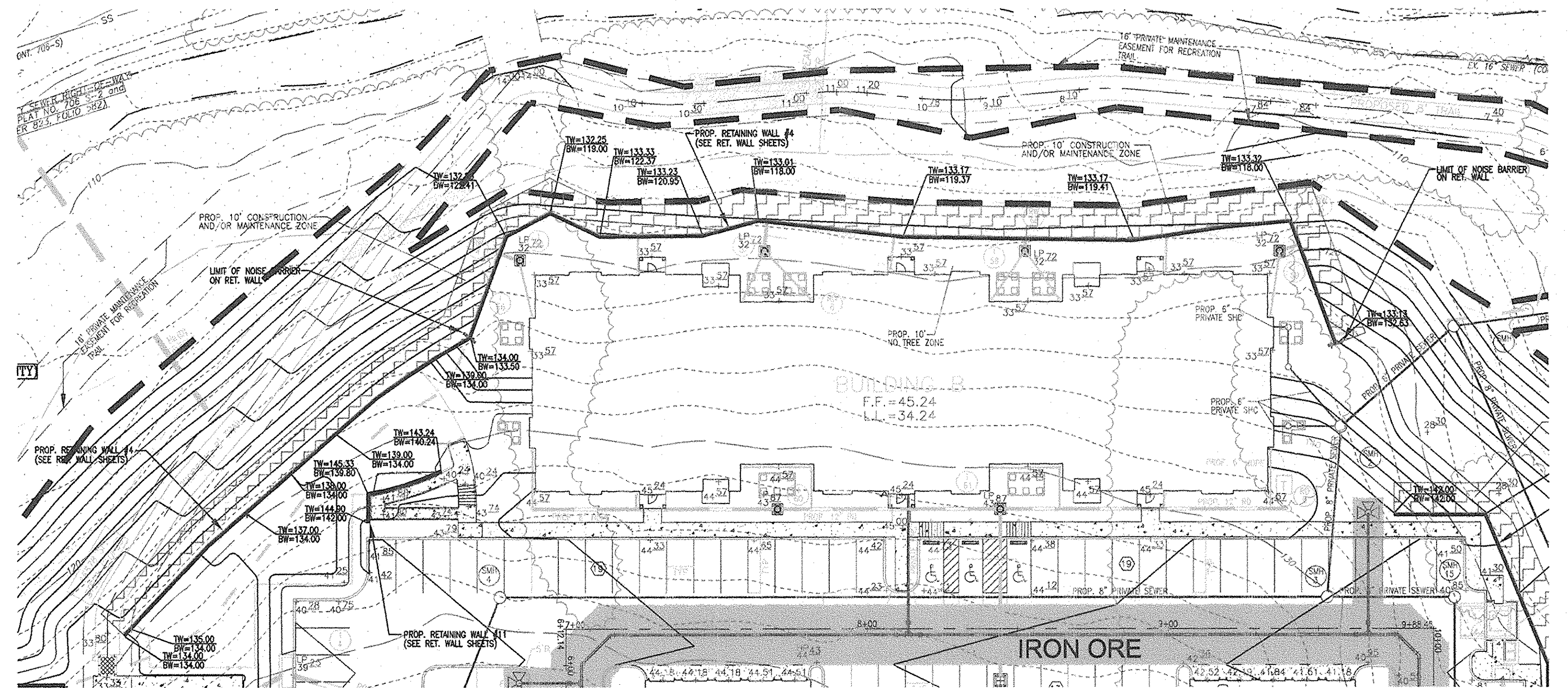
DESIGN BY: WJZ	 WALTER G. ZAWISLAK, PE No. 32033
DRAWN BY: DZ	
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SCALE: 1"=30'	32 SHEET OF 39
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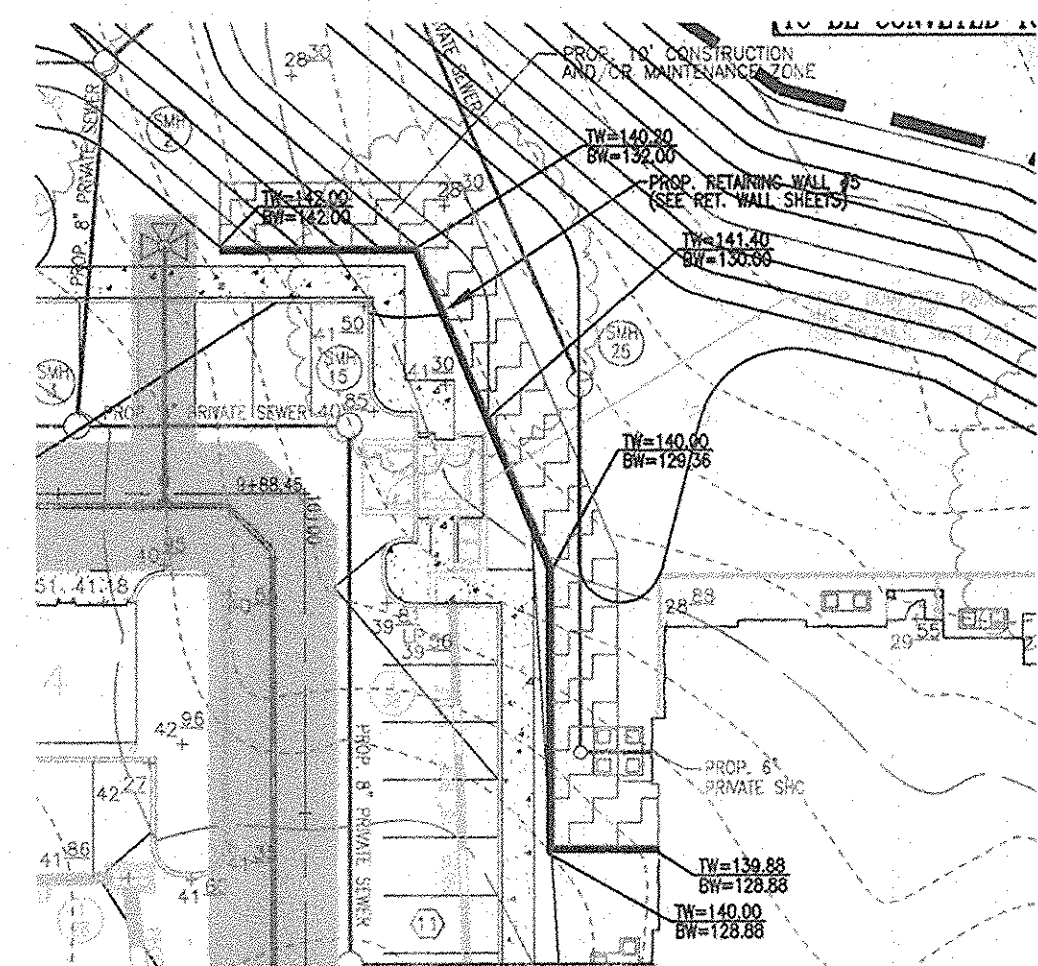
Wall 2 (Geogrid)
Scale: 1"=30'



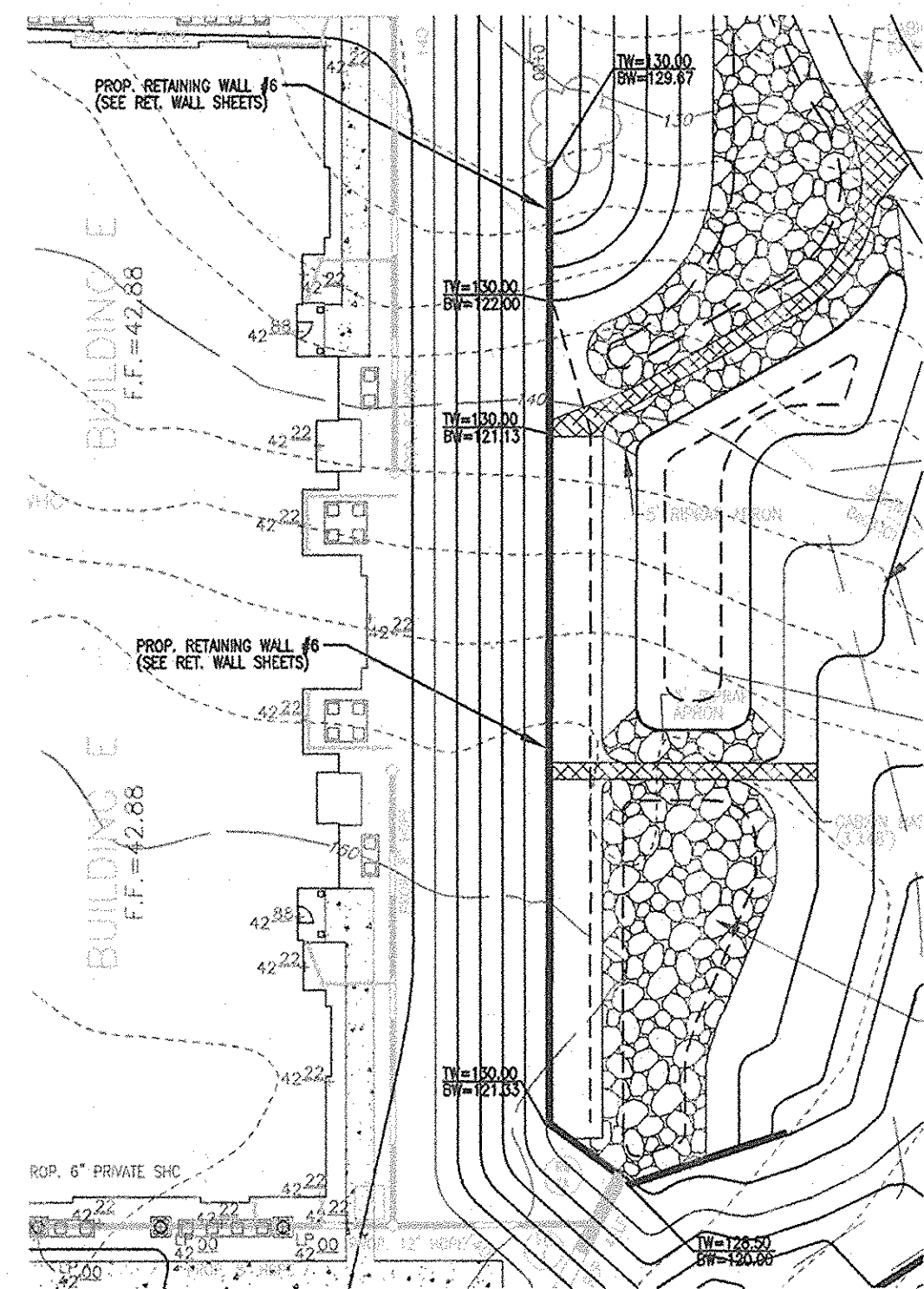
Wall 3 (Geogrid)
Scale: 1"=30'



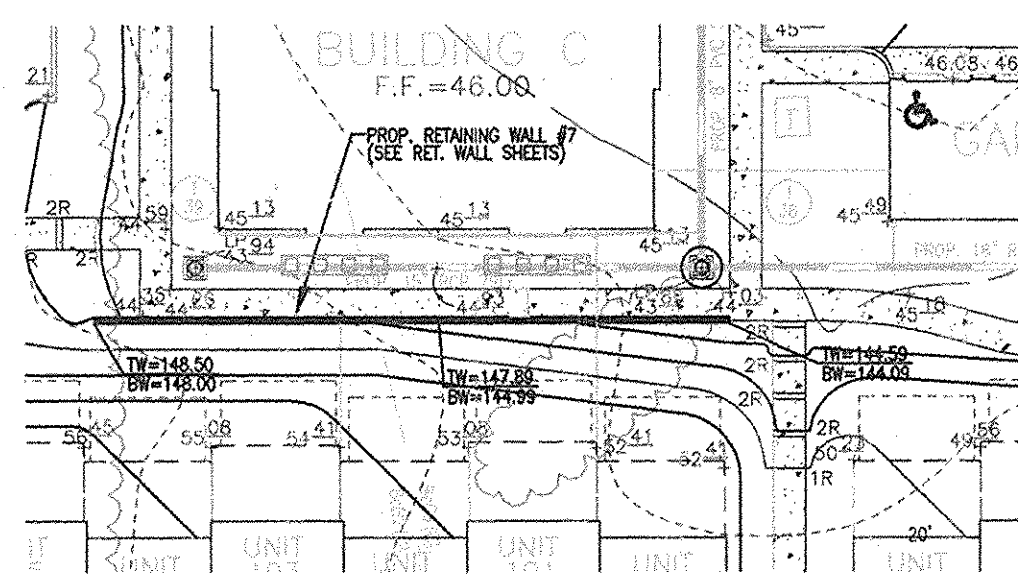
Wall 4 (Geogrid)
Scale: 1"=30'



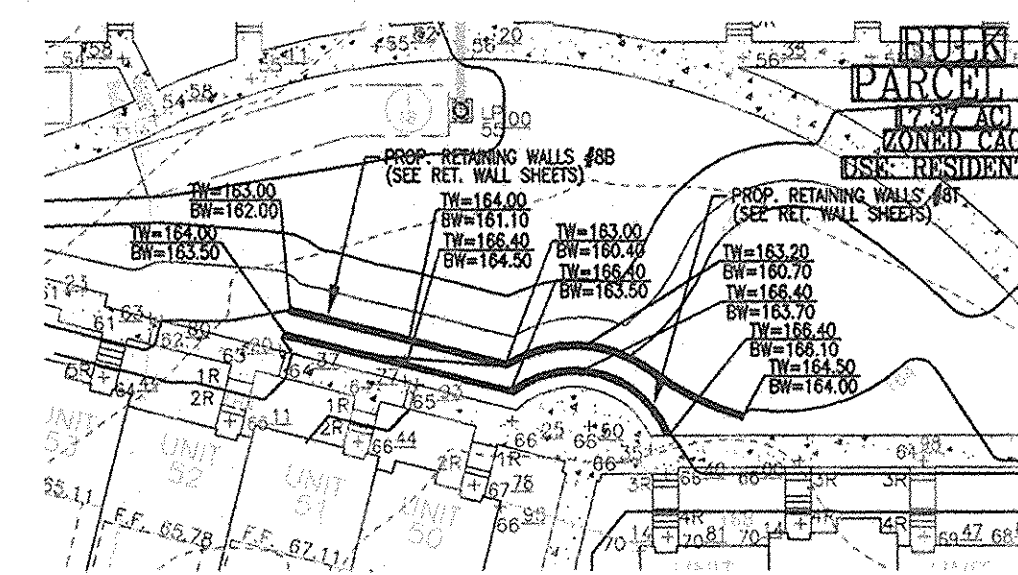
Wall 5 (Geogrid)
Scale: 1"=30'



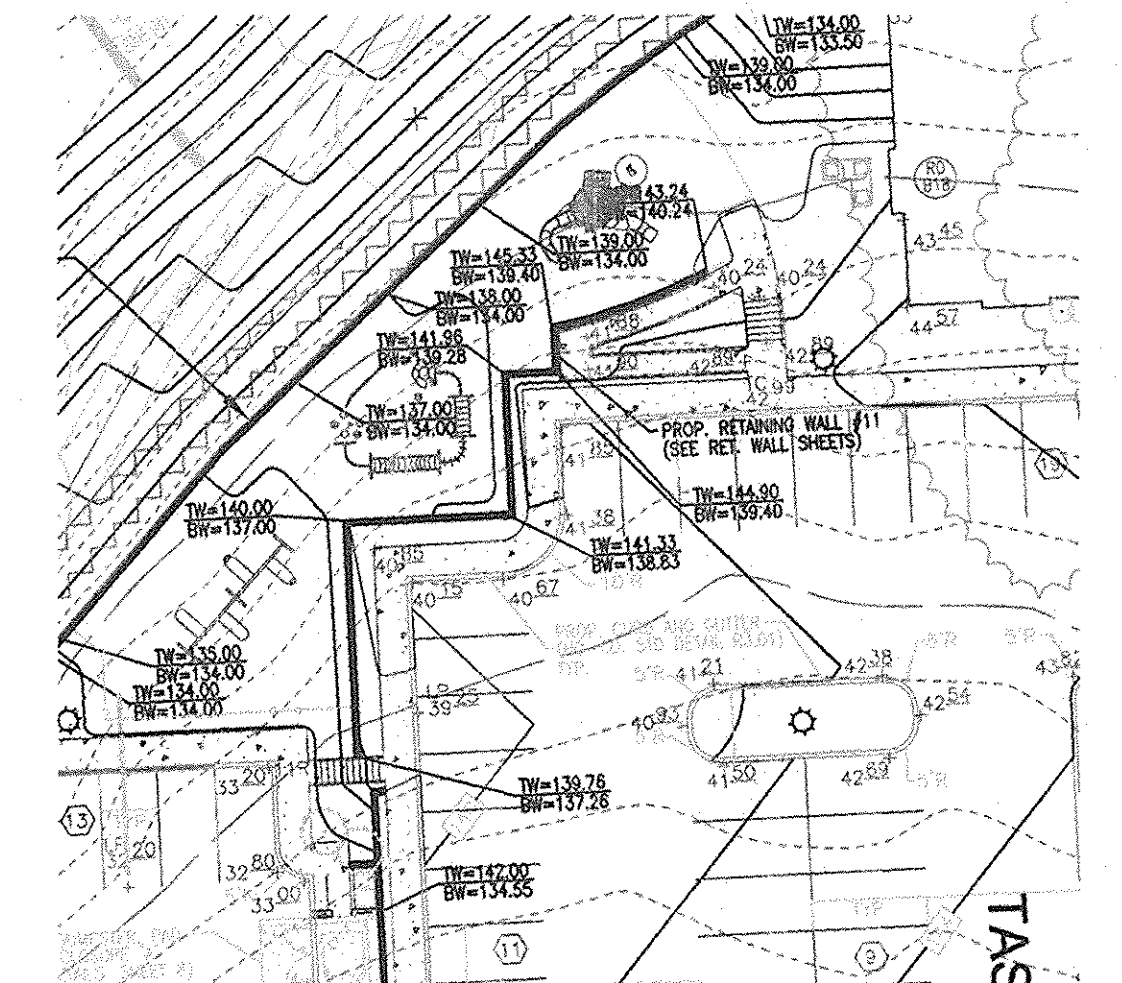
Wall 6 (Concrete)
Scale: 1"=30'



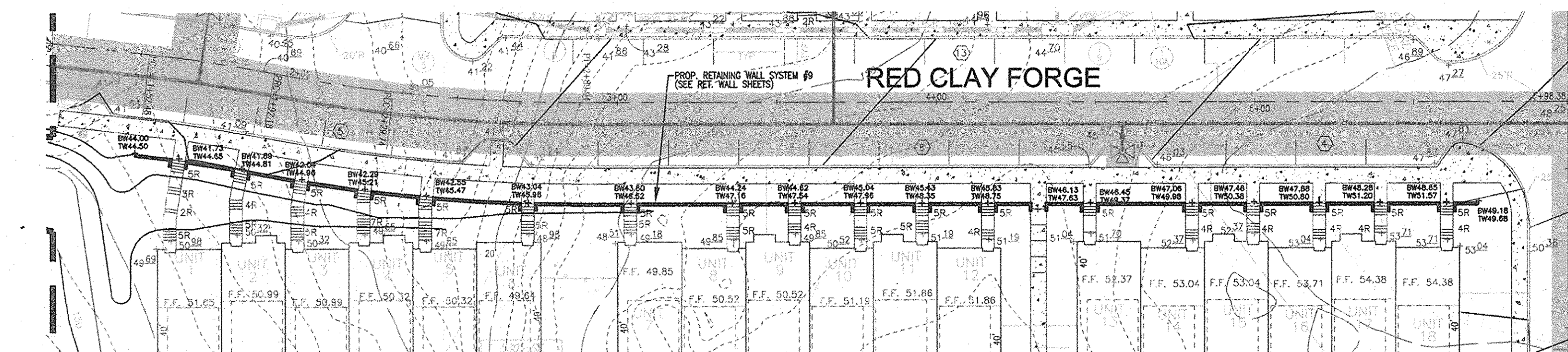
Wall 7 (Concrete)
Scale: 1"=30'



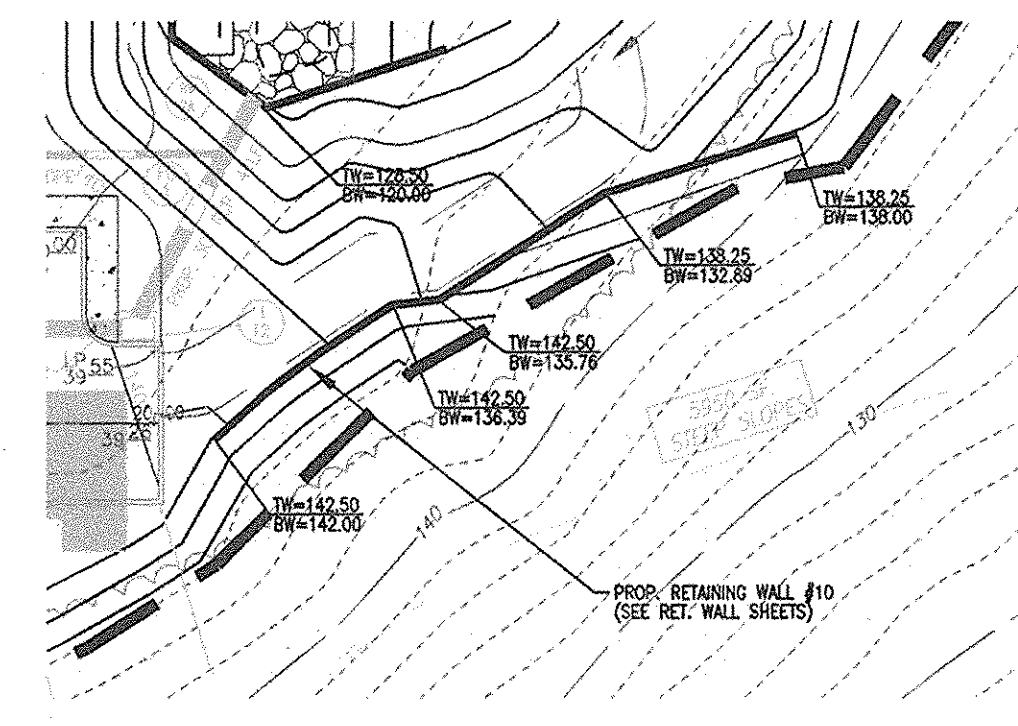
Wall 8B and 8T (Concrete)
Scale: 1"=30'



Wall 11 (Concrete)
Scale: 1"=30'



Wall 9 (Concrete)
Scale: 1"=30'



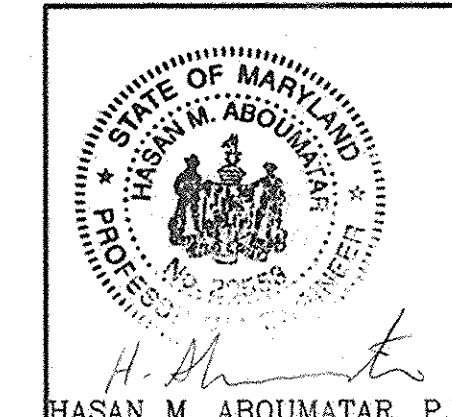
Wall 10 (Geogrid)
Scale: 1"=30'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 12/8/06

 CHIEF, DIVISION OF LAND DEVELOPMENT DATE 12/18/06

 DIRECTOR DATE 12/18/06



OWNER/DEVELOPER
 REVAL ELKBRIDGE, LLC
 301 PENNSYLVANIA AVENUE
 RALEIGH, NC 27609
 (919) 789-9289

NO.	REVISIONS	DATE

SITE DEVELOPMENT PLAN
 BELMONT STATION
 PHASE I, II & III
 TAX MAP 37 BLOCK 18 PARCELS 'A' & 'B' & OPEN SPACE LOT 1 PARCEL 196, 198, 199'
 1ST ELECTION DISTRICT REF: S-04-10 HOWARD COUNTY, MARYLAND

RETAINING WALL PLAN VIEWS

DSH	HMA	11/09/06	3417-H	SHEET 33 OF 39
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ECS MID-ATLANTIC, LLC
 1340 CHARWOOD ROAD, SUITE P
 HANOVER, MARYLAND 21076
 OFFICE (410) 859-4300
 FAX (410) 859-4324
 "Setting The Standard For Service"

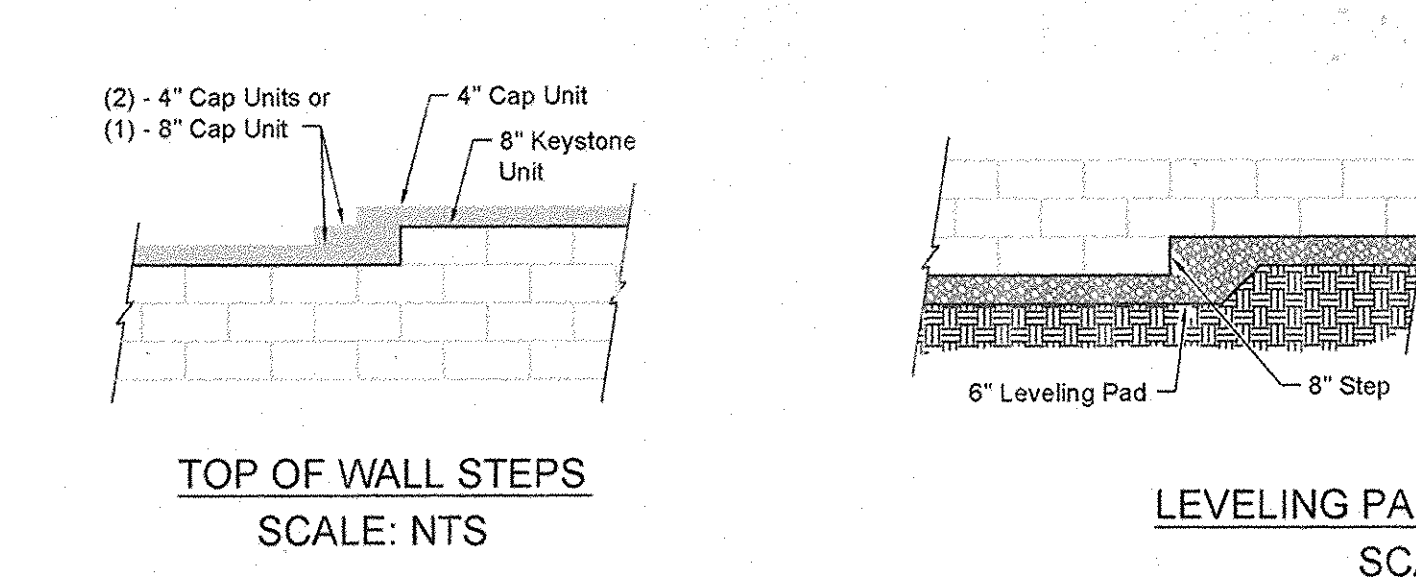
RETAINING WALL SPECIFICATION GUIDELINES

- PART 1: GENERAL**
- 1.01 Description
- Retaining walls must be constructed under the supervision of a Maryland Registered Professional Engineer.
 - Work includes furnishing and installing concrete modular block retaining wall units to the lines and grades shown on the construction drawings and as specified herein.
 - Work includes preparing foundation soil, furnishing and installing leveling pad, unit fill and reinforced backfill to the lines and grades shown on the construction drawings and as specified herein.
 - Work includes furnishing and installing all related materials required for construction of the retaining wall as shown on the construction drawings.
- 1.02 Reference Standards
- ASTM C 90 Lead Bearing Concrete Masonry Units.
 - ASTM C 140 Sampling and Testing Concrete Masonry Units.
 - ASTM D 448 Sizes of Aggregate for Road and Bridge Construction.
 - ASTM D 698 Laboratory Compaction Characteristics using Standard Effort.
- 1.03 Delivery, Storage and Handling
- Contractor shall check the materials upon delivery to assure that proper materials have been received.
 - Contractor shall prevent excessive mud, wet cement, epoxy, and similar materials (which may stiffen themselves) from coming in contact with the materials.
 - Contractor shall protect the materials from damage and exposure to sunlight. Damaged materials shall not be incorporated into the retaining wall structure and backfill.
- 1.04 Quality Assurance
- Owner will be responsible for soil testing and construction observations for quality control during earthwork and retaining wall construction operations.
- PART 2: MATERIALS**
- 2.01 Definitions
- Modular Wall Units - KEYSTONE or equivalent modular concrete facing and corner units, machine made from portland cement, water, and mineral aggregates.
 - Structural Geogrid - a structural geogrid formed by a regular network of integrally connected tensile elements with apertures of sufficient size to allow interlocking with surrounding soil, rock, or earth and function primarily as reinforcement.
 - Unit Fill/Drainage Aggregate - drainage aggregate, such as No. 57 Stone, which is placed within the cells of the modular concrete units and immediately behind the units to a width of at least 12 inches.
 - Reinforced Backfill - Compacted soil which is within the reinforced soil volume as shown on the plans.
 - Excavation Face - The interface between the reinforced backfill and the retained fill. During construction, measures shall be taken to avoid developing a shear plane at this interface.
 - Retained Backfill - On-site material located behind the reinforced zone of soil.
- 2.02 Concrete Units
- Concrete segmental units shall conform to the requirements of NCA TEK 2-4 and have a minimum 28-day compressive strength of 4,000 psi. The units shall also pass 150 freeze thaw cycles in water with less than 1% weight loss for samples tested in accordance with ASTM C-1262.
 - Wall Face Units for general wall construction shall be KEYSTONE Standard II Units or equivalent. Sculptured face or straight (flat) face may be used.
 - Top of Wall Cap Units shall be KEYSTONE Cap Units or equivalent with fiberglass connecting pins.
- 2.03 Fiberglass Connecting Pins
- Connecting pins shall be 1/2" diameter thermostat isophthalic polyester resin-pultruded fiberglass reinforcement rods supplied by the unit manufacturer.
- 2.04 Construction Adhesive
- Construction adhesive for top of wall cap blocks shall be KEYSTONE KapSealTM or an approved equivalent construction adhesive. Material shall conform to ASTM 2339 and shall be supplied by the block unit supplier.
- 2.05 Drainage Pipe
- Continuous collection pipe shall consist of 4-inch diameter slotted or perforated PVC pipe (Schedule 40)
 - Outlet (discharge) pipe shall consist of 4-inch diameter solid PVC pipe (Schedule 40).
 - All pipe fittings shall be appropriate for the pipe size and schedules used.
- 2.06 Soil Fill Materials
- Base Leveling and Pad Material
 - Material shall consist of crushed stone (GA S/B) as shown on the construction drawing. The leveling pad shall be, at a minimum, 6-inches thick. MSHA No. 57 Stone or pad gravel is not permitted.
 - Unit Fill/Drainage Aggregate
 - Fill for units shall be free draining crushed stone or gravel, with a maximum aggregate size of 1 1/2" to 3/4" and no more than 5% passing the No. 50 sieve and conforming to ASTM D 448. Gradation of the unit fill shall be approved by the Geotechnical Engineer. Pad gravel shall not be used. MSHA No. 57 stone may be used.
 - Reinforced Backfill
 - Material shall consist of soil classified as SM, SC or more granular soils per USCS with minimum soil parameters as indicated under design parameters. The backfill material shall contain no particles greater than 2.5 inches in diameter. The backfill material shall contain at least 30 percent by weight retained on the US Standard No. 200 sieve. Other backfill materials may be approved by the Geotechnical Engineer.
 - Impervious Soil
 - Material may be imported or site excavated soils exhibiting a USCS designation of a lean clay (CL) or clayey sand (SC). The material shall contain no less than 40 percent by weight passing the US Standard No. 200 sieve and exhibit a plasticity index no less than 4 and no greater than 20. Other materials may be approved by the Geotechnical Engineer.
 - Sample Submittal
 - The contractor shall submit samples and material specifications of the proposed backfill soils (unit fill, pad material, reinforced backfill) to the Geotechnical Engineer for approval.
 - Soil must meet or exceed the friction angle specified in design parameters.
 - Direct shear testing is required for all soil samples used for Reinforced Backfill.
- 2.07 Structural Geogrid
- The geogrid identified for the retaining wall consists of the following:
 - Tensar UXK110047.
 - Tensar UXK140065.
 - Tensar UXK160060.
 - Tensar UXK150060.
 - Other geogrid may be utilized provided the materials meet or exceed the minimum strength with similar or better strain characteristics of the Tensar geogrid and are approved by the Geotechnical Engineer for use with soil backfill. The material shall be protected from sunlight and weather while stored on site in accordance with the manufacturer's recommendation.
- 2.08 Geotextile
- A non-woven geotextile shall be utilized as shown on the plans to provide a filter between the unit fill/drainage aggregate and the reinforced backfill.
 - The geotextile shall consist of a Mifflin 14GN, or an approved equivalent.
 - Where geogrids are located, the geotextile shall be placed as illustrated on the plans. At junctions and ends, the geotextile shall be overlapped at least 12 inches. The geotextile shall be placed so that intimate contact is made between the geotextile and the backfill material.
 - Ripped or otherwise damaged material shall not be used. The material shall be protected from sunlight and weather while stored on site in accordance with the manufacturer's recommendation.

DESIGN PARAMETERS

Configuration:	Minimum Friction Angle	Minimum Unit Weight (pcf)
Battered face wall (4.4%)	32	125
Wall #2= 6'-7" / 2,500	30	120
Wall #3= 11'-1" / 2,500	30	120
Wall #4= 15'-4" / 2,500	30	120
Wall #5= 12'-1" / 2,500	30	120
Wall #10= 7'-3" / 1,500	30	120
Retained soils		
Foundation soils		

Backslope Angle: Varies (2H:1V maximum)
 Toe Slope Angle: Varies (2H:1V maximum)
 Wall Embedment: Varies (16 inches minimum)
 Building & Pavement Surcharge: Varies (250 psf maximum)



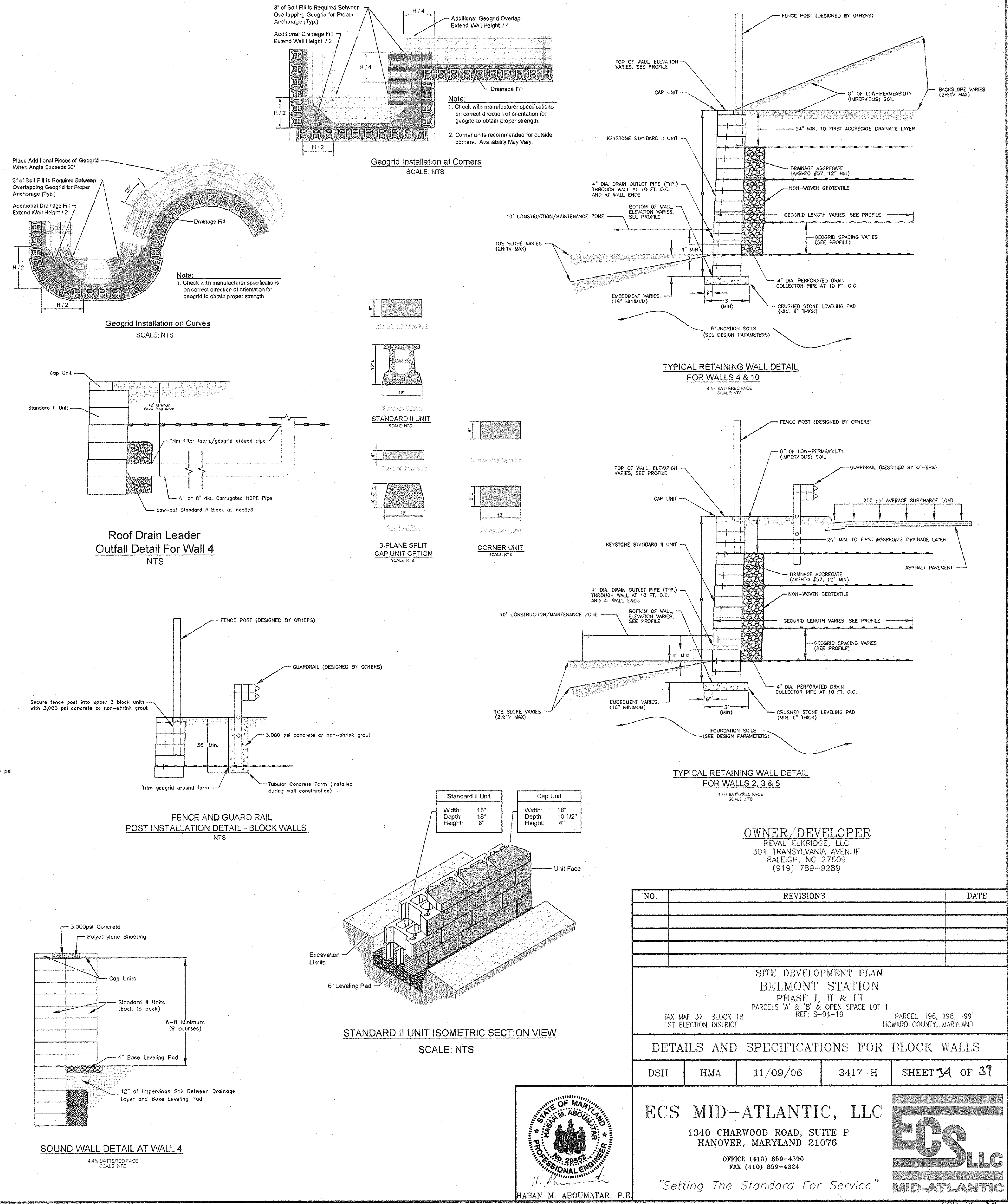
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION: *[Signature]* DATE: 12/18/06

CHIEF, DIVISION OF LAND DEVELOPMENT: *[Signature]* DATE: 12/18/06

DIRECTOR: *[Signature]* DATE: 12/18/06

- PART 3: INSTALLATION**
- 3.01 Excavation
- Contractor shall excavate to the lines and grades shown on the construction drawings. Contractor shall be careful not to disturb embankment and foundation materials beyond lines shown.
 - All existing topsoil, rootmat and other soft or unsuitable materials shall, at a minimum, be removed from the footprint of the retaining wall.
 - If groundwater is encountered during the excavation of the backslope, a backslope drainage system shall be utilized. The system shall tie into the internal wall drainage system to provide adequate release of any water which accumulates behind the reinforced zone.
- 3.02 Foundation Preparation
- Foundation shall be excavated as required for leveling pad dimensions shown on the construction drawings, or as directed by the Geotechnical Engineer.
 - The required bearing pressure beneath the footing of the wall must be verified in the field by a Geotechnical Engineer.
 - Unsuitable soils shall be removed and replaced with approved material.
 - Over-excavated areas shall be backfilled with approved, compacted backfill material or as approved by the Geotechnical Engineer.
- 3.03 Base Leveling Pad
- Leveling pad materials shall be placed upon an approved foundation as shown on the construction drawings to a minimum thickness of 6 inches.
 - Aggregate material shall be compacted to provide a dense, level surface on which to place the first course of modular units. Compaction shall be to at least 95% of the maximum dry density as determined by the Standard Proctor Compaction Test (ASTM D 698). Leveling pad shall be prepared and leveled to ensure complete contact of retaining wall unit with base.
- 3.04 Unit Installation
- The first course of concrete modular units shall be carefully placed on the base leveling pad. Each unit shall be checked for level (in both directions) and alignment.
 - Install fiberglass connecting pins and fill all voids in and around the modular units with unit fill material. Tamp or rod unit fill to ensure that all voids are completely filled.
 - Sweep excess material from top of units and install the next course. Ensure that the units of each course are completely filled, backfilled and compacted prior to proceeding to next course.
 - Place each subsequent course, ensuring that pins protrude into adjoining courses a minimum of 1 inch. Two pins are required per unit. Pull each unit forward to obtain the desired offset (as noted on the plans), away from the fill zone, locking against the pins in the previous course and backfill as the course is completed. The geogrid shall be placed on top of each height. Wall construction shall not exceed 2 courses in height before reinforced backfill is placed.
 - Follow wall erection and unit fill placement closely with any other backfilling required. Compaction of backfill soil shall be to 95% of the maximum dry density as determined in accordance with ASTM D 698.
 - As appropriate where the wall changes elevation, units can be stepped with the grade or turned into the embankment with a convex return end. Provide appropriate buried units on compacted leveling pad in area of convex return end.
- 3.05 Geogrid Installation
- The geogrid type and length (direction perpendicular to the wall face) shall conform to those indicated on the construction drawings. Geogrid shall be laid continuously at the proper elevations and orientation as shown on the construction drawings or as directed by the Geotechnical Engineer.
 - Correct orientation (roll direction) of the geogrid shall be verified by the Contractor.
 - The geogrid shall be connected to the modular wall units by placing the geogrid over fiberglass pins and laying the grid back to the fill side.
 - A fitting, non-woven geotextile shall be located between the drainage aggregate/unit fill and the reinforced backfill. The geotextile shall be folded back, parallel, above and below the geogrid as necessary to ensure continuous grid placement.
 - The geogrid shall be pulled taut to set the geogrid against the fiberglass pins and to eliminate loose folds in the material. The fill surface shall be level. To tension the geogrid, backfill shall be placed over the geogrid from immediately behind the wall to the back end of the geogrid.
 - No geogrid overlaps will be allowed in any length of geogrid perpendicular to the wall face except at corners or angled locations. The geogrid shall overlap rather than provide no coverage. A minimum of 4 inches of soil cover is required between over lapping layers of geogrid.
- 3.06 Drainage Installation
- Provide continuous 4-inch slotted or perforated PVC pipe behind the wall, no greater than 4 inches above finished grade at the bottom of the wall.
 - Provide 4-inch solid PVC pipe outlets every 10 feet along the wall, and at each end of the wall.
- 3.07 Fill Placement
- Backfill material shall be placed in 8 inch loose lifts and compacted to at least 95% of the maximum dry density as determined by ASTM D 698. The in-place moisture content shall be in the range of at the optimum moisture content to 2 percentage points higher than the optimum moisture content, as determined in accordance with ASTM D 698.
 - Backfill shall be placed, spread and compacted in such a manner that minimizes the development of slack or loss of pretension of the geogrid. Backfill shall be placed in horizontal layers. The excavation face shall be stepped or notched to provide compaction of backfill on a level surface and to increase the interlock between the retained soils and the reinforced backfill.
 - Only hand-operated compaction equipment shall be allowed within 5 feet of the back surface of the KEYSTONE or equivalent units.
 - Backfill shall be placed from immediately behind the excavation face/retained soils and compacted to the specifications presented herein with appropriate compaction equipment.
 - Tracked construction equipment shall not be operated directly on the geogrid. Turning of tracked vehicles shall not be permitted overtop the geogrid.
 - Rubber-tired equipment may pass over the geogrid reinforcement at slow speeds (less than 10 mph). Avoid sudden braking and sharp turning.
 - The suitability of the fill material must be confirmed by a Geotechnical Engineer.
 - The upper 8 inches of wall backfill shall consist of impervious soil, compacted to at least 95% of the maximum dry density as determined by ASTM D 698. The in-place moisture content shall be in the range of at the optimum moisture content to 2 percentage points higher than the optimum moisture content, as determined in accordance with ASTM D 698.
- 3.08 Cap Installation
- Provide permanent mechanical connection to wall units with KEYSTONE KapSealTM or equivalent construction adhesive. Apply adhesive to top surface of lower unit and place cap unit stop adhesive.
 - Place Cap Units over projecting pins from the units below. Pull forward to setback position.
 - Backfill and compact to finished grade.
- 3.09 Fence Installation
- For walls where a fence is required, do not place drainage stone into the tail voids of the upper 3 blocks at each designated post location. Shorter sections of scrap fence post material can be used during wall construction to identify post hole locations and to keep stone out of the voids for easier void cleanup prior to grouting.
 - Place each fence post into the tail void of the upper 3 blocks and grout into place with 3,000 psi non-shrink grout.
 - Construct the fence at the top of each wall in accordance with project documents.
 - See Architectural or Landscape plans and specifications for additional fence details.
- 3.10 Guardrail Installation
- Guardrail post locations should be identified by placement of Sonatube forms (or similar concrete forms). Where necessary, forms should be installed through geogrid by cutting the geogrid to match the form dimensions.
 - The bottom of each form should be a minimum of 36 inches below final grade.
 - After wall construction, trim each form to 2 inches below final grade and install the guardrail post into the form to a depth of 36 inches below final grade.
 - Grout the guardrail post into place with 3,000 psi non-shrink grout or 3,000 psi concrete.
 - Construct the guardrail in accordance with project documents.
 - See Architectural or Landscape plans and specifications for additional guardrail details.
- 3.10 Sound Barrier Wall Installation - Wall 4
- Sound wall shall be constructed by placing Keystone Standard II units in a back-to-back configuration, with all voids filled with drainage stone.
 - Units above the retaining wall drainage layer shall be constructed on a 4-inch crushed stone leveling pad, separated from the drainage layer by 12-inches of impervious soils.
 - A total of 9 courses of Standard II units above grade are required.
 - Affix cap units into place with adhesive and place polyethylene sheeting into void spaces above drainage stone. Place 3,000 psi concrete onto polyethylene sheeting in the void spaces to provide a smooth, level surface at the top of the wall.



OWNER/DEVELOPER
 REVAL ELK RIDGE, LLC
 301 TRANSYLVANIA AVENUE
 RALEIGH, NC 27609
 (919) 789-9289

NO.	REVISIONS	DATE

SITE DEVELOPMENT PLAN
 BELMONT STATION
 PHASE I, II & III
 TAX MAP 37 BLOCK 18
 1ST ELECTION DISTRICT
 PARCELS 'A' & 'B' & OPEN SPACE LOT 1
 REF: S-04-10
 PARCEL 196, 198, 199
 HOWARD COUNTY, MARYLAND

DETAILS AND SPECIFICATIONS FOR BLOCK WALLS

DSH HMA 11/09/06 3417-H SHEET 34 OF 39

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 HANOVER, MARYLAND 21076
 OFFICE (410) 859-4300
 FAX (410) 859-4324
 "Setting The Standard For Service"

ECS LLC
 MID-ATLANTIC

HASAN M. ABOUMATAR, P.E.

Retaining Wall Specifications and Guidelines

Part 1: General

- 1.01 Description**
 A. Retaining walls must be constructed under the supervision of a Maryland Registered Professional Engineer.
 B. Work includes preparation of foundation soils, furnishing all materials, and installing all materials to the lines and grades shown on the construction drawings.
- 1.02 Codes and Standards**
 A. "International Building Code - 2003", International Code Council, Inc.
 B. "ACI Manual of Concrete Practice - Parts 1 Through 5 - 2001"
 C. "Manual of Standard Practice - Concrete Steel Reinforcing Institute"
 D. "American Society for Testing and Materials"
- 1.03 Damage, Storage, and Handling**
 A. The Contractor shall check the materials upon delivery to assure that the proper materials have been received.
 B. The Contractor shall properly handle and store the materials to prevent damage to the materials. Damaged materials shall not be incorporated into the wall.
- 1.04 Quality Assurance**
 A. The Owner shall engage a qualified testing agency to provide observation and testing services as described below.
 B. Concrete Placement
 1. The agency shall inspect the formwork and reinforcing steel placement for compliance with the contract documents. Reinforcing steel should be inspected for correct size, quantity, and spacing.
 2. Fresh concrete shall be sampled in accordance with ASTM C 172, and tested for slump, air entrainment, and temperature.
 3. Test cylinders shall be molded in accordance with ASTM C 31. Four test cylinders shall be molded for each day's pour, or for every 100 cubic yards of concrete placed, whichever is greater.
 C. Fill Placement
 1. All soil fills shall be tested in accordance with ASTM D 2922.
 2. A minimum of one compaction test per lift should be made per 2,500 square feet of fill lift area, but not fewer than two tests per lift should be made.
 3. The elevations and locations of the field density tests should be clearly identified at the time of fill placement and compaction.

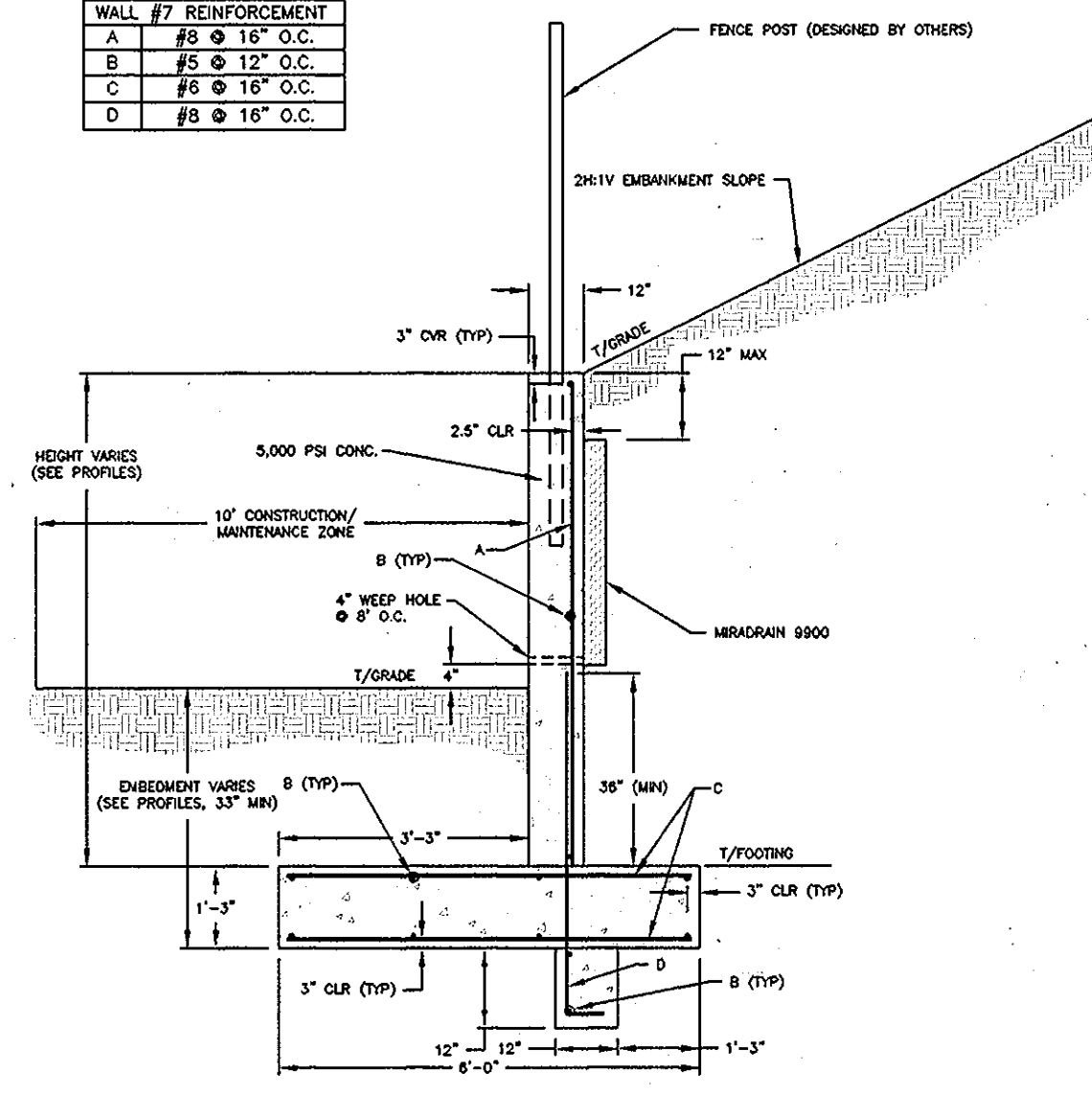
Part 2: Materials

- 2.01 Concrete**
 A. Concrete shall conform to Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 414
 B. Concrete shall have a minimum 28-day compressive strength of 5,000 psi (Wall 6) or 3,000 psi (Walls 7, 8B, 8T, 9, and 11)
 C. Concrete shall have a maximum slump of 6 inches and shall be air entrained to 6% (+/- 1%) by volume. Concrete for foundations does not require air entrainment.
 D. Concrete shall have a minimum density of 145 pcf and a maximum water-to-cement ratio of 0.50
- 2.02 Steel Reinforcement**
 Steel reinforcing shall conform to ASTM A-615, Grade 60.
 B. Submit shop drawings at least 15 business days before date reviewed submittals will be needed. Shop drawings shall bear the contractor's stamp of approval which shall constitute that he has verified all field measurements, construction criteria, materials, and similar data, and has checked each drawing for completeness, coordination, and compliance with contract documents.
- 2.03 Soil Backfill**
 A. Material should consist of soil classified as SM, SC, or more granular, in accordance with ASTM D 2487.
 B. Material should have no particle larger than 2.5 inches and shall contain at least 30 percent, by weight, retained on the U.S. No. 200 sieve.
 C. Materials should have a Liquid Limit less than 45, and a Plasticity Index less than 20.
 D. Material should have a minimum friction angle of 28 degrees and a minimum dry unit weight of 120 pcf.
 E. The Contractor should submit samples of the proposed backfill soils to the Geotechnical Engineer of Record for approval prior to their use.
- 2.04 Drainage Board**
 A. Drainage board used behind the walls shall consist of Miradrain 9900, or an approved equivalent.

Part 3: Construction

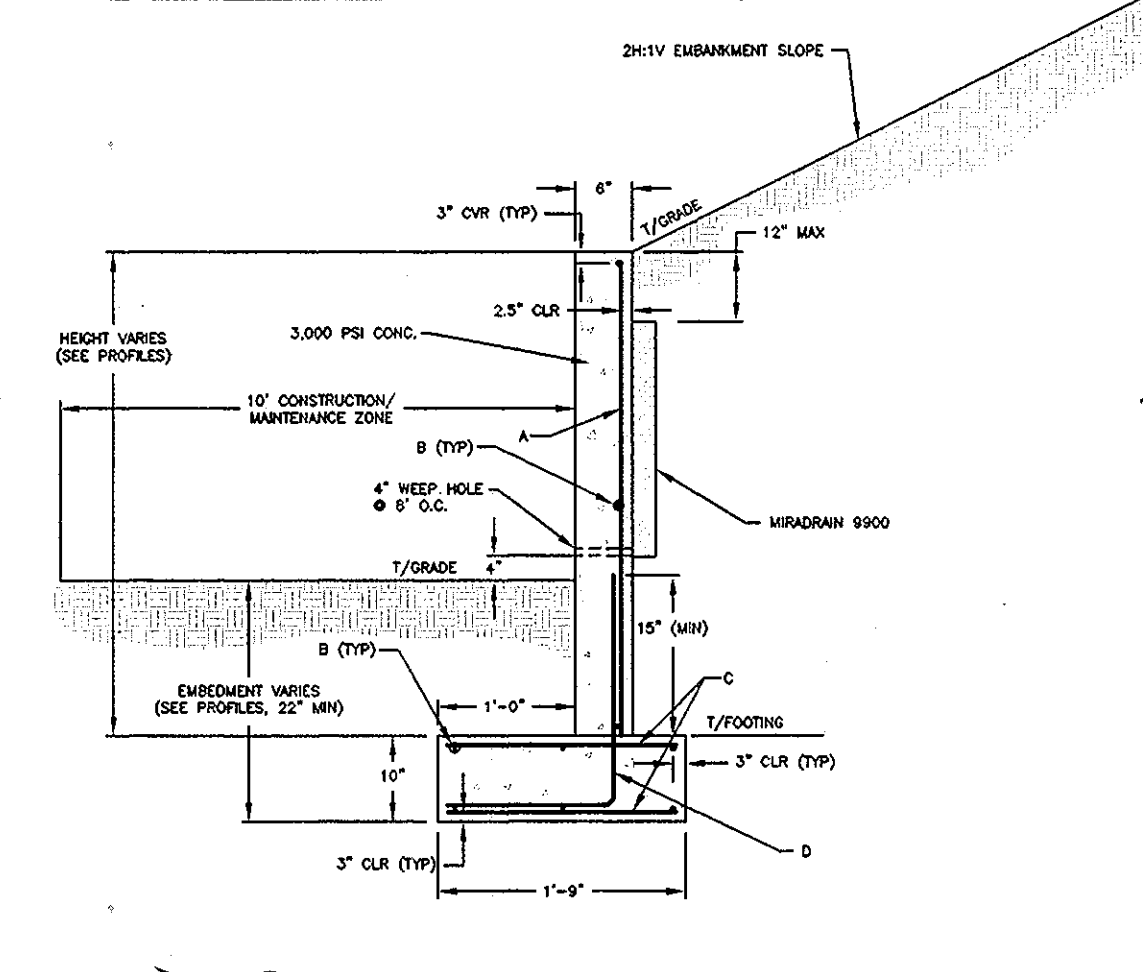
- 3.01 General**
 A. All existing underground utilities shall be properly marked, and relocated if necessary, prior to construction.
 B. All proposed underground utilities or structures in the general wall area shall be completely installed prior to the construction of the wall.
 C. Protect all existing and/or new structures from damage by construction equipment. Immediately repair any damage that may occur.
- 3.02 Foundation**
 A. The wall foundation shall be excavated to the grades and lines as shown on the construction drawings. Contractor should take care not to disturb foundation soils beyond the lines and grades shown.
 B. The foundation shall bear at the minimum embedment depths indicated, as measured from the final grade at the front of the wall.
 C. The foundation subgrade soils shall be tested by a qualified representative of the Geotechnical Engineer to verify the availability of the design bearing pressure of 3,000 psf (Wall 6) or 2,000 psf (Walls 7, 8B, 8T, 9, and 11).
 D. If unsuitable soils are encountered at design foundation levels, the unsuitable soils shall be removed and the over-excavated areas shall be replaced with compacted structural fill.
- 3.03 Steel Reinforcement**
 A. All steel reinforcing shall have a minimum clear cover of 3 inches unless otherwise noted on the contract documents.
 B. Where applicable, splices for reinforcing steel shall be made by contact tension lap splices.
 C. Welding and field-bending of reinforcing steel is not permitted.
 D. Furnish all accessories, chairs, spce bars, supports, etc. necessary to secure reinforcing.
- 3.04 Cast-In-Place Concrete**
 A. Footing Concrete
 1. The vertical faces of the footing and key excavation may be used as forms for placement of foundation concrete.
 2. Foundation concrete, or protective mud mats, should be placed the same day that the foundation subgrade is approved.
 3. Provide concrete protection against freezing during placement and for 5 days thereafter.
 B. Wall Concrete
 1. Furnish and erect concrete forms to the lines and grades shown on the construction drawings.
 2. Locate construction joints so as to not impair the strength of the structure, but not more than 60 feet in any direction. Provide continuous bentonite strip waterstrip at all construction joints.
 3. Make stops in concrete pours using vertical bulkheads.
 4. All reinforcing shall be continuous through joints and bulkheads.
 5. Chamfer exposed concrete corners 3/4" by 3/4" minimum.
 6. Provide 4" diameter weep holes every 8 feet along the bottom of the wall and at wall ends. The weep holes should be formed in place prior to concrete placement by using PVC pipe. Weep hole locations must not interfere with steel reinforcing, and shall be no greater than 4 inches above final grade at the front of the wall.
 7. Where a fence is required, it is recommended that the fence posts be installed during wall concrete placement. The fence posts shall have a minimum of 24 inches of embedment into the wall, and be located along the center of the wall. Alternatively, provide 4 inch diameter by 24 inch deep post holes at the designated fence post locations along the centerline of the wall. The post holes should be formed in place prior to concrete placement by using PVC pipe.
- 3.05 Backfilling**
 A. All soil backfill shall conform to the material requirements of section 2.03.
 B. Backfill shall be moisture conditioned to within 2 percentage points of the optimum moisture content, as determined in accordance with ASTM D-698.
 C. Backfill shall be placed in loose lifts, not exceeding 8 inches in thickness, and then compacted to at least 95 percent of the maximum dry density, as determined in accordance with ASTM D-698.
 D. Backfilling shall not occur against the wall until the wall concrete has attained at least 75 percent of the 28-day design strength, and no earlier than 3 days after placement.
 E. Where feasible, maintain equal grades on each side of the wall during backfilling to prevent overturning and lateral movements. When the grade differential at the wall exceeds 12 inches, only hand-operated compaction equipment shall be allowed.
 F. Drainage boards shall be placed against the wall, extending from the weep hole up within 12 inches of final grade at the top of the wall.
- 3.06 Finish**
 A. Refer to Architectural drawings and specifications for detailed information regarding wall finish and wall cap (if any).
 B. Final grades at the wall shall be established by the Contractor in accordance with the most recent site grading plans.
 C. Final grades shall be stabilized and seeded per the approved civil plans unless noted otherwise on the site grading plans.
 D. Install fence at the top of the wall in accordance with project documents. If fence posts are installed subsequent to wall construction, the fence posts shall be grouted into the PVC post holes using 3,000 psi non-shrink grout.
 E. See Architectural or Landscape plans and specifications for additional fence details.

WALL #7 REINFORCEMENT	
A	#8 @ 18" O.C.
B	#5 @ 12" O.C.
C	#6 @ 16" O.C.
D	#8 @ 16" O.C.



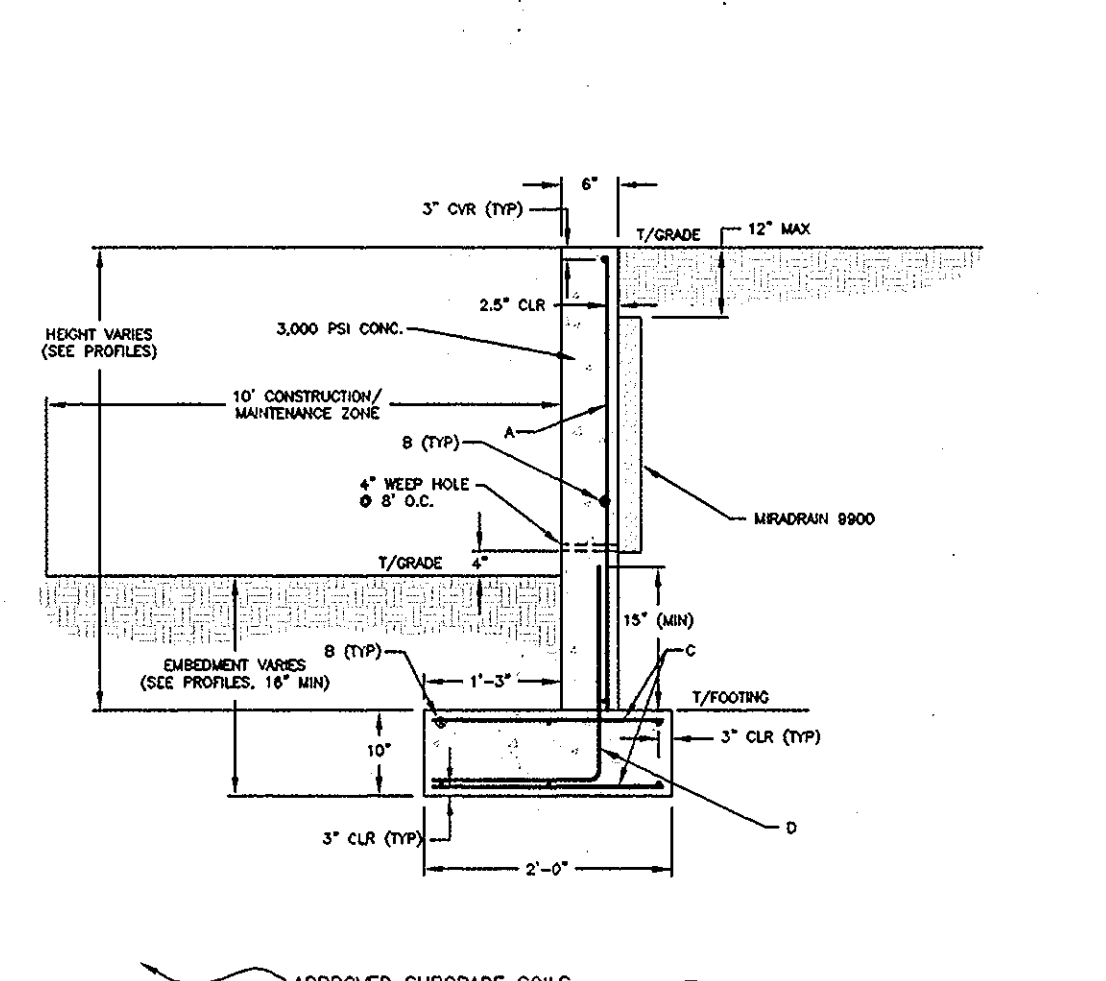
WALL #6 TYPICAL SECTION
 NTS
 8'-8" MAXIMUM EXPOSED WALL HEIGHT

WALL #8 REINFORCEMENT	
A	#3 @ 18" O.C.
B	#3 @ 9" O.C.
C	#4 @ 18" O.C.
D	#3 @ 18" O.C.



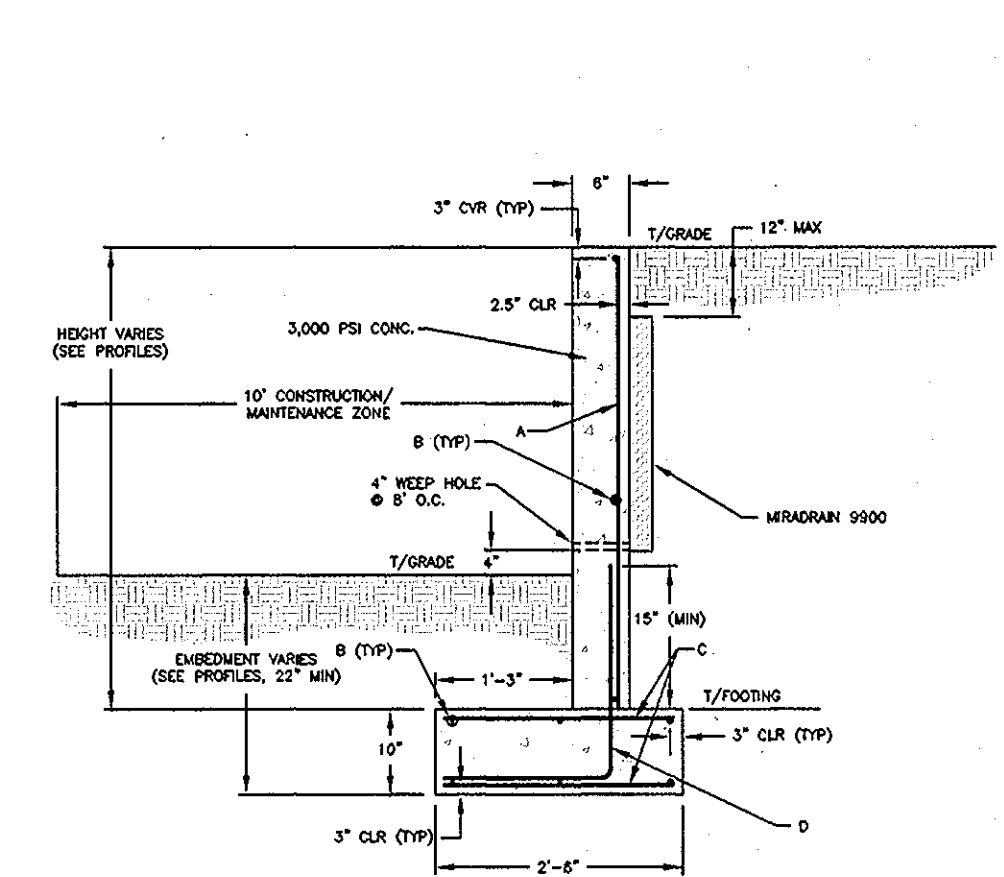
WALL #7 TYPICAL SECTION
 NTS
 2'-11" MAXIMUM EXPOSED WALL HEIGHT

WALL #8B REINFORCEMENT	
A	#3 @ 18" O.C.
B	#3 @ 9" O.C.
C	#4 @ 18" O.C.
D	#3 @ 18" O.C.



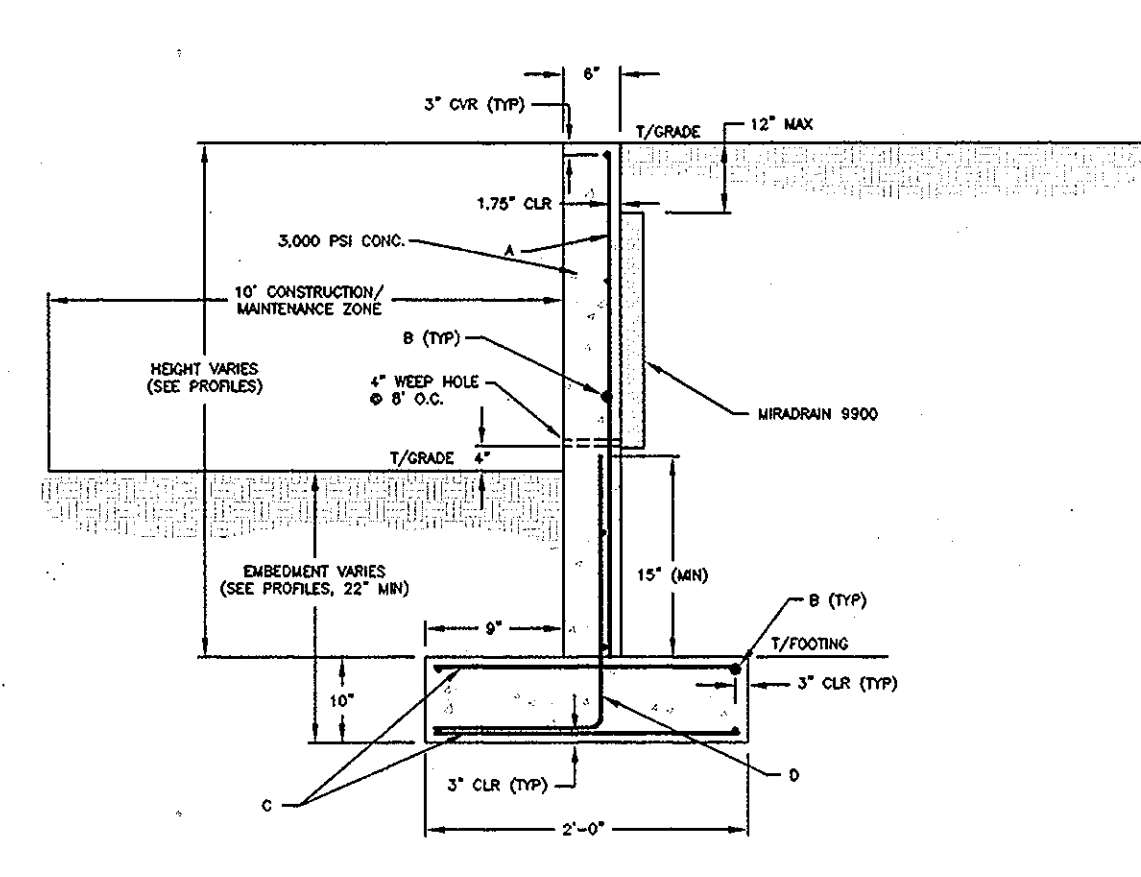
WALL #8B TYPICAL SECTION
 NTS
 2'-11" MAXIMUM EXPOSED WALL HEIGHT

WALL #9T REINFORCEMENT	
A	#3 @ 18" O.C.
B	#3 @ 9" O.C.
C	#4 @ 18" O.C.
D	#3 @ 18" O.C.



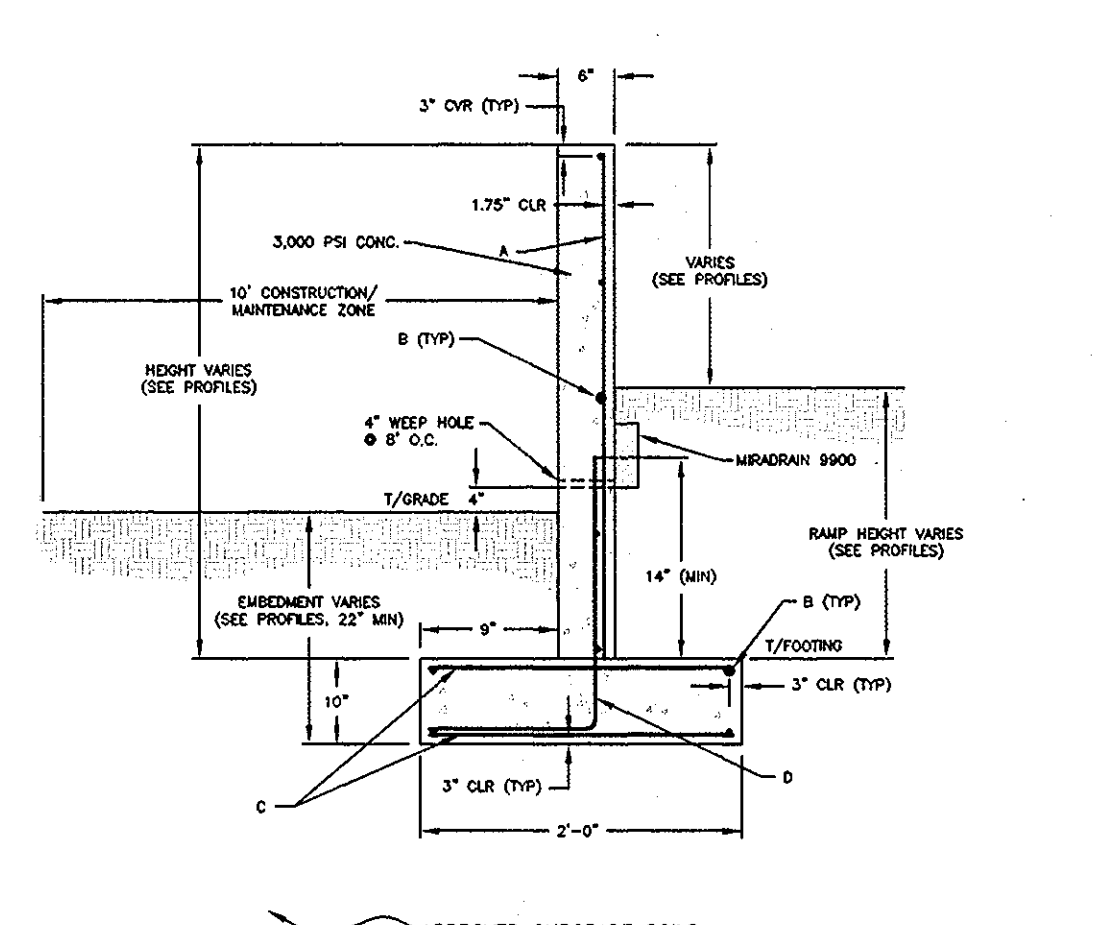
WALL #8T TYPICAL SECTION
 NTS
 2'-11" MAXIMUM EXPOSED WALL HEIGHT

WALL #10 REINFORCEMENT	
A	#3 @ 18" O.C.
B	#3 @ 9" O.C.
C	#4 @ 18" O.C.
D	#3 @ 18" O.C.

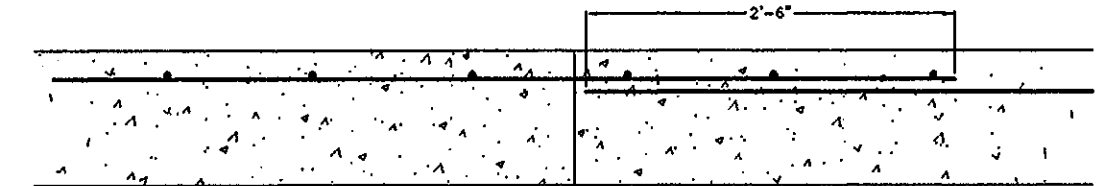


WALL #9 TYPICAL SECTION
 NTS
 2'-11" MAXIMUM EXPOSED WALL HEIGHT

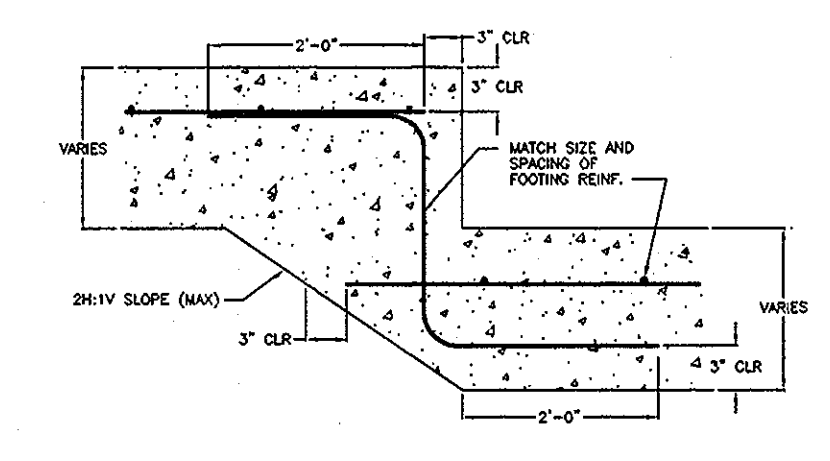
WALL #12 REINFORCEMENT	
A	#3 @ 18" O.C.
B	#3 @ 9" O.C.
C	#3 @ 12" O.C.
D	#3 @ 18" O.C.



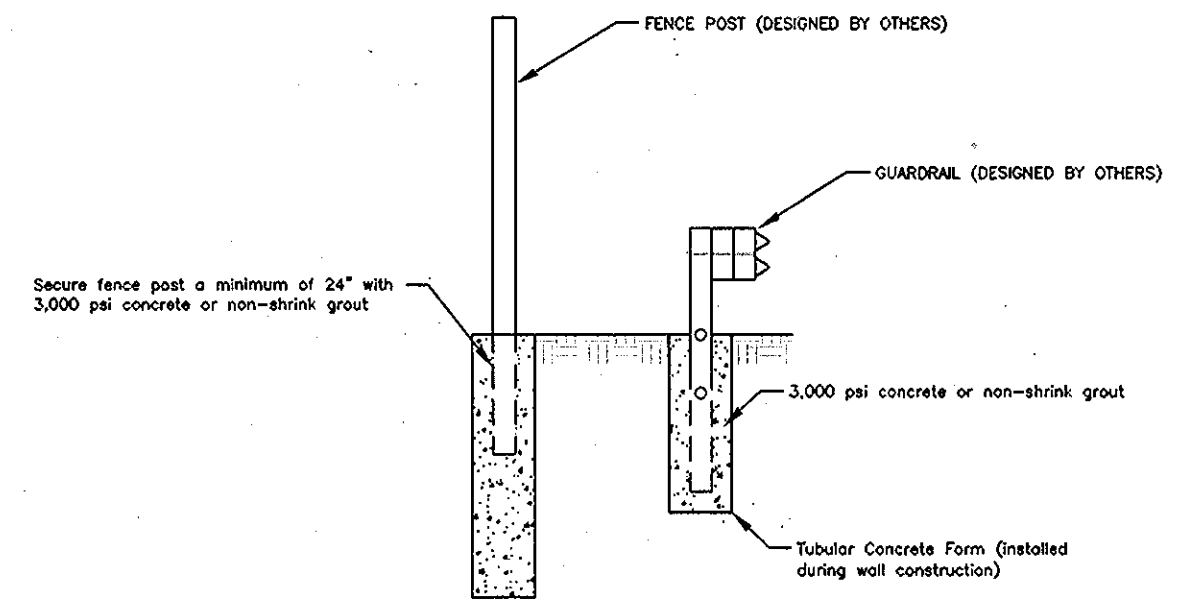
WALL #11 TYPICAL SECTION
 NTS
 5'-11" MAXIMUM EXPOSED WALL HEIGHT



CONSTRUCTION JOINT
 NTS



FOOTING STEP
 NTS



FENCE AND GUARD RAIL POST INSTALLATION DETAIL - CONCRETE WALLS
 NTS

OWNER/DEVELOPER
 REVAL ELKRIDGE, LLC
 301 TRANSYLVANIA AVENUE
 RALEIGH, NC 27609
 (919) 789-9289

NO.	REVISIONS	DATE

SITE DEVELOPMENT PLAN
BELMONT STATION
 PHASE I, II & III
 PARCELS 'A' & 'B' & OPEN SPACE LOT 1
 REF: S-04-10
 TAX MAP 37 BLOCK 18
 1ST ELECTION DISTRICT
 PARCEL '196, 198, 199'
 HOWARD COUNTY, MARYLAND

DETAILS AND SPECIFICATIONS FOR CONCRETE WALLS

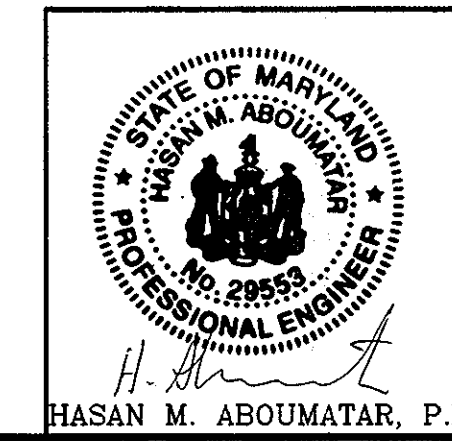
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APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Howard County Seal
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE 12/10/06

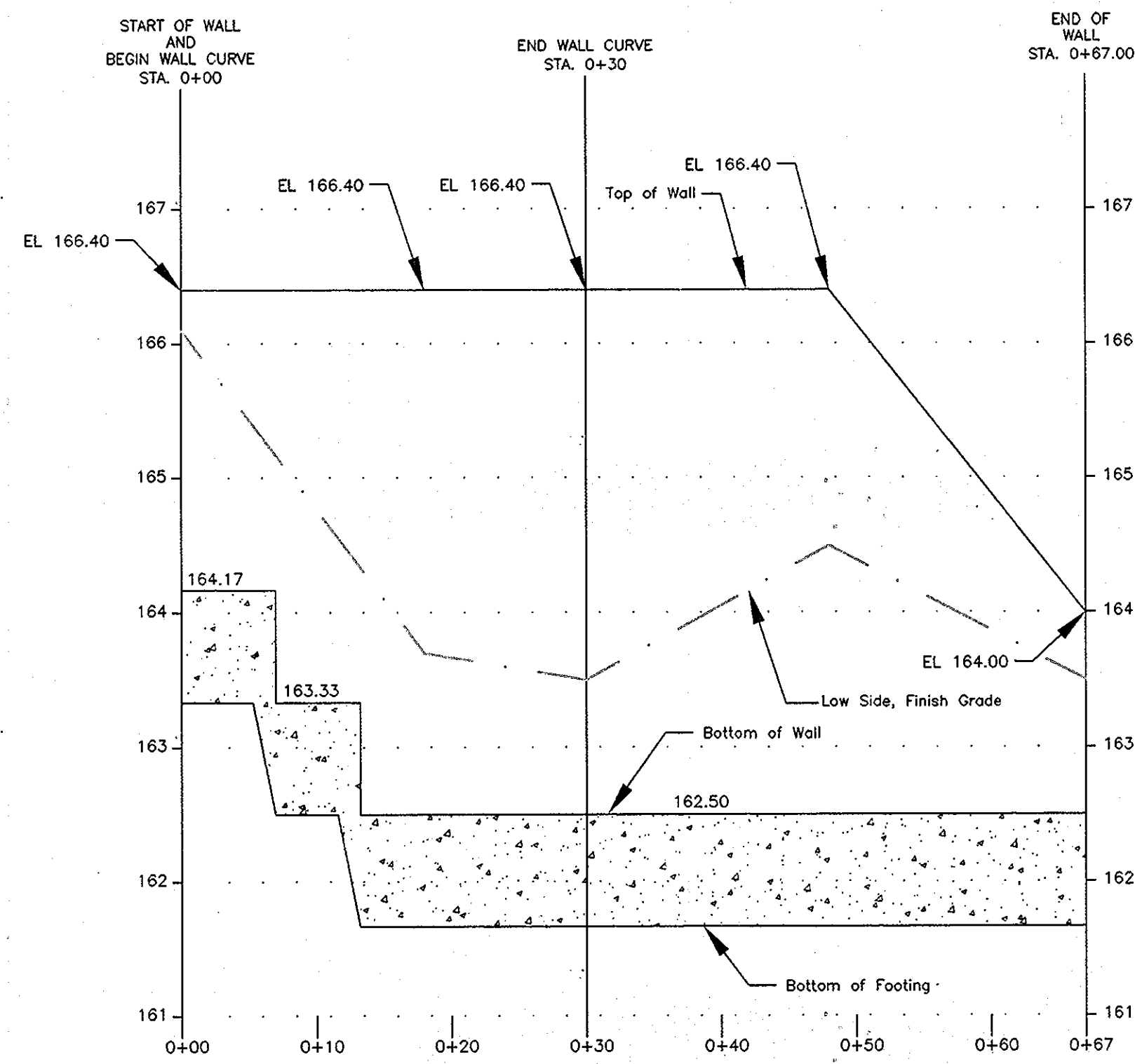
Chris Hamilton
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE 12/18/06

Messiah A. Gault
 DIRECTOR
 DATE 12/10/06



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 "Setting The Standard For Service"

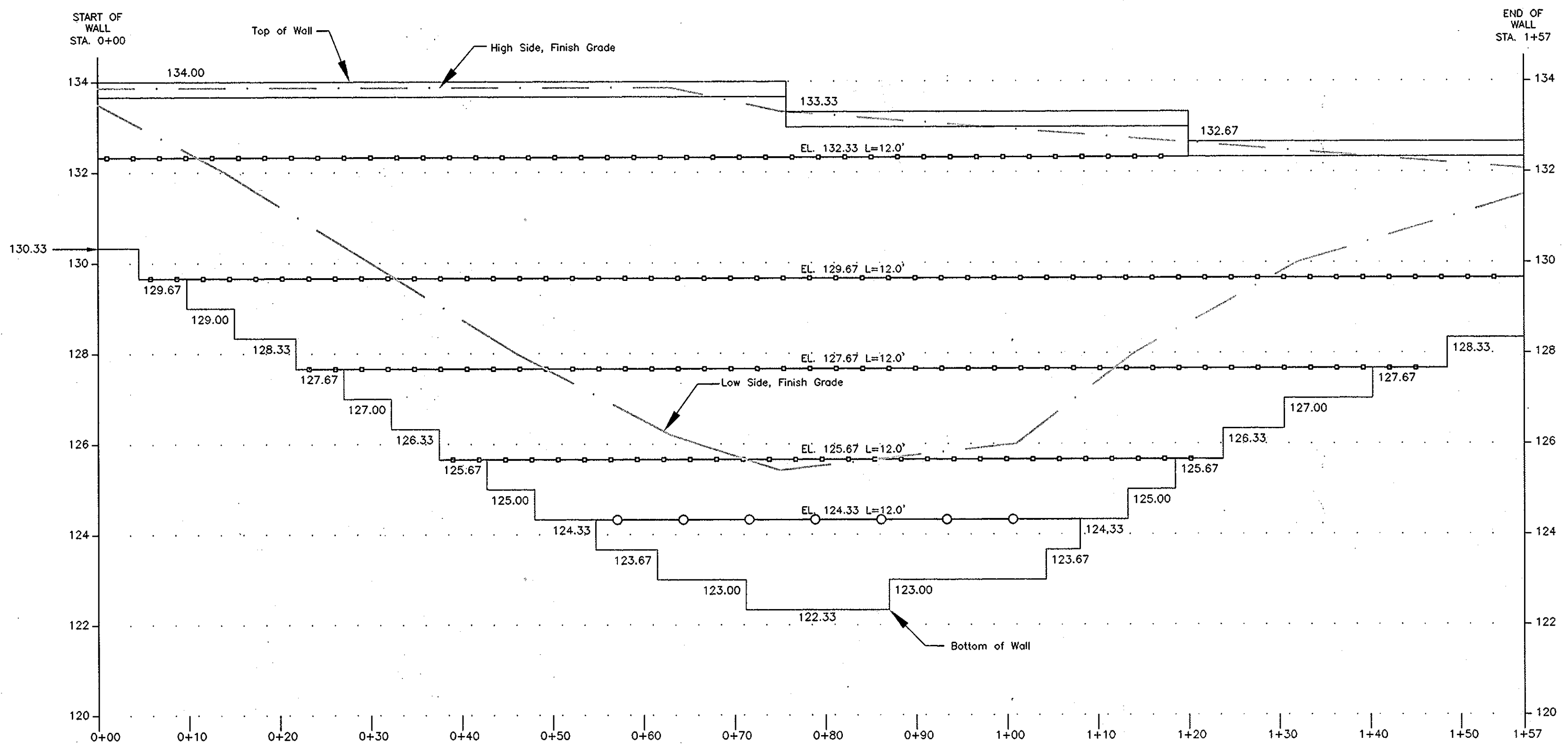
ECS LLC
MID-ATLANTIC



WALL #8T PROFILE

SCALE
VERTICAL SCALE 1"=1'
HORIZONTAL SCALE 1"=10'

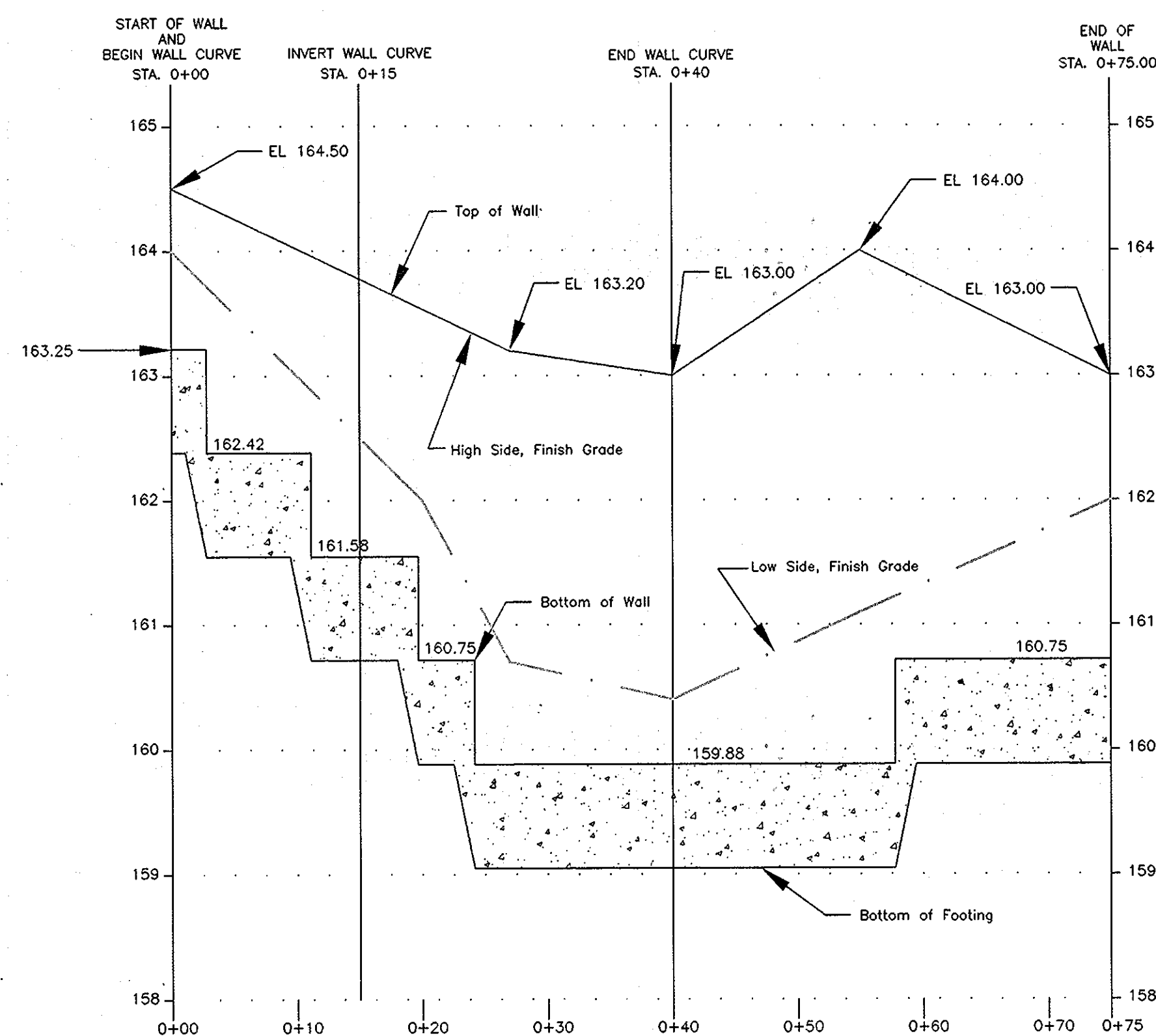
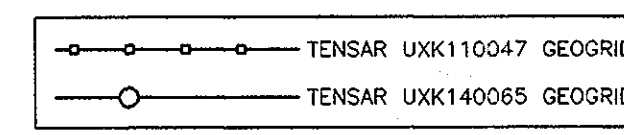
2,000psf MINIMUM ALLOWABLE BEARING PRESSURE
2'-11" MAXIMUM EXPOSED HEIGHT



WALL #2 PROFILE

SCALE
VERTICAL SCALE 1"=2'
HORIZONTAL SCALE 1"=10'

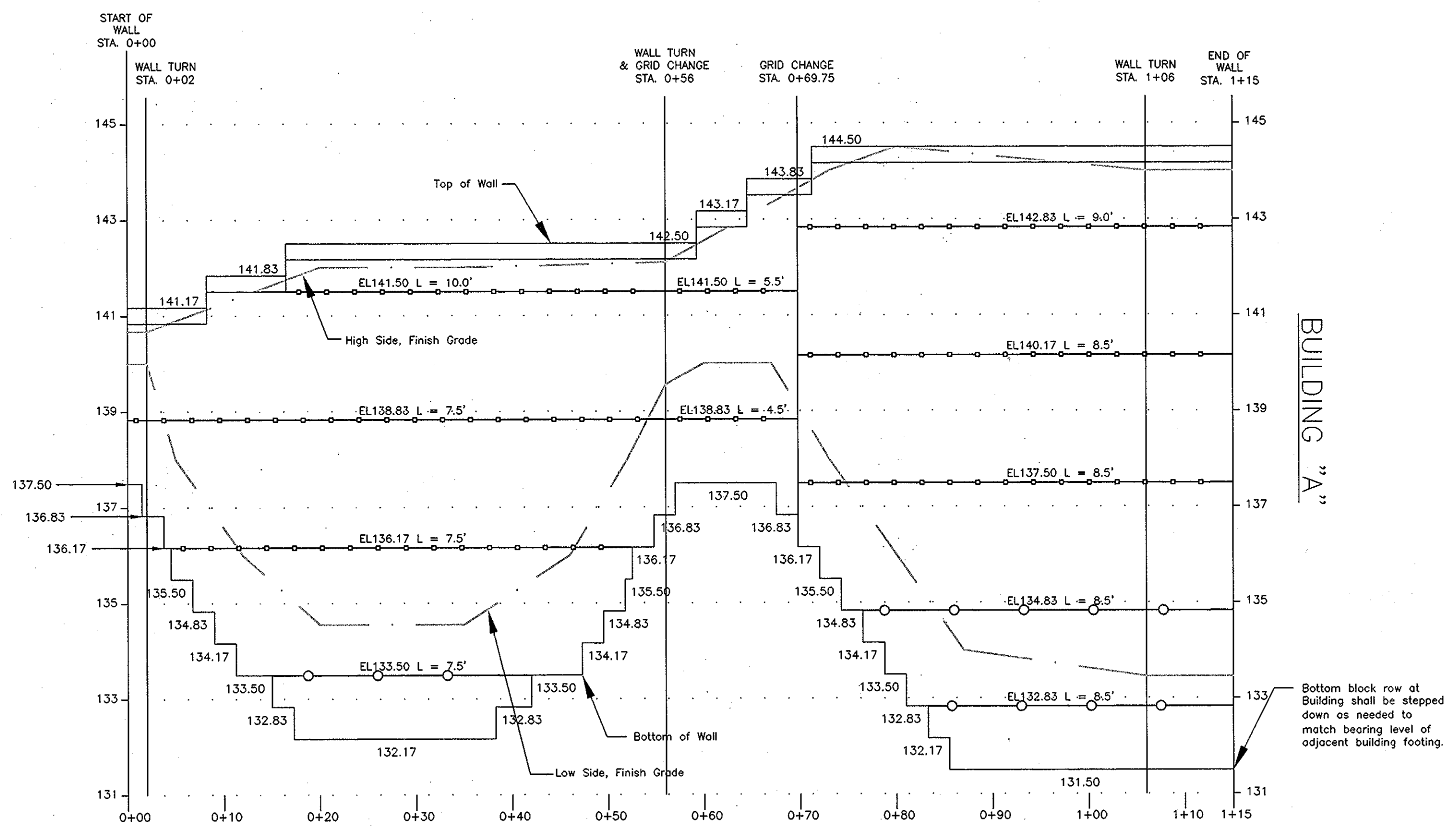
2,500psf MINIMUM ALLOWABLE BEARING PRESSURE



WALL #8B PROFILE

SCALE
VERTICAL SCALE 1"=1'
HORIZONTAL SCALE 1"=10'

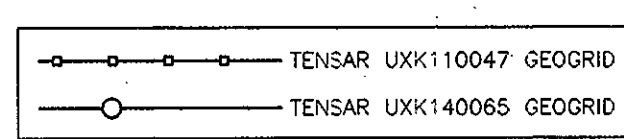
2,000psf MINIMUM ALLOWABLE BEARING PRESSURE
2'-11" MAXIMUM EXPOSED HEIGHT



WALL #3 PROFILE

SCALE
VERTICAL SCALE 1"=2'
HORIZONTAL SCALE 1"=10'

2,500psf MINIMUM ALLOWABLE BEARING PRESSURE



BUILDING "A"

Bottom block row at Building shall be stepped down as needed to match bearing level of adjacent building footing.

OWNER/DEVELOPER
REVAL ELKFRIDGE, LLC
301 TRANSYLVANIA AVENUE
RALEIGH, NC 27609
(919) 789-9289



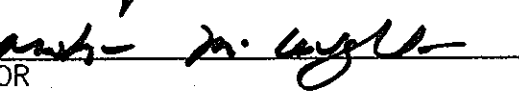
NO.	REVISIONS	DATE

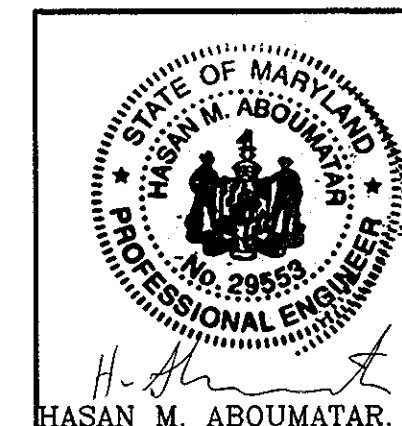
SITE DEVELOPMENT PLAN
BELMONT STATION
PHASE I, II & III
PARCELS 'A' & 'B' & OPEN SPACE LOT 1
TAX MAP 37 BLOCK 18 1ST ELECTION DISTRICT
REF: S-04-10
PARCEL '196, 198, 199'
HOWARD COUNTY, MARYLAND

RETAINING WALL ELEVATION VIEWS

DSH	HMA	11/09/06	3417-H	SHEET 36 OF 39
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APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

 12/8/06
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
 12/18/06
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
 12/14/06
 DIRECTOR DATE



ECS MID-ATLANTIC, LLC

1340 CHARWOOD ROAD, SUITE P
HANOVER, MARYLAND 21076

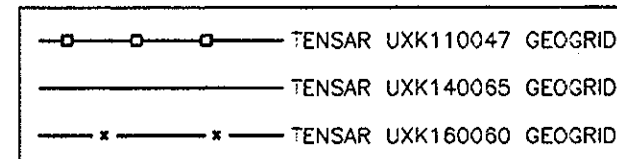
OFFICE (410) 859-4300
FAX (410) 859-4324

"Setting The Standard For Service"



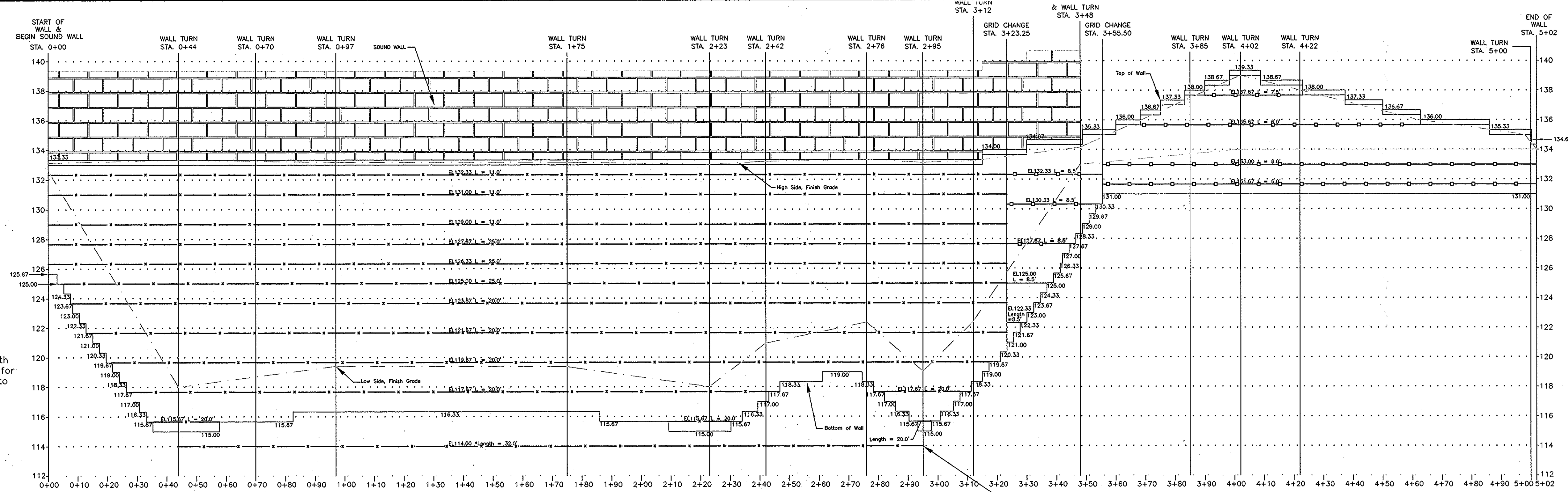
WALL #4 PROFILE

SCALE
VERTICAL SCALE 1"=4'
HORIZONTAL SCALE 1"=20'



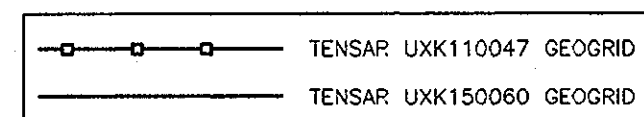
2,500psf MINIMUM ALLOWABLE BEARING PRESSURE

NOTE: Depending on final footing sizes and locations, the upper layer(s) of geogrid in this wall may conflict with the footings. Where necessary, geogrid may be cut for footing installation and then mechanically connected to the footing. Alternatively, the geogrid may be formed into the footing concrete if feasible.



WALL #5 PROFILE

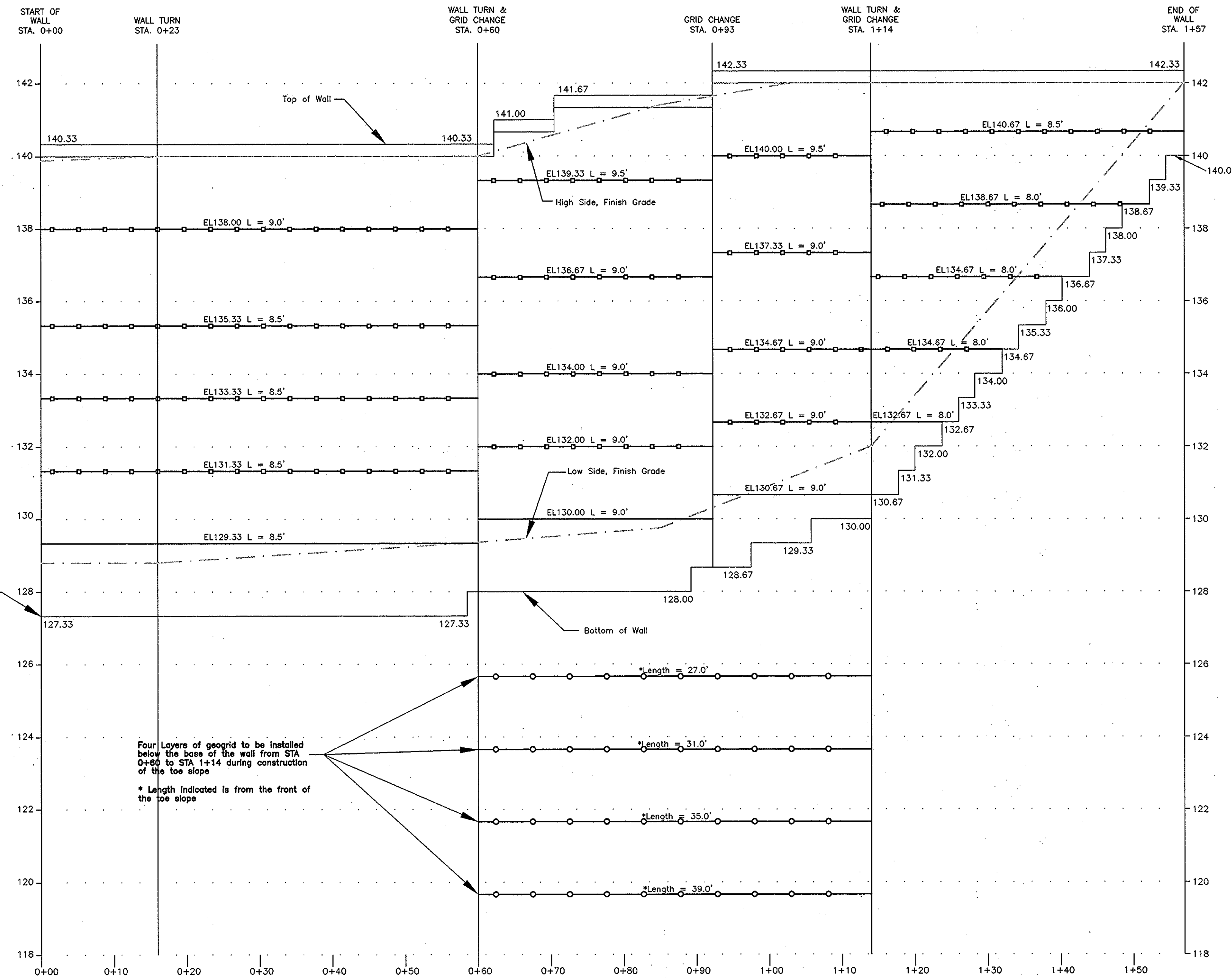
SCALE
VERTICAL SCALE 1"=2'
HORIZONTAL SCALE 1"=10'



2,500psf MINIMUM ALLOWABLE BEARING PRESSURE

Bottom block row at Building shall be stepped down as needed to match bearing level of adjacent building footing.

BUILDING "D"



Four layers of geogrid to be installed below the base of the wall from STA 0+80 to STA 1+14 during construction of the toe slope
* Length indicated is from the front of the toe slope

One Layer of geogrid to be installed below the base of the wall from STA 0+44 to STA 2+95 during construction of the toe slope
* Length indicated is from the front of the toe slope

OWNER/DEVELOPER
REVAL ELKRIDGE, LLC
301 PENNSYLVANIA AVENUE
RALEIGH, NC 27609
(919) 789-9289

NO.	REVISIONS	DATE

SITE DEVELOPMENT PLAN
BELMONT STATION
PHASE I, II & III
TAX MAP 37 BLOCK 18 PARCELS 'A' & 'B' & OPEN SPACE LOT 1 REF: S-04-10 PARCEL '196, 198, 199' 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

RETAINING WALL ELEVATION VIEWS

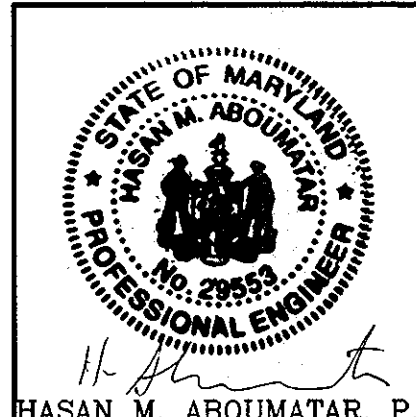
DSH	HMA	11/09/06	3417-H	SHEET 37 OF 39
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APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Mark A. Campbell 12/15/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Andy Kramlich 12/15/06
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

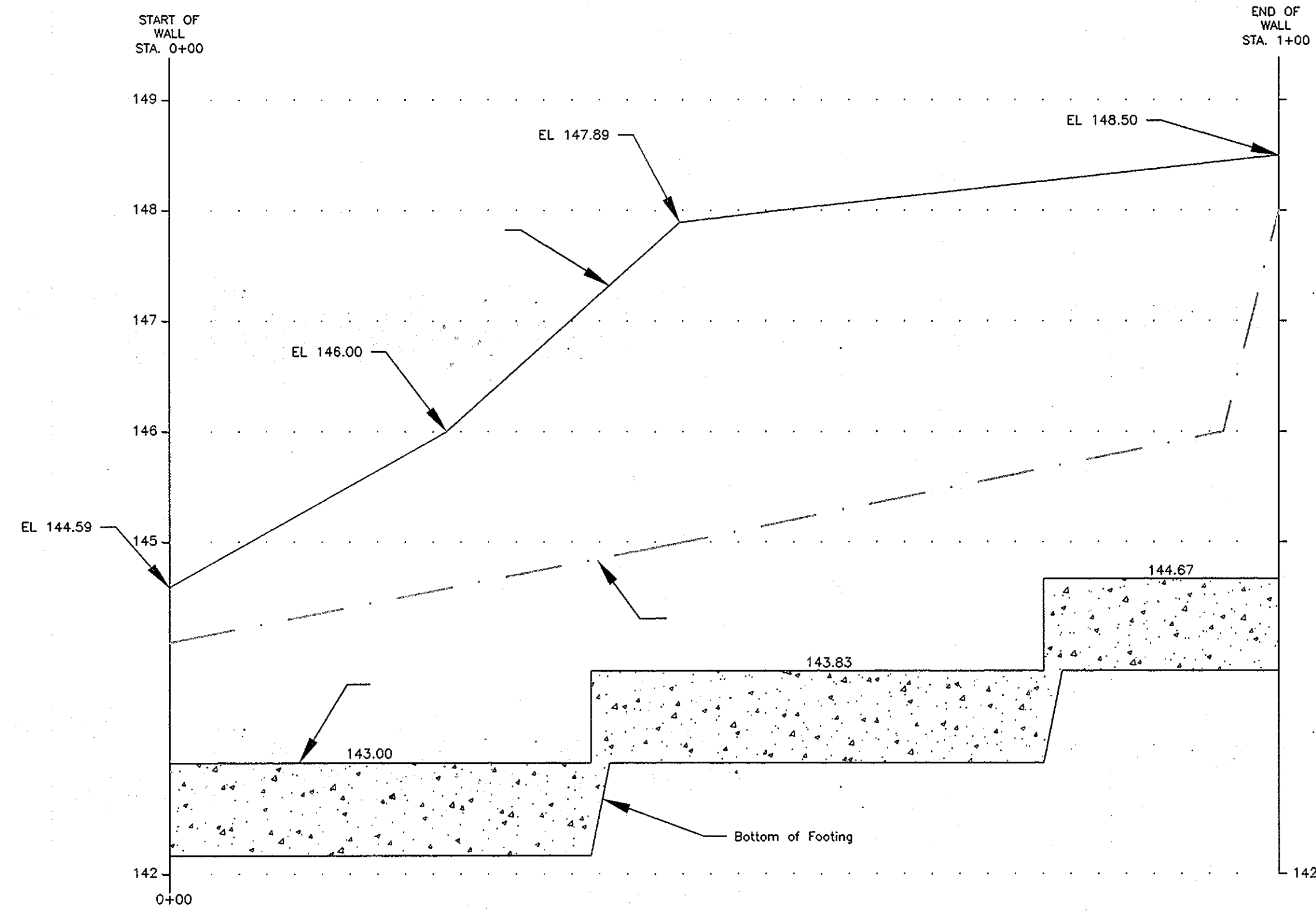
Mark A. Campbell 12/15/06
DIRECTOR DATE



ECS MID-ATLANTIC, LLC
1340 CHARWOOD ROAD, SUITE P
HANOVER, MARYLAND 21076

OFFICE (410) 859-4300
FAX (410) 859-4324

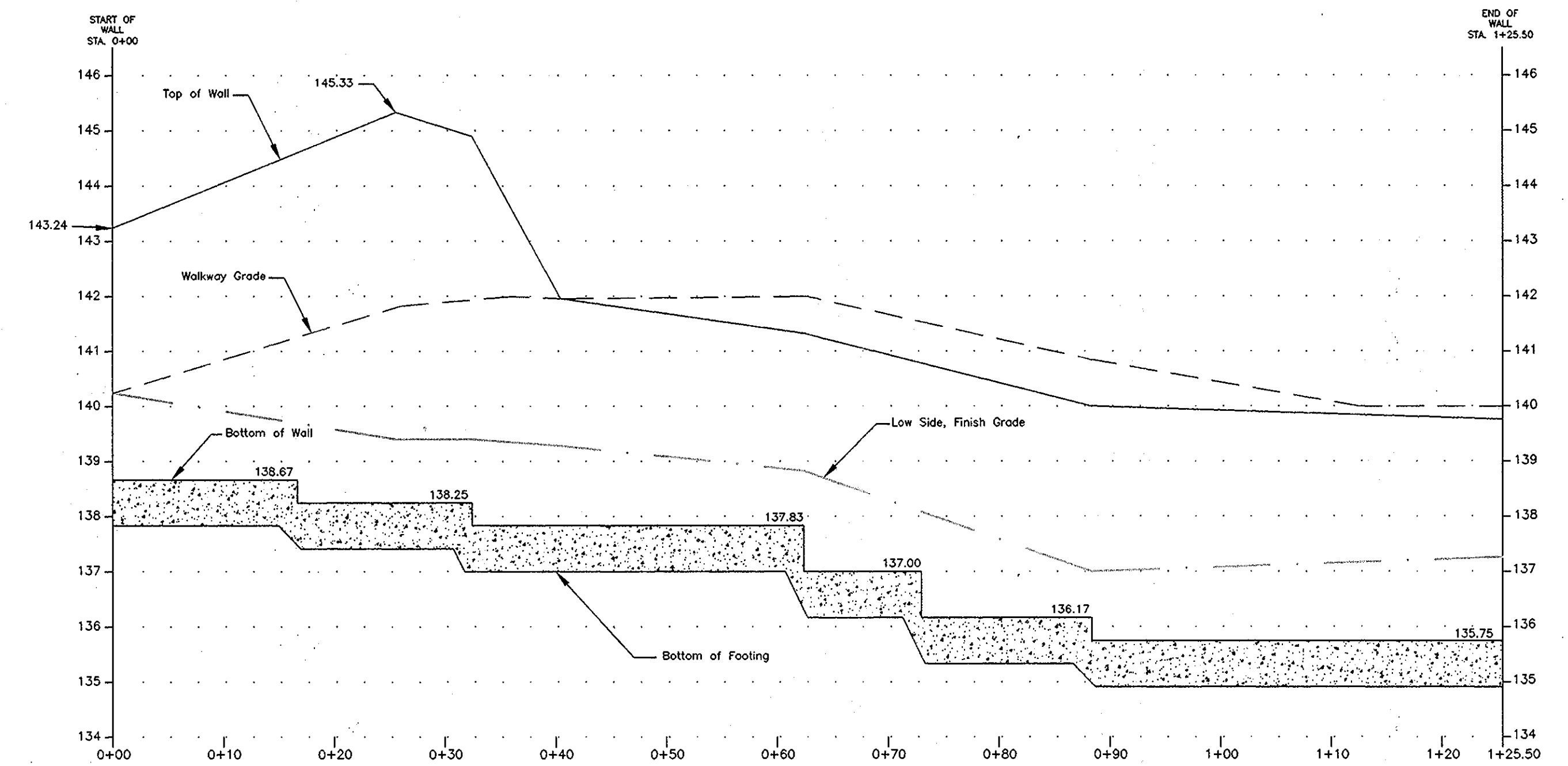
"Setting The Standard For Service"



WALL #7 PROFILE (CONCRETE)

SCALE
VERTICAL SCALE 1"=1'
HORIZONTAL SCALE 1"=10'

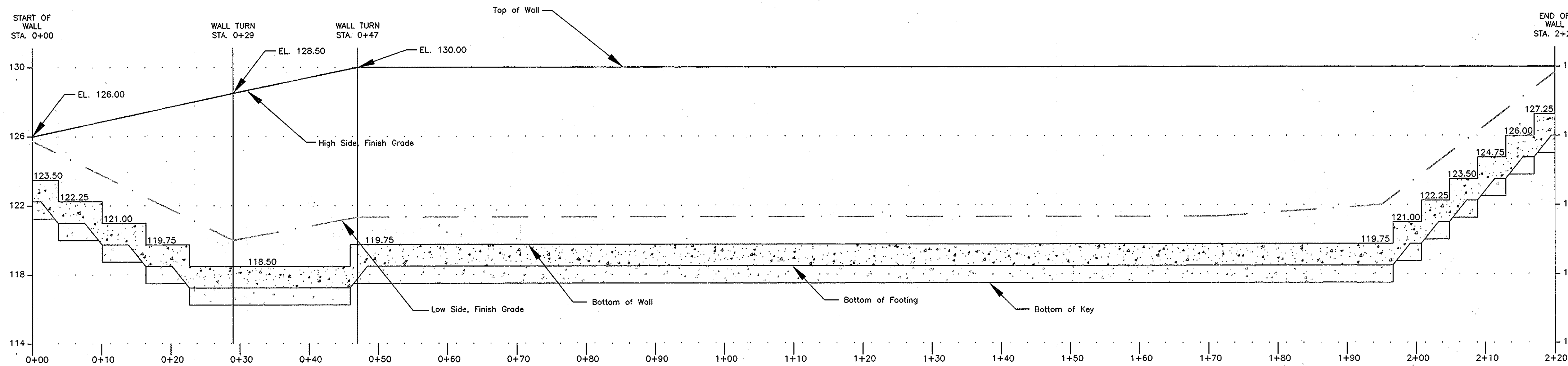
2,000psf MINIMUM ALLOWABLE BEARING PRESSURE
2'-11" MAXIMUM EXPOSED HEIGHT



WALL #11 PROFILE

SCALE
VERTICAL SCALE 1"=2'
HORIZONTAL SCALE 1"=10'

2,000psf MINIMUM ALLOWABLE BEARING PRESSURE
5'-11" MAXIMUM EXPOSED HEIGHT



WALL #6 PROFILE (CONCRETE)

SCALE
VERTICAL SCALE 1"=4'
HORIZONTAL SCALE 1"=10'

3,000psf MINIMUM ALLOWABLE BEARING PRESSURE
8'-8" MAXIMUM EXPOSED HEIGHT

OWNER/DEVELOPER

REVAL ELKRIDGE, LLC
301 TRANSYLVANIA AVENUE
RALEIGH, NC 27609
(919) 789-9289

NO.	REVISIONS	DATE

SITE DEVELOPMENT PLAN
BELMONT STATION
PHASE I, II & III
PARCELS 'A' & 'B' & OPEN SPACE LOT 1
TAX MAP 37 BLOCK 18 1ST ELECTION DISTRICT REF: S-04-10 PARCEL '196, 198, 199' HOWARD COUNTY, MARYLAND

RETAINING WALL ELEVATION VIEWS

DSH	HMA	11/09/06	3417-H	SHEET 38 OF 39
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APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 12/18/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
[Signature] 12/18/06
CHIEF, DIVISION OF LAND DEVELOPMENT DATE
[Signature] 12/18/06
DIRECTOR DATE



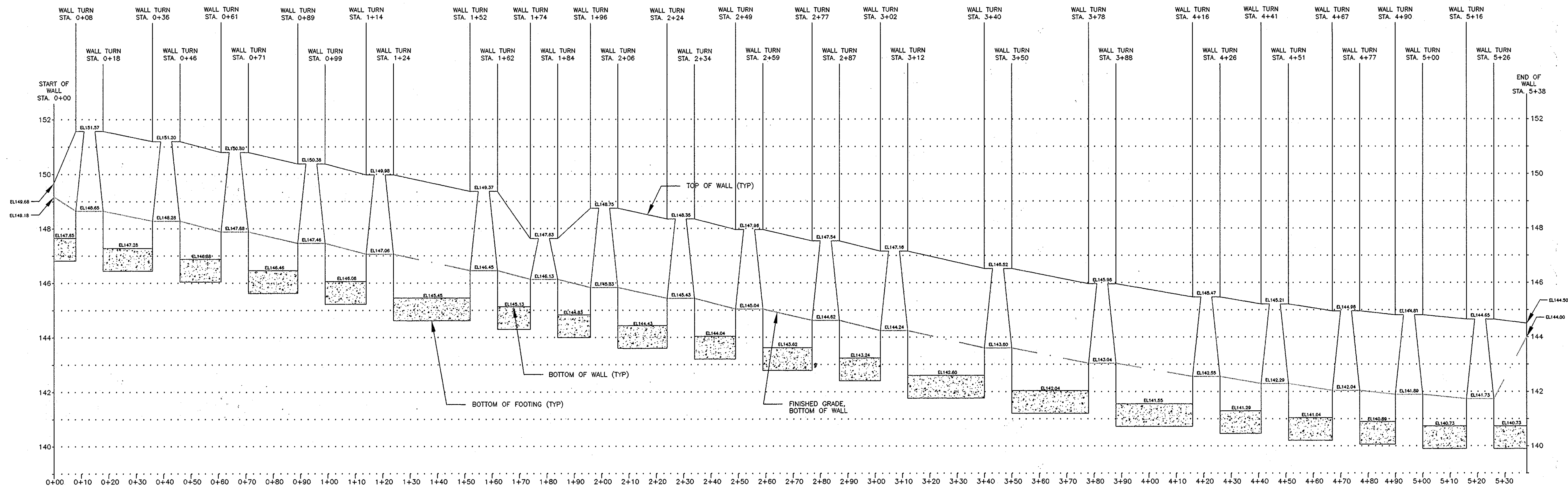
ECS MID-ATLANTIC, LLC

1340 CHARWOOD ROAD, SUITE P
HANOVER, MARYLAND 21076

OFFICE (410) 859-4300
FAX (410) 859-4824

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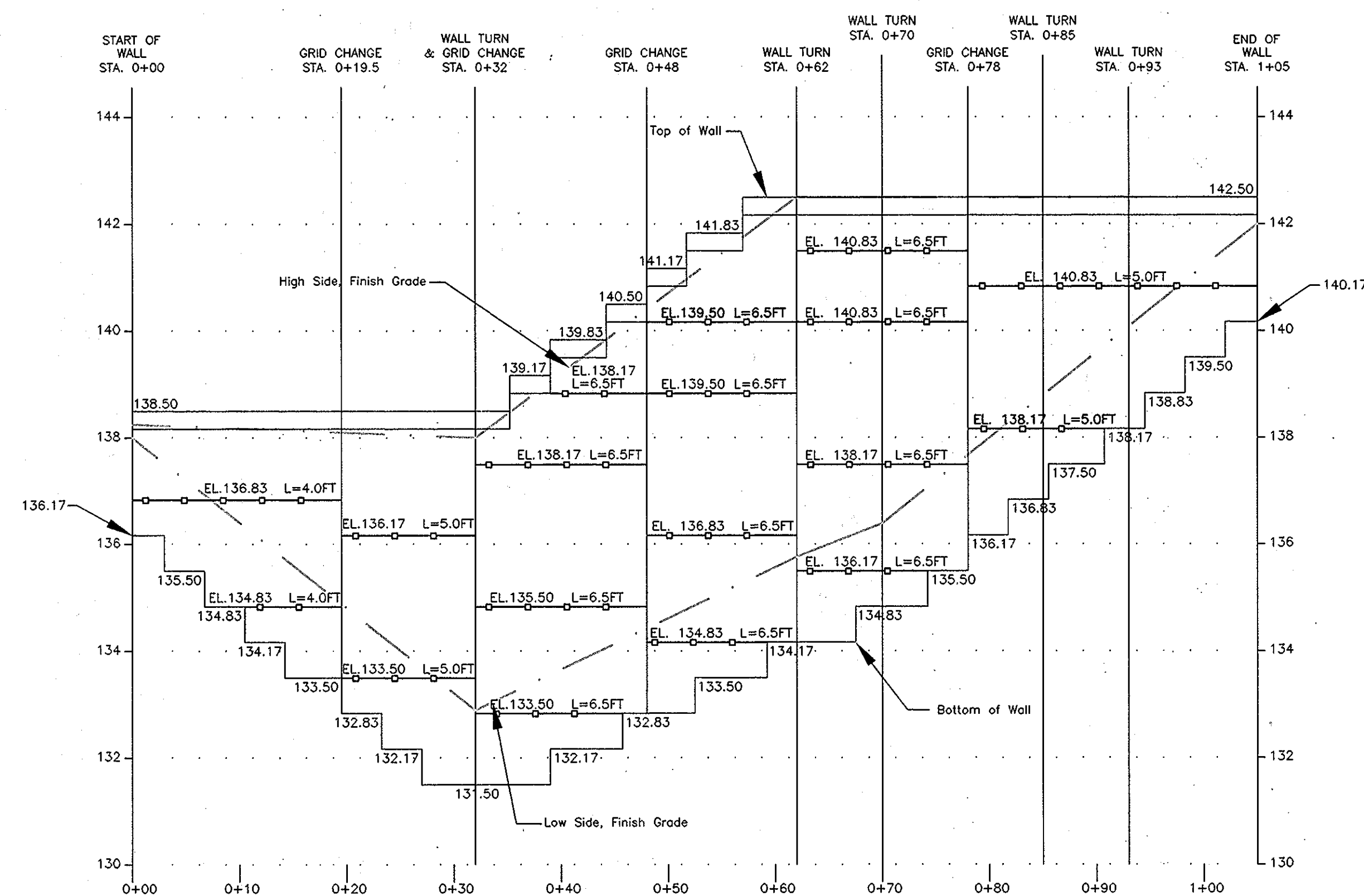




2,000psf MINIMUM ALLOWABLE BEARING PRESSURE
2'-11" MAXIMUM EXPOSED HEIGHT

WALL #9 PROFILE (CONCRETE)

SCALE
VERTICAL SCALE 1"=2'
HORIZONTAL SCALE 1"=20'



1,500psf MINIMUM ALLOWABLE BEARING PRESSURE

WALL #10 PROFILE

SCALE
VERTICAL SCALE 1"=2'
HORIZONTAL SCALE 1"=10'

—○— TENSAR UXK110047 GEOGRID

OWNER/DEVELOPER
REVAL ELKRIDGE, LLC
301 TRANSYLVANIA AVENUE
RALEIGH, NC 27609
(919) 789-9289



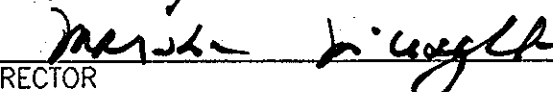
NO.	REVISIONS	DATE

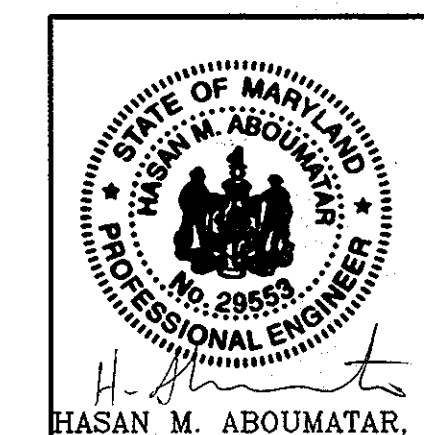
**SITE DEVELOPMENT PLAN
BELMONT STATION
PHASE I, II & III**
PARCELS 'A' & 'B' & OPEN SPACE LOT 1
REF: S-04-10 PARCEL '196, 198, 199'
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

RETAINING WALL ELEVATION VIEWS

DSH	HMA	11/09/06	3417-H	SHEET 39 OF 39
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APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

 DATE 12/10/06
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE 12/15/06
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE 12/18/06
 DIRECTOR



ECS MID-ATLANTIC, LLC

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