

SHEET INDEX	
NO	DESCRIPTION
1	TITLE SHEET
2	SITE DEVELOPMENT PLAN
3	GRADING AND SEDIMENT CONTROL
4	SEDIMENT CONTROL DETAILS
5	DETAIL SHEET
6	PROFILES
7	UNDERGROUND SWM DETAILS
8	SAND FILTER #1 DETAILS & NOTES
9	SAND FILTER #2 DETAILS & NOTES
10	LANDSCAPE PLAN
11	LANDSCAPE PLAN
12	LANDSCAPE SCHEDULES AND DETAILS
13	RETAINING WALL CONSTRUCTION DETAILS

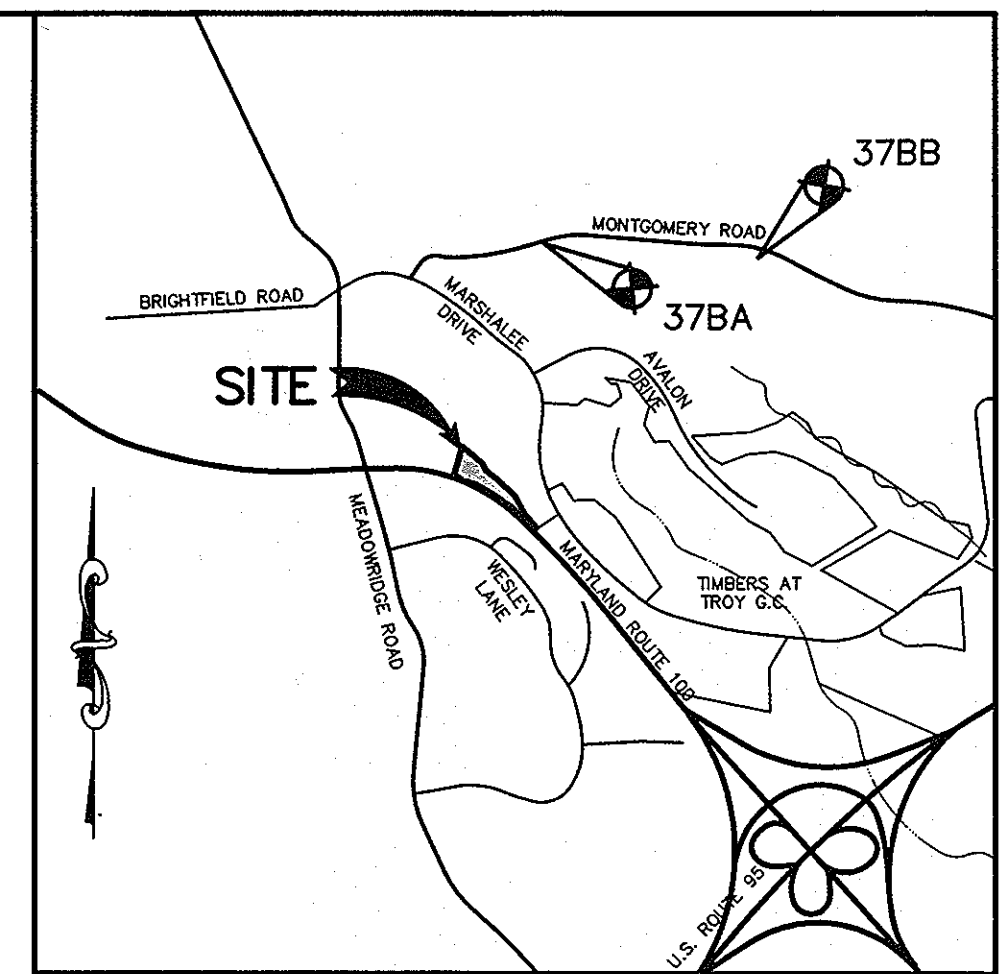
SITE DEVELOPMENT PLAN

LYNDWOOD SQUARE

PARCEL E-1

1st ELECTION DISTRICT

HOWARD COUNTY, MARYLAND



BENCH MARK

HOWARD COUNTY MONUMENT 37BA
 N 563785.618 E 1376343.172
 ELEV. 394.786
 DISC LOCATED 25.1 FT SOUTH OF
 MONTGOMERY ROAD CENTERLINE AND
 64 FT WEST OF ENTRANCE #6028.

HOWARD COUNTY MONUMENT 378B
 N 563663.415 E 1378040.471
 ELEV. 373.822
 DISC LOCATED NORTH OF
 MONTGOMERY ROAD AT 16.3 FT
 NORTHEAST OF FIRST GUARD RAIL
 POST AND 12.6 FT NORTHWEST OF
 SECOND GUARD RAIL POST AND 3.5
 FT SOUTH OF SIDEWALK.

VICINITY MAP

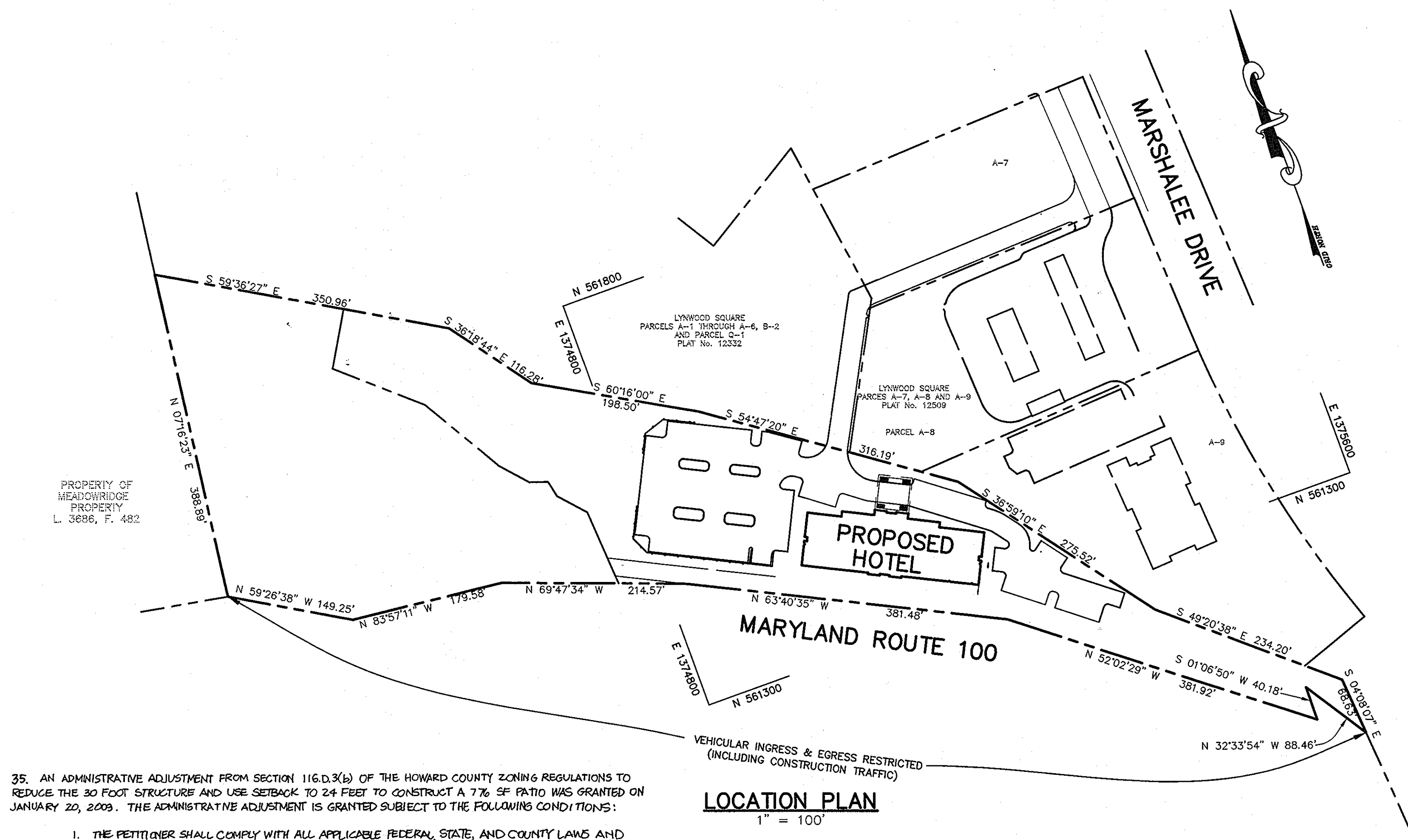
SCALE: 1"=2000'
 COPYRIGHT ADC THE MAP PEOPLE
 PERMITTED USE NO. 20894285

AREA TABULATION CHART

AREA OF PARCEL E-1	6.19 ACRES
LIMIT OF DISTURBED AREA	3.2 ACRES
PRESENT ZONING	PEC
PROPOSED USE	4 STORY HOTEL
NUMBER OF ROOMS	99
PARKING REQUIRED	1 SPACE/ROOM = 99 SPACES
PARKING PROVIDED	100 SPACES (INCL. 4 HANDICAP)

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/ CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY PATTON HARRIS RUST AND ASSOCIATES, DATED OCTOBER, 2004.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 378A AND 378B WERE USED FOR THIS PROJECT.
- WATER IS PUBLIC. CONTRACT NO. 14-3996-D
- SEWER IS PUBLIC. SEWER DRAINAGE AREA: DEEP RUN (PATAPSCO) CONTRACT NO. 14-3996-D
- THE REQUIRED STORMWATER MANAGEMENT WILL BE PROVIDED IN TWO (2) UNDERGROUND SAND FILTERS FOR WOV, A STONE TRENCH FOR Rev, AND UNDERGROUND PIPES FOR Cpv. ALL STRUCTURES WILL BE PRIVATELY OWNED AND MAINTAINED.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
- 100- YEAR FLOODPLAIN DOES NOT AFFECT THIS PROJECT. FLOODPLAIN EASEMENT SHOWN PER PLAT NO. 15544.
- WETLANDS SHOWN PER PLAT NO. 15544.
- A TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY LEE CUNNINGHAM AND ASSOCIATES, DATED OCTOBER, 2004.
- A NOISE STUDY FOR THIS PROJECT IS NOT REQUIRED.
- THE BOUNDARY FOR THIS PROJECT WAS TAKEN FROM PLAT NO. 15544.
- SUBJECT PROPERTY ZONED PEC PER 02-02-04 COMPREHENSIVE ZONING PLAN.
- ALL ELEVATIONS SHOWN ARE BASED ON THE U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929.
- SEE DEPARTMENT OF PLANNING AND ZONING FILE NO'S. F-02-29, SDP-02-83, F-03-64, F-94-26, S-91-11, P-93-11, F-97-95, F-98-115, F-94-96, S-93-02, WP-92-47.
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO T180.
- THIS PROJECT IS EXEMPT FROM THE REQUIREMENTS OF THE HOWARD COUNTY FOREST CONSERVATION PROGRAM SINCE THIS PROJECT WAS INCLUDED WITHIN THE LIMITS OF DISTURBANCE OF SDP-02-83, WHICH WAS "GRANDFATHERED" FOR THE PURPOSE OF THE STATE AND HOWARD COUNTY FOREST CONSERVATION PROGRAM.
- THIS PLAN IS SUBJECT TO THE AMENDED 5th EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, PER CB-45-2003, AND THE AMENDED ZONING REGULATIONS PER CB-75-2003.
- WAIVER PETITION WP-02-47 WAS APPROVED ON 12/28/2001 WAIVING SECTION 16.120(c)(i) TO PERMIT THE REQUIRED ROAD FRONTAGE OF 60 FEET FOR A NON-RESIDENTIAL PARCEL (E-1) TO BE REDUCED TO ZERO FEET, SUBJECT TO THE FOLLOWING CONDITIONS:
 - ACCESS TO PARCEL E-1 SHALL BE PROVIDED BY A RECORDED VEHICULAR ACCESS EASEMENT THAT IS TO BE SHOWN ON FINAL PLAT F-02-29.
 - STATE HIGHWAY ADMINISTRATION WILL NOT BE RESPONSIBLE FOR ANY NOISE MITIGATION.
- NO GRADING OR CLEARING IS ALLOWED IN ANY ENVIRONMENTAL AREA UNLESS IT HAS BEEN DETERMINED TO BE A "NECESSARY" DISTURBANCE, OR IF A WAIVER HAS BEEN APPROVED.
- ON-SITE LIGHTING WILL COMPLY WITH SECTION 134 OF THE ZONING REGULATIONS. REFER TO SHEET 2 FOR LIGHT FIXTURE SPECIFICATION.
- ANY FURTHER DEVELOPMENT OF THIS SITE REQUIRES A NEW STORMWATER MANAGEMENT PLAN.
- WAIVER PETITION WP 06-21 WAS APPROVED ON SEPT. 30, 2005 WAIVING SECTION 16.156(K) GRANTING AN EXTENSION TO MARCH 5, 2006 TO SUBMIT ORIGINALS FOR SIGNATURES.

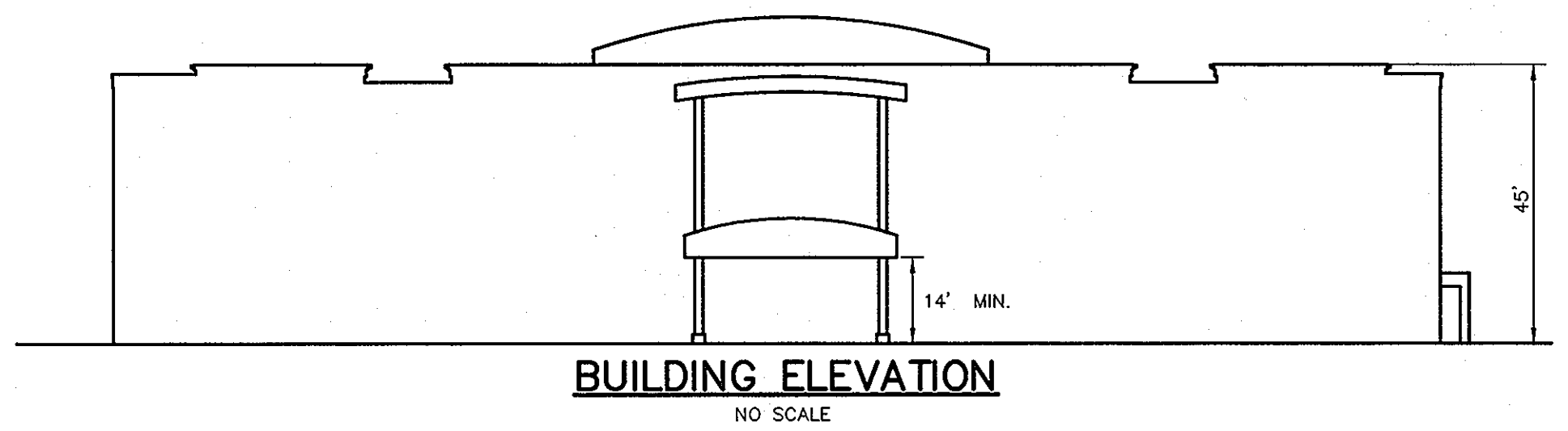


35. AN ADMINISTRATIVE ADJUSTMENT FROM SECTION 116.D.3.(b) OF THE HOWARD COUNTY ZONING REGULATIONS TO REDUCE THE 30 FOOT STRUCTURE AND USE SETBACK TO 24 FEET TO CONSTRUCT A 7% SF PATIO WAS GRANTED ON JANUARY 20, 2009. THE ADMINISTRATIVE ADJUSTMENT IS GRANTED SUBJECT TO THE FOLLOWING CONDITIONS:

- THE PETITIONER SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND COUNTY LAWS AND REGULATIONS.
- A BUILDING PERMIT FOR THE PROPOSED DEVELOPMENT SHALL BE OBTAINED WITHIN TWO YEARS FROM THE DATE OF THIS ORDER AND SUBSTANTIAL CONSTRUCTION SHALL BE COMPLETED WITHIN THREE YEARS.
- THE GRANTED ADMINISTRATIVE ADJUSTMENT SHALL APPLY SOLELY TO THE PATIO AS DEPICTED ON THE ADMINISTRATIVE ADJUSTMENT PLAN SUBMITTED BY THE PETITIONER AND NOT TO ANY OTHER STRUCTURE, ADDITION, BUILDING OR USE. THE PETITIONER SHALL SUBMIT A COPY OF THIS DECISION AND ORDER WITH THE BUILDING PERMIT APPLICATION.
- THIS DECISION AND ORDER SHALL BE MAINTAINED IN THE OWNER'S PROPERTY RECORDS AND SHALL BE TRANSFERRED TO ANY SUCCEEDING OWNER OF THE PROPERTY.

LOCATION PLAN

1" = 100'



BUILDING ELEVATION
NO SCALE

ADDRESS CHART

PARCEL NUMBER	STREET ADDRESS
E-1	6064 MARSHALEE DRIVE

SUBDIVISION NAME	SECT./AREA	PARCEL
LYNDWOOD SQUARE	-	E-1
PLAT NO. 15544	BLOCK # 11 ZONING PEC	TAX MAP NO. 37 ELECT. DIST. 1 CENSUS TRACT 6011.01
WATER CODE D 04	SEWER CODE	2610000

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITIES SHOWN ON THESE PLANS WERE CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

JOHN C. POMEROY, PE
 DATE: 3/22/2010

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR 7/6/07 DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION N.Y. 7-37 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT 7/6/07 DATE

3/3/09	I	ADD PATIO
DATE	NO.	REVISION
OWNER	DEVELOPER	
100 INVESTMENT LP ATTN: HOWARD RESNECK 9200 RUMSEY ROAD COLUMBIA, MARYLAND 21045 410-997-7222	BAYWOOD HOTELS ATTN: CHET PATEL 7211 HANOVER PARKWAY SUITE C-D GREENBELT, MARYLAND 20770 301-345-8700 EXT. 251	

PROJECT: **LYNDWOOD SQUARE**
PARCEL E-1

AREA: TAX MAP 37, GRID NO. 11
PLAT NO. 15735, PARCEL E-1, ZONED PEC
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE SHEET

Patton Harris Rust & Associates, pc
 Engineers, Surveyors, Planners, Landscape Architects.
 8818 Centre Park Drive
 Columbia, MD 21045
 T 410.997.8900
 F 410.997.9282

6/13/07
DATE

DOMENICK W. COLANGELO #27200

DESIGNED BY: CJR/ACR
 DRAWN BY: DAM
 PROJECT NO.: 12724-1-01
 C100COV
 DATE: JUNE 19, 2007
 SCALE: AS SHOWN
 DRAWING NO. 1 OF 13

STORMWATER MANAGEMENT SUMMARY TABLE						
	DRAINAGE AREA (AC)	WQV* (CF)	Rev* (CF)	Cpv** (AC-FT)	Qp 1 (CFS)	Qp 10 (CFS)
EX. CONDITIONS AT STUDY POINT	1.83	-	-	-	1.38	5.39
PR. CONDITIONS AT STUDY POINT	1.83	-	-	-	4.65	10.30
UNDERGROUND PIPES	1.83	5413	704 (0.20 AC)	0.175	0.12	12.99

*THE REQUIRED WQV WILL BE PROVIDED IN TWO (2) UNDERGROUND SAND FILTERS AND Rev WILL BE PROVIDED IN A STONE TRENCH.
 **THE REQUIRED Cpv WILL BE PROVIDED IN AN UNDERGROUND STORMWATER MANAGEMENT PIPE FACILITY.

Qp AND Qf ARE NOT REQUIRED FOR THIS SITE.

- NOTES:**
1. ALL RADII ARE 5' UNLESS OTHERWISE NOTED.
 2. ALL DIMENSIONS ARE TO FACE OF CURB OR BUILDING UNLESS OTHERWISE NOTED.
 3. ALL ON-SITE ROADS ARE PRIVATE.
 4. STD/REV/BARR.CURB *- DENOTES TRANSITION BETWEEN STANDARD, REVERSE & BARRIER CURB
 5. STREET LIGHT, 250 WATT HPS (SAC) MOUNTED AT 30' ON A BRONZE FIBERGLASS POLE USING A 12' ARM.

LEGEND

- 450 --- EXISTING 10' CONTOURS
- 448 --- EXISTING 2' CONTOURS
- 450 --- PROPOSED 10' CONTOURS
- 448 --- PROPOSED 2' CONTOURS
- --- PROPOSED CURB & GUTTER & BARRIER CURB
- --- PROPOSED STORM DRAIN
- --- EXISTING TREELINE
- --- PROPOSED TREELINE
- --- P-2 PAVING (HO.CO. DETAIL R-2.01)
- --- CONCRETE SIDEWALK (HO.CO. DETAIL R-3.05)

LIGHTING FIXTURE SCHEDULE

TYPE	LAMPS	MOUNTING	DESCRIPTION	VOLTAGE	CATALOG NO.
250W MH	25' ROUND STRAIGHT ALUMINUM POLE	TYPE 3 CUT OFF	PARKING LUMINAIRE (BLACK FINISH) WITH MATCHING POLE	208V	KIM LIGHTING #AET3250MH BL-F/VSF-ISA POLE #PRA25-6188A/BL-P

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITIES SHOWN ON THESE PLANS WERE CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

John C. Povalac
 JOHN C. POVALAC #27742
 DATE 3/22/2010

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR *Doug Lefferts* 7/6/09 DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION N.Y. 7337
 CHIEF, DIVISION OF LAND DEVELOPMENT 2/16/10 DATE

DATE NO.	REVISION
3/3/09 2	ADD PATIO
02/01/09 1	REVISED 6" W/ CONCRETE WATER LINE

OWNER: 100 INVESTMENT LP, ATTN: HOWARD RESNECK, 9200 RUMSEY ROAD, COLUMBIA, MARYLAND 21045, 410-997-7222

DEVELOPER: BAYWOOD HOTELS, ATTN: CHET PATEL, 7211 HANOVER PARKWAY, SUITE C-D, GREENBELT, MARYLAND 20770, 301-345-8700 EXT. 251

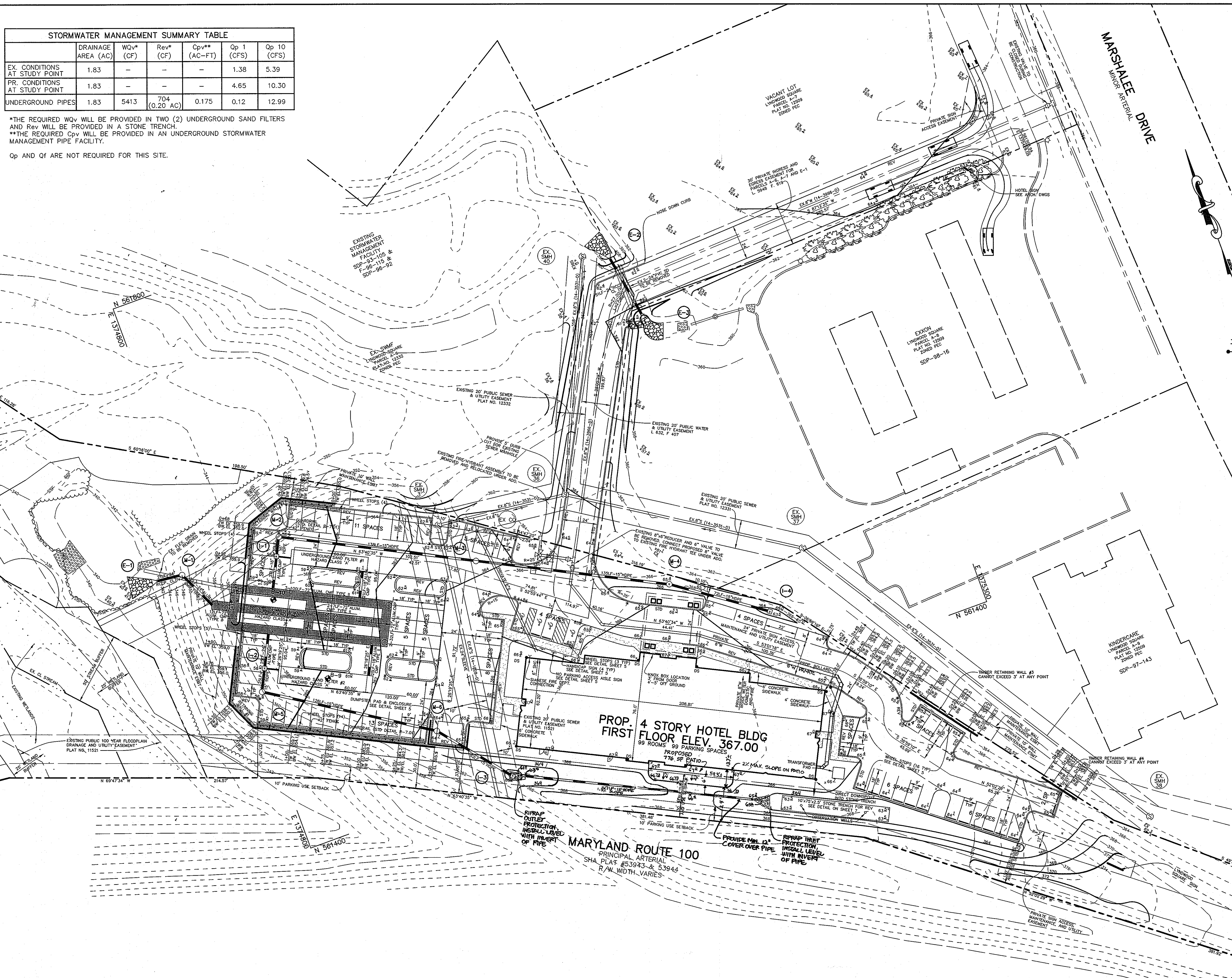
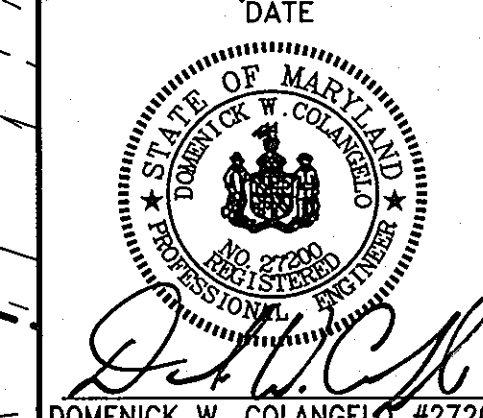
PROJECT: LYNWOOD SQUARE, PARCEL E-1

AREA: TAX MAP 37, GRID NO. 11, PLAT NO. 15735, PARCEL E-1, ZONED PEC, 1st ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE: SITE DEVELOPMENT PLAN

Patton Harris Rust & Associates, pc
 Engineers, Surveyors, Planners, Landscape Architects.
 8818 Centre Park Drive
 Columbia, MD 21045
 T 410.997.8900
 F 410.997.9282

DATE: 6/13/07
 DESIGNED BY: CJR/ACR
 DRAWN BY: DAM
 PROJECT NO: 12724A-1-0, C400SIT.DWG
 DATE: JUNE 19, 2007
 SCALE: 1" = 30'
 DRAWING NO. 2 OF 13



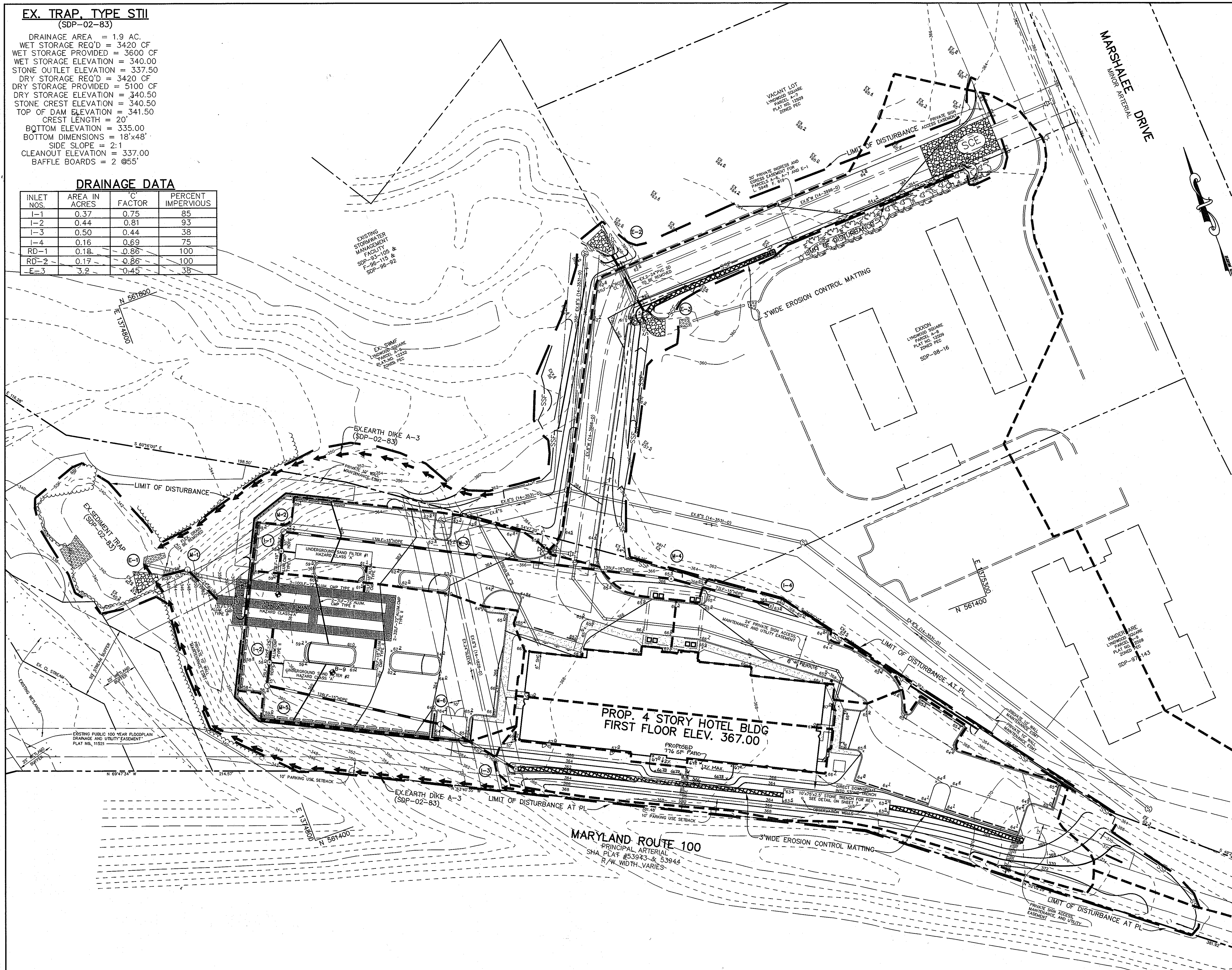
P:\projects\12724A-Originals\C400SIT.dwg, 6/13/2007 10:46:00 AM

EX. TRAP, TYPE STILL
(SDP-02-83)

DRAINAGE AREA = 1.9 AC.
WET STORAGE REQ'D = 3420 CF
WET STORAGE PROVIDED = 3600 CF
WET STORAGE ELEVATION = 340.00
STONE OUTLET ELEVATION = 337.50
DRY STORAGE REQ'D = 3420 CF
DRY STORAGE PROVIDED = 5100 CF
DRY STORAGE ELEVATION = 340.50
STONE CREST ELEVATION = 340.50
TOP OF DAM ELEVATION = 341.50
CREST LENGTH = 20'
BOTTOM ELEVATION = 335.00
BOTTOM DIMENSIONS = 18'x48'
SIDE SLOPE = 2:1
CLEANOUT ELEVATION = 337.00
BAFFLE BOARDS = 2 @55'

DRAINAGE DATA

INLET NOS.	AREA IN ACRES	C FACTOR	PERCENT IMPERVIOUS
I-1	0.37	0.75	85
I-2	0.44	0.81	93
I-3	0.50	0.44	38
I-4	0.16	0.69	75
RD-1	0.18	-0.86	100
RD-2	0.17	-0.86	100
E-3	3.2	-0.45	38



LEGEND

INLET PROTECTION		CIP
SOIL LINES		
DRAINAGE AREA LINES		
LIMIT OF DISTURBANCE		
SUPER SILT FENCE		SSF
SILT FENCE		SF
EROSION CONTROL MATTING		
STABILIZED CONSTRUCTION ENTRANCE		SCE

BY THE DEVELOPER :

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

John R. Robinson 6/14/07
DEVELOPER DATE

BY THE ENGINEER :

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

John W. C. J. 6/13/07
ENGINEER DATE

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

Jim Meyer 6/26/07
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John R. Robinson 6/26/07
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
Deborah L. Hester 7/6/07
DIRECTOR DATE

Paul Edwards 7/3/07
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
John W. C. J. 7/6/07
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

3/3/09 2 ADD PARTIO AND ADJUST GRADING
07/01/08 1 REVISED 8" PRIVATE WATER LINE

DATE NO.	REVISION
07/01/08 1	REVISED 8" PRIVATE WATER LINE

OWNER	DEVELOPER
100 INVESTMENT LP ATTN: HOWARD RESNECK 9200 RUMSEY ROAD COLUMBIA, MARYLAND 21045 410-997-7222	BAYWOOD HOTELS ATTN: CHET PATEL 7211 HANOVER PARKWAY SUITE C-D GREENBELT, MARYLAND 20770 301-345-8700 EXT. 251

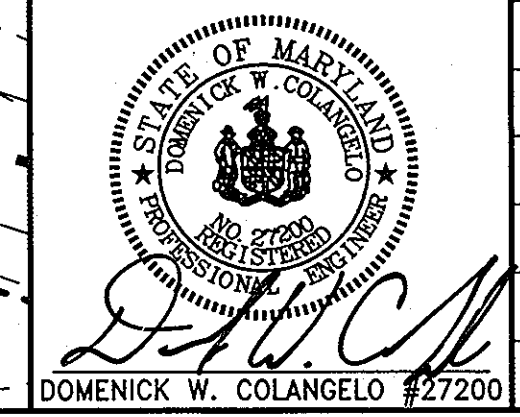
PROJECT **LYNDWOOD SQUARE**
PARCEL E-1

AREA TAX MAP 37, GRID NO. 11
PLAT NO. 15735, PARCEL E-1, ZONED PEC
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

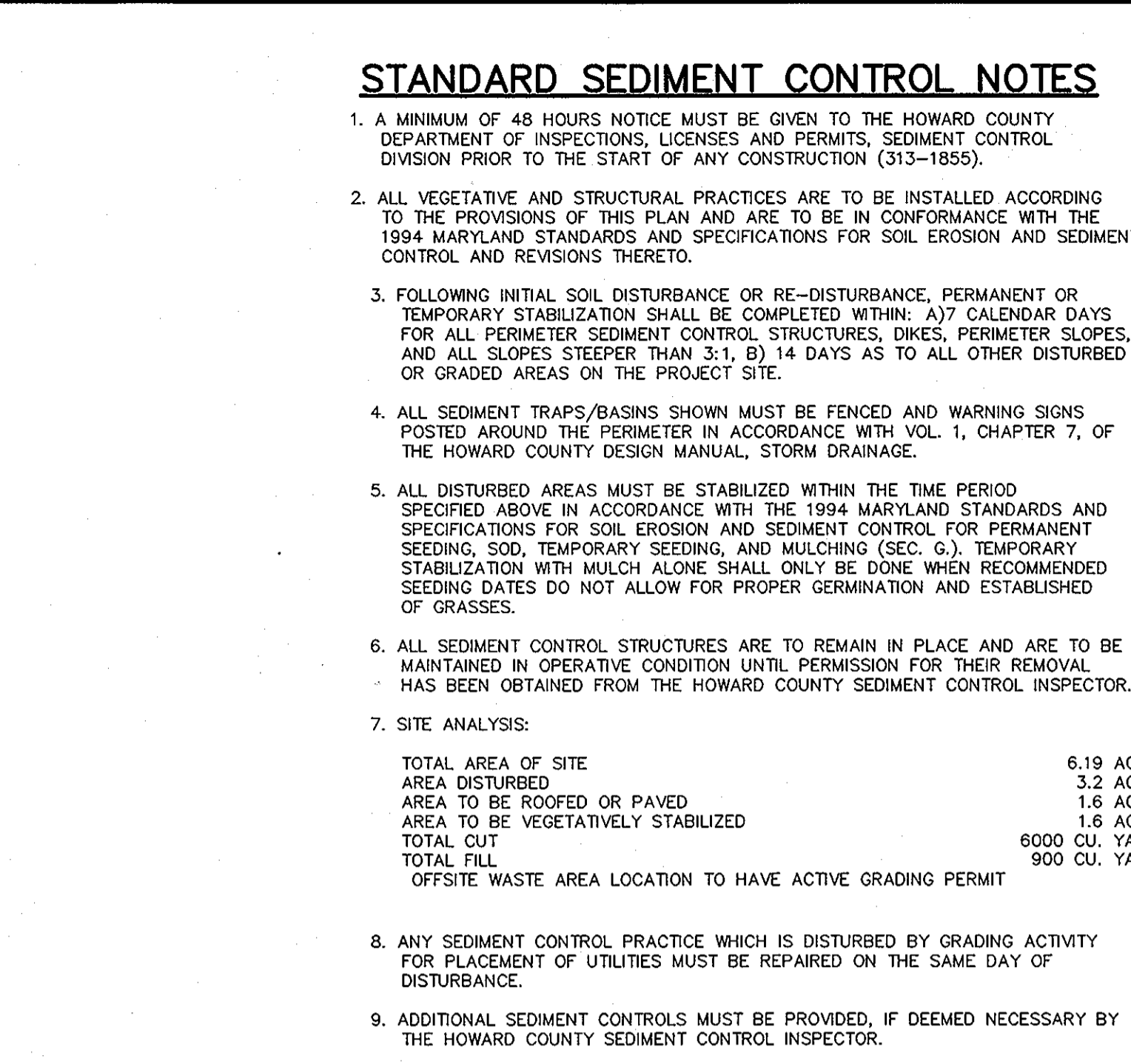
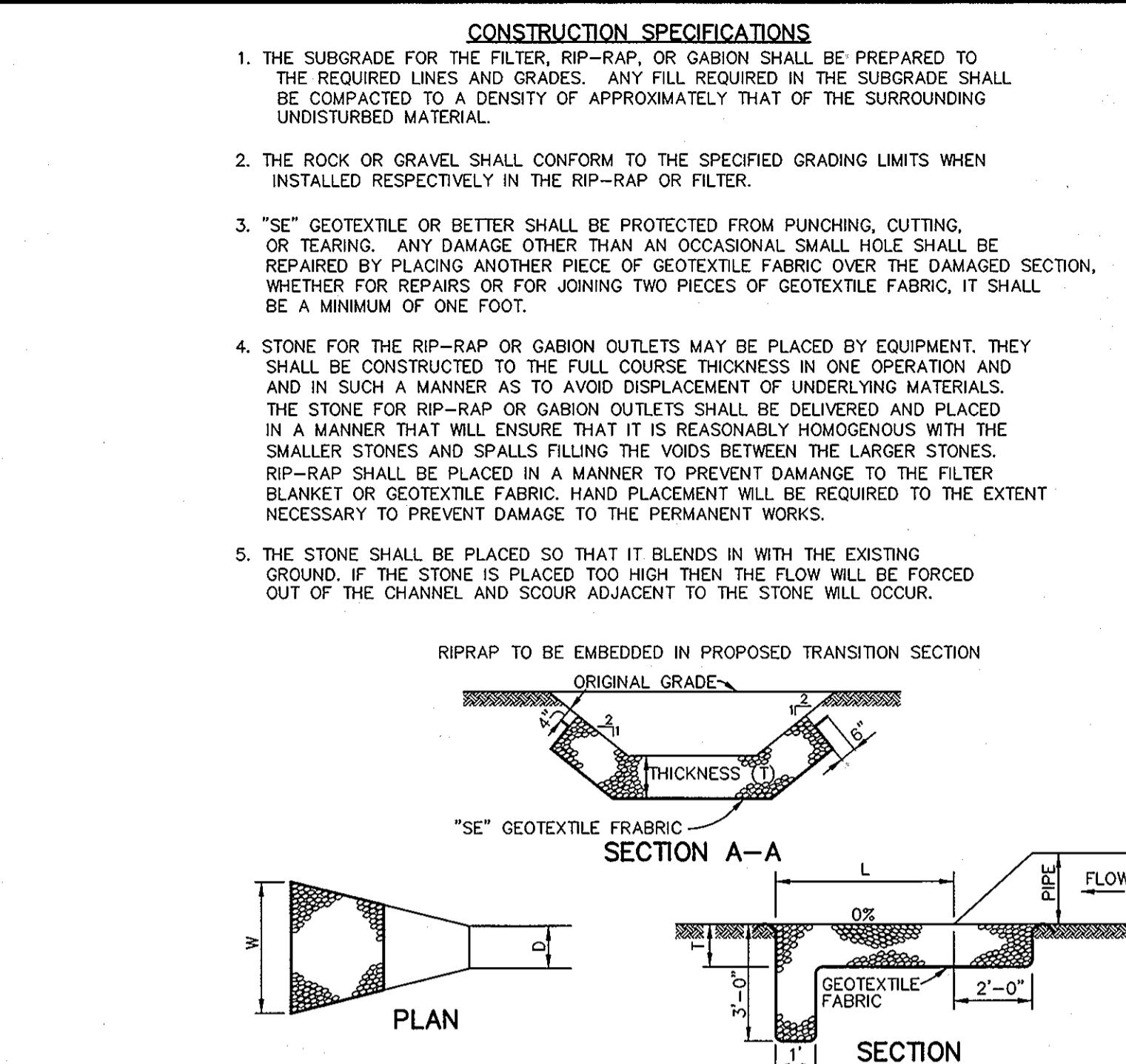
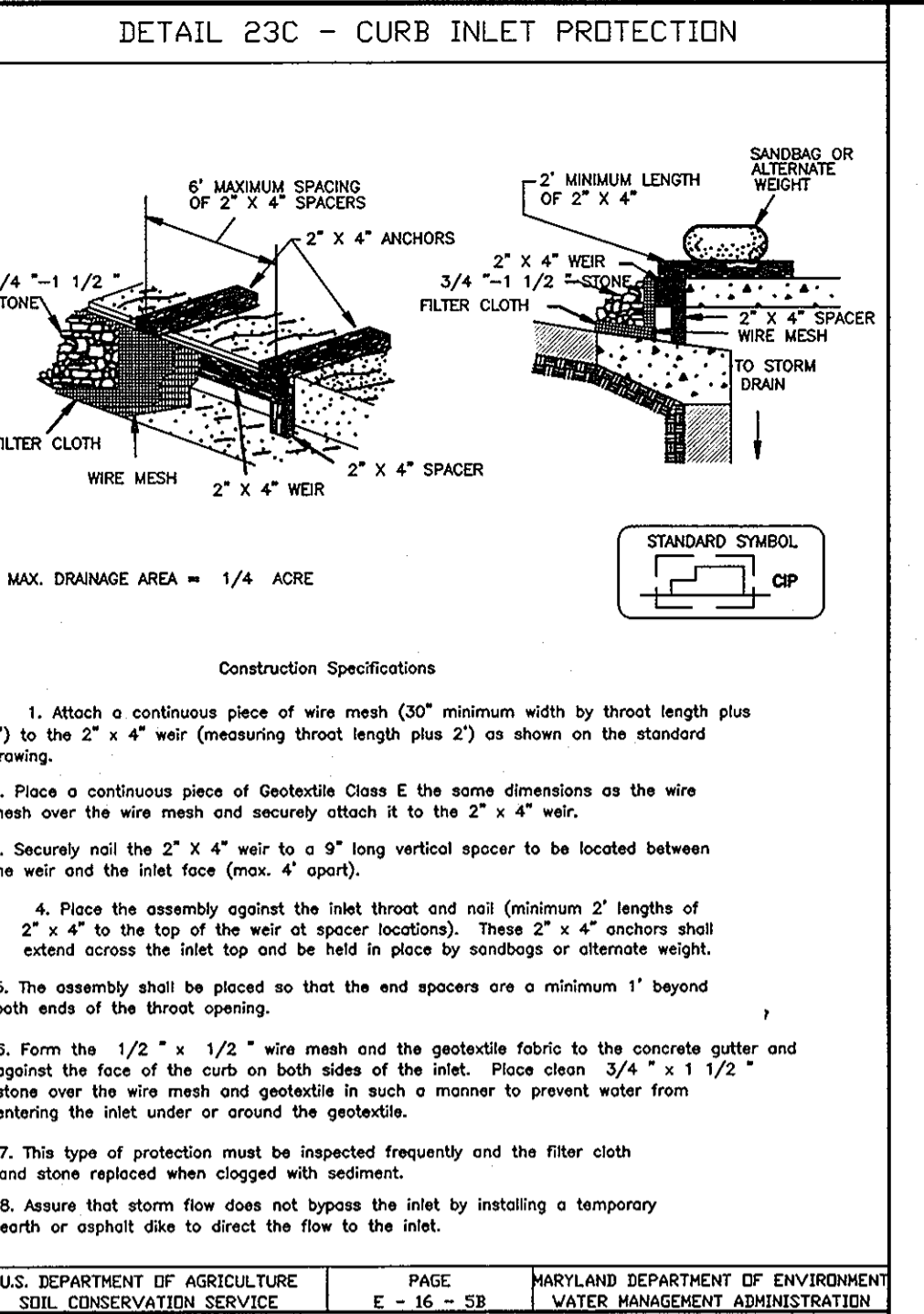
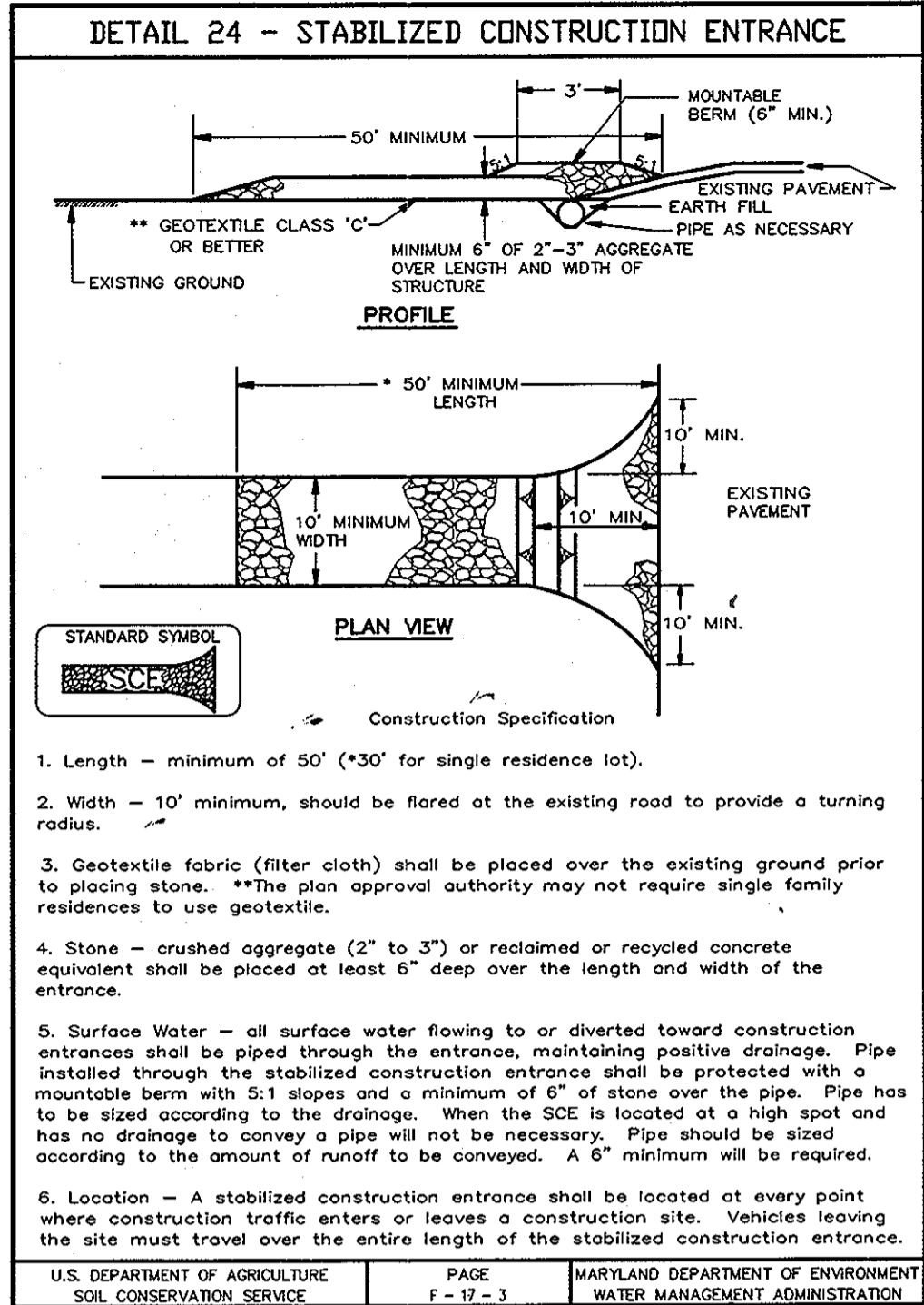
TITLE **GRADING, SEDIMENT CONTROL AND DRAINAGE AREA MAP**

Patton Harris Rust & Associates, pc
Engineers, Surveyors, Planners, Landscape Architects.
8818 Centre Park Drive
Columbia, MD 21045
T 410.997.8900
F 410.997.9282

6/13/07
DATE
DESIGNED BY : CJR/ACR
DRAWN BY : DAM
PROJECT NO : 1272A1-01
C400SIT.DWG
DATE : JUNE 19, 2007
SCALE : 1" = 30'
DRAWING NO. 3 OF 13



Project: 1272A1-01.dwg, 6/13/07 10:47:24 AM



BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 ALSO AUTHORIZE EROSION CONTROL AND STABILIZATION DISTURBED AREAS IN ACCORDANCE WITH CONSERVATION DISTRICT.

[Signature] 6/14/07
DEVELOPER DATE

BY THE ENGINEER:

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

[Signature] 6/13/07
ENGINEER DATE

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

[Signature] 6/26/07
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

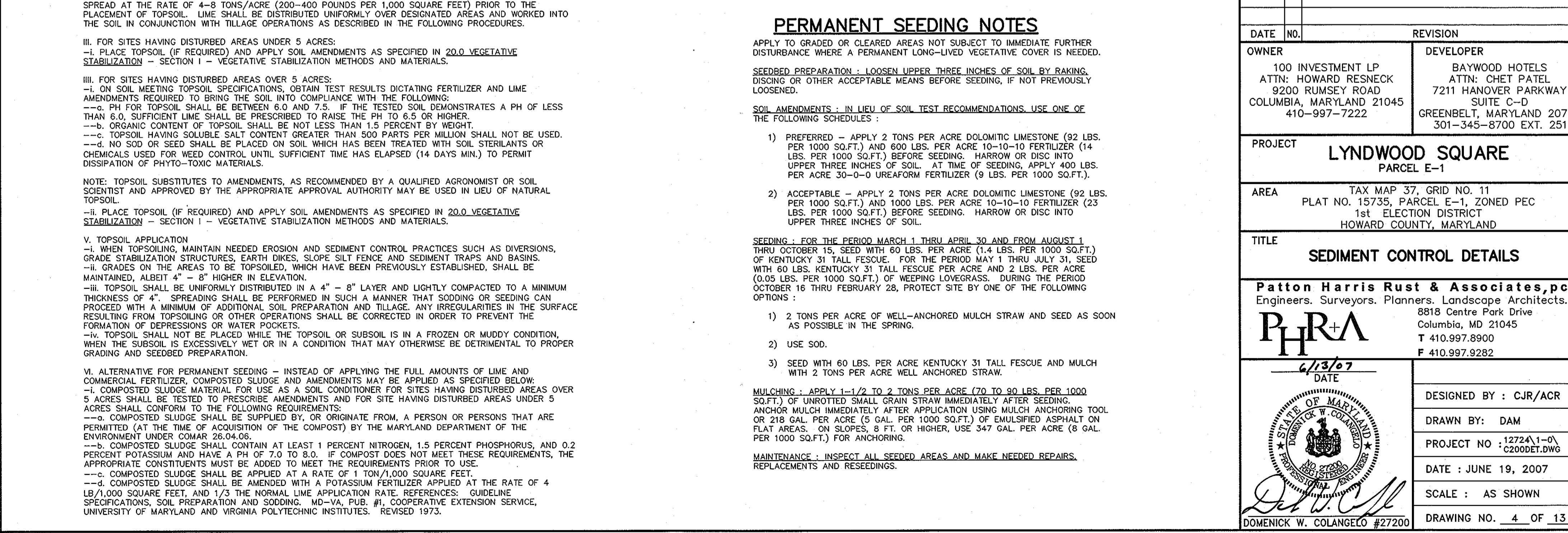
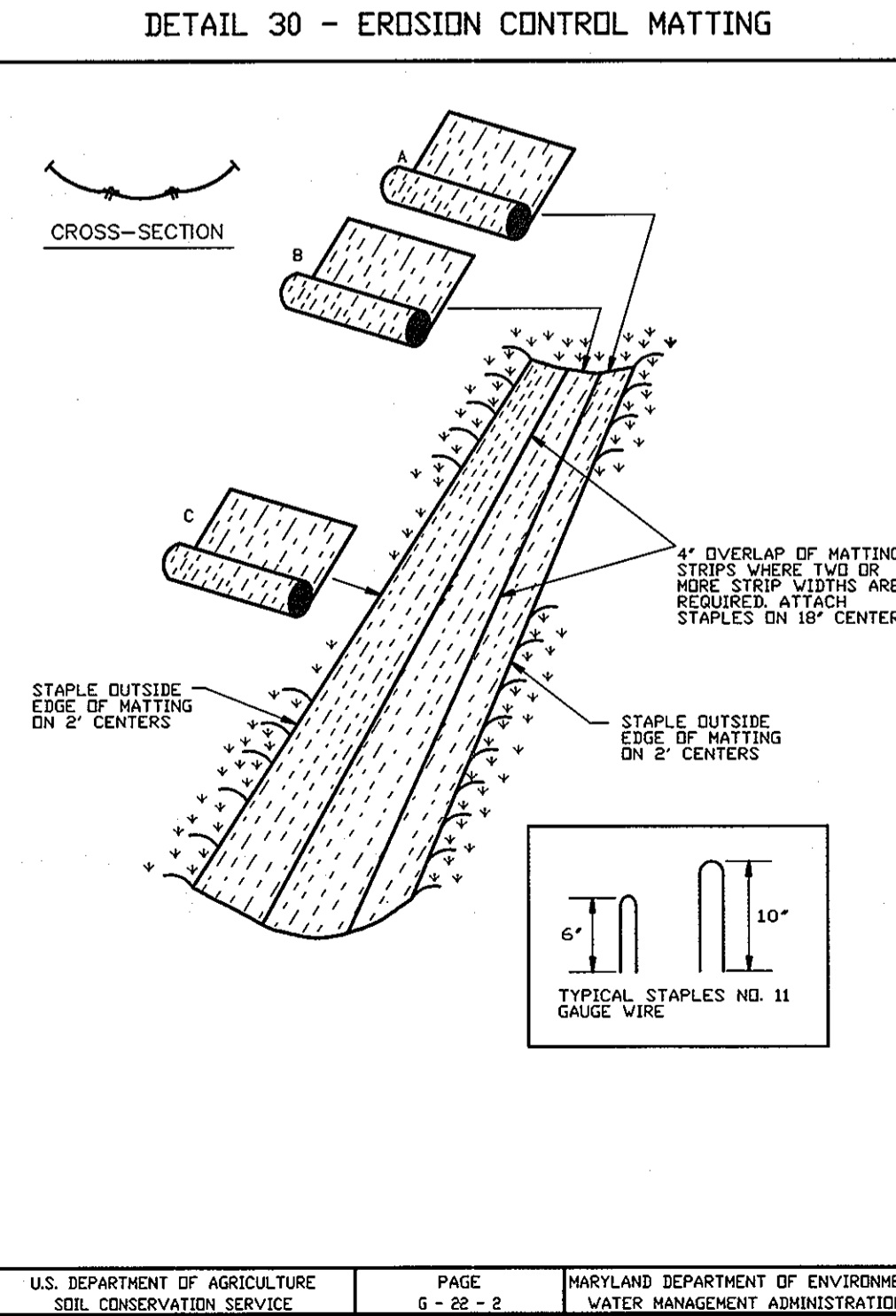
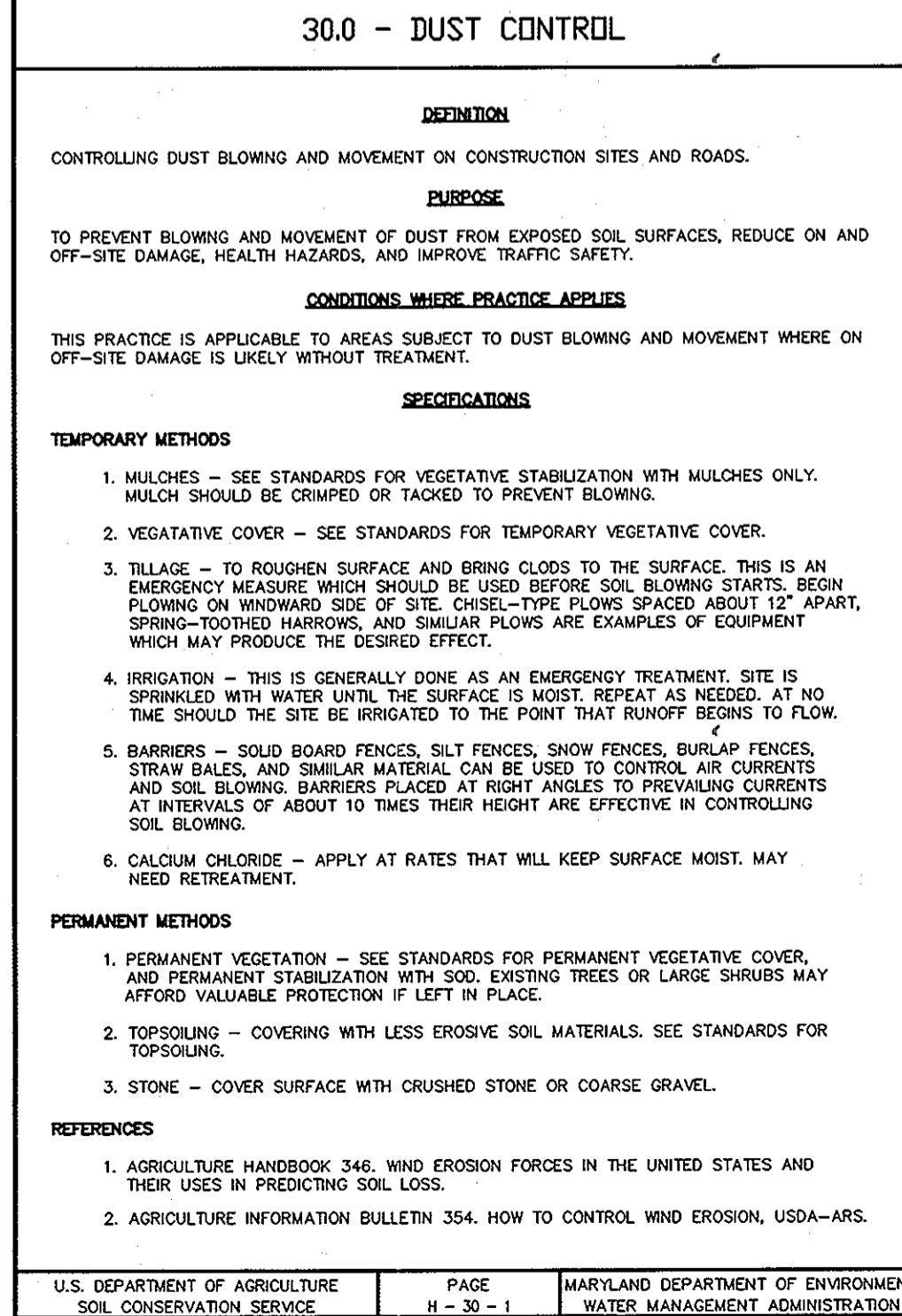
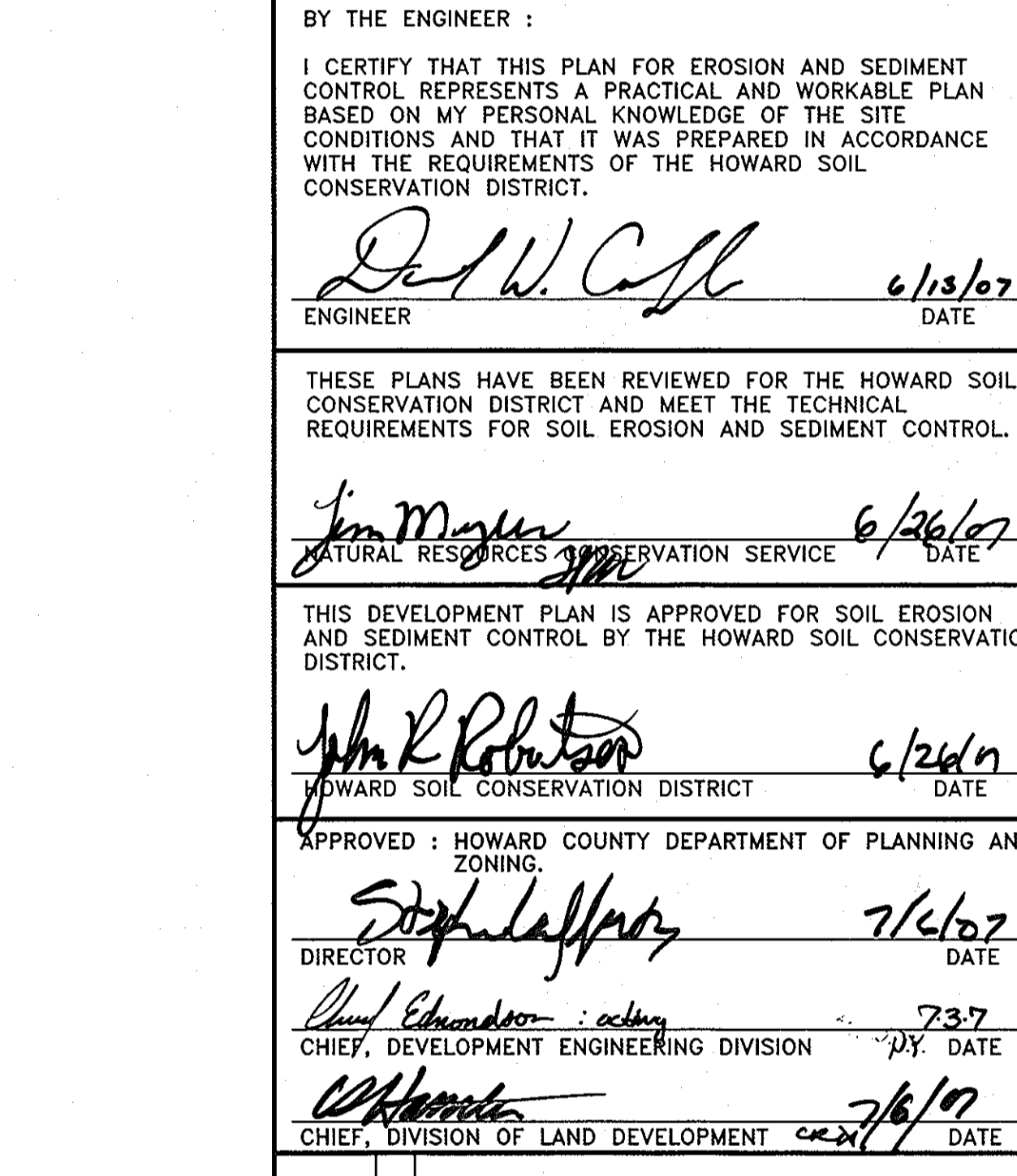
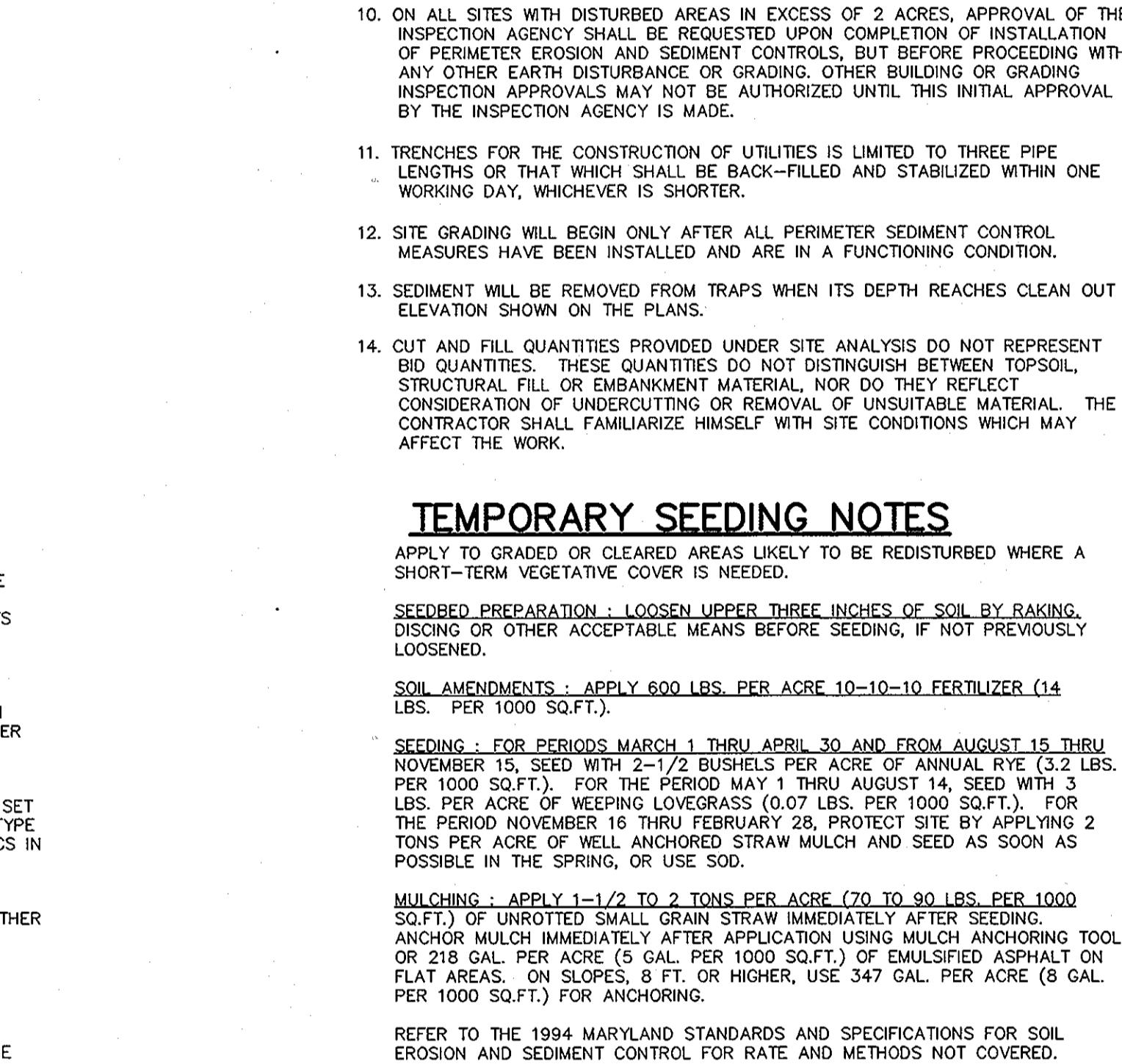
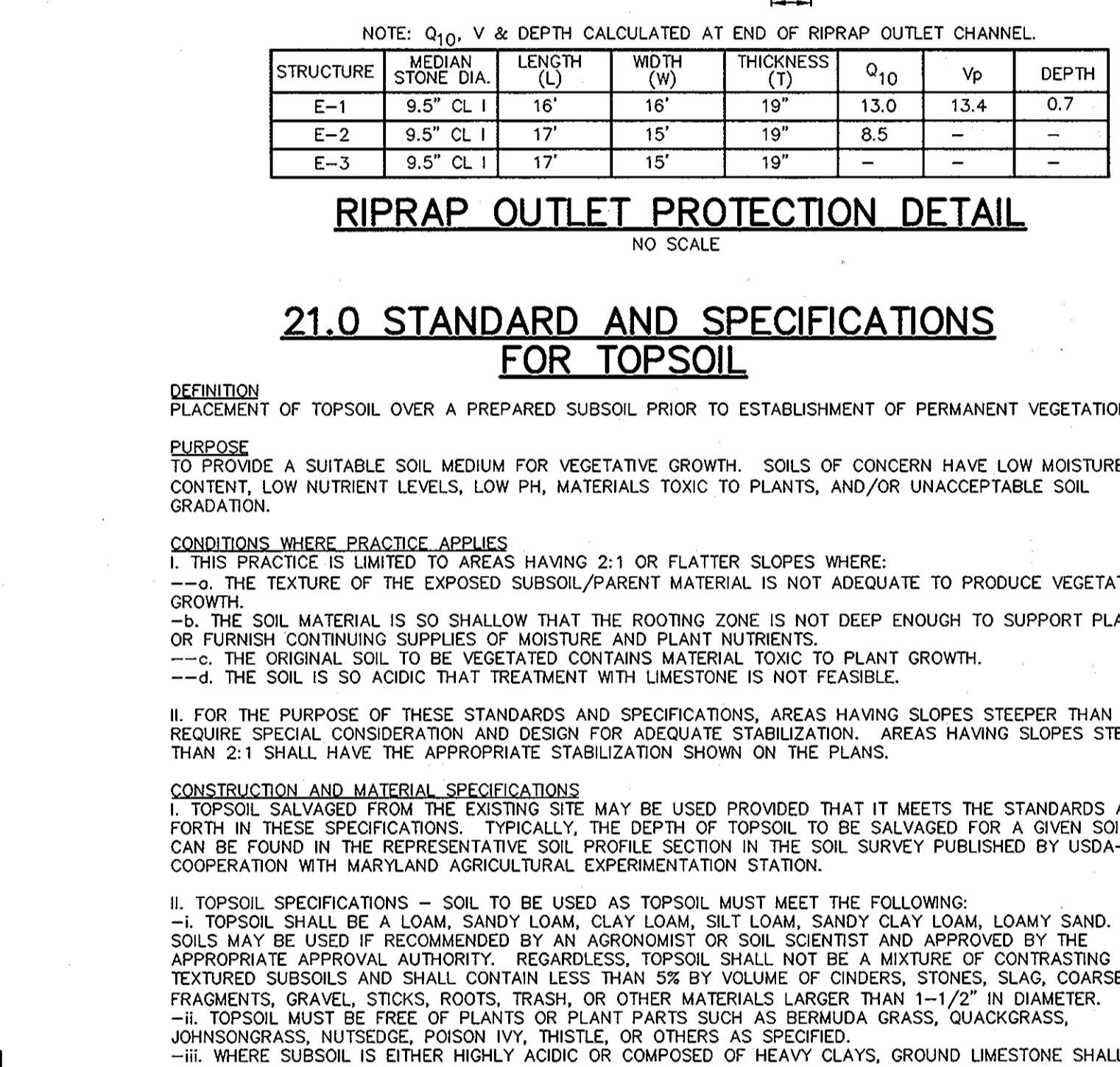
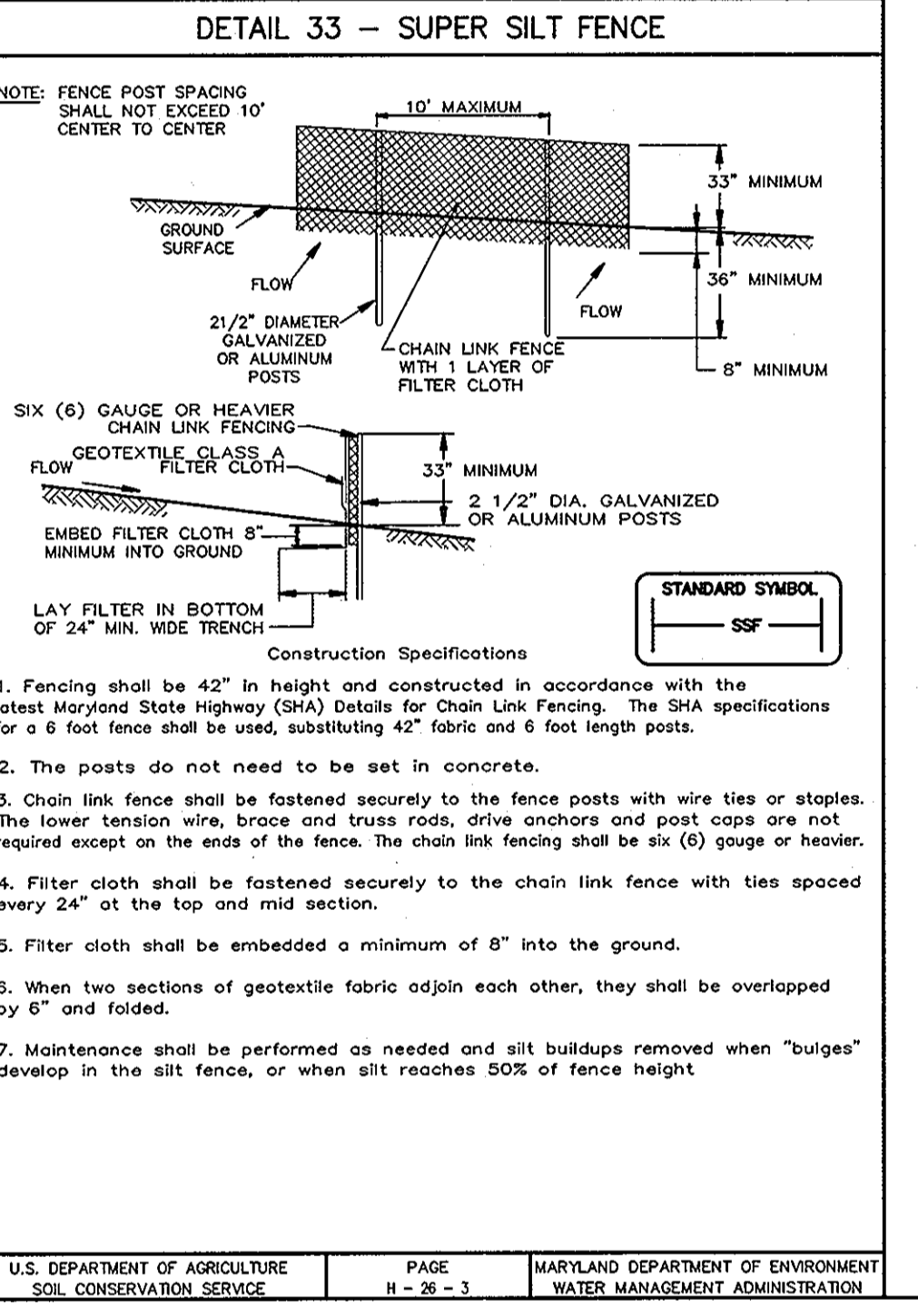
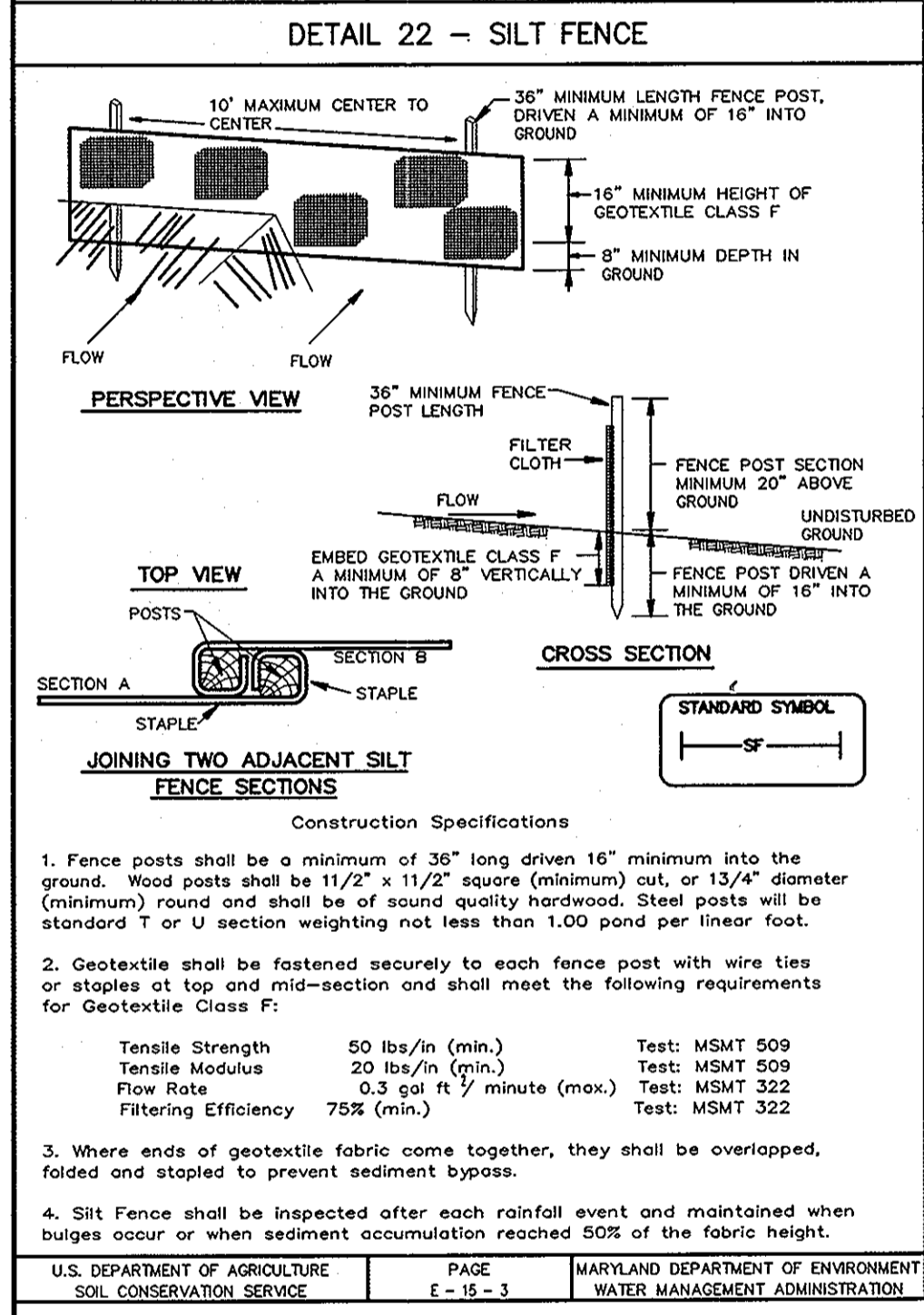
[Signature] 6/26/07
HOWARD SOIL CONSERVATION DISTRICT DATE

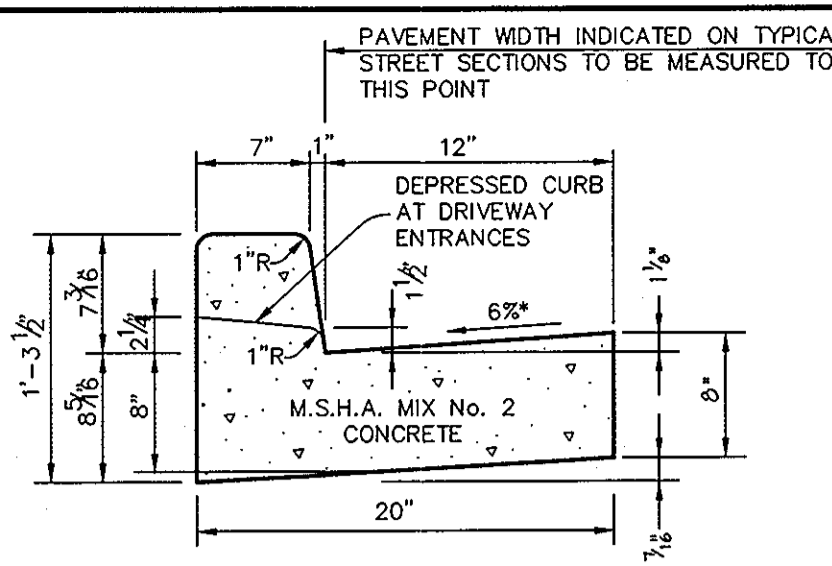
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

[Signature] 7/6/07
DIRECTOR DATE

[Signature] 7/6/07
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 7/6/07
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

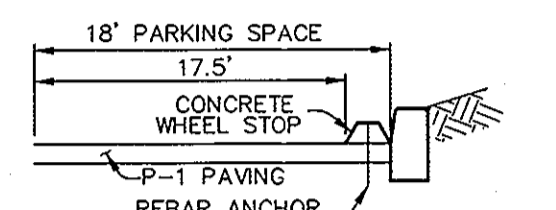




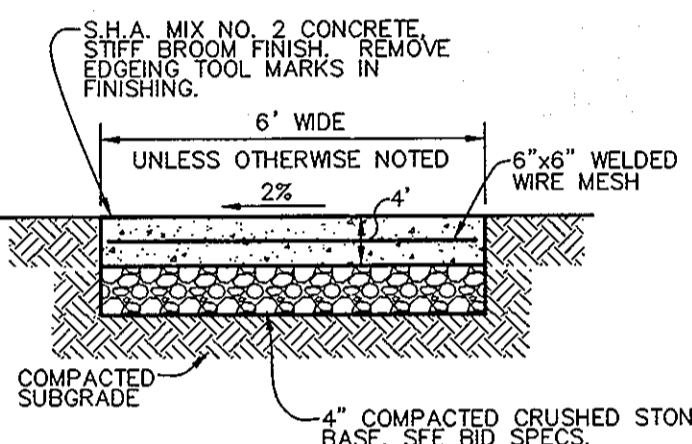
HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-3.01).

* GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AS THE PAVEMENT.

STANDARD 7" COMBINATION CURB AND GUTTER
NO SCALE

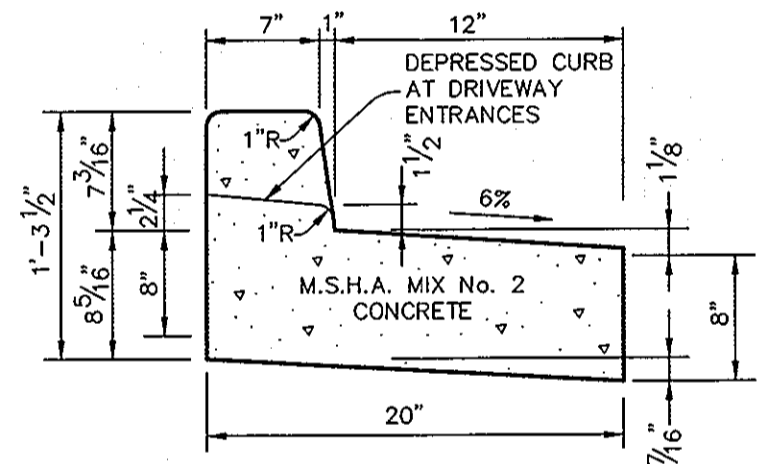


CONCRETE WHEEL STOP LOCATION PLAN
NO SCALE

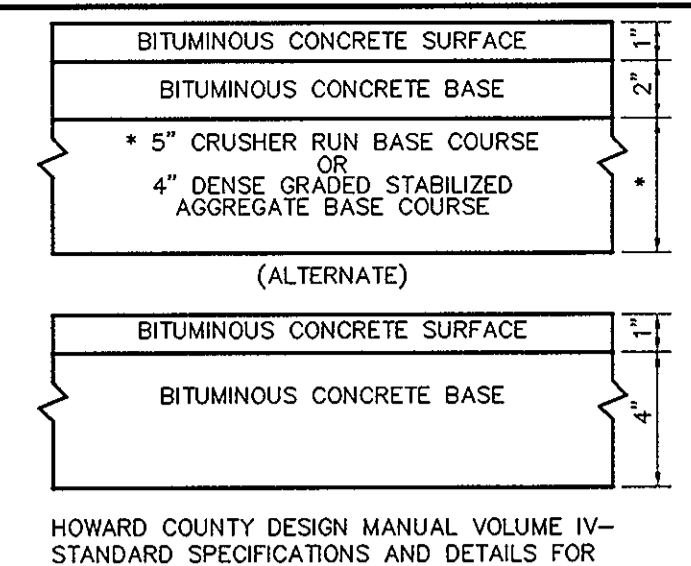


NOTES: PROVIDE LATITUDINAL EXPANSION JOINTS AT 15' O.C. (MAX.) PROVIDE CONTRACTION (DUMMY) JOINT AT 5' O.C. INTERVALS BETWEEN EXPANSION JOINTS. SIDEWALK TO BE SCRIBED IN 5' MAX. SQUARES.

SIDEWALK w/ REINFORCING
NO SCALE

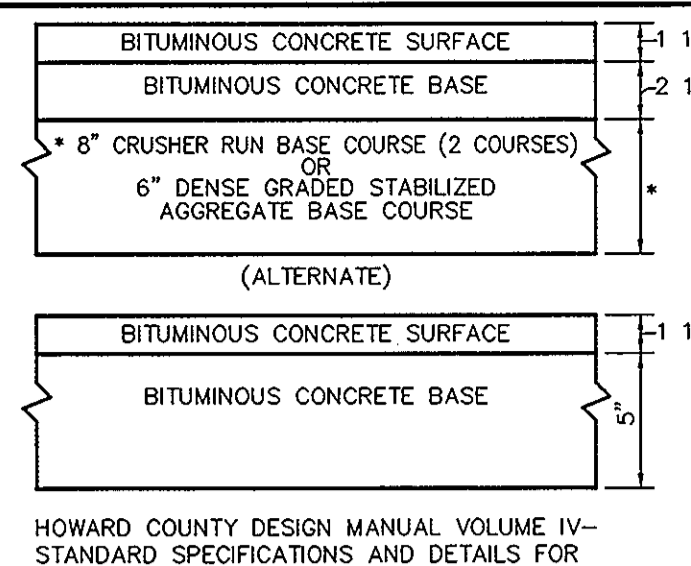


REVERSE 7" COMBINATION CURB AND GUTTER
NO SCALE



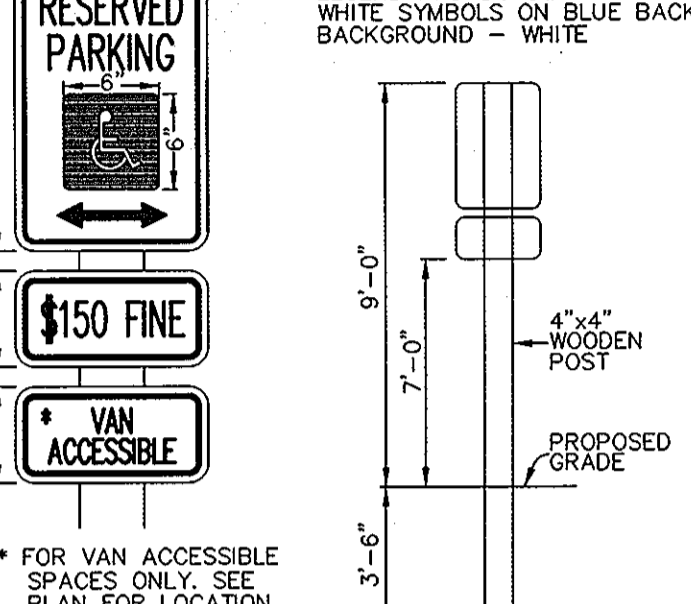
HOWARD COUNTY DESIGN MANUAL VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.01)

P-1 PAVING
NO SCALE

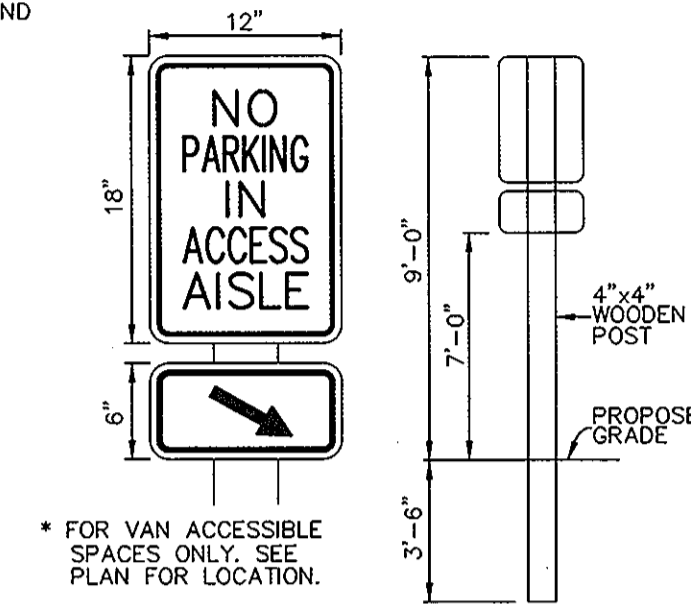


HOWARD COUNTY DESIGN MANUAL VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.01)

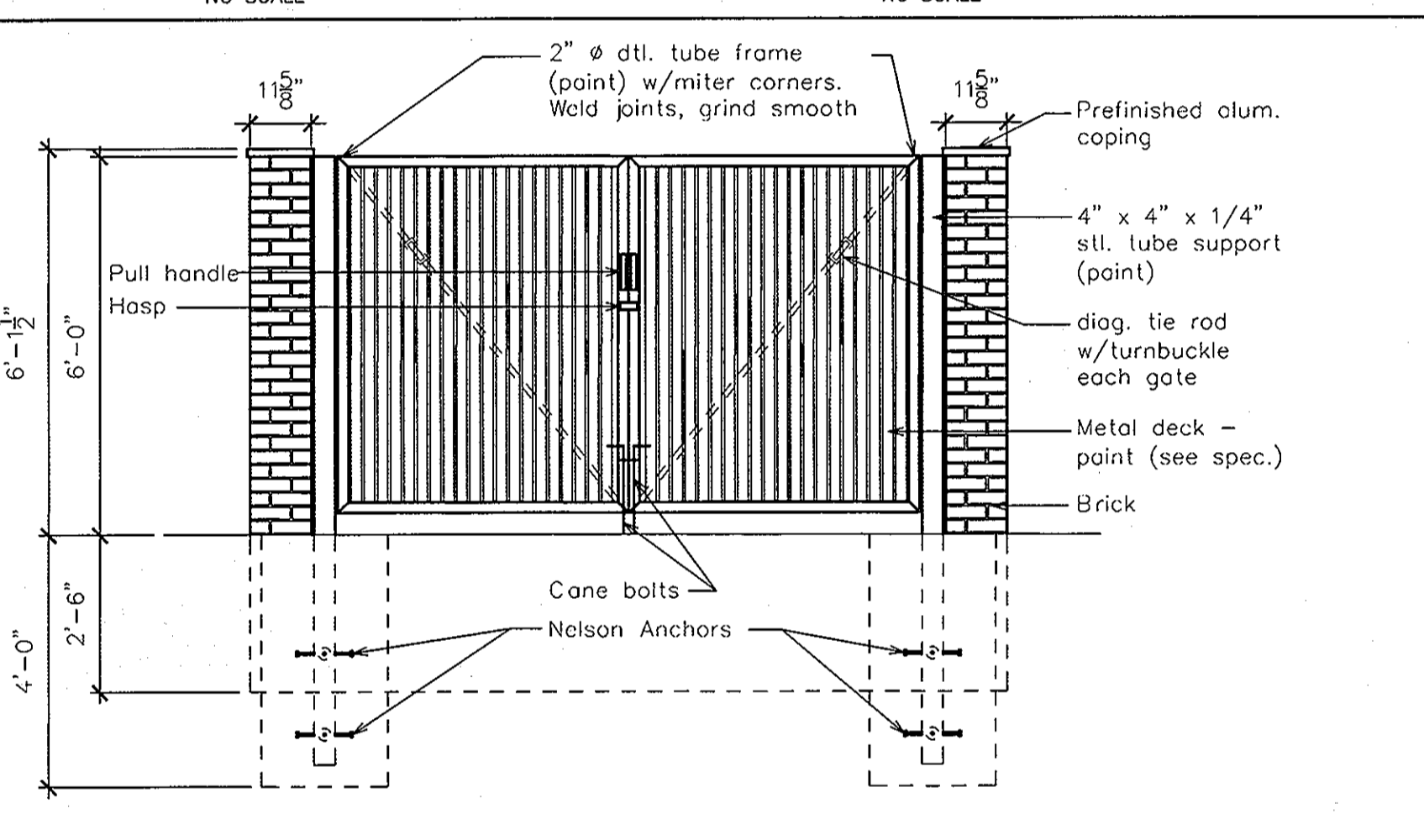
P-2 PAVING
NO SCALE



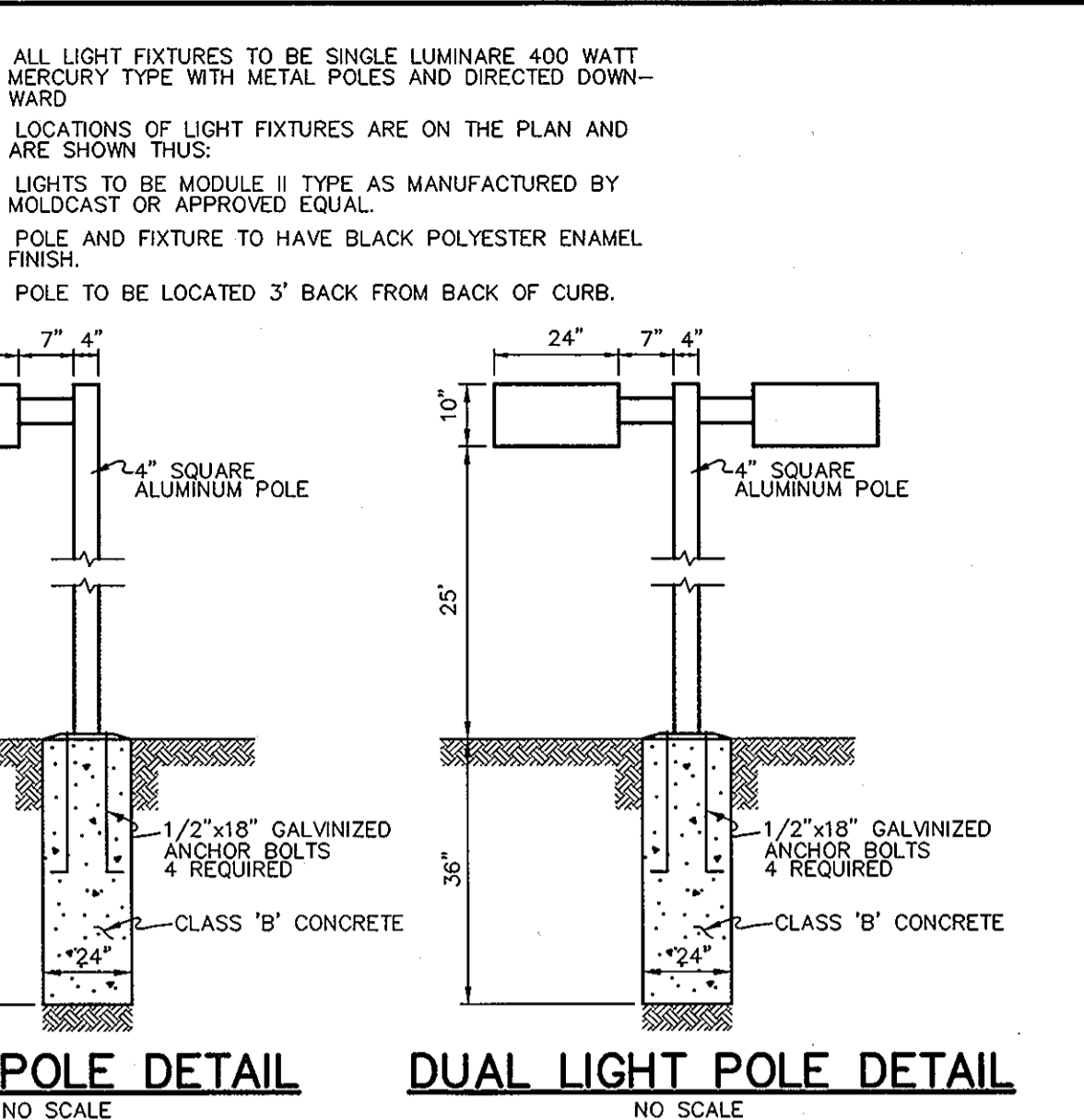
HANDICAP SIGN DETAIL
NO SCALE



ACCESS AISLE SIGN
NO SCALE

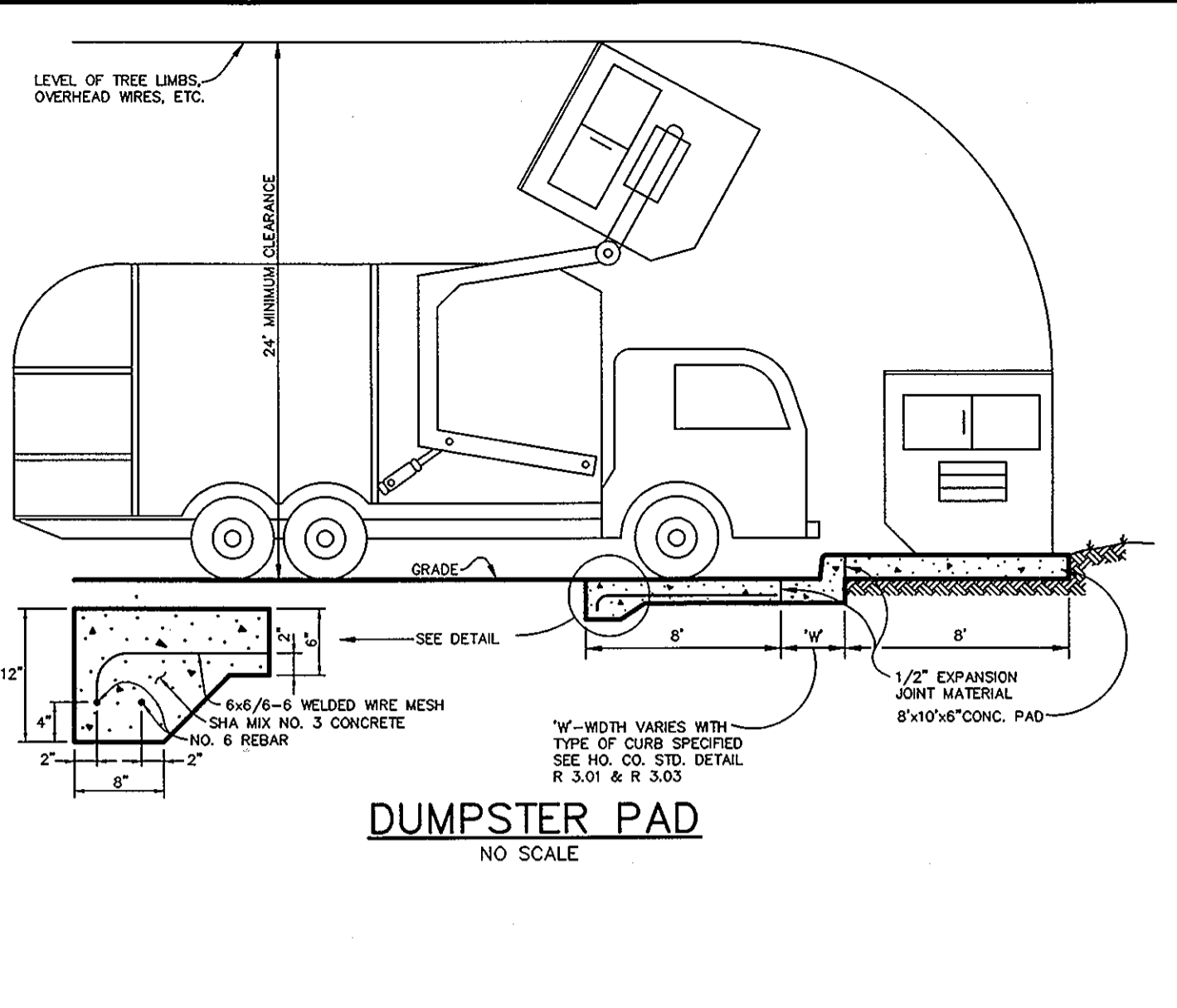


2 Dumpster Enclosure Front Elevation
A-14

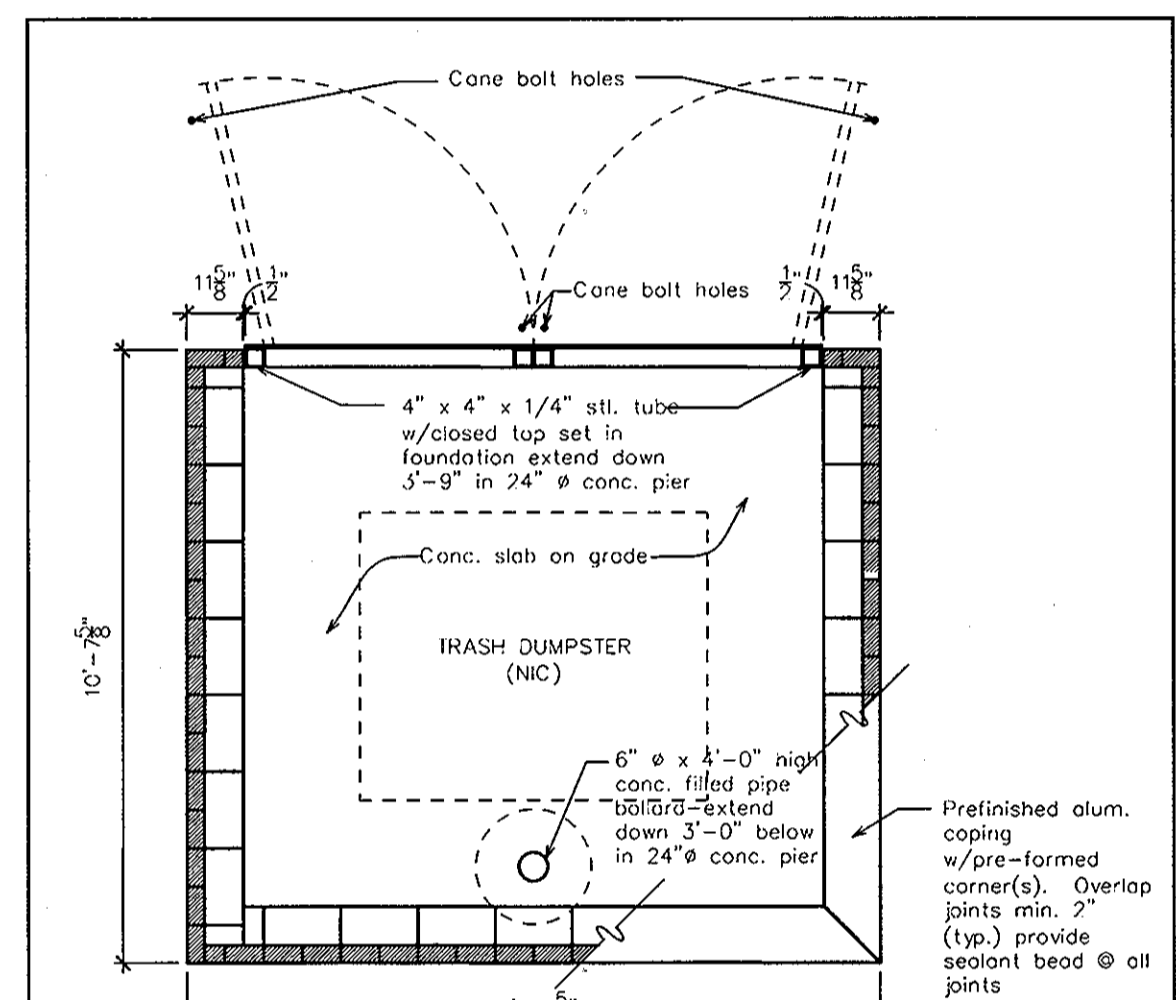


LIGHT POLE DETAIL
NO SCALE

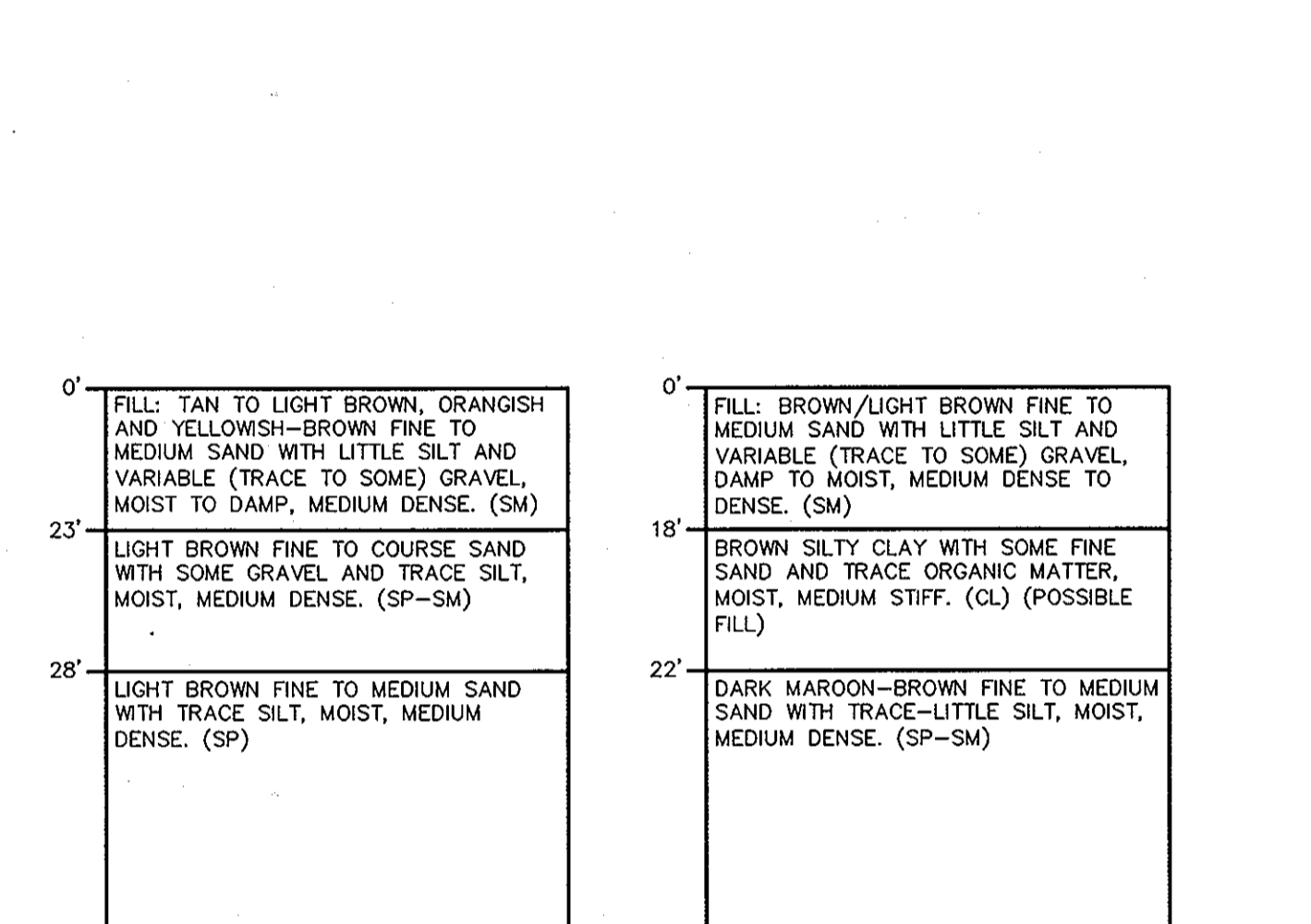
DUAL LIGHT POLE DETAIL
NO SCALE



DUMPSTER PAD
NO SCALE

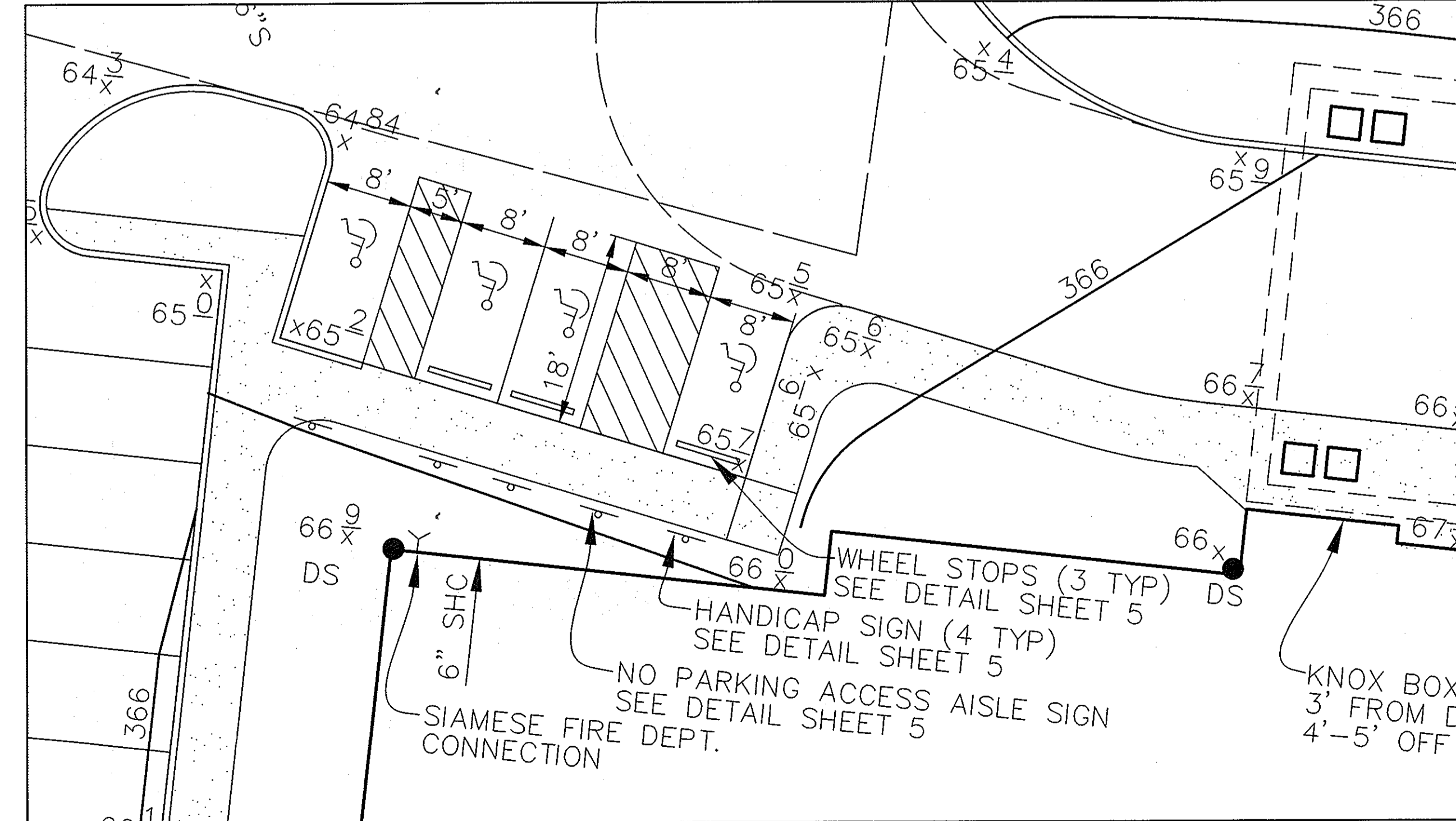


1 Dumpster Enclosure Plan
A-14

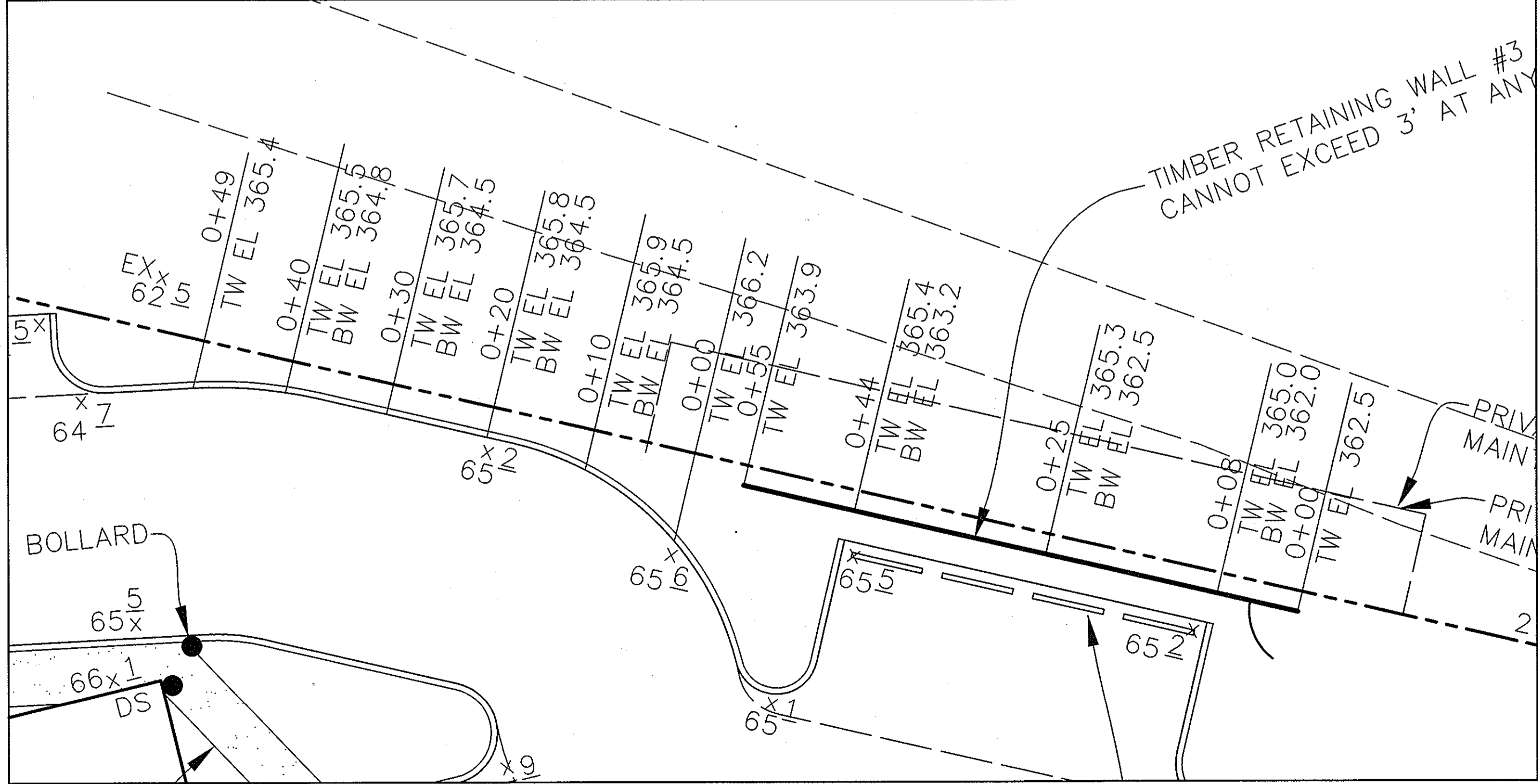


BORING B-9
NO SCALE

BORING B-10
NO SCALE



HANDICAP RAMP DETAIL
SCALE: 1" = 10'



CURB/WALL DETAIL
SCALE: 1" = 10'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
 Director: *Stephen Caffrey* 7/16/07
 Chief, Development Engineering Division: *Paul Edwards* 7-37
 Chief, Division of Land Development: *Colangelo* 7/6/07

DATE	NO.	REVISION

OWNER 100 INVESTMENT LP ATTN: HOWARD RESNECK 9200 RUMSEY ROAD COLUMBIA, MARYLAND 21045 410-997-7222	DEVELOPER BAYWOOD HOTELS ATTN: CHET PATEL 7211 HANOVER PARKWAY SUITE C-D GREENBELT, MARYLAND 20770 301-345-8700 EXT. 251
---	---

PROJECT LYNDWOOD SQUARE
PARCEL E-1

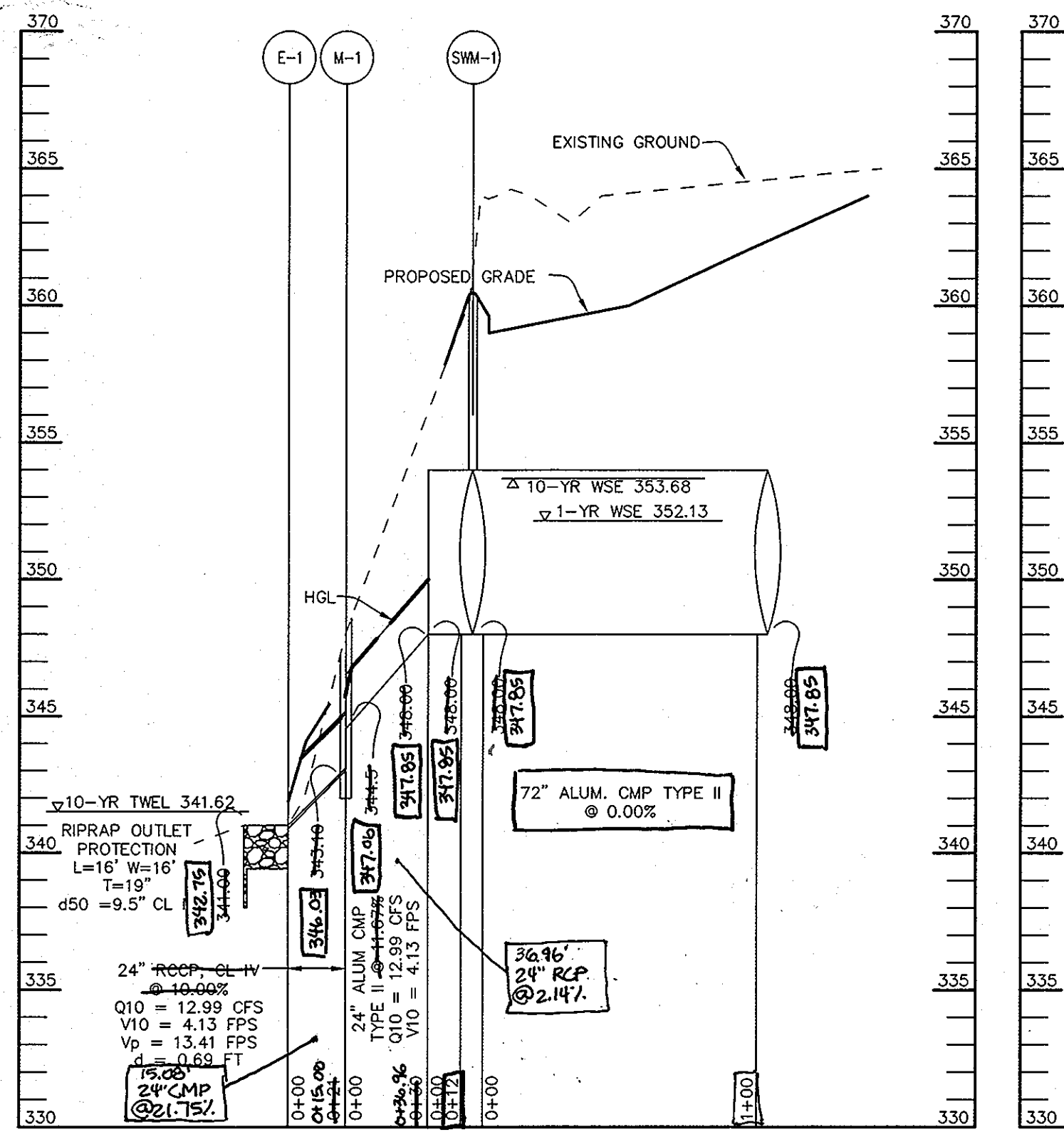
AREA TAX MAP 37, GRID NO. 11
PLAT NO. 15735, PARCEL E-1, ZONED PEC
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE DETAIL SHEET

Patton Harris Rust & Associates, pc
Engineers, Surveyors, Planners, Landscape Architects.
8818 Centre Park Drive
Columbia, MD 21045
T 410.997.8900
F 410.997.9282

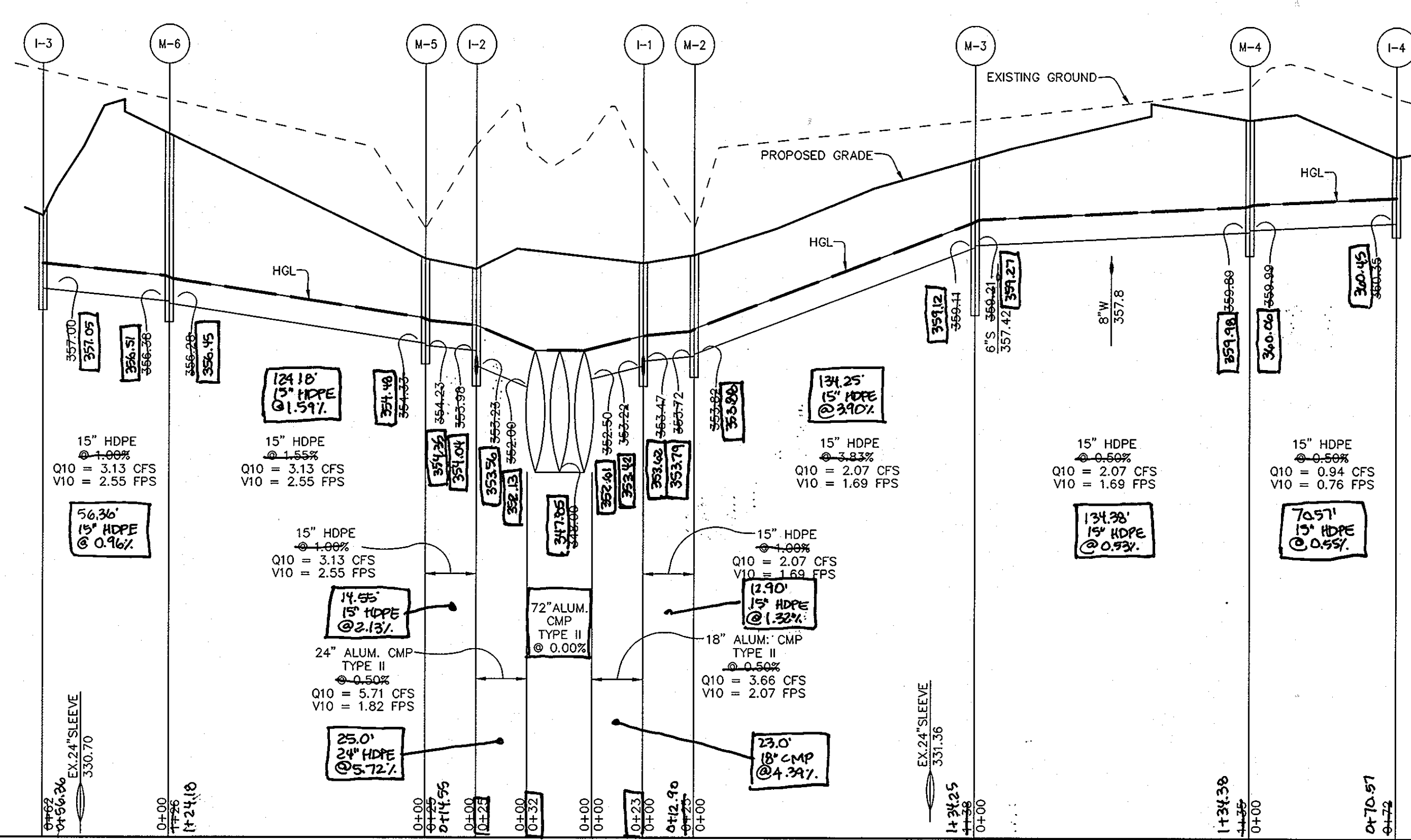
DESIGNED BY: CJR/ACR
DRAWN BY: DAM
PROJECT NO.: 1272A(1-0)
DATE: JUNE 19, 2007
SCALE: AS SHOWN
DRAWING NO.: 5 OF 13





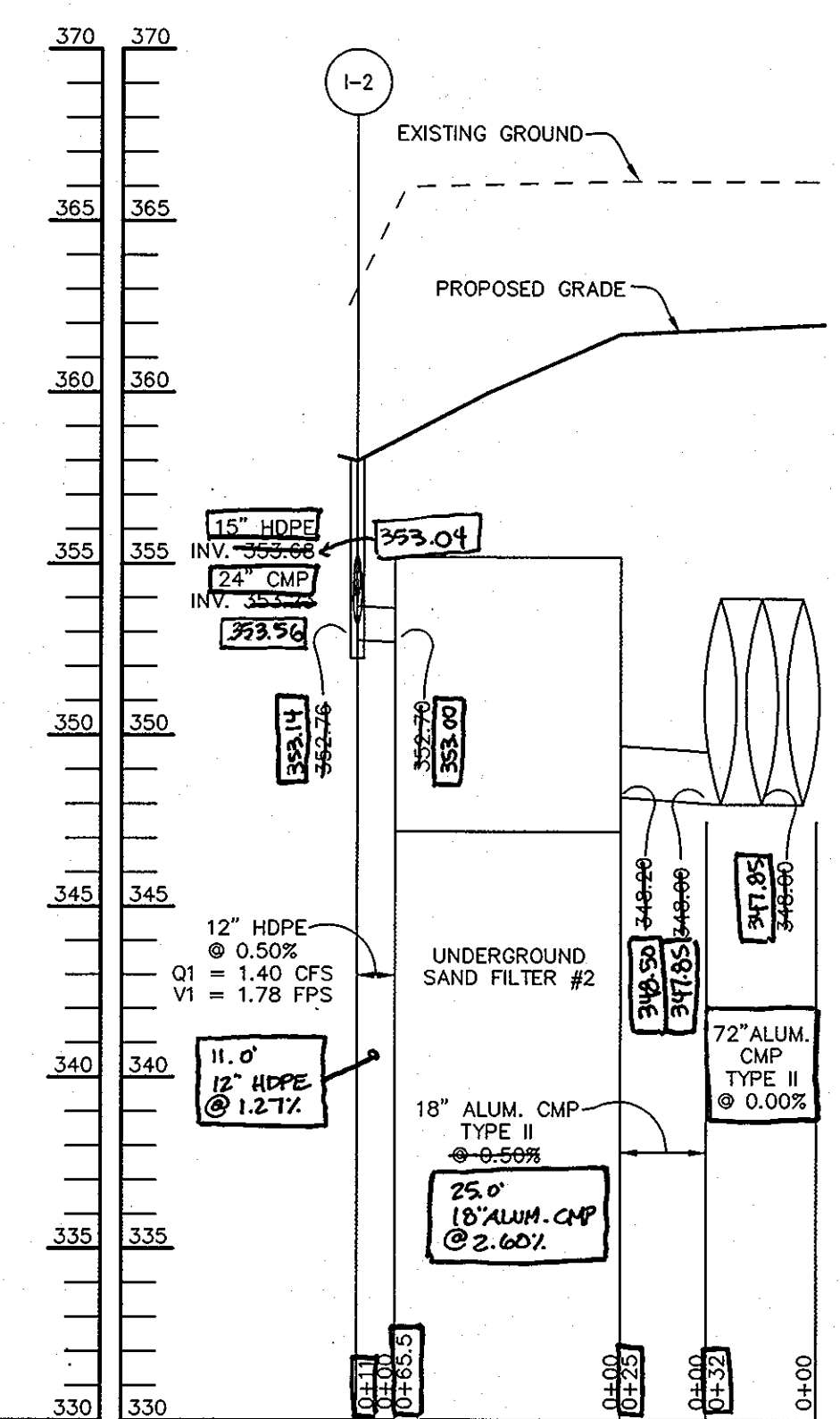
STORM DRAIN PROFILE

SCALE:
HOR.-1"=50'
VERT.-1"=5'



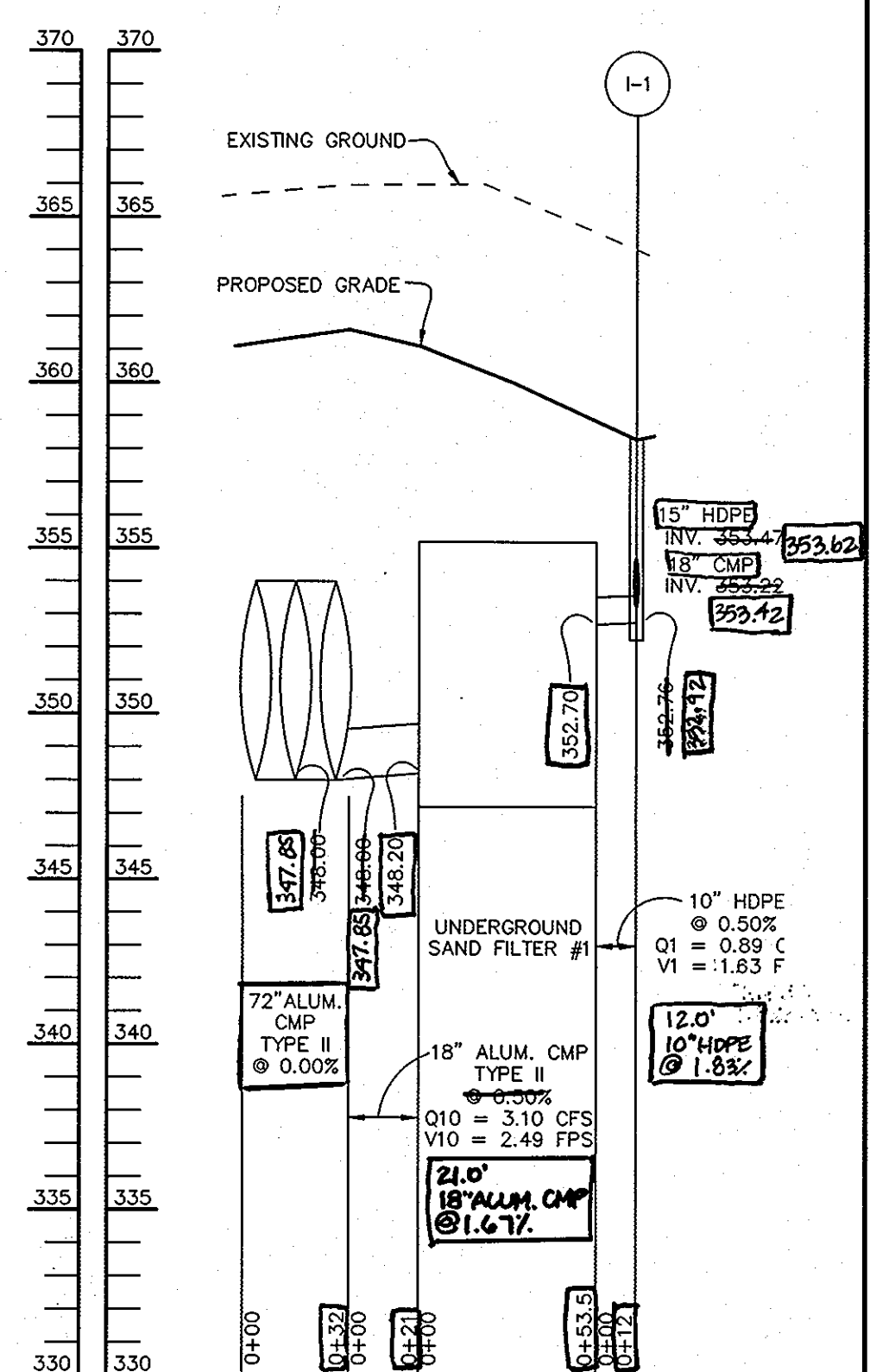
STORM DRAIN PROFILE

SCALE:
HOR.-1"=50'
VERT.-1"=5'



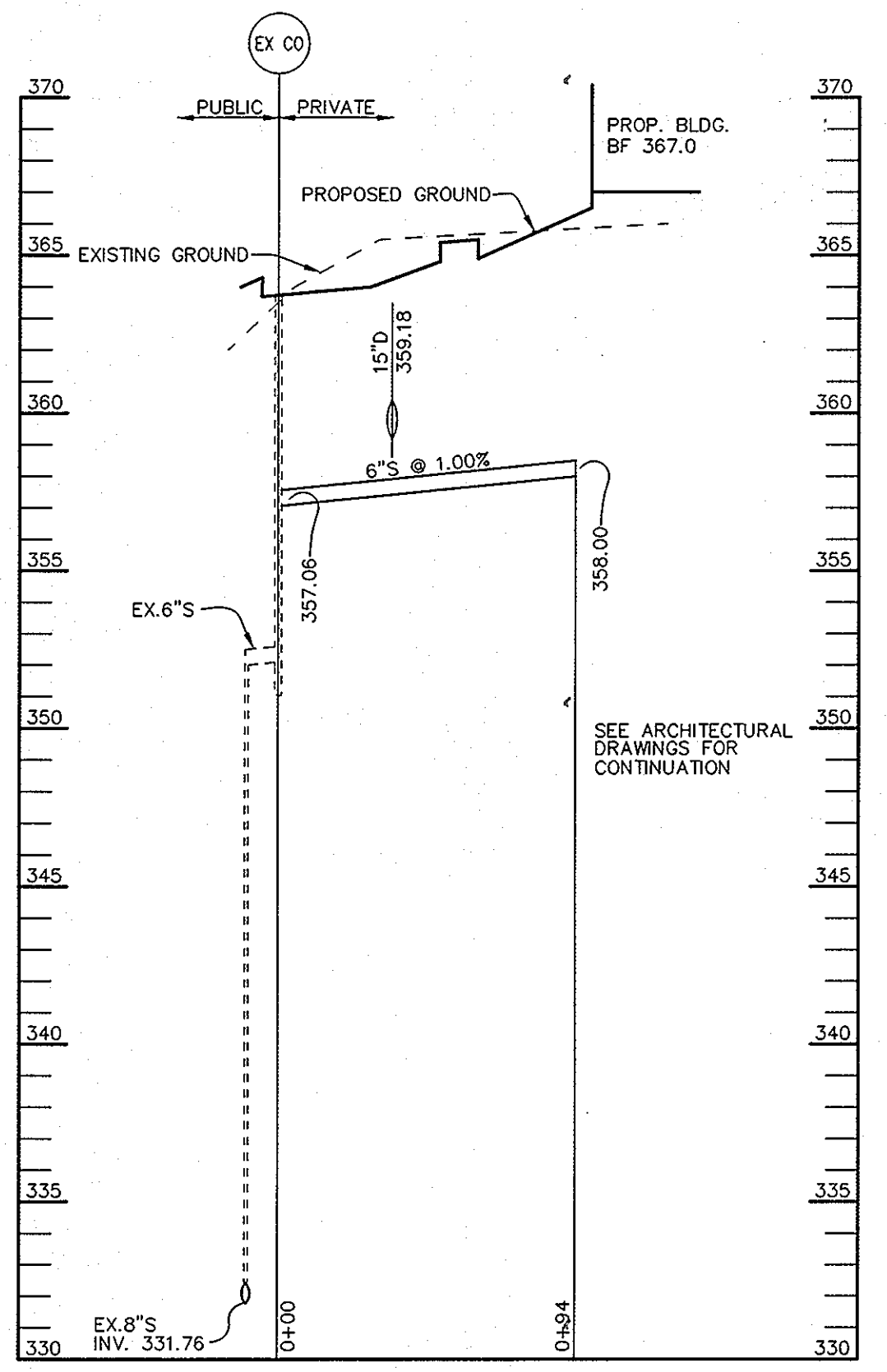
STORM DRAIN PROFILE

SCALE:
HOR.-1"=50'
VERT.-1"=5'



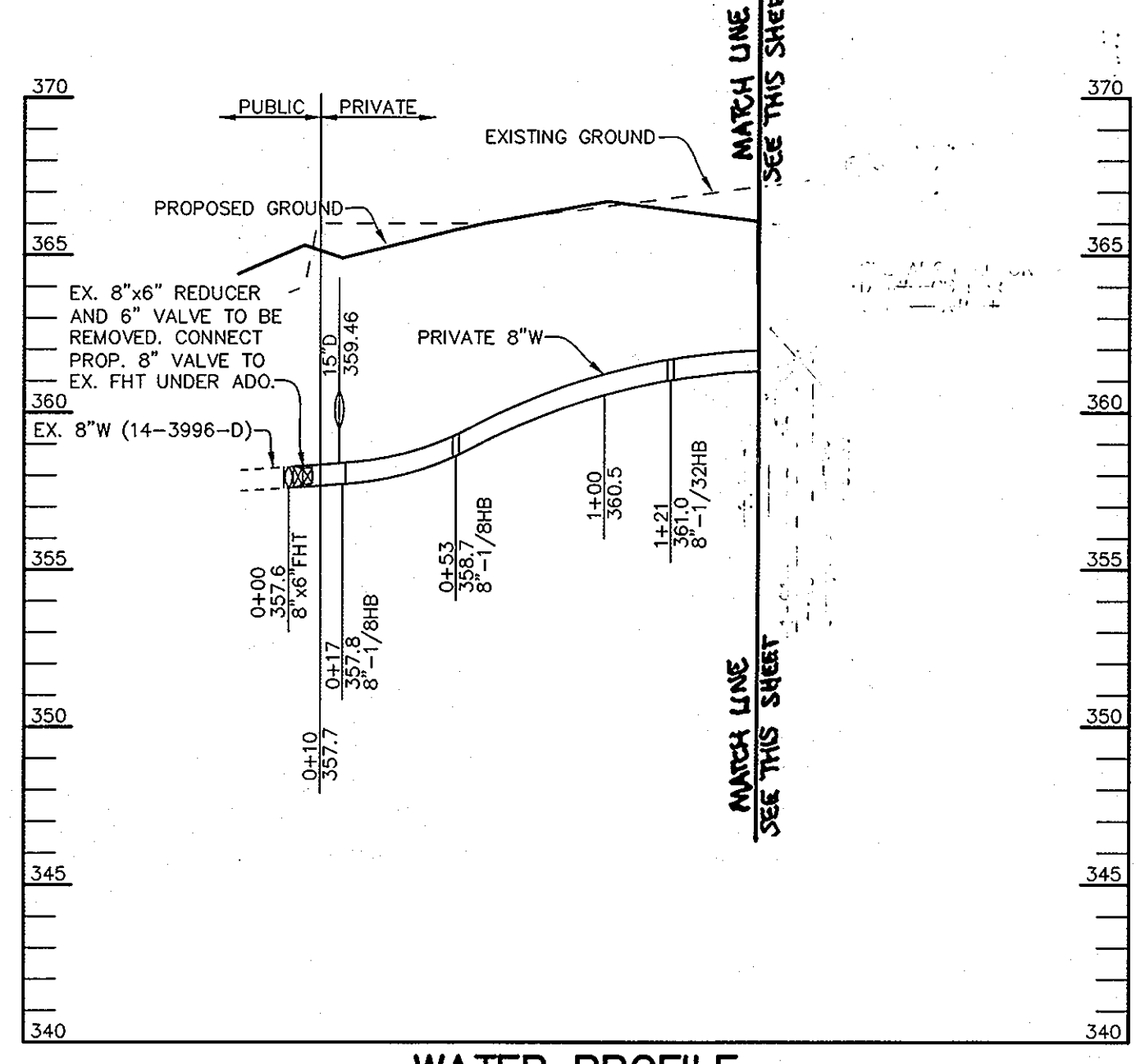
STORM DRAIN PROFILE

SCALE:
HOR.-1"=50'
VERT.-1"=5'



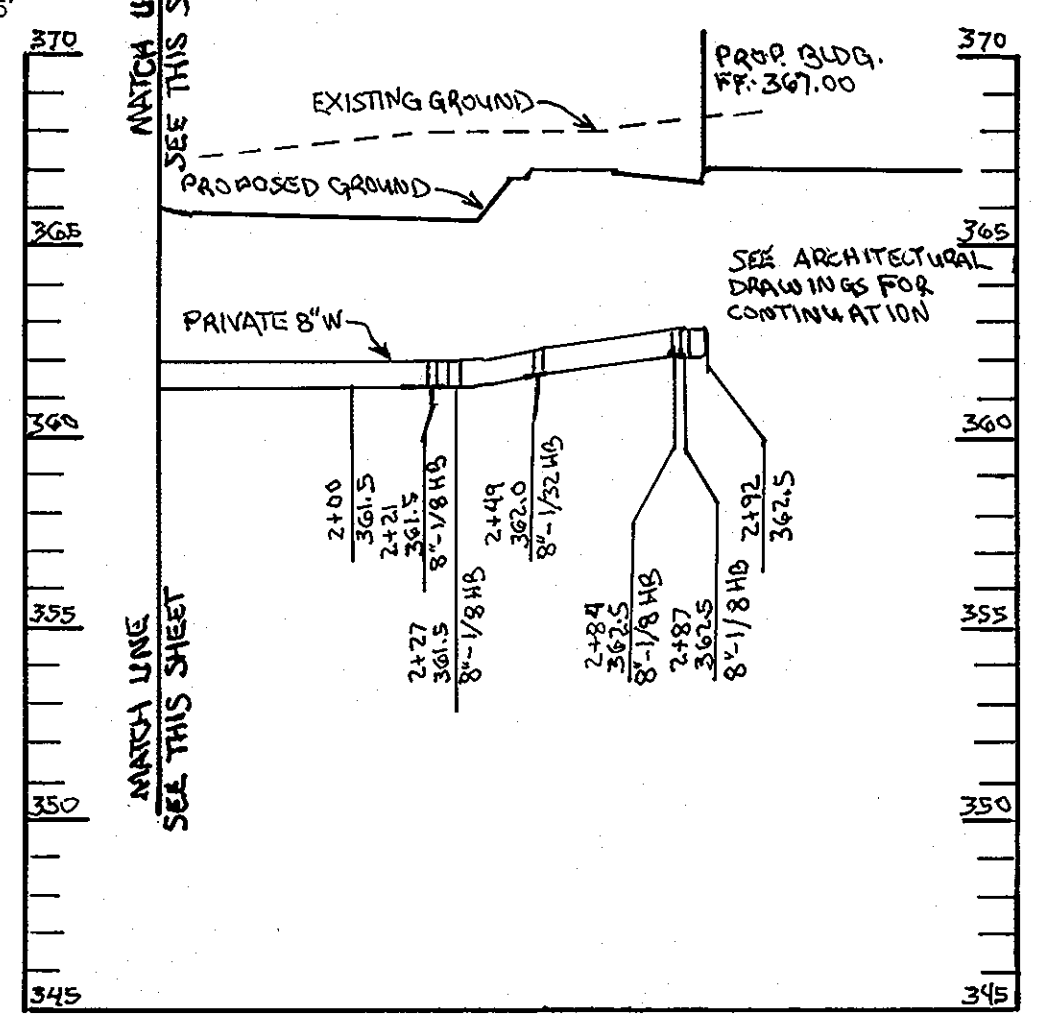
SEWER PROFILE

SCALE:
HOR.-1"=50'
VERT.-1"=5'



WATER PROFILE

SCALE:
HOR.-1"=50'
VERT.-1"=5'



WATER PROFILE

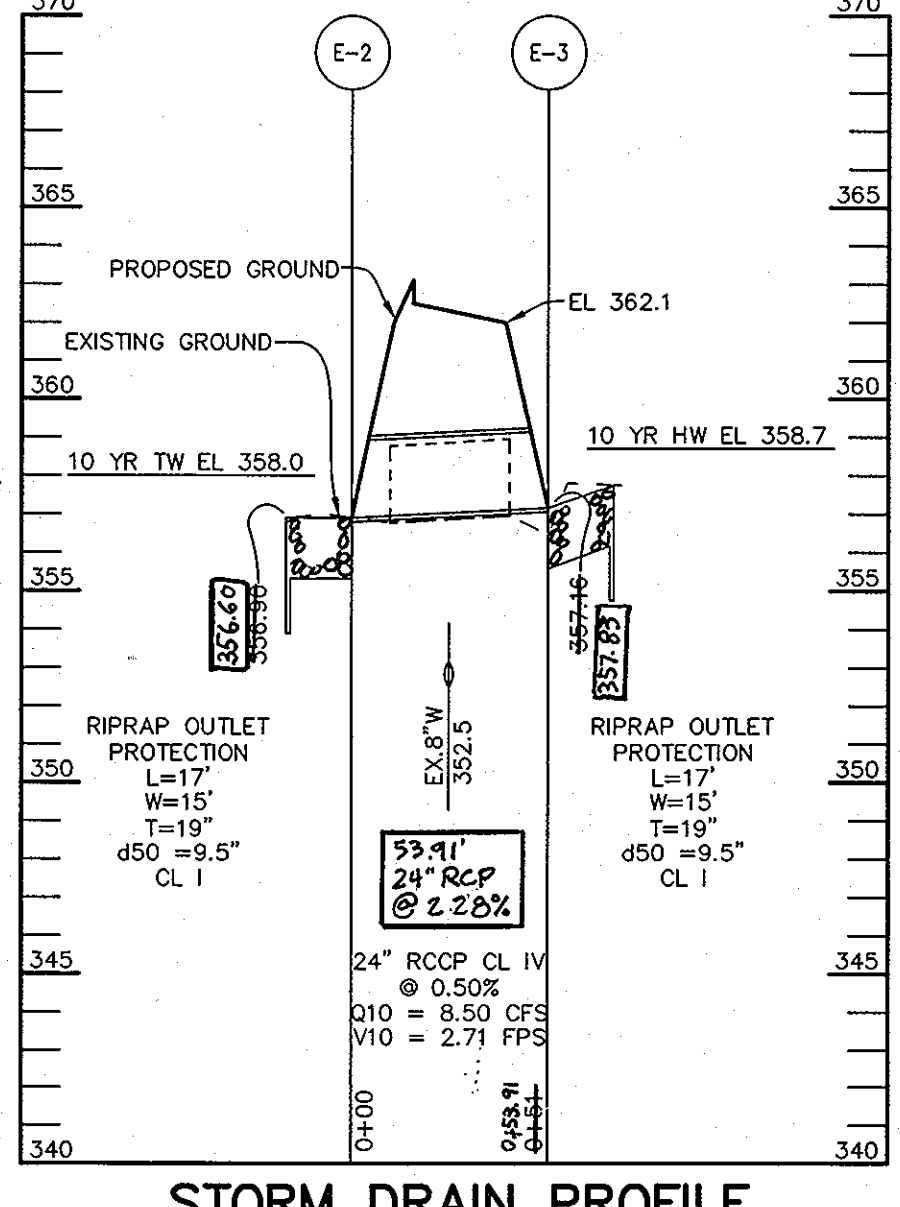
SCALE:
HOR.-1"=50'
VERT.-1"=5'

STRUCTURE SCHEDULE						
STRUCTURE	TYPE	LOCATION	INV. IN	INV. OUT	TOP	REMARKS
I-1	DBL S	N 561599 E 1374847	353.62	353.22	358.20	HOCO STD. DETAIL SD-4.23
I-2	DBL S	N 561529 E 1374813	354.04	353.64	358.00	HOCO STD. DETAIL SD-4.23
I-3	S	N 561398 E 1374948	-	354.10	360.00	HOCO STD. DETAIL SD-4.22
I-4	S	N 561445 E 1375156	-	352.70	358.50	HOCO STD. DETAIL SD-4.22
M-1	4'-0" DIA.	N 561609 E 1374781	347.06	344.80	351.20	HOCO STD. DETAIL G-5.12
M-2	4'-0" DIA.	N 561611 E 1374854	353.88	352.72	358.17	HOCO STD. DETAIL G-5.12
M-3	4'-0" DIA.	N 561548 E 1374976	359.27	359.12	364.08	HOCO STD. DETAIL G-5.12
M-4	4'-0" DIA.	N 561487 E 1375097	350.06	350.98	355.07	HOCO STD. DETAIL G-5.12
M-5	4'-0" DIA.	N 561514 E 1374806	354.43	354.25	358.51	HOCO STD. DETAIL G-5.12
M-6	4'-0" DIA.	N 561446 E 1374910	356.51	356.45	362.20	HOCO STD. DETAIL G-5.12
E-1	24" END SECTION	N 561612 E 1374760	-	342.76	348.00	HOCO STD. DETAIL SD-5.51
E-2	24" END SECTION	N 561717 E 1375135	-	356.60	362.00	HOCO STD. DETAIL SD-5.51
E-3	24" END SECTION	N 561667 E 1375144	-	357.89	363.00	HOCO STD. DETAIL SD-5.51

NOTES:
FOR END SECTIONS THE LOCATION IS CENTER OF THROAT OPENING AT FACE OF STRUCTURE.
LOCATION OF INLETS AND MANHOLES IS AT CENTER OF TOP COVER.

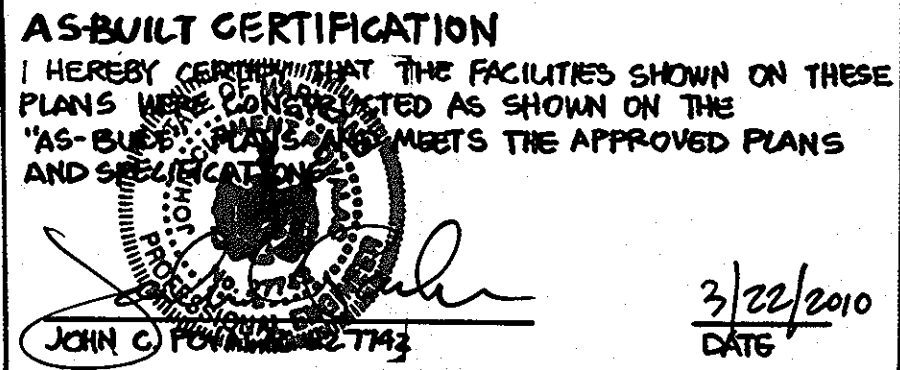
PIPE SCHEDULE

PIPE LENGTH	SIZE	TYPE
12	10"	HDPE
11	12"	HDPE
583	15"	HDPE
69	18"	ALUM. CMP
55	24"	ALUM. CMP
72	24"	RCCP
390	72"	ALUM. CMP



STORM DRAIN PROFILE

SCALE:
HOR.-1"=50'
VERT.-1"=5'



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
 DIRECTOR: *[Signature]* 7/6/07 DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 CHIEF, DIVISION OF LAND DEVELOPMENT: *[Signature]* 7/6/07 DATE

DATE	NO.	REVISION
02/01/08	1	REVISED PRIVATE 8" W WATER LINE PROFILE

OWNER: 100 INVESTMENT LP
 ATTN: HOWARD RESNECK
 9200 RUMSEY ROAD
 COLUMBIA, MARYLAND 21045
 410-997-7222

DEVELOPER: BAYWOOD HOTELS
 ATTN: CHET PATEL
 7211 HANOVER PARKWAY
 SUITE C-D
 GREENBELT, MARYLAND 20770
 301-345-8700 EXT. 251

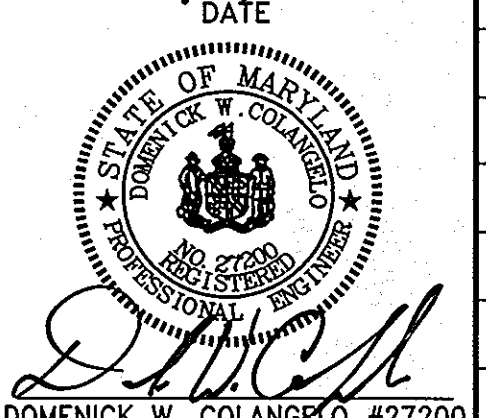
PROJECT: LYNDWOOD SQUARE
 PARCEL E-1

AREA: TAX MAP 37, GRID NO. 11
 PLAT NO. 15735, PARCEL E-1, ZONED PEC
 1st ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: PROFILE SHEET

Patton Harris Rust & Associates, pc
 Engineers, Surveyors, Planners, Landscape Architects.
 8818 Centre Park Drive
 Columbia, MD 21045
 T 410.997.8900
 F 410.997.9282

DESIGNED BY: CJR/ACR
 DRAWN BY: DAM
 PROJECT NO: 1273A(1-0)
 :C700PRO.DWG
 DATE: JUNE 19, 2007
 SCALE: AS SHOWN
 DRAWING NO. 6 OF 13



UNDERGROUND STORMWATER MANAGEMENT CONSTRUCTION SPECIFICATIONS

A. SITE PREPARATION

AREAS UNDER THE CULVERTS, STRUCTURAL WORKS, AND STREAM DIVERSION SHALL BE CLEARED, GRUBBED, AND THE TOPSOIL STRIPPED TO REMOVE ALL TREES, VEGETATION, ROOTS, OR OTHER OBJECTIONABLE MATERIAL.

B. SPECIFICATION FOR CORRUGATED STEEL PIPE

DESCRIPTION

THE ALUMINIZED TYPE II CORRUGATED STEEL SHALL BE FABRICATED IN ACCORDANCE WITH AASHTO DESIGNATION M-274 FROM A BASE METAL MANUFACTURED IN ACCORDANCE WITH ASTM A-525 COATED UNIFORMLY ON BOTH SIDES WITH 1.00 ZN/SQ.FT. OF PURE ALUMINUM.

MATERIAL

THE ALUMINIZED TYPE II CORRUGATED METAL PIPE SHALL BE OF THE CORRUGATION DESIGN AND GAGE INDICATED. THE STEEL PIPE, COUPLERS, AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-36 WITH THE PIPE HAVING A 3"x1" CORRUGATION PROFILE AND SHALL BE A MINIMUM 12 GAGE (0.109"). THE COUPLING BANDS SHALL BE THE SAME MATERIAL AS THE PIPE AND SHALL BE A MINIMUM OF 10-INCHES WIDE. THE CORRUGATED METAL PIPE SHALL BE MANUFACTURED WITH CONTINUOUS LOCKSEAM OR BUT WELDED HELICAL CORRUGATIONS AND HAVE NO LESS THAN TWO ANNULAR CORRUGATIONS REROLLED AT BOTH ENDS OF ANY LENGTH OF PIPE. COUPLING BANDS SHALL BE FORMED WITH TWO CORRUGATIONS THAT ARE SPACED TO PROVIDE SEATING IN THE SECOND REROLLED CORRUGATION OF EACH PIPE END AND PIPE ENDS SHALL BE MATCHED AND NUMBERED. COUPLING BANDS SHALL BE PER THE APPROVED PLANS. ALL ALUMINIZED SURFACES THAT WILL BE IN CONTACT WITH CONCRETE SHALL BE PAINTED WITH ONE COAT OF ZINC CHROMATE PRIMER.

ALL FITTINGS AND STRUCTURAL PLATES MUST BE EVALUATED BY THE MANUFACTURER AND ANY REINFORCEMENT REQUIRED MUST BE DESIGNED IN ACCORDANCE WITH ASTM A998.

C. INSTALLATION

THE CORRUGATED METAL PIPE SHALL BE HANDLED IN A MANNER NOT TO DAMAGE THE PIPE OR COATING. BEDDING AND BACKFILL MATERIAL SHALL BE SELECTED, GRANULAR MATERIAL AND SHALL BE FREE OF ROCKS AND HARD CLODS LARGER THAN 3-INCHES IN SIZE. THE BEDDING AND BACKFILL MATERIAL SHALL BE CAREFULLY PLACED AND CONSOLIDATED EVENLY ON BOTH SIDES OF THE PIPE IN MAXIMUM 8-INCH LOOSE LIFTS. THE PH OF THE SURROUNDING SOIL SHALL BE LESS THAN (9) AND GREATER THAN (4).

THE MATERIAL MUST COMPLETELY FILL ALL SPACES UNDER AND ADJACENT TO THE STRUCTURE OR PIPE. AT NO TIME DURING THE BACKFILLING OPERATION SHALL DRIVEN EQUIPMENT BE ALLOWED TO OPERATE CLOSER THAN FOUR FEET, MEASURED HORIZONTALLY, TO ANY PART OF THE STRUCTURE UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR DRIVE EQUIPMENT OVER A CONCRETE STRUCTURE OR PIPE UNLESS THERE IS A COMPACTED FILL OF 24-INCHES OR GREATER OVER THE STRUCTURE OR PIPE.

CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SHORING OF TRENCH WALLS TO PREVENT FAILURE DURING CONSTRUCTION.

D. CONNECTIONS

ALL CONNECTIONS SHALL BE WATER TIGHT. THIS INCLUDES ALL ENDCAPS, PIPES, CONNECTIONS TO AND FROM CONCRETE STRUCTURE AND ALL CONNECTION FROM STORM DRAINAGE SYSTEM. SEE MATERIAL SPECIFICATIONS ABOVE.

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED UNDERGROUND STORMWATER MANAGEMENT FACILITY

1. UNDERGROUND STRUCTURES WILL REQUIRE PERIODIC INSPECTION AND CLEANING TO MAINTAIN OPERATION AND FUNCTION. OWNERS WILL HAVE THE UNDERGROUND STRUCTURES INSPECTED YEARLY OR REQUIRED BY HOWARD COUNTY. UTILIZING THE UNDERGROUND UNITS INSPECTION/MONITORING FORM, INSPECTIONS CAN BE DONE BY USING A CLEAR PLEXIGLAS TUBE ("SLUDGE JUDGE") TO EXTRACT A WATER COLUMN SAMPLE. WHEN SEDIMENT DEPTHS EXCEED 5" THEN CLEANING OF THE STRUCTURES IS REQUIRED.

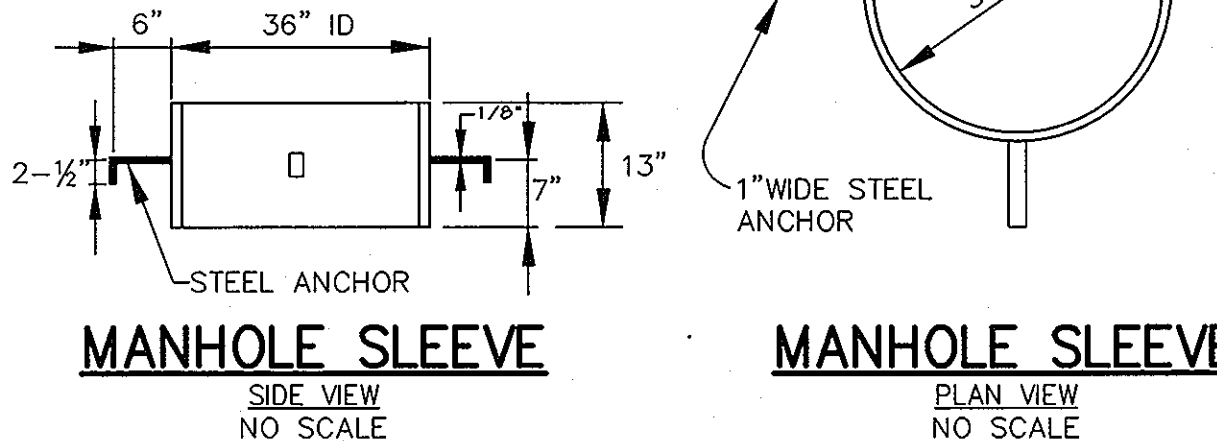
2. UNDERGROUND FACILITY STRUCTURES MUST BE CHECKED AND CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS. CONTACT APPROPRIATE REGULATORY AGENCIES.

3. MAINTENANCE OF UNDERGROUND STRUCTURES SHOULD BE DONE BY A VACUUM TRUCK WHICH WILL REMOVE THE WATER, SEDIMENT, DEBRIS, FLOATING HYDROCARBONS, AND OTHER MATERIALS IN THE UNIT. THE PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS AND LIQUID MUST BE FOLLOWED.

4. INLET AND OUTLET PIPES MUST BE CHECKED FOR ANY OBSTRUCTIONS AND IF ANY OBSTRUCTIONS ARE FOUND THEY MUST BE REMOVED. STRUCTURAL PARTS OF THE UNDERGROUND FACILITY WILL BE REPAIRED AS NEEDED.

5. OWNER SHALL RETAIN AND MAKE UNDERGROUND FACILITY INSPECTION/MONITORING FORMS AVAILABLE TO HOWARD COUNTY OFFICIALS UPON THEIR REQUEST.

*THIS SLEEVE SLIDES OVER THE OUTSIDE OF THE MANHOLE RISER AND REMOVES THE LIVE LOADS FROM THE PIPE ITSELF.

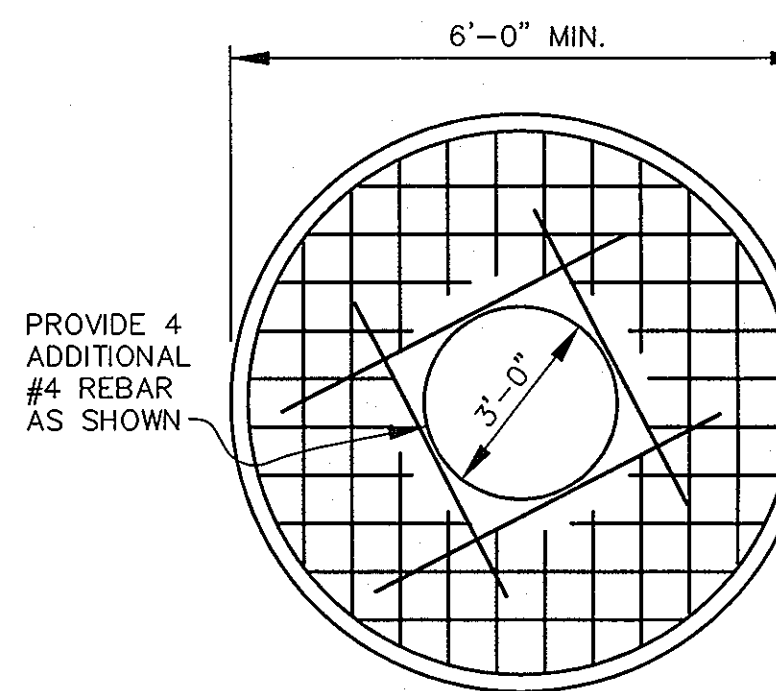


MANHOLE SLEEVE

MANHOLE SLEEVE

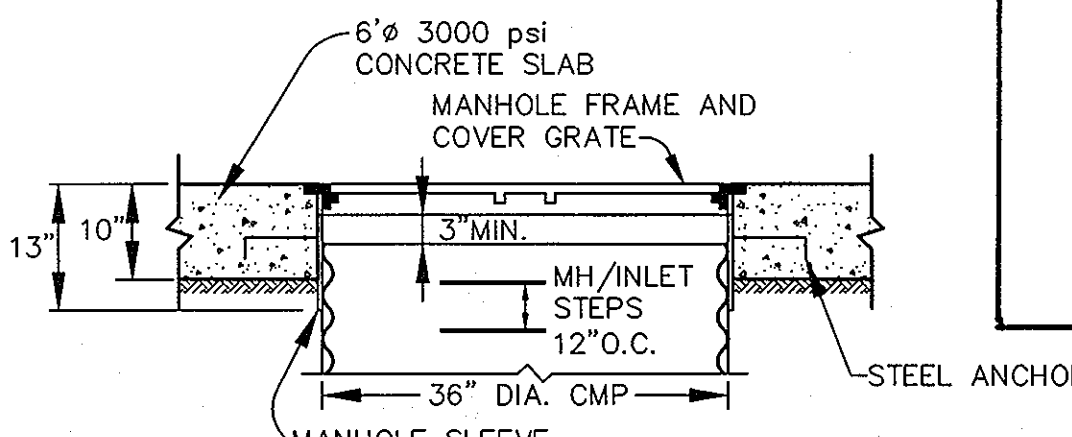
SIDE VIEW NO SCALE

PLAN VIEW NO SCALE



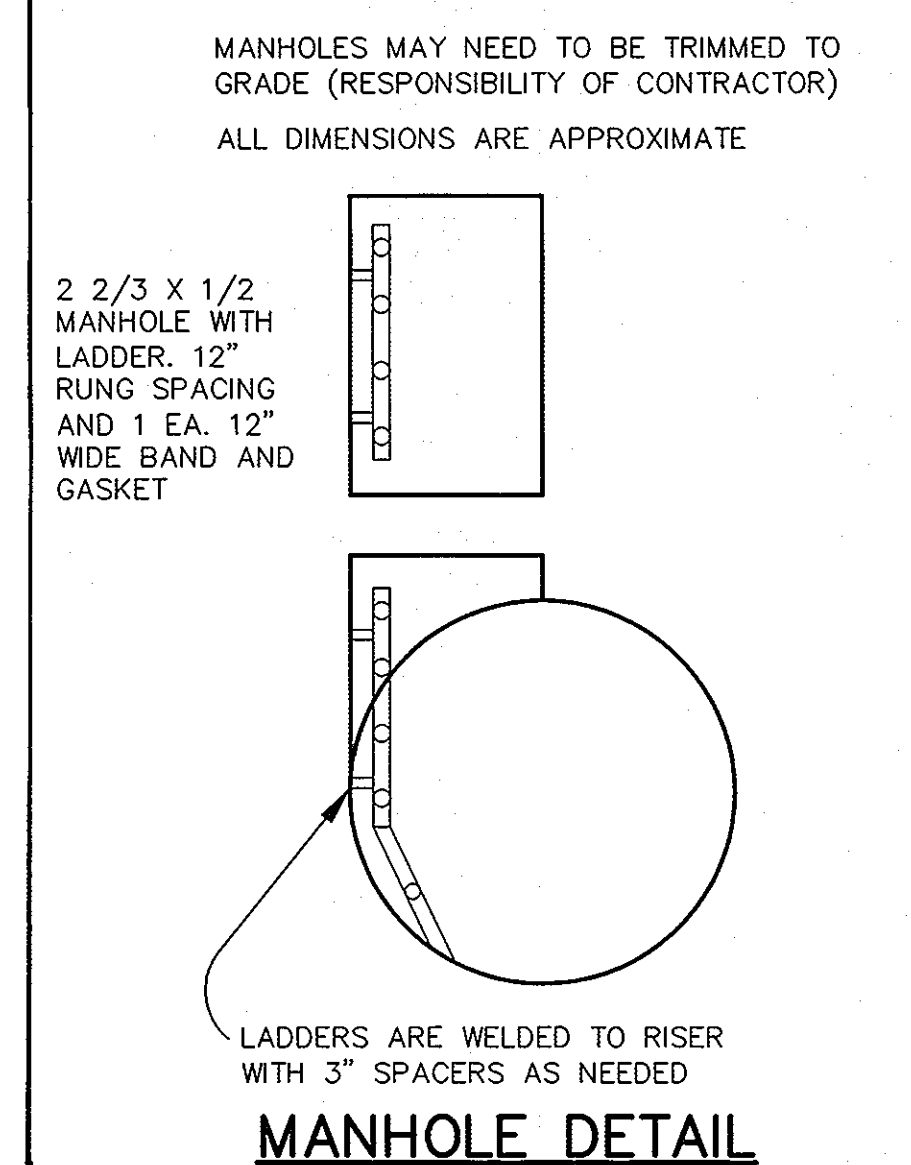
MANHOLE CONCRETE CAP

NO SCALE



CMP RISER MANHOLE SLEEVE DETAIL

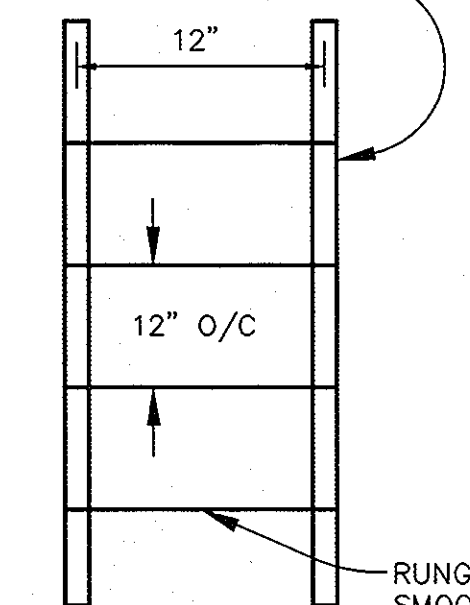
NO SCALE



MANHOLE DETAIL

NOT TO SCALE

SIDES ARE 1 1/2" X 1 1/2" X 1/4" STEEL ANGLE



MANHOLE LADDER DETAIL

NOT TO SCALE

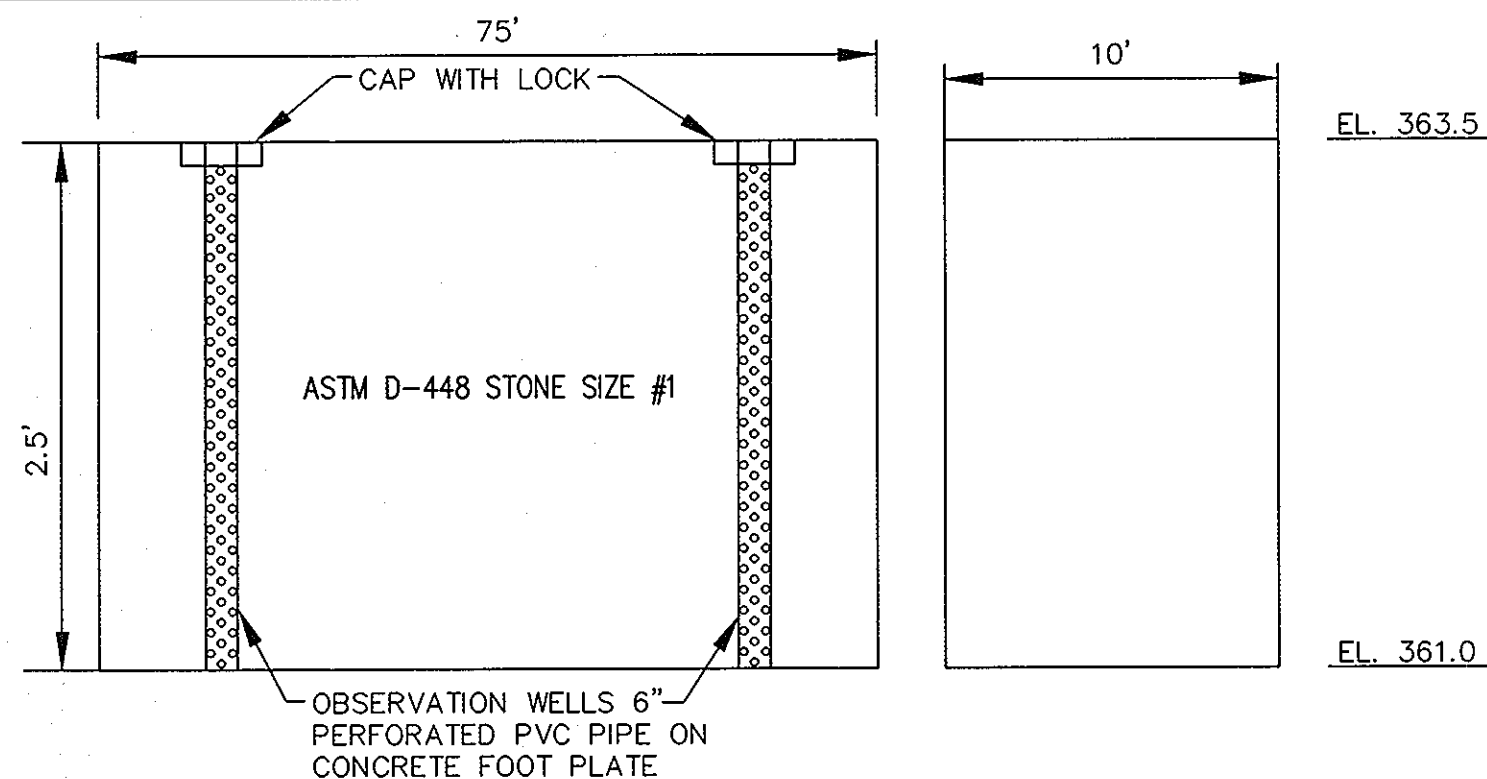
AS-BUILT CERTIFICATION
I HEREBY CERTIFY THAT THE FACILITIES SHOWN ON THESE PLANS HAVE BEEN CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEET THE APPROVED PLANS AND SPECIFICATIONS.

John E. Povall
JOHN E. POVALL #27742

3/22/2010
DATE

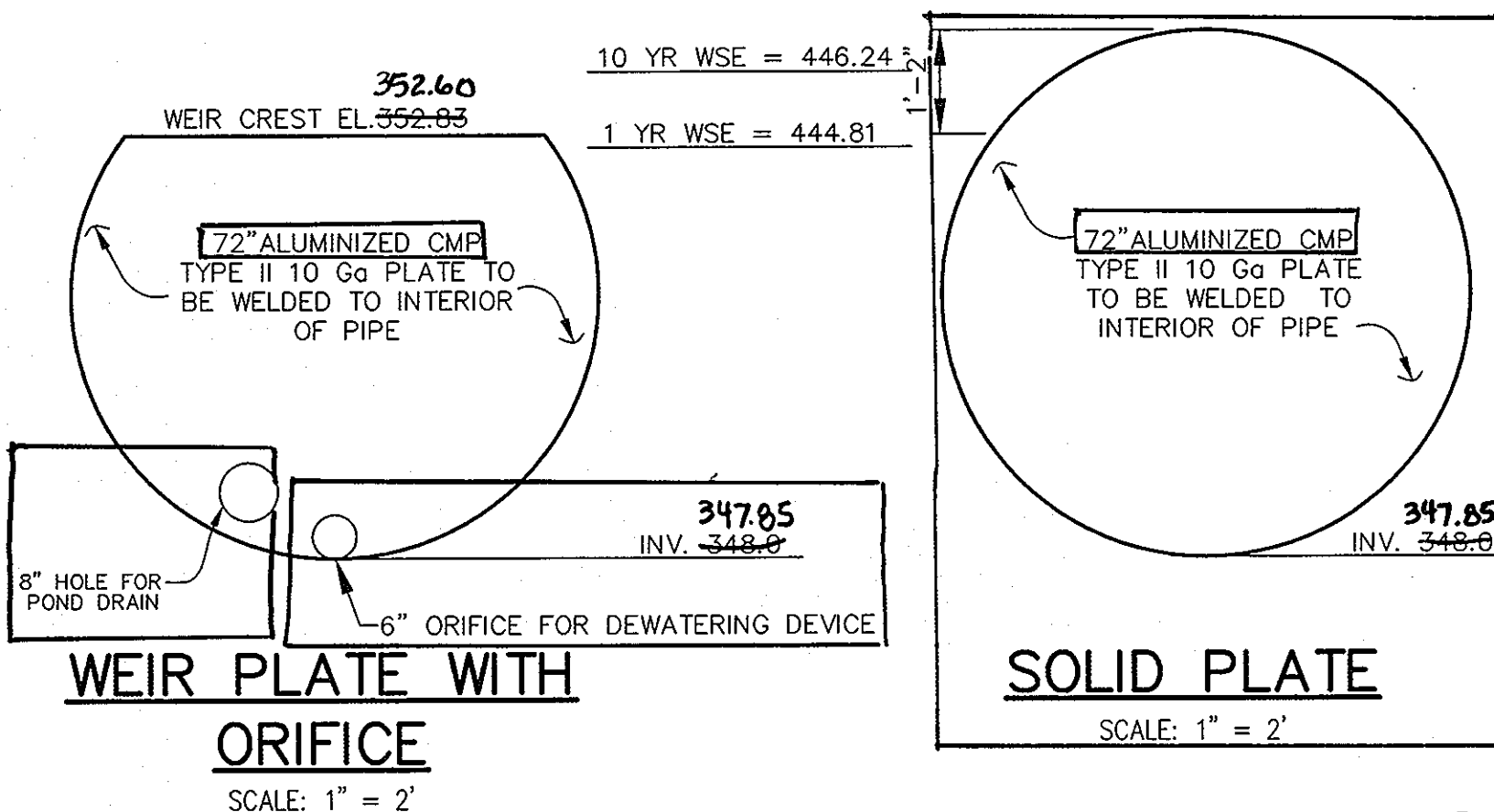
GENERAL NOTES:

- ALL CONSTRUCTION SHALL MEET THE HOWARD COUNTY STANDARDS AND SPECIFICATIONS.
- CONCRETE STRENGTH SHALL BE 3,000 PSI MIN. AT 28 DAYS.
- REINFORCEMENT SHALL BE CLEAN AND FREE OF RUST AND MEET ASTM-615 GRADE 60.
- ALL REINFORCEMENT SHALL HAVE 2" MIN. COVER.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION.
- THE STRUCTURE FOUNDATION AND PIPE BEDDING SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO INSTALLATION.
- GALVANIZE TRASH RACK AFTER FABRICATION AND PAINT WITH TWO COATS OF BATTLESHIP GREY PAINT.
- ALL ALUMINIZED PIPE IN CONTACT WITH CONCRETE SHALL BE COATED WITH BITUMINOUS COATING.
- CMP PIPE INSTALLATION PER MANUFACTURER'S RECOMMENDATION.
- CONTRACTOR SHALL EXERCISE CARE DURING CONSTRUCTION SO AS NOT TO DAMAGE UNDERGROUND S.W.M.F. ANY DAMAGE TO CMP, MANHOLES, ETC. SHALL BE REPAIRED BY CONTRACTOR AT HIS/HER EXPENSE TO SATISFACTION OF ENGINEER.



STONE TRENCH FOR Rev

NO SCALE

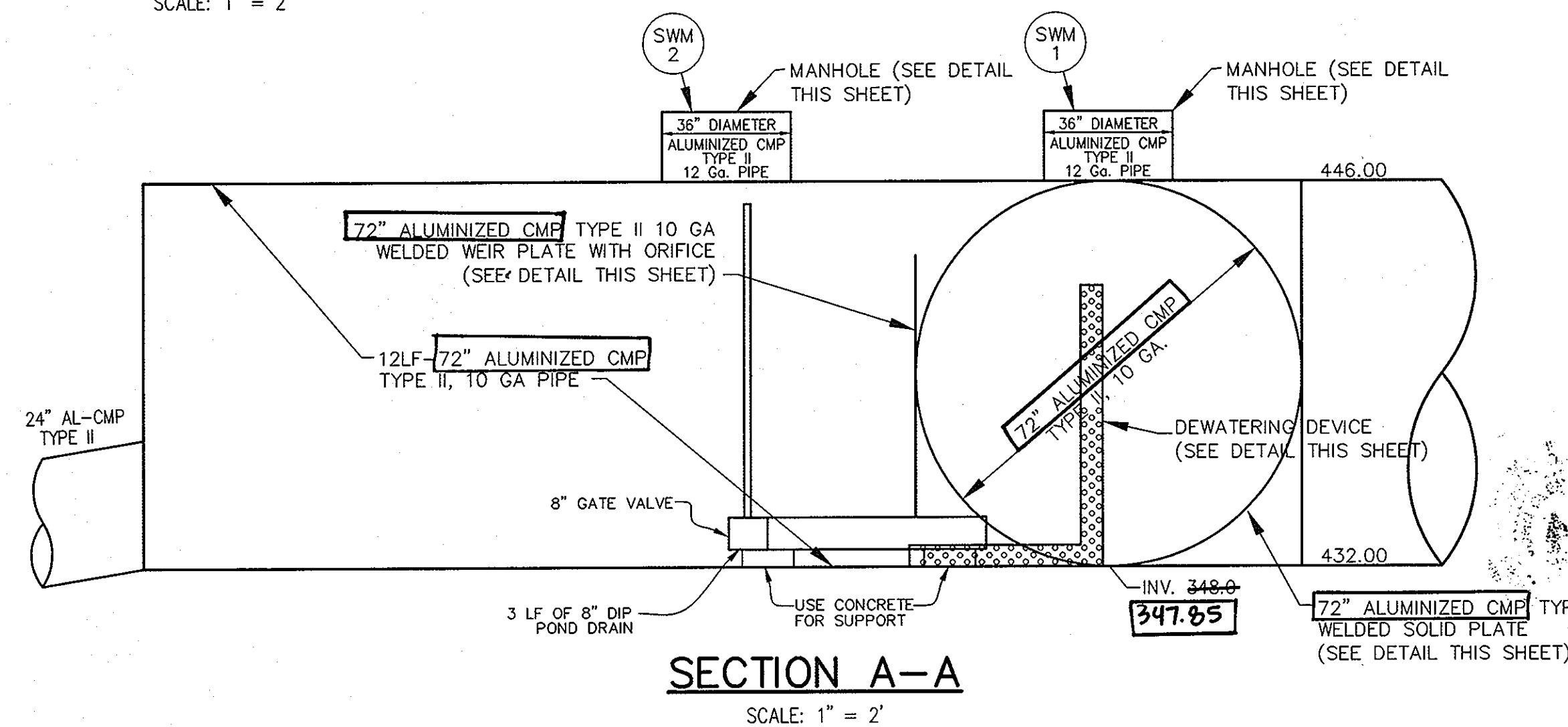


WEIR PLATE WITH ORIFICE

SCALE: 1" = 2'

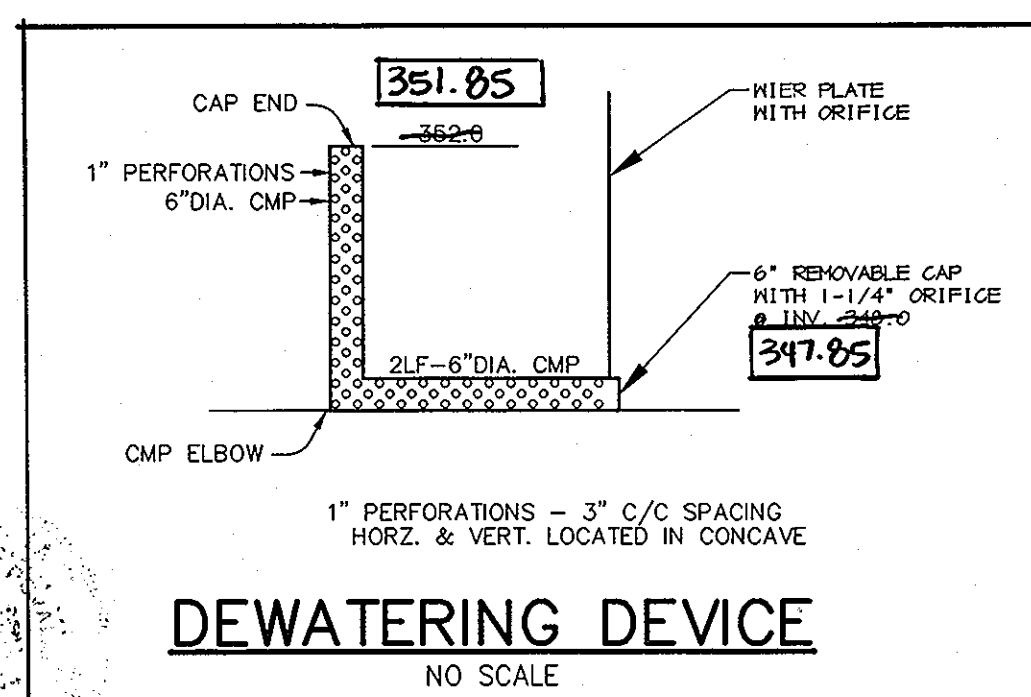
SOLID PLATE

SCALE: 1" = 2'



SECTION A-A

SCALE: 1" = 2'

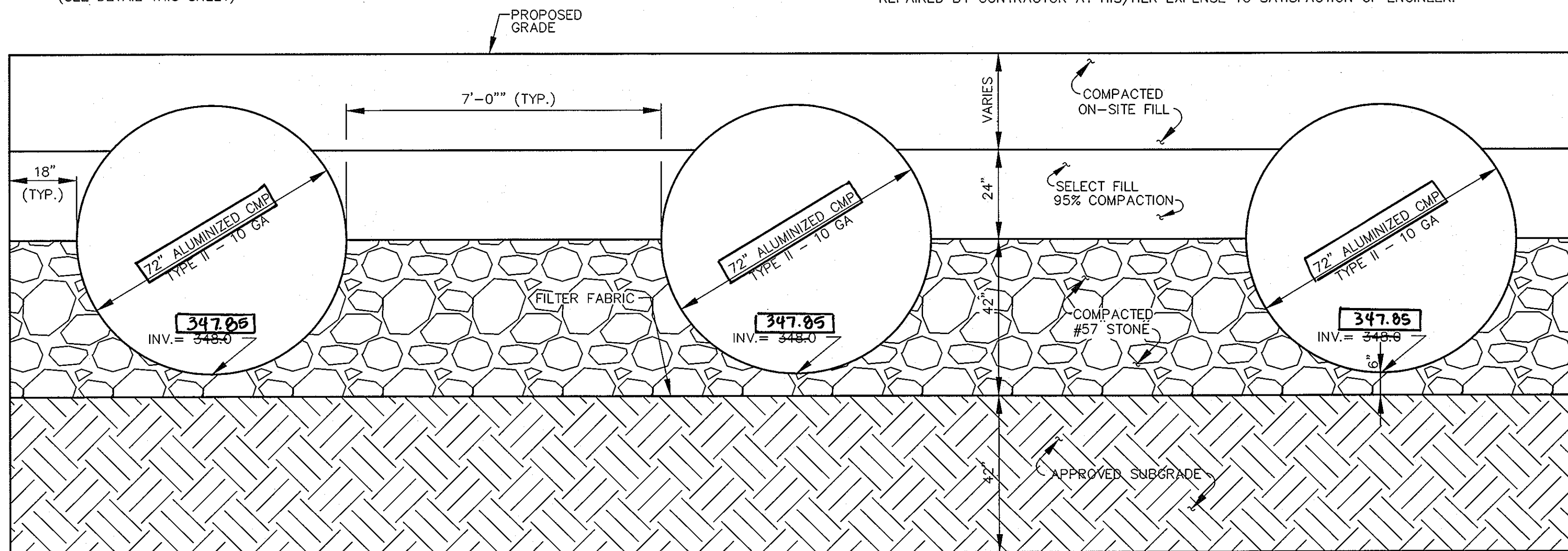


DEWATERING DEVICE

NO SCALE

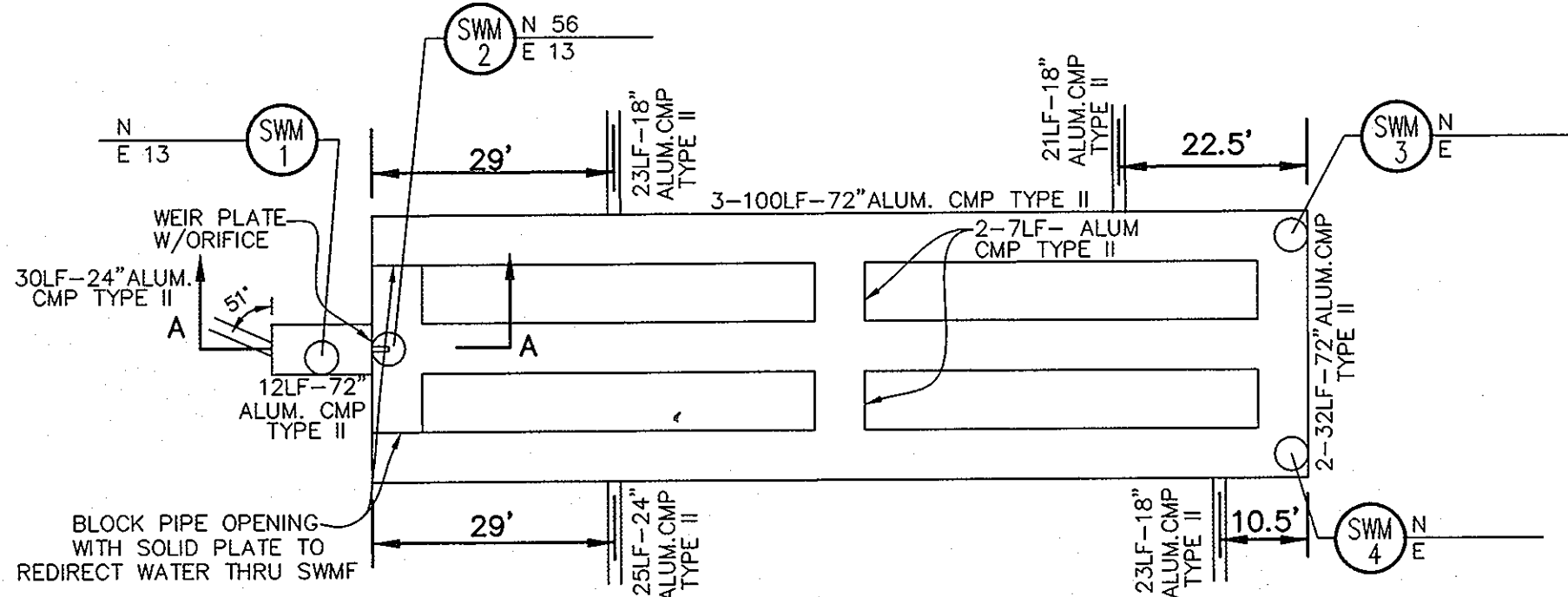
NOTES:

- MANHOLES TO BE DESIGNED TO MEET ROADWAY LOAD STANDARDS.
- ALL CONSTRUCTION SHALL MEET THE HOWARD CO. STANDARDS AND SPECIFICATIONS.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION.
- THE STRUCTURE FOUNDATION SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER.
- ALL DEBRIS SHALL BE KEPT OUT OF THE FACILITY DURING AND AFTER CONSTRUCTION.



TYPICAL SECTION

SCALE: 1" = 2'



UNDERGROUND S.W.M.F.

SCALE: 1" = 20'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

John E. Povall 7/6/07
DIRECTOR DATE

Chet Patell 7/3/07
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

John E. Povall 7/6/07
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DATE	NO.	REVISION

OWNER	DEVELOPER
100 INVESTMENT LP ATTN: HOWARD RESNECK 9200 RUMSEY ROAD COLUMBIA, MARYLAND 21045 410-997-7222	BAYWOOD HOTELS ATTN: CHET PATEL 7211 HANOVER PARKWAY SUITE C-D GREENBELT, MARYLAND 20770 301-345-8700 EXT. 251

PROJECT: **LYNDWOOD SQUARE**
PARCEL E-1

AREA: TAX MAP 37, GRID NO. 11
PLAT NO. 15735, PARCEL E-1, ZONED PEC
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: **UNDERGROUND SWM DETAILS**

Patton Harris Rust & Associates, pc
Engineers, Surveyors, Planners, Landscape Architects.
8818 Centre Park Drive
Columbia, MD 21045
T 410.997.8900
F 410.997.9282

6/13/07
DATE

DESIGNED BY: CJR/ACR

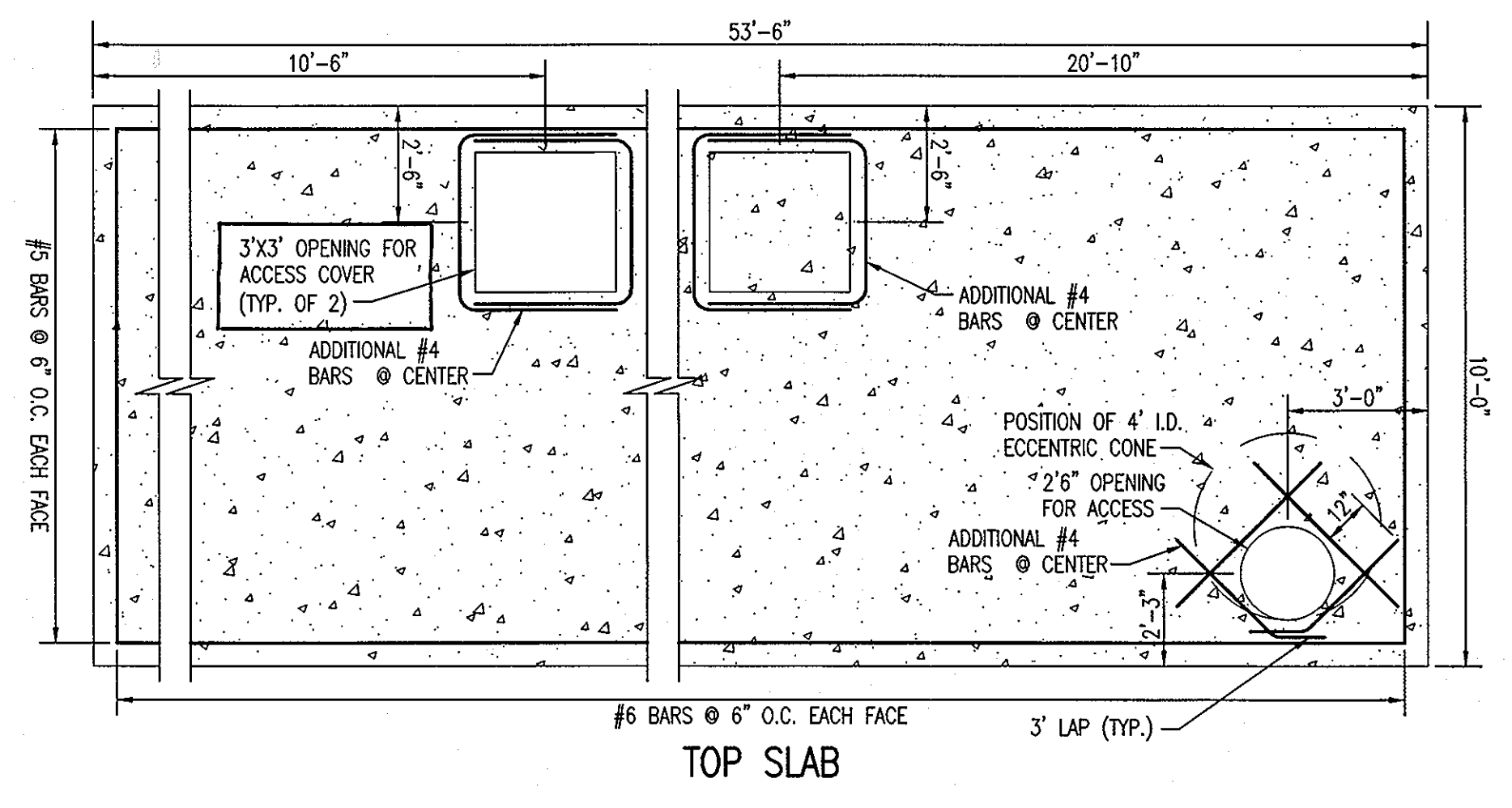
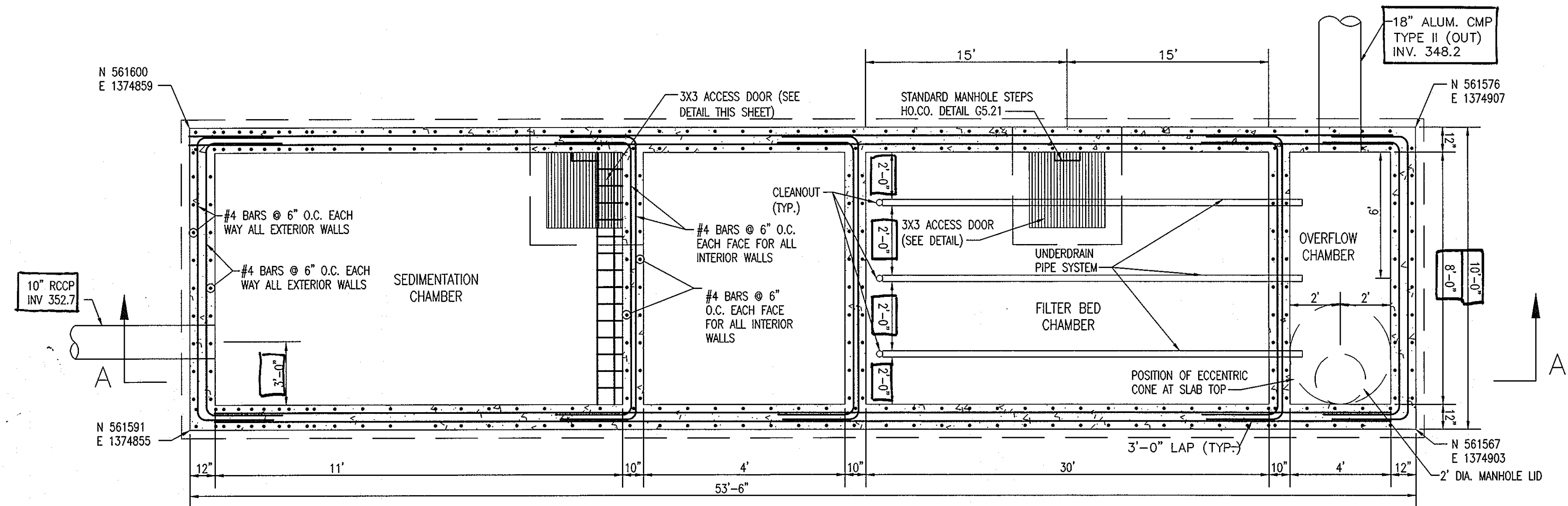
DRAWN BY: DAM

PROJECT NO.: 1272A(1-0)
C701PRO.DWG

DATE: JUNE 19, 2007

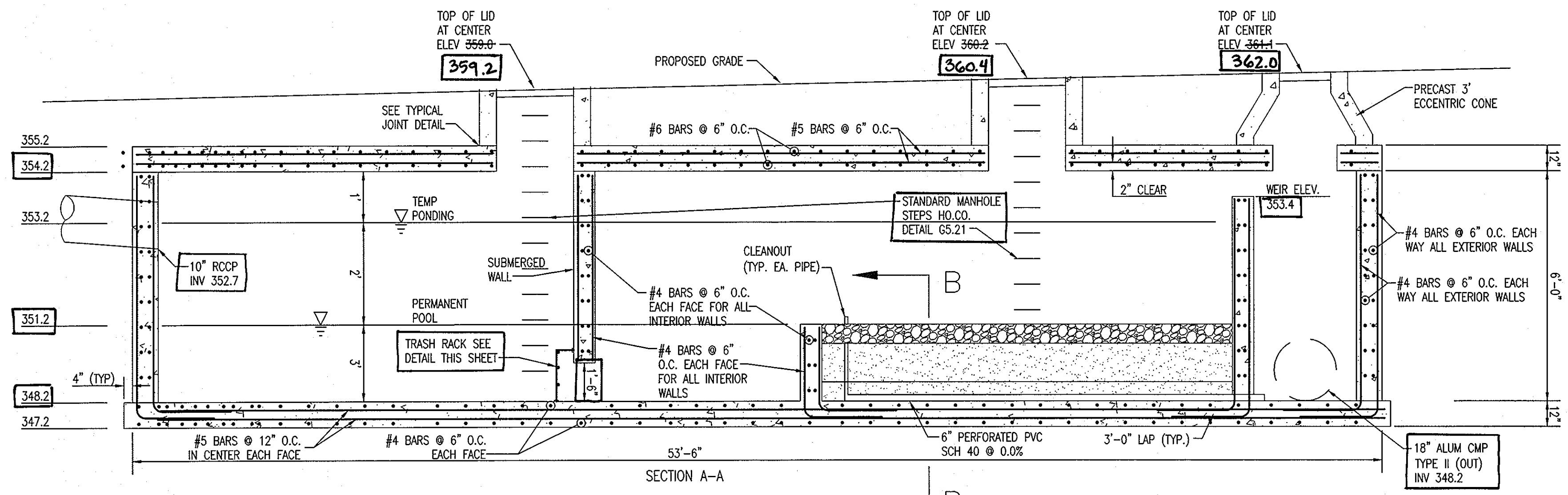
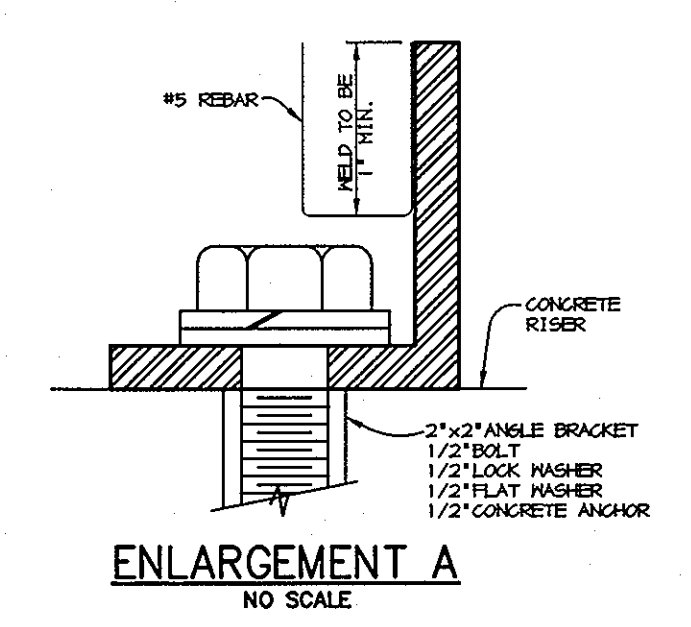
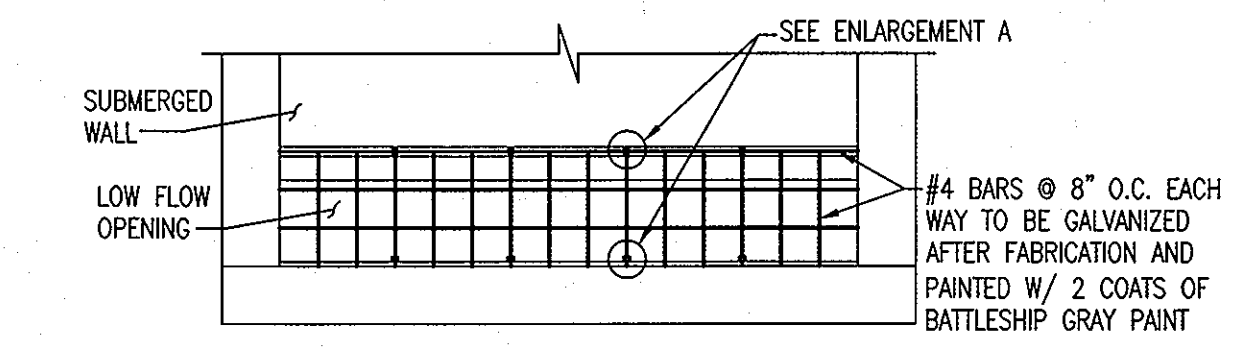
SCALE: AS SHOWN

DRAWING NO.: 7 OF 13



OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED UNDERGROUND STORMWATER FILTRATION SYSTEMS (F-2 AND F-3)

1. THE SEDIMENT CHAMBER OUTLET DEVICES SHALL BE CLEANED AND/OR REPAIRED WHEN DRAWDOWN TIMES WITHIN THE CHAMBER EXCEED 36 HOURS.
2. DEBRIS AND LITTER SHALL BE REMOVED AS NECESSARY TO INSURE PROPER OPERATION OF THE SYSTEM.
3. SEDIMENT SHALL BE CLEANED OUT OF THE SEDIMENTATION CHAMBER WHEN IT ACCUMULATES TO A DEPTH OF 6 INCHES. VEGETATION WITHIN THE SEDIMENT CHAMBER SHALL BE LIMITED TO A HEIGHT OF 18 INCHES.
4. WHEN WATER PONDS ON THE SURFACE OF THE FILTER BED FOR MORE THAN 72 HOURS, THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REPLACED WITH FRESH MATERIAL. PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS AND LIQUID MUST BE FOLLOWED BY THE OWNER.
5. A LOGBOOK SHALL BE MAINTAINED TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
6. THE MAINTENANCE LOGBOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
7. ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION SYSTEM HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.



UNDERGROUND SAND FILTER STRUCTURES

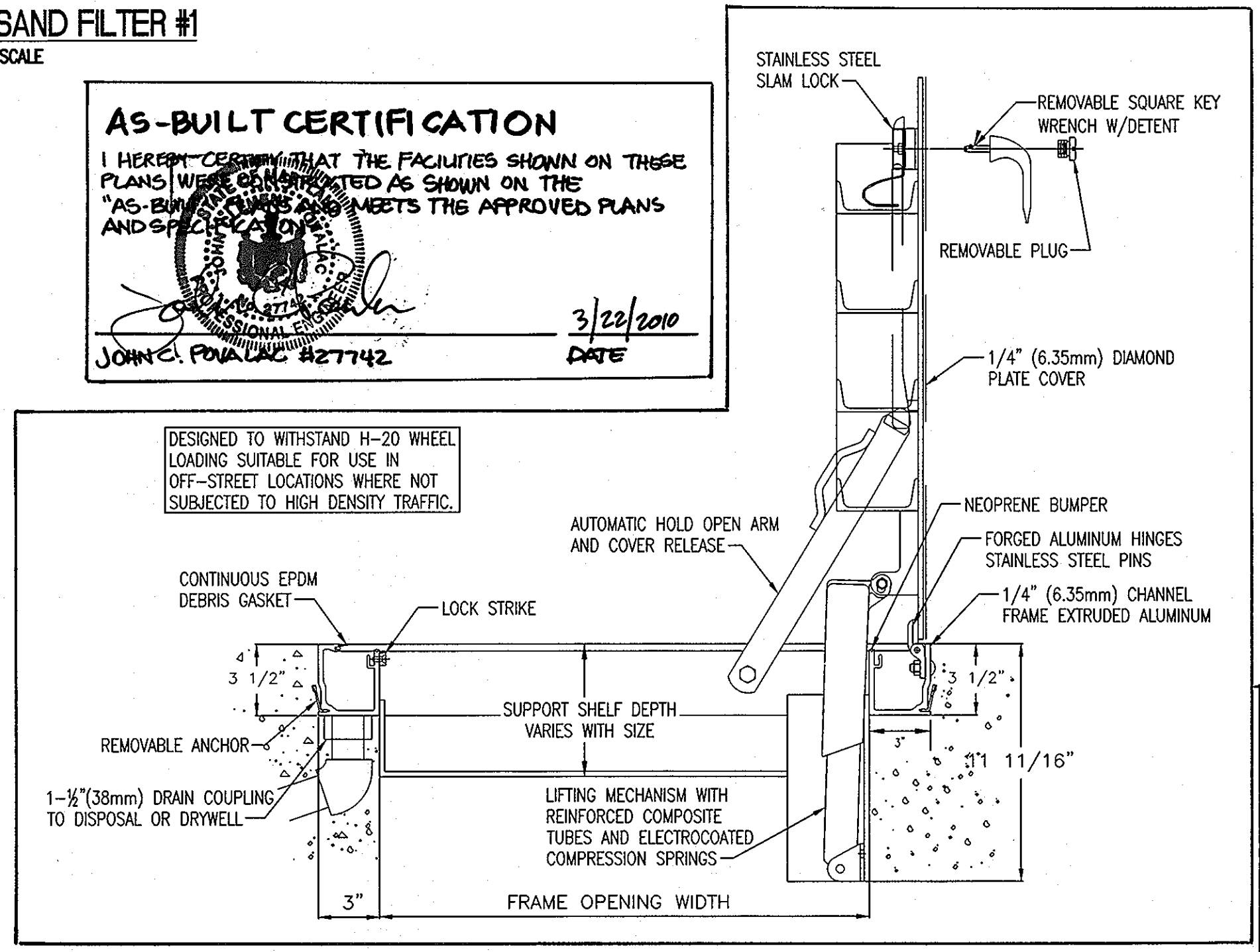
- GENERAL NOTES**
1. USE POURED-IN-PLACE CONCRETE FOR THE ENTIRE STRUCTURE.
 2. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION FOR MATERIALS AND METHODS OF CONSTRUCTION.
 3. WALL THICKNESS SHALL BE AS SHOWN ON THE CONSTRUCTION DRAWINGS.
 4. CONCRETE SHALL BE MIX NO. 1, FC = 3,500 PSI AT 28 DAYS.
 5. ALL REINFORCING STEEL TO BE ASTM A615, GR.60.
 6. THE TOP 4 INCHES OF WALLS MAY BE BRICK MASONRY FOR LEVELING, IF REQUIRED. BRICK MASONRY SHALL COMPLY WITH THE LATEST SA SPECIFICATION.
 7. ALL INLETS AND INCOMING PIPES SHALL BE CHECKED FOR POSSIBLE BACKWATER OR TAILWATER PROBLEMS.
 8. PERFORATIONS IN 6" PVC UNDERDRAIN SHALL BE 3/8" DIAMETER PLACED 4" O.C. AROUND FULL CIRCUMFERENCE OF PIPE.
- CONSTRUCTION NOTES**
1. SILT AND DEBRIS SHALL NOT BE ALLOWED TO ENTER THE STRUCTURES UNTIL CONTRIBUTING DRAINAGE AREAS HAVE BEEN PERMANENTLY STABILIZED.
 2. ALL OPENINGS TO STRUCTURES SHALL BE PROTECTED WITH THE APPROPRIATE SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
- INSPECTION NOTES**
1. PRIOR TO START OF CONSTRUCTION SAND FILTER STRUCTURES, THE HOWARD COUNTY INSPECTOR MUST BE CALLED 48 HOURS IN ADVANCE.
 2. THE INSPECTOR MUST BE NOTIFIED AT EACH OF THE FOLLOWING STAGES:
 - A. APPROVAL OF SUBGRADE FOR FOOTINGS.
 - B. FOOTING FORMED AND STEEL SET PRIOR TO POURING.
 - C. STRUCTURE SIDES FORMED AND STEEL SET PRIOR TO POURING.
 - D. PRIOR TO TOP SLAB AND MANHOLES BEING SET, INSPECTOR MUST CHECK STRUCTURE AND ALL DEBRIS AND SILT IN STRUCTURE REMOVED.
 - E. WHEN SITE IS PERMANENTLY STABILIZED AND SEDIMENT CONTROL MEASURES TO PROTECT INLET ARE TO BE REMOVED.
- MAINTENANCE NOTES (SAND FILTER WASTE)**
1. THE SAND FILTER STRUCTURES WILL REQUIRE PERIODIC AND REGULAR CLEANING. OWNERS OF THESE FACILITIES WILL HAVE TO CLEAN THEM AS NEEDED OR ON A FREQUENCY THAT THE APPROVING AUTHORITY DETERMINES IS APPROPRIATE. OWNERS OF SAND FILTER STRUCTURES WILL BE NOTIFIED BY THE INSPECTION AUTHORITY OF THE REQUIRED FREQUENCY OF MAINTENANCE.
 2. MAINTENANCE OF THESE FACILITIES WILL CONSIST OF CLEANING OUT THE CHAMBERS AND DISPOSAL OF THE WASTE AND THE REPAIR OF THE FACILITY AS NEEDED. PERIODIC INSPECTIONS OF THESE FACILITIES WILL BE MADE BY THE PRINCE GEORGE'S COUNTY INSPECTOR.
 3. THE DISPOSAL OF THE LIQUID AND SOLID MATTER SHOULD BE AS FOLLOWS:
 - A. ALL LIQUID MATERIAL IN THE FIRST AND SECOND CHAMBER SHALL BE PUMPED INTO A SUITABLE TANK TRUCK. PUMPED MATERIAL SHALL BE DISPOSED OF AT AN APPROVED SANITARY DISCHARGE MANHOLE OR SHALL BE TAKEN TO AN APPROVED SEWAGE TREATMENT PLANT FOR DISPOSAL.
 - B. THE SOLID MATERIAL SHALL BE DISPOSED OF AT AN APPROVED SANITARY LANDFILL.
 4. THE INLET PIPES, PERFORATED PIPES, CLEANOUT RISERS, AND STRUCTURAL PARTS SHALL BE REPAIRED AS NEEDED.
 5. SAND, STONE AND FILTER COMPONENTS SHALL BE REPLACED WITH MATERIALS MEETING ORIGINAL SPECIFICATIONS SHOWN ON THESE DRAWINGS.

UNDERGROUND SAND FILTER #1

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITIES SHOWN ON THESE PLANS WERE CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

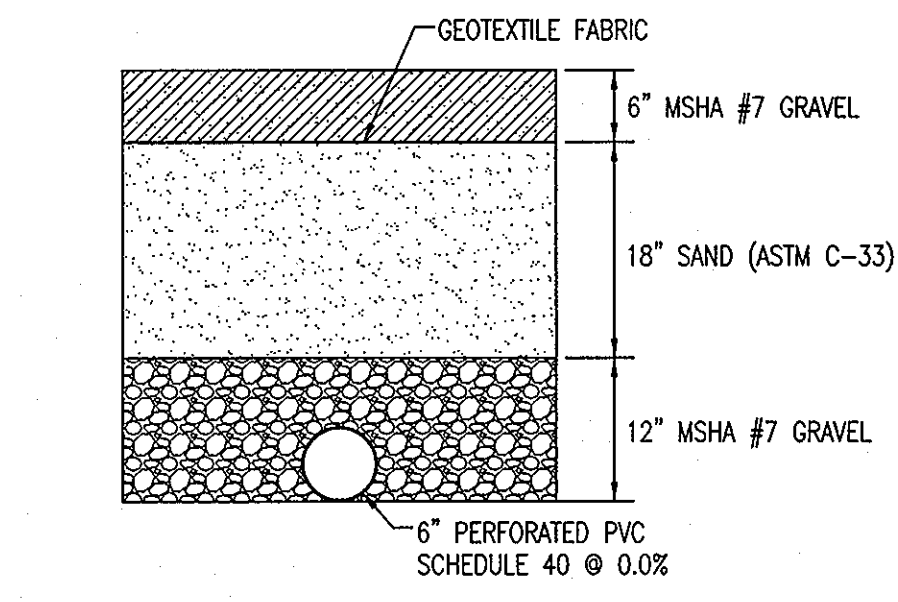
JOHN C. POVALAK #27742 DATE 3/22/2010



- NOTES:**
1. DOOR SHALL BE BILCO TYPE J-AL H20 ACCESS DOOR, SINGLE LEAF ALUMINUM CONSTRUCTION OR EQUAL.
 2. DOOR SUPPLIED BY CBG SOUTH, INC. 9689 GERWIG LANE, COLUMBIA, MD 21046 PH (410)995-6400 FX (410)381-0071
 3. CONTRACTOR SHALL CONNECT DRAIN COUPLING TO A PIPE AND PROVIDE DISCHARGE INTO WATER QUALITY STRUCTURE.
 4. CONTRACTOR SHALL PROVIDE OWNER WITH REMOVABLE HANDLE AT JOB CLOSE OUT ALONG WITH ALL PRODUCT INFORMATION OBTAINED FROM DISTRIBUTOR.

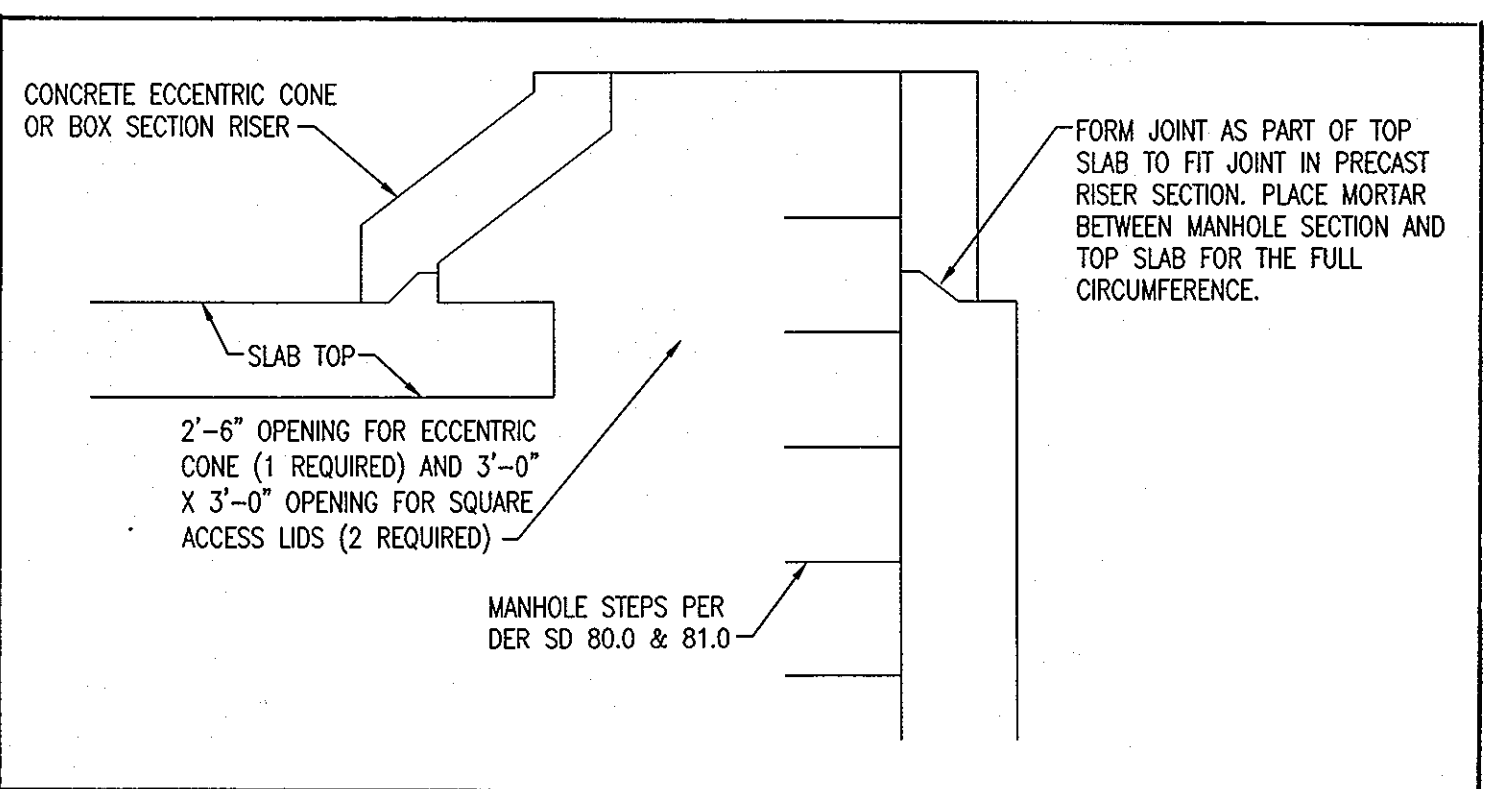
ACCESS DOOR DETAIL

NOT TO SCALE



TYPICAL SAND FILTER SECTION

NOT TO SCALE



TYPICAL JOINT DETAIL

NOT TO SCALE

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.	
<i>Dirge Laffey</i>	7/6/07
DIRECTOR	DATE
<i>Chet Chabon</i>	7-3-7
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>C. Hamilton</i>	7/6/07
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE

DATE	NO.	REVISION

OWNER	DEVELOPER
100 INVESTMENT LP ATTN: HOWARD RESNECK 9200 RUMSEY ROAD COLUMBIA, MARYLAND 21045 410-997-7222	BAYWOOD HOTELS ATTN: CHET PATEL 7211 HANOVER PARKWAY SUITE C-D GREENBELT, MARYLAND 20770 301-345-8700 EXT. 251

PROJECT	AREA
LYNDWOOD SQUARE PARCEL E-1	TAX MAP 37, GRID NO. 11 PLAT NO. 15735, PARCEL E-1, ZONED PEC 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND

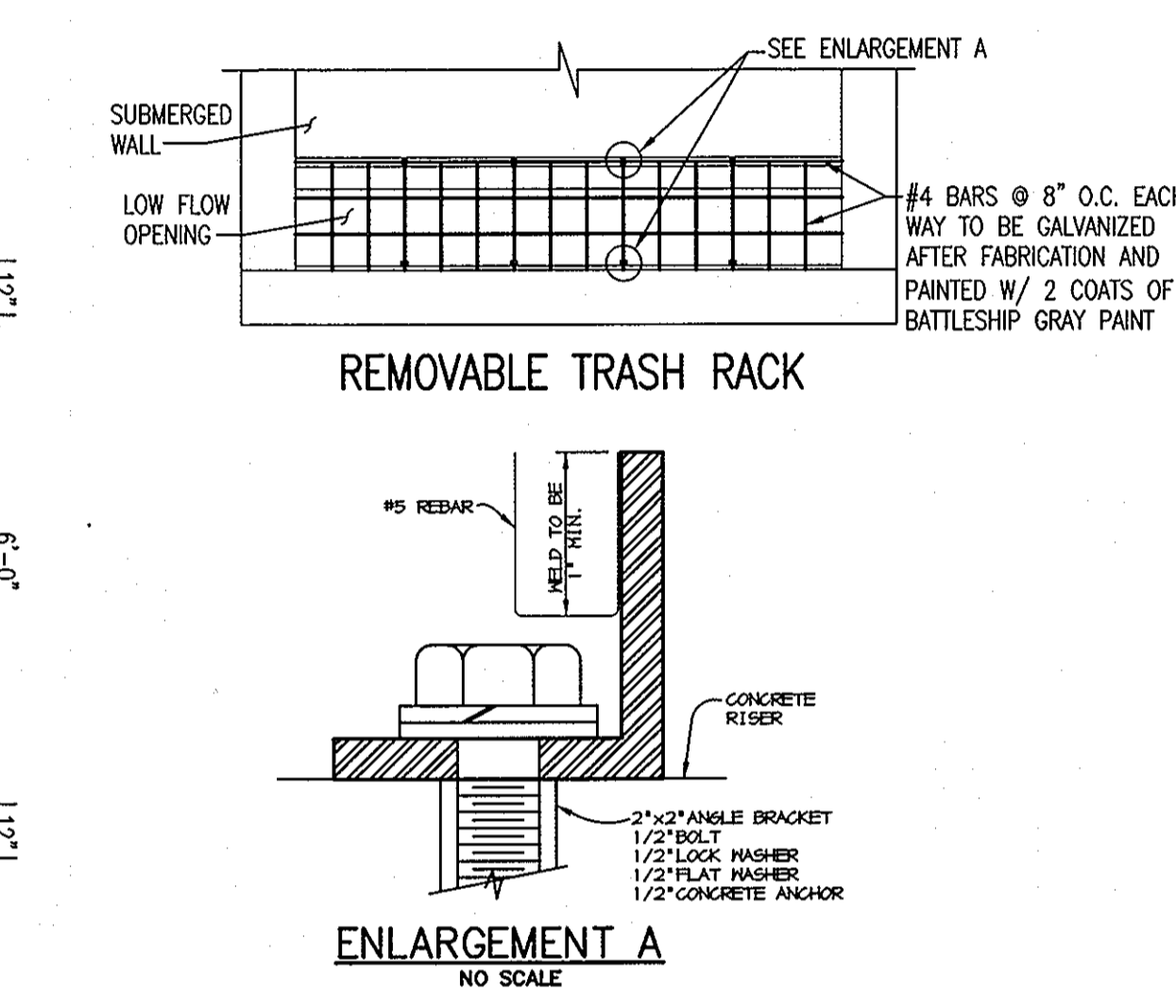
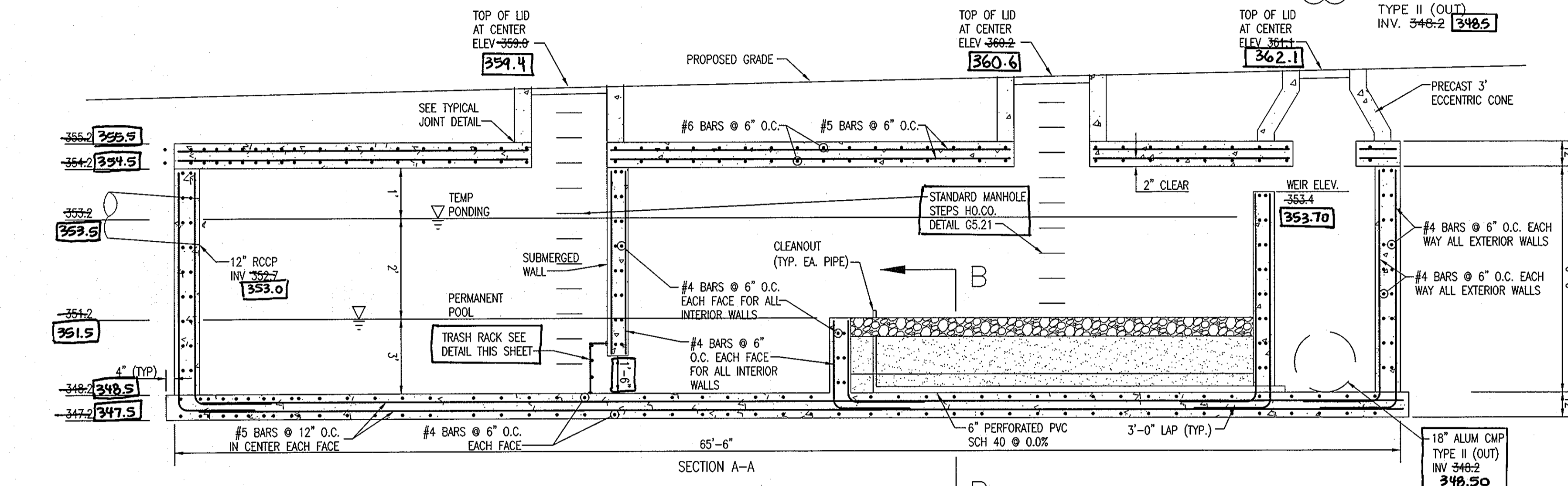
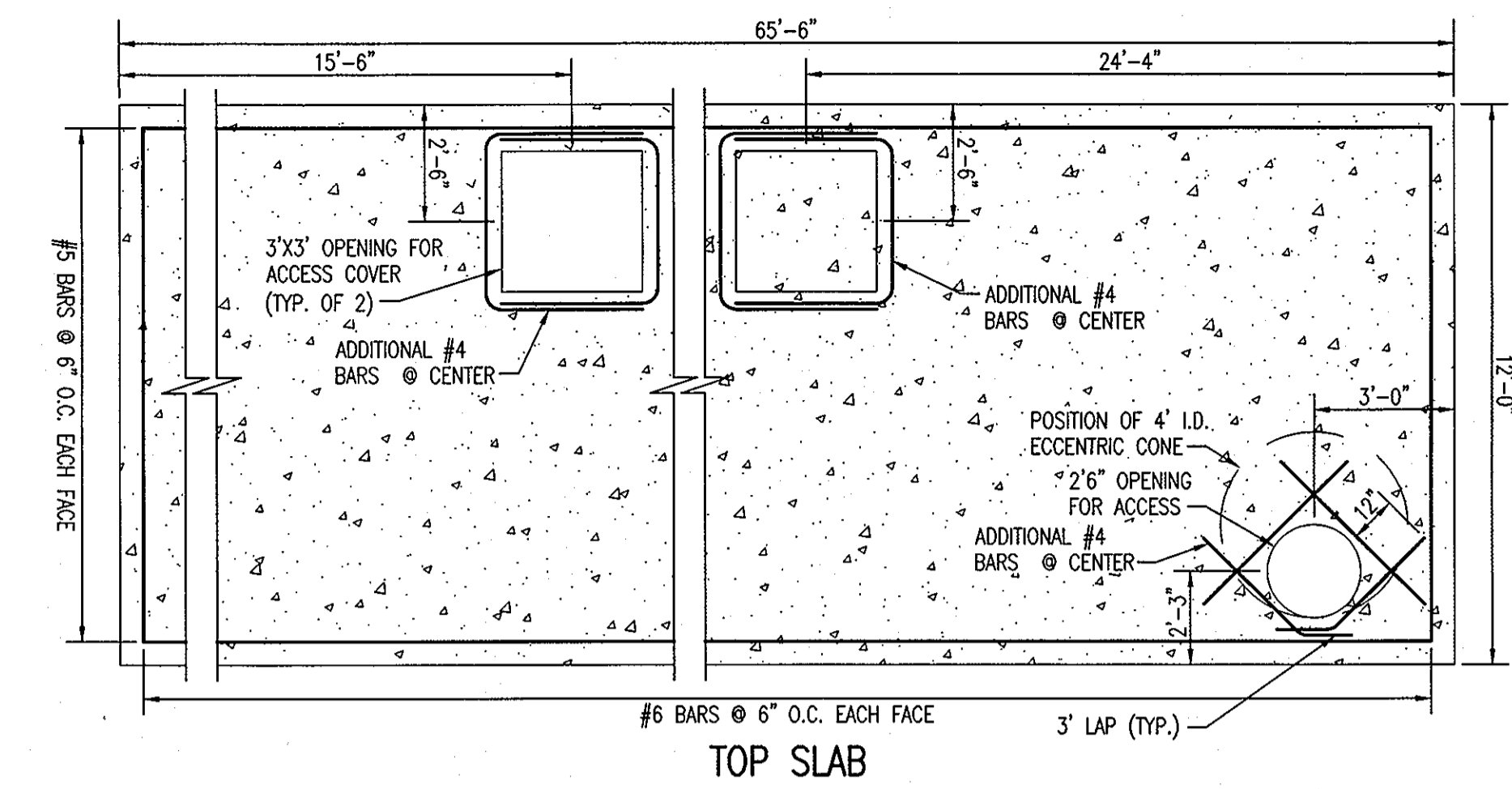
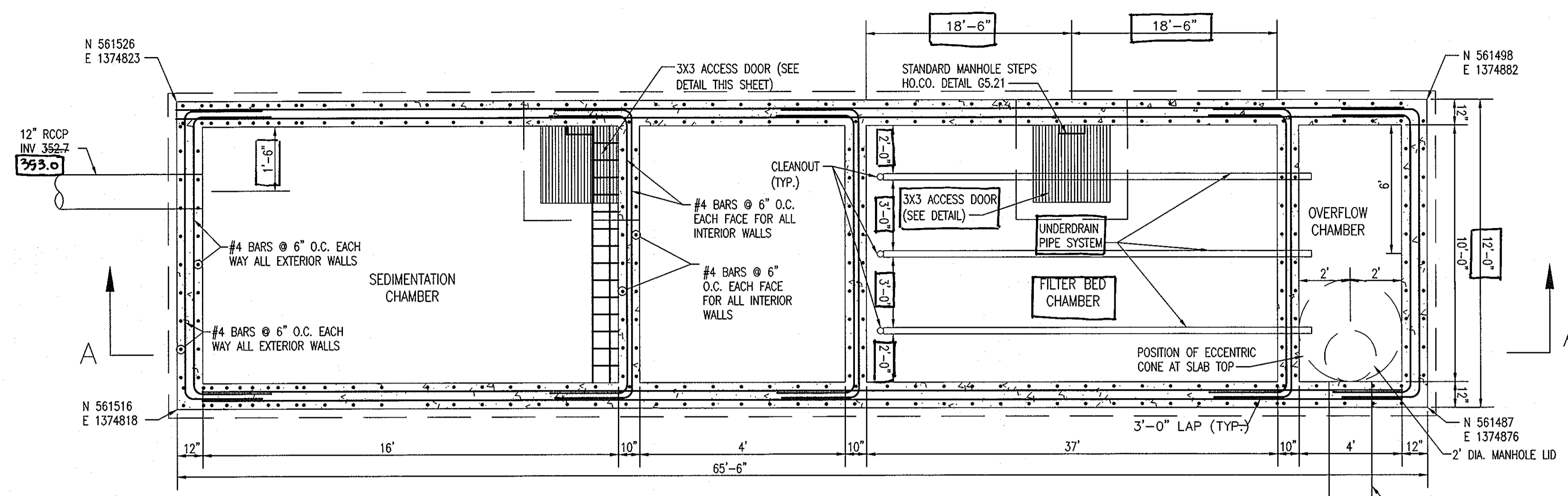
TITLE

**SAND FILTER #1
DETAILS & NOTES**

Patton Harris Rust & Associates, pc
Engineers, Surveyors, Planners, Landscape Architects.
8818 Centre Park Drive
Columbia, MD 21045
T 410.997.8900
F 410.997.9282

DESIGNED BY : CJR/ACR
DRAWN BY : DAM
PROJECT NO : 1272A(1-0) C902DET.DWG
DATE : JUNE 19, 2007
SCALE : AS SHOWN
DRAWING NO. 8 OF 13





OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED UNDERGROUND STORMWATER FILTRATION SYSTEMS (F-2 AND F-3)

1. THE SEDIMENT CHAMBER OUTLET DEVICES SHALL BE CLEANED AND/OR REPAIRED WHEN DRAWDOWN TIMES WITHIN THE CHAMBER EXCEED 36 HOURS.
2. DEBRIS AND LITTER SHALL BE REMOVED AS NECESSARY TO INSURE PROPER OPERATION OF THE SYSTEM.
3. SEDIMENT SHALL BE CLEANED OUT OF THE SEDIMENTATION CHAMBER WHEN IT ACCUMULATES TO A DEPTH OF 6 INCHES. VEGETATION WITHIN THE SEDIMENT CHAMBER SHALL BE LIMITED TO A HEIGHT OF 18 INCHES.
4. WHEN WATER PONDS ON THE SURFACE OF THE FILTER BED FOR MORE THAN 72 HOURS, THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REPLACED WITH FRESH MATERIAL. PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS AND LIQUID MUST BE FOLLOWED BY THE OWNER.
5. A LOGBOOK SHALL BE MAINTAINED TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
6. THE MAINTENANCE LOGBOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
7. ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION SYSTEM HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.

UNDERGROUND SAND FILTER STRUCTURES

GENERAL NOTES

1. USE POURED-IN-PLACE CONCRETE FOR THE ENTIRE STRUCTURE.
2. REFER TO MARYLAND STATE HIGHWAY ADMINISTRATION FOR MATERIALS AND METHODS OF CONSTRUCTION.
3. WALL THICKNESS SHALL BE AS SHOWN ON THE CONSTRUCTION DRAWINGS.
4. CONCRETE SHALL BE MIX NO. 1, FC = 3,500 PSI AT 28 DAYS.
5. ALL REINFORCING STEEL TO BE ASTM A615, GR.60.
6. THE TOP 4 INCHES OF WALLS MAY BE BRICK MASONRY FOR LEVELING, IF REQUIRED. BRICK MASONRY SHALL COMPLY WITH THE LATEST SA SPECIFICATION.
7. ALL INLETS AND INCOMING PIPES SHALL BE CHECKED FOR POSSIBLE BACKWATER OR TAILWATER PROBLEMS.
8. PERFORATIONS IN 6" PVC UNDERDRAIN SHALL BE 3/8" DIAMETER PLACED 4" O.C. AROUND FULL CIRCUMFERENCE OF PIPE.

CONSTRUCTION NOTES

1. SILT AND DEBRIS SHALL NOT BE ALLOWED TO ENTER THE STRUCTURES UNTIL CONTRIBUTING DRAINAGE AREAS HAVE BEEN PERMANENTLY STABILIZED.
2. ALL OPENINGS TO STRUCTURES SHALL BE PROTECTED WITH THE APPROPRIATE SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.

INSPECTION NOTES

1. PRIOR TO START OF CONSTRUCTION SAND FILTER STRUCTURES, THE HOWARD COUNTY INSPECTOR MUST BE CALLED 48 HOURS IN ADVANCE.
2. THE INSPECTOR MUST BE NOTIFIED AT EACH OF THE FOLLOWING STAGES:
 - A. APPROVAL OF SUBGRADE FOR FOOTINGS.
 - B. FOOTING FORMED AND STEEL SET PRIOR TO POURING.
 - C. STRUCTURE SIDES FORMED AND STEEL SET PRIOR TO POURING.
 - D. PRIOR TO TOP SLAB AND MANHOLES BEING SET, INSPECTOR MUST CHECK STRUCTURE AND ALL DEBRIS AND SILT IN STRUCTURE REMOVED.
 - E. WHEN SITE IS PERMANENTLY STABILIZED AND SEDIMENT CONTROL MEASURES TO PROTECT INLET ARE TO BE REMOVED.

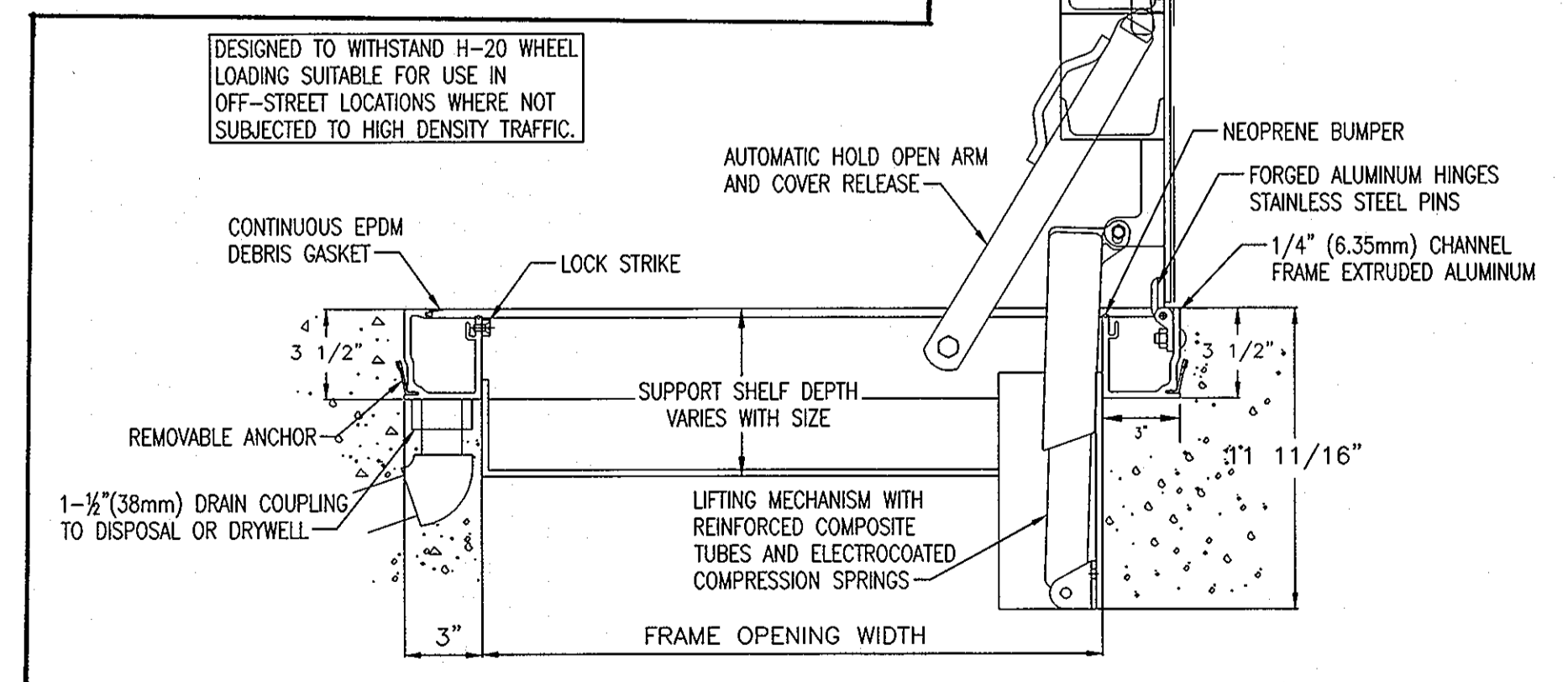
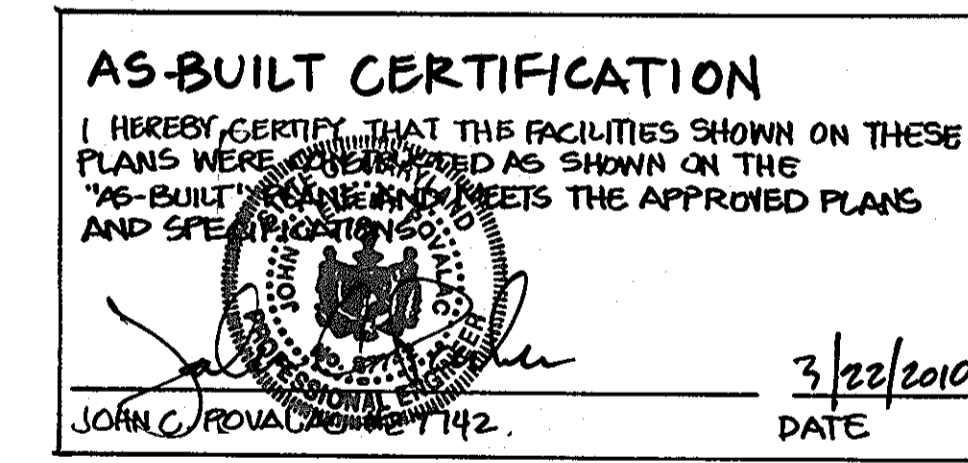
MAINTENANCE NOTES (SAND FILTER WASTE)

1. THE SAND FILTER STRUCTURES WILL REQUIRE PERIODIC AND REGULAR CLEANING. OWNERS OF THESE FACILITIES WILL HAVE TO CLEAN THEM AS NEEDED OR ON A FREQUENCY THAT THE APPROVING AUTHORITY DETERMINES IS APPROPRIATE. OWNERS OF SAND FILTER STRUCTURES WILL BE NOTIFIED BY THE INSPECTION AUTHORITY OF THE REQUIRED FREQUENCY OF MAINTENANCE.
2. MAINTENANCE OF THESE FACILITIES WILL CONSIST OF CLEANING OUT THE CHAMBERS AND DISPOSAL OF THE WASTE AND THE REPAIR OF THE FACILITY AS NEEDED. PERIODIC INSPECTIONS OF THESE FACILITIES WILL BE MADE BY THE PRINCE GEORGE'S COUNTY INSPECTOR.
3. THE DISPOSAL OF THE LIQUID AND SOLID MATTER SHOULD BE AS FOLLOWS:
 - A. ALL LIQUID MATERIAL IN THE FIRST AND SECOND CHAMBER SHALL BE PUMPED INTO A SUITABLE TANK TRUCK. PUMPED MATERIAL SHALL BE DISPOSED OF AT AN APPROVED SANITARY DISCHARGE MANHOLE OR SHALL BE TAKEN TO AN APPROVED SEWAGE TREATMENT PLANT FOR DISPOSAL. MATERIAL SHALL NOT BE DISCHARGED BACK INTO THE STRUCTURE OR PUMPED INTO THE DISCHARGE PIPE OF THE STORM DRAINAGE SYSTEM.
 - B. THE SOLID MATERIAL SHALL BE DISPOSED OF AT AN APPROVED SANITARY LANDFILL.
4. THE INLET PIPES, PERFORATED PIPES, CLEANOUT RISERS, AND STRUCTURAL PARTS SHALL BE REPAIRED AS NEEDED.
5. SAND, STONE AND FILTER COMPONENTS SHALL BE REPLACED WITH MATERIALS MEETING ORIGINAL SPECIFICATIONS SHOWN ON THESE DRAWINGS.

FILTER FABRIC SPECIFICATION

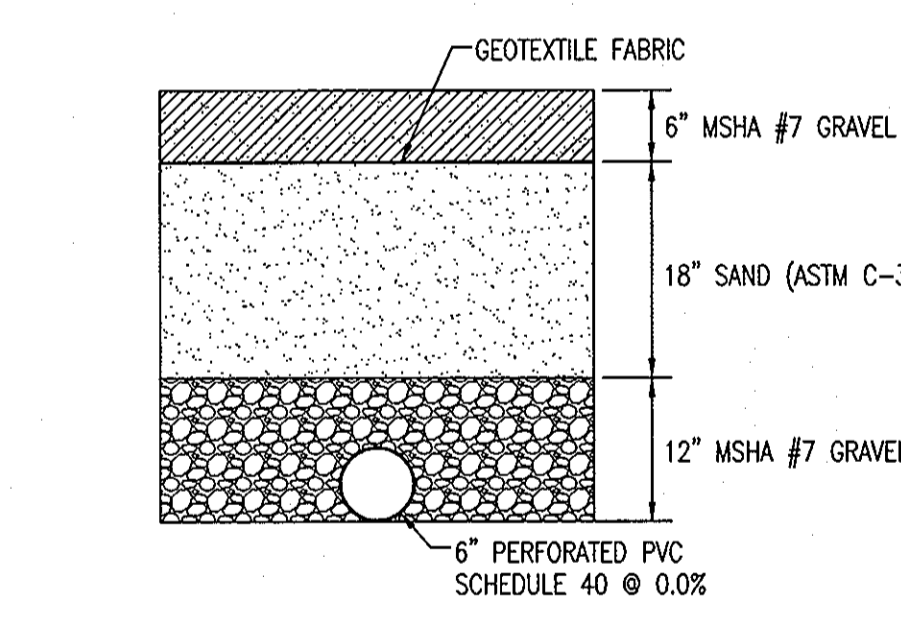
1. THE FILTER FABRIC (GEOTEXTILE FABRIC BENEATH THE TOP STONE LAYER SHALL BE ENKADRAIN 9120 OR EQUIVALENT CONFORMING TO THE FOLLOWING:
 - A. MATERIAL: NON-WOVEN GEOTEXTILE FABRIC
 - B. UNIT WEIGHT: 8 OZ. PER SQUARE YARD (MIN)
 - C. FLOW RATE: 120 GPM PER SQUARE FOOT (MIN)
 - D. PUNCTURE: 120 POUNDS (MIN)
 - E. THICKNESS: 0.8 INCHES (MIN)
 - F. TENSILE STRENGTH: 300 POUNDS (MIN)
2. THE MATERIAL SHALL BE TESTED ACCORDING TO THE FOLLOWING METHODS:
 - A. ASTM D-1777 - WEIGHT
 - B. ASTM D-751 (MODIFIED) - PUNCTURE STRENGTH
 - C. ASTM D-1682 - TENSILE STRENGTH
 - D. FALLING HEAD TEST - FLOW RATE
3. PLACEMENT - THE FABRIC SHALL BE CUT TO SUFFICIENT DIMENSIONS TO COVER THE ENTIRE WETTED PERIMETER OF THE FILTER AREA WITH A TWELVE (12) INCH MINIMUM OVERLAP.

UNDERGROUND SAND FILTER #2

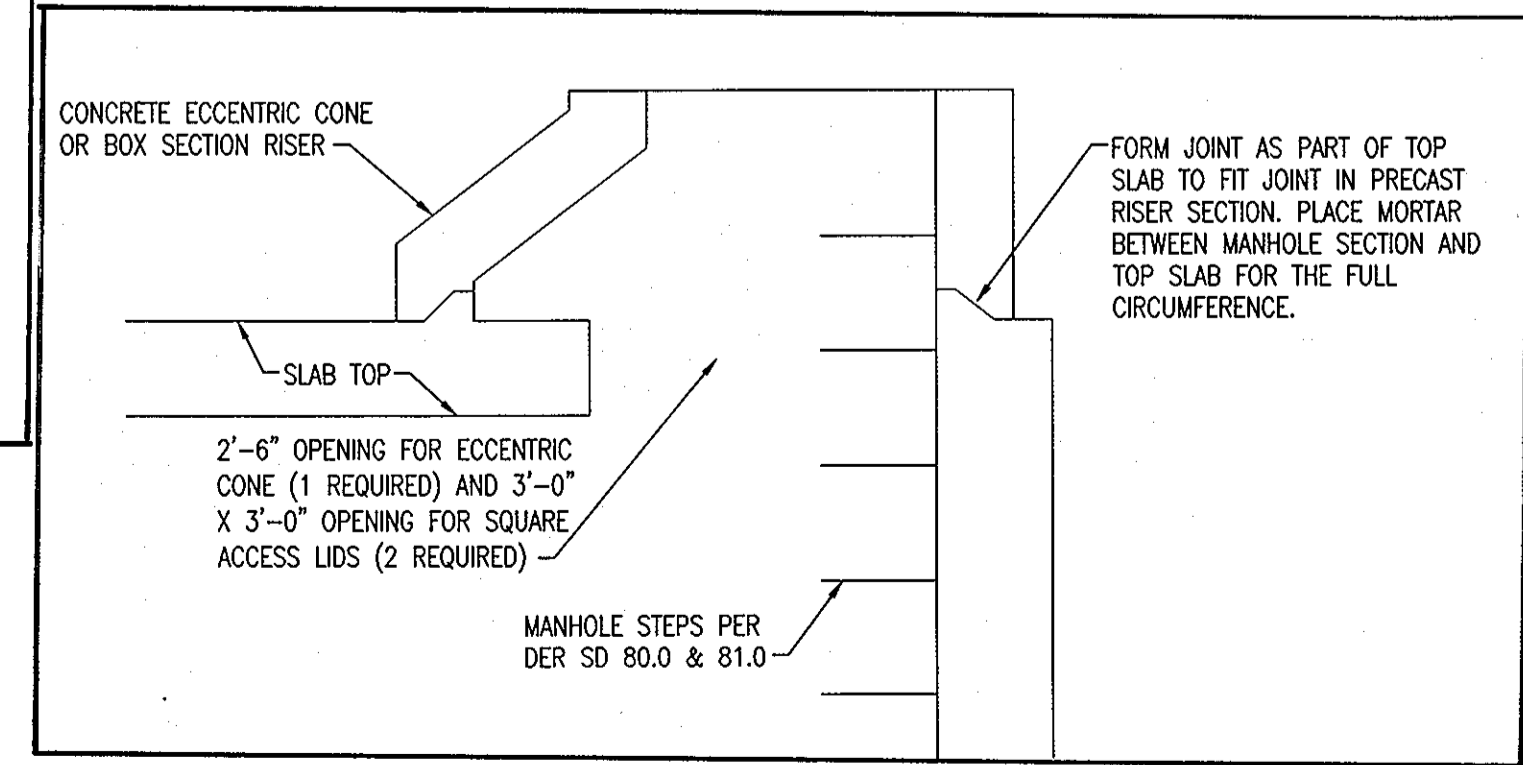


- NOTES:
1. DOOR SHALL BE BILCO TYPE J-AL H20 ACCESS DOOR, SINGLE LEAF ALUMINUM CONSTRUCTION OR EQUAL.
 2. DOOR SUPPLIED BY CBG SOUTH, INC. 9689 GERWIG LANE; COLUMBIA, MD 21046 PH (410)995-6400 FX (410)381-0071
 3. CONTRACTOR SHALL CONNECT DRAIN COUPLING TO A PIPE AND PROVIDE DISCHARGE INTO WATER QUALITY STRUCTURE.
 4. CONTRACTOR SHALL PROVIDE OWNER WITH REMOVABLE HANDLE AT JOB CLOSE OUT ALONG WITH ALL PRODUCT INFORMATION OBTAINED FROM DISTRIBUTOR.

ACCESS DOOR DETAIL
NOT TO SCALE



TYPICAL SAND FILTER SECTION
NOT TO SCALE



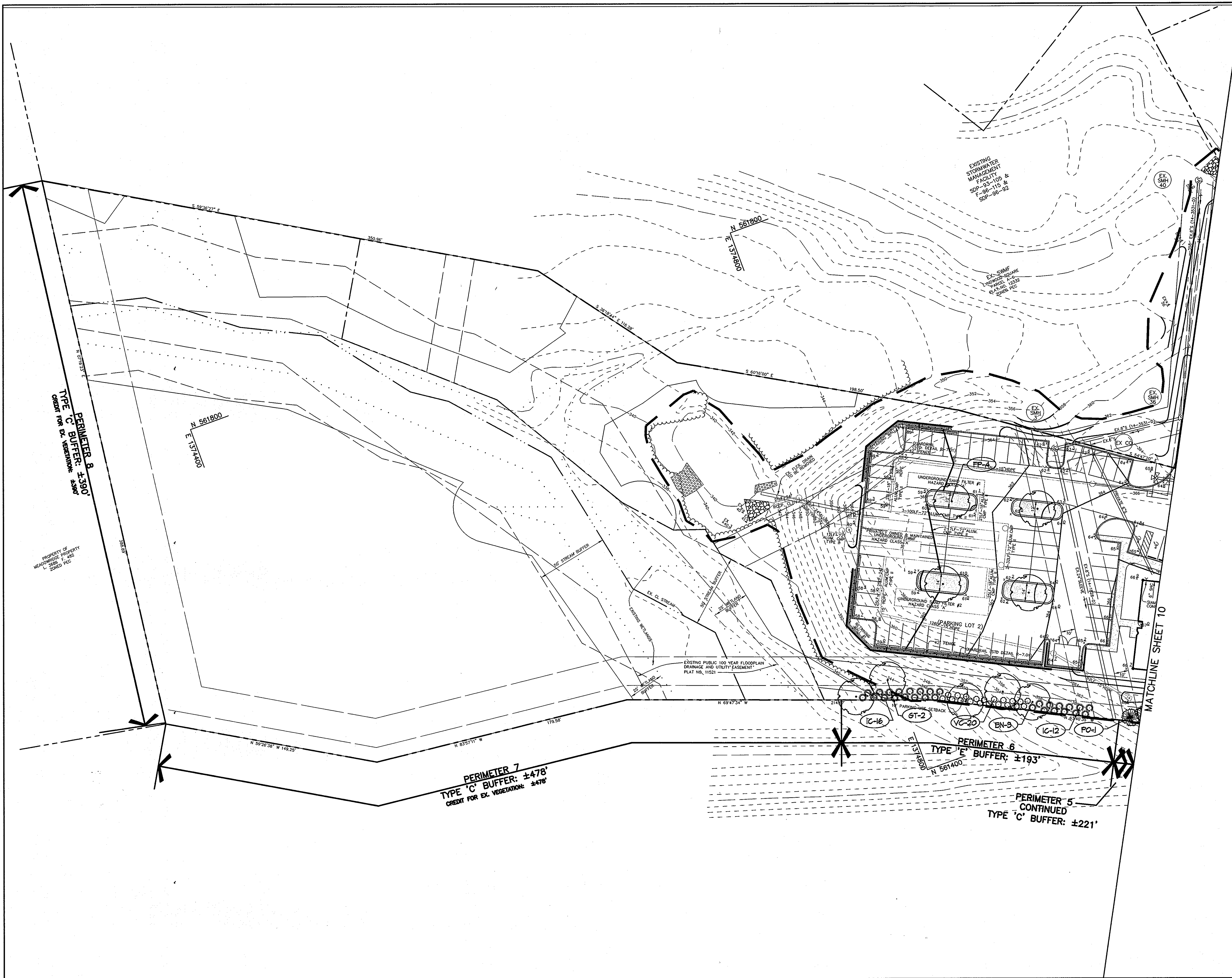
TYPICAL JOINT DETAIL
NOT TO SCALE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.	
DIRECTOR	DATE
<i>John C. Proval</i>	7-3-07
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>John C. Proval</i>	7/6/09
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
DATE NO.	REVISION
OWNER	DEVELOPER
100 INVESTMENT LP ATTN: HOWARD RESNECK 9200 RUMSEY ROAD COLUMBIA, MARYLAND 21045 410-997-7222	BAYWOOD HOTELS ATTN: CHET PATEL 7211 HANOVER PARKWAY SUITE C-D GREENBELT, MARYLAND 20770 301-345-8700 EXT. 251
PROJECT	LYNDWOOD SQUARE PARCEL E-1
AREA	TAX MAP 37, GRID NO. 11 PLAT NO. 15735, PARCEL E-1, ZONED PEC 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TITLE	SAND FILTER #2 DETAILS & NOTES
Patton Harris Rust & Associates, pc Engineers, Surveyors, Planners, Landscape Architects. 8818 Centre Park Drive Columbia, MD 21045 T 410.997.8900 F 410.997.9282	
DATE	DESIGNED BY: CJR/ACR
6/13/07	DRAWN BY: DAM
DATE	PROJECT NO.: 1272A(1-0) C903DET.DWG
DATE	DATE: JUNE 19, 2007
DATE	SCALE: AS SHOWN
DATE	DRAWING NO. 9 OF 13



LEGEND	
EX. TREELINE	
PROP. TREELINE	
PROPERTY LINE	
CONTOUR LINES	
EX. BUILDING	
PROP. SHADE TREE	
PROP. EVERGREEN TREE	
PROP. SHRUBS	
PERIMETER LANDSCAPE REQUIREMENT	
PERIMETER LANDSCAPE EDGE LIMITS	
PERIMETER LANDSCAPE EDGE CONTINUES	
PROPOSED LANDSCAPE ISLAND	

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.	
DIRECTOR <i>Stephen Lafferty</i>	DATE 7/6/07
CHIEF, DEVELOPMENT ENGINEERING DIVISION <i>Paul Braxton</i>	DATE 7/3/07
CHIEF, DIVISION OF LAND DEVELOPMENT <i>Collette</i>	DATE 7/6/07
3/3/07	APP PATTI O
DATE NO.	REVISION
OWNER 100 INVESTMENT LP ATTN: HOWARD RESNECK 9200 RUMSEY ROAD COLUMBIA, MARYLAND 21045 410-997-7222	DEVELOPER BAYWOOD HOTELS ATTN: CHET PATEL 7211 HANOVER PARKWAY SUITE C-D GREENBELT, MARYLAND 20770 301-345-8700 EXT. 251
PROJECT LYNDWOOD SQUARE PARCEL E-1	
AREA TAX MAP 37, GRID NO. 11 PLAT NO. 15735, PARCEL E-1, ZONED PEC 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
TITLE LANDSCAPE PLAN	
Patton Harris Rust & Associates, pc Engineers. Surveyors. Planners. Landscape Architects. 8818 Centre Park Drive Columbia, MD 21045 T 410.997.8900 F 410.997.9282	
DATE 6-14-07	DESIGNED BY : KLM
	DRAWN BY: KLM
	PROJECT NO 1272A1-0 PLANS L202LND
	DATE : JUNE 19, 2007
SCALE : 1" = 30'	DRAWING NO. 10 OF 13



LEGEND	
EX. TREELINE	
PROP. TREELINE	
PROPERTY LINE	
CONTOUR LINES	
EX. BUILDING	
PROP. SHADE TREE	
PROP. EVERGREEN TREE	
PROP. SHRUBS	
PERIMETER LANDSCAPE REQUIREMENT	
PERIMETER LANDSCAPE EDGE LIMITS	
PERIMETER LANDSCAPE EDGE CONTINUES	
PROPOSED LANDSCAPE ISLAND	

NOTE: NO LANDSCAPING ALLOWED WITHIN 7 1/2' EITHER SIDE OF FIRE DEPARTMENT CONNECTION. CLEAR ACCESS IS REQUIRED.

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
 DIRECTOR *Scott Lafferty* 7/6/07 DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION *Chad Anderson* 7/3/07 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT *C. Hamilton* 7/6/07 DATE

DATE	NO.	REVISION

OWNER 100 INVESTMENT LP ATTN: HOWARD RESNECK 9200 RUMSEY ROAD COLUMBIA, MARYLAND 21045 410-997-7222	DEVELOPER BAYWOOD HOTELS ATTN: CHET PATEL 7211 HANOVER PARKWAY SUITE C-D GREENBELT, MARYLAND 20770 301-345-8700 EXT. 251
--	--

PROJECT **LYNDWOOD SQUARE**
PARCEL E-1

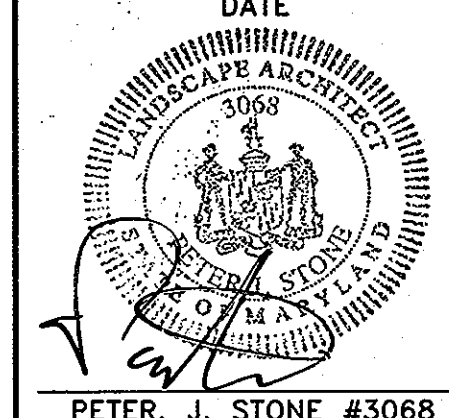
AREA TAX MAP 37, GRID NO. 11
PLAT NO. 15735, PARCEL E-1, ZONED PEC
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE **LANDSCAPE PLAN**

Patton Harris Rust & Associates, pc
Engineers, Surveyors, Planners, Landscape Architects.
8818 Centre Park Drive
Columbia, MD 21045
T 410.997.8900
F 410.997.9282

DATE 6-14-07

DESIGNED BY : KLM
 DRAWN BY: KLM
 PROJECT NO 12724-1-01
 PLANS L200LND
 DATE : JUNE 19, 2007
 SCALE : 1" = 30'
 DRAWING NO. 11 OF 13

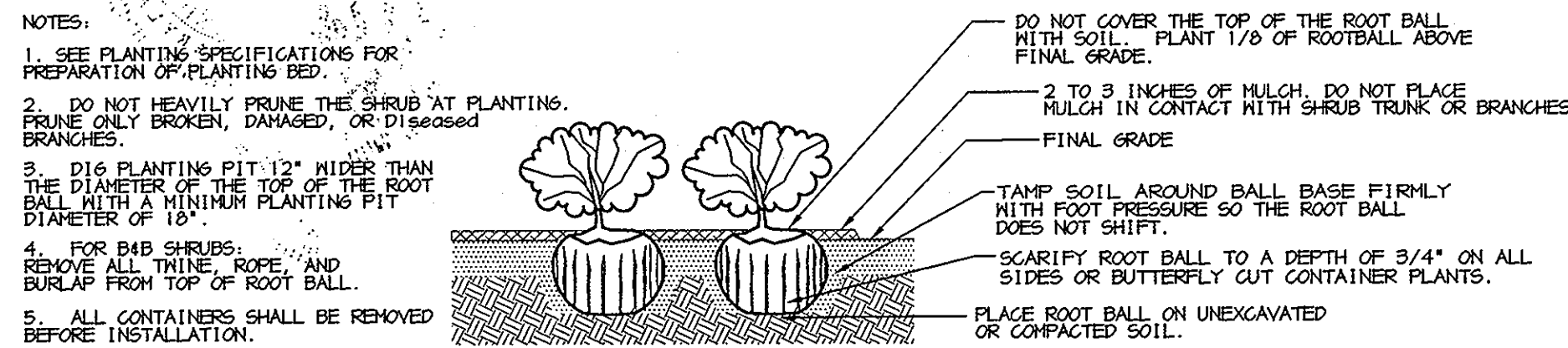


SCHEDULE A - PERIMETER LANDSCAPE EDGE							
PERIMETER	ADJACENT TO ROADWAYS						ADJACENT TO PERIMETER PROPERTIES
	2	3	4	5	6	7	8
LANDSCAPE TYPE	B	C	E	C	E	C	C
LINEAR FEET OF ROADWAY FRONTAGE/ PERIMETER	±115'	±303'	±150'	±221'	±143'	±478'	±390'
CREDIT FOR EXISTING VEGETATION (YES/NO/ LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO	NO	YES ±478'	YES ±390'
CREDIT FOR WALL, FENCE, BERM OR DRIVE AISLE (YES/NO/LINEAR FEET)	NO	NO	NO	NO	NO	NO	NO
LINEAR FEET REMAINING	±115'	±303'	±150'	±221'	±143'	±0'	±0'
NUMBER OF PLANTS REQUIRED							
SHADE TREES	0	10	4	6	5	0	0
EVERGREEN TREES	0	14	0	11	0	0	0
SHRUBS	0	0	40	0	48	0	0
NUMBER OF PLANTS PROVIDED							
SHADE TREES	0	10	4	6	5	0	0
EVERGREEN TREES	0	14	0	11	0	0	0
SMALL FLOWERING TREES	0	0	0	0	0	0	0
SHRUBS	0	0	40	0	48	0	0

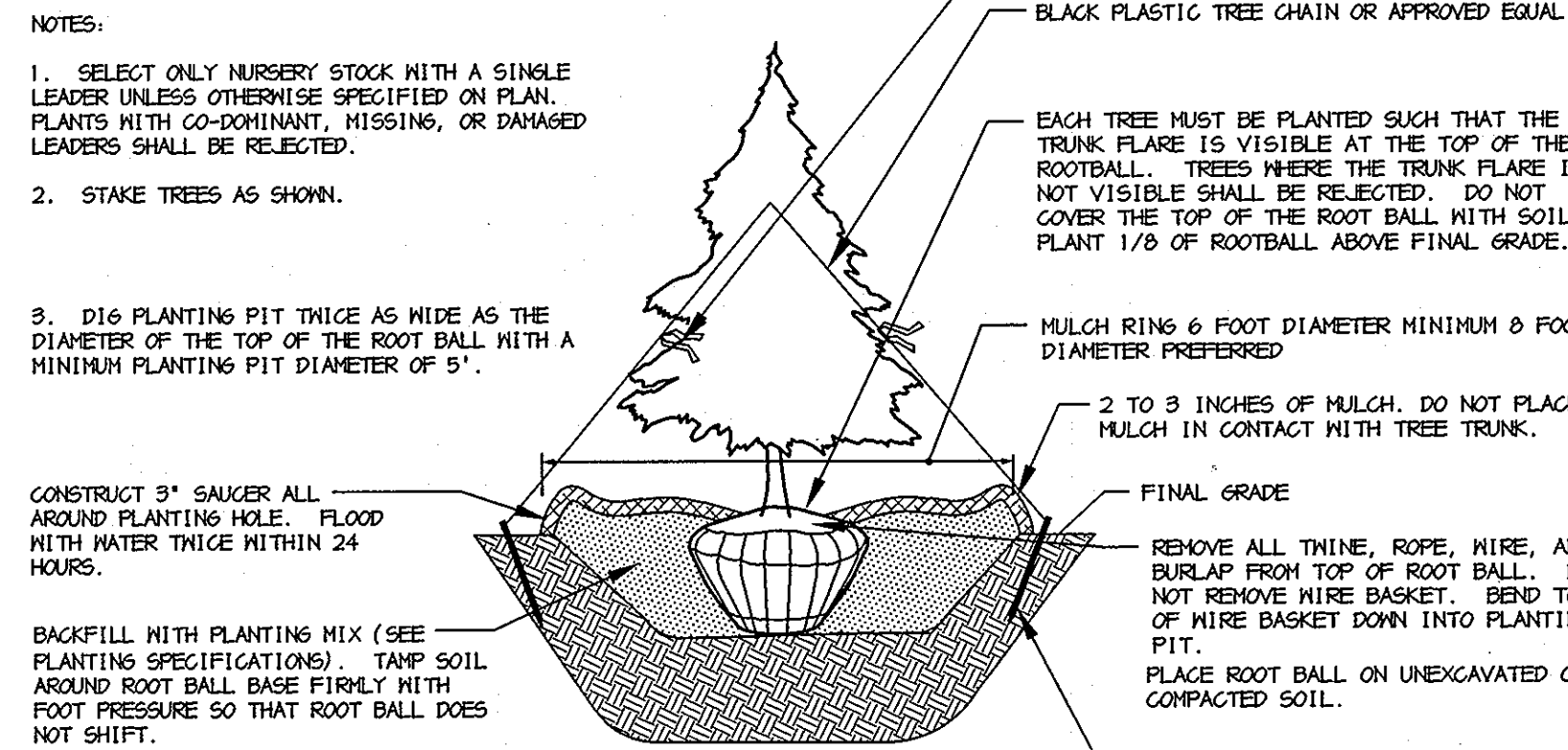
SCHEDULE 'A' NOTES:
 REGULATIONS DO NOT REQUIRE LANDSCAPE EDGES, BUFFERING, OR SCREENING BETWEEN INTERNAL LOTS OR PARCELS WITHIN THE SAME DEVELOPMENT. (PAGE 17 OF THE HO. CO. LANDSCAPE MANUAL)

SCHEDULE B - PARKING LOT INTERNAL LANDSCAPING		
PARKING LOT	1	2
NUMBER OF PARKING SPACES	24	77
NUMBER OF SHADE TREES REQUIRED (1/20 SPACES)	1	4
NUMBER OF TREES PROVIDED		
SHADE TREES	1	4
OTHER TREES (2:1 SUBSTITUTION)	0	0
NUMBER OF ISLANDS PROVIDED (EQUIVALENT)	1	4

PERIMETER AND PARKING LOT PLANT LIST					
SYMBOL	QTY.	SCIENTIFIC / COMMON NAME	SIZE	ROOT	REMARKS
BN	7	Betula nigra "Heritage" Heritage River Birch	10'-12' ht.	B4B	Plant as shown
FP	14	Fraxinus pennsylvanica "Marshall's Seedless" Marshall's Seedless Green Ash	2.5'-3' cal.	B4B	Plant as shown
GT	10	Gleditsia triacanthos "Imperial" Imperial Thornless Honeylocust	2.5'-3' cal.	B4B	Plant as shown
CL	14	Claytonia virginica Leyland Cypress	5'-6' ht.	B4B	Plant as shown
FO	14	Ficus ornata Ficus	6'-8' ht.	B4B	Plant as shown
IC	51	Ilex crenata "Green Lustre" Green Lustre Japanese Holly	2'-2.5' ht.	B4B	Plant as shown
VC	91	Viburnum carolinense Carolina Spice Viburnum	2.5'-3' ht.	B4B	Plant as shown



SHRUB BED PLANTING DETAIL - B&B AND CONTAINER SHRUBS
 NOT TO SCALE



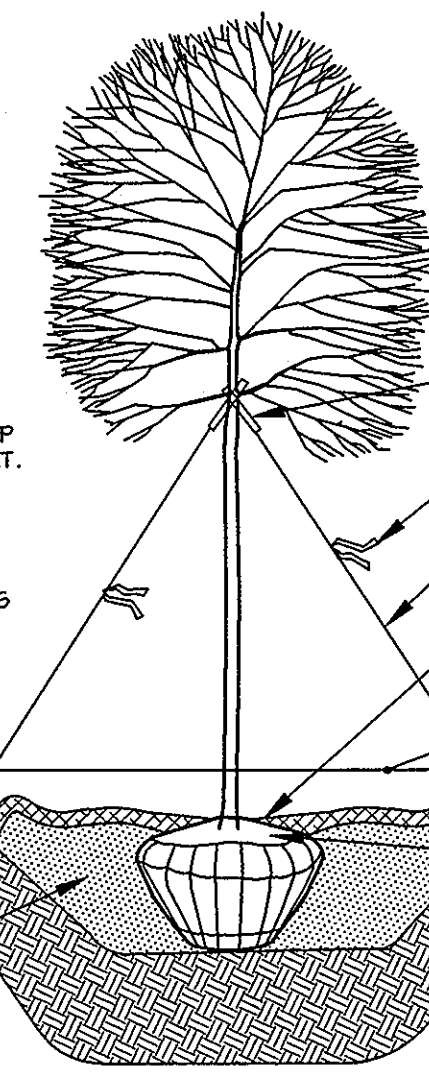
EVERGREEN B&B TREE PLANTING DETAIL
 NOT TO SCALE

NOTES:

- DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES. SOME INTERIOR THINGS AND LATERAL BRANCHES MAY BE PRUNED; HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.
- STAKE TREES AS SHOWN.

- DIG PLANTING PIT TWICE AS WIDE AS THE DIAMETER OF THE TOP OF THE ROOT BALL WITH A MINIMUM PLANTING PIT DIAMETER OF 5'.
- PLACE ROOT BALL ON UNEXCAVATED OR COMPACTED SOIL.
- TIGHTEN WIRE OR CABLE ONLY ENOUGH TO KEEP FROM SLIPPING. ALLOW FOR SOME TRUNK MOVEMENT. PLASTIC HOSE SHALL BE LONG ENOUGH TO ACCOMMODATE 1.5 IN. OF GROWTH AND BUFFER ALL BRANCHES FROM THE WIRE.
- TUCK ANY LOOSE ENDS OF THE WIRE OR CABLE INTO THE WIRE WRAP SO THAT NO SHARP WIRE ENDS ARE EXPOSED.
- INSTALL THREE GUY WIRES PER TREE, SPACED EVENLY AROUND THE TRUNK.
- ENSURE THAT THE BEARING SURFACE OF THE PROTECTIVE COVERING OF THE WIRE OR CABLE AGAINST THE TREE TRUNK IS A MINIMUM OF 0.5 IN. REMOVE STAKES AFTER ONE YEAR.

- CONSTRUCT 3" SAUCER ALL AROUND PLANTING HOLE. FLOOD WITH WATER TWICE WITHIN 24 HOURS.
- REMOVE ALL THINE, ROPE, WIRE, AND BURLAP FROM TOP OF ROOT BALL. DO NOT REMOVE WIRE BASKET. BEND TOP OF WIRE BASKET DOWN INTO PLANTING PIT.
- PLACE ROOT BALL ON UNEXCAVATED OR COMPACTED SOIL.
- 2"x2" BY 30" LONG WOOD STAKE. ALL STAKES SHALL BE DRIVEN OUTSIDE THE EDGE OF THE ROOT BALL INTO PREFERABLY UNEXCAVATED SOIL. DRIVE INTO GROUND AND EXPOSE ONLY 6"-8" OF STAKE.



DECIDUOUS B&B TREE PLANTING DETAIL (TREES 3" CAL. OR LARGER)
 NOT TO SCALE

PLANTING SPECIFICATIONS

- PLANTS, RELATED MATERIAL, AND OPERATIONS SHALL MEET THE DETAILED DESCRIPTION, AS GIVEN ON THE PLANS AND AS DESCRIBED HEREIN. WHERE DISCREPANCIES EXIST BETWEEN STANDARDS & GUIDELINES REFERENCED WITHIN THESE SPECIFICATIONS AND THE HOWARD COUNTY LANDSCAPE MANUAL, THE LATTER TAKES PRECEDENCE.
- ALL PLANT MATERIAL, UNLESS OTHERWISE SPECIFIED, THAT IS NOT NURSERY GROWN, UNIFORMLY BRANCHED, DOES NOT HAVE A VIGOROUS ROOT SYSTEM, AND DOES NOT CONFORM TO THE MOST RECENT EDITION OF THE AMERICAN ASSOCIATION OF NURSERYMEN (AAN) STANDARDS WILL BE REJECTED. PLANT MATERIAL THAT IS NOT HEALTHY, VIGOROUS, FREE FROM DEFECTS, DECAY, DISFIGURING ROOTS, SUNSCALD INJURIES, ABRASIONS OF THE BARK, PLANT DISEASE, INSECT PEST EGGS, BORERS AND ALL FORMS OF INSECT INFESTATIONS OR OBJECTIONABLE DISFIGUREMENTS WILL BE REJECTED. PLANT MATERIAL THAT IS WEAK OR WHICH HAS BEEN CUT BACK FROM LARGER GRADES TO MEET SPECIFIED REQUIREMENTS WILL BE REJECTED. TREES WITH FORKED LEADERS WILL BE REJECTED. ALL B & B PLANTS SHALL BE FRESHLY DUG; NO HEALED-IN PLANTS OR PLANTS FROM COLD STORAGE WILL BE ACCEPTED.
- UNLESS OTHERWISE SPECIFIED, ALL GENERAL CONDITIONS, PLANTING OPERATIONS, DETAILS AND PLANTING SPECIFICATIONS SHALL CONFORM TO THE MOST RECENT EDITION OF THE "LANDSCAPE SPECIFICATION GUIDELINES BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF MD, DC, & VA", (HEREINAFTER "LANDSCAPE GUIDELINES") APPROVED BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF METROPOLITAN WASHINGTON AND THE POTOMAC CHAPTER OF THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS.
- CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR AFTER DATE OF ACCEPTANCE IN ACCORDANCE WITH THE APPROPRIATE SECTION ON THE LANDSCAPE GUIDELINES. CONTRACTOR'S ATTENTION IS DIRECTED TO THE MAINTENANCE REQUIREMENTS FOUND WITHIN THE ONE YEAR SPECIFICATIONS INCLUDING WATERING AND REPLACEMENT OF SPECIFIED PLANT MATERIAL.
- CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL RELEVANT AND APPROPRIATE UTILITY COMPANIES, UTILITY CONTRACTORS, AND "MISS UTILITY" A MINIMUM OF 48 HOURS PRIOR TO THE BEGINNING OF ANY WORK. CONTRACTOR MAY MAKE MINOR ADJUSTMENTS IN SPACING AND LOCATION OF PLANT MATERIAL TO AVOID CONFLICTS WITH UTILITIES. MAJOR CHANGES WILL REQUIRE THE APPROVAL OF THE LANDSCAPE ARCHITECT. DAMAGE TO EXISTING STRUCTURE AND UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.
- PROTECTION OF EXISTING VEGETATION TO REMAIN SHALL BE ACCOMPLISHED VIA THE TEMPORARY INSTALLATION OF 4 FOOT HIGH SNOW FENCE AT THE DRIP LINE, SEE DETAIL.
- CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL MATERIAL IN THE PROPER PLANTING SEASON FOR EACH PLANT TYPE. ALL PLANTING IS TO BE COMPLETED WITHIN GROWING SEASON OF COMPLETION OF SITE CONSTRUCTION. DO NOT PLANT PINUS STROBUS OR XOPRESSACYPARIS LEYLANDII BETWEEN NOVEMBER 15 AND MARCH 15. LANDSCAPE PLANTS ARE NOT TO BE INSTALLED BEFORE SITE IS GRADED TO FINAL GRADE.
- CONTRACTOR TO REGRADE, FINE GRADE, SOD, HYDROSEED AND STRAW MULCH ALL AREAS DISTURBED BY THEIR WORK.
- BID SHALL BE BASED ON ACTUAL SITE CONDITIONS. NO EXTRA PAYMENT SHALL BE MADE FOR WORK ARISING FROM ACTUAL SITE CONDITIONS DIFFERING FROM THOSE INDICATED ON DRAWINGS AND SPECIFICATIONS.
- PLANT QUANTITIES ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. IF DISCREPANCIES EXIST BETWEEN QUANTITIES SHOWN ON PLAN AND THOSE SHOWN ON THE PLANT LIST, THE QUANTITIES ON THE PLAN TAKE PRECEDENCE. WHERE DISCREPANCIES ON THE PLAN EXIST BETWEEN THE SYMBOLS AND THE CALLOUT LEADER, THE NUMBER OF SYMBOLS TAKE PRECEDENCE.
- ALL SHRUBS AND GROUND COVER AREAS SHALL BE PLANTED IN CONTINUOUS PLANTING BEDS, PREPARED AS SPECIFIED, UNLESS OTHERWISE INDICATED ON PLANS. (SEE SPECIFICATION 13). BEDS TO BE MULCHED WITH MINIMUM 2" AND MAXIMUM 3" OF COMPOSTED, DOUBLE-SHREDDED HARDWOOD MULCH THROUGHOUT.
- POSITIVE DRAINAGE SHALL BE MAINTAINED ON PLANTING BEDS (MINIMUM 2 PERCENT SLOPE).
- BED PREPARATION SHALL BE AS FOLLOWS: TILL INTO A MINIMUM DEPTH OF 6" 1 YARD OF COMPRO OR LEAFGRO PER 200 SF OF PLANTING BED, AND 1 YARD OF TOPSOIL PER 100 SF OF BED. ADD 3 LBS OF STANDARD 5-10-5 FERTILIZER PER CUBIC YARD OF PLANTING MIX AND TILL. ERICACEOUS PLANTS (AZALEAS, RHODODENDRONS, ETC.): TOP DRESS AFTER PLANTING WITH IRON SULFATE OR COMPARABLE PRODUCT ACCORDING TO PACKAGE DIRECTIONS. TAXUS BACCATA 'REPANDENS' (ENGLISH WEeping YEW): TOP DRESS AFTER PLANTING WITH 1/4 TO 1/2 CUP LIME EACH.
- PLANTING MIX: FOR TREES NOT IN A PREPARED BED, MIX 50% COMPRO OR LEAFGRO WITH 50% SOIL FROM TREE HOLE TO USE AS BACKFILL, SEE TREE PLANTING DETAIL.
- WEED & INSECT CONTROL: INCORPORATE A PRE-EMERGENT HERBICIDE INTO THE PLANTING BED FOLLOWING RECOMMENDED RATES ON THE LABEL. FOR TREE PLANTING, APPLY A PRE-EMERGENT ON TOP OF SOIL AND ROOT BALL BEFORE MULCHING. CAUTION: FOR AREAS TO BE PLANTED WITH A GROUND COVER, BE SURE TO CAREFULLY CHECK THE CHEMICAL USED TO ASSURE ITS ADAPTABILITY TO THE SPECIFIC GROUND COVER TO BE TREATED. MAINTAIN THE MULCH WEED-FREE FOR THE EXTENT OF THE WARRANTY PERIOD. UNDER NO CIRCUMSTANCES IS A PESTICIDE CONTAINING CHLORPYRIFOS TO BE USED AS A MEANS OF PEST CONTROL.
- WATER: ALL PLANT MATERIAL PLANTED SHALL BE WATERED THOROUGHLY THE DAY OF PLANTING. ALL PLANT MATERIAL NOT YET PLANTED SHALL BE PROPERLY PROTECTED FROM DRYING OUT UNTIL PLANTED. AT A MINIMUM, WATER UNPLANTED PLANT MATERIAL DAILY AND AS NECESSARY TO AVOID DESSICATION.
- PRUNING: DO NOT HEAVILY PRUNE TREES AND SHRUBS AT PLANTING. PRUNE ONLY BROKEN, DEAD, OR DISEASED BRANCHES.
- ALL AREAS WITHIN CONTRACT LIMITS DISTURBED DURING OR PRIOR TO CONSTRUCTION NOT DESIGNATED TO RECEIVE PLANTS AND MULCH SHALL BE FINE GRADED, GRASS SEED PLANTED, AND COVERED WITH STRAW MULCH.

GENERAL NOTES:

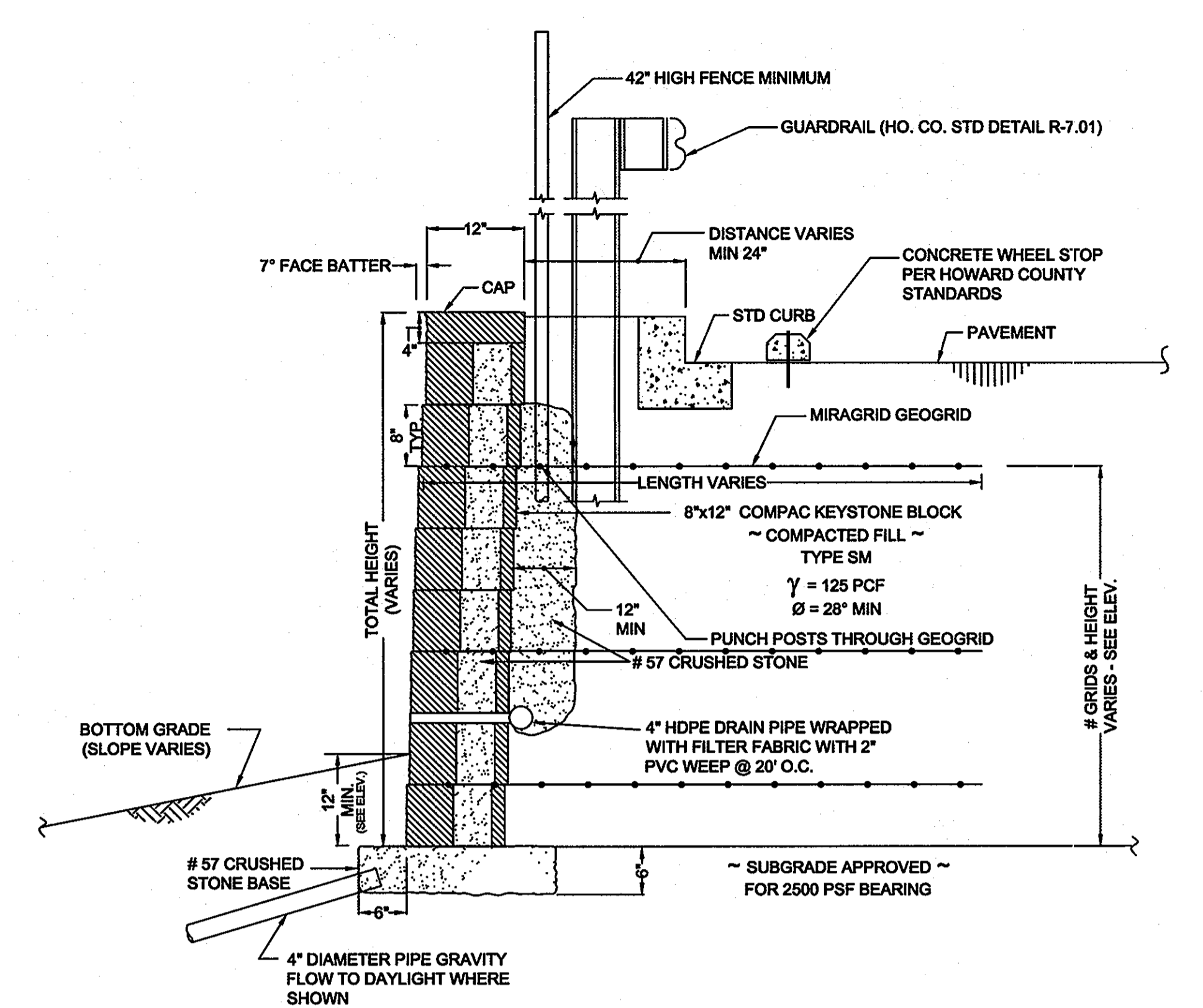
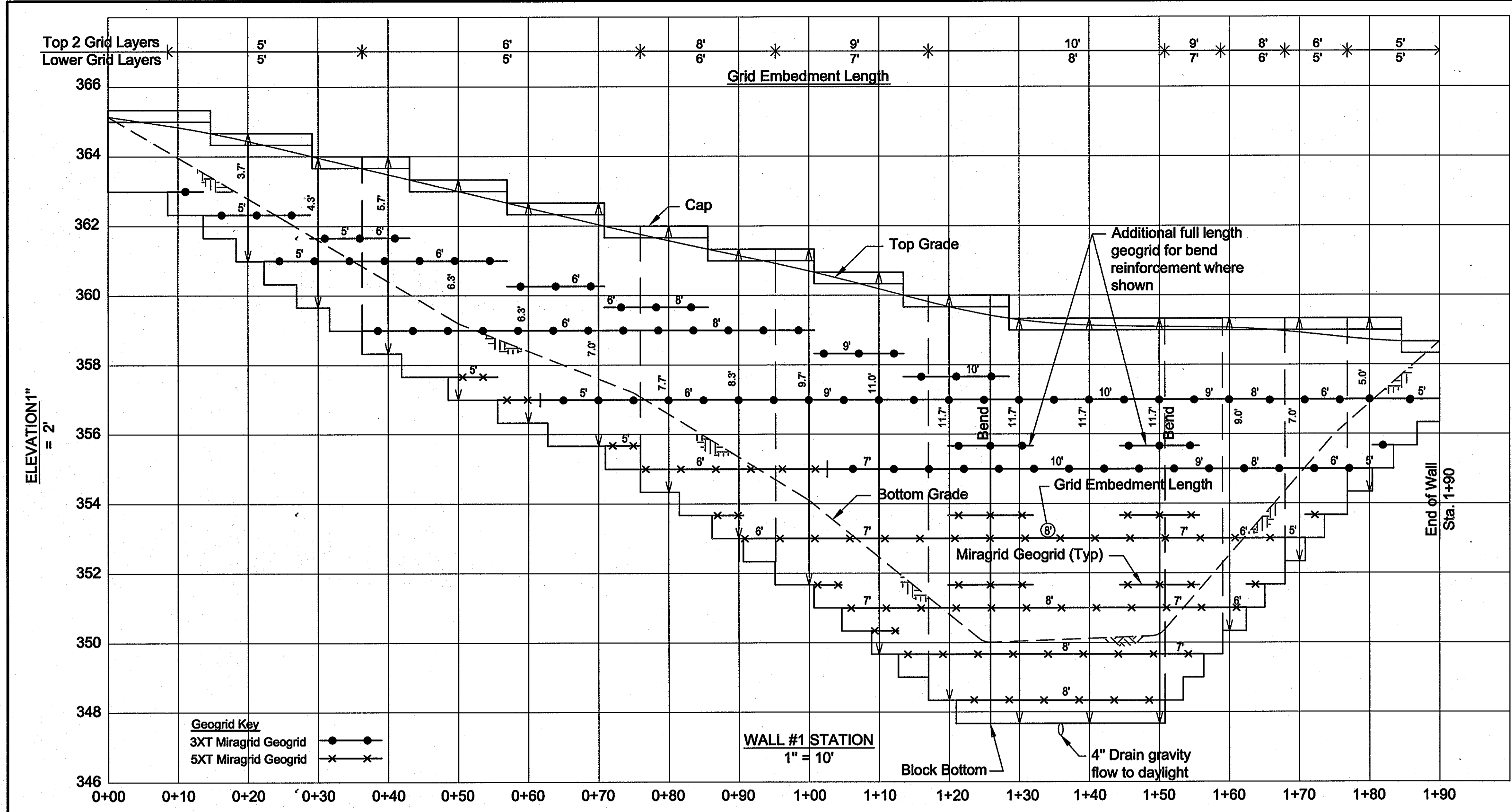
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING MUST BE POSTED AS PART OF THE DEVELOPER AGREEMENT IN THE AMOUNT OF \$17,190.00
 32 SHADE TREES @ \$300 = \$9,600
 0 ORNAMENTAL TREES @ \$150 = \$0
 33 EVERGREEN TREES @ \$150 = \$4,950
 88 SHRUBS @ \$30 = \$2,640
- THIS PLAN IS FOR LANDSCAPING PURPOSES ONLY.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- ALL MATERIAL SELECTED SHALL BE EQUAL TO OR BETTER THAN THE REQUIREMENTS OF THE "USA STANDARD FOR NURSERY STOCK", LATEST EDITION, AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
- ALL MATERIAL SHALL BE PLANTED IN ACCORDANCE WITH THE MINIMUM STANDARDS CITED IN THE LATEST EDITION OF "LANDSCAPE SPECIFICATION GUIDELINES" PUBLISHED BY THE LANDSCAPE CONTRACTORS ASSOCIATION.
- AT THE TIME OF INSTALLATION, ALL SHRUBS AND OTHER PLANTINGS SHALL BE OF THE PROPER HEIGHT AND/OR SPREAD REQUIREMENTS IN ACCORDANCE WITH THIS PLAN AND THE HOWARD COUNTY LANDSCAPE MANUAL.
- NO SUBSTITUTIONS OR RELOCATION OF PLANTS MAY BE MADE WITHOUT PRIOR APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING OF HOWARD COUNTY. ANY DEVIATION FROM THIS LANDSCAPE PLAN MAY RESULT IN A REQUIREMENT FOR SUBMITTAL OF AN OFFICIAL "REDLINE REVISION" TO THE SITE DEVELOPMENT PLAN(S) AND/OR DENIAL IN THE RELEASE OF LANDSCAPE SURETY.
- EXISTING TREES ALONG COLUMBIA 100 PARKWAY TO BE RETAINED WHERE POSSIBLE. ANY TREE WHICH IS REMOVED, DAMAGED OR DESTROYED BY THE PROPOSED DEVELOPMENT SHALL BE REPLACED BY THE DEVELOPER. THE TWO TO BE REMOVED BY THE ENTRANCE HAVE BEEN REPLACED WITH PROPOSED PERIMETER PLANTINGS.

DEVELOPER'S/BUILDER'S CERTIFICATE:

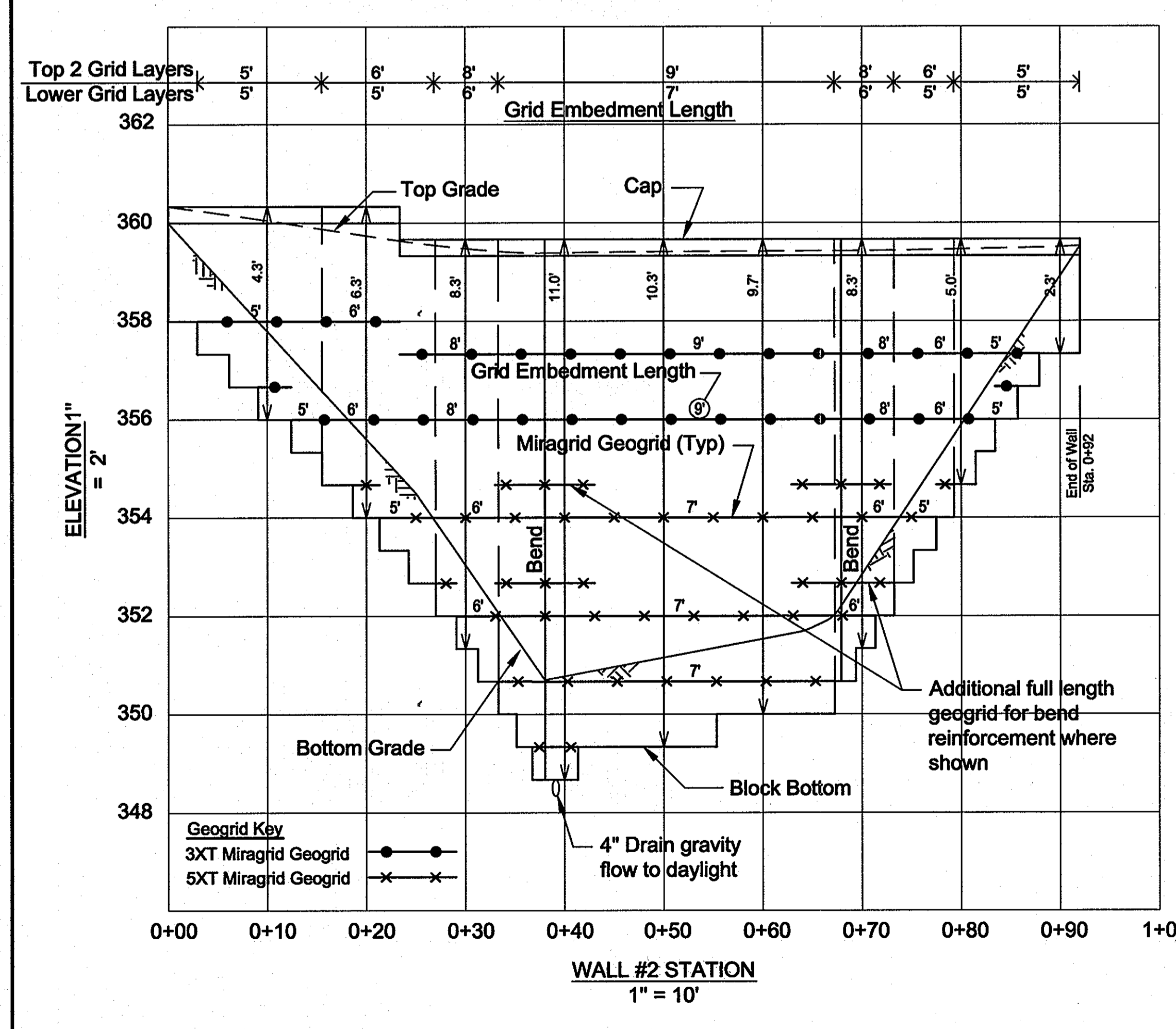
I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

[Signature] 6/14/07
 SIGNATURE DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.	
<i>[Signature]</i> DIRECTOR	7/6/07 DATE
<i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	7-7 DATE
<i>[Signature]</i> CHIEF, DIVISION OF LAND DEVELOPMENT	7/6/07 DATE
DATE NO.	REVISION
OWNER 100 INVESTMENT LP ATTN: HOWARD RESNECK 9200 RUMSEY ROAD COLUMBIA, MARYLAND 21045 410-997-7222	DEVELOPER BAYWOOD HOTELS ATTN: CHET PATEL 7211 HANNOVER PARKWAY SUITE C-D GREENBELT, MARYLAND 20770 301-345-8700 EXT. 251
PROJECT LYNDWOOD SQUARE PARCEL E-1	
AREA TAX MAP 37, GRID NO. 11 PLAT NO. 15735, PARCEL E-1, ZONED PEC 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
TITLE LANDSCAPE SCHEDULES AND DETAILS	
Patton Harris Rust & Associates, P.C. Engineers, Surveyors, Planners, Landscape Architects. 8818 Centre Park Drive Columbia, MD 21045 T 410.997.8900 F 410.997.9282	
DATE 6-19-07	
DESIGNED BY : KLM	
DRAWN BY: KLM	
PROJECT NO : 12724A-1-0ENGR PLANS L2011LD	
DATE : JUNE 19, 2007	
SCALE : NOT TO SCALE	
DRAWING NO. 12 OF 13	
PETER J. STONE #3068	



- NOTES:
- 1.) No trees shall be planted within 10 feet of the top of the retaining wall.
 - 2.) Retaining walls shall only be constructed under the observation of a registered professional engineer and a (NICET, WACEL, or equiv.) certified soils technician.
 - 3.) The required bearing pressure beneath the wall system shall be verified in the field by a certified soils technician. Testing documentation must be provided to the Howard County Inspector prior to start of construction. The required bearing test shall be the Dynamic Cone Penetrometer test ASTM STP-399.
 - 4.) The suitability of fill material shall be confirmed by the on-site soils technician. Each 8' lift must be compacted to a minimum 95% standard proctor density and the testing report shall be made available to the Howard County Inspector upon completion of construction.
 - 5.) One soil boring is required every one hundred feet along the length of the wall. Copies of the boring reports shall be provided to the Howard County Inspector prior to the start of the construction.



SPECIFICATIONS KEYSTONE MODULAR CONCRETE BLOCK RETAINING WALL

PART 1: GENERAL

- 1.01 Description**
1. Work shall consist of furnishing and construction of a KEYSTONE Retaining Wall System in accordance with these specifications and in reasonably close conformity with the lines, grades, design, and dimensions shown on the plans.
 2. Work includes preparing foundation soil, furnishing and installing leveling pad, unit drainage fill and backfill to the lines and grades shown on the construction drawings.
 3. Work includes furnishing and installing geogrid soil reinforcement of the type, size, location, and lengths designated on the construction drawings.

- 1.02 Delivery, Storage and Handling**
1. Contractor shall check all materials upon delivery to assure that the proper type, grade, color, and certification has been received.
 2. Contractor shall protect all materials from damage due to job site conditions and in accordance with manufacturer's recommendations. Damaged materials shall not be incorporated into the work.

PART 2: PRODUCTS

- 2.01 Modular Concrete Retaining Wall Units**
1. Material shall consist of a compacted #57 crushed stone base as shown on the construction drawings.
 2. Unit drainage fill shall consist of #57 crushed stone
 3. One cubic foot, minimum, of drainage fill shall be used for each square foot of wall face. Drainage fill shall be placed within cores of, between, and behind units to meet this requirement.
 4. Reinforced backfill shall be free of debris and meet the following gradation tested in accordance with ASTM D-422 and meet other properties shown on the plan:

Sieve Size	Percent Passing
2 inch	100-75
3/4 inch	100-75
No. 40	0-60
No. 200	0-50

 Plasticity Index (PI) <15 and Liquid Limit <40 per ASTM D-4318.
 5. Material can be site excavated soils where the above requirements can be met. Unsuitable soils for backfill (high plastic clays or organic soils) shall not be used in the reinforced soil mass.
 6. Geogrid Soil Reinforcement

- 2.02 Shear Connectors**
1. Shear connectors shall be 1/2 inch diameter thermoset isophthalic polyester resin-produced fiberglass reinforcement rods or equivalent to provide connection between vertically and horizontally adjacent units. Strength of shear connectors between vertical adjacent units shall be applicable over a design temperature of 10 degrees F to + 100 degrees F.
 2. Shear connectors shall be capable of holding the geogrid in the proper design position during grid pre-tensioning and backfilling.
- 2.03 Base Leveling Pad Material**
1. Reinforced backfill shall type SM, be free of debris and meet the following gradation tested in accordance with ASTM D-422 and meet other properties shown on the plan:
- 2.04 Unit Drainage Fill**
1. Unit drainage fill shall consist of #57 crushed stone
 2. One cubic foot, minimum, of drainage fill shall be used for each square foot of wall face. Drainage fill shall be placed within cores of, between, and behind units to meet this requirement.
- 2.05 Reinforced Backfill**
1. Reinforced backfill shall type SM, be free of debris and meet the following gradation tested in accordance with ASTM D-422 and meet other properties shown on the plan:
- 2.06 Geogrid Soil Reinforcement**

- 2.07 Drainage Pipe**
1. The drainage pipe shall be perforated corrugated HDPE pipe manufactured in accordance with ASTM D-1248.
- PART 3 EXECUTION**
- 3.01 Excavation**
1. Contractor shall excavate to the lines and grades shown on the construction drawings. Owner's representative shall be responsible for inspecting and approving the excavation prior to placement of leveling material or fill soils.
- 3.02 Base Leveling Pad**
1. Leveling pad material shall be placed to the lines and grades shown on the construction drawings, to a minimum thickness of 6 inches and extend laterally a minimum of 6' in front and behind the modular wall unit.
 2. Leveling pad shall be prepared to insure full contact to the base surface of the concrete units.
- 3.03 Modular Unit Installation**
1. First course of units shall be placed on the leveling pad at the appropriate line and grade. Alignment and level shall be checked in all directions and insure that all units are in full contact with the base and properly seated.
 2. Place the front of units side-by-side. Do not leave gaps between adjacent units. Layout of corners and curves shall be in accordance with manufacturer's recommendations.
 3. Install shear/connecting devices per manufacturer's recommendations.
 4. Place and compact drainage fill within and behind wall units. Place and compact backfill soil behind drainage fill. Follow wall erection and drainage fill closely with structure backfill.
 5. Maximum stacked vertical height of wall units, prior to unit drainage fill and backfill placement and compaction, shall not exceed three courses.
- 3.04 Structural Geogrid Installation**
1. Geogrid shall be oriented with the highest strength axis perpendicular to the wall alignment.
 2. Geogrid reinforcement shall be placed at the strengths, lengths, and elevations shown on the construction design drawings or as directed by the Engineer.
 3. The geogrid shall be laid horizontally on compacted backfill and attached to the modular wall units. Place the next course of modular concrete units over the geogrid. The geogrid shall be pulled taut, and anchored prior to

- backfill placement on the geogrid.
- 3.05 Reinforced Backfill Placement**
1. Reinforced backfill shall be placed, spread, and compacted in such a manner that minimizes the development of slack in the geogrid and installation damage.
 2. Reinforced backfill shall be placed and compacted in lifts not to exceed 6 inches where hand compaction is used, or 8 - 10 inches where heavy compaction equipment is used. Lift thickness shall be decreased to achieve the required density as required.
 3. Reinforced backfill shall be compacted to 95% of the maximum density as determined by ASTM D698. The moisture content of the backfill material prior to and during compaction shall be uniformly distributed throughout each layer and shall be + 3% to - 3% of optimum.
 4. Only lightweight hand-operated equipment shall be allowed within 3 feet from the tail of the modular concrete unit.
 5. Tracked construction equipment shall not be operated directly upon the geogrid reinforcement. A minimum fill thickness of 6 inches is required prior to operation of tracked vehicles over the geogrid. Tracked vehicle turning should be kept to a minimum to prevent tracks from displacing the fill and damaging the geogrid.
 6. Rubber tired equipment may pass over geogrid reinforcement at slow speeds, less than 10 MPH. Sudden braking and sharp turning shall be avoided.
 7. At the end of each day's operation, the Contractor shall slope the last lift of reinforced backfill away from the wall units to direct runoff away from wall face. The Contractor shall not allow surface runoff from adjacent areas to enter the wall construction site.
- 3.06 Cap Installation**
1. Cap units shall be glued to underlying units with an all-weather adhesive recommended by the manufacturer.
- 3.07 Field Quality Control**
1. The Owner shall engage inspection and testing services, including independent laboratories, to provide quality assurance and testing services during construction.
 2. As a minimum, quality assurance testing should include foundation soil inspection, soil and backfill testing, verification of design parameters, and observation of construction for general compliance with design drawings and specifications.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Stephen Laffan 7/6/07
DIRECTOR DATE

Chet Patil 7/3/07
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Debra... 7/6/07
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

PHONE REVISION

OWNER: 100 INVESTMENT LP
ATTN: HOWARD RESNECK
9200 RUMSEY ROAD
COLUMBIA, MARYLAND 21045
410-997-7222

DEVELOPER: BAYWOOD HOTELS
ATTN: CHET PATEL
7211 HANOVER PARKWAY
SUITE C-D
GREENBELT, MARYLAND 20770
301-345-8700

PROJECT: LYNDWOOD SQUARE
PARCEL E-1

AREA: TAX MAP 37, GRID NO. 11
PLAT NO. 15735, PARCEL E-1, ZONED PEC
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: RETAINING WALL DETAILS

HILLIS-CARNES
ENGINEERING ASSOCIATES, INC.

12011 Guilford Road Suite 106 Annapolis Junction, Maryland 20701
Baltimore, (410) 880-4788 D.C. (301) 470-4239 Fax (410) 880-4098

Patton Harris Rust & Associates, p.c
Engineers, Surveyors, Planners, Landscape Architects.
8818 Centre Park Drive
Columbia, MD 21045
T 410.997.8900
F 410.997.9282

DESIGNED BY: RWS
DRAWN BY: AM
PROJECT NO: 04145-B
DATE: JUNE 19, 2007
SCALE: AS SHOWN
DRAWING NO. 13 OF 13