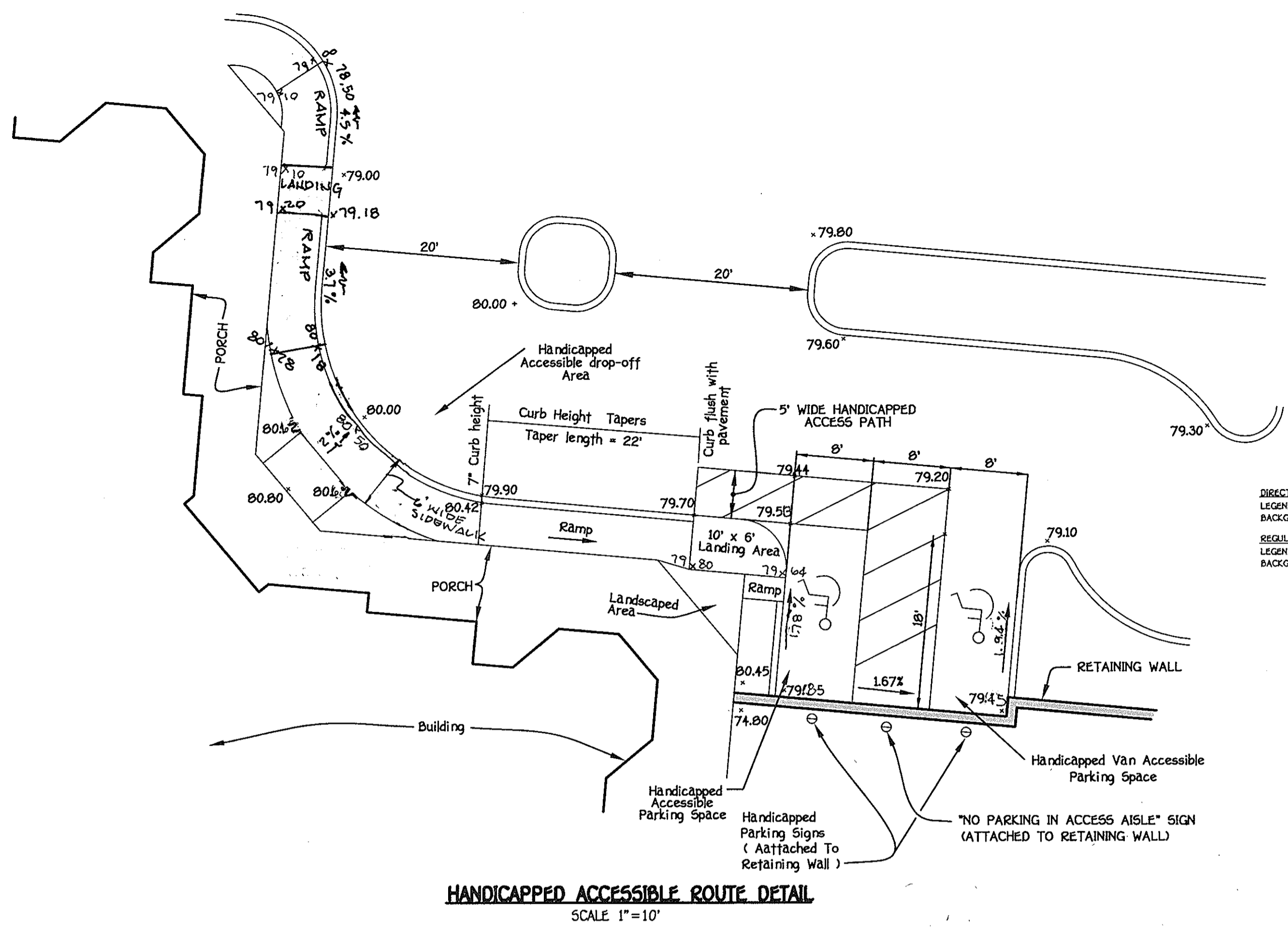
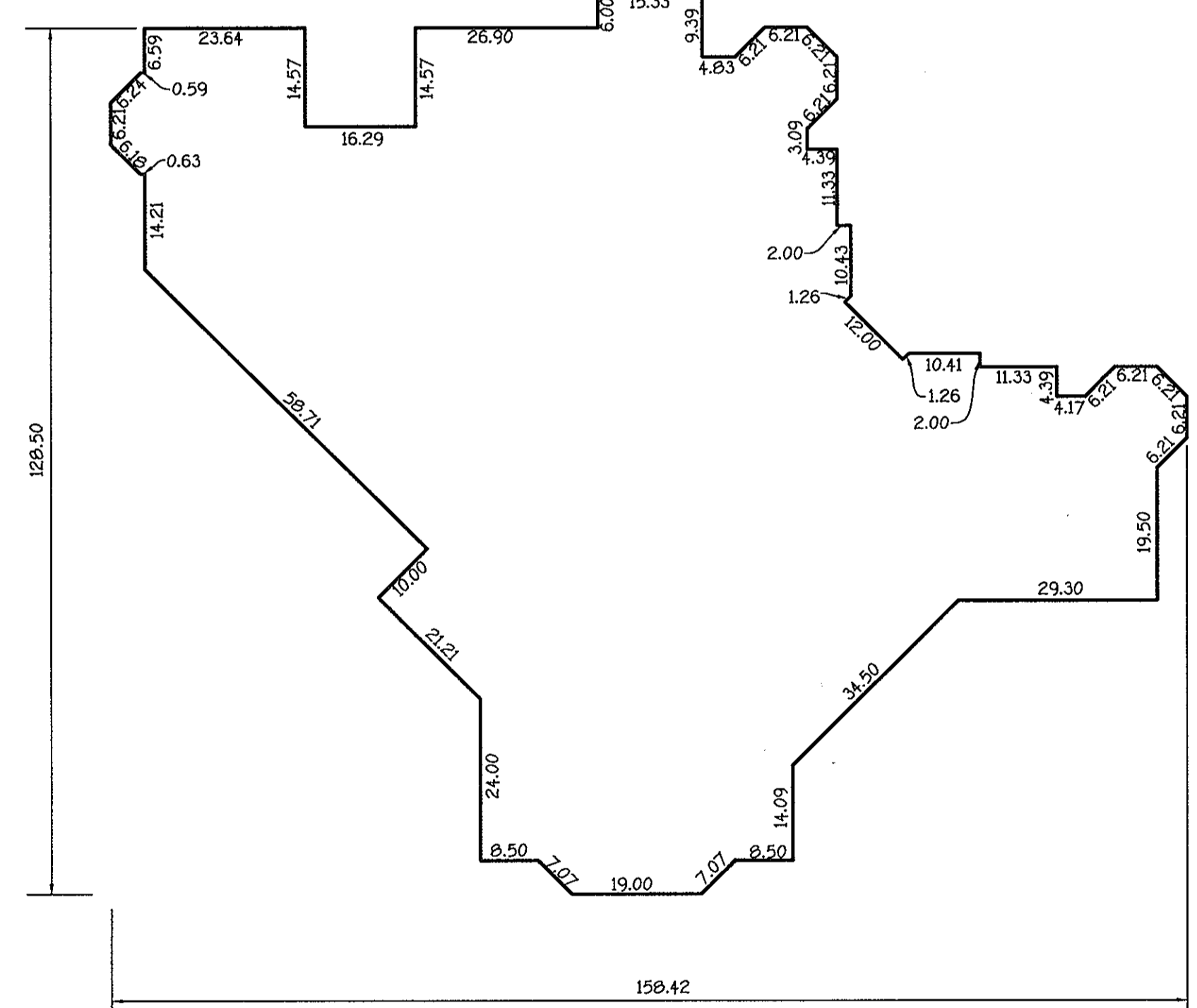


R:\Drawings\410359 Arcadia Square\Handicap Parking Details Building Footprints And Details Sheet 9.dwg, 11/10/2003 5:34:48 PM



HANDICAPPED ACCESSIBLE ROUTE DETAIL
SCALE 1"=10'



BUILDING FOOTPRINT
SCALE 1"=20'

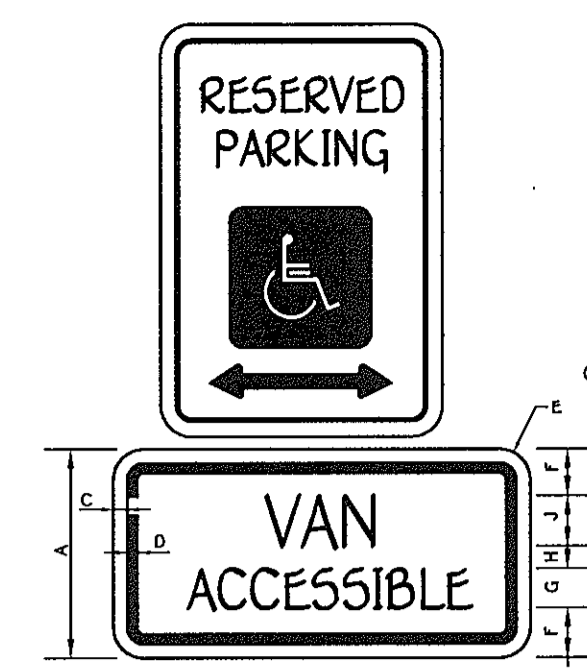
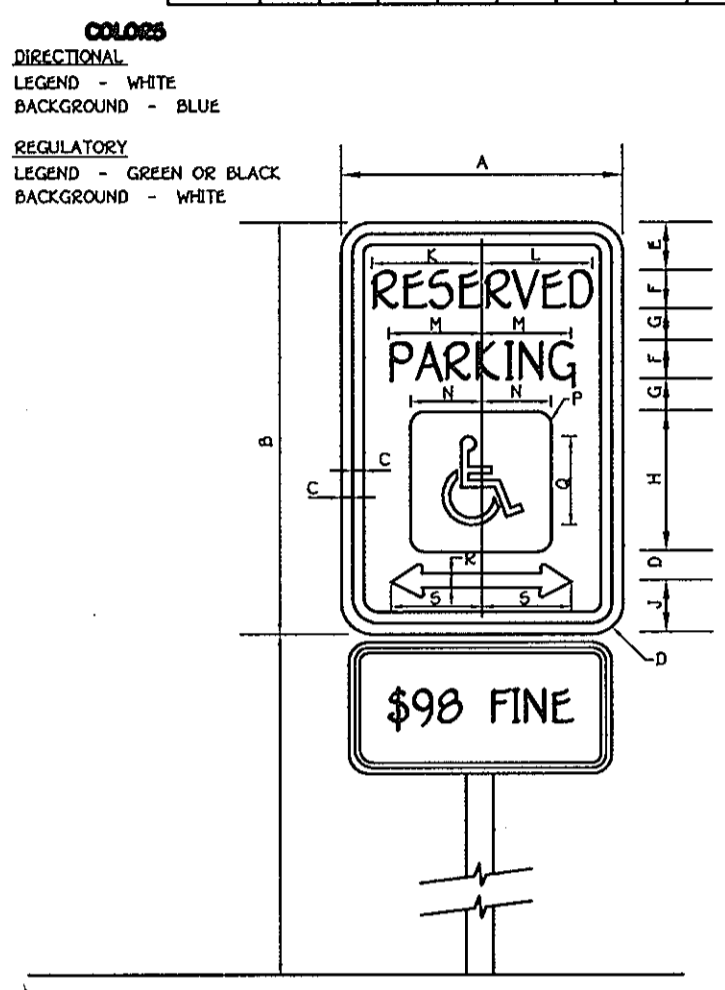
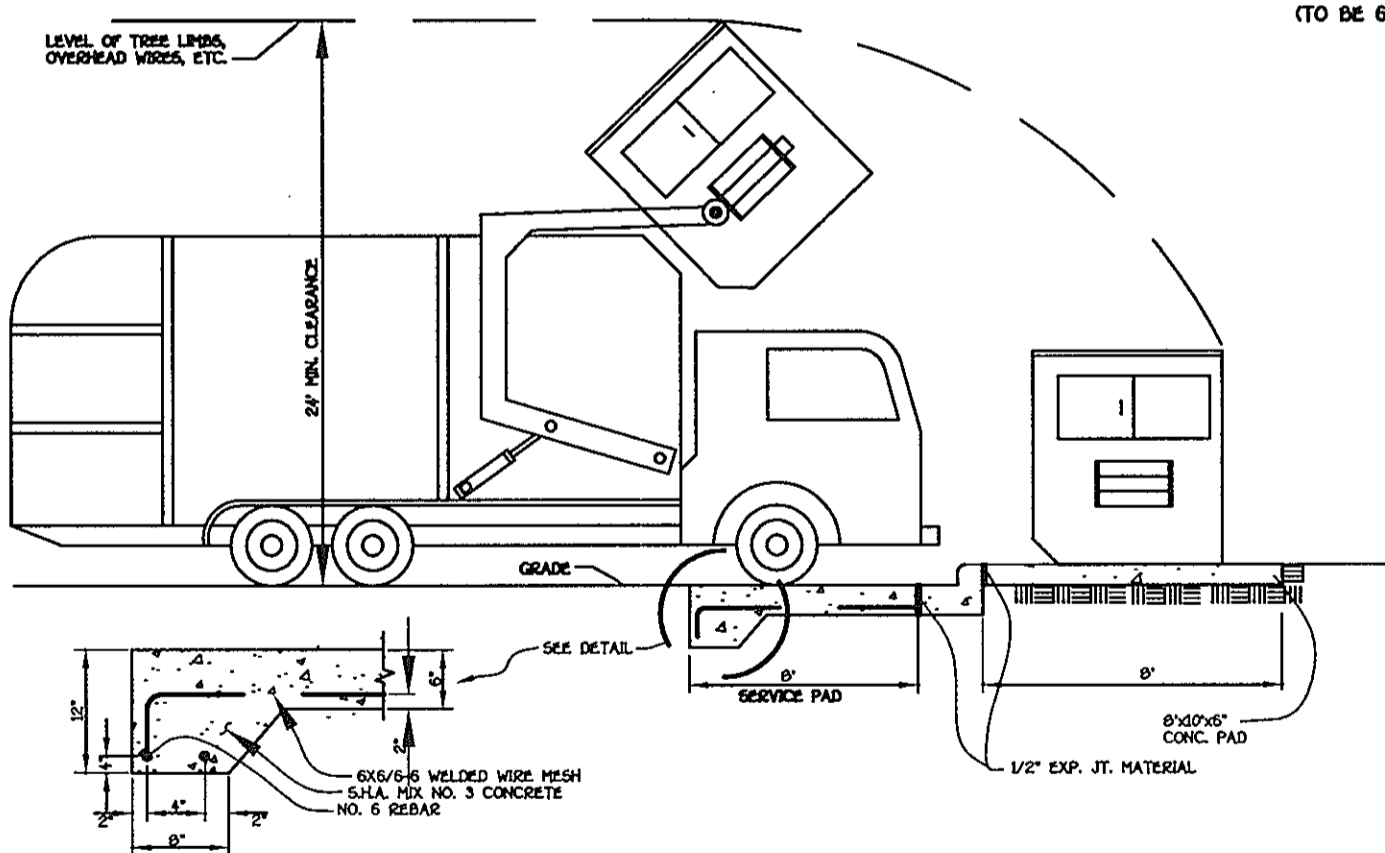


Table with 2 columns: SIGN SIZE, DIMENSIONS (INCHES). Rows include MIN, STD, and columns A through J.

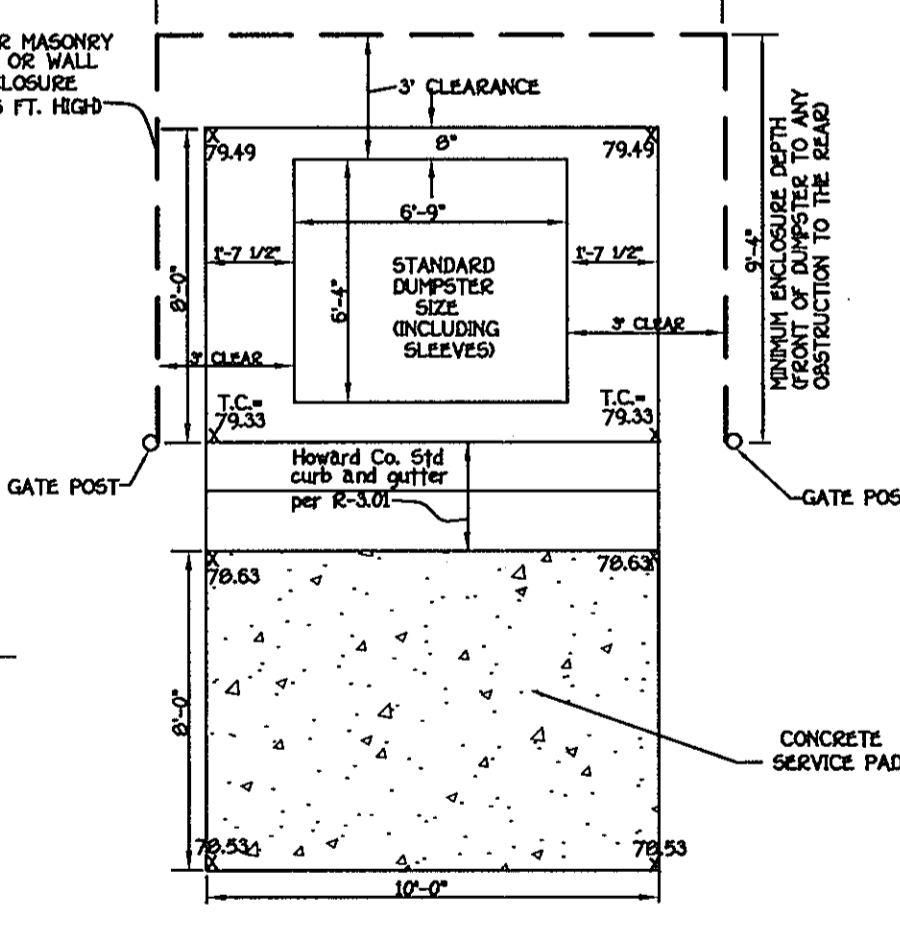


HANDICAPPED PARKING SIGN DETAIL
NOT TO SCALE

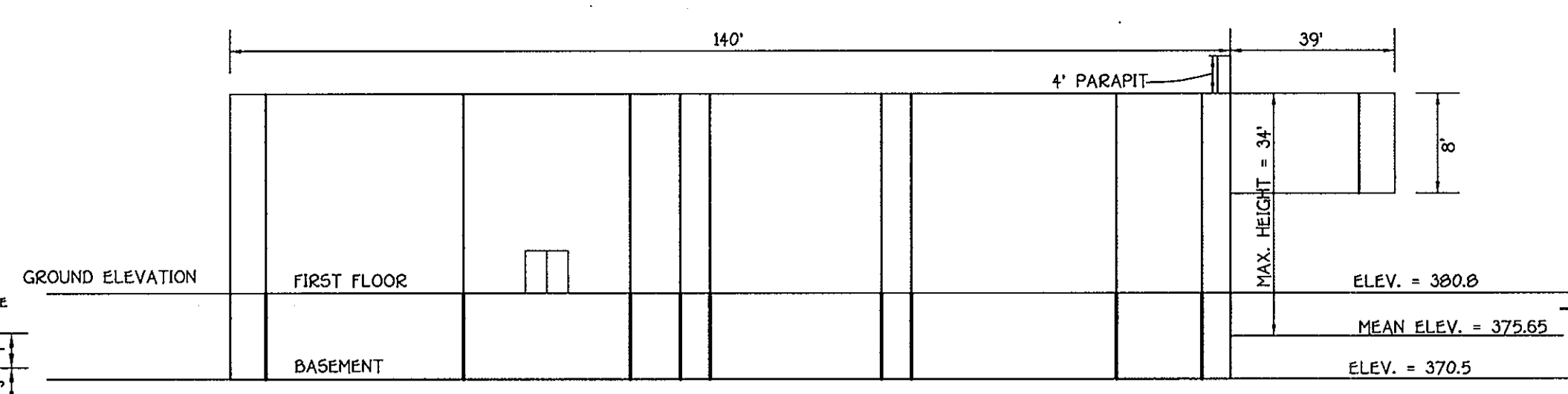
Table with 2 columns: SIGN SIZE, DIMENSIONS (INCHES). Rows include MIN, STD, and columns A through S.



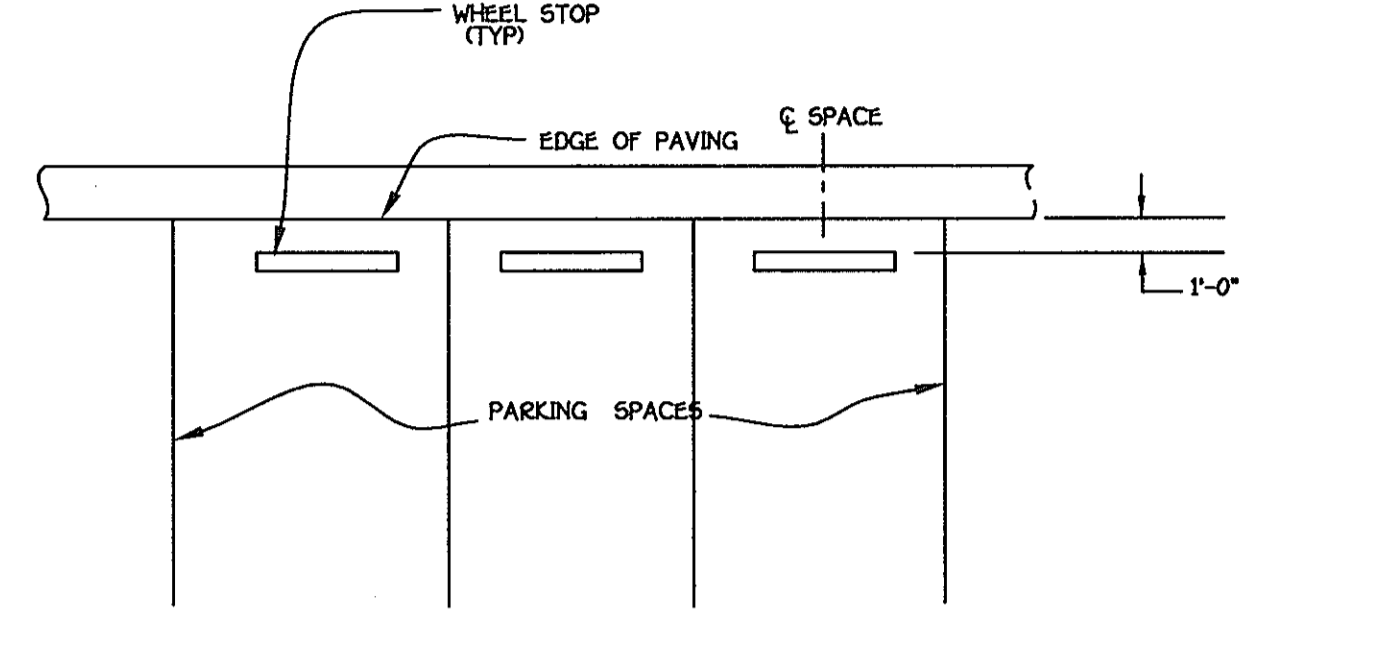
SOLID WASTE SERVICE PAD
NOT TO SCALE



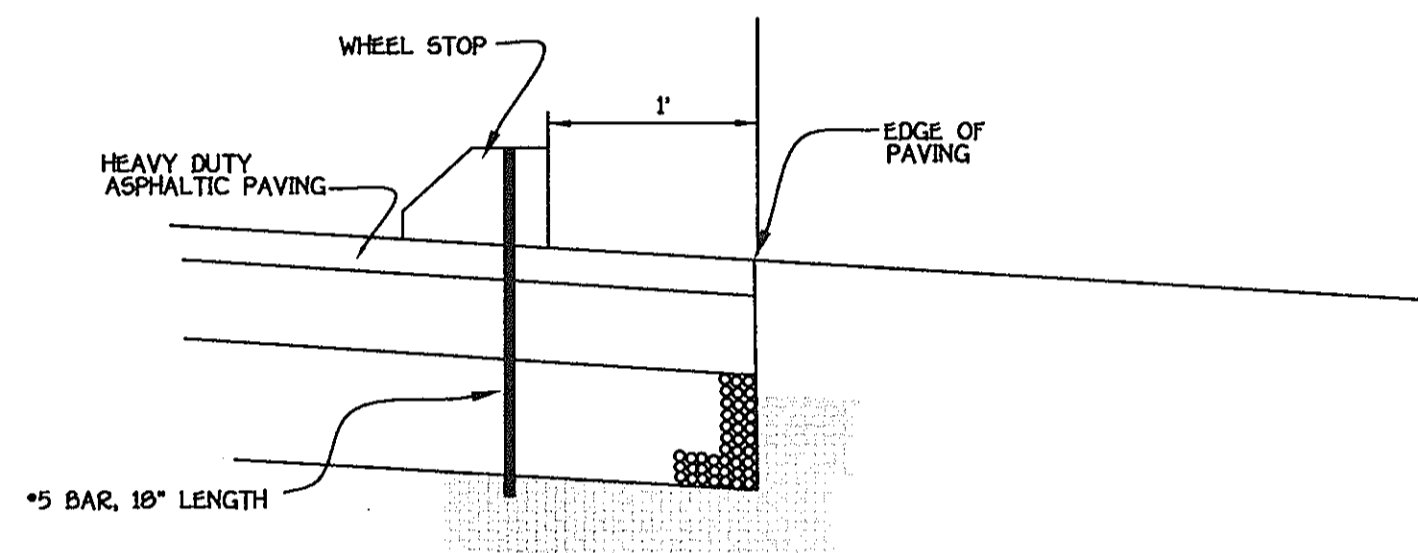
SOLID WASTE CONTAINER ENCLOSURE
NOT TO SCALE



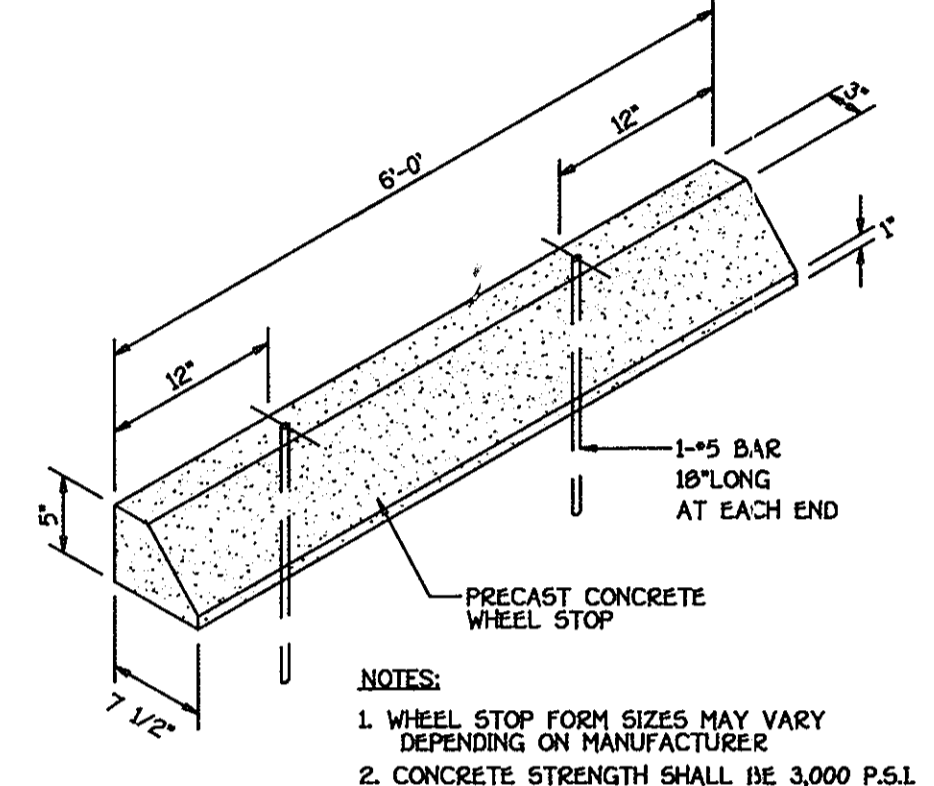
FRONT ELEVATION OF BUILDING
NOT TO SCALE



WHEEL STOP LOCATION DETAIL
NO SCALE

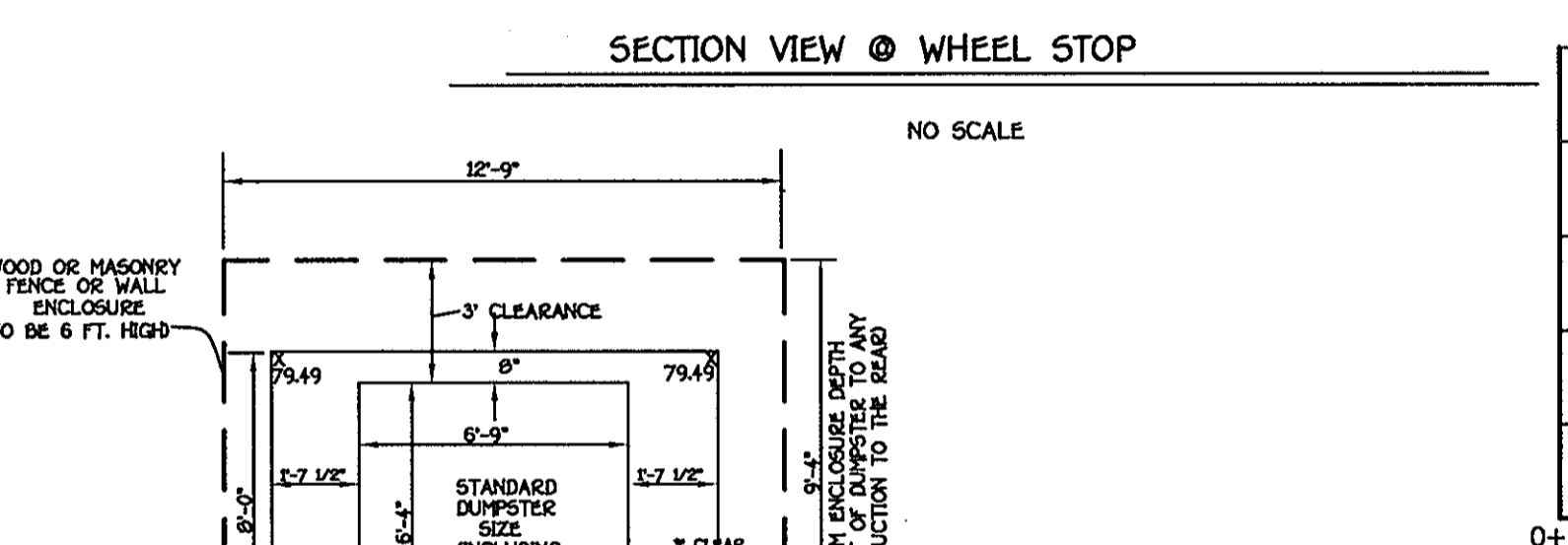


TYPICAL P-1 PAVING SECTION
(ON-SITE PARKING) NOT TO SCALE

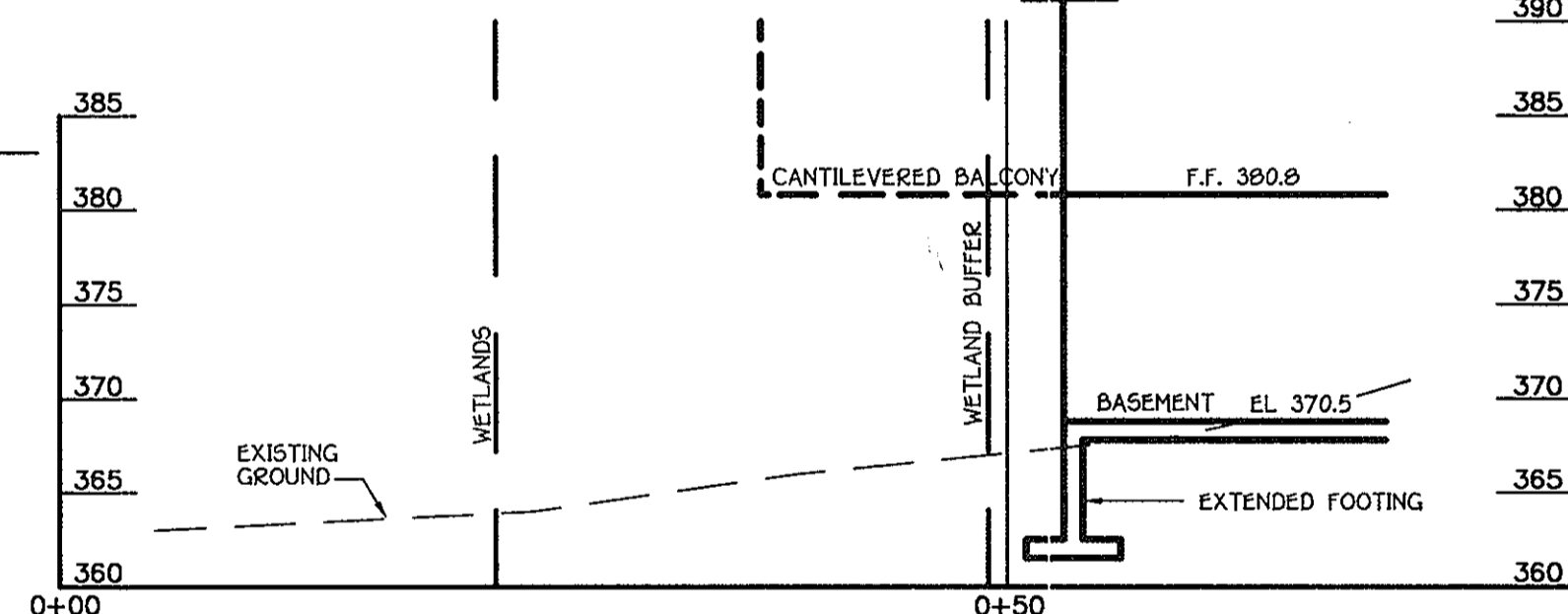


- NOTES: 1. WHEEL STOP FORM SIZES MAY VARY DEPENDING ON MANUFACTURER. 2. CONCRETE STRENGTH SHALL BE 3,000 P.S.I.

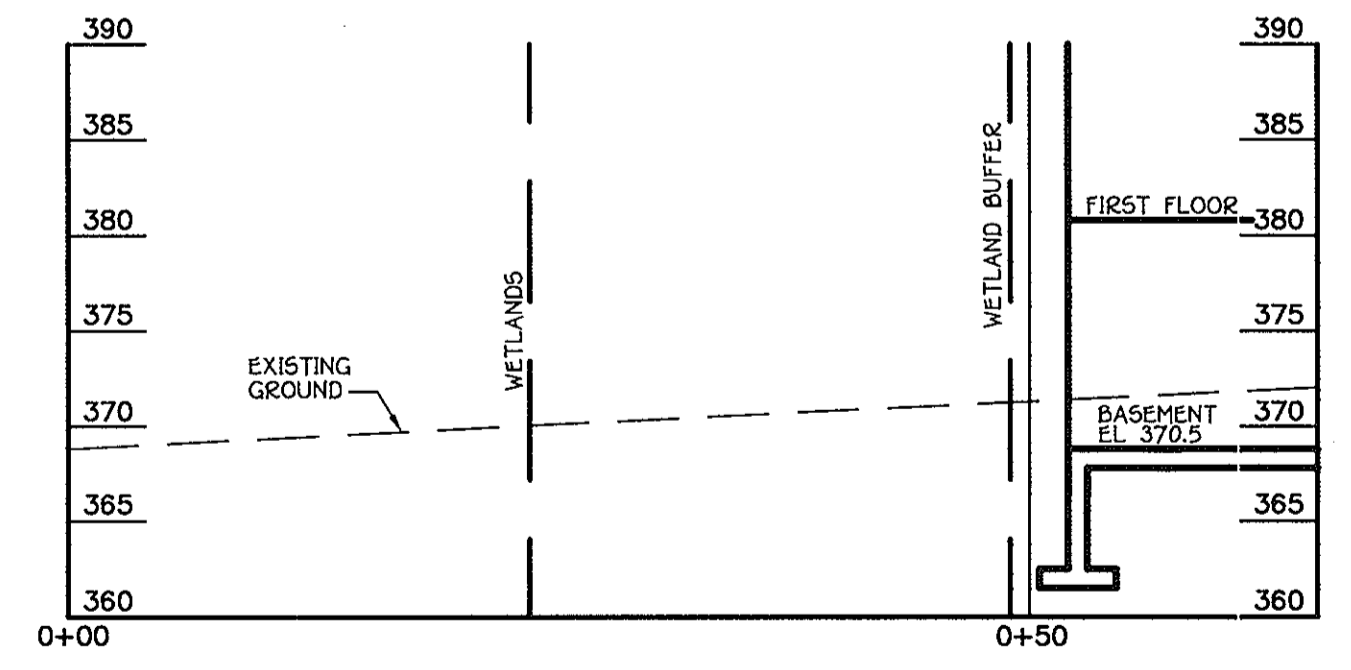
WHEEL STOP DETAIL
NO SCALE



SECTION VIEW @ WHEEL STOP
NO SCALE



BUILDING SECTION A
HORIZONTAL SCALE: 1"=10'
VERTICAL SCALE: 1"=10'



BUILDING SECTION B
HORIZONTAL SCALE: 1"=10'
VERTICAL SCALE: 1"=10'

Table with 3 columns: NO., DESCRIPTION, DATE. Includes project information and a signature block for Fisher, Collins & Carter, Inc.

ENGINEER'S CERTIFICATE: I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District. Signature of engineer (print name below signature) Date 1/20/03

DEVELOPER'S CERTIFICATE: I/We certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize specific on-site inspection by the Howard Soil Conservation District. Signature of Developer (print name below signature) Date 1/20/03

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING. Director - Department of Planning and Zoning. Chief, Division of Land Development. Chief, Development Engineering Division. SUBDIVISION: ARCADIA SQUARE. SECTION/AREA: 77. PARCEL NO.: 77. DEED NO.: 1551/89. BLOCK NO.: 4. ZONE: R-20. TAX/ZONE: 24. ELEC. DIST.: 602306. CENSUS TR.: 602306. WATER CODE: F-06. SEWER CODE: 5754700.

HANDICAP PARKING DETAILS BUILDING FOOTPRINTS AND DETAILS. ARCADIA SQUARE GROUP CARE FACILITY. TAX MAP No.: 24. PARCEL No.: 77. SECOND ELECTION DISTRICT: HOWARD COUNTY, MARYLAND. SCALE: AS SHOWN. DATE: JANUARY 13, 2003. SHEET 9 OF 14. SDP-02-113

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: Arcadia Square, Location: Howard County, Maryland, Boring Number: SWM-1, Job #: 01584A

ELEV.	SOIL DESCRIPTION	STR. DEPTH	DEPTH	CON.	SAMPLE BLOWS	NO.	REC.	BORING & SAMPLING NOTES
381.8	SURFACE	0.0						
379.8	Brown, moist, soft to medium stiff silty fine sand trace mica (M)	1	1-2.3	1	10"	1	10"	3" Topsoil
375.0	Brown, moist, loose to medium dense silty fine sand (SM)	2	1-2.4	2	10"	2	10"	Groundwater encountered at 9.5' while drilling
370.0	Brown, moist, loose to medium dense silty fine sand (SM)	3	3-4.6	3	15"	3	15"	Caved in at 13.0' at Completion
365.0	Brown, moist, loose to medium dense silty fine sand (SM)	4	3-4.5	4	15"	4	15"	Backfilled after 24 hours
360.0	Bottom of Hole at 16.5'							

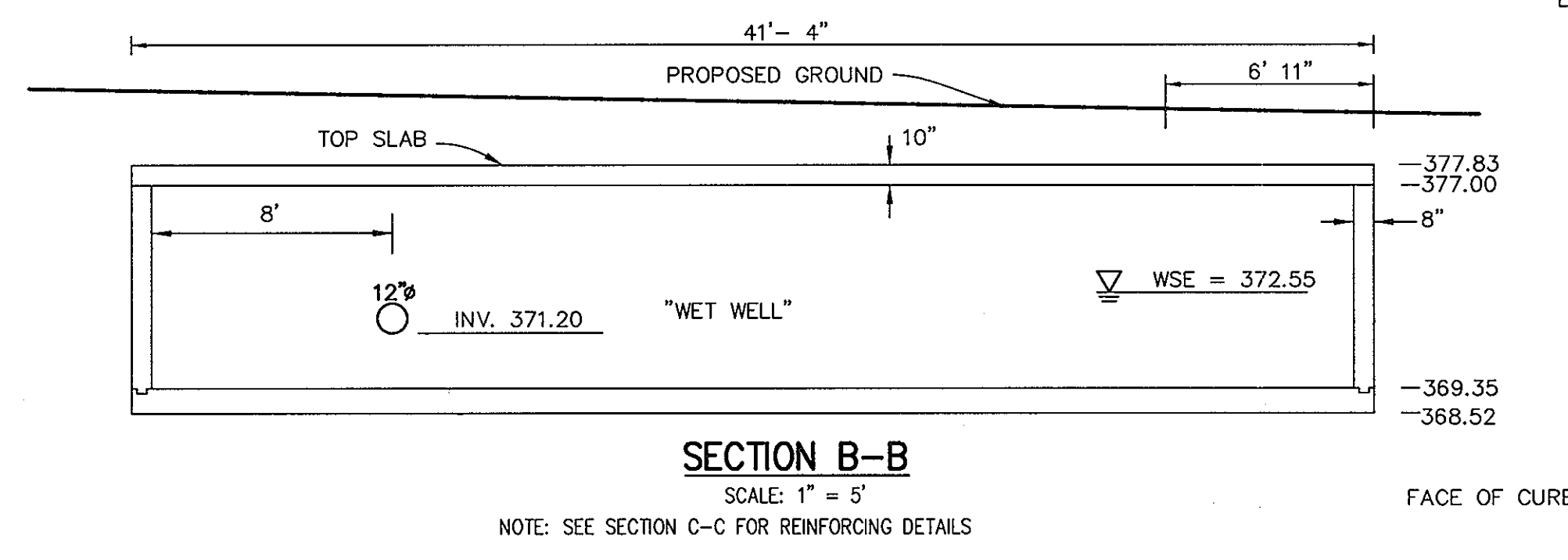
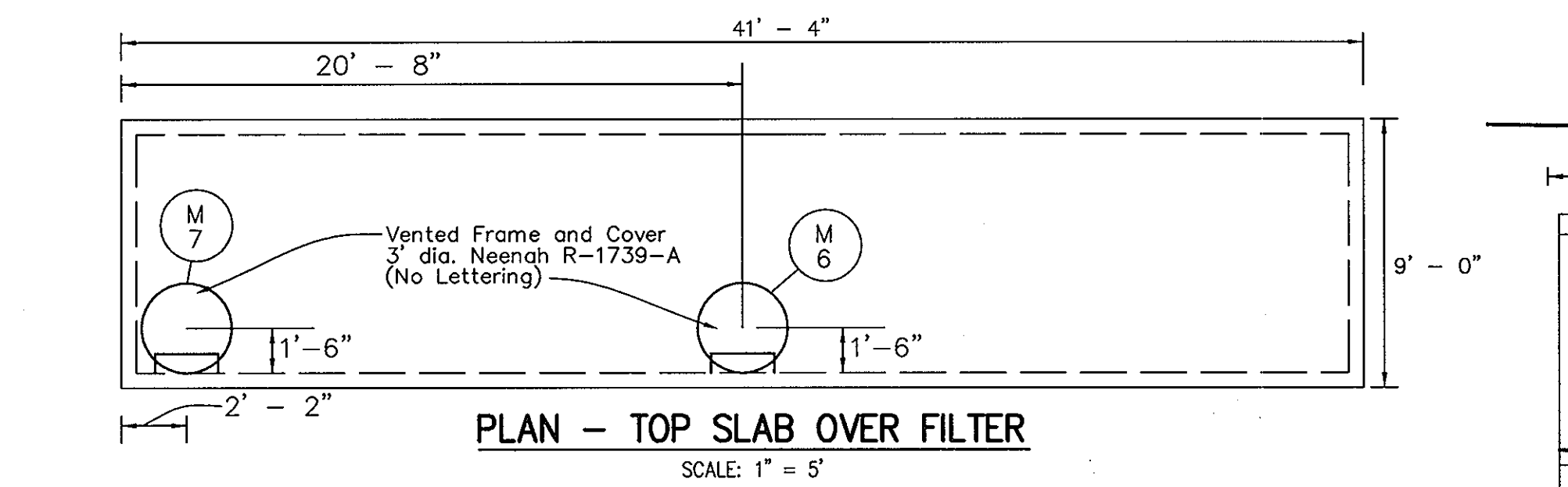
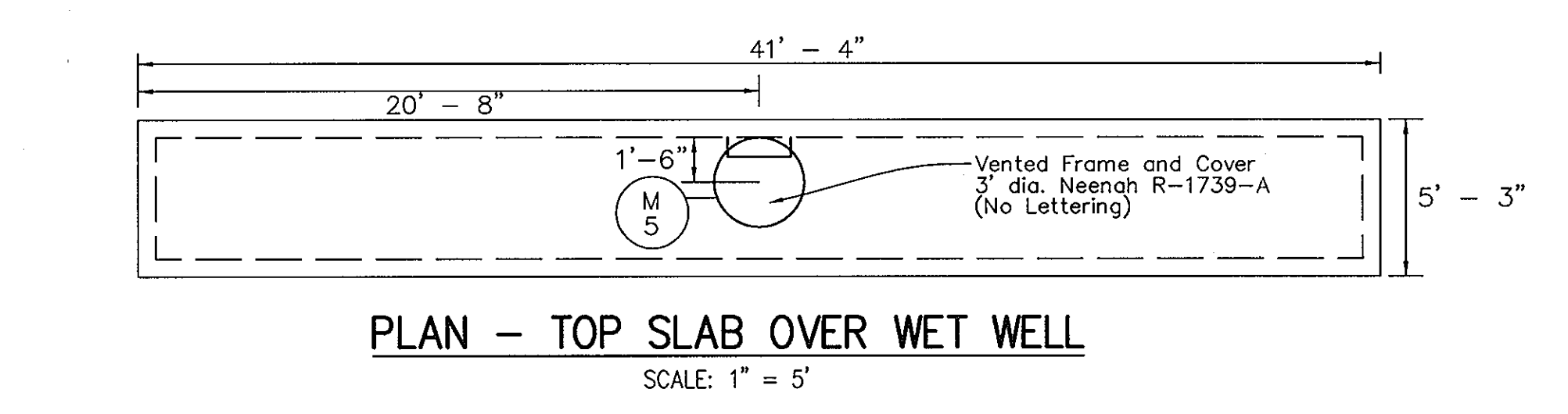
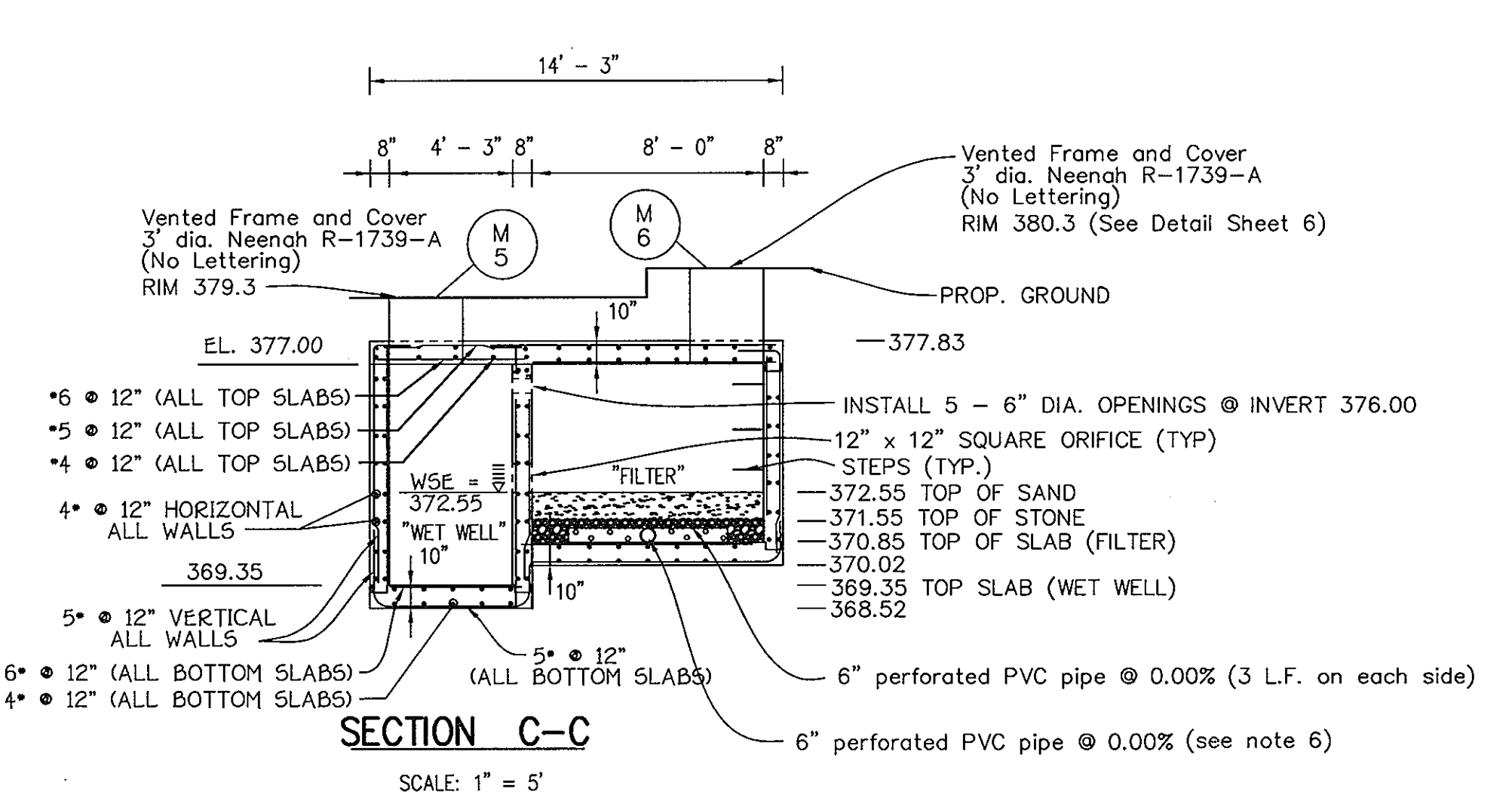
SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED. SAMPLE CONDITIONS: UNDISTURBED. GROUND WATER DEPTH: AT COMPLETION 11.0 FT. BORING METHOD: HSA-HOLLOW STEM AUGERS.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: Arcadia Square, Location: Howard County, Maryland, Boring Number: SWM-2, Job #: 01584A

ELEV.	SOIL DESCRIPTION	STR. DEPTH	DEPTH	CON.	SAMPLE BLOWS	NO.	REC.	BORING & SAMPLING NOTES
378.0	SURFACE	0.0						
376.0	Brown, moist, soft to medium stiff silty fine sand (M)	1	2-2.3	1	10"	1	10"	3" Topsoil
372.55	Brown, moist, loose to medium dense micaceous silty fine sand (SM)	2	4-3.3	2	18"	2	18"	Groundwater encountered at 11.5' while drilling
369.35	Brown, moist, loose to medium dense micaceous silty fine sand (SM)	3	1-3.3	3	18"	3	18"	Caved in at 11.5' at Completion
365.2	Brown, moist, loose to medium dense micaceous silty fine sand (SM)	4	3-5.6	4	15"	4	15"	Backfilled after 24 hours
360.0	Bottom of Hole at 16.5'							

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED. SAMPLE CONDITIONS: UNDISTURBED. GROUND WATER DEPTH: AT COMPLETION 10.0 FT. BORING METHOD: HSA-HOLLOW STEM AUGERS.

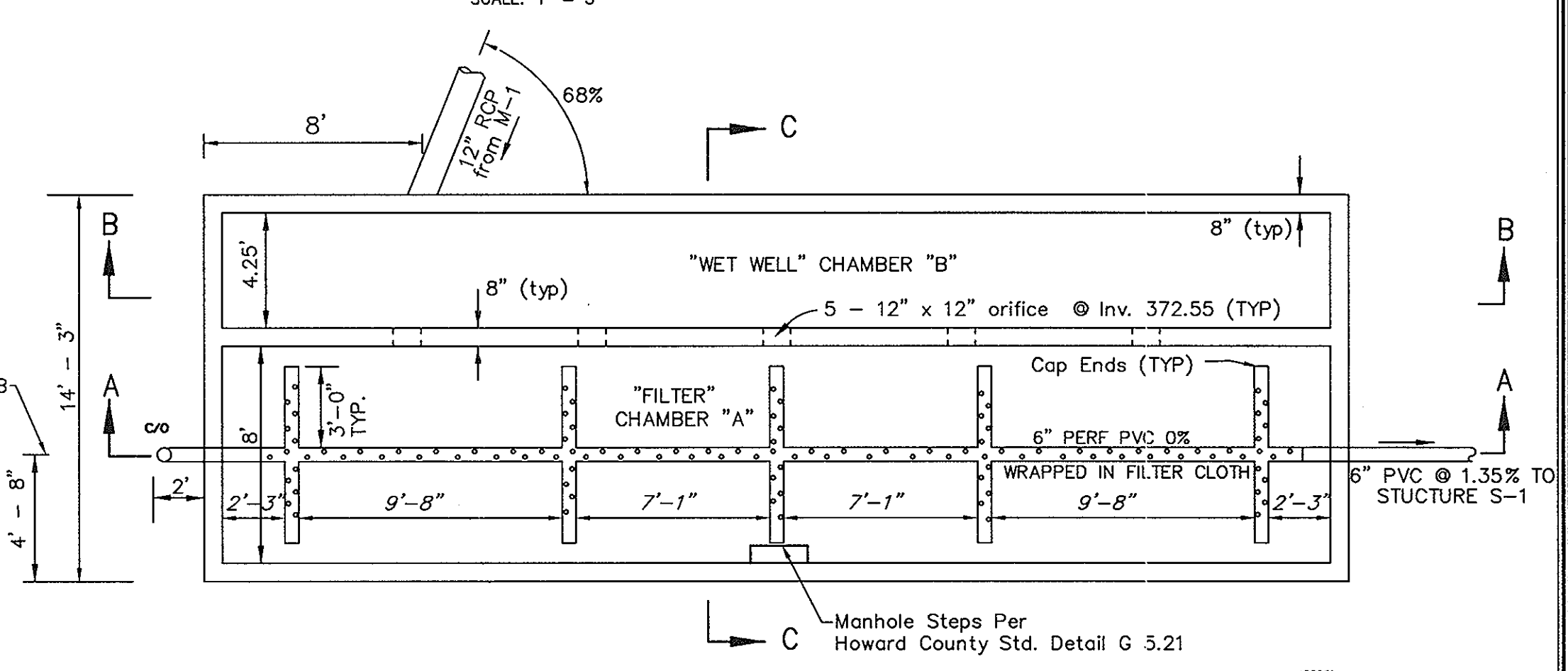
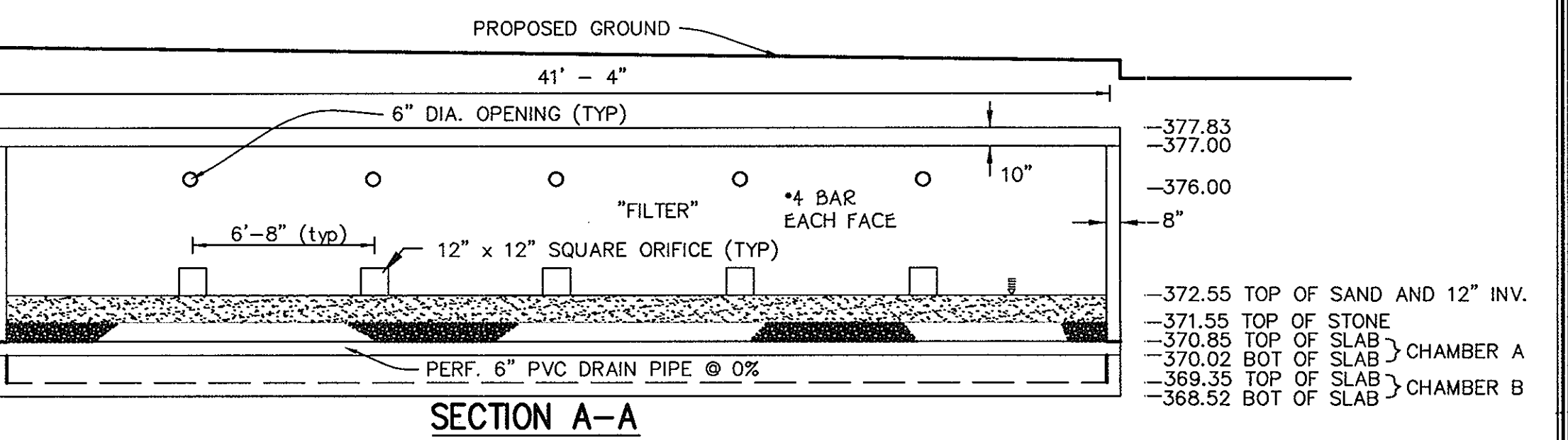


SAND FILTER NOTES AND SPECIFICATIONS

- All sand filter construction shall follow current MSHA specifications for construction and materials.
- For details not shown, refer to MSHA standard MD 374.21.
- Place filter fabric between 12" sand filter layer and stone. Filter fabric to be "Class C" per Standards and Specifications for Soil Erosion and Sediment Control.
- Sand shall meet ASTM C-33 (0.02" to 0.04" or approved equal, and be clean and free of debris.
- Stone around perforated drain pipe shall be washed AASHTO M43 (0.375" to 0.75") and free of debris.
- The PVC pipe beneath the sand filter shall be perforated Schedule 40 PVC @ 0.00% with a clean out at west end. Perforations shall be AASHTO M-36, class 2 perforations (3/8" diameter holes, with 3.3 sq. in. per square ft. of pipe surface area - 30 perforations per square ft. of pipe meets this requirement). Lateral "tee" shall be perforated and capped.
- Provide ladder rungs below manholes (see MSHA 383.9D).
- Rungs or steps shall be 10" minimum width at 12" c/c.
- Place a wide mesh geotextile fabric on top of the sand filter to be rolled up, removed, cleaned and reinstalled during maintenance operations.
- Sand filter bed shall be level (i.e., 0.0 %).
- The 6" outfall pipe shall be PVC Schedule 40 at 1.00% (min) slope to the w/g vault (5-1).
- Structure shall be placed on a firm subgrade approved by a geotechnical engineer.
- Grade and slope adjustments completed in field may be made with concrete mix no. 5 or brick and mortar.
- Manholes must be vented with an equivalent area of a 3' dia. opening (71 sq. in.) on each manhole.

GENERAL NOTES

SPECIFICATIONS	CURRENT AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES FOR DESIGN
LOADING	H6 25
CONCRETE	MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI
REINFORCING	ASTM A615 GRADE 60 2" MINIMUM CONCRETE COVER UNLESS NOTED OTHERWISE. BAR LAPS IN ACCORDANCE WITH AASHTO SPEC. NOT INDICATED
KEYS	DIMENSIONS AS NOTED
CHAMFER	3/4" x 3/4" ON EXPOSED EDGES.
OPENINGS	ALL OPENINGS TO HAVE ADDITIONAL REINFORCING TO EACH SIDE IF A MINIMUM TOTAL AMOUNT EQUAL TO THAT INTERRUPTED. OPENINGS ALSO TO HAVE #6 BARS EACH FACE ROTATED 45° FROM MAIN REINFORCING.



HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: Arcadia Square, Location: Howard County, Maryland, Boring Number: SWM-4, Job #: 01584A

ELEV.	SOIL DESCRIPTION	STR. DEPTH	DEPTH	CON.	SAMPLE BLOWS	NO.	REC.	BORING & SAMPLING NOTES
379.8	SURFACE	0.0						
378.0	Brown, moist, soft to medium stiff silty fine sand trace gravel fragments (SM)	1	2-2.4	1	15"	1	15"	3" Topsoil
375.0	Brown, moist, loose to medium dense silty fine sand (SM)	2	4-9.10	2	16"	2	16"	Groundwater encountered at 10.0' while drilling
370.0	Brown, wet, medium dense gravelly medium sand (SP-GP)	3	7-9.9	3	13"	3	13"	Caved in at 12.5' at Completion
365.0	Brown, moist, medium dense micaceous silty fine sand (SM)	4	6-7-17	4	13"	4	13"	Backfilled after 24 hours
360.0	Bottom of Hole at 16.5'							

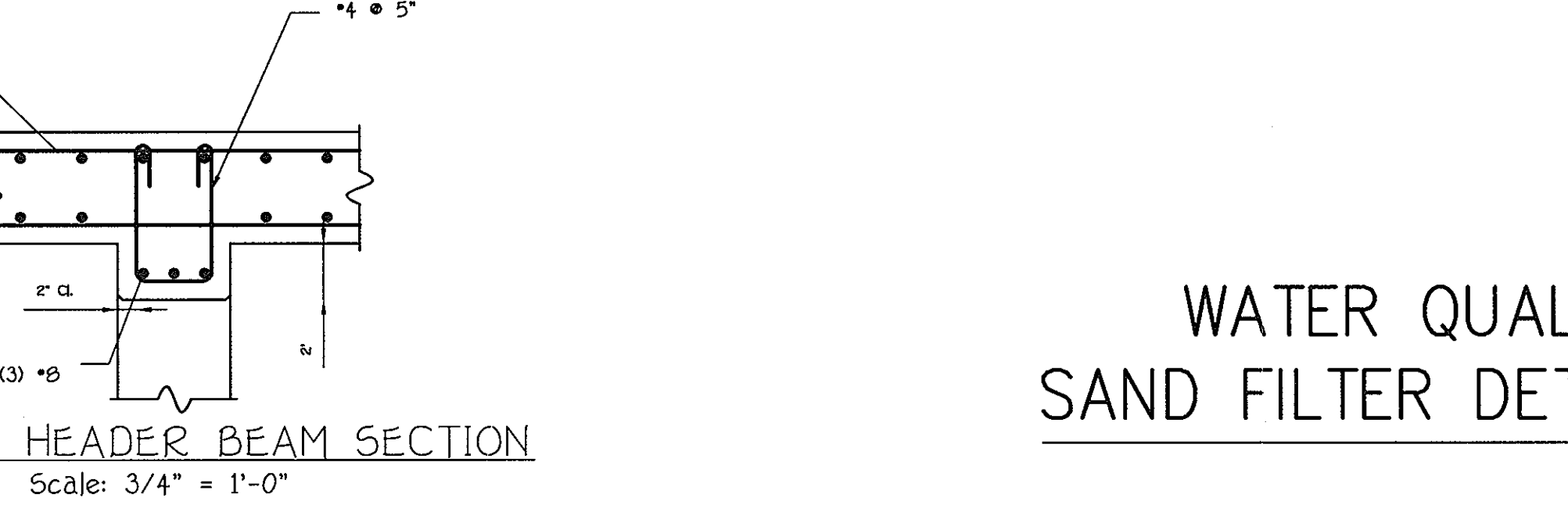
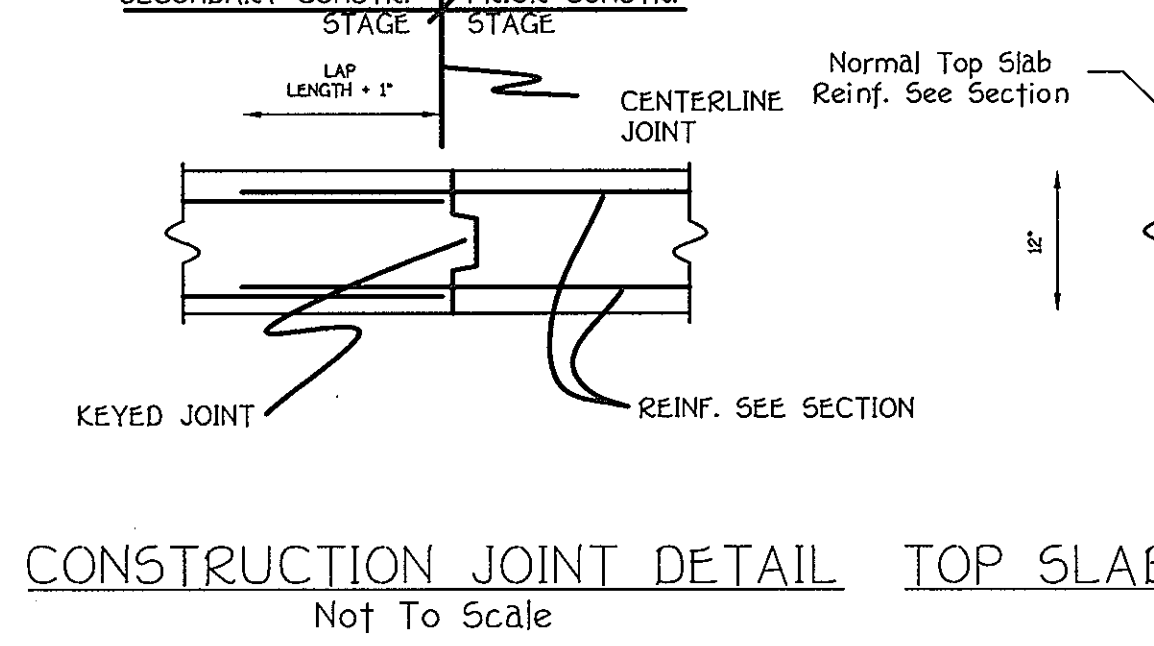
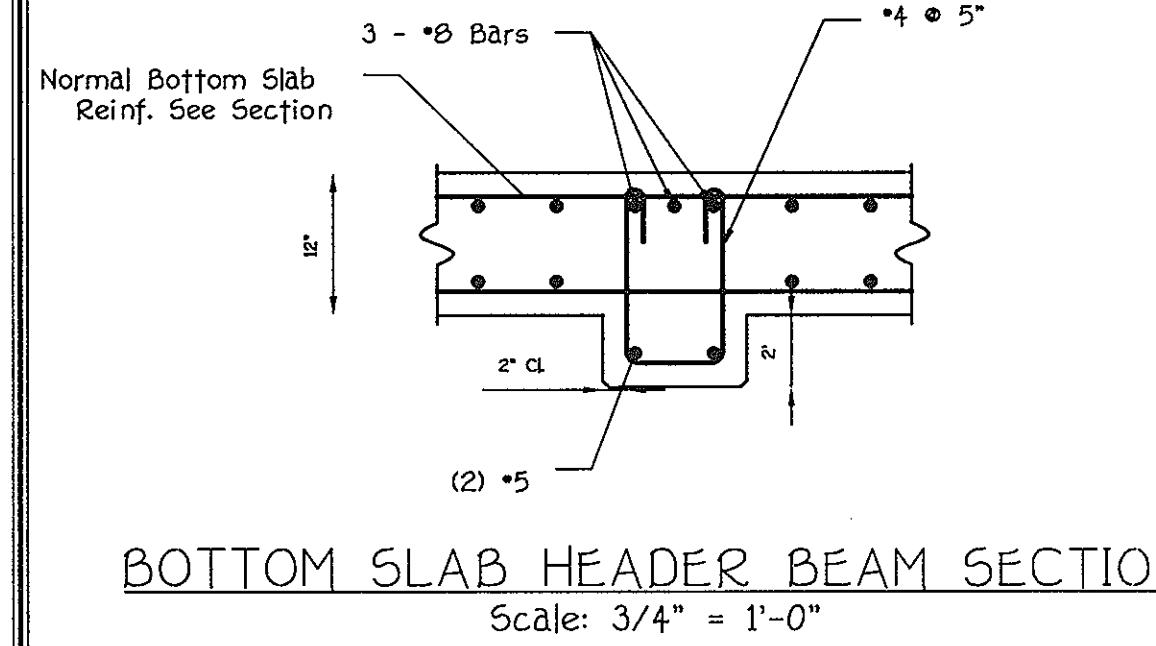
SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED. SAMPLE CONDITIONS: UNDISTURBED. GROUND WATER DEPTH: AT COMPLETION 8.5 FT. BORING METHOD: HSA-HOLLOW STEM AUGERS.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: Arcadia Square, Location: Howard County, Maryland, Boring Number: SWM-5, Job #: 01584A

ELEV.	SOIL DESCRIPTION	STR. DEPTH	DEPTH	CON.	SAMPLE BLOWS	NO.	REC.	BORING & SAMPLING NOTES
378.0	SURFACE	0.0						
376.0	Brown, moist, soft to medium stiff silty fine sand and roots (M)	1	1-2.3	1	12"	1	12"	4" Topsoil
372.55	Orange brown, moist, very loose to medium dense silty fine sand (SM)	2	2-2.3	2	13"	2	13"	Groundwater encountered at 9.0' while drilling
369.35	Brown, moist, loose to medium dense micaceous silty fine sand (SM)	3	7-8-11	3	14"	3	14"	Caved in at 11.5' at Completion
365.2	Brown, moist, loose to medium dense micaceous silty fine sand (SM)	4	6-10-15	4	15"	4	15"	Backfilled after 24 hours
360.0	Bottom of Hole at 16.5'							

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED. SAMPLE CONDITIONS: UNDISTURBED. GROUND WATER DEPTH: AT COMPLETION 8.5 FT. BORING METHOD: HSA-HOLLOW STEM AUGERS.



WATER QUALITY SAND FILTER DETAIL (S-2)

NO.	DESCRIPTION	DATE

ENGINEER'S CERTIFICATE
I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Signature of Engineer: [Signature] Date: 1/22/03

DEVELOPER'S CERTIFICATE
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 inspection by the Howard Soil Conservation District.

Signature of Developer: [Signature] Date: 1/22/03

OWNER
LEWAL PARTNERSHIP, LLP
100 PAINTERS MILL ROAD
SUITE 900
OWINGS MILL, MARYLAND 21117
410-363-3434

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Planning and Zoning: [Signature] Date: 2/19/03

Chief, Development Engineering Division: [Signature] Date: 2/19/03

Director - Department of Planning and Zoning: [Signature] Date: 2/19/03

PROJECT	SECTION/AREA	PARCEL NO.
ARCADIA SQUARE	N/A	77

DEED REF.	BLOCK NO.	ZONE	TAX	ELEC. DIST.	CENSUS TR.
1551/89	4	R-20	24	2ND	602306

WATER CODE	SEWER CODE
F-06	5754700

STORMWATER MANAGEMENT NOTES AND DETAILS

ARCADIA SQUARE

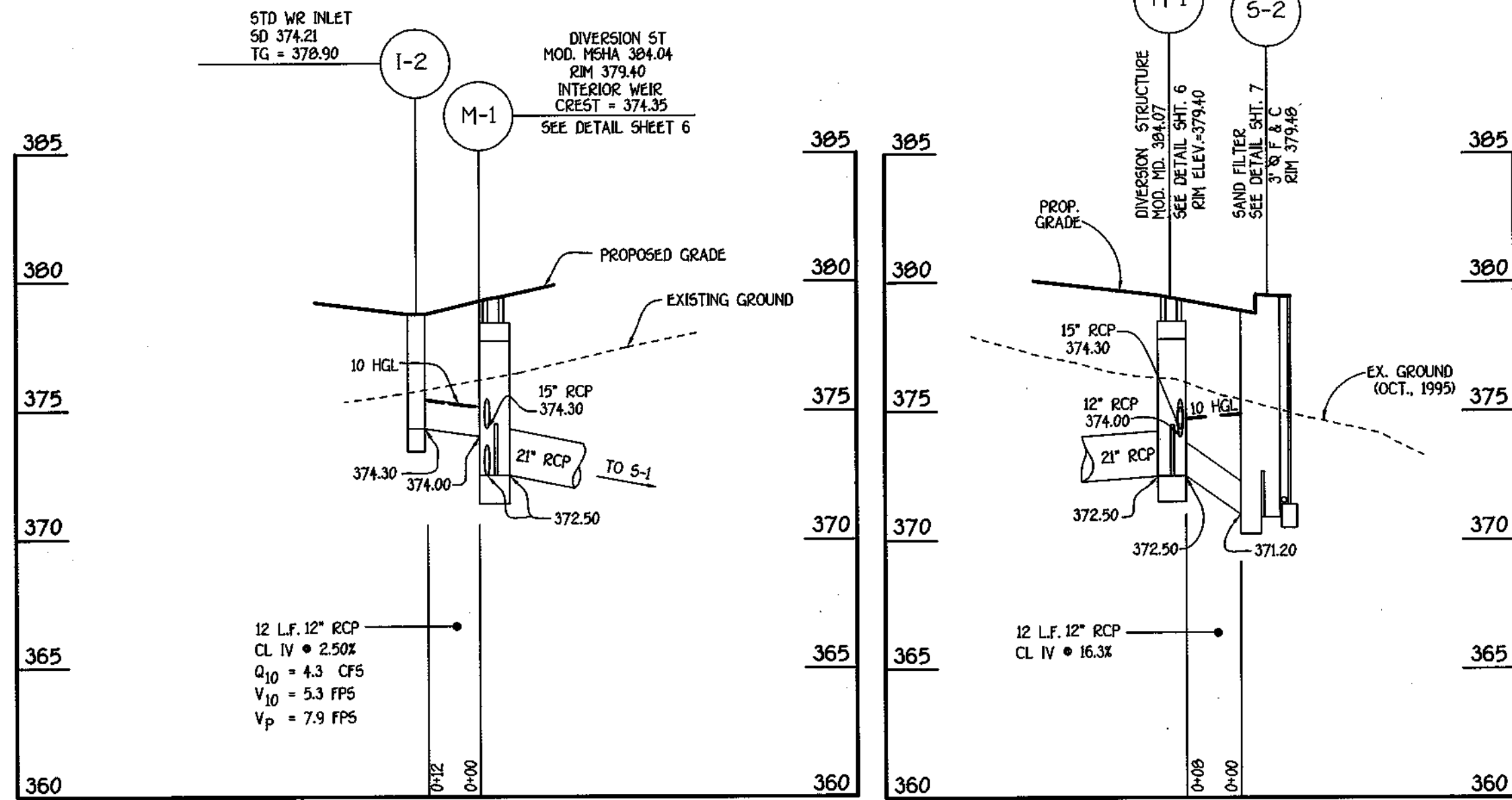
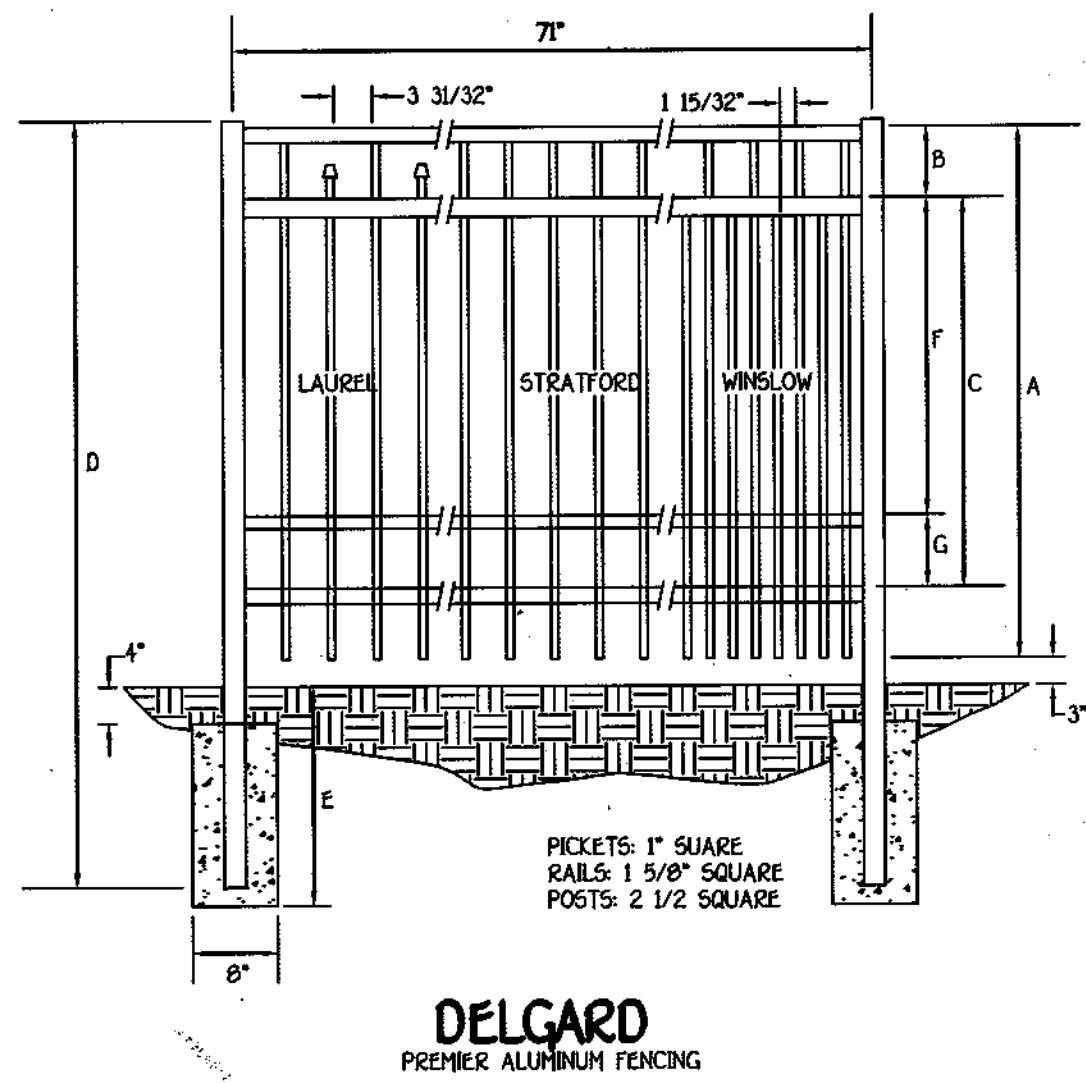
GROUP CARE FACILITY

TAX MAP No: 24 PARCEL No: 77
2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JANUARY 13, 2003
SHEET 7 OF 14 SDP-02-113



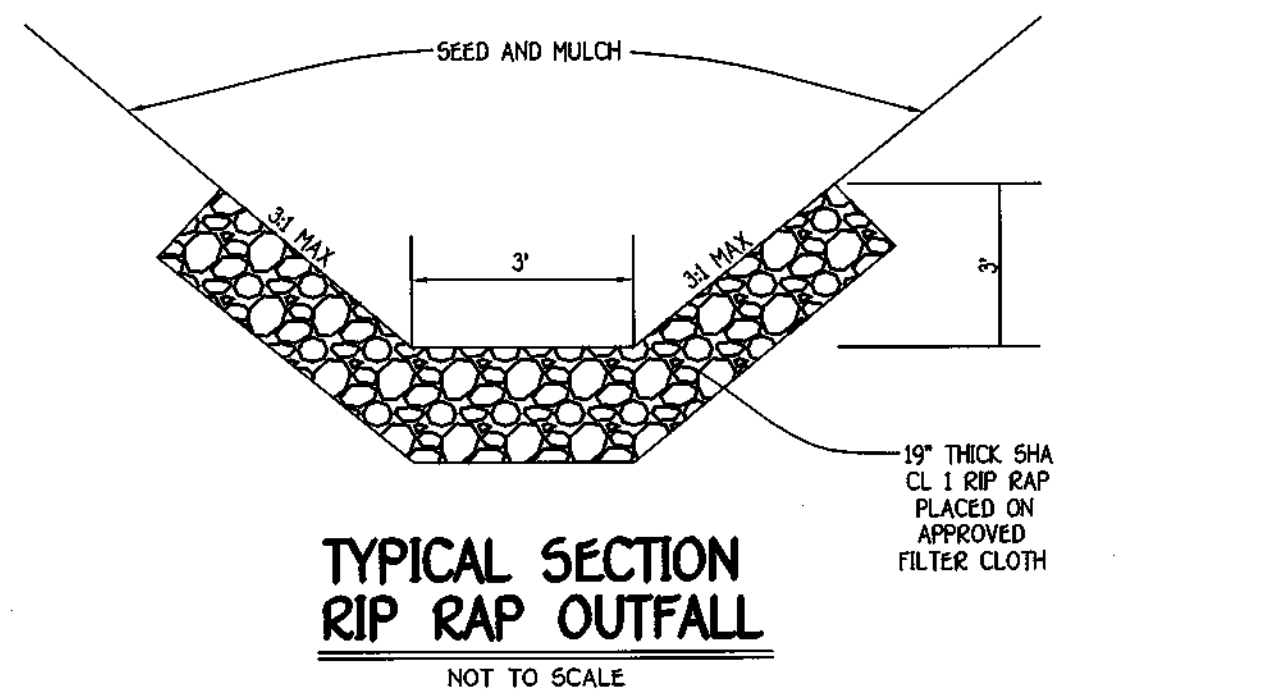
K:\Drawings\440359 Arcadia Square\Stormwater Management\Notes And Details\Sheet 7.dwg, 1/13/2003 2:26:09 PM

NOMINAL HEIGHT	A	B	C	D	E	F	G
48" (3-RAIL)	48"	8"	32"	70"	20"	N/A	N/A
60" (3-RAIL)	60"	8"	44"	88"	26"	N/A	N/A
72" (3-RAIL)	72"	8"	56"	106"	32"	N/A	N/A
84" (3-RAIL)	84"	9"	N/A	124"	38"	58"	9"
96" (3-RAIL)	96"	9"	N/A	142"	44"	70"	9"

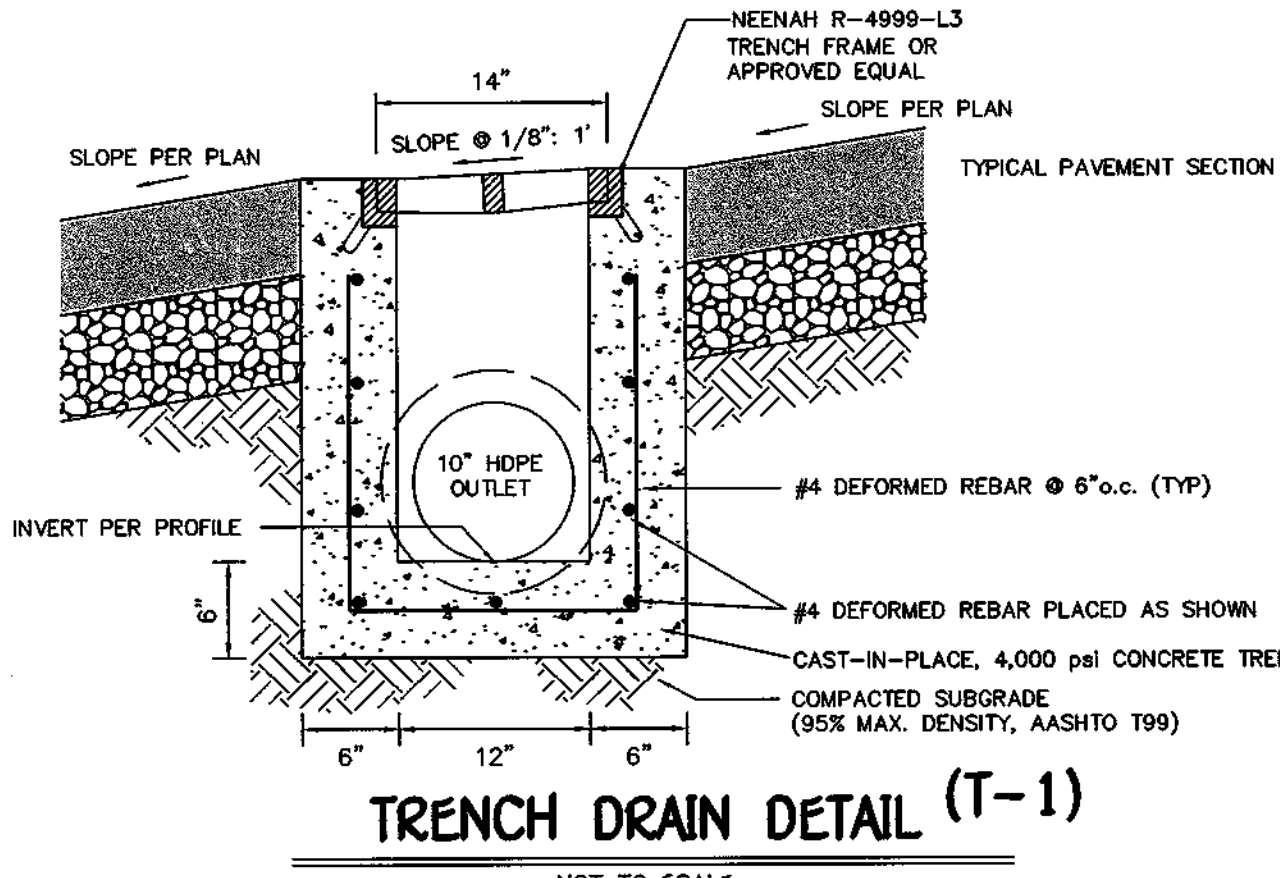


STORM DRAIN PROFILE I-2 TO M-1

STORM DRAIN PROFILE M-1 TO 5-2



TYPICAL SECTION RIP RAP OUTFALL



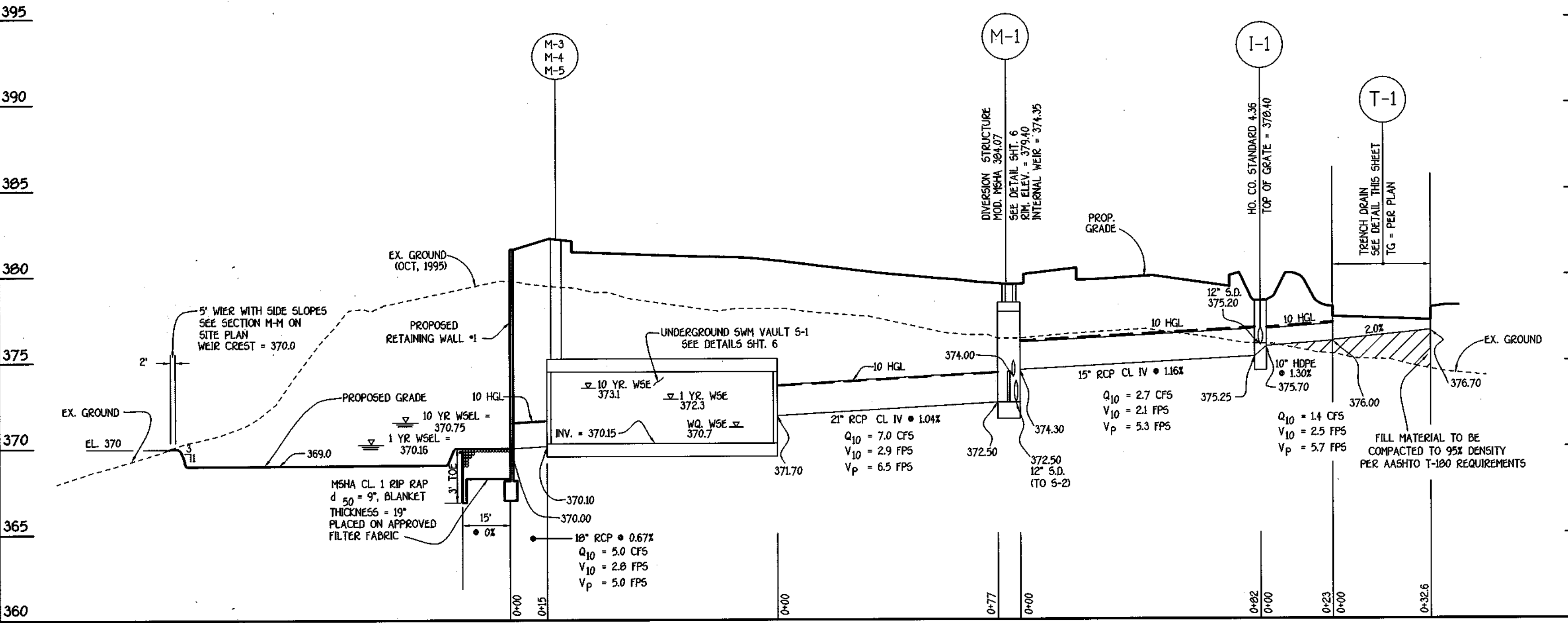
TRENCH DRAIN DETAIL (T-1)

STRUCTURE	NORTH	EAST	TYPE	STD. DETAILS	GRATE/RIM ELEV.	INV. IN	INV. OUT	REMARKS
I-1	506773.06	1357729.39	RCP OPEN END GRATE	SD 4.36	378.40	375.70	375.25	
I-2	506698.42	1357750.82	SING. WR	SD 4.37	378.90	-	374.30	
M-1	506695.63	1357767.96	DIVERSION STRUCTURE	SHT. 6	379.40	374.00	372.50	
M-2	506657.76	1357907.32	3" DIA PRECAST	SHT. 6	382.2	-	370.10	
M-3	506695.62	1357925.76	3" DIA PRECAST	SHT. 6	380.0	-	370.15	
M-4	506666.32	1357928.12	3" DIA PRECAST	SHT. 6	381.0	-	370.15	
M-5	506666.98	135776.44	3" DIA PRECAST	SHT. 6	379.3	-	369.35	
M-6	506675.37	135775.27	3" DIA PRECAST	SHT. 6	380.2	-	370.85	
M-7	506677.02	1357796.97	3" DIA PRECAST	SHT. 6	380.1	-	370.85	
T-1	506769.49	1357884.72	TRENCH DRAIN	SHT. 5	PER PLAN	-	376.00	
S-1	PER PLAN	U.G. CONC. VAULT	SHT. 6	-	-	370.15	370.10	
S-2	PER PLAN	SAND FILTER	SHT. 7	-	-	371.2	370.85	

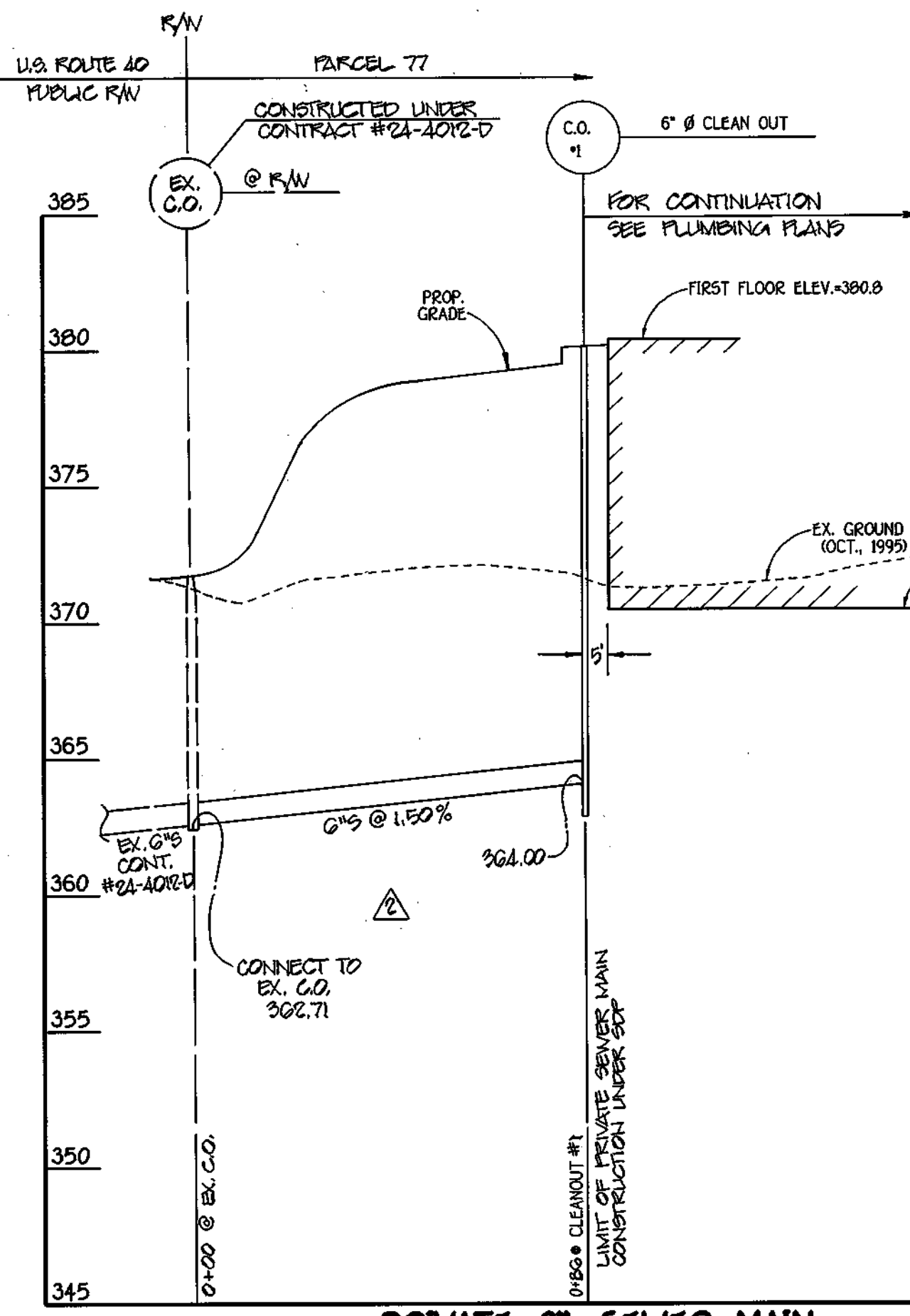
SIZE	MATERIAL	LENGTH
6"	SOLID PVC (SCH 40)	52'
10"	HDPE	23'
12"	RCP CLASS IV	18'
15"	RCP CLASS IV	82'
18"	RCP CLASS IV	15'
21"	RCP CLASS IV	77'
4"	PERF PVC (SCH 40)	275'

CONSTRUCTION SPECIFICATIONS FOR RIP-RAP OUTFALL

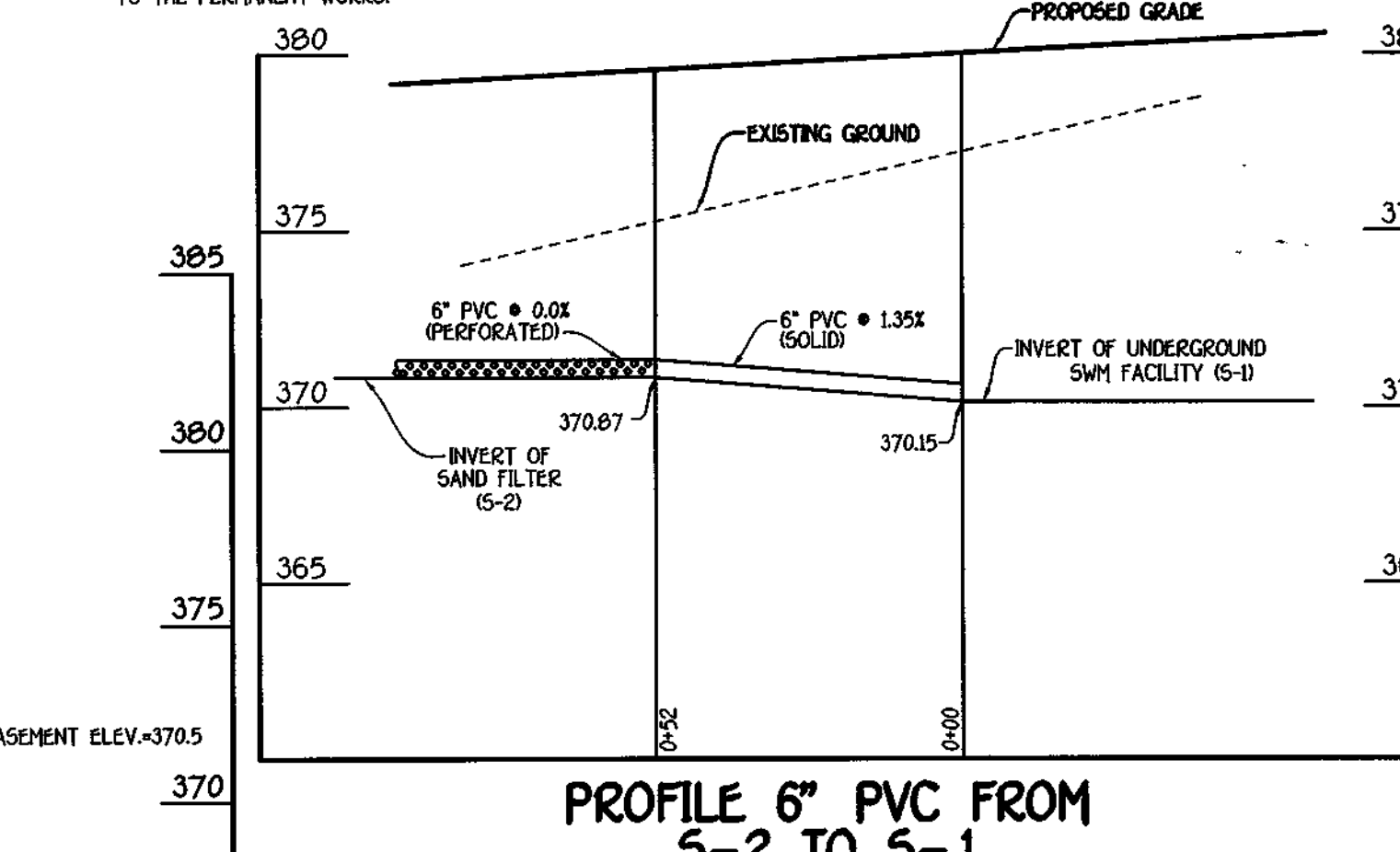
- THE SUBGRADE FOR THE FILTER, RIP RAP OR GABION SHALL BE PREPARED TO THE REQUIRED LINES AND GRADES. ANY FILL REQUIRED IN THE SUBGRADE SHALL BE COMPACTED TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
- THE ROCK OR GRAVEL SHALL CONFORM TO THE SPECIFIED GRADING LIMITS WHEN INSTALLED RESPECTIVELY IN THE RIP RAP OR FILTER.
- FILTER CLOTH SHALL BE PROTECTED FROM PUNCHING, CUTTING OR TEARING. ANY DAMAGE OTHER THAN AN OCCASIONAL HOLE SHALL BE REPAIRED BY PLACING ANOTHER PIECE OF CLOTH OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE CLOTH. ALL OVERLAPS, WHETHER FOR REPAIRS OR FOR JOINING TWO PIECES OF CLOTH SHALL BE A MINIMUM OF ONE FOOT.
- STONE FOR THE RIP RAP OR GABION OUTLET MAY BE PLACED BY EQUIPMENT. BOTH SHALL BE CONSTRUCTED TO THE FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. THE STONE FOR RIP RAP OR GABION OUTLETS SHALL BE DELIVERED AND PLACED IN A MANNER THAT WILL INSURE THAT IT IS REASONABLY HOMOGENEOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. RIP RAP SHALL BE PLACED IN A MANNER TO PREVENT DAMAGE TO THE FILTER BLANKET OR FILTER CLOTH. HAND PLACEMENT WILL BE REQUIRED TO THE EXTENT NECESSARY TO PREVENT DAMAGE TO THE PERMANENT WORKS.



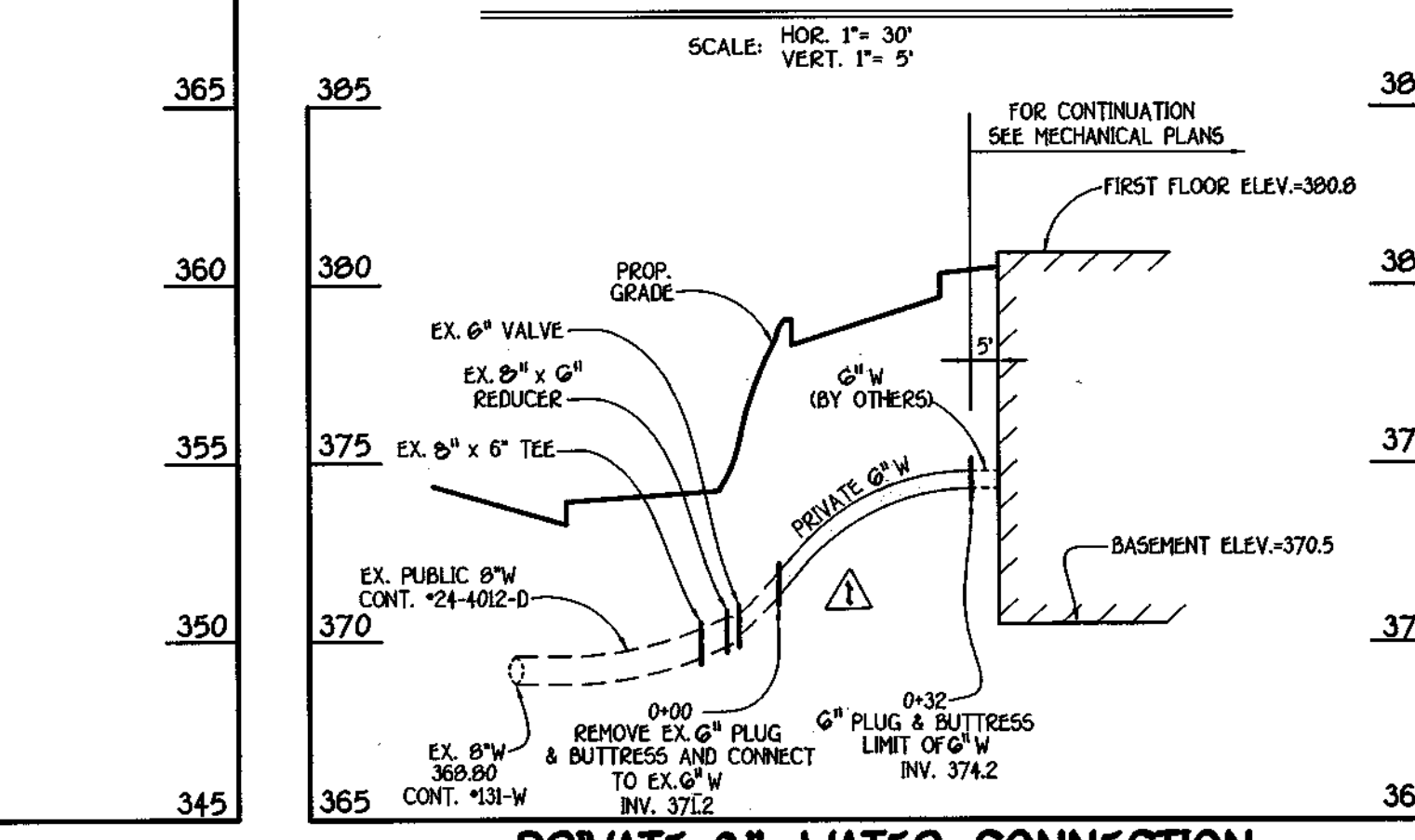
STORM DRAIN PROFILE 5-1 TO T-1



PRIVATE 6" SEWER MAIN



PROFILE 6" PVC FROM 5-2 TO 5-1



PRIVATE 6" WATER CONNECTION

NO.	REVISION	DATE
1	REVISE SEWER MAIN PROFILE	5/7/03
2	REVISE WATER SERVICE FROM 4" TO 6"	5/7/03

ENGINEER'S CERTIFICATE
 I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
 Signature of Engineer (print name below signature) _____ Date 1/23/03

DEVELOPER'S CERTIFICATE
 I/we certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic off-site inspection by the Howard Soil Conservation District.
 Signature of Developer (print name below signature) _____ Date 1/23/03

OWNER
 LEVAL PARTNERSHIP, LLP
 100 PAINTERS MILL ROAD, SUITE 900
 OWINGS MILLS, MARYLAND 21117
 (410) 363-3434

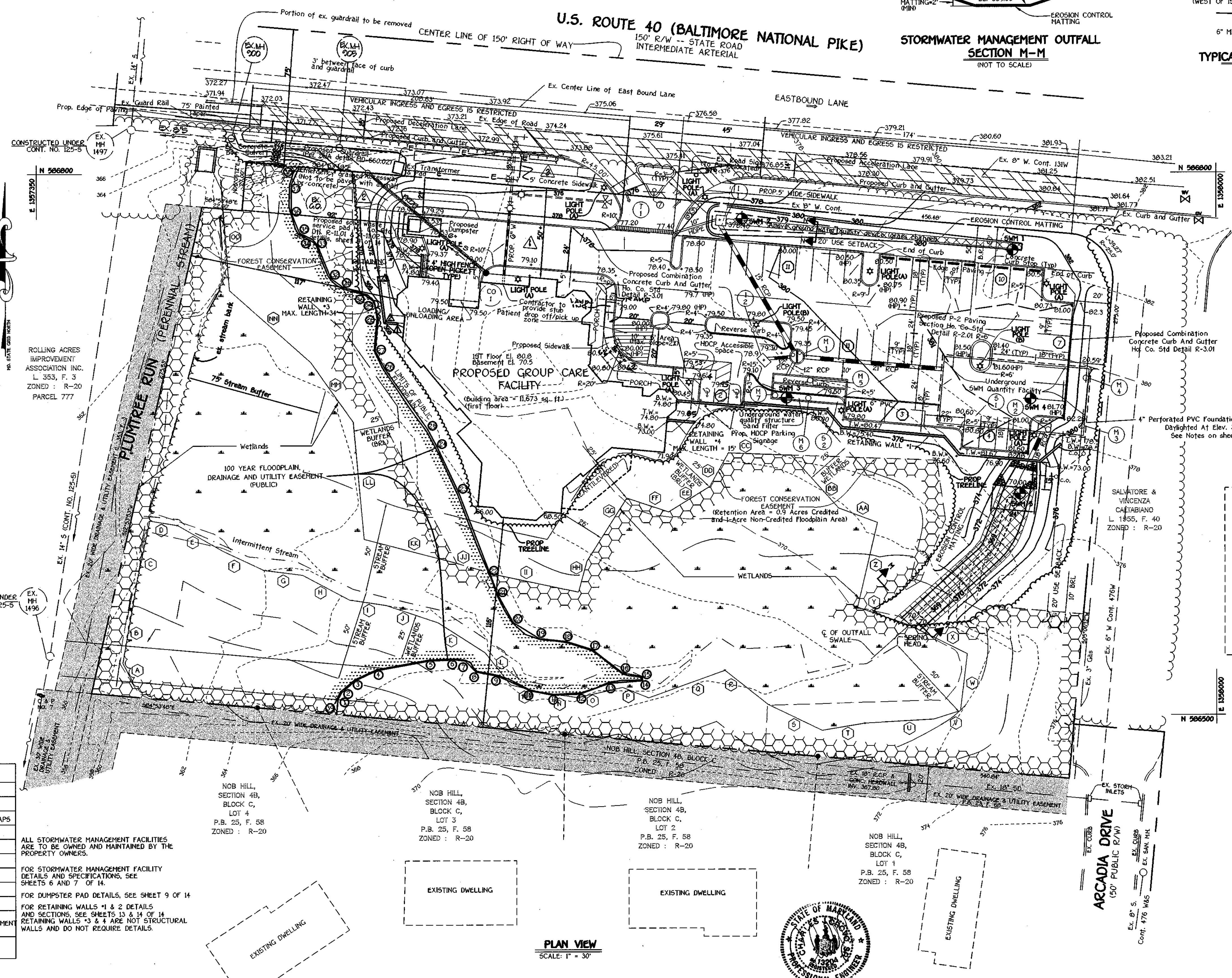
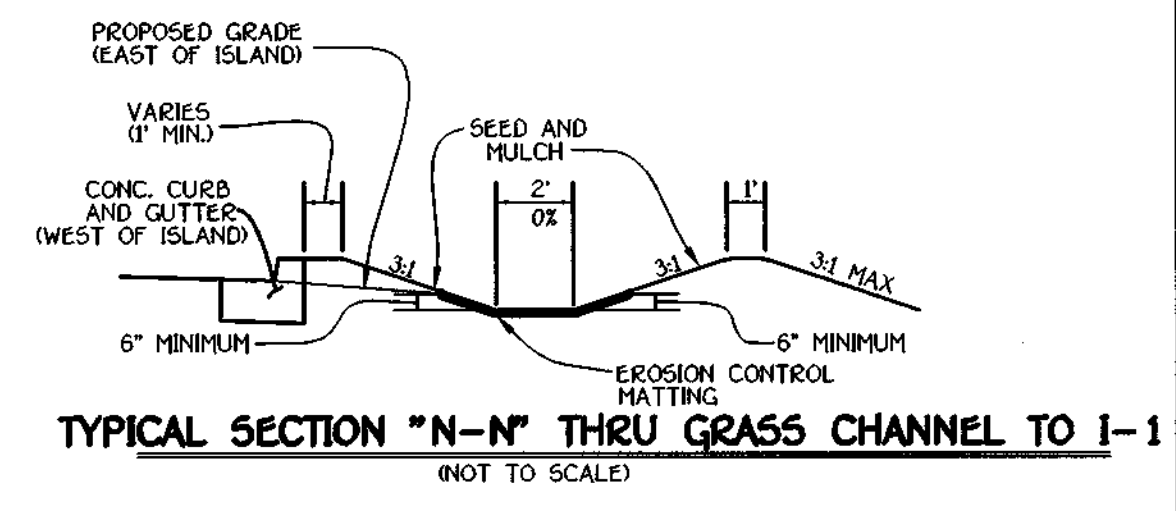
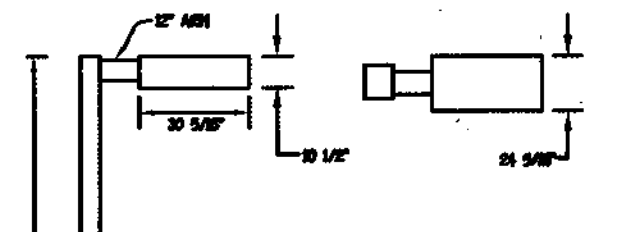
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING					
Director - Department of Planning and Zoning			Date 2/19/03		
Chief, Division of Land Development			Date 2/19/03		
Chief, Development Engineering Division			Date 2/6/03		
SUBDIVISION	SECTION/AREA	PARCEL NO.			
ARCADIA SQUARE	---	77			
DEED NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
1551/89	4	R-20	24	SECOND	602306
WATER CODE	SEWER CODE				
F-06	5754700				

UTILITY PROFILES, NOTES & DETAILS

ARCADIA SQUARE GROUP CARE FACILITY

TAX MAP No: 24 PARCEL No: 77
 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: JANUARY 13, 2003
 SHEET 5 OF 14 SDP-02-113

K:\Drawings\410059 Arcadia Square\410059 Arcadia Square Utility Profiles Notes And Details Sheet 5.dwg, 1/13/2003 2:18:12 PM



LIGHTING CHART

SYMBOL	QUANTITY	LABEL	ARRANGEMENT	LUMENS	LLF	DESCRIPTION
☆	9	A	SINGLE	14000	0.7	HL105-172PH-III
☆	2	B	SINGLE	14000	0.7	HL105-172PH-IV

WETLAND CHART

Line Number	Bearing	Distance
A	S 27°13'21" E	11.69'
B	S 09°54'22" W	46.06'
C	S 11°50'27" W	33.92'
D	N 80°31'20" W	15.57'
E	N 60°05'44" W	28.59'
F	N 64°52'42" W	29.06'
G	N 82°39'09" W	21.67'
H	N 61°48'19" W	29.38'
I	N 81°39'56" W	20.25'
J	N 71°11'06" W	30.15'
K	N 57°12'17" W	30.90'
L	N 38°06'24" W	22.46'
M	N 76°11'42" W	16.32'
N	N 01°13'56" W	21.51'
O	S 77°13'37" W	25.41'
P	N 68°06'20" W	15.57'
Q	S 70°14'23" W	44.62'
R	N 51°28'52" W	30.42'
S	N 64°29'30" W	33.02'
T	S 80°34'38" W	23.74'
U	S 86°40'16" W	38.10'
V	S 72°57'32" W	15.42'
W	S 08°53'27" W	31.72'
X	S 63°39'29" E	35.47'
Y	S 70°29'07" E	30.32'
Z	S 13°06'50" W	48.15'
AA	S 69°39'24" E	22.79'
BB	S 41°39'48" E	39.34'
CC	S 87°52'12" E	34.41'
DD	N 28°57'00" E	21.29'
EE	N 58°13'09" E	26.59'
FF	S 71°38'47" E	24.47'
GG	N 32°17'01" E	41.18'
HH	N 14°48'53" E	17.69'
II	S 77°57'29" E	46.22'
JJ	S 73°31'28" E	22.65'
KK	S 75°16'55" E	52.87'
LL	S 05°10'43" E	64.97'
MM	S 35°09'25" E	40.57'
NN	S 48°21'16" E	59.82'
OO	S 04°27'07" E	61.68'

LEGEND

- ① 8" WIDE WHITE LINE (SOLID)
- ② 5" WIDE WHITE LINE (SOLID)
- ③ 5" WIDE x 3" LONG WHITE LINES WITH 9" LONG GAPS
- ④ 5" WIDE YELLOW LINE (SOLID)
- ⑤ STOP SIGN (R1-1)
- ⑥ NO LEFT TURN SIGN (R3-2)
- ⑦ KEEP RIGHT SIGN (R4-7)
- DENOTES PROPOSED TREELINE
- DENOTES EXISTING TREELINE
- DENOTES FOREST CONSERVATION EASEMENT
- DENOTES 100 YR FLOOD PLAIN

ALL STORMWATER MANAGEMENT FACILITIES ARE TO BE OWNED AND MAINTAINED BY THE PROPERTY OWNERS.

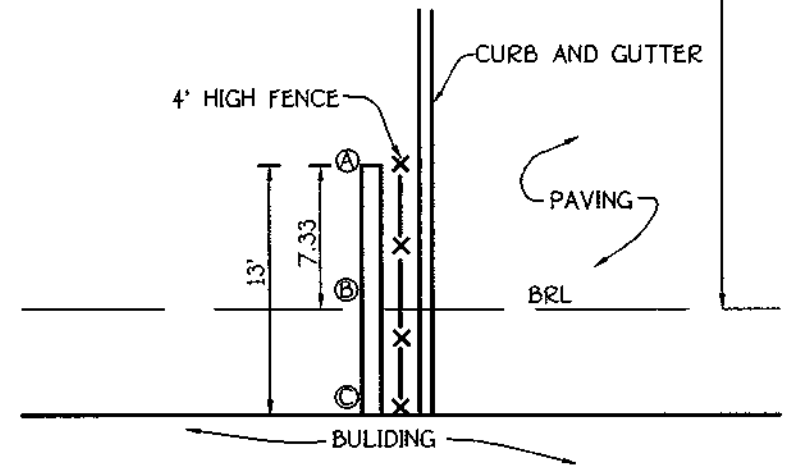
FOR STORMWATER MANAGEMENT FACILITY DETAILS AND SPECIFICATIONS, SEE SHEETS 6 AND 7 OF 14.

FOR DUMPSTER PAD DETAILS, SEE SHEET 9 OF 14.

FOR RETAINING WALLS #1 & 2 DETAILS AND SECTIONS, SEE SHEETS 13 & 14 OF 14.

RETAINING WALLS #3 & 4 ARE NOT STRUCTURAL WALLS AND DO NOT REQUIRE DETAILS.

LOCATION ALONG WALL	TOP ELEV.	BOTTOM ELEV.	HEIGHT
A	79.37	78.7	0.67
B	79.4	76.5	2.9
C	79.4	74.8	4.6



ENLARGEMENT OF RETAINING WALL #2
SCALE: 1" = 10'

RETAINING WALL #3 ELEVATIONS	TOP	BOTTOM
A	472.00	472.00
B	470.30	468.00
C	470.00	470.00

FLOOD PLAIN DATA

LINE	ELEVATION	BEARING	DISTANCE
39		S05°06'12"W	8.28'
1	365.6	N28°20'55"E	4.66'
2	365.6	N49°08'21"E	9.79'
3	365.6	N65°08'28"E	13.30'
4	365.6	N79°52'15"E	29.39'
5	365.7	N87°34'48"E	13.90'
6	365.7	S83°37'07"E	5.56'
7	365.7	S44°38'18"E	8.63'
8	365.7	S73°01'18"E	12.16'
9	365.7	S65°24'28"E	19.75'
10	365.7	S79°23'25"E	12.74'
11	365.8	N87°48'19"E	15.06'
12	365.8	N70°07'13"E	17.23'
13	365.8	N85°43'28"E	18.24'
14	365.8	N80°01'31"W	11.8'
15	365.8	N80°01'31"W	11.8'
16	365.8	N52°01'32"W	21.14'
17	365.8	S72°23'47"W	14.89'
18	365.8	N63°32'17"W	15.23'
19	365.8	N68°10'33"W	16.62'
20	365.8	N28°47'52"W	17.77'
21	365.8	N20°23'26"W	11.32'
22	365.8	N20°58'46"W	50.01'
23	365.8	N25°03'38"W	27.29'
24	365.8	N28°19'15"W	10.97'
25	365.8	N35°06'07"W	40.46'
26	365.9	N27°58'19"W	11.72'
27	365.9	N85°01'16"E	18.18'
28	365.9	N12°32'23"W	9.74'
29	366.0	N47°35'21"W	5.01'
30	366.1	N73°18'09"W	14.04'
31	366.2	N53°53'20"W	8.24'
32	366.2	N21°45'05"W	19.70'
33	366.2	N39°24'34"W	4.01'
34	366.8	N63°27'19"W	8.27'
35	367.0	N22°05'13"W	12.88'
36	367.3	N00°13'36"W	16.00'
37	367.4	N24°33'25"E	10.65'
38			

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
410-481-2000

NO.	REVISION	DESCRIPTION	DATE
1		INDICATE EXISTING ELECTRIC POWER CABLES	5/7/03
2		REVISE POWER MAIN ALIGNMENT	5/7/03
3		REVISE WATER SERVICE FROM 4" TO 6"	5/7/03

ENGINEER'S CERTIFICATE
I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
Signature of Engineer (print name below signature) *John J. ...* Date *1/22/03*

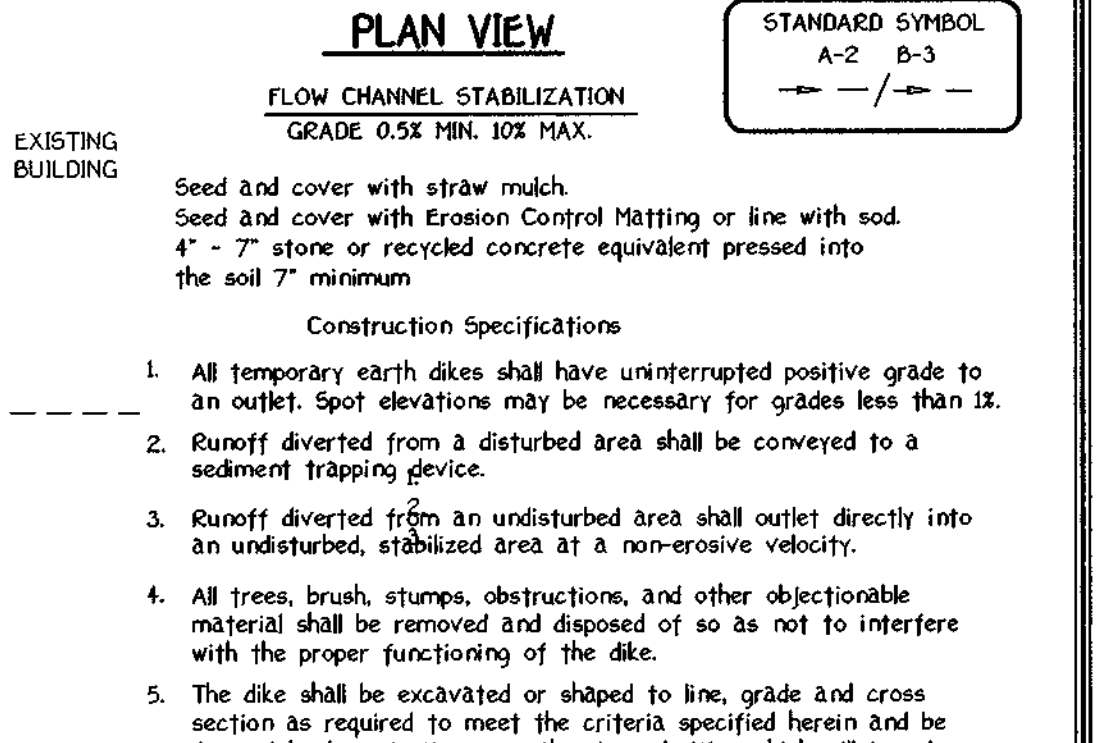
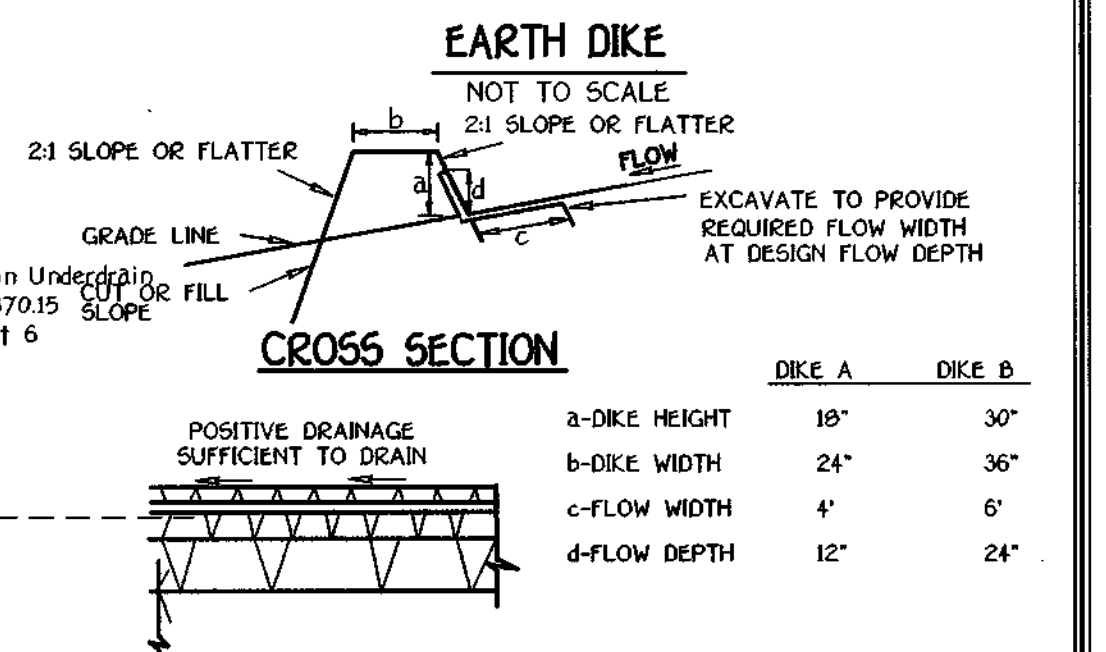
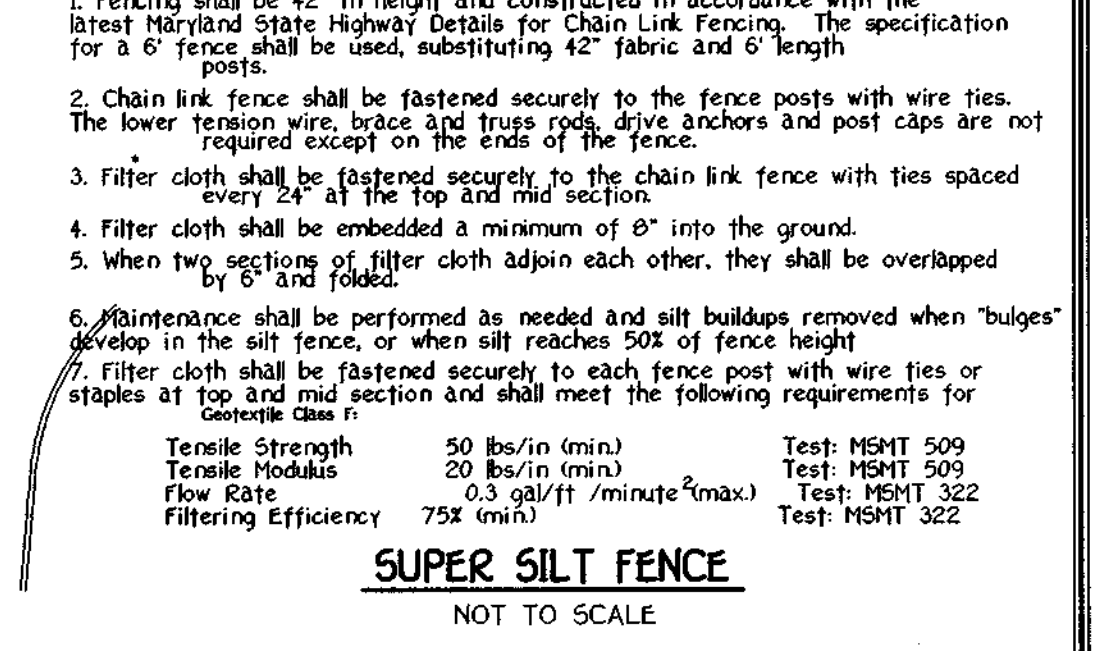
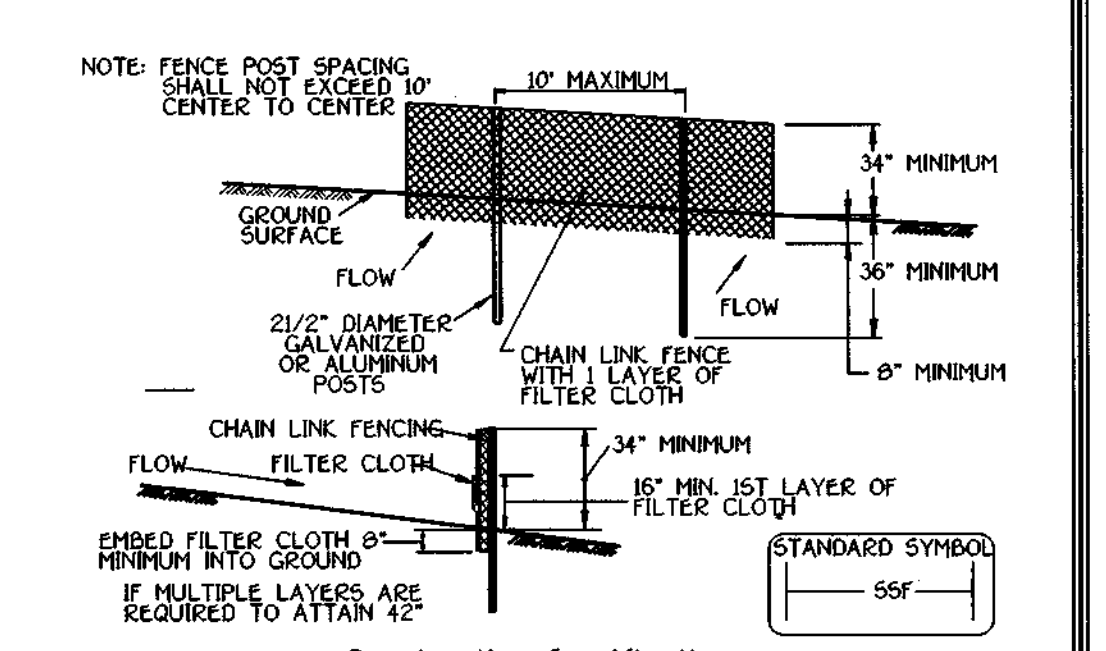
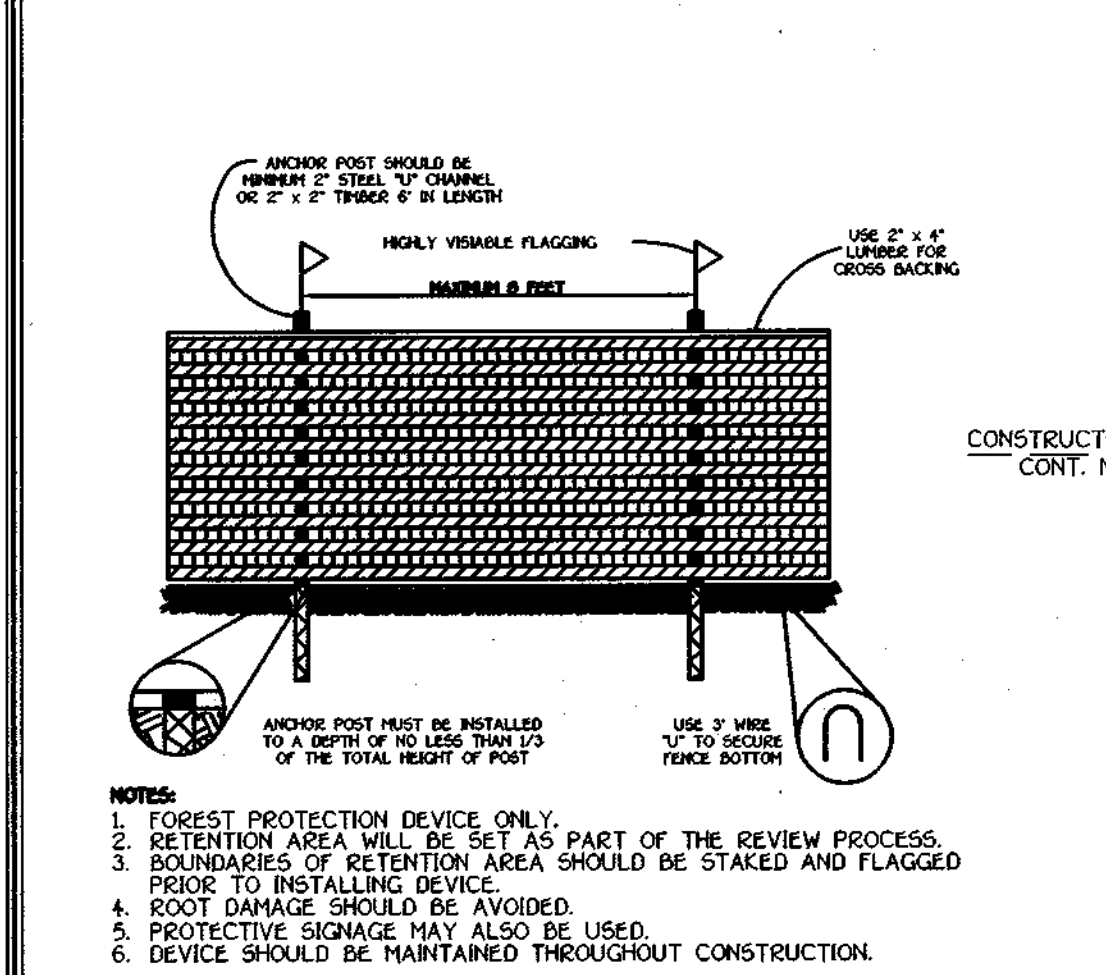
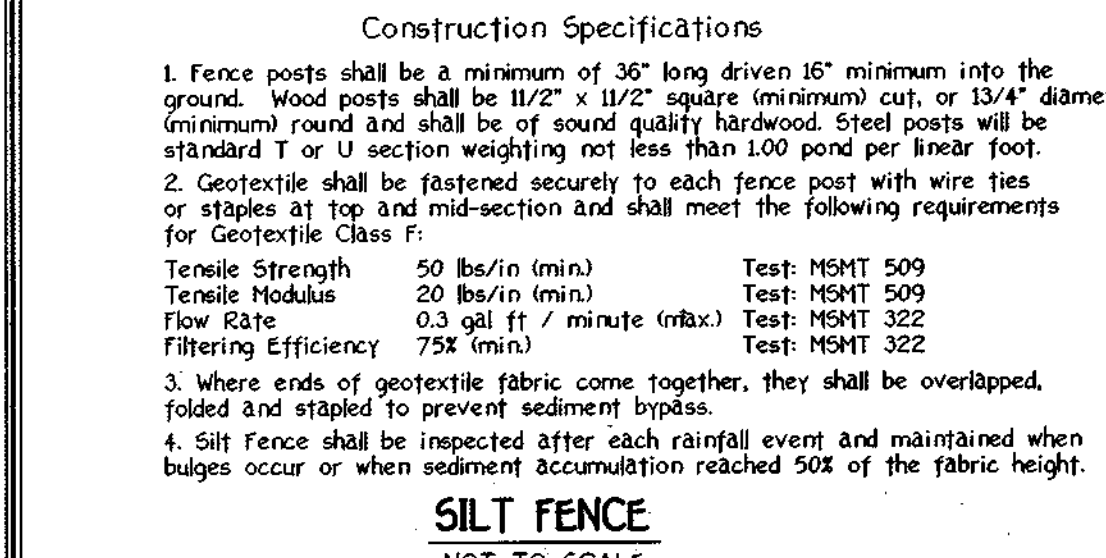
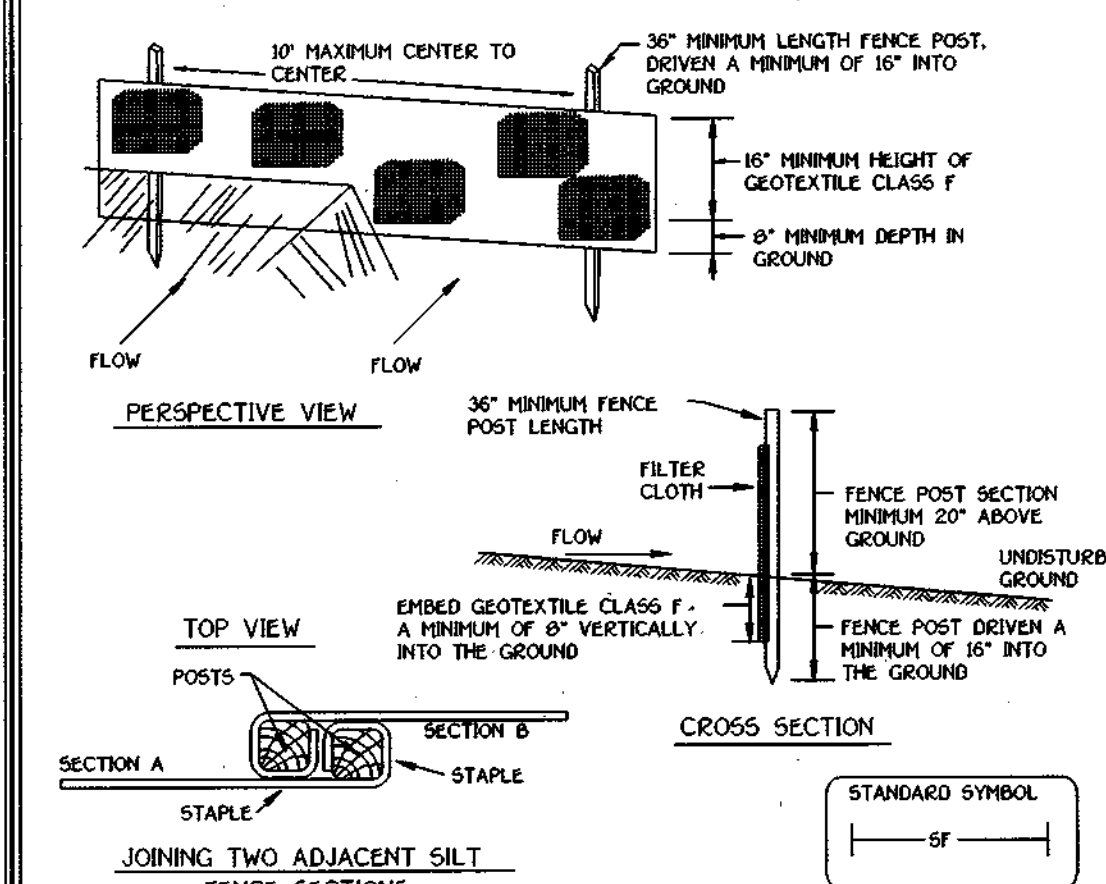
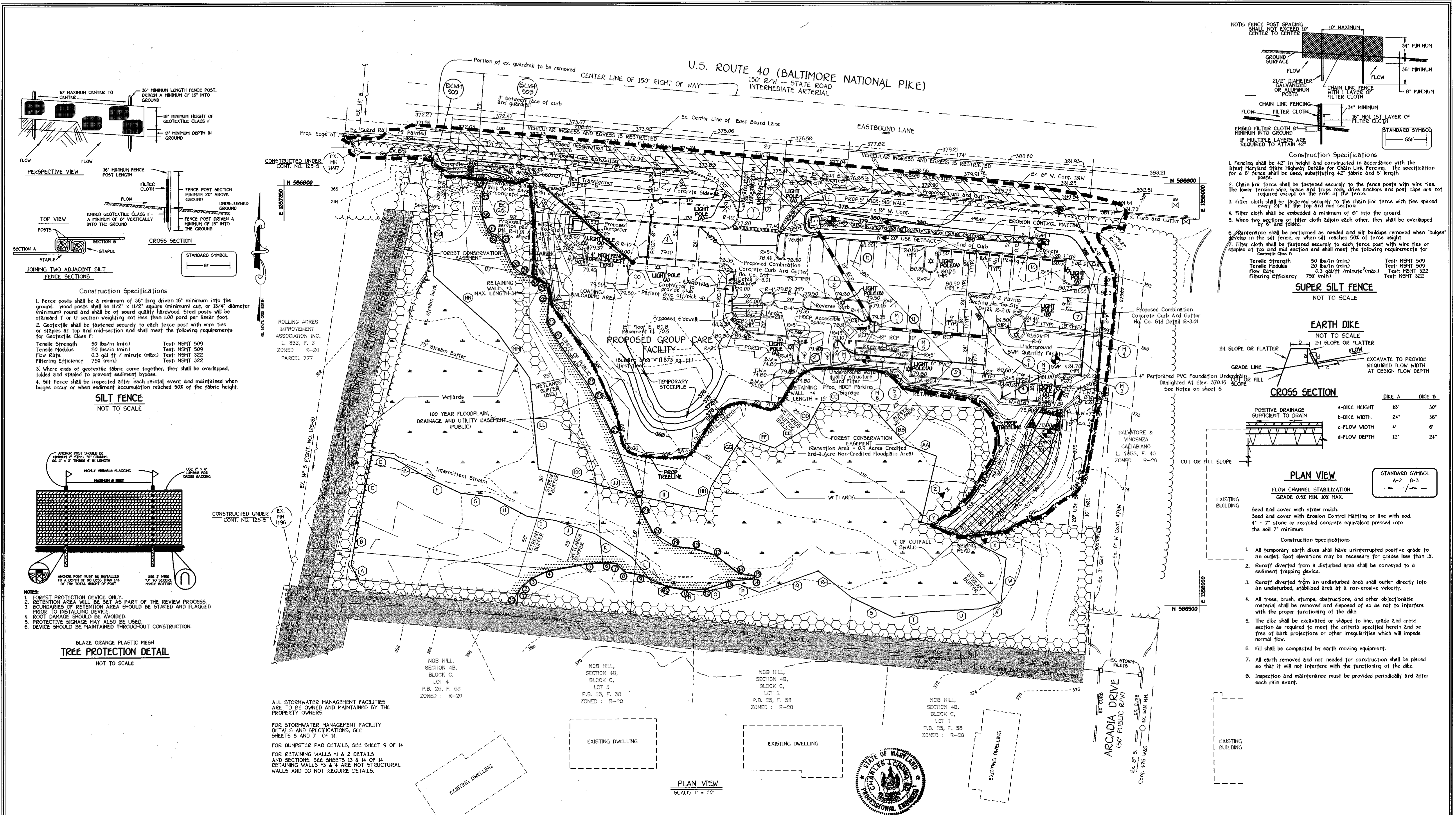
DEVELOPER'S CERTIFICATE
I/We certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize personal on-site inspection by the Howard Soil Conservation District.
Signature of Developer (print name below signature) *...* Date *...*

OWNER
LEVAL PARTNERSHIP, LLP
100 PARTNERS HILL ROAD, SUITE 900
OWINGS HILLS, MARYLAND 21117
(410) 363-3434

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Masha D. ... 2/19/10
Director - Department of Planning and Zoning
Andy ... 2/19/03
Chief, Division of Land Development
... 2/10/03
Chief, Development Engineering Division

SUBDIVISION: ARCADIA SQUARE SECTION/AREA: 77 PARCEL NO.: 77
DEED NO.: 1951/09 BLOCK NO.: 4 ZONE: R-20 TAX/ZONE: 24 ELEC. DIST.: 2ND CENSUS TR.: 602306
WATER CODE: F-06 SEWER CODE: 5754700

SITE DEVELOPMENT PLAN
ARCADIA SQUARE GROUP CARE FACILITY
TAX MAP No.: 24 PARCEL No.: 77
SECOND ELECTION DISTRICT: HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' DATE: JANUARY 13, 2003
SHEET 2 OF 14 SDP-02-113



FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10722 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
410-481-2999

NO.	DESCRIPTION	DATE
1	INDICATE EXISTING ELECTRIC POWER CABLES	8/1/03
2	REVISE SEWER MAIN ALIGNMENT	8/1/03
3	REVISE WATER SERVICE FROM 4" TO 6"	8/1/03

ENGINEER'S CERTIFICATE
I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
Signature of Engineer (print name below signature) *John A. Fisher* Date *1/26/03*

DEVELOPER'S CERTIFICATE
I/We certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.
Signature of Developer (print name below signature) *Leval Partnership, LLP* Date *1/26/03*

Reviewed for HOWARD SCD and meets Technical Requirements.
John A. Fisher Date *2/6/03*

U.S.D.A. Natural Resources Conservation Service
This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
Howard SCD *John A. Fisher* Date *2/6/03*

OWNER
LEVAL PARTNERSHIP, LLP
100 PAINTERS HILL ROAD, SUITE 900
OWINGS HILLS, MARYLAND 21117
(410) 363-3434

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
John A. Fisher Date *2/19/03*
Director - Department of Planning and Zoning
John A. Fisher Date *2/19/03*
Chief, Division of Development
John A. Fisher Date *2/19/03*
Chief, Development Engineering Division

SUBDIVISION	SECTION/AREA	PARCEL NO.
ARCADIA SQUARE		77

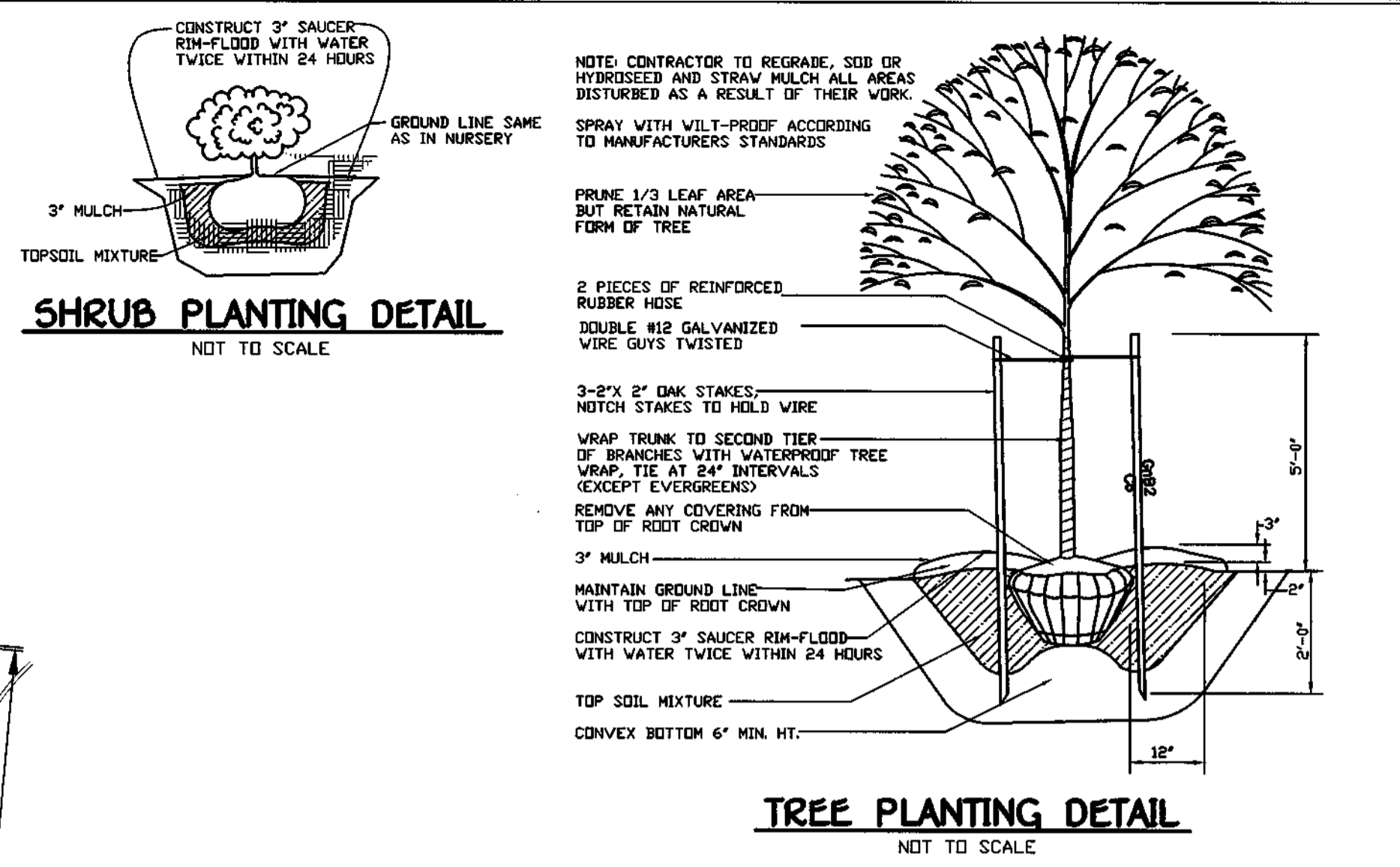
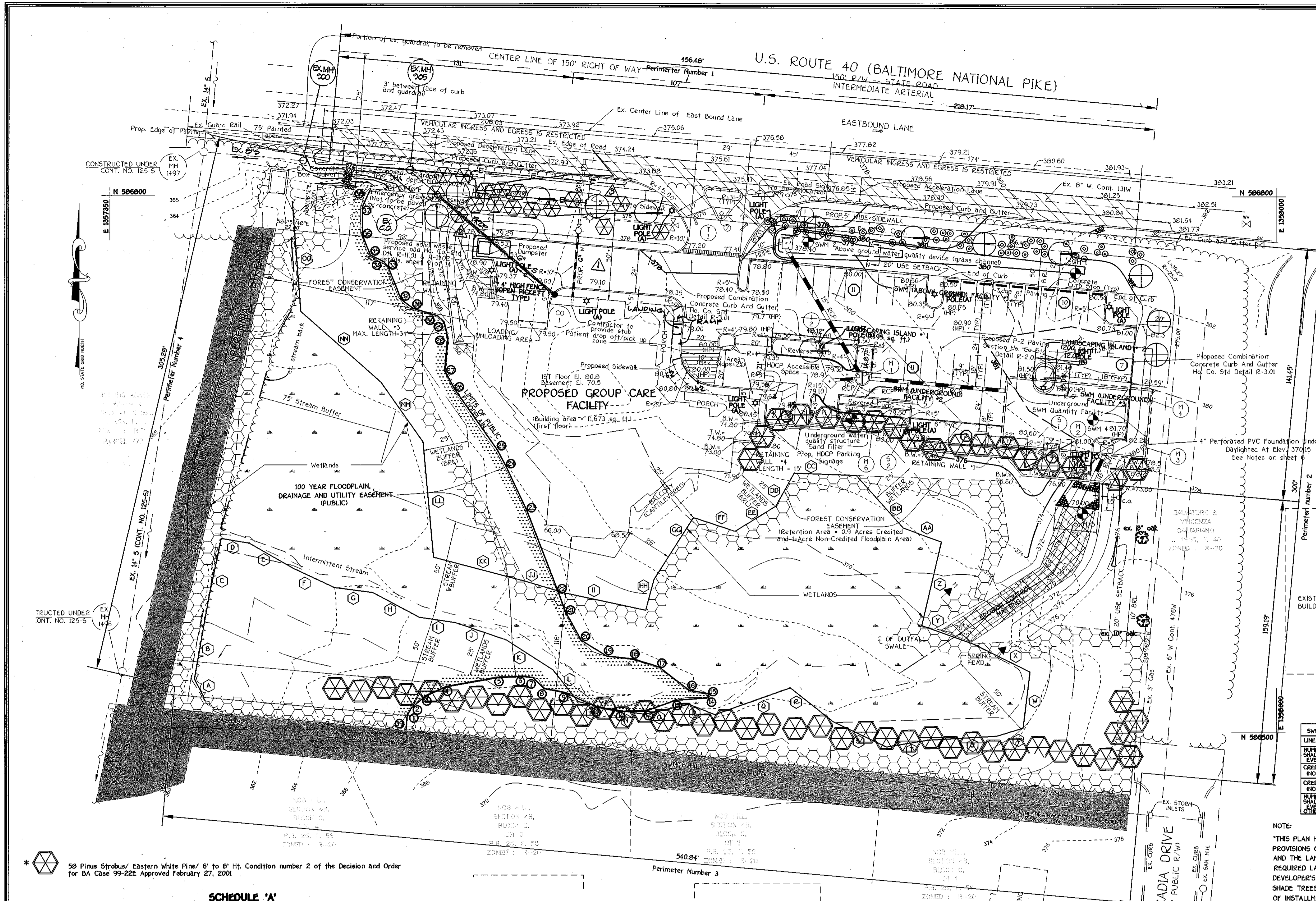
DEED NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
1551/89	4	R-20	24	SECOND	602306

WATER CODE F-06 SEWER CODE 5794700

SEDIMENT AND EROSION CONTROL PLAN

ARCADIA SQUARE GROUP CARE FACILITY

TAX MAP No: 24 PARCEL No: 77
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JANUARY 13, 2003
SHEET 3 OF 14 SDP-02-113



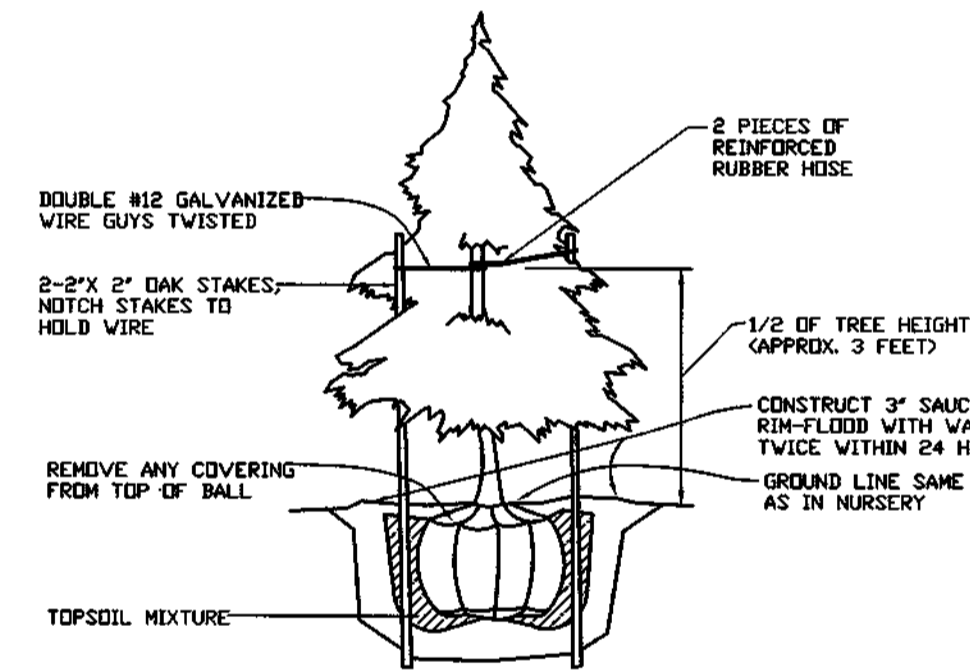
PLANTING SPECIFICATIONS

Plants, related material, and operations shall meet the detailed description as given on the plans and as described herein. All plant material, unless otherwise specified, shall be nursery grown, uniformly branched, have a vigorous root system, and shall conform to the species, size, root and shape shown on the plant list and the American Association of Nurserymen (AAN) Standards. Plant material shall be healthy, vigorous, free from defects, decay, disfiguring roots, sun scald injuries, abrasions of the bark, plant disease, insect pest eggs, borers and all forms of insect infestations or objectionable disfigurements. Plant material that is weak on which has been cut back from larger grades to meet specified requirements will be rejected. Trees with forked leaders will not be accepted. All plants shall be freshly dug and held in plants from cold storage will be accepted. Unless otherwise specified, all general conditions, planting operations, details and planting specification shall conform to "Landscape Specification Guidelines for Baltimore-Washington Metropolitan Area", General Part, "Landscape Guidelines", approved by the Landscape Contractors Association of Metropolitan Washington and the Potomac Chapter of the American Society of Landscape Architects, latest edition, including all appendices. Contractor shall be required to guarantee all plant material for a period of one year after date of acceptance in accordance with the appropriate section of the Landscape Guidelines. Contractor's attention is directed to the maintenance requirements found within the one year specifications including watering and replacement of specified plant material. Contractor shall be responsible for notifying utility companies, utility contractors and "Miss Utility" a minimum of 48 hours prior to beginning any work. Contractor may make minor adjustments in spacing and location of plant material to avoid conflicts with utilities. Damage to existing structure and utilities shall be repaired at the expense of the Contractor. Protection of existing vegetation to remain shall be accomplished by the temporary installation of 4 foot high snow fence or blaze orange safety fence at the strip line. Contractor is responsible for installing all material in the proper planting season for each plant type. All planting is to be completed within the growing season of completion of site construction. No extra payment shall be made for work arising from 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. All shrubs shall be planted in continuous trenches or prepared planting beds and mulched with composted hardwood mulch as details and specified except where noted on plans. Positive drainage shall be maintained in planting beds 2 percent slope. Planting mix shall be as follows: Bedding Plants - Two parts: topsoil, one part well-rotted cow or horse manure. Add 3 lbs. of standard fertilizer per cubic yard of planting mix. Evergreen Plants - two parts: topsoil, one part well-rotted cow or horse manure. Add 3 lbs. of standard fertilizer per cubic yard of planting mix. Fertilizer per cubic yard of planting mix. Topsoil shall conform to the Landscape Guidelines. Weed Control: Incorporate a pre-emergent herbicide into the planting bed following recommended rates on the label. Caution: Be sure to carefully check the chemical used to assure its suitability to the specific ground cover to be treated. All areas with contract limits disturbed during or prior to construction not designated to receive plants and mulch shall be fine graded and seeded. This plan is intended for landscape use only. See other plan sheets for more information on grading, sediment control, layout, etc.

SCHEDULE 'D'

SWM FACILITY	1
LINEAR FEET OF PERIMETER	180
NUMBER OF TREES REQUIRED	15
SHADE TREES	15
EVERGREEN TREES	0
CREDIT FOR EXISTING VEGETATION (NO, YES AND %)	NO
CREDIT FOR OTHER LANDSCAPING (NO, YES AND %)	YES 100%
NUMBER OF TREES PROVIDED	15
SHADE TREES	15
EVERGREEN TREES	0
OTHER TREES (NOT SUBSTITUTION)	0

EVERGREEN PLANTING DETAIL



LANDSCAPING PLANT LIST

QTY.	SYMBOL	NAME	SIZE
8	⊕	ACER RUBRUM 'OCTOBER GLORY' (OCTOBER RED MAPLE)	2 1/2"-3" CALIPER FULL CROWN, BAB
15	⊗	PICEA ABIES NORWAY SPRUCE	6'-8" HEIGHT
7	⊖	PLATANUS X ACERIFOLIA 'BLOODGOOD'	2 1/2"-3" CALIPER FULL CROWN, BAB
27	⊙	RED TWIGGED DOGWOOD	2-1/2"-3" HEIGHT
27	⊕	TAXUS REPANDENS SPREADING ENGLISH YEW	2-1/2" - 3" HT.

SCHEDULE B

NUMBER OF LANDSCAPED ISLANDS	2
NUMBER OF PARKING SPACES	40
NUMBER OF TREES REQUIRED	2
NUMBER OF TREES PROVIDED	2
SHADE TREES	2

58 Pinus Strobus/ Eastern White Pine/ 6' to 8' Ht. Condition number 2 of the Decision and Order for BA Case 99-22E Approved February 27, 2001

SCHEDULE 'A'

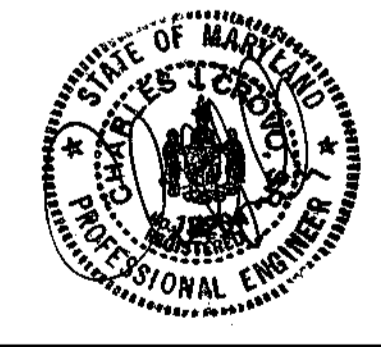
PERIMETER	CATEGORY	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE OR PERIMETER	CREDIT FOR EXISTING VEGETATION	NUMBER OF PLANTS REQUIRED					NUMBER OF PLANTS PROVIDED	
					SHADE TREES	EVERGREEN TREES	SHRUBS	SHADE TREES	EVERGREEN TREES	OTHER TREES (2:1 SUBSTITUTION)	SHRUBS (4:1 SUBSTITUTION)
P-1	ADJACENT TO ROADWAY	B	107		2	3	—	2	3	—	—
		D	131		3	13	—	3	13	—	—
		E	210		6	0	54	6	0	54	—
P-2	ADJACENT TO PERIMETER	A	300	159 (48%)	2	—	—	2	—	—	—
P-3	ADJACENT TO PERIMETER	C	541	541	—	—	—	—	—	—	58 *
P-4	ADJACENT TO PERIMETER	C	505	305	—	—	—	—	—	—	—

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

LANDSCAPE DEVELOPER'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 Landscaping Manual. I/We further certify that upon completion a letter of landscape installation accompanied by an executed one year guarantee of plant materials will be submitted to the Department of Planning and Zoning.

ENGINEER'S CERTIFICATE
I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

DEVELOPER'S CERTIFICATE
I/We certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.



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

SUBDIVISION	ARCADIA SQUARE	SECTION/AREA	---	PARCEL NO.	77
DEED NO.	1551/89	BLOCK NO.	4	ZONE	R-20
TAX/ZONE	24	ELEC. DIST.	SECOND	CENSUS TR.	602306
WATER CODE	F-06	SEWER CODE	5794700		

LANDSCAPE PLAN
ARCADIA SQUARE GROUP CARE FACILITY
TAX MAP No: 24 PARCEL No: 77
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1"=30' DATE: JANUARY 13, 2003
SHEET 10 OF 14 SDP-02-113

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
ELLIOTT CITY, MARYLAND 21117
410-418-2955

NO.	DESCRIPTION	DATE
1	INDICATE EXISTING ELECTRIC POWER CABLES	5/7/03
2	REMOVE 60" EX. MAIN ALIGNMENT	5/7/03
3	REMOVE WATER SERVICE FROM 4" TO 6"	5/7/03

ON-SITE SIGNAGE

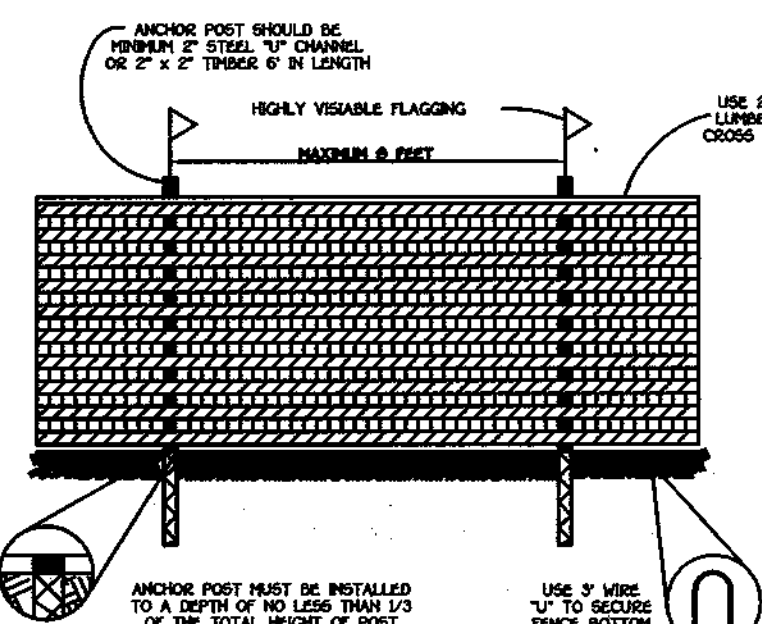
FOREST CONSERVATION EASEMENT

UNAUTHORIZED DISTURBANCE OF VEGETATION IS PROHIBITED. VIOLATORS SUBJECT TO PENALTIES UNDER THE HOWARD COUNTY FOREST CONSERVATION ACT OF 1991.

TREES FOR YOUR FUTURE

11" MINIMUM

15" MINIMUM



- NOTES:**
1. FOREST PROTECTION DEVICE ONLY.
 2. RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
 3. BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.
 4. ROOT DAMAGE SHOULD BE AVOIDED.
 5. PROTECTIVE SIGNAGE MAY ALSO BE USED.
 6. DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

TREE PROTECTION DETAIL
NOT TO SCALE

LINE	BEARING	DISTANCE
100	S84°53'40"E	49.66'
101	N56°50'50"E	15.66'
102	N68°58'54"E	33.32'
103	S70°29'07"E	23.71'
104	S59°51'41"W	32.80'
105	S22°02'19"W	37.00'
106	S08°16'38"E	33.00'
107	S87°52'12"E	115.00'
108	N28°50'02"E	21.29'
109	N58°13'09"E	26.59'
110	S71°39'17"E	24.47'
111	N32°17'01"E	41.89'
112	N17°48'53"E	17.69'
113	S77°57'29"E	46.22'
114	S73°34'28"E	22.85'
115	S27°22'46"E	124.68'
116	S00°04'19"W	106.27'
117	S84°53'40"E	50.66'
118	N05°06'12"E	27.00'
119	S84°53'40"E	22.00'
120	N12°53'33"E	275.53'
121	S84°19'48"W	540.84'
122	S05°06'12"W	91.03'

ALL STORMWATER MANAGEMENT FACILITIES ARE TO BE OWNED AND MAINTAINED BY THE PROPERTY OWNERS.

FOR STORMWATER MANAGEMENT FACILITY DETAILS AND SPECIFICATIONS, SEE SHEETS 6 AND 7 OF 14.

FOR DUMPSTER PAD DETAILS, SEE SHEET 9 OF 14.
FOR RETAINING WALLS #1 & 2 DETAILS AND SECTIONS, SEE SHEETS 13 & 14 OF 14.
RETAINING WALLS #3 & 4 ARE NOT STRUCTURAL WALLS AND DO NOT REQUIRE DETAILS.

FOR STORMWATER MANAGEMENT FACILITY DETAILS AND SPECIFICATIONS, SEE SHEETS 6 AND 7 OF 14.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CONTINENTAL SQUARE OFFICE PARK - 10732 BALTIMORE NATIONAL PIKE
ELKTON CITY, MARYLAND 21821
410.438.2000

NO.	DESCRIPTION	DATE
1	INDICATE EXISTING ELECTRIC POWER CABLES	5/7/03
2	REVISE SEWER MAIN ALIGNMENT	5/7/03
3	REVISE WATER SERVICE FROM 4" TO 6"	5/7/03

ENGINEER'S CERTIFICATE

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

Signature of Engineer (print name below signature) *[Signature]* Date *1/22/03*

DEVELOPER'S CERTIFICATE

"I/we certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."

Signature of Developer (print name below signature) *[Signature]* Date *1/22/03*



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 2/19/03
Director - Department of Planning and Zoning
[Signature] 2/19/03
Chief, Division of Land Development
[Signature] 2/19/03
Chief, Development Engineering Division

SUBDIVISION	SECTION/AREA	PARCEL NO.
ARCADIA SQUARE	77	77
DEED NO.	BLOCK NO.	ZONE
1551/89	4	R-20
WATER CODE	SEWER CODE	CENSUS TR.
F-06	24	602306
ELEC. DIST.		SECOND
7574700		

FOREST CONSERVATION PLAN

ARCADIA SQUARE GROUP CARE FACILITY

TAX MAP No.: 24 PARCEL No.: 77
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JANUARY 13, 2003
SHEET 11 OF 14

SDP-02-113

SOILS LEGEND

SOIL	NAME	CLASS
Co	Codorus silt loam	C
GnB2	Glenelg loam, 3 to 8 percent slopes, moderately eroded	B
GnB2	Glenelg silt loam, 3 to 8 percent slopes, moderately eroded	C
Ha	Hatboro silt loam	D
MID2	Manor loam, 15 to 25 percent slopes, moderately eroded	B

NOTES:
Hydric soils and/or contains hydric inclusions

- FOREST STAND DELINEATION NOTES**
1. PSD fieldwork was completed on March 22, 2002 utilizing the procedures outlined in the Howard County Forest Conservation Manual.
 2. Forest Stand #1 consists of very young pioneer forest cover, with no sensitive resources. The forest stand boundary follows the floodplain and wetland buffers as shown on the plan.
 3. Forest Stand #2 consists of the more mature wetland and floodplain forest which includes all sensitive resources, including streams and wetlands and their buffers, and the 100-year floodplain.
 4. There are no specimen trees located on or immediately adjacent to this site.
 5. There are no rare, threatened, or endangered species known to exist on-site.
 6. See the Forest Stand Delineation Report for more detailed information.

- FOREST CONSERVATION NOTES**
1. The areas to be cleared consist of low quality pioneer forest with no sensitive resources, and must be cleared to accommodate the proposed use.
 2. The amount of forest protected within the Forest Conservation Easement exceeds the Break-Even Point, therefore, no reforestation is required for this project.
 3. All high priority retention areas are being preserved on this site, including the floodplain, wetlands, and wetland stream buffer areas.
 4. A Forest Conservation Plan of Easement shall be recorded in the Land Records of Howard County in accordance with Howard County Code Section 16.1204(d)(8).

- FOREST CONSERVATION EASEMENT PROTECTION PROGRAM**
1. There is no reforestation requirement for this project, therefore the pre- and post-construction protection programs are identical, and consist of proper demarcation and posting of the Forest Conservation Easement in the field, and preventing any and all disturbance within the Forest Conservation Easement.
 2. There shall be no clearing, grading, or disturbance of vegetation in the Forest Conservation Easement without the prior approval of Howard County.
 3. The Forest Conservation Easement shall be staked and protected with high visibility orange safety fence prior to any construction or grading activity.
 4. The Forest Conservation Easement shall be permanently located and posted with appropriate signage at 50-foot intervals (see detail).
 5. There shall be no stockpiling of materials, staging of equipment, disposal of trash and debris, or other such disturbance within the Forest Conservation Easement.
 6. The forest conservation obligation incurred by this project has been satisfied with the retention of 0.9 acres of forested area and 1.0 acre of non-forested area which meets or exceeds the break-even point obligation of 0.9 acres for this site. Forest conservation value in the amount of \$7,841.00 has been posted for this project.
 7. The forest conservation obligation has been established to fulfill the requirements of Section 16.1200 of the Howard County Code. The Forest Conservation Easement, however, is a management practice as defined in the Deed of Forest Conservation Easement as allowed.

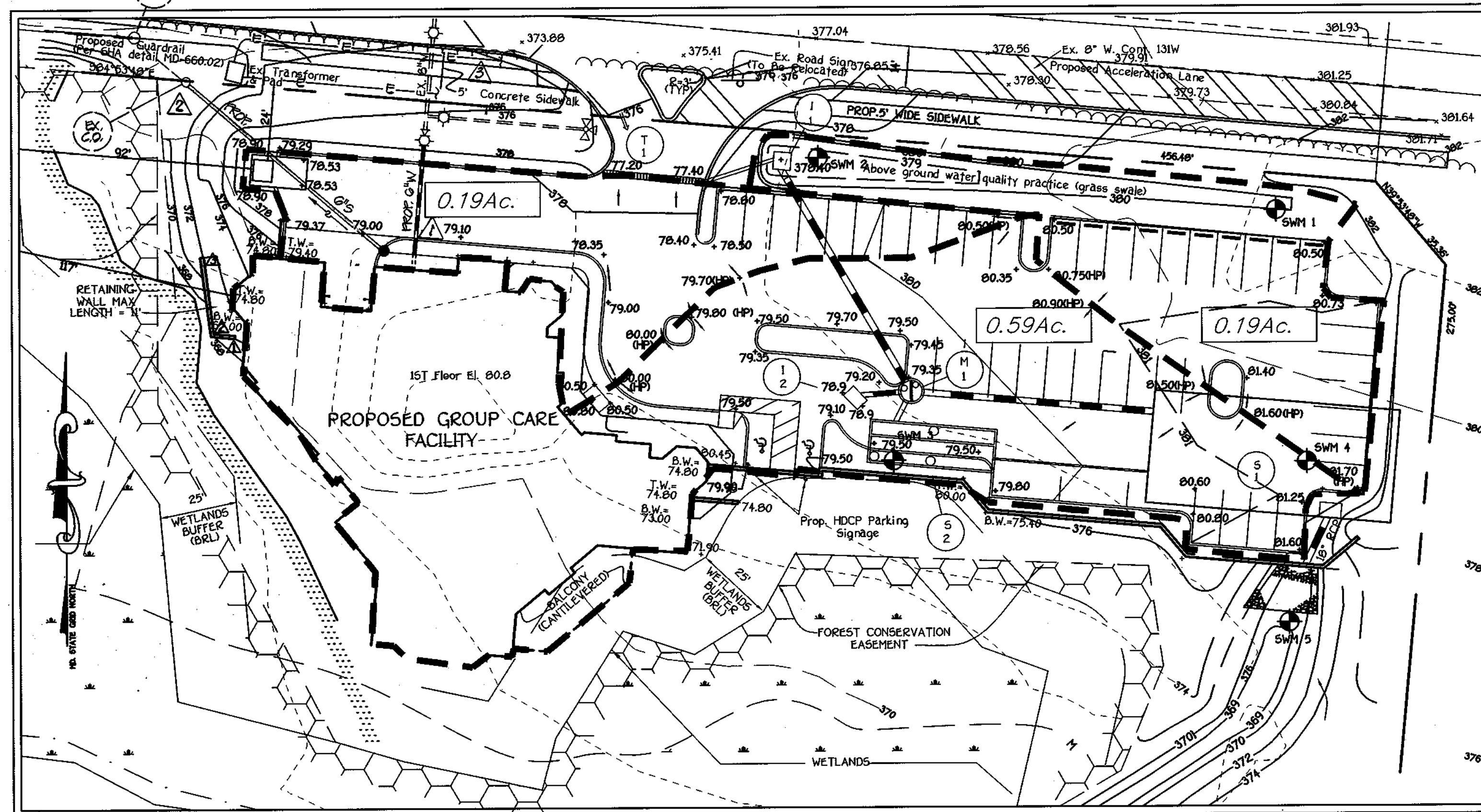
Jeffrey A. Williams
Consulting Ecologist
18941 Middlebrook Road
Pawton, MD 21120
(410) 328-2277

FOREST CONSERVATION WORKSHEET

I. BASIC SITE DATA	ACRES
GROSS SITE AREA	3.6
AREA WITHIN 100 YEAR FLOODPLAIN	1.0
AREA WITHIN AGRICULTURAL USE	0
NET TRACT AREA	2.6
LAND USE CATEGORY	INSTITUTIONAL
II. INFORMATION FOR CALCULATIONS	
A. NET TRACT AREA	2.6
B. REFORESTATION THRESHOLD (20X x A)	0.5
C. AFFORESTATION THRESHOLD (15X x A)	0.4
D. EXISTING FOREST ON NET TRACT AREA	2.6
E. EXISTING FOREST ABOVE FC THRESHOLD	2.1
F. BREAK EVEN POINT (E x 0.2) + B)	0.9
G. FOREST TO BE CLEARED	1.5
H. FOREST TO BE RETAINED	0.9

NOTE: TOTAL AREA IN FOREST CONSERVATION EASEMENT = 1.9 ACRES

K:\Drawings\440559 Arcadia Square\440559 FOREST CONSERVATION PLAN.dwg, 1/10/03 5:52:28 PM



AREA TABULATION

AREA DESIGNATION	ACREAGE	CONCENTRATION FACTOR	IMPERVIOUS
TO T-1	0.19	0.85	100
TO I-1	0.19	0.85	56
TO I-2	0.59	0.85	96

NOTE:
The time of concentration used for each drainage area is 5.0 minutes.

ARCADIA SQUARE
STORM DRAIN DRAINAGE AREA MAP
1" = 50'

LEGEND

- Existing Contour
- Proposed Contour
- Drainage Divide

SOILS LEGEND

SOIL	NAME	CLASS
* Co	Codorus silt loam	C
GB2	Glenside loam, 3 to 8 percent slopes, moderately eroded	B
* GrB2	Glenville silt loam, 3 to 8 percent slopes, moderately eroded	C
** Ha	Harboro silt loam	D
MID2	Manor loam, 15 to 25 percent slopes, moderately eroded	B

- NOTES:
- * Hydric soils and/or contains hydric inclusions
 - ** May contain hydric inclusions
 - † Generally only within 100-year floodplain areas



ENGINEER'S CERTIFICATE

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

Signature of Engineer: *[Signature]* Date: 1/24/03

DEVELOPER'S CERTIFICATE

"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 inspection by the Howard Soil Conservation District."

Signature of Developer: *[Signature]* Date: 1/24/03

APPROVED: HOWARD COUNTY
DEPARTMENT OF PLANNING AND ZONING
Chief, Division of Land Development: *[Signature]* Date: 2/19/03
Chief, Development Engineering Division: *[Signature]* Date: 2/16/03
Director - Department of Planning and Zoning: *[Signature]* Date: 2/19/03

PROJECT	SECTION/AREA	PARCEL NO.
ARCADIA SQUARE	N/A	77
DEED REF. 1551/89	BLOCK NO. 4 ZONE R-20 TAX 24 ELEC. DIST. 2ND CENSUS TR. 602306	
WATER CODE F-06	SEWER CODE 5754700	

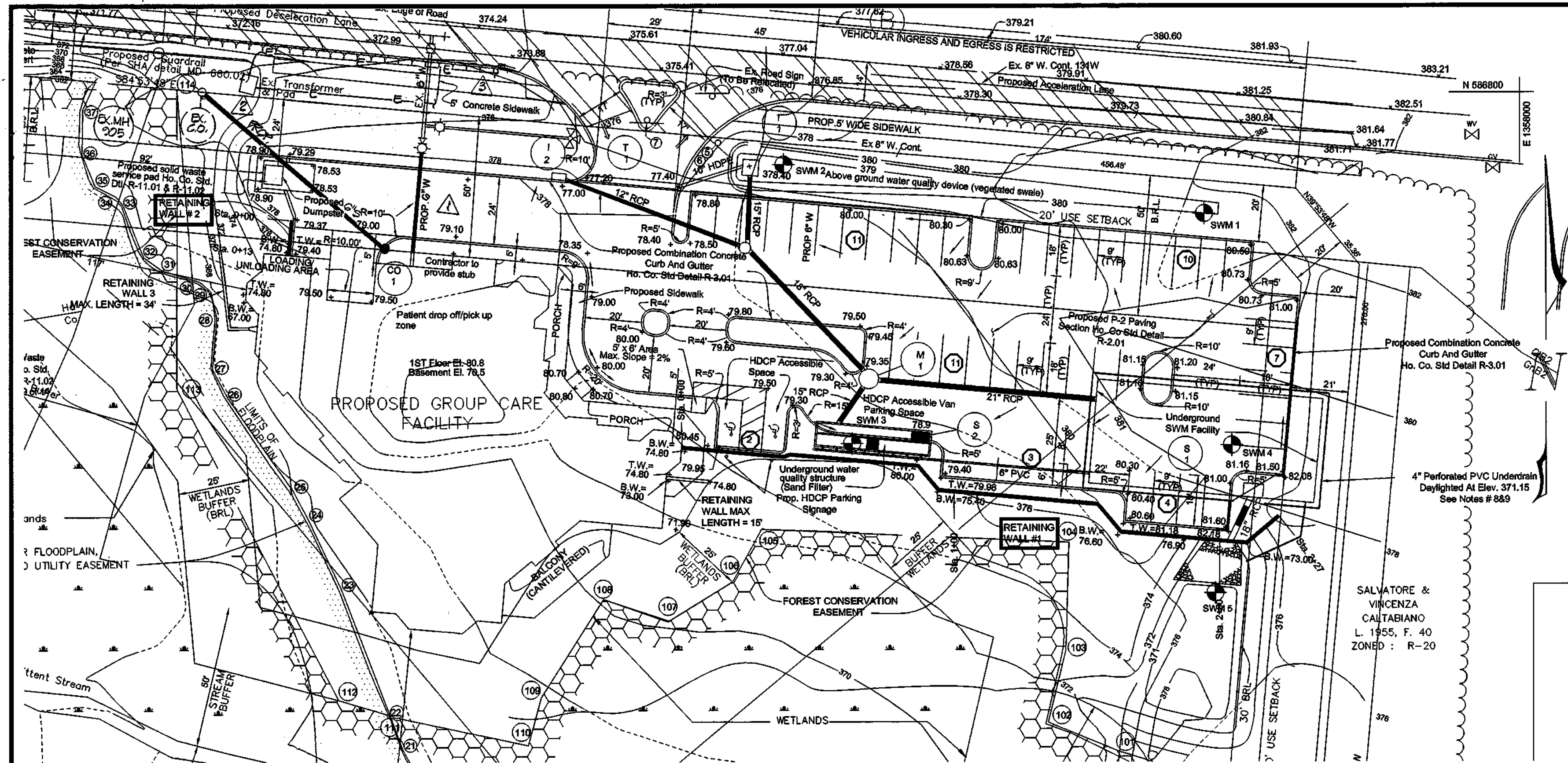
STORM DRAIN DRAINAGE AREA MAP

ARCADIA SQUARE
GROUP CARE FACILITY

TAX MAP No: 24 PARCEL No: 77
2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: A5 SHOWN DATE: JANUARY 13, 2003
SHEET 12 OF 14

ELLIOTT CITY, MARYLAND 20616
FISHER, COBBINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CORNER SQUARE OFFICE PARK - 1872 BALTIMORE NATIONAL PIKE

NO.	DESCRIPTION	DATE
1	INDICATE EXISTING ELECTRIC POWER CABLES	5/7/02
2	INDICATE EXISTING MAIN ALIGNMENT	5/7/02
3	REVISE WATER SERVICE FROM 4" TO 6"	5/7/02



WALL LOCATION PLAN (FOR WALL LOCATION ONLY)
SCALE: 1" = 30'

SPECIFICATIONS
KEYSTONE MODULAR CONCRETE BLOCK RETAINING WALL

PART 1: GENERAL

1.01 Description
A. 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.
B. 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.
C. Work includes furnishing and installing geogrid soil reinforcement of the type, size, location, and length designated on the construction drawings.

1.02 Delivery, Storage and Handling
A. Contractor shall check all materials upon delivery to assure that the proper type, grade, color, and certification has been received.
B. 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
A. Modular concrete units shall conform to the following architectural requirements:
face color - concrete gray - standard manufacturer's color may be specified by the Owner.
face finish - sculptured rock face in angular triangular configuration. Other face finishes will not be allowed without written approval of Owner.
bond configuration - running with bonds nominally located at midpoint vertically adjacent units, in both straight and curved alignments.
exposed surfaces of units shall be free of chips, cracks or other imperfections when viewed from a distance of 10 feet under diffused lighting.
B. Modular concrete materials shall conform to the requirements of ASTM C1372 - Standard Specifications for Segmental Retaining Wall Units.
C. Modular concrete units shall conform to the following structural and geometric requirements measured in accordance with appropriate references:
compressive strength = 3000 psi minimum;
absorption = 8 % maximum (6% in northern states) for standard weight aggregates;
dimensional tolerance = ± 1/8" from nominal unit dimensions not including rough split face, ± 1/16" unit height - top and bottom planes;
unit size - 8" (H) x 16" (W) x 12" (D) minimum;
unit weight - 75 lbs/unit minimum for standard weight aggregates;
inter-unit shear strength - 1000 pcf minimum at 2 psi normal pressure;
geogrid/unit peak connection strength - 1000 pcf minimum at 2 psi normal force.

2.02 Shear Connectors
A. Shear connectors shall be 1/2 inch diameter thermoset isoplastic polyester resin-impregnated 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.
B. 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
A. Material shall consist of a compacted #57 crushed stone base as shown on the construction drawings.

2.04 Unit Drainage Fill
A. Unit drainage fill shall consist of #57 crushed stone.
B. 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
A. 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:

Grain Size	Percent Passing
3/4 inch	100-75
No. 40	0-80
No. 200	0-35

Plasticity Index (PI) < 15 and Liquid Limit < 40 per ASTM D-4318.
B. 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.

2.06 Geogrid Soil Reinforcement

2.07 Drainage Pipe
A. The drainage pipe shall be perforated corrugated HDPE pipe manufactured in accordance with ASTM D-1248.

PART 3: EXECUTION

3.01 Excavation
A. 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
A. 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.
B. Leveling pad shall be prepared to insure full contact to the base surface of the concrete units.

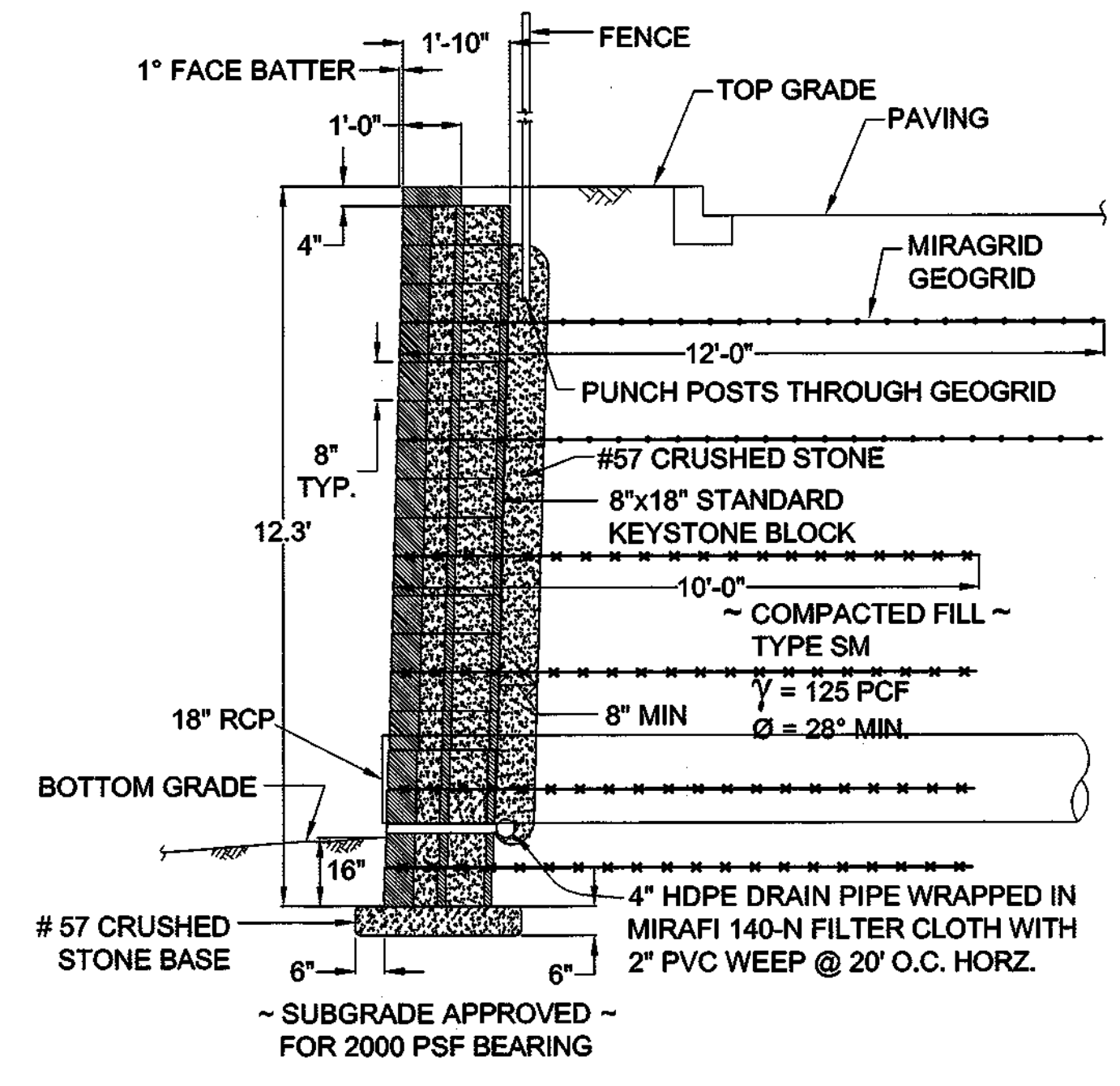
3.03 Modular Unit Installation
A. First course of units shall be placed on the leveling pad at the appropriate line and grade. Alignment and level shall be checked in all directions and insure that all units are in full contact with the base and properly seated.
B. Place the front of units side-by-side. Do not leave gaps between adjacent units. Layout of corners and curves shall be in accordance with manufacturer's recommendations.
C. Install shear-connecting devices per manufacturer's recommendations.
D. 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.
E. 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
A. Geogrid shall be oriented with the highest strength axis perpendicular to the wall alignment.
B. Geogrid reinforcement shall be placed at the strengths, lengths, and elevations shown on the construction design drawings or as directed by the Engineer.
C. 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.
D. Geogrid reinforcements shall be continuous throughout their embedment lengths and placed side-by-side to provide 100% coverage at each level. Spliced connections between shorter pieces of geogrid or gaps between adjacent pieces of geogrid are not permitted.

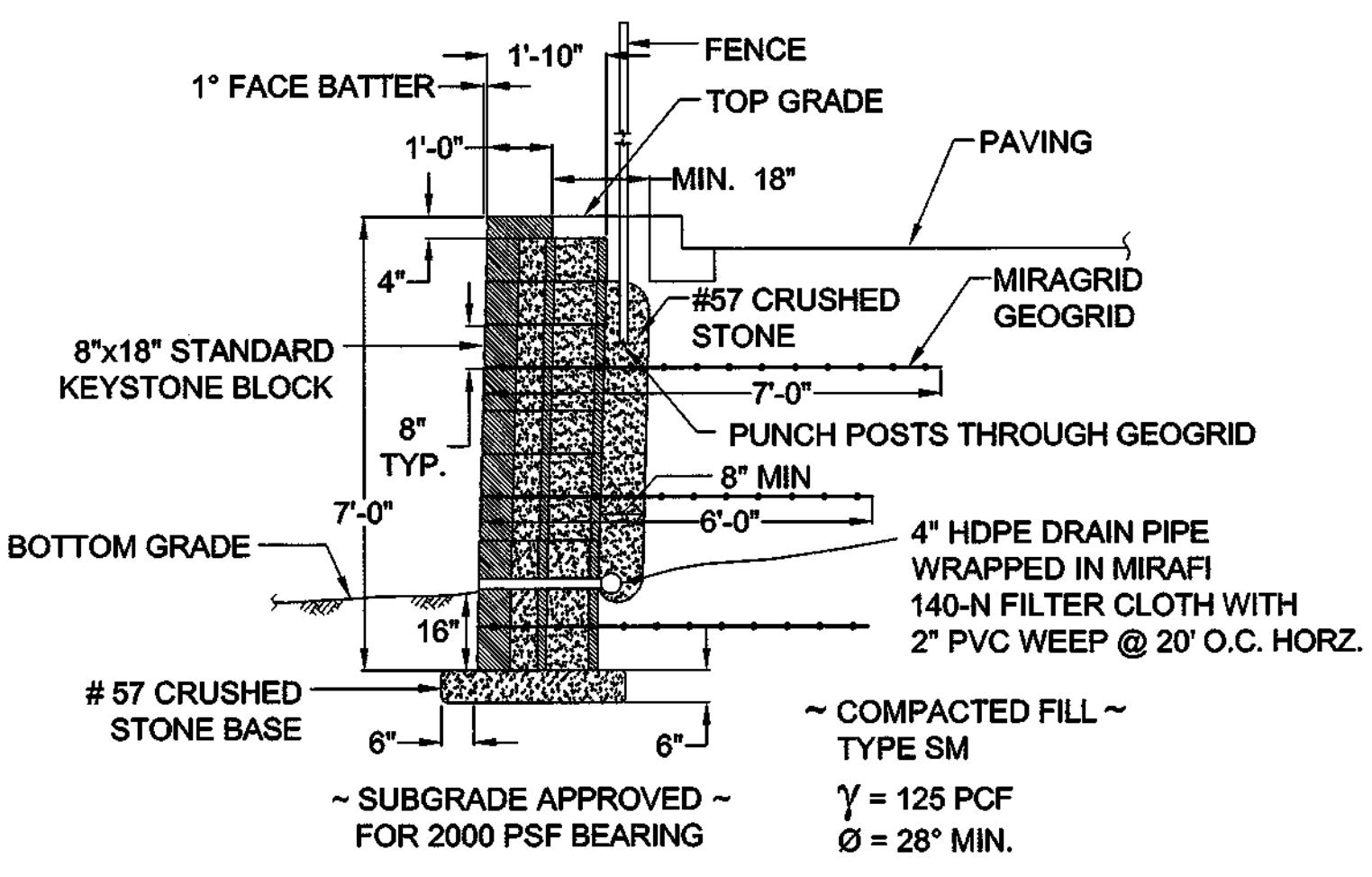
3.05 Reinforced Backfill Placement
A. Reinforced backfill shall be placed, spread, and compacted in such a manner that minimizes the development of slack in the geogrid and installation damage.
B. Reinforced backfill shall be placed and compacted in lifts not to exceed 6 inches where hand compaction is used, or 8 - 10 inches where heavy compaction equipment is used. Lift thickness shall be decreased to achieve the required density as required.
C. 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.
D. Only lightweight hand-operated equipment shall be allowed within 3 feet from the tail of the modular concrete unit.
E. 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.
F. Rubber tired equipment may pass over geogrid reinforcement at slow speeds, less than 10 MPH. Sudden braking and sharp turning shall be avoided.
G. 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 adjacent areas to enter the wall construction site.

3.06 Cap Installation
A. Cap units shall be glued to underlying units with an all-weather adhesive recommended by the manufacturer. Do not exceed three courses.

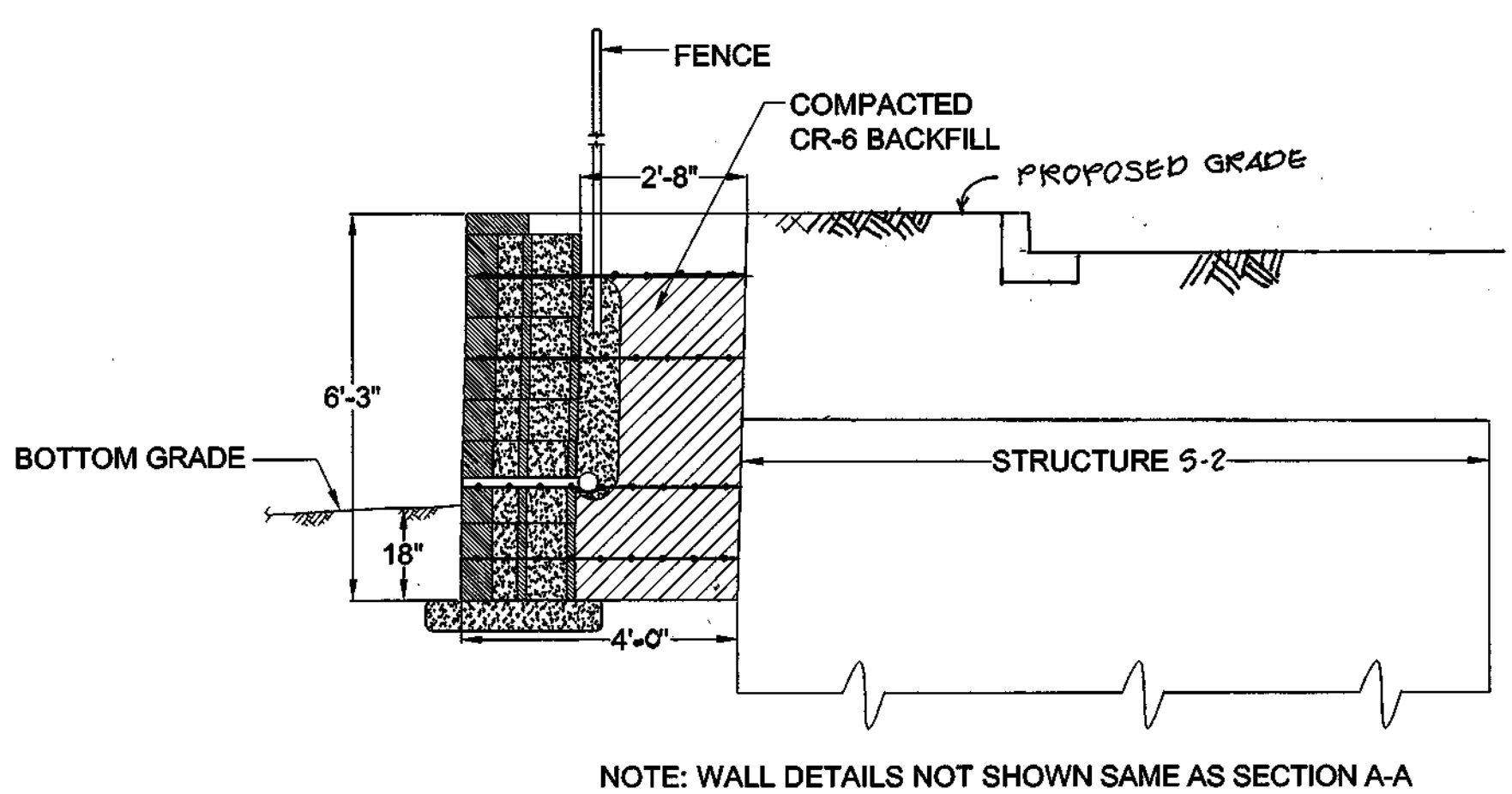
3.07 Field Quality Control
A. The Owner shall engage inspection and testing services, including independent laboratories, to provide quality assurance and testing services during construction.
B. As a minimum, quality assurance testing should include foundation soil inspection, soil and backfill testing, verification of design parameters, and observation of construction for general compliance with design drawings and specifications.



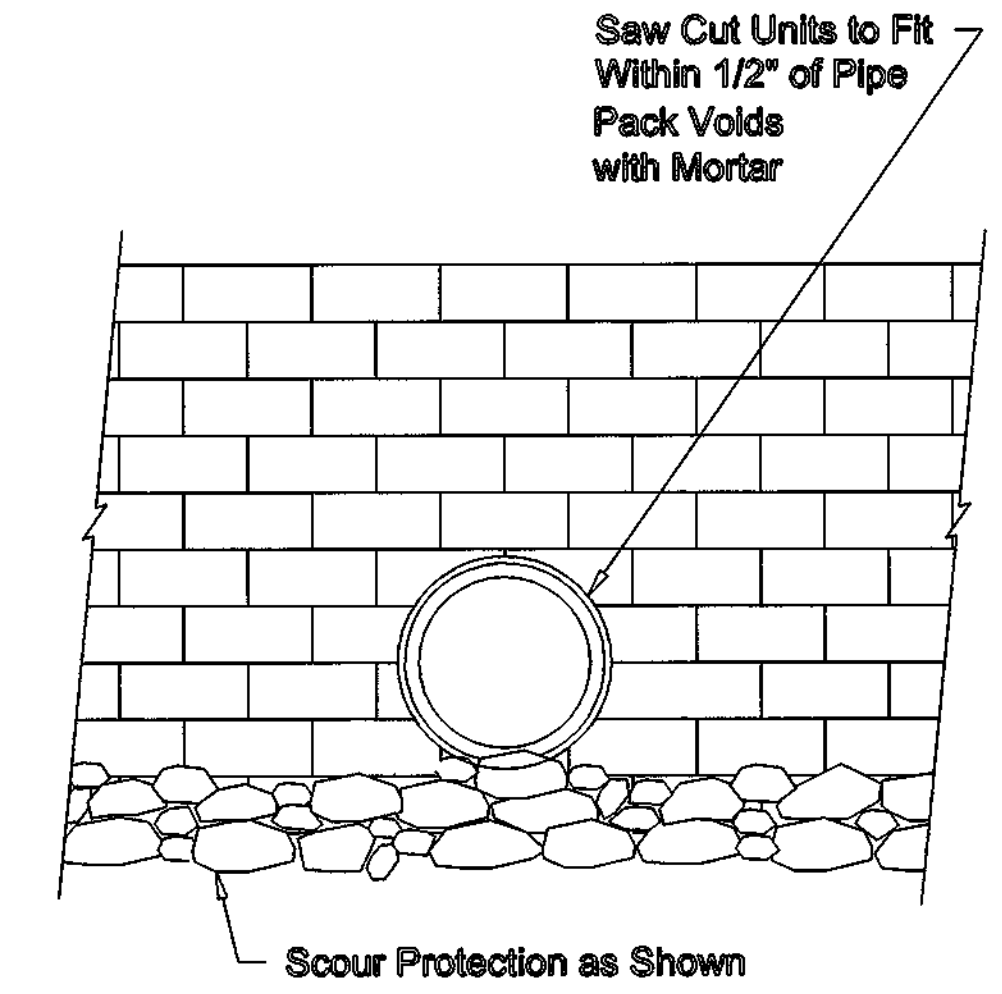
WALL #1 @ Sta. 2+05 - SECTION A-A
3/8" = 1'



WALL #2 @ STA. 0+13 - SECTION B-B
3/8" = 1'



WALL #1 @ STA. 0+80 - SECTION D-D
3/8" = 1'



TYP. DETAIL PIPE OUTLET ELEVATION
N.T.S.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Department of Planning and Zoning: *[Signature]* Date: 2/19/03

Chief, Development Engineering Division: *[Signature]* Date: 2/19/03

Director - Department of Planning and Zoning: *[Signature]* Date: 2/19/03

INDICATE EXISTING ELECTRIC POWER CABLES	DATE
REVISION: POWER MAIN ALIGNMENT	5/7/03
REVISION: WATER SERVICE FROM 4" TO 6"	5/7/03

PLAT REF.	BLOCK NO.	ZONE	TAX	ELEC. DIST.	CENSUS TR.
1551/89	4	R-20	24	2ND	6023.06

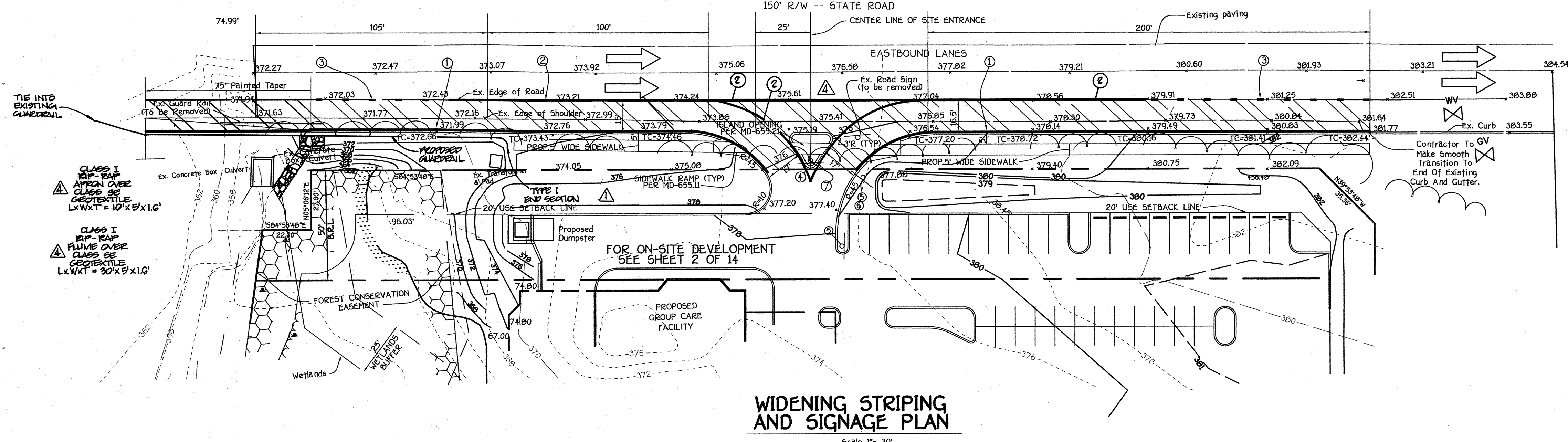
WATER CODE: F-06 SEWER CODE: 5754700

NOTES: 1.) NO TREES SHALL BE PLANTED WITHIN 15 FEET OF THE TOP OF THE RETAINING WALL.
2.) THE REQUIRED BEARING PRESSURE BENEATH THE WALL FOUNDATION SHALL BE VERIFIED IN THE FIELD BY A GEOTECHNICAL ENGINEER WITH A MINIMUM SAFETY FACTOR OF 2.0.
3.) SUITABILITY OF THE RETAINING WALL BACKFILL MATERIAL SHALL BE CONFIRMED BY A GEOTECHNICAL ENGINEER.
4.) RETAINING WALL MUST BE CONSTRUCTED UNDER THE OBSERVATION OF A REGISTERED PROFESSIONAL ENGINEER.



HILLIS-CARNES ENGINEERING ASSOCIATES, INC. 12011 Guilford Road - Suite 106 (410) 880-4788	OWNER: LEWAL PARTNERSHIP, LLP 100 PAINTERS MILL ROAD SUITE 900 OWINGS MILL, MARYLAND 21117 410-363-3434	PROJECT: ARCADIA SQUARE	SECTION/AREA: N/A	LOT NO. Par. 11.07	DESIGNED BY: RWS	DATE: 6/14/02	APPROVED BY: RMH
	ANNAPOLIS JUNCTION, MARYLAND Fax: (410)880-4098	JOB NUMBER: 00188A	SCALE: AS SHOWN	DATE: 6/14/02	DRAWN BY: AM	REVISOR: RMH	REVISOR DATE: 10/14/02

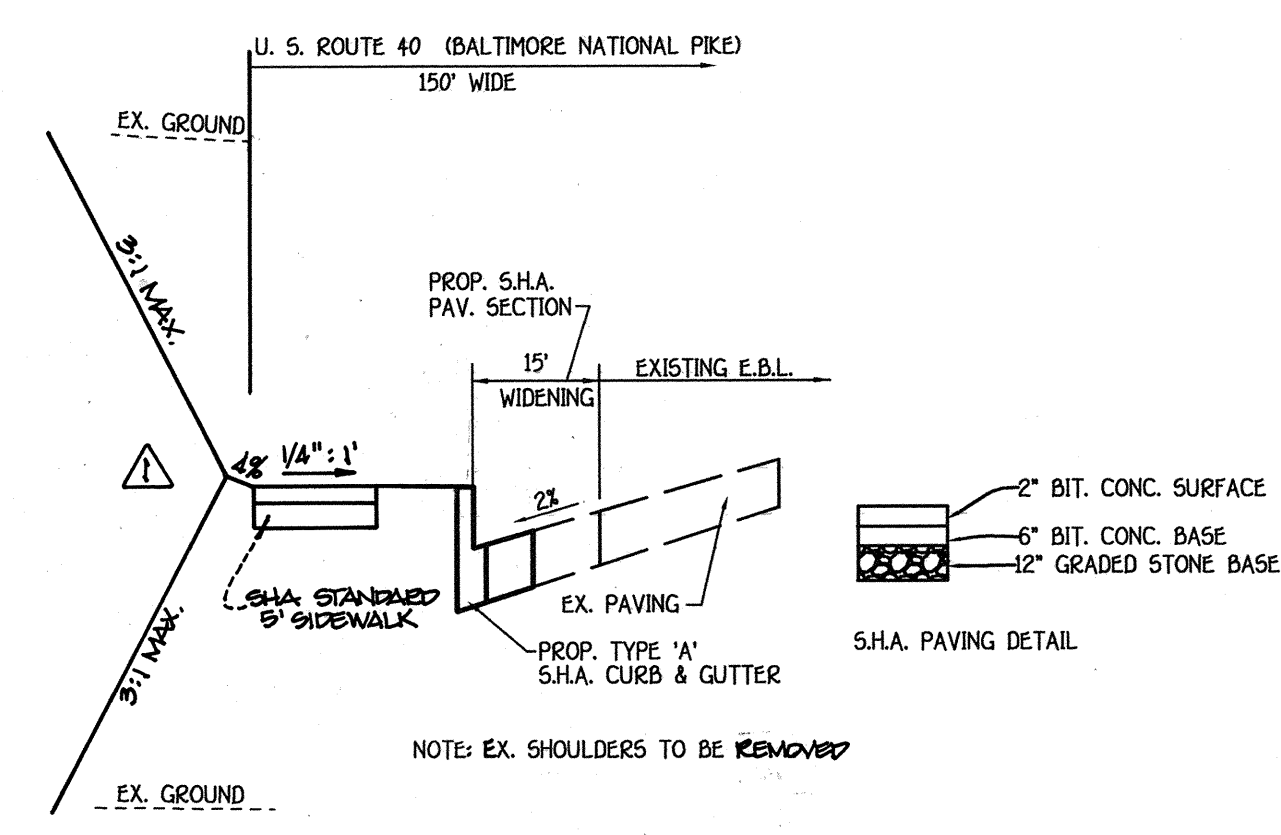
U.S. ROUTE 40 (BALTIMORE NATIONAL PIKE)



LEGEND	
①	6" WIDE WHITE LINE (SOLID)
②	5" WIDE WHITE LINE (SOLID)
③	5" WIDE x 3' LONG WHITE LINES WITH 9' LONG GAPS
④	5" WIDE YELLOW LINE (SOLID)
⑤	STOP SIGN (R1-1)
⑥	NO LEFT TURN SIGN (R3-2)
⑦	KEEP RIGHT SIGN (R4-7)

NOTE: SIGNS ⑥ AND ⑦ ARE TO BE MOUNTED ON THE SAME POST

WIDENING STRIPING AND SIGNAGE PLAN
Scale 1" = 30'

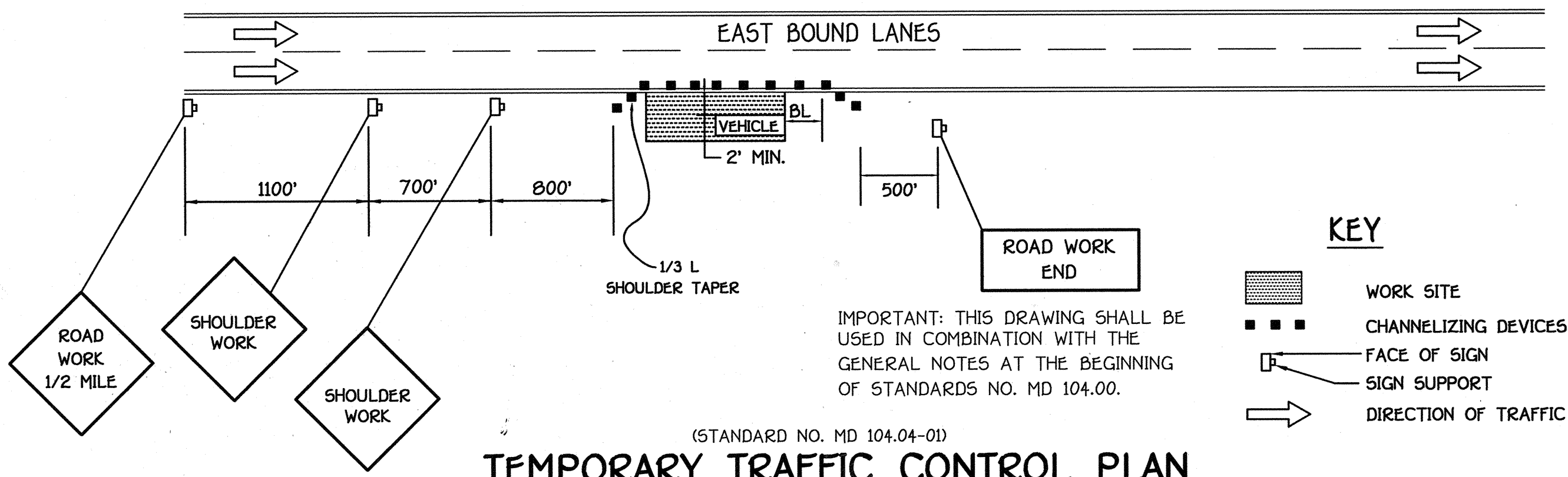


TYP. S.H.A. PAVING SECTION
NOT TO SCALE

MAINTENANCE OF TRAFFIC SPECIAL PROVISIONS

- GENERAL**
- THE PURPOSE OF THIS PORTION OF THE SPECIAL PROVISION IS TO SET FOR THE TRAFFIC CONTROL REQUIREMENTS NECESSARY FOR THE SAFE AND EFFICIENT MAINTENANCE TO TRAFFIC WITHIN WORK AREAS, AND TO MINIMIZE ANY INCONVENIENCES TO THE TRAVELING PUBLIC AND THE CONTRACTOR AND/OR PERMITTEE.
 - PROPERTY TRAFFIC CONTROL THROUGH WORK AREAS IS ESSENTIAL FOR INSURING THE SAFETY AND THAT OF HIGHWAY WORKERS HAS THE HIGHEST PRIORITY OF ALL TASKS WITHIN THIS PROJECT. THE PROPERTY APPLICATION OF THE APPROVED TRAFFIC CONTROL PLAN (TCP) WILL PROVIDE THE DESIRED LEVEL OF SAFETY.
 - THROUGHOUT THESE SPECIAL PROVISIONS, ANY MENTION OF THE TCP SHALL BE IMPLIED TO INCLUDE ANY COMBINATION OF TYPICAL TRAFFIC CONTROL STANDARDS WHICH FORM THE OVERALL TCP FOR THIS PROJECT WHICH HAS BEEN APPROVED BY THE APPROPRIATE SHA TRAFFIC ENGINEER.
 - THE CONTRACTOR AND/OR PERMITTEE SHALL BE REQUIRED TO ADHERE TO THE PROVISIONS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 1998 EDITION, ESPECIALLY PART VI, AND TO SECTION 814 OF THE MARYLAND DOT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS (JANUARY, 1992), INCLUDING ALL REVISIONS AND SUPPLEMENTS TO EACH.
 - THE CONTRACTOR AND/OR PERMITTEE SHALL BE REQUIRED TO ADHERE TO THE REQUIREMENTS SET FOR IN THE TCP AND THESE SPECIAL PROVISIONS, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. ANY REQUESTS TO MAKE MINOR CHANGES TO THE TCP OR THE SPECIAL PROVISIONS WITH REGARD TO THE TRAFFIC CONTROL ITEMS SHALL BE MADE IN WRITING TO THE ENGINEER A MINIMUM OF THREE WORKING DAYS PRIOR TO THE PROPOSED SCHEDULING CHANGE. THE CONTRACTOR AND/OR PERMITTEE SHALL HAVE WRITTEN APPROVAL OF THE ENGINEER PRIOR TO THE IMPLEMENTATION OF ANY CHANGE.
 - NO WORK SHALL BEGIN ON ANY WORK ACTIVITY OR WORK PHASE UNTIL ALL REQUIRED TRAFFIC CONTROL PATTERNS AND DEVICES INDICATED ON THE TCP FOR THAT ACTIVITY OR PHASE ARE COMPLETELY AND CORRECTLY IN PLACE TO HAVE BEEN CHECKED FOR APPROVED USAGE.
 - GENERAL AND SPECIFIC WARNING SIGNS SHALL ONLY BE IN PLACE WHEN SPECIFIC WORK TASKS AND ACTIVITIES ARE ACTUALLY UNDERWAY OR CONDITIONS EXIST THAT POSE A POTENTIAL HAZARD TO THE PUBLIC, AND ANY ADDITIONAL SIGNING HAS BEEN APPROVED BY THE APPROPRIATE SHA TRAFFIC ENGINEER. NOTE: THE PRACTICE OF PLACING SIGNING AND OTHER TRAFFIC CONTROL DEVICES IN ADDITION TO THOSE INDICATED ON THE APPROVED TCP IS NOT PERMITTED.
 - THE CONTRACTOR AND/OR PERMITTEE SHALL PROVIDE, MAINTAIN IN NEW CONDITION, AND MOVE WHEN NECESSARY, OR AS DIRECTED BY THE ENGINEER, ALL TRAFFIC CONTROL DEVICES USED FOR THE GUIDANCE AND PROTECTION OF MOTORISTS, PEDESTRIANS, AND WORKERS.
 - ALL TRAFFIC CONTROL DEVICES REQUIRED BY THE TCP SHALL BE KEPT IN GOOD CONDITION, FULLY PERFORMING AS SET FORTH IN THE TCP, THE MUTCD, AND/OR SECTION 814 OF THE SPECIFICATIONS. FOR REFLECTIVE DEVICES, A PARTICULAR DEVICE IS ASSUMED TO HAVE FAILED TO MEET MINIMUM OPERATIONAL STANDARDS WHEN THE DEVICE NO LONGER HAS RETRO-REFLECTANCE CAPABILITY OF AT LEAST 60% OF THE SPECIFIED MINIMUM VALUE OVER AT LEAST 90% OF THE VISIBLE REFLECTIVE SURFACE.
 - ALL TRAFFIC CONTROL DEVICES NOT REQUIRED FOR THE SAFE CONDUCT OF TRAFFIC SHALL BE PROMPTLY REMOVED, COMPLETELY COVERED, TURNED AWAY FROM TRAFFIC, OR OTHERWISE TAKEN OUT OF SERVICE. IT IS INTENDED THAT NO TRAFFIC CONTROL DEVICE IS TO BE IN SERVICE WHEN THERE IS NO CLEAR CUT REASON FOR THE DEVICE.
 - THROUGHOUT THE PERIODS OF WORK ACTIVITIES, TRAFFIC SHALL BE MAINTAINED BY IMPLEMENTING THE APPROVED TCP. IN LIEU OF THE TCP PREPARED FOR THIS PROJECT, AND/OR INDIVIDUAL TYPICAL TRAFFIC CONTROL STANDARDS, THE CONTRACTOR AND/OR PERMITTEE HAS THE OPTION OF PREPARING AND SUBMITTING A TCP, WHOLLY OR IN PART, OF HIS OWN DESIGN, FOLLOWING GUIDELINES SET FORTH IN THE MUTCD AND PRESCRIBED BY THE ADMINISTRATION. A TCP DEVELOPED BY THE CONTRACTOR AND/OR PERMITTEE SHALL NOT BE IMPLEMENTED UNTIL ADVANCE WRITTEN APPROVAL IS OBTAINED FROM THE ENGINEER. TCP'S MAY BE IMPLEMENTED WITHIN A SINGLE PROJECT OR JOINTLY BETWEEN TWO OR MORE PROJECTS. IN SITUATIONS WHERE TCP'S JOINTLY IMPLEMENTED, CARE SHALL BE EXERCISED TO PRESENT CORRECT AND NON-CONFLICTING GUIDANCE TO THE TRAVELING PUBLIC.
 - THROUGHOUT THESE SPECIAL PROVISIONS, WHERE SPEED OF TRAFFIC IS NOTED, THIS MEANS THE POSTED SPEED OR PREVAILING TRAVEL SPEED, WHICHEVER IS HIGHER, UNLESS OTHERWISE NOTED.
 - TRAFFIC SHALL BE MAINTAINED AT ALL TIMES THROUGHOUT THE ENTIRE LENGTH OF THE PROJECT, UNLESS OTHERWISE NOTED. NO TRAVEL LANES OTHER THAN THOSE DESIGNATED FOR POSSIBLE CLOSURE IN THE TCP SHALL BE CLOSED WITHOUT OBTAINING PRIOR APPROVAL FROM THE ENGINEER. ALL INGRESS AND EGRESS TO THE WORK AREA BY THE CONTRACTOR AND/OR PERMITTEE SHALL BE PERFORMED WITH THE FLOW OF TRAFFIC.

U.S. ROUTE 40 (BALTIMORE NATIONAL PIKE)



TEMPORARY TRAFFIC CONTROL PLAN
NO SCALE

IMPORTANT: THIS DRAWING SHALL BE USED IN COMBINATION WITH THE GENERAL NOTES AT THE BEGINNING OF STANDARDS NO. MD 104.00.

KEY

	WORK SITE
	CHANNELIZING DEVICES
	FACE OF SIGN
	SIGN SUPPORT
	DIRECTION OF TRAFFIC



ENGINEER'S CERTIFICATE
I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
Signature of Engineer (print name below signature) *1/20/03* Date

DEVELOPER'S CERTIFICATE
I/we certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize person on-site inspection by the Howard Soil Conservation District.
Signature of Developer (print name below signature) *1/22/03* Date

OWNER
LEWAL PARTNERSHIP, LLP
100 PAINTERS HILL ROAD, SUITE 900
OWINGS HILLS, MARYLAND 21117
(410) 363-3434

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Mark D. Lyle 2/19/03
Director - Department of Planning and Zoning Date

David Hamilton 2/19/03
Chief, Division of Land Development Date

John DeWitt 2/16/03
Chief, Development Engineering Division Date

SUBDIVISION	SECTION/AREA	PARCEL NO.			
ARCADIA SQUARE	77	77			
DEED NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
1551/89	4	R-20	24	SECOND	602306
WATER CODE	SEWER CODE				
F-06	5754700				

MD. RTE. 40 WIDENING PLAN AND TRAFFIC MAINTENANCE NOTES AND DETAILS

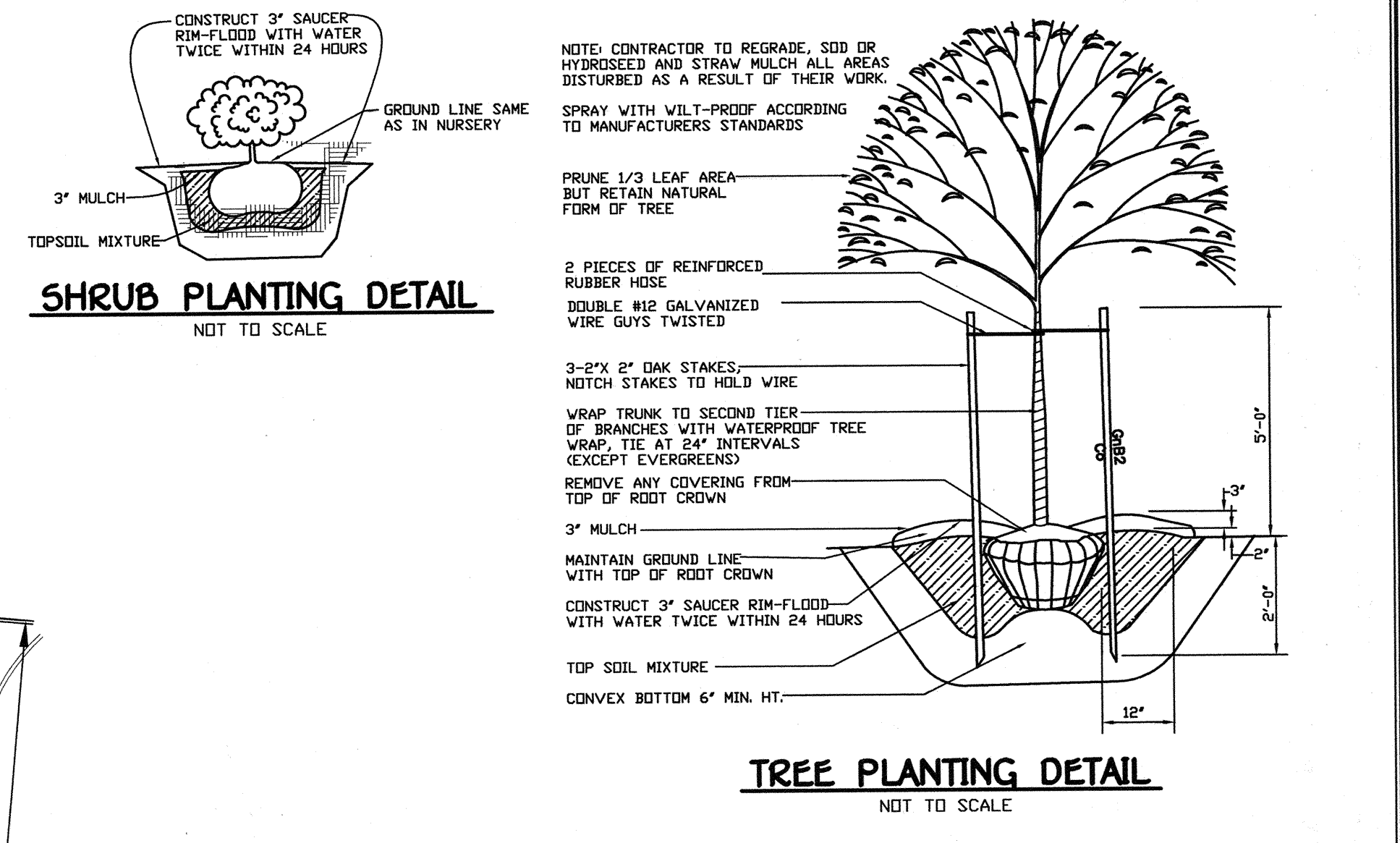
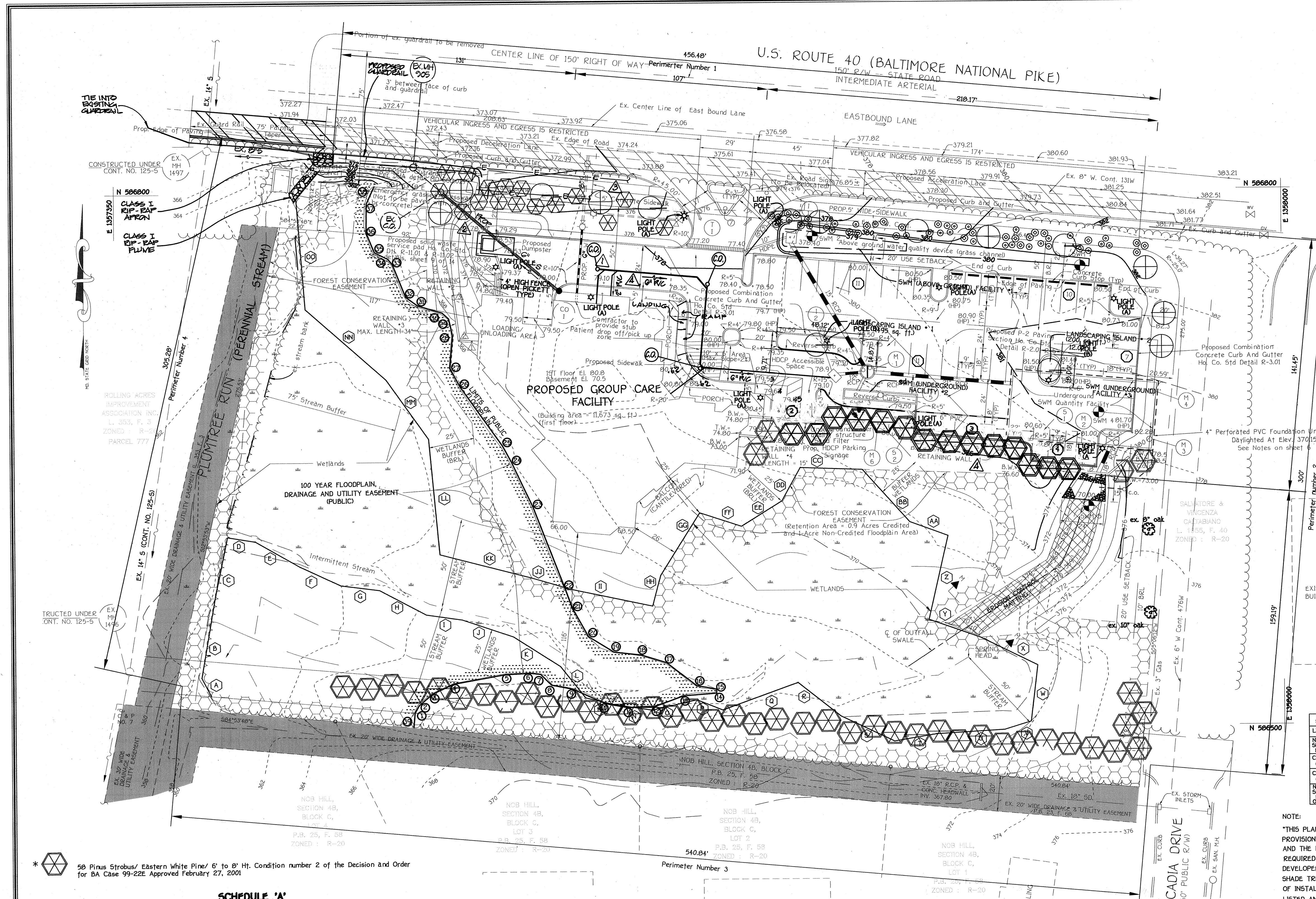
ARCADIA SQUARE GROUP CARE FACILITY

TAX MAP No: 24 PARCEL No: 77
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN DATE: JANUARY 13, 2003
SHEET 8 OF 14

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 1872 BALTIMORE NATIONAL PIKE
ELLCOTT CITY, MARYLAND 21042
410-681-2995

NO.	DESCRIPTION	DATE
1	ADD CHANNELIZING ALONG U.S. ROUTE 40 AND STRIPING AT ENTRANCE AND ADD RIP-RAP PROTECTION AT EX. BOX CULVERT	5/9/04



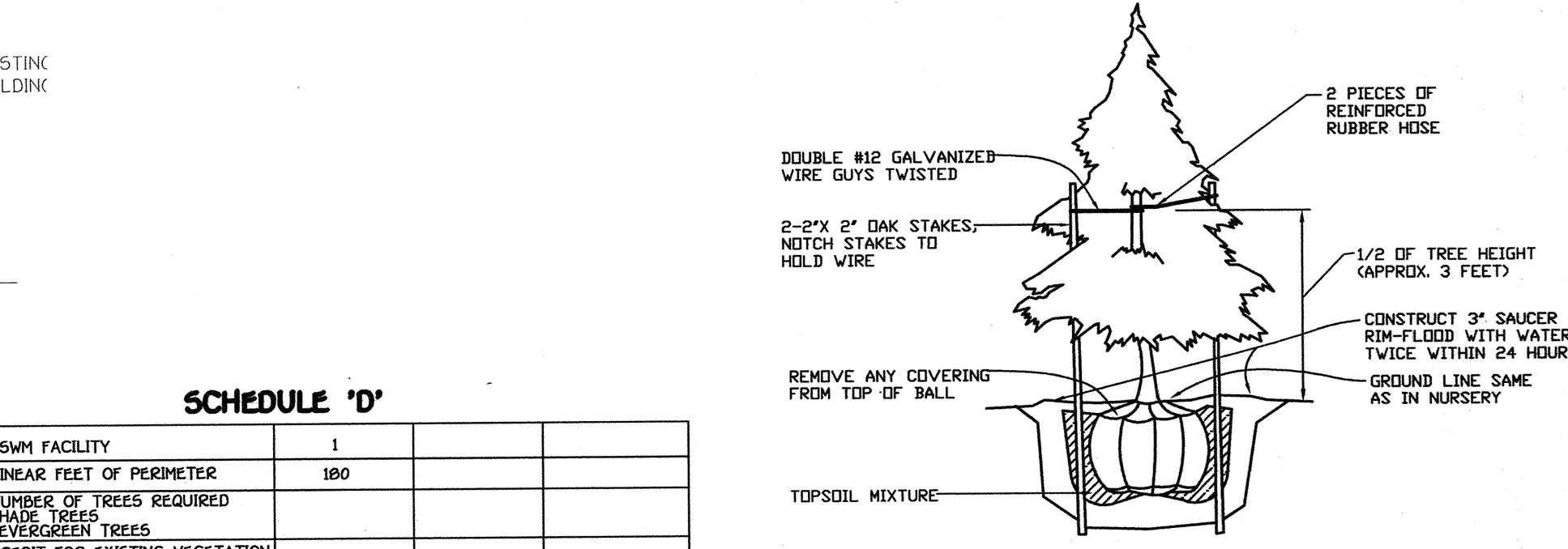
PLANTING SPECIFICATIONS

Plants, related material, and operations shall meet the detailed description as given on the plans and as described herein. All plant material, unless otherwise specified, shall be nursery grown, uniformly branched, have a vigorous root system, and shall conform to the species, size, root and shape shown on the plant list and the American Association of Nurserymen (AAN) Standards. Plant material shall be healthy, vigorous, free from defects, decay, disfiguring roots, sun scald injuries, abrasions of the bark, plant disease, insect pest eggs, borers and all forms of insect infestations or objectionable disfigurements. Plant material that is weak or which has been cut back from larger grades to meet specified requirements will be rejected. Trees with forked leaders will not be accepted. All plants shall be freshly dug no heat-dried plants from cold storage will be accepted. Unless otherwise specified, all general conditions, planting operations, details and planting specifications shall conform to "Landscape Specification Guidelines for Baltimore-Washington Metropolitan Areas", hereinafter "Landscape Guidelines", approved by the Landscape Contractors Association of Metropolitan Washington and the Potomac Chapter of the American Society of Landscape Architects, latest edition, including all addenda.

Contractor shall be responsible for notifying utility companies, utility contractors and "Miss Utility" a minimum of 48 hours prior to beginning any work. Contractor shall be responsible for protecting existing utilities. Contractor shall be responsible for installing a minimum of 4 foot high safety fence or blaze orange safety fence in accordance with the appropriate section of the Landscape Guidelines. Contractor's attention is directed to the maintenance requirements found within the one year specifications including watering and replacement of specified plant material.

Contractor shall be responsible for notifying utility companies, utility contractors and "Miss Utility" a minimum of 48 hours prior to beginning any work. Contractor shall be responsible for protecting existing utilities. Contractor shall be responsible for installing a minimum of 4 foot high safety fence or blaze orange safety fence in accordance with the appropriate section of the Landscape Guidelines. Contractor's attention is directed to the maintenance requirements found within the one year specifications including watering and replacement of specified plant material.

Contractor shall be responsible for notifying utility companies, utility contractors and "Miss Utility" a minimum of 48 hours prior to beginning any work. Contractor shall be responsible for protecting existing utilities. Contractor shall be responsible for installing a minimum of 4 foot high safety fence or blaze orange safety fence in accordance with the appropriate section of the Landscape Guidelines. Contractor's attention is directed to the maintenance requirements found within the one year specifications including watering and replacement of specified plant material.



SCHEDULE 'D'

LINEAR FEET OF PERIMETER	NUMBER OF TREES REQUIRED
180	180
SHADE TREES	74
EVERGREEN TREES	74
CREDIT FOR EXISTING VEGETATION (NO, YES AND %)	NO
CREDIT FOR OTHER LANDSCAPING (NO, YES AND %)	YES 100%
NUMBER OF TREES PROVIDED	180
SHADE TREES	74
EVERGREEN TREES	74
OTHER TREES (NO SUBSTITUTION)	---

SCHEDULE 'B'

PARKING LOT INTERNAL LANDSCAPING

NUMBER OF LANDSCAPED ISLANDS	NUMBER OF PARKING SPACES	NUMBER OF TREES PROVIDED	NUMBER OF TREES REQUIRED
2	40	2	2
27	40	27	27
2	27	2	2

LANDSCAPING PLANT LIST

QTY.	NAME	SIZE
8	ACER RUBRUM 'OCTOBER GLORY' (OCTOBER RED MAPLE)	2 1/2"-3" CALIPER FULL CROWN, BAB
16	PICEA ABIES NORWAY SPRUCE	6'-8' HEIGHT
7	PLATANUS X ACEFFOLIA 'BLOODGOOD' BLOODGOOD LONDON PLAIN	2 1/2"-3" CALIPER FULL CROWN, BAB
27	RED TWIGGED DOGWOOD	2-1/2"-3" HEIGHT
27	TAXUS REPANDENS SPREADING ENGLISH YEW	2-1/2" - 3" HT.

NOTE:

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 HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$17,220.00 FOR 15 SHADE TREES, 74 EVERGREENS AND 54 SHRUBS. AT THE TIME OF INSTALLATION, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL. ANY DEVIATION FROM THIS APPROVED LANDSCAPING PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.

58 Pinus Strobus/ Eastern White Pine/ 6' to 8' Ht. Condition number 2 of the Decision and Order for BA Case 99-22E Approved February 27, 2001

SCHEDULE 'A'

PERIMETER	CATEGORY (PROPERTIES/ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE OR PERIMETER	CREDIT FOR EXISTING VEGETATION	NUMBER OF PLANTS REQUIRED			NUMBER OF PLANTS PROVIDED		
					SHADE TREES	EVERGREEN TREES	SHRUBS	OTHER TREES (01 SUBSTITUTION)	SHRUBS (001 SUBSTITUTION)	
P-1	ADJACENT TO ROADWAY	B	107	---	2	3	---	---	---	
		D	131	---	3	13	---	---	---	
		E	219	---	6	0	54	---	54	
P-2	ADJACENT TO PERIMETER	A	300	15% (417)	2	---	---	---	---	
P-3	ADJACENT TO PERIMETER	C	541	541	---	50	---	---	---	
P-4	ADJACENT TO PERIMETER	C	305	---	---	---	---	---	---	

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

LANDSCAPE DEVELOPER'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 Landscaping Manual. I/We further certify that upon completion a letter of landscape installation accompanied by an executed one year guarantee of plant materials will be submitted to the Department of Planning and Zoning.

Name: *[Signature]* Date: *1/24/02*

ENGINEER'S CERTIFICATE

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

Signature of Engineer (print name below signature): *[Signature]* Date: *1/24/02*

DEVELOPER'S CERTIFICATE

I/We certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

Signature of Developer (print name below signature): *[Signature]* Date: *1/24/02*



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 2/15/02
Director - Department of Planning and Zoning

[Signature] 2/19/02
Chief, Division of Land Development

[Signature] 2/16/02
Chief, Development Engineering Division

SUBDIVISION	SECTION/AREA	PARCEL NO.
ARCADIA SQUARE	---	77

DEED NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
1551/89	4	R-20	24	SECOND	602306

WATER CODE: F-06 SEWER CODE: 5754700

LANDSCAPE PLAN

ARCADIA SQUARE GROUP CARE FACILITY

TAX MAP No. 24 PARCEL No. 77
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1"=30' DATE: JANUARY 13, 2003
SHEET 10 OF 14 SDP-02-113

NO.	INVERT	PITTING
1	970.80	CONNECTION @ BUILDING
2	970.24	WYE CONNECTION
3	970.80	CONNECTION @ BUILDING
4	970.00	WYE CONNECTION
5	970.90	CLEAN-OUT
6	970.90	REL. WYE CONNECTION
7	970.80	CONNECTION @ BUILDING
8	970.00	CONNECTION TO INLET
9	971.10	45° BEND W/CLEANOUT
10	971.30	45° BEND

LIGHTING CHART

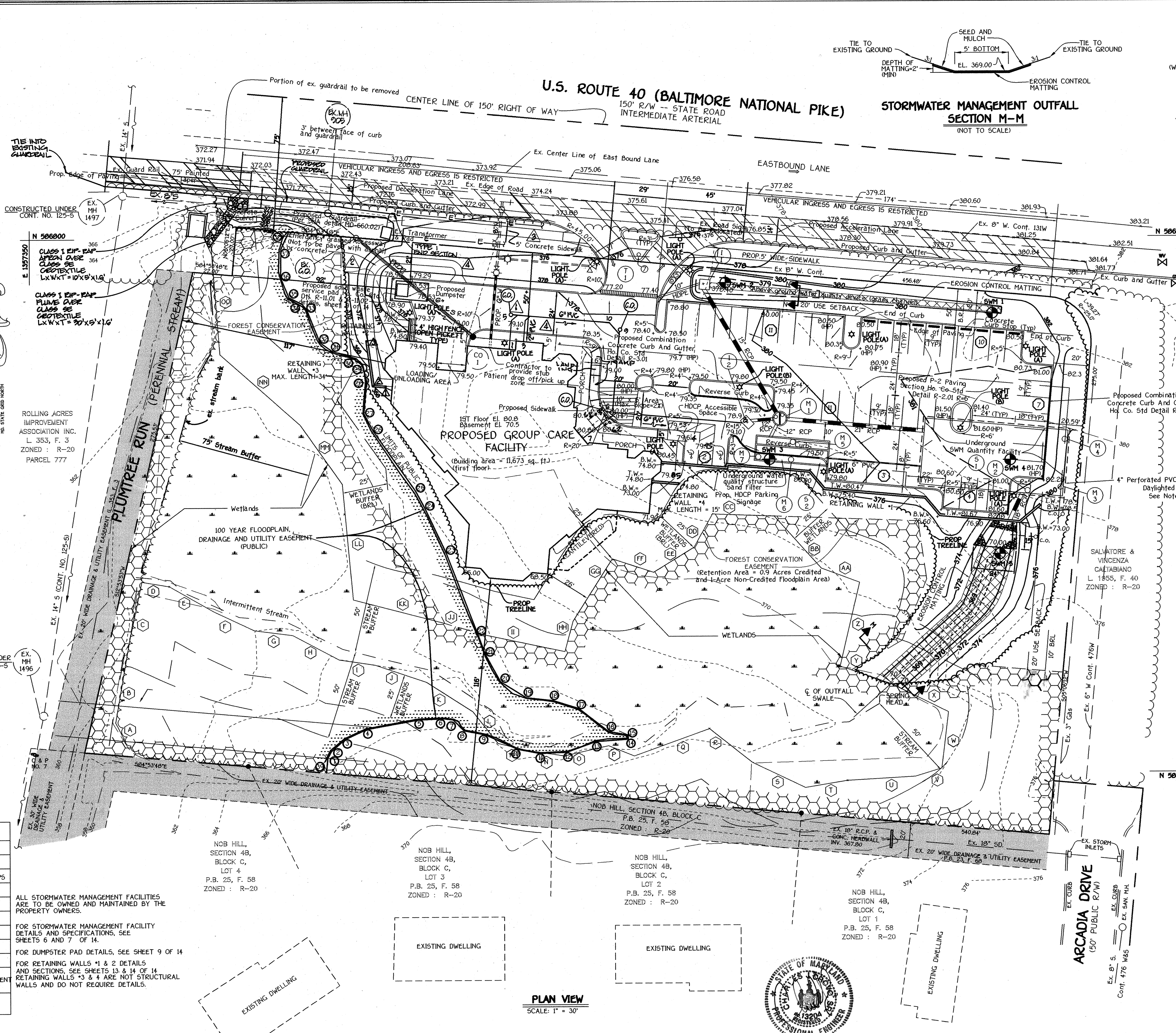
SYMBOL	QUANTITY	LABEL	ARRANGEMENT	LUMENS	LLF	DESCRIPTION
☆	9	A	SINGLE	14000	0.7	HL105-175MH-III
☆	2	B	SINGLE	14000	0.7	HL105-175MH-IV

Line Number	Bearing	Distance
A	S 27°13'21" E	11.69'
B	S 09°54'22" W	46.06'
C	S 1°50'27" W	33.92'
D	N 80°31'20" W	15.57'
E	N 60°05'44" W	28.59'
F	N 64°52'42" W	25.06'
G	N 82°39'09" W	21.67'
H	N 61°48'19" W	29.38'
I	N 81°39'58" W	20.25'
J	N 71°11'16" W	30.15'
K	N 57°12'17" W	30.90'
L	N 38°06'24" W	22.46'
M	N 76°11'42" W	16.32'
N	N 81°13'56" W	21.51'
O	S 77°13'37" W	25.41'
P	N 68°06'20" W	15.57'
Q	S 70°14'23" W	44.62'
R	N 51°28'52" W	30.42'
S	N 64°29'30" W	33.02'
T	S 80°34'38" W	23.74'
U	S 86°40'16" W	38.10'
V	S 72°57'32" W	15.42'
W	S 08°53'27" W	31.72'
X	S 63°39'29" E	35.47'
Y	S 70°29'07" E	30.32'
Z	S 13°06'50" W	48.15'
AA	S 69°39'24" E	22.79'
BB	S 41°39'48" E	39.34'
CC	S 87°52'12" E	34.61'
DD	N 28°50'02" E	21.29'
EE	N 58°13'09" E	26.59'
FF	S 71°38'47" E	24.47'
GG	N 32°17'01" E	41.18'
HH	N 14°48'53" E	17.69'
II	S 77°57'29" E	46.22'
JJ	S 73°34'28" E	22.89'
KK	S 75°18'55" E	22.87'
LL	S 05°10'43" E	64.97'
MM	S 35°09'25" E	40.57'
NN	S 48°21'16" E	59.82'
OO	S 04°27'07" E	61.68'

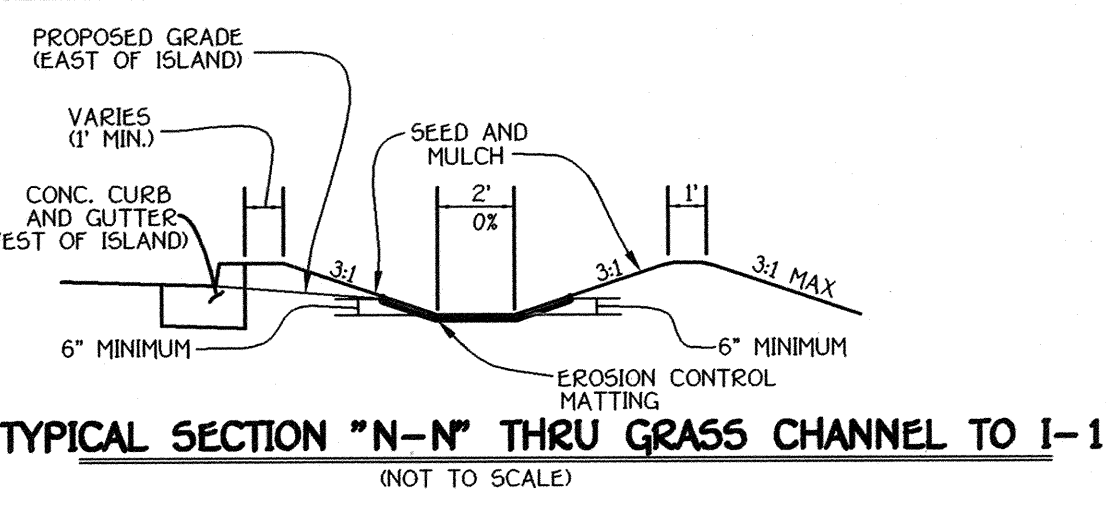
LEGEND

- ① 8" WIDE WHITE LINE (SOLID)
- ② 5" WIDE WHITE LINE (SOLID)
- ③ 5" WIDE x 3" LONG WHITE LINES WITH 9" LONG GAPS
- ④ 5" WIDE YELLOW LINE (SOLID)
- ⑤ STOP SIGN (R1-1)
- ⑥ NO LEFT TURN SIGN (R3-2)
- ⑦ KEEP RIGHT SIGN (R4-7)
- DENOTES PROPOSED TREELINE
- DENOTES EXISTING TREELINE
- DENOTES FOREST CONSERVATION EASEMENT
- DENOTES 100 YR FLOOD PLAIN

NOTE: SIGNS ⑤ AND ⑥ ARE TO BE MOUNTED ON THE SAME POST

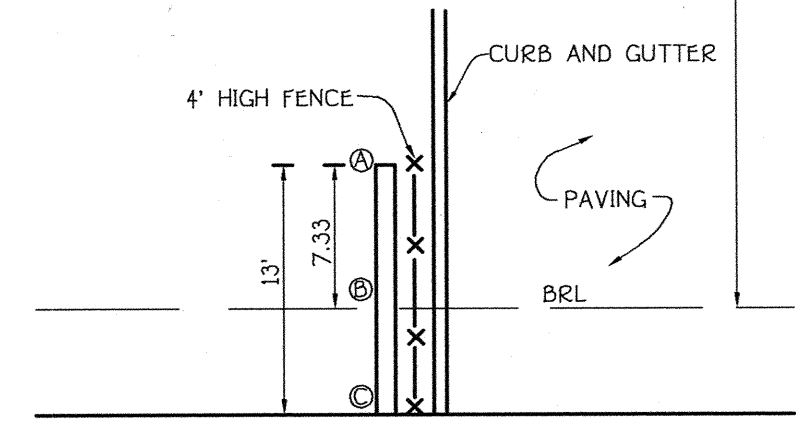


PLAN VIEW
SCALE: 1" = 30'



TYPICAL SECTION "N-N" THRU GRASS CHANNEL TO I-1
(NOT TO SCALE)

LOCATION ALONG WALL	TOP ELEV.	BOTTOM ELEV.	HEIGHT
A	79.37	78.7	0.67
B	79.4	76.5	2.9
C	79.4	74.8	4.6



ENLARGEMENT OF RETAINING WALL #2
SCALE: 1" = 10'

RETAINING WALL #3 ELEVATIONS	TOP	BOTTOM
A	472.00	472.00
B	470.30	468.00
C	470.00	470.00

LINE	ELEVATION	BEARING	DISTANCE
39	365.6	S05°06'12"W	8.28'
1	365.6	N28°20'55"E	4.66'
2	365.6	N49°08'21"E	9.79'
3	365.6	N65°08'28"E	13.30'
4	365.6	N79°52'15"E	29.39'
5	365.7	N87°34'48"E	13.90'
6	365.7	S83°37'07"E	5.56'
7	365.7	S44°38'18"E	8.63'
8	365.7	S79°01'88"E	12.16'
9	365.7	S65°24'26"E	19.79'
10	365.7	S79°19'25"E	12.74'
11	365.8	N87°48'19"E	15.06'
12	365.8	N70°07'13"E	17.23'
13	365.8	N85°43'28"E	18.24'
14	365.8	N01°01'26"W	2.31'
15	365.8	N80°01'31"W	11.18'
16	365.8	N52°01'32"W	21.14'
17	365.8	N72°26'44"W	14.85'
18	365.8	N83°42'31"W	15.23'
19	365.8	N58°10'33"W	16.62'
20	365.8	N28°47'52"W	17.77'
21	365.8	N20°23'26"W	11.32'
22	365.8	N20°58'46"W	50.01'
23	365.8	N25°03'38"W	27.29'
24	365.8	N28°19'15"W	10.97'
25	365.8	N35°06'07"W	40.46'
26	365.9	N27°58'19"W	11.72'
27	365.9	N05°01'16"E	18.18'
28	365.9	N12°32'23"W	9.74'
29	366.0	N47°35'21"W	5.01'
30	366.1	N73°18'09"W	14.04'
31	366.2	N53°53'20"W	8.24'
32	366.2	N21°45'05"W	19.70'
33	366.7	N39°24'34"W	4.81'
34	366.8	N63°27'19"W	8.27'
35	367.0	N22°05'53"W	12.08'
36	367.3	N00°43'36"W	16.00'
37	367.4	N24°33'25"E	10.65'
38			

ENGINEER'S CERTIFICATE
I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
Signature of Engineer (print name below signature) _____ Date 1/31/03

DEVELOPER'S CERTIFICATE
I/we certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize persons on-site inspection by the Howard Soil Conservation District.
Signature of Developer (print name below signature) _____ Date

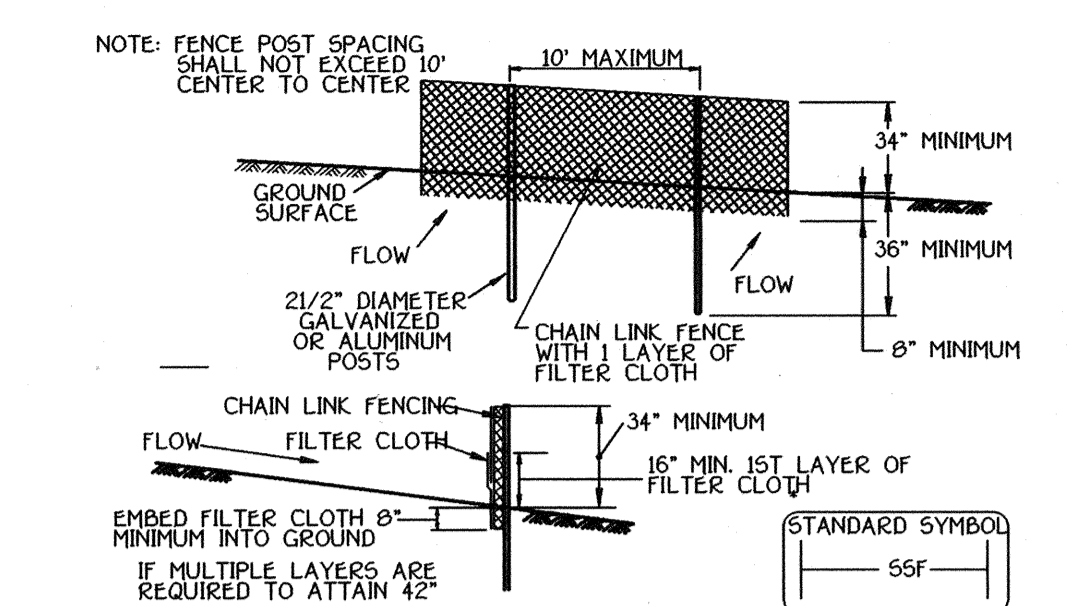
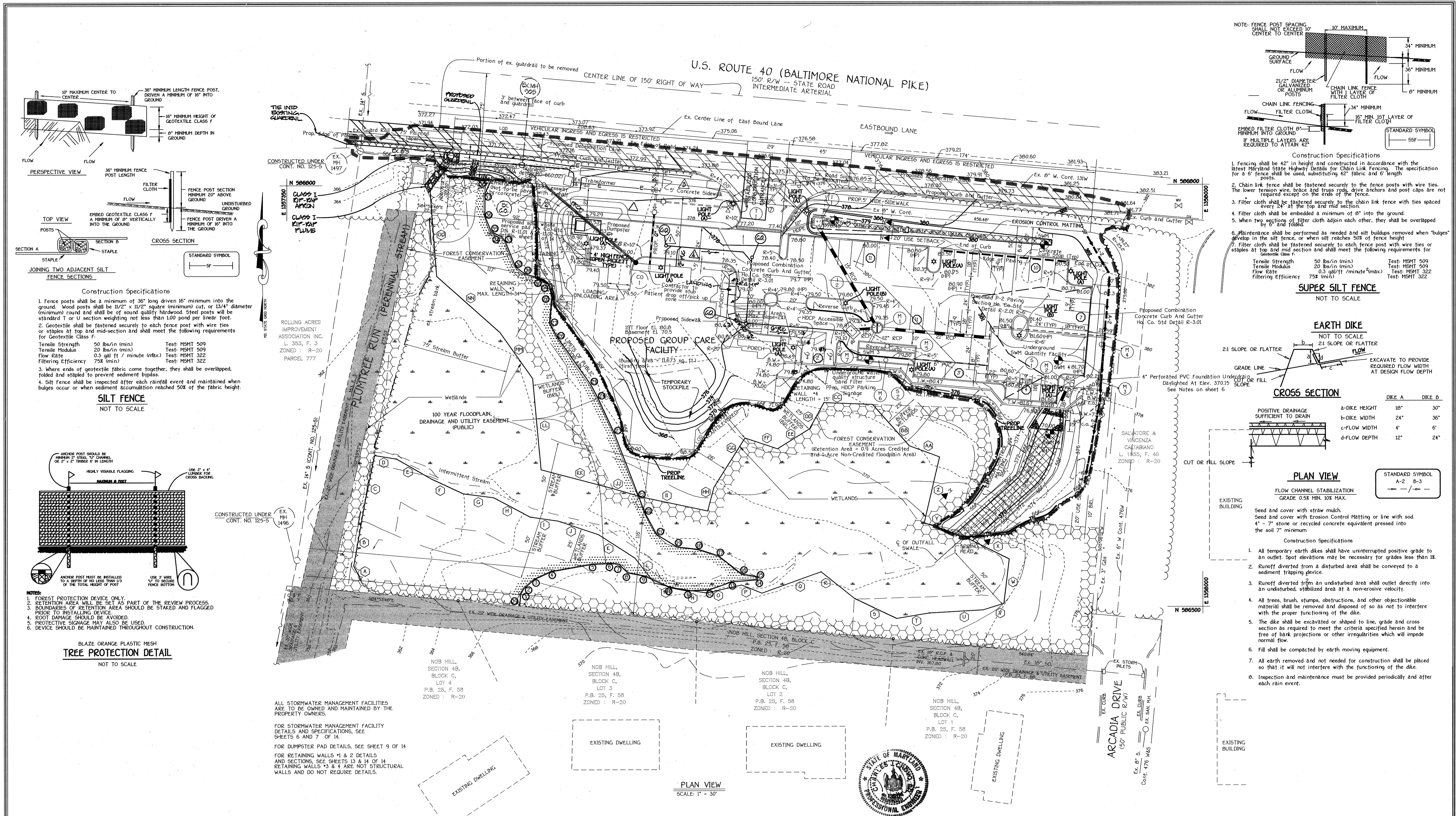
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Director - Department of Planning and Zoning
Chief, Division of Land Development
Date: 2/19/03

DEED NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
1551/89	4	R-20	24	77	602306

SITE DEVELOPMENT PLAN
ARCADIA SQUARE GROUP CARE FACILITY
TAX MAP No.: 24 PARCEL No.: 77
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' DATE: JANUARY 13, 2003
SHEET 2 OF 14 SDP-02-113

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
FEDERAL SQUARE OFFICE PARK - 18272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
410-481-2855

NO.	DESCRIPTION	DATE
1	RELOCATE STREET LIGHTS OUT 5/14 R/W, ADD 0' & 2' PVC UNDERDRAIN FOR ROOF LEAKS, AND GUARDRAIL ALONG U.S. ROUTE 40 AND ADD RIP-RAP AT EXISTING BOX CULVERT	8/3/02
2	INDICATE EXISTING ELECTRIC POWER CABLES	9/7/02
3	REVISE SEWER MAIN ALIGNMENT	9/7/02
4	REVISE WATER SERVICE FROM 4" TO 6"	9/7/02

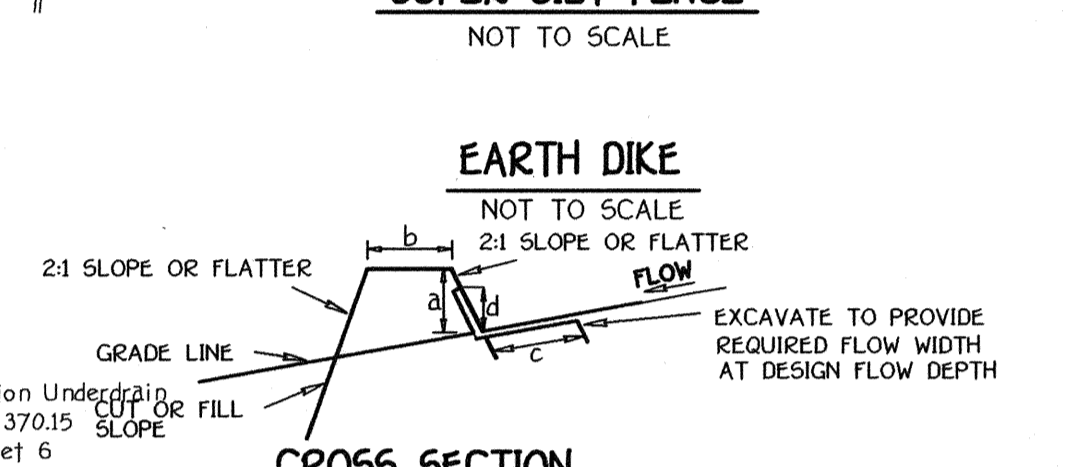


Construction Specifications

- Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length posts.
- Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.
- Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
- Filter cloth shall be embedded a minimum of 8" into the ground.
- When two sections of filter cloth adjoin each other, they shall be overlapped by 5" and folded.
- Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height.
- Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:

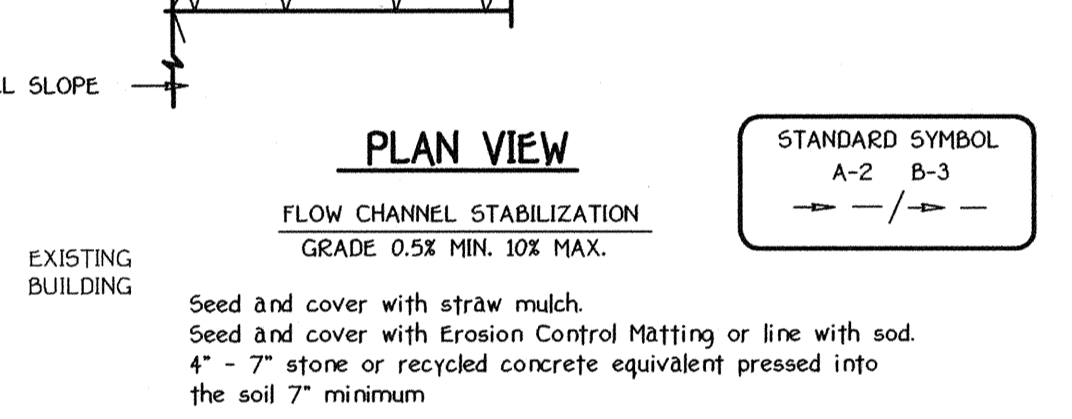
Tensile Strength	50 lbs/in (min)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min)	Test: MSMT 509
Flow Rate	0.3 gal/ft / minute (max)	Test: MSMT 322
Filtering Efficiency	75% (min)	Test: MSMT 322

SILT FENCE
NOT TO SCALE



CROSS SECTION
NOT TO SCALE

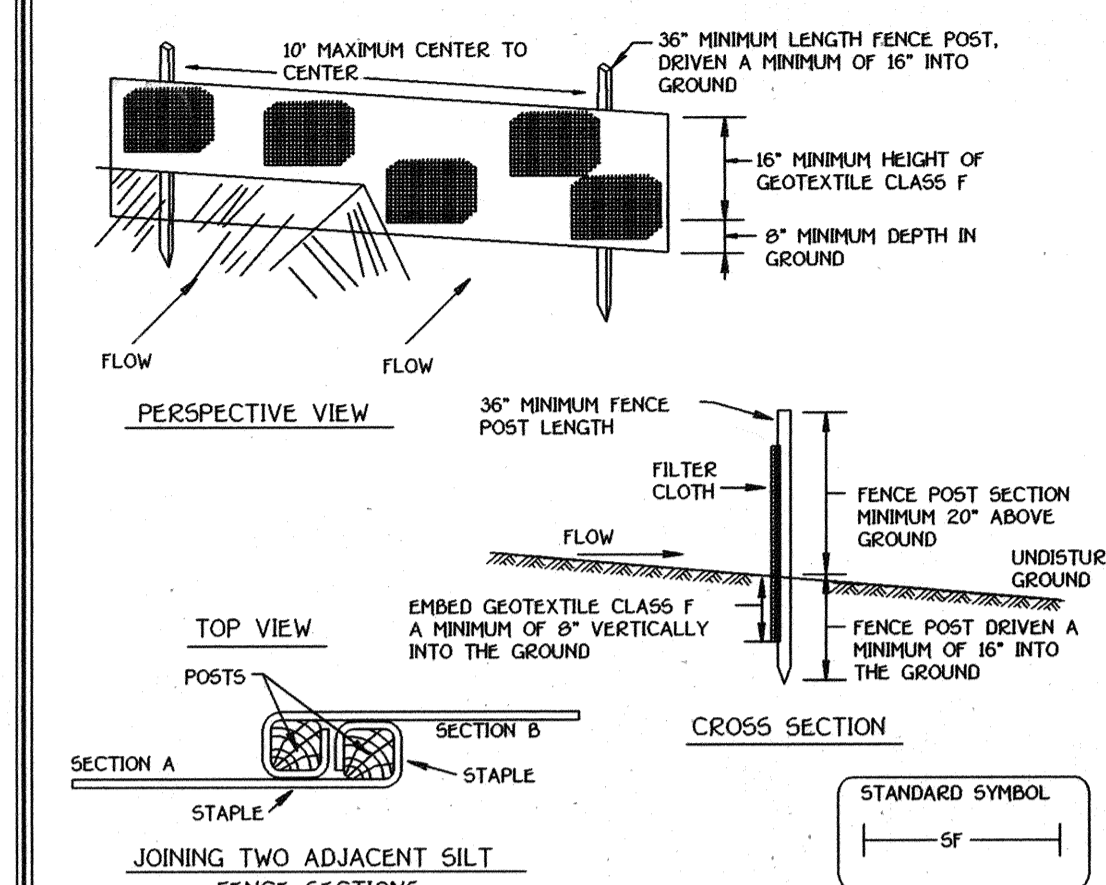
	DIKE A	DIKE B
a-DIKE HEIGHT	18"	30"
b-DIKE WIDTH	24"	36"
c-FLOW WIDTH	4"	6"
d-FLOW DEPTH	12"	24"



PLAN VIEW
FLOW CHANNEL STABILIZATION
GRADE 0.5% MIN. 10% MAX.

Construction Specifications

- All temporary earth dikes shall have uninterrupted positive grade to an outlet. Spot elevations may be necessary for grades less than 1%.
- Runoff diverted from a disturbed area shall be conveyed to a sediment trapping device.
- Runoff diverted from an undisturbed area shall outlet directly into an undisturbed, stabilized area at a non-erosive velocity.
- All trees, brush, stumps, obstructions, and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of the dike.
- The dike shall be excavated or shaped to line, grade and cross section as required to meet the criteria specified herein and be free of bark projections or other irregularities which will impede normal flow.
- Fill shall be compacted by earth moving equipment.
- All earth removed and not needed for construction shall be placed so that it will not interfere with the functioning of the dike.
- Inspection and maintenance must be provided periodically and after each rain event.

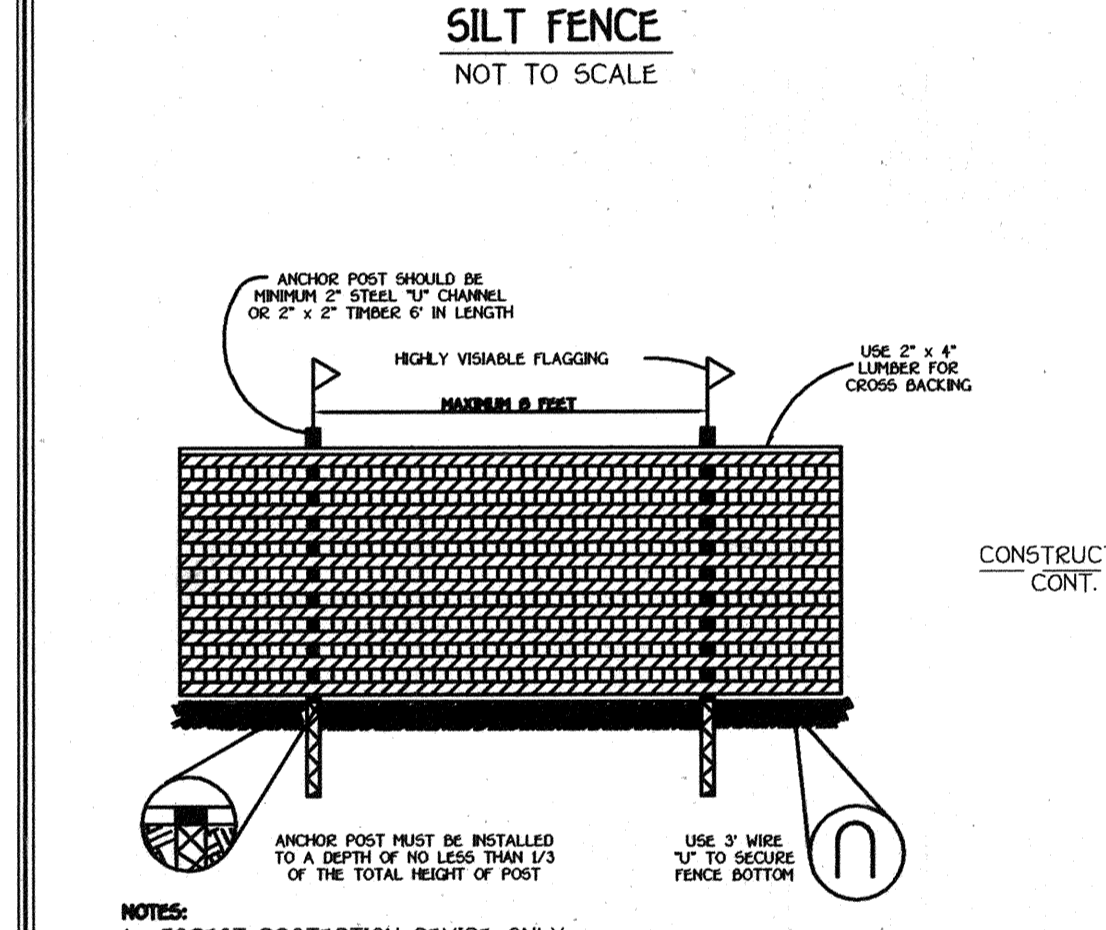


Construction Specifications

- Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum) cut, or 1 3/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 100 pound per linear foot.
- Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min)	Test: MSMT 509
Flow Rate	0.3 gal/ft / minute (max)	Test: MSMT 322
Filtering Efficiency	75% (min)	Test: MSMT 322
- Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypasses.
- Silt fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

SILT FENCE
NOT TO SCALE



TREE PROTECTION DETAIL
NOT TO SCALE

NOTES:

- FOREST PROTECTION DEVICE ONLY.
- RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
- BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.
- ROOT DAMAGE SHOULD BE AVOIDED.
- PROTECTIVE SIGNAGE MAY ALSO BE USED.
- DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

ALL STORMWATER MANAGEMENT FACILITIES ARE TO BE OWNED AND MAINTAINED BY THE PROPERTY OWNERS.

FOR STORMWATER MANAGEMENT FACILITY DETAILS AND SPECIFICATIONS, SEE SHEETS 6 AND 7 OF 14.

FOR DUMPSTER PAD DETAILS, SEE SHEET 9 OF 14.

FOR RETAINING WALLS *1 & 2 DETAILS AND SECTIONS, SEE SHEETS 13 & 14 OF 14.

RETAINING WALLS *3 & 4 ARE NOT STRUCTURAL WALLS AND DO NOT REQUIRE DETAILS.

NO.	DESCRIPTION	DATE
1	RELOCATE STREET LIGHTS OUT OF SWA H/W, ADD 6" & 2" PVC UNDERDRAIN FOR ROAD LENSES, ADD GUARDRAIL ALONG U.S. ROUTE 40 AND ADD KIP-RAP AT EXISTING BOX CULVERT	5/3/04
2	INDICATE EXISTING ELECTRICAL POWER CABLES	5/7/03
3	REVISE SEWER MAIN ALIGNMENT	5/7/03
4	REVISE WATER SERVICE FROM 4" TO 6"	5/7/03

ENGINEER'S CERTIFICATE

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

Signature of Engineer (print name below signature) *[Signature]* Date *1/28/03*

DEVELOPER'S CERTIFICATE

I/We certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

Signature of Developer (print name below signature) *[Signature]* Date *1/28/03*

Reviewed for HOWARD SCD and meets Technical Requirements.

Signature of Reviewer *[Signature]* Date *2/4/03*

U.S.D.-Natural Resources Conservation Service

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

Signature of District Engineer *[Signature]* Date *2/4/03*

Howard SCD

OWNER

LEWAL PARTNERSHIP, LLP
100 PAINTERS MILL ROAD, SUITE 900
OWINGS MILLS, MARYLAND 21117
(410) 363-3434

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Signature of Director *[Signature]* Date *2/19/03*

Signature of Chief of Planning and Zoning *[Signature]* Date *2/19/03*

Signature of Chief, Development Engineering Division *[Signature]* Date *2/16/03*

SUBDIVISION	SECTION/AREA	PARCEL NO.
ARCADIA SQUARE	---	77

DEED NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
1551/89	4	R-20	24	SECOND	602306

WATER CODE: F-06 SEWER CODE: 5754700

SEDIMENT AND EROSION CONTROL PLAN

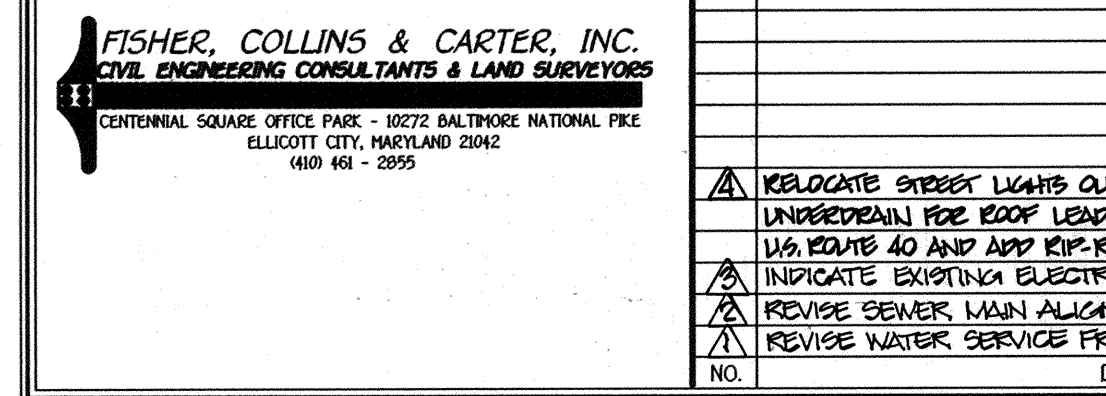
ARCADIA SQUARE GROUP CARE FACILITY

TAX MAP No: 24 PARCEL No: 77

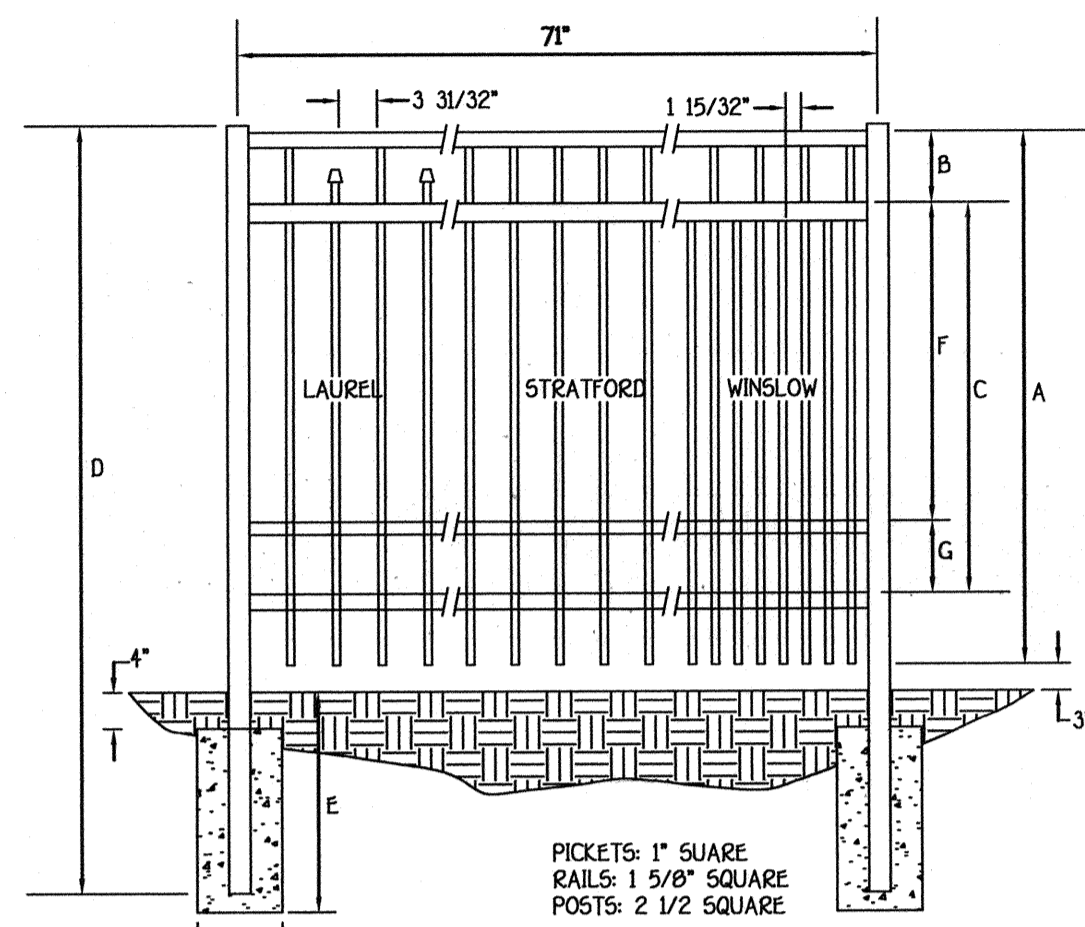
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN DATE: JANUARY 13, 2003

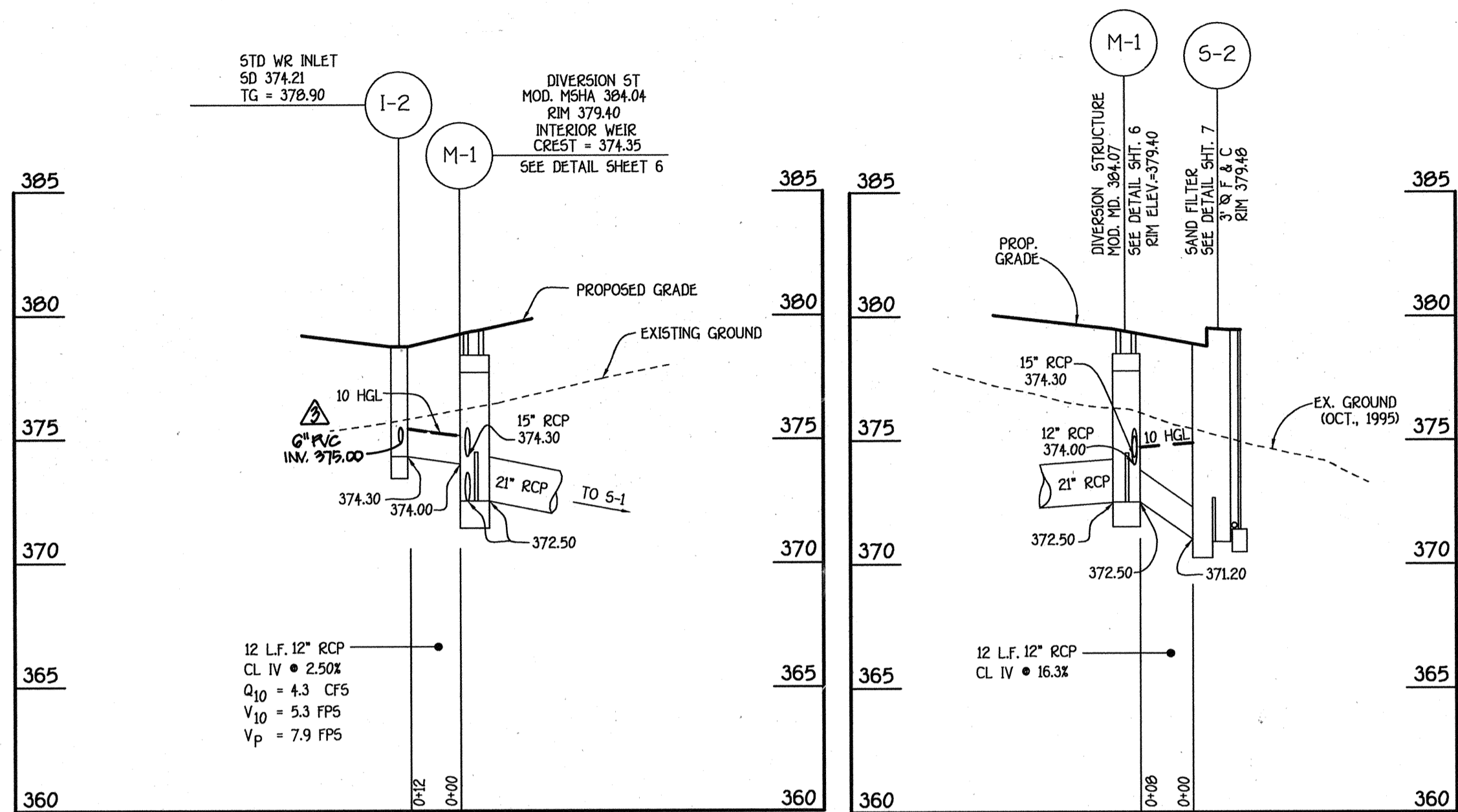
SHEET 3 OF 14 S0P-02-113



NOMINAL HEIGHT	A	B	C	D	E	F	G
48" (3-RAIL)	48"	8"	32"	70"	20"	N/A	N/A
60" (3-RAIL)	60"	8"	44"	88"	26"	N/A	N/A
72" (3-RAIL)	72"	8"	56"	106"	32"	N/A	N/A
84" (3-RAIL)	84"	9"	N/A	124"	38"	9"	9"
96" (3-RAIL)	96"	9"	N/A	142"	44"	7"	9"

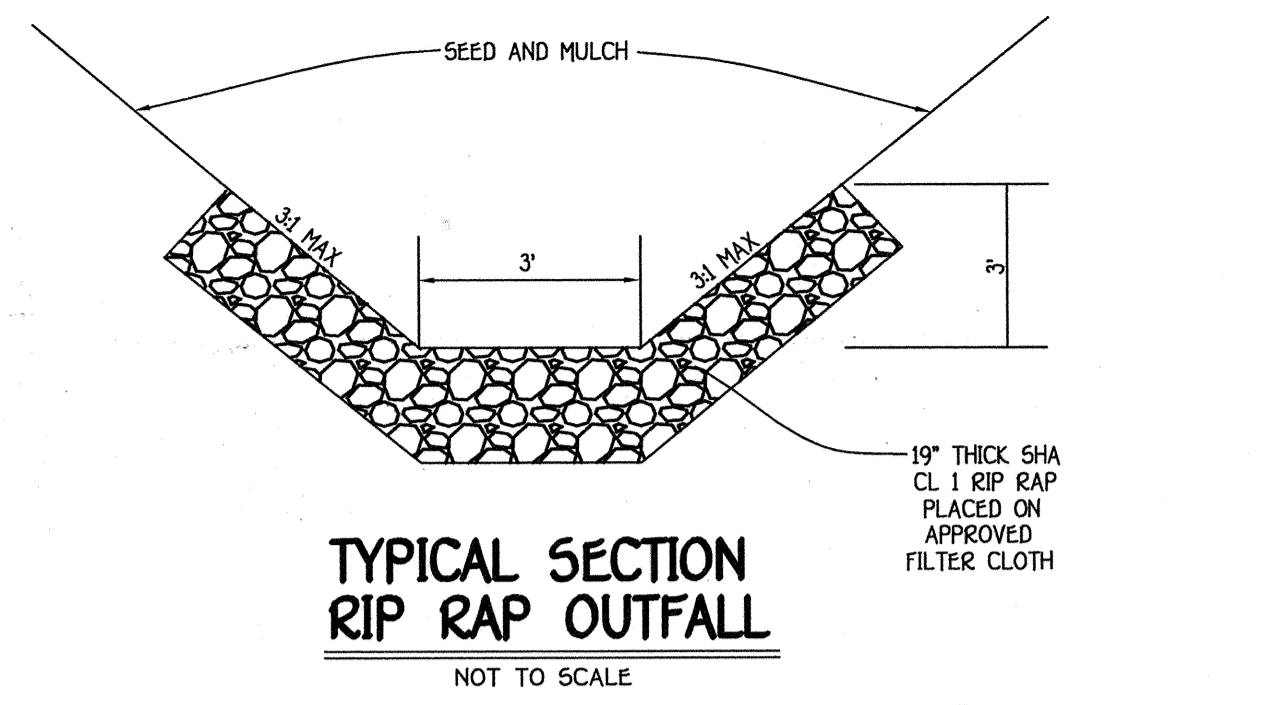


DELGARD
PREMIER ALUMINUM FENCING

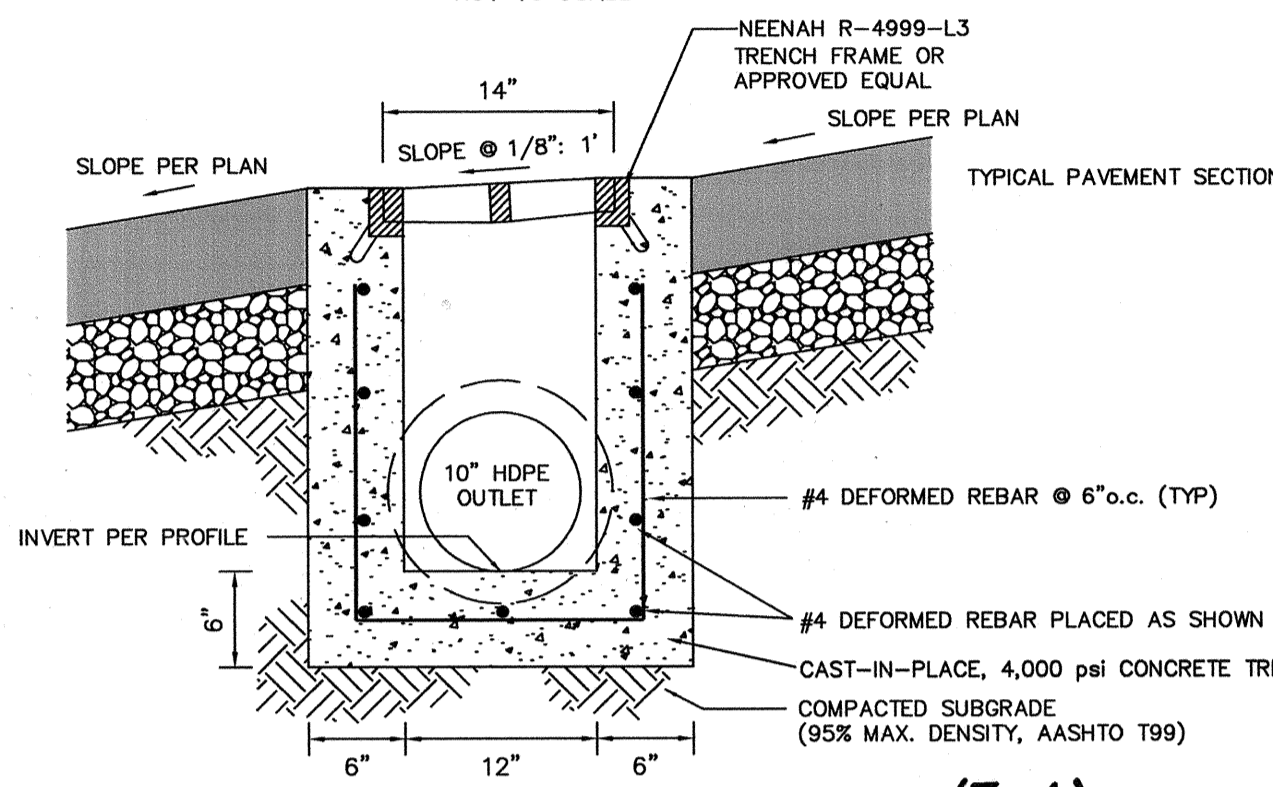


STORM DRAIN PROFILE I-2 TO M-1

STORM DRAIN PROFILE M-1 TO 5-2



TYPICAL SECTION
RIP RAP OUTFALL

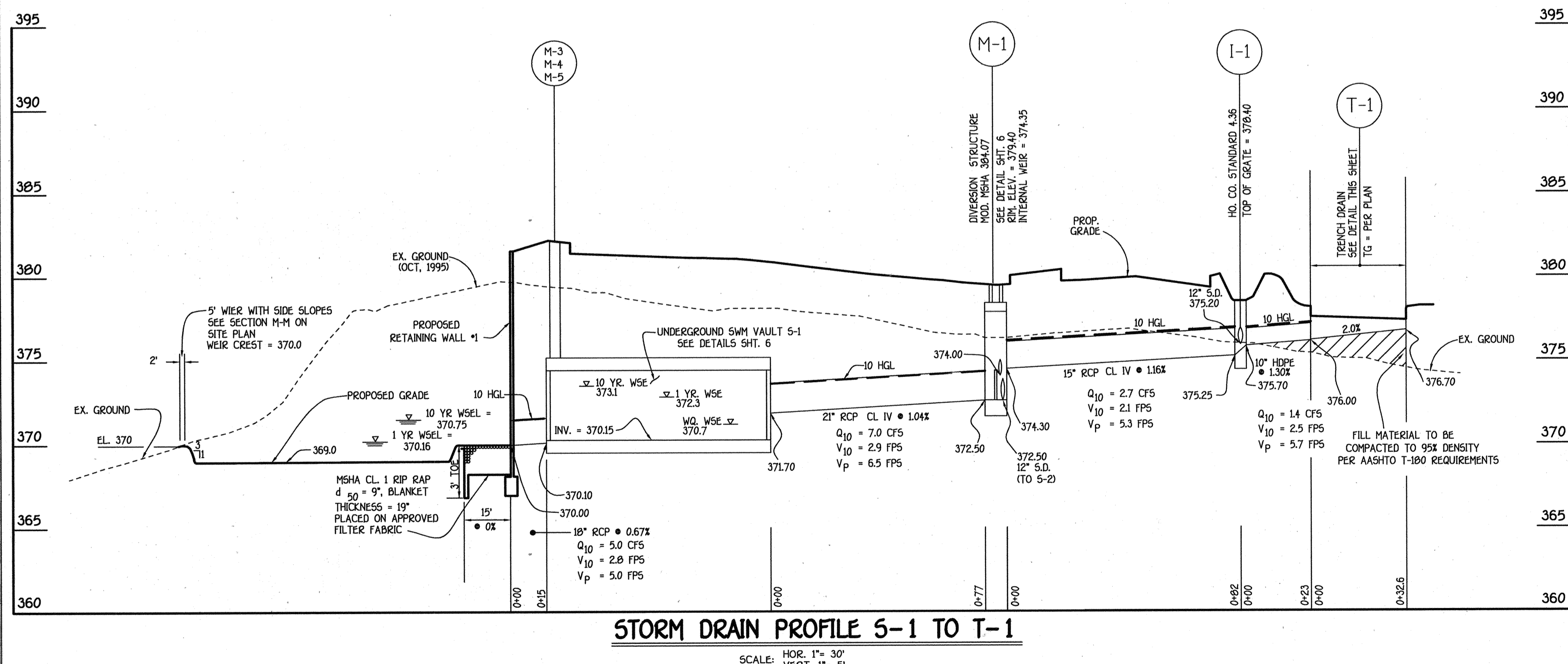


TRENCH DRAIN DETAIL (T-1)

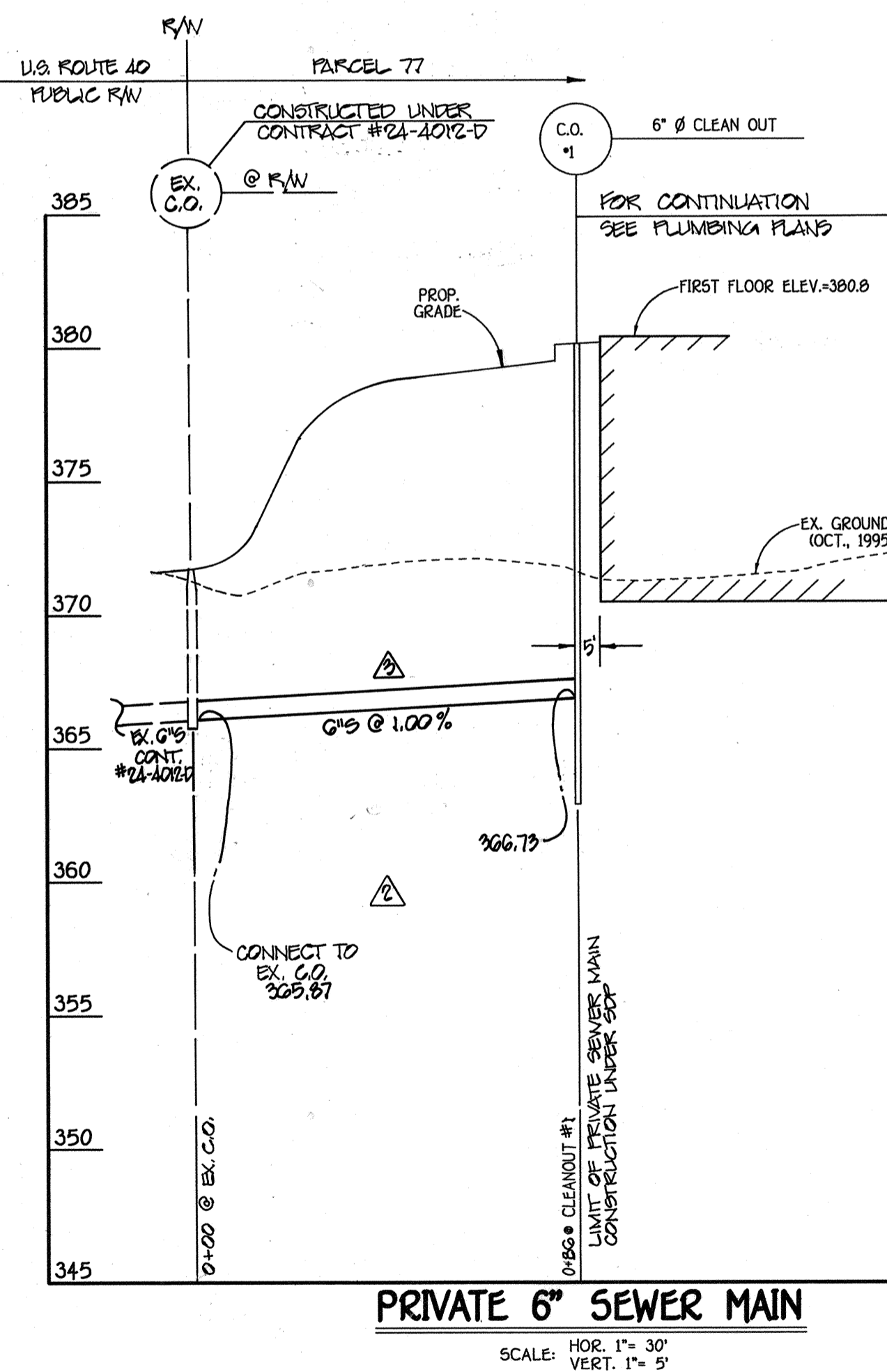
STRUCTURE	NORTH	EAST	TYPE	STD. DETAILS	GRATE/RIM ELEV.	INV. IN	INV. OUT	REMARKS
I-1	506773.06	135779.39	PL OPEN		SD 4.36	378.40	375.25	
I-2	506696.63	135779.82	SING. WR		SD 4.37	378.90	374.30	
M-1	506695.63	135779.96	DIVERSION STRUCT.		SHT. 6	379.40	374.30	372.50
M-2	506657.76	135790.32	3\"/>					

SIZE	MATERIAL	LENGTH
6"	SOLID PVC (SCH 40)	272'
10"	HDPE	23'
12"	RCP CLASS IV	18'
15"	RCP CLASS IV	82'
18"	RCP CLASS IV	15'
21"	RCP CLASS IV	77'
4"	PERF PVC (SCH 40)	275'

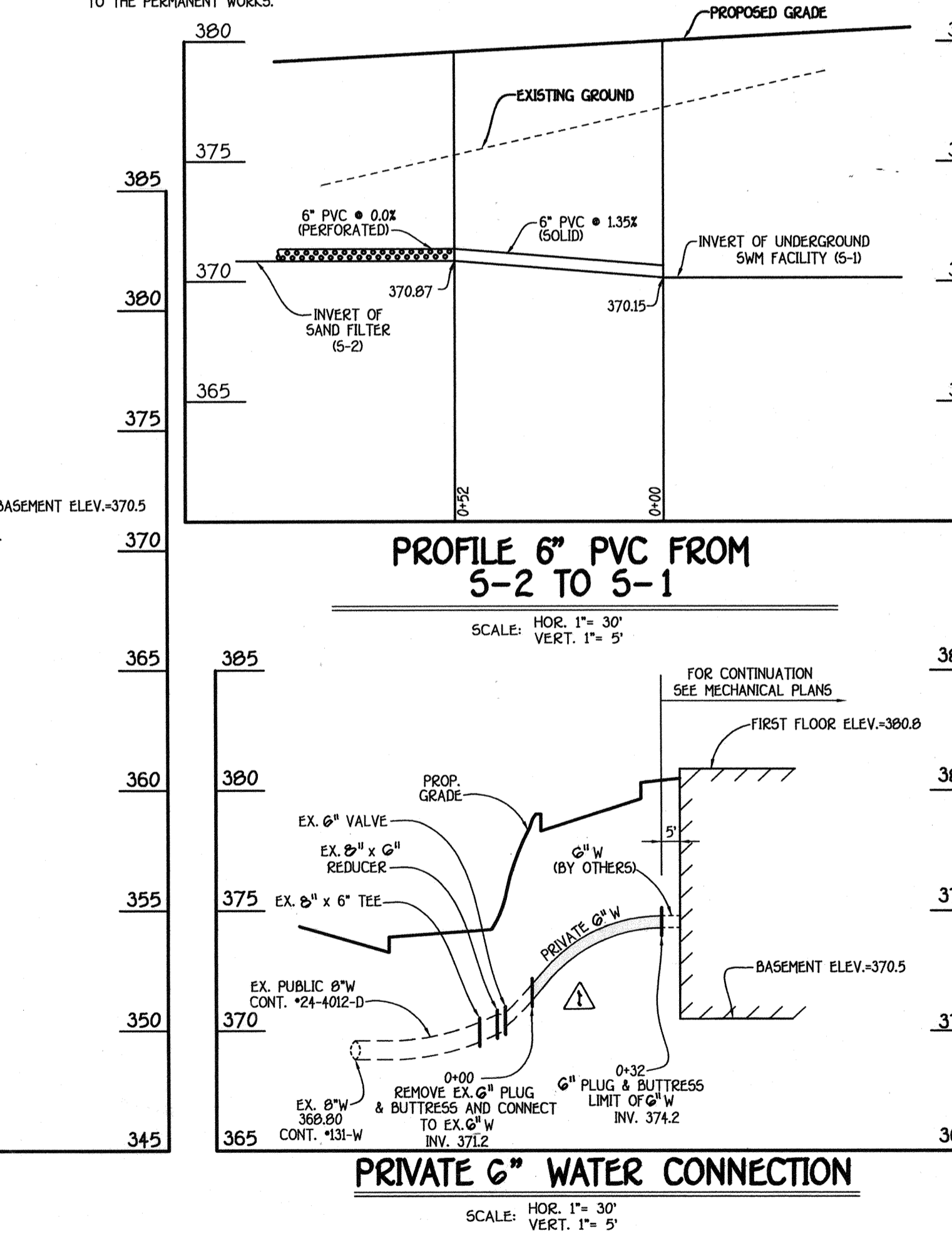
- CONSTRUCTION SPECIFICATIONS FOR RIP-RAP OUTFALL**
- THE SUBGRADE FOR THE FILTER, RIP RAP OR GABION SHALL BE PREPARED TO THE REQUIRED LINES AND GRADES. ANY FILL REQUIRED IN THE SUBGRADE SHALL BE COMPACTED TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
 - THE ROCK OR GRAVEL SHALL CONFORM TO THE SPECIFIED GRADING LIMITS WHEN INSTALLED RESPECTIVELY IN THE RIP RAP OR FILTER.
 - FILTER CLOTH SHALL BE PROTECTED FROM PUNCHING, CUTTING OR TEARING. ANY DAMAGE OTHER THAN AN OCCASIONAL HOLE SHALL BE REPAIRED BY PLACING ANOTHER PIECE OF CLOTH OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE CLOTH ALL OVERLAPS, WHETHER FOR REPAIRS OR FOR JOINING TWO PIECES OF CLOTH SHALL BE A MINIMUM OF ONE FOOT.
 - STONE FOR THE RIP RAP OR GABION OUTLET MAY BE PLACED BY EQUIPMENT. BOTH SHALL BE CONSTRUCTED TO THE FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. THE STONE FOR RIP RAP OR GABION OUTLETS SHALL BE DELIVERED AND PLACED IN A MANNER THAT WILL INSURE THAT IT IS REASONABLY HOMOGENEOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. RIP RAP SHALL BE PLACED IN A MANNER TO PREVENT DAMAGE TO THE FILTER BLANKET OR FILTER CLOTH. HAND PLACEMENT WILL BE REQUIRED TO THE EXTENT NECESSARY TO PREVENT DAMAGE TO THE PERMANENT WORKS.



STORM DRAIN PROFILE 5-1 TO T-1



PRIVATE 6" SEWER MAIN



PROFILE 6" PVC FROM 5-2 TO 5-1

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLIOTT CITY, MARYLAND 20601
410 461 - 2955

NO.	DESCRIPTION	DATE
1	REVISE 6" SEWER PROFILE AND REVISE 6" PIPE SCHEDULE	9/1/02
2	REVISE SEWER MAIN PROFILES	9/7/02
3	REVISE WATER SERVICE FROM 4" TO 6"	9/7/02

ENGINEER'S CERTIFICATE
"I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."
Signature of Engineer (print name below signature) *1/22/02* Date

DEVELOPER'S CERTIFICATE
"I/we certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion beginning the project. I also authorize personal on-site inspection by the Howard Soil Conservation District."
Signature of Developer (print name below signature) *1/22/02* Date

OWNER
LEWAL PARTNERSHIP, LLP
100 PAINTERS HILL ROAD, SUITE 900
OWINGS MILLS, MARYLAND 21117
(410) 363-3434

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
David J. Lepley 2/13/02
Director - Department of Planning and Zoning
Andy Hamish 2/13/02
Chief, Division of Land Development
John Dammann 2/16/02
Chief, Development Engineering Division

SUBDIVISION: ARCADIA SQUARE
DEED NO. 1551/89, BLOCK NO. 4, ZONE R-20, TAX/ZONE 24, ELEC. DIST. SECOND, CENSUS TR. 602306
WATER CODE: F-06, SEWER CODE: 5754700

UTILITY PROFILES, NOTES & DETAILS

ARCADIA SQUARE GROUP CARE FACILITY

TAX MAP No. 24, PARCEL No. 77
SECOND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN, DATE: JANUARY 13, 2003
SHEET 5 OF 14, SDP-02-113

K:\Drawings\440359 Arcadia Square\Utility Profiles\Notes And Details\Sheet 5.dwg, 1/13/2003 2:16:12 PM

ON-SITE SIGNAGE

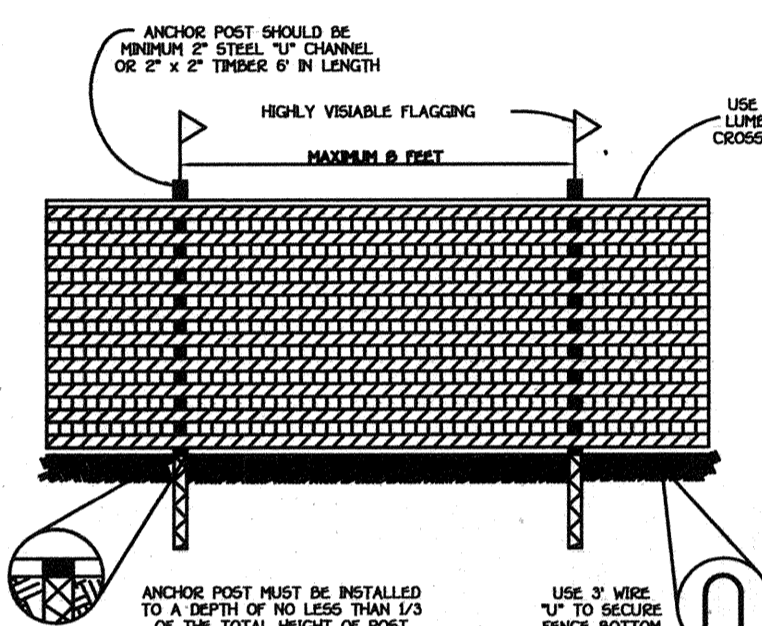
FOREST CONSERVATION EASEMENT

UNAUTHORIZED DISTURBANCE OF VEGETATION IS PROHIBITED. VIOLATORS SUBJECT TO PENALTIES UNDER THE HOWARD COUNTY FOREST CONSERVATION ACT OF 1991.

TREES FOR YOUR FUTURE

15" MINIMUM

11" MINIMUM



- NOTES:**
1. FOREST PROTECTION DEVICE ONLY. RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS. BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.
 2. ROOT DAMAGE SHOULD BE AVOIDED.
 3. PROTECTIVE SIGNAGE MAY ALSO BE USED.
 4. DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

PLAZE ORANGE PLASTIC MESH TREE PROTECTION DETAIL
NOT TO SCALE

LINE	BEARING	DISTANCE
100	S84°53'48"E	49.66'
101	N56°50'50"E	15.66'
102	N65°38'24"E	33.32'
103	S70°29'07"E	23.71'
104	S59°51'41"W	32.80'
105	S22°02'19"W	37.00'
106	S08°16'30"E	33.00'
107	S07°52'12"E	115.00'
108	N28°50'02"E	21.29'
109	N50°13'09"E	26.59'
110	S71°38'17"E	24.47'
111	N32°17'01"E	41.18'
112	N17°48'53"E	17.69'
113	S77°57'29"E	46.22'
114	S73°34'28"E	22.85'
115	S27°22'46"E	124.68'
116	S00°04'19"W	106.27'
117	S84°53'48"E	58.66'
118	N05°06'12"E	27.00'
119	S84°53'48"E	22.00'
120	N12°53'37"E	275.53'
121	S84°15'48"W	540.84'
122	S05°06'12"W	91.03'

ALL STORMWATER MANAGEMENT FACILITIES ARE TO BE OWNED AND MAINTAINED BY THE PROPERTY OWNERS.

FOR STORMWATER MANAGEMENT FACILITY DETAILS AND SPECIFICATIONS, SEE SHEETS 6 AND 7 OF 14.

FOR DUMPSTER PAD DETAILS, SEE SHEET 9 OF 14.

FOR RETAINING WALLS 1 & 2 DETAILS AND SECTIONS, SEE SHEETS 13 & 14 OF 14.

RETAINING WALLS 3 & 4 ARE NOT STRUCTURAL WALLS AND DO NOT REQUIRE DETAILS.

PLAN VIEW
SCALE: 1" = 30'



SOILS LEGEND		
SOIL	NAME	CLASS
Co	Codorus silt loam	C
GIB2	Glenelg loam, 3 to 8 percent slopes, moderately eroded	B
GnB2	Glenville silt loam, 3 to 8 percent slopes, moderately eroded	C
Ha	Hatboro silt loam	D
MI2	Manor loam, 15 to 25 percent slopes, moderately eroded	B

NOTES:
• Hydric soils and/or contains hydric inclusions

- FOREST STAND DELINEATION NOTES**
1. FSD fieldwork was completed on March 22, 2002 utilizing the procedures outlined in the Howard County Forest Conservation Manual.
 2. Forest Stand #1 consists of very young pioneer forest cover, with no sensitive resources. The forest stand boundary follows the floodplain and wetland buffers as shown on the plan.
 3. Forest Stand #2 consists of the more mature wetland and floodplain forest which includes all sensitive resources on-site, including streams and wetlands and their buffers, and the 100-year floodplain.
 4. There are no specimen trees located on or immediately adjacent to this site.
 5. There are no rare, threatened, or endangered species known to exist on-site.
 6. See the Forest Stand Delineation Report for more detailed information.

- FOREST CONSERVATION NOTES**
1. The area to be cleared consists of low quality pioneer forest with no sensitive resources, and must be cleared to accommodate the proposed use.
 2. The amount of forest protected within the Forest Conservation Easement exceeds the Break-Even Point, therefore, no reforestation is required for this project.
 3. All high priority retention areas are being preserved on this site, including the floodplains, wetlands, and wetland stream buffer areas.
 4. A Forest Conservation Plan of Easement shall be recorded in the Land Records of Howard County in accordance with Howard County Code Section 16.1204(d)(8).

- FOREST CONSERVATION EASEMENT PROTECTION PROGRAM**
1. There is no reforestation requirement for this project, therefore the pre- and post-construction protection program are identical and consist of proper demarcation and posting of the Forest Conservation Easement in the field, and preventing any and all disturbance within the Forest Conservation Easement.
 2. There shall be no clearing, grading, or disturbance of vegetation in the Forest Conservation Easement without the prior approval of Howard County.
 3. The Forest Conservation Easement shall be surveyed and protected with high visibility orange safety fence prior to any construction or grading activity.
 4. The Forest Conservation Easement shall be permanently located and posted with appropriate signage at 50-foot intervals (see detail).
 5. There shall be no stockpiling of materials, staging of equipment, disposal of trash and debris, or other such disturbance within the Forest Conservation Easement.
 6. The forest conservation easement required by this project has been graded with the retention of 0.9 of an acre credited easement and 1.0 acre of non-credited easement which meets or exceeds the break-even point calculation of 0.9 acres for this site. Forest conservation survey in the amount of \$7,841.00 has been posted for this project.
 7. The forest conservation easement has been established to fulfill the requirements of Section 16.120 of the Howard County Code and the Forest Conservation Manual. No clearing, grading, or construction is permitted within the forest conservation easement, however, forest management practices as defined in the Deed of Forest Conservation Easement are allowed.
- PLAT NO. 15802

Jeffrey A. Wolinski
Consulting Biologist
18941 Middletown Road
Parkers, MD 21120
(410) 926-2277
MDPCA Qualified Professional

FOREST CONSERVATION WORKSHEET

I. BASIC SITE DATA	ACRES
GROSS SITE AREA	3.6
AREA WITHIN 100 YEAR FLOODPLAIN	1.0
AREA WITHIN AGRICULTURAL USE	0
NET TRACT AREA	2.6
LAND USE CATEGORY	INSTITUTIONAL

II. INFORMATION FOR CALCULATIONS

A. NET TRACT AREA	2.6
B. REFORESTATION THRESHOLD (20% x A)	0.5
C. AFFORESTATION THRESHOLD (5% x A)	0.4
D. EXISTING FOREST ON NET TRACT AREA	2.6
E. EXISTING FOREST ABOVE FC THRESHOLD	2.1
F. BREAK EVEN POINT (E x 0.2) + B)	0.9
G. FOREST TO BE CLEARED	1.6
H. FOREST TO BE RETAINED	0.9

NOTE: TOTAL AREA IN FOREST CONSERVATION EASEMENT = 1.9 ACRES

ENGINEER'S CERTIFICATE

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

Signature of Engineer (print name below signature) *Jeffrey A. Wolinski* Date *2/15/10*

DEVELOPER'S CERTIFICATE

"I/we certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."

Signature of Developer (print name below signature) *Leval Partnership, LLP* Date *1/24/10*

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Joseph D. Loyd 2/15/10
Director - Department of Planning and Zoning
Christy Hester 2/19/10
Chief, Department of Land Development
Michelle Danner 2/16/10
Chief, Development Engineering Division

SUBDIVISION	SECTION/AREA	PARCEL NO.
ARCADIA SQUARE	---	77
DEED NO.	BLOCK NO.	ZONE
1551/89	4	R-20
TAX/ZONE	ELEC. DIST.	CENSUS TR.
24	SECOND	602306
WATER CODE	SEWER CODE	
F-06	5754700	

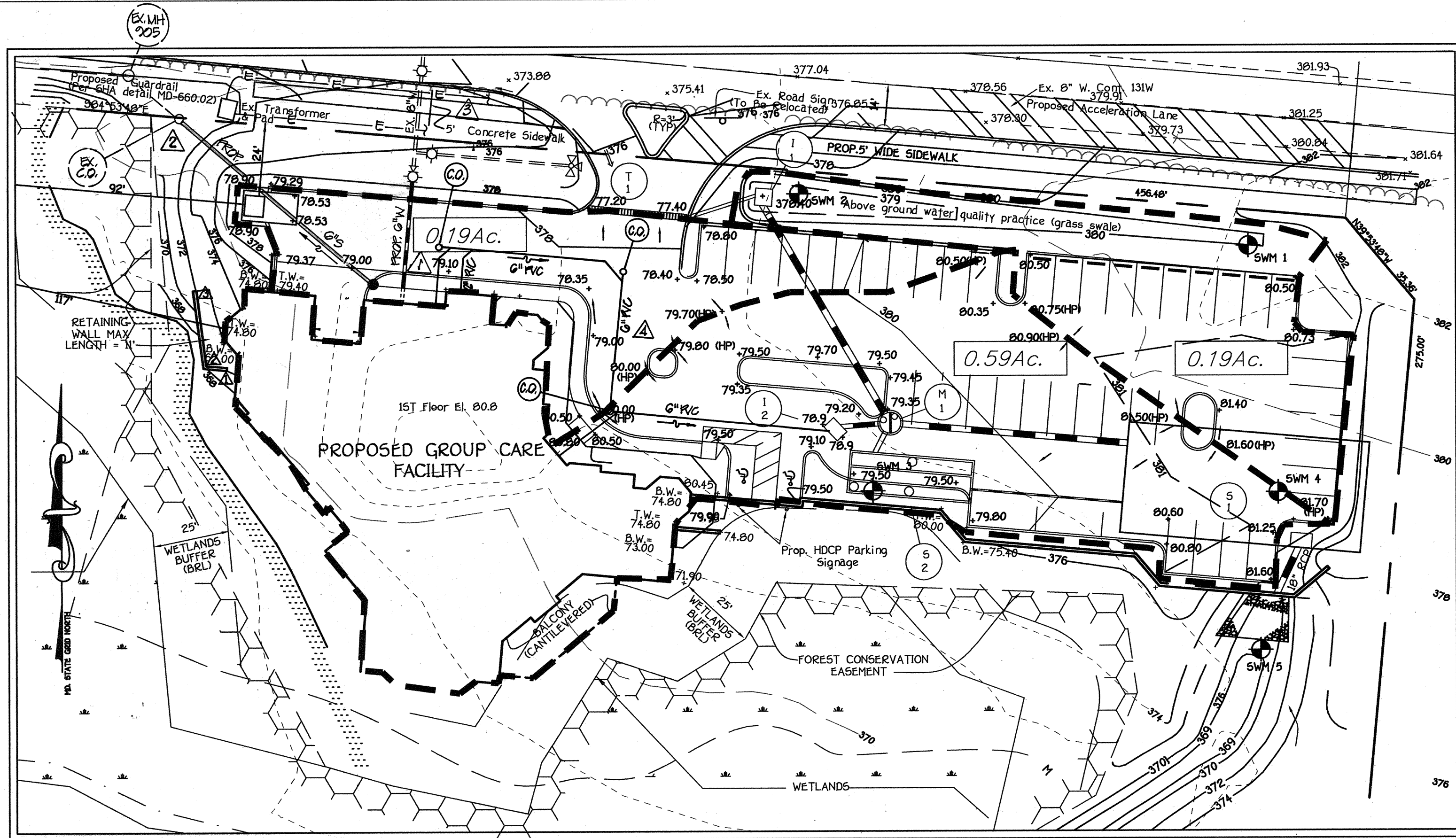
FOREST CONSERVATION PLAN

ARCADIA SQUARE GROUP CARE FACILITY

TAX MAP No: 24 PARCEL No: 77
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JANUARY 13, 2003
SHEET 11 OF 14

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 18272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
410 981 - 2955

NO.	DESCRIPTION	DATE
1	RELOCATE STREET LIGHTS OUT OF SHA R/W AND ADD 6" PVC UNDERDRAIN FOR ROOF LEAVES	5/3/04
2	INDICATE EXISTING ELECTRIC POWER CABLES	5/7/05
3	REVISE SEWER MAIN ALIGNMENT	5/7/05
4	REVISE WATER SERVICE FROM 4" TO 6"	5/7/05



AREA TABULATION

AREA DESIGNATION	ACREAGE	C FACTOR	I IMPERVIOUS
TO T-1	0.19	0.85	100
TO I-1	0.19	0.85	56
TO I-2	0.59	0.85	98

NOTE:
The time of concentration used for each drainage area is 5.0 minutes.

ARCADIA SQUARE
STORM DRAIN DRAINAGE AREA MAP
1" = 50'

LEGEND

-----	Existing Contour
-----	Proposed Contour
-----	Drainage Divide

SOILS LEGEND

SOIL	NAME	CLASS
* Co	Codorus silt loam	C
GIB2	Glenelg loam, 3 to 8 percent slopes, moderately eroded	B
* GIB2	Glenville silt loam, 3 to 8 percent slopes, moderately eroded	C
** Ha	Hatboro silt loam	D
MID2	Manor loam, 15 to 25 percent slopes, moderately eroded	B

NOTES:
* Hydric soils and/or contains hydric inclusions
** May contain hydric inclusions
† Generally only within 100-year floodplain areas



ENGINEER'S CERTIFICATE
"I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

Signature of Engineer: *[Signature]* Date: 1/22/03

DEVELOPER'S CERTIFICATE
"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 inspection by the Howard Soil Conservation District."

Signature of Developer: *[Signature]* Date: 1/22/03

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Chief, Division of Land Development: *[Signature]* Date: 2/19/03
Chief, Development Engineering Division: *[Signature]* Date: 2/16/03
Director - Department of Planning and Zoning: *[Signature]* Date: 2/19/03

PROJECT		SECTION/AREA	PARCEL NO.
ARCADIA SQUARE		N/A	77
DEED REF.	BLOCK NO.	ZONE	TAX
1551/89	4	R-20	24
WATER CODE		ELEC. DIST.	CENSUS TR.
F-06		2ND	602306
SEWER CODE		5754700	

STORM DRAIN DRAINAGE AREA MAP
ARCADIA SQUARE
GROUP CARE FACILITY
TAX MAP No: 24 PARCEL No: 77
2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JANUARY 13, 2003
SHEET 12 OF 14

ELLSWORTH CITY, MARYLAND 2086
FISHER, COVENS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL FREE

NO.	DESCRIPTION	DATE
1	ADD 6" PVC UNDERDRAIN FOR ROOF LEADERS	5/5/04
2	INDICATE EXISTING ELECTRIC POWER CABLES	5/7/03
3	REVISE SEWER MAIN ALIGNMENT	5/7/03
4	REVISE WATER SERVICE FROM 4" TO 6"	5/7/03

K:\Drawings 4400359 Arcadia Square\0359 Arcadia Square Drainage area Map Sheet 10.dwg, 1/10/2003 5:54:54 PM