

SHEET INDEX

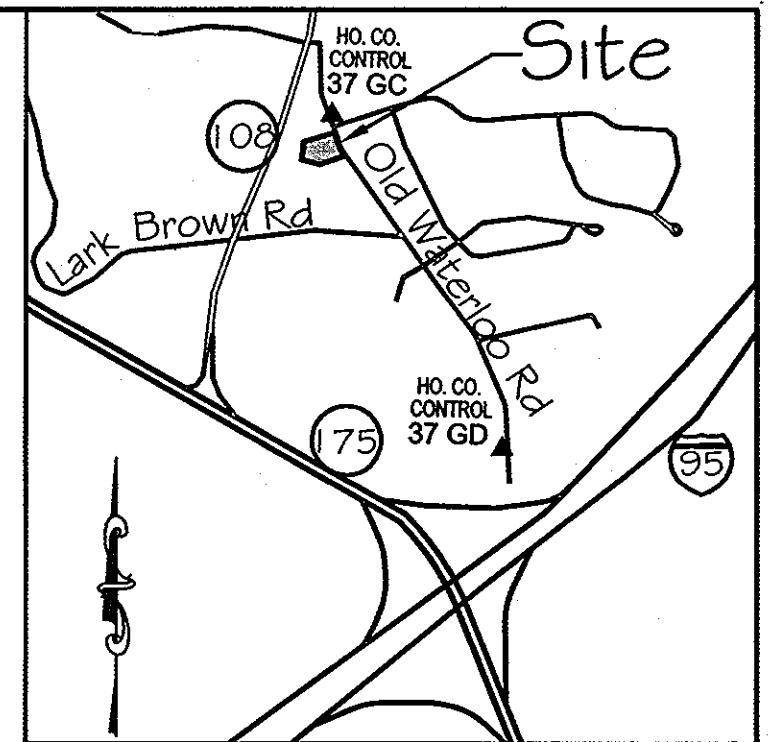
1	TITLE SHEET
2	SITE DEVELOPMENT PLAN
3	SITE DEVELOPMENT PLAN & DETAILS
4	UTILITY PROFILES
5	STRUCTURE DETAILS
6-7	STORMTECH SC-740 CHAMBER DETAILS
8	MD 378 SPECIFICATION
9	EXISTING DRAINAGE AREA MAP
10	PROPOSED DRAINAGE AREA MAP
11	ONSITE DRAINAGE AREA AND STORM DRAIN STUDY
12	GRADING, EROSION, AND SEDIMENT CONTROL PLAN
13	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS
14	LANDSCAPE PLAN, NOTES AND SCHEDULES
15	FOREST CONSERVATION PLAN
16-17	WALL DESIGN/DETAIL

SITE DEVELOPMENT PLAN

KIDDIE ACADEMY OF ELKRIDGE

6th ELECTION DISTRICT

HOWARD COUNTY, MARYLAND



VICINITY MAP
SCALE: 1" = 2000'

BENCH MARK
HOWARD COUNTY SURVEY CONTROL STATION : 376D
ELEVATION 290.93
N 553,237.204
E 1,372,353.605

HOWARD COUNTY SURVEY CONTROL STATION : 376C
ELEVATION 331.86
N 555,250.791
E 1,370,946.348

SITE DATA

AREA OF PARCEL	1.00 Ac.
DISTURBED AREA	1.18 Ac.
PRESENT ZONING	B-1
PROPOSED USE	CHILD DAY CARE CENTER
BUILDING COVERAGE	10,744 SF (25% OF GROSS AREA)

OF PARKING SPACES REQUIRED
10,744 SF @ 3 SP/1,000 SF = 32 SPACES

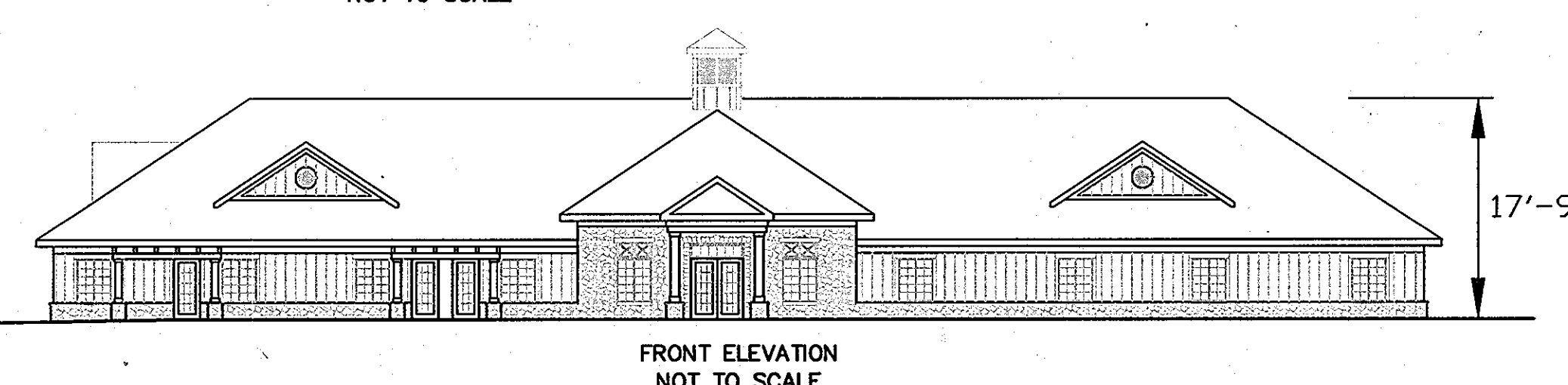
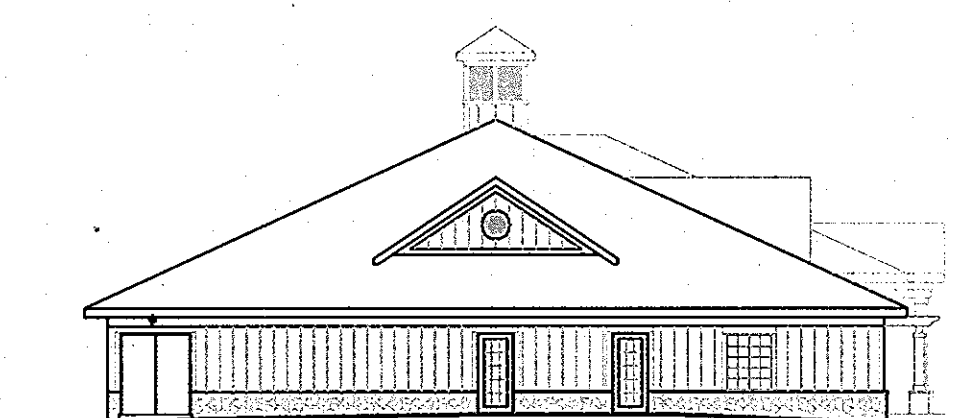
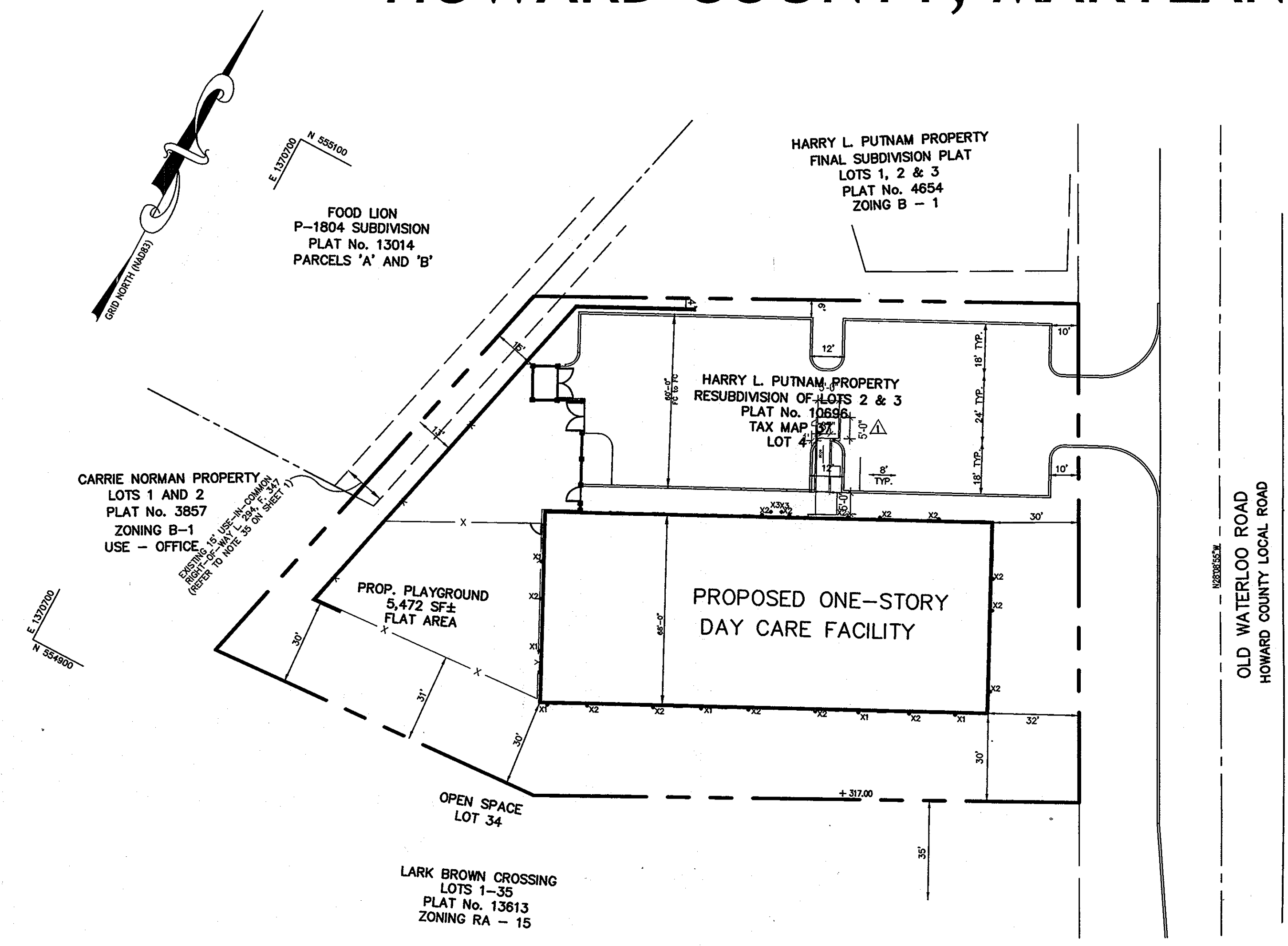
OF PARKING SPACES PROVIDED
= 32 SPACES (INCLUDING 2 HC)

DPZ FILE REFERENCES
F-92-135
SDP 05-053 (VOIDED BY DPZ
PM 07/18/05)

MAXIMUM NUMBER
OF EMPLOYEES: 20 EMPLOYEES

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATION IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION. AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB AND FACE OF BUILDING UNLESS OTHERWISE NOTED.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM A FIELD SURVEY, PREPARED BY PHR+A, DATED 6/25/04.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 376D AND 376C WERE USED FOR THIS PROJECT.
- WATER IS PUBLIC. CONTRACT NO. 320-W.
- SEWER IS PUBLIC. CONTRACT NO. 10-1675.
- THE STORMWATER MANAGEMENT QUANTITY AND WATER QUALITY PROPOSED FOR THIS SITE WILL BE ACHIEVED VIA AN INFILTRATION TRENCH AND WILL BE PRIVATELY MAINTAINED.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICES. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
- A 100-YEAR FLOODPLAIN STUDY IS NOT REQUIRED FOR THIS PROJECT.
- THERE ARE NO WETLANDS ON THIS SITE.
- A TRAFFIC IMPACT ANALYSIS HAS BEEN PREPARED BY STREET TRAFFIC STUDIES, LTD. DATED SEPTEMBER 16, 2005
- A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- A GEOTECHNICAL STUDY HAS BEEN PREPARED BY KONDNER ENGINEERING AND TECHNICAL SERVICES, DATED 7/28/04.
- THE BOUNDARY SURVEY FOR THIS PROJECT HAS BEEN PREPARED BY PHR+A, DATED 6/25/04.
- SUBJECT PROPERTY ZONED B-1 PER 2/02/04 COMPREHENSIVE ZONING PLAN.
- SEE DEPARTMENT OF PLANNING AND ZONING FILE NOS. F-92-135 & SDP 05-053 (VOIDED BY DPZ ON 07/18/05).
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.
- ALL STORM DRAIN PIPE BEDDING SHALL BE CLASS "C" AS SHOWN IN FIG. 11.4, VOLUME 1 OF HOWARD COUNTRY DESIGN MANUAL UNLESS OTHERWISE NOTED.
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- PROFILES STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN.
- ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO T80.
- THE PAVEMENT DETAILS SHOWN FOR THIS SITE REFLECT THE HOWARD COUNTY STANDARD PAVEMENT SECTIONS AND ARE NOT BASED ON SITE SPECIFIC CONDITIONS. PRIOR TO PAVING THE FINAL PAVEMENT SECTIONS SHALL BE DETERMINED BY A QUALIFIED GEOTECHNICAL ENGINEER BASED ON IN-SITU TESTING OF THE FINISHED SUBGRADE.
- IN ACCORDANCE WITH SECTION 16.1202 OF THE FOREST CONSERVATION MANUAL, A FEE-IN-LIEU OF FOREST CONSERVATION OBLIGATION FOR THIS PROJECT HAS BEEN PAID TO THE HO. CO. FOREST CONSERVATION FUND FOR 0.48 ACRES OF REFORESTATION IN THE AMOUNT OF \$10,454.40.
- ALL OUTDOOR LIGHTING SHALL COMPLY WITH THE REQUIREMENTS OF ZONING SECTION 134.
- LANDSCAPING IN ACCORDANCE WITH SECTION 16.124 OF THE LANDSCAPE MANUAL SHALL BE PROVIDED AS SHOWN ON THIS SITE PLAN. LANDSCAPE SURETY IN THE AMOUNT OF \$8,910.00 HAS BEEN POSTED AS A PART OF THE DEVELOPER'S AGREEMENT.
- CONTRACTOR TO CONNECT ALL ROOF DRAIN INTO INLET 1/6 FROM BACK OF BUILDING.
- ALL LIGHTING IS TO BE DIRECTED/REFLECTED AWAY FROM ADJACENT PUBLIC ROADS AND RESIDENTIALLY ZONED PROPERTIES, AND BE IN ACCORDANCE WITH SECTION 134 OF THE HOWARD COUNTY REGULATIONS.
- THE EXISTING 15' USE-IN-COMMON R/W IS A PRIVATE ACCESS AUTHORIZED FOR THE FOLLOWING PROPERTIES:
FOOD LION - TM. 37 P.366 LOT PAR4
JOHN PATRICK DOYLE - TM. 37 P.264
WATERLOO ROAD LLC - TM. 37 P.613 LOT 1
- A KNOX BOX IS TO BE PLACED NO FURTHER THAN 6 FEET AWAY FROM THE MAIN ENTRANCE AND WIRED TO FIRE ALARM PANEL.



FOR AS-BUILT ONLY:

AS-BUILT CERTIFICATION:
I hereby certify, by my seal, that the facilities shown on this plan were constructed as shown on the "AS-BUILT" plan meet the Approved Plans and Specifications.

Mark Tsitlik PE. 33351
Engineer's Signature MD License No.

Mark Tsitlik 03-15-11
KCVI Date

Professional Certification.
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 33351
Expiration Date 06-30-2012.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

<i>Mark Tsitlik</i>	6/22/06
DIRECTOR	DATE
<i>Chris Comarata</i>	6/22/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>Chris Comarata</i>	6/22/06
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE

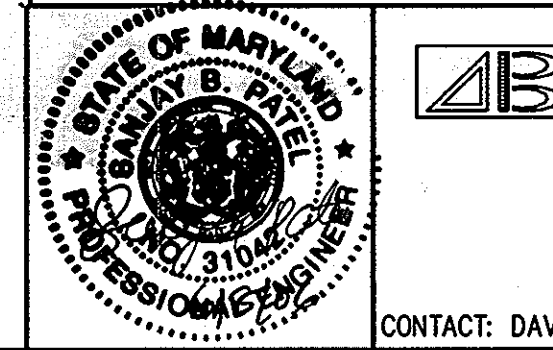
05-15-11	AS-BUILT
10-12-07	RELOCATION OF HANDICAP RAMP
DATE	REVISION

⚠ MOVE THE LOCATION OF HANDICAP RAMP FROM MAIN ENTRANCE TO THE ISLAND ON THE LEFT OF THE MAIN ENTRANCE

ADDRESS CHART

PARCEL	STREET ADDRESS
P/O 613/LOT 4	6534 OLD WATERLOO ROAD

SUBDIVISION NAME:		SECT./AREA:	PARCEL:
THE HARRY L. PUTNAM PROPERTY		-	P/O 613/ LOT 4
PLAT #:	BLOCK #:	ZONE:	TAX MAP NO.:
10696	20	B-1	37
WATER CODE:		SEWER CODE:	
E-08		2521000	
ELECT. DIST.:		CENSUS TRACT:	
6 TH		6067.03	

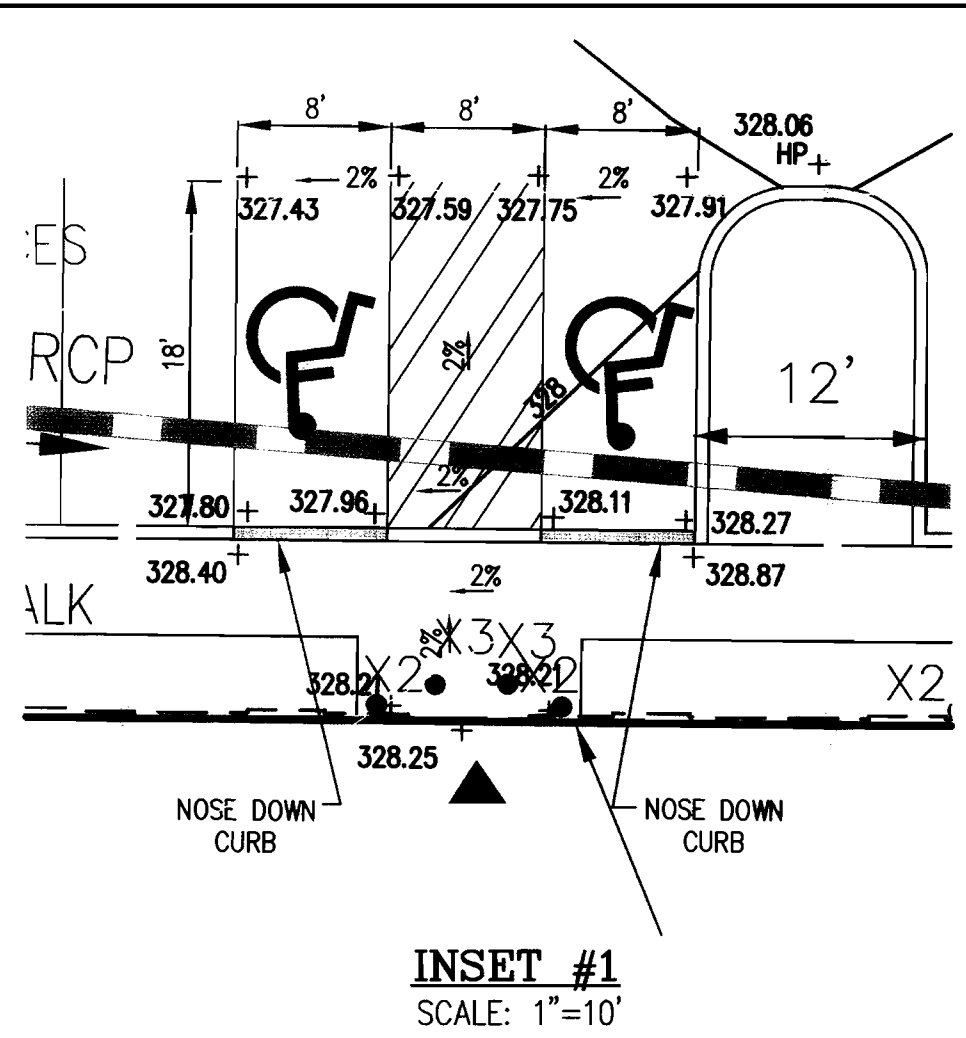
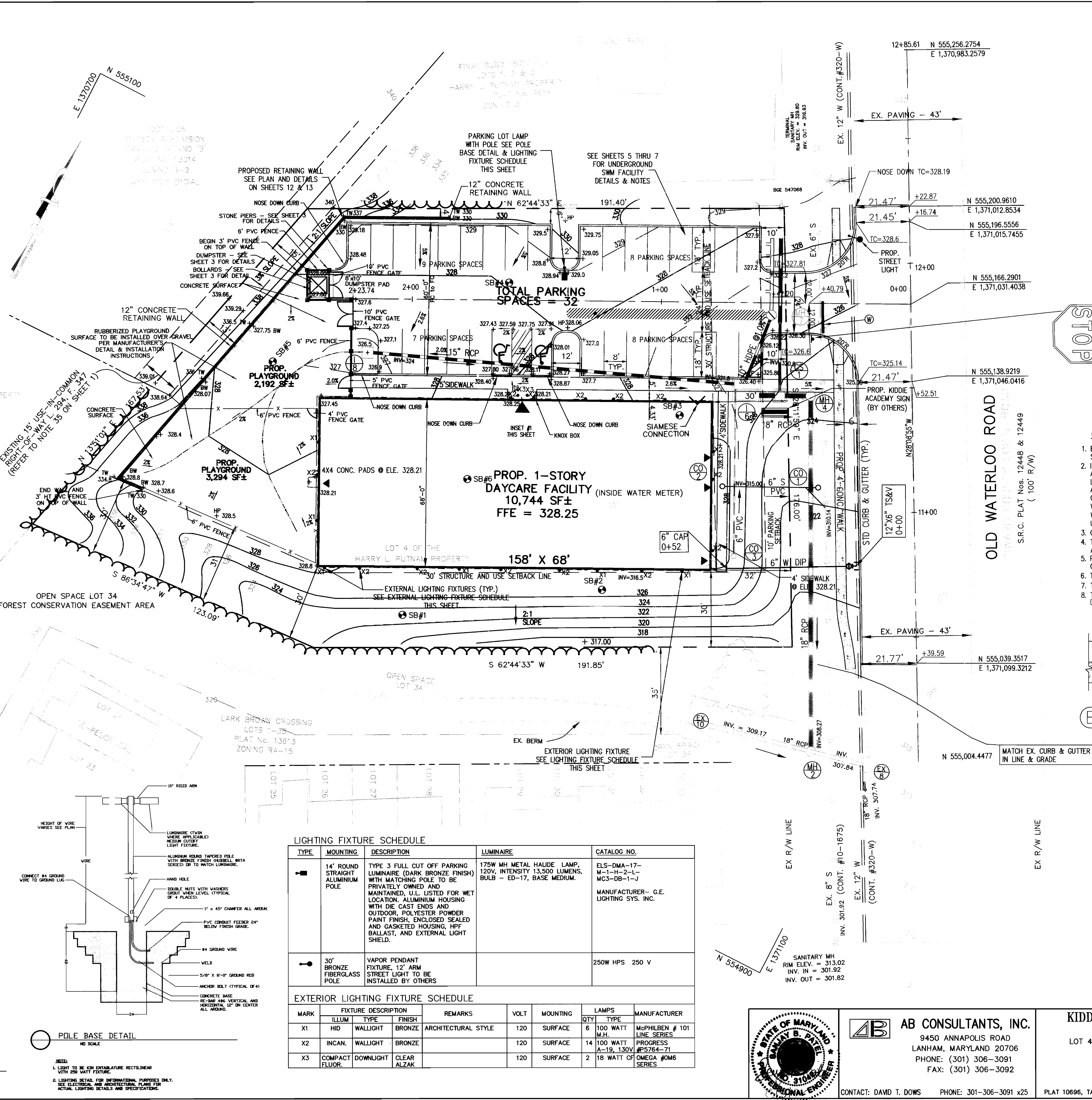
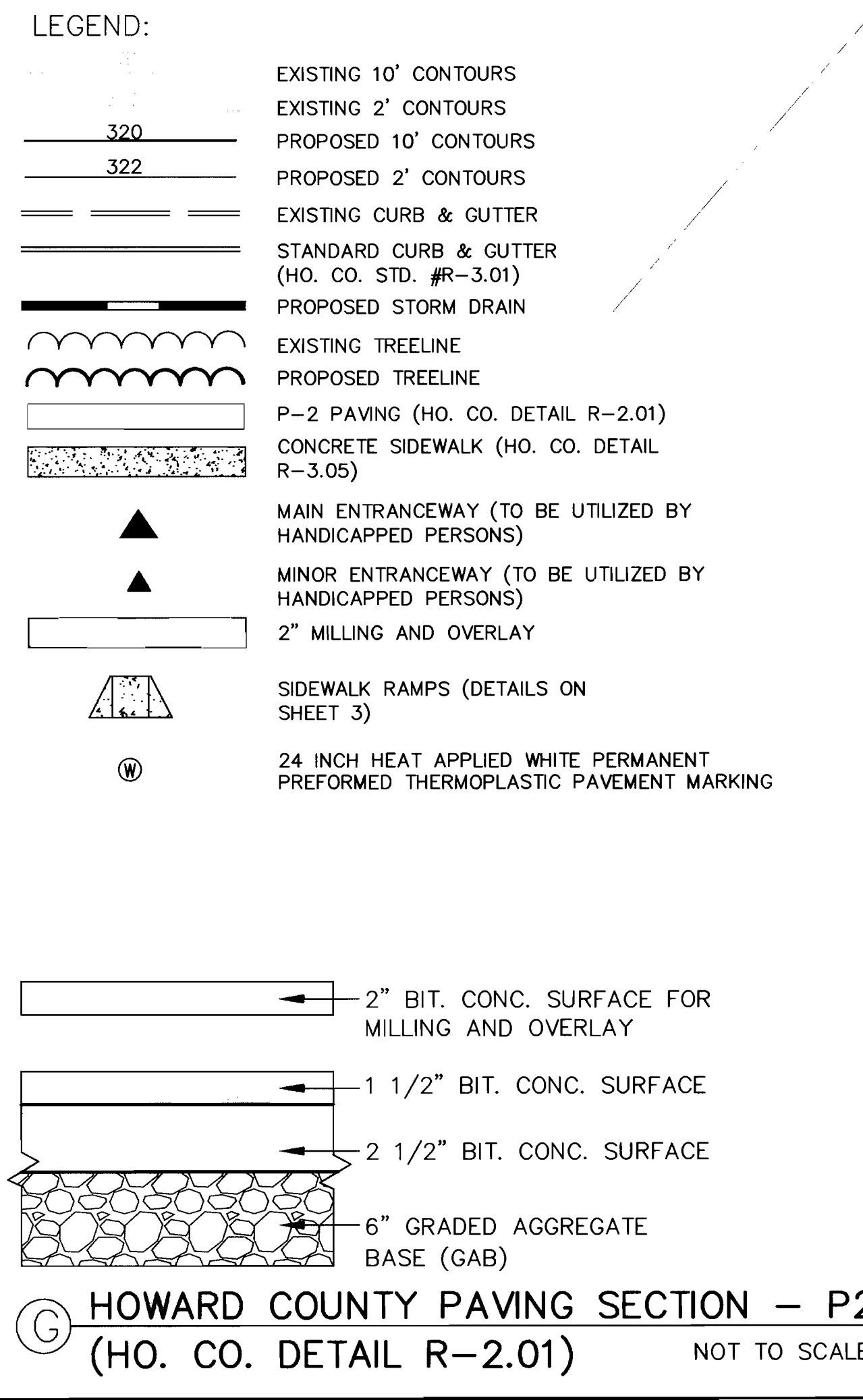
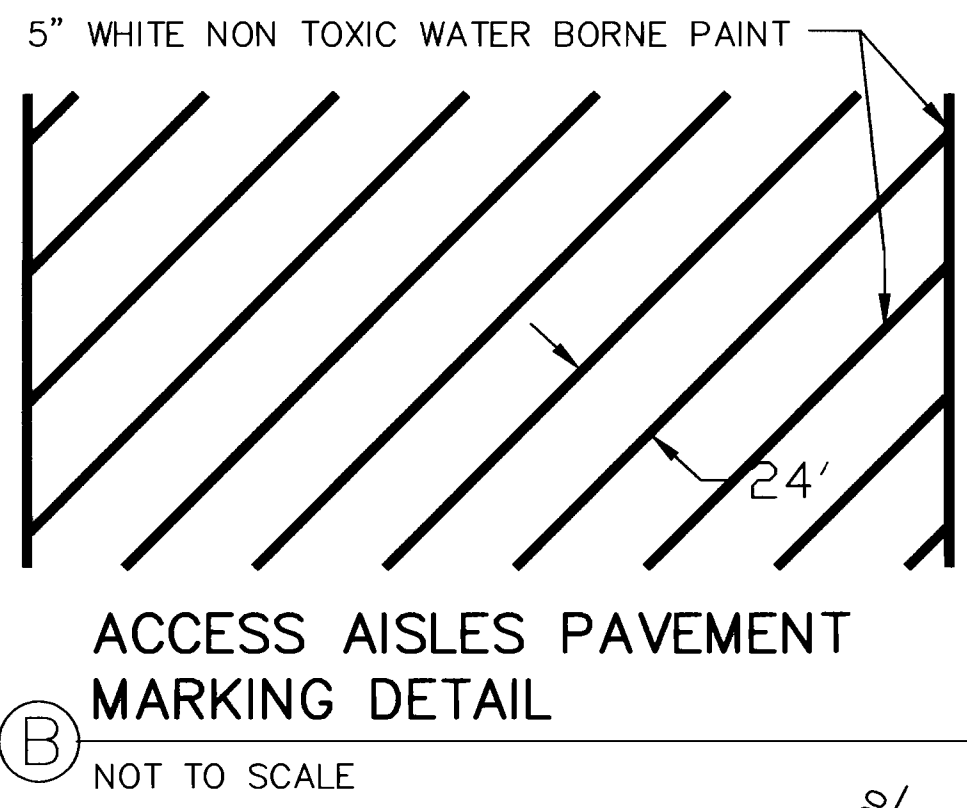
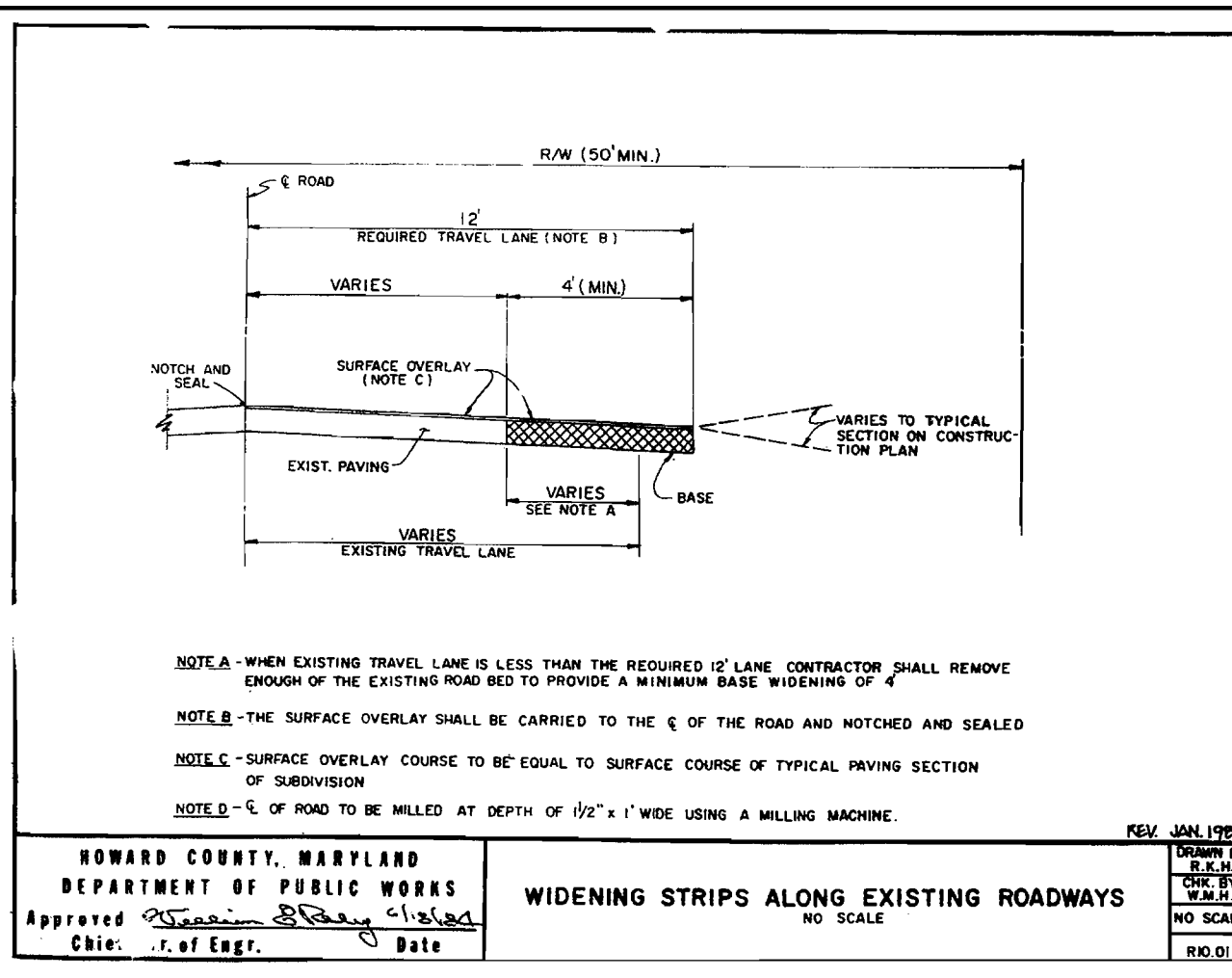


AB CONSULTANTS, INC.
9450 ANNAPOLIS ROAD
LANHAM, MARYLAND 20706
PHONE: (301) 306-3091
FAX: (301) 306-3092

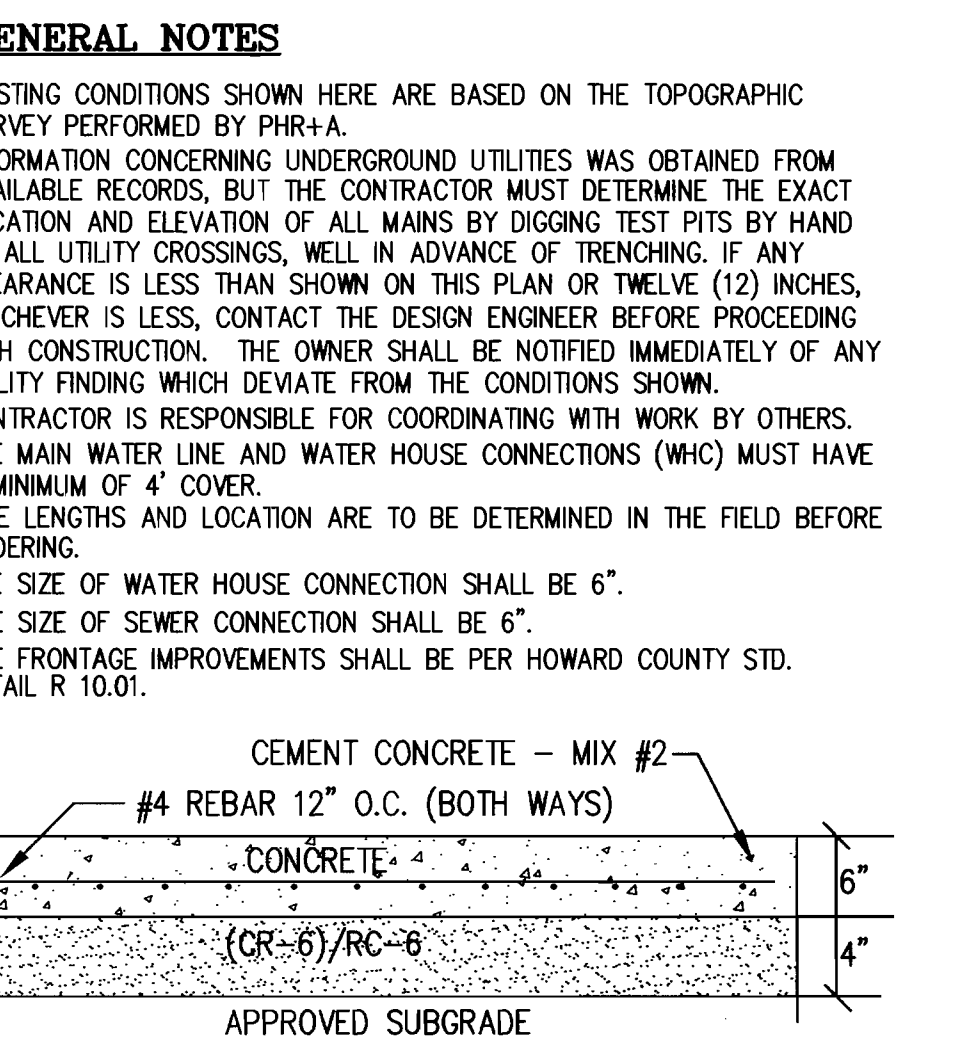
KIDDIE ACADEMY OF ELKRIDGE DAY CARE FACILITY
LOT 4 OF THE HARRY L. PUTNAM PROPERTY

TITLE SHEET
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

PROJECT NO.	05-114
SCALE:	1"=30'
DATE:	06/09/06
DRAWN BY:	CADD
CHECKED BY:	AS-BUILT
AS-BUILT SHEET:	1 OF 17



- NOTES:**
1. ALL CURB RADII ARE 5' UNLESS OTHERWISE NOTED.
 2. ALL DIMENSIONS ARE TO FACE OF CURB OR BUILDING UNLESS OTHERWISE NOTED.
 3. ALL ON-SITE ROADS ARE PRIVATE.
 4. ALL LIGHTING IS TO BE DIRECTED/REFLECTED AWAY FROM ADJACENT PUBLIC ROADS AND RESIDENTIALLY ZONED PROPERTIES, AND BE IN ACCORDANCE WITH SECTION 134 OF THE HOWARD COUNTY REGULATIONS.
 5. * STD/REV-STANDARD TO REVERSE CURB TRANSITION.
 6. ALL SIDEWALK RADII AREA 3' UNLESS OTHERWISE NOTED.
 7. SWM FACILITY AND ALL STORM DRAIN SYSTEM (INCLUDING STRUCTURE # CS/1 TO MH/2) ARE PRIVATELY OWNED & MAINTAINED.
 8. FOR DETAIL OF STRUCTURE # 1/6, CS/1 AND MH/7 REFER TO SHEET 5.



DUMPSTER PAD (E) NOT TO SCALE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR: *[Signature]* DATE: 6/14/06

CHIEF, DEVELOPMENT ENGINEERING DIVISION: *[Signature]* DATE: 6/23/06

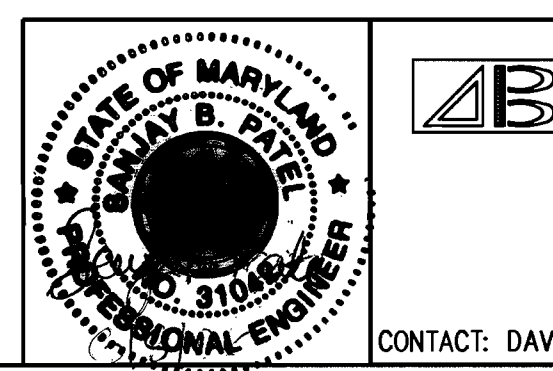
CHIEF, DIVISION OF LAND DEVELOPMENT: *[Signature]* DATE: 6/29/06

LIGHTING FIXTURE SCHEDULE

TYPE	MOUNTING	DESCRIPTION	LUMINAIRE	CATALOG NO.
14' ROUND STRAIGHT ALUMINUM POLE		TYPE 3 FULL CUT OFF PARKING LUMINAIRE (DARK BRONZE FINISH) WITH MATCHING POLE TO BE PRIVATELY OWNED AND MAINTAINED, U.L. LISTED FOR WET LOCATION. ALUMINUM HOUSING WITH DIE CAST ENDS AND OUTDOOR, POLYESTER POWDER PAINT FINISH, ENCLOSED SEALED AND GASKETED HOUSING, HPF BALLAST, AND EXTERNAL LIGHT SHIELD.	175W MH METAL HALIDE LAMP, 120V, INTENSITY 13,500 LUMENS, BULB - ED-17, BASE MEDIUM.	ELS-DMA-17-M-1-1-2-L-MC3-DB-1-L
30' BRONZE FIBERGLASS POLE		VAPOR PENDANT FIXTURE, 12' ARM STREET LIGHT TO BE INSTALLED BY OTHERS		250W HPS 250 V

EXTERIOR LIGHTING FIXTURE SCHEDULE

MARK	FIXTURE DESCRIPTION	VOLT	MOUNTING	LAMPS	MANUFACTURER
X1	HID WALLLIGHT BRONZE ARCHITECTURAL STYLE	120	SURFACE	6 100 WATT M.H.	McPHILBEN # 101 LINE SERIES
X2	INCAN. WALLLIGHT BRONZE	120	SURFACE	14 100 WATT A-19, 130V	PROGRESS #PS764-71
X3	COMPACT FLUOR.	120	SURFACE	2 18 WATT CF	OMEGA #OM6 SERIES



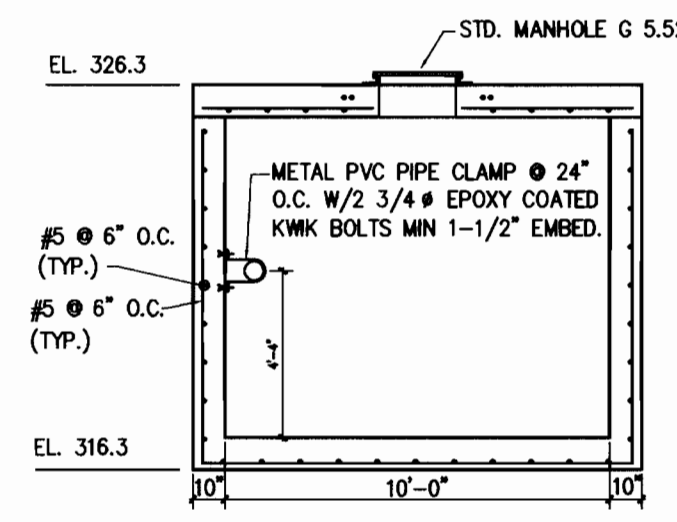
AB CONSULTANTS, INC.
 9450 ANNAPOLIS ROAD
 LANHAM, MARYLAND 20706
 PHONE: (301) 306-3091
 FAX: (301) 306-3092

KIDDIE ACADEMY OF ELKRIDGE DAY CARE FACILITY
 LOT 4 OF THE HARRY L. PUTNAM PROPERTY
SITE DEVELOPMENT PLAN
 6th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

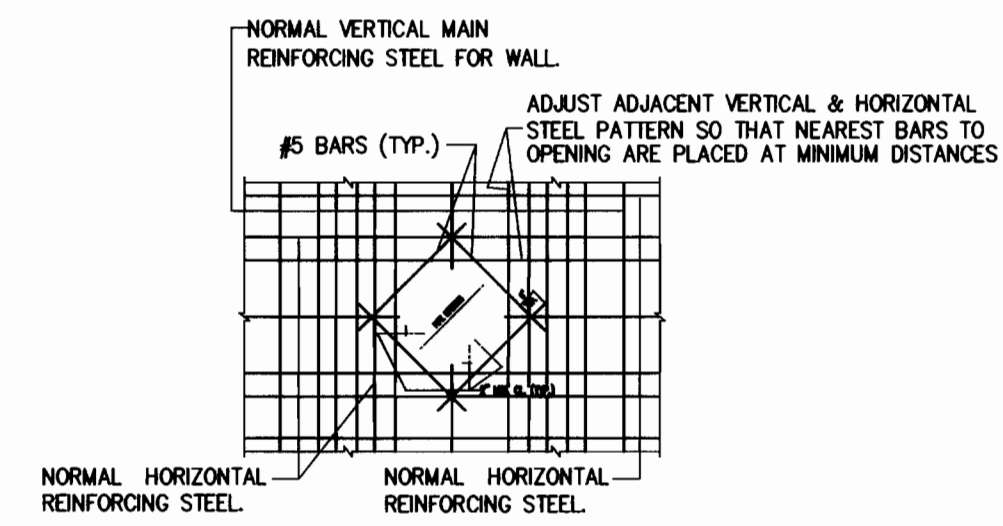
CONTACT: DAVID T. DOWS PHONE: 301-306-3091 x25

PROJECT NO. 05-114
 SCALE: 1"=20'
 DATE: 06/09/06
 DRAWN BY: CADD
 CHECKED BY: DTD
 SHEET: 2 OF 17

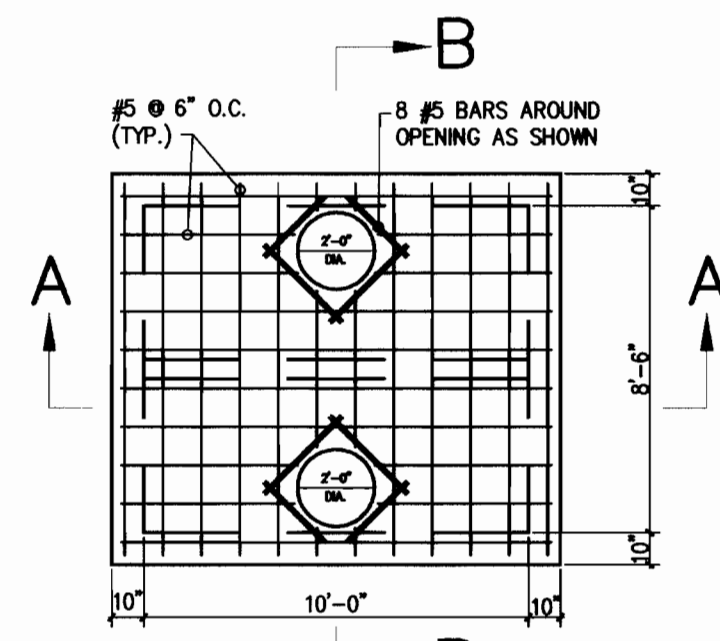
FOR I/6



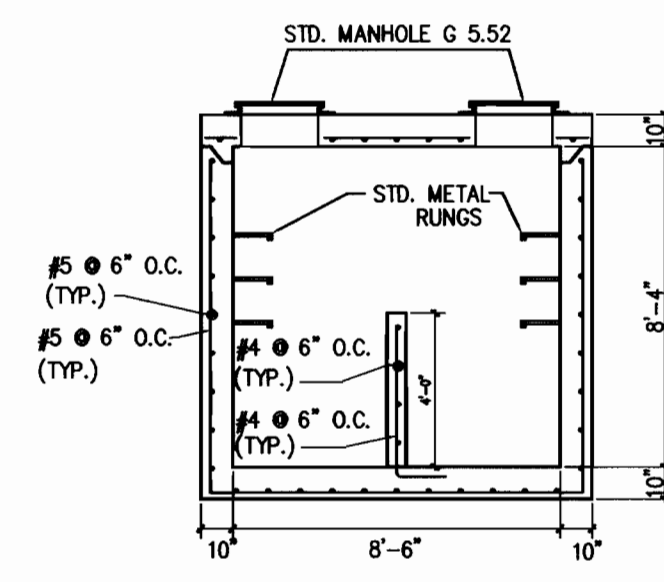
SECTION A-A
SCALE: 1"=5'



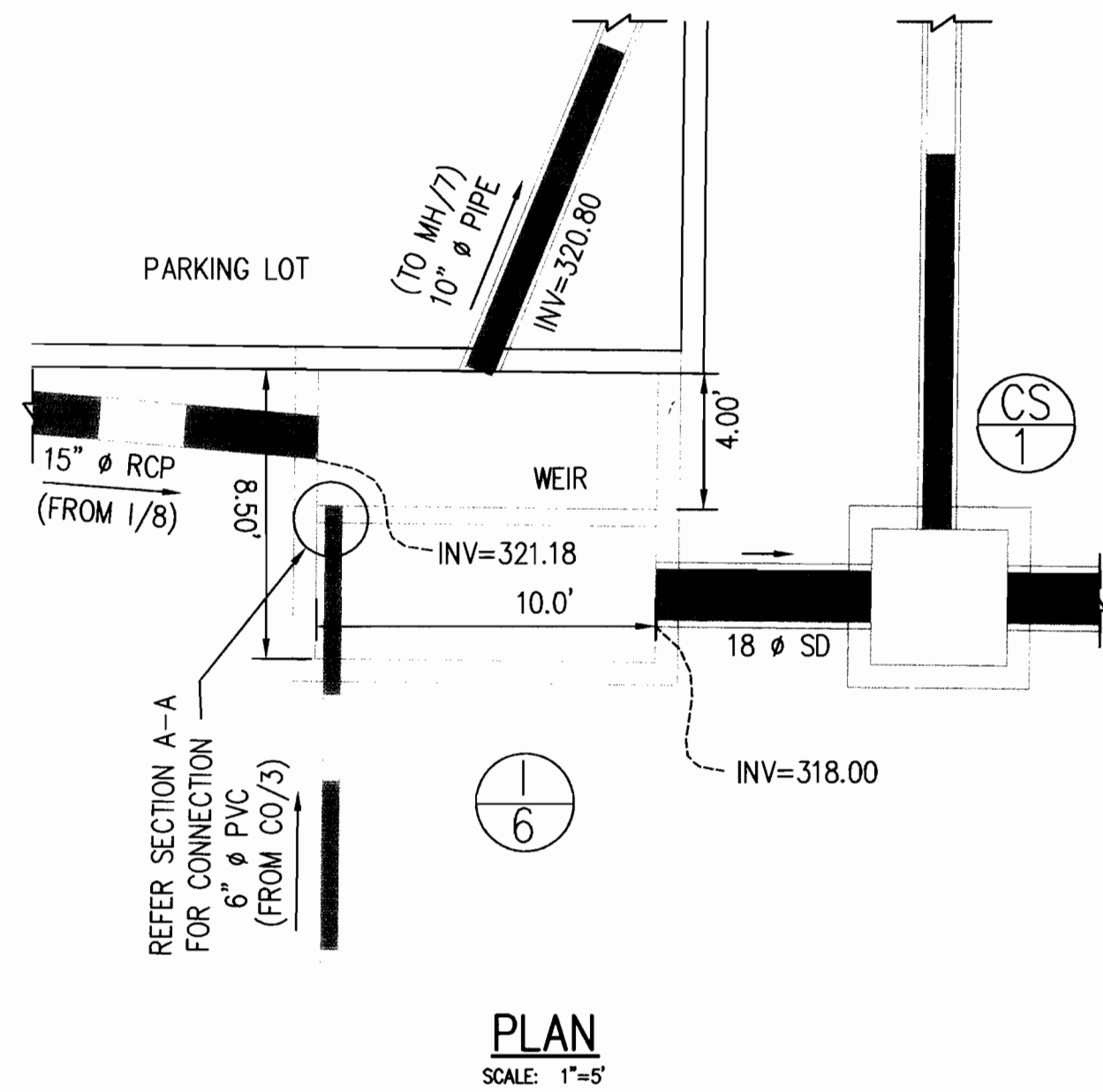
TYP WALL OPENING DETAIL
SCALE: N.T.S.



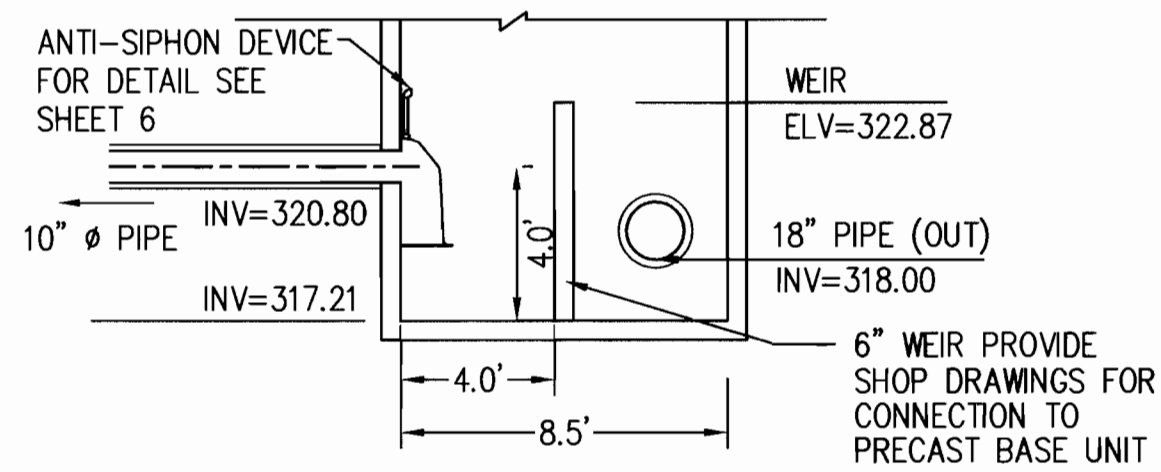
TOP SLAB PLAN
SCALE: 1"=5'



SECTION B-B
SCALE: 1"=5'

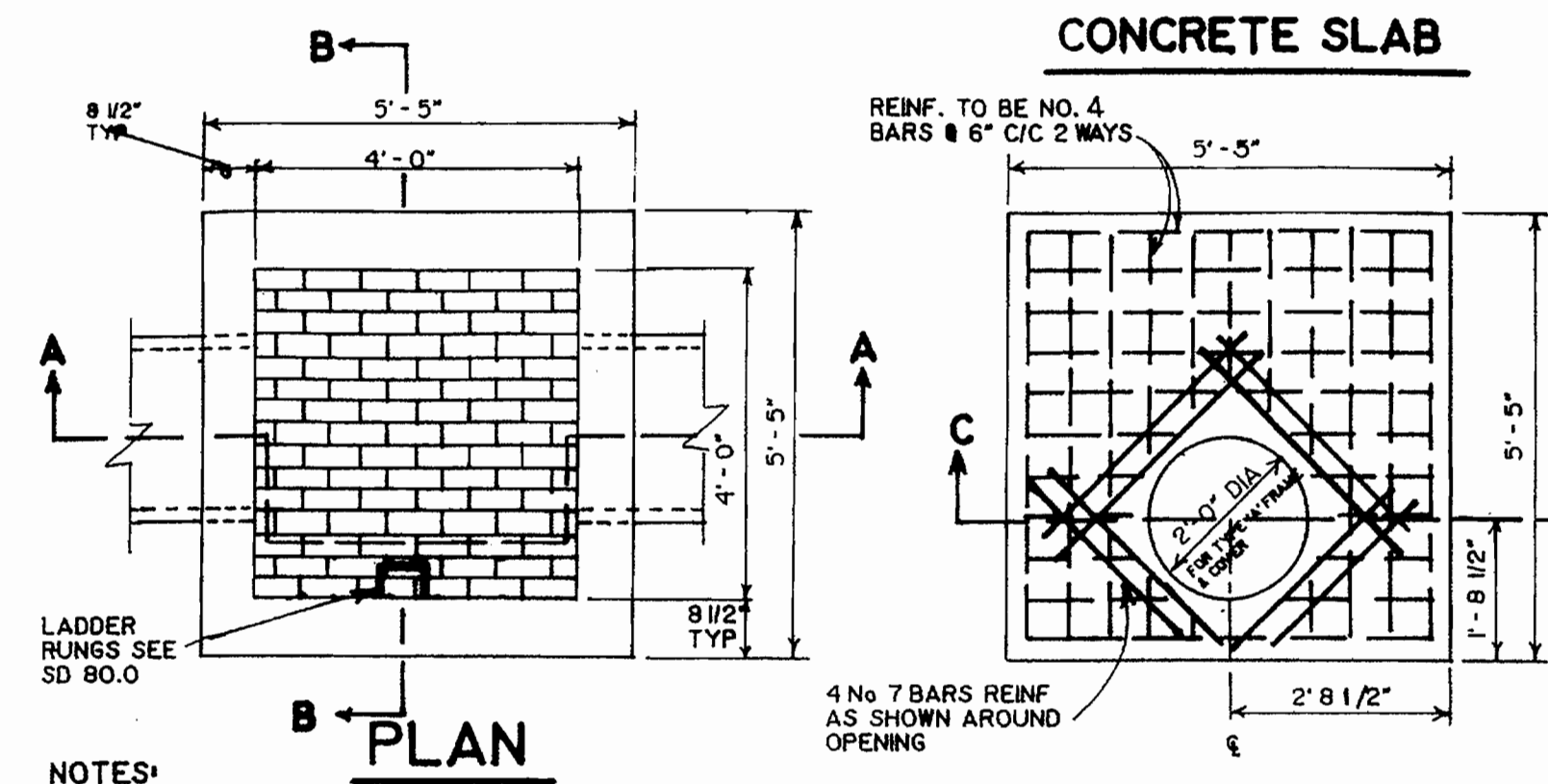


PLAN
SCALE: 1"=5'

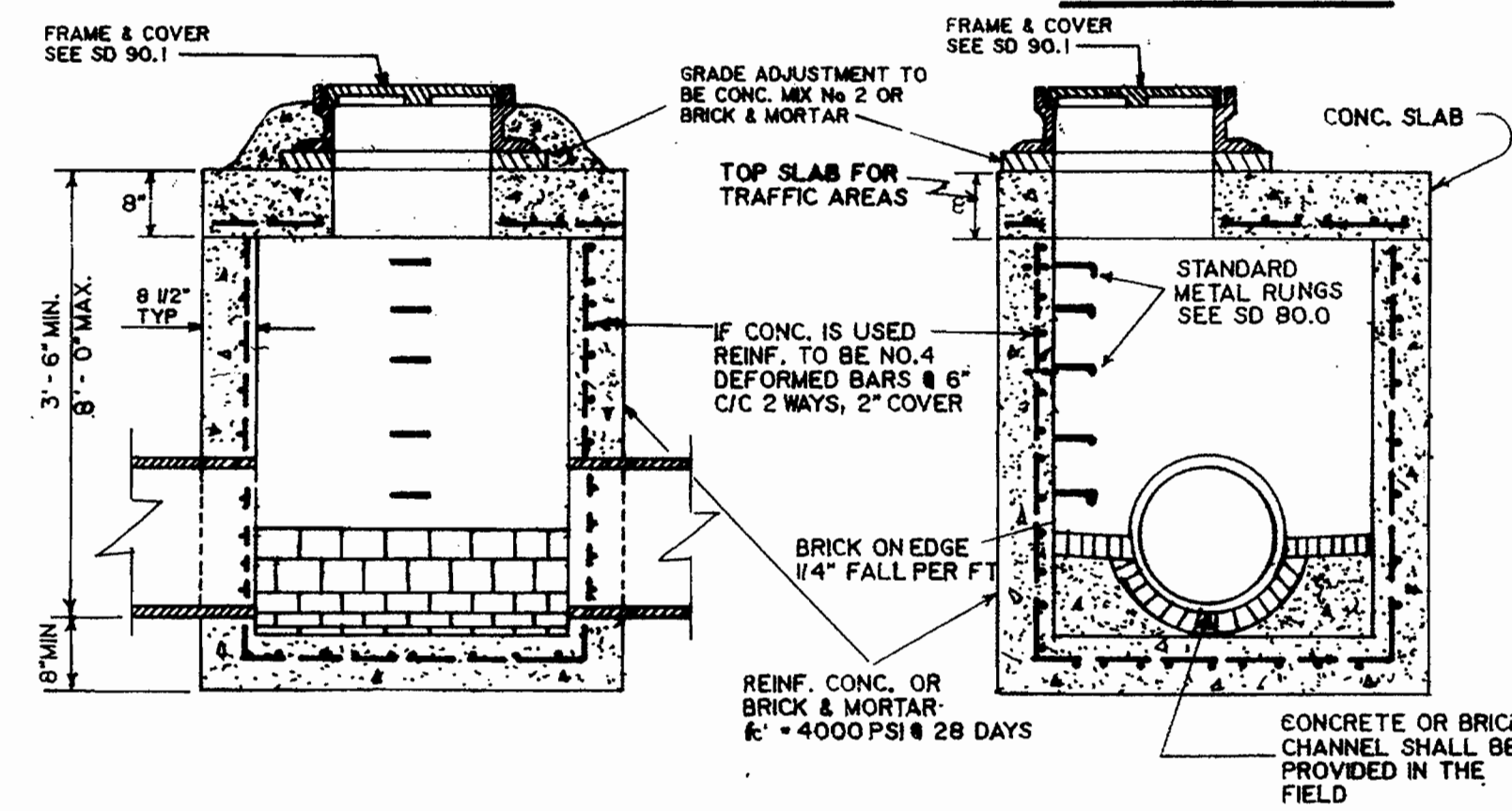


NOTE:
REFER SECTION B-B FOR REINFORCEMENT AND WALL OPENING
DETAIL FOR WALL OPENING

FOR CS/1

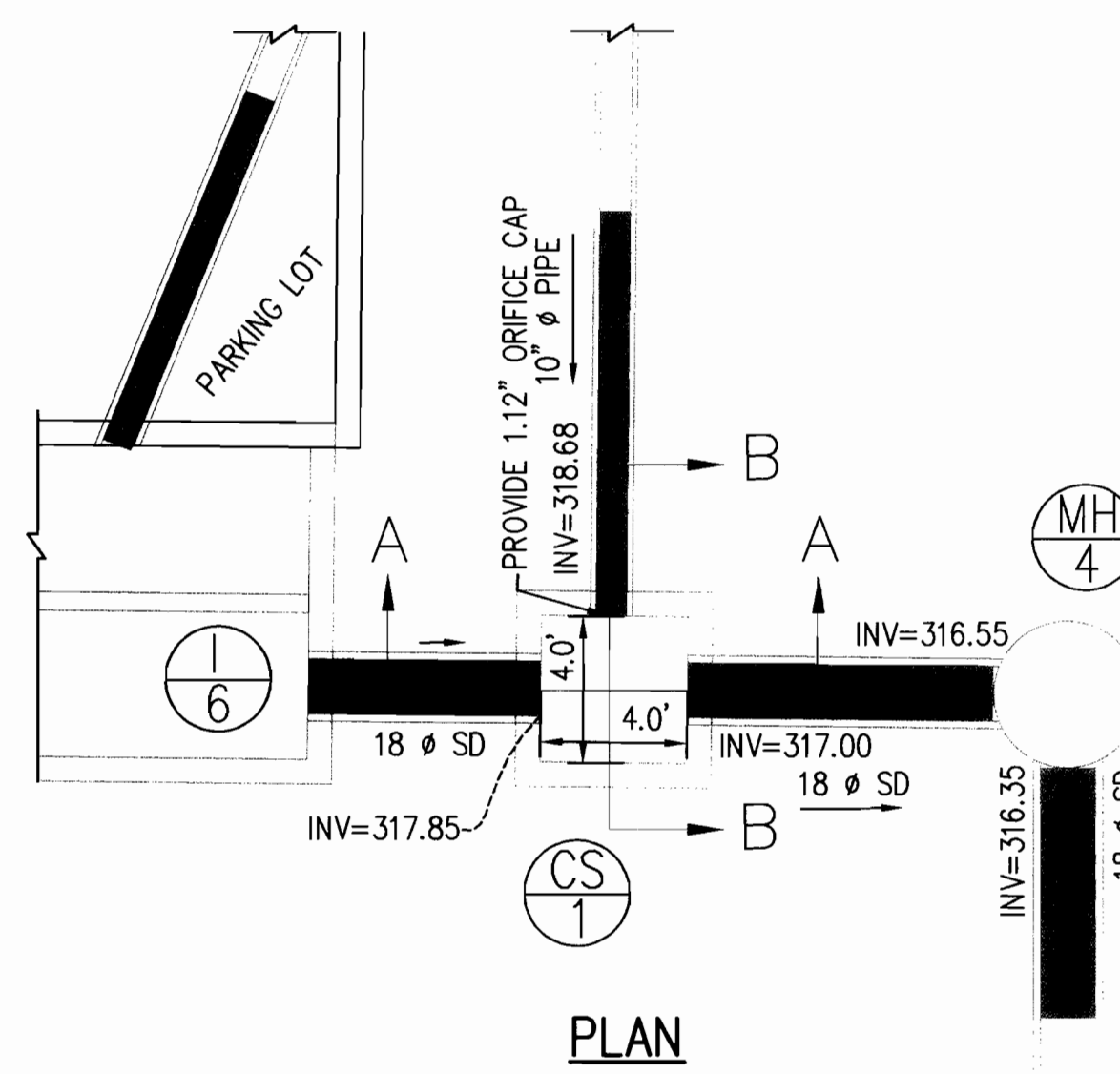


- NOTES:
1. PARTIS IS REQUIRED FOR BRICK WALL CONSTRUCTION IN ACCORDANCE WITH Prince George's County, Department of Environmental Resources, Watershed Protection Branch STANDARDS & SPECIFICATIONS.
 2. SPECIAL DESIGN IS REQUIRED FOR STRUCTURES WITHIN TRAFFIC AREAS.
 3. ALL REINFORCING STEEL TO BE ASTM A 615 GRADE 60.



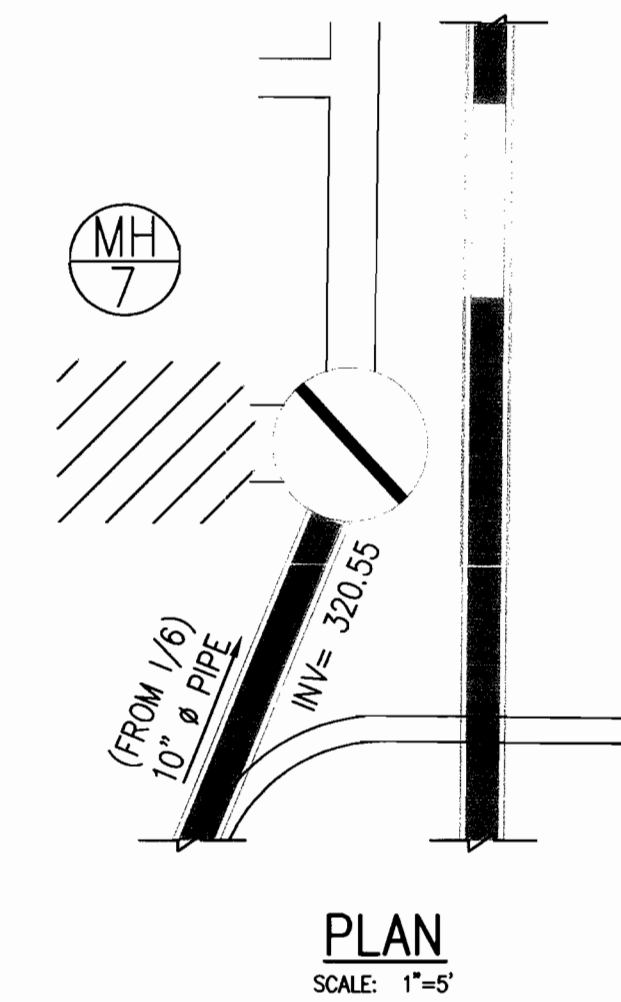
SECTION A-A

SECTION B-B

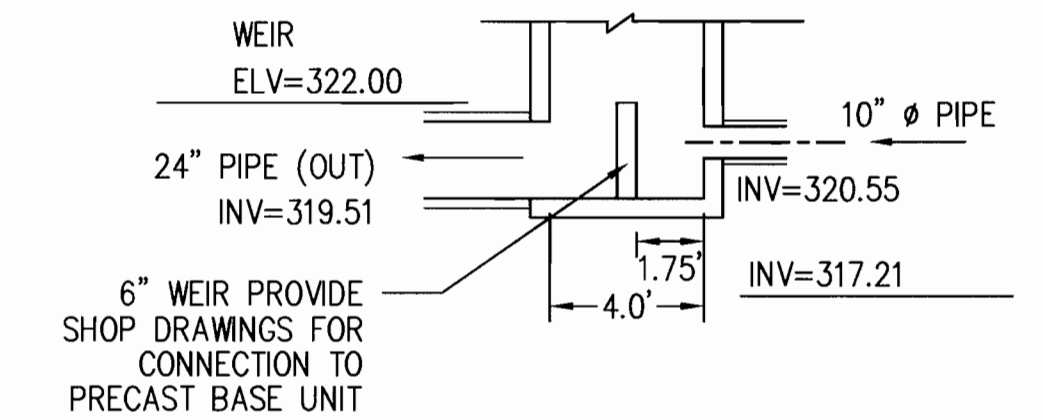


PLAN

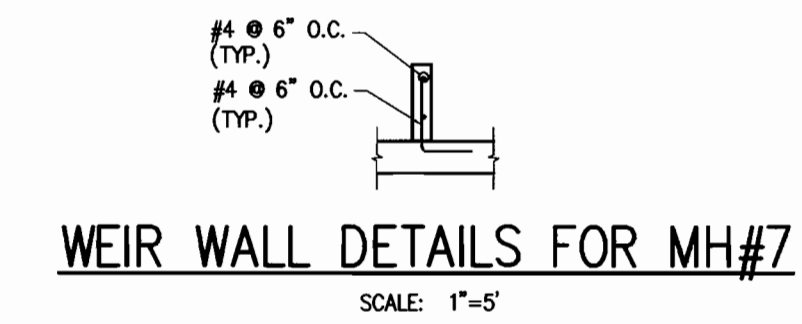
FOR MH/7



PLAN
SCALE: 1"=5'



NOTE:
FOR MH/7 USE DETAIL SAME AS CS/1. AND FOR
WEIR WALL REFER WEIR WALL DETAIL



WEIR WALL DETAILS FOR MH#7
SCALE: 1"=5'

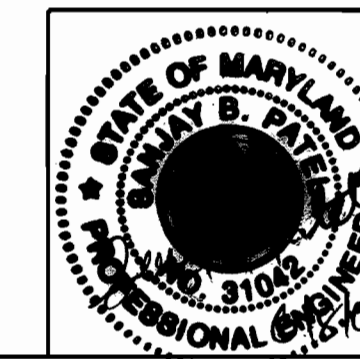
APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.		
<i>Mark A. Coyle</i>	6/27/06	DATE
DIRECTOR		
<i>Chris Comarota</i>	6/27/06	DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION		
<i>David Harter</i>	6/27/06	DATE
CHIEF, DIVISION OF LAND DEVELOPMENT		

DATE	NO.	REVISION

OWNER:
Chamberlain Construction Inc of MD
3219-A Corporate Court
Ellicott City, Maryland 21042
Attn: Doug Chamberlain
410-203-2460

DEVELOPERS:
Patel Associates, LLC
5105 Santa Fe Court
Ellicott City, MD 21043
410-715-4626

Kiddie Academy
Chris Comarota
108 Wheel Road
Bel Air, MD 21015
410-569-9165 x240



AB CONSULTANTS, INC.
9450 ANNAPOLIS ROAD
LANHAM, MARYLAND 20706
PHONE: (301) 306-3091
FAX: (301) 306-3092

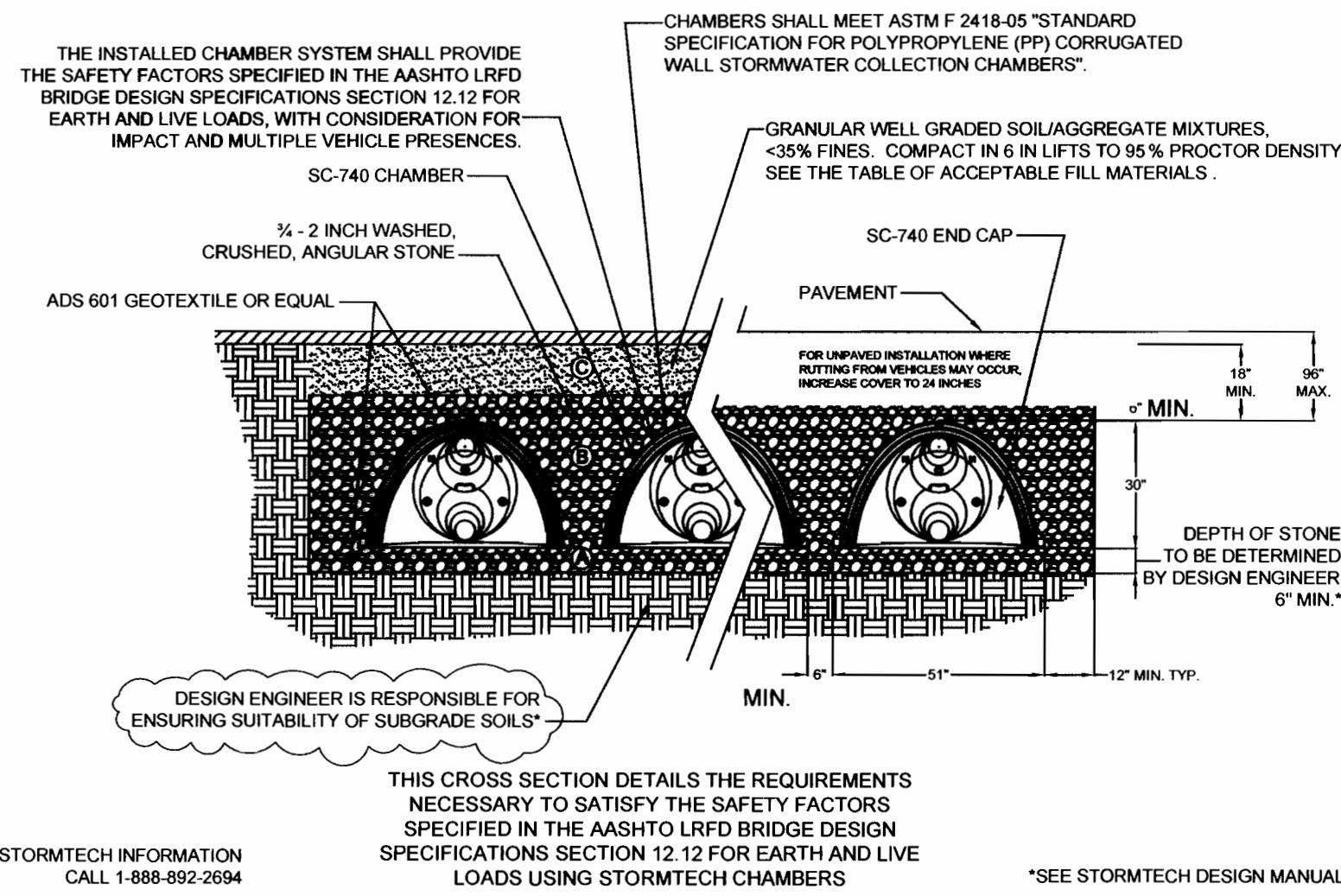
**KIDDIE ACADEMY OF ELKRIDGE
DAY CARE FACILITY**
LOT 4 OF THE HARRY L. PUTNAM PROPERTY
STRUCTURE DETAILS
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

PROJECT NO.
05-114
SCALE: AS SHOWN
DATE: 06/09/06
DRAWN BY: CADD
CHECKED BY: DTD

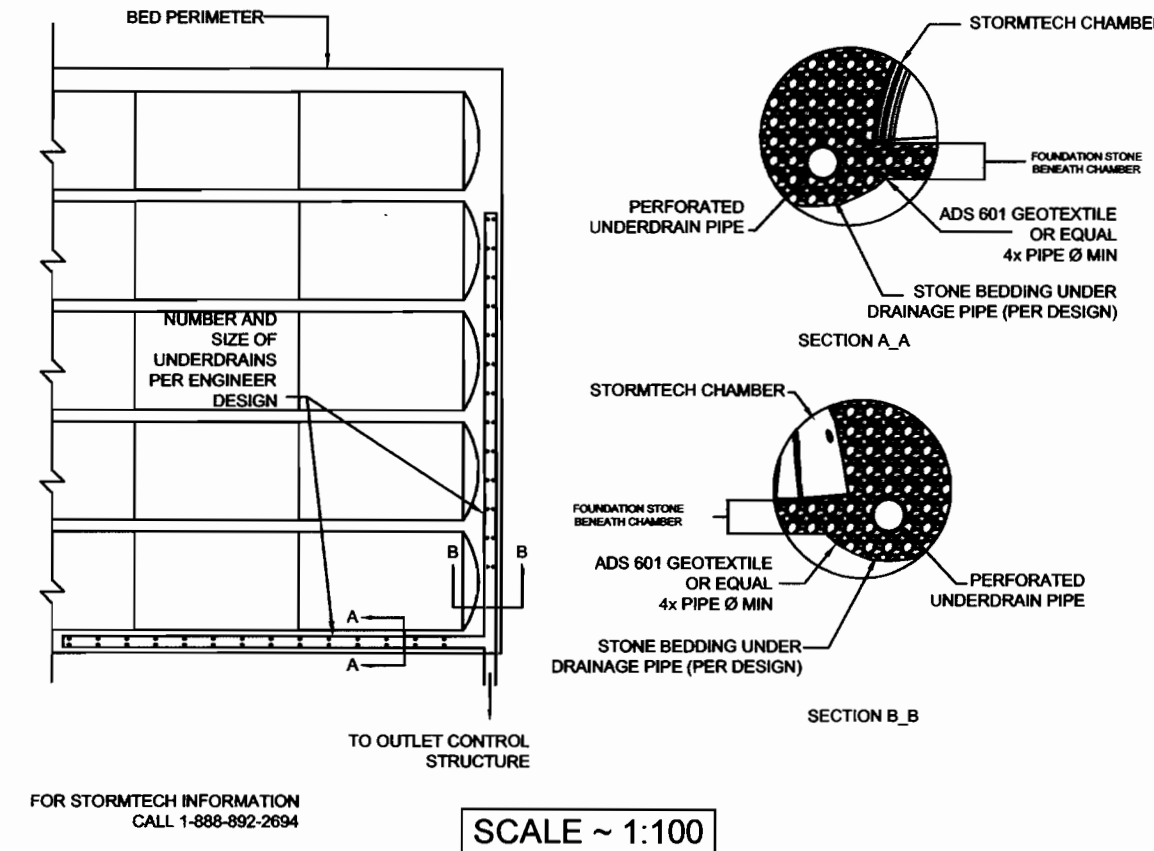
CONTACT: DAVID T. DOWS PHONE: 301-306-3091 x25

PLAT 10696, TAX MAP 37, GRID 20, P/O 613/LOT 4, DEED REF: 4201/41 SHEET: 5 OF 17

SDP-06-042

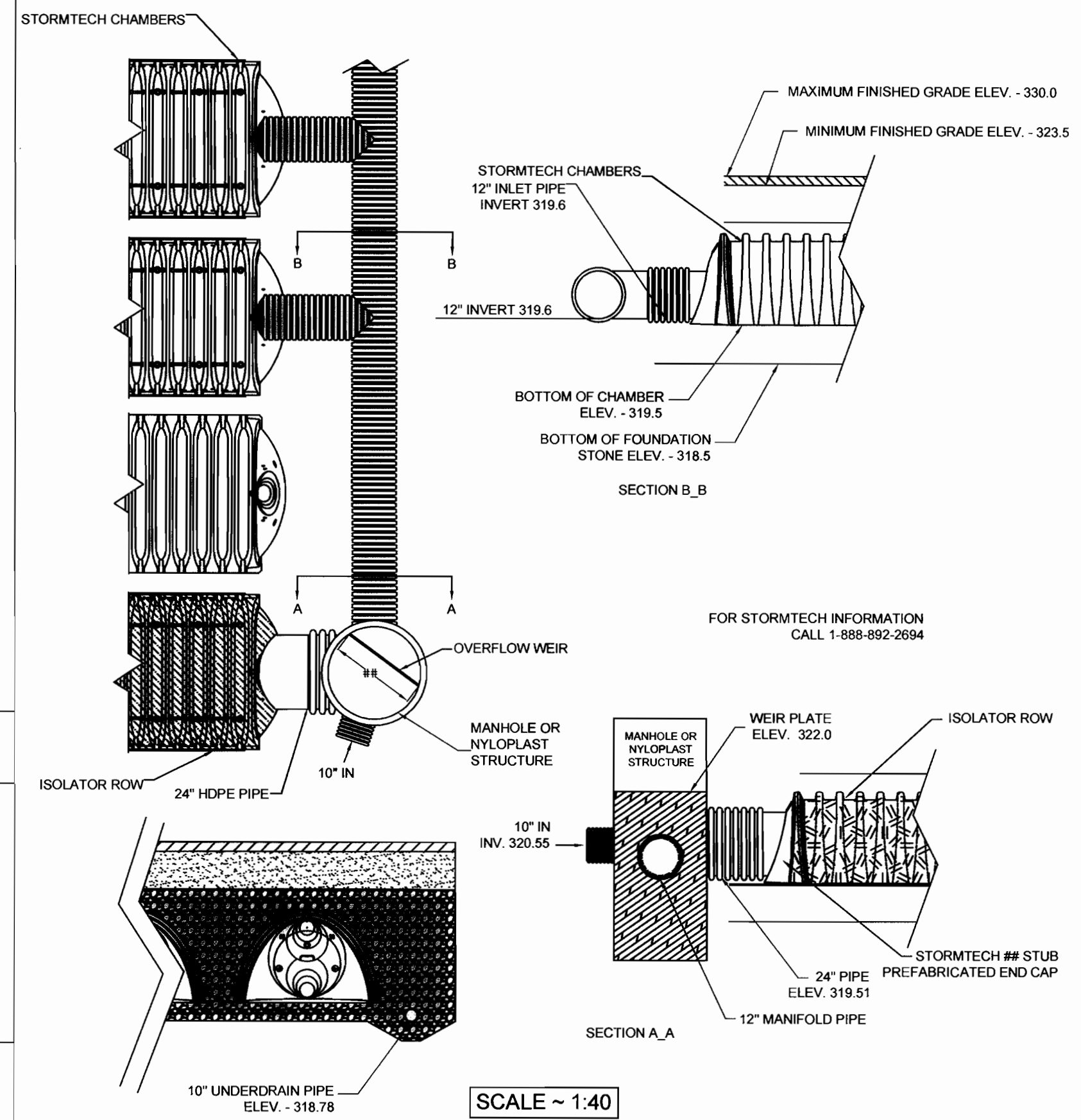


SC-740 TYPICAL CROSS SECTION



STORMTECH UNDERDRAIN DETAIL

NOTES:
 1. ALL DESIGN SPECIFICATIONS FOR STORMTECH CHAMBERS SHALL BE IN ACCORDANCE WITH THE STORMTECH DESIGN MANUAL.
 2. THE INSTALLATION OF STORMTECH CHAMBERS SHALL BE IN ACCORDANCE WITH THE LATEST STORMTECH INSTALLATION INSTRUCTIONS.
 3. THE CONTRACTOR IS ADVISED TO REVIEW AND UNDERSTAND THE INSTALLATION INSTRUCTIONS PRIOR TO BEGINNING SYSTEM INSTALLATION. CALL 1-888-892-2694 OR VISIT WWW.STORMTECH.COM TO RECEIVE A COPY OF THE LATEST STORMTECH INSTALLATION INSTRUCTIONS.



STORMTECH ELEVATIONS

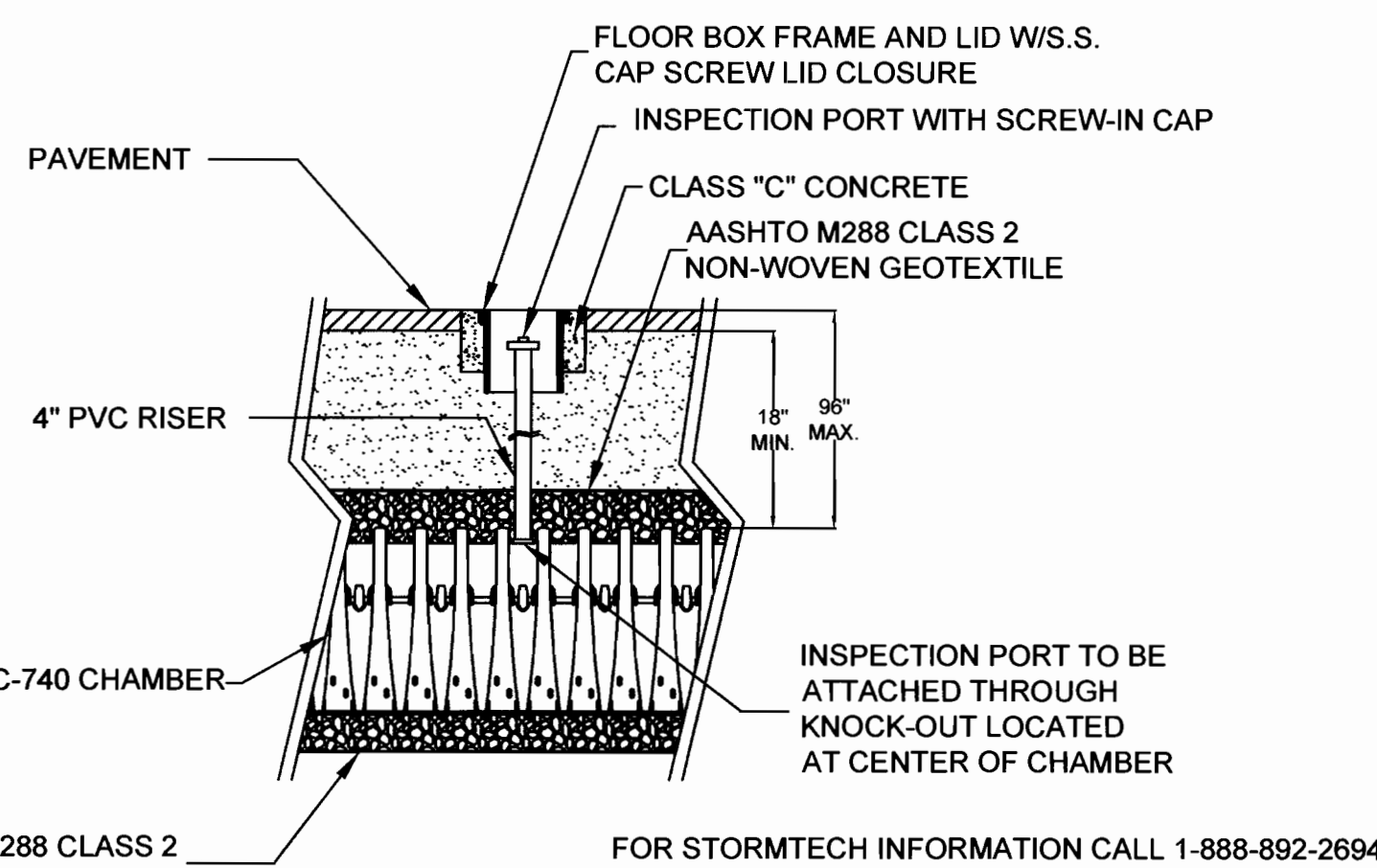
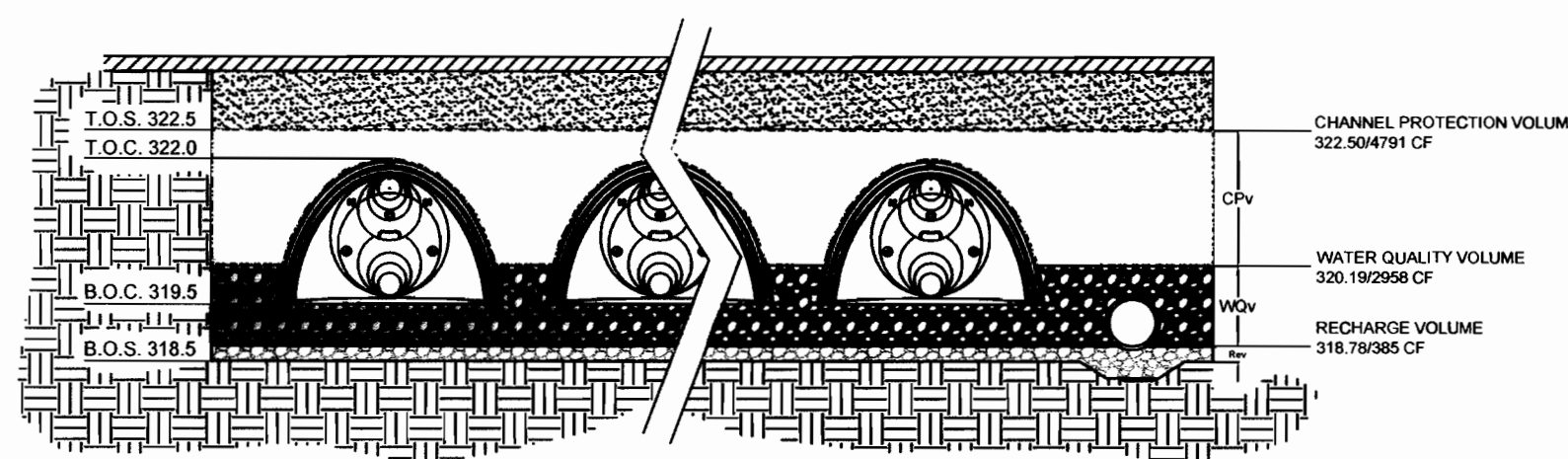
TECHNICAL DETAILS

ACCEPTABLE FILL MATERIALS STORMTECH SC-740 CHAMBER SYSTEMS

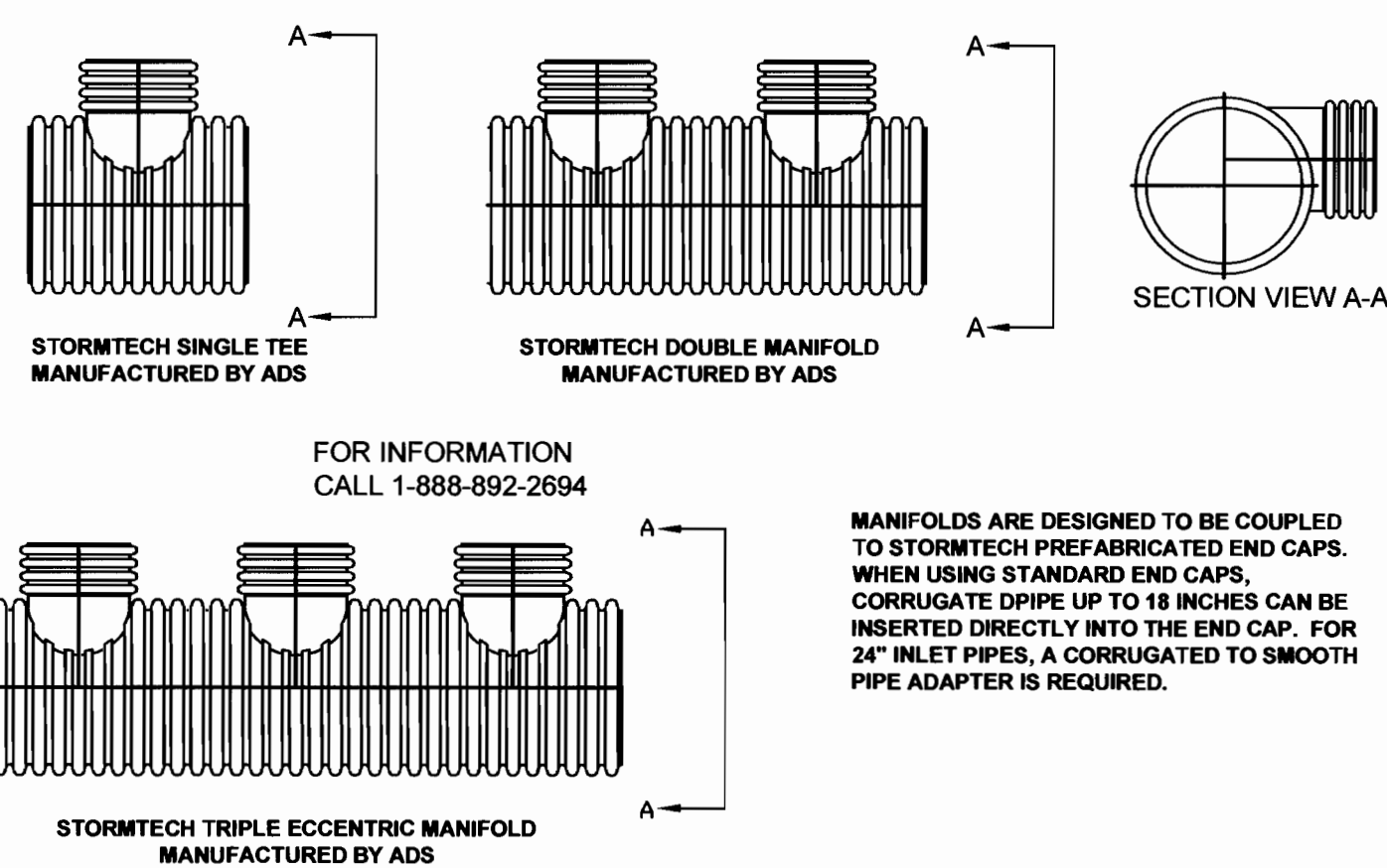
MATERIAL LOCATION	DESCRIPTION	AASHTO M43 DESIGNATION	AASHTO M145 DESIGNATION	COMPACTION/DENSITY REQUIREMENT
FILL MATERIAL FROM 18" TO GRADE ABOVE CHAMBERS	ANY SOIL/ROCK MATERIALS, NATIVE SOILS OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	N/A	PREPARE PER ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
FILL MATERIAL FOR 6" TO 18" ELEVATION ABOVE CHAMBERS (24" FOR UNPAVED INSTALLATIONS)	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES.	3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	A-1, A-2, A-3	COMPACT IN 6" LIFTS TO A MINIMUM 95% STANDARD PROCTOR DENSITY. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 LBS. DYNAMIC FORCE NOT TO EXCEED 20,000 LBS.
EMBEDMENT STONE SURROUNDING AND TO A 6" ELEVATION ABOVE CHAMBERS	WASHED ANGULAR STONE WITH THE MAJORITY OF PARTICLES BETWEEN 1/4" - 2 INCH	3, 357, 4, 467, 5, 56, 57	N/A	NO COMPACTION REQUIRED
FOUNDATION STONE BELOW CHAMBERS	WASHED ANGULAR STONE WITH THE MAJORITY OF PARTICLES BETWEEN 1/4" - 2 INCH	3, 357, 4, 467, 5, 56, 57	N/A	PLATE COMPACT OR ROLL TO ACHIEVE A 95% STANDARD PROCTOR DENSITY

PLEASE NOTE: THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE WASHED CRUSHED ANGULAR. FOR EXAMPLE, THE STONE MUST BE SPECIFIED AS WASHED, CRUSHED, ANGULAR NO. 4 STONE.

STORMTECH ACCEPTABLE FILL MATERIALS

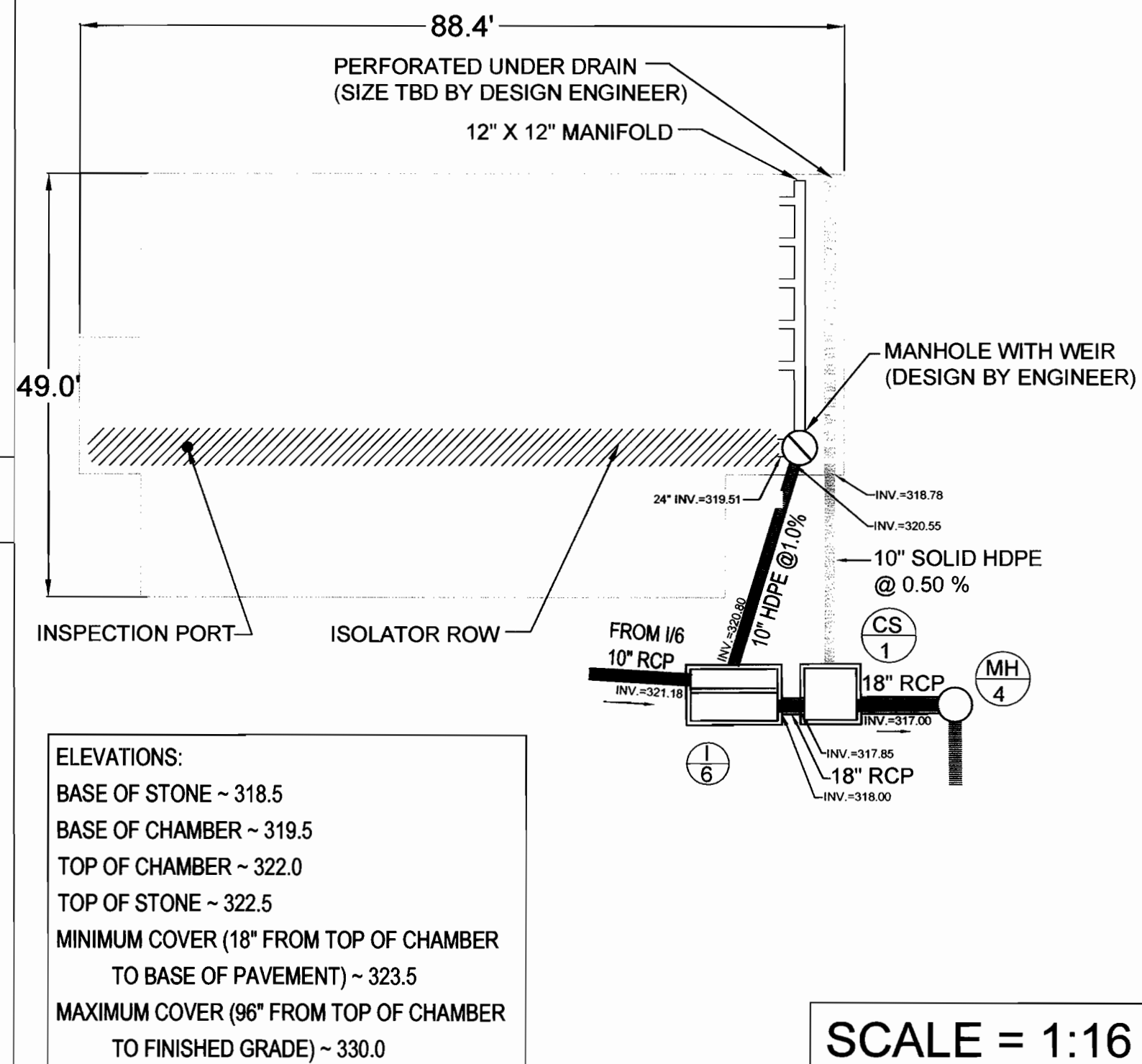


STORMTECH INSPECTION PORT DETAIL



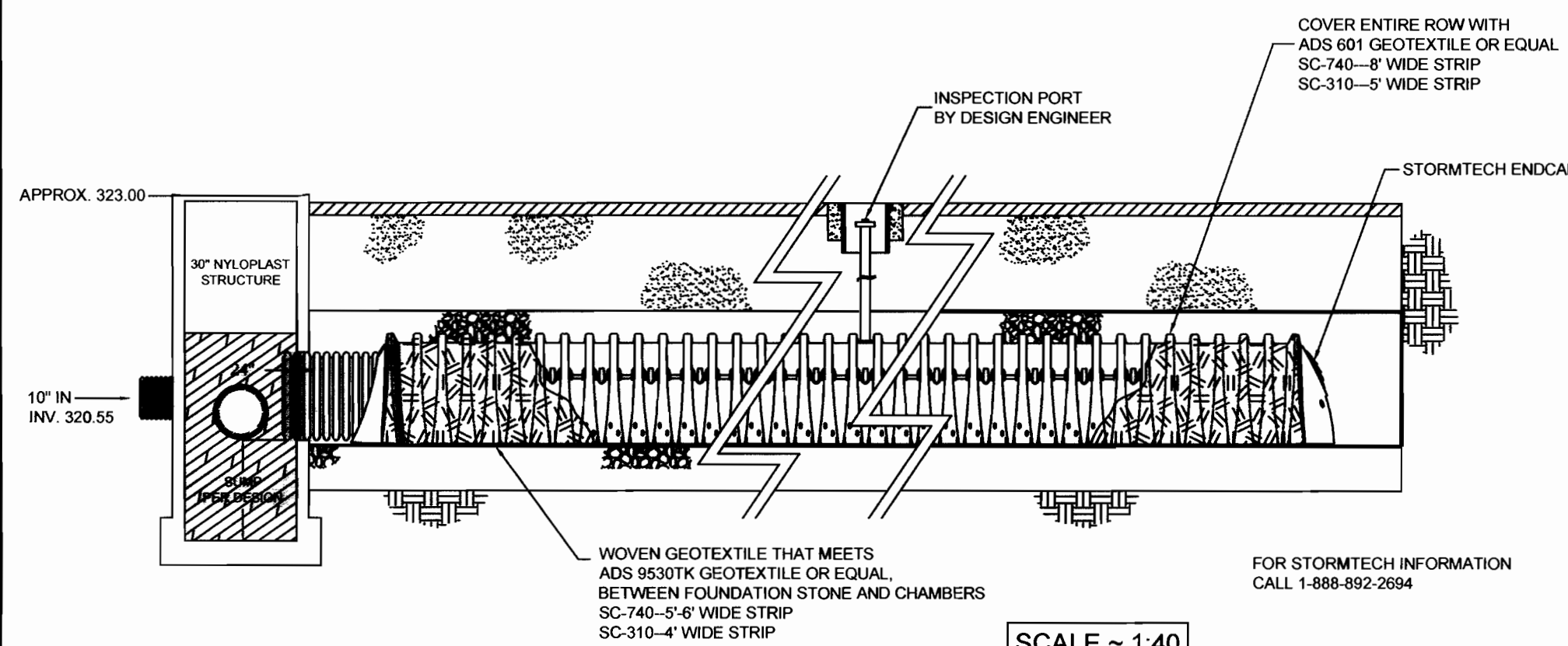
ADS MANIFOLD DETAILS

100 SC-740 STORMTECH CHAMBERS STORAGE PER INSTALLED CHAMBER w/ 12" STONE BELOW / 6" STONE ABOVE CHAMBER ~ 81.7 CF
 TOTAL STORAGE PROVIDED ~ 8170 CF

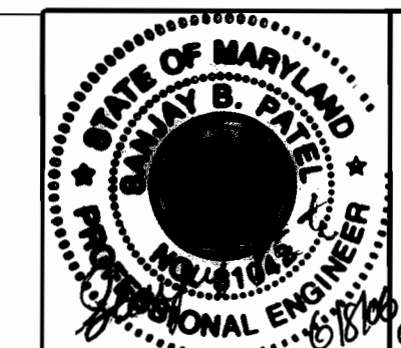


STORMTECH SC-740 CHAMBER LAYOUT

VOLUME BY ELEVATION



STORMTECH ISOLATOR ROW DETAIL



AB CONSULTANTS, INC.
 9450 ANNAPOLIS ROAD
 LANHAM, MARYLAND 20706
 PHONE: (301) 306-3091
 FAX: (301) 306-3092

KIDDIE ACADEMY OF ELKRIDGE DAY CARE FACILITY
 LOT 4 OF THE HARRY L. PUTNAM PROPERTY
STORMTECH SC-740 CHAMBER DETAILS
 6th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

PROJECT NO. 05-114
 SCALE: 06/09/06
 DRAWN BY: CADD
 CHECKED BY: DTD
 SHEET: 6 OF 17

CONTACT: DAVID T. DOWS PHONE: 301-306-3091 x25

PLAT 10696, TAX MAP 37, GRID 20, P/O 613/LOT 4, DEED REF: 4201/41

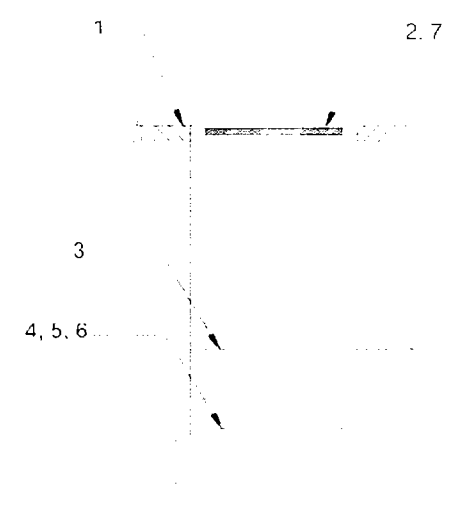
13.1 Inspection and Maintenance



13.1 TREATMENT TRAIN INSPECTION AND MAINTENANCE

The StormTech treatment train includes treatment train units (TRU) and treatment chambers. It is recommended that inspection and maintenance (I&M) be initiated at the furthest upstream treatment unit and continue downstream as necessary. The following I&M procedures follow the approach provided by StormTech for the Isolator Row and the StormTech Pre-Treatment Device (PTD).

Figure 17 - Catchbasin/Manhole I&M Steps



13.2 CATCHBASIN/MANHOLE I&M

Typically a stormwater system will have catchbasins, manholes, upstream of the detention treatment system. In some cases these may be the only pre-treatment devices. Regular I&M of catchbasins and manholes should be scheduled and performed as part of a site's routine maintenance plan.

Catchbasin/Manhole - Step-by-Step Maintenance Procedures

- 1) Inspect catchbasins and manholes upstream of StormTech chambers, or sediment.
- 2) Remove grate or cover.
- 3) Skim out debris and floatables.
- 4) Use a stadia rod to measure the depth of sediment.
- 5) If sediment is at a depth greater than 6" proceed to step 6. If not proceed to step 7.
- 6) Vacuum or manually remove sediment.
- 7) Replace grate.
- 8) Record depth & date and schedule next inspection.

TABLE 10 - Pretreatment Inspection and Maintenance Guidelines

Component/Device/Location	Inspection*	Maintenance**
StormTech Isolator TM Rows	Bi-Annually	JetVac - Curvet Cleaning Nozzle Preferred
Sediment Basin	Quarterly or after large storm event	Excavate sediment
Catch Basin Strip	Quarterly	Excavate, pump, or vacuum
Sedimentation Structure	Quarterly	Excavate, pump, or vacuum
Catch Basin Filter Bags	After all storm events	Clean and/or replace filter bags
Porous Pavement	Quarterly	Sweep/Pavement
Pipe Header Design	Quarterly	Excavate, pump, or vacuum
Water Quality Inlet	Quarterly	Excavate, pump, or vacuum
Sand Filters	Quarterly or after storm event	Remove & replace sand filter

* This schedule does not account for regional or site variables. Local municipal guidelines should be followed for inspection when available. ** The methods stated are minimum guidelines for removal and cleaning of system. Other methods may apply.

13.4 ISOLATORTM ROW INSPECTION

Regular inspection and maintenance are essential to assure a properly functioning stormwater system. Inspection is easily accomplished through the manhole or optional inspection ports of an Isolator Row. Please follow local and OSHA rules for a confined space entry.

Inspection ports can allow inspection to be accomplished safely from the surface without the need for a confined space entry. Inspection ports provide visual access to the system with the use of a flashlight. A stadia rod may be inserted to determine the depth of sediment. If upon visual inspection it is found that sediment has accumulated to an average depth exceeding 3 inches, cleanup is required.

A StormTech Isolator Row should initially be inspected immediately after completion of the site's construction. While every effort should be made to prevent sediment from entering the system during construction, it is during this time that excess amounts of sediments are most likely to enter any stormwater system. Inspection and maintenance, if necessary, should be performed prior to passing responsibility over to the site's owner. Once in normal service, a StormTech Isolator Row should be inspected bi-annually until an understanding of the site's characteristics is developed. The site's maintenance manager can then revise the inspection schedule based on experience or local requirements.

13.5 ISOLATOR ROW MAINTENANCE

JetVac maintenance is required if sediment has been collected to an average depth of 3 inches or more inside the Isolator Row. The JetVac process utilizes a high pressure water nozzle to propel itself down the Isolator Row while scouring and suspending sediments. As the nozzle is retrieved, a wave of suspended sediments is flushed back into the manhole for vacuuming. Most sewer and pipe maintenance companies have vacuum/JetVac combinations. Fixed nozzles designed for culverts or large diameter pipe cleaning are preferable. Rear facing jets with an effective spread of at least 45 degrees are best. Most JetVac units have a maximum of 400 feet of hose allowing maintenance of an Isolator Row up to 50 chambers long. This JetVac process should only be performed on StormTech Rows that have A/S/H/D class 1 woven geotextile over their angular base stone.

Additional Notes

- 1) Inspect every 6 months during the first year of operation. Adjust the inspection interval based on previous observations of sediment accumulation and high water elevations.
- 2) Conduct jetting and vacuuming only when inspection show that maintenance is necessary.

13.6 ECCENTRIC PIPE HEADER INSPECTION

These guidelines do not supersede a pipe manufacturer's recommended I&M procedures. Consult with the manufacturer of the pipe header system for specific I&M procedures. Inspection of the header system should be carried out quarterly. On sites which generate higher levels of sediment more frequent inspections may be necessary. Headers may be accessed through risers, access ports or manholes. Measurement of sediment may be taken with a stadia rod or similar device. Cleanup of sediment should occur when the sediment volume has reached the storage area by 25% of the depth of sediment has reached approximately 25% of the diameter of the structure.

Eccentric Header Step-by-Step Maintenance Procedures

- 1) Locate manholes, access ports or risers connected to the header system.
- 2) Remove grates or covers.
- 3) Using a stadia rod, measure the depth of sediment.
- 4) If sediment is at a depth of about 25% pipe volume or 25% pipe diameter proceed to step 5. If not proceed to step 6.
- 5) Vacuum pump the sediment. Do not flush sediment out in wet pipes.
- 6) Replace grates and covers.
- 7) Record depth & date and schedule next inspection.

13.7 ECCENTRIC PIPE HEADER MAINTENANCE

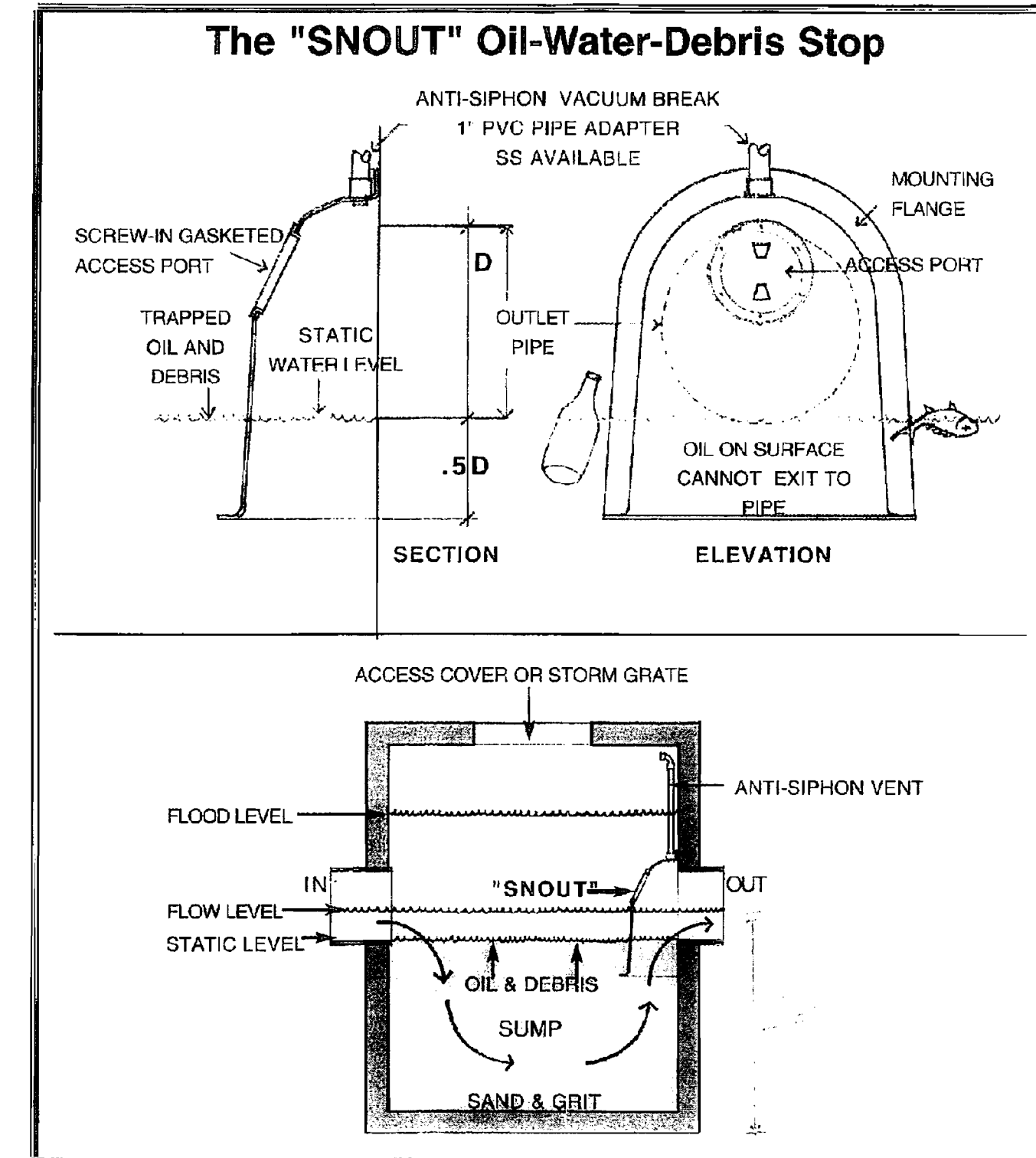
Cleanup of accumulated material should be accomplished by vacuum pumping the material from the header. Cleanup should be accomplished during dry weather. Care should be taken to avoid flushing sediments out through the outlet pipes and into the chamber risers.

STORMTECH ISOLATORTM ROW - STEP-BY-STEP MAINTENANCE PROCEDURES

- Step 1) Inspect Isolator Rows for sediment.**
- A) Inspection ports (if present)
 - i. Remove lid from floor box frame.
 - ii. Remove cap from inspection riser.
 - iii. Using a flashlight and stadia rod, measure depth of sediment.
 - iv. If sediment is at or above 3 inch depth proceed to Step 2. If not proceed to step 3.
 - B) All Isolator Rows
 - i. Remove cover from manhole at upstream end of Isolator Row.
 - ii. Using a flashlight inspect down Isolator Row through outlet pipe.
 1. Mirrors or poles or cameras may be used to view a confined space entry.
 2. Follow OSHA regulations for confined space entry to testing manhole.
 - iii. If sediment is at or above the lower row of sidewalk holes (approximately 3 inches) proceed to Step 2. If not proceed to Step 3.
- Step 2) Clean out Isolator Rows using the JetVac process.**
- A) A fixed curved cleaning nozzle with rear facing nozzle spread of 45 degrees or more is preferable.
 - B) Apply multiple passes of JetVac until backflush water is clean.
 - C) Vacuum manhole sump as required.
- Step 3) Replace all caps, lids and covers.**
- Step 4) Inspect & clean catch basins and manholes upstream of the StormTech system following the procedures for Class C Manhole Inlet System.**

Best Management Products, Inc.

www.bestmp.com

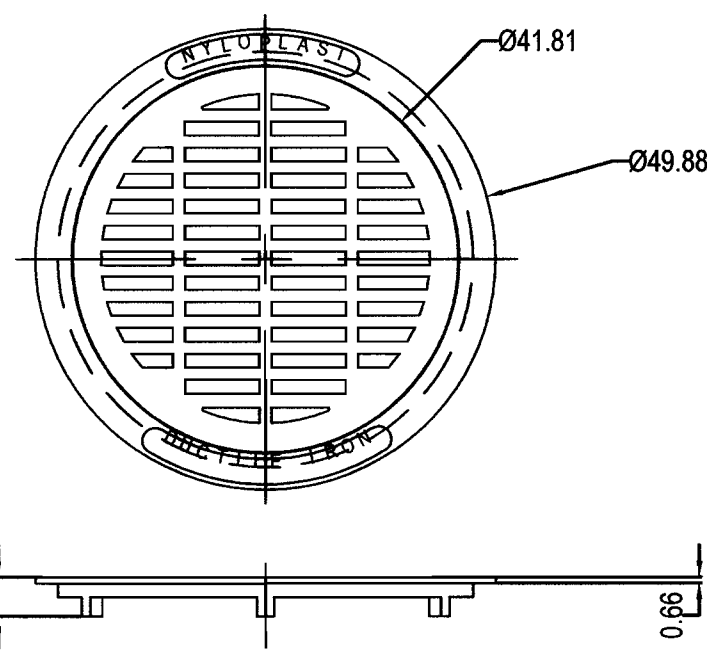


For additional information visit our web-site at: www.bestmp.com or contact: T.J. Mullen 888-354-7585, 215-884-6195 fax, tjm@bestmp.com

Best Management Products, Inc. • 53 Mt Archer Rd. • Lyme CT • 800-504-8008 • 860-434-3195 fax



INSPECTION & MAINTENANCE



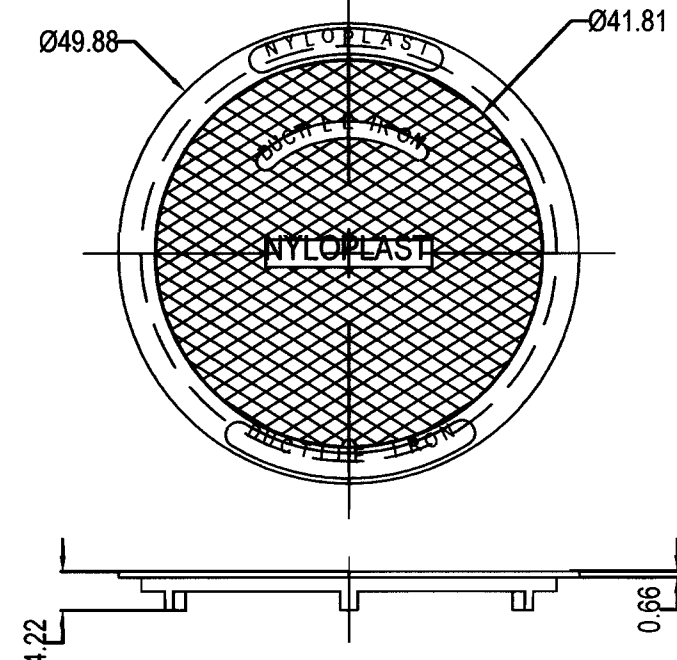
STANDARD

APPROX. DRAIN AREA = 192.00 SQ. IN.
APPROX. WEIGHT WITH FRAME = 189.00 LBS.

NYLOPLAST 30" GRATES/COVERS

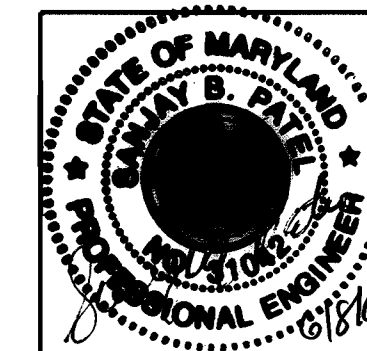
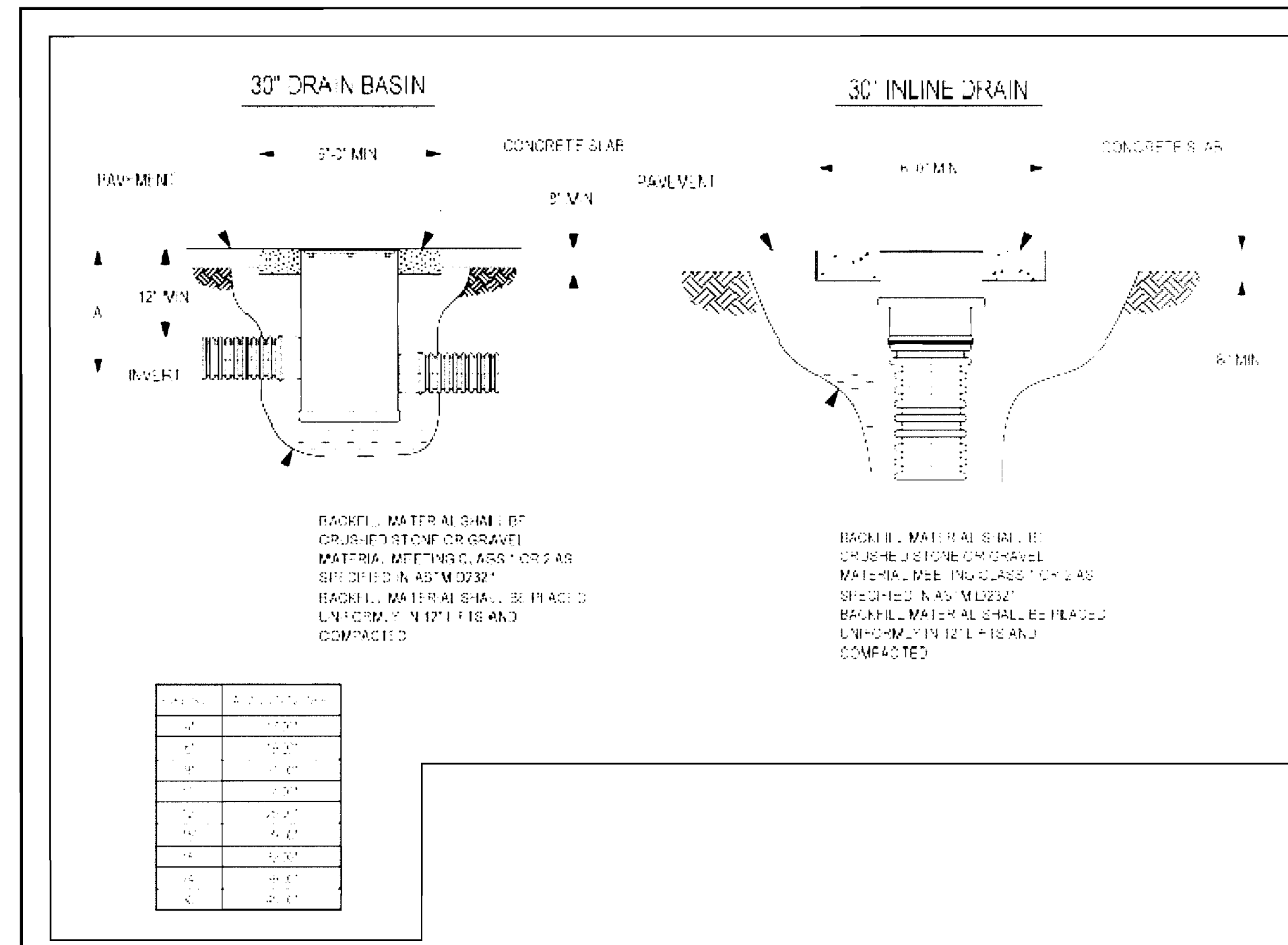
STANDARD GRATE HAS H-25 HEAVY DUTY RATING
SOLID COVER HAS H-25 HEAVY DUTY RATING
QUALITY MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
MATERIAL: DUCTILE IRON
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST
PRICE INCLUDES FRAME & GRATE/COVER

* SIZE OF OPENING MEETS REQUIREMENTS OF AMERICAN DISABILITY ACT AS STATED IN FEDERAL REGISTER PART III, DEPARTMENT OF JUSTICE, 28 CFR PART 36. NONDISCRIMINATION ON THE BASIS OF DISABILITY BY PUBLIC ACCOMMODATIONS AND IN COMMERCIAL FACILITIES; FINAL RULE.



SOLID

APPROX. WEIGHT WITH FRAME = 225.00 LBS.



AB CONSULTANTS, INC.
9450 ANNAPOLIS ROAD
LANHAM, MARYLAND 20706
PHONE: (301) 306-3091
FAX: (301) 306-3092

CONTACT: DAVID T. DOWS PHONE: 301-306-3091 x25

KIDDIE ACADEMY OF ELKRIDGE DAY CARE FACILITY
LOT 4 OF THE HARRY L. PUTNAM PROPERTY
STORMTECH SC-740
CHAMBER DETAILS
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
Director: *Howard K. Lytle* 6/20/06
Chief, Development Engineering Division: *Andy Klemm* 6/27/06
Chief, Division of Land Development: *Andy Klemm* 6/27/06

DATE NO. REVISION

OWNER: Chamberlain Construction Inc of MD
3219-A Corporate Court
Ellicott City, Maryland 21042
Attn: Doug Chamberlain
410-203-2460

DEVELOPERS:
Patel Associates, LLC 5105 Santa Fe Court Ellicott City, MD 21043 410-715-4626
Kiddie Academy Chris Commarota 108 Wheel Road Bel Air, MD 21015 410-569-9165 x240

PROJECT NO. 05-114
SCALE:
DATE: 06/09/06
DRAWN BY: CADD
CHECKED BY: DTD
SHEET: 7 OF 17

Pond MD-378-15

CONSTRUCTION SPECIFICATIONS

These specifications are appropriate to all ponds within the scope of the Standard for practice MD-378. All references to ASTM and AASHTO specifications apply to the most recent version.

Site Preparation

Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and sharp breaks shall be sloped to no steeper than 1:1. All trees shall be cleared and grubbed within 15 feet of the toe of the embankment.

Areas to be covered by the reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush, and stumps shall be cut approximately level with the ground surface. For dry stormwater management ponds, a minimum of a 25-foot radius around the inlet structure shall be cleared.

All cleared and grubbed material shall be disposed of outside and below the limits of the dam and reservoir as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

Earth Fill

Material - The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6", frozen or other objectionable materials. Fill material for the center of the embankment, and cut off trench shall conform to Unified Soil Classification GC, SC, CH, or CL and must have at least 30% passing the #200 sieve. Consideration may be given to the use of other materials in the embankment if designed by a geotechnical engineer. Such special designs must have construction supervised by a geotechnical engineer.

Materials used in the outer shell of the embankment must have the capability to support vegetation of the quality required to prevent erosion of the embankment.

Placement - Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in maximum 8 inch thick (before compaction) layers which are to be continuous over the entire length of the fill. The most permeable borrow material shall be placed in the downstream portions of the embankment. The principal spillway must be installed concurrently with fill placement and not excavated into the embankment.

Compaction - The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of heavy equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction will be obtained with the equipment used. The fill material shall contain sufficient moisture so that if formed into a ball it will not crumble, yet not be so wet that water can be squeezed out.

When required by the reviewing agency the minimum required density shall not be less than 95% of maximum dry density with a moisture content within ±2% of the optimum. Each layer of fill shall be compacted as necessary to obtain that density, and is to be certified by the Engineer at the time of construction. All compaction is to be determined by AASHTO Method T-99 (Standard Proctor).

Cut Off Trench - The cutoff trench shall be excavated into impervious material along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation, with the minimum width being four feet. The depth shall be at least four feet below existing grade or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill shall be compacted with construction equipment, rollers, or hand tampers to assure maximum density and minimum permeability.

NRCS - MARYLAND

JANUARY 2000

Pond MD-378-17

bands or flanges. Aluminum Pipe, when used with flowable fill or when soil and/or water conditions warrant for increased durability, shall be fully bituminous coated per requirements of AASHTO Specification M-190 Type A. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer or two coats of asphalt. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be between 4 and 9.

2. Coupling bands, anti-seep collars, end sections, etc. must be composed of the same material and coatings as the pipe. Metals must be insulated from dissimilar materials with use of rubber or plastic insulating materials at least 24 mils in thickness.

3. Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight. Dimple bands are not considered to be watertight.

All connections shall use a rubber or neoprene gasket when joining pipe sections. The end of each pipe shall be re-rolled an adequate number of corrugations to accommodate the bandwidth. The following type connections are acceptable for pipes less than 24 inches in diameter: flanges on both ends of the pipe with a circular 3/8 inch closed cell neoprene gasket, pre-punched to the flange bolt circle, sandwiched between adjacent flanges; a 12-inch wide standard lap type band with 12-inch wide by 3/8-inch thick closed cell circular neoprene gasket; and a 12-inch wide huffer type band with o-ring gaskets having a minimum diameter of 1/2 inch greater than the corrugation depth. Pipes 24 inches in diameter and larger shall be connected by a 24 inch long annular corrugated band using a minimum of 4 (four) rods and lugs, 2 on each connecting pipe end. A 24-inch wide by 3/8-inch thick closed cell circular neoprene gasket will be installed with 12 inches on the end of

each pipe. Flanged joints with 3/8 inch closed cell gaskets the full width of the flange is also acceptable.

Helically corrugated pipe shall have either continuously welded seams or have lock seams with internal caulking or a neoprene bead.

4. Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.

5. Backfilling shall conform to "Structure Backfill".

6. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

Reinforced Concrete Pipe - All of the following criteria shall apply for reinforced concrete pipe:

1. Materials - Reinforced concrete pipe shall have bell and spigot joints with rubber gaskets and shall equal or exceed ASTM C-361.

2. Bedding - Reinforced concrete pipe conduits shall be laid in a concrete bedding / cradle for their entire length. This bedding / cradle shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 50% of its outside diameter with a minimum thickness of 6 inches. Where a concrete cradle is not needed for structural reasons, flowable fill may be used as described in the "Structure Backfill" section of this standard. Gravel bedding is not permitted.

3. Laying pipe - Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of

NRCS - MARYLAND

JANUARY 2000

Pond MD-378-19

All borrow areas shall be graded to provide proper drainage and left in a slightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching in accordance with the Natural Resources Conservation Service Standards and Specifications for Critical Area Planting (MD-342) or as shown on the accompanying drawings.

Erosion and Sediment Control

Construction operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized. State and local laws concerning pollution abatement will be followed. Construction plans shall detail erosion and sediment control measures.

NRCS - MARYLAND

JANUARY 2000

Pond MD-378-20

OPERATION AND MAINTENANCE

An operation and maintenance plan in accordance with Local or State Regulations will be prepared for all ponds. As a minimum, the dam inspection checklist located in Appendix A shall be included as part of the operation and maintenance plan and performed at least annually. Written records of maintenance and major repairs needs to be retained in a file. The issuance of a Maintenance and Repair Permit for any repairs or maintenance that involves the modification of the dam or spillway from its original design and specifications is required. A permit is also required for any repairs or reconstruction that involve a substantial portion of the structure. All indicated repairs are to be made as soon as practical.

NRCS - MARYLAND

JANUARY 2000

Pond MD-378-16

Embankment Core - The core shall be parallel to the centerline of the embankment as shown on the plans. The top width of the core shall be a minimum of four feet. The height shall extend up to at least the 10 year water elevation or as shown on the plans. The side slopes shall be 1 to 1 or flatter. The core shall be compacted with construction equipment, rollers, or hand tampers to assure maximum density and minimum permeability. In addition, the core shall be placed concurrently with the outer shell of the embankment.

Structure Backfill

Backfill adjacent to pipes or structures shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe, unless there is a compacted fill of 24" or greater over the structure or pipe.

Structure backfill may be flowable fill meeting the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 313 as modified. The mixture shall have a 100-200 psi, 28 day unconfined compressive strength. The flowable fill shall have a minimum pH of 4.0 and a minimum resistivity of 2,000 ohm-cm. Material shall be placed such that a minimum of 6" (measured perpendicular to the outside of the pipe) of flowable fill shall be under (bedding), over and, on the sides of the pipe. It only needs to extend up to the spring line for rigid conduits. Average slump of the fill shall be 7" to assure flowability of the material. Adequate measures shall be taken (sand bags, etc.) to prevent floating the pipe. When using flowable fill, all metal pipe shall be bituminous coated. Any adjoining soil fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers

or other manually directed compaction equipment. The material shall completely fill all voids adjacent to the flowable fill zone. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a structure or pipe unless there is a compacted fill of 24" or greater over the structure or pipe. Backfill material outside the structural backfill (flowable fill) zone shall be of the type and quality conforming to that specified for the core of the embankment or other embankment materials.

Pipe Conduits

All pipes shall be circular in cross section.

Corrugated Metal Pipe - All of the following criteria shall apply for corrugated metal pipe:

1. Materials - (Polymer Coated steel pipe) - Steel pipes with polymeric coatings shall have a minimum coating thickness of 0.01 inch (10 mil) on both sides of the pipe. This pipe and its appurtenances shall conform to the requirements of AASHTO Specifications M-245 & M-246 with watertight coupling bands or flanges.

Materials - (Aluminum Coated Steel Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-274 with watertight coupling bands or flanges. Aluminum Coated Steel Pipe, when used with flowable fill or when soil and/or water conditions warrant the need for increased durability, shall be fully bituminous coated per requirements of AASHTO Specification M-190 Type A. Any aluminum coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer or two coats of asphalt.

Materials - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-196 or M-211 with watertight coupling

NRCS - MARYLAND

JANUARY 2000

Pond MD-378-18

the pipe. The first joint must be located within 4 feet from the riser.

4. Backfilling shall conform to "Structure Backfill".

5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

Plastic Pipe - The following criteria shall apply for plastic pipe:

1. Materials - PVC pipe shall be PVC-1120 or PVC-1220 conforming to ASTM D-1785 or ASTM D-2241. Corrugated High Density Polyethylene (HDPE) pipe, couplings and fittings shall conform to the following: 4" - 10" inch pipe shall meet the requirements of AASHTO M252 Type S, and 12" through 24" inch shall meet the requirements of AASHTO M294 Type S.

2. Joints and connections to anti-seep collars shall be completely watertight.

3. Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.

4. Backfilling shall conform to "Structure Backfill".

5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

Drainage Diaphragms - When a drainage diaphragm is used, a registered professional engineer will supervise the design and construction inspection.

Concrete

Concrete shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 414, Mix No. 3.

Rock Riprap

NRCS - MARYLAND

JANUARY 2000

Rock riprap shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 311.

Geotextile shall be placed under all riprap and shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 921.09, Class C.

Care of Water during Construction

All work on permanent structures shall be carried out in areas free from water. The Contractor shall construct and maintain all temporary dikes, levees, cofferdams, drainage channels, and stream diversions necessary to protect the areas to be occupied by the permanent works. The contractor shall also furnish, install, operate, and maintain all necessary pumping and other equipment required for removal of water from various parts of the work and for maintaining the excavations, foundation, and other parts of the work free from water as required or directed by the engineer for constructing each part of the work. After having served their purpose, all temporary protective works shall be removed or leveled and graded to the extent required to prevent obstruction in any degree whatsoever of the flow of water to the spillway or outlet works and so as not to interfere in any way with the operation or maintenance of the structure. Stream diversions shall be maintained until the full flow can be passed through the permanent works. The removal of water from the required excavation and the foundation shall be accomplished in a manner and to the extent that will maintain stability of the excavated slopes and bottom required excavations and will allow satisfactory performance of all construction operations. During the placing and compacting of material in required excavations, the water level at the locations being refilled shall be maintained below the bottom of the excavation at such locations which may require draining the water sumps from which the water shall be pumped.

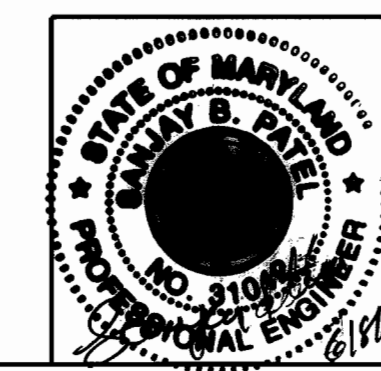
Stabilization

NRCS - MARYLAND

JANUARY 2000

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
 [Signature] 6/28/00
 DIRECTOR DATE
 [Signature] 6/23/00
 CHIEF, DEVELOPMENT, ENGINEERING DIVISION DATE
 [Signature] 6/27/00
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DATE	NO.	REVISION
OWNER:		
Chamberlain Construction Inc of MD 3219-A Corporate Court Ellicott City, Maryland 21042 Attn: Doug Chamberlain 410-203-2460		
DEVELOPERS:		
Patel Associates, LLC 5105 Santa Fe Court Ellicott City, MD 21043 410-715-4626	Kiddie Academy Chris Commarota 108 Wheel Road Bel Air, MD 21015 410-569-9165 x240	



AB CONSULTANTS, INC.
 9450 ANNAPOLIS ROAD
 LANHAM, MARYLAND 27006
 PHONE: (301) 306-3091
 FAX: (301) 306-3092

KIDDIE ACADEMY OF ELKRIDGE DAY CARE FACILITY
 LOT 4 OF THE HARRY L. PUTNAM PROPERTY
MD 378 SPECIFICATION
 6th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 PLAT 10696, TAX MAP 37, GRID 20, P/O 613/LOT 4, DEED REF: 4201/41

PROJECT NO. 05-114
 SCALE: 1"=20'
 DATE: 06/09/06
 DRAWN BY: CADD
 CHECKED BY: DTD
 SHEET: 8 OF 17

CONTACT: DAVID T. DOWS PHONE: 301-306-3091 x25

Tc A TO B - 100'
SHEET-GRASS
@ 7.3%

EXISTING BUILDING
USE: RETAIL

Tc B TO C - 40'
SHALLOW-UNPAVED
@ 1.75%

Tc C TO D - 108'
SHALLOW-PAVED
@ 3.06%

Tc D TO E - 146'
CHANNEL FLOW
@ 1.50%

Tc A TO B - 100'
SHEET-GRASS
@ 13.12%

Tc C TO D - 148'
SHALLOW-UNPAVED
@ 3.64%

SUMMARY TABLE

STUDY POINT	DRAINAGE AREA (ac.)	RCN	TC
A	0.26	94	0.183
C	1.05	94	0.162
ON-SITE	1.00	94	N/A

UNIFIED SIZING CRITERIA

CATEGORY	VOLUME REQ	REMARKS
WQv	2,958 Cu.Ft.	
Rev	385 Cu.Ft.	
Cpv	0.11 Ac.Ft.	
Qp	SAFE CONVEYANCE	
Qf	N/A	

LEGEND:

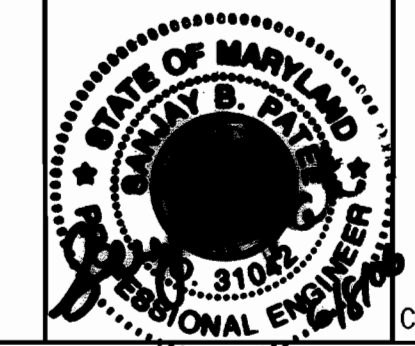
- DRAINAGE DIVIDE FOR SWM
- Tc PATH

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
 Director: *Mark P. Coughlin* 6/27/16
 Chief, Development Engineering Division: *Michelle Williams* 6/27/16
 Chief, Division of Land Development: *Cindy Hamrick* 6/27/16

OWNER:
 Chamberlain Construction Inc of MD
 3219-A Corporate Court
 Ellicott City, Maryland 21042
 Attn: Doug Chamberlain
 410-203-2460

DEVELOPERS:
 Patel Associates, LLC
 5105 Santa Fe Court
 Ellicott City, MD 21043
 410-715-4626

Kiddie Academy
 Chris Commarota
 108 Wheel Road
 Bel Air, MD 21015
 410-569-9165 x240



AB CONSULTANTS, INC.
 9450 ANNAPOLIS ROAD
 LANHAM, MARYLAND 20706
 PHONE: (301) 306-3091
 FAX: (301) 306-3092
 CONTACT: DAVID T. DOWS PHONE: 301-306-3091 x25

KIDDIE ACADEMY OF ELKRIDGE DAY CARE FACILITY
 LOT 4 OF THE HARRY L. PUTNAM PROPERTY
PROPOSED DRAINAGE AREA MAP
 6th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 PLAT 10696, TAX MAP 37, GRID 20, P/O 613/LOT 4, DEED REF: 4201/41

PROJECT NO. 05-114
 SCALE: 1"=20'
 DATE: 06/09/06
 DRAWN BY: CADD
 CHECKED BY: DTD
 SHEET: 10 OF 17

LEGEND:

- SSF — SUPER SILT FENCE
- LIMIT OF DISTURBANCE
- SCE STABILIZED CONSTRUCTION ENTRANCE
- CIP CURB INLET PROTECTION
- MIP MEDIAN INLET PROTECTION
- EX. & PROP. DRAINAGE AREA

SEQUENCE OF CONSTRUCTION:

1. OBTAIN GRADING PERMIT.
2. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND PERIMETER SEDIMENT CONTROL DEVICES AND INLET PROTECTION DEVICES AS SHOWN ON PLAN. (2 DAYS)
3. WITH PERMISSION FROM HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, BEGIN CLEARING & ROUGH GRADING.
4. CONSTRUCT WATER AND SEWER. (15 DAYS)
5. CONSTRUCT RETAINING WALL. (10 DAYS)
6. CONSTRUCT BUILDING FOUNDATION AND SLAB ON GRADE. (15 DAYS)
7. GRADE THE PARKING AREA UP TO THE SUBGRADE ELEVATION. (3 DAYS)
8. STABILIZED SIDE SLOPES AND SUBGRADE AREAS WITH SEED AND MULCH. (2 DAYS)
9. CONSTRUCT UNDERGROUND SWM FACILITY AND STORMDRAIN SYSTEM. (15 DAYS)
NOTE: CONTRACTOR TO CONSTRUCT STORM DRAIN SYSTEM FROM UPSTREAM TO DOWNSTREAM AND PROVIDE INLET PROTECTION IMMEDIATELY AFTER THE CONSTRUCT INLET.
10. REESTABLISH SUBGRADE OVER SWM FACILITIES. (2 DAYS)
11. CONSTRUCT 6" GRADED AGGREGATE BASE COURSE. (2 DAYS)
12. CONSTRUCT CURB AND GUTTER AND SIDEWALK. (7 DAYS)
13. CONSTRUCT BITUMINOUS CONCRETE PAVING. (7 DAYS)
14. UPON APPROVAL FROM FROM HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES AND STABILIZE REMAINING DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES. (20 DAYS)

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Michael Patten 6/9/06
DEVELOPER DATE

BY THE ENGINEER:

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

Seamus Pater 6/8/06
ENGINEER DATE

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

Jim Meyer 6/20/06
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

Heffernan W. Schomberg 6/20/06
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Mark S. Coughlin 6/22/06
DIRECTOR DATE
David Williams 6/23/06
CHIEF DEVELOPMENT ENGINEERING DIVISION DATE
David K. Smith 6/27/06
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

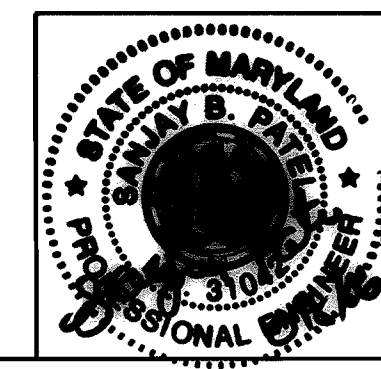
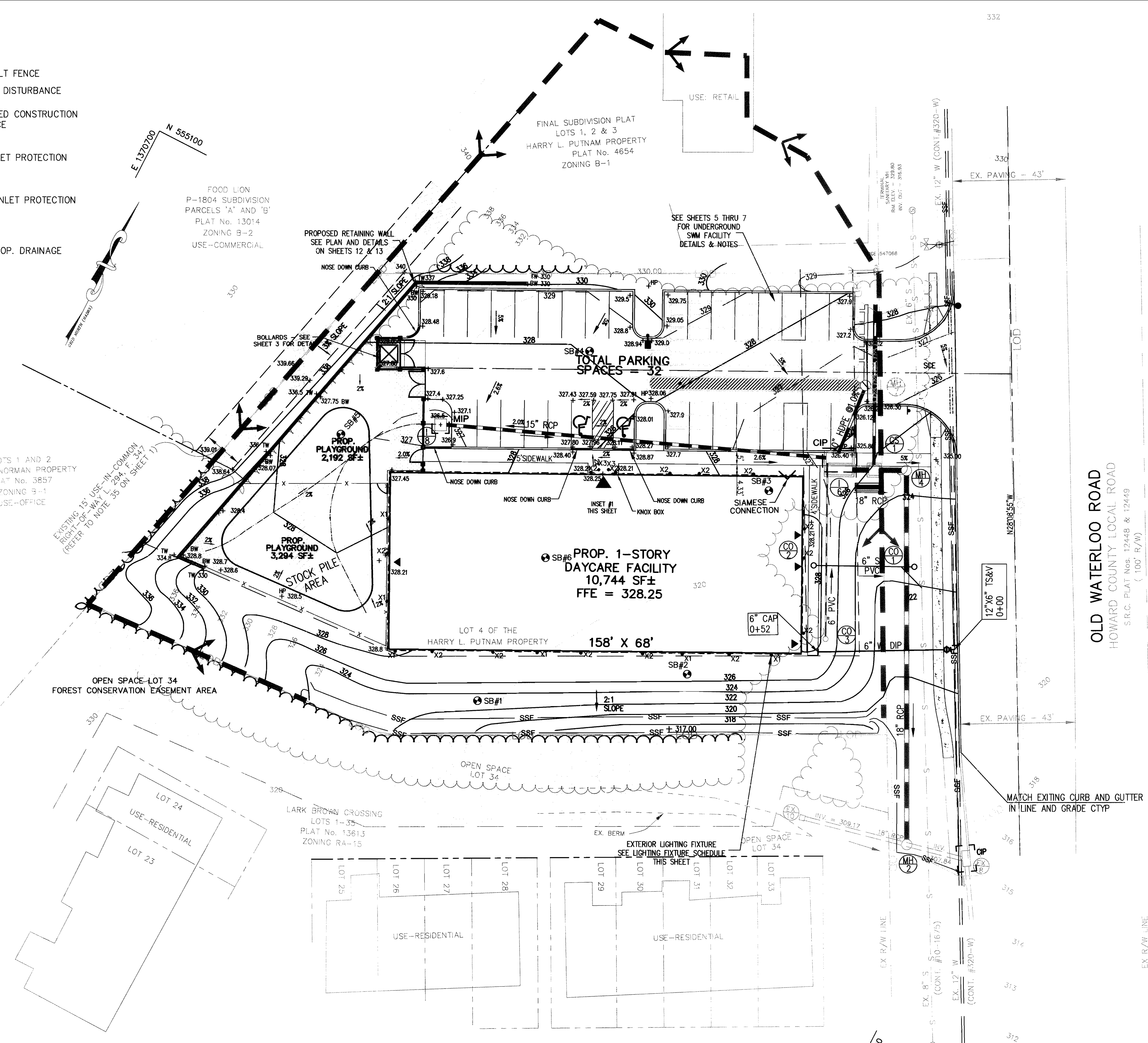
DATE	NO.	REVISION

OWNER:
Chamberlain Construction Inc of MD
3219-A Corporate Court
Ellicott City, Maryland 21042
Attn: Doug Chamberlain
410-203-2460

DEVELOPERS:
Patel Associates, LLC
5105 Santa Fe Court
Ellicott City, MD 21043
410-715-4626

Kiddie Academy
Chris Commarota
108 Wheel Road
Bel Air, MD 21015
410-569-9165 x240

PROJECT NO. 05-114
SCALE: 1"=20'
DATE: 06/09/06
DRAWN BY: CADD
CHECKED BY: DTD
SHEET: 12 OF 17



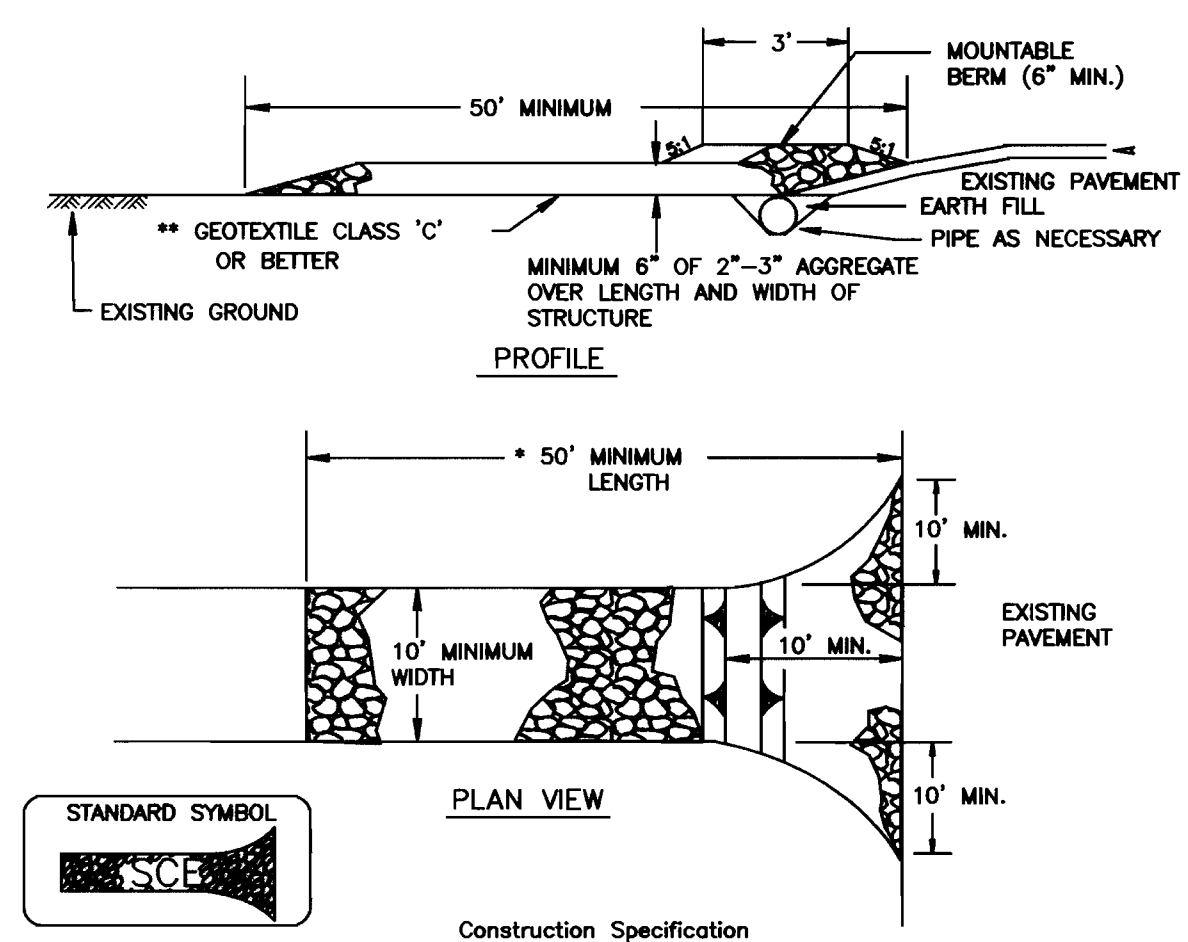
AB CONSULTANTS, INC.
9450 ANNAPOLIS ROAD
LANHAM, MARYLAND 20706
PHONE: (301) 306-3091
FAX: (301) 306-3092

CONTACT: DAVID T. DOWS PHONE: 301-306-3091 x25

KIDDIE ACADEMY OF ELKRIDGE DAY CARE FACILITY
LOT 4 OF THE HARRY L. PUTNAM PROPERTY
GRADING, EROSION AND SEDIMENT CONTROL PLAN
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

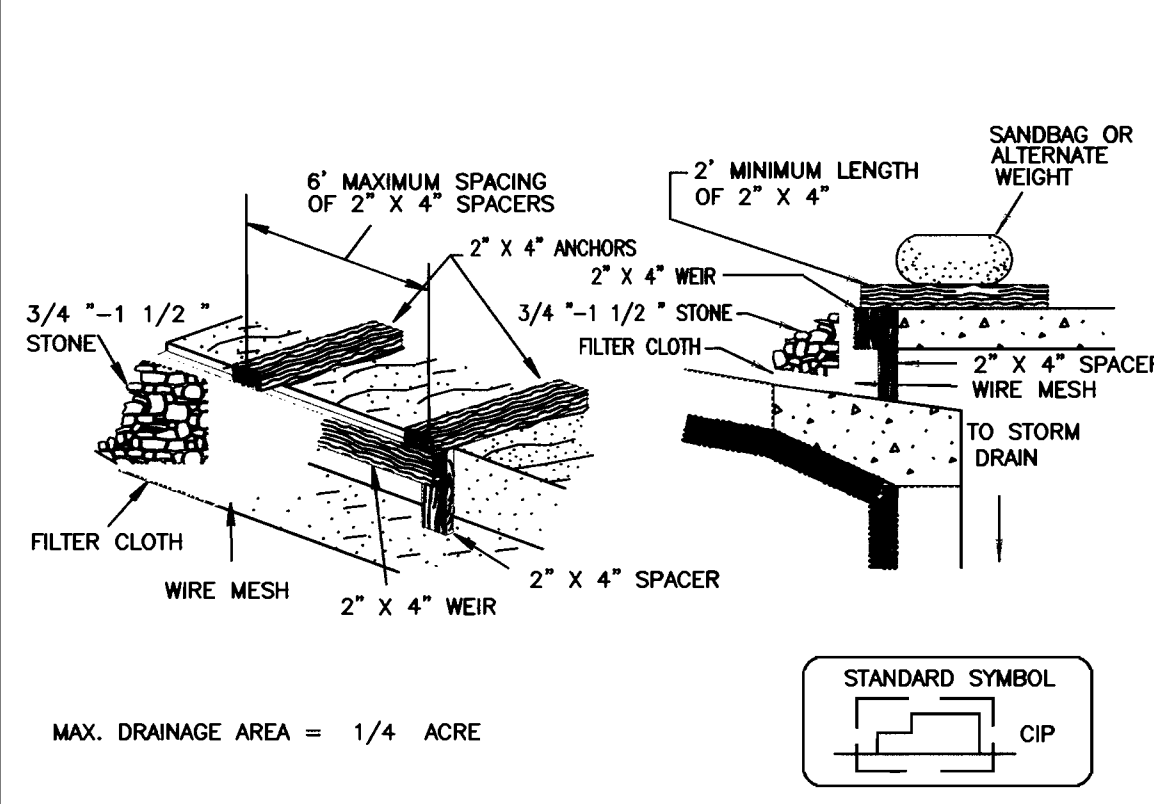
PLAT 10696, TAX MAP 37, GRID 20, P/O 613/LOT 4, DEED REF: 4201/41

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



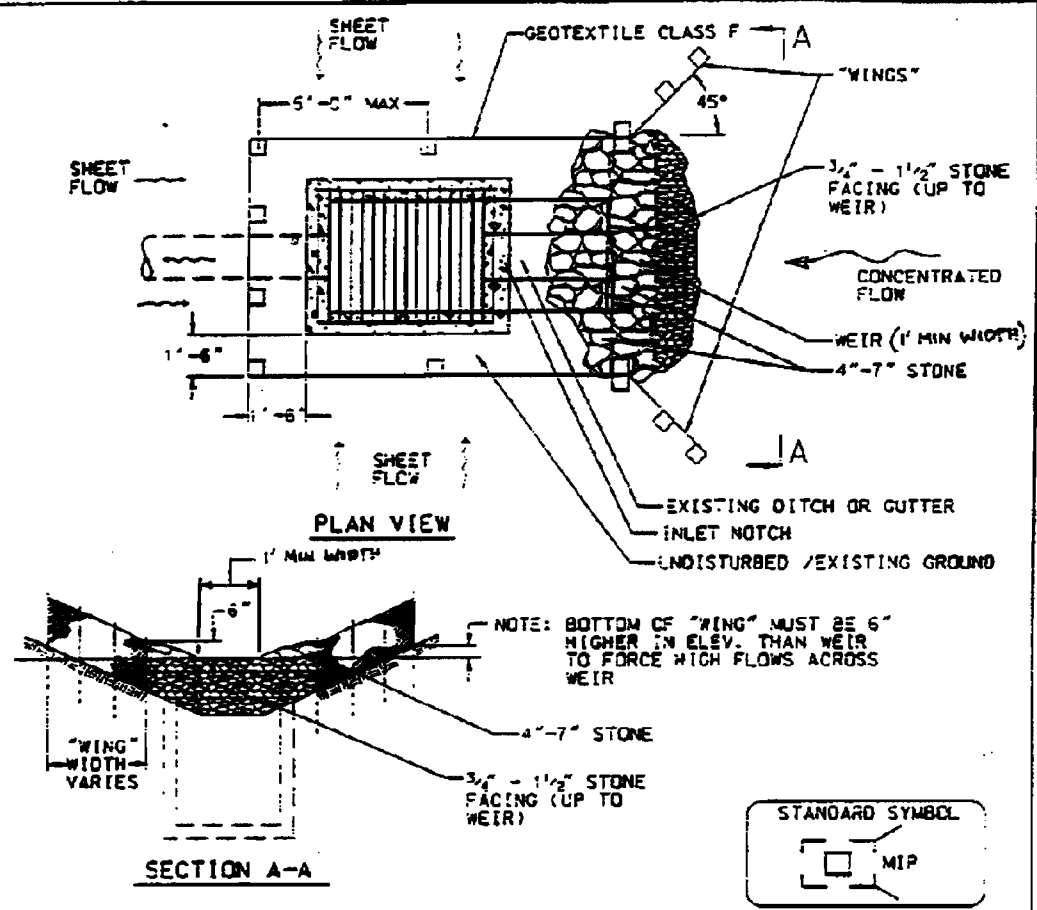
- Construction Specifications**
- Length - minimum of 50' (*30' for single residence lot).
 - Width - 10' minimum, should be flared at the existing road to provide a turning radius.
 - Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. *The plan approval authority may not require single family residences to use geotextile.
 - Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
 - Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
 - Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.
- U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE F-17-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 23C - CURB INLET PROTECTION (COG OR COS INLETS)



- Construction Specifications**
- MAX. DRAINAGE AREA = 1/4 ACRE
- Attach a continuous piece of wire mesh (30" minimum width by throat length plus 4") to the 2' x 4" weir (measuring throat length plus 2") as shown on the standard drawing.
 - Place a continuous piece of Geotextile Class E the same dimensions as the wire mesh over the wire mesh and securely attach to the 2' x 4" weir.
 - Securely nail the 2' x 4" weir to a 9" long vertical spacer to be located between the weir and the inlet face (max. 4" apart).
 - Place the assembly against the inlet throat and nail (minimum 2" lengths of 2" x 4" to the top of the weir at spacer locations). These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.
 - The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening.
 - Form the 1/2" x 1/2" wire mesh and the geotextile fabric to the concrete gutter and against the face of the curb on both sides of the inlet. Place clean 3/4" x 1 1/2" stone over the wire mesh and geotextile in such a manner to prevent water from entering the inlet under or around the geotextile.
 - This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
 - Assure that storm flow does not bypass the inlet by installing a temporary earth or asphalt dike to direct the flow to the inlet.
- U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE E-16-5B MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 23D - MEDIAN INLET PROTECTION



- Construction Specifications**
- Fence posts shall be 36" (min.) long, driven 16" into the ground and spaced 5' (max.) apart. Wood posts shall be 1 1/2" x 1 1/2" (min.) square cut or 1 3/4" (min.) diameter round and shall be of sound quality hardwood. Steel posts shall be standard T or U section weighting not less than 1.00 lb/linear foot.
 - Geotextile Class F shall be fastened securely to each post with wire ties or staples at top and mid-section.
 - Where ends of geotextile fabric come together they shall be overlapped, folded and stapled.
 - Median Inlet Protection shall be inspected after each rain and maintained when bulges occur in the fabric or when the stone clogs.
 - Stone used to construct the weir shall be 4" - 7" with a 1" thick layer of 3/4" - 1 1/2" stone on the upstream face.
- U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE E-16-5C MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION 1994

Temporary Seeding

Vegetation - annual grass or grain used to provide cover on disturbed areas for up to 12 months. For longer duration of vegetative cover, Permanent Seeding is required.

A. Seed Mixtures - Temporary Seeding

- Select one or more of the species or mixtures listed in Table 26 for the appropriate Plant Hardness Zone (from Figure 5) and enter them in the Temporary Seeding Summary below, along with application rates, seeding dates and seeding depths. If this summary is not put on the plans and completed, then Table 26 must be put on the plans.
- For sites having soil test performed, the rates shown on this table shall be deleted and the rates recommended by the testing agency shall be written in. Soil tests are not required for Temporary Seeding.

TEMPORARY SEEDING SUMMARY					FERTILIZER RATE (10-10-10)	LIME RATE
NO.	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATE	SEEDING DEPTH		
1	BARLEY	122	2/1-4/30	1"-2"	600 LBS/AC (15 LB/1000SF)	2 TONS/AC (100LB/1000SF)
2	WEEDING LOVEGRASS	4	5/1-8/14	1/4"-1/2"		
3	RYE	140	8/15-11/15	1"-2"		

Permanent Seeding

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

A. Seed Mixtures - Permanent Seeding

- Select one or more of the species or mixtures listed in Table 25 for the appropriate Plant Hardness Zone (from Figure 5) and enter them in the Permanent Seeding Summary below, along with application rates and seeding dates. Seeding depths can be estimated using Table 26. If this Summary is not put on the construction plans and completed, then Table 25 must be put on the plans. Additional planting specifications for exceptional sites such as shorelines, streambanks, or dunes or for special purposes such as wildlife or aesthetic treatment may be found in USDA-SCS Technical Field Office guide, Section 342 - Critical Area Planting. For special low maintenance areas, see Sections IV and V. Turfgrass.
- For sites having disturbed area over 5 acres, the rates shown on this table shall be deleted and the rates recommended by the soil testing agency shall be written in.
- For areas receiving low maintenance, apply ureaform fertilizer (46-0-0) at 3 1/2 lbs/1000 sq.ft. (150 lbs/acre), in addition to the above soil amendments shown in the table below, to be performed at the time of seeding.

PERMANENT SEEDING SUMMARY							
SEED MIXTURE(HARDNESS ZONE 6B) FROM TABLE 25				FERTILIZER RATE (10-20-20)		LIME RATE	
NO.	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATE	SEEDING DEPTH	N	P ₂ O ₅	K ₂ O
1	TALL FESCUE (85%)	125	3/1-5/15	1/4"-1/2"	(2 LB/1000 SF)	(4 LB/1000 SF)	(4 LB/1000 SF)
2	PERENNIAL RYEGRASS (10%)	15	8/15-10/15	1/4"-1/2"	1000 SF	1000 SF	1000 SF
3	KENTUCKY BLUEGRASS (5%)	10	8/15-10/15	1/4"-1/2"			

Note: Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.

ii. Place topsoil (if required) and apply soil amendments as specified in 20.0 Stabilization - Section I - Vegetative Stabilization Methods and Materials.

Topsoil Application

- When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Salt Fence and Sediment Traps and Basins.
- Grade on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" - 8" higher in elevation.
- Topsoil shall be uniformly distributed in a 4" - 8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.
- Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.

vi. Alternative for Permanent Seeding - Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below:

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

References: Guideline Specifications, Soil Preparation and Sodding, Md-VA, Pub. #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institutes.

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Michael Pata 6/9/06
DEVELOPER DATE

BY THE ENGINEER:

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

Jeffrey W. Schmitz 6/20/06
ENGINEER DATE

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

Jim Meyer 6/20/06
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

Jeffrey W. Schmitz 6/20/06
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Frank A. Goyell 6/16/06
DIRECTOR DATE

Chris Commarota 6/20/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Andy Panantz 6/20/06
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

OWNER:

Chamberlain Construction Inc of MD
3219-A Corporate Court
Ellicott City, Maryland 21042
Attn: Doug Chamberlain
410-203-2460

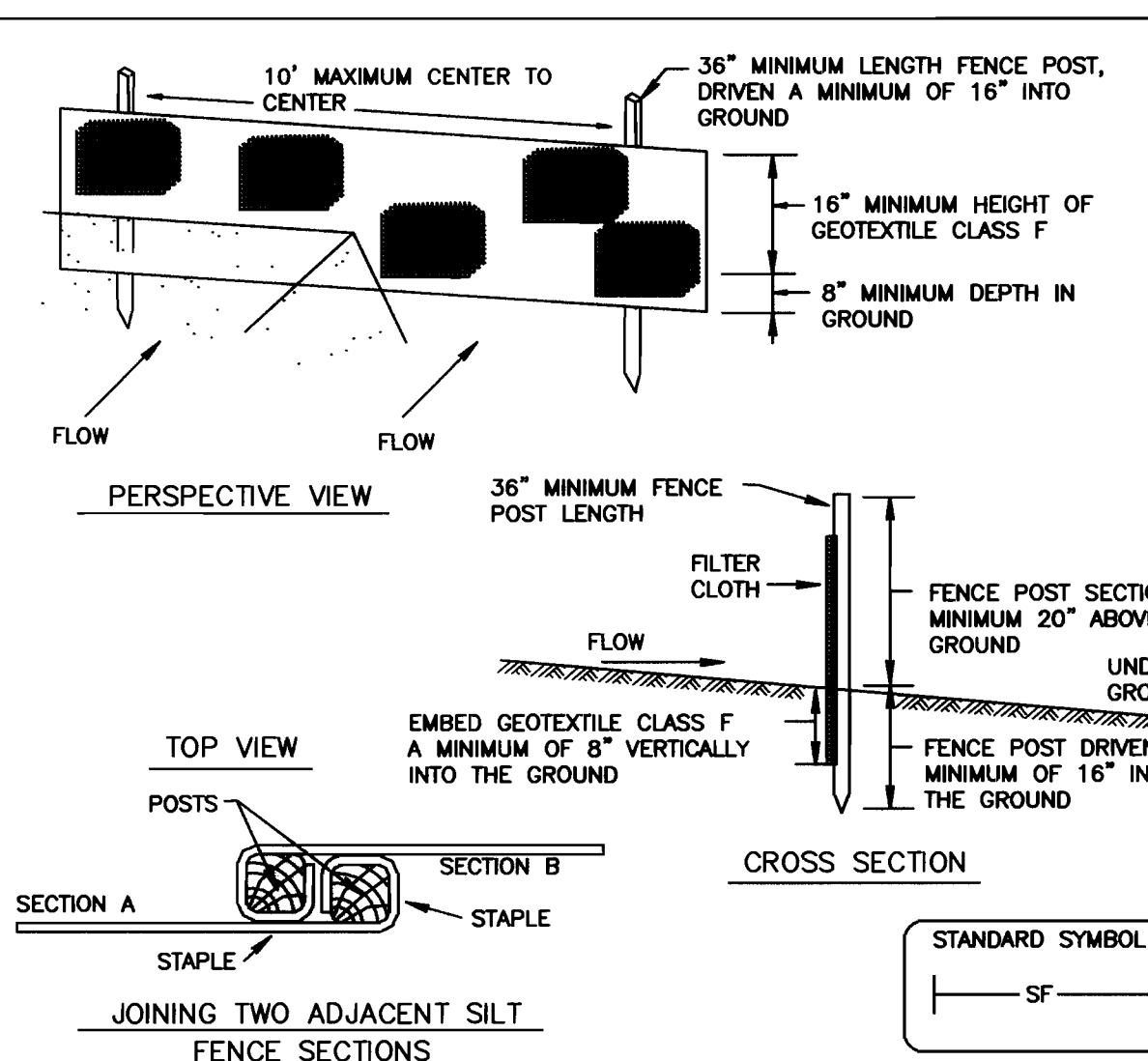
DEVELOPERS:

Patel Associates, LLC
5105 Santa Fe Court
Ellicott City, MD 21043
410-715-4626

Kiddie Academy of Elkridge
DAY CARE FACILITY
LOT 4 OF THE HARRY L. PUTNAM PROPERTY
EROSION & SEDIMENT CONTROL
NOTES AND DETAILS
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
PLAT 10696, TAX MAP 37, GRID 20, P/O 613/LOT 4, DEED REF: 4201/41

PROJECT NO. 05-114
SCALE: 1"=20'
DATE: 06/09/06
DRAWN BY: CADD
CHECKED BY: DTD
SHEET: 13 OF 17

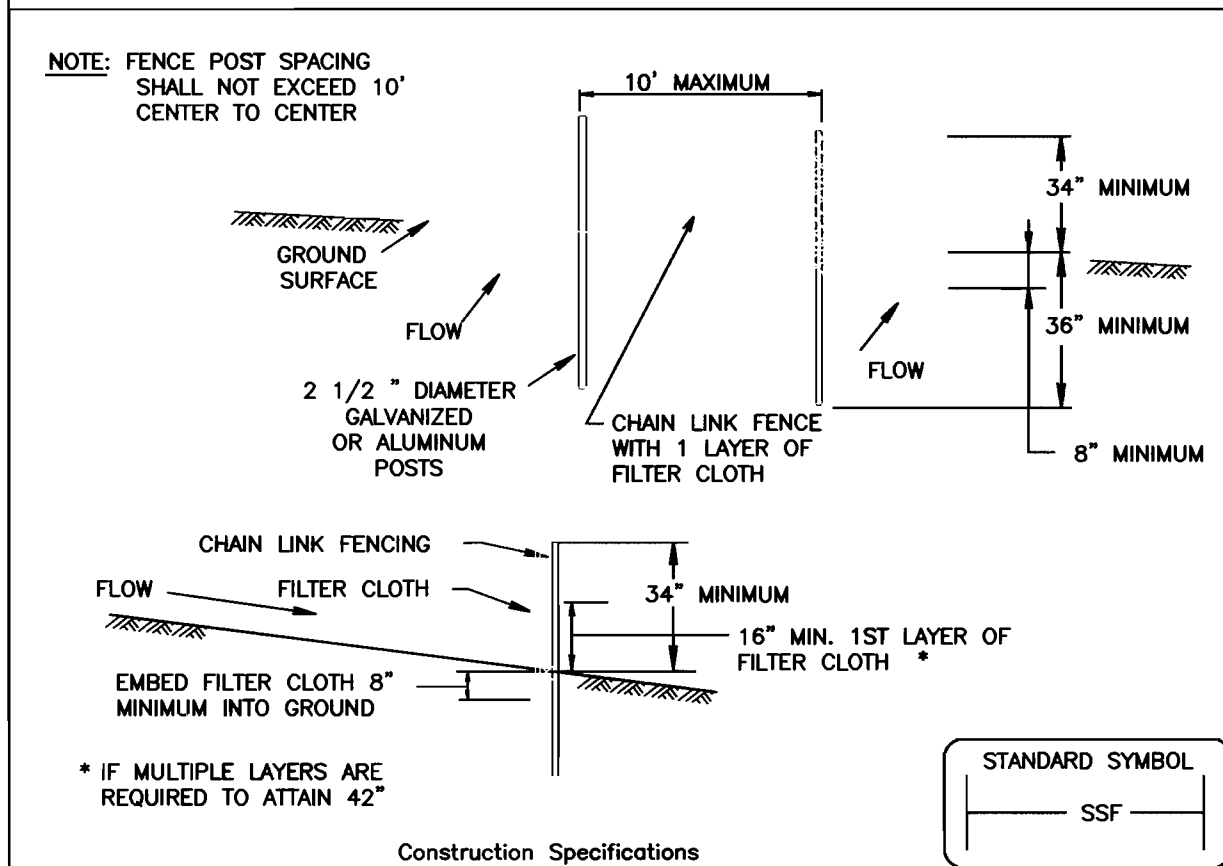
DETAIL 22 - SILT FENCE



- 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 1.00 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 bypass.
 - Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.
- U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE E-15-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 33 - SUPER SILT FENCE



- Construction Specifications**
- NOTE: FENCE POST SPACING SHALL NOT EXCEED 10' CENTER TO CENTER
- 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 6" 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:

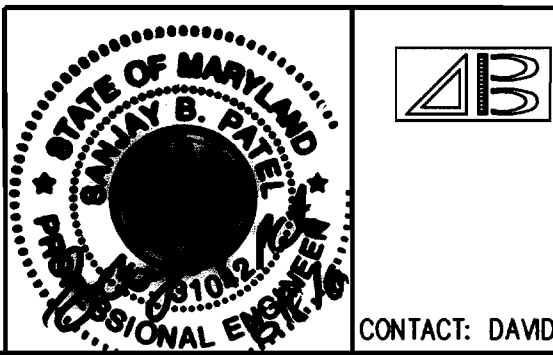
Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal/ft /minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322
- U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE H-26-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

STANDARD EROSION AND SEDIMENT CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and permits, sediment control divisions prior to the start of any construction (313-1855).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1994 Maryland standards and specifications for soil erosion and sediment control and revisions thereto.
- Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within: A) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes, and all slopes steeper than 3:1 B) 14 days as to all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around the perimeter in accordance with vol.1, chapter 7, of the Howard county design manual, storm drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 Maryland standards and specifications for soil erosion and sediment control for permanent seeding, SOD, temporary seeding, and mulching. (see 6). Temporary stabilization with mulch alone shall only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- All sediment control structures are to be maintained in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard county sediment control inspector.
- Site Analysis:

Total area of site	1.00 Acres
Area Disturbed	1.30 Acres
Area to be roofed or paved	0.84 Acres
Area to be vegetatively stabilized	0.66 Acres
Total cut	0
Total fill	3545 Cu. Yards

 offsite waste/borrow location to have an active grading permit.
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment controls must be provided, if deemed necessary by the Howard county sediment control inspector.
- On all sites with disturbed areas in excess of 2 Acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
- Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized within one working day, whichever is shorter.
- Site grading will begin only after all perimeter sediment control measures have been installed and are in a functioning condition.
- Sediment will be removed from traps when its depth reaches clean out elevation shown on the plans.
- Cut and fill quantities provided under site analysis do not represent bid quantities. These quantities do not distinguish between topsoil, structural fill or embankment material, nor do they reflect consideration of undercutting or removal of unsuitable material. The contractor shall familiarize himself with site conditions which may affect the work.



AB CONSULTANTS, INC.
9450 ANNAPOLIS ROAD
LANHAM, MARYLAND 20706
PHONE: (301) 306-3091
FAX: (301) 306-3092

CONTACT: DAVID T. DOWS PHONE: 301-306-3091 x25

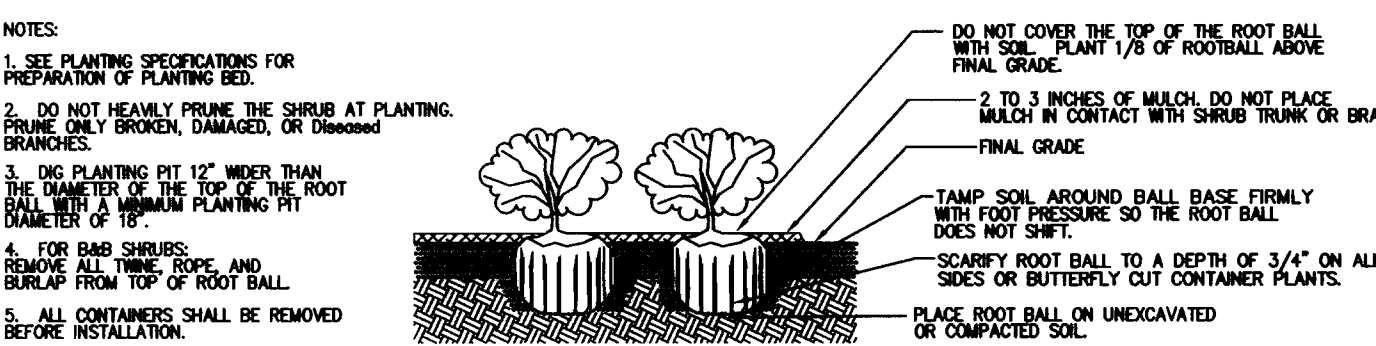
PLAT 10696, TAX MAP 37, GRID 20, P/O 613/LOT 4, DEED REF: 4201/41

GENERAL NOTES

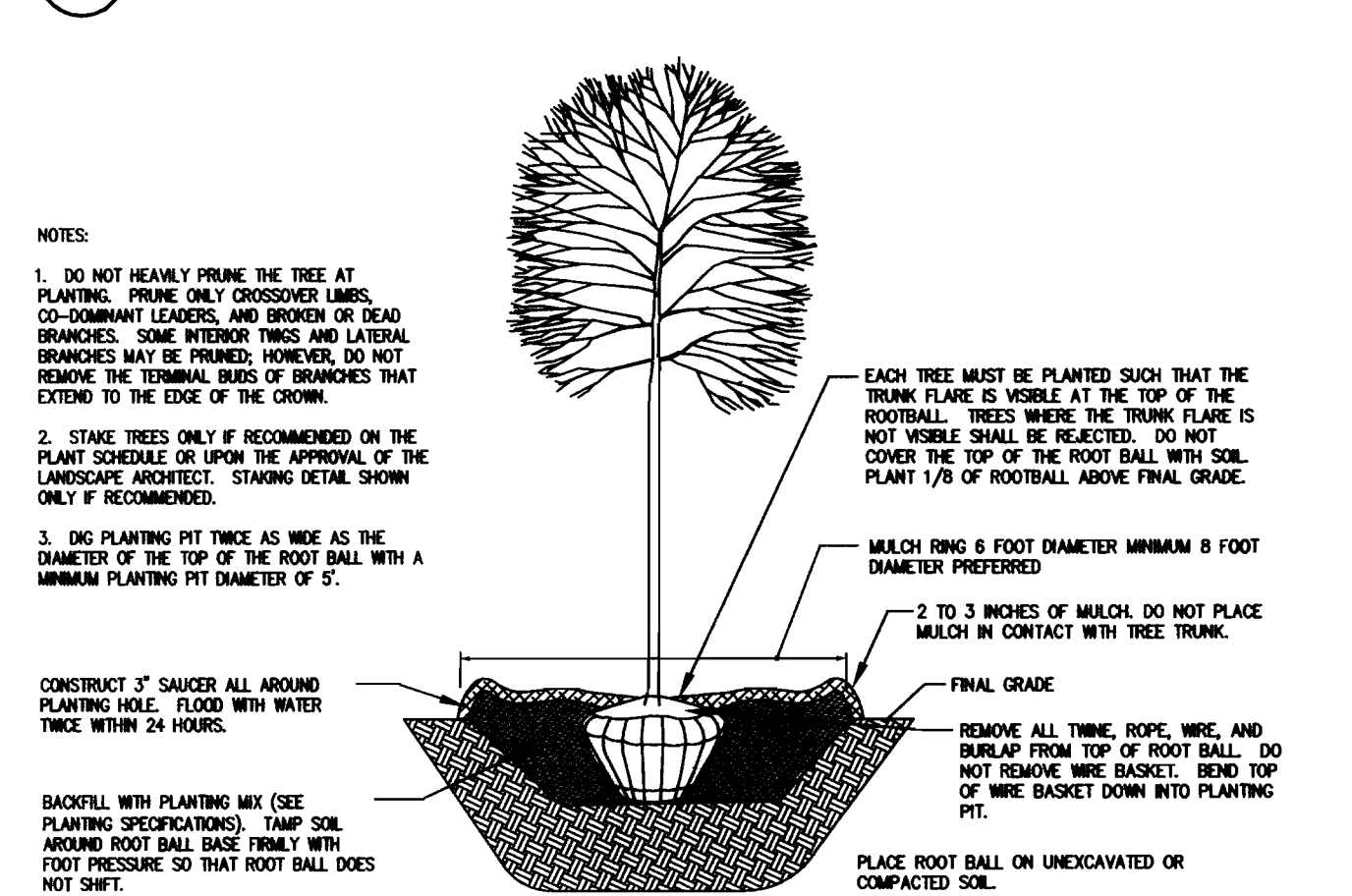
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- THIS PLAN IS FOR LANDSCAPING PURPOSES ONLY.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- ALL MATERIAL SELECTED SHALL BE EQUAL TO OR BETTER THAN THE REQUIREMENTS OF THE "USA STANDARD FOR NURSERY STOCK", LATEST EDITION, AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
- ALL MATERIAL SHALL BE PLANTED IN ACCORDANCE WITH THE MINIMUM STANDARDS CITED IN THE LATEST EDITION OF "LANDSCAPE SPECIFICATION GUIDELINES" PUBLISHED BY THE LANDSCAPE CONTRACTORS ASSOCIATION.
- AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS SHALL BE OF THE PROPER HEIGHT AND/OR SPREAD REQUIREMENTS IN ACCORDANCE WITH THIS PLAN.
- NO SUBSTITUTIONS OR RELOCATION OF PLANTS MAY BE MADE WITHOUT PRIOR APPROVAL FROM THE LANDSCAPE ARCHITECT.
- LANDSCAPE SURETY IN THE AMOUNT OF \$8,910.00 HAS BEEN POSTED AS A PART OF THE DEVELOPER'S AGREEMENT.
 19 SHADE TREES @ \$300 = \$5,700
 19 EVERGREEN TREES @ \$150 = \$2,850
 12 SHRUBS @ \$30 = \$360

LEGEND

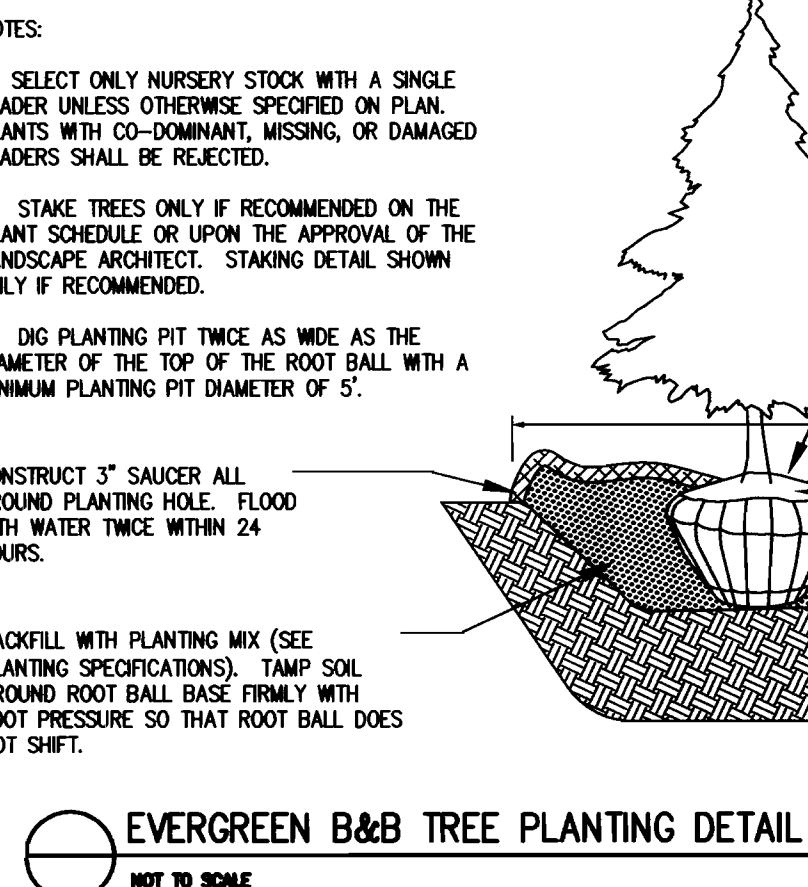
- PROP. SHADE TREE
- PROP. EVERGREEN TREE
Picea omorika
- PROP. SHRUB
Ilex cornuta
- PERIMETER LANDSCAPE REQUIREMENT
- PARKING LOT LANDSCAPE REQUIREMENT



SHRUB BED PLANTING DETAIL - B&B AND CONTAINER SHRUBS



DECIDUOUS B&B TREE PLANTING DETAIL



SCHEDULE B - PARKING LOT INTERNAL LANDSCAPING

PARKING LOT	NUMBER OF PARKING SPACES	NUMBER OF SHADE TREES REQUIRED (1/20 SPACES)	NUMBER OF TREES PROVIDED	NUMBER OF ISLANDS REQUIRED (1/20 SPACES)	NUMBER OF ISLANDS PROVIDED (200 SF/ISLAND)
32	32	2	-	2	2

PLANT LIST

SYMBOL	QTY.	SCIENTIFIC/COMMON NAME	SIZE	ROOT
AR	10	Acer rubrum 'Autumn Flame' Autumn Flame Red maple	2 1/2 - 3" cal.	B&B
QP	5	Quercus palustris Pin oak	2 1/2 - 3" cal.	B&B
PY	8	Prunus x yedoensis Yoshino Cherry	1 1/2 - 2" cal.	B&B
PO	19	Picea omorika Serbian spruce	8'-10' ht.	B&B
IC	17	Ilex cornuta 'Nana' Dwarf chinese holly	24"-30" HT	Cont.

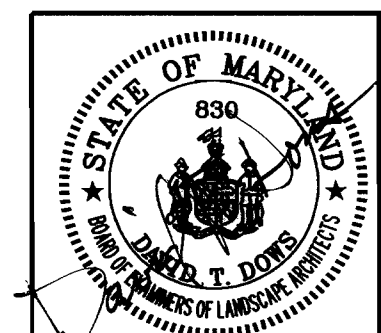
SCHEDULE A - PERIMETER LANDSCAPE EDGE

PERIMETER	ADJACENT TO PERIMETER PROPERTIES				ADJACENT TO ROADWAYS			
	1	2	3	4	1	2	3	4
LANDSCAPE TYPE *	C	A	E	B				
LINEAR FEET OF ROADWAY FRONTAGE / PERIMETER	320±	385±	70±	106±				
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO				
CREDIT FOR WALL, FENCE, BERM OR DRIVE AISLE (YES/NO/LINEAR FEET)	NO	YES** 204±	YES*** 24±	NO				
LINEAR FEET REMAINING	320±	189±	46±	106±				
NUMBER OF PLANTS REQUIRED	8	6	1	2				
SHADE TREES	16	-	12	3				
EVERGREEN TREES	-	-	-	-				
SHRUBS	-	-	-	-				
NUMBER OF PLANTS PROVIDED	8	2****	1	3				
SHADE TREES	16	8****	-	-				
EVERGREEN TREES	-	-	-	-				
SHRUBS	-	-	-	-				

- * A = 1 SHADE TREE/60 LF
- * B = 1 SHADE TREE/50 LF; 1 EVERGREEN/40 LF
- * C = 1 SHADE TREE/40 LF; 1 EVERGREEN/20 LF
- * E = 1 SHADE TREE/40 LF; 1 SHRUB/4 LF
- ** CREDIT FOR RETAINING WALL
- *** CREDIT FOR DRIVE AISLE
- **** SUBSTITUTION OF 8 SMALL FLOWERING TREES (YOSHINO CHERRIES) FOR 4 MAJOR SHADE TREES.

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

Signature: *Niall O'Leary* Date: 6/9/06



AB CONSULTANTS, INC.
 9450 ANNAPOLIS ROAD
 LANHAM, MARYLAND 20706
 PHONE: (301) 306-3091
 FAX: (301) 306-3092

KIDDIE ACADEMY OF ELKRIDGE DAY CARE FACILITY
 LANDSCAPE PLAN, NOTES AND SCHEDULES
 6th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

OWNER: Chamberlain Construction Inc of MD
 3219-A Corporate Court
 Ellicott City, Maryland 21042
 Attn: Doug Chamberlain
 410-203-2460

DEVELOPERS: Patel Associates, LLC
 5105 Santa Fe Court
 Ellicott City, MD 21043
 410-715-4626

Chris Commarota
 108 Wheel Road
 Bel Air, MD 21015
 410-569-9165 x240

PROJECT NO. 05-114
 SCALE: 1"=20'
 DATE: 06/09/06
 DRAWN BY: CADD
 CHECKED BY: DTD

SHEET: 14 OF 17

PLANTING SPECIFICATIONS

- Plants, related material, and operations shall meet the detailed description, as given on the plans and as described herein. Where discrepancies exist between Standards & Guidelines referenced within these specifications and the Howard County Landscape Manual, the latter takes precedence.
- All plant material, unless otherwise specified, that is not nursery grown, uniformly branched, does not have a vigorous root system, and does not conform to the most recent edition of the American Association of Nurserymen (AAN) Standards will be rejected. Plant material that is not healthy, vigorous, free from defects, decay, disfiguring roots, sunscald injuries, abrasions of the bark, plant disease, insect pest eggs, borers and all forms of insect infestations or objectionable disfigurements will be rejected. Plant material that is weak or which has been cut back from larger grades to meet specified requirements will be rejected. Trees with forked leaders will be rejected. All B & B plants shall be freshly dug; no heated-in plants or plants from cold storage will be accepted.
- Unless otherwise specified, all general conditions, planting operations, details and planting specifications shall conform to the most recent edition of the "Landscape Specification Guidelines by the Landscape Contractors Association of MD, DC, & VA", (hereinafter "Landscape Guidelines") approved by the Landscape Contractors Association of Metropolitan Washington and the Potomac Chapter of the American Society of Landscape Architects.
- Contractor shall guarantee all plant material for a period of one year after date of acceptance in accordance with the appropriate section on the Landscape Guidelines. Contractor's attention is directed to the maintenance requirements found within the one year specifications including watering and replacement of specified plant material.
- Contractor shall be responsible for notifying all relevant and appropriate utility companies, utility contractors, and "Miss Utility" a minimum of 48 hours prior to the beginning of any work. Contractor may make minor adjustments in spacing and location of plant material to avoid conflicts with utilities. Major changes will require the approval of the landscape architect. Damage to existing structure and utilities shall be repaired at the expense of the Contractor.
- Protection of existing vegetation to remain shall be accomplished via the temporary installation of 4 foot high snow fence at the drip line, see detail.
- Contractor is responsible for installing all material in the proper planting season for each plant type. All planting is to be completed within growing season of completion of site construction. Do not plant Pinus strobus or Xcupressacyparis leylandii between November 15 and March 15. Landscape plants are not to be installed before site is graded to final grade.
- Contractor to regrade, fine grade, sod, hydroseed and straw mulch all areas disturbed by their work.
- Bid shall be based on actual site conditions. No extra payment shall be made for work arising from actual site conditions differing from those indicated on drawings and specifications.
- Plant quantities are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on plan and those shown on the plant list, the quantities on the plan take precedence. Where discrepancies on the plan exist between the symbols and the callout leader, the number of symbols take precedence.
- All shrubs and groundcover areas shall be planted in continuous planting beds, prepared as specified, unless otherwise indicated on plans. (See Specification 13). Beds to be mulched with minimum 2" and maximum 3" of composted, double-shredded hardwood mulch throughout.
- Positive drainage shall be maintained on planting beds (minimum 2 percent slope).
- Bed preparation shall be as follows: Till to a minimum depth of 6" 1/2 yard of Compro or Leafgro per 200 SF of planting bed, and 1 yard of topsoil per 100 SF of bed. Add 3 lbs of standard 5-10-5 fertilizer per cubic yard of planting mix and till. Ericaceous plants (Azaleas, Rhododendrons, etc.): top dress after planting with iron sulfate or comparable product according to package directions. Taxus baccata 'Repandens' (English weeping yews): Top dress after planting with 1/4 to 1/2 cup lime each.
- Planting mix: For trees not in a prepared bed, mix 50% Compro or Leafgro with 50% soil from tree hole to use as backfill, see tree planting detail.
- Weed & insect control: Incorporate a pre-emergent herbicide into the planting bed following recommended rates on the label. For tree planting, apply a pre-emergent on top of soil and root ball before mulching. Caution: For areas to be planted with a ground cover, be sure to carefully check the chemical used to assure its adaptability to the specific groundcover to be treated. Maintain the mulch weed-free for the extent of the warranty period. Under no circumstances is a pesticide containing chlorpyrifos to be used as a means of pest control.
- Water: All plant material planted shall be watered thoroughly the day of planting. All plant material not yet planted shall be properly protected from drying out until planted. At a minimum, water unplanted plant material daily and as necessary to avoid desiccation.
- Pruning: Do not heavily prune trees and shrubs at planting. Prune only broken, dead, or diseased branches.
- All areas within contract limits disturbed during or prior to construction not designated to receive plants and mulch shall be fine graded, grass seed planted, and covered with straw mulch.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Director: *Frank P. Uyle* Date: 6/9/06
 Chief, Development Engineering Division: *Andy Karnatz* Date: 6/9/06
 Chief, Division of Land Development: *Andy Karnatz* Date: 6/9/06

DATE NO. REVISION

OWNER: Chamberlain Construction Inc of MD
 3219-A Corporate Court
 Ellicott City, Maryland 21042
 Attn: Doug Chamberlain
 410-203-2460

DEVELOPERS: Patel Associates, LLC
 5105 Santa Fe Court
 Ellicott City, MD 21043
 410-715-4626

Kiddie Academy
 Chris Commarota
 108 Wheel Road
 Bel Air, MD 21015
 410-569-9165 x240

Howard County Forest Conservation Worksheet

Project Name: Chartwood Professional Center
 State File #: _____
 Date: June 14, 2004

Net Tract Area	Acres
A. Total Tract Area	A = 1.00
B. Other Deductions	B = 0.00
C. Net Tract Area	C = 1.00
Land Use Category: Commercial / Industrial / Office	
D. Afforestation Threshold (Net Tract Area X 15%)	D = 0.15
E. Conservation Threshold (Net Tract Area X 15%)	E = 0.15

Existing Forest Cover	
F. Existing Forest Cover within the Net Tract Area	F = 0.86
G. Area of Forest Above Conservation Threshold	G = 0.71
If the Existing Forest Cover (F) is greater than Conservation Threshold (G), then $G = \text{Existing Forest Cover (F)} - \text{Conservation Threshold (E)}$; Otherwise $G = 0$	

Break Even Point	
H. Break Even (Amount of forest that must be retained so that no mitigation is required)	H = 0.29
(1) If the area of forest above the Conservation Threshold (G) is greater than zero, then $H = (0.2 \times \text{the area of forest above Conservation Threshold (G)}) + \text{the Conservation Threshold (E)}$	
(2) If the area of forest above the Conservation Threshold (G) is equal to zero, then $H = \text{Existing Forest Cover (F)}$	

I. Forest Clearing Permitted Without Mitigation	I = 0.57
$I = 0.001 = \text{Existing Forest Cover (F)} - \text{Break Even Point (H)}$	

Proposed Forest Clearing	
J. Total Area of Forest to be Cleared	J = 0.88
K. Total Area of Forest to be Retained	K = 0.00
$K = \text{Existing Forest Cover (F)} - \text{forest to be cleared (J)}$	

Planting Requirements
 If the Total Area of Forest to be Cleared (K) is at or above the Breakeven Point (H), no planting is required and no further calculations are necessary (L=0, M=0, N=0, P=0);
 If not, calculate the planting requirement below:

L. Reforestation for Clearing Above the Conservation Threshold	L = 0.18
(1) If the total area of forest to be retained (K) is greater than the Conservation Threshold (E), then $L = \text{the area of forest to be cleared (J)} \times 0.25$; or (2) If the forest to be retained (K) is less than or equal to the Conservation Threshold (E), then $L = \text{area of forest above Conservation Threshold (G)} \times 0.25$	

M. Reforestation for Clearing Below the Conservation Threshold	M = 0.30
(1) If Existing Forest Cover (F) is greater than Conservation Threshold (E) and the forest to be retained (K) is less than or equal to the Conservation Threshold (E), then $M = 2.0 \times (\text{the Conservation Threshold (E)} - \text{the forest to be retained (K)})$ (2) If Existing Forest (F) is less than or equal to the Conservation Threshold (E), then $M = 2.0 \times \text{Forest to be cleared (J)}$	

N. Credit for Retention Above the Conservation Threshold	N = 0.00
If the area of forest to be retained (K) is greater than the Conservation Threshold (E), then $N = K - E$	

P. Total Reforestation Required	P = 0.48
$P = L + M - N$	

Q. Total Afforestation Required	Q = 0.00
(1) If Existing Forest Cover (F) is less than the Afforestation Threshold (D) then $Q = \text{the Afforestation Threshold (D)} - \text{the Existing Forest Cover (F)}$	

R. Total Planting Requirement	R = 0.48
$R = P + Q$	

FOREST CONSERVATION NOTES

- TWO (2) FOREST STANDS EXIST ON-SITE.
- NO WETLANDS, STREAMS, OR 100-YEAR FLOODPLAIN EXIST ON-SITE.
- NO CRITICAL HABITATS OF RARE, THREATENED OR ENDANGERED SPECIES WERE OBSERVED.
- NO TREES, SHRUBS, OR PLANTS IDENTIFIED AS RARE, THREATENED OR ENDANGERED WERE OBSERVED.
- THERE ARE NO KNOWN CEMETERY OR BURIAL PLOTS LOCATED ON THE SITE, ACCORDING TO THE HOWARD COUNTY HISTORIC AND CEMETERY SITE MAP.
- THE SITE CONTAINS NO HYDRIC SOILS.
- THE HOWARD COUNTY FOREST CONSERVATION MANUAL SUPERSEDES ANY DISCREPANCIES BETWEEN THE MANUAL AND THESE PLANS.
- SEE FOREST STAND DELINEATION REPORT DATED OCTOBER 11, 2005 FOR FIELD INVESTIGATION NARRATIVE.
- IN ACCORDANCE WITH SECTION 16.1202 OF THE FOREST CONSERVATION MANUAL, A FEE-IN-LIEU OF FOREST CONSERVATION OBLIGATION FOR THIS PROJECT HAS BEEN PAID TO THE HO.CO. FOREST CONSERVATION FUND FOR 0.48 ACRES OF REFORESTATION IN THE AMOUNT OF \$10,454.40.

LEGEND

STEEP SLOPES >25% 

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
 DIRECTOR: *Mark M. Clegg* 6/25/04
 CHIEF, DEVELOPMENT, ENGINEERING DIVISION: *David T. Dows* 6/23/04
 CHIEF, DIVISION OF LAND DEVELOPMENT: *Andy Harvath* 6/27/04

DATE	NO.	REVISION

OWNER:
 Chamberlain Construction Inc of MD
 3219-A Corporate Court
 Ellicott City, Maryland 21042
 Attn: Doug Chamberlain
 410-203-2460

DEVELOPERS:
 Patel Associates, LLC
 5105 Santa Fe Court
 Ellicott City, MD 21043
 410-715-4626

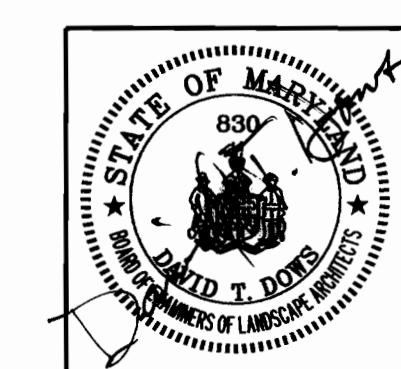
Kiddie Academy
 Chris Commarota
 108 Wheel Road
 Bel Air, MD 21015
 410-569-9165 x240

PROJECT NO. 05-114
 SCALE: 1"=20'
 DATE: 06/09/06
 DRAWN BY: CADD
 CHECKED BY: DTD
 SHEET: 15 OF 17

OLD WATERLOO ROAD
 HOWARD COUNTY LOCAL ROAD
 S.R.C. PLAT Nos. 12446 & 12449
 (100' R/W)

SITE CHARACTERISTICS

GROSS AREA	1.00 ACRES
100 YEAR FLOODPLAIN AREA	0.00 ACRES
NET TRACT AREA	1.00 ACRES
TOTAL FORESTED AREA	0.86 ACRES
TOTAL STEEP SLOPES (>25%)	0.02 ACRES



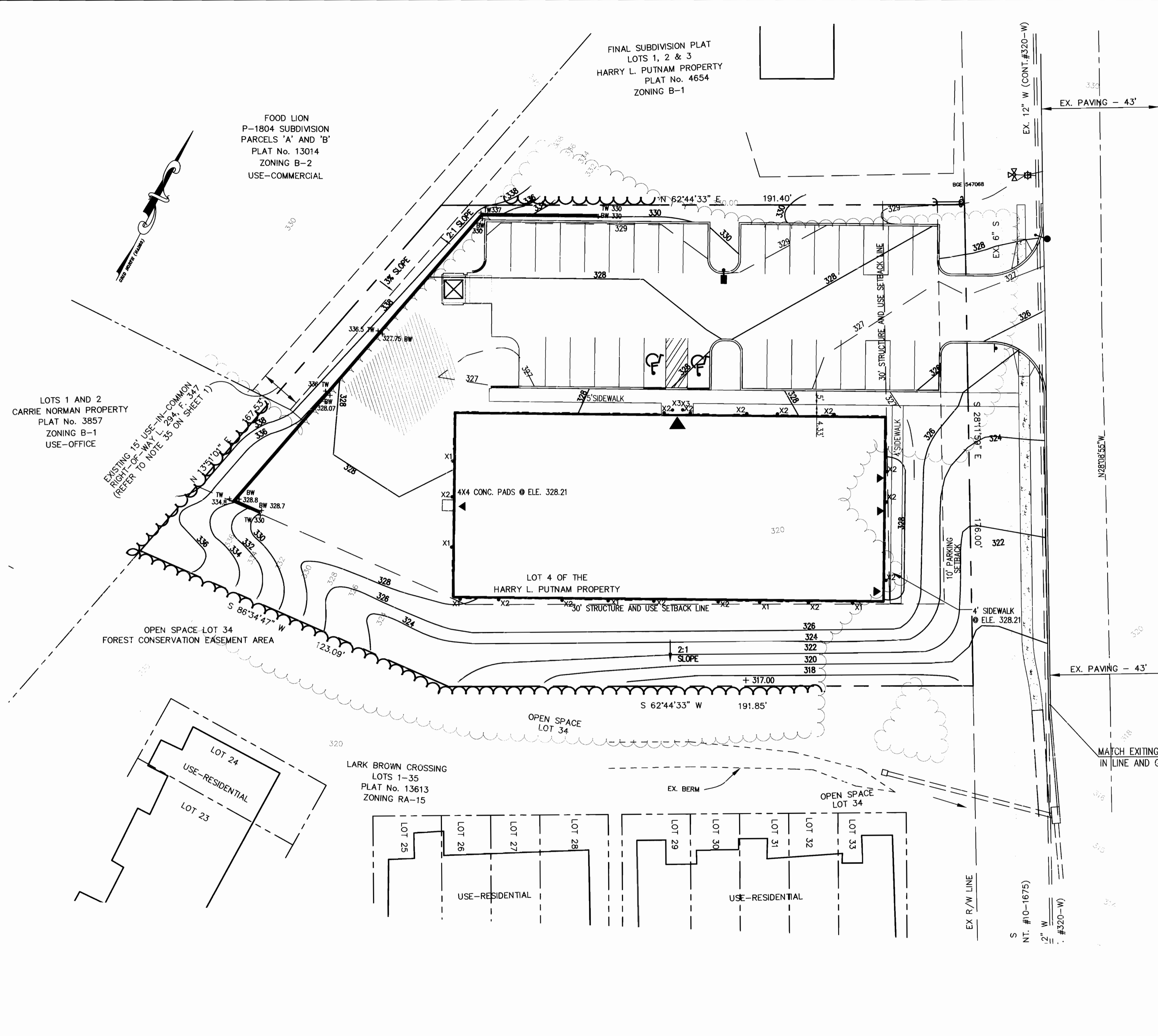
AB CONSULTANTS, INC.
 9450 ANNAPOLIS ROAD
 LANHAM, MARYLAND 20706
 PHONE: (301) 306-3091
 FAX: (301) 306-3092

CONTACT: DAVID T. DOWS PHONE: 301-306-3091 x25

KIDDIE ACADEMY OF ELKBRIDGE DAY CARE FACILITY
 LOT 4 OF THE HARRY L. PUTNAM PROPERTY
FOREST CONSERVATION PLAN

6th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

PLAT 10696, TAX MAP 37, GRID 20, P/O 613/LOT 4, DEED REF: 4201/41



FOOD LION
 P-1804 SUBDIVISION
 PARCELS 'A' AND 'B'
 PLAT No. 13014
 ZONING B-2
 USE-COMMERCIAL

FINAL SUBDIVISION PLAT
 LOTS 1, 2 & 3
 HARRY L. PUTNAM PROPERTY
 PLAT No. 4654
 ZONING B-1

LOTS 1 AND 2
 CARRIE NORMAN PROPERTY
 PLAT No. 3857
 ZONING B-1
 USE-OFFICE

EXISTING 15' USE-IN-COMMON
 RIGHT-OF-WAY L. 294' E. 134.7'
 (REFER TO NOTE 35 ON SHEET 1)

LARK BROWN CROSSING
 LOTS 1-35
 PLAT No. 13613
 ZONING RA-15

OPEN SPACE LOT 34
 FOREST CONSERVATION EASEMENT AREA

LOT 24
 USE-RESIDENTIAL
 LOT 23
 USE-RESIDENTIAL

LOT 25
 USE-RESIDENTIAL

LOT 26
 USE-RESIDENTIAL

LOT 27
 USE-RESIDENTIAL

LOT 28
 USE-RESIDENTIAL

LOT 29
 USE-RESIDENTIAL

LOT 30
 USE-RESIDENTIAL

LOT 31
 USE-RESIDENTIAL

LOT 32
 USE-RESIDENTIAL

LOT 33
 USE-RESIDENTIAL

GENERAL NOTES

ALL NOTES GIVEN ON THESE DRAWINGS ARE SUPPLEMENT TO THE PROJECT SPECIFICATIONS AND NOT INTENDED TO REPLACE THEM. IN THE EVENT OF A CONFLICT BETWEEN THE NOTES AND THE PROJECT SPECIFICATIONS, CONTRACTOR SHALL OBTAIN CLARIFICATION IN WRITING.

A. DESIGN CRITERIA

1. CODES AND SPECIFICATIONS

- 1.1. "INTERNATIONAL BUILDING CODE" ICC 2003
- 1.2. "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" ANSI/ASCE 7-95 - 1998, AMERICAN SOCIETY OF CIVIL ENGINEERS
- 1.3. "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" ACI 318-05 AMERICAN CONCRETE INSTITUTE
- 1.4. "ACI MANUAL OF CONCRETE PRACTICE - PARTS 1 THROUGH 6 - 2005" AMERICAN CONCRETE INSTITUTE
- 1.5. "MANUAL OF STANDARD PRACTICE", CONCRETE REINFORCING STEEL INSTITUTE

2. DESIGN LOADS

- 2.1. LIVE LOADS
- SURCHARGE LOADS: 240 PSF
- PASSIVE PRESSURE: 250PSF/FT
- ACTIVE PRESSURE: 35 PSF/FT
- METHOD OF WALL DESIGN: EQUIV. FLUID PRESSURE

B. MATERIALS:

1. CONCRETE

- 1.1. PROVIDE THE FOLLOWING TYPES OF CONCRETE AND THE DESIGN 28-DAY COMPRESSIVE STRENGTHS (f_c):
NORMAL WEIGHT (145-150 PCF) - 3000 PSI ALL OTHER CONCRETE
- 1.2. ALL CONCRETE SHALL HAVE ENTRAINED AIR 5% TO 7% EXCEPT FOOTING CONCRETE

- 1.3. PORTLAND CEMENT SHALL CONFORM TO ASTM C-150 TYPE I OR TYPE II CEMENT
- 1.4. AGGREGATE FOR CONCRETE SHALL CONFORM TO ASTM C-33, EXCEPTIONS MAY BE USED ONLY WITH WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER.

2. REINFORCING STEEL

- 2.1. ALL REINFORCING STEEL (#3 - #18) SHALL CONFORM TO ASTM A615 GRADE 60 (60000 PSI YIELD STRESS) AND SHALL BE USED THROUGH OUT THE JOB.

C. FOUNDATIONS & GEOTECHNICAL REPORT:

1. ALL FOUNDATION WORK TO BE DONE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL INVESTIGATION REPORT PREPARED BY KODNER ENGINEERING & TECHNICAL SERVICES DATED JULY 28, 2004. SEE GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS.

D. CONSTRUCTION

1. ALL MATERIALS, WORKMANSHIP AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH THE STRUCTURAL DRAWINGS, SPECIFICATIONS AND GENERAL NOTES. MINIMUM PROVISIONS OF THE INTERNATIONAL BUILDING CODE, 2003 EDITION, AND LOCAL AMENDMENTS SHALL APPLY WHERE DETAILS ARE NOT SHOWN OR DESCRIBED. IN CASE OF CONFLICT BETWEEN THE GENERAL NOTES, DETAILS AND SPECIFICATIONS, THE MOST RIGID REQUIREMENTS SHALL GOVERN.
2. DO NOT SCALE DRAWINGS USE NUMERICAL DIMENSIONS
3. DRAWINGS ARE NOT TO BE USED FOR SHOP DETAILING OR FOR CONSTRUCTION UNLESS SPECIFICALLY STAMPED BY THE STRUCTURAL ENGINEER FOR "DETAILING" OR "FOR CONSTRUCTION". THESE DRAWINGS ARE NOT TO BE REPRODUCED FOR THE PURPOSE OF USING THEM AS SHOP DETAIL DRAWINGS. SHOP DRAWINGS PRODUCED IN SUCH A MANNER WILL BE REJECTED AND RETURNED.

4. CONTRACTOR SHALL FURNISH DETAIL DRAWINGS FOR APPROVAL. CONCRETE REINFORCEMENT SHALL NOT BE FABRICATED WITHOUT PRIOR APPROVAL OF THE ENGINEER.

5. CONTRACTOR SHALL FURNISH DIMENSIONED COORDINATED SHOP DRAWINGS SHOWING THE LOCATIONS OF ALL SLEEVES AND REQUIRED OPENINGS.

6. IMPLEMENTING JOB SITE SAFETY AND CONSTRUCTION PROCEDURES ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR

7. UNLESS OTHERWISE SHOWN OR NOTED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING LOCATION AND PLACEMENT OF ANY INSERTS, HANGERS, PIPE SLEEVES, HOLES, OR ANCHOR BOLTS THAT ARE REQUIRED.

8. ALL COSTS OF INVESTIGATION AND/OR REDESIGN, DUE TO CONTRACTOR MISLOCATION OF STRUCTURAL ELEMENTS OR OTHER LACK OF CONFORMANCE WITH THE PROJECT DOCUMENTS, SHALL BE AT THE CONTRACTOR'S EXPENSE.

9. UNLESS OTHERWISE NOTED, ALL DETAILS, SECTIONS, AND NOTES ON THESE DRAWINGS ARE INTENDED TO BE TYPICAL FOR SIMILAR SITUATION ELSEWHERE

10. CLEARANCES: CONTRACTOR SHALL VERIFY CLEARANCES AND NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES.

E. FOUNDATIONS & STRUCTURAL EARTHWORK:

1. GENERAL:

- 1.1. SEE THE SPECIFICATIONS AND GEOTECHNICAL REPORT REQUIREMENTS FOR EXCAVATION AND PREPARATION OF THE FOUNDATION SUBGRADE, INCLUDING COMPACTION PROCEDURES. REQUIREMENTS CONTAINED IN THE GEOTECHNICAL REPORT ARE PART OF THIS WORK
- 1.2. CONTRACTOR SHALL VERIFY ALL EXISTING FIELD CONDITIONS THAT MAY AFFECT THE INSTALLATION OF THE FOUNDATION SYSTEM AS SHOWN PRIOR TO STARTING WORK.
- 1.3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING, AND/OR RELOCATING ALL EXISTING UTILITIES, WHETHER INDICATED OR NOT, WHICH MAY BE AFFECTED BY THE CONSTRUCTION PROCESS.
- 1.4. UTILITIES LOCATED WITHIN FIVE (5) FEET OF OR UNDERNEATH A FOUNDATION SHALL BE ENCASED IN CONCRETE.
- 1.5. ALL FOUNDATIONS SHALL BE PLACED ON UNDISTURBED SOIL OR COMPACTED STRUCTURAL FILL. BEARING ELEVATIONS ARE ESTIMATED FROM SOIL BORING DATA INDICATED IN THE GEOTECHNICAL REPORT. DETERMINATION OF FINAL BEARING ELEVATIONS AND FIELD VERIFICATION OF ALLOWABLE BEARING PRESSURE SHALL BE MADE BY AN EXPERIENCED, QUALIFIED GEOTECHNICAL ENGINEER PRIOR TO PLACING FOUNDATIONS.

- 1.6. CONCRETE FOR FOUNDATIONS SHALL BE POURED ON THE SAME DAY SUBGRADE APPROVAL IS GIVEN BY THE GEOTECHNICAL ENGINEER.

- 1.7. RETAINING WALL FOUNDATION SHALL BEAR A MINIMUM OF 2'-6" BELOW GRADE. IN CASE OF CONFLICT, NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER IN ADVANCE OF ANY CONSTRUCTION TO ALLOW FOR ADJUSTMENT.

- 1.8. (2A) FOUNDATION SOILS MUST BE EXAMINED BY THE SOILS ENGINEER TO ASSURE THE ACTUAL FOUNDATION SOIL STRENGTH MEETS OR EXCEEDS ASSUMED DESIGN STRENGTH.

- 1.9. (2B) THE PROPOSED CONSTRUCTION OF THE RETAINING WALL SHALL BE PERFORMED UNDER THE OBSERVATION OF A MARYLAND REGISTERED PROFESSIONAL ENGINEER.

F. REINFORCED CONCRETE NOTES:

1. THE FOLLOWING MINIMUM CONCRETE COVER (CLEAR COVER) SHALL BE PROVIDED FOR CAST-IN-PLACE CONCRETE REINFORCEMENT UNLESS NOTED OTHERWISE:

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
CONCRETE EXPOSED TO EARTH OR WEATHER	2"
#6 BARS AND LARGER	1-1/2"
#5 BARS AND SMALLER	

2. ANY CHANGE IN THE LOCATION OF THE CONSTRUCTION JOINTS SHOWN OR SPECIFIED IS SUBJECT TO THE ARCHITECTS APPROVAL. THE CONTRACTOR SHALL SUBMIT THE SHOP DRAWINGS SHOWING THE LOCATION OF ALL CONSTRUCTION JOINTS.
3. NO SLEEVE SHALL BE PLACED THROUGH ANY CONCRETE ELEMENT UNLESS SHOWN ON THE STRUCTURAL DRAWINGS, APPROVED SLEEVING SHOP DRAWINGS OR SPECIFICALLY AUTHORIZED IN WRITING BY THE STRUCTURAL ENGINEER.

4. REINFORCEMENT SPLICES:

- 4.1. ALL REINFORCEMENT IF SPLICING IS REQUIRED SHALL CONFORM TO ACI 318
- 4.2. REINFORCING BARS SHALL BE CONTINUOUS AROUND CORNERS.
- 4.3. ALL LAP SPLICES SHALL BE SPLICED IN CONTACT AND WIRED TOGETHER EXCEPT WHERE DEFINITELY DETAILED OTHERWISE.

5. ALL INSERTS AND SLEEVES SHALL BE CAST-IN-PLACE WHENEVER FEASIBLE. DRILLED OR POWER DRIVEN FASTENERS WILL BE PERMITTED WHEN PROVEN TO THE SATISFACTION OF THE STRUCTURAL ENGINEER THAT THE FASTENERS WILL NOT SPALL THE CONCRETE AND HAVE THE SAME CAPACITY AS CAST-IN-PLACE INSERTS.

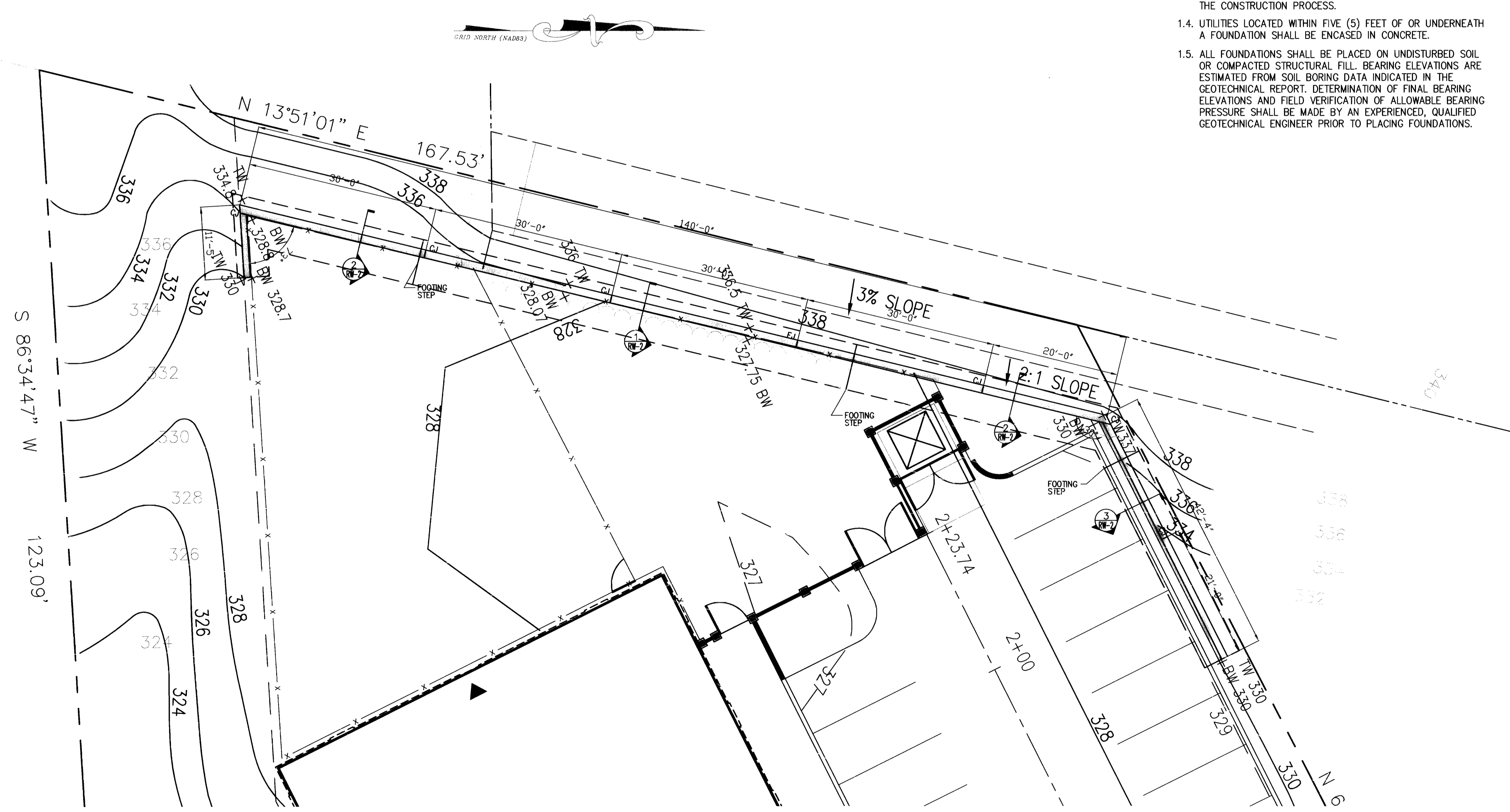
6. CHAMFER ALL EXPOSED CONCRETE CORNERS, 3/4" x 3/4" MINIMUM, UNLESS NOTED OTHERWISE ON ARCHITECTURAL DRAWINGS.

7. NO WELDING OF REINFORCING SHALL BE PERMITTED UNLESS SPECIFICALLY CALLED FOR OR APPROVED BY THE STRUCTURAL ENGINEER.

8. PROVIDE PLASTIC TIPPED BOLSTERS AND CHAIRS AT ALL LOCATIONS WHERE THE CONCRETE SURFACE IN CONTACT WITH THE BOLSTERS OR CHAIRS IS EXPOSED.

9. ALL REINFORCEMENT BENDS SHALL BE MADE COLD.

10. ALL WALLS SHALL BE DOWELED INTO THE FOOTINGS WITH THE BARS OF THE SAME SIZE AND SPACING AS THE WALL BARS HAVING MINIMUM 36 BAR DIAMETER EMBEDMENT EXCEPT WHERE SPECIFICALLY INDICATED OTHERWISE.

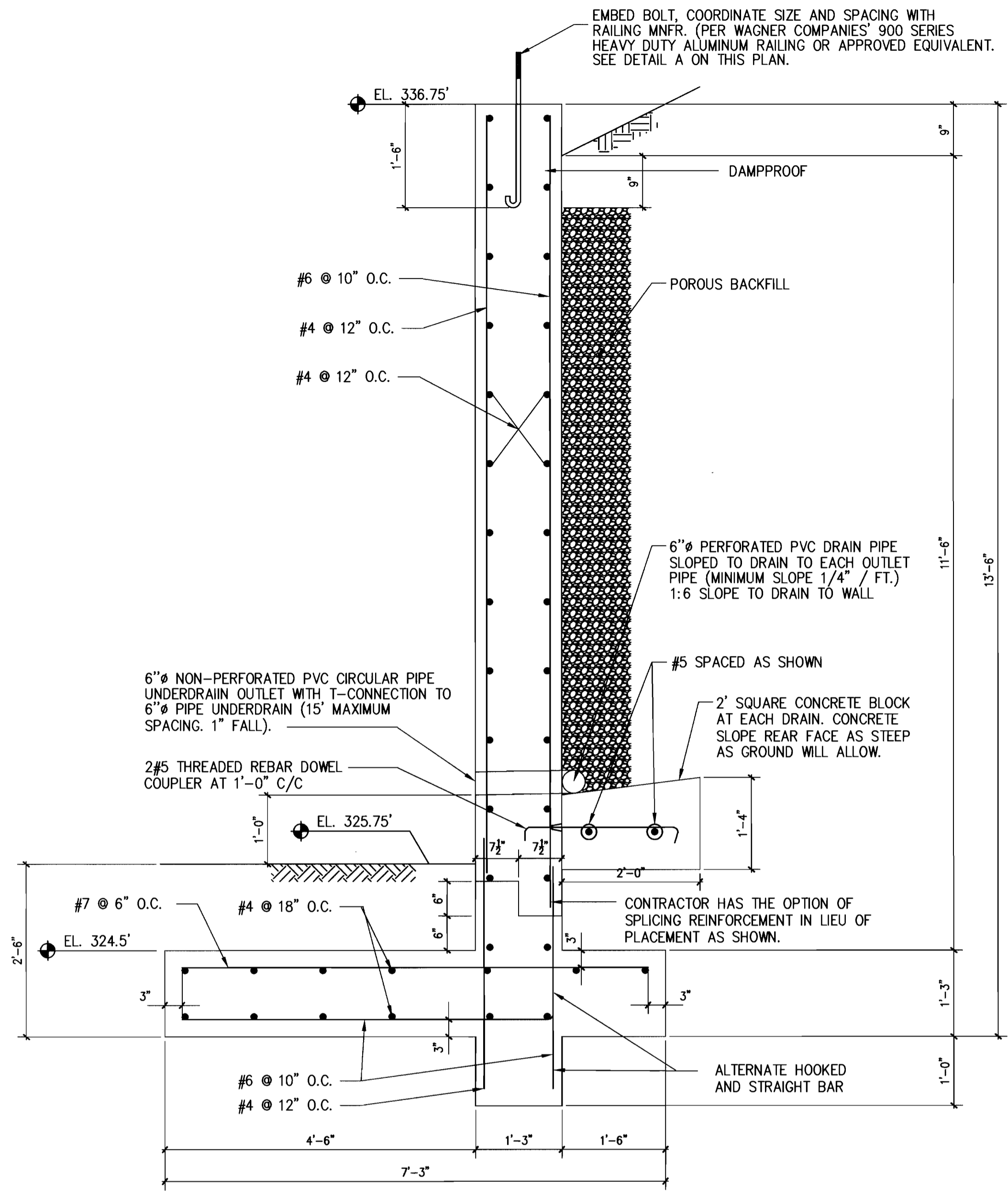


APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
 Frank J. Vogel - 6/22/06
 DIRECTOR DATE
 Chief, Development Engineering Division 6/22/06
 Chief, Division of Land Development 6/22/06

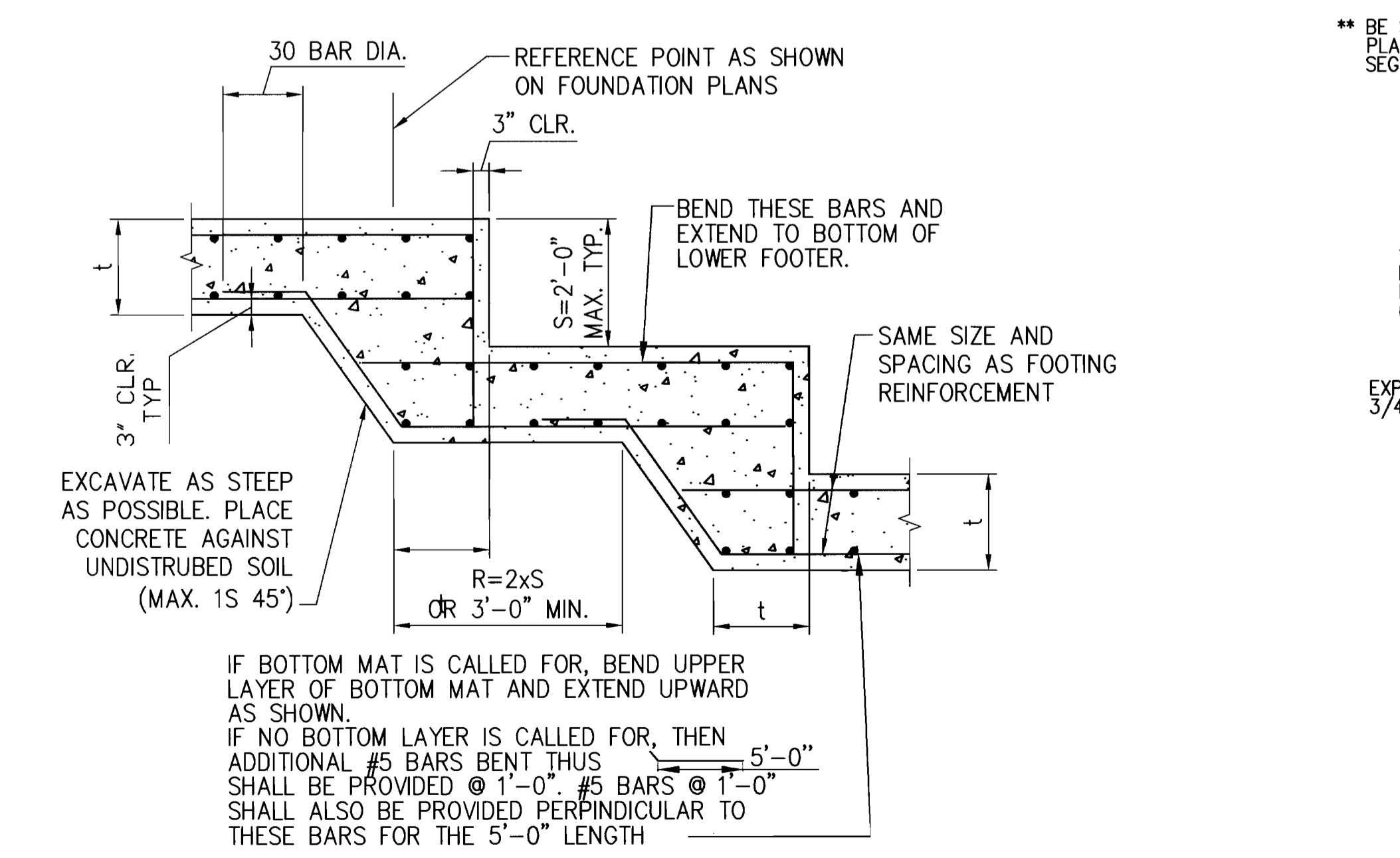
DATE	NO.	REVISION
OWNER: Chamberlain Construction Inc of MD 3219-A Corporate Court Ellicott City, Maryland 21042 Attn: Doug Chamberlain 410-203-2460		
DEVELOPERS: Patel Associates, LLC 5105 Santa Fe Court Ellicott City, MD 21043 410-715-4626 Kiddie Academy Chris Commarota 108 Wheel Road Bel Air, MD 21015 410-569-9165 x240		

AB CONSULTANTS, INC.
 9450 ANNAPOLIS ROAD
 LANHAM, MARYLAND 20706
 PHONE: (301) 306-3091
 FAX: (301) 306-3092
 CONTACT: DAVID T. DOWS PHONE: 301-306-3091 x25

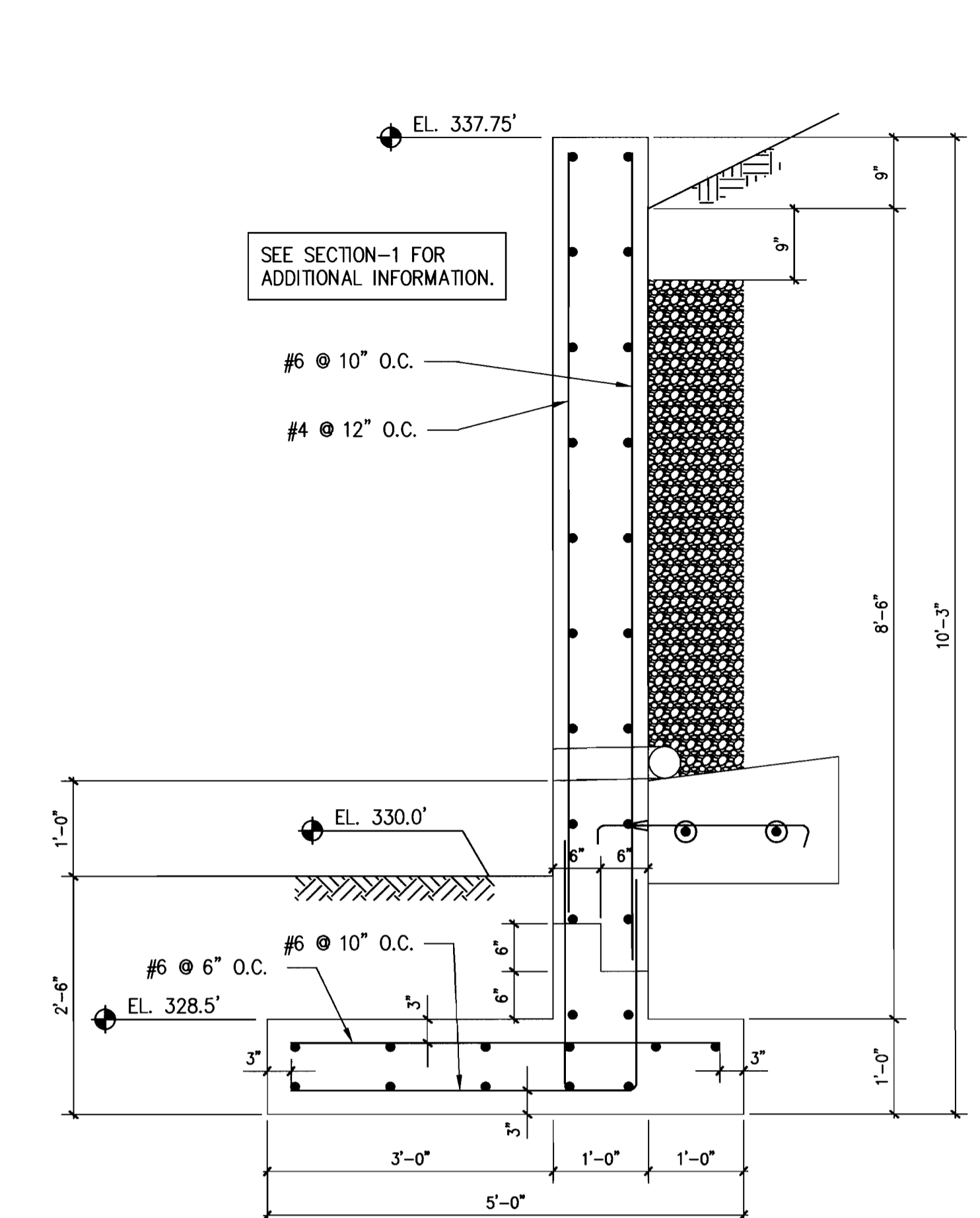
KIDDIE ACADEMY OF ELKRIDGE DAY CARE FACILITY
 LOT 4 OF THE HARRY L. PUTNAM PROPERTY
RETAINING WALL PLAN & NOTES
 6th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 PLAT 10696, TAX MAP 37, GRID 20, P/O 613/LOT 4, DEED REF: 4201/41
 PROJECT NO. 05-114
 SCALE: 1"=10'
 DATE: 06/09/06
 DRAWN BY: CADD
 CHECKED BY: DTD
 SHEET: 16 OF 17



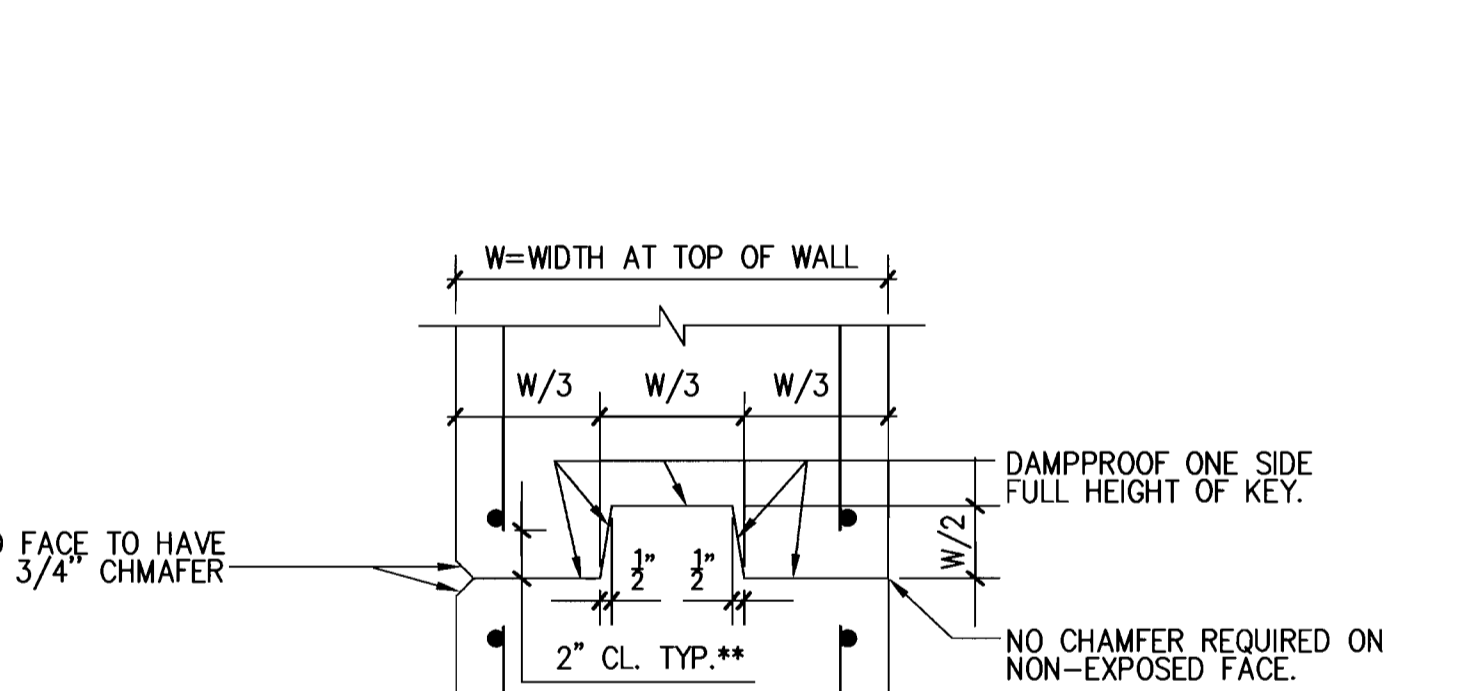
NOTE:
 1. EXACT ELEVATION OF DRAIN TO BE DETERMINED BY ENGINEER IN FIELD.
 2. POROUS BACKFILL SHALL BE STONE CONFORMING TO AASHTO M 43, SIZE NO. 57.



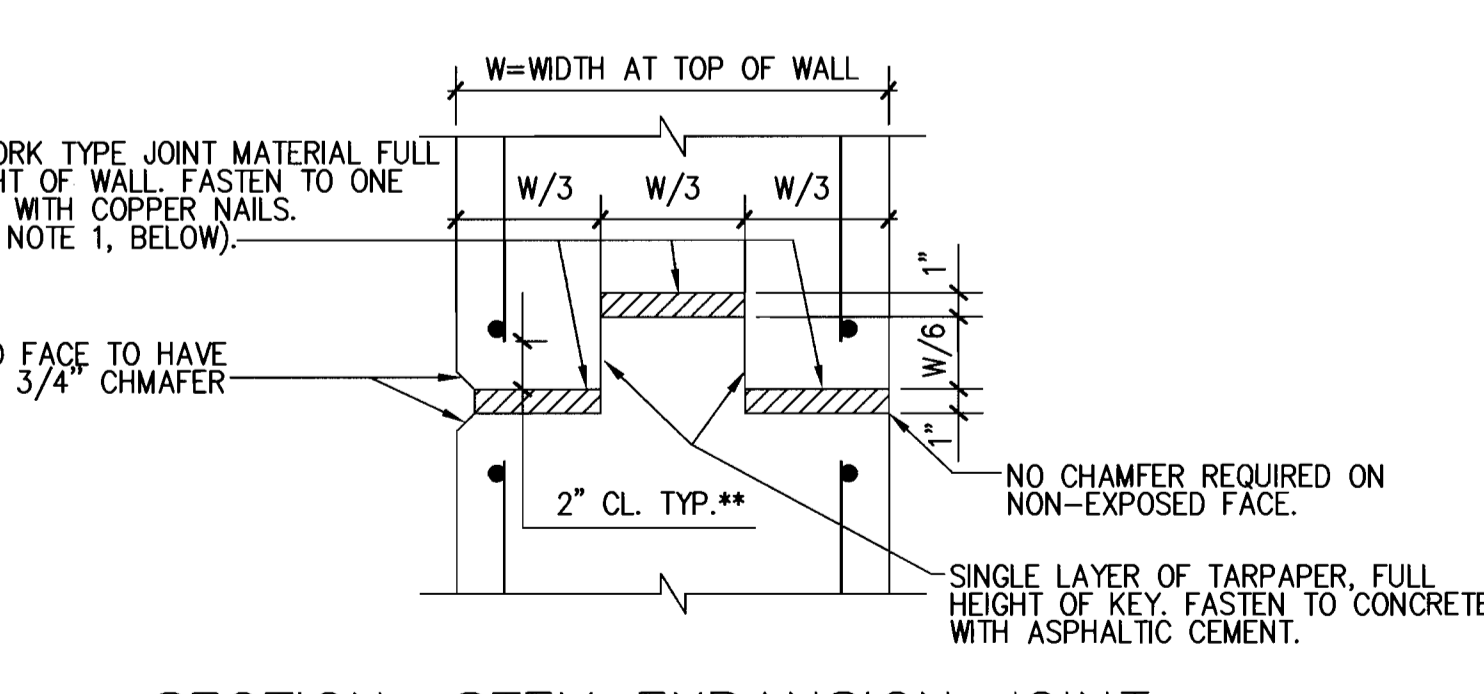
TYP. STEPPED FOOTING
 SCALE: 1/2" = 1'-0"



SECTION 3
 SCALE: 3/4" = 1'-0"

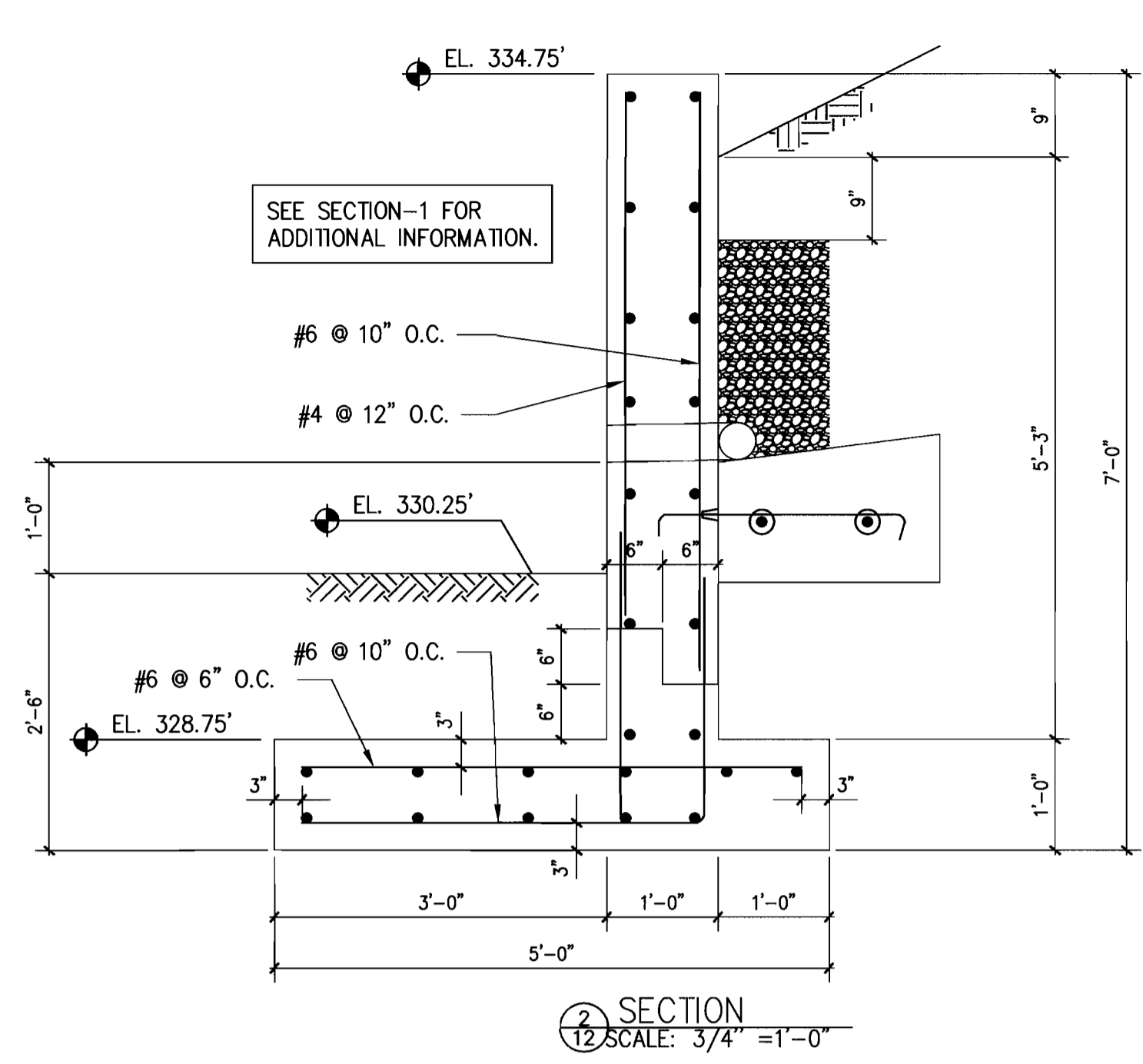


SECTION: STEM CONTRACTION JOINT
 SCALE: 1 1/2" = 1'-0"



SECTION: STEM EXPANSION JOINT
 SCALE: 1 1/2" = 1'-0"

NOTES:
 1. JOINT LOCATIONS SHALL BE AS SHOWN ON CONTRACT DRAWINGS. IF NO LOCATIONS ARE GIVEN CONCRETE RETAINING WALLS SHALL HAVE CONTRACTION JOINTS A MAXIMUM OF EVERY 30'-0" AND EXPANSION JOINTS, WITH CORK TYPE MATERIAL, A MAXIMUM OF EVERY 90'-0".
 2. STOP KEY 9" BELOW TOP OF WALL.
 3. REINFORCING STEEL SHALL NOT PASS THROUGH CONTRACTION OR EXPANSION JOINT.
 4. ALL KEYS ARE NOMINAL SIZE.
 5. ONLY PLACE CONTRACTION AND EXPANSION JOINTS IN STEMS (NO JOINT IN FOOTER)

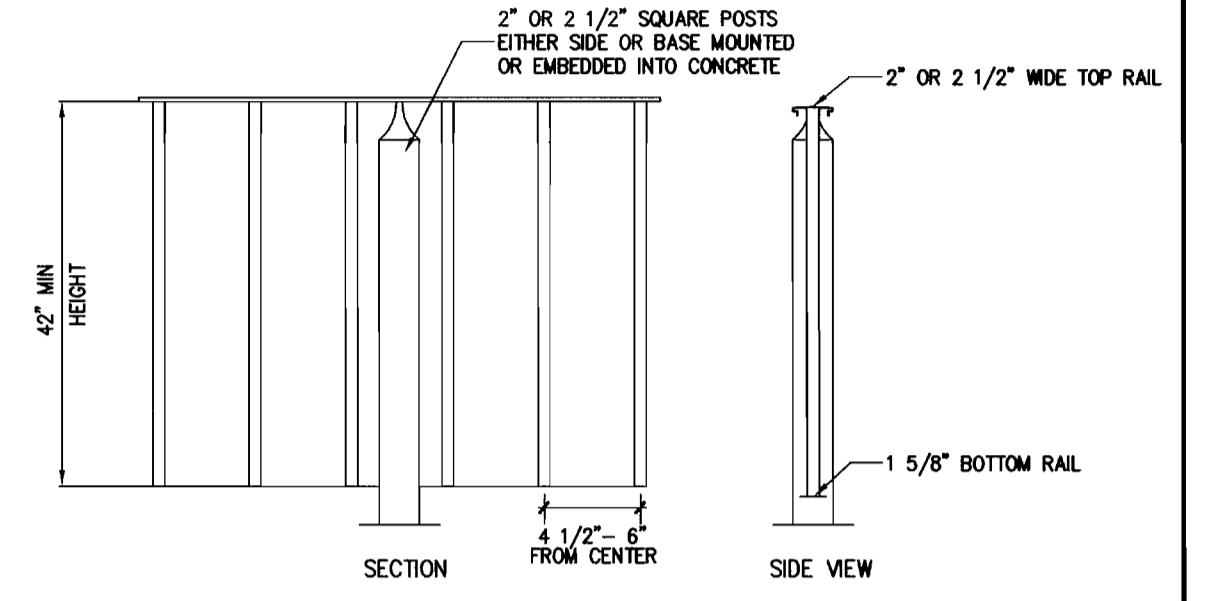


SECTION 6
 SCALE: 3/4" = 1'-0"

TABLE A
 REINFORCEMENT TENSION LAPS, AND EMBEDMENT
 fy = 60000 psi, f'c = 3000 psi

BAR SIZE	BAR DIA (in)	EMBEDMENT AND CLASS A LAP (in)				CLASS B LAP (in)			
		TOP BAR		OTHER BARS		TOP BAR		OTHER BARS	
		CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2
3	.375	22	32	17	25	28	42	22	32
4	.500	29	43	22	33	37	56	29	43
5	.625	36	54	28	41	47	70	36	54
6	.750	43	64	33	50	56	84	43	64
7	.875	63	94	48	72	81	122	63	94
8	1.00	72	107	55	82	93	139	72	107
9	1.128	81	121	62	93	105	157	81	121
10	1.270	91	136	70	105	118	177	91	136
11	1.410	101	151	78	116	131	196	101	151

NOTES FOR USE WITH TABLE A:
 1. TABLE A PRESENTS LENGTHS OF TENSION DEVELOPMENT LENGTHS AND TENSION LAP SPLICE LENGTHS BASED ON ACI 318-05, SECTION 12.2.2.
 2. CLASS A LAP LENGTHS APPLY WHEN BAR LAPS ARE STAGGERED TO LAP HALF THE BARS AT THE SAME LOCATION OR WHEN BARS ARE LAPPED AT A LOCATION WHERE THE REINFORCEMENT AREA PROVIDED IS AT LEAST TWICE THAT REQUIRED.
 3. CLASS B LAP LENGTHS APPLY WHEN ALL BARS ARE SPLICED AT A LOCATION OF MAXIMUM STRESS IN THE BARS.
 4. CASE 1 LENGTHS APPLY TO BEAMS AND COLUMNS WITH CONCRETE COVER EQUAL OR GREATER THAN THE BAR DIAMETER, CLEAR BAR SPACING EQUAL OR GREATER THAN THE BAR DIAMETER AND WITH STIRRUPS OR TIES NOT LESS THAN THE CODE MINIMUM THROUGHOUT THE LENGTH IN THE TABLE; AND FOR OTHER ELEMENTS WITH CONCRETE COVER EQUAL OR GREATER THAN THE BAR DIAMETER AND CLEAR SPACING EQUAL OR GREATER THAN TWO TIMES THE BAR DIAMETER.
 5. CASE 2 LENGTHS APPLY TO BEAMS AND COLUMNS WITH CONCRETE COVER LESS THAN THE BAR DIAMETER, AND CLEAR BAR SPACING LESS THAN THE BAR DIAMETER; AND FOR OTHER ELEMENTS WITH CONCRETE COVER LESS THAN THE BAR DIAMETER AND CLEAR SPACING LESS THAN TWO TIMES THE BAR DIAMETER.
 6. TOP BARS ARE HORIZONTAL REINFORCEMENT PLACED SO THAT MORE THAN 12 IN OF CONCRETE IS CAST BELOW THE REINFORCEMENT.
 7. MULTIPLY LENGTHS SHOWN BY 0.78 FOR 4000 PSI CONCRETE.
 8. MULTIPLY LENGTHS SHOWN BY 1.3 FOR LIGHTWEIGHT AGGREGATE CONCRETE.
 9. MULTIPLY LENGTHS SHOWN BY 1.3 FOR EPOXY-COATED BARS.



SECTION 7
 SCALE: NOT TO SCALE
 PER WAGNER COMPANIES' 900 SERIES HEAVY DUTY ALUMINUM RAILING OR APPROVED EQUIVALENT.
 NOTE - ALL COMPONENTS PAINTED BLACK.

GENERAL NOTES:
 1. (2A) FOUNDATION SOILS MUST BE EXAMINED BY THE SOILS ENGINEER TO ASSURE THE ACTUAL FOUNDATION SOIL STRENGTH MEETS OR EXCEEDS ASSUMED DESIGN STRENGTHS.
 2. (2B) THE PROPOSED CONSTRUCTION OF THE RETAINING WALL SHALL BE PERFORMED UNDER THE OBSERVATION OF A MARYLAND REGISTERED PROFESSIONAL ENGINEER.

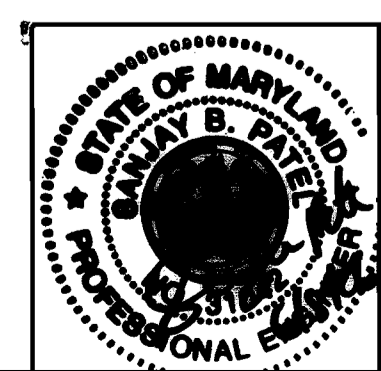
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
 Director: *Mark A. Neill* 6/20/06
 Chief, Development Engineering Division: *Chris Commarota* 6/20/06
 Chief, Division of Land Development: *Chris Commarota* 6/20/06

DATE	NO.	REVISION

OWNER:
 Chamberlain Construction Inc of MD
 3219-A Corporate Court
 Ellicott City, Maryland 21042
 Attn: Doug Chamberlain
 410-203-2460

DEVELOPERS:
 Patel Associates, LLC
 5105 Santa Fe Court
 Ellicott City, MD 21043
 410-715-4626

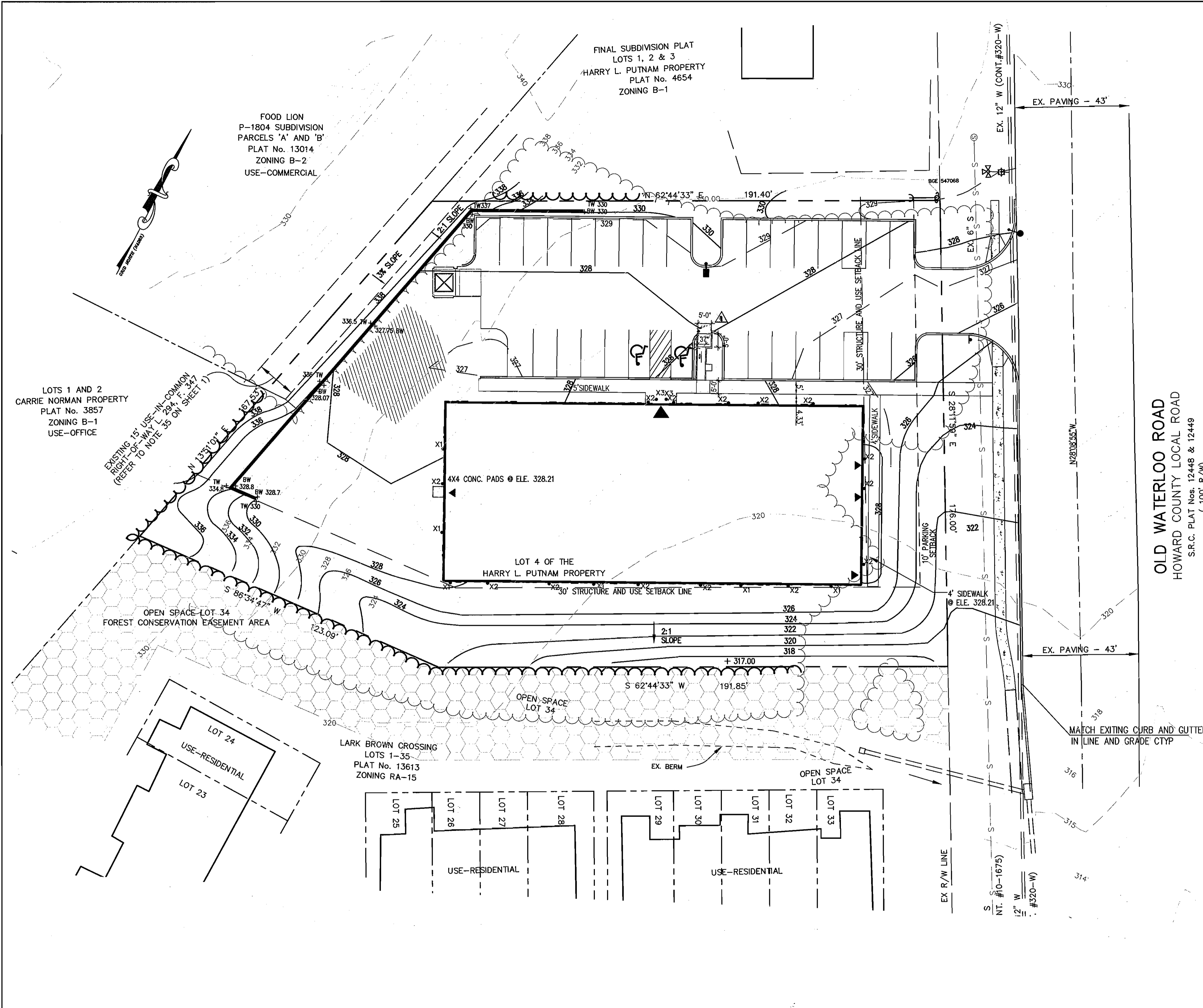
Kiddie Academy
 Chris Commarota
 108 Wheel Road
 Bel Air, MD 21015
 410-569-9165 x240



AB CONSULTANTS, INC.
 9450 ANNAPOLIS ROAD
 LANHAM, MARYLAND 20706
 PHONE: (301) 306-3091
 FAX: (301) 306-3092

KIDDIE ACADEMY OF ELKRIDGE
 DAY CARE FACILITY
 LOT 4 OF THE HARRY L. PUTNAM PROPERTY
 WALL SECTIONS & DETAILS
 6th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 PLAT 10696, TAX MAP 37, GRID 20, P/O 613/LOT 4, DEED REF: 4201/41

PROJECT NO. 05-114
 SCALE:
 DATE: 06/09/06
 DRAWN BY: CADD
 CHECKED BY: DTD
 SHEET: 17 OF 17



Howard County Forest Conservation Worksheet

Project Name: Chartwood Professional Center
 State File #: _____
 Date: June 14, 2004

Net Tract Area	Acres
A. Total Tract Area	A = 1.00
B. Other Deductions	B = 0.00
C. Net Tract Area	C = 1.00
Land Use Category Commercial / Industrial / Office	
D. Afforestation Threshold (Net Tract Area X 15%)	D = 0.15
E. Conservation Threshold (Net Tract Area X 15%)	E = 0.15

Existing Forest Cover	
F. Existing Forest Cover within the Net Tract Area	F = 0.88
G. Area of Forest Above Conservation Threshold	G = 0.71
If the Existing Forest Cover (F) is greater than Conservation Threshold (G), then G = Existing Forest Cover (F) - Conservation Threshold (E); Otherwise G = 0	

Break Even Point	
H. Break Even (Amount of forest that must be retained so that no mitigation is required)	H = 0.29
(1) If the area of forest above the Conservation Threshold (G) is greater than zero, then $H = (0.2 \times \text{the area of forest above Conservation Threshold (G)}) + \text{the Conservation Threshold (E)}$	
(2) If the area of forest above the Conservation Threshold (G) is equal to zero, then $H = \text{Existing Forest Cover (F)}$	

Proposed Forest Clearing	
J. Total Area of Forest to be Cleared	J = 0.86
K. Total Area of Forest to be Retained	K = 0.00
K = Existing Forest Cover (F) - forest to be cleared (J)	

Planting Requirements
 If the Total Area of Forest to be Cleared (J) is at or above the Breakeven Point (H), no planting is required and no further calculations are necessary (L=0, M=0, N=0, P=0).
 If not, calculate the planting requirement below:

L. Reforestation for Clearing Above the Conservation Threshold	L = 0.18
(1) If the total area of forest to be retained (K) is greater than the Conservation Threshold (E), then $L = \text{the area of forest to be cleared (J)} \times 0.25$; or (2) If the forest to be retained (K) is less than or equal to the Conservation Threshold (E), then $L = \text{area of forest above Conservation Threshold (G)} \times 0.25$	

M. Reforestation for Clearing Below the Conservation Threshold	M = 0.30
(1) If Existing Forest Cover (F) is greater than Conservation Threshold (E) and the forest to be retained (K) is less than or equal to the Conservation Threshold (E), then $M = 2.0 \times (\text{the Conservation Threshold (E)} - \text{the forest to be retained (K)})$ (2) If Existing Forest (F) is less than or equal to the Conservation Threshold (E), then $M = 2.0 \times \text{Forest to be cleared (J)}$	

N. Credit for Retention Above the Conservation Threshold	N = 0.00
If the area of forest to be retained (K) is greater than the Conservation Threshold (E), then $N = K - E$	

P. Total Reforestation Required	P = 0.48
$P = L + M - N$	

Q. Total Afforestation Required	Q = 0.00
(1) If Existing Forest Cover (F) is less than the Afforestation Threshold (D) then $Q = \text{the Afforestation Threshold (D)} - \text{Existing Forest Cover (F)}$	

R. Total Planting Requirement	R = 0.48
$R = P + Q$	

FOREST CONSERVATION NOTES

- TWO (2) FOREST STANDS EXIST ON-SITE.
- NO WETLANDS, STREAMS, OR 100-YEAR FLOODPLAIN EXIST ON-SITE.
- NO CRITICAL HABITATS OF RARE, THREATENED OR ENDANGERED SPECIES WERE OBSERVED.
- NO TREES, SHRUBS, OR PLANTS IDENTIFIED AS RARE, THREATENED OR ENDANGERED WERE OBSERVED.
- THERE ARE NO KNOWN CEMETERY OR BURIAL PLOTS LOCATED ON THE SITE, ACCORDING TO THE HOWARD COUNTY HISTORIC AND CEMETERY SITE MAP.
- THE SITE CONTAINS NO HYDRIC SOILS.
- THE HOWARD COUNTY FOREST CONSERVATION MANUAL SUPERSEDES ANY DISCREPANCIES BETWEEN THE MANUAL AND THESE PLANS.
- SEE FOREST STAND DELINEATION REPORT DATED OCTOBER 11, 2005 FOR FIELD INVESTIGATION NARRATIVE.
- IN ACCORDANCE WITH SECTION 16.1202 OF THE FOREST CONSERVATION MANUAL, A FEE-IN-LIEU OF FOREST CONSERVATION OBLIGATION FOR THIS PROJECT HAS BEEN PAID TO THE HO.CO. FOREST CONSERVATION FUND FOR 0.48 ACRES OF REFORESTATION IN THE AMOUNT OF \$10,454.40.

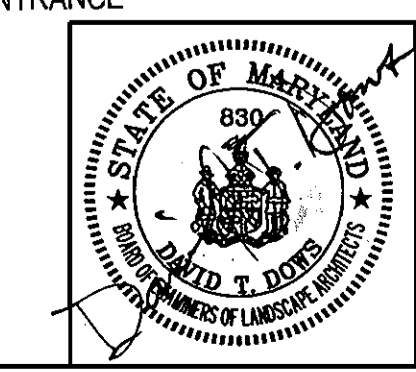
LEGEND

STEEP SLOPES >25%

SITE CHARACTERISTICS

GROSS AREA	1.00 ACRES
100 YEAR FLOODPLAIN AREA	0.00 ACRES
NET TRACT AREA	1.00 ACRES
TOTAL FORESTED AREA	0.86 ACRES
TOTAL STEEP SLOPES (>25%)	0.02 ACRES

△ MOVE THE LOCATION OF HANDICAP RAMP FROM MAIN ENTRANCE TO THE ISLAND ON THE LEFT OF THE MAIN ENTRANCE



AB CONSULTANTS, INC.
 9450 ANNAPOLIS ROAD
 LANHAM, MARYLAND 20706
 PHONE: (301) 306-3091
 FAX: (301) 306-3092

KIDDIE ACADEMY OF ELKRIDGE DAY CARE FACILITY
 LOT 4 OF THE HARRY L. PUTNAM PROPERTY
FOREST CONSERVATION PLAN
 6th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
 Director: *Mark M. Clegg* 6/24/04
 Chief, Development, Engineering Division: *Chris Commarota* 6/23/06
 Chief, Division of Land Development: *Ande Harman* 6/27/06

10-12-07	△	RELOCATION OF HANDICAP RAMP
DATE	NO.	REVISION

OWNER:
 Chamberlain Construction Inc of MD
 3219-A Corporate Court
 Ellicott City, Maryland 21042
 Attn: Doug Chamberlain
 410-203-2460

DEVELOPERS:
 Patel Associates, LLC
 5105 Santa Fe Court
 Ellicott City, MD 21043
 410-715-4626

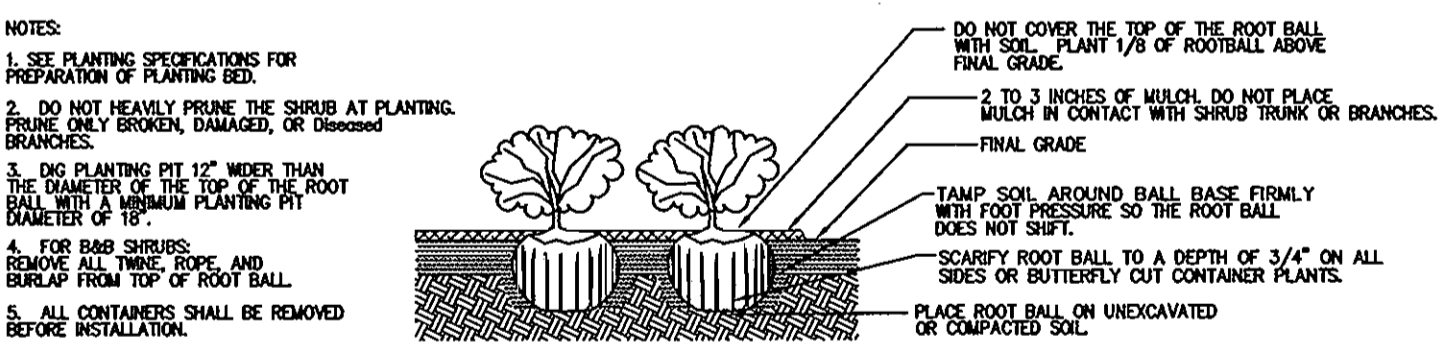
Kiddie Academy
 Chris Commarota
 108 Wheel Road
 Bel Air, MD 21015
 410-569-9165 x240

GENERAL NOTES

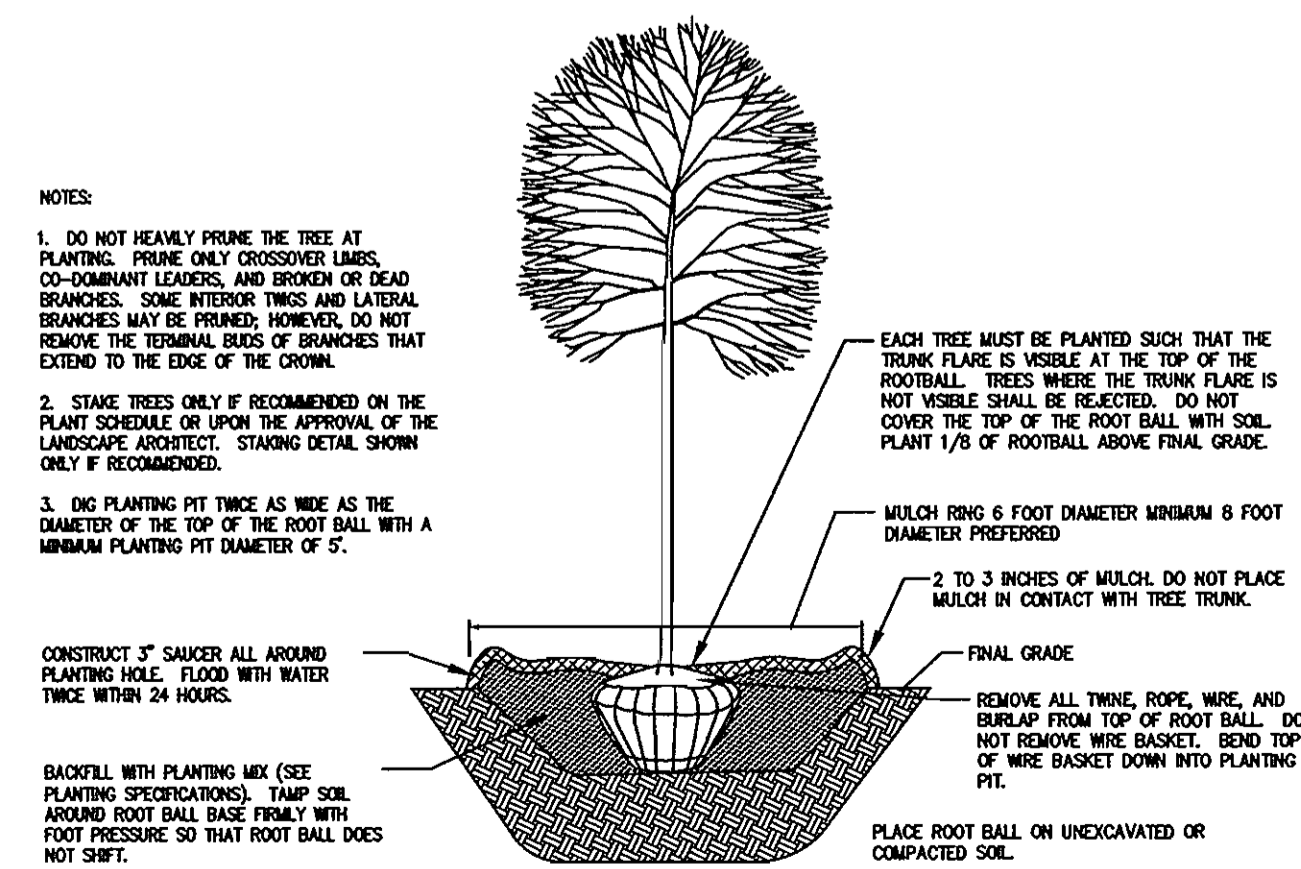
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- THIS PLAN IS FOR LANDSCAPING PURPOSES ONLY.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- ALL MATERIAL SELECTED SHALL BE EQUAL TO OR BETTER THAN THE REQUIREMENTS OF THE "USA STANDARD FOR NURSERY STOCK", LATEST EDITION, AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
- ALL MATERIAL SHALL BE PLANTED IN ACCORDANCE WITH THE MINIMUM STANDARDS CITED IN THE LATEST EDITION OF "LANDSCAPE SPECIFICATION GUIDELINES" PUBLISHED BY THE LANDSCAPE CONTRACTORS ASSOCIATION.
- AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS SHALL BE OF THE PROPER HEIGHT AND/OR SPREAD REQUIREMENTS IN ACCORDANCE WITH THIS PLAN.
- NO SUBSTITUTIONS OR RELOCATION OF PLANTS MAY BE MADE WITHOUT PRIOR APPROVAL FROM THE LANDSCAPE ARCHITECT.
- LANDSCAPE SURETY IN THE AMOUNT OF \$8,910.00 HAS BEEN POSTED AS A PART OF THE DEVELOPER'S AGREEMENT.
 - 19 SHADE TREES @ \$300 = \$5,700
 - 19 EVERGREEN TREES @ \$150 = \$2,850
 - 12 SHRUBS @ \$30 = \$360

LEGEND

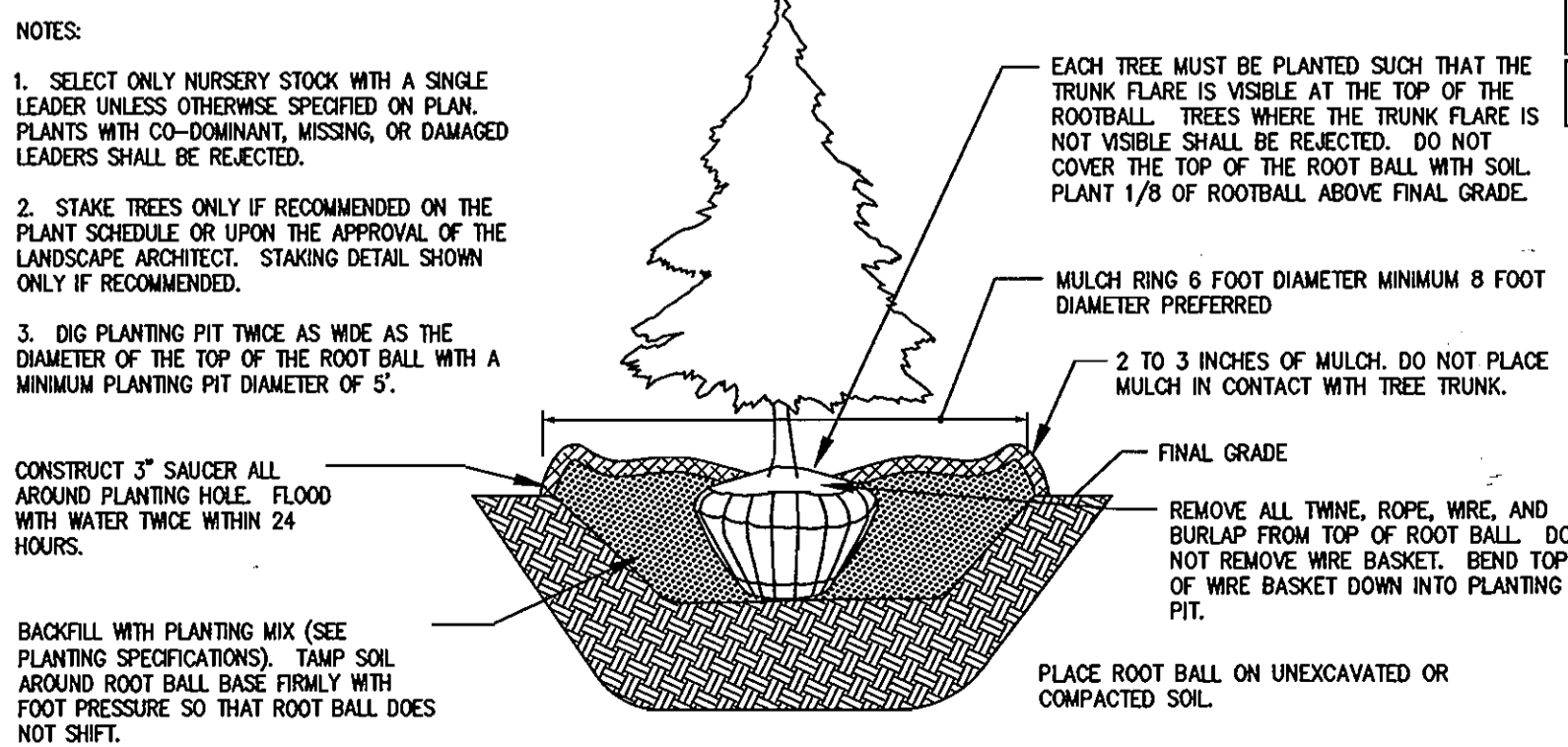
- PROP. SHADE TREE
- PROP. EVERGREEN TREE
Picea omorika
- PROP. SHRUB
Ilex cornuta
- PERIMETER LANDSCAPE REQUIREMENT
- PARKING LOT LANDSCAPE REQUIREMENT



SHRUB BED PLANTING DETAIL - B&B AND CONTAINER SHRUBS



DECIDUOUS B&B TREE PLANTING DETAIL



EVERGREEN B&B TREE PLANTING DETAIL

SCHEDULE B - PARKING LOT INTERNAL LANDSCAPING

PARKING LOT	1
NUMBER OF PARKING SPACES	32
NUMBER OF SHADE TREES REQUIRED (1/20 SPACES)	2
NUMBER OF TREES PROVIDED	2
SHADE TREES	2
OTHER TREES (2:1 SUBSTITUTION)	-
NUMBER OF ISLANDS REQUIRED (1/20 SPACES)	2
NUMBER OF ISLANDS PROVIDED (200 SF/ISLAND)	2

PLANT LIST

SYMBOL	QTY.	SCIENTIFIC/COMMON NAME	SIZE	ROOT
AR	10	Acer rubrum 'Autumn Flame' Autumn Flame Red maple	2 1/2 - 3" cal.	B&B
QP	5	Quercus palustris Pin oak	2 1/2 - 3" cal.	B&B
PY	8	Prunus x yedoensis Yoshino Cherry	1 1/2 - 2" cal.	B&B
PO	19	Picea omorika Serbian spruce	8'-10' ht.	B&B
IC	17	Ilex cornuta 'Nana' Dwarf chinese holly	24"-30" HT	Cont.

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

SIGNATURE: *Niall Gatto* DATE: 6/9/06

SCHEDULE A - PERIMETER LANDSCAPE EDGE

PERIMETER	ADJACENT TO PERIMETER PROPERTIES				ADJACENT TO ROADWAYS			
	1	2	3	4	1	2	3	4
LANDSCAPE TYPE *	C	A	E	B				
LINEAR FEET OF ROADWAY FRONTAGE/ PERIMETER	320±	385±	70±	106±				
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO				
CREDIT FOR WALL, FENCE, BERM OR DRIVE AISLE (YES/NO/LINEAR FEET)	NO	YES** 204±	YES*** 24±	NO				
LINEAR FEET REMAINING	320±	189±	46±	106±				
NUMBER OF PLANTS REQUIRED	8	6	1	2				
SHADE TREES	16	-	12	3				
EVERGREEN TREES	8	2****	1	3				
NUMBER OF PLANTS PROVIDED	8	17	1	3				
SHADE TREES	8	17	1	3				
EVERGREEN TREES	8	17	1	3				

* A = 1 SHADE TREE/60 LF
B = 1 SHADE TREE/50 LF; 1 EVERGREEN/40 LF
C = 1 SHADE TREE/40 LF; 1 EVERGREEN/20 LF
E = 1 SHADE TREE/40 LF; 1 SHRUB/4 LF
** CREDIT FOR RETAINING WALL
*** CREDIT FOR DRIVE AISLE
**** SUBSTITUTION OF 8 SMALL FLOWERING TREES (YOSHINO CHERRIES) FOR 4 MAJOR SHADE TREES.

AB CONSULTANTS, INC.
9450 ANNAPOLIS ROAD
LANHAM, MARYLAND 20706
PHONE: (301) 306-3091
FAX: (301) 306-3092

KIDDIE ACADEMY OF ELKRIDGE DAY CARE FACILITY
LOT 4 OF THE HARRY L. PUTNAM PROPERTY
LANDSCAPE PLAN, NOTES AND SCHEDULES
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
DIRECTOR: *Frank P. Cuyler* DATE: 6/9/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION: *Chris Commarota* DATE: 6/9/06
CHIEF, DIVISION OF LAND DEVELOPMENT: *Chris Commarota* DATE: 6/9/06

10-12-07 **RELOCATION OF HANDICAP RAMP**
DATE NO. REVISION

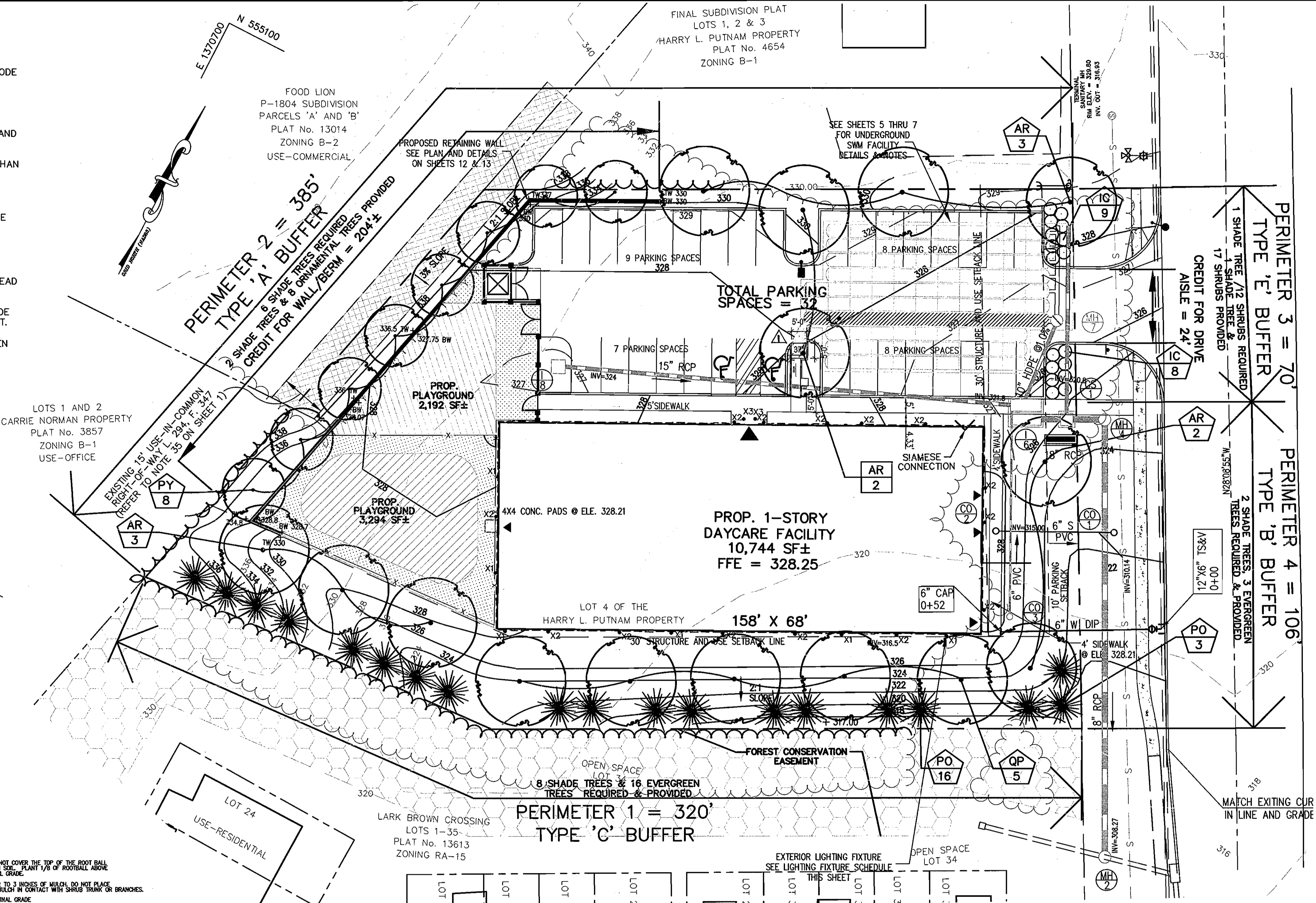
OWNER: Chamberlain Construction Inc of MD
3219-A Corporate Court
Ellicott City, Maryland 21042
Attn: Doug Chamberlain
410-203-2460

DEVELOPERS:
Patel Associates, LLC
5105 Santa Fe Court
Ellicott City, MD 21043
410-715-4626

Kiddie Academy
Chris Commarota
108 Wheel Road
Bel Air, MD 21015
410-569-9165 x240

PROJECT NO. 05-114
SCALE: 1"=20'
DATE: 06/09/06
DRAWN BY: CADD
CHECKED BY: DTD
SHEET: 14 OF 17

SDP-06-042

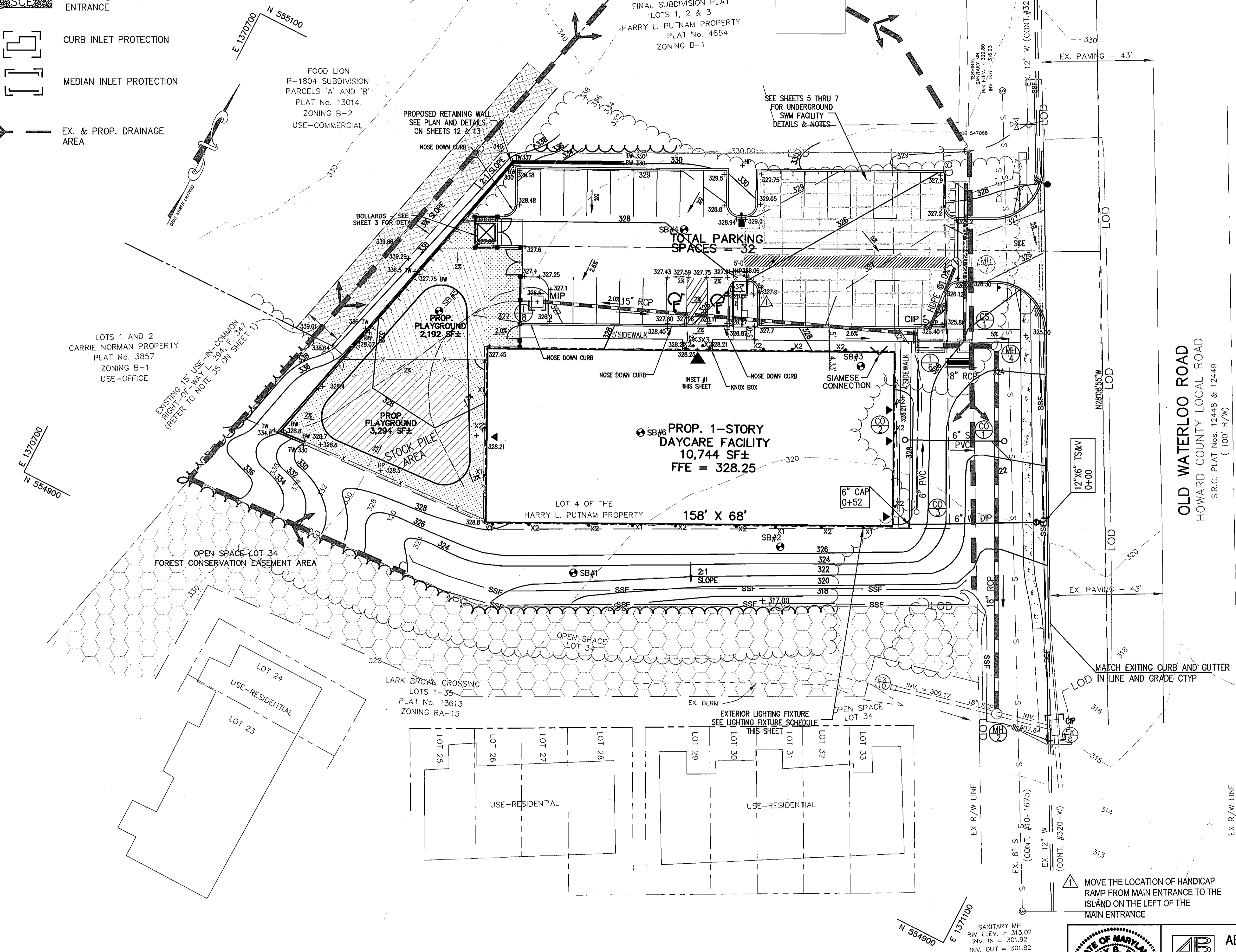


PLANTING SPECIFICATIONS

- Plants, related material, and operations shall meet the detailed description, as given on the plans and as described herein. Where discrepancies exist between Standards & Guidelines referenced within these specifications and the Howard County Landscape Manual, the latter takes precedence.
- All plant material, unless otherwise specified, that is not nursery grown, uniformly branched, does not have a vigorous root system, and does not conform to the most recent edition of the American Association of Nurserymen (AAN) Standards will be rejected. Plant material that is not healthy, vigorous, free from defects, decay, disfiguring roots, sunscald injuries, abrasions of the bark, plant disease, insect pest eggs, borers and all forms of insect infestations or objectionable disfigurements will be rejected. Plant material that is weak or has been cut back from larger grades to meet specified requirements will be rejected. Trees with forked leaders will be rejected. All B & B plants shall be freshly dug; no heated-in plants or plants from cold storage will be accepted.
- Unless otherwise specified, all general conditions, planting operations, details and planting specifications shall conform to the most recent edition of the "Landscape Specification Guidelines" by the Landscape Contractors Association of MD, DC, & VA, (hereinafter "Landscape Guidelines") approved by the Landscape Contractors Association of Metropolitan Washington and the Potomac Chapter of the American Society of Landscape Architects.
- Contractor shall guarantee all plant material for a period of one year after date of acceptance in accordance with the appropriate section on the Landscape Guidelines. Contractor's attention is directed to the maintenance requirements found within the one year specifications including watering and replacement of specified plant material.
- Contractor shall be responsible for notifying all relevant and appropriate utility companies, utility contractors, and "Miss Utility" a minimum of 48 hours prior to the beginning of any work. Contractor may make minor adjustments in spacing and location of plant material to avoid conflicts with utilities. Major changes will require the approval of the landscape architect. Damage to existing structure and utilities shall be repaired at the expense of the Contractor.
- Protection of existing vegetation to remain shall be accomplished via the temporary installation of 4 foot high snow fence at the drip line, see detail.
- Contractor is responsible for installing all material in the proper planting season for each plant type. All planting is to be completed within growing season of completion of site construction. Do not plant Pinus strobus or Xopresacyparis leylandii between November 15 and March 15. Landscape plants are not to be installed before site is graded to final grade.
- Contractor to regrade, fine grade, sod, hydroseed and straw mulch all areas disturbed by their work.
- Bid shall be based on actual site conditions. No extra payment shall be made for work arising from actual site conditions differing from those indicated on drawings and specifications.
- Plant quantities are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on plan and those shown on the plant list, the quantities on the plan take precedence. Where discrepancies on the plan exist between the symbols and the callout leader, the number of symbols take precedence.
- All shrubs and groundcover areas shall be planted in continuous planting beds, prepared as specified, unless otherwise indicated on plans. (See Specification 13). Beds to be mulched with minimum 2" and maximum 3" of composted, double-shredded hardwood mulch throughout.
- Positive drainage shall be maintained on planting beds (minimum 2 percent slope).
- Bed preparation shall be as follows: Till into a minimum depth of 6" 1 yard of Compro or Leafgro per 200 SF of planting bed, and 1 yard of topsoil per 100 SF of bed. Add 3 lbs of standard 5-10-5 fertilizer per cubic yard of planting mix and till. Ericaceous plants (Azaleas, Rhododendrons, etc.); top dress after planting with iron sulfate or comparable product according to package directions. Toxus baccata 'Repandens' (English weeping yews): Top dress after planting with 1/4 to 1/2 cup lime each.
- Planting mix: For trees not in a prepared bed, mix 50% Compro or Leafgro with 50% soil from tree hole to use as backfill, see tree planting detail.
- Weed & insect control: Incorporate a pre-emergent herbicide into the planting bed following recommended rates on the label. For tree planting, apply a pre-emergent on top of soil and root ball before mulching. Caution: For areas to be planted with a ground cover, be sure to carefully check the chemical used to assure its adaptability to the specific groundcover to be treated. Maintain the mulch weed-free for the extent of the warranty period. Under no circumstances is a pesticide containing chlorpyrifos to be used as a means of pest control.
- Water: All plant material planted shall be watered thoroughly the day of planting. All plant material not yet planted shall be properly protected from drying out until planted. At a minimum, water unplanted plant material daily and as necessary to avoid desiccation.
- Pruning: Do not heavily prune trees and shrubs at planting. Prune only broken, dead, or diseased branches.
- All areas within contract limits disturbed during or prior to construction not designated to receive plants and mulch shall be fine graded, grass seed planted, and covered with straw mulch.

LEGEND:

- SSF — SUPER SILT FENCE
- LOD — LIMIT OF DISTURBANCE
- STABILIZED CONSTRUCTION ENTRANCE
- CIP CURB INLET PROTECTION
- MIP MEDIAN INLET PROTECTION
- EX. & PROP. DRAINAGE AREA



- SEQUENCE OF CONSTRUCTION:**
1. OBTAIN GRADING PERMIT.
 2. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND PERIMETER SEDIMENT CONTROL DEVICES AND INLET PROTECTION DEVICES AS SHOWN ON PLAN. (2 DAYS)
 3. WITH PERMISSION FROM HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, BEGIN CLEARING & ROUGH GRADING.
 4. CONSTRUCT WATER AND SEWER. (15 DAYS)
 5. CONSTRUCT RETAINING WALL. (10 DAYS)
 6. CONSTRUCT BUILDING FOUNDATION AND SLAB ON GRADE. (15 DAYS)
 7. GRADE THE PARKING AREA UP TO THE SUBGRADE ELEVATION. (3 DAYS)
 8. STABILIZED SIDE SLOPES AND SUBGRADE AREAS WITH SEED AND MULCH. (2 DAYS)
 9. CONSTRUCT UNDERGROUND SWM FACILITY AND STORMDRAIN SYSTEM. (15 DAYS)
NOTE: CONTRACTOR TO CONSTRUCT STORM DRAIN SYSTEM FROM UPSTREAM TO DOWNSTREAM AND PROVIDE INLET PROTECTION IMMEDIATELY AFTER THE CONSTRUCT INLET.
 10. REESTABLISH SUBGRADE OVER SWM FACILITIES. (2 DAYS)
 11. CONSTRUCT 6\"/>

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Michael... 6/9/06
DEVELOPER DATE

BY THE ENGINEER:

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

Sanjay Patel 6/8/06
ENGINEER DATE

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

Jim Meyer 6/20/06
NATURAL RESOURCES SERVICE DATE

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

Geoffrey W. Schomberg 6/20/06
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Mark... 6/22/06
DIRECTOR DATE

... 6/23/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

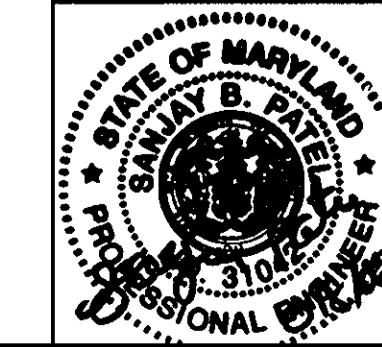
... 6/27/06
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DATE	NO.	REVISION
10-12-07	1	RELOCATION OF HANDICAP RAMP

OWNER:
Chamberlain Construction Inc of MD
3219-A Corporate Court
Ellicott City, Maryland 21042
Attn: Doug Chamberlain
410-203-2460

DEVELOPERS:
Patel Associates, LLC
5105 Santa Fe Court
Ellicott City, MD 21043
410-715-4626

Kiddie Academy
Chris Commarota
108 Wheel Road
Bel Air, MD 21015
410-569-9165 x240



AB CONSULTANTS, INC.
9450 ANNAPOLIS ROAD
LANHAM, MARYLAND 20706
PHONE: (301) 306-3091
FAX: (301) 306-3092

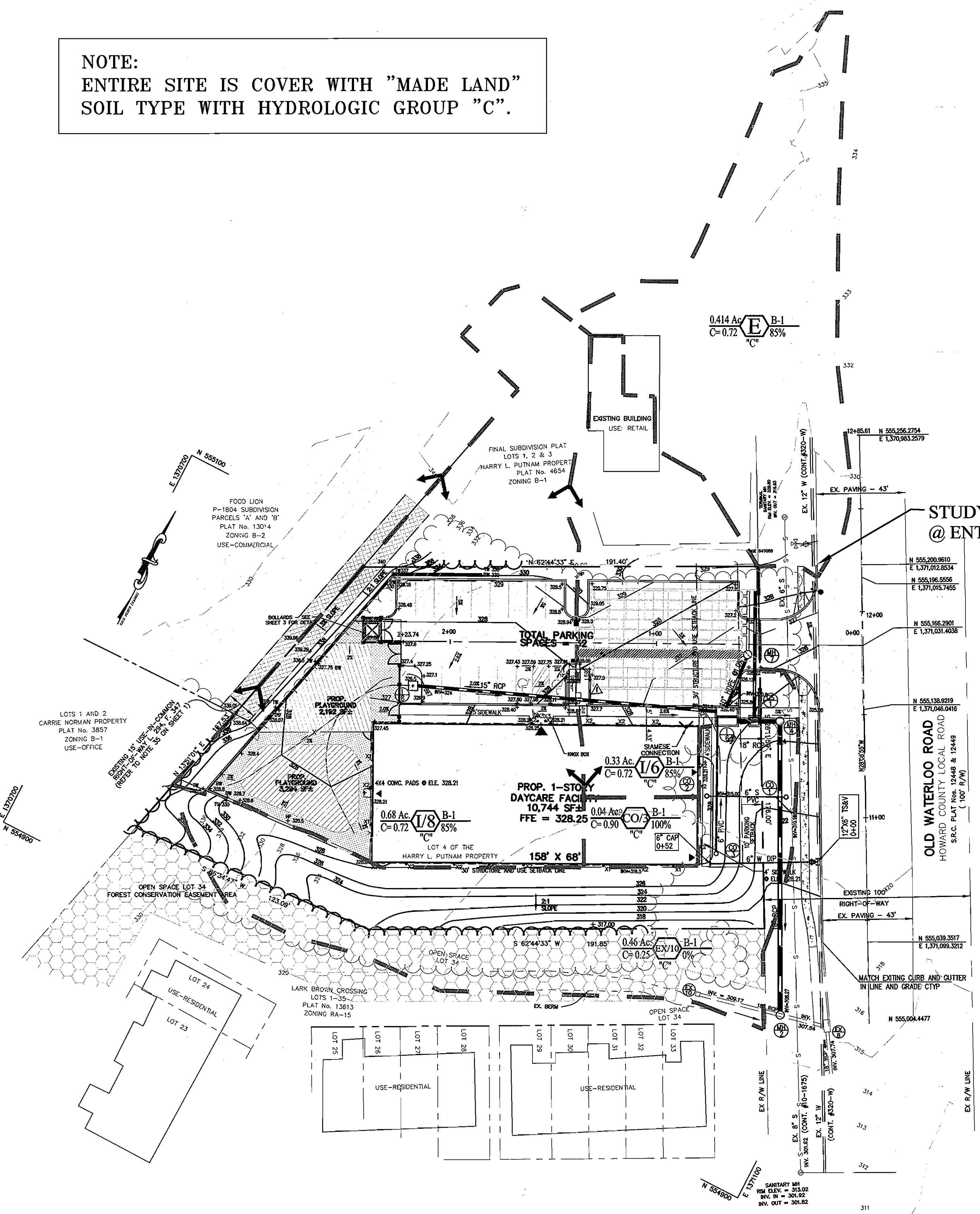
CONTACT: DAVID T. DOWS PHONE: 301-306-3091 x25

KIDDIE ACADEMY OF ELKRIDGE DAY CARE FACILITY
LOT 4 OF THE HARRY L. PUTNAM PROPERTY
GRADING, EROSION AND SEDIMENT CONTROL PLAN
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

PROJECT NO. 05-114
SCALE: 1"=20'
DATE: 06/09/06
DRAWN BY: CADD
CHECKED BY: DTD

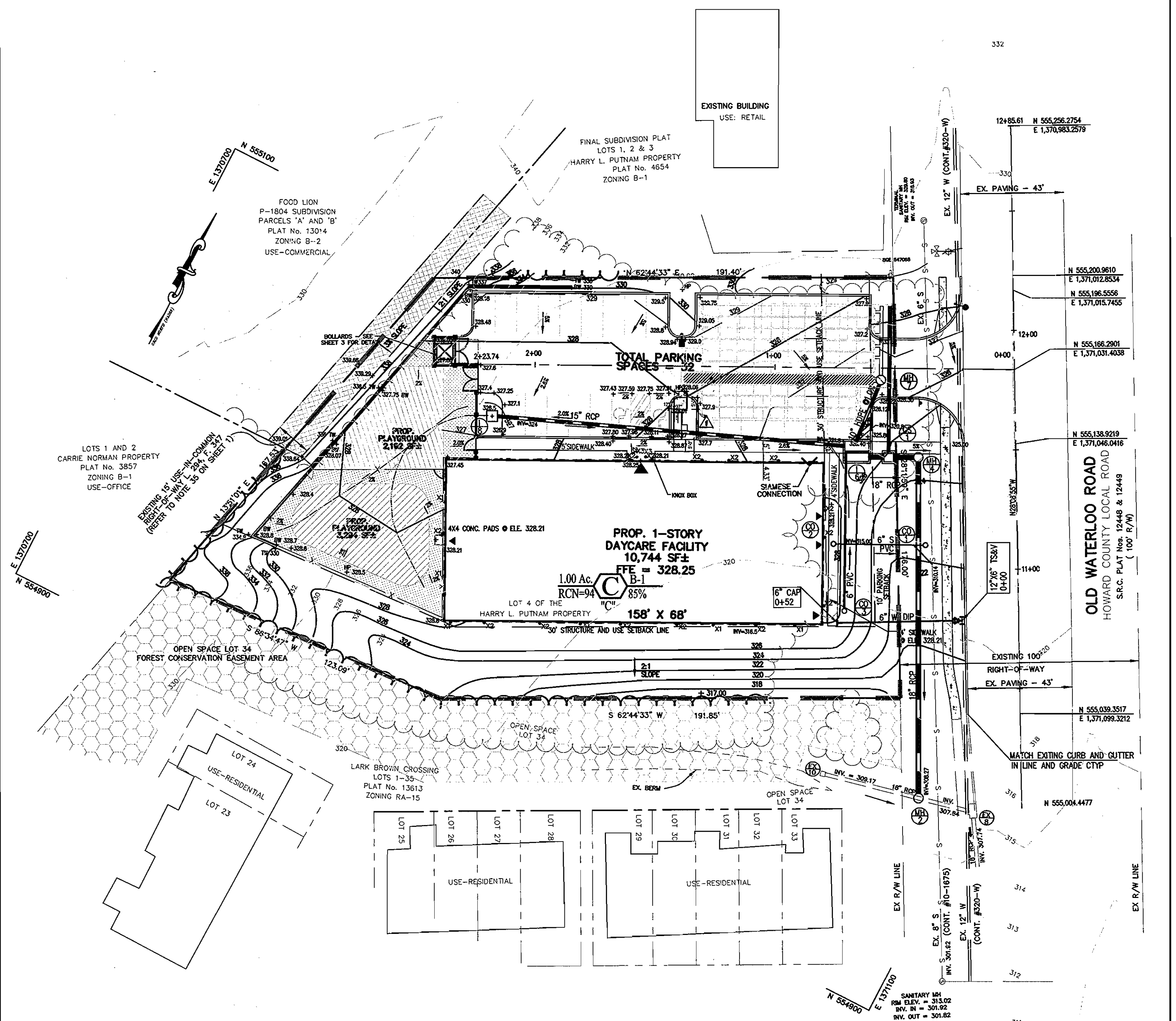
PLAT 10696, TAX MAP 37, GRID 20, P/O 613/LOT 4, DEED REF: 4201/41 SHEET: 12 OF 17

NOTE:
ENTIRE SITE IS COVER WITH "MADE LAND"
SOIL TYPE WITH HYDROLOGIC GROUP "C".



STORM DRAIN STUDY
SCALE: 1" = 30'

STUDY POINT @ ENTRANCE (E)



ON-SITE DRAINAGE AREA MAP

SCALE: 1" = 30'

LEGEND:

— DRAINAGE DIVIDE

⚠ MOVE THE LOCATION OF HANDICAP RAMP FROM MAIN ENTRANCE TO THE ISLAND ON THE LEFT OF THE MAIN ENTRANCE

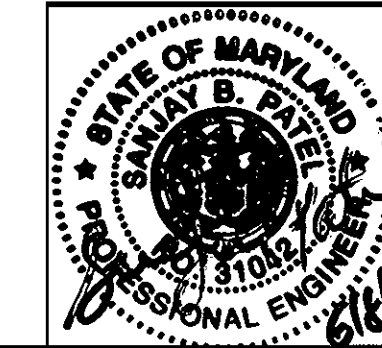
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

DIRECTOR: *[Signature]* DATE: 6/27/06
 CHIEF, DEVELOPMENT, ENGINEERING DIVISION: *[Signature]* DATE: 6/27/06
 CHIEF, DIVISION OF LAND DEVELOPMENT: *[Signature]* DATE: 6/27/06

DATE	NO.	REVISION
10-12-07	1	RELOCATION OF HANDICAP RAMP

OWNER:
Chamberlain Construction Inc of MD
3219-A Corporate Court
Ellicott City, Maryland 21042
Attn: Doug Chamberlain
410-203-2460

DEVELOPERS:
 Patel Associates, LLC
5105 Santa Fe Court
Ellicott City, MD 21043
410-715-4626
 Kiddie Academy
Chris Cammarota
108 Wheel Road
Bel Air, MD 21015
410-569-9165 x240



AB CONSULTANTS, INC.
9450 ANNAPOLIS ROAD
LANHAM, MARYLAND 20706
PHONE: (301) 306-3091
FAX: (301) 306-3092
CONTACT: DAVID T. DOWS PHONE: 301-306-3091 x25

KIDDIE ACADEMY OF ELKRIDGE DAY CARE FACILITY
LOT 4 OF THE HARRY L. PUTNAM PROPERTY
ON-SITE DRAINAGE AREA MAP & STORM DRAIN STUDY
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
PLAT 10696, TAX MAP 37, GRID 20, P/O 613/LOT 4, DEED REF: 4201/41

PROJECT NO. 05-114
SCALE: AS SHOWN
DATE: 06/09/06
DRAWN BY: CADD
CHECKED BY: DTD
SHEET: 11 OF 17

Tc A TO B - 100'
SHEET-GRASS
@ 7.3%

EXISTING BUILDING
USE: RETAIL

PROP. Tc

Tc B TO C - 40'
SHALLOW-UNPAVED
@ 1.75%

Tc C TO D - 108'
SHALLOW-PAVED
@ 3.06%

TOTAL PARKING
SPACES = 32

Tc D TO E - 146'
CHANNEL FLOW
@ 1.50%

PROP. 1-STORY
DAYCARE FACILITY
10,744 SF±
FFE = 328.25

1.05 Ac. C B-1
RCN=94 85%

0.26 Ac. A B-1
RCN=94 85%

Tc C TO D - 148'
SHALLOW-UNPAVED
@ 3.64%

Tc A TO B - 100'
SHEET-GRASS
@ 13.12%

SUMMARY TABLE

STUDY POINT	DRAINAGE AREA (ac.)	RCN	TC
A	0.26	94	0.183
C	1.05	94	0.162
ON-SITE	1.00	94	N/A

UNIFIED SIZING CRITERIA

CATEGORY	VOLUME REQ	REMARKS
WQv	2,958 Cu.Ft.	
Rev	385 Cu.Ft.	
Cpv	0.11 Ac.Ft.	
Qp	SAFE CONVEYANCE	
Qf	N/A	

LEGEND:

- DRAINAGE DIVIDE FOR SWM
- Tc PATH

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
 Director: *Frank A. Wozel* DATE: 6/27/06
 Chief, Development Engineering Division: *Chris Commarota* DATE: 6/27/06
 Chief, Division of Land Development: *Andy Hensley* DATE: 6/27/06

10-12-07 RELOCATION OF HANDICAP RAMP
 DATE NO. REVISION

OWNER:
 Chamberlain Construction Inc of MD
 3219-A Corporate Court
 Ellicott City, Maryland 21042
 Attn: Doug Chamberlain
 410-203-2460

DEVELOPERS:
 Patel Associates, LLC
 5105 Santa Fe Court
 Ellicott City, MD 21043
 410-715-4626

Kiddie Academy
 Chris Commarota
 108 Wheel Road
 Bel Air, MD 21015
 410-569-9165 x240

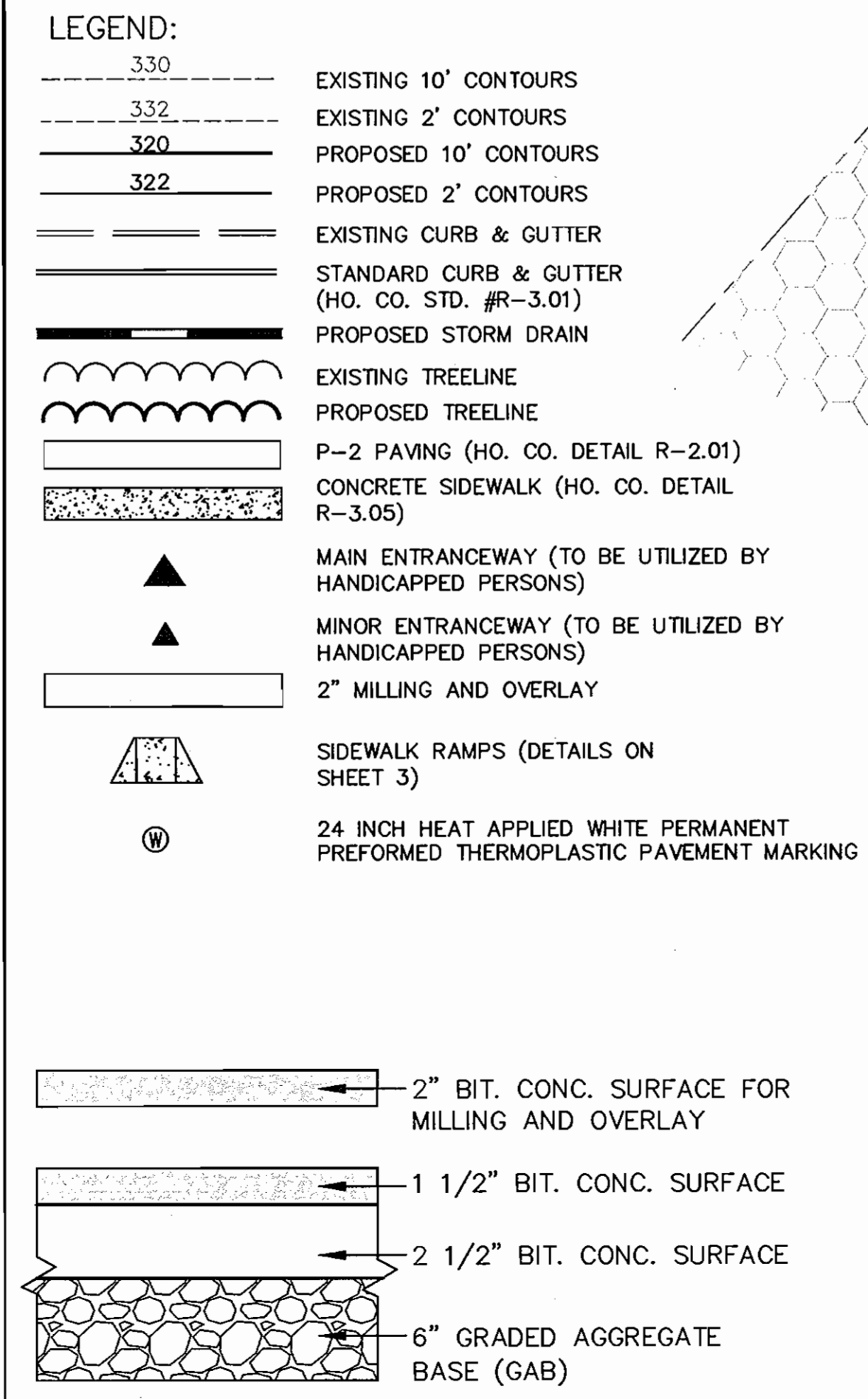
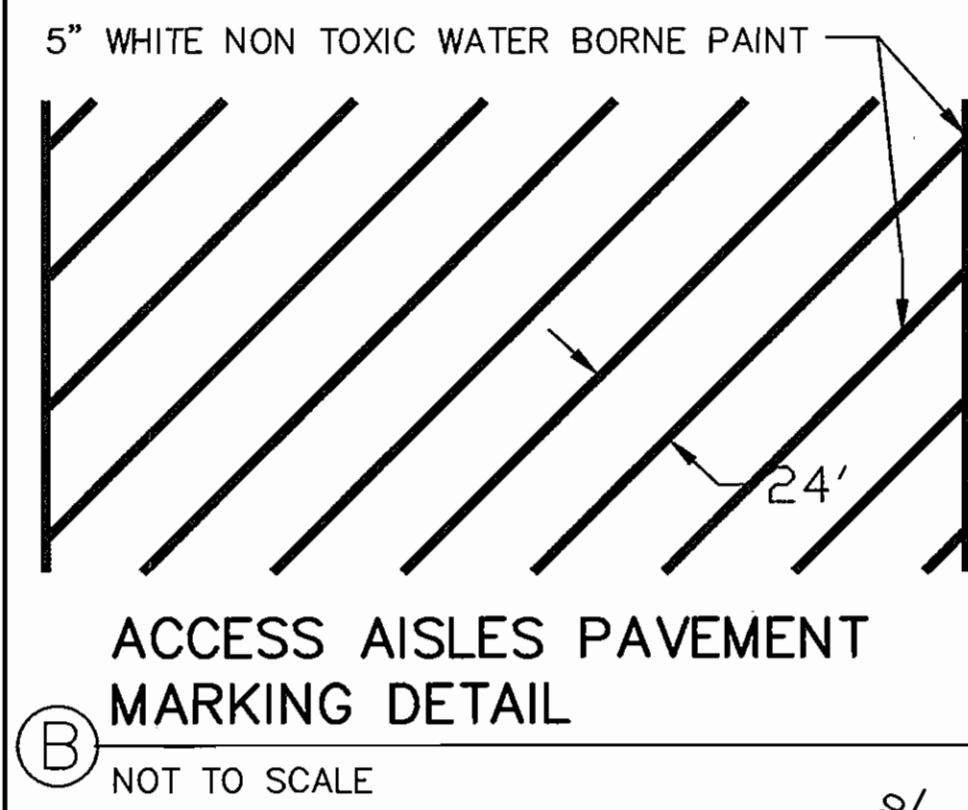
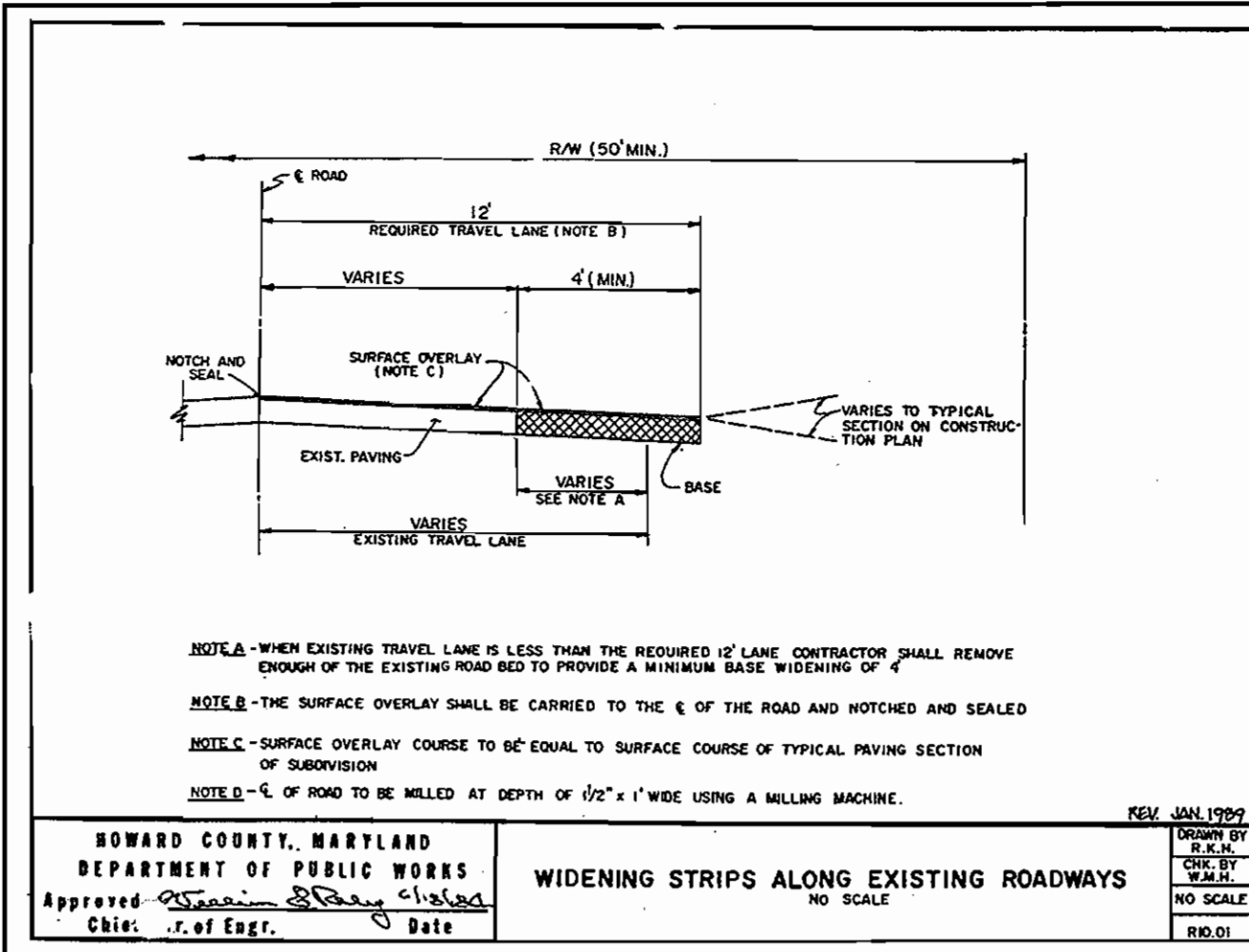


AB CONSULTANTS, INC.
 9450 ANNAPOLIS ROAD
 LANHAM, MARYLAND 20706
 PHONE: (301) 306-3091
 FAX: (301) 306-3092

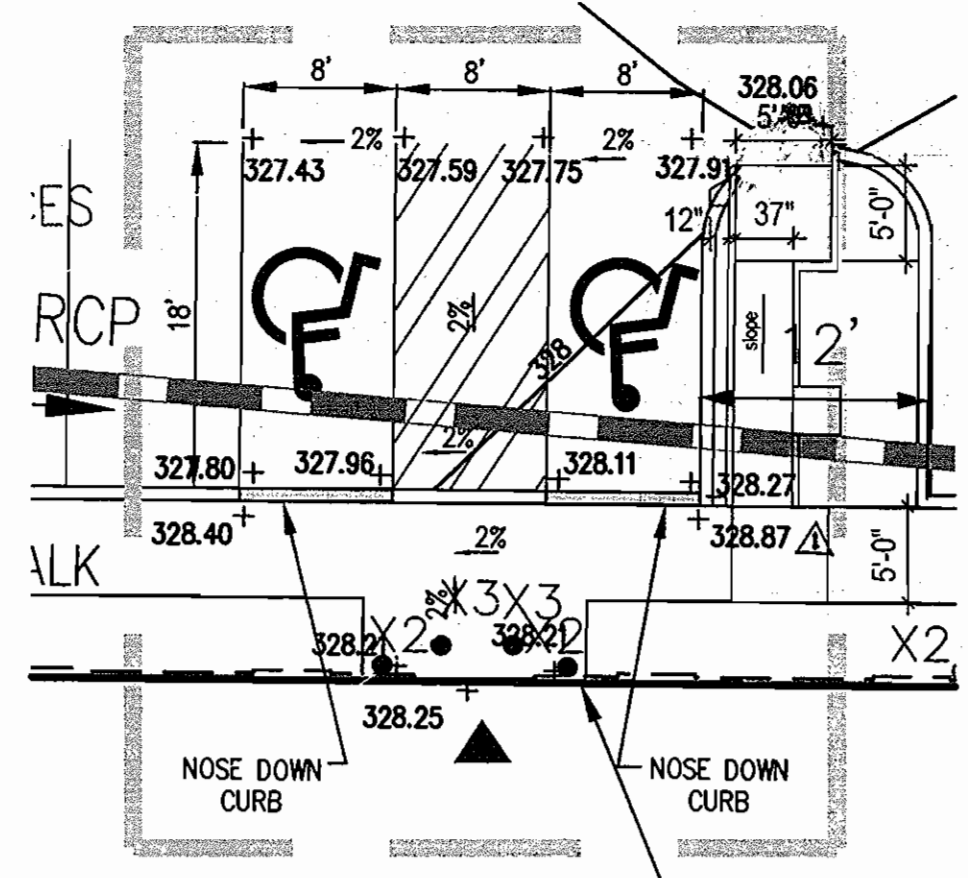
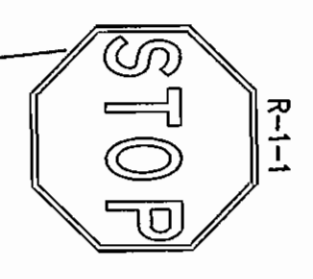
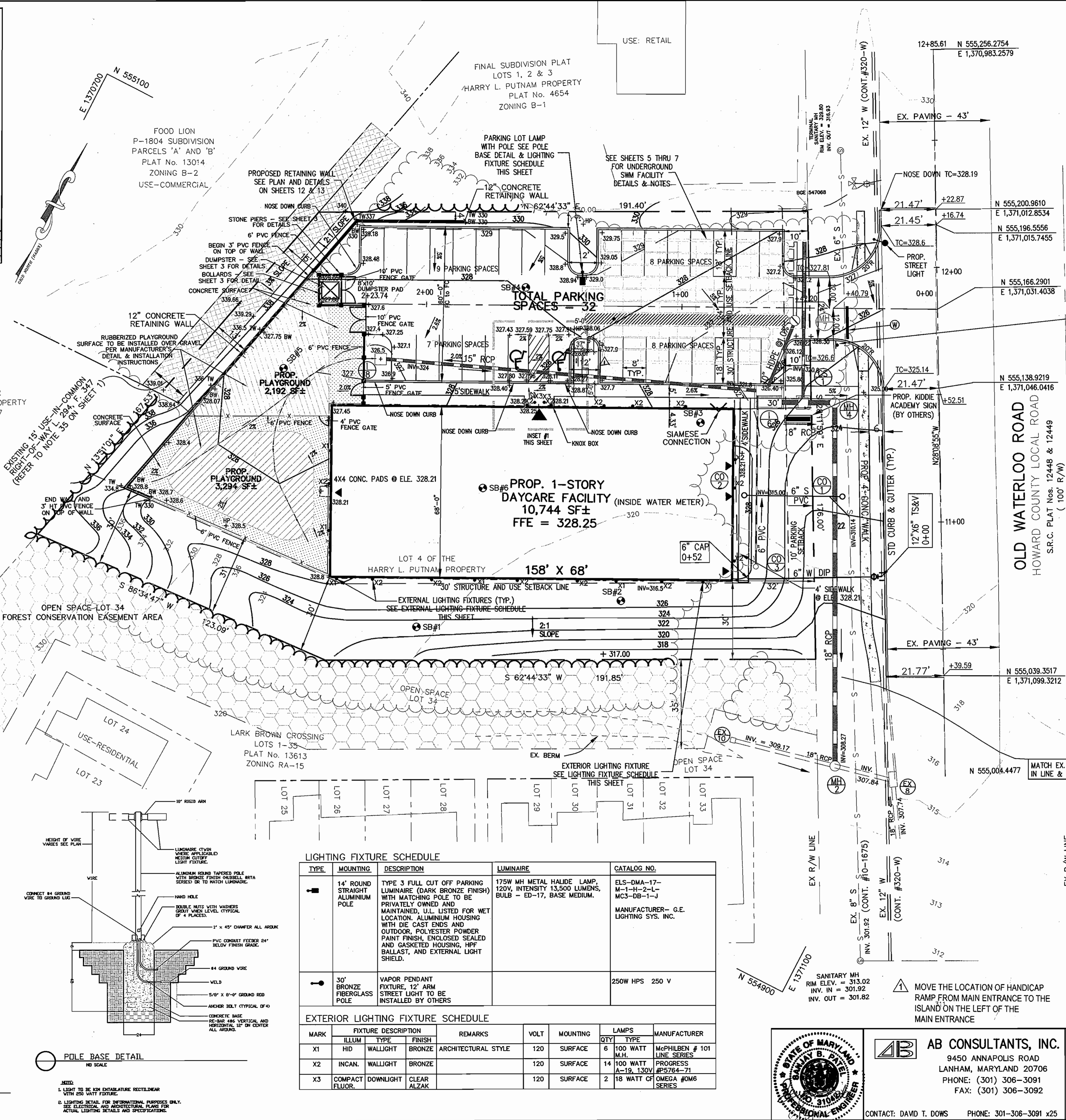
**KIDDIE ACADEMY OF ELKRIDGE
 DAY CARE FACILITY**
 LOT 4 OF THE HARRY L. PUTNAM PROPERTY
PROPOSED DRAINAGE AREA MAP

6th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

PROJECT NO.
05-114
 SCALE: 1"=20'
 DATE: 06/09/06
 DRAWN BY: CADD
 CHECKED BY: DTD
 SHEET: 10 OF 17

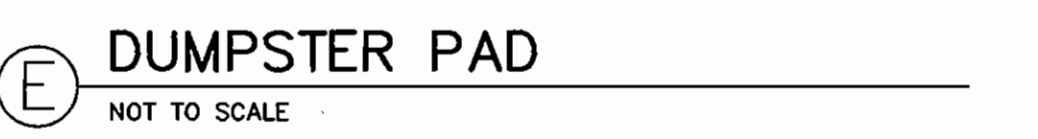
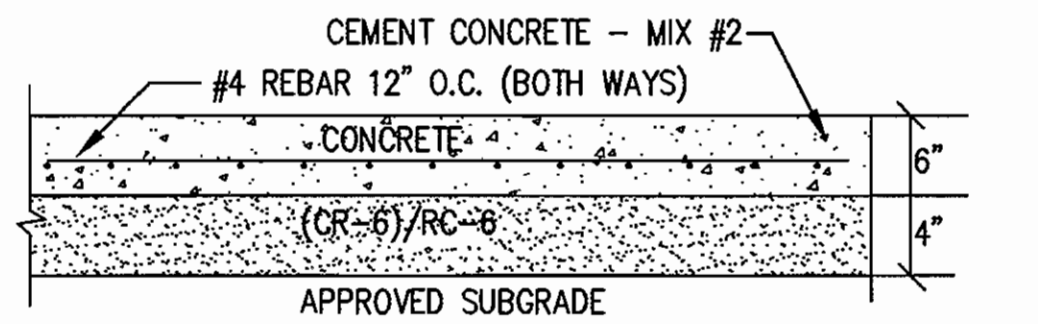


HOWARD COUNTY PAVING SECTION - P2 (HO. CO. DETAIL R-2.01) NOT TO SCALE



- NOTES:**
1. ALL CURB RADII ARE 5' UNLESS OTHERWISE NOTED.
 2. ALL DIMENSIONS ARE TO FACE OF CURB OR BUILDING UNLESS OTHERWISE NOTED.
 3. ALL ON-SITE ROADS ARE PRIVATE.
 4. ALL LIGHTING IS TO BE DIRECTED/REFLECTED AWAY FROM ADJACENT PUBLIC ROADS AND RESIDENTIALLY ZONED PROPERTIES, AND BE IN ACCORDANCE WITH SECTION 134 OF THE HOWARD COUNTY REGULATIONS.
 5. * STD/REV-STANDARD TO REVERSE CURB TRANSITION.
 6. ALL SIDEWALK RADII AREA 3' UNLESS OTHERWISE NOTED.
 7. SWM FACILITY AND ALL STORM DRAIN SYSTEM (INCLUDING STRUCTURE # CS/1 TO MH/2) ARE PRIVATELY OWNED & MAINTAINED.
 8. FOR DETAIL OF STRUCTURE # 1/6, CS/1 AND MH/7 REFER TO SHEET 5.

- GENERAL NOTES**
1. EXISTING CONDITIONS SHOWN HERE ARE BASED ON THE TOPOGRAPHIC SURVEY PERFORMED BY PHR+A.
 2. INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF ALL MAINS BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS, WELL IN ADVANCE OF TRENCHING. IF ANY CLEARANCE IS LESS THAN SHOWN ON THIS PLAN OR TWELVE (12) INCHES, WHICHEVER IS LESS, CONTACT THE DESIGN ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION. THE OWNER SHALL BE NOTIFIED IMMEDIATELY OF ANY UTILITY FINDING WHICH DEVIATE FROM THE CONDITIONS SHOWN.
 3. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH WORK BY OTHERS.
 4. THE MAIN WATER LINE AND WATER HOUSE CONNECTIONS (WHC) MUST HAVE A MINIMUM OF 4' COVER.
 5. PIPE LENGTHS AND LOCATION ARE TO BE DETERMINED IN THE FIELD BEFORE ORDERING.
 6. THE SIZE OF WATER HOUSE CONNECTION SHALL BE 6".
 7. THE SIZE OF SEWER CONNECTION SHALL BE 6".
 8. THE FRONTAGE IMPROVEMENTS SHALL BE PER HOWARD COUNTY STD. DETAIL R 10.01.



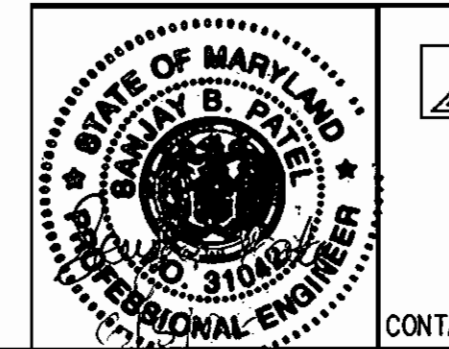
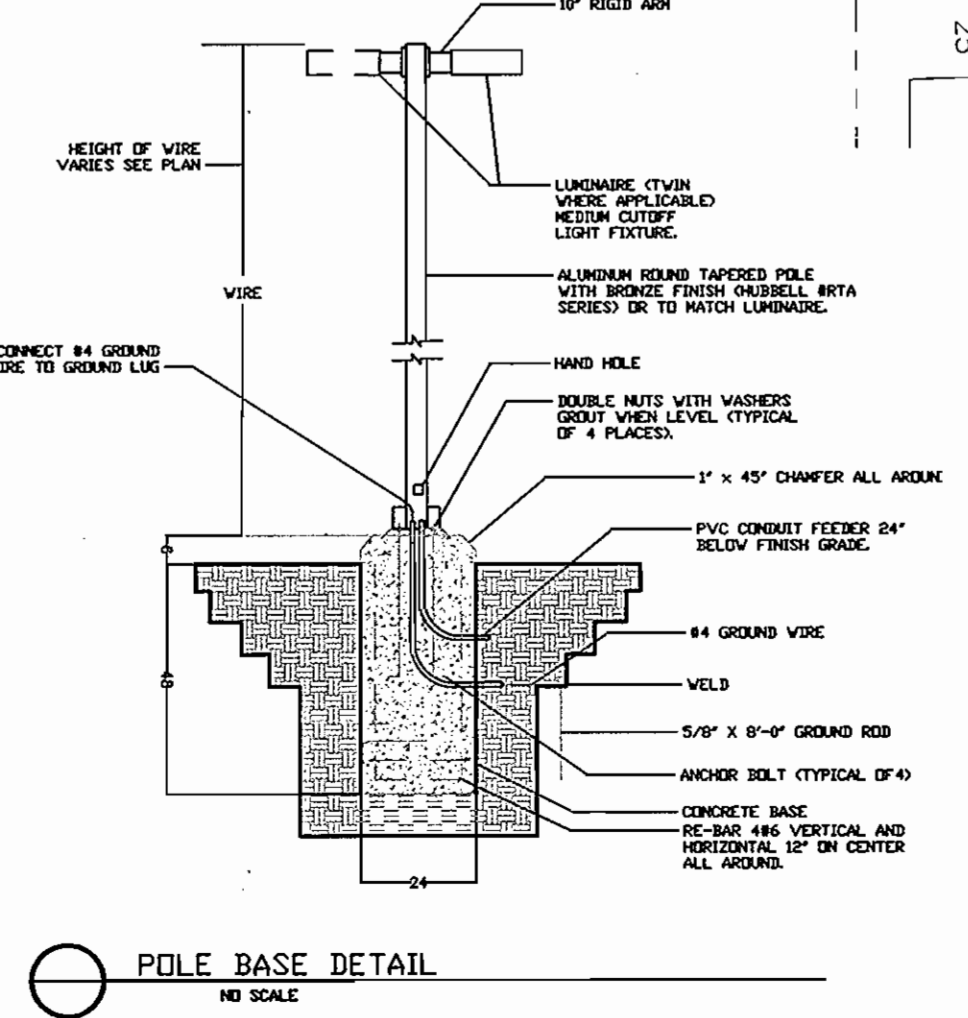
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
 DIRECTOR: *John J. Coyle* DATE: 6/14/06
 CHIEF, DEVELOPMENT ENGINEERING DIVISION: *Walter D. ...* DATE: 6/22/06
 CHIEF, DIVISION OF LAND DEVELOPMENT: *Carolee ...* DATE: 6/22/06

LIGHTING FIXTURE SCHEDULE

TYPE	MOUNTING	DESCRIPTION	LUMINAIRE	CATALOG NO.
14" ROUND STRAIGHT ALUMINUM POLE		TYPE 3 FULL CUT OFF PARKING LUMINAIRE (DARK BRONZE FINISH) WITH MATCHING POLE TO BE PRIVATELY OWNED AND MAINTAINED. U.L. LISTED FOR WET LOCATION. ALUMINUM HOUSING WITH DIE CAST ENDS AND OUTDOOR, POLYESTER POWDER PAINT FINISH, ENCLOSED SEALED AND GASKETED HOUSING, HPF BALLAST, AND EXTERNAL LIGHT SHIELD.	175W MH METAL HALIDE LAMP 120V, INTENSITY 13,500 LUMENS, BULB - ED-17, BASE MEDIUM.	ELS-DMA-17-M-1-H-2-L-MC3-DB-1-J
30" BRONZE VAPOR PENDANT FIBERGLASS POLE		VAPOR PENDANT FIBERGLASS POLE		250W HPS 250 V

EXTERIOR LIGHTING FIXTURE SCHEDULE

MARK	ILLUM	FIXTURE DESCRIPTION	REMARKS	VOLT	MOUNTING	LAMPS	MANUFACTURER
X1	HID	WALLIGHT BRONZE	ARCHITECTURAL STYLE	120	SURFACE	6 100 WATT M.H.	McPHILBEN # 101 LINE SERIES
X2	INCAN.	WALLIGHT BRONZE		120	SURFACE	14 100 WATT A-19, 130V #P5764-71	PROGRESS
X3	COMPACT FLUOR.	DOWNLIGHT CLEAR ALZAK		120	SURFACE	2 18 WATT CF	OMEGA #0M6 SERIES



AB CONSULTANTS, INC.
 9450 ANNAPOLIS ROAD
 LANHAM, MARYLAND 20706
 PHONE: (301) 306-3091
 FAX: (301) 306-3092
 CONTACT: DAVID T. DOWS PHONE: 301-306-3091 x25

KIDDIE ACADEMY OF ELKRIDGE DAY CARE FACILITY
 LOT 4 OF THE HARRY L. PUTNAM PROPERTY
SITE DEVELOPMENT PLAN
 6th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 PROJECT NO. 05-114
 SCALE: 1"=20'
 DATE: 06/09/06
 DRAWN BY: CADD
 CHECKED BY: DTD
 SHEET: 2 OF 17

SHEET INDEX

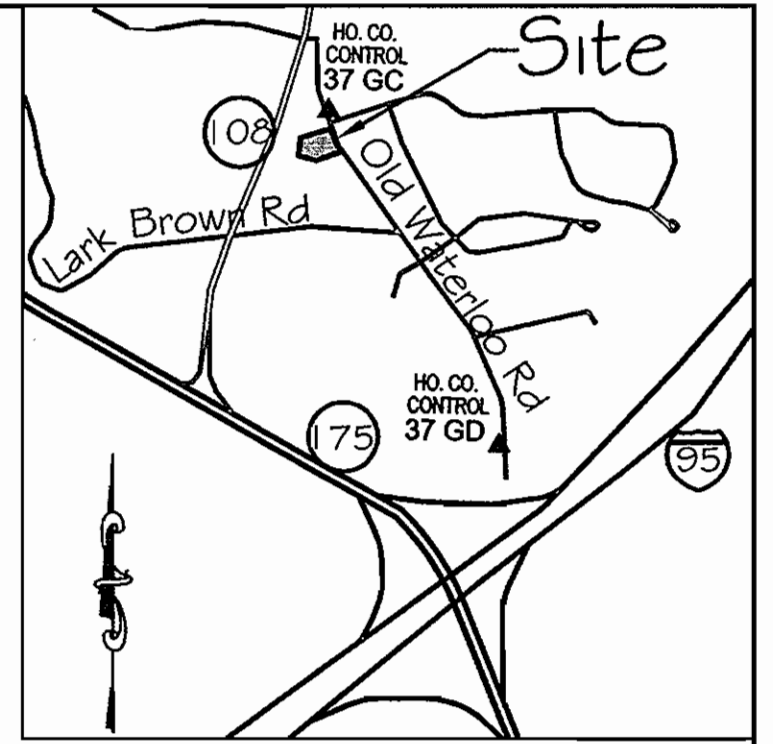
1	TITLE SHEET
2	SITE DEVELOPMENT PLAN
3	SITE DEVELOPMENT PLAN & DETAILS
4	UTILITY PROFILES
5	STRUCTURE DETAILS
6-7	STORMTECH SC-740 CHAMBER DETAILS
8	MD 378 SPECIFICATION
9	EXISTING DRAINAGE AREA MAP
10	PROPOSED DRAINAGE AREA MAP
11	ONSITE DRAINAGE AREA AND STORM DRAIN STUDY
12	GRADING, EROSION, AND SEDIMENT CONTROL PLAN
13	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS
14	LANDSCAPE PLAN, NOTES AND SCHEDULES
15	FOREST CONSERVATION PLAN
16-17	WALL DESIGN/DETAIL

SITE DEVELOPMENT PLAN

KIDDIE ACADEMY OF ELKRIDGE

6th ELECTION DISTRICT

HOWARD COUNTY, MARYLAND



VICINITY MAP
SCALE: 1" = 2000'

BENCH MARK
HOWARD COUNTY SURVEY CONTROL STATION : 37GD
ELEVATION 290.93
N 553,237.204
E 1,372,353.605

HOWARD COUNTY SURVEY CONTROL STATION : 37GC
ELEVATION 331.86
N 555,250.791
E 1,370,946.348

SITE DATA

AREA OF PARCEL	1.00 Ac.
DISTURBED AREA	1.18 Ac.
PRESENT ZONING	B-1
PROPOSED USE	CHILD DAY CARE CENTER
BUILDING COVERAGE	10,744 SF (25% OF GROSS AREA)

OF PARKING SPACES REQUIRED
10,744 SF @ 3 SP/1,000 SF = 32 SPACES

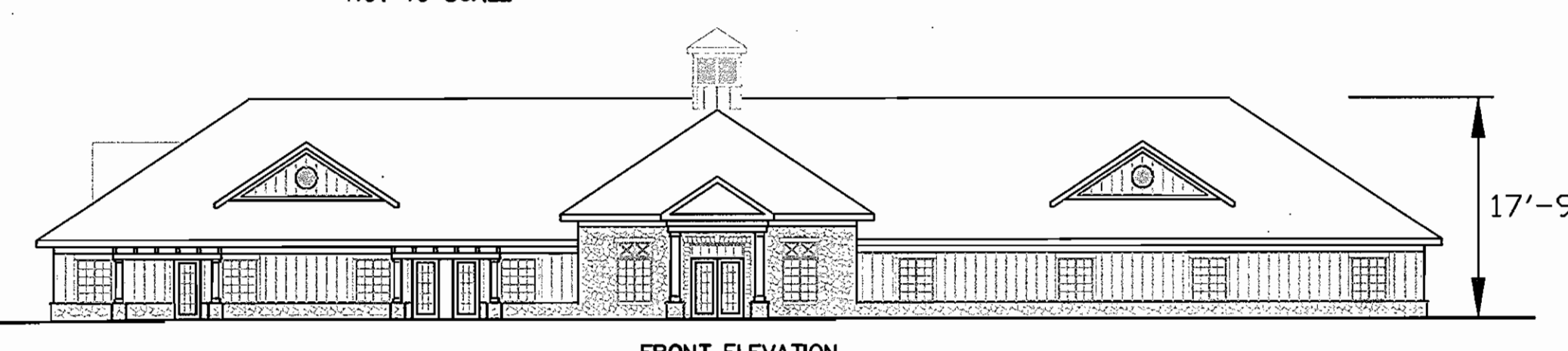
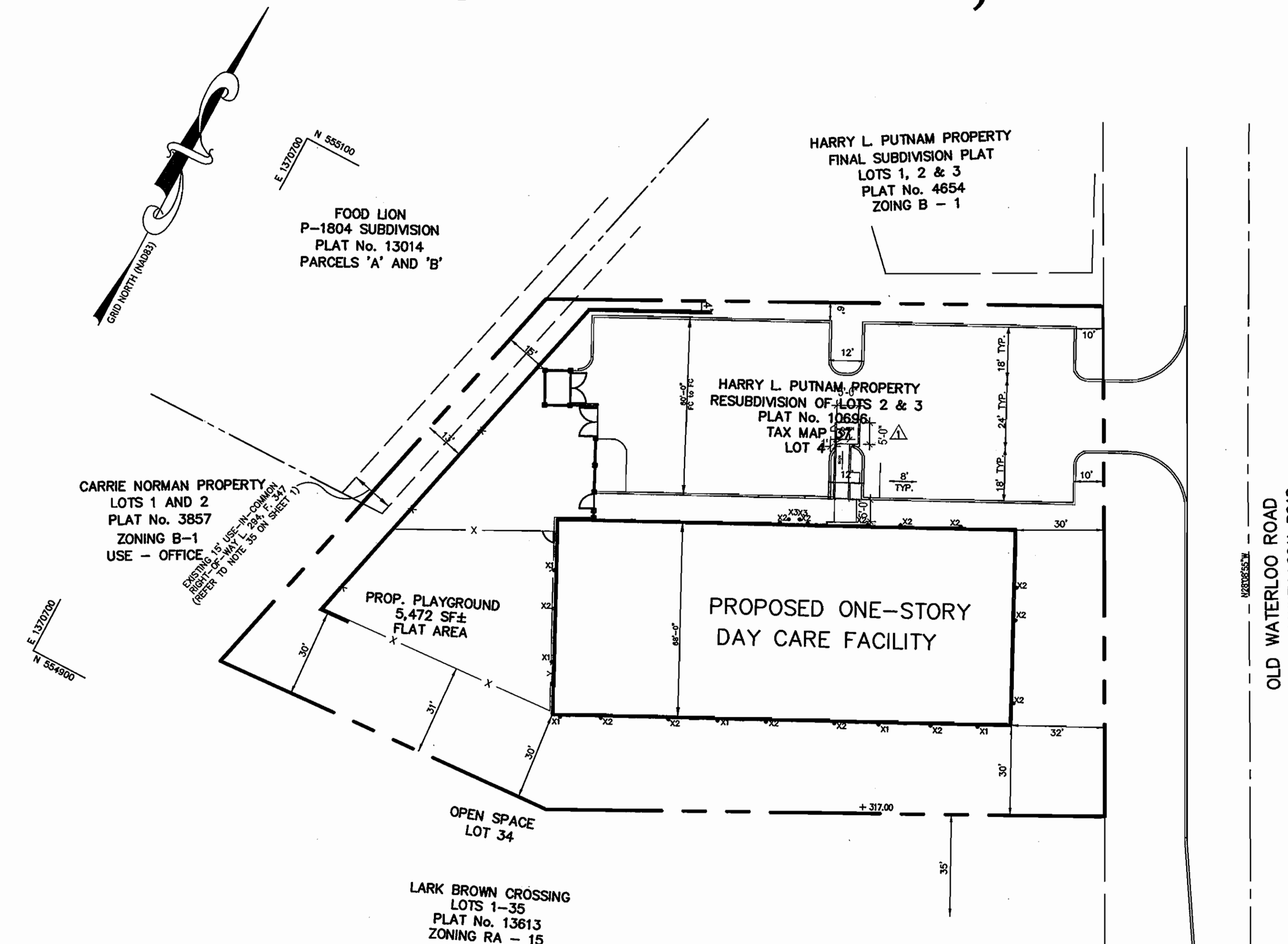
OF PARKING SPACES PROVIDED
= 32 SPACES (INCLUDING 2 HC)

DPZ FILE REFERENCES
F-92-135
SDP 05-053 (VOIDED BY DPZ
PM 07/18/05)

MAXIMUM NUMBER
OF EMPLOYEES: 20 EMPLOYEES

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATION IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION. AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB AND FACE OF BUILDING UNLESS OTHERWISE NOTED.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM A FIELD SURVEY, PREPARED BY PHR+A, DATED 6/25/04.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 37GD AND 37GC WERE USED FOR THIS PROJECT.
- WATER IS PUBLIC. CONTRACT NO. 320-W.
- SEWER IS PUBLIC. CONTRACT NO. 10-1675.
- THE STORMWATER MANAGEMENT QUANTITY AND WATER QUALITY PROPOSED FOR THIS SITE WILL BE ACHIEVED VIA AN INFILTRATION TRENCH AND WILL BE PRIVATELY MAINTAINED.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICES. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
- A 100-YEAR FLOODPLAIN STUDY IS NOT REQUIRED FOR THIS PROJECT.
- THERE ARE NO WETLANDS ON THIS SITE.
- A TRAFFIC IMPACT ANALYSIS HAS BEEN PREPARED BY STREET TRAFFIC STUDIES, LTD. DATED SEPTEMBER 16, 2005
- A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- A GEOTECHNICAL STUDY HAS BEEN PREPARED BY KONDNER ENGINEERING AND TECHNICAL SERVICES, DATED 7/28/04.
- THE BOUNDARY SURVEY FOR THIS PROJECT HAS BEEN PREPARED BY PHR+A, DATED 6/25/04.
- SUBJECT PROPERTY ZONED B-1 PER 2/02/04 COMPREHENSIVE ZONING PLAN.
- SEE DEPARTMENT OF PLANNING AND ZONING FILE NOS. F-92-135 & SDP 05-053 (VOIDED BY DPZ ON 07/18/05.)
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.
- ALL STORM DRAIN PIPE BEDDING SHALL BE CLASS "C" AS SHOWN IN FIG. 11.4, VOLUME 1 OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE NOTED.
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- PROFILES STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN.
- ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO T100.
- THE PAVEMENT DETAILS SHOWN FOR THIS SITE REFLECT THE HOWARD COUNTY STANDARD PAVEMENT SECTIONS AND ARE NOT BASED ON SITE SPECIFIC CONDITIONS. PRIOR TO PAVING THE FINAL PAVEMENT SECTIONS SHALL BE DETERMINED BY A QUALIFIED GEOTECHNICAL ENGINEER BASED ON IN-SITU TESTING OF THE FINISHED SUBGRADE.
- IN ACCORDANCE WITH SECTION 16.1202 OF THE FOREST CONSERVATION MANUAL, A FEE-IN-LIEU OF FOREST CONSERVATION OBLIGATION FOR THIS PROJECT HAS BEEN PAID TO THE HO. CO. FOREST CONSERVATION FUND FOR 0.48 ACRES OF REFORESTATION IN THE AMOUNT OF \$10,454.40.
- ALL OUTDOOR LIGHTING SHALL COMPLY WITH THE REQUIREMENTS OF ZONING SECTION 134.
- LANDSCAPING IN ACCORDANCE WITH SECTION 16.124 OF THE LANDSCAPE MANUAL SHALL BE PROVIDED AS SHOWN ON THIS SITE PLAN. LANDSCAPE SURETY IN THE AMOUNT OF \$8,910.00 HAS BEEN POSTED AS A PART OF THE DEVELOPER'S AGREEMENT.
- CONTRACTOR TO CONNECT ALL ROOF DRAIN INTO INLET 1/6 FROM BACK OF BUILDING.
- ALL LIGHTING IS TO BE DIRECTED/REFLECTED AWAY FROM ADJACENT PUBLIC ROADS AND RESIDENTIALLY ZONED PROPERTIES, AND BE IN ACCORDANCE WITH SECTION 134 OF THE HOWARD COUNTY REGULATIONS.
- THE EXISTING 15' USE-IN-COMMON R/W IS A PRIVATE ACCESS AUTHORIZED FOR THE FOLLOWING PROPERTIES:
FOOD LION - TM. 37 P.366 LOT PAR4 JOHN PATRICK DOYLE - TM. 37 P.613 LOT 1
JOHN PATRICK DOYLE - TM. 37 P.264 WATERLOO ROAD LLC - TM. 37 P.613 LOT 4
- A KNOX BOX IS TO BE PLACED NO FURTHER THAN 6 FEET AWAY FROM THE MAIN ENTRANCE AND WIRED TO FIRE ALARM PANEL.

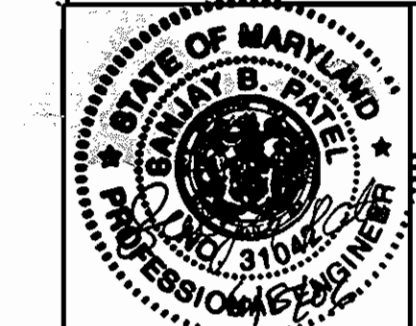


△ MOVE THE LOCATION OF HANDICAP RAMP FROM MAIN ENTRANCE TO THE ISLAND ON THE LEFT OF THE MAIN ENTRANCE

ADDRESS CHART

PARCEL	STREET ADDRESS
P/O 613/LOT 4	6534 OLD WATERLOO ROAD

SUBDIVISION NAME:		SECT./AREA:	PARCEL:
THE HARRY L. PUTNAM PROPERTY		-	P/O 613/ LOT 4
PLAT #:	BLOCK #:	ZONE:	TAX MAP NO. :
10696	20	B-1	37
WATER CODE:		ELECT. DIST. :	CENSUS TRACT:
E-08		6 TH	6067.03
SEWER CODE:			
2521000			



AB CONSULTANTS, INC.
9450 ANNAPOLIS ROAD
LANHAM, MARYLAND 20706
PHONE: (301) 306-3091
FAX: (301) 306-3092

KIDDIE ACADEMY OF ELKRIDGE DAY CARE FACILITY
LOT 4 OF THE HARRY L. PUTNAM PROPERTY

TITLE SHEET
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

<i>Mark J. Ungel</i>	6/20/06
DIRECTOR	DATE
<i>Walter D. ...</i>	6/20/06
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>Cathy ...</i>	6/27/06
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE

10-12-07	△	RELOCATION OF HANDICAP RAMP
DATE	NO.	REVISION

OWNER:
Chamberlain Construction Inc of MD
3219-A Corporate Court
Ellicott City, Maryland 21042
Attn: Doug Chamberlain
410-203-2460

DEVELOPERS:
Patel Associates, LLC
5105 Santa Fe Court
Ellicott City, MD 21043
410-715-4626

Kiddie Academy
Chris Commarata
108 Wheel Road
Bel Air, MD 21015
410-569-9165 x240