

SHEET INDEX	
NO.	DESCRIPTION
1	TITLE SHEET
2	SITE DEVELOPMENT AND GRADING PLAN
3	SEDIMENT AND EROSION CONTROL PLAN, NOTES AND DETAILS SWM PROFILES, SPECIFICATIONS AND DETAILS

GENERAL NOTES

- SUBJECT PROPERTY ZONED R-20 PER THE 2-2-04 COMPREHENSIVE ZONING PLAN AND THE COMP-LITE ZONING AMENDMENTS DATED JULY 28, 2006.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY PREPARED BY FISHER COLLINS AND CARTER INC., DATED JULY 2006, AND ROAD CONSTRUCTION PLANS F-09-018. ALL VERTICAL CONTROLS ARE BASED ON NAVD '83. BOUNDARY IS BASED ON FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED BY SHANABERGER & LANE, ON OR ABOUT APRIL, 2005.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE COORDINATE SYSTEM (NAD '83/91). HOWARD COUNTY MONUMENT NOS. 246C AND 246E WERE USED FOR THIS PROJECT.
- WATER AND SEWER ARE PUBLIC AND EXISTING UTILITIES ARE BASED ON CONTRACT 24-4377-D.
- STORMWATER MANAGEMENT WILL BE PROVIDED IN ACCORDANCE WITH F-09-018, USING DISCONNECTION OF ROOFTOP AND NON-ROOFTOP RUNOFF METHODS, ALONG WITH BIORETENTION FACILITIES. CONSTRUCTION DETAILS ARE PROVIDED HEREIN.
- EXISTING UTILITIES SHOWN WERE LOCATED BY RECORD DRAWINGS AND FIELD LOCATIONS AND PER F-09-018. IF NECESSARY, CONTRACTOR SHALL ADJUST STRUCTURE TOPS TO MEET SDP GRADES.
- THERE ARE NO FLOODPLAINS OR STEEP SLOPES ON THIS SITE.
- THERE ARE NO WETLANDS ON THIS SITE PER A WETLAND STUDY PERFORMED BY ECO-SCIENCE PROFESSIONALS, INC., DATED NOVEMBER, 2006, AND APPROVED WITH SP-07-006.
- A TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY THE MARS GROUP DATED NOVEMBER, 2005 AND WAS APPROVED UNDER F-09-018.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING WAS POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$5,400.00 FOR 17 SHADE TREES AND 10 SHRUBS, PER F-09-018.
- THIS PROJECT COMPLIED WITH THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BY PAYMENT OF A FEE-IN-LIEU OF \$18,822.00 FOR THE TOTAL FOREST CONSERVATION OBLIGATION AMOUNT OF 0.57 ACRES. THIS FEE WAS PAID WITH F-09-018 TO THE HOWARD COUNTY FOREST CONSERVATION FUND.
- UNLESS NOTED AS "PRIVATE", ALL EASEMENTS ARE PUBLIC.
- E.R.L. INDICATES ZONING RESTRICTION LINE. OTHER RESTRICTIONS MAY APPLY.
- IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS; BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACK PORCHES OR DECKS OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE BUILDERS EXPENSE.
- NO NOISE STUDY IS REQUIRED FOR THIS PROJECT.
- TRACT BOUNDARY ESTABLISHED BY A FIELD RUN SURVEY PERFORMED BY SHANABERGER & LANE DATED APRIL 2005.
- FOR FLAG OR PIPE STEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF PIPE STEM AND ROAD RIGHT OF WAY LINE ONLY AND NOT ONTO THE FLAG OF PIPE STEM LOT DRIVEWAY.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 - WIDTH - 12' (16' SERVING MORE THAN ONE RESIDENCE)
 - SURFACE - 6" OF COMPACT CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2" MIN.)
 - GEOMETRY - MAXIMUM 14% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM 45' TURNING RADIUS.
 - STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING).
 - DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOODPLAIN WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY.
 - STRUCTURE CLEARANCES - MINIMUM 12 FEET.
 - MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY.
- ALL WATER METERS SHALL BE SET INSIDE.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- FOR DRIVEWAY ENTRANCE DETAIL SEE HOWARD COUNTY STANDARD DETAILS R-6.03 & R-6.05.
- SIC ELEVATIONS SHOWN ARE AT THE PROPERTY LINE OR EASEMENT LINE.
- THE PRIVATE USE-IN-COMMON MAINTENANCE AGREEMENT FOR LOTS 1-5 HAS BEEN RECORDED IN THE LAND RECORDS OF HOWARD COUNTY, MARYLAND IN LIBER 124823 - AT FOLIO 3-22.
- THE STAKING OF FOUNDATIONS PRIOR TO CONSTRUCTION TO ENSURE COMPLIANCE WITH REGULATORY BUILDING RESTRICTION LINES IS RECOMMENDED.
- DRIVEWAY SLOPES SHOWN ARE AVERAGE. THE SLOPE AT THE OUTSIDE EDGES COULD BE FLATTER OR STEEPER DEPENDING ON GRADE OF ROADWAY.
- THIS PLAN CONFORMS WITH THE AMENDED 5th EDITION OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. THE BUILDER SHALL APPLY FOR BUILDING PERMITS FOR ALL LOTS AS SHOWN ON THIS SITE DEVELOPMENT PLAN WITHIN FIVE YEARS OF SIGNATURE APPROVAL OF THIS PLAN.
- A FEE-IN-LIEU OF PROVIDING OPEN SPACE HAS BEEN PAID IN THE AMOUNT OF \$6000.00, AS PART OF THE RESUBDIVISION UNDER F-09-018.
- A PRIVATE ROAD STREET NAME SIGN (S/N/S) ASSEMBLY OR PRIVATE RANGE OF ADDRESS SIGN THAT NEEDS TO BE INSTALLED AT THE INTERSECTION OF THE PRIVATE ROAD WITH A PUBLIC ROAD SHALL BE FABRICATED AND INSTALLED BY HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPERS/OWNERS EXPENSE. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-5752 FOR DETAILS AND COST ESTIMATES.
- 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.
- ALL STORMWATER MANAGEMENT DETAILS AND DESIGNS PER APPROVED F-09-018 AND "REVISED - FINAL STORMWATER MANAGEMENT COMPUTATIONS" DATED OCTOBER 25, 2007, AS PROVIDED BY FISHER COLLINS AND CARTER, INC.
- ~~LOTS 2-5 WILL MEET STORMWATER MANAGEMENT REQUIREMENTS USING MICRO-BIORETENTION (M-B) FACILITIES ARE PRIVATELY OWNED AND MAINTAINED IN ACCORDANCE WITH INDIVIDUAL DECLARATIONS OF COVENANTS.~~

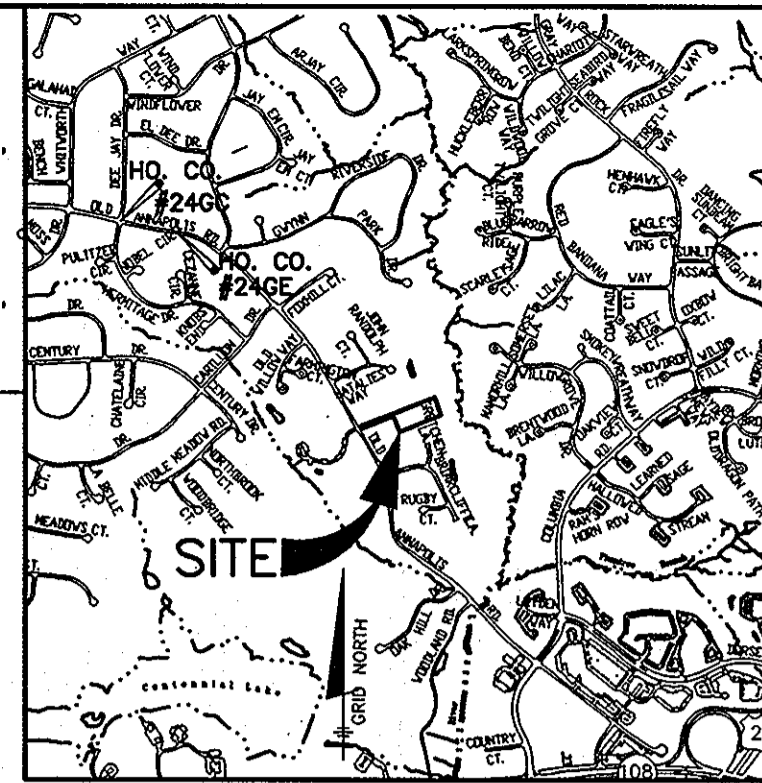
SITE DEVELOPMENT PLAN

CENTENNIAL MEADOWS

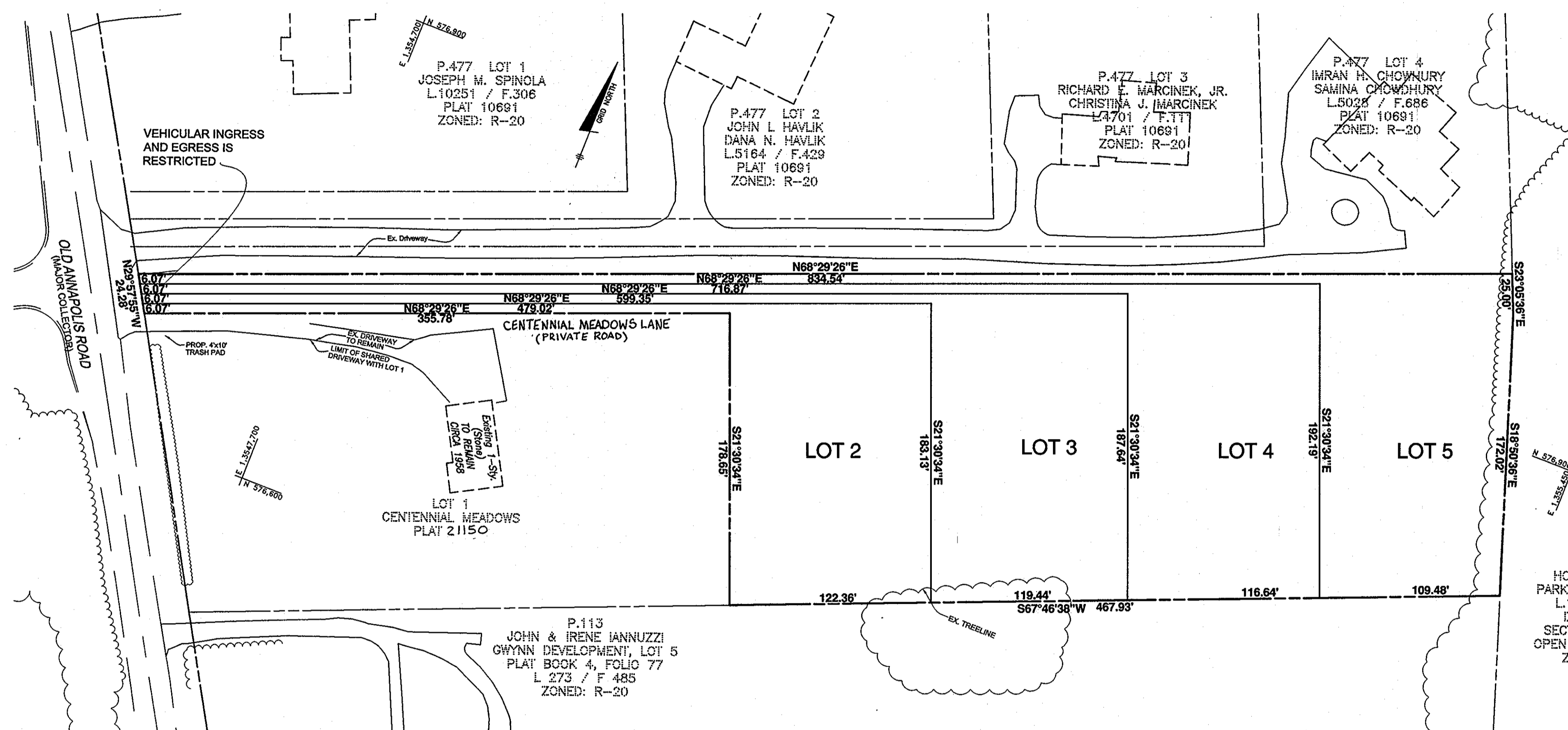
2nd ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

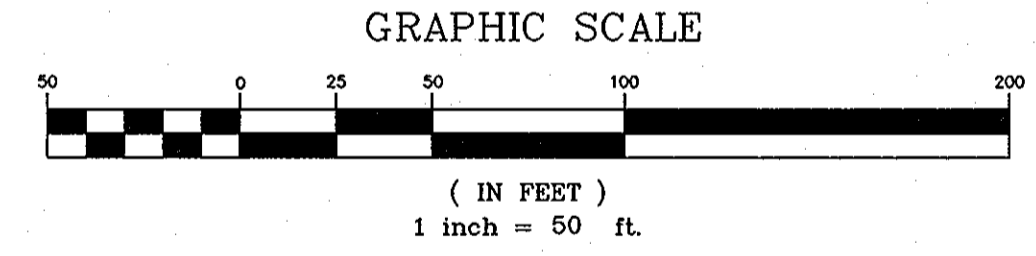
BENCH MARKS--(NAD'83)	
HO. CO. #246C	EL. 439.58'
N 578,868.583'	E 1,352,120.690'
STANDARD DISC ON CONC. MONUMENT	
HO. CO. #246E	EL. 446.44'
N 578,706.480'	E 1,352,699.690'
STANDARD DISC ON CONC. MONUMENT	



VICINITY MAP
SCALE: 1"=2000'
ADC MAP 11, GRID H12



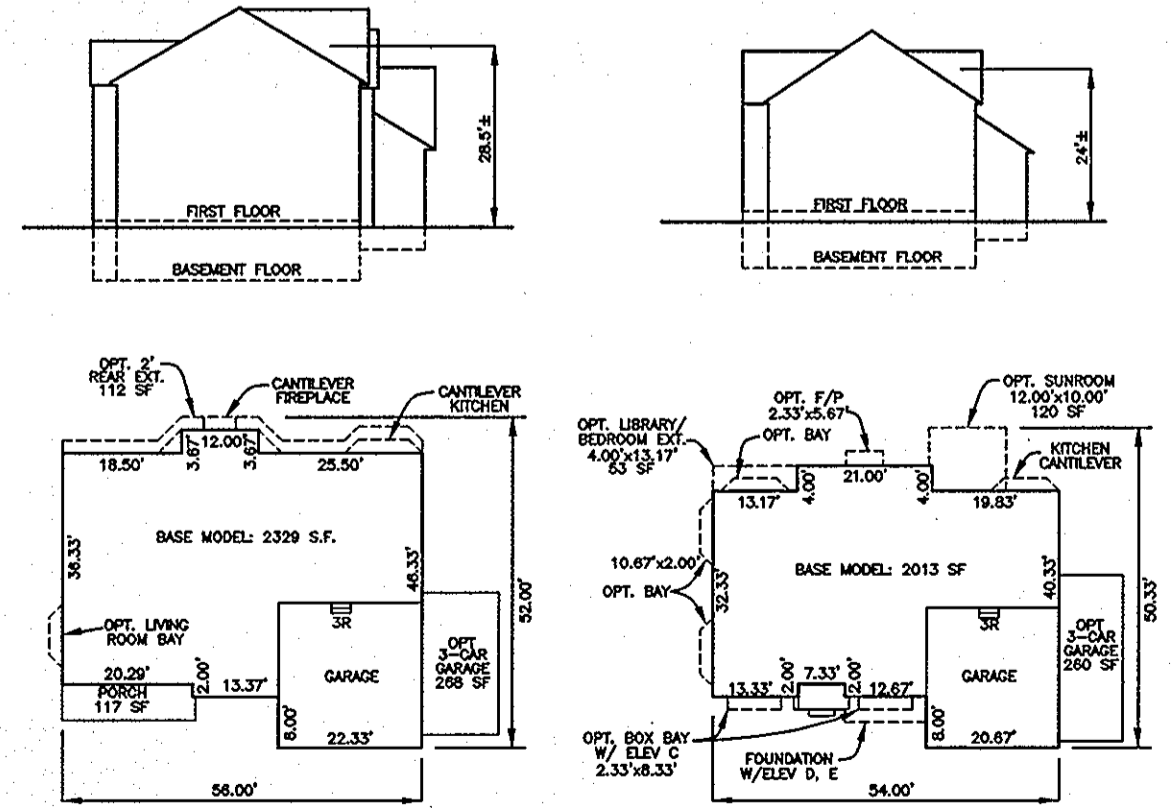
PLAN
SCALE: 1" = 50'



LEGEND	
EXISTING CONTOUR	- - - - -
PROPOSED CONTOUR	- - - - -
EXISTING WOODS LINE	- - - - -
EXISTING STRUCTURE	[Symbol]
PROPOSED STRUCTURE	[Symbol]
BUILDING RESTRICTION LINE	[Symbol]
FIRST FLOOR ELEVATION	FF=350.9
BASEMENT FLOOR ELEVATION	B=-341.9
EX. UTILITY POLE	[Symbol]
EXISTING STREET TREE PER F-09-018	[Symbol]
EXISTING PERMITS AND SCREENING TREES & SHRUBS PER F-09-018	[Symbol]
PUBLIC WATER AND/OR SEWER & UTILITY EASEMENT	[Symbol]
PRIVATE USE-IN-COMMON ACCESS EASEMENT	[Symbol]
1% - 24% SLOPES	[Symbol]

SITE ANALYSIS DATA CHART

A) TOTAL PROJECT AREA	2.36 AC.
B) AREA OF THIS PLAN SUBMISSION	2.36 AC.
C) APPROXIMATE LIMIT OF DISTURBANCE	2.36 AC.
D) PRESENT ZONING:	R-20
E) PROPOSED USE OF SITE:	RESIDENTIAL SINGLE FAMILY DETACHED UNITS
F) FLOOR SPACE PER LOT	N/A
G) TOTAL NUMBER OF UNITS ALLOWED AS SHOWN ON FINAL PLAT(S)	4
H) TOTAL NUMBER OF UNITS PROPOSED	4
I) MAXIMUM NUMBER OF EMPLOYEES PER USE	N/A
J) NUMBER OF PARKING SPACES REQUIRED BY HO. CO. ZONING REGULATIONS	N/A
K) NUMBER OF PARKING SPACES PROVIDED	N/A
L) OPEN SPACE ON-SITE PERCENTAGE OF GROSS AREA	N/A
M) AREA OF RECREATIONAL OPEN SPACE REQUIRED	N/A
N) BUILDING COVERAGE OF SITE PERCENTAGE OF GROSS AREA	N/A
O) APPLICABLE DPZ FILE REFERENCES:	SP-07-006, F-09-018 F-09-104 CONTRACT # 24-4377-D
P) PROPOSED WATER AND SEWER SYSTEMS:	<input checked="" type="checkbox"/> PUBLIC <input type="checkbox"/> PRIVATE



TUSCANY
DEVONSHIRE
HOUSE FOOTPRINTS
SCALE: 1" = 30'

MINIMUM LOT SIZE CHART			
LOT	GROSS AREA	PIPESTEM AREA	MINIMUM LOT SIZE
2	24,637 S.F.	2,137 S.F.	22,500 S.F.
3	25,376 S.F.	2,877 S.F.	22,499 S.F.
4	26,099 S.F.	3,599 S.F.	22,500 S.F.
5	26,805 S.F.	4,304 S.F.	22,501 S.F.

ADDRESS CHART	
LOT	STREET ADDRESS
2	9712 CENTENNIAL MEADOWS LANE
3	9716 CENTENNIAL MEADOWS LANE
4	9720 CENTENNIAL MEADOWS LANE
5	9724 CENTENNIAL MEADOWS LANE

PERMIT INFORMATION CHART				
SUBDIVISION NAME:	SECTION/AREA:	LOT #	TAX MAP	ELECTION DISTRICT
CENTENNIAL MEADOWS	N/A	LOTS 2 - 5	30	2nd
PLAT No.	GRID No.	ZONE	TAX MAP	ELECTION DISTRICT
21149-21150	3	R-20	30	2nd
CENSUS TRACT				
				6023.04

NO.	DATE	REVISION

BENCHMARK ENGINEERING, INC.

410-465-8105 (F) 410-465-8644

60 THOMAS JOHNSON DRIVE A FREDERICK, MARYLAND 21702

WWW.BE-ENGINEERING.COM

STATE OF MARYLAND
PROFESSIONAL ENGINEER
3/19/2010

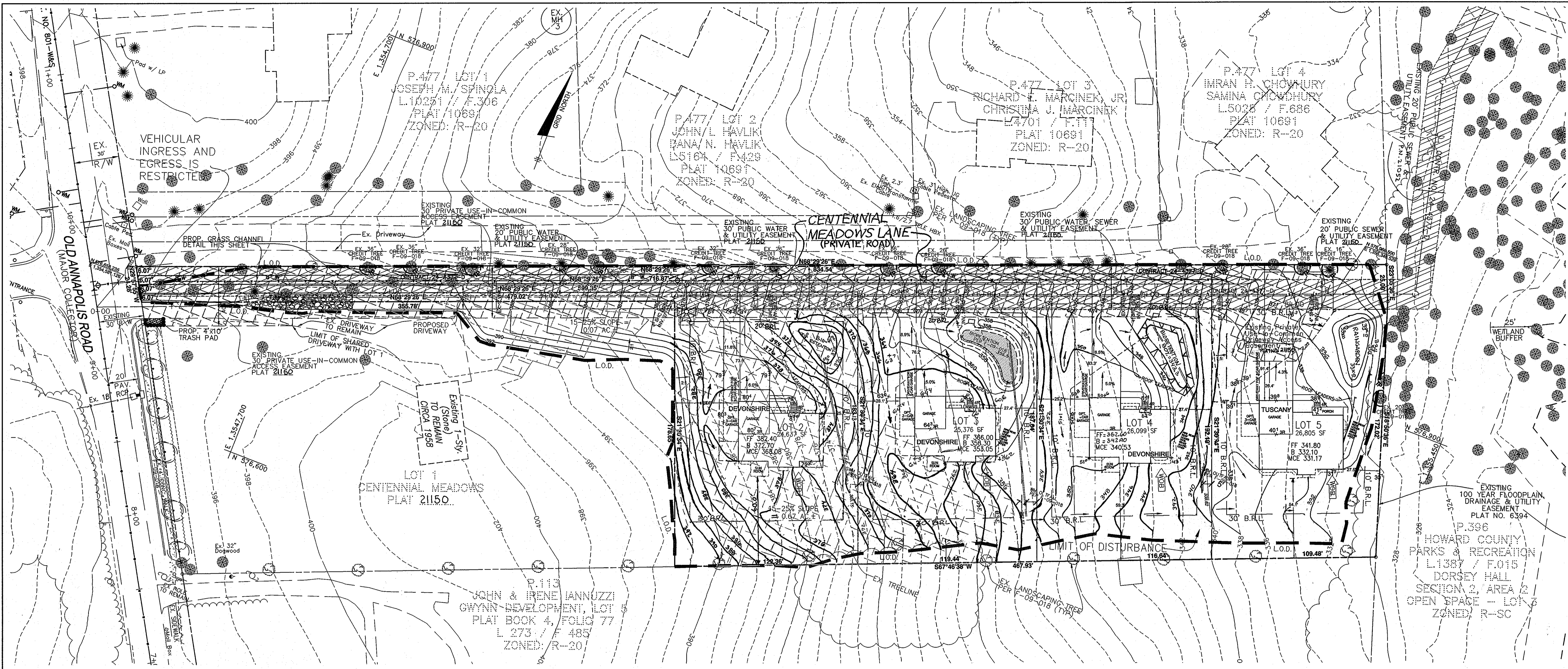
OWNER: LOWELL D. RAU 9780 OLD ANNAPOLIS ROAD ELLICOTT CITY, MARYLAND 21042 410-730-8954	PROJECT: CENTENNIAL MEADOWS LOTS 2 THROUGH 5
BUILDER: CORNERSTONE HOLDINGS, LLC 9695 NORFOLK AVENUE LAUREL, MARYLAND 20723 410-792-2565	LOCATION: TAX MAP 30, GRID 3 PARCEL TM PARCEL 112 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TITLE: TITLE SHEET SP-07-006, F-09-018, F-09-104 CONTRACT # 24-4377-D	DATE: DECEMBER, 2009 MARCH, 2010
DES: AAM DRAFT: AAM CHECK: BFC	PROJECT NO. 2266 DRAWING 1 OF 3

APPROVED: DEPARTMENT OF PLANNING AND ZONING

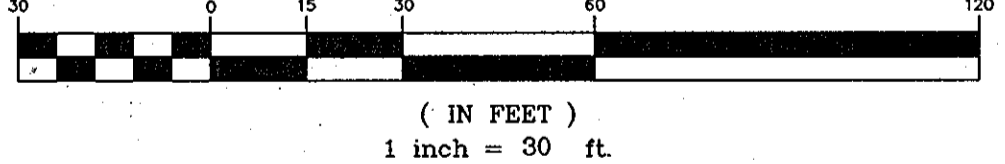
[Signature] 6/24/10
CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 6/24/10
CHIEF, DEVELOPMENT ENGINEERING DIVISION

[Signature] 6/24/10
DIRECTOR

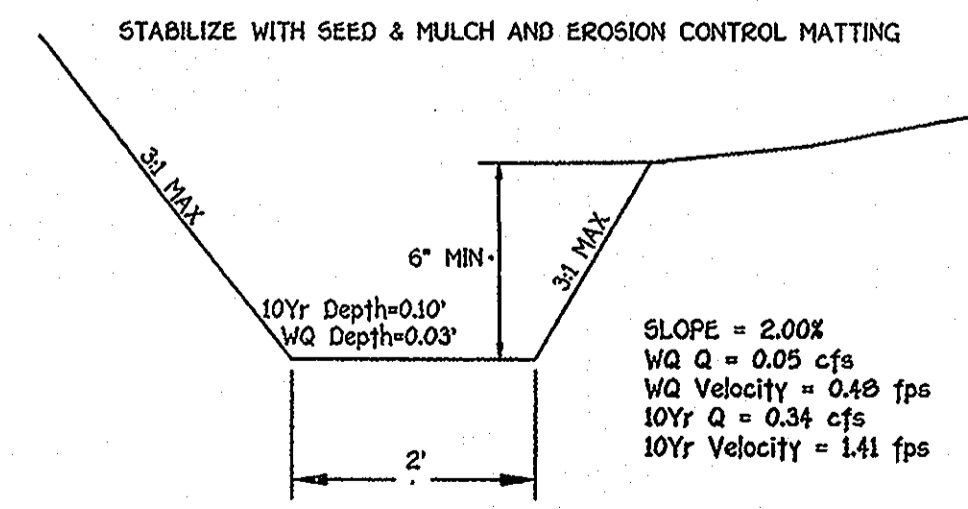
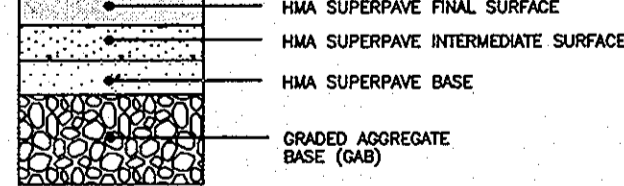


PLAN
SCALE: 1" = 30'



SECTION NUMBER	ROAD AND STREET CLASSIFICATION	CALIFORNIA BEARING RATIO (CBR)	3 TO <5			5 TO <7			7 TO <9		
			MIN HMA WITH GAB	HMA WITH CONSTANT GAB							
P-1	PARKING BAYS, RESIDENTIAL AND NON-RESIDENTIAL PARKING DRIVE AISLES, RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 2 HEAVY TRUCKS PER DAY	HMA SUPERPAVE FINAL SURFACE	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
		HMA SUPERPAVE INTERMEDIATE SURFACE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		HMA SUPERPAVE BASE	2.0	2.0	2.0	3.5	3.0	2.5			
		GRADED AGGREGATE BASE (GAB)	8.5	7.0	5.0	4.0	4.0	4.0			

P-1 PAVING DETAIL



*GRASS CHANNEL DETAIL
NO TO SCALE

*ALL STORMWATER MANAGEMENT DETAILS AND DESIGNS PER APPROVED F-09-018 AND "REVISED - FINAL STORMWATER MANAGEMENT COMPUTATIONS" DATED OCTOBER 25, 2007, AS PROVIDED BY FISHER COLLINS AND CARTER, INC.

LOT	INV. @ MAIN	INV. @ ROW/ESMT	MCE
2	362.62	362.82	368.08
3	347.25	347.45	353.05
4	334.89	335.09	340.53
5	325.77	325.97	331.17

CONTRACTOR TO CHECK SEWER HOUSE CONNECTION ELEVATION AT PROPERTY/EASEMENT LINE PRIOR TO CONSTRUCTION OF HOUSE TO ENSURE PROPER SHO SLOPES CAN BE MAINTAINED.

LEGEND

- EXISTING CONTOUR: 390, 386
- PROPOSED CONTOUR: 412
- EXISTING WOODS LINE
- EXISTING STRUCTURE
- PROPOSED STRUCTURE
- BUILDING RESTRICTION LINE: 30' BRL
- FIRST FLOOR ELEVATION: FF=350.9
- BASEMENT FLOOR ELEVATION: B=341.9
- EX. UTILITY POLE
- EXISTING STREET TREE PER F-09-018
- EXISTING PERIMETER AND SCREENING TREES & SHRUBS PER F-09-018
- PUBLIC WATER AND/OR SEWER & UTILITY EASEMENT
- PRIVATE USE IN COMMON ACCESS EASEMENT
- 15% - 24.9% SLOPES

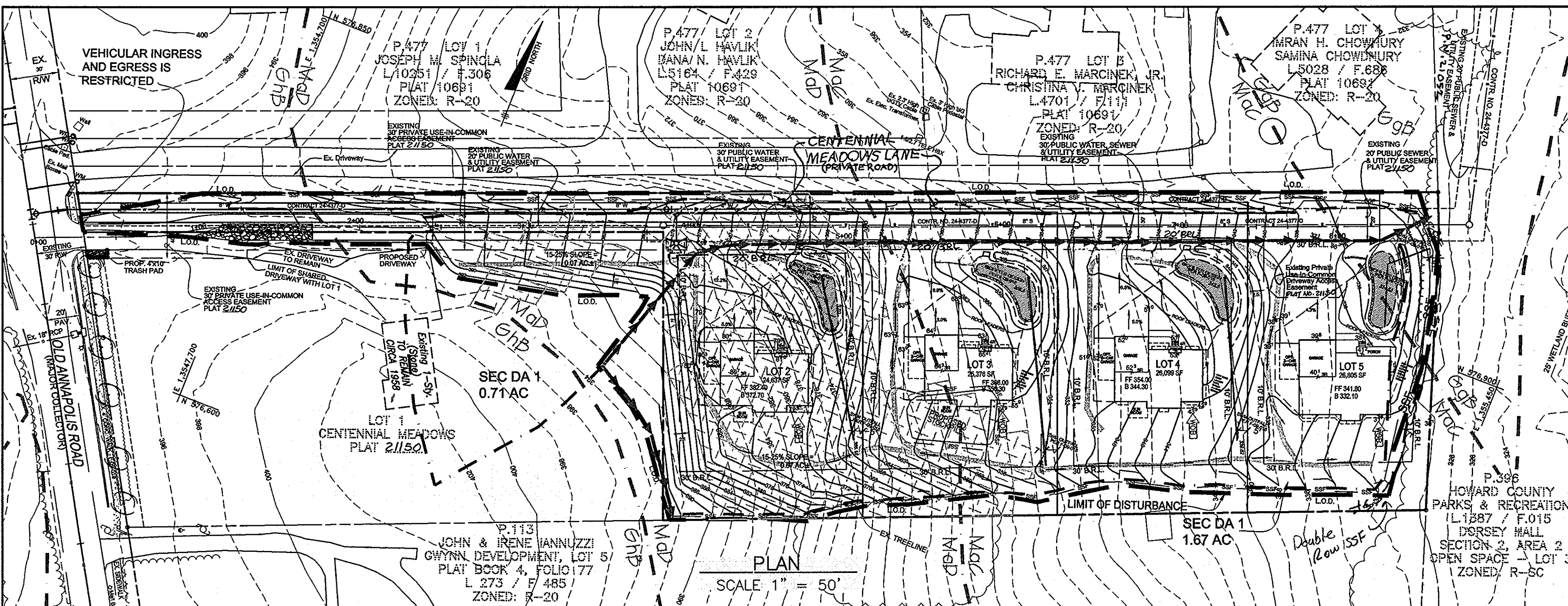
APPROVED: DEPARTMENT OF PLANNING AND ZONING
Keith S. ... 4/10/10
 CHIEF, DIVISION OF LAND DEVELOPMENT
William ... 5/2/10
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
Thomas E. ... 6/9/10
 DIRECTOR

NO.	DATE	REVISION
4	11-10-11	REVISE GRADES ON LOT 3 PER AS-BUILT CONDITIONS
3	8-30-11	REVISE GRADES ON LOTS 3, 4 & 5. REVISE BIO-RETENTION CONFIGURATION ON LOT 4 PER AS-BUILT
2	5-16-11	REVISE FF ELEVATION AND ASSOCIATED GRADES ON LOT 4 PER AS-BUILT CONDITIONS
1	5-3-11	REVISE GRADES ON LOT 2 PER AS-BUILT CONDITIONS

BENCHMARK ENGINEERING, INC.
 ENGINEERS & LAND SURVEYORS & PLANNERS
 8480 BALTIMORE NATIONAL PIKE SUITE 418 ELLICOTT CITY, MARYLAND 21043
 (P) 410-465-8105 (F) 410-465-6644
 60 THOMAS JOHNSON DRIVE A FREDERICK, MARYLAND 21702
 (P) 301-371-3505 (F) 301-371-3506
 WWW.BE-ONLINEENGINEERING.COM

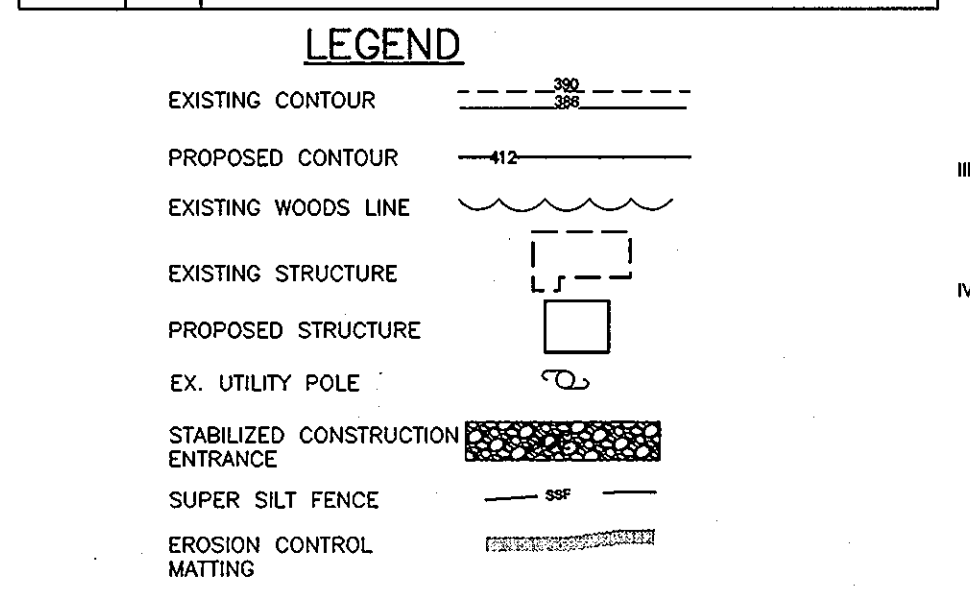
STATE OF MARYLAND PROFESSIONAL ENGINEER
 3/9/2010
 Professional Certification: I hereby certify that these documents were prepared or approved by me and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 28559 Expiration Date: 7-28-2011.

OWNER: LOWELL D. RAU 9780 OLD ANNAPOLIS ROAD ELLICOTT CITY, MARYLAND 21042 410-730-8954	PROJECT: CENTENNIAL MEADOWS LOTS 2 THROUGH 5
BUILDER: CORNERSTONE HOLDINGS, LLC 9695 NORFOLK AVENUE LAUREL, MARYLAND 20723 410-792-2565	LOCATION: TAX MAP 30, GRID 3 TM PARCEL 112 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DATE: DECEMBER, 2009 MARCH, 2010	TITLE: SITE DEVELOPMENT AND GRADING PLAN
DES: AAM DRAFT: AAM CHECK: BFC	PROJECT NO. 2266 SCALE: AS SHOWN DRAWING 2 OF 3



SOILS LEGEND

MAP SYMBOL	SOIL TYPE	MAPPING UNIT
GbB	B	GLENELG LOAM, 3 TO 8 PERCENT SLOPES
GbH	B	GLENELG-URBAN LAND COMPLEX, 0 TO 8 PERCENT SLOPES
MacB	B	MANOR LOAM, 0 TO 15 PERCENT SLOPES
MacD	B	MANOR LOAM, 15 TO 25 PERCENT SLOPES
Co	B	CODORUS AND HATBORO SILT LOAMS, 0 TO 3 PERCENT SLOPES



SEQUENCE OF CONSTRUCTION

NOTIFY SEDIMENT CONTROL DIVISION 48 HOURS PRIOR TO START OF CONSTRUCTION

1. OBTAIN GRADING PERMIT.
2. INSTALL SILT FENCE.
3. GRADE DRIVEWAY, APPLY STONE BASE AND STABILIZE DISTURBED AREAS. CONSTRUCT EARTH DIKE TO DIVERT WATER FROM LOTS.
4. GRADE LOTS, EXCAVATE FOR FOUNDATIONS, FINISH GRADE AND STABILIZE IN ACCORDANCE WITH TEMPORARY SEEDING NOTES.
5. CONSTRUCT HOUSES, BATHS, AND CONSTRUCT DRIVEWAYS.
6. FINAL GRADE AND STABILIZE IN ACCORDANCE WITH PERMANENT SEEDING NOTES.
7. INSTALL BIORETENTION FACILITY AND PROTECT WITH SILT FENCE TO ENSURE NO SEDIMENT LATER RUNOFF ENTERS FACILITY.
8. WITH APPROVAL OF THE HOWARD COUNTY FACILITIES ARE STABILIZED, REMOVE EARTH DIKE AND PAVE DRIVEWAYS.
9. WITH APPROVAL OF THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE ANY REMAINING DISTURBED AREAS.

* - - INDICATES SINGLE HOUSE CONSTRUCTION.

EROSION CONTROL MATTING SHALL BE PLACED IN SWALES WHERE DEEMED NECESSARY UNTIL VEGETATION IS ESTABLISHED OR SOLID SOIL SHOULD BE USED.

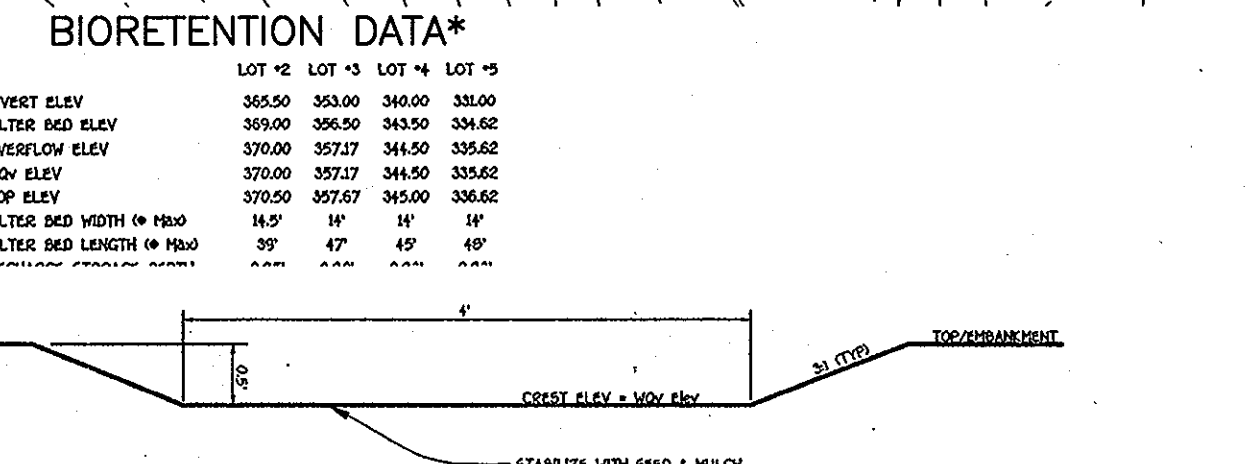
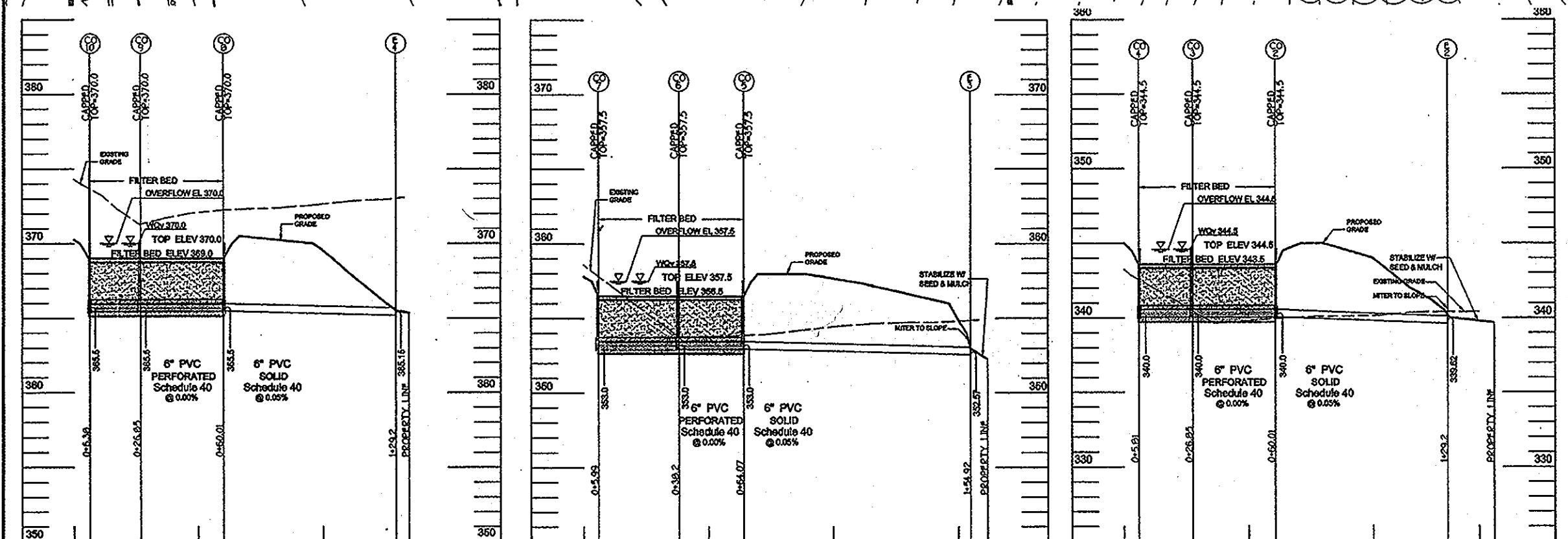
TOPSOIL SPECIFICATIONS

1. Topsoil salvaged from the existing site may be used provided that standards or for these purposes. Topsoil shall be tested for depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by the U.S. Department of Agriculture, Agricultural Experiment Station.
2. Topsoil Specifications - Soil to be used as topsoil must meet the following:
 - i. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand, or loamy fine sand. It may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be of a nature of containing features or objects, such as stones, roots, or other debris, in excess of 10% by volume of cinders, stones, soil, coarse fragments, roots, sticks, trash, or other materials larger than 1 1/2" in diameter.
 - ii. Topsoil must be free of plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nutgrass, poison ivy, thistle, or others as specified.
 - iii. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be applied at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.
3. For sites having disturbed areas over 5 acres:
 - i. Place topsoil (if required) and apply soil amendments as specified in 2.0.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
 - ii. For sites having disturbed areas over 5 acres:
 - i. On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
 - a. pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient time shall be prescribed to raise the pH to 6.5 or higher.
 - b. Organic content of topsoil shall be not less than 1.5 percent by weight.
 - c. Topsoil having soluble salt content greater than 500 parts per million shall not be used.
 - d. No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days minimum) to permit dissipation of phytotoxic materials.

SEDIMENT CONTROL NOTES

1. A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTION, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION. (313-1850).
2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. REVISIONS THERETO.
3. FOLLOWING INITIAL SOIL DISTURBANCE OR RESTORATION, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 4-7 CALENDAR DAYS FOR ALL PERMANENT SEDIMENT CONTROL STRUCTURES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1. B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
4. ALL SEDIMENT TRAPS/BASINS SHALL BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
5. 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 (SEC. 51) SOO (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 14 CALENDAR DAYS FOR ALL PERMANENT SEDIMENT CONTROL STRUCTURES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1. B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
7. SITE ANALYSIS:

TOTAL AREA OF SITE (THIS SUBMISSION)	2.36	ACRES
AREA DISTURBED	2.36	ACRES
AREA TO BE ROOFED OR PAVED	0.65	ACRES
AREA TO BE VEGETATIVELY STABILIZED	1.71	ACRES
TOTAL CUT	6205	CY
TOTAL FILL	4210	CY
OFFSITE WASTE/BORROW AREA LOCATION	*	

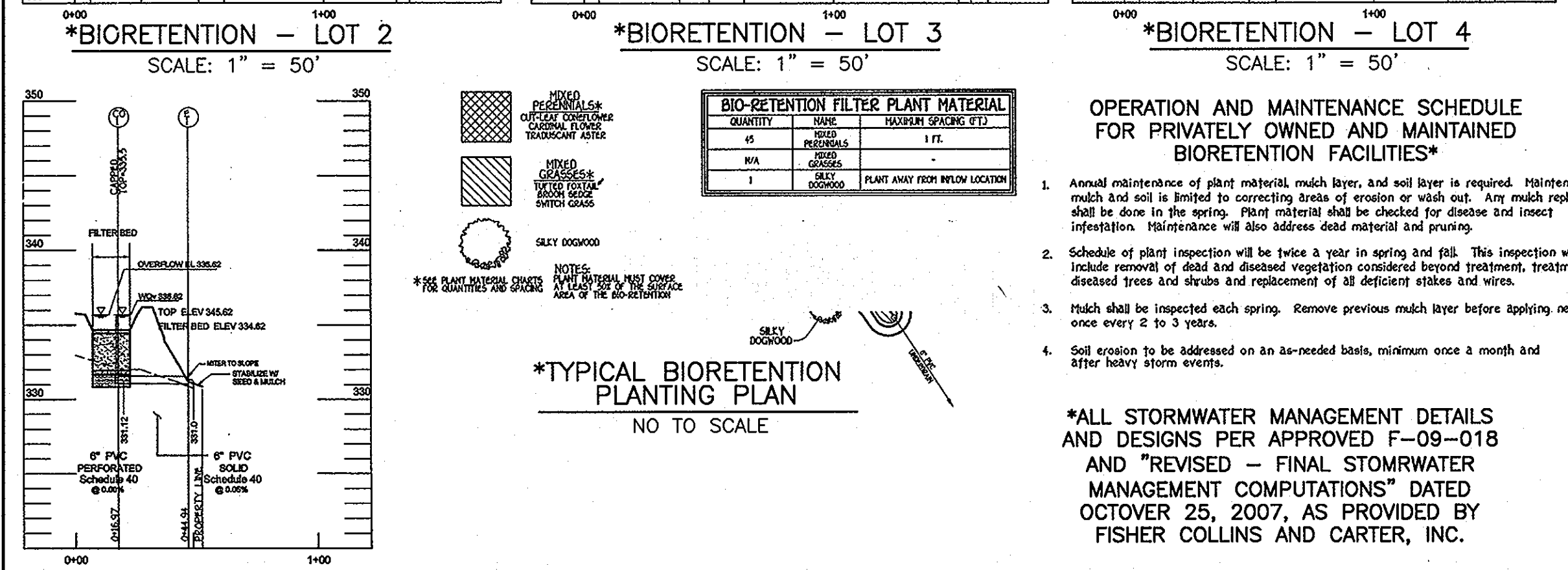


SPECIFICATIONS*

SOIL TEXTURE AND STRUCTURE
Soil shall have a sandy loam, loamy sand, or loam texture per USDA. Inverted triangle. Minimum dry content shall be 85%. Soil moisture shall be 50-60% and 20-30% test composition. The soil shall be a uniform mix. Free of stones, roots, or other similar objects larger than two inches. No other materials or substances shall be mixed or dumped into the bioretention facility. The soil shall be placed in layers of 12 inches. The soil shall be placed in layers of 12 inches. The soil shall be placed in layers of 12 inches.

SOIL PREPARATION
Soil preparation shall be performed on-site or off-site and transported to the facility location when ready for installation. The soil shall be certified as meeting the criteria established for the soil medium and approved by the site inspector.

SOIL TESTING
Soil preparation shall be performed on-site or off-site and transported to the facility location when ready for installation. The soil shall be certified as meeting the criteria established for the soil medium and approved by the site inspector.



PERMANENT SEEDBED PREPARATIONS

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

1. PREFERRED - APPLY 2 TONS PER ACRE DOLOMIC LIMESTONE (92 LBS/1000 SQ FT) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT) BEFORE SEEDING. NARROW OR DISC INTO UPPER THREE INCHES OF SOIL AT TIME OF SEEDING. APPLY 400 LBS PER ACRE 30-0-0-0 UREAFORM FERTILIZER (9 LBS/1000 SQ FT).
2. ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMIC LIMESTONE (92 LBS/1000 SQ FT) AND 1000 LBS PER ACRE 10-10-10 FERTILIZER (23 LBS/1000 SQ FT) BEFORE SEEDING. NARROW OR DISC INTO UPPER THREE INCHES OF SOIL.

TEMPORARY SEEDBED PREPARATIONS

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE RESTORED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT). SEEDING: PERIOD MARCH 1 THROUGH APRIL 30 AND FROM AUGUST 15 THROUGH NOVEMBER 15. SEED WITH 2-1/2 BUSHELS PER ACRE OF ANNUAL RYE (13.2 LBS/1000 SQ FT) FOR PERIODS MARCH 1 THROUGH APRIL 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOWGRASS (107 LBS/1000 SQ FT) FOR PERIOD NOVEMBER 16 THROUGH FEBRUARY 28. PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOO.

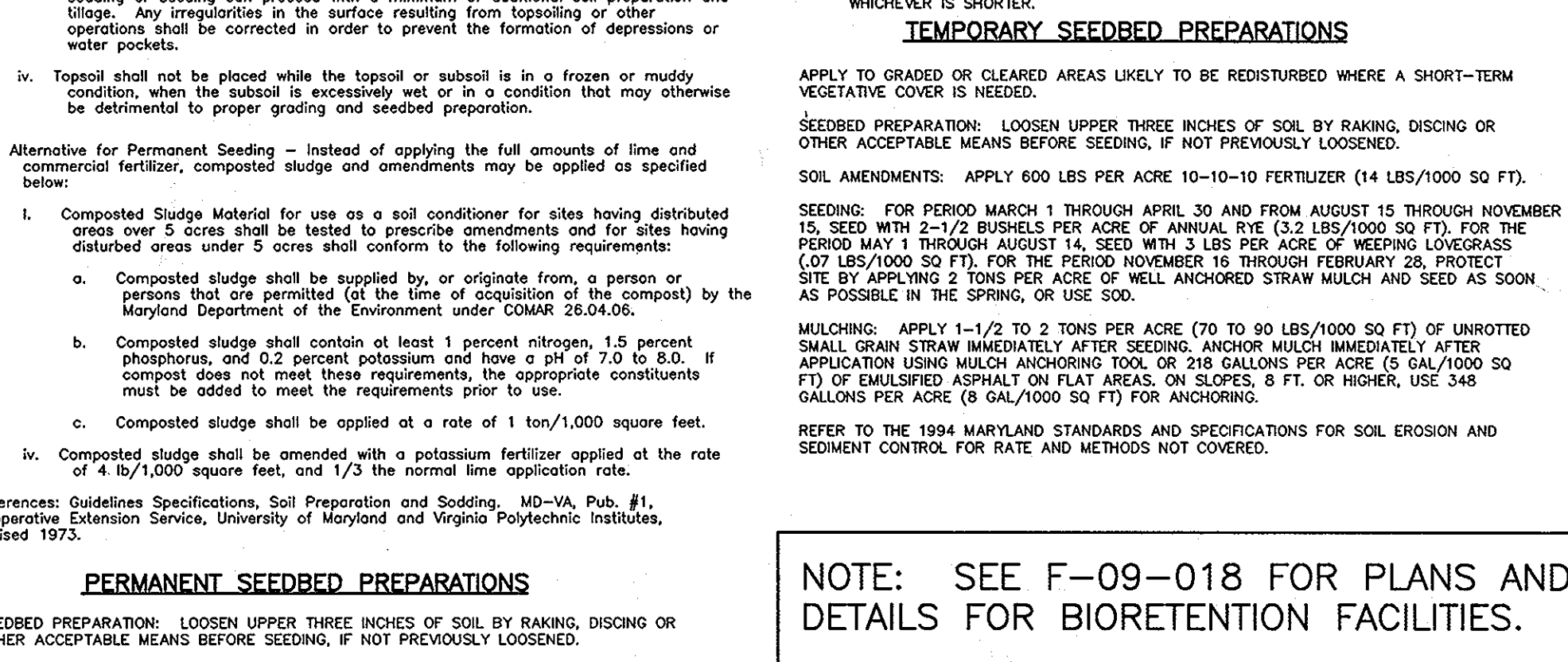
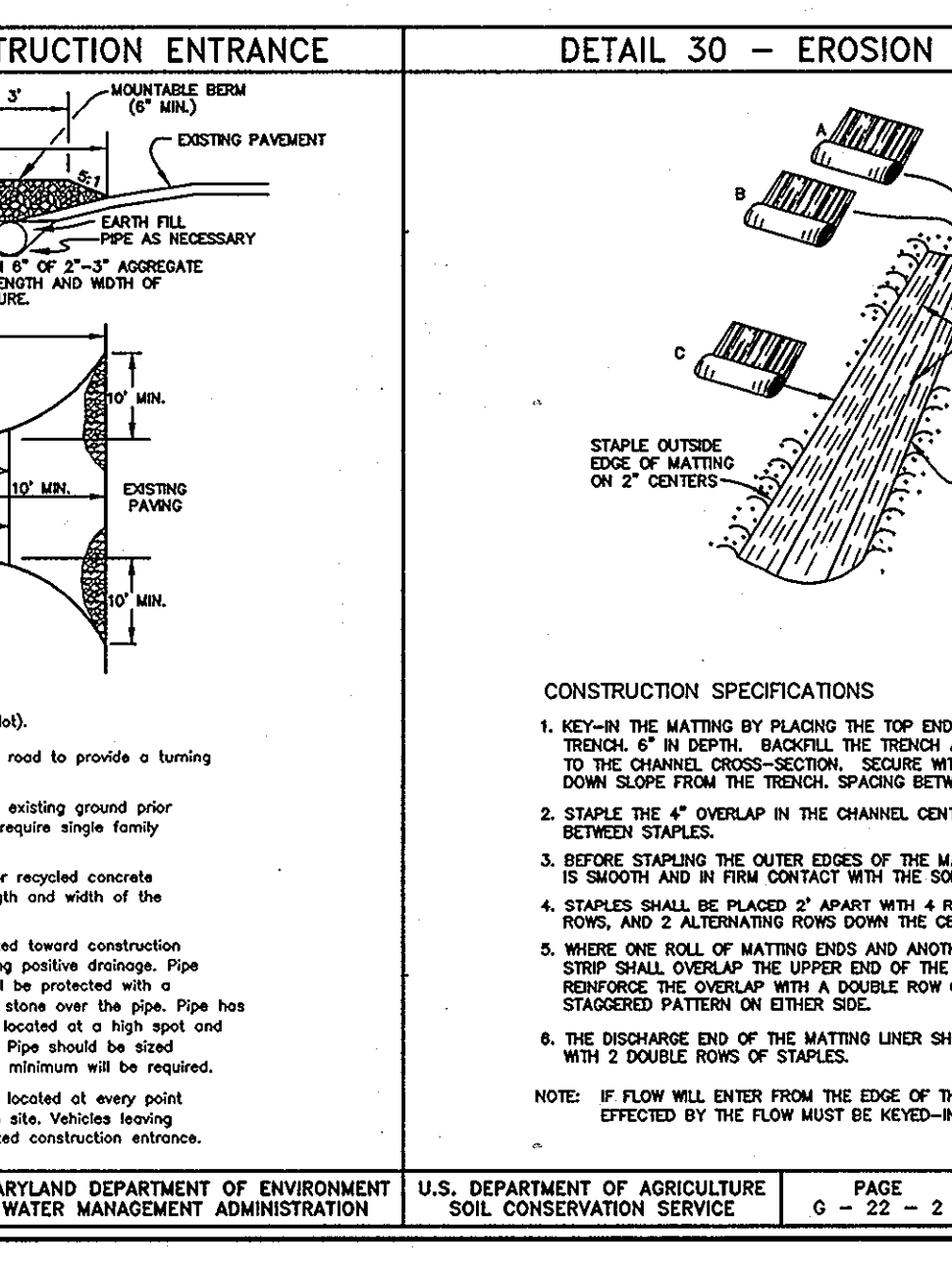
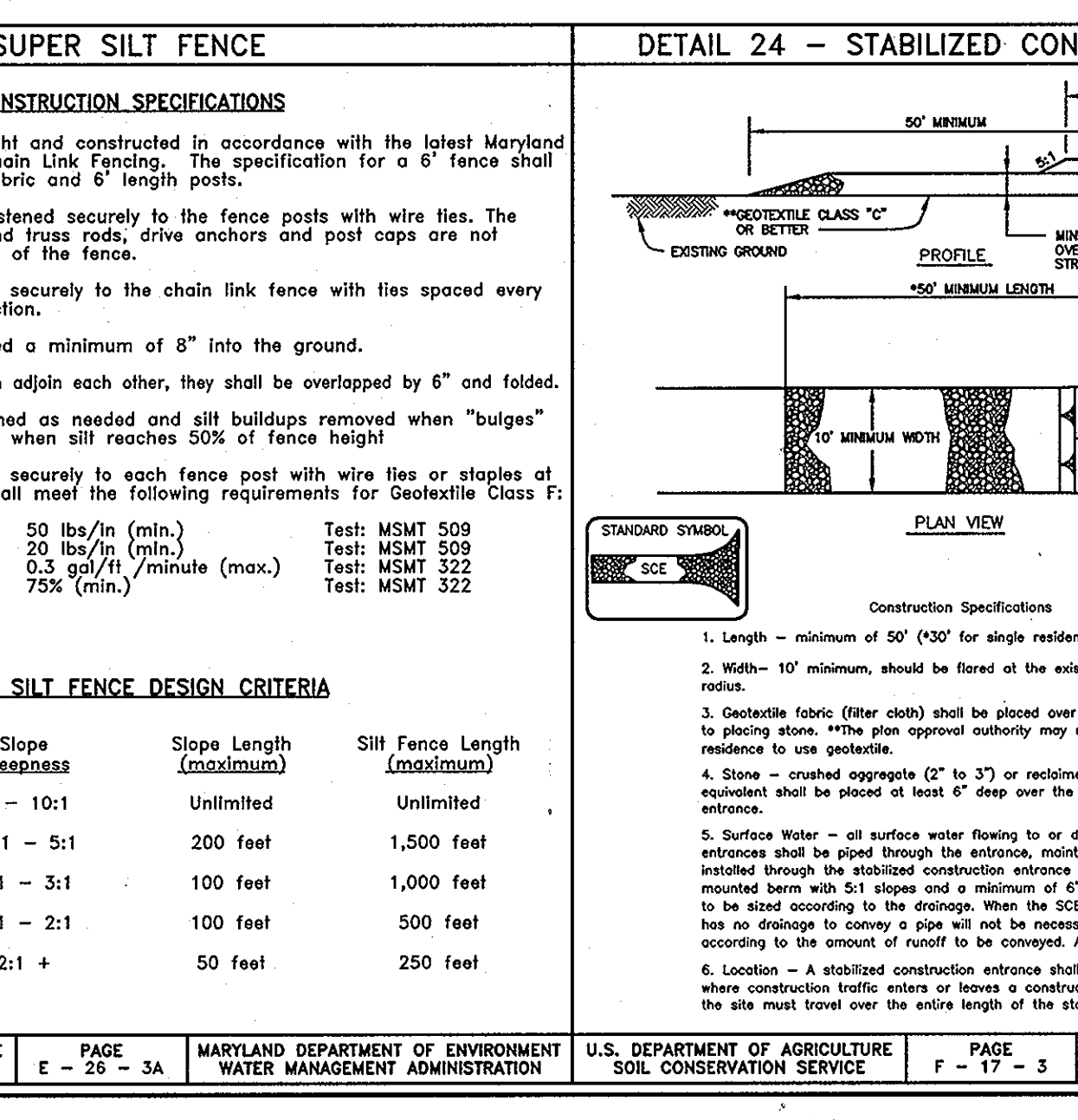
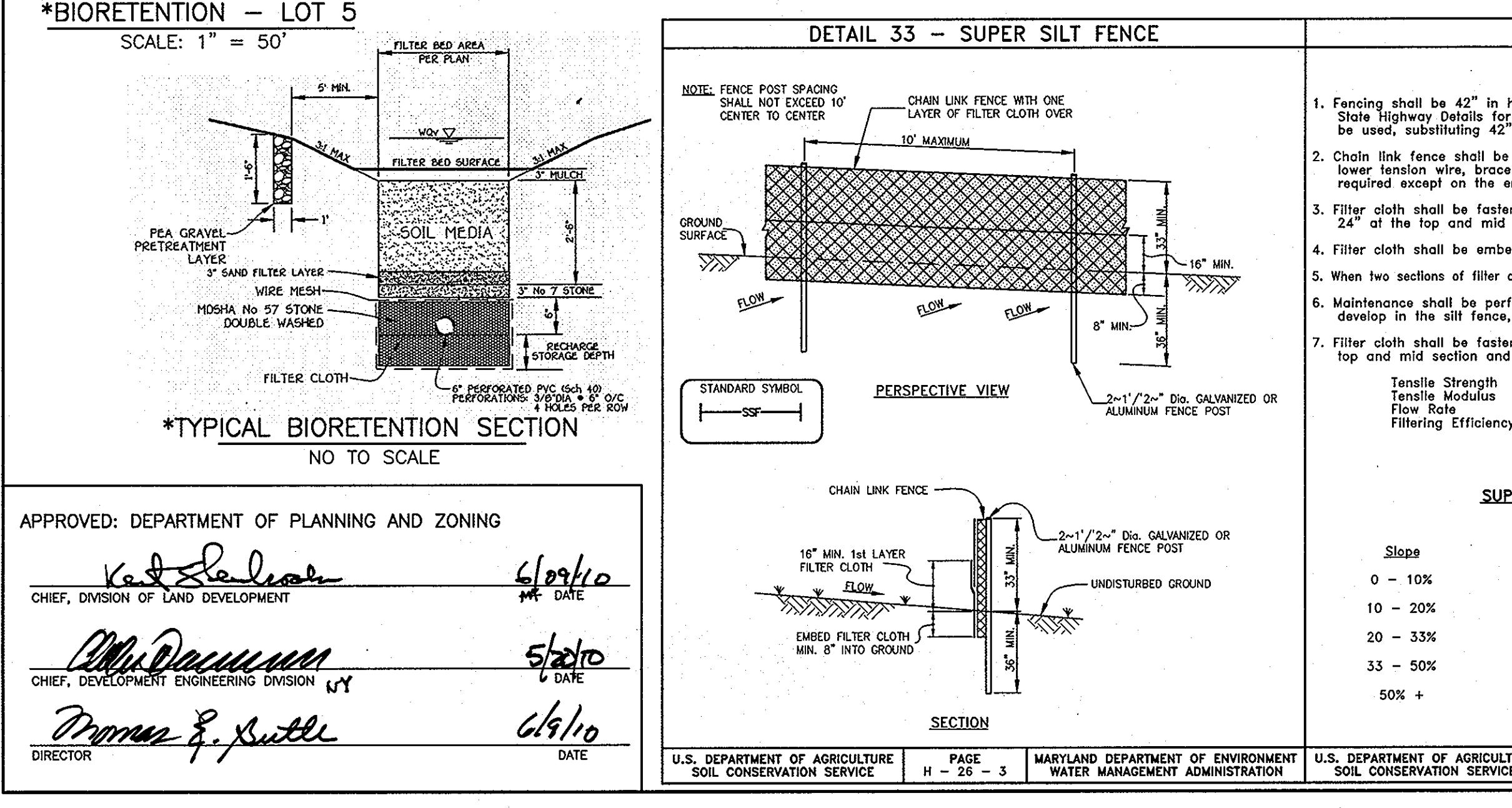
MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT) OF UNROTTED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER SEEDING USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (6 GALL/1000 SQ FT) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES 8 FT OR HIGHER, USE 348 GALLONS PER ACRE (6 GALL/1000 SQ FT) FOR ANCHORING.

VEGETATIVE STABILIZATION - SECTION 1

VEGETATIVE STABILIZATION METHODS AND MATERIALS

VEGETATIVE STABILIZATION - SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS

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ENGINEER'S CERTIFICATE

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

ENGINEER: *[Signature]* DATE: 3/9/2010

DEVELOPER'S CERTIFICATE

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

DEVELOPER: *[Signature]* DATE: 3-17-10

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

HOWARD SCD

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] DATE: 6/9/10

[Signature] DATE: 5/2/10

[Signature] DATE: 6/9/10

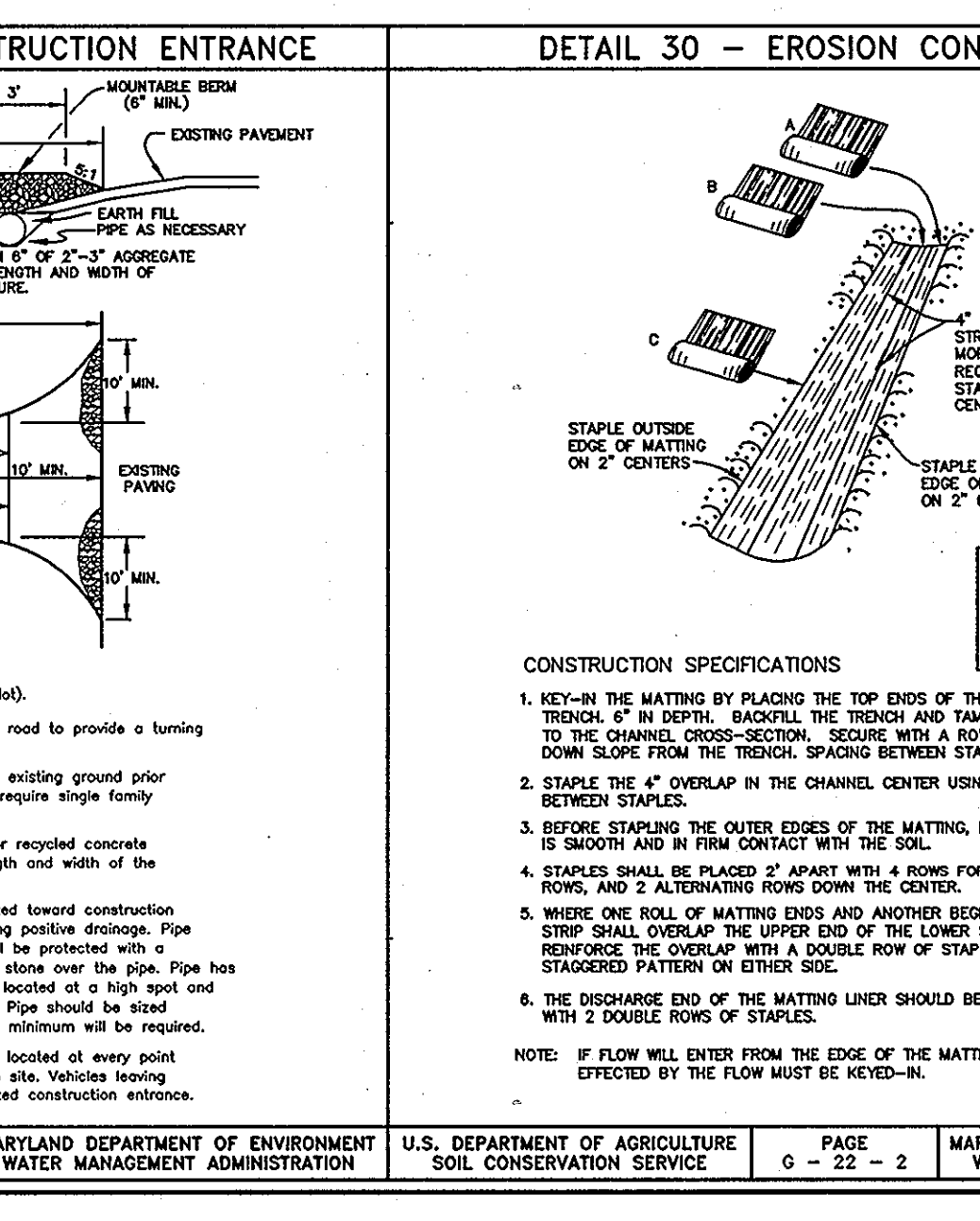
SUPER SILT FENCE DESIGN CRITERIA

Slope	Slope Steepness	Slope Length (maximum)	Silt Fence Length (maximum)
0 - 10%	0 - 1:1	Unlimited	Unlimited
10 - 20%	1:1 - 5:1	200 feet	1,500 feet
20 - 33%	5:1 - 3:1	100 feet	1,000 feet
33 - 50%	3:1 - 2:1	100 feet	500 feet
50% +	2:1 +	50 feet	250 feet

CONSTRUCTION SPECIFICATIONS

1. KEY-IN THE MATTING BY PLACING THE TOP ENDS OF THE MATTING IN A NARROW TRENCH 6" IN DEPTH. BACKFILL THE TRENCH AND TAMP FINELY TO CONFORM TO THE CHANNEL CROSS-SECTION. SECURE WITH A ROW OF STAPLES ABOUT 4" DOWN SLOPE FROM THE TRENCH. SPACING BETWEEN STAPLES IS 6".
2. STAPLE THE 4" OVERLAP IN THE CHANNEL CENTER USING AN 18" SPACING BETWEEN STAPLES.
3. BEFORE STAPLING THE OUTER EDGES OF THE MATTING, MAKE SURE THE MATTING IS SMOOTH AND IN FIRM CONTACT WITH THE SOIL.
4. STAPLES SHALL BE PLACED 2" APART WITH 4 ROWS FOR EACH STRIP, 2 OUTER ROWS, AND 2 ALTERNATING ROWS DOWN THE CENTER.
5. WHILE ONE ROLL OF MATTING DIES AND ANOTHER BEGINS, THE END OF THE TOP STRIP SHALL OVERLAP THE UPPER END OF THE LOWER STRIP BY 4". OVERLAP FASHION SHOULD BE USED WITH A SINGLE ROW OF STAPLES SPACING 4" APART IN A STAGGERED PATTERN ON EITHER SIDE.
6. THE DISCHARGE END OF THE MATTING SHOULD BE SIMILARLY SECURED WITH 2 ROWS OF STAPLES.

NOTE: IF FLOW WILL ENTER FROM THE EDGE OF THE MATTING WHEN THE AREA EFFECTED BY THE FLOW MUST BE HEARD-H.



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BUILDER: CORNERSTONE HOLDINGS, LLC, 9695 NORFOLK AVENUE, LAUREL, MARYLAND 20723, 410-792-2565

PROJECT: CENTENNIAL MEADOWS LOTS 2 THROUGH 5

LOCATION: TAX MAP 30, GRID 3, 2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE: SEDIMENT AND EROSION CONTROL PLAN, NOTES AND DETAILS, SWM PROFILES, SPECIFICATIONS AND DETAILS

DATE: DECEMBER, 2009, PROJECT NO. 2266, MARCH, 2010

DES: AAM, DRAFT: AAM, CHECK: BFC, SCALE: AS SHOWN, DRAWING 3 OF 3