

SITE DATA

1. LOCATION: TAX MAP 43, GRID 14, PARCELS A, B & C.
2. 6TH ELECTION DISTRICT
3. ZONING: CAC-CLI
4. WATERSHED: DORSEY RUN, STREAM USE DESIGNATION: NATURAL.

GENERAL NOTES

1. ALL EXISTING UTILITIES, PAVEMENT, STRUCTURES, AND VEGETATION ON-SITE WITHIN THE PROPOSED LIMITS OF CONSTRUCTION WILL BE DEMOLISHED AND REMOVED. AN EXISTING OVERHEAD ELECTRIC LINE RUNS OVER AND IN THE VICINITY OF THE WATER & SEWER LINES ON-SITE TO BE ABANDONED, AND CARE WILL BE TAKEN TO AVOID CONFLICT DURING CONSTRUCTION.
2. ALL EXISTING WATER AND SEWER CONNECTIONS ON-SITE HAVE BEEN PREVIOUSLY ABANDONED AND REMOVED. NEW SERVICE CONNECTIONS WILL BE ADDED IN ACCORDANCE WITH SUBSEQUENT PLANS.

SITE ANALYSIS DATA CHART

TOTAL PROJECT AREA:	16.6255 AC
AREA OF PLAN SUBMISSION:	16.6255 AC
LIMIT OF DISTURBED AREA:	16.29 AC
PRESENT ZONING DESIGNATION:	CAC-CLI
TOTAL UNITS ALLOWED FOR PROJECT:	366 DU
TOTAL UNITS PROPOSED ON THIS SUBMISSION:	0 DU
OPEN SPACE ON SITE:	0.00 AC
AREA OF RECREATION OPEN SPACE REQUIRED:	
ACRES REQUIRED:	1.595 AC
ACRES PROVIDED:	1.657 AC
DPZ FILE REFERENCES:	ZB 1048B, SP-06-18, F-07-156, HO-827, WP-06-096, AA-06-016

THIS SDP IS FOR ROUGH GRADING PURPOSES ONLY.

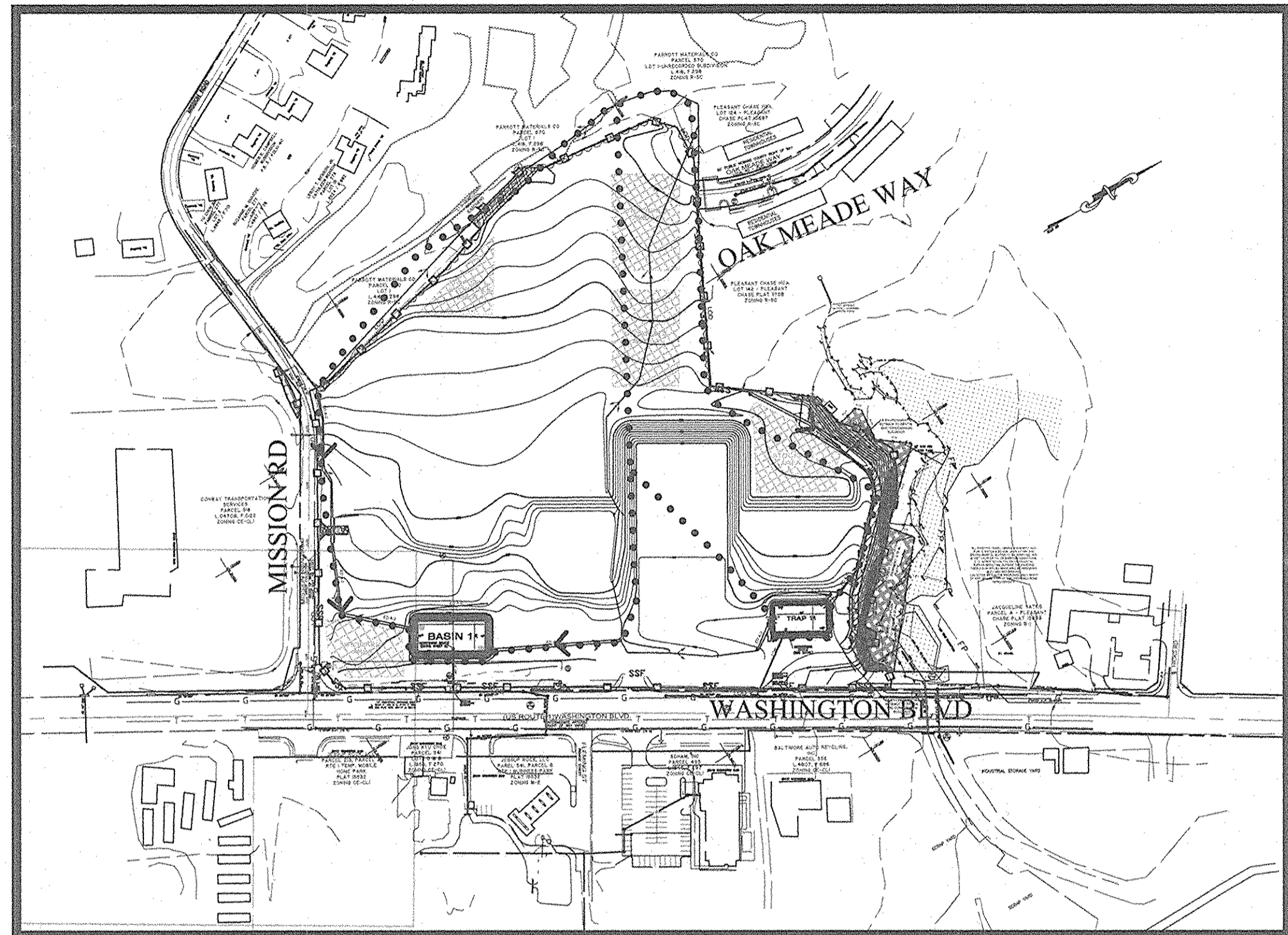
SITE DEVELOPMENT PLAN

MISSION PLACE

6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SHEET INDEX

1. COVER SHEET
- 2-3. EXIST. CONDITIONS, SOILS MAP AND DEMOLITION PLAN
- 4-5. SITE DEVELOPMENT PLAN
- 6-7. MASS GRADING & SEDIMENT CONTROL PLAN
8. SEDIMENT CONTROL DETAILS
9. POND PROFILES AND DETAILS
- 10-11. RETAINING WALL PLANS, PROFILES & DETAILS



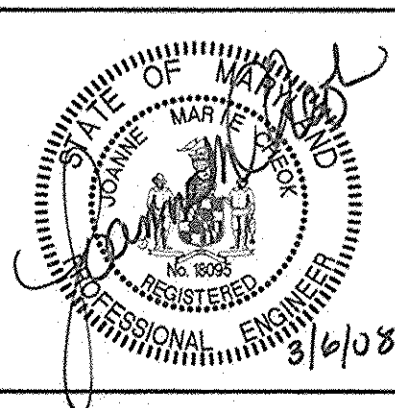
OVERALL PLAN
SCALE: 1"=200'
600 SCALE MAP # 2243

GENERAL NOTES CONTINUED

23. WAIVER PETITION WP-06-096 WAS APPROVED BY THE PLANNING DIRECTOR ON AUGUST 9, 2006 REQUESTING TO WAIVE SUBDIVISION & LAND REGULATION SECTION 16.116(a)(1) TO ALLOW GRADING, REMOVAL OF VEGETATIVE COVER AND TREES AND TO ALLOW PAVING WITHIN 25 FEET OF A WETLAND FOR THE PURPOSE OF THE PRIMARY SITE ENTRANCE FROM MISSION ROAD, AND SECTION 16.116(a)(2)(ii), TO ALLOW GRADING, REMOVAL OF VEGETATIVE COVER WITHIN 75 FEET OF A PERENNIAL STREAM FOR THE PURPOSE OF REMOVING EXISTING WATER AND SEWER MAINS, PAVING AND DEBRIS, TO REGRADE AND RESTORE AN AREA OUTSIDE OF THE EXISTING TREELINE, AND TO PROVIDE A DECELERATION LANE OF US ROUTE 1. THIS WAIVER WAS ALSO GRANTED TO ALLOW CONSTRUCTION OF AN 18' WIDE PRIVATE ROAD AND A RETAINING WALL AROUND THE BUILDING ON PARCEL C. THIS 18' WIDE ROAD IS LOCATED ALONG THE NORTH SIDE OF PARCEL C BETWEEN THE PROPOSED APARTMENT BUILDING AND THE FOREST CONSERVATION EASEMENT. SECTION 16.119(f)(1) TO ALLOW AN ACCESS POINT ONTO A RESTRICTED ACCESS ROAD (US ROUTE 1) WHEN ALTERNATIVE ACCESS IS AVAILABLE FROM A LOWER CLASSIFICATION ROAD (MISSION ROAD), THE ACCESS POINT FROM ROUTE 1 IS A RIGHT TURN ONLY INTO THE SITE. EXIT FROM THE SITE ONTO US ROUTE 1 WILL NOT BE ALLOWED.
- APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
 1. FOLLOWING THE REMOVAL OF THE PUBLIC UTILITIES AND PAVEMENT FROM THE ENVIRONMENTAL BUFFERS LYING ALONG THE NORTHEASTERN EDGE OF THE SITE, THE APPLICANT SHALL REFOREST THE AREA BETWEEN THE PRIVATE ROAD/RETAINING WALL AND THE EXISTING FOREST. THIS REFORESTATION SHALL BE DONE TO THE MAXIMUM EXTENT POSSIBLE (BASED ON AVAILABLE SPACE) BUT SHALL NOT BE LESS THAN THE 0.17 ACRES IDENTIFIED ON THE APPLICANT'S EXHIBIT DATED 6/22/06.
 2. PER SCD COMMENTS DATED 4/20/06:
 - a. MOVE RETAINING WALL/FOOTER EDGE TO NO CLOSER THAN 10' FROM BUFFER EDGE.
 - b. SHOW STREAM FROM PLEASANT CHASE POND OUTFALL.
 3. THE APPLICANT SHALL ACQUIRE AN ACCESS PERMIT FROM SHA FOR THE ACCESS FROM ROUTE 1. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAMS OR THEIR REQUIRED BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS, EXCEPT AS PERMITTED BY AFOREMENTIONED WAIVER (WP-06-096), AND MDE PERMIT 07-NT-3012 AND USACE PERMIT 2007/60333.
24. THE PROPERTY CONTAINS 0.09 ACRES OF 15%-25% SLOPE AND 0.44 ACRES OF 25% OR GREATER SLOPES. THESE SLOPE AREAS WILL BE REMOVED BY VIRTUE OF GRADING FOR THE DEVELOPMENT BY THIS SDP. THESE AREAS ARE EACH LESS THAN 20,000 SQFT AND THEIR REMOVAL IS NECESSARY TO ACCOMPLISH THIS DEVELOPMENT.
25. A MINIMUM BUILDING RESTRICTION LINE ALONG US ROUTE 1 IS ZERO (0) FEET AND A MAXIMUM OF 68.5 FEET. A MINIMUM BUILDING RESTRICTION LINE ALONG MISSION ROAD IS ZERO (0) FEET.
26. EXISTING WATER AND SEWER LINES ON SITE TO BE ABANDONED AND REMOVED IN ACCORDANCE WITH A PETITION TO RELEASE A UTILITY EASEMENT PER SECTION 4.201(D). EASEMENTS WERE ABANDONED BY COUNTY COUNCIL RESOLUTION 134-2007 AND 135-2007 ON DECEMBER 03, 2007.
27. A RIGHT OF ENTRY AGREEMENT FOR THE PURPOSE OF ESTABLISHING ADEQUATE SIGHT DISTANCE ALONG MISSION ROAD FOR THE PROPOSED PRIVATE COMMON USE EASEMENT ON PARCEL A WAS ESTABLISHED ON THE ADJACENT PARCEL 518 AND WAS RECORDED IN LIBER 11088 AT FOLIO 724.

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.

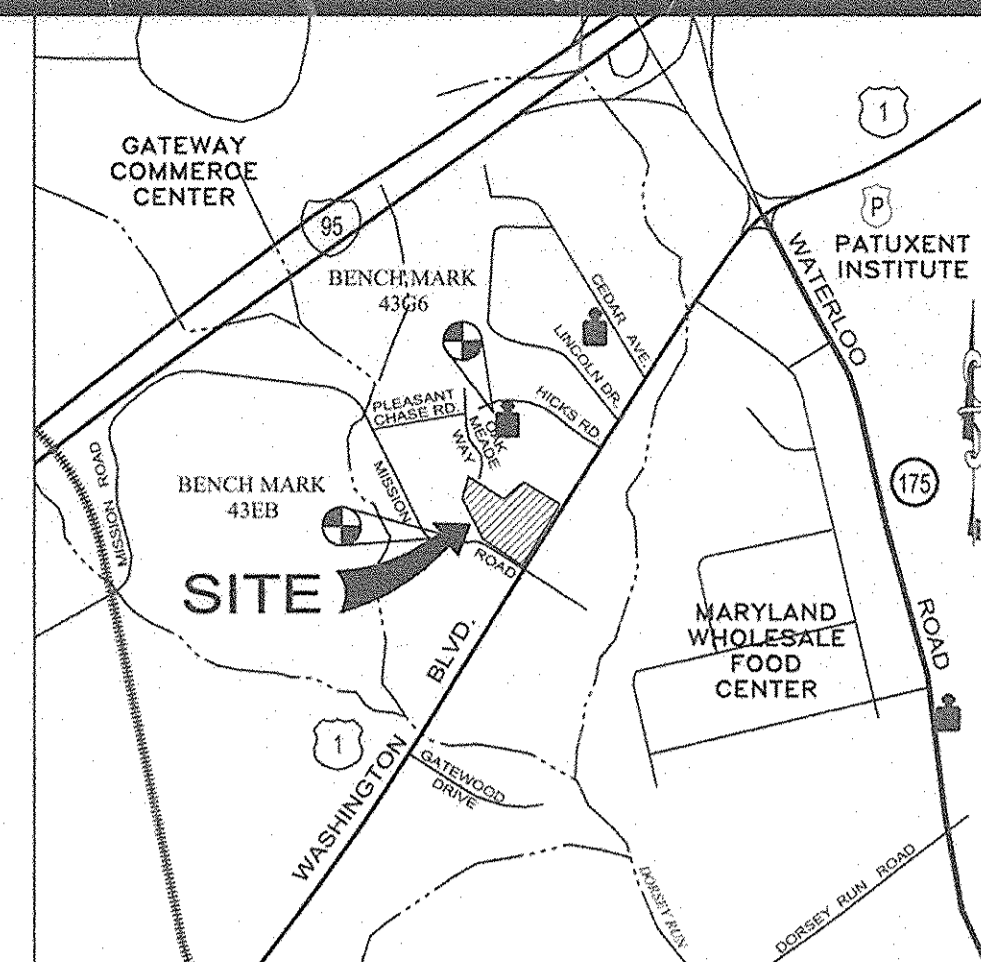
LICENSE NO. 18095
EXPIRATION DATE: 12/21/08



BENCH MARKS

CONTROL STATION 43G6
ELEVATION 220.11
N 544,117.545
E 1,370,550.825
LOCATED NEAR THE ENTRANCE TO TRAILER PARK, 68.8' SOUTH FROM FIRE HYDRANT

CONTROL STATION 43EB
ELEVATION 216.99
N 545,963.658
E 1,371,573.830
LOCATED 78' NORTH OF HICKS ROAD.



VICINITY MAP

1" = 2000'

THIS MAP IS CONCEPTUAL LAYOUT ONLY (AS THIS SDP-07-156 IS FOR MASS GRADING ONLY AND NOT ASSOCIATED WITH ANY STRUCTURES AS CURRENTLY SHOWN ON THE VICINITY MAP).

ADC STREET MAP # 20, GRID G-2 & G-3

SEWER CODE: S/3240000
WATER CODE: B02
TEST GRADIENT: 550

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880, 24 HOURS IN ADVANCED OF COMMENCEMENT WORK.
3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
4. TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
5. ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
6. THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH TWO FOOT CONTOUR INTERVALS PREPARED BY DEWBERRY & DAVIS, LLC, DATED JULY 7, 2004.
7. 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. 43EB AND 43G6 WERE USED FOR THIS PROJECT.
8. WATER IS PUBLIC. CONTRACT 24-4402-D, DORSEY RUN DRAINAGE AREA.
9. SEWER IS PUBLIC. CONTRACT 24-4402-D, DORSEY RUN DRAINAGE AREA.
10. STORMWATER MANAGEMENT WILL BE PROVIDED ON-SITE BY PRIVATE UNDERGROUND QUALITY, DETENTION, AND GROUNDWATER RECHARGE STRUCTURES.
11. EXISTING UTILITIES WERE PLOTTED FROM FIELD RUN SURVEY AND AS-BUILT DRAWINGS.
12. FLOODPLAIN ELEVATIONS WERE TAKEN FROM A PLAT FOR PARCEL A, PLEASANT CHASE AND FLOOD PLAIN CALCULATIONS APPROVED WITH SP-06-18.
13. THE WETLANDS DELINEATION STUDY FOR THIS PROJECT WAS PREPARED BY MCCARTHEY & ASSOCIATES, DATED JULY 24 AND FEBRUARY 2006, AND WAS APPROVED ON OCTOBER 4, 2006.
14. THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY THE TRAFFIC GROUP, DATED DECEMBER 2005, AND WAS APPROVED ON OCTOBER 4, 2006.
15. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING, AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAM, OR THEIR REQUIRED BUFFERS, FOREST CONSERVATION EASEMENT AREAS, AND 100 YEAR FLOODPLAIN, EXCEPT AS PERMITTED BY WP-06-096, MDE PERMIT 07-NT-3012, AND USACE PERMIT 2007/60333.
16. THIS PLAN IS SUBMITTED AND APPROVED IN ACCORDANCE WITH CONDITIONS AND APPROVALS FROM PRELIMINARY EQUIVALENT SKETCH PLAN SP-06-18, APPROVED ON NOVEMBER 22, 2006, AND FROM FINAL PLAN F-07-156, APPROVED ON OCTOBER 10, 2007.
17. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL.
18. LANDSCAPING REQUIREMENTS WILL BE ADDRESSED WITH THE SUBSEQUENT SITE DEVELOPMENT PLAN ASSOCIATED WITH THIS PROJECT (SDP-07-104 AND SDP-07-113).
19. THIS PROJECT COMPLIES WITH THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION AS PART OF F-07-156 BY PROVIDING 0.45 ACRES OF ON-SITE REFORESTATION, 0.15 ACRES OF ON-SITE RETENTION, AND 4.69 ACRES OF OFF-SITE CONSERVATION. FOREST CONSERVATION SURETY WILL BE POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT IN THE AMOUNT OF \$9,801.00 (19,602 SF @ \$0.50/SF) FOR REFORESTATION AND \$1,306.80 (6,534 SF @ \$0.20/SF) FOR ON-SITE RETENTION.
20. NO CEMETERIES EXIST ON-SITE.
21. THE SUBJECT PROPERTY IS ZONED CAC-CLI PER THE 2/2/04 COMPREHENSIVE ZONING PLAN AND THE "COMP LITE" ZONING AMENDMENTS EFFECTIVE 7/28/06.
22. THE SITE IS LISTED IN THE HOWARD COUNTY HISTORIC SITES INVENTORY AS HO-827. PURSUANT TO PLAN REVIEW BY THE HISTORIC DISTRICT COMMISSION ON MAY 3, 2007, THE EXISTING LOG CAB BUILDING ON THE SITE WILL BE DEMOLISHED.

ALTERNATIVE COMPLIANCE REQUESTS IN ACCORDANCE WITH THE ROUTE 1 MANUAL:

- REQUEST A REDUCTION TO COMMERCIAL SPACE RATIO OF 300 SQ FT / DU TO 235 SQ FT / DU. APPROVED BY THE DIRECTOR, MAY 4, 2006.
- REQUEST AN INCREASED BUILDING SETBACK FROM RTE 1 TO SIXTY EIGHT AND A HALF FEET. APPROVED BY THE DIRECTOR, MAY 4, 2006.
- REQUEST TO ALLOW A PORTION OF THE COMMERCIAL PARKING ADJACENT TO RTE 1. APPROVED BY THE DIRECTOR, MAY 4, 2006.
- REQUEST TO ELIMINATE 50% RETAIL REQUIREMENT FOR FIRST FLOOR OF OFFICE BUILDING. DENIED BY DIRECTOR, MAY 4, 2006. 50% RETAIL WILL BE PROVIDED ON THE FIRST FLOOR OF THE OFFICE BUILDING.
- REQUEST A WAIVER TO DESIGN MANUAL VOLUME 3, SECTION 2.3.1.B, TO REDUCE SIGHT DISTANCE TO 240' AND TO ALLOW SIGHT LINE ACROSS ADJACENT PROPERTY WITHOUT AN EASEMENT. DENIED BY DIRECTOR, OCTOBER 18, 2006. IN LIEU OF THE WAIVER, THE DEVELOPER WILL PURSUE ROAD IMPROVEMENTS AT FINAL PLAN AS NECESSARY TO MEET SIGHT DISTANCE REQUIREMENTS.
- REQUEST A WAIVER TO DESIGN MANUAL VOLUME 1, SECTION 5.2.7.D.(b), TO ALLOW ACCESS POINTS TO SWM FACILITIES WITHIN TRAVEL LANES; AND TO SECTION 5.2.7.D.(s), TO ALLOW THE SWM FACILITIES TO BE CONSTRUCTED OF DIFFERING MATERIALS. APPROVED BY THE DIRECTOR, SEPTEMBER 20, 2006.

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

U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE DATE

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

[Signature] DATE 3/13/08

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

[Signature] DATE 4/14/08

[Signature] DATE 3/17/08

[Signature] DATE 4/14/08

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 INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT."

[Signature] DATE 03/06/08

SIGNATURE OF DEVELOPER
PRINTED NAME: SCOTT C. REED, MANAGER

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 REQUIREMENT OF THE HOWARD COUNTY CONSERVATION DISTRICT."

[Signature] DATE 03/06/08

SIGNATURE OF ENGINEER
PRINTED NAME: JOANNE M. CHEEK

PERMIT INFORMATION CHART

SUBMISSION NAME	SECTION / AREA	LOT / PARCEL #
MISSION PLACE	N/A	PARCELS A, B, C
PLAT # OR L.F. BLOCK #	ZONE	TAX MAP
11884-11888	CAC-CLI	43 SIXTH
WATER CODE	SEWER CODE	GENSUS TR
B-02	3240000	6069.01
PROPOSED IMPROVEMENTS	ROUGH GRADING, SITE RETAINING WALL AND FOREST CONSERVATION	

ADDRESS CHART

PARCEL NO.	ADDRESS (FOR MASS GRADING ONLY)
PARCEL A:	8152 MISSION ROAD, JESSUP, MD
PARCEL B:	8150 MISSION ROAD, JESSUP, MD
PARCEL C:	8144 WASHINGTON BLVD, JESSUP, MD

NOTE: INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF THE MAINS BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS WELL IN ADVANCE OF THE START OF EXCAVATION. CONTACT "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO THE START OF EXCAVATION. IF CLEARANCES ARE LESS THAN SHOWN ON THIS PLAN OR TWELVE (12) INCHES, WHICHEVER IS LESS, CONTACT THE ENGINEER AND THE UTILITY BEFORE PROCEEDING WITH CONSTRUCTION.

MISSION PLACE
PARCELS A, B, & C
ROUGH GRADING PLAN
W&S CONTRACT: 24-4402-D

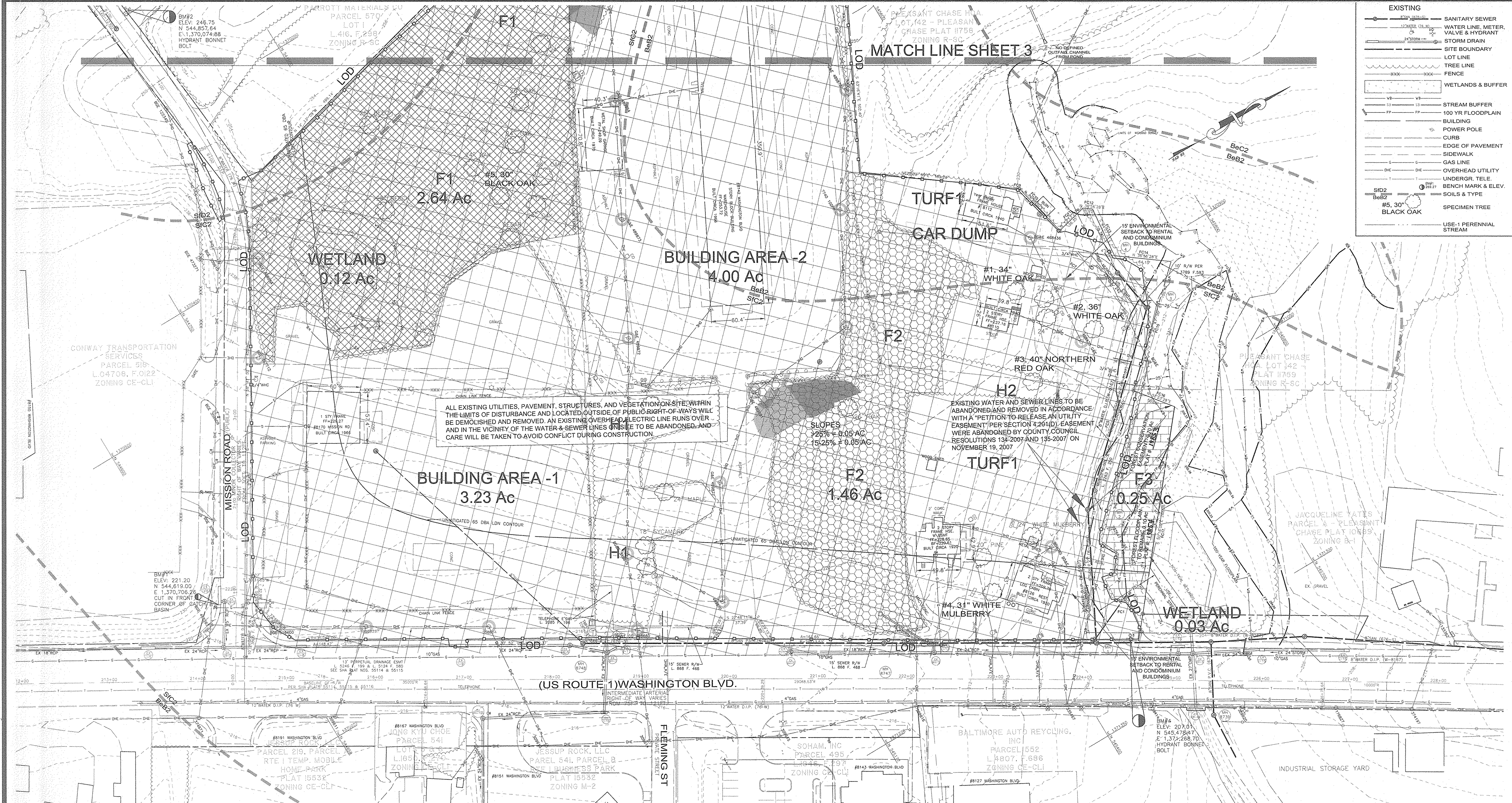
6TH ELECTICN DISTRICT HOWARD COUNTY, MARYLAND

Dewberry

OWNER / DEVELOPER:
MISSION ROAD INVESTORS, LLC
c/o THE DOLBEN COMPANY, INC.
2600 MIDWAY BRANCH DR, 2nd FL
ODENTON, MD 21113
CONTACT: MATTHEW BITAR
PH: 301.912.3600
FX: 301.912.3400

Drawn by: KDM
Designed by: KDM
Checked by: JMC
Zone: CAC-CLI

Section:	NA	Area:	NA	Phase:	NA	Scale:	
Tax Map Grid & Parcel:	MAP 43, GRID 14 PARCELS A, B & C	Date:	MARCH 2008	Prior Submittal:	ZB 1048M SP-06-18 SDP-07-104 F-07-156	HO-827 SDP-07-113	WP-06-096 AA-06-016
File number:	1 of 11						



EXISTING

	SANITARY SEWER
	WATER LINE, METER, VALVE & HYDRANT
	STORM DRAIN
	SITE BOUNDARY
	LOT LINE
	TREE LINE
	FENCE
	WETLANDS & BUFFER
	STREAM BUFFER
	100 YR FLOODPLAIN
	BUILDING
	POWER POLE
	CURB
	EDGE OF PAVEMENT
	SIDEWALK
	GAS LINE
	OVERHEAD UTILITY
	UNDERGR. TELE.
	BENCH MARK & ELEV.
	SOILS & TYPE
	SPECIMEN TREE
	USE-1 PERENNIAL STREAM

ALL EXISTING UTILITIES, PAVEMENT, STRUCTURES, AND VEGETATION ON-SITE WITHIN THE LIMITS OF DISTURBANCE AND LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAYS WILL BE DEMOLISHED AND REMOVED. AN EXISTING OVERHEAD ELECTRIC LINE RUNS OVER AND IN THE VICINITY OF THE WATER & SEWER LINES ON-SITE TO BE ABANDONED AND CARE WILL BE TAKEN TO AVOID CONFLICT DURING CONSTRUCTION.

EXISTING WATER AND SEWER LINES TO BE ABANDONED AND REMOVED IN ACCORDANCE WITH A PETITION TO RELEASE AN UTILITY EASEMENT PER SECTION 4-204(D). EASEMENTS WERE ABANDONED BY COUNTY COUNCIL RESOLUTIONS 134-2007 AND 135-2007 ON NOVEMBER 19, 2007.

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

U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE DATE: 3/13/08

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

John R. Roberts 3/13/08
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Dan L. Wynn 3/13/08
DIRECTOR

John M. Williams 3/13/08
CHIEF, DEVELOPMENT ENGINEERING DIVISION

Andy Hancock 4/1/08
CHIEF, DIVISION OF LAND DEVELOPMENT

BY THE DEVELOPER:

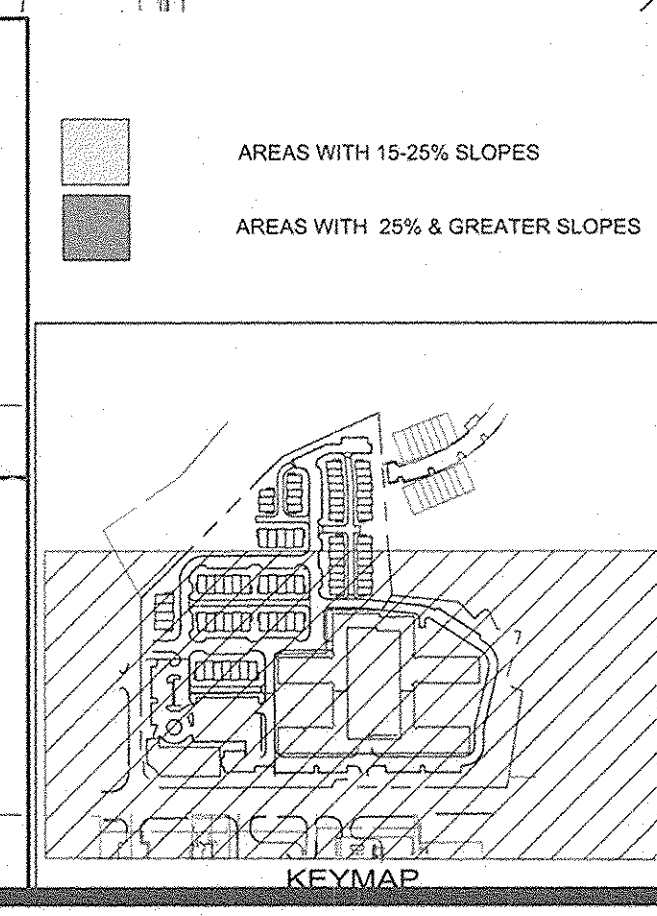
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Scott C. Reed 03/06/08
SIGNATURE OF DEVELOPER
PRINTED NAME: SCOTT C. REED, MANAGER

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."

Joanne M. Cheek 03/06/08
SIGNATURE OF ENGINEER
PRINTED NAME: JOANNE M. CHEEK



NOTE:

ALL EXISTING FACILITIES, WELLS, SEPTIC SYSTEMS, UTILITIES, BUILDINGS AND STRUCTURES ON SITE WILL BE REMOVED OR SEALED & ABANDONED IN PLACE IN ACCORDANCE WITH ALL APPLICABLE PERMITS AND REGULATIONS.

EXISTING BG&E POLE TO BE REMOVED OR RELOCATED.

SOILS LEGEND

HOWARD COUNTY

NON-HYDRIC SOILS LIST

BeB2	BELTSVILLE SILT LOAM, 5 TO 8 PERCENT SLOPES, MODERATELY ERODED
BeL2	BELTSVILLE - DEPTH TO BEDROCK UNDETERMINED; 1- 1/2 TO 3 FEET TO WATER TABLE; SEVERE LIMITATIONS FOR SEWAGE DISPOSAL FIELDS; MODERATE LIMITATIONS FOR HOMES WITH BASEMENTS; IMPEDED DRAINAGE; SEASONAL HIGH WATER TABLE.
SiC2	SASSAFRAS GRAVELLY SANDY LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED
SiD2	SASSAFRAS GRAVELLY SANDY LOAM, 10 TO 15 PERCENT SLOPES, MODERATELY ERODED
SaSA	SASSAFRAS - DEPTH TO BEDROCK UNDETERMINED; 5+ FEET DEPTH TO WATER TABLE; SLIGHT TO MODERATE LIMITATIONS FOR SEWAGE DISPOSAL FIELDS AND HOMES WITH BASEMENTS DEPENDING ON SLOPE; EROSION HAZARD.

DESCRIPTION PER HOWARD COUNTY SOIL SURVEY (1968)

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. 18095

EXPIRATION DATE: 12/21/08

Matthew Bitar 4/6/08
REGISTERED PROFESSIONAL ENGINEER

INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND DEPTH OF THE MAINS BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS WELL IN ADVANCE OF THE START OF EXCAVATION. CONTACT "MIS UTILITY" AT 410-257-1777 AT LEAST 48 HOURS PRIOR TO THE START OF EXCAVATION. IF CLEARANCES ARE LESS THAN SHOWN ON THIS PLAN OR TWELVE (12) INCHES, WHICH EVER IS LESS, CONTACT THE ENGINEER AND THE UTILITY BEFORE PROCEEDING WITH CONSTRUCTION.

EXISTING CONDITION, SOILS MAP & DEMOLITION PLAN

MISSION PLACE
PARCELS A, B, & C
ROUGH GRADING PLAN
W&S CONTRACT: 24-4402-D

6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

Dewberry
203 PERRY PARKWAY, SUITE 1
GAITHERSBURG, MARYLAND 20877
PHONE: 301.948.8300
FAX: 301.258.7607

OWNER / DEVELOPER:
MISSION ROAD INVESTORS, LLC
c/o THE DOLBEN COMPANY, INC.
2600 MIDWAY BRANCH DR, 2ND FL
ODENTON, MD 21113
CONTACT: MATTHEW BITAR
PH: 301.912.3600
FX: 301.912.3400

Drawn by: KDM
Designed by: KDM
Checked by: JMC
Zoned: CAC-CLI
Sheet: 2 of 11

Section: NA	Area:	Phase: NA	Scale: 1"=50'
Tax Map Grid & Parcel: MAP 43, GRID 14 PARCELS A, B & C	Date: MARCH 2008	Prior Submittals: ZB-10468M SP-06-18 E-07-156	HO-827 WP-06-096 SDP-07-104 AA-06-016 SDP-07-113

File number: SDP-07-101



LEGEND:

EXISTING

- Sanitary Sewer
- Water Line, Meter, Valve & Hydrant
- Storm Drain
- Site Boundary
- Lot Line
- Tree Line
- Fence
- Wetlands & Buffer
- Stream Buffer
- 100 Yr Floodplain
- Building
- Power Pole
- Curb
- Edge of Pavement
- Sidewalk
- Gas Line
- Overhead Utility
- Undergr. Tele.
- Bench Mark & Elev.
- Soils & Type
- Specimen Tree
- Use-1 Perennial Stream

AREAS WITH 15-25% SLOPES

AREAS WITH 25% & GREATER SLOPES

F FOREST

TURF BUILDINGS, PARKING AND VEGETATION

H HEDGE ROW

FOREST F-1: 2.64 AC UPLAND

FOREST F-2: 1.46 AC UPLAND

FOREST F-3: 0.14 AC UPLAND
0.10 AC FLOODPLAIN

FOREST STAND F1 ANALYSIS

KEY	TYPE OF COMMUNITY	AREA	SOIL INFORMATION	TYPICAL FOREST COVER FOR SOIL	WOODLAND SUITABILITY	HABITAT VALUE	EXISTING VEGETATION	STAND CHARACTERISTICS	FOREST AREA
F-1	upland hardwood	2.64	SfD2	PINE	75-84	not a critical habitat	dominant and co-dominant sp. beeches, poplar, red maple, green ash, various oak.	6'-20" 5 to 15 closed canopy good condition	0
			SfC2	PINE	75-84		dominant species beeches, poplar, red maple, green ash, various oak, beach pine.	6'-20" 5 to 15 closed canopy	0

FOREST STAND F2 ANALYSIS

KEY	TYPE OF COMMUNITY	AREA	SOIL INFORMATION	TYPICAL FOREST COVER FOR SOIL	WOODLAND SUITABILITY	HABITAT VALUE	EXISTING VEGETATION	STAND CHARACTERISTICS	FOREST AREA
F-2	upland hardwood	1.46	SfC2	PINE	75-84	not a critical habitat	dominant and co-dominant sp. beeches, poplar, red maple, green ash, various oak.	6'-20" 5 to 15 closed canopy good condition	0
			BeB2	PINE and OAK	65-74		beach pine	6'-20" 5 to 10 closed canopy	0

FOREST STAND F3 ANALYSIS

KEY	TYPE OF COMMUNITY	AREA	SOIL INFORMATION	TYPICAL FOREST COVER FOR SOIL	WOODLAND SUITABILITY	HABITAT VALUE	EXISTING VEGETATION	STAND CHARACTERISTICS	FOREST AREA
F-3	lowland hardwood	0.25	SfC2	PINE	75-84	high	dominant and co-dominant sp. poplar, red maple, various oak.	6'-20" 15 to 30 closed canopy fair condition heavy dumping and trash on ground level; invasive groundcover	0.25 ac.

FOREST STAND DELINEATION

Three distinct forest stands were identified along with turf areas and hedgerows located within the subject property as follows:

Forest Stand F-1: This stand is approximately 2.64 acres of mid-age mixed hardwood forest with some variation in species composition along the stand fringe. The main characteristic of this upland forest stand is the size of the dominant species. Among these species are tulip poplar (*Liriodendron tulipifera*), American beech (*Fagus grandifolia*) and oak species (*Quercus spp.*), with a size range between 6" and 20" d.b.h. The understory is a mixture of mostly beech, green ash (*Fraxinus pennsylvanica*), red maple (*Acer rubrum*), hickory (*Carya sp.*), greenbrier (*Smilax sp.*), sweet gum (*Liquidambar styraciflua*) and various oak species. There are few understory species in this stand. The canopy closure is approximately 99%. Herbaceous species were not observed (snow time) apart from the edge of the forest. The preservation priority is high because a wetland of approximately 5,117 square feet is associated with this forest.

Forest Stand F-2: This upland forest stand occurs on approximately 1.46 acres of the Subject Property with some variation in species composition along the stand's fringe. The canopy comprises white oak (*Quercus alba*), red maple, sweet gum, and green ash. Canopy closure is approximately 75%. This forest stand is in an early seral successional level of hardwood development. Due to this stand's stage of development, most of the size classes of dominant species are in the range of 6" to 20" d.b.h. The understory comprises a mixture of black cherry (*Prunus serotina*), green ash, beech, scrub pine (*Pinus virginiana*) and eastern red cedar (*Juniperus virginiana*). The coverage within the understory is 60%. Among herbaceous species are Japanese honeysuckle (*Lonicera japonica*), brambles (*Rubus sp.*), Asiatic bittersweet (*Celastrus orbiculatus*), winterberry (*Ilex verticillata*), poison ivy (*Rhus radicans*), and other grasses. No wetland areas have been identified within this forest stand. The preservation priority is high.

Forest Stand F-3: This forest stand occurs on approximately 0.25 acres of the subject property and is a continuation of a larger forest stand on the north. The canopy composition is a mixture of red maple, tulip poplar, and oak. The understory is very dense with some hardwood saplings but mostly with invasive species such as multiflora rose (*Rosa multiflora*), greenbrier, honeysuckle, English ivy (*Hedera helix*), common onion grass (*Allium vineale*), and poison ivy. This stand is contiguous to a stream and contains approximately 1,282 square feet of wetlands and 5,877 square feet of 100-year flood plain, which makes it high priority for preservation. There is a significant amount of trash and debris along the stream bank.

Building Area-1: Building Area 1 comprises of 3.23 acres of land; ninety seven (97%) percent of it is covered by buildings and gravel parking. Although there are small green areas along the perimeter, there are no trees or shrubs within the area.

Building Area-2: Building Area 2 is totally covered by buildings and asphalt parking. There are no trees or any vegetation.

TURF-1: Turf 1 is comprised of the majority of Parcels 525, 446 and 447; it contains several houses, access driveways and a couple of wood sheds. The topography slopes down west to east. Four specimen trees were identified on this lot; a 31" white mulberry (*Morus alba*), two white oaks 34" and 36", and a 40" northern red oak (*Quercus borealis*). No environmentally sensitive areas are associated with TURF-1.

Hedgerow H-1: This upland tree row is a mix of trees, shrubs, and herbaceous species typical of middle succession growth on unused areas. The canopy comprises three sycamores (*Platanus occidentalis*), one tulip poplar, red maple, and white oak. The understory is made of green ash, various oak species, scrub pine, and red maple. Among the herbaceous species are greenbrier, bramble, honeysuckle, multiflora rose, winter berry, and poison ivy. No environmentally sensitive areas are associated with H-1.

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

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 INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Signature: *Scott C. Reed* DATE: 03/06/08
PRINTED NAME: SCOTT C. REED, MANAGER

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 REQUIREMENT OF THE HOWARD SOIL CONSERVATION DISTRICT.

Signature: *Joanne M. Cheek* DATE: 03/06/08
PRINTED NAME: JOANNE M. CHEEK

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Signature: *David L. Weger* DATE: 2/11/08
DIRECTOR

Signature: *Chris Homan* DATE: 4/10/08
CHIEF, DIVISION OF LAND DEVELOPMENT

SOILS LEGEND

HOWARD COUNTY

NON-HYDRIC SOILS LIST

BeB2 BELTSVILLE SILT LOAM, 1 TO 5 PERCENT SLOPES, MODERATELY ERODED

SfC2 SASSAFRAS GRAVELLY SANDY LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED

SfD2 SASSAFRAS GRAVELLY SANDY LOAM, 10 TO 15 PERCENT SLOPES, MODERATELY ERODED

SASSAFRAS - DEPTH TO BEDROCK UNDETERMINED; 5+ FEET DEPTH TO WATER TABLE; SLIGHT TO MODERATE LIMITATIONS FOR SEWAGE DISPOSAL FIELDS AND HOMES WITH BASEMENTS DEPENDING ON SLOPE; EROSION HAZARDOUS.

DESCRIPTION PER HOWARD COUNTY SOIL SURVEY (1988)

KEYMAP

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. 18095

EXPIRATION DATE: 12/21/08

Signature: *Matthew Bitar* DATE: 3/6/08

NOTE: INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF THE MAINS BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS WELL IN ADVANCE OF THE START OF EXCAVATION. CONTACT "MISS UTILITY" AT 410-527-7777 AT LEAST 48 HOURS BEFORE THE START OF EXCAVATION. IF CLEARANCES ARE LESS THAN SHOWN ON THIS PLAN OR TWELVE (12) INCHES, WHICHEVER IS LESS, CONTACT THE ENGINEER AND THE UTILITY BEFORE PROCEEDING WITH CONSTRUCTION.

EXISTING CONDITION, SOILS MAP & DEMOLITION PLAN

MISSION PLACE
PARCELS A, B, & C
ROUGH GRADING PLAN
W&S CONTRACT: 24-4402-D

6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

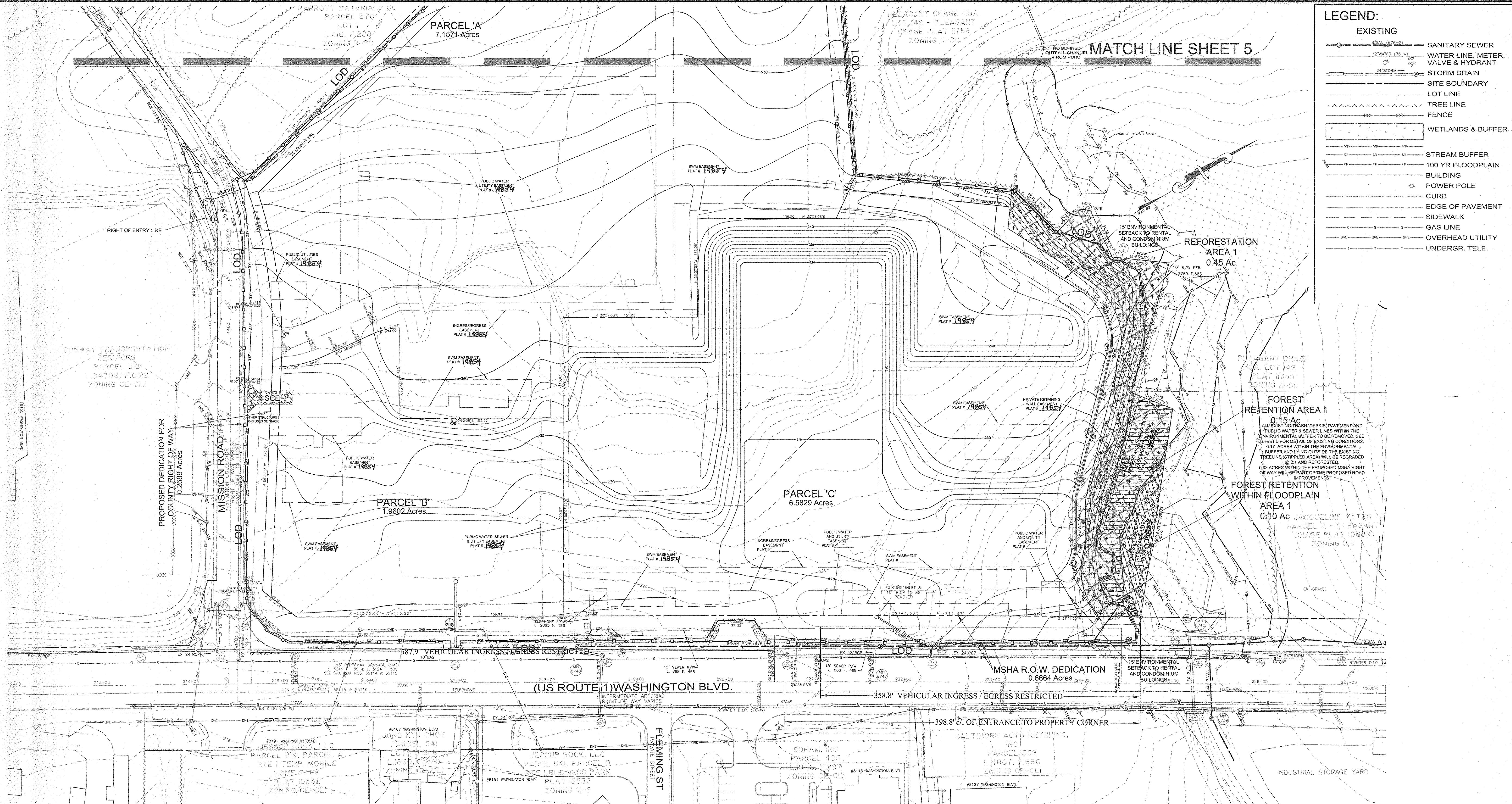
Dewberry

203 PERRY PARKWAY, SUITE 1
GAITHERSBURG, MARYLAND 20877
PHONE: 301.948.8300
FAX: 301.258.7607

OWNER / DEVELOPER:
MISSION ROAD INVESTORS, LLC
c/o THE DOLBEN COMPANY, INC.
2600 MIDWAY BRANCH DR, 2nd FL
ODENTON, MD 21113
CONTACT: MATTHEW BITAR
PH: 301.912.3600
FX: 301.912.3400

Drawn by: KDM
Designed by: KDM
Checked by: JMC
Zone: CAC-CLI
Sheet: 3 of 11

Section: NA Area: NA Phase: NA Scale: 1"=50'
Tax Map Grid & Parcel: MAP 43, GRID 14, PARCELS A, B, & C Date: MARCH 2008
Prior Submittals: ZB 1048M SP-06-18 F-07-156 HO-827 SDP-07-104 SDP-07-113 WP-06-096 AA-06-016
File number: SDP-07-101



LEGEND:

EXISTING	
	SANITARY SEWER
	WATER LINE, METER, VALVE & HYDRANT
	STORM DRAIN
	SITE BOUNDARY
	LOT LINE
	TREE LINE
	FENCE
	WETLANDS & BUFFER
	STREAM BUFFER
	100 YR FLOODPLAIN
	BUILDING
	POWER POLE
	CURB
	EDGE OF PAVEMENT
	SIDEWALK
	GAS LINE
	OVERHEAD UTILITY
	UNDERGR. TELE.

MATCH LINE SHEET 5

REFORESTATION AREA 1
0.45 Ac

FOREST RETENTION AREA 1
0.15 Ac

FOREST RETENTION WITHIN FLOODPLAIN AREA 1
0.10 Ac

(US ROUTE 1) WASHINGTON BLVD.

MSHA R.O.W. DEDICATION
0.6664 Acres

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

U.S.D.A.-NATURAL RESOURCES CONSERVATION SERVICE DATE: 3/13/08

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

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

BY THE DEVELOPER:

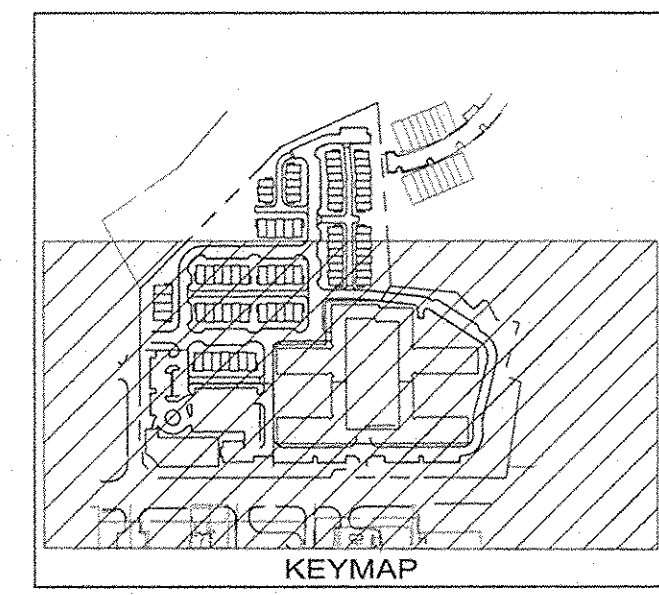
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Signature of Developer: [Signature]
DATE: 03/06/08
PRINTED NAME: SCOTT C. REED, MANAGER

BY THE ENGINEER:

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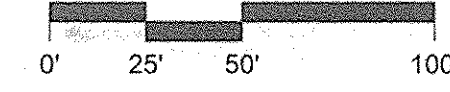
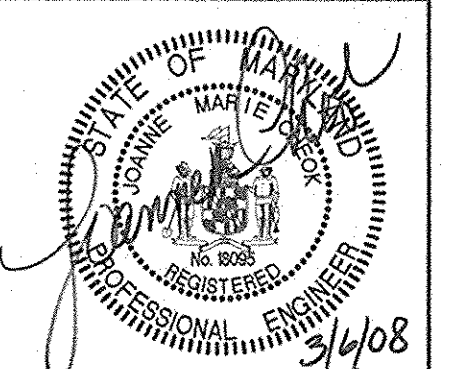
Signature of Engineer: [Signature]
DATE: 03/06/08
PRINTED NAME: JOANNE M. CHEOK



FOREST CONSERVATION EASEMENT

Course	Bearing	Distance
FC1	S 31°24'25" W	15.80'
FC2	N 89°18'44" W	51.01'
FC3	Rad: 61.00' Arc: 41.24' Tan: 21.44' Chd: N 39°45'44" W	40.46'
FC4	N 59°07'52" W	50.98'
FC5	N 43°31'47" W	164.10'
FC6	Rad: 61.00' Arc: 99.72' Tan: 57.28' Chd: N 80°47'50" W	93.54'
FC7	S 63°56'08" W	107.52'
FC8	N 53°20'05" W	44.41'
FC9	N 37°03'59" E	5.29'
FC10	N 78°59'50" E	65.77'
FC11	N 13°12'11" W	36.35'
FC12	N 38°55'28" E	10.75'
FC13	S 84°07'33" E	58.38'
FC14	N 36°56'28" E	64.15'
FC15	S 42°47'50" E	152.43'
FC16	N 52°23'28" E	50.07'
FC17	S 59°16'00" E	237.73'

PROFESSIONAL CERTIFICATION:
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LICENSE NO. 18095
EXPIRATION DATE: 12/21/08



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SITE DEVELOPMENT PLAN
MISSION PLACE
PARCELS A, B, & C
ROUGH GRADING PLAN
W&S CONTRACT: 24-4402-D

6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

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Drawn by: KDM
Designed by: KDM
Checked by: JMC
Zone: CAC-CLI

Section: NA Area: NA Phase: NA Scale: 1"=50'
Tax Map Grid & Parcel: MAP 45, GRID 14 PARCELS A, B & C Date: MARCH 2008 Prior Submittals: ZB 1048M SP-06-18 HO-827 SDP-07-104 WP-06-096 AA-06-016 F-07-156 SDP-07-113 File number: 4 of 11

SDP-07-101

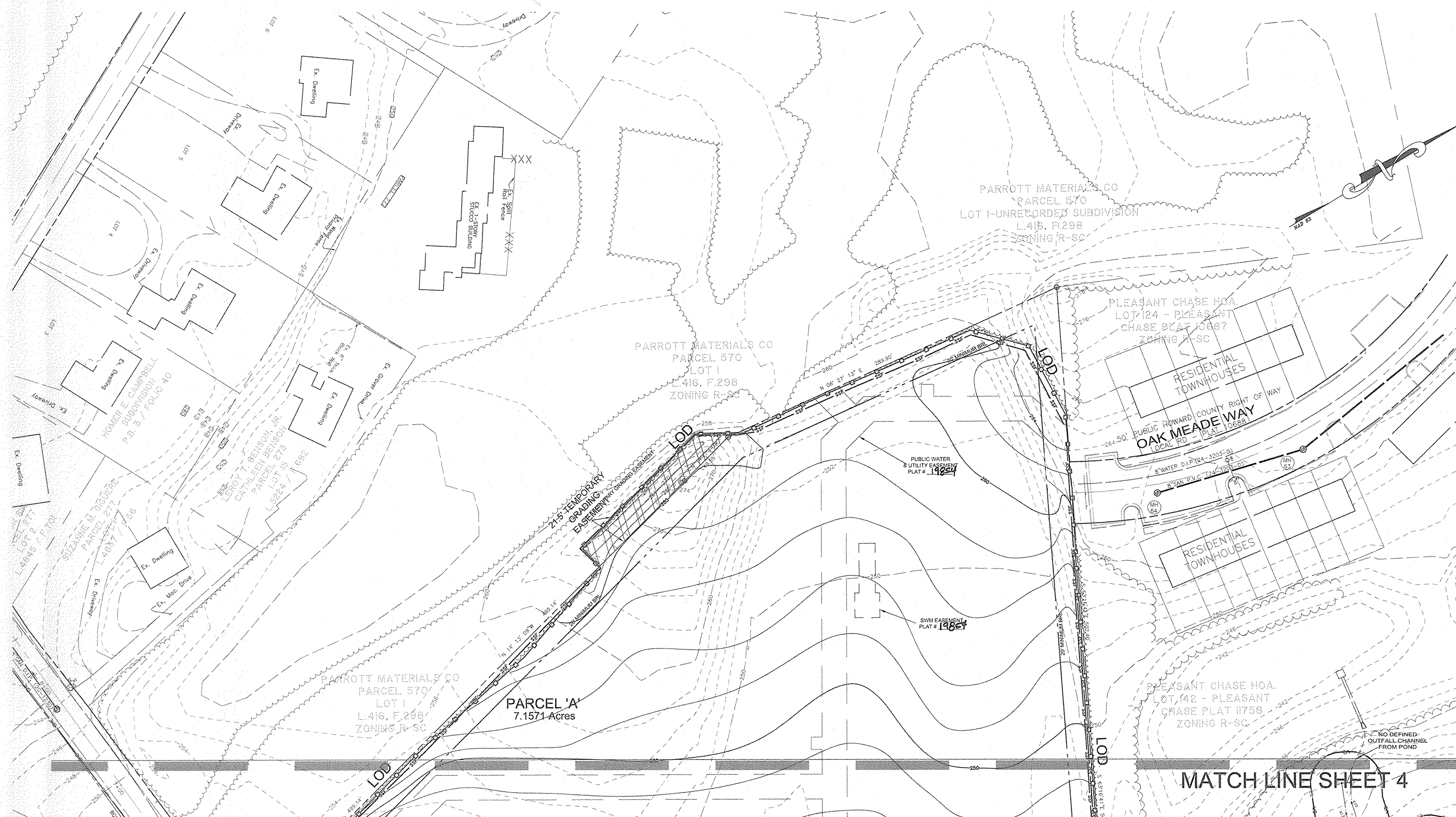


Figure 2. Temporary Sediment Basin Design Data Sheet

Computed by: RAL Date: APR '07 Checked by: _____ Date: _____
 Project name: MISSION PLACE Basin #: 1
 Location: HOWARD COUNTY

Total area draining to basin: 9.35 acres (ac)

Basin Volume Design

Note: 1. Also see Surface Area Design #10, this form.
 2. To convert ft³ to yd³, divide ft³ by 27. To convert ft³ to yd³, divide ft³ by 9.

1. Min. required vol. = 1600 ft³ x 9.35 ac. drainage = 33,660 ft³
2. Actual Volume of basin = 54,086 ft³
3. Excess vol. = 20,426 ft³ (to obtain required capacity)
4. Vol. at drawdown elev. = 1800 ft³ x 9.35 ac. = 16,830 ft³
5. Vol. of basin at elevation = 900 ft³ x 9.35 ac. = 8,415 ft³
6. Elevation corresponding to min. required volume of basin (riser crest elevation) = 217.50 ft.
7. Permanent pool elevation = 215.50 ft.
8. Distance from riser crest elevation to permanent pool elevation = 2.0 ft.
9. Basin crest elevation = 214.25 ft.
10. Distance from riser crest elevation to cleanout elevation = 3.25 ft.

Spillway Design

11. Q_s = 38.25 cfs (peak discharge from 10-yr, 24-hr storm event, attach computations)

Principal Spillway (Q_s) (See Detail J1)

12. Design Principal Spillway (barrel) discharge, Design Q_s = 38.25 cfs (min. 10% of 10 year peak or 8" Diameter Pipe)
13. H = 5.2 ft. Barrel length = 58 ft.
14. Barrel Diam. = 36 in. Note: Q_s must equal or exceed Design Q_s.
15. Q_s = Q (from Table 11 or 12) x 0.85 x (length correction factor) 1.05 = 40.42 cfs.
16. Riser Diameter = 36 in.; Riser Height = 5.5 ft.; Riser Head (h) = 2.5 ft.
17. Trash Rack Diam. = 54 in.; Trash Rack Height = 1.0 ft.

NOTE: A table showing design data shall be included on the plan for each basin.

C-10-10

Emergency Spillway (Q_e) (See Detail J1)

17. Emergency spillway cap. = Q_e = 0 cfs
18. Width = 0 ft
19. Entrance channel slope = 0%
20. Exit channel slope = 0%

Anti-Scoop Collar Design (If Required)

21. y = 5.9 ft. z = 2 ft. pipe slope = 2.24 ft. L_s = 43.5 ft.
22. Rise = 2.0 ft. S = 0.005 ft. In square, projection = 1.7 ft.

Basin Elevations

23. Riser Crest = 217.50 ft. 24. Design High Water = 218.00 ft.
25. Emergency Spillway Crest = 217.50 ft. 26. Min. settled top of dam = 220.00 ft.
27. Permanent pool = 215.50 ft. 28. Bottom of Basin = 213.00 ft.
29. Draw-down orifice invert = 215.50 ft.

Surface Area Design

30. Min. basin surface area; SA ≥ 0.0035 x Q_s = 0.0035 x 38.25 cfs = 0.134 ac.

Draw-down Device

31. Draw-down device orifice diameter = 4 in. (From Table 11)
32. A = Total area of perforations ≥ 4A_s
 A_s = (if perforation foot/perforation area ft²/perforation length ft.)
 A_s = 0.34 ft²
 A = Internal orifice area (from Table 11 or computed)

C-10-11

LEGEND:

EXISTING

- SANITARY SEWER
- WATER LINE, METER, VALVE & HYDRANT
- STORM DRAIN
- SITE BOUNDARY
- LOT LINE
- TREE LINE
- FENCE
- WETLANDS & BUFFER
- STREAM BUFFER
- 100 YR FLOODPLAIN
- BUILDING
- POWER POLE
- CURB
- EDGE OF PAVEMENT
- SIDEWALK
- GAS LINE
- OVERHEAD UTILITY
- UNDERGR. TELE.

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

U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE DATE: _____

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

John R. Robertson 3/13/08
 HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Dan H. Dwyer 4/14/08
 DIRECTOR DATE

Joanne M. Check 03/06/08
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

BY THE DEVELOPER:

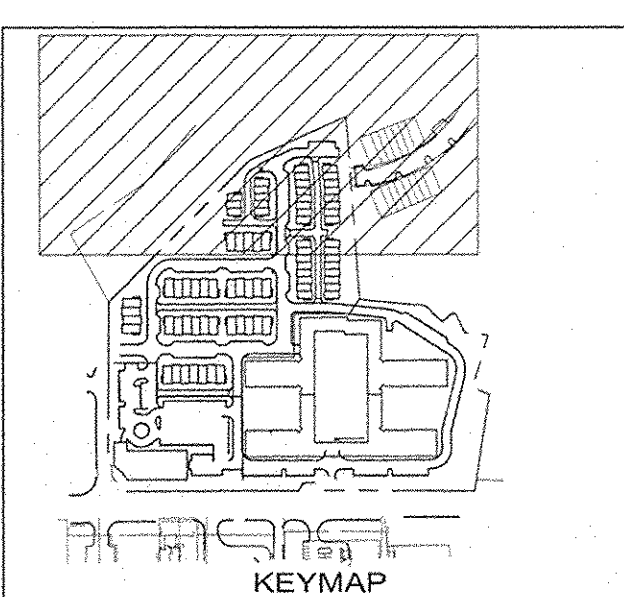
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Scott C. Reed 03/06/08
 SIGNATURE OF DEVELOPER DATE
 PRINTED NAME: SCOTT C. REED, MANAGER

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 REQUIREMENT OF THE HOWARD SOIL CONSERVATION DISTRICT."

Joanne M. Check 03/06/08
 SIGNATURE OF ENGINEER DATE
 PRINTED NAME: JOANNE M. CHECK



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. 18095
 EXPIRATION DATE: 12/21/08

Matthew Bitar 3/6/08
 REGISTERED PROFESSIONAL ENGINEER

NOTE

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MISSION PLACE
 PARCELS A, B, & C
 ROUGH GRADING PLAN
 W&S CONTRACT: 24-4402-D

6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

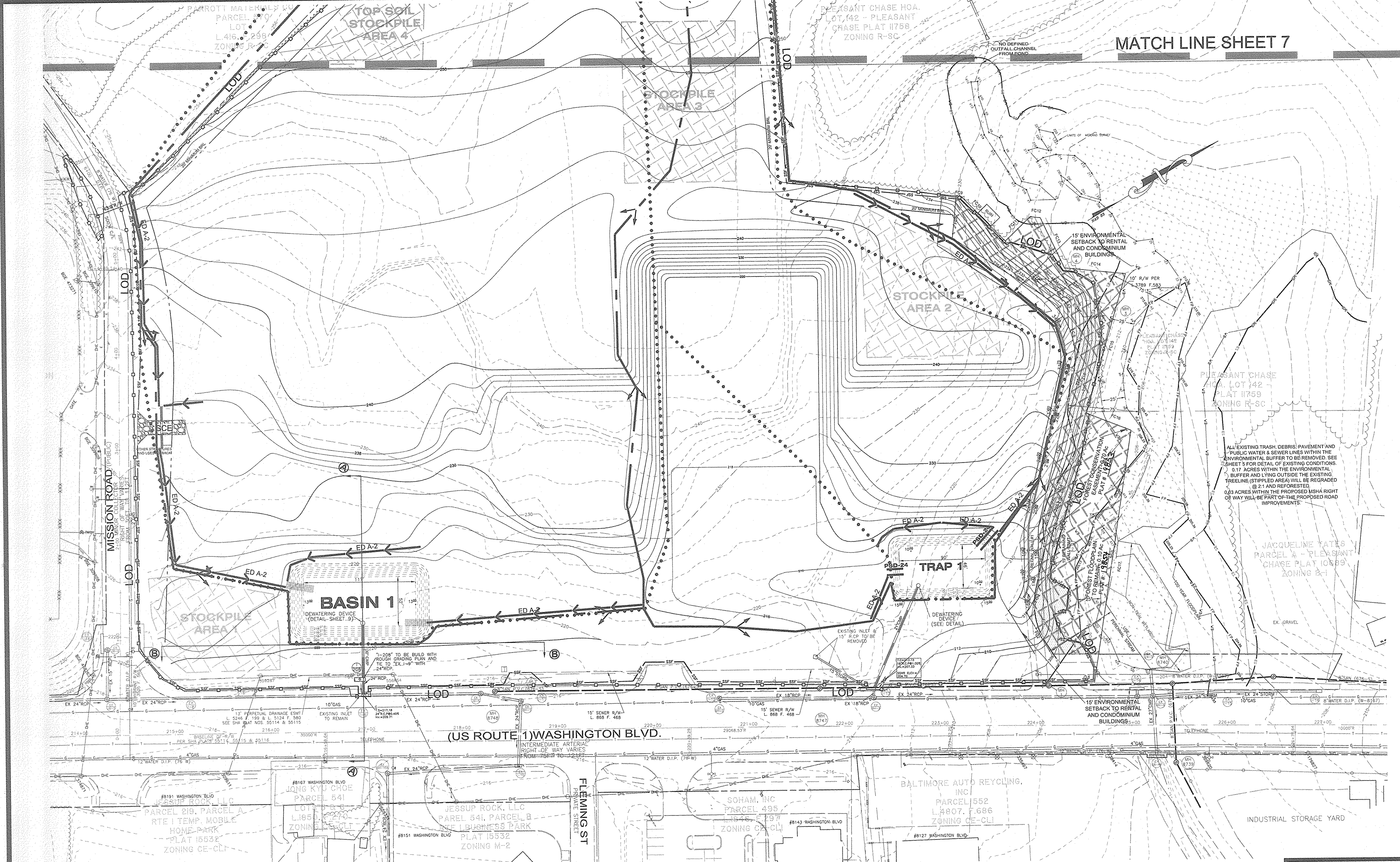
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 CONTACT: MATTHEW BITAR
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Drawn by: KDM
 Designed by: KDM
 Checked by: JMC
 Zone: CAC-CLI
 Sheet: 5 of 11

Section: NA Area: _____ Phase: NA Scale: 1"=50'
 Tax Map Grid & Parcel: MAP 43, GRID 14 PARCELS A, B & C Date: MARCH 2008
 Prior Submittals: ZB 1048M SP-06-18 F-07-156 HO-827 SDP-07-104 AA-06-016 WP-06-096 AA-06-016
 File number: _____

SDP-07-101



LEGEND:

EXISTING

- 18" SAN (67'-5") SANITARY SEWER
- 12" WATER (76-W) WATER LINE, METER, VALVE & HYDRANT
- 24" STORM STORM DRAIN
- SITE BOUNDARY
- LOT LINE
- TREE LINE
- FENCE
- WETLANDS & BUFFER
- STREAM BUFFER
- 100 YR FLOODPLAIN
- BUILDING
- POWER POLE
- CURB
- EDGE OF PAVEMENT
- SIDEWALK
- GAS LINE
- OVERHEAD UTILITY
- UNDERGR. TELE.

PROPOSED

- SCENE STABILIZED CONSTRUCTION ENTRANCE
- EQ-A-2 SUPER SILT-FENCE
- PSD-24 EARTH DIKE
- PIPE SLOPE DRAIN
- EXISTING DRAINAGE AREA
- PROPOSED DRAINAGE AREA

TRAP SUMMARY # 1

1. TYPE OF TRAP	ST - 1
2. DRAINAGE AREA	4.93 Ac.
EXISTING = 4.03 Ac.	
PROPOSED = 4.93 Ac.	
3. STORAGE REQUIRED	17,748 cf
4. STORAGE PROVIDED	
(a) WET = 9,385 CF	
(b) DRY = 11,735 CF	
TOTAL	21,120 CF
5. WEIR LENGTH	N/A
6. PIPE LENGTH	116'
7. BARREL DIAMETER	21"
8. RISER DIAMETER	27"
9. TRASH RACK DIAMETER	42"
10. BOTTOM ELEVATION	210.00
11. WET STORAGE ELEVATION	212.00
12. CREST ELEVATION	214.00
13. STORAGE DEPTH	4.0'
14. EMBANKMENT ELEVATION	215.00
15. CLEANOUT ELEVATION	211.00
16. BOTTOM DIMENSION	90' X 46'
17. SIDE SLOPE	2:1

THESE PLANS HAVE BEEN REVIEWED BY HOWARD COUNTY SOIL CONSERVATION DISTRICT AND APPROVED FOR TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

U.S.D.A. - NATURAL RESOURCES CONSERVATION SERVICE DATE: 3/13/08

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John R. Robertson
DIRECTOR

BY THE DEVELOPER:

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Mission Place Investors, LLC
By: Scott C. Reed, Manager
DATE: 03/06/08

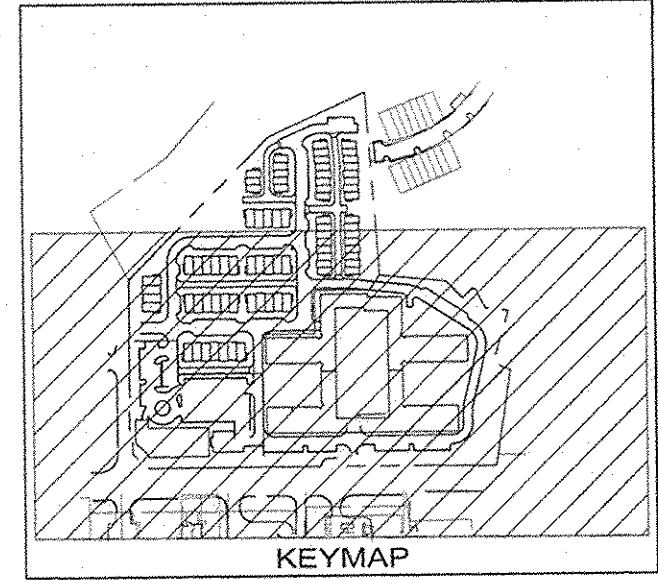
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Joanne M. Cheok
DATE: 03/06/08

SIGNATURE OF ENGINEER
PRINTED NAME: JOANNE M. CHEOK



THIS SITE IS A REDEVELOPMENT OF EXISTING INDUSTRIAL AND RESIDENTIAL USES. ROUGH GRADING ACTIVITIES WILL REMOVE ALL EXISTING BUILDINGS AND PAVEMENT ON-SITE. THE SITE WILL BE SEEDED AND STABILIZED AT THE END OF ROUGH GRADING ACTIVITIES. PROPOSED SEDIMENT CONTROL TRAPS WILL OUTFALL DIRECTLY INTO THE EXISTING STORM DRAINAGE SYSTEM. THEREFORE, NO INTERIM STORM WATER MANAGEMENT CONTROLS WILL BE REQUIRED.

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. 18095
EXPIRATION DATE: 12/21/08

Matthew Bitar
Professional Engineer
3/6/08

GRADING AND SEDIMENT CONTROL PLAN

MISSION PLACE
PARCELS A, B, & C
ROUGH GRADING PLAN
W&S CONTRACT: 24-4402-D

6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

OWNER / DEVELOPER:
MISSION ROAD INVESTORS, LLC
c/o THE DOLBEN COMPANY, INC.
2600 MIDWAY BRANCH DR, 2ND FL
ODENTON, MD 21113
CONTACT: MATTHEW BITAR
PH: 301.912.3600
FX: 301.912.3400

Drawn by: KDM
Designed by: KDM
Checked by: JMC
Zone: CAC-CLI
Sheet: 6 of 11

Section: NA Area: NA Phase: NA Scale: 1"=50'

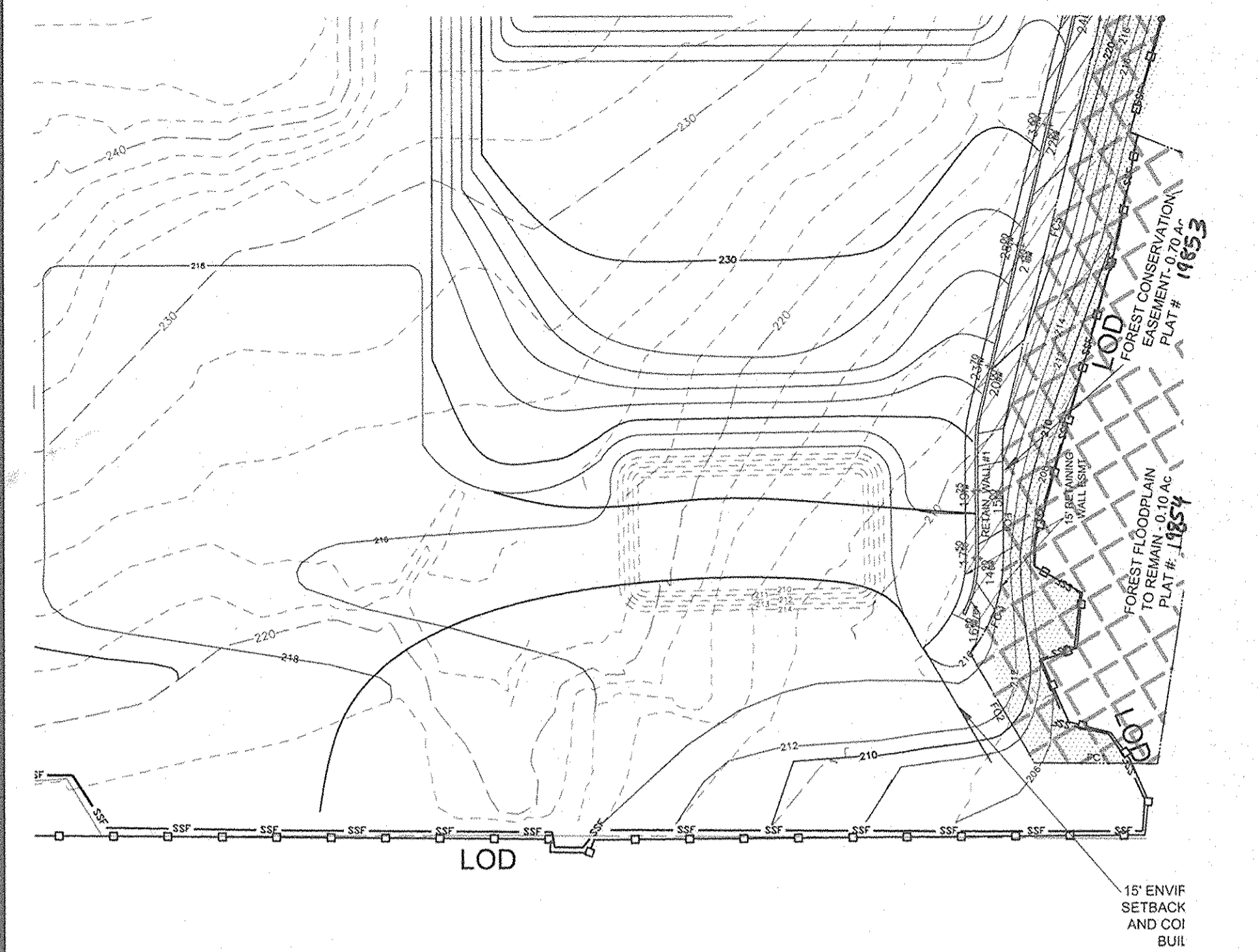
Tax Map Grid & Parcel: MAP 43, GRID 14, PARCELS A, B & C Date: MARCH 2008

Prior Submittals:
ZB 1048M
SP-06-18
F-07-156

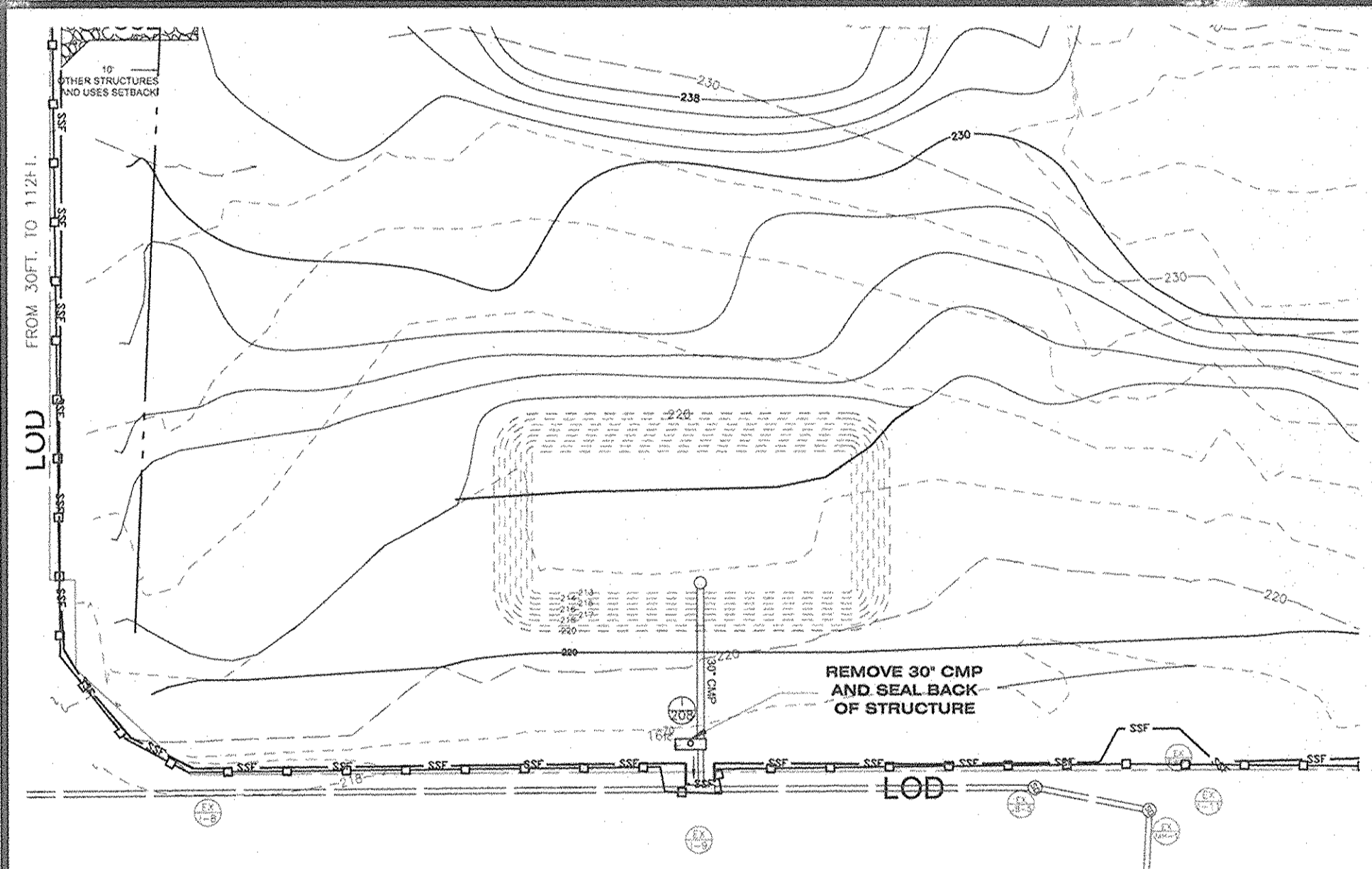
HO-827
SDP-07-104
SDP-07-113

WP-06-096
AA-06-016

File number: SDP-07-101

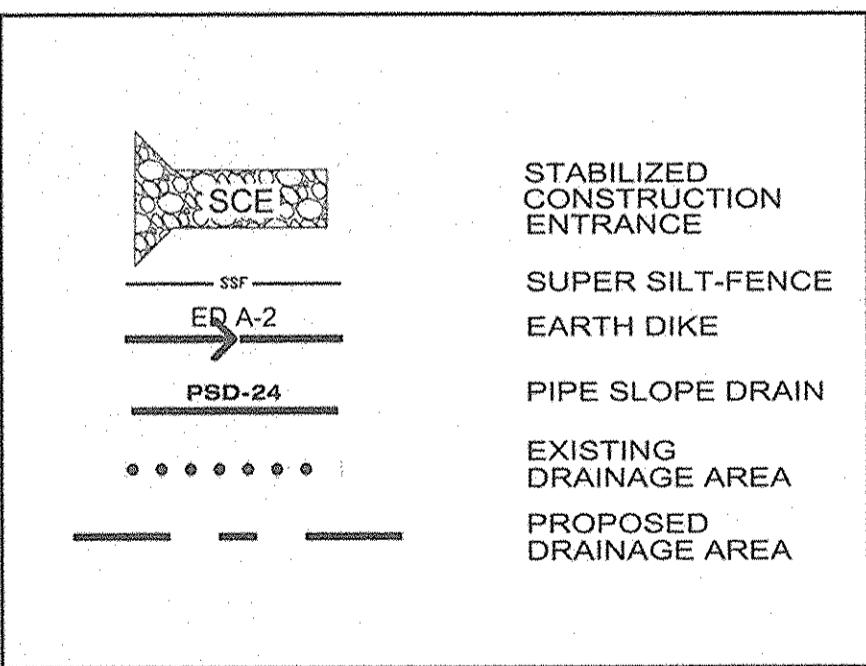


**FINAL GRADING
AFTER REMOVING TRAP 1**



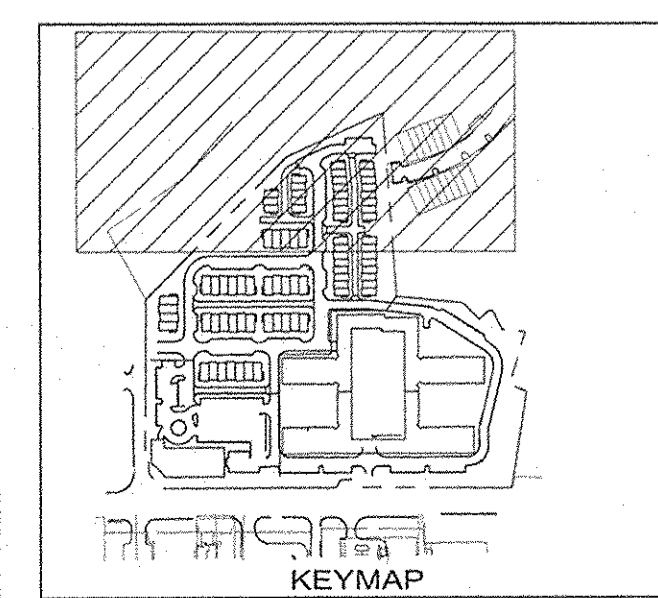
**FINAL GRADING
AFTER REMOVING BASIN 1**

REQUIRED TRAP SHALL REMAIN IN PLACE UNTIL THEY MUST BE REMOVED FOR FINAL CONSTRUCTION. SEE SEQUENCE OF CONSTRUCTION - SHEET 8



LEGEND:

	EXISTING		SANITARY SEWER
	WATER LINE, METER, VALVE & HYDRANT		STORM DRAIN
	SITE BOUNDARY		LOT LINE
	TREE LINE		FENCE
	WETLANDS & BUFFER		STREAM BUFFER
	100 YR FLOODPLAIN		BUILDING
	POWER POLE		CURB
	EDGE OF PAVEMENT		SIDEWALK
	GAS LINE		OVERHEAD UTILITY
	UNDERGR. TELE.		



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

U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE DATE: 3/13/08

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

John P. Robertson 3/13/08
DIRECTOR

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

James H. Wynn 3/17/08
DIRECTOR

Cindy Klaus 4/11/08
CHIEF, DIVISION OF LAND DEVELOPMENT

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 INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

Scott C. Reed 03/06/08
SIGNATURE OF DEVELOPER
PRINTED NAME: SCOTT C. REED, MANAGER

BY THE ENGINEER:

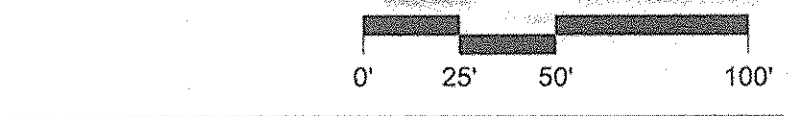
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENT OF THE HOWARD SOIL CONSERVATION DISTRICT."

Joanne M. Check 03/06/08
SIGNATURE OF ENGINEER
PRINTED NAME: JOANNE M. CHECK

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. 18095
EXPIRATION DATE: 12/21/08

Matthew Bitar 3/6/08
PROFESSIONAL ENGINEER



NOTE
INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF THE MAINS BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS WELL IN ADVANCE OF THE START OF EXCAVATION. CONTACT "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO THE START OF EXCAVATION. IF CLEARANCES ARE LESS THAN SHOWN ON THIS PLAN OR TWELVE (12) INCHES, WHICHEVER IS LESS, CONTACT THE ENGINEER AND THE UTILITY BEFORE PROCEEDING WITH CONSTRUCTION.

**GRADING AND SEDIMENT CONTROL PLAN
MISSION PLACE
PARCELS A, B, & C
ROUGH GRADING PLAN**

W&S CONTRACT: 24-402-D

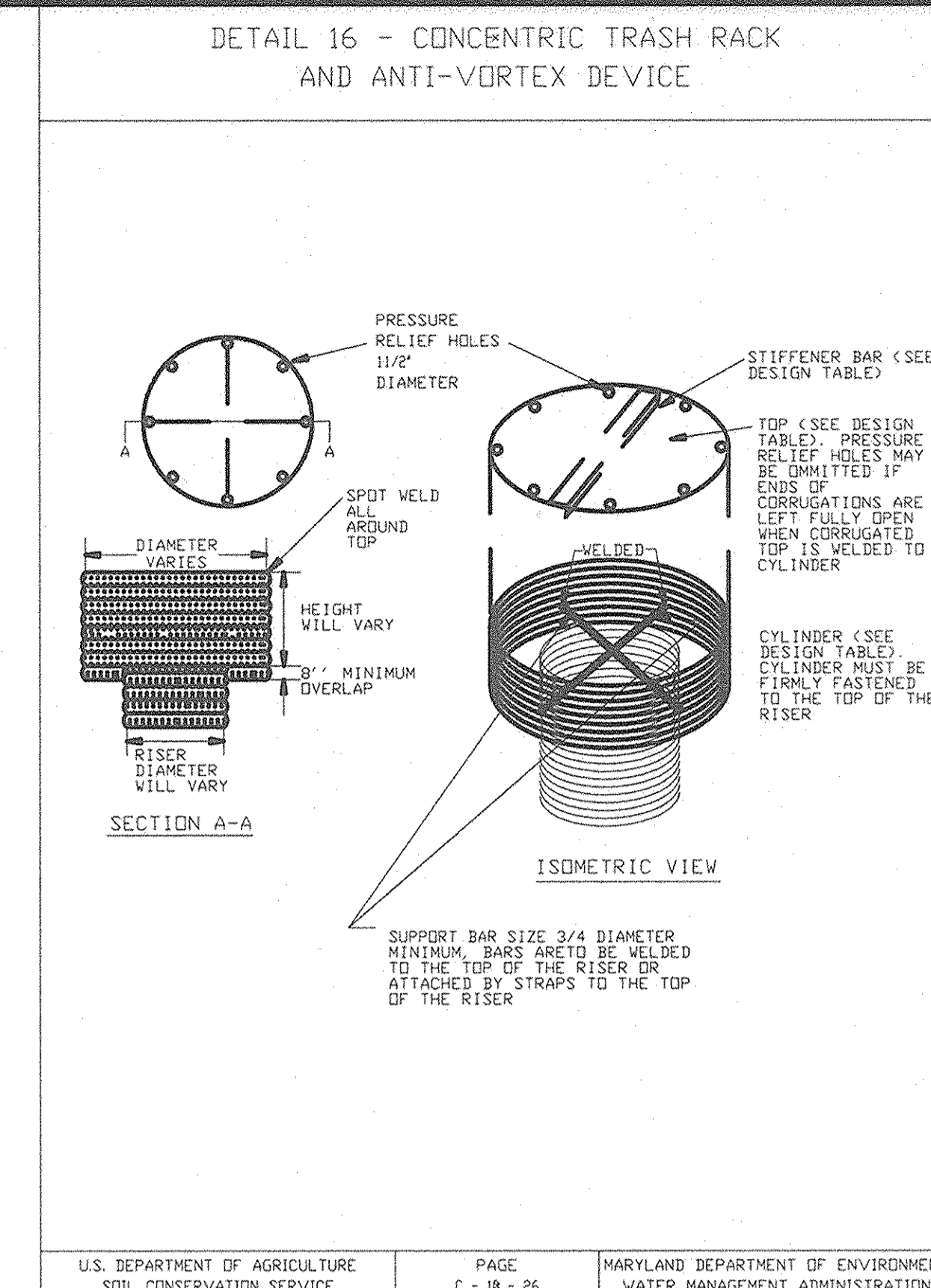
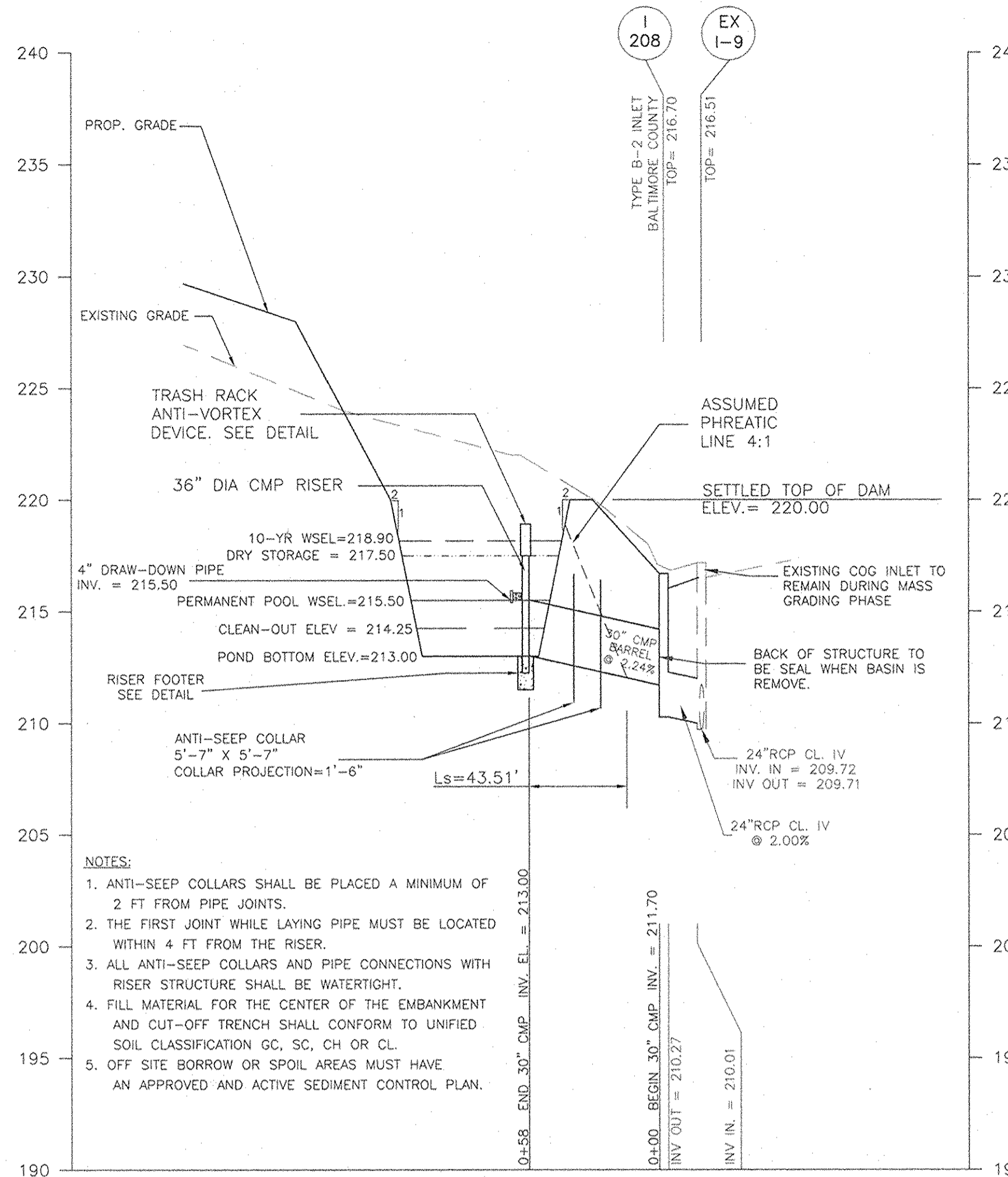
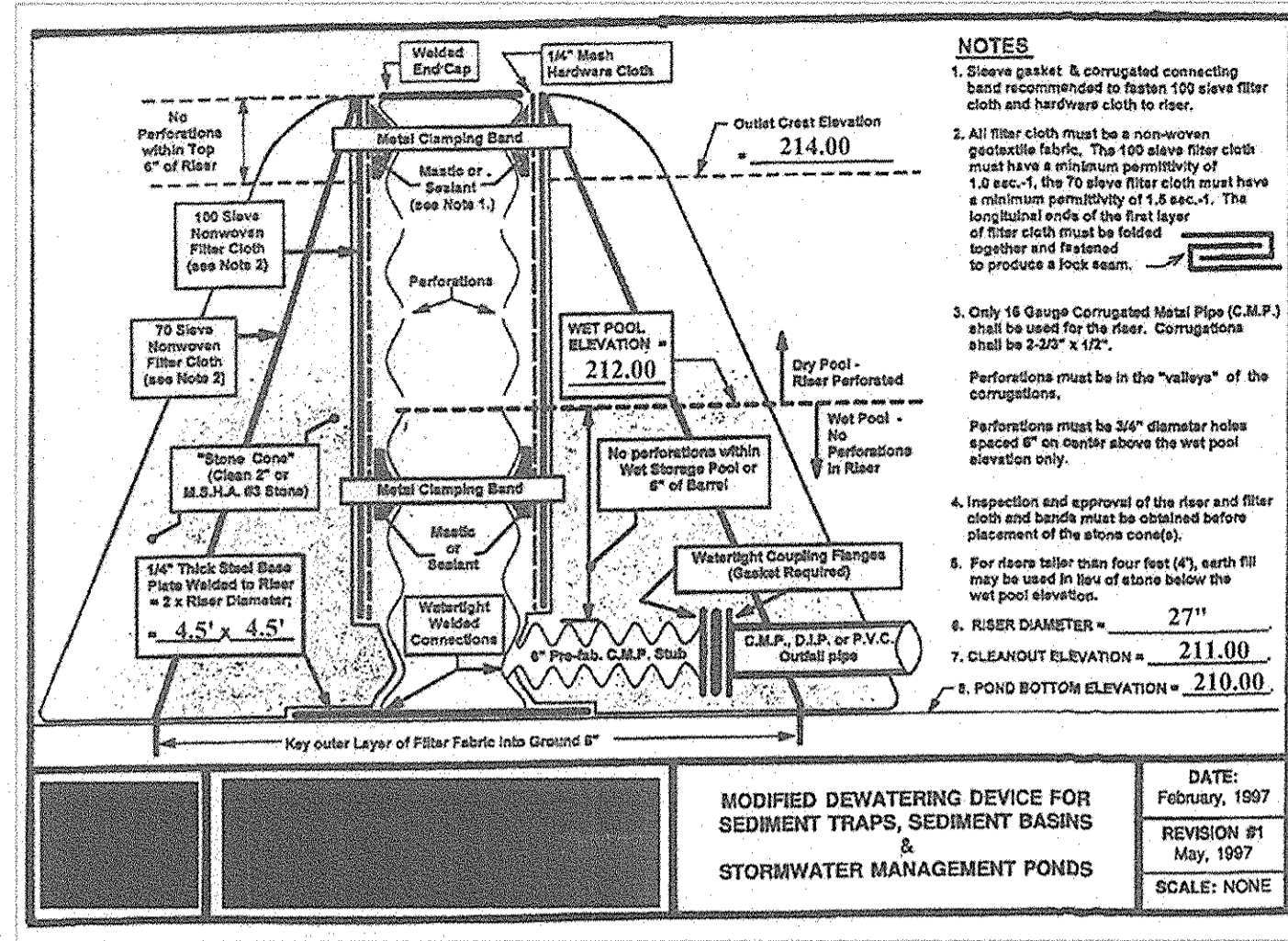
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

Dewberry
203 PERRY PARKWAY, SUITE 1
GAITHERSBURG, MARYLAND 20877
PHONE: 301.948.8300
FAX: 301.258.7607

OWNER / DEVELOPER:
MISSION ROAD INVESTORS, LLC
c/o THE DOLBEN COMPANY, INC.
2600 MIDWAY BRANCH DR, 2nd FL
ODENTON, MD 21113
CONTACT: MATTHEW BITAR
PH: 301.912.3600
FX: 301.912.3400

Drawn by: KDM
Designed by: KDM
Checked by: JMC
Zoned: CAC-CLI
Sheet: 7 of 11

Section: NA Area: NA Phase: NA Scale: 1"=50'
Tax Map Grid & Parcel: MAP 43, GRID 14 Date: MARCH 2008 Prior Submittals: ZB 1048M SP-06-18 F-07-156 HO-827 SDP-07-104 AA-06-016 WP-06-096 SDP-07-104 AA-06-016 File number: SDP-07-101

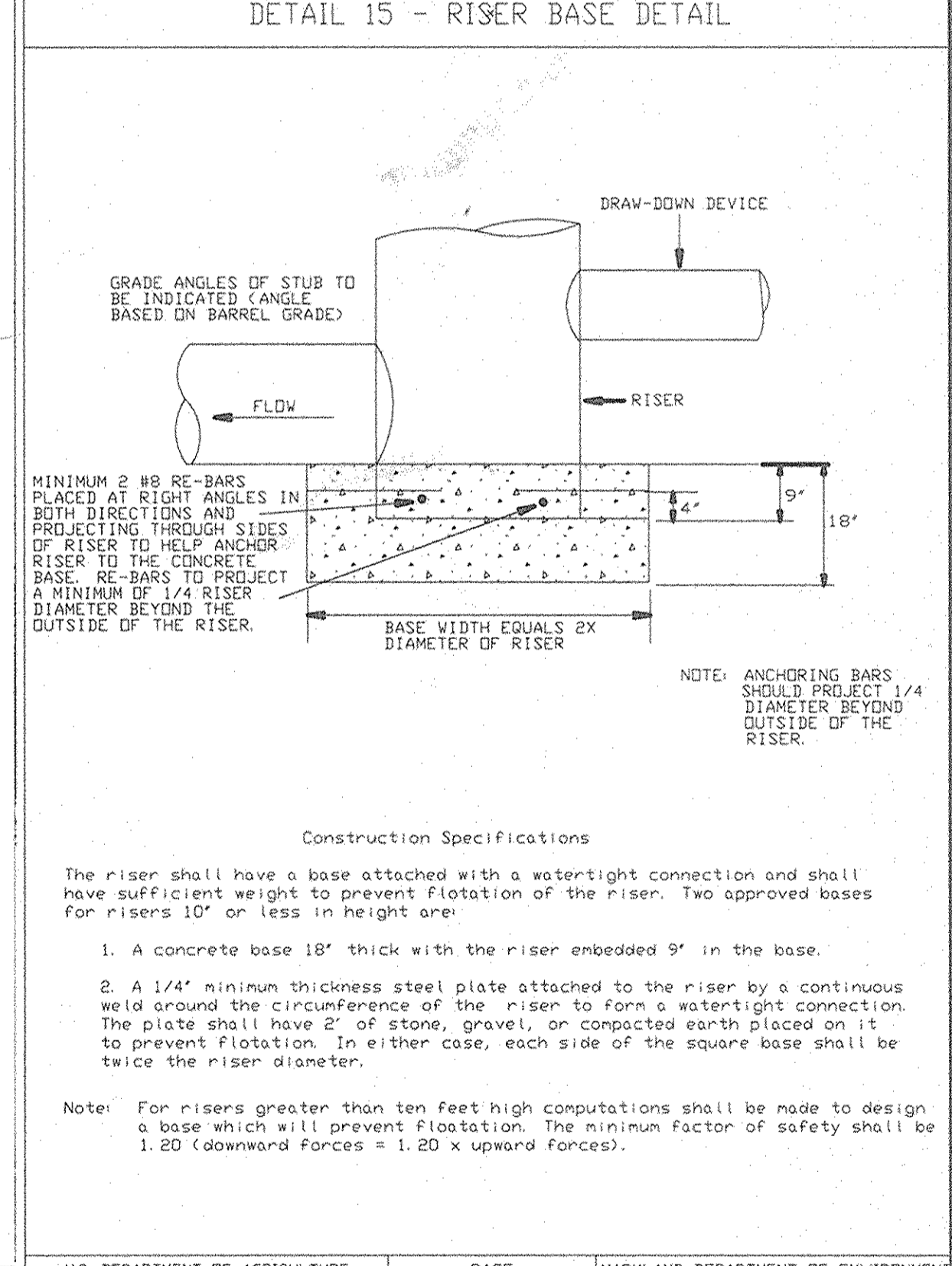
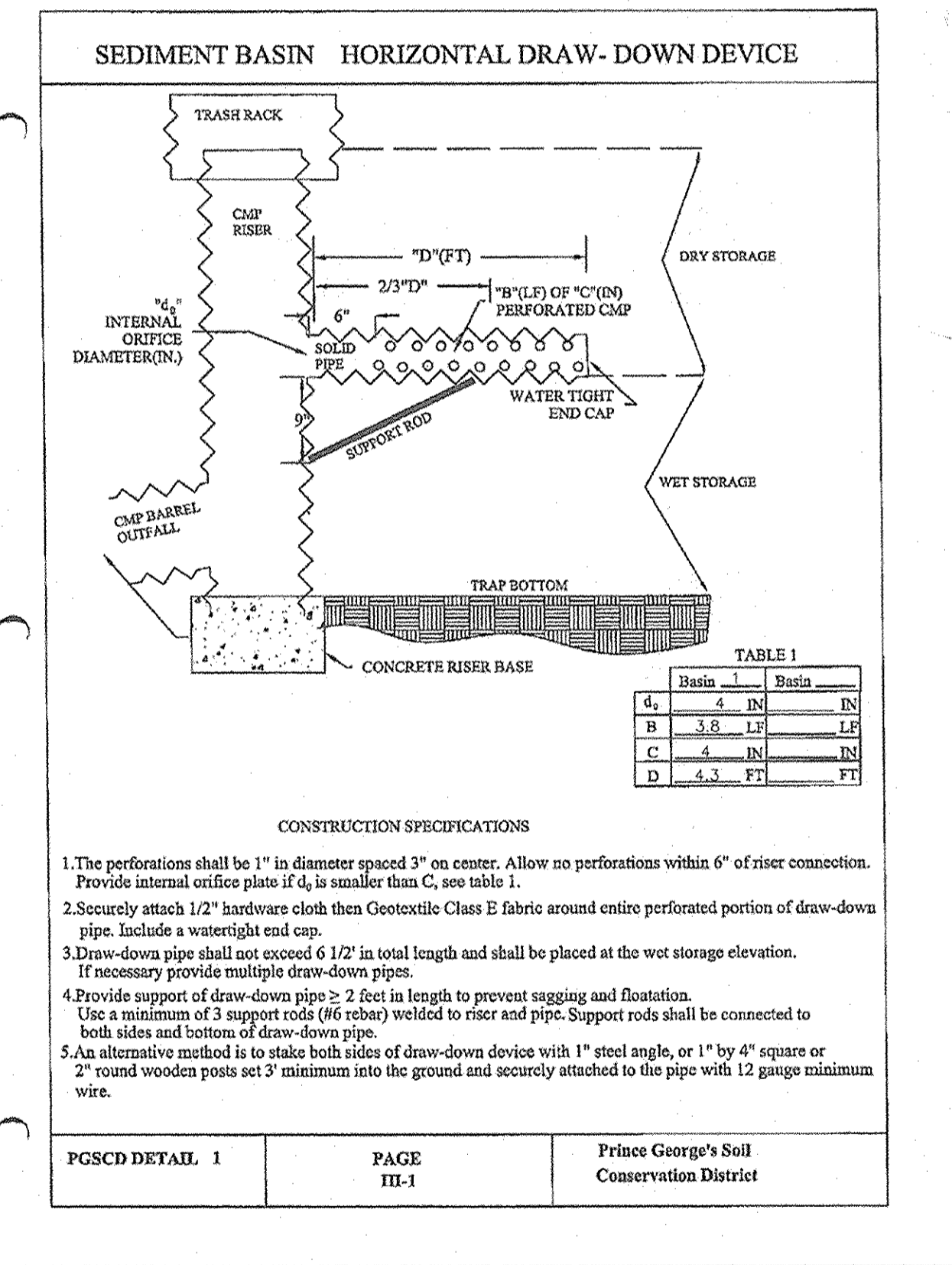
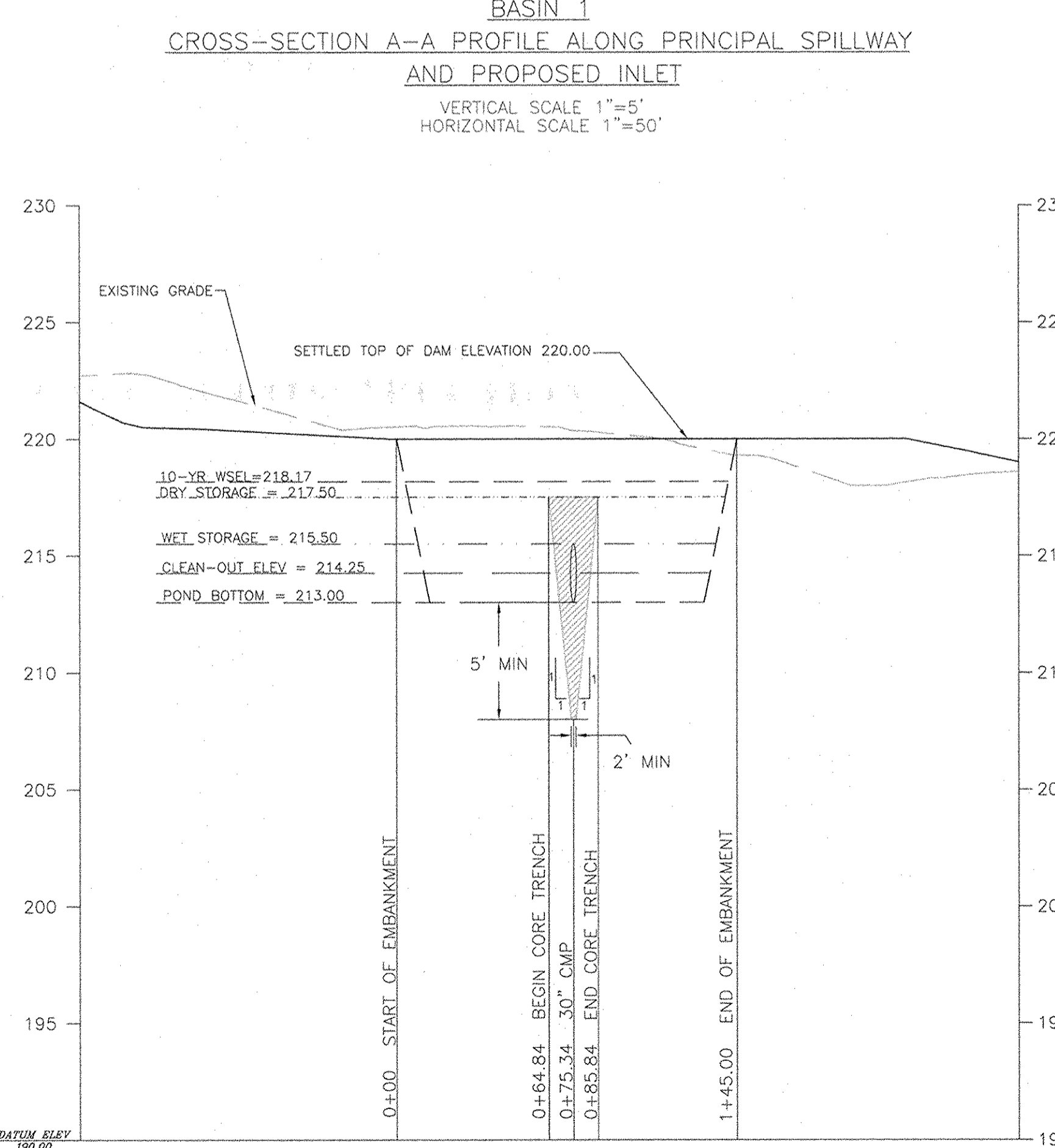
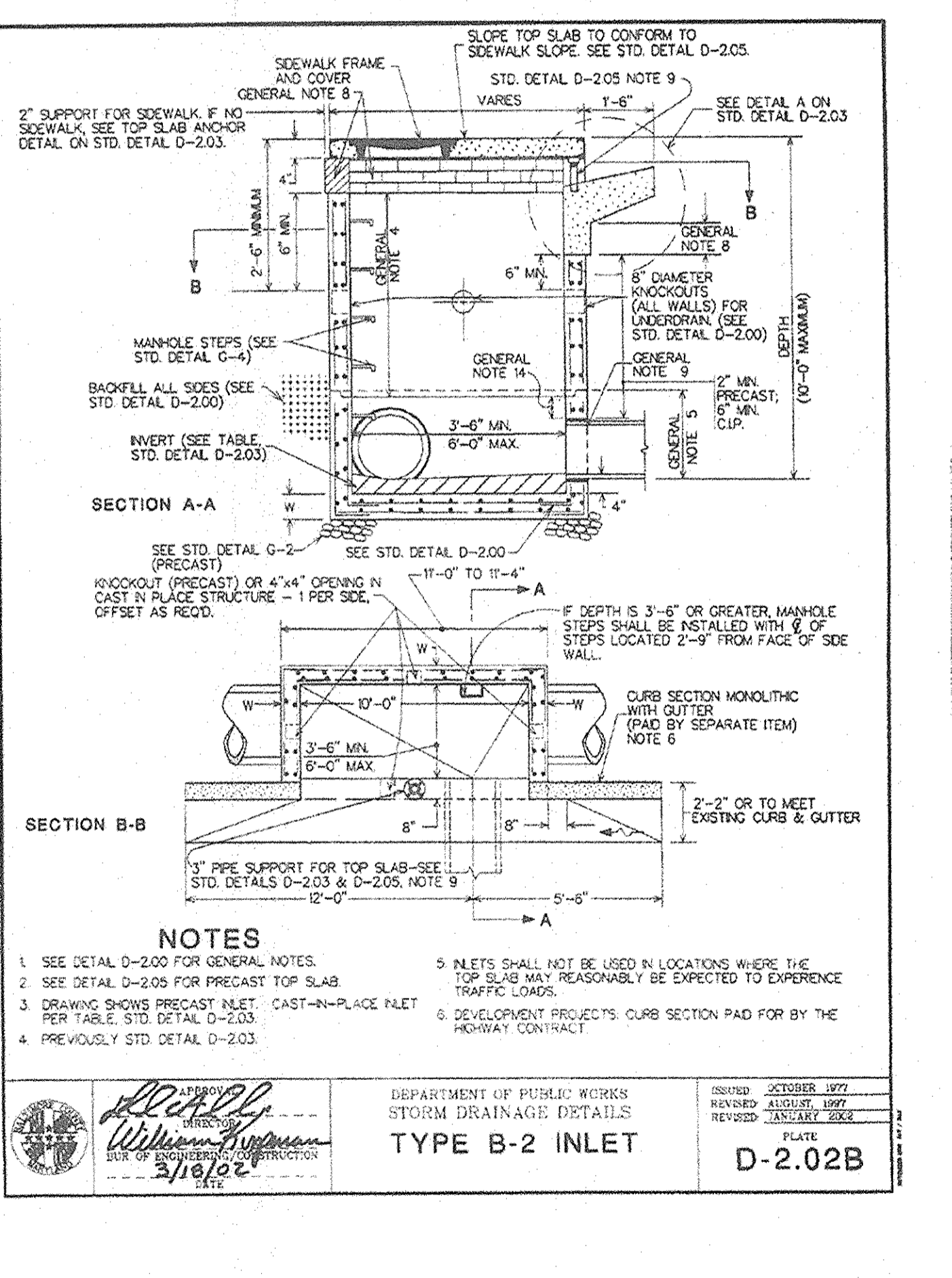


DETAIL 16 CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE (continued)

Riser Diam., in.	Trash Rack Cylinder Diam., in.	Thick., gage	H., in.	Minimum Size Support Bar	Minimum Top Thickness	Stiffener
12	18	16	6	#6 Rebar	16 ga.	--
15	21	16	7			--
18	27	16	8			--
21	30	16	11			--
24	36	16	13		14 ga.	--
27	42	16	15		14 ga.	--
36	54	14	17	#8 Rebar	12 ga.	--
42	60	14	19			--
48	72	12	21	1-1/4" pipe or 1-1/4 x 1-1/4 x 1/4 angle	10 ga.	--
54	78	12	25			--
60	90	12	29	1-1/2" pipe or 1-1/2 x 1-1/2 x 1/4 angle	8 ga.	--
66	96	10	33	2" pipe or 2x2x1/8 angle	8 ga.	2x2x1/4 w/stiffener
72	102	10	36			2-1/2x2-1/2 angle
78	114	10	39	2-1/2" pipe or 2x2x1/4 angle		
84	120	10	42	2-1/2" pipe or 2-1/2x2-1/2x1/4 angle		2-1/2x2-1/2x1/8 angle

Note: The above trash rack and anti-vortex device information is only for corrugated metal pipe. Concrete risers must meet the requirements of MD 378.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE
PAGE C-18-26A
MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



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

U.S.D.A.-NATURAL RESOURCES CONSERVATION SERVICE DATE: 3/13/98

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING DATE: 4/19/98

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 INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF DEVELOPER: Scott C. Reed, Manager DATE: 03/06/08

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 REQUIREMENT OF THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF ENGINEER: Joanne M. Check DATE: 03/06/08

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. 18095
EXPIRATION DATE: 12/21/08

**BASIN PROFILE AND DETAILS
MISSION PLACE
PARCELS A, B, & C
ROUGH GRADING PLAN**

W&S CONTRACT: 24-4402-D

6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

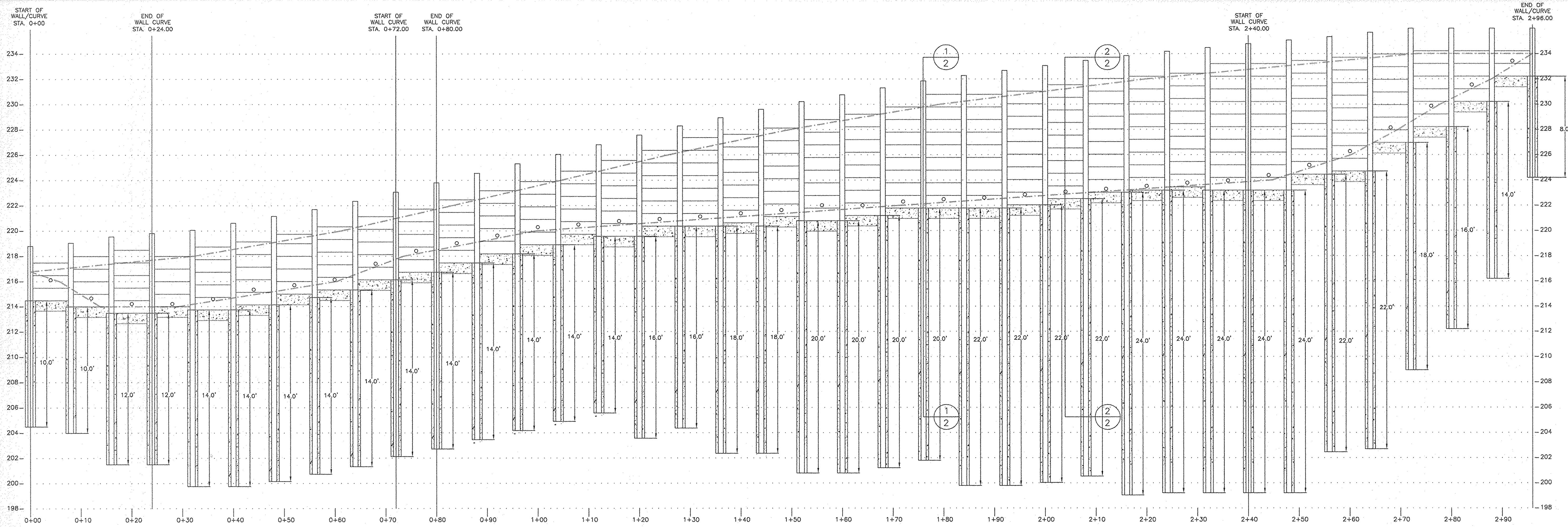
Dewberry
203 PERRY PARKWAY, SUITE 1
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PHONE: 301.948.8300
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OWNER / DEVELOPER:
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c/o THE DOLBEN COMPANY, INC.
2600 MIDWAY BRANCH DR, 2nd FL
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CONTACT: MATTHEW BITAR
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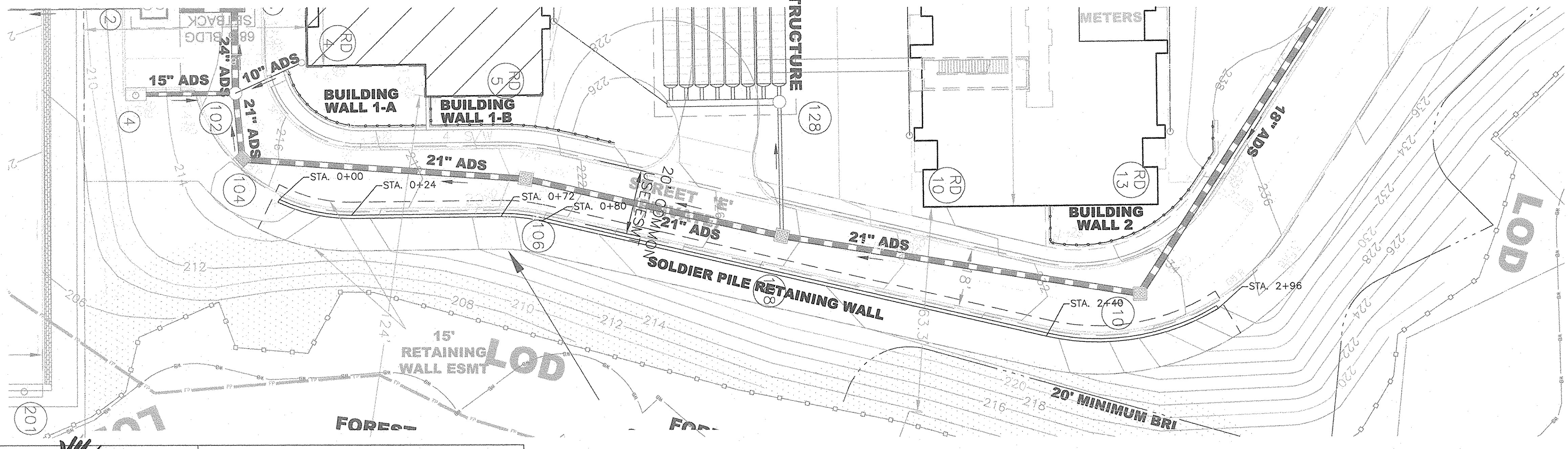
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Designed by: KDM
Checked by: JMC
Scale: AS SHOWN
Sheet: 9 of 11

Tax Map Grid & Parcel: MAP 43, GRID 14 PARCELS A, B & C
Date: MARCH 2008
Prior Submittals: ZB 1048M SP-06-18 F-07-156
HO-827 SDP-07-104 AA-06-016
WP-06-096 AA-06-016

File number: SDP-07-101



WALL ELEVATION VIEW
 VERTICAL SCALE 1"=4'
 HORIZONTAL SCALE 1"=10'



WALL PLAN VIEW
 SCALE 1"=20'

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

U.S.D.A.-NATURAL RESOURCES CONSERVATION SERVICE

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

HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Director DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

CHIEF, DIVISION OF LAND DEVELOPMENT DATE

BY THE DEVELOPER:

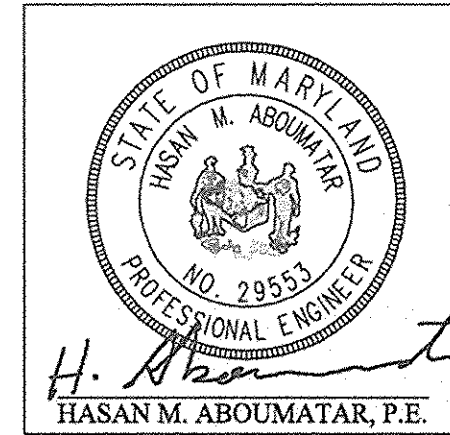
"I ME CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE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

Mission Road Investors, LLC
 By: [Signature] DATE 3/6/08
 SIGNATURE OF DEVELOPER
 PRINTED NAME:

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 REQUIREMENT OF THE HOWARD SOIL CONSERVATION DISTRICT."

[Signature] DATE 3/6/08
 SIGNATURE OF ENGINEER
 PRINTED NAME:



NOTE

INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS BY THE CONTRACTOR. BEST INTERESTS OF THE PROJECT LOCATION AND ELEVATION OF THE MAJORS BY PROBE TEST PITS BY HAND AT ALL UTILITY CROSSINGS WELL IN ADVANCE OF THE START OF EXCAVATION. CONTACT "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO THE START OF EXCAVATION. IF CLEARANCES ARE LESS THAN SHOWN ON THIS PLAN OR TWELVE (12) INCHES, WHICHEVER IS LESS, CONTACT THE ENGINEER AND THE UTILITY BEFORE PROCEEDING WITH CONSTRUCTION.

MISSION PLACE
 RETAINING WALL
 PLAN VIEW & WALL PROFILE
 W&S CONTRACT: 24-4402-D

6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

ECS MID-ATLANTIC	1340 Charwood Rd., Suite P Hanover, MD 21076 PH: 410.859.4300 FX: 410.859.4324	OWNER / DEVELOPER: MISSION ROAD INVESTORS, LLC c/o THE DOLBEN COMPANY, INC. 2600 MIDWAY BRANCH DR, 2nd FL ODENTON, MD 21113 CONTACT: MATTHEW BITAR PH: 301.912.3600 FX: 301.912.3400	Drawn by: DSH Designed by: HMA Checked by: HMA Zone: CAC-CLI
	Section: NA Area: NA Phase: NA Scale: AS NOTED	Date: 08/29/07	Prior Submittals: ZB 1048M SP-06-18 F-07-156

Sheet: 10 of 11

GENERAL NOTES

DESIGN:

- BUILDING CODE - INTERNATIONAL BUILDING CODE 2003 EDITION

FOUNDATIONS - GENERAL:

- DRILLED PIERS SHALL BE INSTALLED TO THE DEPTHS AND SIZE INDICATED BY THE PROFILES AND SECTIONS.
- DRILLED PIERS SHALL BE TEMPORARILY CASED WITH APPROVED STEEL CASING, OR SLURRY BENTONITE SHOULD BE USED IF GROUNDWATER IS ENCOUNTERED OR IF SIDE WALLS COLLAPSE.
- ALL DRILLED PIERS SHALL BE INSPECTED BY THE INDEPENDENT TESTING AGENCY PRIOR TO CONCRETE PLACEMENT. THE INDEPENDENT TESTING AGENCY SHALL BE THE SOLE JUDGE AS TO THE SUITABILITY OF THE DRILLED PIER EMBEDMENT. EMBEDMENT ELEVATIONS SHALL BE ADJUSTED AS REQUIRED.

PIER AND FOOTING CONCRETE AND REINFORCING STEEL:

- CONCRETE SHALL CONFORM TO ACI BUILDING CODE (318R-95) AND SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH AND DENSITY IN ACCORDANCE WITH THE FOLLOWING:

STRENGTH PSI	MIN. DENSITY PCF	MAX W/C RATIO
3000	145	0.55

- REINFORCING SHALL CONFORM TO ASTM A615, GRADE 60, UNLESS NOTED OTHERWISE.
- MINIMUM CONCRETE COVER, UNLESS NOTED OTHERWISE:
UNFORMED SURFACE IN CONTACT WITH THE GROUND. 3 IN.
FORMED SURFACES EXPOSED TO EARTH OR WEATHER. #5 BARS AND SMALLER 1 1/2 IN.

STRUCTURAL STEEL SOLDIER PILES:

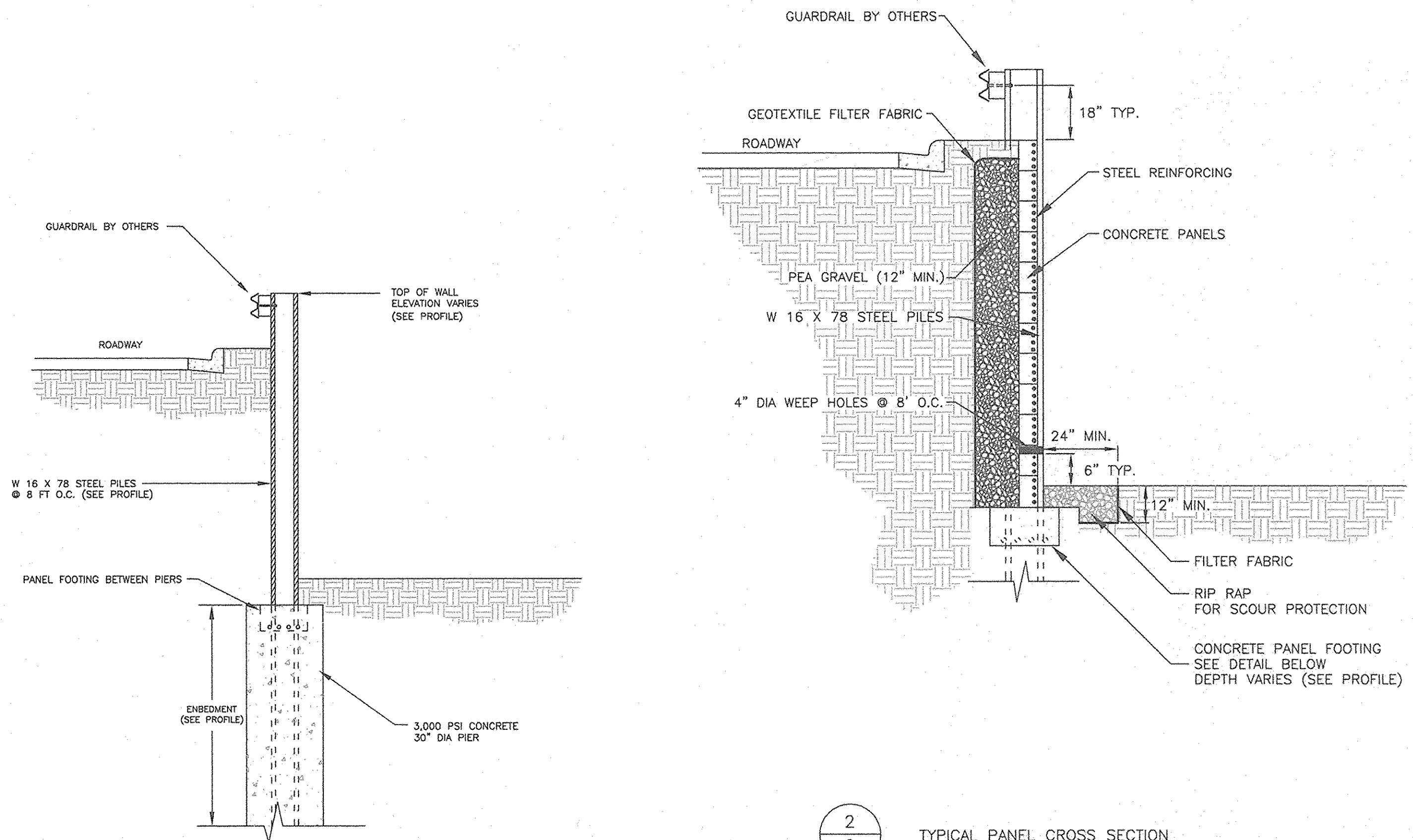
- STEEL SHALL CONFORM TO GRADE A992 (Fy=60 KSI)
- ALL STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE AISC CODE OF STANDARD PRACTICE (1992), EXCEPT AS MODIFIED IN THESE NOTES AND THE PROJECT SPECIFICATIONS.
- STEEL SHALL BE PROVIDED WITH CORROSION PROTECTION IN ACCORDANCE WITH THE STRUCTURAL ENGINEER'S SPECIFICATIONS.
- STRUCTURAL STEEL SOLDIER PILES SHALL BE FINISHED IN ACCORDANCE WITH THE ARCHITECT'S SPECIFICATIONS.
- STEEL SOLDIER PILES SHALL BE SET WITHIN 1-INCH ± OF THEIR VERTICAL ALIGNMENT.

PRECAST CONCRETE PANELS:

- PRECAST CONCRETE SHALL BE CONSTRUCTED IN ACCORDANCE WITH ACI 318, LATEST EDITION. ALL PRECAST CONCRETE UNITS SHALL BE MANUFACTURED IN ACCORDANCE WITH PCI MNL-116, LATEST EDITION.
- UNLESS NOTED, ALL PRECAST CONCRETE ELEMENTS SHALL COMPLY WITH MATERIALS SPECIFIED IN OTHER SECTIONS AND THE FOLLOWING:
 - MINIMUM CONCRETE STRENGTH SHALL BE 5000 PSI AT 28 DAYS. U.N. CONCRETE STRENGTH AT STRIPPING, SHALL BE 3500 PSI MINIMUM.
 - MAXIMUM WATER CEMENT RATIO SHALL NOT EXCEED 0.45.
- PRECAST CONCRETE PANEL FACES SHALL BE FINISHED IN ACCORDANCE WITH THE ARCHITECT'S SPECIFICATIONS.
- TOP OF FOUNDATIONS, GRADE WALLS AND STEEL BEAMS SHALL BE CLEANED PRIOR TO SETTING THE PANEL. PANELS SHALL BE SET ON SHIMS (DESIGNED BY PRECAST SUPPLIER).
- PRECAST CONCRETE PANELS SHALL BE ORIENTED SUCH THAT THE STEEL REINFORCEMENT IN THE PANEL IS LOCATED NEAR THE FRONT OF THE WALL.

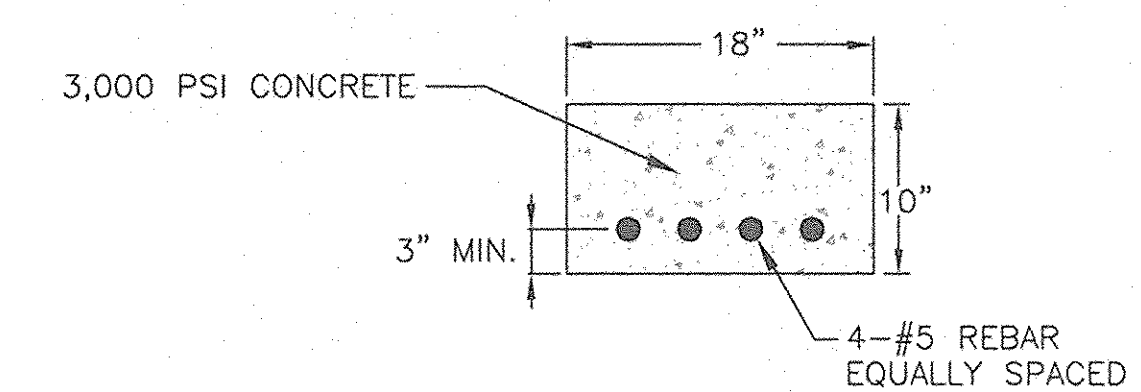
INSTALLATION:

- GEOSYNTHETIC FILTER FABRIC SHALL BE INSTALLED CONTINUOUSLY BETWEEN FILL MATERIAL AND PEA GRAVEL.
- THE 6"x12" PRECAST CONCRETE PANELS ARE THEN INSTALLED AGAINST THE FRONT FLANGE OF THE STEEL PILES.
- 4" DIAMETER WEEP HOLES SHALL BE CORED THROUGH THE FIRST CONCRETE PANEL ABOVE GRADE, AT THE MIDPOINT BETWEEN THE STEEL PILES.
- ADDITIONAL GEOSYNTHETIC FILTER FABRIC SHALL BE PLACED TO COVER THE WEEP HOLES AT THE BACK EDGE OF THE PANEL.
- THE REMAINING CONCRETE PANELS ARE THEN INSTALLED, WITH PEA GRAVEL (AASHTO No. 8) BEING PLACED IN THE ANNULAR SPACE BETWEEN THE FILTER FABRIC AND THE CONCRETE PANELS.
- PEA GRAVEL SHALL BE PLACED BEHIND PANELS AND COMPACTED AS PANELS ARE PLACED.
- ALL FILL MATERIAL WITH IN THE VICINITY OF THE WALL SHOULD CONSIST OF SM OF MORE GRANULAR SOILS, WITH A MINIMUM INTERNAL FRICTION ANGLE OF 32 DEGREES.

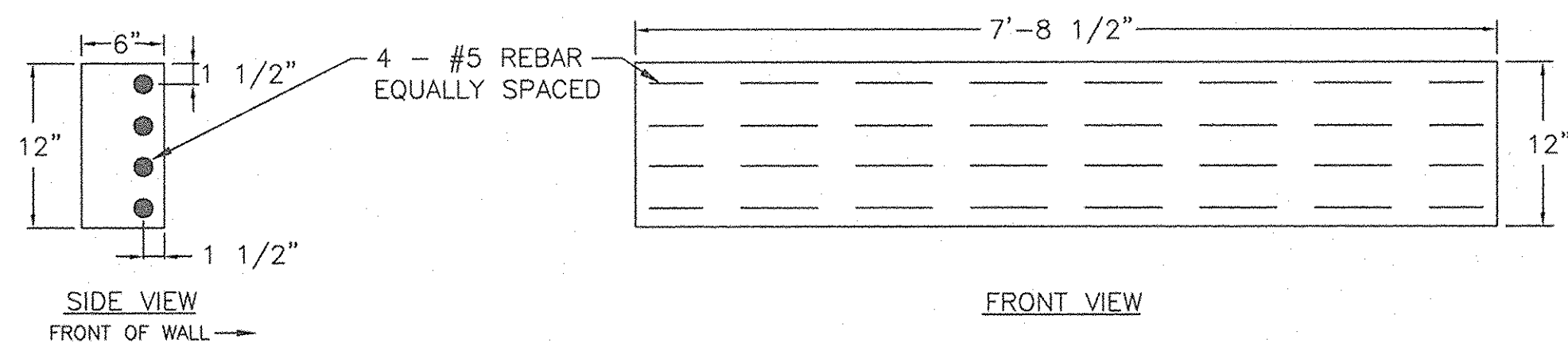


1 TYPICAL SOLDIER PILE DETAIL N.T.S.

2 TYPICAL PANEL CROSS SECTION N.T.S.

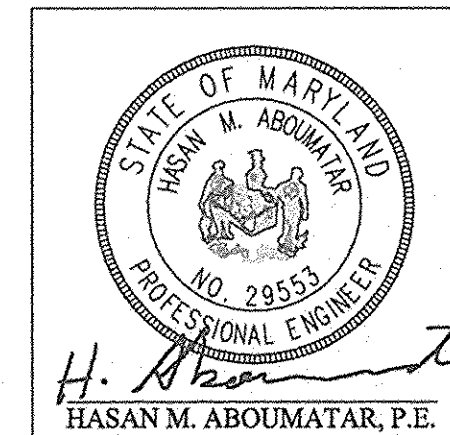


TYPICAL CONCRETE PANEL FOOTING DETAIL N.T.S.



TYP. PRECAST CONCRETE PANELS N.T.S.

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.	
U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.	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 INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT." Mission Road Driveways LLC Signature of Developer: [Signature] DATE: 3/16/08
HOWARD SOIL CONSERVATION DISTRICT APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING. Director: [Signature] DATE: 3/17/08	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 REQUIREMENT OF THE HOWARD SOIL CONSERVATION DISTRICT." Signature of Engineer: [Signature] DATE: 3/16/08
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 3/17/08	CHIEF, DIVISION OF LAND DEVELOPMENT DATE: 3/16/08



MISSION PLACE RETAINING WALL SECTIONS, DETAILS & SPECIFICATIONS W&S CONTRACT: 24-4402-D			
6TH ELECTION DISTRICT		HOWARD COUNTY, MARYLAND	
Section: NA Tax Map Grid & Parcel: MAP 45, GRID 14 PARCELS 214, 221, 446, 447 and 523	Date: 08/29/07	Phase: NA Price Submittal: ZB 1048M SP-06-18 F-07-156	Scale: AS NOTED HDC-07-21 WP-06-096 AA-06-016 SDP-07-104 SDP-07-113
OWNER / DEVELOPER: MISSION ROAD INVESTORS, LLC c/o THE DOLBEN COMPANY, INC. 2600 MIDWAY BRANCH DR, 2nd FL ODENTON, MD 21113 CONTACT: MATTHEW BITAR PH: 301.912.3600 FX: 301.912.3400		Drawn by: DSH Designed by: HMA Checked by: HMA Zoned: CAC-CLI	Sheet: 11 of 11 File number: 3357-F