

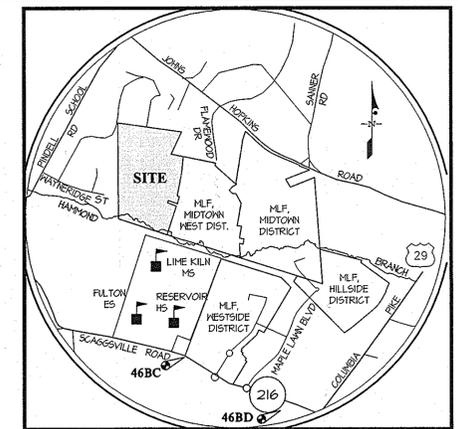
# CONSTRUCTION PLANS

## STORMWATER MANAGEMENT and SEDIMENT CONTROL

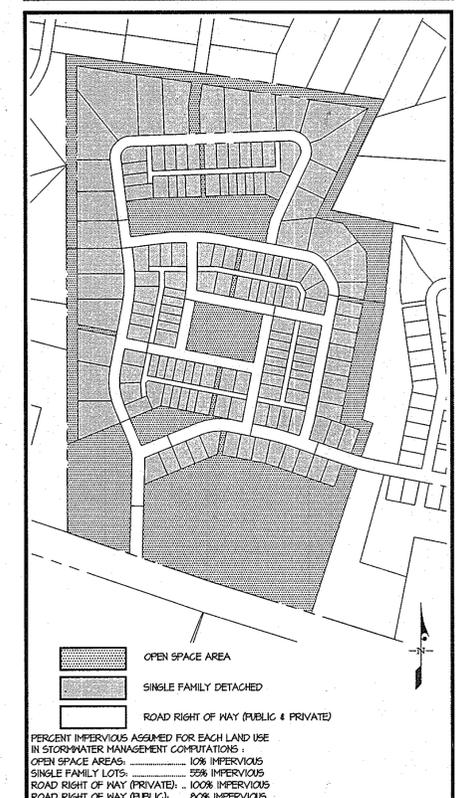
### MAPLE LAWN FARMS

#### GARDEN DISTRICT

#### NON-BUILDABLE PARCEL 'W'



VICINITY MAP		ADC MAP 5052
SCALE: 1" = 2000'		GRID T E
BENCHMARKS		
46BC	ELEV. = 412.16 N = 594429.15 E = 1391205.71 STANDARD DISC ON CONCRETE MONUMENT	46BD ELEV. = 431.17 N = 598256.16 E = 1394461.55 STANDARD DISC ON CONCRETE MONUMENT



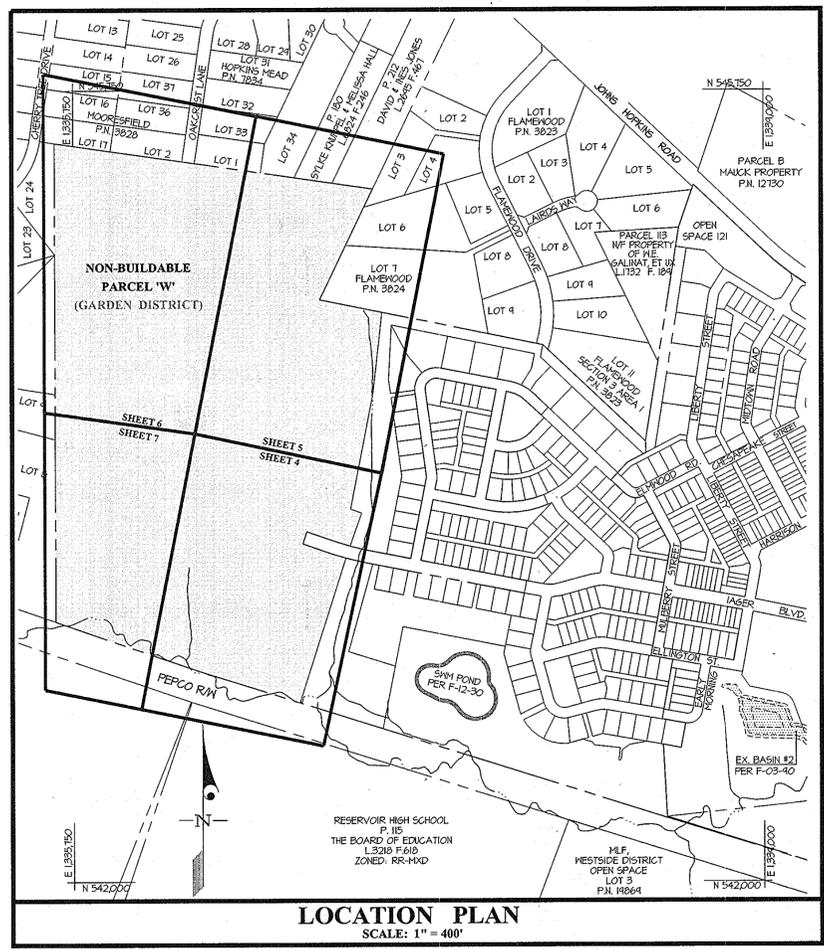
LAND USE MAP	
SCALE: 1" = 400'	
<p>PERCENT IMPERVIOUS ASSIGNED FOR EACH LAND USE IN STORMWATER MANAGEMENT COMPUTATIONS:</p> <p>OPEN SPACE AREAS: 10% IMPERVIOUS</p> <p>SINGLE FAMILY LOTS: 55% IMPERVIOUS</p> <p>ROAD RIGHT OF WAY (PRIVATE): 100% IMPERVIOUS</p> <p>ROAD RIGHT OF WAY (PUBLIC): 80% IMPERVIOUS</p>	

- GENERAL NOTES:**
- ZONING: SITE IS BEING DEVELOPED UNDER MXD-3 REGULATIONS, PER ZB495M, APPROVED ON 2/9/01 AND ZB-1039M APPROVED 03/20/06 AND THE COMPREHENSIVE ZONING PLAN DATED 02/02/04. UNDERLYING ZONING IS RR-DEO AND THE COMP LITE ZONING REGULATION AMENDMENTS DATED 07/28/06.
  - THE PREVIOUS DEPARTMENT OF PLANNING AND ZONING FILE NUMBERS: 5-01-11, 5-06-16, ZB-495M, ZB-1039M, PB-353, PB-378, NP-01-11, NP-03-02, F-05-13, F-06-16, F-06-24, F-07-14, F-07-12, F-07-14, F-07-14, F-07-21, F-08-04, F-08-15, F-08-16, F-08-12, NP-03-12, F-12-24, F-12-30.
  - THIS PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
  - THE CEMETERY INVENTORY MAPS DO NOT SHOW ANY CEMETERIES WITHIN THE PROJECT LIMITS. THE EXISTING CEMETERY ONCE LOCATED ON THE KESSEL PROPERTY WAS RELOCATED UNDER NP-05-12.
  - THE SCENIC ROADS MAP DOES NOT INDICATE ANY SCENIC ROADS WITHIN OR ADJACENT TO THE PROJECT LIMITS.
  - THIS PROPERTY WAS BROUGHT INTO THE METROPOLITAN DISTRICT ON APRIL 26, 2001.
  - THIS AREA OF DEVELOPMENT DOES NOT CONTAIN ANY PUBLIC OR PRIVATE ROADS.

- SITE ANALYSIS  
GROSS SITE AREA FOR PHASES 1 THROUGH 4D: 444.43 ACRES ±  
AREA OF THIS PLAN SUBMISSION: 15.31 ACRES ±  
DISTURBED AREA: 58.6 ACRES ±  
AREA OF OPEN SPACE: 0 ACRES ±  
AREA OF 100 YEAR FLOODPLAIN: 5.49 ACRES ±  
AREA OF ROADWAY (PUBLIC): 0 ACRES ±  
AREA OF ROADWAY (PRIVATE): 0 ACRES ±  
AREA OF RESIDENTIAL LOTS: 0 ACRES ±  
AREA OF OR LOTS/PARCELS: 0 ACRES ±  
AREA OF 5FD LOTS: 0 ACRES ±  
TOTAL UNITS PER 5-06-16 REGULATIONS: 0 LOTS  
TOTAL NUMBER OF LOTS / PARCELS (THIS PLAN SUBMISSION): 1 LOTS  
NO. OF OR LOTS/PARCELS: 0 LOTS  
NO. OF 5FD LOTS: 0 LOTS  
AREA OF NON-BUILDABLE PARCELS: 15.31 ACRES ±  
NON-BUILDABLE PARCELS: 1 PARCELS
- OPEN SPACE REQUIREMENTS WILL BE CALCULATED AND PROVIDED WITH FUTURE PLAN SUBMISSIONS.
- NO RESIDENTIAL UNITS ARE BEING BROUGHT INTO THE PROJECT WITH THIS PLAN SUBMISSION.
- SOILS DATA WAS TAKEN FROM THE SOIL SURVEY OF HOWARD COUNTY, MARYLAND ISSUED JULY 1968.
- CONTOURS SHOWN WERE TAKEN FROM AERIAL TOPOGRAPHY PREPARED DURING MARCH 1997 BY SDI AND THEN UPDATED BY GRADE CHECKS PERFORMED BY GUTSCHICK, LITTLE & WEBER, P.A. AND BASED ON F-12-30. BOUNDARY INFORMATION SHOWN IS BASED UPON A FIELD SURVEY PREPARED BY GUTSCHICK, LITTLE & WEBER, P.A. ON OR ABOUT JUNE, 2007.
- WETLAND DELINEATION WAS DETERMINED BY EXPLORATION RESEARCH, INC. AND APPROVED BY THE CORPS OF ENGINEERS UNDER ID #32743-3 ON 05/14/98. IMPACTS TO WETLANDS AND WATERS OF THE STATE RESULTING FROM THIS DEVELOPMENT ARE AUTHORIZED BY MDE PERMIT #01-NP-031/2006/5421.
- THE 100-YEAR FLOOD PLAIN LIMITS WERE DETERMINED BY THE FLOODPLAIN STUDY PREPARED BY GUTSCHICK, LITTLE & WEBER, P.A. AS PART OF P-02-12 AND P-11-02.
- HORIZONTAL AND VERTICAL DATUM IS BASED ON HOWARD COUNTY STATION 46BC AND 46BD.
- EXISTING UTILITIES WERE TAKEN FROM AVAILABLE HOWARD COUNTY RECORDS.
- PUBLIC WATER AND SEWER TO BE UTILIZED:  
EXISTING WATER CONTRACT NUMBER: 24-4702-D THRU 24-4704-D  
EXISTING SEWER CONTRACT NUMBER: 24-4702-D THRU 24-4704-D
- TRAFFIC STUDY WAS PREPARED AND SUBMITTED AS PART OF 5-06-16, WHICH WAS SIGNED BY THE PLANNING BOARD ON 02/20/07.
- PERENNIAL STREAM BUFFERS ARE DETERMINED BY LAND USE ADJOINING THE OPEN SPACE (I.E. ELEVATION + 50' BUFFER, RESIDENTIAL + 75' BUFFER). ALL USES ADJOINING AN INTERMITTENT STREAM = 50' BUFFER.
- STORMWATER MANAGEMENT, FOR BOTH QUALITY AND QUANTITY, FOR THE INFRASTRUCTURE AND RESIDENTIAL LOTS WILL BE SATISFIED TWO REGIONAL FACILITIES BEING CONSTRUCTED BY THESE PLANS. THE FACILITIES WILL BE P-3 PONDS WITH EXTENDED DETENTION. THEY WILL BE PUBLICLY OWNED WITH JOINT MAINTENANCE. THE RECHARGE REQUIREMENTS FOR THIS AREA WILL BE PROVIDED IN PRIVATELY OWNED AND MAINTAINED FACILITIES TO BE LOCATED WITHIN OPEN SPACE LOTS. THE TWO P-3 PONDS WILL SERVE AS SEDIMENT BASINS FOR THE GRADING SHOWN BEFORE BEING CONVERTED. THE REV FACILITIES WILL BE DESIGNED WITH FUTURE ROAD CONSTRUCTION PLANS.
- THE RESIDENTIAL LOTS, PARCELS AND EMPLOYMENT USE STRUCTURES DEVELOPED OR PROPOSED ON THE ORIGINAL 507 ACRE TRACT FOR MAPLE LAWN FARMS ARE GRANDFATHERED TO THE FOURTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AS DEVELOPED UNDER 5-01-11, PB CASE 353 AND ZB CASE NO. 495M. HOWEVER, THE PROPOSED RESIDENTIAL AND EMPLOYMENT USES THAT ARE TO BE DEVELOPED UNDER THE AMENDED CSP 5-06-16 AND ZB CASE NO. 1039M FOR THE FORMER KESSEL AND OLIVER PROPERTIES ARE SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS PER COUNCIL BILL NO. 45-2003 AND THE ZONING REGULATIONS PER COUNCIL BILL NO. 75-2003.
- AS STATED IN THE DECISION AND ORDER FOR THIS PLAN, THE PLANNING BOARD SHALL REVIEW AND APPROVE SITE DEVELOPMENT PLANS FOR ALL SINGLE FAMILY ATTACHED AND MULTI-FAMILY RESIDENTIAL USES, AND ALL EMPLOYMENT AND OPEN SPACE USE DEVELOPMENT FOR THE SUBJECT MAPLE LAWN FARMS PROJECT. ALL OF THE IMPROVEMENTS THAT WERE NECESSARY FOR THE MAPLE LAWN FARMS PROJECT TO BE IN COMPLIANCE WITH THE FINDINGS TEST EVALUATION RESTRICTIONS ENUNCIATED BY THE ZONING BOARD ON PAGE 22-23 OF ITS DECISION ON THE TOP HAVE BEEN CONSTRUCTED.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, OR PLACEMENT OF NEW STRUCTURES IS PERMITTED WITHIN LIMITS OF WETLANDS, STREAMS, THEIR REQUIRED BUFFERS, AND 100 YEAR FLOOD PLAIN AREAS, EXCEPT AS PERMITTED UNDER NP-02-54, NP-03-02, AND NP-03-120.
- OPEN SPACE LOTS MAY CONTAIN ACTIVE RECREATIONAL FACILITIES AS ALLOWED BY THE APPROVED COMPREHENSIVE DEVELOPMENT CRITERIA.
- PHASING FOR THIS PROJECT IS IN ACCORDANCE WITH THE DECISION AND ORDER FOR ZONING BOARD CASE NO. ZB-495M & ZB-1039M AND THE DECISION AND ORDER FOR PB CASE NO. 353 (COMPREHENSIVE SKETCH PLAN, 5-01-11) AND NO. 378 (COMPREHENSIVE SKETCH PLAN, 5-06-16) AND THE CPZ AFFO RE-PHASING LETTER DATED JULY 8, 2008.
- DEVELOPMENT FOR THIS PHASE WILL BE DONE IN ACCORDANCE WITH THE COMPREHENSIVE DEVELOPMENT CRITERIA APPROVED WITH 5-01-11, 5-06-16, PB-353, AND PB-378.
- THE TRANSPORTATION AND TRANSIT DESIGN WILL BE IMPLEMENTED AS OUTLINED IN THE PETITIONER'S EXHIBIT 35 AS SUBMITTED AS PART OF ZB495M.
- A NOISE STUDY WAS PREPARED BY KILDMAN & ASSOCIATES FOR 5-01-11, (APPROVED BY PLANNING BOARD ON AUGUST 8, 2001), AND UPDATED BY WILSON T. BALLARD COMPANY IN MAY 2006 FOR 5-06-16 (APPROVED BY PLANNING BOARD ON FEBRUARY 20, 2007).
- THE LIMITS OF THIS SUBMISSION DOES NOT INCLUDE MODERATE INCOME HOUSING UNITS.
- FOR SOIL TYPES, DESCRIPTIONS AND LIMITATIONS, SEE 5-01-11, AND 5-06-16.

**GENERAL NOTES (cont.):**

- THE ORIGINAL FOREST CONSERVATION OBLIGATION THAT WAS ESTIMATED FOR ALL OF MAPLE LAWN FARMS HAS BEEN FULFILLED WITH THE FOREST CONSERVATION EASEMENTS CREATED UNDER P-12-002 AND SUBSEQUENT PLATS.
- THE 75' TREE CONFLICT EASEMENT SHOWN ON THESE PLANS GRANTS PERGO THE RIGHT TO ENTER THE EASEMENT FOR THE PURPOSE OF CUTTING DOWN, TRIMMING, REMOVING AND/OR KEEPING CUT ALL TREES WHICH MAY INTERFERE WITH ANY TOWERS, POLES, STRUCTURES, WIRES, CABLES, CONDUITS OR OTHER INFRASTRUCTURE WITHIN THE PERGO ROW AS PER LIBER 2209 FOLIO 38.
- ALL BUFFERING AND OTHER LANDSCAPING REQUIREMENTS/FEATURES WILL BE PROVIDED AT THE SITE DEVELOPMENT PLAN STAGE AND/OR THE FINAL PLAN STAGE AND WILL BE PROVIDED IN ACCORDANCE WITH THE COMPREHENSIVE SKETCH PLAN CRITERIA.
- STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH THE 2000 MARYLAND STORMWATER DESIGN MANUAL, VOLUMES I AND II. IT WAS DETERMINED THAT THIS PROJECT MET THE CRITERIA OUTLINED IN THE MOE STORMWATER MANAGEMENT REGULATIONS, GUIDANCE FOR IMPLEMENTATION FOR ACCEPTANCE OF THE 2000 DESIGN CRITERIA AND THROUGH THE ADMINISTRATIVE WAIVER PROCESS, WAS GRANTED A WAIVER. THIS PLAN RECEIVED COMPREHENSIVE SKETCH PLAN APPROVAL (5-06-16) ON JANUARY 25, 2007. THIS PLAN IS ALSO SUBJECT TO THE EXPIRATION OF THIS WAIVER UNLESS ALL OF THE STORMWATER MANAGEMENT IS CONSTRUCTED BY MAY 4, 2011.
- THE PATHWAY DISTURBANCE TO THE FLOODPLAINS, STREAM, WETLANDS, AND THEIR BUFFERS WERE CONSIDERED ESSENTIAL DISTURBANCE, PER SECTION 16.16(C) OF THE REGULATIONS.
- PRIOR TO COMMENCEMENT OF GRADING OPERATIONS ON THE AREA IDENTIFIED AS GARDEN DISTRICT, NON-BUILDABLE PARCEL 'W' (MAPLE LAWN FARMS, INC.), THE EXISTING WELL MUST BE SEALED AND THE EXISTING SEPTIC SYSTEM MUST BE ABANDONED AT THE RESIDENCE IDENTIFIED AS "ASH CHERRY TREE DRIVE" WHICH IS ON THE SUBJECT PROPERTY. THE DRILLED WELL, NO-15-1022, IS TO BE SEALED BY A LICENSED WELL DRILLER. THE WELL ABANDONMENT REPORT IS TO BE RECEIVED BY THE HEALTH DEPARTMENT PRIOR TO GRADING OPERATIONS. THE SEPTIC TANK IS TO BE PUMPED, CRUSHED, AND FILLED WITH CLEAN EARTH MATERIALS. THE CONTRACTOR ABANDONING THE SEPTIC SYSTEM IS TO SEND THE INVOICE FOR PUMPING THE TANK AND A WRITTEN REPORT WITH PHOTOS TO THE HEALTH DEPARTMENT.



NP-01-11  
ON MAY 2, 2001 NP-01-11 WAS GRANTED FOR THE FOLLOWING:  
• ADDITIONAL POINTS OF ACCESS ALLOWED ONTO SANNER ROAD OTHER THAN THOSE PERMITTED BY 16.16(F)(1), SUBJECT TO FURTHER ANALYSIS AND APPROVALS AT LATER PLAN STAGES.  
• RESIDENTIAL LOTS ARE ALLOWED TO FRONT ON NEIGHBORHOOD PARKS INSTEAD BEING LIMITED FRONTAGE ON PUBLIC ROWS AS IN 16.12(C)(2), SUBJECT TO ADEQUATE PRIVATE ALLEY ACCESS.

NP-03-02  
ON OCT. 11, 2002, NP-03-02 WAS GRANTED TO ALLOW:  
• GRADING WITHIN THE 75' STREAM BUFFER AND FLOODPLAIN AS SHOWN ON THE REVISED GRADING EXHIBIT SUBMITTED 9/6/02 (WAIVER FROM SECTION 16.16 (A)(2)(ii) AND SECTION 16.15 (C)(2) RESPECTIVELY.  
• ELIMINATION OF TRUNCATION AT RIGHT-OF-WAY CORNERS OF RESIDENTIAL LOTS AND OTHER PARCEL CORNERS AT RIGHT-OF-WAYS WHERE NECESSARY TO ACHIEVE THE TRADITIONAL NEIGHBORHOOD DESIGN (WAIVER FROM SECTION 16.16 (E)(3)).  
THE DISTANCE WITHIN THE FLOODPLAIN AND STREAM BUFFER IS SUBJECT TO OBTAINING THE NECESSARY PERMITS FROM MDE AND DNR. ELIMINATION OF THE TRUNCATIONS IS SUBJECT TO HAVING ADEQUATE SIGHT AND INTERSECTION DISTANCE AS DETERMINED BY THE DPZ DEVELOPMENT ENGINEERING DIVISION.

LEGEND	
400	EXISTING CONTOUR
400	PROPOSED CONTOUR
---	EXISTING TREELINE
[Pattern]	STABILIZED CONSTRUCTION ENTRANCE
[Pattern]	BOTH CONDITIONS EARTH DIKE
[Pattern]	FINAL EARTH DIKE
[Pattern]	INITIAL EARTH DIKE
[Pattern]	PROPOSED SILT FENCE
[Pattern]	PROPOSED SUPER SILT FENCE
[Pattern]	LIMIT OF DISTURBANCE
---	FP 100 YEAR FLOODPLAIN
---	SB STREAM BUFFER
---	FCE FOREST CONSERVATION EASEMENT
---	CENTERLINE OF STREAM
---	WB WETLAND BUFFER
---	LIMIT OF WETLAND
---	WETLAND AREA
[Pattern]	EROSION CONTROL MATTINGS
[Pattern]	15' NO-WOODY VEGETATION ZONE
[Symbol]	SOIL BORING LOCATION

Approved: Howard County Department of Public Works  
*William R. Mullen* 12-14-12  
 Chief, Bureau of Highways Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*Carl S. DeLoach* 12/14/12  
 Chief, Division of Land Development Date  
*Mark Bennett* 12/17/12  
 Chief, Development Engineering Division Date

**GLWGUTSCHICK LITTLE & WEBER, P.A.**  
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
 3909 NATIONAL DRIVE - SUITE 250 - BURTINSVILLE OFFICE PARK  
 BURTINSVILLE, MARYLAND 20868  
 TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-988-2524 FAX: 301-421-4186

DES. DEV	DRN. KLP	CHK. CKG	DATE	REVISION	BY	APPR.

PREPARED FOR:  
 MAPLE LAWN FARMS 1, LLC  
 SUITE 300 WOODHOLME CENTER  
 1829 REISTERSTOWN ROAD  
 BALTIMORE, MD 21208  
 ATTN: MARK BENNETT  
 410-484-8400

PROFESSIONAL CERTIFICATION  
 I HEREBY CERTIFY THAT THESE PLANS 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. 12975  
 EXPIRATION DATE: MAY 28, 2014  
 11-20-12  
 ELECTION DISTRICT No. 5

COVER SHEET  
**MAPLE LAWN FARMS**  
 GARDEN DISTRICT  
 NON-BUILDABLE PARCEL 'W'

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	MXD-3	11001
DATE	TAX MAP - GRID	SHEET
NOV. 2012	41-21-46-3	1 OF 27

**SUMMARY OF DEVELOPMENT CRITERIA (PER S-06-16)**

**OPEN SPACE (OS)**

**PERMITTED USES**  
 ANY USES WHICH DO NOT INVOLVE ANY EXTENSIVE COVERAGE OF LAND WITH STRUCTURES, INCLUDING, BUT NOT LIMITED TO, PARKS, PLAYING FIELDS, PLAYGROUNDS, TENNIS, BASKETBALL AND ALL PURPOSE COURTS, GOLF COURSES, POOLS, PATHWAYS, ANY OTHER OUTDOOR RECREATIONAL USES, AND ENVIRONMENTAL FACILITIES SUCH AS STORM WATER MANAGEMENT FACILITIES OR WATER QUALITY FACILITIES. IN ADDITION, BUILDINGS AND PARKING LOTS SHALL BE PERMITTED IF THEY ARE FOR THE PUBLIC OR FOR RESIDENTS AND PEOPLE WORKING WITHIN THE SUBJECT PROPERTY AND ARE OWNED BY A HOMEOWNERS' OR BUSINESS OWNERS' ASSOCIATION, OR ARE FOR NON-PROFIT USES, SUCH AS A SCHOOL, LIBRARY, FIRE AND RESCUE STATION, POST OFFICE, MUSEUM, ART GALLERY, NATURE CENTER, OR COMMUNITY BUILDING. PARKING LOTS USE ACCESSORY TO AN APPROVED USE TO AN APPROVED USE ON THE SAME LOT. OPEN LAND WITHIN DESIGNATED RESIDENTIAL LAND USE AREAS SHALL BE CONSIDERED OPEN SPACE IF IT IS HELD FOR THE COMMON USE OF PERSONS RESIDING IN THE VICINITY OF SUCH LAND.

- OTHER PERMITTED USES:**
- PUBLIC OR PRIVATE CHILD CARE CENTER.
  - COMMUNITY CENTER FOR CUSTOMARY COMMUNITY ACTIVITIES INCLUDING BUT NOT LIMITED TO:
    - THE PRESENTATION AND PERFORMANCE OF OUTDOOR COMMUNITY ACTIVITIES, PUBLIC OR PRIVATE, SUCH AS MUSICAL AND THEATRICAL PERFORMANCES, OUTDOOR PICNICS, ART SHOWS, AND GARNIVALS.
    - RINKING SALES, WHITE ELEPHANT SALES, CAKE SALES, DANCES, AND SIMILAR ACTIVITIES.
    - OPERATION OF A COMMUNITY HALL INCLUDING LEASING OF SAME FOR PUBLIC OR PRIVATE USE.
  - OPERATION OF INCIDENTAL COMMERCIAL ACTIVITIES SUCH AS A SNACK BAR.
  - PUBLIC OR PRIVATE TENNIS COURTS, TOGETHER WITH SUCH INCIDENTAL COMMERCIAL ACTIVITIES AS ARE CONSISTENT WITH THE PRIMARY USE OF THE LOT AS A TENNIS FACILITY.
  - BUILDINGS AND PARKING LOTS WHICH ARE OWNED AND USED BY ANY GOVERNMENTAL ENTITY OR HOMEOWNERS' ASSOCIATION OR ARE USED FOR NON-PROFIT PURPOSES INCLUDING BUT NOT LIMITED TO:
    - COMMUNITY LIBRARY FACILITY.
    - TEEN CENTER BUILDING INCLUDING INCIDENTAL SALES ON THE PREMISES OF FOOD AND BEVERAGES.
    - BUILDINGS USED PRIMARILY FOR RELIGIOUS ACTIVITIES.
    - HALL ROOM, POST, GETTING HALL, EXERCISE FACILITY, LEASING OFFICES, ADMINISTRATIVE OFFICES, INCLUDING INCIDENTAL SALES ON THE PREMISES OF FOOD AND BEVERAGES.
  - PARK STRUCTURES INCLUDING BUT NOT LIMITED TO, GAZEBOS, PAVILIONS, AMPHITHEATER SEATING, DECKS, FOUNTAINS, WALKS, HARDSCAPE PLAZAS, TRAILS, PATIOS, ETC.
  - UTILITY FACILITIES.
  - ENVIRONMENTAL FACILITIES SUCH AS DRAINAGE, STORMWATER MANAGEMENT FACILITIES, WETLAND MITIGATION AFForestation OR REFORESTATION.
  - ACTIVITY AREAS SUCH AS TROT LOTS, VOLLEYBALL, AND MULTI-PURPOSE COURTS, PICNIC AREAS, ETC.
  - SIGN AND ENTRY FEATURES MAY BE LOCATED AT ANY LOCATION IN A SETBACK, IF APPROVED BY THE PLANNING BOARD AND DOES NOT INTERFERE WITH SIGHT DISTANCE ALONG PUBLIC ROADS.

**LOT AREA**  
 NO MINIMUM MAXIMUM LOT SIZES APPLY WITHIN OPEN SPACE LAND USE AREAS EXCEPT THAT 30% OF THE GROSS ACREAGE OF ALL RECORDED LAND MUST BE OPEN SPACE AND 10% OF THE OPEN SPACE MUST BE AVAILABLE FOR ACTIVE RECREATION.

**SETBACKS**  
 BUILDINGS OR STRUCTURES WITHIN OPEN SPACE LAND USE AREAS SHALL BE A MINIMUM OF 10' FROM RIGHT-OF-WAY OR PROPERTY LINE, EXCEPT THAT PARK LIKE STRUCTURES SUCH AS GAZEBOS, PAVILIONS, BENCHES, FOUNTAINS AND SIMILAR STRUCTURES MAY BE LOCATED ANYWHERE WITHIN AN OPEN SPACE LOT, EXCEPT HOWEVER, THAT BUILDINGS SHALL BE PERMITTED ANYWHERE WITHIN OPEN SPACE LAND USE AREAS IN ACCORDANCE WITH A SITE DEVELOPMENT PLAN APPROVED BY THE HOWARD COUNTY PLANNING BOARD.

**HEIGHT**  
 THERE SHALL BE NO HEIGHT LIMITATIONS FOR BUILDINGS OR STRUCTURES IN OPEN SPACE LAND USE AREAS, PROVIDED IMPROVEMENTS ARE CONSTRUCTED IN ACCORDANCE WITH A SITE DEVELOPMENT PLAN APPROVED BY THE HOWARD COUNTY PLANNING BOARD.

**COVERAGE**  
 NO COVERAGE REQUIREMENT IS IMPOSED UPON LOTS WITHIN OPEN SPACE LAND USE AREAS.

**PARKING**  
 HEALTH CLUB: 10.0 SPACES PER 1000 SQUARE FEET OF NET LEASABLE AREA  
 SWIMMING POOL, COMMUNITY: 10 SPACES PER SEVEN PERSONS PERMITTED IN THE POOL AT ONE TIME BY THE HEALTH DEPT.  
 TENNIS COURT: 20 SPACES PER COURT

SUCH PARKING AREAS MAY BE IN PARKING LOTS, PARALLEL SPACES LOCATED ON PAVED AREAS IN AND/OR ADJACENT TO PUBLICLY MAINTAINED ROADWAYS, ADJACENT TO PUBLIC OR PRIVATE SERVICE DRIVES OR ORIENTED DIAGONALLY OR AT RIGHT ANGLES TO SUCH ROADWAYS OR SERVICE DRIVES. REDUCTIONS IN PARKING REQUIREMENTS ARE PERMITTED PURSUANT TO THE HOWARD COUNTY ZONING REGULATIONS SECTIONS 133.0.6 (PARKING STUDIES), AND 133.E1 (SHARED PARKING).

**ACCESSORY USES**  
 ANY USE NORMALLY AND CUSTOMARILY INCIDENTAL TO ANY USE PERMITTED IN ANY LAND USE AREA SHALL BE PERMITTED.

**SINGLE FAMILY DETACHED (SFD)**  
**PERMITTED USES**  
 ALL LOTS WITHIN SINGLE FAMILY DETACHED LAND USE AREAS SHALL BE USED ONLY FOR ONE SINGLE FAMILY DETACHED DWELLING, OR ONE ZERO LOT DWELLING UNIT PER LOT. PRIVATE RECREATIONAL FACILITIES, SUCH AS SWIMMING POOLS, TENNIS COURTS AND BASKETBALL COURTS RESERVED FOR THE ON-SITE RESIDENTS AND THEIR GUESTS ARE ALSO PERMITTED. ACCESSORY STRUCTURES AND ACCESSORY USES ARE ALSO PERMITTED.

- ANY OF THE PERMITTED USES MAY INCLUDE HOME OCCUPATIONS WITHIN THE PRINCIPAL STRUCTURE. THE FOLLOWING ADDITIONAL USES NOT REFERRED TO OR INCLUDED IN THE ABOVE USES, WHICH ARE ALLOWED BY SPECIAL EXCEPTION IN THE RD DISTRICT, WILL BE PERMITTED AS A MATTER OF RIGHT IN THE SINGLE FAMILY DETACHED LAND USE AREAS, AND ARE SPECIFICALLY APPROVED BY THE PLANNING BOARD ON THIS AMENDED COMPREHENSIVE SKETCH PLAN.
- ANTIQUE SHOPS, ART GALLERIES AND CRAFT SHOPS.
  - BED AND BREAKFAST INNS.
  - CONCERT OR RECITAL ESTABLISHMENTS.
  - HOME OCCUPATIONS (ALSO SEE SECTION 120.C.1 FOR ACCESSORY USE PROVISIONS).
  - CHARITABLE AND PHILANTHROPIC INSTITUTIONS.
  - HOMES-NURSING HOMES, GROUP CARE FACILITIES, CHILDREN'S HOMES.
  - ATHLETIC FACILITIES-ATHLETIC FIELDS, COMMERCIAL OR COMMUNITY SWIMMING POOLS, TENNIS CLUBS AND SIMILAR USES.
  - COUNTRY CLUBS AND GOLF COURSES.
  - PUBLIC UTILITY USES, LIMITED TO: (A) UTILITY SUBSTATION, (B) ABOVE GROUND PIPELINES, (C) PUMPING STATIONS, (D) TELEPHONE EXCHANGES, (E) OTHER UTILITY DEVICES SUCH AS TRANSFORMERS, SWITCH GEAR, TELEPHONE CABINETS, ETC.
  - ENTRANCE FEATURES FOR SUBDIVISIONS.
  - ACCESSORY DWELLING UNITS (SUCH UNITS SHALL NOT COUNT TOWARDS THE MAXIMUM NUMBER OF DWELLING UNITS; SUCH UNITS SHALL BE OWNED AND MAINTAINED BY THE OWNER OF THE PRINCIPAL DWELLING UNIT; ALSO SEE SECTION 104).

FOR ALL LOTS AND PARCELS WHICH ARE TECHNICALLY IN THE SFD LAND USE, BUT LATER RECORDED AS ADDITIONAL OPEN SPACE (E.G. NOS 4 HALFKWAY PARCELS) THE PROVISIONS OF THE OPEN SPACE CRITERIA SHALL BE USED IN LIEU OF THE SFD CRITERIA.

**DENSITY**  
 AVERAGE DENSITY SHALL NOT EXCEED 2.8 DWELLING UNITS PER GROSS ACRE BASED ON THE ENTIRE AREA OF THE SINGLE FAMILY DETACHED LAND USE.

**SUMMARY OF DEVELOPMENT CRITERIA (CONTINUED)**

LOT TYPE	MIN. FRONT SETBACK	MIN. SIDE SETBACK	MIN. LOT WIDTH AT FRONT BDL
Cottage	10'	4' EXCEPT FOR GARAGE WHICH MAY BE 0'	32'
Manor	40'000 Square Feet	40'	
Villa	54000 Square Feet	54'	
Estate	200000 Square Feet	120'	

EXCEPT FOR LOTS IDENTIFIED ON AMENDED OSF, WHICH SHALL NOT BE LESS THAN 100' AT FRONT BDL.

LOT TYPE SHALL BE DESIGNATED ON FINAL PLATS FOR ALL SINGLE FAMILY DETACHED AREAS. ESTATE LOTS SHALL BE LOCATED AS SHOWN ON THIS PLAN.

LOT TYPE	MIN. FRONT SETBACK	MIN. SIDE SETBACK	MINIMUM REAR SETBACK TO PRINCIPAL STRUCTURE	MINIMUM REAR SETBACK (ATTACHED OR DETACHED) OR TO ACCESSORY STRUCTURE
Cottage	10'	4' EXCEPT FOR GARAGE WHICH MAY BE 0'	20'	3'
Villa	12'	6' EXCEPT FOR GARAGE WHICH MAY BE 0'	20'	3'
Estate	20'	20' EXCEPT FOR GARAGE WHICH MAY BE 10'	20'	3'

A ZERO LOT LINE DWELLING UNIT MAY BE LOCATED ON ANY PROPERTY LINE WHICH IS NOT A STREET RIGHT-OF-WAY PROVIDED THAT (I) NO PART OF THE DWELLING SHALL ENCRUCH ON THE ADJOINING LOT, (II) AN ACCESS EASEMENT FOR THE PURPOSE OF MAINTENANCE TO THE SIDE OF THE STRUCTURE SHALL BE INCLUDED IN THE DEED WHERE APPROPRIATE. SPACING BETWEEN DWELLING UNITS SHALL BE A MINIMUM OF 8'. GARAGES, HOWEVER, MAY ADJOIN ALONG THE PROPERTY LINE, PROVIDED THEY COMPLY WITH ALL BUILDING AND FIRE CODE REGULATIONS.

HABITABLE SPACE AND/OR OPEN/ENCLOSED DECKS MAY BE BUILT OVER ATTACHED GARAGES. IN THOSE CASES, THE GARAGE SETBACKS SHALL GOVERN.

OTHER DECKS MUST BE A MINIMUM OF 10' FROM REAR PROPERTY LINE, AND ARE SUBJECT TO SIDE YARD SETBACKS.

FACING ACCESSORY STRUCTURES AND DETACHED GARAGES (ACROSS AN ALLEY/LANE ROW) SHALL BE A MINIMUM OF 30' APART.

STRUCTURES MAY BE LOCATED ANYWHERE WITHIN SUCH SETBACK AREAS IN ACCORDANCE WITH A SITE DEVELOPMENT PLAN APPROVED BY THE HOWARD COUNTY PLANNING BOARD.

**EXCEPTIONS TO SETBACK REQUIREMENTS**

- PORCHES MAY ENCRUCH INTO THE FRONT YARD TO WITHIN 2' FROM THE FRONT PROPERTY LINE OR RIGHT-OF-WAY FOR COTTAGES, MANORS, AND VILLAS. TO WITHIN 12' FOR ESTATES. PORCHES MAY ENCRUCH INTO THE SIDE YARD OF CORNER LOTS TO WITHIN 2' FROM THE RIGHT-OF-WAY FOR COTTAGES, MANORS, AND VILLAS. TO WITHIN 12' FOR ESTATES. WHERE A SIDE YARD ABUTS AN OPEN SPACE OR PASSAGE PORCHES MAY ENCRUCH TO WITHIN 1' FROM THE SIDE PROPERTY LINE FOR COTTAGES, MANORS, AND VILLAS. TO WITHIN 12' FOR ESTATES.
- STOOPS AND STEPS MAY ENCRUCH INTO THE FRONT AND SIDE YARDS TO WITHIN 1' FROM THE FRONT PROPERTY LINE.
- GARDEN WALLS, FENCES, PIERS, GATES AND SIMILAR ORNAMENTS MAY BE BUILT IN THE FRONT AND SIDE YARDS NOT CLOSER THAN 1' FROM THE FRONT PROPERTY LINE, NOT GREATER THAN 48" IN HEIGHT ALONG THE FRONT PROPERTY LINE AND NOT GREATER THAN 12" ALONG THE SIDE AND REAR PROPERTY LINES. AN ARCHWAY OR PIERS DEFINING A LEAD WALK MAY BE UP TO GREATER THAN 48" IN HEIGHT ALONG THE FRONT PROPERTY LINE AND NOT GREATER THAN 12" ALONG THE SIDE AND REAR PROPERTY LINES.
- MASONRY VENEERS MAY ENCRUCH A MAXIMUM OF SIX INCHES INTO ANY REQUIRED SETBACK AREA.

**ACCESS**  
 PERMANENT ACCESS TO LOTS MAY BE PROVIDED BY MEANS OF ALLEYS, USING PERPETUAL RECIPROCAL EASEMENTS OR OTHER ACCEPTABLE LEGAL PROVISIONS.

**BUILDING HEIGHT**  
 MAXIMUM BUILDING HEIGHT ON ALL LOTS SHALL BE 30' TO THE MIDPOINT OF THE ROOF. HEIGHT MEASURED FROM THE HIGHEST ADJOINING GROUND ELEVATION ADJACENT TO THE BUILDING EXCEPT AS OTHERWISE APPROVED ON A SITE DEVELOPMENT PLAN BY THE HOWARD COUNTY PLANNING BOARD.

**COVERAGE**  
 LOT COVERAGE FOR ESTATE LOTS SHALL NOT EXCEED 50 PERCENT, INCLUDING PRINCIPAL AND ACCESSORY STRUCTURES BUT NOT INCLUDING SIDEWALKS, PAVED PARKING AREAS, DRIVEWAYS, PORCHES, STOOPS, STEPS, DECKS, PATIOS, IN-GROUND POOLS, LANDSCAPING AND SIMILAR STRUCTURES.

**PARKING**  
 NO LESS THAN TWO PARKING SPACES SHALL BE PROVIDED FOR EACH SINGLE FAMILY DETACHED DWELLING UNIT. NO LESS THAN ONE PARKING SPACE SHALL BE PROVIDED FOR EACH ACCESSORY DWELLING UNIT. SUCH SPACES MAY CONSIST OF GARAGE, DRIVEWAY AND/OR SIMILAR OFF-STREET PARKING SPACES. VISITOR PARKING AND OVERFLOW PARKING MAY BE ACCOMMODATED AS ON-STREET PARKING WITHIN THE PUBLIC RIGHT-OF-WAY.

REDUCTIONS IN PARKING REQUIREMENTS ARE PERMITTED PURSUANT TO THE HOWARD COUNTY ZONING REGULATIONS SECTION 133.E1 (SHARED PARKING).

**OTHER RESIDENTIAL (OR)**

**PERMITTED USES**  
 APARTMENT DWELLINGS (INCLUDING STACKED TOWNHOUSES AND OTHER ARCHITECTURAL LAYOUTS WITH BOTH HORIZONTAL AND VERTICAL PARTY WALLS), SINGLE-FAMILY ATTACHED DWELLINGS, LIVE-WORK UNITS, SEMI-DETACHED DWELLINGS AND TWO-FAMILY DWELLINGS SHALL BE PERMITTED WITHIN OTHER RESIDENTIAL LAND USE AREAS. MIDTOWN PARCEL A-1 AND THE OR AREA OF THE WESTSIDE DISTRICT MAY CONTAIN LIVE-WORK UNITS.

STACKED TOWNHOUSES HAVE THE APPEARANCE OF CONVENTIONAL TOWNHOUSES, BUT ARE SPECIFICALLY SEPARATED BOTH HORIZONTALLY AND VERTICALLY. THE UNITS MAY OR MAY NOT HAVE INTEGRAL AT-GRABE GARAGES.

LIVE-WORK UNITS ARE VERTICALLY INTEGRATED BUILDING TYPES, WHERE THE FIRST FLOOR (AND BASEMENT, IF PROVIDED) SHALL BE UTILIZED AS COMMERCIAL SPACE AND THE UPPER LEVEL(S) SHALL BE RESIDENTIAL USE ONLY.

UPPER FLOORS OF ALL OTHER RESIDENTIAL STRUCTURES SHALL BE RESIDENTIAL USE ONLY.

APARTMENT BUILDING TYPES MAY ALSO INCLUDE ACCESSORY USES, SUPPORT SERVICES, AND AMENITIES INCLUDING BUT NOT LIMITED TO EXERCISE FACILITY, ADMINISTRATIVE OFFICES, HALL ROOM, MEETING ROOMS, ETC. WITH NO LIMITATIONS IN SIZE. COMMERCIAL/RETAIL SPACE ON THE FIRST FLOOR OF AN APARTMENT BUILDING MAY NOT EXCEED 1000 SQUARE FEET OR 15% OF THE GROSS FIRST FLOOR AREA, WHICHEVER IS GREATER. THIS CRITERIA IS NOT MEANT TO RESTRICT VERTICALLY INTEGRATED USES WHERE THE FIRST FLOOR IS COMMERCIAL/RETAIL AND THE UPPER FLOORS RESIDENTIAL.

OTHER PERMITTED USES INCLUDE PRIVATE RECREATIONAL FACILITIES SUCH AS TROT LOTS, SWIMMING POOLS, BASKETBALL COURTS AND TENNIS COURTS RESERVED FOR THE USE OF A SPECIFIC PROJECT'S RESIDENTS AND THEIR GUESTS. SUCH FACILITIES MAY BE LOCATED WITHIN CONDOMINIUM DEVELOPMENTS AS WELL AS WITHIN COMMUNITIES WHERE ALL PROPERTIES ARE INCLUDED WITHIN RECORDED COVENANTS AND LIENS, WHICH GOVERN AND PROVIDE FINANCIAL SUPPORT FOR OPERATIONS OF THE FACILITIES.

ANY OF THE PERMITTED USES MAY INCLUDE HOME OCCUPATIONS WITHIN THE PRINCIPAL STRUCTURE.

ACCESSORY STRUCTURES AND USES ARE ALSO PERMITTED FOR ALL OTHER RESIDENTIAL LAND USE AREAS. THE FOLLOWING ADDITIONAL USES NOT REFERRED TO OR INCLUDED IN THE ABOVE USES, WHICH ARE ALLOWED BY SPECIAL EXCEPTION IN THE RD DISTRICT, WILL BE PERMITTED AS A MATTER OF RIGHT IN THE OTHER RESIDENTIAL LAND USE AREAS, AND ARE SPECIFICALLY APPROVED BY THE PLANNING BOARD ON THIS AMENDED COMPREHENSIVE SKETCH PLAN.

- ANTIQUE SHOPS, ART GALLERIES AND CRAFT SHOPS.
- BED AND BREAKFAST INNS.
- CONCERT OR RECITAL ESTABLISHMENTS.
- HOME OCCUPATIONS (ALSO SEE SECTION 120.C.1 FOR ACCESSORY USE PROVISIONS).
- CHARITABLE AND PHILANTHROPIC INSTITUTIONS.
- HOMES-NURSING HOMES, GROUP CARE FACILITIES, CHILDREN'S HOMES.
- ATHLETIC FACILITIES-ATHLETIC FIELDS, COMMERCIAL OR COMMUNITY SWIMMING POOLS, TENNIS CLUBS AND SIMILAR USES.
- COUNTRY CLUBS AND GOLF COURSES.
- PUBLIC UTILITY USES, LIMITED TO: (A) UTILITY SUBSTATION, (B) ABOVE GROUND PIPELINES, (C) PUMPING STATIONS, (D) TELEPHONE EXCHANGES, (E) OTHER UTILITY DEVICES SUCH AS TRANSFORMERS, SWITCH GEAR, TELEPHONE CABINETS, ETC.
- ENTRANCE FEATURES FOR SUBDIVISIONS.
- ACCESSORY DWELLING UNITS (SUCH UNITS SHALL NOT COUNT TOWARDS THE MAXIMUM NUMBER OF DWELLING UNITS; SUCH UNITS SHALL BE OWNED AND MAINTAINED BY THE OWNER OF THE PRINCIPAL DWELLING UNIT; ALSO SEE SECTION 104).

FOR ALL LOTS AND PARCELS WHICH ARE TECHNICALLY IN THE OR LAND USE, BUT LATER RECORDED AS ADDITIONAL OPEN SPACE (E.G. NOS 4 HALFKWAY PARCELS) THE PROVISIONS OF THE OPEN SPACE CRITERIA SHALL BE USED IN LIEU OF THE OR CRITERIA.

**DENSITY**  
 AVERAGE DENSITY SHALL NOT EXCEED 14.0 UNITS PER GROSS ACRE BASED ON THE ENTIRE AREA OF OTHER RESIDENTIAL LAND USE.

**LOT SIZE**  
 NO MINIMUM OR MAXIMUM LOT SIZE IS ESTABLISHED FOR THE OTHER RESIDENTIAL LAND USE AREAS.

**SUMMARY OF DEVELOPMENT CRITERIA (CONTINUED)**

**STRUCTURE SETBACKS**  
 THE MINIMUM REQUIRED SETBACKS FOR OTHER RESIDENTIAL STRUCTURES SHALL BE AS FOLLOWS:

LOT TYPE	MIN. FRONT SETBACK	MIN. SIDE SETBACK	MINIMUM REAR SETBACK	
			TO PRINCIPAL STRUCTURE	TO REAR GARAGE ATTACHED OR DETACHED OR TO ACCESSORY STRUCTURE
SINGLE FAMILY ATTACHED	0'	0'	3'	20'
LIVE-WORK	0'	0'	3'	20'
SEMI-DETACHED	10'	4' EXCEPT FOR GARAGE WHICH MAY BE 0'	3'	20'
TWO-FAMILY	10'	4' EXCEPT FOR GARAGE WHICH MAY BE 0'	3'	20'
APARTMENT	10'	0' EXCEPT FOR GARAGE WHICH MAY BE 0'	3'	20'

HABITABLE SPACE AND/OR OPEN/ENCLOSED DECKS MAY BE BUILT OVER ATTACHED GARAGES. IN THOSE CASES, THE GARAGE SETBACKS SHALL GOVERN. WHERE THE REAR LOT LINE IS CONTIGUOUS TO GREEN OPEN SPACE, THE REAR PRINCIPAL STRUCTURE SETBACK MAY BE REDUCED TO 10' AND THE REAR SETBACK FOR DECKS MAY BE REDUCED TO 3'.

OTHER DECKS MUST BE A MINIMUM OF 10' FROM REAR PROPERTY LINE, AND ARE SUBJECT TO SIDE YARD SETBACKS.

FACING ACCESSORY STRUCTURES AND DETACHED GARAGES (ACROSS AN ALLEY/LANE ROW) SHALL BE A MINIMUM OF 30' APART.

BETWEEN APARTMENT BUILDINGS, THE MINIMUM SETBACK DISTANCES SHALL BE 30' FRONT TO FRONT, 50' BACK TO BACK, 50' FRONT TO BACK AND 10' FOR ALL OTHER CONDITIONS. BETWEEN SINGLE-FAMILY ATTACHED BUILDINGS, THE MINIMUM SETBACK DISTANCES SHALL BE 30' FRONT TO FRONT, 50' BACK TO BACK (EXCEPT ACROSS AN ALLEY), 50' BACK TO FRONT AND 6' (OR AS REQUIRED BY THE BUILDING CODE) FOR ALL OTHER CONDITIONS.

IN THE HILL SIDE DISTRICT, THE FRONT AND SIDE SETBACKS FROM MAPLE LAWN BLVD. MAY BE REDUCED TO 5'. ON PARCEL A-1 IN MIDTOWN, THE FRONT SETBACK FOR APARTMENTS, ALONG MAPLE LAWN BLVD. MAY BE REDUCED TO 10'.

**OVERALL OPEN SPACE TRACKING CHART**

PHASE NO.	FILE REF. NO.	GROSS ACREAGE	O.S. AC. (%)	ACTIVE O.S. AC. (%)
1	F-03-01	51.46	21.5 (40.7)	---
2	F-03-40	31.43	15.75 (42.2)	152 (41.7) ⊕
3	F-04-42	58.80	22.85 (28.9)	---
4a	F-05-81 / F-05-82	15.41	6.10 (43.3)	0.24 (4.3) ⊕
4b	F-05-194 / F-05-195	3.12	0.00 (0.0)	---
4c	F-05-112 / F-05-113	3.00	0.00 (0.0)	---
5a	F-06-43	33.26	0.00 (0.0)	---
5b	F-06-161	33.26	0.00 (0.0)	---
5c	F-06-12	15.05	0.00 (0.0)	---
5d	F-06-183	3.05	0.00 (0.0)	---
6a	F-07-81	0.00	0.00 (0.0)	---
n/a	F-07-103	3.05	0.00 (0.0)	---
6b	F-08-54 / F-08-55	80.60	0.00 (0.0)	---
n/a	F-04-41	0.00	0.00 (0.0)	---
n/a	F-10-46	0.00	0.03 (0.0)	---
7	F-10-61	16.60	1.15 (0.0)	---
8a	F-11-21	0.00	-1.18 (0.0)	---
8b	F-12-21	0.00	-1.52 (-3.1)	---
8c	F-12-20	1.65	0.00 (0.0)	---
8d	F-12-24	30.22	0.00 (0.0)	---
n/a	F-12-15	4.31	0.00 (0.0)	---
n/a	F-12-03	0.00	-0.54 (0.0)	---
9c	F-13-07	34.08	0.00 (0.0)	---
9d	F-13-08	15.74	0.00 (0.0)	---
n/a	F-12-26	15.46	0.00 (0.0)	---
TOTALS		444.93	46.48 (10.4)	171.40 (14.4)

⊕ THE PERCENT OF ACTIVE OPEN SPACE IS BASED UPON THE TOTAL OPEN SPACE PROVIDED. 10% RECREATIONAL OPEN SPACE IS REQUIRED.

Area	Area used	Total
① Midtown Area 1 (F-03-40)	25.125 (community center) [50.0 ac.] 05 126 [0.55 ac.] 05 128 [230] [1.46 ac.]	752 ac.
② Hillside Area 1 (F-05-31/F-05-32)	Pathways	0.24 ac.
③ Westside Area 1 (F-08-54)	25.4 (Recreational Field) [4.16 ac.]	4.16 ac.
④ Westside Area 2 (F-12-21)	25.66 [6.67 ac.]	0.67 ac.
⑤ Midtown Hill Area 1 (F-12-24)	25.84 [6.66 ac.] 25.85 [6.63 ac.]	1.31 ac.
⑥ Westside Area 3 (F-13-03)	25.18 [6.64 ac.]	0.64 ac.
⑦ Midtown Hill Area 2 (F-13-07)	25.174 [6.13 ac.] 25.180 [6.14 ac.] 25.182 [3.58]	5.05 ac.
⑧ Business Area 2 (F-12-26)	25.3 [3.14 ac.]	3.14 ac.

SUCH PARKING AREAS MAY BE PARALLEL SPACES LOCATED ON PAVED AREAS IN AND/OR ADJACENT TO PUBLICLY MAINTAINED ROADWAYS, ADJACENT TO PUBLIC OR PRIVATE SERVICE DRIVES OR ORIENTED DIAGONALLY OR AT RIGHT ANGLES TO SUCH ROADWAYS OR SERVICE DRIVES.

REDUCTIONS IN PARKING REQUIREMENTS ARE PERMITTED PURSUANT TO THE HOWARD COUNTY ZONING REGULATIONS SECTION 133.E1 (SHARED PARKING).

**HOUSING FOR ELDERLY AND/OR HANDICAPPED PERSONS**  
 IN THE EVENT A FACILITY QUALIFIES UNDER FEDERAL STATE OR COUNTY PROGRAMS INTENDED TO PROMOTE HOUSING FOR THE ELDERLY OR HANDICAPPED, THE PARKING REQUIREMENTS MAY BE MODIFIED TO PROVIDE FOR FOUR PARKING SPACES FOR EVERY TEN DWELLING UNITS PARTICIPATING IN SUCH PROGRAM. IN THE EVENT THE UNITS ARE WITHDRAWN FROM A HOUSING PROGRAM, THE OWNER OF THE FACILITY SHALL IMMEDIATELY NOTIFY THE DEPARTMENT OF PLANNING AND ZONING AND SHALL CONSTRUCT, PRIOR TO FURTHER OCCUPANCY OF THE WITHDRAWN UNITS, SUCH ADDITIONAL PARKING SPACES AS ARE NECESSARY TO PROVIDE ONE AND ONE-HALF PARKING SPACE FOR EACH DWELLING UNIT WITHDRAWN.

**OVERALL TRACKING CHART**

PHASE NO.	FILE REF. NO.	GROSS ACREAGE	NON-BUILDABLE					S.F.D. AC. (%)	O.R. AC. (%)	EMP. AC. (%)	O.S. AC. (%)	FUB. RD.		PRIV. RD. ACREAGE	SPD UNITS	O.R. UNITS (APT./S.F.A.)	S.F.D. DENSITY	O.R. DENSITY	EMP. BLDG. AREA	EMP. F.A.R.	
			SF	OR	EMP	OS	%					SF	OR								
1	F-03-01	51.46	0.00	0.00	0.00	0.00	0.00	---	---	30.83 (59.3)	21.5 (40.7)	0.00	0.00	4.35	---	---	---	---	---	---	---
2	F-03-40	31.43	0.52	0.43	0.24	0.00	0.31	10.84 (24.0)	8.04 (21.6)	1.56 (4.2)	15.75 (42.2)	3.12	3.14	1.56	1.68	55	65	5.1/AC.	8.4/AC.	---	---
3	F-04-42	58.80	-0.52	-0.43	2.71	0.00	0.30	7.11 (12.1)	12.28 (20.9)	14.80 (25.2)	22.85 (38.9)	2.52	0.46	0.00	1.00	41	74	5.8/AC.	6.4/AC.	---	---
4a	F-05-81 / F-05-82	15.41	0.00	1.48	-1.64	0.00	-1.41	0.00 (0.0)	1.21 (4.1)	1.61 (10.4)	6.30 (43.3)	0.00	3.40	1.64	0.46	---	54	---	8.1/AC.	---	---
4b	F-05-194 / F-05-195	3.12	0.00	0.00	-1.26	0.00	-1.04	0.00 (0.0)	0.00 (0.0)	0.00 (0.0)	3.15 (101.0)	1.23	0.44	0.00	0.00	---	---	---	---	---	---
4c	F-05-112 / F-05-113	3.00	0.00	0.00	0.00	0.00	0.00	0.00 (0.0)	0.15 (5.1)	2.05 (68.3)	0.00 (0.0)	0.00	0.00	0.00	---	---	---	---	---	---	---
5a	F-06-43	33.26	0.00	0.00	-1.25	0.00	0.00	0.00 (0.0)	1.25 (3.8)	0.00 (0.0)	18.50 (55.6)	2.27	3.16	0.00	0.00	---	---	---	---	---	---
5b	F-06-161	33.26	0.00																		

**SEDIMENT CONTROL LEGEND**

- 400 EXISTING CONTOUR
- 400 PROPOSED CONTOUR
- EXISTING TREELINE
- STABILIZED CONSTRUCTION ENTRANCE
- BOTH CONDITIONS EARTH DIKE
- FINAL EARTH DIKE
- INITIAL EARTH DIKE
- SF PROPOSED SILT FENCE
- SSF PROPOSED SUPER SILT FENCE
- LIMIT OF DISTURBANCE
- FP 100 YEAR FLOODPLAIN
- SB STREAM BUFFER
- FCE FOREST CONSERVATION EASEMENT
- CENTERLINE OF STREAM
- WETLAND BUFFER
- LIMIT OF WETLAND
- WETLAND AREA
- EROSION CONTROL MATTING
- 15' NO-WOODY VEGETATION ZONE
- SOIL BORING LOCATION

- NOTES:**
- EX STORM DRAIN SHOWN IS PER F-13-07.
  - WHERE L.O.D. IS NOT SHOWN, THE SEDIMENT CONTROL DEVICES WILL INDICATE THE LIMIT OF DISTURBANCE.
  - CONTRACTOR MUST TURN ALL SILT FENCE AND SUPER SILT FENCE UPHILL BY 2' IN ELEVATION EVERY 25 FEET.
  - FOR DUST CONTROL INFORMATION, SEE SHEET 10.
  - FOR PLANS, PROFILES AND DETAILS FOR THE CONSTRUCTION OF SEDIMENT BASIN 3, SEE SHEETS 14 THROUGH 16, AND 21.
  - FOR PLANS, PROFILES AND DETAILS FOR THE CONSTRUCTION OF SEDIMENT BASIN 4, SEE SHEETS 11 THROUGH 13, AND 21.
  - FOR EARTH DIKE TREATMENT INFORMATION, SEE SHEET 8.
  - GEOTEXTILE GLASS C SHALL BE PLACED OVER THE BOTTOM AND SIDES OF THE OUTLET CHANNEL PRIOR TO THE PLACEMENT OF STONE. SECTIONS OF THE GEOTEXTILE FABRIC MUST OVERLAP AT LEAST 1' WITH THE SECTION NEAREST THE ENTRANCE PLACED ON TOP. THE GEOTEXTILE FABRIC SHALL BE EMBEDDED AT LEAST 6" INTO THE EXISTING GROUND AT THE ENTRANCE OF THE OUTLET CHANNEL.
  - FOR CONVERSION OF SEDIMENT BASINS 3 AND 4 TO FINAL STORMWATER MANAGEMENT PONDS, SEE SHEETS 20 & 21.

- SEQUENCE OF CONSTRUCTION**
- OBTAIN GRADING PERMIT AND ARRANGE FOR AN ON-SITE PRE-CONSTRUCTION MEETING WITH THE SEDIMENT CONTROL INSPECTOR. (1 DAY)
  - CONTRACTOR IS TO INSPECT THE EXISTING SEDIMENT CONTROL DEVICES CONSTRUCTED UNDER F-12-50 AND MAKE THE NECESSARY REPAIRS TO THE DEVICES. (2 WEEKS)
  - WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, INSTALL STABILIZED CONSTRUCTION ENTRANCES, SILT FENCE, AND SUPER SILT FENCE. (2 WEEKS)
  - ONCE ALL THE MATERIALS FOR THE CONSTRUCTION OF THE BASINS ARE ON SITE, BEGIN CONSTRUCTION OF THE SEDIMENT BASINS. INSTALL Baffles AND CONTRACTOR TO INSTALL BRICK TO PROVIDE TEMPORARY NEAR GREST ELEVATION IN RISER. (2 MONTHS)
  - ONCE THE FILL FOR THE SEDIMENT BASINS HAVE REACHED THE TOP OF DAM, INSTALL THE EARTH DIKES BEGINNING AT THE DOWNSTREAM DIKE. INSTALL THE EARTH DIKES AS SHOWN IN ORDER TO PROVIDE POSITIVE DRAINAGE TO THE BASIN. THE CONTRACTOR MUST CONTINUE TO PROVIDE POSITIVE DRAINAGE ALONG THE DIKES AS THE FILL CONTINUES AND THE EARTH DIKES ARE RELOCATED. (1 MONTH)
  - ONCE PERMISSION HAS BEEN GRANTED BY THE SEDIMENT CONTROL INSPECTOR, BEGIN GRASS GRADING. THE CONTRACTOR MUST IMPLEMENT DUST CONTROL MEASURES PER SPECIFICATIONS SHOWN IN THIS PLAN SET AND AS REQUESTED BY THE SEDIMENT CONTROL INSPECTOR. (4 MONTHS)
  - FINE GRADE SITE AND STABILIZE DISTURBED AREAS PER THE TEMPORARY SEEDING NOTES IN THIS PLAN SET. (1 MONTH)
  - ONCE PERMISSION HAS BEEN OBTAINED FROM THE SEDIMENT CONTROL INSPECTOR, DEVICES MAY BE REMOVED. IMMEDIATELY STABILIZE ANY DISTURBANCE AS A RESULT OF THEIR REMOVAL. (1 MONTH)
  - ONCE ALL OF THE AREAS DRAINING TO THE BASINS HAVE BEEN STABILIZED AND PERMISSION HAS BEEN GRANTED BY THE SEDIMENT CONTROL INSPECTOR, CONTRACTOR IS TO BEGIN THE CONVERSION OF THE SEDIMENT BASINS TO SHM PONDS. (1 MONTH)
  - THE CONTRACTOR SHALL REMOVE ALL NON-NATURAL ITEMS (DEBRIS AND JUNK) FROM ALL SENSITIVE AREAS (FLOODPLAINS, FOREST, STREAMS, WETLANDS AND BUFFERS) ON THE SITE AND STABILIZE. (1 MONTH)
- WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, CERTAIN ITEMS MAY BE PERFORMED CONCURRENTLY.

THESE PLANS FOR SMALL POND CONSTRUCTION SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*John L. Robinson* 7/31/14  
 HARD S.C.D. DATE

**BUILDER'S CERTIFICATE**

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

*Robert V. P... 7/23/14*  
 SIGNATURE OF DEVELOPER/BUILDER DATE

**ENGINEER'S CERTIFICATE**

I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

*Ch... 7/22/14*  
 ENGINEER'S SIGNATURE DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

*Kate... 8/1/14*  
 Chief, Division of Land Development Date

*8/9/14*  
 Chief, Development Engineering Division Date

**GLW GUTSCHICK LITTLE & WEBER, P.A.**  
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
 3009 NATIONAL DRIVE - SUITE 250 - BURTNSVILLE OFFICE PARK  
 BURTNSVILLE, MARYLAND 20866  
 TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APPR.

PREPARED FOR:  
 MAPLE LAWN FARMS 1, LLC  
 SUITE 300 WOODHOLME CENTER  
 1829 REISTERSTOWN ROAD  
 BALTIMORE, MD 21208  
 ATTN: MARK BENNETT  
 410-484-8400

**PROFESSIONAL CERTIFICATION**

I HEREBY CERTIFY THAT THESE PLANS 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. 12875, EXPIRATION DATE: MAY 28, 2016.

*7/22/14*

**REVISED OVERALL SEDIMENT CONTROL PLAN**

**MAPLE LAWN FARMS**  
 GARDEN DISTRICT  
 NON-BUILDABLE PARCEL 'W'

SCALE: 1" = 100'

DATE: JUNE, 2014

ZONING: MXD-3

TAX MAP - GRID: 41-21-46-3

G. L. W. FILE No. 11001

SHEET 3 OF 27

ELECTION DISTRICT No. 5

HOWARD COUNTY, MARYLAND



FOR SPOT ELEVATIONS ALONG EARTH DIKES, SEE SHEETS 4 THRU 7

THIS PLAN SUPERCEDES THE PLAN SIGNED ON 12/13/12 AND IS INTENDED TO REVISE THE GRADING SO THAT THIS PORTION OF THE PROJECT CAN BALANCE WITHIN ITSELF.

L:\cadd\working\11001\11001-03-25-replacement-sheets\11001-03-25-01 (Replacement) dwg.  
 PLOTTED: 7/17/2014 11:53 AM, LAST SAVED: 7/17/2014 11:28 AM, PLOTTED BY: Doug Young, P.E.

**SEDIMENT CONTROL LEGEND**

- 400 EXISTING CONTOUR
- 400 PROPOSED CONTOUR
- EXISTING TREELINE
- STABILIZED CONSTRUCTION ENTRANCE
- BOTH CONDITIONS EARTH DIKE
- FINAL EARTH DIKE
- INITIAL EARTH DIKE
- SF PROPOSED SALT FENCE
- SSF PROPOSED SUPER SALT FENCE
- LIMIT OF DISTURBANCE
- FP 100 YEAR FLOODPLAIN
- SB STREAM BUFFER
- FCE FOREST CONSERVATION EASEMENT
- 30J CENTERLINE OF STREAM
- WB WETLAND BUFFER
- LIMIT OF WETLAND
- WETLAND AREA
- EROSION CONTROL MATTING
- 15' NO-WOODY VEGETATION ZONE
- SOIL BORING LOCATION
- GABION INFLOW PROTECTION
- RRP RIP-RAP INFLOW PROTECTION

**100 YEAR FLOODPLAIN STUDY**  
CROSS SECTION 1' LEVEL FT.

STREAM 'A'	STREAM 'B'
240	344.32
650	409.60
141	409.60
865	404.42
450	410.60
1000	416.60
HARVARD BRANCH	
1364	341.04
1100	344.32
1300	344.51
8468	345.20
8410	345.81
STREAM 'B'	
300	400.10
400	400.13

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*John Robinson* 7/31/14  
HOWARD S.C.D. DATE

**BUILDER'S CERTIFICATE**

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A HAZARDLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

*Mark Bennett* 7/23/14  
SIGNATURE OF DEVELOPER/BUILDER DATE

**ENGINEER'S CERTIFICATE**

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

*Mark Bennett* 7/22/14  
ENGINEER'S SIGNATURE DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

*Kevin Delaney* 8/14/14  
Chief, Division of Land Development Date  
*Kevin Delaney* 8/18/14  
Chief, Development Engineering Division Date

**GLWGUTSCHICK LITTLE & WEBER, P.A.**  
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
3909 NATIONAL DRIVE - SUITE 250 - BURTINSVILLE OFFICE PARK  
BURTINSVILLE, MARYLAND 20868  
TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-889-2524 FAX: 301-421-4188

DES. DEV DRN. KLP CHK. CKG

DATE	REVISION	BY	APPR.

PREPARED FOR:  
MAPLE LAWN FARMS 1, LLC  
SUITE 300 WOODOLME CENTER  
1829 REISTERSTOWN ROAD  
BALTIMORE, MD 21208  
ATTN: MARK BENNETT  
410-484-8400

**PROFESSIONAL CERTIFICATION**

I HEREBY CERTIFY THAT THESE PLANS 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. 12875, EXPIRATION DATE: MAY 28, 2016.



**REVISED GRADING / SEDIMENT CONTROL PLAN**

**MAPLE LAWN FARMS**  
GARDEN DISTRICT  
NON-BUILDABLE PARCEL 'W'

ELECTION DISTRICT No. 5

SCALE	ZONING	G. L. W. FILE No.
1" = 50'	MXD-3	11001
DATE	TAX MAP - GRID	SHEET
JUNE, 2014	41-21/46-3	4 OF 27

HOWARD COUNTY, MARYLAND



THIS PLAN SUPERCEDES THE PLAN SIGNED ON 12/13/12 AND IS INTENDED TO REVISE THE GRADING SO THAT THIS PORTION OF THE PROJECT CAN BALANCE WITHIN ITSELF.

MATCHLINE D-D (SEE SHEET 1)

MATCHLINE A-A (SEE SHEET 5)

**SEDIMENT CONTROL LEGEND**

- 400 ——— EXISTING CONTOUR
- 400 - - - - - PROPOSED CONTOUR
- — — — — EXISTING TREELINE
-  STABILIZED CONSTRUCTION ENTRANCE
-  BOTH CONDITIONS EARTH DIKE
-  FINAL EARTH DIKE
-  INITIAL EARTH DIKE
-  PROPOSED SILT FENCE
-  PROPOSED SUPER SILT FENCE
-  LIMIT OF DISTURBANCE
-  100 YEAR FLOODPLAIN
-  STREAM BUFFER
-  FOREST CONSERVATION EASEMENT
-  CENTERLINE OF STREAM
-  WETLAND BUFFER
-  LIMIT OF WETLAND
-  WETLAND AREA
-  EROSION CONTROL MATTING
-  15' NO-MOODY VEGETATION ZONE
-  SOIL BORINGS LOCATION

100 YEAR FLOODPLAIN STUDY	
CROSS SECTION	ELEV. FT.
1400	423.33
1400	435.24

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL, MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*John R. Robertson* 7/31/14  
 HOWARD S.C.D. DATE

**BUILDER'S CERTIFICATE**

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A WETLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

*M.D.R. H. v. Pina* 7/23/14  
 SIGNATURE OF DEVELOPER/BUILDER DATE

**ENGINEER'S CERTIFICATE**

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

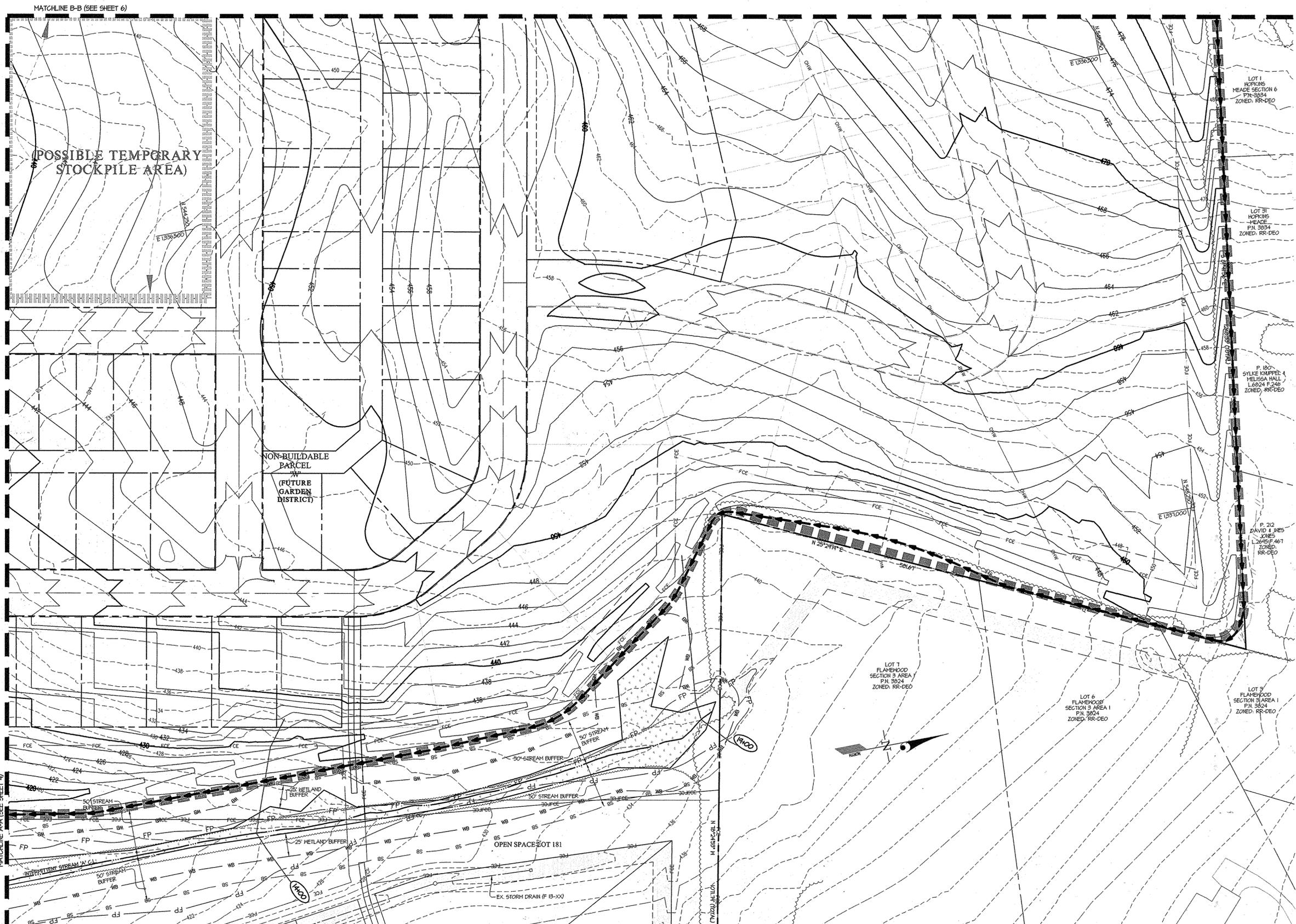
*Chris* 7/22/14  
 ENGINEER'S SIGNATURE DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

*Kate L. Jones* 8/1/14  
 Chief, Division of Land Development Date  
*[Signature]* 8/8/14  
 Chief, Development Engineering Division Date

**GLWGUTSCHICK LITTLE & WEBER, P.A.**  
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
 3909 NATIONAL DRIVE - SUITE 250 - BURTOWNSVILLE OFFICE PARK  
 BURTOWNSVILLE, MARYLAND 20867  
 TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-888-2524 FAX: 301-421-4186

DES. DEV	DRN. KLP	CHK. CKG	DATE	REVISION	BY	APPR.



THIS PLAN SUPERCEDES THE PLAN SIGNED ON 12/13/12 AND IS INTENDED TO REVISE THE GRADING SO THAT THIS PORTION OF THE PROJECT CAN BALANCE WITHIN ITSELF.

**REVISED GRADING / SEDIMENT CONTROL PLAN**

**MAPLE LAWN FARMS**  
 GARDEN DISTRICT  
 NON-BUILDABLE PARCEL 'W'

**PROFESSIONAL CERTIFICATION**

I HEREBY CERTIFY THAT THESE PLANS 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. 12875 EXPIRATION DATE: MAY 28, 2015  
 7/22/14



ELECTION DISTRICT No. 5

SCALE	ZONING	G. L. W. FILE No.
1" = 50'	MXD-3	11001
DATE	TAX MAP - GRID	SHEET
JUNE, 2014	41-21/46-3	5 OF 27

HOWARD COUNTY, MARYLAND

**SEDIMENT CONTROL LEGEND**

- 400 EXISTING CONTOUR
- 400 PROPOSED CONTOUR
- EXISTING TREELINE
- STABILIZED CONSTRUCTION ENTRANCE
- BOTH CONDITIONS EARTH DIKE
- FINAL EARTH DIKE
- INITIAL EARTH DIKE
- SF PROPOSED SILT FENCE
- SSF PROPOSED SUPER SILT FENCE
- LIMIT OF DISTURBANCE
- FP 100 YEAR FLOODPLAIN
- SB STREAM BUFFER
- FCE FOREST CONSERVATION EASEMENT
- 304 CENTERLINE OF STREAM
- WB WETLAND BUFFER
- LIMIT OF WETLAND
- WETLAND AREA
- EROSION CONTROL MATTING
- 15' NO-WOODY VEGETATION ZONE
- SOIL BORING LOCATION



THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*John P. Roberts* 7/31/14  
 HOWARD S.C.D. DATE

**BUILDER'S CERTIFICATE**  
 I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

*M.D. B. v. P.* 7/23/14  
 SIGNATURE OF DEVELOPER/BUILDER DATE

**ENGINEER'S CERTIFICATE**  
 I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

*Mark Bennett* 7/22/14  
 ENGINEER'S SIGNATURE DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*Kate Schumacher* 8/11/14  
 Chief, Division of Land Development Date  
 8/9/14  
 Chief, Development Engineering Division Date

**GLW GUTSCHICK LITTLE & WEBER, P.A.**  
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
 3909 NATIONAL DRIVE - SUITE 250 - BURTOWNSVILLE OFFICE PARK  
 BURTOWNSVILLE, MARYLAND 20886  
 TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-988-2524 FAX: 301-421-4186

DATE	REVISION	BY	APPR.

PREPARED FOR:  
 MAPLE LAWN FARMS 1, LLC  
 SUITE 300 WOODHOLME CENTER  
 1829 REISTERSTOWN ROAD  
 BALTIMORE, MD 21208  
 ATTN: MARK BENNETT  
 410-484-8400

**PROFESSIONAL CERTIFICATION**  
 I HEREBY CERTIFY THAT THESE PLANS 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. 12875  
 EXPIRATION DATE: MAY 28, 2016  
 7/22/14



ELECTION DISTRICT No. 5

THIS PLAN SUPERCEDES THE PLAN SIGNED ON 12/13/12 AND IS INTENDED TO REVISE THE GRADING SO THAT THIS PORTION OF THE PROJECT CAN BALANCE WITHIN ITSELF.

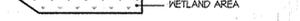
**REVISED GRADING / SEDIMENT CONTROL PLAN**  
**MAPLE LAWN FARMS**  
 GARDEN DISTRICT  
 NON-BUILDABLE PARCEL "W"

SCALE	ZONING	G. L. W. FILE No.
1" = 50'	MXD-3	11001
DATE	TAX MAP - GRID	SHEET
JUNE, 2014	41-21/46-3	6 OF 27

HOWARD COUNTY, MARYLAND

L:\CADD\WORKINGS\11001\FINALS\SWM-SC-2014-08-25 REPLACEMENT SHEETS\1001\_04-07-SC-CF (Replacement).dwg  
 PLOTTED: 7/17/2014 1:14 PM. LAST SAVED: 7/10/2014 5:41 PM. PLOTTED BY: Doug Vande Pyle

**SEDIMENT CONTROL LEGEND**

- 400 --- EXISTING CONTOUR
- 400 --- PROPOSED CONTOUR
- --- EXISTING TREELINE
-  STABILIZED CONSTRUCTION ENTRANCE
-  BOTH CONDITIONS EARTH DIKE
-  FINAL EARTH DIKE
-  INITIAL EARTH DIKE
-  PROPOSED SILT FENCE
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-  LIMIT OF DISTURBANCE
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-  FOREST CONSERVATION EASEMENT
-  CENTERLINE OF STREAM
-  KETLAND BUFFER
-  LIMIT OF WETLAND
-  WETLAND AREA
-  EROSION CONTROL MATTING
-  15' NO-WOODY VEGETATION ZONE
-  SOIL BORING LOCATION
-  GABION INFLOW PROTECTION

**100 YEAR FLOODPLAIN STUDY**

CROSS SECTION	INSEL. FT.
HAMMOND BRANCH	
8723	398.92
8439	400.04
8082	401.11
8245	402.25
STREAM HB-II	
3431	406.50
1450	415.34

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*John R. Roberts* 7/31/14  
 HORD S.C.D. DATE

**BUILDER'S CERTIFICATE**

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*M.D. v. Rao* 7/23/14  
 SIGNATURE OF DEVELOPER/BUILDER DATE

**ENGINEER'S CERTIFICATE**

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*[Signature]* 7/22/14  
 ENGINEER'S SIGNATURE DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

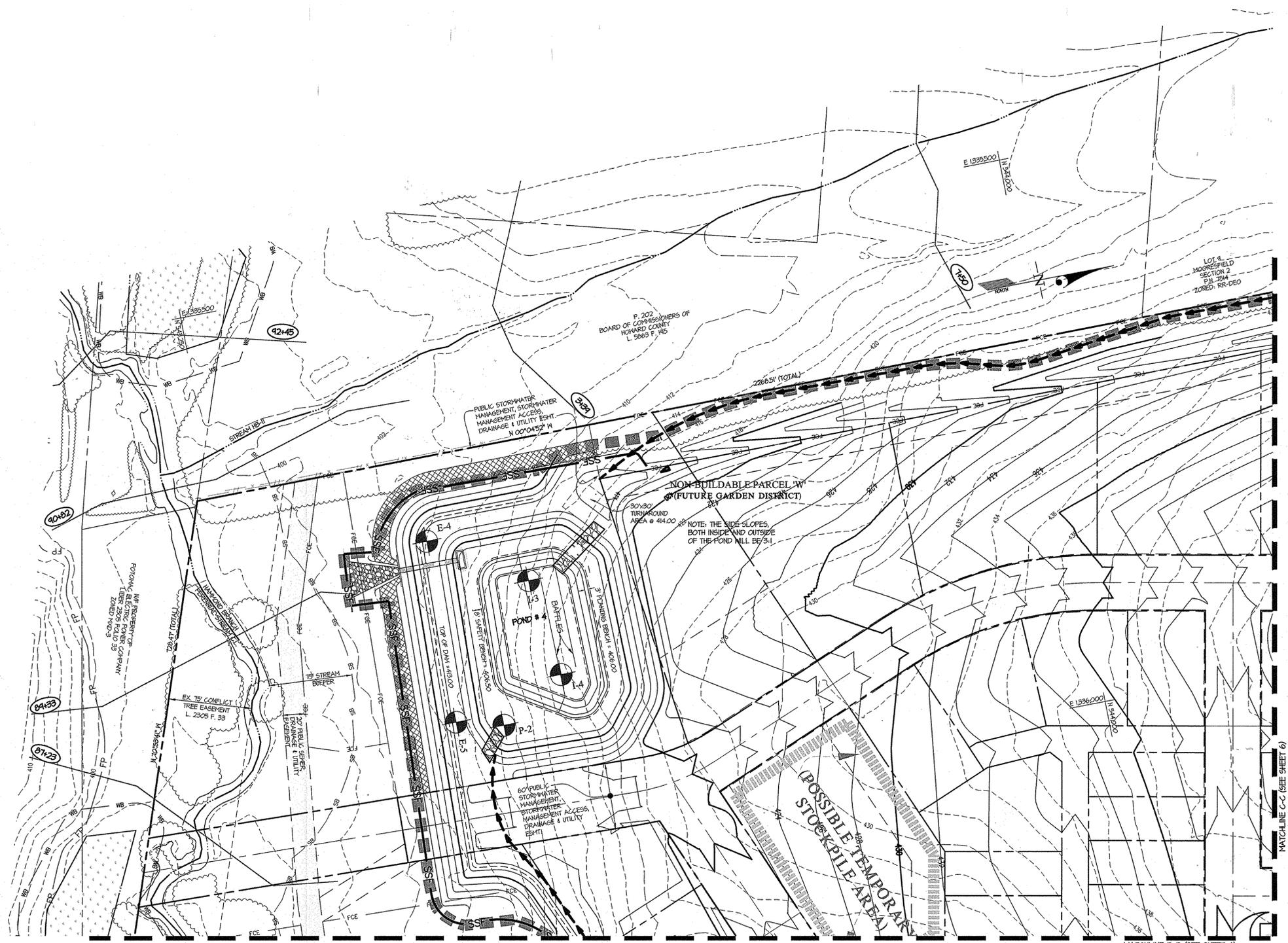
*[Signature]* 8/11/14  
 Chief, Division of Land Development Date

*[Signature]* 8/8/14  
 Chief, Development Engineering Division Date

**GLWGUTSCHICK LITTLE & WEBER, P.A.**

CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
 3909 NATIONAL DRIVE - SUITE 250 - BURTNSVILLE OFFICE PARK  
 BURTNSVILLE, MARYLAND 20867  
 TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-889-2524 FAX: 301-421-4186

DES. DEV DRN. KLP CHK. CKG



THIS PLAN SUPERCEDES THE PLAN SIGNED ON 12/13/12 AND IS INTENDED TO REVISE THE GRADING SO THAT THIS PORTION OF THE PROJECT CAN BALANCE WITHIN ITSELF.

**REVISED GRADING / SEDIMENT CONTROL PLAN**

**MAPLE LAWN FARMS  
 GARDEN DISTRICT  
 NON-BUILDABLE PARCEL 'W'**

**PROFESSIONAL CERTIFICATION**

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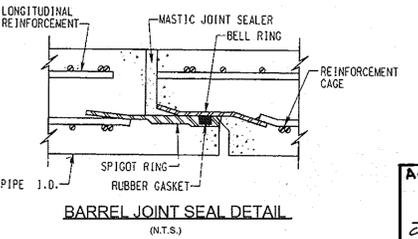
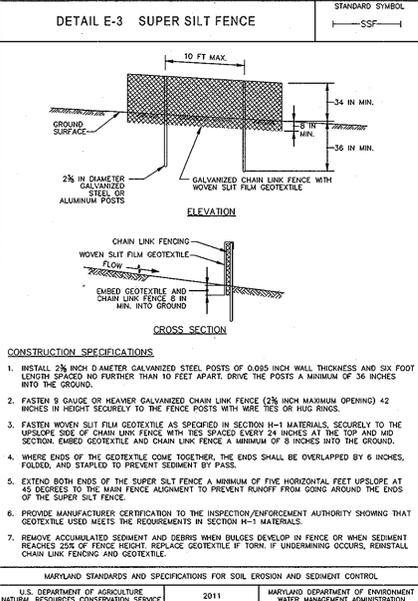
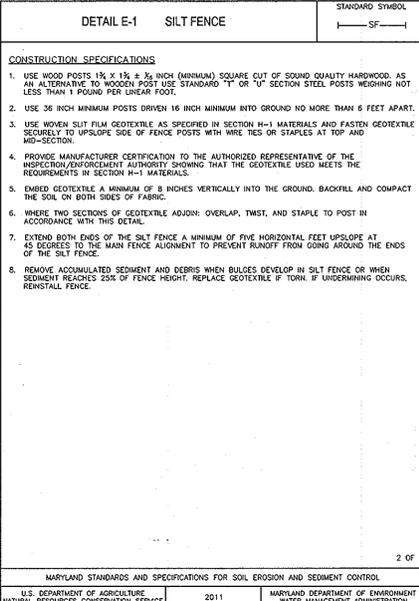
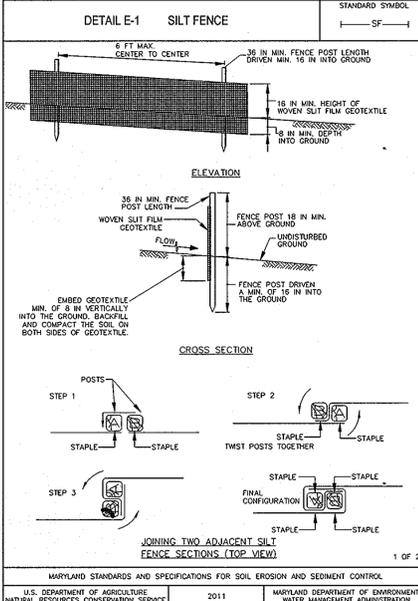
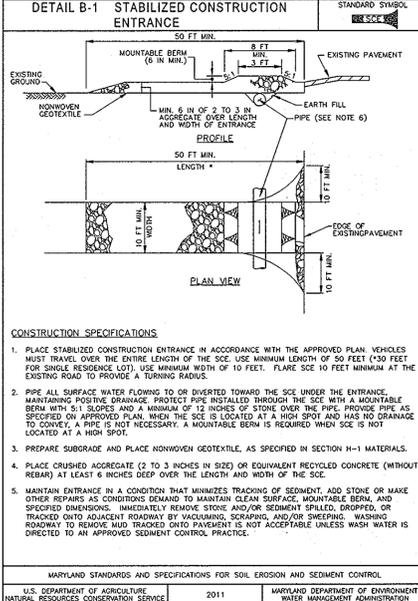
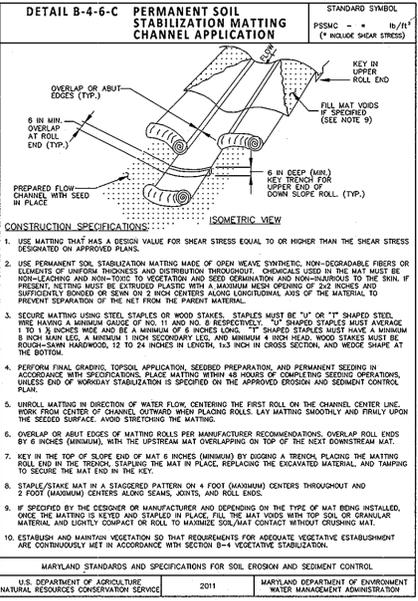
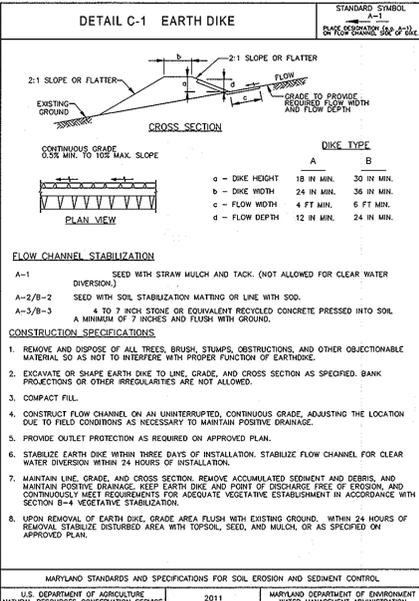
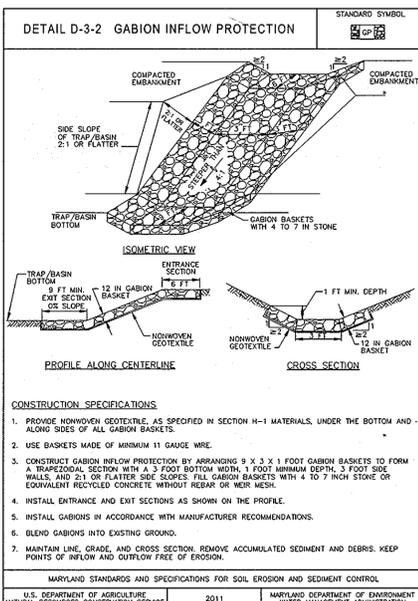
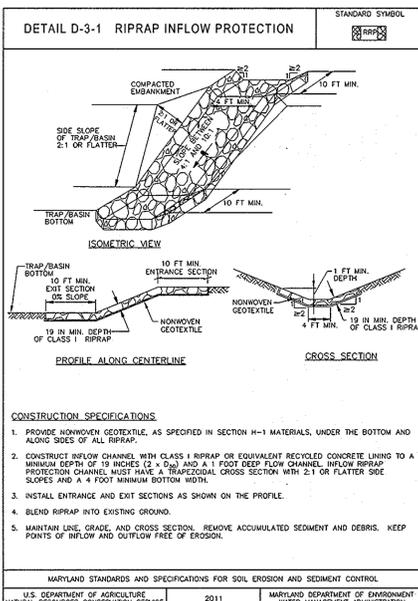
7/22/14

SCALE 1" = 50'	ZONING MXD-3	G. L. W. FILE No. 11001
DATE JUNE, 2014	TAX MAP - GRID 41-21/46-3	SHEET 7 OF 27

HOWARD COUNTY, MARYLAND

ELECTION DISTRICT No. 5





Approved: Howard County Department of Public Works  
*William R. Smith* 12-14-12  
 Chief, Bureau of Highways

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
*John R. Blunt* 12/12/12  
 HOWARD S.C.D. DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*Kevin DeLeon* 12/17/12  
 Chief, Division of Land Development DATE  
*Mark Bennett* 12/17/12  
 Chief, Development Engineering Division DATE

**ENGINEER'S CERTIFICATE**  
 I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND FEASIBLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.  
*CKJ* 11-20-12  
 ENGINEER'S SIGNATURE DATE

**BUILDER'S CERTIFICATE**  
 I HEREBY CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.  
*William R. Smith* 11-20-12  
 SIGNATURE OF DEVELOPER/BUILDER DATE

**GLW GUTSCHICK LITTLE & WEBER, P.A.**  
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK  
 BURTONSVILLE, MARYLAND 20866  
 TEL: 301-421-4024 FAX: 301-421-4186

DATE	REVISION	BY	APPR.

PREPARED FOR:  
 MAPLE LAWN FARMS 1, LLC  
 SUITE 300 WOODHOLME CENTER  
 1829 REISTERSTOWN ROAD  
 BALTIMORE, MD 21208  
 ATTN: MARK BENNETT  
 410-484-8400

**PROFESSIONAL CERTIFICATION**  
 I HEREBY CERTIFY THAT THESE PLANS 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. 12975.  
 EXPIRATION DATE: MAY 26, 2014  
 11-20-12  
 STATE OF MARYLAND PROFESSIONAL ENGINEER

**SEDIMENT CONTROL NOTES and DETAILS**  
**MAPLE LAWN FARMS**  
 GARDEN DISTRICT  
 NON-BUILDABLE PARCEL "W"  
 SCALE: AS SHOWN  
 ZONING: MXD-3  
 G. L. W. FILE NO.: 11001  
 DATE: NOV. 2012  
 TAX MAP - GRID: 41-21/46-3  
 SHEET: 9 OF 27  
 ELECTION DISTRICT No. 5  
 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE NO.
AS SHOWN	MXD-3	11001
DATE	TAX MAP - GRID	SHEET
NOV. 2012	41-21/46-3	9 OF 27





Approved: Howard County Department of Public Works  
*Walter J. M... 12-14-12*  
 Chief, Bureau of Highways Date

**LEGEND**

B SOILS	DRAINAGE DIVIDE
C SOILS	TC PATH
D SOILS	

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*Walter J. M... 12/17/12*  
 Chief, Division of Land Development Date  
*Walter J. M... 12/17/12*  
 Chief, Development Engineering Division Date

**GLWGUTSCHICK LITTLE & WEBER, P.A.**  
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
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NO.	DATE	REVISION	BY	APPR.

PREPARED FOR:  
 MAPLE LAWN FARMS 1, LLC  
 SUITE 300 WOODHOLME CENTER  
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 ATTN: MARK BENNETT  
 410-484-8400

PROFESSIONAL CERTIFICATION  
 I HEREBY CERTIFY THAT THESE PLANS 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. 12378, EXPIRATION DATE: MAY 26, 2014

*11-20-12*

**TEMPORARY SWM DRAINAGE AREA MAP -- PRE-DEVELOPMENT**

**MAPLE LAWN FARMS**  
 GARDEN DISTRICT  
 NON-BUILDABLE PARCEL "W"

ELECTION DISTRICT No. 5

SCALE	ZONING	G. L. W. FILE No.
1"=100'	MXD-3	11001
DATE	TAX MAP - GRID	SHEET
NOV. 2012	41-21/46-3	11 OF 27

HOWARD COUNTY, MARYLAND

TEMPORARY STORMWATER MANAGEMENT VOLUMES				
DESIGN CRITERIA ITEM	BASIN 3		BASIN 4	
	REQUIRED	PROVIDED	REQUIRED	PROVIDED
NET VOLUME	12,120 c.f.	73,180 c.f. @ 404.00	35,460 c.f.	31,026 c.f. @ 406.00
1 YEAR MANAGEMENT	12,120 c.f.	155,291 c.f. @ 404.00	35,460 c.f.	115,618 c.f. @ 410.88
TOP OF DAM	408.50	---	414.00	---

TEMPORARY STORMWATER MANAGEMENT SUMMARY				
DESIGN CRITERIA ITEM	POND 3		POND 4	
	BEFORE DEV.	AFTER DEV.	BEFORE DEV.	AFTER DEV.
DRAINAGE AREA	40.50 ac.	38.10 ac.	17.30 ac.	14.70 ac.
CURVE NUMBER	54	91	58	91
TIME OF CONCENTRATION	0.33 Hr.	0.17 Hr.	0.24 Hr.	0.17 Hr.

	BASIN 3			BASIN 4		
	BEFORE	UNMANAGED	MANAGED	BEFORE	UNMANAGED	MANAGED
1 YR	2.67 c.f.s.	80.80 c.f.s.	2.50 c.f.s. @ 405.00	0.87 c.f.s.	54.25 c.f.s.	0.85 c.f.s. @ 410.88
2 YR	4.50 c.f.s.	105.43 c.f.s.	16.44 c.f.s. @ 405.43	3.82 c.f.s.	111.0 c.f.s.	6.95 c.f.s. @ 411.21
10 YR	44.81 c.f.s.	185.26 c.f.s.	143.02 c.f.s. @ 406.50	21.22 c.f.s.	124.24 c.f.s.	106.82 c.f.s. @ 412.00



Approved: Howard County Department of Public Works  
*W. R. M. A.* 12-14-12  
 Chief, Bureau of Highways Date

LEGEND	
	B SOILS
	DRAINAGE DIVIDE
	C SOILS
	TC PATH
	D SOILS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*[Signature]* 12/17/12  
 Chief, Division of Land Development Date  
*[Signature]* 01/17/12  
 Chief, Development Engineering Division Date

**GLW** GUTSCHICK LITTLE & WEBER, P.A.  
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK  
 BURTONSVILLE, MARYLAND 20866  
 TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

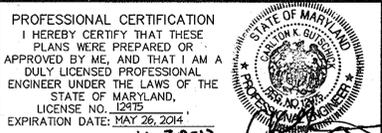
DATE	REVISION	BY	APPR.

PREPARED FOR:  
 MAPLE LAWN FARMS 1, LLC  
 SUITE 300 WOODHOLME CENTER  
 1829 REISTERSTOWN ROAD  
 BALTIMORE, MD 21208  
 ATTN: MARK BENNETT  
 410-484-8400

DATE	REVISION	BY	APPR.

PROFESSIONAL CERTIFICATION  
 I HEREBY CERTIFY THAT THESE PLANS 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. 12172, EXPIRATION DATE: MAY 26, 2014

11-20-12  
 ELECTION DISTRICT No. 5



TEMPORARY SWM DRAINAGE AREA MAP -- POST-DEVELOPMENT  
**MAPLE LAWN FARMS**  
 GARDEN DISTRICT  
 NON-BUILDABLE PARCEL 'W'

SCALE	ZONING	G. L. W. FILE No.
1"=100'	MXD-3	11001
DATE	TAX MAP - GRID	SHEET
NOV. 2012	41-21/46-3	12 OF 27

SCALE	ZONING	G. L. W. FILE No.
1"=100'	MXD-3	11001
DATE	TAX MAP - GRID	SHEET
NOV. 2012	41-21/46-3	12 OF 27

DESIGN CRITERIA ITEM	POND 3		POND 4	
	REQUIRED	PROVIDED	REQUIRED	PROVIDED
WATER QUALITY VOLUME	53,143 c.f.	54,014 c.f. @ 400/50	32,234 c.f.	36,155 c.f. @ 406/00
RECHARGE VOLUME	17,260 c.f.	SEE NOTE 4 BELOW	11,226 c.f.	SEE NOTE 4 BELOW
CHANNEL PROTECTION	84,942 c.f.	105,154 c.f. @ 403/26	55,151 c.f.	61,855 c.f. @ 404/88
TOP OF DAM	406.00	---	414.00	---

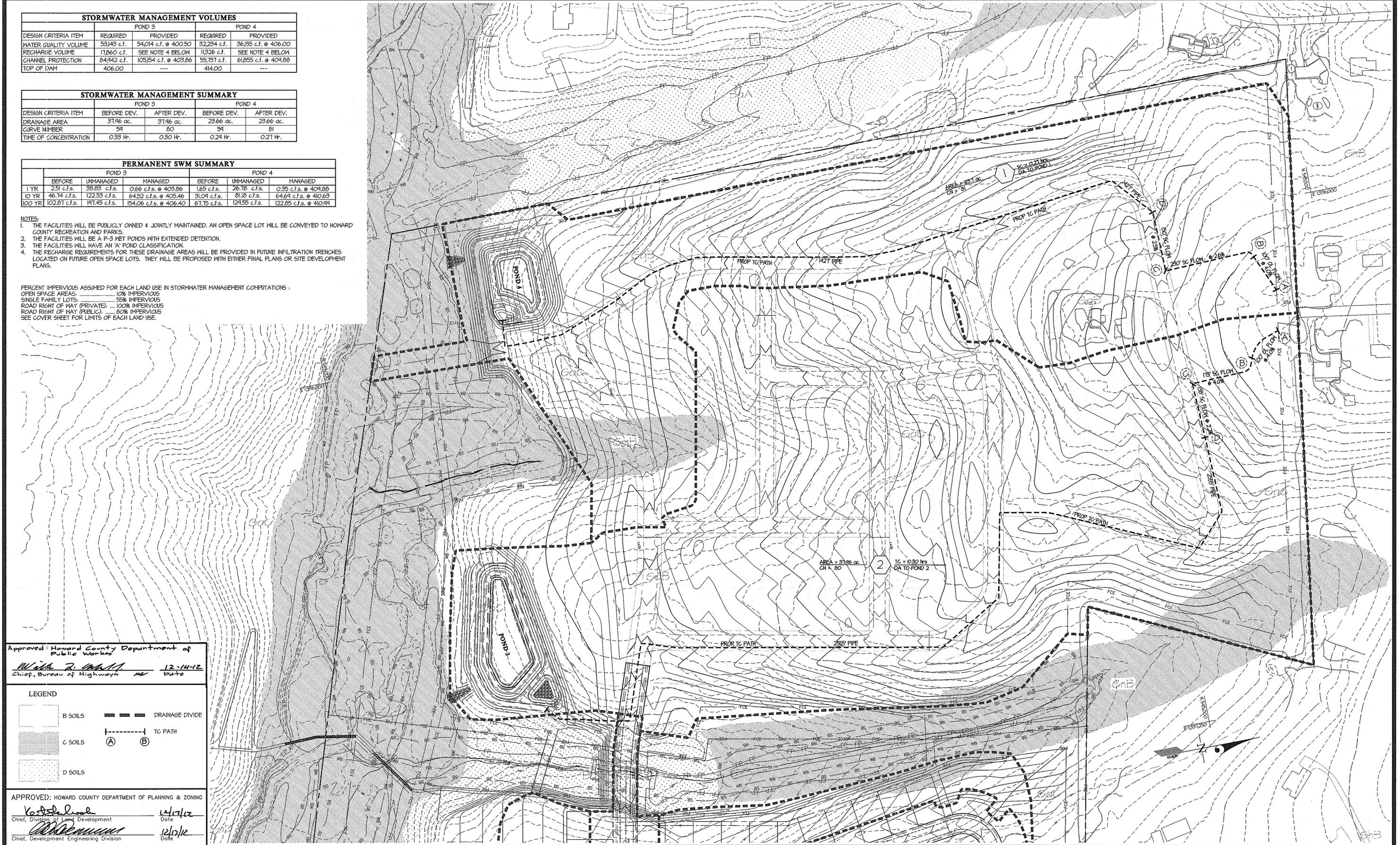
DESIGN CRITERIA ITEM	POND 3		POND 4	
	BEFORE DEV.	AFTER DEV.	BEFORE DEV.	AFTER DEV.
DRAINAGE AREA	31.96 ac.	31.96 ac.	23.66 ac.	23.66 ac.
CURVE NUMBER	54	80	54	81
TIME OF CONCENTRATION	0.33 Hr.	0.30 Hr.	0.24 Hr.	0.21 Hr.

	POND 3			POND 4		
	BEFORE	UNMANAGED	MANAGED	BEFORE	UNMANAGED	MANAGED
1 YR	231 c.f.s.	38,823 c.f.s.	0.66 c.f.s. @ 403/86	1.65 c.f.s.	26.78 c.f.s.	0.35 c.f.s. @ 404/88
10 YR	46.74 c.f.s.	122.33 c.f.s.	64.52 c.f.s. @ 405/46	31.04 c.f.s.	81.18 c.f.s.	64.64 c.f.s. @ 410/63
100 YR	102.87 c.f.s.	141.43 c.f.s.	154.06 c.f.s. @ 406/40	67.75 c.f.s.	124.55 c.f.s.	122.85 c.f.s. @ 410/41

- NOTES:
- THE FACILITIES WILL BE PUBLICLY OWNED & JOINTLY MAINTAINED. AN OPEN SPACE LOT WILL BE CONVEYED TO HOWARD COUNTY RECREATION AND PARKS.
  - THE FACILITIES WILL BE A P-3 MET POND WITH EXTENDED DETENTION.
  - THE FACILITIES WILL HAVE AN 'A' POND CLASSIFICATION.
  - THE RECHARGE REQUIREMENTS FOR THESE DRAINAGE AREAS WILL BE PROVIDED IN FUTURE INFILTRATION TRENCHES LOCATED ON FUTURE OPEN SPACE LOTS. THEY WILL BE PROPOSED WITH EITHER FINAL PLANS OR SITE DEVELOPMENT PLANS.

PERCENT IMPERVIOUS ASSUMED FOR EACH LAND USE IN STORMWATER MANAGEMENT COMPUTATIONS:

OPEN SPACE AREAS: ..... 10% IMPERVIOUS  
 SINGLE FAMILY LOTS: ..... 35% IMPERVIOUS  
 ROAD RIGHT OF WAY (PRIVATE): ..... 100% IMPERVIOUS  
 ROAD RIGHT OF WAY (PUBLIC): ..... 80% IMPERVIOUS  
 SEE COVER SHEET FOR LIMITS OF EACH LAND USE.



Approved: Howard County Department of Public Works  
*Walter R. Smith* 12-14-12  
 Chief, Bureau of Highways Date

LEGEND	
B SOILS	--- --- DRAINAGE DIVIDE
C SOILS	--- --- TC PATH
D SOILS	(A) (B)

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*Robert L. Smith* 12/17/12  
 Chief, Division of Land Development Date  
*Robert L. Smith* 12/17/12  
 Chief, Development Engineering Division Date

**GLWGUTSCHICK LITTLE & WEBER, P.A.**  
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
 3009 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK  
 BURTONSVILLE, MARYLAND 20866  
 TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

Drawings: 09001\FINALS\SWM-SC\09001 SWM DAM.dwg DRN. CHK. CKG DATE REVISION BY APPR.

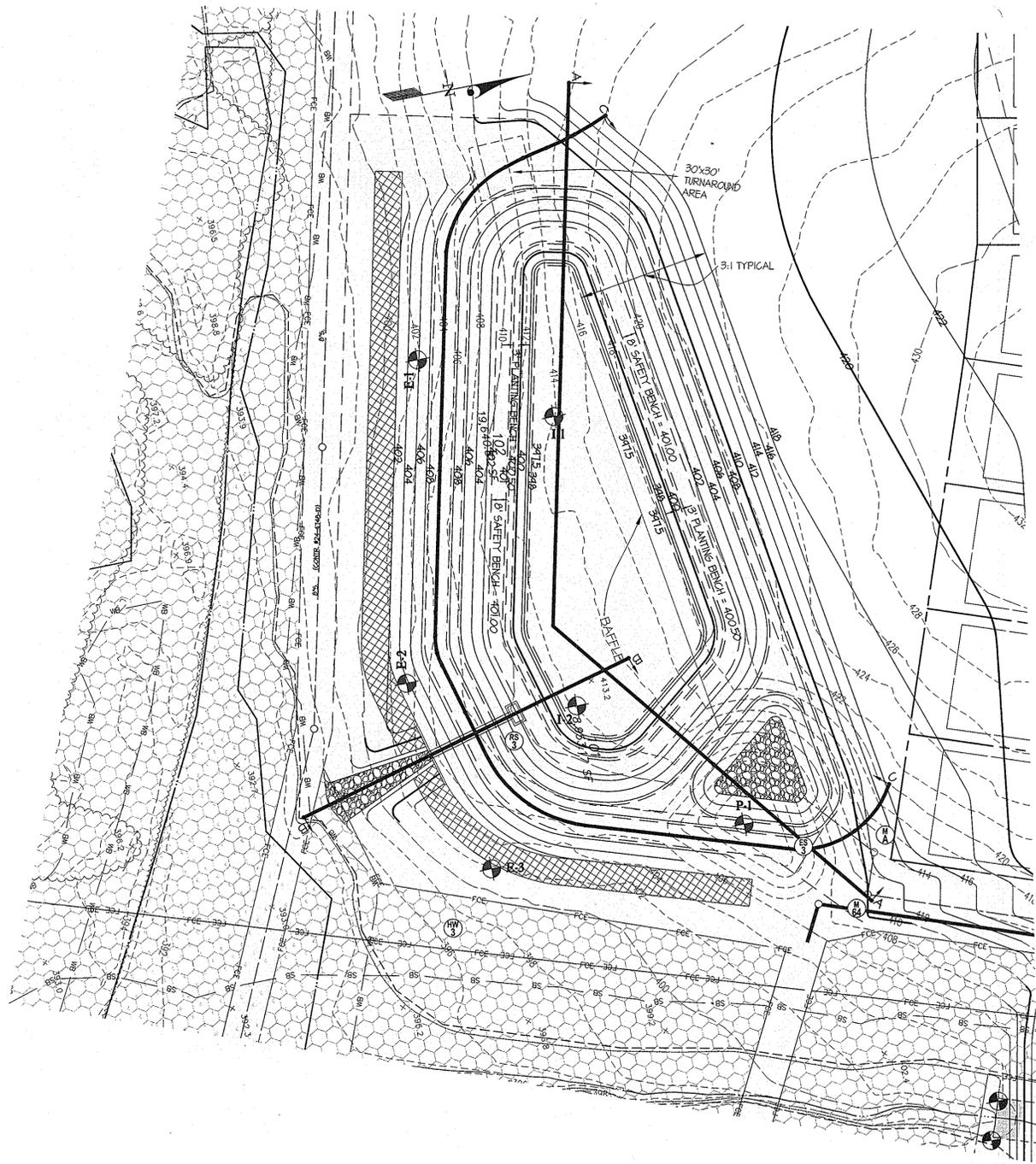
PREPARED FOR:  
 MAPLE LAWN FARMS 1, LLC  
 SUITE 300 WOODHOLME CENTER  
 1829 REISTERSTOWN ROAD  
 BALTIMORE, MD 21208  
 ATTN: MARK BENNETT  
 410-484-8400

PROFESSIONAL CERTIFICATION  
 I HEREBY CERTIFY THAT THESE PLANS 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. 12878  
 EXPIRATION DATE: MAY 26, 2014



ULTIMATE SWM DRAINAGE AREA MAP  
**MAPLE LAWN FARMS**  
 GARDEN DISTRICT  
 NON-BUILDABLE PARCEL 'W'

SCALE	ZONING	G. L. W. FILE No.
1"=100'	MXD-3	11001
DATE	TAX MAP - GRID	SHEET
NOV. 2012	41-21/46-3	13 OF 27



POND 3 (BASIN GRADING) SCALE: 1" = 40'



POND 4 (BASIN GRADING) SCALE: 1" = 40'

Approved: Howard County Department of Public Works  
*With 2.0001* 12-14-12  
 Chief, Bureau of Highways Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*Krista Lunde* 12/17/12  
 Chief, Division of Land Development Date  
*William* 12/17/12  
 Chief, Development Engineering Division Date

**GLW GUTSCHICK LITTLE & WEBER, P.A.**  
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK  
 BURTONSVILLE, MARYLAND 20866  
 TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

L:\CAD\DRAWINGS\2012\2012-01-11\11-14-16\_S&M\_DETAILS.dwg DES. DEV DRN. JRD CHK. CKG

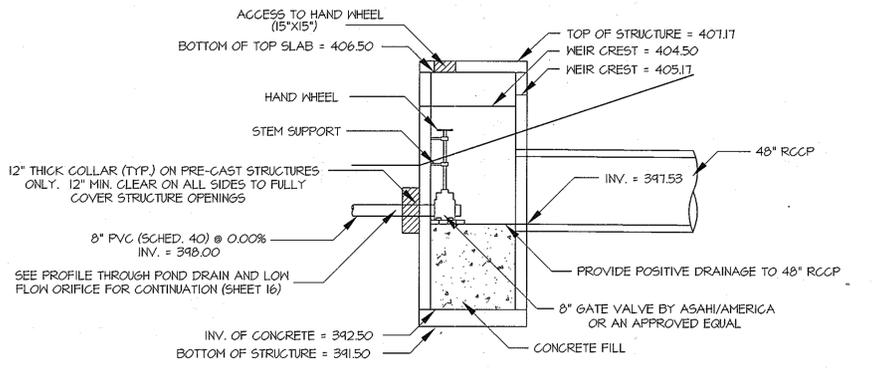
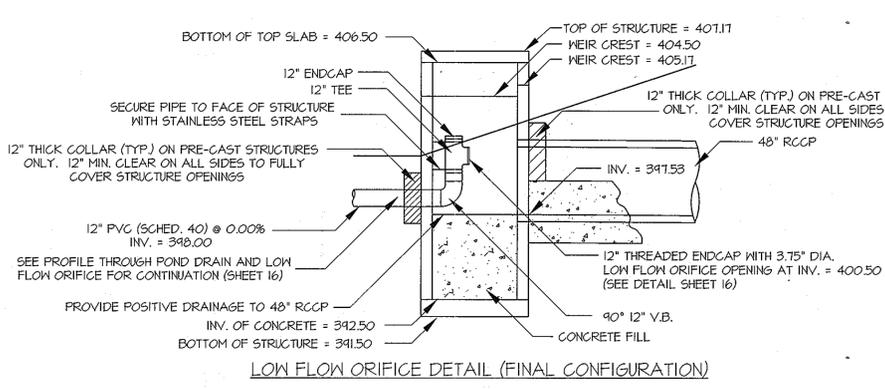
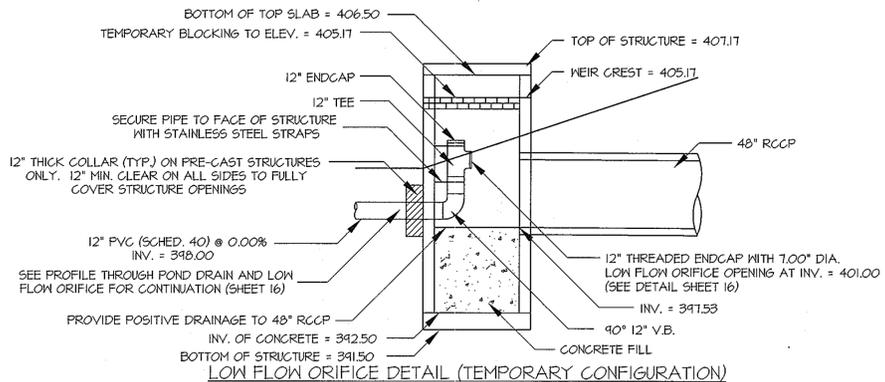
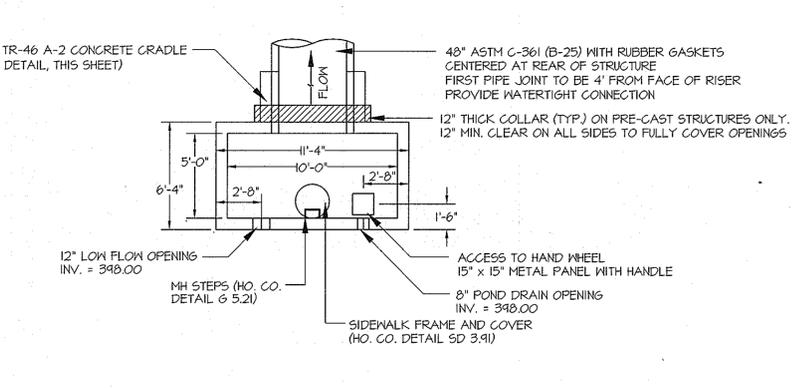
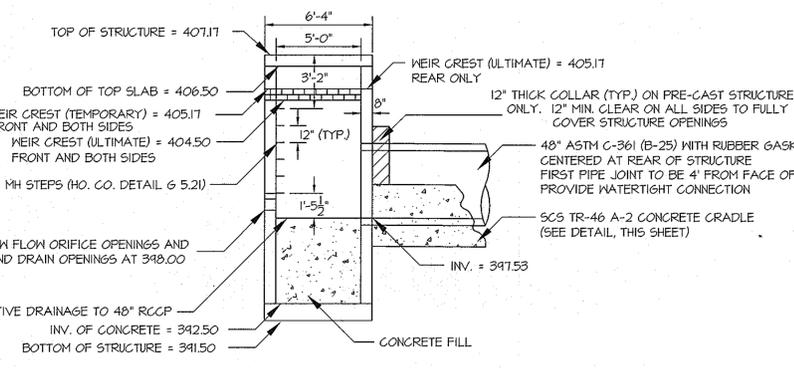
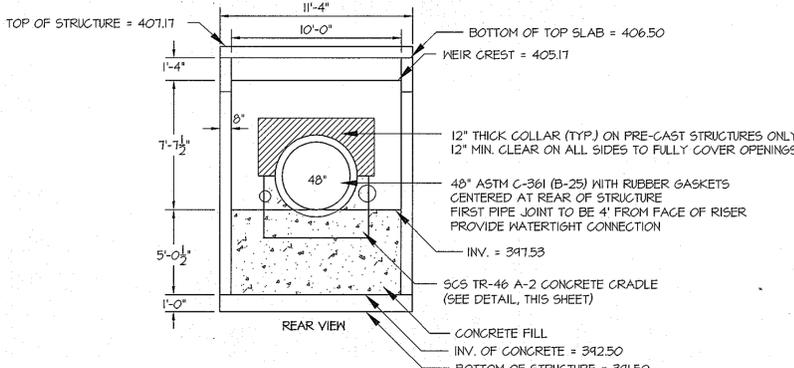
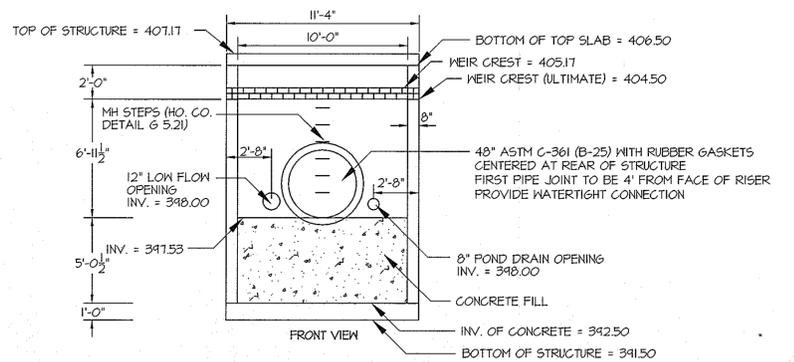
**ENGINEER'S CERTIFICATE**  
 I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.  
*CKG* 11-20-12  
 ENGINEER'S SIGNATURE DATE

**BUILDER'S CERTIFICATE**  
 I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.  
*Mark Bennett* 11-20-12  
 SIGNATURE OF DEVELOPER/BUILDER DATE

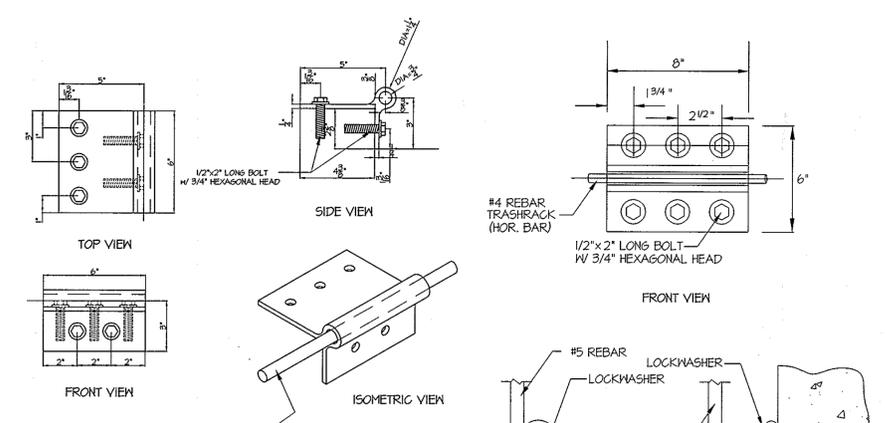
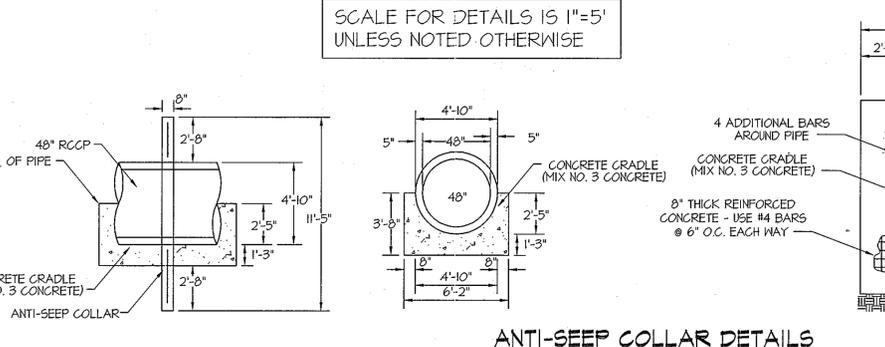
THESE PLANS FOR SMALL POND CONSTRUCTION SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.  
*John R. Weston* 11/29/12  
 HOWARD S.C.D. DATE

**PROFESSIONAL CERTIFICATION**  
 I HEREBY CERTIFY THAT THESE PLANS 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. 12875.  
 EXPIRATION DATE: MAY 26, 2014  
*CKG*  
 ELECTION DISTRICT No. 5

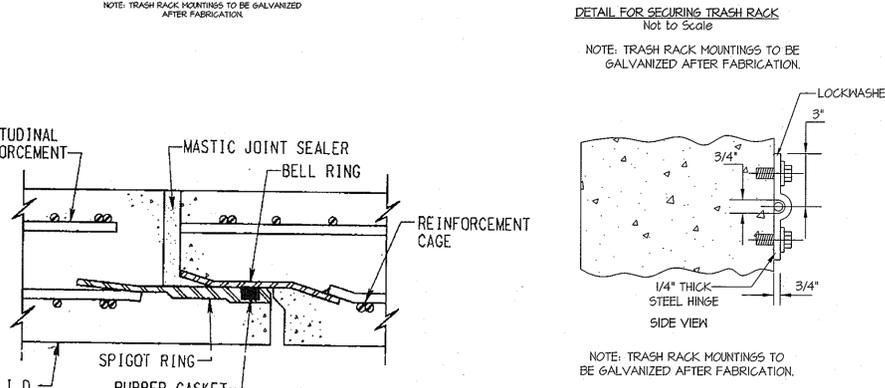
**PONDS 3 & 4 GRADING PLANS (AS BASINS)**  
**MAPLE LAWN FARMS**  
 GARDEN DISTRICT  
 NON-BUILDABLE PARCEL "W"  
 SCALE AS SHOWN  
 ZONING MXD-3  
 G. L. W. FILE No. 11001  
 DATE NOV. 2012  
 TAX MAP - GRID 41-21/46-3  
 SHEET 14 OF 27  
 HOWARD COUNTY, MARYLAND



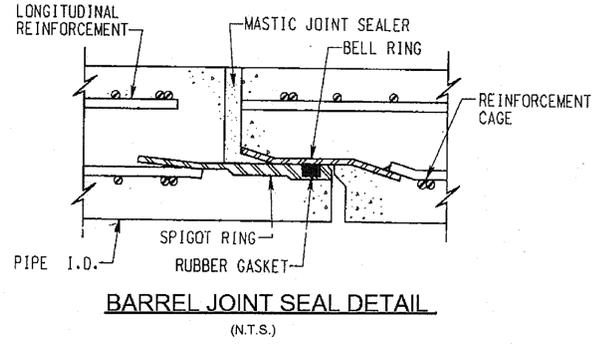
SCALE FOR DETAILS IS 1"=5' UNLESS NOTED OTHERWISE



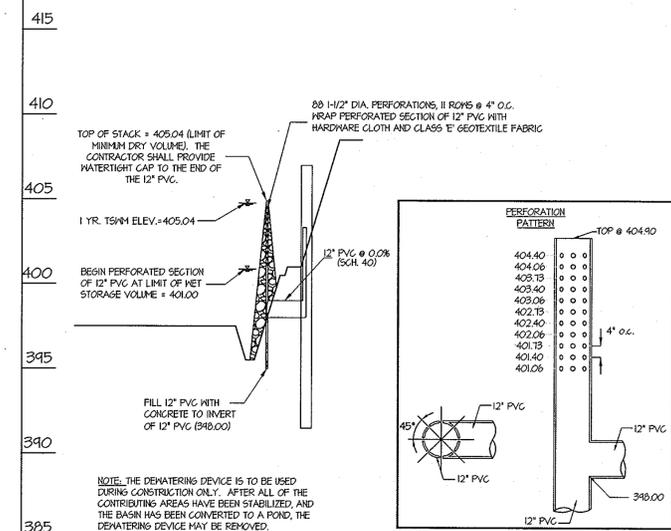
HINGE DETAIL NOT TO SCALE



HINGE DETAIL NOT TO SCALE



BARREL JOINT SEAL DETAIL (N.T.S.)



DEWATERING DEVICE - TEMPORARY SWM SCALE: 1"=5' (H) 1"=50' (V)

Approved: Howard County Department of Public Works  
 With R. Muller, 12-14-12  
 Chief, Bureau of Highways Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
 K. Salas, 12/17/12  
 Chief, Division of Land Development Date

Chief, Development Engineering Division  
 12/17/12 Date

**ENGINEER'S CERTIFICATE**  
 I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

Signature: [Signature] DATE: 11-20-12

**BUILDER'S CERTIFICATE**  
 I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Signature: M. Muller, Vice Pres DATE: 11-20-12

THESE PLANS FOR SMALL POND CONSTRUCTION SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Signature: [Signature] DATE: 11/29/12  
 HOWARD S.C.D. DATE

**NOTES:**  
 1. RISER STRUCTURE IS TO BE A PRE-CAST RISER. SHOP DRAWINGS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION OF THE RISER. THE RISER MAY BE CAST IN PLACE, PROVIDE THE APPROPRIATE SHOP DRAWINGS HAVE BEEN SUBMITTED TO THE ENGINEER.  
 2. PROVIDE WATERTIGHT CONNECTIONS AT ALL ORIFICE OPENINGS. USE NON-SHRINK GROUT WHERE NECESSARY.  
 3. THE RISER WILL BE OPEN ALL FOUR SIDES FOR A TOTAL WEIR LENGTH OF 30 FEET.  
 4. CONTRACTOR IS TO PROVIDE WATERTIGHT JOINTS BETWEEN RISER SECTIONS. SECTIONS ARE TO BE SECURED WITH METAL STRAPS.  
 5. THE FIRST PIPE JOINT MUST BE WITHIN FOUR FEET OF THE RISER FACE. PROVIDE WATERTIGHT CONNECTION BETWEEN RISER AND BARREL.

**GLW GUTSCHICK LITTLE & WEBER, P.A.**  
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
 3009 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK  
 BURTONSVILLE, MARYLAND 20866  
 TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2324 FAX: 301-421-4186

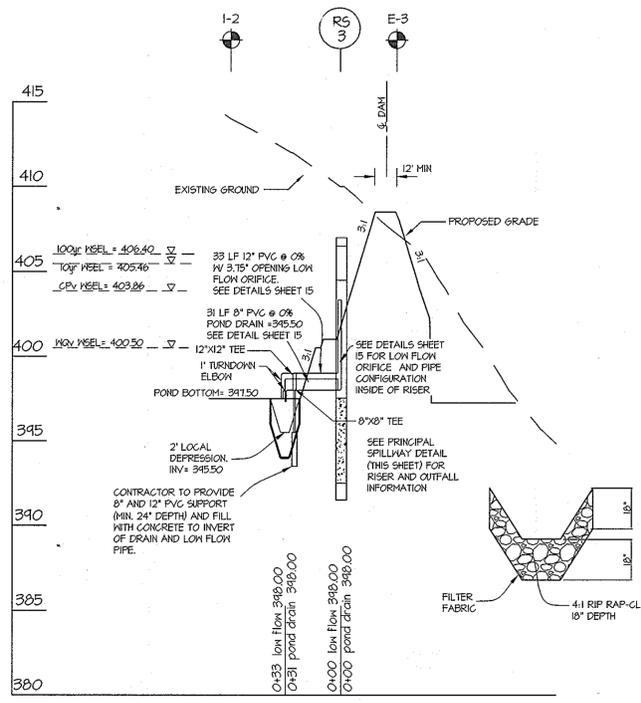
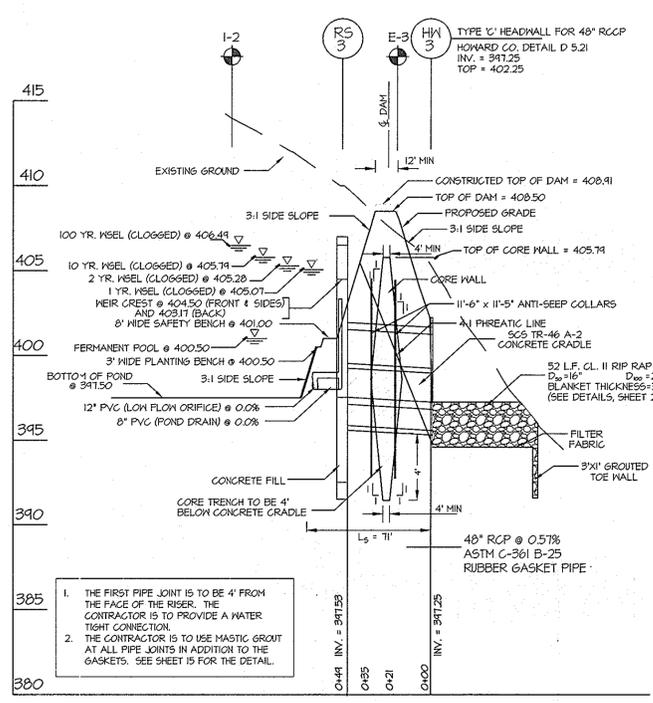
DATE	REVISION	BY	APPR.

PREPARED FOR:  
 MAPLE LAWN FARMS 1, LLC  
 SUITE 300 WOODHOLME CENTER  
 1829 REISTERSTOWN ROAD  
 BALTIMORE, MD 21208  
 ATTN: MARK BENNETT  
 410-484-8400

**PROFESSIONAL CERTIFICATION**  
 I HEREBY CERTIFY THAT THESE PLANS 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. 12875.  
 EXPIRATION DATE: MAY 26, 2017.

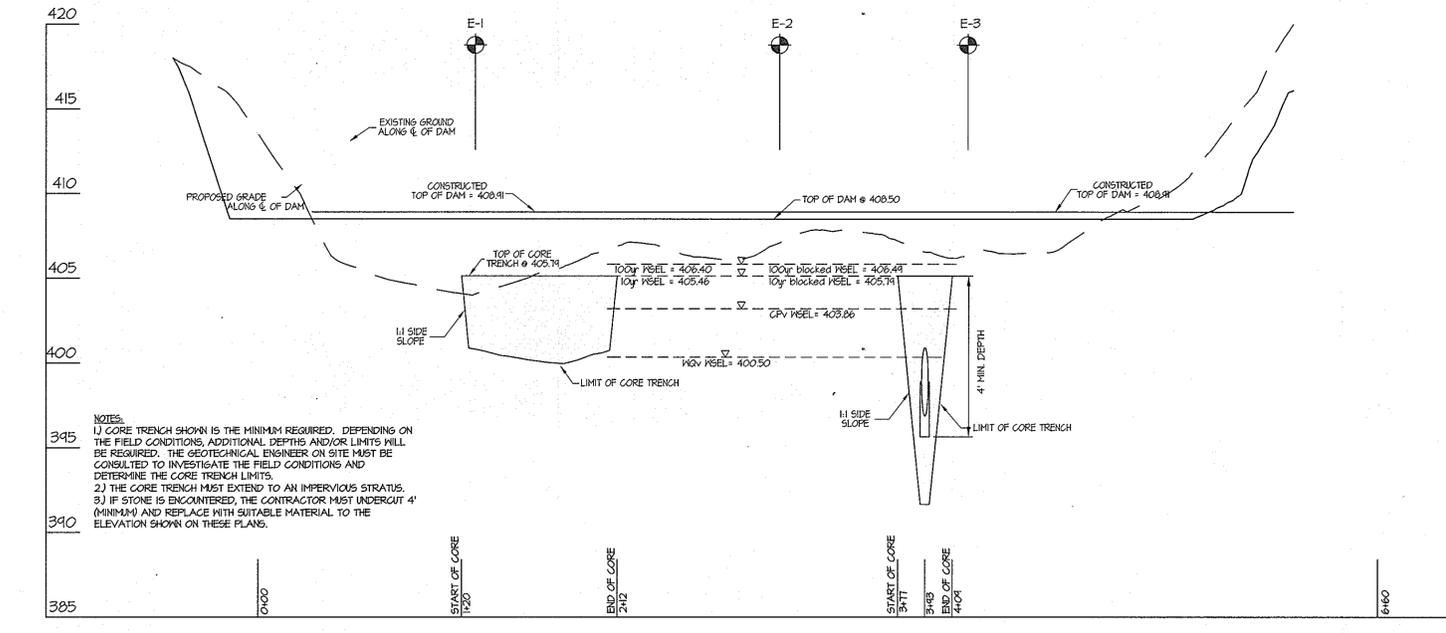
11-20-12

POND 3 NOTES and DETAILS			SCALE	ZONING	G. L. W. FILE No.
<b>MAPLE LAWN FARMS</b> GARDEN DISTRICT NON-BUILDABLE PARCEL "W"			AS SHOWN	MXD-3	11001
DATE	TAX MAP - GRID	SHEET	NOV. 2012	41-21/46-3	15 OF 27

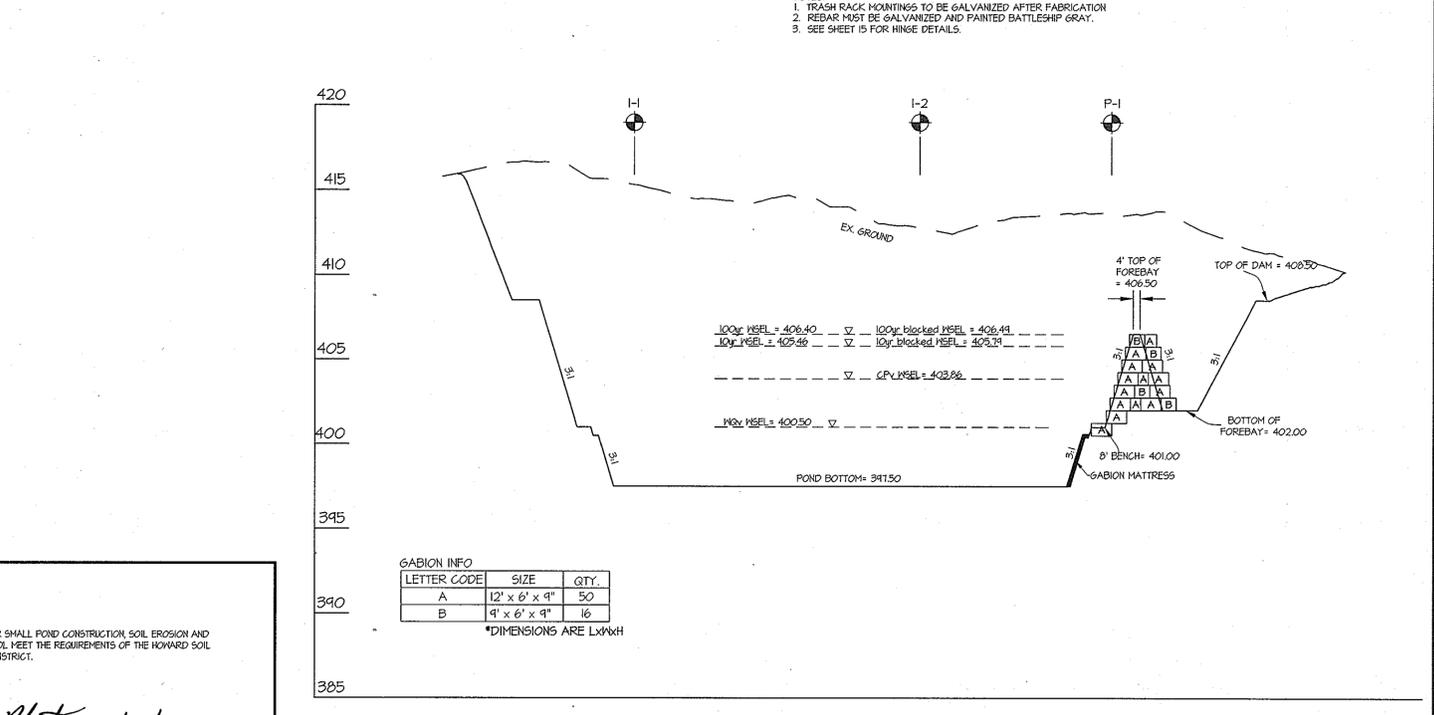
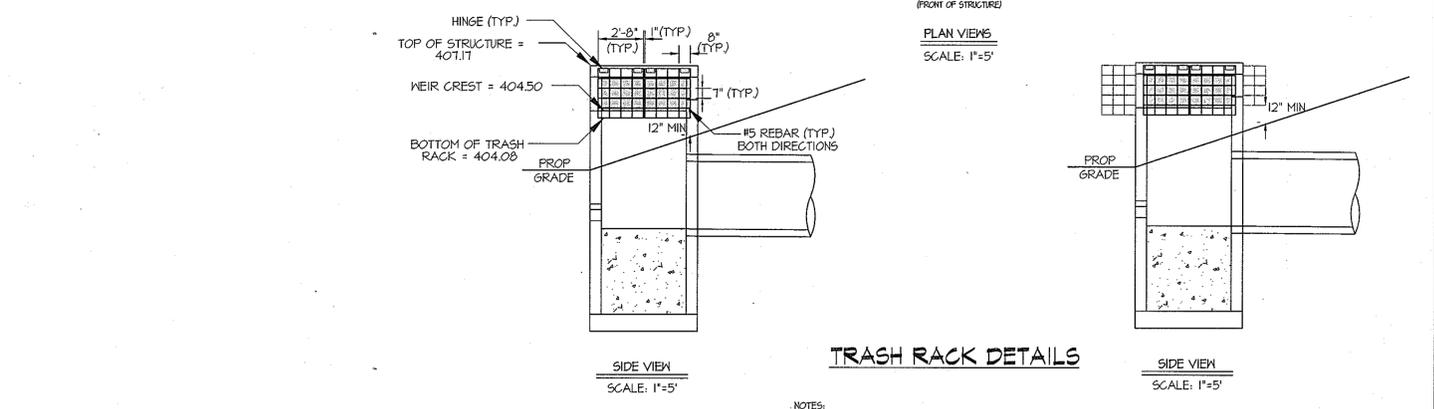
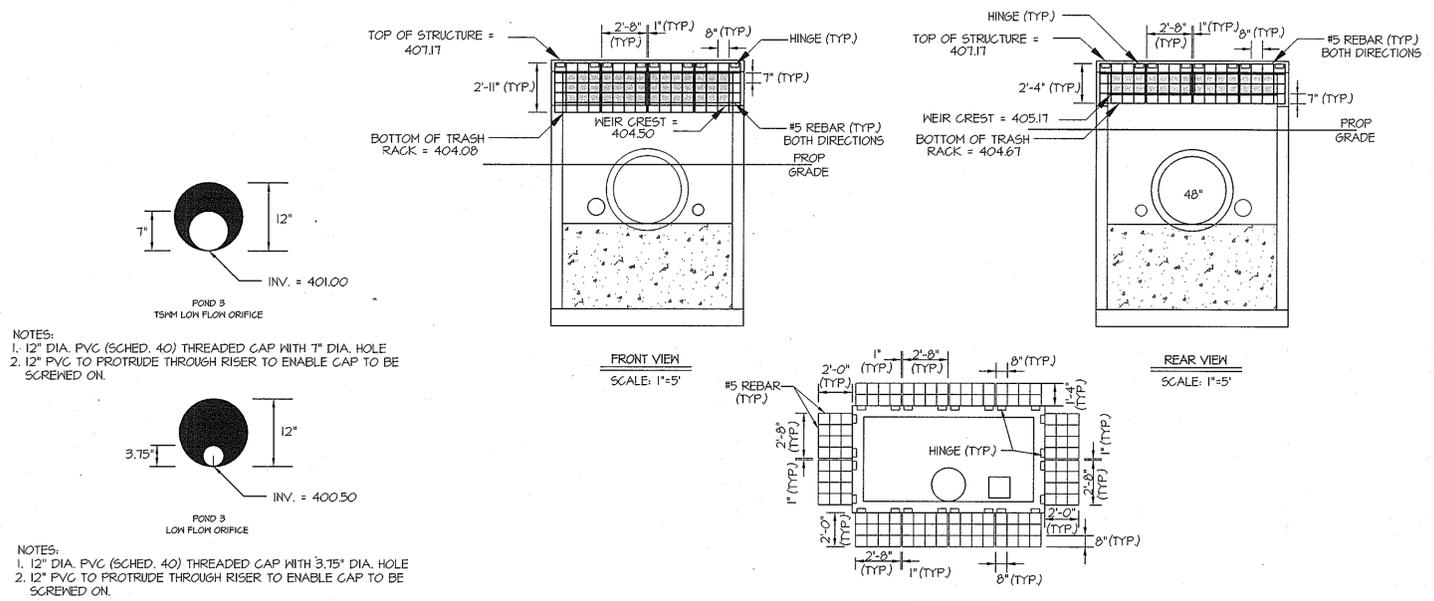


PROFILE THROUGH PRINCIPAL SPILLWAY SCALE: 1"=5' (V)  
1"=50' (H)

PROFILE THROUGH POND DRAIN AND LOW FLOW RELEASE SCALE: 1"=5' (V)  
1"=50' (H)



CROSS SECTION OF DAM ALONG CENTERLINE SCALE: 1"=5' (V)  
1"=50' (H)



PROFILE THROUGH FOREBAYS SCALE: 1"=5' (V)  
1"=50' (H)

Approved: Howard County Department of Public Works  
*W. R. M...* 12-14-12  
Chief, Bureau of Highways

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*K...* 12/17/12  
Chief, Division of Land Development

*C...* 12/17/12  
Chief, Development Engineering Division

**ENGINEER'S CERTIFICATE**  
I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTICED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

*C...* 11-20-12  
ENGINEER'S SIGNATURE DATE

**BUILDER'S CERTIFICATE**  
I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

*John R. Bl...* 11-20-12  
SIGNATURE OF DEVELOPER/BUILDER DATE

THESE PLANS FOR SMALL POND CONSTRUCTION SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*John R. Bl...* 4/29/12  
HOWARD S.C.D. DATE

**GLWGUTSCHICK LITTLE & WEBER, P.A.**  
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK  
BURTONSVILLE, MARYLAND 20866  
TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4188

DES.	DEV.	DRN.	JRD.	CHK.	CKG.	DATE	REVISION	BY	APPR.

PREPARED FOR:  
MAPLE LAWN FARMS 1, LLC  
SUITE 300 WOODHOLME CENTER  
1829 REISTERSTOWN ROAD  
BALTIMORE, MD 21208  
ATTN: MARK BENNETT  
410-484-8400

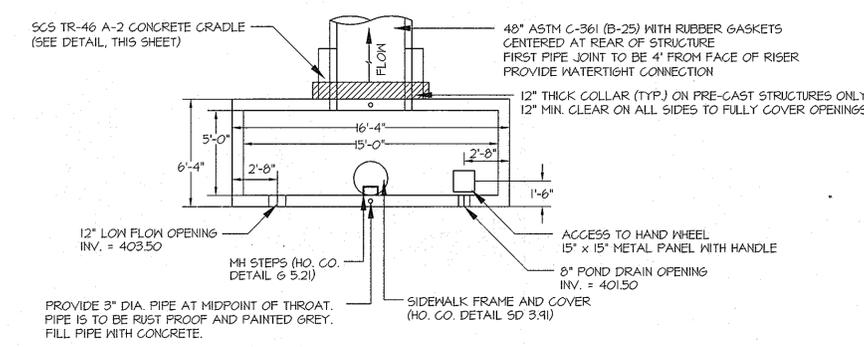
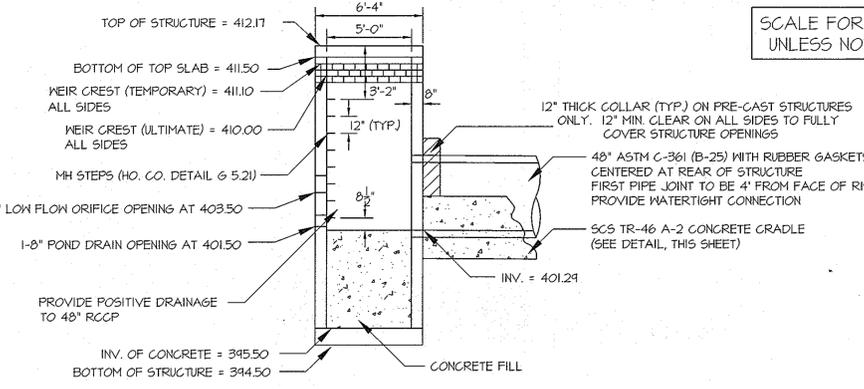
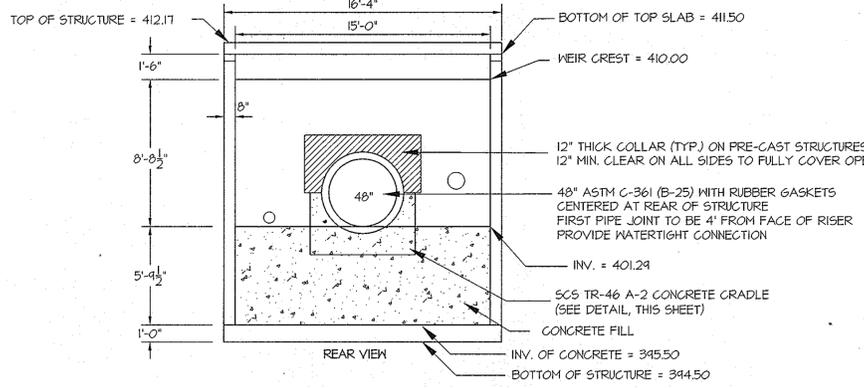
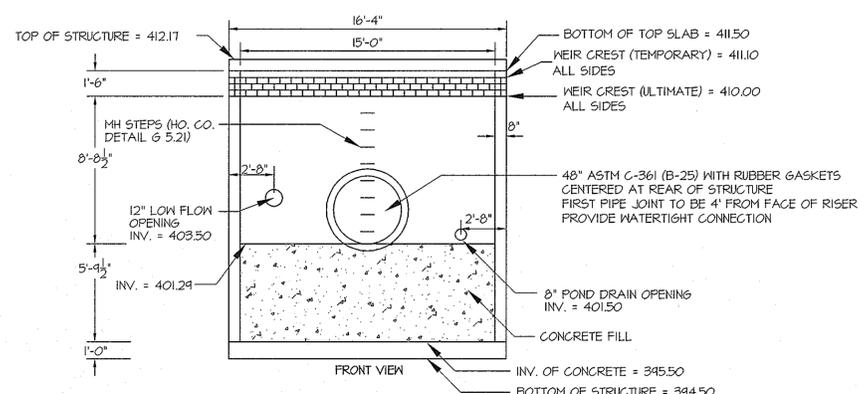
**PROFESSIONAL CERTIFICATION**  
I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 12875.  
EXPIRATION DATE: MAY 26, 2014.

*John R. Bl...* 11-20-12  
ELECTION DISTRICT No. 5

**POND 3 NOTES and DETAILS**  
**MAPLE LAWN FARMS**  
GARDEN DISTRICT  
NON-BUILDABLE PARCEL 'W'

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	MXD-3	11001
DATE	TAX MAP - GRID	SHEET
NOV. 2012	41-21/46-3	16 OF 27

HOWARD COUNTY, MARYLAND



Approved: Howard County Dept. of Public Works  
*Will Z. Hubert*  
 Chief, Bureau of Highways  
 12-14-12  
 Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*Kurt Schuler*  
 Chief, Division of Land Development  
 12/17/12  
 Date

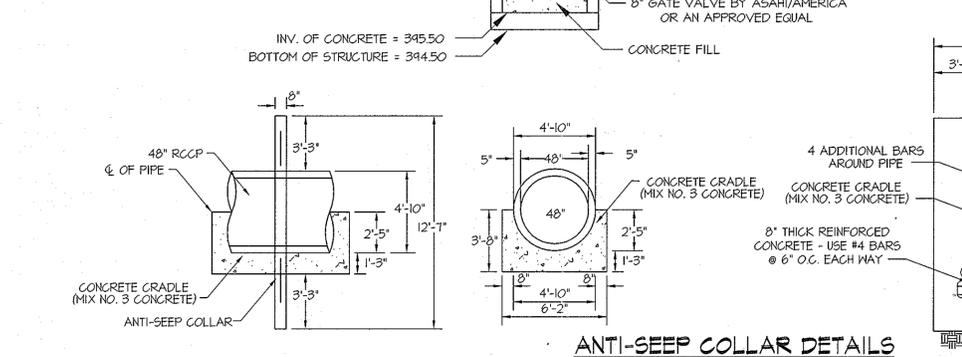
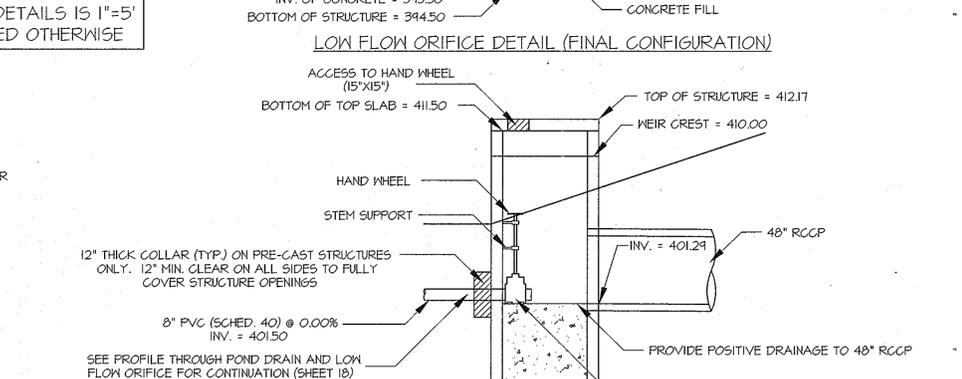
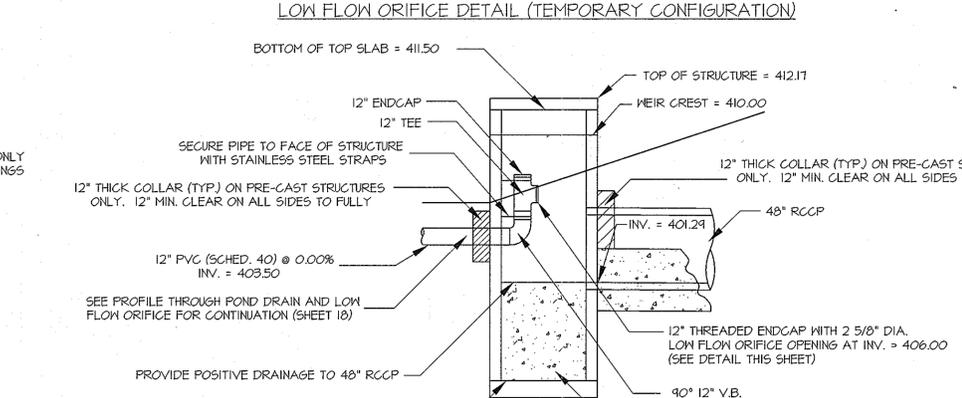
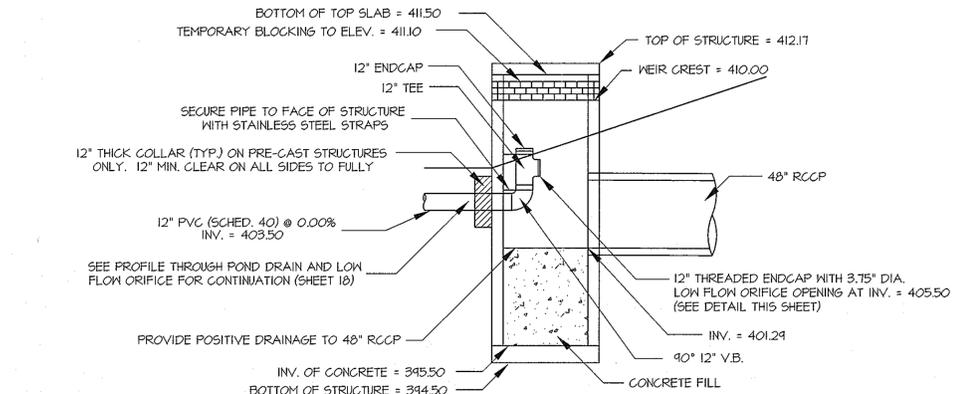
*Chad Williams*  
 Chief, Development Engineering Division  
 12/17/12  
 Date

**ENGINEER'S CERTIFICATE**  
 I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

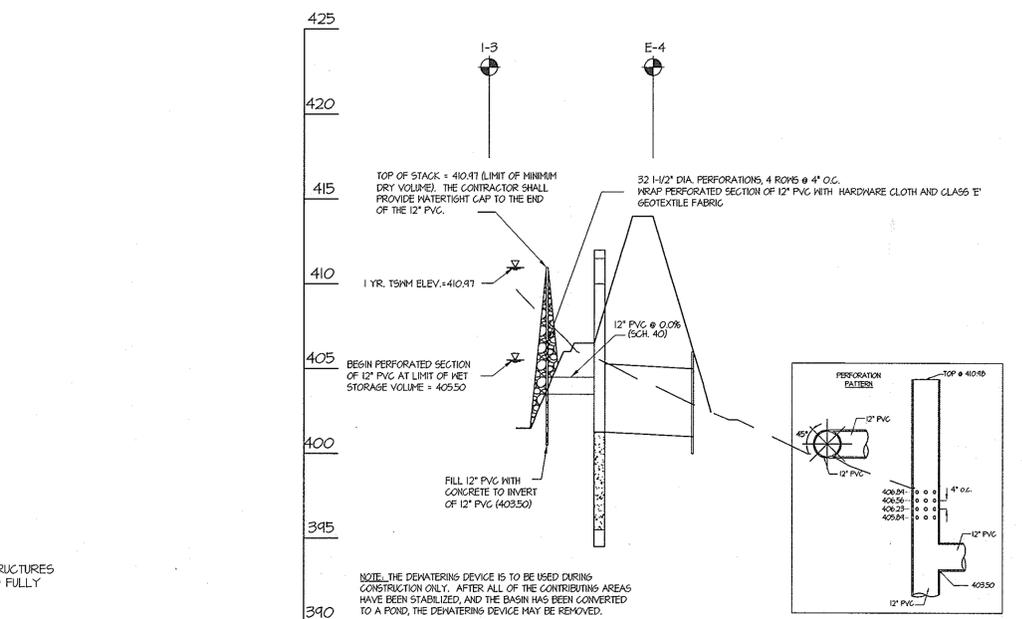
*Chad Williams*  
 DATE 11-20-12

**BUILDER'S CERTIFICATE**  
 I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A HAZARD DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

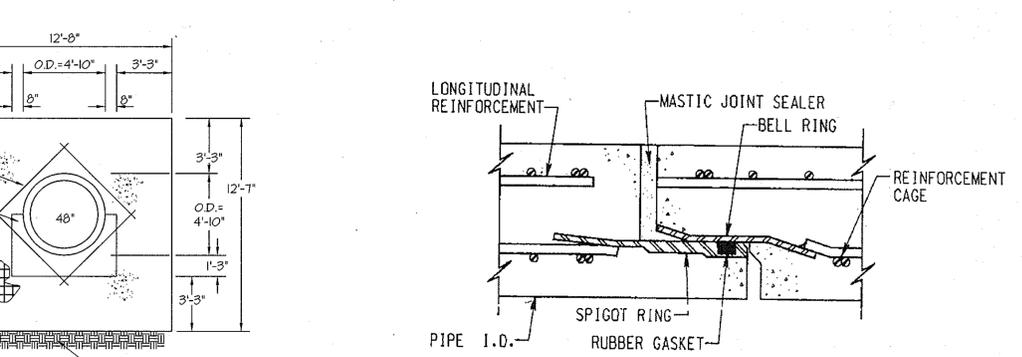
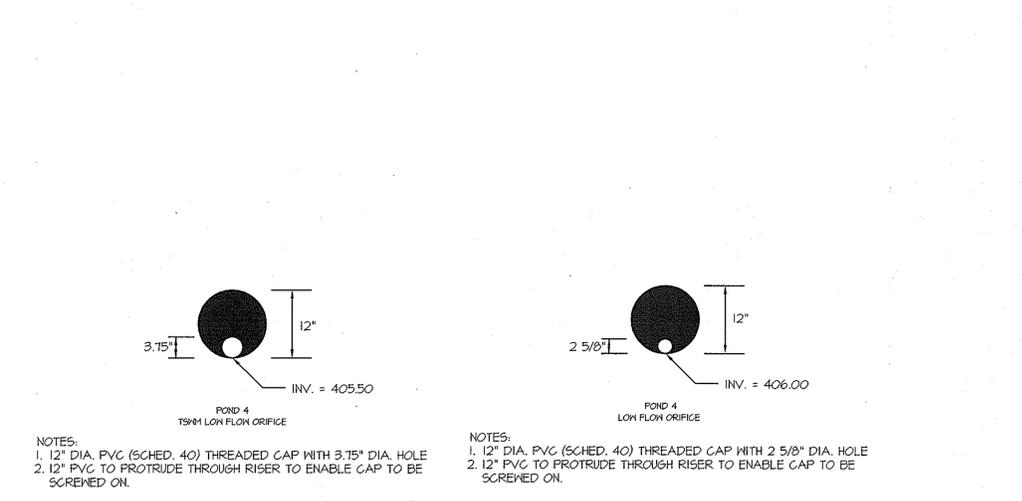
*Mark Bennett*  
 SIGNATURE OF DEVELOPER/BUILDER  
 DATE 11-20-12



**ANTI-SEEP COLLAR DETAILS**  
 48" RCCP  
 CONCRETE CRADLE (MIX NO. 3 CONCRETE)  
 ANTI-SEEP COLLAR



**DEWATERING DEVICE - TEMPORARY SWM**  
 SCALE: 1"=5' (V)  
 1"=50' (H)



**BARREL JOINT SEAL DETAIL**  
 (N.T.S.)

**POND 4 NOTES and DETAILS**  
**MAPLE LAWN FARMS**  
 GARDEN DISTRICT  
 NON-BUILDABLE PARCEL 'W'

NOTES:  
 1. RISER STRUCTURE IS TO BE A PRE-CAST RISER. SHOP DRAWINGS MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION OF THE RISER. THE RISER MAY BE CAST IN PLACE, PROVIDE THE APPROPRIATE SHOP DRAWINGS HAVE BEEN SUBMITTED TO THE ENGINEER.  
 2. PROVIDE WATER-TIGHT CONNECTIONS AT ALL ORIFICE OPENINGS. USE NON-SHRINK GROUT WHERE NECESSARY.  
 3. THE RISER WILL BE OPEN ALL FOUR SIDES FOR A TOTAL WEIR LENGTH OF 40 FEET.  
 4. CONTRACTOR IS TO PROVIDE WATER-TIGHT JOINTS BETWEEN RISER SECTIONS. SECTIONS ARE TO BE SECURED WITH METAL STRAPS.  
 5. THE FIRST PIPE JOINT MUST BE WITHIN FOUR FEET OF THE RISER FACE. PROVIDE WATER-TIGHT CONNECTION BETWEEN RISER AND BARREL.

**GLWGUTSCHICK LITTLE & WEBER, P.A.**  
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK  
 BURTONSVILLE, MARYLAND, 20886  
 TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4188

REVISION	DATE	BY	APP'R

PREPARED FOR:  
 MAPLE LAWN FARMS 1, LLC  
 SUITE 300 WOODHOLME CENTER  
 1829 REISTERSTOWN ROAD  
 BALTIMORE, MD 21208  
 ATTN: MARK BENNETT  
 410-484-8400

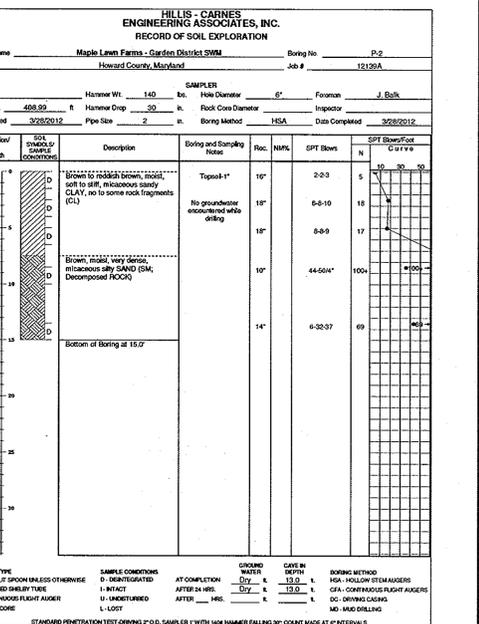
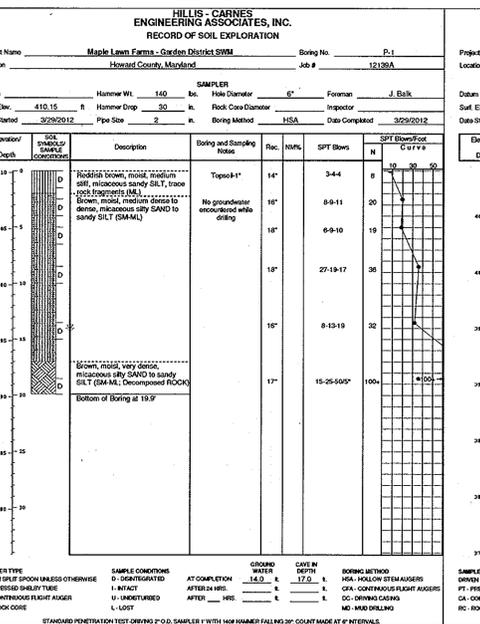
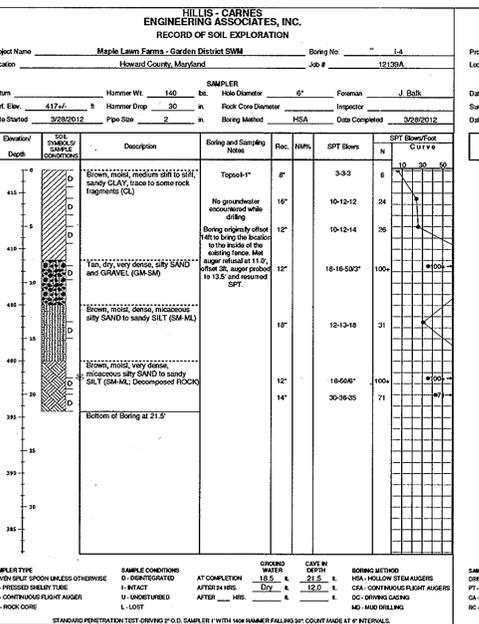
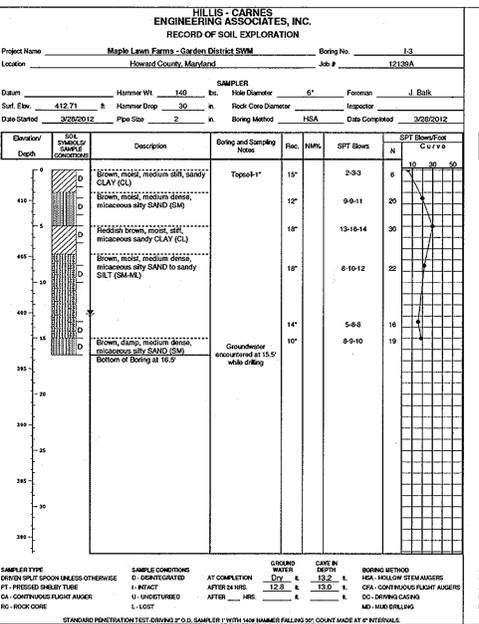
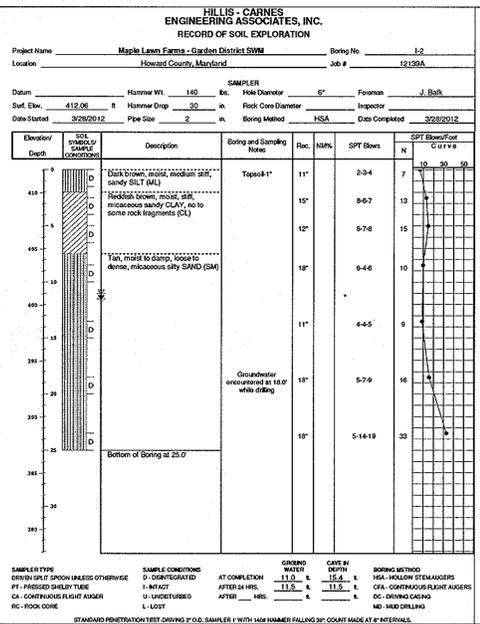
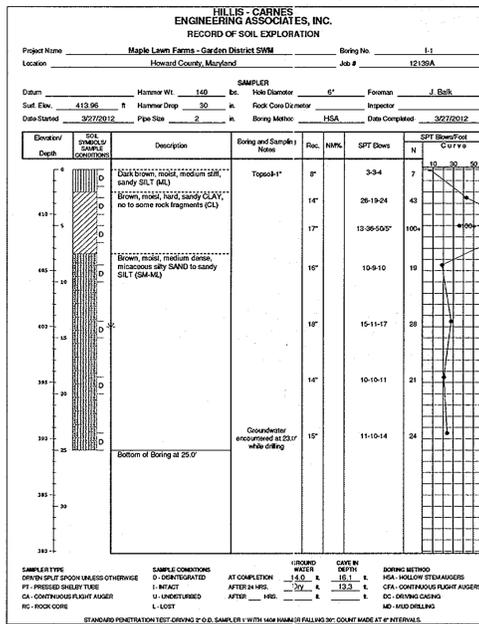
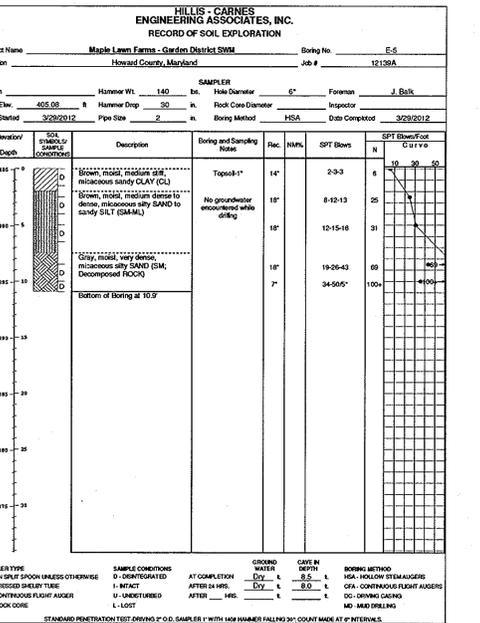
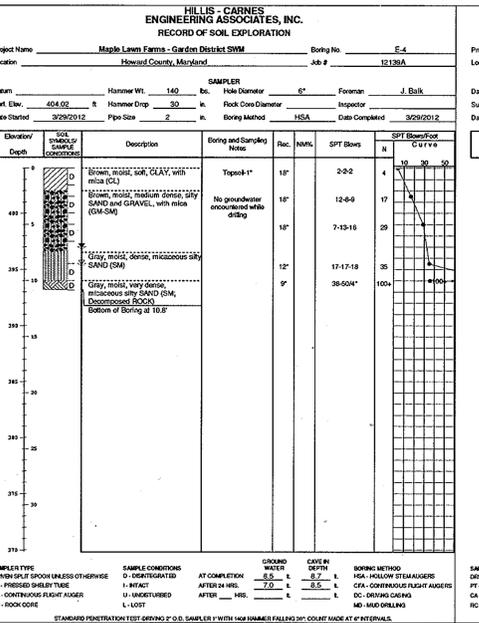
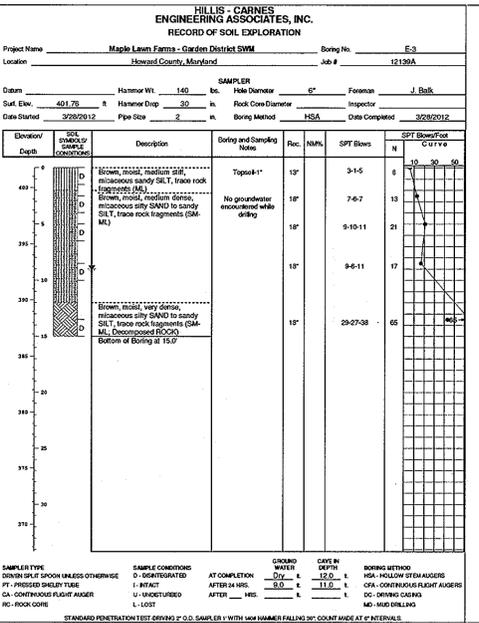
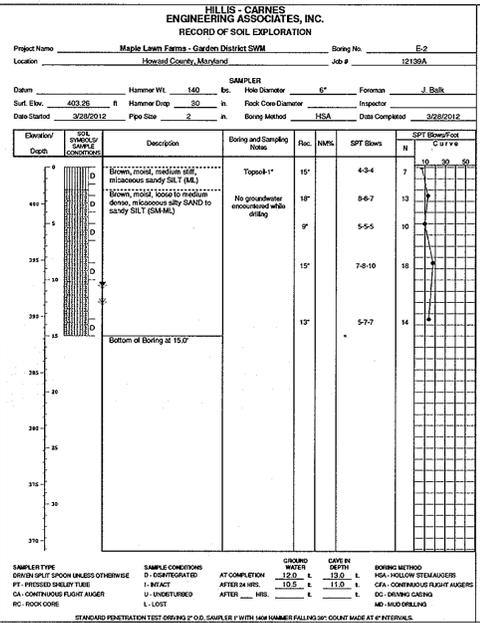
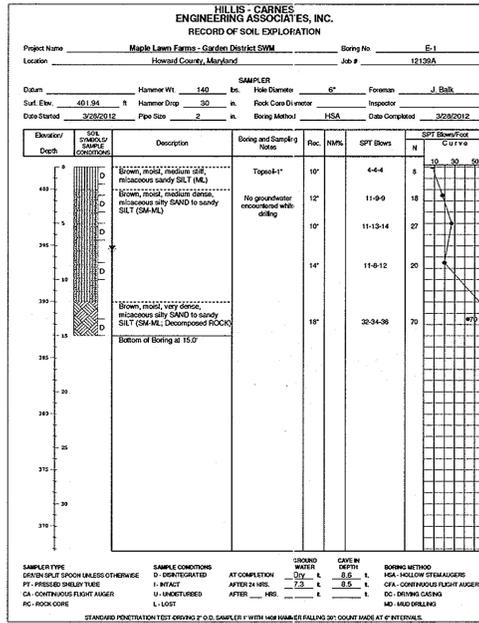
**PROFESSIONAL CERTIFICATION**  
 I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 12976.  
 EXPIRATION DATE: MAY 26, 2014

*John K. Roberts*  
 DATE 11-20-12  
 ELECTION DISTRICT No. 5

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	MXD-3	11001
DATE	TAX MAP - GRID	SHEET
NOV. 2012	41-21/46-3	17 OF 27

HOWARD COUNTY, MARYLAND





Approved: Howard County Dept. of Public Works  
*W. J. M. C.* 12-14-12  
 Chief, Bureau of Highways

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*Keith D. ...* 12/17/12  
 Chief, Division of Land Development  
*...* 12/17/12  
 Chief, Development Engineering Division

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD COUNTY SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

*Ch...* 11-20-12  
 DATE

"I HEREBY CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD COUNTY SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT."

*John H. ...* 11-20-12  
 SIGNATURE OF DEVELOPER/BUILDER DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL, MEET THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

*John H. ...* 11/29/12  
 HOWARD S.C.D. DATE

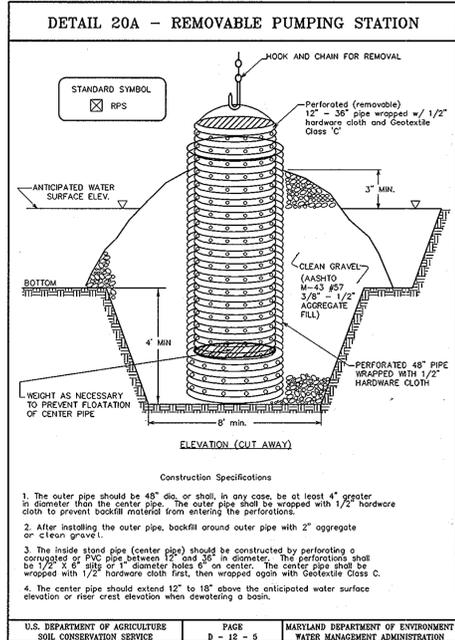
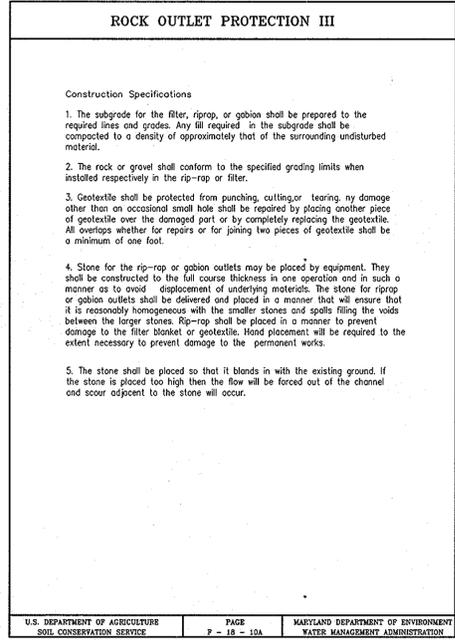
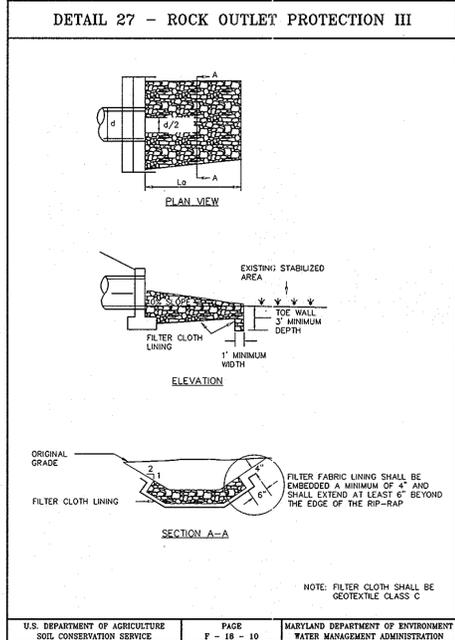
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 3309 NATIONAL DRIVE - SUITE 220 - BURTONSVILLE OFFICE PARK  
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 TEL: 301-421-4024 FAX: 301-421-4186

PREPARED FOR:  
 MAPLE LAWN FARMS 1, LLC  
 SUITE 300 WOODHOLME CENTER  
 1829 REISTERSTOWN ROAD  
 BALTIMORE, MD 21208  
 ATTN: MARK BENNETT  
 410-484-8400

PROFESSIONAL CERTIFICATION  
 I HEREBY CERTIFY THAT THESE PLANS 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. 22775  
 EXPIRATION DATE: MAY 26, 2014

POND 3 & 4 GEO-TECH INFORMATION  
 MAPLE LAWN FARMS  
 GARDEN DISTRICT  
 NON-BUILDABLE PARCEL 'W'

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**POUND CONSTRUCTION SPECIFICATIONS**

THESE SPECIFICATIONS ARE APPROPRIATE TO ALL PONDS FACILITIES. 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 OBJECTABLE 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 20 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 OBJECTABLE MATERIAL UNLESS OTHERWISE DESIGNATED ON THE PLANS. TREES, BRUSH, AND STRIPS SHALL BE CUT APPROXIMATELY LEVEL WITH THE GROUND SURFACE.

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 4" FROZEN OR OTHER OBJECTABLE MATERIALS. FILL MATERIAL FOR THE CENTER OF THE EMBANKMENT CONFORM TO UNIFIED SOIL CLASSIFICATION GC, SC, CH OR CL AND MUST HAVE AT LEAST 50% 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 TIRE, 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 FORCED INTO A BALL IT WILL NOT CRUMBLE, YET NOT 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).

**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 LEVEL 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 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 PSF, 20 DAY UNCONFINED COMPRESSIVE STRENGTH THE FLOWABLE FILL SHALL HAVE A MINIMUM PI OF 40 AND A MINIMUM RESISTIVITY OF 2000 OHM-CM. MATERIAL SHALL BE PLACED SUCH THAT A MINIMUM OF 6" (MEASURED PERPENDICULAR TO THE CENTER 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 CONDITIONS, AVERAGE SLUMP OF THE FILL SHALL BE 1" TO ASSURE FLOWABILITY OF THE MATERIAL. ADEQUATE MEASURES SHALL BE TAKEN (SAND BAGG, 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 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 OTHER EMBANKMENT MATERIALS.

**PIPE CONDITIONS**

ALL PIPES SHALL BE CIRCULAR IN CROSS SECTION.

**CORRUGATED METAL PIPE** - ALL OF THE FOLLOWING CRITERIA SHALL APPLY FOR CORRUGATED METAL PIPE:

- MATERIALS - (POLYMER COATED STEEL PIPE) - STEEL PIPES WITH POLYMERIC COATINGS SHALL HAVE A MINIMUM COATING THICKNESS OF 0.01 INCH (0 MIL) ON BOTH SIDES OF THE PIPE. THIS PIPE AND ITS APPURTENANCES SHALL CONFORM TO THE REQUIREMENTS OF AASHTO SPECIFICATIONS M-245.4 & M-246 WITH WATER TIGHT 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 WATER TIGHT 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 COATING CONFORMING TO THE ABOVE. ALUMINUM SURFACES THAT ARE TO BE IN CONTACT WITH CONCRETE SHALL BE PAINTED WITH ONE COAT OF ZINC CARBOXYMETHYL 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.

MATERIALS - (ALUMINUM PIPE) - THIS PIPE AND ITS APPURTENANCES SHALL CONFORM TO THE REQUIREMENTS OF AASHTO SPECIFICATION M-196 OR M-201 WITH WATER TIGHT COUPLING 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. ANY ALUMINUM SURFACES THAT ARE TO BE IN CONTACT WITH CONCRETE SHALL BE PAINTED WITH ONE COAT OF ZINC CARBOXYMETHYL 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.

- COUPLING BANDS, ANTI-SEEP COLLARS, END SECTIONS, ETC. MUST BE COMPOSED OF THE SAME MATERIAL AND COATING AS THE PIPE. METALS MUST BE INSULATED FROM DISSIMILAR MATERIALS WITH USE OF RUBBER OR PLASTIC INSULATING MATERIALS AT LEAST 24 MILS IN THICKNESS.
- CONNECTIONS - ALL CONNECTIONS WITH PIPES MUST BE COMPLETELY WATER TIGHT. 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 WATER TIGHT. DIMPLE BANDS ARE NOT CONSIDERED TO BE WATER TIGHT.

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 GEOTEXTILE GASKET, PRE-PINCHED 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 HUGGER TYPE BAND WITH O-RING GASKETS HAVING A MINIMUM DIAMETER OF 1/2 INCH GREATER THAN THE CORRUGATION DEPTH. 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 WELDS, 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 GALVANIZING OR A NEOPRENE BEAD.

- 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.
- BACKFILLING SHALL CONFORM TO "STRUCTURE BACKFILL".
- OTHER DETAILS (ANTI-SEEP COLLARS, VALVES, ETC.) SHALL BE AS SHOWN ON THE DRAWINGS.

PLASTIC PIPE - THE FOLLOWING CRITERIA SHALL APPLY FOR PLASTIC PIPE:

- 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 M254 TYPE S.
- JOINTS AND CONNECTIONS TO ANTI-SEEP COLLARS SHALL BE COMPLETELY WATER TIGHT.
- 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.
- BACKFILLING SHALL CONFORM TO "STRUCTURE BACKFILL".
- OTHER DETAILS (ANTI-SEEP COLLARS, VALVES, ETC.) SHALL BE AS SHOWN ON THE DRAWINGS.

**CONCRETE**

CONCRETE SHALL MEET THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 404, NO. 3.

**ROCK RIPRAP**

ROCK RIPRAP SHALL MEET THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 51.

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 421.04, 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 DICES, 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 MANNER WITH THE OPERATION OR MAINTENANCE OF THE STRUCTURE. STREAM DIVERSIONS SHALL BE MAINTAINED UNTIL THE FILL 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 EXCAVATION SURFACES AND BOTTOM REQUIRED EXCAVATIONS AND WILL ALLOW SATISFACTORY PERFORMANCE OF ALL CONSTRUCTION OPERATIONS. DURING THE PLACING AND COMPACTION OF MATERIAL IN REQUIRED EXCAVATIONS, THE WATER LEVEL AT THE LOCATIONS BEING REFILLED SHALL BE MAINTAINED BELOW THE EXCAVATION AT SUCH LOCATIONS WHICH MAY REQUIRE DRAINING THE WATER SHOPS FROM WHICH THE WATER SHALL BE LIFTED.

**STABILIZATION**

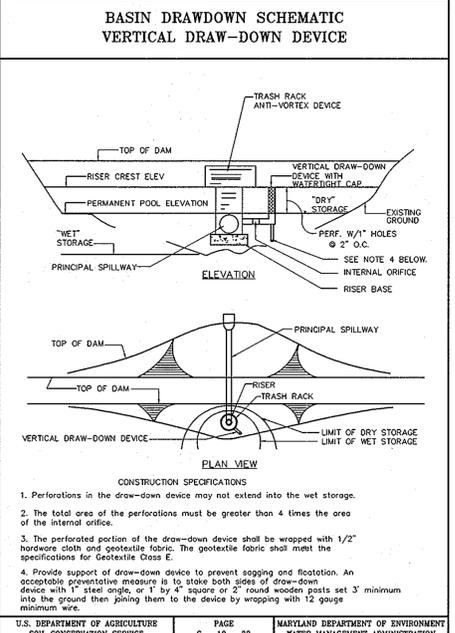
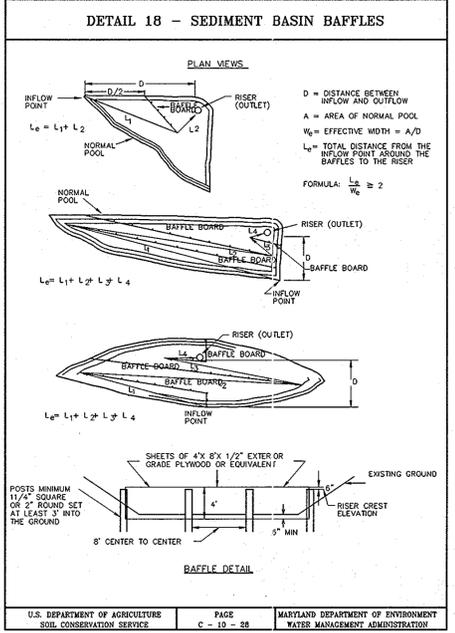
ALL BORROW AREAS SHALL BE GRADED TO PROVIDE PROPER DRAINAGE AND BE LEFT IN A SATISFACTORY CONDITION. ALL EXPOSED SURFACES OF THE EMBANKMENT, SPILLWAY, SPOIL AND BORROW AREAS, AND BERMS SHALL BE STABILIZED BY SEEDING, LIMING, FERTILIZING AND MULCHING.

**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.

**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 REPORT 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.



**EMBANKMENT AND CUT-OFF TRENCH CONSTRUCTION**

The area of the pond facilities should be stripped of topsoil and any other unsuitable materials from the embankment or structure areas in accordance with Soil Conservation Guidelines. After stripping operations have been completed, the exposed subgrade materials should be protected with a loaded dump truck or similar equipment in the presence of a geotechnical engineer or his representative. For areas that are not accessible to a dump truck, the exposed materials should be observed and tested by a geotechnical engineer or his representative using a Dynamic Cone Penetrometer. Any excessively soft or loose materials identified by profiling or penetrometer testing should be excavated to suitable firm soil, and then grades re-established by backfilling with suitable soil.

A representative of the Geotechnical Engineer should be present to monitor placement and compaction of fill for the embankment and cut-off trench. In accordance with NRCS-ND Code No. 378 Pond Standards/Specifications, soils considered suitable for the center of 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.

It is the professional opinion that in addition to the soil materials described above a fine-grained soil, including Silt (M) with a plasticity index of 10 or more can be utilized for the center of the embankment and core trench. All fill materials must be placed and compacted in accordance with NRCS-ND Code No. 378 specifications.

**REMARKS**

The evaluations contained in this report are based on our understanding of the proposed construction, the data obtained from our field exploration, and our experience with the soils and subsurface conditions in this area. If there are any changes to the project characteristics, this office should be advised so that the evaluations made in this report may be re-evaluated.

The reader is referred to the Records of Soil Exploration in the Appendix for details related to the subsurface conditions encountered in the borings. It should be noted that stratification lines shown on the Records of Soil Exploration represent approximate transitions between material types. In-situ strata changes could occur gradually or at slightly different levels. Also, it should be noted that the soil borings depict conditions at the particular locations and at the particular times indicated. Some conditions, particularly granular conditions, could change with time.

His appreciate having been of service to you in the subsurface exploration of this project and we are prepared to assist you during the construction phase as well. If you have any questions concerning the contents of this report or any of our consulting design, testing, and inspection services, please contact this office.

**BUILDER'S CERTIFICATE**

"I HEREBY CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

THESE PLANS FOR SMALL POND CONSTRUCTION SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Signature: *John L. Bennett* Date: 11-20-12

Signature: *John L. Bennett* Date: 11/29/12

**PREPARED FOR:**  
MAPLE LAWN FARMS 1, LLC  
SUITE 300 WOODHURST CENTER  
1829 REISTERSTOWN ROAD  
BALTIMORE, MD 21208  
ATTN: MARK BENNETT  
410-484-8400

**PROFESSIONAL CERTIFICATION**  
I HEREBY CERTIFY THAT THESE PLANS 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. 12875  
EXPIRATION DATE: MAY 26, 2014



**POND NOTES AND DETAILS**  
**MAPLE LAWN FARMS**  
GARDEN DISTRICT  
NON-BUILDABLE PARCEL "W"

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	MXD-3	11001
DATE	TAX MAP - GRID	SHEET
NOV. 2012	41-21/46-3	20 OF 27

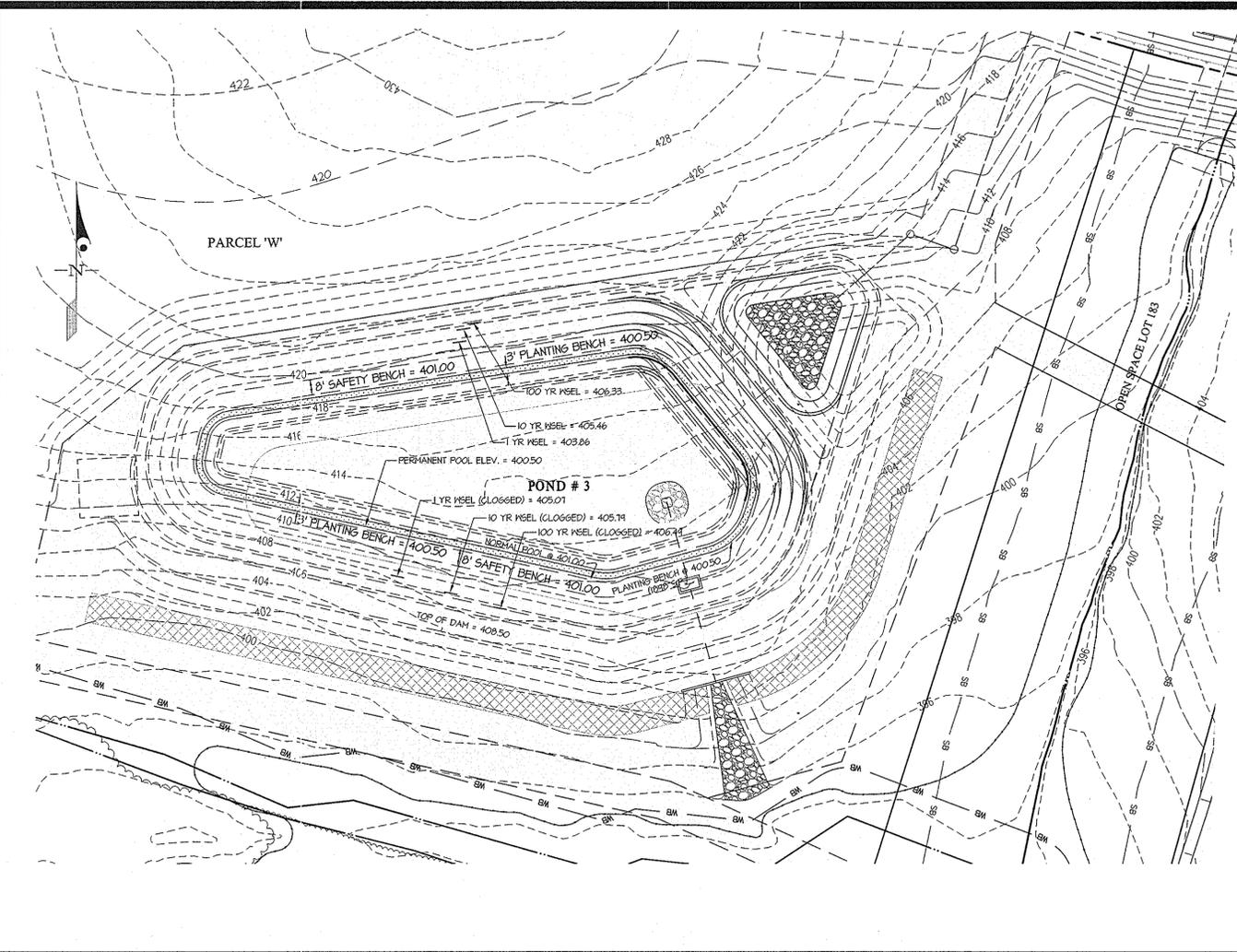
Approved: Howard County Dept. of Public Works  
*Mich 2. mull* 12-14-12  
Chief, Bureau of Highways Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*John L. Bennett* 12/17/12  
Chief, Division of Land Development Date

*John L. Bennett* 12/17/12  
Chief, Development Engineering Division Date

**GLWGUTSCHICK LITTLE & WEBER, P.A.**  
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
3909 NATIONAL DRIVE - SUITE 250 - BIRTONVILLE OFFICE PARK  
BIRTONVILLE, MARYLAND 20866  
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DES. DEV DRN. JRD CHK. CKG DATE REVISION BY APPR



STORMWATER MANAGEMENT POND 3 ENLARGEMENT / PLANTING PLAN SCALE: 1" = 40'

**STORMWATER MANAGEMENT POND 3**  
 STORMWATER MANAGEMENT POND 3 PROVIDES QUALITY CONTROL (M&V) AND QUANTITY CONTROL FOR 31.96 ACRES OF THE PROPOSED DEVELOPMENT. M&V IS PROVIDED VIA A PERMANENT POOL. CPV IS PROVIDED VIA EXTENDED DETENTION. SAFE PASSAGE OF THE 100-YEAR DESIGN STORM HAS BEEN ANALYZED FOR THE BLOCKED CONDITION AND A MINIMUM 2- FEET OF FREEBOARD HAS BEEN PROVIDED.

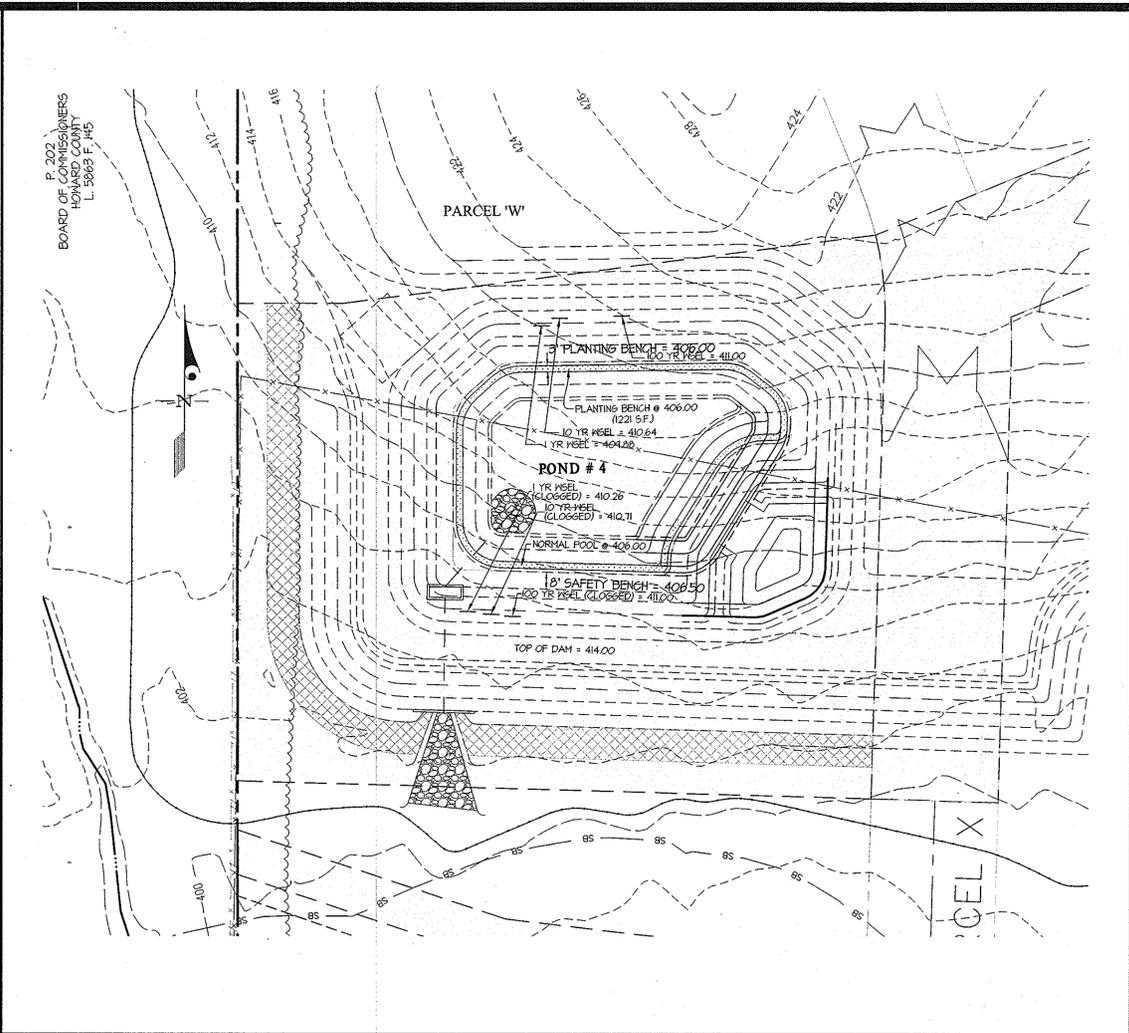
TYPE (PER MDE) : WET POND (P2)  
 MD-318 HAZARD CLASS A FACILITY  
 TOTAL DRAINAGE AREA TO FACILITY = 31.96 ACRES (AREA I)  
 CN = 80  
 ZONING: MXD-3, 55% IMPERVIOUS  
 TC = 0.30 HRS.  
 M&V REQUIRED = 1.22 AC-FT  
 M&V PROVIDED = 1.24 AC-FT  
 M&V/PERMANENT POOL M&V = 400.50  
 CPV REQUIRED = 1.95  
 CPV PROVIDED = 2.12  
 CPV M&V = 403.51  
 REV REQUIREMENT = 1.22 AC-FT  
 REV TO BE PROVIDED BY INFILTRATION TRENCHES (SEE BELOW)  
 1-YR DISCHARGE = 0.69 CFS @ 409.51  
 10-YR DISCHARGE = 64.41 CFS @ 405.46  
 100-YR BLOCKED DISCHARGE = 1071.94 CFS @ 405.74  
 100-YR DISCHARGE = 155.94 CFS @ 406.53  
 100-YR BLOCKED DISCHARGE = 1575.6 CFS @ 406.44  
 LAG: 18 HOURS  
 8 FT. SAFETY BENCH = 401.00  
 3 FT. AQUATIC BENCH = 400.50  
 OUTFALL: PRECAST RISER STRUCTURE TO 48" RCP TO STREAM BUFFER  
 TOP OF DAM = 409.50

\*THE RECHARGE REQUIREMENT FOR THIS DRAINAGE AREA I WILL BE PROVIDED BY INFILTRATION TRENCHES ON FUTURE OPEN SPACE LOTS.

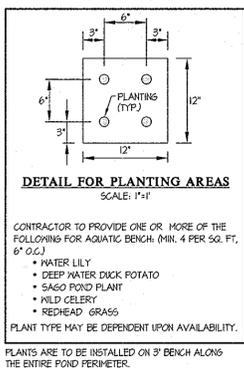
**STORMWATER MANAGEMENT POND 4**  
 STORMWATER MANAGEMENT POND 4 PROVIDES QUALITY CONTROL (M&V) AND QUANTITY CONTROL FOR 23.66 ACRES OF THE PROPOSED DEVELOPMENT. M&V IS PROVIDED VIA A PERMANENT POOL. CPV IS PROVIDED VIA EXTENDED DETENTION. SAFE PASSAGE OF THE 100-YEAR DESIGN STORM HAS BEEN ANALYZED FOR THE BLOCKED CONDITION AND A MINIMUM 2- FEET OF FREEBOARD HAS BEEN PROVIDED.

TYPE (PER MDE) : WET POND (P2)  
 MD-318 HAZARD CLASS A FACILITY  
 TOTAL DRAINAGE AREA TO FACILITY = 23.66 ACRES (AREA I)  
 CN = 81  
 ZONING: MXD-3, 55% IMPERVIOUS  
 TC = 0.21 HRS.  
 M&V REQUIRED = 0.74 AC-FT  
 M&V PROVIDED = 0.83 AC-FT  
 M&V/PERMANENT POOL M&V = 406.00  
 CPV REQUIRED = 1.28  
 CPV PROVIDED = 1.46  
 CPV M&V = 404.45  
 REV REQUIREMENT = 0.26 AC-FT  
 REV TO BE PROVIDED BY INFILTRATION TRENCHES (SEE BELOW)  
 1-YR DISCHARGE = 0.35 CFS @ 404.88  
 10-YR DISCHARGE = 67.21 CFS @ 410.64  
 100-YR BLOCKED DISCHARGE = 1126.0 CFS @ 410.71  
 100-YR DISCHARGE = 124.20 CFS @ 411.00  
 100-YR BLOCKED DISCHARGE = 124.06 CFS @ 411.00  
 18 HOURS  
 8 FT. SAFETY BENCH = 409.50  
 3 FT. AQUATIC BENCH = 406.00  
 OUTFALL: PRECAST RISER STRUCTURE TO 48" RCP TO STREAM BUFFER  
 TOP OF DAM = 414.00

\*THE RECHARGE REQUIREMENT FOR THIS DRAINAGE AREA I WILL BE PROVIDED BY INFILTRATION TRENCHES ON FUTURE OPEN SPACE LOTS.



STORMWATER MANAGEMENT POND 4 ENLARGEMENT / PLANTING PLAN SCALE: 1" = 40'



**PLANT LIST FOR STORMWATER MANAGEMENT POND 3**

SYMBOL	QTY.	NAMES (BOTANICAL / SCIENTIFIC)	SIZE	NOTES
SL	1466	Sagittaria latifolia Duck Potato	1 PINT CONT. OR BARE ROOT	12" o.c.
SP	1466	Scirpus pungens Three-Square Bulrush	1 PINT CONT. OR BARE ROOT	12" o.c.
PL	1466	Polygonum reptans Jacob's Ladder	1 PINT CONT. OR BARE ROOT	12" o.c.
PV	1466	Peltandra virginica Arrow Arum	1 PINT CONT. OR BARE ROOT	12" o.c.

NOTE: STORMWATER MANAGEMENT POND PLANTINGS ARE PER MDE 2000 REQUIREMENTS

1064 PLANTS IS REQUIRED FOR POND 3. THE NUMBER OF EACH SPECIES PLANTED WILL BE DETERMINED AT THE TIME OF CONVERSION DEPENDING ON AVAILABILITY.

**PLANT LIST FOR STORMWATER MANAGEMENT POND 4**

SYMBOL	QTY.	NAMES (BOTANICAL / SCIENTIFIC)	SIZE	NOTES
SL	1246	Sagittaria latifolia Duck Potato	1 PINT CONT. OR BARE ROOT	12" o.c.
SP	1246	Scirpus pungens Three-Square Bulrush	1 PINT CONT. OR BARE ROOT	12" o.c.
PL	1246	Polygonum reptans Jacob's Ladder	1 PINT CONT. OR BARE ROOT	12" o.c.
PV	1246	Peltandra virginica Arrow Arum	1 PINT CONT. OR BARE ROOT	12" o.c.

NOTE: STORMWATER MANAGEMENT POND PLANTINGS ARE PER MDE 2000 REQUIREMENTS

5164 PLANTS IS REQUIRED FOR POND 4. THE NUMBER OF EACH SPECIES PLANTED WILL BE DETERMINED AT THE TIME OF CONVERSION BASED ON AVAILABILITY.

Approved: Howard County Dept. of Public Works  
 [Signature] 12-14-12  
 Chief, Bureau of Highways

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
 [Signature] 12/17/12  
 Chief, Division of Land Development

[Signature] 12/17/12  
 Chief, Development Engineering Division

**ENGINEER'S CERTIFICATE**  
 I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT THESE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

[Signature] 11-20-12  
 ENGINEER'S SIGNATURE DATE

**BUILDER'S CERTIFICATE**  
 I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

[Signature] 11/29/12  
 SIGNATURE OF DEVELOPER/BUILDER DATE

THESE PLANS FOR SMALL POND CONSTRUCTION SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

[Signature] 11/29/12  
 HOWARD S.C.D. DATE

**GLWGUTSCHICK LITTLE & WEBER, P.A.**  
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
 3309 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK  
 BURTONSVILLE, MARYLAND 20885  
 TEL: 301-421-4024 FAX: 410-880-1820 DC/VL: 301-989-2524 FAX: 301-421-4186

PREPARED FOR:  
 MAPLE LAWN FARMS 1, LLC  
 SUITE 300 WOODHOLME CENTER  
 1829 REISTERSTOWN ROAD  
 BALTIMORE, MD 21208  
 ATTN: MARK BENNETT  
 410-484-8400

DATE	REVISION	BY	APPR.

**PROFESSIONAL CERTIFICATION**  
 I HEREBY CERTIFY THAT THESE PLANS 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. 12975.  
 EXPIRATION DATE: MAY 26, 2014

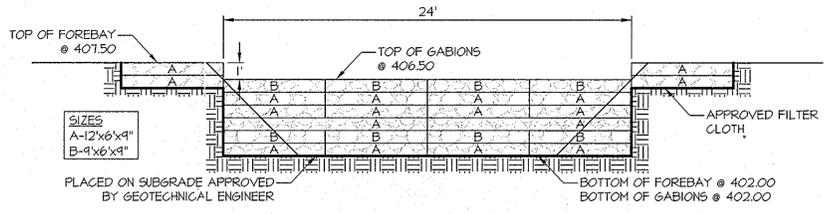
[Signature] 11-20-12

**POND 3 & 4 CONVERSION GRADES, POND SUMMARIES, and PLANTING DETAILS**

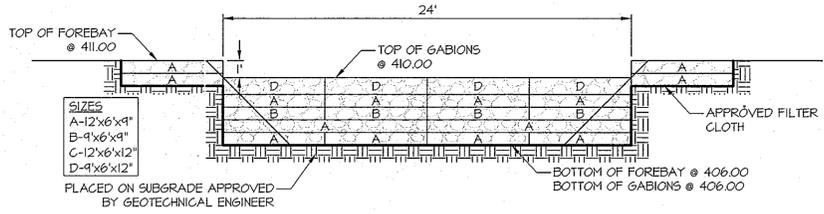
**MAPLE LAWN FARMS**  
 GARDEN DISTRICT  
 NON-BUILDABLE PARCEL 'W'

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	MXD-3	11001
DATE	TAX MAP - GRID	SHEET
NOV. 2012	41-21/46-3	21 OF 27

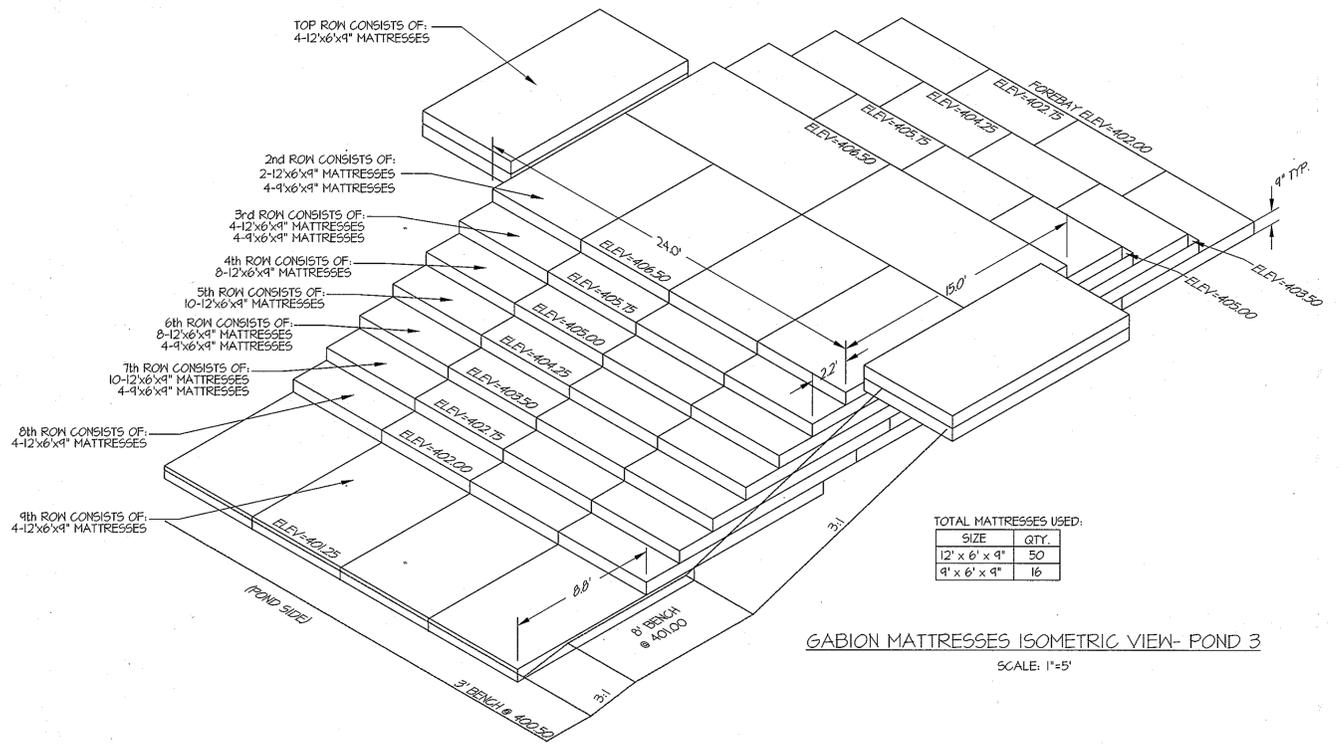
HOWARD COUNTY, MARYLAND



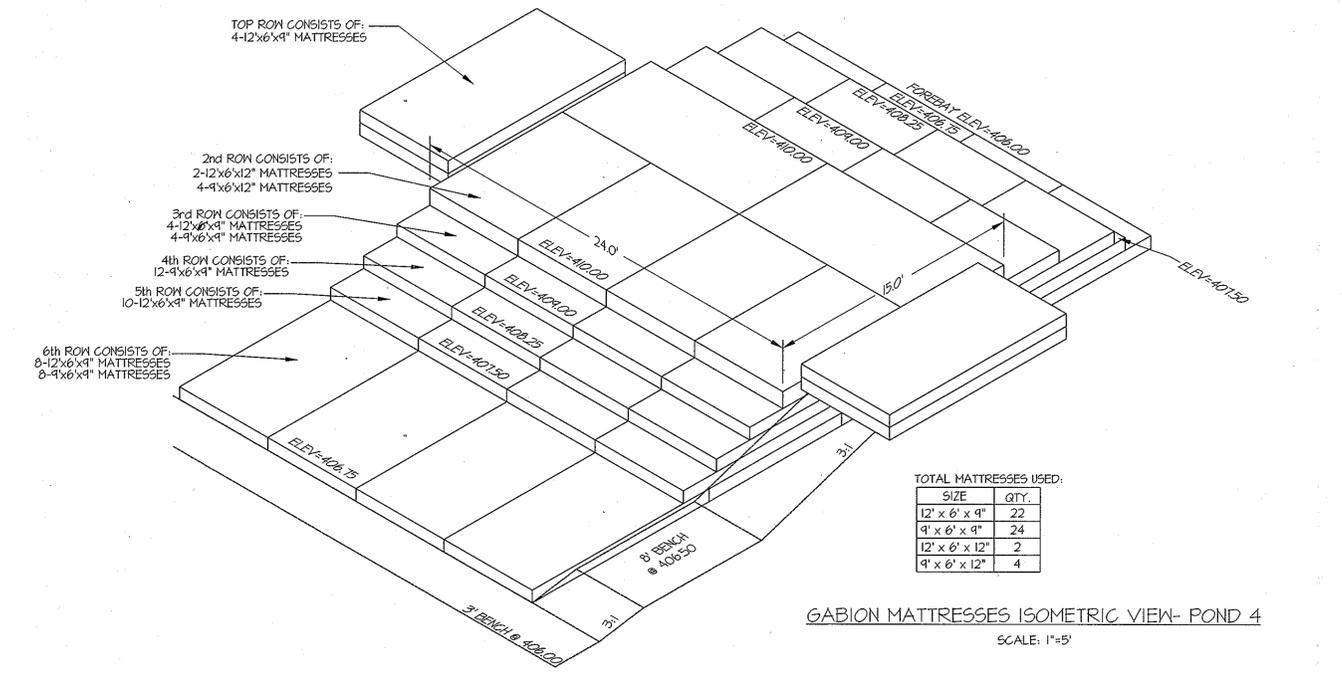
FOREBAY SPILLWAY DETAIL- POND 3  
SCALE: 1"=5'



FOREBAY SPILLWAY DETAIL- POND 4  
SCALE: 1"=5'



GABION MATTRESSES ISOMETRIC VIEW- POND 3  
SCALE: 1"=5'



GABION MATTRESSES ISOMETRIC VIEW- POND 4  
SCALE: 1"=5'

Approved: Howard County Dept. of Public Works  
*William R. ...* 12-14-12  
Chief, Bureau of Highways

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*K... ..* 12/17/12  
Chief, Division of Land Development  
*...* 12/17/12  
Chief, Development Engineering Division

**GLWGUTSCHICK LITTLE & WEBER, P.A.**  
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK  
BURTONSVILLE, MARYLAND 20866  
TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4188

DATE	REVISION	BY	APPR.

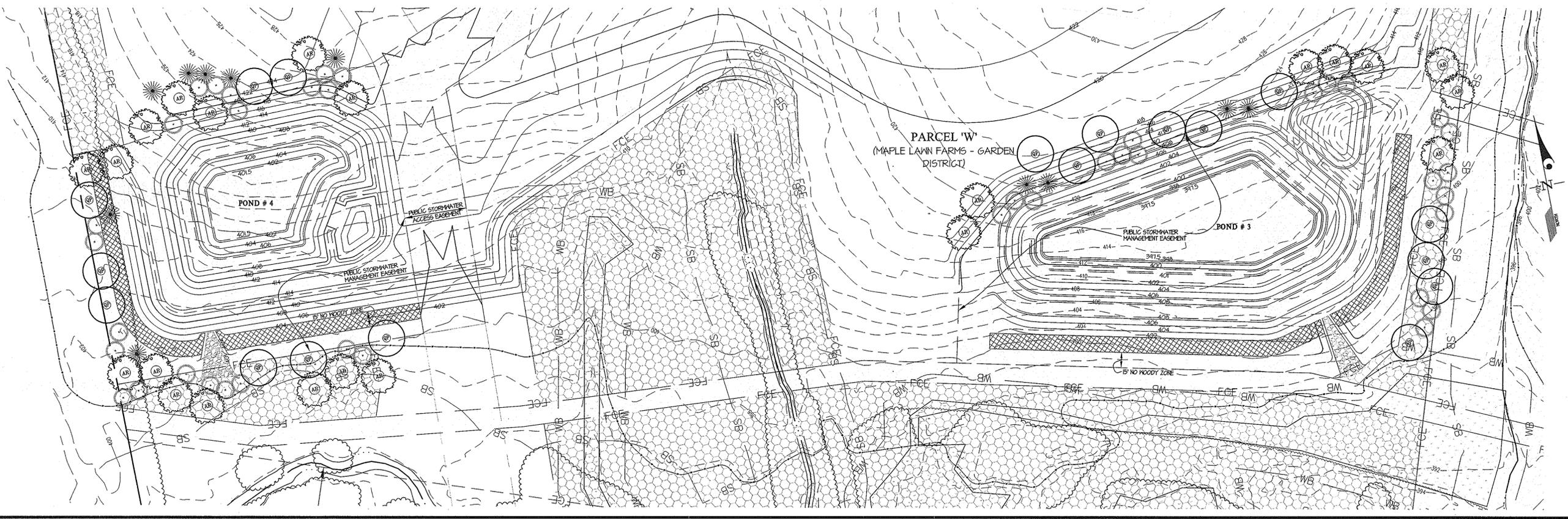
PREPARED FOR:  
MAPLE LAWN FARMS 1, LLC  
SUITE 300 WOODHOLME CENTER  
1829 REISTERSTOWN ROAD  
BALTIMORE, MD 21208  
ATTN: MARK BENNETT  
410-484-8400

PROFESSIONAL CERTIFICATION  
I HEREBY CERTIFY THAT THESE PLANS  
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. 12975.  
EXPIRATION DATE: MAY 26, 2014  
*...* 11-20-12

**POND 3 & 4 GABION BASKET DETAILS**  
**MAPLE LAWN FARMS**  
GARDEN DISTRICT  
NON-BUILDABLE PARCEL 'W'  
ELECTION DISTRICT No. 5  
HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	MXD-3	11001
DATE	TAX MAP - GRID	SHEET
NOV. 2012	41-21/46-3	22 OF 27





STORMWATER MANAGEMENT PERIMETER Nos. 1 thru 5 PLANTING PLAN SCALE: 1" = 50'

STORMWATER MANAGEMENT AREA LANDSCAPING - SCHEDULE D										
PERIMETER	PROPOSED LAND USE	TYPE OF BUFFER	ADJACENT LAND USE	LINEAR FEET OF PERIMETER	NUMBER OF PLANTS REQUIRED SHADE TREES	NUMBER OF PLANTS PROVIDED EVERGREEN TREES	CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR-FEET) DESCRIBE BELOW IF NEEDED.	CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR-FEET) DESCRIBE BELOW IF NEEDED.	SHADE TREES	EVERGREEN TREES
SM-1	SM	3' BUFFER *	RESIDENTIAL (SFD)	351 L.F.	1	4	NO	NO	1	4
SM-2	SM	PER EXTERNAL PERIMETER #3	INSTITUTIONAL	362 L.F.	1	4	PER EXTERNAL PERIMETER #3	NO	SEE NOTE 1	SEE NOTE 1
SM-3	SM	3' BUFFER *	RESIDENTIAL (SFD)	512 L.F.	11	14	NO	NO	11	14
SM-4	SM	3' BUFFER *	RESIDENTIAL (SFD)	867 L.F.	17	22	NO	NO	17	22
SM-5	SM	3' BUFFER *	RESIDENTIAL (SFD)	225 L.F.	5	6	NO	NO	5	6

\* FOLLOWS COMPREHENSIVE SKETCH PLAN GUIDELINE REQUIREMENTS  
 ① CREDIT FOR FOREST RETENTION ALONG THIS PERIMETER.

PLANT LIST					
SYMBOL	QTY.	NAMES (BOTANICAL / SCIENTIFIC)	SIZE	ROOT	COMMENTS
SHADE TREES					
⊙	22	ACER RUBRUM 'AUTUMN FLAME' AUTUMN FLAME MAPLE	2 1/2"-3" Cal.	B4B	
⊙	18	QUERCUS PALUSTRIS PIN OAK	2 1/2"-3" Cal.	B4B	
EVERGREEN TREES					
⊙	15	PINUS STROBUS WHITE PINE	6'-8" Ht.	B4B	
⊙	52	ILEX OPACA AMERICAN HOLLY	6'-8" Ht.	B4B	



Approved: Howard County Dept. of Public Works  
*W. Z. Mott* 12-14-12  
 Chief, Bureau of Highways Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*K. Shilow* 12/12  
 Chief, Division of Land Development Date

*[Signature]* 12/12  
 Chief, Development Engineering Division Date

STATE OF MARYLAND  
 Michael B. Tran  
 933 LANDSCAPE ARCHITECT  
 11-21-12

THIS PLAN IS FOR PLANTING PURPOSES ONLY

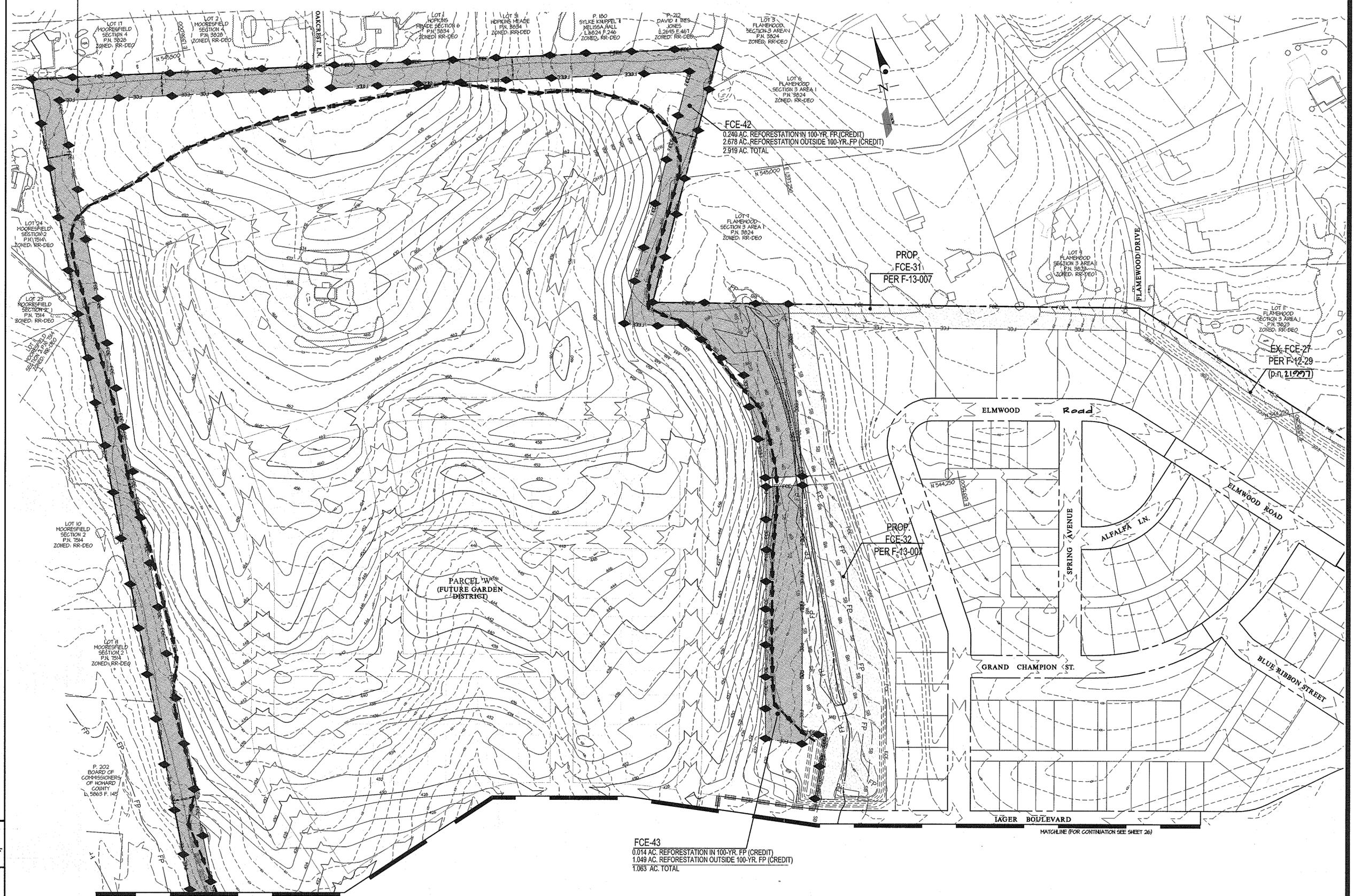
<b>GLWGUTSCHICK LITTLE &amp; WEBER, P.A.</b> CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK BURTONSVILLE, MARYLAND 20866 TEL: 301-421-4024 BALT: 410-880-1800 DC/VA: 301-989-2524 FAX: 301-421-4186	PREPARED FOR: MAPLE LAWN FARMS 1, LLC SUITE 300 WOODHOLME CENTER 1829 REISTERSTOWN ROAD BALTIMORE, MD 21208 ATTN: MARK BENNETT 410-484-8400	<b>LANDSCAPE PLAN / NOTES and DETAILS</b> <b>MAPLE LAWN FARMS</b> GARDEN DISTRICT NON-BUILDABLE PARCEL 'W'			SCALE 1" = 100'	ZONING MXD-3	G. L. W. FILE No. 11001
		ELECTION DISTRICT No. 5	DATE NOV. 2012	TAX MAP - GRID 41-21/46-3	SHEET 24 OF 27		

**FOREST CONSERVATION LEGEND**

- 400 ——— EXISTING CONTOUR
- EXISTING TREELINE
- CENTERLINE OF STREAM
- FP ——— FLOODPLAIN
- SB ——— STREAM BUFFER
- LIMIT OF WETLAND
- WETLAND AREA
- WETLAND BUFFER
- FCE ——— FOREST CONSERVATION EASEMENT
- FOREST CONSERVATION SIGN
- FCE ——— PROPOSED FOREST CONSERVATION EASEMENT
- NON-CREDITED FOREST RETENTION
- CREDITED FOREST RETENTION
- FOREST CLEARING
- PLANTING AREA (AFFORESTATION AND REFORESTATION)
- TREE PROTECTION FENCE
- AREA OF PLAN SUBMISSION TO BE PLATTED AT F-PLAN STAGE
- LIMIT OF DISTURBANCE

NOTE: FOR STEEP SLOPES SEE LANDSCAPE PLANS, SHEETS 17-18.

FCE-41  
2.821 AC. ALL REFORESTATION PLANTING



STATE OF MARYLAND  
Michael B. Tran  
11.21.12  
933  
LANDSCAPE ARCHITECT

Approved: Howard County Dept. of Public Works  
*Wade 2*  
Chief, Bureau of Highways  
12-14-12  
Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*Val St. Louis*  
Chief, Division of Land Development  
12/17/12  
Date  
*W. R. ...*  
Chief, Development Engineering Division  
12/17/12  
Date

**GLWGUTSCHICK LITTLE & WEBER, P.A.**  
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK  
BURTONSVILLE, MARYLAND 20886  
TEL: 301-421-4024 BAL: 410-980-1820 DC/VA: 301-959-2524 FAX: 301-421-4186

L:\CAD\DRAWINGS\11001\FINAL\SM-S\11001 25-26\_FC.dwg DES. DEV DRN. KLP CHK. CKG

DATE	REVISION	BY	APPR.

PREPARED FOR:  
MAPLE LAWN FARMS 1, LLC  
SUITE 300 WOODHOLME CENTER  
1829 REISTERSTOWN ROAD  
BALTIMORE, MD 21208  
ATTN: MARK BENNETT  
410-484-8400

**FOREST CONSERVATION PLAN**  
**MAPLE LAWN FARMS**  
GARDEN DISTRICT  
NON-BUILDABLE PARCEL W  
ELECTION DISTRICT No. 5  
HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1" = 100'	MXD-3	11001
DATE	TAX MAP - GRID	SHEET
NOV. 2012	41-21/46-3	25 OF 27

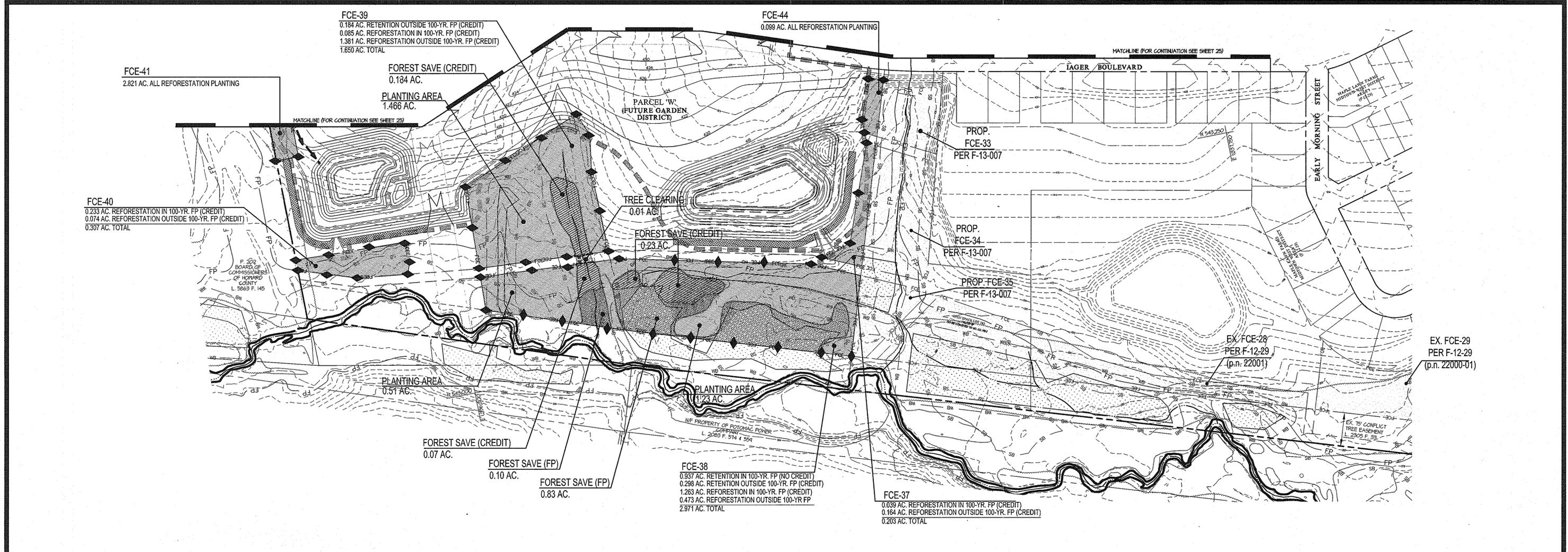
FCE-43  
0.014 AC. REFORESTATION IN 100-YR. FP (CREDIT)  
1.049 AC. REFORESTATION OUTSIDE 100-YR. FP (CREDIT)  
1.063 AC. TOTAL

PROP. FCE-32  
PER F-13-007

PROP. FCE-31  
PER F-13-007

FCE-42  
0.240 AC. REFORESTATION IN 100-YR. FP (CREDIT)  
2.678 AC. REFORESTATION OUTSIDE 100-YR. FP (CREDIT)  
2.919 AC. TOTAL

EX-FCE-27  
PER F-12-29  
(P.N. 21227)



**FCE-39**  
 0.184 AC. RETENTION OUTSIDE 100-YR. FP (CREDIT)  
 0.085 AC. REFORESTATION IN 100-YR. FP (CREDIT)  
 1.381 AC. REFORESTATION OUTSIDE 100-YR. FP (CREDIT)  
 1.650 AC. TOTAL

**FCE-44**  
 0.099 AC. ALL REFORESTATION PLANTING

**FCE-41**  
 2.821 AC. ALL REFORESTATION PLANTING

**FOREST SAVE (CREDIT)**  
 0.134 AC.

**PLANTING AREA**  
 1.466 AC.

**PARCEL 'W'**  
 (FUTURE GARDEN DISTRICT)

**PROP. FCE-33**  
 PER F-13-007

**PROP. FCE-34**  
 PER F-13-007

**PROP. FCE-35**  
 PER F-13-007

**EX. FCE-28**  
 PER F-12-29  
 (p.n. 22001)

**EX. FCE-29**  
 PER F-12-29  
 (p.n. 22000-01)

**FCE-40**  
 0.233 AC. REFORESTATION IN 100-YR. FP (CREDIT)  
 0.074 AC. REFORESTATION OUTSIDE 100-YR. FP (CREDIT)  
 0.307 AC. TOTAL

**TREE CLEARING**  
 0.01 AC.

**FOREST SAVE (CREDIT)**  
 0.23 AC.

**PLANTING AREA**  
 0.51 AC.

**PLANTING AREA**  
 1.23 AC.

**FOREST SAVE (CREDIT)**  
 0.07 AC.

**FOREST SAVE (FP)**  
 0.10 AC.

**FOREST SAVE (FP)**  
 0.83 AC.

**FCE-38**  
 0.937 AC. RETENTION IN 100-YR. FP (NO CREDIT)  
 0.298 AC. RETENTION OUTSIDE 100-YR. FP (CREDIT)  
 1.263 AC. REFORESTATION IN 100-YR. FP (CREDIT)  
 0.473 AC. REFORESTATION OUTSIDE 100-YR. FP  
 2.971 AC. TOTAL

**FCE-37**  
 0.039 AC. REFORESTATION IN 100-YR. FP (CREDIT)  
 0.164 AC. REFORESTATION OUTSIDE 100-YR. FP (CREDIT)  
 0.203 AC. TOTAL

**TREE PLANTING AND MAINTENANCE CALENDAR**

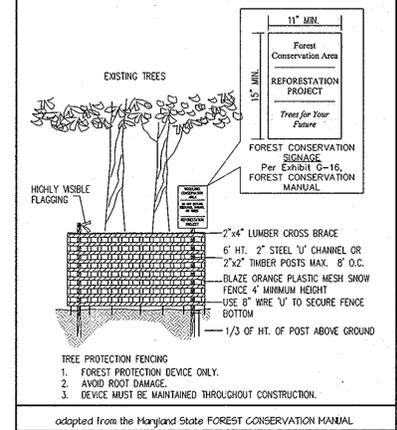
TASKS	MONTHS											
	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
TRANSPLANT OF 2" DBH OR GREATER												
PLANTING SEEDLINGS, WHIPS												
MINIMUM MONITORING			*			*				*		
FERTILIZER (IF NEEDED)												
WATER **												
PRUNING												

**KEY**  
 \* ACTIVITIES DURING THESE MONTHS ARE DEPENDANT UPON GROUND CONDITIONS  
 \*\* GREATLY RECOMMENDED  
 \*\*\* RECOMMENDED WITH ADDITIONAL CARE  
 \*\*\*\* RECOMMENDED  
 \* DEPENDANT UPON SITE CONDITIONS  
 \*\* DEPENDANT UPON SITE CONDITIONS, WEEKLY WATERING IS GREATLY RECOMMENDED FROM MAY THROUGH OCTOBER UNLESS WEEKLY RAINFALL EQUALS 1"

**NOTE:**  
 The planting and care of trees is most successful when coordinated with the local climatic conditions. This calendar summarizes some of the recommended time frames for basic reforestation and stress reduction activities.

**SOURCE:** adopted from the Maryland State FOREST CONSERVATION MANUAL

**TREE PROTECTION FENCE NOT TO SCALE**



**NOTES:**

1. THE TREE PROTECTION FENCING SHOWN ON THESE PLANS IS TEMPORARY AND SHALL REMAIN IN PLACE DURING CONSTRUCTION ACTIVITY, BUT THE FOREST CONSERVATION SIGNAGE IS PERMANENT AND SHALL REMAIN IN PLACE AROUND THE FOREST CONSERVATION EASEMENTS AFTER THE REMOVAL OF THE TREE PROTECTION FENCING.
2. FOREST CONSERVATION SIGNAGE SHALL BE INSTALLED ALONG THE PERIMETER OF THE CONSERVATION EASEMENT AT 50' TO 100' APART AND AT ALL CORNERS WHERE THE EASEMENT CHANGES DIRECTION.
3. ATTACHMENT OF SIGNS TO TREES IS PROHIBITED.

**FOREST CONSERVATION PLANTING QUANTITY SCHEDULE**

FOREST PLANTING LOCATION NO.	FCE-37	FCE-38	FCE-39	FCE-40	FCE-41	FCE-42	FCE-43	FCE-44	TOTAL
AREA TO BE PLANTED (IN AC.)	0.20	1.74	1.47	0.31	2.82	2.42	1.06	0.10	10.62
BASE QUANTITY OF 2" CAL. TREES REQUIRED (AT 100 TREES/AC.)	20	174	147	31	282	242	106	10	1,062
CREDIT FOR LANDSCAPE TREES TO BE PLANTED	14	---	---	15	94	102	---	2	227
REQUIRED QUANTITY OF 2" CAL. TREES TO BE PLANTED	6	174	147	16	188	190	106	8	835

**FOREST CONSERVATION PLANT LIST**

PLANT NAME (BOTANICAL/COMMON)	FOREST PLANTING AREA								
	FCE-37	FCE-38	FCE-39	FCE-40	FCE-41	FCE-42	FCE-43	FCE-44	TOTAL
AMELANCHIER CANADENSIS/SERVICEBERRY		15	25			17	16		73
ACER RUBRUM/RED MAPLE	6	64	11	7	45	20	24	4	181
CERCIS CANADENSIS/EASTERN REDBUD		15	26		53	25	16	4	134
LIRIODENDRON TULIFERA/TULIP TREE		16	37	3		25	25		106
PLATANUS OCCIDENTALIS/AMERICAN SYCAMORE (PLANETREE)		64	11	6		18	25		124
QUERCUS PALUSTRIS/PIN OAK					45	25			70
QUERCUS RUBRUM/RED OAK					45	25			70
PINUS STROBILIS/WHITE PINE			37			35			72
<b>TOTAL</b>	<b>6</b>	<b>174</b>	<b>147</b>	<b>16</b>	<b>188</b>	<b>190</b>	<b>106</b>	<b>8</b>	<b>835</b>

**NOTES:**

1. THE QUANTITY SHOWN ABOVE IS FOR PLANTING WITH 2" U2" CAL. TREES AT 20' X 20' SPACINGS. EVERGREEN TREES SHALL BE 6'-8" HT.
2. LANDSCAPE TREES WITH THE FCE AREAS WOULD REDUCE THE ABOVE QUANTITIES ACCORDINGLY.

Approved: Howard County Dept. of Public Works  
 With R. Maltz 12-14-12  
 Chief, Bureau of Highways Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
 Kest Schulze 12/11/12  
 Chief, Division of Land Development Date

Chief, Development Engineering Division 12/17/12  
 Date

STATE OF MARYLAND  
 Michael B. Tran  
 933 LANDSCAPE  
 11-21-12

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**FOREST CONSERVATION PLAN / NOTES and DETAILS**

**MAPLE LAWN FARMS**  
 GARDEN DISTRICT  
 NON-BUILDABLE PARCEL 'W'

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