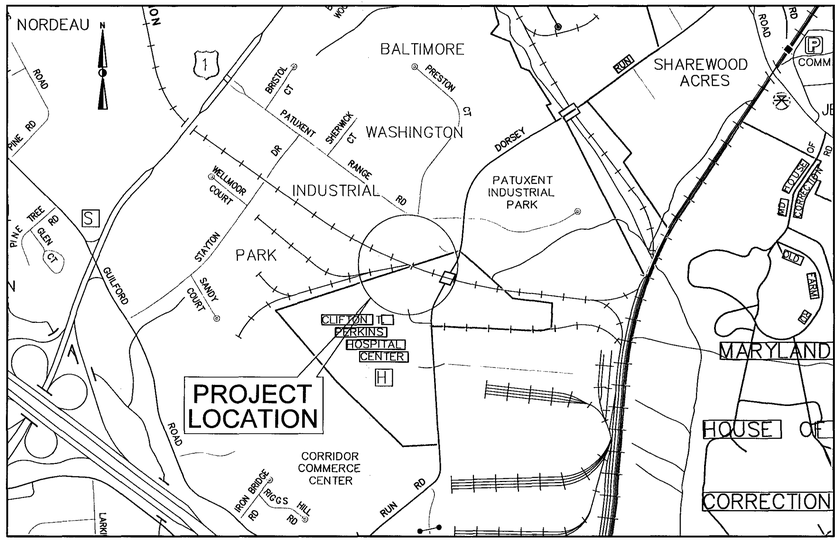
PIPE REPAIR

8255 PATUXENT RANGE ROAD
ELECTION DISTRICT 1
HOWARD COUNTY, MARYLAND
CAPITAL PROJECT D-1125

INDEX OF SHEETS



LOCATION MAP
HOWARD COUNTY

1000 0 1000 2000

SCALE: 1" = 1000'

GENERAL NOTES:

1. THE PLAN AND PROFILE WAS DEVELOPED WITHOUT THE BENEFIT OF A FIELD RUN TOPOGRAPHIC SURVEY. INFORMATION TO PREPARE THIS PLAN WAS OBTAINED FROM SHEET 2 OF 2 "STORM DRAIN PROFILE FOR BALTIMORE-WASHINGTON INDUSTRIAL PARK", F-86-25; AND SHEET 2 OF 12 OF SDP#86-161. ALL ELEVATIONS ARE APPROXIMATE.
2. CONTRACTOR MUST PROTECT THE EXISTING RAILROAD SIDING AT ALL TIMES. DAMAGE TO THE RAILROAD SIDING MUST BE REPLACED AT THE CONTRACTORS EXPENSE.
3. HOWARD COUNTY WILL COORDINATE THE APPROVALS OF ANY PARKING AREAS THAT WILL BE USED FOR STAGING AND STORAGE. THE CONTRACTOR SHALL MINIMIZED DISTURBANCE TO EXISTING PAVEMENT AND CURBS. REPAIR ANY PAVEMENT AND CURBING DAMAGED AS PART OF THIS TASK.
4. PROPOSED MANHOLE ACCESS NO.1 SHALL BE MANUFACTURED INTEGRAL TO THE 84-INCH CMP. THE RISER PIPE SHALL BE 36" DIAMETER WITH A 36" FRAME AND COVER SET IN A 6'X6' CONCRETE SLAB, 4" THICK AT THE SURFACE. THE RISER SHALL INCLUDE LADDER RUNGS.
5. PROPOSED MANHOLE ACCESS NO.2 SHALL BE 48" DIAMETER, PRECAST CONCRETE WITH A 24" DIAMETER FRAME AND COVER 6" BASE FINISH GRADE. SEE HOWARD CO. STANDARD G-5.12 FOR ADDITIONAL INFORMATION.
6. THE CONTRACTOR SHALL NOTIFY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AND MISS UTILITY AT 1-800-257-7777 AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK
7. THE SYSTEM OF COORDINATES USED BY HOWARD COUNTY IS BASED IN THE FOLLOWING DATUMS AND PROJECTIONS:

   HORIZONTAL: MARYLAND NAD83 (ADJ 1991)
   VERTICAL: NAVD88

   HOWARD COUNTY CONTROL:

   STATION NO.
   STATION NO.
8. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY.
9. ALL WORK SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF THE "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL," ISSUED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT AND THE NATURAL RESOURCES CONSERVATION SERVICE.
10. THE PROPERTY LINES AND EASEMENT LINES ARE BASED ON LAND ACQUISITION DOCUMENTS RESEARCHED AND PLACED ON THE PLANS.
11. SHOULD THE CONTRACTOR DISCOVER DISCREPANCIES BETWEEN THE PLANS AND THE FIELD CONDITIONS, THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY TO RESOLVE THE SITUATION. SHOULD THE CONTRACTOR MAKE FIELD CORRECTIONS OR ADJUSTMENTS WITHOUT NOTIFYING THE ENGINEER, THEN THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR THOSE CHANGES.
12. CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHOD, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
13. APPROXIMATE UTILITIES ARE SHOWN FROM AVAILABLE RECORDS. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
14. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
15. UTILITY CONTACTS:

BGE:	(410)-597-7835 (ELECTRIC)
BGE:	(410)-291-5101 (GAS)
VERIZON:	(410)-224-9285
MCI:	(912)-729-6016
XPEIUS:	(703)-386-2340
ABOVENET:	(443)-250-1873
COMCAST:	(410)-513-3207

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. EP-11.09

HOWARD SOIL CONSERVATION DISTRICT DATE 11/5/10

ENGINEER'S CERTIFICATE

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

SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) DATE 11-5-10

DAVID T. MORGON!

DEVELOPER'S CERTIFICATE

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

SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) DATE 11/5/10

PROFESSIONAL CERTIFICATION

"I HEREBY CERTIFY THAT DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16156
EXPIRATION DATE: 8/28/2012

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS DATE 11/5/10

ACT. CHIEF, BUREAU OF ENGINEERING DATE 11/5/10

CHIEF, DIVISION OF TRANSPORTATION AND SPECIAL PROJECTS DATE 11/5/10

CHIEF, BUREAU OF HIGHWAYS DATE 11-5-10

PREPARED BY
URS
4 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
TEL: (410) 785-7220

STATE OF MARYLAND DAVID THOMAS MORGON 22021 REGISTERED PROFESSIONAL ENGINEER 11-5-10

DES:	DTM	1	AS-BUILT	4/13
DRN: BJK				
CHK: DTM				
DATE: 10/2010	BY	NO.	REVISION	DATE

TITLE SHEET

SCALE MAP NO. ____ BLOCK NO. ____

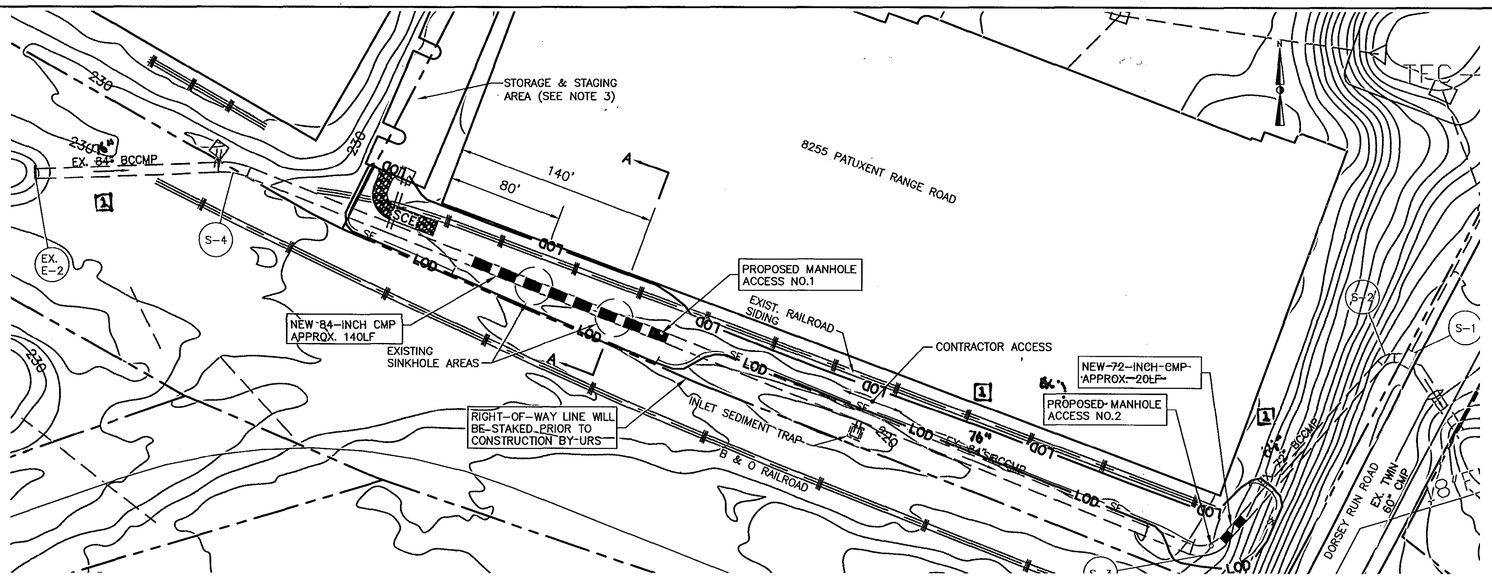
PIPE REPAIR
8255 PATUXENT RANGE ROAD

ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
CAPITAL PROJECT D-1125

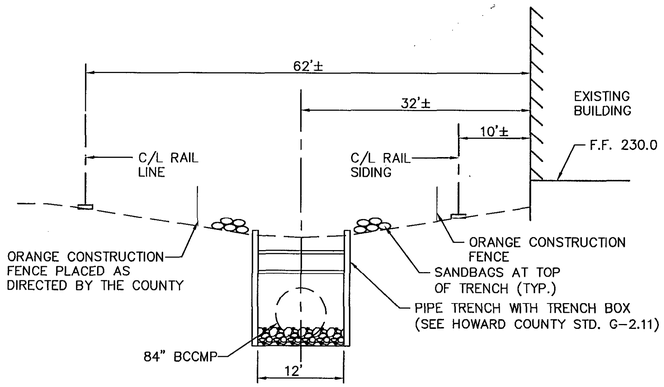
SCALE AS SHOWN

SHEET 1 OF 3

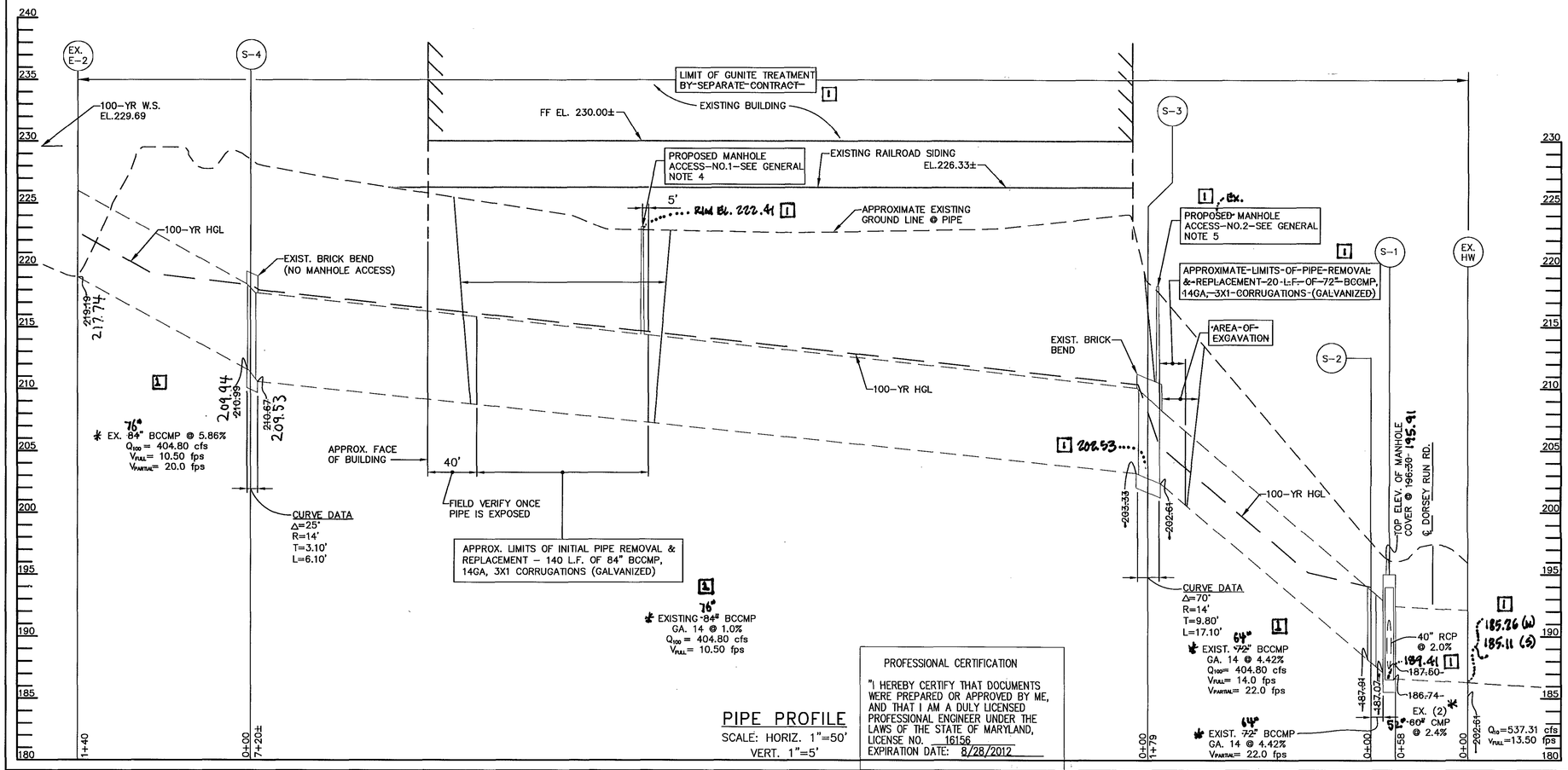
FILE NAME: O:\20834583\CAD\PlanSet\pGN-T000_HoCo.dwg PLOTTED: Friday, November 05, 2010 - 7:59am USER: chris_fleming



PLAN
SCALE: 1"=50'



SECTION A-A
SCALE: 1"=10'



PIPE PROFILE
SCALE: HORIZ. 1"=50'
VERT. 1"=5'

PROFESSIONAL CERTIFICATION

"I HEREBY CERTIFY THAT DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16156 EXPIRATION DATE: 8/28/2012

LEGEND

- SF — SILT FENCE
- SSF — SUPER SILT FENCE
- OCF — ORANGE CONSTRUCTION FENCE
- LOD — LIMIT OF DISTURBANCE SEED
- SCE — STABILIZED CONSTRUCTION ENTRANCE
- SP — STANDARD INLET PROTECTION
- FB — FILTER BAG

SEE SHEET 1 FOR GENERAL NOTES

* NOTE: GUNITE TREATMENT REDUCED DIAMETER BY 8" [1]

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. EP.11.09

HOWARD SOIL CONSERVATION DISTRICT — DATE 11/5/10

ENGINEER'S CERTIFICATE

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

SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) DAVID T. MORICONI — DATE 11-5-10

DEVELOPER'S CERTIFICATE

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

SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) ACTING — DATE 11/5/10

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE 11/5/10
CHIEF, DIVISION OF TRANSPORTATION AND SPECIAL PROJECTS — DATE 11/5/10
Acf. CHIEF, BUREAU OF ENGINEERING — DATE 11/5/10
CHIEF, BUREAU OF HIGHWAYS — DATE 11-5-10

PREPARED BY
URS
4 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
TEL: (410) 785-7220

STATE OF MARYLAND — DAVID THOMAS MORICONI — REG. NO. 21581 — REGISTERED PROFESSIONAL ENGINEER — 11/5/10

DES: DTM	1	AS-BUILT		4/2013
DRN: BJK				
CHK: DTM				
DATE: 10/2010	BY	NO.	REVISION	DATE

PLAN, PIPE PROFILE AND DETAILS

SCALE MAP NO. ____ BLOCK NO. ____

PIPE REPAIR
8255 PATUXENT RANGE ROAD
ELECTION DISTRICT NO. 1 - JESSUP, MARYLAND
CAPITAL PROJECT D-1125

SCALE AS SHOWN

SHEET 2 OF 3

FILE NAME: O:\20834583\CAD\PlanSet\pDP-0000_HoCo.dwg PLOTTED: Friday, November 05, 2010 - 8:02am USER: chris_fleming

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG–LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER 3 INCHES OF SOIL BY RAKING, DISCING, OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. IF NOT PREVIOUSLY LOOSENED.

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

1. PREFERRED – APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS. PER 1,000 SQUARE FEET) AND 600 LBS. PER ACRE 10–10–10 FERTILIZER (14 LBS. PER 1,000 SQUARE FEET) BEFORE SEEDING. HARROW OR DISC INTO UPPER 3 INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30–0–0 UREAFORM FERTILIZER (9 LBS. PER 1,000 SQUARE FEET).
2. ACCEPTABLE – APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS. PER 1,000 SQUARE FEET) AND 1,000 LBS. PER ACRE 10–10–10 FERTILIZER (23 LBS. PER 1,000 SQUARE FEET) BEFORE SEEDING. HARROW OR DISC INTO UPPER 3 INCHES OF SOIL.

SEEDING: FOR THE PERIOD MARCH 1 THROUGH APRIL 30 AND FROM AUGUST 1 THROUGH OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS. PER 1,000 SQUARE FEET) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 60 LBS. KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (0.05 LBS. PER 1,000 SQUARE FEET) OF WEEPING LOVEGRASS. DURING THE PERIOD OCTOBER 16 THROUGH FEBRUARY 28, PROTECT SITE BY ONE OF THE FOLLOWING OPTIONS:

1. 2 TONS PER ACRE OF WELL–ANCHORED MULCH STRAW AND SEED AS SOON AS POSSIBLE IN THE SPRING.
2. USE SOD.
3. SEED WITH 60 LBS. PER ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS PER ACRE WELL ANCHORED STRAW.

MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS. PER 1,000 SQUARE FEET) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GALLONS PER 1,000 SQUARE FEET) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES, 8 FEET OR HIGHER, USE 347 GALLONS PER ACRE (8 GALLONS PER 1,000 SQUARE FEET) FOR ANCHORING.

MAINTENANCE: INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS, AND RESEEDINGS.

TEMPORARY SEEDING NOTES

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

SEEDBED PREPARATION: LOOSEN UPPER 3 INCHES OF SOIL BY RAKING, DISCING, OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

SOIL AMENDMENTS: APPLY 600 LBS. PER ACRE 10–10–10 FERTILIZER (14 LBS. PER 1,000 SQUARE FEET).

SEEDING: FOR PERIODS MARCH 1 THROUGH APRIL 30 AND FROM AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 2 1/2 BUSHELS PER ACRE OF ANNUAL RYE (3.2 LBS. PER 1,000 SQUARE FEET). FOR THE PERIOD MAY 1 THROUGH AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WEEPING LOVEGRASS (0.07 LBS. PER 1,000 SQUARE FEET). FOR THE PERIOD NOVEMBER 16 THROUGH FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING OR USE SOD.

MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS. PER 1,000 SQUARE FEET) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GALLONS PER 1,000 SQUARE FEET) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES, 8 FEET OR HIGHER, USE 347 GALLONS PER ACRE (8 GALLONS PER 1,000 SQUARE FEET) FOR ANCHORING. REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

REFER TO THE "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" FOR ADDITIONAL RATES AND METHODS NOT COVERD.

SEDIMENT CONTROL NOTES

1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (410–313–1855).
2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.
3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
   A. 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3:1.
   B. 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THE PERIMETER IN ACCORDANCE WITH VOLUME 1, CHAPTER 7, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING, SOD, TEMPORARY SEEDING, AND MULCHING (SECTION G).

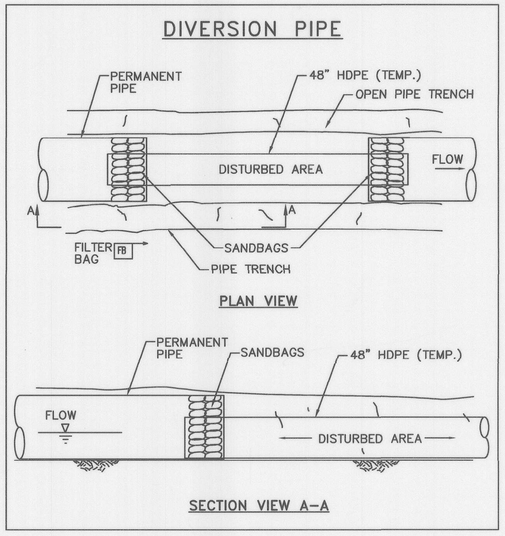
   TEMPORARY STABILIZATION WITH MULCH ALONE SHALL ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THERE REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
7. SITE ANALYSIS:

   TOTAL AREA OF SITE – 0.50 ARCES
   AREA DISTURBED – 0.50 ACRES
   AREAS TO BE ROOFED OR PAVED – 0.00 ACRES
   AREA TO BE VEGETATIVELY STABILIZED – 0.50 ACRES
   TOTAL CUT – 1800 CY
   TOTAL FILL – 1200 CY
   OFF–SITE WASTE SITE – HOWARD COUNTY LANDFILL
   OFF–SITE BORROW SITE – APPROVED SITE WITH AN ACTIVE GRADING PERMIT
8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
9. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED. IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
10. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
11. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
12. SITE GRADING WILL BEGIN ONLY AFTER ALL PERIMETER SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED AND ARE IN A FUNCTIONING CONDITION.
13. SEDIMENT WILL BE REMOVED FROM TRAPS WHEN ITS DEPTH REACHES CLEAN OUT ELEVATION SHOWN ON THE PLANS.
14. CUT AND FILL QUANTITIES PROVIDED UNDER SITE ANALYSIS DO NOT REPRESENT BID QUANTITIES. THESE QUANTITIES DO NOT DISTINGUISH BETWEEN TOPSOIL, STRUCTURAL FILL OR EMBANKMENT MATERIAL, NOR DO THEY REFLECT CONSIDERATION OF UNDERCUTTING OR REMOVAL OF UNSUITABLE MATERIAL. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH SITE CONDITIONS WHICH MAY AFFECT THE WORK.
15. CONSTRUCTION WITHIN, ALONG OR ACROSS STREAM CHANNELS SHALL, AS A MINIMUM, CONFIRM TO CRITERIA DESCRIBED UNDER "MARYLAND'S WATERWAY CONSTRUCTION GUIDELINES."

SEQUENCE OF CONSTRUCTION

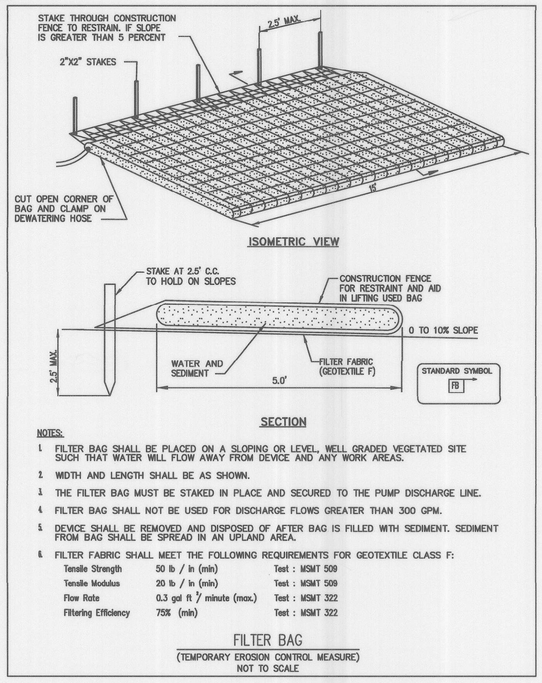
1. OBTAIN THE NECESSARY GRADING PERMITS PRIOR TO CONSTRUCTION (1 DAY).
2. NOTIFY HOWARD COUNTY AT 410–313–1855 AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION (1 DAY).
3. WITH THE APPROVAL OF THE INSPECTOR, INSTALL STABILIZED CONSTRUCTION ENTRANCES, SILT FENCES, SUPER SILT FENCES AND INLET PROTECTION. THIS WILL INCLUDE THE REMOVAL OF VEGETATION WITHIN THE LIMITS OF DISTURBANCE BY MOWING AND MINOR CLEARING AND GRUBBING OF SMALL WOODY VEGETATION. (2 DAYS)
4. INSTALL MEASURES TO PROTECT THE RAILROAD SIDING AS DIRECTED BY THE COUNTY. THE RAILROAD SIDING SHALL BE PROTECTED TO THE MAXIMUM EXTENT PRACTICAL. (2 DAYS)
5. EXCAVATION PIPE TRENCH BEGINNING WITH DOWNSTREAM END OF 84–INCH CMP TO BE REMOVED. INSTALL TRENCH SUPPORT SYSTEM. EXCAVATE FOR PROPER BEDDING, AND INSTALL NEW PIPE. CONNECT PER MANUFACTURER SPECIFICATIONS AND AS DIRECTED BY THE COUNTY. THE PROPOSED MANHOLE ACCESS NO. 1 SHALL BE A MINIMUM OF 36–INCHES IN DIAMETER WITH A GAGE AND CORRUGATION COMPATIBLE WITH THE 84–INCH PIPE. DURING NON–WORKING PERIODS, PLACE A 48–INCH HDPE IN THE PIPE TRENCH, BETWEEN THE 84–INCH PIPES AND SECURE WITH SANDBAGS AT THE ENDS. SEE DETAIL. (8 DAYS)
6. BACKFILL TRENCH USING PROPER COMPACTION TECHNIQUES AS OUTLINED IN THE SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS. STABILIZE THE SURFACE WITH 4–INCHES OF SALVAGED TOPSOIL, SEED AND MULCH. (1 DAY)
7. EXCAVATION PIPE TRENCH BEGINNING WITH DOWNSTREAM END OF 72–INCH CMP TO BE REMOVED. INSTALL TRENCH SUPPORT SYSTEM. EXCAVATE FOR PROPER BEDDING, AND INSTALL NEW PIPE. CONNECT PER MANUFACTURER SPECIFICATIONS AND AS DIRECTED BY THE COUNTY. THE PROPOSED MANHOLE ACCESS NO. 2 SHALL BE A MINIMUM OF 48–INCHES AT THE BASE AND 36–INCH MINIMUM AT THE FRAME AND COVER. MANHOLE ACCESS NO. 2 SHALL BE PRECAST CONCRETE (4 DAYS)
8. BACKFILL TRENCH USING PROPER COMPACTION TECHNIQUES AS OUTLINED IN THE SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS. STABILIZE THE SURFACE WITH 4–INCHES OF SALVAGED TOPSOIL, SEED AND MULCH. (1 DAY)
9. PREPARE PIPE FOR GUNITE AND INVERT GROUT TREATMENT. PLACE GUNITE IN PIPE BEGINNING AT THE UPSTREAM END OF THE PIPE AND PROGRESS DOWNSTREAM. WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS. A MINIMUM OF 3–INCH OF GUNITE SHALL BE APPLIED TO THE INTERIOR OF THE PIPE CIRCUMFERENCE. WORK WILL ONLY BE PERFORMED ON DRY WEATHER DAYS
10. REMOVE ALL MATERIAL PROTECTING THE RAILROAD SIDING. STABILIZE WITH BALLAST STONE, TOPSOIL, SEED AND MULCH AS DIRECTED BY THE COUNTY. (2 DAYS)
11. WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL REMAINING SEDIMENT CONTROL DEVICES AND COMPLETE THE FINAL STABILIZATION. (2 DAYS)

DIVERSION PIPE



PLAN VIEW

SECTION VIEW A–A



ISOMETRIC VIEW

SECTION

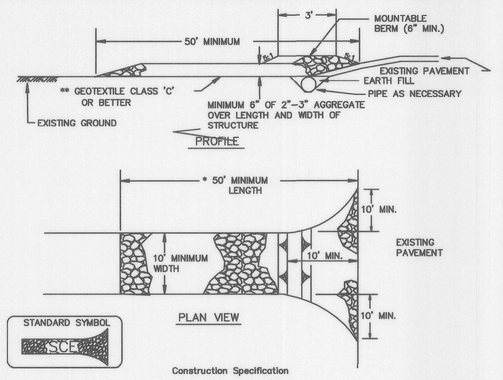
NOTES:

1. FILTER BAG SHALL BE PLACED ON A SLOPING OR LEVEL, WELL GRADED VEGETATED SITE SUCH THAT WATER WILL FLOW AWAY FROM DEVICE AND ANY WORK AREAS.
2. WIDTH AND LENGTH SHALL BE AS SHOWN.
3. THE FILTER BAG MUST BE STAKED IN PLACE AND SECURED TO THE PUMP DISCHARGE LINE.
4. FILTER BAG SHALL NOT BE USED FOR DISCHARGE FLOWS GREATER THAN 300 GPM.
5. DEVICE SHALL BE REMOVED AND DISPOSED OF AFTER BAG IS FILLED WITH SEDIMENT. SEDIMENT FROM BAG SHALL BE SPREAD IN AN UPLAND AREA.
6. FILTER FABRIC SHALL MEET THE FOLLOWING REQUIREMENTS FOR GEOTEXTILE CLASS F:

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

FILTER BAG
(TEMPORARY EROSION CONTROL MEASURE)
NOT TO SCALE

DETAIL 24 – STABILIZED CONSTRUCTION ENTRANCE



Construction Specification

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

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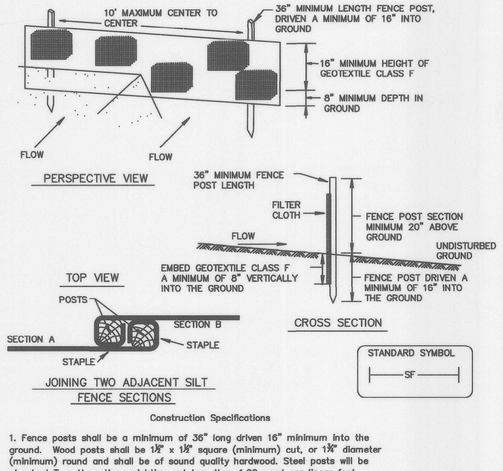
DETAIL 22 – SILT FENCE



Construction Specifications

1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1½" x 1½" square (minimum) cut, or 1¾" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.
2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid–section and shall meet the following requirements for Geotextile Class F:

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

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

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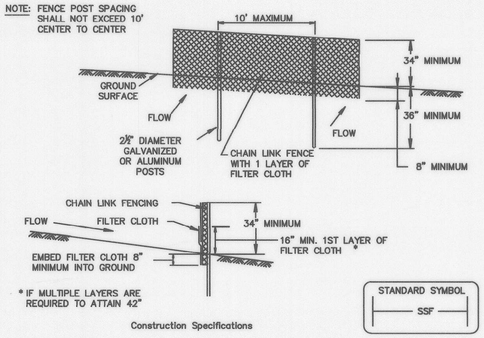
DETAIL 33 – SUPER SILT FENCE



Construction Specifications

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

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

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THESE PLANS FOR SOIL EROSION AND SEDIMENT CON
MEET THE REQUIREMENTS OF THE HOWARD SOIL
CONSERVATION DISTRICT. 10.11.05

John R. Robertson /ca 11/5/10
HOWARD SOIL CONSERVATION DISTRICT DATE

ENGINEER'S CERTIFICATE

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

SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) 11-5-10 DATE
DAVID T. MORICONI

DEVELOPER'S CERTIFICATE

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

SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) 11/5/10 DATE
ACTinda

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS — DATE 11/5/10
CHIEF, DIVISION OF TRANSPORTATION AND SPECIAL PROJECTS — DATE 11/5/10
ACTING CHIEF, BUREAU OF ENGINEERING — DATE 11/5/10
CHIEF, BUREAU OF HIGHWAYS — DATE 11-5-10

PREPARED BY
URS
4 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
TEL: (410) 785–7220

STATE OF MARYLAND DAVID THOMAS MORICONI 21580 REGISTERED PROFESSIONAL ENGINEER 11-5-10

DES:				
DRN: BJK				
CHK: DTM				
DATE: 10/2010	BY	NO.	REVISION	DATE
	DTM	1	AS-BUILT	4/13

SCALE MAP NO. _____ BLOCK NO. ____–____

EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

PIPE REPAIR
8255 PATUXENT RANGE ROAD

ELECTION DISTRICT NO. 1 – JESSUP, MARYLAND
CAPITAL PROJECT D–1125

SC
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FILE NAME: O:\20834583\CAD\PlanSet\pES–N001_HoCo.dwg PLOTTED: Friday, November 05, 2010 – 8:03am USER: chris_fle