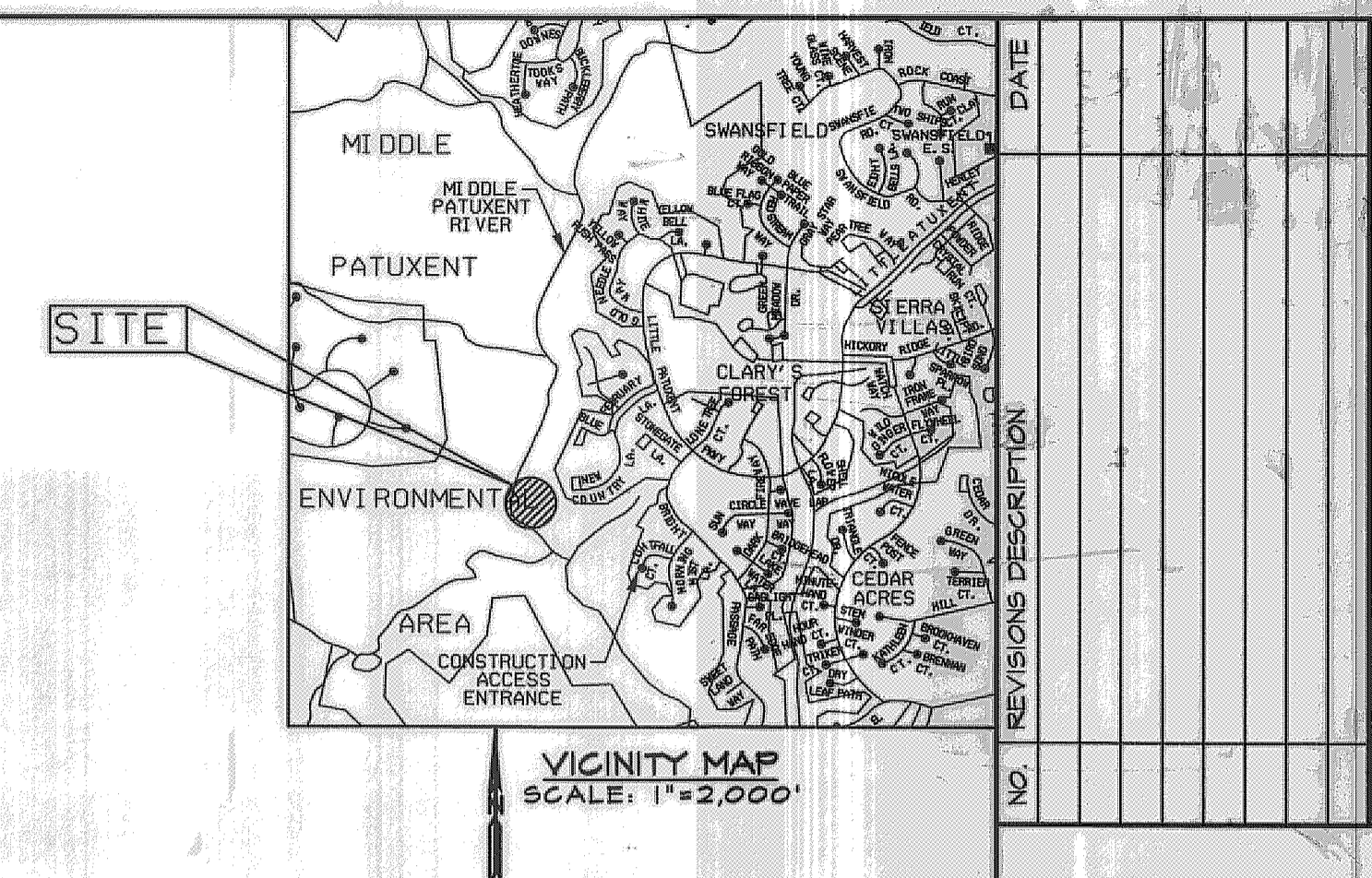


NEW COUNTRY LANE STORMWATER OUTFALL REPAIR PROJECT HOWARD COUNTY, MARYLAND CAPITAL PROJECT NO. D-1125



LEGEND	
	EXIST. TREES
	EXIST. MAJOR CONTOUR
	EXIST. MINOR CONTOUR
	PROP. CONTOURS
	TREE LINE LIMIT
	LIMIT OF DISTURBANCE
	SILT FENCE
	SUPER SILT FENCE
	REMOVABLE PUMPING STATION
	SILT BAG FILTERING DEVICE
	STABILIZED CONSTRUCTION ENTRANCE
	ORANGE SAFETY FENCE
	EXISTING STORM DRAIN
	PROPOSED STORM DRAIN
	PERIMETER DIKE/SWALE
	EXISTING FENCE
	EXISTING EDGE OF ROADWAY
	EDGE OF WETLAND
	WATERS OF THE U.S.
	OPEN WATER
	DATA COLLECTION POINT
	SOILS BOUNDARY
	PUMP
	PROPERTY LINE
	EASEMENT LINE
	TREE TO BE REMOVED
	AT GRADE INLET PROTECTION

INDEX OF SHEETS		
SHEET	SHEET NO.	DESCRIPTION
T-1	1	TITLE SHEET
PL-1	2	STORMWATER PLAN
PR-1	3	STORMWATER PROFILE
DE-1	4	STORMWATER NOTES AND DETAILS
ES-1	5	SEDIMENT AND EROSION CONTROL PLAN
ES-2	6	SEDIMENT CONTROL NOTES AND DETAILS
ES-3	7	CONSTRUCTION ACCESS PLAN

SITE ANALYSIS DATA CHART

- PROJECT AREA: 0.40 ACRES.
- LIMIT OF CONSTRUCTION SITE DISTURBED AREA: 0.40 ACRES (17,400 SF).
- AREA OF CONSTRUCTION ACCESS: 1.45 ACRES (63,200 SF)
- PRESENT ZONING DESIGNATION: NT, NEW TOWN
- PROPOSED USE FOR THE SITE: EXISTING STORMWATER OUTFALL.

HOWARD COUNTY SURVEY CONTROL			
DESIGNATION	NORTHING	EASTING	ELEVATION
35FA	559266.116	1344682.627	410.329
35AA	560767.714	1335483.852	430.958

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY AND MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS, BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-TITI AT LEAST 5 DAYS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- THE COORDINATES SHOWN HEREON ARE BASED ON HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. BENCHMARKS SHOWN HEREON WERE PROVIDED BY HOWARD COUNTY SURVEY DIVISION AND AB CONSULTANTS. SURVEY DATUMS: NAD 83 (HORIZONTAL) NAVD 88 (VERTICAL).
- EXISTING UTILITIES ARE BASED ON FIELD SURVEYS AND AVAILABLE RECORD DRAWINGS, AND HOWARD COUNTY GIS DATA.
- TOPOGRAPHIC SURVEY OF THE SITE WAS PERFORMED BY AB CONSULTANTS, INC. IN JULY AND OCTOBER 2007. LAND FEATURES, TOPOGRAPHY, BOUNDARY INFORMATION, AND MAPPING FOR THE SITE CONSTRUCTION ACCESS ROUTE IS FROM HOWARD COUNTY GIS DATA.
- NO TRAFFIC STUDY IS REQUIRED FOR THIS PROJECT.
- OBSTRUCTIONS SHOWN ON THIS DRAWING ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY AND KCI TECHNOLOGIES, INC. DOES NOT WARRANT OR GUARANTEE THE CORRECTNESS OR COMPLETENESS OF THE INFORMATION GIVEN. THE CONTRACTOR MUST VERIFY SUCH INFORMATION TO HIS OWN SATISFACTION.
- SHOULD THE CONTRACTOR DISCOVER ANY DISCREPANCIES BETWEEN THE PLANS AND THE FIELD CONDITIONS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY TO RESOLVE THE SITUATION. SHOULD THE CONTRACTOR MAKE FIELD CORRECTIONS OR ADJUSTMENTS WITHOUT NOTIFYING THE ENGINEER, THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR THOSE CHANGES.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO THE CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY.
- EXISTING GROUND AND/OR VEGETATION DISTURBED DURING CONSTRUCTION SHALL BE STABILIZED AND RESTORED UPON COMPLETION OF CONSTRUCTION. THE TRAVELED WAY OF THE SITE CONSTRUCTION ACCESS AND ALL OTHER DISTURBED AREAS SHALL BE STABILIZED WITH PERMANENT VEGETATION AS SPECIFIED ON SHEET 5.
- THE PROPOSED PROJECT IS LOCATED OFF THE WEST END OF NEW COUNTRY LANE.
- EXISTING PROPERTY, EASEMENTS, AND RIGHT-OF-WAYS SHOWN WHERE OBTAINED FROM HOWARD COUNTY RECORD PLATS: PLAT NO'S 5875, 5876, AND 5877 "COLUMBIA VILLAGE OF HICKORY RIDGE, SECTION 3 AREA 6", MAY 7, 1984; PLAT NO'S 7200 AND 7201, "PLAT FOR GRANT OF EASEMENTS, COLUMBIA VILLAGE OF HICKORY RIDGE, SECTION 3 AREA 6", JUNE 5, 1984. THE COUNTY LAND AND SEWER EASEMENTS INVOLVING THE CONSTRUCTION ACCESS ARE LOCATED ON VILLAGE OF HICKORY RIDGE PLAT 7052, JANUARY 1987 AND PLAT 6484, NOVEMBER 1985.
- THIS PROJECT IS EXEMPT FROM THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION. THE EXEMPTION IS FOR THE PROJECT INVOLVING A GRADING PERMIT FOR DEVELOPMENT OF LAND WHICH IS LESS THAN 40,000 SQUARE FEET IN AREA.
- THE STORMWATER DRAINAGE FACILITY SHOWN ON THESE PLANS IS AN EXISTING DRAINAGE SYSTEM FOR NEW COUNTRY LANE.
- CONSTRUCTION ACCESS IS PROVIDED OFF OF LIGHTFALL COURT TO THE SOUTHEAST THROUGH COUNTY LAND ALONG A SEWER EASEMENT. REFER TO SHEET 7, ES-3, CONSTRUCTION ACCESS PLAN.

ENGINEER'S CERTIFICATE

I hereby certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Howard E. Saltzman 11-7-08
SIGNATURE OF THE ENGINEER (PRINT NAME BELOW SIGNATURE) DATE
Howard E. Saltzman

DEVELOPER'S CERTIFICATE

I/We certify that all development and construction will be done according to this plan of development for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspections by the Howard Soil Conservation District.

Howard E. Saltzman 11-7-08
SIGNATURE OF THE DEVELOPER (PRINT NAME BELOW SIGNATURE) DATE
Howard E. Saltzman

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

Sammy J. M. 28634 07-27-2009
SIGNATURE P.E. NO. DATE

Reviewed for HOWARD SCD and meets Technical Requirements.

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

John R. Robertson 11/17/08
HOWARD SCD DATE

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 28634 EXPIRATION DATE: MARCH 26, 2009



NEW COUNTRY LANE STORMWATER OUTFALL REPAIR PROJECT

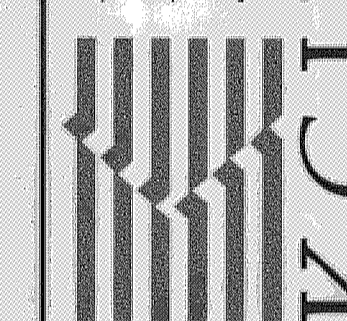
TITLE SHEET

SCALE: AS SHOWN
DATE: 04/02/08
KCI JOB NO.: 01-048228-30
CAPITAL PROJECT NO.: D-1125
PERMIT ISSUE:
CONSTRUCTION ISSUE:

T-1

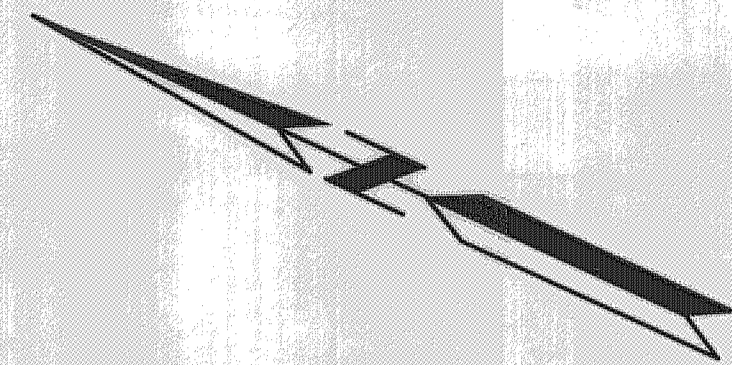
SHEET NO. 1 OF 7

ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS

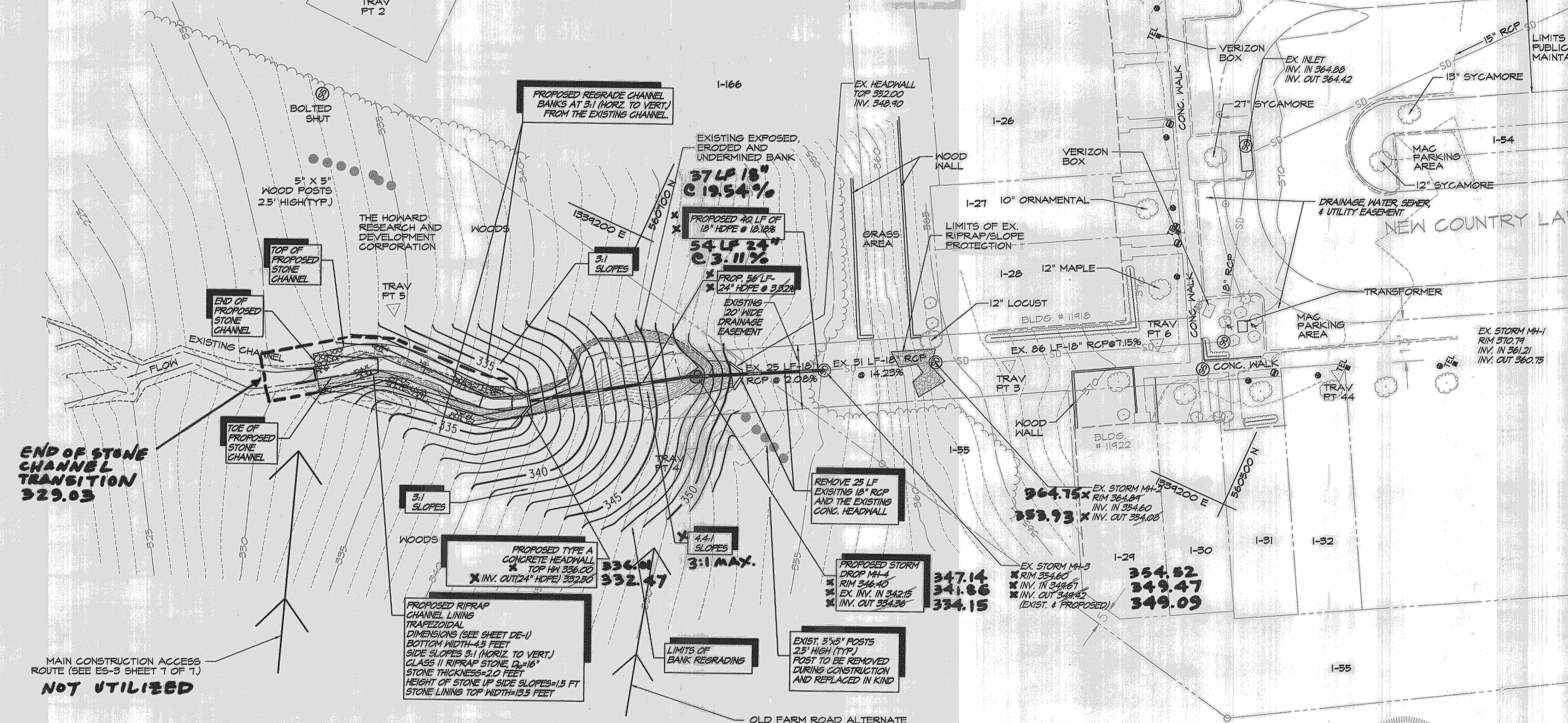


TECHNOLOGIES WWW.KCI.COM

DESIGN PLANS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
STORMWATER MANAGEMENT DIVISION
6 COLUMBIA MARYLAND 21046



BLUE FEBRUARY WAY



END OF STONE CHANNEL TRANSITION 329.03

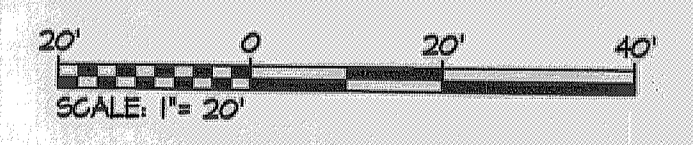
MAIN CONSTRUCTION ACCESS ROUTE (SEE ES-3 SHEET T OF T) NOT UTILIZED

PROPOSED TYPE A CONCRETE HEADWALL
TOP IN 336.00
X INV. OUT 24" HOPE 332.80

PROPOSED STORM DROP MH-4
RIM 346.40
EX INV. IN 342.15
X INV. OUT 344.36

EX STORM MH-3
RIM 354.60
INV. IN 348.67
X INV. OUT 349.42
(EXIST. & PROPOSED)

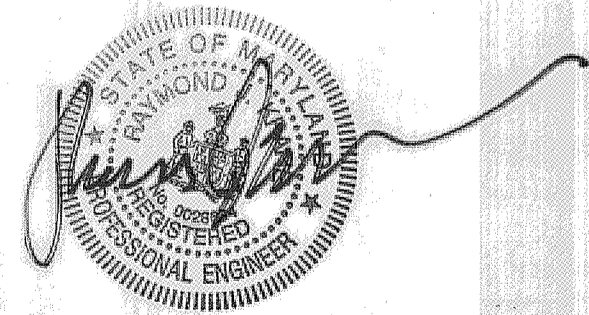
EX STORM MH-3
RIM 354.60
INV. IN 348.67
X INV. OUT 349.42
(EXIST. & PROPOSED)



OLD FARM ROAD ALTERNATE CONSTRUCTION ACCESS ROUTE IF THE MAIN ACCESS ROUTE AND STONE DRIVE FAIL, AND AS DIRECTED BY THE COUNTY PROJECT MANAGER. (SEE ES-3 SHEET T OF T)

Reviewed for HOWARD SCD and meets Technical Requirements.
This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
HOWARD SCD
DATE

PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 28634 EXPIRATION DATE: MARCH 26, 2009
AS-BUILT SURVEY CERTIFIED BY CHARLES ANTHONY MUELLER, MD REG. LS # 11038, 03-2009 FINAL 07-27-2009



NO.	REVISIONS DESCRIPTION	DATE

ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS
KCI
TECHNOLOGIES www.kci.com

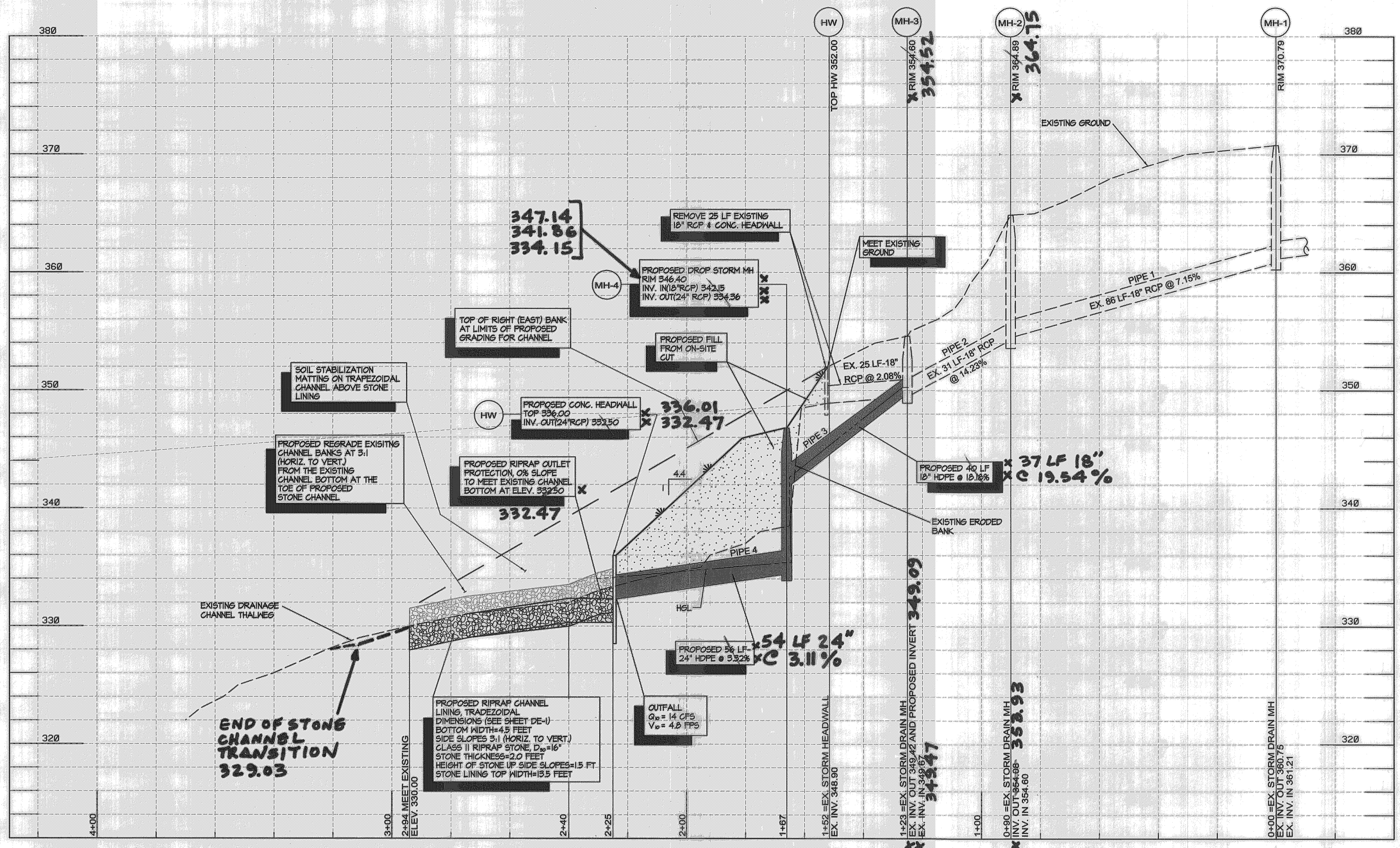
NEW COUNTRY LANE STORMWATER OUTFALL REPAIR PROJECT
DESIGN PLANS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
STORMWATER MANAGEMENT DIVISION
6781 COLUMBIA GATEWAY DRIVE
COLUMBIA, MARYLAND 21046

SCALE:	1" = 20'
DATE:	01/02/08
KCI JOB NO.:	01-04822530
CAPITAL PROJECT NO.:	D-1125
PERMIT ISSUE:	
CONSTRUCTION ISSUE:	

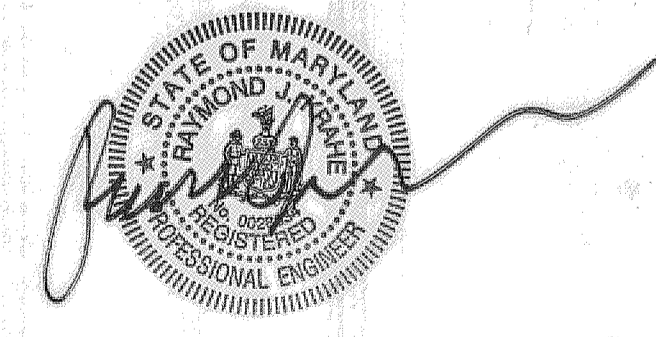
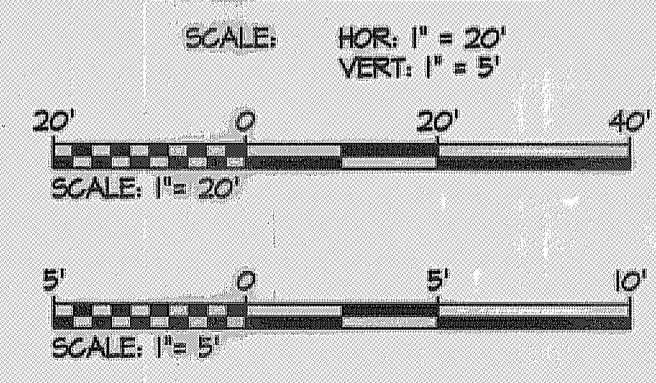
PL-1
SHEET NO. 2 OF 7

AS-BUILT 03-03-2009

KCI FILE: M1 2004 \ 0104822530 \ DRAWINGS



DRAINAGE PROFILE



PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 28634 EXPIRATION DATE: MARCH 26, 2009.

AS-BUILT SURVEY CERTIFIED BY CHARLES ANTHONY MUELLER, MD REG. LS # 11036, 03-03-2009 FINAL 07-27-2009

NO.	REVISIONS DESCRIPTION	DATE

ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS

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**NEW COUNTRY LANE STORMWATER
OUTFALL REPAIR PROJECT**

DESIGN PLANS

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
STORMWATER MANAGEMENT DIVISION
6701 COLUMBIA GATEWAY DRIVE
COLUMBIA, MARYLAND 21046

STORMWATER PROFILE

SCALE:	AS SHOWN
DATE:	09/02/08
KCI JOB NO.:	01-045223.50
CAPITAL PROJECT NO.:	D-1125
PERMIT ISSUE:	
CONSTRUCTION ISSUE:	

PR-1
SHEET NO. 3 OF 7

AS-BUILT 03-03-2009

Reviewed for HOWARD SCD and meets Technical Requirements.

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SCD

DATE

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HOWARD COUNTY SOIL CONSERVATION DISTRICT
STANDARD SEDIMENT CONTROL NOTES

- A MINIMUM OF 5 DAYS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (318-1855).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE CURRENT MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 5:1, B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 51), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:
TOTAL AREA OF CONSTRUCTION SITE 0.40 ACRES (1,400 SF)
AREA DISTURBED 0.40 ACRES (1,400 SF)
AREA TO BE STONE LINED 0.02 ACRES
AREA TO BE VEGETATIVELY STABILIZED 0.42 ACRES
AREA OF CONSTRUCTION ACCESS 1.45 ACRES (63,200 SF)
TOTAL AREA 1.85 ACRES
TOTAL CUT 254 CU. YDS.
TOTAL FILL 254 CU. YDS.
OFFSITE WASTE/BORROW AREA LOCATION N/A
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS AND SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORK DAY.
- OFFSITE WASTE/BORROW SITE SHALL HAVE AN APPROVED SEDIMENT CONTROL PLAN. REFER TO SHEET 1 OF 1, 155-5 FOR CONSTRUCTION ACCESS PLAN. THE CONSTRUCTION ACCESS ROUTE IS ON COUNTY LANDS ALONG THE SEWER EASEMENT. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.

TEMPORARY SEEDING SUMMARY

SEED MIXTURE (HARDNESS ZONE 6B) FROM TABLE 26					FERTILIZER RATE (10-10-10)	LIME RATE
NO.	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS		
1	RYE	140	3/1-4/30 8/15-11/15	1-2 INCH	600 LB/AC (15 LB/1000 SF)	2 tons/ac (100 LB/1000 SF)
2	RYE PLUS FOXTAIL MILLET	150	3/1-4/30 5/1-8/14 8/15-11/15	1 INCH		

PERMANENT SEEDING SUMMARY - NON-GRADED AREAS*

SEED MIXTURE (HARDNESS ZONE 6B) FROM TABLE 25					FERTILIZER RATE (10-20-20)			LIME RATE
NO.	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS	N	P205	K20	
1	TALL FESCUE (85%) PERENNIAL RYEGRASS (10%) KENTUCKY BLUEGRASS (5%)	125 15 10	3/1-5/15 8/15-10/15	1-2 INCH	90 LB/AC (2.0 LB/1000 SF)	175 lb/ac (4.0 LB/1000 SF)	175 lb/ac (4.0 LB/1000 SF)	2 tons/ac (100 LB/1000 SF)
2	WEEPING LOVEGRASS (3%) TALL FESCUE (97%)	113	5/16-8/14	1-2 INCH				

* FOR PERMANENT LANDSCAPING AND SEEDING OF GRADED SITE AREAS. SEE SEQUENCE OF CONSTRUCTION NOTE NO. 11.

PERMANENT VEGETATIVE STABILIZATION

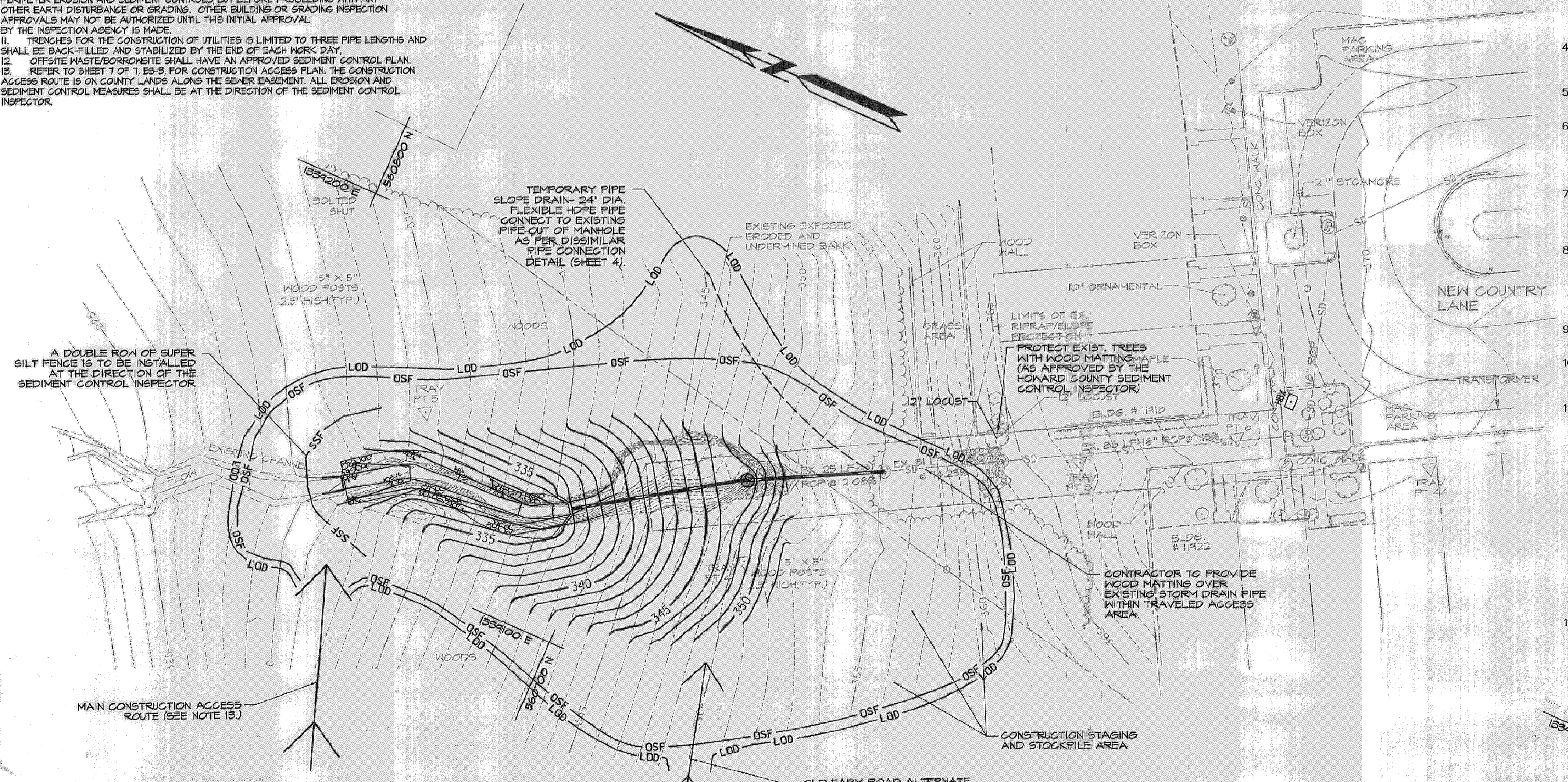
- ALL DISTURBED AREAS, WHICH ARE NOT TO BE PAVED, SHALL BE PERMANENTLY STABILIZED AS FOLLOWS:
- SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES BY RAKING, DISCING, OR OTHER ACCEPTABLE MEANS AFTER SPREADING FOUR INCHES OF TOPSOIL.
 - SOIL AMENDMENTS: APPLY 500 LBS PER ACRE OF 10-10-10 FERTILIZER AND TWO TONS PER ACRE OF LIME.
 - SEEDING: REFER TO THE PERMANENT SEEDING SUMMARY, THIS SHEET.
 - PERMANENT SEEDING AND LANDSCAPING OF GRADED AREAS - REFER TO SEQUENCE OF CONSTRUCTION NOTE NO. 11.
 - MULCHING SPECIFICATIONS: MULCH SHALL BE APPLIED TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING. APPLY 2 TONS PER ACRE OF STRAW OVER ALL SEEDED AREAS. IF A MULCH ANCHORING TOOL IS TO BE USED, THE RATE SHALL BE INCREASED TO 2.5 TONS PER ACRE. MULCH ANCHORING SHALL BE PERFORMED IMMEDIATELY FOLLOWING MULCH APPLICATION TO MINIMIZE LOSS BY WIND AND WATER. THE TYPE OF MULCH ANCHORING USED MUST COMPLY WITH THE 1994 MARYLAND STANDARD AND SPECIFICATIONS.
- ** IF A DIFFERENT TYPE OF MULCH IS TO BE USED, IT MUST COMPLY WITH THE 1994 MARYLAND STANDARD AND SPECIFICATION, CHAPTER 20. **MULCH ANCHORING SHALL BE PERFORMED IMMEDIATELY.

TEMPORARY VEGETATIVE STABILIZATION

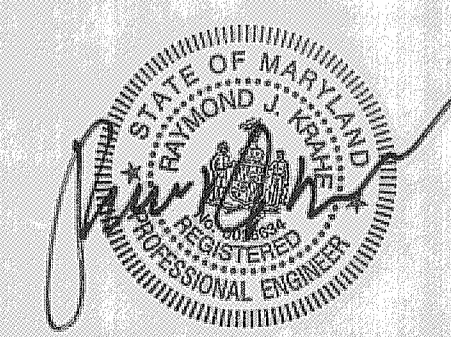
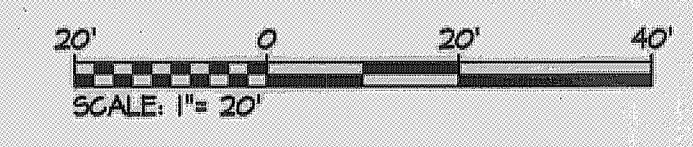
- SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES BY DISCING, RAKING OR OTHER ACCEPTABLE MEANS.
 - SOIL AMENDMENTS: APPLY 600 LBS PER ACRE OF 10-10-10 FERTILIZER AND TWO TONS PER ACRE OF LIME.
 - SEEDING: REFER TO THE TEMPORARY SEEDING SUMMARY, THIS SHEET.
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- ** IF A DIFFERENT TYPE OF MULCH IS TO BE USED, IT MUST COMPLY WITH THE 1994 MARYLAND STANDARD AND SPECIFICATION, CHAPTER 20. **MULCH ANCHORING SHALL BE PERFORMED IMMEDIATELY.

SEQUENCE OF CONSTRUCTION

- OBTAIN THE NECESSARY PERMITS BEFORE CONSTRUCTION. (1 DAY)
- THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 AND THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS / BUREAU OF ENGINEERING / CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AT LEAST 5 DAYS PRIOR TO BEGINNING ANY WORK. (5 DAYS)
- CONTRACTOR SHALL COORDINATE AN ON-SITE PRE-CONSTRUCTION MEETING WHICH SHALL INCLUDE, BUT NOT BE LIMITED TO, THE COUNTY PROJECT MANAGER, THE ENGINEER AND A REPRESENTATIVE FROM THE HOWARD COUNTY CONSTRUCTION INSPECTION DIVISION. (1 DAY)
- MOBILIZE AND PROVIDE EROSION AND SEDIMENT CONTROL FOR THE SITE CONSTRUCTION ACCESS OFF OF LIGHTFALL COURT (SEE NOTE 13.) (2 DAYS.)
- CLEAR AND GRUB FOR CONSTRUCTION AREA AND SEDIMENT AND EROSION CONTROL MEASURES AND DEVICES. (3 DAYS)
- INSTALL THE PERIMETER SEDIMENT CONTROL MEASURES INCLUDING THE ORANGE SAFETY FENCE, SUPER SILT FENCE, WOOD MATTING, AND STABILIZED CONSTRUCTION ENTRANCE AND REMOVE CONCRETE SIDEWALK AND INSTALL AND MAINTAIN TEMPORARY STONE WALK AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN. (5 DAYS)
- EXCAVATE AND REMOVE THE EXISTING STORM DRAINAGE PIPE FROM MANHOLE 3 TO THE HEADWALL (25 LF OF 18-INCH RCP) AND THE EXISTING TYPE A HEADWALL AND APRON. REMOVE FROM THE PROJECT SITE. INSTALL TEMPORARY PIPE SLOPE DRAIN. (5 DAYS)
- EXCAVATE SOIL AND CONSTRUCT DOWNSTREAM RIPRAP STONE CHANNEL TO THE DESIGN GRADE. GRADE CHANNEL SIDE SLOES TO 3:1 (HORIZONTAL TO VERTICAL). INSTALL THE NEW STORM DRAINAGE PIPE SYSTEM: MANHOLE 4; HEADWALL; AND DRAINAGE PIPES FROM EXISTING MH-3 TO MH-4 AND MH-4 TO THE NEW HW AND BACKFILL. (10 DAYS)
- GRADE AND TOPSOIL TO THE PLAN DESIGN GRADE. GRADE SIDE SLOPES TO 3:1 (HORIZONTAL TO VERTICAL) AS SHOWN. (2 DAYS)
- STABILIZE SLOPES APPLY SOIL STABILIZED MATTING, TOPSOIL AND SEED OTHER DISTURBED AREAS. REMOVE TEMPORARY STONE WALK AND CONSTRUCT REPLACEMENT CONCRETE WALK. (3 DAYS)
- LANDSCAPE AND SEED THE GRADED AREA WITH PLANTINGS AND PERMANENT SEED MIX RECOMMENDED BY THE COUNTY:
PERMANENT SEEDING WITHIN THE GRADED AREA
MIX - ANNUAL RYE (LOLIUM MULTIFLORUM) 40% RED TOP (ACROSTIS ALBA) 20% VIRGINIA WILD RYE (ELYMUS VIRGINICUS) 10% SILKY WILD RYE (ELYMUS VILLOSUS) 10% BOTTLEBRUSH GRASS (ELYMUS HYSTRIX) 20% SEED MIX TO BE APPLIED AT A RATE OF 40 LBS PER ACRE; SEEDING DATES - FALL SEEDING - AUGUST TO NOVEMBER, SPRING SEEDING - APRIL TO JUNE; DEPTH - ONE-QUARTER INCH (1/4 INCH); FERTILIZER - NONE; LIME - ONLY IF INDICATED AS NEEDED BY A SOIL TEST.
PERMANENT PLANTING WITHIN THE GRADED AREA REPLANT - NATIVE TREES AND SHRUBS, 5-GALLON CONTAINER STOCK FOR TREES AND 2-GALLON FOR SHRUBS; QUANTITY - 30 TO 35 TREES AND SHRUBS; SPECIES - TULIP POPLAR (LIRIODENDRON TULIPIFERA) RED MAPLE (ACER RUBRUM) RED AND/OR WHITE OAK (QUERCUS RUBRA AND/OR Q. ALBA) SPICEBUSH (LINDERA BENZOIN) BLACKHAW VIBURNUM (VIBURNUM PRUNIFOLIUM)
- UPON COMPLETION OF WORK, REMOVE ALL SEDIMENT CONTROL MEASURES WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR AND STABILIZE ALL DISTURBED AREAS. (7 DAYS)



Reviewed for HOWARD SCD and meets Technical Requirements.
This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
John R. Robertson
HOWARD SCD
DATE 11/17/08



PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 28634 EXPIRATION DATE: MARCH 26, 2009

NO.	REVISIONS DESCRIPTION	DATE

DESIGN PLANS
NEW COUNTRY LANE STORMWATER
OUTFALL REPAIR PROJECT

SEDIMENT & EROSION CONTROL PLAN

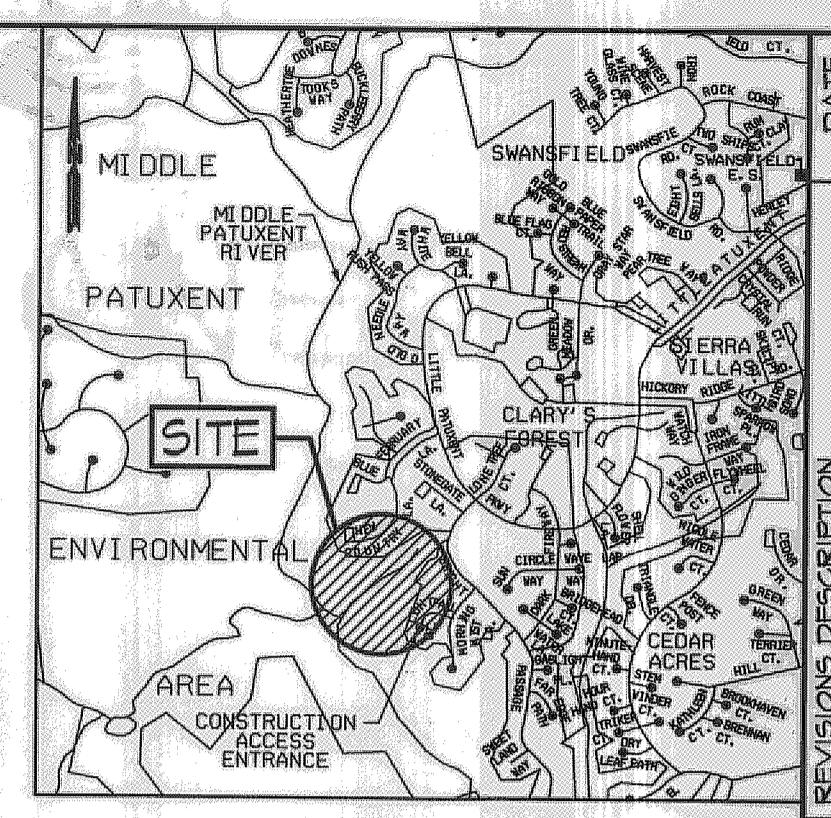
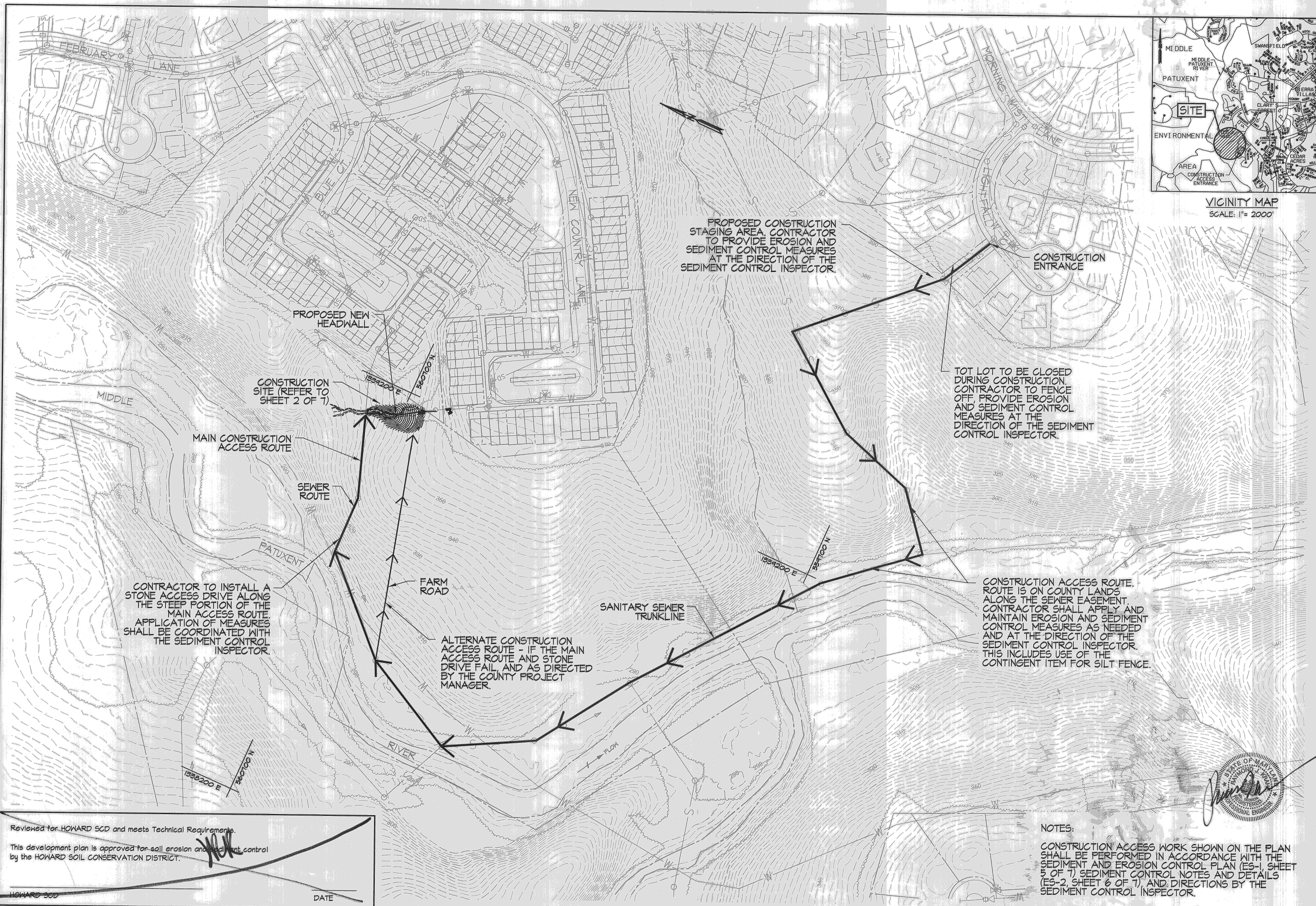
SCALE: AS SHOWN
DATE: 09/02/08
KCI JOB NO.: 01-043223-30
CAPITAL PROJECT NO.: D-1125
CONSTRUCTION ISSUE:

ES-1
SHEET NO. 5 OF 7

ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS

KCI TECHNOLOGIES www.kci.com

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
5701 COUNTRY GATEWAY DRIVE
COLUMBIA, MARYLAND 21046



VICINITY MAP
SCALE: 1" = 2000'

PROPOSED CONSTRUCTION STAGING AREA. CONTRACTOR TO PROVIDE EROSION AND SEDIMENT CONTROL MEASURES AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.

TOT LOT TO BE CLOSED DURING CONSTRUCTION. CONTRACTOR TO FENCE OFF, PROVIDE EROSION AND SEDIMENT CONTROL MEASURES AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.

CONTRACTOR TO INSTALL A STONE ACCESS DRIVE ALONG THE STEEP PORTION OF THE MAIN ACCESS ROUTE. APPLICATION OF MEASURES SHALL BE COORDINATED WITH THE SEDIMENT CONTROL INSPECTOR.

ALTERNATE CONSTRUCTION ACCESS ROUTE - IF THE MAIN ACCESS ROUTE AND STONE DRIVE FAIL, AND AS DIRECTED BY THE COUNTY PROJECT MANAGER.

CONSTRUCTION ACCESS ROUTE. ROUTE IS ON COUNTY LANDS ALONG THE SEWER EASEMENT. CONTRACTOR SHALL APPLY AND MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES AS NEEDED AND AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR. THIS INCLUDES USE OF THE CONTINGENT ITEM FOR SILT FENCE.

NO.	REVISIONS DESCRIPTION	DATE

ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS

KCI TECHNOLOGIES - WWW.KCI.COM

NEW COUNTRY LANE STORMWATER
OUTFALL REPAIR PROJECT

DESIGN PLANS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
STORMWATER MANAGEMENT DIVISION
6751 COLUMBIA GATEWAY DRIVE
COLUMBIA, MARYLAND 21046

CONSTRUCTION ACCESS PLAN

SCALE: 1" = 100'

DATE: 09/02/08

RGI JOB NO.: 01-043223-30

CAPITAL PROJECT NO.: D-125

PERMIT ISSUE: CONSTRUCTION ISSUE:

ES-3
SHEET NO. 7 OF 7

Reviewed for HOWARD SCD and meets Technical Requirements.

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SCD

DATE

NOTES:
CONSTRUCTION ACCESS WORK SHOWN ON THE PLAN SHALL BE PERFORMED IN ACCORDANCE WITH THE SEDIMENT AND EROSION CONTROL PLAN (ES-1, SHEET 5 OF 7) SEDIMENT CONTROL PLAN (ES-1, SHEET 5 OF 7) SEDIMENT CONTROL NOTES AND DETAILS (ES-2, SHEET 6 OF 7), AND DIRECTIONS BY THE SEDIMENT CONTROL INSPECTOR.

