

SITE DEVELOPMENT PLANS

CAMPUS ROAD RELOCATION AND PARKING EXPANSION PROJECT

HOWARD COMMUNITY COLLEGE

HOWARD COUNTY, MARYLAND

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410)313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
4. TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
5. ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
6. THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH TWO FOOT CONTOUR INTERVALS PREPARED BY DFI, INC. DATED MARCH 1996.
7. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 8505 AND 2639004 WERE USED FOR THIS PROJECT.
8. WATER IS PRIVATE.
9. SEWER IS PRIVATE.
10. QUANTITY STORMWATER MANAGEMENT IS PROVIDED BY THE EXISTING STORMWATER MANAGEMENT POND LOCATED ON THIS PROPERTY. WATER QUALITY IS PROVIDED BY A STORMCEPTOR® AND THE EXISTING STORMWATER MANAGEMENT WET POND.
11. EXISTING UTILITIES ARE BASED ON FIELD LOCATED UTILITIES AND ASBUILT INFORMATION PROVIDED BY THE APPROPRIATE UTILITY COMPANY OR HOWARD COMMUNITY COLLEGE.
12. THE FLOODPLAIN STUDY WAS PREPARED BY DFI, INC. DATED OCTOBER, 1996 INCLUDED HEREIN AND WAS APPROVED ON NOVEMBER 26, 1996.
13. THE WETLANDS DELINEATION STUDY FOR THIS PROJECT WAS PREPARED BY DFI, INC. DATED MARCH 1996, AND WAS APPROVED ON NOVEMBER 26, 1996.
14. NO TRAFFIC STUDY IS REQUIRED FOR THIS PROJECT.
15. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS & SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
16. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
17. FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
18. TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED OUTSIDE THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
19. MARYLAND DEPARTMENT OF THE ENVIRONMENT TRACKING# No. 199760299.
20. MDE - NON-TIDAL WETLANDS AND WATERWAY DIVISION FILE NO. 96-NT-1022.
21. WAIVER PETITION WP-97-54 WAS APPROVED BY D.R.Z. ON NOVEMBER 27, 1996 TO WAIVE SECTION 16.115(C), PROHIBITING WORK IN A FLOODPLAIN AND SECTION 16.116, PROHIBITING DISTURBANCE OF STREAMS, WETLANDS AND STEEP SLOPES ON THE CONDITION OF THE OWNER OBTAINING THE REQUIRED STATE AND FEDERAL PERMITS.

SITE ANALYSIS

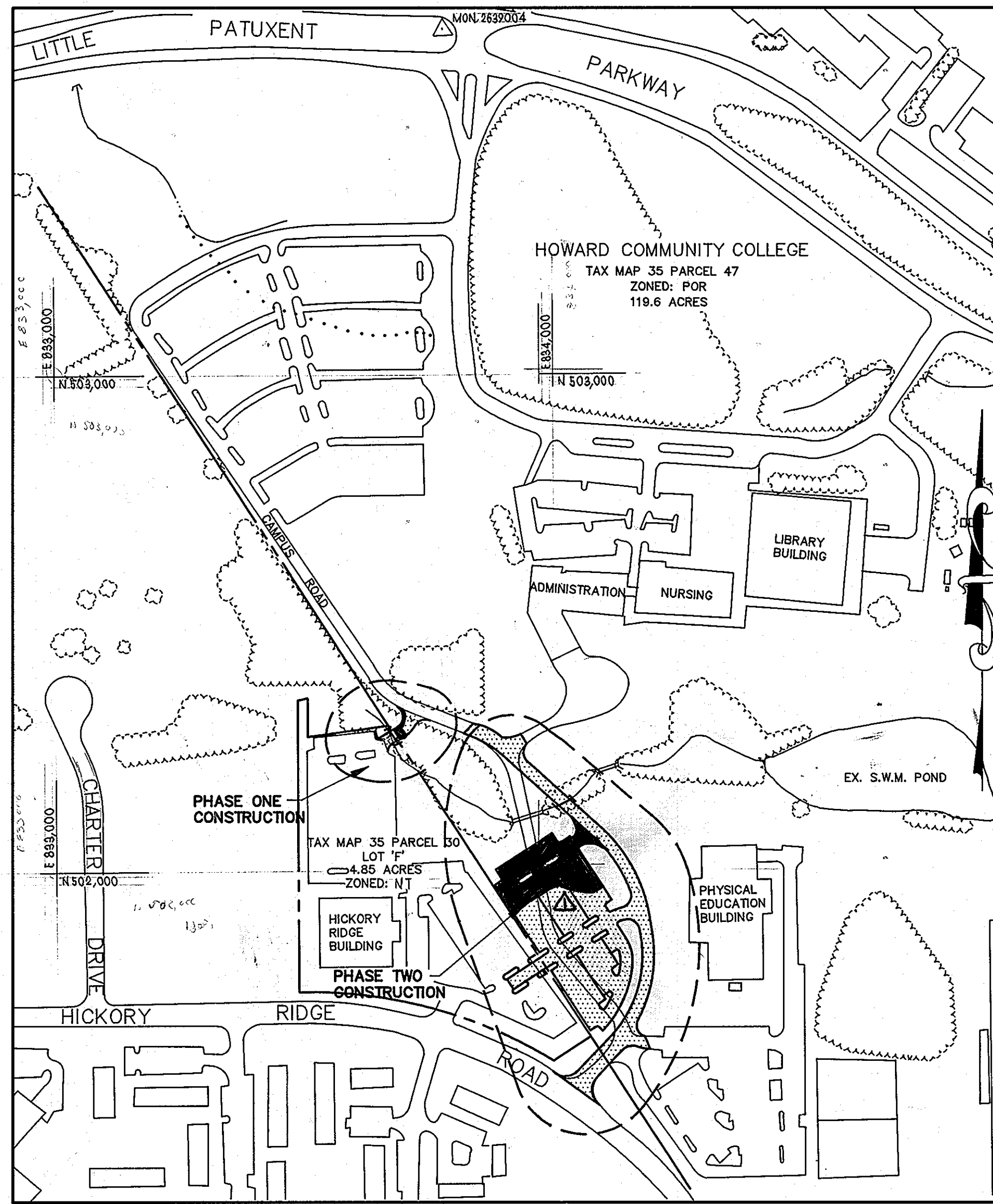
- A. AREA OF PARCEL: (P.47) 119.6 Ac. (P.F) 4.848 Ac. (TOTAL) 124.65 Ac.
- B. PRESENT ZONING: (P.47) POR (P.F) NEW TOWN COMMERCIAL
- C. PROPOSED USE OF STRUCTURE(S): COMMUNITY COLLEGE (EXISTING)
- D. NUMBER OF EXISTING PARKING SPACES:
 PARCEL 47 - 1866 SPACES (INCLUDING 75 HC SPACES)
 PARCEL F - 915 SPACES (INCLUDING 20 HC SPACES) [900± STUDENTS ± 3± 300 SPACES REQUIRED]
- E. EXISTING PARKING SPACES TO BE REMOVED:
 PARCEL 47 - 0 SPACES
 PARCEL F - 21 SPACES
- F. NUMBER OF PARKING SPACES PROPOSED TO BE ADDED:
 PARCEL 47 - 153 SPACES
 PARCEL F - 3 HC SPACES
- G. OTHER RELEVANT INFORMATION:
 NO BUILDING ADDITION/EXPANSION PROPOSED
- H. PREVIOUS RELATED PLAT, AND CASE FILE NUMBERS, DATED AND DETAILS:
 PARCEL 47:
 1. SDP 91-88 PARKING LOT EXPANSION AND SITE AMENITIES 12/90
 2. SDP 87-95 TO SDP 76-30 BUILDING ADDITION 12-09-87
 3. SDP 75-46 - PHYSICAL EDUCATION FACILITY
 4. SDP 76-30 - COMM. ARTS/ADM. BUILDING
 5. PB 229 TECHNICAL ARTS BUILDING (PARCEL 47 + 50 10-15-87)
 6. SDP 68-12 - NO ORIGINAL
 7. SDP 75-32 - NURSE EDUCATION BUILDING
 PARCEL F:
 1. SDP 82-65c GENERAL PHYSICS OFFICE BUILDING 5-11-82
 2. FDP-177-A-1

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. 31029 EXPIRATION DATE: 11-21-10

SETBACKS

PARCEL 47: 30' MIN FROM BUILDING TO PUBLIC R/W
 PARCEL F: 50' MIN FROM BUILDING TO PUBLIC R/W
 TOTAL DISTURBANCE TO PARCEL F: 13,973 ± S.F.

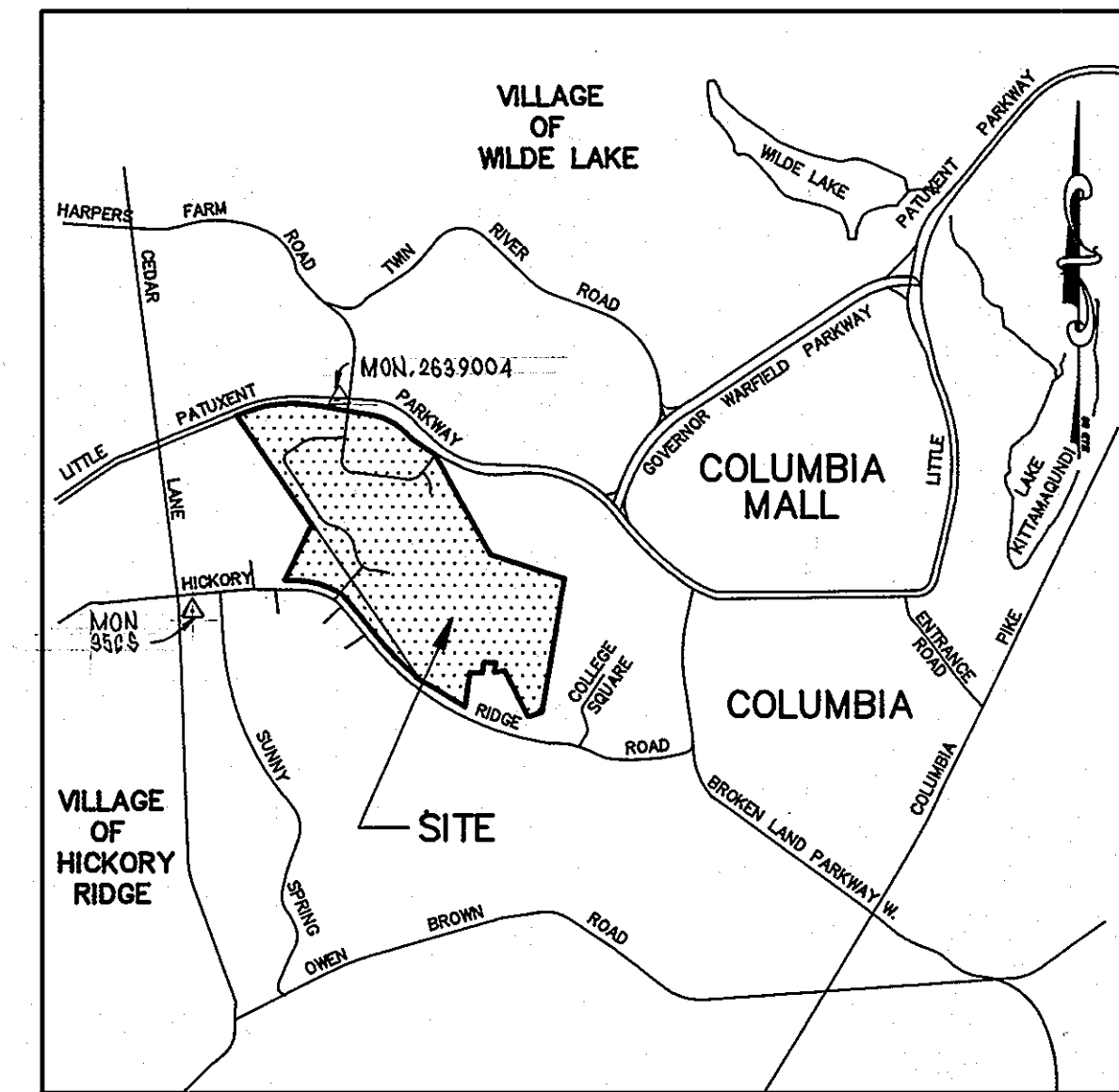
NOTE: NEW SEAL AND SIGNATURE ARE APPLICABLE ONLY TO REVISIONS.



LOCATION MAP
SCALE: 1"=200'

PERMIT INFORMATION CHART				
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL#		
COLUMBIA TOWN CENTER	SECTION 8, AREA 4	LOT F PARCEL 50		
PLAT# 4804	BLOCK# 12	ZONE N.T. COMM	TAX/ZONE MAP 35	ELECT. DISTR 5
WATER CODE 107			CENSUS TRACT 6053.02	
10501 Little Patuxent Parkway				

PERMIT INFORMATION CHART				
SUBDIVISION NAME	AREA	PARCEL#		
HOWARD COMMUNITY COLLEGE	N/A	47		
L/F 486/224	BLOCK# 6 & 1	ZONE POR	TAX/ZONE MAP 35, 36	ELECT. DISTR 5
WATER CODE 107			CENSUS TRACT 6053.02	
SEWER CODE 5522500				



VICINITY MAP
SCALE: 1"=2,000'

LIST OF DRAWINGS

SHEET	DESCRIPTION
1	COVER SHEET
2	DEMOLITION PLAN
3	DEMOLITION PLAN
4	SITE DEVELOPMENT PLAN
5	SITE DEVELOPMENT PLAN
6	SITE DEVELOPMENT PLAN
7	EROSION AND SEDIMENT CONTROL PLAN PHASE ONE
8	EROSION AND SEDIMENT CONTROL PLAN PHASE TWO
9	EROSION AND SEDIMENT CONTROL PLAN PHASE TWO
10	EROSION AND SEDIMENT CONTROL PLAN
11	EROSION AND SEDIMENT CONTROL DETAILS
12	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS
13	ROAD PROFILES AND TYPICAL SECTION
14	STORM DRAIN PROFILES
15	STORM DRAIN AND STORM WATER MANAGEMENT PROFILES AND DETAILS
16	STORM DRAIN AND STORM WATER MANAGEMENT DETAILS
17	DRAINAGE AREA MAP
18	DRAINAGE AREA MAPS
19	TRAFFIC CONTROL PLAN - PHASE TWO CONSTRUCTION
20	LANDSCAPING PLANS
21	LANDSCAPING PLANS
22	LANDSCAPING PLANS
23	ELECTRICAL PLANS
24	PART ELECTRICAL PLAN AND ELECTRICAL DETAILS

DEVELOPER'S CERTIFICATION

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

DR. DWIGHT BURRILL, PRESIDENT
 HOWARD COMMUNITY COLLEGE
 DATE 10/21/96

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 31029 EXPIRATION DATE: 11-21-10"

DATE 10-21-96
 PROFESSIONAL ENGINEER
 STATE OF MARYLAND
 LICENSE NO. 31029
 EXPIRATION DATE: 11-21-10

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

DATE 2/24/97
 U.S.D.A. NATURAL RESOURCES SERVICE

DATE 2/24/97
 APPROVED
 HOWARD S.C.D.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

DATE 2/12/97
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE 3/3/97
 CHIEF, DIVISION OF LAND DEVELOPMENT

DATE 3/15/97
 DIRECTOR

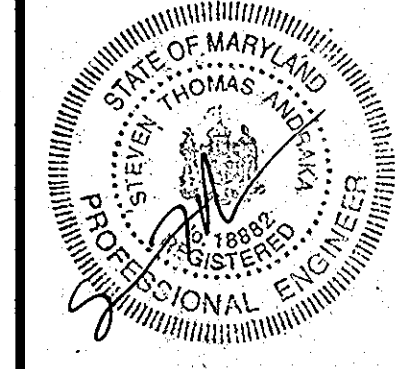
APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY

DATE 12/19/96

DEVELOPER: /OWNER
 KATHLEEN HETHERINGTON, ED. D.
 SECRETARY-TREASURER, PRESIDENT
 HOWARD COMMUNITY COLLEGE
 10901 LITTLE PATUXENT PARKWAY
 COLUMBIA, MD 21044-3197
 (410) 772-4620

DESIGNED			DATE			REVISIONS		
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			
7-26-10	GAH	ADD ENTRANCE / REVISIONS TO EX. PAVING						

CONSULTING ENGINEERS, SURVEYORS, AND LAND PLANNERS
 dfi
 504 BALTIMORE/ANNAPOLIS BOULEVARD
 SEVERNA PARK, MD 21146 (410)647-2727
 FAX (410)647-7127



SITE DEVELOPMENT PLANS
 COVER SHEET
 HOWARD COMMUNITY COLLEGE
 ENTRANCE AND PARKING IMPROVEMENTS
 FOR ADJACENT PARKING GARAGE # 2
 (RED-LINE REVISION TO PREVIOUSLY APPROVED CAMPUS ROAD RELOCATION AND PARKING EXPANSION PROJECT)
 JULY 26, 2010
 PARCEL # 47

SHEET
 1
 OF
 24
 SDP 97-45

MATCHLINE SEE SHEET 3

MATCHLINE SEE SHEET 3

HOWARD COMMUNITY COLLEGE
"HICKORY RIDGE BUILDING"
T.M. 35
COLUMBIA TOWN CENTER
SECTION 8, AREA 4
PARCEL "F"

PHYSICAL
EDUCATION
BUILDING

PHASE TWO CONSTRUCTION

HICKORY

RIDGE

ROAD

CORDAGE
WALK

SEE SHEET 6 OF 24 FOR
REVISED DEMOLITION &
SITE DEVELOPMENT PLAN.
THIS PHASE OF PROJECT
IS CLOSED OUT.

DEVELOPER'S CERTIFICATION

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Debra H. Smull
SIGNATURE OF DEVELOPER
PRINT NAME BELOW SIGNATURE

DATE 10/21/96

ENGINEER'S CERTIFICATE

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

REVIEWED FOR HOWARD
S.C.D. AND MEETS TECHNICAL REQUIREMENTS

Paul Simmons
U.S.D.A. NATURAL RESOURCES
SERVICE DATE 2/1/97

DATE 10-21-96

THIS DEVELOPMENT PLAN IS APPROVED FOR
SOIL EROSION AND SEDIMENT CONTROL BY THE
HOWARD SOIL CONSERVATION DISTRICT.
Frank Robinson
APPROVED HOWARD S.C.D. DATE 2/21/97

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Mike Dammer
CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE 2/21/97

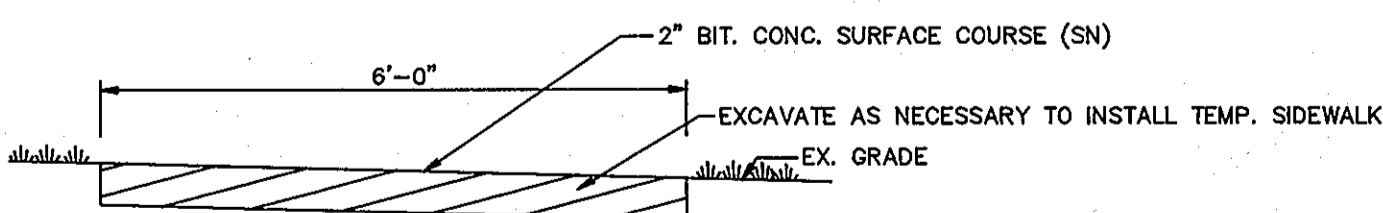
Richard Blood
CHIEF, DIVISION OF LAND DEVELOPMENT

DATE 3/2/97

Mark J. DeGru
DIRECTOR

DATE 3/5/97

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 12/19/96



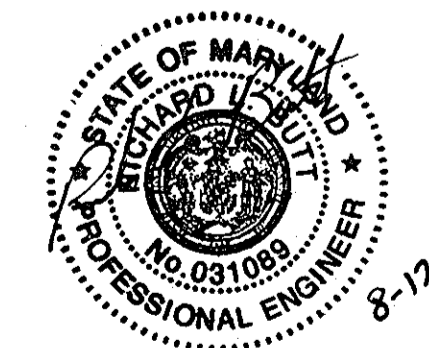
2 TEMPORARY SIDEWALK DETAIL
NOT TO SCALE

LEGEND

PAVING TO BE REMOVED

SYMBOL

- | SYMBOL | DESCRIPTION |
|--------|---|
| 1 | ERECT CONSTRUCTION/WARNING FENCE WHERE SHOWN ON PLAN. ERECT TRAFFIC BARRICADES. REFER TO SEQUENCE OF CONSTRUCTION FOR TIMING. |
| 2 | CONSTRUCT TEMPORARY SIDEWALKS WHERE SHOWN ON PLAN. SEE DETAIL THIS SHEET. REMOVE BACKFILL AND STABILIZE DISTURBED AREA UPON COMPLETION OF PHASE TWO CONSTRUCTION. |
| 3 | INSTALL INFORMATION/DETOUR SIGNAGE |
| 4 | REMOVE AND TEMPORARILY STORE EXISTING SIGN FOR REUSE. |
| 5 | REMOVE AND SALVAGE EXISTING LIGHT POLES. TEMPORARILY STORE ON-SITE. ABANDONE AND CUT EXISTING UNDERGROUND ELECTRIC SUPPLY. REMOVE EX. FOUNDATIONS AS NECESSARY. |
| 6 | CLEAR AND GRUB EXISTING TREE/WOODS. |
| 7 | RELOCATE EXISTING 6 AND 4 INCH WATER LINE SEE SHEETS 4 AND 5 FOR DETAILS, PROFILES AND PLAN VIEW |
| 8 | SAWCUT REMOVE AND DISPOSE OF EXISTING CURB AND GUTTER/BARRIER CURB. |
| 9 | SAWCUT REMOVE AND DISPOSE OF EXISTING ROADWAY PAVEMENT. |
| 10 | SAWCUT REMOVE AND DISPOSE OF EXISTING SIDEWALK PAVEMENT. |
| 11 | REMOVE AND DISPOSE OF EXISTING HEADWALL, EXISTING CATCH BASINS AND STORM DRAIN PIPE. |
| 12 | REMOVE AND DISPOSE OF EXISTING FENCE/ENTRANCE GATE. |
| 13 | REMOVE AND DISPOSE OF EXISTING TIMBER RETAINING WALL. |
| 14 | REMOVE AND DISPOSE OF EXISTING TIMBER STEPS. |
| 15 | REMOVE AND DISPOSE OF EXISTING UTILITY HAND BOXES AND UTILITY MANHOLES. |



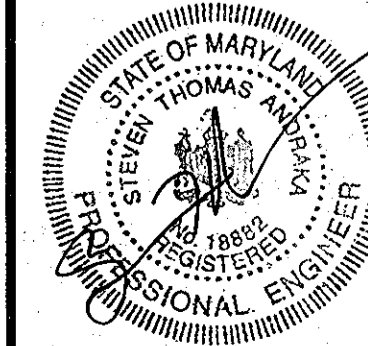
PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 31089. EXPIRATION DATE: 11-21-16

NOTE: NEW SEAL AND SIGNATURE ARE APPLICABLE ONLY TO REVISIONS.

DEVELOPER: /OWNER
KATHLEEN HETHERINGTON, ED. D.
SECRETARY-TREASURER, PRESIDENT
HOWARD COMMUNITY COLLEGE
10901 LITTLE PATUXENT PARKWAY
COLUMBIA, MD 21044-3197
(410) 712-4820

		REVISIONS	
DATE	BY	DATE	DESCRIPTION
7-26-10	GAH		ADD NOTE - REVISE SHEET NUMBER

dfi CONSULTING ENGINEERS, SURVEYORS,
AND LAND PLANNERS
504 BALTIMORE/ANNAPOLIS BOULEVARD
SEVERNA PARK, MD 21146 (410)647-2727
FAX (410)647-7127



DEMOLITION PLAN
HOWARD COMMUNITY COLLEGE
ENTRANCE AND PARKING IMPROVEMENTS
FOR ADJACENT PARKING GARAGE #2
(RED-LINE REVISION TO PREVIOUSLY APPROVED CAMPUS ROAD RELOCATION AND PARKING EXPANSION PROJECT)
JULY 26, 2010

TAX MAP: 33,36

PARCEL # 47

SHEET
2
OF
24

SDP-97-45

DATE PLOTTED: 07/29/96
DRAWN BY: CORNER
E4: HCG

SEE SHEET 6 OF 24 FOR
REVISED DEMOLITION &
SITE DEVELOPMENT PLAN.
THIS PHASE OF PROJECT
IS CLOSED OUT.

DEVELOPER'S CERTIFICATION

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DATE 10/21/96

ENGINEER'S CERTIFICATE

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

DATE 10-21-96

PROFESSIONAL ENGINEER
STATE OF MARYLAND
REGISTERED PROFESSIONAL ENGINEER
ANNAPOLIS, MARYLAND 21404
(410)647-2727

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

DATE 2/24/97

PROFESSIONAL ENGINEER
STATE OF MARYLAND
REGISTERED PROFESSIONAL ENGINEER
ANNAPOLIS, MARYLAND 21404
(410)647-2727

APPROVED: DEPARTMENT OF PLANNING AND ZONING

DATE 2/27/97

CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE 2/2/97

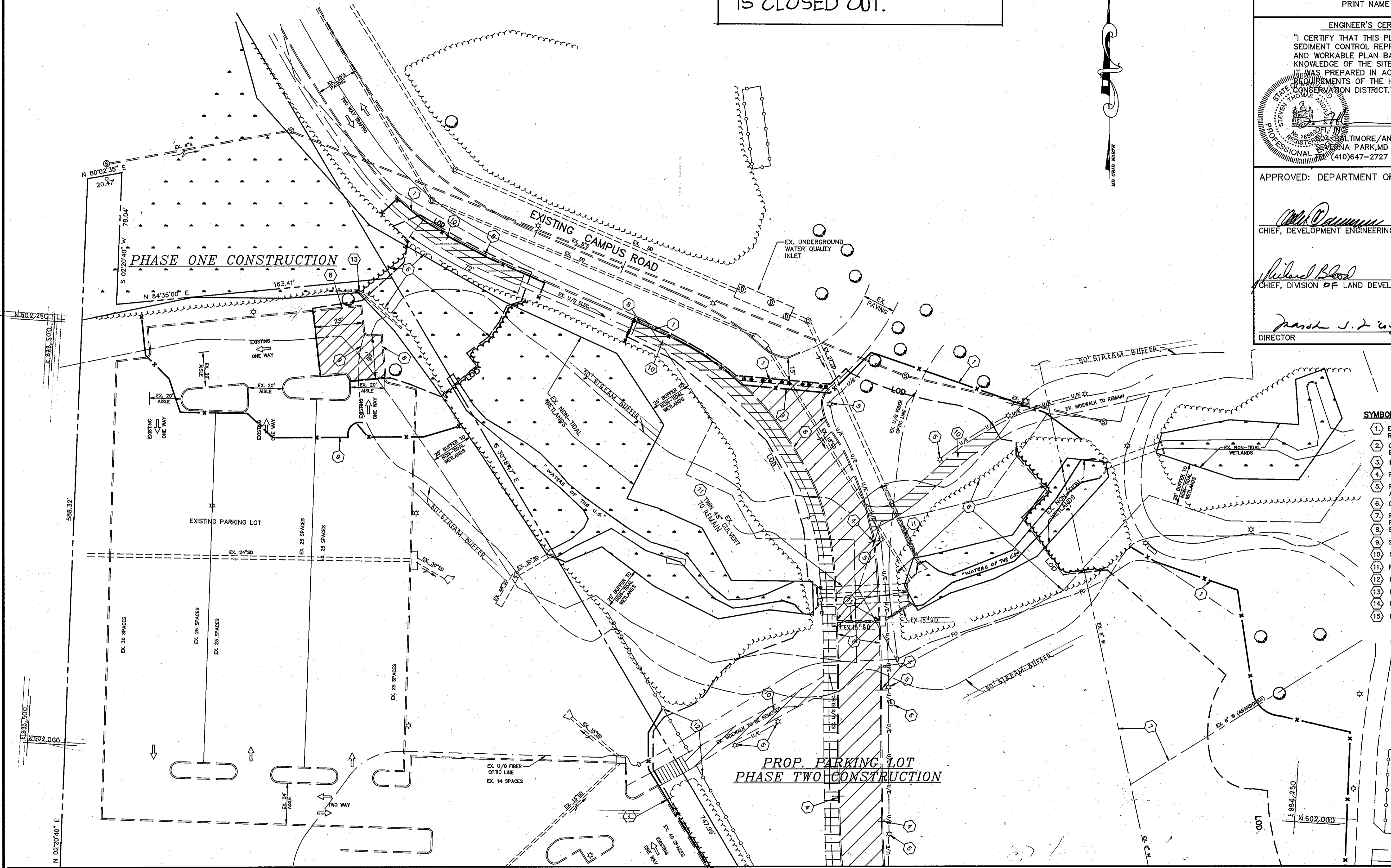
CHIEF, DIVISION OF LAND DEVELOPMENT

DATE 3/5/97

DIRECTOR

APPROVED
PLANNING BOARD
OF HOWARD COUNTY

DATE 12/17/96



- DEMOLITION NOTES**
- SYMBOL DESCRIPTION
1. ERECT CONSTRUCTION/WARNING FENCE WHERE SHOWN ON PLAN. ERECT TRAFFIC BARRICADES. REFER TO SEQUENCE OF CONSTRUCTION FOR TIMING.
 2. CONSTRUCT TEMPORARY SIDEWALKS WHERE SHOWN ON PLAN. SEE DETAIL THIS SHEET. REMOVE BACKFILL AND STABILIZE DISTURBED AREA UPON COMPLETION OF PHASE TWO CONSTRUCTION.
 3. INSTALL INFORMATION/DETOUR SIGNAGE.
 4. REMOVE AND TEMPORARILY STORE EXISTING SIGN FOR REUSE.
 5. REMOVE AND SALVAGE EXISTING LIGHT POLES. TEMPORARILY STORE ON-SITE. ABANDON AND CUT EXISTING UNDERGROUND ELECTRIC SUPPLY. REMOVE EX. FOUNDATIONS AS NECESSARY. CLEAR AND GRUB EXISTING TREE/WOODS.
 6. RELOCATE EXISTING 6 AND 4 INCH WATER LINE SEE SHEETS 4 AND 5 FOR DETAILS, PROFILES AND PLAN VIEW.
 7. SAWCUT REMOVE AND DISPOSE OF EXISTING CURB AND GUTTER/BARRIER CURB.
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 9. SAWCUT REMOVE AND DISPOSE OF EXISTING SIDEWALK PAVEMENT.
 10. REMOVE AND DISPOSE OF EXISTING HEADWALL, EXISTING CATCH BASINS AND STORM DRAIN PIPE.
 11. REMOVE AND DISPOSE OF EXISTING FENCE/ENTRANCE GATE.
 12. REMOVE AND DISPOSE OF EXISTING TIMBER RETAINING WALL.
 13. REMOVE AND DISPOSE OF EXISTING TIMBER STEPS.
 14. REMOVE AND DISPOSE OF EXISTING UTILITY HAND BOXES AND UTILITY MANHOLES.

LEGEND

[Hatched Box] - PAVING TO BE REMOVED

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. 31689, EXPIRATION DATE: 11-21-16

8-12-10

MATCHLINE SEE SHEET 2

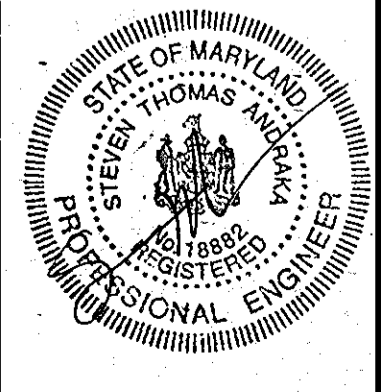
MATCHLINE SEE SHEET 2

DEVELOPER: /OWNER
KATHLEEN HETHERINGTON, ED. D.
SECRETARY-TREASURER, PRESIDENT
HOWARD COMMUNITY COLLEGE
10901 LITTLE PATUXENT PARKWAY
COLUMBIA, MD 21044-3197
(410) 712-4820

REVISIONS		
DATE	BY	DESCRIPTION
7-26-10	GAH	ADD NOTE - REVISE SHEET NUMBER

dfi CONSULTING ENGINEERS, SURVEYORS,
AND LAND PLANNERS

504 BALTIMORE/ANNAPOLIS BOULEVARD
SEVERNA PARK, MD 21146 (410)647-2727
FAX (410)647-7127



DEMOLITION PLAN
HOWARD COMMUNITY COLLEGE
ENTRANCE AND PARKING IMPROVEMENTS
FOR ADJACENT PARKING GARAGE # 2
(RED-LINE REVISION TO PREVIOUSLY APPROVED CAMPUS ROAD RELOCATION AND PARKING EXPANSION PROJECT)
JULY 26, 2010

PARCEL #47

SHEET
3
OF
24

DATE PLOTTED: 07/29/96
DRAWN BY: CORNER
SCALE: H.C.

SDP-97-45

SEE SHEET 6 OF 24 FOR
REVISED DEMOLITION &
SITE DEVELOPMENT PLAN.
THIS PHASE OF PROJECT
IS CLOSED OUT.

DEVELOPER'S CERTIFICATION
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Debra M. Seidel
SIGNATURE OF DEVELOPER
PRINT NAME BELOW SIGNATURE
DATE 10/21/96

ENGINEER'S CERTIFICATE
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT."
DATE 10-21-96
PROFESSIONAL ENGINEER
STATE OF MARYLAND
REGISTERED PROFESSIONAL ENGINEER
NO. 031198
8-12-10
BALTIMORE/ANNAPOLIS BLVD.
SEVERNA PARK, MD 21146
(410)647-2727

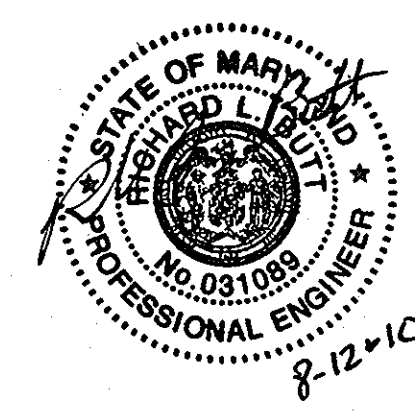
REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS
Cheryl Simms 2/24/97
U.S.D.A. NATURAL RESOURCES SERVICE
DATE
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
John B. Roberts 2/24/97
APPROVED
HOWARD S.C.D. DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chad Dammann 2/27/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
Richard Blood 2/2/97
CHIEF, DIVISION OF LAND DEVELOPMENT DATE
Marsh J. Taylor 2/5/97
DIRECTOR DATE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 12/17/96

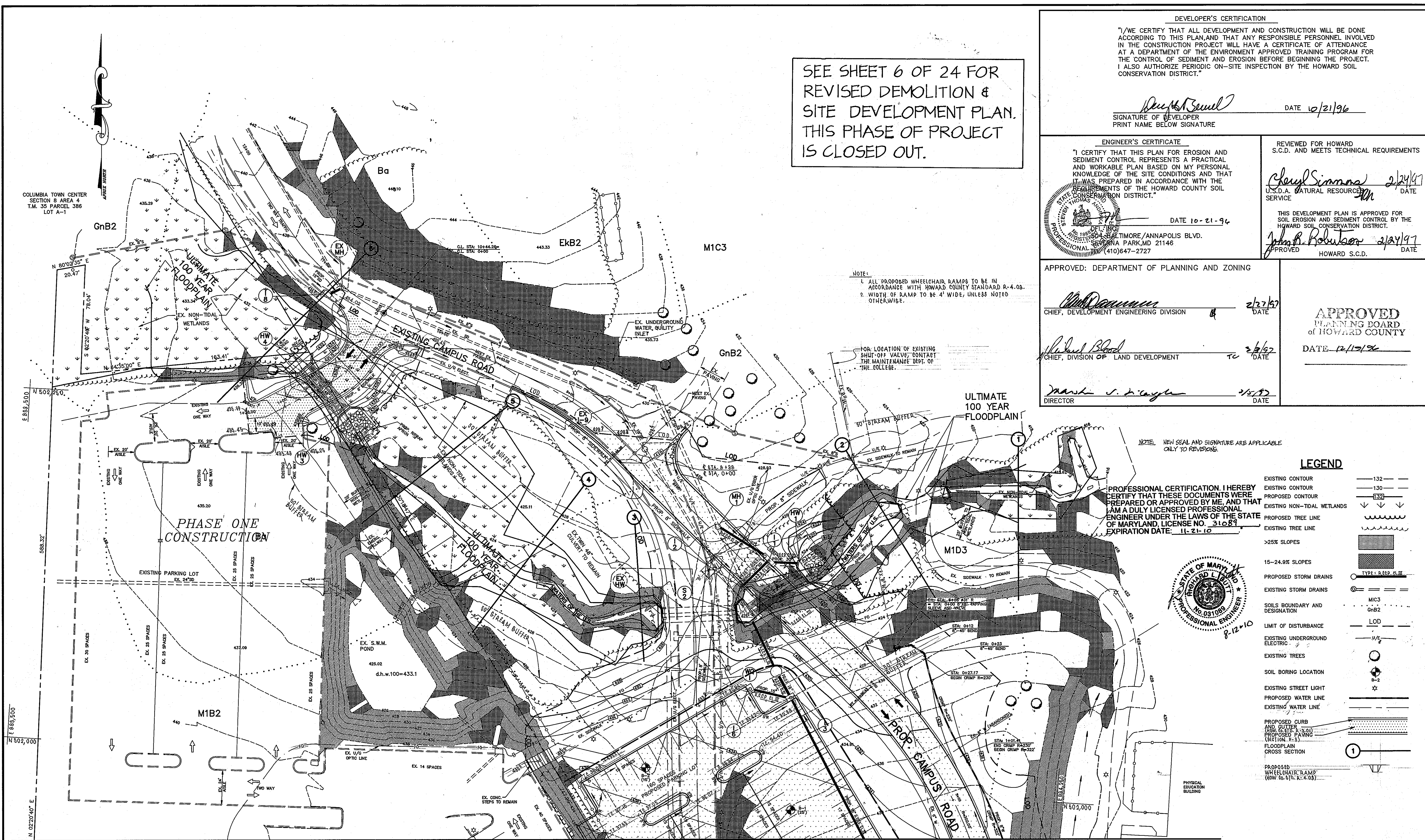
NOTE: NEW SEAL AND SIGNATURE ARE APPLICABLE ONLY TO REVISIONS.

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. 31089, EXPIRATION DATE: 11-21-10



LEGEND

EXISTING CONTOUR	— 132 —
EXISTING CONTOUR	— 130 —
PROPOSED CONTOUR	— [32] —
EXISTING NON-TIDAL WETLANDS	↓ ↓ ↓
PROPOSED TREE LINE	~~~~~
EXISTING TREE LINE	~~~~~
>25% SLOPES	[Hatched Box]
15-24.9% SLOPES	[Hatched Box]
PROPOSED STORM DRAINS	○—TYPE 1-B-1P-4-11
EXISTING STORM DRAINS	○
SOILS BOUNDARY AND DESIGNATION	MIC3 GnB2
LIMIT OF DISTURBANCE	LOD
EXISTING UNDERGROUND ELECTRIC	— U/E —
EXISTING TREES	○
SOIL BORING LOCATION	⊕
EXISTING STREET LIGHT	⊙
PROPOSED WATER LINE	— W —
EXISTING WATER LINE	— W —
PROPOSED CURB AND GUTTER (SECTION: P-3.0)	— [Pattern] —
PROPOSED PAVING (SECTION: P-3)	— [Pattern] —
FLOODPLAIN CROSS SECTION	①
PROPOSED WHEELCHAIR RAMP (DW 6-510-R-4.03)	— [Pattern] —



MATCHLINE SEE SHEET 5

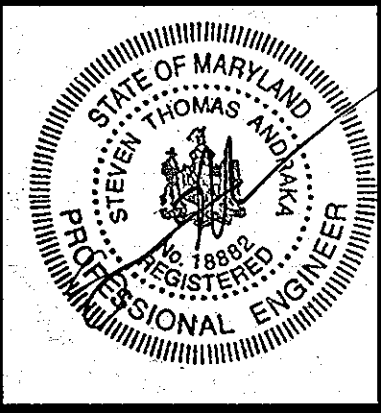
MATCHLINE SEE SHEET 5

DEVELOPER: /OWNER
KATHLEEN HETHERINGTON, ED. D.
SECRETARY-TREASURER, PRESIDENT
HOWARD COMMUNITY COLLEGE
10901 LITTLE PATUXENT PARKWAY
COLUMBIA, MD 21044-3197
(410) 772-4820

DESIGNED	M.A.M.	9/96
		date
DRAWN	L.R.C.	9/96
		date
CHECKED	M.A.M.	9/96
		date
APPROVED	S.T.A.	9/96
		date

REVISIONS		
DATE	BY	DESCRIPTION
07-26-10	GAH	ADD NOTE - REVISE SHEET NUMBER

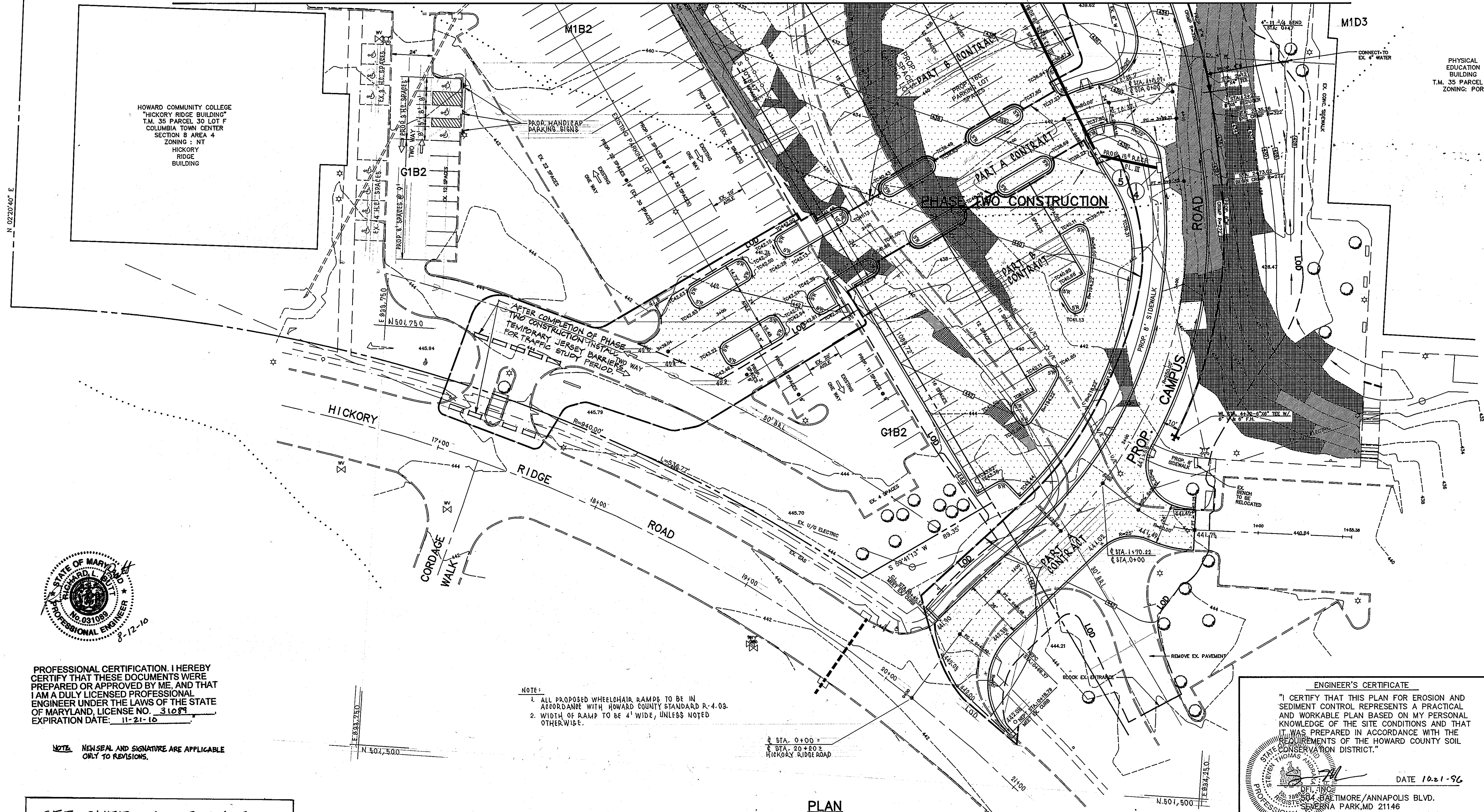
dfi CONSULTING ENGINEERS, SURVEYORS,
AND LAND PLANNERS
504 BALTIMORE/ANNAPOLIS BOULEVARD
SEVERNA PARK, MD 21146 (410)647-2727
FAX (410)647-7127



SITE DEVELOPMENT PLAN
HOWARD COMMUNITY COLLEGE
ENTRANCE AND PARKING IMPROVEMENTS
FOR ADJACENT PARKING GARAGE # 2
(RED-LINE REVISION TO PREVIOUSLY APPROVED CAMPUS ROAD RELOCATION AND PARKING EXPANSION PROJECT)
JULY 26, 2010
PARCEL #47

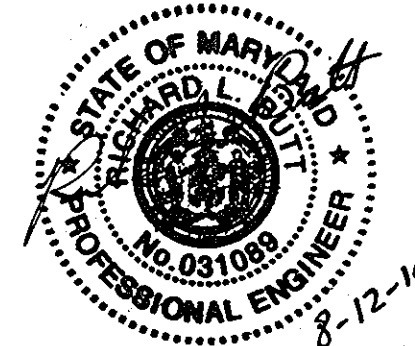
SHEET
4
OF
24

SDP-97-45



LEGEND

- EXISTING CONTOUR ——— 132 ———
- EXISTING CONTOUR ——— 130 ———
- PROPOSED CONTOUR ——— 132 ———
- EXISTING NON-TIDAL WETLANDS ↓ ↓ ↓
- EXISTING TREE LINE ———
- PROPOSED TREE LINE ———
- >25% SLOPES [Hatched pattern]
- 15-24.9% SLOPES [Cross-hatched pattern]
- PROPOSED STORM DRAINS [Symbol]
- EXISTING STORM DRAINS [Symbol]
- SOILS BOUNDARY AND DESIGNATION MIC3 GIB2
- LIMIT OF DISTURBANCE LOD
- EXISTING UNDERGROUND ELECTRIC [Symbol]
- EXISTING TREES [Symbol]
- SOIL BORING LOCATION [Symbol]
- EXISTING STREET LIGHT [Symbol]
- PROPOSED WATER LINE [Symbol]
- EXISTING WATER LINE [Symbol]
- PROPOSED CURB AND GUTTER [Symbol]
- PROPOSED PAVING [Symbol]
- PROPOSED WHEELCHAIR RAMP [Symbol]



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. 31099, EXPIRATION DATE: 11-21-10

NOTE: NEWSEAL AND SIGNATURE ARE APPLICABLE ONLY TO REVISIONS.

- NOTE:
- ALL PROPOSED WHEELCHAIR RAMPS TO BE IN ACCORDANCE WITH HOWARD COUNTY STANDARD R-4.08.
 - WIDTH OF RAMP TO BE 4' WIDE, UNLESS NOTED OTHERWISE.

± STA. 0+00 ±
± STA. 20+20 ±
HICKORY RIDGE ROAD

PLAN SCALE: 1"=30'

SEE SHEET 6 OF 24 FOR REVISED DEMOLITION & SITE DEVELOPMENT PLAN. THIS PHASE OF PROJECT IS CLOSED OUT.

SOIL TYPE LEGEND

- Ba - Baile silt loam
- EKB2 - Elkock silt loam, 3-8% slopes, moderately eroded
- GIB2 - Glenville silt loam, 3-8% slopes, moderately eroded
- MIB2 - Manor loam, 3-8% slopes, moderately eroded
- MIC3 - Manor loam, 8-15% slopes, severely eroded
- MID3 - Manor loam, 15-25% slopes, severely eroded

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

David A. Suell DATE 10/21/96
SIGNATURE OF DEVELOPER
PRINT NAME BELOW SIGNATURE

ENGINEER'S CERTIFICATE
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT."
DATE 10.21.96
[Seal]
RESISTE SEVERNA PARK, MD 21146
PROFESSIONAL-TELE (410)647-2727

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS
Claud Simmonds 2/24/97 DATE
U.S.D.A. NATURAL RESOURCES SERVICE
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
John R. Robertson 2/24/97 APPROVED
HOWARD S.C.D. DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

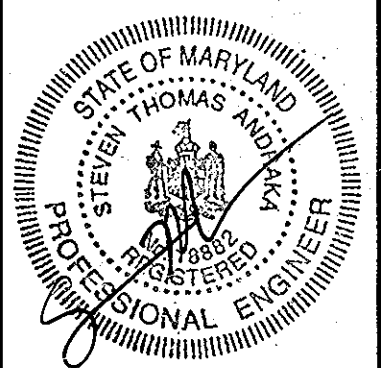
Clayton Dammann 2/27/97 DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION
Richard Blood 2/27/97 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT
Daniel J. Diegel 2/27/97 DATE
DIRECTOR

APPROVED PLANNING BOARD OF HOWARD COUNTY
DATE 12/19/96

DEVELOPER: /OWNER
KATHLEEN HETHERINGTON, ED. D.
SECRETARY-TREASURER, PRESIDENT
HOWARD COMMUNITY COLLEGE
10901 LITTLE PATUXENT PARKWAY
COLUMBIA, MD 21044-3191
(410) 712-4820

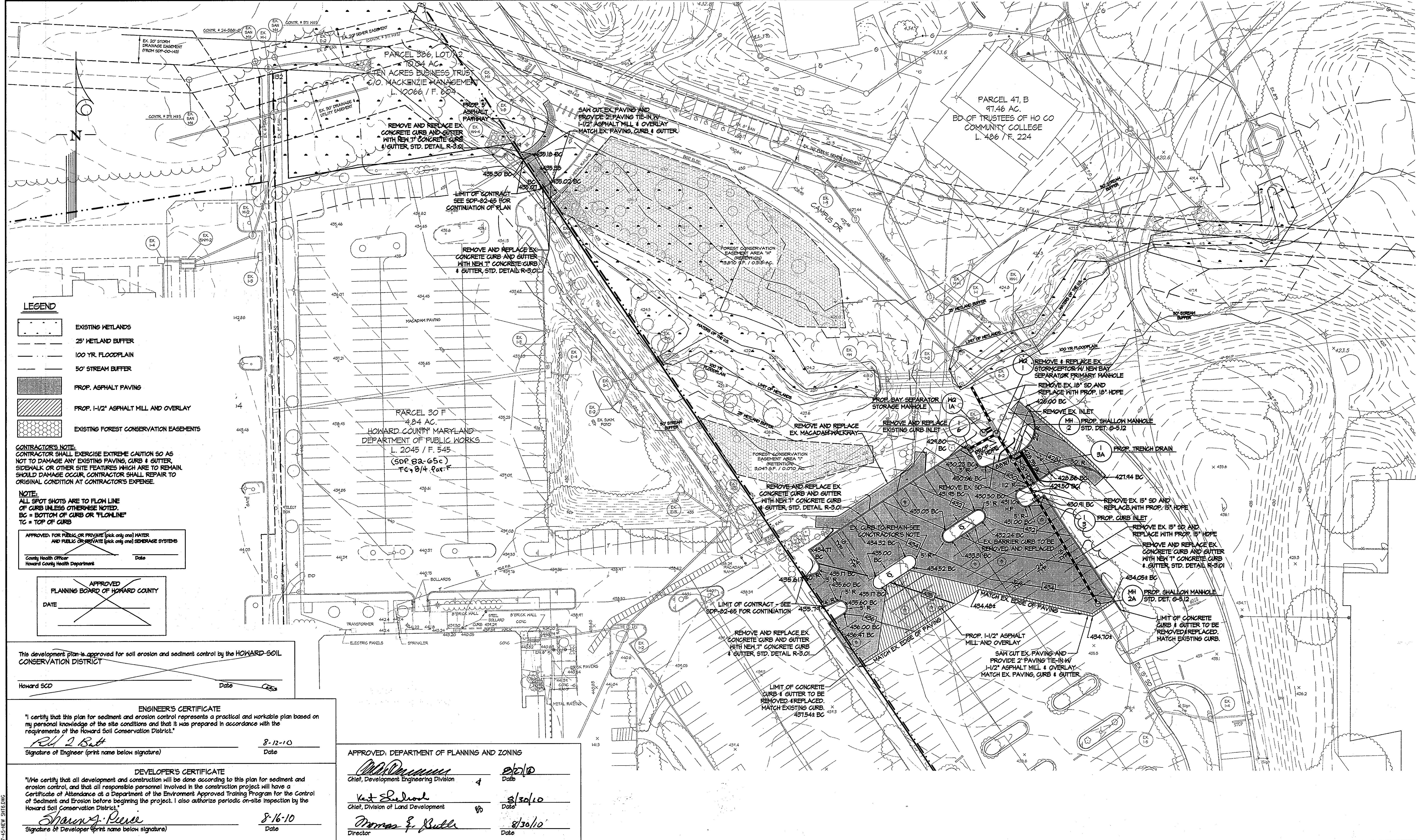
DESIGNED			DATE		
M.A.M.	9/96	date	DATE	BY	DESCRIPTION
L.R.C.	9/96	date	07/26/10	GANH	ADD NOTE-REVISE SHEET NUMBER
M.A.M.	9/96	date			
S.T.A.	9/96	date			

dfi CONSULTING ENGINEERS, SURVEYORS, AND LAND PLANNERS
504 BALTIMORE/ANNAPOLIS BOULEVARD
SEVERNA PARK, MD 21146 (410)647-2727
FAX (410)647-7127



SITE DEVELOPMENT PLAN
HOWARD COMMUNITY COLLEGE
ENTRANCE AND PARKING IMPROVEMENTS
FOR ADJACENT PARKING GARAGE # 2
(RED-LINE REVISION TO PREVIOUSLY APPROVED CAMPUS ROAD RELOCATION AND PARKING EXPANSION PROJECT)
JULY 26, 2010
TAX MAP: 35, 36
PARCEL # 47

SHEET 5 OF 24



- LEGEND**
- EXISTING WETLANDS
 - 25' WETLAND BUFFER
 - 100 YR. FLOODPLAIN
 - 50' STREAM BUFFER
 - PROP. ASPHALT PAVING
 - PROP. 1/2" ASPHALT MILL AND OVERLAY
 - EXISTING FOREST CONSERVATION EASEMENTS

CONTRACTOR'S NOTE:
 CONTRACTOR SHALL EXERCISE EXTREME CAUTION SO AS NOT TO DAMAGE ANY EXISTING PAVING, CURB & GUTTER, SIDEWALK OR OTHER SITE FEATURES WHICH ARE TO REMAIN. SHOULD DAMAGE OCCUR, CONTRACTOR SHALL REPAIR TO ORIGINAL CONDITION AT CONTRACTOR'S EXPENSE.

NOTE:
 ALL SPOT SHOTS ARE TO FLOW LINE OF CURB UNLESS OTHERWISE NOTED.
 BC = BOTTOM OF CURB OR FLOWLINE
 TC = TOP OF CURB

APPROVED FOR PUBLIC OR PRIVATE (pick only one) WATER AND PUBLIC OR PRIVATE (pick only one) SEWERAGE SYSTEMS

County Health Officer _____ Date _____
 Howard County Health Department

APPROVED PLANNING BOARD OF HOWARD COUNTY

DATE _____

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

Howard SCD _____ Date _____

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 that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

RLB
 Signature of Engineer (print name below signature) _____ Date 8-12-10

DEVELOPER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan 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 the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."

Sharon A. Reese
 Signature of Developer (print name below signature) _____ Date 8/16/10

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature]
 Chief, Development Engineering Division _____ Date 8/20/10

[Signature]
 Chief, Division of Land Development _____ Date 8/30/10

[Signature]
 Director _____ Date 8/30/10

DEVELOPER:/OWNER

KATHLEEN HETHERINGTON, ED. D.
 SECRETARY-TREASURER, PRESIDENT
 HOWARD COMMUNITY COLLEGE
 10901 LITTLE PATUXENT PARKWAY
 COLUMBIA, MD 21044-3197
 (410) 712-4820

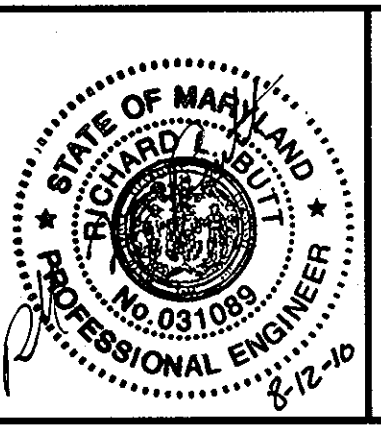
DESIGNED BY:	DATE	BY	DESCRIPTION
GAH	7/26/10	GAH	NEW SHEET FOR REV. #1
DRAWN BY:			
CHECKED BY:			
APPROVED BY:			
SCALE:	1" = 30'		

KCI TECHNOLOGIES

ENGINEERS
 PLANNERS
 SCIENTISTS
 CONSTRUCTION MANAGERS

936 RIDGEBROOK ROAD
 SPARKS, MD 21152
 PHONE: (410) 316-7800

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. 31094, EXPIRATION DATE: 11/21/10.



SITE DEMO & DEVELOPMENT PLAN
 HOWARD COMMUNITY COLLEGE
 ENTRANCE AND PARKING IMPROVEMENTS
 FOR ADJACENT PARKING GARAGE # 2
 (REDLINE REVISION TO PREVIOUSLY APPROVED CAMPUS ROAD RELOCATIONS AND PARKING EXPANSION PROJECT)

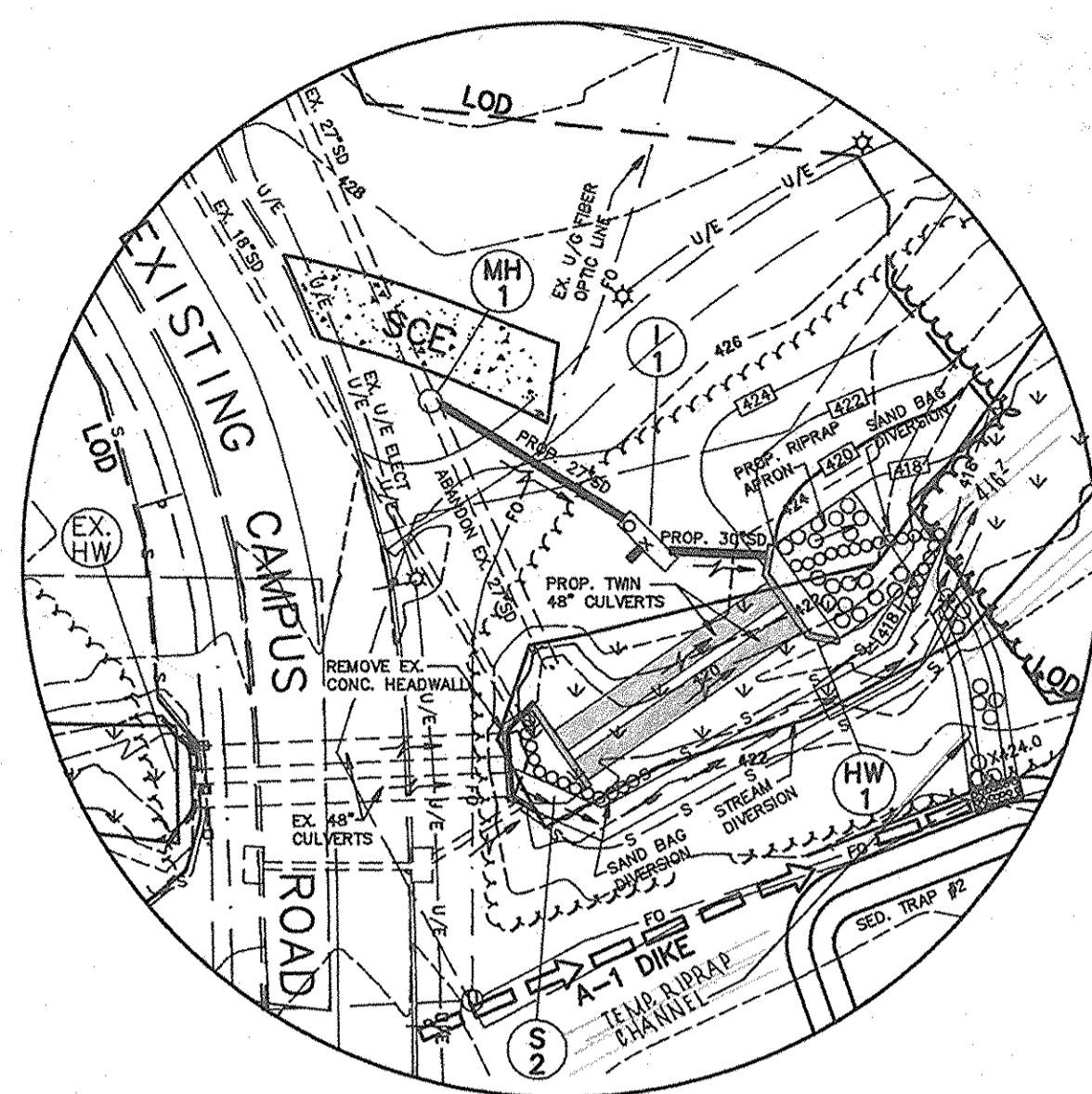
SHEET
 6
 OF
 24

SC-9 OF 14
 KCI JOB NUMBER : 01082978

Tuesday, July 27, 2010 11:32:29 AM
 G:\VLE_HARRID...
 M:\2008\082978\01082978\DWG\SDP-97-45-NEW_SITES.DWG

LEGEND

- EXISTING STREET LIGHT
- PROPOSED WATER LINE
- EXISTING WATER LINE
- PROPOSED CURB AND GUTTER
- PROPOSED PAVING
- STABILIZED CONSTRUCTION ENTRANCE
- SILT FENCE
- EARTH DIKE
- STONE OUTLET STRUCTURE
- SOILS BOUNDARY AND LIMIT OF DISTURBANCE
- EXISTING UNDERGROUND ELECTRIC
- EXISTING CONTOUR
- EXISTING CONTOUR
- EXISTING NON-TIDAL WETLANDS
- PROPOSED TREE LINE
- EXISTING TREE LINE
- >25% SLOPES
- 15-24.9% SLOPES
- PROPOSED STORM DRAINS
- EXISTING STORM DRAINS
- EXISTING TREES
- SOIL BORING LOCATION



CULVERT CONSTRUCTION STAGE ONE

DEVELOPER'S CERTIFICATION

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

DATE 10/21/96

SIGNATURE OF DEVELOPER
PRINT NAME BELOW SIGNATURE

ENGINEER'S CERTIFICATE

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

DATE 10-21-96

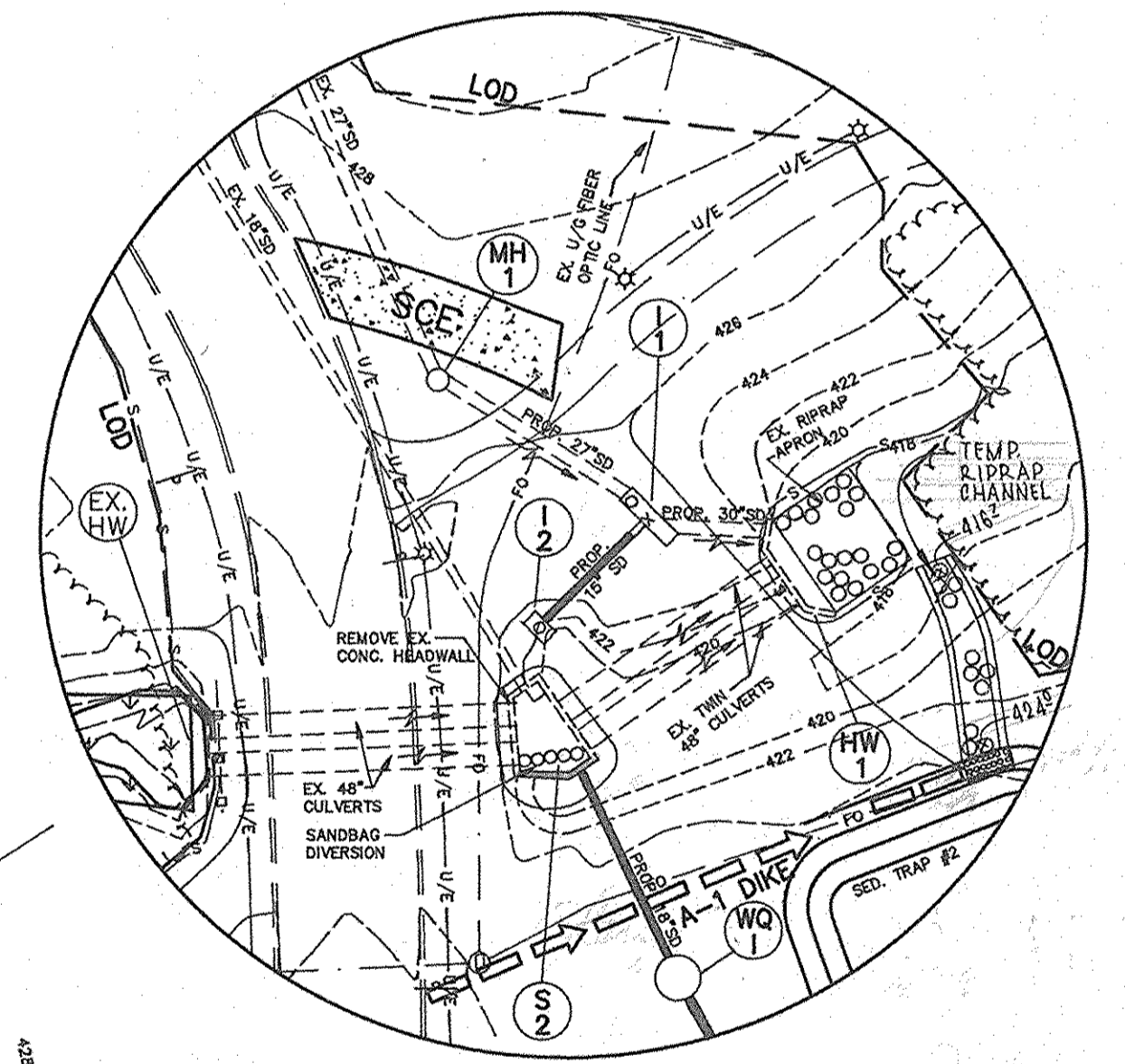
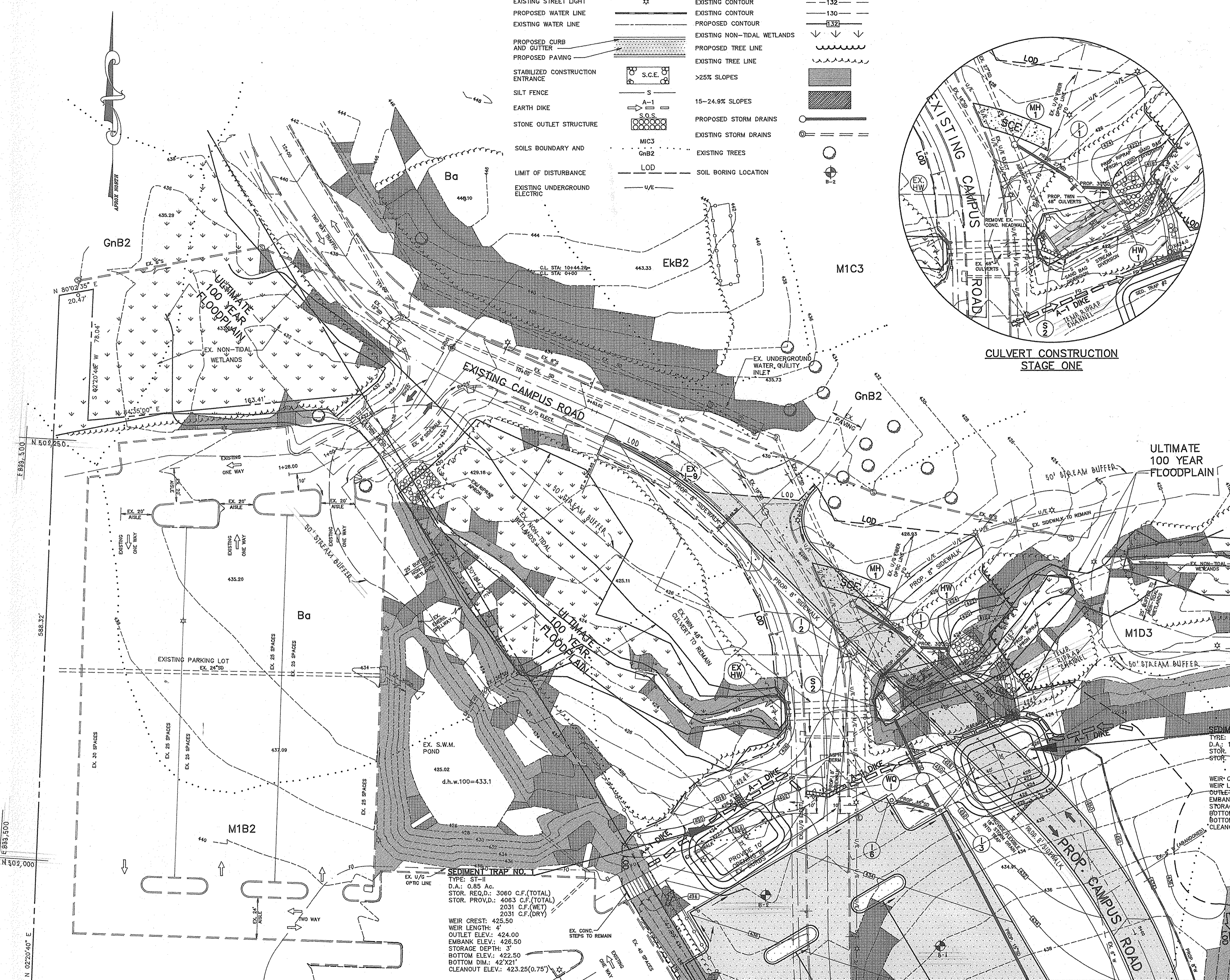
PROFESSIONAL ENGINEER
DFI, INC.
504 BALTIMORE/ANNAPOLIS BLVD.
SEVERNA PARK, MD 21146
TEL: (410)647-2727

APPROVED: DEPARTMENT OF PLANNING AND ZONING

DATE 2/27/97

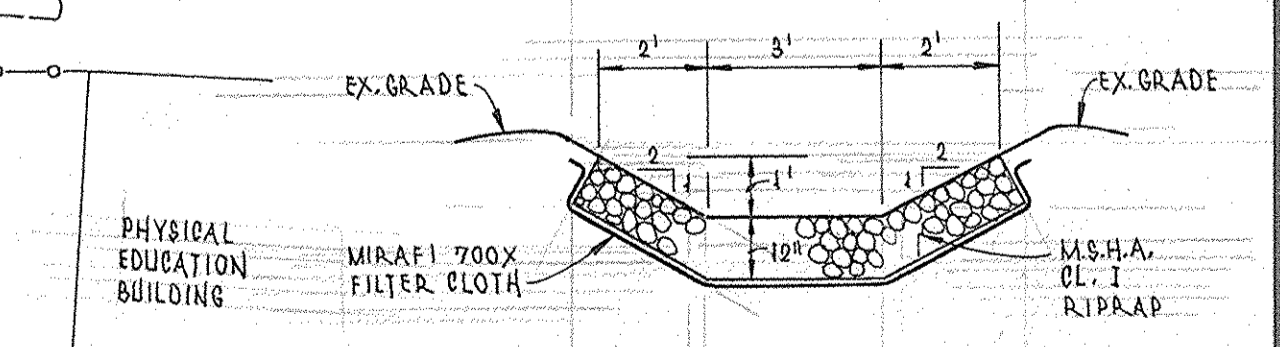
APPROVED PLANNING BOARD OF HOWARD COUNTY

DATE 12/10/96



CULVERT CONSTRUCTION STAGE TWO

SEDIMENT TRAP NO. 2
 TYPE: ST-1
 D.A.: 1.60 AC
 STOR. REQ.D.: 5760 C.F. (TOTAL)
 STOR. PROVID.: 7178 C.F. (TOTAL)
 3589 C.F. (WET)
 3589 C.F. (DRY)
 WEIR CREST: 426.00'
 WEIR LENGTH: 6.5'
 OUTFLET ELEV.: 424.00'
 EMBANK ELEV.: 426.50'
 STORAGE DEPTH: 3'
 BOTTOM ELEV.: 422.50'
 BOTTOM DIM.: 42'x33'
 CLEANOUT ELEV.: 423.00'



TEMPORARY RIPRAP CHANNEL FOR SEDIMENT TRAP#2
 NOT TO SCALE

MATCHLINE SEE SHEET 8

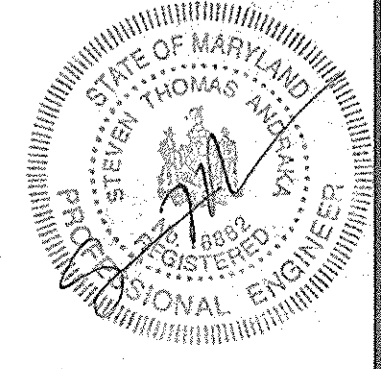
NOTE:
 EARTH DIKES INTERRUPTED BY THE INSTALLATION OF STORM DRAINS ARE TO BE REPAIRED IMMEDIATELY.

MATCHLINE SEE SHEET 8

DEVELOPER: /OWNER
DR. DWIGHT BURRILL, PRESIDENT
HOWARD COMMUNITY COLLEGE
 10901 LITTLE PATUXENT PARKWAY
 COLUMBIA, MD. 21044
 (410) 992-4800

DESIGNED		DATE		DESCRIPTION	
M.A.M.	9/96				
L.R.C.	9/96				
M.A.M.	9/96				
S.T.A.	9/96				

dfi CONSULTING ENGINEERS, SURVEYORS, AND LAND PLANNERS
 504 BALTIMORE/ANNAPOLIS BOULEVARD
 SEVERNA PARK, MD 21146 (410)647-2727
 FAX (410)647-7127



EROSION AND SEDIMENT CONTROL PLAN
 PHASE TWO CONSTRUCTION
CAMPUS ROAD RELOCATION AND PARKING EXPANSION PROJECT
HOWARD COMMUNITY COLLEGE
 SCALE: 1" = 30' DATE: SEPT, 1996
 HOWARD COUNTY, MARYLAND

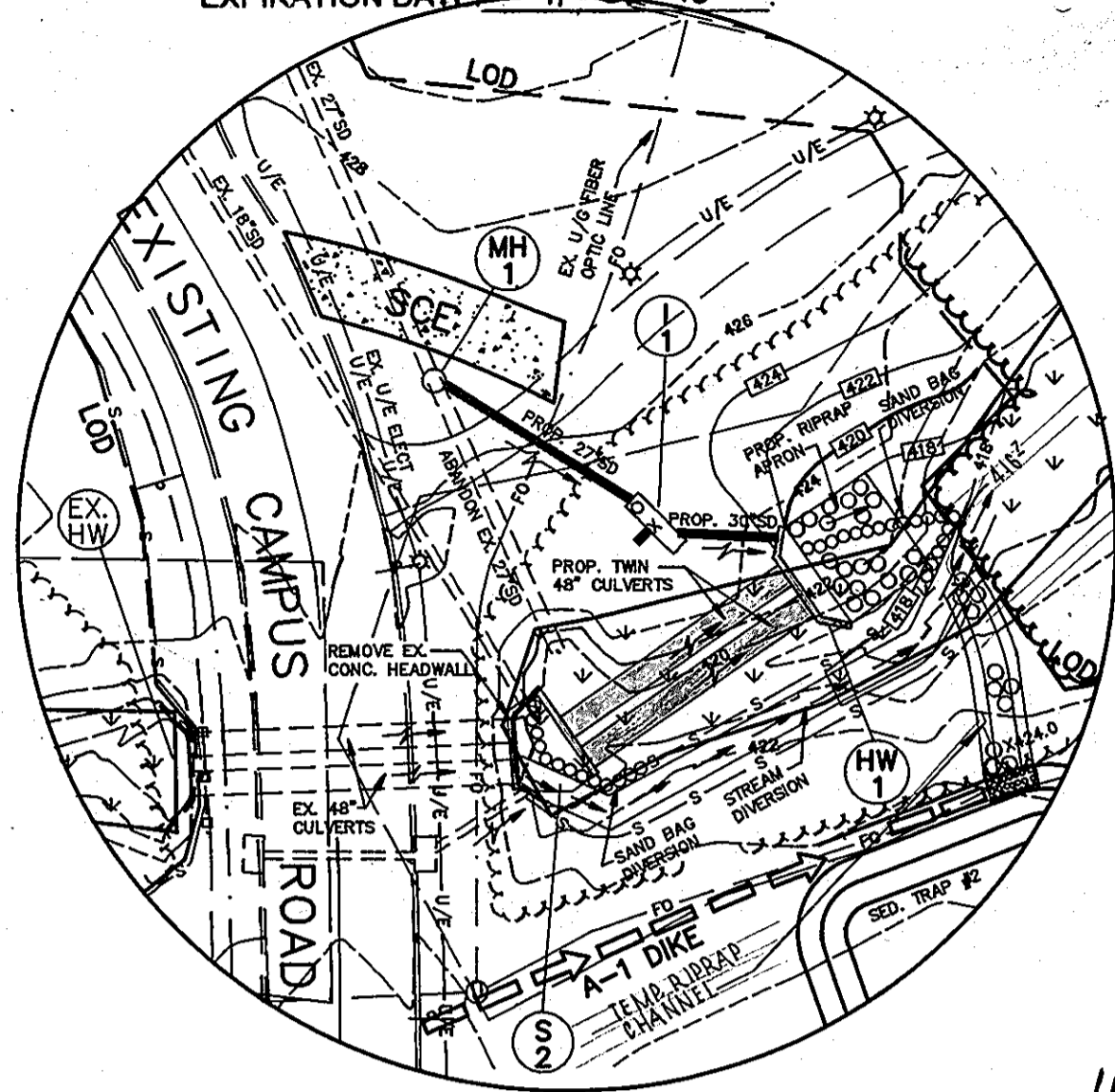
SHEET
7
OF
18

SEE SHEET 10 OF 24 FOR REVISED EROSION & SEDIMENT CONTROL PLAN. THIS PHASE OF PROJECT IS CLOSED OUT.

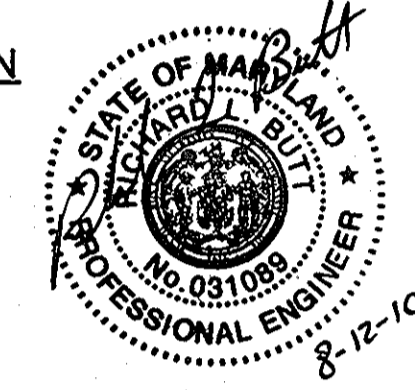
LEGEND

EXISTING STREET LIGHT	☆	EXISTING CONTOUR	- - - 132 - - -
PROPOSED WATER LINE	—	EXISTING CONTOUR	- - - 130 - - -
EXISTING WATER LINE	—	PROPOSED CONTOUR	- - - 132 - - -
PROPOSED CURB AND GUTTER	—	EXISTING NON-TIDAL WETLANDS	↓ ↓ ↓
PROPOSED PAVING	▨	PROPOSED TREE LINE	~~~~~
STABILIZED CONSTRUCTION ENTRANCE	S.C.E.	EXISTING TREE LINE	~~~~~
SILT FENCE	S	>25% SLOPES	▨
EARTH DIKE	A-1	15-24.9% SLOPES	▨
STONE OUTLET STRUCTURE	S.O.S.	PROPOSED STORM DRAINS	—
SOILS BOUNDARY AND LIMIT OF DISTURBANCE	MIC3 GnB2 LOD	EXISTING STORM DRAINS	—
EXISTING UNDERGROUND ELECTRIC	U/E	EXISTING TREES	○
		SOIL BORING LOCATION	○

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. 31084 EXPIRATION DATE: 11-21-10



CULVERT CONSTRUCTION STAGE ONE



ULTIMATE 100 YEAR FLOODPLAIN

DEVELOPER'S CERTIFICATION
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."
 SIGNATURE OF DEVELOPER: *Richard Blood* DATE: 10/21/96
 PRINT NAME BELOW SIGNATURE: RICHARD BLOOD

ENGINEER'S CERTIFICATE
 "I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT THE SAME WERE PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT."
 DATE: 10-21-96
 REGISTERED PROFESSIONAL ENGINEER
 504 BALTIMORE/ANNAPOLIS BLVD.
 SEVERNA PARK, MD 21146
 (410)647-2727

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS
 SIGNATURE: *Cheryl Simmons* DATE: 2/24/97
 U.S.D.A. NATURAL RESOURCES SERVICE

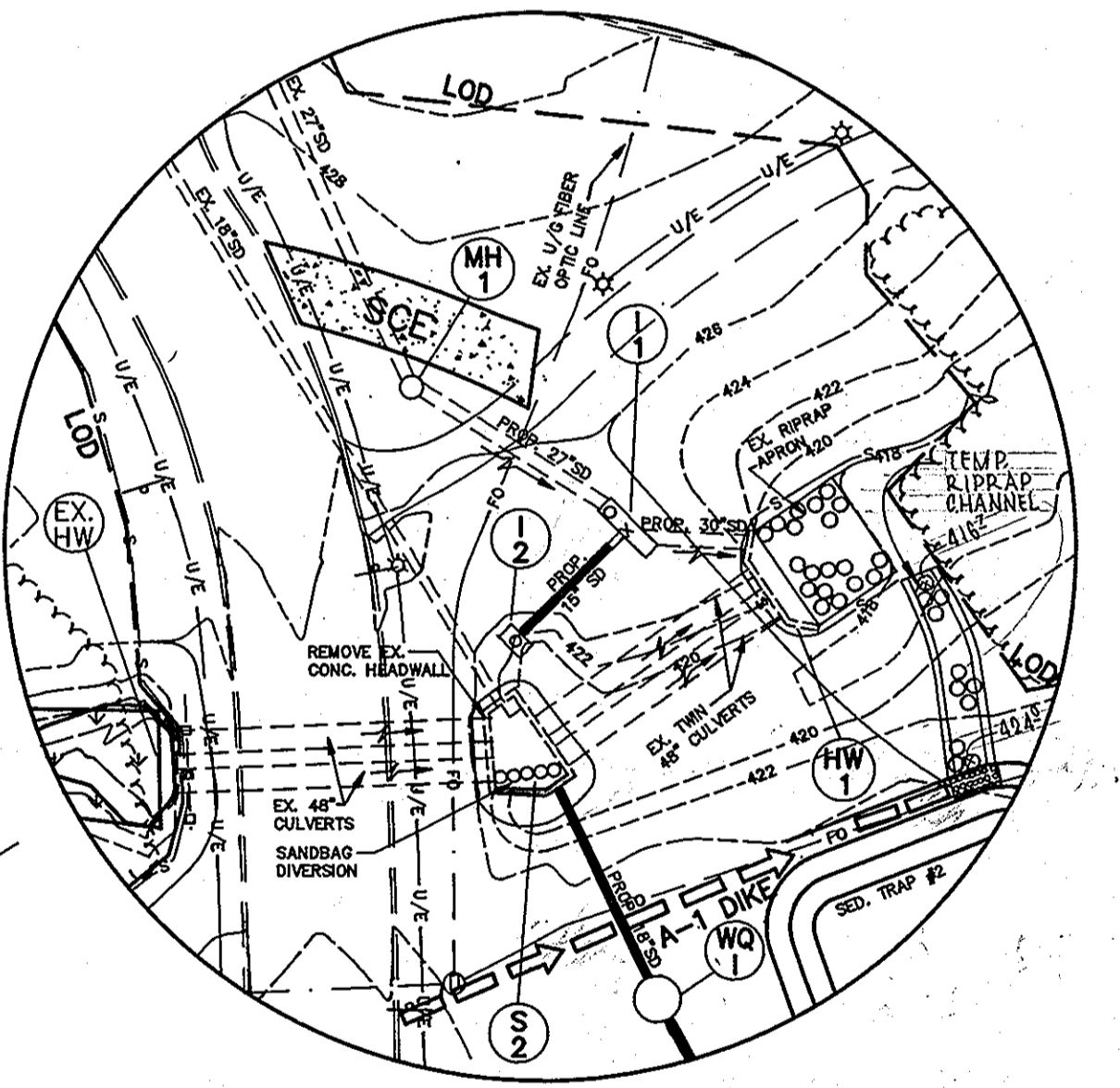
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 SIGNATURE: *John R. Robinson* DATE: 2/24/97
 APPROVED HOWARD S.C.D.

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 SIGNATURE: *Richard Blood* DATE: 2/27/97
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

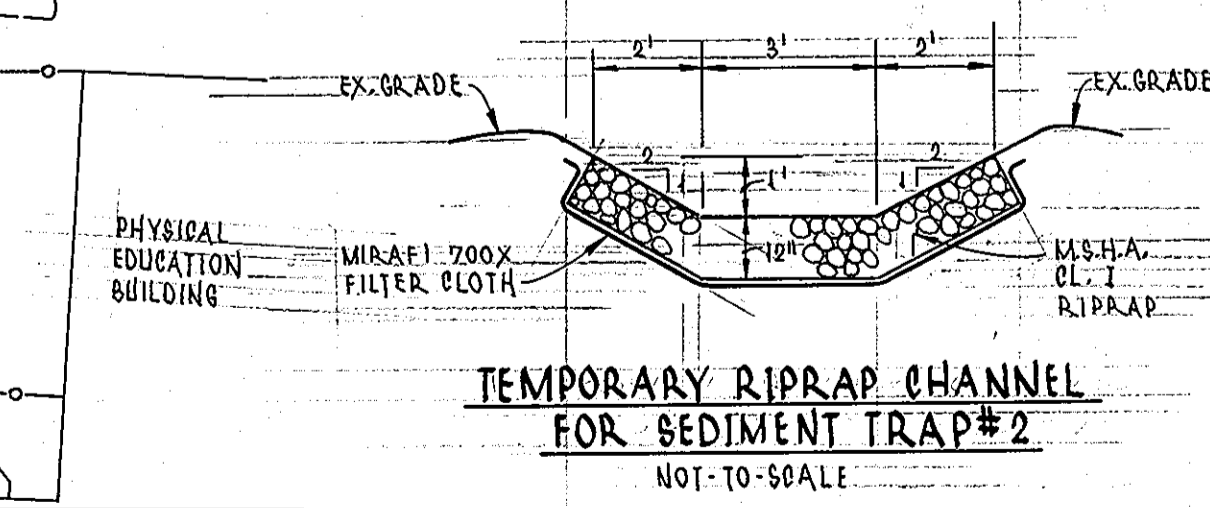
SIGNATURE: *Richard Blood* DATE: 3/3/97
 CHIEF, DIVISION OF LAND DEVELOPMENT

SIGNATURE: *Frank J. Meyer* DATE: 2/5/97
 DIRECTOR

APPROVED PLANNING BOARD OF HOWARD COUNTY
 DATE: 12/19/96



CULVERT CONSTRUCTION STAGE TWO



TEMPORARY RIPRAP CHANNEL FOR SEDIMENT TRAP #2
 NOT-TO-SCALE

SEDIMENT TRAP NO. 1
 TYPE: ST-II
 D.A.: 0.65 Ac.
 STOR. REQ'D.: 3060 C.F. (TOTAL)
 STOR. PROVID.: 4063 C.F. (TOTAL)
 2031 C.F. (WET)
 2031 C.F. (DRY)
 WEIR CREST: 425.50
 WEIR LENGTH: 4'
 OUTLET ELEV.: 424.00
 EMBANK ELEV.: 426.50
 STORAGE DEPTH: 3'
 BOTTOM ELEV.: 422.50
 BOTTOM DIM.: 42'x21'
 CLEANOUT ELEV.: 423.25(0.75')

MATCHLINE SEE SHEET 8
 NOTE: NEW SEAL AND SIGNATURE ARE APPLICABLE ONLY TO REVISIONS.

NOTE: EARTH DIKES INTERRUPTED BY THE INSTALLATION OF STORM DRAINS ARE TO BE REPAIRED IMMEDIATELY.

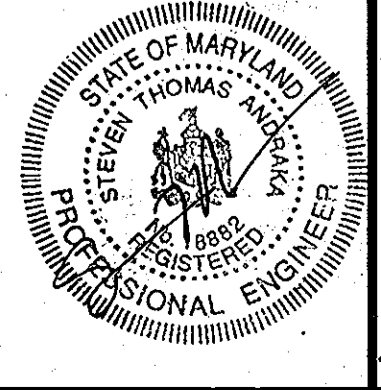
MATCHLINE SEE SHEET 8

DEVELOPER: /OWNER
 KATHLEEN HETHERINGTON, ED. D.
 SECRETARY-TREASURER, PRESIDENT
 HOWARD COMMUNITY COLLEGE
 10901 LITTLE PATUXENT PARKWAY
 COLUMBIA, MD 21044-3197
 (410) 772-4826

DESIGNED	M.A.M.	9/96
DRAWN	L.R.C.	9/96
CHECKED	M.A.M.	9/96
APPROVED	S.T.A.	9/96

REVISIONS		
DATE	BY	DESCRIPTION
07-26-10	GAH	1 ADD NOTE - REVISE SHEET NUMBER

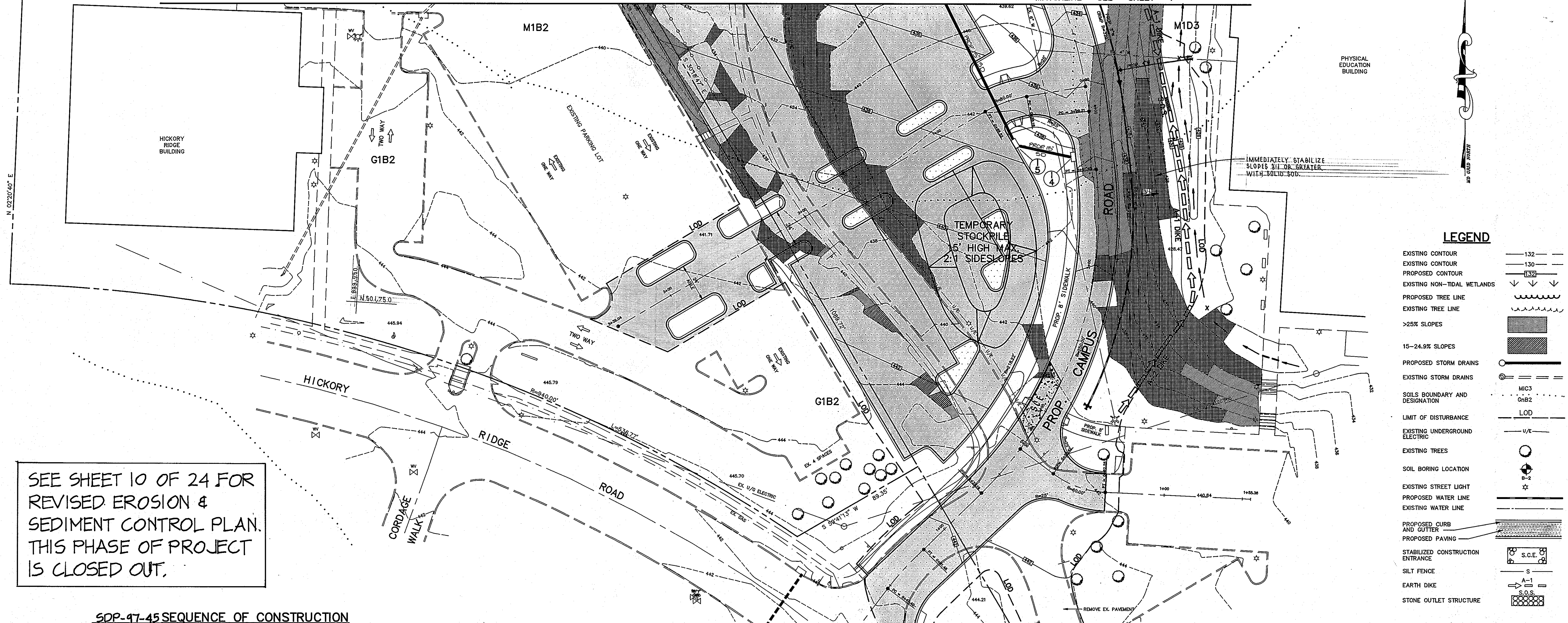
dfi CONSULTING ENGINEERS, SURVEYORS, AND LAND PLANNERS
 504 BALTIMORE/ANNAPOLIS BOULEVARD
 SEVERNA PARK, MD 21146 (410)647-2727
 FAX (410)647-7127



EROSION AND SEDIMENT CONTROL PLAN
 PHASE TWO CONSTRUCTION
 HOWARD COMMUNITY COLLEGE
 ENTRANCE AND PARKING IMPROVEMENTS
 FOR ADJACENT PARKING GARAGE # 2
 (RED-LINE REVISION TO PREVIOUSLY APPROVED CAMPUS ROAD RELOCATION AND PARKING EXPANSION PROJECT)
 JULY 26, 2010
 PARCEL #47

SHEET 8 OF 24
 SDP-97-45

DATE PLOTTED: 10/10/96
 DRAWN BY: CORNELL



SEE SHEET 10 OF 24 FOR REVISED EROSION & SEDIMENT CONTROL PLAN. THIS PHASE OF PROJECT IS CLOSED OUT.

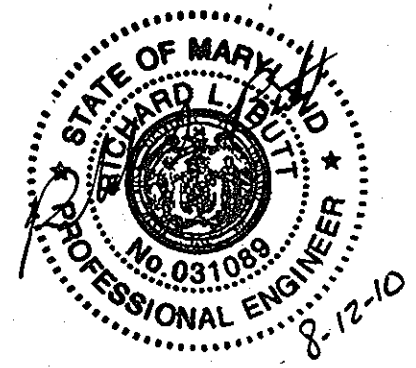
LEGEND

- EXISTING CONTOUR ——— 132 ———
- EXISTING CONTOUR ——— 130 ———
- PROPOSED CONTOUR ——— 132 ———
- EXISTING NON-TIDAL WETLANDS [Symbol]
- PROPOSED TREE LINE [Symbol]
- EXISTING TREE LINE [Symbol]
- >25% SLOPES [Symbol]
- 15-24.9% SLOPES [Symbol]
- PROPOSED STORM DRAINS [Symbol]
- EXISTING STORM DRAINS [Symbol]
- SOILS BOUNDARY AND DESIGNATION MIC3 G1B2
- LIMIT OF DISTURBANCE LOD
- EXISTING UNDERGROUND ELECTRIC [Symbol]
- EXISTING TREES [Symbol]
- SOIL BORING LOCATION [Symbol]
- EXISTING STREET LIGHT [Symbol]
- PROPOSED WATER LINE [Symbol]
- EXISTING WATER LINE [Symbol]
- PROPOSED CURB AND GUTTER [Symbol]
- PROPOSED PAVING [Symbol]
- STABILIZED CONSTRUCTION ENTRANCE [Symbol]
- SILT FENCE [Symbol]
- EARTH DIKE [Symbol]
- STONE OUTLET STRUCTURE [Symbol]

SDP-97-45 SEQUENCE OF CONSTRUCTION PHASE TWO CONSTRUCTION (THIS PHASE CLOSED OUT - SEE NOTE)

- 2 DAYS 1. OBTAIN GRADING PERMIT.
 - 2 WEEKS 2. INSTALL S.C.E.'S, IMPLEMENT TRAFFIC CONTROL PLAN, SEE SHEET 14.
 - 2 WEEKS 3. INSTALL SEDIMENT TRAPS AND ASSOCIATED EARTH DIKES, ASPHALT BERMS AND STONE OUTLET STRUCTURE. DEMOLISH UNDERGROUND UTILITIES. CLEAR FOR AND INSTALL SILT FENCES.
 - 1 WEEK 4. GRADE AND INSTALL SODDED SWALE.
 - 1 WEEK 5. DEMOLISH AND DISPOSE OF EX. PAVEMENT, BEGIN ROUGH GRADING.
 - 2 WEEKS 6. INSTALL STORM DRAINS 1-4 TO 1-3, 1-6 TO 1-3, 1-3 TO SED. TRAP #2. CAP OPENINGS IN W.Q.INLET. INSTALL UTILITIES.
 - 1 MONTH 7. BEGIN CULVERT CONSTRUCTION:
 - a. STAGE ONE (SEE DETAIL):
 1. CLEAR FOR AND INSTALL STREAM DIVERSION, SANDBAG DIVERSION AND SILT FENCE.
 2. CLEAR AND BEGIN ROUGH GRADING, INSTALL HW-1, RIPRAP APRON AND BEGIN INSTALLATION OF 48 INCH CULVERTS.
 3. AS INSTALLATION PROGRESSES BACKFILL CULVERTS AND INSTALL STORM DRAIN SYSTEM MH-1 TO HW-1, ABANDON EXISTING 27 INCH STORM DRAIN.
 4. REMOVE EXISTING CONC. HEADWALL AND INSTALL FOUNDATION FOR STRUCTURE S-2, MAINTAIN STREAM DIVERSION.
 5. INSTALL PART OF STRUCTURE S-2 TO ALLOW STREAM DIVERSION TO CONTINUE AND BACKFILLING OF STRUCTURE S-2.
 - b. STAGE TWO (SEE DETAIL):
 1. REMOVE EXISTING STORM DRAIN PIPES, CATCH BASINS, EX. PAVING AND CURB & GUTTER.
 2. DIVERT STREAM FLOW INTO NEW TWIN 48 INCH CULVERTS WITH SANDBAGS, COMPLETE STRUCTURE S-2, BLOCK INLET, REMOVE STREAM DIVERSION, AND INSTALL SILT FENCE.
 3. INSTALL STORM DRAIN SYSTEM 1-2 TO 1-1, S-2 TO 1-3 (WATER QUALITY INLET).
 - 2 WEEKS 8. FINE GRADE PARKING LOT AND CAMPUS ROAD. STA. 0+00 TO STA. 5+50 AND STA. 7+00 TO STA. 9+30. INSTALL CURB AND GUTTER AND PAVE PARKING LOT AND CAMPUS ROAD. STABILIZE REMAINING DISTURBED AREAS DRAINING TO INLETS 1-4, 1-5, 1-6 AND 1-3.
 - 2 WEEKS 9. INSTALL EARTH DIKE AND STONE OUTLET STRUCTURE. BACKFILL SEDIMENT TRAP #2 WITH COMPACTED FILL WITH INSPECTORS APPROVAL.
 - 2 WEEKS 10. FINE GRADE, INSTALL CURB AND GUTTER STA. 5+50 TO STA. 7+00 AND PAVE REMAINING PORTIONS OF CAMPUS ROAD AND SIDEWALKS.
 - 1 WEEK 11. BACKFILL SEDIMENT TRAP #1 WITH INSPECTORS APPROVAL, REMOVE EARTH DIKES AND STABILIZE REMAINING DISTURBED AREAS.
 - 2 DAYS 12. WITH INSPECTORS APPROVAL, FLUSH STORM DRAIN SYSTEMS AND REMOVE CAP IN 1-3 (WATER QUALITY INLET).
- * ITEMS WHICH CAN BE DONE CONCURRENTLY.

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. 31089 EXPIRATION DATE: 11-21-10



PLAN SCALE: 1"=30'

NOTE: NEW SEAL AND SIGNATURE ARE APPLICABLE ONLY TO REVISIONS.

SOIL TYPE LEGEND

- Ba - Baile silt loam
- EKB2 - Elk oak silt loam, 3-8% slopes, moderately eroded
- G1B2 - Glenville silt loam, 3-8% slopes, moderately eroded
- M1B2 - Manor loam, 3-8% slopes, moderately eroded
- M1C3 - Manor loam, 8-15% slopes, severely eroded
- M1D3 - Manor loam, 15-25% slopes, severely eroded

NOTE: SEE SHEET 12 OF 24 (SCA1 OF 14) FOR NEW PHASE 3 SEQUENCE OF CONSTRUCTION UNDER GP-10-73.

ENGINEER'S CERTIFICATE

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

DATE 10-21-96

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

Carol Simmons 2/24/97 DATE

U.S.D.A. NATURAL RESOURCES SERVICE

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

John R. Blunt 2/24/97 DATE

APPROVED HOWARD S.C.D.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Richard B. Bond 2/27/97 DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION

Mark J. Dwyer 2/27/97 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT

Mark J. Dwyer 2/27/97 DATE

DIRECTOR

APPROVED PLANNING BOARD OF HOWARD COUNTY

DATE 12/12/96

DEVELOPER'S CERTIFICATION

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

Richard B. Bond DATE 10/21/96

SIGNATURE OF DEVELOPER

PRINT NAME BELOW SIGNATURE

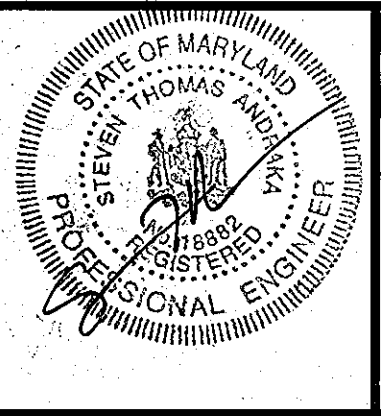
DEVELOPER: /OWNER

KATHLEEN HETHERINGTON, ED. D.
SECRETARY-TREASURER, PRESIDENT
HOWARD COMMUNITY COLLEGE
10901 LITTLE PATUXENT PARKWAY
COLUMBIA, MD 21044-3147
(410) 772-4820

DESIGNED		DATE		BY		DESCRIPTION	
M.A.M.	9/96	07-26-10	GMH	1	ADD NOTE - REVISE SHEET NUMBER		
DRAWN		L.R.C.		9/96			
CHECKED		M.A.M.		9/96			
APPROVED		S.T.A.		9/96			

dfi CONSULTING ENGINEERS, SURVEYORS, AND LAND PLANNERS

504 BALTIMORE/ANNAPOLIS BOULEVARD
SEVERNA PARK, MD 21146 (410)647-2727
FAX (410)647-7127



EROSION AND SEDIMENT CONTROL PLAN
PHASE TWO CONSTRUCTION
HOWARD COMMUNITY COLLEGE
ENTRANCE AND PARKING IMPROVEMENTS
FOR ADJACENT PARKING GARAGE # 2
(RED-LINE REVISION TO PREVIOUS APPROVED CAMPUS ROAD RECONSTRUCTION AND PARKING EXPANSION PROJECT)

JULY 26, 2010

TAX MAP: 35,36

PARCEL # 47

SHEET 9 OF 24

SDP-97-45

- LEGEND**
- EXISTING WETLANDS
 - 25' WETLAND BUFFER
 - 100 YR. FLOODPLAIN
 - 50' STREAM BUFFER
 - PROP. ASPHALT PAVING
 - PROP. 1-1/2" ASPHALT MILL AND OVERLAY
 - EXISTING FOREST CONSERVATION EASEMENTS
 - STABILIZED CONSTRUCTION ENTRANCE
 - LOD - LIMIT OF DISTURBANCE
 - SF - SILT FENCE
 - SSF - SUPER SILT FENCE
 - TAB - TEMPORARY ASPHALT BERM
 - XX - BLAZE ORANGE MESH SAFETY FENCE
 - AT GRADE INLET PROTECTION
 - CURB INLET PROTECTION
 - RRP - RIP-RAP PROTECTION
 - EROSION CONTROL MATTING
 - ROCK FILTER BERM

CONTRACTOR'S NOTE:
 CONTRACTOR SHALL EXERCISE EXTREME CAUTION SO AS NOT TO DAMAGE ANY EXISTING PAVING, CURB & GUTTER, SIDEWALK OR OTHER SITE FEATURES WHICH ARE TO REMAIN. SHOULD DAMAGE OCCUR, CONTRACTOR SHALL REPAIR TO ORIGINAL CONDITION AT CONTRACTOR'S EXPENSE.

NOTE:
 ALL SPOT SHOTS ARE TO FLOW LINE OF CURB UNLESS OTHERWISE NOTED
 BC = BOTTOM OF CURB OR FLOW LINE
 TC = TOP OF CURB

APPROVED FOR PUBLIC OR PRIVATE (pick only one) WATER AND PUBLIC OR PRIVATE (pick only one) SEWERAGE SYSTEMS

County Health Officer _____ Date _____
 Howard County Health Department

APPROVED PLANNING BOARD OF HOWARD COUNTY

DATE _____

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

Shelley Selig 8/25/10
 Howard SCD Date

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 that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

Richard R. Butt 8-12-10
 Signature of Engineer (print name below signature) Date

DEVELOPER'S CERTIFICATE
 "I/We certify that all development and construction will be done according to this plan 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 the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."

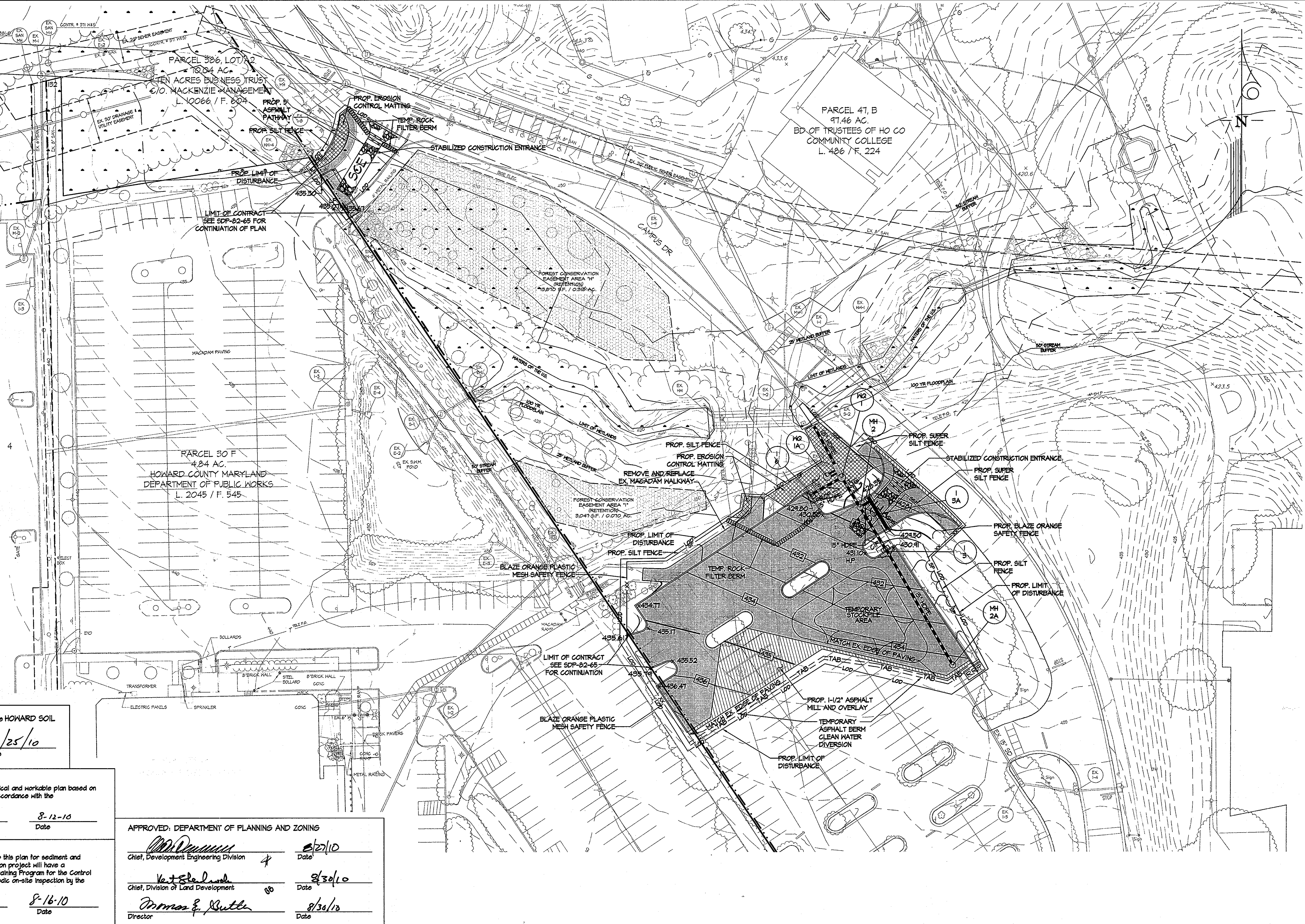
Sharon J. Puccio 8-16-10
 Signature of Developer (print name below signature) Date

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Michael J. Puccio 8/27/10
 Chief, Development Engineering Division Date

Victoria L. Lamb 8/30/10
 Chief, Division of Land Development Date

Norman E. Butler 8/30/10
 Director Date



DEVELOPER:/OWNER
 KATHLEEN HETHERINGTON, ED. D.
 SECRETARY-TREASURER, PRESIDENT
 HOWARD COMMUNITY COLLEGE
 10901 LITTLE PATUXENT PARKWAY
 COLUMBIA, MD 21044-3197
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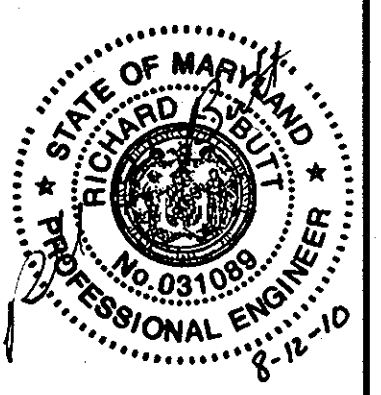
DESIGNED BY:	DATE	BY	DESCRIPTION
GAH	7/26/10	GAH	NEW SHEET FOR REV. #1
DRAWN BY:			
RLB			
CHECKED BY:			
RLB			
APPROVED BY:			
RLB			
SCALE:	1" = 30'		

KCI TECHNOLOGIES

ENGINEERS
 PLANNERS
 SCIENTISTS
 CONSTRUCTION MANAGERS

936 RIDGEBROOK ROAD
 SPARKS, MD 21152
 PHONE: (410) 316-7800

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. 31081, EXPIRATION DATE: 11/21/10.



SEDIMENT & EROSION CONTROL PLAN
 HOWARD COMMUNITY COLLEGE
 ENTRANCE AND PARKING IMPROVEMENTS
 FOR ADJACENT PARKING GARAGE # 2
 (RED-LINE REVISION FOR PREVIOUSLY APPROVED CAMPUS ROAD RELOCATION AND PARKING EXPANSION PROJECT)

SHEET
 10
 OF
 24
 SC-10 OF 14
 KCI JOB NUMBER : 0982978

Tuesday, July 27, 2010 12:44:00 PM
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SEDIMENT CONTROL NOTES

- A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION. (313-1855)
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH SEC. 219 OF THE HOWARD COUNTY STANDARDS AND SPECIFICATIONS.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 - 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, b) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE "1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" FOR PERMANENT SEEDINGS (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 SITE	124.83 ACRES.
AREA DISTURBED	4.00 ACRES.
AREA TO BE PAVED	2.30 ACRES.
AREA TO BE VEGETATIVELY STABILIZED	1.70 ACRES.
TOTAL CUT	8300 CU.YDS.
TOTAL FILL	8300 CU.YDS.
OFFSITE WASTE/BORROW AREA LOCATION	NONE
- 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 CONTROLS MUST BE PROVIDED IF DEEMED NECESSARY BY THE HOWARD COUNTY DPW 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.
- ALL TRENCH MATERIAL SHOULD BE PLACED ON THE HIGHER SIDE OF THE TRENCH.

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 THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

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

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

SEEDING: FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS PER ACRE (1.4 LBS/1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE (0.05 LBS/1000 SQ.FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, AS POSSIBLE IN THE SPRING, OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ.FT.) 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 REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

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

SOIL AMENDMENTS - APPLY 60 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ.FT.)

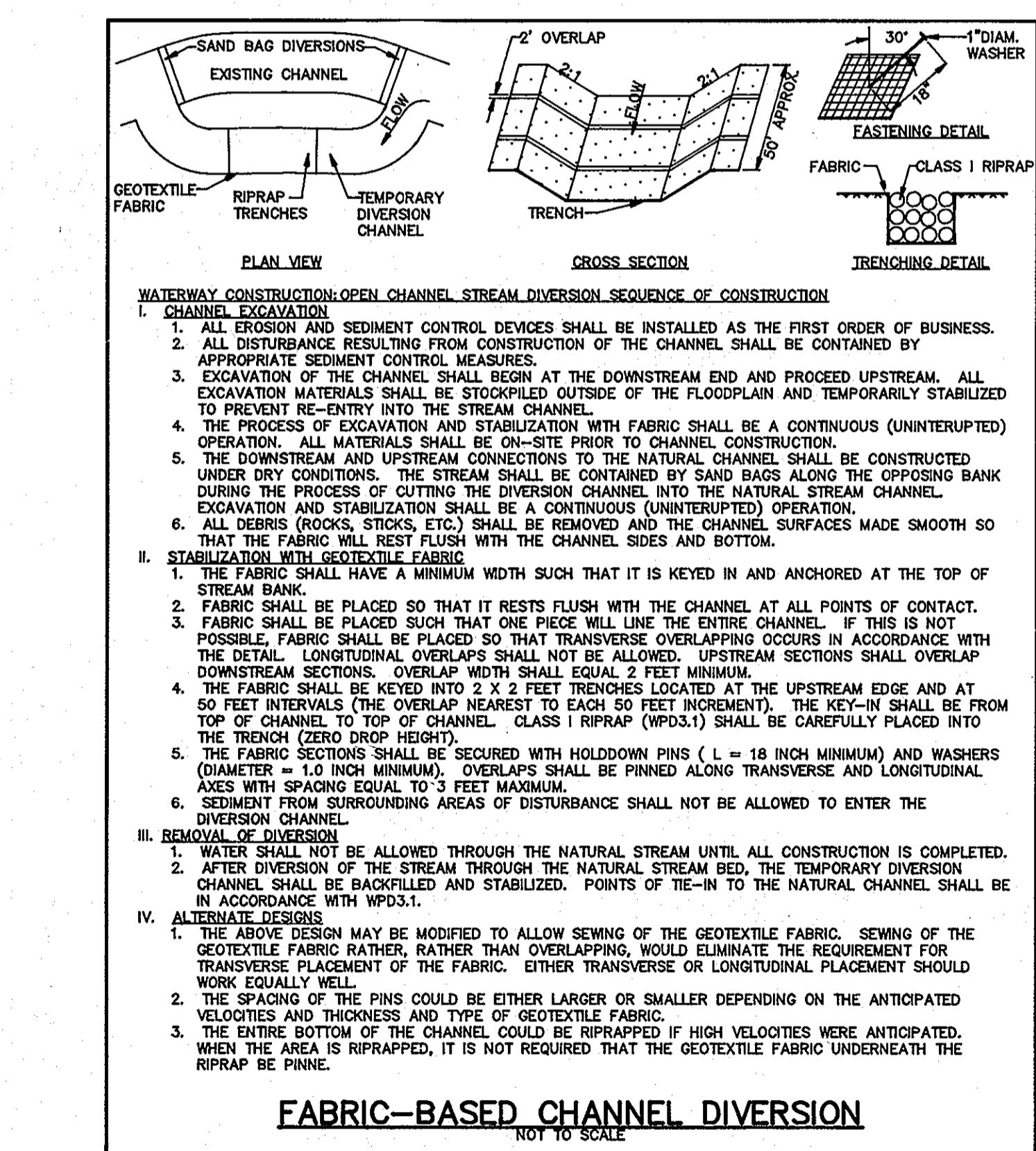
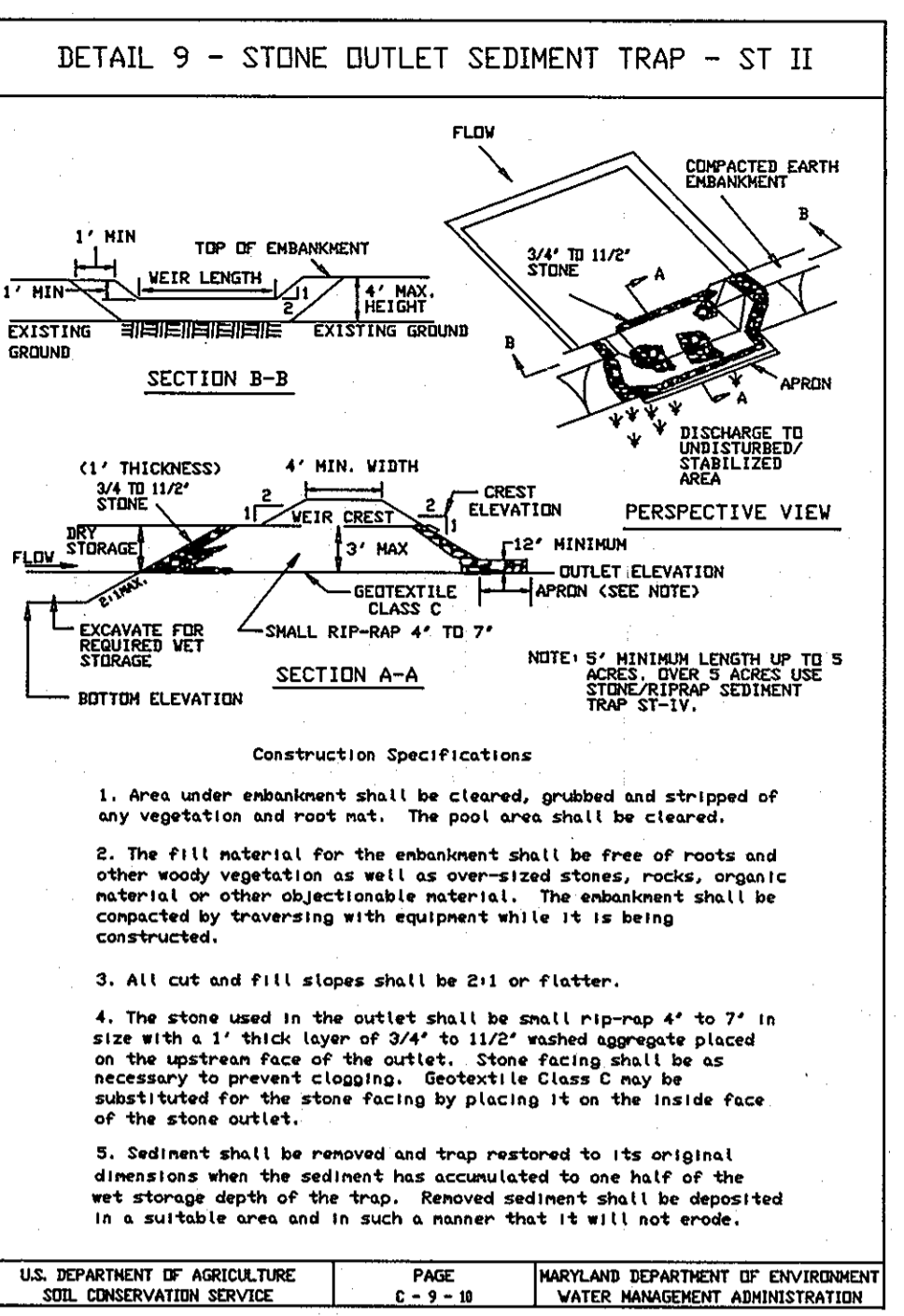
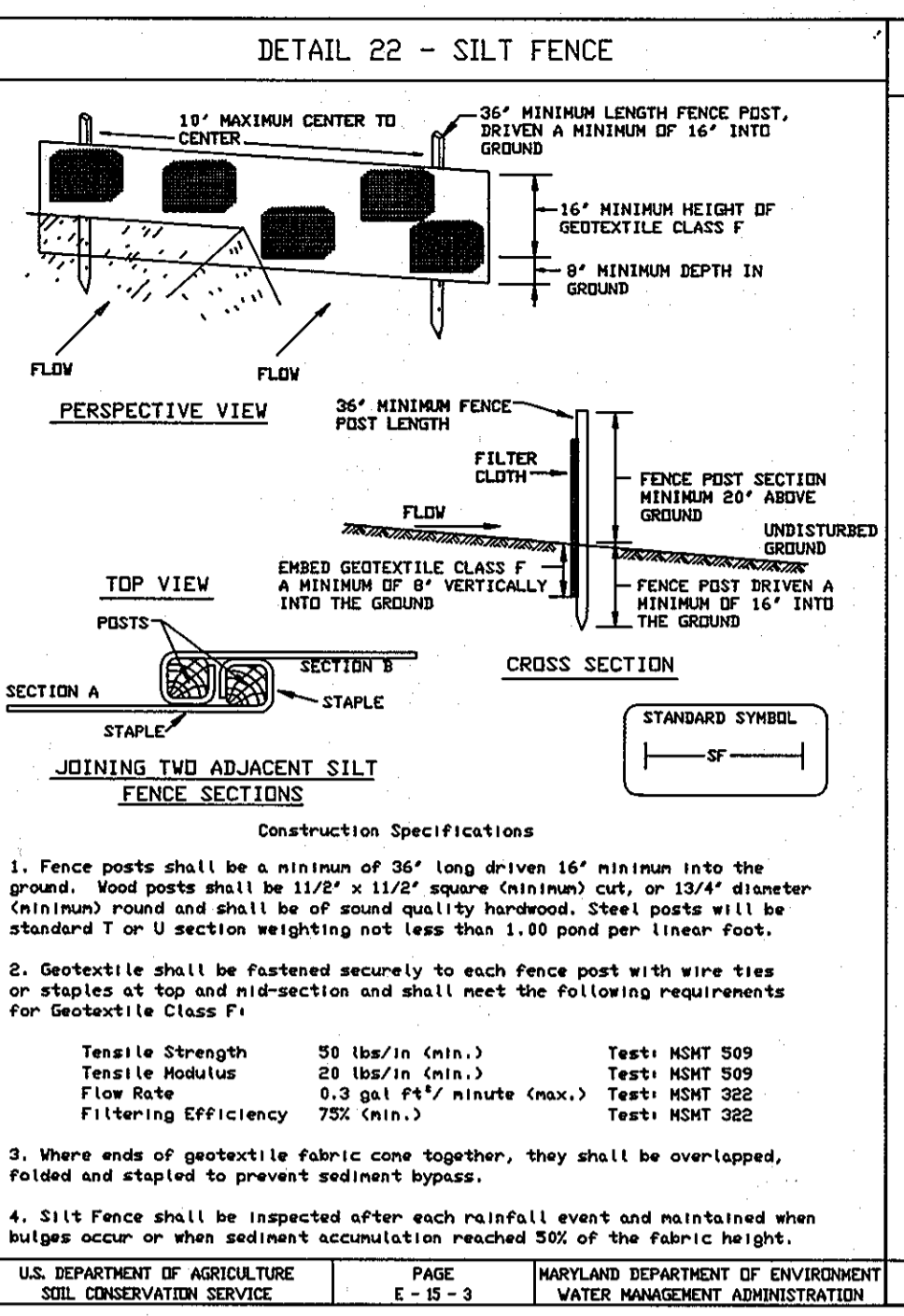
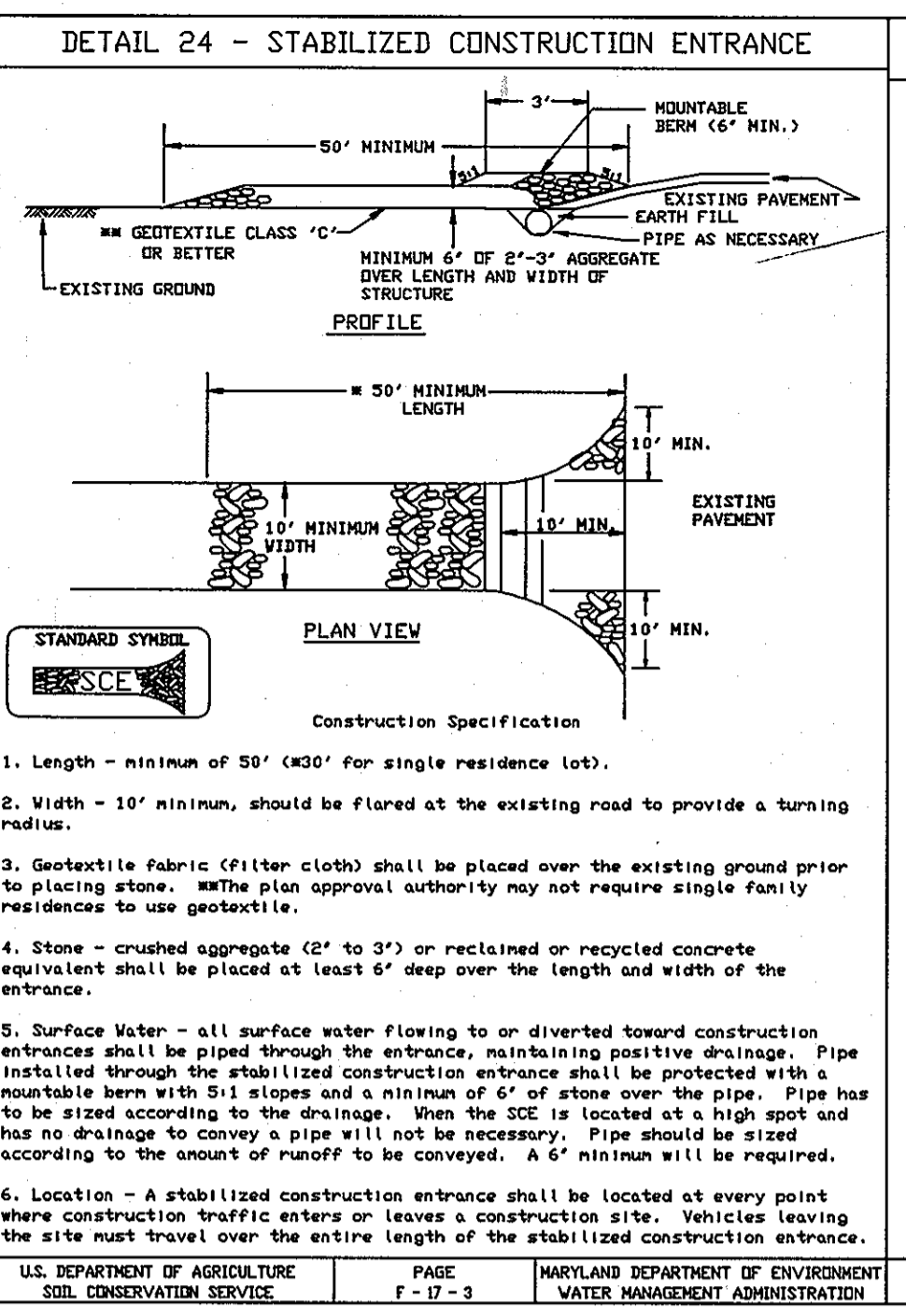
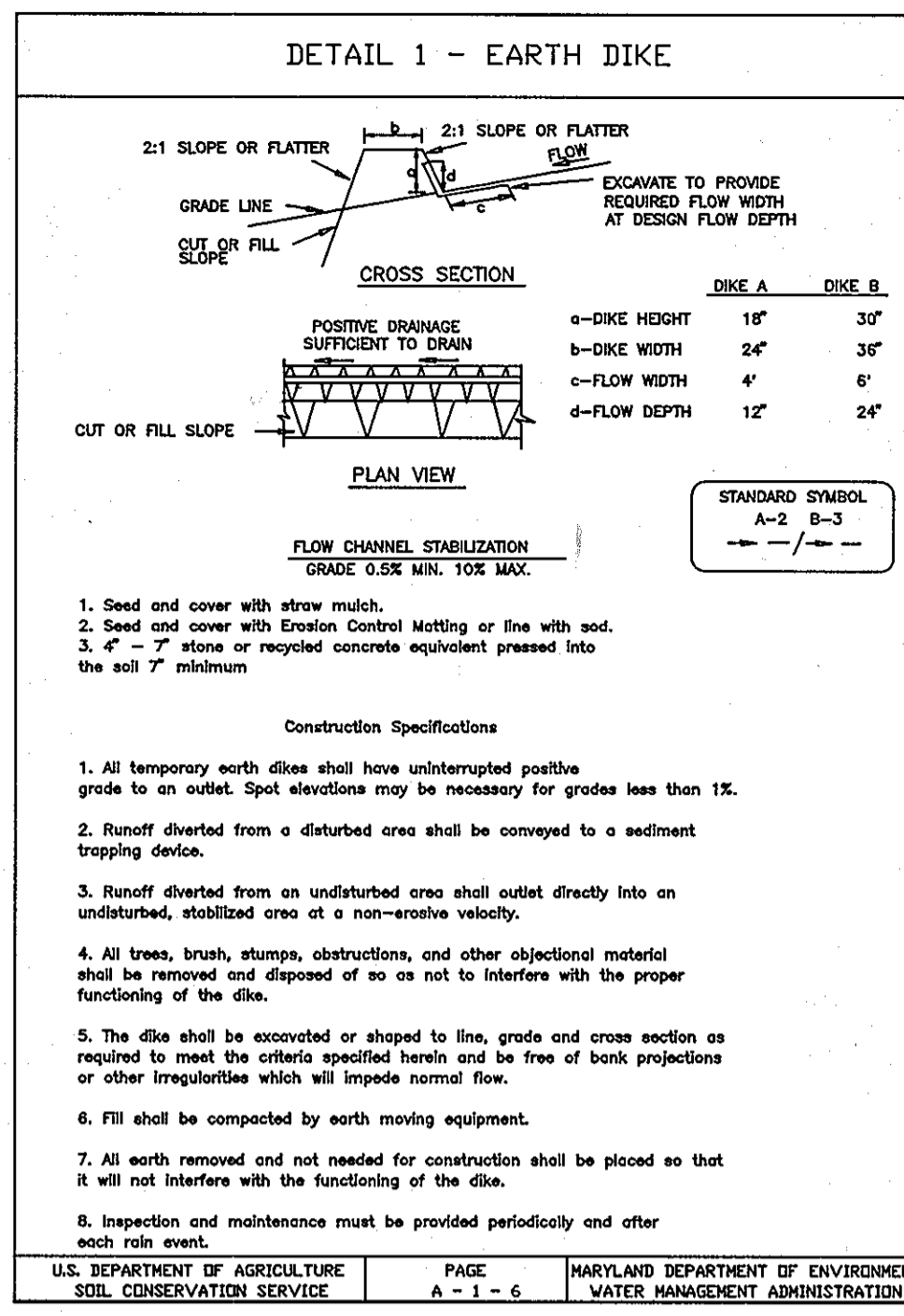
SEEDING - FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ.FT.). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (0.07 LBS/1000 SQ.FT.). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, 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/1000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE(5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

REFER TO THE "1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" FOR RATE AND METHODS NOT COVERED.

NOTE:

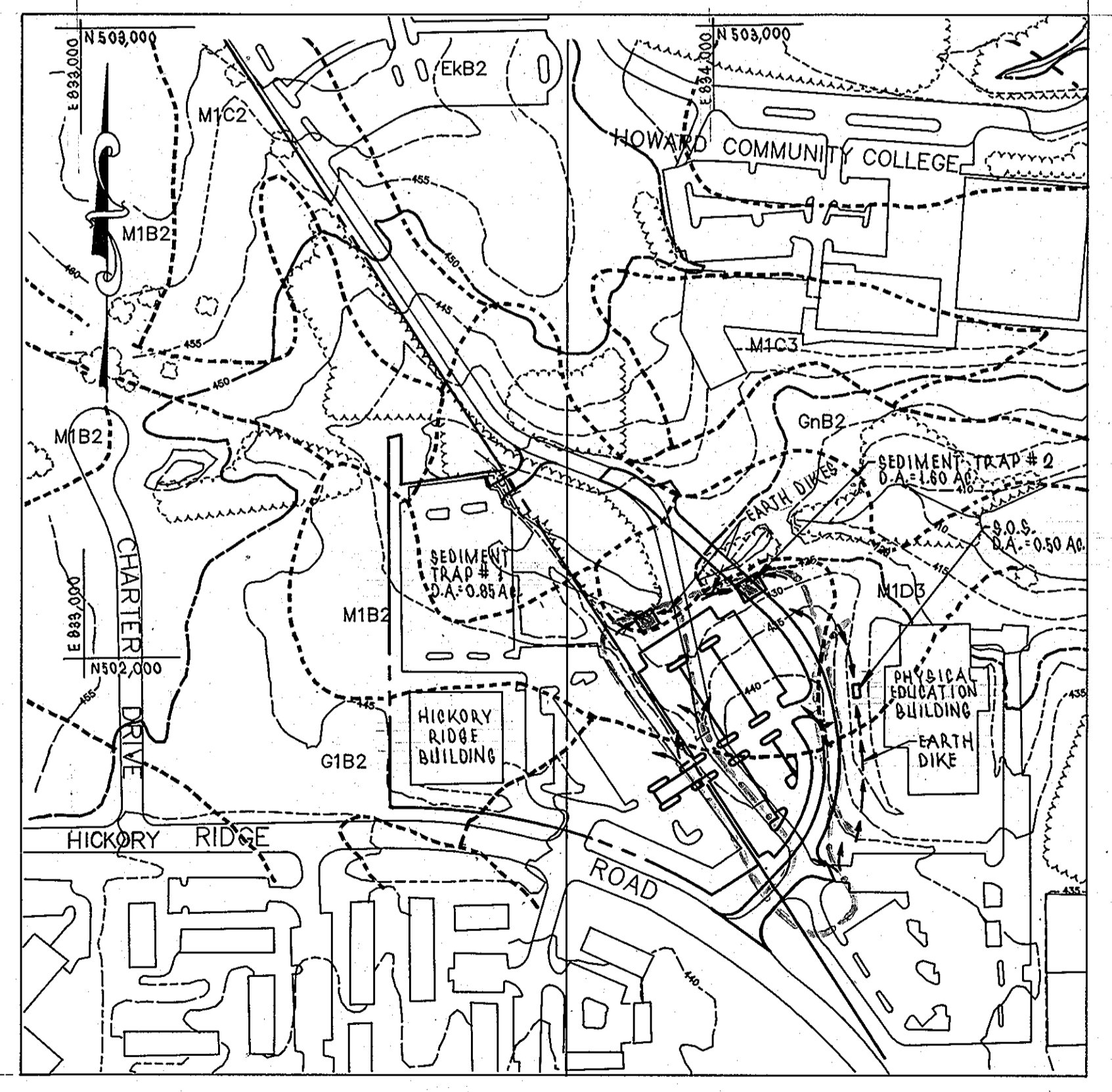
SEDIMENT CONTROL TO BE IMPLEMENTED IN ACCORDANCE WITH VOLUME 4, ARTICLE 35 OF THE HOWARD COUNTY DESIGN MANUAL AND THESE PLANS.



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. 31687, EXPIRATION DATE: 11-21-10



SEE SHEET 12 OF 24 FOR REVISED EROSION & SEDIMENT CONTROL DETAIL SHEET. THIS PHASE OF PROJECT IS CLOSED OUT.



DEVELOPER'S CERTIFICATION

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

DATE 10-21-96

ENGINEER'S CERTIFICATE

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

DATE 10-21-96

APPROVED: DEPARTMENT OF PLANNING AND ZONING

APPROVED: PLANNING BOARD OF HOWARD COUNTY

DATE 12/19/96

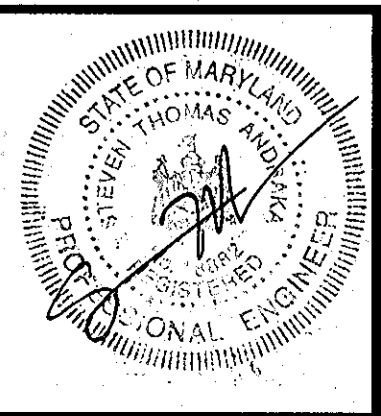
DEVELOPER: /OWNER

KATHLEEN HETHERINGTON ED. D.
SECRETARY-TREASURER, PRESIDENT
HOWARD COMMUNITY COLLEGE
10901 LITTLE PATUXENT PARKWAY
COLUMBIA, MD 21044-3197
(410) 712-4620

REVISIONS		
DATE	BY	DESCRIPTION
07-26-10	GAH	1 ADD NOTE - REVISE SHEET NUMBER

dfi CONSULTING ENGINEERS, SURVEYORS, AND LAND PLANNERS

504 BALTIMORE/ANNAPOLIS BOULEVARD
SEVERNA PARK, MD 21146 (410)647-2727
FAX (410)647-7127



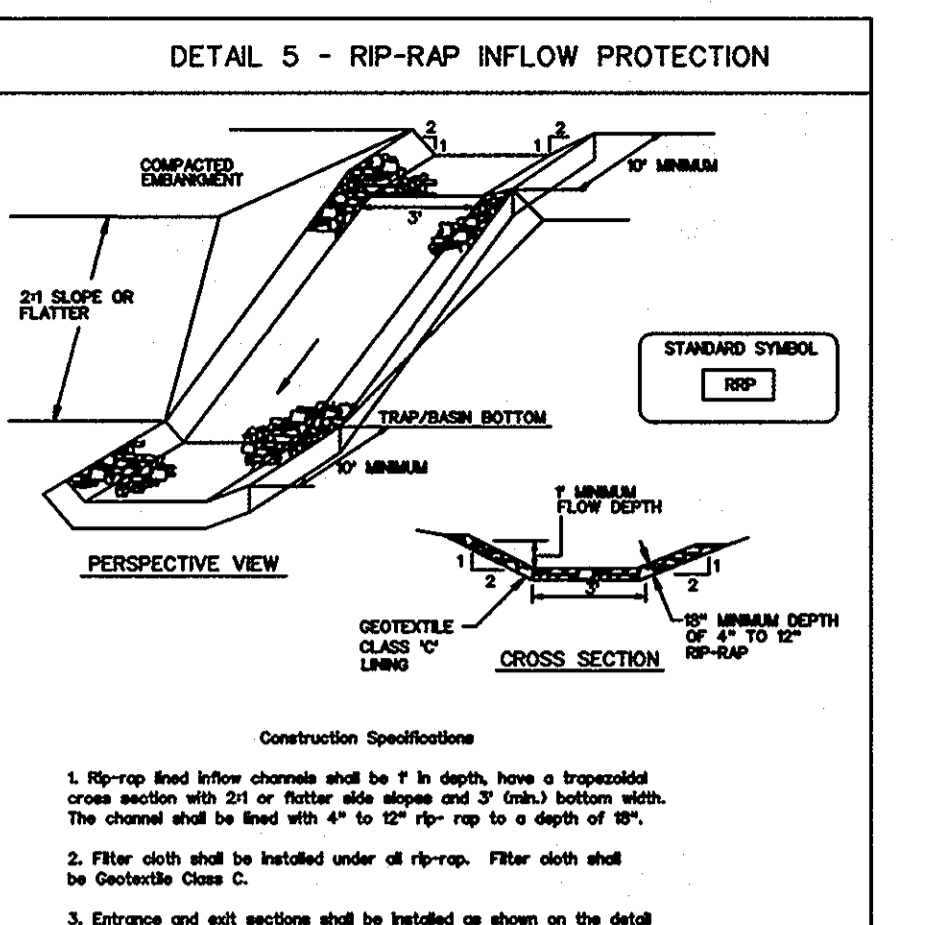
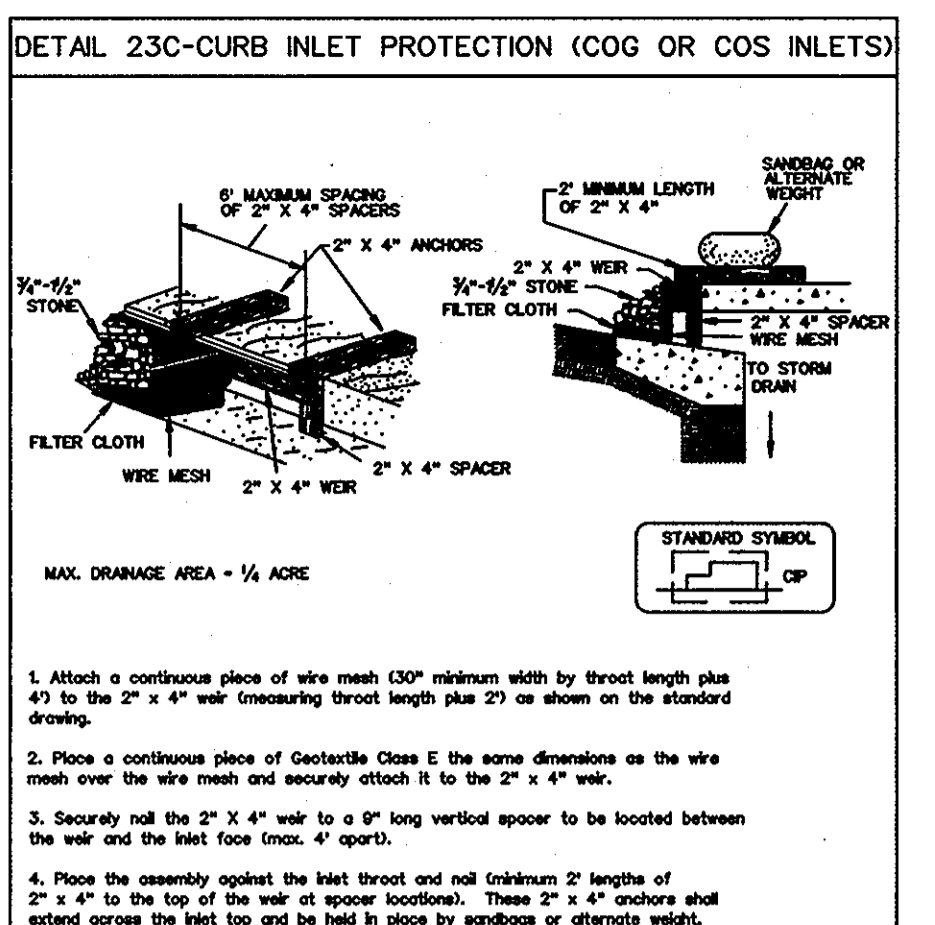
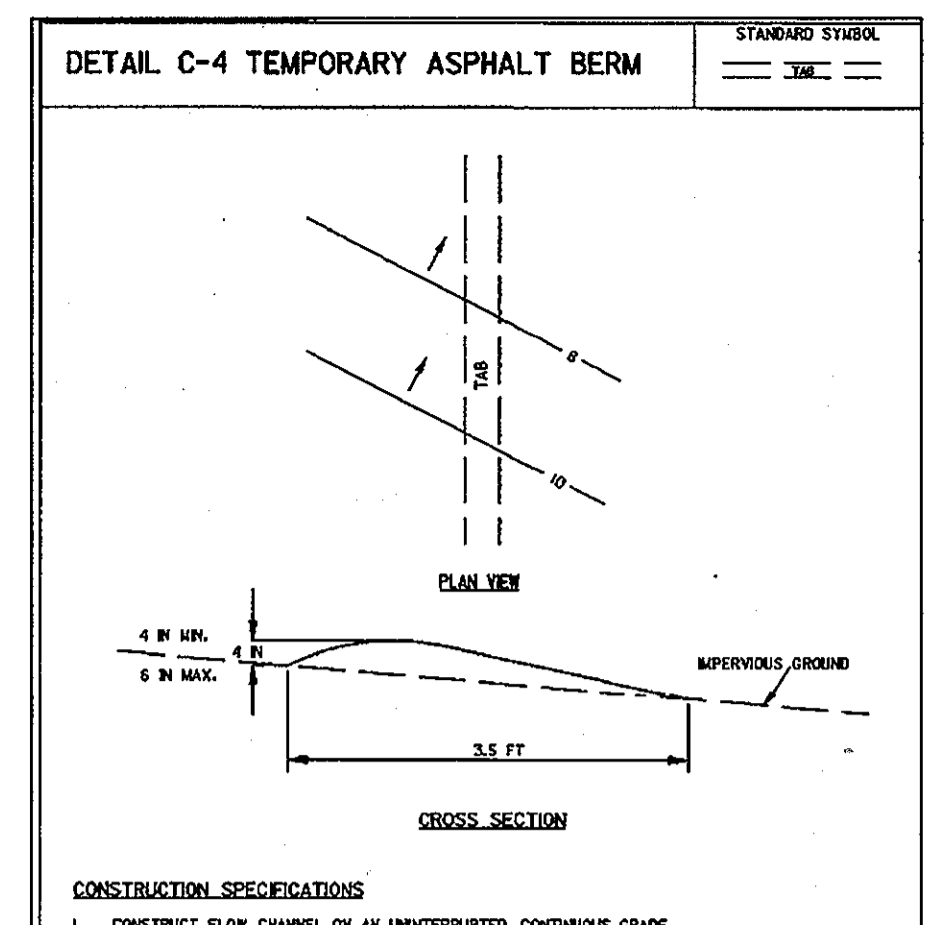
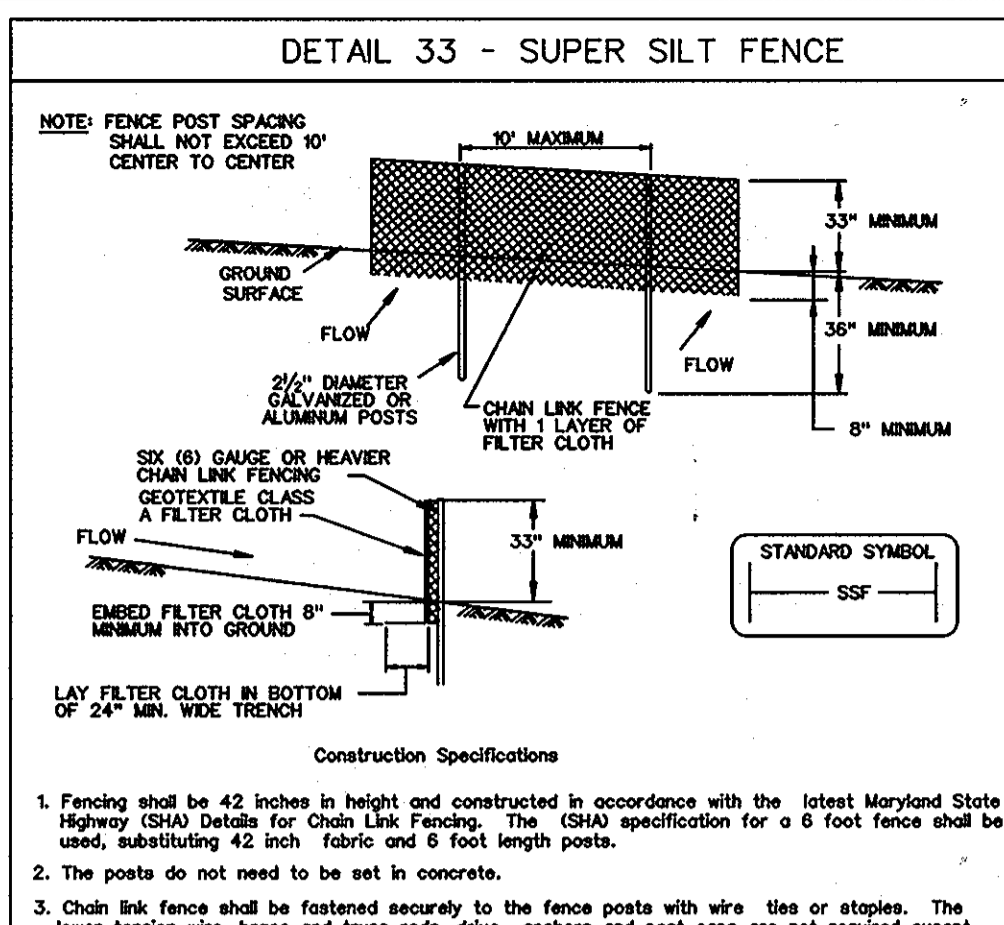
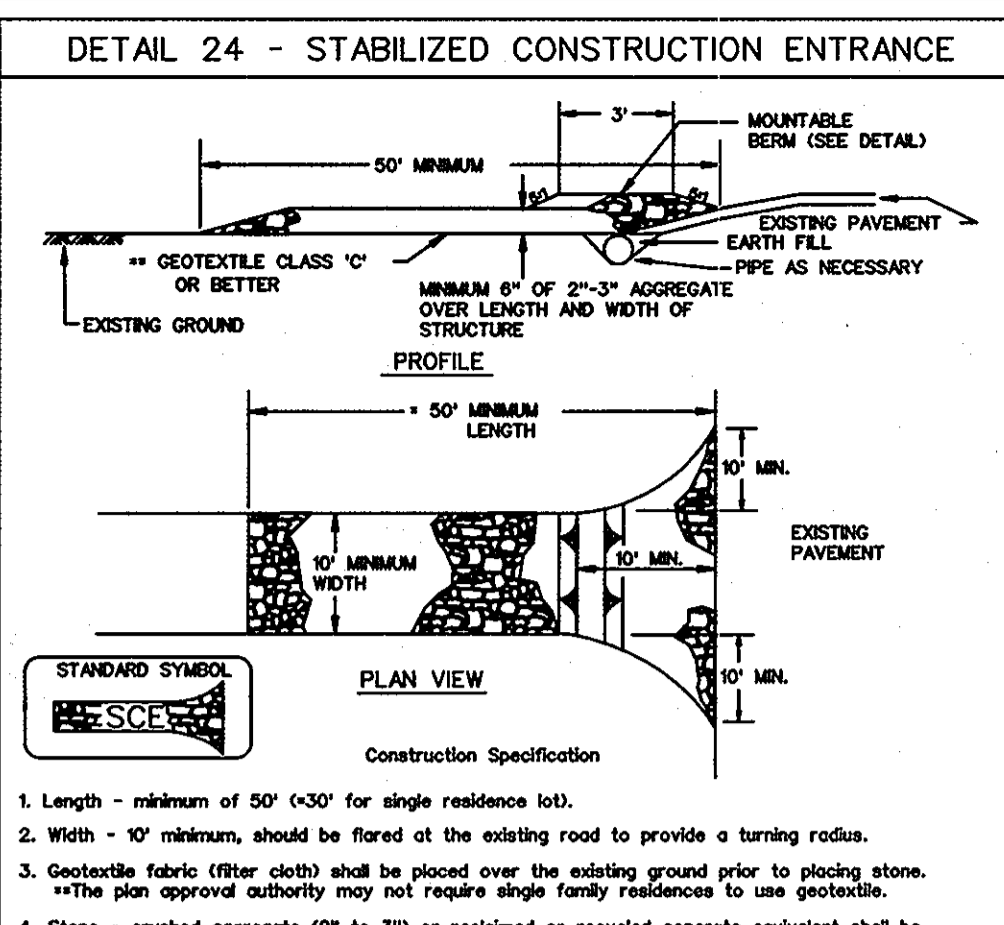
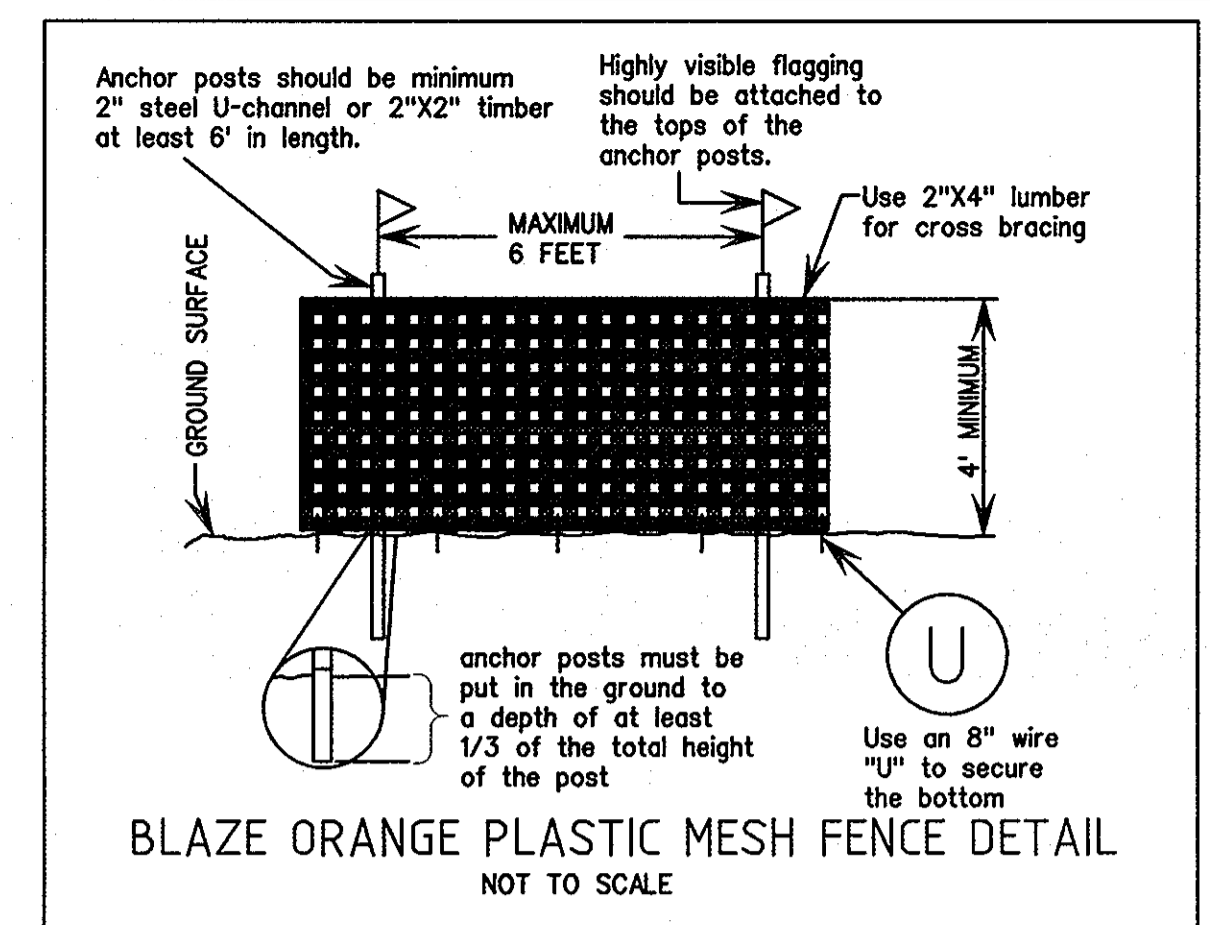
EROSION AND SEDIMENT CONTROL DETAILS
HOWARD COMMUNITY COLLEGE
ENTRANCE AND PARKING IMPROVEMENTS
FOR ADJACENT PARKING GARAGE # 2
(RED-LINE REVISION TO PREVIOUSLY APPROVED CAMPUS ROAD RELOCATION AND PARKING EXPANSION PROJECT)

JULY 26, 2010

PARCEL #47

SHEET 11 OF 24

SDP-97-45



21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

Definition
Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.
Purpose
To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

- Conditions Where Practice Applies**
- This practice is limited to areas having 2:1 or flatter slopes where:
 - The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
 - The original soil to be vegetated contains material toxic to plants.
 - The soil is so acidic that treatment with limestone is not feasible.

* For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

Construction and Material Specifications
* Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experiment Station.

- Topsoil Specifications - Soil to be used as topsoil must meet the following:**
- Topsoil shall be a loam, sandy loam, clay loam, silty loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured materials and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1/2" diameter.

II. Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnsongrass, nutgrass, plantain, ivy, thistle, or others as specified.

III. Where the subsoil is either highly acidic or composed of heavy clay, ground limestone shall be spread at the rate of 4-6 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.

* For sites having disturbed areas under 5 acres:

- Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section * - Vegetative Stabilization Methods and Materials.

** For sites having disturbed areas over 5 acres:

- On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:

- pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be incorporated to raise the pH to 6.5 or higher.
 - Organic content of topsoil shall be not less than 1.5 percent by weight.
 - Topsoil having soluble salt content greater than 500 parts per million shall not be used.
 - No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time as elapsed (14 days min) to permit dissipation of phytotoxicity.
- Note: Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
- Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section * - Vegetative Stabilization Methods and Materials.

Topsoil Application

- When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins.
- Grades on the areas to be topsoiled, which have been previously established, shall be maintained about 4" - 6" higher in elevation.
- Topsoil shall be uniformly distributed in a 4" - 6" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that seeding or sodding can proceed without disturbance and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.
- Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet, or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.

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

Howard Soil Conservation District
Signature of Engineer (print name below signature)
Date: 8/25/10

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 that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Signature of Engineer (print name below signature)
Date: 8-12-10

DEVELOPER'S CERTIFICATE
I/We certify that all development and construction will be done according to this plan 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 the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

Signature of Developer (print name below signature)
Date: 8-16-10

STABILIZED CONSTRUCTION ENTRANCE

Construction Specification

- Length - minimum of 50' (+30' for single residence lot).
- Width - 10' minimum, should be flared at the existing road to provide a turning radius.
- Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. *The plan approval authority may not require stone family resistance to use geotextile.
- 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.
- Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipes installed through the stabilized construction entrance shall be protected with a mounded berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to 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.
- 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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STABILIZED CONSTRUCTION ENTRANCE

Construction Specification

- Length - minimum of 50' (+30' for single residence lot).
- Width - 10' minimum, should be flared at the existing road to provide a turning radius.
- Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. *The plan approval authority may not require stone family resistance to use geotextile.
- 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.
- Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipes installed through the stabilized construction entrance shall be protected with a mounded berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to 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.
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SDP-47-45, PHASE 3, SEQUENCE OF CONSTRUCTION

(APPLICABLE ONLY TO GP-10-7B)

- OBTAIN GRADING PERMIT. CONTACT THE MARYLAND DEPARTMENT OF THE ENVIRONMENT INSPECTOR AT 410-228-2500 A MINIMUM OF 2 WEEKS PRIOR TO THE START OF CONSTRUCTION TO SCHEDULE A PRE-CONSTRUCTION MEETING. THE CONTRACTOR IS TO SUBMIT A SCHEDULE OF WORK ACTIVITIES TO THE DEPARTMENT OF PUBLIC WORKS PRIOR TO INITIATION OF ANY GRADING ACTIVITIES.

On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:

- pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be incorporated to raise the pH to 6.5 or higher.
- Organic content of topsoil shall be not less than 1.5 percent by weight.
- Topsoil having soluble salt content greater than 500 parts per million shall not be used.
- No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time as elapsed (14 days min) to permit dissipation of phytotoxicity.

Note: Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.

- Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section * - Vegetative Stabilization Methods and Materials.

Topsoil Application

- When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins.
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- Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet, or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.

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

Howard Soil Conservation District
Signature of Engineer (print name below signature)
Date: 8/25/10

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 that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Signature of Engineer (print name below signature)
Date: 8-12-10

DEVELOPER'S CERTIFICATE
I/We certify that all development and construction will be done according to this plan 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 the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

Signature of Developer (print name below signature)
Date: 8-16-10

SUPER SILT FENCE

Design Criteria

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

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HOWARD SOIL CONSERVATION DISTRICT PERMITTING DIVISION

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetation cover is needed.

Seedbed Preparation - Loosen upper three inches of soil by raking, disk or other acceptable means before seeding, if not previously loosened.

Soil Amendments - In lieu of soil test recommendations, use one of the following schedules:

- Preferred - Apply 2 tons/acre dolomitic limestone (82 lbs/1000 sq. ft.) and 600 lbs/acre 10-10-10 fertilizer (14 lbs/1000 sq. ft.) before seeding. Harrow or disk topsoil upper three inches of soil. At time of seeding apply 400 lbs/acre 50-0-0 ureaform fertilizer (4 lbs/1000 sq. ft.)
- Alternative - Apply 2 tons/acre dolomitic limestone (82 lbs/1000 sq. ft.) and 1000 lbs/acre 10-10-10 fertilizer (25 lbs/1000 sq. ft.) before seeding. Harrow or disk topsoil upper three inches of soil.

Seeding - For the periods March 1 - April 30, and August 1 - October 15, seed with 60 lbs/acre (14 lbs/1000 sq. ft.) of Kentucky 91 Tall Fescue. For the period May 1 - July 31, seed with 60 lbs Kentucky 91 Tall Fescue per acre and 2 lbs/acre (25 lbs/1000 sq. ft.) of creeping lovegrass. During the period of October 16 - February 28, protect site by:

- Option 1 - Two tons per acre of well anchored straw mulch and seed as soon as possible in the spring.
- Option 2 - Use sod.
- Option 3 - Seed with 60 lbs/acre Kentucky 91 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching - Apply 1/2 to 2 tons/acre (10 to 40 lbs/1000 sq. ft.) of untreated small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 200 gallons per acre (8 gal/1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 6 feet or higher, use 340 gallons per acre (8 gal/1000 sq. ft.) for anchoring.

Maintenance - Inspect all seeding areas and make needed repairs, replacements and reseedings.

Apply to graded or cleared areas likely to be re-disturbed where a short-term vegetative cover is needed.

Seedbed preparation - Loosen upper three inches of soil by raking, disk or other acceptable means before seeding, if not previously loosened.

Soil Amendments - Apply 600 lbs/acre 10-10-10 fertilizer (14 lbs/1000 sq. ft.)

Seeding - For periods March 1 - April 30 and from August 1 - October 15, seed with 2-1/2 tons/acre of annual ryegrass (52 lbs/1000 sq. ft.). For the period May 1 - August 14, seed with 5 lbs/acre of creeping lovegrass (17 lbs/1000 sq. ft.). For the period November 16 - February 28, protect site by applying 2 tons/acre of well anchored straw mulch and seed as soon as possible in the spring or use sod.

Mulching - Apply 1/2 to 2 tons/acre (10 to 40 lbs/1000 sq. ft.) of untreated small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 200 gallons per acre (8 gal/1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 6 feet or higher, use 340 gallons per acre (8 gal/1000 sq. ft.) for anchoring.

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Maintenance - Inspect all seeding areas and make needed repairs, replacements and reseedings.

DETAIL 22 - SILT FENCE

Construction Specifications

- Construct flow channel on an unimproved, continuous grade.
- Install berm to conform to cross section dimensions of a uniform berm with a 4' minimum height and a 3:1 slope.
- Provide outlet protection as required on plan.
- Contact asphalt berm.
- Inspect and provide necessary maintenance.
- Upon removal of asphalt berm, return to original condition or as specified.

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DETAIL 23B - AT GRADE INLET PROTECTION

Construction Specifications

1. Lini grate and wrap with Geotextile Class E to completely cover all openings, then set grate back in place.
2. Place 3/4" to 1/2" stone, 4"-6" thick on the grate to secure the fabric and provide additional filtration.

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DETAIL 23B - AT GRADE INLET PROTECTION

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U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 19 - 5A	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
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DETAIL 23B - AT GRADE INLET PROTECTION

Construction Specifications

1. Lini grate and wrap with Geotextile Class E to completely cover all openings, then set grate back in place.
2. Place 3/4" to 1/2" stone, 4"-6" thick on the grate to secure the fabric and provide additional filtration.

DETAIL 23C-CURB INLET PROTECTION (COG OR COS INLETS)

Construction Specifications

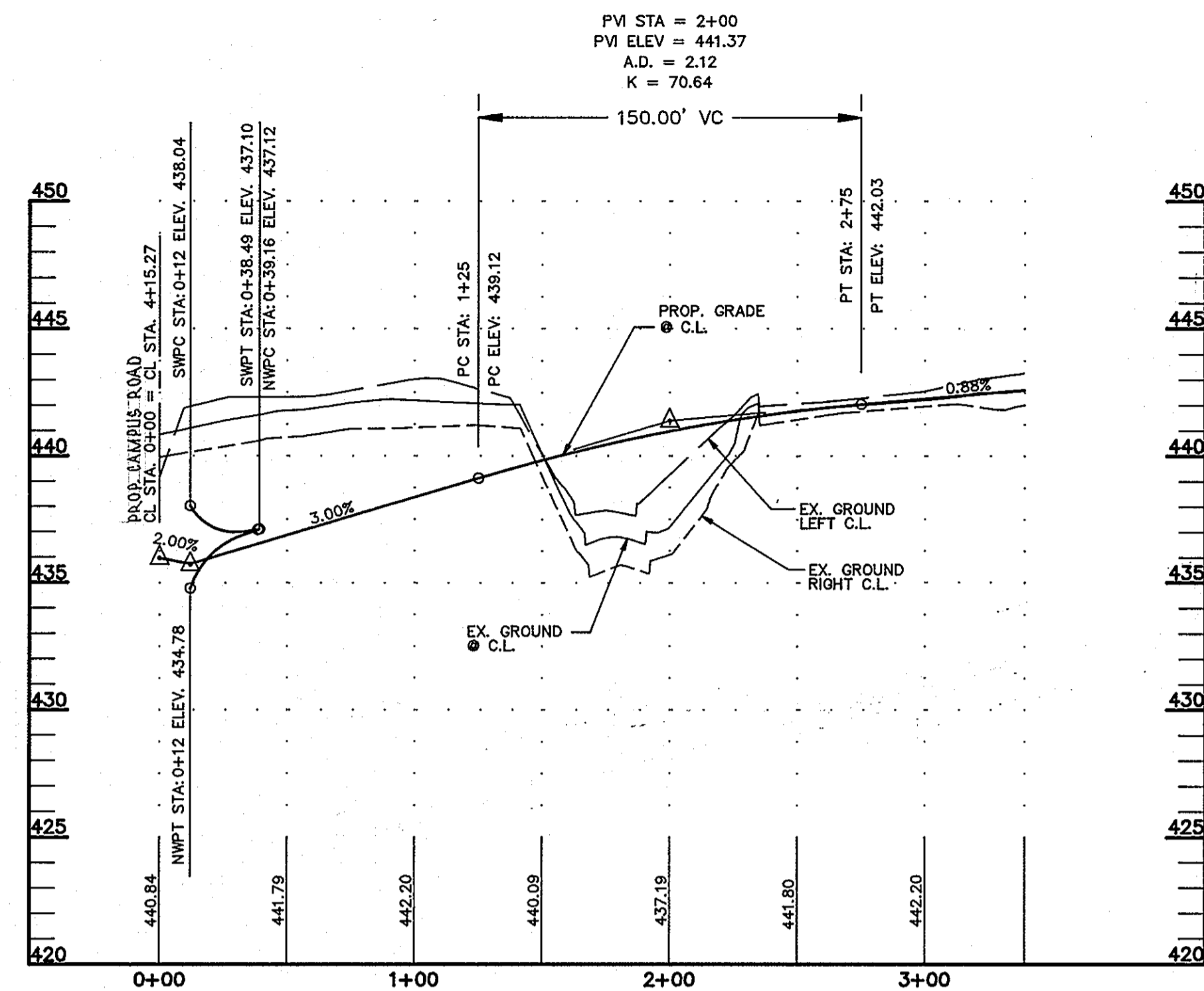
1. Attach a continuous piece of wire mesh (30" minimum width by throat length plus 4") to the 2" x 4" curb (measuring throat length plus 2") on shown on the standard drawing.
2. Place a continuous piece of Geotextile Class E the same dimensions as the wire mesh over the wire mesh and securely attach it to the 2" x 4" curb.
3. Securely nail the 2" x 4" curb to a 6" long vertical spacer to be located between the curb and the inlet face (max. 4" apart).
4. Place the assembly against the inlet throat and nail minimum 2" lengths of 2" x 4" to the top and bottom of the curb. These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.
5. The assembly shall be placed so that the end spacers are a minimum 7" beyond both ends of the throat opening.
6. Form the 1/2" x 1/2" wire mesh and the geotextile fabric to the concrete gutter and against the face of the curb on both sides of the inlet. Place about 3/4" x 3/4" stone over the wire mesh and geotextile in such a manner to prevent water from entering the inlet under or around the geotextile.
7. The type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
8. Assume that storm flow does not bypass the filter by installing a temporary earth or asphalt dike to direct the flow to the inlet.

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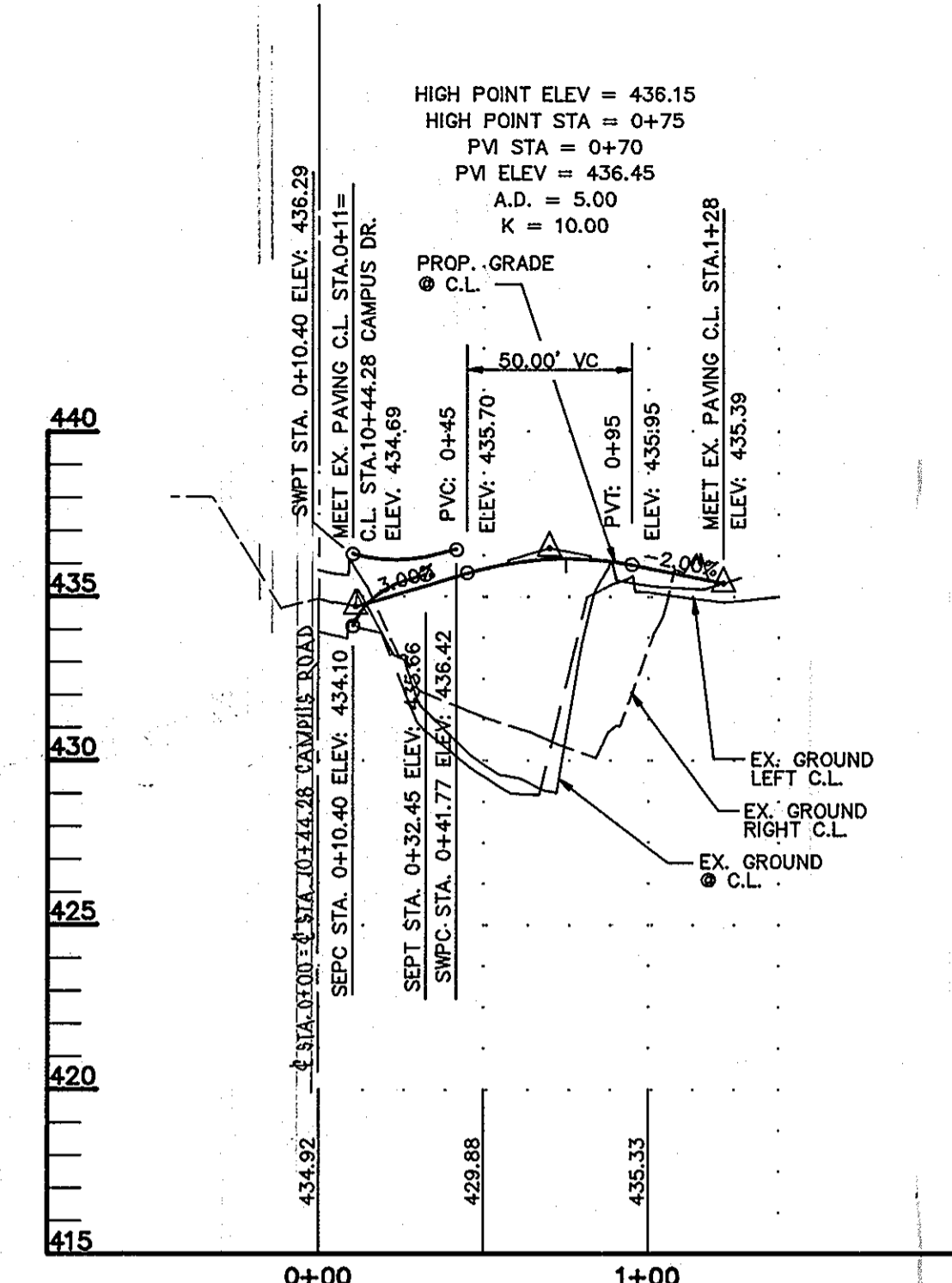
DETAIL 22 - SILT FENCE

Construction Specifications

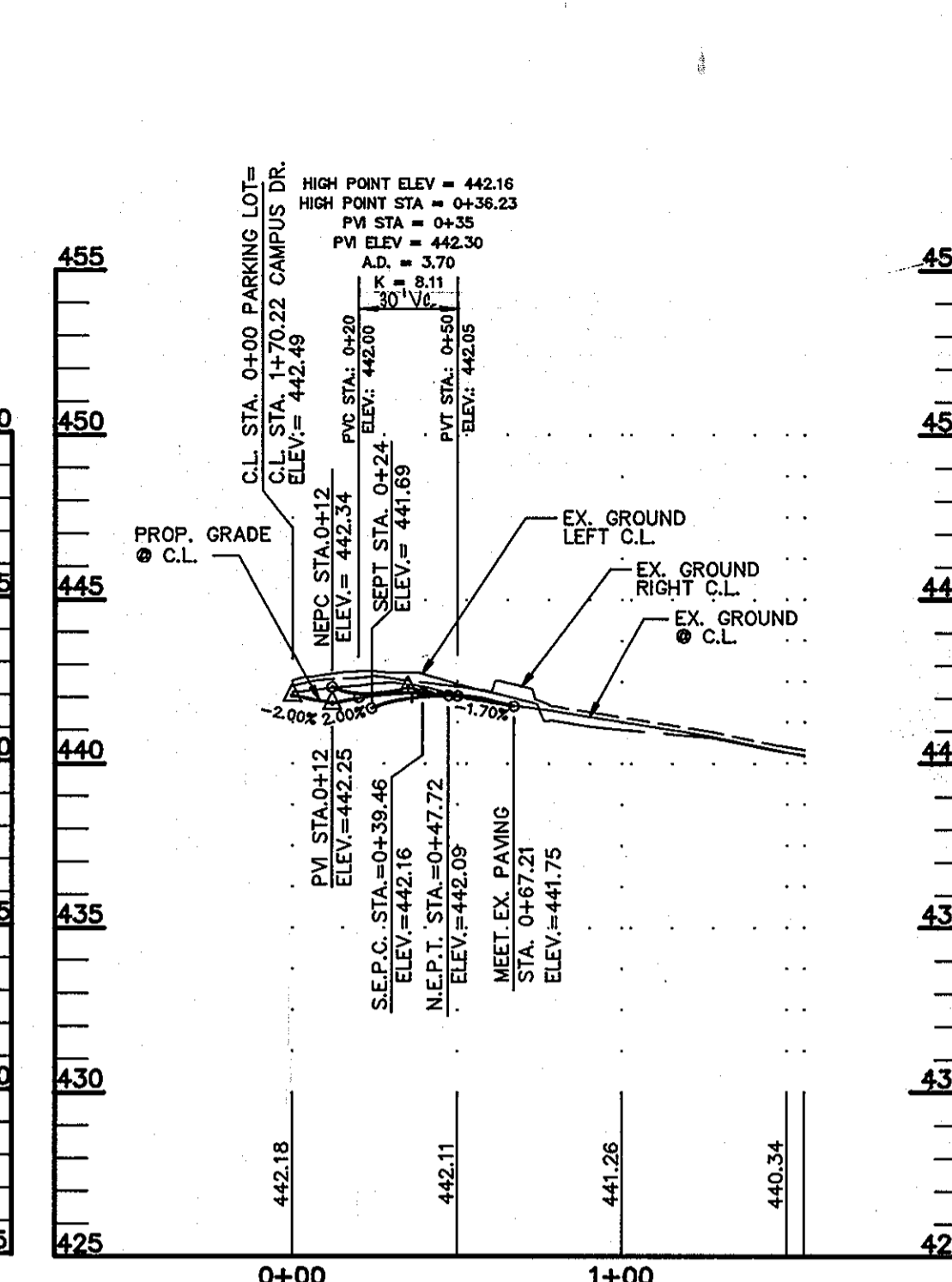
1. Construct flow channel on an unimproved, continuous grade.
2. Install berm to conform



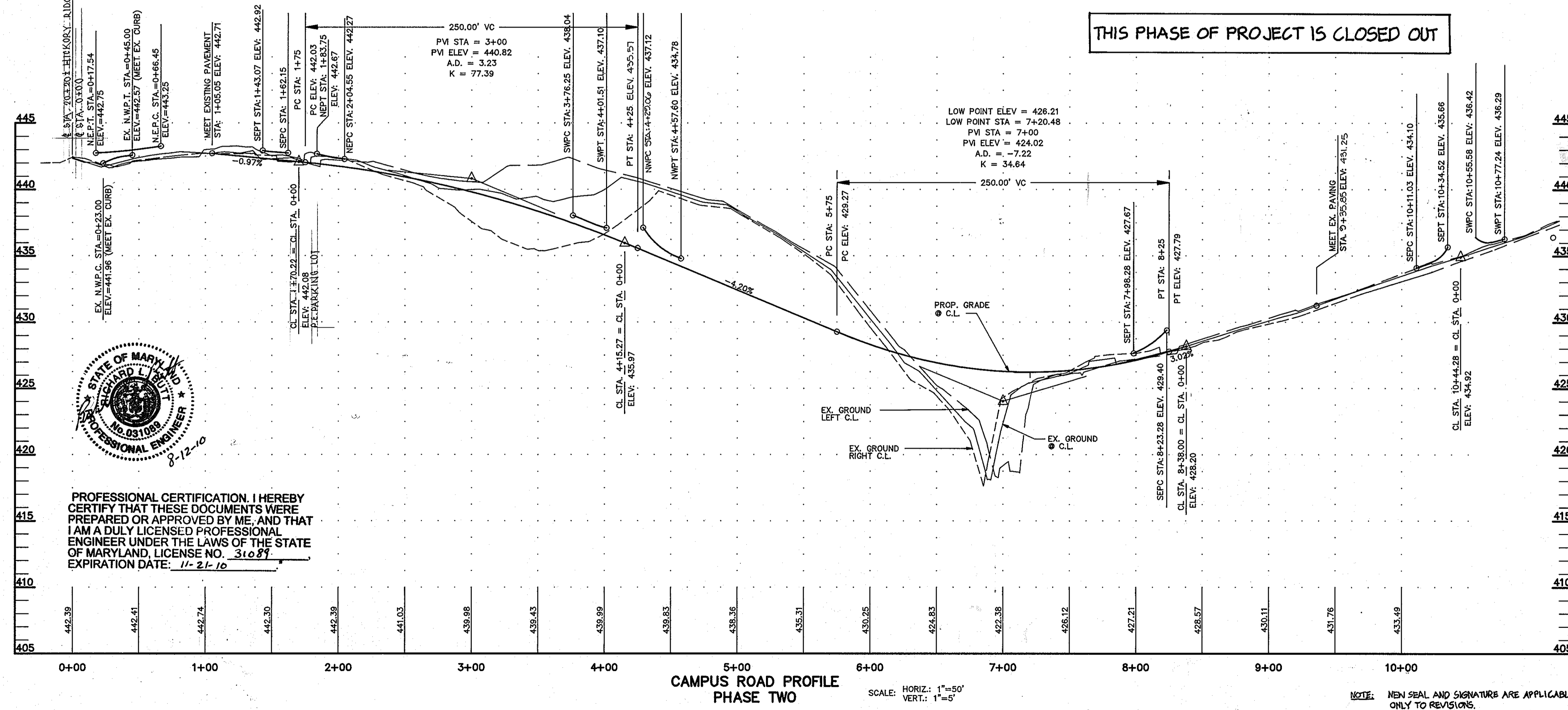
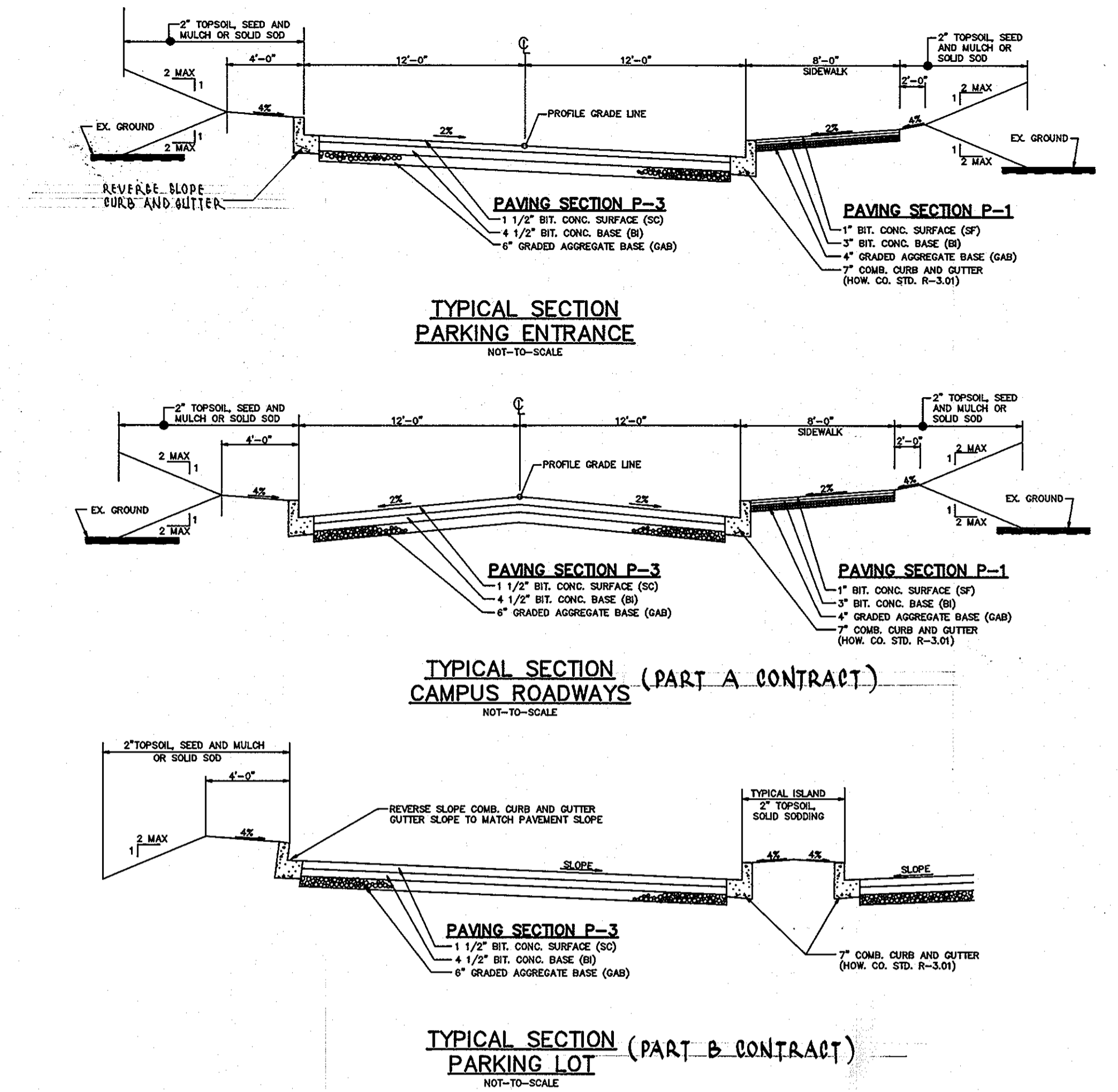
PARKING LOT ROAD PROFILE PHASE TWO
SCALE: HORIZ.: 1"=50'
VERT.: 1"=5'



ROAD CONNECTION PROFILE PHASE ONE
SCALE: HORIZ.: 1"=50'
VERT.: 1"=5'



CAMPUS ROAD TO P.E. PARKING LOT PROFILE PHASE TWO
SCALE: HORIZ.: 1"=50'
VERT.: 1"=5'



CAMPUS ROAD PROFILE PHASE TWO
SCALE: HORIZ.: 1"=50'
VERT.: 1"=5'

DEVELOPER'S CERTIFICATION

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

David Bull
SIGNATURE OF DEVELOPER
DATE 10/21/96

ENGINEER'S CERTIFICATE

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

John R. Robertson
DATE 10-21-96

STATE OF MARYLAND
PROFESSIONAL ENGINEER
THOMAS J. ROBERTSON
No. 081100
2-12-10

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

Carol Simmers 2/24/97
U.S.D.A. NATURAL RESOURCES SERVICE
DATE

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

John R. Robertson 2/24/97
APPROVED HOWARD S.C.D. DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Michael Blouin 2/27/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Richard Blouin 3/3/97
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Martha J. Meyer 10/97
DIRECTOR DATE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 12/12/96

DEVELOPER: /OWNER
KATHLEEN HETHERINGTON, ED. D.
SECRETARY-TREASURER, PRESIDENT
HOWARD COMMUNITY COLLEGE
10901 LITTLE PATUXENT PARKWAY
COLUMBIA, MD 21044-3191
(410) 772-4820

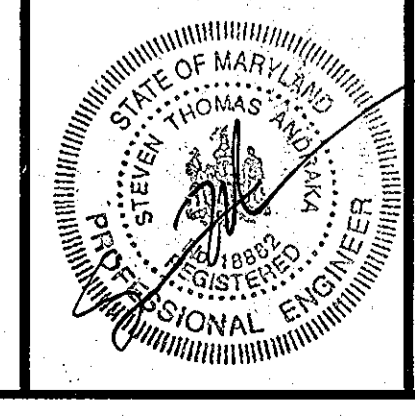
DESIGNED		DATE	
M.A.M.	9/96		
DRAWN		DATE	
R.J.S.	9/96	07/26/10	GAH
CHECKED		DATE	
M.A.M.	9/96		
APPROVED		DATE	
S.T.A.	9/96		

REVISIONS

DATE	BY	DESCRIPTION
07/26/10	GAH	REUSE SHEET NUMBER

dfi CONSULTING ENGINEERS, SURVEYORS, AND LAND PLANNERS

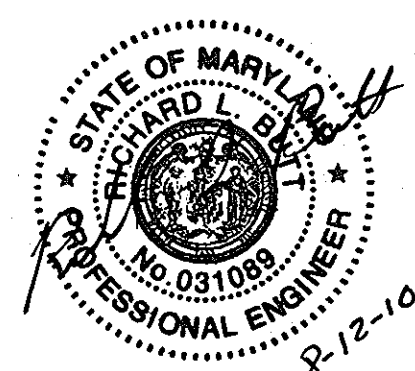
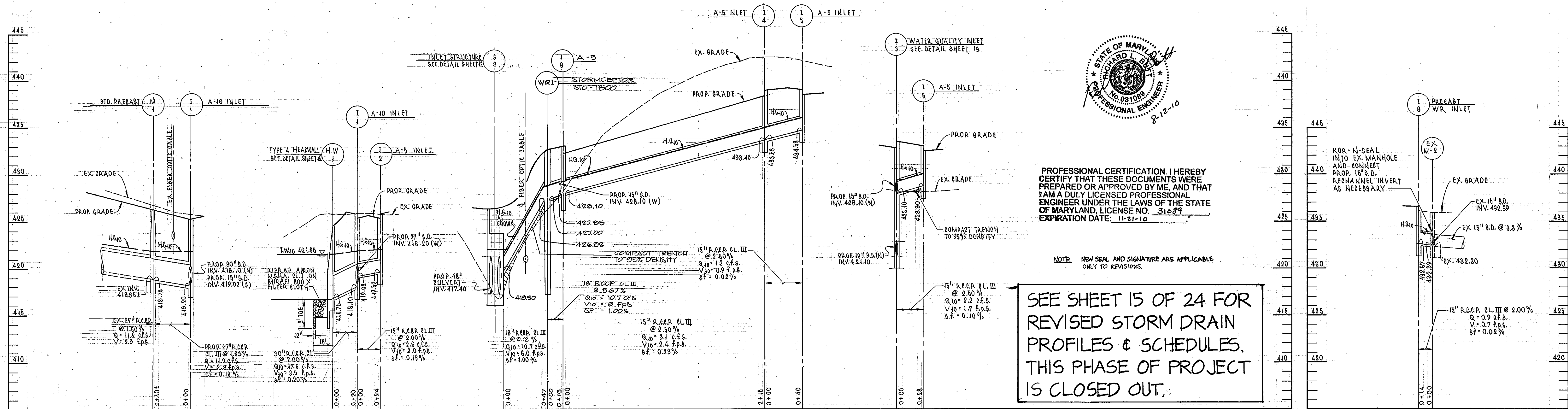
504 BALTIMORE/ANNAPOLIS BOULEVARD
SEVERNA PARK, MD 21146 (410)647-2727
FAX (410)647-7127



ROAD PROFILE AND TYPICAL SECTIONS
HOWARD COMMUNITY COLLEGE
ENTRANCE AND PARKING IMPROVEMENTS
FOR ADJACENT PARKING GARAGE # 2.1
(RED-LINE REVISION TO PREVIOUSLY APPROVED CAMPUS ROAD RELOCATION AND PARKING EXPANSION PROJECT)
JULY 26, 2010

SHEET 13 OF 24
PARCEL #47
SDP 97-45

TAX MAP: 35.36

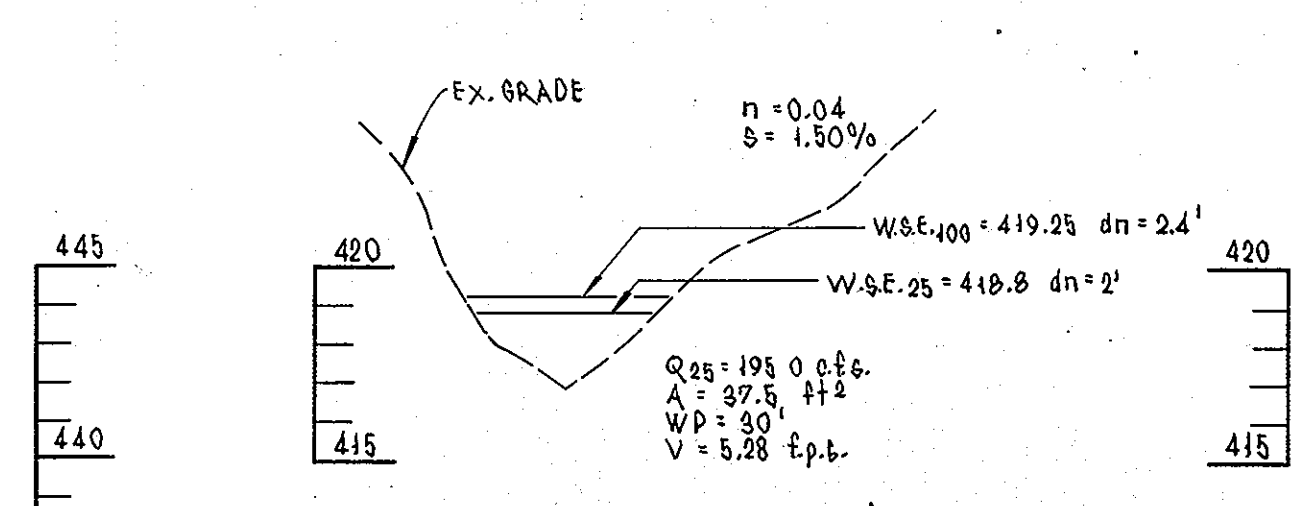


PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 31089 EXPIRATION DATE: 11-21-10

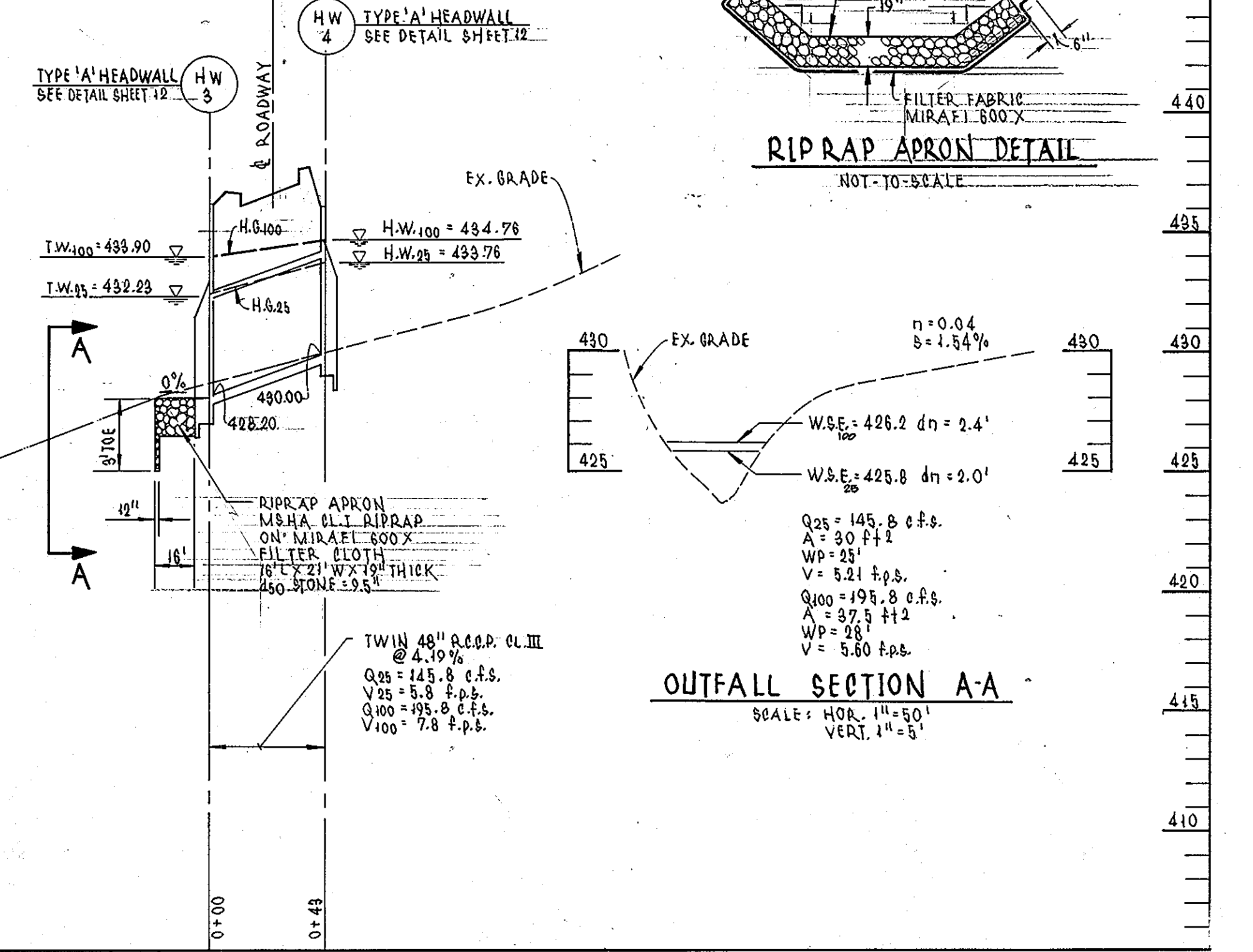
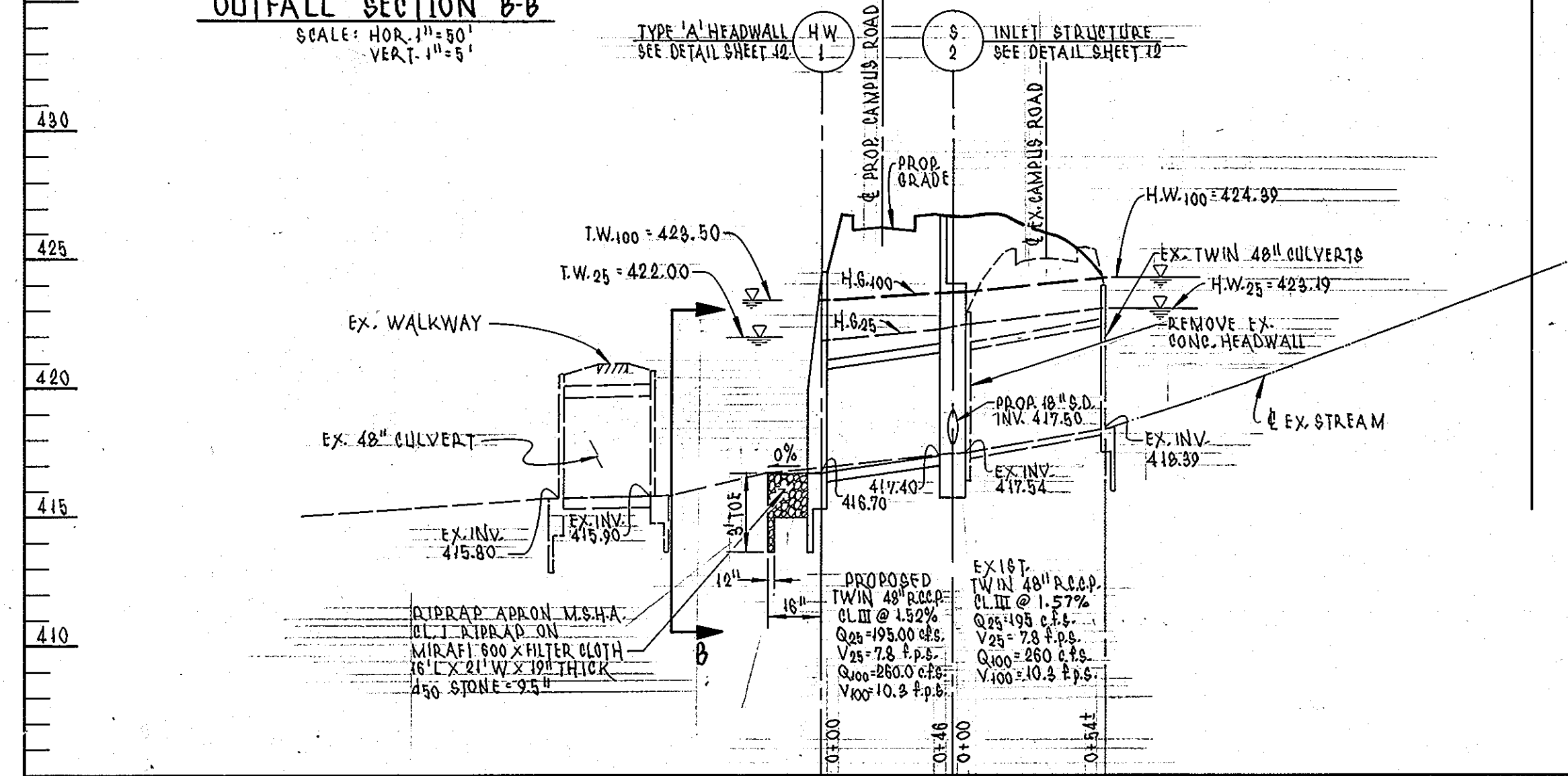
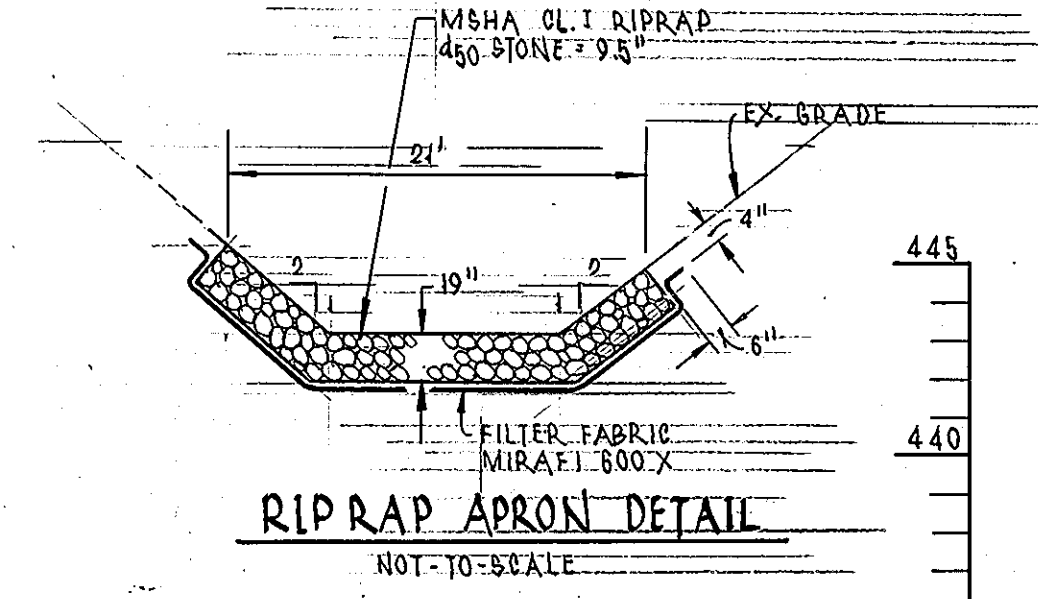
SEE SHEET 15 OF 24 FOR REVISED STORM DRAIN PROFILES & SCHEDULES. THIS PHASE OF PROJECT IS CLOSED OUT.

STORM DRAIN PROFILES (PHASE TWO CONSTRUCTION)

(PHASE ONE CONSTRUCTION)



PHASE TWO CONSTRUCTION PHASE ONE CONSTRUCTION



CULVERT PROFILES

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

Signature: *Debra Arnull* DATE: 10/21/96
 SIGNATURE OF DEVELOPER
 PRINT NAME BELOW SIGNATURE

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

Signature: *Paul Simons* DATE: 2/24/97
 U.S.D.A. NATURAL RESOURCE SERVICE

Signature: *Janet Robertson* DATE: 2/24/97
 APPROVED HOWARD S.C.D.

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Signature: *Richard Blum* DATE: 2/27/97
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

Signature: *Richard Blum* DATE: 3/3/97
 CHIEF, DIVISION OF LAND DEVELOPMENT

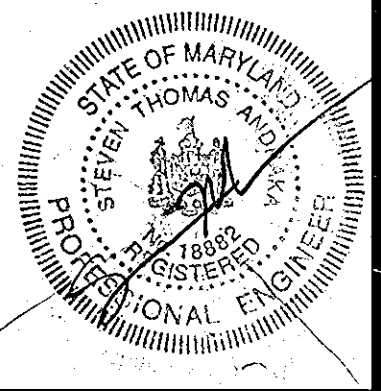
Signature: *Wanda J. ...* DATE: 1/15/97
 DIRECTOR

APPROVED PLANNING BOARD OF HOWARD COUNTY
 DATE: 12/19/96

DEVELOPER: /OWNER
 KATHLEEN HETHERINGTON, ED. D.
 SECRETARY-TREASURER, PRESIDENT
 HOWARD COMMUNITY COLLEGE
 10901 LITTLE PATUXENT PARKWAY
 COLUMBIA, MD 21044-3197
 (410) 712-4820

DESIGNED		DATE		DESCRIPTION	
M.A.M.	9/96	07-26-10	GAH	ADD NOTE - REVISE SHEET NUMBER	
DRAWN	L.R.C.	9/96			
CHECKED	M.A.M.	9/96			
APPROVED	S.T.A.	9/96			

dfi CONSULTING ENGINEERS, SURVEYORS, AND LAND PLANNERS
 504 BALTIMORE/ANNAPOLIS BOULEVARD
 SEVERNA PARK, MD 21146 (410)647-2727
 FAX (410)647-7127



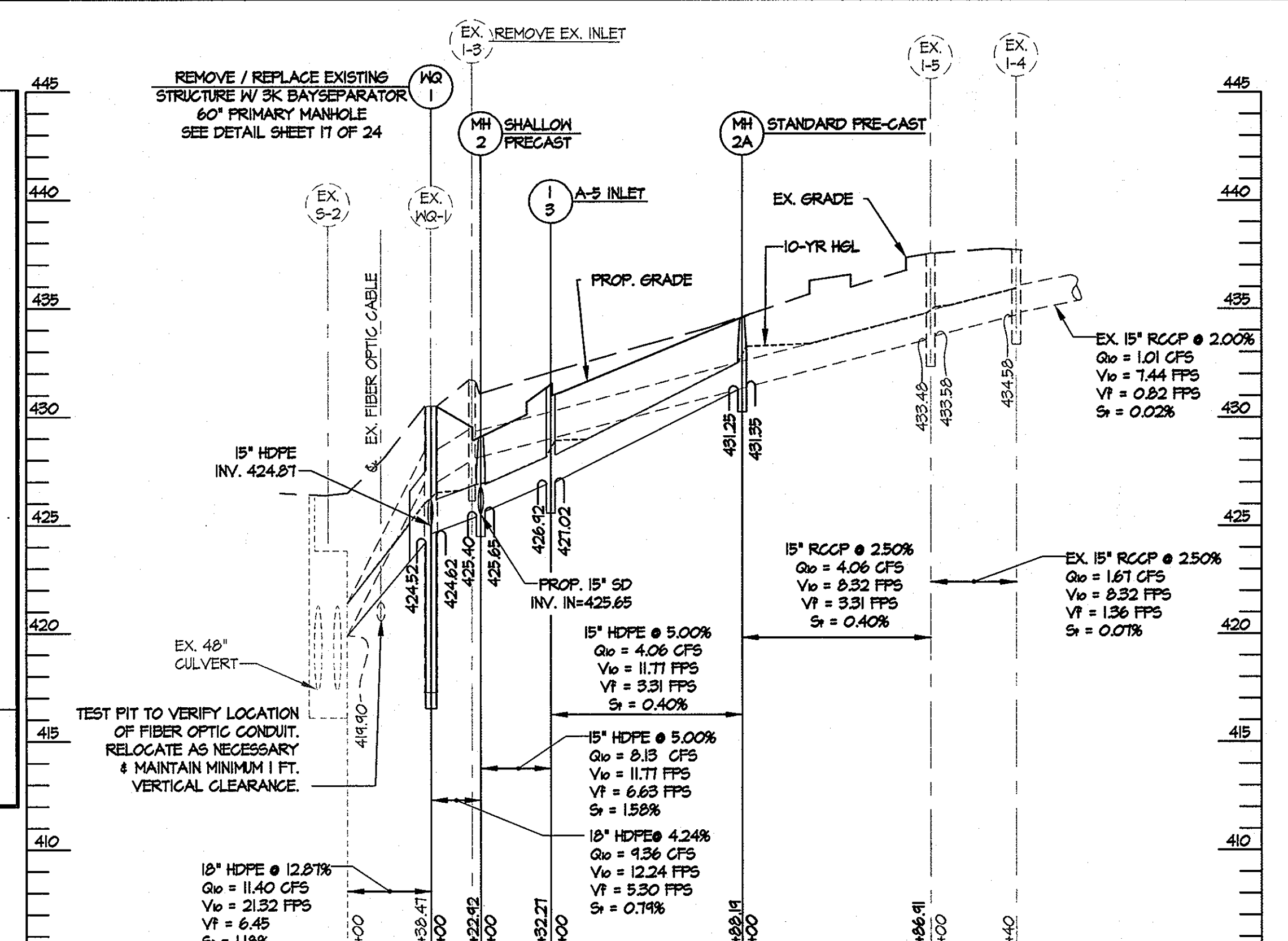
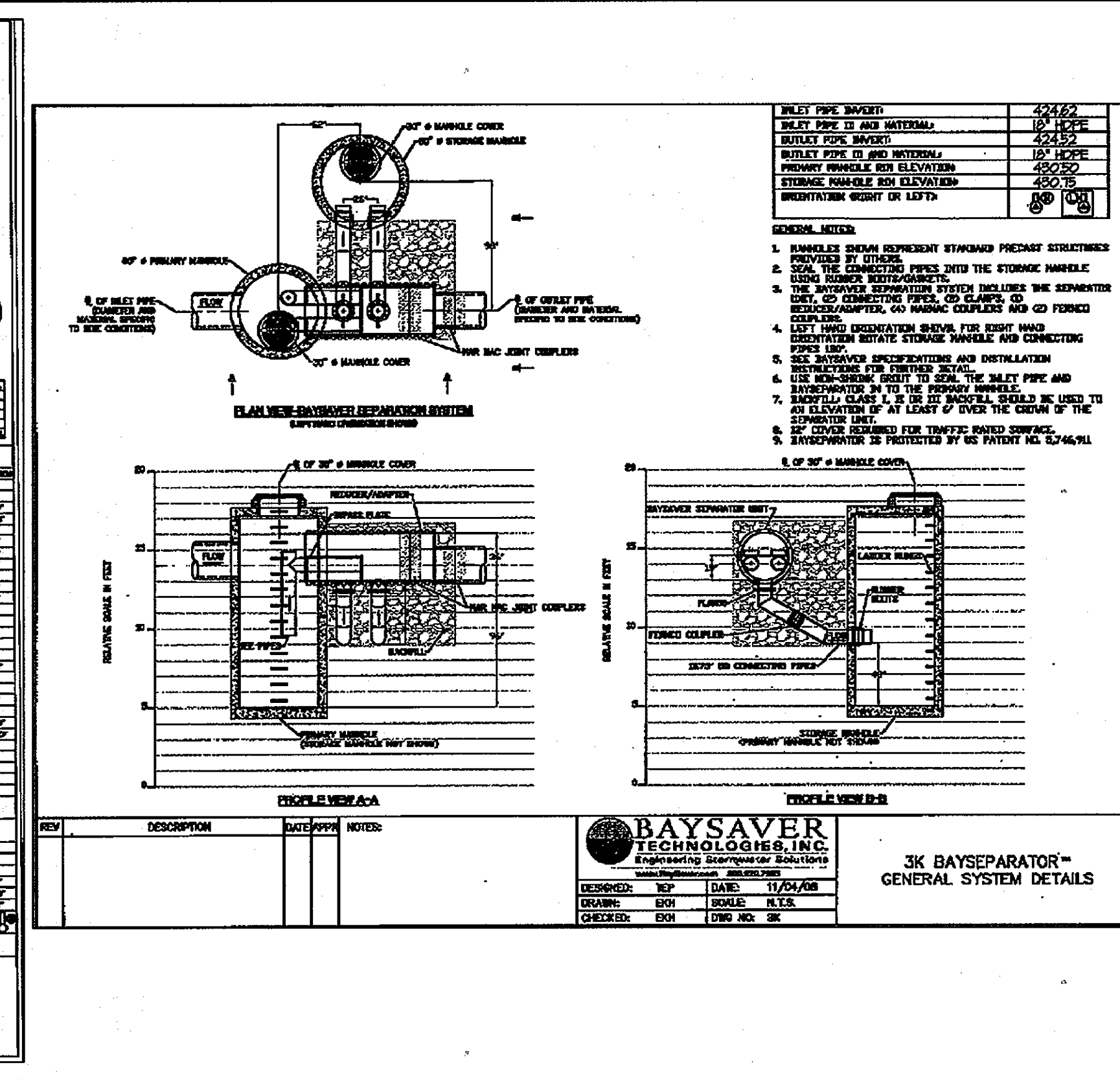
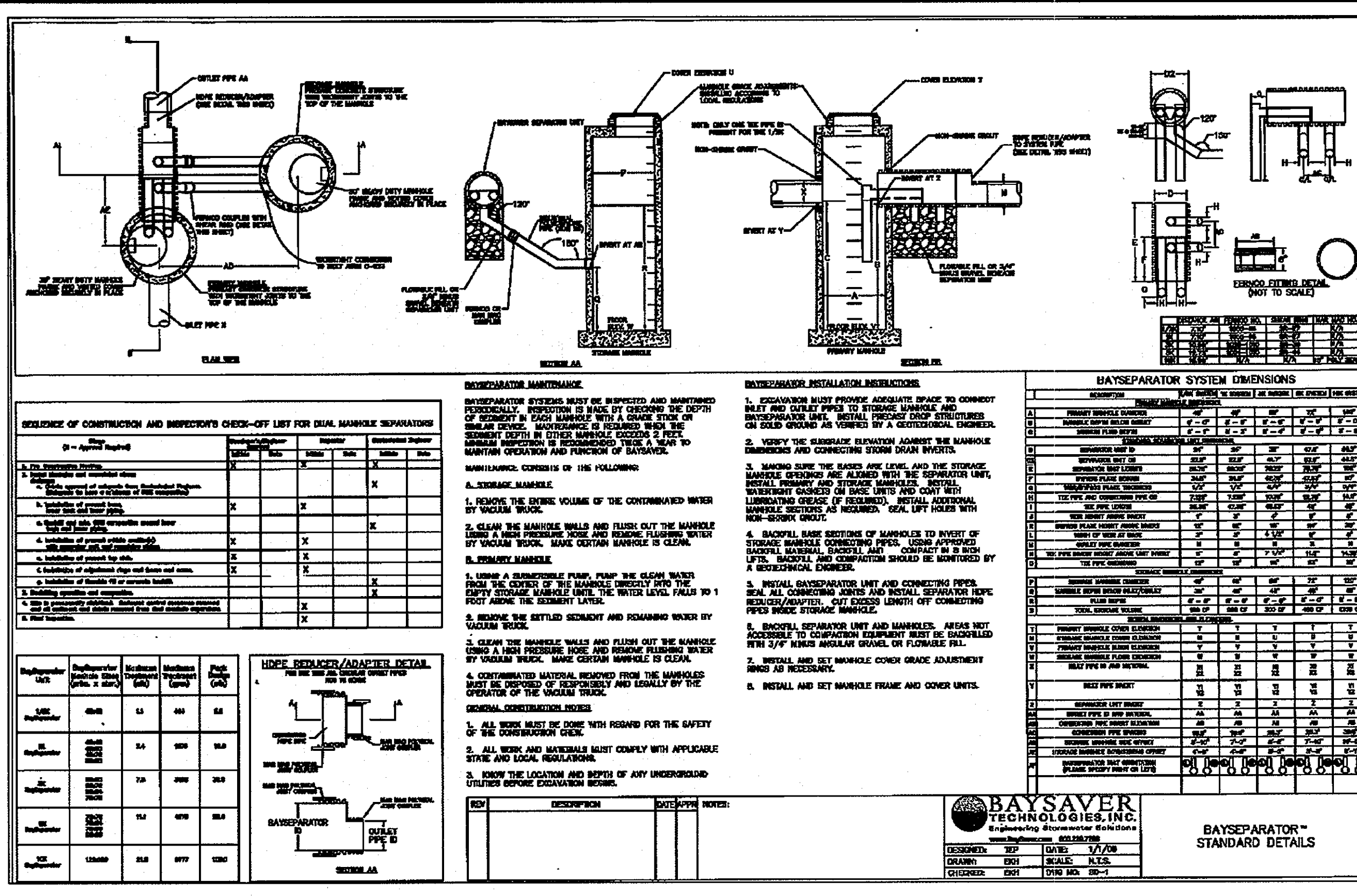
STORM DRAIN PROFILES
 HOWARD COMMUNITY COLLEGE
 ENTRANCE AND PARKING IMPROVEMENTS
 FOR ADJACENT PARKING GARAGE # 2
 (RED-LINE REVISION TO PREVIOUSLY APPROVED CAMPUS ROAD RELOCATION AND PARKING EXPANSION PROJECT)
 JULY 26, 2010

TAX MAP: 35,36

SHEET 14 OF 24

PARCEL # 47

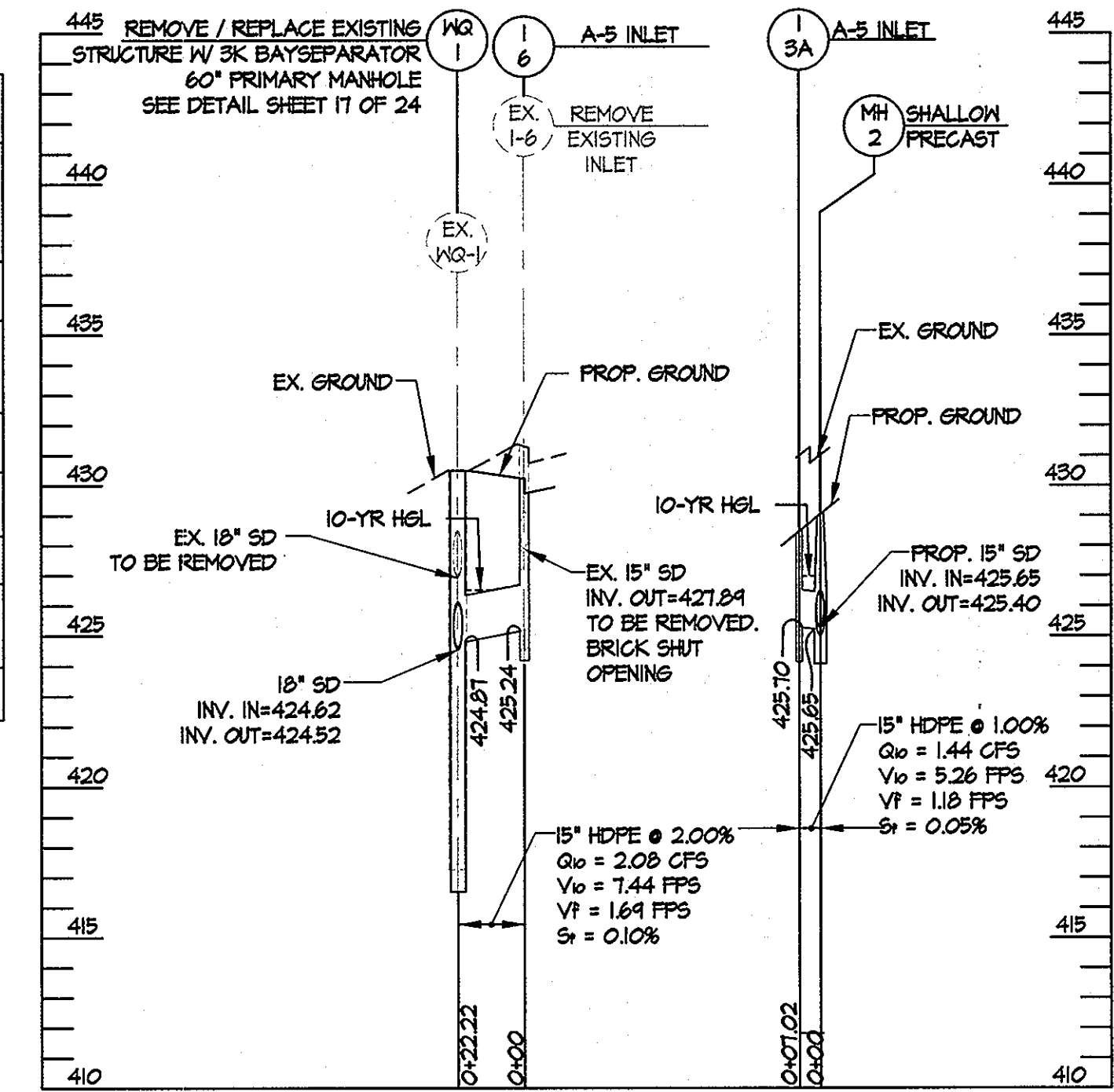
SDP-97-45



STRUCTURE SCHEDULE

NO.	TYPE	LOCATION @ CL		INV. IN	INV. OUT	TOP ELEVATION	HOWARD COUNTY STD. DETAIL
		NORTHING	EASTING				
WQ-1	60" STD. PRECAST MANHOLE	562,826.57	1346,434.64	424.81 / 424.62	424.52	430.70	6-5.13 **
WQ-1A	60" STD. PRECAST MANHOLE	562,821.21	1346,425.11	SEE BAY SEPARATOR DETAIL	SEE BAY SEPARATOR DETAIL	431.00	6-5.13 **
MH-2	48" PRECAST SHALLOW MANHOLE	562,807.06	1346,446.66	425.65	425.40	424.05	6-5.12
MH-2A	48" PRECAST SHALLOW MANHOLE	562,703.13	1346,501.55	431.35	431.25	434.25	6-5.12
I-3	A-5	562,719.45	1346,463.41	427.02	426.92	431.50	D-4.01
I-3A	TRENCH DRAIN	562,803.30	1346,458.34	---	425.70	428.45	SEE MANUFACTURER SPECS
I-6	A-5	562,815.60	1346,415.10	---	425.24	430.48	D-4.01

*TOP ELEVATION FOR INLET IS TO CENTERLINE FACE OF CURB FOR CURB INLETS / CENTER OF BOX FOR YARD OR GRATE INLETS
** SEE BAY SEPARATOR DETAILS THIS SHEET FOR MORE INFORMATION



OPERATION & MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED BAYSAYER WATER QUALITY DEVICE

A. THE BAYSAYER WATER QUALITY SHALL BE PERIODICALLY INSPECTED AND CLEANED TO MAINTAIN OPERATION AND FUNCTION. THE OWNER SHALL INSPECT THE BAYSAYER UNIT YEARLY AT A MINIMUM UTILIZING THE BAYSAYER INSPECTION/MONITORING FORM. INSPECTIONS SHALL BE DONE BY USING A GRADE STICK OR SIMILAR DEVICE. WHEN THE SEDIMENT DEPTHS EXCEED 2 FEET, THE UNIT MUST BE CLEANED.

B. THE BAYSAYER WATER QUALITY STRUCTURE SHALL BE CHECKED AND CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS. THE OWNER SHALL CONTRACT THE APPROPRIATE REGULATORY AGENCIES.

C. THE MAINTENANCE OF THE BAYSAYER UNIT SHALL BE DONE USING A VACUUM TRUCK WHICH WILL REMOVE THE WATER, SEDIMENT, DEBRIS, FLOATING HYDROCARBONS AND OTHER MATERIALS IN THE UNIT. PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS AND LIQUID MUST BE FOLLOWED BY THE OWNER.

D. THE INLET AND OUTLET PIPES SHALL BE CHECKED FOR ANY OBSTRUCTIONS AT LEAST ONCE EVERY SIX MONTHS. IF OBSTRUCTIONS ARE FOUND THE OWNER SHALL HAVE THEM REMOVED. STRUCTURAL PARTS OF THE BAYSAYER UNIT SHALL BE REPAIRED AS NEEDED.

E. THE OWNER SHALL RETAIN AND MAKE THE BAYSAYER INSPECTION/MONITORING FORMS AVAILABLE TO HOWARD COUNTY OFFICIALS UPON THEIR REQUEST.

NOTES:

1. BAYSAYERS ARE TO BE INSTALLED WITH THE STORM DRAIN SYSTEM AND WILL FUNCTION AS SECONDARY SEDIMENT CONTROL DEVICES.

2. UPON COMPLETION OF THE SITE STABILIZATION EACH BAYSAYER SYSTEM SHALL BE FLUSHED & CLEANED OUT AND REFILLED WITH CLEAN WATER.

3. DIMENSIONAL SHOP DRAWINGS ARE TO BE APPROVED BY THE DESIGN ENGINEER.

BAYSAYER INSTALLATION INSTRUCTIONS

1. EXCAVATION MUST PROVIDE ADEQUATE SPACE TO CONNECT INLET AND OUTLET PIPES TO SEPARATOR MANHOLE AND BAYSAYER UNIT. INSTALL PRECAST DROP STRUCTURES ON SOLID GROUND AS VERIFIED BY A GEOTECHNICAL ENGINEER.

2. VERIFY THE SUBGRADE ELEVATION AGAINST THE MANHOLE DIMENSIONS AND CONNECTING STORM DRAIN INVERTS.

3. MAKING SURE THE BASES ARE LEVEL AND THE STORAGE MANHOLE OPENINGS ARE ALIGNED WITH THE SEPARATOR UNIT, INSTALL PRIMARY AND STORAGE MANHOLES. INSTALL RUBBER GASKETS ON BASE UNITS AND COAT WITH LUBRICATING GREASE. INSTALL ADDITIONAL MANHOLE SECTION AS REQUIRED. SEAL LIFT HOLES WITH NON-SHRINK GROUT.

4. BACKFILL BASE SECTIONS OF MANHOLES TO INVERT OF STORAGE MANHOLE CONNECTING PIPES. USING APPROVED BACKFILL MATERIAL, BACKFILL AND COMPACT IN 8 INCH LIFTS. BACKFILL AND COMPACTION SHOULD BE MONITORED BY A GEOTECHNICAL ENGINEER.

5. INSTALL BAYSAYER SEPARATOR UNIT AND CONNECTING PIPES. SEAL ALL CONNECTING JOINTS AND INSTALL SEPARATOR UNIT/STORM DRAIN JOINT COLLAR CUT EXCESS LENGTH OFF CONNECTING PIPES INSIDE STORAGE MANHOLE.

6. BACKFILL SEPARATOR UNIT AND MANHOLES. AREAS NOT ACCESSIBLE TO COMPACTION EQUIPMENT MUST BE BACKFILLED WITH CLEAN CONCRETE OR FLOWABLE FILL.

7. INSTALL AND SET MANHOLE COVER GRADE ADJUSTMENT RINGS AS NECESSARY.

8. INSTALL AND SET MANHOLE FRAME AND COVER UNITS.

BAYSAYER MAINTENANCE

INSPECTION IS MADE BY CHECKING THE DEPTH OF SEDIMENT IN EACH MANHOLE WITH A GRADE STICK OR SIMILAR DEVICE. MAINTENANCE IS REQUIRED WHEN THE SEDIMENT DEPTH IN EITHER MANHOLE EXCEEDS 2 FEET.

MAINTENANCE CONSISTS OF THE FOLLOWING:

A. CONTAMINANT STORAGE MANHOLE

1. REMOVE THE ENTIRE VOLUME OF THE CONTAMINATED WATER BY VACUUM TRUCK.

2. CLEAN THE MANHOLE WALLS AND FLUSH OUT THE MANHOLE USING A HIGH PRESSURE HOSE AND REMOVE FLUSHING WATER BY VACUUM TRUCK. MAKE CERTAIN MANHOLE IS CLEAN.

B. PRIMARY SEPARATION MANHOLE

1. USING A SUBMERSIBLE PUMP, PUMP THE CLEAN WATER FROM THE CENTER OF THE MANHOLE DIRECTLY INTO THE EMPTY STORAGE MANHOLE UNTIL THE WATER LEVEL FALLS TO 1 FOOT ABOVE THE SEDIMENT LAYER.

2. REMOVE THE SETTLED SEDIMENT AND REMAINING WATER BY VACUUM TRUCK.

3. CLEAN THE MANHOLE WALLS AND FLUSH OUT THE MANHOLE USING A HIGH PRESSURE HOSE AND REMOVE FLUSHING WATER BY VACUUM TRUCK. MAKE CERTAIN MANHOLE IS CLEAN.

4. CONTAMINATED MATERIAL REMOVED FROM THE MANHOLES MUST BE DISPOSED OF RESPONSIBLY AND LEGALLY BY THE OPERATOR OF THE VACUUM TRUCK.

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

Howard SCD _____ Date _____

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 that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

Robt. Butt 8-12-10
Signature of Engineer (print name below signature) Date

DEVELOPER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan 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 the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."

Shawn A. Reese 8-16-10
Signature of Developer (print name below signature) Date

APPROVED: DEPARTMENT OF PLANNING AND ZONING

John DeMunn 8/27/10
Chief, Development Engineering Division Date

Vest Shalov 8/30/10
Chief, Division of Land Development Date

Thomas J. Butler 8/30/10
Director Date

APPROVED: FOR PUBLIC OR PRIVATE (pick only one) WATER AND PUBLIC OR PRIVATE (pick only one) SEWERAGE SYSTEMS

County Health Officer
Howard County Health Department

PIPE SCHEDULE

FROM	TO	SIZE	MATERIAL	LENGTH
EX. 5-2	WQ-1	18"	HDPE	35.90'
MH-2	MH-2	18"	HDPE	18.40'
MH-2	I-3	15"	HDPE	28.80'
I-3	MH-2A	15"	HDPE	84.70'
WQ-1	I-6	15"	HDPE	18.25'
MH-2	I-3A	15"	HDPE	5.00'

BAYSAYER SEPARATOR UNIT	BAYSAYER MANHOLE SIZES (PRIM. X STOR.)	MAXIMUM HYDRAULIC RATE (CFS)†	MAXIMUM TREATMENT (GPM)†
3K BAYSAYER SEPARATOR	48x48 48x72 60x60	11 2.4 1.8	8.5 10 30

Project: 10901 LITTLE PATUXENT FARM
Address: COLUMBIA, MD 21044
Contact: RICHARD BENT
Phone: (410) 726-5500
Fax: (410) 726-6692

Delivery Date: _____
Contractor: _____
Address: _____
Phone: _____
Fax: _____

Separator Unit Model:
1K
3K
5K

Manhole Specifications:
Primary Manhole Diameter: 60" inches
Storage Manhole Diameter: 60" inches

Floor Elevations:
Primary Manhole: _____
Separator Unit: _____
Inlet Pipe(s): _____

Cover Elevations:
Primary Manhole: _____
Separator Manhole: _____

Please show orientation (including angle), size and material of inlet pipes above.

This order can be faxed to Boy Saver, Inc. at (301) 829-3747

DEVELOPER: / OWNER
KATHLEEN HETHERINGTON, ED. D.
SECRETARY-TREASURER, PRESIDENT
HOWARD COMMUNITY COLLEGE
10901 LITTLE PATUXENT PARKWAY
COLUMBIA, MD 21044-3197
(410) 712-4820

REVISIONS

DATE	BY	DESCRIPTION
7/26/10	GAH	NEW SHEET FOR REV. #1

ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS

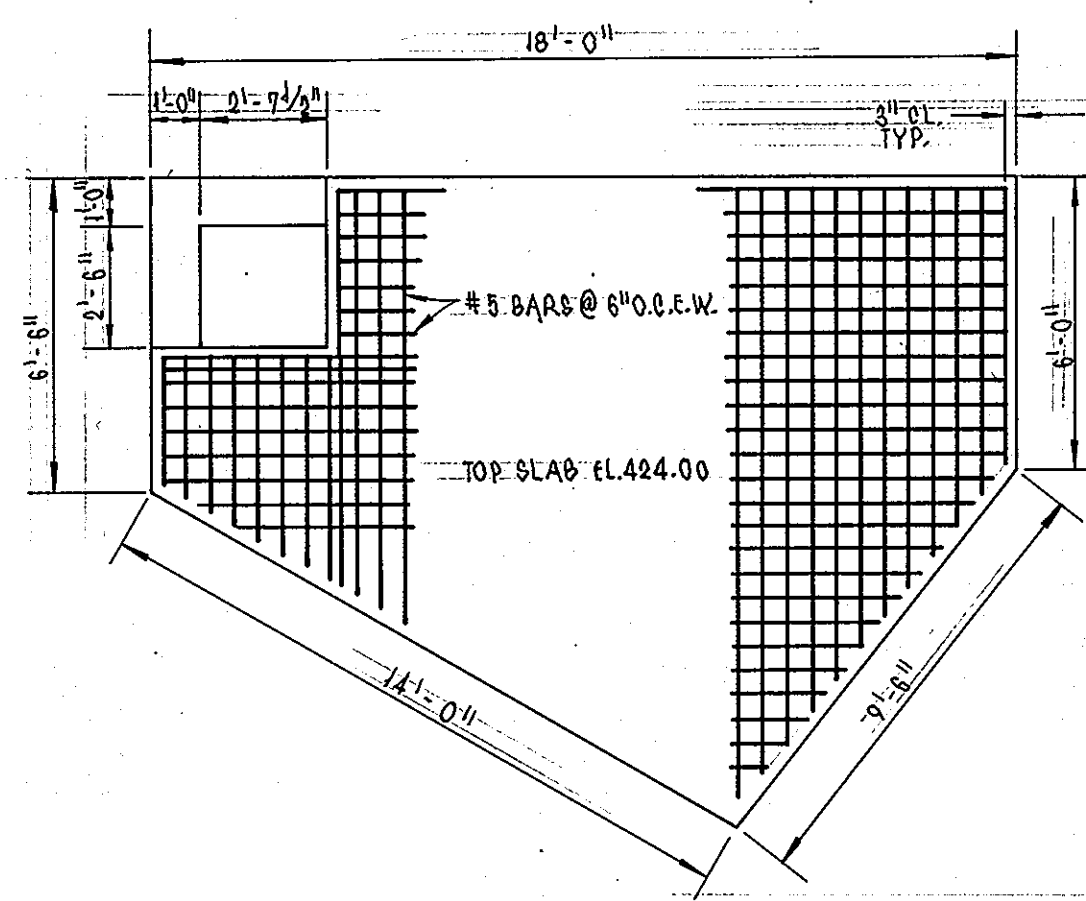
KCI TECHNOLOGIES
936 RIDGEBROOK ROAD
SPARKS, MD 21152
PHONE: (410) 316-7800

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. 31091
EXPIRATION DATE: 11/21/10.



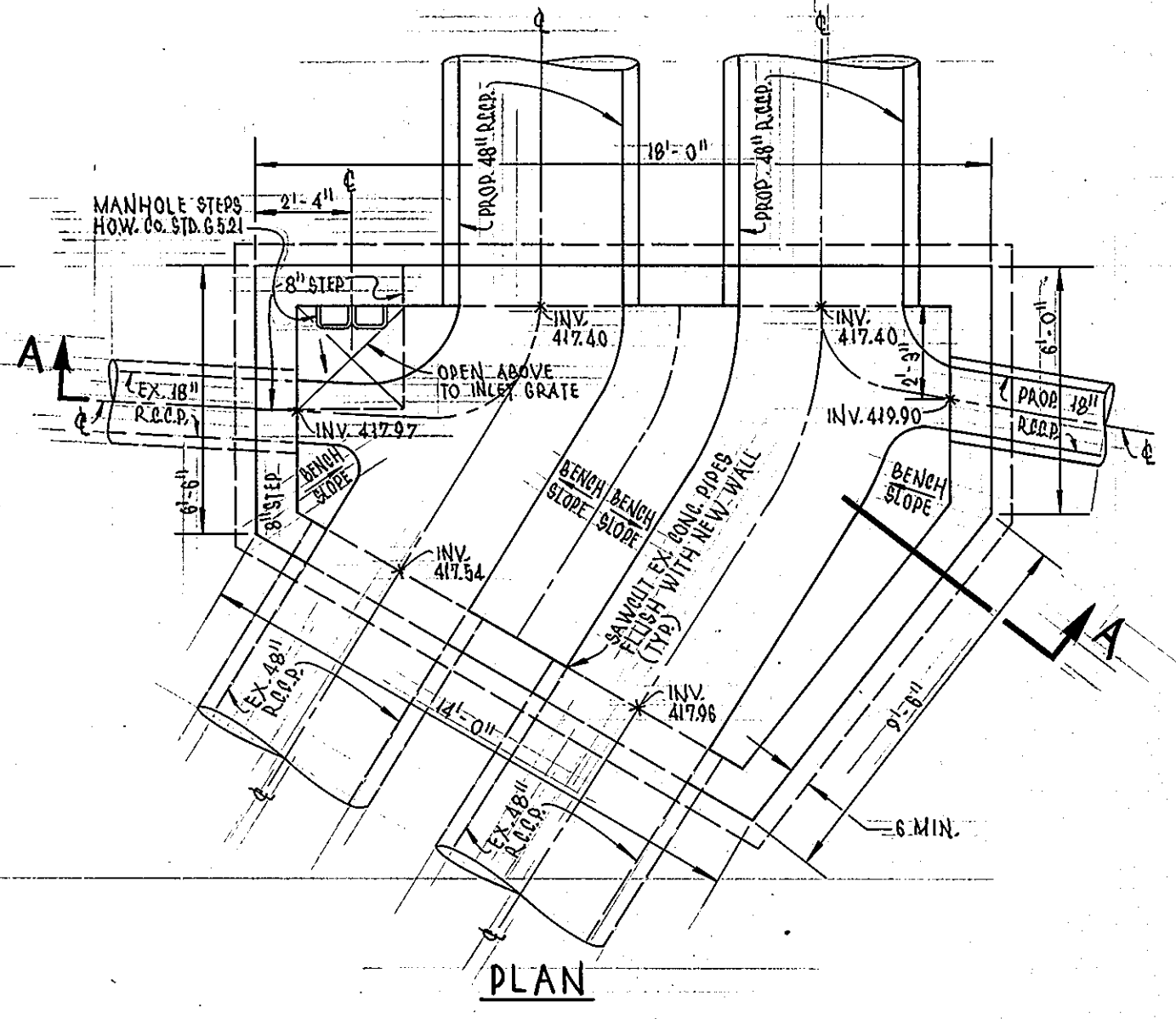
STORM DRAIN & SWM PROFILES & DETAILS
HOWARD COMMUNITY COLLEGE
ENTRANCE AND PARKING IMPROVEMENTS
FOR ADJACENT PARKING GARAGE # 2
(RED-LINE REVISION FOR PREVIOUSLY APPROVED CAMPUS ROAD RELOCATION AND PARKING EXPANSION PROJECT)

SHEET 15 OF 24
SC-12 OF 14
KCI JOB NUMBER: 01082978

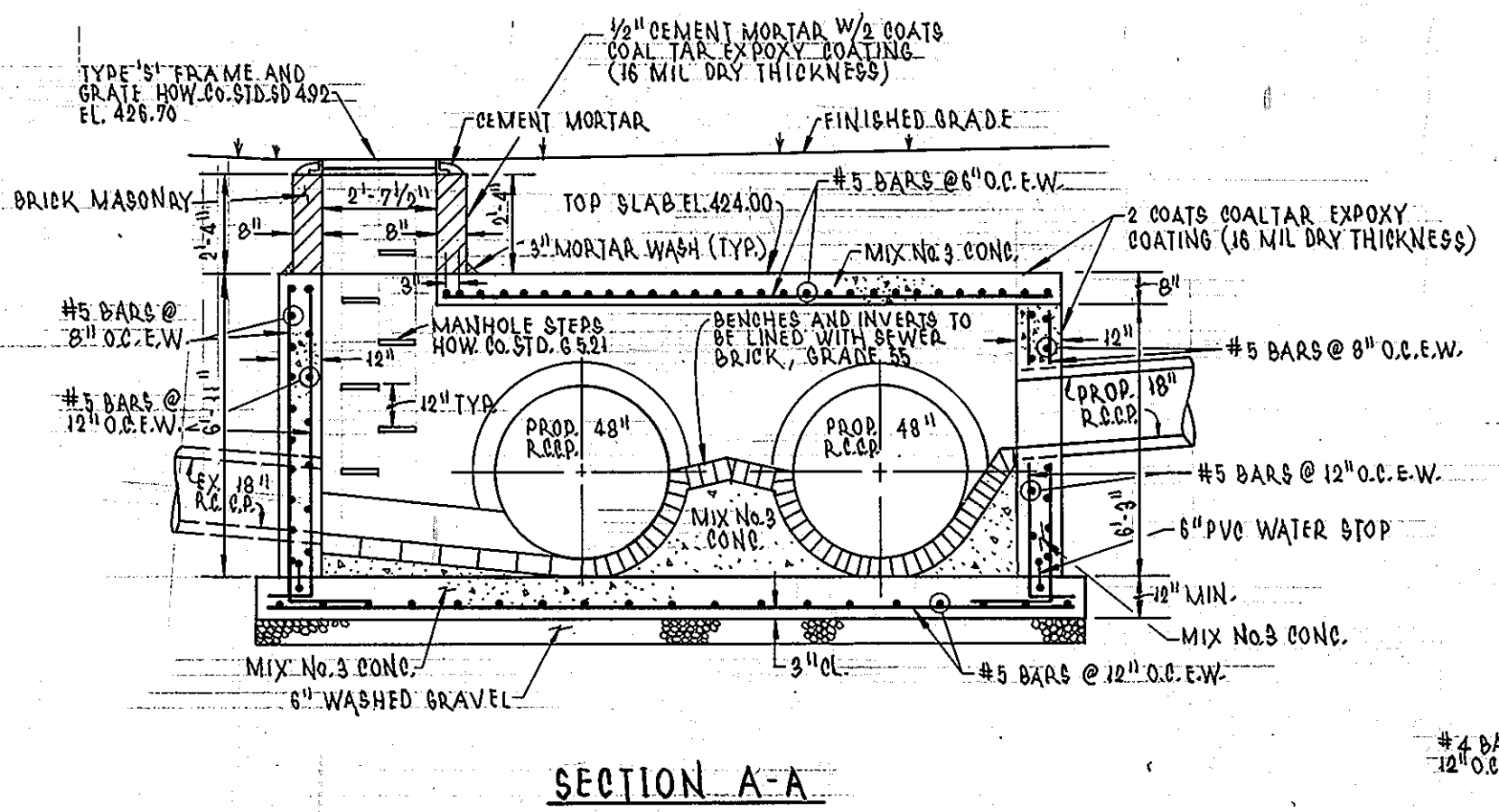


TOP SLAB

SEE SHEET 15 OF 24 FOR REVISED STORM DRAIN & SWM WATER QUALITY DETAILS & SCHEDULES. THIS PHASE OF PROJECT IS CLOSED OUT.



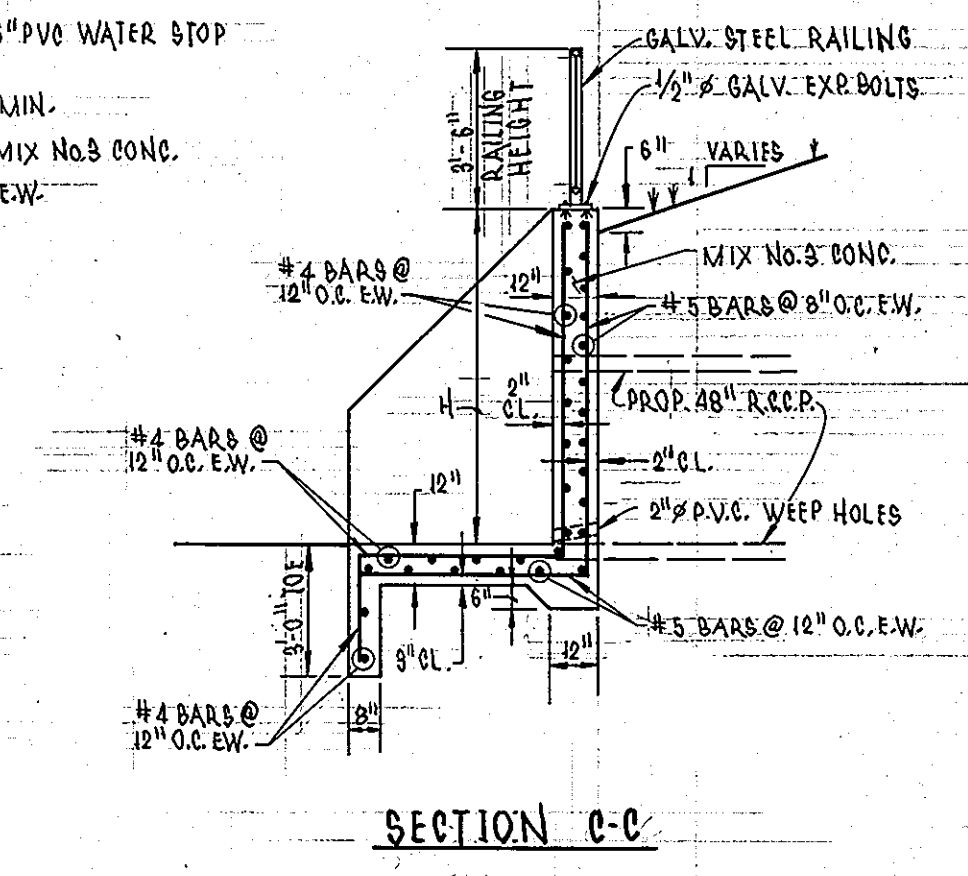
STRUCTURE S-2 DETAILS



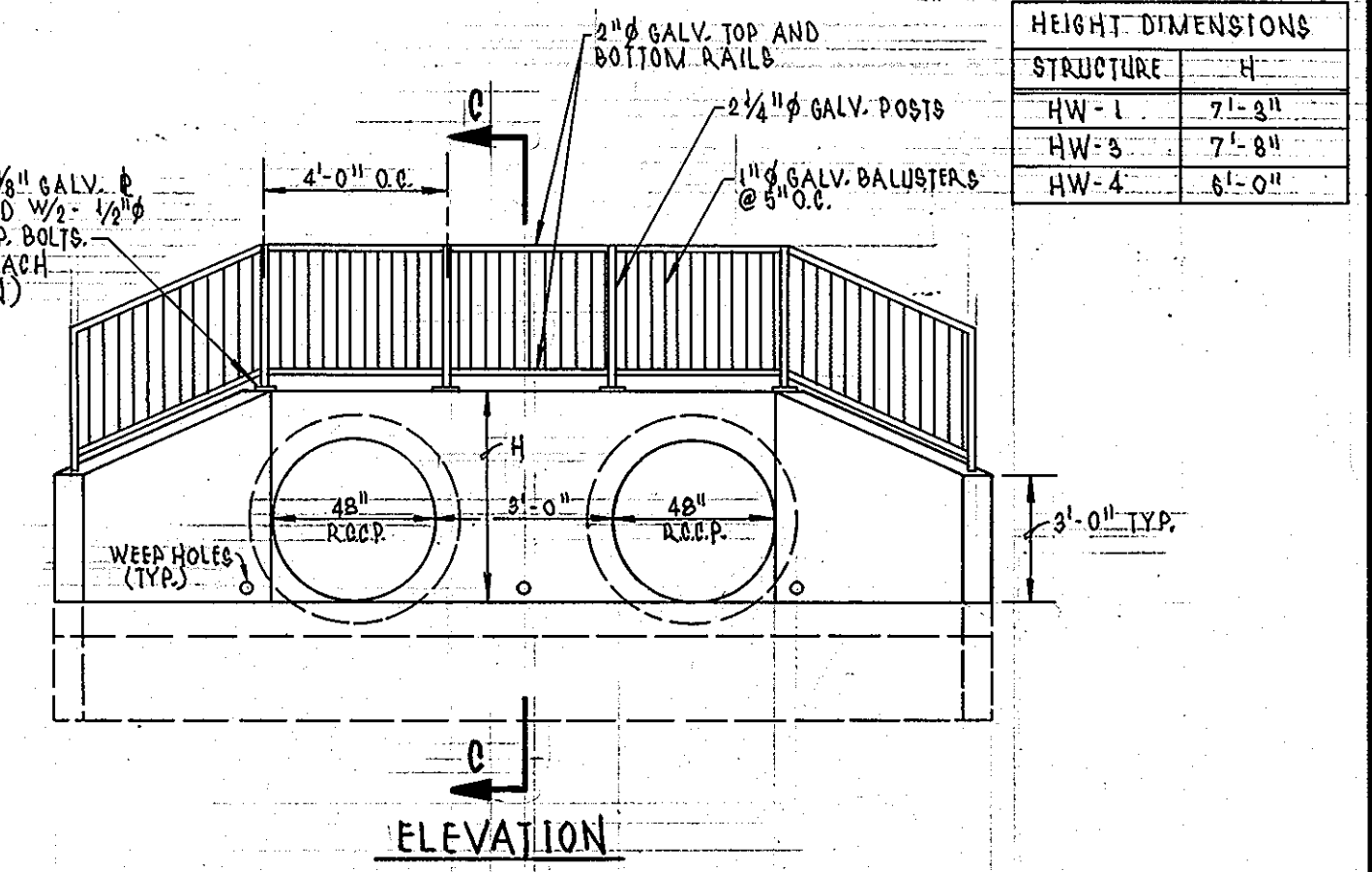
SECTION A-A

OPERATION AND MAINTENANCE SCHEDULE FOR STORMCEPTOR WATER QUALITY DEVICE

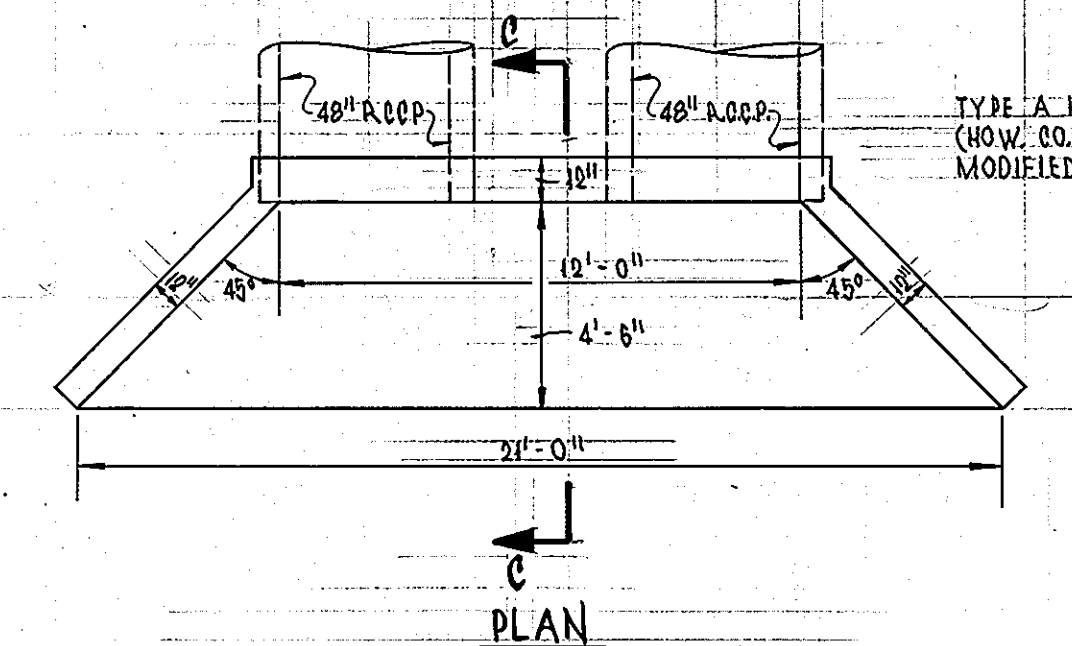
- THE STORMCEPTOR WATER QUALITY STRUCTURE SHALL BE PERIODICALLY INSPECTED AND CLEANED TO MAINTAIN OPERATION AND FUNCTION. THE OWNER SHALL INSPECT THE STORMCEPTOR UNIT YEARLY AT A MINIMUM. UTILIZING THE STORMCEPTOR INSPECTION/MONITORING FORM. INSPECTIONS SHALL BE DONE BY USING A CLEAR PLEXIGLASS TUBE (SLUDGE JUDGE) TO EXTRACT A WATER COLUMN SAMPLE. WHEN THE SEDIMENT DEPTHS EXCEED THE LEVEL SPECIFIED IN TABLE 6 OF THE STORMCEPTOR TECHNICAL MANUAL, THE UNIT MUST BE CLEANED.
- THE STORMCEPTOR WATER QUALITY STRUCTURE SHALL BE CHECKED AND CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS. THE OWNER SHALL CONTACT THE APPROPRIATE REGULATORY AGENCIES.
- THE MAINTENANCE OF THE STORMCEPTOR UNIT SHALL BE DONE USING A VACUUM TRUCK WHICH WILL REMOVE THE WATER, SEDIMENT, DEBRIS, FLOATING HYDROCARBONS AND OTHER MATERIALS IN THE UNIT. PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS AND LIQUID MUST BE FOLLOWED BY THE OWNER.
- THE INLET AND OUTLET PIPES SHALL BE CHECKED FOR ANY OBSTRUCTIONS AT LEAST ONCE EVERY SIX MONTHS. IF OBSTRUCTIONS ARE FOUND THE OWNER SHALL HAVE THEM REMOVED. STRUCTURAL PARTS OF THE STORMCEPTOR UNIT SHALL BE REPAIRED.
- THE OWNER SHALL RETAIN AND MAKE THE STORMCEPTOR INSPECTION/MONITORING FORMS AVAILABLE TO THE HOWARD COUNTY OFFICIALS UPON THEIR REQUEST.



SECTION C-C

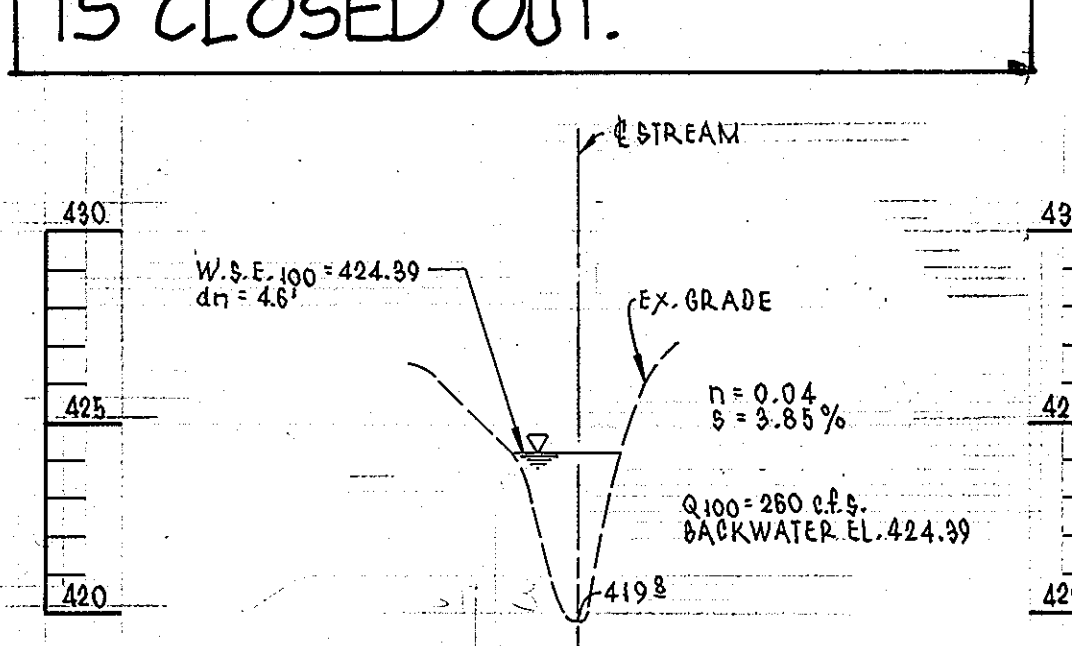


ELEVATION

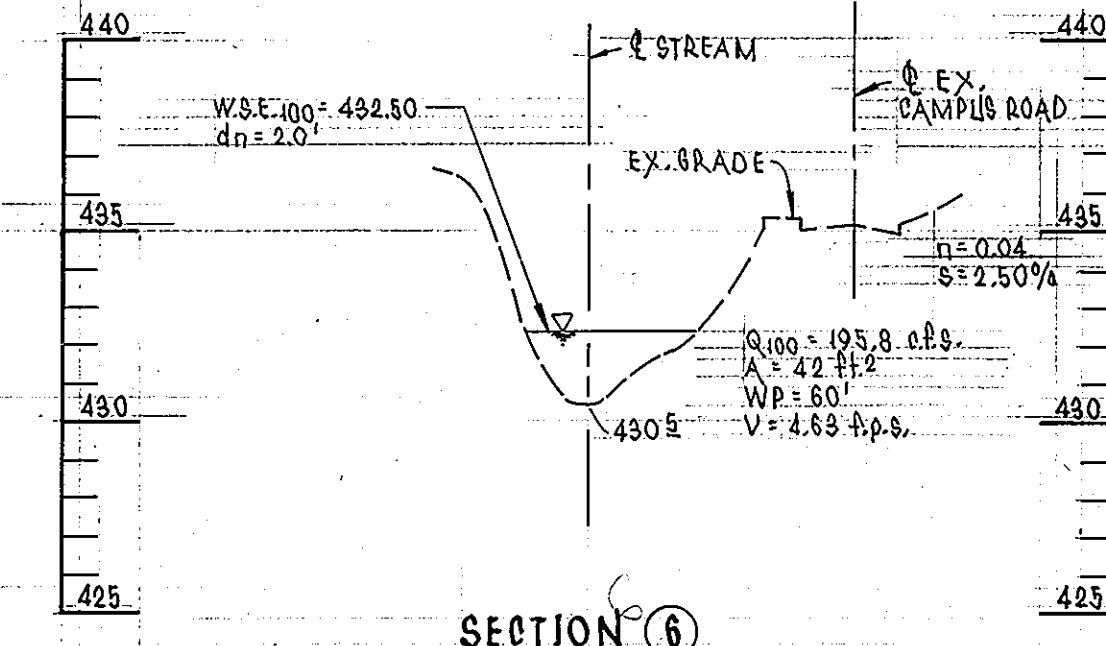


PLAN

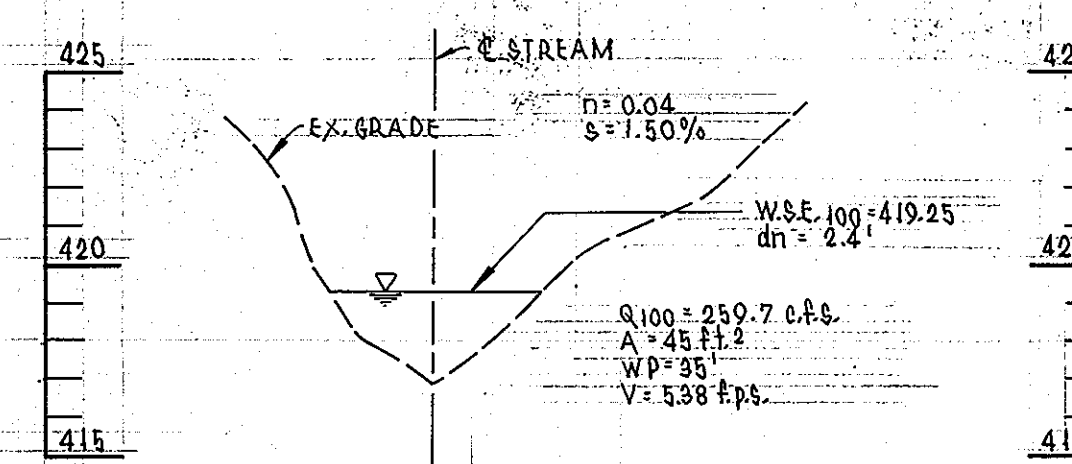
HEADWALL DETAIL FOR HW-1, HW-3, HW-4



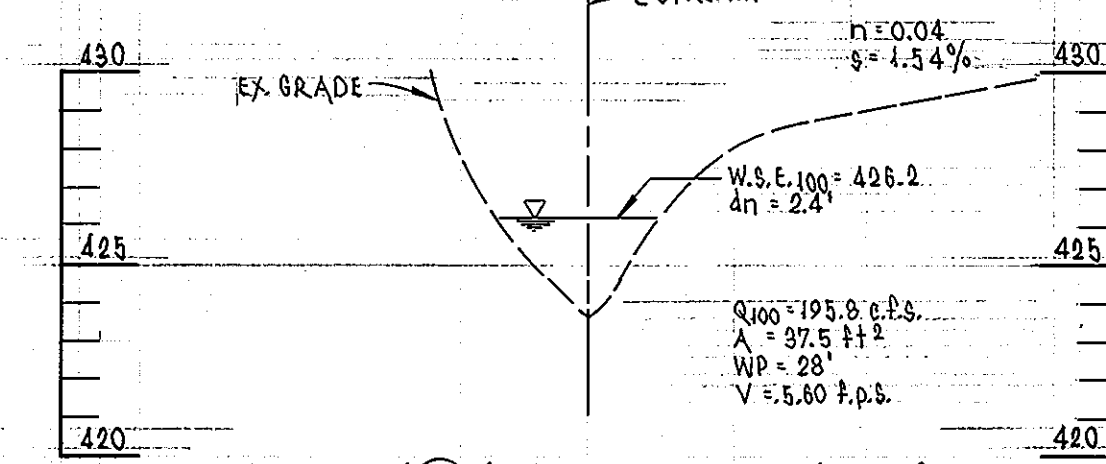
SECTION 3



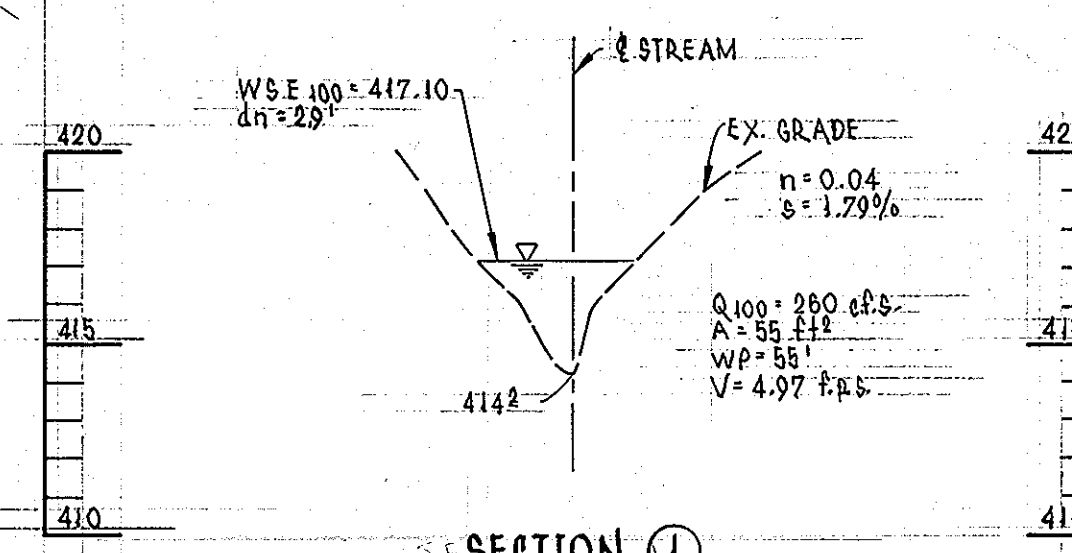
SECTION 6



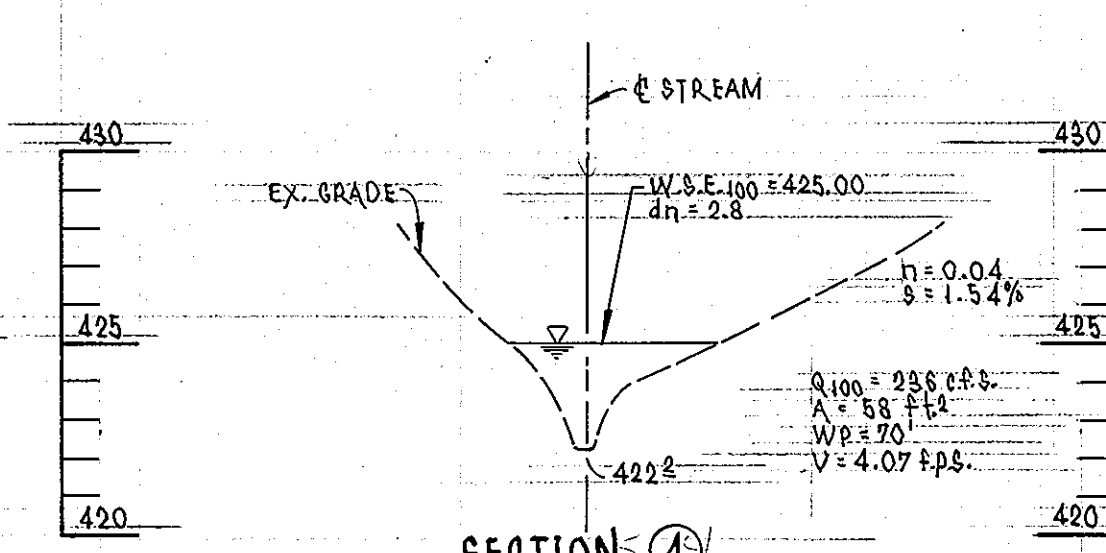
SECTION 2 (OUTFALL SECTION B-B)



SECTION 5 (OUTFALL SECTION A-A)



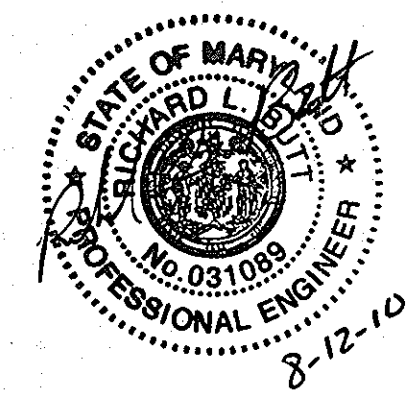
SECTION 1



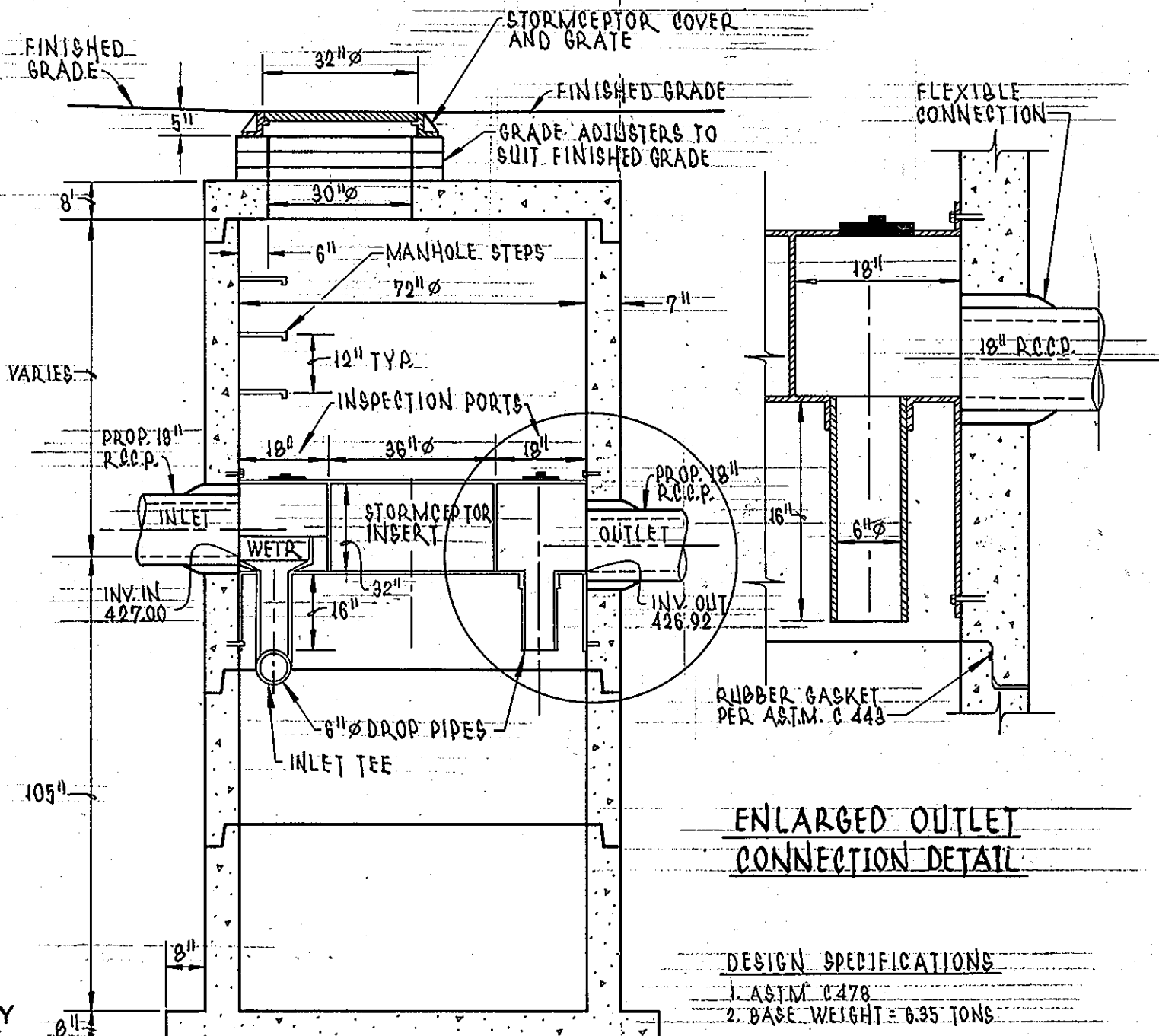
SECTION 4

FLOOD PLAIN CROSS SECTIONS

SCALE: HOR. 1"=50' VERT. 1"=3'



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. 31089, EXPIRATION DATE: 11-21-16



SECTION THRU CHAMBER

STC 1800 PRECAST CONCRETE *STORMCEPTOR®

* AS MANUFACTURE BY STORMCEPTOR CORPORATION, ROCKVILLE, MD. 20852 (800) 762-4703

NOT TO SCALE

DEVELOPER'S CERTIFICATION

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

DATE 10/21/96

ENGINEER'S CERTIFICATE

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

DATE 10-21-96

APPROVED: DEPARTMENT OF PLANNING AND ZONING

APPROVED PLANNING BOARD OF HOWARD COUNTY

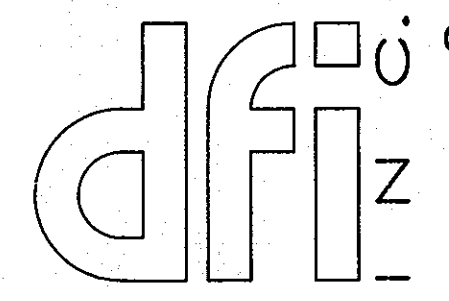
DATE 12/18/96

DATE PLOTTED: 07/1/96 DRAWN BY: CORNER

DEVELOPER: /OWNER
KATHLEEN HETHERINGTON, ED. D.
SECRETARY-TREASURER, PRESIDENT
HOWARD COMMUNITY COLLEGE
10901 LITTLE PATUXENT PARKWAY
COLUMBIA, MD 21044-3197
(410) 772-4620

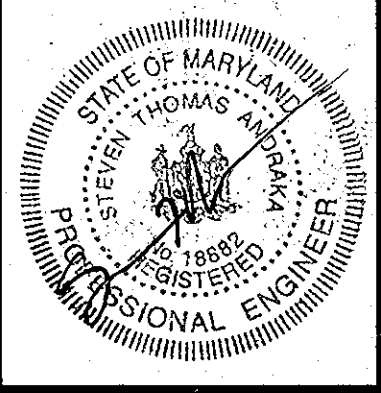
DESIGNED	M.A.M.	9/96
DATE	BY	DESCRIPTION
07-26-10	GAH	1 ADD NOTE - REVISE SHEET NUMBER
DRAWN	R.J.S.	9/96
DATE		
CHECKED	M.A.M.	9/96
DATE		
APPROVED	S.T.A.	9/96
DATE		

DATE	BY	DESCRIPTION
07-26-10	GAH	1 ADD NOTE - REVISE SHEET NUMBER



CONSULTING ENGINEERS, SURVEYORS,
AND LAND PLANNERS

504 BALTIMORE/ANNAPOLIS BOULEVARD
SEVERNA PARK, MD 21146 (410) 647-2727
FAX (410) 647-7127



TAX MAP: 35.36

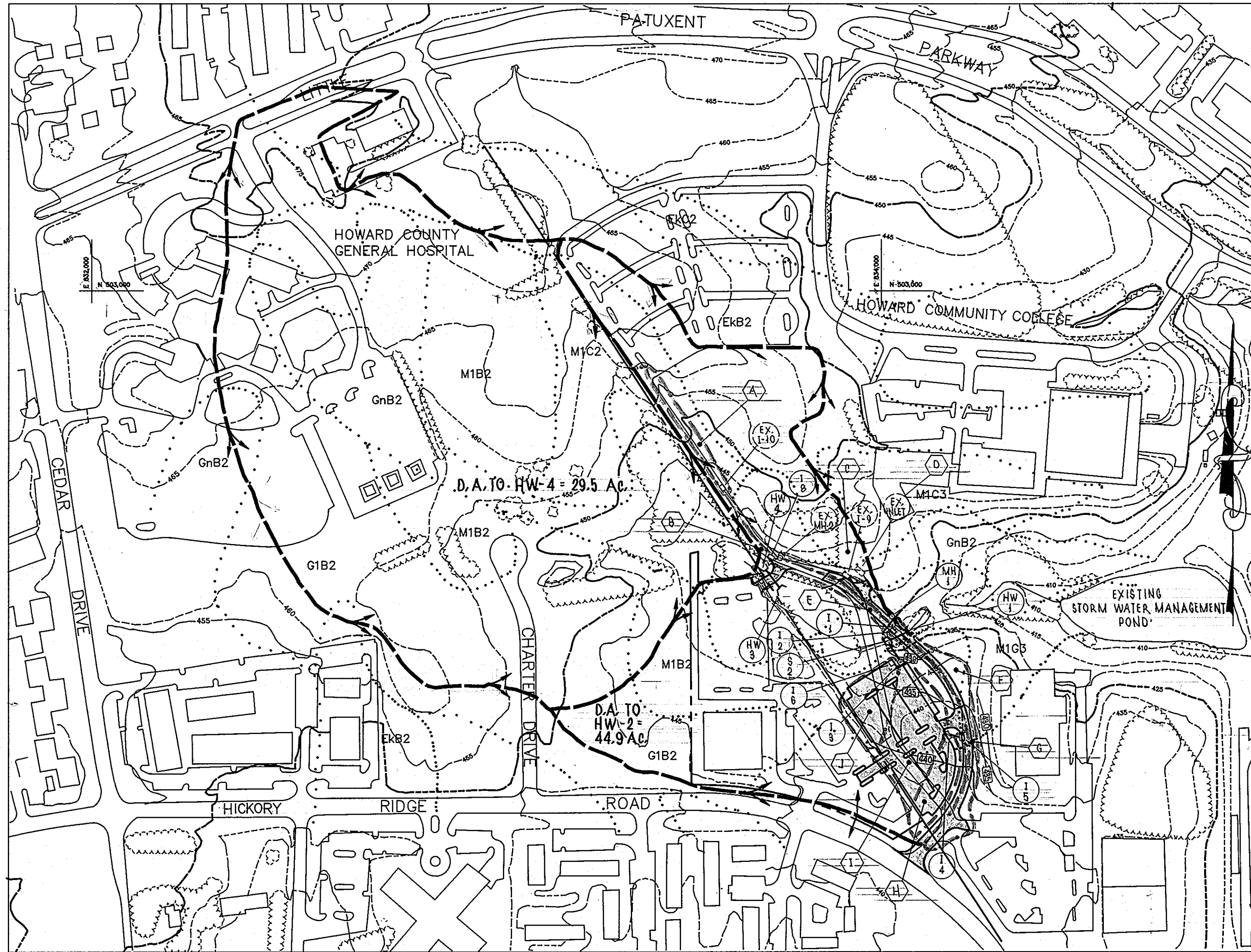
STORM DRAIN DETAILS AND WATER QUALITY INLET DETAILS

HOWARD COMMUNITY COLLEGE
ENTRANCE AND PARKING IMPROVEMENTS
FOR ADJACENT PARKING GARAGE # 2
(RED-LINE REVISION TO PREVIOUSLY APPROVED CAMPUS ROAD RELOCATION AND PARKING EXPANSION PROJECT)
JULY 26, 2010

PARCEL #47

SHEET
16
OF
24

SDP-97-45



AREA (AC)	DRAINAGE FACTOR	%IMP V.
A	0.10	0.86
B	0.14	0.86
C	1.23	0.25
D	1.72	0.86
E	0.58	0.50
F	0.70	0.50
G	0.20	0.70
H	0.31	0.86
I	0.82	0.86
J	0.34	0.86

SOIL TYPE LEGEND
 B1 - BAILEY SILT LOAM
 EK82 - ELIDOK SILT LOAM, 3-8% SLOPES, MODERATELY ERODED
 GnB2 - GLENVILLE SILT LOAM, 3-8% SLOPES, MODERATELY ERODED
 M1B2 - MANOR LOAM, 3-9% SLOPES, MODERATELY ERODED
 M1B4 - MANOR LOAM, 8-15% SLOPES, SEVERELY ERODED
 M1B9 - MANOR LOAM, 15-25% SLOPES, SEVERELY ERODED

STORM DRAIN COMPUTATIONS

FROM NO.	TO NO.	INC. AREA (AC)	TOTAL AREA (AC)	COEFF. "C"	CFA	SLOPE (S)	PIPE		VELOCITY (FPS)	LENGTH (FT)	TIME (MIN)	REMARKS		
							SIZE (IN)	TYPE						
EX-10	EX-M-2	0.10	0.86	0.09			7.0	7.6	0.02%	EX 10'	0.6	195'	5.4	
I-8	EX-M-2	0.14	0.86	0.12			7.0	7.6	0.02%	EX 10'	0.7	10'	0.2	
EX-M-2	EX-I-9		0.24		0.21		7.2	7.6	1.6	0.06%	EX 15'	1.3	200'	2.7
EX-I-9	EX-I-9	1.23	0.25	0.30			10.0	6.6	2.0					
EX-I-9	S-2		1.47		0.51		9.8	6.6	3.4	0.27%	EX 10'	3.8	35'	0.3
MH-1	I-1		1.72	0.86	1.48		7.0	7.6	11.2					
IH-1	I-1		1.72	0.86	1.48		7.0	7.6	11.2	0.16%	27'	2.8	40'	0.1
I-2	I-1		0.58	0.50	0.52		7.0	7.6	2.6	0.16%	15'	2.0	24'	0.2
I-1	I-1		0.70	0.60	0.52		7.0	7.6	3.7					
IH-1	IH-1		2.80		2.31		7.0	7.6	17.6	0.00%	30'	3.5	20'	0.1
I-4	I-5	0.20	0.70	0.14			5.0	8.5	1.2	0.02%	15'	0.9	40'	0.7
I-5	I-3		0.51		0.41		7.0	7.6	3.1	0.23%	15'	2.4	210'	1.5
I-3	I-3	0.83	0.86	0.71			7.0	7.6	5.4					
I-5	I-3	0.34	0.86	0.29			7.0	7.6	2.2	0.10%	15'	1.7	31'	0.3
I-3	S-2		3.28		1.41		7.0	7.6	10.7	1.00%	18'	6.0	95'	0.3
IH-4	IH-3		29.46				145.8	417%	TWN 40'	5.8	48'		Q25	
S-2	IH-1		44.80				195.0	1.00%	TWN 40'	7.8	74'		Q25	

SEE ADDITIONAL DRAINAGE AREA MAPS, SHEET 18 OF 24 FOR STORM DRAIN AND WATER QUALITY.

SEE SHEET 15 OF 24 FOR REVISED STORM DRAIN & SWM PROFILES, DETAILS & SCHEDULES. THIS PHASE OF PROJECT IS CLOSED OUT.

NO.	TYPE	LOCATION	INV. IN	INV. OUT	TOP ELEV.	A.A. CO. STD. DETAIL
HW-1	A	STA. 0+15.00	417.50	416.70	423.95	SEE DETAIL SHEET 12
S-2	BEND	STA. 0+15.00	417.50	417.40	428.70	SEE DETAIL SHEET 12
MH-1	PRECAST	STA. 0+15.00	418.85	418.75	426.34	G 5.12
I-1	A-10	STA. 0+15.00	419.02	418.10	426.56	SD 4.02
I-2	A-5	STA. 0+15.00	419.50	419.50	426.56	SD 4.01
I-3	A-5	STA. 0+15.00	428.10	427.80	433.08	SD 4.01
I-4	A-5	STA. 0+15.00	433.58	433.48	437.92	SD 4.01
I-5	A-5	STA. 0+15.00	434.58	434.58	438.21	SD 4.01
I-6	A-5	STA. 0+15.00	438.80	438.80	432.94	SD 4.01
HW-3	A	STA. 0+15.00	428.20	428.20	435.87	SEE DETAIL SHEET 12
HW-4	A	STA. 0+15.00	430.00	430.00	436.00	SEE DETAIL SHEET 12
I-8	PRECAST	STA. 10+84	432.67	432.67	436.52	SD 4.35
WG1	STORMWATER	STA. 10+84	427.00	426.02	482.00	SEE DETAIL SHEET 12

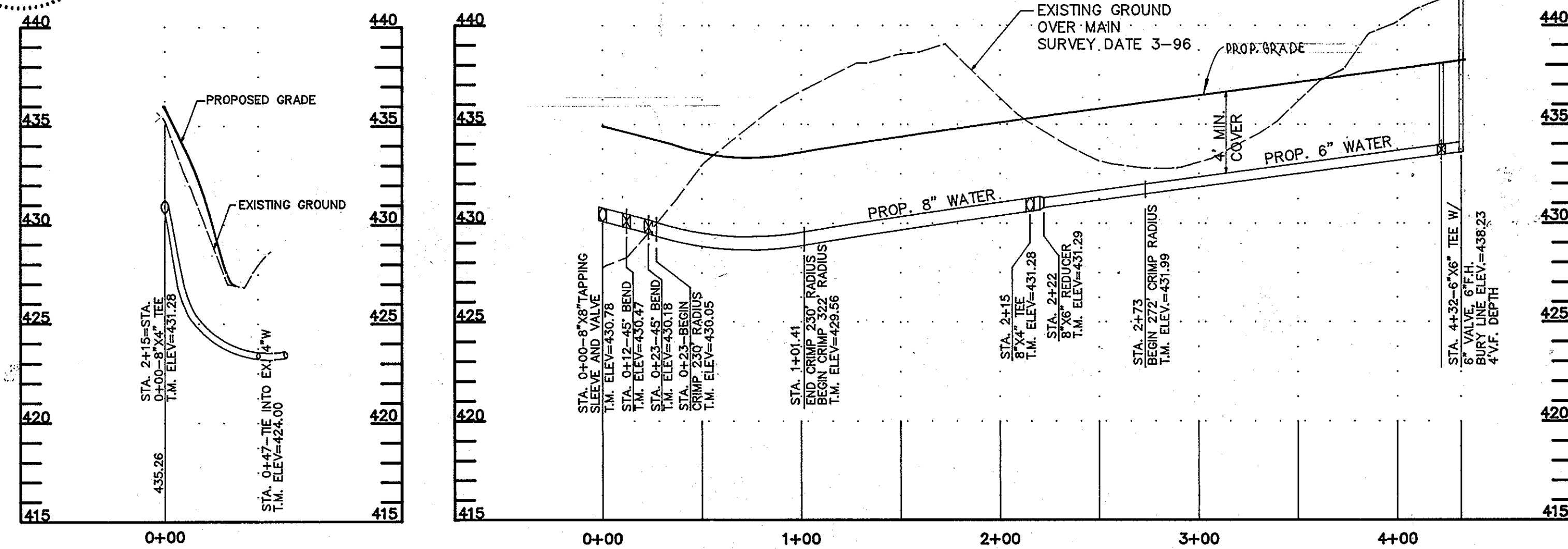


PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 31089, EXPIRATION DATE: 11-21-10.

NOTE: NEW SEAL AND SIGNATURE ARE APPLICABLE ONLY TO REVISIONS.

DRAINAGE AREA MAP

SCALE: 1" = 200'



PROFILE WATER RELOCATION

SCALE: HOR. 1" = 50' VERT. 1" = 5'

CONCRETE STORMCEPTOR® ORDER REQUEST FORM

CONTRACTOR INFORMATION:
 NAME: _____ ADDRESS: _____ CITY: _____ STATE: _____ ZIP CODE: _____ CONTACT: _____ PHONE: _____

OWNER INFORMATION:
 NAME: HOWARD COMMUNITY COLLEGE PHONE: (410) 964-4958 FAX: (410) 964-4909

STORMCEPTOR MODEL: 9000 8000 12000 4800 18000 8000 24000 7900

INLET SIZE: 22" 30" 36" 44" Custom

Manhole Number: 001 Top Elevation (ft): 428.00 Inlet Pipe Invert (ft): 427.00 Outlet Pipe Invert (ft): 426.52

PROJECT NAME: HOWARD COMMUNITY COLLEGE - CAMPUS ROAD RELOCATION
 APPROXIMATE TIME FRAME UNTIL REQUIRED DELIVERY (WEEKS): _____
 DELIVERY ADDRESS: STREET _____ CITY _____ STATE _____ ZIP CODE _____
 DESIGNER COMPANY: DEL, INC. PHONE: (410) 647-2727 FAX: (410) 647-7127

PLEASE FAX THIS ORDER TO STORMCEPTOR AT (801) 762-4190 FOR TECHNICAL ASSISTANCE PLEASE CALL STORMCEPTOR CORPORATION AT (801) 762-8367 OR TOLL FREE AT: (800) 762-4708

ALL LIFTING APPARATUS TO BE PROVIDED BY THE INSTALLATION CONTRACTOR TO BE INCLUDED ON SWM PLAN BY DESIGNER.

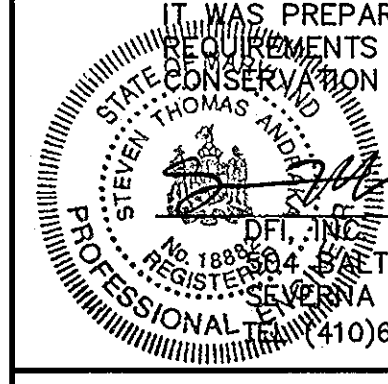
DEVELOPER'S CERTIFICATION

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

Signature: *Debra J. Sull* DATE: 10/21/96
 SIGNATURE OF DEVELOPER
 PRINT NAME BELOW SIGNATURE

ENGINEER'S CERTIFICATE

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



DATE: 10-21-96

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

Signature: *Clyde Simmons* DATE: 2/24/97
 U.S.D. NATURAL RESOURCES SERVICE

Signature: *John P. Robertson* DATE: 2/24/97
 APPROVED HOWARD S.C.D.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Signature: *Michael Blum* DATE: 2/2/97
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

Signature: *Michael Blum* DATE: 2/3/97
 CHIEF, DIVISION OF LAND DEVELOPMENT

Signature: *Debra J. Sull* DATE: 2/5/97
 DIRECTOR

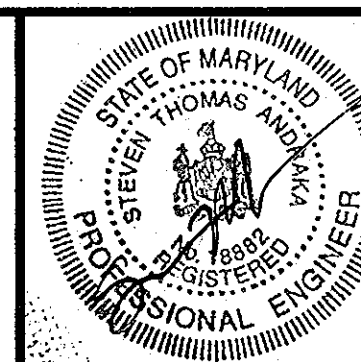
APPROVED PLANNING BOARD OF HOWARD COUNTY
 DATE: 12/19/96

DEVELOPER: /OWNER
 KATHLEEN HETHERINGTON, ED. D.
 SECRETARY-TREASURER, PRESIDENT
 HOWARD COMMUNITY COLLEGE
 10901 LITTLE PATUXENT PARKWAY
 COLUMBIA, MD 21044-3197
 (410) 712-4820

DESIGNED M.A.M. 9/96
 DRAWN R.J.S. 9/96
 CHECKED M.A.M. 9/96
 APPROVED S.T.A. 9/96

REVISIONS		
DATE	BY	DESCRIPTION
07-26-10	GAH	1 ADD NOTES - REVISE SHEET NUMBER

dfi CONSULTING ENGINEERS, SURVEYORS, AND LAND PLANNERS
 504 BALTIMORE/ANNAPOLIS BOULEVARD
 SEVERNA PARK, MD 21146 (410)647-2727
 FAX (410)647-7127



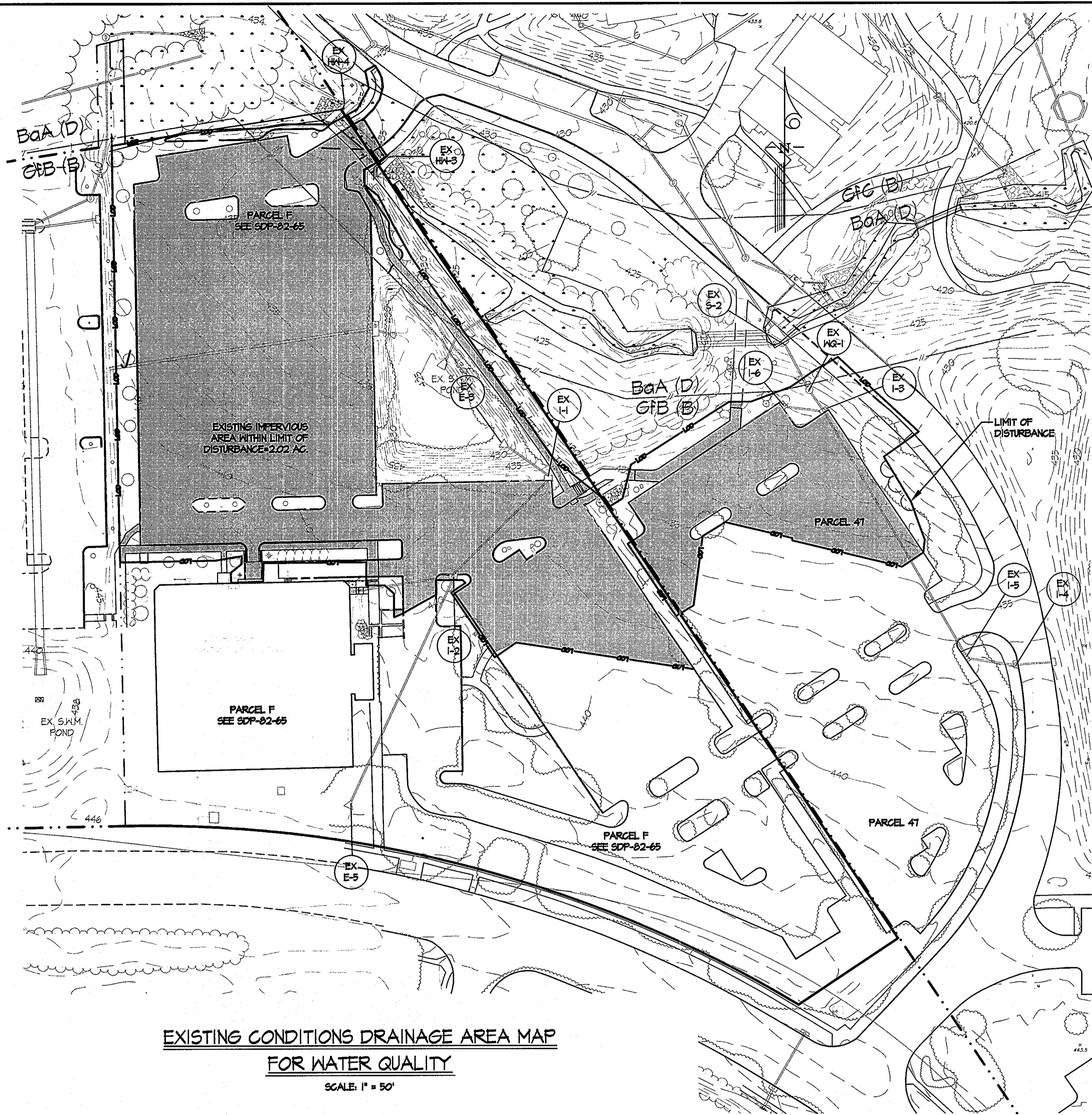
DRAINAGE AREA MAP / WATER PROFILES
 HOWARD COMMUNITY COLLEGE
 ENTRANCE AND PARKING IMPROVEMENTS
 FOR ADJACENT PARKING GARAGE # 2
 (RED-LINE REVISION TO PREVIOUSLY APPROVED CAMPUS ROAD RELOCATION AND PARKING EXPANSION PROJECT)
 JULY 26, 2010

SHEET 17 OF 24

TAX MAP 35.36

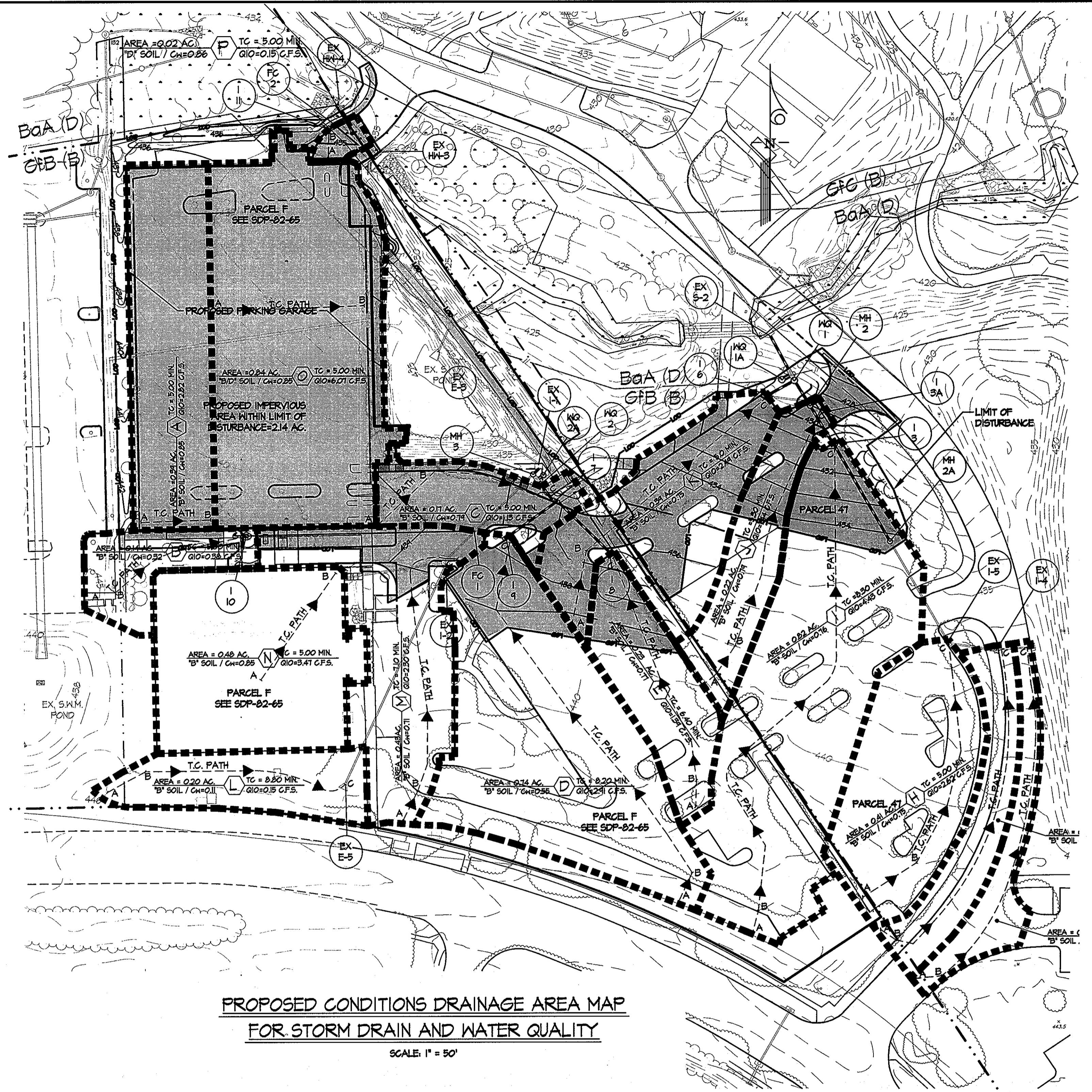
PARCEL #47

SDP-97-45



**EXISTING CONDITIONS DRAINAGE AREA MAP
FOR WATER QUALITY**

SCALE: 1" = 50'



**PROPOSED CONDITIONS DRAINAGE AREA MAP
FOR STORM DRAIN AND WATER QUALITY**

SCALE: 1" = 50'

LEGEND

- DRAINAGE DIVIDE FOR STORM DRAIN
- LIMIT OF DISTURBANCE FOR WATER QUALITY CALCULATIONS
- IMPERVIOUS AREAS WITHIN LIMIT OF DISTURBANCE

NOTE:
SEE SHEET 17 OF 24 FOR
DRAINAGE AREA MAP FOR
STORMWATER QUANTITY

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. 31084 EXPIRATION DATE: 11/21/10.

APPROVED FOR PUBLIC OR PRIVATE (pick one) WATER AND PUBLIC OR PRIVATE (pick one) SEWERAGE SYSTEMS
County Health Officer _____ Date _____
Howard County Health Department

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT
Howard SCD _____ Date _____

APPROVED PLANNING BOARD OF HOWARD COUNTY
DATE _____

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 that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

Rh 2 Bat _____ 8-12-10
Signature of Engineer (print name below signature) Date

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Mr. Dennis _____ 8/2/10
Chief, Development Engineering Division Date
Keith Deane _____ 8/30/10
Chief, Division of Land Development Date
Thomas J. Butler _____ 8/30/10
Director Date

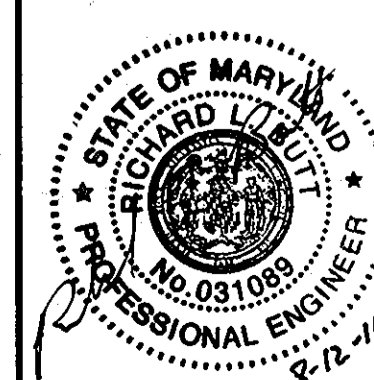
DEVELOPER'S CERTIFICATE
"I/We certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training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

Shirley J. Reese _____ 8-16-10
Signature of Developer (print name below signature) Date

DEVELOPER:/OWNER
KATHLEEN HETHERINGTON, ED. D.
SECRETARY-TREASURER, PRESIDENT
HOWARD COMMUNITY COLLEGE
10901 LITTLE PATUXENT PARKWAY
COLUMBIA, MD 21044-3197
(410) 712-4820

DESIGNED BY:	DATE	BY:	DESCRIPTION
GAH	7/26/10	GAH	NEW SHEET FOR REV. *1
DRAWN BY:			
GAH			
CHECKED BY:			
RLB			
APPROVED BY:			
RLB			
SCALE:	1" = 50'		

KCI TECHNOLOGIES
ENGINEERS PLANNERS SCIENTISTS CONSTRUCTION MANAGERS
936 RIDGEBROOK ROAD
SPARKS, MD 21152
PHONE: (410) 316-7800



DRAINAGE AREA MAPS
HOWARD COMMUNITY COLLEGE
ENTRANCE AND PARKING IMPROVEMENTS
FOR ADJACENT PARKING GARAGE # 2
(RED-LINE REVISION FOR PREVIOUSLY APPROVED CAMPUS ROAD RELOCATION AND PARKING EXPANSION PROJECT)

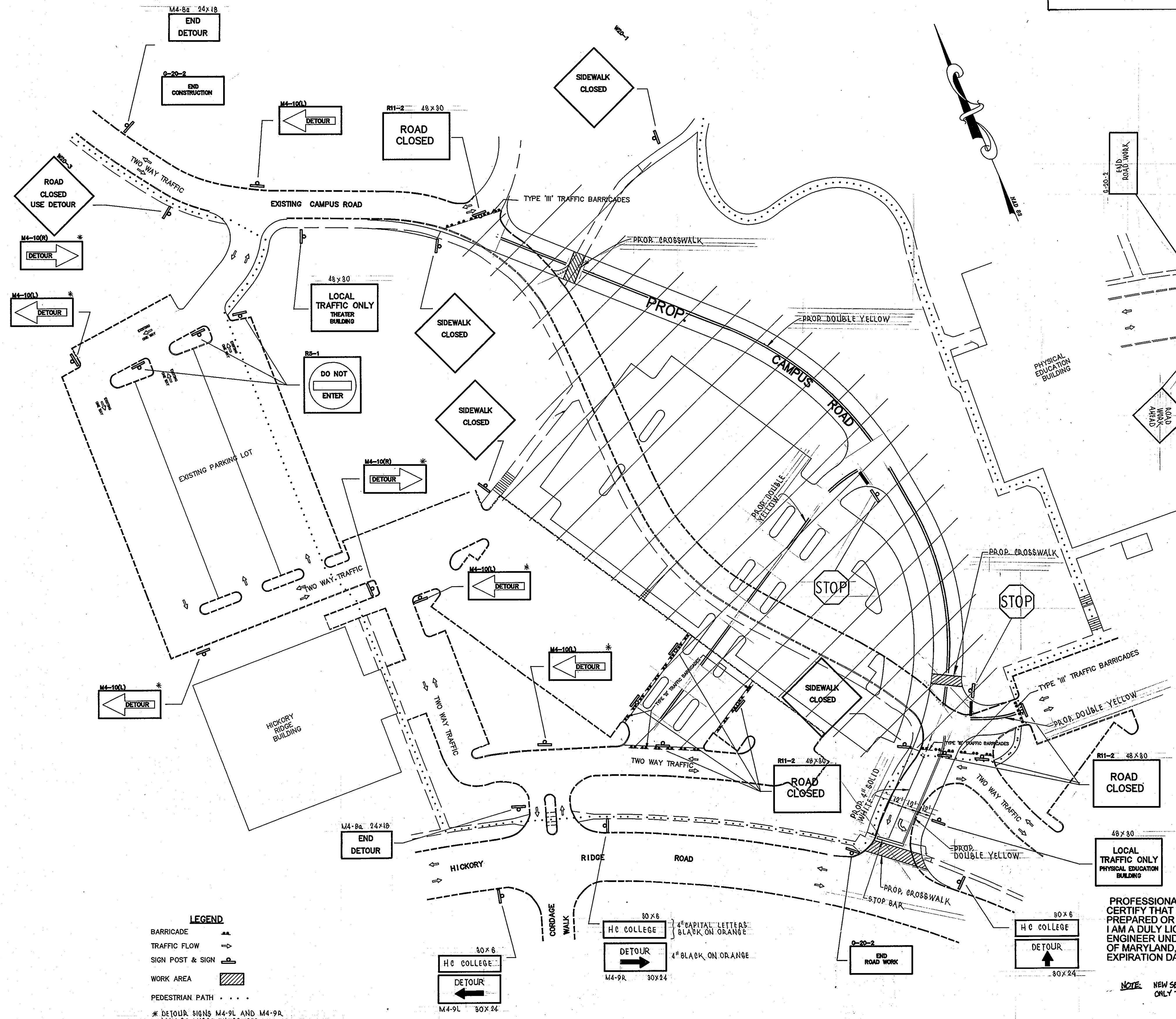
SHEET
18
OF
24
SC-13 OF 14
KCI JOB NUMBER : 01082978

Tuesday, July 27, 2010 2:23:27 PM
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THIS PHASE OF PROJECT IS CLOSED OUT.

GENERAL NOTES - TRAFFIC CONTROL

1. ALL CONSTRUCTION AND MATERIALS FOR THE TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE STANDARDS CONTAINED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
2. TRAVEL LANES SHALL BE A MINIMUM OF TWELVE FEET IN WIDTH. WHEN ONLY ONE LANE IS OPEN, FLAGMEN AND THE APPROPRIATE SIGNING SHALL BE PROVIDED. THE ROADWAY SHALL BE RE-OPENED ON A DAILY BASIS.
3. ALL OPEN TRENCHES SHALL BE CLOSED AT THE END OF THE WORK DAY. IF STEEL PLATES ARE TO BE USED, APPROPRIATE SIGNING WILL BE REQUIRED. STEEL PLATES SHALL BE STAKED IN PLACE AND RAMPED WITH COLD PATCH ASPHALT.
4. ALL SIGNS THAT DO NOT APPLY WILL BE COVERED.
5. ALL CONSTRUCTION SIGNING SHALL BE IN ACCORDANCE WITH THE TYPICAL SIGN PLACEMENT SHOWN ON THESE PLANS AND SHALL NOT OBSTRUCT EXISTING TRAFFIC CONTROL DEVICES.
6. CONSTRUCTION AND WORKMANS' VEHICLES SHALL NOT BE PARKED IN A MANNER THAT WILL IMPEDE TRAFFIC OR IMPAIR SIGHT DISTANCE. THESE VEHICLES SHOULD BE PARKED OFF-STREET ON THE CONSTRUCTION SITE OR ON A SIDE STREET NOT UNDER CONSTRUCTION.
7. ALL WORK WILL BE DONE IN ACCORDANCE WITH MARYLAND STATE HIGHWAY AND MARYLAND OCCUPATIONAL SAFETY AND HEALTH SPECIFICATIONS.

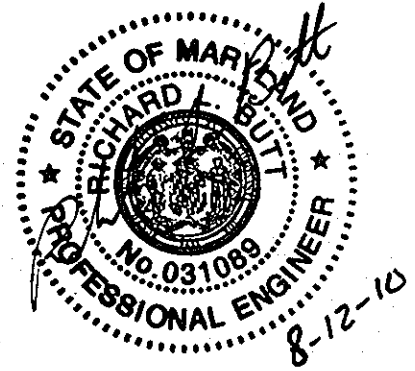


- 1) WHEN WORK BEGINS ON THE NORTHEAST CORNER OF THE CAMPUS ROAD INTERSECTION WITH HICKORY RIDGE ROAD, ROAD WORK AHEAD, 1500 FT., 800 FT. AND ROAD WORK END SIGNS MUST BE INSTALLED ON WOODEN POSTS. THEY SHOULD BE REMOVED AS SOON AS THE ROADWORK ADJACENT TO HICKORY RIDGE ROAD IS COMPLETED.
- 2) THE BONES AND TEMPORARY LANE SHIFT WARNING SIGN ARE TO BE USED WHEN THE WORK AREA EXTENDS INTO THE WESTBOUND TRAVEL LANE ON HICKORY RIDGE ROAD. MUST BE REMOVED BY END OF DAY.

LEGEND
 BARRICADE
 TRAFFIC FLOW
 SIGN POST & SIGN
 WORK AREA
 PEDESTRIAN PATH

* DETOUR SIGNS M4-9L AND M4-9R MAY BE SUBSTITUTED FOR DETOUR SIGNS M4-10(L) AND M4-10(R).

PLAN
 SCALE: 1"=50'



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. 31087, EXPIRATION DATE: 11-21-10.

NOTE: NEW SEAL AND SIGNATURE ARE APPLICABLE ONLY TO REVISIONS.

<p>DEVELOPER'S CERTIFICATION</p> <p>"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."</p> <p><i>Richard B. Belton</i> DATE 10/25/96 SIGNATURE OF DEVELOPER PRINT NAME BELOW SIGNATURE</p>	
<p>ENGINEER'S CERTIFICATE</p> <p>"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT."</p> <p><i>Richard B. Belton</i> DATE 10-21-96 SIGNATURE OF ENGINEER PRINT NAME BELOW SIGNATURE</p>	<p>REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS</p> <p><i>Sheryl Simons</i> 2/24/97 DATE U.S.D.A. NATURAL RESOURCE SERVICE</p> <p>THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.</p> <p><i>John B. Belton</i> 2/24/97 DATE APPROVED HOWARD S.C.D.</p>
<p>APPROVED: DEPARTMENT OF PLANNING AND ZONING</p> <p><i>Richard B. Belton</i> 2/27/97 DATE CHIEF, DEVELOPMENT ENGINEERING DIVISION</p> <p><i>Richard B. Belton</i> 2/27/97 DATE CHIEF, DIVISION OF LAND DEVELOPMENT</p> <p><i>David J. Hingle</i> 2/27/97 DATE DIRECTOR</p>	
<p>APPROVED PLANNING BOARD OF HOWARD COUNTY DATE 12/19/96</p>	

DEVELOPER: /OWNER
 KATHLEEN HETHERINGTON, ED. D.
 SECRETARY-TREASURER, PRESIDENT
 HOWARD COMMUNITY COLLEGE
 10901 LITTLE PATUXENT PARKWAY
 COLUMBIA, MD 21044-3197
 (410) 712-4020

DESIGNED	M.A.M.	9/96
DRAWN	R.J.S.	9/96
CHECKED	M.A.M.	9/96
APPROVED	S.T.A.	9/96

REVISIONS		
DATE	BY	DESCRIPTION
07/26/10	GAH	REVISE SHEET NUMBER

dfi CONSULTING ENGINEERS, SURVEYORS, AND LAND PLANNERS
 504 BALTIMORE/ANNAPOLIS BOULEVARD
 SEVERNA PARK, MD 21146 (410)647-2727
 FAX (410)647-7127

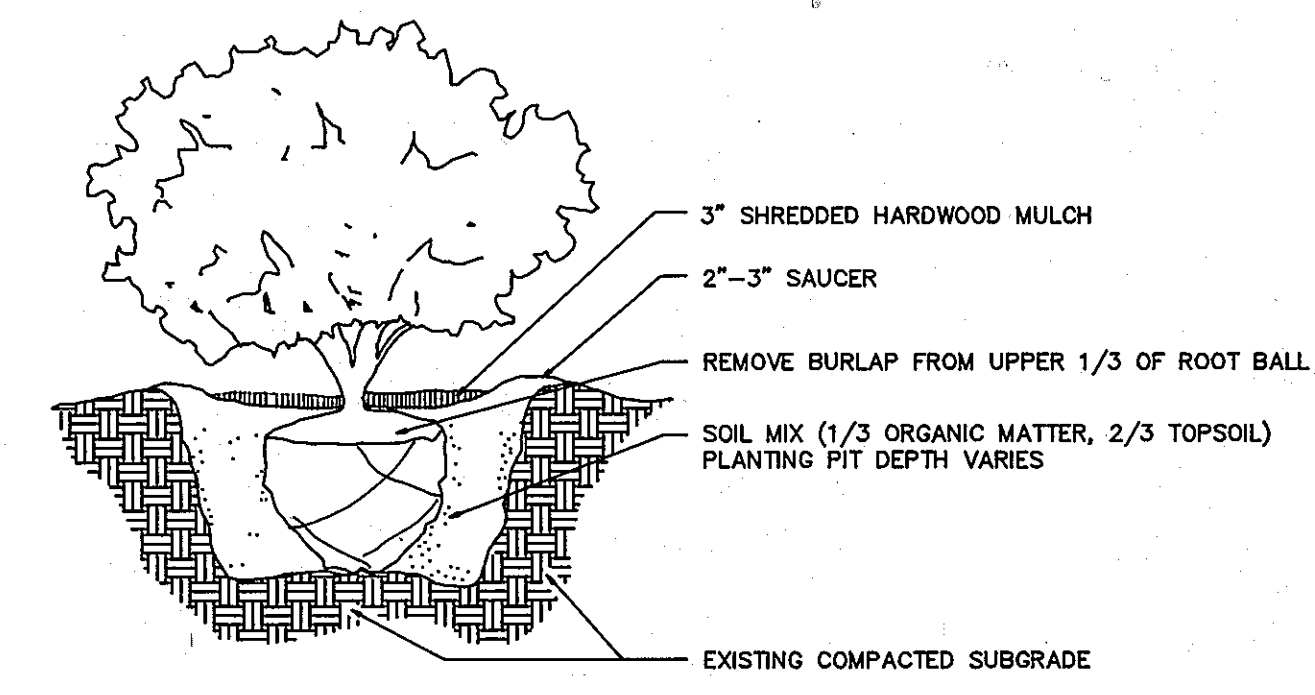
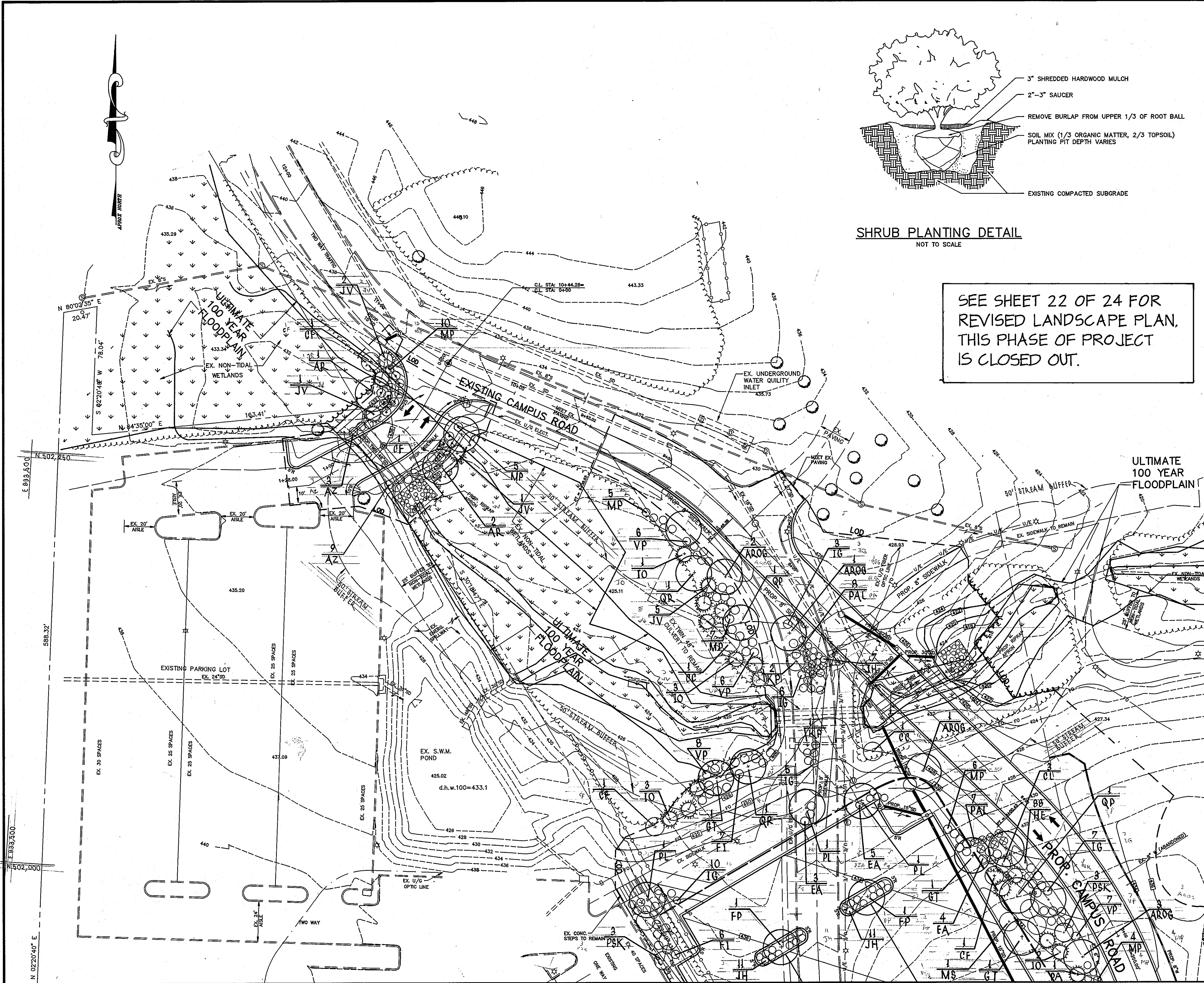


TRAFFIC CONTROL PLAN
 HOWARD COMMUNITY COLLEGE
 ENTRANCE AND PARKING IMPROVEMENTS
 FOR ADJACENT PARKING GARAGE # 2.
 (RED-LINE REVISION TO PREVIOUSLY APPROVED CAMPUS ROAD RELOCATION AND PARKING EXPANSION PROJECT)
 JULY 26, 2010

SHEET
 19
 OF
 24

DATE PLOTTED: 07/23/96 DRAWN BY: COSSNER

PARCEL # 47 SDP-97-45



SHRUB PLANTING DETAIL
NOT TO SCALE

SEE SHEET 22 OF 24 FOR
REVISED LANDSCAPE PLAN,
THIS PHASE OF PROJECT
IS CLOSED OUT.

DEVELOPER'S CERTIFICATION

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

DATE 10/21/96

SIGNATURE OF DEVELOPER
PRINT NAME BELOW SIGNATURE

ENGINEER'S CERTIFICATE

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

DATE 10-21-96

SIGNATURE OF ENGINEER
PRINT NAME BELOW SIGNATURE

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

DATE 2/24/97

SIGNATURE OF REVIEWER
PRINT NAME BELOW SIGNATURE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

DATE 2/27/97

SIGNATURE OF CHIEF, DEVELOPMENT ENGINEERING DIVISION
PRINT NAME BELOW SIGNATURE

DATE 3/2/97

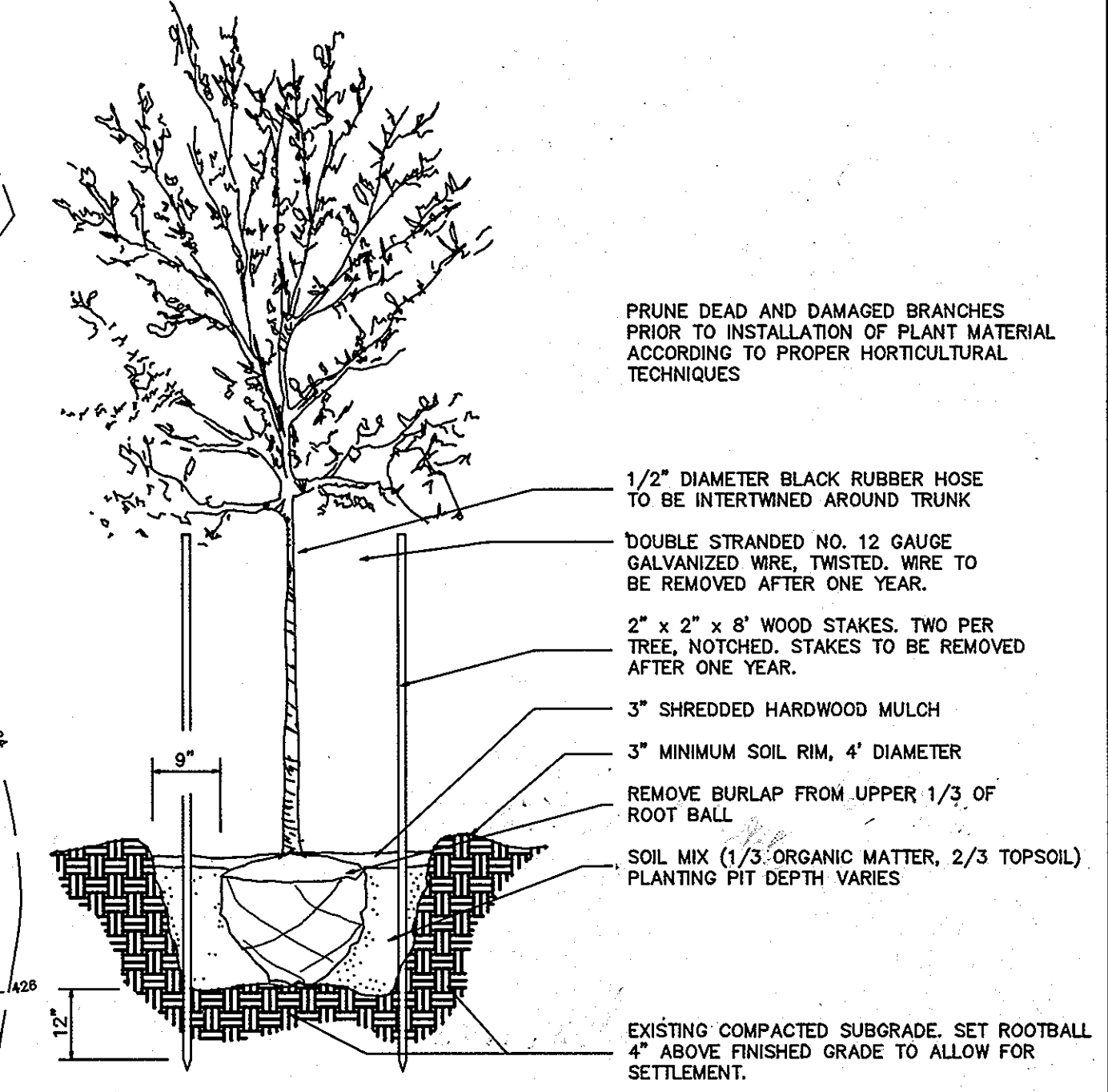
SIGNATURE OF CHIEF, DIVISION OF LAND DEVELOPMENT
PRINT NAME BELOW SIGNATURE

DATE 2/5/97

SIGNATURE OF DIRECTOR
PRINT NAME BELOW SIGNATURE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY

DATE 12/19/96



TREE PLANTING DETAIL
NOT TO SCALE

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. 31087, EXPIRATION DATE: 11-21-10

NOTE: NEW SEAL AND SIGNATURE ARE APPLICABLE ONLY TO REVISIONS.

MATCHLINE SEE SHEET 16

MATCHLINE SEE SHEET 16

DEVELOPER: /OWNER
KATHLEEN HETHERINGTON, ED. D.
SECRETARY-TREASURER, PRESIDENT
HOWARD COMMUNITY COLLEGE
10901 LITTLE PATUXENT PARKWAY
COLUMBIA, MD 21044-3197
(410) 772-4820

DESIGNED			DRAWN			CHECKED			APPROVED		
R.A.K.	9/96	date	LRC/RJS	9/96	date	M.A.M.	9/96	date	S.T.A.	9/96	date

REVISIONS		
DATE	BY	DESCRIPTION
07-26-10	GWH	REV. SHEET NUMBER & INFO. ADD NOTE

dfi CONSULTING ENGINEERS, SURVEYORS,
AND LAND PLANNERS

504 BALTIMORE/ANNAPOLIS BOULEVARD
SEVERNA PARK, MD 21146 (410)647-2727
FAX (410)647-7127

LANDSCAPE PLAN
HOWARD COMMUNITY COLLEGE
ENTRANCE AND PARKING IMPROVEMENTS
FOR ADJACENT PARKING GARAGE # 2
(RED-LINE REVISION TO PREVIOUSLY APPROVED CAMPUS ROAD RELOCATION AND PARKING EXPANSION PROJECT)
JULY 26, 2010

SHEET
20
OF
24

TAX MAP: 35,36

PARCEL # 97

SDP-97-45

SCHEDULE A
PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES
LANDSCAPE TYPE B		
LINEAR FEET OF ROADWAY PERIMETER	045 L.F.	*
CREDIT FOR EXISTING VEGETATION (TOTAL LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	N/A	N/A
CREDIT FOR WALL FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	N/A	N/A
NUMBER OF PLANTS REQUIRED		
SHADE TREES	17	N/A
EVERGREEN TREES	21	N/A
SHRUBS		
NUMBER OF PLANTS PROVIDED		
SHADE TREES	25	N/A
EVERGREEN TREES	25	N/A
OTHER TREES (2:1 SUBSTITUTION) SHRUBS (2:1 SUBSTITUTION)	17	N/A
(DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	104	

* PLEASE SEE LANDSCAPE PLAN OF FILE AT HOWARD COUNTY PLANNING AND ZONING FOR PLANTING ALONG HICKORY RIDGE ROAD AND PARCEL #4 (SDP-02-650)
** DUE TO SITE CONSTRAINTS SUCH AS THE PROPOSED UTILITY LINE AND THE SLOPE, PLANTING WILL NOT BE NECESSARY ON THE EAST SIDE OF PROPOSED CAMPUS ROAD.

SCHEDULE B
PARKING LOT INTERNAL LANDSCAPING

NUMBER OF PARKING SPACES	244
NUMBER OF TREES REQUIRED (1 SHADE TREE / 20 SPACES) = 12	
NUMBER OF TREES PROVIDED (ISLANDS/PARKING)	
SHADE TREES	22
OTHER TREES (2:1 SUBSTITUTION) = 18 EVERGREEN / SMALL DECIDUOUS TREES	



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. 31089. EXPIRATION DATE: 11-27-10

NOTE: NEW SEAL AND SIGNATURE ARE APPLICABLE ONLY TO REVISIONS.

SEE SHEET 22 OF 24 FOR REVISED LANDSCAPE PLAN. THIS PHASE OF PROJECT IS CLOSED OUT.

ENGINEER'S CERTIFICATE
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT."
DATE 10-21-96
PROFESSIONAL ENGINEER
DAVID P. JOHNSON
410-847-2727
704 BALTIMORE/ANNAPOLIS BLVD.
SEVERNA PARK, MD 21146

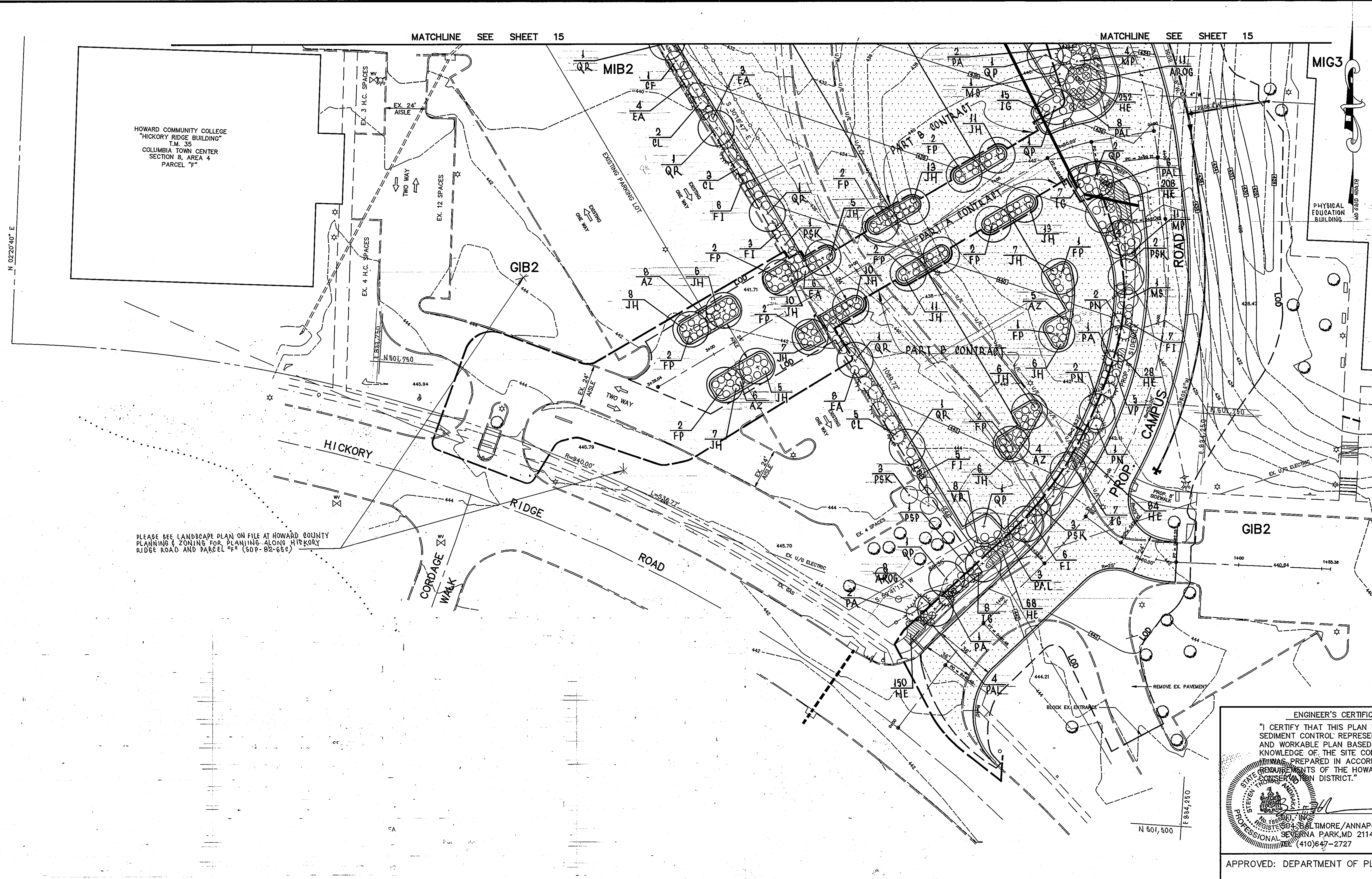
REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS
Cheryl Simmons 2/24/97
U.S.D.A. NATURAL RESOURCE SERVICE
DATE SERVICE
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
John R. Peterson 2/24/97
APPROVED HOWARD S.C.D. DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cheryl Simmons 2/27/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
Richard Blood 3/1/97
CHIEF, DIVISION OF LAND DEVELOPMENT DATE
Mark C. Wagner 2/15/97
DIRECTOR DATE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 12/19/96

DEVELOPER'S CERTIFICATION
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."
Signature of Developer: Douglas Scull
DATE 10/21/96
PRINT NAME BELOW SIGNATURE



PLEASE SEE LANDSCAPE PLAN ON FILE AT HOWARD COUNTY PLANNING AND ZONING FOR PLANTING ALONG HICKORY RIDGE ROAD AND PARCEL #4 (SDP-02-650)

DEVELOPER: /OWNER
KATHLEEN HETHERINGTON, ED. D.
SECRETARY-TREASURER, PRESIDENT
HOWARD COMMUNITY COLLEGE
10901 LITTLE PATUXENT PARKWAY
COLUMBIA, MD 21044-3197
(410) 712-4820

DESIGNED			REVISIONS		
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
9/96	R.A.K.		07-26-10	SAH/NMF	REVISE SHEET NUMBER, ADD NOTE
9/96	LRC/RJS				
9/96	M.A.M.				
9/96	S.T.A.				

dfi CONSULTING ENGINEERS, SURVEYORS, AND LAND PLANNERS
504 BALTIMORE/ANNAPOLIS BOULEVARD
SEVERNA PARK, MD 21146 (410)647-2727
FAX (410)647-7127

LANDSCAPE PLAN
HOWARD COMMUNITY COLLEGE
ENTRANCE AND PARKING IMPROVEMENTS
FOR ADJACENT PARKING GARAGE #2
(RED-LINE REVISION TO PREVIOUSLY APPROVED CAMPUS ROAD RELOCATION AND PARKING EXPANSION PROJECT)
JULY 26, 2010
PARCEL #47

SHEET
21
OF
24

LEGEND

- EXISTING WETLANDS
- 25' WETLAND BUFFER
- 100 YR. FLOODPLAIN
- 50' STREAM BUFFER
- PROP. ASPHALT PAVING
- PROP. 1/2" ASPHALT MILL AND OVERLAY
- EXISTING FOREST CONSERVATION EASEMENTS
- LOD
- LIMIT OF DISTURBANCE
- MAJOR DECIDUOUS TREE
- ORNAMENTAL TREE
- EVERGREEN TREE

PLANT SCHEDULE

KEY	QUAN	BOTANICAL NAME / COMMON NAME	SIZE	ROOT	COMMENT
MAJOR DECIDUOUS TREE					
QP	3	QUERCUS PHELLOS / WILLOW OAK	25" CAL.	B&B	FULL CROWN
ORNAMENTAL TREE					
MS	10	MAGNOLIA STELLATA / STAR MAGNOLIA	1-8' HT.	B&B	FULL CROWN
SHRUBS					
CA	7	CLETHRA ALNIFOLIA / SUMMERSWEET CLETHRA	3' HT.	CA	5' O.C.

SCHEDULE A: PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES
LANDSCAPE TYPE	B	A
LINEAR FEET OF ROADWAY FRONTAGE/ PERIMETER	0 LF	0 LF
EXISTING VEGETATION CREDIT	YES, 250 LF	NO
WALL, FENCE, BERM CREDIT	NO	NO
PLANTS REQUIRED		
SHADE TREES	0	0
EVERGREEN TREES	0	0
SHRUBS	0	0
PLANTS PROVIDED		
SHADE TREES	3	0
EVERGREEN TREES	0	0
SHRUBS	0	0
OTHER TREES (2:1 SUBSTITUTION)	4	0
OTHER SHRUBS (10:1 SUBSTITUTION)	1.0	0

NOTE: SEE SHEET 20 OF 24 FOR LANDSCAPE PLAN

CONTRACTOR'S NOTE:
CONTRACTOR SHALL EXERCISE EXTREME CAUTION SO AS NOT TO DAMAGE ANY EXISTING PAVING, CURB & GUTTER, SIDEWALKS OR OTHER SITE FEATURES WHICH ARE TO REMAIN. SHOULD DAMAGE OCCUR, CONTRACTOR SHALL REPAIR TO ORIGINAL CONDITION AT CONTRACTOR'S EXPENSE.

NOTE:
NOT FOR CONSTRUCTION

APPROVED FOR PUBLIC OR PRIVATE (pick only one) WATER AND PUBLIC OR PRIVATE (pick only one) SEWERAGE SYSTEMS

County Health Officer _____ Date _____
Howard County Health Department

APPROVED PLANNING BOARD OF HOWARD COUNTY

DATE _____

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

Howard SCD _____ Date _____

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 that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

RLB 8-12-10
Signature of Engineer (print name below signature) Date

DEVELOPER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan 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 the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."

Sharon A. Rouse 8-16-10
Signature of Developer (print name below signature) Date

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 8/27/10
Chief, Development Engineering Division Date

[Signature] 8/30/10
Chief, Division of Land Development Date

[Signature] 8/30/10
Director Date

DEVELOPER:/OWNER

KATHLEEN HETHERINGTON, ED. D.
SECRETARY-TREASURER, PRESIDENT
HOWARD COMMUNITY COLLEGE
10901 LITTLE PATUXENT PARKWAY
COLUMBIA, MD 21044-3191
(410) 712-4820

REVISIONS

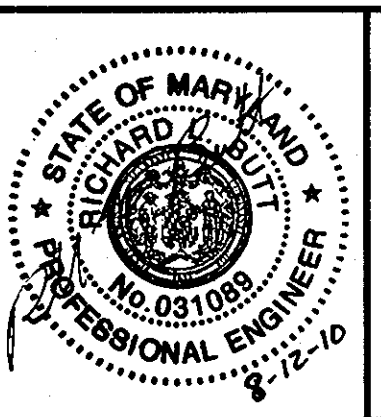
DESIGNED BY:	DATE	BY	DESCRIPTION
GAH	7/26/10	GAH	NEW SHEET FOR REV. #1
DRAWN BY:			
CHECKED BY:			
APPROVED BY:			
SCALE:	1" = 30'		

KCI TECHNOLOGIES

ENGINEERS
PLANNERS
SCIENTISTS
CONSTRUCTION MANAGERS

936 RIDGEBROOK ROAD
SPARKS, MD 21152
PHONE: (410) 316-7800

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. 310691 EXPIRATION DATE: 11/21/10.

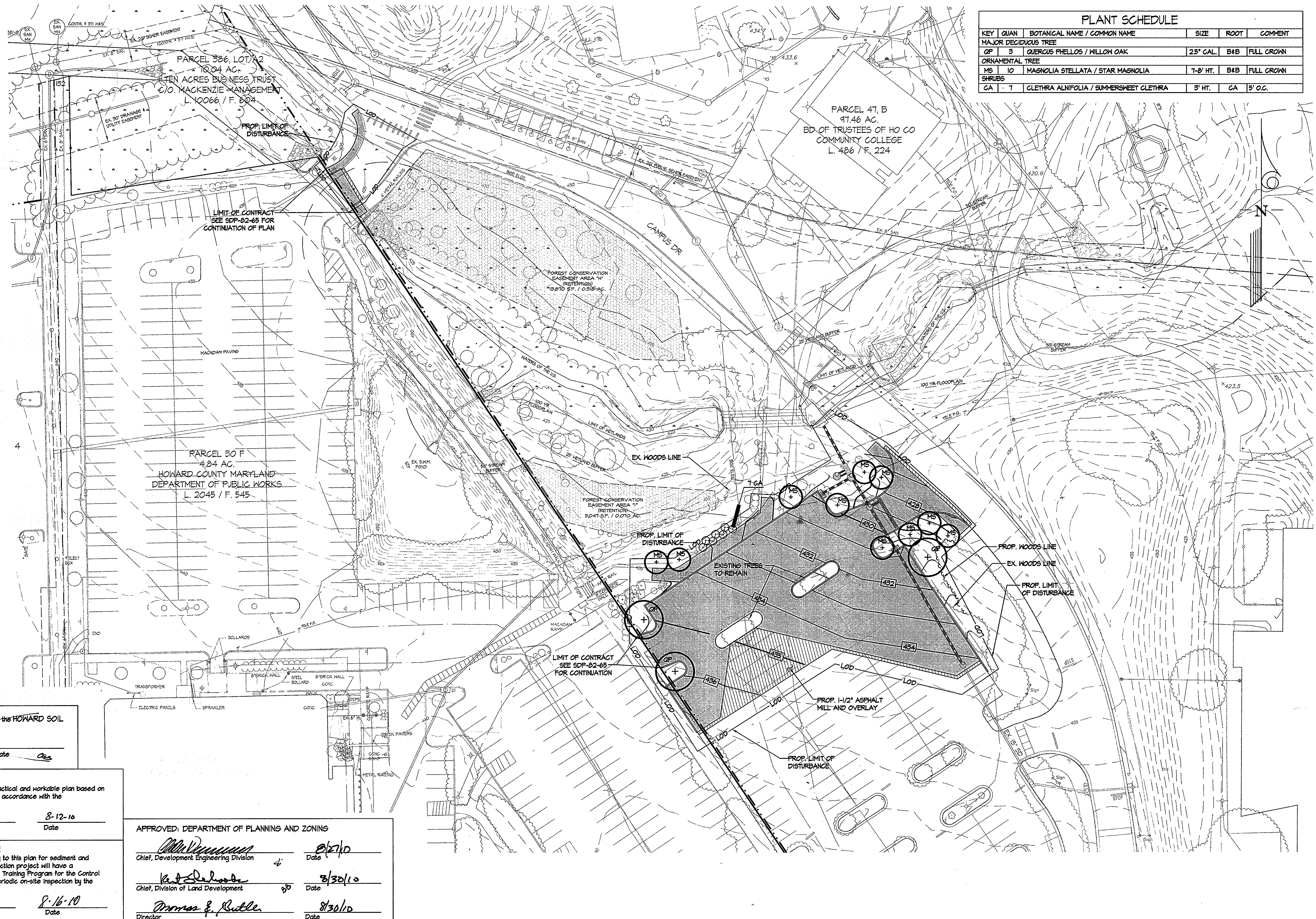


LANDSCAPE PLAN

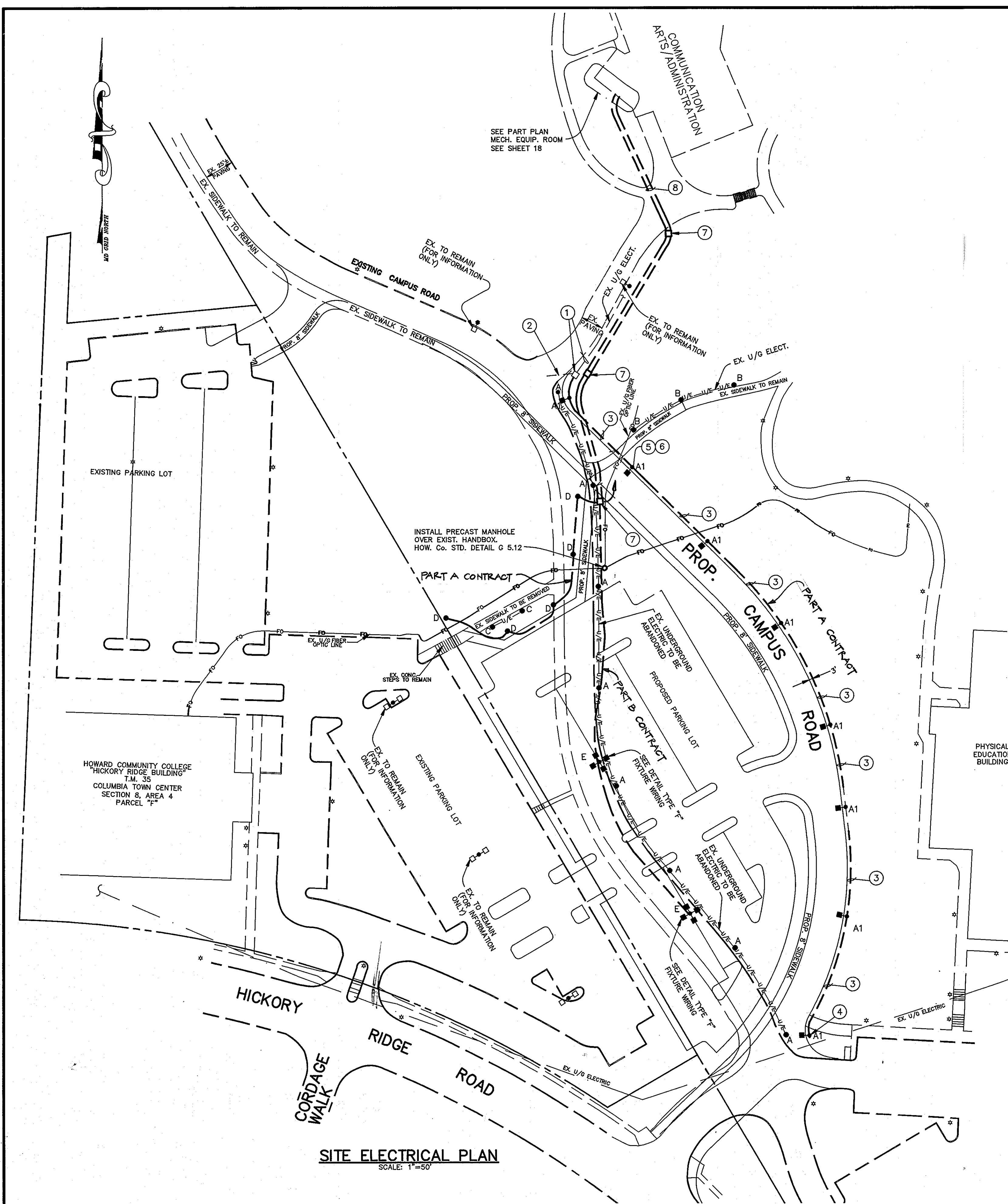
HOWARD COMMUNITY COLLEGE
ENTRANCE AND PARKING IMPROVEMENTS
FOR ADJACENT PARKING GARAGE # 2
(RED-LINE REVISION FOR PREVIOUSLY APPROVED CAMPUS ROAD RELOCATION AND PARKING EXPANSION PROJECT)

SHEET
22
OF
24

SC-14 OF 14
KCI JOB NUMBER : 09022978



Tuesday, July 27, 2010 2:00:40 PM
G:\VLE_HERRID
M:\2009\08\29\20\ADMIN\SDP-97-45-NEW_SHEETZ.DWG



- DRAWING NOTES**
- CUT-OFF AND EXTEND EXIST. UNDERGROUND CONDUIT AND ASSOCIATED 208V ROADWAY LIGHTING AND 120V FLASHER BRANCH CIRCUIT INTO 12" X 12" X 12" CAST IRON PULL BOX. TAPE OFF 120V FLASHER CIRCUIT WIRES (NO LONGER USED) AND DISCONNECT FROM SOURCE FROM PULL BOX EXTEND 3 #2, 1 #10 GROUND IN 1 1/2" PVC CONDUIT TO POLE BASE. SEE DETAIL TYPICAL PULL BOX INSTALLATION.
 - EXTEND EXISTING UNDERGROUND CONDUIT AND ASSOCIATED 208V ROADWAY LIGHTING BRANCH CIRCUIT INTO PULL BOX AND SPLICE WIRING AS REQUIRED.
 - 3 #2, 1 #10 GROUND IN 1 1/2" PVC CONDUIT TO POLE BASE.
 - TAPE OFF AND PROVIDE WIRE NUT ON UNUSED PHASE WIRING.
 - BALANCE LIGHTING LOADS ON THE 3-PHASE 208 VOLT BRANCH CIRCUIT (TYPICAL ALL STREET LIGHTS)
 - INSIDE POLE AT HANDHOLE LOCATION PROVIDE TWO (2) IRON TYPE HEB 30A.600V FUSE HOLDERS AND TWO (2) FUSETRON NM-5 DUAL ELEMENT FUSES. WIRING TO FIXTURE FROM FUSES SHALL BE 2 #12, 1 #12 GND. PROVIDE ADEQUATE SLACK IN WIRING TO ALLOW REMOVAL OF FUSES THRU HANDHOLE (TYPICAL ALL ROADWAY LIGHTING).
 - SEE DETAIL TYPICAL PULL BOX INSTALLATION.
 - SEE SINGLE LINE OUTDOOR LIGHTING POWER FOR TYPES "F" AND "C" FIXTURES BRANCH CIRCUIT REQUIREMENTS (TYPICAL).

THIS PHASE OF PROJECT IS CLOSED OUT.

SITE LIGHTING - POLE / FIXTURE SCHEDULE		
SYMBOL / TYPE	DESCRIPTION	MANUFACTURER AND CATALOG No.
A •	EXISTING 25 FT. HIGH SQUARE TAPERED STEEL POLE WITH 400 WATT METAL HALIDE FIXTURE "SHOE BOX STYLE" BALLAST 208V,1# INDIVIDUALLY FUSED FINISHED OF POLE AND FIXTURE DARK BRONZE. REMOVE POLE / FIXTURE AND TEMPORARILY STORE ON SITE AT LOCATION AS DIRECTED BY OWNER. LOCATE CUT-OFF AND ABANDON EXISTING CONCRETE POLE BASE NOT IN WAY OF NEW WORK.	EXISTING
•• A1	EXISTING TYPE "A" AS DESCRIBED ABOVE. REINSTALL ON NEW CONCRETE POLE BASE WITH NEW BRANCH CIRCUIT CONDUIT WIRING AS INDICATED. PRIOR TO INSTALLATION, CLEAN LENS AND OPTICAL ASSEMBLY, RELAMP, TEST BALLAST, REPLACE DEFECTIVE SOCKETS, BALLASTS FUSE BLOCKS, FUSES ETC. AND RETEST PRIOR TO INSTALLATION. SEE POLE BASE DETAIL "A1".	
B •	EXISTING 7.5 FT. HIGH ROUND ALUMINUM POLE WITH 70 WATT HIGH PRESSURE SODIUM FIXTURE. BALLAST 208V,1# TO REMAIN AT EXISTING LOCATION (SHOWN FOR INFORMATION ONLY)	EXISTING STERNER "JUNO" SERIES
C •	SAME AS TYPE "B" AS DESCRIBED ABOVE. REMOVE POLE / FIXTURE AND TURN OVER TO OWNER FOR "SPARE" AT LOCATION AS DIRECTED BY OWNER LOCATE AND DISCONNECT EXISTING BRANCH CIRCUIT CONDUIT / WIRING AND REMOVE CONCRETE POLE BASE.	EXISTING STERNER "JUNO" SERIES
D •	NEW 7.5 FT. HIGH 3" DIA. ROUND STRAIGHT ALUMINUM POLE WITH HINGED BASE AND 70 WATT HIGH PRESSURE SODIUM FIXTURE. BALLAST 208V,1# TWO FUSE CLIPS AND FUSES FINISH OF POLE AND FIXTURE SHALL BE DARK BRONZE. POLE AND FIXTURE SHALL MATCH EXISTING TYPE "B" AS DESCRIBED ABOVE.	STERNER-"JUNO SERIES" FIXTURES: CAT NO. JN-24-E-5-F3-70-S-208-C (FUSED IN POLE) POLE: STERNER CAT NO. RSA05-C-N WITH HINGED BASE STYLE (STERNER CODE C).
E •	NEW 25 FT. HIGH SQUARE TAPERED STEEL POLE WITH FOUR AT 90° ARRANGEMENT METAL HALIDE FIXTURES "SHOE BOX STYLE" EACH 400 WATTS (CLEAR) WITH 208V,1# BALLAST, TWO FUSE CLIPS AND 5 AMP FUSES. FINISH OF POLE / ARM AND FIXTURE SHALL BE DARK BRONZE. POLE WIND LOAD FACTOR SHALL BE 21.5 AT 80 MPH, TAPER 6.25 X 3.75, WALL THICKNESS 11GA, BASE SQUARE 13.50", BASE HEIGHT 4.50", WITH 5.25" CONDUIT OPENING. SEE POLE BASE DETAIL "E".	STERNER-"EXECUTIVE SERIES" FOUR (4) EX-25-A-49-F-49-FP-400-H-208-C POLE-STERNER CAT NO. STS25-C-N

DEVELOPER'S CERTIFICATION

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DATE 10/21/96

Duffell
SIGNATURE OF DEVELOPER
PRINT NAME BELOW SIGNATURE

ENGINEER'S CERTIFICATE

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

DATE 10-21-96

Carol Simmond
SIGNATURE OF ENGINEER
PRINT NAME BELOW SIGNATURE

DATE 2/24/97

John P. Robertson
SIGNATURE OF ENGINEER
PRINT NAME BELOW SIGNATURE

DATE 2/24/97

APPROVED HOWARD S.C.D.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

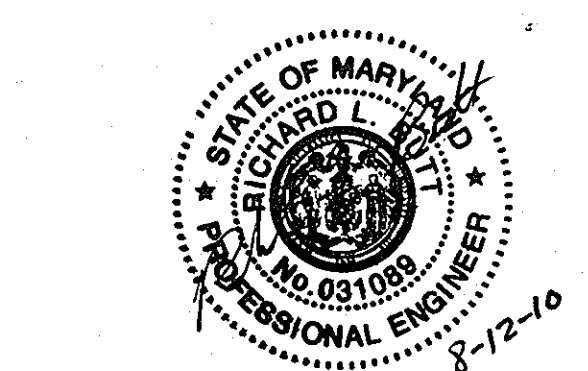
John P. Robertson 2/27/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Michael Blood 2/3/97
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Frank J. ... 2/5/97
DIRECTOR DATE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY

DATE 12/19/96



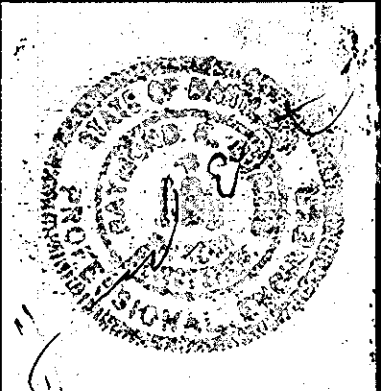
PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 51084 EXPIRATION DATE: 11-21-10

NOTE: NEW SEAL AND SIGNATURE ARE APPLICABLE ONLY TO REVISIONS.

DEVELOPER: / OWNER
KATHLEEN HETHERINGTON, ED. D.
SECRETARY-TREASURER, PRESIDENT
HOWARD COMMUNITY COLLEGE
10901 LITTLE PATUXENT PARKWAY
COLUMBIA, MD 21044-3197
(410) 712-4620

DESIGNED			DRAWN			CHECKED			APPROVED		
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
07-26-10	GAH	REVISE SHEET NUMBER									

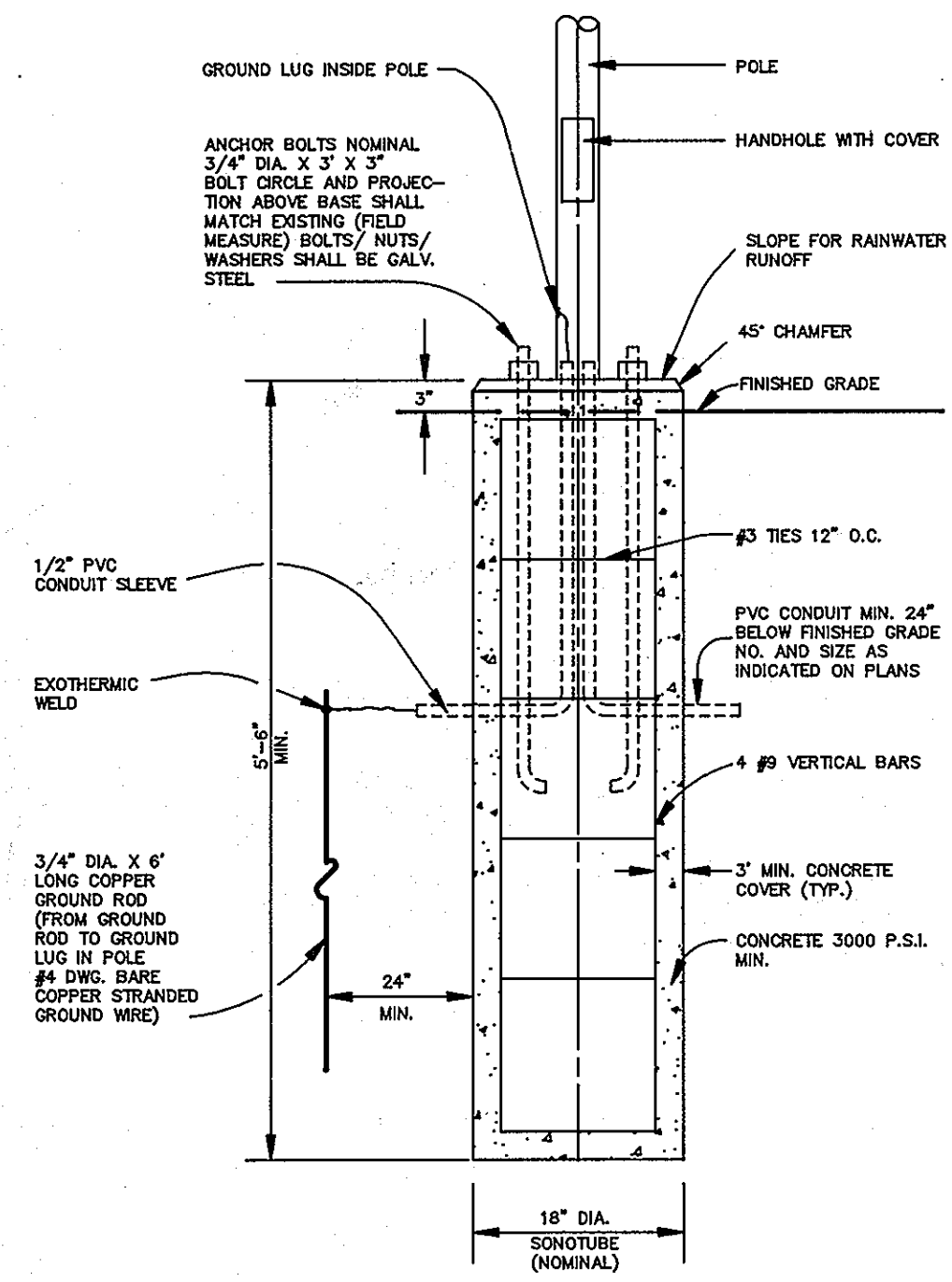
dfi CONSULTING ENGINEERS, SURVEYORS, AND LAND PLANNERS
504 BALTIMORE/ANNAPOLIS BOULEVARD
SEVERNA PARK, MD 21146 (410)647-2727
FAX (410)647-7127



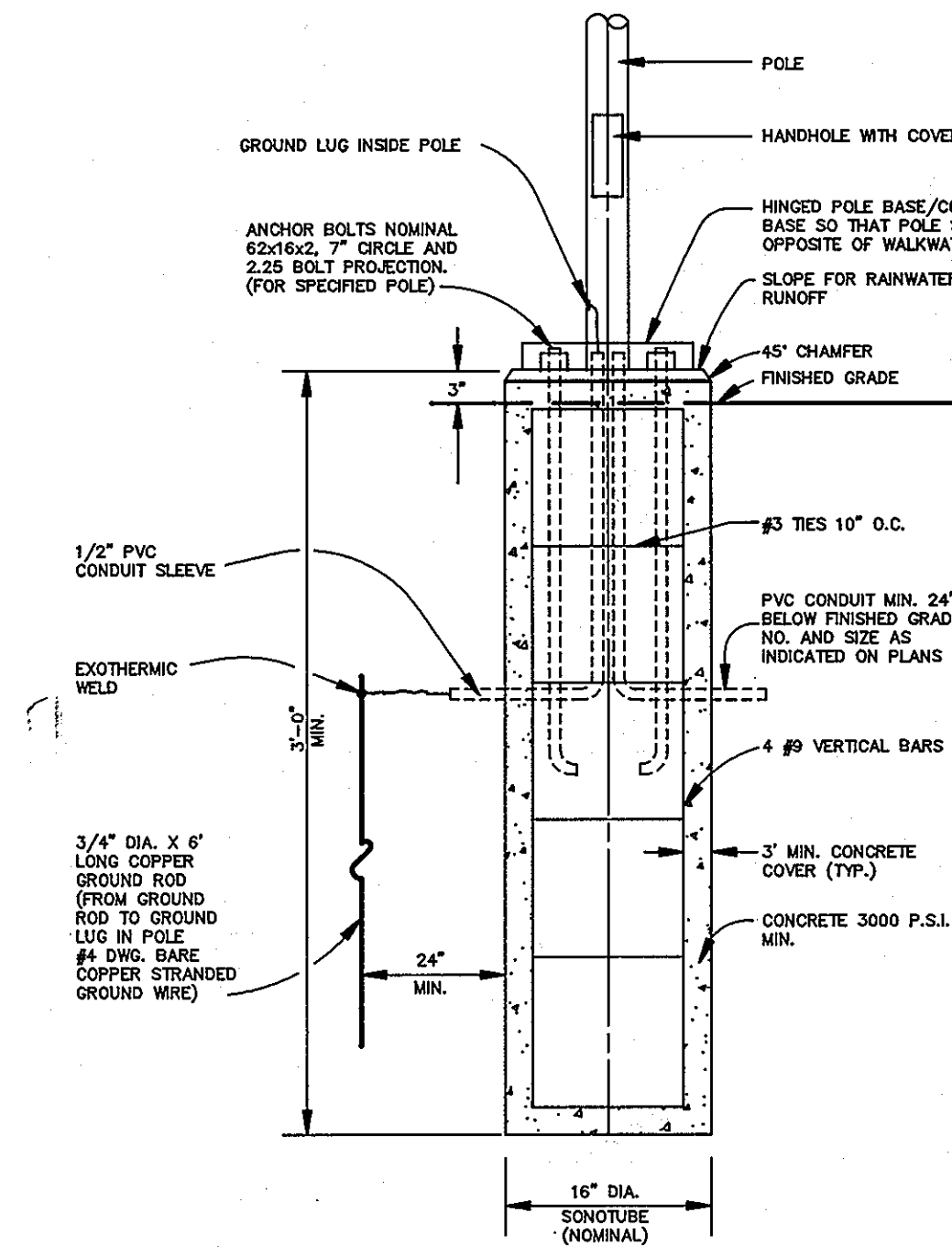
SITE ELECTRICAL PLAN
HOWARD COMMUNITY COLLEGE
ENTRANCE AND PARKING IMPROVEMENTS
FOR ADJACENT PARKING GARAGE # 2
(RED-LINE REVISION TO PREVIOUSLY APPROVED CAMPUS ROAD RELOCATION AND PARKING EXPANSION PROJECT)
JULY 26, 2010

TAX MAP: 35,36
PARCEL #47

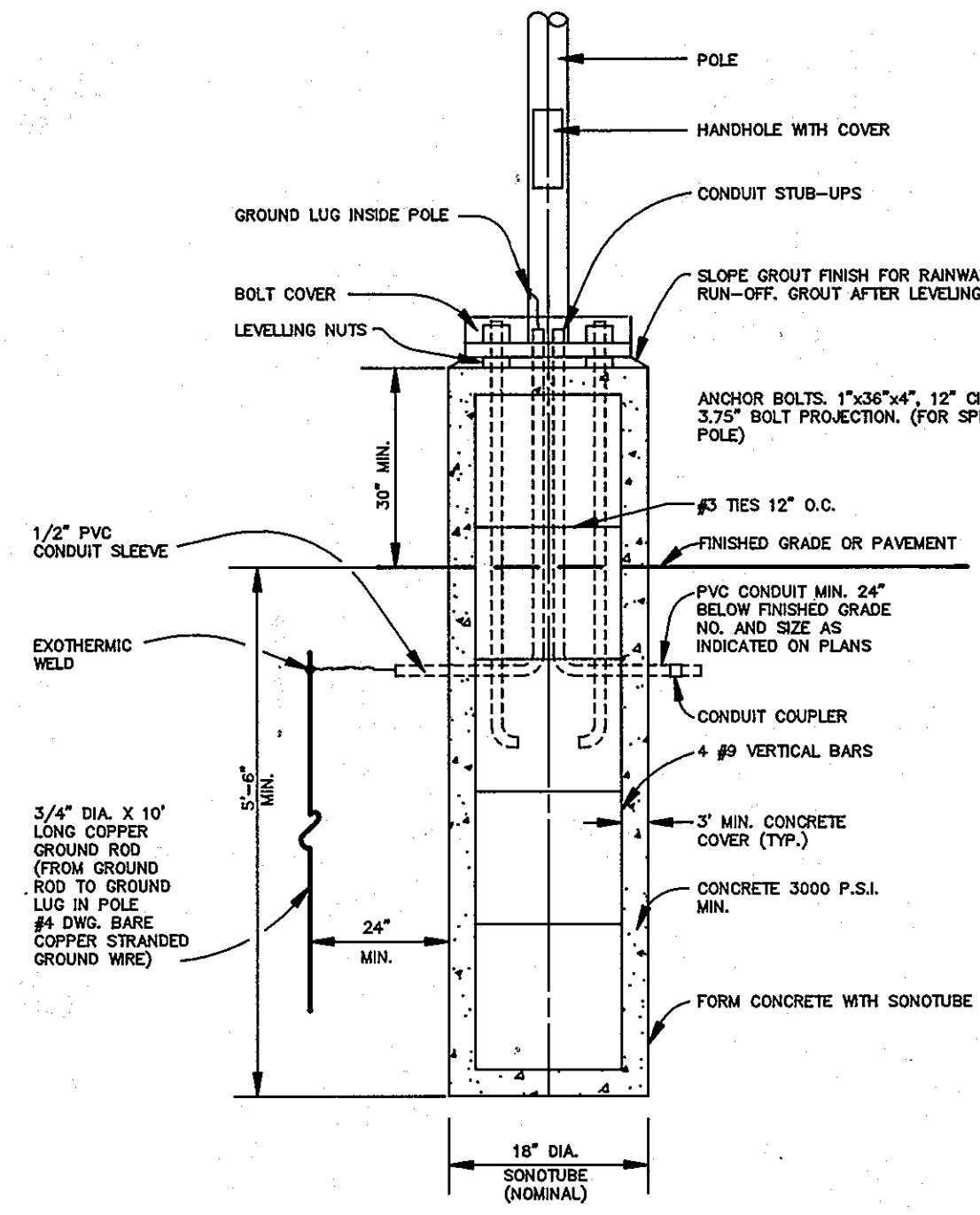
SHEET
23
OF
24



DETAIL "A1"



DETAIL "D"

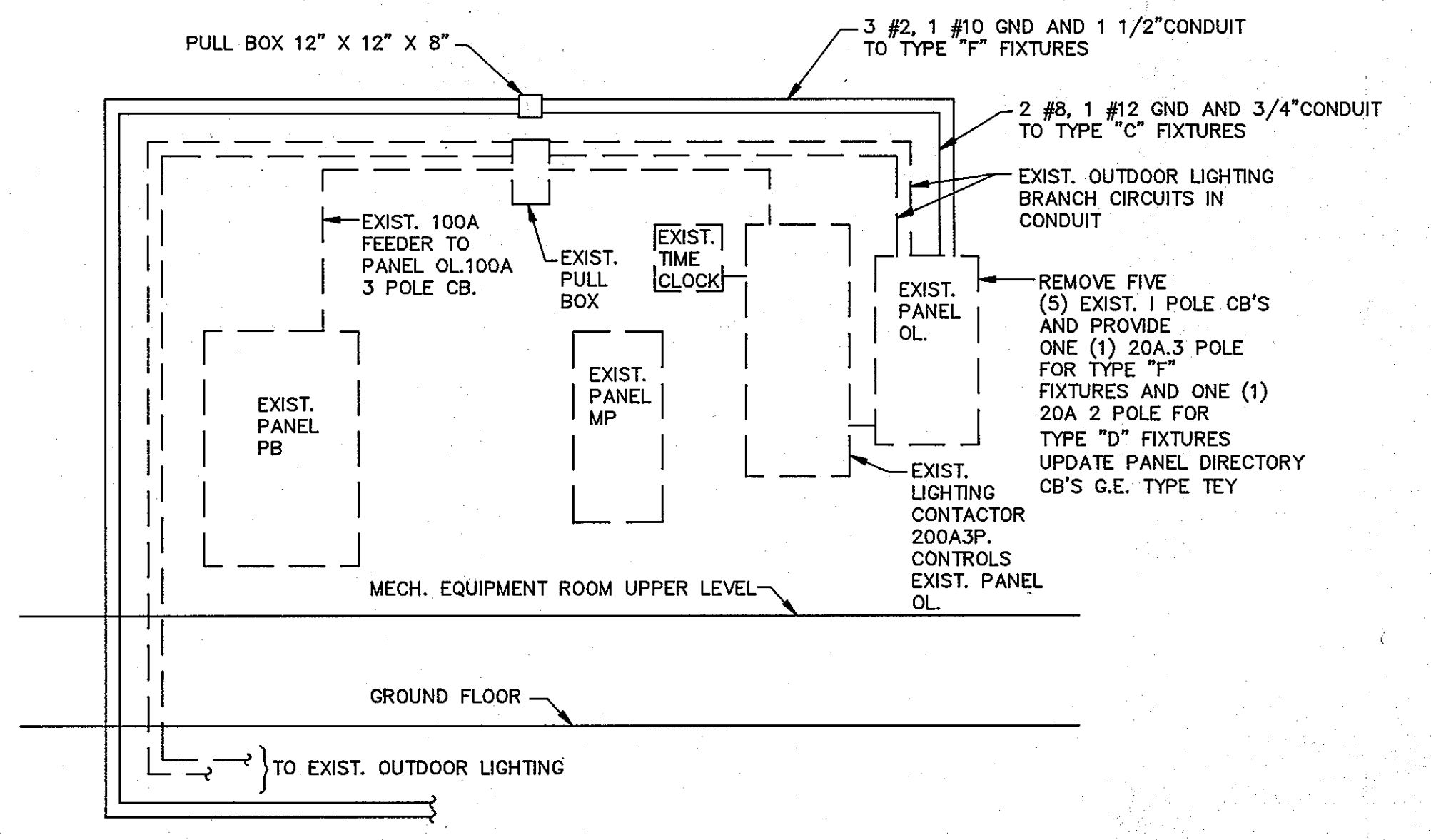


DETAIL "E"

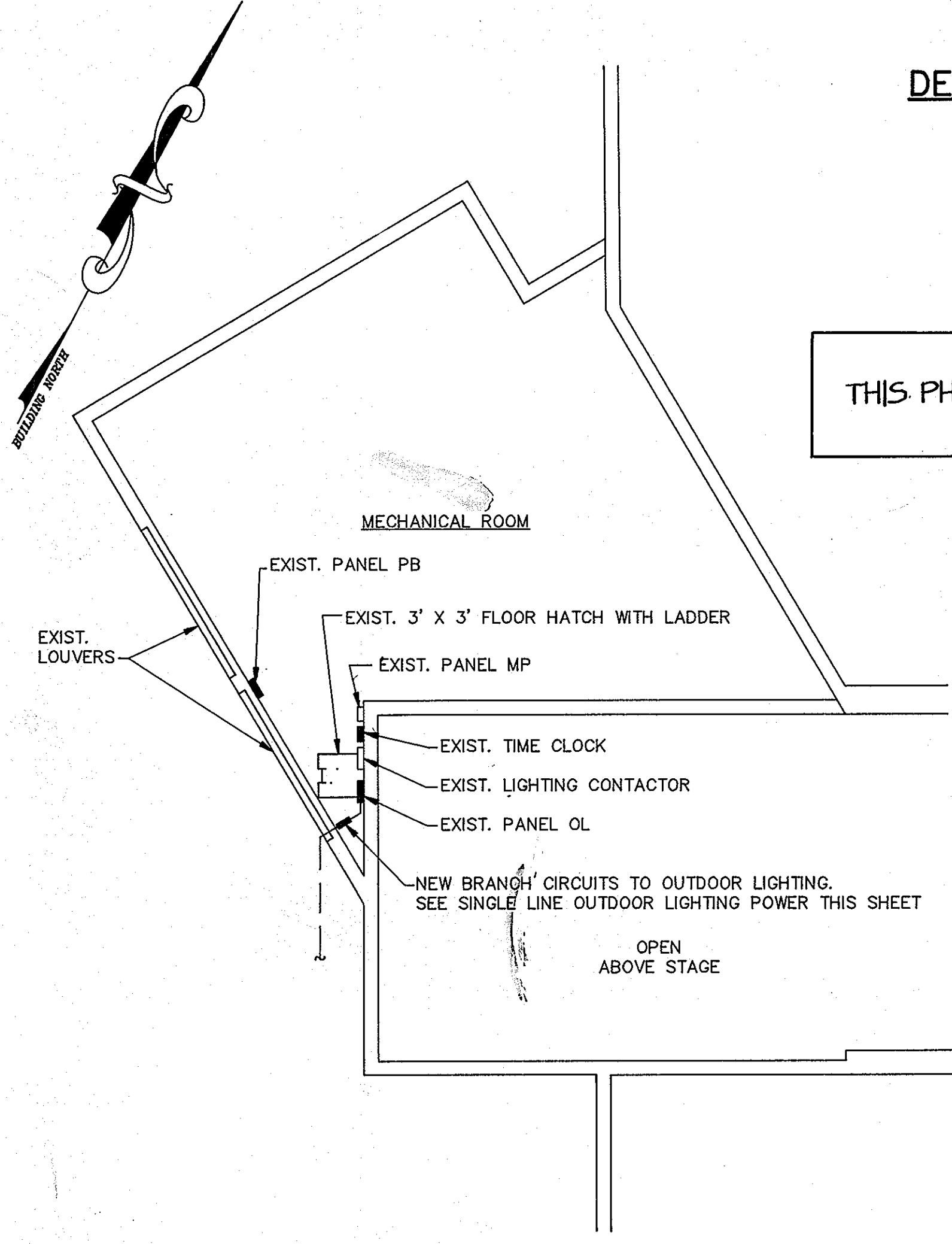
1. SET POLES BACK MINIMUM OF 3'-0" FROM ROADWAY CURBS, AND 2'-0" FROM EDGE OF SIDEWALKS.
2. ALL REINFORCING STEEL SHALL BE A 615 GRADE 60 EXCEPT TIES SHALL BE GRADE 40.

DETAILS LIGHTING POLE BASES

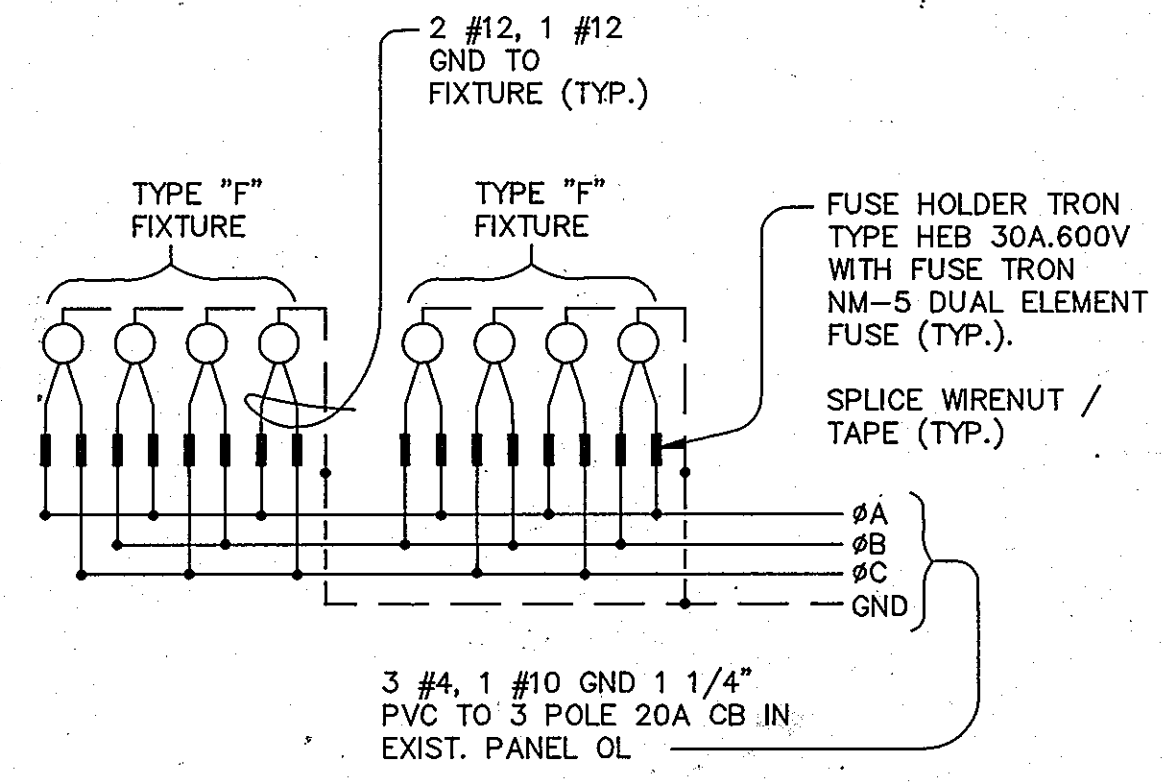
NOT TO SCALE



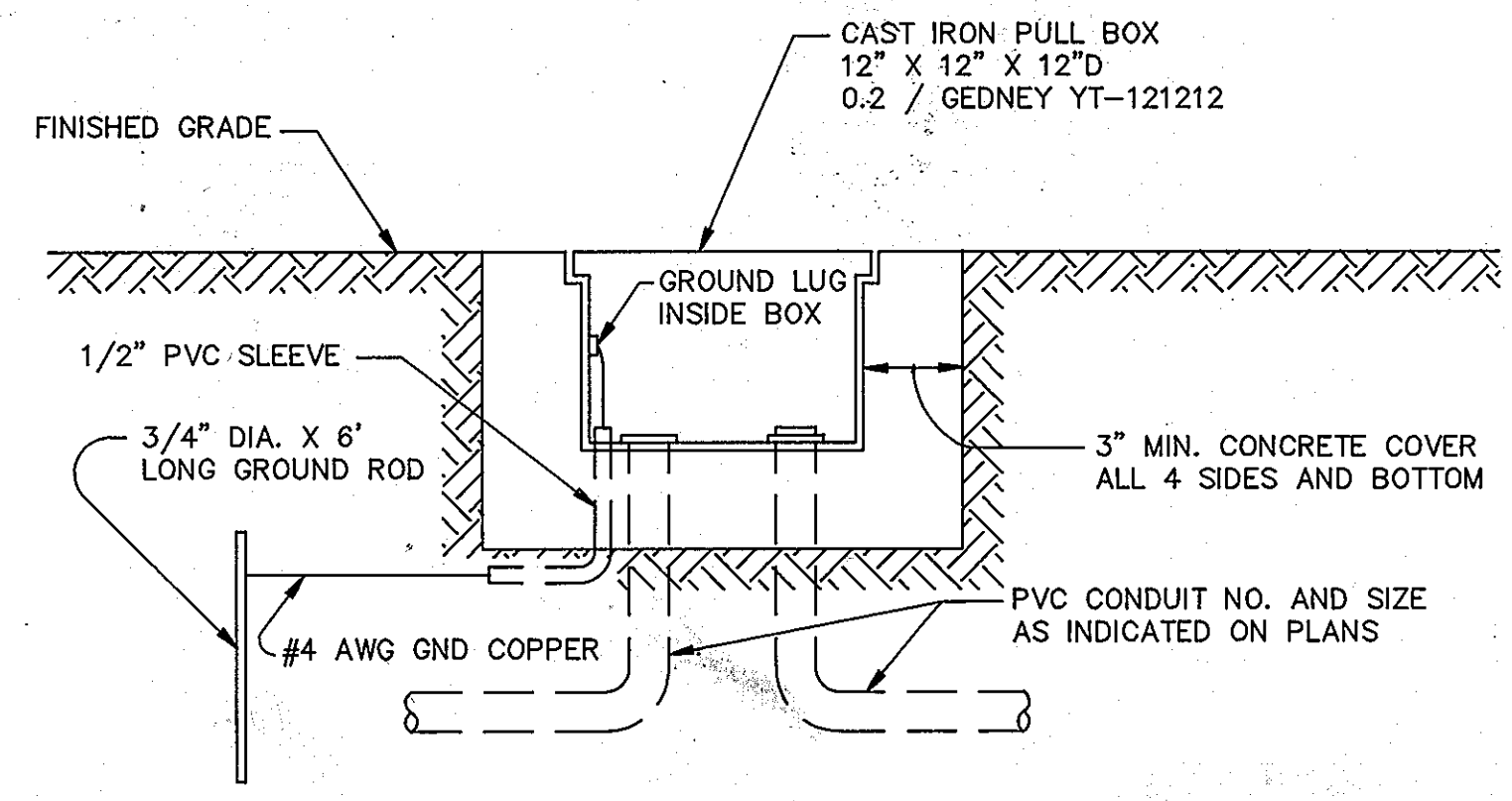
SINGLE LINE
OUTDOOR LIGHTING POWER
NOT TO SCALE



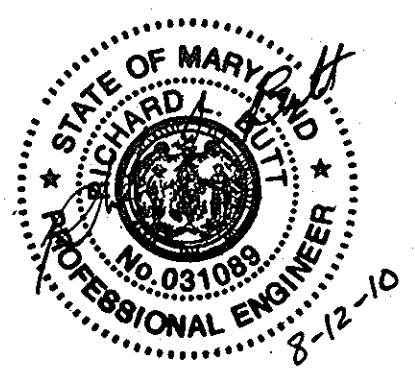
THIS PHASE OF PROJECT IS CLOSED OUT.



DETAIL TYPE "F" FIXTURES WIRING



DETAIL - TYPICAL PULL BOX INSTALLATION
NOT TO SCALE



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. 31089 EXPIRATION DATE: 11-21-10

NOTE: NEW SEAL AND SIGNATURE ARE APPLICABLE ONLY TO REVISIONS.

DEVELOPER'S CERTIFICATION

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Richard J. Mays
SIGNATURE OF DEVELOPER
DATE 10/21/96

ENGINEER'S CERTIFICATE

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

John R. Robertson
DATE 10-21-96

18804 BALTIMORE/ANNAPOLIS BLVD.
SEVERNA PARK, MD 21146
PROFESSIONAL ENGINEER (P.E.) (0)647-2727

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

Chester Simmons 2/24/97
DATE

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

John R. Robertson 2/24/97
DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Richard Blawie 2/27/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Richard Blawie 2/3/97
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Frank J. Mays 2/5/97
DIRECTOR DATE

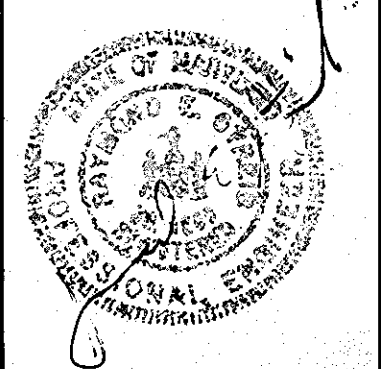
APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 12/19/96

DEVELOPER: / OWNER
KATHLEEN HETHERINGTON, ED. D.
SECRETARY-TREASURER, PRESIDENT
HOWARD COMMUNITY COLLEGE
10901 LITTLE PATUXENT PARKWAY
COLUMBIA, MD 21044-3197
(410) 712-4620

DESIGNED			DATE			BY			DESCRIPTION		
J.S.	9/96	date	07-26-10	GAH	1	REVISE SHEET NUMBER					
DRAWN	R.J.S.	9/96	date								
CHECKED	M.A.M.	9/96	date								
APPROVED	S.T.A.	9/96	date								

dfi CONSULTING ENGINEERS, SURVEYORS,
AND LAND PLANNERS

504 BALTIMORE/ANNAPOLIS BOULEVARD
SEVERNA PARK, MD 21146 (410)647-2727
FAX (410)647-7127



TAX MAP: 35,36

PART ELECTRICAL PLAN AND ELECTRICAL DETAILS
HOWARD COMMUNITY COLLEGE
ENTRANCE AND PARKING IMPROVEMENTS
FOR ADJACENT PARKING GARAGE # 2
(RED-LINE REVISION TO PREVIOUSLY APPROVED CAMPUS ROAD RELOCATION AND PARKING EXPANSION PROJECT)
JULY 26, 2010

SHEET
24
OF
24
PARCEL #47
SDP-97-45

E4: HCO : HCCSEFP : JMR : DRAWN/LET : 10/03/96