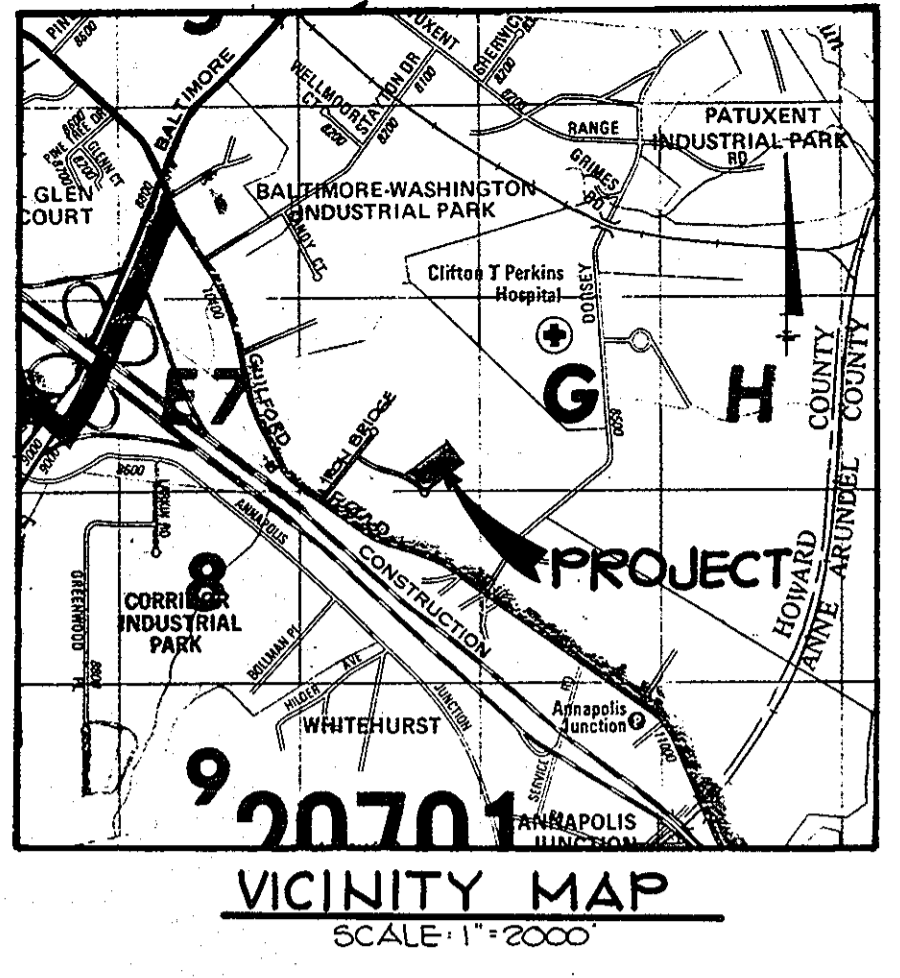


SHEET INDEX	
NO.	DESCRIPTION
1	TITLE SHEET
2	SITE DEVELOPMENT PLAN
3	DETAILS AND STORM DRAIN PROFILES
4	DRAINAGE AREA MAP AND SEDIMENT CONTROL PLAN
5	SEDIMENT CONTROL NOTES AND DETAILS
6	PLANTING PLAN
7	PHASE 2 SEC NOTES & DETAILS
8	SWM PLAN & PROFILE
9	SWM NOTES & DETAILS

SITE DEVELOPMENT PLAN PARCEL C-5 CORRIDOR NORTH 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND



GENERAL NOTES

- ALL WATER LINES SHALL BE CONSTRUCTED A MINIMUM OF 42" COVER BELOW FINISHED GRADE.
- CORRUGATED STEEL PIPE SECTIONS WILL BE JOINED WITH A SINGLE OR TWO PIECE CORRUGATED BAND WITH A WATERTIGHT NEOPRENE GASKET. DIMPLE BAND CONNECTORS WILL NOT BE PERMITTED.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES, WHERE DIRECTED BY THE ENGINEER, A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS.
- CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS:

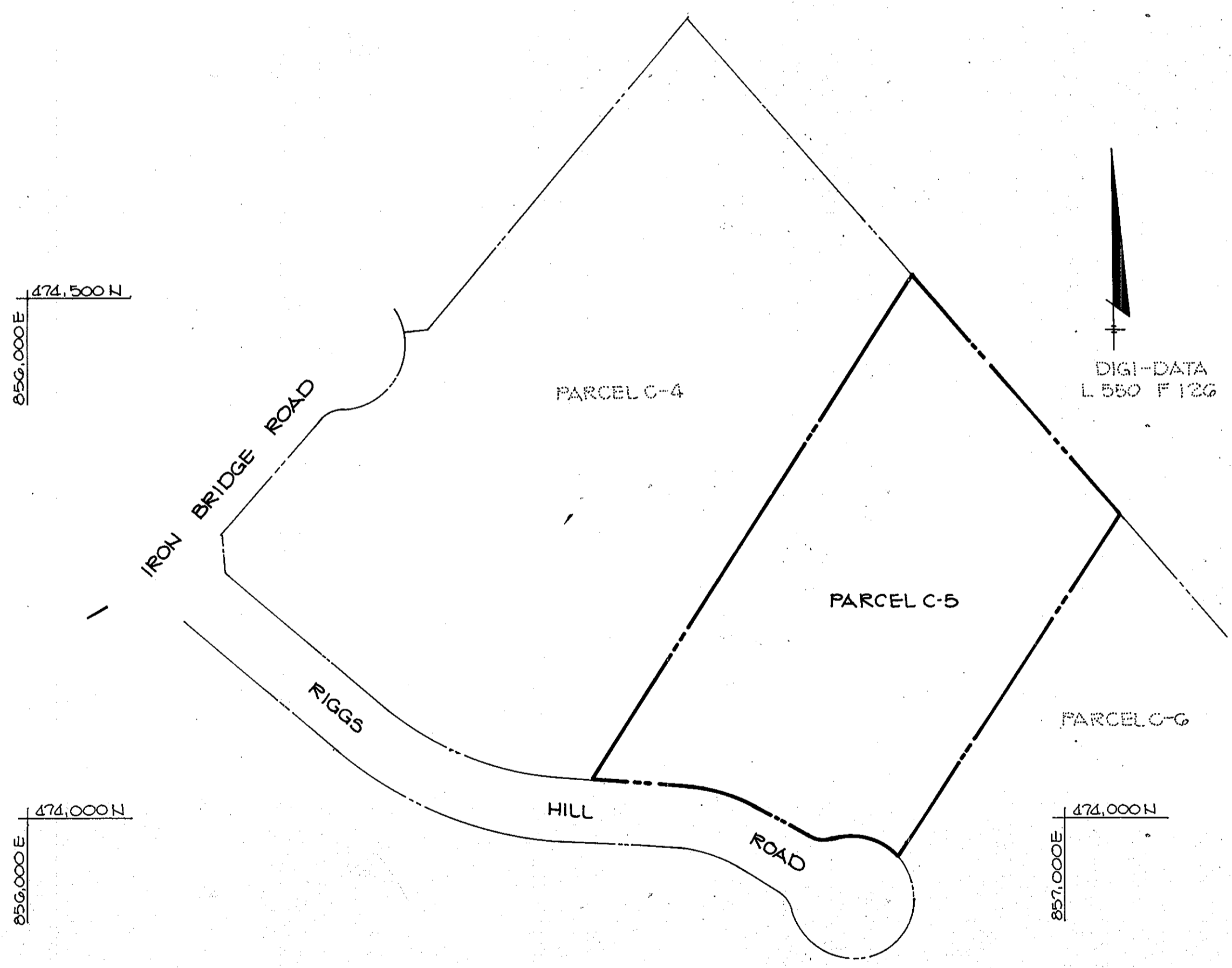
MISS UTILITY	559-0100
C & P TELEPHONE COMPANY	725-9976
HOWARD COUNTY BUREAU OF UTILITIES	992-2366
AT&T CABLE LOCATION DIVISION	393-3553
BALTIMORE GAS & ELECTRIC COMPANY	685-0123
STATE HIGHWAY ADMINISTRATION	531-5533
HOWARD COUNTY CONSTRUCTION/INSPECTION SURVEY DIVISION (24 HOURS NOTICE PRIOR TO COMMENCEMENT OF WORK)	792-7272
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALLS.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT TO SUBGRADE.
- TOPO TAKEN FROM FIELD RUN SURVEY DATED JANUARY, 1986 BY THE RIEMER GROUP, INC.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- ALL STORM DRAIN PIPE BEDDING SHALL BE AS SHOWN IN DETAIL G2.01 (TRENCH IN ROCK OR TRENCH IN EARTH AS DETERMINED BY FIELD CONDITIONS) IN VOL. IV OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR AS SHOWN ON THE DRAWINGS.
- THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORM WATER MANAGEMENT PRACTICES AND THE DISCHARGE OF STORM WATER ONTO OR ACROSS ADJACENT OR DOWNSTREAM PROPERTIES INCLUDED IN THIS PLAN. HE IS ALSO RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR GRADING AND/OR WORK ON ADJACENT PROPERTIES INCLUDED IN THIS PLAN.

SITE TABULATION

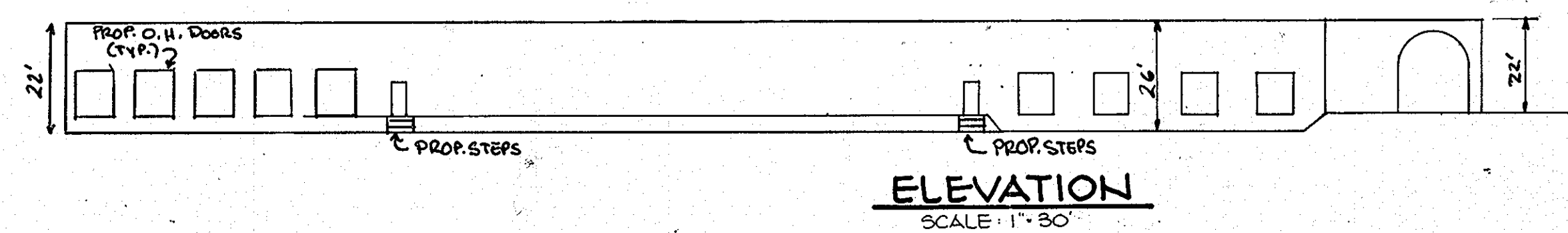
GROSS AREA OF PROPERTY	3.199 ACRES
GROSS AREA OF SUBMISSION	3.199 ACRES
PRESENT ZONING	M-2
GROSS AREA OF 1 STORY BUILDING	45,516 S.F.
BUILDING COVERAGE	33% OF SITE
BUILDING USE	WAREHOUSE
OPEN SPACE REQUIRED	20% (27,869 SQUARE FEET)
OPEN SPACE PROVIDED	36% (62,633 SQUARE FEET)
PARKING REQUIRED (as stated in letter)	
6 OFFICE EMPLOYEES @	5 SPACES
7 SPACES/10 EMPLOYEES	
6 WAREHOUSE EMPLOYEES @	3 SPACES
1 SPACE/2 EMPLOYEES	
	8 SPACES REQUIRED TOTAL
PARKING PROVIDED	21 SPACES
HANDICAPPED PARKING REQUIRED	1 SPACE
HANDICAPPED PARKING PROVIDED	1 SPACE
LANDSCAPED ISLANDS REQUIRED	5%
LANDSCAPED ISLANDS PROVIDED	6%

GENERAL NOTES (CONT.)

16. FOR PHASE 2 LIMIT OF DISTURBANCE (NOV. 17, 2011): PROPOSED DISTURBANCE EXCEEDS PREVIOUS LIMIT OF DISTURBANCE BY LESS THAN 40,000 SQ. FT. THEREFORE THIS REVISION IS EXEMPT FROM THE REQUIREMENTS FOR FOREST CONSERVATION. THE AMOUNT OF PROPOSED DISTURBANCE EXCEEDS THE PREVIOUS DISTURBANCE BY 20,550 SQ. FT.



PLAN
SCALE: 1" = 100'



FOR REVISION ONLY
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. 16597, Expiration Date: 8/15/13

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE: 3-10-86
[Signature]

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
[Signature] COUNTY HEALTH OFFICER 4-9-86 DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.
[Signature] PLANNING DIRECTOR 4/10/86 DATE
[Signature] JOHN W. MURPHY CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION 4-10-86 DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[Signature] DIRECTOR 4-8-86 DATE
[Signature] CHIEF, BUREAU OF ENGINEERING 4-7-86 DATE

3/31/86	1	BUILDING, PARKING & STORM DRAIN ADDITION
DATE	NO.	REVISION

OWNER/DEVELOPER
OWNER: REALTY INC. 10621 RIGGS HILL ROAD JESSUP, MD. 20794
DEVELOPER: JASPER ENGINES & TRANSMISSIONS 815 WERNING ROAD JASPER, IN. 47546 1-800-327-7455

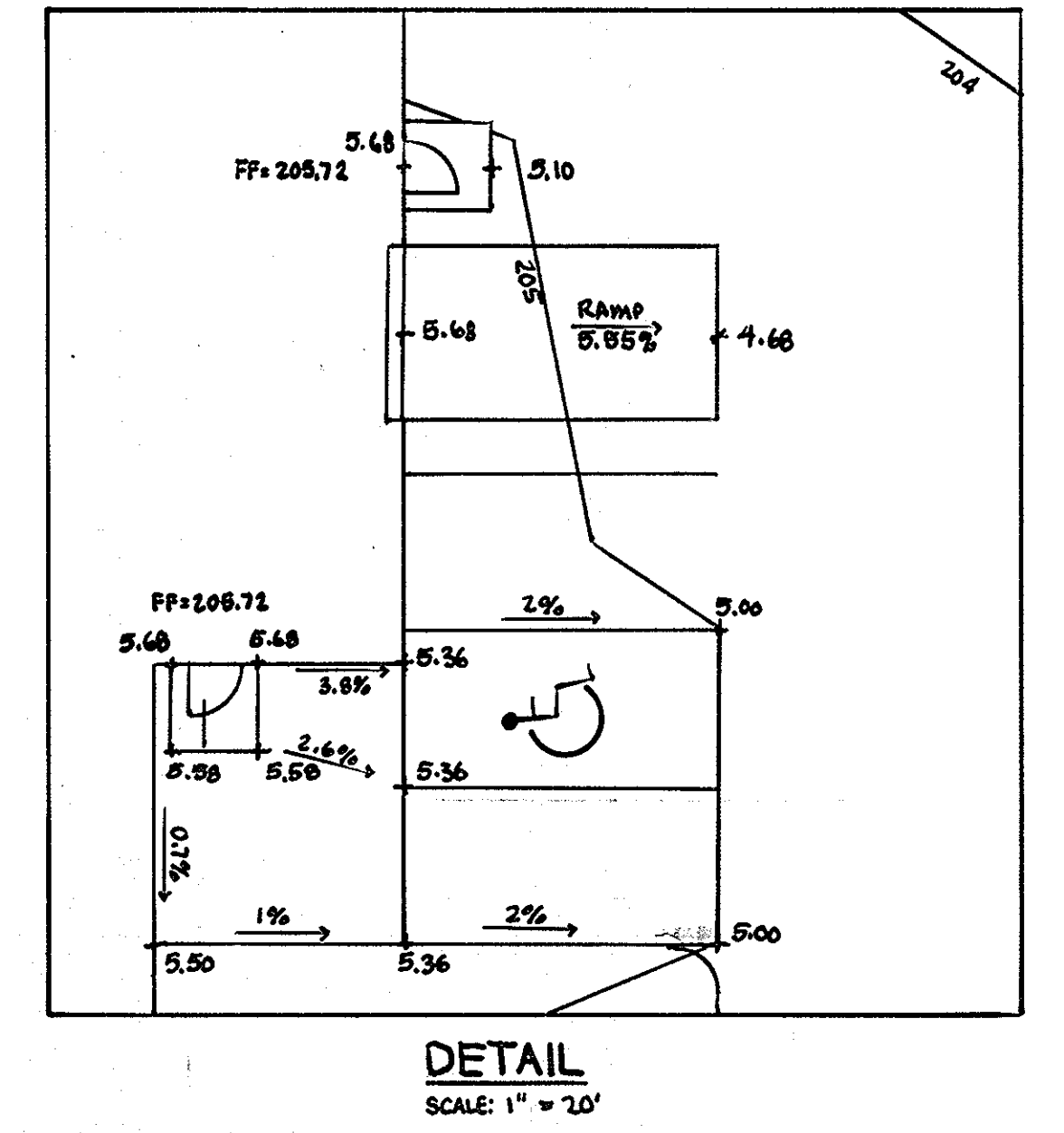
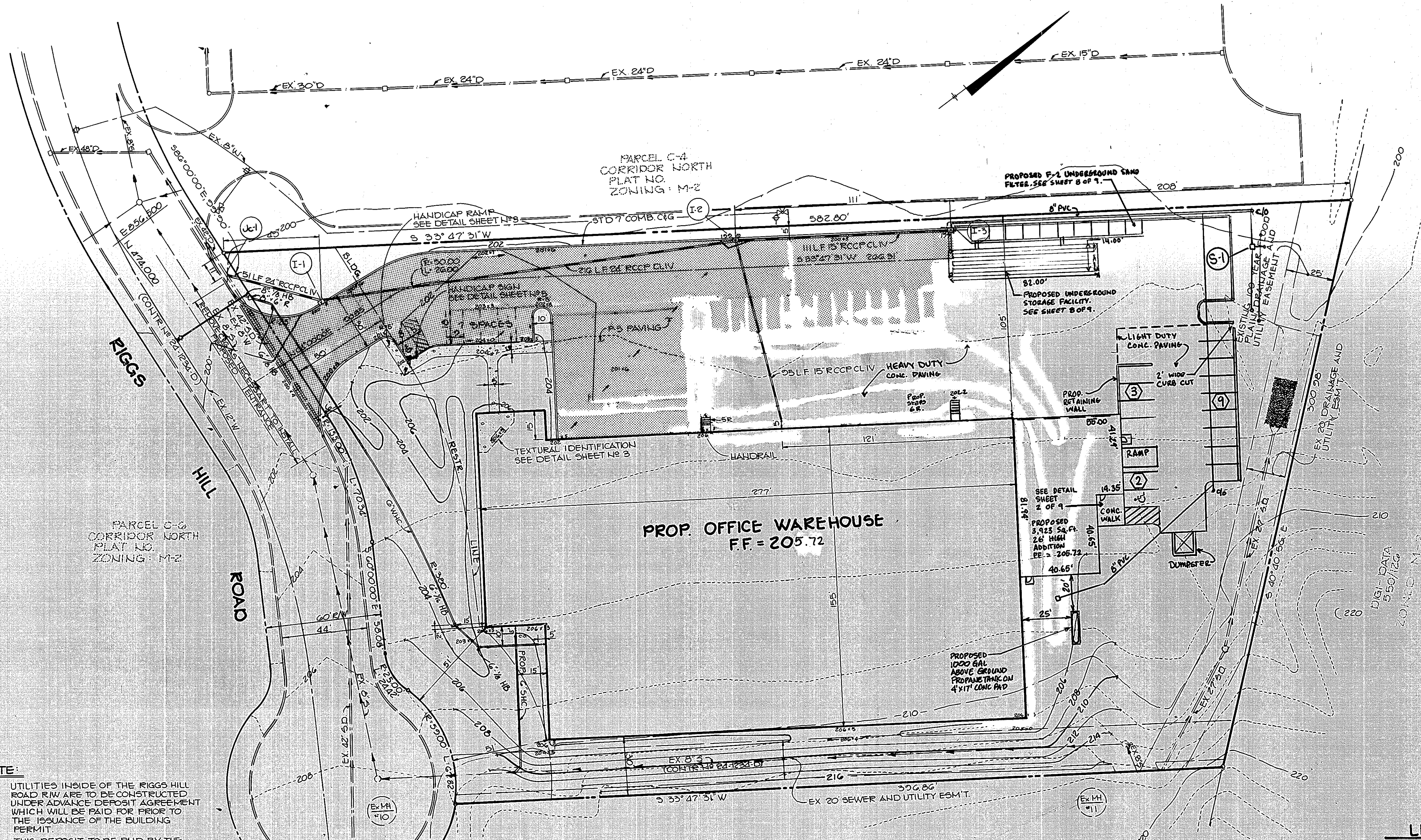
PROJECT: CORRIDOR NORTH PARCEL C-5
AREA: CORRIDOR NORTH PARCEL C-5 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TITLE: TITLE SHEET

THE RIEMER GROUP, INC.
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
3105 Health Park Drive, Elkott City, Maryland 21043 (301) 481-2880

3-25-86 DATE	DESIGNED BY: D.A.M.
	DRAWN BY: D.A.M.
	PROJECT NO: 27400
	DATE: 2-17-86
	SCALE: AS SHOWN
	DRAWING NO. 1 OF 9

ADDRESS CHART	
PARCEL C-5	STREET ADDRESS 10621 RIGGS HILL ROAD
SUBDIVISION NAME CORRIDOR NORTH	SECT./AREA N/A
PLAT # OR L/F 6620	PARCEL # C-5
BLOCK # 7	ELEC. DIST. C
ZONE M-2	CENSUS TR. 6029.01
TAX/ZONE MAP 4B	SEWER CODE 4150000
WATER CODE B02	

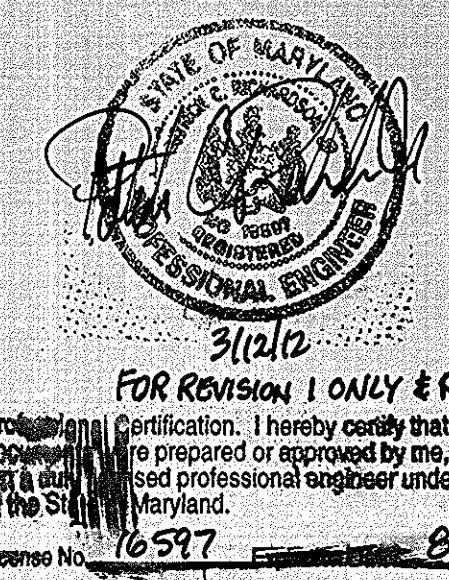
NOTE:
 THE FIRE HYDRANTS LOCATED ON PARCEL C-4
 MUST BE UNDER A DEVELOPER'S AGREEMENT OR
 AN ADVANCE DEPOSIT AGREEMENT MUST BE
 EXECUTED FOR PLACEMENT OF A FIRE HYDRANT
 ON THE NORTHWEST SIDE OF THE ENTRANCE TO
 THE SITE PRIOR TO ISSUANCE OF THE BUILDING PERMIT.



NOTE:
 UTILITIES INSIDE OF THE RIGGS HILL
 ROAD R/W ARE TO BE CONSTRUCTED
 UNDER ADVANCE DEPOSIT AGREEMENT
 WHICH WILL BE PAID FOR PRIOR TO
 THE ISSUANCE OF THE BUILDING
 PERMIT.
 THIS DEPOSIT TO BE PAID BY THE
 OWNER

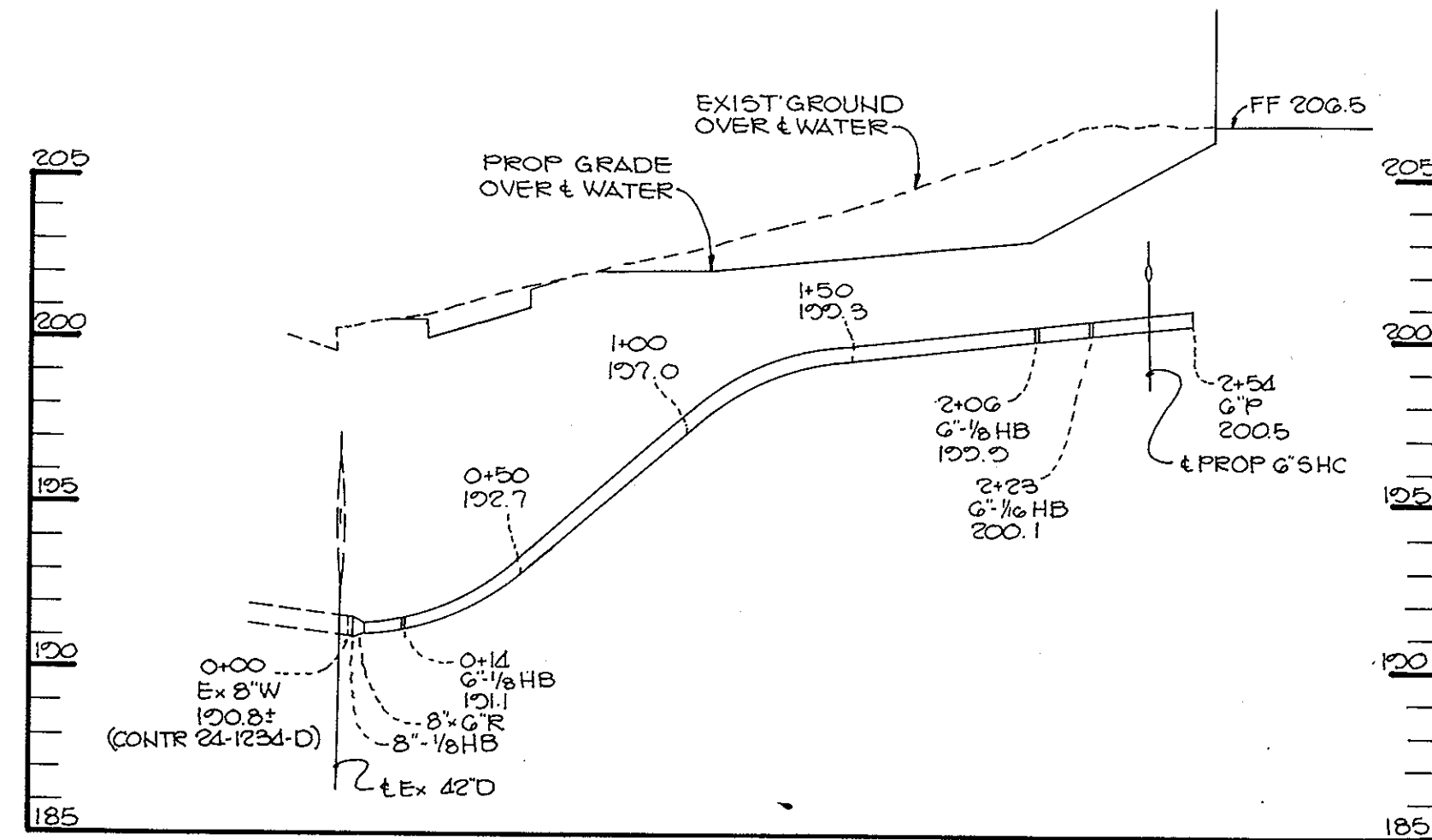
LEGEND
 P-3 PAVING
 CONC. SIDEWALK

8" MIX 3 CONC.
 4" GRADED AGGREGATE BASE
 HEAVY DUTY
 CONCRETE
 5" MIX 3 CONC.
 4" GRADED AGGREGATE BASE
 LIGHT DUTY
 CONCRETE



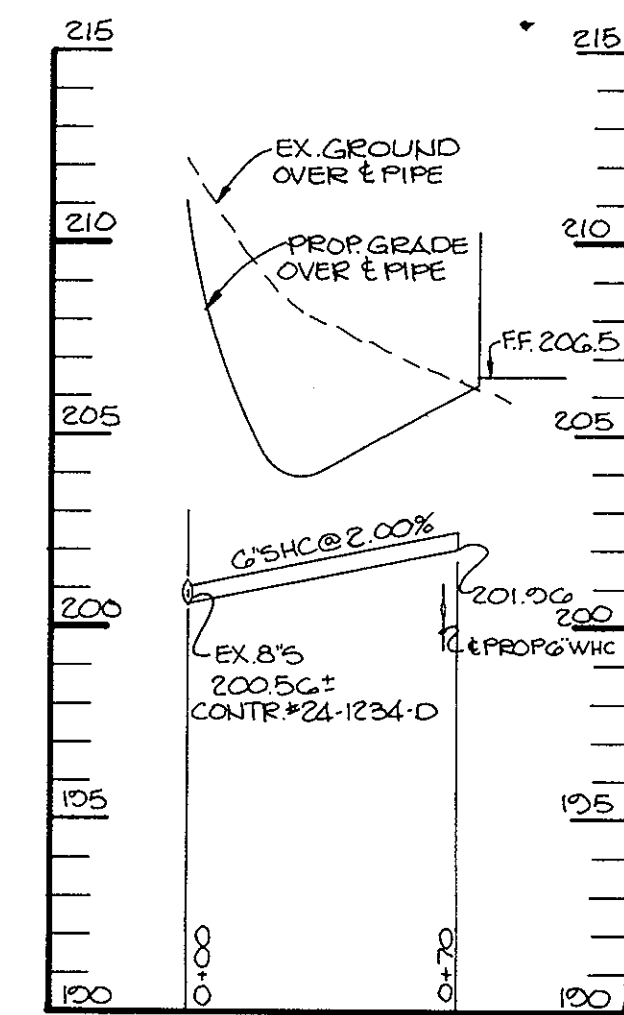
APPROVED
 DIVISION OF LAND DEVELOPMENT &
 ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND
 DATE 3-10-86
 M/S/AM

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.	
<i>Jocelyn Boyd</i> COUNTY OFFICER	4-9-86 DATE
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.	
<i>Acting Donald Dando</i> PLANNING DIRECTOR	4/10/86 DATE
<i>John W. Muscham</i> CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION	4-10-86 DATE
APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.	
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>John F. Nemmy</i> DIRECTOR	4-8-86 DATE
<i>William S. Riley</i> CHIEF, BUREAU OF ENGINEERING	4-7-86 DATE
7/10/82	2 ADDED ABOVE GROUND PROPANE TANK
3/3/81	1 BUILDING, PARKING & STORM DRAIN ADDITIONS
DATE	NO. REVISION
OWNER/DEVELOPER OWNER: REALTY INC. 10621 RIGGS HILL ROAD JESUP, MD. 20794 DEVELOPER: JASPER ENGINES & TRANSMISSIONS 815 WERNING ROAD JASPER, IN. 47546 1-800-327-7495	
PROJECT CORRIDOR NORTH PARCEL C-5	
AREA CORRIDOR NORTH PARCEL C-5 TAX MAP NO. 48 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
TITLE SITE DEVELOPMENT PLAN	
THE RIEMER GROUP, INC. The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm 3106 Heath Park Drive, Ellicott City, Maryland 21043 (301) 481-2890	
DATE 3-10-86	DESIGNED BY: J.K.E.
	DRAWN BY: F.D.M.
	PROJECT NO: 274-00
	DATE: 2-17-86
	SCALE: 1" = 30'
	DRAWING NO. 2 OF 9



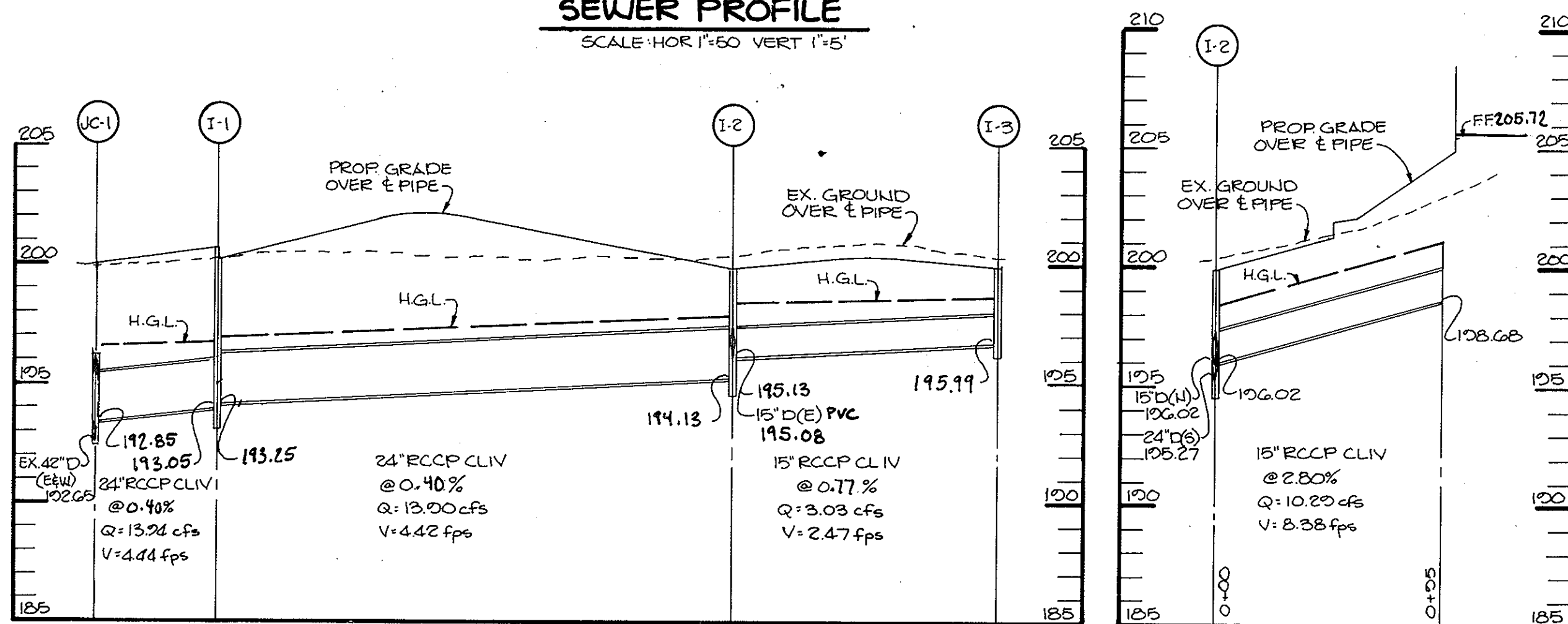
WATER PROFILE

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



SEWER PROFILE

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



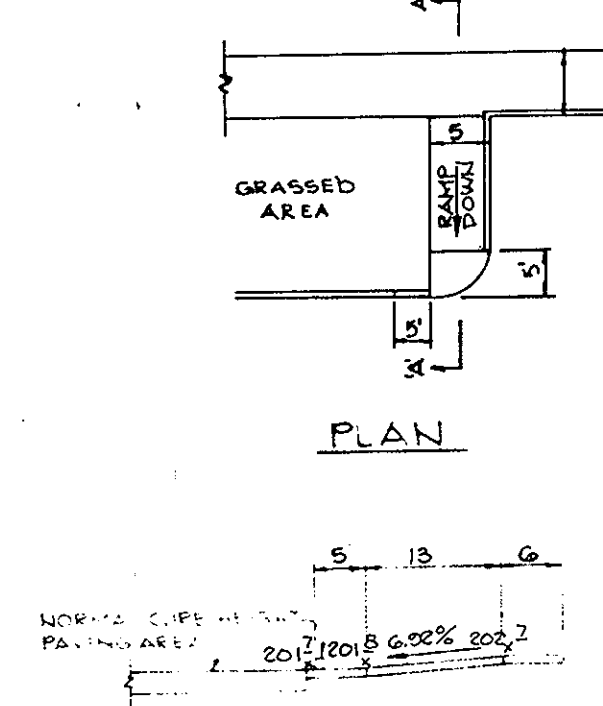
STORM DRAIN PROFILES

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

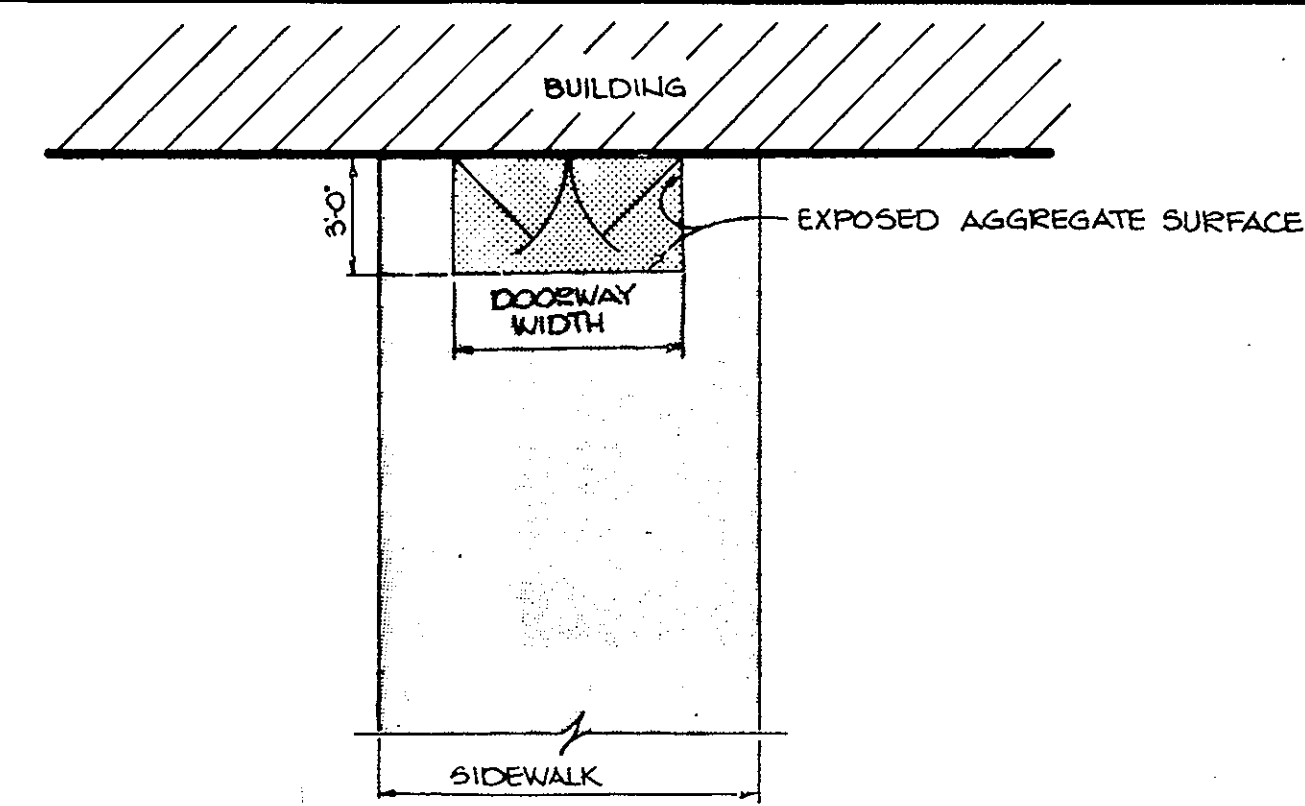
STRUCTURE	TYPE	INV. IN	INV. OUT	TOP OF CURB ELEV.	REMARKS
I-1	A-5 INLET	24" D 194.14	193.95	200.8	Ho. Co. Std. 4.01
I-2	'S' Comb.	15" D (H) 196.02	195.27	200.5	Ho. Co. Std. SD 4.32
I-3	'S' Comb.	---	196.60	200.5	Ho. Co. Std. SD 4.32
JUNCTION CHAMBER		24" D 193.40 42" D 192.65	192.65	---	Ho. Co. Std. SD 1.12

* Elevation at top of grate or rim

STRUCTURE SCHEDULE

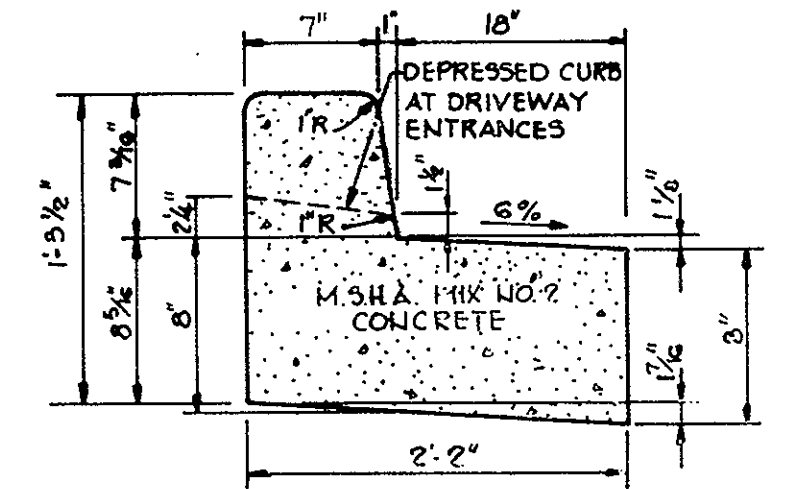


**SECTION A-A
HANDICAP RAMP
DETAIL
NO SCALE**

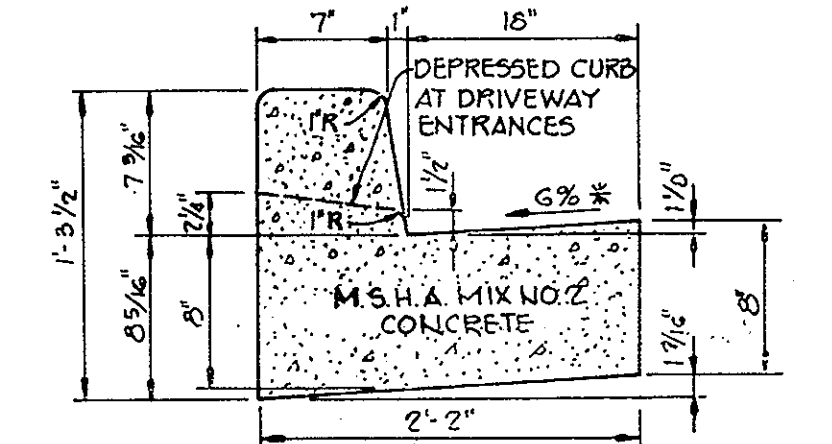


**DETAIL BUILDING ENTRANCE TEXTURAL
IDENTIFICATION FOR THE BLIND
NO SCALE**

NOTE: TO BE USED FOR ALL BUILDING ENTRANCES EXCEPT THOSE THAT ARE EXCLUSIVELY FIRE EXITS

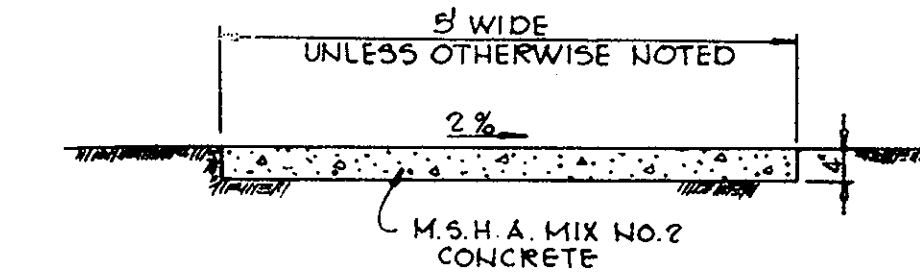


**REVERSE 7" COMBINATION
CURB AND GUTTER
NO SCALE**

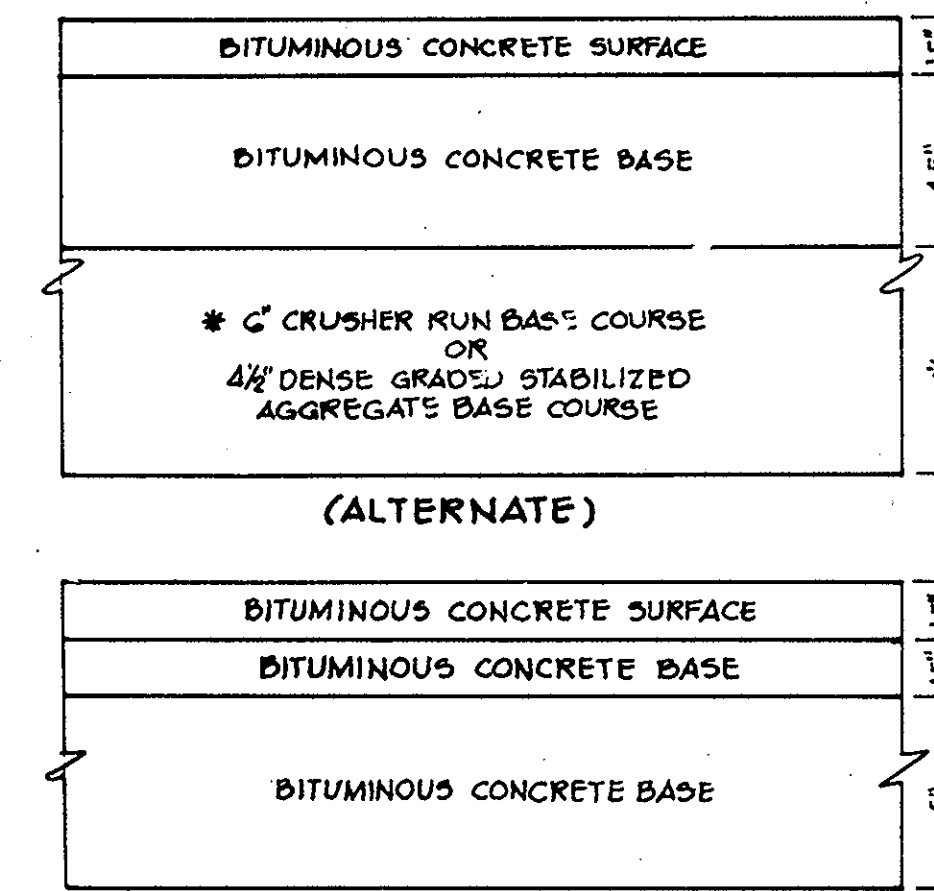


HOWARD COUNTY DESIGN MANUAL VOLUME III - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.01)
* GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AS THE PAVEMENT.

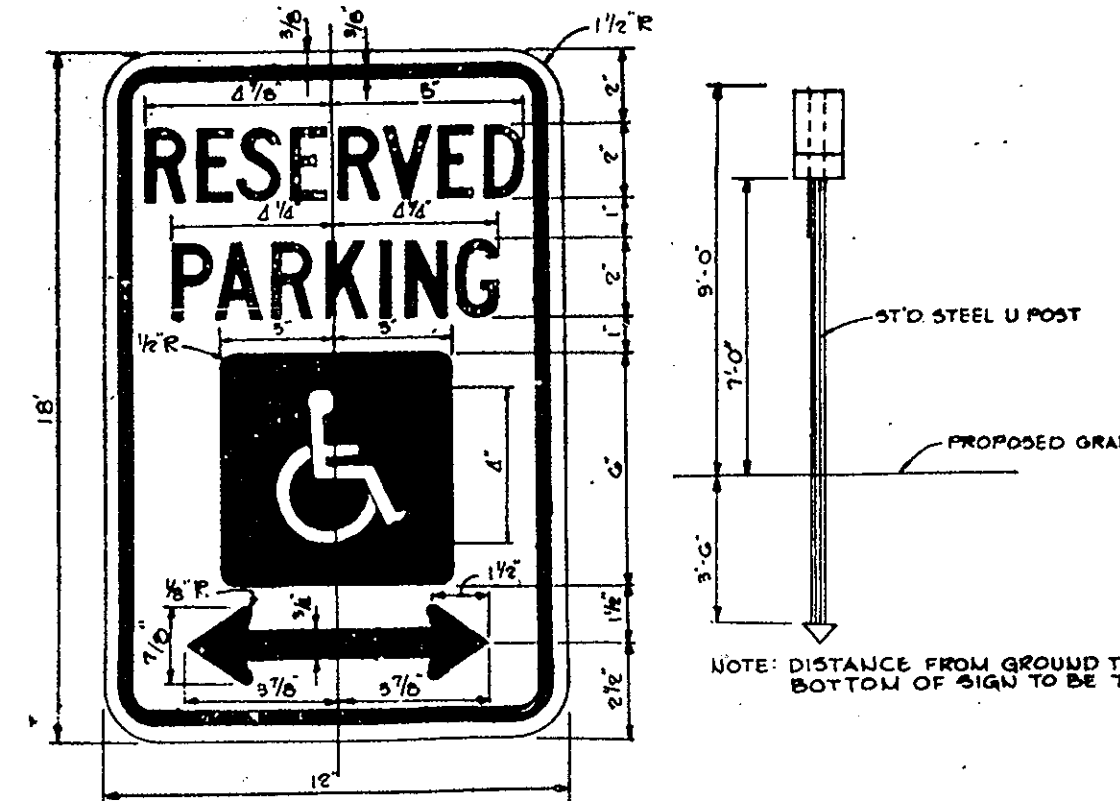
**STANDARD 7" COMBINATION
CURB AND GUTTER
NO SCALE**



**SIDEWALK DETAIL
NO SCALE**



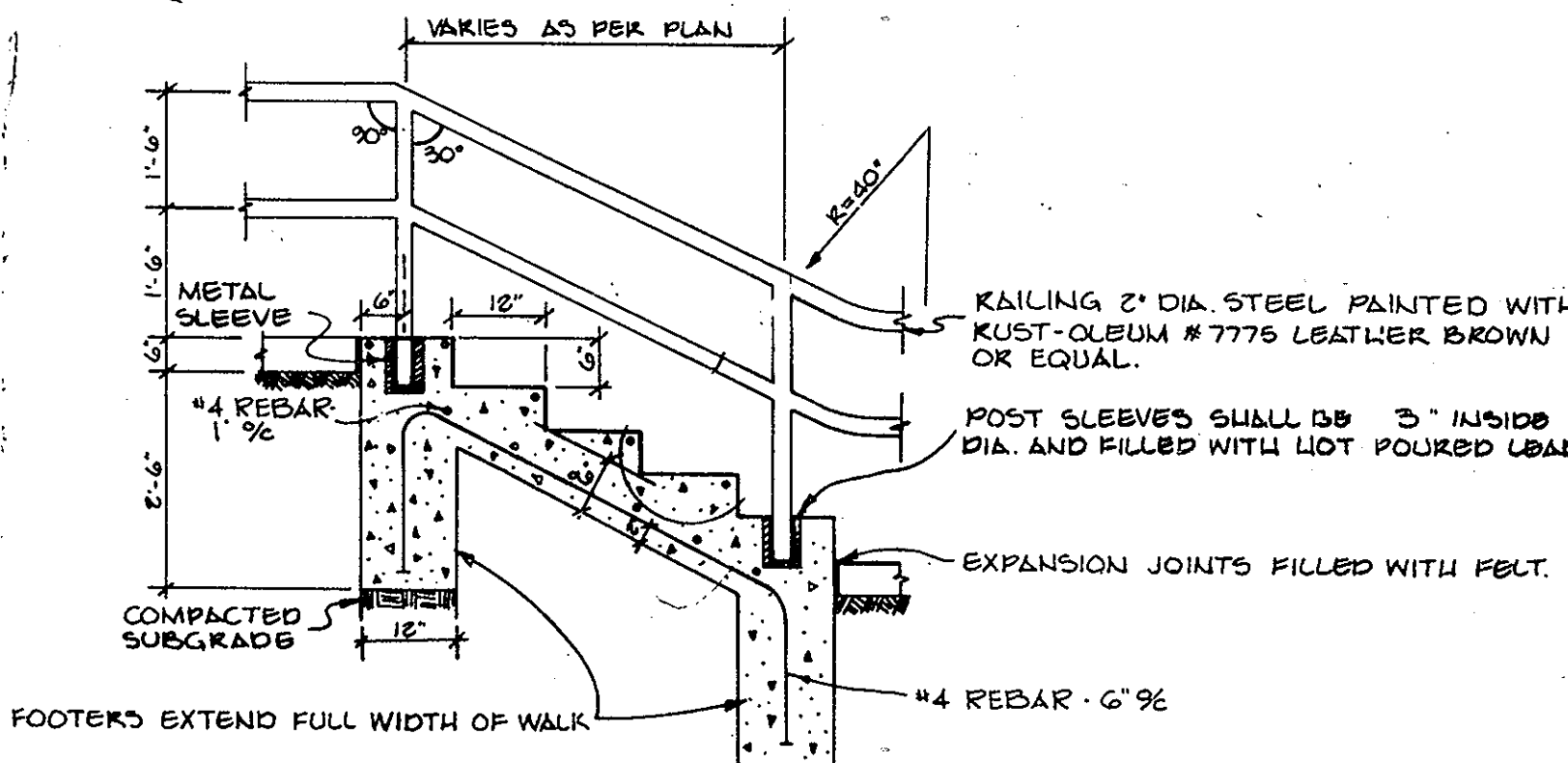
**TYPICAL PAVING SECTION
(8" PAVING, P.3)**



**HANDICAP SIGN DETAIL
NO SCALE**



**50 FINE
HANDICAP SIGN DETAIL
NO SCALE**



**CONCRETE STAIRS AND HANDRAIL DETAIL
NO SCALE**

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

John P. Ryan 4-9-86
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.

Robert Donald 4/10/86
PLANNING DIRECTOR DATE

John W. Muschman 4-10-86
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

David F. Nunn 4-8-86
DIRECTOR DATE

William B. Ryan 4-7-86
CHIEF, BUREAU OF ENGINEERING DATE

3/3/11 BUILDING, PARKING & STORM DRAIN ADDITIONS

DATE NO. REVISION

OWNER/DEVELOPER
OWNER: REALTY INC. 10621 RIGGS HILL ROAD JESSUP, MD. 20794
DEVELOPER: JASPER ENGINES & TRANSMISSIONS 815 WEENING ROAD JASPER, IN. 47546 1-800-327-7455

PROJECT: CORRIDOR NORTH PARCEL C-5

AREA CORRIDOR NORTH TAX MAP NO. 48 PARCEL C-5
GTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

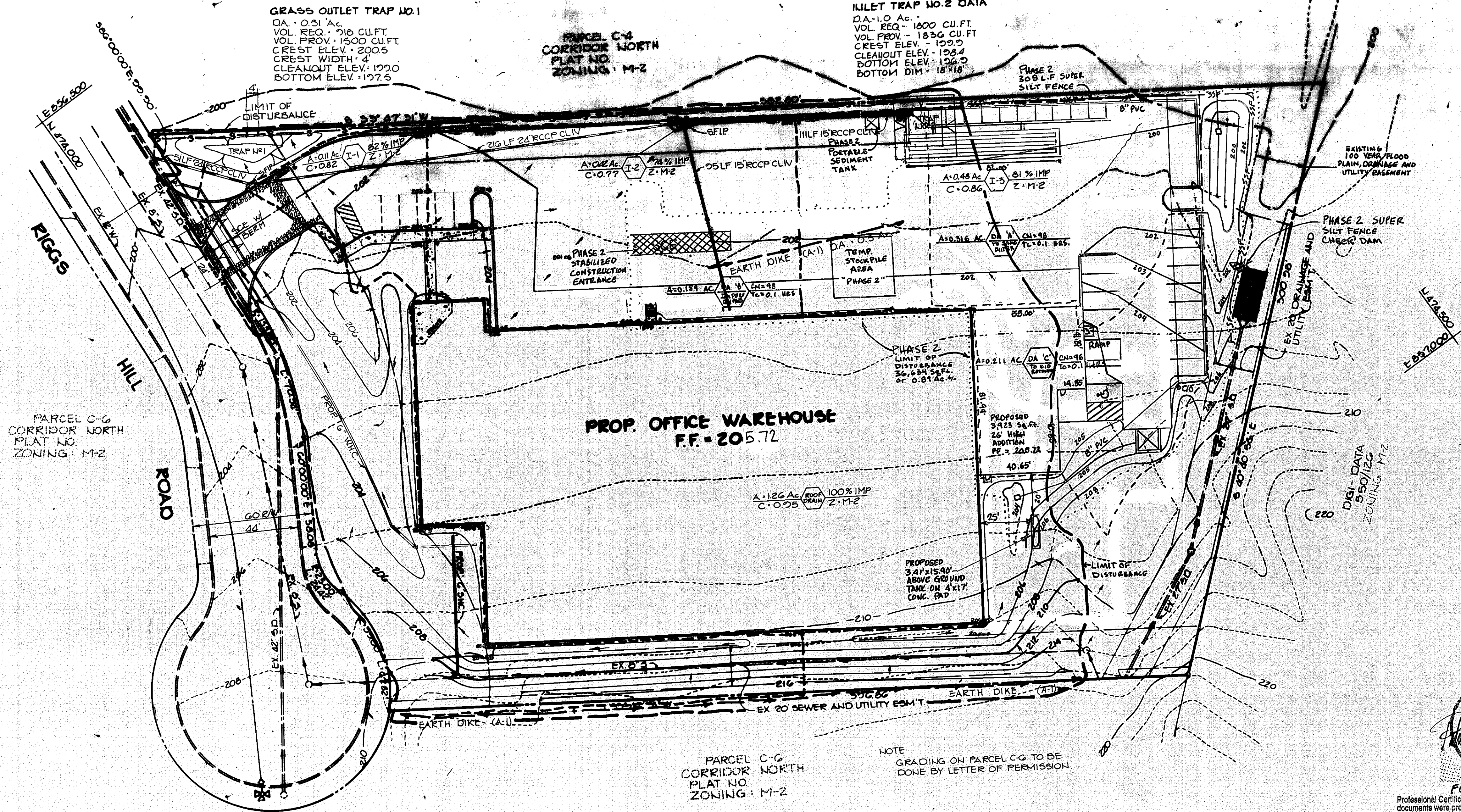
TITLE: DETAILS AND STORM DRAIN PROFILES

THE RIEMER GROUP, INC.
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
3105 Heath Park Drive, Ellicott City, Maryland 21043 (301) 461-2680

3-25-86 DATE
DESIGNED BY: D.A.M.

DRAWN BY: DAM
PROJECT NO: 27400
DATE: FEB. 17, 1986
SCALE: AS SHOWN

Arthur E. Muegge
ARTHUR E. MUEGGE 1017
DRAWING NO. 3 OF 9



- SEQUENCE OF CONSTRUCTION
1. OBTAIN A GRADING PERMIT.
 2. INSTALL STABILIZED CONSTRUCTION ENTRANCE, EARTH DIKES, SILT FENCE AND GRASSED OUTLET TRAP (3 DAYS).
 3. INSTALL STORM DRAINS, STONE FILTER INLET PROTECTION AND INLET TRAP (3 DAYS).
 4. GRADE SITE WITHOUT DISTURBING SEDIMENT CONTROL MEASURE AND STABILIZE IN ACCORDANCE WITH TEMPORARY SEEDING NOTES (6 DAYS).
 5. INSTALL CURB AND GUTTER AND COMMENCE BUILDING CONSTRUCTION.
 6. INSTALL BASE STONE AND REMOVE INLET TRAP NO. 2. INSTALLING STONE FILTER INLET PROTECTION (INLET TRAP SHALL ONLY BE REMOVED AFTER CURB HAS BEEN BACKFILLED AND AREA STABILIZED) (3 DAYS).
 7. INSTALL FINAL PAVING REMOVING STONE FILTER INLET PROTECTION (3 DAYS).
 8. REMOVE GRASSED OUTLET TRAP AND STABILIZE ALL AREAS TO BE GRASSED IN ACCORDANCE WITH PERMANENT SEEDING NOTES (3 DAYS).
 9. UPON APPROVAL OF THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS SEDIMENT CONTROL INSPECTOR, REMOVE REMAINING SEDIMENT CONTROL MEASURES LEAVING EARTH DIKE ON EAST SIDE OF SITE INTACT (2 DAYS).

NOTE FOR PHASE 2 LIMIT OF DISTURBANCE 11/17/11
 PROPOSED DISTURBANCE EXCEEDS PREVIOUS LIMIT OF DISTURBANCE BY LESS THAN 40,000 SQ. FT. THEREFORE THIS REVISION IS EXEMPT FROM THE REQUIREMENTS FOR FOREST CONSERVATION. THE AMOUNT OF PROPOSED DISTURBANCE EXCEEDS THE PREVIOUS DISTURBANCE BY 20,550 SQ. FT.
 DENOTES PHASE 2 L.O.D.
 ----- DENOTES PHASE 2 DRAINAGE AREA

BY THE DEVELOPER:
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT."

Thomas E. Muegge 3-25-86
 DEVELOPER DATE
Bernie DeWinstable 3-25-86
 DATE

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

Arthur E. Muegge 3-25-86
 ENGINEER DATE
 ARTHUR E. MUEGGE

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

John W. Hahn 4-2-86
 U.S. SOIL CONSERVATION SERVICE DATE

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

Stephen L. Fisher 4/2/86
 HOWARD S.C.D. DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

Joseph P. ... 4-7-86
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.

Arthur ... 4/10/86
 PLANNING DIRECTOR DATE

John W. Hahn 4-10-86
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

APPROVED FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Harold F. ... 4-8-86
 DIRECTOR DATE

William S. ... 4-7-86
 CHIEF, BUREAU OF ENGINEERING DATE

7/10/12 2 ADDED ABOVE GROUND PROPPING TANK

3/3/11 1 BUILDING, PARKING & STORAGE AREA ADDITIONS

DATE NO. REVISION

OWNER/DEVELOPER
 OWNER: REALTY INC. 10621 RIGGS HILL ROAD JESSUP, MD. 20794
 DEVELOPER: JASPER ENGINES & TRANSMISSIONS 615 WISCONSIN ROAD JASPER, IN. 47546 1-800-327-7456

PROJECT: CORRIDOR NORTH PARCEL C-5

AREA CORRIDOR NORTH PARCEL C-5 TAX MAP NO. 46 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE: DRAINAGE AREA MAP AND SEDIMENT CONTROL PLAN

THE RIEMER GROUP, INC.
 The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm 9108 Heath Park Drive, Ellicott City, Maryland 21043 (301) 461-0600

3-25-86 DATE
 DESIGNED BY: J.K.B.
 DRAWN BY: F.D.M.
 PROJECT NO: 27400
 DATE: 2-17-80
 SCALE: 1" = 50'
 DRAWING NO. 4 OF 9



3/2/12 FOR REVISION 1 ONLY & REV 2
 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. 16597, Expiration Date: 8/15/12

APPROVED
 DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND
 DATE 3-10-86
M. ...

SEDIMENT CONTROL NOTES

- 1. A minimum of 24 hours notice must be given to the Howard County Office of Inspections and Permits prior to the start of any construction (992-2437)
2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
3. Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) 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.
4. All sediment traps/basins shown 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.
5. 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.
6. 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.
7. Site Analysis:
Total Area of Site 3.192 acres
Area Disturbed 2.5 acres
Area to be roofed or paved 1.6 acres
Area to be vegetatively stabilized 0.7 acres
Total Cut 2700 Cu. yds.
Total Fill 2800 Cu. yds.
8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9. Additional sediment controls must be provided, if deemed necessary by the Howard County DPW sediment control inspector.
10. Site grading will begin only after all perimeter sediment control measures have been installed and are in a functioning condition.
11. Sediment will be removed from traps when its depth reaches the clean out elevation shown on the plans.

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, discing or other acceptable means before seeding.

Soil Amendments: Apply 0-20-20 fertilizer at the rate of 600 lbs. per acre. Harrow or disc lime and 0-20-20 fertilizer into the soil to a minimum depth of 3". Lawns or high maintenance areas will be dragged and leveled with a York rake. At the time of seeding, apply 400 lbs. of 30-0-0 ureaform fertilizer and 500 lbs. of 10-20-20 or equivalent fertilizer per acre.

Seeding: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 40 lbs. per acre (1 lb./1000 sq.ft.) of a mixture of certified 'Merion' Kentucky bluegrass; common Kentucky bluegrass @ 40 lbs. per acre (1 lb./1000 sq.ft.) and Red Fescue, Pennlawn or Jamestown @ 20 lbs. per acre (0.5 lb./1000 sq.ft.) for the period May 1 thru July 31, seed with 40-40-20 mix as specified above and 2 lbs. per acre (0.05 lbs./1000 sq.ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: (Option 1) 2 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 40-40-20 mix specified above 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 reseeding.

TEMPORARY SEEDING NOTES

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

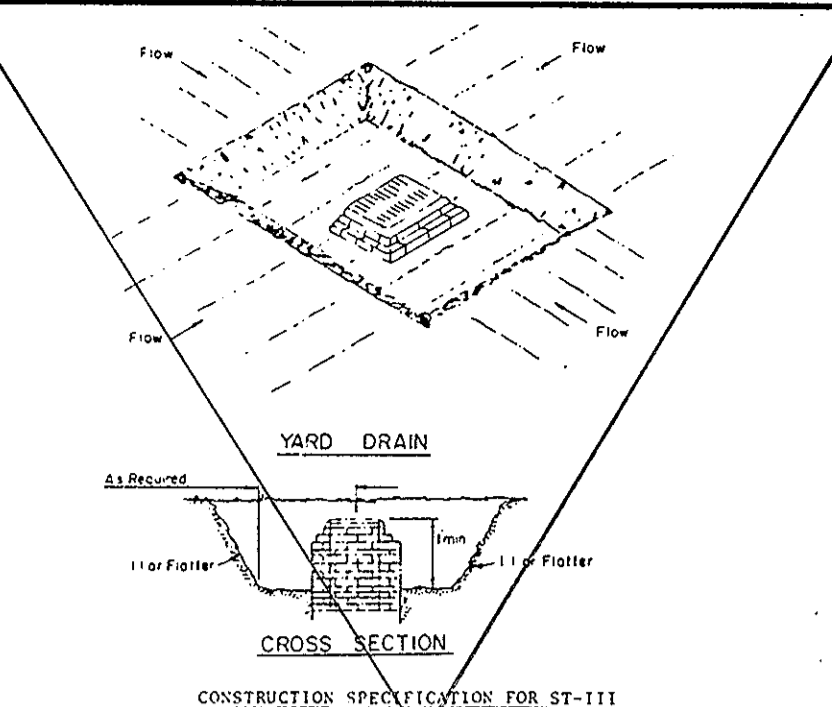
Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.

Soil Amendments: Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft.) Where soil is highly acidic, apply dolomitic limestone at the rate of 1 ton per acre.

Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 140 lbs. per acre of annual rye (3.2 lbs./1000 sq.ft.). For the period May 1 thru August 16, seed with 3 lbs. per acre of weeping lovegrass (.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.



- 1. Sediment shall be removed and the trap restored to its original dimensions when the sediment has accumulated to the design depth of the trap.
2. The volume of sediment storage shall be 1800 cubic feet per acre of contributory drainage area.
3. The structure shall be inspected after each rain and repairs made as needed.
4. The structure shall be carried out in such a manner that erosion and water pollution shall be minimized.
5. The sediment trap shall be removed and the area stabilized when the construction drainage area has been properly stabilized.
6. All out slopes shall be 1:1 or flatter.

STORM INLET SEDIMENT TRAP NO SCALE

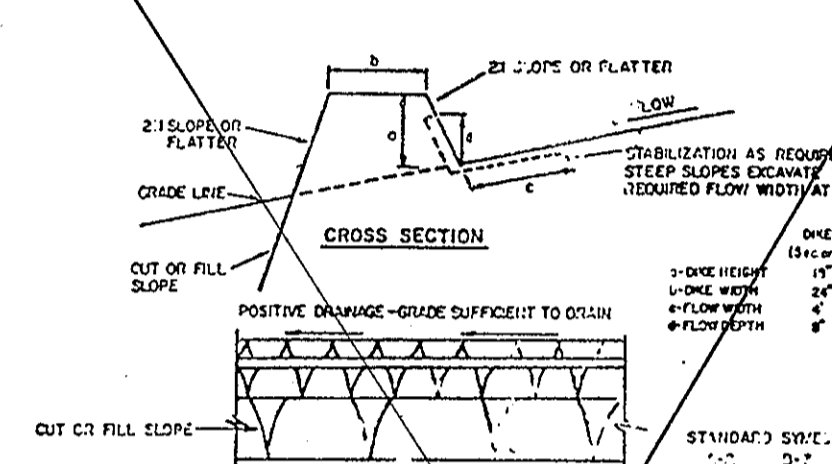
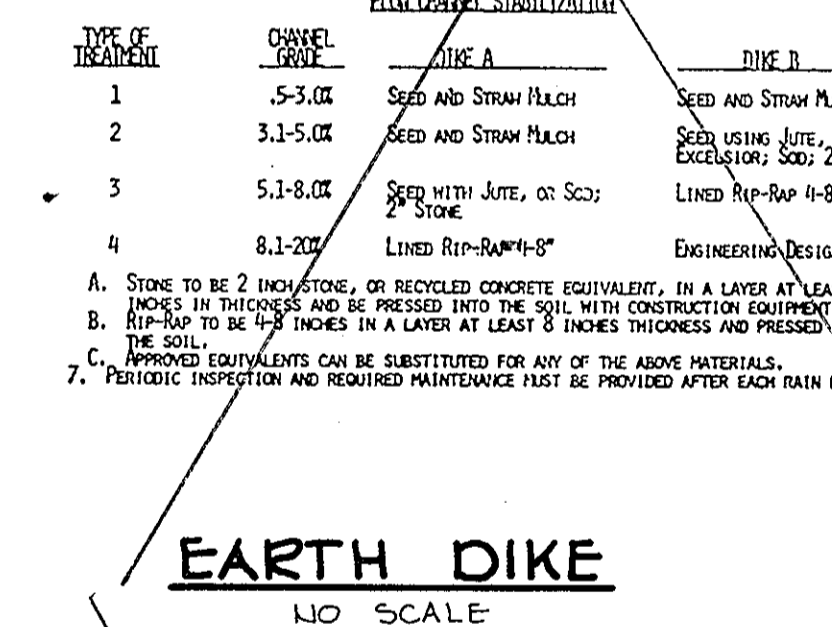
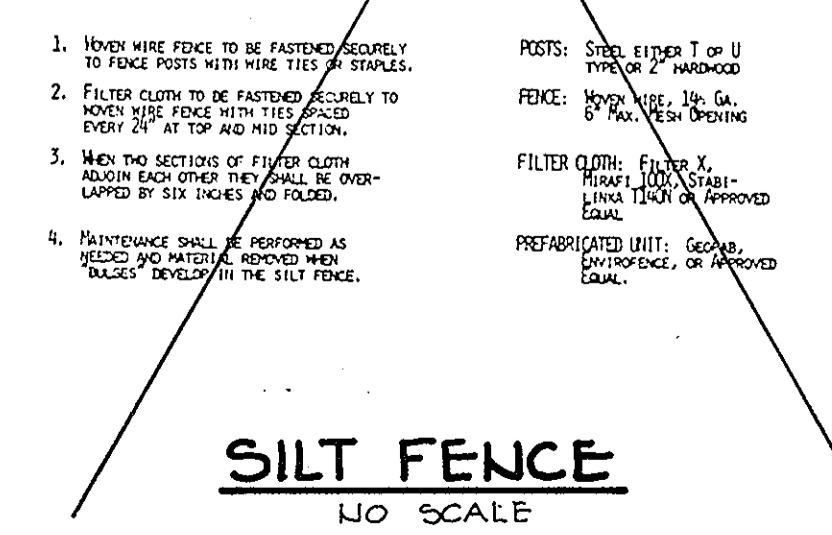
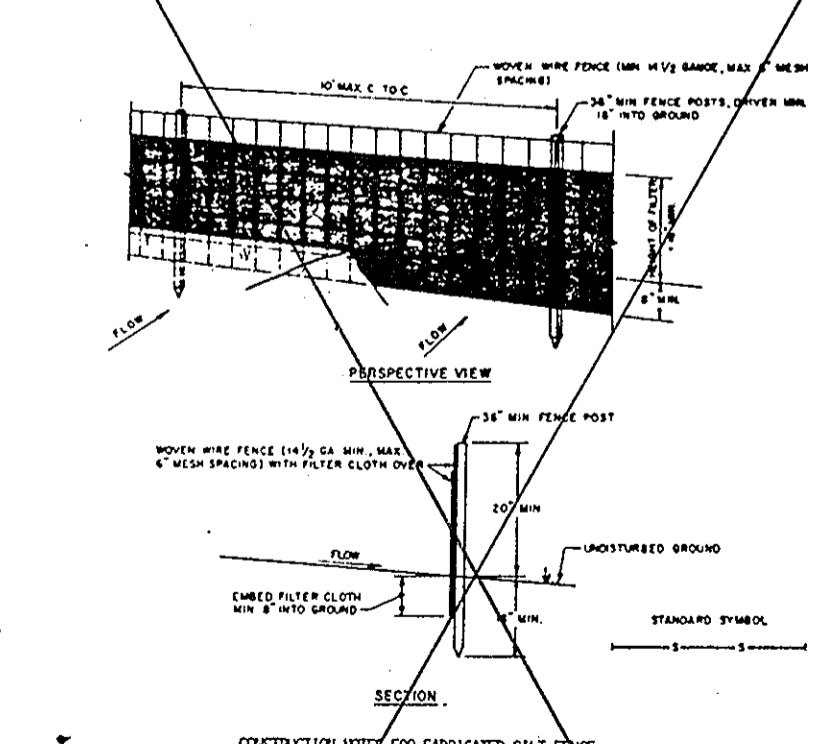


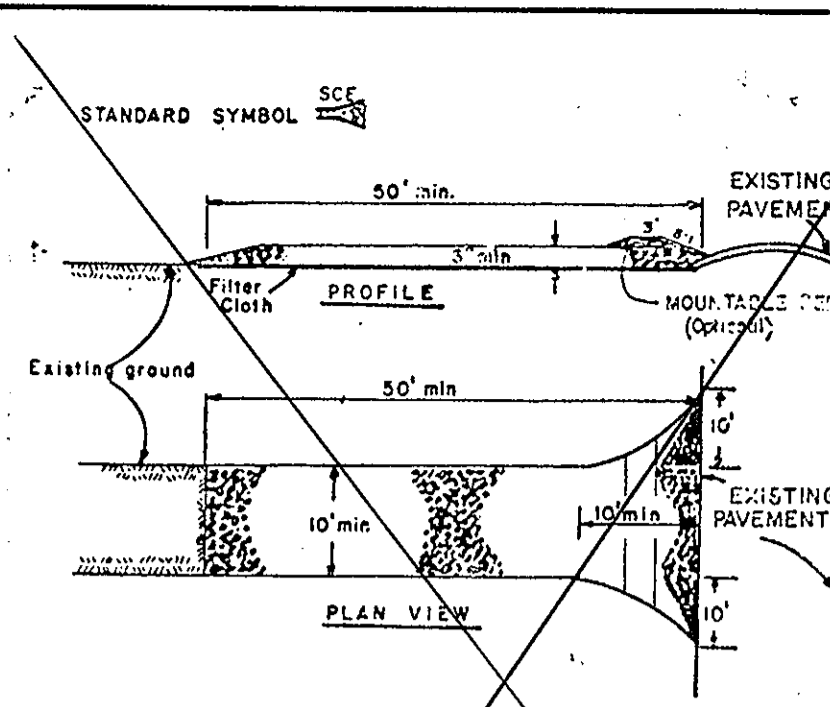
Table with 3 columns: Type of Treatment, Channel Type, and Dike A/B. Lists treatments like Seed and Straw Mulch, Seed Using Jute, etc.



TEMPORARY SEEDING NOTES

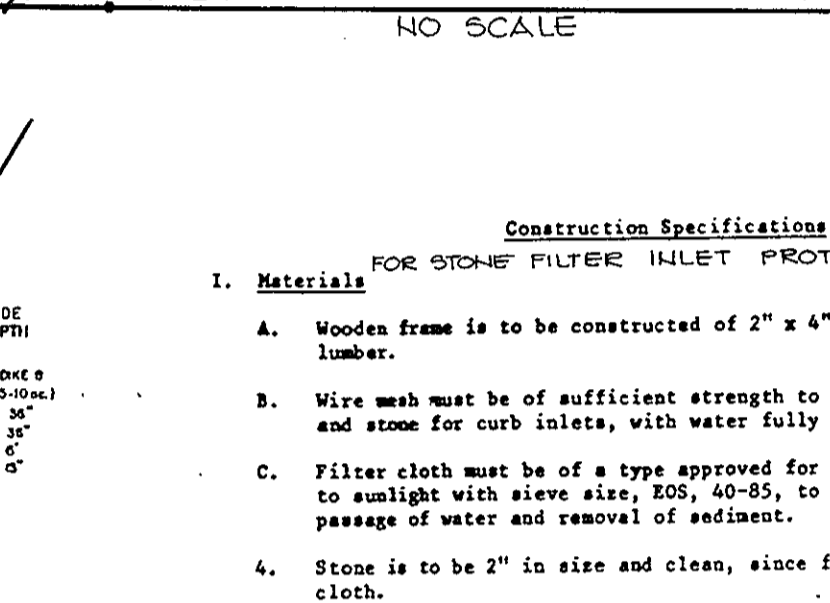


STONE FILTER INLET PROTECTION NO SCALE

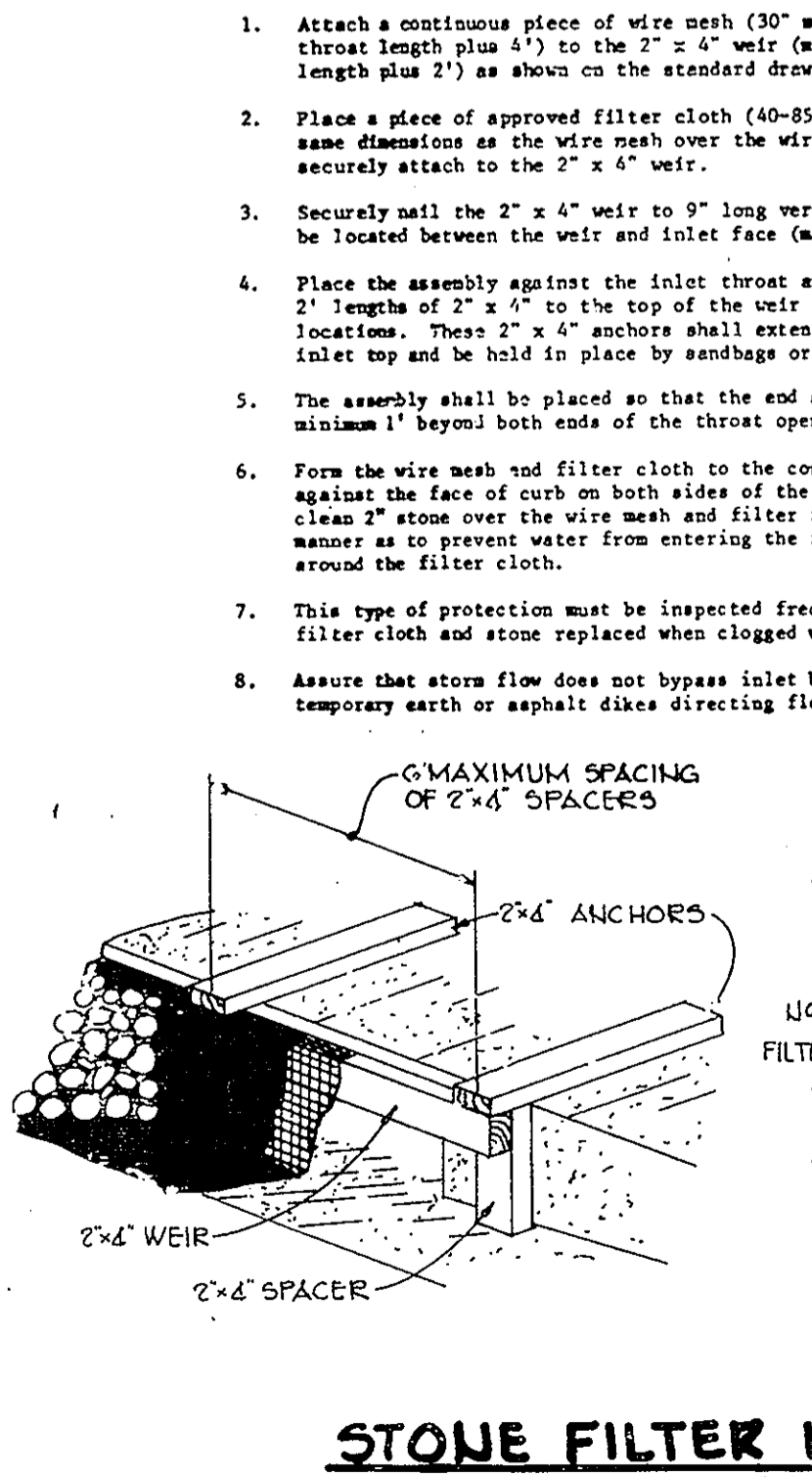


- 1. Stone Size - Use #2 stone, or recycled or recycled concrete equivalent.
2. Length - As required, but not less than 30 feet (except on a single residence lot where a 30 foot minimum length would apply).
3. Thickness - Not less than 6 inches.
4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
5. Filter cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residential lot.
6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking of flowing sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleaning of any measure used to trap sediment. All sediment applied, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. Washing - Streets shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be provided after each rain.

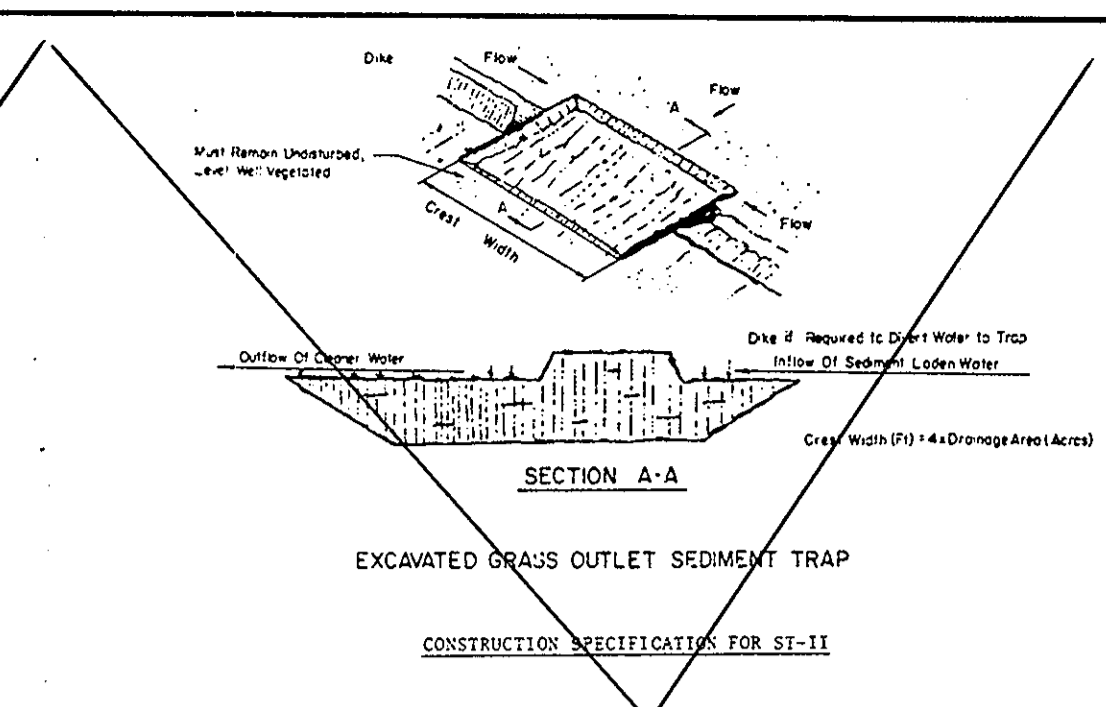
GRASS OUTLET SEDIMENT TRAP NO SCALE



- 1. Materials
A. Wooden frame is to be constructed of 2" x 4" construction grade lumber.
B. Wire mesh must be of sufficient strength to support filter fabric, and stone for curb inlets, with water fully impounded against it.
C. Filter cloth must be of a type approved for this purpose; resistant to sunlight with sieve size, 200, 40-85, to allow sufficient passage of water and removal of sediment.
D. Stone is to be 2" in size and clean, since fines would clog the cloth.
2. Procedure
A. Excavate, ditchline or yard inlet protection.
1. Excavate completely around inlet to a depth of 18" below notch elevation.
2. Drive 2 x 4 post 1' into ground at four corners of inlet. Place nail strips between posts on ends of inlet. Assemble top portion of 2 x 4 frame using overlap joint shown. Top of frame (weir) must be 6" below edge of roadway adjacent to inlet.
3. Stretch wire mesh tightly around frame and fasten securely. Ends must seat at post.
4. Stretch filter cloth tightly around wire mesh, the cloth must extend from top of frame to 18" below inlet notch elev. Fasten securely to frame. Ends must seat at post, be overlapped and folded, then fastened down.
5. Backfill around inlet in compacted 6" layers until layer of earth is even with notch elevation on ends and top elevation on sides.
6. If the inlet is not in a low point, construct a compacted earth dike in the ditchline below it. The top of this dike is to be at least 6" higher than the top of frame (weir).
7. This structure must be inspected frequently and the filter fabric replaced when clogged.
B. Curb Inlet Protection.
1. Attach a continuous piece of wire mesh (30" min. width by throat length plus 4") to the 2" x 4" weir (measuring throat length plus 2") as shown on the standard drawing.
2. Place a piece of approved filter cloth (40-85 sieve) of the same dimensions as the wire mesh over the wire mesh and securely attach to the 2" x 4" weir.
3. Securely nail the 2" x 4" weir to 9" long vertical spacers to be located between the weir and inlet face (max. 6' apart).
4. Place the assembly against the inlet throat and nail (minimum 2" lengths of 2" x 4" to the top of the weir at spacer locations. 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 1' beyond both ends of the throat opening.
6. Form the wire mesh and filter cloth to the concrete gutter and against the face of curb on both sides of the inlet. Place clean 2" stone over the wire mesh and filter fabric in such a manner as to prevent water from entering the inlet under or around the filter cloth.
7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
8. Assure that storm flow does not bypass inlet by installing temporary earth or asphalt dike directing flow into inlet.

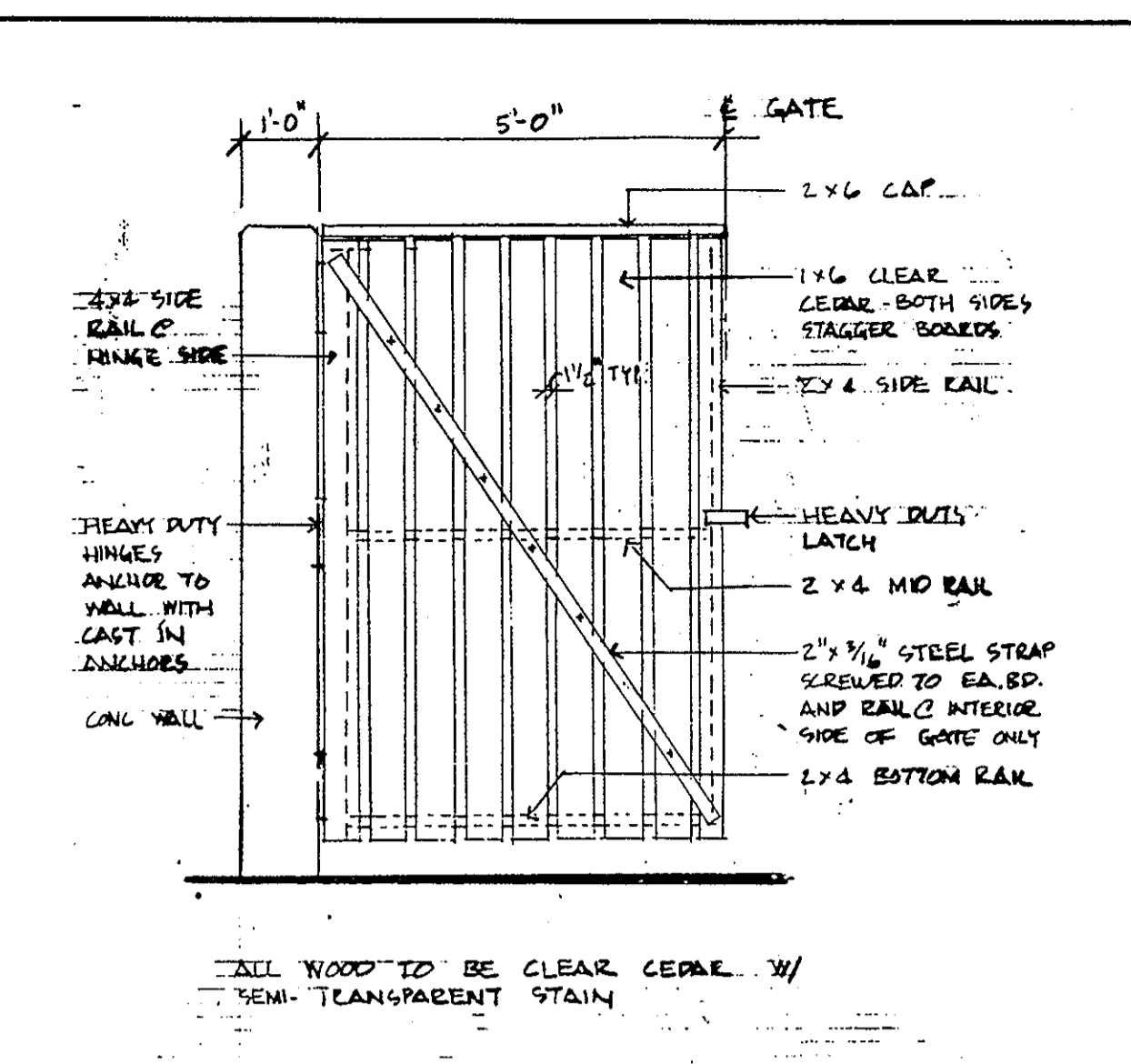


STONE FILTER INLET PROTECTION NO SCALE

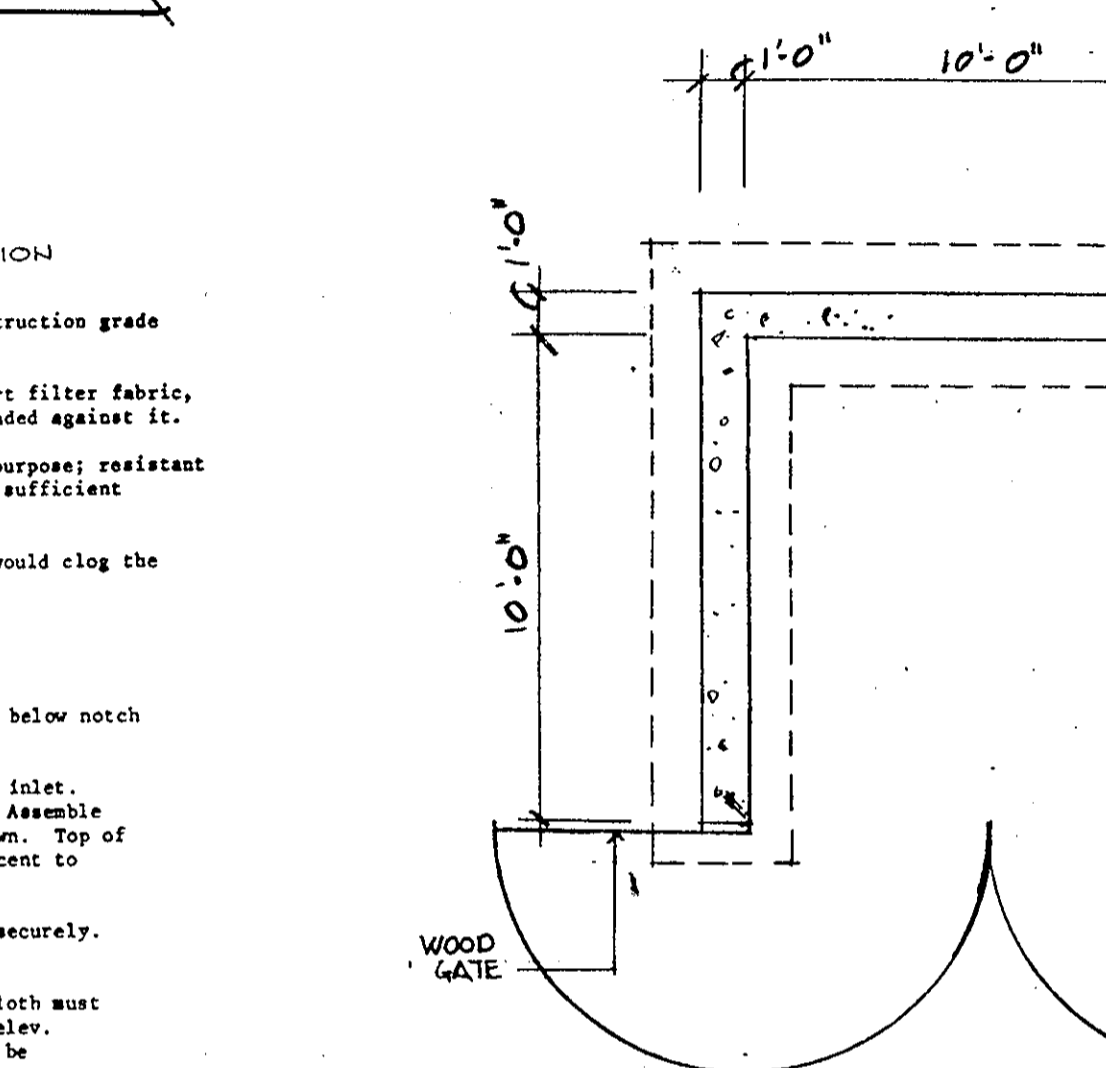


- 1. Volume of sediment storage shall be 1800 cubic feet per acre of contributory drainage area.
2. Minimum crest width shall be 4' X Drainage Area.
3. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
4. The structure shall be inspected after each rain and repairs made as needed.
5. Construction operations shall be carried out in such a manner that erosion and water pollution shall be minimized.
6. The sediment trap shall be removed and area stabilized when the remaining drainage area has been properly stabilized.
7. All out slopes shall be 1:1 or flatter.
Maximum Drainage Area: 5 Acres

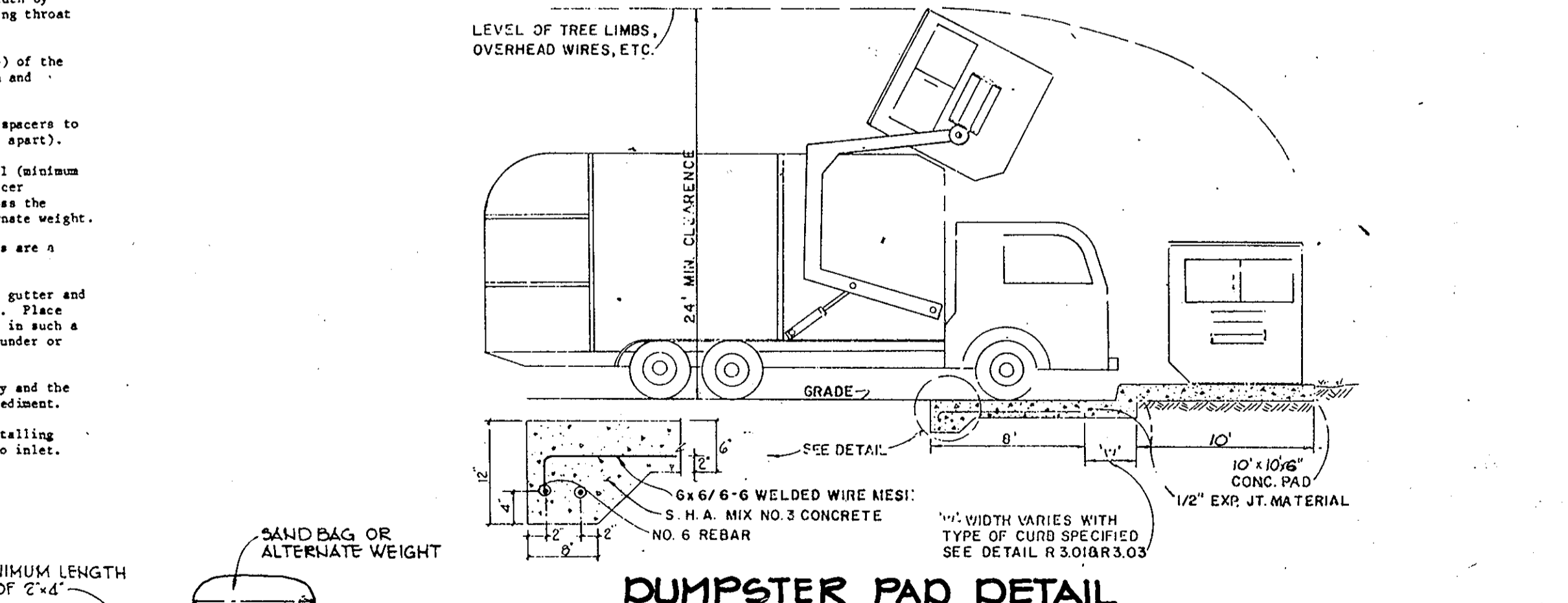
GRASS OUTLET SEDIMENT TRAP NO SCALE



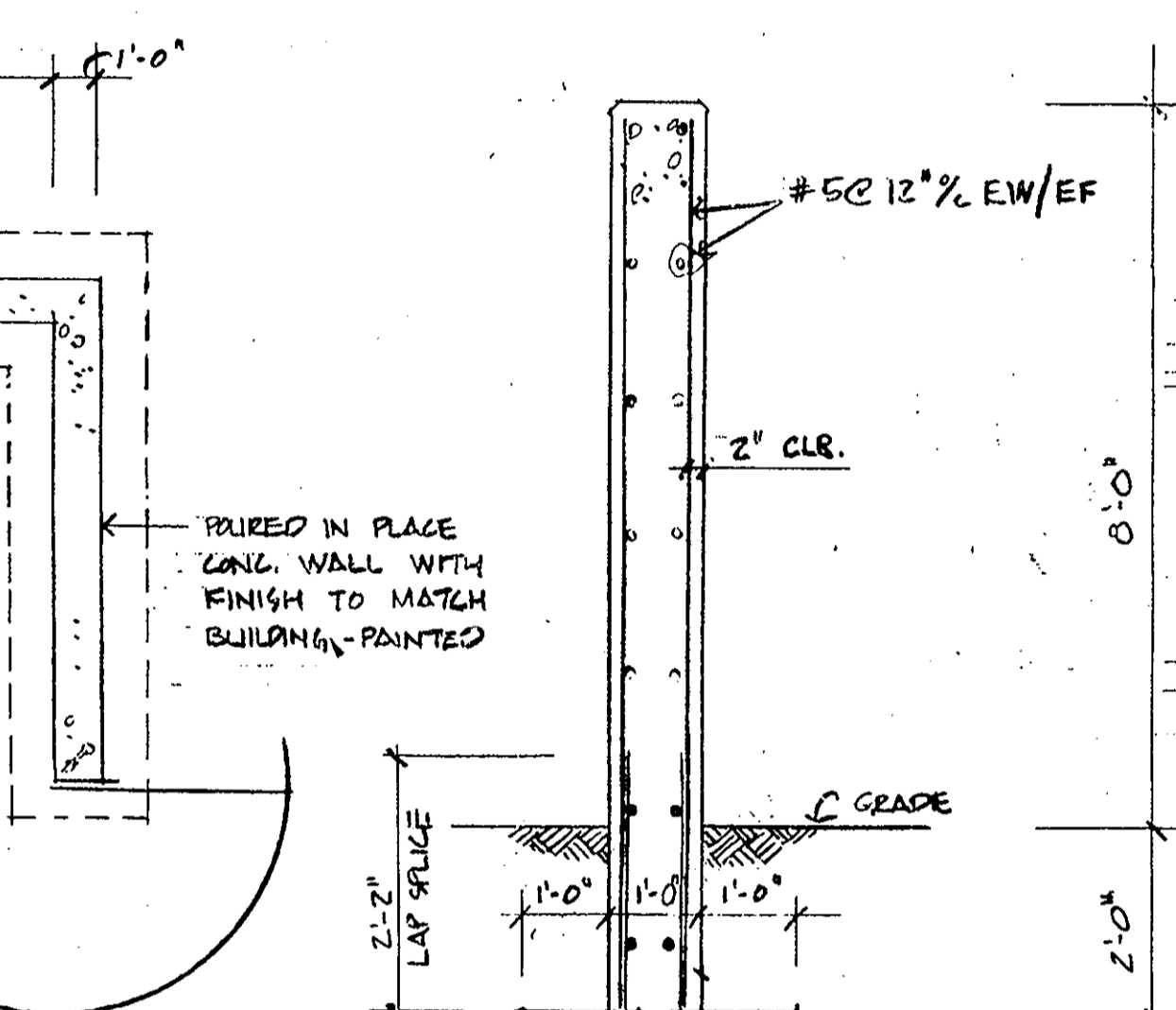
GATE DETAIL NO SCALE



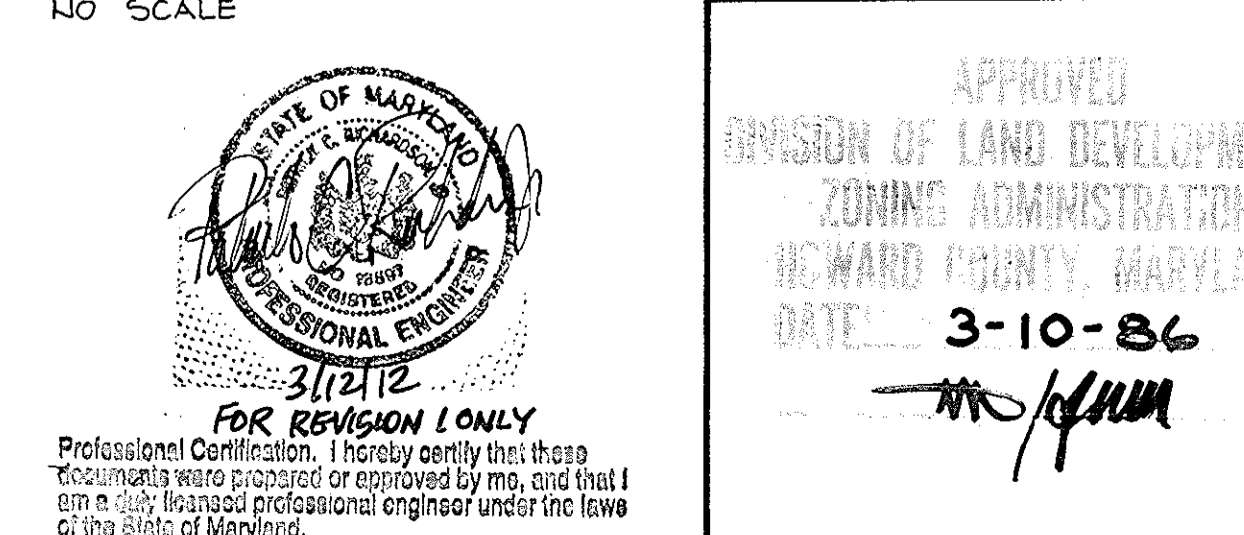
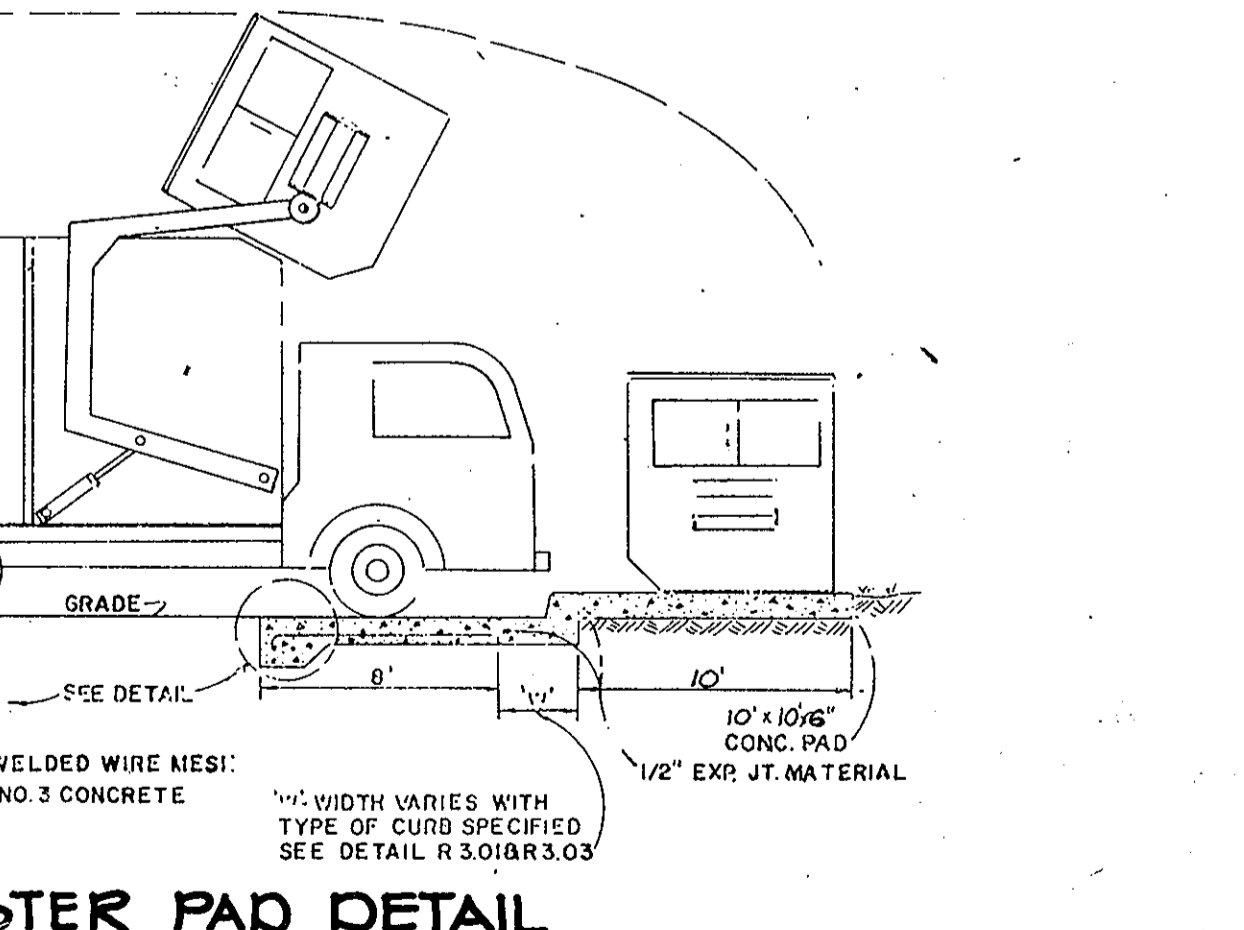
MARSHALLS DUMPSTER SCREEN NO SCALE



DUMPSTER PAD DETAIL NO SCALE



GATE DETAIL NO SCALE



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT. Signature: Joseph Boyle, DATE: 4-9-84

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING. Signature: Arthur E. Muegge, DATE: 4/10/86

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC WORKS. Signature: Arthur E. Muegge, DATE: 4-8-86

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS. Signature: Arthur E. Muegge, DATE: 4-7-86

BY THE DEVELOPER: I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. Signature: Kenneth E. Marshall, DATE: 3-25-86

BY THE ENGINEER: I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. Signature: Arthur E. Muegge, DATE: 3-25-86

REVIEWED FOR HOWARD COUNTY. Signature: Arthur E. Muegge, DATE: 4-2-86

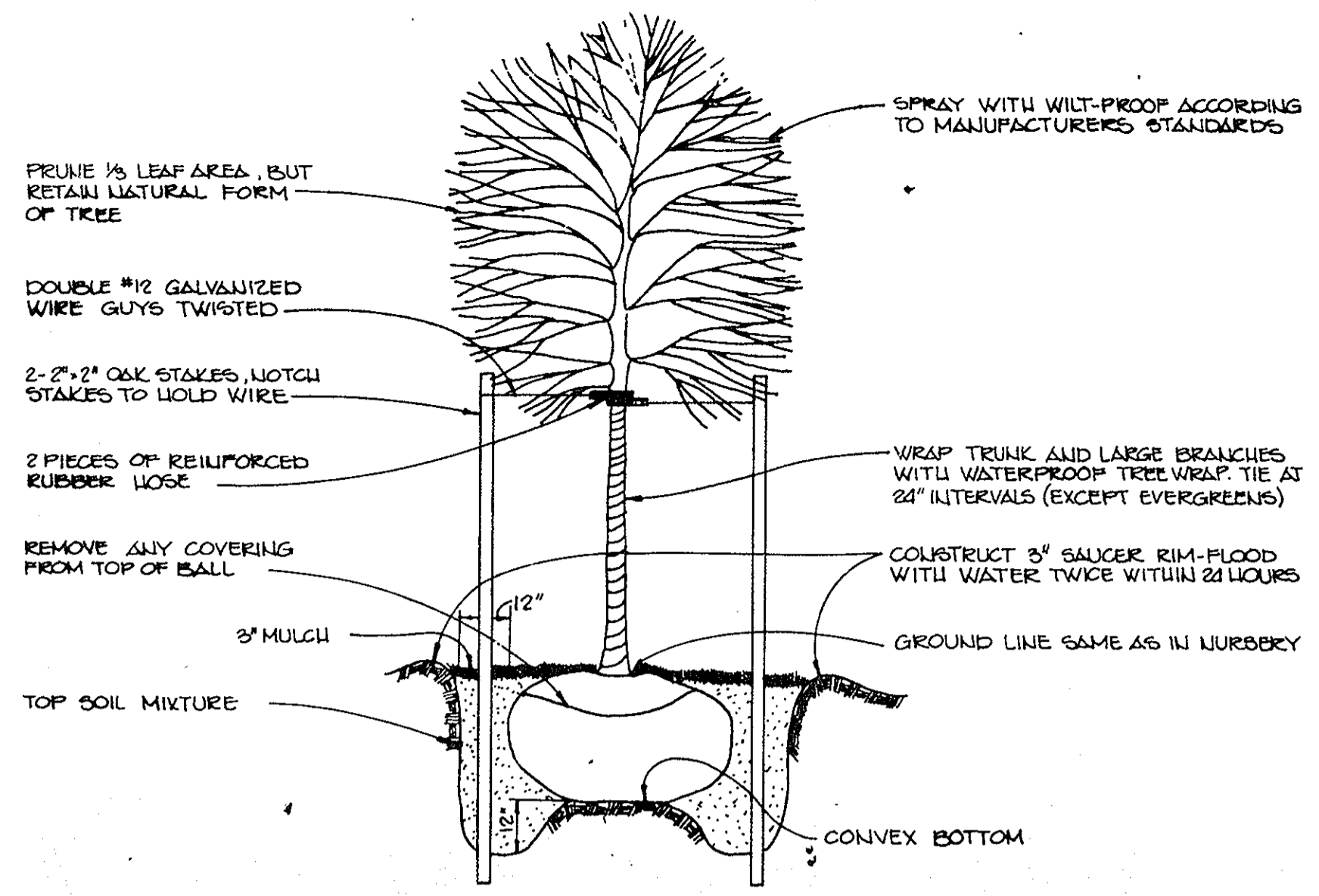
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT. Signature: Arthur E. Muegge, DATE: 4/2/86

3/3/11 BUILDING PARKING & STORM DRAIN ADDITIONS. OWNER/DEVELOPER: REALTY INC. 10621 RIGGS HILL ROAD, JESSUP, MD. 20794. DEVELOPER: JASPER ENGINES & TRANSMISSIONS 815 WASHINGTON ROAD, JASPER, IN. 47546. 1-800-327-7455

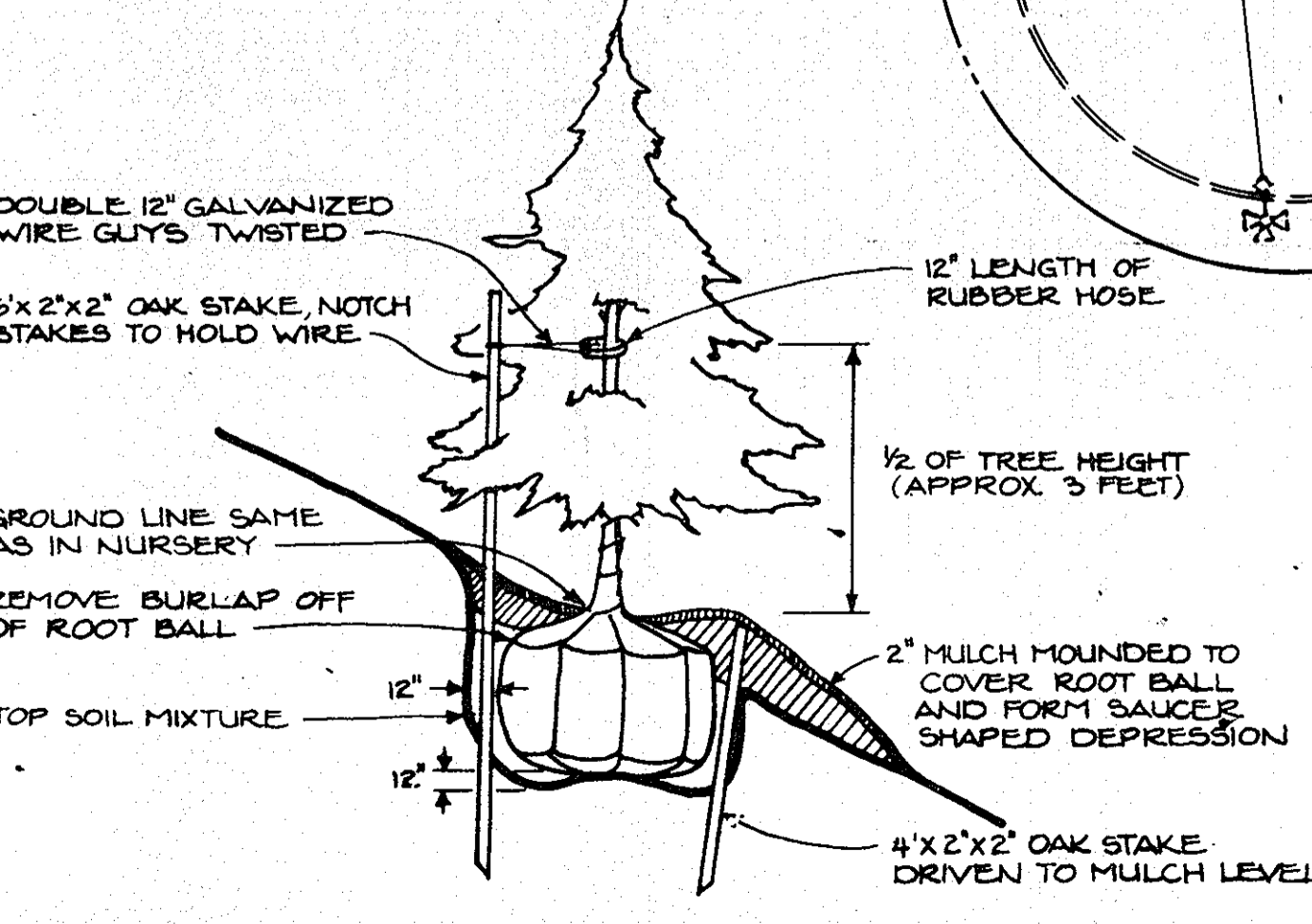
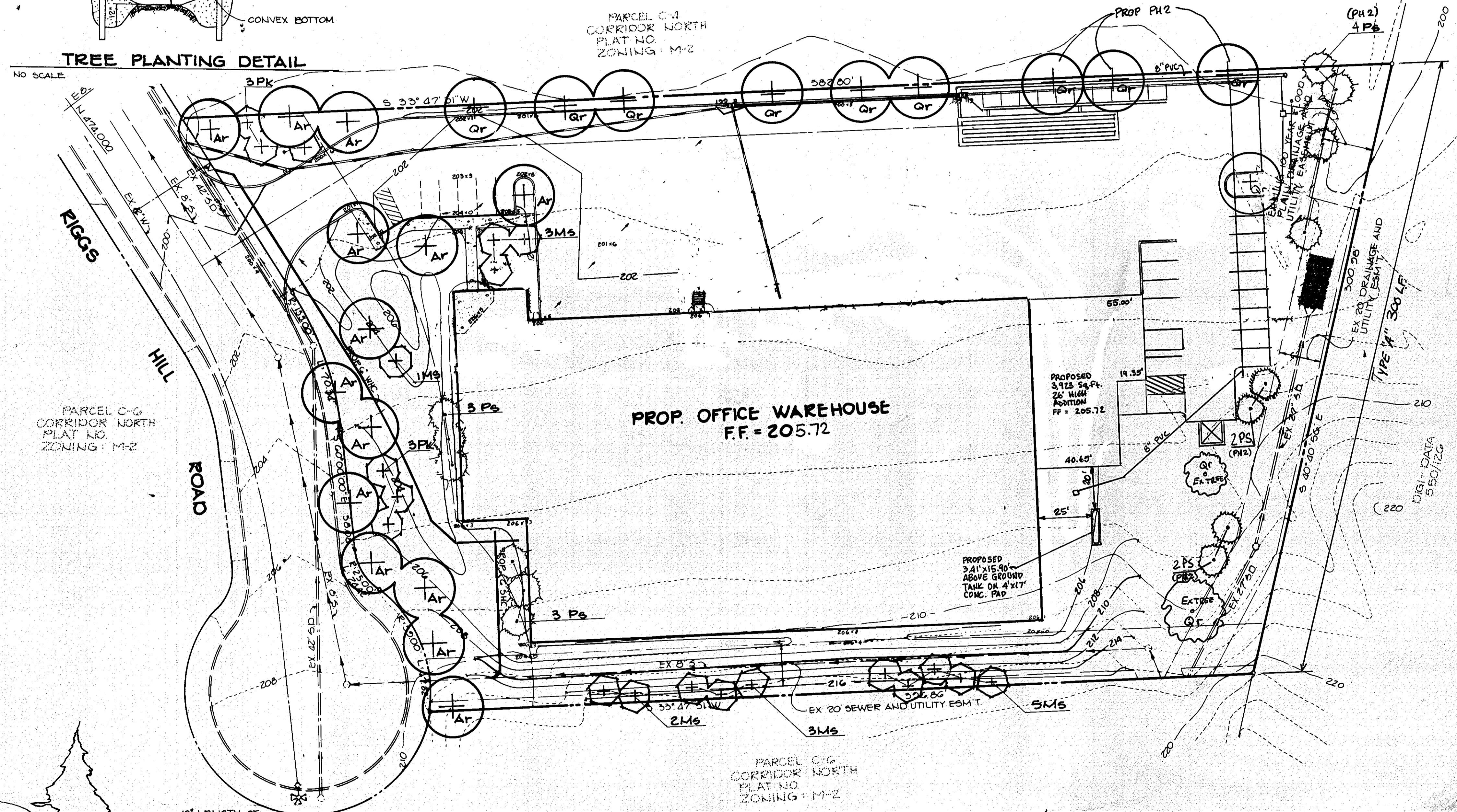
PROJECT: CORRIDOR NORTH PARCEL C-5. AREA CORRIDOR NORTH PARCEL C-5. TAX MAP NO. 46. GTH ELECTRIC DISTRICT HOWARD COUNTY, MARYLAND

SEDIMENT CONTROL DETAILS

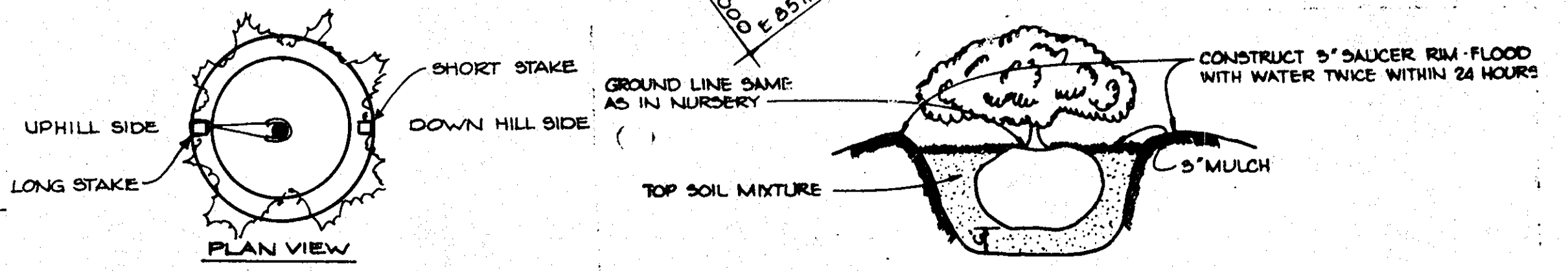
THE RIEMER GROUP, INC. The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm 3105 Health Park Drive, Ellicott City, Maryland 21043 (301) 461-2690. DATE: 3-25-86. DESIGNED BY: D.A.M. DRAWN BY: F.D.M. PROJECT NO: 27400. DATE: 2-17-86. SCALE: NO SCALE. DRAWING NO. 5 OF 9. SDP-86-156



TREE PLANTING DETAIL
NO SCALE



PLANTING DETAIL FOR STEEP SLOPES
NO SCALE



SHRUB PLANTING DETAIL

PLANTING LIST

Shade Trees			
15	Ar	Acer rubrum Red Maple	2 1/2" - 3" cal., 12' - 14' ht. Full Head, B & B
14	Qp	Quercus rubra Red Oak	2 1/2" - 3" cal., 12' - 14' ht. Full Head, B & B
Evergreen Trees			
20	Ps	Pinus strobus Eastern White Pine	6' - 8' ht., 2"-2 1/2" cal., Unsheared, B & B
Flowering Trees			
6	Pk	Prunus serrulata 'Kwanzan' Kwanzan Cherry	2" to 2 1/2" cal., 8' - 10' ht. Full Head, B & B
20	Ms	Malus 'Snowcloud' Snowcloud Crab	2" to 2 1/2" cal., 8' to 10' ht. Full Head, B & B

Tree Quantity Calculation
3.199 Ac. X 16 trees (industrial, unwooded) = 52 trees required

Trees provided:
29 shade trees
46 flowering and evergreen (substitute for 23 shade trees)

52 trees provided

SCHEDULE A PERIMETER LANDSCAPE EDGE

LANDSCAPE TYPE	LINEAR FEET	TREES REQUIRED	TREES PROVIDED
A	300	1.60 = 6	5

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

Jeanne R. Blythe 4-9-86
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.

Arteme Daniels 4/10/86
PLANNING DIRECTOR DATE

John W. ... 4-10-86
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Don F. ... 4-8-86
DIRECTOR DATE

William S. ... 4-7-86
CHIEF, BUREAU OF ENGINEERING DATE

3/8/11	2	BUILDING, PARKING & STORM DRAIN ADDITIONS
2-11-86	1	REMOVED SHRUBS

DATE	NO.	REVISION

OWNER/DEVELOPER

OWNER: REALTY INC. 10621 RIGGS HILL ROAD JESSUP, MD. 20794

DEVELOPER: JASPER ENGINES & TRANSMISSIONS 815 WEDDING ROAD JESUP, MD. 47546 1-800-327-7458

PROJECT: **CORRIDOR NORTH PARCEL C-5**

AREA: CORRIDOR NORTH PARCEL C-5 TAX MAP NO. 48 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE: **PLANTING PLAN**

THE RIEMER GROUP, INC.
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
3105 Health Park Drive, Ellicott City, Maryland 21043 (301) 461-2690

3-25-86 DATE

DESIGNED BY: T.D.F.
DRAWN BY: P.E.R.
PROJECT NO: 27400
DATE: 2-17-86
SCALE: 1" = 30'
DRAWING NO. 6 OF 9

Melanie Moser
MELANIE MOSER

STATE OF MARYLAND PROFESSIONAL ENGINEER

3/12/12 FOR REVISION ONLY & REV 3

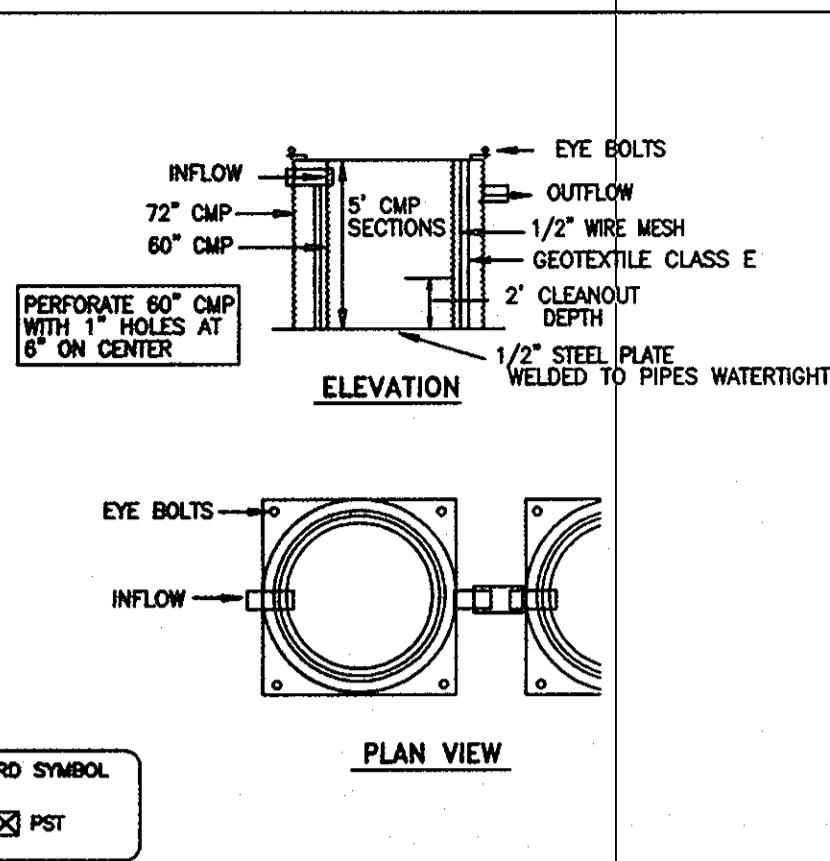
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am in full compliance with the laws of the State of Maryland.

License No. 16597, Expiration Date: 8/15/13

APPROVED
DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE: 3-10-86

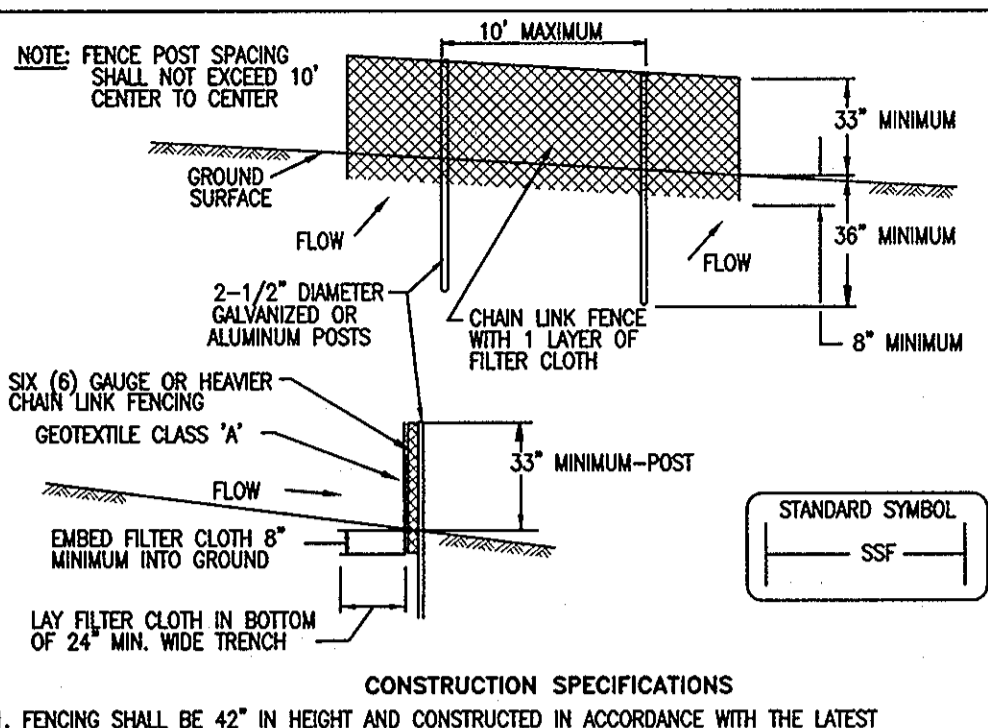
DATE	NO.	REVISION
7/10/12	3	ADDED ABOVE GROUND PROPANE TANK

DETAIL 21 - PORTABLE SEDIMENT TANK



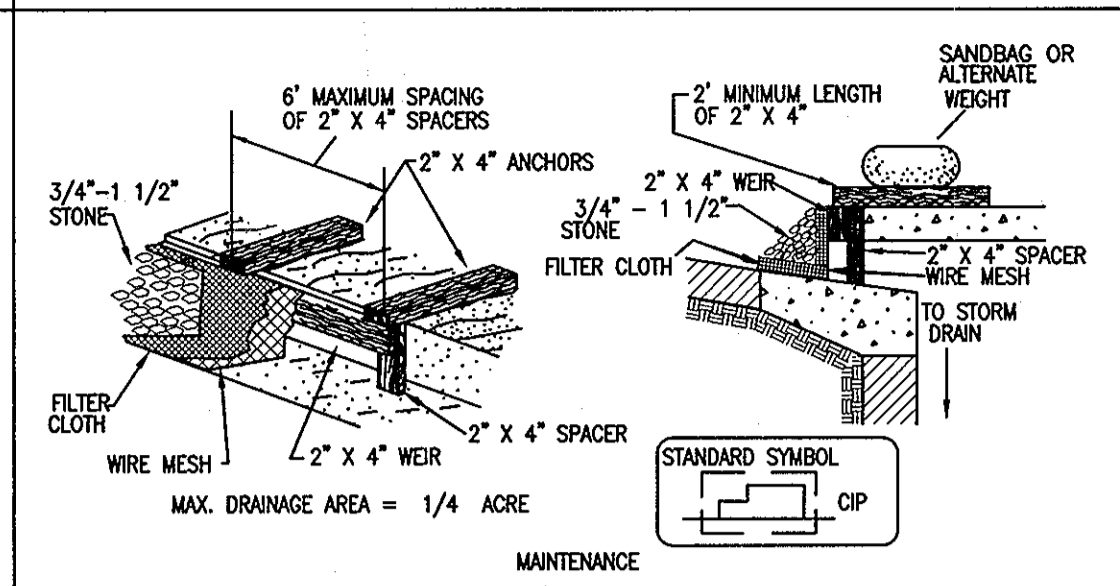
Construction Specifications
1. THE FOLLOWING FORMULA SHOULD BE USED IN DETERMINING THE STORAGE VOLUME OF THE SEDIMENT TANK...

DETAIL 33 - SUPER SILT FENCE



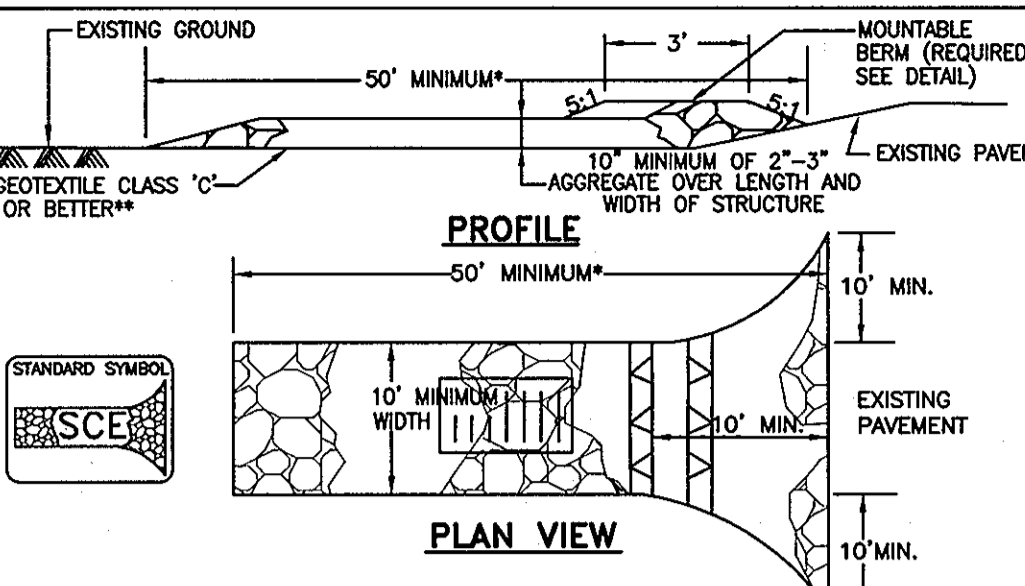
CONSTRUCTION SPECIFICATIONS
1. FENCING SHALL BE 42" IN HEIGHT AND CONSTRUCTED IN ACCORDANCE WITH THE LATEST MARYLAND STATE HIGHWAY (SHA) DETAILS FOR CHAIN LINK FENCING...

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



MAINTENANCE REQUIREMENTS FOR STORM DRAIN INLET PROTECTION ARE INTENSE, DUE TO THE SUSCEPTIBILITY TO CLOGGING. WHEN THE STRUCTURE DOES NOT DRAIN COMPLETELY WITHIN 48 HOURS AFTER A STORM EVENT, IT IS CLOGGED...

HEAVY DUTY STABILIZED CONSTRUCTION ENTRANCE



CONSTRUCTION SPECIFICATION
1. STONE - CRUSHED AGGREGATE (2"-3") OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT. LENGTH - AS REQUIRED, BUT NOT LESS THAN 50% (WGT LESS THAN 50% FOR SINGLE RESIDENCE LOT)...

SPECIFICATIONS FOR BIORETENTION AREAS

FROM "2000 MARYLAND STORMWATER DESIGN MANUAL" APPENDIX B.3.B.

I. MATERIAL SPECIFICATIONS
THE ALLOWABLE MATERIALS TO BE USED IN BIORETENTION ARE DETAILED IN THE TABLE BELOW.
II. PLANTING SOIL
THE SOIL SHALL BE A UNIFORM MIX FREE OF STONES, STUMPS, ROOTS, OR OTHER SIMILAR OBJECTS LARGER THAN 1/2" DIAMETER...

ROOT/CILL 2 TO 3 INCHES OF SAND INTO THE BASE OF THE BIORETENTION FACILITY BEFORE PLACING GRAVEL LAYER.
WHEN BACKFILLING THE BIORETENTION FACILITY WITH PLANTING SOIL, PLACE SOIL IN LIFTS 12" TO 18" DO NOT USE HEAVY EQUIPMENT WITHIN THE BIORETENTION BASIN...

DETAIL - SILT FENCE CHECK DAM

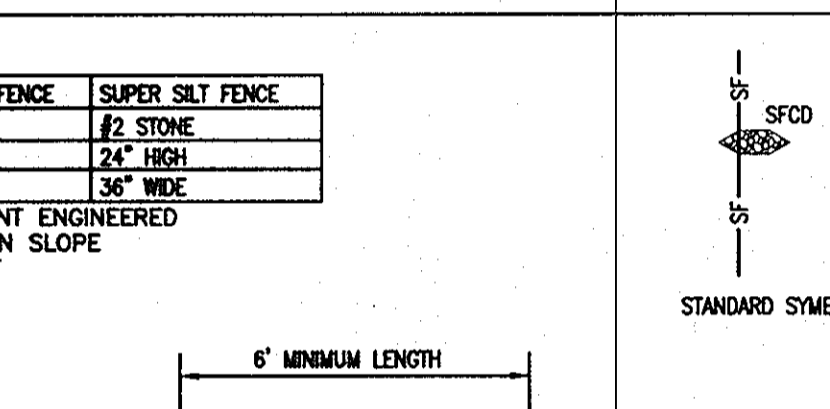


Table with columns for STD. SILT FENCE and SUPER SILT FENCE, listing dimensions like height, width, and material.

TEST BORING LOG

TEST BORING LOG table for 10621 Riggs Hill Road, Boring Number: B-1, showing depth, soil description, and sample information.

TEST BORING LOG

TEST BORING LOG table for 10621 Riggs Hill Road, Boring Number: B-2, showing depth, soil description, and sample information.

PHASE 2 SEQUENCE OF CONSTRUCTION

- 1. OBTAIN GRADING PERMIT AND NOTIFY HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES & PERMITS AT LEAST 48 HOURS PRIOR TO ANY LAND DISTURBANCE...
2. INSTALL STABILIZED CONSTRUCTION ENTRANCE, INLET PROTECTION AND EXISTING INLET AND SUPER SILT FENCE AT LOCATIONS SHOWN ON PLAN...

MATERIAL SPECIFICATIONS FOR BIORETENTION FACILITIES

Table with columns for MATERIAL, SPECIFICATION, SIZE, and NOTES, listing materials like sand, silt, clay, geotextile, and gravel.

UNDERGROUND SANDFILTER SWM FACILITY SUMMARY

Summary table for Underground Sandfilter SWM Facility, including site area, drainage area, and storage capacity.

TEST BORING LOG

TEST BORING LOG table for 10621 Riggs Hill Road, Boring Number: B-3, showing depth, soil description, and sample information.

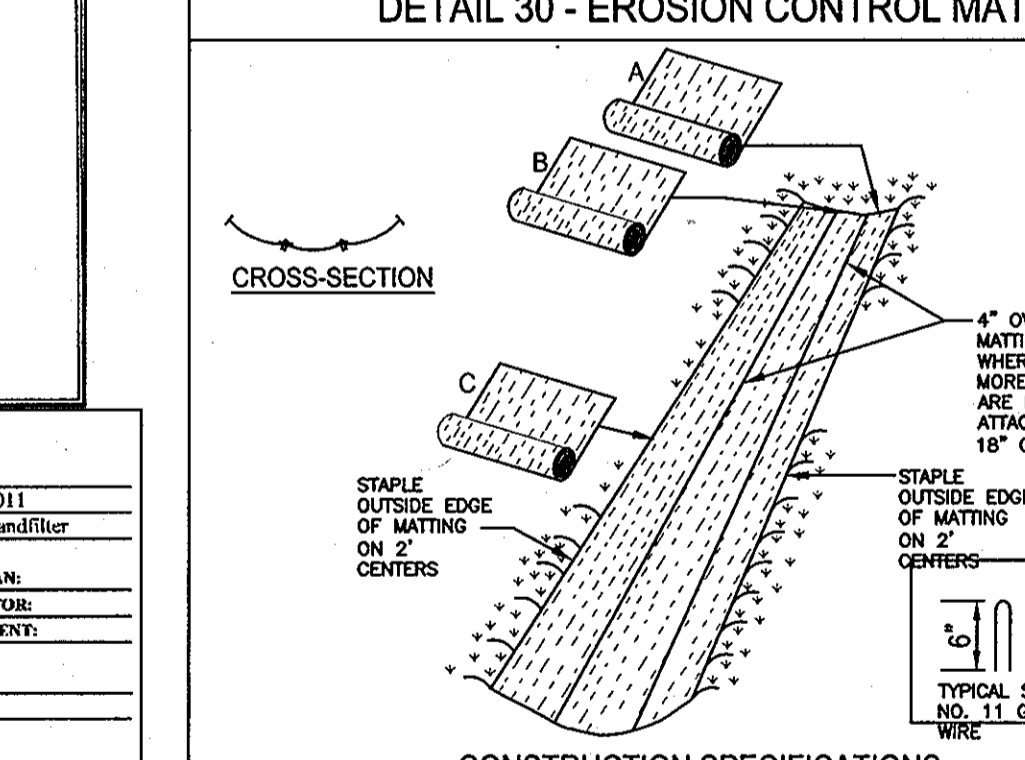
TEST BORING LOG

TEST BORING LOG table for 10621 Riggs Hill Road, Boring Number: B-4, showing depth, soil description, and sample information.

TEST BORING LOG

TEST BORING LOG table for 10621 Riggs Hill Road, Boring Number: B-5, showing depth, soil description, and sample information.

DETAIL 30 - EROSION CONTROL MATTING



CONSTRUCTION SPECIFICATIONS
1. KEY-IN THE MATTING BY PLACING THE TOP ENDS OF THE MATTING IN A NARROW TRENCH, 6" IN DEPTH...

MICRO-BIORETENTION SWM FACILITY SUMMARY

Summary table for Micro-Bioretenction SWM Facility, including site area, drainage area, and storage capacity.

ADDRESS CHART

Address chart table showing Lot/Parcel # and Street Addresses for Parcel C-5.

PERMIT INFORMATION CHART

Permit information chart table with columns for Subdivision Name, Section/Area, Lot/Parcel No., and other details.

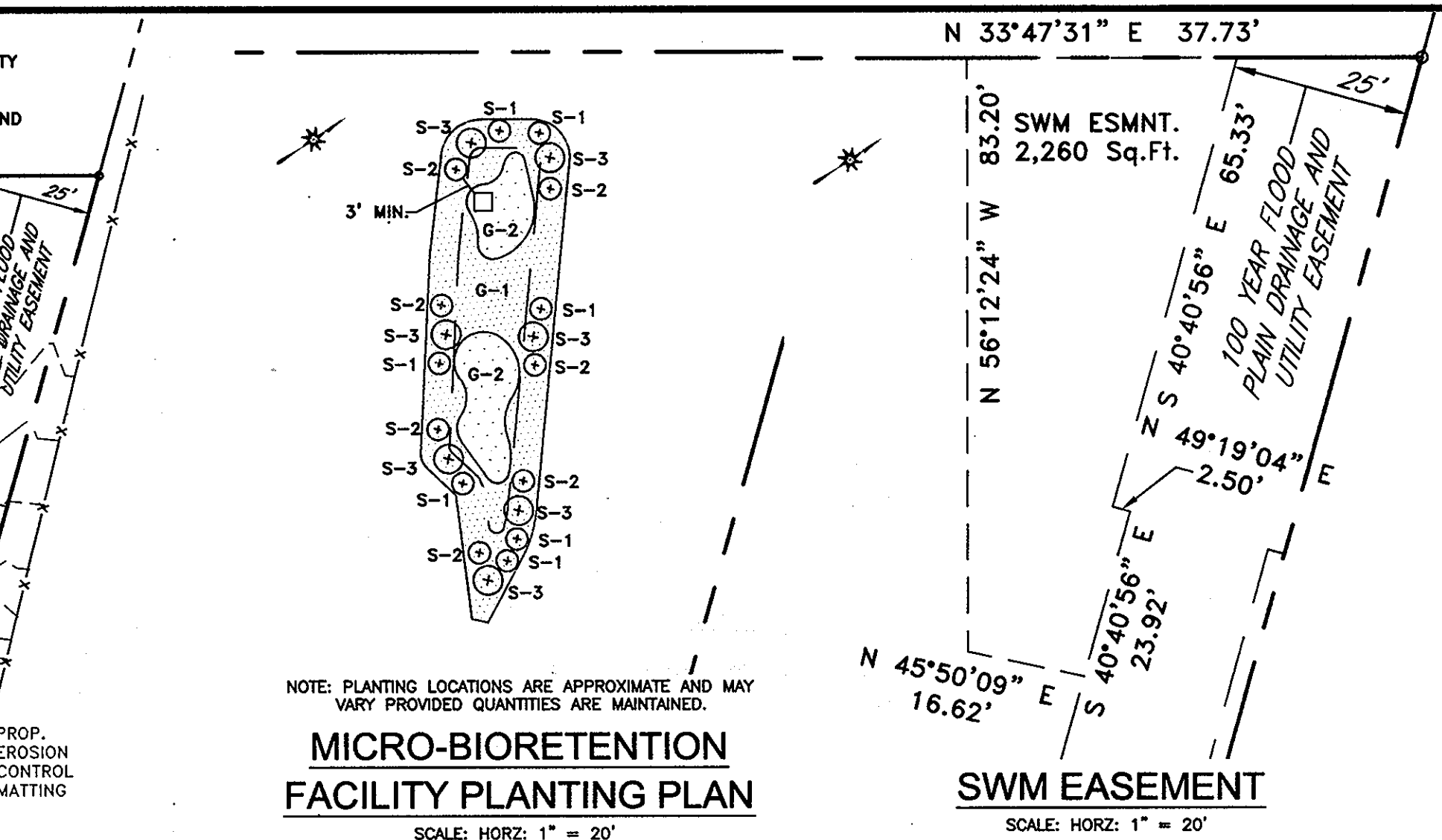
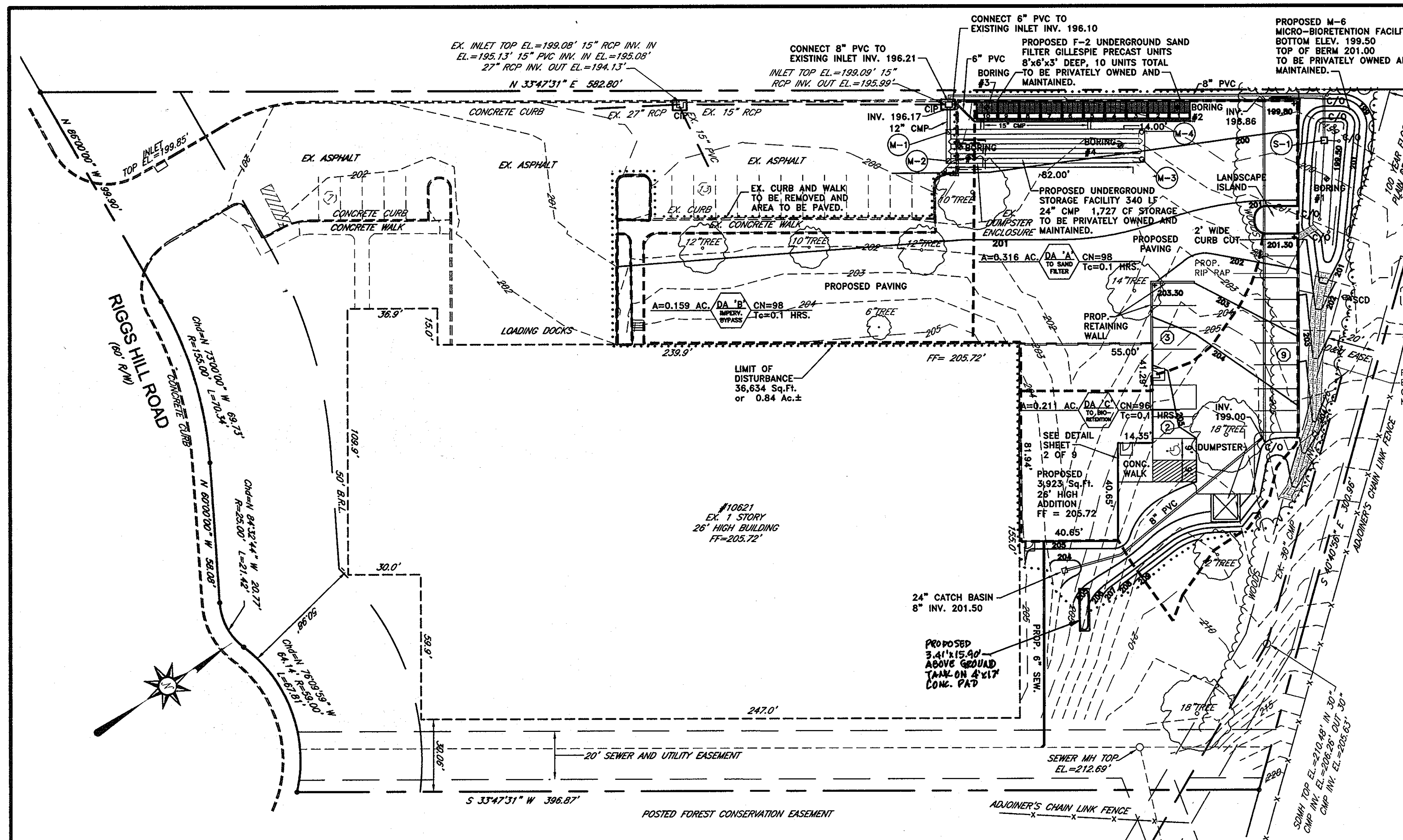
APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chief, Development Engineering Division
Chief, Division of Land Development

Richardson Engineering, LLC
30 East Padonia Road, Suite 500
Timonium, Maryland 21093

OWNERS/DEVELOPER
CORRIDOR NORTH PARCEL C-5
PHASE 2 SEDIMENT AND CONTROL NOTES & DETAILS

DESIGNED BY: DND
DRAWN BY: CND
CHECKED BY: PCR

DATE: 01-17-12
SHEET: 7 OF 9



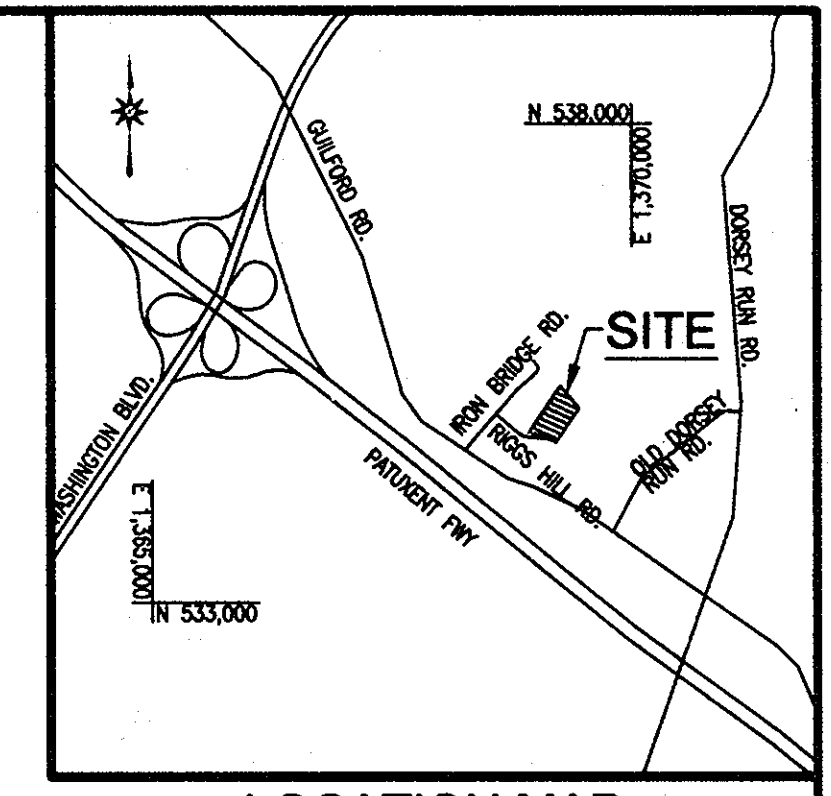
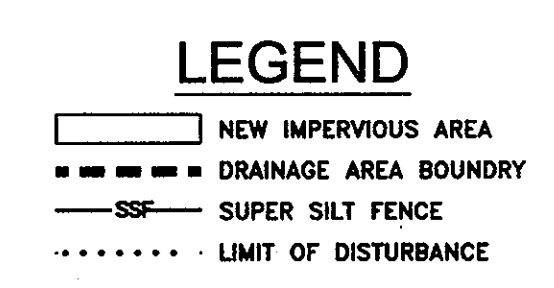
PLANT LIST (FACILITY "A")
SCALE: HORZ: 1" = 20'

SHRUBS

KEY	QUANTITY	BOTANICAL NAME/ COMMON NAME	SIZE	ROOT	REMARKS
S-1	7	Ilex Verticillata Winterberry	36"-48"	Cont.	"Sprite" or Compact (Include 1 male)
S-2	7	Vaccinium Angustifolium Lowbush Blueberry	24"-30"	Cont.	
S-3	7	Ilex Glabra Inkberry	24"-30"	Cont.	

HERBACEOUS

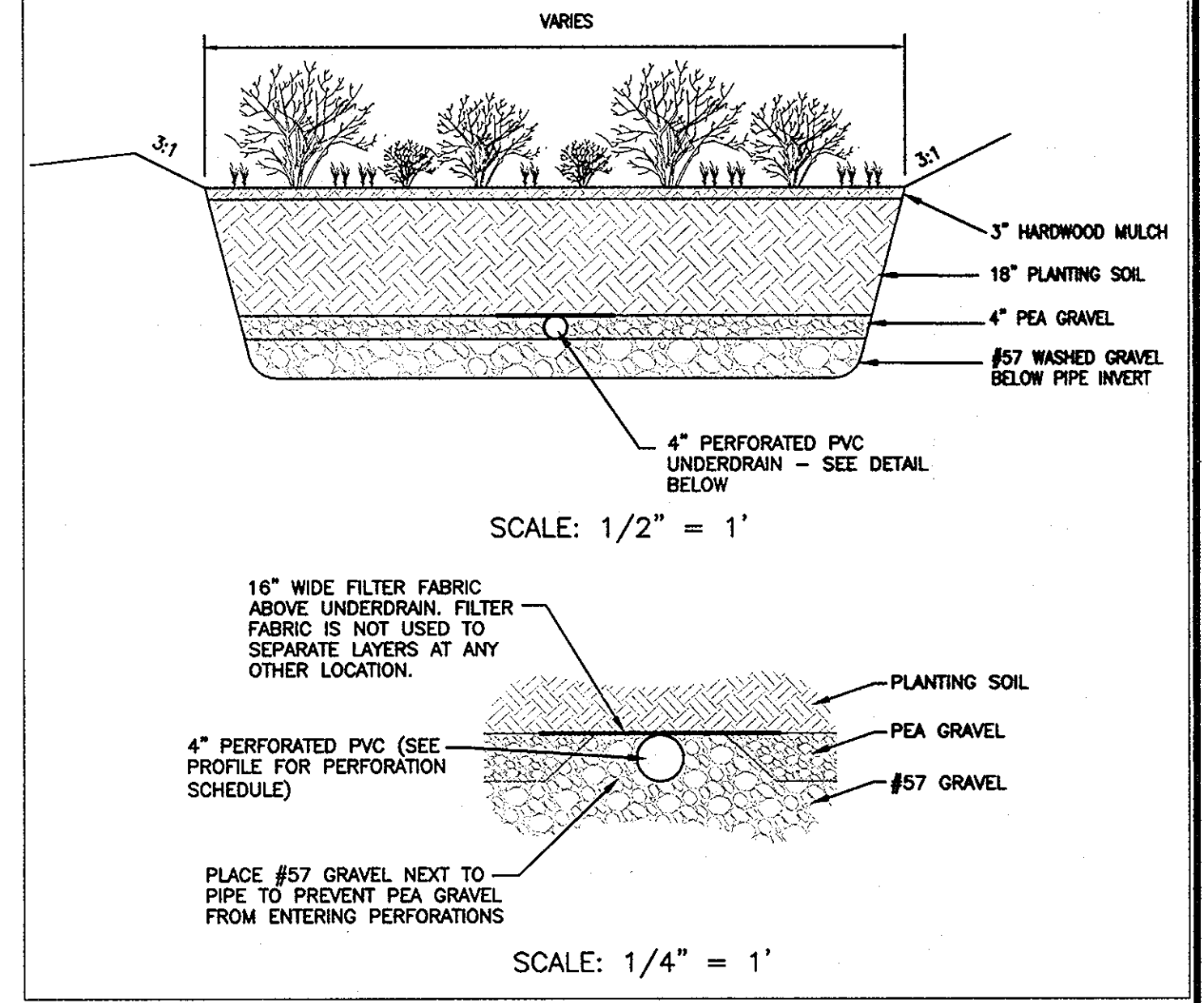
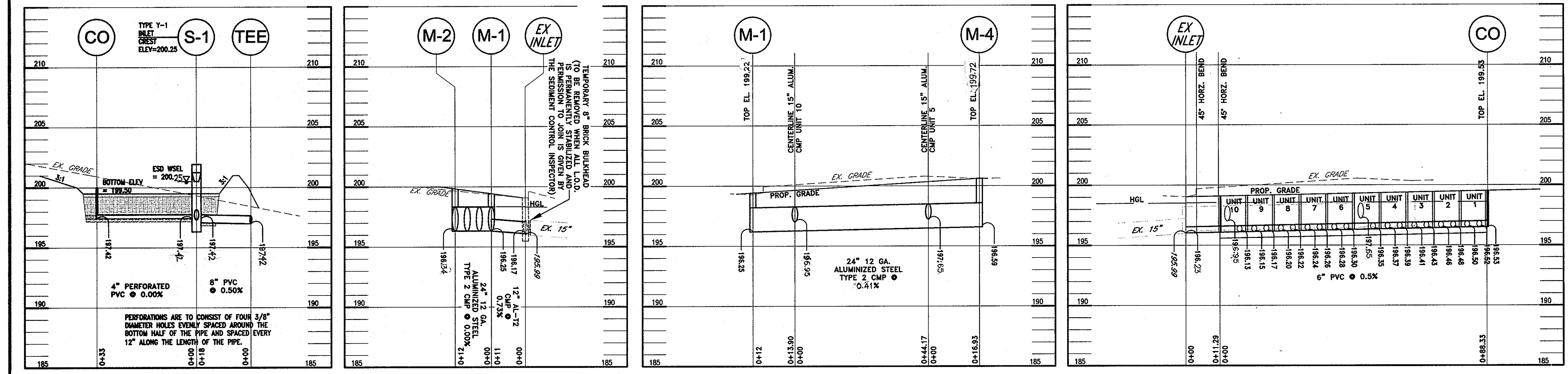
KEY	QUANTITY (gallon containers)	BOTANICAL NAME/ COMMON NAME	SIZE	ROOT	REMARKS
G-1	204	Panicum Virgatum Switchgrass	1 GAL.	Cont.	36" o/c
G-2	56	Scirpus Pungens Three Square Bulrush	1 GAL.	Cont.	36" o/c



- ENVIRONMENTAL NOTES**
- WATERSHED: PATUXENT RIVER
 - THE SITE DOES NOT LIE WITHIN THE CHESAPEAKE BAY CRITICAL AREA.
 - NO FLOODPLAINS OR WETLANDS EXIST ON SITE.
 - THE ENTIRE SITE IS ON HYDROLOGIC SOIL GROUP 'D' SOILS (UHD).
 - PROPOSED IMPROVEMENTS WILL ADD APPROXIMATELY 30,770 SF OF IMPERVIOUS AREA. SINCE THE DISTURBED AREA IS LESS THAN 40,000 SF, A DECLARATION OF INTENT WILL BE SUBMITTED TO OBTAIN AN EXEMPTION FOR FOREST CONSERVATION.

- PHASE 2 SITE ANALYSIS**
- TOTAL AREA: 139,348 S.F. ± or 3.199 AC. ±.
 - DISTURBED AREA: 36,634 S.F. or 0.84 AC.
 - PRESENT ZONING: M-2
 - PROPOSED USE: WAREHOUSE
 - BUILDING COVERAGE: 45,516 S.F. or 1.045 AC. ± (33%).
 - PARKING REQUIRED:
10 OFFICE EMPLOYEES @ 7 PER 10 EMPLOYEES = 7 SPACES
10 WAREHOUSE EMPLOYEES @ 1 PER 2 EMPLOYEES = 5 SPACES
PROVIDED:
(21 STANDARD SPACES, 2 HANDICAPPED SPACES) = 23 SPACES

PLAN
SCALE: 1" = 30'



BIORETENTION SECTION DETAIL
SCALE: AS SHOWN
LIMIT OF DISTURBANCE = 36,634 SF (0.84 AC.)

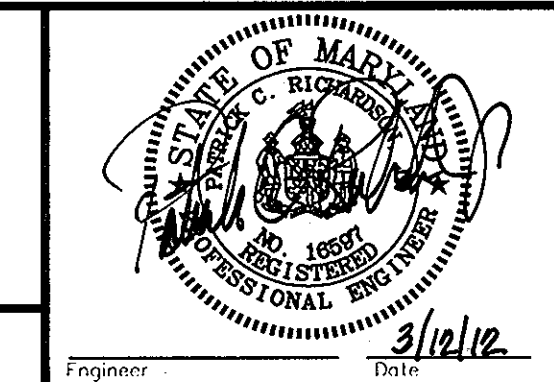
MICRO-BIORETENTION FACILITY PROFILE SCALE: HORZ: 1" = 20' VERT: 1" = 2'
UNDERGROUND STORAGE FACILITY PROFILE SCALE: HORZ: 1" = 20' VERT: 1" = 2'
F-2 UNDERGROUND SAND FILTER PROFILE SCALE: HORZ: 1" = 20' VERT: 1" = 2'

I HEREBY CERTIFY, BY MY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.

ATTEST: PATRICK C. RICHARDSON, JR., P.E. 16297
 REGISTERED PROFESSIONAL ENGINEER
 BUILT NOVEMBER, 2012

ASBUILT

Richardson Engineering, LLC
 30 East Padonia Road, Suite 500
 Timonium, Maryland 21093
 Phone: 410-260-1502 Fax: 443-901-1208



OWNERS/DEVELOPER
 OWNER:
 REALTY INC.
 10621 RIGGS HILL ROAD
 JESSUP, MARYLAND 20794
 DEVELOPER:
 JASPER ENGINES & TRANSMISSIONS
 815 WERNING ROAD
 JASPER, IN. 47546
 PHONE: 800-327-7455

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division
 Chief, Division of Land Development
 Date: 3-28-12
 Date: 4-3-12
 Date: 4/23/12

ADDRESS CHART

Lot/Parcel #	Street Addresses
PARCEL C-5	10621 RIGGS HILL ROAD

PERMIT INFORMATION CHART

Subdivision Name	Section/Area	Lot/Parcel No.
CORRIDOR NORTH PARCEL C-5	N.A.	PARCEL C-5
PLAT #	Grid	Zoning
6629	# 7	M-2
Tax Map No.	Election District	Census Tract
48	6	6069.01
Water Code	Sewer Code	

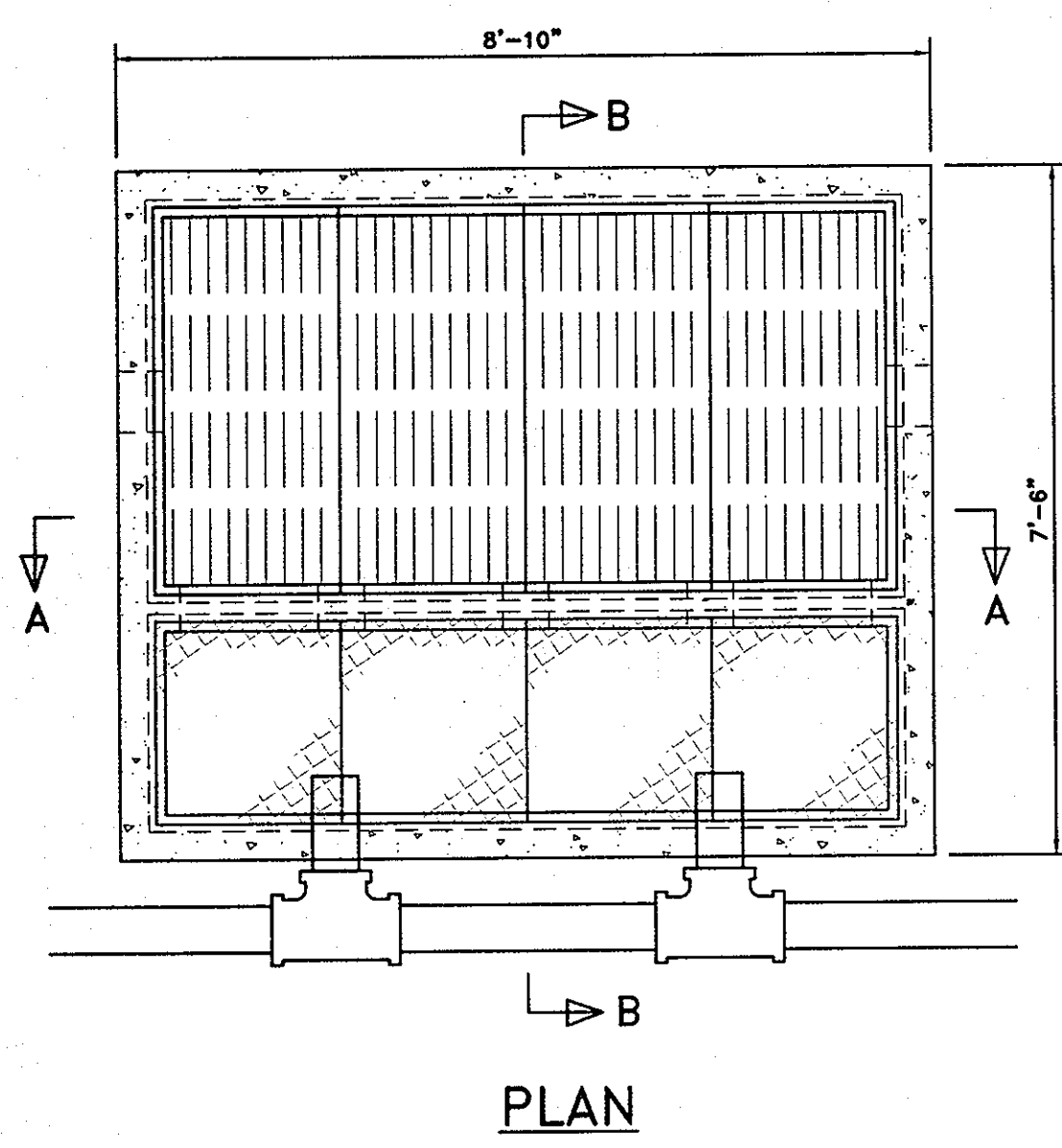
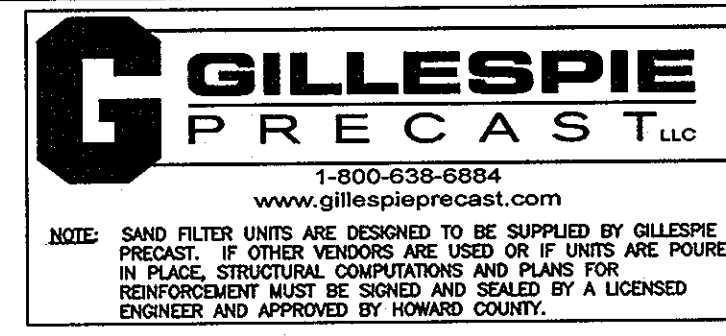
DESIGNED BY: DND SCALE AS SHOWN
DRAWN BY: CND DEED REF. 13200/248
CHECKED BY: PCR PARCEL C-5

DATE: 7/10/12 ABOVE GROUND PROPANE TANK
DATE: 7/10/12 REVISION
DATE: 01-17-12 DRAWING COMPLETED

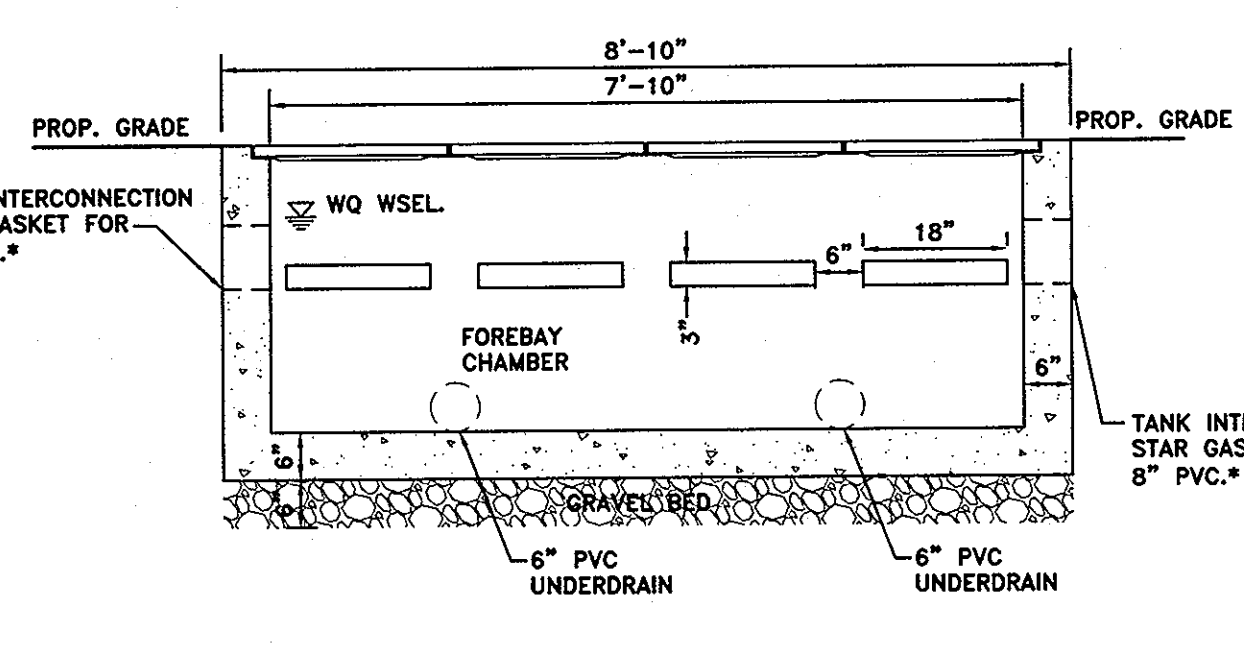
DESIGNED BY: DND SCALE AS SHOWN
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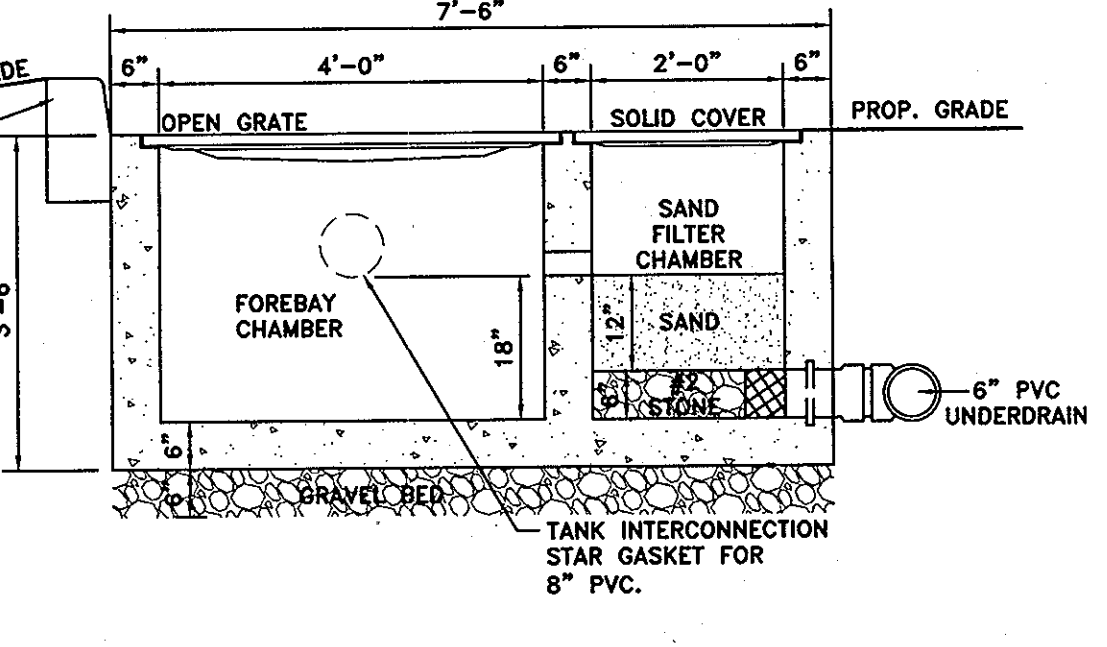
NO. 8
OF 9



NOTE:
FOR INVERT AND GRADE ELEVATIONS
REFER TO "F-2 UNDERGROUND SAND
FILTER PROFILE" ON SHEET 8 OF 9.

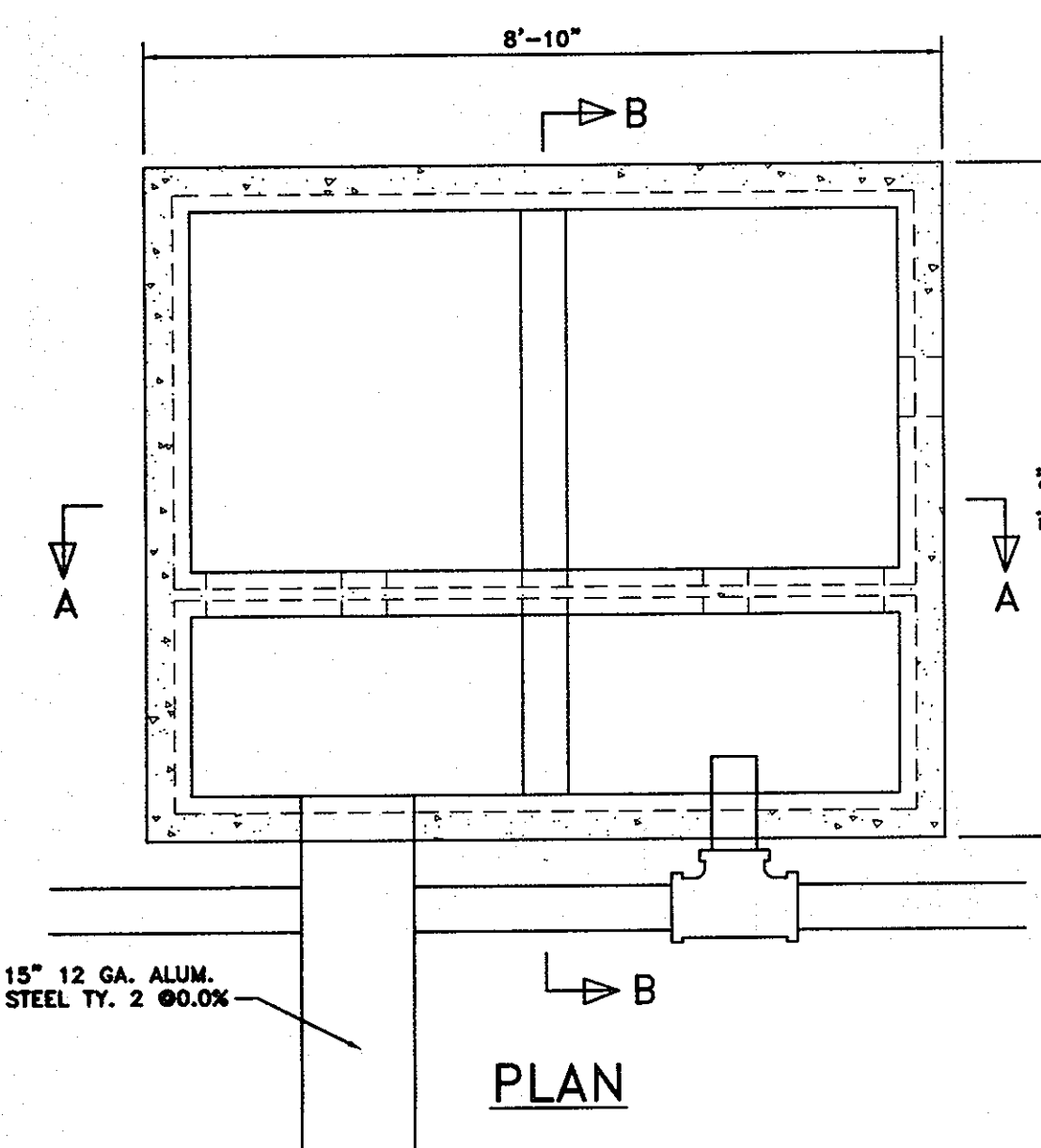


*NOTE:
UNIT 1 SHALL ONLY HAVE (1) TANK
INTERCONNECTION; ALONG SIDE OF UNIT 2.

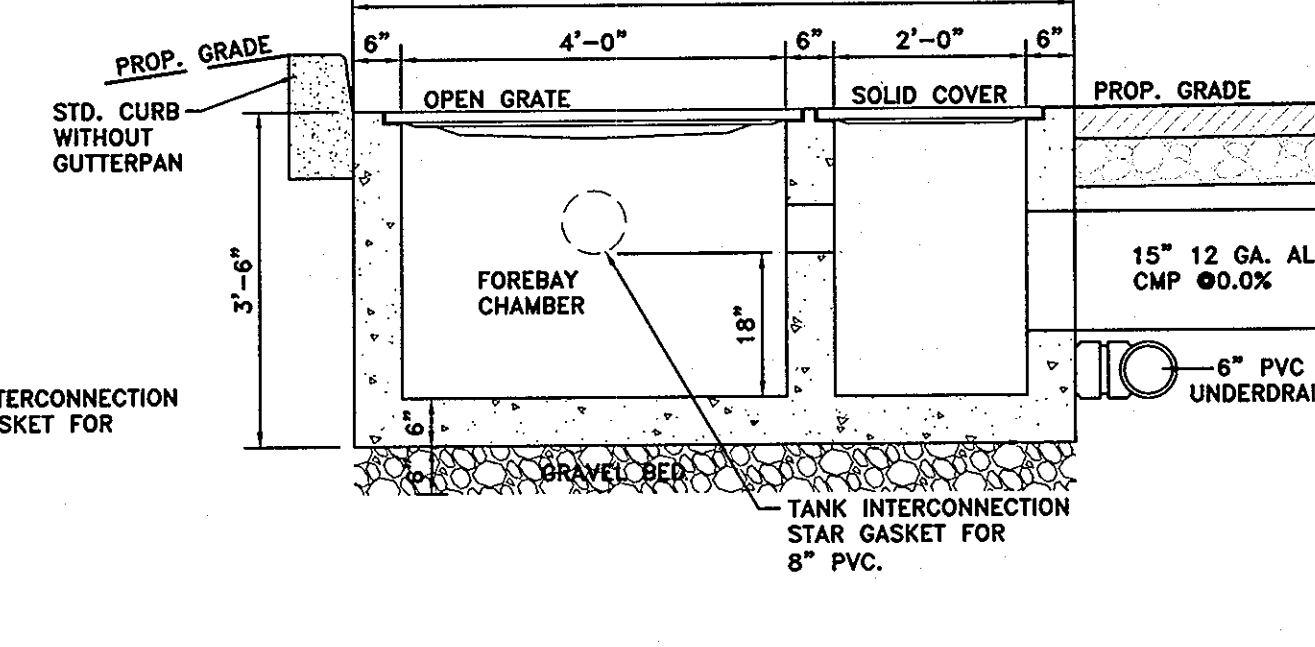
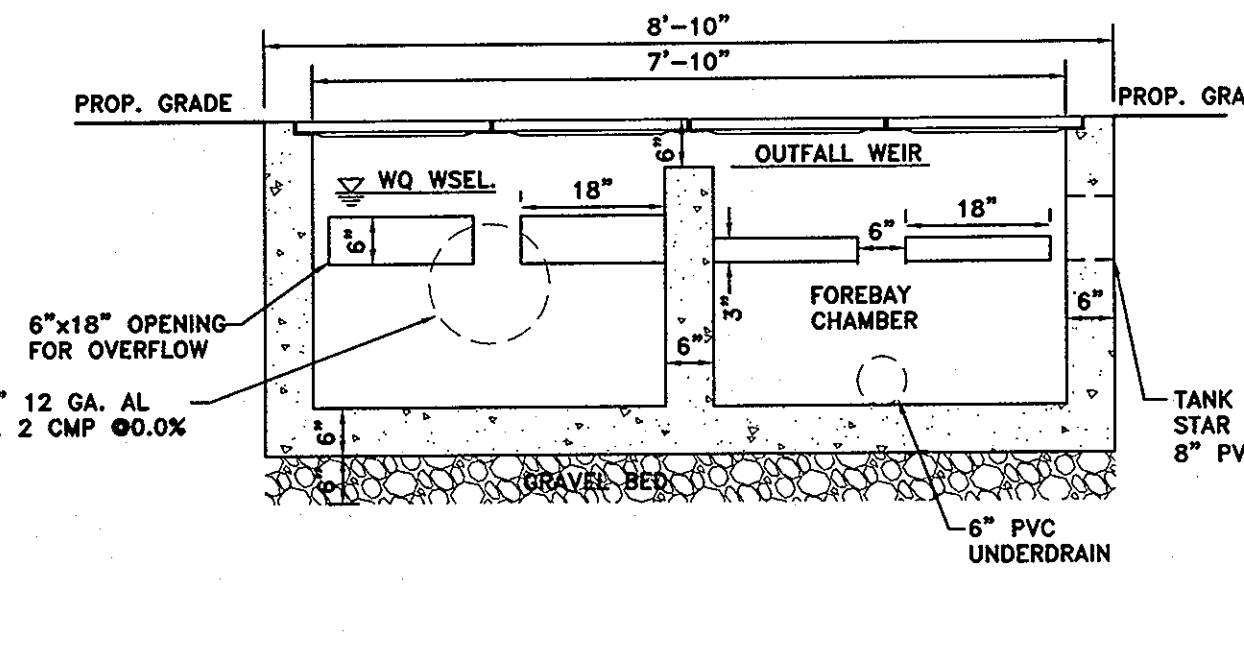


TYPICAL DELAWARE STYLE
UNDERGROUND SAND FILTER (F-2)

SCALE: 1/2" = 1'

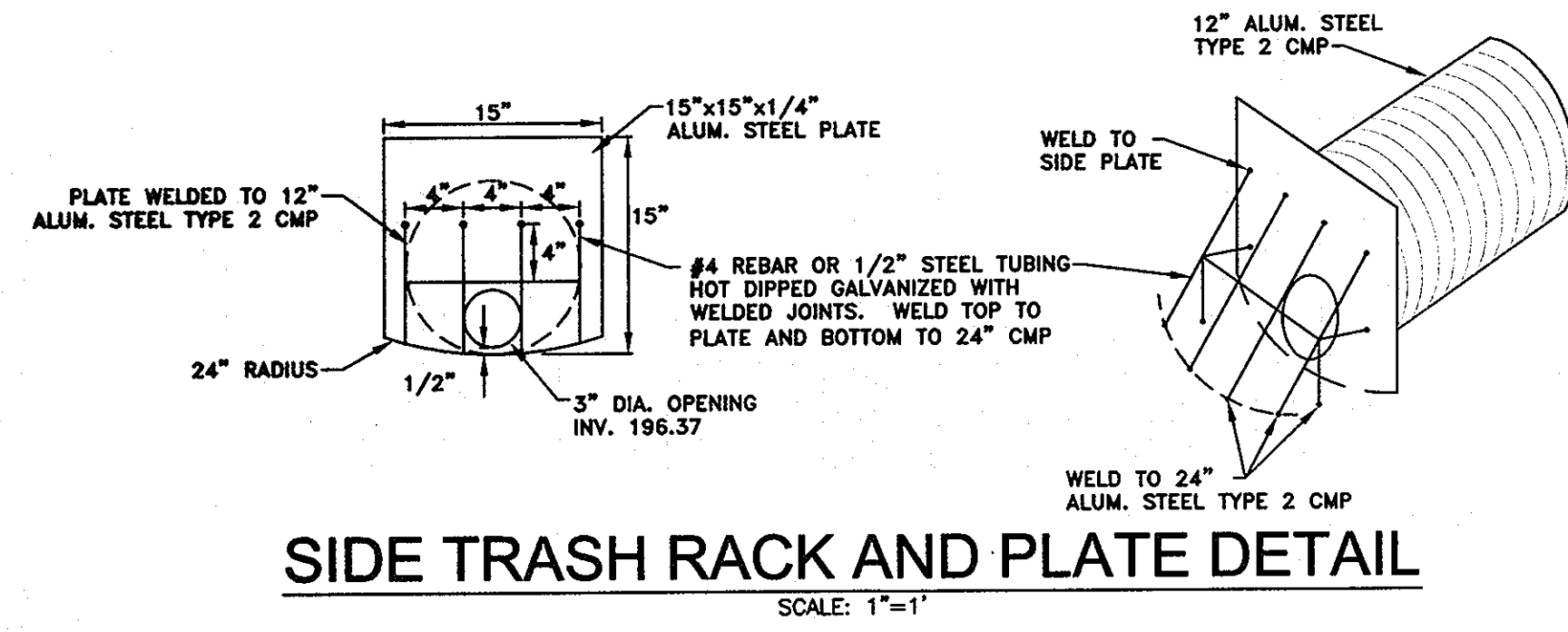


NOTE:
FOR INVERT AND GRADE ELEVATIONS
REFER TO "F-2 UNDERGROUND SAND
FILTER PROFILE" ON SHEET 8 OF 9.



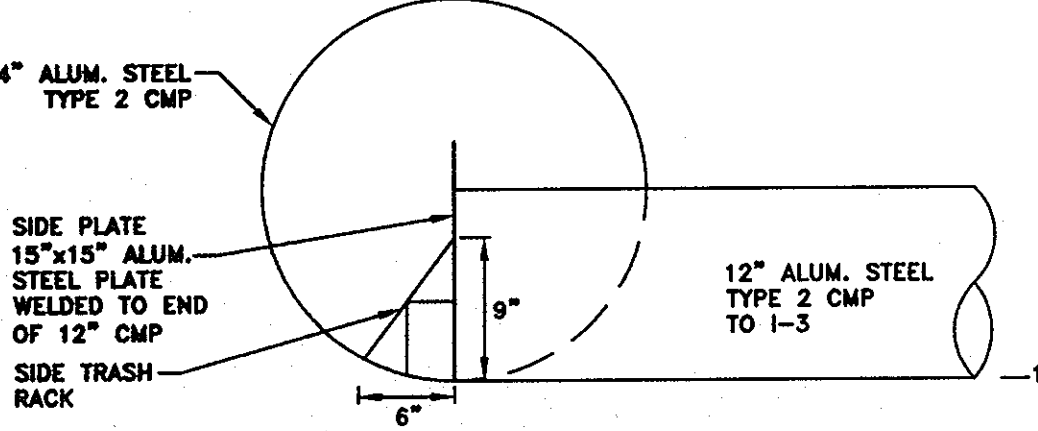
MODIFIED DELAWARE STYLE
UNDERGROUND SAND FILTER (F-2)
FOR UNITS 5 AND 10

SCALE: 1/2" = 1'



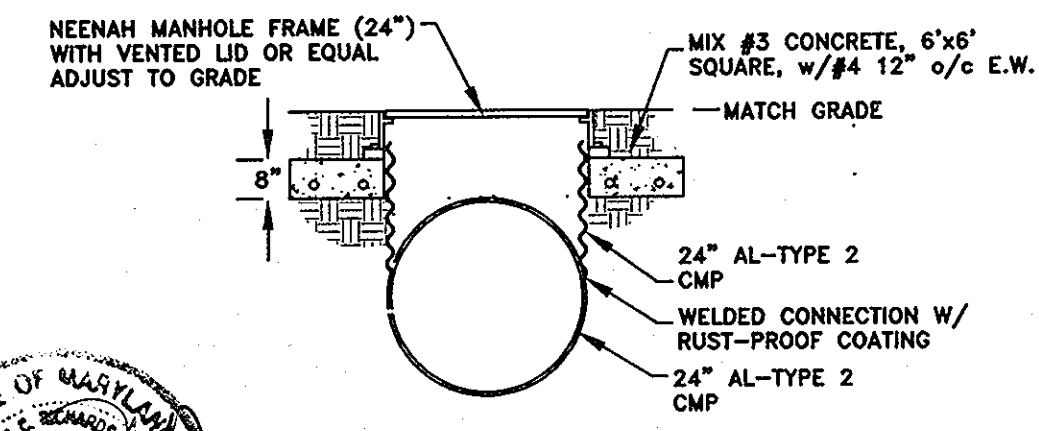
SIDE TRASH RACK AND PLATE DETAIL

SCALE: 1" = 1'



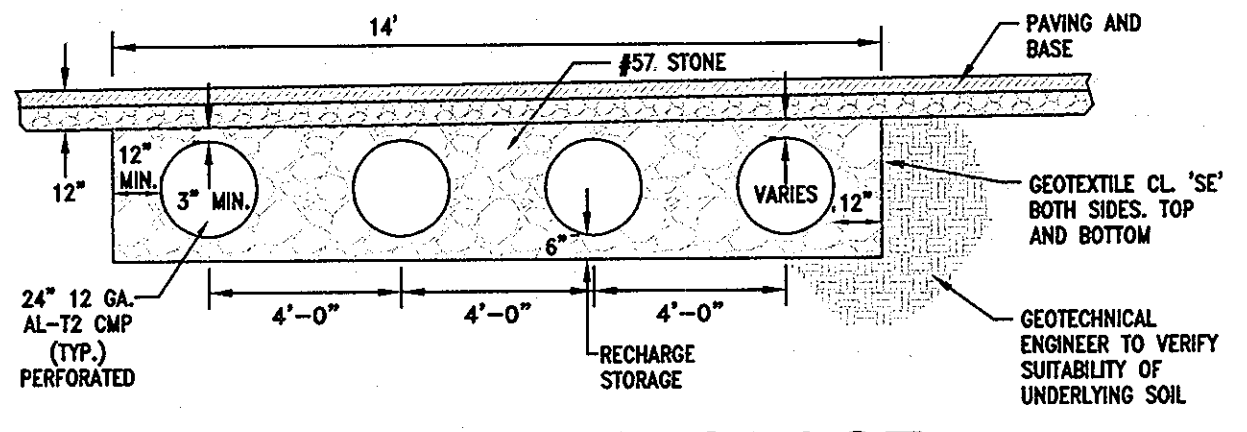
RELEASE STRUCTURE
DETAIL

SCALE: 1" = 1'



ACCESS DETAIL
(M1, 2, 3, 4)

SCALE: 1/2" = 1'



UNDERGROUND STORAGE
SECTION DETAIL

SCALE: 1" = 4'

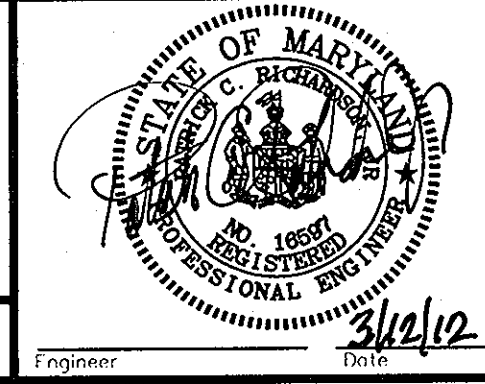
NOTE:
A DESIGN MANUAL WAIVER TO VOLUME 1, SECTIONS 5.2.5.E.1.b, 5.2.5.E.1.i AND 5.2.5.E.1.k
HAS BEEN APPROVED FOR SDP-86-156 AS PER LETTER DATED JANUARY 12, 2012 FROM HOWARD
COUNTY DEPARTMENT OF PLANNING AND ZONING.

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
NUMBER 16597, EXPIRATION DATE: 08-15-2019

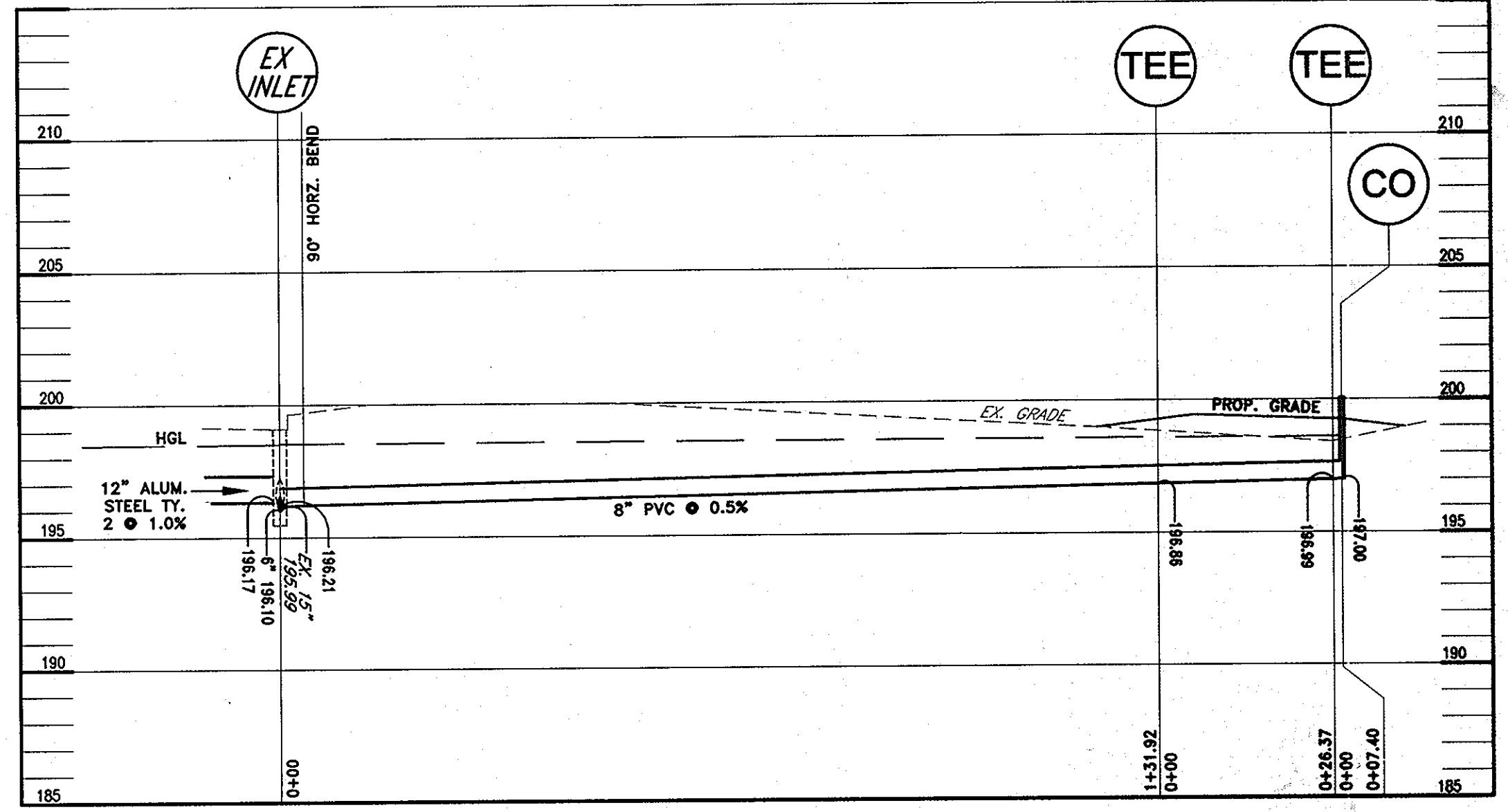
Richardson Engineering, LLC

AS-BUILT

30 East Padonia Road, Suite 500
Timonium, Maryland 21093
Phone: 410-560-1502 Fax: 443-901-1208



OWNERS/DEVELOPER
OWNER:
REALTY INC.
10621 RIGGS HILL ROAD
JESSUP, MARYLAND 20794
DEVELOPER:
JASPER ENGINES & TRANSMISSIONS
815 WERNING ROAD
JASPER, IN. 47546
PHONE: 800-327-7455



8" UNDERDRAIN PROFILE

SCALE: HORIZ: 1" = 20'
VERT: 1" = 2'

OPERATION AND MAINTENANCE SCHEDULE
FOR MICRO-BIORETENTION (M-6)

- ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUME II, TABLE A.4.1 AND 2.
- SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, TREATMENT OF ALL DISEASED TREES AND SHRUBS AND REPLACEMENT OF ALL DEFICIENT STAKES AND WIRES.
- MULCH SHALL BE INSPECTED EACH SPRING. REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS.
- SOIL EROSION-TO BE ADDRESSED ON-AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.

OPERATION AND MAINTENANCE SCHEDULE FOR
PRIVATELY OWNED AND MAINTAINED
UNDERGROUND FACILITIES

- THE UNDERGROUND STORMWATER MANAGEMENT FACILITY IS PRIVATELY OWNED AND IT SHALL BE THE RESPONSIBILITY OF THE OWNER TO PERIODICALLY INSPECT AND CLEAN THE FACILITY TO MAINTAIN ITS OPERATION AND FUNCTION.
- THE UNDERGROUND STORMWATER MANAGEMENT FACILITY SHALL BE INSPECTED YEARLY AT A MINIMUM AND AFTER ESPECIALLY SEVERE STORM EVENTS.
- WHEN SEDIMENT ACCUMULATION OF MORE THAN 2" IS OBSERVED OR ANY DEBRIS THAT MIGHT OBSTRUCT THE OUTFALL IS OBSERVED, THE FACILITY SHALL BE CLEANED.
- THE FACILITY SHALL BE CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS. THE OWNER SHALL CONTACT THE APPROPRIATE REGULATORY AGENCIES NOTIFYING THEM OF THE SPILL AND CLEANUP OPERATION.
- THE SEDIMENT AND DEBRIS SHALL BE REMOVED FROM THE UNDERGROUND STORMWATER MANAGEMENT FACILITY BY VACUUM TRUCK OR OTHER MANUAL MEANS. THE OWNER SHALL FOLLOW PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIAL AND LIQUID.
- THE INLET AND OUTLET PIPES SHALL BE CHECKED FOR ANY OBSTRUCTIONS AT LEAST ONCE EVERY SIX (6) MONTHS. IF OBSTRUCTIONS ARE FOUND, THE OWNER SHALL HAVE THEM REMOVED AND PROPERLY DISPOSED OF.

OPERATION AND MAINTENANCE SCHEDULE FOR
PRIVATELY OWNED AND MAINTAINED UNDERGROUND
STORMWATER FILTRATION SYSTEMS (F-2 AND F-3)

- THE SEDIMENT CHAMBER OUTLET DEVICES SHALL BE CLEANED AND/OR REPAIRED WHEN DRAW-DOWN TIMES WITHIN THE CHAMBER EXCEED 36 HOURS.
- DEBRIS AND LITTER SHALL BE REMOVED AS NECESSARY TO INSURE PROPER OPERATION OF THE SYSTEM.
- SEDIMENT SHALL BE CLEANED OUT OF THE SEDIMENTATION CHAMBER WHEN IT ACCUMULATES TO A DEPTH OF 6 INCHES. VEGETATION WITHIN THE SEDIMENT CHAMBER SHALL BE LIMITED TO A HEIGHT OF 18 INCHES.
- WHEN WATER PONDS ON THE SURFACE OF THE FILTER BED FOR MORE THAN 72 HOURS, THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REPLACED WITH FRESH MATERIAL. PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS AND LIQUID MUST BE FOLLOWED BY THE OWNER.
- A LOG BOOK SHALL BE MAINTAINED TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
- THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
- ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION SYSTEM HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.

MAINTENANCE AND INSPECTION SCHEDULE

THE FOLLOWING MAINTENANCE ITEMS SHOULD BE PERFORMED IN THE SPRING AND THE FALL AND AFTER MAJOR RAINFALL EVENTS:

- REMOVE LITTER AND DEBRIS.
- REPLACE MULCH IN BARE AREAS IN ACCORDANCE WITH SPECIFICATIONS.
- REPAIR ERODED AREAS.
- REMOVE INVASIVE PLANT SPECIES.
- TREAT DISEASED VEGETATION AS NEEDED, A LANDSCAPE PROFESSIONAL SHOULD BE CONSULTED IF TREES NEED TO BE REPLACED OR IF VEGETATIVE COVER CANNOT BE MAINTAINED.
- INSPECT CLEANOUTS. NO WATER SHOULD BE VISIBLE 72 HOURS AFTER RAINFALLS. IF WATER IS VISIBLE, UNDERDRAIN MAY BE CLOGGED AND SHOULD BE CLEANED OUT WITH STANDARD PLUMBING EQUIPMENT.
- IF WATER IS STANDING IN THE FACILITY FOR SIGNIFICANTLY LONGER THAN 72 HOURS AND THERE IS NO WATER VISIBLE IN THE CLEANOUTS, THE FILTER MATERIAL MAY BE CLOGGED. THE AREA MUST BE EXCAVATED AND REBUILT IN ACCORDANCE WITH THESE PLANS.

ADDRESS CHART	
Lot/Parcel #	Street Addresses
PARCEL C-5	10621 RIGGS HILL ROAD

PERMIT INFORMATION CHART			
Subdivision Name	Section/Area	Lot/Parcel No.	
CORRIDOR NORTH PARCEL C-5	N.A.	PARCEL C-5	
PLAT #	Grid #	Zoning	Tax Map No.
6629	7	M-2	48
Water Code	6629	Election District	6
		Census Tract	6069.01
		Sewer Code	

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Date: 3-28-12
Date: 4-12-12
Date: 4/23/12

I HEREBY CERTIFY, BY MY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS
PATRICK C. RICHARDSON, JR., PE 16597
AS BUILT NOVEMBER, 2012.

CORRIDOR NORTH PARCEL C-5		SWM NOTES & DETAILS		DRAWING COMPLETED	
DESIGNED BY:	SCALE	TAX MAP	A.D.C. MAP	JOB #	SHEET
DND	AS SHOWN	48	F-7 & 8	11011	9
DRAWN BY:	DEED REF.	GRID	PLAT REF.	FILES	NO.
CND		7		D:\JOS\2011\11011	9
CHECKED BY:		PARCEL		DRAWINGS\11011\mm1.dwg	OF
PCR	13200/248	C-5			9