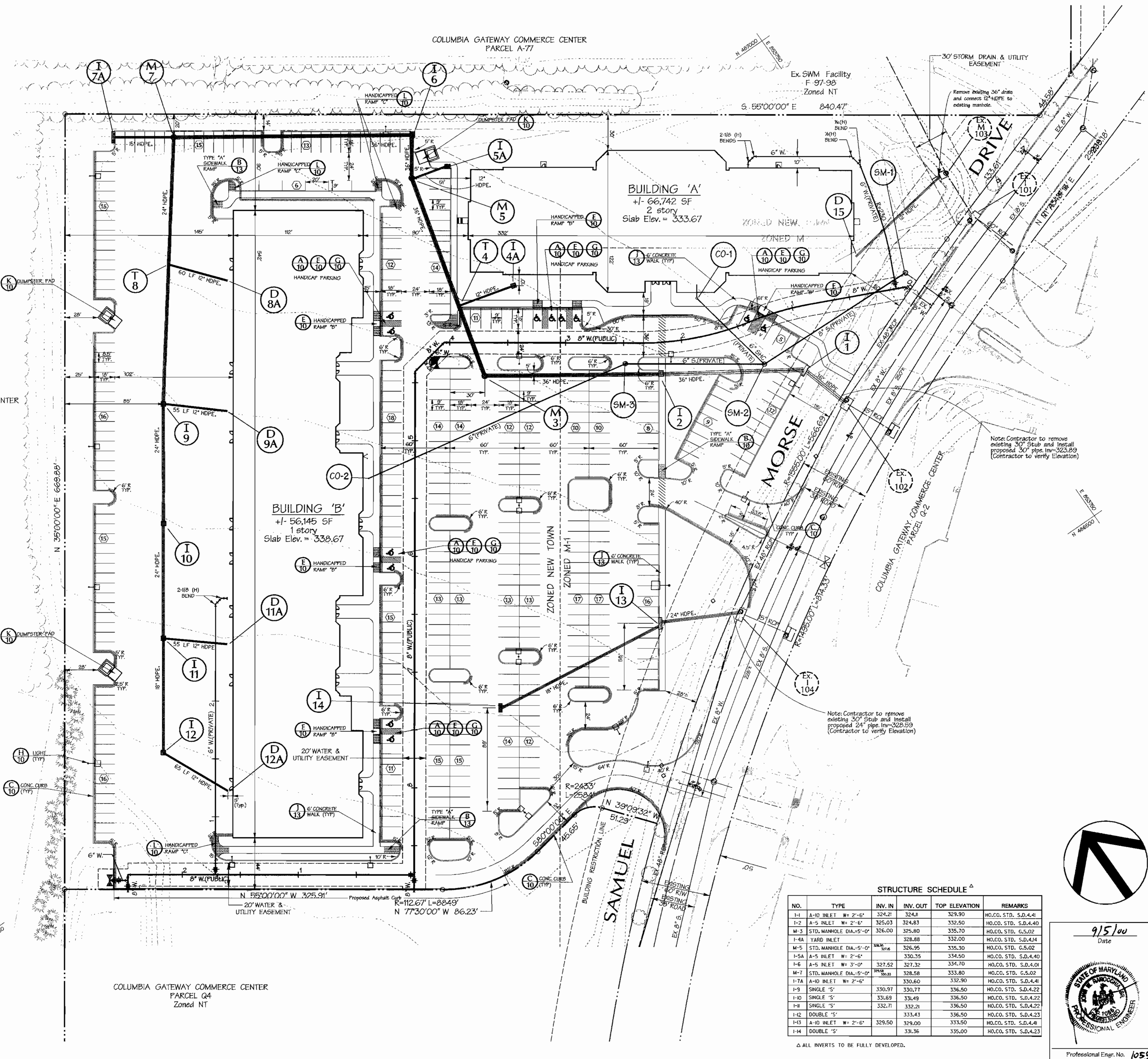


- Legend**
- SYMBOL DESCRIPTION
 - DRL BUILDING RESTRICTION LINE
 - PARKING COUNT
 - VAN HANDICAPPED PARKING
 - HANDICAPPED PARKING
 - EXISTING 10' CONTOUR
 - EXISTING 2' CONTOURS
 - SERVICE PAD & DUMPSTOCK BIN
 - REVERSE CURB & GUTTER
 - DEPRESSED CURB
 - STANDARD CURB & GUTTER
 - STORM DRAIN STRUCTURE LABEL
 - EXISTING SEWER
 - EXISTING STORM DRAIN
 - EXISTING WATER
 - PROPOSED STORM DRAIN
 - PROPOSED SEWER
 - PROPOSED WATER
 - PROPOSED LIGHT



COLUMBIA GATEWAY COMMERCE CENTER
PARCEL 'U'

COLUMBIA GATEWAY COMMERCE CENTER
PARCEL Q4
Zoned NT

NOTE: WATER METERS TO BE LOCATED
WITHIN EACH BUILDING

Note: Contractor to remove
existing 30" Stub and install
proposed 30" pipe Inv=323.59
(Contractor to verify Elevation)

Note: Contractor to remove
existing 30" Stub and install
proposed 24" pipe Inv=325.59
(Contractor to verify Elevation)

**APPROVED
PLANNING BOARD
of HOWARD COUNTY**
DATE JUNE 29, 2000

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

John Dammann 9/15/00
CHIEF, DEVELOPMENT ENGINEERING DIVISION MJK DATE

Linda Hamita 9/15/00
CHIEF, DIVISION OF LAND DEVELOPMENT DATE R

David S. Butler 9/15/00
DIRECTOR DATE

Date	No.	Revision Description

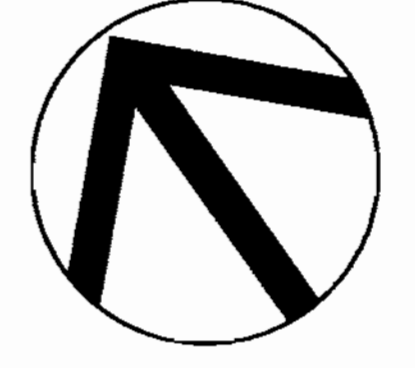
**Columbia Gateway
Parcel Q3**

OWNER: The Howard Research and Development Corporation
200 East Pennsylvania Avenue
Fusion, Maryland 21086
(410) 296-3353
Fax 296-4705

DEVELOPER: AAK III, LLC
8805 COLUMBIA 100 PKWY
SUITE 101
COLUMBIA, MD 21045

STRUCTURE SCHEDULE

NO.	TYPE	INV. IN	INV. OUT	TOP ELEVATION	REMARKS
I-1	A-10 INLET W= 2'-6"	324.21	324.8	329.90	HO.CO. STD. S.D.4.41
I-2	A-5 INLET W= 2'-6"	325.03	324.83	332.50	HO.CO. STD. S.D.4.40
M-3	STD. MANHOLE DIA.=5'-0"	326.00	325.80	335.70	HO.CO. STD. G.5.02
I-4A	YARD INLET	328.88	328.88	332.00	HO.CO. STD. S.D.4.14
M-5	STD. MANHOLE DIA.=5'-0"	326.95	326.95	335.30	HO.CO. STD. G.5.02
I-5A	A-5 INLET W= 2'-6"	330.75	330.75	334.50	HO.CO. STD. S.D.4.40
I-6	A-5 INLET W= 3'-0"	327.52	327.32	334.70	HO.CO. STD. S.D.4.01
M-7	STD. MANHOLE DIA.=5'-0"	328.58	328.58	333.80	HO.CO. STD. G.5.02
I-7A	A-10 INLET W= 2'-6"	330.60	330.60	332.90	HO.CO. STD. S.D.4.41
I-9	SINGLE 'S'	330.97	330.77	336.50	HO.CO. STD. S.D.4.22
I-10	SINGLE 'S'	331.69	331.49	336.50	HO.CO. STD. S.D.4.22
I-8	SINGLE 'S'	332.71	332.21	336.50	HO.CO. STD. S.D.4.22
I-12	DOUBLE 'S'	333.43	333.43	336.50	HO.CO. STD. S.D.4.23
I-13	A-10 INLET W= 2'-6"	329.50	329.00	333.50	HO.CO. STD. S.D.4.41
I-14	DOUBLE 'S'	331.36	331.36	335.00	HO.CO. STD. S.D.4.23



9/15/00
Date

Professional Engr. No. 10551

DMW
Darr-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Fusion, Maryland 21086
(410) 296-3353
Fax 296-4705

A Team of Land Planners,
Landscape Architects,
Engineers, Surveyors &
Environmental Professionals

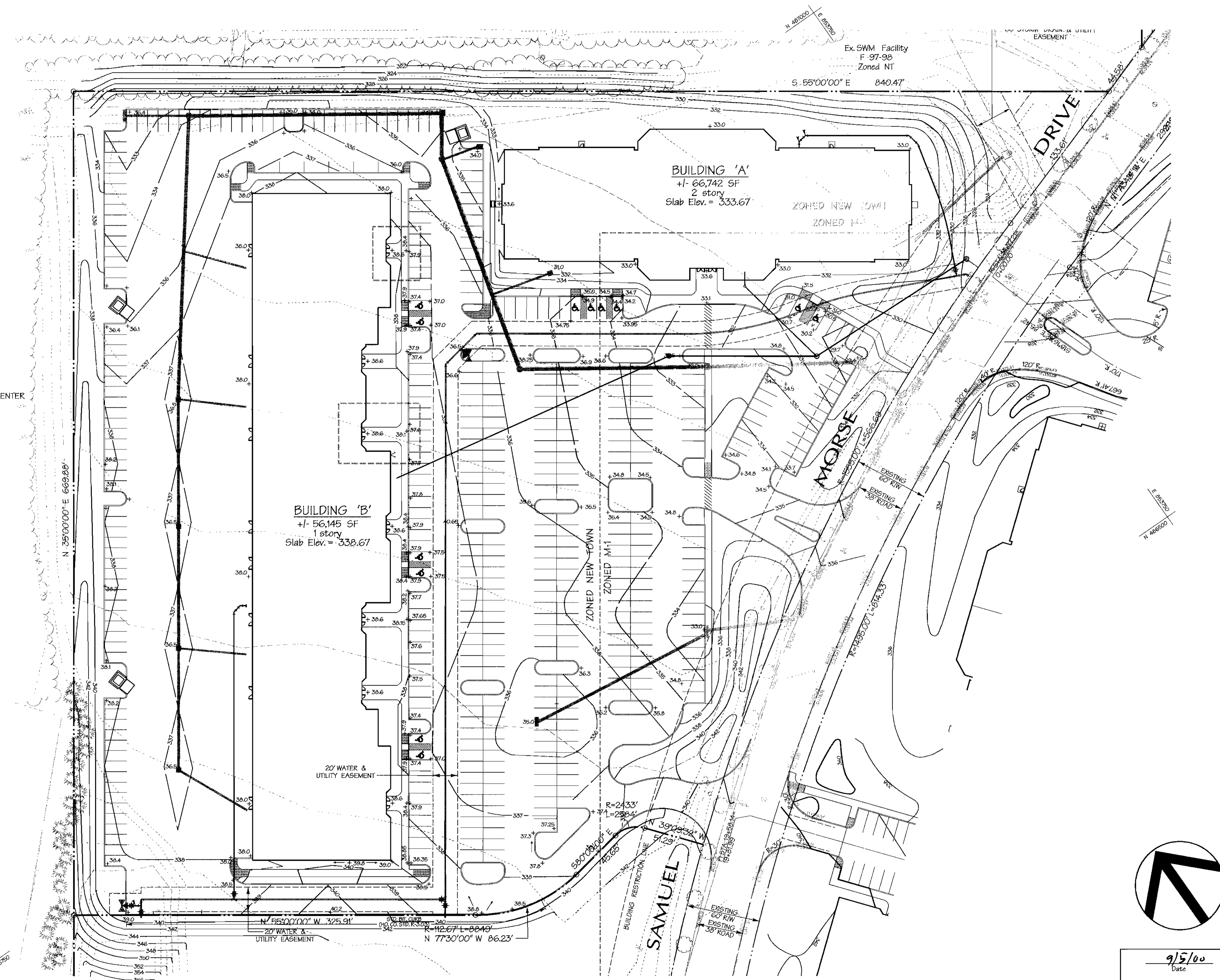
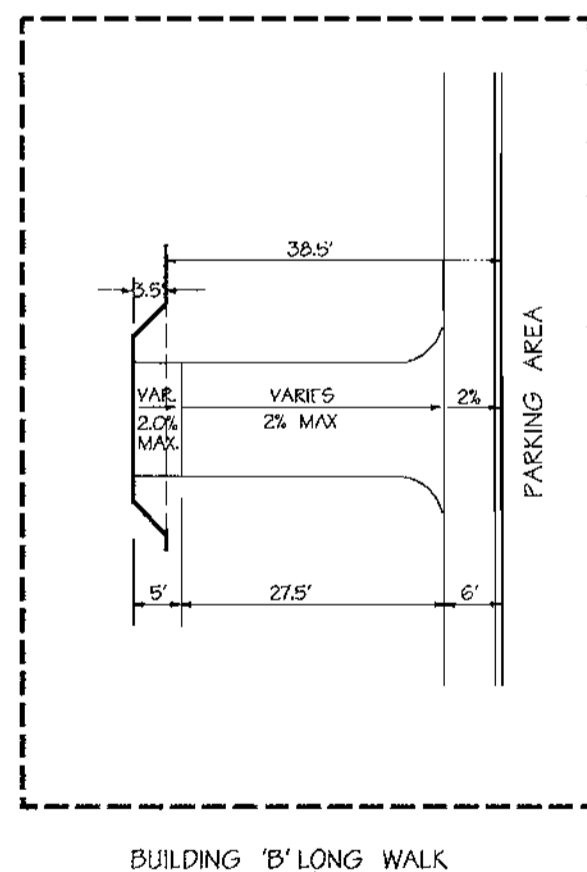
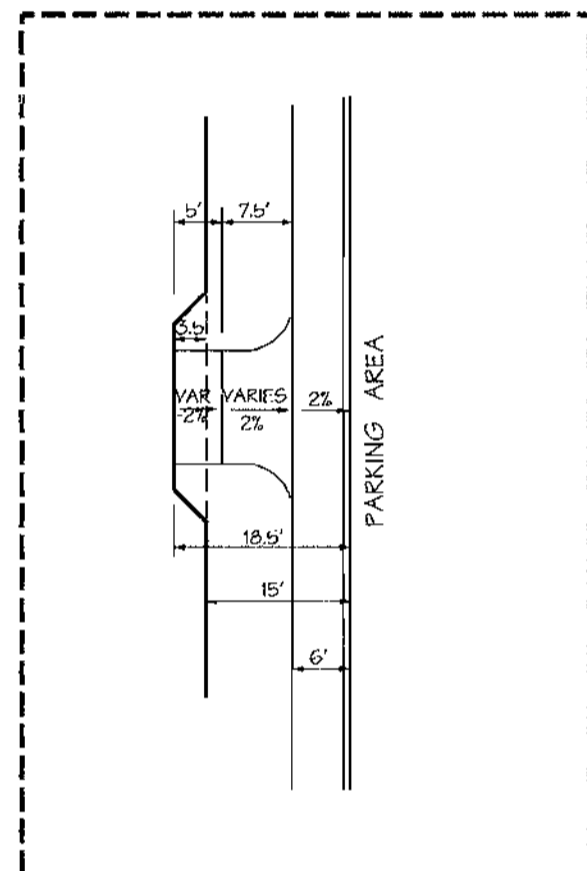
SUBDIVISION NAME: COLUMBIA GATEWAY SECTION AREA: LOT/PARCEL: Q3
PLAT OR L.O. NO.: 13667 BLOCK: 12 & 7 ZONE: M-1 TAXING MAP: 42-43 DISTRICT: G CENSUS TRACT: 6067.03
WATER CODE: E06 SEWER CODE: 4900000

TITLE: **Site Plan**

Des By: MM Scale: 1"=40' Proj. No.: 00021.A
Dwn By: BKC Date: 8-30-00
Chk By: Approved 2 OF 12

Legend

- SYMBOL DESCRIPTION
- BRL BUILDING RESTRICTION LINE
- ⊙ PARKING COUNT
- ⊕ VAN HANDICAPPED PARKING
- ⊖ HANDICAPPED PARKING
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOURS
- PROPOSED CONTOURS
- DEPRESSED CURB
- STANDARD CURB & GUTTER
- EXISTING SEWER
- EXISTING STORM DRAIN
- EXISTING WATER
- PROPOSED STORM DRAIN
- PROPOSED SEWER
- PROPOSED WATER
- SERVICE PAD & DUMPSTER BIN



APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE JUNE 27, 2000

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Chris Dammann 9/15/00
CHIEF, DEVELOPMENT ENGINEERING DIVISION MK DATE

Janet Hamilton 9/14/00
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

James J. Butler 9/18/00
DIRECTOR DATE

Date	No.	Revision Description

**Columbia Gateway
Parcel Q3**

OWNER: The Howard Research and Development Corporation
10275 Little Patuxent Parkway
Columbia, Maryland 21044

DEVELOPER: AAK III, LLC
8905 COLUMBIA 100 PKWY
SUITE 101
COLUMBIA, MD 21045

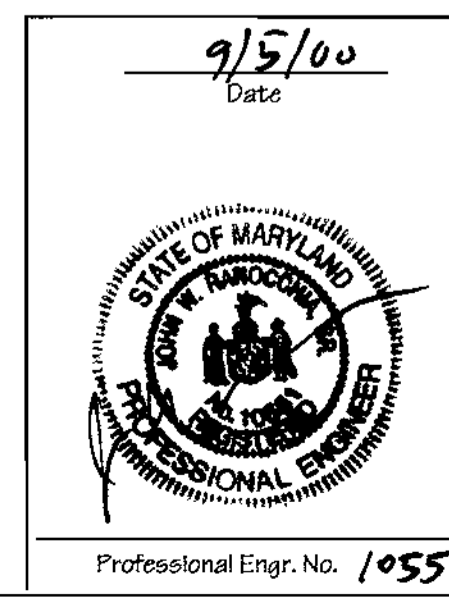
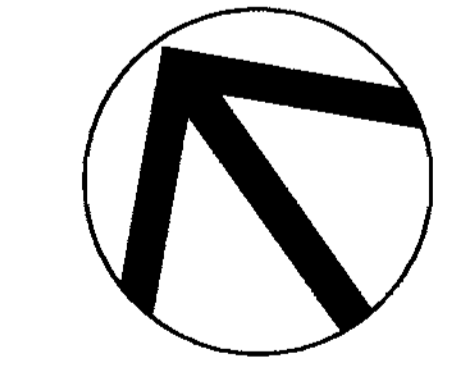
DMW
Duff McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4705

A Team of Land Planners,
Landscape Architects,
Engineers, Surveyors &
Environmental Professionals

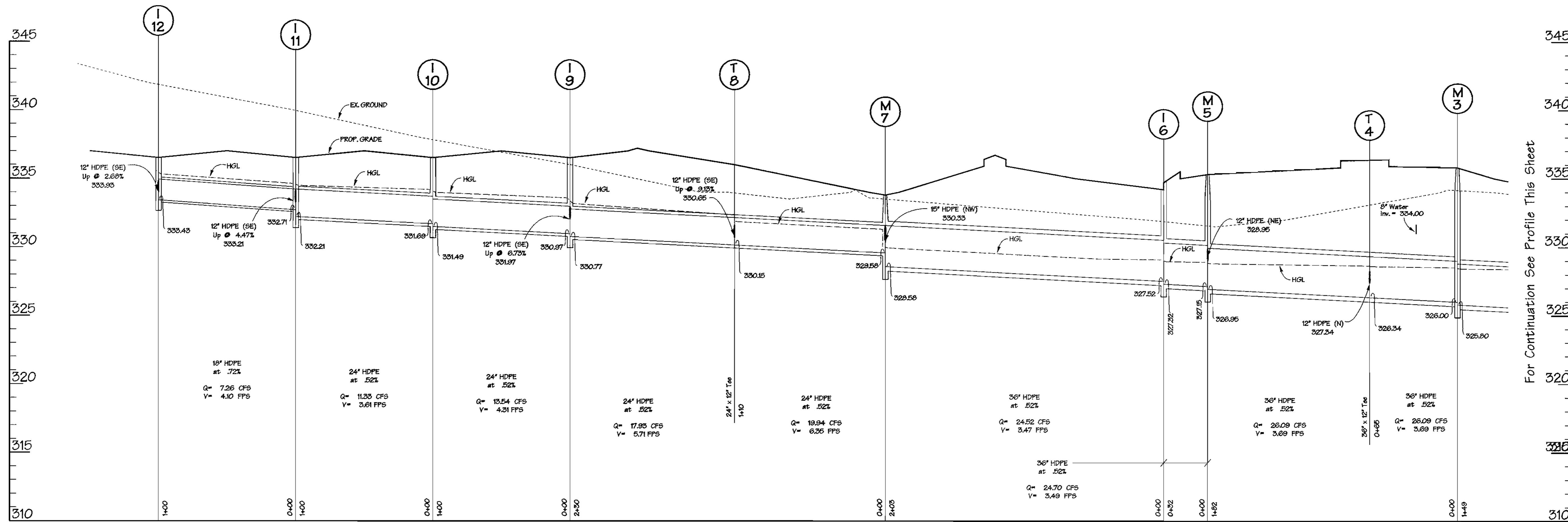
SUBDIVISION NAME COLUMBIA GATEWAY	SECTION NAME 136617	LOT/PARCEL Q3
PLAT OR L.P. 136617	BLOCK 22 & 7	TOWNSHIP MAP 42-45
WATER CODE E06	SEWER CODE 4800000	DENSITY TRACT E0671.03

Grading Plan			
Des By MM	Scale 1"=40'	Proj. No. 00021.A	3 OF 12
Dwn By BKC	Date 8-30-00	Approved	
Chk By	Professional Engr. No. 10551	Approved	

NOTE: A FIVE FOOT LEVEL LANDING SHALL BE PROVIDED AT ALL ENTRANCES (2% MAXIMUM SLOPE) SPOT ELEVATION SHOWN.

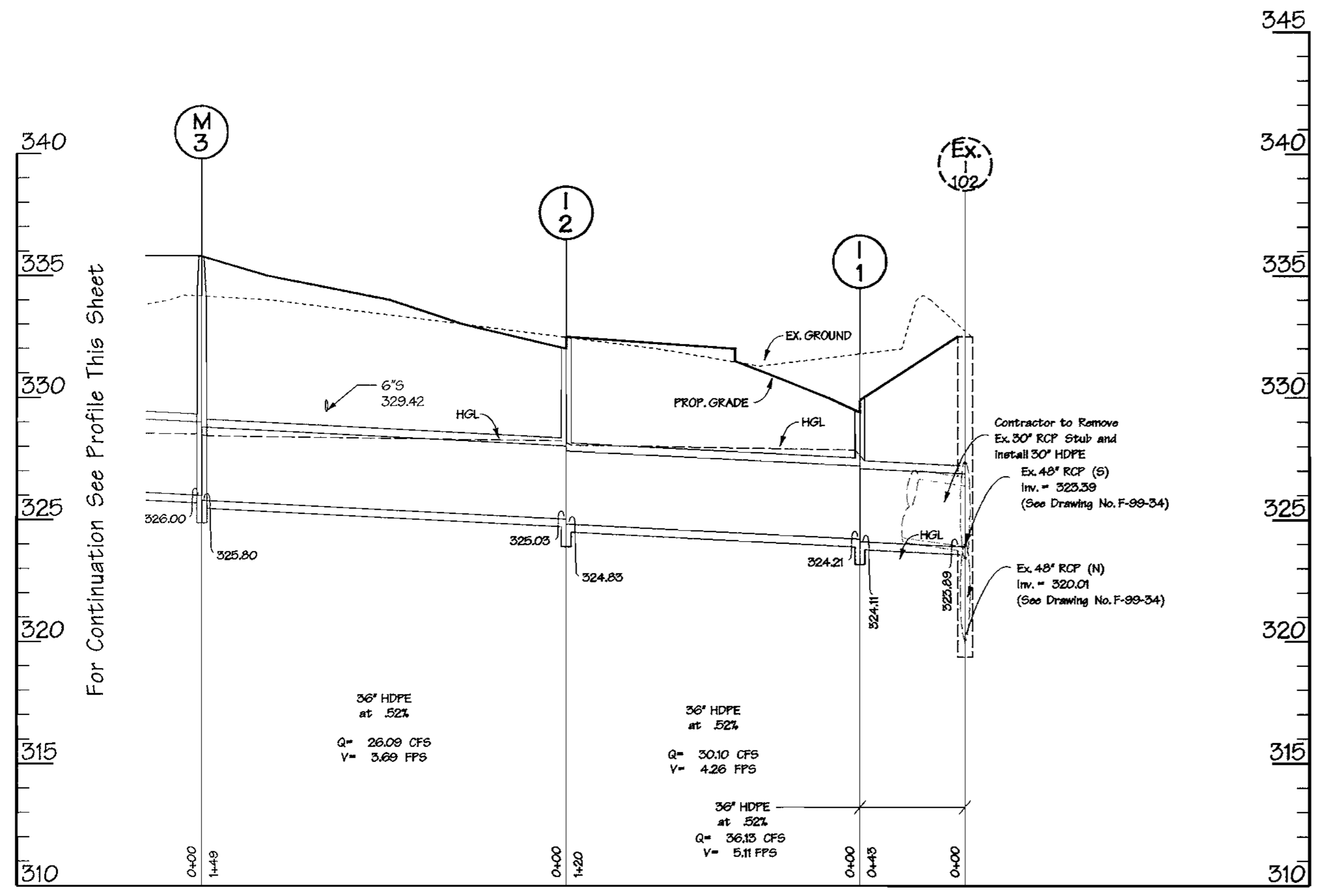


9/5/00
Date



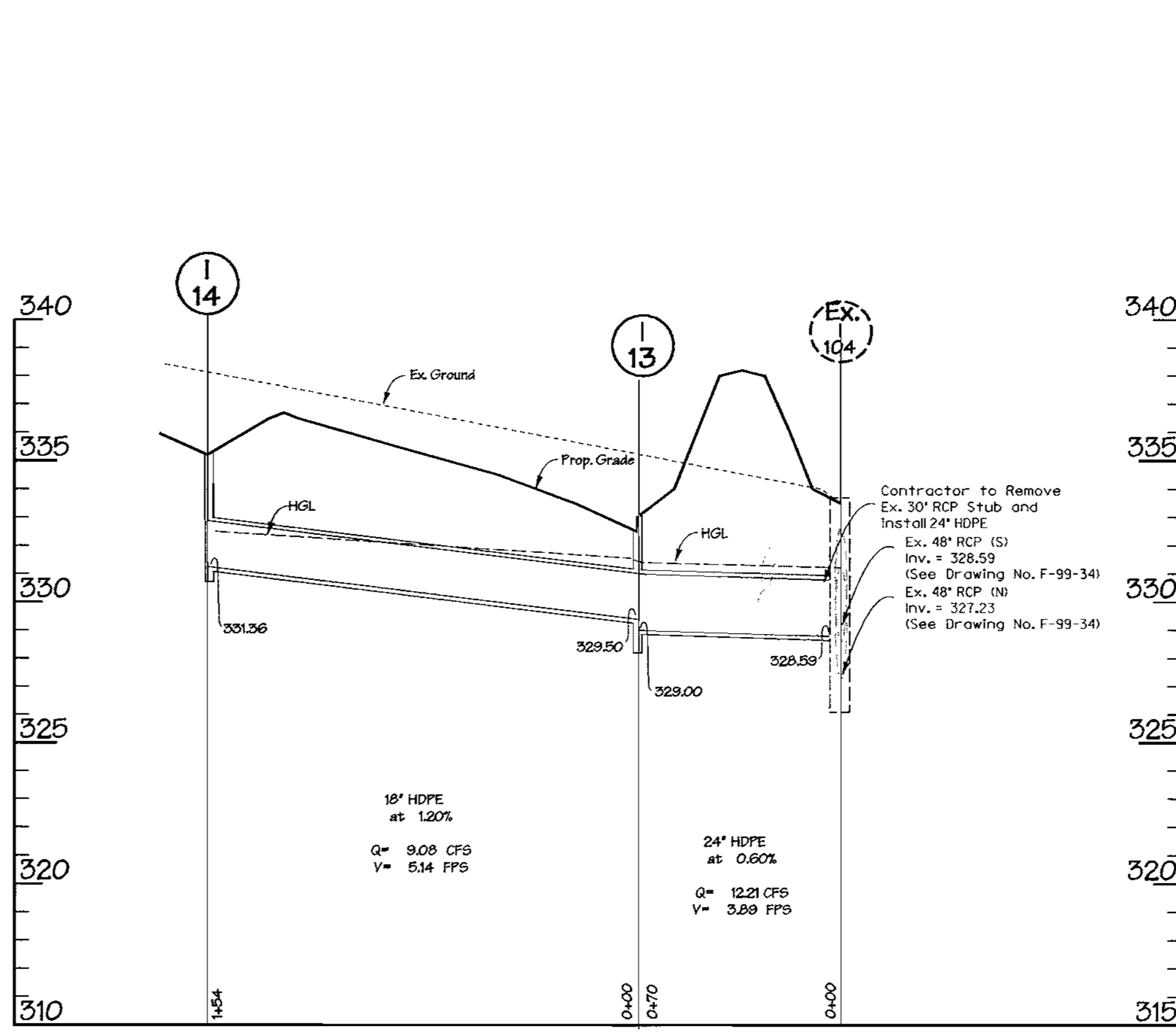
For Continuation See Profile This Sheet

APPROVED
PLANNING BOARD
of HOWARD COUNTY
 DATE June 19, 2000



For Continuation See Profile This Sheet

345
340
335
330
325
320
315
310



340
335
330
325
320
315
310

Storm Drain Profiles
 Scale: 1" = 40' (Hor.)
 1" = 4' (Vert.)

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 Chief, Development Engineering Division MK 9/15/00
 Chief, Division of Land Development 9/15/00
 Director 9/15/00

Date	No.	Revision Description

Columbia Gateway Parcel Q3

OWNER:
 The Howard Research and Development Corporation
 10275 Little Patuxent Parkway
 Columbia, Maryland 21044

DEVELOPER:
 AAK III, LLC
 8805 COLUMBIA 100 PKWY
 SUITE 101
 COLUMBIA, MD 21045

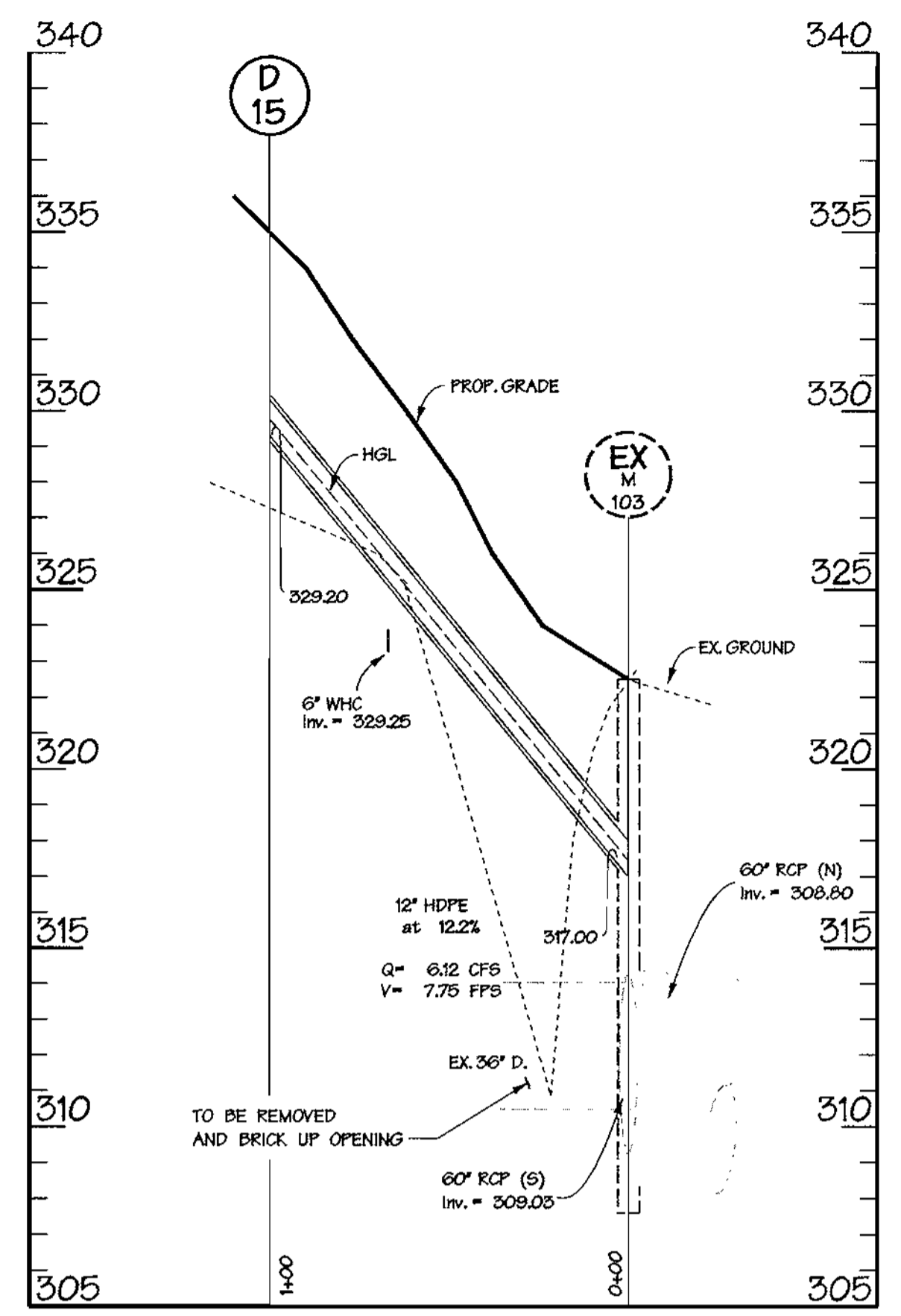
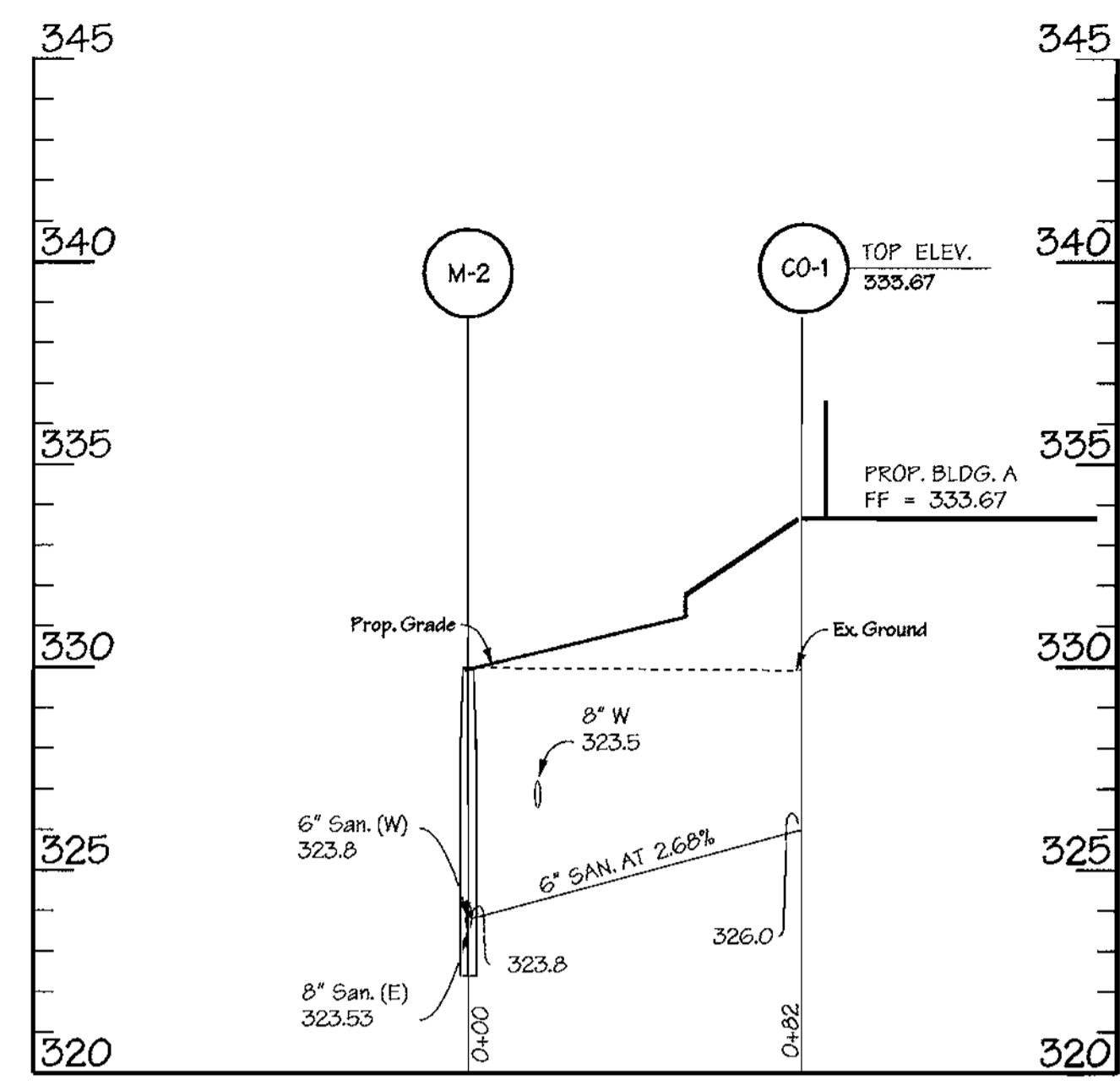
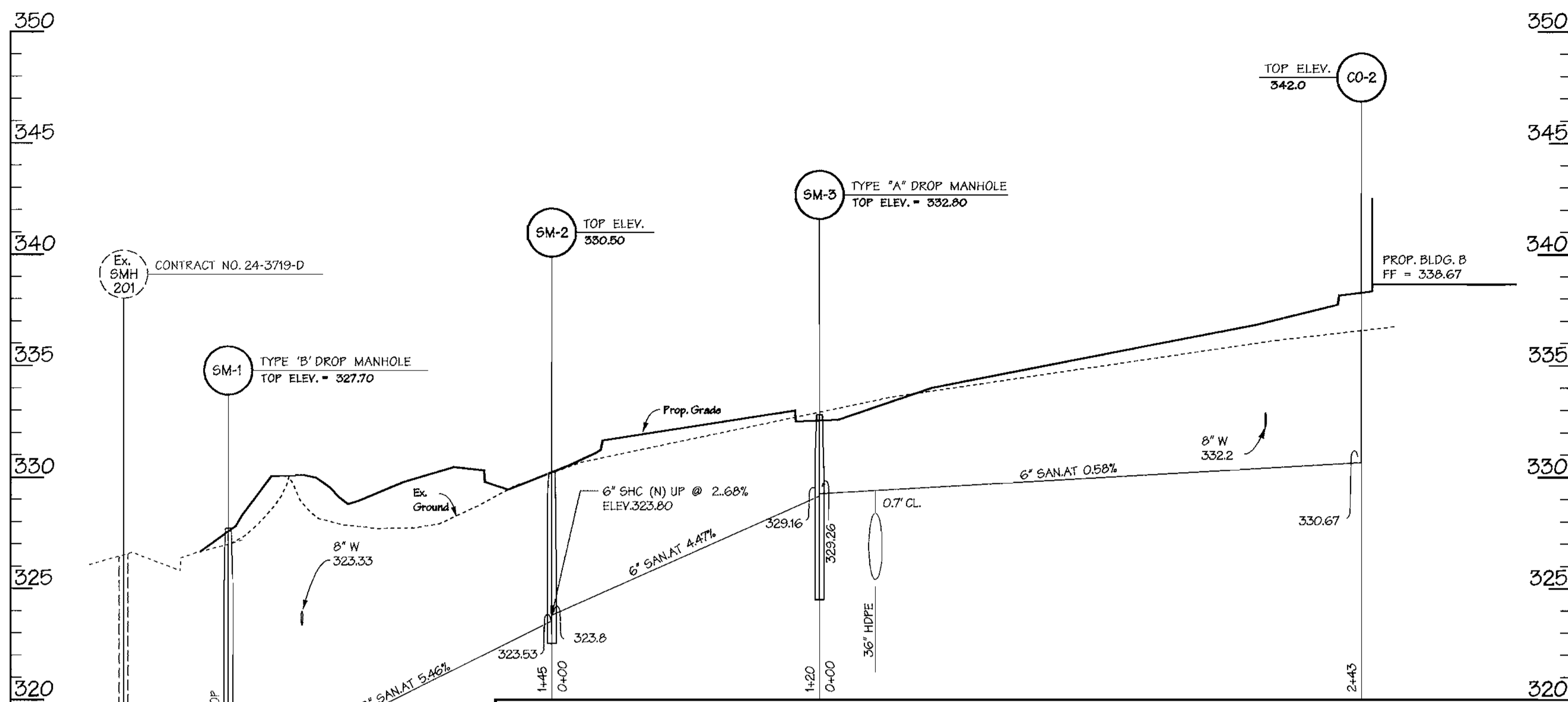
DMW
 Dan McCune-Walkers, Inc.
 3100 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 286-3333
 Fax: 286-4705

A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

9/5/00
 Date

Professional Engr. No. 10551

SUBDIVISION NAME COLUMBIA GATEWAY		SECTION/AREA	101/PARCEL: Q3	
PLAT OR L.P. 13667	BLOCK 12 & 7	ZONE M-1	TAXING MAP 42-43	GENESIS TRACT 6067.03
WATER CODE E06	PRM. NO. 4900000	TITLE Storm Drain Profiles		
Des By JMH	Scale AS SHOWN	Proj. No. 00021.A	5 OF 12	
Drn By JMH	Date 8-30-00	Chk By Approved		



REMOVE EXISTING 8" PLUG CONSTRUCT MANHOLE OVER AND CONNECT TO EXISTING 8" SEWER

FOR EXISTING SANITARY SEE CONTRACT NO. 24-3719-D

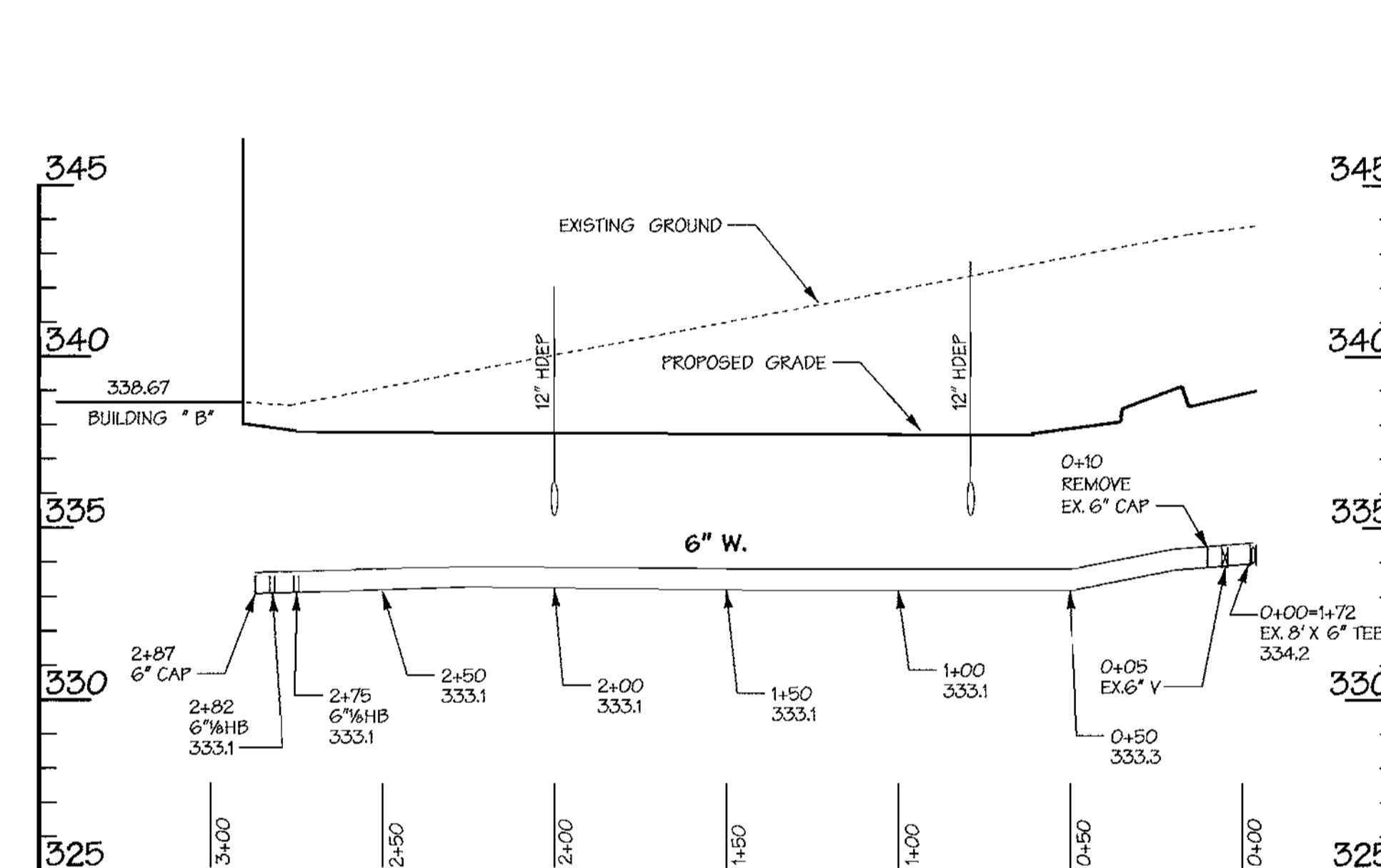
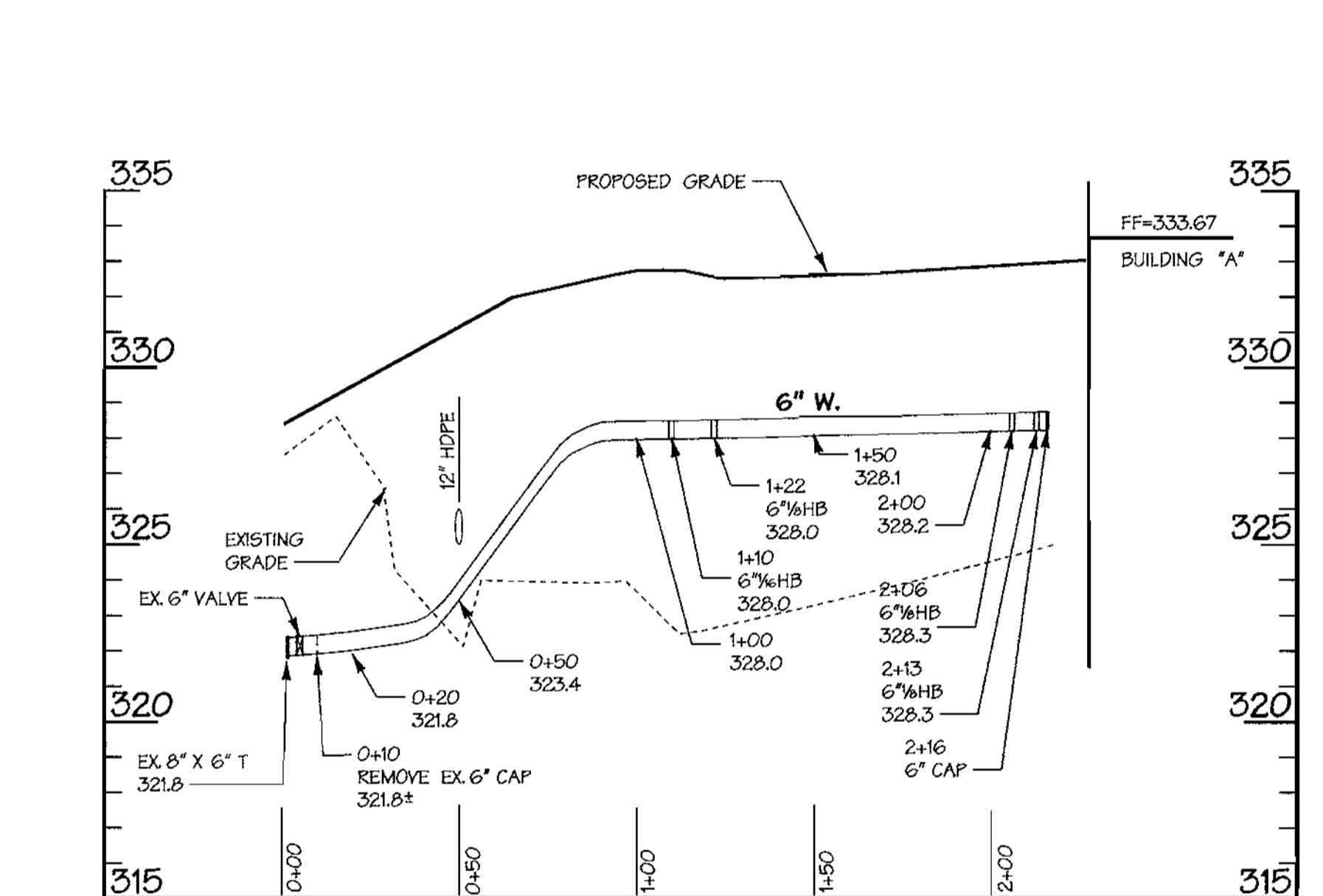
309.30

310.28

EX. 8" San. @ 2.0%

0+00

1-45



* The Type "B" MANHOLE DROP MUST BE HAND FORMED IN FIELD AND THE PIPE MUST BE D.I.P.

APPROVED

PLANNING BOARD

of HOWARD COUNTY

DATE JUNE 29, 2000

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION MK DATE 9/15/00

CHIEF, DIVISION OF LAND DEVELOPMENT DATE 9/15/00

DIRECTOR DATE 9/18/00

Date	No.	Revision Description

Columbia Gateway Parcel Q3

OWNER: The Howard Research and Development Corporation
10275 Little Patuxent Parkway
Columbia, Maryland 21044

DEVELOPER: AAK III, LLC
8805 COLUMBIA 100 PKWY
SUITE 101
COLUMBIA, MD 21045

DMW

Draft-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4705

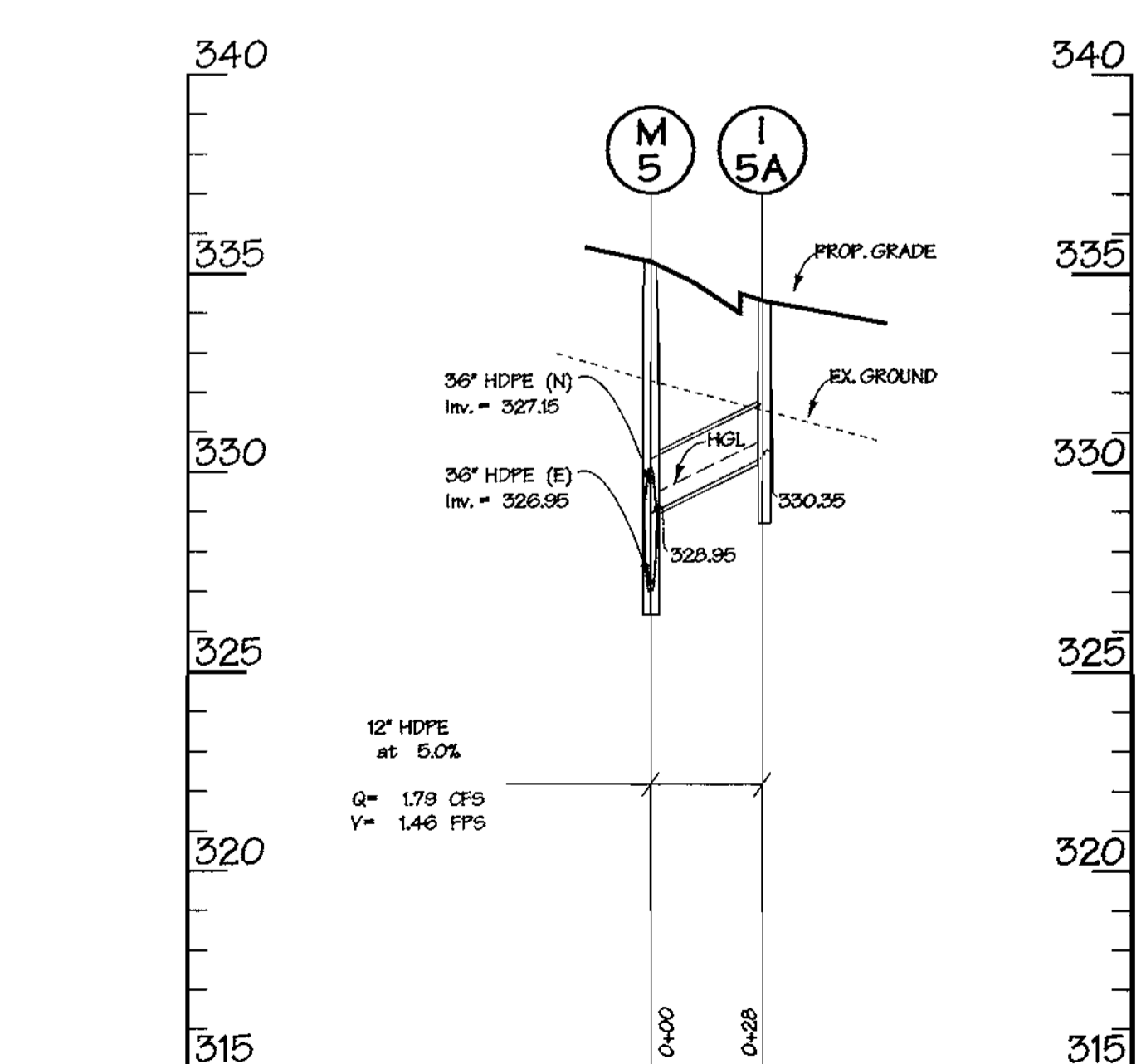
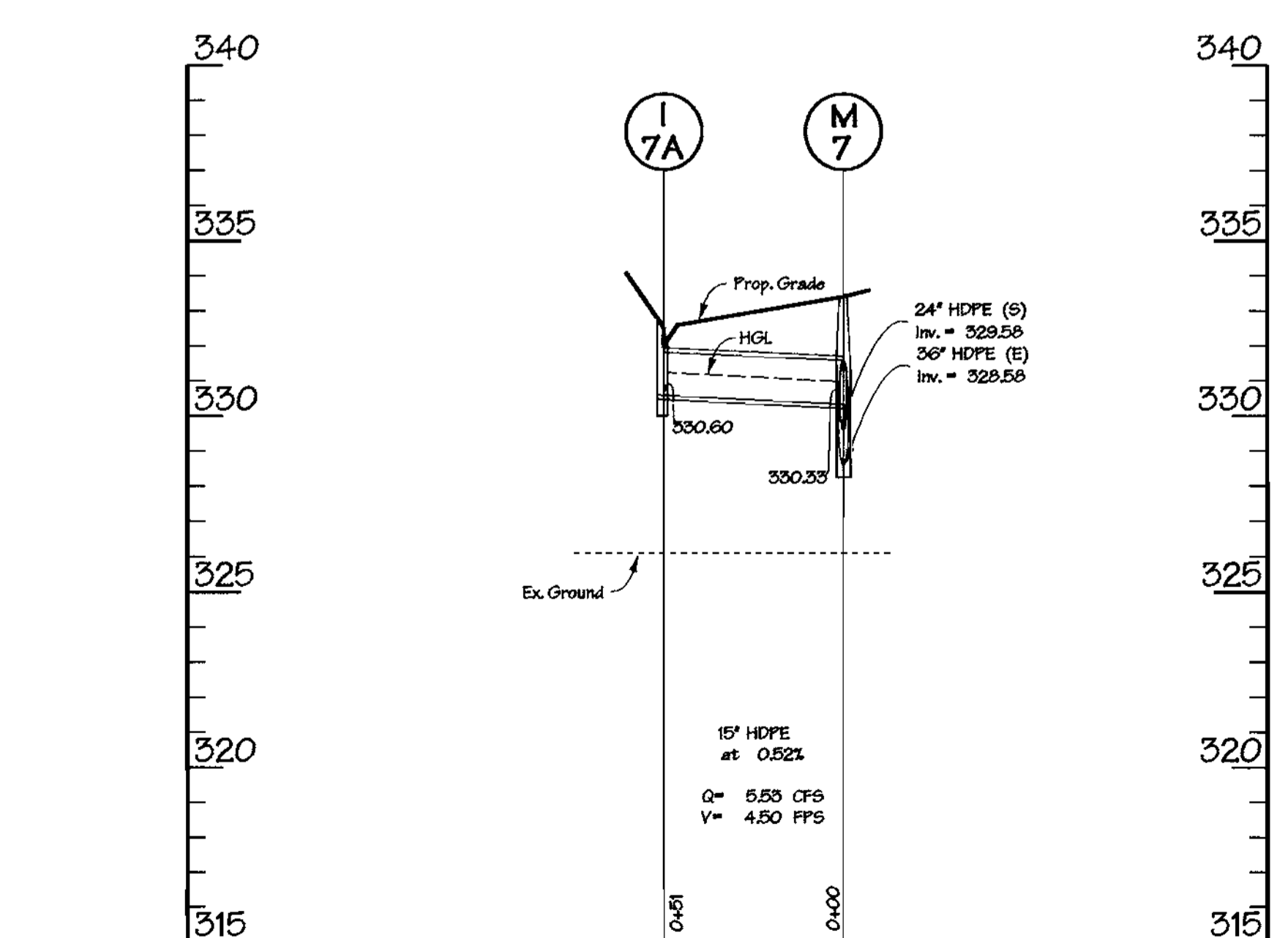
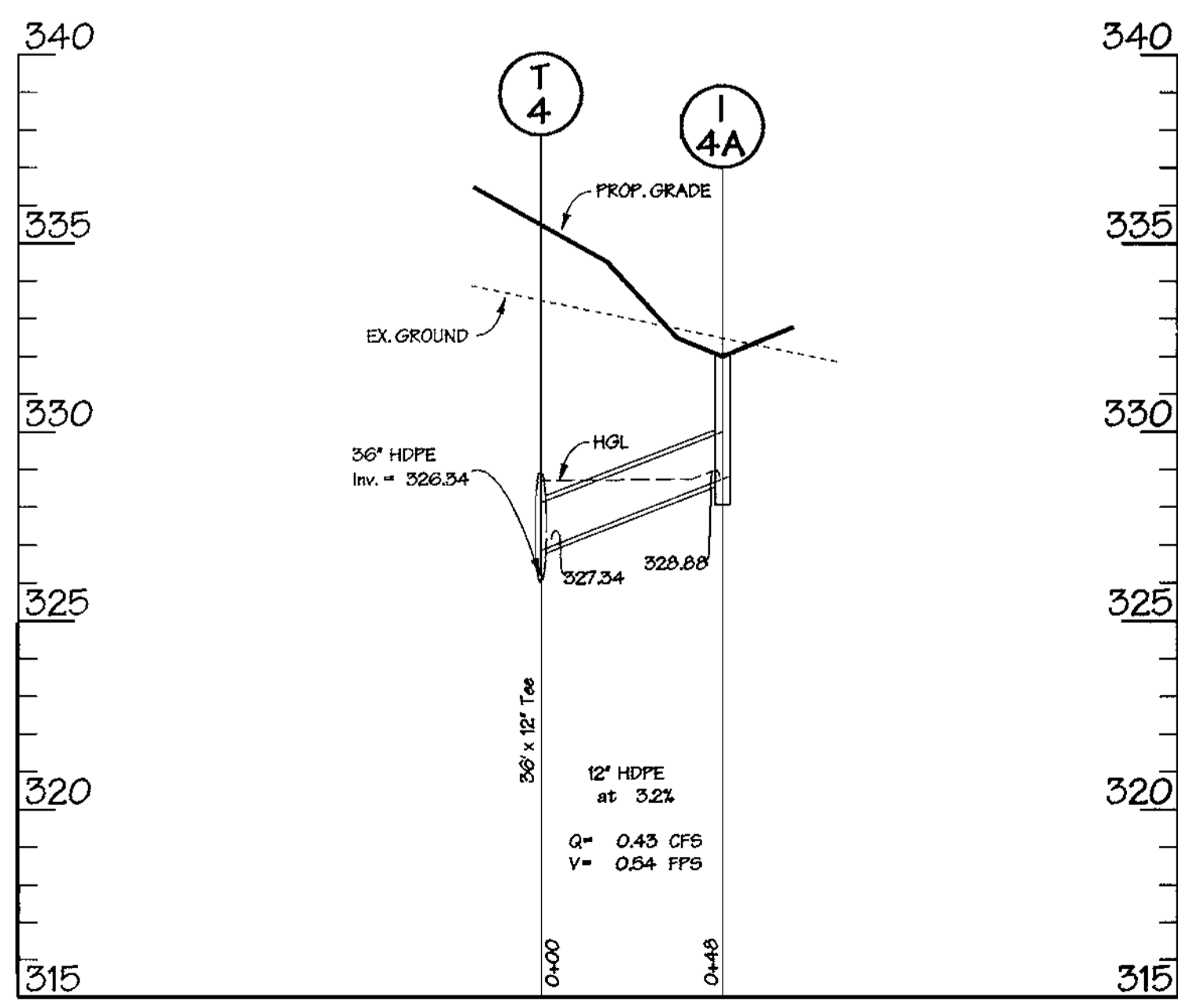
A Team of Land Planners,
Landscape Architects,
Engineers, Surveyors &
Environmental Professionals

SECTION NAME COLUMBIA GATEWAY	SECTION AREA	LOT/FACED
PLAT OR REF 13667	BLOCK 12 & 7	ZONE M-1
WATER CODE EOG	SWR NO. 4900000	GENUS TRACT 6067.03

TITLE Utility Profiles		
Des By BIS	Scale AS SHOWN	Proj. No. 00021.A
Dim By JMH	Date 8-30-00	6 OF 12
Chk By	Approved	

All Profiles

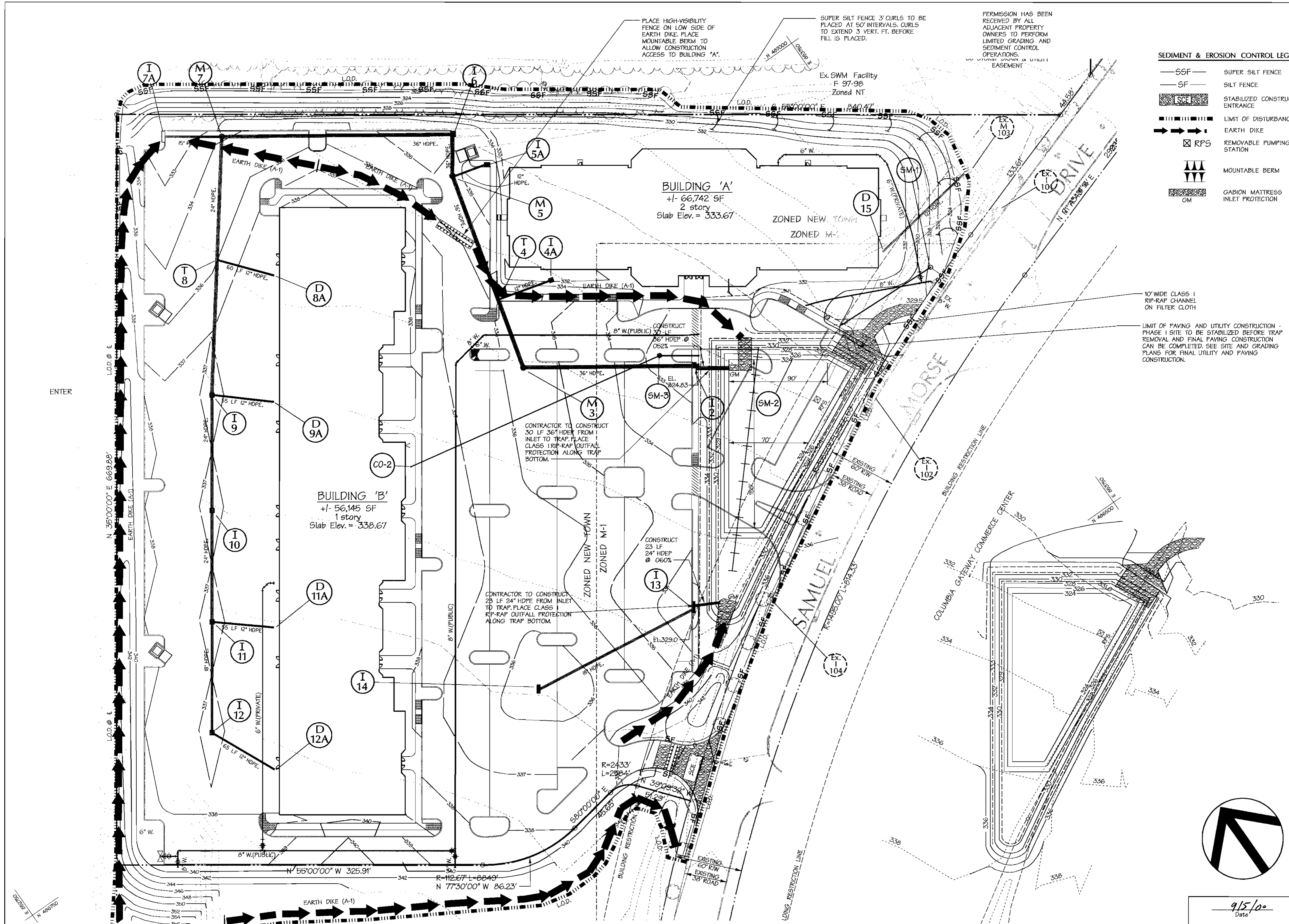
Scale: 1" = 40' (Hor.)
1" = 4' (Vert.)



9/5/00
Date

Professional Engr. No. 10551

STATE OF MARYLAND
REGISTERED PROFESSIONAL ENGINEER



- SEDIMENT & EROSION CONTROL LEGEND**
- SSF — SUPER SILT FENCE
 - SF — SILT FENCE
 - STABILIZED CONSTRUCTION ENTRANCE
 - LIMIT OF DISTURBANCE
 - EARTH DIKE
 - RPS REMOVABLE PUMPING STATION
 - MOUNTABLE BERM
 - GM GABION MATTRESS INLET PROTECTION

APPROVED
PLANNING BOARD
 of HOWARD COUNTY
 DATE JUNE 29, 2000

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

John D. Williams 9/15/00
 CHIEF, DEVELOPMENT ENGINEERING DIVISION MK DATE

David Hamilton 9/15/00
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

James R. Smith 9/15/00
 DIRECTOR DATE

Date	No.	Revision Description

Columbia Gateway Parcel Q3

OWNER: The Howard Research and Development Corporation
 10275 Little Patuxent Parkway
 Columbia, Maryland 21044

DEVELOPER: AAK III, LLC
 8805 COLUMBIA 100 PKWY
 SUITE 101
 COLUMBIA, MD 21045

DMW
 DeWitt-McCune-Walker, Inc.
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 296-3338
 Fax: 296-4700

A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

9/15/00
 Date

STATE OF MARYLAND
 PROFESSIONAL ENGINEER

Professional Engr. No. 10551

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

Cheryl Simmons 9/12/00
 U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE DATE

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

APPROVED: *Arthur Schomig* 9/12/00
 HOWARD SOIL CONSERVATION DISTRICT DATE

PLAN NUMBER

DEVELOPERS CERTIFICATE:

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

James Adams 9/1/00
 SIGNATURE OF DEVELOPER DATE
 PRINT NAME BELOW SIGNATURE

ENGINEERS CERTIFICATE:

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

John W. Ramech, Sr. 9/15/00
 SIGNATURE OF ENGINEER DATE
 PRINT NAME BELOW SIGNATURE

PERMISSION HAS BEEN RECEIVED BY ALL ADJACENT PROPERTY OWNERS TO PERFORM LIMITED GRADING AND SEDIMENT CONTROL OPERATIONS.

INITIAL SEDIMENT TRAP GRADING

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.

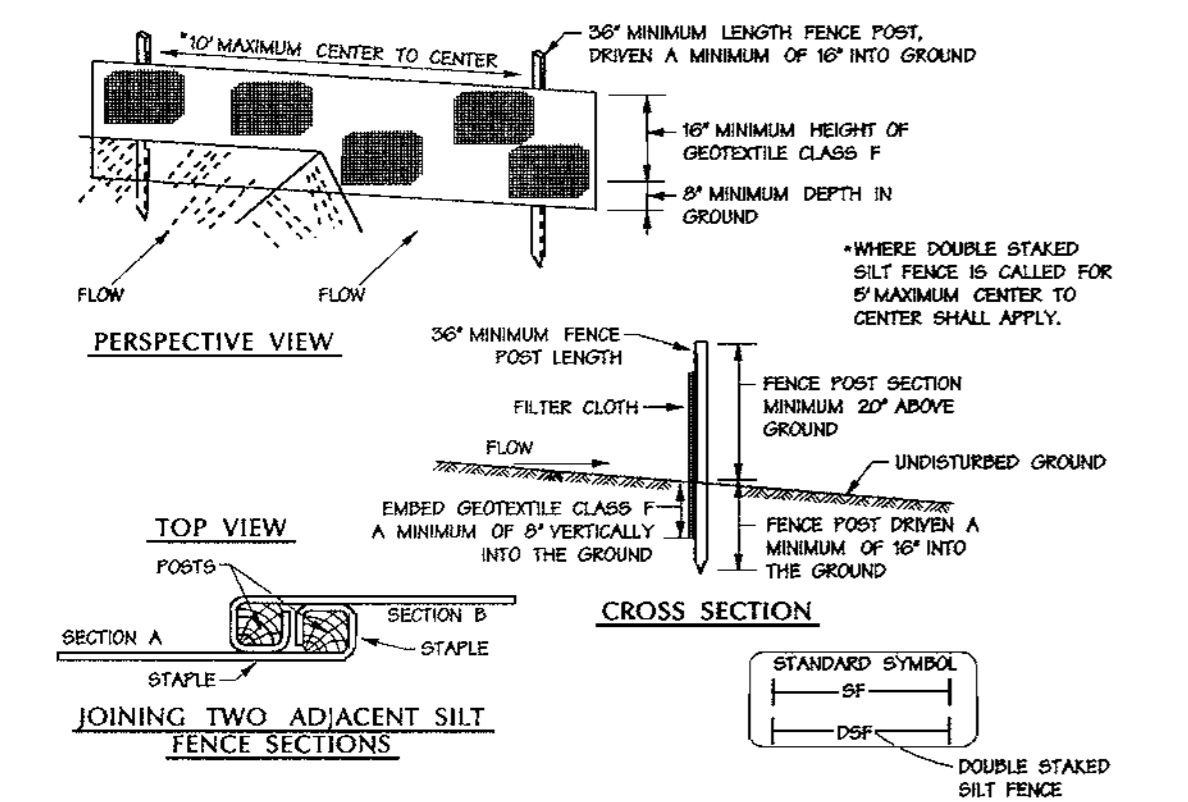
- Conditions Where Practice Applies
1. This practice is limited to areas having 2:1 or flatter slopes where:
a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.

Construction and Material Specifications
1. Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications.

- II. For sites having disturbed areas under 5 acres:
1. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.

or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phytotoxic materials.
Notes: 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.

Topsoil Specifications



CONSTRUCTION SPECIFICATIONS
1. FENCE POSTS SHALL BE A MINIMUM OF 3/4" LONG DRIVEN 1/2" MINIMUM INTO THE GROUND. WOOD POSTS SHALL BE 1 1/2" X 1 1/2" SQUARE (MINIMUM) CUT OR 1 1/2" DIAMETER (MINIMUM) ROUND AND SHALL BE OF SOLID QUALITY HARDWOOD. STEEL POSTS WILL BE STANDARD 1" OR 1 1/4" SECTION WEIGHTING NOT LESS THAN 100 POUND PER LINEAR FOOT.

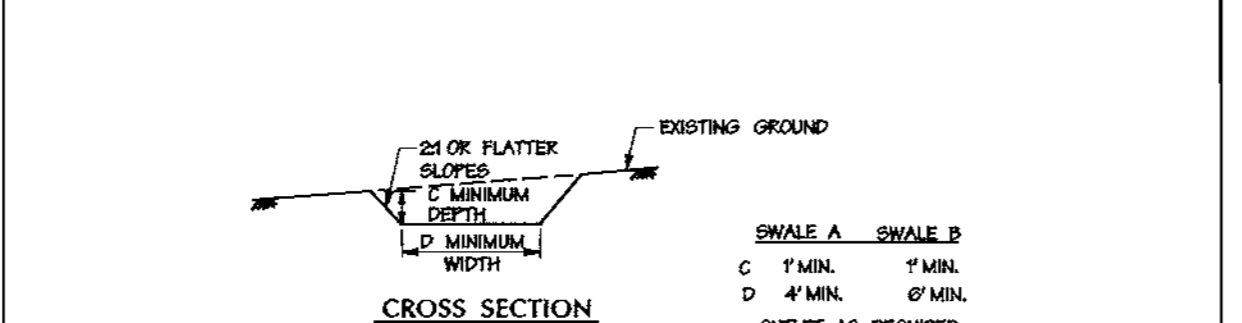
Silt Fence Not To Scale

1. A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (200-1000).

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

TEMPORARY SWALE
1. ALL TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET. SPOT ELEVATIONS MAY BE NECESSARY FOR GRADES LESS THAN 1%.

Sediment Control General Notes



CONSTRUCTION SPECIFICATIONS
1. ALL TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET. SPOT ELEVATIONS MAY BE NECESSARY FOR GRADES LESS THAN 1%.

Temporary Swale

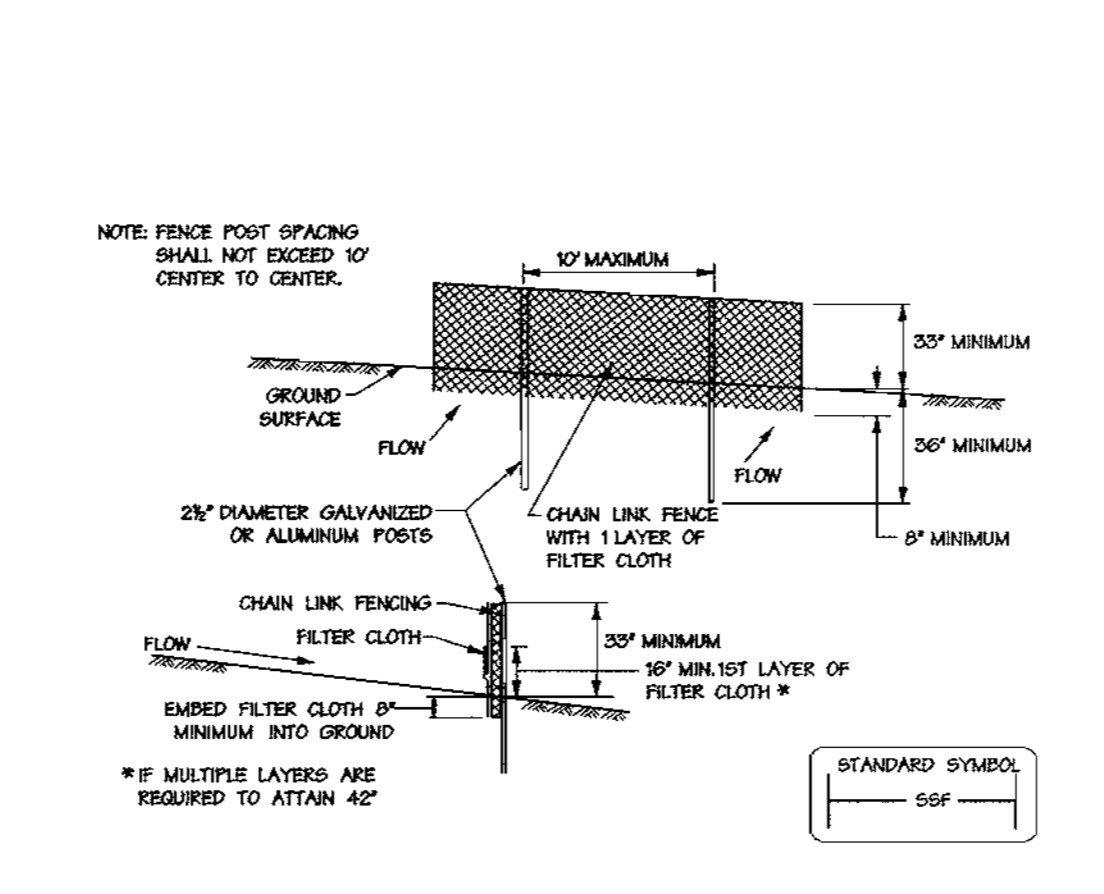
Not To Scale

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

TEMPORARY SEEDING NOTES
APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

Permanent/Temporary Seeding Notes

Earth Dike



Earth Dike Not To Scale

Super Silt Fence

Not To Scale

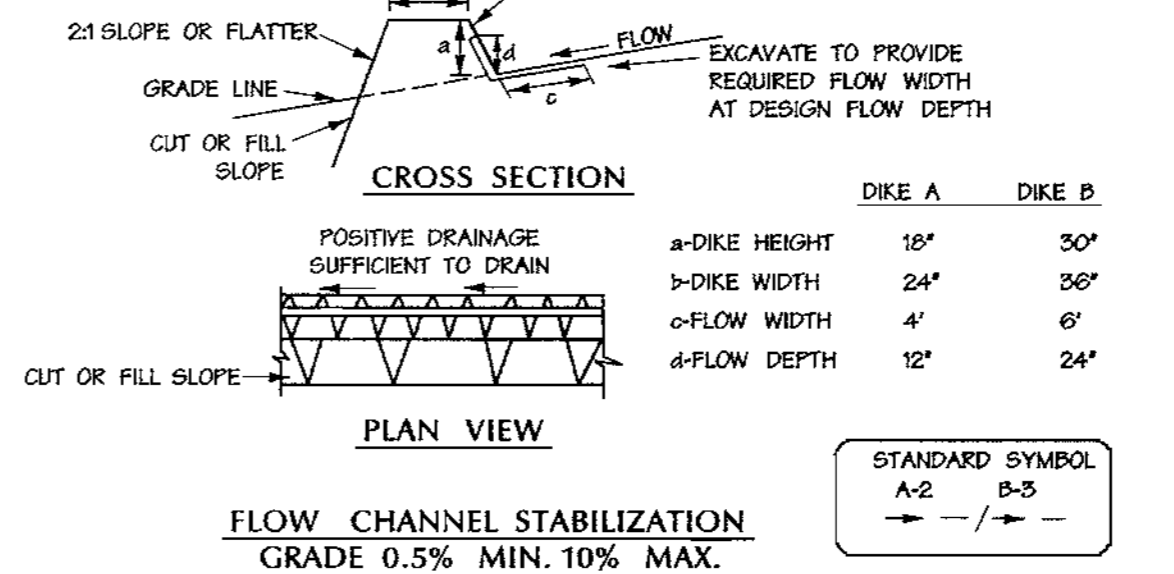
Sediment Control

Not To Scale

CONSTRUCTION SPECIFICATIONS
1. ALL TEMPORARY EARTH DIKES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET. SPOT ELEVATIONS MAY BE NECESSARY FOR GRADES LESS THAN 1%.

DEVELOPERS CERTIFICATE:

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.



Flow Channel Stabilization

Grade 0.5% Min. 10% Max.

TRAP #1 TABLE

Table with columns: TRAP NUMBER, TRAP TYPE, EXISTING DRAINAGE AREA AC, INTERIM DRAINAGE AREA AC, PROPOSED DRAINAGE AREA AC, STORAGE PROVIDED CF, etc.

SEQUENCE OF CONSTRUCTION

- 1. Obtain a grading permit. 7
2. Clear and grub for and install all perimeter and interior sediment control devices, including sediment trap. 14

CONSTRUCTION SPECIFICATIONS

1. ALL TEMPORARY EARTH DIKES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET. SPOT ELEVATIONS MAY BE NECESSARY FOR GRADES LESS THAN 1%.

Stabilized Construction Entrance

Not To Scale

DEVELOPERS CERTIFICATE:

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

Temporary Swale Not To Scale

ENGINEERS CERTIFICATE:

I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

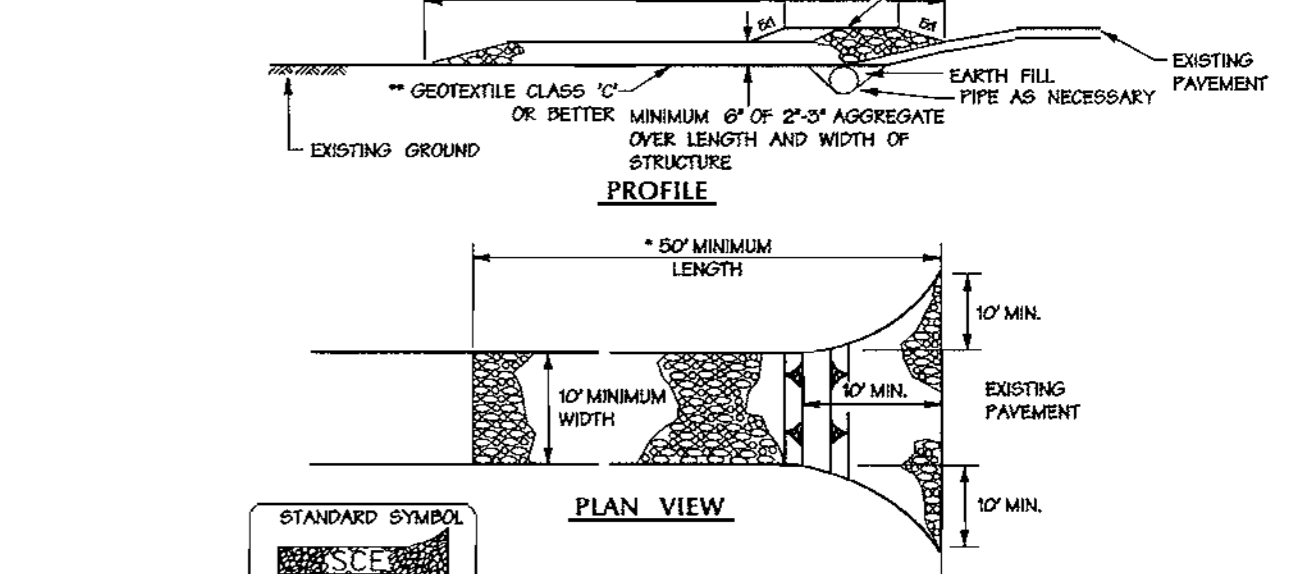
Super Silt Fence Not To Scale

CONSTRUCTION SPECIFICATIONS

1. ALL TEMPORARY EARTH DIKES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET. SPOT ELEVATIONS MAY BE NECESSARY FOR GRADES LESS THAN 1%.

Stabilized Construction Entrance

Not To Scale



Stabilized Construction Entrance

Not To Scale

SEQUENCE OF CONSTRUCTION

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2. Clear and grub for and install all perimeter and interior sediment control devices, including sediment trap. 14

CONSTRUCTION SPECIFICATIONS

1. ALL TEMPORARY EARTH DIKES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET. SPOT ELEVATIONS MAY BE NECESSARY FOR GRADES LESS THAN 1%.

Stabilized Construction Entrance

Not To Scale

APPROVED PLANNING BOARD OF HOWARD COUNTY
DATE: JUNE 29, 2000
HOWARD COUNTY DEPT. OF PLANNING & ZONING
CHIEF, DEVELOPMENT ENGINEERING DIVISION MK
CHIEF, DIVISION OF LAND DEVELOPMENT

Table with columns: Date, No., Revision, Description. Includes revisions for sediment trap and earth dike construction.

Columbia Gateway Parcel Q3

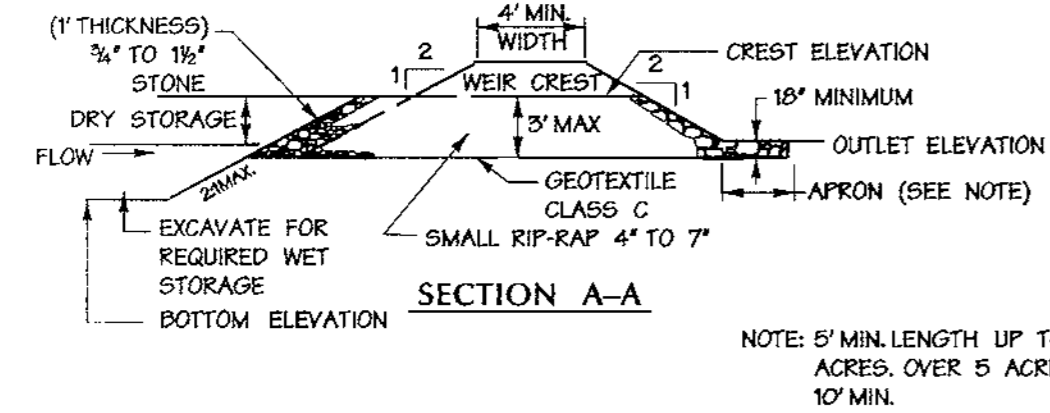
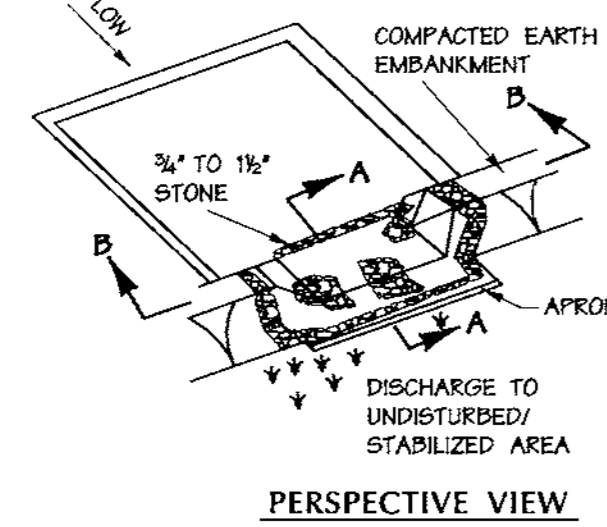
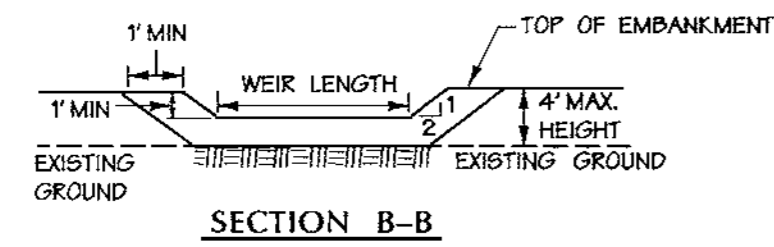
OWNER: The Howard Research and Development Corporation
DEVELOPER: AAK III, LLC

DMW Dan McCreary Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

Table with columns: SUBDIVISION NAME, SECTION/PARCELS, LOT/PARCELS, etc.

Erosion and Sediment Control Details

Des By: BIS/SDS Scale: 1"=40' Proj. No.: 00021.A
Dwn By: WHJ Date: 8-30-00
Chk By: Approved 8 OF 12



U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE C - 9 - 16

MARYLAND DEPARTMENT OF ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION

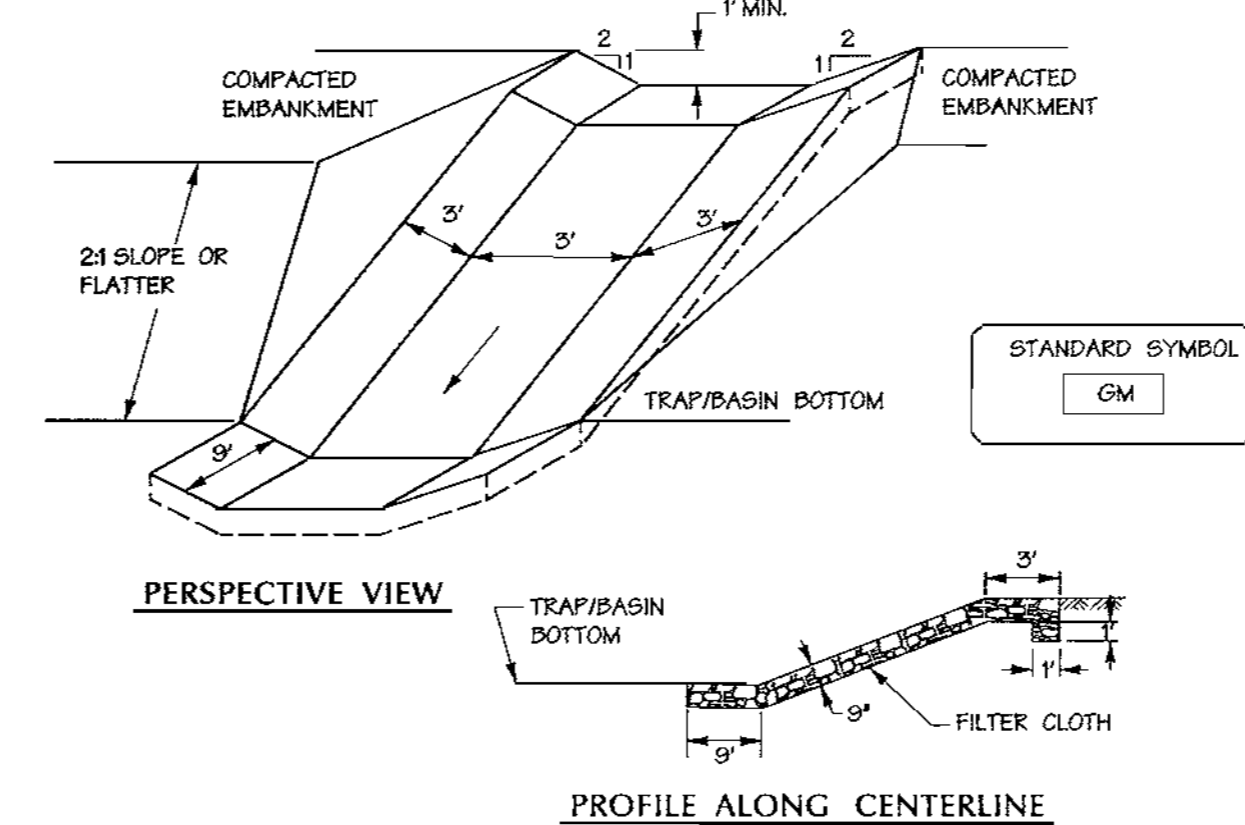
Stone /Rip-Rap Outlet Sediment Trap – ST IV

- CONSTRUCTION SPECIFICATIONS**
1. THE AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
 2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVELING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED. MAXIMUM HEIGHT OF EMBANKMENT SHALL BE 4' MEASURED AT CENTERLINE OF EMBANKMENT.
 3. ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER.
 4. ELEVATION OF THE TOP OF ANY DIKE DIRECTING WATER INTO TRAP MUST EQUAL OR EXCEED THE HEIGHT OF TRAP EMBANKMENT.
 5. STORAGE AREA PROVIDED SHALL BE FIGURED BY COMPUTING THE VOLUME MEASURED FROM TOP OF EXCAVATION. (FOR STORAGE REQUIREMENTS SEE TABLE 9.)
 6. GEOTEXTILE CLASS C SHALL BE PLACED OVER THE BOTTOM AND SIDES OF THE OUTLET CHANNEL PRIOR TO PLACEMENT OF STONE. SECTION OF FABRIC MUST OVERLAP AT LEAST 1' WITH SECTION NEAREST THE ENTRANCE PLACED ON TOP. FABRIC SHALL BE EMBEDDED AT LEAST 6" INTO EXISTING GROUND AT ENTRANCE OF OUTLET CHANNEL.
 7. 4" - 7" STONE SHALL BE USED TO CONSTRUCT THE WEIR AND 4" - 12" OR CLASS I RIP-RAP SHALL BE USED TO CONSTRUCT THE OUTLET CHANNEL.
 8. OUTLET - AN OUTLET SHALL INCLUDE A MEANS OF CONVEYING THE DISCHARGE IN AN EROSION FREE MANNER TO AN EXISTING STABLE CHANNEL. PROTECTION AGAINST SCOUR AT THE DISCHARGE POINT SHALL BE PROVIDED AS NECESSARY.
 9. OUTLET CHANNEL MUST HAVE POSITIVE DRAINAGE FORM THE TRAP.
 10. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 OF THE WET STORAGE DEPTH OF THE TRAP (800 CF/AC). REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
 11. THE STRUCTURE SHALL BE INSPECTED PERIODICALLY AFTER EACH RAIN AND REPAIRED AS NEEDED.
 12. CONSTRUCTION OF TRAPS SHALL BE CARRIED OUT IN SUCH A MANNER THAT SEDIMENT POLLUTION IS ABATED. ONCE CONSTRUCTED, THE TOP AND OUTSIDE FACE OF THE EMBANKMENT SHALL BE STABILIZED WITH SEED AND MULCH. POINTS OF CONCENTRATED INFLOW SHALL BE PROTECTED IN ACCORDANCE WITH GRADE STABILIZATION STRUCTURE CRITERIA. THE REMAINDER OF THE INTERIOR SLOPES SHOULD BE STABILIZED (ONE TIME) WITH SEED AND MULCH UPON TRAP COMPLETION AND MONITORED AND MAINTAINED EROSION FREE DURING THE LIFE OF THE TRAP.
 13. THE STRUCTURE SHALL BE DEWATERED BY APPROVED METHODS, REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE C - 9 - 16A

MARYLAND DEPARTMENT OF ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION

Stone /Rip-Rap Outlet Sediment Trap – ST IV



- CONSTRUCTION SPECIFICATIONS**
1. GABION INFLOW PROTECTION SHALL BE CONSTRUCTED OF 9' X 3' X 9' GABION BASKETS FORMING A TRAPEZOIDAL CROSS SECTION 1' DEEP, WITH 2:1 SIDE SLOPES, AND A 3' BOTTOM WIDTH.
 2. GEOTEXTILE CLASS C SHALL BE INSTALLED UNDER ALL GABION BASKETS.
 3. THE STONE USED TO FILL THE GABION BASKETS SHALL BE 4" - 7" RIP-RAP.
 4. GABIONS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 5. GABION INFLOW PROTECTION SHALL BE USED WHERE CONCENTRATED FLOW IS PRESENT ON SLOPES STEEPER THAN 4:1.

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE B - 7 - 2

MARYLAND DEPARTMENT OF ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION

Gabion Inflow Protection

TABLE 28 STONE SIZE

NUMBER	SIZE RANGE	D ₅₀	D ₁₀₀	AASHTO	WEIGHT
NUMBER 57*	3/4" - 1 1/2"	1/2"	1 1/2"	M-43	N/A
NUMBER 1	2" - 3"	2 1/2"	3"	M-43	N/A
RIP-RAP**	4" - 7"	5 1/2"	7"	N/A	N/A
CLASS I	N/A	9.5"	15"	N/A	150LB MAX.
CLASS II	N/A	16"	24"	N/A	700LB MAX.
CLASS III	N/A	23"	34"	N/A	2000LB MAX.

* THIS CLASSIFICATION IS TO BE USED ON THE INSIDE FACE OF STONE OUTLETS AND CHECK DAMS.
 ** THIS CLASSIFICATION IS TO BE USED WHEN EVER SMALL RIP-RAP IS REQUIRED. THE STATE HIGHWAY ADMINISTRATION DESIGNATION FOR THIS STONE IS STONE FOR GABIONS (305.01.04).

STONE FOR GABION BASKETS

BASKET THICKNESS	SIZE OF INDIVIDUAL STONES	
	INCHES	MM
6	150	3 - 5
9	225	4 - 7
12	300	4 - 7
15	460	4 - 7
26	910	4 - 12

NOTE: RECYCLED CONCRETE EQUIVALENT MAY BE SUBSTITUTED FOR ALL STONE CLASSIFICATIONS. RECYCLED CONCRETE EQUIVALENT SHALL BE CONCRETE BROKEN INTO THE SIZES MEETING THE APPROPRIATE CLASSIFICATION, SHALL CONTAIN NO STEEL REINFORCEMENT, AND SHALL HAVE A DENSITY OF 150 POUNDS PER CUBIC FOOT.

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE H - 24 - 1

MARYLAND DEPARTMENT OF ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION

Materials Specifications

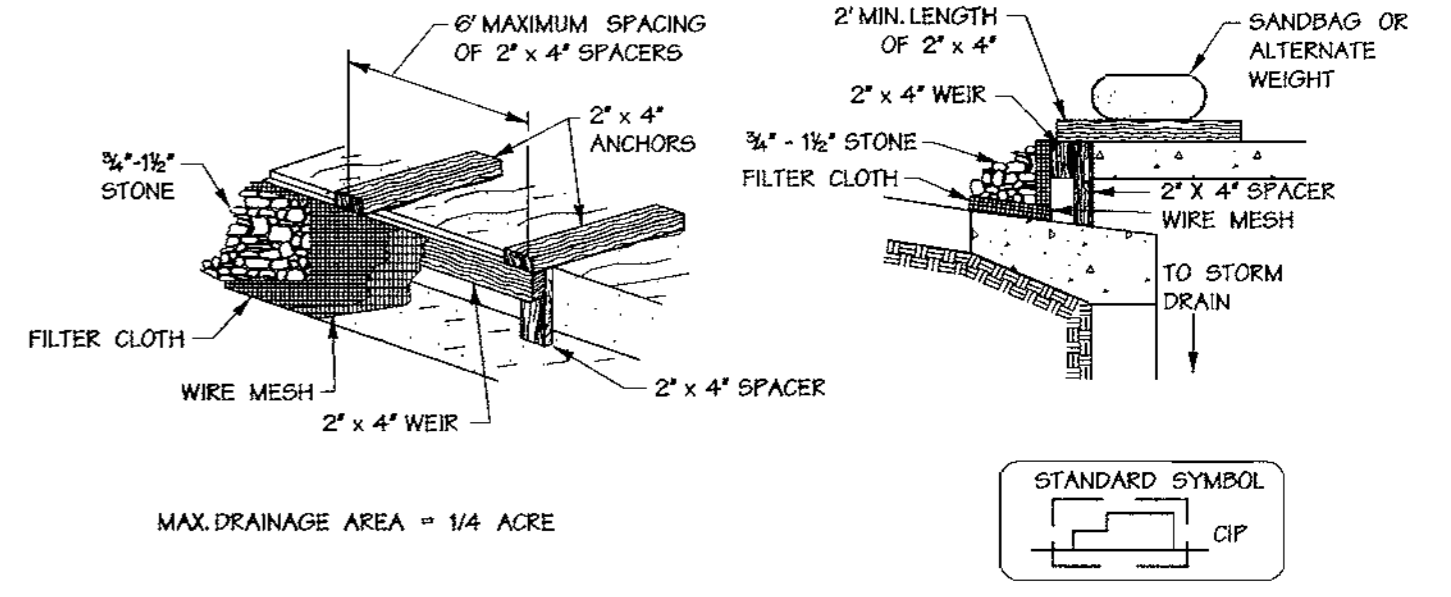
TABLE 27 GEOTEXTILE FABRICS

CLASS	APPARENT OPENING SIZE MM. MAX.	GRAB TENSILE STRENGTH LB. MIN.	BURST STRENGTH PSI. MIN.
A	0.50**	250	500
B	0.60	200	320
C	0.30	200	320
D	0.60	90	145
E	0.30	90	145
F (SILT FENCE)	0.40-0.80*	90	190

* US STD. 515/EV CW-02215 ** 50 MM MAX. FOR SUPER SILT FENCE
 THE PROPERTIES SHALL BE DETERMINED IN ACCORDANCE WITH THE FOLLOWING PROCEDURES:
 - APPARENT OPENING SIZE MSMT 323
 - GRAB TENSILE STRENGTH ASTM D 1682: 4 x 8" SPECIMEN, 1 x 2" CLAMPS, 12" MIN. STRAIN RATE IN BOTH PRINCIPAL DIRECTIONS OF GEOTEXTILE FABRIC.
 - BURST STRENGTH ASTM D 3786

THE FABRIC SHALL BE INERT TO COMMONLY ENCOUNTERED CHEMICALS AND HYDROCARBONS, AND WILL BE ROT AND MILDEW RESISTANT. IT SHALL BE MANUFACTURED FROM FIBERS CONSISTING OF LONG CHAIN SYNTHETIC POLYMERS, AND COMPOSED OF A MINIMUM OF 85% BY WEIGHT OF POLYOLEPHINS, POLYESTERS, OR POLYAMIDES. THE GEOTEXTILE FABRIC SHALL RESIST DETERIORATION FROM ULTRA VIOLET EXPOSURE.

IN ADDITION CLASSSES A THROUGH E SHALL HAVE A 0.01 CM/SEC. MINIMUM PERMEABILITY WHEN TESTED IN ACCORDANCE WITH MSMT 507, AND AN APPARENT MINIMUM ELONGATION OF 20 PERCENT (20%) WHEN TESTED IN ACCORDANCE WITH THE GRAB TENSILE STRENGTH REQUIREMENTS LISTED ABOVE.
 SILT FENCE CLASS F GEOTEXTILE FABRICS FOR SILT FENCE SHALL HAVE A 50 LB./IN. MINIMUM TENSILE STRENGTH AND A 20 LB./IN. MINIMUM TENSILE MODULES WHEN TESTED IN ACCORDANCE WITH MSMT 509. THE MATERIAL SHALL ALSO HAVE A 0.3 GAL./FT. MIN. FLOW RATE AND SEVENTY-FIVE PERCENT (75%) MINIMUM FILTERING EFFICIENCY WHEN TESTED IN ACCORDANCE WITH MSMT 322. GEOTEXTILE FABRICS USED IN THE CONSTRUCTION OF SILT FENCE SHALL RESIST DETERIORATION FROM ULTRA VIOLET EXPOSURE. THE FABRIC SHALL CONTAIN SUFFICIENT AMOUNTS OF ULTRA VIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 12 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 TO 120 DEGREES FAHRENHEIT.



- CONSTRUCTION SPECIFICATIONS**
1. ATTACH A CONTINUOUS PIECE OF 1/2" X 1/2" WIRE MESH (30" MINIMUM 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 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" WEIR.
 3. SECURELY NAIL THE 2" X 4" WEIR TO A 9" LONG VERTICAL SPACER TO BE LOCATED BETWEEN THE WEIR 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 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 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 CLEAN 3/4" X 1 1/2" STONE OVER THE WIRE MESH AND GEOTEXTILE IN SUCH A MANNER TO PREVENT WATER FROM ENTERING THE INLET UNDER OR AROUND THE GEOTEXTILE.
 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 THE INLET BY INSTALLING A TEMPORARY EARTH OR ASPHALT DIKE TO DIRECT THE FLOW OF THE INLET.

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE E - 16 - 20

MARYLAND DEPARTMENT OF ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION

Curb Inlet Protection (COG or COS Inlets) Not To Scale

APPROVED
 PLANNING BOARD
 of HOWARD COUNTY
 DATE JUNE 19, 2000

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

John P. ... 9/15/00
 CHIEF, DEVELOPMENT ENGINEERING DIVISION MK DATE

Chris ... 9/15/00
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE / R

... 9/15/00
 DIRECTOR DATE

Date	No.	Revision Description

Columbia Gateway Parcel Q3

OWNER: The Howard Research and Development Corporation
 10275 Little Patuxent Parkway
 Columbia, Maryland 21044

DEVELOPER: AAK III, LLC
 8805 COLUMBIA 100 PKWY
 SUITE 101
 COLUMBIA, MD 21045

DMW
 Dan McCaskey-Walker, Inc.
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 296-3233
 Fax: 296-4705

A Team of Land Planners,
 Landscape Architects,
 Engineers, Surveyors &
 Environmental Professionals

9/15/00
 Date

STATE OF MARYLAND
 PROFESSIONAL ENGINEER

SUBDIVISION NAME COLUMBIA GATEWAY	SECTION/AREA	LOT/PARCEL	01 - A
PLAT OR LOT 13667	BLOCK / ZONE 2 & T1 M-1	ELECT. DISTRICT 42-43	CENSUS TRACT 6067.03
WATER CODE E06	SEWER CODE 4900000		

Erosion And Sediment Control Details

Des By BIS	Scale 1" = 40'	Proj. No. 00021.A
Dwn By WHJ	Date 7-25-00	
Chk By	Approved	9 OF 12

Professional Engr. No. 10551

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

Chris ... 9/15/00
 U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE DATE

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

APPROVED: *James M. Abrams* 9/15/00
 HOWARD SOIL CONSERVATION DISTRICT DATE

PLAN NUMBER

DEVELOPERS CERTIFICATE:

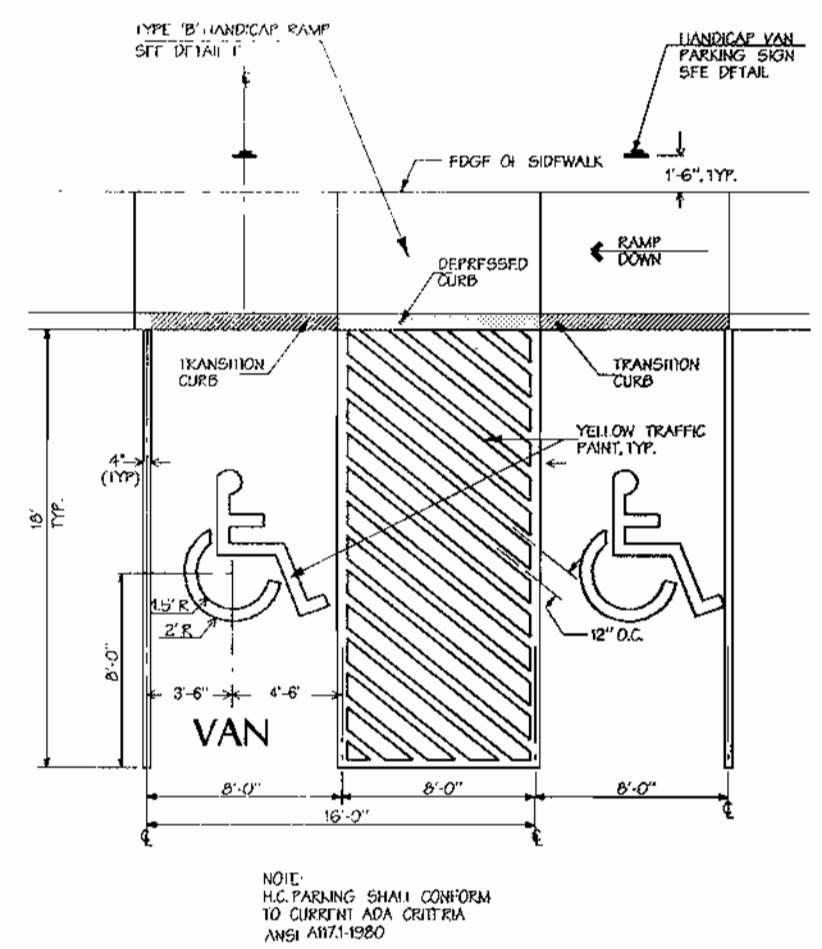
I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE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

James M. Abrams 9/15/00
 SIGNATURE OF DEVELOPER DATE
 PRINT NAME BELOW SIGNATURE
 James M. Abrams

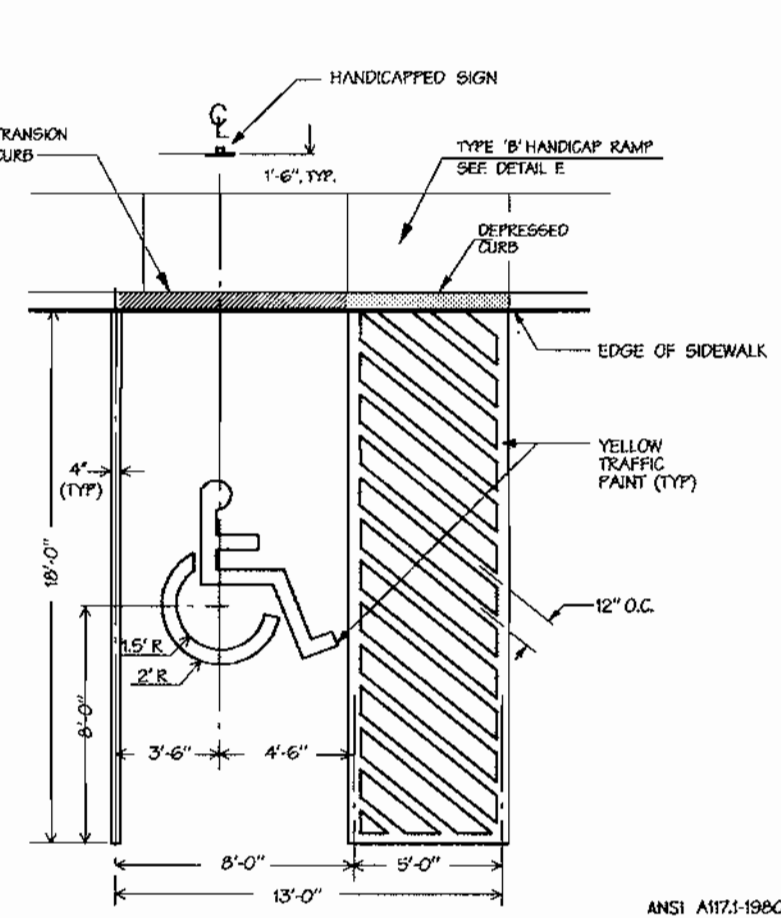
ENGINEERS CERTIFICATE:

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

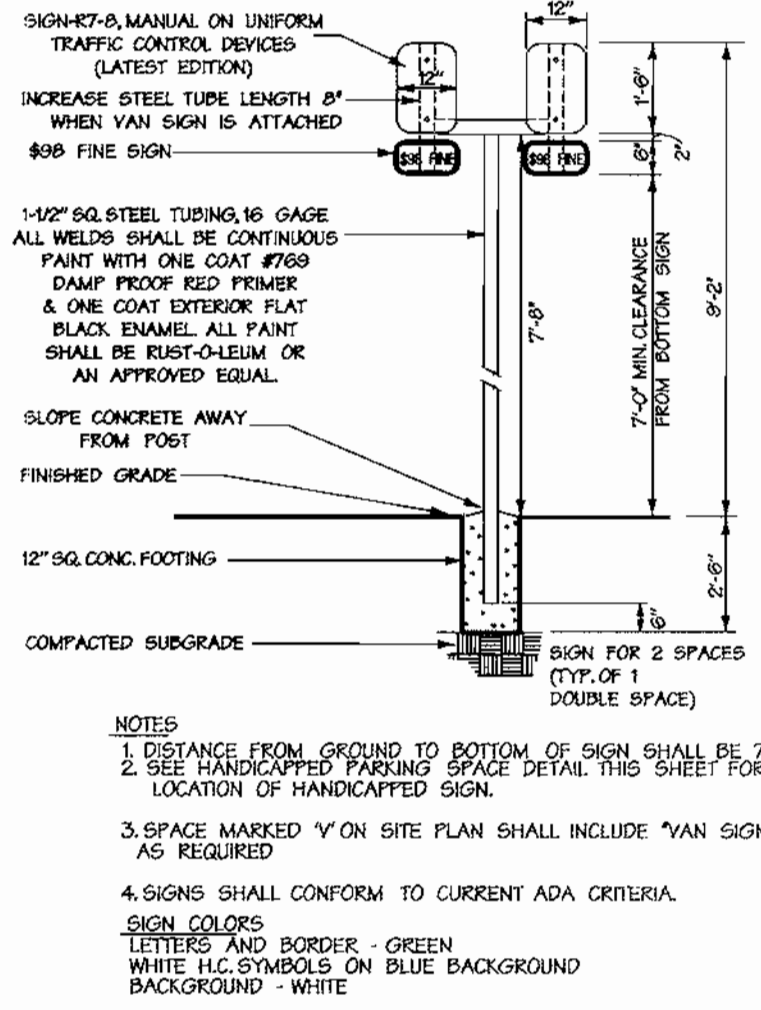
John W. Ranocchia, Sr. 9/15/00
 SIGNATURE OF ENGINEER DATE
 PRINT NAME BELOW SIGNATURE
 John W. Ranocchia, Sr.



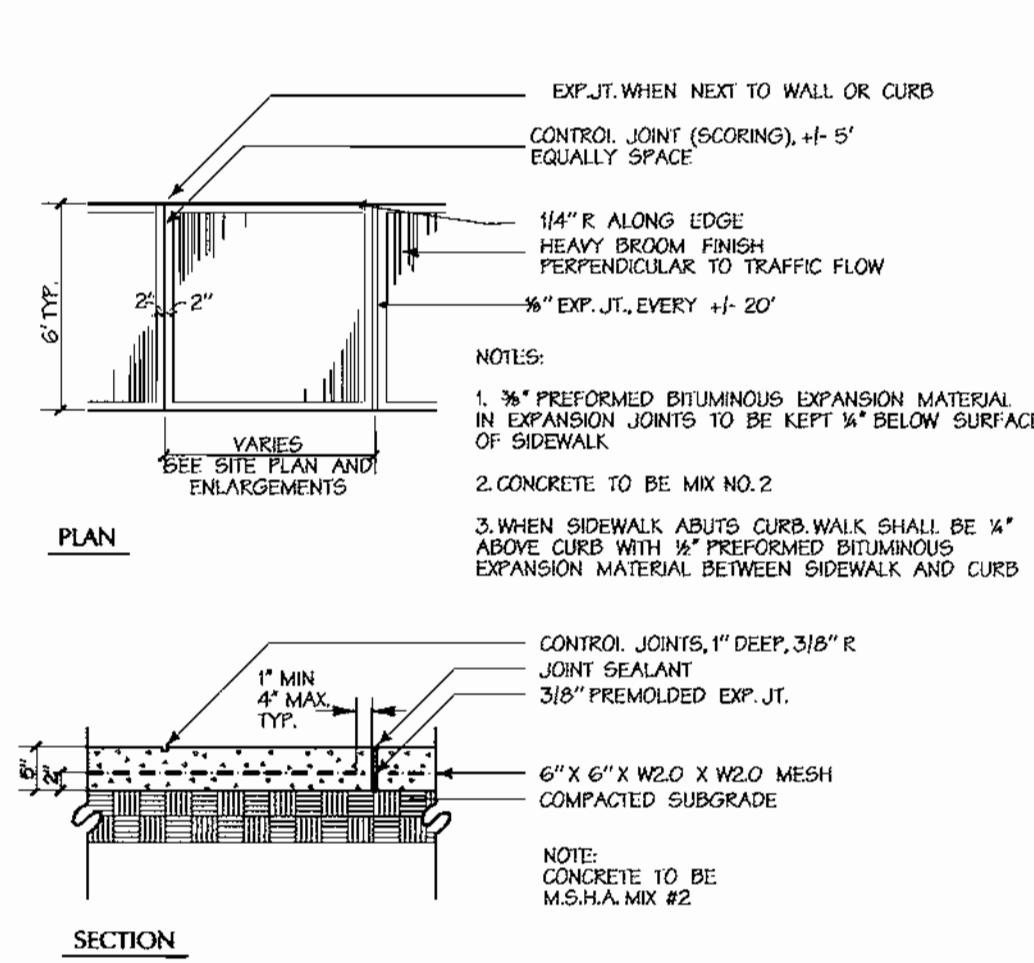
A Handicap Parking: Van & Standard
Not To Scale



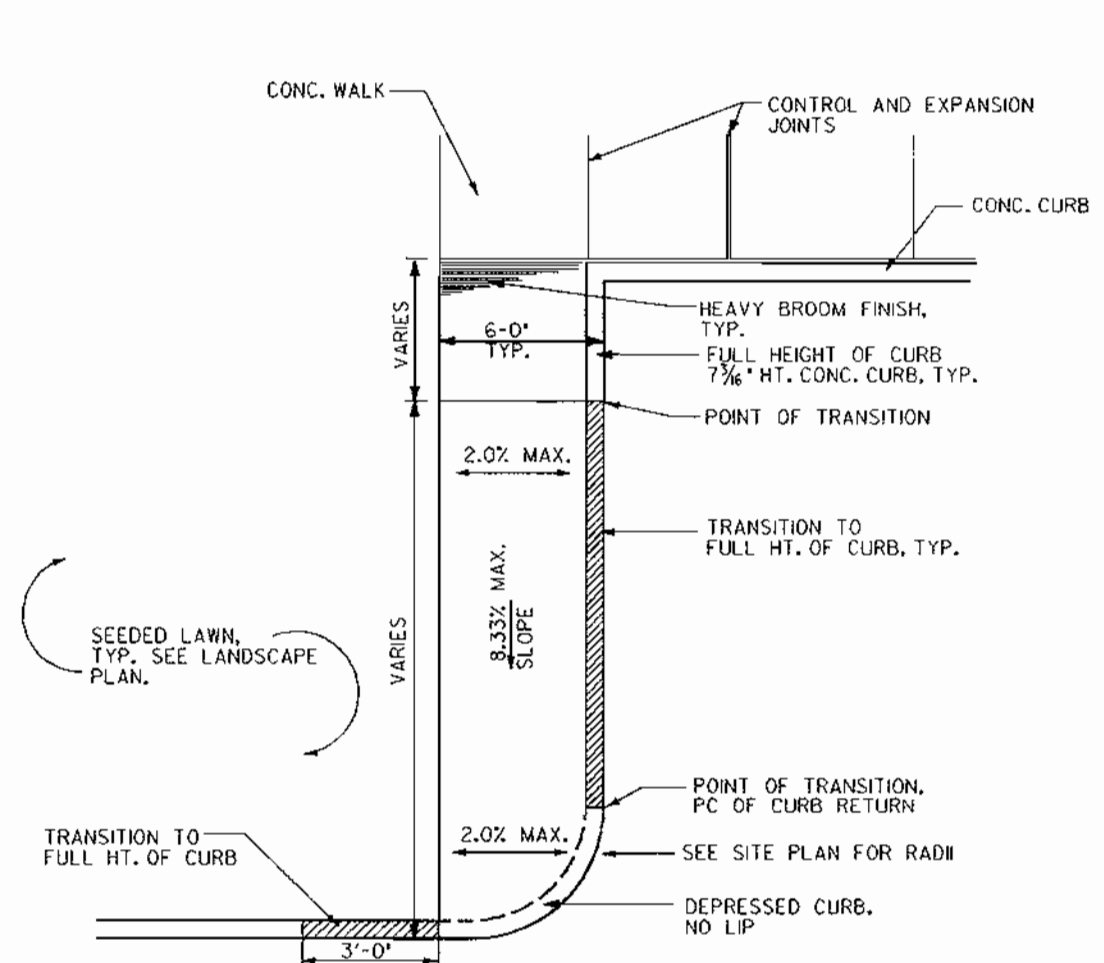
D Handicap Parking Space
Not To Scale



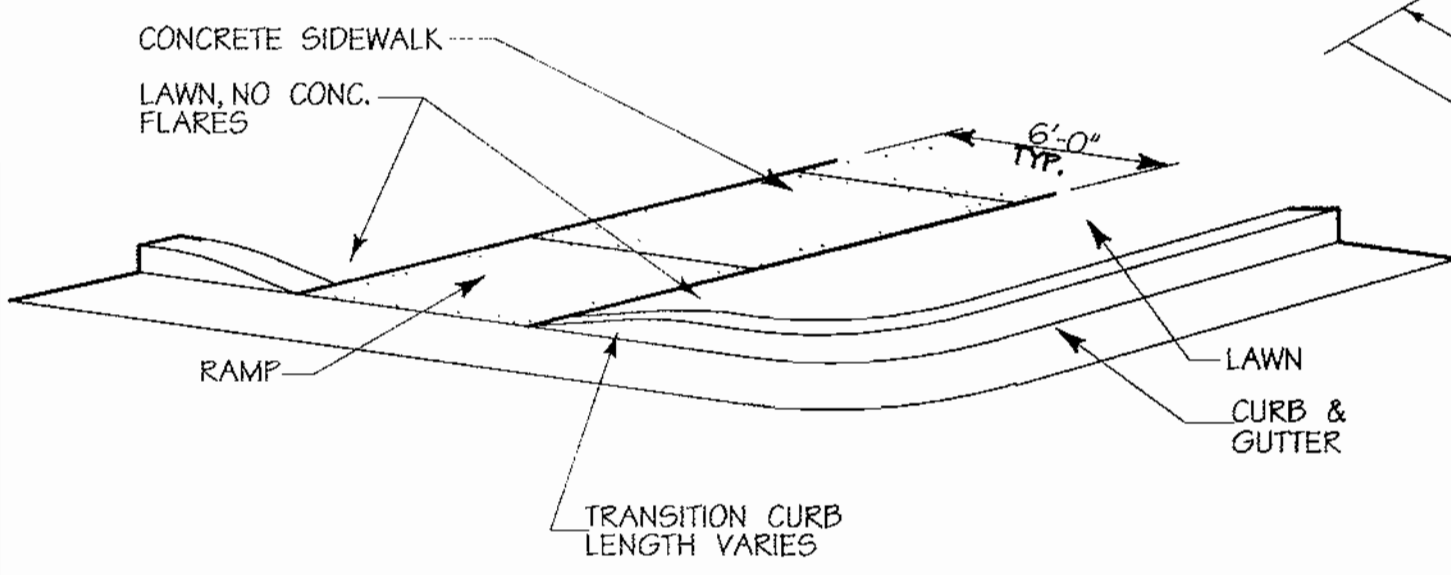
G Handicap Parking Signs
Not To Scale



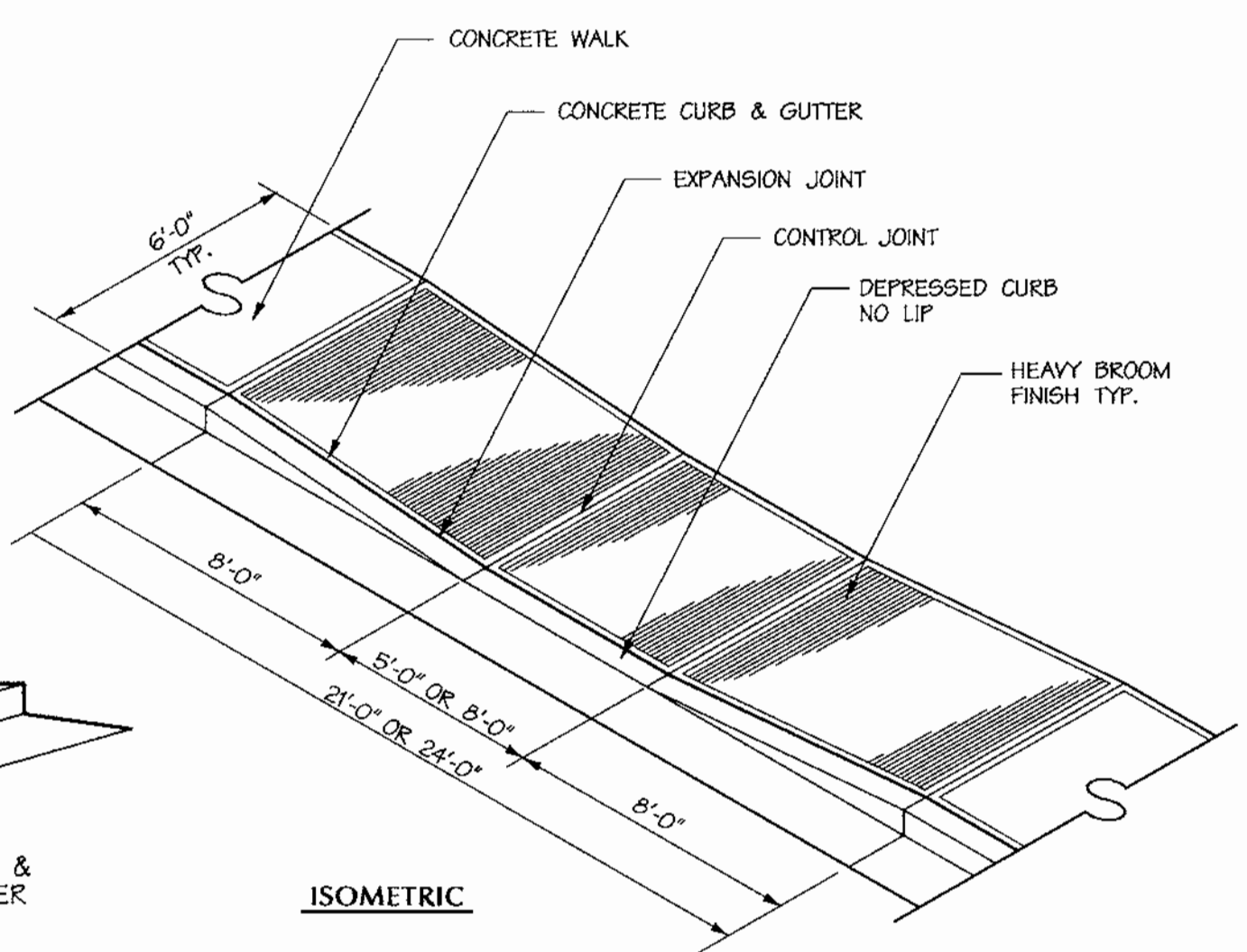
J Concrete Walk
Not To Scale



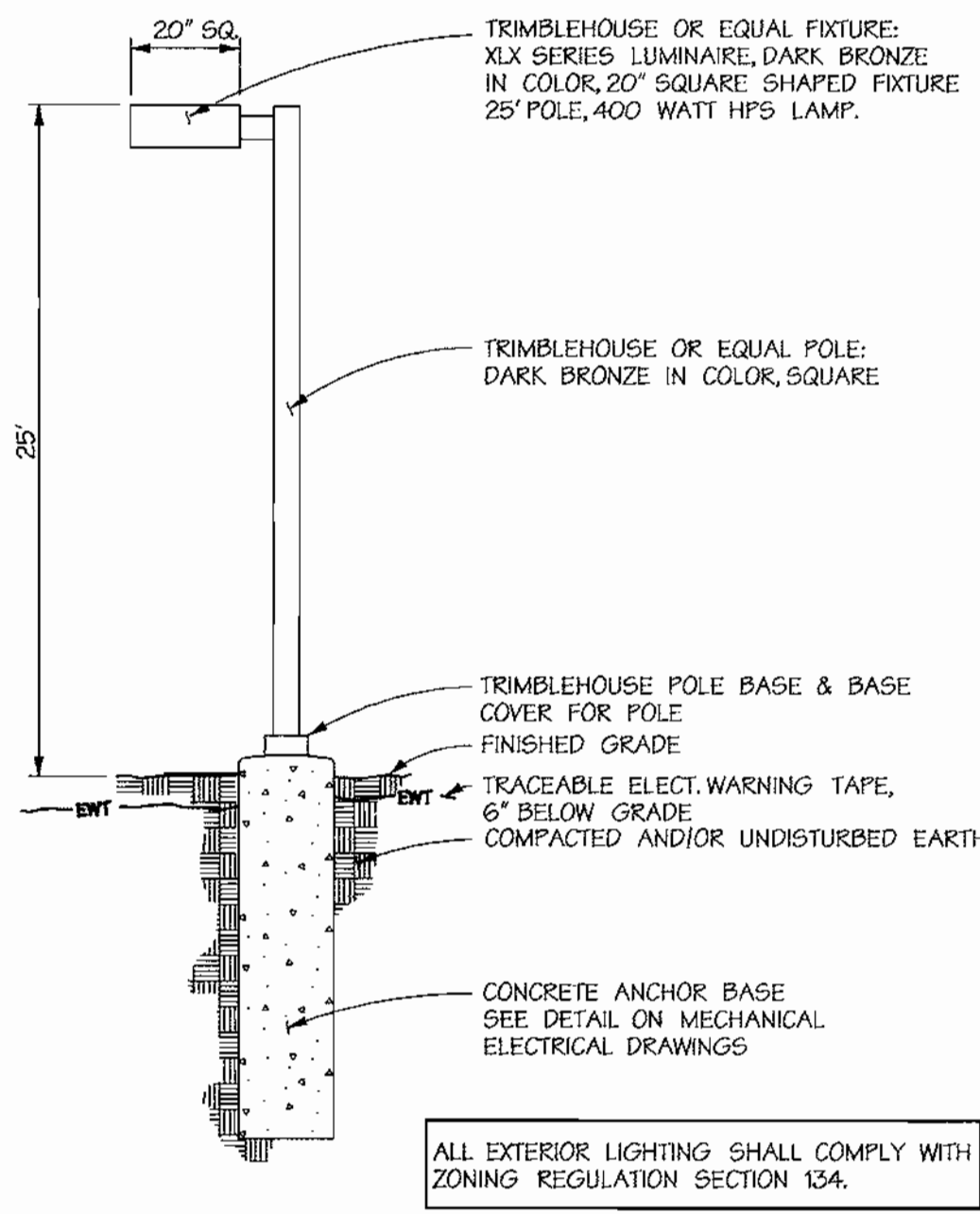
L Handicapped Ramp - C
Not To Scale



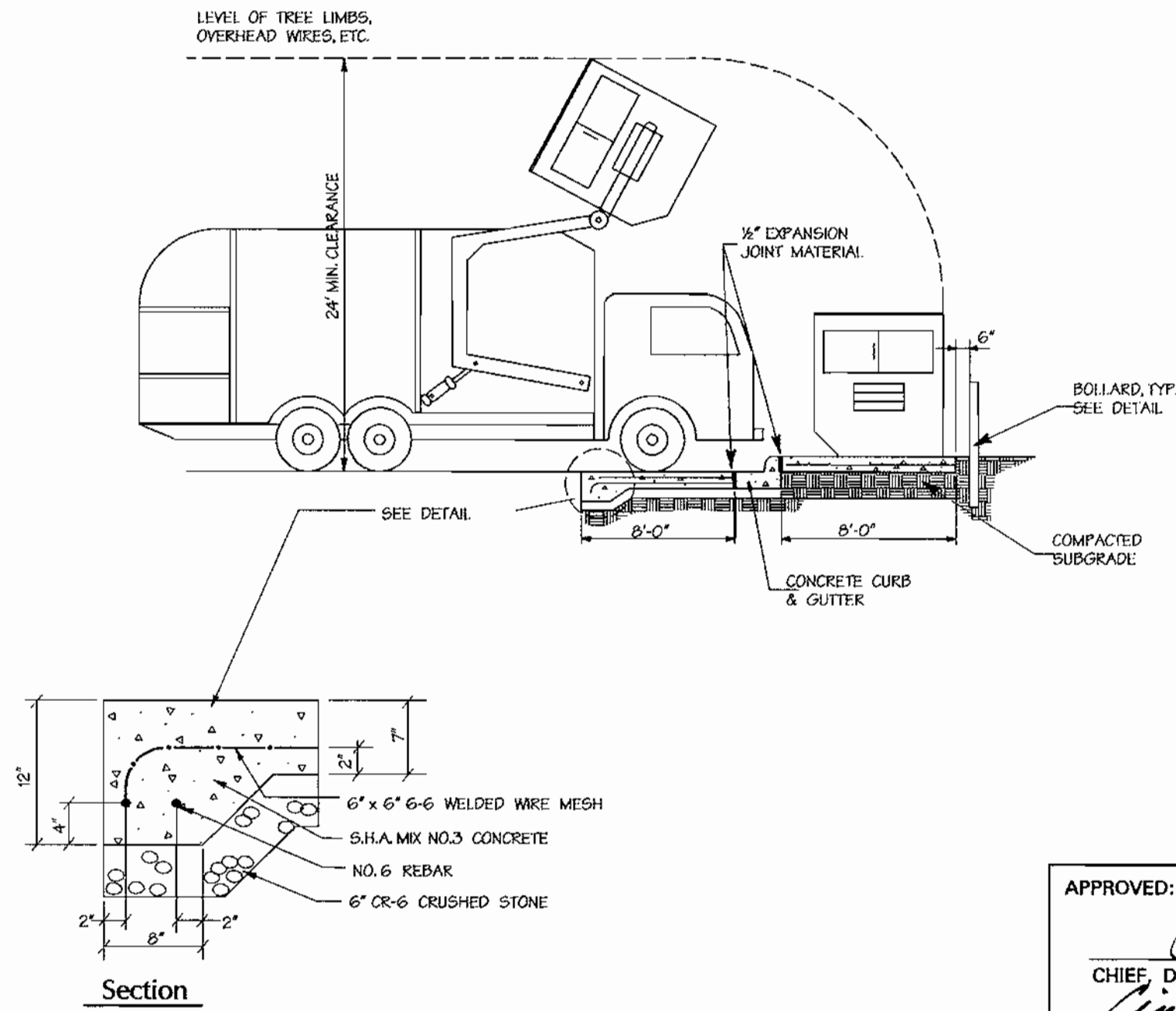
B Type "A" Sidewalk Ramp
Not To Scale



E Type "B" Handicapped Ramp
Not To Scale



H Sharp Cutoff Area Light
Not To Scale



K Service Pad & Dumpster Bin
Not To Scale

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE: June 29, 2000

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 Chief Development Engineering Division MK 9/15/00
 Chief, Division of Land Development 9/15/00
 Director 9/15/00

Date	No.	Revision	Description

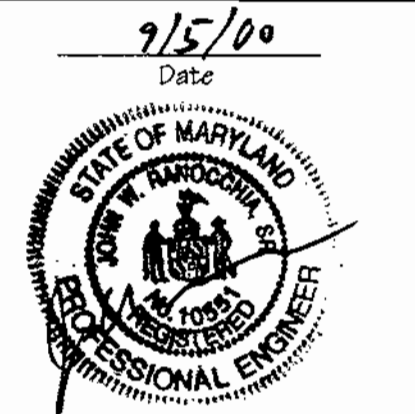
Columbia Gateway Parcel Q3

OWNER: The Howard Research and Development Corporation
 10275 Little Patuxent Parkway
 Columbia, Maryland 21044

DEVELOPER: AAK III, LLC
 8805 COLUMBIA 100 PKWY
 SUITE 101
 COLUMBIA, MD 21045

DMW
 Darr McCona-Walker, Inc.
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 296-3333
 Fax: 296-4705

A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

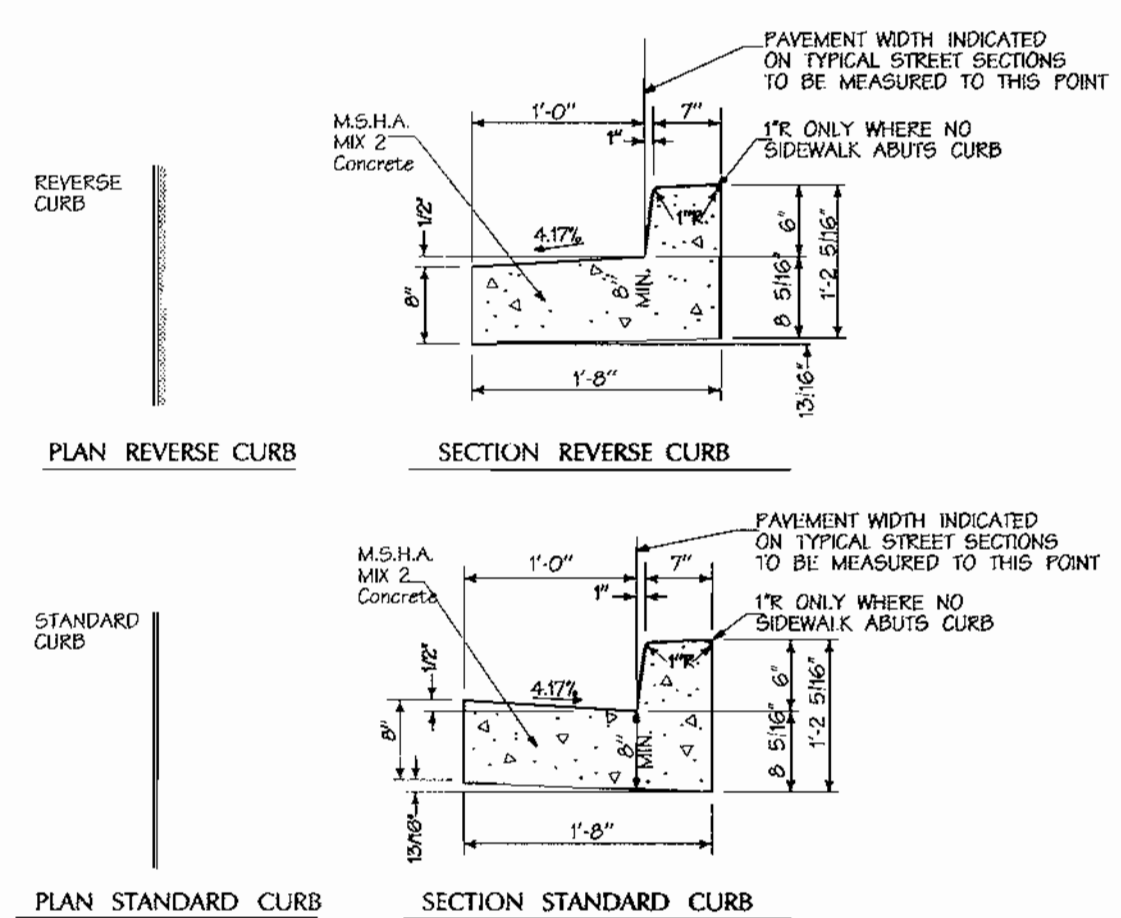


SUBDIVISION NAME: COLUMBIA GATEWAY	SECTION/AREA:	LOT/PARCEL: Q3
PLAT OR REF: 13667	BLOCK: 12 & 7	ZONE: 42-43
MAP: M-1	TAXIDING MAP: 6	ELECT. DISTRICT: 6
OWNER CODE: E06	OWNER USE: 4900000	OTHER TRACT: 6067.03

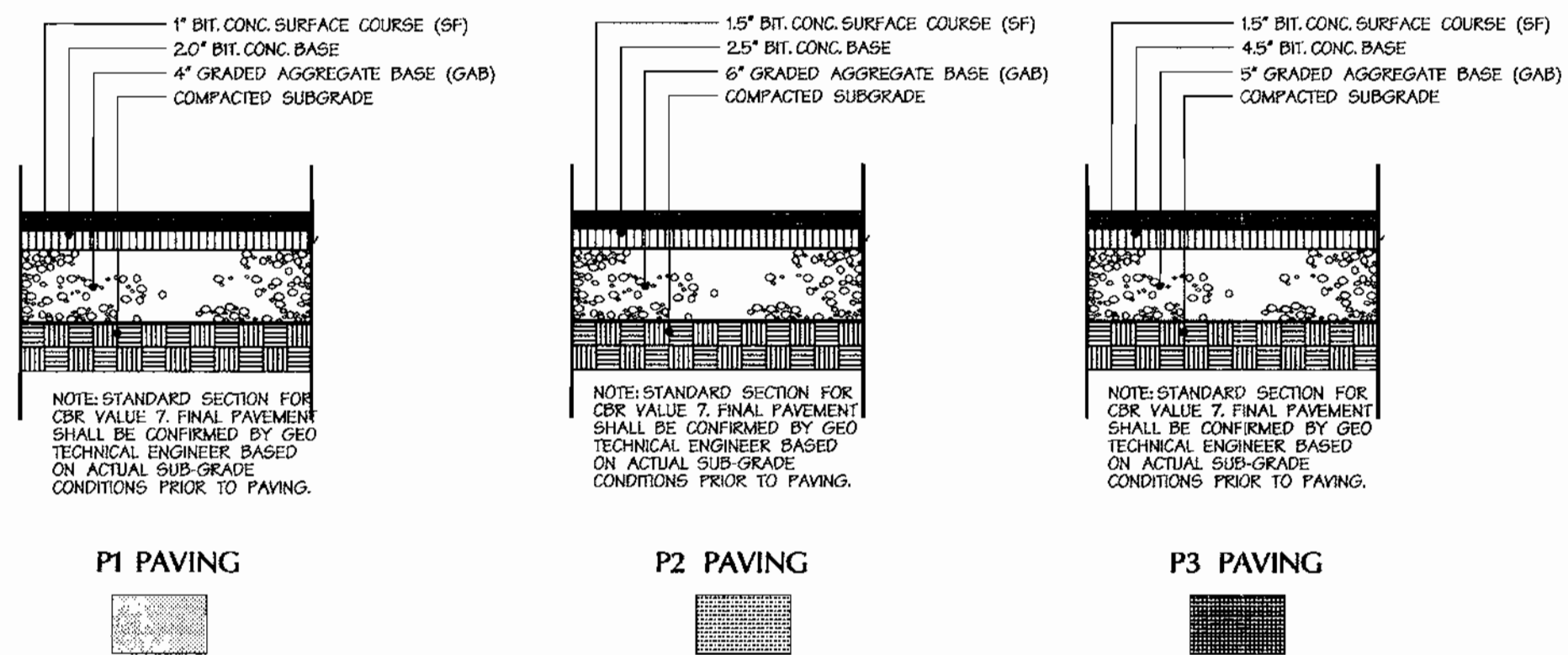
Site Detail Plan

Des By	Scale	Proj. No.	00021.A
Drn By	Date	8-30-00	
Chk By	Approved		10 OF 12

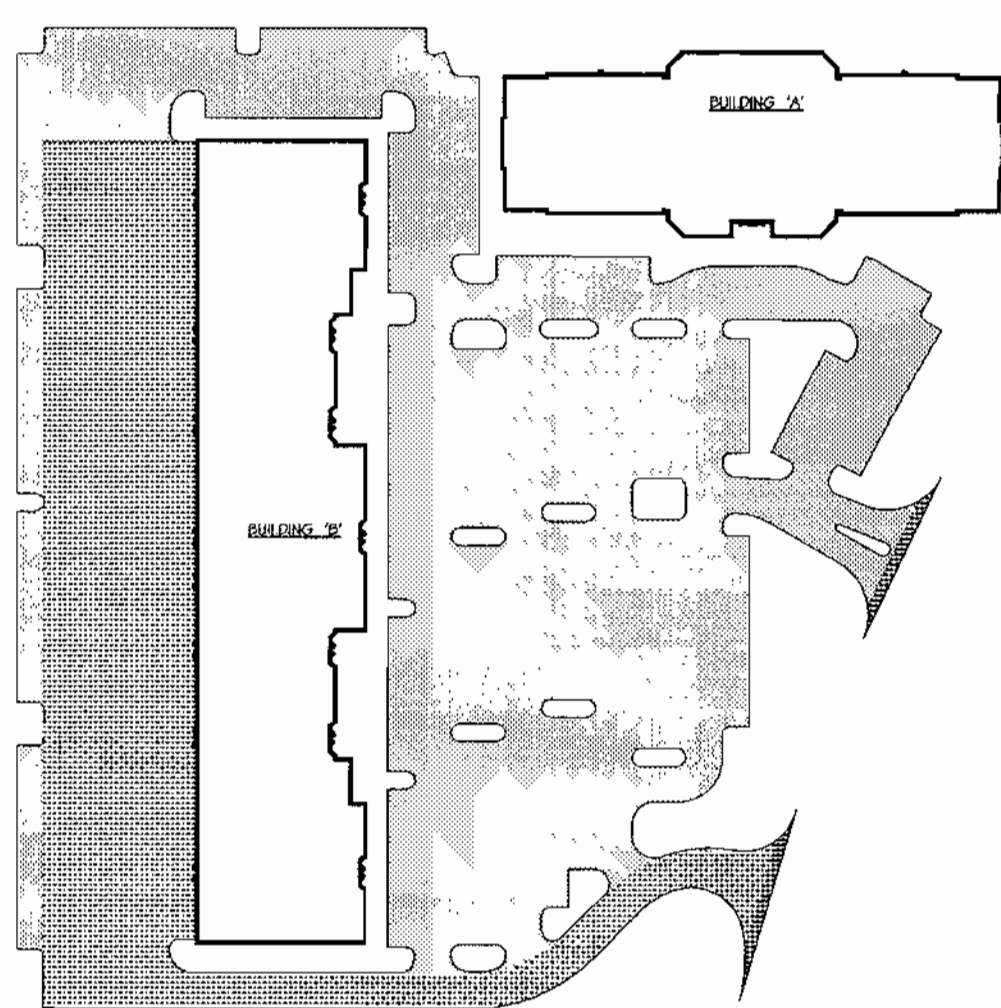
Professional Engr. No. 10557



C Concrete Curb, Typical
Not To Scale



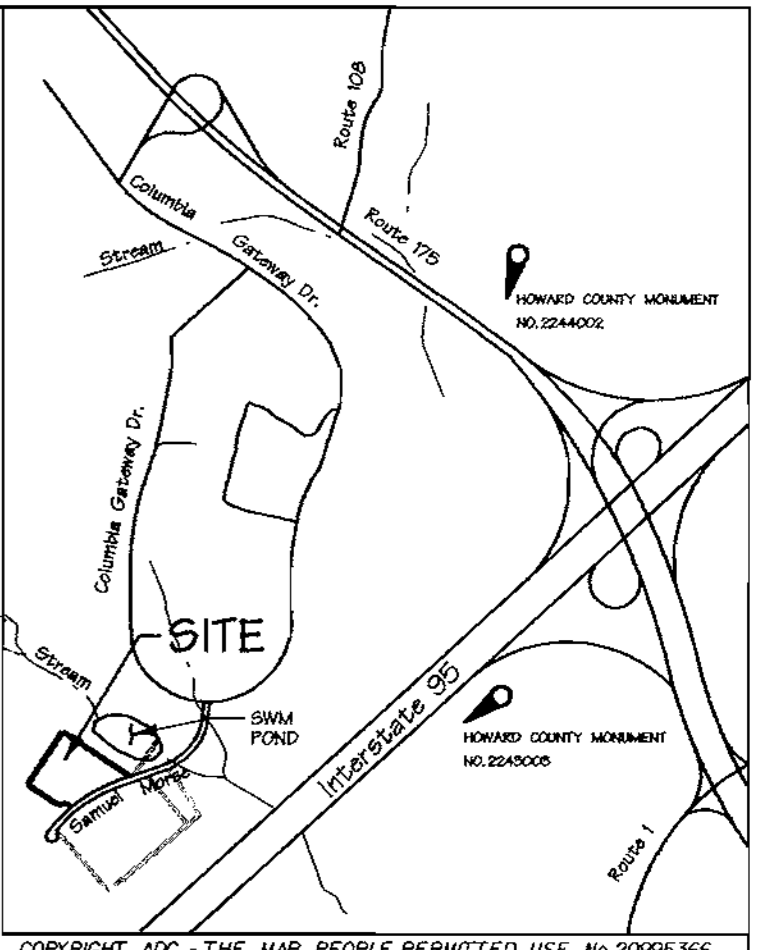
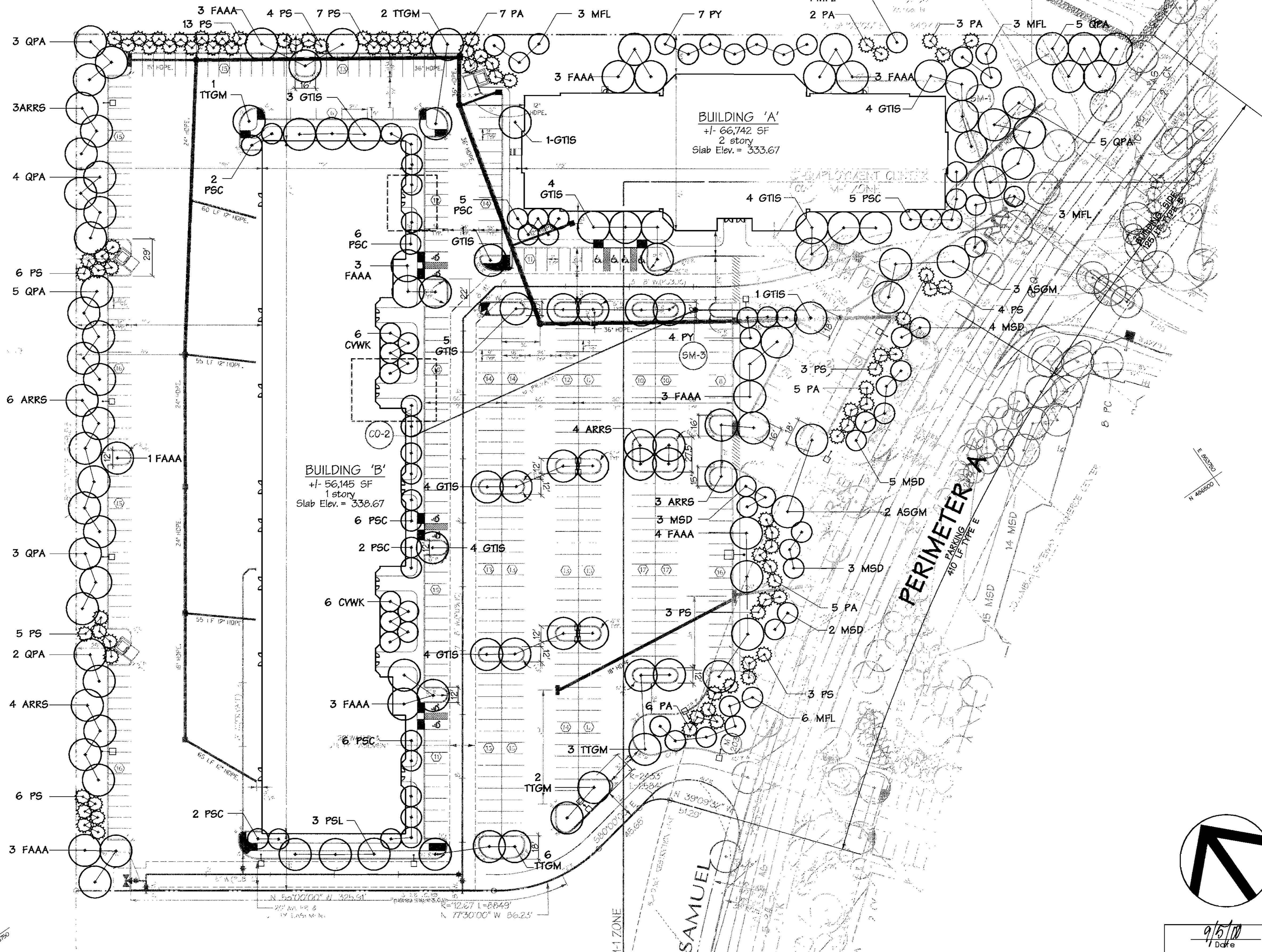
F Paving
Not To Scale



I Paving Plan
Not To Scale

Legend

- | SYMBOL | DESCRIPTION |
|--------|-------------------------------|
| — | BRL BUILDING RESTRICTION LINE |
| ⊙ | PARKING COUNT |
| ⊙ | VAN HANDICAPPED PARKING |
| ⊙ | HANDICAPPED PARKING |
| --- | EXISTING 10' CONTOUR |
| --- | EXISTING 2' CONTOURS |
| ⊖ | REVERSE CURB & GUTTER |
| ⊖ | DEPRESSED CURB |
| ⊖ | STANDARD CURB & GUTTER |
| Ⓜ | STORM DRAIN STRUCTURE LABEL |
| --- | EXISTING SEWER |
| --- | EXISTING STORM DRAIN |
| --- | EXISTING WATER |
| --- | PROPOSED STORM DRAIN |
| --- | PROPOSED SEWER |
| --- | PROPOSED WATER |
| □ | PROPOSED LIGHT |
| ⊙ | PROPOSED SHADE TREE |
| ⊙ | PROPOSED FLOWERING TREE |
| ⊙ | PROPOSED EVERGREEN TREE |
| ⊙ | EXISTING TREE |
| ⊙ | EXISTING TREE TO BE REMOVED |



APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE: JUNE 29, 2000

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

<i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE: <u>7/15/00</u>
<i>[Signature]</i> CHIEF, DIVISION OF LAND DEVELOPMENT	DATE: <u>7/15/00</u>
<i>[Signature]</i> DIRECTOR	DATE: <u>7/19/00</u>

Date	No.	Revision Description

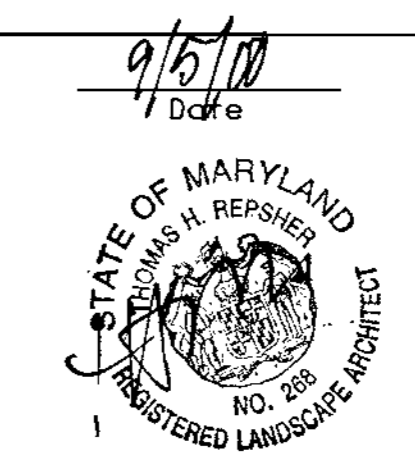
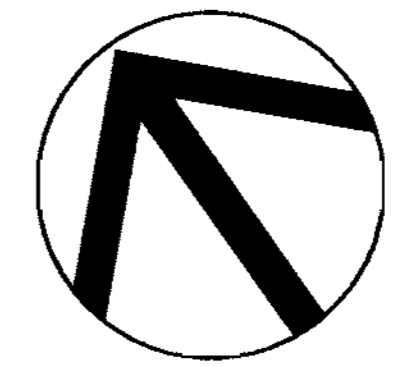
**Columbia Gateway
Parcel Q3**

OWNER:
The Howard Research and Development Corporation
10275 Little Patuxent Parkway
Columbia, Maryland 21044

DEVELOPER:
AAK III, LLC
8805 COLUMBIA 100 PKWY
SUITE 101
COLUMBIA, MD 21045

DMW
Dan McCune-Walker, Inc.
300 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax: 296-4705

*A Team of Land Planners,
Landscape Architects,
Engineers, Surveyors &
Environmental Professionals*

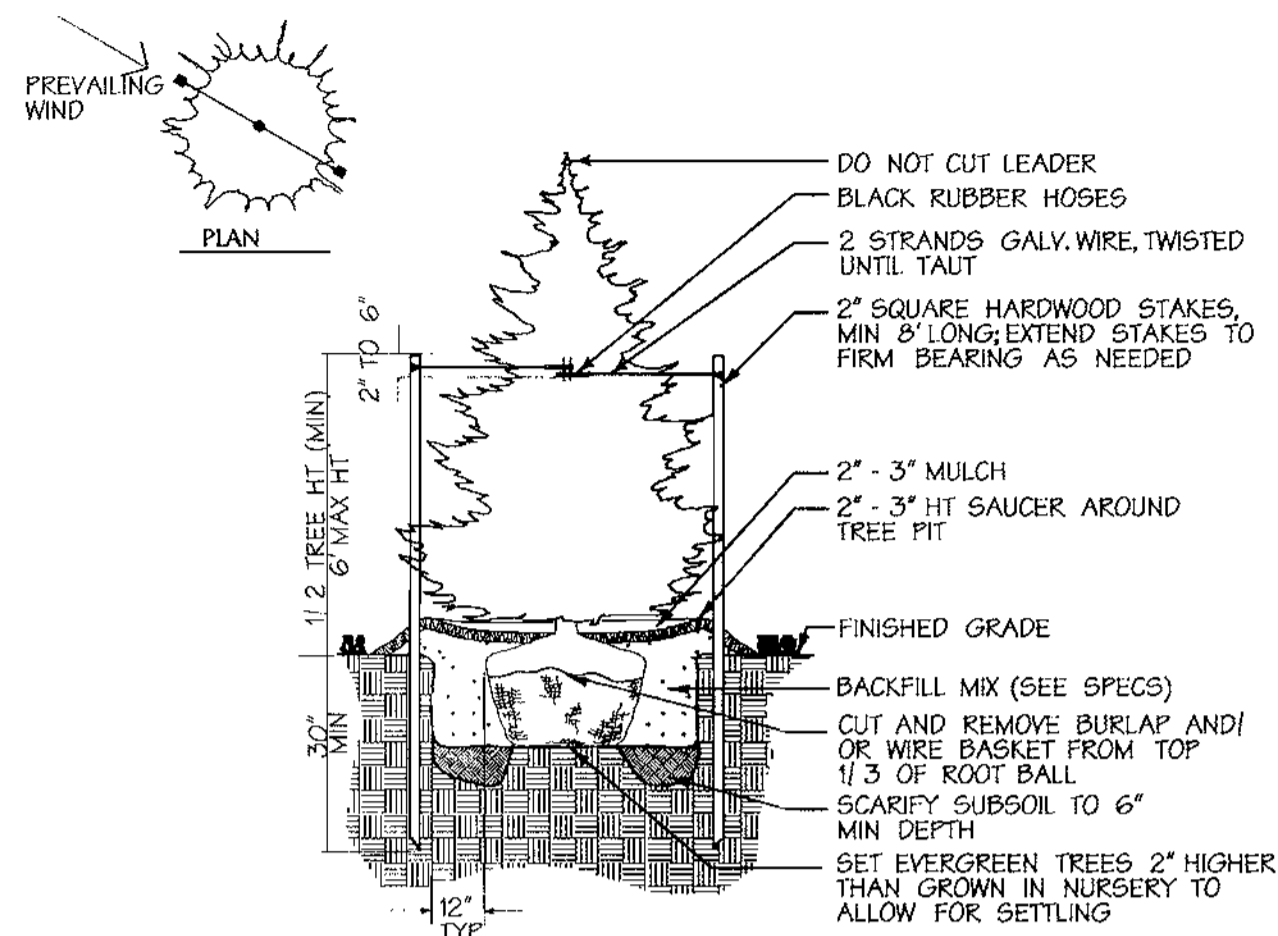


SUBMISSION NAME COLUMBIA GATEWAY	SUBSECTION/A BLOCK # 13667 ZONE M-1	LOT/PARCEL # Q3
PLAT OR TO 13667	BLOCK # 2 & 7	TAZONING MAP 42-43
WORK CODE EO6	TRACED DISTRICT 6	GENESIS TRACT 6067.03
TITLE Landscape & Lighting Plan	DATE 8-30-00	PROJ. NO. 00021.A

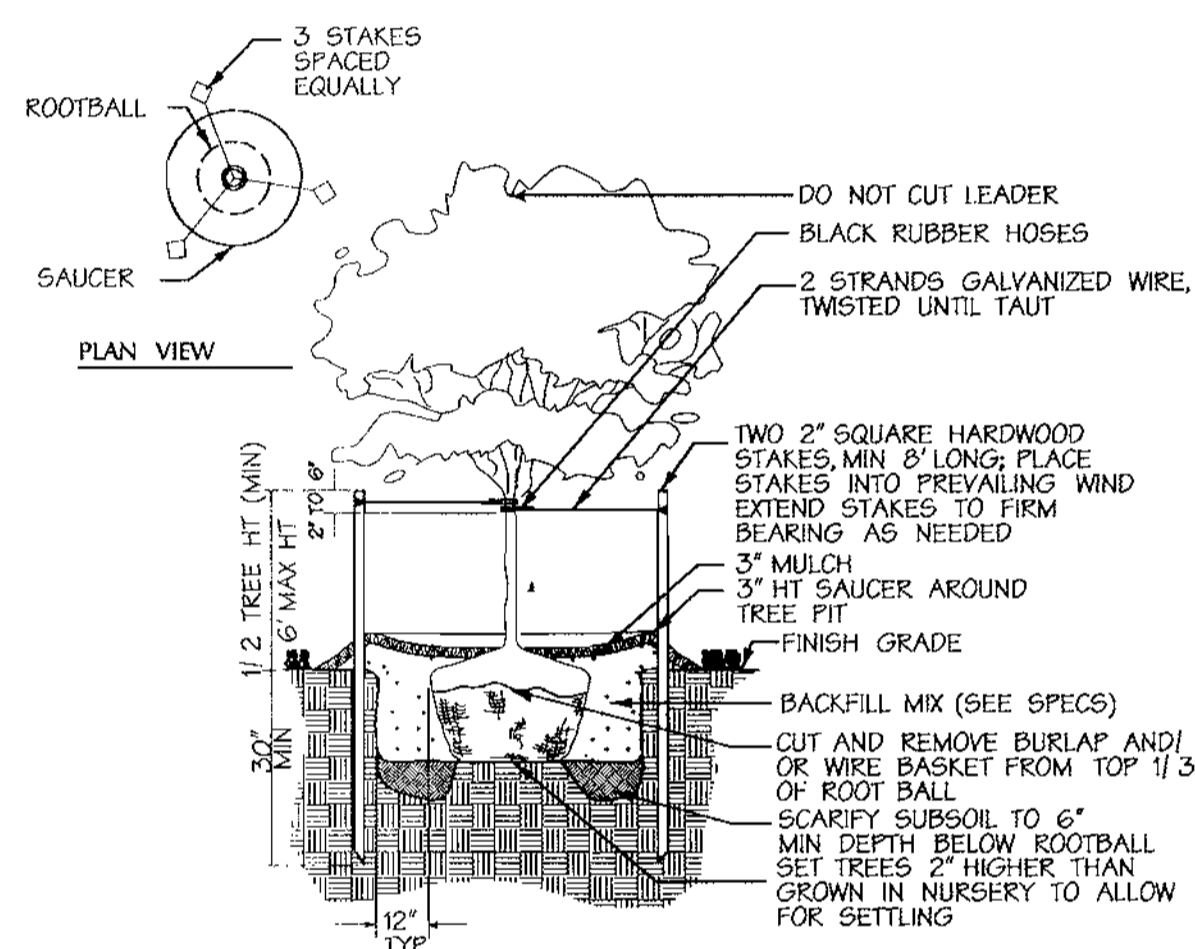
Des By: MM
Um By: BKC
Chk By: Approved

Scale: 1" = 40'
Date: 8-30-00

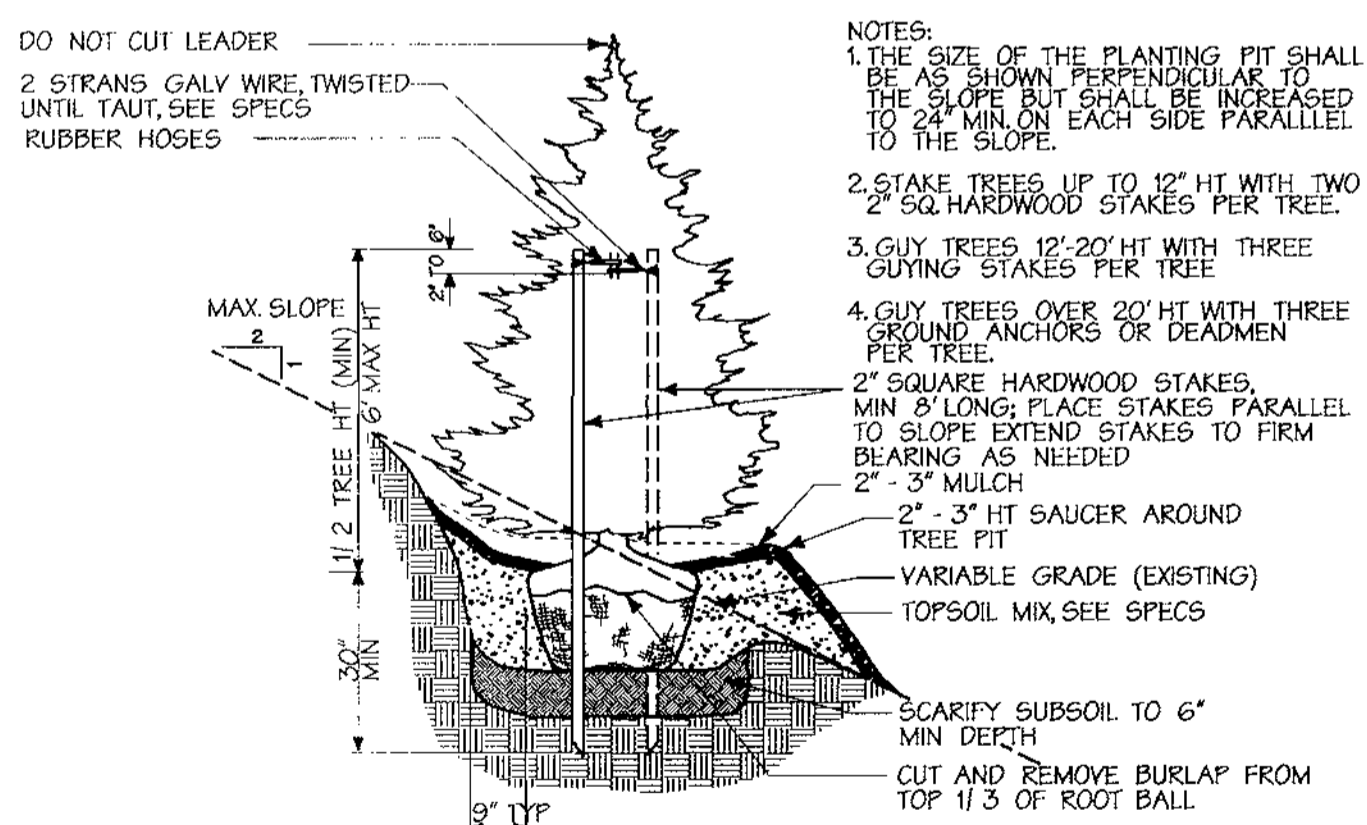
Proj. No.: 00021.A
11 OF 12



A Evergreen Tree Planting
Not To Scale



B Less Than 3\"/>



C Evergreen Tree Planting on Slope
Not To Scale

Landscape Notes

- The contractor shall review architectural/engineering plans to become thoroughly familiar with grading and surface utilities.
- All equipment and tools shall be placed so as not to interfere or hinder the pedestrian and vehicular traffic flow. See Seasonal Plant List for planting times of bulbs and seasonal plants.
- The contractor shall coordinate with lighting and irrigation contractors regarding timing of installation of plant material.
- The contractor shall insure that his work does not interrupt established or projected drainage patterns.
- During planting operations, excess waste materials shall be promptly and frequently removed from the site.
- The contractor is advised of the existence of underground utilities on the site. Their exact location shall be verified in the field with the owner or general contractor prior to the commencement of any digging operations. In the event they are uncovered, the contractor shall be held responsible for all damage to utilities and such damage shall not result in any additional expenses to the owner.
- If utility lines are encountered in excavation of tree pits, other locations for trees shall be made by the contractor without additional compensation. No changes of location shall be made without approval of the landscape architect.
- Maintain positive drainage out of planting beds at a minimum 2% slope. All grades, dimensions, and existing conditions shall be verified by the contractor on site before construction begins. Any discrepancies shall be brought to the attention of the landscape architect or owner.
- Every possible safeguard shall be taken to protect building surfaces, equipment, and furnishings. The contractor shall be responsible for any damage or injury to person or property which may occur as a result of his negligence in the execution of the work.
- In the event of variation between quantities shown on the plant list and the plans, the plans shall control. The contractor is responsible for verifying all plant quantities prior to the commencement of work. All discrepancies shall be reported to the landscape architect for clarification prior to planting. The contractor shall furnish plant material in sizes as specified in plant list.
- The contractor shall stake all material located on the site for review and/or adjustment by the landscape architect prior to planting. All locations are to be approved by the landscape architect before excavation.
- Plants shall conform to current "American Standards for Nursery Stock" by American Association of Nurserymen (AAN), particularly with regard to size, growth, size of ball, and density of branch structure. Plant material shall be tagged at the source by the landscape architect unless this requirement is specifically waived.
- All plants (B&B or containers) shall be properly identified by weather-proof labels securely attached thereto before delivery to project site. Labels shall identify plants by name, species, and size. Labels shall not be removed until the final inspection by the landscape architect or agent in charge.
- Any material and/or work may be rejected by the landscape architect if it does not meet the requirements of the specifications. All rejected materials shall be removed from the site by the contractor.
- No substitutions shall be made without written consent of the owner or landscape architect.
- The landscape architect or owner shall have the right, at any stage of the operations, to reject any and all work and material which, in his opinion, does not meet the requirements of these plans and specifications.
- The contractor shall be wholly responsible for stability and conditions of all trees and shrubs and shall be legally liable for any damage caused by instability of any plant materials.

SCHEDULE A PERIMETER LANDSCAPE EDGE

Category	Landscape Type	Adjacent to Roadway	Formula
Parking	E	410 LF	1 shade/40' + 1 shrub/4'
Building Side	B	125 LF	1 shade/50' + 1 evergreen/40'
Credits for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed)			
		NO	
Credits for Wall, Fence or Berm (Yes, No, Linear Feet) (Describe below if needed)			
		NO	
Number of Plants Required			
Shade Trees		11 + 3 = 14 shade trees	
Evergreen Trees		4 evergreen trees	
Shrubs		105 shrubs	
Number of Plants Provided			
Shade Trees		14	
Evergreen Trees		4	
Other Trees (21 substitution)		02	
Shrubs (101 substitution)		0	
(Describe plant substitution credits below if needed)			

Substitutions: 11 Flowering Trees have been substituted for 105 shrubs

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING

Number of Parking Spaces	462
Number of Trees Required	● 120 sp. = 25
Number of Trees Provided	25
Shade Trees	
Other Trees (21 substitution)	
Number of Islands Required	● 120 sp.
Number of Islands Provided	36

NOTE: This project will be constructed under alternate compliance - HRD standards. The Landscape calculations shown have been prepared in accordance with the provisions in section 16.124 of the Howard County Landscape Manual for bonding purposes only.

Bonding Amount: 37 shade trees @ \$500
4 evergreen trees @ \$150
105 shrubs @ \$50
Total: \$14,750

Plant List

QTY	SYM	BOTANICAL NAME/COMMON NAME	SIZE	REMARKS
SHADE TREES				
20	ARRS	ACER RUBRUM 'RED SUNSET'	2 1/2" - 3" CAL 12-14 HT	B & B FULL HEAD
5	ASGM	ACER SACCHARUM 'GREEN MOUNTAIN'	2 1/2" - 3" CAL 12-14 HT	B & B FULL HEAD
35	GTIS	GLEDTISIA TRI-VAR INERMIS 'SHADEMASTER'	2 1/2" - 3" CAL 12-14 HT	B & B FULL HEAD
27	QPA	QUERCUS PALUSTRIS PIN OAK	2 1/2" - 3" CAL 12-14 HT	B & B FULL HEAD
26	FAAA	FRAXINUS AMERICANA 'AUTUMN APPLAUSE'	2 1/2" - 3" CAL 12-14 HT	B & B FULL HEAD
14	TIGM	TILIA TOMENTOSA 'GREEN MOUNTAIN'	2 1/2" - 3" CAL 12-14 HT	B & B FULL HEAD
FLOWERING TREES				
12	CVWK	CRATAEGUS VIRGIDIS 'WINTER KING'	8-10 HT.	B & B MATCHED GROUPS
16	MFL	MALUS FLORIBUNDA JAPANESE FLOWERING CRAB	8-10 HT.	B & B FULL HEAD
17	MSD	MALUS 'SNOW DRIFT'	8-10 HT.	B & B FULL HEAD
34	PSC	PRUNUS SARGENTII 'COLUMNARIS'	8-10 HT.	B & B FULL HEAD
11	PY	PRUNUS YEDOENSIS YOSHINO CHERRY	8-10 HT.	B & B FULL HEAD
EVERGREEN TREES				
28	PA	PICEA ABIES NORWAY SPRUCE	6-8 HT.	B & B HEAVY / UNSHEARED
54	PS	PINUS STROBUS WHITE PINE	6-8 HT.	B & B HEAVY / UNSHEARED

NOTE: FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$12,600

DEVELOPER'S BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL.

I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE-YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

DATE: 9/1/00
NAME: [Signature]

THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.

PROVIDE THE FOLLOWING NOTE ON THE LANDSCAPE PLAN:

THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BERRIES, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE: JUNE 29, 2000

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
CHIEF, DEVELOPMENT ENGINEERING DIVISION MKK 9/15/00
CHIEF, DIVISION OF LAND DEVELOPMENT 9/15/00
DIRECTOR 9/15/00

Date	No.	Revision Description

Columbia Gateway Parcel Q3

OWNER: The Howard Research and Development Corporation
202 East Pennsylvania Avenue
Columbia, Maryland 21044

DEVELOPER: AAK III, LLC
8905 COLUMBIA 100 PKWY
SUITE 101
COLUMBIA, MD 21045

DMW
Duff McCune-Walker, Inc.
202 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4706

A Team of Land Planners,
Landscape Architects,
Engineers, Surveyors &
Environmental Professionals

SUBDIVISION NAME	SECTION/AREA	LOT/PAVING
COLUMBIA GATEWAY		Q3
PLAT OR L.D.	BLOCK	ZONE
136627	12 & 7	M-1
WATER CODE	ENGINEER MAP	ELECTRICAL
EO6	6	6
	SWR CODE	CFRUS TRACT
		6067.03

Landscape Notes & Details

Des By	MM	Scale	1" = 40'	Proj. No.	00021A
Dwn By	BKC	Date	8-30-00		
Chk By		Approved			12 OF 12

