

SHEET	DESCRIPTION
1	Cover Sheet
2	Site Plan
3	Site Plan
4	Grading Plan
5	Grading Plan
6	Storm Drain Profiles
7	Storm Drain Profiles
8	Storm Drain Profiles
9	Utility Profiles
10	Utility Profiles
11	Drainage Area Map & Sediment Control Plan
12	Drainage Area Map & Sediment Control Plan
13	Erosion & sediment Control Details
14	Erosion & sediment Control Details
15	Site Details
16	Landscape Plan
17	Landscape Plan
18	Landscape Notes & Details
19	Retaining Wall Details

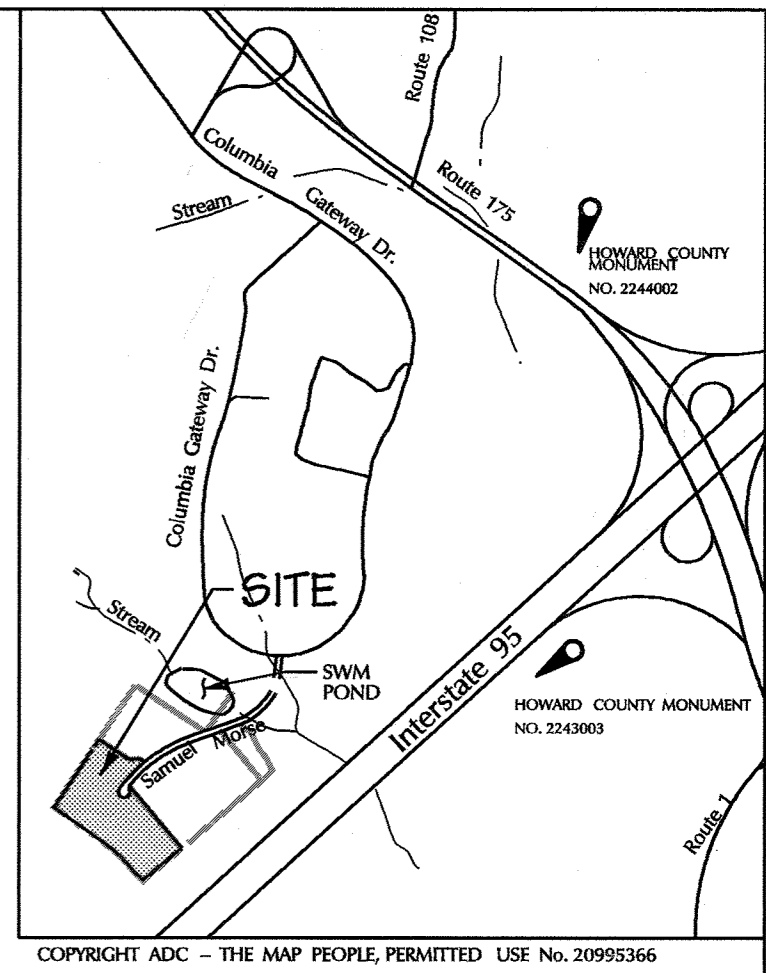
SITE DEVELOPMENT PLAN

for

Gateway Commerce Center

Columbia Gateway, Parcel Q4

Howard County, Maryland



LOCATION MAP

SCALE: 1" = 2000'

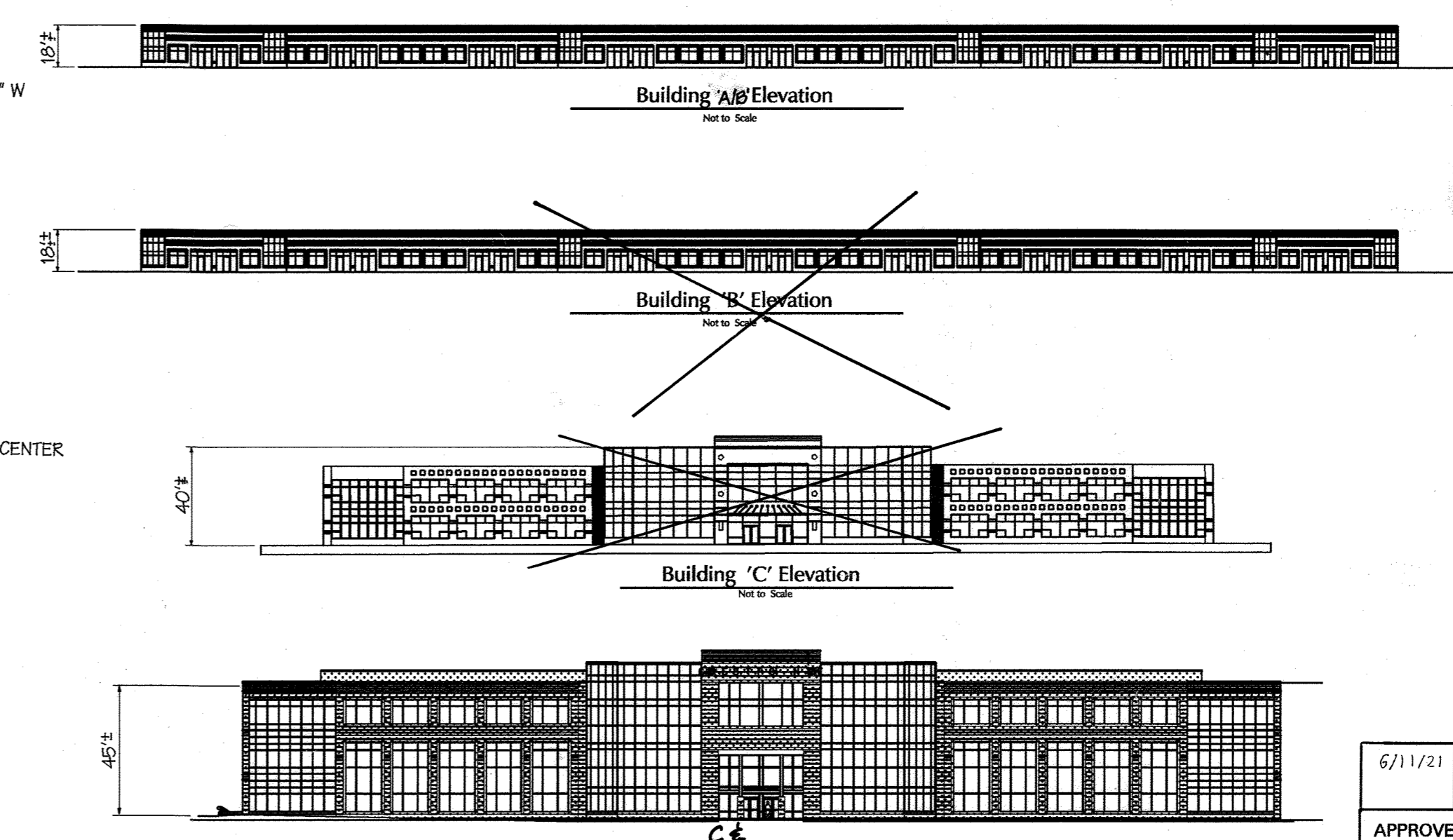
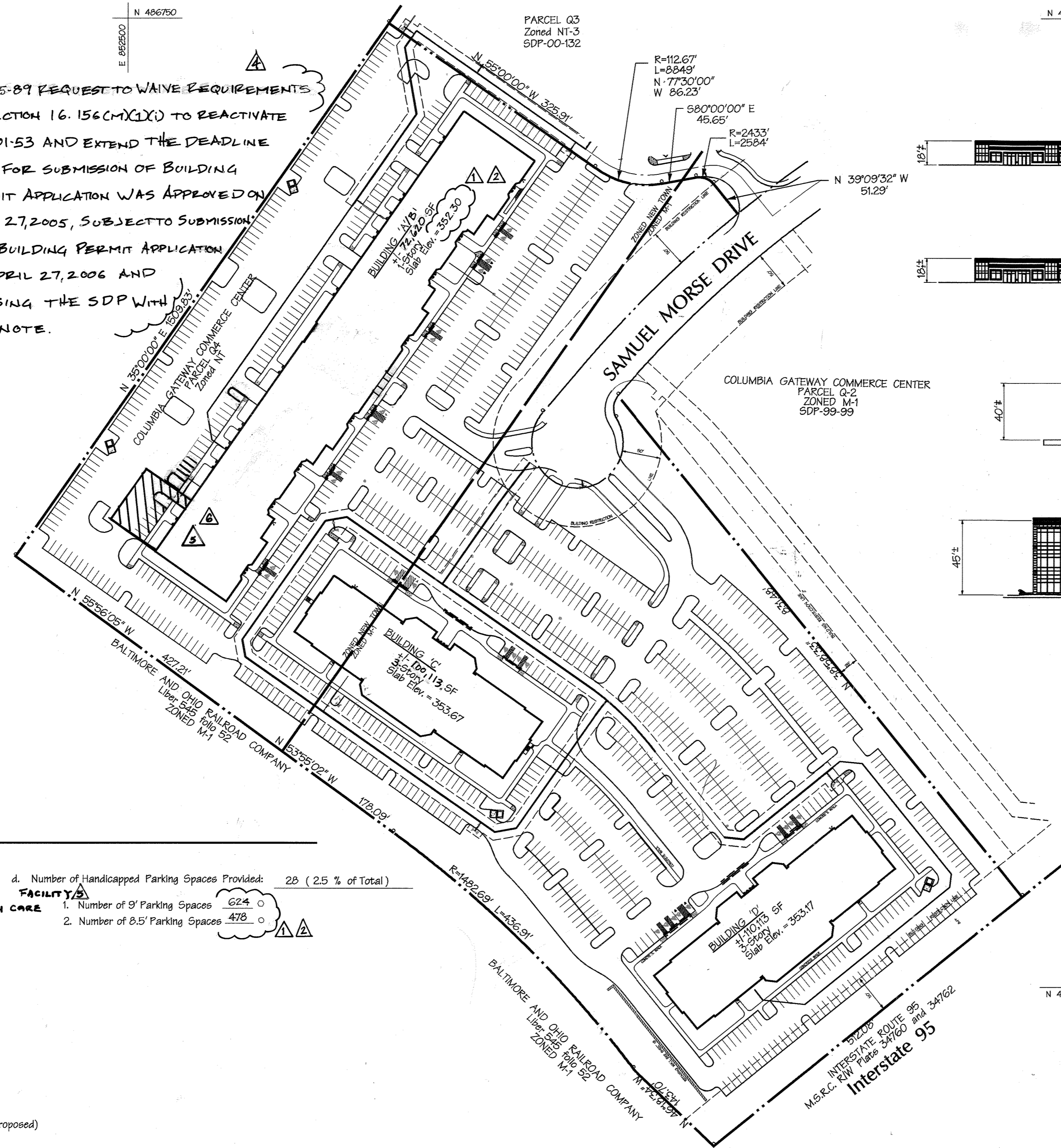
BENCHMARK
DESCRIPTION

- NO. 2244002 - HOWARD COUNTY MONUMENT
- NO. 2243003 - HOWARD COUNTY MONUMENT

General Notes

- All construction shall be performed in accordance with the latest standards and specifications of Howard County, plus MSHA standards and specifications if applicable or as specified.
- Approximate location of existing utilities are based solely on available records. Contractor shall verify the location of any utilities which may be impacted by the work. 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 at least five (5) days before starting work shown on these drawings to verify their location and elevation. The contractor shall notify the engineer immediately if location of utilities is other than shown.
- The contractor shall notify 'Miss Utility' at 1-800-257-7777 at least 48 hours prior to any excavation work being done, and shall notify the Department of Public Works/Bureau of Engineering/Construction Inspection Division at (410) 313-1880 at least five (5) working days prior to the start of work.
- Traffic control devices, markings, and signing shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD). All street and regulatory signs shall be in place prior to the placement of any asphalt.
- Any damage caused by the Contractor to existing public right-of-way, existing paving, existing curb and gutter, existing utilities, etc. shall be repaired at the Contractor's expense.
- The existing topography inside property line per mass grading as shown on GP-99-15
- All hydraulic data is for the 10-year storm unless otherwise noted.
- All fill areas shall be compacted to a minimum of 95% of the maximum dry density as determined and verified in accordance with AASHTO T-180.
- All plan dimensions are to face of curb unless otherwise noted. Numerically written dimensions take precedence over scaled dimensions.
- The coordinates shown herein are based upon the Howard County geodetic control which is based upon the Maryland State plane coordinate system, Howard County monument nos. 2243003 and 2244002 were used for this project.
- Stormwater management quantity and quality control in a regional facility on Parcel A-77 under contract F-97-98
- Public water (Contract # 24-39320) and Public sewer (Contract # 24-39320) to service the site.
- There are no 100 year floodplain or wetlands on this site.
- There are no known cemeteries or burial grounds on this site.
- A traffic report update has been prepared by Wells & Associates, dated May, 2000.
- Exterior Lighting will be in conformance with Section 134, Zoning Regulations
- Electric, gas, cable and telephone lines designed by others.
- This Site is exempt from Forest Conservation Ordinance in accordance with Section 16.1202(b)(1)(v).
- REF WP-04-03 REQUEST WAIVER OF SECTION 16.166.M.1.(i) TO REACTIVATE SDP 01-93 AND EXTEND THE DEADLINE DATE FOR SUBMISSION OF BUILDING PERMIT APPLICATIONS. APPROVED 8-19-03, SUBJECT TO SUBMISSION OF BUILDING PERMITS FOR BLDGS. C & D BY 8-15-04, AND REVISING THE SDP WITH THIS NOTE.

21. WP-05-89 REQUEST TO WAIVE REQUIREMENTS OF SECTION 16.156(M)(1)(D) TO REACTIVATE SDP-01-53 AND EXTEND THE DEADLINE DATE FOR SUBMISSION OF BUILDING PERMIT APPLICATION WAS APPROVED ON APRIL 27, 2005, SUBJECT TO SUBMISSION OF A BUILDING PERMIT APPLICATION BY APRIL 27, 2006 AND REVISING THE SDP WITH THIS NOTE.



Address Chart

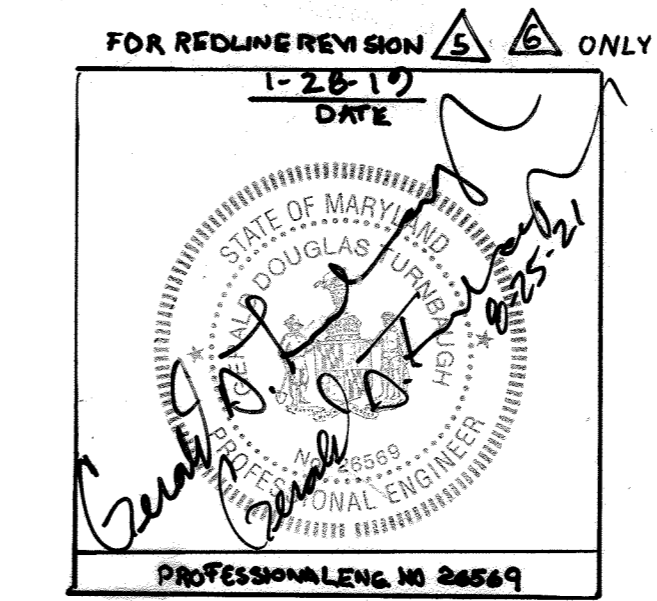
Bldg.	Street Address
A/B	7090 Samuel Morse Drive
B	7100 Samuel Morse Drive
C	7110 Samuel Morse Drive
D	7120 Samuel Morse Drive

PURPOSE STATEMENT FOR REDLINE REVISION NO. 6:
THE PURPOSE OF THIS REDLINE REVISION IS TO UPDATE BUILDING A/B FLOOR SPACE USE AREA DESIGNATIONS AND OVERALL SITE PARKING REQUIREMENTS AS A RESULT OF THE AMBULATORY HEALTH CARE FACILITY FLOOR SPACE LEASE EXPANSION.

PURPOSE STATEMENT FOR REDLINE REVISION NO. 5:
THE PURPOSE OF THIS REDLINE REVISION IS TO UPDATE THE LOCATION OF A PROPOSED FENCED AREA IN FRONT OF BUILDING A/B FOR TENANT USE REVEALS TO SHOW THE AS-BUILT CONDITION.

APPROVED REVISIONS
DATE: 12/28/18
SIGNATURE: [Signature]

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.
7-18-23
License No. 26567, Expiration Date: 7-18-19



APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE: March 8, 2001

Site Analysis Data Chart

- General Site Data
 - Present Zoning: M-1 & NT-EMPLOYMENT
 - Applicable DPZ File References: GP-99-15, F-99-34, F-01-02, WP-04-03, F-85-22, F-94-44, S-85-28, F-96-127, F-96-182, WP-99-180, WP-01-08
 - Proposed Use of Site or Structure(s): Buildings A / B - Office Building, AMBULATORY HEALTH CARE FACILITY; Buildings C & D - Office Buildings
 - Proposed Water: Public - 24-39320; Proposed Sewer: Private - 24-39320
- Area Tabulation
 - Total Project Area: 19.1± A.C.
 - Net Area of Site: 19.1± A.C. (Indicate by Section and Area As Shown on Final Plan) Acres
 - Area of This Plan Submission: 19.1± A.C. Acres
 - Limit of Disturbed Area: 10.8± A.C.
- Open Space Data: N / A
- Parking Space Data
 - Floor Space per floor of proposed use on site: Bldg. A/B 72,000 S.F.; Bldg. C 34,500 S.F.; Bldg. D 110,113 S.F.; 1st floor 33,371 S.F.; 2nd floor 33,371 S.F.; 3rd floor 33,371 S.F.; Total: 245,993 S.F.
 - Number of Parking Spaces Required by Zoning Regulations: 247,683 S.F. OFFICE @ 3.3 PARKING SPACE PER 1,000 S.F. = 918 P.S. PLUS 32,158 S.F. AMBULATORY HEALTH CARE FACILITY @ 3.0 PARKING SPACES PER 1,000 S.F. = 176 P.S. TOTAL PARKING SPACES REQUIRED - 1094 P.S.
 - Total Number of Parking Spaces Provided On-Site: 1095

Overall Property Outline
Scale: 1" = 100'

6/1/21	AMBULATORY HEALTH CARE USE EXPANSION + PARKING REQUIREMENT UPDATE.
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING	
CHIEF, DEVELOPMENT ENGINEERING DIVISION MK	5/21/01 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT JB	5/20/01 DATE
DIRECTOR	6/1/01 DATE
6-25-01	1 RAISE SLAB EL. OF BLDG. A
8-6-01	2 MERGE BLDGS A+B TO A/B
9-29-03	3 ADD 3RD FLOOR TO BLDG. C
6-6-05	4 ADD WAIVER PETITION NOTE
10-9-10	5 NEW FENCED ENCLOSURE A/B FOR BUILDING A/B
	SHOW PARKING PER AS-BUILT CONDITION
Date	No. Revision Description

Columbia Gateway Parcel Q4

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

DEVELOPER: AAK IV, LLC
2805 COLUMBIA 100 PKWY
SUITE 101
COLUMBIA, MD 21045

DMW
Daft 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

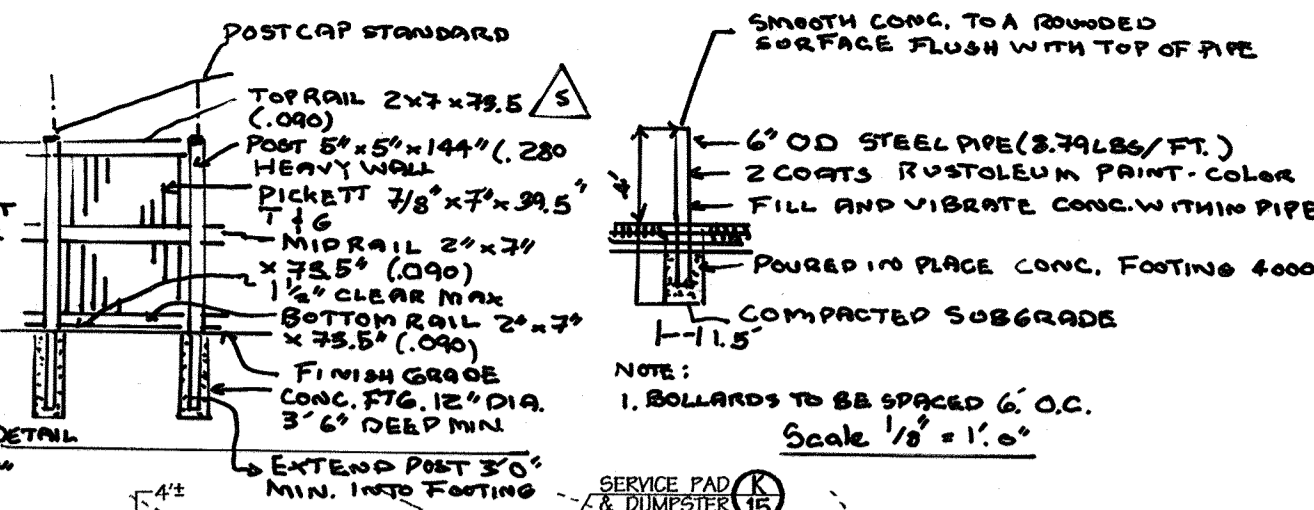
SUBDIVISION NAME	COLUMBIA GATEWAY	BENCHMARK	N/A	LOT/PARCEL #	Q4
DATE OF PLAN	1/7/21	FLOOR #	2 & 7	ELECT. DISTRICT	G
WATER CODE	ED6	SEWER CODE	4900000	GENUS TRACT	6067.03
TITLE					
Cover Sheet					
Des By	MM	Scale	1" = 100'	Proj. No.	00089
Dwn By	ADL & BKC	Date	4-12-01		
Chk By	Approved				1 OF 19

FOR REDLINE REVISION(S) ONLY
1-26-17
DATE

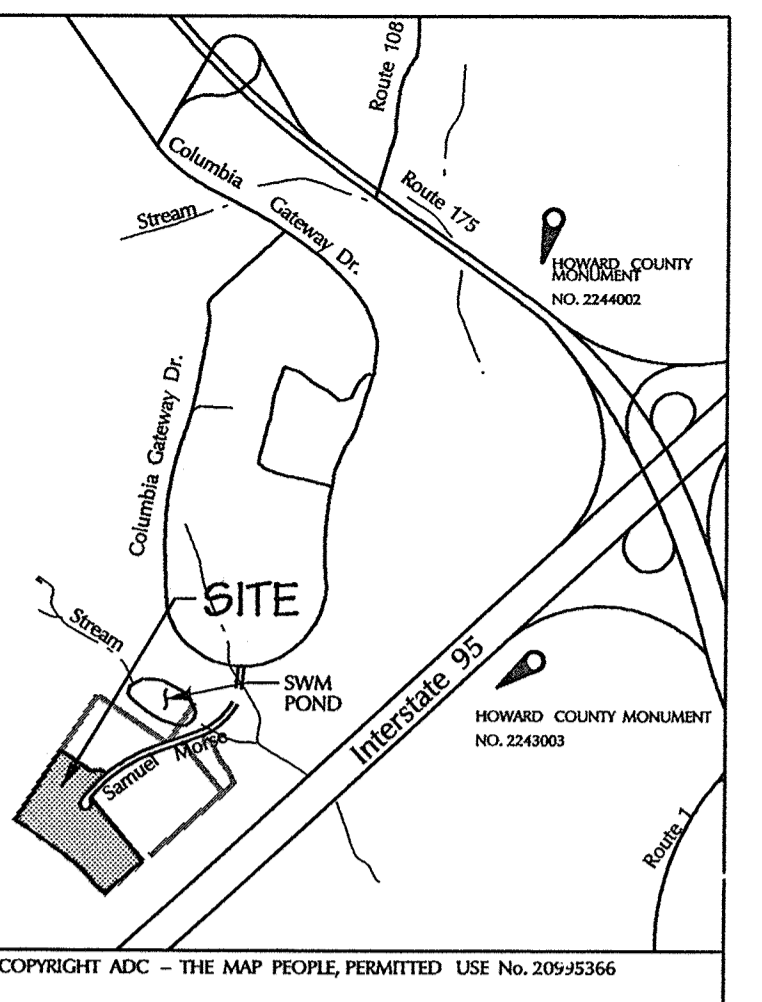
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
LICENSE NO. 26569
EXPIRATION DATE: 7-18-17
PROFESSIONAL ENGINEER

- NOTES:
1. VERIFY LAYOUT IN THE FIELD WITH LANDSCAPE ARCHITECT PRIOR TO EXCAVATION.
 2. ALL PLAY GROUND EQUIPMENT WILL BE FURNISHED AND INSTALLED BY VERBAL BEGINNINGS.
 3. PLAY SURFACE TO BE NO FRACTURE SURFACE OR STANDARD BLEND.
- WWW.NEPAE.COM
NOTOUT.COM

- NOTES:
1. GATES SHALL BE 4'-WIDE AND INSTALLED PER MANUFACTURER SPEC.
 2. USE ALUM. IN SET AT ALL GATE POSTS PER MANUFACTURER SPEC.
 3. CROWN ALL CONC. FTGS. TO DRAIN WATER AWAY FROM POSTS.



STRUCTURE NO.	COORDINATES	
	NORTH	EAST
M-1	480446.70	852119.1
M-2	480680.50	852891.7
M-4	480580.7	852897.5
M-5	480244.8	852892.2
M-6	480195.7	852968.0



Legend

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
—	BUILDING RESTRICTION LINE	⊙	STORM DRAIN STRUCTURE LABEL
⊙	PARKING COUNT	---	EXISTING SEWER
♿	VAN HANDICAPPED PARKING	---	EXISTING STORM DRAIN
♿	HANDICAPPED PARKING	---	EXISTING WATER
---	EXISTING 10' CONTOUR	---	PROPOSED STORM DRAIN
---	EXISTING 2' CONTOURS	---	PROPOSED SEWER
⊙	SERVICE PAD & DUMPSTER BIN	---	PROPOSED WATER
⊙	REVERSE CURB & GUTTER	⬛	PROPOSED LIGHT
⊙	DEPRESSED CURB		
---	STANDARD CURB & GUTTER		

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE: March 8, 2001

The revisions indicated were determined by the DPB to be minor and do not require re-approval by the Planning Board.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Chris Deann
CHIEF, DEVELOPMENT ENGINEERING DIVISION 7/30/01 DATE

Chris Hamilton
CHIEF, DIVISION OF LAND DEVELOPMENT 8/3/01 DATE

Paul Ruter
DIRECTOR 8/3/01 DATE

Date	No.	Revision Description
7/20/01	1	SUBSTITUTION SHEET
	2	RAISED BLDG. ELEVATION "A" AND ADJUSTED PARKING AND CIRCULATION
9/29/02	3	MERGE BLDGS A & B TO A/B
6/6/05	4	ADD 3RD FLOOR TO BLDG. C
		EDIT BLDG. C DIMENSION & STAIR DETAILS

Columbia Gateway Parcel Q4
APPROVED REVISIONS
DATE: 12/28/18
SIGNATURE: 12/31/18

OWNER: The Howard Research and Development Corporation
20275 Little Patuxent Parkway
Columbia, Maryland 21044

DEVELOPER: AAK IV LLC
2805 COLUMBIA 100 PKWY
SUITE 107
COLUMBIA, MD 21045

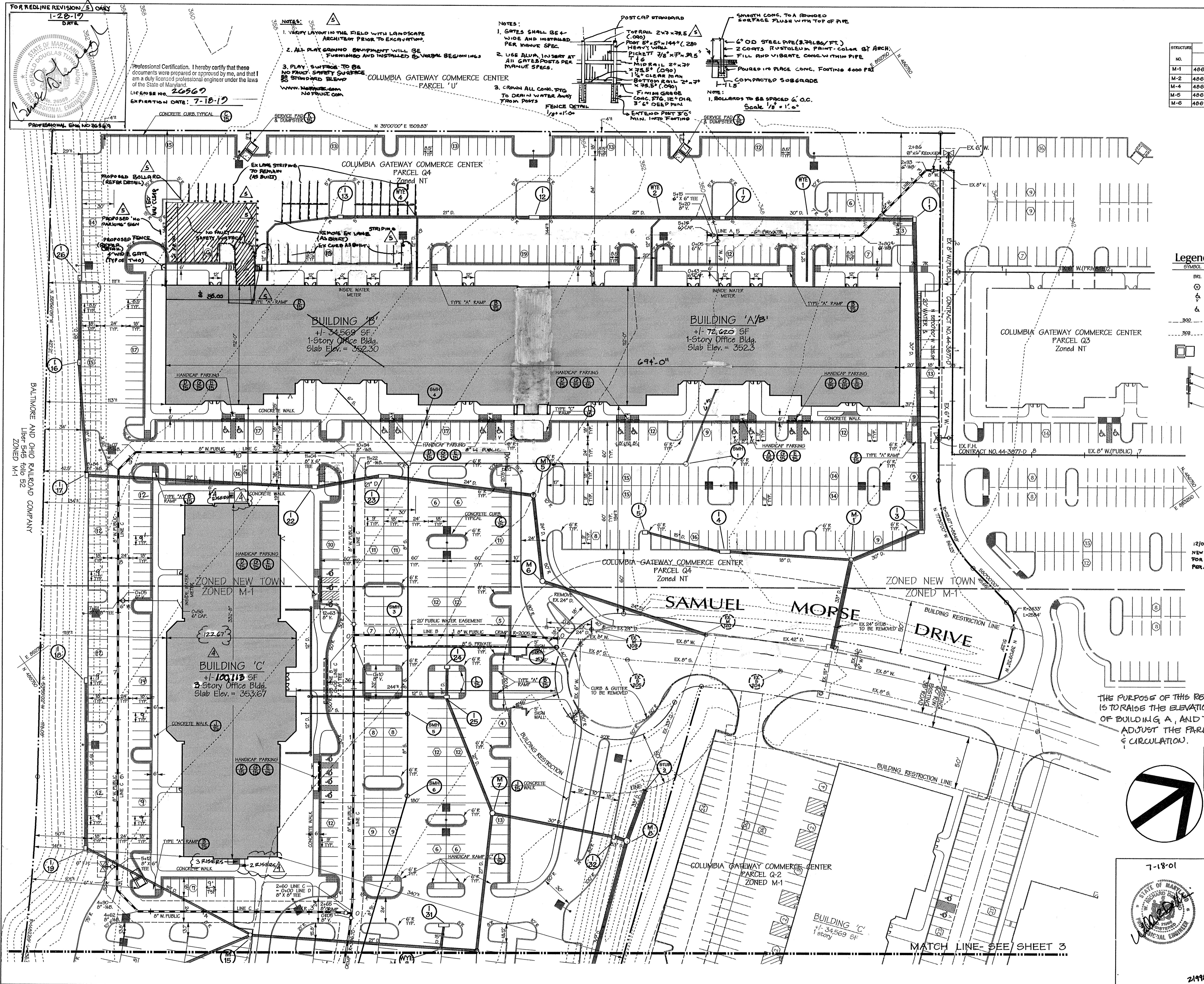
DMW
Doris DeCunha-Walkers, Assoc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3833
Fax: 296-4705

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

SECTION NAME	SECTION NUMBER	LOTPARCEL #
COLUMBIA GATEWAY	NA	Q4
PLAT OR LOT	BLOCK # ZONE	TAXPAYER MAP
15667	12 & 7	ED-42
WATER CODE	SEWER CODE	GENUS TRACT
ED6	4900000	6067.03

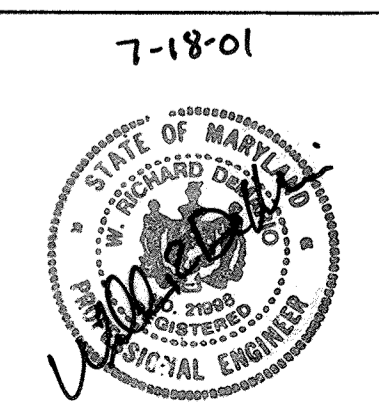
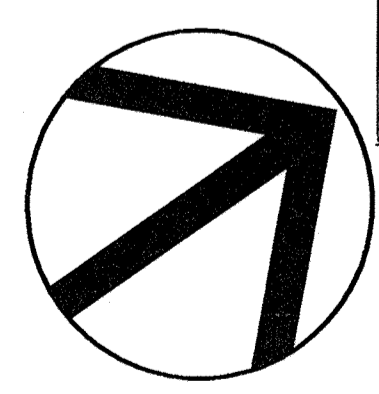
TITLE: Revised Site Plan

Des By: RBW	Scale: 1"=40'	Proj. No.: 00089
Dm By: ADL	Date: 6-12-01	
Chk By:	Approved	2 OF 19



THE PURPOSE OF THIS REVISION IS TO RAISE THE ELEVATION OF BUILDING A, AND TO ADJUST THE PARKING & CIRCULATION.

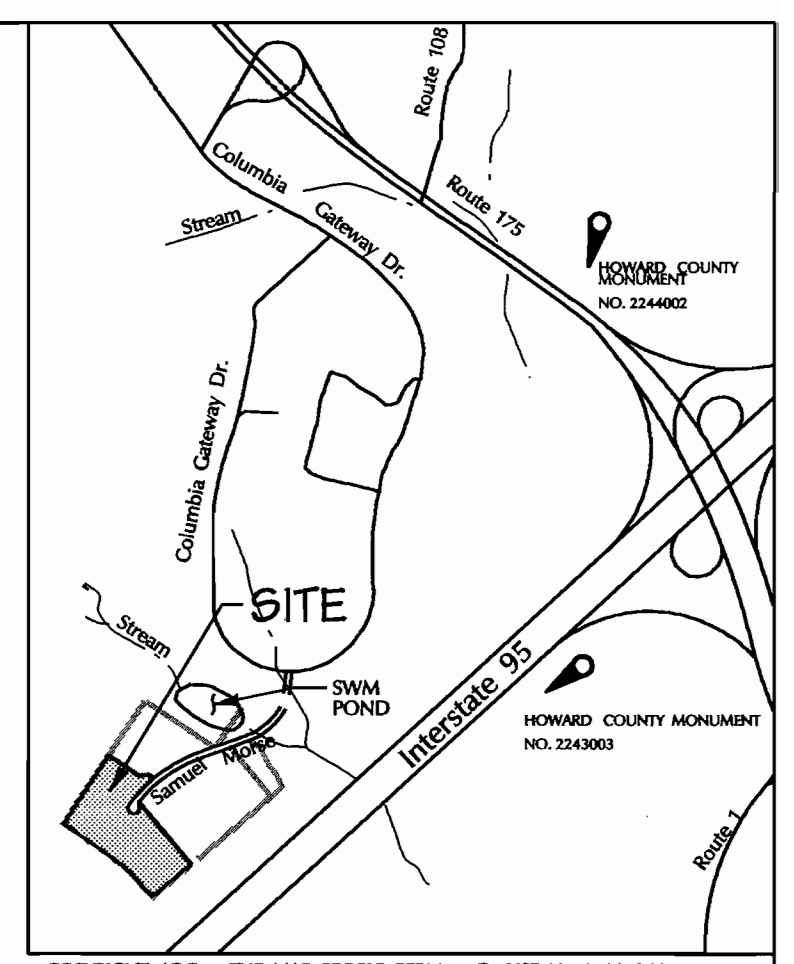
12/05/18
NEW FENCED ENCLOSURE AREA FOR BUILDING A/B SHOW PARKING PER AS BUILT CONITION



21998



STRUCTURE NO.	NORTH COORDINATES	EAST COORDINATES
M-7	440205.17	82010.00
M-8	440122.60	82512.00
M-10	440187.20	825161.20
M-11	440047.4	82526.1



LOCATION MAP
SCALE: 1" = 200'

Legend

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
---	BRL BUILDING RESTRICTION LINE	(M)	STORM DRAIN STRUCTURE LABEL
(P)	PARKING COUNT	---	EXISTING SEWER
(H)	VAN HANDICAPPED PARKING	---	EXISTING STORM DRAIN
(A)	HANDICAPPED PARKING	---	EXISTING WATER
---	EXISTING 10' CONTOUR	---	PROPOSED STORM DRAIN
---	EXISTING 2' CONTOURS	---	PROPOSED SEWER
(S)	SERVICE PAD & DUMPSTER BIN	---	PROPOSED WATER
(C)	REVERSE CURB & GUTTER	(L)	PROPOSED LIGHT
(D)	DEPRESSED CURB		
(G)	STANDARD CURB & GUTTER		

BALTIMORE AND OHIO RAILROAD COMPANY
Liber 545 Folio 52
ZONED M-1

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE **March 8, 2001**

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
[Signature] 5/21/01
 CHIEF, DEVELOPMENT ENGINEERING DIVISION MJK DATE
[Signature] 5/30/01
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
[Signature] 6/1/01
 DIRECTOR DATE

Date	No.	Revision Description

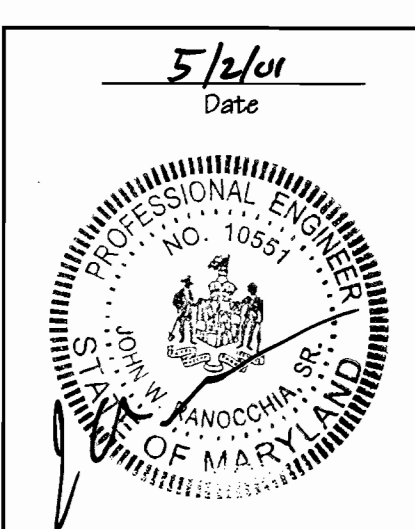
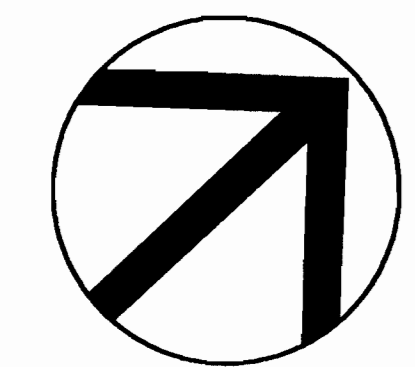
Columbia Gateway Parcel Q4

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

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

DMW
Darr-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3353
Fax 296-4705

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



SUBMISSION NAME: COLUMBIA GATEWAY	SECTIONARY: NA	LOT/PARCEL #: Q4
PLAT OR L.P. BLOCK # ZONE: 14759 12 & 7 INTAM-1	TAXZONE MAP: 42-43	ELECT. DISTRICT: G
WATER CODE: E06	SEWER CODE: 4900000	GENUS TRACT: 6067.03

TITLE: Site Plan		
Des By: RBW	Scale: 1"=40'	Proj. No. 00089
Dm By: ADL	Date: 4-12-01	
Chk By: Approved		3 OF 19

INTERSTATE ROUTE 95
M.S.R.C. R/W Plats 34760 and 34762

INTERSTATE ROUTE 95
VEHICULAR INGRESS AND EGRESS RESTRICTED
INTERSTATE ROUTE 95
M.S.R.C. R/W Plats 34760 and 34762

FOR REVISION REV ONLY
1-23-10
DATE

STATE OF MARYLAND
DOUGLAS T. HARRIS
PROFESSIONAL ENGINEER
No. 25589
Professional Seal

Professional Certification, I hereby certify that these documents were prepared or approved by me, and I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 26769, Expiration Date: 7-18-17
Professional Eng. No. 26769

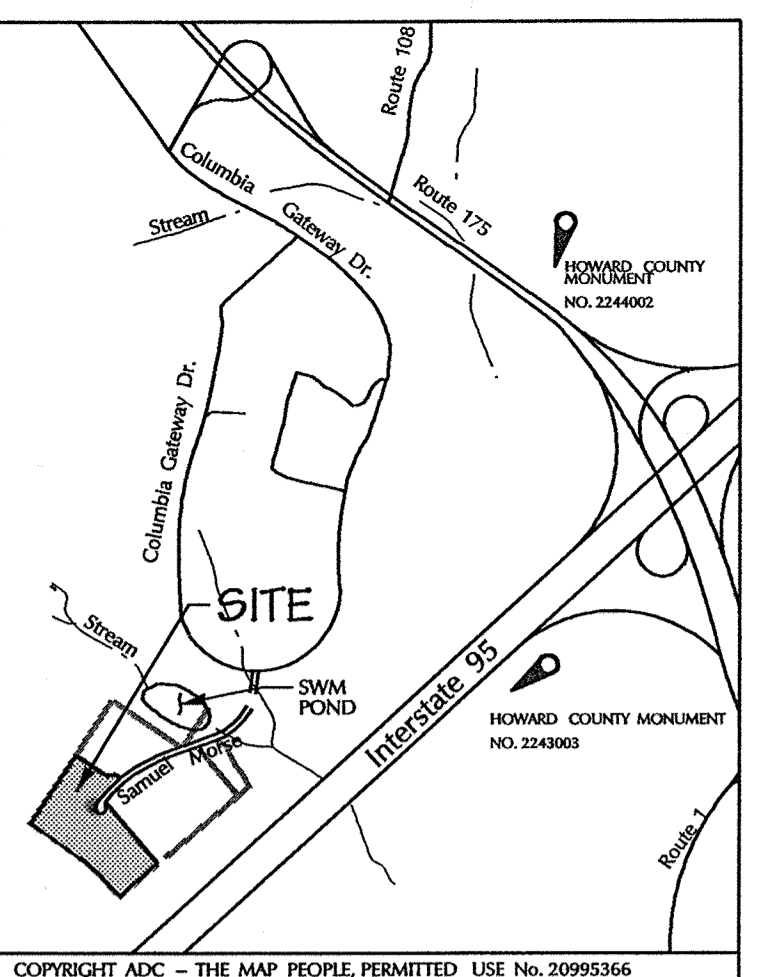
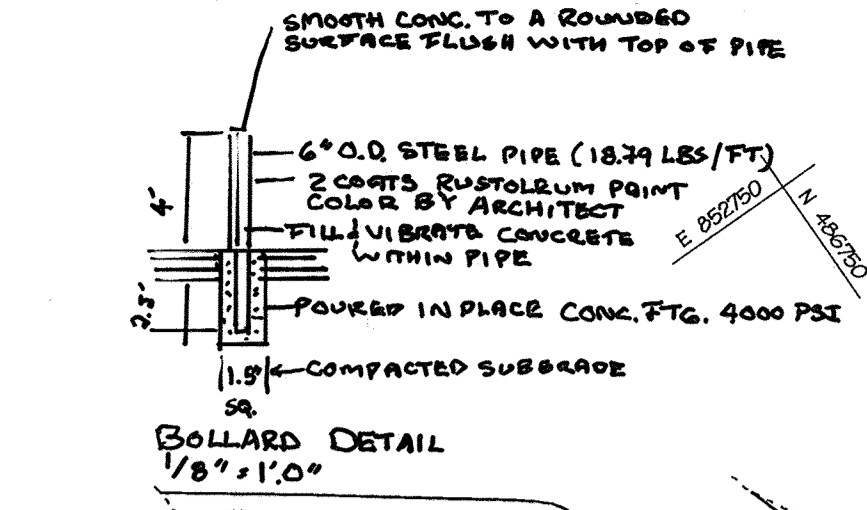
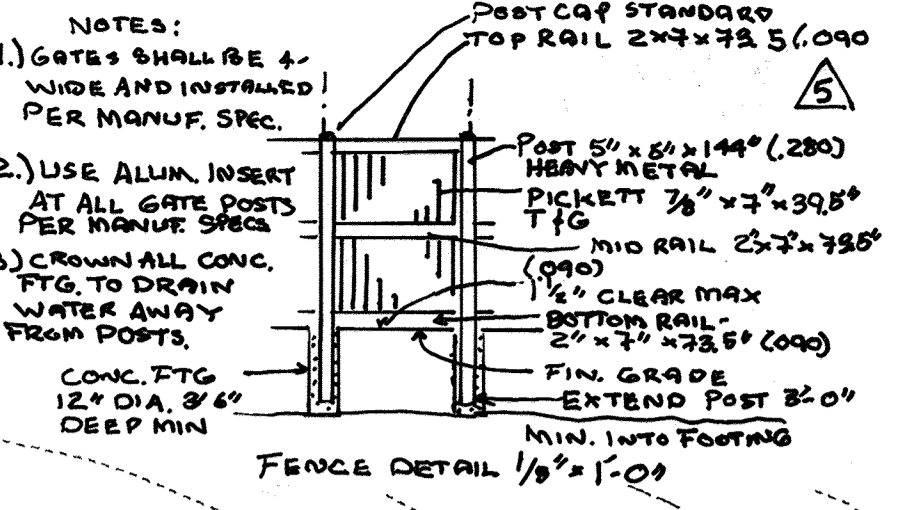
NOTES:
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2. ALL PLAY GROUND EQUIPMENT WILL BE FURNISHED AND INSTALLED BY VERBAL BEGINNINGS
3. PLAY SURFACE TO BE NO FAULT SAFETY SURFACE TO STANDARD BLEND.

COLUMBIA GATEWAY COMMERCE CENTER
WWW.NOFAULT.COM PARCEL 'U'

NOTES:
(1) GATES SHALL BE 4' WIDE AND INSTALLED PER MANUF. SPEC.
(2) USE ALUM. INSERT AT ALL GATE POSTS PER MANUF. SPEC.
(3) CROWN ALL CONC. FTG. TO DRAIN WATER AWAY FROM POSTS.

CONC. FTG. 12" DIA. 8' 6" O.B.P. MIN.

FENCE DETAIL 1/8" x 1'-0"



LOCATION MAP
SCALE: 1" = 2000'

Legend

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
PKL	BUILDING RESTRICTION LINE	(M)	STORM DRAIN STRUCTURE LABEL
(P)	PARKING COUNT	---	EXISTING SEWER
(V)	VAN HANDICAPPED PARKING	---	EXISTING STORM DRAIN
(H)	HANDICAPPED PARKING	---	EXISTING WATER
---	EXISTING 10' CONTOUR	---	PROPOSED STORM DRAIN
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(C)	REVERSE CURB & GUTTER	(L)	PROPOSED LIGHT
(D)	DEPRESSED CURB		
(S)	STANDARD CURB & GUTTER		

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE March 8, 2001

The revisions indicated were determined by the DPZ to be minor and do not require re-approval by the Planning Board.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

<i>[Signature]</i>	7/30/01
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>[Signature]</i>	5/2/01
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>[Signature]</i>	8/2/01
DIRECTOR	DATE

NO.	DATE	REVISION DESCRIPTION
7-20-01	1	SUBSTITUTION SHEET
	1	RAISED BLDG 'A' ELEVATION AND ADJUSTED PARKING AND CIRCULATION
8-24-01	2	MERGE BLDGS A/B TO A/B
9-29-03	3	ADD 2 ND FLOOR TO BLDG. C
12-08-18	4	NEW FENCE ENCLOSURE AREA FOR BUILDING A/B. SHOW PARKING PER AS-BUILT CONDITION
	5	REVISION DESCRIPTION

APPROVED REVISIONS
DATE 12/28/18
SIGNATURE 12/31/18

Columbia Gateway Parcel Q4

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The Howard Research and Development Corporation
20275 Little Patuxent Parkway
Columbia, Maryland 21044

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

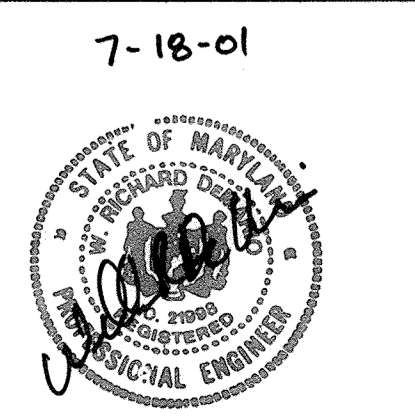
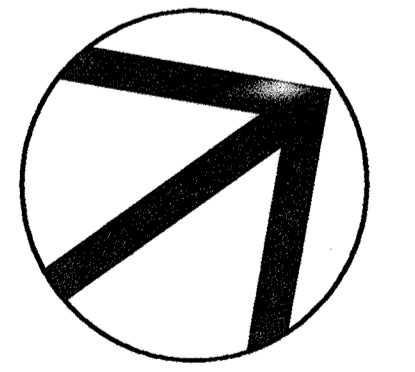
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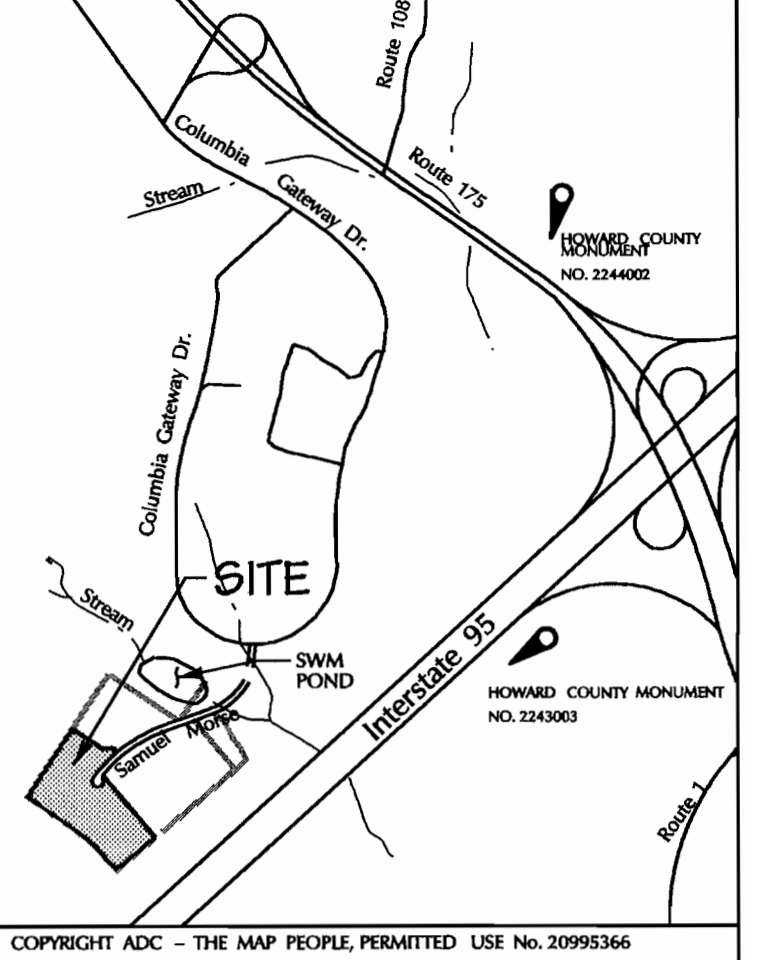
SUBDIVISION NAME COLUMBIA GATEWAY	SECTION/AREA 12 & 7 INTL.	LOT/PARCEL # Q4
PLAT OR LOT 13667	TAXZONE MAP 42-43	ELECT DISTRICT 6
WATER CODE E06	SEWER CODE 4900000	CENSUS TRACT 6067.03

TITLE
Revised Grading Plan

Des By	Scale 1"=40'	Proj. No. 00089
Dim By BKC	Date 6-12-01	
Chk By	Approved	4 OF 19



21916



LOCATION MAP
SCALE: 1" = 2000'

Legend

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
(---)	BRL BUILDING RESTRICTION LINE	(M)	STORM DRAIN STRUCTURE LABEL
(P)	PARKING COUNT	(---)	EXISTING SEWER
(P)	VAN HANDICAPPED PARKING	(---)	EXISTING STORM DRAIN
(P)	HANDICAPPED PARKING	(---)	EXISTING WATER
(---)	EXISTING 10' CONTOUR	(---)	PROPOSED STORM DRAIN
(---)	EXISTING 2' CONTOURS	(---)	PROPOSED SEWER
(---)	EXISTING 2' CONTOURS	(---)	PROPOSED WATER
(□)	SERVICE PAD & DUMPSTER BIN	(---)	PROPOSED LIGHT
(---)	REVERSE CURB & GUTTER	(---)	
(---)	DEPRESSED CURB		
(---)	STANDARD CURB & GUTTER		

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

[Signature] 5/21/01
CHIEF, DEVELOPMENT ENGINEERING DIVISION MK DATE

[Signature] 5/24/01
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 6/1/01
DIRECTOR DATE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE March 8, 2001

Date	No.	Revision Description

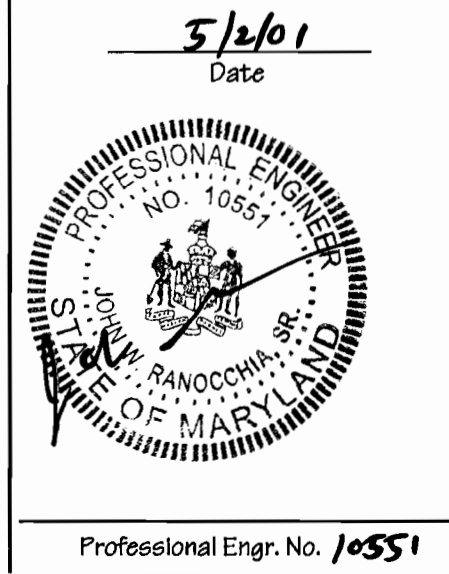
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DEVELOPER:
AAK IV, LLC
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SUITE 101
COLUMBIA, MD 21045

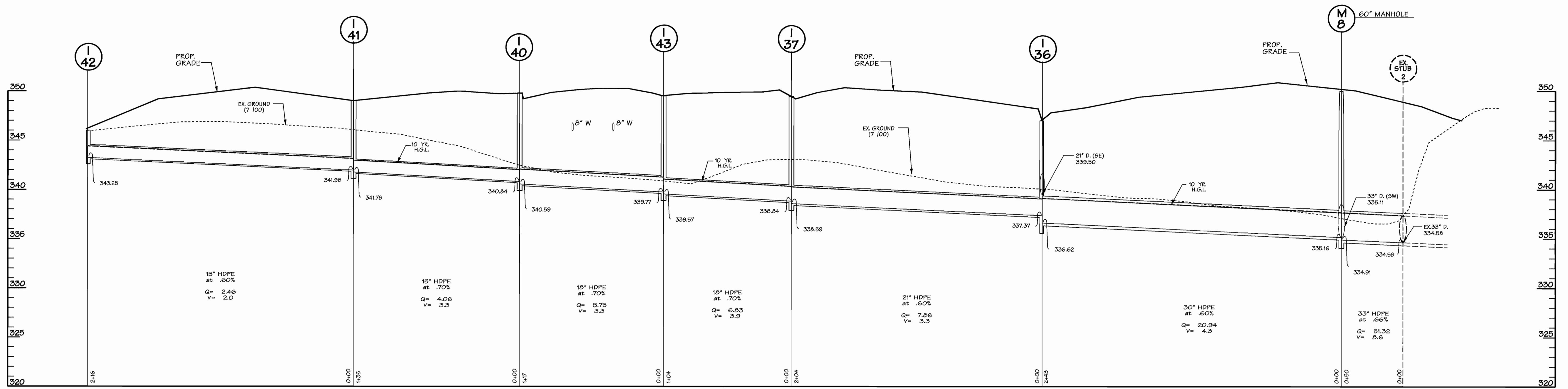
DMW
Darr McCreary-Walkers, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 286-3339
Fax 286-4706

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



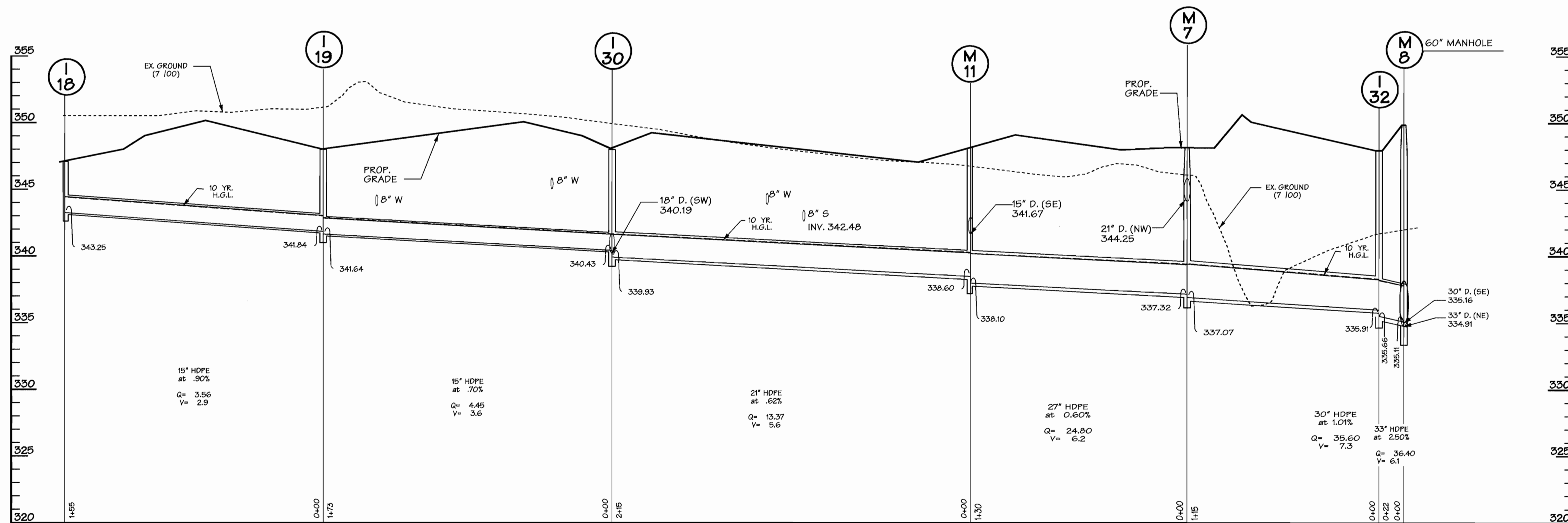
SUBMISSION NAME	SECTION/AREA	LOT/PARCEL #
COLUMBIA GATEWAY	NA	Q4
PLAT # OR L.P. #	BLOCK #	ZONE
14-751	12 & 7	INT&M-43-43
WATER CODE	ELECT. DISTRICT	CENSUS TRACT
E06	G	6067.03
TITLE	POWER CODE	
	4900000	

Grading Plan		
Des By	Scale 1"=40'	Proj. No. 00089
Dwn By BKC	Date 4-12-01	
Chk By	Approved	5 OF 19



Storm Drain Profile

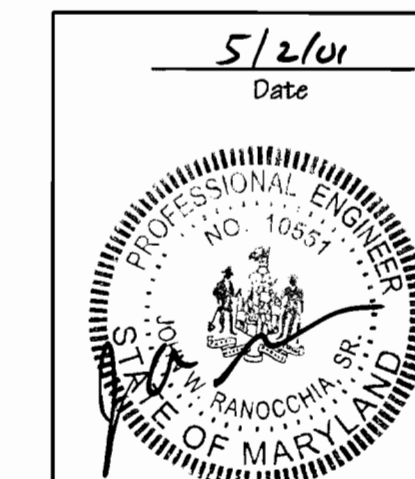
Scale: Horz: 1"=40'
Vert: 1"=5'



Storm Drain Profile

Scale: Horz: 1"=40'
Vert: 1"=5'

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE March 8, 2001



APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION MKK DATE 5/21/01
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE 5/30/01
 DIRECTOR DATE 6/16/01

Date	No.	Revision Description

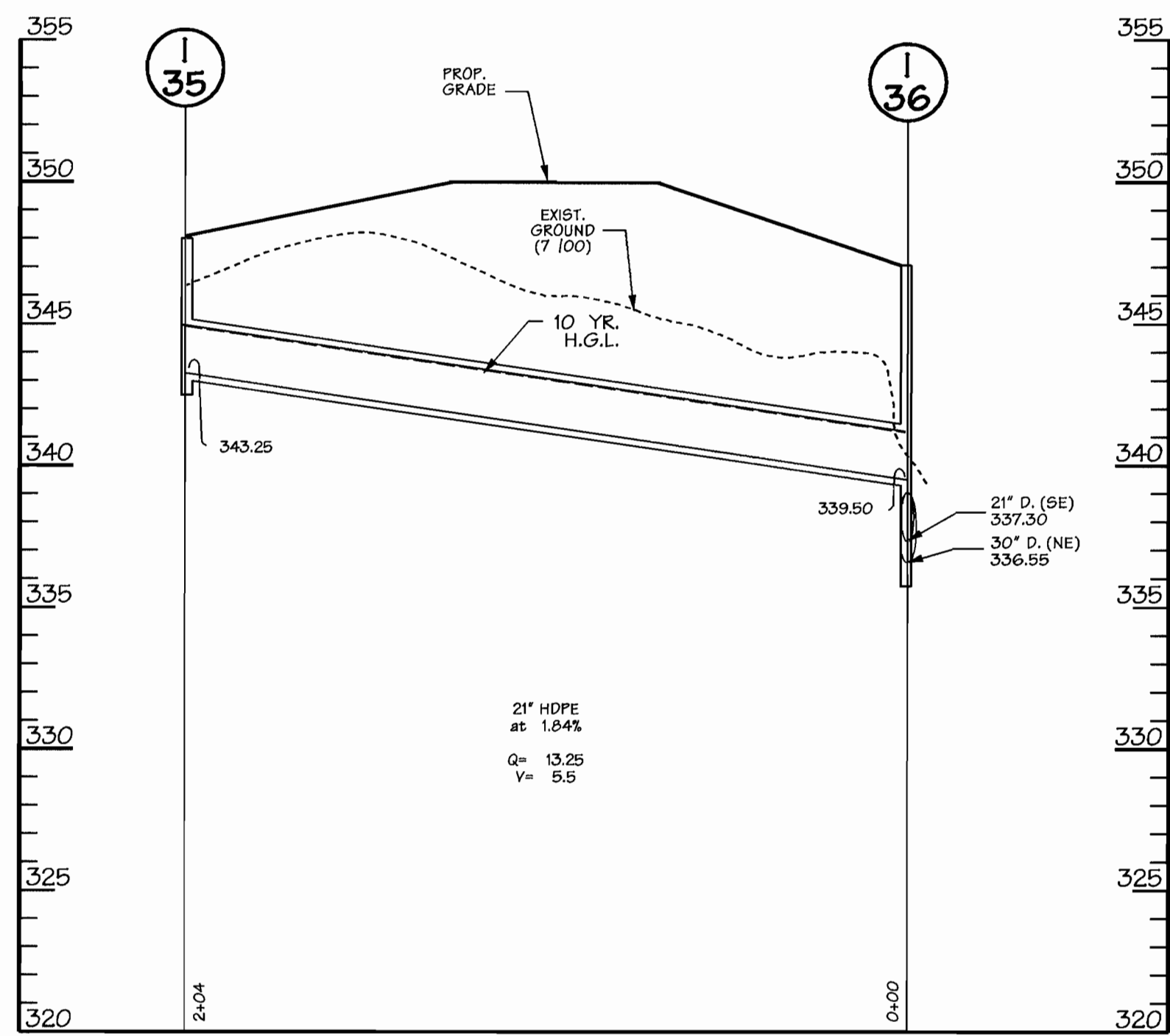
Columbia Gateway Parcel Q4

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

DMW
 DaR McCune-Walker, Inc.
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 286-3833
 Fax 286-4708
 A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

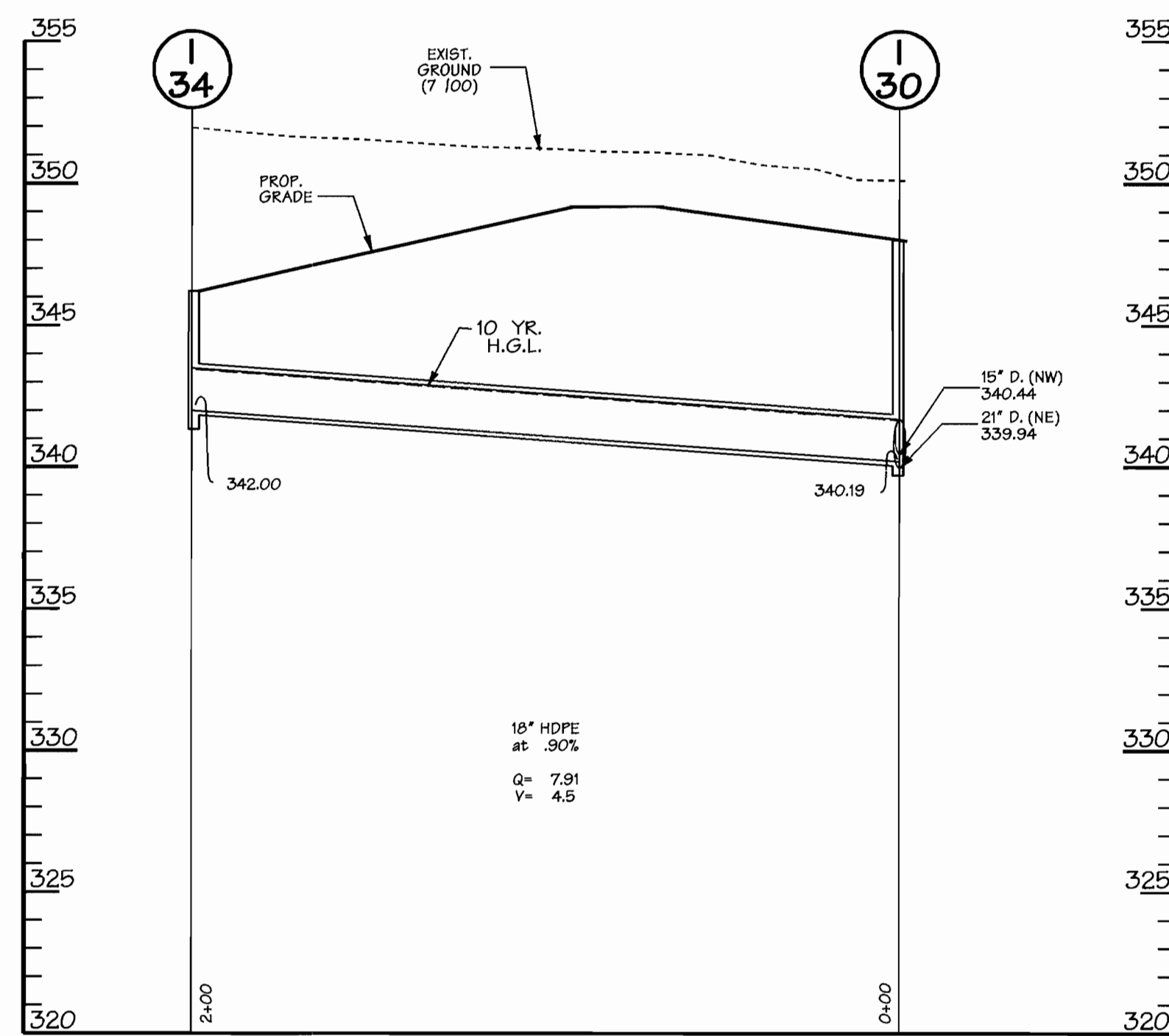
SUBMISSION NAME: COLUMBIA GATEWAY	SECTIONARY: NA	LOT/PARCEL #: Q4
PLAY OR LE: 147-97	BLOCK #: 12 & 7	TAXZONE MAP: 42-43
WATER CODE: E06	SEWER CODE: 4900000	ELECT. DISTRICT: 6
GENIUS TRACT: 6067.03		

TITLE: Storm Drain Profile		
Des By LL	Scale AS SHOWN	Proj. No. 00089
Dim By ADL	Date 4-12-01	
Chk By	Approved	6 OF 19



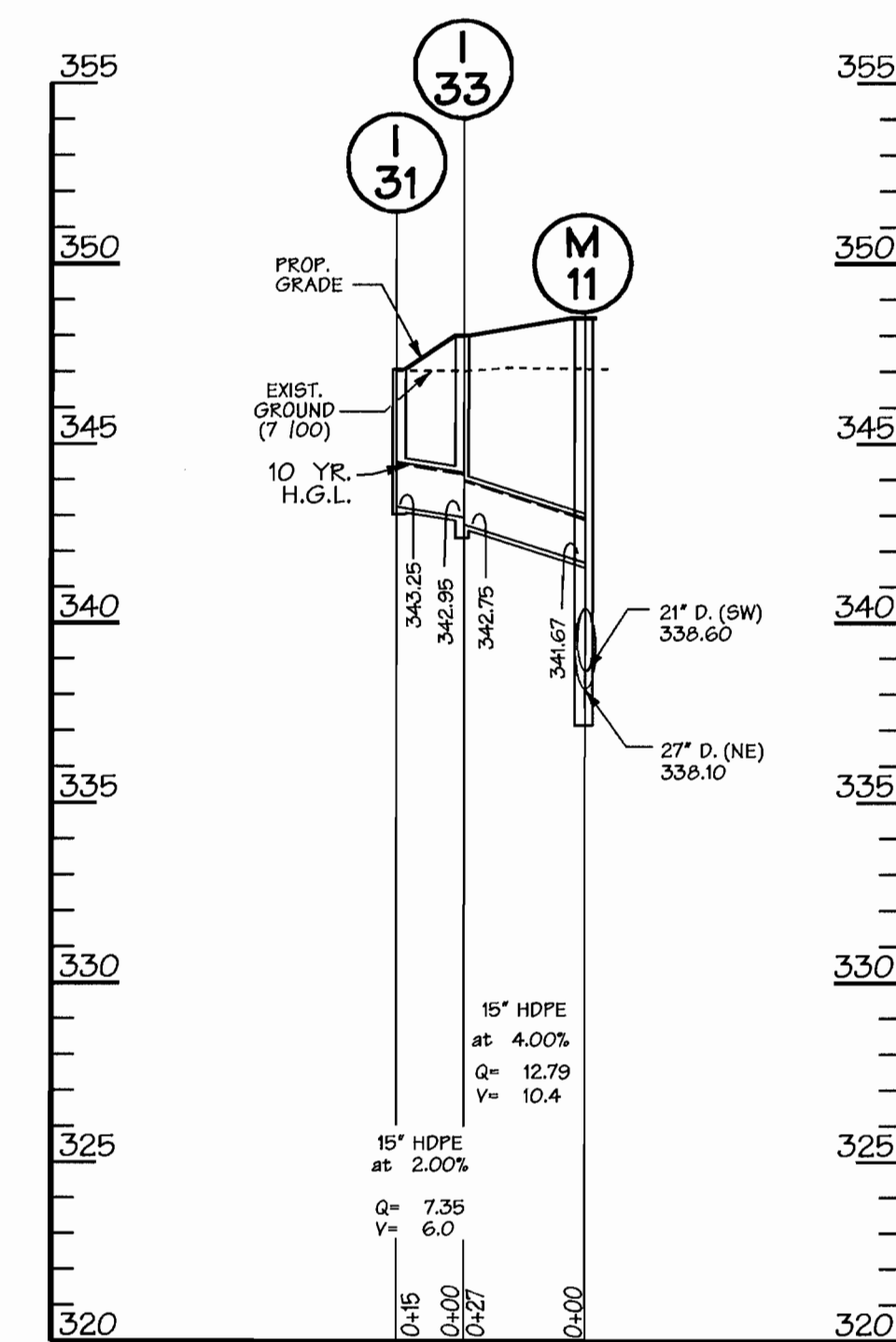
Storm Drain Profile

Scale: Horz: 1"=40'
Vert: 1"=5'



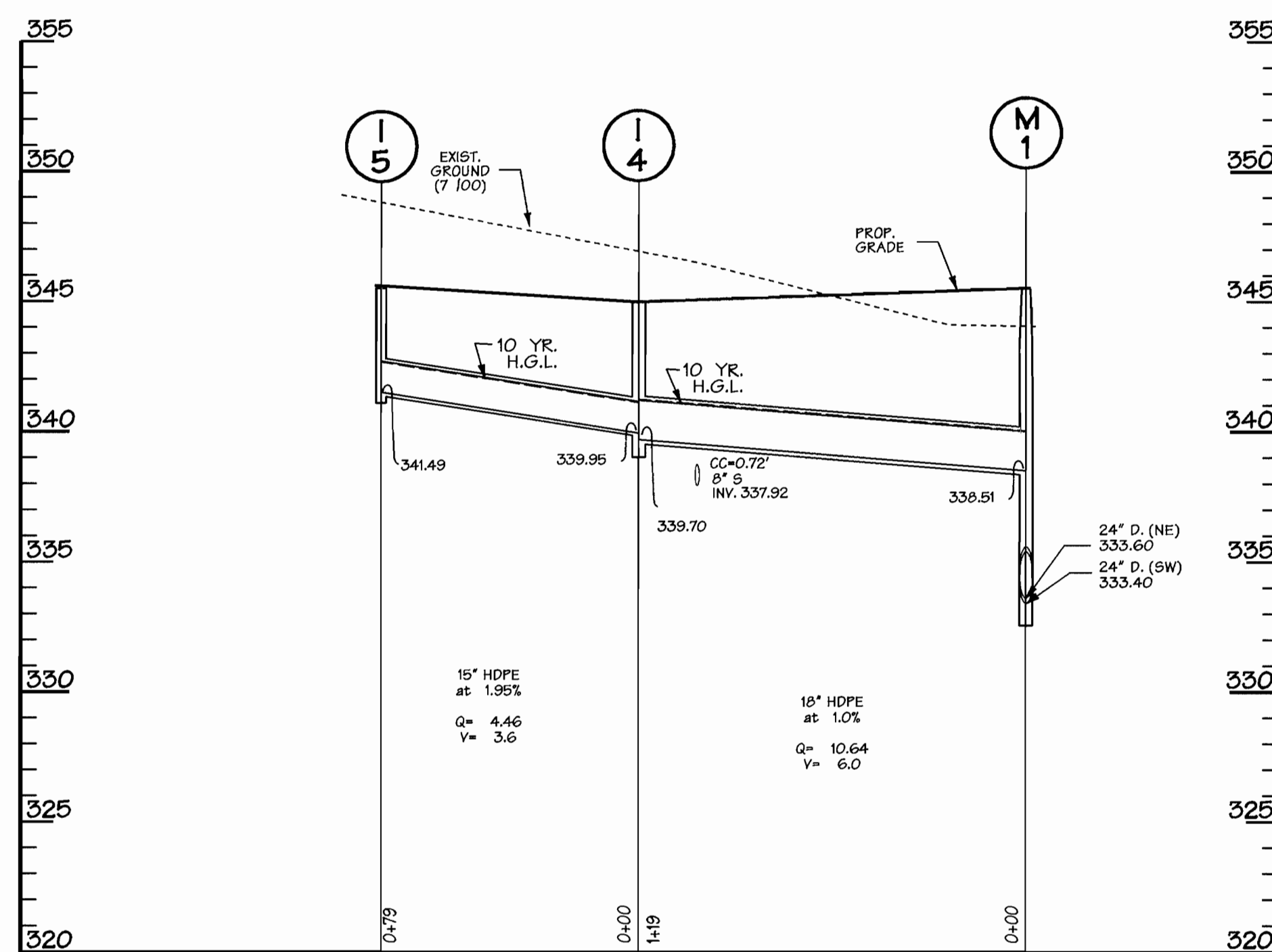
Storm Drain Profile

Scale: Horz: 1"=40'
Vert: 1"=5'



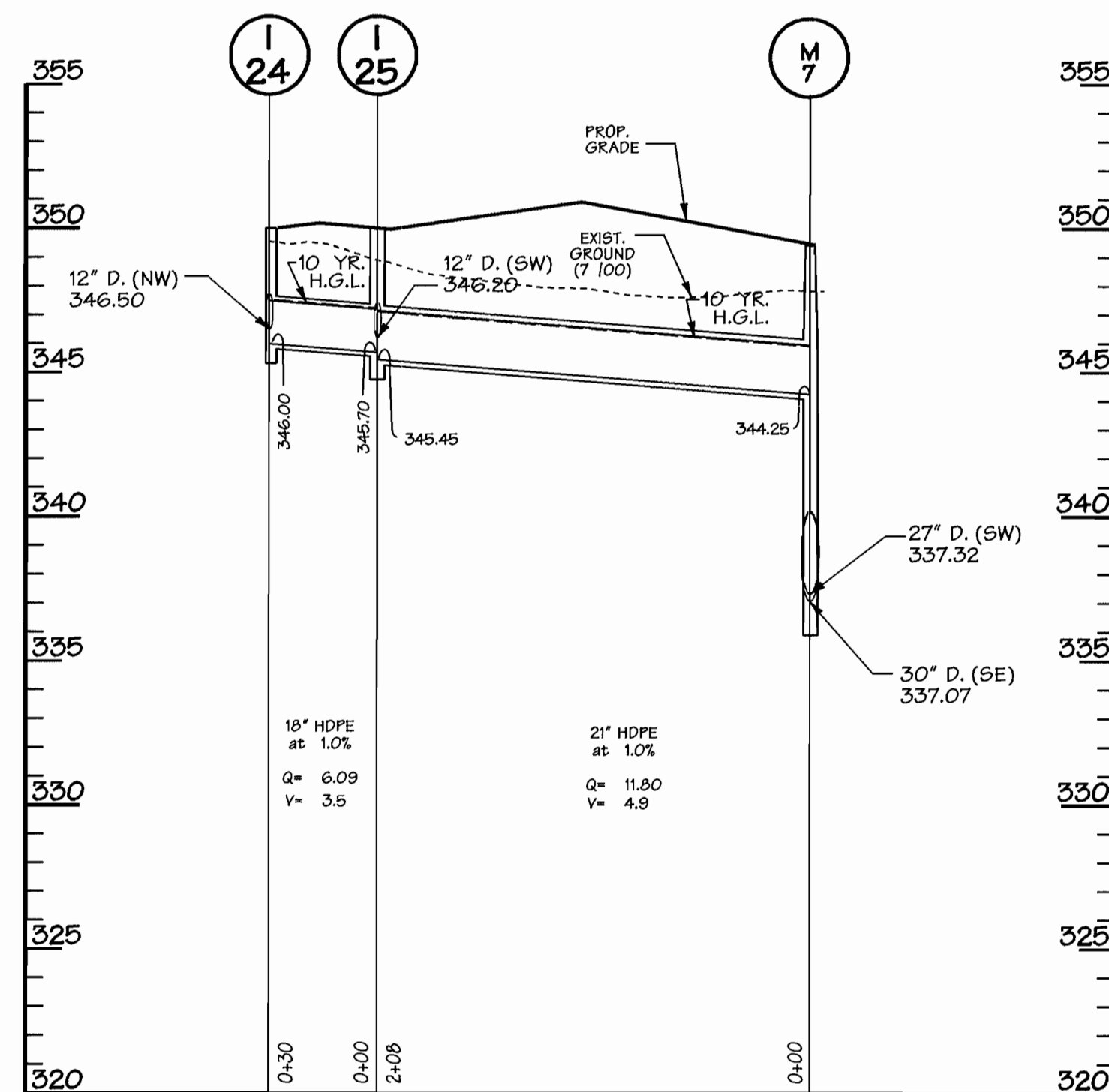
Storm Drain Profile

Scale: Horz: 1"=40'
Vert: 1"=5'



Storm Drain Profile

Scale: Horz: 1"=40'
Vert: 1"=5'



Storm Drain Profile

Scale: Horz: 1"=40'
Vert: 1"=5'

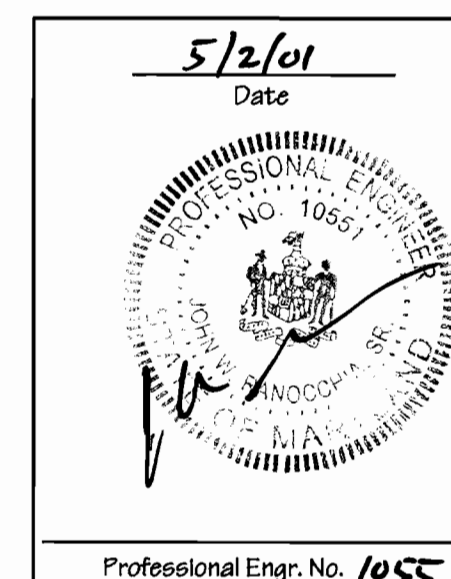
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 Chief, Development Engineering Division MK 5/21/01
 Chief, Division of Land Development 5/30/01
 Director 6/1/01

APPROVED
 PLANNING BOARD
 of HOWARD COUNTY
 DATE March 8, 2001

Columbia Gateway Parcel Q4

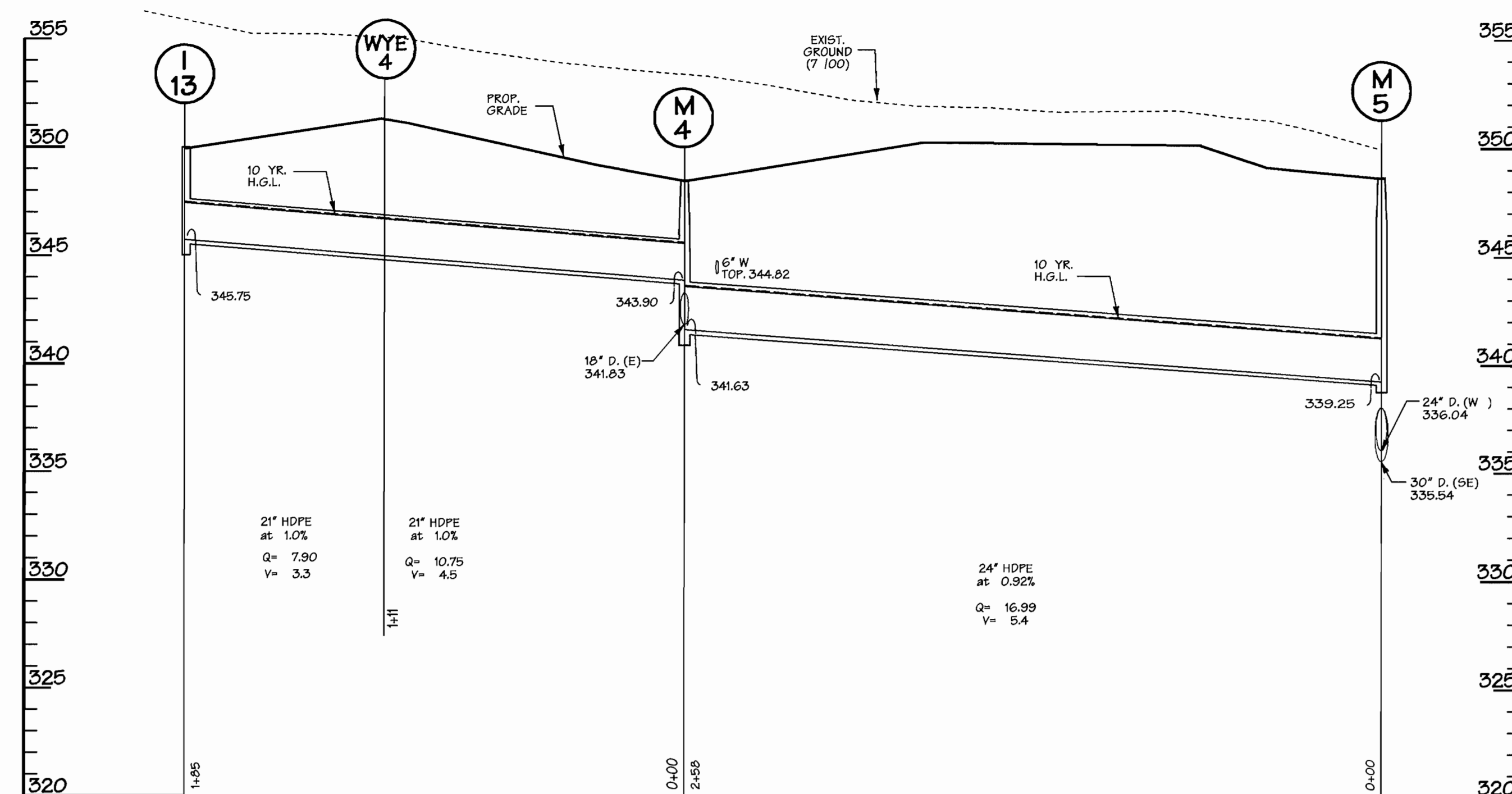
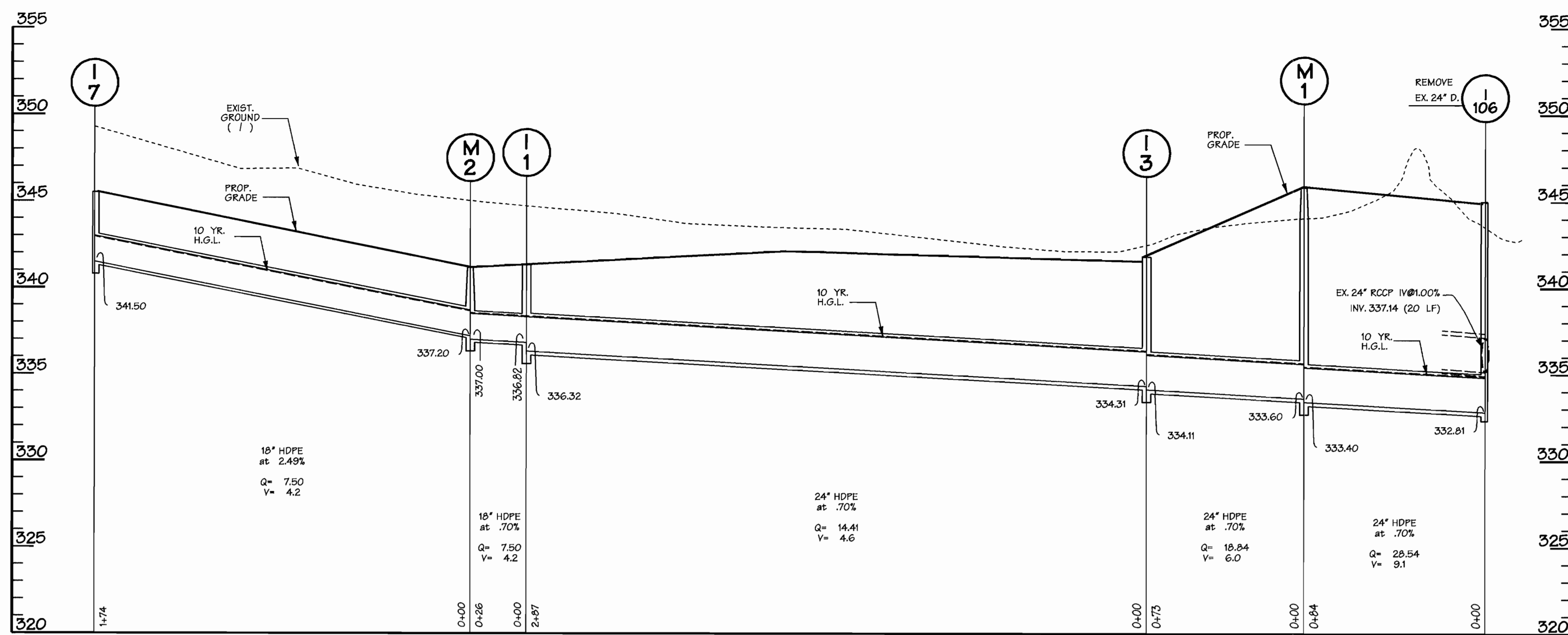
OWNER: The Howard Research and Development Corporation
 DEVELOPER: AAK IV, LLC

DMW
 Daft-McCune-Walker, Inc.
 A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals



SUBDIVISION NAME COLUMBIA GATEWAY	SECTION AREA NA	LOSPARCEL # Q4
PLAT OR L.P. 14759	BLOCK OF ZONE 12 & 7 NT&M-1	ELECT DISTRICT 6
WATER CODE E08	SEWER CODE 4900000	CENSUS TRACT 6067.03

TITLE Storm Drain Profile		
Des By LL	Scale AS SHOWN	Proj. No. 00089
Drn By ADL	Date 4-12-01	
Chk By	Approved	7 OF 19



Storm Drain Profile

Scale: Horz: 1"=40'
Vert: 1"=5'

STRUCTURE SCHEDULE

INLET NO.	INLET TYPE	INV. IN	INV. OUT	TOP ELEV.	REMARKS
I-1	A-5	336.82	336.32	342.00	HO CO STD. SD 4.01
I-3	A-5	334.31	334.11	342.50	HO CO STD. SD 4.01
I-4	A-10	339.95	339.70	344.50	HO CO STD. SD 4.02
I-5	A-5	341.75	341.50	346.00	HO CO STD. SD 4.01
I-7	A-5	341.50	341.50	346.50	HO CO STD. SD 4.01
M-2	STD MANHOLE 48"	337.20	337.00	341.50	HO CO STD. G. 5.12
M-1	STD MANHOLE 48"	333.60	333.40	345.80	HO CO STD. G. 5.12

STRUCTURE SCHEDULE

INLET NO.	INLET TYPE	INV. IN	INV. OUT	TOP ELEV.	REMARKS
I-30	A-10	340.44	339.94	348.50	HO CO STD. SD 4.01
I-31	A-10	338.65	338.15	347.50	HO CO STD. SD 4.02
I-32	A-5	336.82	336.72	348.50	HO CO STD. SD 4.01
I-33	A-5	343.75	343.00	348.00	HO CO STD. SD 4.01
I-34	DOUBLE S	342.00	346.50	348.00	HO CO STD. SD 4.25
I-35	A-10	343.25	343.00	348.00	HO CO STD. SD 4.02
I-36	A-5	337.37	336.82	347.50	HO CO STD. SD 4.01
I-37	A-5	338.84	338.59	349.80	HO CO STD. SD 4.01
I-40	A-5	340.84	340.59	350.20	HO CO STD. SD 4.01
I-41	A-5	341.86	341.78	349.70	HO CO STD. SD 4.01
I-42	A-5	343.25	343.00	347.50	HO CO STD. SD 4.01
I-43	A-5	339.77	339.57	350.30	HO CO STD. SD 4.01
I-18	A-5	343.25	343.00	347.50	HO CO STD. SD 4.01
I-19	A-5	341.86	341.66	348.50	HO CO STD. SD 4.01
I-24	A-5	346.00	346.00	350.50	HO CO STD. SD 4.01
I-25	A-5	346.70	346.45	350.50	HO CO STD. SD 4.01
M-8	STD MANHOLE 72"	335.09	334.84	350.00	HO CO STD. G. 5.11
M-10	STD MANHOLE 60"	343.37	343.00	349.00	HO CO STD. G. 5.11
M-7	STD MANHOLE 60"	337.32	337.07	348.50	HO CO STD. G. 5.12
M-11	STD MANHOLE 48"	338.80	338.10	348.50	HO CO STD. G. 5.12

PIPE SCHEDULE

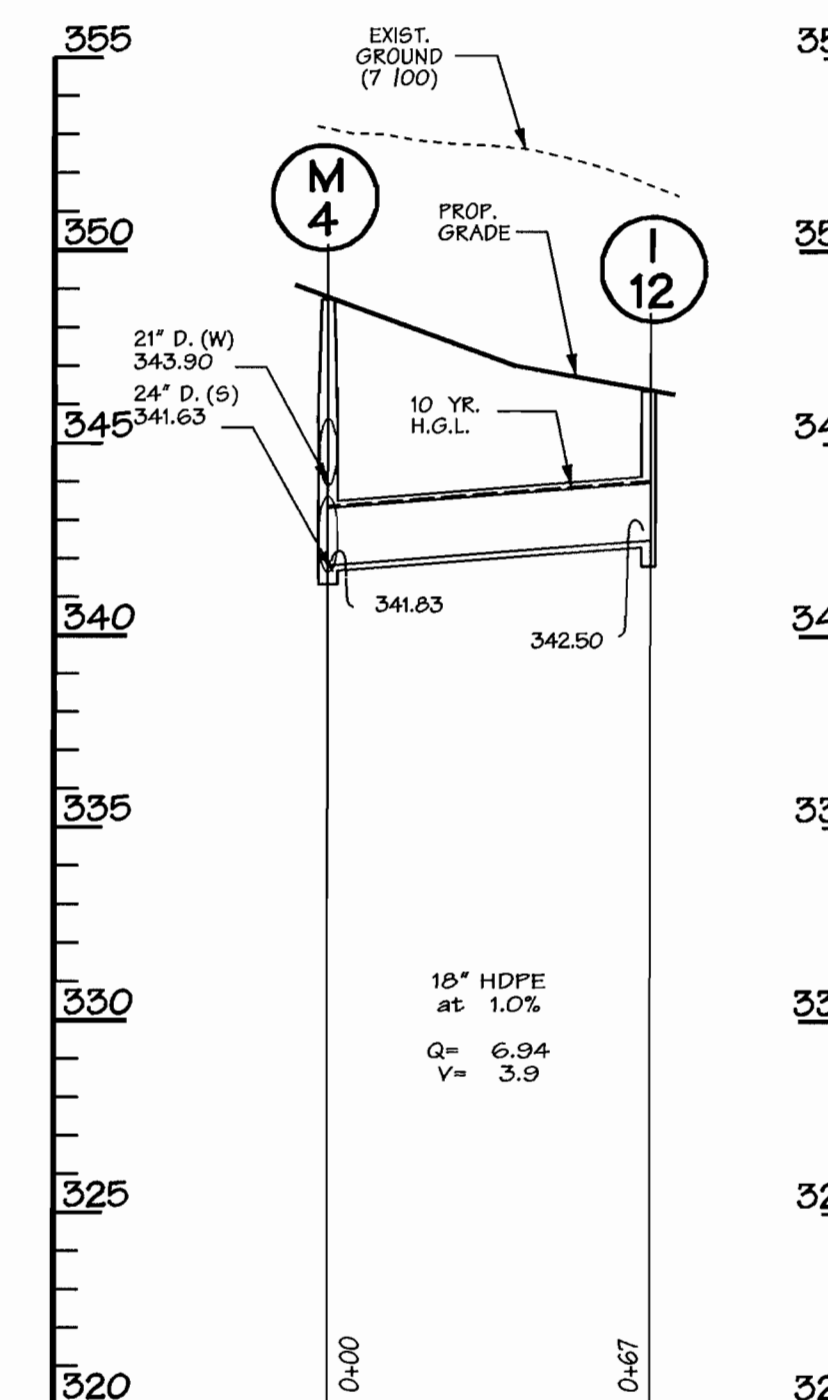
Size	Category	Length
18	HDPE	881
18	HDPE	842
21	HDPE	1086
24	HDPE	824
27	HDPE	395
30	HDPE	502
36	HDPE	0

STRUCTURE SCHEDULE

INLET NO.	INLET TYPE	INV. IN	INV. OUT	TOP ELEV.	REMARKS
I-12	A-10		342.50	346.40	HO CO STD. SD 4.02
I-15	"S"		345.75	350.00	HO CO STD. SD 4.22
I-16	A-5	341.25	341.00	345.50	HO CO STD. SD 4.01
I-17	A-5	340.15	339.90	347.00	HO CO STD. SD 4.01
I-22	A-5	338.17	337.97	350.00	HO CO STD. SD 4.01
I-23	A-10	337.43	337.18	349.50	HO CO STD. SD 4.02
I-28	A-5	342.25	342.50	346.50	HO CO STD. SD 4.01
M-5	STD MANHOLE 60"	336.04	335.54	348.50	HO CO STD. G. 5.12
M-6	STD MANHOLE 60"	334.74	334.54	350.00	HO CO STD. G. 5.12
M-4	STD MANHOLE 48"	343.90	341.83	348.40	HO CO STD. G. 5.12

Storm Drain Profile

Scale: Horz: 1"=40'
Vert: 1"=5'



Storm Drain Profile

Scale: Horz: 1"=40'
Vert: 1"=5'

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE: March 8, 2001

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 Chief, Development Engineering Division
 Chief, Division of Land Development
 Director

Date No. Revision Description

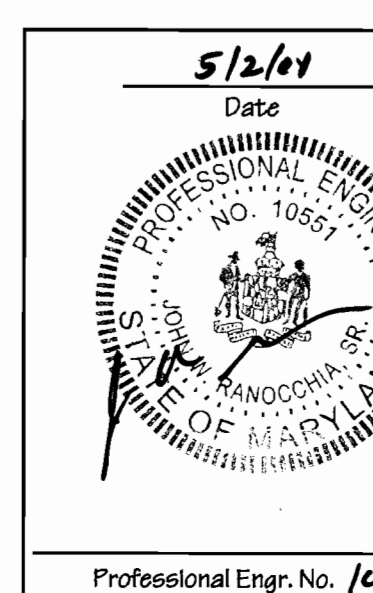
Columbia Gateway
Parcel Q4

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

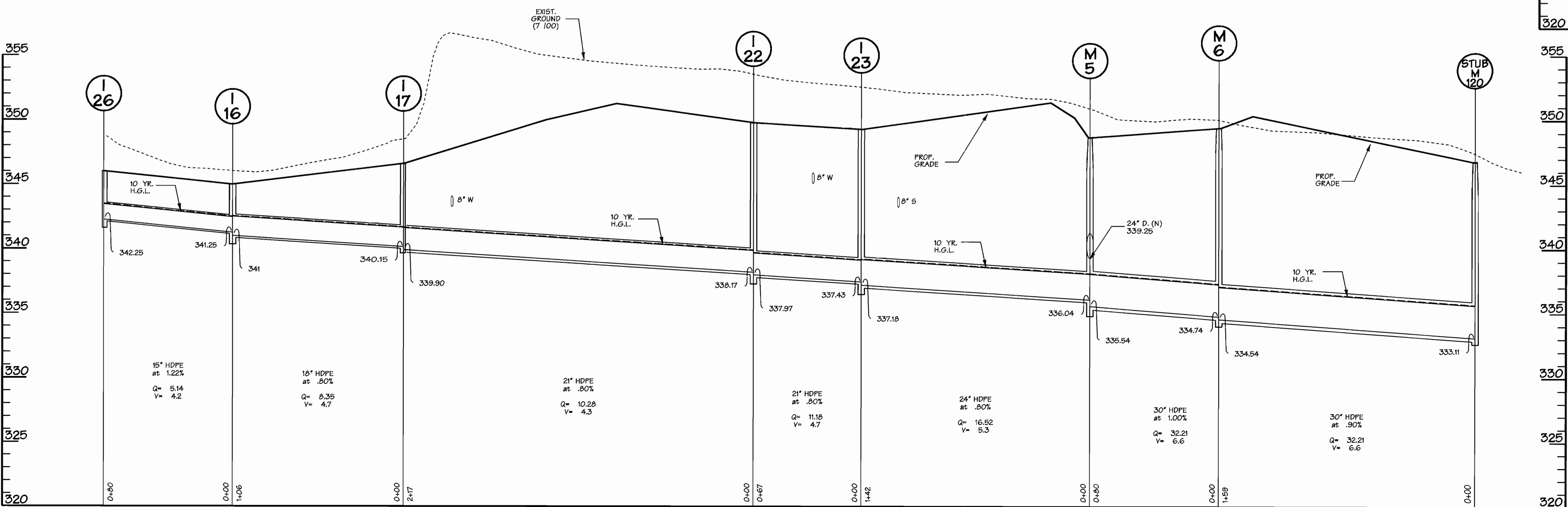
DMW

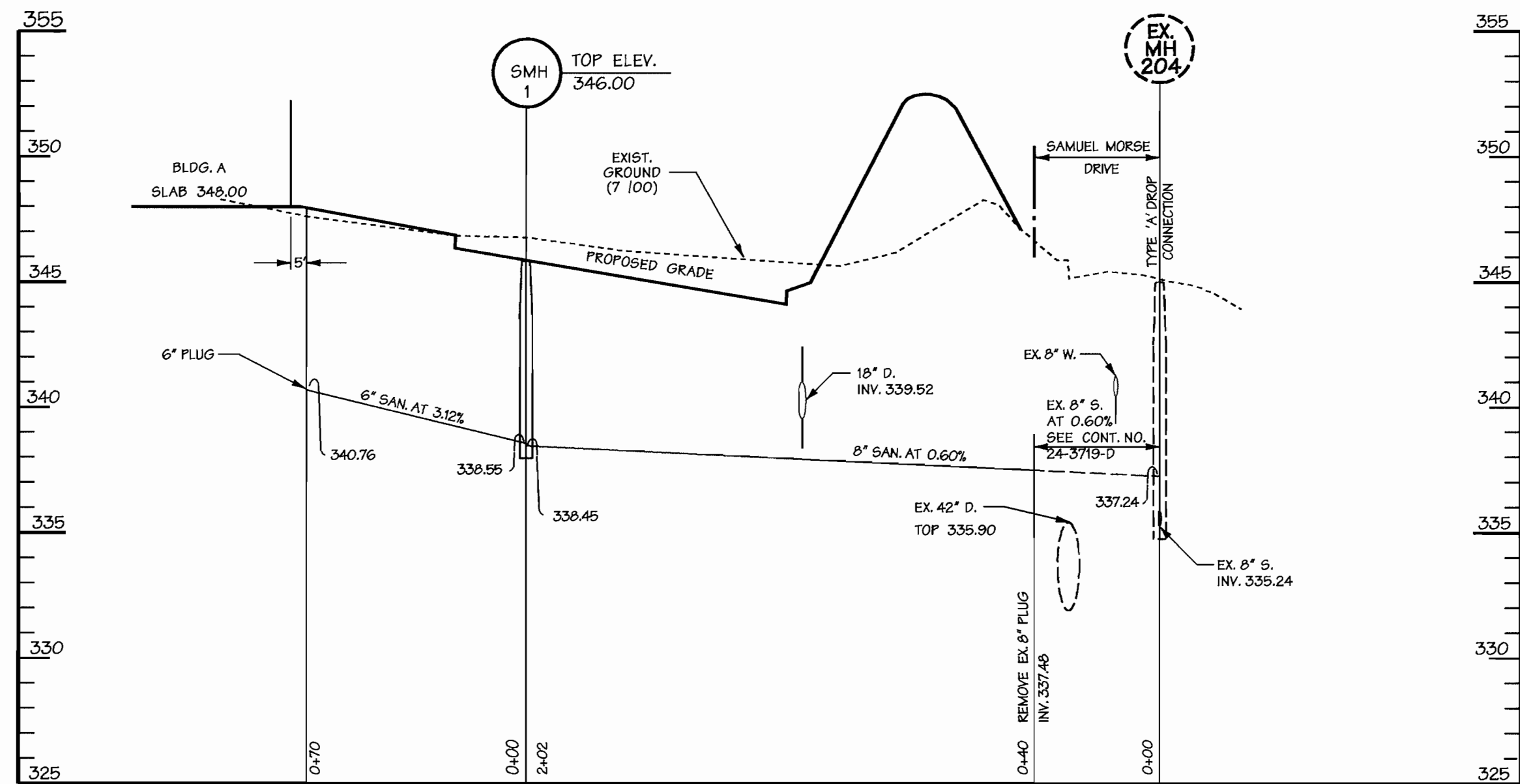
Subdivision Name: COLUMBIA GATEWAY
 Section: NA
 Lot: Q4

Title: Storm Drain Profile
 Des By: LL
 Scale: AS SHOWN
 Proj. No.: 00089



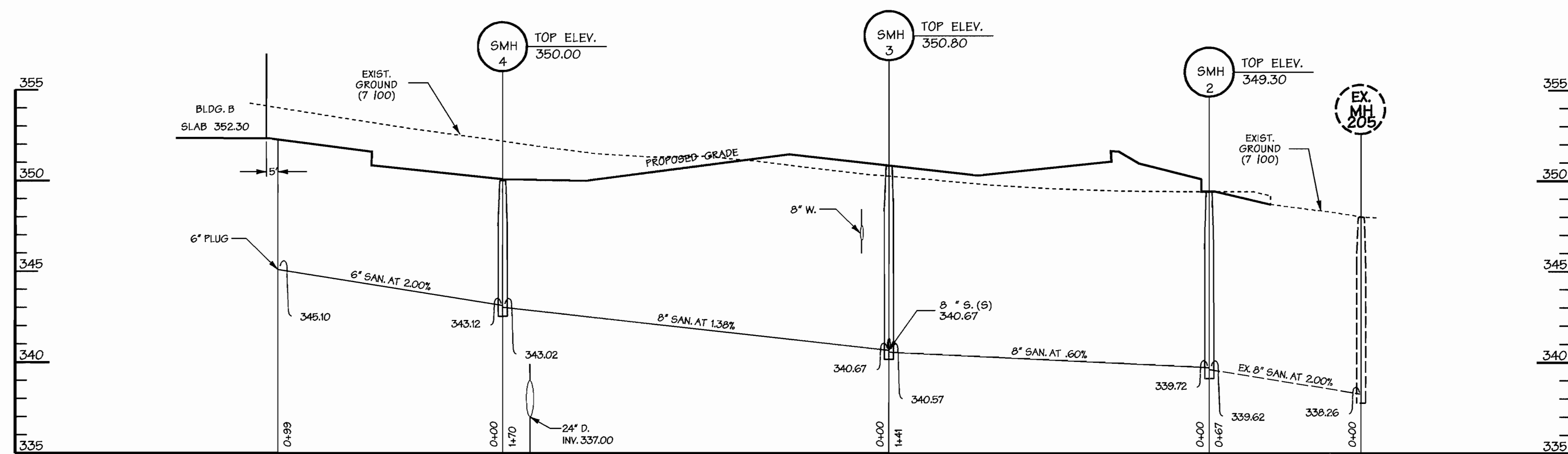
Drn By: ADL
 Date: 4-12-01
 Chk By: Approved
 8 OF 19





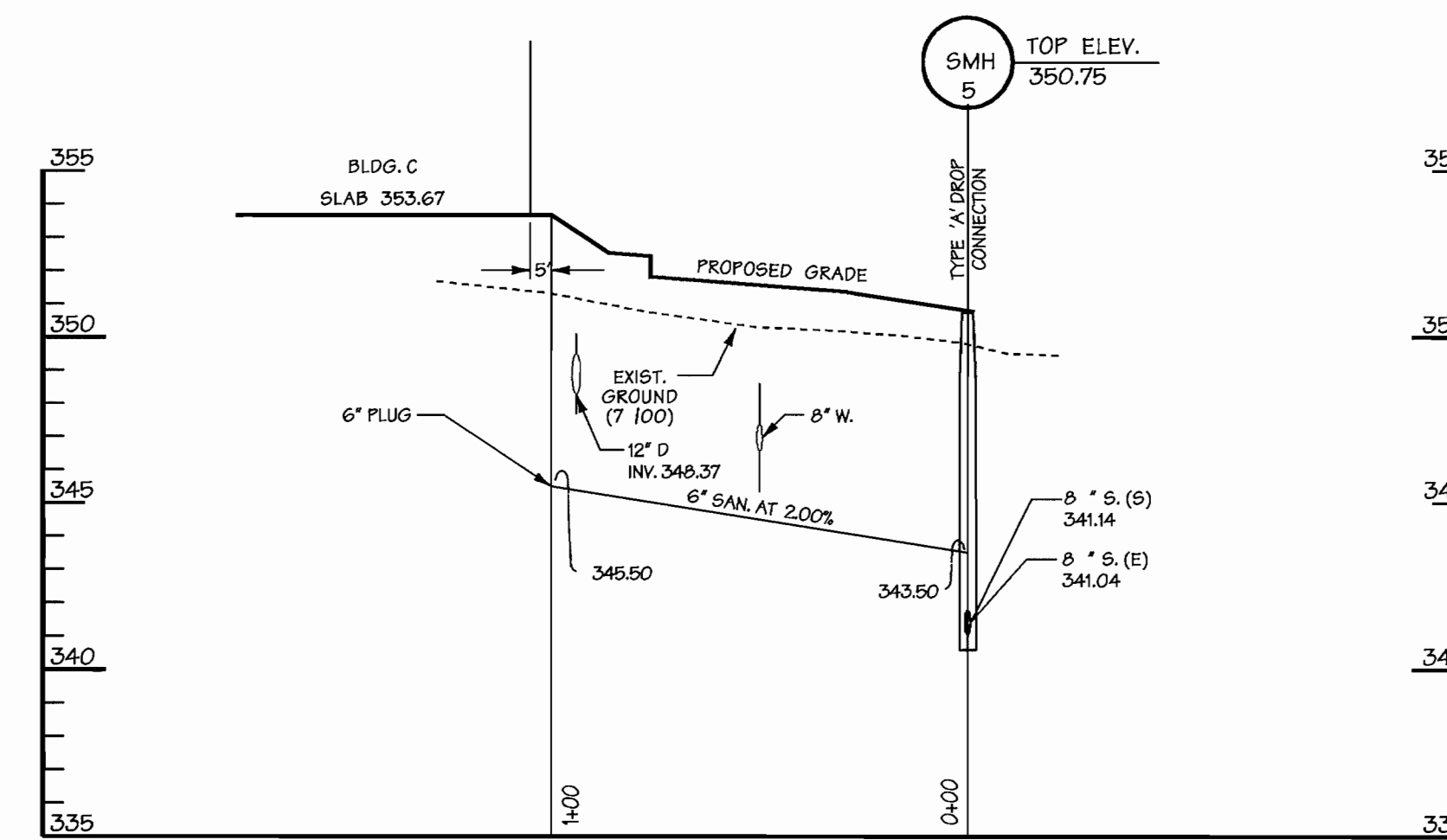
Private San Sewer Profile- Building - A

Scale: Horz: 1"=40'
Vert: 1"=5'



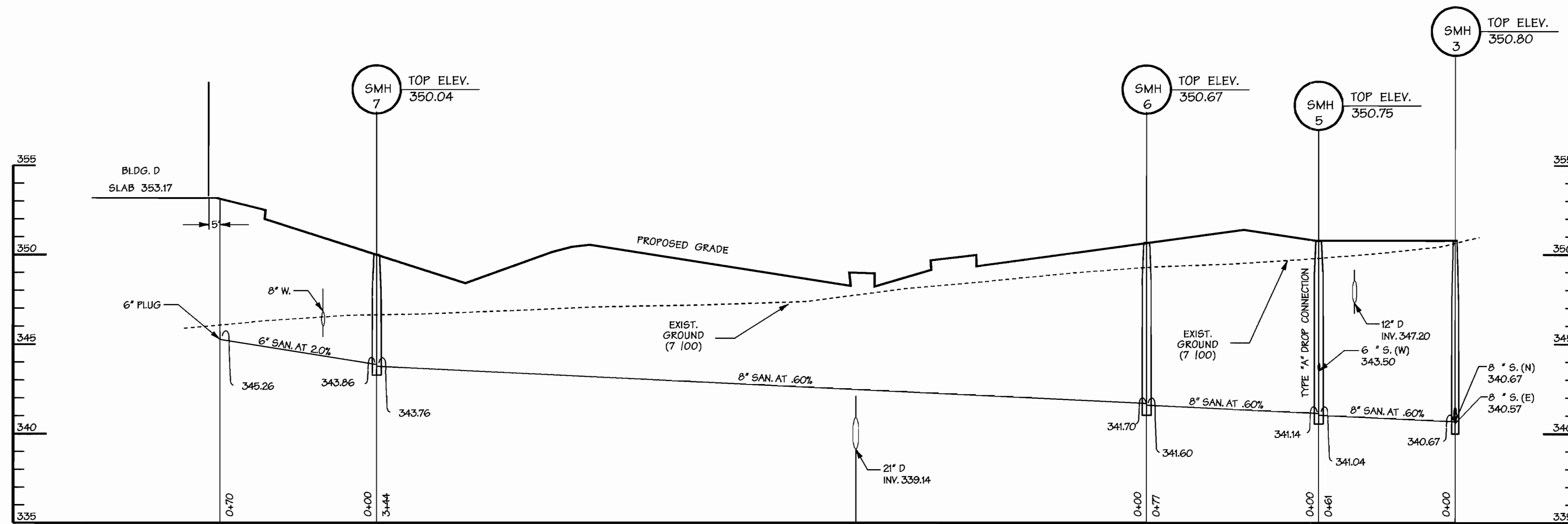
Private San Sewer Profile- Building - B

Scale: Horz: 1"=40'
Vert: 1"=5'



Private San Sewer Profile- Building - C

Scale: Horz: 1"=40'
Vert: 1"=5'



Private San Sewer Profile- Building - D

Scale: Horz: 1"=40'
Vert: 1"=5'

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Chris Dammann 6/21/01
CHIEF, DEVELOPMENT ENGINEERING DIVISION MKK DATE
Andy Hamata 5/30/01
CHIEF, DIVISION OF LAND DEVELOPMENT DATE
James L. Smith 6/1/01
DIRECTOR DATE

Date	No.	Revision Description

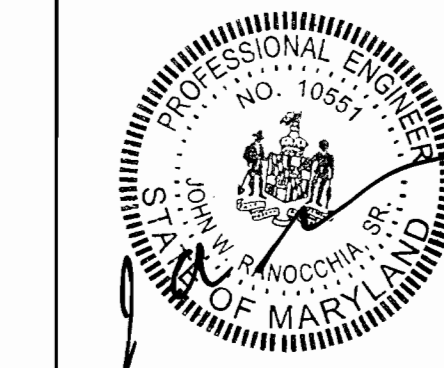
Columbia Gateway Parcel Q4

OWNER: The Howard Research and Development Corporation
12275 Linds Farmwood Parkway
Columbia, Maryland 21044

DEVELOPER: AAK IV, LLC
8805 COLUMBIA 100 PKWY
SUITE 121
COLUMBIA, MD 21045

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE March 8, 2001

5-2-01
Date



Professional Engr. No. 10551

SUBMISSION NAME: COLUMBIA GATEWAY		SECTION: NA	LOSPARCEL #: Q4
PLAT OR LEAF: 14-799	BLOCK #: 12 & 7	TAXZONE MAP: 42-43	ELECT. DISTRICT: G
WATER CODE: E08	SEWER CODE: 4900000	GENSIS TRACT: 6067.03	

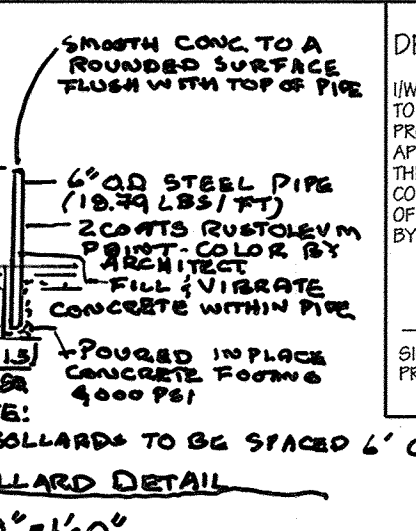
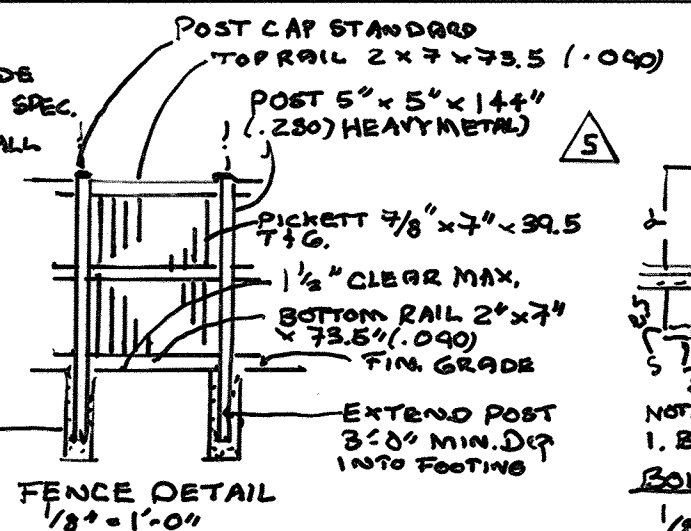
TITLE: Utility Profile Plan		
Des By: DFM	Scale: AS SHOWN	Proj. No. 00089
Dm By: ADL	Date: 4-12-01	9 OF 19
Chk By: Approved		

FOR REDLINE REVISION ONLY
 DATE 1-28-19
 PROFESSIONAL ENGINEER
 License No. 20595
 Expiration Date: 7-18-19

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. 20595, Expiration Date: 7-18-19

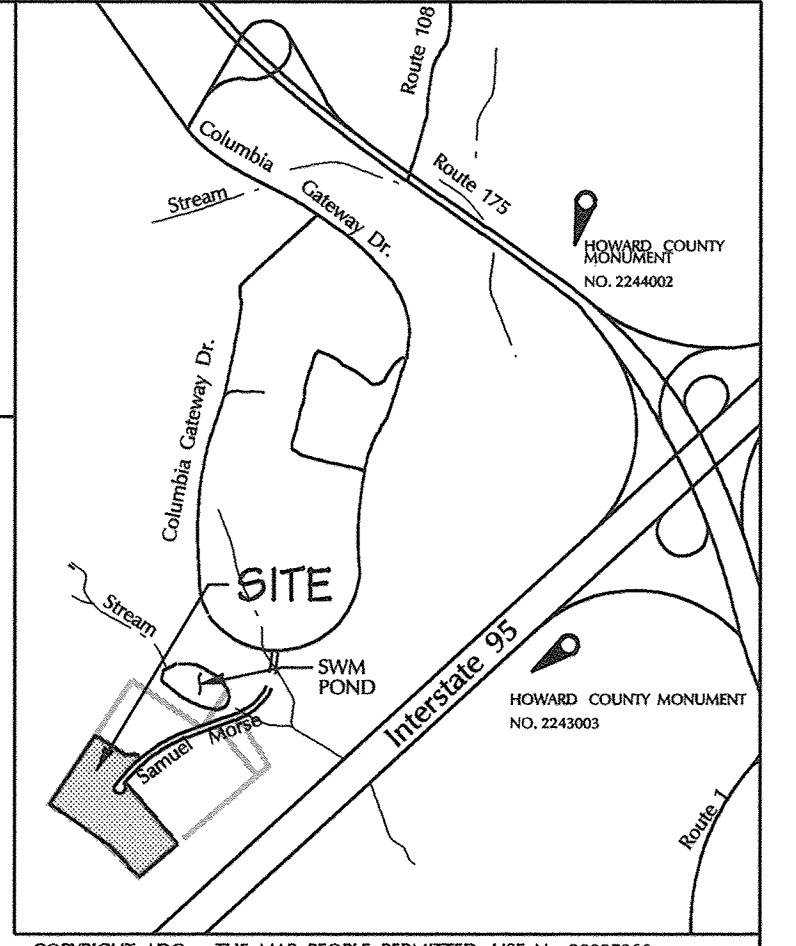
- NOTES:
1. VERIFY LAYOUT IN THE FIELD WITH LANDSCAPE ARCHITECT PRIOR TO EXCAVATION.
 2. ALL PLAYGROUND EQUIPMENT WILL BE FURNISHED AND INSTALLED BY VERBAL BEGINNINGS.
 3. PLAY SURFACE TO BE NOT FULT SAFETY SURFACE SO STANDARD BLEND WWW.NOFULT.COM

- NOTES:
1. GATES SHALL BE 4' WIDE AND INSTALLED PER MANUF. SPEC.
 2. USE ALUM. INSERT AT ALL GATE POSTS PER MANUF. SPEC.
 3. CROWN ALL CONC. FTGS. TO DRAIN WATER AWAY FROM POSTS.

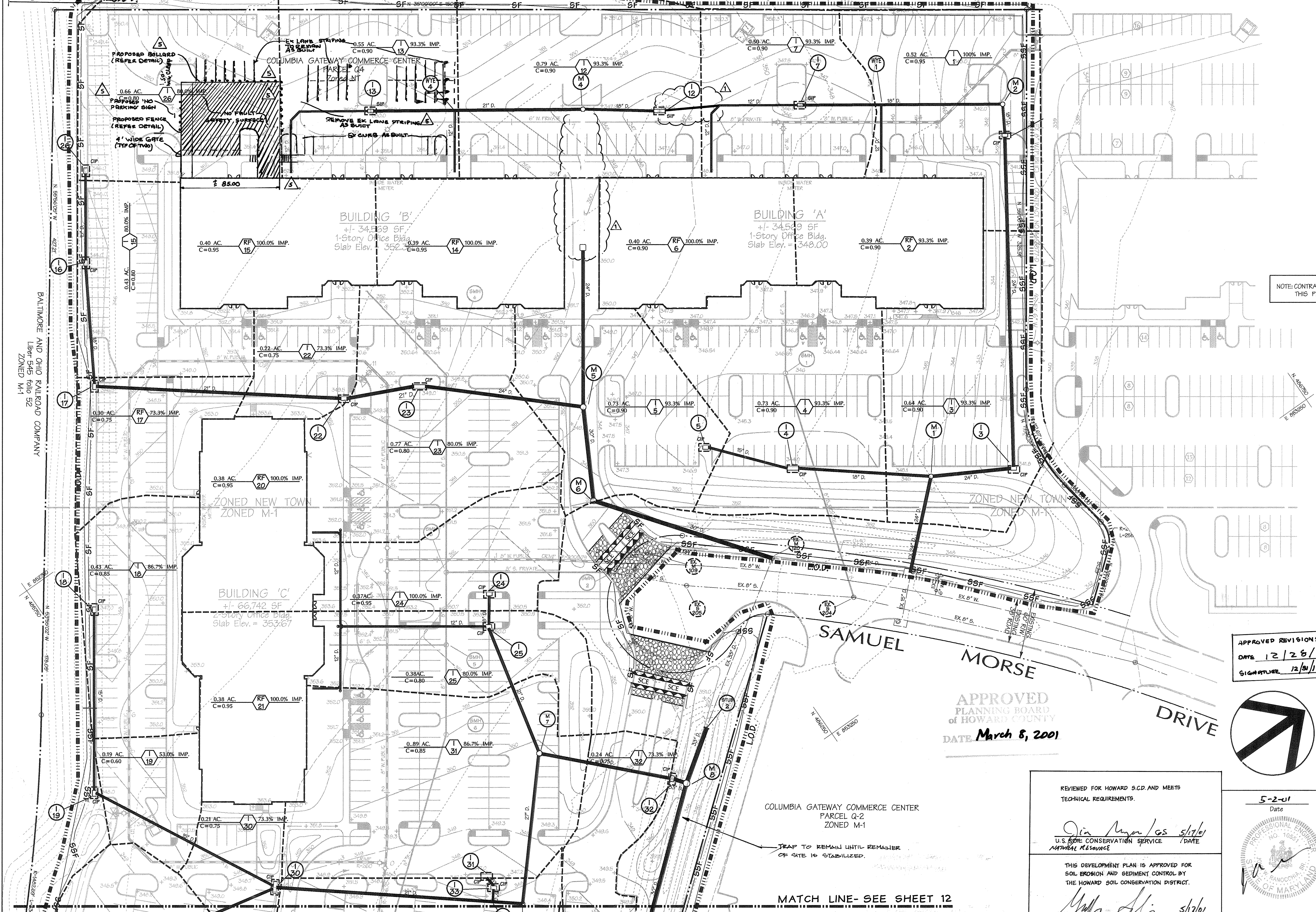


DEVELOPERS CERTIFICATE:
 I HEREBY CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL 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.
 Signature: [Signature] DATE: 5/2/01

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.
 Signature: [Signature] DATE: 5-2-01



LOCATION MAP
 SCALE: 1" = 2000'



NOTE: CONTRACTOR IS RESPONSIBLE FOR CLEANING ANY AND ALL SEDIMENT ATTRIBUTED TO THIS PLAN FROM THE RECEIVING STORMWATER POND.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 Chief, Development Engineering Division MK DATE 5/21/01
 Chief, Division of Land Development DATE 5/30/01
 Director DATE 6/1/01

Date	No.	Revision Description
6/26/01	1	ADJUST DRAINAGE AREA.
12/05/18	5	NEW FENCED ENCLOSURE AREA FOR BUILDING A/B. SHOW PARKING PER AS BUILT CONDITION

APPROVED REVISIONS
 DATE 12/26/18
 SIGNATURE 12/31/18

Columbia Gateway Parcel Q4

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

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

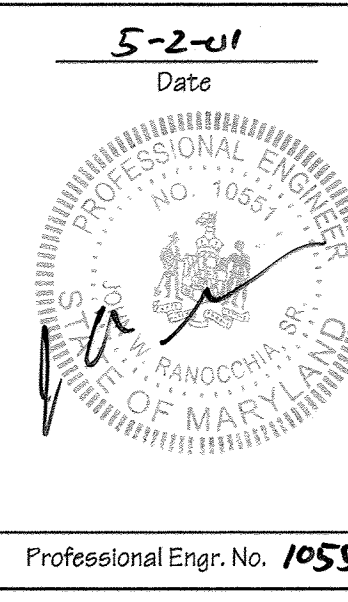
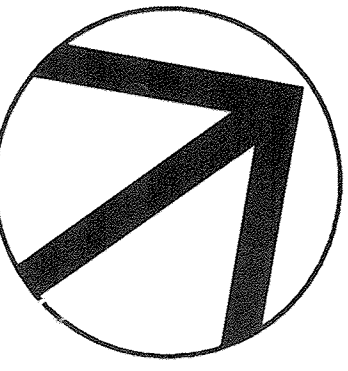
SUBDIVISION NAME: COLUMBIA GATEWAY SECTION: NA LOT/PARCEL #: Q4
 PLAT OR L.P. FILE NO.: 74759 ZONE: 12 & 7 INTAM. TOWN/NEIGHBORHOOD MAP: 42-43 ELECT. DISTRICT: 6 CENSUS TRACT: 6067.03
 WATER CODE: E06 SEWER CODE: 4900000

Drainage Area Map & Sediment Erosion Control

Des By: RBW Scale: 1" = 40'
 Dwn By: ADL Date: 4-12-01 Proj. No.: 00089
 Chk By: Approved 11 OF 19

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.
 Signature: [Signature] DATE: 5/1/01
 U.S. SOIL CONSERVATION SERVICE / DATE
 NATURAL RESOURCE

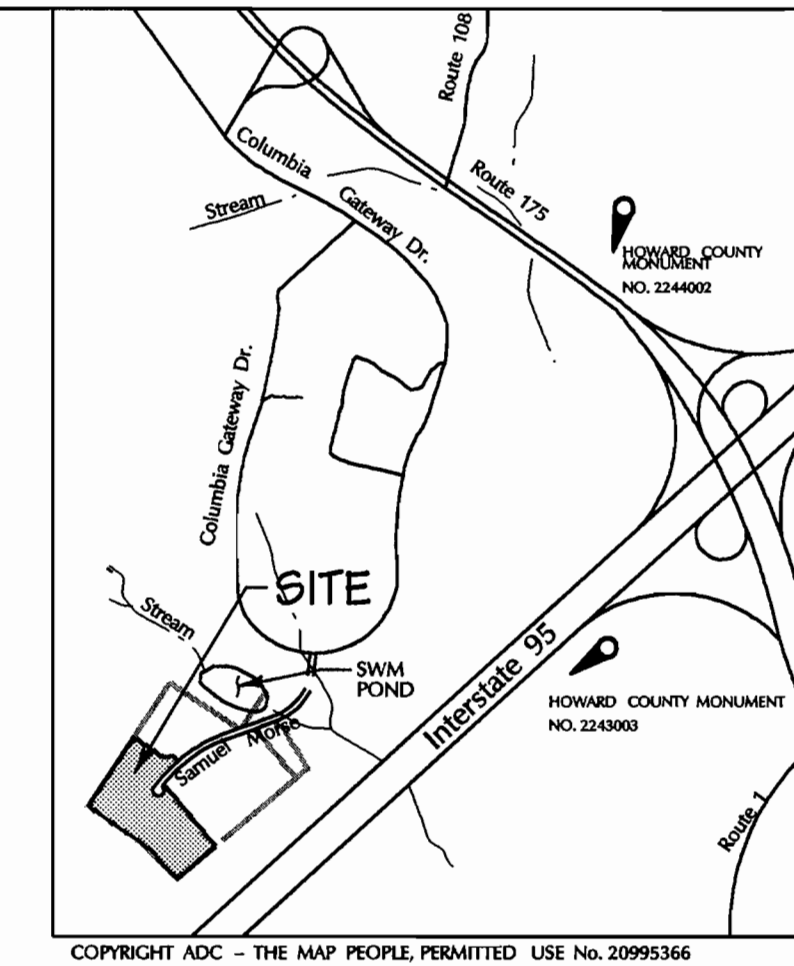
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Signature: [Signature] DATE: 5/1/01
 HOWARD S.C.D.



APPROVED PLANNING BOARD OF HOWARD COUNTY
 DATE: March 8, 2001

COLUMBIA GATEWAY COMMERCE CENTER
 PARCEL Q-2
 ZONED M-1

MATCH LINE- SEE SHEET 12



LOCATION MAP
SCALE: 1" = 2000'

- LEGEND**
- DRAINAGE AREA LINES
 - L.O.D. LIMIT OF DISTURBANCE
 - SSF SUPER SILT FENCE
 - SF SILT FENCE
 - SIP STANDARD INLET PROTECTION
 - RD 100% IMP. DRAINAGE AREA LABELS (0.28 AC, C=0.86)
 - SCE STABILIZED CONSTRUCTION ENTRANCE

NOTE: CONTRACTOR IS RESPONSIBLE FOR CLEANING ANY AND ALL SEDIMENT ATTRIBUTED TO THIS PLAN FROM THE RECEIVING STORMWATER POND.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Michael P. ... 5/21/01
CHIEF, DEVELOPMENT ENGINEERING DIVISION -MK DATE

Linda ... 5/30/01
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Paul ... 6/1/01
DIRECTOR DATE

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE March 8, 2001

Date	No.	Revision Description

Columbia Gateway Parcel Q4

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

DEVELOPER: AAX, IV, LLC
8805 COLUMBIA 100 FWY
SUITE 101
COLUMBIA, MD 21045

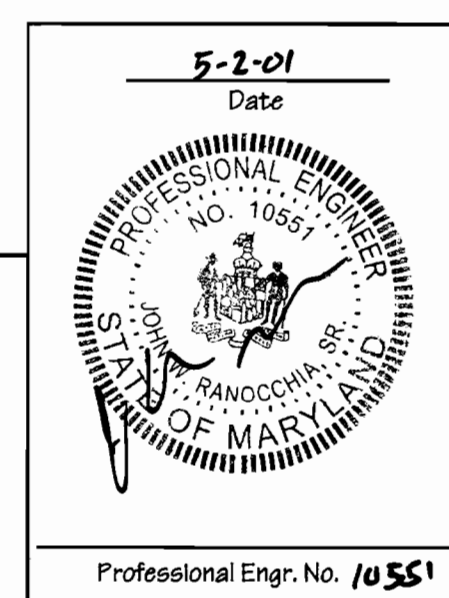
DMW
Duff-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Thousand Oaks, Maryland 21286
(410) 296-3333
Fax 296-4706

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

SUBDIVISION NAME COLUMBIA GATEWAY	SECTION/AREA NA	LOSPARCEL # Q4
PLAT FOR REF 14759	BLOCK # 12 & 7	TRACED MAP INT&M
WATER CODE E06	SEWER CODE 4900000	ELECT DISTRICT 6
CEMETER TRACT 6067.03		

Drainage Area Map & Sediment Erosion Control

Des By RBW	Scale 1" = 40'	Proj. No. 00089
Drn By ADL	Date 4-12-01	
Chk By Approved		12 OF 19



MATCH LINE- SEE SHEET 11

COLUMBIA GATEWAY COMMERCE CENTER
PARCEL Q-2
ZONED M-1

BALTIMORE AND OHIO RAILROAD COMPANY
Liber 545 folio 52
ZONED M-1

DEVELOPERS CERTIFICATE:
I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY 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 EMPLOY 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/WE ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

James M. Adams 5/2/01
SIGNATURE OF DEVELOPER DATE
PRINT NAME BELOW SIGNATURE **JAMES M. ADAMS**

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/SH/WE MUST EMPLOY 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.

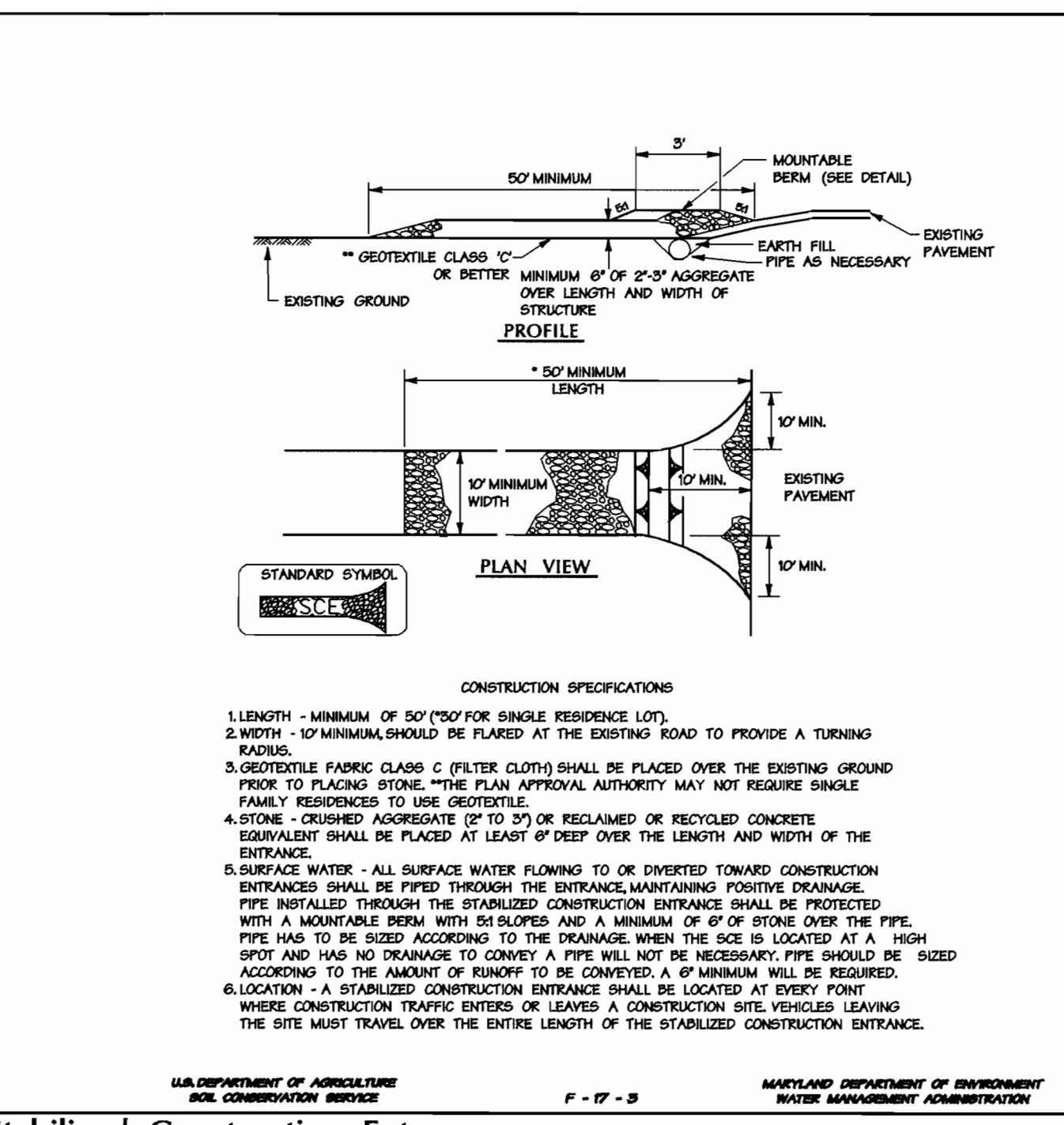
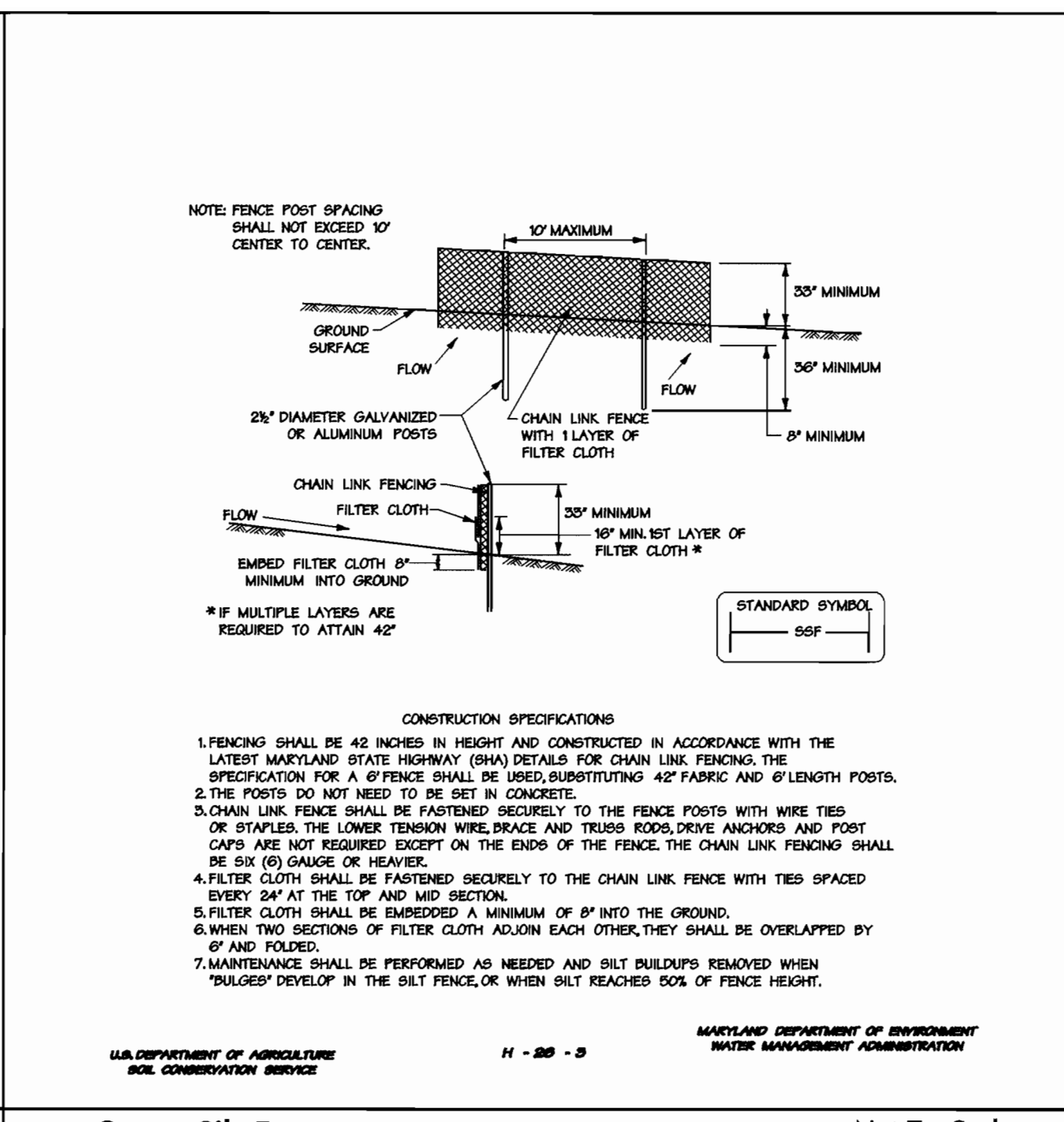
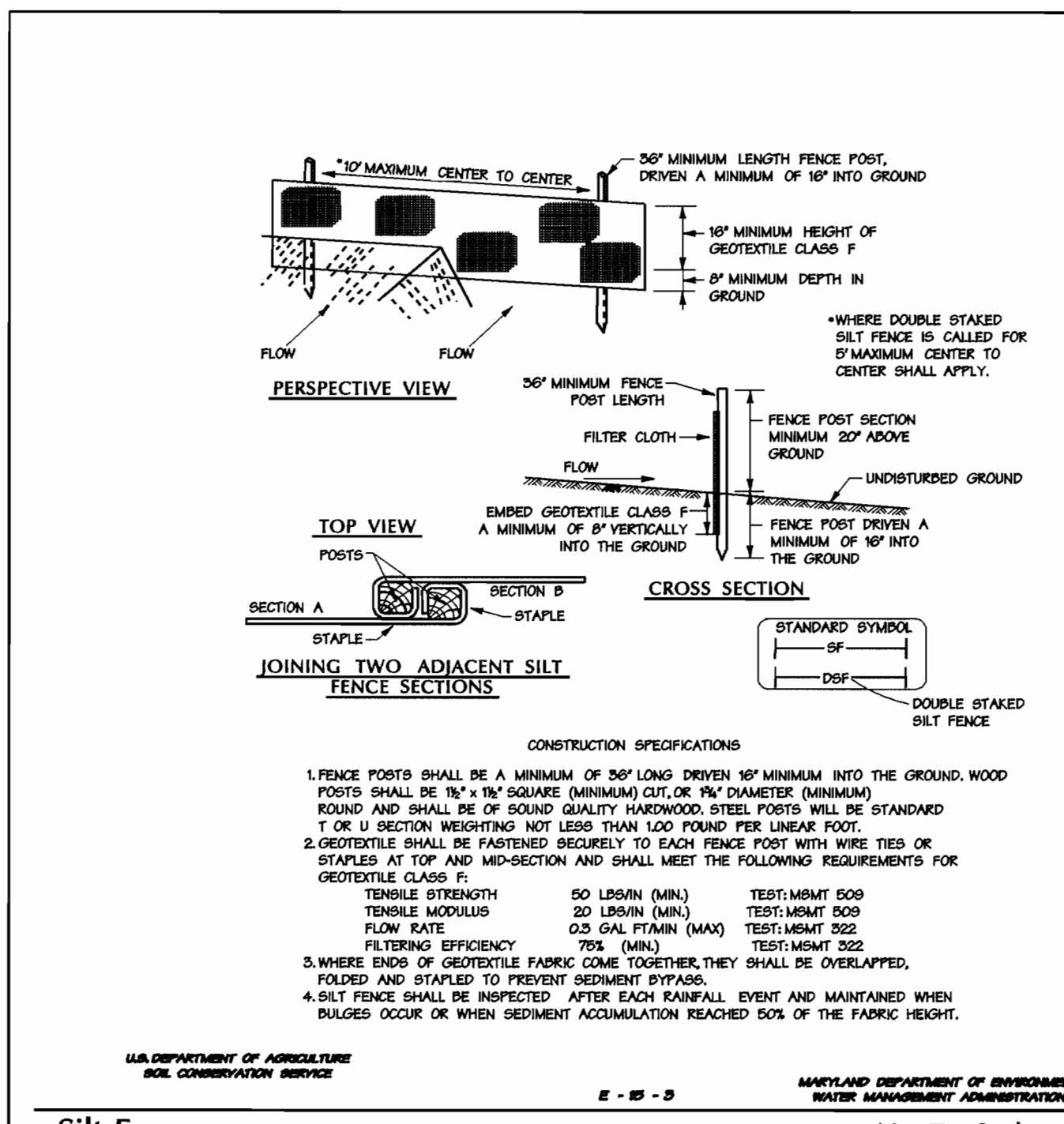
John W. Nawochka, Sr. 5-2-01
SIGNATURE OF ENGINEER DATE
PRINT NAME BELOW SIGNATURE **John W. Nawochka, Sr.**

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

Jim ... 5/17/01
U.S. SOIL CONSERVATION SERVICE DATE
NORMAL RESOURCE

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

Paul ... 5/17/01
HOWARD S.C.D. DATE



Silt Fence Not To Scale

DUST CONTROL SPECIFICATIONS

TEMPORARY METHODS:

- MULCHES - SEE STANDARDS FOR VEGETATIVE STABILIZATION WITH MULCHES. ONLY MULCH SHOULD BE CRIMPED OR TACKED TO PREVENT BLOWING.
- VEGETATIVE COVER - SEE STANDARDS FOR VEGETATIVE COVER.
- TILLAGE - TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN FLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.
- IRRIGATION - THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS MOIST. REPEAT AS NEEDED. AT NO TIME SHOULD THE SITE BE IRRIGATED TO THE POINT THE RUNOFF BEGINS TO FLOW.
- BARRIERS - SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, STRAW BALES, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 10 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING SOIL BLOWING.
- CALCIUM CHLORIDE - APPLY AT A RATE THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

PERMANENT METHODS:

- PERMANENT VEGETATION - SEE STANDARDS FOR PERMANENT VEGETATIVE COVER, AND PERMANENT STABILIZATION WITH 500' EXISTING TREES OR LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE.
- TOPSOILING - COVERING WITH LESS EROSION SOIL MATERIALS. SEE STANDARDS FOR TOPSOILING.
- STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL AFTER RECEIVING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR.

STANDARD SYMBOL
SIF

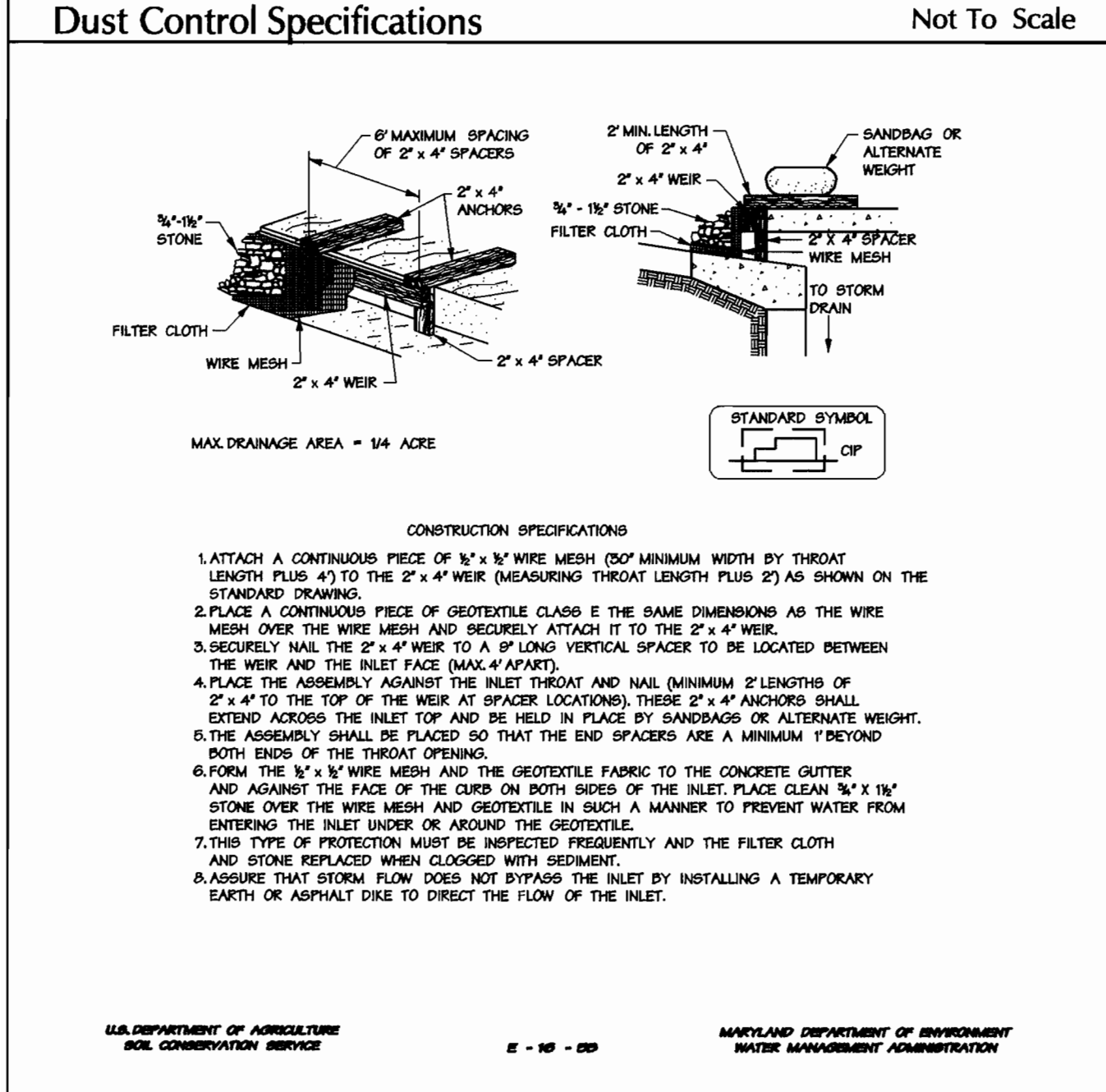
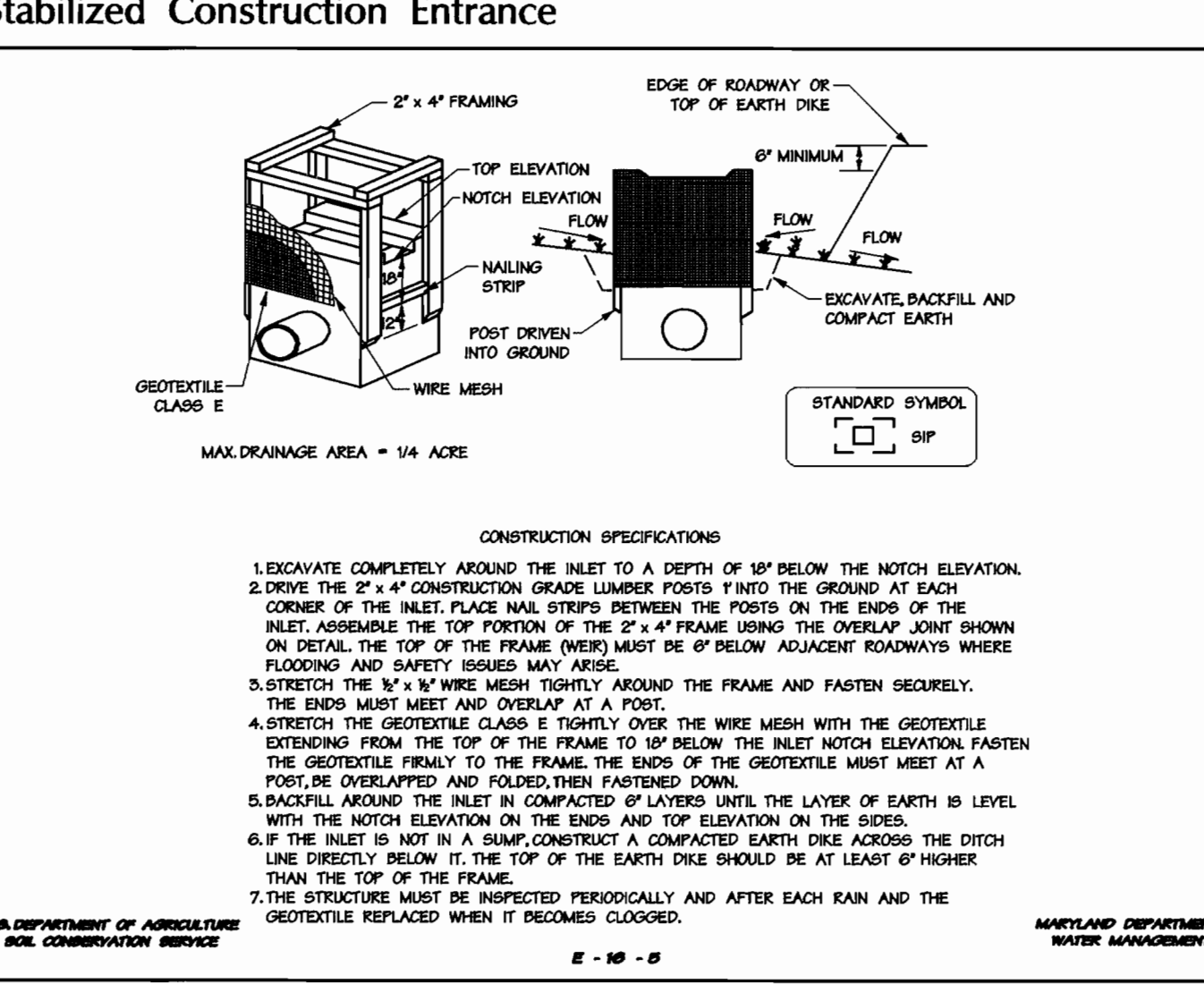
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CONSTRUCTION SPECIFICATIONS

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (303-1059).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THEREOF.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 - SEVEN CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DICES, FORMER SLOPES AND ALL SLOPES STEEPER THAN 3:1.
 - FOURTEEN DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRANSFERING SHOWS MUST BE FENCED AND WASHING BENS FORCED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOLUME CHAPTER 5 OF THE "HOWARD COUNTY DESIGN MANUAL" STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 91.5009 (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MAINTENANCE (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:

TOTAL AREA OF SITE	10.1 ACRES
AREA DISTURBED	10.8 ACRES
AREA TO BE ROOFED OR PAVED	5700 SQUARE FEET
AREA TO BE VEGETATIVELY STABILIZED	3.00 ACRES
TOTAL DIRT	250000 CUBIC YARDS
TOTAL FILL	25000 CUBIC YARDS
OFF-SITE WASTEWATER/SEWER AREA LOCATION WASTE	NA
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR TEMPORARY SEEDING (SEC. 50) AND MAINTENANCE (SEC. 52) SHALL BE REPAIR OR RECONSTRUCTED WITHIN 14 DAYS OF THE DATE OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE FEET LENGTHS OR SHORTER WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

STANDARD SYMBOL
SIF



Sediment Control General Notes Not To Scale

SEQUENCE OF CONSTRUCTION

SEQUENCE	NUMBER OF DAYS
1. OBTAIN A GRADING PERMIT.	7
2. INSTALL SEDIMENT AND EROSION CONTROL DEVICES.	7
3. UPON PERMISSION FROM THE INSPECTOR, <u>ROUGH GRADE SITE</u> .	14
4. CONSTRUCT WATER, SEWER AND STORM DRAIN AND INSTALL INLET PROTECTION EXCEPT ON 1-36-210B. THIS WILL BE COMPLETE WHEN SITE IS STABILIZED.	30
5. BEGIN BUILDING CONSTRUCTION.	180
6. FINE GRADE SITE.	5
7. INSTALL CURB & GUTTER, PAVING AND SIDE WALKS.	7
8. STABILIZE ALL AREAS IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS.	30
9. UPON APPROVAL OF THE SEDIMENT AND EROSION CONTROL INSPECTION REMOVE ALL EROSION CONTROL MEASURES AND STABILIZE.	10

Standard Inlet Protection Not To Scale

CONSTRUCTION SPECIFICATIONS

- EXCAVATE COMPLETELY AROUND THE INLET TO A DEPTH OF 10" BELOW THE NOTCH ELEVATION.
- DRIVE THE 2" x 4" CONSTRUCTION GRADE LAMBER POSTS INTO THE GROUND AT EACH CORNER OF THE INLET. PLACE NAIL STRIPS BETWEEN THE POSTS ON THE ENDS OF THE INLET. ASSEMBLE THE TOP PORTION OF THE 2" x 4" FRAME USING THE OVERLAP JOINT SHOWN ON DETAIL. THE TOP OF THE FRAME (WEIR) MUST BE 6" BELOW ADJACENT ROADWAYS WHERE FLOODING AND SAFETY ISSUES MAY ARISE.
- STRETCH THE 1/2" x 1/2" WIRE MESH TIGHTLY AROUND THE FRAME AND FASTEN SECURELY. THE ENDS MUST MEET AND OVERLAP AT A POST.
- STRETCH THE GEOTEXTILE CLASS E TIGHTLY OVER THE WIRE MESH WITH THE GEOTEXTILE EXTENDING FROM THE TOP OF THE FRAME TO 10" BELOW THE INLET NOTCH ELEVATION. FASTEN THE GEOTEXTILE FIRMLY TO THE FRAME. THE ENDS OF THE GEOTEXTILE MUST MEET AT A POST. OVERLAP AND FOLD, THEN FASTENED DOWN.
- BACKFILL AROUND THE INLET IN COMPACTED 6" LAYERS UNTIL THE LAYER OF EARTH IS LEVEL WITH THE NOTCH ELEVATION ON THE ENDS AND TOP ELEVATION ON THE SIDES.
- IF THE INLET IS NOT IN A SWAMP, CONSTRUCT A COMPACTED EARTH DISE ACROSS THE DITCH LINE DIRECTLY BELOW IT. THE TOP OF THE EARTH DISE SHOULD BE AT LEAST 6" HIGHER THAN THE TOP OF THE FRAME.
- THE STRUCTURE MUST BE INSPECTED PERIODICALLY AND AFTER EACH RAIN AND THE GEOTEXTILE REPLACED WHEN IT BECOMES CLOGGED.

STANDARD SYMBOL
SIF

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

DEVELOPERS CERTIFICATE:

WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY PERSONNEL RESPONSIBLE FOR 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.

SIGNATURE OF DEVELOPER: *James M. Adams* DATE: 5/2/01

ENGINEERS CERTIFICATE:

I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL, REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON 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 THESE ENGINEERS, REGISTERED PROFESSIONAL ENGINEERS, TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

SIGNATURE OF ENGINEER: *John W. Ranocchi* DATE: 5-2-01

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

Jim Myers/CS 5/17/01
U.S. SOIL CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS BASED ON SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

John W. Ranocchi 5/16/01
HOWARD S.C.D. DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

John W. Ranocchi 5/2/01
CHIEF, DEVELOPMENT ENGINEERING DIVISION MKK DATE

John W. Ranocchi 5/17/01
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

John W. Ranocchi 5/16/01
DIRECTOR DATE

APPROVED PLANNING BOARD of HOWARD COUNTY
DATE: March 8, 2001

Columbia Gateway Parcel Q4

OWNER: The Howard Research and Development Corporation
8005 COLUMBIA 100 PKWY
SUITE 101
COLUMBIA, MARYLAND 21044

DEVELOPER: AAK, IV, LLC
8005 COLUMBIA 100 PKWY
SUITE 101
COLUMBIA, MD 21045

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

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

5-2-01 Date

PROFESSIONAL ENGINEER
NO. 10557
JOHN W. RANOCCHI
STATE OF MARYLAND

SUBDIVISION NAME: COLUMBIA GATEWAY	SECTION NAME: NA	LOT/PARCEL #: Q4
PLAT OR LE: 1/7/75 9	BLOCK # ZONE: 12 & 7 INTAM	TAX MAP # EJECT. DISTRICT: 42-43 G
WRITER CODE: E06	SEWER CODE: 4900000	CENSUS TRACT: 6067.03

TITLE: **Sediment & Erosion Control Detail**

Des By: RBW	Scale: 1"=40'	Proj. No.: 00089
Drn By: ADL	Date: 4-12-01	
Chk By:	Approved:	13 OF 19

Professional Engr. No. 1551

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

John W. Ranocchi 5/2/01
CHIEF, DEVELOPMENT ENGINEERING DIVISION MKK DATE

John W. Ranocchi 5/17/01
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

John W. Ranocchi 5/16/01
DIRECTOR DATE

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5-2-01 Date

PROFESSIONAL ENGINEER
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STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

Section I - Vegetative Stabilization Methods and Materials

- A. Site Preparation**
- Install erosion and sediment control structures (either temporary or permanent) such as diversion, grade stabilization structures, berms, siltways, or sediment control basins.
 - Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.
 - Schedule required soil test to determine soil amendment composition and application rates for sites having disturbed areas over 5 acres.
- B. Soil Amendments (Fertilizer and Lime Specifications)**
- Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.
 - Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers shall all be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warranties of the producer.
 - Lime materials shall be ground limestone (hydrated or burnt lime may be substituted) which contains at least 50% total oxides (calcium oxide plus magnesium oxide). Limestone shall be ground to such fineness that at least 50% will pass through a #100 mesh sieve and 90 - 100% will pass through a #20 mesh sieve.
 - Incorporate lime and fertilizer into the top 3 - 5" of soil by disking or other suitable means.
- C. Seeded Preparation**
- Temporary Seeding**
 - Seeded preparation shall consist of loosening soil to a depth of 3" to 5" by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened it should not be rolled or dragged smooth but left in the roughened condition. Sloped areas (steeper than 3:1) should be tracked leaving the surface in an irregular condition with ridges running parallel to the counter of the slope.
 - Apply fertilizer and lime as prescribed on the plans.
 - Incorporate lime and fertilizer into the top 3 - 5" of soil by disking or other suitable means.
 - Permanent Seeding**
 - Minimum soil conditions required for permanent vegetative establishment:
 - Soil pH shall be between 6.0 and 7.0
 - Soluble salts shall be less than 500 parts per million (ppm).
 - The soil shall contain less than 40% clay but enough fine grained material (> 30% silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception is loworganic or organic leopessidic loess to be planted, then a sandy soil (< 30% silt plus clay) would be acceptable.
 - Soil shall contain 1.5% minimum organic matter by weight.
 - Soil must contain sufficient pore space to permit adequate root penetration.
 - If these conditions cannot be met by the soils on site, adding topsoil is required in accordance with Section 21 Standard and Specification for Topsoil.
 - Areas previously graded in conformance with the drawings shall be maintained in a true and even grade, then scarified or otherwise loosened to a depth of 3 - 5" to permit bonding of the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from sliding down a slope.
 - Apply soil amendments as per soil test or as included on the plans.
 - Mix soil amendments into the top 3 - 5" of topsoil by disking or other suitable means. Lawn areas should be rolled to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Where site conditions will not permit normal seeded preparation, loosen surface soil by tamping with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 3:1) should be tracked by a dozer leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 1 - 2" of soil should be loose and friable. Seeded loosening may not be necessary on newly disturbed areas.
- D. Seed Specifications**
- All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to re-testing by a recognized seed laboratory. All seed used shall have been tested within the 6 months immediately preceding the date of sowing such material on the job.
- Note: Seed tags shall be made available to the inspector to verify type and rate of seed used.
- Inoculant - The inoculant for treating legume seed in the seed mixtures shall be a pure culture of nitrogen-fixing bacteria prepared specifically for the species. Inoculants shall not be used later than the date indicated on the container. Add fresh inoculant as directed on package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until used. Temperatures above 75-80° F. can weaken bacteria and make the inoculant less effective.
- E. Methods of Seeding**
- Hydroseeding:** Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer), broadcast or drop seeder, or a cultipacker seeder.
 - If fertilizer is being applied at the time of seeding the application rates amounts will not exceed the following: nitrogen maximum of 100 lbs. per acre total of soluble nitrogen; P2O5 (phosphorus); 200 lbs./acre; K2O (potassium); 200 lbs./acre.
 - Lime - use only ground agricultural limestones, (up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 5 tons are applied by hydroseeding at any one time.
 - Seed and fertilizer shall be mixed on site and seeding shall be done immediately and without interruption.
 - Dry Seeding:** This includes use of conventional drop or broadcast spreaders.
 - Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the Temporary or Permanent Seeding Summaries or Tables 25 or 26. The seeded area shall then be rolled with a weighted roller to provide good seed soil contact.
 - Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.
 - Drill or Cultipacker Seeding:** Mechanized seeders that apply and cover seed with soil.
 - Cultipacker seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seeded must be firm after planting.
 - Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.
- F. Mulch Specifications (In order of preference)**
- Straw shall consist of thoroughly threshed wheat, rye or oat straw, reasonably bright in color, and shall not be musty, moldy, soiled, soaked, or excessively dirty and shall be free of noxious weed seeds as specified in the Maryland Seed Law.
 - Wood Cellulose Fiber Mulch (WCFFM)
 - WCFFM shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state.
 - WCFFM shall be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread slurry.
 - WCFFM, including dye, shall contain no germination or growth inhibiting factors.
 - WCFFM materials shall be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seeds, fertilizer and other additives to form a homogeneous slurry. The mulch material shall form a blotter-like ground cover on application, having moisture absorption and retention properties that shall cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.
 - WCFFM material shall contain no elements or compounds at concentration levels that will be phytotoxic.
 - WCFFM must conform to the following physical requirements: fiber length to approximately 10 inches, ash content of approximately 1 min., pH range of 4.0 to 8.5, ash content of 1.5% maximum and water holding capacity of 50% minimum.
- Note: Only sterile straw mulch should be used in areas where one species of grass is desired.

G. Mulching Seeded Areas - Mulch shall be applied to all seeded areas where one species of grass is desired.

- If grading is completed outside of the seeding season, mulch alone shall be applied as prescribed in this section and maintained until the seeding season returns and seeding can be performed in accordance with these specifications.
- When straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tons/acre. Mulch shall be applied in a uniform loose depth of between 1" and 2". Mulch applied shall achieve a uniform distribution and depth so that the soil surface is not exposed. If a mulch anchoring tool is to be used, the rate should be increased to 2.5 tons/acre.
- Wood cellulose fiber used as a mulch shall be applied at a net dry weight of 1500 lbs. per acre. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a maximum of 50 lbs. of wood cellulose fiber per 100 gallons of water.
- Securing Straw Mulch (Mulch Anchoring shall be performed immediately following mulch application to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon size of area and erosion hazard:**
 - A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of two (2) inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should be used on the contour if possible.
 - Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 pounds/acre. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
 - Application of liquid binders should be heavier at the edges where wind catches much, such as in valleys or on crest of banks. The remainder of area should appear uniform after binder application. Synthetic binders - such as Acrylic DLK (Ago-Tack), DCA-70, Petrosol, Terra Tack, Terra Tack AK, or other approved slurry may be used at rates recommended by the manufacturer to anchor mulch.
 - Lightweight plastic netting may be stapled over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4' to 15' feet wide and 300 to 3,000 feet long.

Section IV - Sod - To provide quick cover on disturbed areas (2:1 grade or flatter).

- A. General Specifications**
- Class of turfgrass sod shall be Maryland or Virginia State Certified or Approved. Sod labels shall be made available to the job foreman and inspector.
 - Sod shall be machine cut at a uniform soil thickness of 3/4" plus or minus 1/4" at the time of cutting. Measurement for thickness shall exclude top growth and thatch. Individual pieces of sod shall be cut to the suppliers width and length. Maximum allowable deviation from standard widths and lengths shall be 5 percent. Broken pads and torn or uneven ends will not be acceptable.
 - Standard size sections of sod shall be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section.
 - Sod shall not be harvested or transplanted when moisture content (excessively dry or wet) may adversely affect its survival.
 - Sod shall be harvested, delivered, and installed within a period of 36 hours. Sod not transplanted within this period shall be approved by an agronomist or soil scientist prior to its installation.
- B. Sod Installation**
- During periods of excessively high temperature or in areas having dry subsoil, the subsoil shall be lightly irrigated immediately prior to laying the sod.
 - The first row of sod shall be laid in a straight line with subsequent rows placed parallel to and tightly wedged against each other. Lateral joints shall be staggered to promote uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots.
 - Wherever possible, sod shall be laid with the long edge parallel to the contour and with staggering joints. Sod shall be rolled and tamped, repeated or otherwise secured to promote slippage on slopes and to ensure solid contact between sod roots and the underlying soil surface.
 - Sod shall be watered immediately following rolling or tamping until the underside of the new sod pad and soil surface below the soil are thoroughly wet. The operations of laying, tamping and irrigating for any piece of sod shall be completed within eight hours.
- C. Sod Maintenance**
- In the absence of adequate rainfall, watering shall be performed daily or as often as necessary during the first week and in sufficient quantities to maintain moist soil to a depth of 4". Watering should be done during the heat of the day to prevent wilting.
 - After the first week, sod watering is required as necessary to maintain adequate moisture content.
 - The first mowing of sod should not be attempted until the sod is firmly rooted. No more than 1/3 of the grass leaf shall be removed by the initial cutting or subsequent cuttings. Grass height shall be maintained between 2" and 3" unless otherwise specified.

PERMANENT SEEDING NOTES

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

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

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

FERTILIZER - APPLY 2 TONS PER ACRE SOLUBLE NITROGEN (OR 100,000 SQFT) AND 500 LBS PER ACRE SOLUBLE PHOSPHORUS (OR 14,000,000 SQFT) BEFORE SEEDING. MAXIMUM OF 50-0-0 UREA-NITROGEN FERTILIZER (OR 100,000 SQFT).

LIME - APPLY 2 TONS PER ACRE SOLUBLE LIME (OR 100,000 SQFT) AND 500 LBS PER ACRE 10-10-40 FERTILIZER (OR 100,000 SQFT) BEFORE SEEDING. HARDEN OR TAMP INTO UPPER THREE INCHES OF SOIL.

SEEDING - FOR THE PERIODS MARCH 1 THRU APRIL 30 AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS PER ACRE (OR 14,000,000 SQFT) OF KENTUCKY 31 TALL FESCUE FOR THE PERIOD MAY 1 THRU JULY 31 SEED WITH 60 LBS PER ACRE (OR 14,000,000 SQFT) OF TALL FESCUE PER ACRE AND 2 TONS PER ACRE OF WOOD CELLULOSE FIBER MULCH (OR 14,000,000 SQFT) FOR THE PERIOD SEPTEMBER 15 THRU FEBRUARY 28. PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE. (OR 14,000,000 SQFT) OF WOOD CELLULOSE FIBER MULCH AND SEED WITH 60 LBS PER ACRE (OR 14,000,000 SQFT) OF TALL FESCUE AND MALEN WITH 2 TONS PER ACRE OF WOOD CELLULOSE FIBER MULCH.

MULCHING - APPLY 1 1/2 TO 2 TONS PER ACRE (TO 80 LBS/1000 SQFT) OF UNMILLED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING AND/OR MULCH IMMEDIATELY AFTER SEEDING USING MULLER ANCHORED TOOL OR 200 GALLONS PER ACRE (OR 500,000 SQFT) OF GRANULAR LIME ANCHORED TOOL OR 200 GALLONS PER ACRE (OR 500,000 SQFT) OF GRANULAR LIME ANCHORED TOOL OR 200 GALLONS PER ACRE (OR 500,000 SQFT) FOR ANCHORING.

MAINTENANCE - INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDING.

TEMPORARY SEEDING NOTES

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

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

SOIL AMENDMENTS - APPLY 600 LBS PER ACRE 10-10-40 FERTILIZER (OR 100,000 SQFT).

SEEDING - FOR THE PERIODS MARCH 1 THRU APRIL 30 AND AUGUST 1 THRU OCTOBER 15, SEED WITH 2400 BUSHEL PER ACRE OF ANNULAR RYE (OR 14,000,000 SQFT) FOR THE PERIOD MAY 1 THRU JULY 31 SEED WITH 2400 BUSHEL PER ACRE OF ANNULAR RYE (OR 14,000,000 SQFT) FOR THE PERIOD SEPTEMBER 15 THRU FEBRUARY 28. PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE. (OR 14,000,000 SQFT) OF WOOD CELLULOSE FIBER MULCH AND SEED WITH 2400 BUSHEL PER ACRE (OR 14,000,000 SQFT) OF ANNULAR RYE AND MALEN WITH 2 TONS PER ACRE OF WOOD CELLULOSE FIBER MULCH.

MULCHING - APPLY 1 1/2 TO 2 TONS PER ACRE (TO 80 LBS/1000 SQFT) OF UNMILLED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING AND/OR MULCH IMMEDIATELY AFTER SEEDING USING MULLER ANCHORED TOOL OR 200 GALLONS PER ACRE (OR 500,000 SQFT) OF GRANULAR LIME ANCHORED TOOL OR 200 GALLONS PER ACRE (OR 500,000 SQFT) FOR ANCHORING.

REFER TO THE 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR ADDITIONAL NOTES AND METHODS NOT COVERED.

Temporary And Permanent Seeding Notes

Section V - Turfgrass Establishment

Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which will receive a medium high level of maintenance. Areas to receive seed shall be tilled by disking or other approved methods to a depth of 2 to 4 inches, leveled and raked to prepare a proper seedbed. Stones and debris over 1/4 inches in diameter shall be removed. The resulting seedbed should be prepared in accordance with these specifications.

A. Turfgrass Mixtures

- Kentucky Bluegrass - Full sun mixture** - For use in areas that receive intensive management. Irrigation required in the areas of central Maryland and eastern shore. Recommended Certified Kentucky Bluegrass Cultivars Seeding Rate: 15 to 2.0 pounds/1000 square feet. A minimum of three bluegrass cultivars should be chosen ranging from a minimum of 10% to a maximum of 35% of the mixture by weight.
- Kentucky Bluegrass/Perennial Rye** - Full sun mixture - For use in full sun areas where rapid establishment is necessary and when turf will receive medium to intensive management. Recommended Certified Kentucky Bluegrass Cultivars Seeding Rate: 2 pounds mixture/1000 square feet. A minimum of 3 Kentucky Bluegrass Cultivars must be chosen, with each cultivar ranging from 10% to 35% of the mixture by weight.
- Tall Fescue/Kentucky Bluegrass** - Full sun mixture - For use in drought prone areas and/or for areas receiving low to medium management in full sun to medium shade. Recommended mixture includes certified Tall Fescue Cultivars 95 - 100%, certified Kentucky Bluegrass Cultivars 0 - 5%. Seeding rate: 5 to 8 lb/1000 sq. ft. One or more cultivars may be blended.
- Kentucky Bluegrass/Fine Fescue** - Shade Mixture - For use in areas with shade in bluegrass lawns. For establishment in high quality, intensively managed turf area. Mixture includes certified Kentucky Bluegrass Cultivars 30-40% and certified Fine Fescue and 60-70%. Seeding rate: 1 1/2 - 3 lbs/1000 square feet. A minimum of 3 Kentucky Bluegrass cultivars must be chosen, with each cultivar ranging from a minimum of 10% to a maximum of 35% of the mixture by weight.

Note: Turfgrass varieties should be selected from those listed in the most current University of Maryland Publication, Agronomy Wimeo 477, Turfgrass Cultivar Recommendations for Maryland.

B. Ideal times of seeding

- Western MD: March 15 - June 1, August 1 - October 1 (Hardiness Zones - 5b, 6a)
- Central MD: March 1 - May 15, August 15 - October 15 (Hardiness Zone - 6b)
- Southern MD, Eastern Shore: March 1 - May 15, August 15 - October 15 (Hardiness Zones - 7a, 7b)

C. Irrigation

If soil moisture is deficient, supply new seedlings with adequate water for plant growth (1/2" - 1" every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedlings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.

D. Repairs and Maintenance

- Inspect all seeded areas for failures and make necessary repairs, replacements, and reseeding within the planting season.
- Once the vegetation is established, the site shall have 95% groundcover to be considered adequately stabilized.
- If the stand provides less than 40% ground coverage, reestablish following original lime, fertilizer, seeded preparation and seeding recommendations.
- If the stand provides between 40% and 94% ground coverage, overseeding and fertilizing using half of the rates originally applied may be necessary.
- Maintenance fertilizer rates for permanent seedings are shown in Table 24. For lawns and other medium high maintenance turfgrass areas, refer to the University of Maryland publication "Lawn Care in Maryland" Bulletin No. 171.

G - 20 - 1A

VEGETATIVE STABILIZATION

21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

Definition

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

Purpose

To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

Conditions Where Practice Applies

- This practice is limited to areas having 2:1 or flatter slopes where:
 - The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
 - The original soil to be vegetated contains material toxic to plant growth.
 - The soil is so acidic that treatment with limestone is not feasible.
- For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

Construction and Material Specifications

- Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experimental Station.
- Topsoil Specifications - Soil to be used as topsoil must meet the following:
 - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel sticks, roots, trash, and other materials larger 1 1/2 inch in diameter.
 - Topsoil must be free of plants or plant parts such as Bermuda grass, quack grass, Johnsongrass, nutgrass, poison ivy, thistle, or others as specified.
 - Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.

II. For sites having disturbed areas under 5 acres:

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

III. For sites having disturbed areas over 5 acres:

- On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
 - pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
 - Organic contents of topsoil shall be not less than 1.5 percent by weight.
 - Topsoil having soluble salt content greater than 500 parts per million shall not be used.

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

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

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

V. Topsoil Application

- When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slop Silt Fence and Sediment Traps and Basins.
- Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" - 8" higher in elevation.
- Topsoil shall be uniformly distributed in a 4" - 8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.
- Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seeded preparation.

Topsoil Specifications

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE March 8, 2001

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

Jim Myers / 6/3 5/17/01
U.S. SOIL CONSERVATION SERVICE
NATURAL RESOURCE

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

John W. Roman 5/17/01
HOWARD S.C.D. DATE



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 FOND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN AS-BUILT PLAN OF THE FOND WITHIN 30 DAYS OF COMPLETION. I/ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

James M. A. B. Adams 5/2/01
SIGNATURE OF DEVELOPER
PRINT NAME BELOW SIGNATURE

ENGINEERS CERTIFICATE:

I CERTIFY THAT THIS PLAN FOR FOND CONSTRUCTION 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 NOTICED THE REQUIREMENTS HEISHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE FOND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN AS-BUILT PLAN OF THE FOND WITHIN 30 DAYS OF COMPLETION.

John W. Roman 5-20-01
SIGNATURE OF ENGINEER
PRINT NAME BELOW SIGNATURE

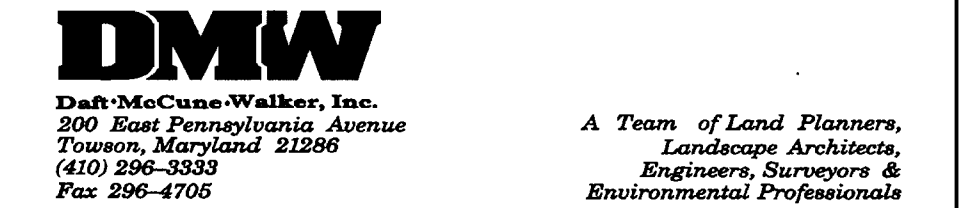
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Chris P. ... 5/21/01
CHIEF, DEVELOPMENT ENGINEERING DIVISION
W. ... 5/20/01
CHIEF, DIVISION OF LAND DEVELOPMENT
... 6/1/01
DIRECTOR DATE

Date No. Revision Description

Columbia Gateway Parcel Q4

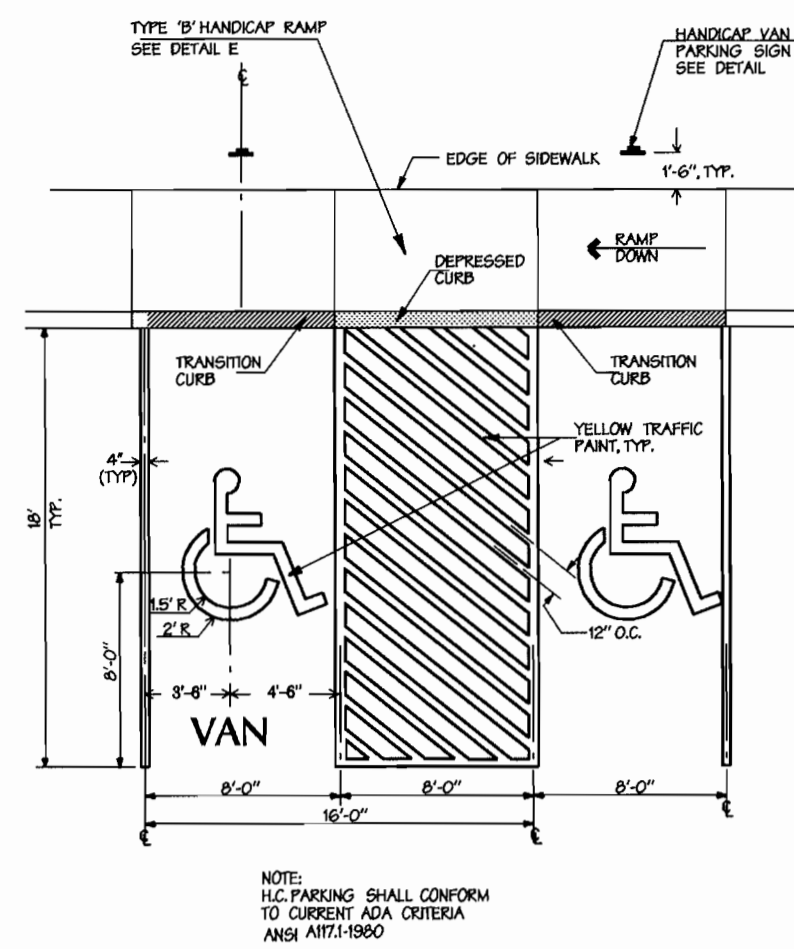
OWNER: The Howard Research and Development Corporation
DEVELOPER: AAK IV, LLC



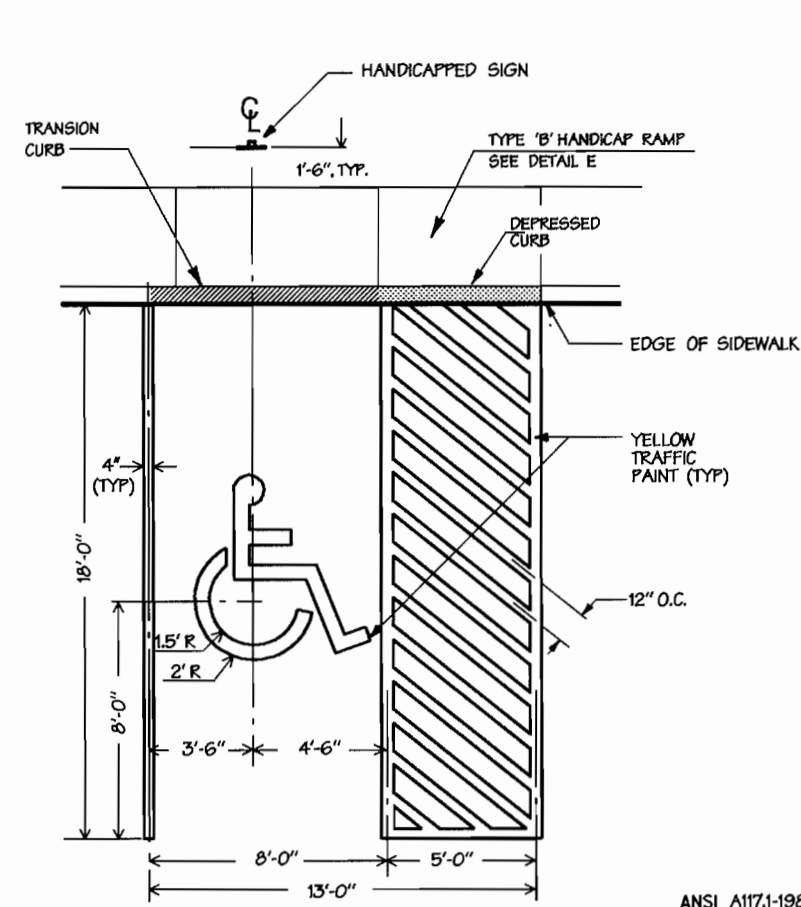
PROJECT NAME: COLUMBIA GATEWAY
SECTION/AREA: NA
PLAT OR LEI: BLOCK # ZONE: TAXPAYER MAP: ELECT. DISTRICT: 6
PROJECT NO.: 1175-112-7-1 METABOL: 6067.03
WATER CODE: E06 SEWER CODE: 49000000

Sediment & Erosion Control Detail

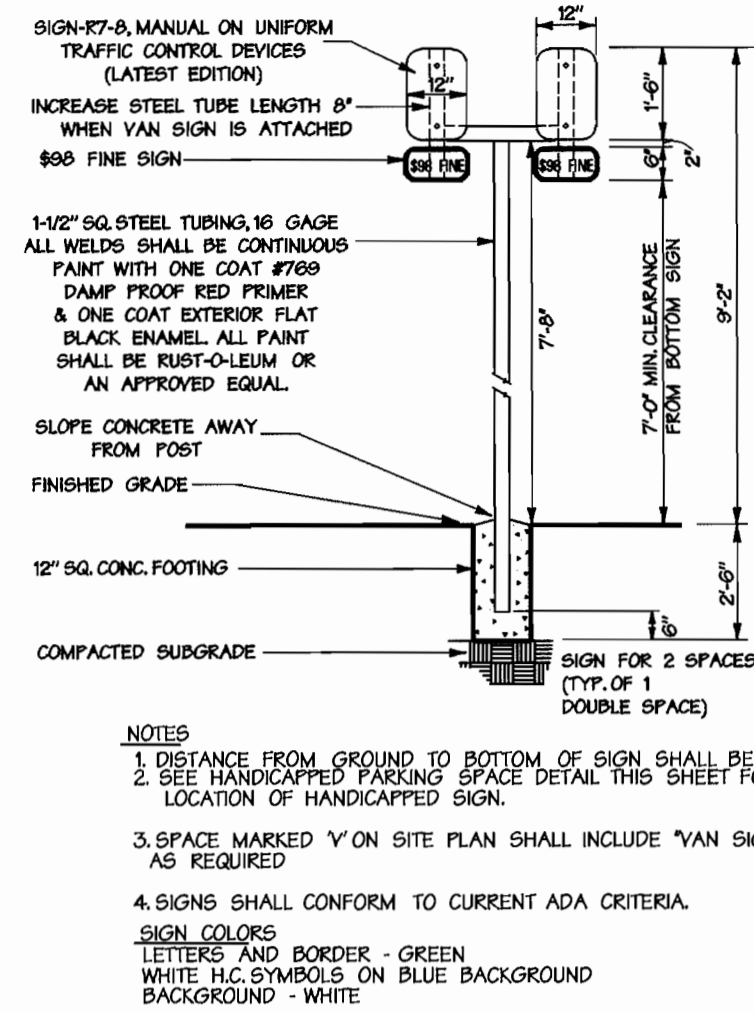
Des By RBW Scale 1" = 40' Proj. No. 00089
Dwn By ADL Date 4-12-01
Chy By Approved 14 OF 19



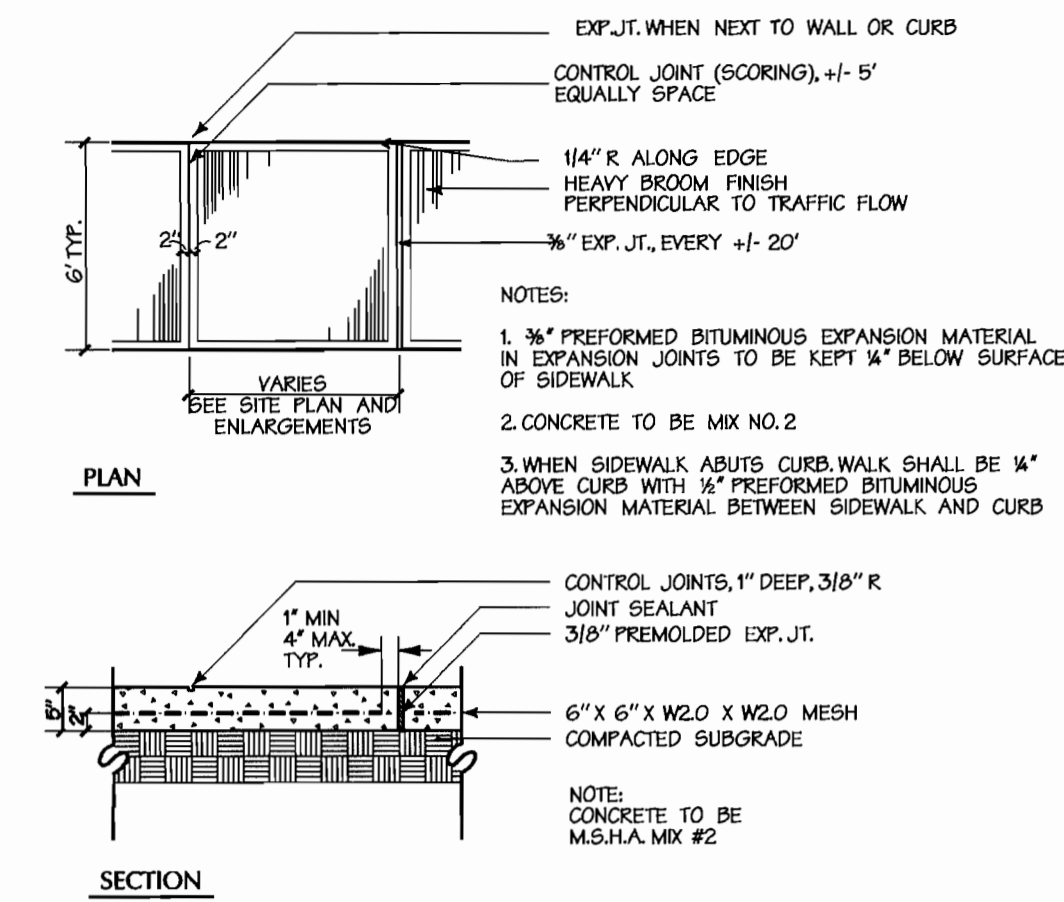
A Handicap Parking: Van & Standard
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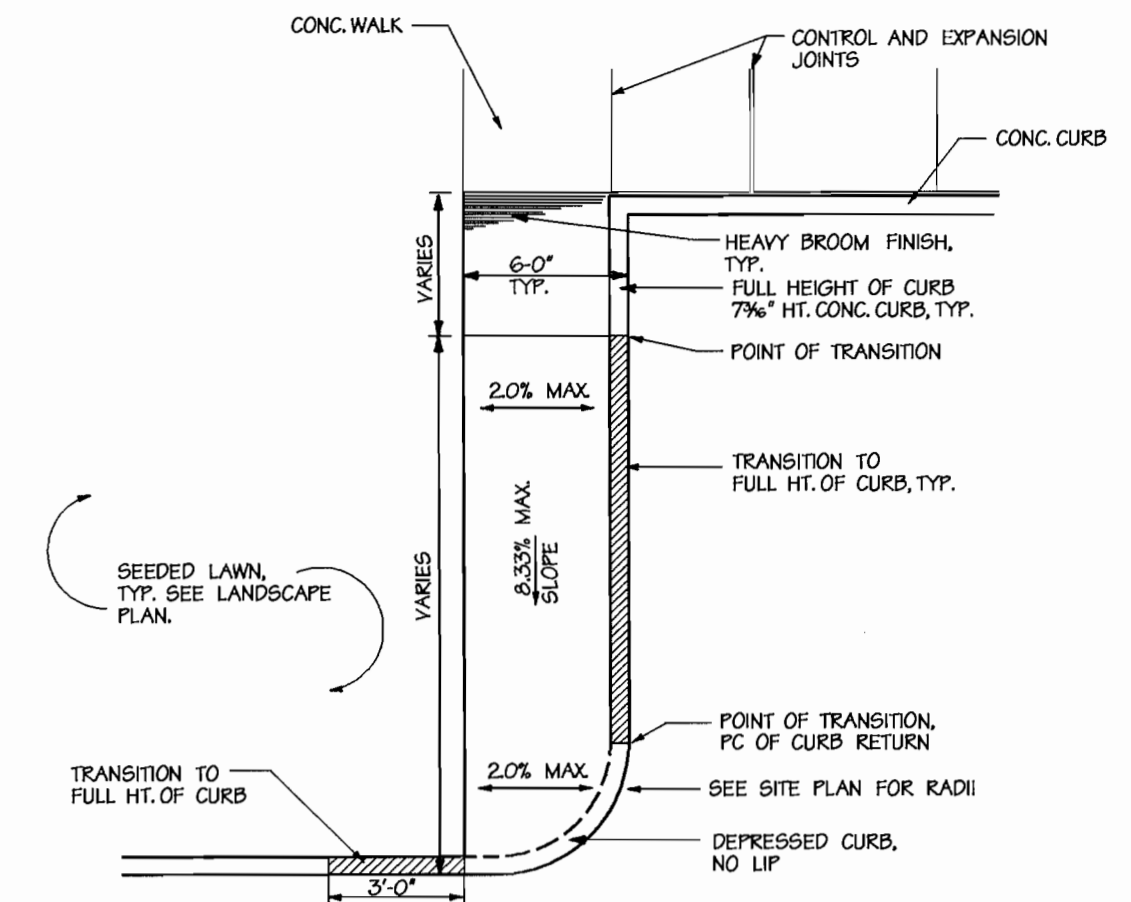
D Handicap Parking Space
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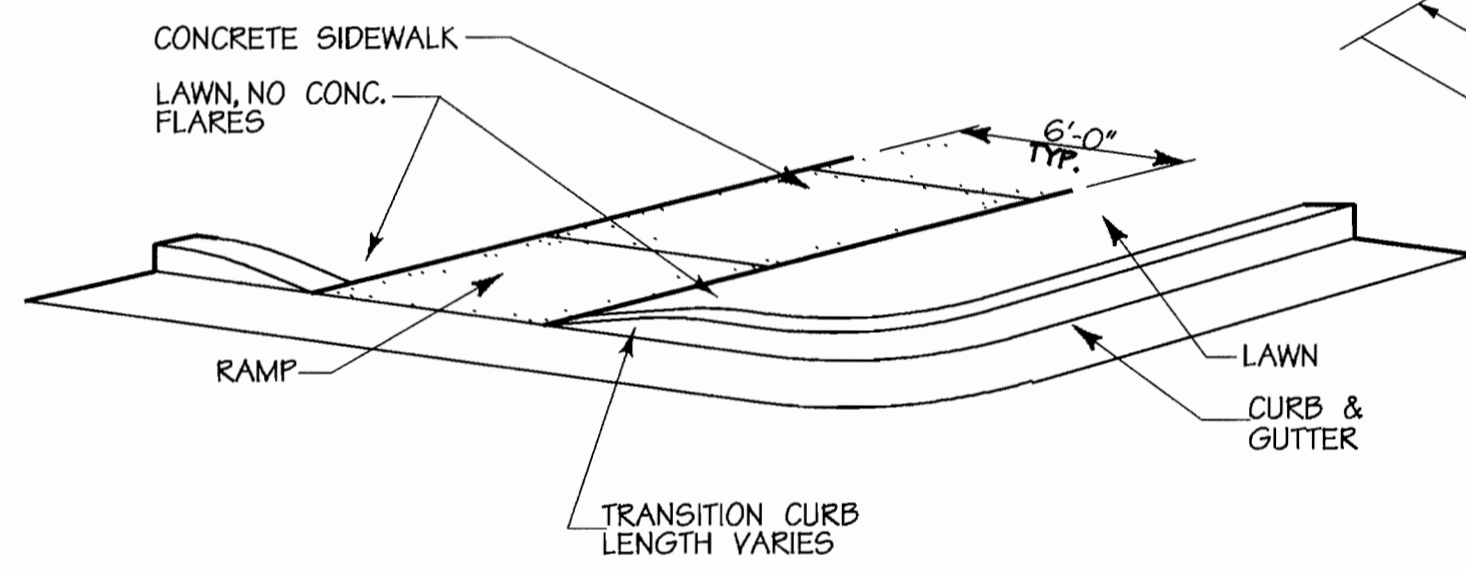
G Handicap Parking Signs
Not To Scale



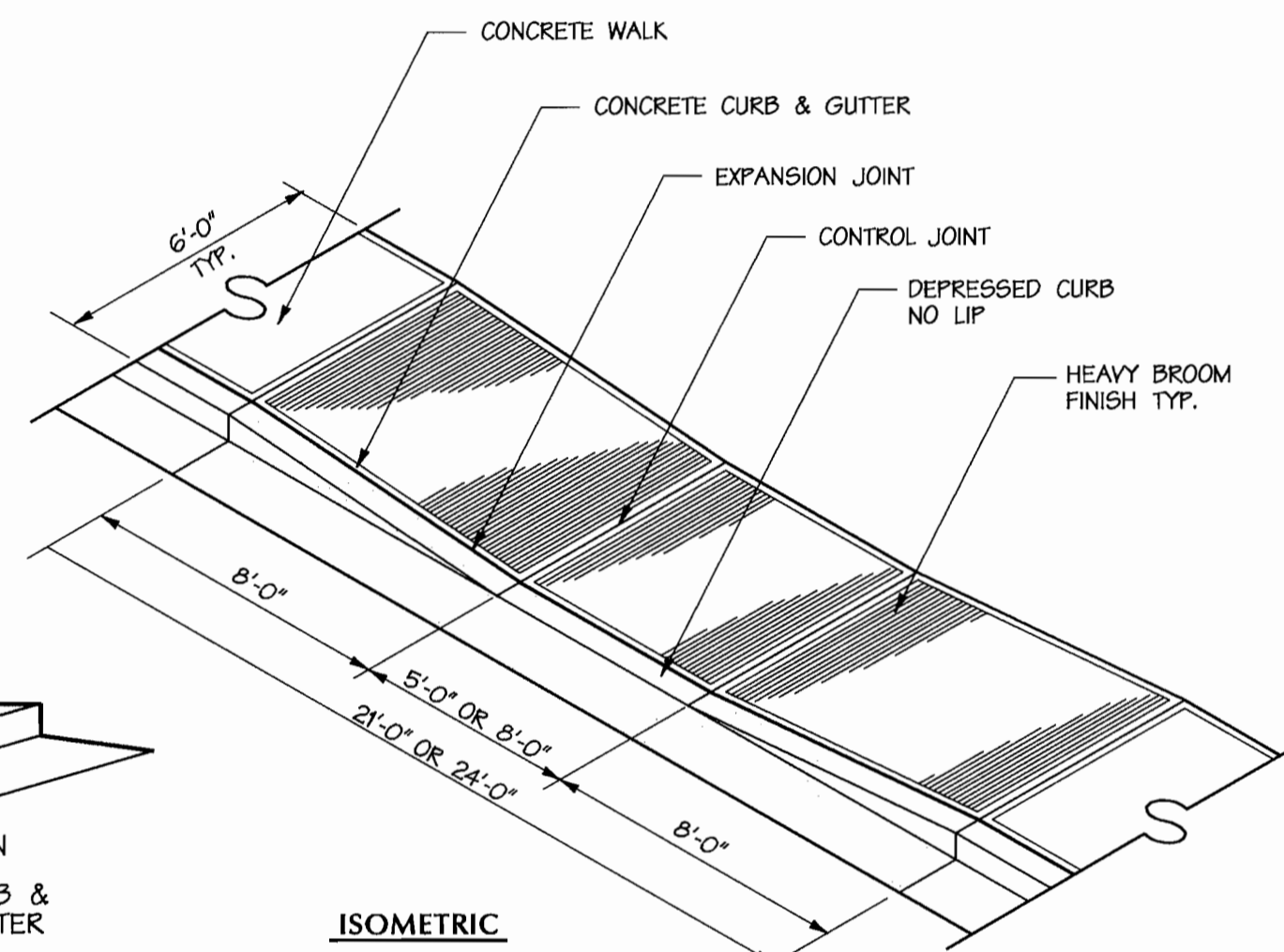
J Concrete Walk
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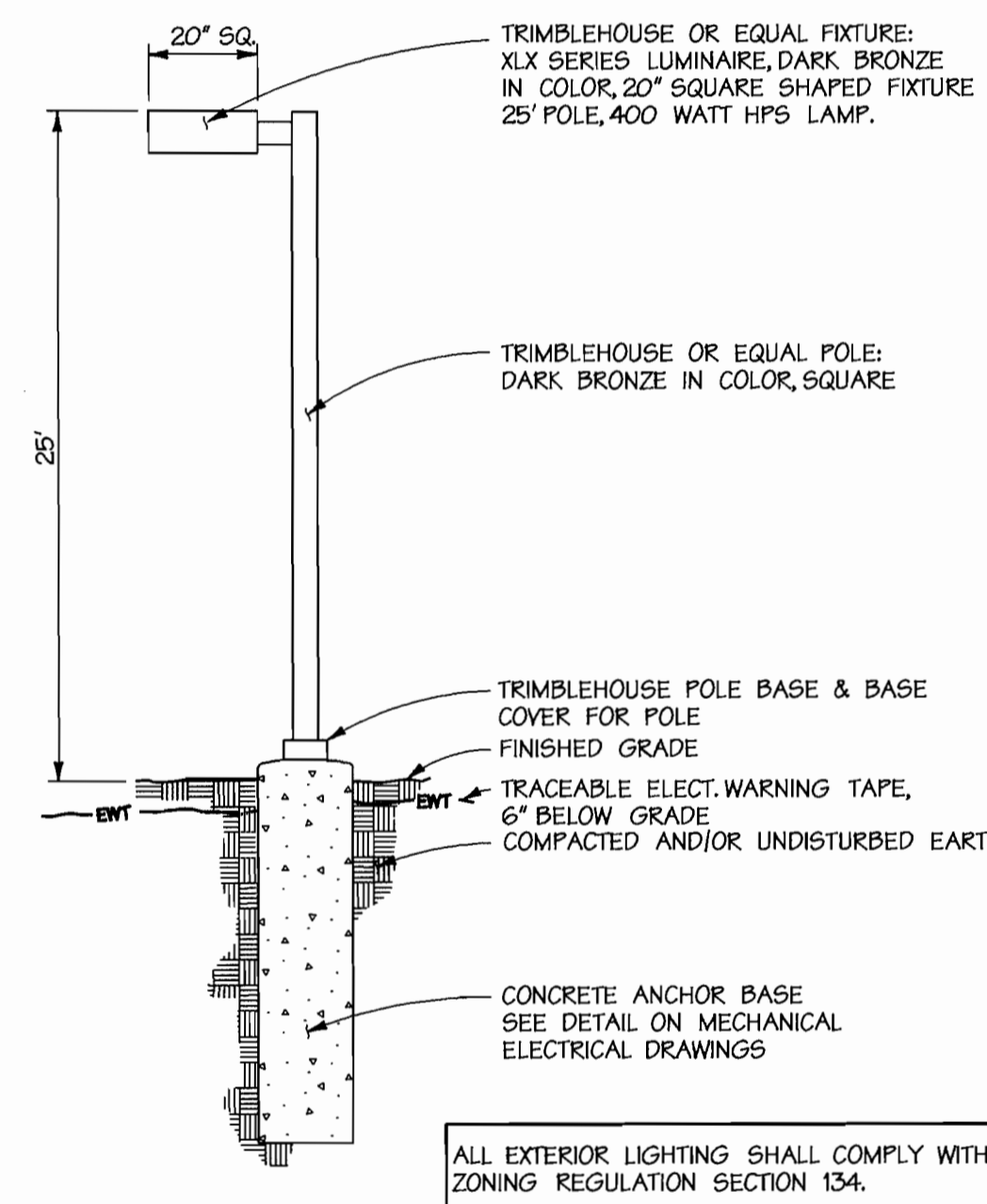
L Handicap Ramp -C
Not To Scale



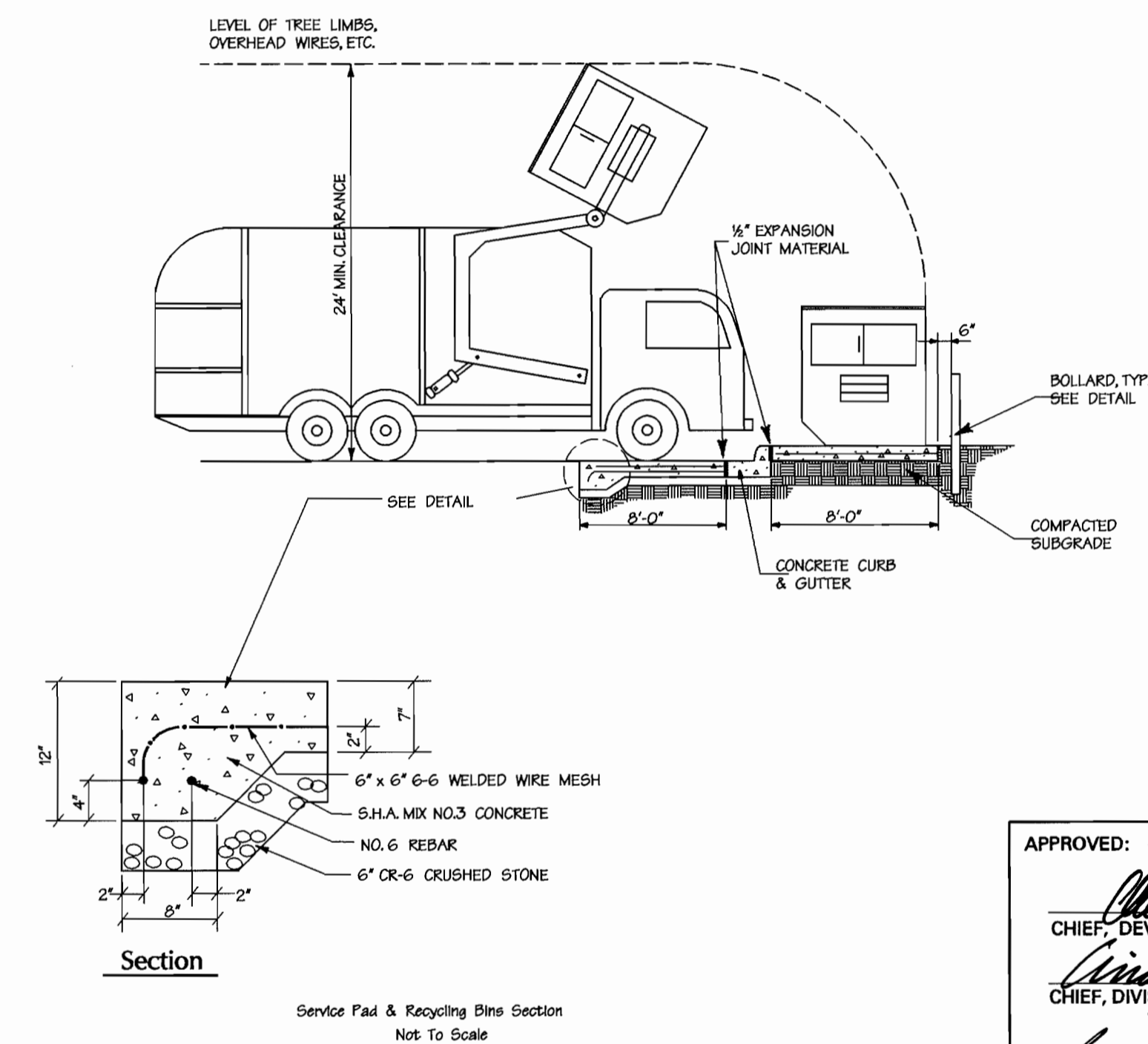
B Type "A" Sidewalk Ramp
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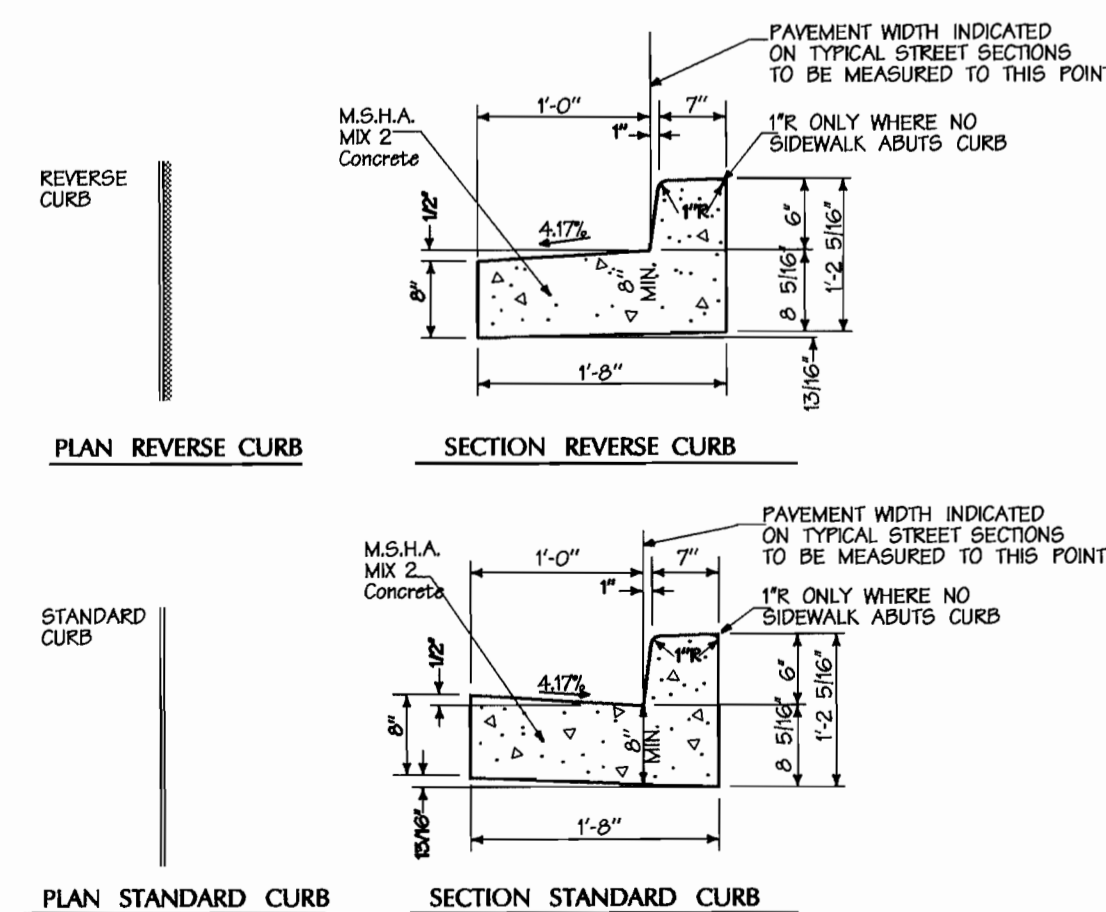
E Type "B" Handicap Ramp
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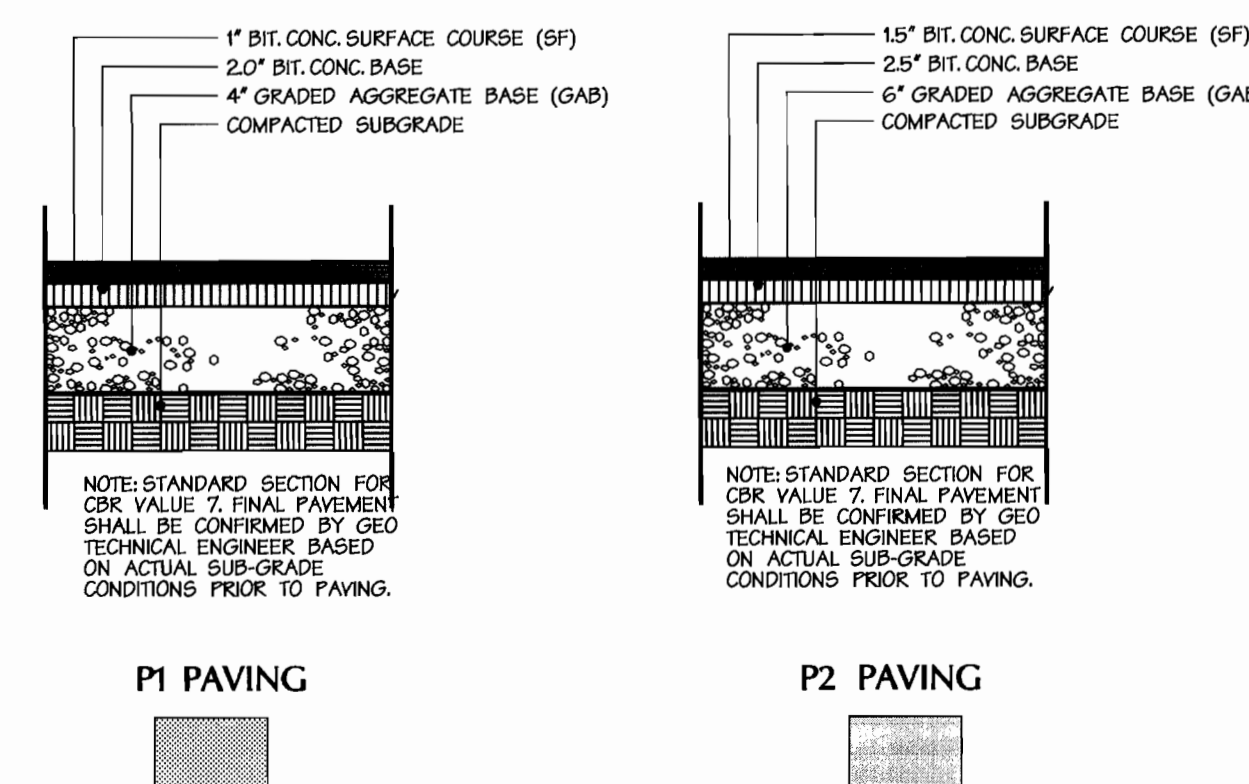
H Sharp Cutoff Area Light
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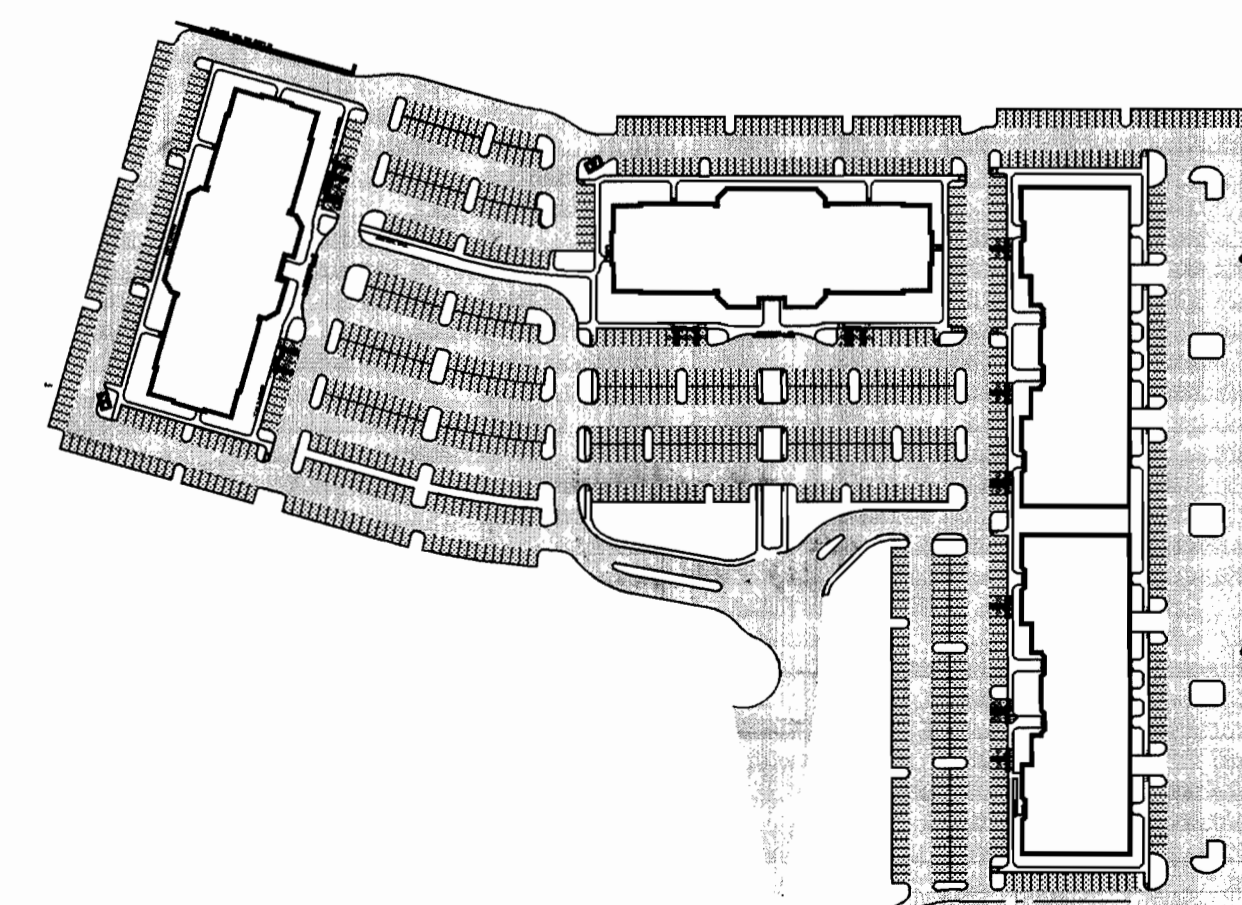
K Service Pad & Dumpster Bin
Not To Scale



C Concrete Curb, Typical
Not To Scale



F Paving
Not To Scale



I Paving Plan
Not To Scale

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION MKJ 5/21/01
 CHIEF, DIVISION OF LAND DEVELOPMENT 5/21/01
 DIRECTOR 6/1/01

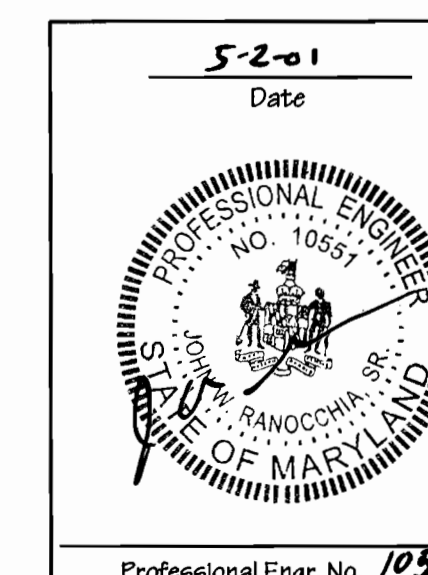
APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE March 8, 2001

Date	No.	Revision Description

Columbia Gateway Parcel Q4

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

DMW
 Darr McCune-Walker, Inc.
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 286-2523
 Fax: 286-4706



SUBDIVISION NAME	SECTION/NA	LOT/PARCEL #
COLUMBIA GATEWAY	NA	Q4

TITLE: **Site Details**

Des By	Scale AS SHOWN	Proj. No. 00089
Drn By ADL	Date 4-12-01	15 OF 19
Chk By	Approved	

1.23.2019
Date

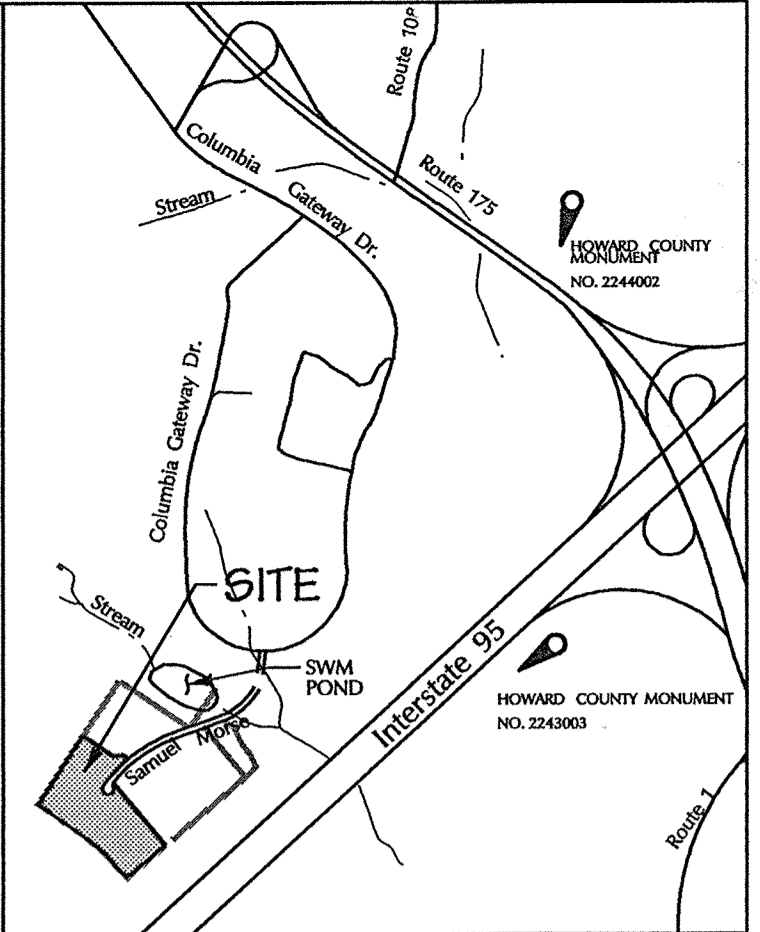


Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 712 Exp. Date 11-10-2019

NOTES:
1. VERIFY LAYOUT IN THE FIELD WITH LAND SCAPE ARCHITECT PRIOR TO EXCAVATION.
2. ALL PLAYGROUND EQUIPMENT SHALL BE FURNISHED AND INSTALLED BY VERBAL BEGINNINGS
3. PLAY SURFACE TO BE NO FAULT SAFETY SURFACE
50 STANDBY BLEND
COLUMBIA GATEWAY COMMERCE CENTER
PARCEL 'U'
WWW.NOFAULT.COM

NOTES:
1. GATES SHALL BE 4'-WIDE AND PARALLEL PER MANUF. SPEC.
2. USE ALUMINUM INSERT ALL GATE POSTS PER MANUF. SPEC.
3. CAP ALL CONC. PIPES TO DRAIN WATER AWAY FROM POSTS.
EXTEND POSTS 3'-0" MIN. INTO PPE
3'-0" MIN. INT. PPE
3' CK

POST CAP STANDARD TOP RAIL 2"x3"x7.5' (0.00)
4" O.D. STEEL PIPE (17.99 LBS/FT)
2 COATS RUSTOLEUM PAINT-COLOR BY ARCHITECT
FILL WITH GRATE CONCRETE WITHIN PIPE
POURED IN PLACE CONC. FOOTING 4000 PSI
COMPACTED SUBGRADE
NOTE: 1. BOLLARDS TO BE PLACED 6' O.C.
BOLLARD DETAIL
1/8" = 1'-0"



LOCATION MAP
SCALE: 1" = 200'

Legend table with symbols and descriptions for building restriction lines, parking counts, contours, and various site features.

APPROVED PLANNING BOARD OF HOWARD COUNTY
DATE: March 8, 2001
The indicated revisions were determined by the DPE to be minor and do not require re-approval by the Planning Board.

Approval table with signatures and dates for the Chief Development Engineering Division and Chief Division of Land Development.

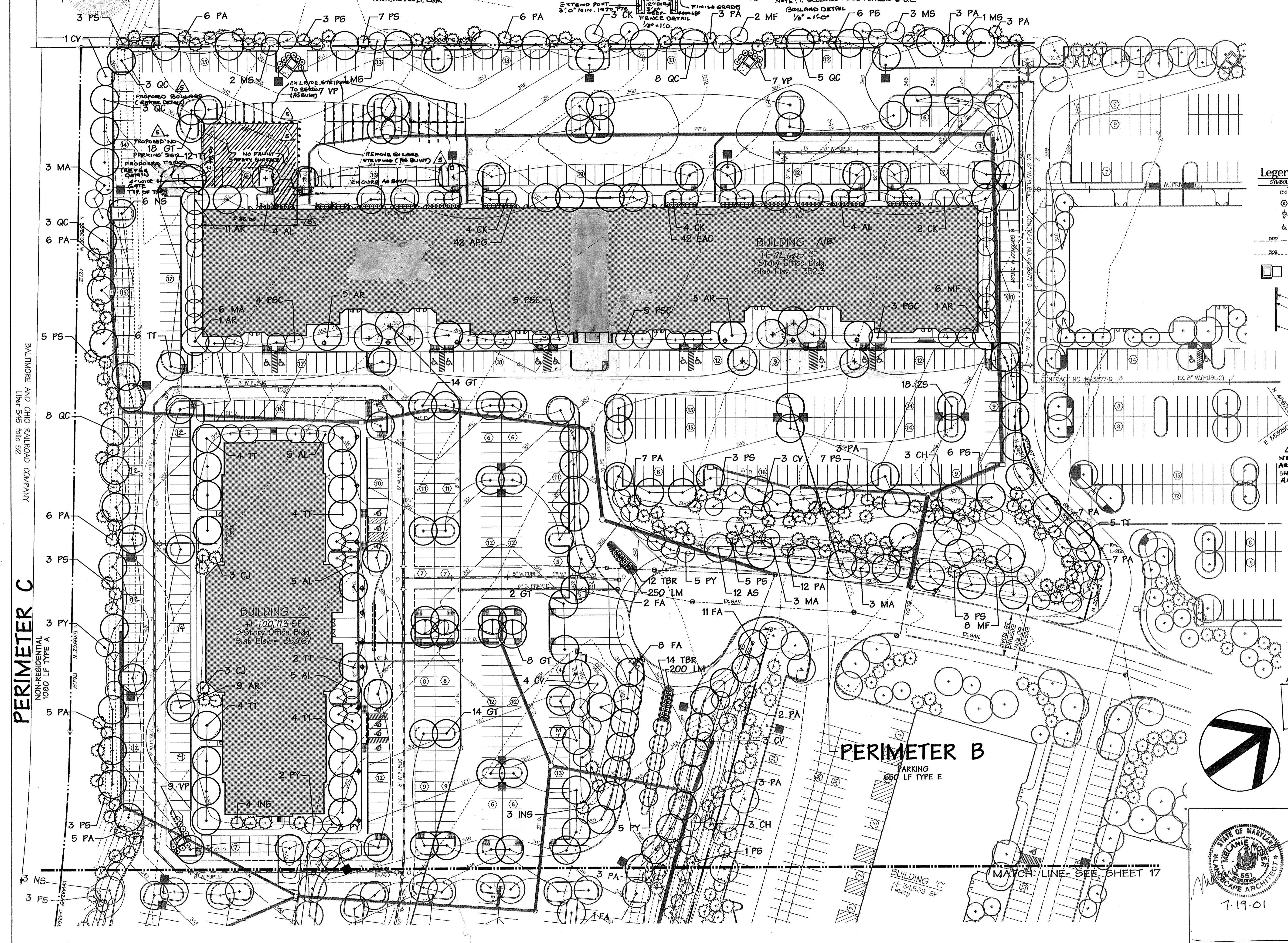
Revision table with columns for Date, No., and Revision Description.

APPROVED REVISIONS
DATE: 12/28/18
SIGNATURE: [Signature]

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

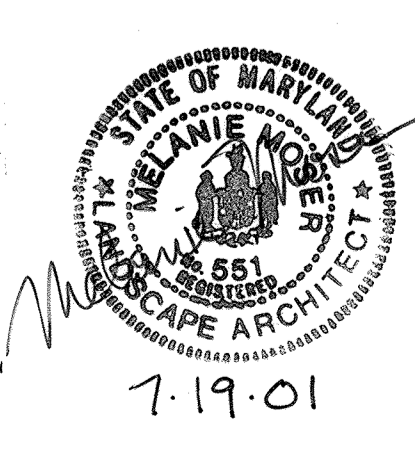
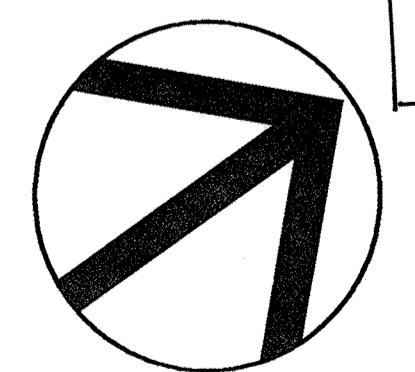
DMW (District of Maryland) stamp and project information table including title, scale, and project number.

Project information table with fields for Des By, Dm By, Chk By, Scale, Date, and Project Number.

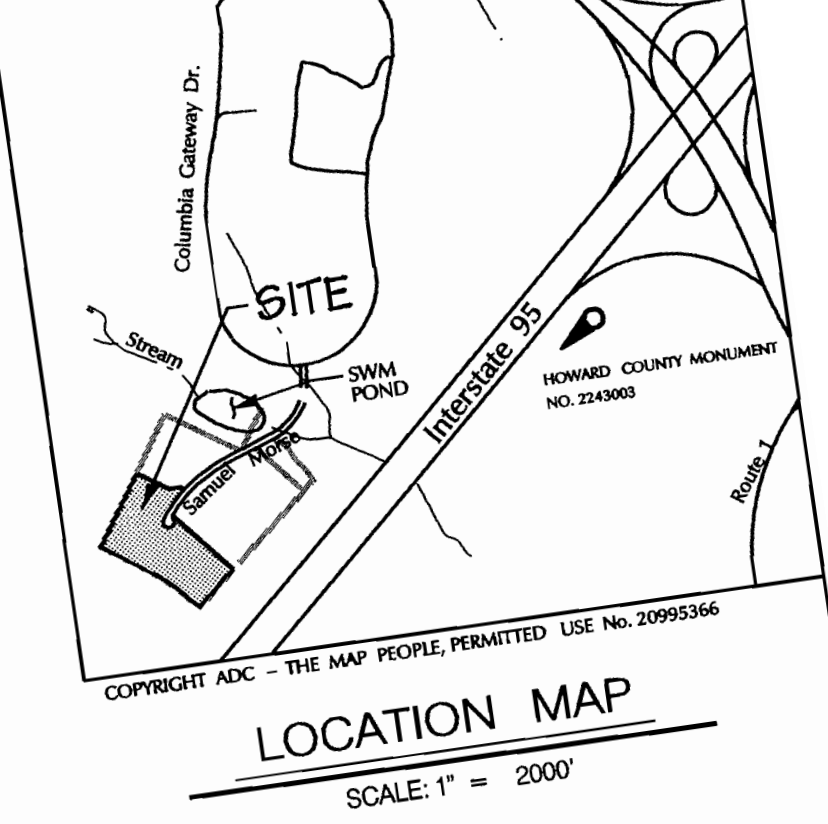
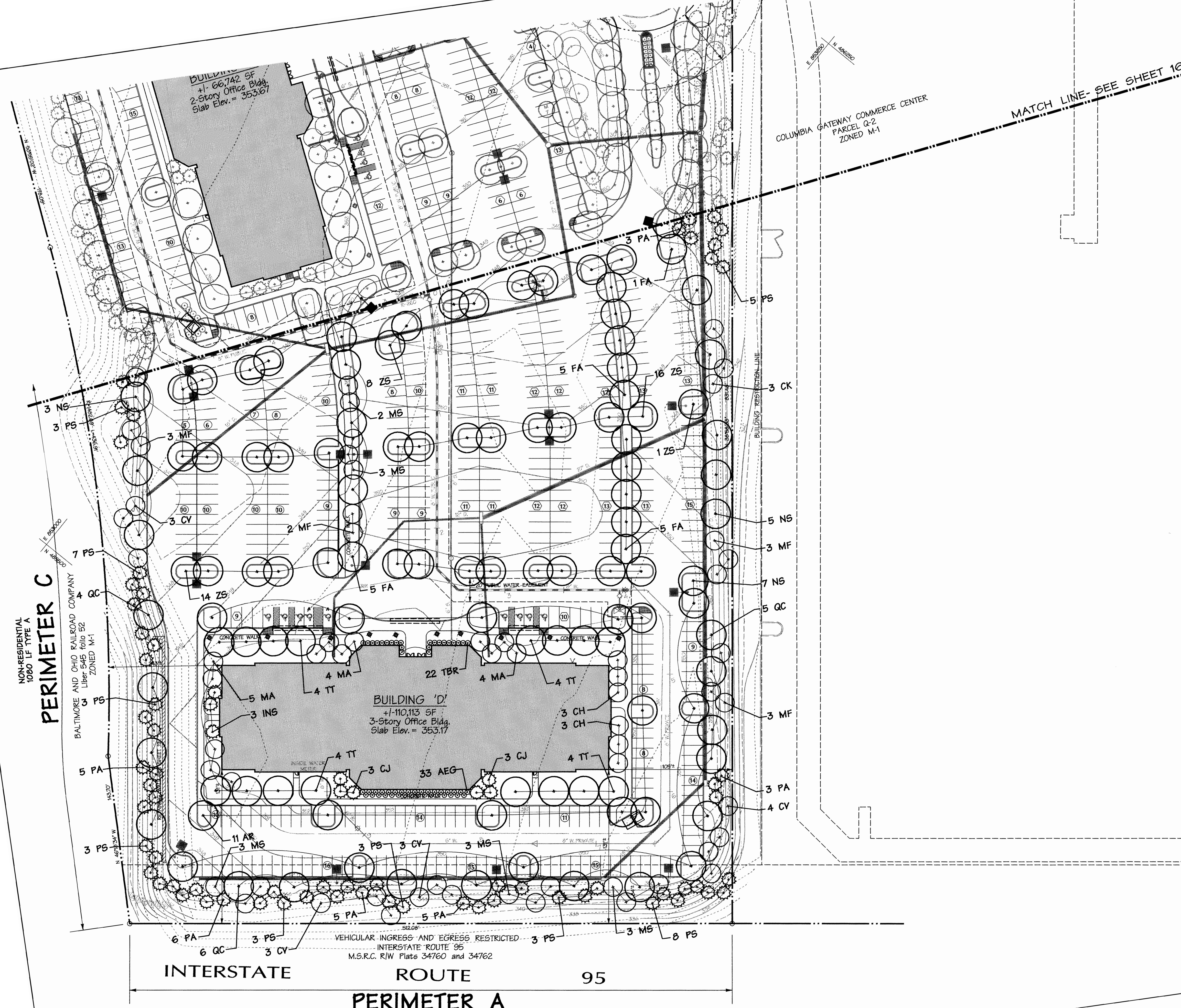


PERIMETER C
NON-RESIDENTIAL 1000 LF TYPE A
BALTIMORE AND OHIO RAILROAD COMPANY
Liber 545 folio 52

PERIMETER B
PARKING 650 LF TYPE E



SUBSTITUTE PLAN



COLUMBIA GATEWAY COMMERCE CENTER
 PARCEL Q-2
 ZONED M-1

MATCH LINE-SEE SHEET 16

APPROVED
 PLANNING BOARD
 of HOWARD COUNTY
 DATE March 8, 2001

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION MK 5/21/01
 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT 5/30/01
 DATE
 DIRECTOR 4/1/01
 DATE

Revision Description
 Date No.

Columbia Gateway Parcel Q4

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

DEVELOPER:
 AAK IV, LLC
 8802 COLUMBIA 100 PKWY
 SUITE 101
 COLUMBIA, MD 21045

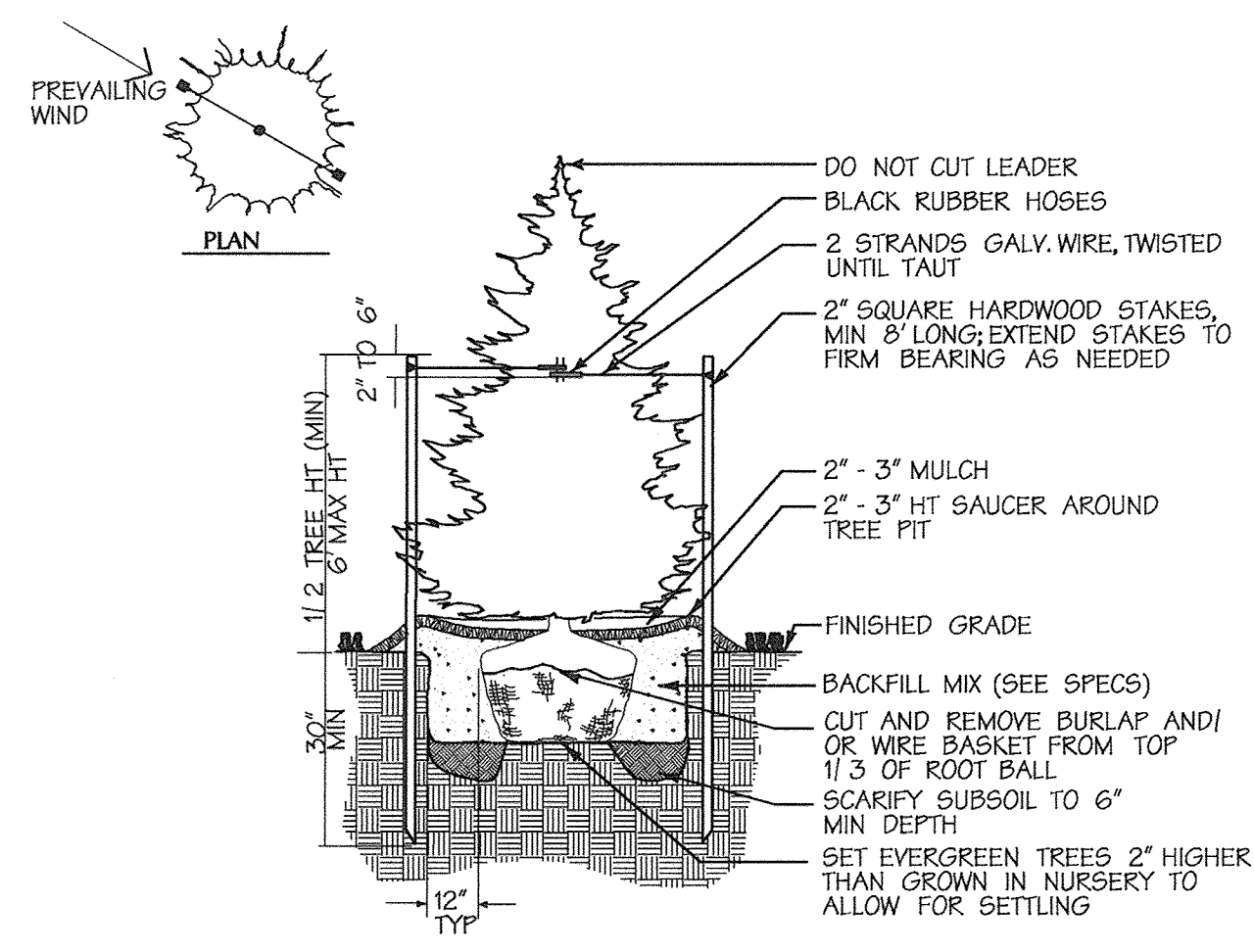
DMW
 Dan-McCune-Walken, Inc.
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 296-3333
 Fax 296-4705

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

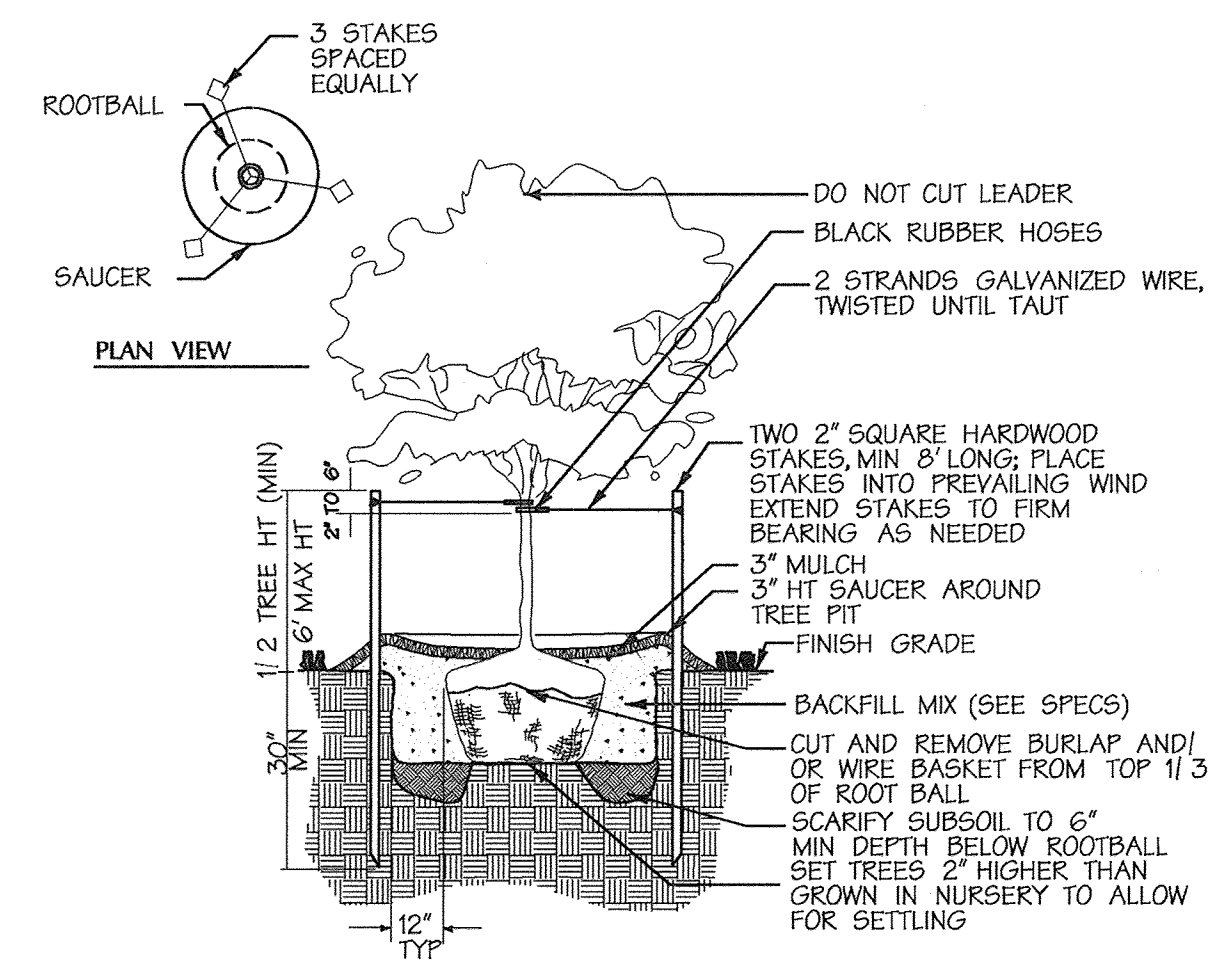
5-2-01
 Date
 PROFESSIONAL SEAL
 WELANIE MOSE
 LANDSCAPE ARCHITECT
 Professional L.A. No. 551

PROJECT INFORMATION
 SUBMISSION NAME: COLUMBIA GATEWAY
 PLAT: 12 & 7
 BLOCK #1 ZONE: INT/AM
 TOWNSHIP: 12 & 7
 SECTION: NA
 RANGE: 43
 ELECT. DISTRICT: 6
 SEWER CODE: 4900000
 TITLE: **Landscape Plan**
 Des By: FWK
 Dwn By: FWK
 Chk By: MM
 Scale: 1" = 40'
 Date: 4-12-01
 Approved:
 Proj. No. 0007
 17 OF

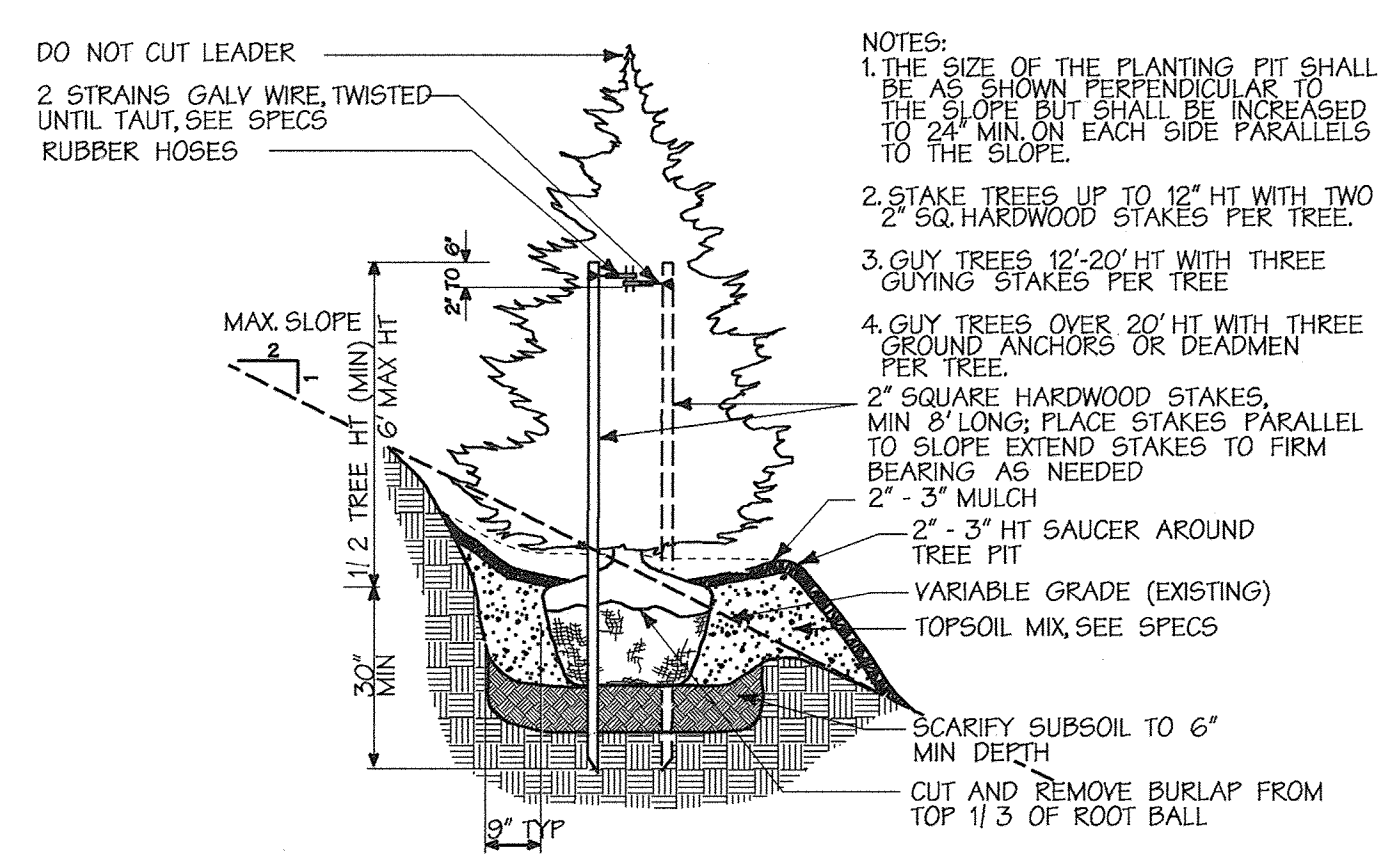
CSP.01.52



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 bidding. 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 container) 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.

- All proposed trees to be installed either entirely in or entirely out of planting beds. Planting bed lines are not to be obstructed. Mulch shall have been shredded within the last six months.
- All planting beds adjacent to lawn, sod, or seeded areas shall be spade edged.
- Maintenance shall begin after each plant has been installed and shall continue until 90 days after final acceptance by the architect or owner representative. Maintenance includes moving of turf, watering, pruning, weeding, fertilizing, mulching, replacement of sick or dead plants, and any other care necessary for the proper growth of the plant material. The contractor must be able to provide continued maintenance if requested by the owner.
- Upon completion of all landscaping, an acceptance of the work shall be held. The contractor shall notify the landscape architect or owner for scheduling the inspection at least seven (7) days prior to the anticipated inspection date.
- All trees shall be guaranteed for 12 months from the date of acceptance.
- The contractor is responsible for testing project soils. The contractor is to provide a certified soils report to the owner. The contractor shall verify that the soils on site are acceptable for the proper growth of the proposed plant material. Should the contractor find poor soil conditions, the contractor shall be required to provide soil amendments as necessary. These amendments shall include, but not be limited to, fertilizers, lime, and topsoil. Proper planting soils must be verified prior to planting of materials.
- PLANTING MIX**
 - Planting mix shall be prepared at approved on-site staging area using approved on-site existing soil. Mix minimum quantities of 20 cubic yards or sufficient mix for entire job if less than 20 cubic yards is required.
 - Thoroughly mixed in the following proportions for tree and shrub planting mix:
 - 5 cy existing soil
 - 2 cy sharp sand
 - 3 cy wood residuals
 - 4.5 lbs treble superphosphate
 - 5 lbs dolomite limestone (eliminate for acid loving plants)
 - For bed planting shrubs and groundcover spaces 24 inches or closer, incorporate the following ingredients per 20 sf and incorporate into top 8 inches of existing soils by rototilling or similar method of incorporation:
 - 2 cy sharp sand
 - 3 cy organic material
 - 4.5 lbs treble superphosphate
 - 5 lbs dolomite limestone (eliminate for acid loving plants)
- The contractor shall dispose of stumps and major roots of all plants to be removed. Any depressions caused by removal operations shall be refilled with fertile, friable soil placed and compacted so as to reestablish proper grade for new planting and/or lawn areas.
- The contractor shall insure adequate vertical drainage in all plant beds and planters.

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.

NAME J. M. A. DATE 5/2/01

SCHEDULE A PERIMETER LANDSCAPE EDGE

Category	Adjacent to Roadways	Adjacent to Perimeter Properties
Landscape Type	E (Parking)	A (Non-Residential - Other uses)
Linear Feet of Roadway Frontage/Perimeter	1160 LF	1060 LF
Formula	1 shade/40' + 1 shrub/4'	1 shade/60'
Credit for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed)	NO	
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (Describe below if needed)	NO	
Number of Plants Required	29 (Type E) + 10 (Type A) = 47 shade trees	
Evergreen Trees	290 shrubs	
Number of Plants Provided	47	
Shade Trees	24	
Evergreen Trees	30	
Other Trees (21 substitution)	25	
Shrubs (104 substitution)		
(Describe plant substitution credits below if needed)		

Substitutions: 20 Flowering Trees and 24 Evergreen Trees have been substituted for 267 shrubs

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING

Number of Parking Spaces	1105
Number of Trees Required	@ 1/20 sp. = 551
Number of Trees Provided	56
Shade Trees	
Other Trees (21 substitution)	
Number of Islands Required @ 1/20 sp.	56
Number of Islands Provided	107

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:
103 shade trees @ \$300
24 evergreen trees @ \$150
30 flowering trees @ \$150
25 shrubs @ \$50
Total: \$39,600

Plant List

QTY	SYM	BOTANICAL NAME/Common Name	SIZE	REMARKS
SHADE TREES				
43	AR	ACER RUBRUM 'RED SUNSET'	2 1/2" - 3" CAL 12-14 HT	B & B FULL HEAD
12	AS	ACER SACCHARUM 'GREEN MOUNTAIN'	2 1/2" - 3" CAL 12-14 HT	B & B FULL HEAD
37	FA	FRAXINUS AMERICANA 'AUTUMN APPLAUSE'	2 1/2" - 3" CAL 12-14 HT	B & B FULL HEAD
		AUTUMN APPLAUSE WHITE ASH	12-14 HT	
56	GT	GLEDISIA TRIA VAR. INERMIS 'SHADEMASTER'	2 1/2" - 3" CAL 12-14 HT	B & B FULL HEAD
21	NS	NYSSA SYLVATICA BLACK GUM	2 1/2" - 3" CAL 12-14 HT	B & B FULL HEAD
45	QC	QUERULUS COCINEA SCARLET OAK	2 1/2" - 3" CAL 12-14 HT	B & B FULL HEAD
3	TT	TILIA TOMENTOSA 'GREEN MOUNTAIN'	2 1/2" - 3" CAL 12-14 HT	B & B FULL HEAD
		GREEN MOUNTAIN LINDEN	12-14 HT	
57	ZS	ZELKOVA SERRATA 'VILLAGE GREEN'	2 1/2" - 3" CAL 12-14 HT	B & B FULL HEAD
		VILLAGE GREEN ZELKOVA	12-14 HT	
FLOWERING TREES				
19	AL	AMELANCHIER LARVIS ALLEGHENY SERVICEBERRY	8-10 HT.	B & B
16	CK	CORNUS KOLSA KOLSA DOGWOOD	8-10 HT.	B & B
24	CV	CRATAEGUS VIRIDIS 'WINTER KING'	8-10 HT.	B & B MATCHED GROUPS
		WINTER KING HAWTHORN		
12	CH	CHIONANTHUS VIRGINICUS FRINGE TREE	8-10 HT.	B & B
28	MA	MAGNOLIA STELLATA 'ROYAL STAR'	8-10 HT.	B & B
		ROYAL STAR MAGNOLIA		
27	MF	MALLUS FLORIBUNDA JAPANESE FLOWERING CRAB	8-10 HT.	B & B FULL HEAD
29	MS	MALLUS 'SNOW DRIFT'	8-10 HT.	B & B FULL HEAD
		SNOW DRIFT CRAB		
17	PSC	PRUNUS SARGENTII 'COLUMNARIS'	8-10 HT.	B & B FULL HEAD
		COLUMNAR SARGENT CHERRY		
18	PY	PRUNUS YEDOENSIS YOSHINO CHERRY	8-10 HT.	B & B FULL HEAD
EVERGREEN TREES				
12	CJ	CRYPTOMERIA JAP. 'YOSHINO'	6-8 HT.	B & B UNSHEARED
10	INS	ILEX x NELLE STEVENS NELLE STEVENS HOLLY	6-8 HT.	B & B UNSHEARED
111	PA	PICEA ABIES NORWAY SPRUCE	6-8 HT.	B & B HEAVY / UNSHEARED
93	PS	PINUS STROBUS WHITE PINE	6-8 HT.	B & B HEAVY / UNSHEARED
SHRUB				
75	AEG	ABELIA 'EDWARD GOUCHER'	24" - 30" HT.	B & B
		EDWARD GOUCHER ABELIA		
42	EAC	EUONYMUS ALATUS 'COMPACTUS'	24" - 30" HT.	B & B
		COMPACT BURNING BUSH		
48	TBR	TAXUS BACCATA 'REPANDENS'	24" - 30" SPREAD	B & B
		SPREADING ENGLISH YEW		
23	VP	VIBURNUM x PRAGENSE WILLOWLEAF VIBURNUM	3-4 HT.	B & B
SHRUB				
450	LM	LIRIOPE MUSCARI 'BIG BLUE'	1 QT	CONT. 8" O.C.
		BIG BLUE LIRIOPE		

NOTE: FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT IN THE AMOUNT OF \$39,600.

NOTE: MANUFACTURE: THOMAS GARDCO LIGHTING
ITEM NUMBER: SCHOOL BOLLARD BRM 822
TEL: 800-227-0756
HEIGHT: 32"

Path Light Detail
Not To Scale

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
CHIEF, DEVELOPMENT ENGINEERING DIVISION MKK DATE 5/2/01
CHIEF, DIVISION OF LAND DEVELOPMENT DATE 5/2/01
DIRECTOR DATE 6/1/01

Date	No.	Revision Description
6-29-01	1	ADJUST PLANT LIST.
12/09/18	2	NEW FENCED ENCLOSURE AREA FOR BUILDING A/B. SHOW PARKING PER AS BUILT CONDITION

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE March 8, 2001

Columbia Gateway Parcel Q4

OWNER: The Howard Research and Development Corporation
300 East Pennsylvania Avenue
10275 Lisle Parkway, Parkway
Columbia, Maryland 21044
DEVELOPER: AAK IV, LLC
8805 COLUMBIA 100 FWKY
SUITE 101
COLUMBIA, MD 21045

DMW
Dan McCune-Walkers, Inc.
300 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax: 296-4762
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

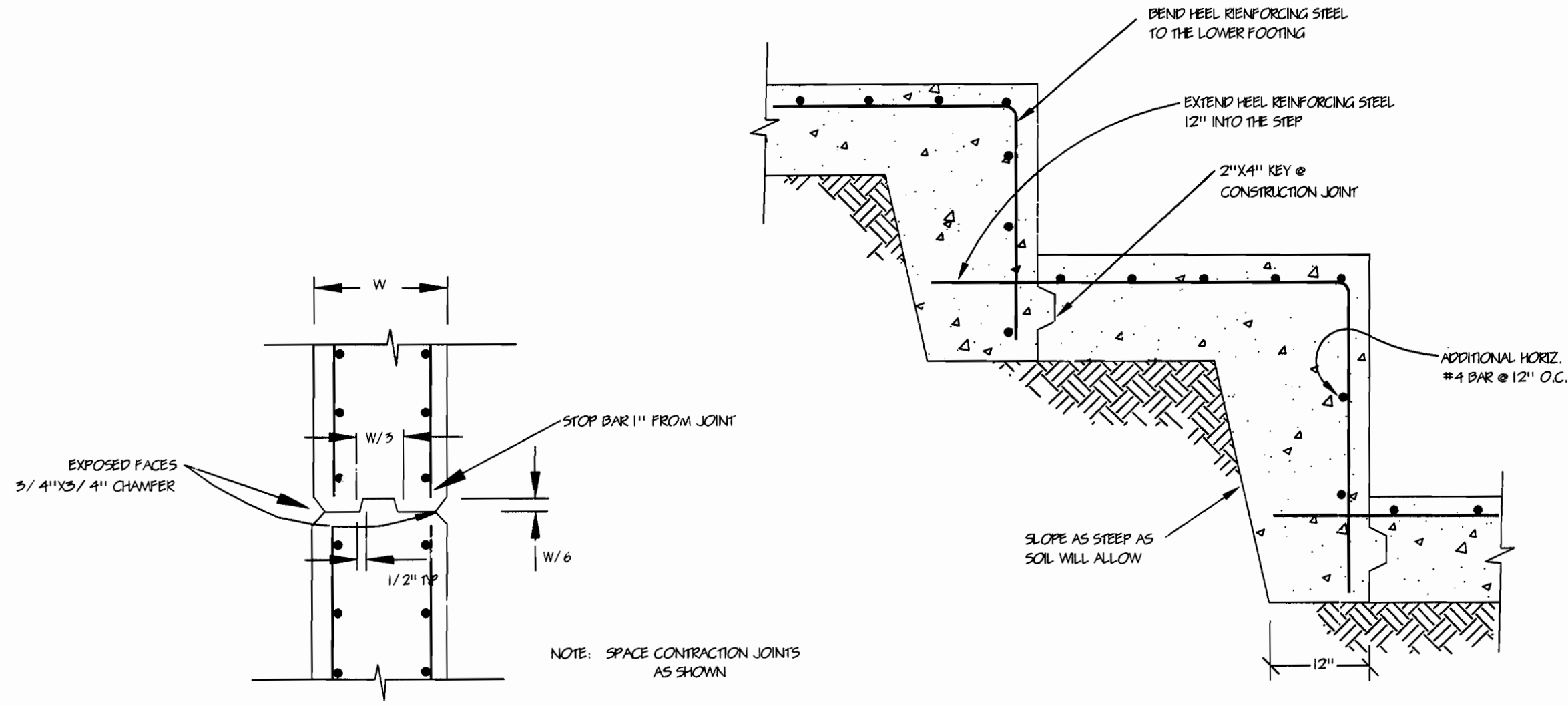
SECTION NAME: COLUMBIA GATEWAY SECTION: NA LOT/PARCEL #: Q4
PLAT OR LP: 1175-1 BLOCK #: 12 & 7 ZONE: TAXONE MAP: 42-43 ELECT. DISTRICT: G CENSUS TRACT: 8067.03
WATER CODE: E06 REPORT CODE: 4900000

TITLE: **Landscape Notes & Details**

Des By FWK Scale 1"=40' Proj. No. 00089
Dm By FWK Date 4-12-01
Chk By MM Approved 18 OF 19

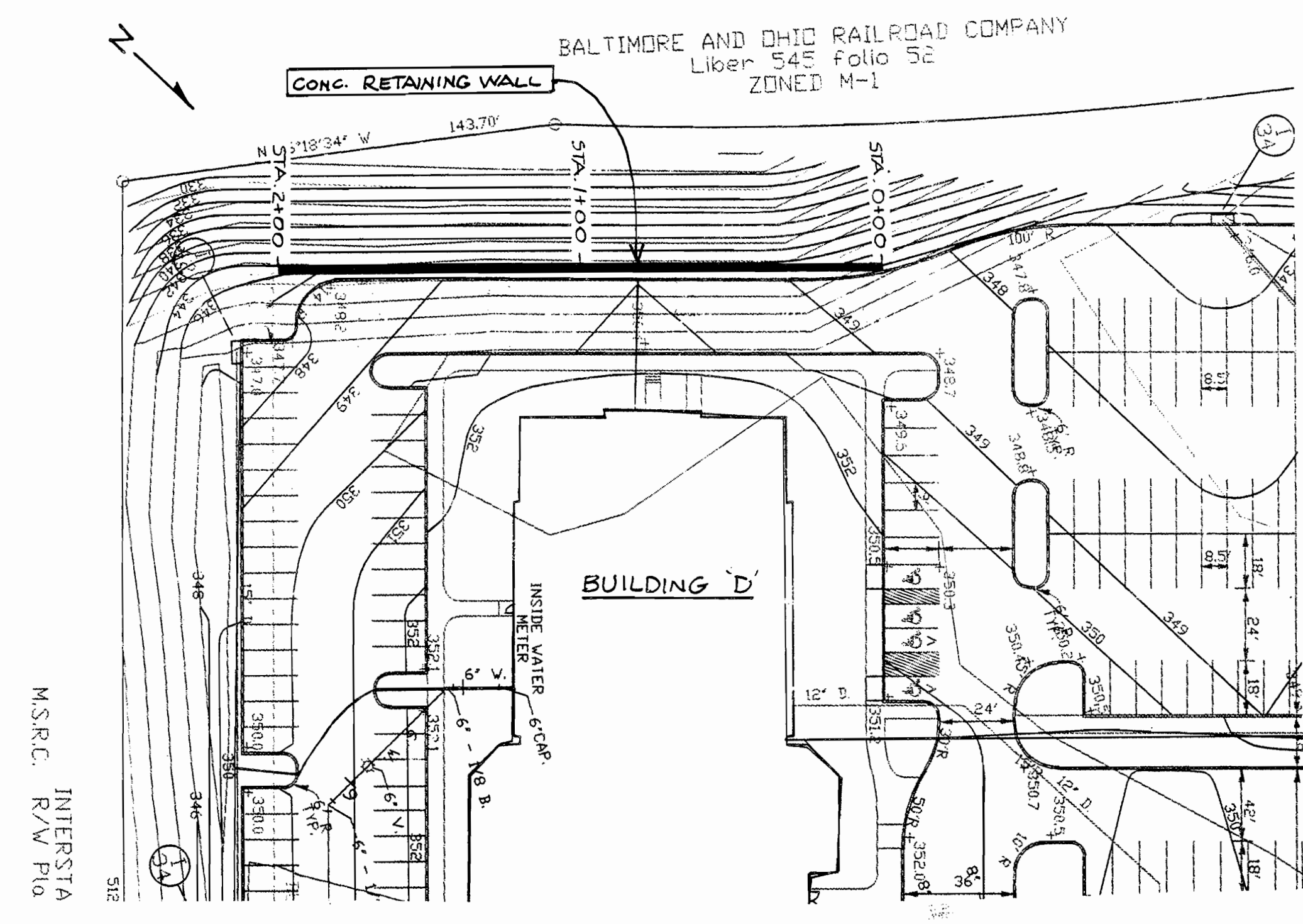
FOR REDLINE REVISION ONLY
DATE 1-23-2019
PROFESSIONAL ENG. NO. 712

DATE 5-2-01
Professional L.A. No. 551

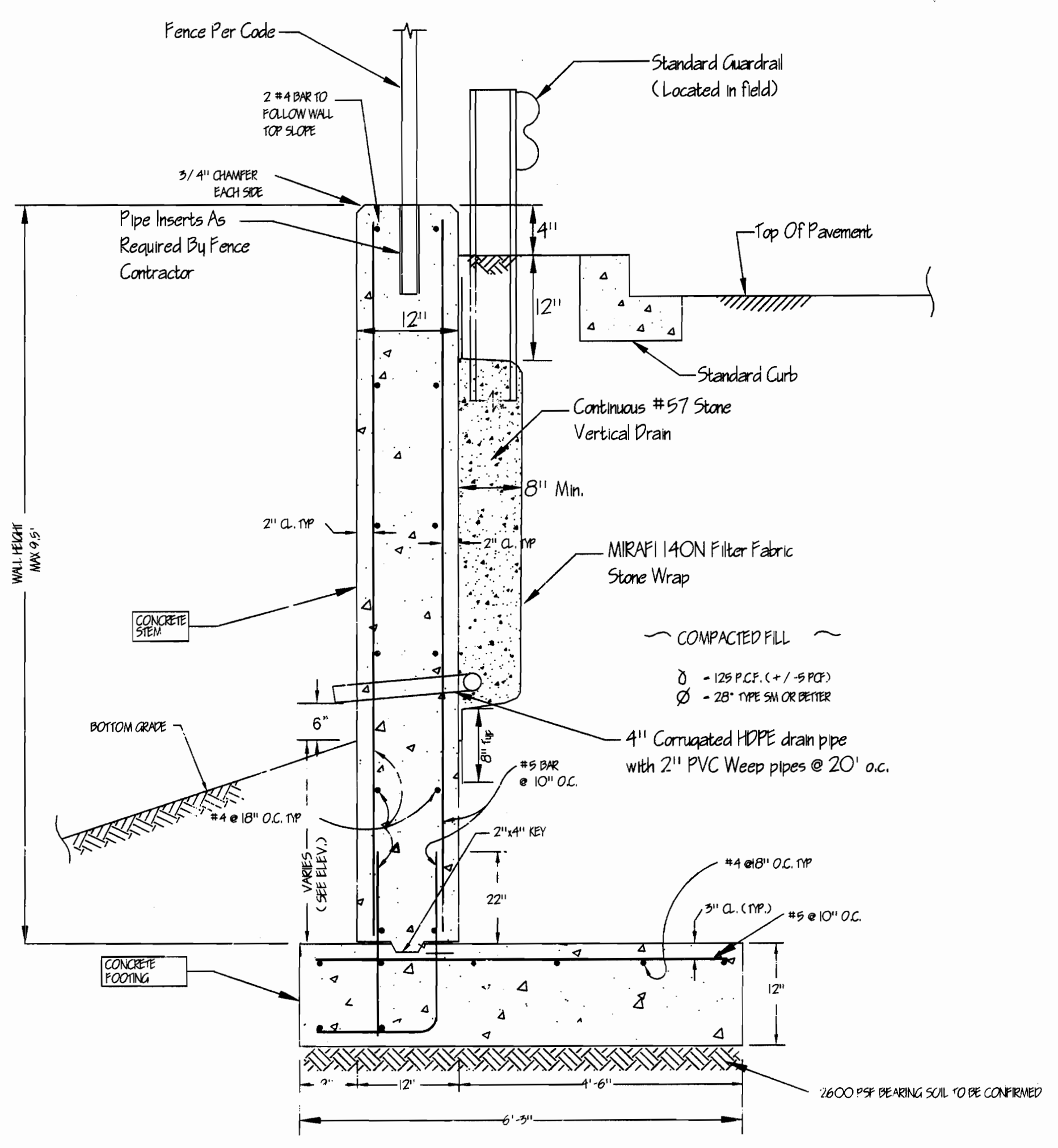


WALL STEM VERTICAL CONTRACTION JOINT C.J. DETAIL
NOT TO SCALE

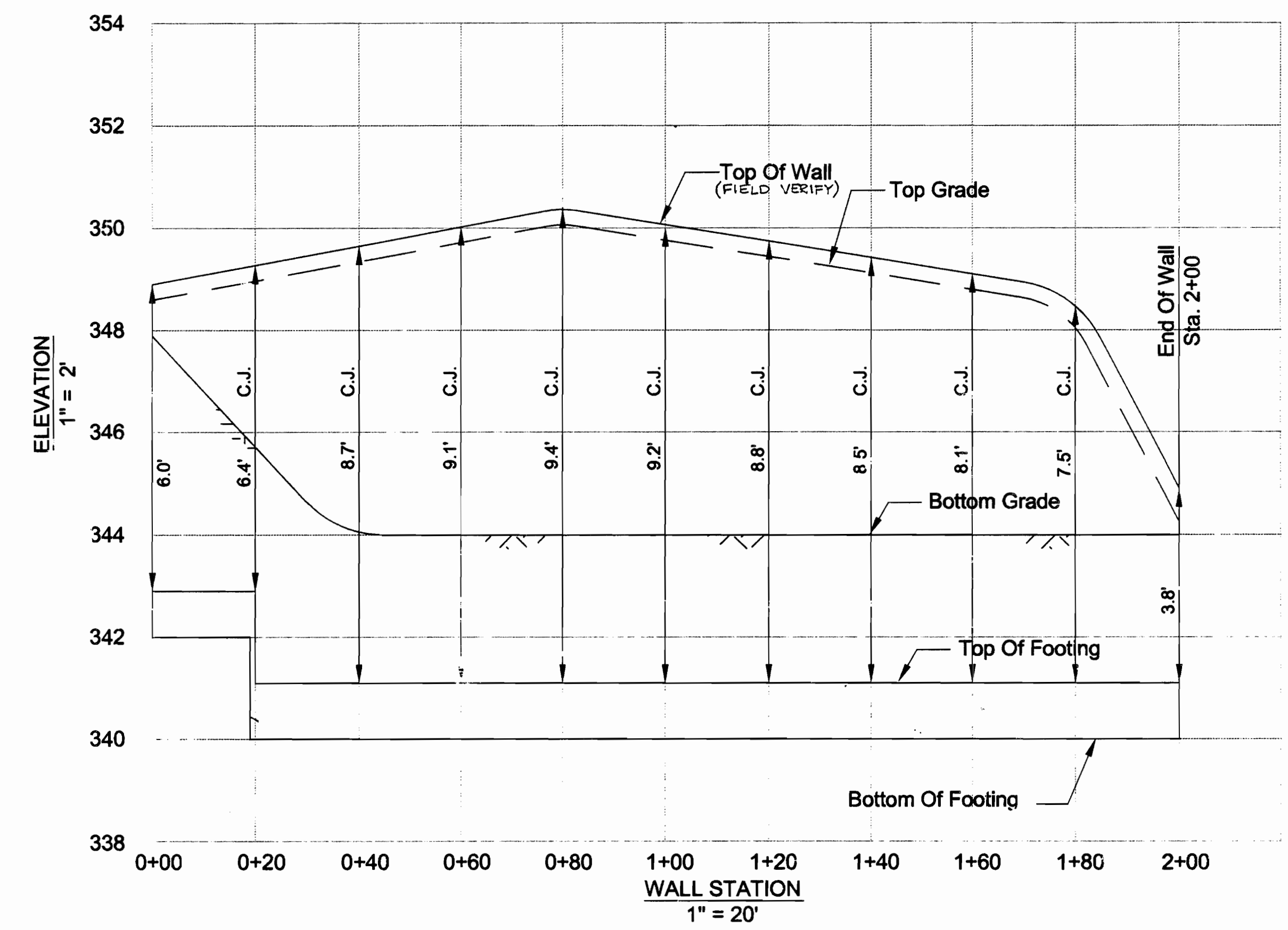
WALL STEP DETAIL
NOT TO SCALE



WALL LOCATION PLAN
1" = 40'



WALL SECTION
NOT TO SCALE



WALL ELEVATION
1" = 20'

- NOTES:**
- 1.) ALL RETAINING WALL CONCRETE SHALL BE 4000 PSI WITH AIR ENTRAINMENT.
 - 2.) REINFORCING STEEL SHALL CONFORM TO ASTM A-615 GRADE 60.
 - 3.) WALL BACKFILL SHALL BE COMPACTED TO 95% OF T-99.
 - 4.) CONCRETE WORK SHALL COMPLY WITH THE LATEST ACI 318 BUILDING CODE FOR CONCRETE STRUCTURES.
 - 5.) ALL REBAR SPLICES NOT SHOWN SHALL BE A MINIMUM 40 BAR DIAM.
 - 6.) ALL WALL EXPOSED SURFACES SHALL BE MORTAR PATCHED AND SACK-RUBBED FINISHED WITH GROUT AND BURLAP.

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE March 8, 2001

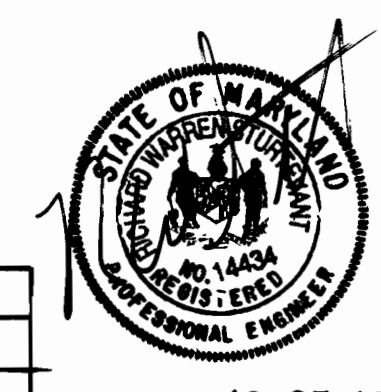
Approved:	Howard County Department of Planning & Zoning	Date	5/21/01
Chief, Development Engineering Division	MK	Date	5/21/01
Chief, Development of Land Development	7/Date	Date	6/1/01
Director		Date	

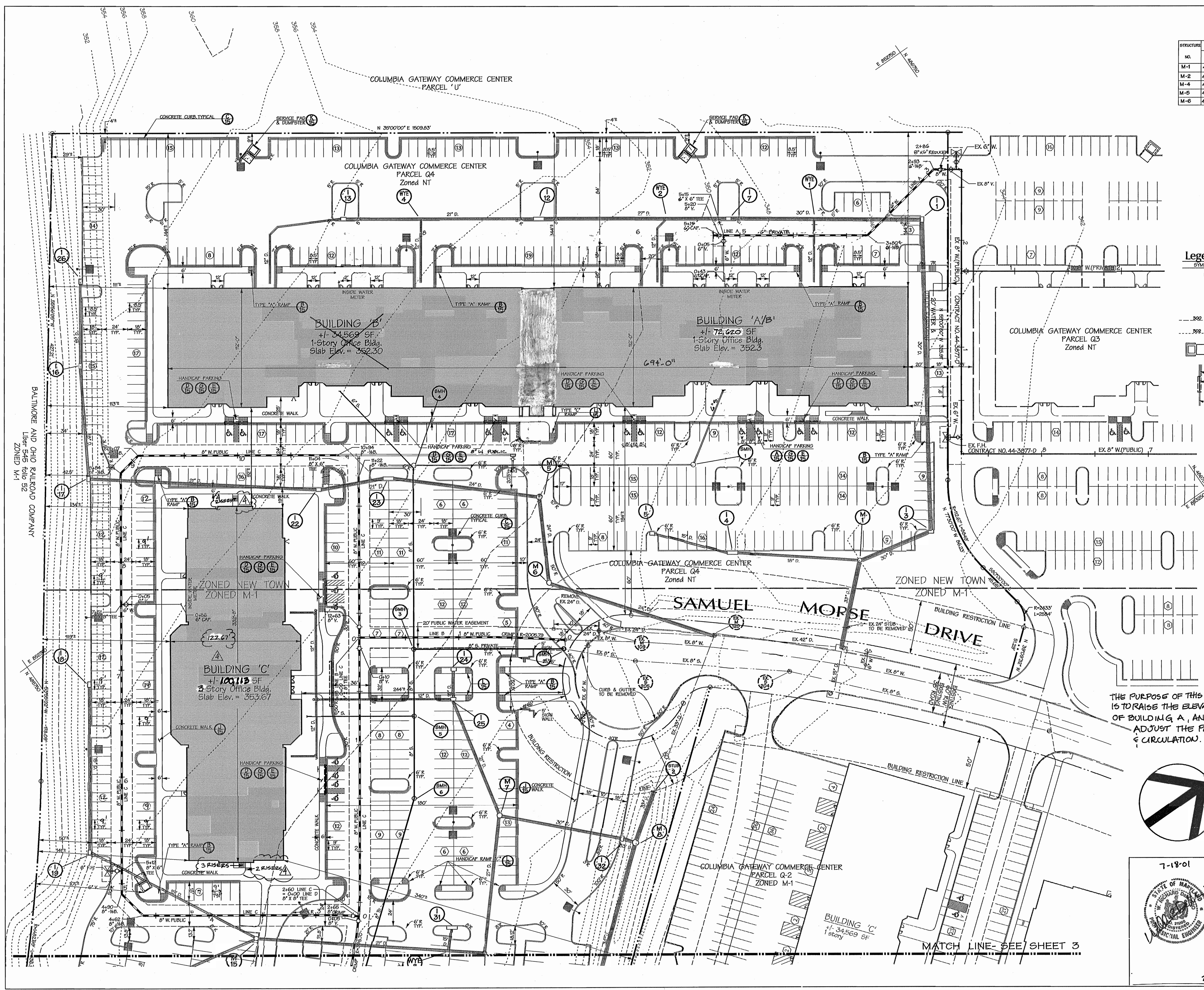
Date No. Revision Description
COLUMBIA GATEWAY PARCEL Q4
OWNER: DEVELOPER
The Howard Research and Development Corporation, 8805 Columbia 100 Pkwy, Suite 101, Little Paxson, Pkwy, Columbia, Maryland 21044

RETAINING WALL DETAILS
Daft, McCune & Walker, Inc.
200 East Pennsylvania Avenue
Towson, MD 21286
Hillis-Carnes Engineering Associates, Inc.
12011 Guilford Road Suite 106
Annapolis Junction, Maryland 20701

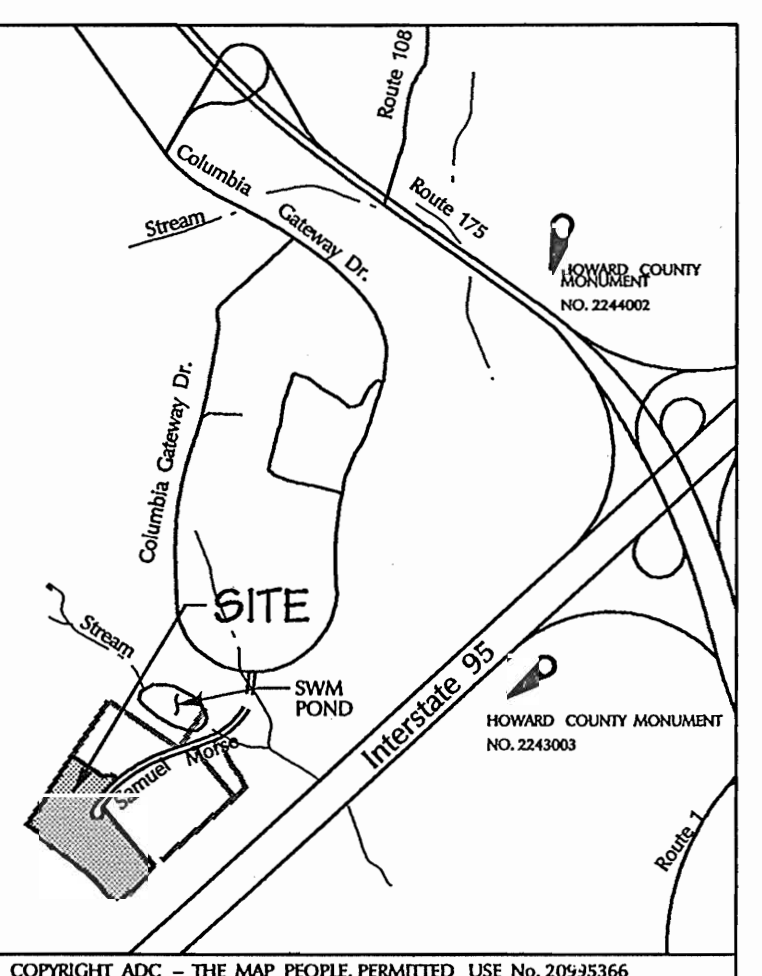
Date	10/13/00	Design By	RWS
Project #	00440-A	Drawn By	AM
File Name	J/cad/hcea/00440-A	Checked By	RMH

DIVISION NAME	COLUMBIA GATEWAY	SECTION AREA	NA	LIT/PARCEL#	Q4
PLAN OR LP		BLK#	12 & 7	ELECT DISTRICT	G
WATER CODE	ED6	SEWER CODE	4900000	CENSUS TRACT	6067.03





STRUCTURE NO.	COORDINATES	
	NORTH	EAST
M-1	486446.70	853119.1
M-2	486680.30	852891.7
M-4	486580.7	852897.5
M-5	486244.8	852892.2
M-6	486198.7	852898.0



LOCATION MAP
SCALE: 1" = 2000'

Legend

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
—	BUILDING RESTRICTION LINE	⊙	STORM DRAIN STRUCTURE LABEL
⊙	PARKING COUNT	---	EXISTING SEWER
♿	VAN HANDICAPPED PARKING	---	EXISTING STORM DRAIN
♿	HANDICAPPED PARKING	---	EXISTING WATER
---	EXISTING 10' CONTOUR	---	PROPOSED STORM DRAIN
---	EXISTING 2' CONTOURS	---	PROPOSED SEWER
□	SERVICE PAD & DUMPSTER BIN	---	PROPOSED WATER
⊙	REVERSE CURB & GUTTER	⊙	PROPOSED LIGHT
---	DEPRESSED CURB		
---	STANDARD CURB & GUTTER		

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE: March 8, 2001

The revisions indicated were determined by the DPE to be minor and do not require re-approval by the Planning Board.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING	
<i>Chad DeWitt</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	7/3/01 DATE
<i>Cindy Gardner</i> CHIEF, DIVISION OF LAND DEVELOPMENT	8/2/01 DATE
<i>Paul Ruth</i> DIRECTOR	8/2/01 DATE

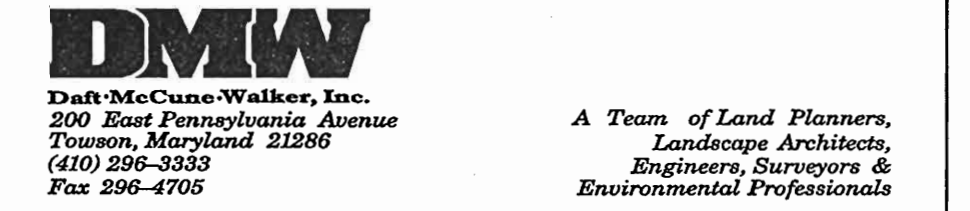
Date	No.	Revision Description
7-20-01	1	SUBSTITUTION SHEET
8-6-01	2	RAISED BLDG. ELEVATION "A" AND ADJUSTED PARKING AND CIRCULATION
9-29-03	3	MERGE BLDGS A&B TO BLDG. C
6-6-05	4	EDIT BLDG 'C' DIMENSION STAIR DETAILS

THE PURPOSE OF THIS REVISION IS TO RAISE THE ELEVATION OF BUILDING A, AND TO ADJUST THE PARKING & CIRCULATION.

Columbia Gateway Parcel Q4

OWNER: The Howard Research and Development Corporation
10275 LINDA FAYWOOD PARKWAY
COLUMBIA, MARYLAND 21044

DEVELOPER: AAK, IV, LLC
8825 COLUMBIA 100 PKWY
COLUMBIA, MD 21045



SUBDIVISION NAME: COLUMBIA GATEWAY	SECTION: NA	LOT/PARCEL #: Q4
PLAT OR REF: 136617	BLOCK #: 12 & 7	TAXONE MAP: 42-43
WATER CODE: E06	SEWER CODE: 4900000	CENSUS TRACT: 6067.03

TITLE: Revised Site Plan

Des By: RBW	Scale: 1"=40'	Proj. No.: 00089
Drn By: ADL	Date: 6-12-01	
Chk By: Approved		2 OF 19



21998

Sheet Index

SHEET	DESCRIPTION
1	Cover Sheet
2	Site Plan
3	Site Plan
4	Grading Plan
5	Grading Plan
6	Storm Drain Profiles
7	Storm Drain Profiles
8	Storm Drain Profiles
9	Utility Profiles
10	Utility Profiles
11	Drainage Area Map & Sediment Control Plan
12	Drainage Area Map & Sediment Control Plan
13	Erosion & sediment Control Details
14	Erosion & sediment Control Details
15	Site Details
16	Landscape Plan
17	Landscape Plan
18	Landscape Notes & Details
19	Retaining Wall Details

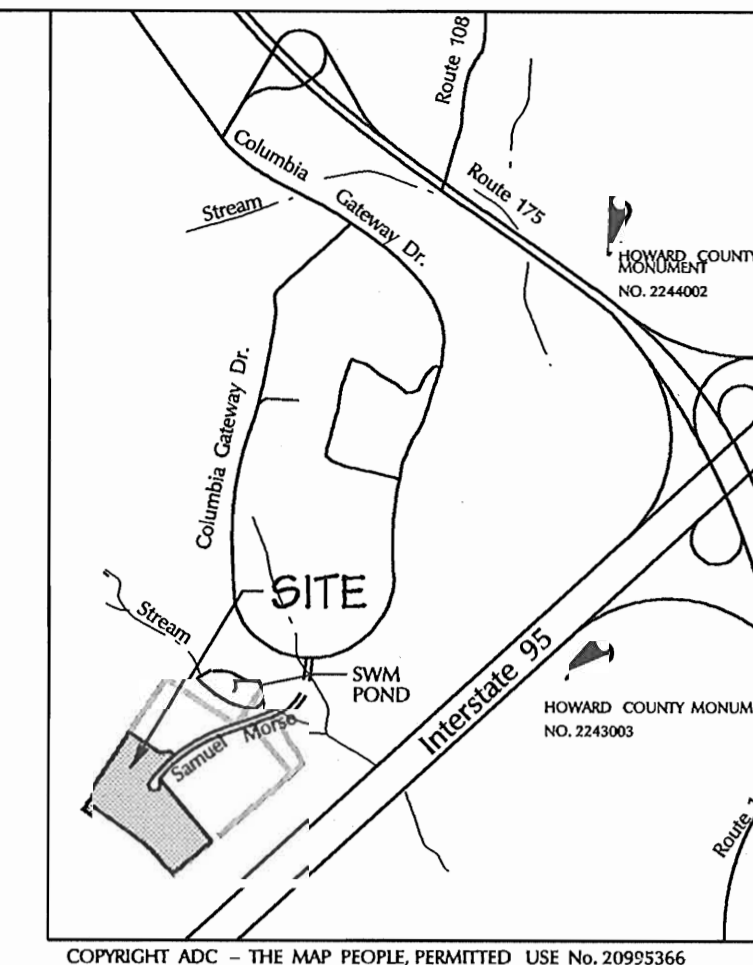
SITE DEVELOPMENT PLAN

for

Gateway Commerce Center

Columbia Gateway, Parcel Q4

Howard County, Maryland



LOCATION MAP

SCALE: 1" = 2000'

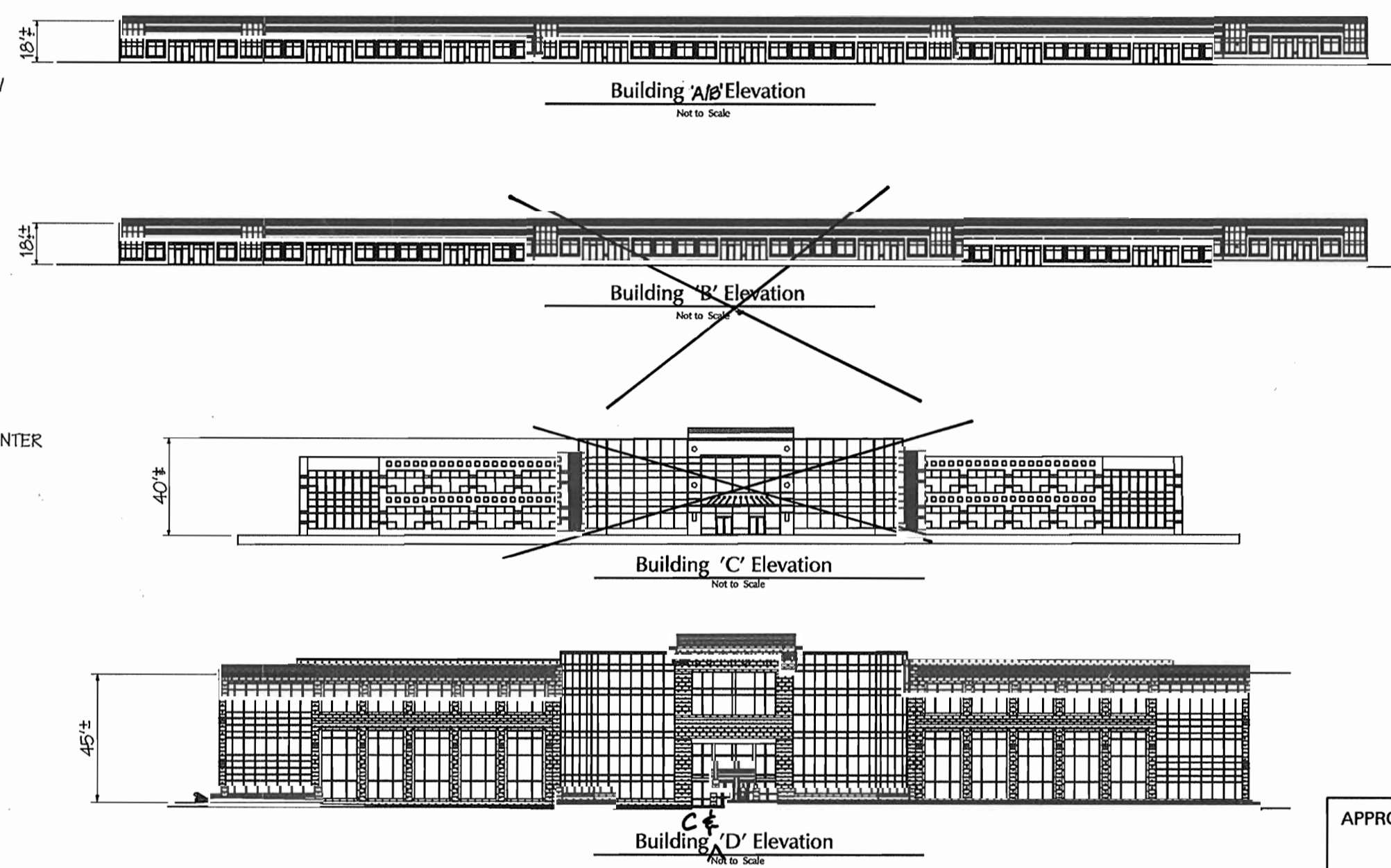
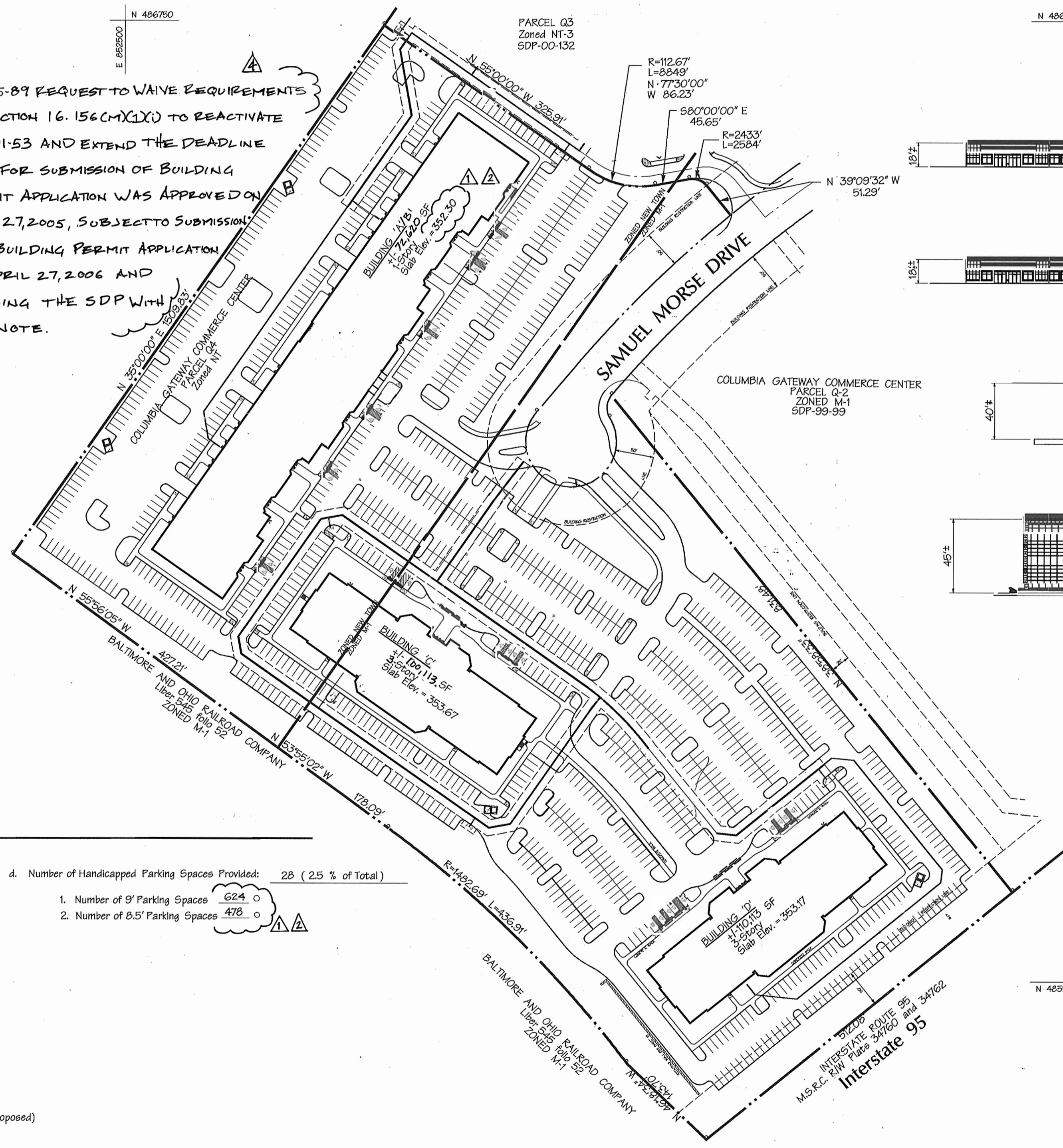
BENCHMARK

DESCRIPTION
NO. 2244002 - HOWARD COUNTY MONUMENT
NO. 2243005 - HOWARD COUNTY MONUMENT

General Notes

- All construction shall be performed in accordance with the latest standards and specifications of Howard County, plus MSHA standards and specifications if applicable or as specified.
- Approximate location of existing utilities are based solely on available records. Contractor shall verify the location of any utilities which may be impacted by the work. 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 at least five (5) days before starting work shown on these drawings to verify their location and elevation. The contractor shall notify the engineer immediately if location of utilities is other than shown.
- The contractor shall notify Miss Utility at 1-800-257-7777 at least 48 hours prior to any excavation work being done, and shall notify the Department of Public Works/Bureau of Engineering/Construction Inspection Division at (410) 313-1800 at least five (5) working days prior to the start of work.
- Traffic control devices, markings, and signing shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD). All street and regulatory signs shall be in place prior to the placement of any asphalt.
- Any damage caused by the Contractor to existing public right-of-way, existing paving, existing curb and gutter, existing utilities, etc., shall be repaired at the Contractor's expense.
- The existing topography inside property line per mass grading as shown on GP-99-15
- All hydraulic data is for the 10-year storm unless otherwise noted.
- All fill areas shall be compacted to a minimum of 95% of the maximum dry density as determined and verified in accordance with AASHTO T-100.
- All plan dimensions are to face of curb unless otherwise noted. Numerically written dimensions take precedence over scaled dimensions.
- The coordinates shown herein are based upon the Howard County geodetic control which is based upon the Maryland State plane coordinate system. Howard County monument no. 2243003 and 2244002 were used for this project.
- Stormwater management quantity and quality control in a regional facility on Parcel A-77 under contract F-97-98
- Public water (Contract # 24-39320) and Public sewer (Contract # 24-39320) to service the site.
- There are no 100 year floodplain or wetlands on this site.
- There are no known cemeteries or burial grounds on this site.
- A traffic report update has been prepared by Wells & Associates, dated May, 2000.
- Exterior Lighting will be in conformance with Section 134, Zoning Regulations
- Electric, gas, cable and telephone lines designed by others.
- This Site is exempt from Forest Conservation Ordinance in accordance with Section 16.1202(h)(1)(v).
- REF. WP-04-03 REQUEST WAIVER OF SECTION 16.156.M.1.(i) TO REACTIVATE SDP 01-53 AND EXTEND THE DEADLINE DATE FOR SUBMISSION OF BUILDING PERMIT APPLICATIONS. APPROVED BY 15-09, SUBJECT TO SUBMISSION OF BUILDING PERMITS FOR BLDG. C & D BY 8-15-04, AND REVISING THE SDP WITH THIS NOTE.

21. WP-05-89 REQUEST TO WAIVE REQUIREMENTS OF SECTION 16.156(M)(IX) TO REACTIVATE SDP-01-53 AND EXTEND THE DEADLINE DATE FOR SUBMISSION OF BUILDING PERMIT APPLICATION WAS APPROVED ON APRIL 27, 2005, SUBJECT TO SUBMISSION OF A BUILDING PERMIT APPLICATION BY APRIL 27, 2006 AND REVISING THE SDP WITH THIS NOTE.



Address Chart

Bldg.	Street Address
A/B	7090 Samuel Morse Drive
B	7100 Samuel Morse Drive
C	7110 Samuel Morse Drive
D	7120 Samuel Morse Drive

Site Analysis Data Chart

- General Site Data
 - Present Zoning: M-1 & NT-EMPLOYMENT
 - Applicable DPZ File References: GP-99-15, F-99-34, F-01-02, WP-04-03, F-96-22, S-94-44, S-85-29, F-96-127, F-96-182, WP-98-130, WP-01-08
 - Proposed Use of Site or Structure(s): Buildings A, B, Office Building, Buildings C & D- Office Buildings
 - Proposed Water: Public - 24-39320 Proposed Sewer: Private 24-39320 Water and contract number
- Area Tabulation
 - Total Project Area: 191±A.C.
 - Net Area of Site: 191±A.C. (Indicate by Section and Area As Shown on Final Plat) Acres
 - Area of This Plan Submission: 191±A.C. Acres
 - Limit of Disturbed Area: 18.8±A.C.
 - Building Coverage of Site: 3.5±A.C. Acres and 17.3 % of Gross Area (Proposed)
- Open Space Data: N/A
- Parking Space Data
 - Floor Space per floor of proposed use on site: Bldg. A/B 72,620 SF; Bldg. C 34,660 SF; Bldg. D 110,113 SF; 1st floor 33,371 SF; 2nd floor 33,371 SF; 3rd floor 33,371 SF; Total: 245,933 SF. Building A/B floor 1: 72,620 SF; Building C floor 1: 33,371 SF; Building D floor 1: 36,704 SF; floor 2: 36,704 SF; floor 3: 36,704 SF.
 - Number of Parking Spaces Required by Zoning Regulations: 934 (232,840 SF / 3.3 per 1000)
 - Total Number of Parking Spaces Provided On-Site: 1095
- Number of Handicapped Parking Spaces Provided: 28 (2.5 % of Total)
 - Number of 9' Parking Spaces: 224
 - Number of 8.5' Parking Spaces: 478

Overall Property Outline

Scale: 1"=100'

March 8, 2001

5/2/01
Date

Professional Engr. No. 10551

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Chief, Development Engineering Division MK	5/2/01
DATE	
Chief, Division of Land Development HB	5/20/01
DATE	
Director	6/1/01
DATE	

Date	No.	Revision Description
6-25-01	1	RAISE SLAB EL. OF BLDG. A.
8-6-01	2	MERGE BLDGS. A+B TO A/B
9-29-03	3	ADD 3RD FLOOR TO BLDG. C
6-6-05	4	ADD WAIVER PETITION NOTE

Columbia Gateway Parcel Q4

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

DEVELOPER: AAK IV, LLC
8005 COLUMBIA 100 PKWY
SUITE 101
COLUMBIA, MD 21045

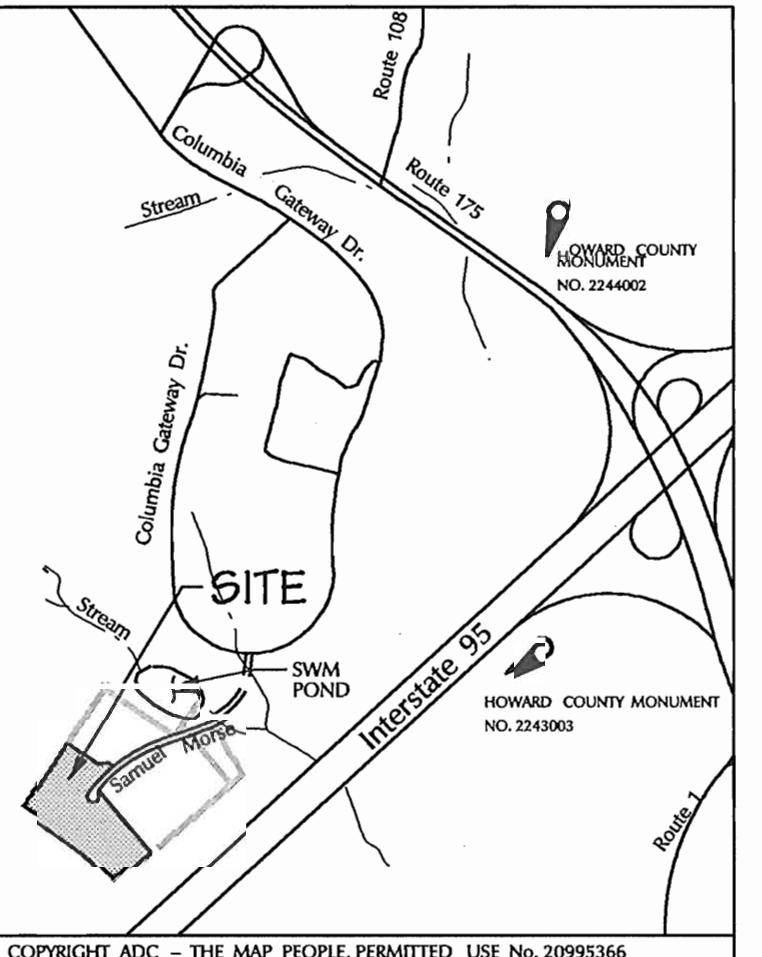
DMW
Daft McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 396-3333
Fax 298-4705

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

SUBDIVISION NAME	COLUMBIA GATEWAY	SECTION/AREA	NA	LOT/PARCEL #	Q4
PLAT OR MAP	17/91	BLOCK #	2	TRACT #	6067.03
WATER CODE	E06	SEWER CODE	4900000		

Cover Sheet

Des By	MM	Scale	1"=100'	Proj. No.	00089
Drn By	ADL & BKC	Date	4-12-01		
Chk By	Approved				1 OF 19

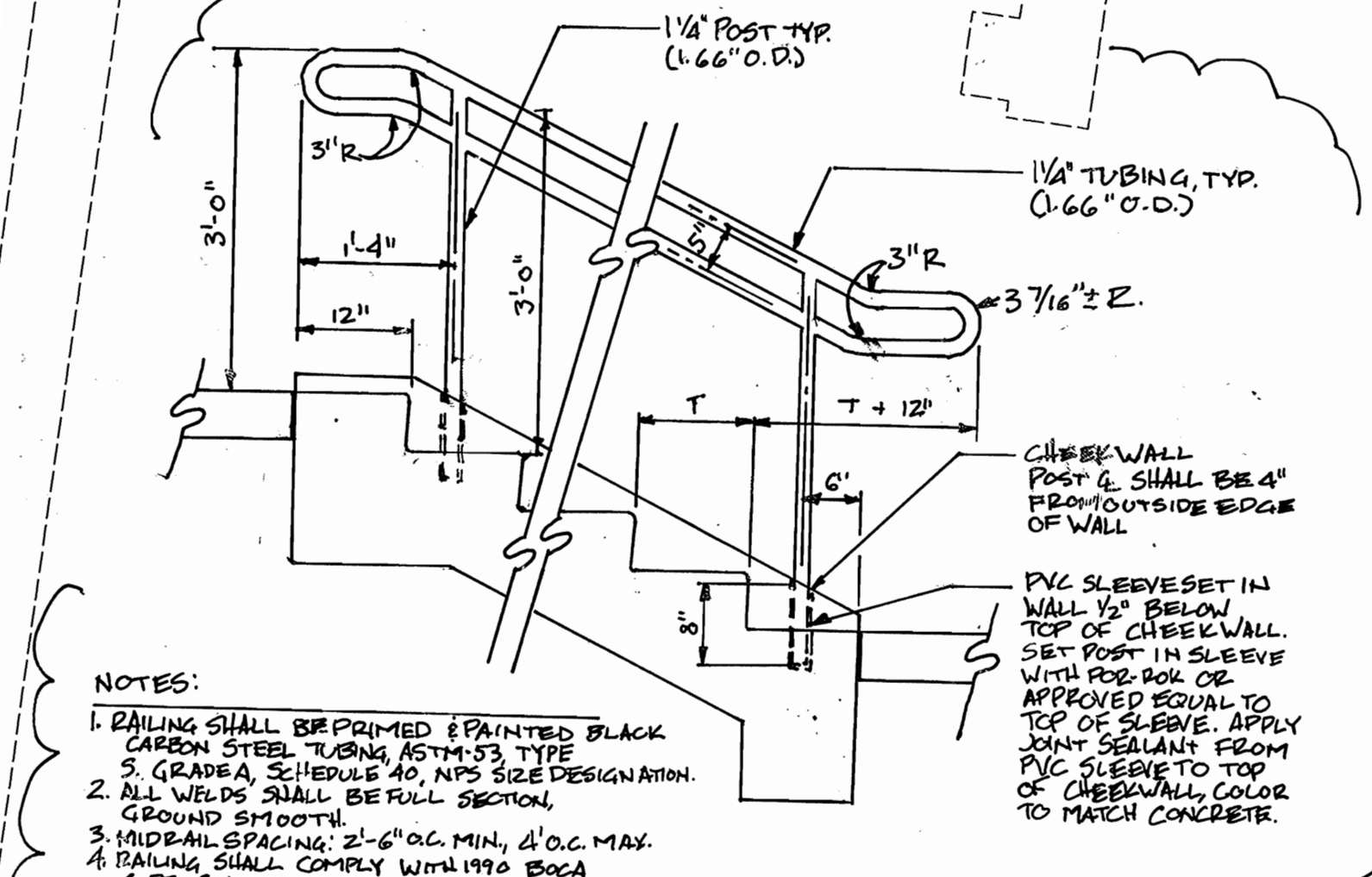


LOCATION MAP
SCALE: 1" = 200'

STRUCTURE NO.	COORDINATES	NORTH	EAST
M-7	480253.7	86214.90	
M-8	480122.60	85512.80	
M-10	480197.20	85518.50	
M-11	486947.4	86258.1	

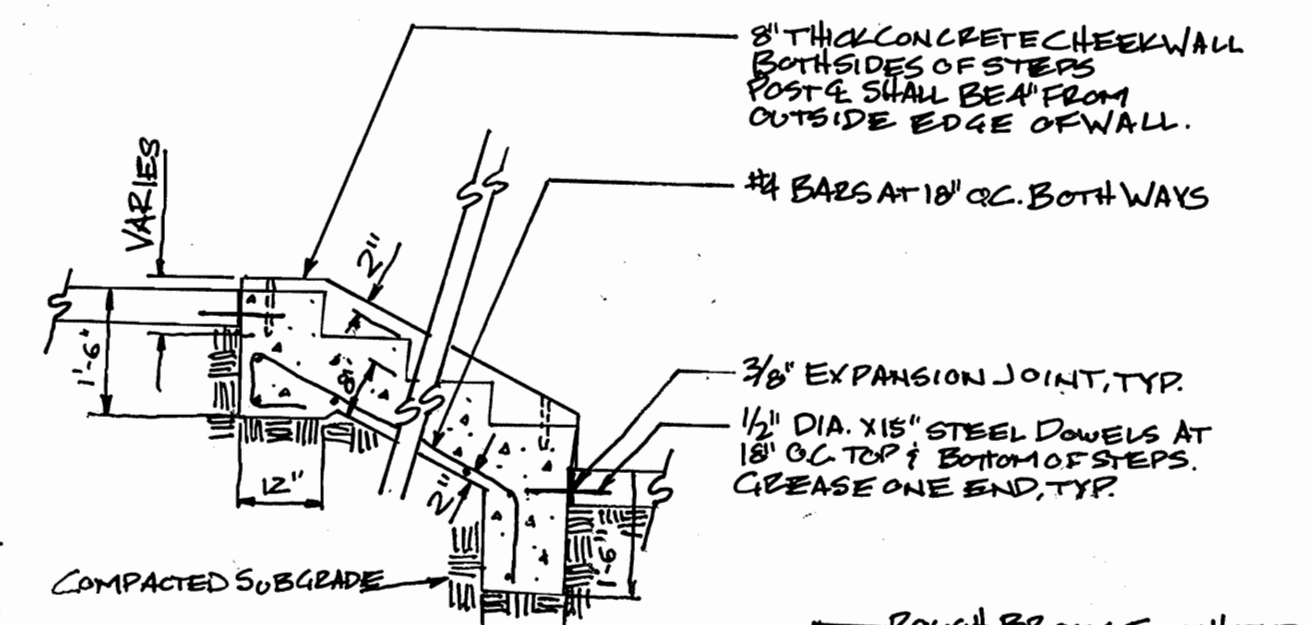
Legend

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
---	BUILDING RESTRICTION LINE	(15)	STORM DRAIN STRUCTURE LABEL
(P)	PARKING COUNT	---	EXISTING SEWER
(V)	VAN HANDICAPPED PARKING	---	EXISTING STORM DRAIN
(H)	HANDICAPPED PARKING	---	EXISTING WATER
---	EXISTING 10' CONTOUR	---	PROPOSED STORM DRAIN
---	EXISTING 2' CONTOURS	---	PROPOSED SEWER
[]	SERVICE PAD & DUMPSTER BIN	---	PROPOSED WATER
[]	REVERSE CURB & GUTTER	(C)	PROPOSED LIGHT
[]	DEPRESSED CURB		
[]	STANDARD CURB & GUTTER		



NOTES:
 1. RAILING SHALL BE PRIMED & PAINTED BLACK CARBON STEEL TUBING ASTM-A53 TYPE S. GRADE A, 2" HEADS 40, NPS SIZE DESIGNATION.
 2. ALL WELDS SHALL BE FULL SECTION, GROUND SMOOTH.
 3. HORIZONTAL SPACING: 2'-6" O.C. MIN, 4' O.C. MAX.
 4. RAILING SHALL COMPLY WITH 1970 BOCA CODE, SECTIONS 822.0 & 1109.8

RAILING
NOT TO SCALE



NOTE:
ALL STEPS SHALL BE 5' WIDE.

CONCRETE STEPS
NOT TO SCALE

APPROVED
 OF HOWARD COUNTY
 DATE: **March 8, 2001**

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

<i>[Signature]</i>	5/21/01
CHIEF, DEVELOPMENT ENGINEERING DIVISION MK	DATE
<i>[Signature]</i>	5/30/01
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>[Signature]</i>	6/1/01
DIRECTOR	DATE

6/6/01 7 ADD STAIR RAILING DETAILS.

Date	No.	Revision Description

Columbia Gateway Parcel Q4

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

DEVELOPER:
AAK IV, LLC
8805 COLUMBIA 100 PKWY
SUITE 501
COLUMBIA, MD 21045

DMW
Darr-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Poolesville, Maryland 21088
(410) 396-3333
Fax 296-4705

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

SUBDIVISION NAME: COLUMBIA GATEWAY	SECTION: NA	LOT/PARCEL #: Q4
PLAT OR REF: 14759	BLOCK # ZONE: 12 & 7 INTAM-1	TAXICONE MAP: 42-43
WATER CODE: E06	SEWER CODE: 4900000	CENSUS TRACT: 6067.03

TITLE: Site Plan		
Des By: RBW	Scale: 1" = 40'	Proj. No. 00089
Drn By: ADL	Date: 4-12-01	
Chk By:	Approved:	3 OF 19

5/2/01
Date

PROFESSIONAL ENGINEER
 NO. 10551
 STATE OF MARYLAND

Professional Engr. No. 10551



BALTIMORE AND OHIO RAILROAD COMPANY
 Liber 545 Folio B2
 ZONED M-1

INTERSTATE ROUTE 95
 VEHICULAR INGRESS AND EGRESS RESTRICTED
 INTERSTATE ROUTE 95
 M.S.R.C. R/W Plats 34760 and 34762

INTERSTATE ROUTE 95
 M.S.R.C. R/W Plats 34760 and 34762