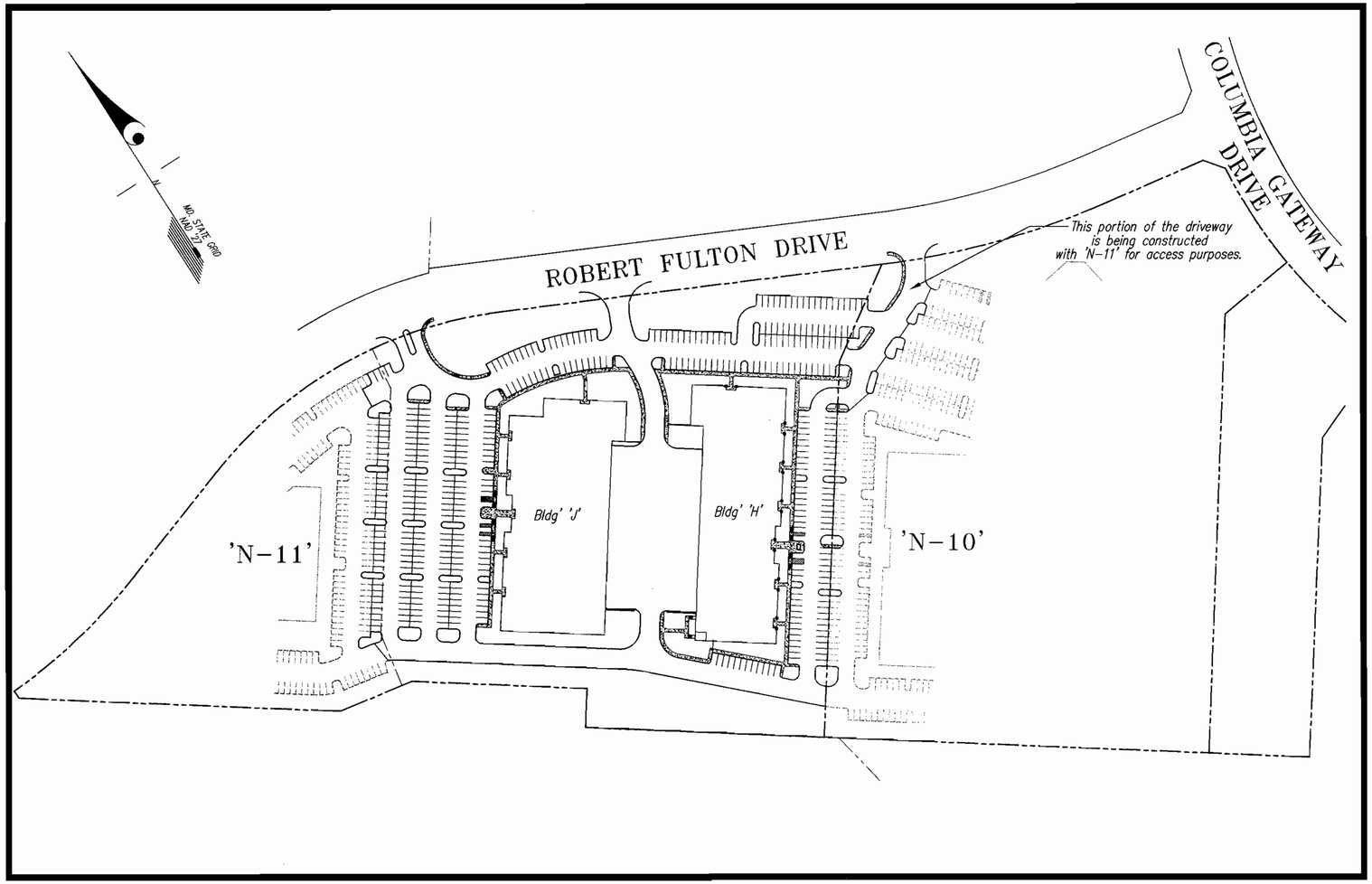
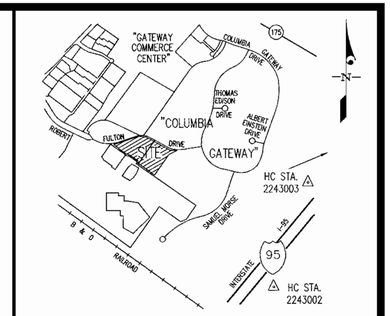
SITE DEVELOPMENT PLAN
COLUMBIA GATEWAY
PART OF PARCEL 'N-11'

GENERAL NOTES

1. All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standard and specifications if applicable.
2. The contractor shall notify the Department of Public Works/Bureau of Inspection at (410) 313-1880 at least five (5) working days prior to the start of work.
3. The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
4. The contractor shall notify the Howard County Department of Public Works, Bureau of Utilities at (410) 313-4900 at least five working days prior to starting any excavation work.
5. Area of Parcel: 14.2008 Ac. Disturbed Area: 12.2 Ac.
6. 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.
7. All plan dimensions are to face of curb unless otherwise noted.
8. Existing topography was determined by approved final construction plans for development.
9. Coordinates and bearings are based upon the MD State Plane System (NAD '27).
10. Water and sewer shown is public.
11. All existing water and sewer is shown per Cont. Nos. 24-1440-D, 24-1587-D & 20-1397-D.
12. Stormwater management quantity and quality are provided offsite at a regional facility.
13. All existing public storm drain is per F-87-63 & F-86-128.
14. All curb radii is 5' unless noted otherwise.
15. Utility information taken from approved final construction plans for development.
16. Sidewalks adjacent to perpendicular parking shall be 6' wide. All other sidewalks shall be 5' wide, except where dimensioned otherwise. Provide 3' radius rounding at all angle breaks and intersections.
17. Contractor shall utilize PVC pipe for all sewer house connections. Contractor shall utilize D.I.P. (Cl. 51) for 4" and 6" water house connections and D.I.P. (Cl. 50) for 8" water house connections.
18. For all storm drain connections at existing stubs, the contractor shall remove the existing blocking and maintain the same grade and alignment.
19. Use trench bedding class "C" for storm drains.
20. Paved areas indicated are private except as noted.
21. Project background: See Dept. of Planning & Zoning File Numbers: P-86-22, S-84-44, F-85-55, F-85-63, F-86-17, F-86-63, F-86-182, F-87-96, F-88-91, F-90-175, F-91-16, F-92-15, F-99-156, F-00-11 & SP-01-24.
22. Recording reference: Plat No. 14298.
23. All proposed ramps shall be in accordance with current A.D.A. standards. Maximum sidewalk cross slope shall be two percent. Provide a five-foot by five-foot level (2 percent max.) landing at the top and bottom of all ramps and building entrances and exits.
24. All water meters shall be located inside buildings.
25. The proposed water and sewer house connection alignments indicated on the plans, from the existing utilities to the building, are to be constructed by the building plumber and are approximate. The proposed stubs are located 5' from the building face.
26. The proposed roof drain alignment connections indicated on the plans, from the stubs to the building, are to be constructed by the building plumber and are approximate. The proposed stubs are located 5' from the building face.
27. Maintain 2% cross-slopes on sidewalks, per standard details. Where sidewalk is adjacent to building, slope away from building, and utilize expansion joint material and sealer in the joint between the sidewalk and the building wall.
28. Sufficient sight distance per the Howard County Design Manual must be provided at all access points. Any landscaping that obstructs the line of sight must be relocated.
29. A traffic study and A.P.F.O. analysis, which included this Parcel, were performed under F-99-156.
30. There is no floodplain on this site.
31. There are no wetlands on this site.
32. This parcel does not appear on the county's cemetery inventory as having any cemeteries or burial grounds. Also, there is no physical evidence to indicate that either a cemetery or burial ground is present on the site.
33. Horizontal and vertical control are based on Howard County Control Sta. 2243002 and Howard County Sta. 2243003.
34. All exterior lighting shall conform to Section 134 of the Zoning Regulations.
35. This site is exempt from the Forest Conservation ordinance in accordance with Section 16.1202 (b)(1)(iv) a planned office park greater than 75 acres.



KEY MAP
SCALE: 1"=100'



VICINITY MAP
1"=2000'

BENCHMARK

SITE ANALYSIS

1. Area of site: 618,587 s.f. or 14.2008 ac.
2. Disturbed Area: 12.2 Ac.
3. Present Zoning: M-1.
4. Proposed Use: Research and Development/Light Warehouse.
5. Floor space: Building H 49,500 s.f.
   Building J 56,350 s.f.
   Total Floor Space: 105,850 s.f.
6. Total number of Parking Spaces required: 350*
7. Total number of Handicap Spaces required: 9
8. Minimum number of Van accessible: 2
9. Total number of Parking Spaces provided: 425 (provides parking ratio of 4.01 sp./1000 s.f.)
10. Total number of Handicap Spaces provided: 9
11. Total number of Van accessible provided: 4
12. Building coverage: 105,850 s.f.
13. Floor/Area ratio (F.A.R.): 105,850/618,587 = 0.17

* - Based on General Office use @ 3.3 spaces/1000 s.f.

SHEET INDEX

1. Cover Sheet
2. Site Development Plan
3. Site Details/Paving Plan
4. Handicap Access and Site Details
5. Landscape Plan
6. Landscape Notes & Details
7. Sediment Control Plan
8. Sediment Control Notes and Details
9. Storm Drain Profiles & Schedules
10. W.H.C. and S.H.C. Profiles
11. Drainage Area Map
12. Striping Plan

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director	Date 1/11/01
Chief, Division of Land Development	Date 1/11/01
Chief, Development Engineering Division MK	Date 1/5/01

ADDRESS CHART	
PARCEL 'N-11' BLDG	STREET ADDRESS
"H"	8661 ROBERT FULTON DRIVE
"J"	8671 ROBERT FULTON DRIVE

WATER CODE:	SEWER CODE:

SUBDIVISION NAME:			SECTION/AREA		PARCEL
COLUMBIA GATEWAY			N/A		'N-11'
PLAT	ZONE	TAX MAP	BLOCK	ELEC. DIST.	CENSUS TRACT
14298	M-1	42	12	6	6055

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL.: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

\DRAWINGS\00069\DESIGN\00069SP7.DWG	DES.	DRN.	CHK.

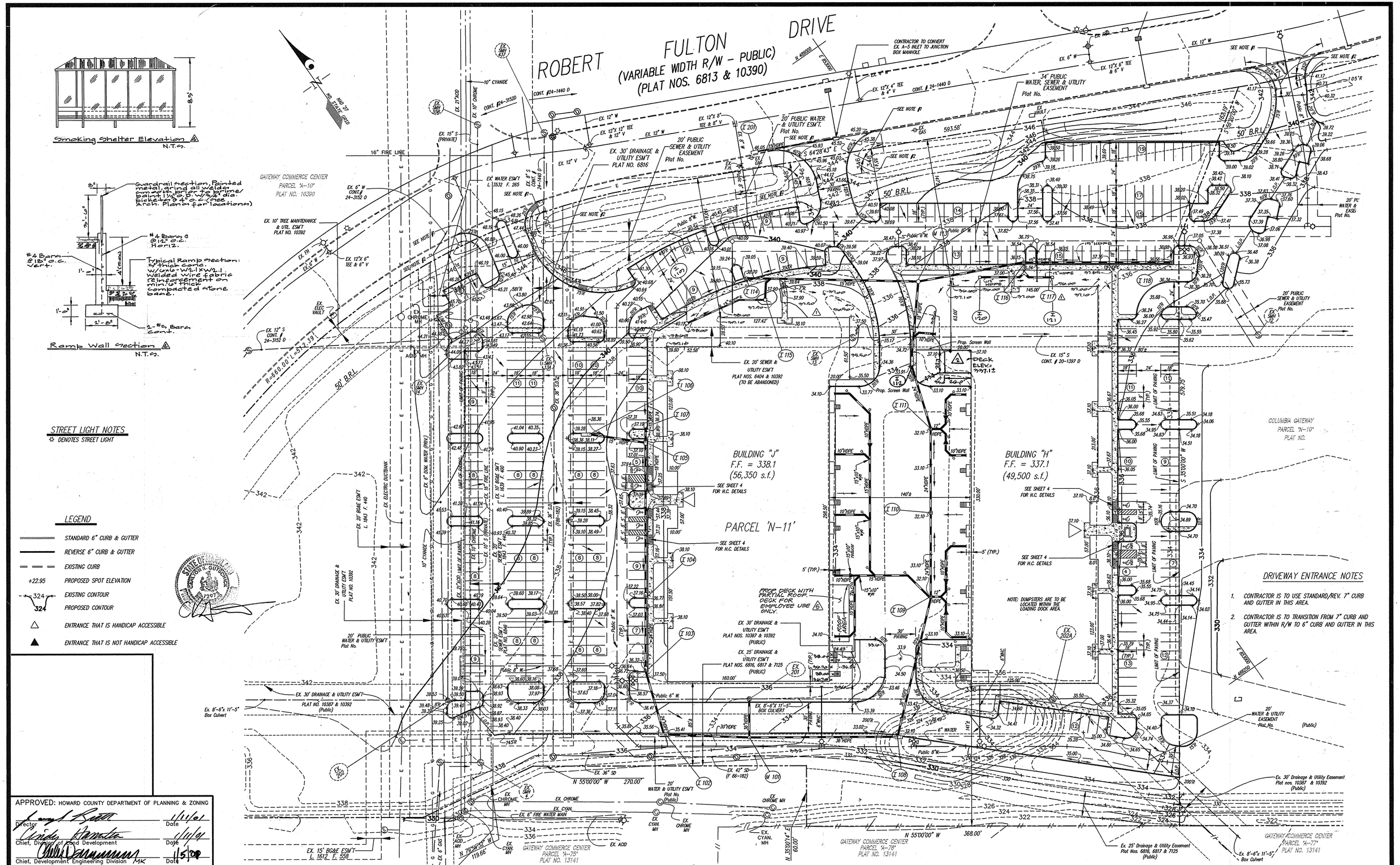
DATE	REVISION	BY	APP'R.

PREPARED FOR :
GATEWAY 67 L.L.C.
7165 COLUMBIA GATEWAY DRIVE
COLUMBIA, MD. 21046
PH: 410-290-1400
ATTN: MR. GOLE SCHNORF

COVER SHEET
COLUMBIA GATEWAY
PART OF PARCEL 'N-11'
PLAT No. 14298
GULFORD ELECTION DISTRICT No. 6
HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	M-1	00069
DATE	TAX MAP - GRID	SHEET
SEPT., 2000	42 - 12	1 OF 12

SDP-00-149



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director	Date 1/11/01
Chief, Division of Land Development	Date 1/11/01
Chief, Development Engineering Division MK	Date 1/5/01

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
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\DRAWINGS\00069\DESIGN\00069SP8.DWG | DES. DEV | DRN. GMB | CHK. DEV

DATE	REVISION	BY	APP'R.
3/9/15	REMOVE REVISION 4, ADD EXTERIOR DECK WITH PARTIAL ROOF 6	SEG	
12-19-12	Paver Patio & smoke shelter added to rear of Building 'J' 4		
3-12-03	Add Deck Addition To Corner Of Building "H" 2		
8-31-01	deleted screen wall on Bldgs. H & J		
8-31-01	1 rev. plan to add I 119, I 116, I 121, and prop. grading as needed		

PREPARED FOR:
Gateway 67 L.L.C.
7165 Columbia Gateway Dr.
Columbia, Maryland 21046
Attn.: Cole Scnorf
Phone: (410) 290-1400

SITE DEVELOPMENT PLAN
COLUMBIA GATEWAY
PART OF
PARCEL 'N-11'
PLAT NO. 14298
GUILFORD ELECTION DISTRICT No. 6 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=40'	M-1	00069
DATE	TAX MAP – GRID	SHEET
SEPT., 2000	42-12	2 OF 12

SDP 00 149

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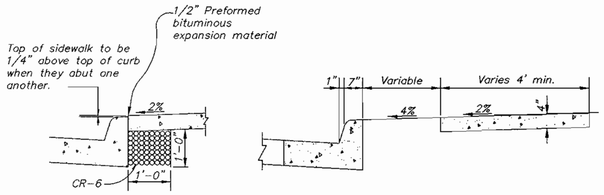
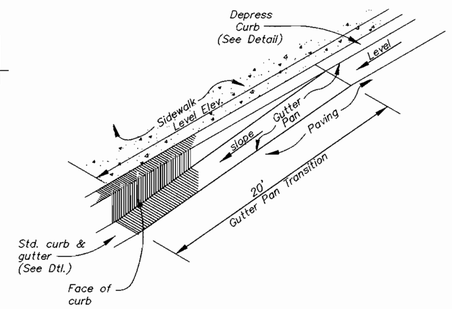


Detail A

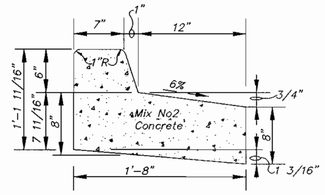
Notes:

1. Sidewalk to be scribed in 5' maximum squares.
2. Expansion joints across the sidewalk not to be more than 15' apart.
3. 1/2" preformed bituminous expansion material in expansion joints to be kept 1/4" below surface of sidewalk.
4. Concrete to be mix No.2
5. When sidewalk abuts curb, walk shall be 1/4" above curb with preformed bituminous expansion material between sidewalk and curb and resting on a compacted crushed stone base. See detail A this sheet.
6. On longitudinal sidewalk grades of 5% or greater, a concrete header, 6" thick and 6" deep below the normal 4" sidewalk thickness shall be constructed for the full width of the sidewalk at intervals of 48'. The headers shall be placed at expansion joint locations and shall be monolithic with the sidewalk.



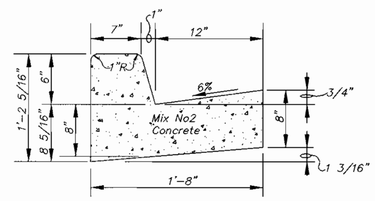
Gutter Transition – Isometric

N.T.S.



Reverse 6" Combination Curb & Gutter

N.T.S.



Standard 6" Combination Curb & Gutter

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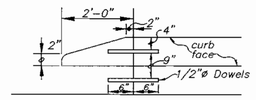
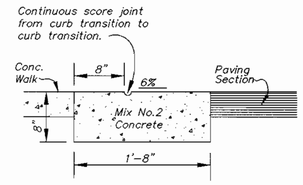


Nose Down Curb Detail

N.T.S.



Depressed Curb Entrance

N.T.S.

Section Number	Full Depth Bit. Conc. Alternate	Granular Base Alternates
P-1	5" total: 1" Bit Conc. Surface; 4" Bit Conc. Base	7" total: 1" Bit Conc. Surface; 2 Bit Conc. Base; 4" Graded Aggregate Base
P-2	6 1/2" total: 1 1/2" Bit Conc. Surface; 5" Bit Conc. Base	10" total: 1 1/2" Bit Conc. Surface; 2 1/2" Bit Conc. Base; 6" Graded Aggregate Base
P-3	8" total: 1 1/2" Bit Conc. Surface; 1 1/2" Bit Conc. Base; 5" Bit Conc. Base	11" total: 1 1/2" Bit Conc. Surface; 4 1/2" Bit Conc. Base; 5" Graded Aggregate Base

Paving Sections

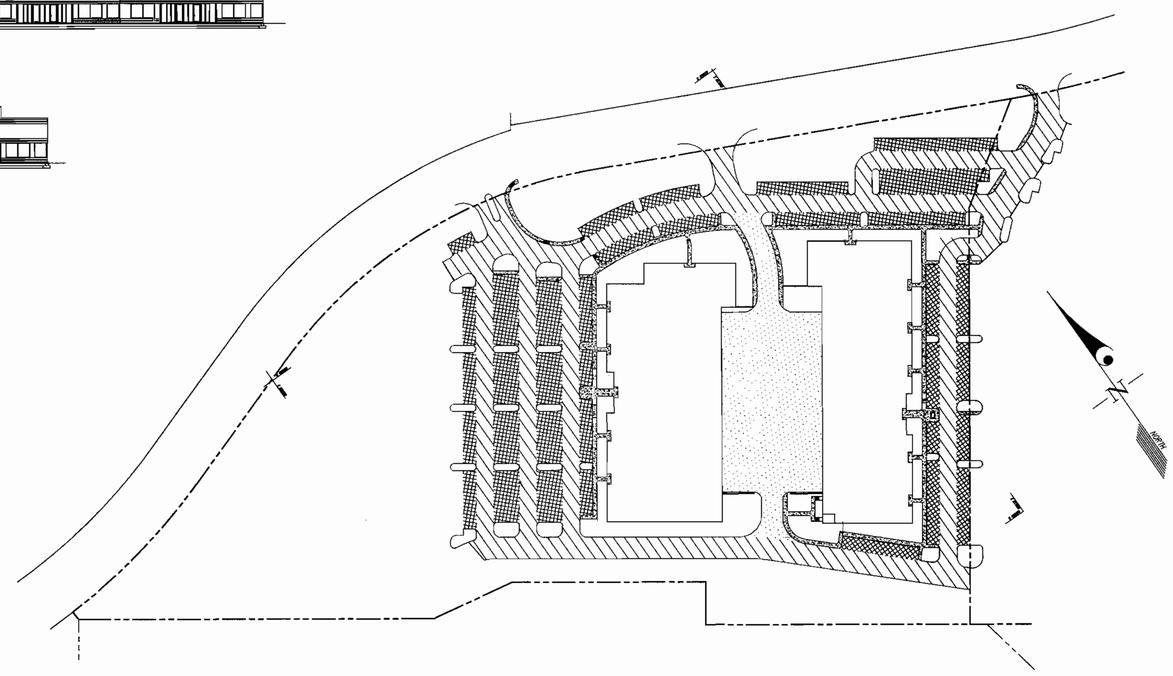
N.T.S.

BUILDING 'H'

BUILDING 'J'

FRONT ELEVATIONS

NOT TO SCALE



PAVING PLAN

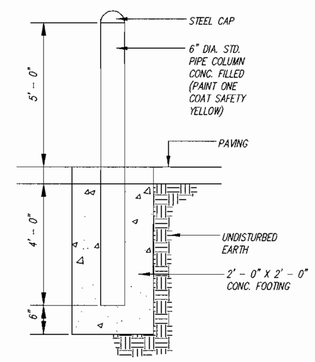
SCALE: 1" = 100'

LEGEND

P1

P2

P3



BOLLARD DETAIL

(N.T.S.)

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director	Date 1/11/01
Chief, Division of Land Development	Date 1/11/01
Chief, Development Engineering Division MK	Date 1/5/01

STATE OF MARYLAND — CARLTON K. GUTSCHICK — No. 7073 — PROFESSIONAL ENGINEER

GLW GUTSCHICK LITTLE & WEBER, P.A.

CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL.: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

\DRAWINGS\00069\DESIGN\00069SP11.DWG	DES.	DRN.	CHK.

DATE	REVISION	BY	APP'R.

PREPARED FOR :

Gateway 67 L.L.C.
7165 Columbia Gateway Drive
Columbia, Md. 21046
PH: 410-290-1400
ATTN: MR. COLE SCHNORF

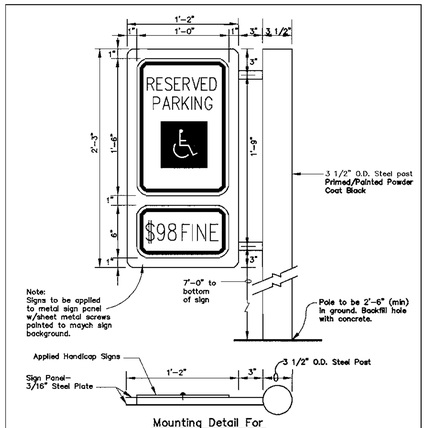
SITE DETAILS / PAVING PLAN

COLUMBIA GATEWAY
PART OF
PARCEL "N-11"
PLAT No. 14298

GUILFORD ELECTION DISTRICT No. 6 — HOWARD COUNTY, MARYLAND

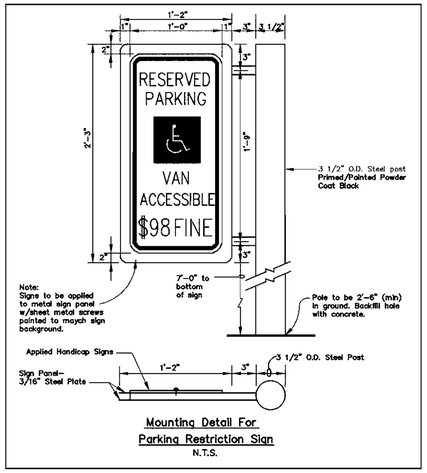
SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	M-1	00069
DATE	TAX MAP - GRID	SHEET
SEPT., 2000	42 - 12	3 OF 12

SDP-00-149



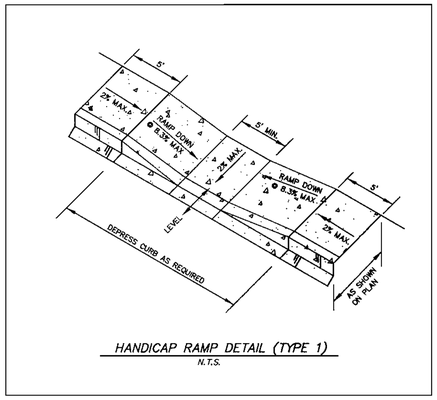
Mounting Detail For Parking Restriction Sign

N.T.S.



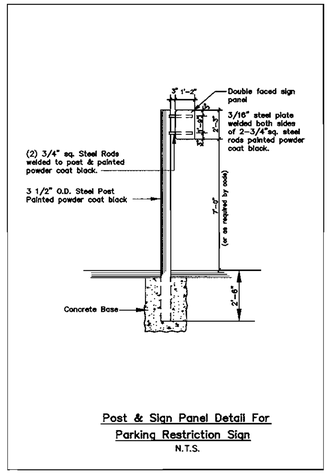
Mounting Detail For Parking Restriction Sign

N.T.S.



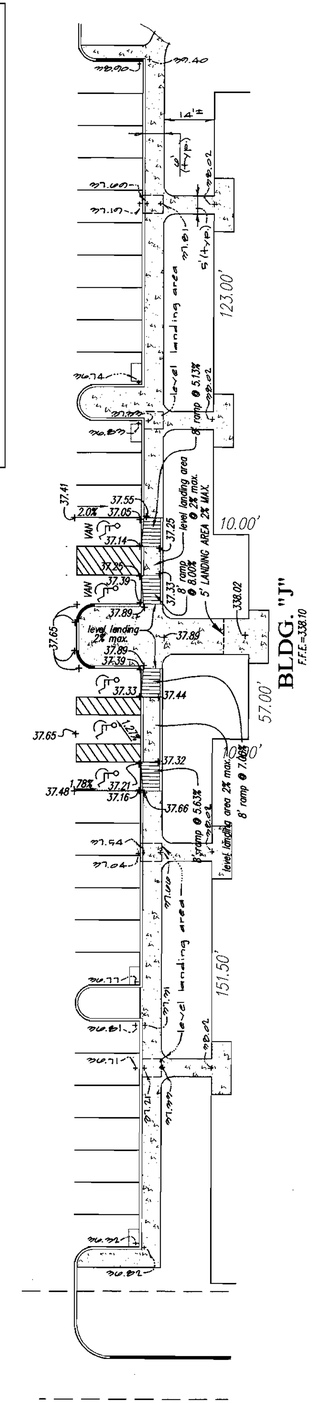
HANDICAP RAMP DETAIL (TYPE 1)

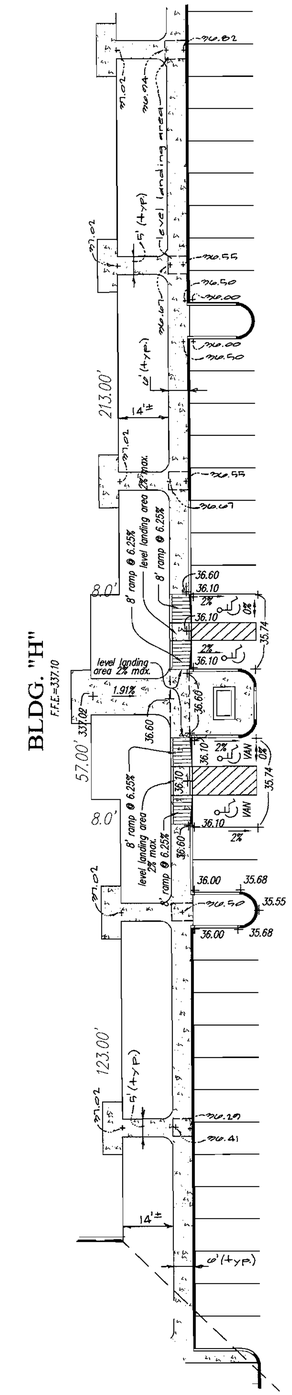
N.T.S.



Post & Sign Panel Detail For Parking Restriction Sign

N.T.S.





HANDICAP ACCESS DETAILS

SCALE: 1"=20'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director	Date 1/11/01
Chief, Division of Land Development	Date 1/11/01
Chief, Development Engineering Division MK	Date 1/5/01

STATE OF MARYLAND — CARLTON K. GUTSCHICK — No. 12972 — PROFESSIONAL ENGINEER

GLW GUTSCHICK LITTLE & WEBER, P.A.

CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

\DRAWINGS\00069\DESIGN\00069SP10.DWG | DES. | DRN. | CHK.

DATE	REVISION	BY	APP'R.

PREPARED FOR :
Gateway 67 L.L.C.
7165 COLUMBIA GATEWAY DRIVE
COLUMBIA, MD. 21046
PH: 410-290-1400
ATTN: MR. COLE SCHNORF

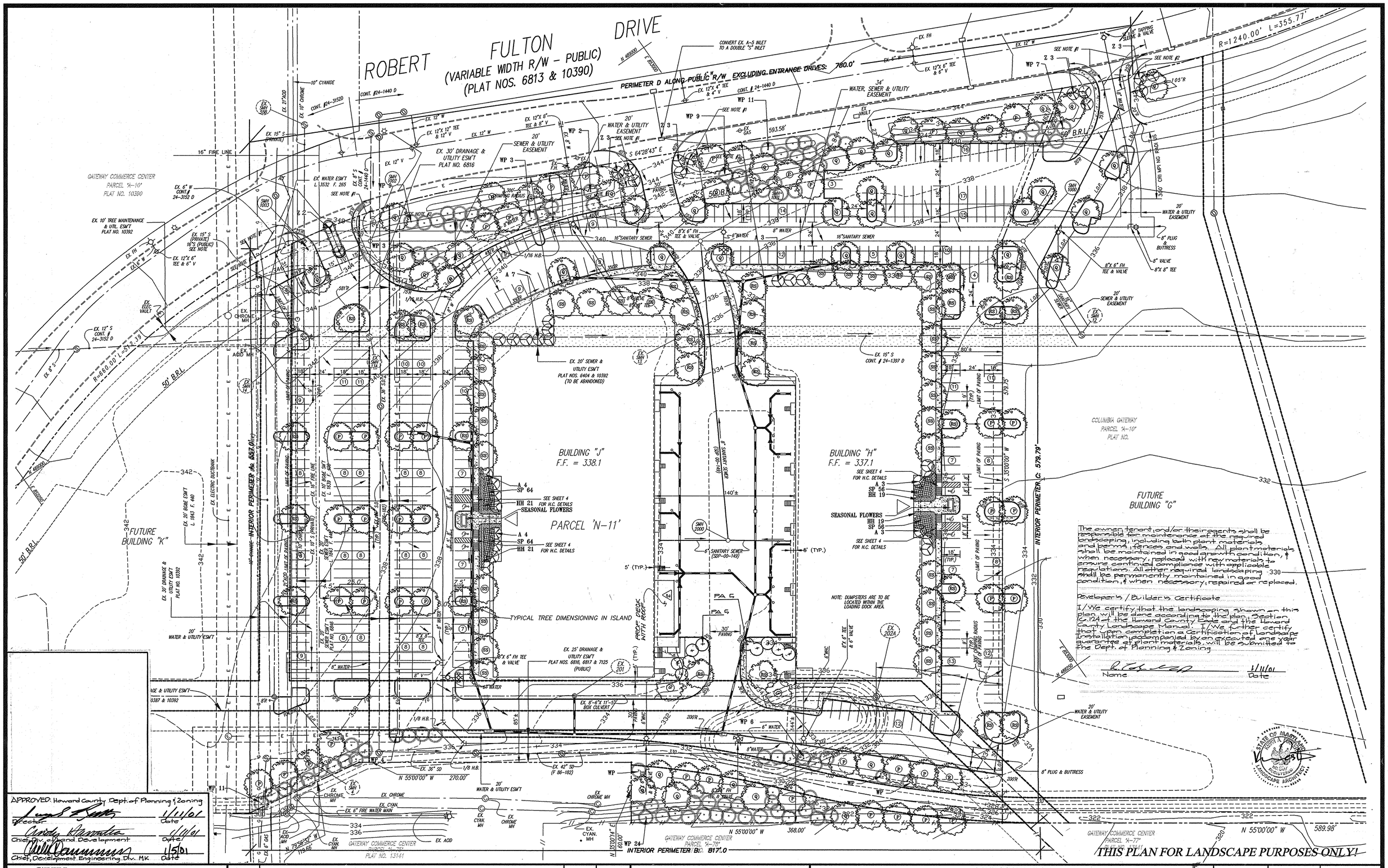
HANDICAP ACCESS AND SITE DETAILS

COLUMBIA GATEWAY
PART OF
PARCEL "N-11"
PLAT No. 14298

GUILFORD ELECTION DISTRICT No. 6 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	M-1	00069
DATE	TAX MAP – GRID	SHEET
SEPT., 2000	42 – 12	4 OF 12

SDP-00-149



The owner, tenant, and/or their agents shall be responsible for maintenance of the required landscaping, including both plant materials and berms, fences and walls. All plant materials shall be maintained in good growth condition, & when necessary, replaced with new materials to ensure continued compliance with applicable regulations. All other required landscaping shall be permanently maintained in good condition, & when necessary, repaired or replaced.

Developer's / Builder's Certificate

I/We certify that the landscaping shown on this plan will be done according to the plan. Section 6.124 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 Dept. of Planning & Zoning.

Name — Date 1/11/01

APPROVED: Howard County Dept. of Planning & Zoning

Director — Date 1/11/01

Chief, Div. of Land Development — Date 1/11/01

Chief, Development Engineering Div. MK — Date 1/5/01

GLW GUTSCHICK LITTLE & WEBER, P.A.

CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE — SUITE 250 — BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APP'R.
3/6/15	ADD EXTERIOR DECK, REAR BUILDING 'J'	SEG	
8.20.01	rev. landscape plantings		

\DRAWINGS\00069\00069LP8.DWG | DES. | DRN. | CHK.

PREPARED FOR:

Gateway 63 Partnership
7165 Columbia Gateway drive
Columbia, Maryland 21046
Ph.(410) 290-1400
Attn: Mr. Cole Schnorff

LANDSCAPE PLAN

COLUMBIA GATEWAY

PART OF
PARCEL N-11
PLAT NO.:

GUILDFORD ELECTION DISTRICT No. 6 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=40'	M-1	00069
DATE	TAX MAP - GRID	SHEET
JUNE 2000	42-12	5 OF 12

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PLANT LIST

SYMBOL	QTY.	NAMES (BOTANICAL / SCIENTIFIC)	SIZE	ROOT	COMMENTS
SHADE TREES					
RS	30	Acer rubrum 'Red Sunset' / Red Sunset Red Maple	2 1/2-3" Cal.	B&B	
SS	44	Acer rubrum 'Scarlet Sentinel' / Scarlet Sentinel Red Maple	2 1/2-3" Cal.	B&B	
P	44	Platanus x acerifolia 'Bloodgood' / Bloodgood London Planetree	2 1/2-3" Cal.	B&B	
Q	44	Quercus phellos/ Willow Oak	2 1/2-3" Cal.	B&B	
EVERGREEN TREES					
WP	92	Pinus strobus/ White Pine	8'-10' Ht.	B&B	
ORNAMENTAL TREES					
A	24	Amelanchier arborea 'Autumn Sunset' Autumn Sunset Serviceberry	8'-10' Ht.	B&B	
Z	14	Malus 'Zumi' / Zumi Crabapple	8'-10' Ht.	B&B	
SHRUBS					
HH	80	Ilex convexa 'Helleri / Helleri Holly	2-2 1/2' Spr.	B&B	
SP	240	Spiraea x bumalda 'Anthony Waterer' / Anthony Waterer Spirea	18-24' Spr.	Cont.	

NOTE: Seasonal color to be selected by Owner.
*All areas not paved or mulched or planted shall be sodded or seeded.

SCHEDULE A
PERIMETER LANDSCAPE EDGE

Category	Perimeter	
	Adj. to Roadways	Adj. to Perim. Prop.
	D	Internal Perimeter
Landscape Type	E	
Linear Feet of Roadway Frontage/Perimeter	780'	
Credit for Ex. Vegetation (Yes, No, Linear Feet) (describe below if needed)	NO	
Credit for Wall, Fence or Berm (Yes, No, Linear Feet	YES BERM 720'	
Number of Plants Required Shade Trees Evergreen Trees Shrubs	 22 0 15	
Number of Plants Provided Shade Trees Evergreen Trees Other Trees (2:1 subst.) Shrubs (10:1 subst.) (describe plant substitution credits below if needed)	 -- Alternative Compliance...exceeds county req.-- -- Alternative Compliance...exceeds county req.-- -- Alternative Compliance...exceeds county req.-- -- Alternative Compliance...exceeds county req.--	

Schedule 'A' Number of Shade Trees for bonding: 21 x $300 = $ 6,300
Schedule 'A' Number of Evergreen Trees for bonding: 0 x $150 = $ 00.00
Schedule 'A' Number of Shrubs for bonding: 15 x $ 30 = $ 450

TOTAL Estimate for Bonding: $ 6,750

COMMENTS: ______

SCHEDULE B
PARKING LOT INTERNAL LANDSCAPING

Number of Parking Spaces = 421 Spaces

Number of Trees Required = 21 Trees @ 1 per 20 spaces

Number of Trees Provided
Shade Trees 39
Other Trees (2:1 substitution)
NOTE:
Alternative Compliance per HRD's Standards
Alternative Compliance exceeds County requirements

Schedule 'B' Number of Equivalent Shade Trees (EST) for bonding: 21 x $300 = $ 6,300

LANDSCAPING NOTES

1. This plan has been prepared in accordance with Section 16.124 of the Howard County Code and Chapter VI (Alternative Compliance) of the Howard County Landscape Manual.
2. Contractor shall notify all utilities at least (5) five days before starting work. All General Notes, especially those regarding utilities, on Sheet 1 shall apply.
3. Field verify underground utility locations and existing conditions before starting planting work. Contact engineer / landscape architect if any relocations are required.
4. Plant quantities shown on Plant List are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on the plan and those shown on the plant list, the quantities on the plan shall take precedence.
5. All plant material shall be full, heavy, well formed, and symmetrical, and conform to the A.A.N. Specifications, and be installed in accordance with project specifications.
6. No substitution shall be made without written consent of the owner or his representative.
7. All areas disturbed by construction activities but not otherwise planted, paved, or mulched shall be seeded or sodded in accordance with the project specifications.
8. The contractor shall notify the owner in writing if he/she encounters soil drainage conditions which may be detrimental to the growth of the plants.
9. All exposed earth within limits of planting beds shall be mulched with shredded hardwood mulch per Planting Details.
10. "Schedule A - Perimeter Landscape Edge: and "Schedule B - Parking Lot Internal Landscaping" are provided for landscape surety calculation purposes only. Financial surety for the required landscaping shall be posted with the developers agreement in the amount of $13,050.
11. Tabulation for landscape shown:
Required planting by HRD for 13.64 acres of R&D/OFFICE at 22 trees / acre = 300 trees

Planting provided:
Shade Trees (existing and proposed): 102
Ornamental Trees: 38 = 19 E.S.T. 1
Evergreen Trees ([5 existing] and [129 proposed]) 32 = 46 E.S.T. 1
1 E.S.T. - Equivalent Shade Trees
The balance of the HRD required shade trees is provided by proposed shrubs and ground covers

STATE OF MARYLAND
KEVIN A. FOSTER
No. 807
REGISTERED
LANDSCAPE ARCHITECT

PLANT MATERIALS AND PLANTING METHODS

A. Plant Materials

The landscape contractor shall furnish and install and/or dig, ball, burlap and transplant all of the plant materials called for on drawings and/or listed in the Plant Schedule.

1. Plant Names

Plant names used in the Plant Schedule shall conform with "Standardized Plant Names," latest edition.

2. Plant Standards

All plant material shall be equal to or better than the requirements of the "USA Standard for Nursery Stock" latest edition, as published by the American Association of Nurserymen (hereafter referred to as AAN Standards). All plants shall be typical of their species and variety, shall have a normal habit of growth and shall be first quality, sound, vigorous, well-branched and with healthy, well-furnished root systems. They shall be free of disease, insect pests and mechanical injuries.

All plants shall be nursery grown and shall have been grown under the same climate conditions as the location of this project for at least two years before planting. Neither heeled-in plants nor plants from cold storage will be accepted.

3. Plant Measurements

All plants shall conform to the measurements specified in the Plant Schedule as approved by the ARC.

a. Caliper measurements shall be taken six inches (6") above grade for trees under four-inch (4") caliper and twelve (12") above grade for trees four inches (4") in caliper and over.

b. Minimum branching height for all trees shall be six feet (6'), maximum eight feet (8').

c. Minimum size for planting shade trees shall be 3-3?" caliper, 14'-16' in height.

d. Minimum size for planting minor or intermediate focus trees (pines, crabapples, etc.) shall be 3"-3?" caliper, 10'-12' in height.

e. Minimum size for planting shrubs shall be 18" - 24" spread unless noted otherwise.

f. Caliper, height, spread and size of ball shall be generally as follows:

CALIPER	HEIGHT	SPREAD	SIZE OF BALL
3" - 3.5"	14'-16'	6'-8'	32" diameter
3.5"- 4"	14'-16'	8'-10'	36" diameter
4" - 4.5"	16'-18'	8'-10'	40" diameter
4.5"- 5"	16'-17'	10'-12'	44" diameter
5" - 5.5"	16'-20'	10'-12'	48" diameter
5.5"- 6"	18'-20'	12'-14'	52" diameter

All plant material shall generally average the median for the size ranges indicated above as indicated in the "AAN Standards".

4. Plant Identification

Legible labels shall be attached to all shade trees, minor trees, specimen shrubs and bundles or boxes of other plant material giving the botanical and common names, size and quantity of each. Each shipment of plants shall bear certificates of inspection as required by Federal, State and County authorities.

5. Plant Inspection

The ARC may, upon request by the builder or developer, at least ten (10) days prior to the installation of any proposed plant material, inspect all proposed plant material at the source of origin.

B. Planting Methods

All proposed plant materials that meet the specifications in Section A are to be planted in accordance with the following methods during the proper planting seasons as described in the following:

1. Planting Seasons

The planting of deciduous trees, shrubs and vines shall be from March 1st to June 15th and from September 15th to December 15th. Planting of deciduous material may be continued during the winter months providing there is no frost in the ground and frost-free topsoil planting mixtures are used.

The planting of evergreen material shall be from March 15th to June 15th and from August 15th to December 1st. No planting shall be done when ground is frozen or excessively moist. No frozen or wet topsoil shall be used at any time.

2. Digging

All plant material shall be dug, balled and burlapped (B+B) in accordance with the "AAN Standards".

3. Excavation of Plant Pits

The landscaping contractor shall excavate all plant pits, vine pits, hedge trenches and shrub beds in accordance with the following schedule:

a. Locations of all proposed plant material shall be staked and approved in the field by the landscape architect before any of the proposed plant material is installed by the landscape contractor.

b. All pits shall be generally circular in outline, vertical sides; depth shall not be less than 6" deeper than the root ball, diameter shall not be less than two times the diameter of the root ball as set forth in the following schedule.

c. If areas are designated as shrub beds or hedge trenches, they shall be excavated to at least 18" depth minimum. Areas designated for ground covers and vines shall be excavated to at least 12" in depth minimum.

d. Diameter and depth of tree pits shall generally be as follows:

PLANT SIZE	ROOT BALL	PIT DIAMETER	PIT DEPTH
3" - 3.5"cal.	32"	64"	28"
3.5"- 4" cal.	36"	72"	32"
4" - 4.5"cal.	40"	80"	36"
4.5"- 5" cal.	44"	88"	40"
5" - 5.5"cal.	48"	96"	44"
5.5"- 6" cal.	52"	104"	48"

A 20% compaction figure of the soil to be removed is assumed and will be allowed in calculation of extra topsoil. The tabulated pit sizes are for purposes of uniform calculation and shall not override the specified depths below the bottoms of the root balls.

4. Staking, Guying and Wrapping

All plant material shall be staked or guyed, and wrapped in accordance with the following specifications:

a. Stakes: Shall be sound wood 2" x 2" rough sawn oak or similar durable woods, or lengths, minimum 7'-0" for major trees and 5'-0" minimum for minor trees.

b. Wire and Cable: Wire shall be #10 ga. galvanized or bethanized annealed steel wire. For trees over 3" caliper, provide 5/16" turn buckles, eye and eye with 4" take-up. For trees over 5" caliper, provide 3/16", 7 strand cable cadmium plated steel, with galvanized "eye" thimbles of wire and hose on trees up to 3" in caliper.

c. Hose: Shall be new, 2 ply reinforced rubber hose, minimum 1/2" I.D. "Plastic Lock Ties" or "Paul's Trees Braces" may be used in place of wire and hose on trees up to 3" in caliper.

d. All trees under 3" in caliper are to be planted and staked in accordance with the attached "Typical Tree Staking Detail". All trees over 3" in caliper are to be planted and guyed in accordance with the attached "Typical Tree Guying Detail".

5. Plant Pruning, Edging and Mulching

a. Each tree, shrub or vine shall be pruned in an appropriate manner to its particular requirements, in accordance with accepted standard practice. Broken or bruised branches shall be removed with clean cuts flush with the adjacent trunk or branches. All cuts over 1" in diameter shall be painted with an approved antiseptic tree wound dressing.

b. All trenches and shrub beds shall be edged and cultivated to the lines shown on the drawing. The areas around isolated plants shall be edged and cultivated to the full diameter of the pit. Sod which has been removed and stacked shall be used to trim the edges of all excavated areas to the neat lines of the plant pit saucers, the edges of shrub areas, hedge trenches and vine pockets.

c. After cultivation, all plant materials shall be mulched with a 2" layer of fine, shredded pine bark, peat moss, or another approved material over the entire area of the bed or saucer.

6. Plant Inspection and Acceptance

The ARC shall be responsible for inspecting all planting projects on a periodic basis to assure that all work is proceeding in accordance with the approved plans and specifications.

7. Plant Guarantee

All plant material shall be guaranteed for the duration of one full growing season, after final inspection and acceptance of the work in the planting project. Plants shall be alive and in satisfactory growing condition at the end of the guarantee period.

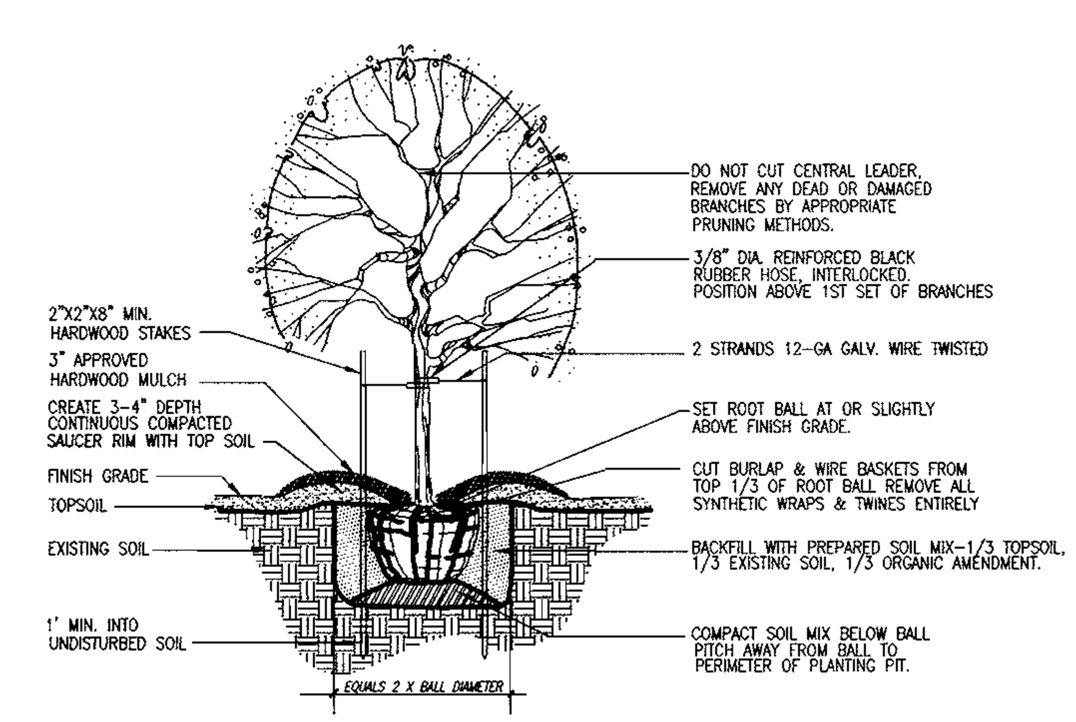
a. For this purpose, the "growing season" shall be that period between the end of the "Spring" planting season, and the commencement of the "Fall" planting season.

b. Guarantee for planting performed after the specified end of the "Spring" planting season, shall be extended through the end of the next following "Spring" planting season.

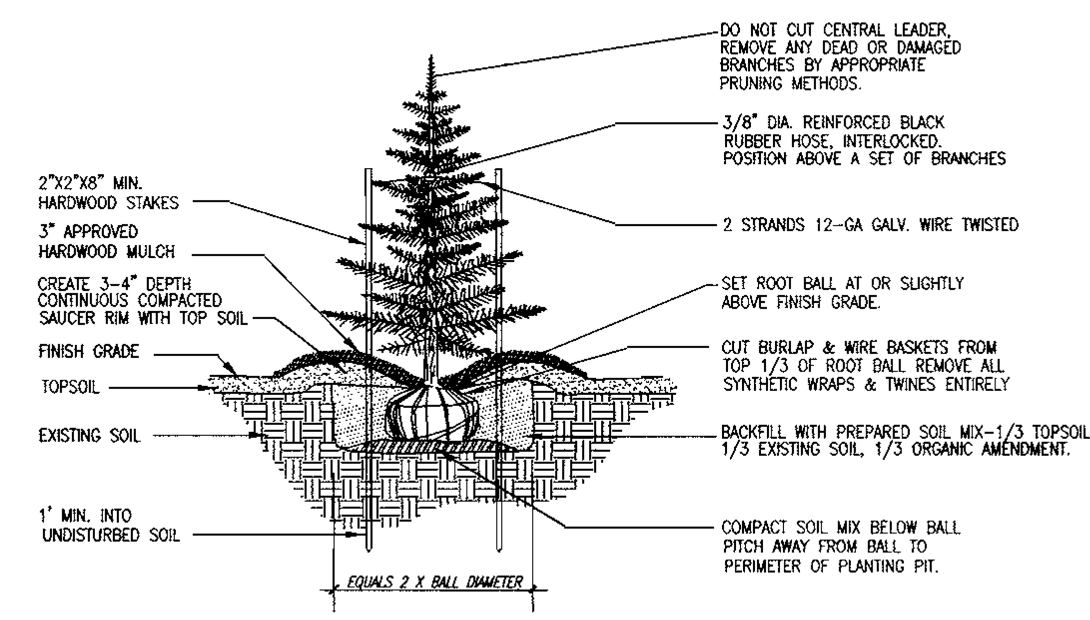
Sodding

All sodding shall be in accordance to the "Landscape Specification Guidelines for Baltimore-Washington metropolitan Areas" latest edition, approved by the Landscape Contractors Association of Metropolitan Washington and the American Society of Landscape Architects.

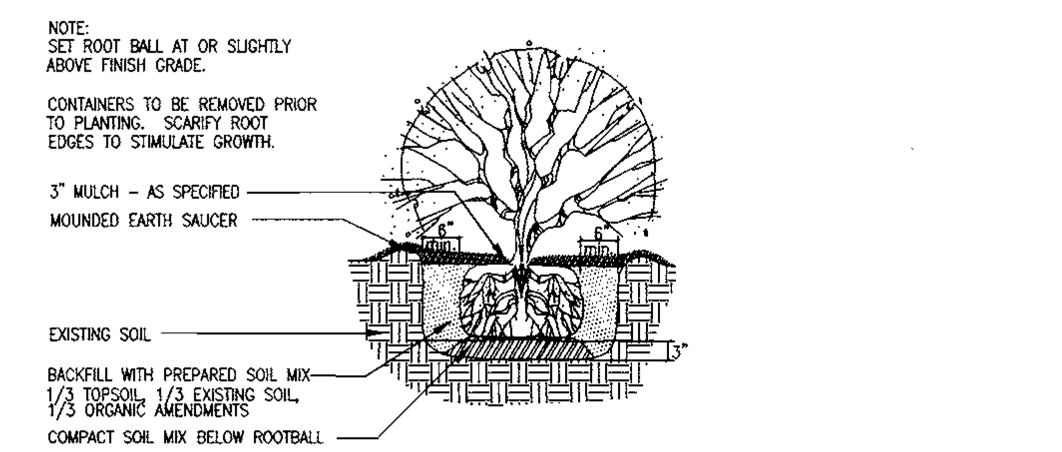
All sod shall be strongly rooted sod, not less than two years old and free of weeds and undesirable native grasses. Provide only sod capable of growth development when planted and in strips not more than 18" wide x 4" long. Provide sod composed principally of improved strain Kentucky bluegrass, such as, Columbia, Victa, or Escort.



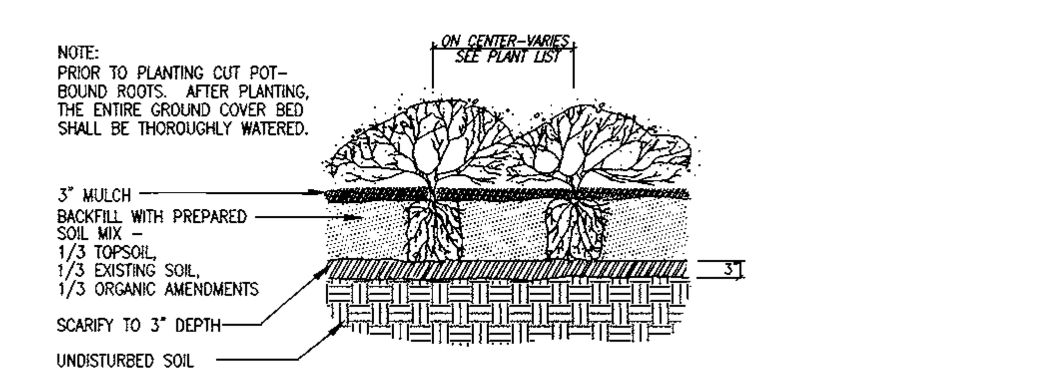
DECIDUOUS TREE PLANTING DETAIL
FOR PLANTING MATERIAL UP TO 3 1/2" CALIPER NTS



EVERGREEN TREE PLANTING DETAIL NTS



SHRUB PLANTING DETAIL NTS



GROUNDCOVER PLANTING DETAIL NTS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director	Date 1/11/01
Chief, Division of Land Development	Date 1/11/01
Chief, Development Engineering Division MK	Date 1/5/01

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

\DRAWINGS\00069\DESIGN\00069LD8.DWG | DES. LMM | DRN. LMM | CHK.

DATE	REVISION	BY	APP'R.

PREPARED FOR:
Gateway 63 Partnership
7165 Columbia Gateway Drive
Columbia, Maryland 21046
Ph: (410) 290-1400
Attn: Mr. Cole Shnorff

LANDSCAPE NOTES & DETAILS
COLUMBIA GATEWAY
PARCEL 'N-11'
PLAT No.
GUILFORD ELECTION DISTRICT No. 6 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
NOT TO SCALE (PLOT AT 1"=1')	M-1	00069
DATE	TAX MAP - GRID	SHEET
JUNE, 2000	42-12	6 OF 12

SDP-00-149

ld8.dwg 11-21-00 4:18:46 pm EST

ENGINEER'S CERTIFICATE

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

12/27/00
Date

DEVELOPER'S/BUILDER'S CERTIFICATE

"I/We certify that all development and/or construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Maryland Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the HSCD."

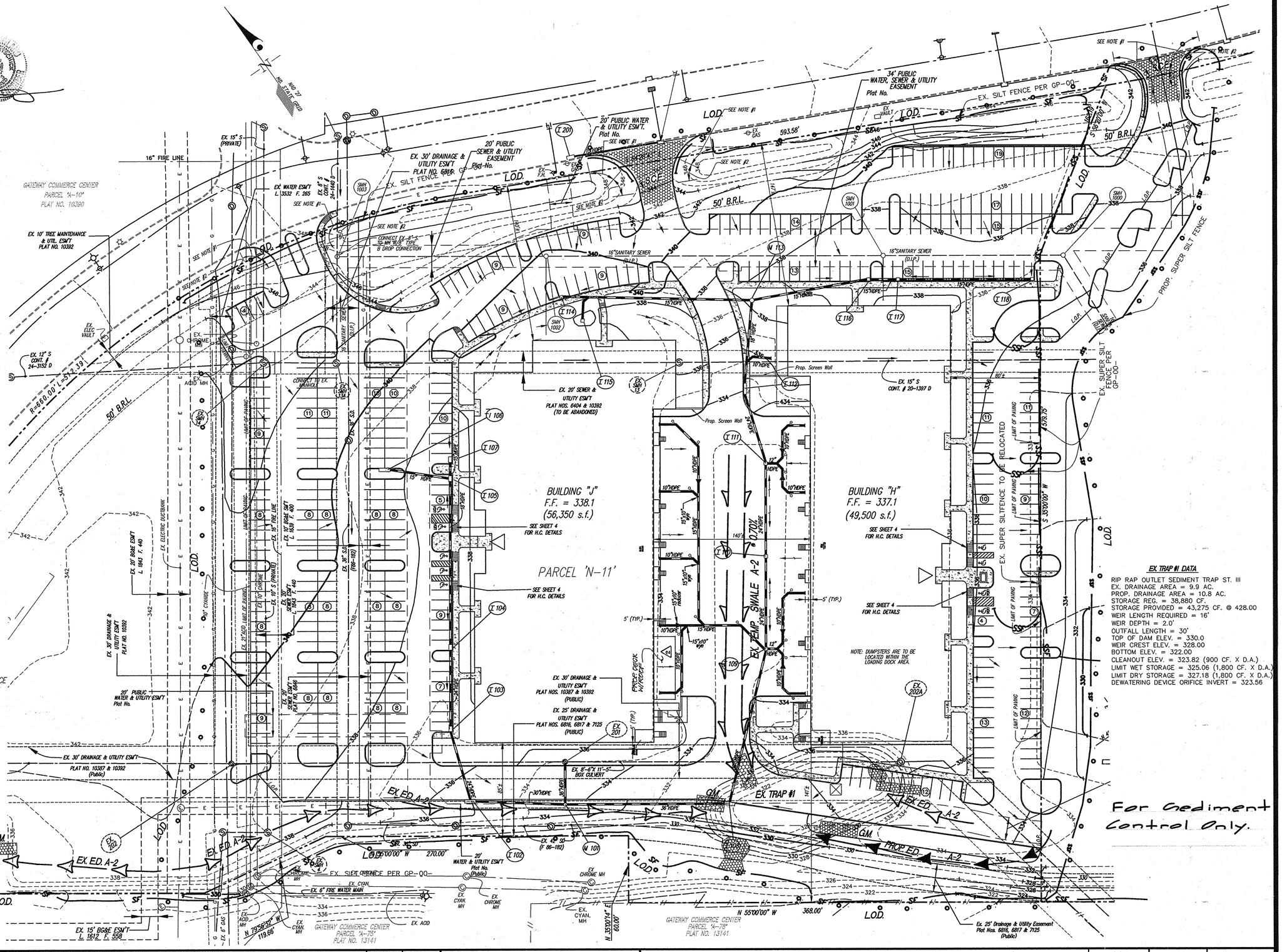
12/27/00
Signature of Developer/Builder Date

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

1/3/01
Howard S.C.D. Date

These Plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

1/3/01
Natural Resources Conservation Service Date



LEGEND

ED. A-1	EX. EARTH DIKE (PER GP-00-)
ED. A-1	PROP. EARTH DIKE
TEMP. SWALE A-1	EX. TEMPORARY SWALE
GM	GABION INFLOW PROTECTION
RPS	REMOVABLE PUMPING STATION
SSF	SUPER SILT FENCE
SF	SILT FENCE
L.O.D.	LIMIT OF DISTURBANCE
324	EXIST. CONTOUR
324	PROPOSED CONTOUR
	BEFORE DEV. D.A.
	BEFORE/AFTER DEV. D.A.
	AFTER DEV. D.A.
S.C.E.	STABILIZED CONSTRUCTION ENTRANCE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director	Date 1/11/01
Chief, Division of Land Development	Date 1/11/01
Chief, Development Engineering Division MK	Date 1/5/01

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
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TEL.: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DES. DEV	DRN. GMB	CHK. DEV
\DRAWINGS\00069\DESIGN\00069SC.DWG		

DATE	REVISION	BY	APP'R.
3/10/15	ADD EXTERIOR DECK, REAR BUILDING J	SEG	
8.22.01	deleted screen wall on Bldgs. H & J		

PREPARED FOR:
Gateway 67 L.L.C.
7165 Columbia Gateway Dr.
Columbia, Maryland 21046
Attn.: Cole Scnorf
Phone: (410) 290-1400

SEDIMENT & EROSION CONTROL PLAN

COLUMBIA GATEWAY
PART OF
PARCEL 'N-11'
PLAT NO. 14298

GUILFORD ELECTION DISTRICT No. 6 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=40'	M-1	00069
DATE	TAX MAP – GRID	SHEET
SEPT., 2000	42-12	7 OF 12

SDP 00-149

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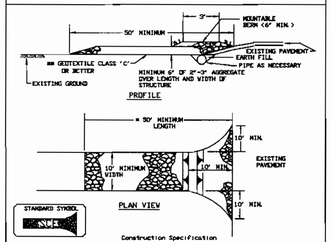
DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE

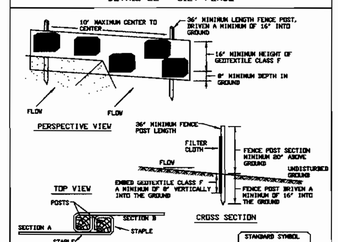


Construction Specification

1. Length - minimum of 50' (*30' for single residence lot).
2. Width - 10' minimum, should be flared at the existing road to provide a turning radius.
3. Geotextile fabric (Filter cloth) shall be placed over the existing ground prior to placing stone. *The plan approval authority may not require single family residences to use geotextile.
4. Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
6. Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE F - 9 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 22 - SILT FENCE



Construction Specifications

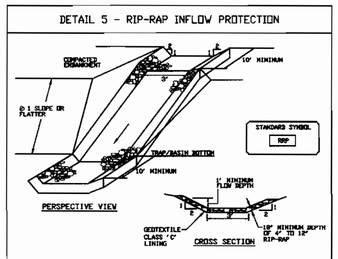
1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1"x2" square (minimum) cut, or 1%" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighing not less than 1.00 pond per linear foot.
2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal/ft²/ minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE F - 9 - 1	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 5 - RIP-RAP INFLOW PROTECTION

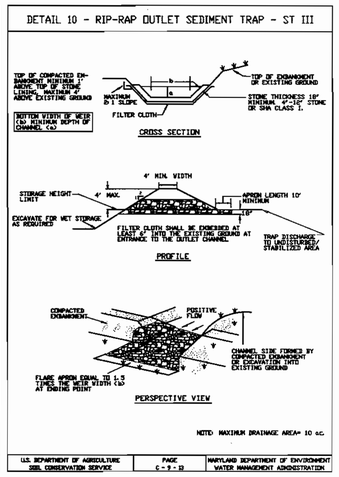


Construction Specifications

1. Rip-rap lined inflow channels shall be 1' in depth, have a trapezoidal cross section with 5:1 or flatter side slopes and 3' (min.) bottom width. The channel shall be lined with 4" to 12" rip- rap to a depth of 18".
2. Filter cloth shall be installed under all rip-rap. Filter cloth shall be Geotextile Class C.
3. Entrance and exit sections shall be installed as shown on the detail section.
4. Rip-rap used for the lining may be recycled for permanent outlet protection if the basin is to be converted to a stormwater management facility.
5. Gabion Inflow Protection may be used in lieu of Rip-rap Inflow Protection.
6. Rip-rap should blend into existing ground.
7. Rip-rap Inflow Protection shall be used where the slope is between 4:1 and 10:1, for slopes flatter than 10:1 use Earth Dike or Temporary Swale lining criteria.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE B - 6 - 2	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 10 - RIP-RAP OUTLET SEDIMENT TRAP - ST III



NOTE: MAXIMUM DRAINAGE AREA= 10 ac.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE C - 9 - 1B	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

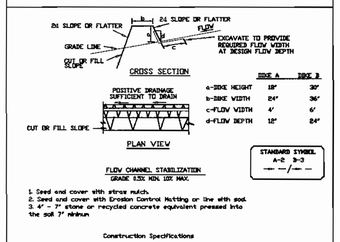
RIP-RAP OUTLET SEDIMENT TRAP - ST III

Construction Specifications

1. The area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. The fill material for the embankment shall be free of roots or other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed. Maximum height of embankment shall be 4', measured at centerline of embankment.
3. All cut and fill slopes shall be 2:1 or flatter.
4. Elevation of the top of any dike directing water into trap must equal or exceed the height of trap embankment.
5. Storage area provided shall be figured by computing the volume measured from top of excavation. (for storage requirements see Table 10).
6. Filter cloth shall be placed over the bottom and sides of the outlet channel prior to placement of stone. Section of fabric must overlap at least 1' with section nearest the entrance placed on top. Fabric shall be embedded at least 6" into existing ground at entrance of outlet channel.
7. Stone used in the outlet channel shall be 4" - 12" placed 18" thick.
8. Outlet - An outlet shall be provided, which includes a means of conveying the discharge in an erosion free manner to an existing stable channel. Protection against scour at the discharge end shall be provided as necessary.
9. Outlet channel must have positive drainage from the trap.
10. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/4 of the wet storage depth of the trap (1250 cf/ac). Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
11. The structure shall be inspected periodically after each rain and repaired as needed.
12. Construction of traps shall be carried out in such a manner that sediment pollution is abated. Once constructed, the top and outside face of the embankment shall be stabilized with seed and mulch. Points of concentrated inflow shall be protected in accordance with Grade Stabilization Structure criteria. The remainder of the interior slopes should be stabilized (one time) with seed and mulch upon trap completion and monitored and maintained erosion free during the life of the trap.
13. The structure shall be dewatered by approved methods, removed and the area stabilized when the drainage area has been properly stabilized.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE C - 9 - 1BA	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 1 - EARTH DIKE



	SWALE A	SWALE D
a-DIKE HEIGHT	18"	30"
b-DIKE WIDTH	24"	36"
c-FLOW WIDTH	4'	6'
d-FLOW DEPTH	12"	24"

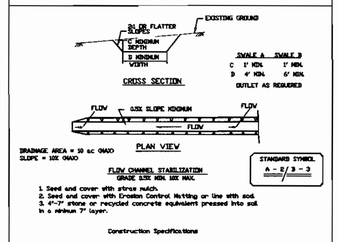
1. Seed and cover with straw mulch.
2. Seed and cover with Erosion Control Matting or line with sod.
3. 4" - 7" stone or recycled concrete equivalent pressed into the soil 7" minimum

Construction Specifications

1. All temporary earth dikes shall have uninterrupted positive grade to an outlet. Spot elevations may be necessary for grades less than 1%.
2. Runoff diverted from a disturbed area shall be conveyed to a sediment trapping device.
3. Runoff diverted from an undisturbed area shall outlet directly into an undisturbed, stabilized area at a non-erosive velocity.
4. All trees, brush, stumps, obstructions, and other objectional material shall be removed and disposed of so as not to interfere with the proper functioning of the dike.
5. The dike shall be excavated or shaped to line, grade and cross section as required to meet the criteria specified herein and be free of back projections or other irregularities which will impede normal flow.
6. Fill shall be compacted by earth moving equipment.
7. All earth removed and not needed for construction shall be placed so that it will not interfere with the functioning of the dike.
8. Inspection and maintenance must be provided periodically and after each rain event.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE A - 1 - 4	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 2 - TEMPORARY SWALE



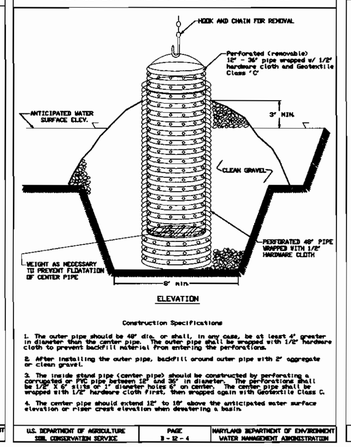
1. Seed and cover with straw mulch.
2. Seed and cover with Erosion Control Matting or line with sod.
3. 4"-7" stone or recycled concrete equivalent pressed into soil to a minimum 7" layer.

Construction Specifications

1. All temporary swales shall have uninterrupted positive grade to an outlet. Spot elevations may be necessary for grades less than 1%.
2. Runoff diverted from a disturbed area shall be conveyed to a sediment trapping device.
3. Runoff diverted from an undisturbed area shall outlet directly into an undisturbed stabilized area at a non-erosive velocity.
4. All trees, brush, stumps, obstructions, and other objectional material shall be removed and disposed of so as not to interfere with the proper functioning of the swale.
5. The swale shall be excavated or shaped to line, grade and cross section as required to meet the criteria specified herein and be free of back projections or other irregularities which will impede normal flow.
6. Fill, if necessary, shall be compacted by earth moving equipment.
7. All earth removed and not needed for construction shall be placed so that it will not interfere with the functioning of the swale.
8. Inspection and maintenance must be provided periodically and after each rain event.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE A - 2 - 4	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 20A - REMOVABLE PUMPING STATION

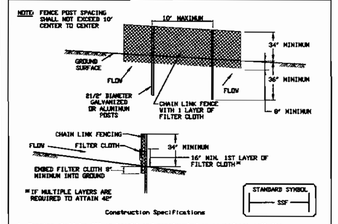


Construction Specifications

1. The outer pipe should be 48" dia. or shall, in any case, be at least 4" greater in diameter than the center pipe. The outer pipe shall be wrapped with 1/2" hardware cloth to prevent backfill material from entering the perforations.
2. After installing the outer pipe, backfill around outer pipe with 2" aggregate or clean gravel.
3. The inner pipe pipe (center pipe) should be constructed by perforating a corrugated metal pipe between 18" and 36" in diameter. The perforations shall be 1/2" X 4" slits or 1" diameter holes 6" on center. The center pipe shall be wrapped with 1/2" hardware cloth first, then wrapped again with Geotextile Class C.
4. The center pipe should extend 12" to 18" above the anticipated water surface elevation or riser crest elevation when dewatering a basin.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE B - 12 - 4	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 33 - SUPER SILT FENCE



Construction Specifications

1. Fencing shall be 48" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length posts.
2. Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.
3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
4. Filter cloth shall be embedded a minimum of 6" into the ground.
5. When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
6. Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height
7. Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal/ft²/minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE H - 26 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

PERMANENT SEEDING NOTES

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

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

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

1) Preferred – Apply 2 tons per acre dolomitic limestone (92 lbs/1000 square feet) and 600 lbs per acre 10–10–10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30–0–0 unreaform fertilizer (9 lbs/1000 sq ft).

2) Acceptable – Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10–10–10 fertilizer (23 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil.

Seeding: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lbs/1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching: Apply 1–1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

Maintenance: Inspect all seeded areas and make needed repairs, replacements and reseedings.

TEMPORARY SEEDING NOTES

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

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

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

Seeding: For periods March 1 thru April 30 and from August 15 thru October 15, seed with 2–1/2 bushel per acre of annual rye (3.2 lbs./1000 sq.ft.). For the period May 1 thru August 14, seed with .3 lbs per acre of weeping lovegrass (.007 lbs/1000 sq ft). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

Mulching: Apply 1–1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted, weed–free, small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes, 8 ft or higher, use 348 gal per acre (8 gal/1000 sq ft) for anchoring.

Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

SEDIMENT CONTROL NOTES

1. A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (410) 313–1855.

2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

3. Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes and perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.

4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.

5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings, sod, temporary seeding and mulching (Sec. G). Temporary stabilization, with mulch alone, can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.

6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.

7. Site Analysis:

Total Area of Site	:	14.2 Acres±
Area Disturbed	:	12.2 Acres±
Area to be roofed or paved	:	7.65 Acres
Area to be vegetatively stabilized	:	4.55 Acres±
Total Cut	:	18.50 Cu. Yds.
Total Fill	:	18.50 Cu. Yds.
Off-site waste/borrow area location: GATEWAY PARCEL T-6		

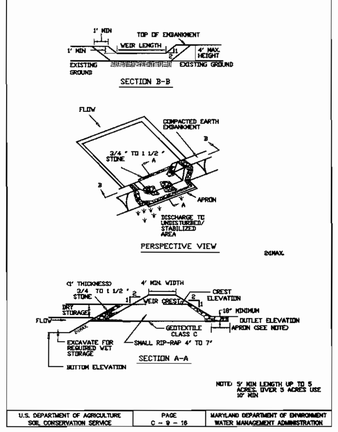
8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.

9. Additional sediment control must be provided, if deemed necessary by the Howard County DPW Sediment Control Inspector.

10. 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.

11. Trenches for the construction of utilities is limited to 3 pipe lengths or that which shall be backfilled and stabilized within one working day, whichever is shorter.

DETAIL 10A - STONE/ RIP-RAP OUTLET SEDIMENT TRAP - ST IV



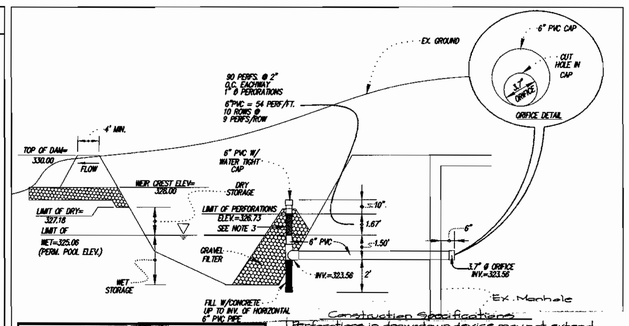
U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE C - 9 - 1B	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

STONE /RIP-RAP OUTLET SEDIMENT TRAP - ST IV

Construction Specifications

1. The area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. The fill material for the embankment shall be free of roots or other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed. Maximum height of embankment shall be 4', measured at centerline of embankment.
3. All cut and fill slopes shall be 2:1 or flatter.
4. Elevation of the top of any dike directing water into trap must equal or exceed the height of trap embankment.
5. Storage area provided shall be figured by computing the volume measured from top of excavation. (for storage requirements see Table 10).
6. Geotextile Class C shall be placed over the bottom and sides of the outlet channel prior to placement of stone. Section of fabric must overlap at least 1' with section nearest the entrance placed on top. Fabric shall be embedded at least 6" into existing ground at entrance of outlet channel.
7. 4" - 7" stone shall be used to construct the weir and 4" - 12" or Class I rip-rap shall be used to construct the outlet channel.
8. Outlet - An outlet shall include a means of conveying the discharge in an erosion free manner to an existing stable channel. Protection against scour at the discharge point shall be provided as necessary.
9. Outlet channel must have positive drainage from the trap.
10. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 of the wet storage depth of the trap (900 cf/ac). Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
11. The structure shall be inspected periodically after each rain and repaired as needed.
12. Construction of traps shall be carried out in such a manner that sediment pollution is abated. Once constructed, the top and outside face of the embankment shall be stabilized with seed and mulch. Points of concentrated inflow shall be protected in accordance with Grade Stabilization Structure criteria. The remainder of the interior slopes should be stabilized (one time) with seed and mulch upon trap completion and monitored and maintained erosion free during the life of the trap.
13. The structure shall be dewatered by approved methods, removed and the area stabilized when the drainage area has been properly stabilized.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE C - 9 - 18A	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



Construction Specifications

1. Perforations in drawdown device may not extend into wet storage.
2. The total area of the perfs must be greater than 4 times the area of internal orifice.
3. The perforated portion of the drawdown device shall be wrapped w/ 1/2" hardware cloth & geotextile fabric. The geotextile fabric shall meet the specs for Geotextile Class B.
4. Provide support at drawdown device to prevent sagging & flotation.

Dewatering Device @ Trap #1
N.T.S.

APPROVED: Howard County Dept. of Planning & Zoning

Director	Date 1/11/01
Chief, Div. of Land Development	Date 1/11/01
Chief, Development Engineering Div. HK	Date 1/5/01

SEQUENCE OF CONSTRUCTION

1)Obtain grading permit and arrange on-site pre-construction meeting with sediment control inspector. (1 day)

2)Inspect and repair existing sediment control devices constructed under GP 00- , adjust earth dikes/swales as necessary in order to provide positive drainage. (1 week)

3)construct water and sewer from existing stubs to the buildings and install the storm drain system. (2months)

4) Construct buildings. (9 months)

5) Fine grade the site. (2 weeks)

6) Install curb and gutter, sidewalk and base paving except in the area of the sediment trap. Stabilize all remaining areas with grass, seed and mulch. (2 weeks)

7) When areas draining to the sediment control devices have been stabilized and permission is granted from the sediment control inspector, backfill the sediment trap and remove sediment control devices. (2 weeks)

8) Install surface paving. (1 week)

9) Install landscaping. (1 week)

10) Remove any remaining sediment control devices and stabilize areas (1 week)

DEVELOPER'S/BUILDER'S CERTIFICATE

"I/We certify that all development and/or construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Maryland Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the HSCD."

Signature of Developer/Builder — Date 12/27/00

ENGINEER'S CERTIFICATE

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

STATE OF MARYLAND — CARLTON S. GUTSCHICK — No. 29975 — PROFESSIONAL ENGINEER

Date 12/27/00

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

Natural Resources Conservation Service — Date 1/3/01

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

Howard S.C.D. — Date 1/3/01

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

\DRAWINGS\00069\DESIGN\00069SC1 | DES. MCF | DRN. GMB | CHK. DEV

DATE	REVISION	BY	APP'R.

PREPARED FOR :
GATEWAY 67 L.L.C.
7165 COLUMBIA GATEWAY DRIVE
COLUMBIA, MD. 21046
PH: 410-290-1400
ATTN: COLE SCHNORF

SEDIMENT CONTROL NOTES AND DETAILS

COLUMBIA GATEWAY
PART OF PARCEL 'N-11'
PLAT No. 14298

GUILFORD ELECTION DISTRICT No. 6 — HOWARD COUNTY, MARYLAND

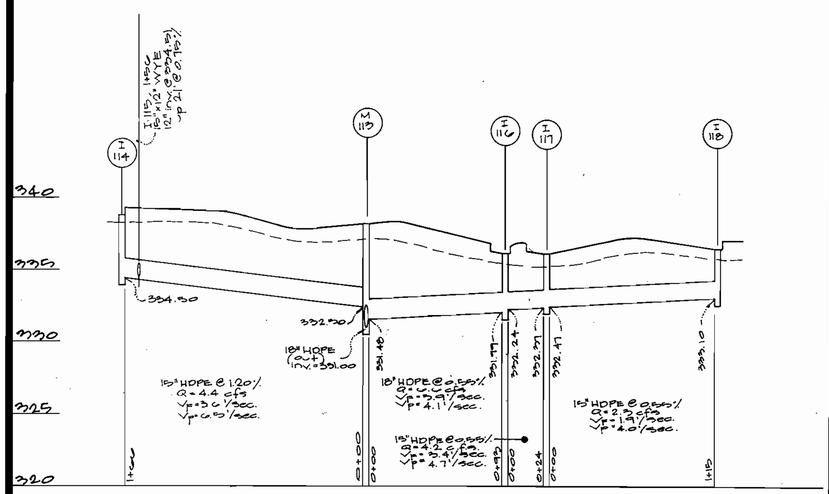
SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	M-1	00069
DATE	TAX MAP – GRID	SHEET
SEPT., 2000	42 - 12	8 OF 12

SDP-00-149

PIPE SCHEDULE			
SIZE	TYPE	QUANTITY (L.f.)	REMARKS
10"	HDPE	423	
12"	"	102	
15"	"	736	
18"	"	224	
24"	"	190	
30"	"	232	
36"	HDPE	309	

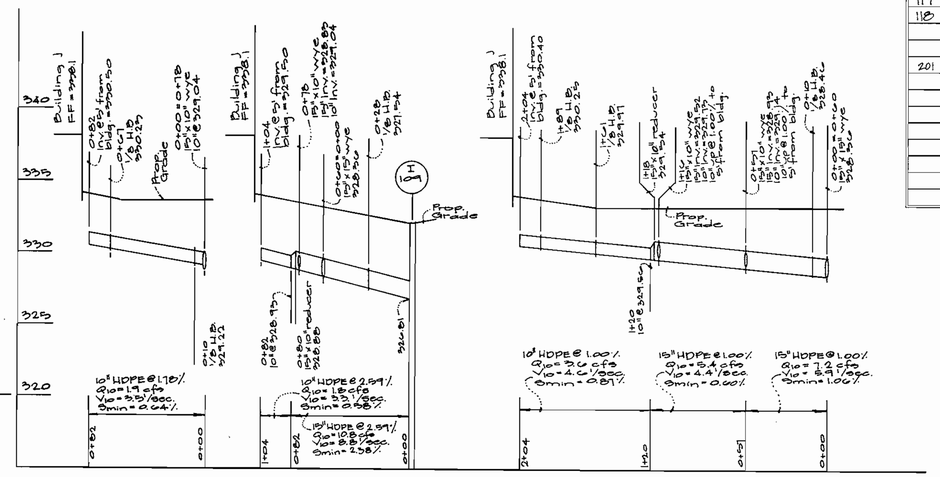
HDPE: High Density Polyethelene double wall, smooth interior must meet AASHTO M-294.

STRUCTURE SCHEDULE									
NO	TYPE	WIDTH (INSIDE)	TOP ELEVATION UPPER	TOP ELEVATION LOWER	INVERT ELEVATION UPPER	INVERT ELEVATION LOWER	STD. DETAIL	LOCATIONS	REMARKS
101	Pre Cast MH	72" Diam	339.0	339.0	336.50 / 336.50	329.00			
102	A-10	60" Diam	330.03	333.71	328.6	327.80	Ho. Co. SD 4.41		
103	WR Inlet	std	332.40	—	329.9	329.00	Ho. Co. SD 4.35		
104	WR Inlet		331.11	—	331.0	330.4	Ho. Co. SD 4.35		
105	WR Inlet	↓	337.20	—	337.0	336.6	Ho. Co. SD 4.35		
106	COG-15	48" Diam	338.94	338.72	333.5	—	MD 374.02		
107	WR Inlet	std	337.20	—	333.5	—	Ho. Co. 4.35		
108	A-10	72" Diam	332.60	332.60	324.4	324.4	Ho. Co. SD 4.41		
109	Shallow MH w/Grate	48"	332.70	—	328.4 / 328.4	328.1	69.05 (Modified)	Place WR Grate in top slab MD 374.02	
110	WR Inlet	std	332.70	—	326.6	326.3	Ho. Co. SD 4.35		
111	WR Inlet	std	332.70	—	328.4 / 328.1	327.0	Ho. Co. SD 4.35		
112	A-10	48" Diam	334.76	334.41	331.0	328.6	Ho. Co. SD 4.41		
113	Pre Cast MH	48" Diam	338.20	—	332.5 / 332.5	331.0			
114	WR Inlet	std	338.88	—		334.4	Ho. Co. SD 4.35		
116	WR Inlet		330.15	—	332.24	331.99	Ho. Co. SD 4.35		
117	WR Inlet	↓	330.15	—	332.47	332.37	Ho. Co. SD 4.35		
118	WR Inlet	std	330.56	—	—	333.1	Ho. Co. SD 4.35		
201	Doub. 'S' Comb.	std.	346.18*	346.18*	—	342.18	Ho. Co. SD 4.34	*to be field verified	



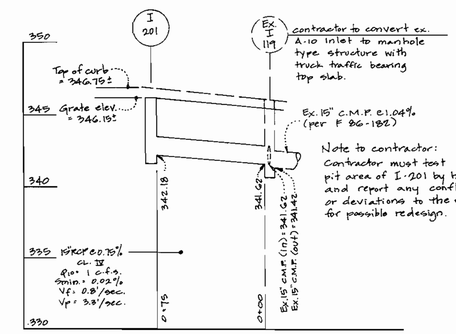
Storm Drain Profile

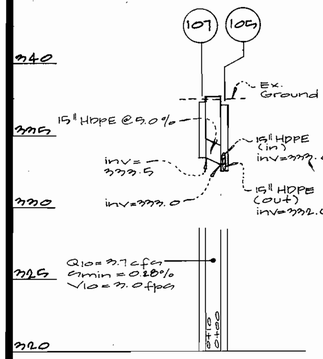
scale: 1" = 50' (horz.) 1" = 5' (Vert.)

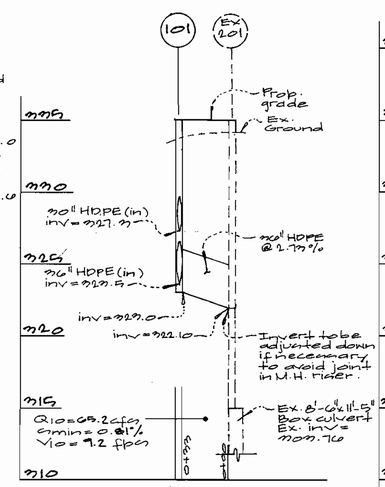


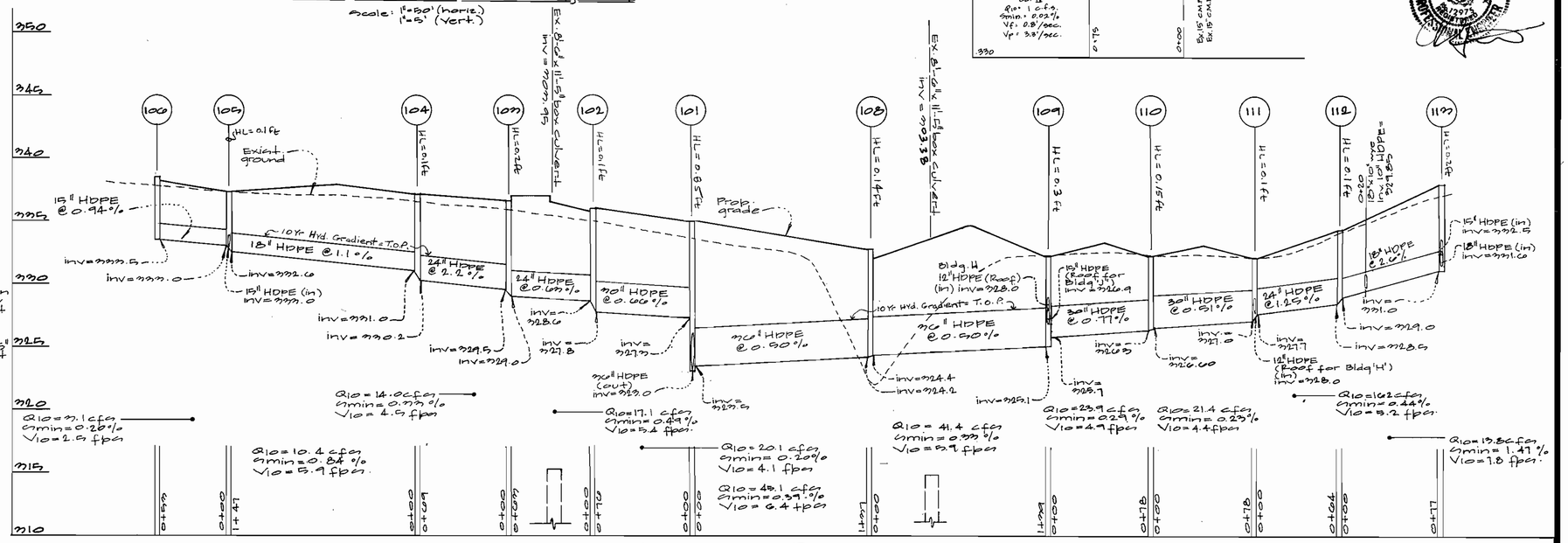
Roof Drains for Building "J"

scale: 1" = 50' (horiz.) 1" = 5' (Vert.)









Storm Drain Profile

scale: 1" = 50' (horz.) 1" = 5' (Vert.)

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director	Date 1/11/01
Chief, Division of Land Development	Date 1/11/01
Chief, Development Engineering Division MK	Date 1/5/01

GLW GUTSCHICK LITTLE & WEBER, P.A.

CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

\DRAWINGS\00069\DESIGN\00069sd1.DWG | DES. | DRN. | CHK.

DATE	REVISION	BY	APP'R.

PREPARED FOR:
Gateway 01 LLC
7165 COLUMBIA GATEWAY DRIVE
COLUMBIA, MD. 21046
PH: 410-290-1400
ATTN: MR. COLE SCHNORF

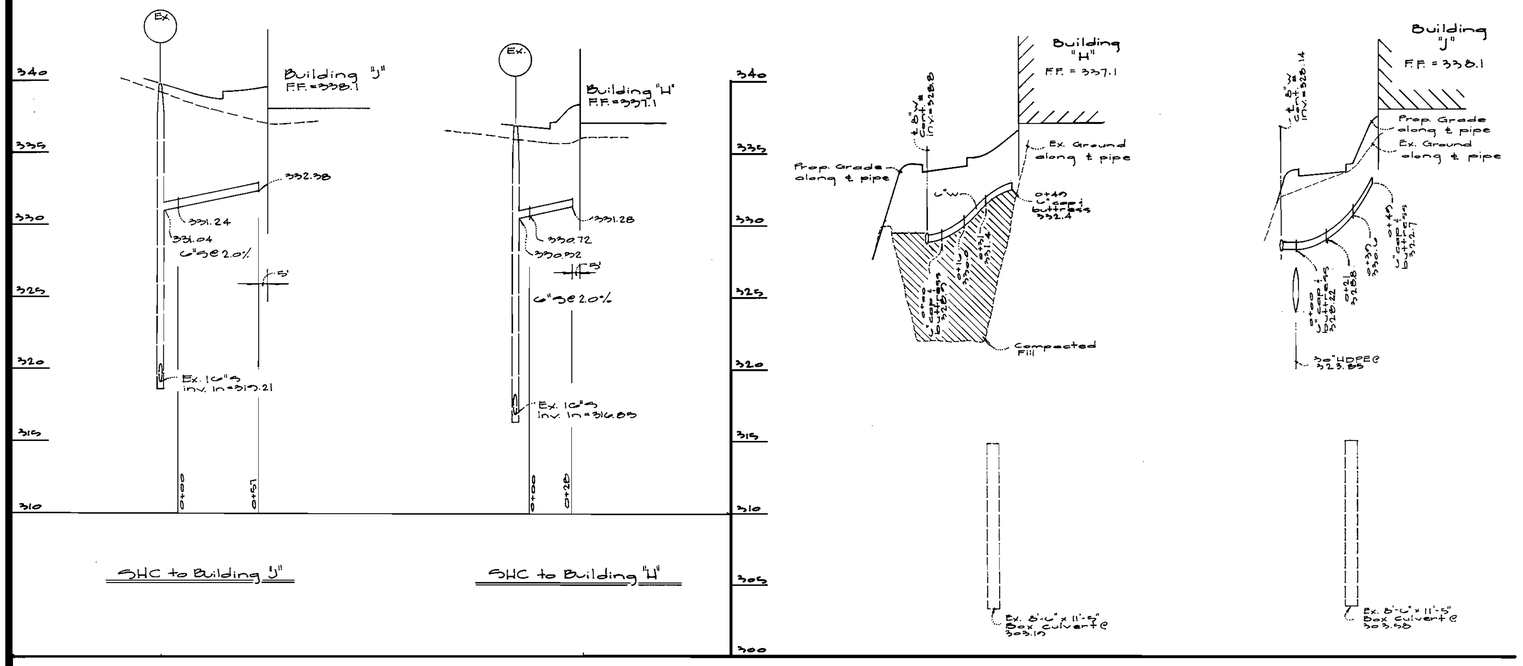
STORM DRAIN PROFILES

COLUMBIA GATEWAY
PARCEL 'N-11'
PLAT No.

GUILFORD ELECTION DISTRICT No. 6 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	M-1	00069
DATE	TAX MAP – GRID	SHEET
Sept. 2000	42 – 12	9 OF 12

SDP 00-149



Profiles

Scale: Horz.: 1" = 50'
Vert.: 1" = 5'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director	Date 1/11/01
Chief, Division of Land Development	Date 1/11/01
Chief, Development Engineering Division MK	Date 1/5/01

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

\DRAWINGS\00069\DESIGN\00069sd1.DWG	DES.	DRN.	CHK.

DATE	REVISION	BY	APP'R.

PREPARED FOR:
Gateway 27 LLC
7165 COLUMBIA GATEWAY DRIVE
COLUMBIA, MD. 21046
PH: 410-290-1400
ATTN: MR. COLE SCHNORF

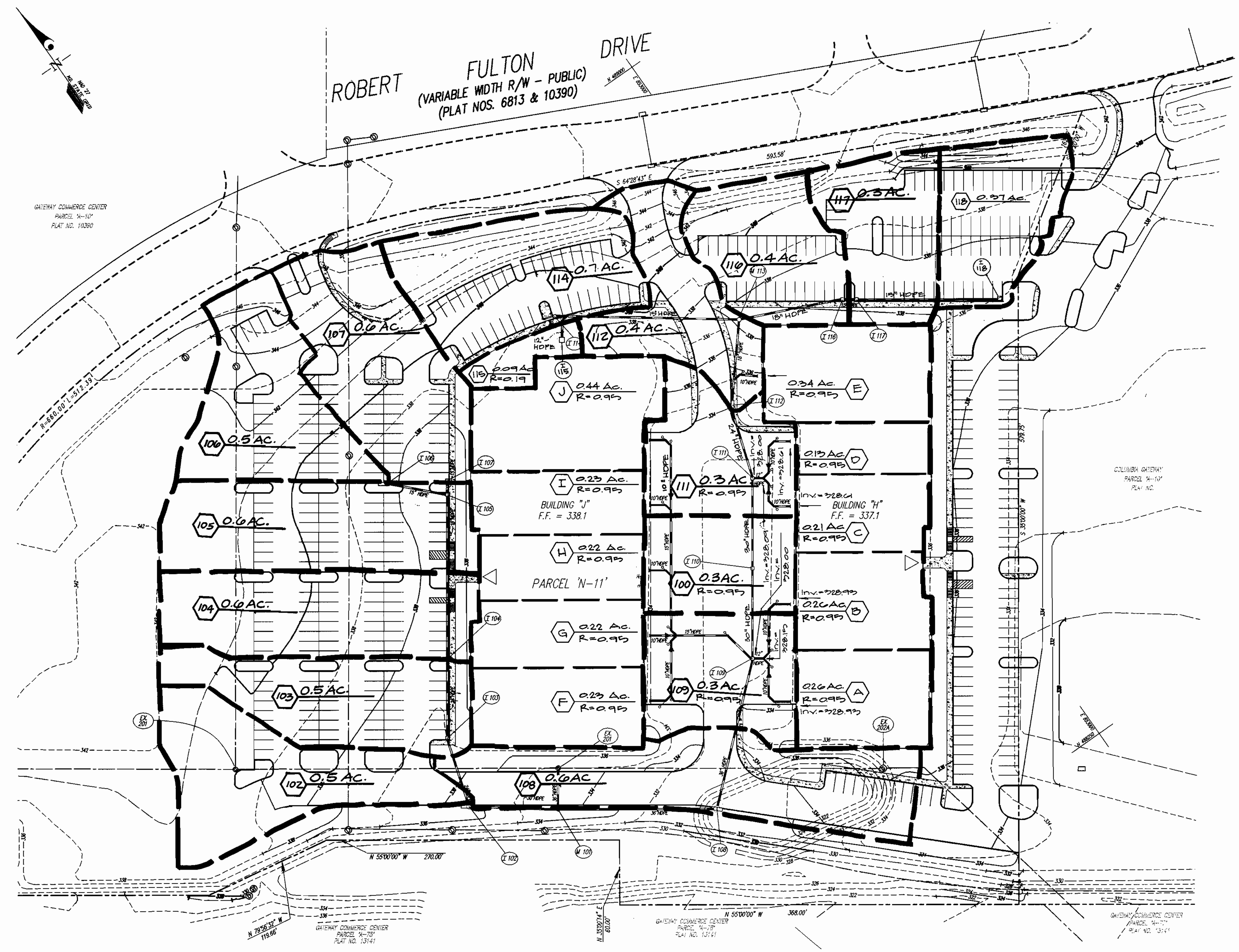
WATER & SEWER PROFILES

COLUMBIA GATEWAY
PARCEL 'N-10, 11 & 12'
PLAT No.

GUILFORD ELECTION DISTRICT No. 6 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	M-1	00069
DATE	TAX MAP – GRID	SHEET
Sept, 2000	42 – 12	10 OF 12

SDP 00-149



NOTES

1. ALL 'R' VALUES ARE 0.72 UNLESS NOTED
2. C SOILS WERE USED TO DESIGN THE IMPROVEMENTS DUE TO THE PREVIOUS MASS GRADING OPERATIONS ON THE SITE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director	Date 1/11/01
Chief, Division of Land Development	Date 1/11/01
Chief, Development Engineering Division MK	Date 1/5/01

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

\DRAWINGS\00069\DESIGN\00069DA8.DWG	DES. DEV	DRN. GMB	CHK. DEV

DATE	REVISION	BY	APP'R.

PREPARED FOR :
Gateway 67 LLC
7165 Columbia Gateway Dr.
Columbia, Maryland 21046
Attn.: Cole Scnorf
Phone: (410) 290-1400

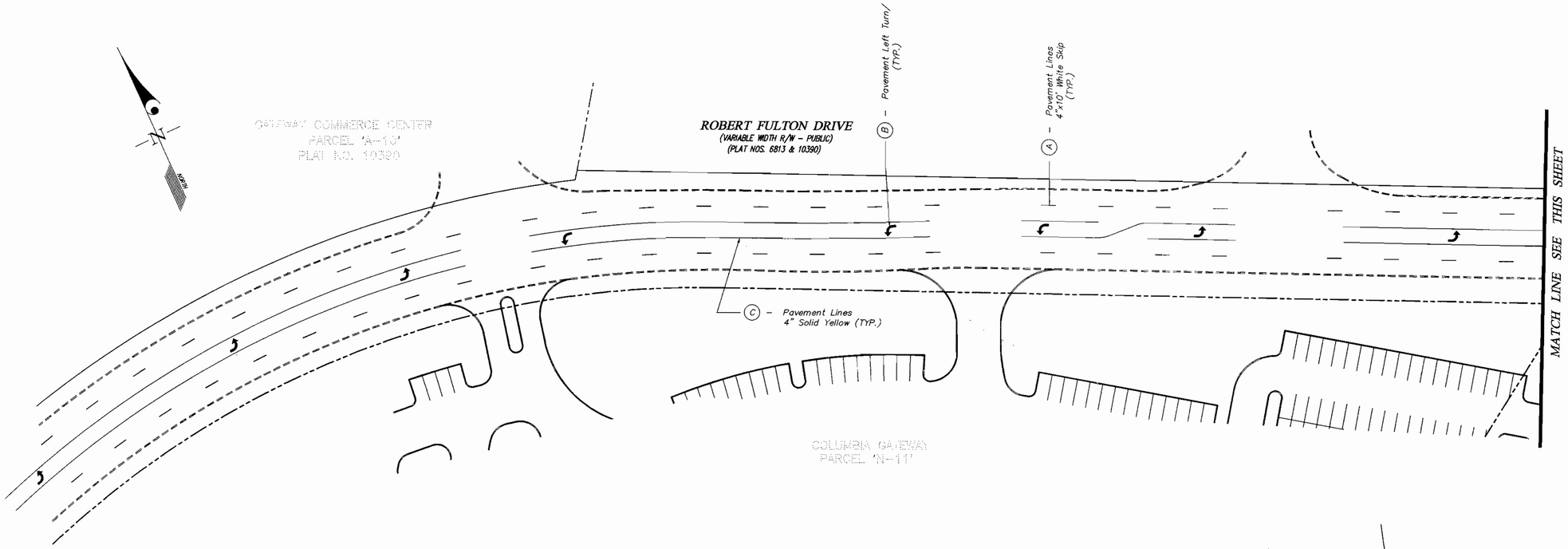
DRAINAGE AREA MAP

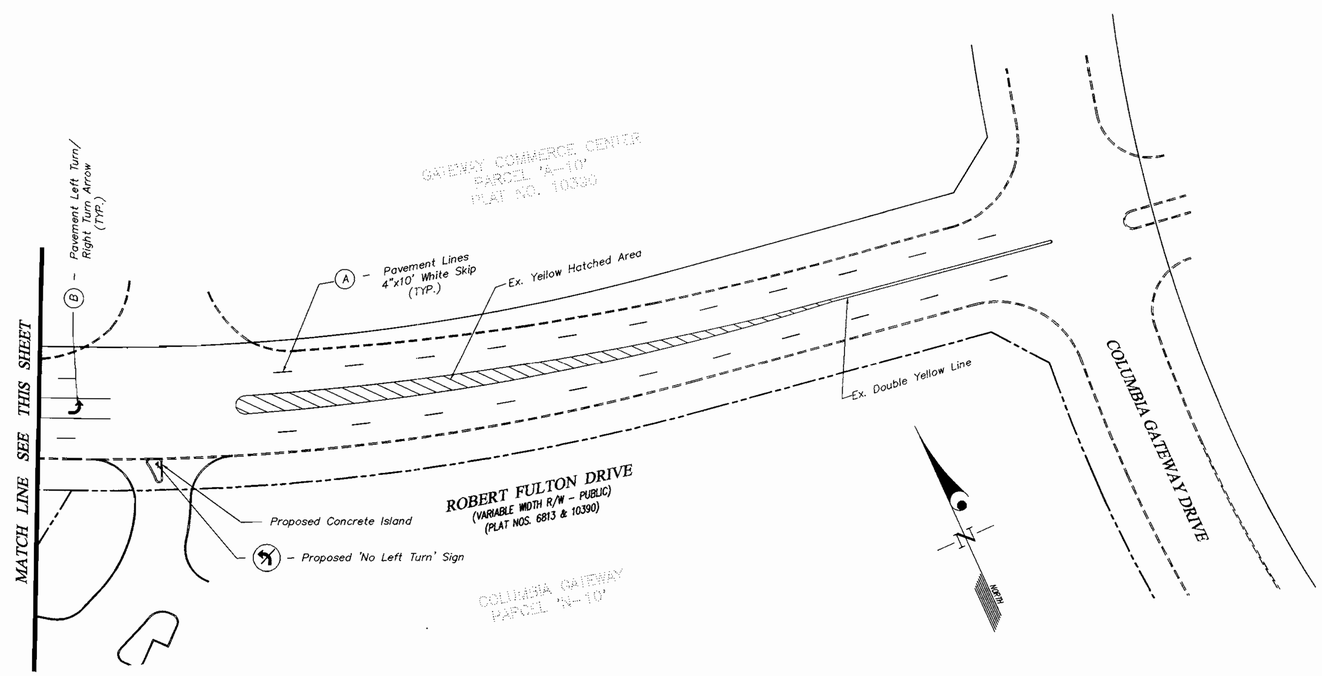
COLUMBIA GATEWAY
PART OF
PARCEL 'N-11'
PLAT NO.

GUILFORD ELECTION DISTRICT No. 6 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=50'	M-1	00069
DATE	TAX MAP - GRID	SHEET
Sept., 2000	42-12	11 OF 12

SDP 00-149





PAVEMENT MARKING NOTES

1. ALL PAVEMENT MARKINGS TO BE APPLIED USING "SETFAST PREMIMUM ALKYD TRAFFIC PAINT" BY SHERWIN WILLIAMS OR APPROVED EQUAL.
2. EXISTING PAVEMENT MARKINGS THAT ARE IN CONFLICT WITH THE PROPOSED PAVEMENT MARKINGS FOR THIS CONTRACT WILL BE REMOVED BY THE CONTRACTOR BY ANY METHOD WHICH IS APPROVED BY THE COUNTY INSPECTOR.

LEGEND

(A) - PAVEMENT LINES - 4" X 10' WHITE SKIP

(B) - PAVEMENT SYMBOL - LEFT TURN/RIGHT TURN ARROW

(C) - PAVEMENT LINES - 4" SOLID YELLOW

Final striping is shown hereon. Contractor shall inspect existing striping patterns to determine changes required to implement this plan.

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

County Health Officer — Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director — Date 1/11/01

Chief, Division of Land Development — Date 1/11/01

Chief, Development Engineering Division MK — Date 1/5/01

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

\DRAWINGS\00069\0069STR.dwg	DES.	DRN.	CHK.

DATE	REVISION	BY	APP'R.

PREPARED FOR :
Gateway 67 L.L.C.
7165 Columbia Gateway Dr.
Columbia, Maryland 21046
Attn: Cole Schnarf
Phone: (410) 290-1400

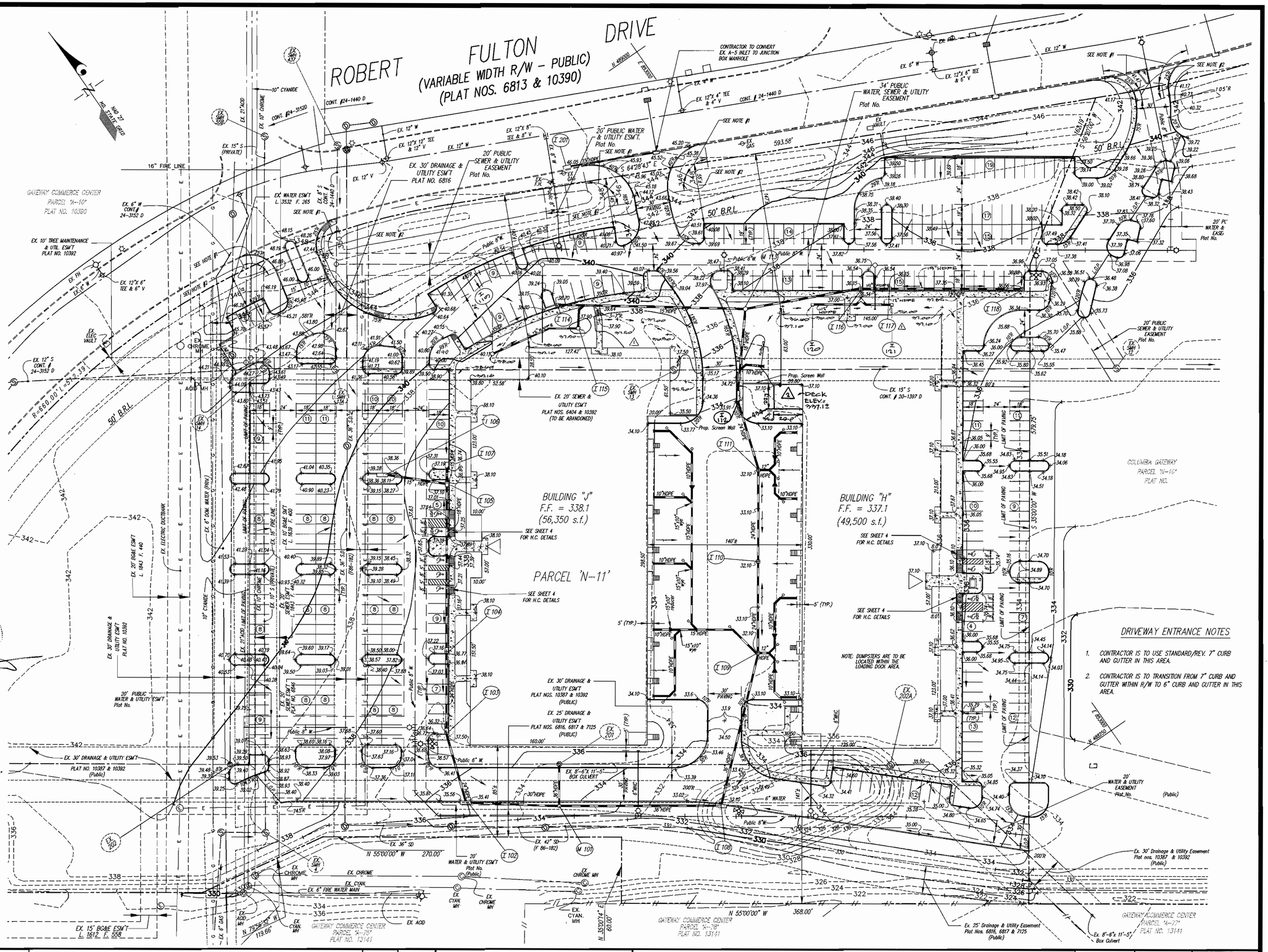
STRIPING PLAN

COLUMBIA GATEWAY
PART OF
PARCEL 'N-11'
PLAT NO. 14298

GUILFORD ELECTION DISTRICT No. 6 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=40'	M-1	00069
DATE	TAX MAP - GRID	SHEET
SEPT., 2000	42-12	12 OF 12

SDP-00-149



STREET LIGHT NOTES

☼ DENOTES STREET LIGHT

LEGEND

- STANDARD 6" CURB & GUTTER
- REVERSE 6" CURB & GUTTER
- EXISTING CURB
- +22.95 PROPOSED SPOT ELEVATION
- 324 EXISTING CONTOUR
- 324 PROPOSED CONTOUR
- △ ENTRANCE THAT IS HANDICAP ACCESSIBLE
- ▲ ENTRANCE THAT IS NOT HANDICAP ACCESSIBLE

DRIVEWAY ENTRANCE NOTES

1. CONTRACTOR IS TO USE STANDARD/REV. 7" CURB AND GUTTER IN THIS AREA.
2. CONTRACTOR IS TO TRANSITION FROM 7" CURB AND GUTTER WITHIN R/W TO 6" CURB AND GUTTER IN THIS AREA.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director	Date 1/11/01
Chief, Division of Land Development	Date 1/11/01
Chief, Development Engineering Division MK	Date 1/5/01

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
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\DRAWINGS\00069\DESIGN\00069SP8.DWG | DES. DEV | DRN. GMB | CHK. DEV

DATE	REVISION	BY	APP'R.
7-12-00	Add Deck Addition To Corner Of Building "H" 2		
8.7.01	deleted screen wall on Bldgs. H & J		
9.7.01	1 rev. plan to add I 110, I 120, I 121, and prop. grading as needed		

PREPARED FOR:

Gateway 67 L.L.C.
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Columbia, Maryland 21046
Attn.: Cole Scnorf
Phone: (410) 290-1400

SITE DEVELOPMENT PLAN

COLUMBIA GATEWAY
PART OF PARCEL 'N-11'
PLAT NO. 14298

GUILFORD ELECTION DISTRICT No. 6 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=40'	M-1	00069
DATE	TAX MAP – GRID	SHEET
SEPT., 2000	42-12	2 OF 12

SDP 00 149

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