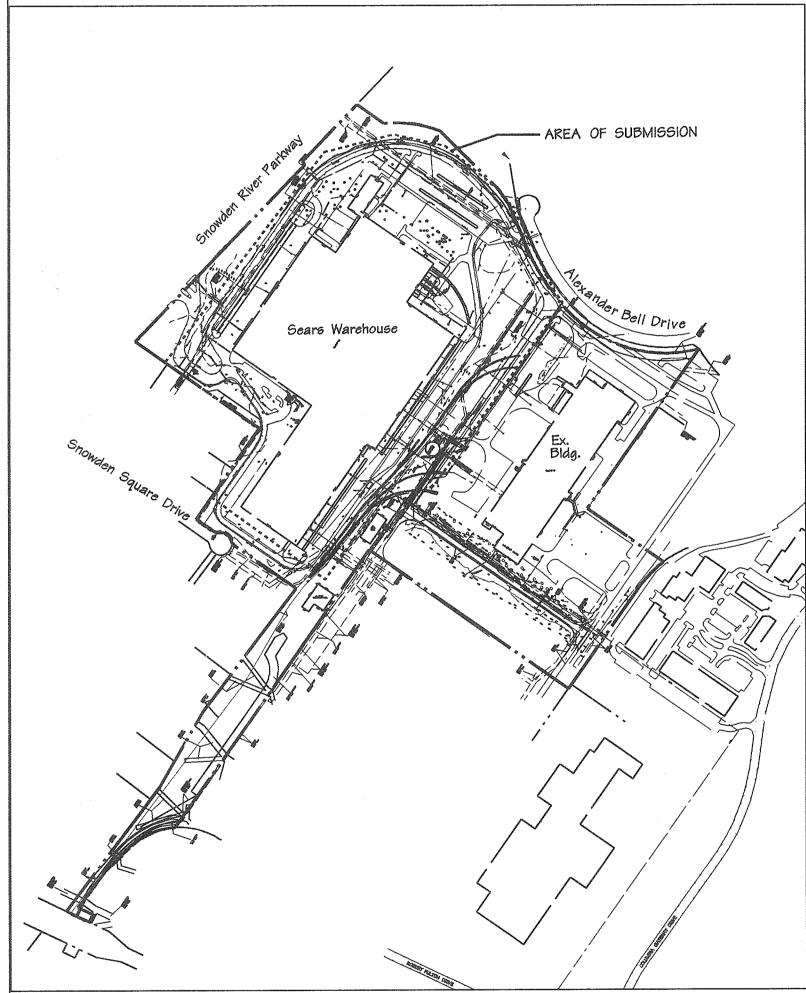
Sheet Index DESCRIPTION SHEET COVER SHEET SITE / GRADING PLAN SITE / GRADING PLAN 2 SITE / GRADING PLAN 3 STORM DRAIN PROFILES STORM DRAIN PROFILES SITE DETAILS LANDSCAPE PLAN LANDSCAPE PLAN 2 LANDSCAPE PLAN 3 LANDSCAPE NOTES AND DETAILS EROSION & SEDIMENT CONTROL PLAN 1 EROSION & SEDIMENT CONTROL PLAN 2 EROSION & SEDIMENT CONTROL PLAN 3 EROSION & SEDIMENT CONTROL DETAILS EROSION & SEDIMENT CONTROL DETAILS STORM DRAIN PLAN STORM DRAIN & WATER PROFILES



Overall Property Outline



Site Development Plan Sears Warehouse

PARCEL A-74 At Gateway Commerce Center Columbia, Maryland

Site Analysis Data Chart

1. General Site Data Applicable DPZ File References: F-98-69, ZB-915, S-84-44, S-85-55, F-88-91, F-87-96, F-85-55, VP-84-150.VP-85-34.F-90-175.VP-85-35.VP-86-81.VP-88-17.WP-88-63.WP-90-141. AA-91-15,ZB-915,5-92-10,SDP-92-49,F92-15,F-92-57,F-92-136,F-92-140,WP-93-48,F-93-47,SDP-93-42 Proposed Use of Site or Structure(s): Proposed Water and Sewer Systems: X Public -Water and Sewer contract number 391-D 2. Area Tabulation +/- 115.65 AC. (Indicate by Section and Area As Shown on Final Plat or As Shown on Deed) +/- 115.65 A.C. (Indicate by Section and Area As Shown on Check Plat) c. Area of This Plan Submission: _ +/- 61 AC. e. Building Coverage of Site: +1-23.25 Acres and 20 % % of Total Project Area 3. Open Space Data: N / A 4. Parking Space Data Warehouse +/- 995,696 S.F., a. Floor Space per floor of proposed use on site: Office +/- 17,036 S.F. (Within Limit of Submission) b. Number of Parking Spaces Required by Zoning Regulations: Office @ 3.3 spaces / 1000 = 56 Parking Spaces Warehouse @ 0.5 spaces / 1000 = 498 Parking Spaces Total = 554 Parking Spaces c. Total Number of Parking Spaces Provided On-Site: d. Number of Handicapped Parking Spaces Provided:

General Notes

- 1. All construction shall be performed in accordance with the latest standards and specifications of Howard County, plus MSHA standards and specifications if applicable
- 2. 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 contractors operation shall be repaired immediately at the contractor's expense.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. 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 Contactors expense.
- 7. The existing topography inside property line per Gutschick Little and Webber dated Jan. 98'. The courses and coordinates shown are based upon the Maryland Coordinate system and supplemented by DMW for utility inverte and ring road.
- 8. All hydraulic data is for the 10-year storm unless otherwise noted.

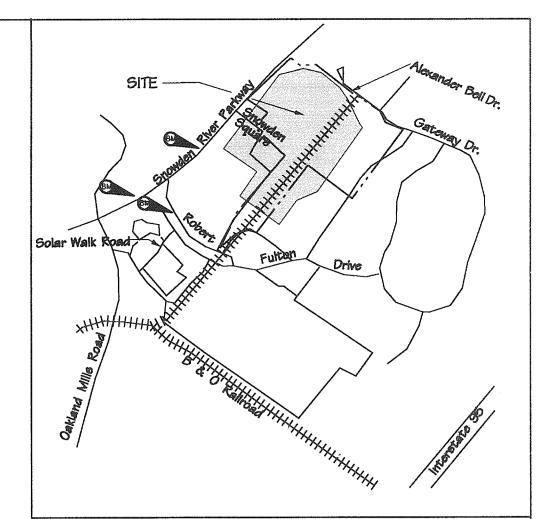
- The subsurface exploration and geotechnical engineering analysis for this project was completed by Hillis Carnes in February 1998.
- 10. All fill areas shall be compacted to a minimum of 95% of the maximum dry density as determined and verified in accordance with AASHTO T-180.
- All plan dimensions are to face of curb unless otherwise noted. Numerically written dimensions take precedence over scale dimensions. 12. The coordinates shown hereon are based on NAD '27 the Howard County geodetic control stations No. 2243002 and No. 2243003 which is based upon the Maryland State
- 13. Stormwater management and water quality for the proposed site improvements will be provided by the regional pond on parcel A-65. See (DPZ File No. F-97-98).
- 14. The existing water system serving this project is private and is not to be added or extended to under the proposed site development plan.

plane coordination system.

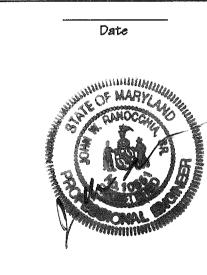
- 15. The existing sewer system serving this project is private and is not to be added or extended to under the proposed site development plan.
- 16. There are no 100 year floodplain or wetlands within the limits of submission.
- 17. There are no known cemeteries or burial grounds on this site.
- 18. A traffic report update has been prepared by Wells & Associates, dated February 1998.
- 19. Exterior Lighting will be in conformance with Section 134, Zoning Regulations
- 20. Electric, gas, cable and telephone lines designed by others.

21. On November 16, 1992, WP-93-48, Walver of Section 16.113 (f) (8), was granted to allow a private commercial driveway to have direct accres to an arterial highway.

22. The contractor or developer shall contact the Construction Inspection Division 24 hours in advance of commencement of work at (410) 313-1880.







	Professional Engineer No. 10551
APPROVED: HOWAR	D COUNTY DEPT. OF PLANNING & ZONING
CHIEF, DEVELOPMENT	ENGINEERING DIVISION & DATE
CHIEF, DIVISION OF	Handle 6/4/98 AND DEVELOPMENT DATE
DIRECTOR	Suita 6/4/98 DATE

Revision Description

Sears Warehouse PARCEL A-74 At Gateway Commerce Center

Building 20, 8901 Snowden River Parkway

The Howard Research and Development Corporation
/ GEAPE II, Inc.
10275 Little Patuxent Parkway, Columbia, MD 21044 Developer

Sears Logistics Services Inc. 3333 Beverly Road, Hoffman Estates, IL 60179

(410) 296-3333 Fax 296-4705

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

SUBDIVISION NAME SUBDIVISION NAME

GATEWAY COMMERCE CENTER

PLAT# OR LF BLOCK # ZONE TAXZONE MAP ELECT. DISTRICT

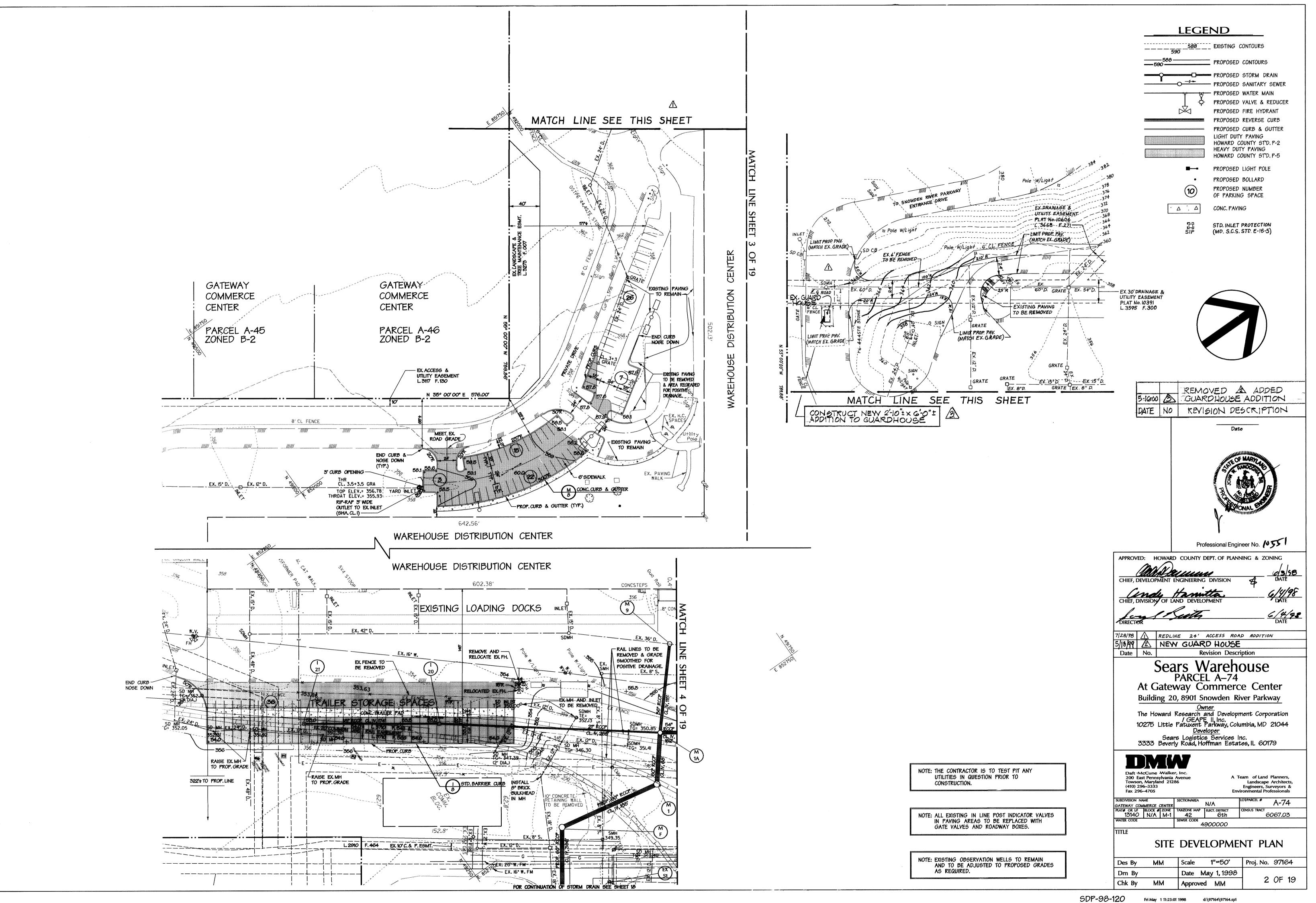
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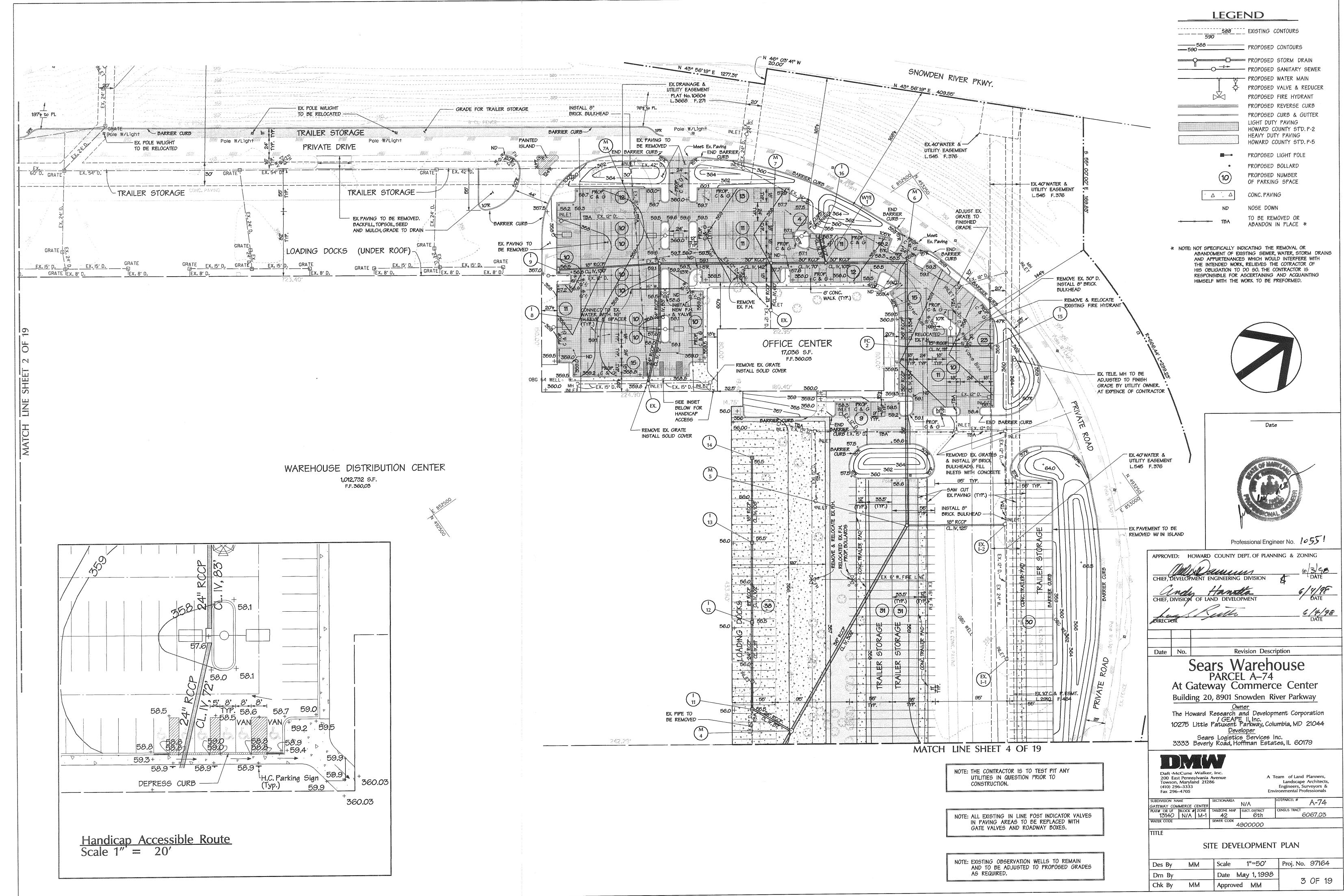
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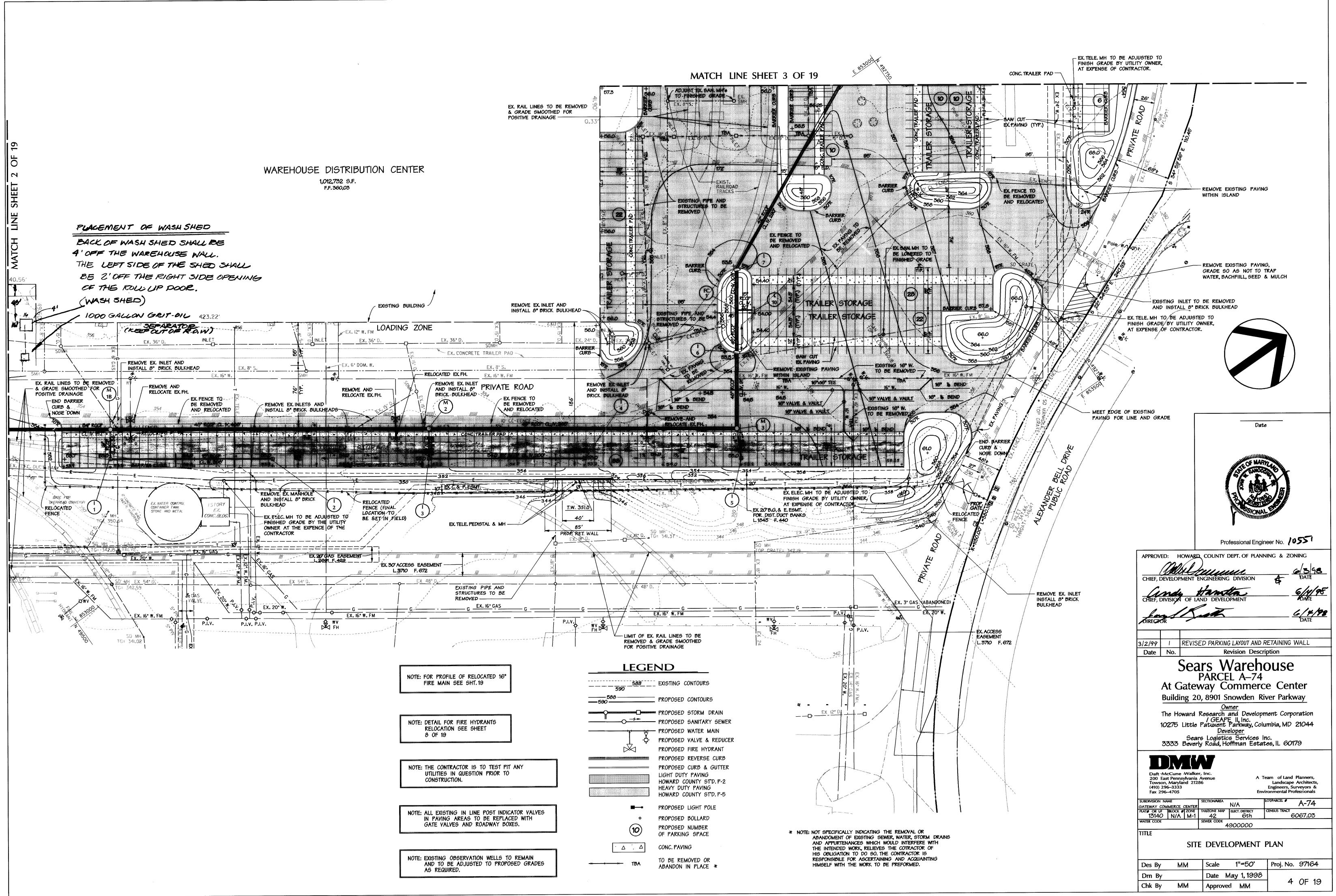
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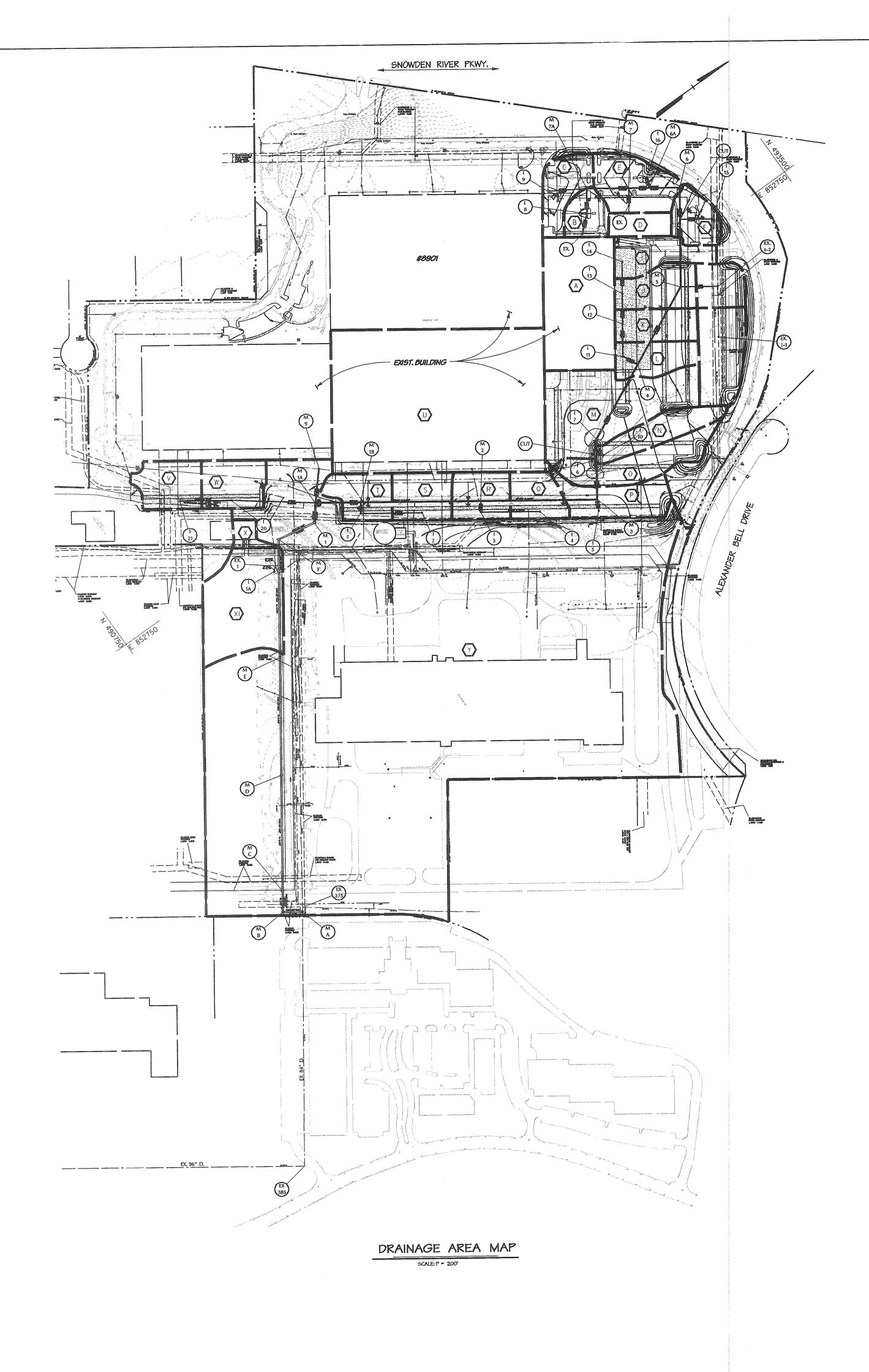
COVER SHEET

Des By	ММ	Scale 1'	'=50'	Proj. No.	97164
Drn By		Date May	1,1998		O= 40
Chk By	ММ	Approved	ММ] 1	OF 19







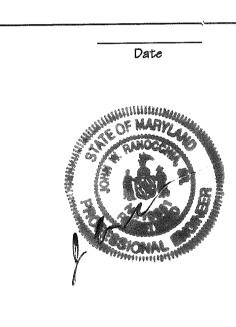


AREA AND "C" FACTOR TABULATION

INLET#	ZONI	NG	SUBAREA	AREA (ac)	"C" FACTOR	% IMPERVIOUS
1-1			Т	0.73	0.95	100%
I - 2			5	0.76	0.95	100 %
1-3			R	0.72	0.95	100 %
1-4	DRAINS	REA	Q	0.68	0.95	100 %
I - 5	7	0	P	0.78	0.94	98 %
I - 6	& ROOF	KK.	0	1.30	0.90	93 %
1-7	•ಶ ►	4	М	2.24	0.91	95 %
1-8	9	ADDITIONAL	В	0.60	0.79	78 %
1-9	PARKING	TIQ:	С	0.79	0.78	76 %
I-10	PAR	A O	N	0.98	0.91	94 %
I -11	Š	PROPOSED	L	0.84	0.95	100 %
1-12	TSIX	ROP	K	0.74	0.95	100 %
1-13	TI III		J	0.85	0.95	100 %
1-14			ı	0.82	0.88	90 %
I -1 5			F	0.59	0.84	85 %
1-16			E	1.25	0.76	73 %
EX. I-1			G	1.15	0.83	87 %
EX.1-2			Н	0.57	0.81	78 %
X.36" D. O M-4			U	8.03	0.95	100 %
1-20			w	0.79	0.95	100 %
1-21			Y	0.78	0.95	100 %
I-1A			xı	2.10	0.75	74 %
EX. ROOF R. TO 1-8			A	2.49	0.95	100 %
X. ROOF R. TO 1-7		V	D	0.39	0.95	100 %
EX. INLET	I	ND.	Х	0.20	0.75	80 %
1-1A	1	ND.	X1	2.10	EX. ULT. 0.34 0.75	* 73 % ±
EX. 84" D.	l i	ND.	Y	38.88	EX. ULT. 0.56 0.75	* 73 % ±

GTPLICTUPE GCHEDIII E

	מרטע אייני	WIDTH	INVERT		TOP ELEVATION	REMARKS	LOCATION
NO.	TYPE	OR DIA.	IN	OUT	TOT LLLY/(HON	INDIVITORIO	
<i>I</i> -1	PRE-CAST MH	7'-0"	330.18	329.98	345.00 ±	MSHA MD. 384.07	SEE PLAN
/I-1A	PRE-CAST MH	10'-0"	331.09	330.59	351.70	MSHA MD. 384.11	SEE PLAN
1-1B	PRE-CAST MH	7-0"	332.50	332.00	353.72	MSHA MD. 384.07	SEE PLAN
1-2	PRE-CAST MH	6'-0"	336.31	336.11	353.72	MSHA MD. 384.05	SEE PLAN
1-3	PRE-CAST MH	6'-0"	339.27	339.07	353.72	MSHA MD. 384.05	SEE PLAN
1-4	PRE-CAST MH	6'-0"	343.44	342.94	356.04	MSHA MD. 384.05	SEE PLAN
1-5	PRE-CAST MH	5' - 0"	345.65	345,55	358.97	STD. DETAIL G 5.13	SEE PLAN
4-6	PRE-CAST MH	5 '-0 "	348.39	347.89	359.07	STD. DETAIL G 5.13	SEE PLAN
и-6A	PRE-CAST MH	5'-0"	349.20	349.00	357.45	STD. DETAIL G 5.13	SEE PLAN
vI-7	PRE-CAST MH	5'-0"	349.80	349.60	357.95	STD. DETAIL G 5.13	SEE PLAN
V-7A	PRE-CAST MH	5'-0"	351.15	350.65	359.20	STD. DETAIL G 5.13	SEE PLAN
vi-9	PRE-CAST MH	5'-0"	345.28	339.60	MEET EX. PAVING	STD. DETAIL G 5.13	SEE PLAN
C.I-1	FIELD CONNECTION	48"X15"	341.67	340.29		STD. DETAIL SD 2.01	SEE PLAN
C.I-2	FIELD CONNECTION	36"X15"	348.05	347.17	•	STD. DETAIL SD 2.01	SEE PLAN
		 					
-1	DBL 'S' GRATE	3'-5"	346.30	346.10	353.00	STD. DETAIL SD 4.23	SEE PLAN
-2	DBL 'S' GRATE	3'-5"	-	349.00	353.00	STD. DETAIL SD 4.23	SEE PLAN
-3	DBL 'S' GRATE	3'-5"	346.60	346.40	353.00	STD. DETAIL SD 4.23	SEE PLAN
1-4	DBL 'S' GRATE	3'-5"	-	349.00	353.00	STD. DETAIL SD 4.23	SEE PLAN
I - 5	DBL 'S' GRATE	3'-5"	-	349.00	353.00	STD. DETAIL SD 4.23	SEE PLAN
1-6	A-10	2'-6"	340.02	339.82	354.10	STD. DETAIL SD 4.02	SEE PLAN
1-7	A-10	2'-6"	341.06	340.56	354.10	STD. DETAIL SD 4.02	SEE PLAN
I-8	5-COMB	3'-5"	352.02	352.10	358.20	STD. DETAIL SD 4.32	SEE PLAN
1-9	5-COMB	3'-5"	-	352.43	357.10	STD. DETAIL SD 4.32	SEE PLAN
1-10	A-10	2'-6"	-	345.67	354.60	STD. DETAIL SD 4.02	SEE PLAN
I-11	DBL 'S' GRATE	2'-71/2"	348.23	348.03	355.50	STD. DETAIL SD 4.23	SEE PLAN
I-12	DBL 'S' GRATE	2'-71/2"	349.58	349.33	355.50	STD. DETAIL SD 4.23	SEE PLAN
1-13	DBL 'S' GRATE	2'-71/2"	350.85	350.60	355,50	STD. DETAIL SD 4.23	SEE PLAN
I-14	DBL 'S' GRATE	2'-71/2"	-	351.50	355.50	STD. DETAIL SD 4.23	SEE PLAN
I- 1 5	A-5	2'-6"	-	353.40	357.90	STD. DETAIL SD 4.01	SEE PLAN
1-16	DBL 'S' COMB.	3'-5"	-	352.70	357.30	STD. DETAIL SD 4.34	SEE PLAN
1-20	DBL 'S' GRATE	2'-71/2"	347.96	347.71	353.00	STD. DETAIL SD 4.23	SEE PLAN
I-21	DBL 'S' GRATE	2'-71/2"	-	349.00	353.00	STD. DETAIL SD 4.23	SEE PLAN
I-1A	DBL 'S' GRATE	2'-71/2"	•	343.74	348.00	STD. DETAIL SD 4.23	SEE PLAN
M-A	PRE-CAST MANHOLE	10°-0"	322.82	322.62	SET IN FIELD	MSHA MD 384.11	SEE PLAN
M-A M-B	PRE-CAST MANHOLE	10'-0"	323.18	323.08	SET IN FIELD	MSHA MD 384.11	SEE PLAN
	PRE-CAST MANHOLE	10'-0"	323.56	323.46	SET IN FIELD	MSHA MD 384.11	SEE PLAN
M-C	PRE-CAST MANHOLE	7-0"	325.58	325.48	SET IN FIELD	MSHA MD 384.07	SEE PLAN
M-D	PRE-CAST MANHOLE	7-0"	327.60	327.50	SET IN FIELD	MSHA MD 384.07	SEE PLAN
M-E M-F	PRE-CAST MANHOLE	7-0"	329.60	329.50	SET IN FIELD	MSHA MD 384.07	SEE PLAN



Professional Engineer No. /055/

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Revision Description Date No.

Sears Warehouse PARCEL A-74 At Gateway Commerce Center

Building 20, 8901 Snowden River Parkway

Owner
The Howard Research and Development Corporation
/ GEAPE II, Inc.
10275 Little Patuxent Parkway, Columbia, MD 21044
Developer
Sears Logistics Services Inc.
3333 Beverly Road, Hoffman Estates, IL 60179

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

GATEWAY COMMERCE CENTER

PLAT# OR LF BLOCK # ZONE 13140 N/A M-1 TAXZONE MAP 42 Gth

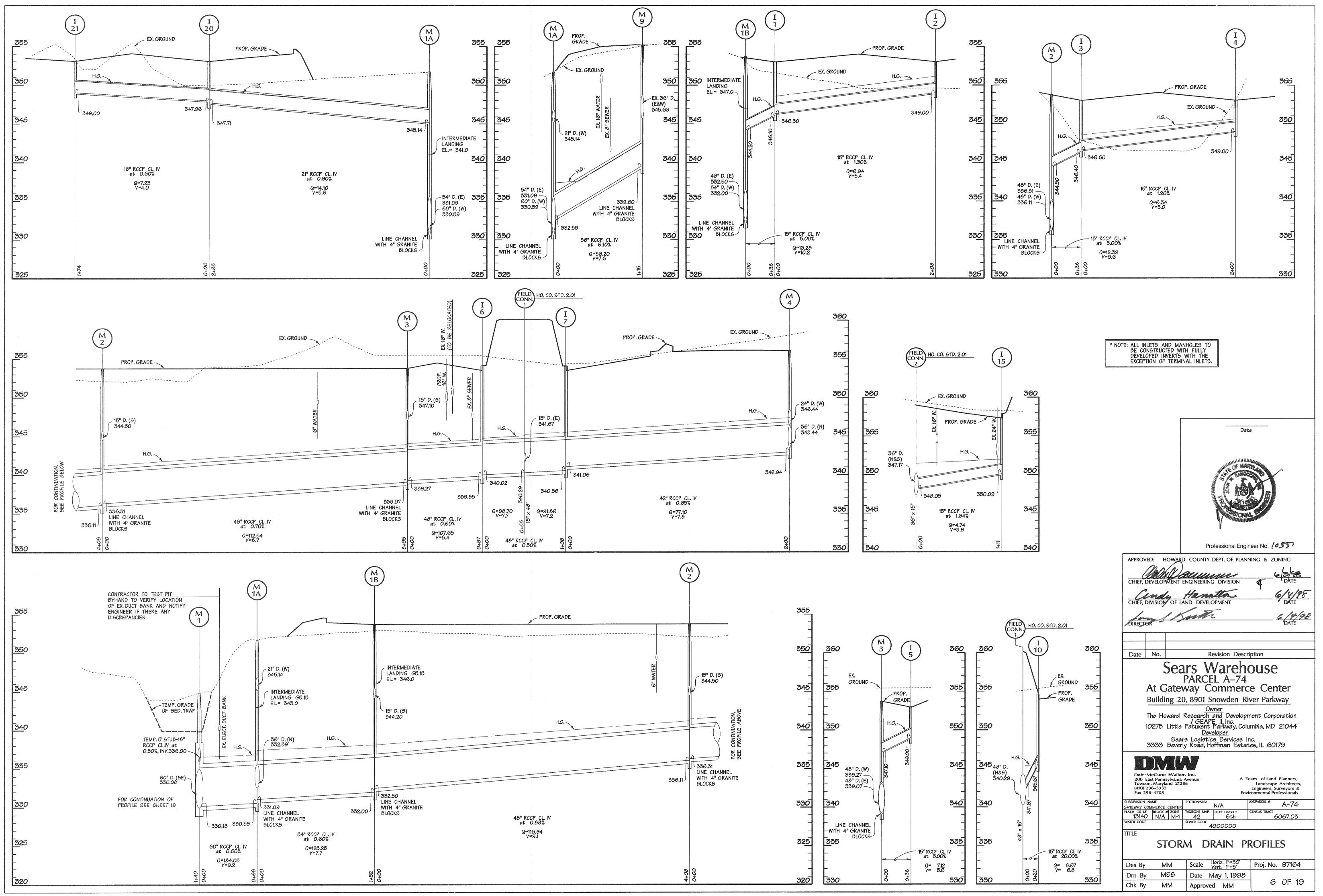
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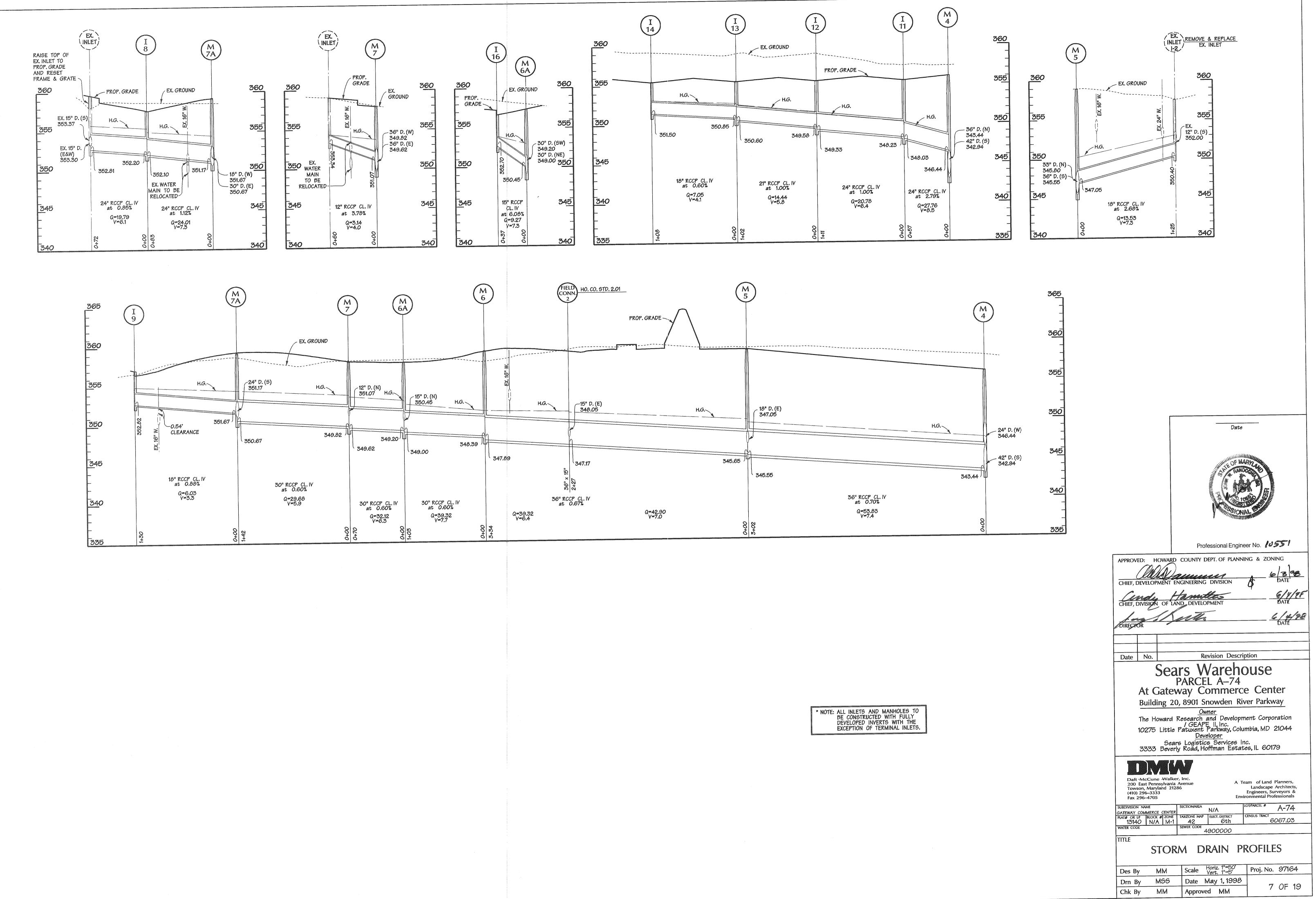
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DRAINAGE AREA MAP

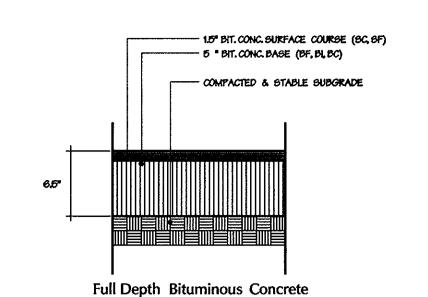
Drn By CEO,WHJ Date May 1,1998 Chk By MM

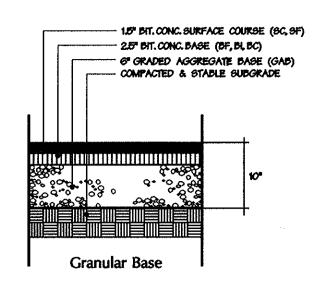
Des By DFM Scale 1"=200' Proj. No. 97164 5 OF 19 Approved MM





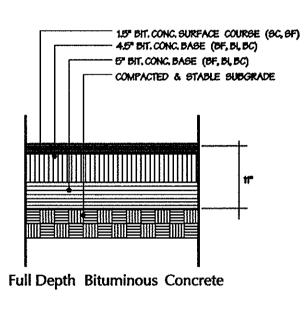
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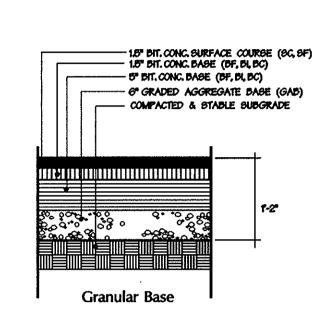




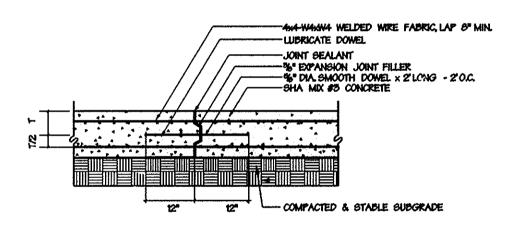
A P2 Paving Sections: Passenger Parking and Travelways
Not To Scale

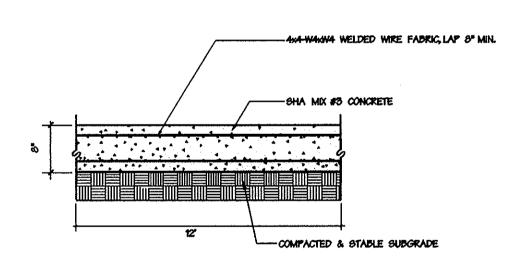
NOTE: MINIMUM CBR VALUE FOR THE PROPOSED PAVING SECTIONS 3.



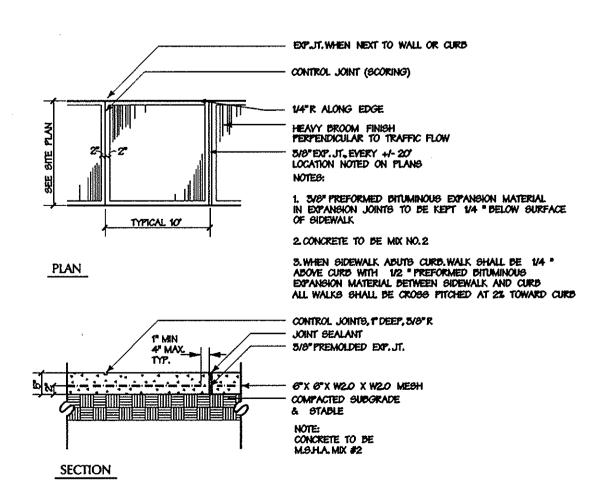


B P5 Paving Sections: Truck Parking and Travelways

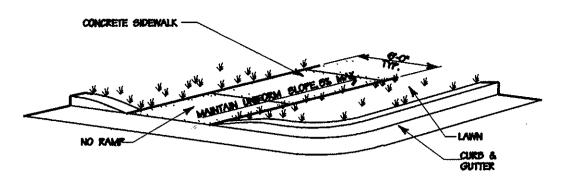




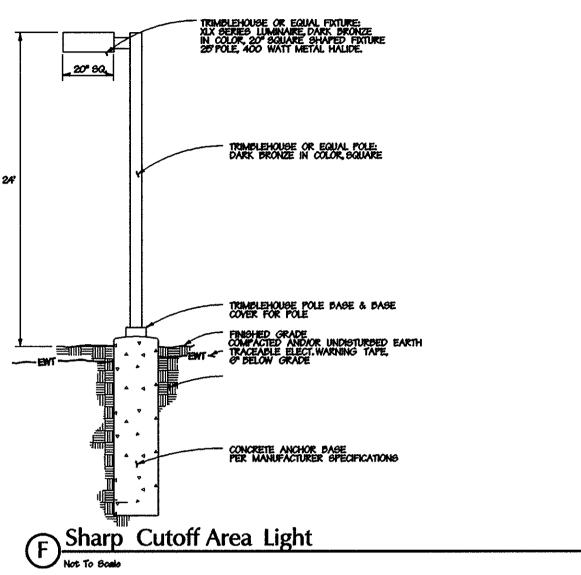
Concrete Pavement w/Keyed Construction Joint

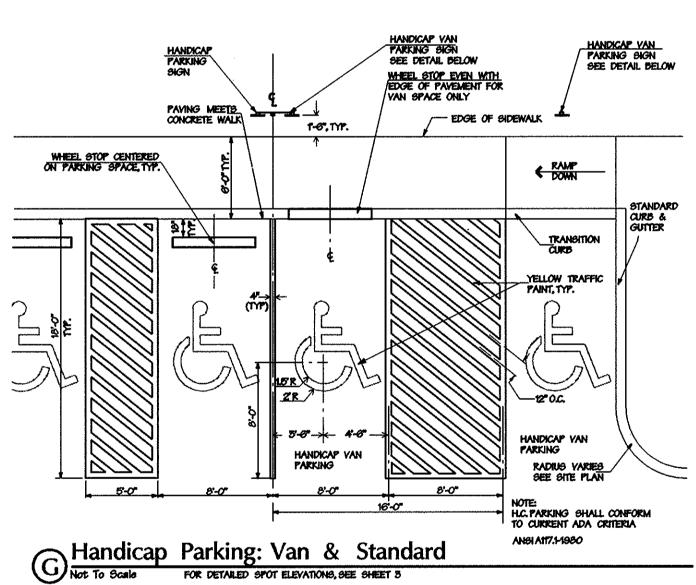


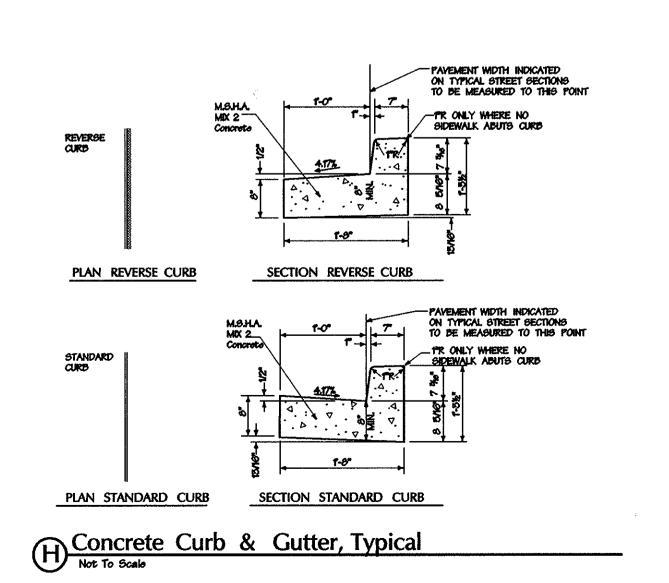
Concrete Walk
Not To Scale

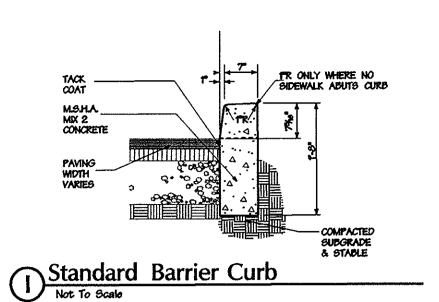


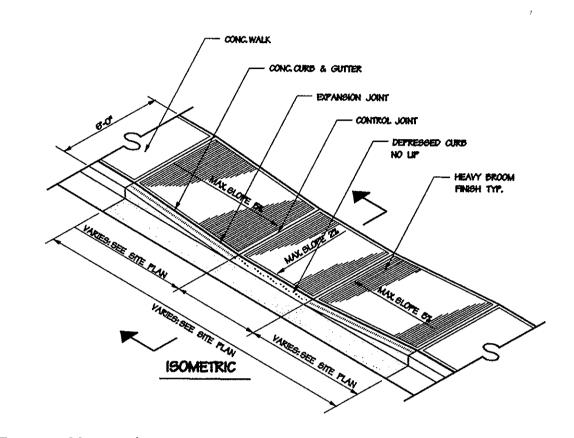
E Sidewalk Ramp 'B'
Not To Scale



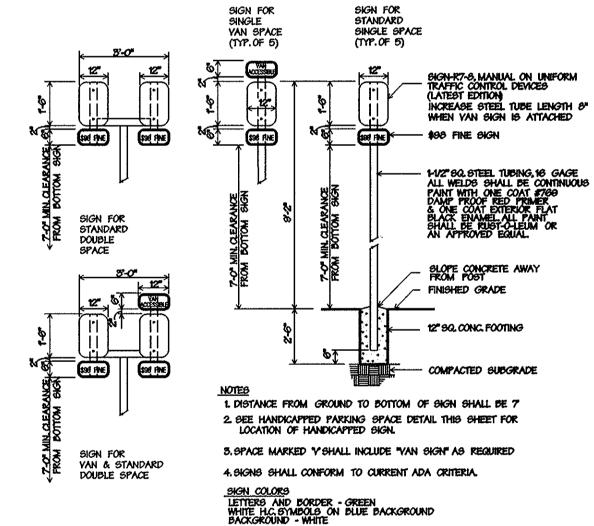


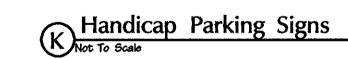


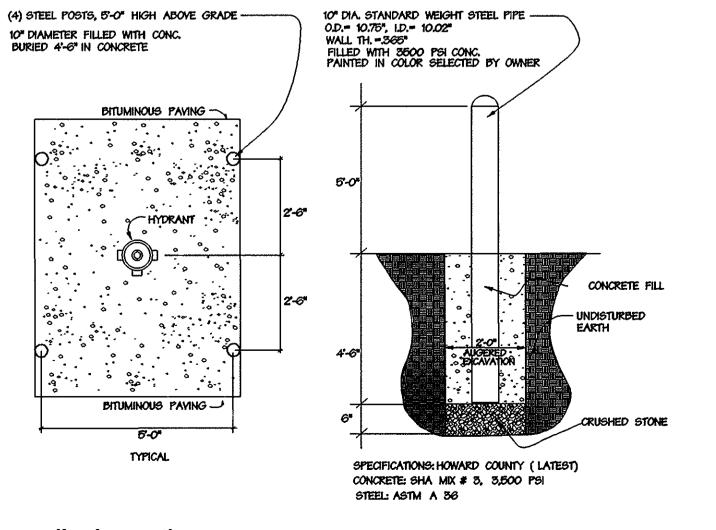




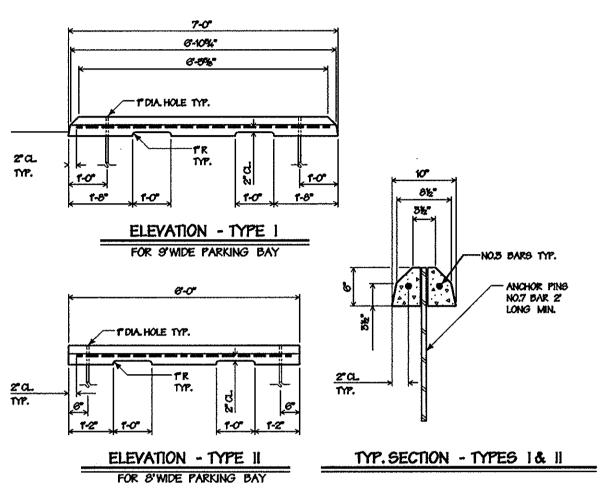




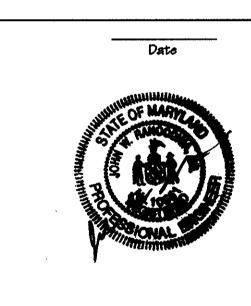




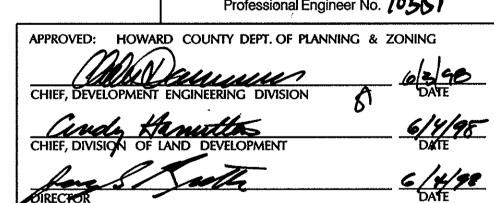
Bollard Detail
Not To Scale



Precast Concrete Wheelstop 1/2"=1'-0"
Not To Scale



Professional Engineer No. 10557



3/2/99 I REMOVED SECTION A-A: BOLLARD PROTECTION Date No. Revision Description

Sears Warehouse PARCEL A-74 At Gateway Commerce Center

Building 20, 8901 Snowden River Parkway

Owner
The Howard Research and Development Corporation

/ GEAPE II, Inc.
10275 Little Patuxent Parkway, Columbia, MD 21044

<u>Developer</u>

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3333 Beverly Road, Hoffman Estates, IL 60179

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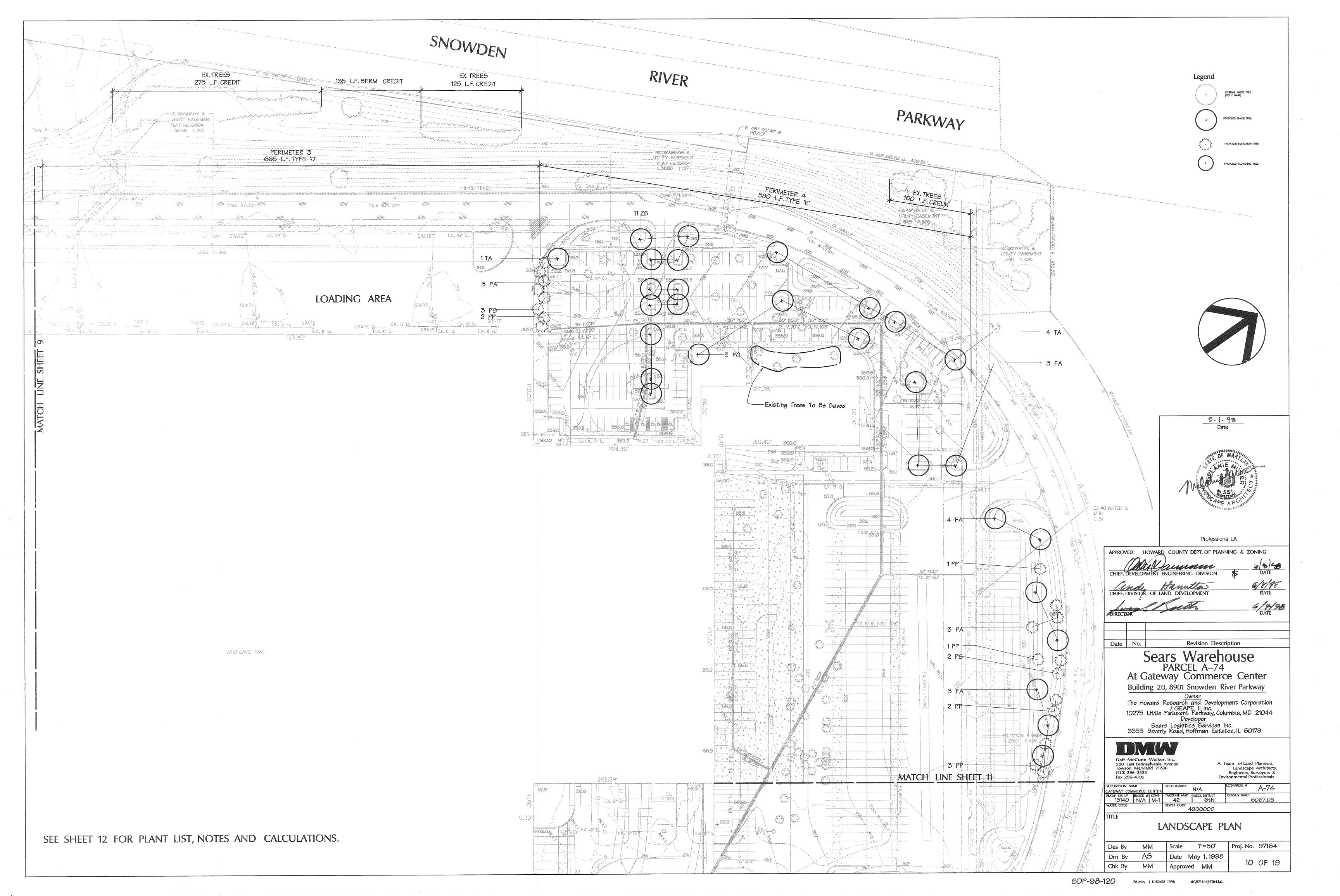
Team of Land Planners, Landscape Architects, Engineers, Surveyors & rironmental Professionals

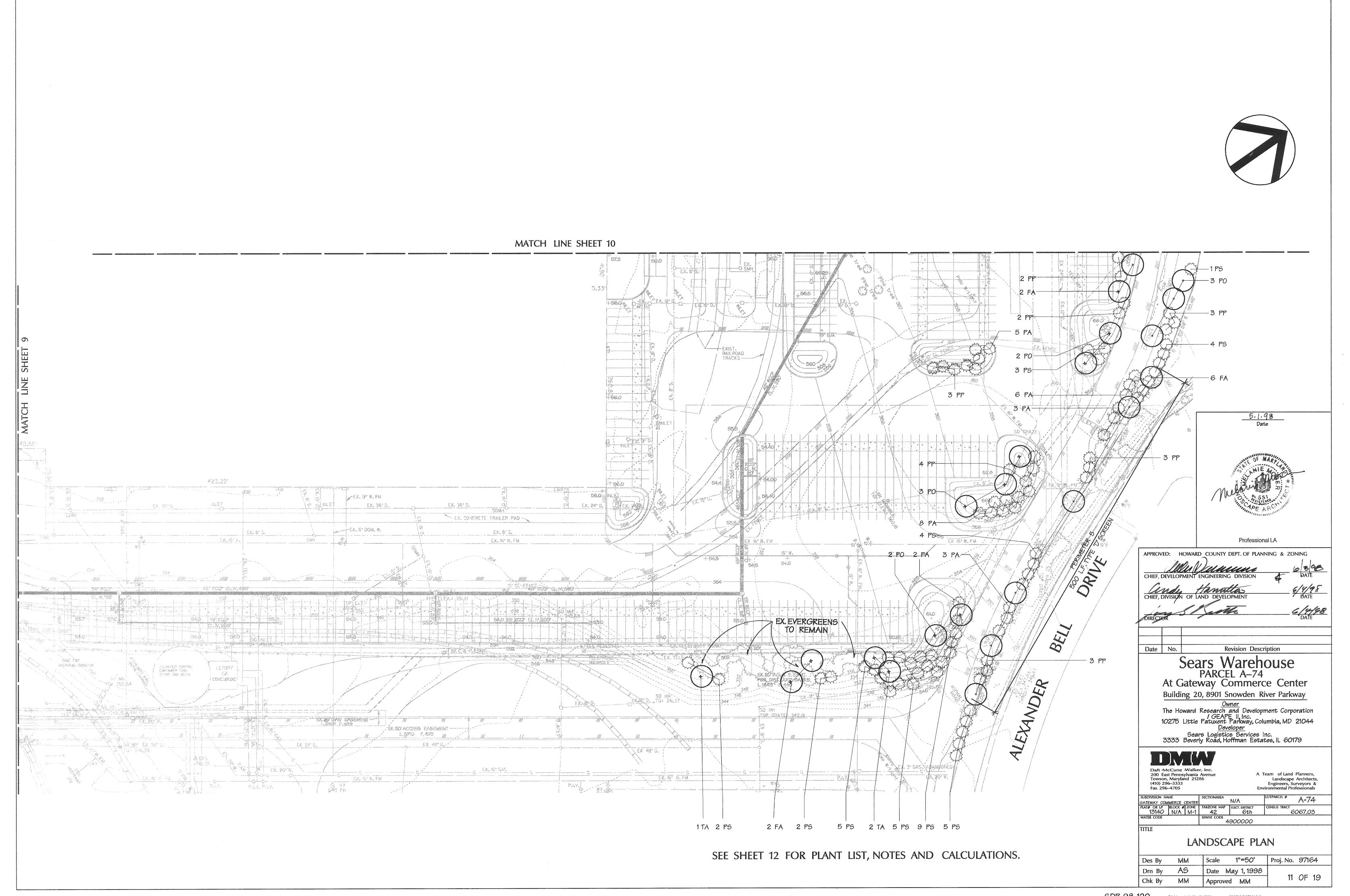
SUBDIVISION NAME
GATEWAY COMMERCE CENTER
PLAT# OR LF BLOCK # ZONE TAXZONE MAP ELECT. DISTRICT CEN
13140 N/A M-1 42 6th

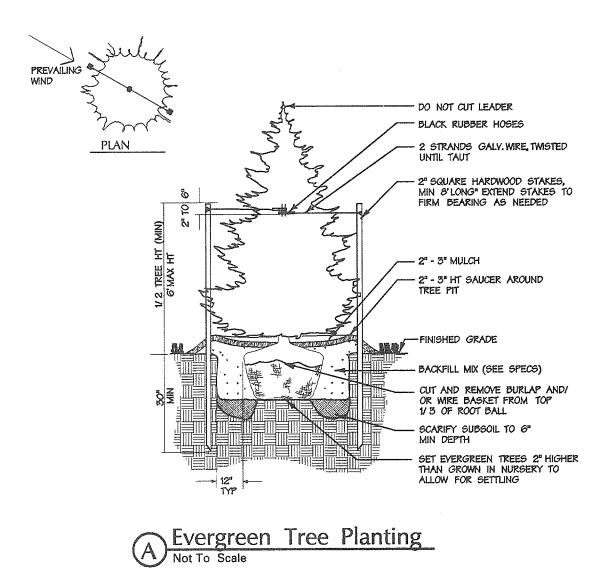
WATER CODE
SEWER CODE 4900000 SITE DETAILS

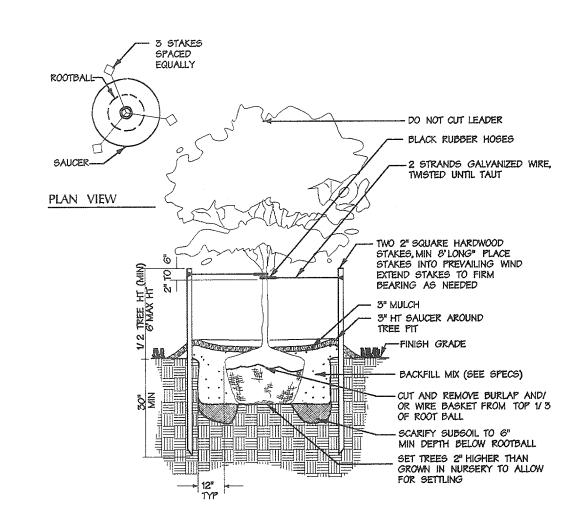
Scale 1"=50' Proj. No. 97164 ММ AS Date May 1, 1998 8 OF 19 Chk By ММ Approved MM



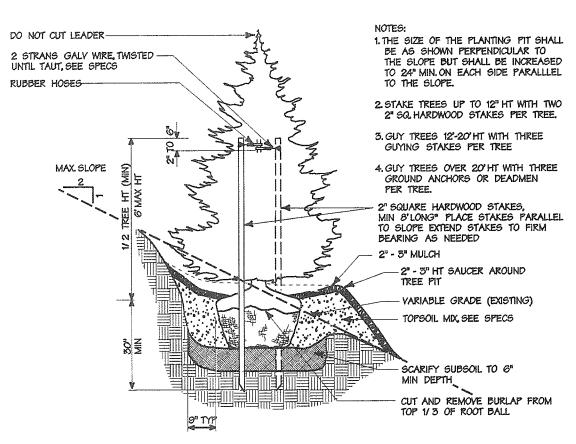








B 3" Cal. or LessTree Planting Detail



Evergreen Tree Planting on Slope
Not To Scale

SCHEDULE A PERIMETER LANDSCAPE EDGE

CATEGORY	LANDSCAPE	BUFFER TYPE	PERIMETERS LESS CREDIT	LANDSCAPE BUFFER CALCULATIONS
LANDSCAPE TYPE	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES		
LINEAR FEET OF ROADWAY FRONTAGE / PERIMETER		395'L.F. OF LANDSCAPE TYPE 'A' PERIMETERS 1 & 2	395'L.F.	1 SHADE TREE @ 60'L.F. = 7 SHADE TREES
	665'L.F. OF LANDSCAPE TYPE 'D' PERIMETER 3 (LOADING)		130' L.F.	1 SHADE TREE @ 60'L.F. = 2 SHADE TREES 1 EVERGREEN @ 10'L.F. = 13 EVERGREENS
	590'L.F. OF LANDSCAPE TYPE 'E' PERIMETER 4 (PARKING)		490' L.F.	1 SHADE TREE @ 40'L.F. = 12 SHADE TREES 1 SHRUB @ 4'L.F. = 123 SHRUBS
	500'L.F. OF LANDSCAPE TYPE 'D' PERIMETER 5 (LOADING)		500° L.F.	1 SHADE TREE @ 60'L.F. = 8 SHADE TREES 1 EVERGREEN @ 10'L.F. = 50 EVERGREENS
CREDIT FOR EXISTING VEGETATION	PERIMETER 3: 400 L.F. PERIMETER 4: 100 L.F.			
CREDIT FOR BERM (DESCRIBE BELOW IF NEEDED)	PERIMETER 3: 135 L.F.			
NUMBER OF PLANTS REQUIRED SHADE TREES -INCLUDES SCHEDULE 'B' EVERGREEN TREES SHRUBS	48 63 123			
NUMBER OF PLANTS PROVIDED SHADE TREES EVERGREEN TREES OTHER TREES (2:1 SUBSTITUTION) SHRUBS (10:1 SUBSTITUTION) (DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	74 107 * 6 0 *			

* NOTE: 13 EVERGREENS HAVE BEEN SUBSTITUTED FOR THE 123 REQUIRED SHRUBS.

LANDSCAPE NOTES

- 1. The contractor shall review architectural/engineering plans to become thoroughly familiar with grading and surface utilities.
- 2. The contractor shall coordinate with lighting and irrigation contractors regarding timing of installation of plant material.
- 3. The contractor shall insure that his work does not interrupt established or projected drainage patterns.
- 4. During planting operations, excess waste materials shall be promptly and frequently removed from the site.
- 5. 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.
- 6. 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.
- 7. Every possible safeguard shall be taken to protect building surfaces, equipment, and furnishing. 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.
- 8. 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. Sod quantity take-offs are the responsibility of the contractor. 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.
- 9. 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 exception
- 10. 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
- 11. 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.

architect unless this requirement is specifically waived

- 12. 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.
- 13. No substitutions shall be made without written consent of the owner or landscape architect.

 14. 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.
- 15. The contractor shall be wholly responsible for stability and conditions of all trees and shall be legally liable for any damage caused by instability of any plant materials.
- 16. All planting beds adjacent to lawn, sod, or seeded areas shall be spade edged.
- 17. 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 mowing 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.
- 19. 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.
- 20. The contractor is responsible for testing project solls. 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.
- 21. PLANTING MIX:

 a. Planting mix shall be prepared at approved on-site staging area using approved on-site existing soll. Mix minimum quantities of 20 cubic yards or sufficient mix for entire job if less than 20 cubic
- b. 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 dolmonite limestone (eliminate for acid loving plants)
- 22. 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 soll placed and compacted so as to reestablish proper grade for new planting and/or lawn areas.
- 23. The contractor shall insure adequate vertical drainage in all plant beds and planters.

 24. All disturbed areas on the site not planted with shrubs or ground cover shall be fine graded and seeded or sodded as noted on landscape plan.

 FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING MUST BE POSTED

 AS PART OF THE GRADING PERMIT IN THE AMOUNT OF \$ 12,330.00

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING

NUMBER OF PARKING SPACES	378
NUMBER OF TREES REQUIRED @ 1/20 PKG. SPACES	19
NUMBER OF TREES PROVIDED SHADE TREES OTHER TREES (2 :1 SUBSTITUTION)	19 <i>O</i>

		NT LIST BOTANICAL NAME/ COMMON NAME	SIZE	QUANTITIES	REMARKS
SHADE TREES	TA	TILIA AMERICANA 'REDMOND' REDMOND LINDEN	2 1 / 2" - 3" CAL. 11 TO 13 FT.	19	B & B FULL HEAD
	PO	PLATANUS OCCIDENTALIS AMERICAN SYCAMORE	2 1 / 2" - 3" CAL. 12- 14 FT.	19	B & B FULL HEAD
	Z5	ZELKOVA SERRATA GREEN VASE ZELKOVA	2 1 / 2" - 3" CAL. 12- 14 FT.	14	B & B FULL HEAD
	FA	FRAXINUS AMERICANA 'GREENSPIRE' GREENSPIRE ASH	2 1 / 2" - 3" CAL. 12- 14 FT.	22	B & B FULL HEAD
FLOWERING TR	EES CV	CRATAEGUS VIRIDIS 'WINTER KING' WINTER KING HAWTHORN	2 1 / 2" - 3" CAL. 10- 12 FT.	6	B & B FULL HEAD
EVERGREEN TR	EES				
	PA	PICEA ABIES NORWAY SPRUCE	6'-8' HT.	33	B & B NATURAL
	PP	PICEA PUNGENS COLORADO BLUE SPRUCE	6'-8' HT.	29	B & B NATURAL
	PS	PINUS STROBUS WHITE PINE	6'-8' HT.	45	B & B NATURAL

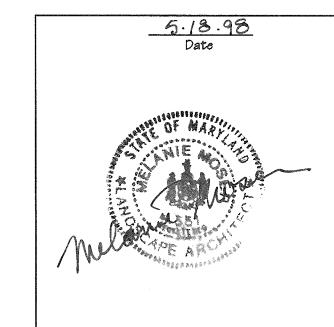
The owner, tenant, and/or their agents shall be responsible for maintenance of the required landscaping, including both plant materials and berms, fences and walls. All plant materials shall be maintained in good growing condition, and when necessary, replaced with new materials to ensure continued compliance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

DEVELOPER'S / BUILDER'S CERTIFICATE

I/We certify that the landscaping shown on this plan will be done according to the plan, SECTION 16.124 of the Howard County Code and the Howard County Landscape Manual. I/We further certify that upon completion a Certification of Landscape Installation, accompanied by an executed one year guarantee of plant materials, will be submitted to the Department of Planning and Zoning.



5-20-1998 DATE This plan has been prepared in accordance with the provisions of SECTION 16.124 of the Howard County Code and the Landscape Manual.



APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION

CHIEF, DIVISION OF LAND DEVELOPMENT

DIRECTOR

DATE

DATE

No. | Revision Description

Sears Warehouse

PARCEL A-74
At Gateway Commerce Center
Building 20, 8901 Snowden River Parkway

Owner
The Howard Research and Development Corporation

/ GEAPE II, Inc.
10275 Little Patuxent Parkway, Columbia, MD 21044

Developer

Sears Logistics Services Inc. 3333 Beverly Road, Hoffman Estates, IL 60179



(410) 296-3333

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

Fax 296–4705

SUBDIVISION NAME

GATEWAY COMMERCE CENTER

PLAT# OR LF
13140

N/A

M-1

42

SECTION/AREA

N/A

LOTPARCEL #
A-74

PLAT# OR LF
13140

N/A

M-1

42

Oth
6067.03

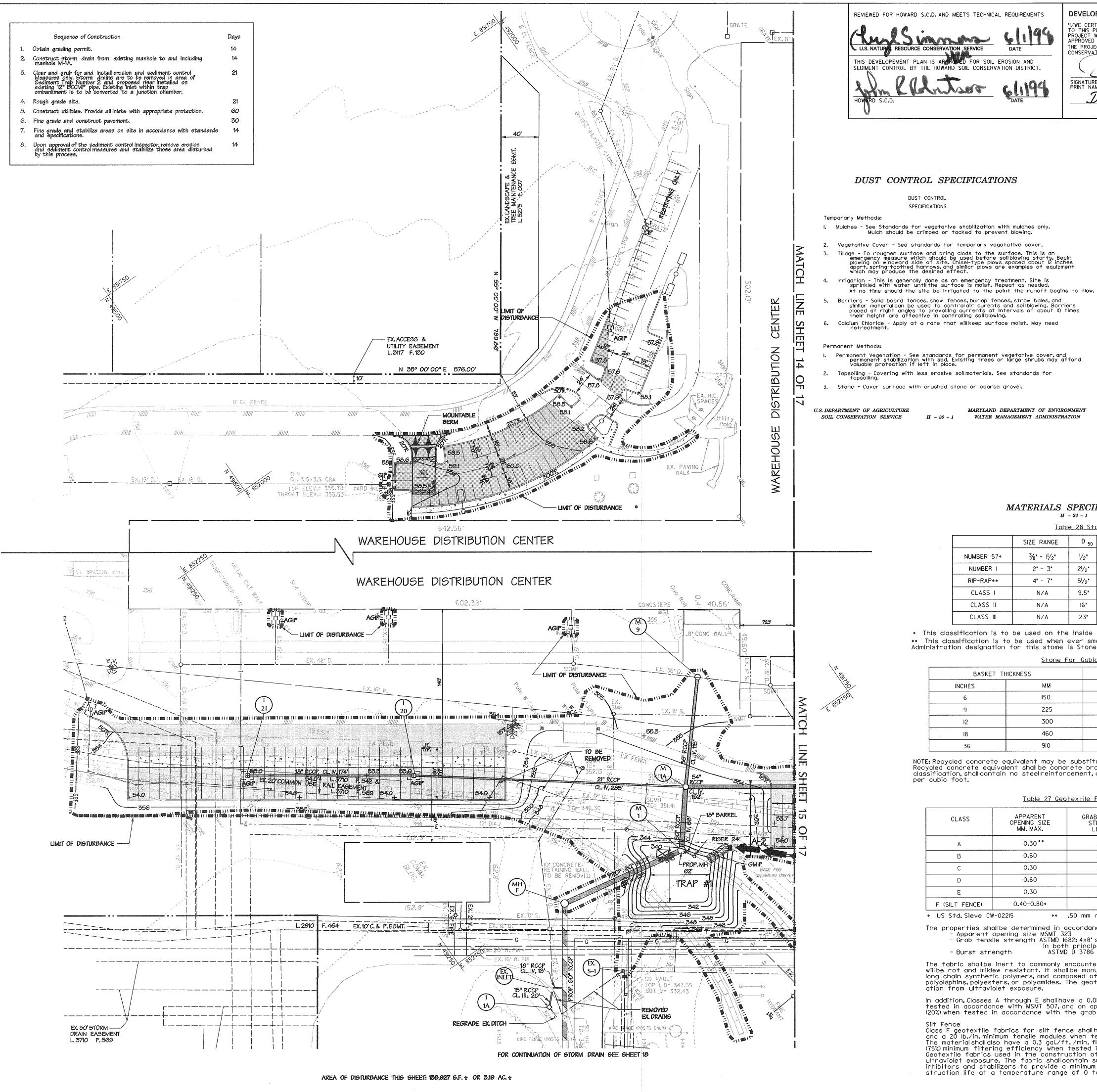
WATER CODE

LANDSCAPE NOTES AND DETAILS

 Des By
 MM
 Scale
 1"=50'
 Proj. No. 97164

 Drn By
 AS
 Date May 1, 1998
 12 OF 19

 Chk By
 MM
 Approved MM
 12 OF 19



REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS THIS DEVELOPEMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

DUST CONTROL

SPECIFICATIONS

H - 30 - 1

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

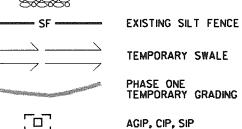
ENGINEER'S CERTIFICATION: "ICERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIRMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT." John W. Ranocchia, 5-.

TRAP TABLE I

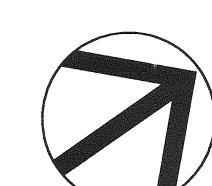
IIVAI IAULL	i .	
TRAP NUMBER		l l
TRAP TYPE		ST I
EXISTING DRAINAGE AREA AC.		3.33
INTERIM DRAINAGE AREA AC.		1.13
PROPOSED DRAINAGE AREA AC.	1.13	
	5,994	
STORAGE REQUIRED C.F.	DRY	5,994
	TOTAL	988,اا
	WET	8,564
STORAGE PROVIDED C.F.	DRY	88I , II
	19,752	
EXISTING GROUND ELEV.		343.5
TOP EMBANKMENT ELEV.	348.0	
WEIR CREST ELEV.	344.0	
WET STORAGE / OUTLET ELEV.		342.0
CLEANOUT ELEV.		341.0
BOTTOM ELEV.		340.0
DEPTH OF CHANNEL (a)		NA
OUTLET WIDTH (b)		NA
BOTTOM DIMENSION		58′ X 62′
TRAP SIDESLOPES		2:1
	WET	2.0′
TRAP DEPTH	DRY	2.0′
	TOTAL	4.0′
BARREL DIAMETER	18"	
RISER DIAMETER		24"
WET STORAGE ZONE ELEV.		340.0-342.0
DRY STORAGE ZONE ELEV.		342.0-344.0

LEGEND

EXISTING CONTOUR PROPOSED CONTOUR PROPOSED REVERSE SLOPE CURB & GUTTER PROPOSED CURB & GUTTER 42" RCCP CL.IV 85 LF PROPOSED STORM DRAIN PROPOSED PARKING SPACE COUNT LIMIT OF DISTURBANCE SUPER SILT FENCE SPOT ELEVATION EXISTING EARTH DIKE EXISTING STABILIZED CONSTRUCTION ENTRANCE



TEMPORARY SWALE PHASE ONE TEMPORARY GRADING



MATERIALS SPECIFICATIONS H - 24 - 1

MARYLAND DEPARTMENT OF ENVIRONMENT

WATER MANAGEMENT ADMINISTRATION

<u>Table 28 Stone Size</u>

			<u> </u>		
	SIZE RANGE	D ₅₀	D 100	AASHT0	WEIGHT
NUMBER 57*	3/8" - 11/2"	1/2"	l ^l /2"	M-43	N/A
NUMBER I	2" - 3"	21/2*	3*	M-43	N/A
RIP-RAP**	4" - 7"	5 ^l /2*	7"	N/A	N/A
CLASS I	N/A	9.5"	15"	N/A	I50lb max.
CLASS II	N/A	16"	24"	N/A	700lb max.
CLASS III	N/A	23"	34"	N/A	2000lb max.

* This classification is to be used on the inside face of stone outlets and check dams. ** This classification is to be used when ever smallrip-rap is required. The State Highway Administration designation for this stome is Stone For Gabions (905.01.04)

Stone For Gabion Baskets

	<u> </u>			
BASKET THI	CKNESS	SIZE OF INDIVIDUAL STONES		
INCHES	ММ	INCHES	ММ	
6	150	3 - 5	75 - 125	
9	225	4 - 7	100 - 175	
12	300	4 - 7	100 - 175	
18	460	4 - 7	100 - 175	
36	910	4 - 12	100 - 300	

NOTE: Recycled concrete equivalent may be substituted for all stone classifications. Recycled concrete equivalent shall be concrete broken into the sizes meeting the appropriate classification, shall contain no steel reinforcement, and shall have a density of 150 pounds per cubic foot.

Table 27 Geotextile Fabrics

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

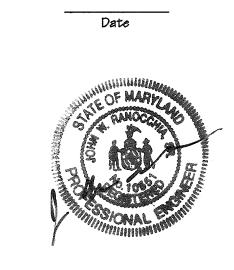
* US Std. Sieve CW-02215 ** .50 mm max. for Super Silt Fence The properties shall be determined in accordance with the following procedures: - Apparent opening size MSMT 323 - Grab tensile strength ASTMD 1682: 4x8" specimen, lx2" clamps, l2"/min. strain rate in both principal directions of geotextile fabric.

- Burst strength ASTMD D 3786 - Burst strength

The fabric shall be inert to commonly encountered chemicals and hydrocarbons, and will be rot and mildew resistant. It shall be manufactured from fibers consisting of long chain synthetic polymers, and composed of a minimum of 85% by weight of polyolephins, polyesters, or polyamides. The geotectile fabric shallresist deterioration from ultraviolet exposure.

In addition, Classes A through E shall have a 0.01 cm./sec. minimum permeability when tested in accordance with MSMT 507, and an apparent minimum elongation of 20 percent (20%) when tested in accordance with the grab tensile strength requirements listed above.

Class F geotextile fabrics for silt fence shall have a 50 lb./in. minimum tensile strength and a 20 lb./in. minimum tensile modules when tested in accordance with MSMT 509. The material shall also have a 0.3 gal./ft./min. flow rate and seventy-five percent (75%) minimum filtering efficiency when tested in accordance with MSMT 322. Geotextile fabrics used in the construction of silt fence shall resist deterioration from ultraviolet exposure. The fabric shall contain sufficient amounts of ultraviolet ray inhibitors and stabilizers to provide a minimum of 12 months of expected usable construction life at a temperature range of 0 to 120 degrees F.



Professional Engineer No. 10551

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING MH Mummer

Revision Description Date

Sears Warehouse PARCEL A-74

At Gateway Commerce Center Building 20, 8901 Snowden River Parkway

The Howard Research and Development Corporation / GEAPE II, Inc.
10275 Little Patuxent Parkway, Columbia, MD 21044 Developer

Sears Logistics Services Inc. 3333 Beverly Road, Hoffman Estates, IL 60179



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

GATEWAY COMMERCE CENTER

PIAT# OR UF BLOCK # ZONE TAXZONE MAP ELECT. DISTRICT CENTER

13140 N/A M-1 42 6th

WATER CODE

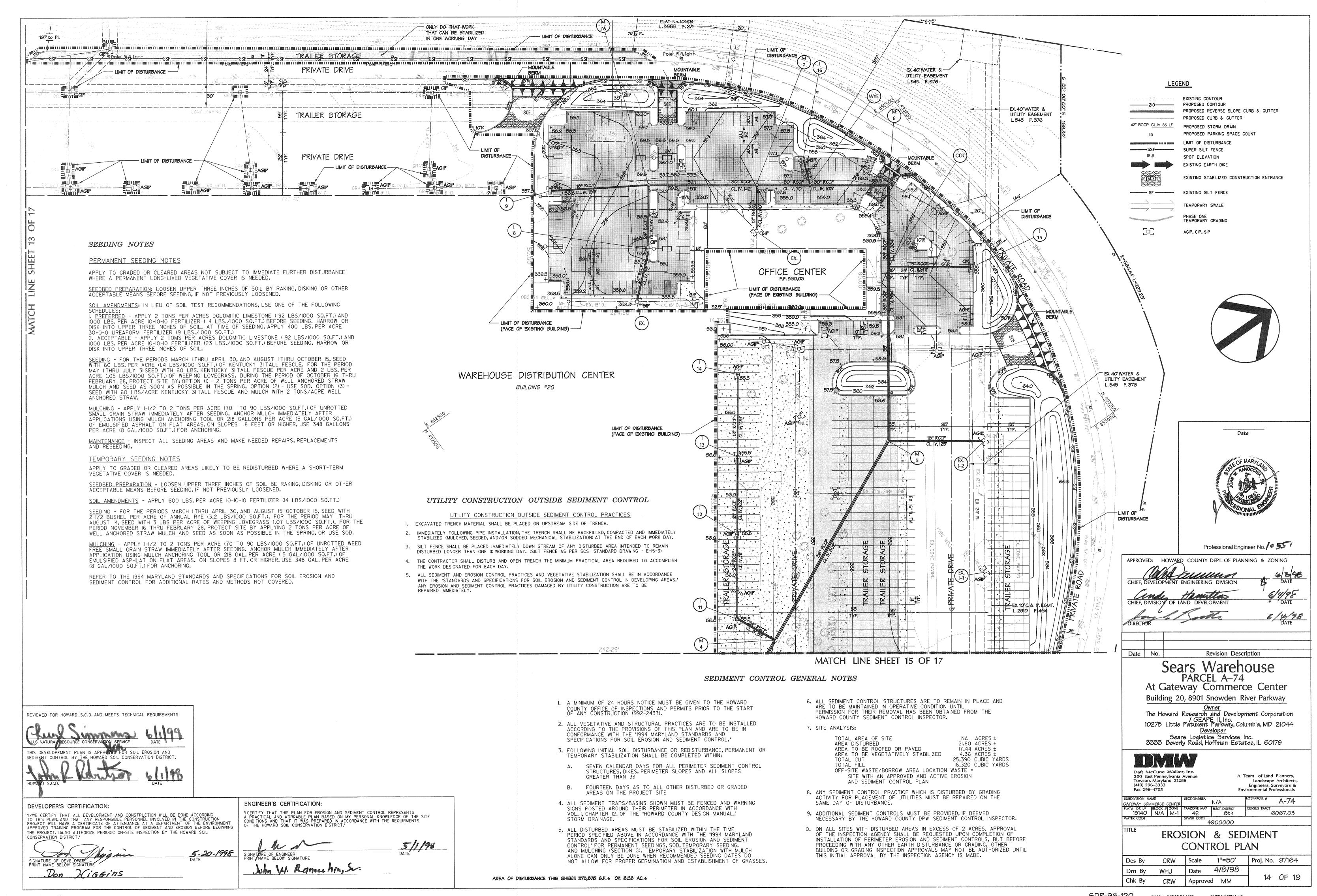
SEWER CODE

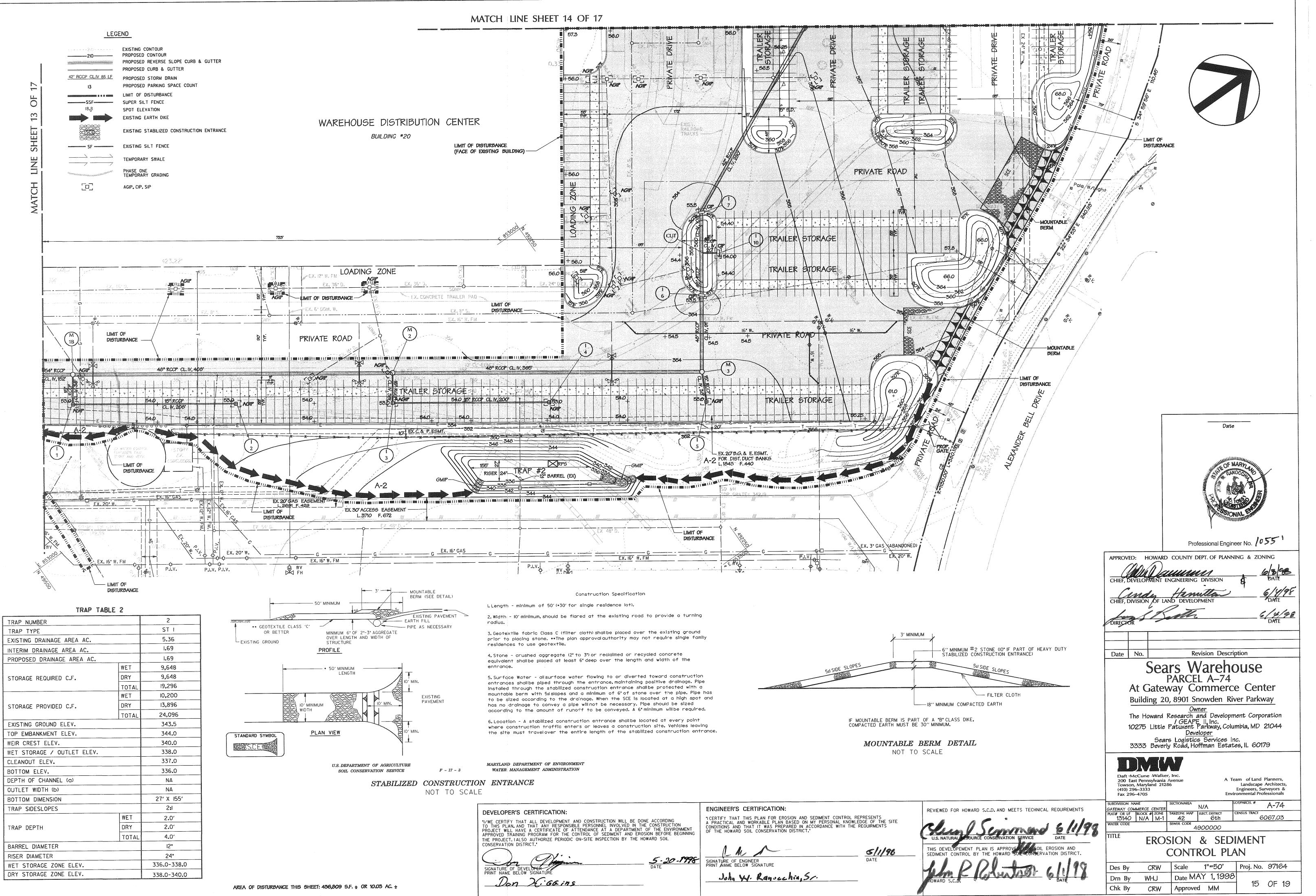
4900000 4900000

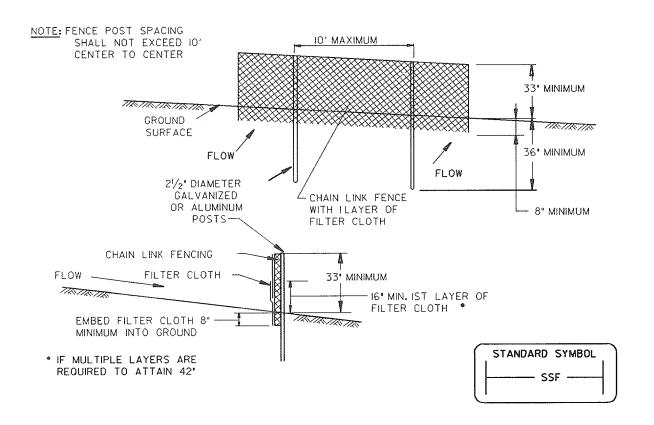
> **EROSION & SEDIMENT** CONTROL PLAN

Scale 1"=50' Proj. No. 97164 CRW Date May 1, 1998 13 OF 19

Approved MM







Construction Specifications

1. Fencing shall be 42 inches in height and constructed in accordance with the latest Maryland State Highway (SHA) Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42' fabric and 6' length posts.

2. The posts do not need to be set in concrete.

3. Chain link fence shall be fastened securely to the fence posts with wire ties or staples. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence. The chain link fencing shall be six (6) guage or heavier.

4. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.

5. Filter cloth shall be embedded a minimum of 8' into the ground. 6. When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.

7. 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

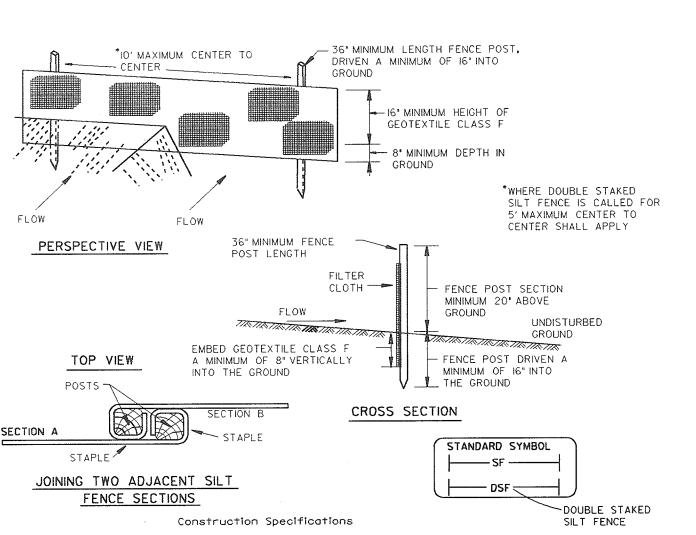
U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

H - 26 - 3

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

SUPER SILT FENCE

NOT TO SCALE



I. Fence posts shall be a minimum of 36' long driven 16' minimum into the ground. Wood posts shall be $1/2" \times 1/2"$ square (minimum) cut, or $1\sqrt[3]{4}"$ diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.

2. Geotextile shallbe 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 Tensile Modulus Flow Rate

50 lbs/in (min.) 20 lbs/in (min.) 0.3 galft/minute

Test: MSMT 509 Test: MSMT 509 Test: MSTM 322

Test: MSMT 322

Filtering Efficiency 75% (min.) 3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.

E - 15 - 3

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.

SOIL CONSERVATION SERVICE

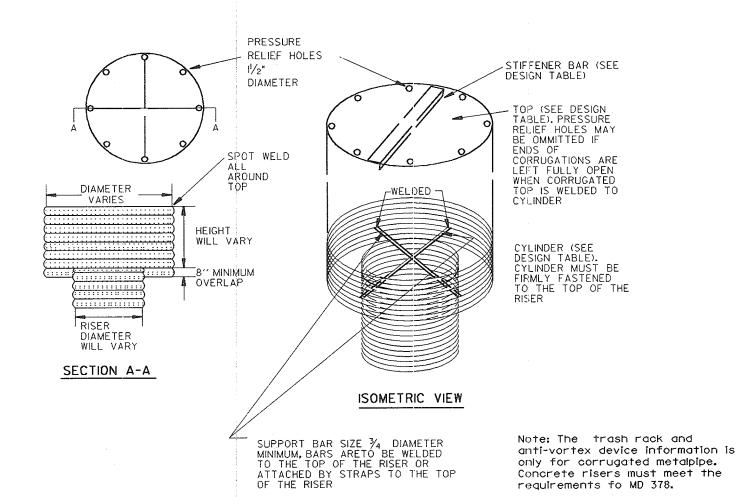
SILT FENCE

U.S. DEPARTMENT OF AGRICULTURE

NOT TO SCALE

MARYLAND DEPARTMENT OF ENVIRONMENT

WATER MANAGEMENT ADMINISTRATION



Riser		sh Rack linder Thick		Minimum Size	Minimum	Тор
Diam., in.		gage	H. in.	Support Bar	Thickness	Stiffener
12	18	16	6	#6 Rebar	16 ga.	
15	21	16	: 7	•	•	
18	27	16	: 8	•	•	
21	30	16	: II	•	•	
24	36	16	13	•	l4 ga.	
27	42	16	15	•	14 ga.	
36	54	14	17	#8 Rebar	12 ga.	
42	60	14	19	•	•	
48	72	12	21	- /4" pipe or - /4 x - /4 x /4 angle	10 ga.	
54	78	12	25	•	¥	
60	90	12	29	- /2" p[pe or - /2 × - /2 × /4 angle	8 ga.	
66	96	10	33	2" pipe or 2×2×3/16 angle	8 ga., w/stiffener	2x2xI/4 angle
72	102	Ю	36	•	•	2-1/2x2- 1/2x1/4 angle
78	114	10	39	2-1/2" pîpe or 2x2x1/4 angle	•	•
84	120	10	42	2-I/2" pipe or 2-I/2x2-I/2xI/4 angle	• :	2-1/2×2-1/2× ‰ angle
.DEPARTMENT O SOIL CONSERVAT				C - 10 - 26		TAND DEPARTMENT OF ENVIRONMEN TER MANAGEMENT ADMINISTRATION

CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE NOT TO SCALE

Construction Specifications

I. The area under the 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\$ized stones, rocks, organic material, or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed. 3. The total trap volume as measured from the bottom to riser crest elevation shall be 3600 cubic feet per acre of drainage area (see Table 9). The top of embankment must be \geq 1' above the riser crest elevation. 4. Sediment shall be removed and the trap restored to its original dimensions when the sediment has accumulated to one half of the wet storage depth of the trap (900cf/ac). The sediment shall be deposited in a suitable area and in such a manner that it will not erode. 5. The structure shall be inspected periodically and after each rain and repairs 6. Construction operations shall be carried out in such a manner that erosion and water pollution are 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. 7. The structure shallbe removed and area stabilized when the drainage area has been properly stabilized. 8. All cut and fill slopes shall be 2: or flatter. 9. All pipe connections shall be watertight. 10. Above the wet storage elevation, the riser shall be perforated with $lar{1}{2}$ wide by 6'long slits or l'diameter holes spaced 6'vertically and horizontally. No perforations will be allowed within 6' of the horizontal barrel. II. The riser shallbe wrappėd with $\frac{1}{2}$ hardware cloth (wire) then wrapped with Geotextile Class E. The filter cloth shall extend 6" above the highest slit and 6'below the lowest slit. Where ends of filter cloth come together, they shall be overlapped, folded and fastened to prevent bypass. Filter cloth shall be replaced as necessary to prevent clogging. 12. Straps or connecting bands shall be used to hold the filter cloth and wire fabric in place. They shall be placed at the top and bottom of the cloth. 13. Fill material around the pipe spillway shall be hand compacted in 4° layers. A minimum of 2' of hand-compacted backfill shall be placed over the pipe spillway before crossing it with construction equipment. 14. The riser shall be anchored with either a concrete base or steel plate base to prevent flotation. Concrete bases shall be at least twice the riser diameter and 12 deep with the riser embedded 9. Steelplate bases shall be at least twice the riser diameter, $\frac{1}{4}$ minimum thickness and attached to the bottom of the riser by a continuous weld to form a watertight connection. Then place 2' of stone, gravelor tamped earth on the plate. 15. Anti seep collars shall be constructed in accordance with plans (ref. table 16 and Details C-10-23 AND C-10-24). 16. Concentric trash rack and anti-vortex device design details are on Detail C-IO-26 AND C-IO-26A. 17. Refer to Section D for dewatering requirements of sediment traps. 18. Outlet - An outlet shall be provided, which includes a means of conveying the discharge in an erosion free manner to an existing stable channel.

19. Where discharge occurs at the property line, local ordinances and drainage

C-9-7A

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

PIPE OUTLET SEDIMENT TRAP - ST I

easement requirements shallbe met.

NOT TO SCALE

it will not interfere with the functioning of the dike. each rain event. A - 1 - 6EARTH DIKE GRADE ANGLES OF STUB TO BE INDICATED (ANGLE BASED ON BARREL GRADE) FLOW MINIMUM 2 *8 RE-BARS
PLACED AT RIGHT ANGLES IN
BOTH DIRECTIONS AND
PROJECTING THROUGH SIDES
OF RISER TO HELP ANCHOR RISER TO HELP ANCHOUNTED BASE. RE-BARS TO PROJE A MINIMUM OF 1/4 RISER DIAMETER BEYOND THE OUTSIDE OF THE RISER. Construction Specifications for risers 10" or less in height are: twice the riser diameter. 1.20 (downward forces = 1.20 \times upward forces). C - 10 - 25RISER BASE DETAIL

b 2:ISLOPE OR FLATTER 2:ISLOPE OR FLATTER EXCAVATE TO PROVIDE REQUIRED FLOW WIDTH GRADE LINE AT DESIGN FLOW DEPTH CUT OR FILL SLOPE DIKE B DIKE A a-DIKE HEIGHT POSITIVE DRAINAGE SUFFICIENT TO DRAIN A A A A A A A A C-FLOW WIDTH VVVVV d-FLOW DEPTH PLAN VIEW STANDARD SYMBOL A-2 B-3 ---/----FLOW CHANNEL STABILIZATION GRADE 0.5% MIN. IO% MAX. I. 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?" minimum Construction Specifications

I. 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 shalloutlet 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 shallbe excavated or shaped to line, grade and cross section as required to meet the criteria specified herein and be free of bank projections or other irregularities which willimpede normal flow.

6. Fill shall be compacted by earth moving equipment.

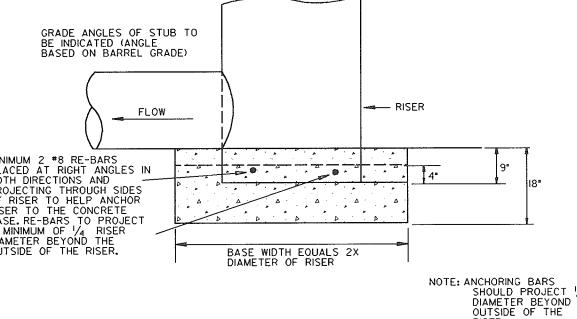
7. All earth removed and not needed for construction shall be placed so that

8. Inspection and maintenance must be provided periodically and after

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

NOT TO SCALE



The riser shall have a base attached with a watertight connection and shall have sufficient weight to prevent flotation of the riser. Two approved bases

I. A concrete base 18" thick with the riser embedded 9" in the base.

2. A $\frac{1}{4}$ minimum thickness steelplate attached to the riser by a continuous weld around the circumference of the riser to form a watertight connection. The plate shall have 2' of stone, gravel, or compacted earth placed on it to prevent flotation. In either case, each side of the square base shall be

Note: For risers greater than ten feet high computations shall be made to design a base which willprevent floatation. The minimum factor of safety shall be

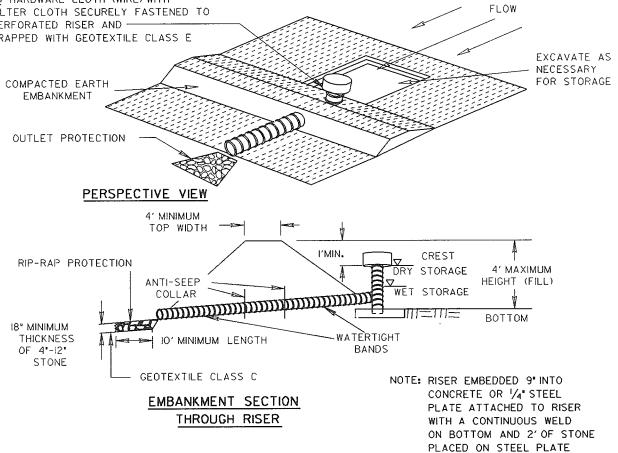
U.S. DEPARTMENT OF AGRICULTURE

MARYLAND DEPARTMENT OF ENVIRONMENT

SOIL CONSERVATION SERVICE

WATER MANAGEMENT ADMINISTRATION

NOT TO SCALE 1/2" HARDWARE CLOTH (WIRE) WITH FILTER CLOTH SECURELY FASTENED TO PERFORATED RISER AND -WRAPPED WITH GEOTEXTILE CLASS E



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

C - 9 - 7

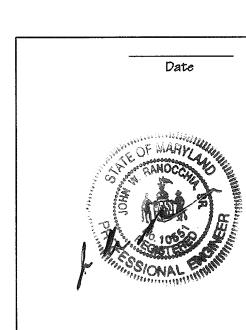
PIPE OUTLET SEDIMENT TRAP - ST I

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

TWICE THE RISER DIAMETER

NOT TO SCALE

DEVELOPER'S CERTIFICATION: *I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. LALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT. 5-20-1978 Dan X:661:115 **ENGINEER'S CERTIFICATION:** "ICFRTIFY 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 REQUIRMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT." John W. Ranocchia, Sv. REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS



		Professional Engineer No. 1955			
APPROVED: H	OWARD COL	INTY DEPT. OF PLA	NNING & Z	ONING	
_ Mu		nun		6/3/98	
CHIEF, DEVELOP	MENT ENGINE	ERING DIVISION	#	DATE	
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CHIEF, DIVISION	OF LAND D	DEVELOPMENT		ø ØATE	
Land				6/4/88	
DIRECTOR				DATE	

Revision Description Sears Warehouse

PARCEL A-74 At Gateway Commerce Center Building 20, 8901 Snowden River Parkway

The Howard Research and Development Corporation / GEAPE II, Inc. 10275 Little Patuxent Parkway, Columbia, MD 21044 Developer

Sears Logistics Services Inc. 3333 Beverly Road, Hoffman Estates, IL 60179



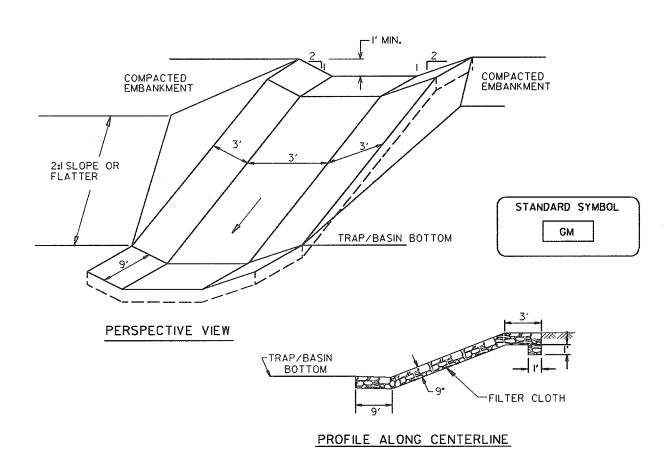
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & nvironmental Professionals

GATEWAY COMMERCE CENTER N/A
PLAT# OR LF BLOCK # ZONE TAXZONE MAP ELECT. DISTRICT 13140 N/A M-1 42 6th 4900000

EROSION & SEDIMENT CONTROL DETAILS

| Proj. No. 97164 CRW Scale NA Des By Date MAY 1,1998 Drn By 16 OF 19 Approved MM CRW

Fri May 1 12:41:26 1998 d:\97164\97164.sc4



Construction Specifications

- I. Gabion inflow protection shall be constructed of 9' \times 3' \times 9' gabion baskets forming a trapezoidal cross section I' deep, with 2:1 side slopes, and a 3' bottom width.
- 2. Geotextile Class C shall be installed under all gabion baskets.
- 3. The stone used to fill the gabion baskets shall be 4" 7".
- 4. Gabions shall be installed in accordance with manufacturers recommendations.
- 5. Gabion Inflow Protection shall be used where concentrated flow is present on slopes steeper than 4:1.

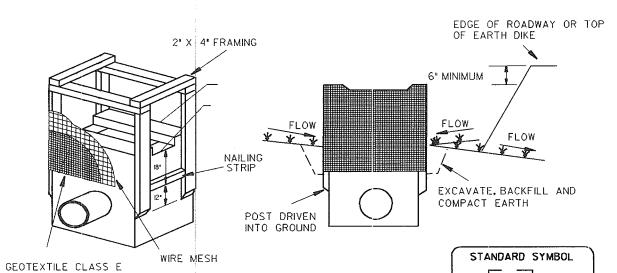
U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

B - 7 - 2

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

GABION INFLOW PROTECTION

NOT TO SCALE



Construction Specifications

MAX. DRAINAGE AREA = 1/4 ACRE

I. Excavate completely around the inlet to a depth of 18" below the notch elevation.

2. Drive the 2'x 4'construction grade lumber posts I'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.

3. Stretch the 1/2" x 1/2" wire mesh tightly around the frame and fasten securely. The ends must meet and overlap at a

4. Stretch the Geotextile Class E tightly over the wire mesh with the geotixtile extending from the top of the frame to 18' below the inlet notch elevation. Fasten the geotextile firmly to the frame. The ends of the geotextile must meet at a post, be overlapped and folded, then fastened down.

5. 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.

6. If the inlet is not in a sump, construct a compacted earth dike across the ditch line directly below it. The top of the earth dike should be at least 6 higher than the top of the frame.

7. The structure must be inspected periodically and after each rain and the geotextile replaced when it becomes clogged.

6' MAX MUM SPACING OF 2" X 4" SPACERS

2" X 4" WEIR

WIRE MESH

MAX. DRAINAGE AREA = 1/4 ACRE

∠2' X 4' ANCHORS

2" X 4" SPACER

Construction Specifications

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

STANDARD INLET PROTECTION

WATER MANAGEMENT ADMINISTRATION E - 16 - 5

-2' MINIMUM LENGTH

OF 2" X 4"

2" X 4" WEIR

FILTER CLOTH

NOT TO SCALE

TO STORM

STANDARD SYMBOL

MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

E - 16 - 5A

2. Place $\frac{y_4}{4}$ to $\frac{y_2}{2}$ stone, 4'-6' thick on the grate to secure the fabric and

1. Lift grate and wrap with Geotextile Class E to completely cover all openings,

PLAN/CUT AWAY VIEW

CROSS SECTION

Construction Specifications

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

-3/4" - 11/2" STONE

- GEOTEXTILE CLASS E

MAX. DRAINAGE AREA = 1/4 ACRE

- 6" OVERLAP

AT GRADE INLET PROTECTION

then set grate back in place.

provide additional filtration.

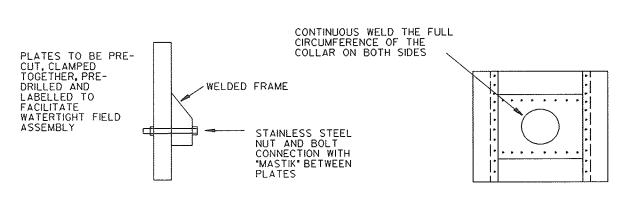
STANDARD SYMBOL

AGIP

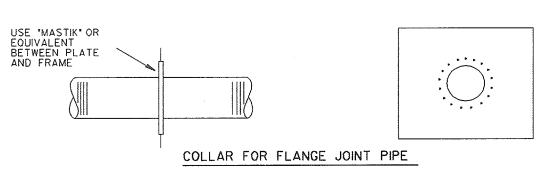
GEOTEXTILE CLASS E

NOT TO SCALE

INSTALL COLLAR WITH CORRUGATIONS VERTICAL MINIMUM LAST TWO CORRUGATIONS ON EACH END MUST BE ANNULAR OR CONTINUOUS WELD THE FULL CIRCUMFERENCE OF THE COLLAR ON BOTH SIDES COLLAR WELDED IN PLACE ON BARREL SECTION



ANTI-SEEP COLLAR DESIGN



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

TYPICAL ANTI-SEEP COLLARS

C - 10 - 24

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

NOT TO SCALE

I. Attach a continuous piece of $\frac{1}{2}$ $\frac{x}{2}$ wire mesh (30" minimum width by throat length plus 4') to the 2' x 4' weir (measuring throat length plus 2') as shown on the standard 2. Place a continuous piece of Geotextile Class E the same dimensions as the wire mesh over the wire mesh and securely attach it to the 2' x 4' weir. 3. Securely nail the 2" X 4" wair to a 9" long vertical spacer to be located between the weir and the inlet face (max. 4' apart). 4. Place the assembly against the inlet throat and nail (minimum 2' lengths of 2" x 4" to the top of the weir at spacer locations). These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight. 5. The assembly shallbe placed so that the end spacers are a minimum I'beyond both ends of the throat opening. 6. Form the $\frac{1}{2}$ 'x $\frac{1}{2}$ ' wire mesh and the geotextile fabric to the concrete gutter and against the face of the curb on both sides of the inlet. Place clean 3/4" x 11/2" stone over the wire mesh and geotextile in such a manner to prevent water from entering the inlet under or around the geotextile. 7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ALMINISTRATION

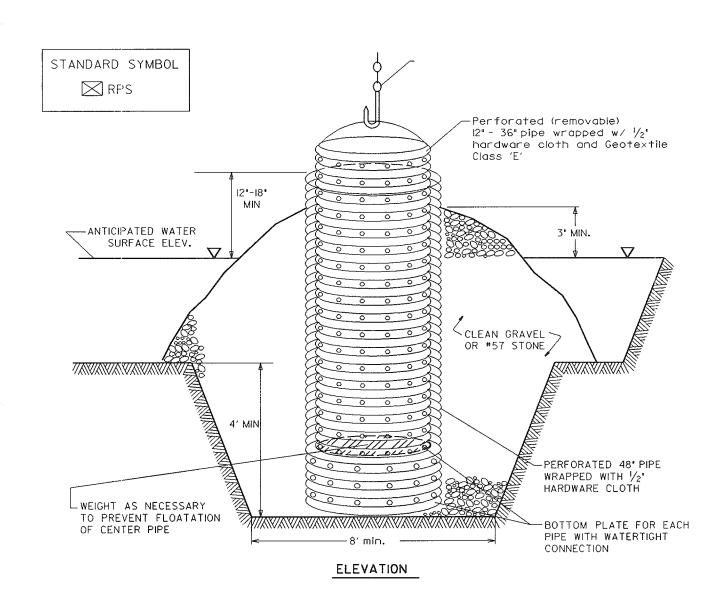
CURB INLET PROTECTION (COG OR COS INLETS)

earth or asphalt dike to direct the flow to the inlet.

8. Assure that storm flow does not bypass the inlet by installing a temporary

E - 16 - 5B

NOT TO SCALE



Construction Specifications

I. 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 inside stand pipe (center pipe) should be constructed by perforating a corrugated or PVC pipe between 12" and 36" in diameter. The perforations shall be $\frac{1}{2}$ " X 6" slits or 1" diameter holes 6" on center. The center pipe shall be wrapped with $\frac{1}{2}$ hardware cloth first, then wrapped again with Geotextile Class E. 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

REMOVABLE PUMPING STATION

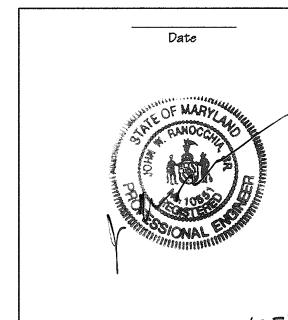
D - 12 - 5

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

NOT TO SCALE

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



Professional Engineer No. 10557 APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING Revision Description Date No. Sears Warehouse PARCEL A–74
At Gateway Commerce Center Building 20, 8901 Snowden River Parkway The Howard Research and Development Corporation 10275 Little Patuxent Parkway, Columbia, MD 21044 Developer Sears Logistics Services Inc. 3333 Beverly Road, Hoffman Estates, IL 60179 Daft ·McCune -Walker, Inc. 200 East Pennsylvania Avenue Towson, Maryland 21286 A Team of Land Planners, Landscape Architects, (410) 296–3333 Engineers, Surveyors & Fax 296-4705 CENSUS TRACT

SUBDIVISION NAME

GATEWAY COMMERCE CENTER

PLAT# OR IF BLOCK # ZONE TAXZONE MAP ELECT. DISTRICT

13140 N/A M-1 42 6th

SEWER CODE

4900000 **EROSION & SEDIMENT** CONTROL DETAILS CRW Scale NA Proj. No. 97164 Des By Date MAY 1,1998 WHJ Drn By 17 OF 19 Approved MM CRW

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