

- Notes
- Sidewalk to be scribed in 5' maximum squares.
 - Expansion joints across the sidewalk not to be more than 15' apart.
 - 1/2" preformed bituminous expansion material in expansion joints to be kept 1/4" below surface of sidewalk.
 - Concrete to be mix No.2
 - When sidewalk abuts curb, walk shall be 1/4" above curb with performed bituminous expansion material between sidewalk and curb and resting on a compacted crushed stone base. See detail A this sheet.
 - 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.

APPROVED: FOR PUBLIC WATER + SEWERAGE SYSTEMS.
 HOWARD COUNTY HEALTH DEPARTMENT
 County Health Officer *[Signature]* Date 1-15-03
 APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING
 Director *[Signature]* Date 1/13/03
 Chief, Division of Land Development *[Signature]* Date 1/13/03
 Chief, Development Engineering Division *[Signature]* Date 1/13/03

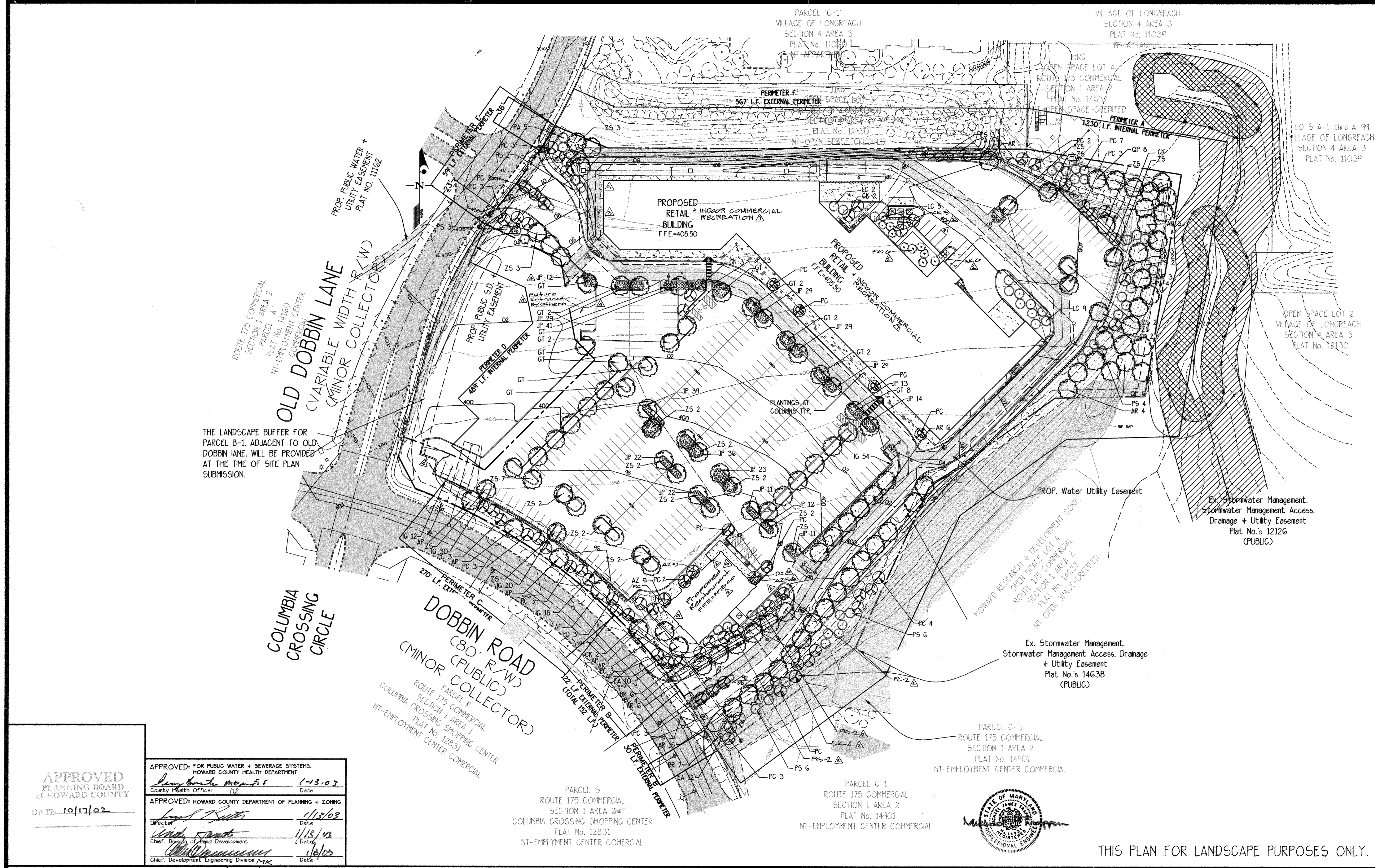
APPROVED PLANNING BOARD OF HOWARD COUNTY
 DATE 10/17/02

DES.	DRN. MIP	CHK.	DATE	REVISION	BY	APPR.

OWNER:
 ABRAMS DEVELOPMENT GROUP, INC.
 SNOWDEN COMMONS
 5850 WATERLOO ROAD, SUITE 230
 COLUMBIA, MD 21045
 ATTN: MICKEY ABRAMS
 (410) 461-4340

SITE DETAIL SHEET
ROUTE 175 COMMERCIAL
 SECTION 1 AREA 2
 PARCEL "B-1" & "B-2"
 PLAT No.

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NEW TOWN	02080
DATE	TAX MAP - GRID	SHEET
OCT., 2002	36-18	3 OF 13



THE LANDSCAPE BUFFER FOR PARCEL B-1, ADJACENT TO OLD DOBBIN LANE, WILL BE PROVIDED AT THE TIME OF SITE PLAN SUBMISSION.

APPROVED
PLANNING BOARD
OF HOWARD COUNTY

DATE: 10/17/02

APPROVED: FOR PUBLIC WATER + SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT	
<i>Sung-bum Moon</i> County Health Officer	1-13-03 Date
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING	
<i>Paul Smith</i> Director	11/13/03 Date
<i>David Strick</i> Chief, Division of Land Development	1/18/04 Date
<i>Michael Cummings</i> Chief, Development Engineering Division	1/16/02 Date

PARCEL S
ROUTE 175 COMMERCIAL
SECTION 1 AREA 2
COLUMBIA CROSSING SHOPPING CENTER
PLAT No. 12831
NT-EMPLOYMENT CENTER COMMERCIAL

PARCEL C-1
ROUTE 175 COMMERCIAL
SECTION 1 AREA 2
PLAT No. 11039
NT-EMPLOYMENT CENTER COMMERCIAL

PARCEL C-3
ROUTE 175 COMMERCIAL
SECTION 1 AREA 2
PLAT No. 14901
NT-EMPLOYMENT CENTER COMMERCIAL



THIS PLAN FOR LANDSCAPE PURPOSES ONLY.

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

DATE	REVISION	BY	APP'R.
10/17/02	Rev Building A Label	gt	MJT
11/11/04	Add Patio Adjacent to Building B	WesJ	
11/11/04	Add Patio adjacent to Building B	WesJ	
12/10/04	Rev Parking & Landscape Adj To Par. B-1	WesJ	
01/10/05	Add Patio Adjacent to Building A Restaurant & Extend Walk of Bldg	WesJ	
01/10/05	Rev Landscape & Bldg Footprint Bldg B & Rear Dumpster	WesJ	

OWNER:
ABRAMS DEVELOPMENT GROUP, INC.
SNOWDEN COMMONS
5850 WATERLOO ROAD, SUITE 230
COLUMBIA, MD 21045
MR. MICKEY ABRAMS
(410) 461-4340

DOBBIN STATION LANDSCAPE PLAN
ROUTE 175 COMMERCIAL
SECTION 1 - AREA 2
PARCEL B-1 & B-2
PLAT NO. 15747

SCALE	ZONING	G. L. W. FILE No.
1"=50'	NEW TOWN	02080
DATE	TAX MAP - GRID	SHEET
OCT., 2002	36-18	5 of 13

SOP 03-42

PLANT MATERIALS AND PLANTING METHODS

A. Plant Materials

The landscape contractor shall furnish and install and/or dig, ball, burlap and transport 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 shade trees shall be six feet (6'), maximum eight feet (8').

c. 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.

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% 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'.

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, Victoria, or Escort.

LANDSCAPING NOTES

- This plan has been prepared in accordance with the New Town Alternative Compliance provisions of Section 16.124 of the Howard County Code and the Howard County Landscape Manual.
- 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.
- Field verify underground utility locations and existing conditions before starting planting work. Contact engineer / landscape architect if any relocations are required.
- 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.
- 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.
- No substitution shall be made without written consent of the owner or his representative.
- All areas disturbed by construction activities but not otherwise planted, paved, or mulched shall be seeded or sodded in accordance with the project specifications.
- 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.
- All exposed earth within limits of planting beds shall be mulched with shredded hardwood mulch per Planting Details.
- Financial surety for the required landscaping per schedule A and B shall be posted with the grading permit in the amount of \$15,150.00
- Tabulation for Landscape shown: Required planting by HRD for 9.23 acre of office combined at 22 trees/acre = 203 trees
Planting provided:
Shade Trees 125
Ornamental Trees 64 = 32 E.S.T. 1 SHADE AT 2:1
Evergreen Trees 87 = 44 E.S.T. 1 SHADE AT 2:1
Shrubs provided: 816 = 82 E.S.T. 1 SHADE AT 10:1
Total E.S.T. = 263
*E.S.T., or Equivalent Shade Tree
- 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.

Category	SCHEDULE A					
	PERIMETER #A	PERIMETER #B	PERIMETER #C	PERIMETER #D	PERIMETER #E	PERIMETER #F
Landscape Buffer Type	N/A	B	E	N/A	B	C
Linear Feet of Roadway/Perimeter Frontage	1,230'	152'	120'	489'	59'	567'
Credit for Ex. Vegetation (Yes, No, Linear Feet) (describe below if needed)	N/A	NO	NO	N/A	NO	NO
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (describe below if needed)	N/A	No	No	N/A	No	No
Number of Plants Required Shade Trees Evergreen Trees Shrubs	N/A	3 4 0	3 0 30	N/A	2 0 15	14 22 0
Number of Plants Provided Shade Trees Evergreen Trees Other Trees (2:1 subst.) Shrubs (10:1 subst.) (describe plant substitution credits below if needed)	0 0 0 0	3 0 7 35	3 0 11 68	0 0 0 0	0 2 4 0	17 117 0 0
Bond Requirement - Surety for Schedule A: Schedule 'A' Number of Shade Trees for bonding: 14 x \$300 = \$4,200.00 Schedule 'A' Number of Evergreen Trees for bonding: 26 x \$150 = \$3,900.00 Schedule 'A' Number of Shrubs for bonding: 45 x \$30 = \$1,350.00 Schedule 'B' Number of required Shade Trees for bonding: 19 x \$300 = \$5,700.00 TOTAL Estimate for Surety: \$15,150.00						
COMMENTS:						

SYMBOL	QTY.	NAMES (BOTANICAL / SCIENTIFIC)	SIZE
PLANT LIST			
SHADE TREES			
AR 41		Acer rubrum 'October Sunset'	2 1/2"-3" Cal. B+B
AP 5		Acerifolium platanus London Plane Tree	7' min. branching ht
GT 25		Gleditsia triacanthos 'Shademaster'	2 1/2"-3" Cal. B+B
QP 14		Quercus phellos Willow Oak	7' min. branching ht
ZS 42		Zelkova serrata 'Village Green' Village Green Zelcova	2 1/2"-3" Cal. B+B
EVERGREEN TREES			
LC 16		x Cupressocyparis 'Leylandi' Leyland Cypress	10'-12' in height
PA 16		Picea abies Norway Spruce	10'-12' in height
PS 32		Pinus strobus White Pine	10'-12' in height
ORNAMENTAL TREES			
CK 19		Cornus kousa 'Stellata' Stellata Kousa Dogwood	1 1/2"-2" Cal. B+B
PC 68		Prunus cerasifera 'Thundercloud' Purple Leafed Plum	1 1/2"-2" Cal. B+B
			7' min. branching ht
			M5 4
			Malus 'sargentii' Sargent Crabapple
			11/2"-2" cal. B+B
SHRUBS			
AZ 20		Rhododendron 'Glen Dale' Glen Dale Azaleas	24'-30" in Ht. B+B
BR 13		Berberis thunbergiana 'Rosy Glow' Rosy Glow Barberry	24'-30" in Ht. B+B
EA 22		Euonymus alata 'Compacta' Compact Burning Bush	24'-30" in Ht. B+B
JP 405		Juniperus parsonii Parson's Juniper	24'-30" in Ht. B+B
IG 156		Ilex glomerata Inherry	24'-30" in Ht. B+B

PLANT QUANTITIES ARE TO BE CONFIRMED BY THE LANDSCAPE CONTRACTOR.

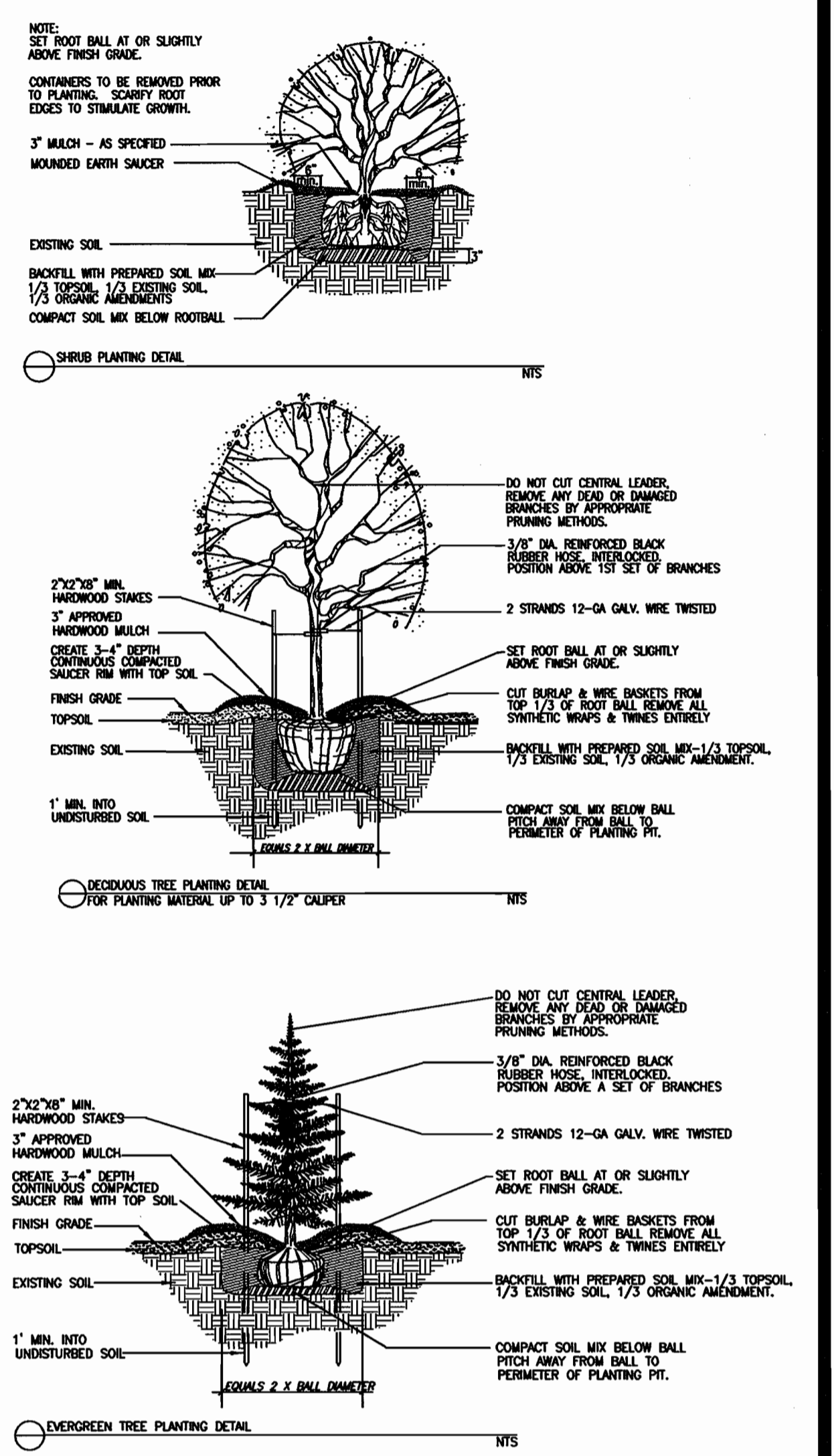
SCHEDULE B PARKING LOT INTERNAL LANDSCAPING	
Number of Parking Spaces =	384 Spaces (Provided)
Number of Trees Required =	19 Trees • 1 per 20 spaces
Number of Trees Provided	52
Other Trees (2:1 substitution)	
NOTE:	NUMBER OF LANDSCAPED ISLANDS REQUIRED: 19 @ 1 PER 20 SPACES NUMBER OF LANDSCAPED ISLANDS PROVIDED: 43 @ 1 PER 10 SPACES
Schedule 'B' Number of required Shade Trees for bonding: 19 x \$300 = \$5,700.00	

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, accompanies by an executed one-year guarantee of plant materials, will be submitted to the Department of Planning and Zoning.

Name (Developer's / Builder's) _____ Date 12/29/02

Financial surety for the required landscaping has been posted with the Developer's agreement in the amount of \$15,150.00.



APPROVED PLANNING BOARD OF HOWARD COUNTY

DATE 10/17/02

APPROVED FOR PUBLIC WATER + SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT

County Health Officer MR 1-15-03

APPROVED HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING

Director 1/13/03

Chief, Division of Land Development 1/13/03

Chief, Development Engineering Division MK 1/2/03

GLWGUTSCHICK 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: 410-880-1620 DC/VA: 301-989-2524 FAX: 301-421-4186

DES.	DRN.	CHK.	DATE	REVISION	BY	APPR.

OWNER:

ABRAMS DEVELOPMENT GROUP, INC.

SNOWDEN COMMONS

5850 WATERLOO ROAD, SUITE 230

COLUMBIA, MD 21045

MR. MICKEY ABRAMS

(410) 461-4340

LANDSCAPE DETAIL SHEET

ROUTE 175 COMMERCIAL

SECTION 1 - AREA 2

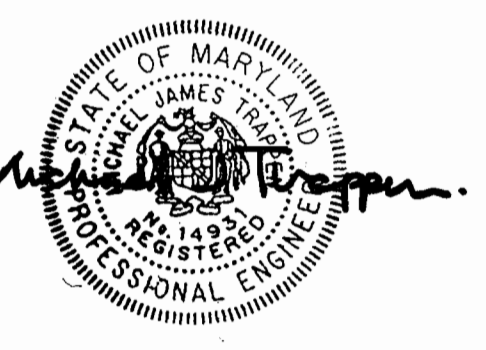
PARCEL "B-1" & "B-2"

PLAT NO.

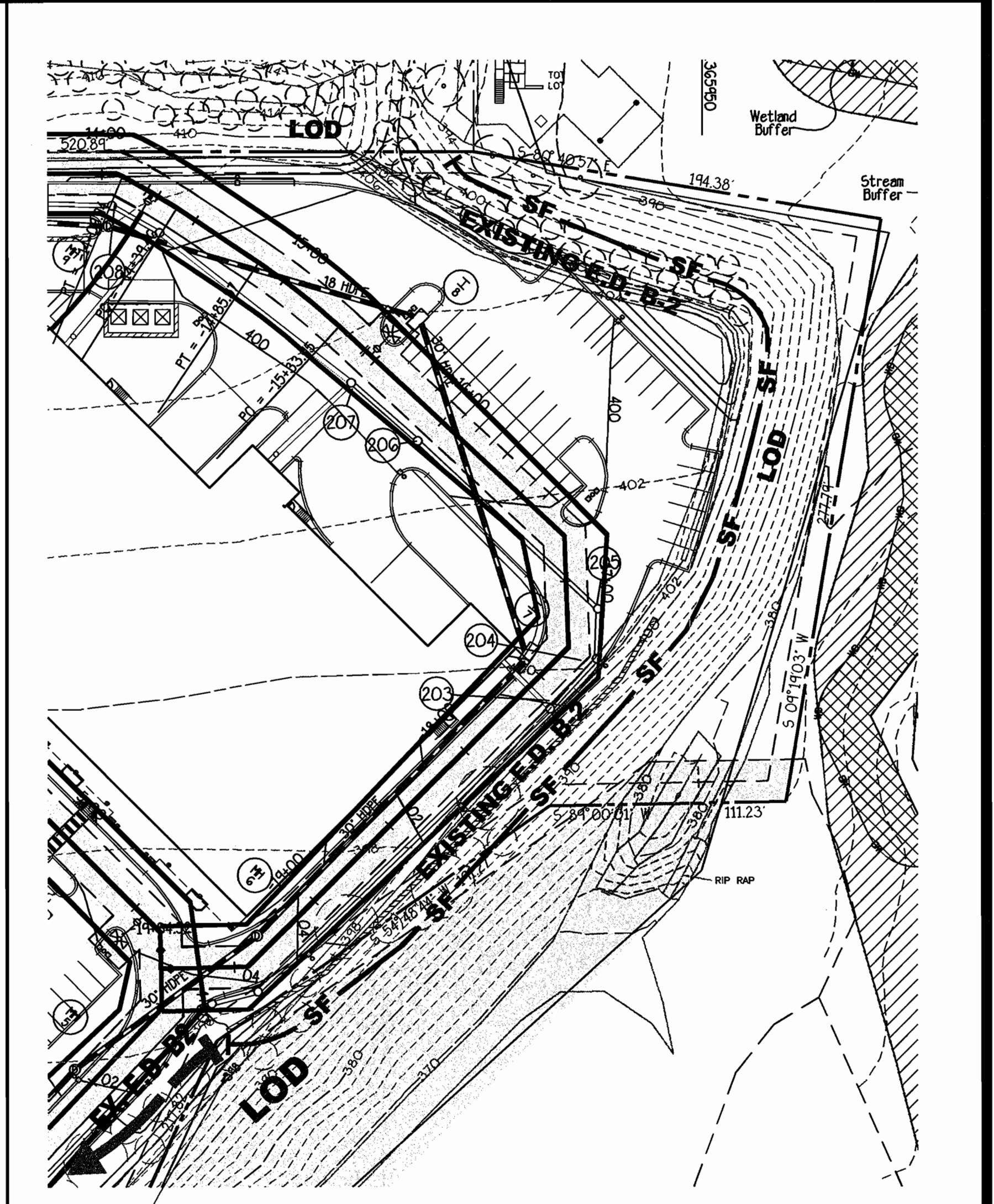
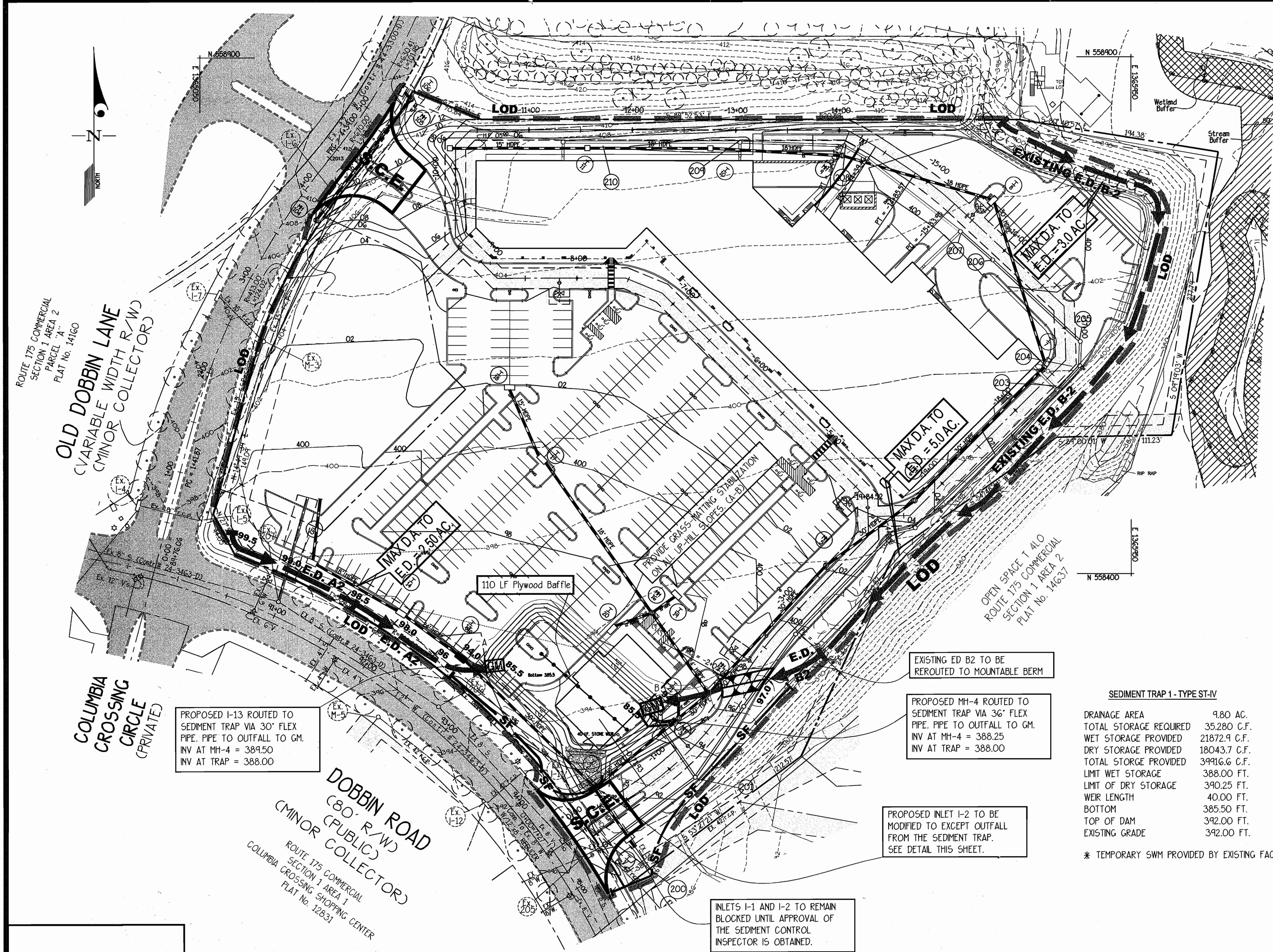
ELECTION DISTRICT No. 6

HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
NTS	NEW TOWN	02080
DATE	TAX MAP - GRID	SHEET
OCT., 2002	36-18	6 of 13



THIS PLAN FOR LANDSCAPE PURPOSES ONLY



EXISTING ED TO BE REMOVED 10 FT. DOWNHILL FROM END OF PROPOSED RETAINING WALL AND UPHILL.

PROPOSED I-13 ROUTED TO SEDIMENT TRAP VIA 30" FLEX PIPE. PIPE TO OUTFALL TO GM. INV AT MH-4 = 389.50 INV AT TRAP = 388.00

EXISTING ED B2 TO BE REROUTED TO MOUNTABLE BERM

PROPOSED MH-4 ROUTED TO SEDIMENT TRAP VIA 36" FLEX PIPE. PIPE TO OUTFALL TO GM. INV AT MH-4 = 388.25 INV AT TRAP = 388.00

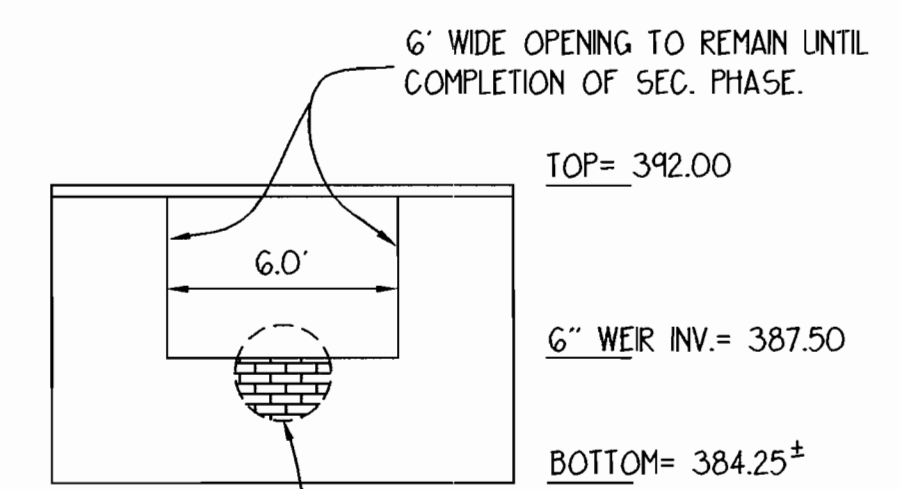
PROPOSED INLET I-2 TO BE MODIFIED TO EXCEPT OUTFALL FROM THE SEDIMENT TRAP. SEE DETAIL THIS SHEET.

INLETS I-1 AND I-2 TO REMAIN BLOCKED UNTIL APPROVAL OF THE SEDIMENT CONTROL INSPECTOR IS OBTAINED.

SEDIMENT TRAP 1 - TYPE ST-IV

DRAINAGE AREA	9.80 AC.
TOTAL STORAGE REQUIRED	35,280 C.F.
WET STORAGE PROVIDED	21,872.9 C.F.
DRY STORAGE PROVIDED	18,043.7 C.F.
TOTAL STORAGE PROVIDED	39,916.6 C.F.
LIMIT WET STORAGE	388.00 FT.
LIMIT DRY STORAGE	390.25 FT.
WEIR LENGTH	40.00 FT.
BOTTOM	385.50 FT.
TOP OF DAM	392.00 FT.
EXISTING GRADE	392.00 FT.

* TEMPORARY SWM PROVIDED BY EXISTING FACILITY.



PRECAST TYPE A-10 INLET. TYP. DET. SD 4.02J

6" WIDE OPENING TO REMAIN UNTIL COMPLETION OF SEC. PHASE.

6" WEIR INV = 387.50

BOTTOM = 384.25'

OPENING FOR FUTURE 30' HDPE TO BE BRICKED CLOSED UNTIL COMPLETION OF SEC. PHASE.

INLET I-2 SEC. MODIFICATIONS (Back of Structure) NTS



THIS PLAN IS FOR SEDIMENT CONTROL ONLY!

APPROVED FOR PUBLIC WATER + SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT
County Health Officer *Mike...* Date 1/12/03

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING
Director *...* Date 1/13/03
Chief, Division of Land Development *...* Date 1/13/03
Chief, Development Engineering Division *...* Date 1/13/03

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 12/20/02

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.

Signature of Engineer *Michael J. Trippan* Date 12/19/02

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

Signature of Reviewer *Jim Mayes* Date 12/30/02

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

Signature of Approver *John R. Robertson* Date 12/30/02

LEGEND

---	EXISTING CONTOUR
---	PROPOSED CONTOUR
---	LIMIT OF DISTURBANCE
SF	SILT FENCE
ED	EARTH DIKE
GM	GABION INFLOW PROTECTION
SCE	STABILIZED CONSTRUCTION ENTRANCE

APPROVED PLANNING BOARD OF HOWARD COUNTY
DATE 10/17/02

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. 410-580-1820 DC/VA 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APPR.

Owner:
ABRAMS DEVELOPMENT GROUP, INC.
SNOWDEN COMMONS
5850 WATERLOO ROAD, SUITE 230
COLUMBIA, MD 21045
MR. MICKEY ABRAMS
(410) 461-4340

SEDIMENT CONTROL PLAN
ROUTE 175 COMMERCIAL SECTION 1 AREA 2 PARCEL "B-1" & "B-2"
PLAT NO. _____
ELECTION DISTRICT No. 6
HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1" = 50'	NEW TOWN	02080
DATE	TAX MAP - GRID	SHEET
OCT, 2002	36-18	7 OF 13

SDP 03-02

STANDARD AND SPECIFICATIONS FOR TOPSOIL

DEFINITION
PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION.

PURPOSE
TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH MATERIALS TOXIC TO PLANTS AND/OR UNACCEPTABLE SOIL GRADATION.

CONDITIONS WHERE PRACTICE APPLIES

- THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPE WHERE:
 - THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.
 - THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTAINING SUPPLIED OF MOISTURE AND PLANT NUTRIENTS.
 - THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.
 - THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.
- FOR THE PURPOSES OF THESE STANDARDS AND SPECIFICATIONS, AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION. AREAS HAVING SLOPES STEEPER THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION ON THE PLANS.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

- TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE RESPECTIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SSS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.
- TOPSOIL SPECIFICATIONS - SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
 - TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SCL LOAM, SANDY CLAY LOAM, LOAMY SAND, OR OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF COBBLES, STONES, SLAG, COARSE FIBROUS, GRAVEL, STICKS, ROOTS, TRUNKS, OR OTHER MATERIALS LARGER THAN 1 1/2" DIAMETER.
 - TOPSOIL MUST BE FREE OF PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
 - WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.
 - FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:
 - PLACE TOPSOIL OF REQUIRED AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 2.0.0 VEGETATIVE STABILIZATION - SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS (FOR SEE SEEDING NOTES).
 - FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:
 - ON SOIL MEETING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS INDICATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:
 - PH FOR TOPSOIL SHALL BE BETWEEN 6.0 AND 7.5. IF THE TESTED SOIL DEMONSTRATES A PH OF LESS THAN 6.0, SUFFICIENT LIME SHALL BE PRESCRIBED TO RAISE THE PH TO 6.5 OR HIGHER.
 - ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT.
 - TOPSOIL HAVING SOLUBLE SALT GREATER THAN 500 PARTS PER MILL SHALL NOT BE USED.
 - NO SOD OR SEED SHALL BE PLACED ON SOIL WHICH HAS BEEN WITH SOIL STABILIZANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (30 DAYS MIN) TO PERMIT DISSIPATION OF PHOTO-TOXIC MATERIALS.
 - NOTE: TOPSOIL SUBSTITUTES OR AMENDMENTS AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL.
 - PLACE TOPSOIL OF (REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 2.0 VEGETATIVE STABILIZATION - SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS (FOR SEE SEEDING NOTES).
 - TOPSOIL APPLICATION
 - WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSION, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS.
 - GRADES ON THE AREAS TO BE TOPSOILED WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBERT 4"-8" HIGHER IN ELEVATION.
 - TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4"-8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SOODING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY REGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER.
 - TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS FROZEN OR MUDDY CONDITION. WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDING PREPARATION.
 - ALTERNATIVE FOR PERMANENT SEEDING - INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERICAL FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS MAY BE APPLIED AS SPECIFIED BELOW:
 - COMPOSTED SLUDGE MATERIAL FOR USE AS A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES SHALL BE TESTED TO PRESCRIBE AMENDMENTS AND FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
 - COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATE FROM, A PERSON OR PERSONS THAT ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT UNDER COMAR 26.04.06.
 - COMPOSTED SLUDGE SHALL CONTAIN AT LEAST 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHORUS, AND 0.2 PERCENT POTASSIUM AND HAVE A PH OF 7.0 TO 8.0. IF COMPOST DOES NOT MEET THESE REQUIREMENTS, THE APPROPRIATE CONSTITUENTS MUST BE ADDED TO MEET THE REQUIREMENTS PRIOR TO USE.
 - COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1000 SQUARE FEET.

PERMANENT SEEDING NOTES

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

SEEDING PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RANGING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING (UNLESS PREVIOUSLY LOOSENED).

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

- PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ FT) 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 UREA-FORM FERTILIZER (14 LBS/1000 SQ FT).
- 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 PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS PER ACRE (14 LBS/1000 SQ FT) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS PER ACRE 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE CO5 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 500 - 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 UNWETTED 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 SEEDING 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.

SEEDING PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RANGING, 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 (0.7 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 UNWETTED, 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.

NOTE: TOPSOIL SUBSTITUTES OR AMENDMENTS AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL.

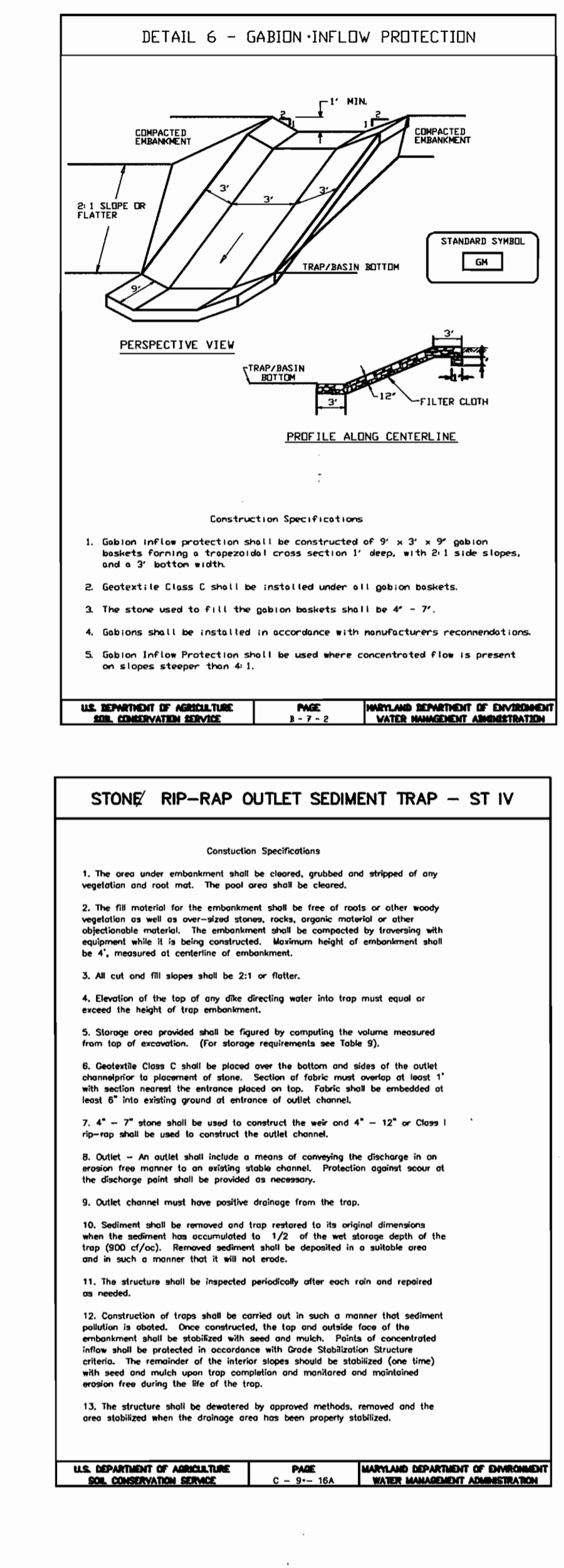
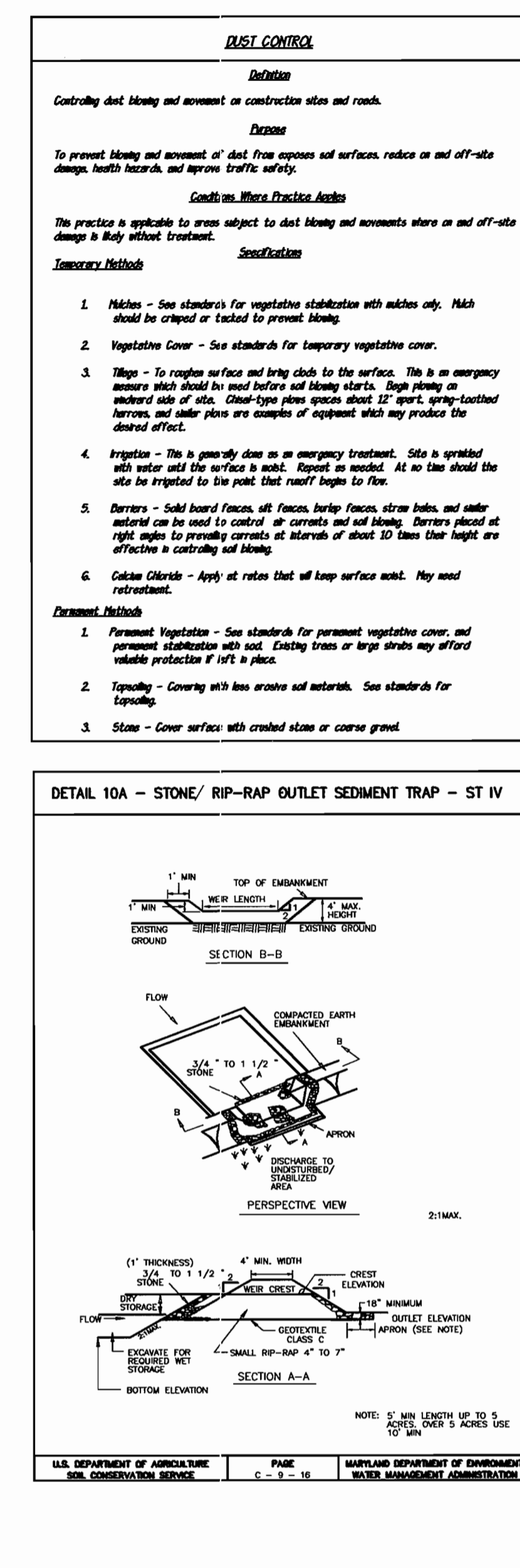
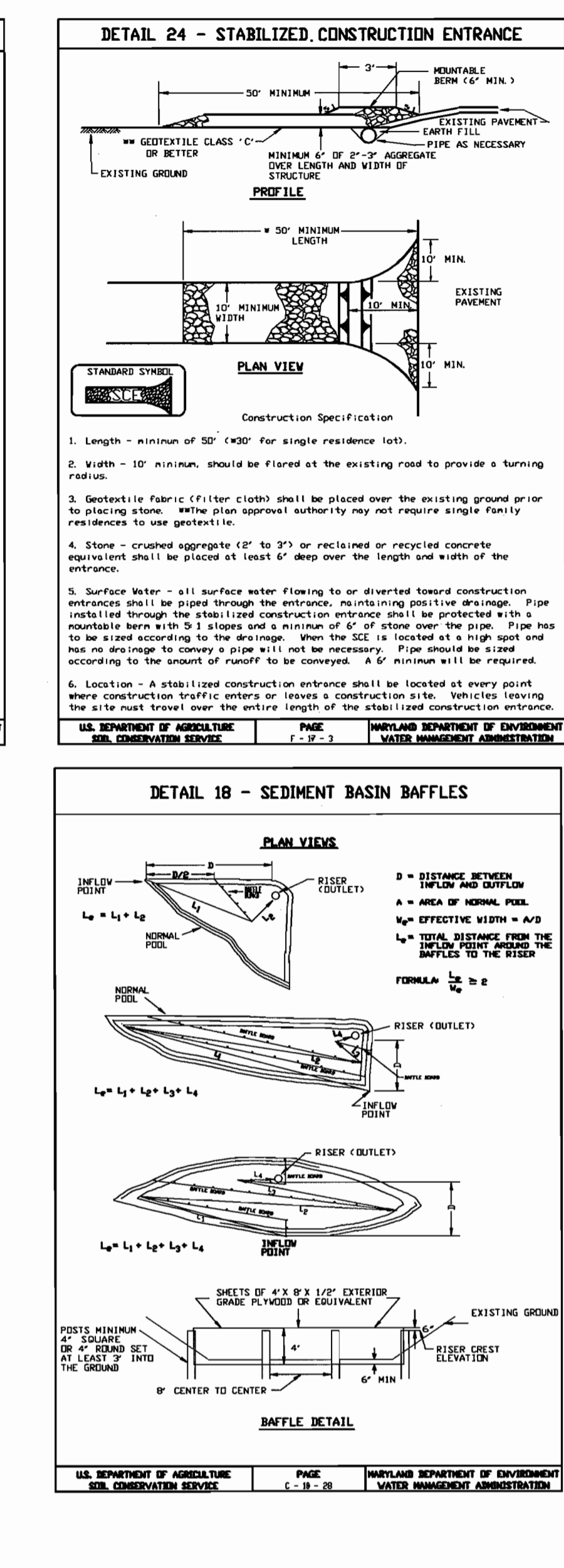
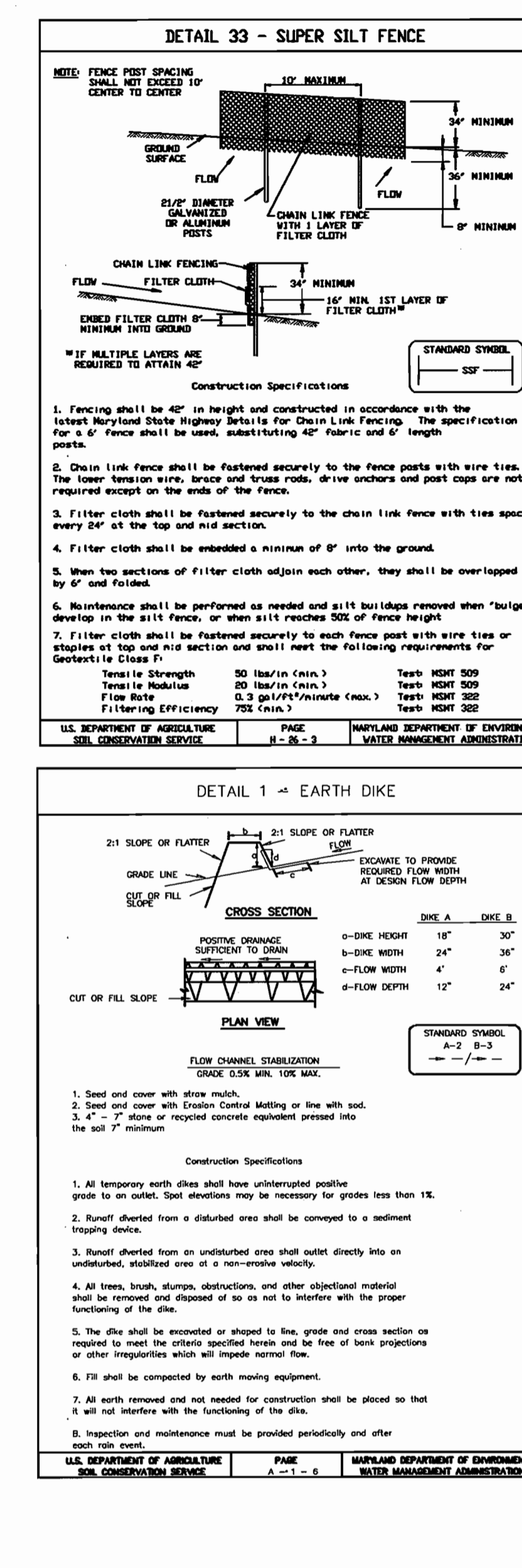
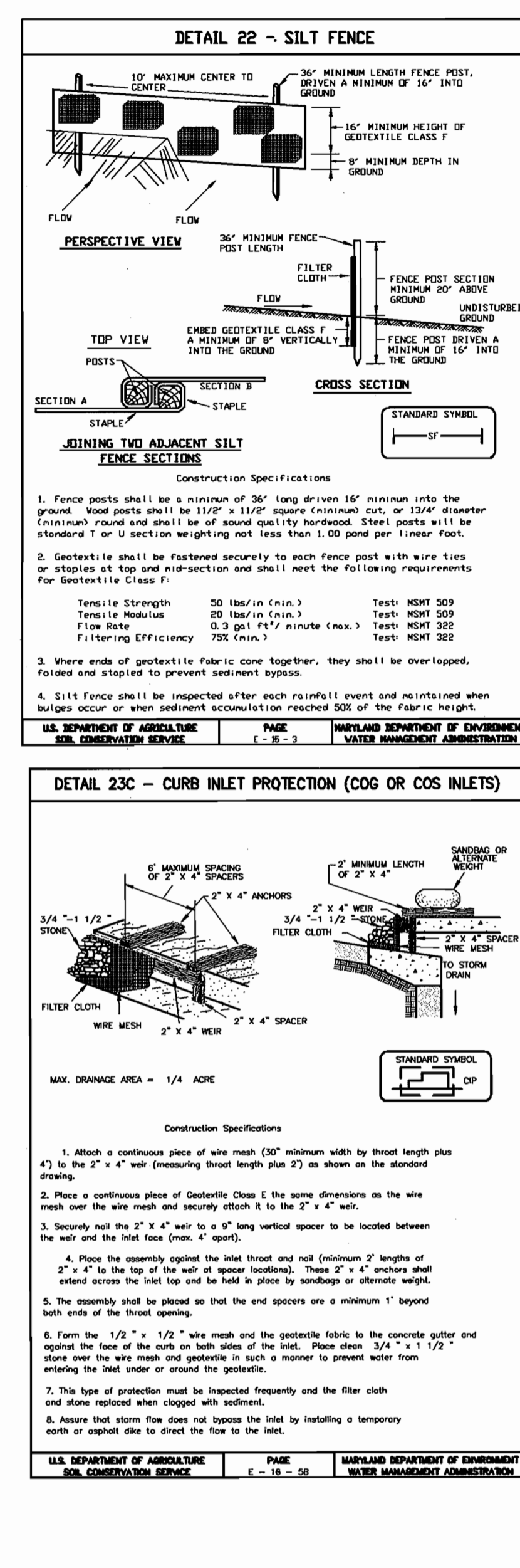
B. PLACE TOPSOIL OF (REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 2.0 VEGETATIVE STABILIZATION - SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS (FOR SEE SEEDING NOTES).

V. TOPSOIL APPLICATION

- WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSION, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS.
- GRADES ON THE AREAS TO BE TOPSOILED WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBERT 4"-8" HIGHER IN ELEVATION.
- TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4"-8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SOODING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY REGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER.
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VI. ALTERNATIVE FOR PERMANENT SEEDING - INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERICAL FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS MAY BE APPLIED AS SPECIFIED BELOW:

- COMPOSTED SLUDGE MATERIAL FOR USE AS A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES SHALL BE TESTED TO PRESCRIBE AMENDMENTS AND FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
 - COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATE FROM, A PERSON OR PERSONS THAT ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT UNDER COMAR 26.04.06.
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 - COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1000 SQUARE FEET.



SEDIMENT CONTROL NOTES

- 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
- 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 AND REVISIONS THEREOF.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 14 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES AND PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- 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.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS, SOIL TEMPORARY SEEDINGS AND MULCHING (SEC. 2). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:

TOTAL AREA OF SITE	10.25 ACRES
AREA DISTURBED	1.61 ACRES
AREA TO BE ROOFED OR PAVED	6.41 ACRES
AREA TO BE VEGETATIVELY STABILIZED	3.20 ACRES
TOTAL CUT	26,000 CU. YDS.
TOTAL FILL	26,000 CU. YDS.
OFF-SITE WASTE/BORROW AREA LOCATION	NONE
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED IF DEEMED NECESSARY BY THE HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, 10% 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 BLENDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO 3 FEET LENGTHS OR THAT WHICH SHALL BE BACKFILLED AND STABILIZED WITHIN 1 WORKING DAY, WHICHEVER IS SHORTER.

APPROVED PLANNING BOARD OF HOWARD COUNTY
DATE: 10/17/02

APPROVED FOR PUBLIC WATER + SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
Date: 11-13-02

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING
Date: 11/13/02

APPROVED: HOWARD COUNTY DEPARTMENT OF ENVIRONMENT
Date: 11/13/02

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: 12/20/02

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.

Signature: Michael J. Troppan Date: 12/19/02

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

Signature: Jim Myers Date: 12/30/02

Signature: John R. ... Date: 12/30/02

GLWGUTSCHICK 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

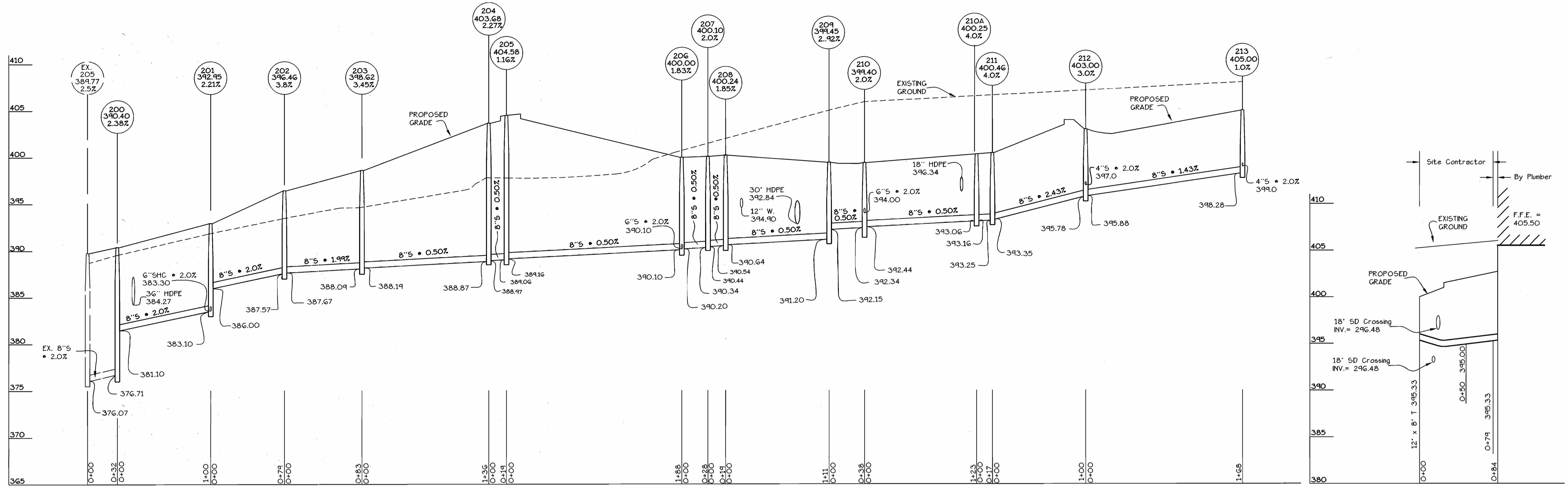
DES.	DRN. kip	CHK.	DATE	REVISION	BY	APPR.

Owner:
ABRAMS DEVELOPMENT GROUP, INC.
SNOWDEN COMMONS
5850 WATERLOO ROAD, SUITE 230
COLUMBIA, MARYLAND 21045
ATTN: MICKY ABRAMS
(410) 461-4340

SEDIMENT CONTROL DETAILS
ROUTE 175 COMMERCIAL
PARCELS "B-1" & "B-2"
PLAT No. _____
ELECTION DISTRICT No. 6

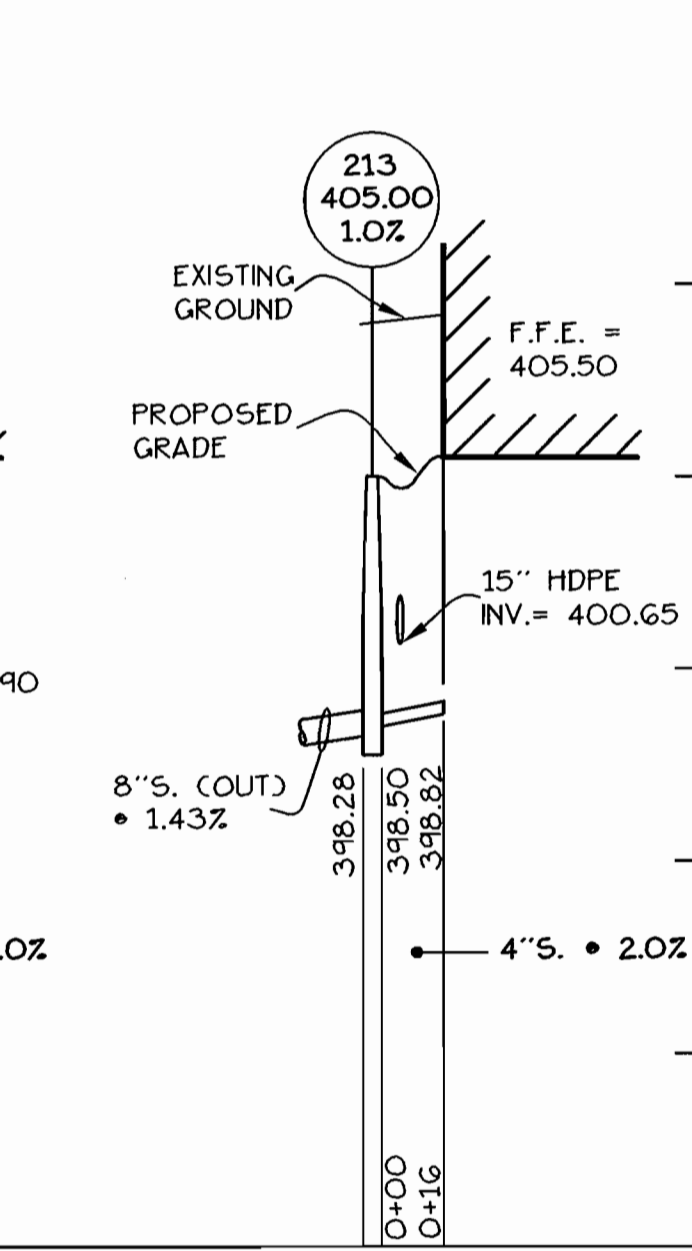
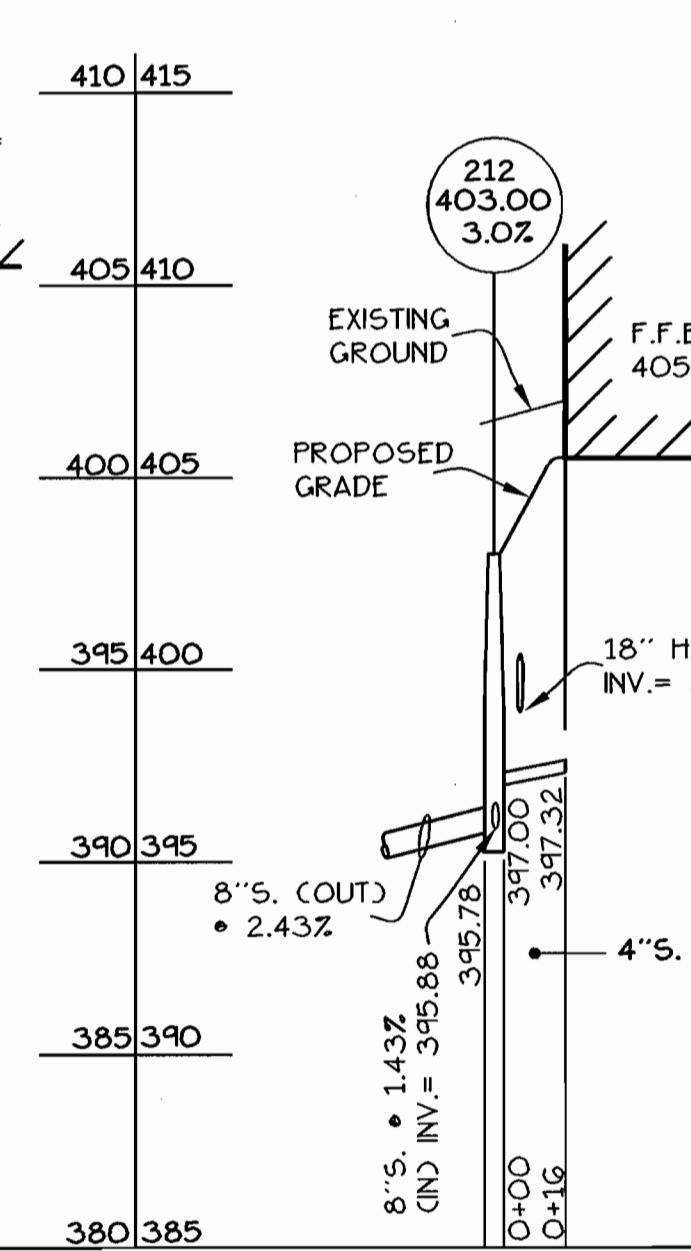
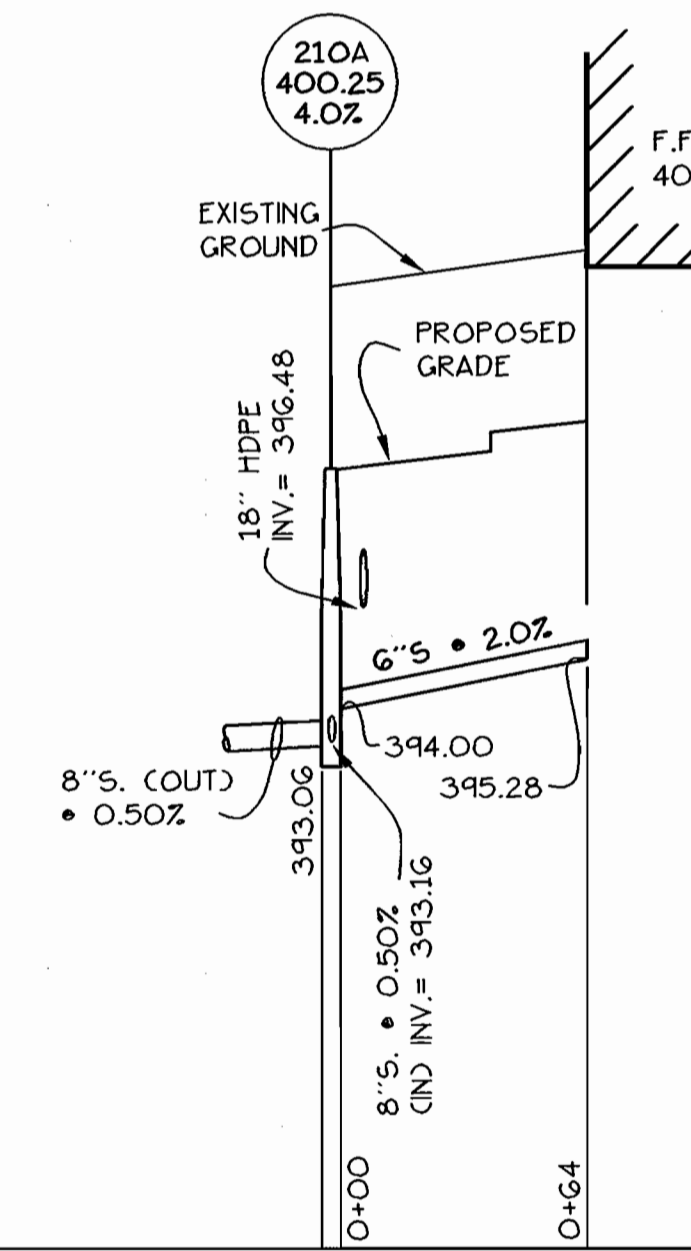
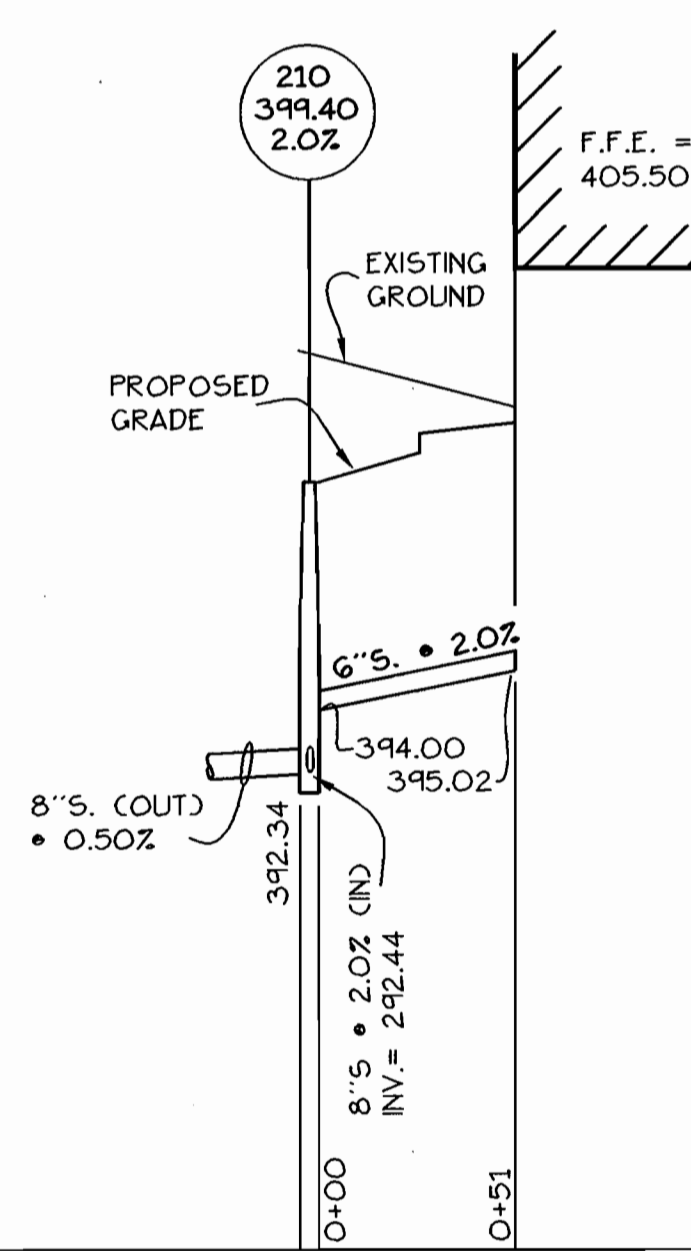
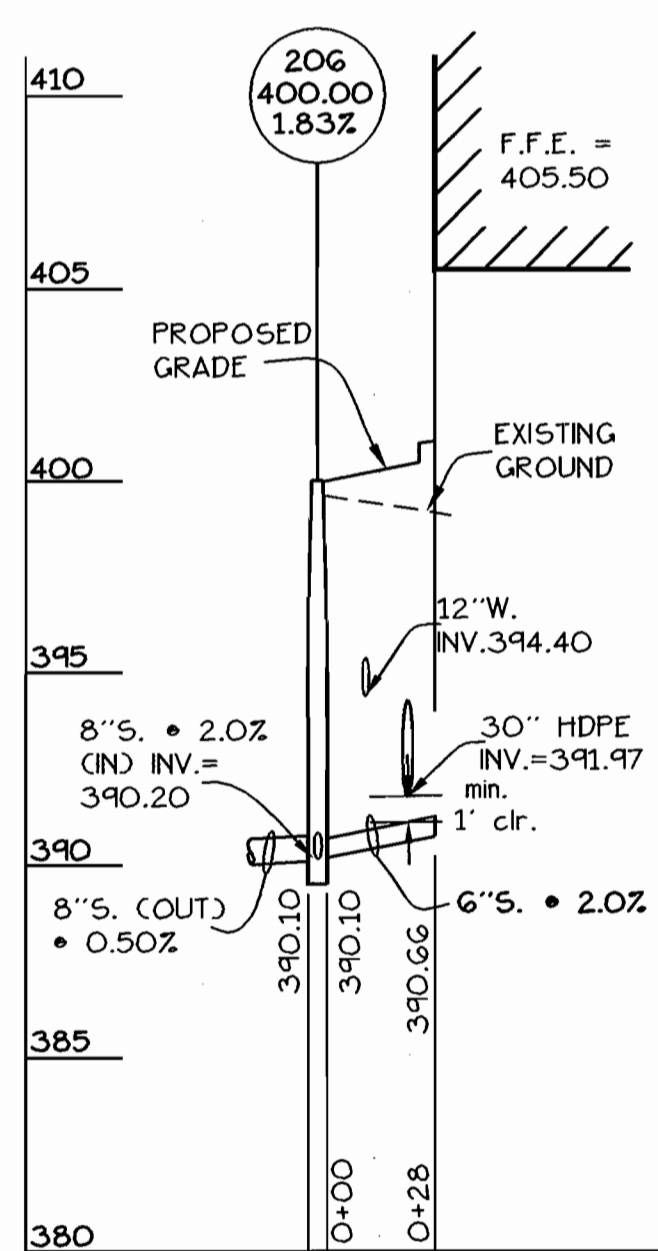
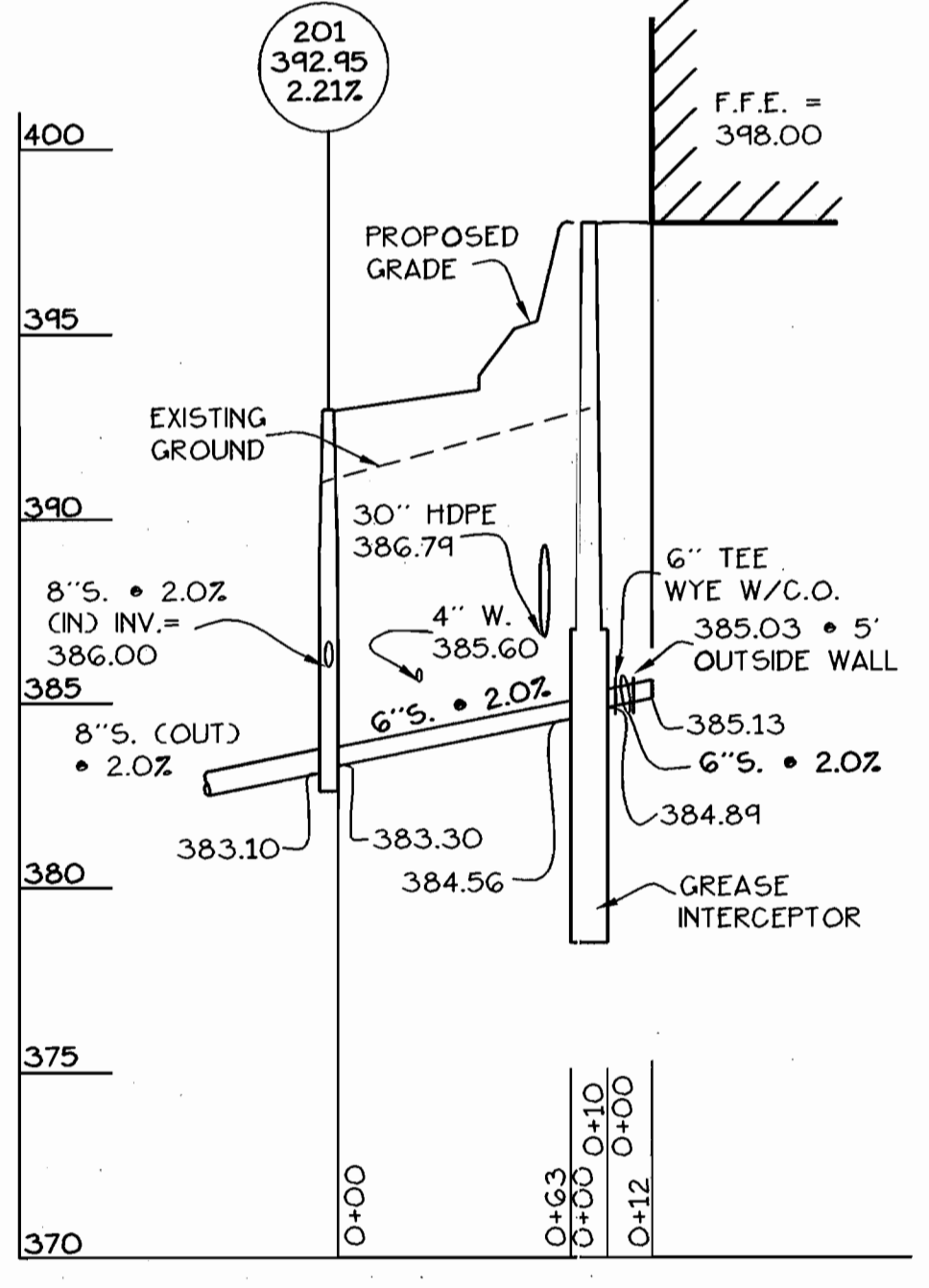
SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT	02080
DATE	TAX MAP - GRID	SHEET
OCT, 2002	36 - 18	8 OF 13

HOWARD COUNTY, MARYLAND



PRIVATE SEWER PROFILES

PRIVATE WATER PROFILE



APPROVED
PLANNING BOARD
of HOWARD COUNTY

DATE: 10/17/02

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT
Perry R. Smith 1-13-03
County Health Officer
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Paul R. Smith 1/13/03
Director
Chris H. Smith 1/13/03
Chief, Division of Solid Development
Michael J. Smith 1/2/03
Chief, Development Engineering Division

FOR ALL PROFILES ON THIS SHEET
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



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: 301-999-2524 FAX: 301-421-4186

OWNER:
ABRAMS DEVELOPMENT GROUP, INC.
SNOWDEN COMMONS
5850 WATERLOO ROAD, SUITE 230
COLUMBIA, MARYLAND 21045
ATTN: MICKEY ABRAMS
(410) 461-4340

UTILITY PROFILES
ROUTE 175 COMMERCIAL
PARCELS "B-1" & "B-2"
PLAT No.

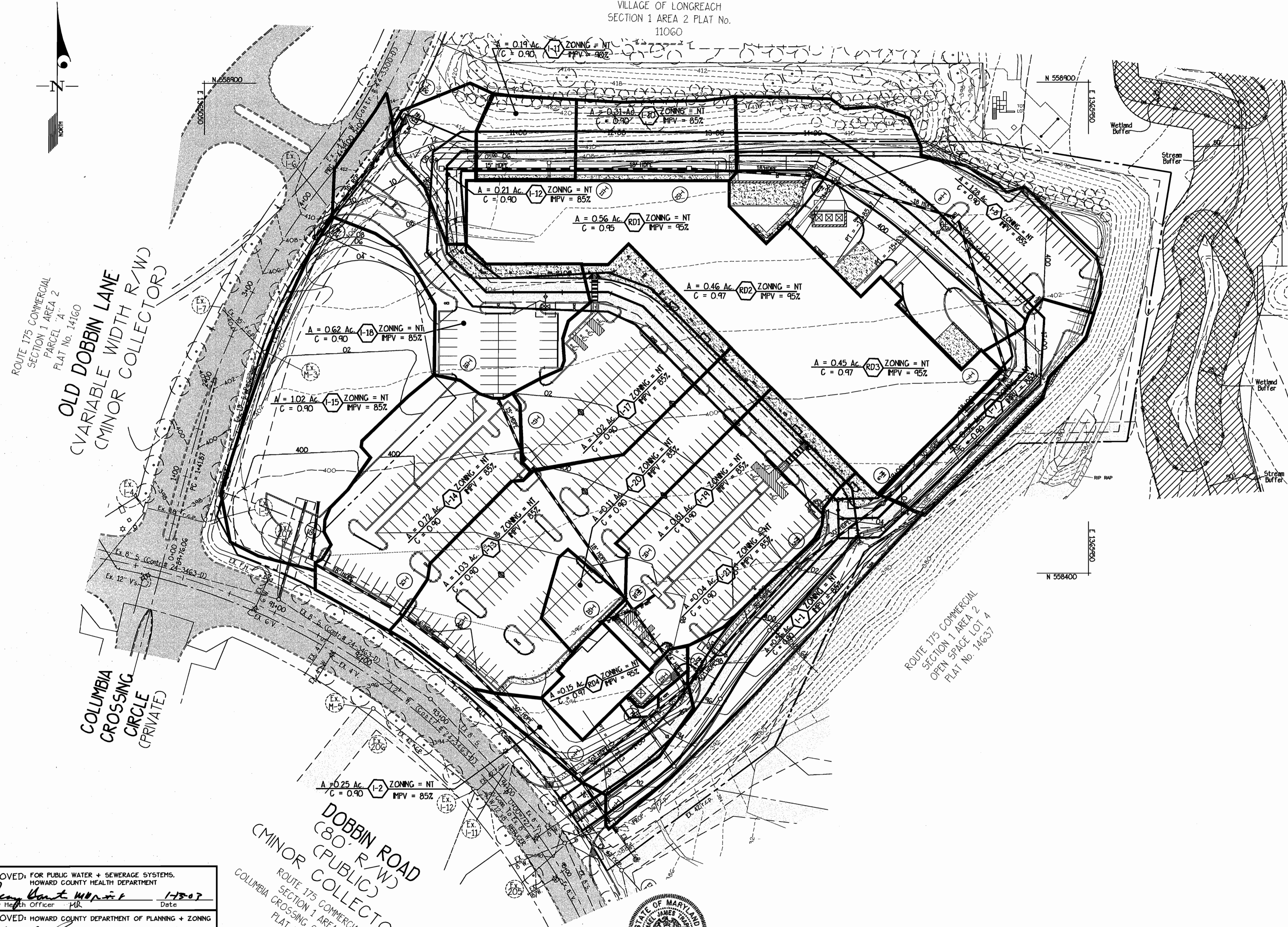
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AS SHOWN	NT	02080
DATE	TAX MAP - GRID	SHEET
OCT., 2002	36 - 18	10 OF 13

Drawings\02080\SP11.dwg	DES.	DRN. M.P.	CHK.	DATE	REVISION	BY	APPR.
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ELECTION DISTRICT No. 6

HOWARD COUNTY, MARYLAND

PARCEL "C-1"
VILLAGE OF LONGREACH
SECTION 1 AREA 2 PLAT No.
11060



ROUTE 175 COMMERCIAL
SECTION 1 AREA 2
PARCEL "A"
PLAT No. 14160

OLD DOBBIN LANE
(VARIABLE WIDTH R/W)
(MINOR COLLECTOR)

COLUMBIA
CROSSING
CIRCLE
(PRIVATE)

DOBBIN ROAD
(80' R/W)
MINOR (PUBLIC)
COLLECTOR

ROUTE 175 COMMERCIAL
SECTION 1 AREA 2
COLUMBIA CROSSING SHOPPING CENTER
PLAT No. 12064



APPROVED
PLANNING BOARD
of HOWARD COUNTY

DATE: 10/17/02

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

Debra Van der Weide
County Health Officer - MR Date: 1/28/02

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING

Joseph J. Suter 1/18/03
Director Date

Cindy Hunt 1/18/03
Chief, Division of Land Development Date

Michael Abrams 1/2/03
Chief, Development Engineering Division - MK Date

GLWGUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
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SNOWDEN COMMONS
5850 WATERLOO ROAD, SUITE 230
COLUMBIA, MD 21045
ATTN: MICKEY ABRAMS
(410) 461-4340

Storm Drain Drainage Area Map
ROUTE 175 COMMERCIAL
PARCEL "B-1" & "B-2"
PLAT NO.

SCALE	ZONING	G. L. W. FILE No.
1" = 50'	NEW TOWN	02080
DATE	TAX MAP - GRID	SHEET
OCT., 2002	36 - 18	11 OF 13

DES.	DRN. WSL.	CHK.	DATE	REVISION	BY	APPR.

ELECTION DISTRICT No. 6

HOWARD COUNTY, MARYLAND

SPECIFICATIONS

KEYSTONE MODULAR CONCRETE BLOCK RETAINING WALL

PART 1: GENERAL

- 1.01 Description**
A. Work shall consist of furnishing and construction of a KEYSTONE Retaining Wall System in accordance with these specifications and in reasonably close conformity with the lines, grades, design, and dimensions shown on the plans.
B. Work includes preparing foundation soil, furnishing and installing leveling pad, unit drainage fill and backfill to the lines and grades shown on the construction drawings.
C. Work includes furnishing and installing geogrid soil reinforcement of the type, size, location, and lengths designated on the construction drawings.

- 1.02 Delivery, Storage and Handling**
A. Contractor shall check all materials upon delivery to assure that the proper type, grade, color, and certification has been received.
B. Contractor shall protect all materials from damage due to job site conditions and in accordance with manufacturer's recommendations. Damaged materials shall not be incorporated into the work.

PART 2: PRODUCTS

- 2.01 Modular Concrete Retaining Wall Units**
A. Modular concrete units shall conform to the following architectural requirements:
 face color - concrete gray - standard manufacturer's color may be specified by the Owner.
 face finish - sculptured rock face in angular tri-planer configuration. Other face finishes will not be allowed without written approval of Owner.
 bond configuration - running with bonds normally located at midpoint vertically adjacent units, in both straight and curved alignments.
 exposed surfaces of units shall be free of chips, cracks or other imperfections when viewed from a distance of 10 feet under diffused lighting.
B. Modular concrete materials shall conform to the requirements of ASTM C1372 - Standard Specifications for Segmental Retaining Wall Units.
C. Modular concrete units shall conform to the following structural and geometric requirements measured in accordance with appropriate references:
 compressive strength = 3000 psi minimum;
 absorption = 8 1/2% maximum (6% in northern states) for standard weight aggregates;
 dimensional tolerances = ± 1/8" from nominal unit dimensions - not including rough split face, ± 1/16" unit height - top and bottom planes;
 unit size - 8" (H) x 18" (W) x 22" (D) minimum;
 unit weight - 100 lbs/unit minimum for standard weight

- aggregates;
 inter-unit shear strength - 1000 ppi minimum at 2 psi normal pressure;
 geogrid/unit peak connection strength - 1000 ppi minimum at 2 psi normal force.
D. Modular concrete units shall conform to the following vertical setback = 1/8" per course (near vertical) or 1" per course per design;
 alignment and grid positioning mechanism - fiberglass pins, two per unit minimum;
 maximum horizontal gap between erected units shall be 1/2 inch.

- 2.02 Shear Connectors**
A. Shear connectors shall be 1/2 inch diameter thermoset isophthalic polyester resin-protected fiberglass reinforcement rods or equivalent to provide connection between vertically and horizontally adjacent units.
 Strength of shear connectors between vertical adjacent units shall be applicable over a design temperature of 10 degrees F to + 100 degrees F.
B. Shear connectors shall be capable of holding the geogrid in the proper design position during grid pre-tensioning and backfilling.

- 2.03 Base Leveling Pad Material**
A. Material shall consist of a compacted #57 crushed stone base as shown on the construction drawings.
2.04 Unit Drainage Fill
A. Unit drainage fill shall consist of #57 crushed stone.
B. One cubic foot, minimum, of drainage fill shall be used for each square foot of wall face. Drainage fill shall be placed within cores of, between, and behind units to meet this requirement.

- 2.05 Reinforced Backfill**
A. Reinforced backfill shall type SM, be free of debris and meet the following gradation tested in accordance with ASTM D-422 and meet other properties shown on the plan:

Sieve Size	Percent Passing
2 inch	100-75
3/4 inch	100-75
No. 40	0-60
No. 200	0-35

 Plasticity Index (PI) < 15 and Liquid Limit < 40 per ASTM D-4318.
B. Material can be site excavated soils where the above requirements can be met. Unsuitable soils for backfill (high plastic clays or organic soils) shall not be used in the reinforced soil mass.
2.06 Geogrid Soil Reinforcement

- A.** Geosynthetic reinforcement shall consist of geogrids manufactured specifically for soil reinforcement applications and shall be manufactured from high tenacity polyester yarn.

- 2.07 Drainage Pipe**
A. The drainage pipe shall be perforated corrugated HDPE pipe manufactured in accordance with ASTM D-1248.

PART 3 EXECUTION

- 3.01 Excavation**
A. Contractor shall excavate to the lines and grades shown on the construction drawings. Owner's representative shall be responsible for inspecting and approving the excavation prior to placement of leveling material or fill soils.

- 3.02 Base Leveling Pad**
A. Leveling pad material shall be placed to the lines and grades shown on the construction drawings, to a minimum thickness of 6 inches and extend laterally a minimum of 6" in front and behind the modular wall unit.
B. Leveling pad shall be prepared to insure full contact to the base surface of the concrete units.

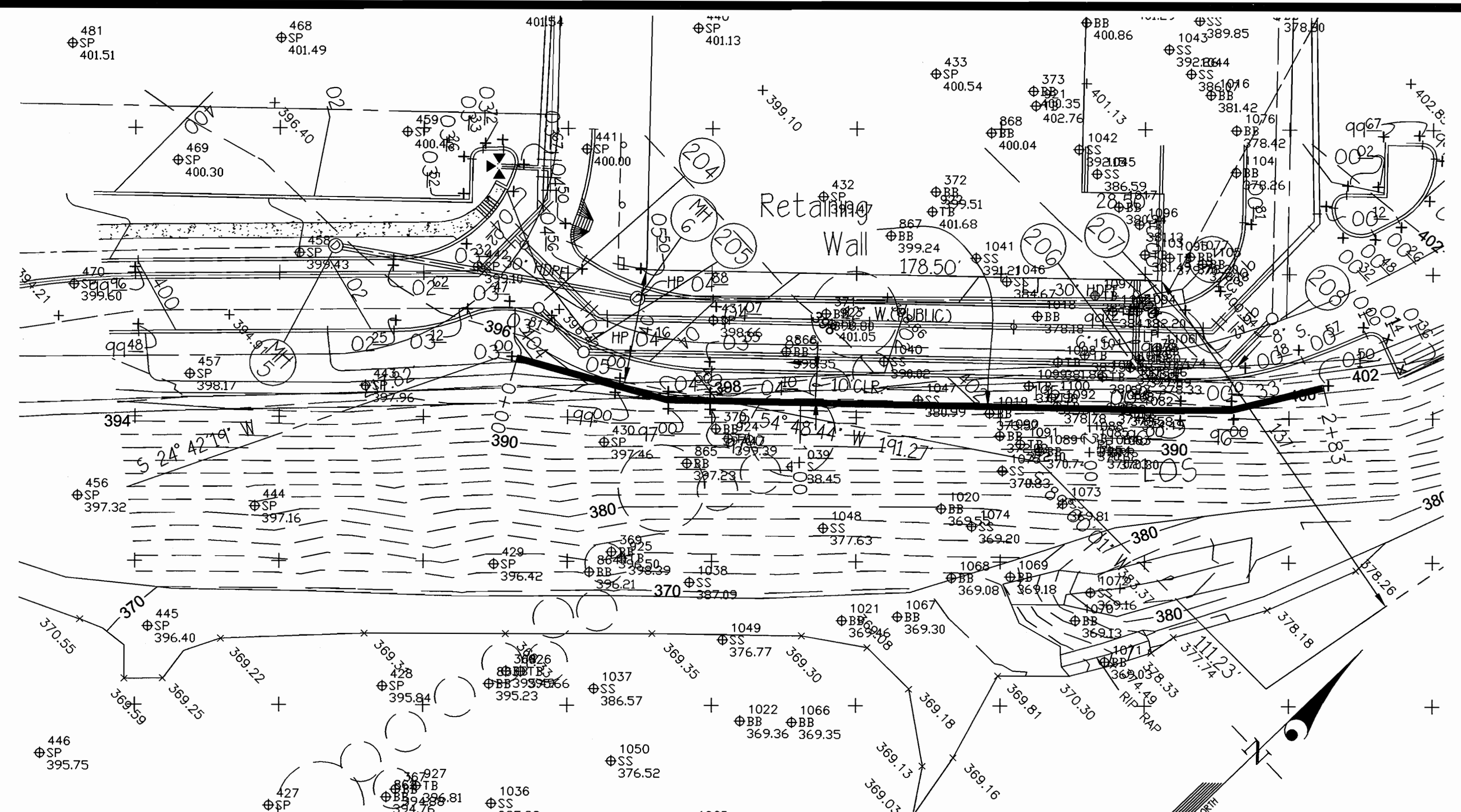
- 3.03 Modular Unit Installation**
A. First course of units shall be placed on the leveling pad at the appropriate line and grade. Alignment and level shall be checked in all directions and insure that all units are in full contact with the base and properly seated.
B. Place the front of units side-by-side. Do not leave gaps between adjacent units. Layout of corners and curves shall be in accordance with manufacturer's recommendations.
C. Install shear/connecting devices per manufacturer's recommendations.
D. Place and compact drainage fill within and behind wall units. Place and compact backfill soil behind drainage fill. Follow wall erection and drainage fill closely with structure backfill.
E. Maximum stacked vertical height of wall units, prior to unit drainage fill and backfill placement and compaction, shall not exceed three courses.

- 3.04 Structural Geogrid Installation**
A. Geogrid shall be oriented with the highest strength axis perpendicular to the wall alignment.
B. Geogrid reinforcement shall be placed at the strengths, lengths, and elevations shown on the construction design drawings or as directed by the Engineer.
C. The geogrid shall be laid horizontally on compacted backfill and attached to the modular wall units. Place the next course of modular concrete units over the geogrid. The geogrid shall be pulled taut, and anchored prior to backfill placement on the geogrid.
D. Geogrid reinforcements shall be continuous throughout their embedment lengths and placed side-by-side to provide 100% coverage at each level. Spliced connections between shorter pieces of geogrid or gaps between adjacent pieces of geogrid are not permitted.

- 3.05 Reinforced Backfill Placement**
A. Reinforced backfill shall be placed, spread, and compacted in such a manner that minimizes the development of slack in the geogrid and installation damage.
B. Reinforced backfill shall be placed and compacted in lifts not to exceed 6 inches where hand compaction is used, or 8 - 10 inches where heavy compaction equipment is used. Lift thickness shall be decreased to achieve the required density as required.
C. Reinforced backfill shall be compacted to 95% of the maximum density as determined by ASTM D698. The moisture content of the backfill material prior to and during compaction shall be uniformly distributed throughout each layer and shall be + 3% to - 3% of optimum.
D. Only lightweight hand-operated equipment shall be allowed within 3 feet from the tail of the modular concrete unit.
E. Tracked construction equipment shall not be operated directly upon the geogrid reinforcement. A minimum fill thickness of 6 inches is required prior to operation of tracked vehicles over the geogrid. Tracked vehicle turning should be kept to a minimum to prevent tracks from displacing the fill and damaging the geogrid.
F. Rubber tired equipment may pass over geogrid reinforcement at slow speeds, less than 10 MPH.
G. Sudden braking and sharp turning shall be avoided. At the end of each day's operation, the Contractor shall slope the last lift of reinforced backfill away from the wall units to direct runoff away from wall face. The Contractor shall not allow surface runoff from adjacent areas to enter the wall construction site.

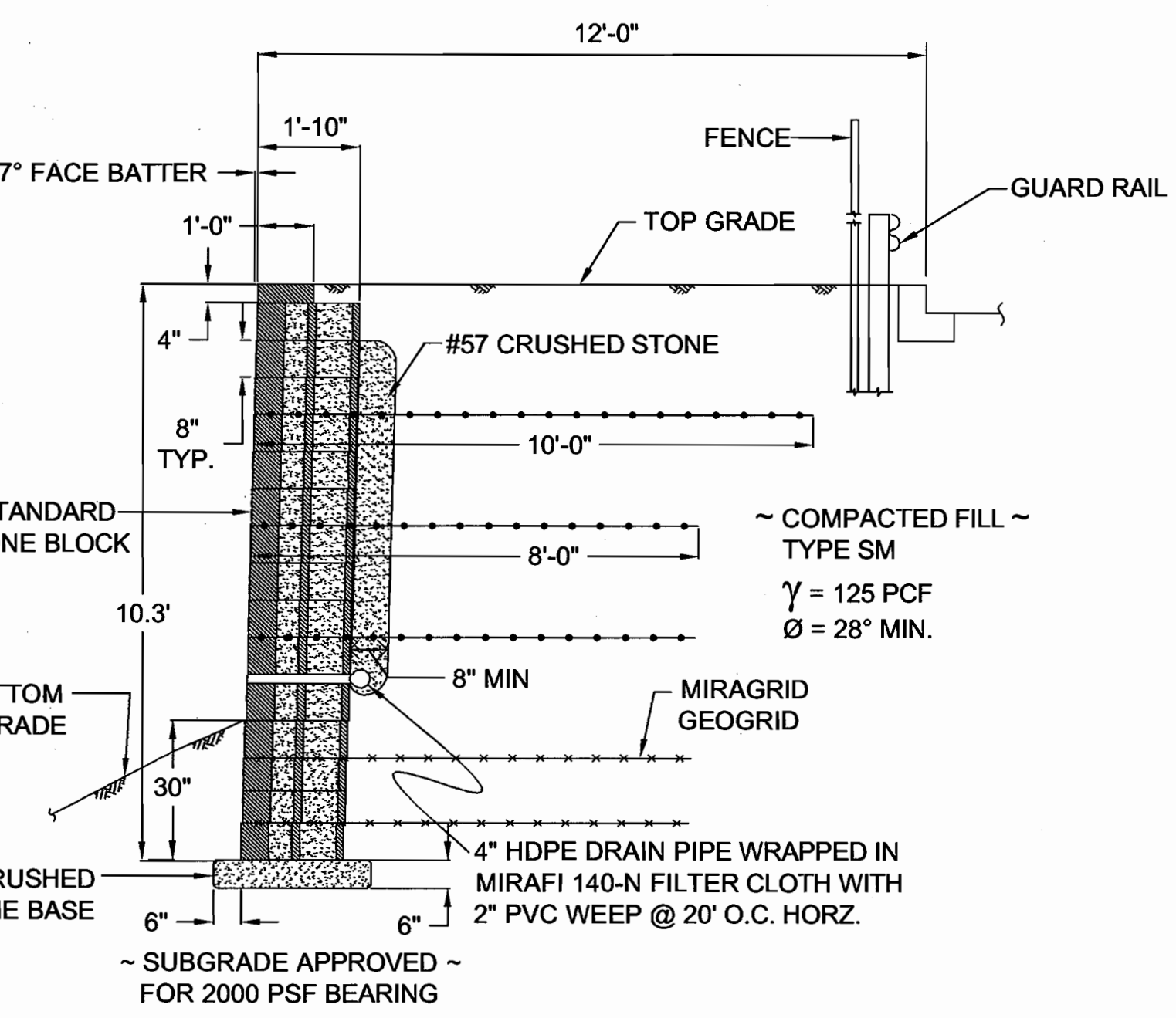
- 3.06 Cap Installation**
A. Cap units shall be glued to underlying units with an all-weather adhesive recommended by the manufacturer.

- 3.07 Field Quality Control**
A. The Owner shall engage inspection and testing services, including independent laboratories, to provide quality assurance and testing services during construction.
 As a minimum, quality assurance testing should include foundation soil inspection, soil and backfill testing, verification of design parameters, and observation of construction for general compliance with design drawings and specifications.

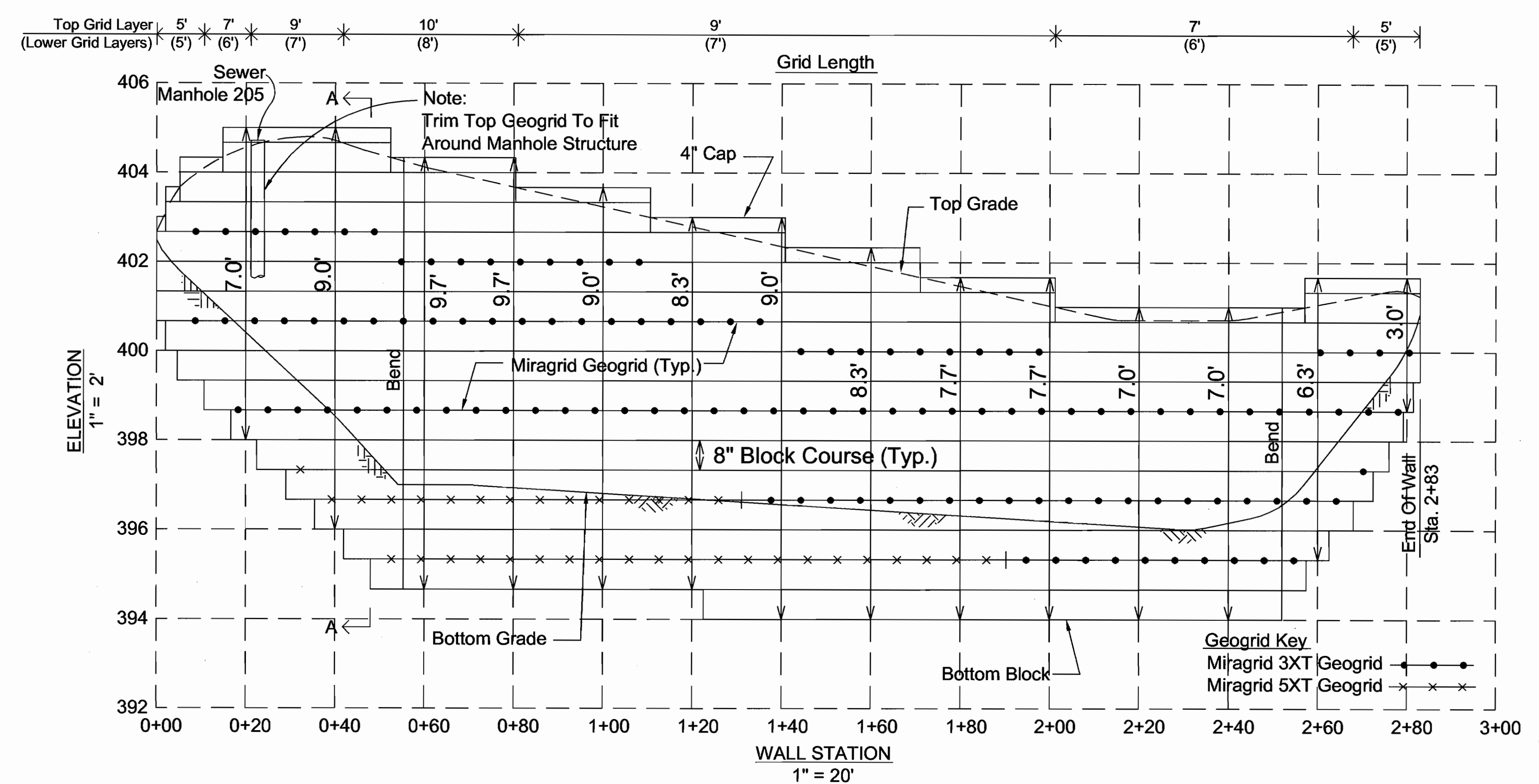


LOCATION PLAN
 SCALE: 1" = 30'

- Notes:**
- No trees shall be planted within 15' of the top of the retaining wall.
 - The required bearing pressure beneath the wall foundation shall be verified in field by a geotechnical engineer. Test results shall be given to the Howard Co. Inspector prior to wall construction.
 - Suitability of the retaining wall backfill material shall be confirmed by a geotechnical engineer. Backfill compaction shall be performed in accordance with specifications & all test results shall be given to the Ho. Co. Inspector upon wall completion.
 - Retaining wall must be constructed under the observation of a registered professional geotechnical engineer.



WALL @ STA. 0+50 - SECTION A-A
 SCALE: 3/8" = 1'



WALL ELEVATION
 SCALE: 1" = 20'

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 10/17/02

APPROVED: FOR PUBLIC WATER + SEWERAGE SYSTEMS.
 HOWARD COUNTY HEALTH DEPARTMENT
 County Health Officer *[Signature]* Date 1-13-03

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING
 Director *[Signature]* Date 1/13/03
 Chief, Division of Land Development *[Signature]* Date 1/13/03
 Chief, Development Engineering Division *[Signature]* Date 1/2/03

HILLIS-CARNES ENGINEERING ASSOCIATES, INC.
 12011 Guilford Road - Suite 106
 Annapolis Junction, Maryland
 Tel: (410) 880-4788 Fax: (410) 880-4098

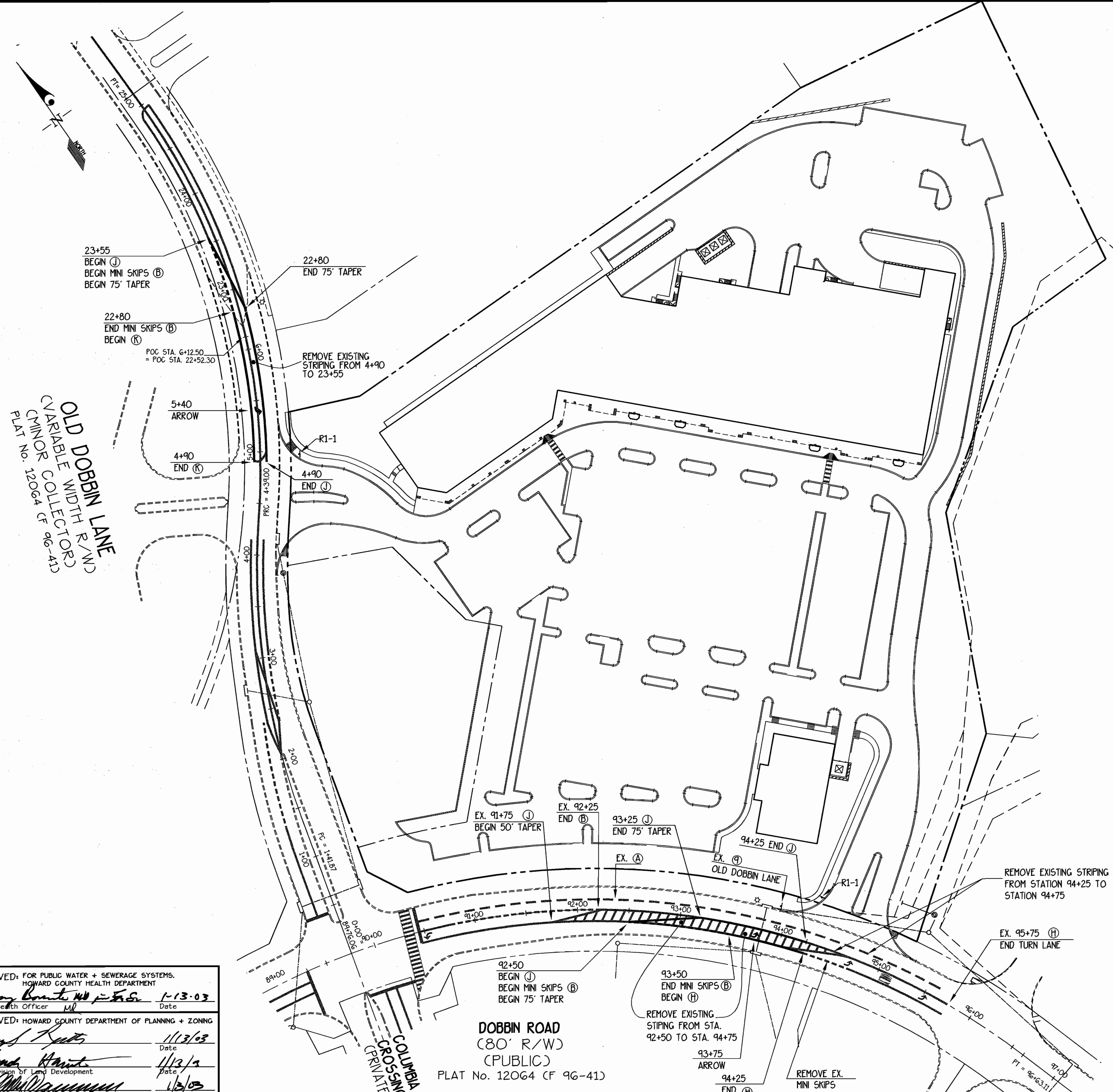
GLWGUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20866
 TEL: 301-421-4024 BALT: 410-880-1620 DC/VA: 301-989-2524 FAX: 301-421-4186

Owner:
 ABRAMS DEVELOPMENT GROUP, INC.
 SNOWDEN COMMONS
 5850 WATERLOO ROAD, SUITE 230
 COLUMBIA, MARYLAND 21045
 ATTN: MICKY ABRAMS
 (410) 461-4340

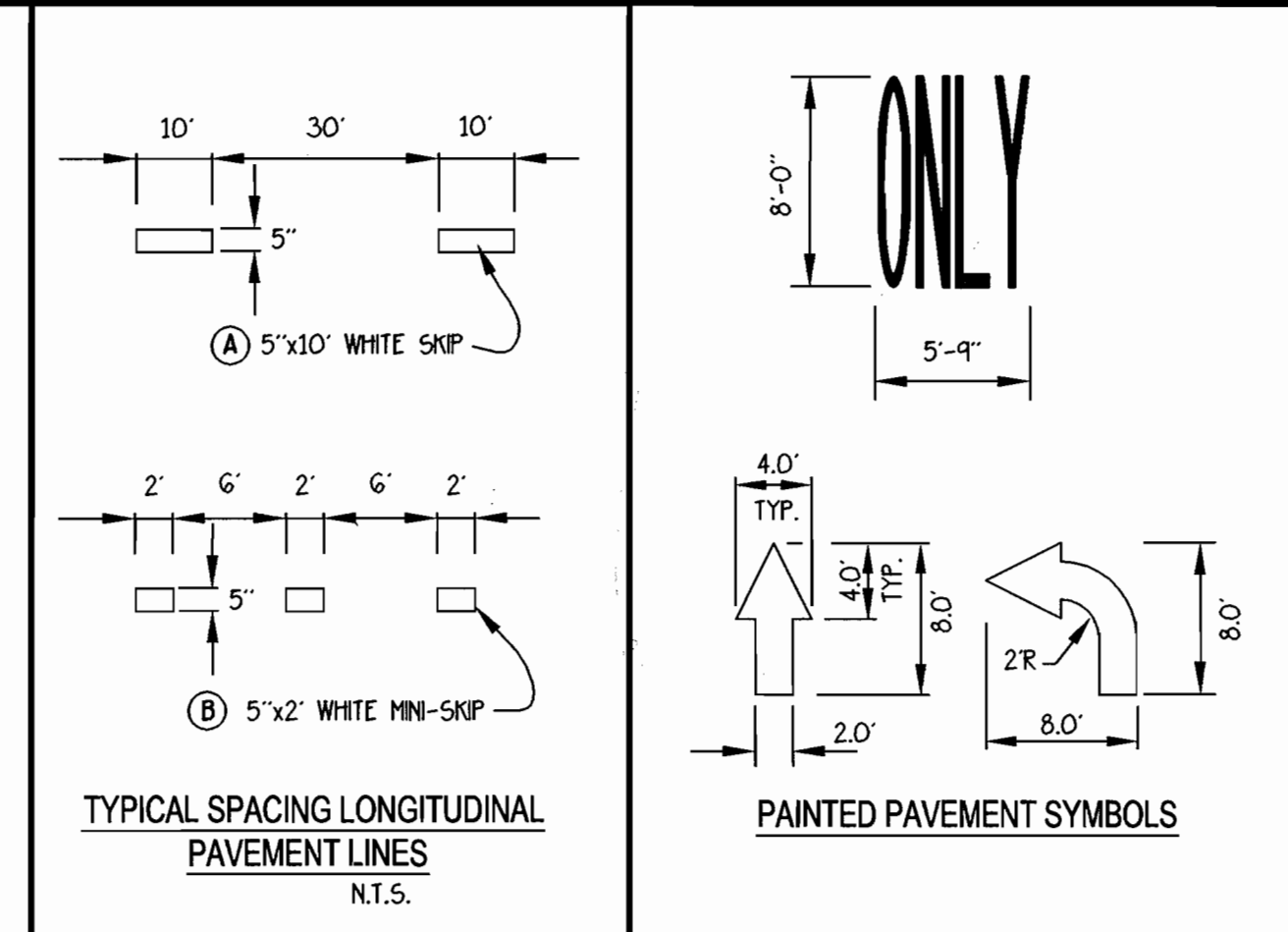
RETAINING WALL CONSTRUCTION DETAILS
ROUTE 175 COMMERCIAL
 SECTION 1 - AREA 2
 PARCELS 'B-1' & 'B-2'
 PLAT NO.
 ELECTION DISTRICT No. 6

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT	02080
DATE	TAX MAP - GRID	SHEET
OCT., 2002	36 - 18	12 Of 13

HCEA Project No. 02373C	DES. RWS	DRN. AM	CHK. RMH	DATE	REVISION	BY	APPR.
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OLD DOBBIN LANE
 VARIABLE WIDTH R/W
 (MINOR COLLECTOR)
 PLAT NO. 12064 CF 96-41D



PAVEMENT MARKING NOTES

- ALL PAVEMENT MARKINGS TO BE APPLIED USING 'SETFAST PREMIUM ALKYD TRAFFIC PAINT' BY SHERWIN WILLIAMS OR APPROVED EQUAL. ALL PAVEMENT ARROWS, 'ONLY' MARKINGS, STOP BARS, STOP BAR MARKINGS AND CROSSWALK MARKINGS MUST BE INSTALLED IN THERMOPLASTIC.
- EXISTING PAVEMENT MARKINGS THAT ARE IN CONFLICT WITH THE PROPOSED PAVEMENT MARKINGS FOR THIS CONTRACT. SHALL BE REMOVED BY GRINDING.

SIGNING NOTES

- SIGN ERECTED AT THE SIDE OF THE ROAD SHALL BE MOUNTED AT A HEIGHT OF AT LEAST 7 FEET MEASURED FROM THE BOTTOM OF THE SIGN TO THE NEAR EDGE OF THE PAVEMENT.
- ALL SIGNS TO BE MOUNTED ON 4"x4"x12" WOLMANIZED. (PRESSURE TREATED). WOODEN POSTS.
- SIGNS SHALL BE 12" TO 18" FROM EDGE OF SIGN TO CURB LINE. STOP SIGNS SHALL BE LOCATED 15' BACK FROM INTERSECTING STREET CURB LINE OR AS DIRECTED BY HOWARD COUNTY TRAFFIC DIVISION.

SIGNING DETAIL

R1-1
30" x 30"

- LEGEND**
- (A) PAVEMENT LINES - 5" X 10' WHITE SKIP
 - (B) PAVEMENT LINES - 5" X 2' WHITE MINI-SKIP
 - (C) PAVEMENT SYMBOL - LEFT TURN ARROW
 - (E) PAVEMENT SYMBOL - ONLY
 - (H) PAVEMENT LINE - 5" X 75' WHITE
 - (J) PAVEMENT LINE - 5" DOUBLE YELLOW SOLID
 - (K) PAVEMENT LINE - 5" X 150' WHITE

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 10/17/02

APPROVED: FOR PUBLIC WATER + SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT
Ben Bantz 11/3/03
County Health Officer Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING
John Hunt 11/3/03
Director Date
John Hunt 11/3/03
Chief, Division of Land Development Date
Michael J. Steppan 11/3/03
Chief, Development Engineering Division Date

DOBBIN ROAD
(80' R/W)
(PUBLIC)
PLAT No. 12064 CF 96-41



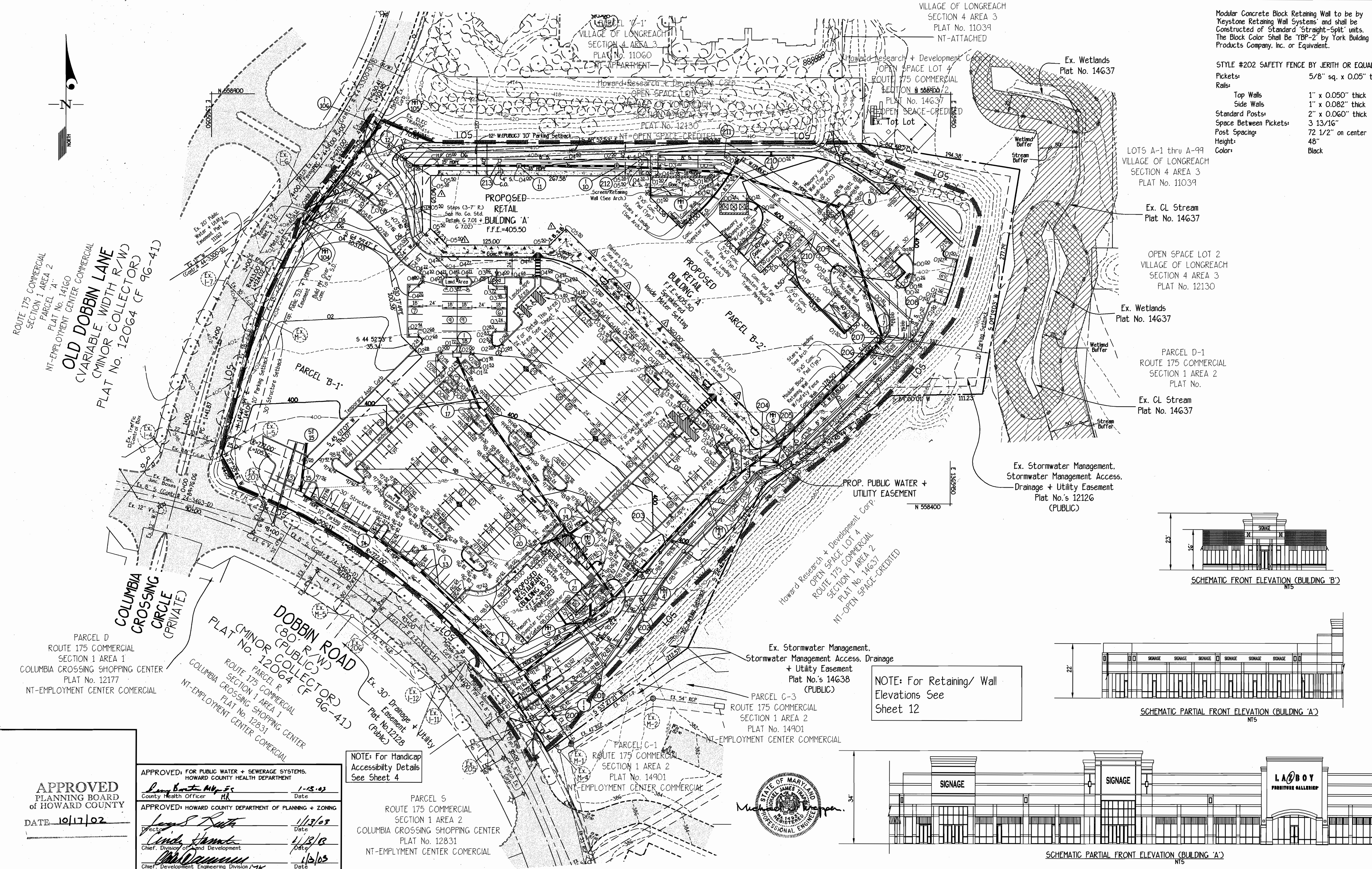
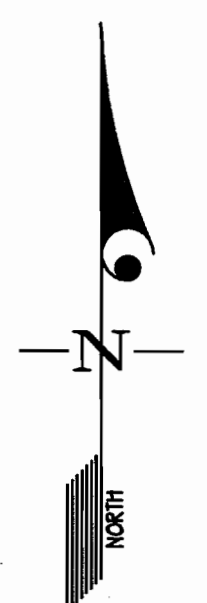
GLWGUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3009 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APPR.

OWNER:
ABRAMS DEVELOPMENT GROUP, INC.
SNOWDEN COMMONS
5850 WATERLOO ROAD, SUITE 230
COLUMBIA, MD 21045
ATTN: MICKEY ABRAMS
(410) 461-4340

SIGNAGE + STRIPING PLAN
ROUTE 175 COMMERCIAL
SECTION 1 AREA 2
PARCEL "B-1" & "B-2"
PLAT No. 12064
ELECTION DISTRICT No. 6
HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1" = 50'	NEW TOWN	02080
DATE	TAX MAP - GRID	SHEET
SEPT., 2002	36-18	13 OF 13



Modular Concrete Block Retaining Wall to be by Keystone Retaining Wall Systems and shall be constructed of Standard 'Straight-Split' units. The Block Color Shall Be 'YBF-2' by York Building Products Company, Inc. or Equivalent.

STYLE #202 SAFETY FENCE BY JERITH OR EQUAL

Pickets: 5/8" sq. x 0.05" thick

Rails:

- Top Walls 1" x 0.050" thick
- Side Walls 1" x 0.082" thick

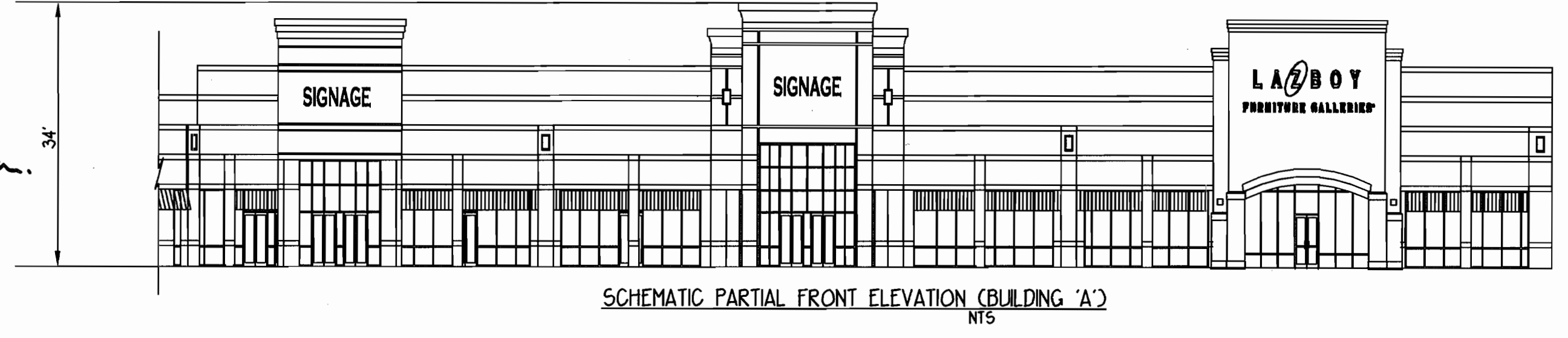
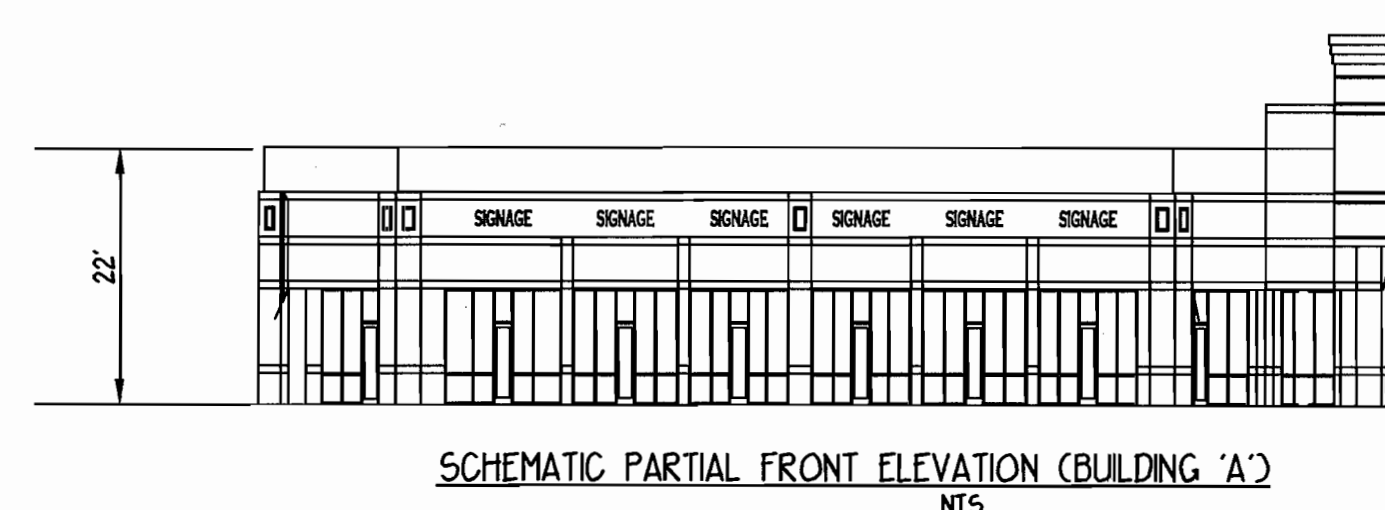
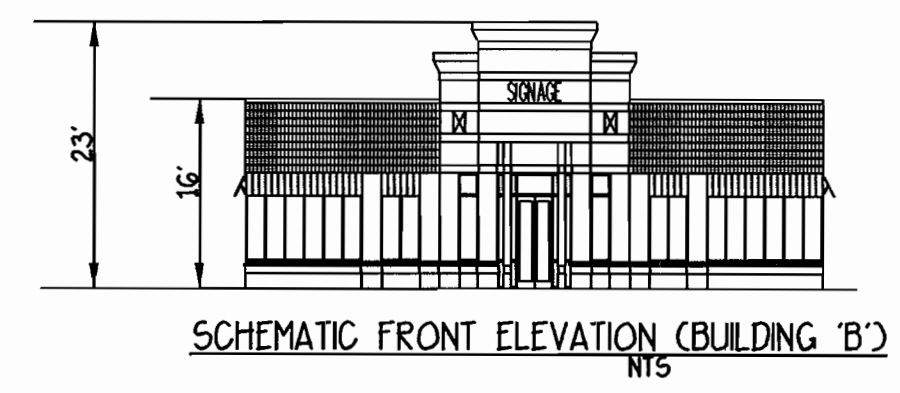
Standard Posts: 2" x 0.060" thick

Space Between Pickets: 3 13/16"

Post Spacing: 72 1/2" on center

Height: 48"

Color: Black



NOTE: For Retaining/ Wall Elevations See Sheet 12



APPROVED: FOR PUBLIC WATER + SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT
County Health Officer *1-15-02*

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING
Director *1/13/03*
Chief, Division of Land Development *1/13/03*
Chief, Development Engineering Division *1/13/03*

NOTE: For Handicap Accessibility Details See Sheet 4

PARCEL 5
ROUTE 175 COMMERCIAL
SECTION 1 AREA 2
COLUMBIA CROSSING SHOPPING CENTER
PLAT No. 12831
NT-EMPLOYMENT CENTER COMMERCIAL

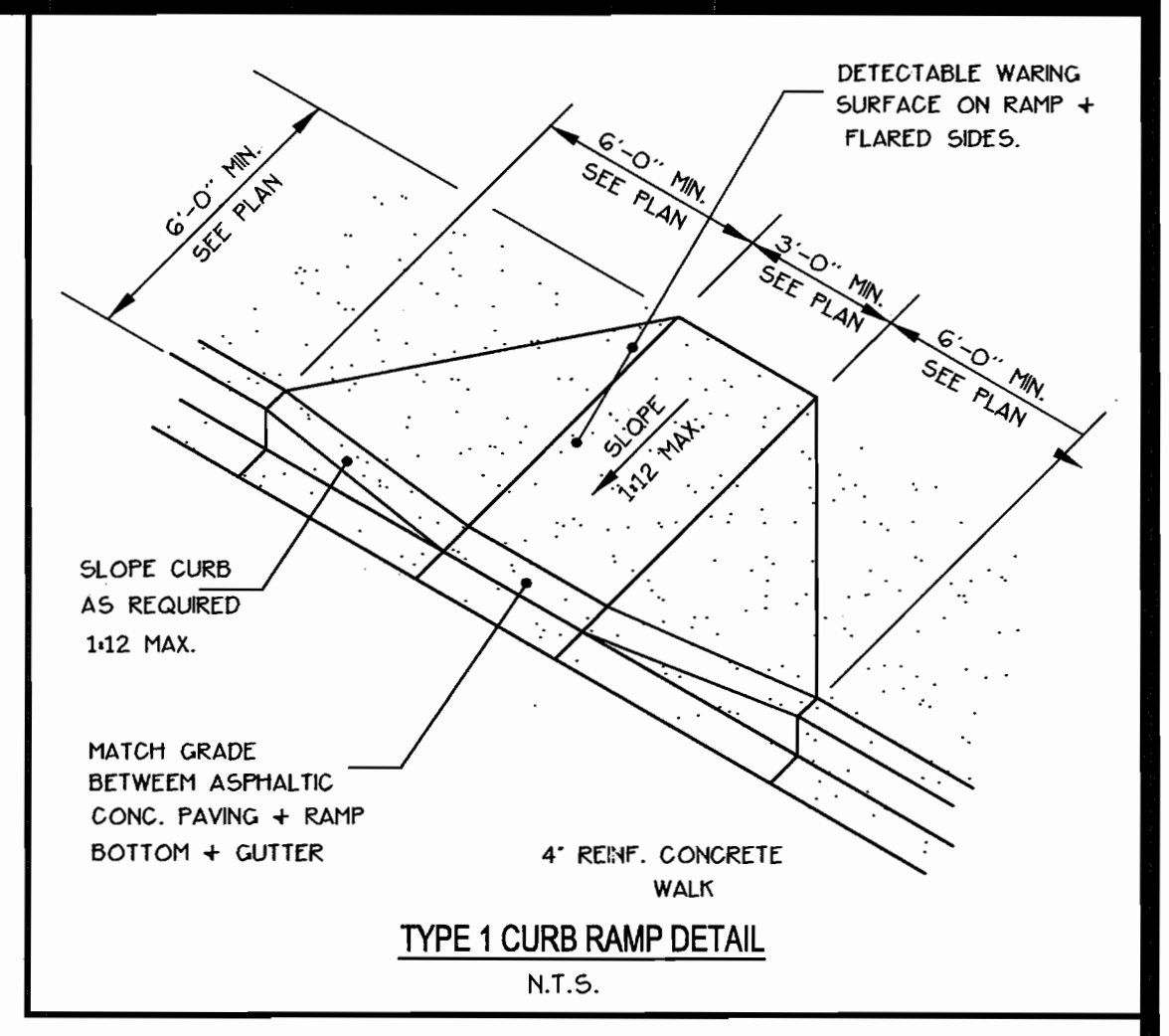
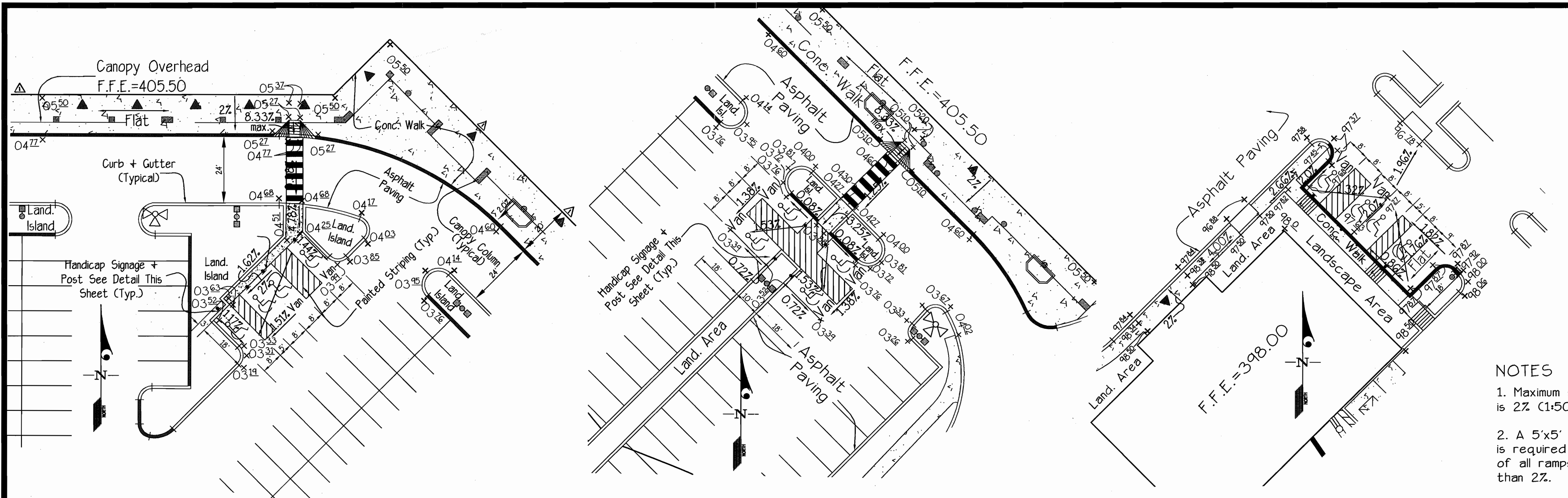
APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 10/17/02

GLWGUTSCHICK 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

OWNER:
ABRAMS DEVELOPMENT GROUP, INC.
SNOWDEN COMMONS
5850 WATERLOO ROAD, SUITE 230
COLUMBIA, MD 21045
MR. MICKEY ABRAMS
(410) 461-4340

SITE DEVELOPMENT PLAN
ROUTE 175 COMMERCIAL
SECTION 1 - AREA 2
PARCEL "B-1" & "B-2"
PLAT NO. 15749

SCALE	ZONING	G. L. W. FILE No.
1" = 50'	NEW TOWN	02080
DATE	TAX MAP - GRID	SHEET
OCT., 2002	36-18	2 OF 13

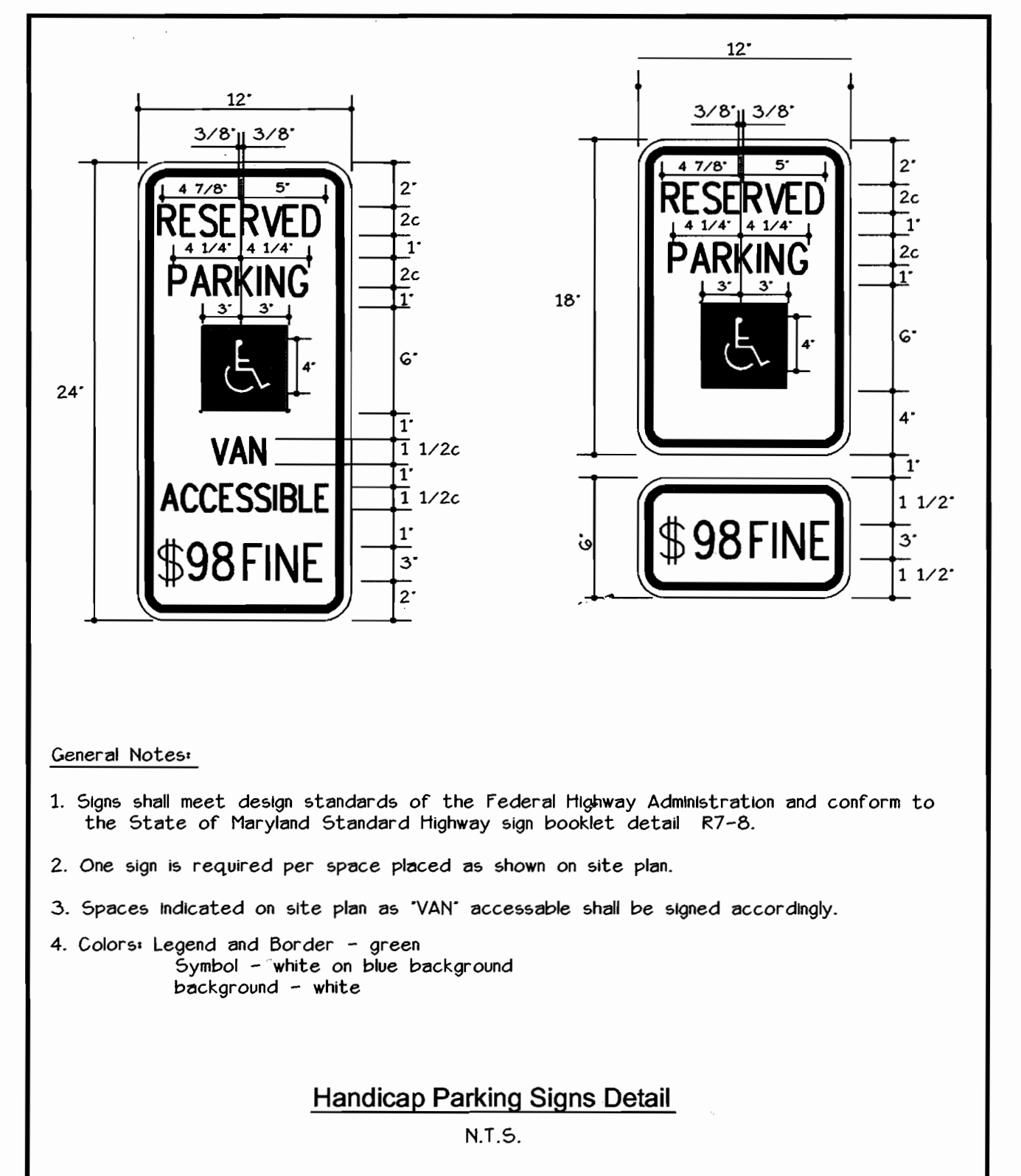
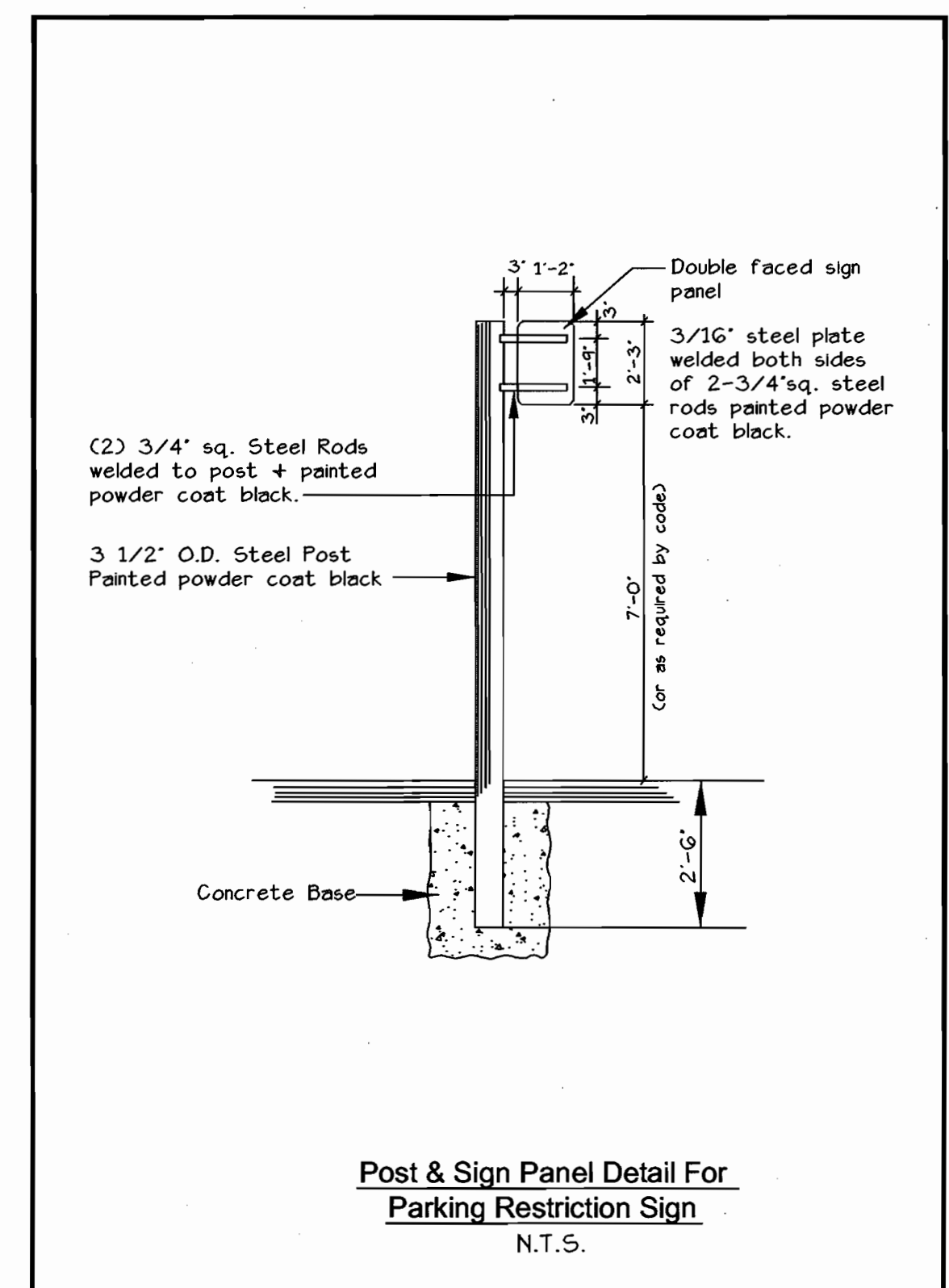
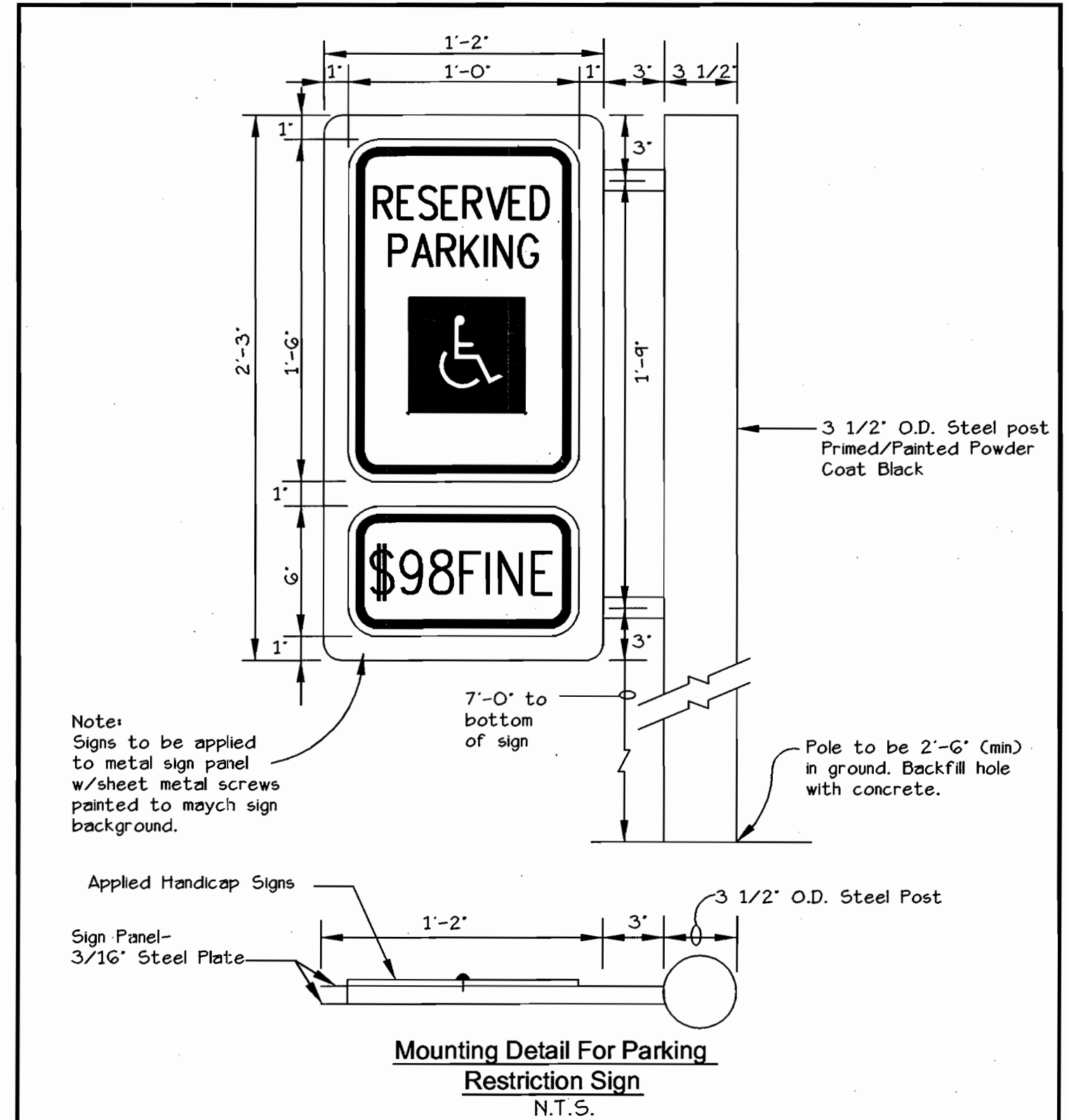
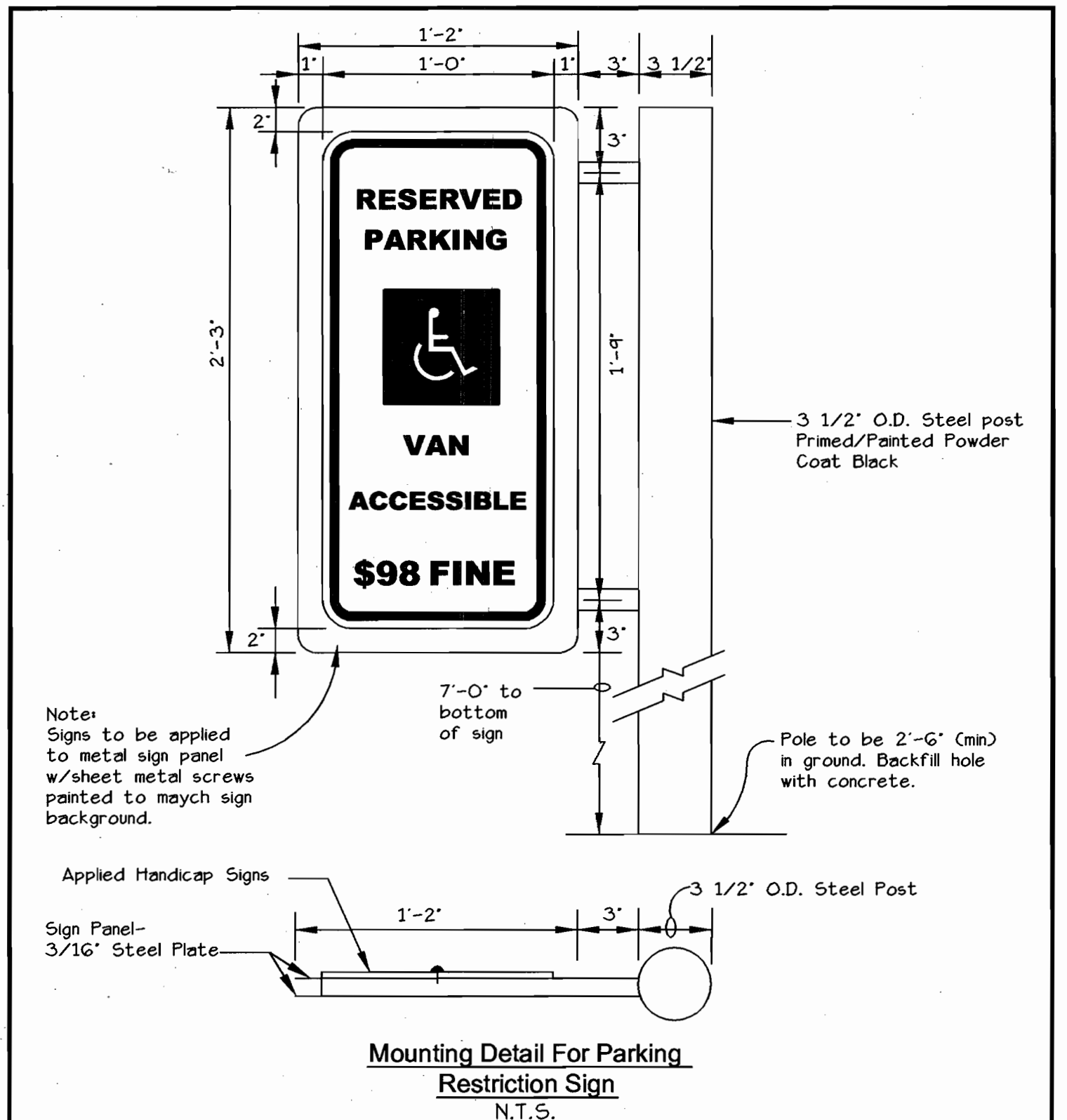


HANDICAP ACCESSIBILITY DETAILS

Scale: 1" = 20'

NOTES

1. Maximum sidewalk crossslope is 2% (1:50).
2. A 5'x5' minimum level (2%) landing is required at the top and bottom of all ramps. Ramps are slopes greater than 2%.
3. Maximum slope in any direction of the handicap accessible parking is 2%.



APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 10/17/02

APPROVED: FOR PUBLIC WATER + SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT
Raymond M. M... 1-13-02
County Health Officer Date
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING
David R. Smith 1/13/02
Director Date
Alvin J. Hunter 1/13/02
Chief, Division of Land Development Date
Michael J. ... 1/13/02
Chief, Development Engineering Division Date



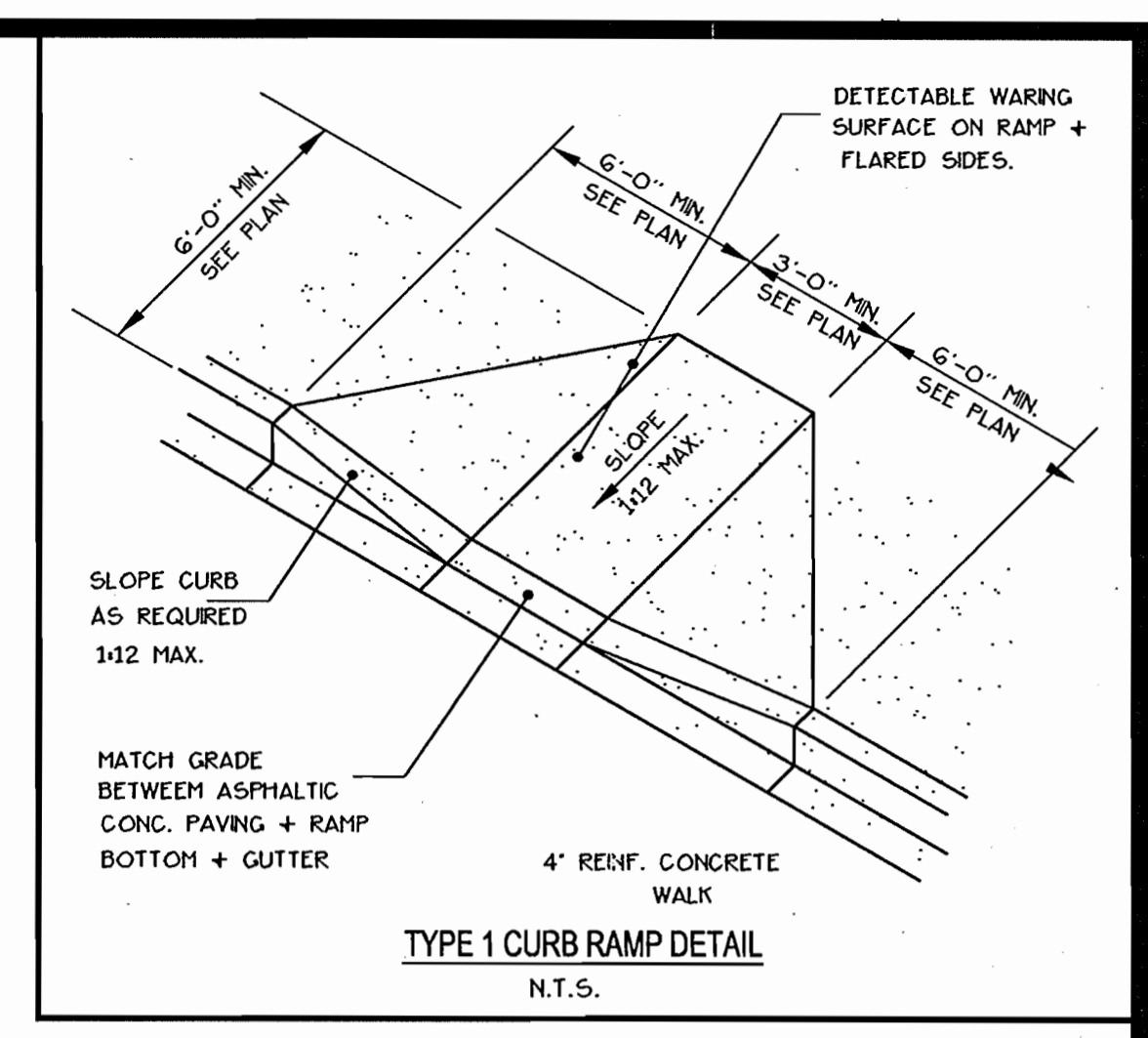
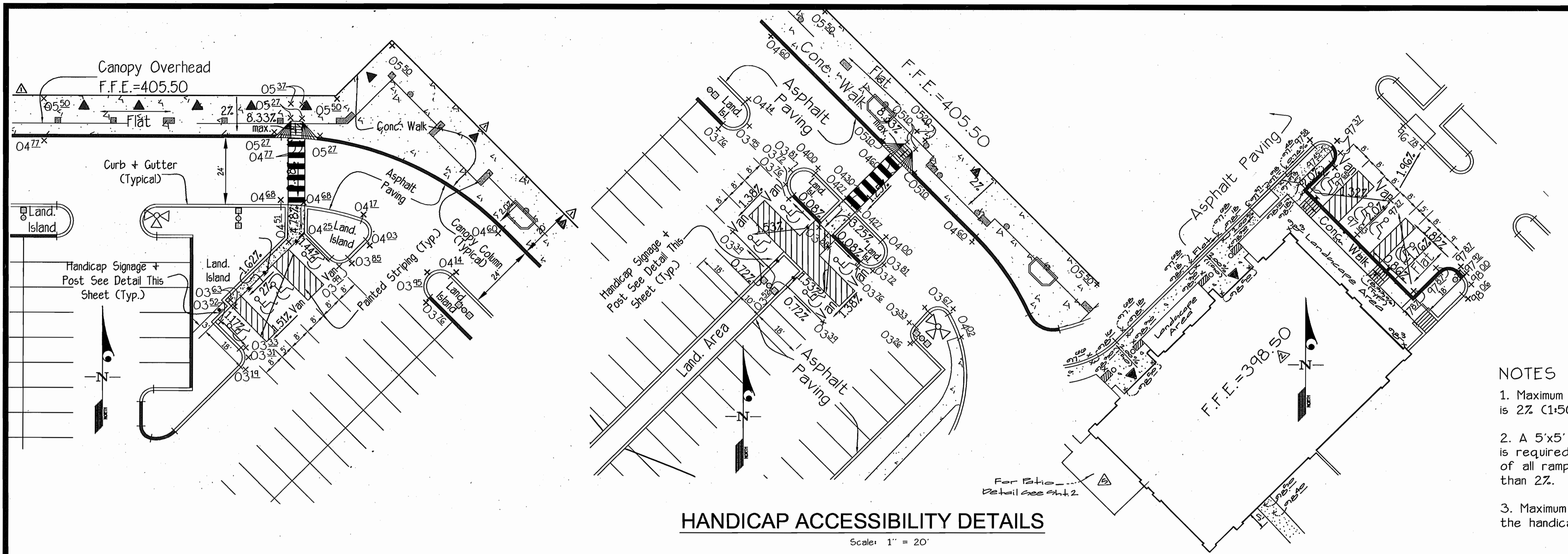
GLWGUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BAL: 410-680-1820 DC/VA: 301-959-2524 FAX: 301-421-4186

DATE	BY	APP'R	REVISION
10/17/02	WJW		Rev. Door Locations

OWNER:
ABRAMS DEVELOPMENT GROUP, INC.
SNOWDEN COMMONS
5850 WATERLOO ROAD, SUITE 230
COLUMBIA, MD. 21045
MR. MICKEY ABRAMS
(410) 461-4340

HANDICAP ACCESSIBILITY PLAN
ROUTE 175 COMMERCIAL
SECTION 1 AREA 2
PARCELS B-1 & B-2
PLAT No. 15-749

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT	02080
DATE	TAX MAP - GRID	SHEET
OCT., 2002	36 - 18	4 OF 13

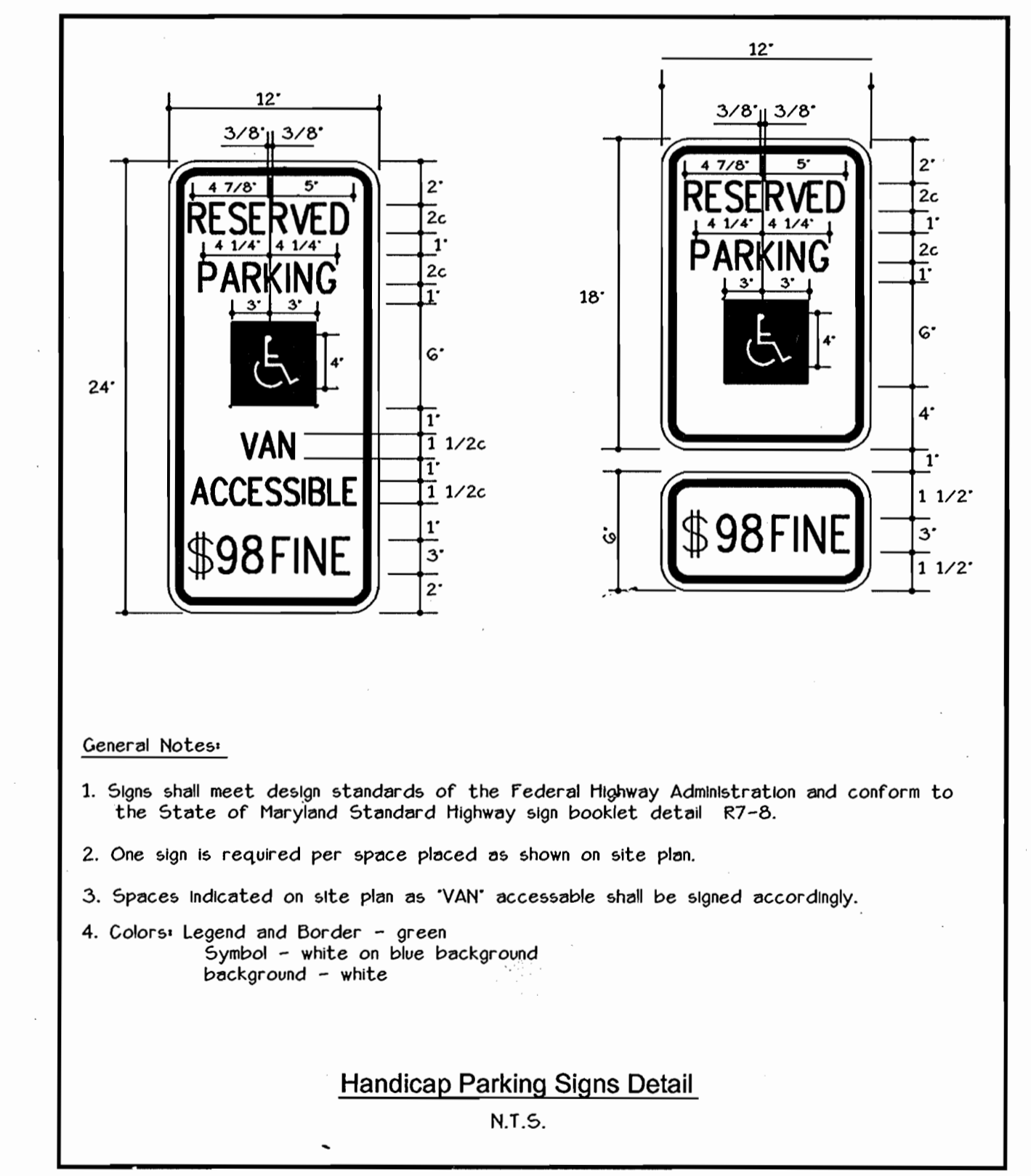
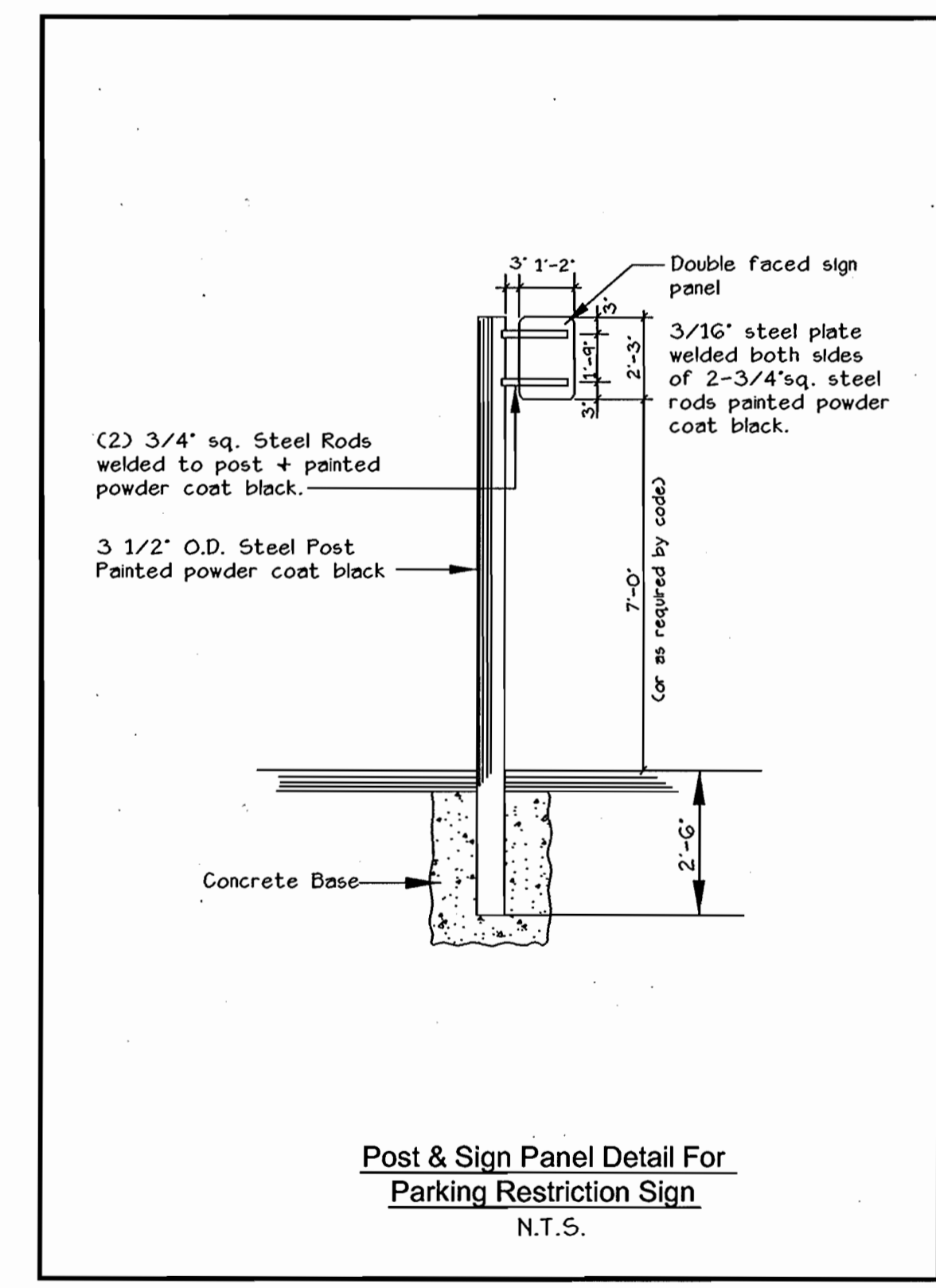
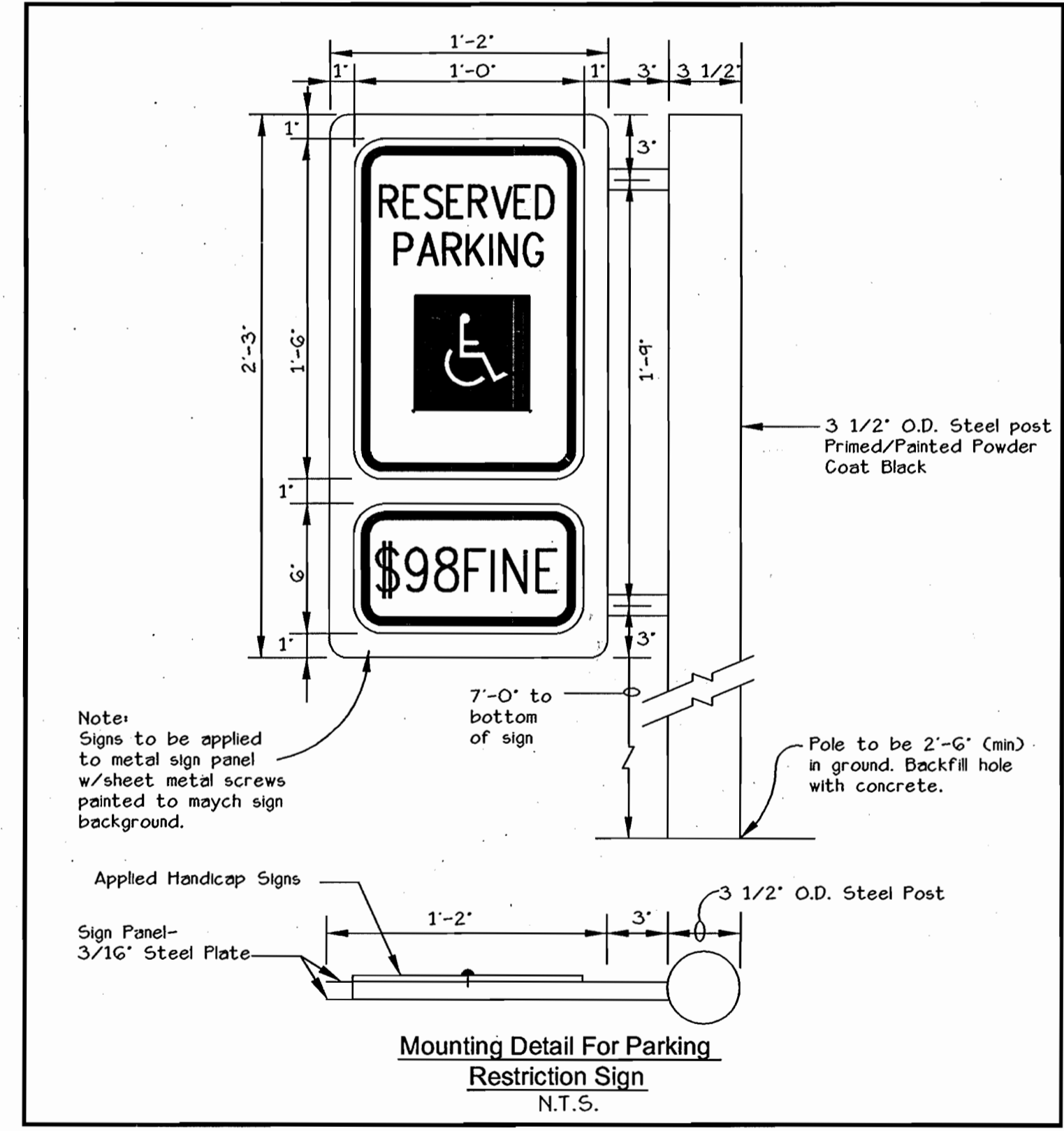
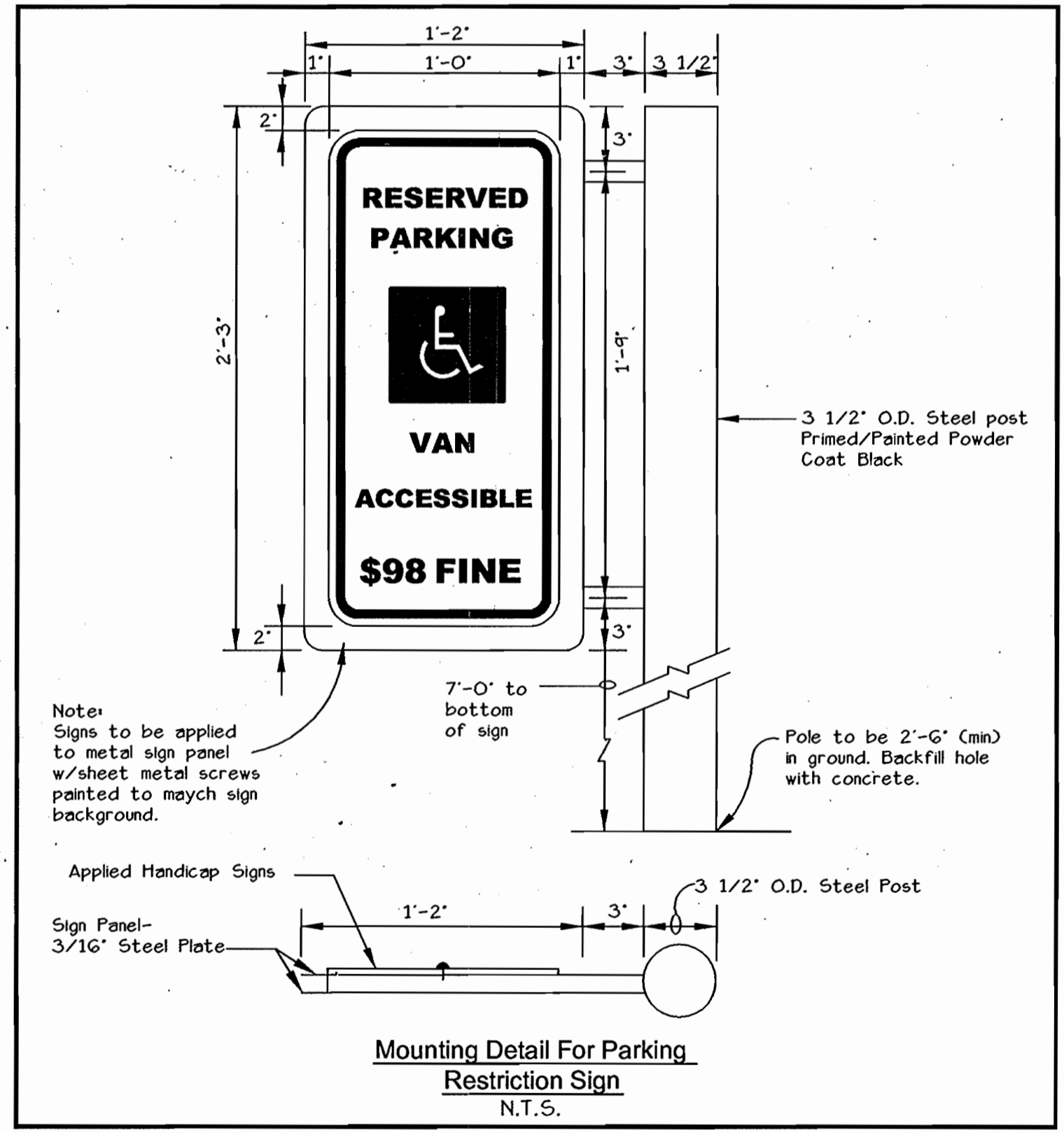


HANDICAP ACCESSIBILITY DETAILS

Scale: 1" = 20'

NOTES

1. Maximum sidewalk crossslope is 2% (1:50).
2. A 5'x5' minimum level (2%) landing is required at the top and bottom of all ramps. Ramps are slopes greater than 2%.
3. Maximum slope in any direction of the handicap accessible parking is 2%.



- General Notes:**
1. Signs shall meet design standards of the Federal Highway Administration and conform to the State of Maryland Standard Highway sign booklet detail R7-8.
 2. One sign is required per space placed as shown on site plan.
 3. Spaces indicated on site plan as 'VAN' accessible shall be signed accordingly.
 4. Colors: Legend and Border - green
Symbol - white on blue background
background - white

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE: 10/17/02

APPROVED: FOR PUBLIC WATER + SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT
[Signature] 1-13-02
County Health Officer
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING
[Signature] 1/13/02
Director
[Signature] 1/13/02
Chief, Division of Land Development
[Signature] 1/13/02
Chief, Development Engineering Division



GLWGUTSCHICK 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

OWNER:
ABRAMS DEVELOPMENT GROUP, INC.
SNOWDEN COMMONS
5850 WATERLOO ROAD, SUITE 230
COLUMBIA, MD. 21045
MR. MICKEY ABRAMS
(410) 461-4340

HANDICAP ACCESSIBILITY PLAN
ROUTE 175 COMMERCIAL
SECTION 1 AREA 2
PARCELS B-1 & B-2
PLAT No. 15-749

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT	02080
DATE	TAX MAP - GRID	SHEET
OCT., 2002	36 - 18	4 OF 13

Drawings\02080\DESIGN\02080SP4.dwg	DES.	DRN. WSL	CHK.	DATE	REVISION	BY	APP'R.

ELECTION DISTRICT No. 6

HOWARD COUNTY, MARYLAND

General Notes

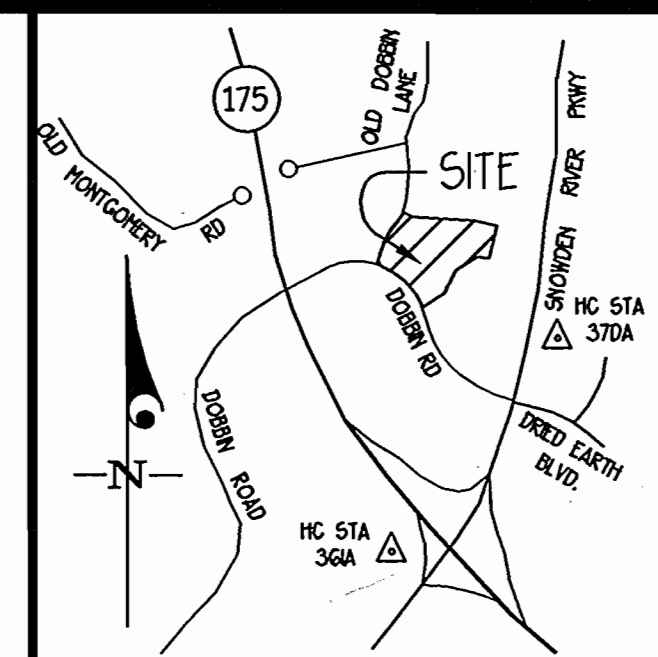
- All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standards and specifications if applicable.
- The contractor shall notify the Department of Public Works, Bureau of Engineering, Construction Inspection Division at (410) 313-1880 at least 48 Hours prior to the start of work.
- The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
- The contractor shall notify the Howard County Department of Public Works, Bureau of Utilities at (410) 313-4900 at least five (5) working days prior to starting any excavation work.
- Proposed Use: Bldg A - Retail & Restaurant
Bldg B - Restaurant
- All plan dimensions are to face of curb unless otherwise noted.
- Existing topography is shown per field run survey information by Schmidt, Pfeltz + McDonald, Inc. + from design plans for construction.
- Coordinates and bearings are based upon the MD State plane system (NAD '83).
- Water and sewer service is public.
- Water quality + quantity is provided under SDP 01-09 (Facility No. 2).
- All existing water and sewer is per Contract 24-3463-D.
- All existing public storm drain is per SDP-01-09.
- See trench bedding class 'C' for storm drains.
- Recording reference: Plat No. 15747
- Existing utilities are based on approved design plans for construction and field location by Gutschick, Little + Weber, P.A.
- There is no floodplain on Site.
- There are no wetlands on Site.
- Building setbacks and building restrictions are per FDP 235.
- This site is exempt from the Forest Conservation requirements of Section 16.1200 of the Howard County Code by Section 16.1202(b)(1)(IV).
- NOTE: In case of discrepancies between the plat and the plans, the plat shall govern.
- No clearing, grading or construction is permitted within any wetland, wetlands, buffer, 50' stream buffer or floodplain.
- All outdoor lighting shall comply with the requirements of zoning section 134.400 site lighting indicated on these plans is a single or twin bronze, full cutoff, 400 watt fixture mounted on a 30-foot tall, round, tapered, dark bronze pole.
- The Landscape Plan was prepared according to the Alternative Compliance Section of the Landscape Manual.

SITE DEVELOPMENT PLAN

ROUTE 175 COMMERCIAL

SECTION 1 AREA 2

PARCELS "B-1" & "B-2"



VICINITY MAP
SCALE: 1"=2000'

Sheet Index

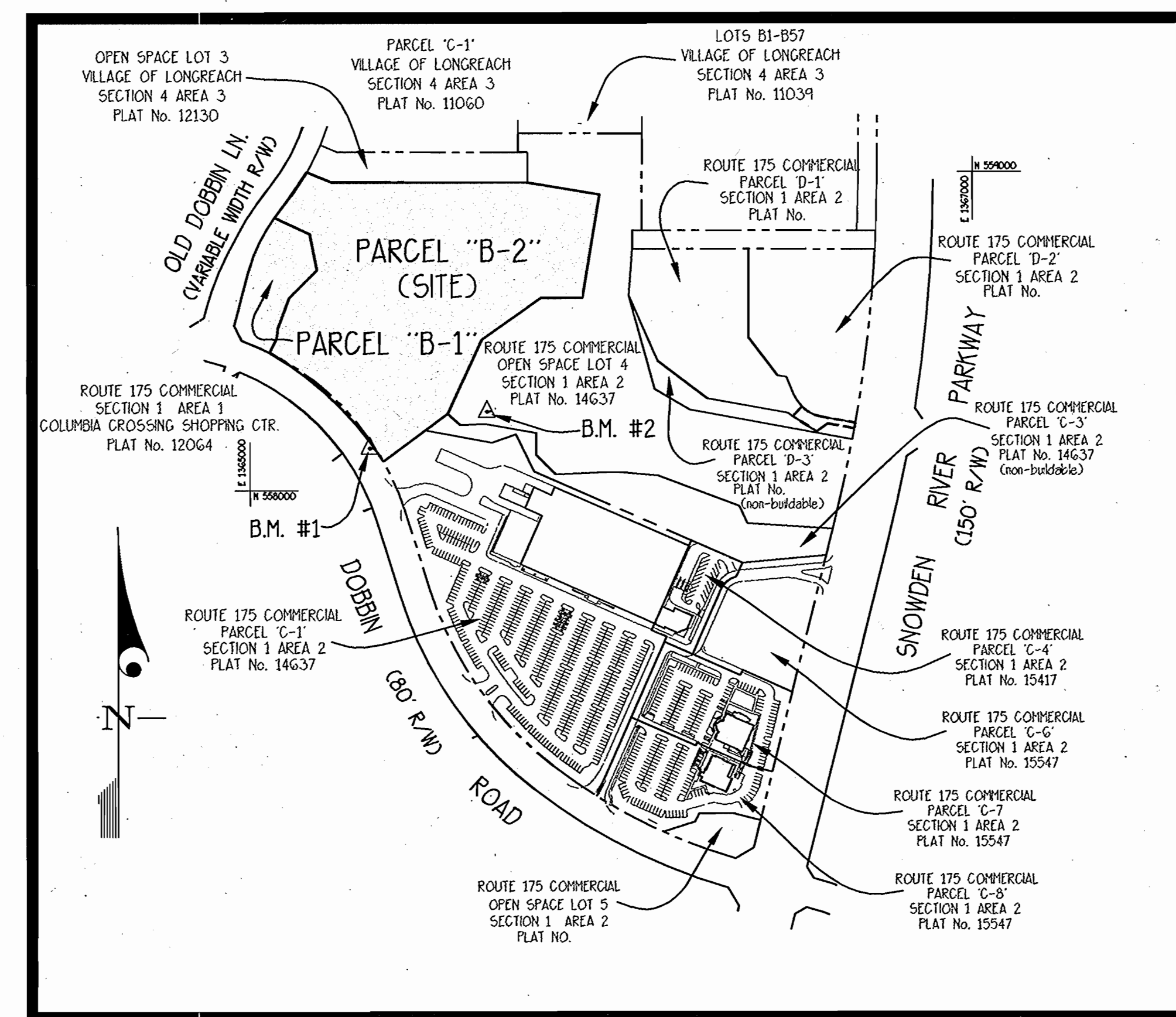
- Cover Sheet
- Site Development Plan
- Site Detail Sheet
- Handicap Accessibility Plan + Details
- Landscape Plan
- Landscape Details Notes + Schedules
- Sediment Control Plan
- Sediment Control Notes + Details
- Storm Drain Profiles + Schedules
- Water + Sewer Profiles
- Storm Drain Drainage Area Map
- Retaining + Screen Wall Details
- Signage + Striping Plan

Site Analysis Data Chart

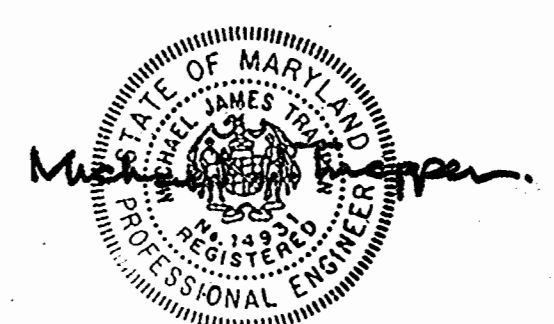
- Gross Area: Parcel B-1: 42,314 SF or 0.97 Ac.
Parcel B-2: 404,237 SF or 9.28 Ac.
Total: 446,551 SF 10.25 Ac.
- Limit of Disturbed Area = 418,797 SF or 9.61 Ac.
- Zoning = NT - Employment Center - Commercial (FDP 235)
- Proposed Use: Building A: Retail & Fast Food Restaurant
Building B: Standard Restaurant
- Gross Floor Area:
Building A: 2,000 SF
Building B: 2,000 SF (Fast Food Restaurant)
Building B: 2,000 SF (Standard Restaurant)
- Net Floor Area:
Building A: 2,000 SF (Fast Food Restaurant)
Building B: 2,000 SF (Standard Restaurant)
- No. of standard parking spaces required by FDP 235:
5 spaces per 1,000 SF net Retail area + 14 spaces per 1,000 SF net Fast-Food area
Building A: 2,000 SF / 1,000 x 5 = 10 spaces
Building B: 2,000 SF / 1,000 x 14 = 28 spaces
Total = 38 spaces
- No. of handicap spaces required: 8 spaces (1 van space).
- No. of standard parking spaces provided: 374 spaces.
- No. of handicap spaces provided: 12 spaces (8 van spaces).
- Total parking spaces provided: 385 spaces.
- Building area including canopy:
Building A: 64,112 SF + 5,763 SF canopy = 69,875 SF
Building B: 40,000 SF + 48,000 SF canopy = 88,000 SF
- Building Percent Coverage:
Parcel B-2: Building A = 70,142 / 404,237 x 100 = 17.4%
Parcel B-2: Building B = 71,500 / 404,237 x 100 = 17.7%
Parcel B-2: Total = 141,642 / 404,237 x 100 = 35.1%
Parcel B-1 -- Grading Only
- Project background: See Dept. of Planning + Zoning File Numbers: F-00-149, S 99-05, FDP 235, PB 337, WP 99-117, WP 00-24, WP 99-41, SDP-01-09, SDP-01-132, F 02-141, F 02-153, F 01-16, SDP 02-106, SDP 02-142 + SDP 03-09, F 02-012, F 02-022, F 03-036.

LEGEND

- 366--- EX. CONTOUR
- 300--- PROP. CONTOUR
- EX. TREES
- EX. STORM DRAIN
- PROP. STORM DRAIN
- LIMIT OF SUBMISSION
- EX. SANITARY SEWER
- EX. WATERLINE
- PROP. SANITARY SEWER
- PROP. WATERLINE
- EX. CURB + GUTTER
- CONCRETE CURB + GUTTER
- ASPHALT CURB
- PROP. REVERSE CURB + GUTTER
- CONCRETE SIDEWALK
- DUMPSTER OR UTILITY PAD
- EX. EASEMENTS
- EX. ASPHALT PAVING
- x 78.88 TOP OF PAVING SPOT SHOT
- NUMBER OF PARKING SPACES
- PROP. LIGHT FIXTURE + POLE
- EX. LIGHT FIXTURE + POLE
- HANDICAP CURB RAMP (SEE DETAIL SHEET 4)
- RETAINING WALL/SCREEN WALL
- PATRON ENTRANCE
- LOADING AREA



KEY MAP
SCALE: 1" = 300'
Bench Mark No. 1
Traverse Station 970
Elev. = 390.29
Bench Mark No. 2
Traverse Station 971
Elev. = 378.42



OWNER:
ABRAMS DEVELOPMENT GROUP INC.
SNOWDEN COMMONS
5650 WATERLOO ROAD, SUITE 230
COLUMBIA, MARYLAND 21045
ATTN: MICKEY ABRAMS
(410) 461-4340

COVER SHEET
ROUTE 175 COMMERCIAL
SECTION 1 - AREA 2
PARCELS "B-1" & "B-2"
PLAT NO. 15747

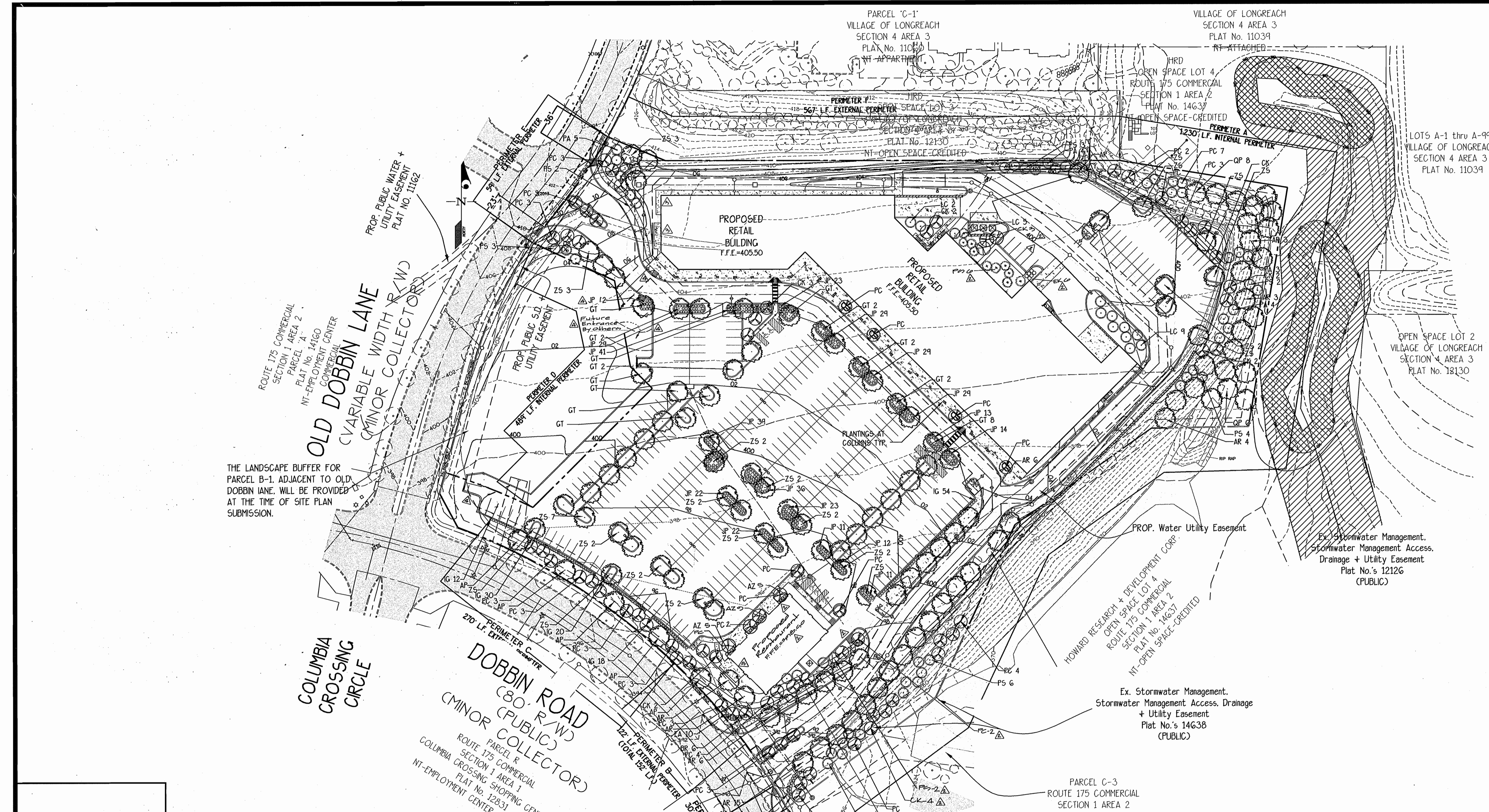
WATER CODE:		SEWER CODE:		ADDRESS CHART		
EOG	3460000	Parcel Number	Street Address			
		B-1	G201 Old Dobbin Lane			
		B-2	Building A - G181 Old Dobbin Lane			
		B-2	Building B - G191 Old Dobbin Lane			
SUBDIVISION NAME:		SECTION / AREA		PARCELS		
ROUTE 175 COMMERCIAL		1 / 2		B-1 + B-2		
PLAT No.	ZONE	TAX MAP	BLOCK	ELEC. DIST.	CENSUS TRACT	
15747	CEC-COMM	36	18	6	6067.03	
SCALE		ZONING		G. L. W. FILE No.		
AS SHOWN		NT		02080		
DATE		TAX MAP - GRID		SHEET		
OCT., 2002		36 - 18		1 OF 13		

APPROVED: FOR PUBLIC WATER + SEWERAGE SYSTEMS,
HOWARD COUNTY HEALTH DEPARTMENT
Date: 1-13-03
County Health Officer: MK

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING
Date: 1/13/03
Date: 1/13/03
Date: 1/13/03
Chief, Division of Land Development
Chief, Development Engineering Division MK

GLWGUTSCHICK 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 FAX: 301-421-4188

DATE	REVISION	BY	APPR.
1/14/03	Rev. site Analysis Data chart		
1/15/03	Rev. site Analysis No. 07A		
1/18/03	Rev. site Analysis Data chart		
2/12/03	Rev. General Notes & site Analysis Data chart		



THE LANDSCAPE BUFFER FOR PARCEL B-1, ADJACENT TO OLD DOBBIN LANE, WILL BE PROVIDED AT THE TIME OF SITE PLAN SUBMISSION.

APPROVED: FOR PUBLIC WATER + SEWERAGE SYSTEMS.
 HOWARD COUNTY HEALTH DEPARTMENT
 County Health Officer *[Signature]* Date 1/13/03
 APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING
 Director *[Signature]* Date 1/13/03
 Chief, Division of Land Development *[Signature]* Date 1/13/03
 Chief, Development Engineering Division *[Signature]* Date 1/13/03

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 10/17/02

PARCEL 5
 ROUTE 175 COMMERCIAL
 SECTION 1 AREA 2 -
 COLUMBIA CROSSING SHOPPING CENTER
 PLAT No. 12831
 NT-EMPLOYMENT CENTER COMMERCIAL

PARCEL C-1
 ROUTE 175 COMMERCIAL
 SECTION 1 AREA 2
 PLAT No. 14901
 NT-EMPLOYMENT CENTER COMMERCIAL

PARCEL C-3
 ROUTE 175 COMMERCIAL
 SECTION 1 AREA 2
 PLAT No. 14901
 NT-EMPLOYMENT CENTER COMMERCIAL



THIS PLAN FOR LANDSCAPE PURPOSES ONLY.

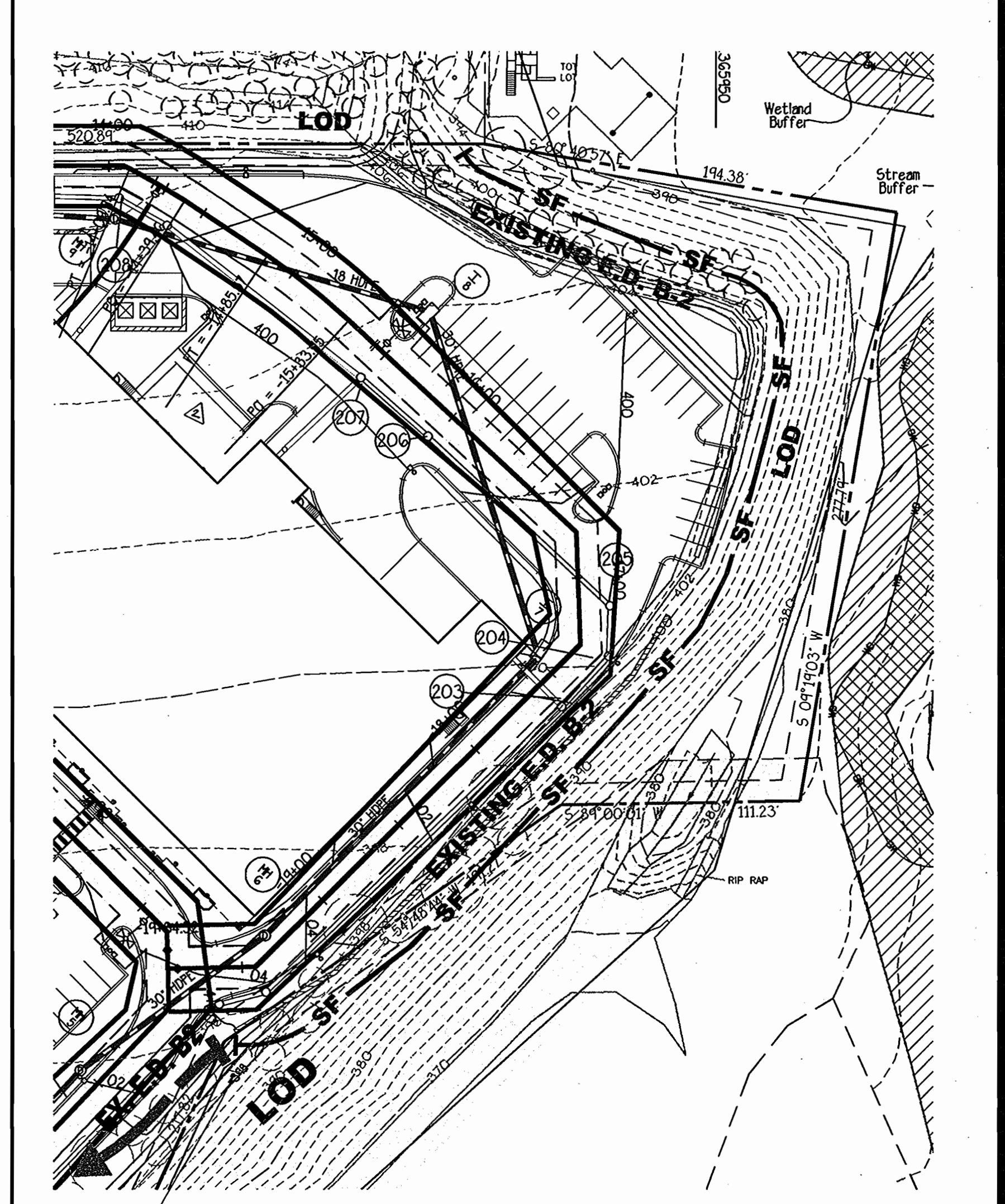
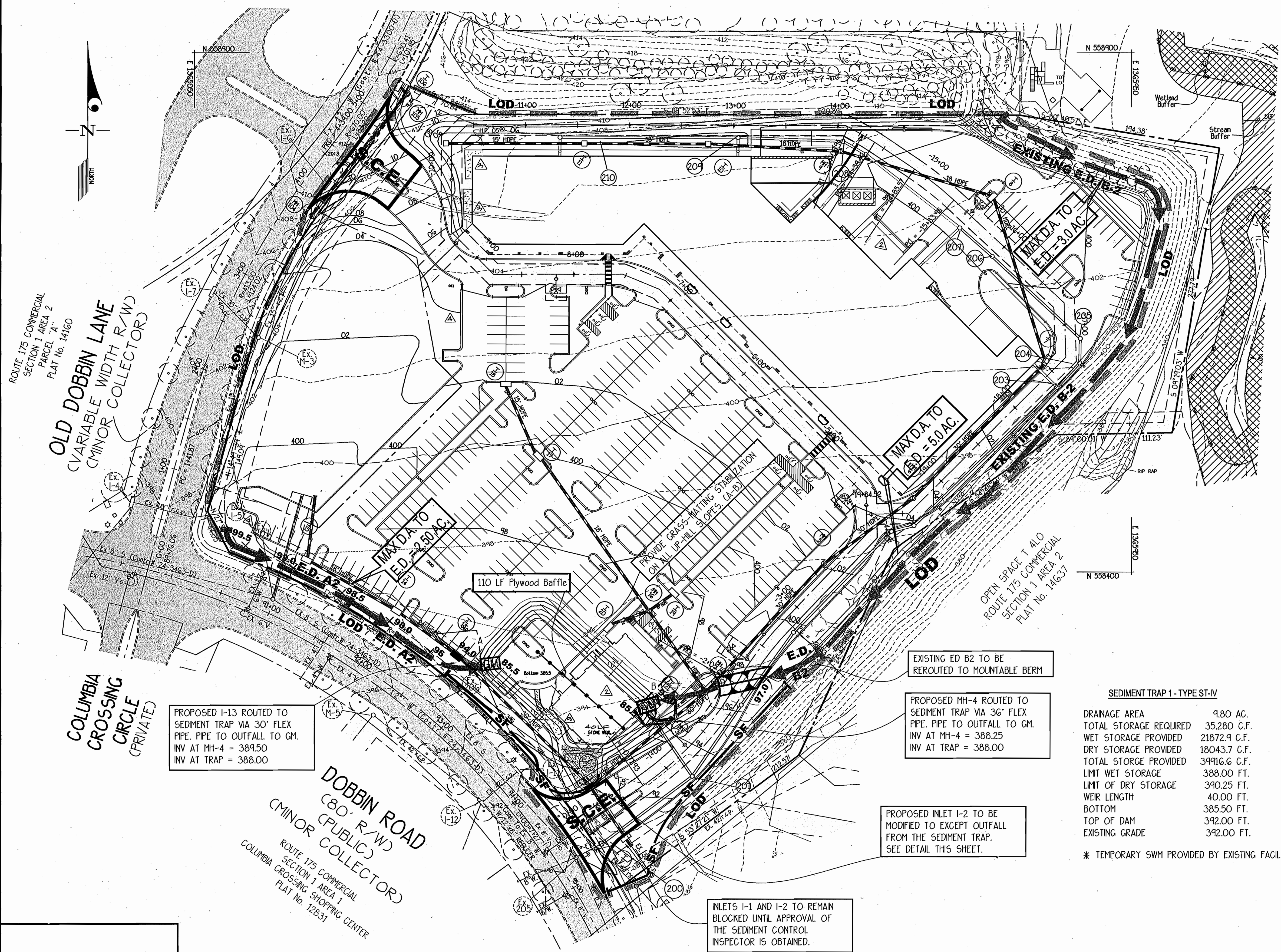
GLWGUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20886
 TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-988-2524 FAX: 301-421-4186

DATE	REVISION	BY	APPR.
1/13/03	Add Patio adjacent to Building B	WGL	
1/13/03	Rev Parking & Landscapes Adj To Par. B-1	WGL	
1/13/03	Add Patio Adjacent To Building A Restaurant & Extend walk of Bldg	WGL	
1/13/03	Rev Landscapes & Bldg Footprint Bldg B & Rear Dumpsters	WGL	

OWNER:
 ABRAMS DEVELOPMENT GROUP, INC.
 SNOWDEN COMMONS
 5850 WATERLOO ROAD, SUITE 230
 COLUMBIA, MD 21045
 MR. MICKEY ABRAMS
 (410) 461-4340

DOBBIN STATION LANDSCAPE PLAN
ROUTE 175 COMMERCIAL
SECTION 1 - AREA 2
PARCEL B-1 & B-2
 PLAT No. 15740

SCALE	ZONING	G. L. W. FILE No.
1"=50'	NEW TOWN	02080
DATE	TAX MAP - GRID	SHEET
OCT., 2002	36-18	5 of 13



EXISTING ED TO BE REMOVED 10 FT. DOWNHILL FROM END OF PROPOSED RETAINING WALL AND UPHILL.

EXISTING ED B2 TO BE REROUTED TO MOUNTABLE BERM

PROPOSED MH-4 ROUTED TO SEDIMENT TRAP VIA 36" FLEX PIPE. PIPE TO OUTFALL TO GM. INV AT MH-4 = 388.25 INV AT TRAP = 388.00

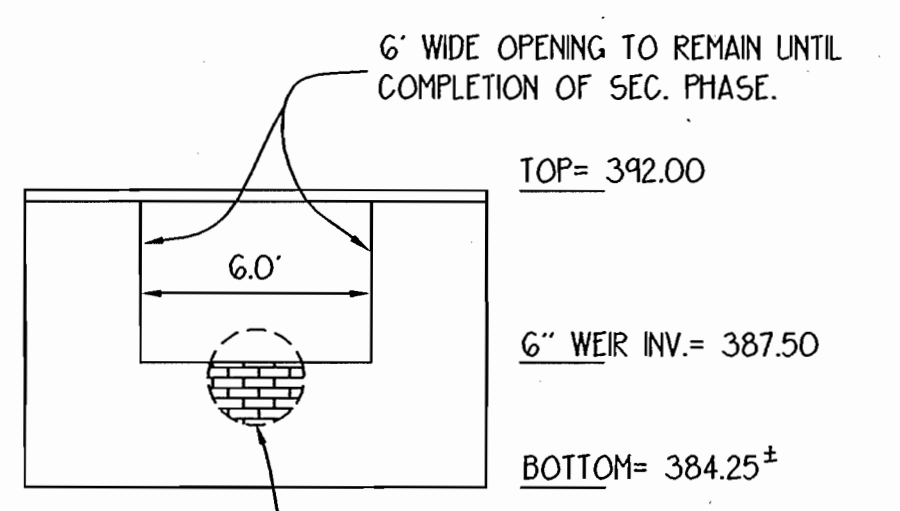
PROPOSED INLET I-2 TO BE MODIFIED TO EXCEPT OUTFALL FROM THE SEDIMENT TRAP. SEE DETAIL THIS SHEET.

INLETS I-1 AND I-2 TO REMAIN BLOCKED UNTIL APPROVAL OF THE SEDIMENT CONTROL INSPECTOR IS OBTAINED.

SEDIMENT TRAP 1 - TYPE ST-IV

DRAINAGE AREA	9.80 AC.
TOTAL STORAGE REQUIRED	35,280 C.F.
WET STORAGE PROVIDED	21,872.9 C.F.
DRY STORAGE PROVIDED	18,043.7 C.F.
TOTAL STORAGE PROVIDED	39,916.6 C.F.
LIMIT WET STORAGE	388.00 FT.
LIMIT OF DRY STORAGE	390.25 FT.
WEIR LENGTH	40.00 FT.
BOTTOM	385.50 FT.
TOP OF DAM	392.00 FT.
EXISTING GRADE	392.00 FT.

* TEMPORARY SWM PROVIDED BY EXISTING FACILITY.



PRECAST TYPE A-10 INLET. TYP. DET. SD 4.02J

OPENING FOR FUTURE 30" HDPE TO BE BRICKED CLOSED UNTIL COMPLETION OF SEC. PHASE.

INLET I-2 SEC. MODIFICATIONS (Back of Structure) NTS



THIS PLAN IS FOR SEDIMENT CONTROL ONLY!

APPROVED FOR PUBLIC WATER + SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT
County Health Officer *MR* 1-18-03
Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING
Director *MR* 1/13/03
Date
Chief, Division of Land Development *MR* 1/13/03
Date
Chief, Development Engineering Division *MR* 1/13/03
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.

Signature of Developer/Builder *John M. Ah* 12/29/02
Date

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.

Signature of Engineer *Michael J. Trappan* 12/17/02
Date

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

Signature of Reviewer *Jim Mayes* 12/30/02
Date
Natural Resources Conservation Service

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

Signature of Approver *John R. Robinson* 12/30/02
Date
Howard S.C.D.

LEGEND

---	EXISTING CONTOUR
---	PROPOSED CONTOUR
---	LIMIT OF DISTURBANCE
SF	SILT FENCE
E.D.	EARTH DIKE
GM	GABION INFLOW PROTECTION
SCE	STABILIZED CONSTRUCTION ENTRANCE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 10/17/02

GLWGUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20886
TEL: 301-421-4024 FAX: 301-421-4186

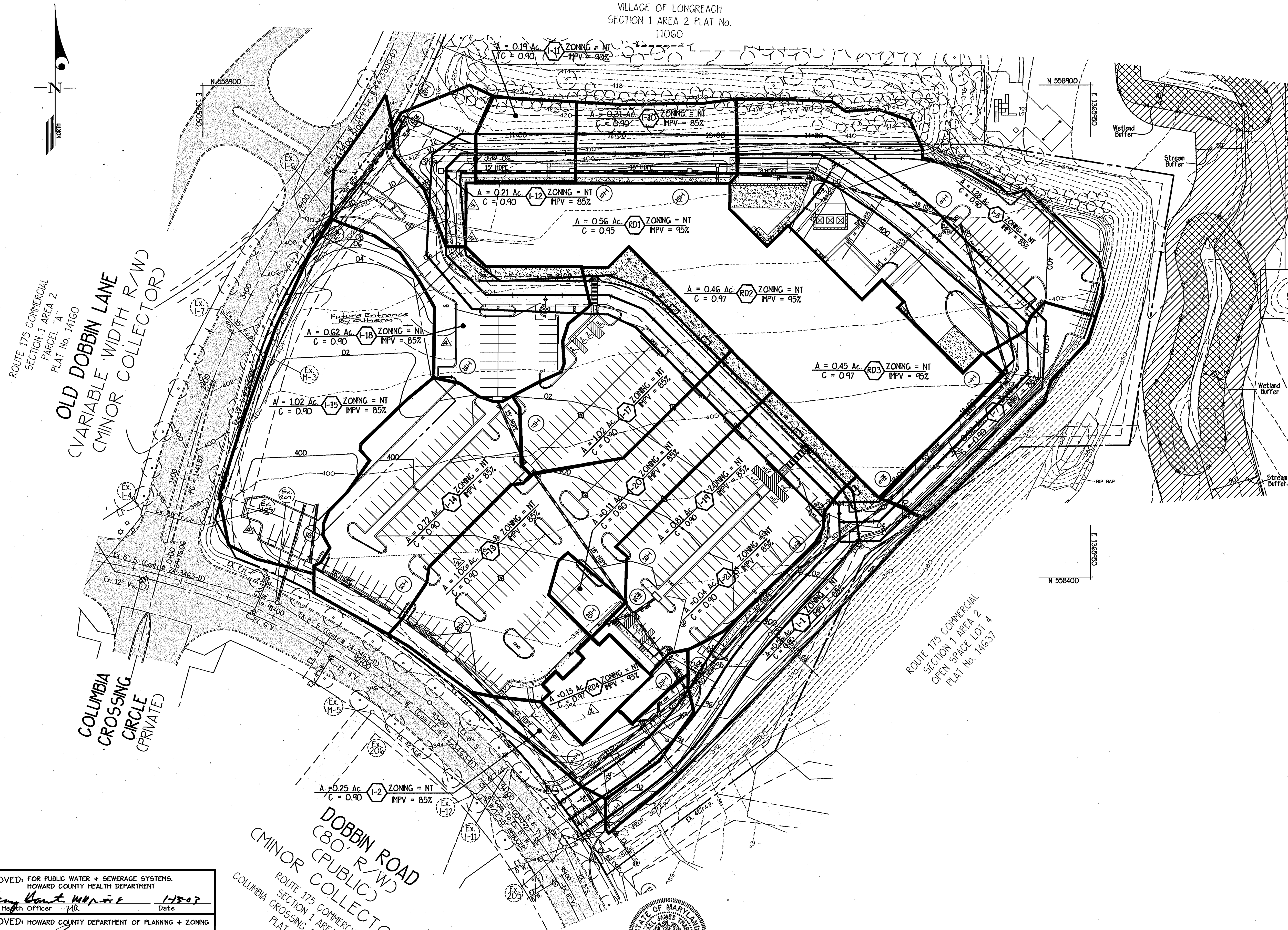
NO.	DATE	REVISION	BY	APPR.
1114104		Add Patio Adjacent to Bldg B A	WESJ	
1114105		Rev. Footprint Adj. to Bldg B-1A	WESJ	
1114106		Add Patio Adjacent to Bldg A Restaurant and Extend walkway rear Bldg A	WESJ	
1114107		Rev. Footprint Bldg B Area Near Bldg A Dumpsters	WESJ	

Owner:
ABRAMS DEVELOPMENT GROUP, INC.
SNOWDEN COMMONS
5850 WATERLOO ROAD, SUITE 230
COLUMBIA, MD 21045
MR. MICKEY ABRAMS
(410) 461-4340

SEDIMENT CONTROL PLAN
ROUTE 175 COMMERCIAL
SECTION 1 AREA 2
PARCEL "B-1" & "B-2"
PLAT NO. 15747-2A
ELECTION DISTRICT No. 6
HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE NO.
1" = 50'	NEW TOWN	02080
DATE	TAX MAP - GRID	SHEET
OCT., 2002	36-18	7 OF 13

PARCEL "C-1"
VILLAGE OF LONGREACH
SECTION 1 AREA 2 PLAT No.
11060



ROUTE 175 COMMERCIAL
SECTION 1 AREA 2
PARCEL "A"
PLAT No. 14160
OLD DOBBIN LANE
(VARIABLE WIDTH R/W)
CMINOR COLLECTOR

COLUMBIA CROSSING CIRCLE
(PRIVATE)

DOBBIN ROAD
(80' R/W)
CMINOR (PUBLIC)
ROUTE 175 COMMERCIAL
SECTION 1 AREA 2
COLUMBIA CROSSING SHOPPING CENTER
PLAT No. 12064

Michael J. Trapp
Professional Engineer
No. 12345
State of Maryland

APPROVED
PLANNING BOARD
of HOWARD COUNTY

DATE 10/17/02

APPROVED FOR PUBLIC WATER + SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT
Debra G. Murrice 1/15/07
County Health Officer Date
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING
David R. Smith 1/15/03
Director Date
Chris Hunt 1/12/03
Chief, Division of Land Development Date
Mike Cummings 1/2/03
Chief, Development Engineering Division Date

GLWGUTSCHICK 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 FAX: 301-421-4188

NO.	DATE	REVISION	BY	APP'R.
11/14/02		Add Bldg. Adjacent to Bldg. B	WSJ	
12/14/02		Rev. Curb Line Adj. To Bar B-1	WSJ	
01/15/03		Add Bldg. Adjacent to Bldg. A Restaurant & Extend Walk Behind Bldg. A	WSJ	
01/15/03		Rev. Bldg. B Footprint & Area Near Bldg. A Computers, Etc. E-1 Ints.	WSJ	

OWNER:
ABRAMS DEVELOPMENT GROUP, INC.
SNOWDEN COMMONS
5850 WATERLOO ROAD, SUITE 230
COLUMBIA, MD 21045
ATTN: MICKEY ABRAMS
(410) 461-4340

Storm Drain Drainage Area Map
ROUTE 175 COMMERCIAL
PARCEL "B-1" & "B-2"
PLAT No. 14749

SCALE	ZONING	G. L. W. FILE No.
1" = 50'	NEW TOWN	02080
DATE	TAX MAP - GRID	SHEET
OCT., 2002	36 - 18	11 OF 13

