

**GENERAL NOTES**

- All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standard and specifications if applicable.
- The contractor shall notify the Department of Public Works/Construction Inspection Division at (410) 313-1880 at least five (5) working days 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 working days prior to starting any excavation work.
- Site area: 3.67 acres
- 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.
- All plan dimensions are to face of curb unless otherwise noted.
- Existing topography reflects mass grading as shown on F-96-89 & SDP 97-110.
- Coordinates and bearings are based upon the MD State plan system (NAD '27).
- Water and sewer shown is public.
- Stormwater management for this site was approved under Department of Planning & Zoning File No. F-96-89.
- All existing water and sewer is per Contract 34-3528-D.
- All existing public storm drain is per F-96-89 (F-97-43) (Plot No. 12544).
- All curb radii is 5' unless noted otherwise.
- Utility information taken from approved final construction plans for development.
- Sidewalks adjacent to perpendicular parking shall be 6' wide. All other sidewalks shall be 4' wide except where dimensioned otherwise. Provide 3' radius rounding at all angle breaks and intersections.
- Contractor shall utilize PVC pipe for all sewer house connections. Contractor shall utilize D.I.P. (Cl. 51) for 6" water house connection.
- For all storm drain connections at existing stubs, the contractor shall remove the existing blocking and maintain use trench bedding class "C" for storm drains.
- Paved areas indicated are private except as noted.
- Project background: See Dept. of Planning & Zoning File Numbers: S-93-121, P-95-10, WP-95-32, WP-95-78, WP-95-441, F-96-89 & SDP-96-110, F-97-43.
- Recording reference: Plot No. 12544.
- All proposed ramps shall be in accordance with current A.D.A. standards. Maximum sidewalk cross slope shall be two percent. Provide a five-foot by five-foot level (2 percent max.) landing at the top and bottom of all ramps and building entrances and exits.
- All water meters shall be located inside buildings.
- The limits of public maintenance for waterhouse connections shall be 7' from the back of curb.
- All proposed site utilities are to terminate 5' from the building. The building plumber shall connect to and extend these utilities to the inside of the building.
- For Gas, Telephone and Electric routing, see plans by others.
- Fire Lanes to be provided in accordance with the direction of the Fire Marshall or local Fire Department.
- There is no floodplain on this site as determined by a study performed by Whitman, Reardon and Assoc. and approved under P-95-10 on January 20, 1995.
- There are no wetlands on this site as determined by Exploration Research, Inc. and approved under P-95-10 on January 20, 1995.
- The traffic study for this site was prepared by Wells & Associates and was approved under P-95-10 on January 20, 1995.

On March 20, 1997, the Planning Board approved the footprint for this proposed building. The existing farm pond & water quality facilities are located within land to be owned by the Columbia Association. Cosmetic & landscaping items not performed by Howard Co Dept of Public Works will be the responsibility of the Columbia Association. Structural & scheduled cosmetic/aesthetic items will be the responsibility of the Howard Co Dept of Public Works.

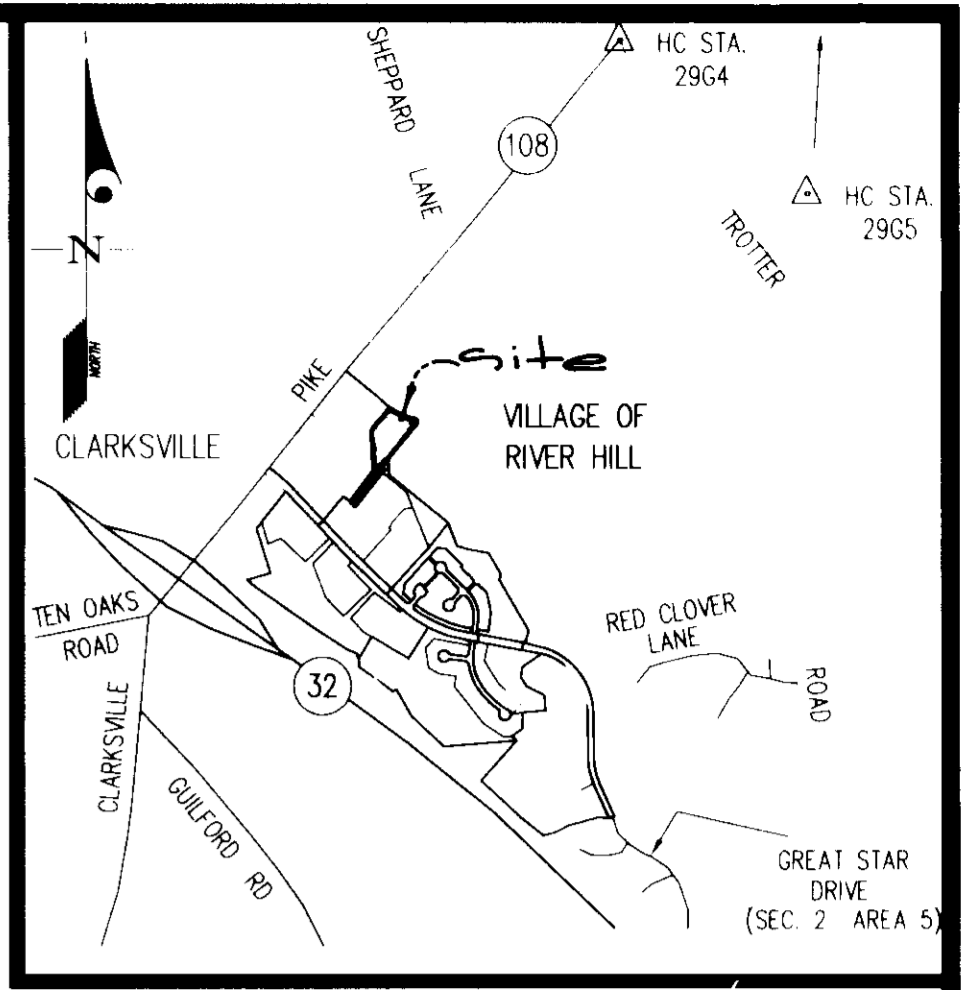
# SITE DEVELOPMENT PLAN

## VILLAGE OF RIVER HILL

### SECTION 4 ~ AREA 2

#### HOWARD COUNTY, MARYLAND

HO. CO. MONUMENT 29G4 IS AT THE INTERSECTION OF ROUTE 108 AND TROTTER RD. MONUMENT 29G5 IS AN ADDITIONAL 2544 ± ALONG RTE 108 AWAY FROM THE SITE.



VICINITY MAP  
SCALE: 1" = 2000'

**Site Analysis**

Project Area	2.07 Ac±
Limit of Disturbed Area	2.07 Ac±
Present Zoning	New Town
Proposed Use	Health Club
Total Floor Space	11065 sq ft / Floor x 2 Floors = 22130 sq ft
No. of Parking Spaces Required	As Required by Planning Board
No. of Parking Spaces Provided	202 per 11065 sq ft this plan = 222 total = 225
Building Coverage of Site	11065 sq ft (5.4%)*
Area of Landscape Islands	8550 sq ft
Area of Parking Lot	2.24 Ac±

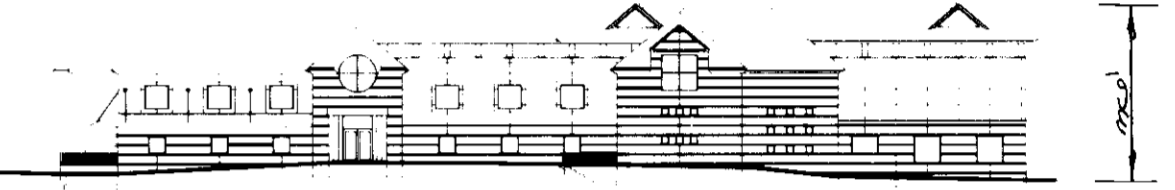
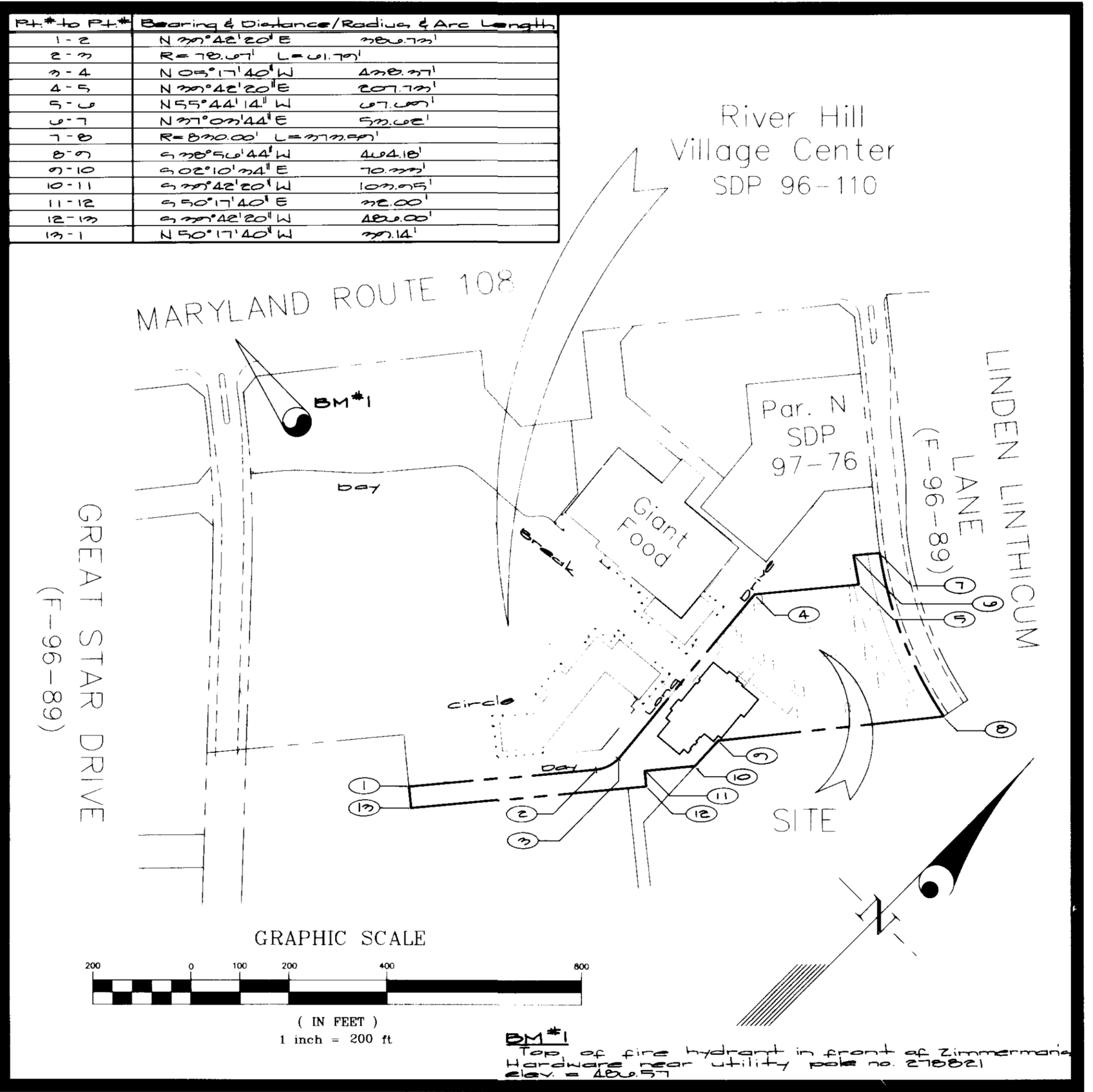
\* Based upon 0.0024 Ac. of open space within FDP. (16% coverage allowed)

**STREET LIGHT INFORMATION**

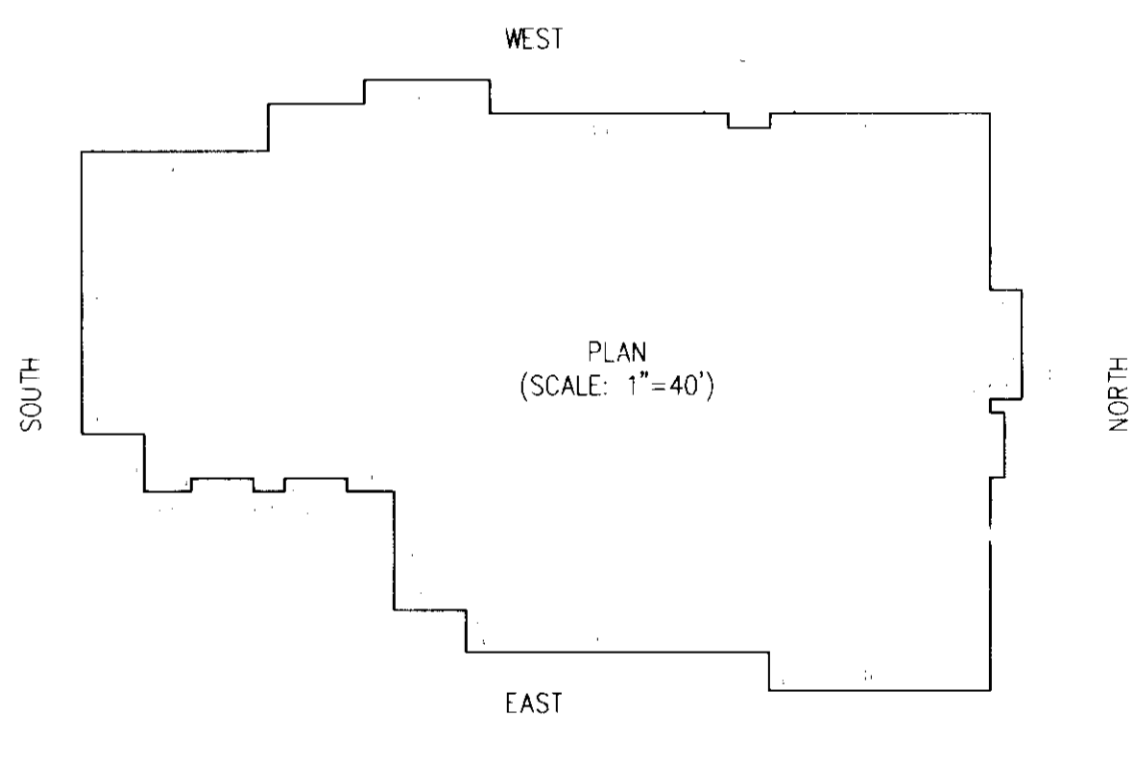
SYMBOL	DESCRIPTION	QUAN.
+	TYPE X-4 - QUAD TYPE IV WITH HORIZONTAL 400 WATT METAL HALIDE LAMPS ON A 30 FOOT ROUND TAPERED STEEL POLE (BROWN)	4

**DRAWING LIST**

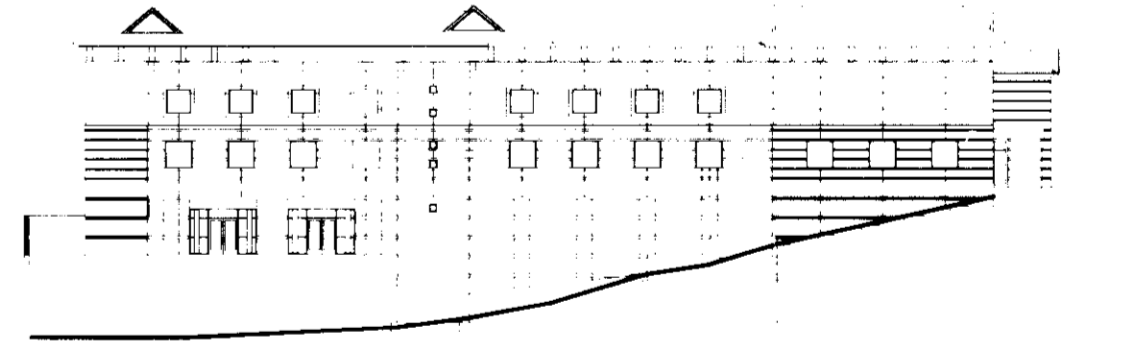
NO.	DESCRIPTION
1.	COVER SHEET
2.	SITE DEVELOPMENT PLAN
3.	DRAINAGE AREA MAP / SEDIMENT CONTROL PLAN
4.	LANDSCAPING & LIGHTING PLAN
5.	SEDIMENT CONTROL NOTES & DETAILS
6.	PLANTING NOTES & DETAILS
7.	Storm drain, private water & sewer profiles & site details



WEST ELEVATION  
(SCALE: 1"=40')



PLAN  
(SCALE: 1"=40')



EAST ELEVATION  
(SCALE: 1"=40')

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

APPROVED: *Cindy Hamilton* 7/18/97

APPROVED: *John Hamilton* 7/18/97

DATE: May 8, 1997

**ADDRESS CHART**

WATER CODE: 1-10	SEWER CODE: 6653500	PARCEL NUMBER: 2	STREET ADDRESS: 6151 Bay Long Drive
SUBDIVISION NAME: VILLAGE OF RIVER HILL		SECTION/AREA: 4 / 2	PARCEL: 2
PLAT: 12544	BLOCK: 34 & 35	ZONE: NT	TAX MAP: 34 & 35
ELEC. DIST.: 5		CENSUS TRACT: 6055	

**GUTSCHICK LITTLE & WEBER, P.A.**  
CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS  
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK - BURTONSVILLE, MARYLAND 20866  
TEL: (301) 421-4024 NO. VA.: (301) 989-2524 BALT.: (410) 880-1820 FAX: (301) 421-4186 DES. GM DRN. CAD CHK.

NO.	DATE	REVISION	BY	APPR.

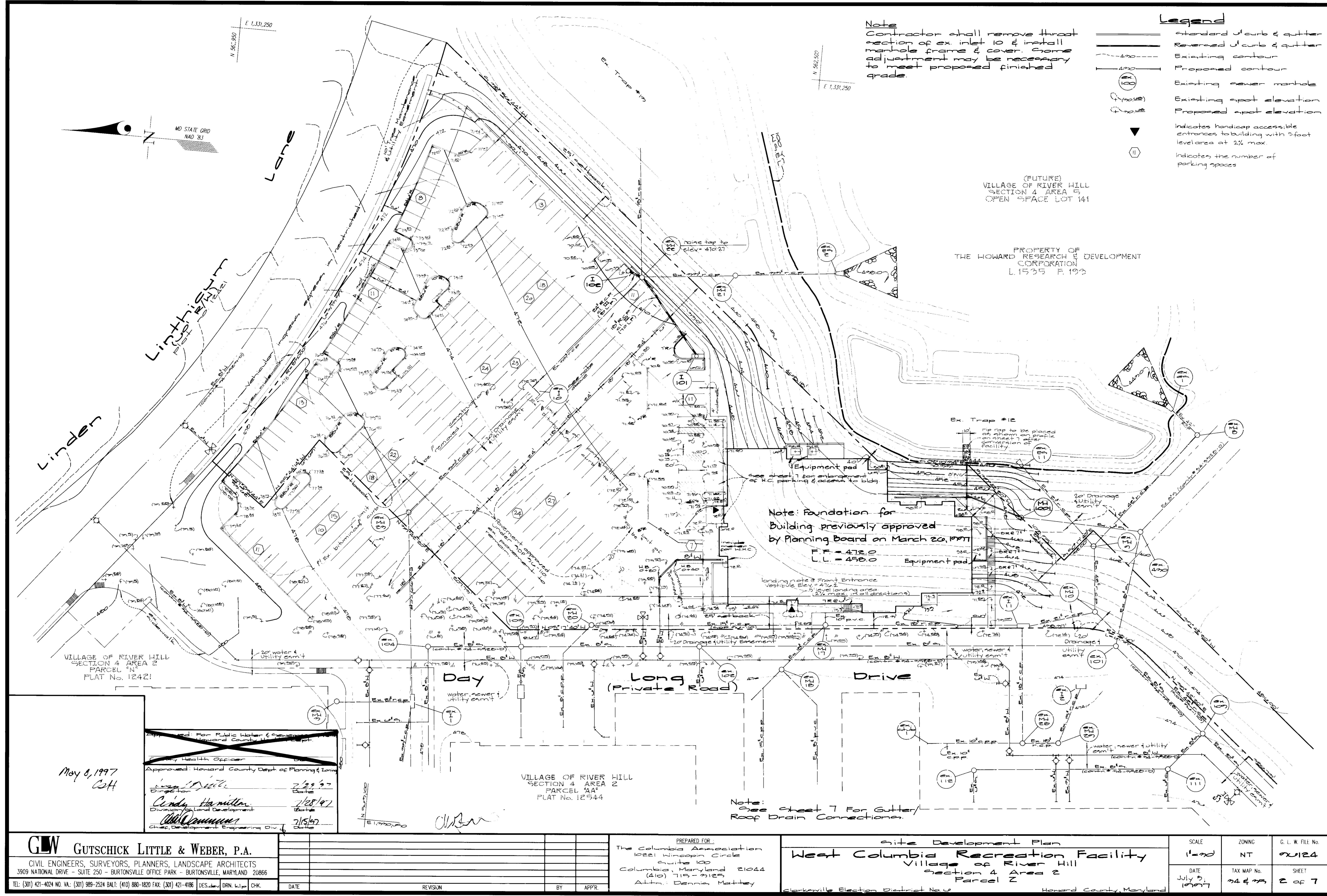
PREPARED FOR:  
THE COLUMBIA ASSOCIATION  
10221 WINCOPIN CIRCLE  
SUITE 100  
COLUMBIA, MD 21044  
(410) 715-3125  
ATTN: DENNIS MATTEY

**COVER SHEET**

West Columbia Recreation Facility  
Village of River Hill  
Section 4 Area 2  
Parcel 2

CLARKSVILLE ELECTION DISTRICT No. 6 HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN	ZONING: NT	G. L. W. FILE No.: 96124
DATE: July 3, 1997	TAX MAP No.: 34 & 35	SHEET: 1 OF 7



**Note**  
Contractor shall remove throat section of ex. inlet 10 & install manhole frame & cover. Some adjustment may be necessary to meet proposed finished grade.

- Legend**
- standard U/curb & gutter
  - Reversed U/curb & gutter
  - - - - Existing contour
  - - - - Proposed contour
  - ⊙ Existing sewer manhole
  - ⊙ Existing spot elevation
  - ⊙ Proposed spot elevation
  - ▲ Indicates handicap accessible entrances to building with 5-foot level area at 2% max.
  - ⊞ Indicates the number of parking spaces

(FUTURE)  
VILLAGE OF RIVER HILL  
SECTION 4 AREA 6  
OPEN SPACE LOT 141

PROPERTY OF  
THE HOWARD RESEARCH & DEVELOPMENT CORPORATION  
L1535 P.193

**Note: Foundation for Building previously approved by Planning Board on March 26, 1997**  
F.F. = 472.0  
L.L. = 458.0  
Equipment pad

**Note:** See sheet 7 For Gutter/Roof Drain Connections.

VILLAGE OF RIVER HILL  
SECTION 4 AREA 2  
PARCEL "N"  
PLAT No. 12421

VILLAGE OF RIVER HILL  
SECTION 4 AREA 2  
PARCEL "A"  
PLAT No. 12344

May 8, 1997  
CJH

Approved: Howard County Dept. of Planning & Zoning  
Director  
Candy Hamilton  
Division of Land Development  
Chief, Development Engineering Div.

**GLW GUTSCHICK LITTLE & WEBER, P.A.**  
CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS  
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK - BURTONSVILLE, MARYLAND 20866  
TEL: (301) 421-4024 NO. VA.: (301) 989-2524 BALT.: (410) 880-1820 FAX: (301) 421-4186 DES. DRN. W. CHK.

DATE	REVISION	BY	APPR.

PREPARED FOR:  
The Columbia Association  
10221 Winopin Circle  
Suite 100  
Columbia, Maryland 21044  
(410) 715-2125  
Attn: Dennis Matthey

Site Development Plan  
**West Columbia Recreation Facility**  
Village of River Hill  
Section 4 Area 2  
Parcel 2  
Clarksville Election District No. 9  
Howard County, Maryland

SCALE	ZONING	G. L. W. FILE No.
1"=20'	NT	20124
DATE	TAX MAP No.	SHEET
July 2, 1997	74 & 75	2 of 7

PLANT MATERIALS AND PLANTING METHODS

A. Plant Materials

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

1. Plant Names

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

2. Plant Standards

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

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

3. Plant Measurements

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

- a. Caliper measurements shall be taken six inches (6") above grade for trees under four-inch (4") caliper and twelve (12") above grade for trees four inches (4") in caliper and over.
- b. Minimum branching height for all trees shall be six feet (6'), maximum eight feet (8').
- c. Minimum size for planting shade trees shall be 3-3 1/2" caliper, 14'-16' in height.
- d. Minimum size for planting minor or intermediate focus trees (pines, crabapples, etc.) shall be 3"-3 1/2" caliper, 10'-12' in height.
- e. Minimum size for planting shrubs shall be 18" - 24" spread unless noted otherwise.
- f. Caliper, height, spread and size of ball shall be generally as follows:

CALIPER	HEIGHT	SPREAD	SIZE OF BALL
3" - 3 1/2"	14'-16'	6'-8'	32" diameter
3 1/2" - 4"	14'-16'	8'-10'	36" diameter
4" - 4 1/2"	16'-18'	8'-10'	40" diameter
4 1/2" - 5"	16'-17'	10'-12'	44" diameter
5" - 5 1/2"	16'-20'	10'-12'	48" diameter
5 1/2" - 6"	18'-20'	12'-14'	52" diameter

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

4. Plant Identification

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

5. Plant Inspection

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

B. Planting Methods

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

1. Planting Seasons

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

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

2. Digging

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

3. Excavation of Plant Pits

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

- a. Locations of all proposed plant material shall be staked and approved in the field by the landscape architect before any of the proposed plant material is installed by the landscape contractor.
- b. All pits shall be generally circular in outline, vertical sides; depth shall not be less than 6" deeper than the root ball, diameter shall not be less than two times the diameter of the root ball as set forth in the following schedule.
- c. If areas are designated as shrub beds or hedge trenches, they shall be excavated to at least 18" depth minimum. Areas designated for ground covers and vines shall be excavated to at least 12" in depth minimum.
- d. Diameter and depth of tree pits shall generally be as follows:

PLANT SIZE	ROOT BALL	PIT DIAMETER	PIT DEPTH
3" - 3 1/2" cal.	32"	64"	28"
3 1/2" - 4" cal.	36"	72"	32"
4" - 4 1/2" cal.	40"	80"	36"
4 1/2" - 5" cal.	44"	88"	40"
5" - 5 1/2" cal.	48"	96"	44"
5 1/2" - 6" cal.	52"	104"	48"

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

4. Staking, Guying and Wrapping

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

- a. Stakes: Shall be sound wood 2" x 2" rough sawn oak or similar durable woods, or lengths, minimum 7'-0" for major trees and 5'-0" minimum for minor trees.
- b. Wire and Cable: Wire shall be #10 ga. galvanized or bethanized annealed steel wire. For trees over 3" caliper, provide 5/16" turn buckles, eye and eye with 4" take-up. For trees over 5" caliper, provide 3/16", 7 strand cable cadmium plated steel, with galvanized "eyes" thimbles of wire and hose on trees up to 3" in caliper.
- c. Hose: Shall be new, 2 ply reinforced rubber hose, minimum 1/2" I.D. "Plastic Lock Ties" or "Paul's Trees Braces" may be used in place of wire and hose on trees up to 3" in caliper.
- d. All trees under 3" in caliper are to be planted and staked in accordance with the attached "Typical Tree Staking Detail". All trees over 3" in caliper are to be planted and guyed in accordance with the attached "Typical Tree Guying Detail".

5. Plant Pruning, Edging and Mulching

- a. Each tree, shrub or vine shall be pruned in an appropriate manner to its particular requirements, in accordance with accepted standard practice. Broken or bruised branches shall be removed with clean cuts flush with the adjacent trunk or branches. All cuts over 1" in diameter shall be painted with an approved antiseptic tree wound dressing.
- b. All trenches and shrub beds shall be edged and cultivated to the lines shown on the drawing. The areas around isolated plants shall be edged and cultivated to the full diameter of the pit. Sod which has been removed and stacked shall be used to trim the edges of all excavated areas to the neat lines of the plant pit saucers, the edges of shrub areas, hedge trenches and vine pockets.
- c. After cultivation, all plant materials shall be mulched with a 2" layer of fine, shredded pine bark, peat moss, or another approved material over the entire area of the bed or saucer.

6. Plant Inspection and Acceptance

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

7. Plant Guarantee

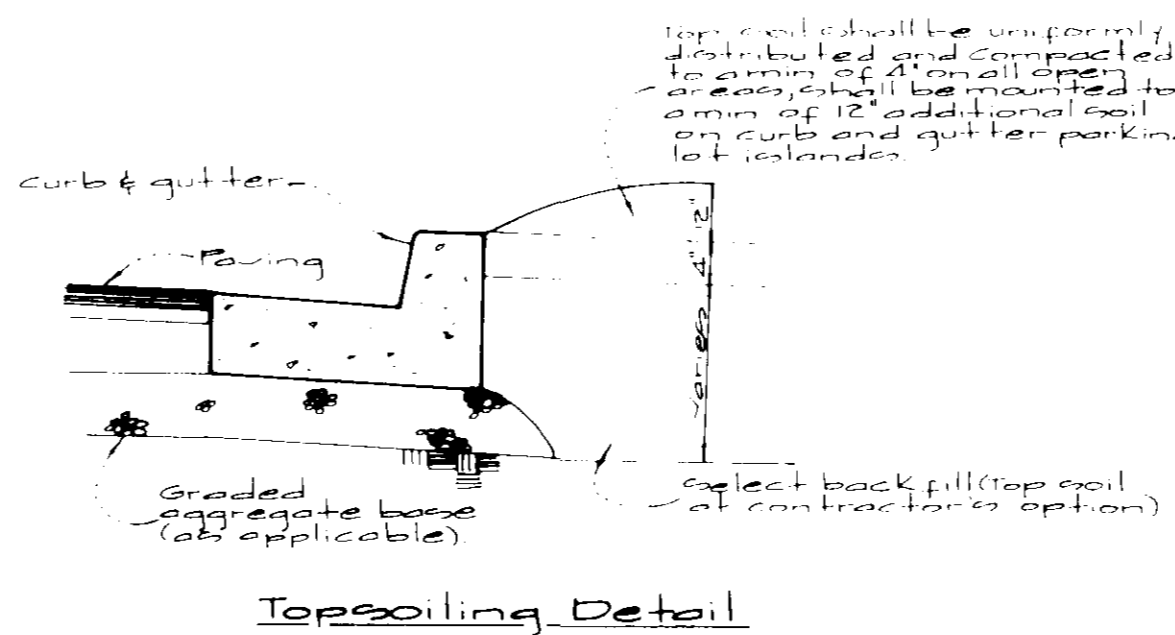
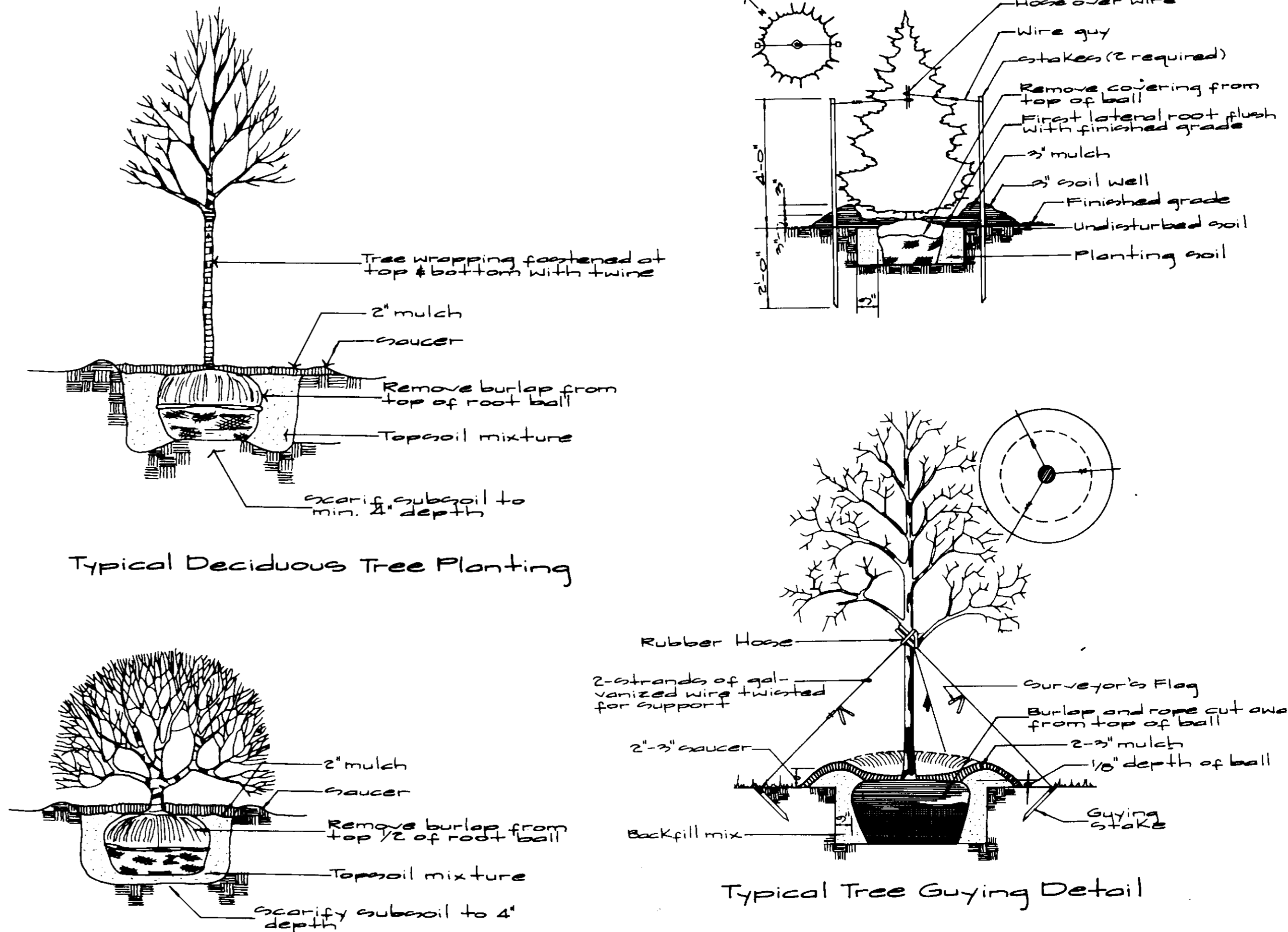
All plant material shall be guaranteed for the duration of one full growing season, after final inspection and acceptance of the work in the planting project. Plants shall be alive and in satisfactory growing condition at the end of the guarantee period.

- a. For this purpose, the "growing season" shall be that period between the end of the "Spring" planting season, and the commencement of the "Fall" planting season.
- b. Guarantee for planting performed after the specified end of the "Spring" planting season, shall be extended through the end of the next following "Spring" planting season.

Sodding

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

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



**Materials:**  
Top soil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand or other soils as approved by an Agronomist or soil scientist. It shall not have a mixture of contrasting textured subsoil and contain no more than 5 percent by volume of cinders, stones, clay, coarse fragments, gravel, sticks, roots, trash or other extraneous materials larger than 1/2" in dia. Top soil must be free of plants or plant parts of Bermuda grass, quack grass, Johnson grass, nutgrass, poison ivy, the fleas, or other weeds as specified. All top soil shall be tested by a recognized laboratory for organic matter content and soluble salts. A pH of 6.0 to 7.5 and an organic content of not less than 1% percent by weight is required. If pH value is less than 6.0, lime shall be applied and incorporated with the top soil to adjust the pH to 6.5 or higher. Top soil containing soluble salts greater than 500 per million shall not be used.

Notes

- 1. The Landscape Plan has been prepared in accordance with the alternative compliance provisions of section 10.12 of the Howard County Code & the Landscaping Manual.
- 2. Landscape schedules A & B are shown for surety purposes only. Financial surety for the required landscaping per these schedules is \$2500 (25 equ. shade trees x 100) to be posted with the grading surety.

Schedule 'A'  
Perimeter Landscape Edge

Category	Adjacent to Roadway	Adjacent to Perimeter
Landscape Type	E	
Linear Foot of roadway along Linden Linthicum Plantage/Plantation	200	
Credit for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed)	none	
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (Describe below if needed)	none	NA
Number of Plants Required		
Shade Trees	0	
Evergreen Trees	0 (20 equ. 20 (25 equ. trees))	
Number of Plants Provided		
Shade Trees	By Alt. compliance	
Evergreen Trees		
Other Trees (21 substitution) (Describe plant substitution credits below if needed)		

Schedule 'B'  
Parking Lot Internal Landscaping

Number of Parking Spaces	275*
Number of Trees Required/1%	7**
Number of Trees Provided	By Alternative Compliance
Shade Trees	
Other Trees (21 substitution)	

\* Number of spaces within limit of submission  
\*\* 14 trees in the total required for the 275 parking spaces, however, there are 7 existing trees (per ADP 20.11e). Therefore, only 7 trees are required under this ADP.

Approved: [Signature] Public Works/Permits/Inspection Dept.  
Howard County, MD  
Date: [Blank]

Approved: [Signature] Health Officer  
Date: [Blank]

Approved: [Signature] Howard County Department of Planning & Zoning  
Director  
Date: 7/29/97

Approved: [Signature] Cindy Hamilton  
Division of Land Development  
Date: 1/28/97

Approved: [Signature] Chief Development Engineering  
Date: 7/15/97

**GLW GUTSCHICK LITTLE & WEBER, P.A.**  
CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS  
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK - BURTONSVILLE, MD 20866  
TELEPHONE (301)421-4024 NO. VA. (301)989-2524 BALTO. (301)880-1820 FAX (301)421-4186

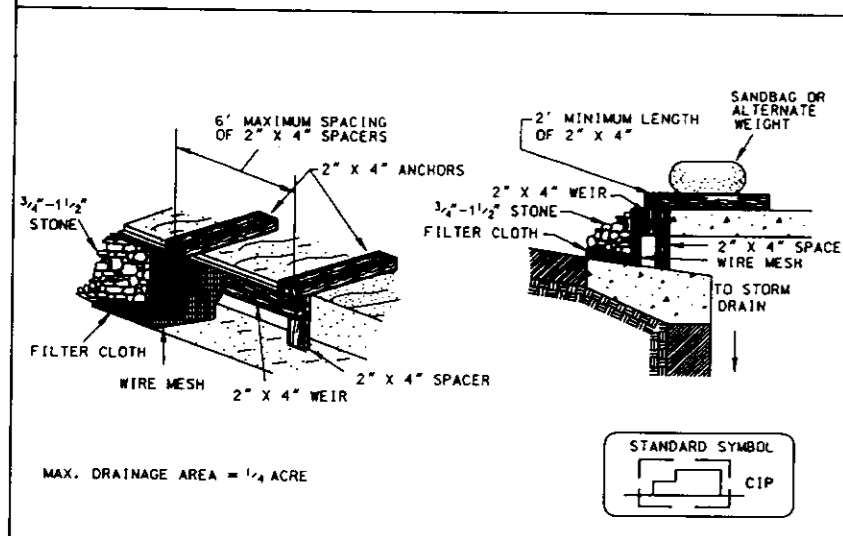
DATE	REVISION	BY	APP'R.

PREPARED FOR:  
The Columbia Association  
10221 Winecup Circle  
Suite 100  
Columbia, Maryland 21044  
(410) 715-2125  
Attn.: Dennis Matthey

**Planting Notes & Details**  
**West Columbia Recreation Facility**  
Village of River Hill  
Section 4 Area 2  
Parcel Z  
Clarksville Election District No. 9  
Howard County, Maryland

DES.:	SCALE	ZONING	G.L.W. FILE NO.
DRN.:	As Shown	NT	20124
WED.:	DATE	TAX MAP NO.	SHEET
CHK.:	July 31, 1997	24 & 25	2 of 7

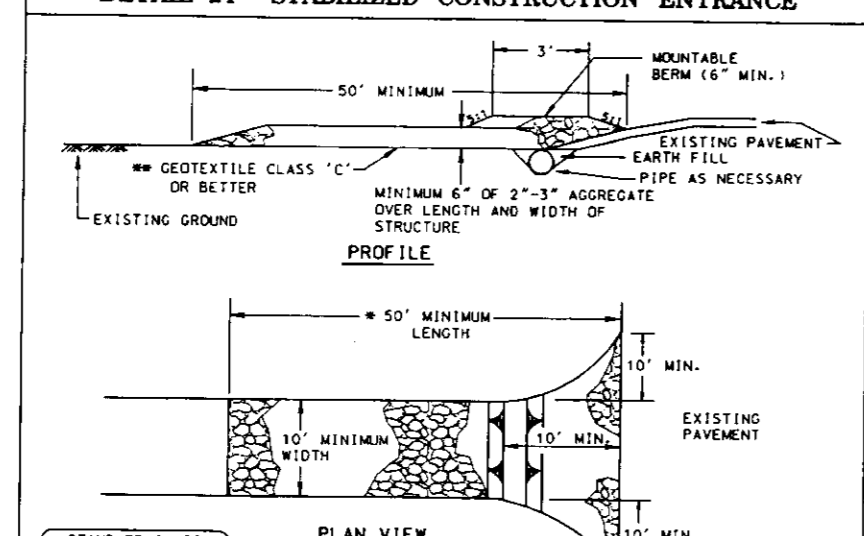
**DETAIL 28C - CURB INLET PROTECTION (COG OR COS INLETS)**



- Construction Specifications**
1. Attach a continuous piece of wire mesh (30\"/>

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE 8-18-88 MARYLAND DEPARTMENT OF ENVIRONMENTAL WATER MANAGEMENT ADMINISTRATION

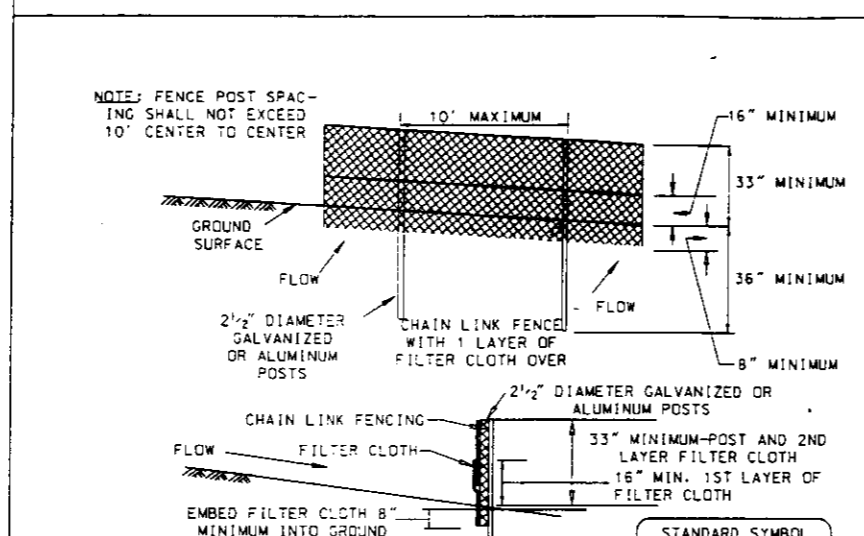
**DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE**



- Construction Specifications**
1. Length - minimum of 50' (50' for single residence lots).
  2. Width - 10' minimum, should be placed on the existing road to provide a turning radius.
  3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. The plan approval authority may not require single family residences to use geotextile.
  4. Stone - crushed aggregate (2\"/>

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE 8-18-88 MARYLAND DEPARTMENT OF ENVIRONMENTAL WATER MANAGEMENT ADMINISTRATION

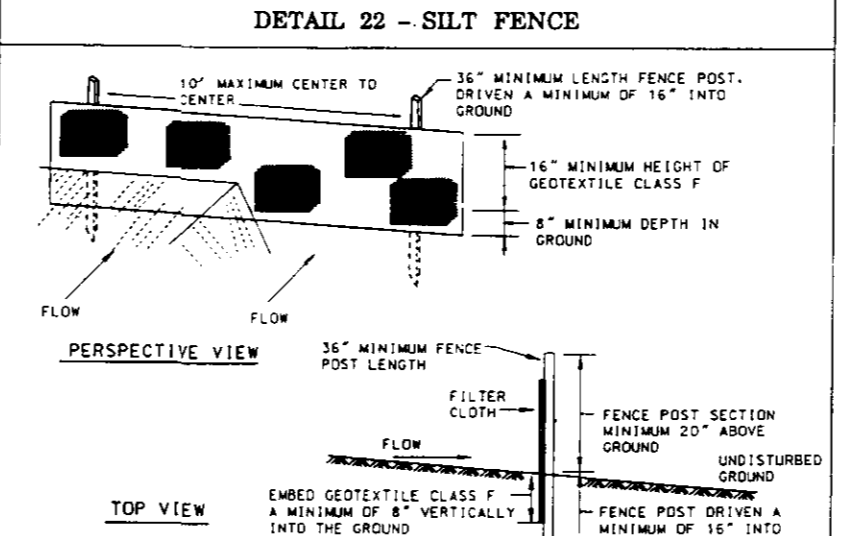
**DETAIL 33 - SUPER SILT FENCE**



- Construction Specifications**
- Fencing shall be 42 inches in height and constructed in accordance with the Forest Maryland Stone Highway Details for Chain Link Fencing. The specification for a 6 foot fence shall be used, substituting 42 inch fabric and 6 foot length posts.
1. The posts do not need to set in concrete.
  2. Chain link fence shall be fastened securely to the fence posts with wire ties or staples.
  3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24\"/>

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE 8-18-88 MARYLAND DEPARTMENT OF ENVIRONMENTAL WATER MANAGEMENT ADMINISTRATION

**DETAIL 22 - SILT FENCE**



- Construction Specifications**
1. Fence posts shall be a minimum of 36\"/>
- |                      |                            |                |
|----------------------|----------------------------|----------------|
| Tensile Strength     | 50 lb/in (min.)            | Test: MSMT 509 |
| Tensile Modulus      | 20 lb/in (min.)            | Test: MSMT 509 |
| Flow Rate            | 0.3 gal/44.7 minute (min.) | Test: MSMT 322 |
| Filtering Efficiency | 75% (min.)                 | Test: MSMT 322 |

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE 8-18-88 MARYLAND DEPARTMENT OF ENVIRONMENTAL WATER MANAGEMENT ADMINISTRATION

**SEDIMENT CONTROL NOTES**

1. A minimum of 48 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (4-0) 3/3-1955
2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
3. Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes and perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding, sod, temporary seeding, and mulching. (Sec G) Temporary stabilization, with mulch alone, shall only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
7. Site Analysis:
 

Total Area of Site	: 3.07	Acres
Area Disturbed	: 2.04	Acres
Area to be roofed or paved	: 1.04	Acres
Area to be vegetatively stabilized	: 1.02	Acres
Total Cut	: 5000	Cu. Yds.
Total Fill	: 1100	Cu. Yds.

 Off-site waste/borrow area location: Village of River Hill 4/1 Phase I FOU-110
8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9. Additional sediment control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
11. Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back filled and stabilized within one working day, whichever is shorter.

**PERMANENT SEEDING NOTES**

- Apply to graded or cleared area not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.
- Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.
- Soil Amendments: In lieu of soil test recommendations, use one of the following schedules
- 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 square feet) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq ft).
  - 2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil.

- Seeding: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lbs/1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.
- Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted, weed-free, small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes, 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.
- Maintenance: Inspect all seeded areas and make needed repairs, replacements and reseeding.

**TEMPORARY SEEDING NOTES**

- Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.
- Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not 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 (.07 lbs/1000 sq ft). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.
- Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted, weed-free, small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes, 8 ft or higher, use 348 gal per acre (8 gal/1000 sq ft) for anchoring.
- Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

APPROVED: PUBLIC WATER & SEWERAGE SYSTEMS  
HOWARD COUNTY DEPARTMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director: *[Signature]* Date: 7/29/97

Division of Land Development: *[Signature]* Date: 7/25/97

Chief, Development Engineering Division: *[Signature]* Date: 7/15/97

May 8, 1997  
*[Signature]*

**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]* 3/31/97  
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]* 7.3.97  
Date

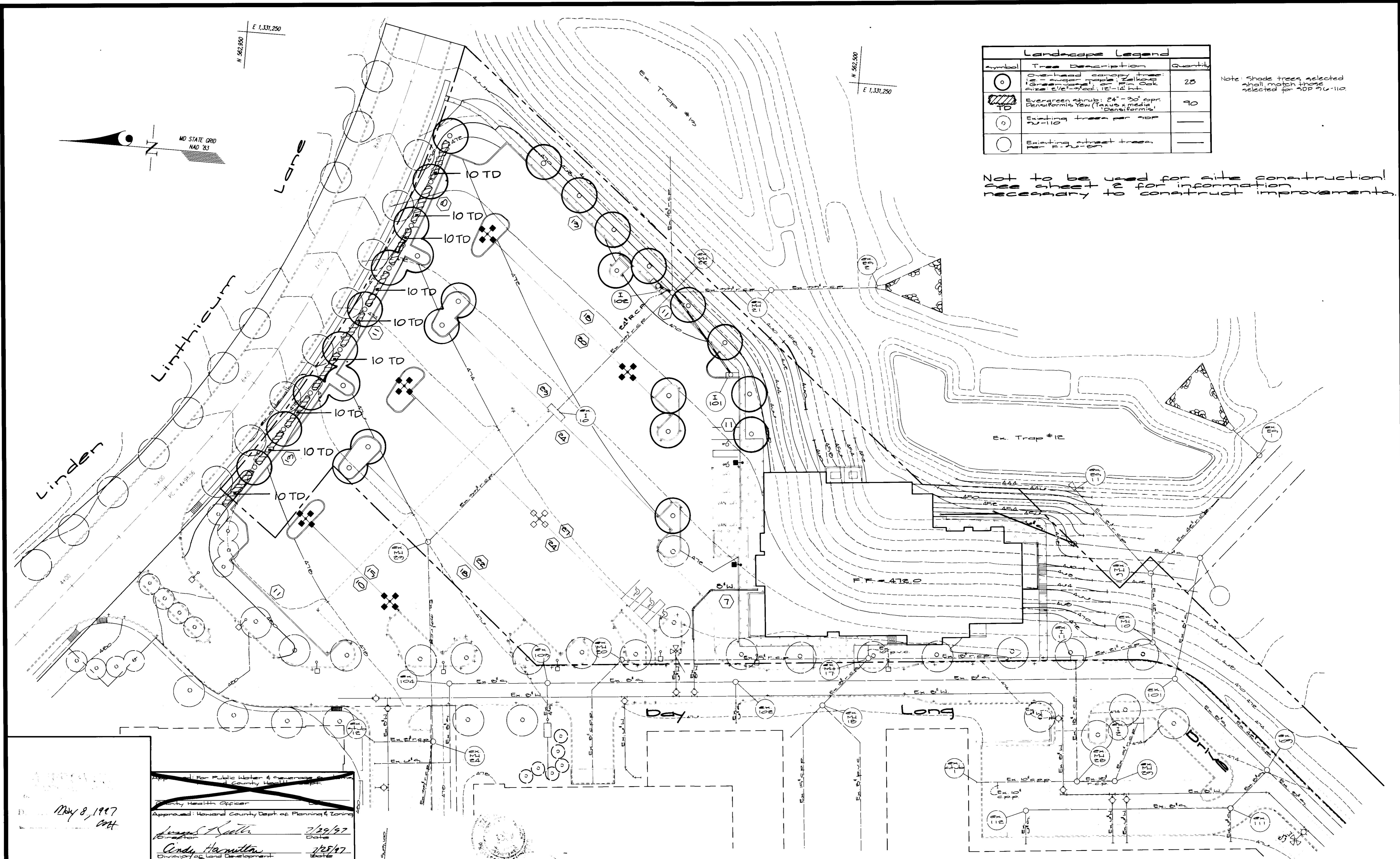
These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

Natural Resources Conservation Service Date

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

Howard S.C.D. Date

<b>GLW GUTSCHICK LITTLE &amp; WEBER, P.A.</b> CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK - BURTONSVILLE, MARYLAND 20866 TEL: (301) 421-4024 NO. VA: (301) 989-2524 BALT: (410) 880-1820 FAX: (301) 421-4186	PREPARED FOR: The Columbia Association 10221 Kingscove Circle Suite 100 Columbia, Maryland 21044 (410) 715-2125 Attn: Dennis Matthey	Sediment Control Notes & Details West Columbia Recreation Facility Village of River Hill Section 4 Area 2 Parcel Z	SCALE: _____ ZONING: NT G. L. W. FILE No.: 9124
	DATE: July 31, 1997 TAX MAP No.: 24 & 25 SHEET: 5 of 7	Clarksville Election District No. _____ Howard County, Maryland	REVISION: _____ BY: _____ APPR: _____



Landscape Legend		
Symbol	Tree Description	Quantity
○	Overhead canopy trees: 12" sugar maple, 12" holly greenleafed, 12" pin oak size elevated; 12-14 ht.	20
⊗	Evergreen shrub: 24" - 30" spp. Densiformis Yew (Taxus x media Densiformis)	90
○	Existing trees per ADP 20-110	—
○	Existing street trees per ADP	—

Note: Shade trees selected shall match those selected for ADP 96-110.

Not to be used for site construction!  
See sheet 2 for information  
necessary to construct improvements.

May 8, 1997  
 Approved: Howard County Dept. of Planning & Zoning  
 Director: [Signature] 7/29/97  
 Cindy Hamilton 7/25/97  
 Chief, Development Engineering Div. 7/15/97

For Landscaping Purposes Only!

**GLW GUTSCHICK LITTLE & WEBER, P.A.**  
 CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS  
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK - BURTONSVILLE, MARYLAND 20866  
 TEL: (301) 421-4024 MO. VA.: (301) 989-2524 BAL: (410) 880-1820 FAX: (301) 421-4186 DES. DRN. K.L.P. CHK.

DATE	REVISION	BY	APPR.

PREPARED FOR:  
 The Columbia Association  
 10221 Winopim Circle  
 Suite 100  
 Columbia, Maryland 21044  
 (410) 715-2125  
 Attn: Dennis Matley

Landscape & Lighting Plan  
**West Columbia Recreation Facility**  
 Village of River Hill  
 Section 4 Area 2  
 Parcel Z  
 Clarksville Election District No. 6  
 Howard County, Maryland

SCALE	ZONING	G. L. W. FILE No.
1" = 20'	NT	96124
DATE	TAX MAP No.	SHEET
July 31, 1997	24 & 25	4 of 7

**SEQUENCE OF CONSTRUCTION**

1. Obtain grading permit. (1 day)
2. Arrange for an on-site pre-construction meeting with the Sediment Control Inspector. (1 day)
3. Install stone construction entrance. (1 day)
4. Wrap site with silt fence and super silt fence as shown or Sediment Control Plan. (2 days)
5. Construct storm drains. (1 week)
6. Construct water and sewer from existing stubs to within 5' of building. (2 days)
7. Fine grade site. (5 days)
8. Construct building. (2 months)
9. Install curb and gutter, sidewalks, and base paving. Stabilize remaining areas with grass, seed and mulch. Convert thrust section areas 1-10 to manhole frames & cover (2 weeks)
10. Install surface paving. (2 weeks)
11. Install landscaping. (1 week)
12. With permission of the Sediment Control Inspector, remove silt fence and super silt fence, and stabilize as necessary. (2 days)

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

*Clayd Summers* 7/99  
Natural Resources Conservation Service Date  
MVL

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

*[Signature]*  
Howard S.C.D. Date

**DEVELOPER'S/BUILDER'S CERTIFICATE**

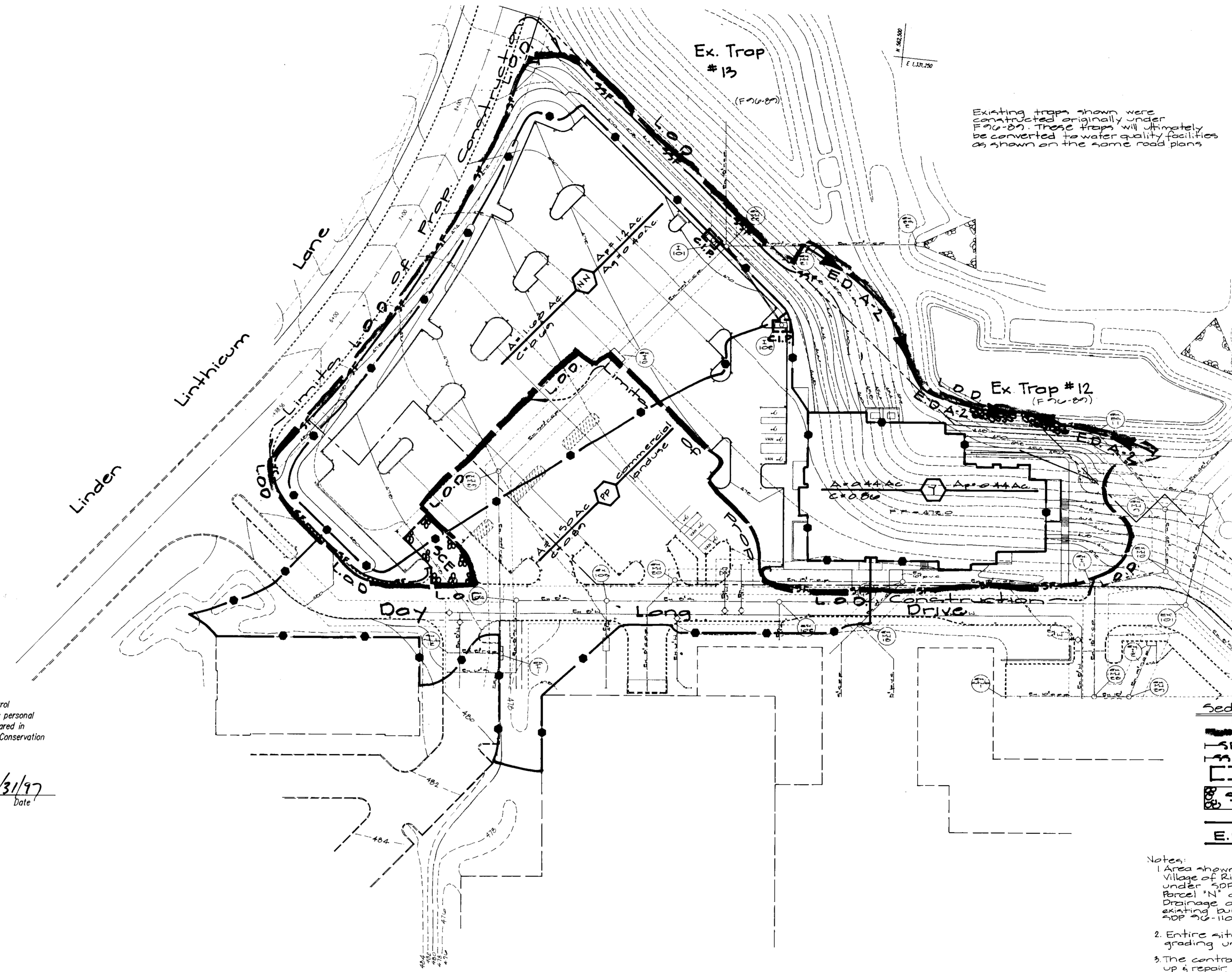
"I/We certify that all development and/or construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Maryland Department of the Environment Approved Training Program for the Control of Sediment and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

*D. Matt* 7.3.97  
Signature of Developer/Builder 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]* 3/31/97  
Date



Existing traps shown were constructed originally under FOU-09. These traps will ultimately be converted to water quality facilities as shown on the same road plans.

**Sediment Control Legend**

- L.O.D. Limit of Disturbance
- S.F. Silt Fence
- S.F.F. Super Silt Fence
- C.I.P. Curb Inlet Protection
- S.C.E. Stabilized Construction Entrance
- Drainage Divide
- E.D. Earth Dike

- Notes:
1. Area shown as dashed indicates portion of Village of River Hill Village Center approved under SOP 96-110 and Village of River Hill Parcel 'N' approved under SOP 97-70. Drainage area limits shown in vicinity of existing buildings were taken from SOP 96-110 and SOP 97-70.
  2. Entire site in 'C' soils due to mass grading under FOU-09 and SOP 96-110.
  3. The contractor is responsible for the clean up & repair of the storm drains and the storm water management facility in the event of a sediment control device failure. Therefore, daily inspection and repair of devices are of utmost importance.

*[Signature]* For Sediment Control Only! Not to be used for site construction. See sheet 2 for information necessary to construct improvements.

APPROVED: PUBLIC WATER & SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT	
_____ Health Officer	_____ Date
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING	
<i>[Signature]</i> Director	7/29/97 Date
<i>[Signature]</i> Cindy Hamilton Division Land Development	7/27/97 Date
<i>[Signature]</i> Chief, Development Engineering Division	7/15/97 Date

May 8, 1997  
CWH

**GLW GUTSCHICK LITTLE & WEBER, P.A.**

CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS  
3909 NATIONAL DRIVE SUITE 250 BURTONSVILLE OFFICE PARK BURTONSVILLE, MD 20866

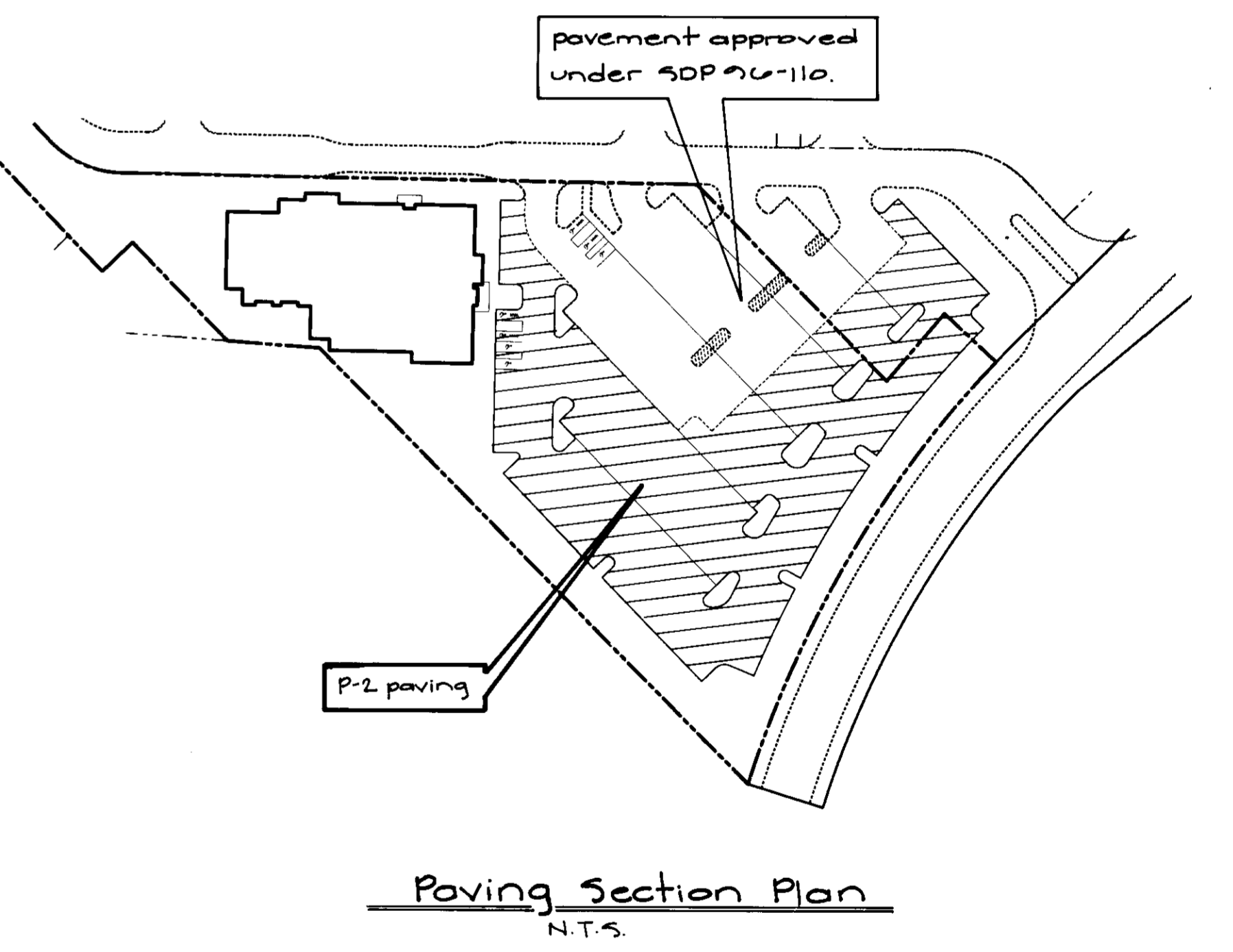
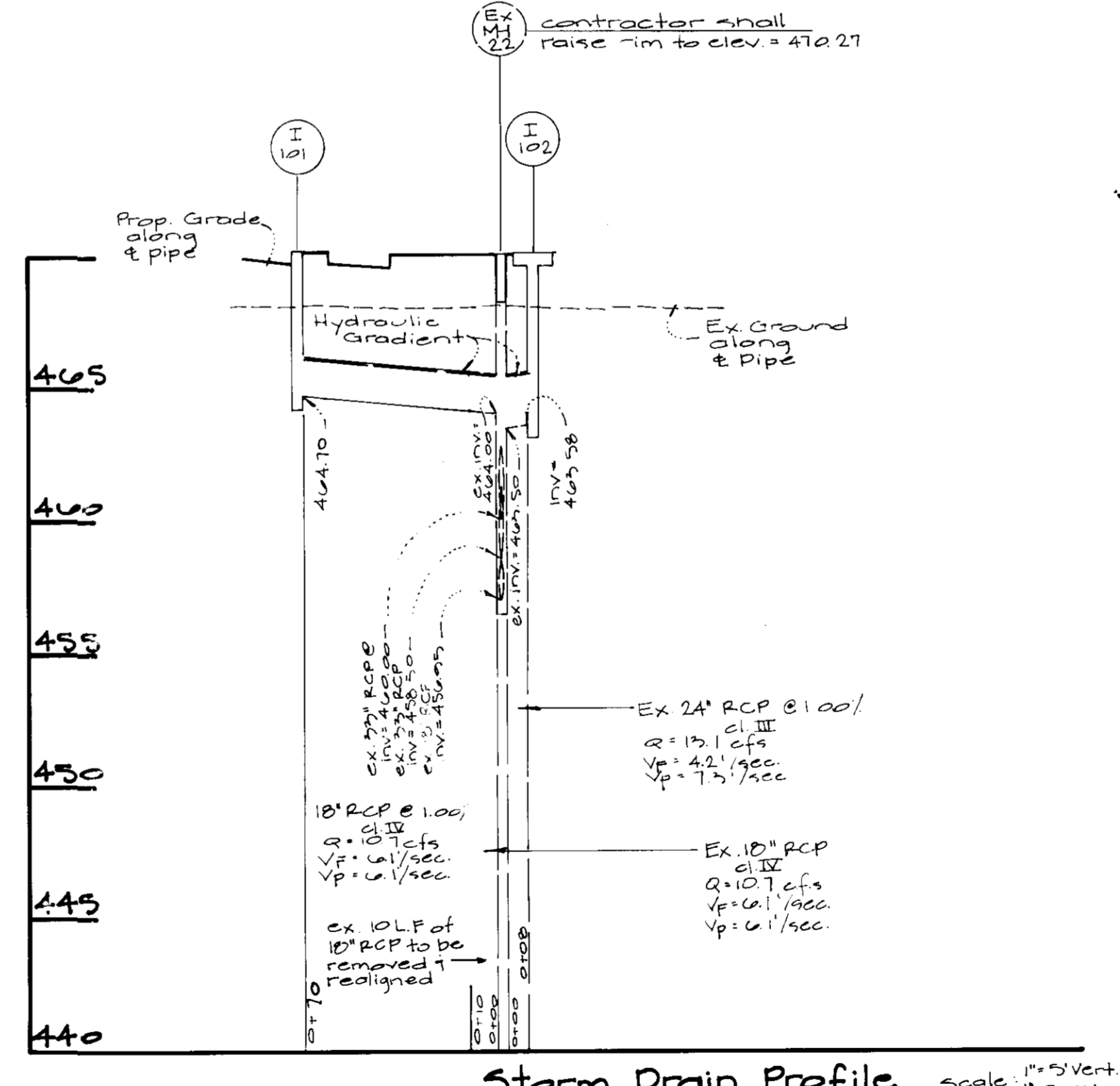
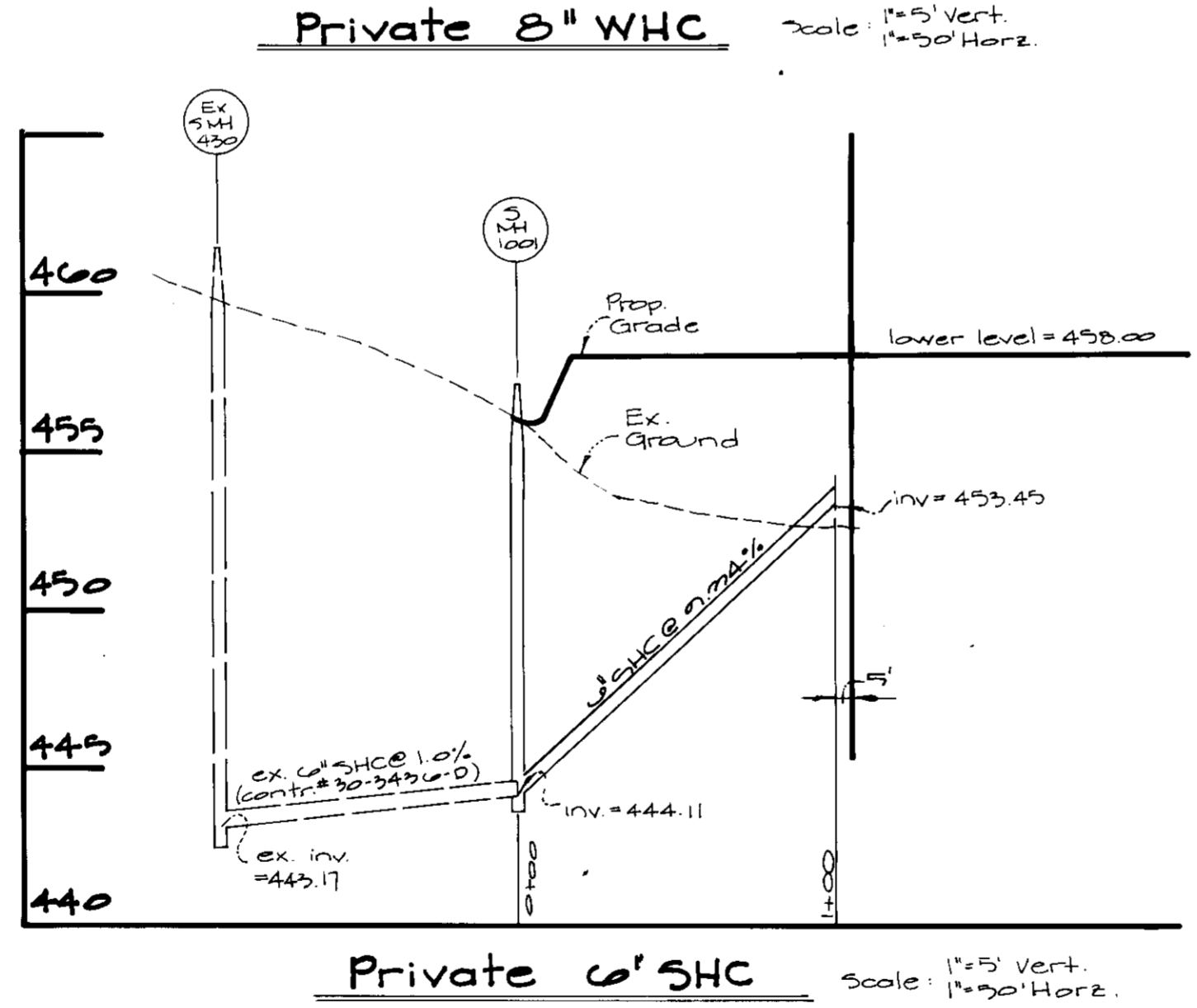
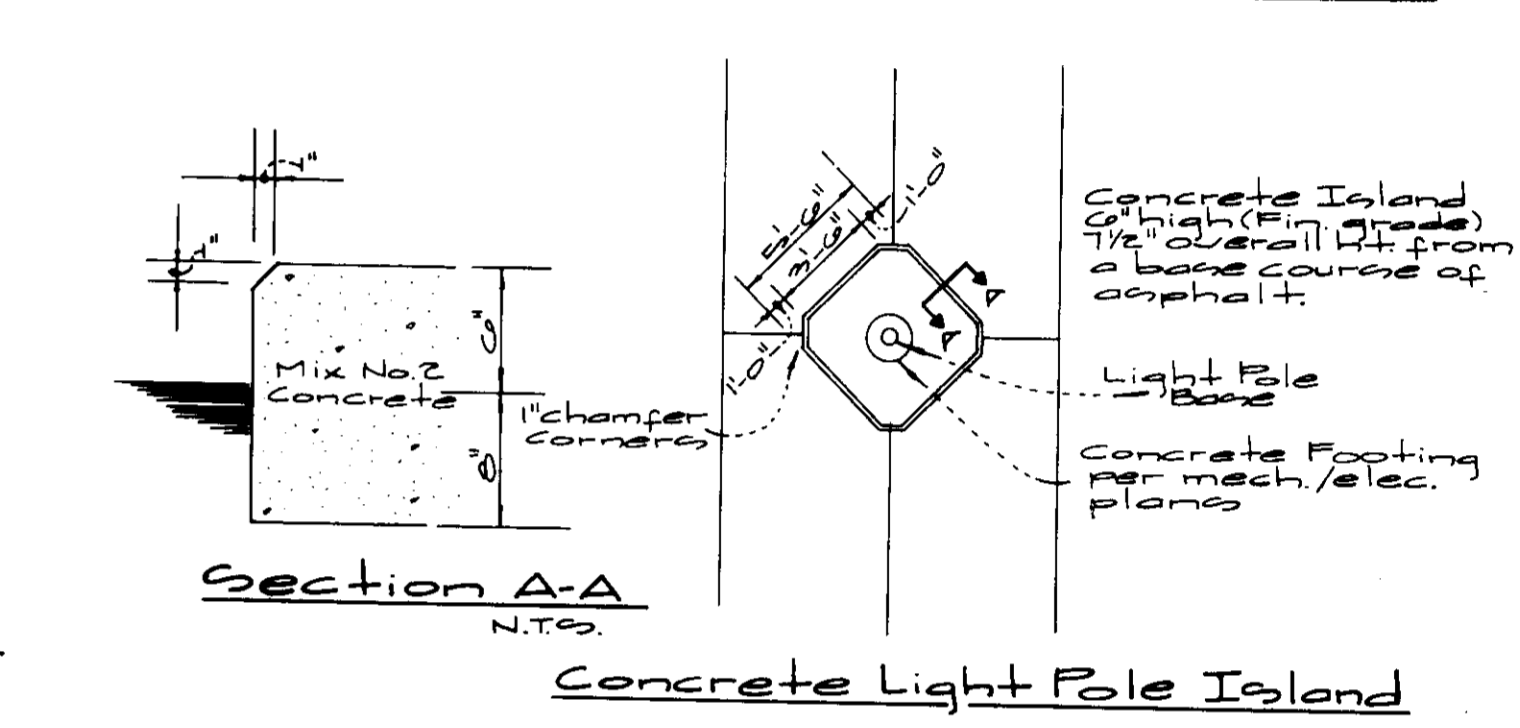
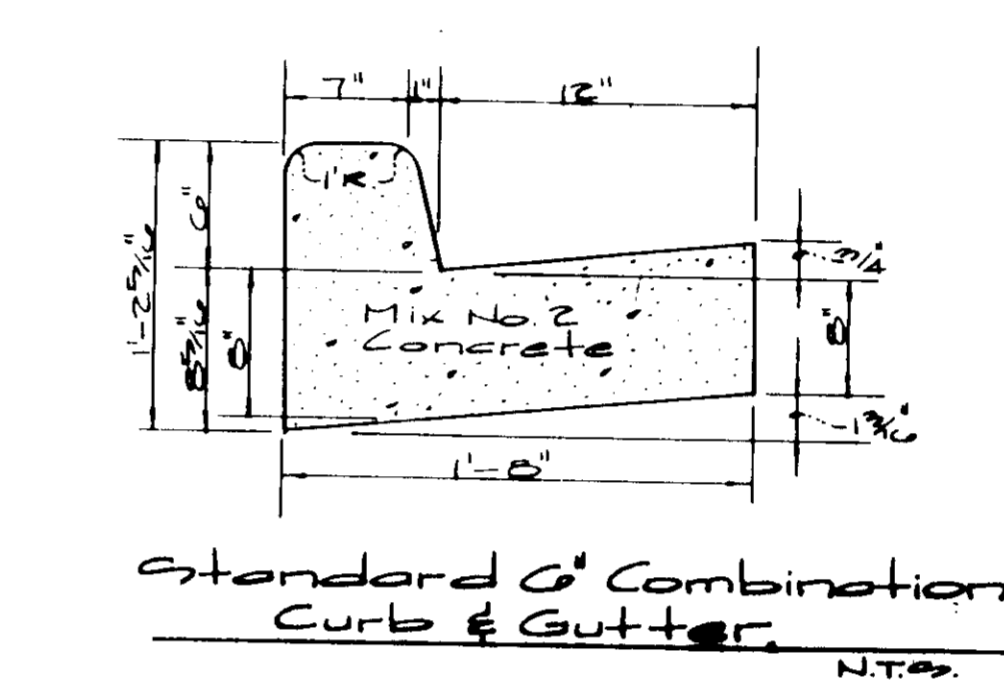
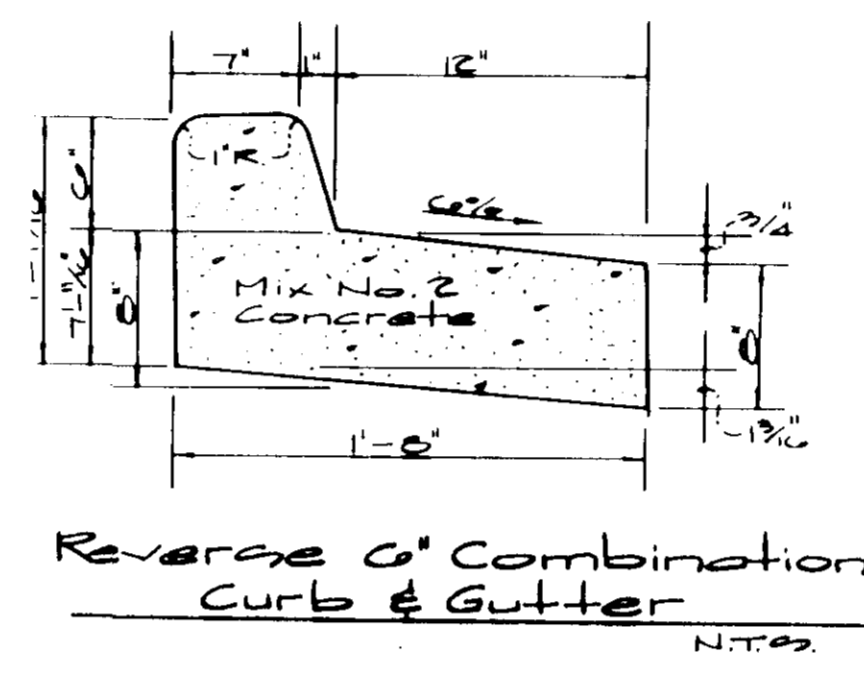
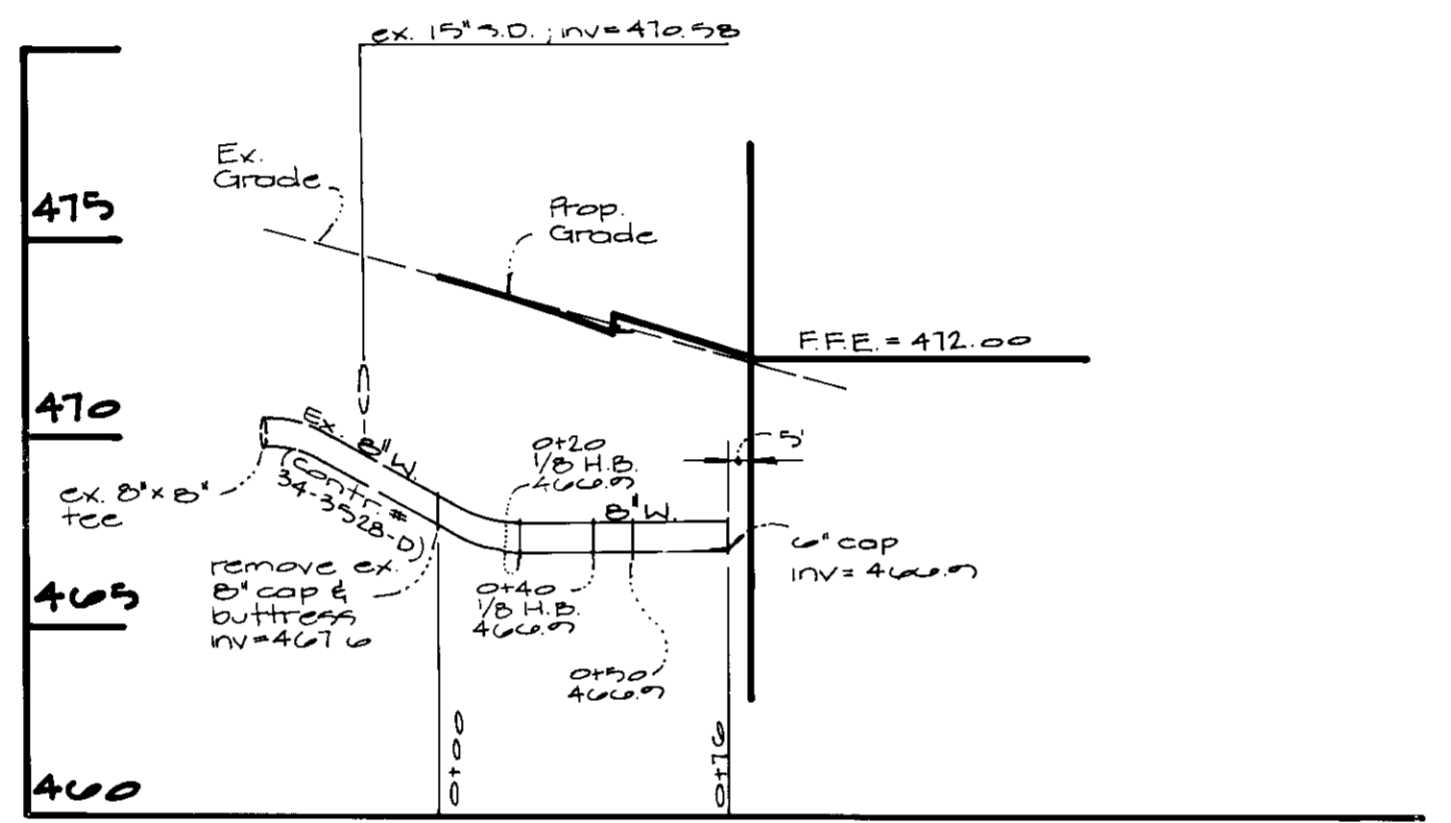
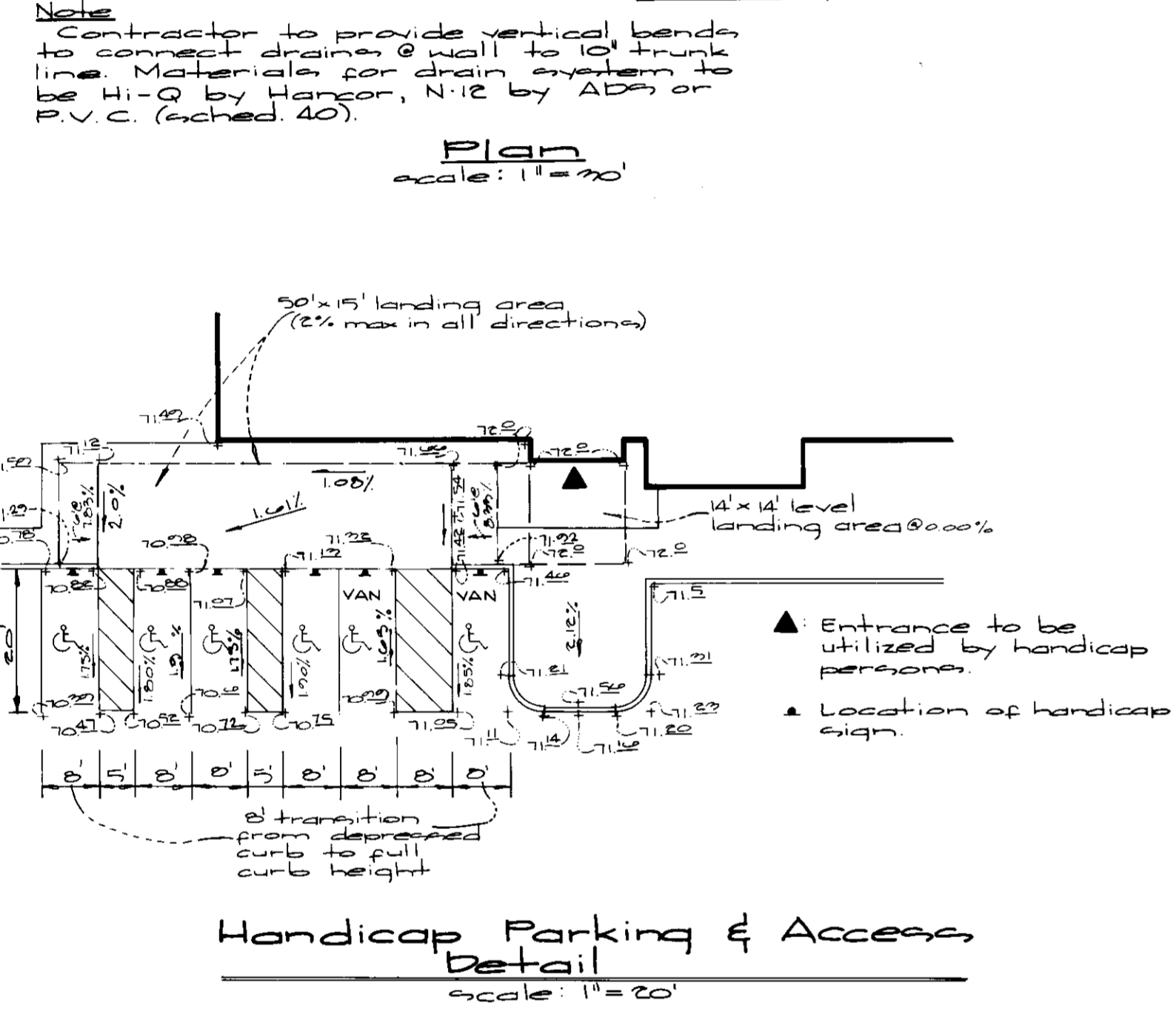
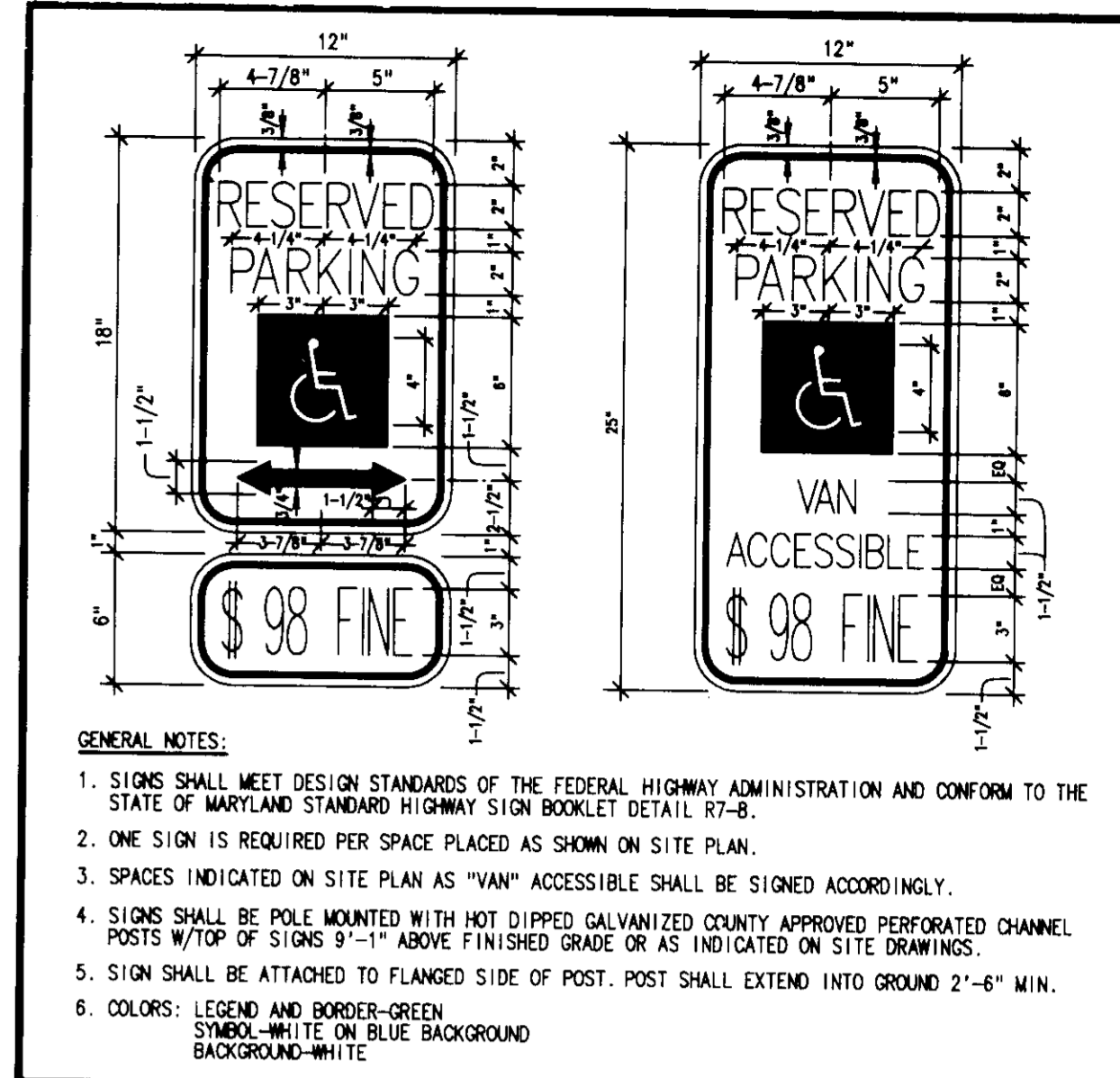
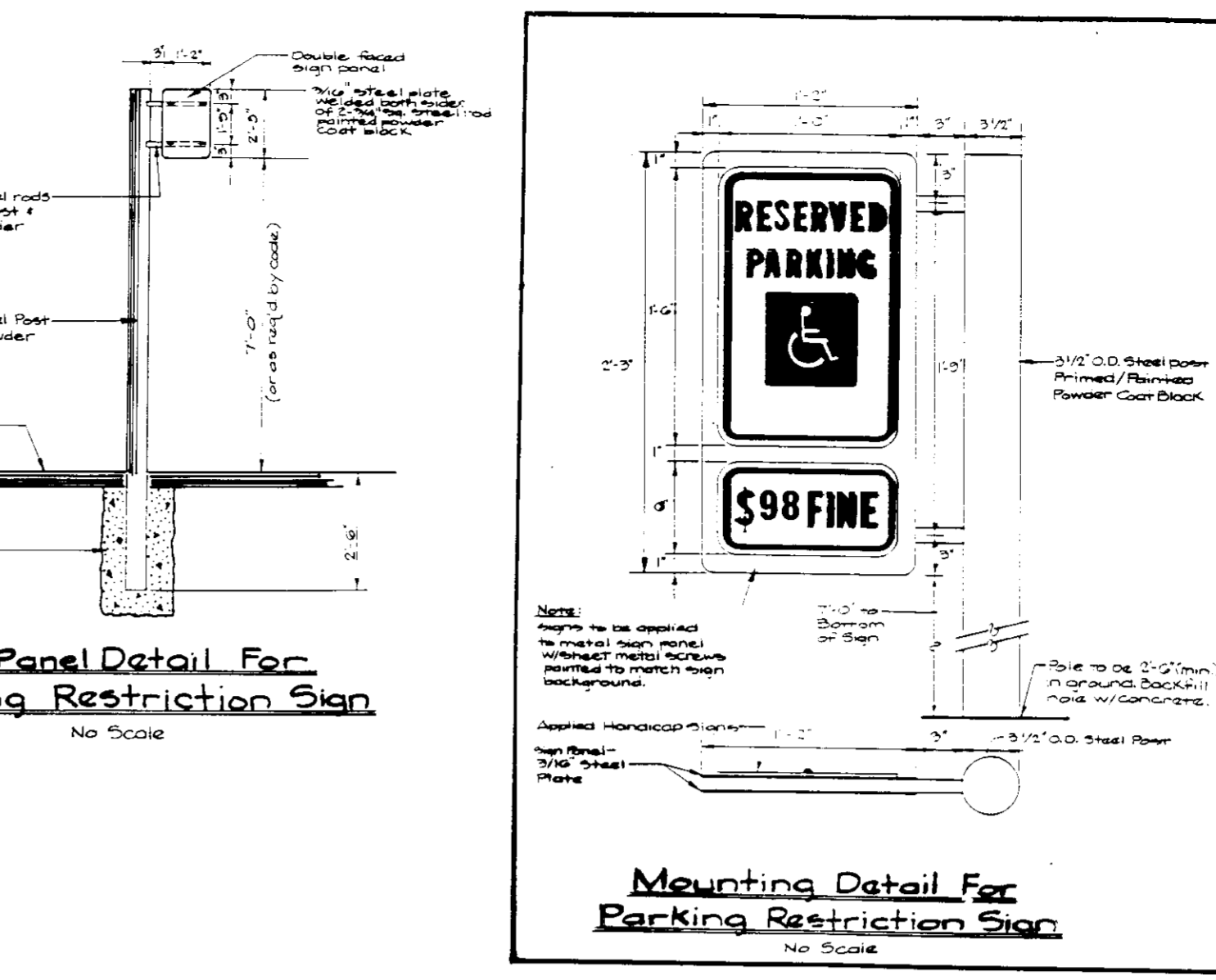
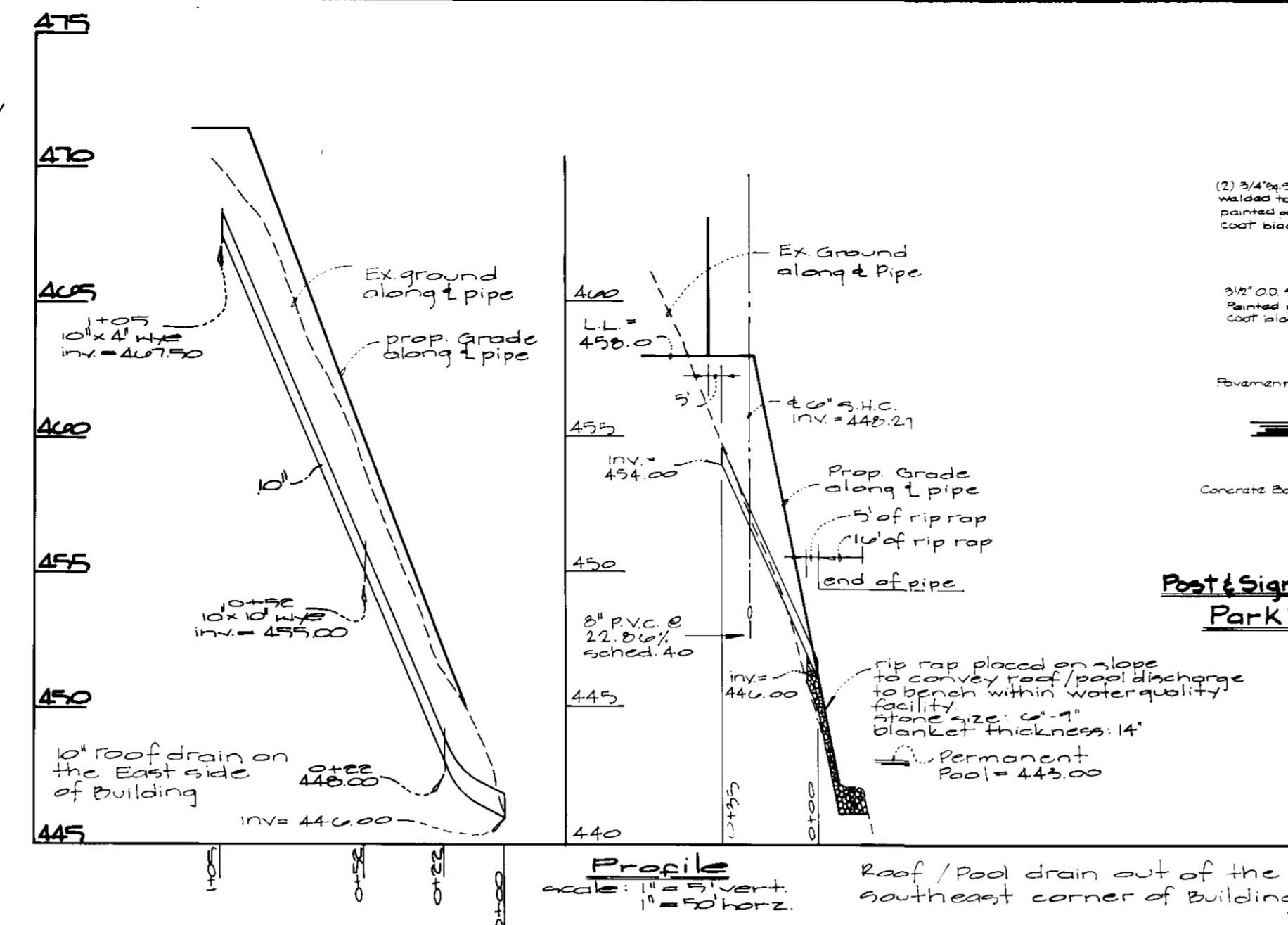
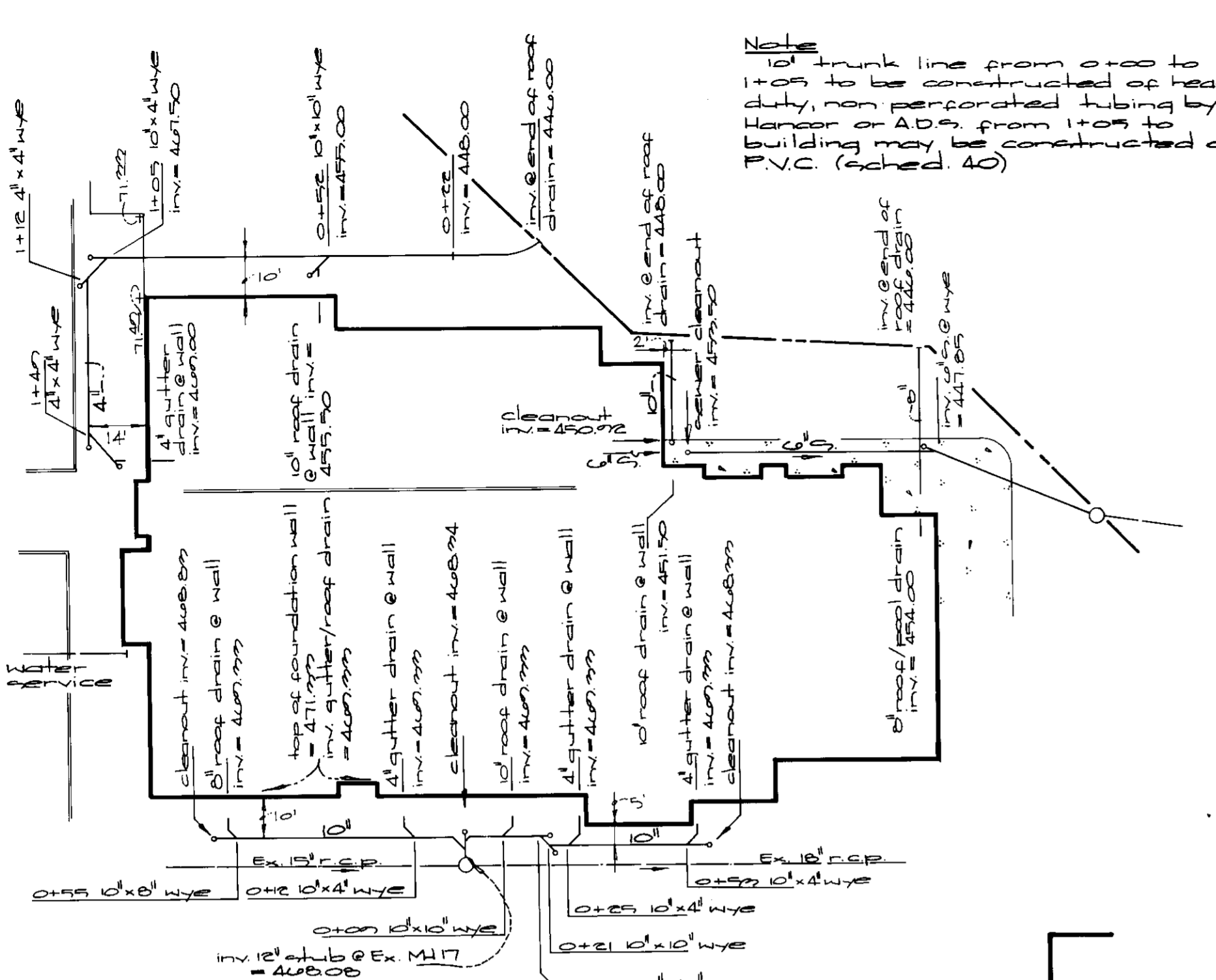
TELEPHONE (301)421-4024 NO VA (301)989-2524 BALTO (301)880-1820 FAX (301)421-4186

DATE	REVISION	BY	APP'R.

PREPARED FOR:  
The Columbia Association  
10221 Wincopin Circle  
Suite 100  
Columbia, Md 21044  
(410) 715-3125  
Attn: Dennis Motley

Sediment Control Plan / Drainage Area Map  
West Columbia Recreation Facility  
Village of River Hill  
Section 4 Area 2  
Parcel Z  
Clarksville Election District No. 6  
Howard County, Maryland

DES.	SCALE	ZONING	G.L.W. FILE NO.
DEV	1" = 50'	NT	96124
DRN.	DATE	TAX MAP NO.	SHEET
MCF	July 31, 1997	34935	3 of 7
CHK.	CHK.		
CKG			



APPROVED FOR PUBLIC WATER & SEWERAGE SYSTEMS  
 HOWARD COUNTY HEALTH DEPARTMENT  
 City Health Officer  
 APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
 Director  
 Date: 7/29/97  
 Date: 7/28/97  
 Date: 7/15/97

Structure Schedule							Pipe Schedule		
No	Type	inside width	Top Elev.	Invert Elev.	At'd detail	location	size/type	class	length
151	CO2 15	4'-0"	412.05	410.41	SHA MD 374.02	see plan	10" RCP	IX	70 L.F.
152	CO2 15	4'-0"	410.05	410.05	SHA MD 374.01	see plan	4" PVC	sched 40	70 L.F.
							8" PVC	sched 40	0 L.F.
							10" PVC	sched 40	234 L.F.

**GLW GUTSCHICK LITTLE & WEBER, P.A.**  
 CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS  
 3909 NATIONAL DRIVE, SUITE 250 - BURTONSVILLE OFFICE PARK - BURTONSVILLE, MD 20866  
 TELEPHONE (301)421-4024 NO VA (301)989-2524 BALTO (301)880-1820 FAX (301)421-4186

DATE	REVISION	BY	APP.

PREPARED FOR:  
 The Columbia Association  
 10221 Wingopin Circle  
 Suite 100  
 Columbia, MD 21044  
 (410) 715-3125  
 Attn: Dennis Matthey

storm drains, private water and sewer, and site details  
**West Columbia Recreation Facility**  
 Village of River Hill  
 Section 4 Area 2  
 Parcel Z  
 Clarksville Election District No 6  
 Howard County, Maryland

DES. / DEV.	SCALE	ZONING	G.L.W. FILE NO.
MCF	As shown	NT	90124
DRN.	DATE	TAX MAP NO.	SHEET
MCF	July 3, 1997	34 & 35	7 of 7
CHK.			
CKG			