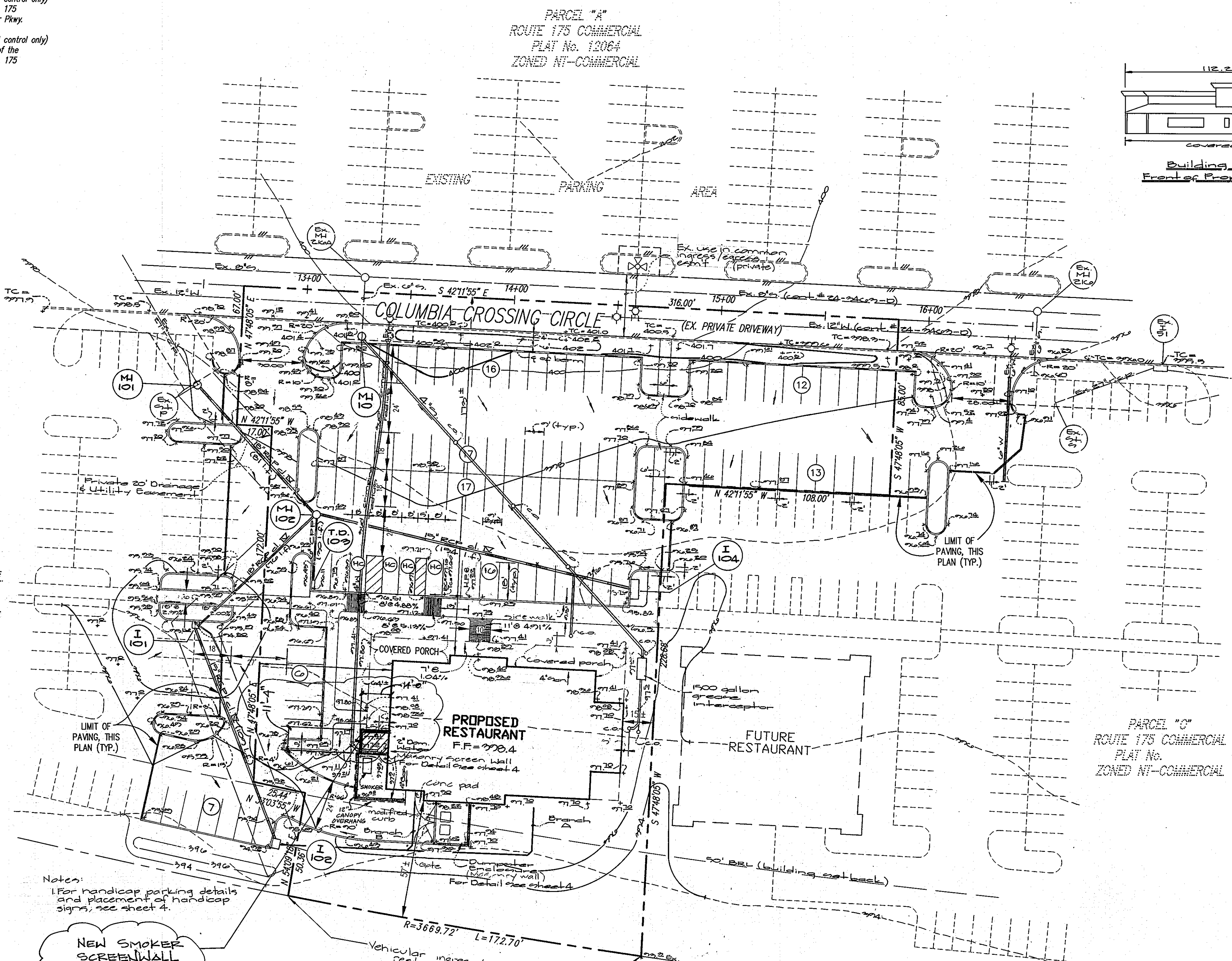
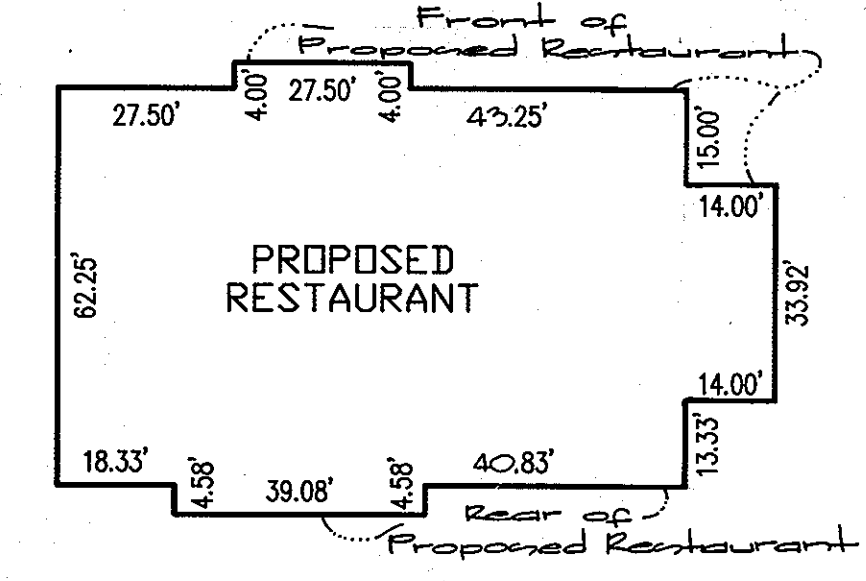
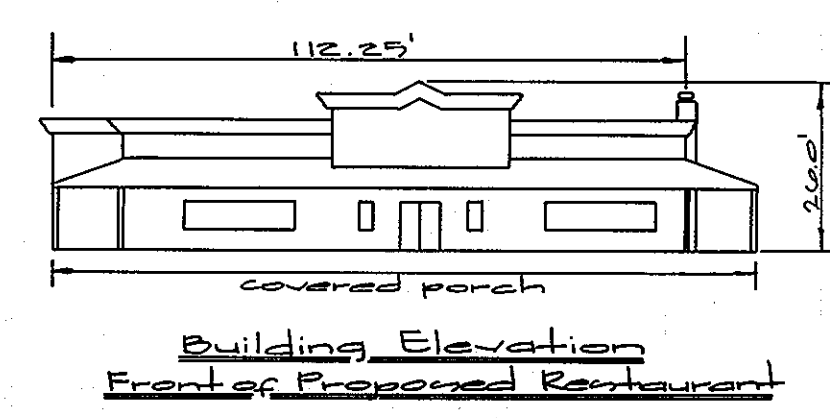
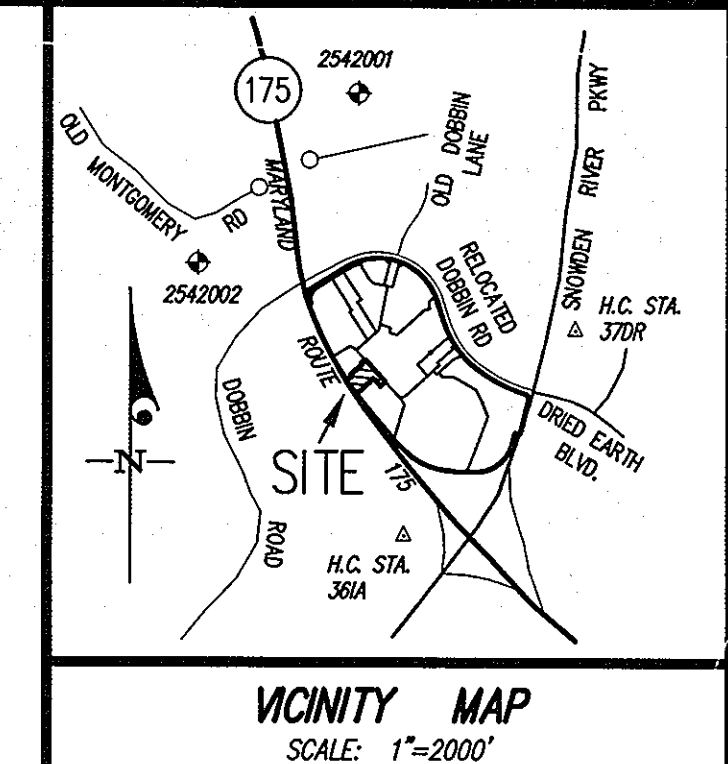


**GENERAL NOTES**

- 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, Bureau of Construction Inspection at (301) 411-1000 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) 313-1200 at least five working days prior to starting any excavation work.
- Site area: 1.5384 acres
- All plan dimensions are to face of curb unless otherwise noted.
- Existing topography reflects mass grading as shown on GP 96-45 & F-96-41 and as-constructed, August 1996.
- Coordinates and bearings are based upon the MD State plan system (MAD 83).
- All existing water and sewer shown is public, per contract 24-3463-D.
- Stormwater management for this site is proposed under GP 96-45 & F-96-41.
- All existing public storm drain is per F-96-41.
- 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, unless dimensioned otherwise. 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 the sewer house connection. Contractor shall utilize D.I.P. (CL 51) for the water house connection.
- For all storm drain connections at existing stubs, the contractor shall remove the existing blocking and maintain the same grade and alignment to the first structure.
- Use trench bedding class "C" for storm drains.
- Paved areas indicated are private.
- Project background: See Dept. of Planning & Zoning File Numbers: SP 95-08, FDP 95-226, WP 95-94, GP 96-45, F-96-41 & PB 302, F-97-54.
- Recording reference: Plat No. 12409 (F-97-54)
- 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.
- The water meter shall be located inside the building.
- The limits of public maintenance for the water house connection 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 separate plan.
- There are no lot line building setbacks, except as indicated from the public Right-of-Way. No parking area shall be located within 10' of any lot line except shared parking facilities between two or more lots and except as approved by the Howard County Planning Board.
- On November 6, 1996 the Howard County Planning Board approved the location of the dumpster enclosure within the 50' setback.

**BENCHMARK DESCRIPTIONS**  
 Station 2542001 (concrete monument)  
 Elevation: 426.971 (for vertical control only)  
 Station is located on B.G. & E. transmission lines 1060± S.W. of Dobbin Road.  
 Station 2542002 (concrete monument)  
 Elevation: 363.638' (for vertical control only)  
 Station is located 1000± west of Rte. 175 on transmission line @ B. G. & E. tower 19-E.  
 Station 370A (1/2" rebar)  
 N 69281.1794, E 416566.7155 (for horizontal control only)  
 Station is located 0.45± miles North of Rte. 175 and 46± East of the curb of Snowden River Pkwy.  
 Station 361A (concrete monument)  
 N 69205.9263, E 416313.5119 (for horizontal control only)  
 Station is located at the Southeast corner of the intersection of Snowden River Pkwy, and Rte. 175 3± from curb and 5.7± from guard rail.



**BUILDING DIMENSIONS**  
SCALE: 1"=30'

**Legend**

- Existing Contour
- - - Proposed Contour
- +--- Elevation at Bottom of Curb (unless noted otherwise)
- ==== Standard C & G
- ==== Reversed C & G
- ==== Bituminous C & G

**SITE ANALYSIS - PARCEL "N"**

- AREA OF PARCEL: 67,013 S.F. / 1.5384 AC.
- ZONING: NEW TOWN
- PROPOSED USE: RESTAURANT
- GROSS BUILDING AREA: 4,000 sq ft
- AREA OF SUBMISSION: 2.75 AC. ±
- TOTAL PARKING SPACES REQUIRED: 23 (1 space/1000 sq ft)
- TOTAL PARKING SPACES PROVIDED: 27
- TOTAL NO. OF HANDICAP SPACES REQUIRED: 4
- NO. OF HANDICAP VAN SPACES REQUIRED: 1
- TOTAL NO. OF HANDICAP SPACES PROVIDED: 2
- NO. OF HANDICAP VAN SPACES PROVIDED: 2

\* SAME AS DISTURBED AREA

**CURVE TABLE**

RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
3669.72	172.70	86.37	172.69	N 35°21'06" W	02°41'47"

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEMS,  
 HOWARD COUNTY HEALTH DEPARTMENT  
 Date: 12-9-96  
 County Health Officer: MR. [Signature]

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
 Date: 12/20/96  
 Director: [Signature]  
 Date: 12/20/96  
 Chief, Division of Land Development and Research: [Signature]  
 Date: 12/4/96  
 Chief, Development Engineering Division: MK

NEW SMOKER SCREENWALL ADDITION LOCATION

ADDITION ONLY!

**MARYLAND ROUTE 175**  
 (M.S.H.A. R/W PLAT Nos. 41415 & 41577 - 41582)  
 (Intermediate divided arterial highway)

APPROVED PLANNING BOARD OF HOWARD COUNTY  
 DATE: 11/6/96

**GLW GUTSCHICK LITTLE & WEBER, P.A.**  
 CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS  
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK - BURTONSVILLE, MARYLAND 20886  
 TEL: (301) 421-4024 NO. VA.: (301) 989-2524 BALT: (410) 880-1820 FAX: (301) 421-4186 DES-DEV DRN: KLP CHK: DEV

NO.	DATE	REVISION	BY	APP'R.
3-23-01		ADD ADDITIONAL SCREEN WALL, SMOKER, 8'x2' CANOPY OVERHANG	KJ	
12-11-00		Revise Handicap Parking during Signature Process on sheets 1 & 2	St.	

**OWNER**  
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION  
 10275 LITTLE PATRUXENT PARKWAY  
 COLUMBIA, MD. 21044  
 PHONE: (410) 982-6027  
 ATTN: AL EDWARDS

**DEVELOPER / PREPARED FOR:**  
 RED RIVER BARBEQUE & GRILL  
 1117 LAKE HERON DRIVE, SUITE 2B  
 ANNAPOLIS, MD. 21403  
 PHONE: (410) 263-0101  
 ATTN: ANDY BATCH

**SITE DEVELOPMENT PLAN**  
**ROUTE 175 COMMERCIAL**  
**PARCEL "N"**

SCALE: 1"=30'  
 ZONING: NT-COMMERCIAL  
 G. L. W. FILE NO.: 96042  
 DATE: November, 1996  
 TAX MAP No.: 36  
 SHEET: 1 OF 2

**ADDRESS CHART**

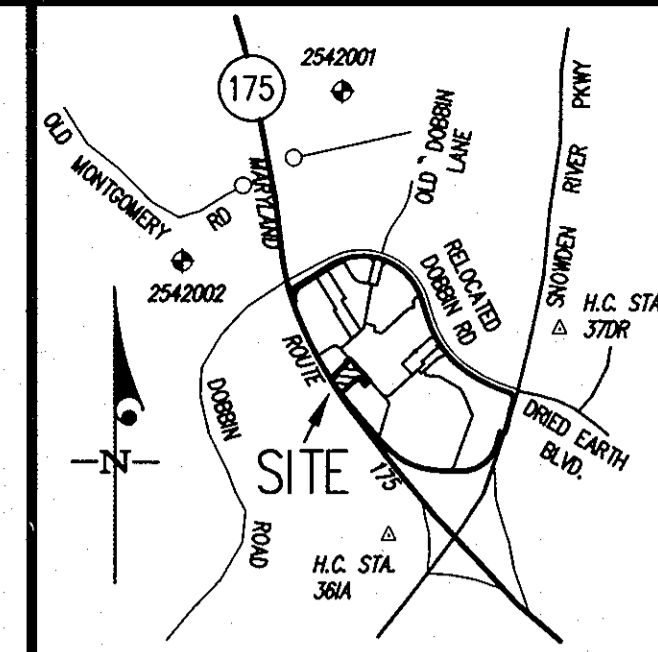
WATER CODE	SEWER CODE	PARCEL NUMBER	STREET ADDRESS
600	600000	N	6201 COLUMBIA CROSSING CIRCLE

**SUBDIVISION NAME:** ROUTE 175 COMMERCIAL  
**SECTION/AREA:** 1/1  
**PARCEL:** N

PLAT	ZONE	TAX MAP	BLOCK	ELEC. DIST.	CENSUS TRACT
12409	NEW TOWN	36	18	6	6067.03

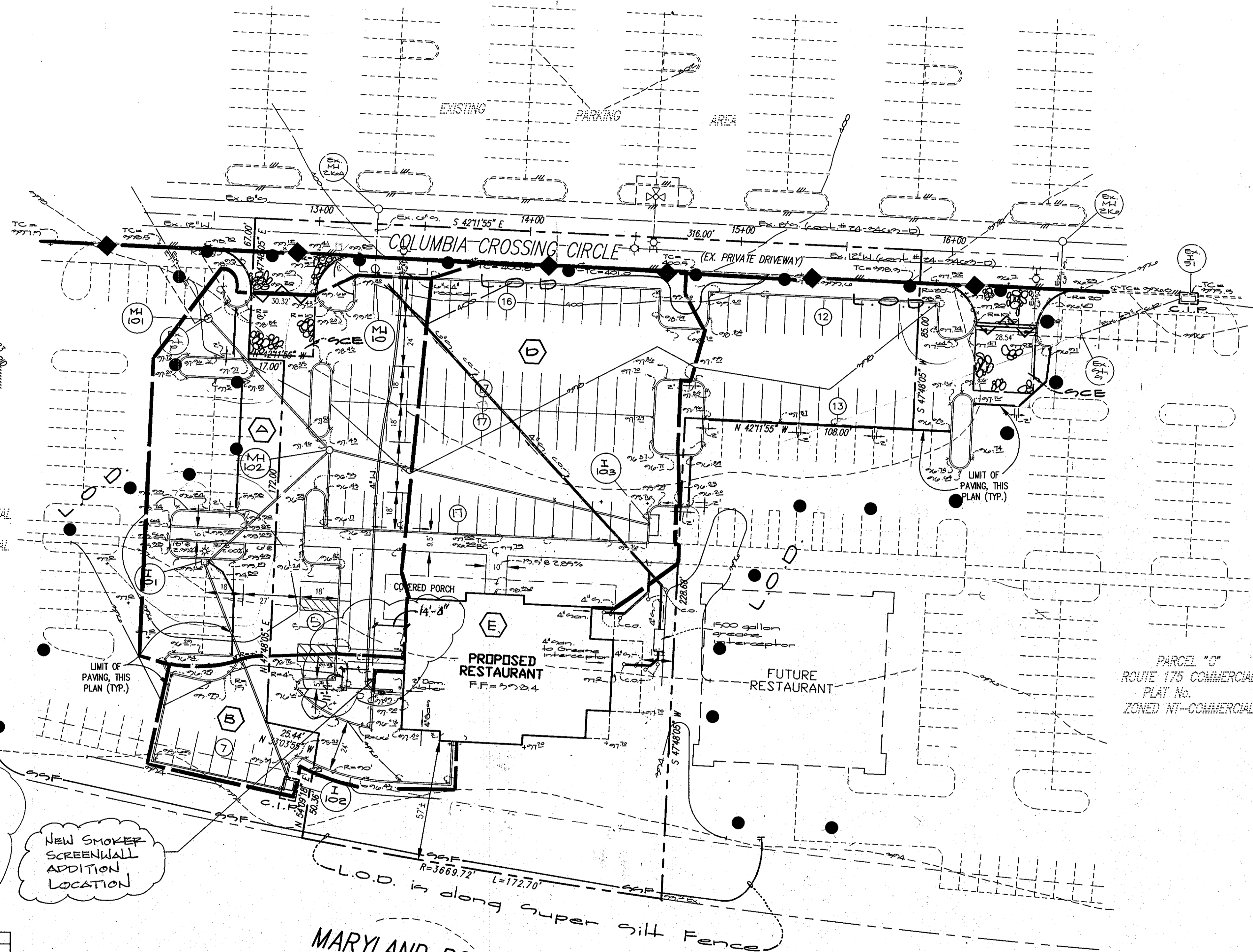


Drainage Area Information				
Drainage Area	Drainage Area (Ac)	Impervious Area (%)	Storm Area (Ac)	'C'
A	0.44	0.77 (87%)	0.05	0.80
B	0.18	0.14 (78%)	0.04	0.72
D	0.46	0.77 (85%)	0.07	0.76
E	0.15	0.15 (100%)	-	0.82



VICINITY MAP  
SCALE: 1"=2000'

PARCEL "A"  
ROUTE 175 COMMERCIAL  
PLAT No. 12064  
ZONED NT-COMMERCIAL



- Legend**
- - - - Existing Contour
  - Proposed Contour
  - + Spot Elevation
  - Super Silt Fence (detail 23)
  - C.I.P. Curb Inlet Protection (detail 23c)
  - Stone Construction Entrance (detail 24)
  - Storm Drain Drainage Limit
  - Before Development Drainage Limit to S.S.F.
  - L.O.D. Limit of Disturbance
  - Storm Drain Drainage Area Designation

PARCEL "B"  
ROUTE 175 COMMERCIAL  
PLAT No.  
ZONED NT-COMMERCIAL

PARCEL "C"  
ROUTE 175 COMMERCIAL  
PLAT No.  
ZONED NT-COMMERCIAL

Stamp: *John J. G...*  
AUG 19 2009  
ADDITION ONLY!

NEW SMOKE SCREEN WALL  
ADDITION LOCATION

CURVE TABLE				
RADIUS	LENGTH	TANGENT	CHORD	BEARING DELTA
3669.72	172.70	86.37	172.69	N 35°21'06" W 02°41'47"

MARYLAND ROUTE 175  
(M.S.H.A. R/W PLAT Nos. 4415 & 4157 - 4158)

Note: Not to be used for site construction. See sheet for information necessary to construct improvements.

APPROVED  
PLANNING BOARD  
OF HOWARD COUNTY  
DATE: 11/4/96

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEMS,  
HOWARD COUNTY HEALTH DEPARTMENT  
*Joyce M. Boyd* 12-7-96  
County Health Officer MK Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*Richard Blood* 12/20/96  
Director Date

*Richard Blood* 12/20/96  
Chief, Division of Land Development and Research Date

*Richard Blood* 12/20/96  
Chief, Development Engineering Division MK Date

Developers/Builder's Certificate  
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 HSCA.

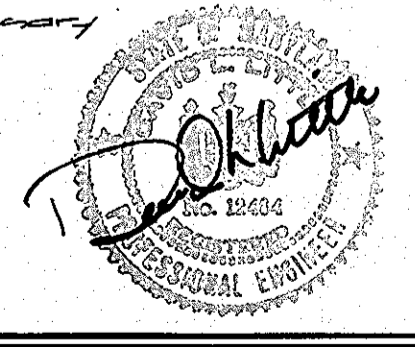
*John J. G...* 11-25-96  
Signature of Developer/Builder Date

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.

*John J. G...* 10/6/96  
Signature of Engineer Date

This Development Plan is approved for the Howard Soil Conservation District and meets the technical requirements.

*John J. G...* 11/26/96  
Signature of District Director Date



For Drainage Area Data  
Sediment Control Only

- Sequence of Construction**
1. Obtain Grading permit.
  2. Arrange on-site pre-construction meeting w/ sediment control inspector.
  3. Install stone construction entrances & super silt fence as shown on these plans.
  4. Fine grade site.
  5. Construct utilities from existing stubs to the building.
  6. Construct building.
  7. Install curb & gutter, sidewalk & base paving. Stabilize remaining areas w/ grass seed & mulch.
  8. When areas draining to sediment control measures have been stabilized & permission is granted from the sediment control inspector, flush storm drain system.
  9. Install remaining bituminous curb. Install remaining base paving, seed & mulch all remaining areas.
  10. Install landscaping.
  11. Remove all remaining sediment controls.
- Note: The contractor is responsible for the clean up and repair of the storm drains and the stormwater management in the event of a sediment control device failure. Therefore, daily inspection and repair of devices are of utmost importance.

ADDRESS CHART				
WATER CODE: 6201	SEWER CODE: 6202	PARCEL NUMBER: 6201	STREET ADDRESS: COLUMBIA CROSSING CIRCLE	SECTION/AREA: 171
SUBDIVISION NAME: ROUTE 175 COMMERCIAL		PARCEL: 12409	TAX MAP: 36	ELEC. DIST.: 6
PLAT: 12409	ZONE: NT-COMMERCIAL	TAX MAP: 36	BLOCK: 18	CENSUS TRACT: 6027.05

**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 BAL: (410) 880-1820 FAX: (301) 421-4186 DES. DEV. DRN. K.L.P. CHK. DEW

DATE	REVISION	BY	APPR.

OWNER  
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION  
10275 LITTLE PATUXENT PARKWAY  
COLUMBIA, MD. 21044  
PHONE: (410) 992-6027  
ATTN: AL EDWARDS

DEVELOPER / PREPARED FOR:  
RED RIVER BARBEQUE & GRILL  
1117 LAKE HERON DRIVE, SUITE 2B  
ANNAPOLIS, MD. 21403  
PHONE: (410) 269-0101  
ATTN: ANDY BATCH

Drainage Area Map & Sediment Control Plan  
**ROUTE 175 COMMERCIAL**  
PARCEL "N"  
GUILFORD ELECTION DISTRICT No. 6  
HOWARD COUNTY, MARYLAND  
November, 1996

SCALE: 1"=30'	ZONING: NT-COMMERCIAL	G. L. W. FILE No.: 96042
DATE: November, 1996	TAX MAP No.: 36	SHEET: 2 OF 6



**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, Bureau of Construction Inspection at (301) 792-7272 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: 1.5384 acres
- All plan dimensions are to face of curb unless otherwise noted.
- Existing topography reflects mass-grading as shown on GP 96-45 & F-96-41 and as as-built, August 1996.
- Coordinates and bearings are based upon the MD State plan system (NAD '83).
- All existing water and sewer shown is public, per contract 24-3463-D.
- Stormwater management for this site is proposed under GP 96-45 & F-96-41.
- All existing public storm drain is per F-96-41.
- 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, unless dimensioned otherwise. 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 the sewer house connection. Contractor shall utilize D.I.P. (CL 51) for the water house connection.
- For all storm drain connections at existing stubs, the contractor shall remove the existing blocking and maintain the same grade and alignment to the first structure.
- Use trench bedding class "C" for storm drains.
- Paved areas indicated are private.
- Project background: See Dept. of Planning & Zoning File Numbers: SP 95-06, FDP 95-226, WP 95-94, GP 96-45, F-96-41 & PB 302.
- Recording reference: Plat No. 12489
- 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.
- The water meter shall be located inside the building.
- The limits of public maintenance for the water house connection 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 separate plan.
- There are no lot line building setbacks, except as indicated from the public right-of-way. No parking area shall be located within 10' of any lot line except shared parking facilities between two or more lots and except as approved by the Howard County Planning Board.

**BENCHMARK DESCRIPTIONS**

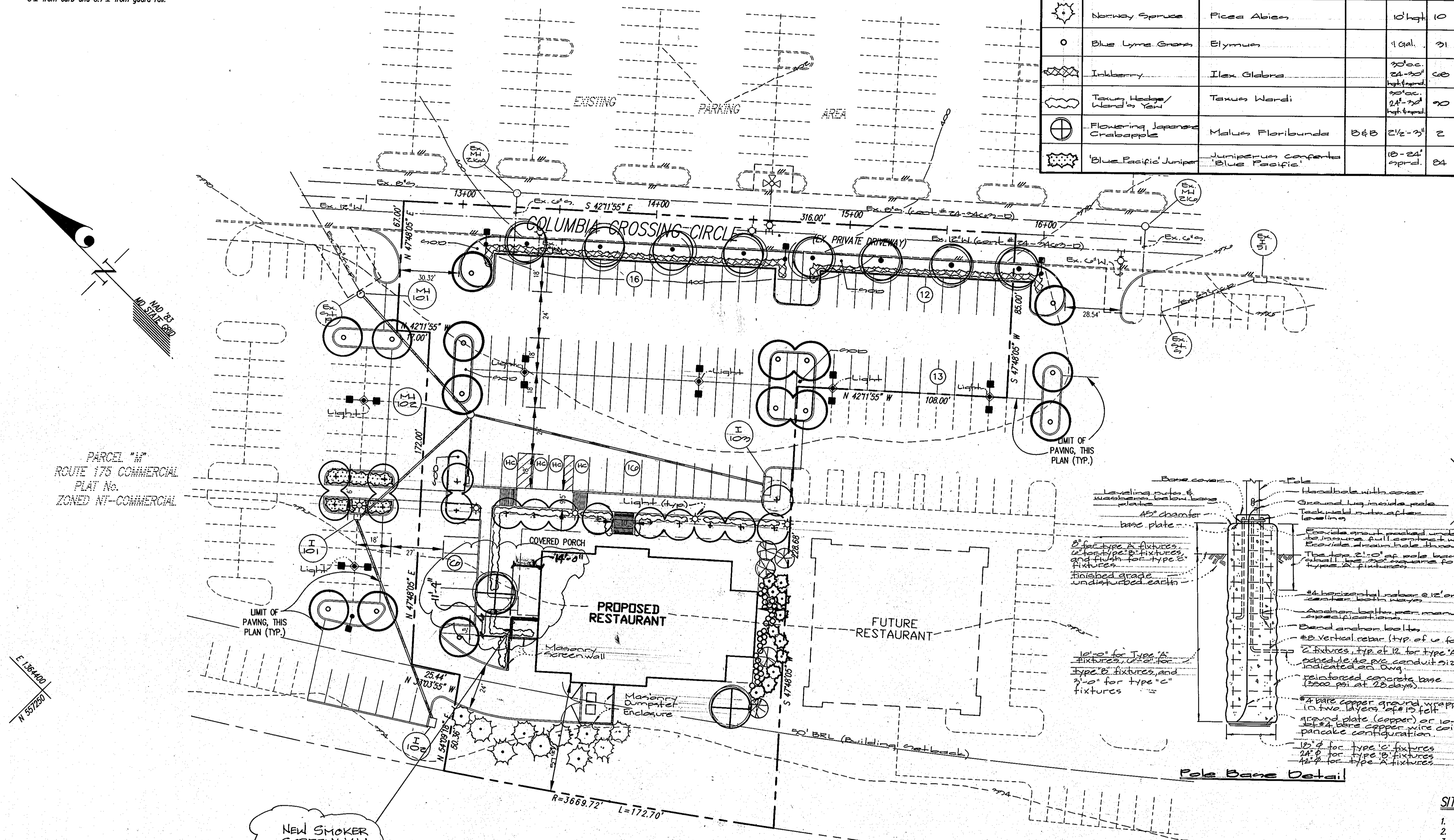
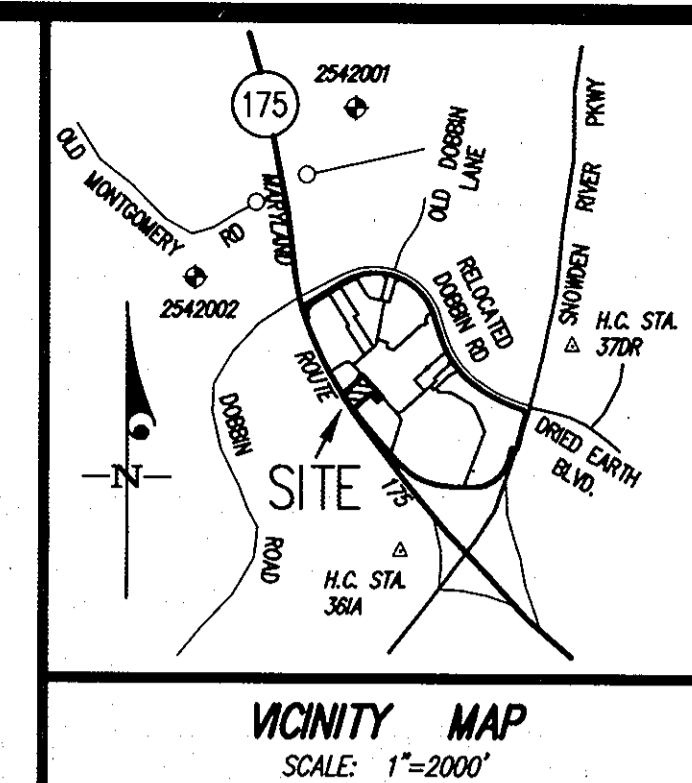
Station 2542001 (concrete monument)	Elevation: 428.871 (for vertical control only)	Station is located on B.G. & E. transmission lines 1060'± S.W. of Dobbin Road.
Station 2542002 (concrete monument)	Elevation: 363.638' (for vertical control only)	Station is located 1000'± west of Rte. 175 on transmission line @ B.G. & E. tower 19-E.
Station 370R (1/2" rebar)	N 69881.1794, E 416566.7155 (for horizontal control only)	Station is located 0.45± miles North of Rte. 175 and 46'± East of the curb of Snowden River Pkwy.
Station 361A (concrete monument)	N 69205.9263, E 416313.5119 (for horizontal control only)	Station is located at the Southeast corner of the intersection of Snowden River Pkwy, and Rte. 175 3'± from curb and 5.7'± from guard rail.

**Light Fixture Schedule**

Type	Description	Lamps	Voltage	Mounting	Manufacturer
A	Lighting Fixtures with Type III Illumination distribution	2-1000 MH High	480V, 1φ	300°± above top of pole	Emco Cat # BGA-120-911-100MH-Color-Appl. Pole-LW Industries Filter 11.0-1-Color DM 4010
B	Lighting fixture with Type II Illumination distribution	1-MH 400/Hp	480V, 1φ	30°± above top of pole	Emco Cat # BGA-181-54-400MH-Color-Appl. Pole-LW Industries Filter 11.0-1-Color DM 4010
C	Lighting fixture pole-top mounted	1-MH 175/W	480V, 1φ	10-0° pole	Lumex Cat # 175MH-Color-L-CR-480-1-175MH-APR-4-10

**Landscape Legend**

Symbol	Common Name	Botanical Name	Remark	Size	Count
○	Green Vase Zerkova	Zerkova cernata (Green Vase)	B&B	2'-3/4" cal.	8
○	Village Green Zerkova	Zerkova cernata (Village Green)	B&B	2'-3/4" cal.	15
+	Purpleleaf Plum (Thundercloud)	Prunus cerasifera (Thundercloud)	B&B	2'-3/4" cal.	16
⊗	River Birch (Multi-Stem)	Betula nigra	B&B	12-14'	9
⊛	American Arborvitae	Thuja occidentalis	B&B	7-8'	11
⊙	Norway Spruce	Picea abies		10' high	10
○	Blue Lyme Grass	Elymus		1 gal.	31
⊗	Inkberry	Ilex glabra		2'-3/4" cal.	68
⊗	Texas Hedge/Wand in Wand	Taxus wandi		2'-3/4" cal.	20
⊕	Flowering Japanese Crabapple	Malus floribunda	B&B	2'-3/4" cal.	2
⊗	Blue Pacific Juniper	Juniperus conferta (Blue Pacific)		10-24' spread	24



**CURVE TABLE**

RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
3669.72'	172.70'	86.37'	172.69'	N 32°10'6" W	02°41'42"

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

*John M. DeL...*  
County Health Officer  
Date: 12-9-96

**APPROVED**  
HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

*James Keith*  
Director  
Date: 12/20/96

*Richard Blood*  
Chief, Division of Land Development and Research  
Date: 12/14/96

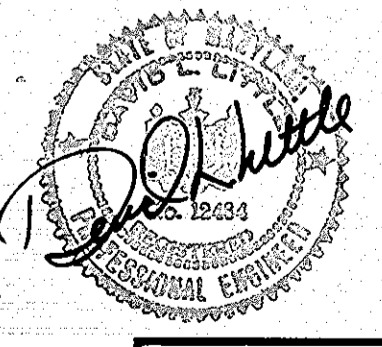
*Mike*  
Chief, Development Engineering Division  
Date: 12/14/96

**NEW SMOKER SCREENWALL ADDITION LOCATION**

**ADDITION ONLY!**

**BOARD OF ARCHITECTS**  
1996  
AUG 19 2009

**MARYLAND ROUTE 175**  
(M.S.H.A. R/W PLAT Nos. 41415 & 41577 - 41582)



**For Landscaping Purposes Only**

- SITE ANALYSIS - PARCEL "N"**
- AREA OF PARCEL: 67,013 S.F. / 1.5384 AC.
  - ZONING: NEW TOWN
  - PROPOSED USE: RESTAURANT
  - GROSS BUILDING AREA:
  - NET BUILDING AREA:
  - TOTAL PARKING SPACES REQUIRED:
  - TOTAL NO. OF HANDICAP SPACES REQUIRED:
  - NO. OF HANDICAP VAN SPACES REQUIRED:
  - TOTAL NO. OF HANDICAP SPACES PROVIDED:
  - NO. OF HANDICAP VAN SPACES PROVIDED:

**ADDRESS CHART**

WATER CODE	SEWER CODE	PARCEL NUMBER	STREET ADDRESS
100	400000	N	171 COLUMBIA CROSSING CIRCLE

**SUBDIVISION NAME:** ROUTE 175 COMMERCIAL  
**SECTION/AREA:** 1/1  
**PARCEL:** 12489

**PLAT:** 12489  
**ZONE:** NEW TOWN  
**TAX MAP:** 36  
**BLOCK:** 18  
**ELEC. DIST.:** 6  
**CENSUS TRACT:** 60703

**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 BAL: (410) 880-1820 FAX: (301) 421-4186 DES:JRC DRN:KLP CHK:DEW

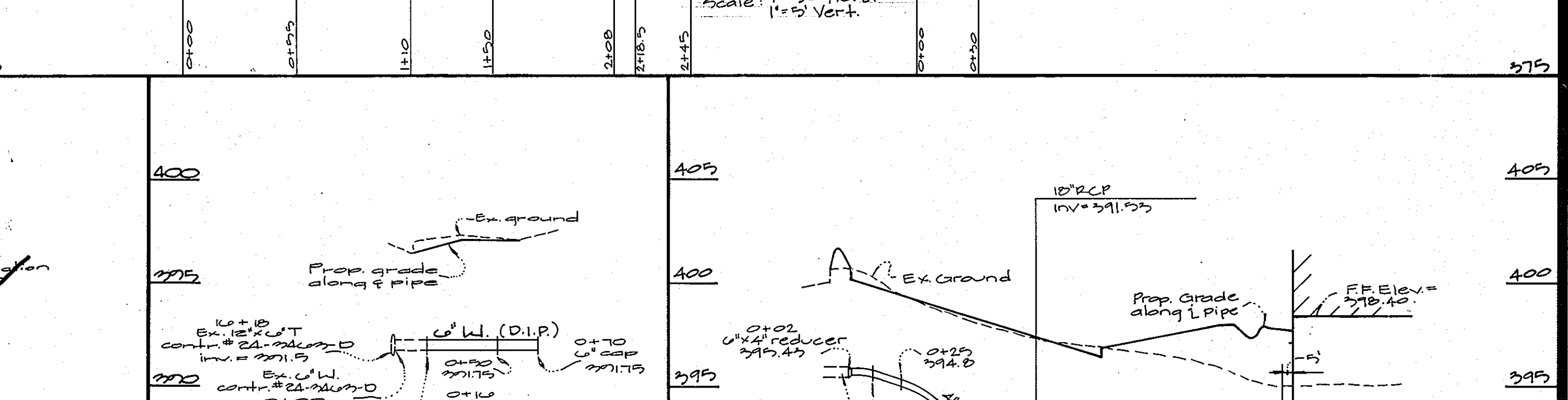
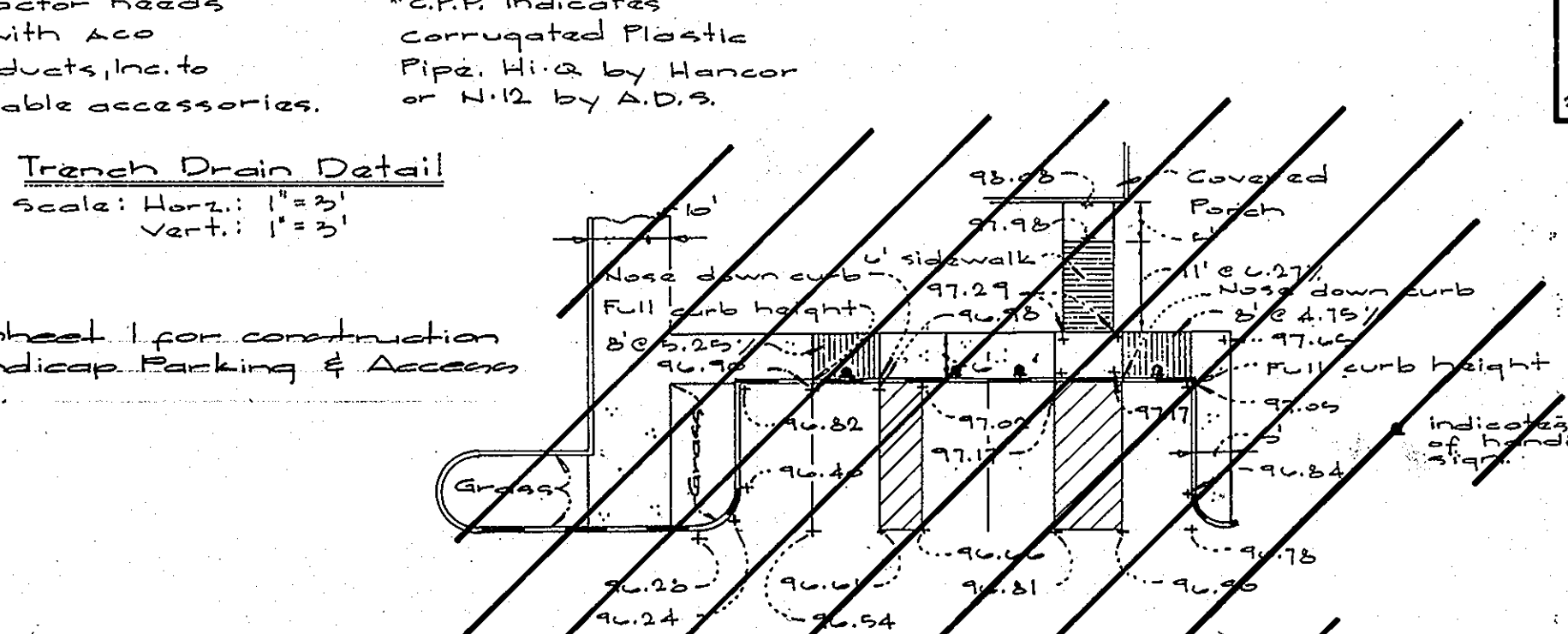
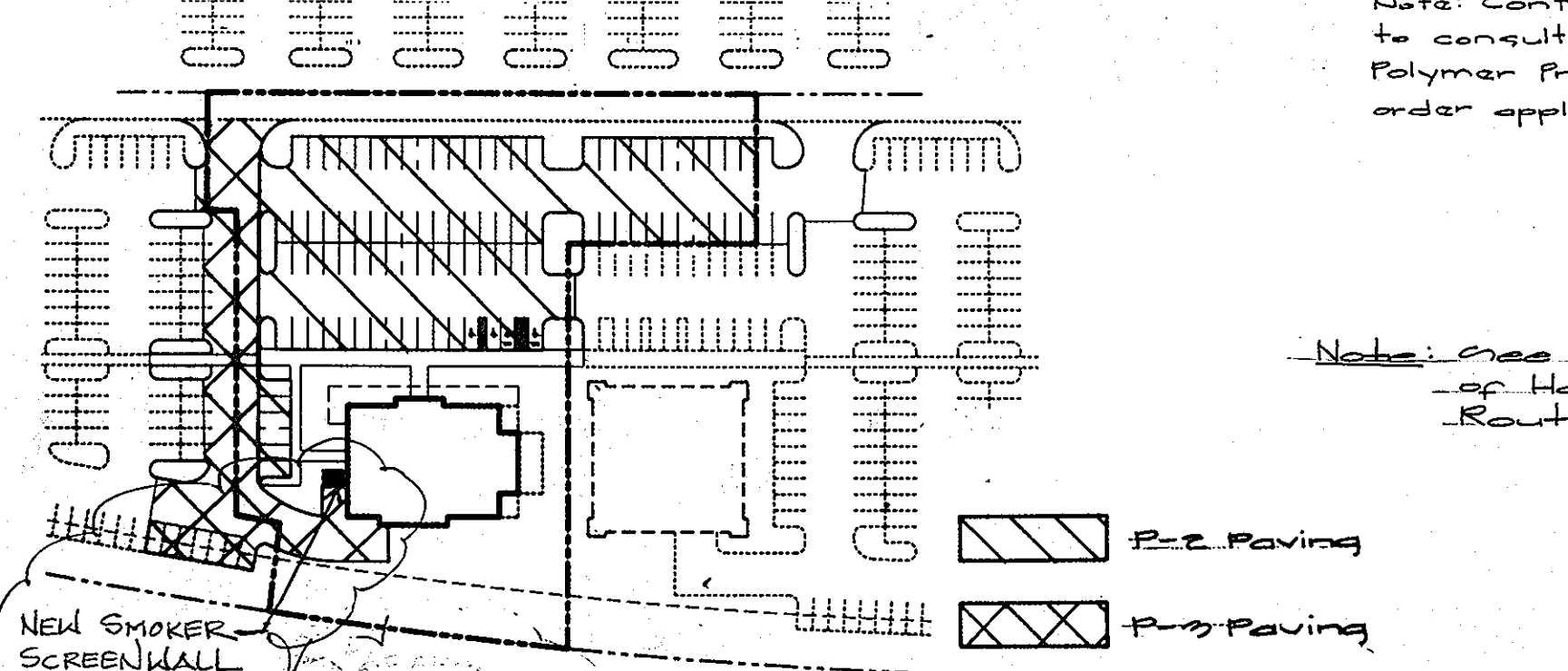
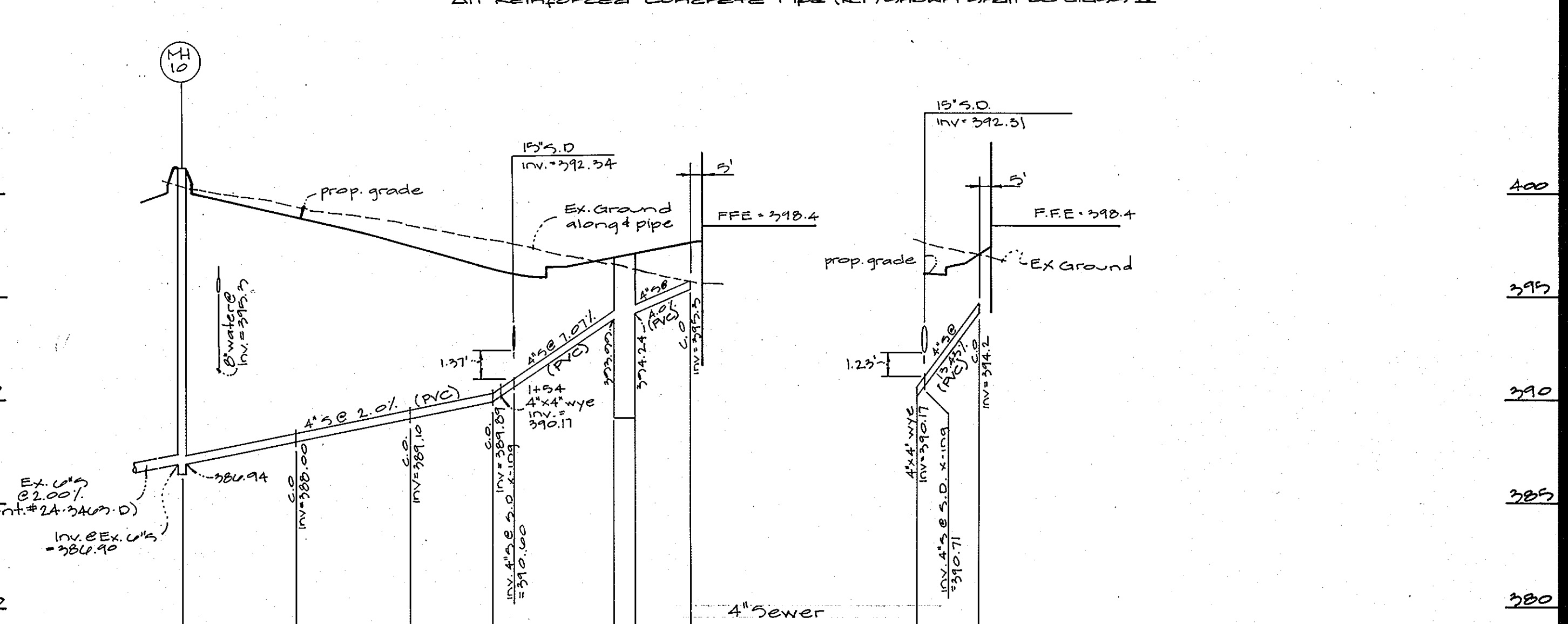
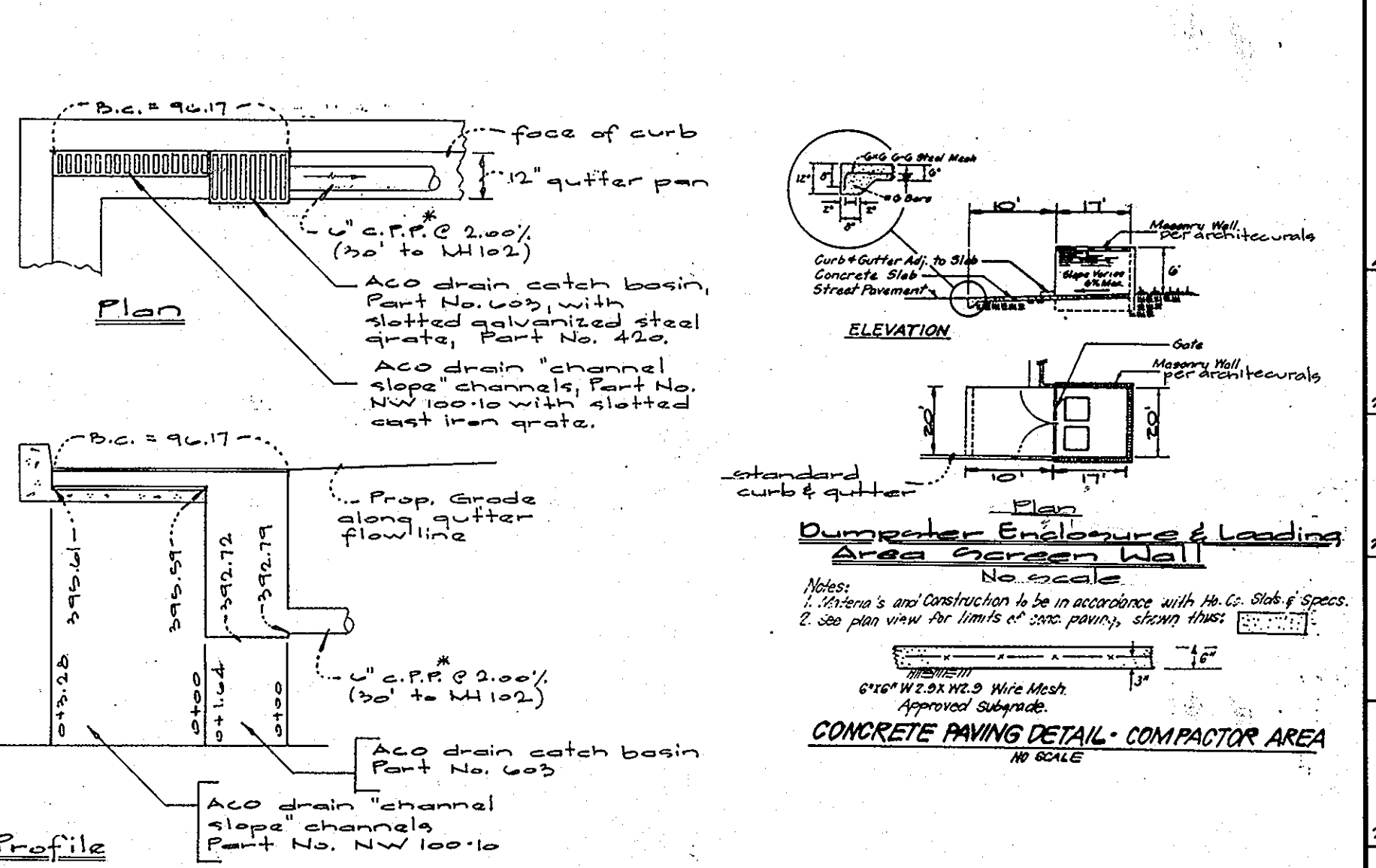
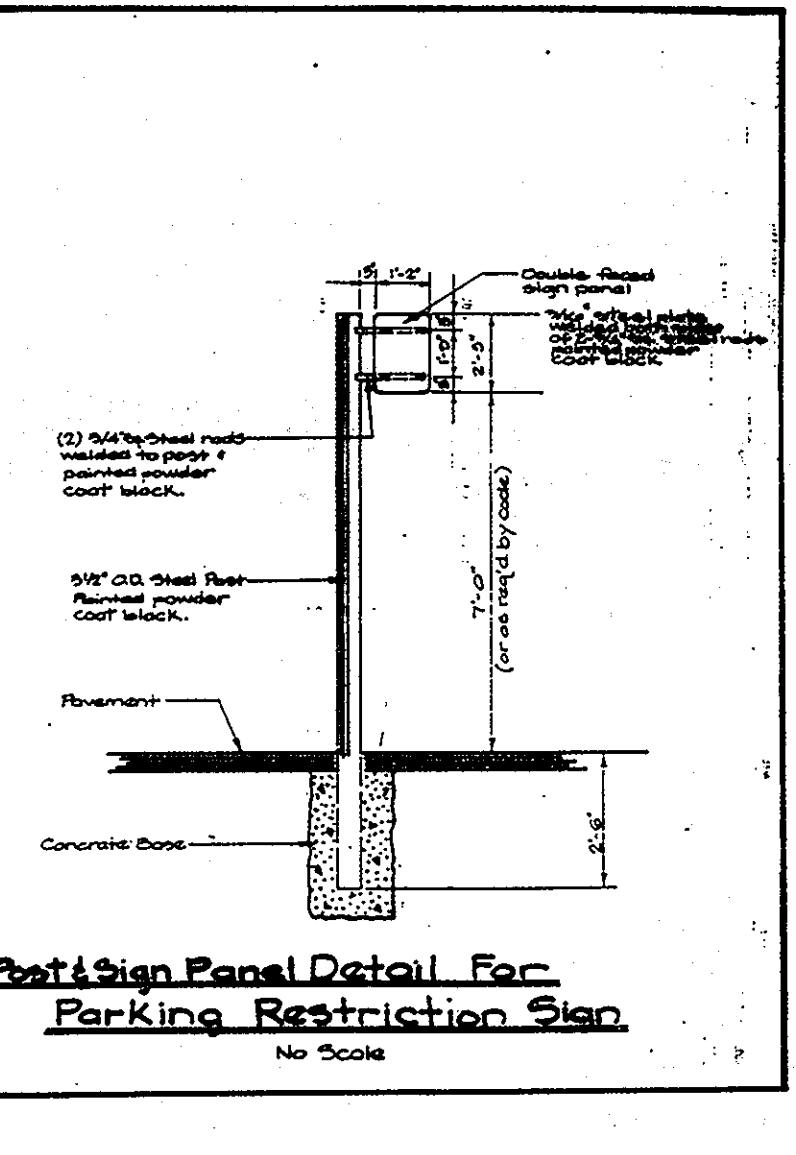
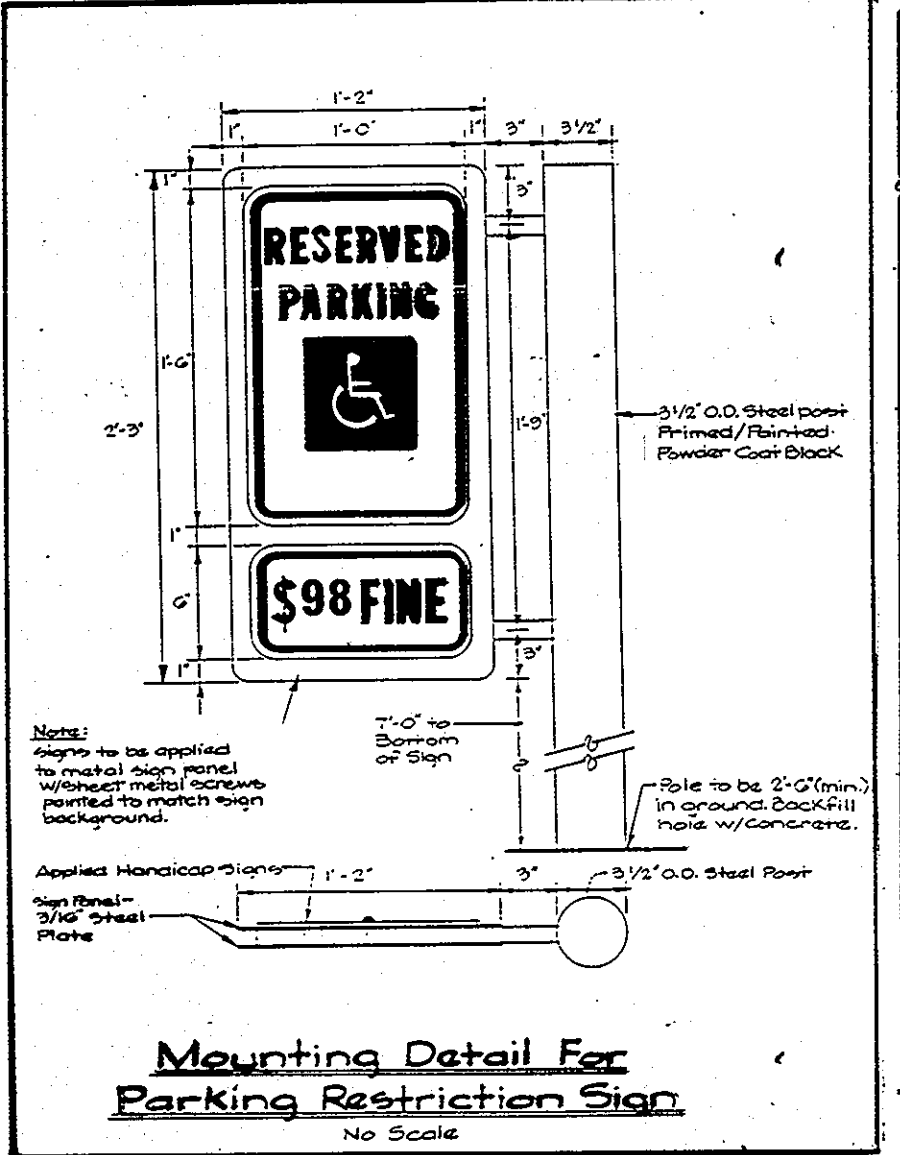
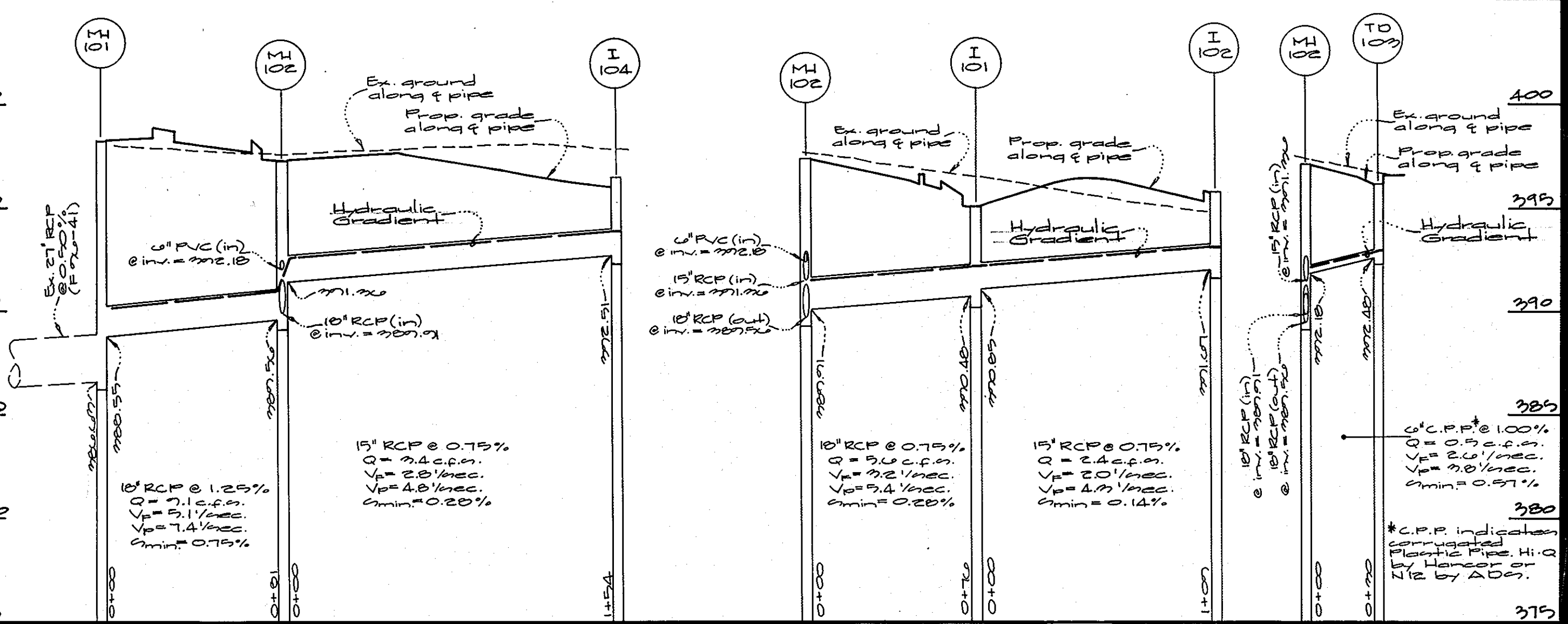
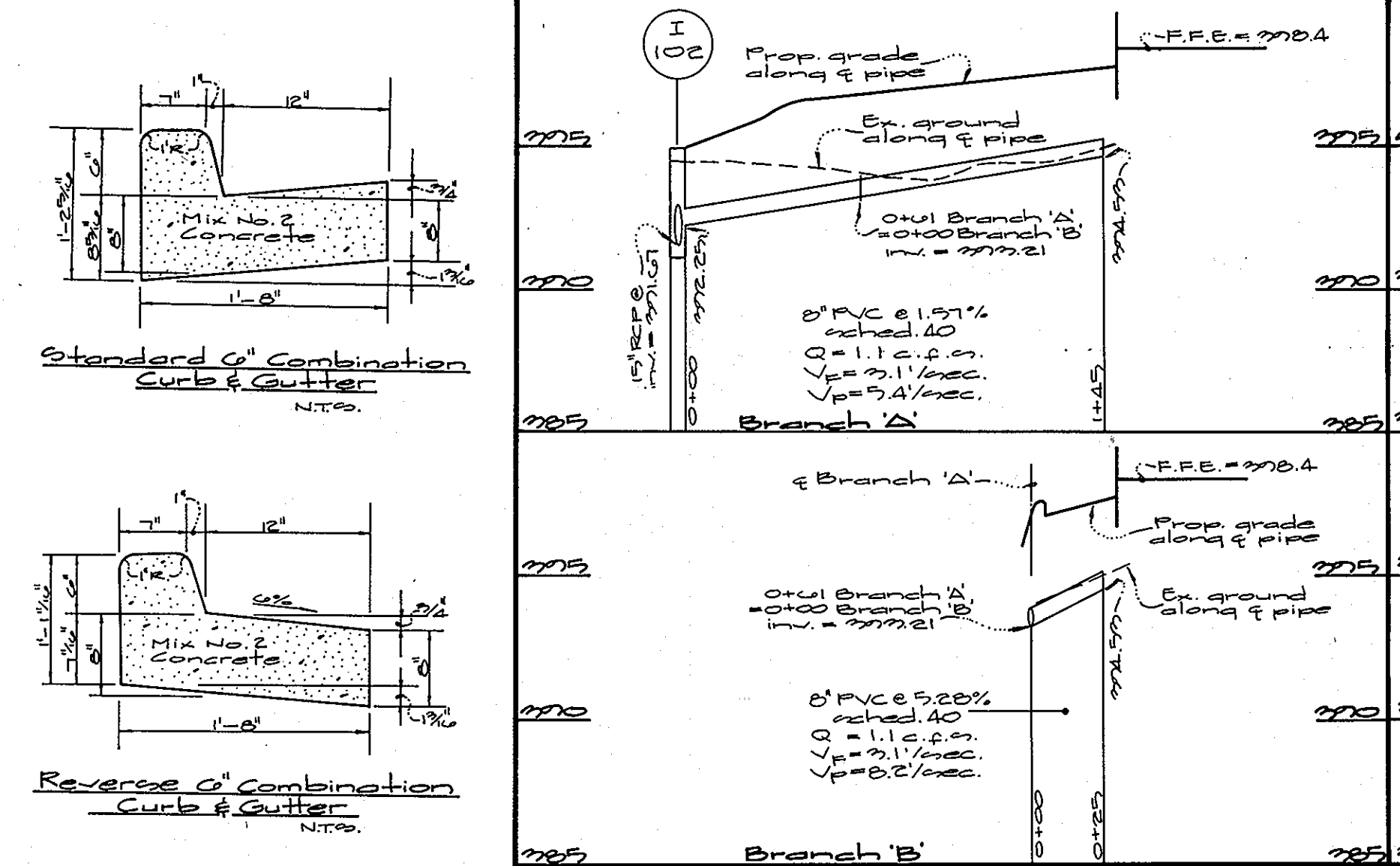
**OWNER**  
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION  
10275 LITTLE PATUXENT PARKWAY  
COLUMBIA, MD. 21044  
PHONE: (410) 992-6027  
ATTN: AL EDWARDS

**DEVELOPER / PREPARED FOR:**  
RED RIVER BARBEQUE & GRILL  
1117 LAKE HERON DRIVE, SUITE 2B  
ANNAPOLIS, MD. 21403  
PHONE: (410) 269-0101  
ATTN: ANDY BATCH

**Landscaping Plan**  
**ROUTE 175 COMMERCIAL**  
**PARCEL "N"**

SCALE: 1"=30'  
DATE: November, 1996  
ZONING: NT-COMMERCIAL  
TAX MAP No. 36  
G. L. W. FILE No. 96042  
SHEET 3 OF 6





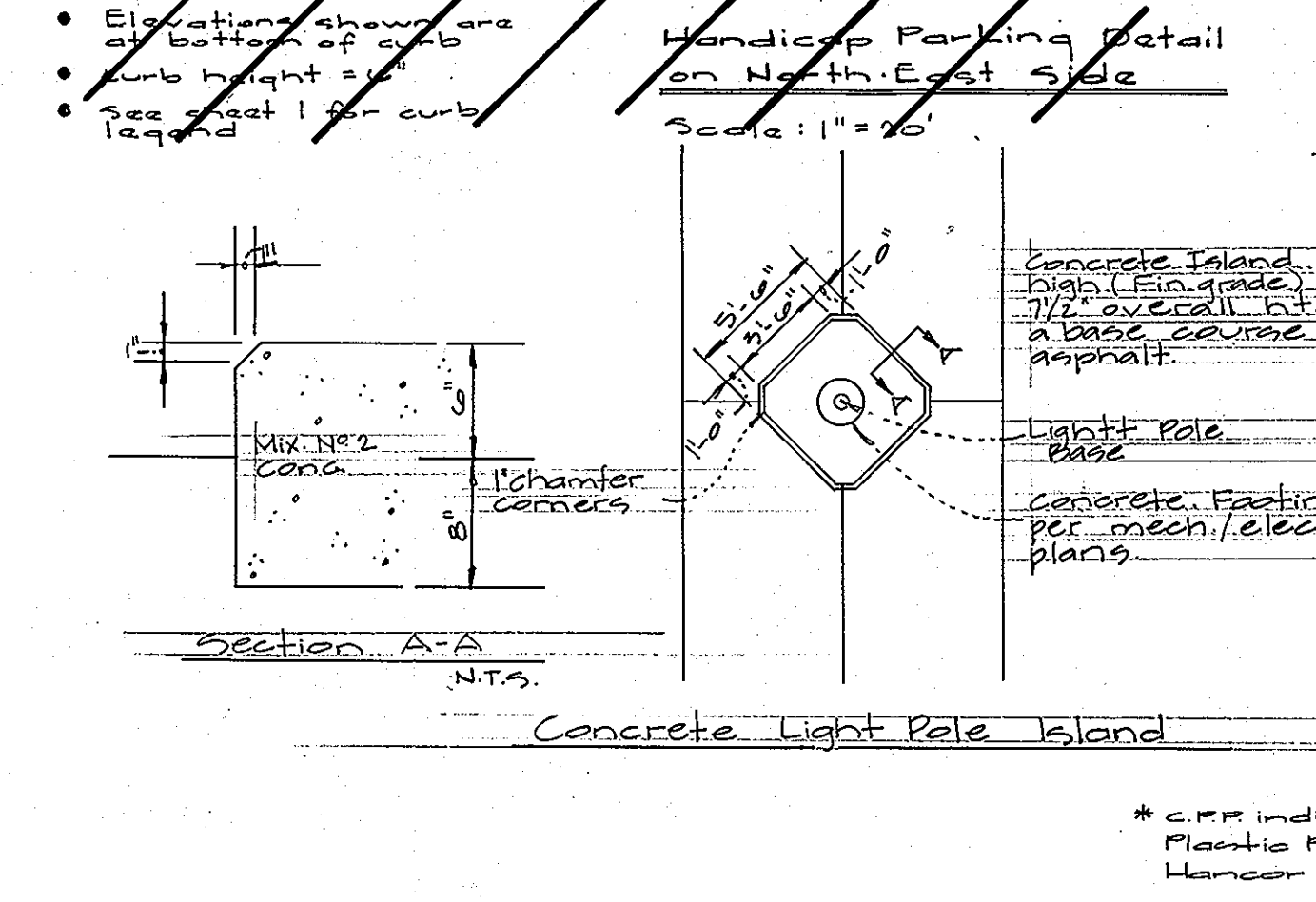
APPROVED  
PLANNING BOARD  
OF HOWARD COUNTY.  
DATE 11/6/96

P-2	RESIDENTIAL ZONES - LOCAL, CUL-DE-SAC STS, ALLEYS AND PRIVATE ROADS SERVING INDIVIDUAL LOTS	1 1/2" BIT. CONC. SURFACE	2 1/2" BIT. CONC. BASE
	TRAVELWAYS APARTMENTS AND COMMERCIAL INDUSTRIAL ZONES WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY	5" BIT. CONC. BASE	6" GRADED AGGREGATE BASE (GAB)
P-3	RESIDENTIAL ZONES - SENIOR AND MAJOR COLLECTORS COMMERCIAL-INDUSTRIAL ZONES LOCAL AND CUL-DE-SAC STREETS ALLEYS	1 1/2" BIT. CONC. SURFACE	1 1/2" BIT. CONC. BASE
	TRAVELWAYS APARTMENTS AND COMMERCIAL-INDUSTRIAL ZONES WITH MORE THAN 10 HEAVY TRUCKS PER DAY	5" BIT. CONC. BASE	5" GRADED AGGREGATE BASE (GAB)

Approved: For public water coverage systems  
Howard County Health Department  
Date 12-9-96

Approved: Howard County Dept. of Planning/Zoning  
Date 12/20/96

Approved: Chief, Div. of Land Development & Research  
Date 1/14/97



Pipe Schedule			
Size & Type	Class	Quantity	
U.C.P.P.*		20 L.F.	
15" RCP	II	239 L.F.	
10" RCP	II	157 L.F.	
8" PVC	sched. 40	170 L.F.	

Structure Schedule									
No.	Type	Width (inside)	Top Elevation	Upper Invert	Lower Invert	Std. Detail	Location	Remarks	
I-101	comb. inlet	2'-5"	392.00	392.00	392.00	S.D. 4.92	See Plan		
I-102	"	"	391.42	391.42	391.42	S.D. 4.40	"		
I-104	"	"	392.20	392.20	392.20	S.D. 4.41	"		
TO-103	trench drain		392.17	392.17	392.17	See detail	"		
MH-101	Std Manhole	4'-0"	392.10	392.10	392.10	GS.12	"		
MH-102	"	"	392.10	392.10	392.10	GS.12	"		







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 "eye" thimbles of wire and hose on trees up to 3" in caliper.
- c. Hose: Shall be new, 2 ply reinforced rubber hose, minimum 1/2" I.D. "Plastic Lock Ties" or "Paul's Trees Braces" may be used in place of wire and hose on trees up to 3" in caliper.
- d. All trees under 3" in caliper are to be planted and staked in accordance with the attached "Typical Tree Staking Detail". All trees over 3" in caliper are to be planted and guyed in accordance with the attached "Typical Tree Guying Detail".

5. Plant Pruning, Edging and Mulching

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

6. Plant Inspection and Acceptance

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

7. Plant Guarantee

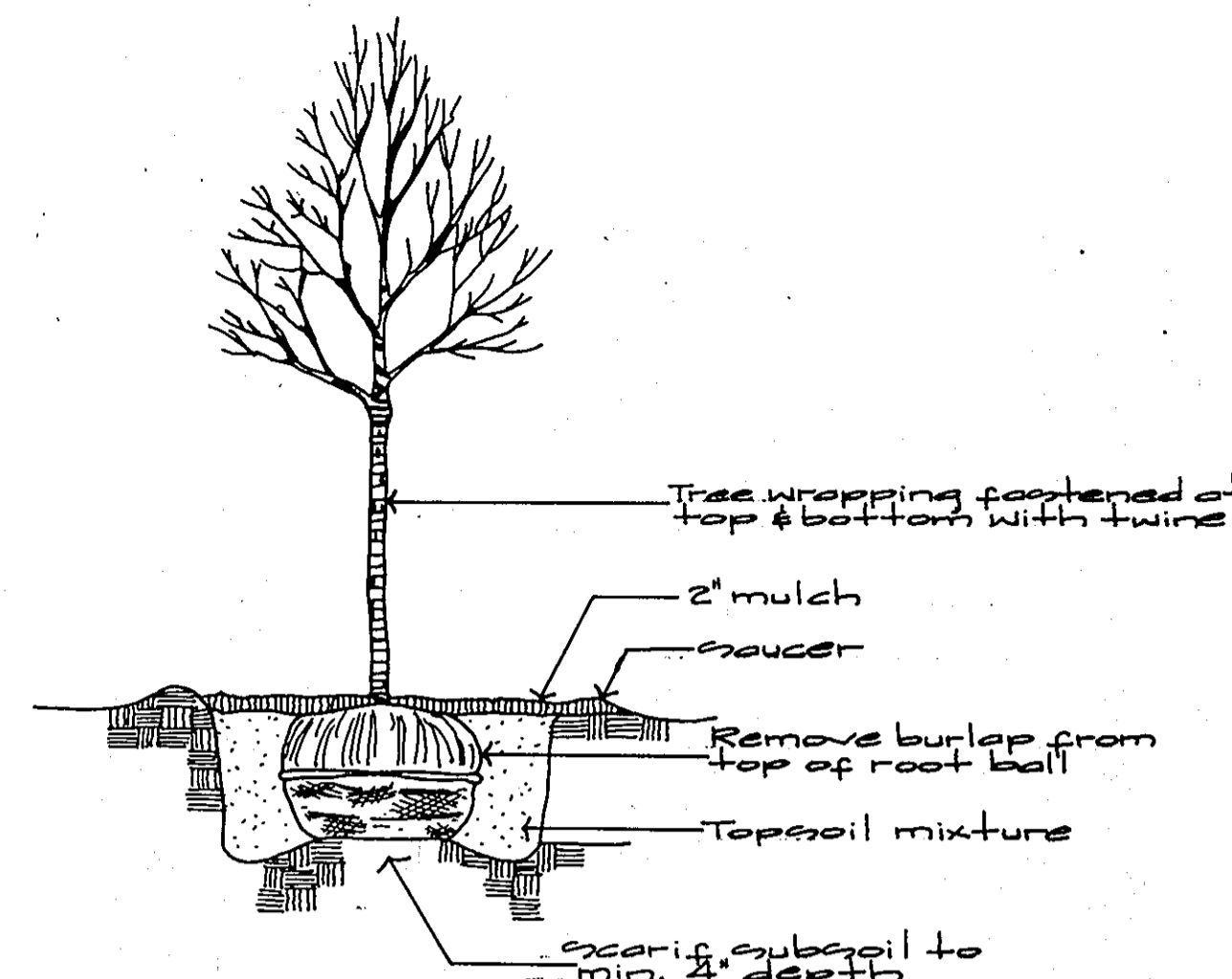
All plant material shall be guaranteed for the duration of one full growing season, after final inspection and acceptance of the work in the planting project. Plants shall be alive and in satisfactory growing condition at the end of the guarantee period.

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

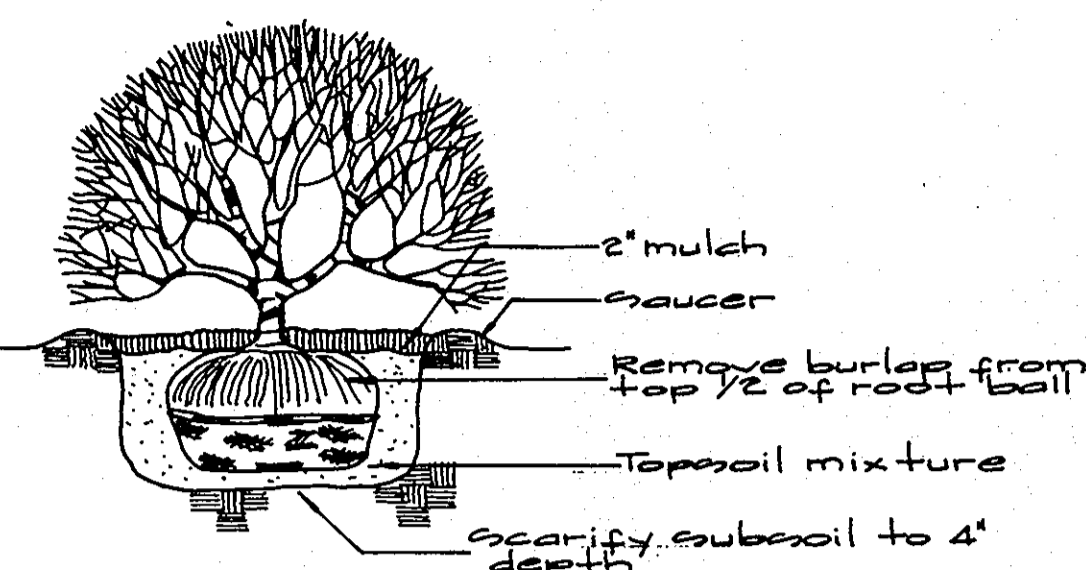
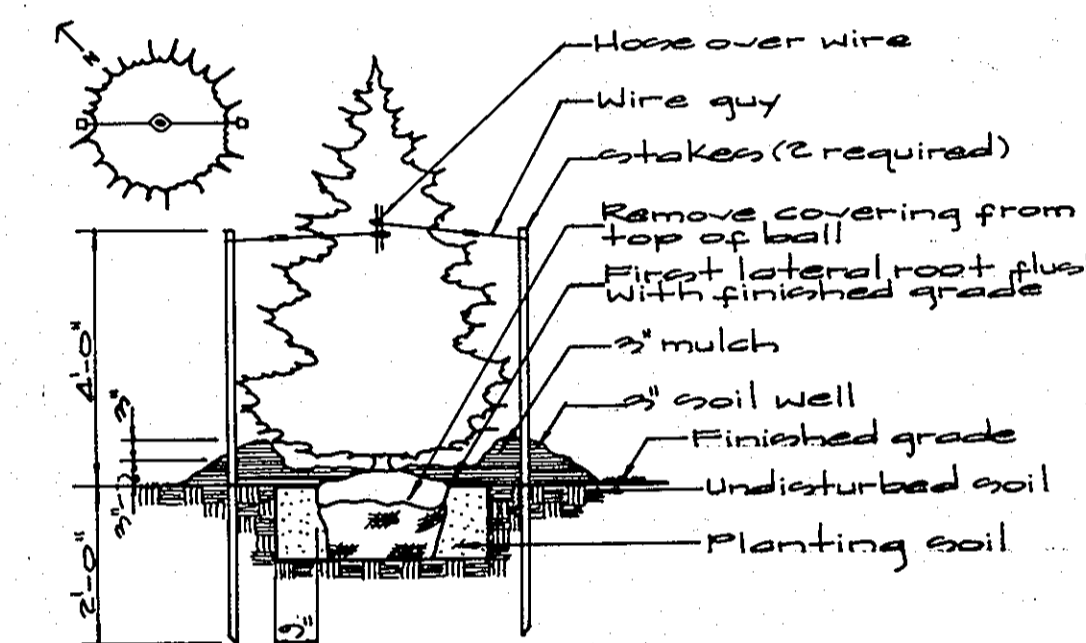
Sodding

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

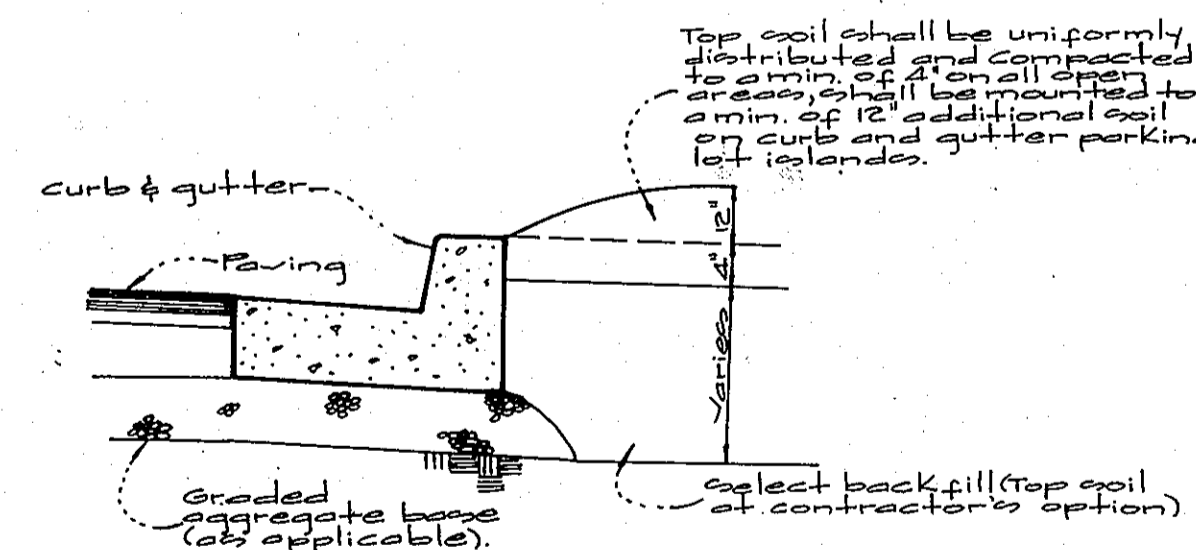
All sod shall be strongly rooted sod, not less than two years old and free of weeds and undesirable native grasses. Provide only sod capable of growth development when planted and in strips not more than 18" wide x 4" long. Provide sod composed principally of improved strain Kentucky bluegrass, such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



Typical Deciduous Tree Planting



Typical Tree Guying Detail



Topsoiling Detail

Materials:

Top soil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand or other soil as approved by the ARC. Topsoil shall not be a mixture of contrasting textured subsoil and contain no more than 5 percent by volume of cinders, stones, slag, coarse fragments, gravel, brick, 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, juback grass, johnson grass, nutcracker, poison ivy, thistle, or others as specified. All top soil shall be tested by a recognized laboratory for organic matter content, pH and soluble salts. A pH of 6.0 to 7.5 and an organic content of not less than 1.5 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.



APPROVED PLANNING BOARD HOWARD COUNTY DATE: 11/6/96

Approved: For Public Water & Sewerage Systems, Howard County Department of Health Officer, Date: 12-9-96  
 Approved: Howard County Department of Planning & Zoning, Date: 12/2/96  
 Approved: Chief, Div. of Land Development & Research, Date: 12/24/96  
 Approved: Chief, Development Engineering, Date: 12/24/96

**GW 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.

Owner: The Howard Research & Development Corporation, 10215 Little Patuxent Pkwy., Columbia, Maryland 21044, Phone: (410)992-6027  
 Planting Notes & Details  
 Route 175 Commercial Parcel "N"  
 Guilford Election District No. 6  
 Howard County, Maryland

DES.:	SCALE	ZONING	G.L.W. FILE No.
	As Shown	NT-Commercial	96042
DRN.:	DATE	TAX MAP No.	SHEET
W.S.J.	Nov 1996	70	1 of 10
CHK.:			