SITE DEVELOPMENT PLAN

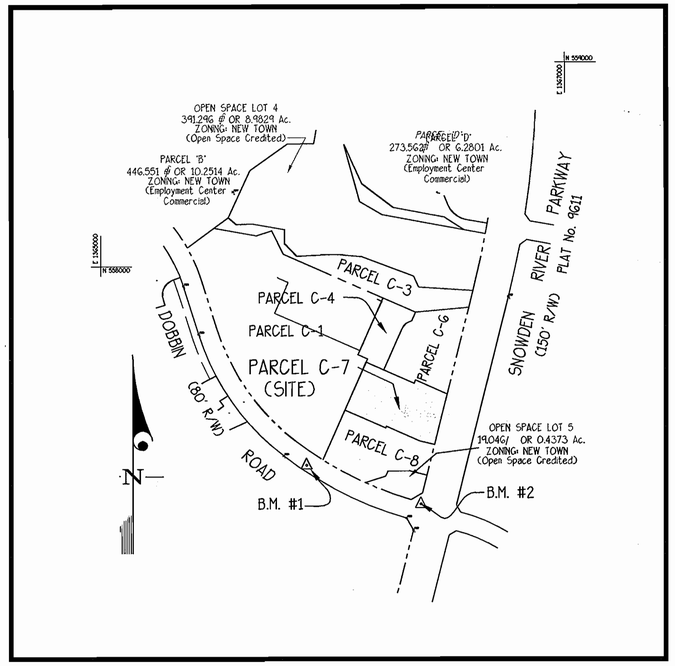
ROUTE 175 COMMERCIAL

SECTION 1 AREA 2

PARCEL C-7

General Notes

1. All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standards and specifications if applicable.
2. 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.
3. The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
4. The contractor shall notify the Howard County Department of Public Works, Bureau of Utilities at (410) 313-4900 at least five (5) working days prior to starting any excavation work.
5. Proposed Use: Bldg A - Restaurant
6. All plan dimensions are to face of curb unless otherwise noted.
7. Existing topography is shown per field run survey information by Gutshcick, Little Weber, P.A. + by design grades from design plans for construction.
8. Coordinates and bearings are based upon the MD State plane system (NAD '83).
9. Water and sewer service is public.
10. A Stormwater management water quality manhole is Existing for this site under SDP 01-132. Water quantity is provided under SDP 01-09 (Facility No. 8).
11. All existing water and sewer is per Contract 24-4035-D.
12. All existing public storm drain is per SDP-01-132.
13. See trench bedding class 'C' for storm drains.
14. Recording reference: Plat No. 15947
15. Existing utilities are based on approved design plans for construction and field location by Gutschick, Little + Weber, P.A.
16. There is no floodplain on Site.
17. There are no wetlands on Site.
18. Building setbacks and building restrictions are per FDP 235.
19. 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).
20. NOTE: In case of discrepancies between the plat and the plans, the plat shall govern.
21. No clearing, grading or construction is permitted within any wetland, wetlands, buffer, 50' stream buffer or floodplan.
22. All outdoor lighting shall comply with the requirements of zoning section 134.The site lighting indicated on these plans is a single or twin bronze, full cutoff, 400 watt fixture mounted on a 25-foot tall, round, tapered, dark bronze pole.
23. This project is part of a construction, operation + reciprical easement agreement that allows shared parking + driveway access for all parcels (C-1,C-4,C-6 thru C-8), recorded as Liber 5708 Folio 628.
24. The Landscape Plan was prepared according to the Alternative Compliance Section of the Landscape Manual.



Bench Mark No. 1
Traverse Station 976
Elev.=374.37

KEY MAP
SCALE : 1" = 300'

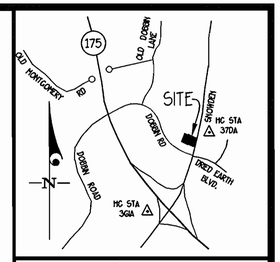
Bench Mark No. 2
Traverse Station 975
ELEV.=362.00

Sheet Index

1. Cover Sheet
2. Site Development Plan
3. Site/Handicap Accessibility Details
4. Landscape Plan
5. Landscape Details Notes + Schedules
6. Sediment Control Plan
7. Sediment Control Details
8. Utility Profiles + Storm Drain Manifold Detail
9. Drainage Area Map

LEGEND

366	EX. CONTOUR
300	PROP CONTOUR
	EX. TREES
	EX. STORM DRAIN
	PROP. STORM DRAIN
LOS	LIMIT OF SUBMISSION
8'S 8'S	EX. SANITARY SEWER
Ex. 8" W	EX. WATERLINE
	CONCRETE CURB + GUTTER
PROP. 8'S	PROP. SANITARY SEWER
	PROPOSED WATERLINE
	EX. CURB + GUTTER
	FUTURE CURB + GUTTER
	PROPOSED REVERSE CURB + GUTTER
	CONCRETE SIDEWALK, DUMPSTER PAD OR UTILITY PAD
	EX. EASEMENTS
	EX. ASPHALT PAVING
78	TOP OF PAVING SPOT SHOT
6	NUMBER OF PARKING SPACES
	PROP. LIGHT FIXTURE + POLE
	EX. LIGHT FIXTURE + POLE



VICINITY MAP
SCALE: 1"=2000'

Site Analysis Data Chart

1. Total of Parcel C-7 Area = 84,887 SF or 1.95 Ac.
2. Limit of Disturbed Area = 85,897 SF or 1.97 Ac.
3. Zoning = NT - Employment Center - Commercial (FDP 235)
4. Proposed Use: Restaurant.
5. △1 Floor Area = 7,127 SF Gross Building Area

   7,127 SF Total Gross Area
6. No. of standard parking spaces required by FDP 235 (5 spaces per 1,000 SF net area): 7,127 SF/1,000 SF x 5 = 36 spaces.
7. No. of handicap spaces required: 5 spaces (1 van space).
8. No. of standard parking spaces provided: 110 spaces.
9. No. of handicap spaces provided: 5 spaces (2 van spaces).
10. Total parking spaces provided: 115 spaces.
11. 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, & F 02-12.

* On July 1, 1999, WP-99-117, waiver of Section 16.144(f) was granted, to not be required to submit a Preliminary Plan, subject to various conditions in the approval letter.

** On October 1, 1999, WP-00-24, waiver of Section 16.144, was granted to reactivate Sketch Plan S-99-05 and grant a 45 day extension to submit the Sketch Plan for signature.

*** On March 23, 1999, WP-99-41, waiver of Section 16.144(f)(1), was appproved to permit a private commercial driveway direct access to an arterial road, subject to various conditions in the approval letter.

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 07/25/02

APPROVED: FOR PUBLIC WATER + SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
County Health Officer — Date 9/5/02

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING
Director — Date 9/9/02
Chief, Division of Land Development — Date 9/6/02
Chief, Development Engineering Division — Date 8/8/02

△1 Owner:
Red Robin Int. Inc.
6312 S. Fiddlers Green Circle
#200 N
Greenwood Village, CO 80111-5012
303-846-6000

△1

△1

STATE OF MARYLAND — MICHAEL JAMES TRUPPENAY — No. 14322 — REGISTERED PROFESSIONAL ENGINEER

10-4-00	Rev. site Analysis Data chart & owner Info. △1	WOJ	
DATE	REVISION	BY	APP'R.

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

Drawings\02069\Design\02069SP1.Dwg | DES. | DRN. WSJ | CHK.

PREPARED FOR:
THE HOWARD RESEARCH & DEVELOPMENT CORP.
THE ROUSE BUILDING
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044
ATTN: PAUL CAVENAUGH
TELE: (410) 996-6284

COVER SHEET
ROUTE 175 COMMERCIAL
PARCEL 'C-7'
SECTION 1 AREA 2
PLAT No. (15947)
ELECTION DISTRICT No. 6 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT	02069
DATE	TAX MAP - GRID	SHEET
JULY, 7 2002	36-18/37-13	1 OF 9

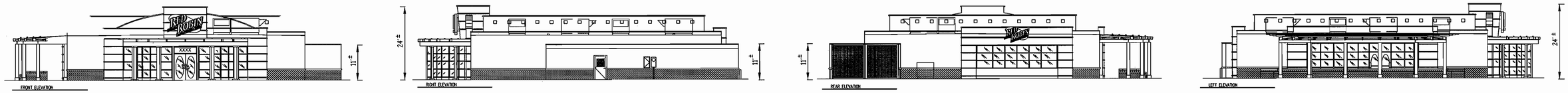
ADDRESS CHART	
PARCEL NUMBER	STREET ADDRESS
C-7	8640 SNOWDEN RIVER PARKWAY

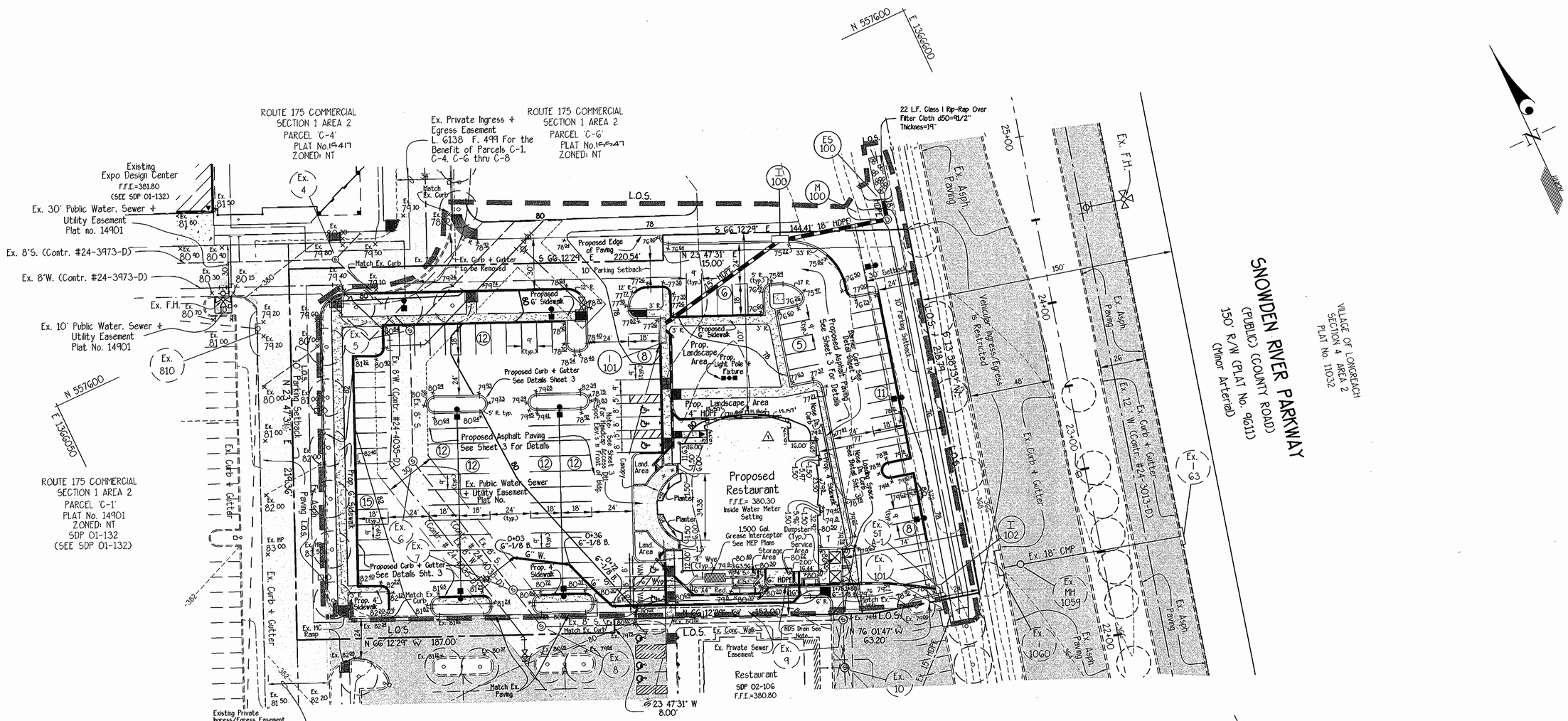
WATER CODE: EOG	SEWER CODE: 3460000

SUBDIVISION NAME: ROUTE 175 COMMERCIAL	SECTION/AREA 1 / 2	PARCEL C-7 (P/O 521)

PLAT No.	ZONE	TAX MAP	BLOCK	ELEC. DIST.	CENSUS TRACT
15947	NT	36	18	6	6067.03

SDP 02-142





NOTE: Improvements indicated on Parcel C-8 indicated as existing were taken from approved plans for construction.

NOTE: For Storm Drain Manifold Deail See Sheet 8

NOTE: NDS Drain To Consist of
NDS 9" Square Grate #999.
NDS 9x9 Low Profile Adapter
#930.NDS 6" Universal Outlet
#1266. 6" HDPE + 6"HDPE Wye

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 07/25/02

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

Penny Rosenstein M.D. MP County Health Officer	9/5/02 Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING

Director	9/3/02 Date
Chief, Division of Land Development	9/6/02 Date
Chief, Development Engineering Division MK	9/21/02 Date

STATE OF MARYLAND
MICHAEL JAMES TRUPPO
No. 14978
REGISTERED PROFESSIONAL ENGINEER

△1 Owner:
Red Robin Int. Inc.
6312 Fiddlers Green Circle
200 N
Greenwood Village, CO 80111
720-848-1000

△1

△1

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

DATE	REVISION	BY	APP'R.
10-4-02	Rev. Owner Inc. Rev. Bldg. To Enclose Porch △1	WJJ	

Drawings\02069\Design\02069SP2.Dwg | DES. | DRN. WsJ | CHK.

PREPARED FOR :
THE HOWARD RESEARCH & DEVELOPMENT CORP.
THE ROUSE BUILDING
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044
ATTN: PAUL CAVENAUGH
TELE: (410) 996-6284

SITE DEVELOPMENT PLAN

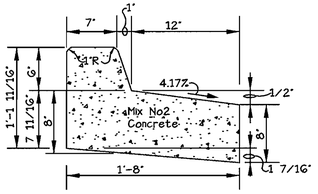
ROUTE 175 COMMERCIAL

PARCEL 'C-7'
SECTION 1 AREA 2
PLAT No. 15547

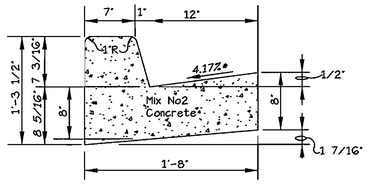
ELECTION DISTRICT No. 6 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=30'	NT	02069
DATE	TAX MAP - GRID	SHEET
JULY, 7 2002	36-18/37-13	2 OF 9

SDP 02-142



Reverse 6" Combination Curb + Gutter
N.T.S.



Standard 6" Combination Curb + Gutter
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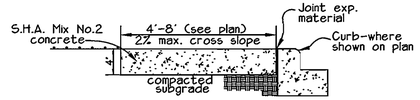
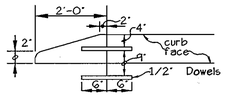
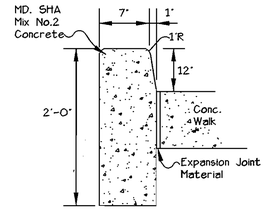


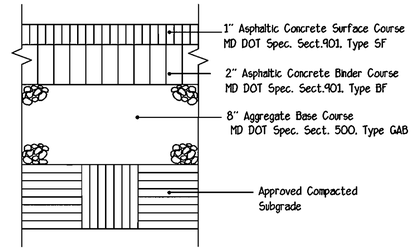
Typical Sidewalk Detail



Nose Down Curb Detail
N.T.S.

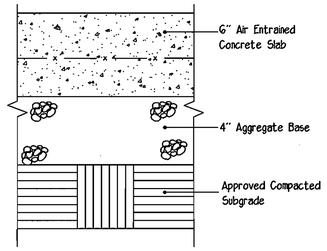


Barrier Curb
(Northeast Corner of The Building)
N.T.S.



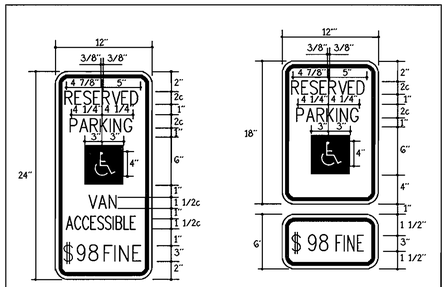
ASPHALT PAVEMENT SECTION
N.T.S.

Pavement sections taken from a report by Giles Engineering Associates, Inc. entitled "Geotechnical Engineering Exploration + Analysis" dated April 19, 2002.



PORTLAND CEMENT CONCRETE PAVEMENT

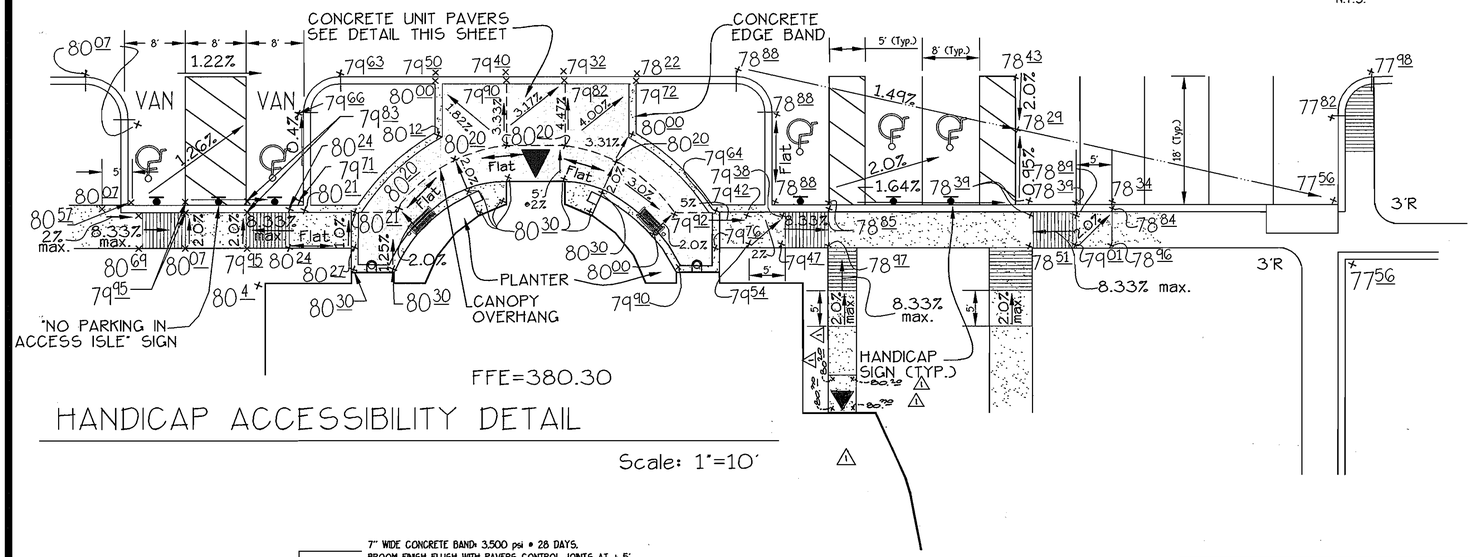
Materials and construction procedures shall be in accordance with the Md. D.O.T. Standard Specifications Section 520.



General Notes:

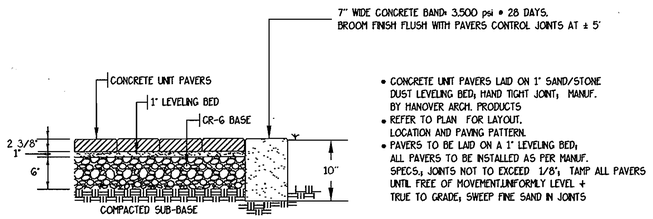
1. Signs shall meet design standards of the Federal Highway Administration and conform to the State of Maryland Standard Highway sign booklet detail R7-8.
2. One sign is required per space placed as shown on site plan. signed accordingly
3. Spaces indicated on site plan as "VAN" accessable shall be signed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

HANDICAP PARKING SIGNS DETAIL
N.T.S.



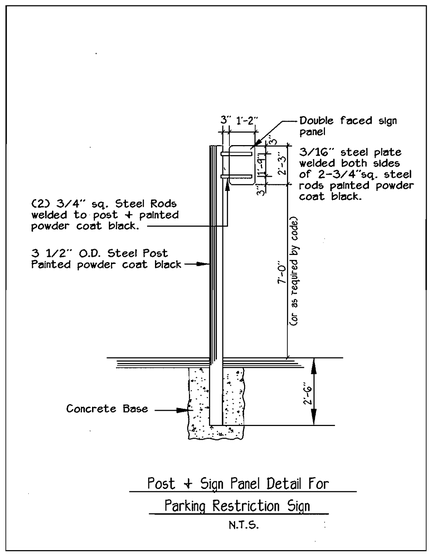
HANDICAP ACCESSIBILITY DETAIL

Scale: 1"=10'

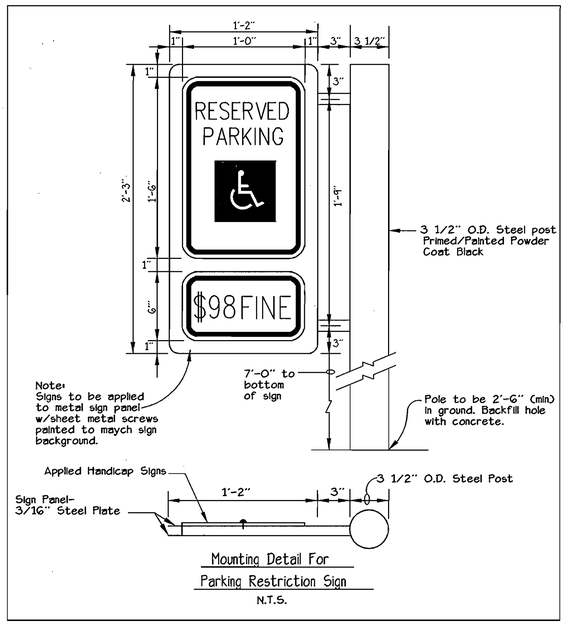


- CONCRETE UNIT PAVERS LAID ON 1" SAND/STONE DUST LEVELING BED, HAND TIGHT JOINT, MANUF. BY HANOVER ARCH. PRODUCTS
- REFER TO PLAN FOR LAYOUT, LOCATION AND PAVING PATTERN.
- PAVERS TO BE LAID ON A 1" LEVELING BED, ALL PAVERS TO BE INSTALLED AS PER MANUF. SPECS., JOINTS NOT TO EXCEED 1/8", TAMP ALL PAVERS UNTIL FREE OF MOVEMENT, UNIFORMLY LEVEL + TRUE TO GRADE, SWEEP FINE SAND IN JOINTS

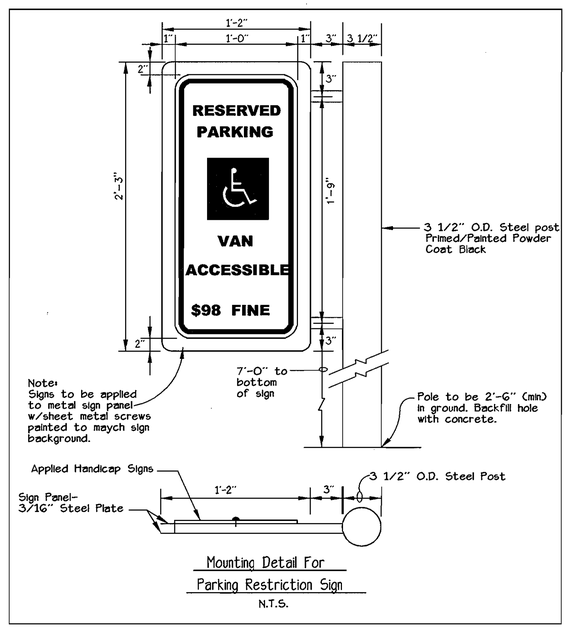
CONCRETE PAVERS ON AGGREGATE BASE
NTS



Post + Sign Panel Detail For Parking Restriction Sign
N.T.S.



Mounting Detail For Parking Restriction Sign
N.T.S.



Mounting Detail For Parking Restriction Sign
N.T.S.

APPROVED
PLANNING BOARD
of HOWARD COUNTY.
DATE 07/25/02

APPROVED: FOR PUBLIC WATER + SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT
County Health Officer — Date 9/5/02

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING
Director — Date 9/9/02
Chief, Division of Land Development — Date 9/6/02
Chief, Development Engineering Division MK — Date 9/29/02

Owner:
Red Robin Int. Inc.
6312 S. Fiddlers Green Circle
200 N
Greenwood Village, CO 80111
303-846-6000

DATE	REVISION	BY	APP'R.
6.4.03	Rev. Handicap Access Detail & owner Info.	WSJ	

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

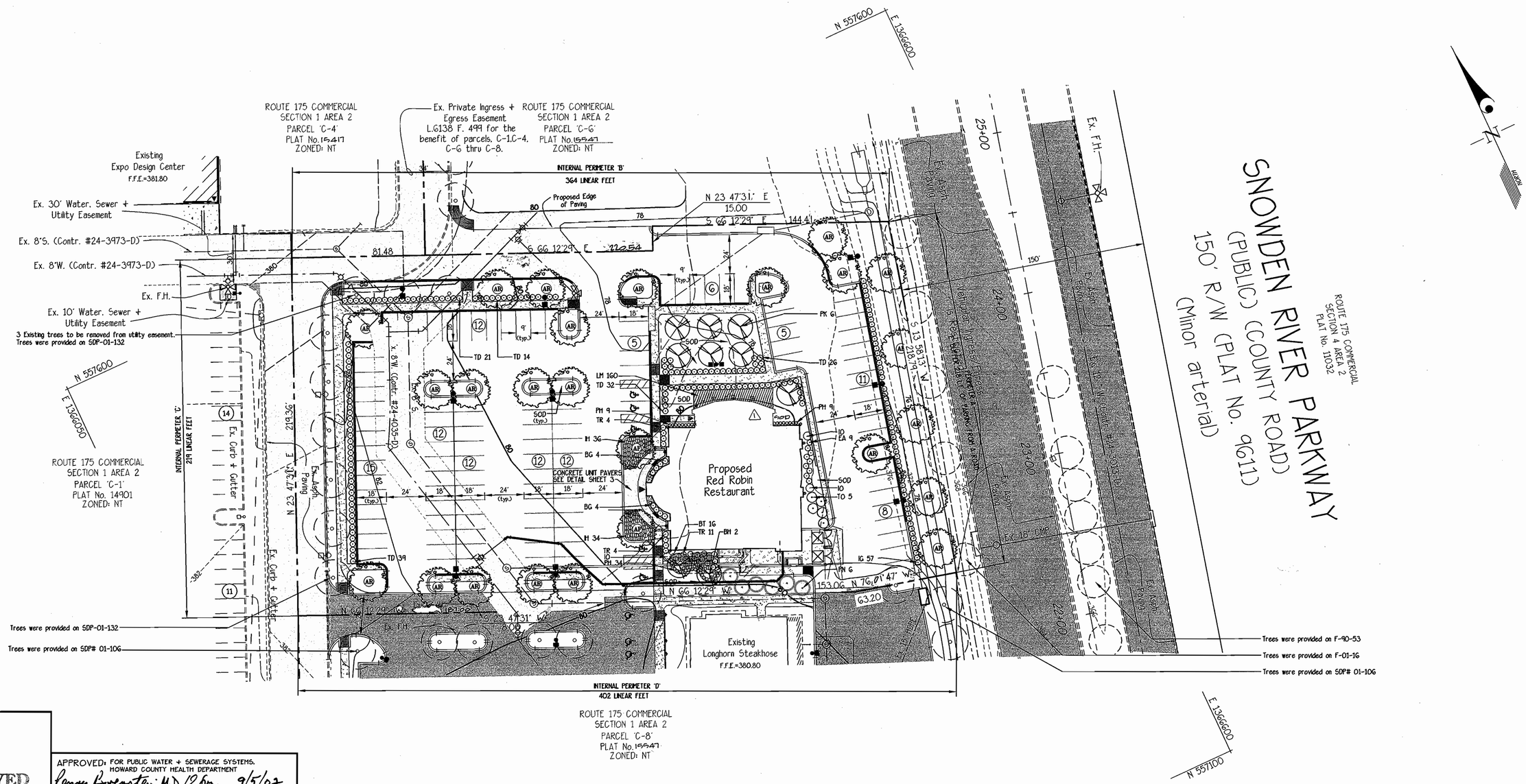
Drawings\02069\Design\02069SP3.Dwg | DES. | DRN. WSJ | CHK.

PREPARED FOR:
THE HOWARD RESEARCH & DEVELOPMENT CORP.
THE ROUSE BUILDING
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044
ATTN: PAUL CAVENAUGH
TELE: (410) 996-6284

SITE/HANDICAP ACCESSIBILITY DETAILS
ROUTE 175 COMMERCIAL
PARCEL 'C-7'
SECTION 1 AREA 2
PLAT No. 15547
ELECTION DISTRICT No. 6
HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT	02069
DATE	TAX MAP - GRID	SHEET
JULY, 7 2002	36-18/37-13	3 OF 9

SDP 02-142



APPROVED
PLANNING BOARD
of HOWARD COUNTY.
DATE 07/25/02

APPROVED: FOR PUBLIC WATER + SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT
Penny Rosenstein M.D. 9/5/02
County Health Officer MR Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING
Director 9/9/02 Date
Cindy Hewitt 9/6/02
Chief, Division of Land Development Date
9/3/02
Chief, Development Engineering Division MK Date

STATE OF MARYLAND MICHAEL JAMES TRAPP No. 14938 REGISTERED PROFESSIONAL ENGINEER

Michael J. Trapp

△ Owner:
Red Robin Int. Inc.
6312 S. Fiddlers Green Circle #200 N
Greenwood Village, CO 80111
non-846-6000

THIS PLAN IS FOR LANDSCAPE PURPOSES ONLY.

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

Drawings\02069\Design\02069SP4.Dwg | DES. | DRN. WSJ | CHK.

DATE	REVISION	BY	APP'R.
6.4.09	Rev: Bldg. to enclose Patio + owner info. △	GT	

PREPARED FOR:
THE HOWARD RESEARCH & DEVELOPMENT CORP.
THE ROUSE BUILDING
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044
ATTN: PAUL CAVENAUGH
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LANDSCAPE PLAN
ROUTE 175 COMMERCIAL
PARCEL 'C-7'
SECTION 1 AREA 2
PLAT No. 15547
ELECTION DISTRICT No. 6 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=30'	NT	02069
DATE	TAX MAP – GRID	SHEET
JULY, 7 2002	36-18/37-13	4 OF 9

SDP 02-142

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 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 % 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".

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.

LANDSCAPING NOTES

1. 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.
2. Contractor shall notify all utilities at least (5) five days before starting work. All General Notes, especially those regarding utilities, on Sheet 1 shall apply.
3. Field verify underground utility locations and existing conditions before starting planting work. Contact engineer / landscape architect if any relocation's are required.
4. Plant quantities shown on Plant List are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on the plan and those shown on the plant list, the quantities on the plan shall take precedence.
5. All plant material shall be full, heavy, well formed, and symmetrical, and conform to the A.A.N. Specifications, and be installed in accordance with project specifications.
6. No substitution shall be made without written consent of the owner or his representative.
7. All areas disturbed by construction activities but not otherwise planted, paved, or mulched shall be seeded or sodded in accordance with the project specifications.
8. The contractor shall notify the owner in writing if he/she encounters soil drainage conditions which may be detrimental to the growth of the plants.
9. All exposed earth within limits of planting beds shall be mulched with shredded hardwood mulch per Planting Details.
10. Financial surety for the required landscaping per schedule A and B shall be posted with the grading permit in the amount of $4,950.00
11. Tabulation for landscape shown:
Required planting by HRD for 1.90 acre of office combined at 20 trees/acre = 38 trees

Planting provided:		
Shade Trees	31	
Ornamental Trees	10 = 5	E.S.T. 1 SHADE AT 2:1
Evergreen Trees	14 = 7	E.S.T. 1 SHADE AT 2:1
Shrubs provided:	311 = 31	E.S.T. 1 SHADE AT 10:1

Total E.S.T. = 86
*E.S.T., or Equivalent Shade Tree

12. 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.

PLANT LIST

SYMBOL	QTY.	NAMES (BOTANICAL / SCIENTIFIC)	SIZE
TREES			
AF	2	Acer x fremanii 'Armstrong' Armstrong Maple	2 1/2"-3" Cal. B+B 7' min. branching ht
AR	23	Acer rubrum 'October Sunset' October Sunset Red Maple	2 1/2"-3" Cal. B+B 7' min. branching ht
BH	3	Betula nigra 'Heritage' Heritage River Birch	12-14' in height
IO	3	Ilex x 'Oakleaf' Oakleaf Holly	6' in height
PK	7	Prunus serrulata 'Kwanzaan' Kwanzaan Cherry	2 1/2"-3" Cal. B+B 7' min. branching ht
PN	6	Pinus nigra Austrian Pine	10'-12' in height
TO	5	Thuja occidentalis 'Emerald Green' Emerald Green Arborvitae	7-8' in height, B+B
SHRUBS			
BG	8	Buxus x 'Green Mountain' Green Mountain Boxwood	24"-30" in Ht. B+B
BT	16	Berberis thunbergii var atropurpurea Crimson Pygmy Barberry	24"-30" in Ht. B+B
EA	9	Euonymus alata 'Compacta' Compact Burning Bush	24"-30" in Ht. B+B
IG	57	Ilex glomerata Inkberry	24"-30" in Ht. B+B
IH	70	Ilex 'Helleri' Helleri Holly	24"-30" in Ht. B+B
TD	132	Taxus x media 'Densiformis' Intermediate Yew	24"-30" in Ht. B+B
TR	19	Taxus baccata 'Repandens' Spreading English Yew	24"-30" in Ht. B+B
HERBACEOUS PLANTS			
LM	160	Liriope muscari 'Big Blue' Big Blue Lillyturf	1 Gal. Cont.
PH	52	Pennisetum alopecuroides 'Hameln' Dwarf Pennisetum	1 Gal. Cont.

PLANT QUANTITIES ARE TO BE CONFIRMED BY THE LANDSCAPE CONTRACTOR.

SCHEDULE A PERIMETER LANDSCAPE EDGE Category	PERIMETER #A	PERIMETER #B	PERIMETER #C	PERIMETER #D
	buffer Parking from Roadway	Internal Perim.	Internal Perim.	Internal Perim.
Landscape Buffer Type	E	N/A	N/A	N/A
Linear Feet of Roadway/ Perimeter Frontage	218'	364'	219'	402'
Credit for Ex. Vegetation (Yes, No, Linear Feet) (describe below if needed)	NO	N/A	N/A	N/A
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (describe below if needed)	No	No	No	No
Number of Plants Required Shade Trees Evergreen Trees Shrubs	 5 0 55	N/A	N/A	N/A
Number of Plants Provided Shade Trees Evergreen Trees Other Trees (2:1 subst.) Shrubs (10:1 subst.) (describe plont substitution credits below if needed)	 5 0 0 57	 0 0 0 0	 0 0 0 0	 0 0 0 0

Bond Requirement - Surety for Schedule A:
Schedule 'A' Number of Shade Trees for bonding: 5 x $300 = $ 1,500.00
Schedule 'A' Number of Evergreen Trees for bonding: 0 x $150 = $ 0.00
Schedule 'A' Number of Shrubs for bonding: 55 x $30 = $ 1,650.00

Schedule 'B' Number of required Shade Trees for bonding: 6 x$300 = $1,800.00
TOTAL Estimate for Surety: $4,950.00
COMMENTS:

SCHEDULE B
PARKING LOT INTERNAL LANDSCAPING

Number of Parking Spaces = 115 Spaces (Provided)

Number of Trees Required = 6 Trees * 1 per 20 spaces

Number of Trees Provided Shade Trees 13
Other Trees (2:1 substitution)
NOTE: Number of parking islands required: 1 island per 20 spaces. 6 islands required.
Number of parking islands provided: 15 islands provided.

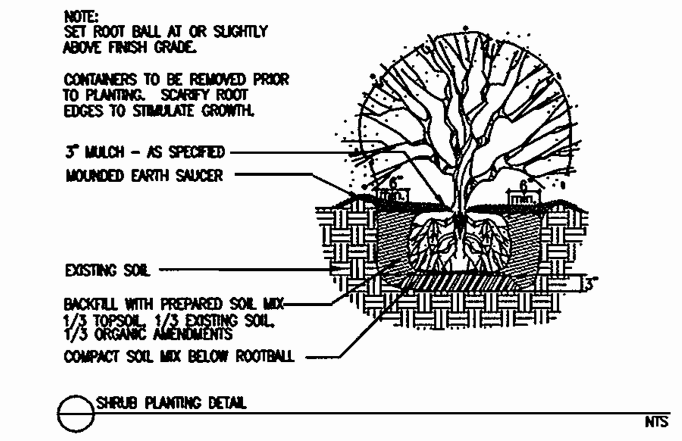
Schedule 'B' Number of required Shade Trees for bonding: 6 x $300 = $1,800.00

DEVELOPER'S / BUILDER'S CERTIFICATE

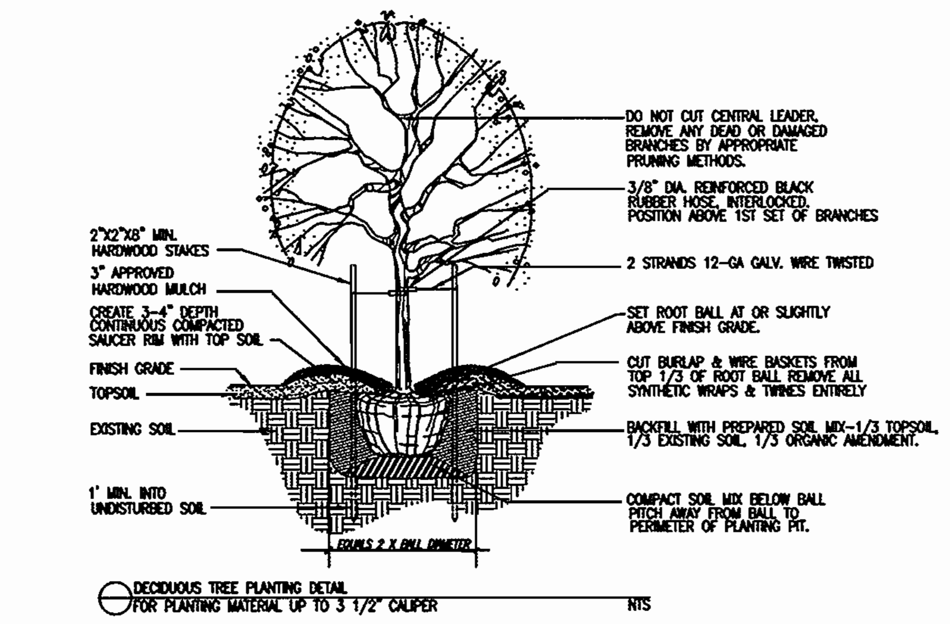
I/We certify that the landscaping shown on this plan will be done according to the plan, Section 16.124 of the Howard County Code and the Howard County Landscape manual. I/We further cerify that upon completion a Certification of Landscape Installation, accompanies by an executed one-year guarantee of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

CHARLES DUSENBERRY (signature) 8/2/02
Name (Developer's /Builder's) Date

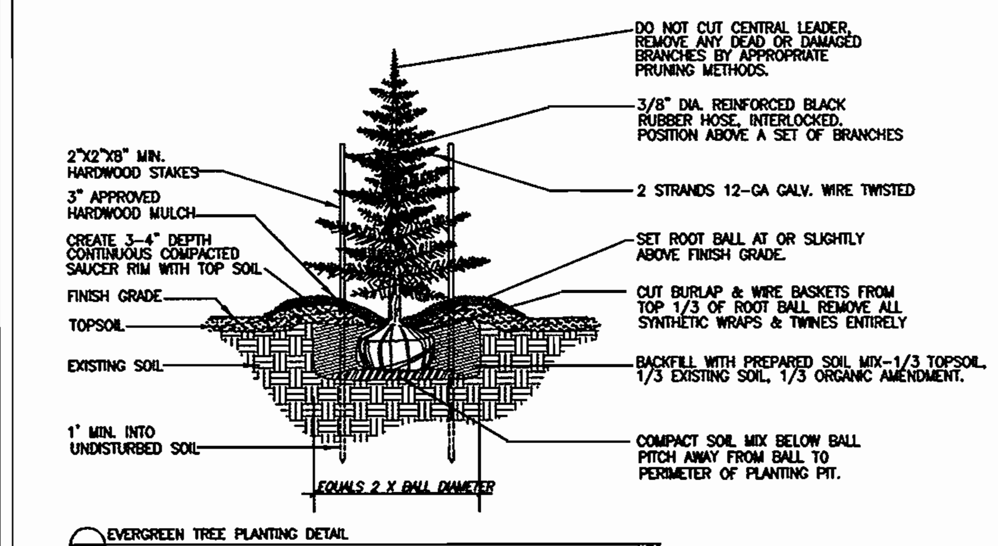
Financial surety for the required landscaping has been posted in the amount of $4,950.00.



SHRUB PLANTING DETAIL NTS



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



EVERGREEN TREE PLANTING DETAIL NTS

⚠ Owner:
Red Robin International Inc.
6312 Fiddlers Green Circle
#200N
Greenwood Village, CO 80111
303-846-6000

⚠

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 07/25/02

APPROVED: FOR PUBLIC WATER + SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT
(signature) M.D. 9/5/02
County Health Officer MK Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING
(signature) 9/9/02
Director Date
(signature) 9/6/02
Chief, Division of Land Development Date
(signature) 8/29/02
Chief, Development Engineering Division MK Date

STATE OF MARYLAND — MICHAEL JAMES TRAPP — No. 14931 — REGISTERED PROFESSIONAL ENGINEER

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

Drawings\02069\Design\02069SP5.Dwg | DES. | DRN. WsJ | CHK.

DATE	REVISION	BY	APP'R.
6.4.07	Rev. owner info. ⚠	WSJ	

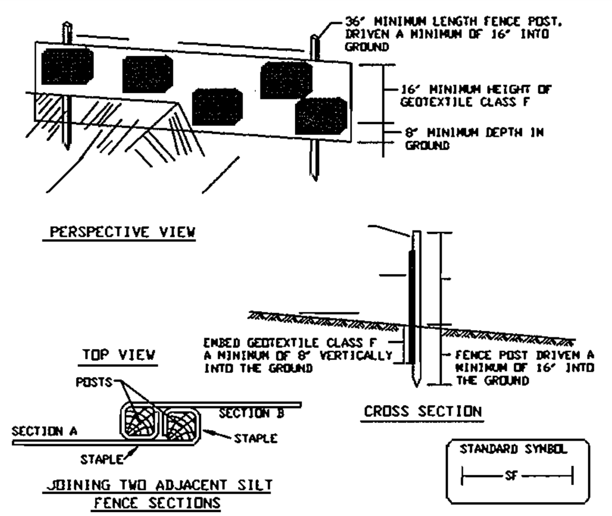
PREPARED FOR :
THE HOWARD RESEARCH & DEVELOPMENT CORP.
THE ROUSE BUILDING
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044
ATTN: PAUL CAVENAUGH
TELE: (410) 996-6284

LANDSCAPE DETAIL SHEET
ROUTE 175 COMMERCIAL
PARCEL 'C-7'
SECTION 1 AREA 2
PLAT No. 15547
ELECTION DISTRICT No. 6 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
NTS	NT	02069
DATE	TAX MAP - GRID	SHEET
MAY, 2002	36-18/37-13	5 OF 9

SDP 02-142

DETAIL 22 - SILT FENCE



Construction Specifications

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

2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

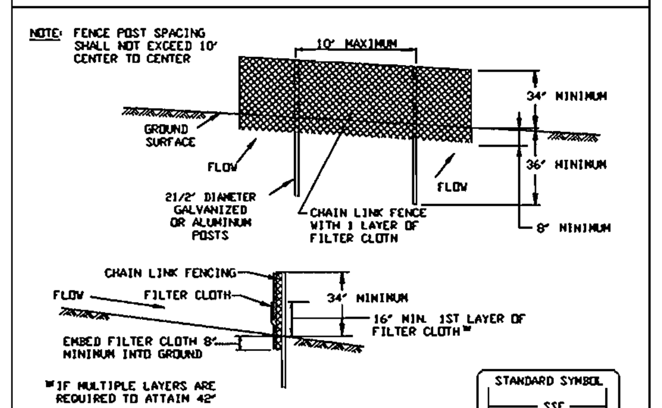
Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal ft²/ minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.

4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 15 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 33 - SUPER SILT FENCE



Construction Specifications

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

2. Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.

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

4. Filter cloth shall be embedded a minimum of 8" into the ground.

5. When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.

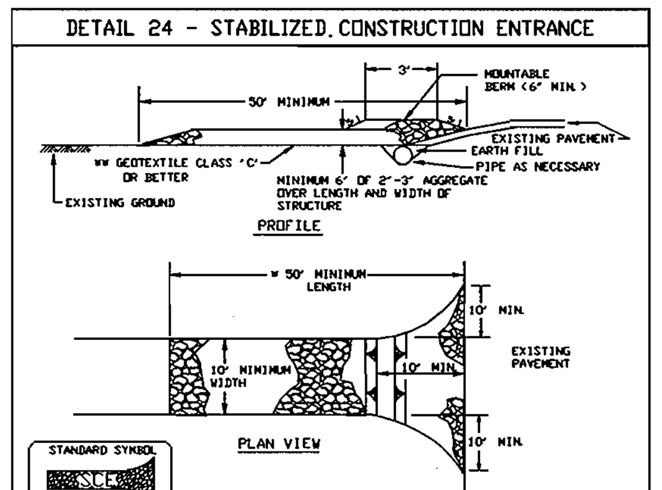
6. Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height

7. Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:

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

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

DETAIL 24 - STABILIZED. CONSTRUCTION ENTRANCE



Construction Specification

1. Length - minimum of 50' (*30' for single residence lot).

2. Width - 10' minimum, should be flared at the existing road to provide a turning radius.

3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family residences to use geotextile.

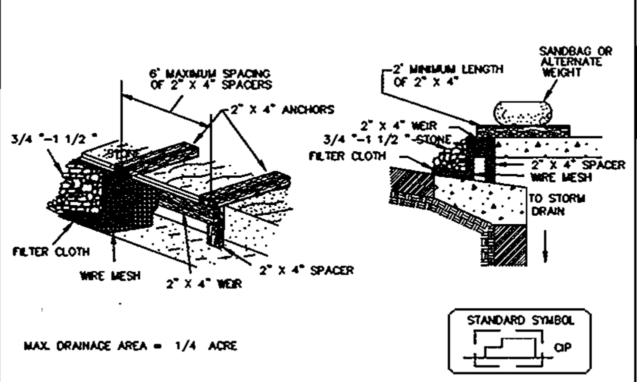
4. Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.

5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.

6. Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE F - 17 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 23C - CURB INLET PROTECTION (COG OR COS INLETS)



MAX. DRAINAGE AREA = 1/4 ACRE

Construction Specifications

1. Attach a continuous piece of wire mesh (30" minimum width by throat length plus 4') to the 2" x 4" weir (measuring throat length plus 2') as shown on the standard drawing.

2. Place a continuous piece of Geotextile Class E the same dimensions as the wire mesh over the wire mesh and securely attach it to the 2" x 4" weir.

3. Securely nail the 2" X 4" weir to a 9" long vertical spacer to be located between the weir and the inlet face (max. 4' apart).

4. Place the assembly against the inlet throat and nail (minimum 2' lengths of 2" x 4" to the top of the weir at spacer locations). These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.

5. The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening.

6. Form the 1/2 " x 1/2 " wire mesh and the geotextile fabric to the concrete gutter and against the face of the curb on both sides of the inlet. Place clean 3/4 " x 1 1/2 " stone over the wire mesh and geotextile in such a manner to prevent water from entering the inlet under or around the geotextile.

7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.

8. Assure that storm flow does not bypass the inlet by installing a temporary earth or asphalt dike to direct the flow to the inlet.

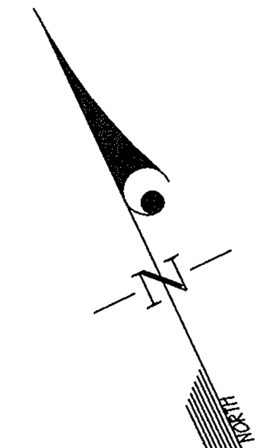
U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 16 - 5B	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

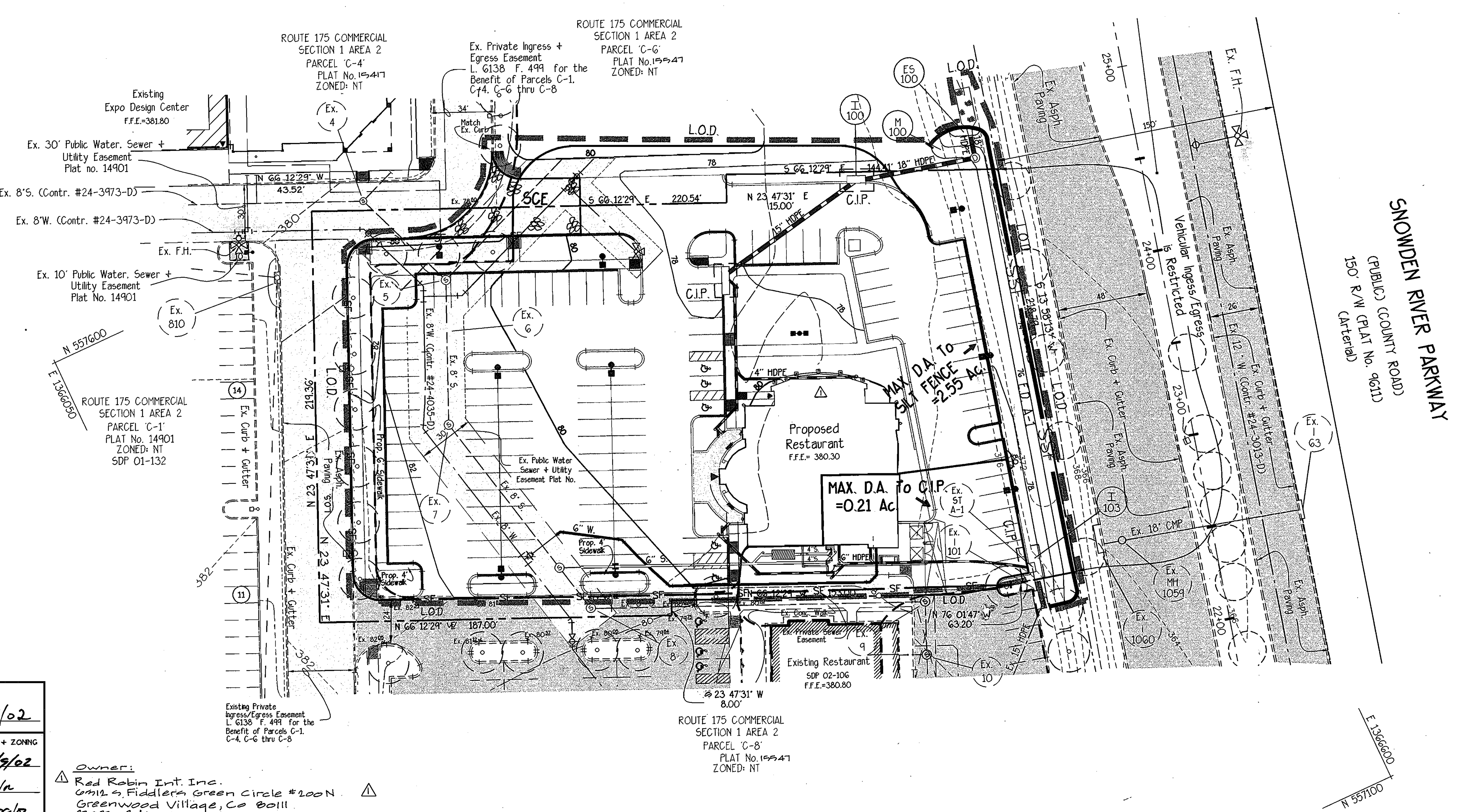
Sequence of Construction

1. Obtain permits and arrange for pre-construction meeting with the Sediment Control Inspector (1 day);
2. Install stabilized construction entrance and perimeter silt fence and super silt fence. (1 week);
3. Grade site (3 weeks):
4. Construct building (4 months);
5. Install utilities. Install storm drain. (1month);
6. Install curb and gutter, sidewalks and base pave. Stabilize areas with grass seed and mulch (1 month);
7. When permission has been granted by the sediment Control Inspector and all areas draining to the sediment controls have been stabilized. Remove sediment controls and install landscaping. (2 weeks);
8. Install surface course paving and parking lot striping (1 week).

LEGEND

- PROPOSED DRAINAGE DIVIDE
- EXISTING DRAINAGE DIVIDE
- LOD — LIMIT OF DISTURBANCE
- SF — SILT FENCE
- SSF — SUPER SILT FENCE
- SCE — STABILIZED CONSTRUCTION ENTRANCE
- C.I.P. INLET PROTECTION





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] 8/2/02
Signature of Developer/Builder — Date
Charles Ebenberry

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

[signature] — 8/27/02
Howard S.C.D. — Date

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

[signature] — 8/27/02
Natural Resources Conservation Service — 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."

Michael J. Trapp 8/16/02
Date

STATE OF MARYLAND — MICHAEL JAMES TRAPP — No. 14931 — REGISTERED PROFESSIONAL ENGINEER

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 07/25/02

APPROVED: FOR PUBLIC WATER + SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT
[signature] M.D. — 9/5/02
County Health Officer — Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING
[signature] — 9/9/02
Director — Date
[signature] — 9/6/02
Chief, Division of Land Development — Date
[signature] — 8/29/02
Chief, Development Engineering Division MK — Date

Owner:
Red Robin Int. Inc.
6312 S. Fiddlers Green Circle #200N
Greenwood Village, Co 80111
303-846-6000

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

Drawings\02069\Design\02069SP6.Dwg	DES.	DRN. WsJ	CHK.

DATE	REVISION	BY	APP'R.
6.4.09	Rev. Bldg. to enclose Patio + owner info	WsJ	

PREPARED FOR :
THE HOWARD RESEARCH & DEVELOPMENT CORP.
THE ROUSE BUILDING
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044
ATTN: PAUL CAVENAUGH
TELE: (410) 996-6284

SEDIMENT CONTROL PLAN

ROUTE 175 COMMERCIAL

PARCEL 'C-7'
SECTION 1 AREA 2
PLAT No. 15547

ELECTION DISTRICT No. 6 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=30'	NT	02069
DATE	TAX MAP - GRID	SHEET
MAY, 2002	36-18/37-13	6 OF 9

SDP 02-142

GEOTECHNICAL
5.0 CONCLUSIONS AND RECOMMENDATIONS *

The conditions imposed by the proposed development have been evaluated on the basis of the assumed floor elevation of the building, the engineering characteristics of the subsurface materials encountered in the borings and the anticipated soil behavior both during and after construction. The conclusions and recommendations for foundation and floor slab design along with site development recommendations and considerations are discussed in the following sections of this report.

The proposed site contains some soil and foundation oriented problems especially wi respect to the moisture and disturbance sensitive soils and existing fill. The design recommendatio presented in this report are therefore predicated upon all foundation and floor slab constructic rocedures being observed and tested by a representative of our firm.

5.1 Limited Volatile Organic Compound Vapor Scan

The soil samples recovered from the test borings did not exhibit odors or discoloration which would be indicative of volatile organic compound (VOC) content. In addition, the results the vapor scan conducted on each of the recovered soil samples, using a Photoionization Detect (PID), did not indicate the presence of any detectable levels of volatile organic compound vapo within the head space of the soil sample containers. The results of the PID vapor scan are shown c the Test Boring Logs, enclosed in Appendix B, and the procedure used for the PID vapor scan discussed in Appendix D.

5.2 Site Development Recommendations

The site development recommendations provided in the following subsections were develope based upon the subsurface conditions at the boring locations and the site conditions during drillin Therefore, specific site preparation operations will depend upon the weather and soil conditio during construction. Bids for site preparation should be based upon the time of year that constructic will be conducted.

Site Stripping

Site preparation will require removal of any surface vegetation, and organic soils or oth deleterious materials. About 1 inch of rootmat was present in the test borings. Removal thicknesse however, may vary between boring locations in unexplored areas of the site. Actual removal deptl should not be based solely on soil coloration and should be determined by a representative of our fir at the time of grading, based on the subgrade materials' organic content and stability.

Undercutting/Stabilization

Dry Weather Conditions: If earthwork (site stripping/grading) activities are performed durin dry weather, extensive overexcavation or subgrade stabilization is not expected to be necessa beyond that noted above, provided that the subgrade is not exposed to excessive disturbance fro construction traffic. Areas of overexcavation should also be expected, however, due to existing fi and construction traffic disturbance.

Wet Weather Conditions: If earthwork proceeds during a generally wet construction period typically associated with early spring, late fall and winter construction and the moisture and disturbance sensitive soils increase in moisture content, they will become unstable. It is expected that an additional 12 to 18-inch-thick layer of surface soil (and possibly more in localized areas) will need to be removed and replaced with structural compacted fill or other stabilization methods used to develop a stable subgrade during wet conditions. This estimated overexcavation depth is based upon the moisture sensitivity of the soils encountered in the test borings and the assumed effect during a wet-weather grading period. If recompaction or undercutting is necessary, it should be confirmed through continuous observation and testing by a representative of our firm. Based on the soils encountered in the test borings, unstable soils are recommended to be dried and recompacted (if feasible), or removed to a suitable bearing subgrade and replaced with structural compacted fill, or mechanically stabilized with a coarse crushed aggregate compacted into the subgrade (possibly placed with a geotextile or geogrid), or chemically modified, such as with hydrated lime or Portland Cement, depending on soil type, and recompacted. The actual stabilization method(s) used should be decided by a representative of our firm, after consultation with the owner, based on the conditions during construction.

Proofroll, Scarify and Compact Subgrade

The stripped subgrade within the development areas should be proofrolled with heavy rubber-tired construction equipment, such as a fully-loaded tandem-axle dump truck, (approved by and in the presence of a representative of our firm) to detect soft, very loose, yielding soils which should be removed to a stable subgrade. The suitability of the soils within the foundation influence zone should be determined as noted in the Foundation Design Parameters section of this report. The subgrade should then be scarified to a depth of at least 8 inches, adjusted in moisture content as needed, and recompacted to the required density. Low areas and excavations may then be raised to the planned finished grade with structural compacted fill. Site preparation and selection, placement, and compaction of structural fill should be performed under engineering controlled conditions in accordance with the project specifications (approved by the geotechnical engineer). We recommend the Guide Specifications (Standard Proctor procedures) enclosed in Appendix E be used as a guideline for preparing the project specifications.

Subgrade Protection

The silty and clayey soils encountered in the test borings are considered to be moisture and disturbance sensitive, and will become unstable if disturbed (rutted) by construction traffic. The cohesionless soils are also disturbance sensitive, susceptible to caving and erodible in the presence of flowing water. The site should be graded in anticipation of wet weather to help prevent water from ponding within construction areas and/or flowing into excavations. Accumulated water must be removed immediately along with unstable soil. Foundation concrete should be placed and excavations backfilled as soon as possible after the concrete has cured to protect the bearing grade. The subgrade may become unstable after initial preparation and compaction over time due to construction traffic disturbance and weather deterioration of the soil stability. Restabilization immediately prior to floor and pavement construction may therefore be required and should be anticipated, particularly if site preparation is performed during unfavorable weather conditions, or if the subgrade is subjected to excessive construction traffic. The severity of construction problems will be dependent, in part, on the precautions that are taken by the contractors to protect the moisture and disturbance sensitive soil and the weather conditions during construction.

Reuse of On-Site Soil

On-site soil may be reused as structural fill for foundation and floor slab support, provided the soil does not contain significant organic content, oversized material as noted in Item No. 4 of the Guide Specifications or other deleterious materials. The soils must be placed and compacted at a moisture content that is within a relatively narrow range (as noted in Item No. 5 of the enclosed Guide Specifications) of the materials' optimum moisture content determined by Standard Proctor (ASTM D-698) procedures for proper compaction. Recompaction problems should be expected in wet weather due to the moisture sensitivity of the silty and clayey soils. Some drying of on-site soils is expected to be needed due to the relatively high moisture contents of the collected soil samples. The soils should not be compacted too dry, however, since they will likely use their apparent stability if they later become wet. Use of a less moisture sensitive imported granular material during wet conditions may be needed to reduce compaction difficulties, especially if sufficient drying weather is not available to allow use of on-site soils.

Excavation

Clayey sand soils were encountered in the test borings. Therefore, some excavation bank stability problems are expected to occur. Relatively flat slopes, benching or temporary bracing may be needed. The degree of excavation instability problems is dependent upon the depth of excavation, length of time that excavations remain open, excavation bank slopes, water levels and the suitability of any dewatering systems, if needed. Site and excavation safety is the responsibility of the contractors. Excavations should be performed in accordance with local, state and federal (OSHA) regulations for safety.

Information taken from a report by Giles Engineering Associates, Inc. titled " Geotechnical Engineering Exploration + Analysis, Proposed Red Robbin Restaurant, Columbia, Maryland " dated April 19,2002.

SEDIMENT CONTROL NOTES

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

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

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

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

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

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

7. Site Analysis:

Total Area of Site	:	1.95	Acres
Area Disturbed	:	1.97	Acres
Area to be roofed or paved	:	1.34	Acres
Area to be vegetatively stabilized	:	0.63	Acres
Total Cut	:	2,000	Cu. Yds.
Total Fill	:	2,000	Cu. Yds.
Off-site waste/borrow area location:		N/A	

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

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

10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.

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

NOTE: TOTAL CUT AND FILL QUANTITIES ARE FOR PLAN PURPOSES ONLY. CONTRACTOR IS RESPONSIBLE FOR DETERMINING EARTHWORK AT TIME OF CONTRACT

PERMANENT SEEDING NOTES

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

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

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

1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 square feet) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 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 small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

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

TEMPORARY SEEDING NOTES

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

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

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

Seeding: For periods March 1 thru April 30 and from August 15 thru October 15, seed with 2-1/2 bushel per acre of annual rye (3.2 lbs./1000 sq.ft.). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.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.

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

I. This practice is limited to areas having 2:1 or flatter slopes where:
   a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
   b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplied of moisture and plant nutrients.
   c. The original soil to be vegetated contains material toxic to plant growth.
   d. The soil is so acidic that treatment with limestone is not feasible.

II. For the purpose 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 shown on the plans.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

I. Topsoil salvaged from the existing site may be used provided that it meets the standards as 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-SCS in cooperation with Maryland Agricultural Experimental Station.
   i. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by a 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 cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2" in diameter.
   ii. Topsoil must be free of plant parts such as bermuda grass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistle, or others as specified.
   iii. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate if 4-8 tons/acre (200-400 pounds per 1,000 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.

II. For sites having disturbed areas under 5 acres:
   i. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.

III. For sites having disturbed areas over 5 acres:
   i. On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
      a. pH for topsoil shall be between 6.0 and 7.5. If

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE 07/25/02

APPROVED: FOR PUBLIC WATER + SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT
Penny Borenstein M.D. — County Health Officer — Date 9/5/02

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING
Director — Date 9/9/02
Chief, Division of Land Development — Date 9/6/02
Chief, Development Engineering Division MK — Date 8/29/02

Owner:
Red Robin International Inc.
6312 S. Fiddlers Green Circle
200 N
Greenwood Village, CO 80111
303-846-6000

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 — Charles Dusenberry — Date 8/2/02

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."

Michael J. Trapper — Date 8/16/02

STATE OF MARYLAND — MICHAEL JAMES TRAPPER — No. 14931 — REGISTERED PROFESSIONAL ENGINEER

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

Natural Resources Conservation Service — Date 8/27/02

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

Howard S.C.D. — Date 8/27/02

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

Drawings\02069\Design\02069SP7.Dwg | DES. | DRN. WsJ | CHK.

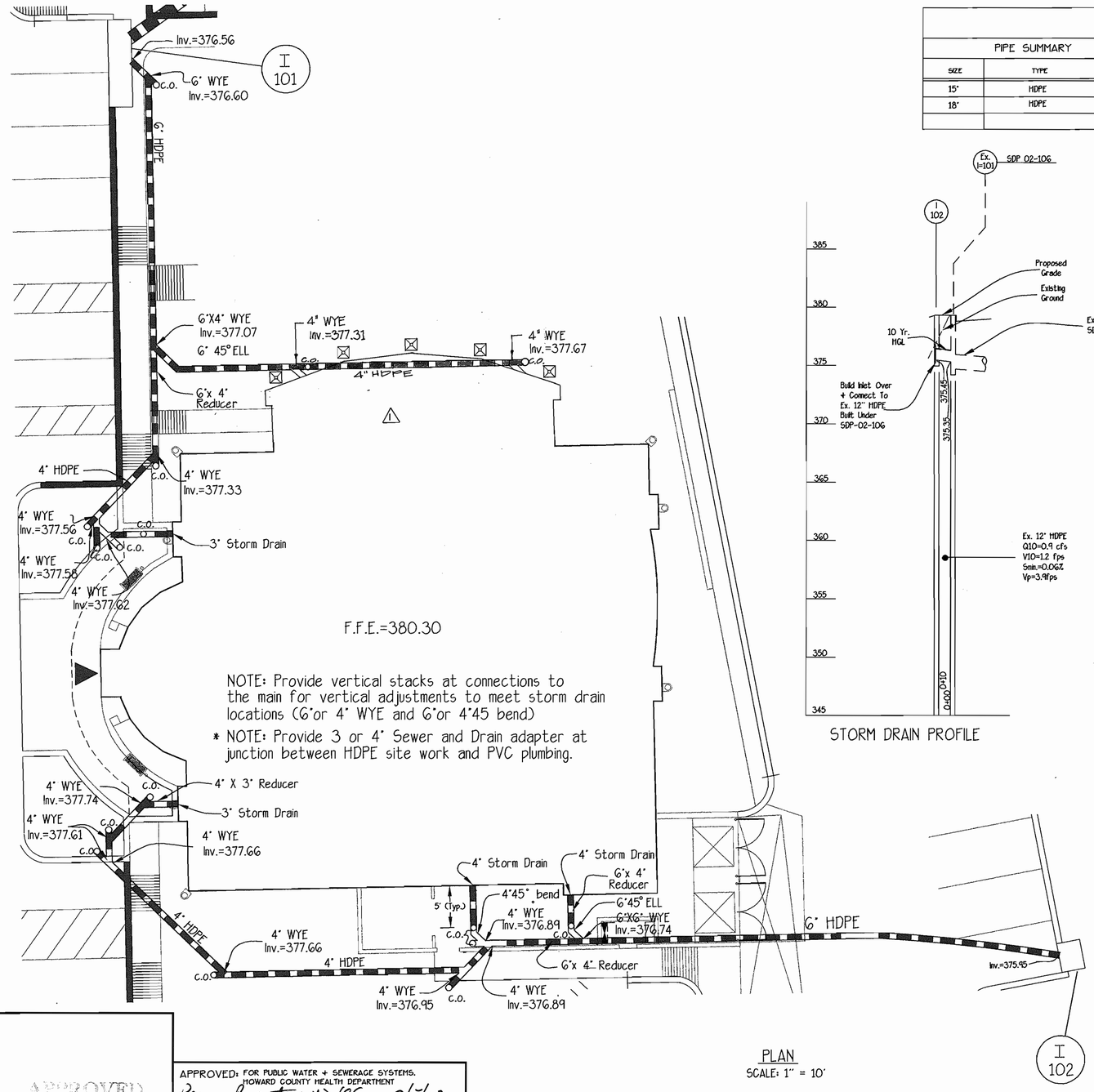
DATE	REVISION	BY	APP'R.
6.4.09	Rev. Owner Info. 1	WSJ	

PREPARED FOR :
THE HOWARD RESEARCH & DEVELOPMENT CORP.
THE ROUSE BUILDING
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044
ATTN: PAUL CAVENAUGH
TELE: (410) 996-6284

SEDIMENT CONTROL NOTES
ROUTE 175 COMMERCIAL
PARCEL 'C-7'
SECTION 1 AREA 2
PLAT No. 15547
ELECTION DISTRICT No. 6 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
NTS	NT	02069
DATE	TAX MAP - GRID	SHEET
MAY, 2002	36-18/37-13	7 OF 9

SDP 02-142

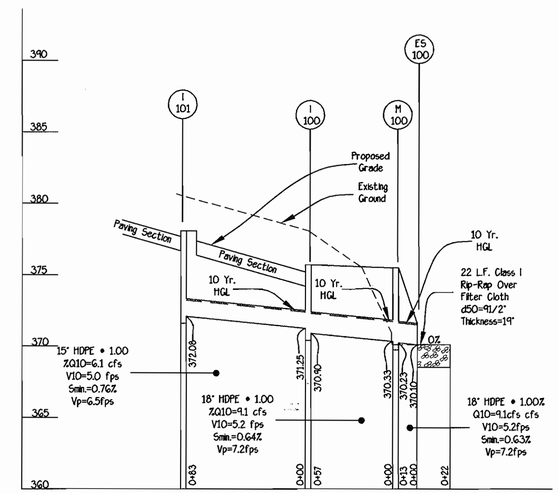


PLAN
SCALE: 1" = 10'

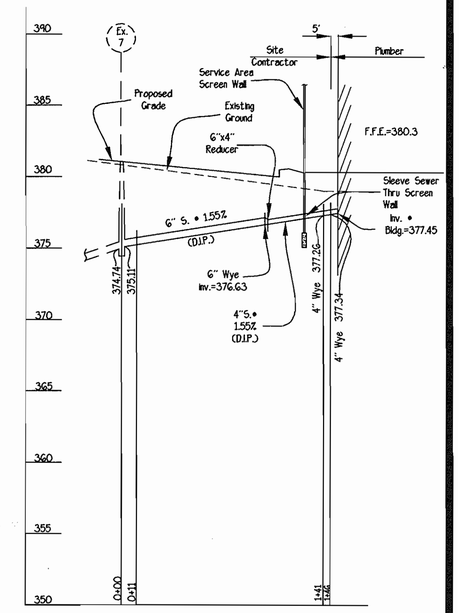
PIPE SUMMARY		
SIZE	TYPE	LENGTH
15"	HDPE	83'
18"	HDPE	70'

STRUCTURE SCHEDULE									
NO	TYPE	WIDTH (INSIDE)	TOP ELEVATION UPPER	TOP ELEVATION LOWER	INVERT ELEVATION UPPER	INVERT ELEVATION LOWER	STD. DETAIL	LOCATIONS	REMARKS
I 100	A-10 Inlet	3'-0"	375.72		370.33	370.23	S.D. 4.41	See Plan	
I 101	COS A-15 Inlet	4'-0"	378.06		—	372.08	MD-374.63	See Plan	
I 102	A-5 Inlet	2'-6"	379.29		—	375.45	S.D. 4.40	See Plan	
M 100	Manhole	48" Dia.	375.50		370.33	370.23	G 5.12	See Plan	

STORM DRAIN PROFILE

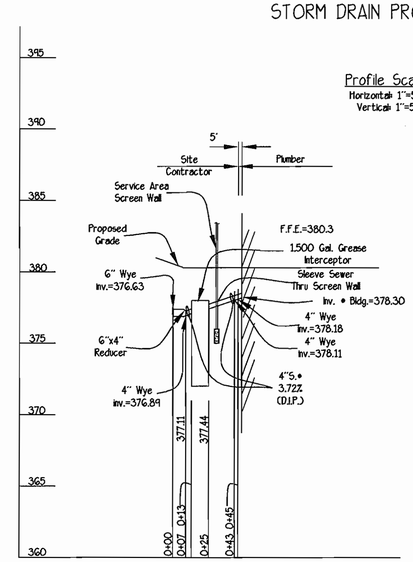


STORM DRAIN PROFILE

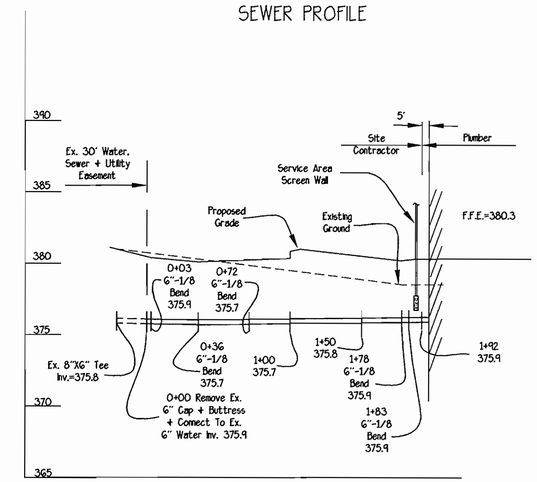


SEWER PROFILE

Profile Scales:
Horizontal: 1"=50'
Vertical: 1"=5'



SEWER PROFILE



WATER PROFILE

APPROVED
HOWARD COUNTY BOARD OF EDUCATION
07/25/02

APPROVED: FOR PUBLIC WATER + SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT
Penny Bernstein M.D. MK 9/5/02
County Health Officer Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING
Director 9/9/02 Date
Chief, Division of Land Development 9/6/02 Date
Chief, Development Engineering Division MK 9/3/02 Date

Owner:
Red Robin Int. Inc.
4912 S. Fiddlers Green Circle #200 N
Greenwood Village, Co. 80111
303-846-6000

STATE OF MARYLAND MICHAEL JAMES TRAINOR No. 14292 REGISTERED PROFESSIONAL ENGINEER

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
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Drawings\02069\Design\02069SP8.Dwg | DES. | DRN. WSJ | CHK.

DATE	REVISION	BY	APP'R.
6.4.09	Rev. Bldg. to enclose Patio + Owner info. ⚠1	WSJ	

PREPARED FOR:
THE HOWARD RESEARCH & DEVELOPMENT CORP.
THE ROUSE BUILDING
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044
ATTN: PAUL CAVENAUGH
TELE: (410) 996-6284

UTILITY PROFILES & STORM DRAIN MANIFOLD DETAIL

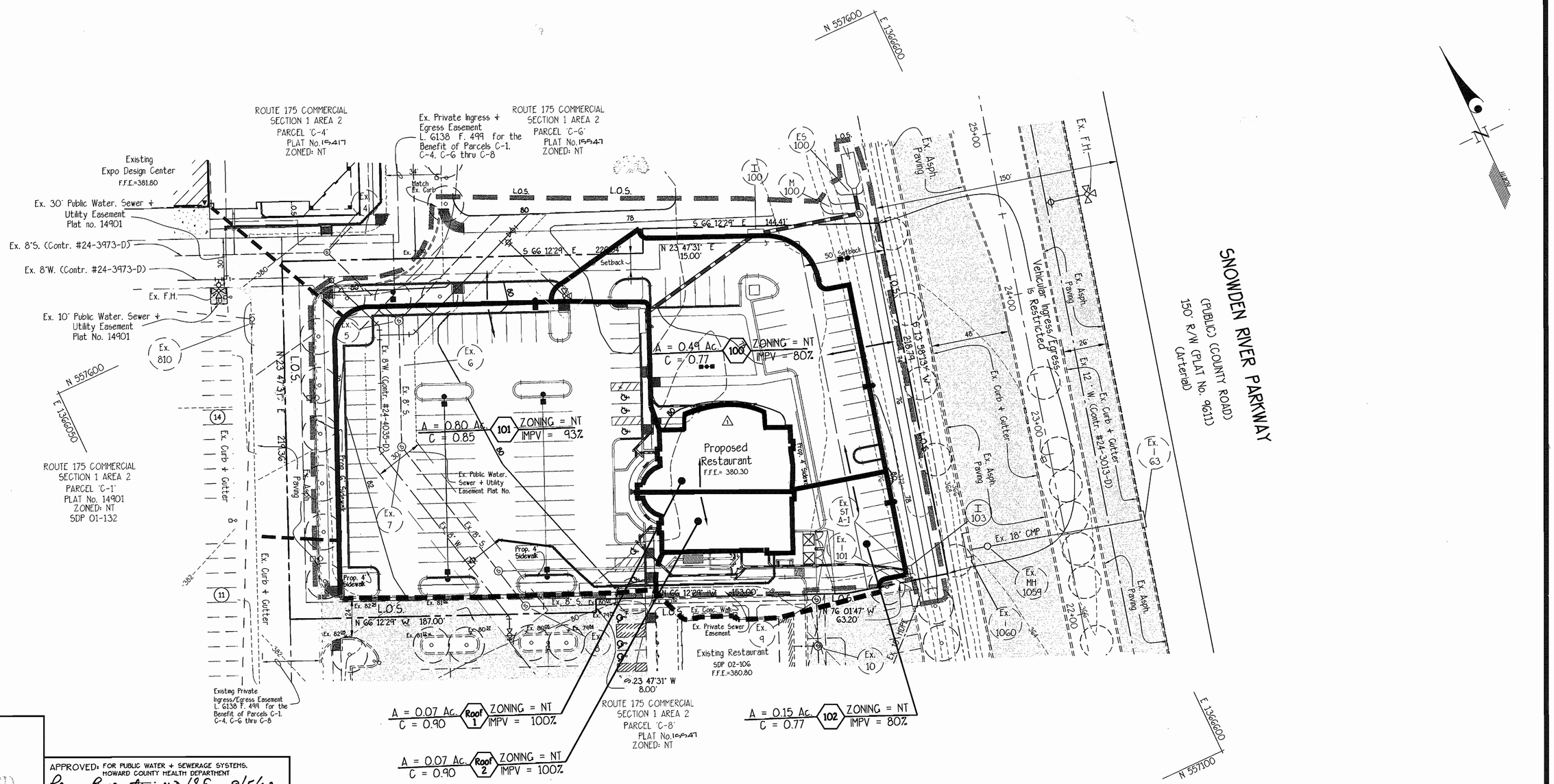
ROUTE 175 COMMERCIAL

PARCEL 'C-7'
SECTION 1 AREA 2
PLAT No. 15547

ELECTION DISTRICT No. 6 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT	02069
DATE	TAX MAP – GRID	SHEET
MAY, 2002	36-18/37-17	8 OF 9

SDP 02-142



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

Penny Borenstein M.D. MH	9/5/02
County Health Officer	Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING

Director	9/9/02 Date
Cindy Hanaka Chief, Division of Land Development	9/6/02 Date
Chief, Development Engineering Division MK	8/29/02 Date

APPROVED
PLAN BOARD
of HOWARD COUNTY
DATE 07/25/02

STATE OF MARYLAND
MICHAEL JAMES TRAPP
No. 14949
REGISTERED
PROFESSIONAL ENGINEER

GLW GUTSCHICK LITTLE & WEBER, P.A.
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DATE	REVISION	BY	APP'R.
4-8-03	Rev. Bldg. To Enclose Patio & Owner Inf.	WSJ	

Drawings\02069\Design\02069SP9.Dwg | DES. | DRN. WSJ | CHK.

PREPARED FOR:
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THE ROUSE BUILDING
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COLUMBIA, MARYLAND 21044
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DRAINAGE AREA MAP

ROUTE 175 COMMERCIAL

PARCEL 'C-7'
SECTION 1 AREA 2
PLAT No. 15947

ELECTION DISTRICT No. 6 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=30'	NT	02069
DATE	TAX MAP – GRID	SHEET
JULY, 7 2002	36-18/37-13	9 OF 9

SDP 02-142