

S:\2004 Projects\SO4009-02 419-Bower Member One\SO4009-02 419 Member One Site Plan.dwg (Site Plan) (4)dwg, C04-GRADING PLAN, 5/19/2005 11:05:47 AM

NORTH MERIDIAN
SECTION 3
CITY VIEW HEIGHTS ADDITION

PIPE SPECIFICATIONS:

1. CORRUGATED METAL PIPE (CMP) SHALL BE ALUMINIZED STEEL, TYPE II
2. CONCRETE PIPE (RCP) SHALL BE CLASS III

CURB & GUTTER NOTES

1. CURB AND GUTTER ALONG THE TURNING LANE AND EXPOSED TO ROUTE 419 SHALL BE CG-7.
2. CURB AND GUTTER WITHIN SITE SHALL BE CG-6 OR CG-6R. THE CG-6R (REVERSE OR DRY CURB) IS SHOWN AS HATCHED. THE TRANSITION FROM CG-7 TO CG-6 SHALL OCCUR OFF VDOT RIGHT OF WAY.
3. CURB AND GUTTER AT ENTRANCE ONTO ROUTE 419 TO BE TAPERED PER VDOT REQUIREMENTS. TYPICALLY TAPER THE CURB FROM 6" HIGH TO 0" HIGH OVER A 24" SPAN.

ETHRIDGE ROAD - 50' R/W
CURB & GUTTER

PROPOSED GUARDRAIL
W/STANDARD FLARED END SECTIONS

ELECTRIC ROAD

ROUTE 419 - R/W VARIES

BOWER ROAD - 50' R/W

PROVIDE WATERPROOFING FOR
THIS SIDE OF THE BUILDING
WHERE THE GROUND ELEVATION IS
HIGHER THAN THE FLOOR
ELEVATION

TOP OF WALL = 1168.50
INVERT OF 36" PIPE = 1160.64
BOTTOM OF WALL = 1159.34 (18" BELOW PIPE INVERT)
WALL HEIGHT = 9.16' (BUILD WALL PER 10' DIMENSIONS)

CONCRETE RETAINING/HEAD WALL DETAILS

HEIGHT OF WALL IN FEET	THICKNESS AT TOP IN FEET	THICKNESS AT BASE IN FEET	COMPRESSION AT TOP LBS./SQ. FT.	AREA OF SECTION SQ. FT.
3	1'-0"	1'-9 3/4"	858	4.83
4	1'-0"	2'-4 3/4"	1141	7.43
5	1'-0"	3'-0"	1427	10.63
6	1'-0"	3'-7 1/4"	1712	14.43
7	1'-0"	4'-2 3/4"	1997	18.83
8	1'-0"	4'-9 3/4"	2283	23.83
9	1'-0"	5'-4 3/4"	2568	29.43
10	1'-0"	6'-0"	2853	35.83
11	1'-1 1/4"	6'-7 1/4"	3139	42.88
12	1'-2 3/8"	7'-2 3/4"	3424	51.03
13	1'-3 5/8"	7'-9 3/4"	3709	59.78
14	1'-4 3/4"	8'-4 3/4"	3995	69.23
15	1'-5"	9'-0"	4280	78.38

SAFE BEARING CAPACITY OF SOIL	
ROCK MINIMUM	10,000 - 20,000 LBS. SQ. FT.
GRAVEL AND COARSE SAND, WELL CEMENTED	10,000 - 20,000 LBS. SQ. FT.
CLAY IN THICK BEDS, ALWAYS DRY	12,000 - 16,000 LBS. SQ. FT.
CLAY IN THICK BEDS, MODERATELY DRY	8,000 - 12,000 LBS. SQ. FT.
CLAY, SOFT	2,000 - 4,000 LBS. SQ. FT.
SAND, DRY, COMPACT, AND WELL CEMENTED	8,000 - 12,000 LBS. SQ. FT.
SAND, CLEAN DRY	4,000 - 8,000 LBS. SQ. FT.
ALLUVIAL SOILS, ETC.	1,000 - 2,000 LBS. SQ. FT.

CONCRETE GRAVITY RETAINING WALLS
INFINITE SURCHARGE AND DECK SURCHARGE - LOADED

THE ABOVE DETAIL IS COPIED FROM VDOT ROAD AND BRIDGE STANDARDS,
VOLUME 1, 2001 EDITION. THE BELOW INFORMATION SHOULD BE USED TO
CONSTRUCT THE WALL.

Member One Federal Credit Union
Route 419, Roanoke County
Prepared for Thor, inc.
Windsor Hills Magisterial District
Roanoke County, Virginia

REVISIONS:
County & VDOT Comments
March 29, 2005
County VDOT & WVHA Comments
May 3, 2005
County Comments
May 18, 2005

DESIGNED BY: GST

DRAWN BY: GST

CHECKED BY: SRB

SCALE: 1" = 30'

DATE: November 16, 2004

SHEET TITLE:

Grading Plan

C04
04 OF 12
PROJECT NUMBER:
SO4009-02