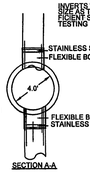
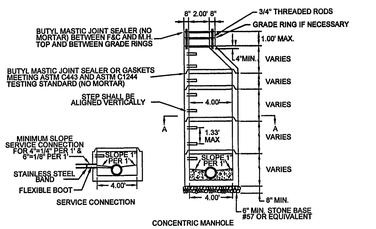
09250comp01-02-nd01.plt

NOTES:
1. ALL MANHOLE FRAMES AND COVERS SHALL BE EAST JORDAN IRON WORKS, INC. WATERTIGHT MANHOLE FRAME MODEL #1045Z. WATERTIGHT COVER MODEL #1040AGS AND BOLT-DOWN MANHOLE COVER MODEL #1040ACLGS, OR APPROVED EQUAL. BOLT-DOWN MODEL TO BE USED IN AREAS SUBJECTED TO FLOODING OR AS DIRECTED BY THE AUTHORITY.
2. STEPS TO BE VERTICALLY ALIGNED.
3. THE FRAME AND COVER SHALL BE PROPERLY ALIGNED WITH THE FIRST OPENING OF THE MANHOLE STRUCTURE AND BOLTED IN PLACE.
4. FLAT TOP MANHOLES MAY ONLY BE SUBSTITUTED WITH THE PERMISSION OF THE UTILITY DIRECTOR. WHEN USED, THE ECCENTRIC OPENING MUST LINE UP WITH THE STEPS.
5. SAMPLING MANHOLES IN TRAFFIC AREAS SHALL BE CONSTRUCTED AS PER MANHOLE DETAILS.
6. FLEXIBLE JOINT MANHOLE CONNECTION SHALL BE AS MANUFACTURED BY PRES-SEAL GASKET CORPORATION OR EQUAL.
7. GROUT ANNULAR SPACE BETWEEN PIPE AND PRECAST MANHOLE ON INSIDE OF MANHOLE.

INVERTS WILL BE THE SAME SIZE AS THE PIPE AND SUFFICIENT SIZE FOR PLUGS AND TESTING EQUIPMENT.



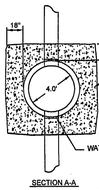
SECTION A-A



CONCENTRIC MANHOLE WITH PRECAST INVERT

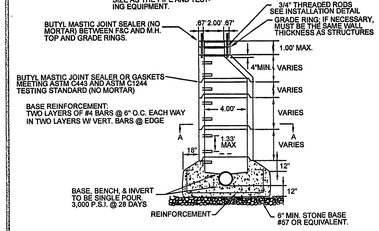
WESTERN VIRGINIA WATER AUTHORITY – CONSTRUCTION STANDARDS		
REVISION DATE		
07/01/04	4' STANDARD MANHOLE FOR PIPE 15" OR SMALLER	S-01
03/01/06		

NOTES:
1. ALL MANHOLE FRAMES AND COVERS SHALL BE EAST JORDAN IRON WORKS, INC. WATERTIGHT MANHOLE FRAME MODEL #1045Z. WATERTIGHT COVER MODEL #1040AGS AND BOLT-DOWN MANHOLE COVER MODEL #1040ACLGS, OR APPROVED EQUAL. BOLT-DOWN MODEL TO BE USED IN AREAS SUBJECTED TO FLOODING OR AS DIRECTED BY THE AUTHORITY.
2. STEPS TO BE VERTICALLY ALIGNED.
3. THE ENTIRE MANHOLE STRUCTURE INCLUDING FRAME AND COVER SHALL BE INSTALLED BEFORE CUTTING THE TOP OF THE SEWER PIPE IN THE MANHOLE. AUTHORITY INSPECTOR TO BE PRESENT DURING INSTALLATION.
4. THE FRAME AND COVER SHALL BE PROPERLY ALIGNED WITH THE 2 FOOT OPENING OF THE MANHOLE STRUCTURE AND BOLTED IN PLACE.
5. RISER AND OTHER SECTIONS SHALL NOT BE INSTALLED FOR A MINIMUM OF 24 HOURS AFTER POURING OF BASE,BENCH, & INVERT.
6. GROUT ANNULAR SPACE BETWEEN PIPE AND PRECAST MANHOLE ON INSIDE OF MANHOLE.

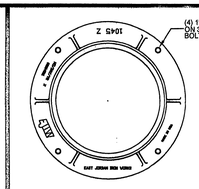


INVERTS WILL BE THE SAME SIZE AS THE PIPE AND TESTING EQUIPMENT.

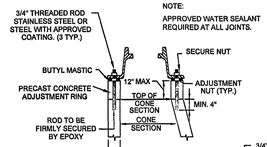
SECTION A-A



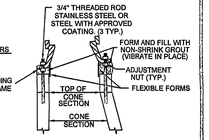
WESTERN VIRGINIA WATER AUTHORITY – CONSTRUCTION STANDARDS		
REVISION DATE		
07/01/04	STRADDLE MANHOLE FOR PIPE 15" OR SMALLER	S-02
03/01/06		



NOTE:
APPROVED WATER SEALANT REQUIRED AT ALL JOINTS.



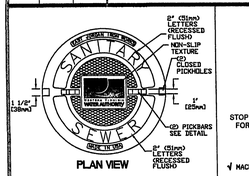
INSTALLATION DETAIL
FOR ALL FRAMES AND COVERS



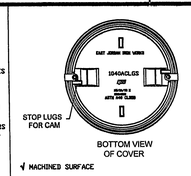
INSTALLATION DETAIL
FOR SLOPE ADJUSTMENT

WATERTIGHT MANHOLE FRAME MODEL #1045Z
BY EAST JORDAN IRON WORKS, INC. OR EQUIVALENT.

WESTERN VIRGINIA WATER AUTHORITY – CONSTRUCTION STANDARDS		
REVISION DATE		
07/01/04	WATERTIGHT MANHOLE FRAME	S-05
03/01/06		



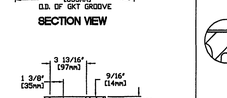
PLAN VIEW



BOTTOM VIEW OF COVER

SECTION VIEW

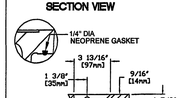
SECTION VIEW



PICKBAR DETAIL

STANDARD MANHOLE COVER MODEL #1040AGS BY EAST JORDAN IRON WORKS, INC OR EQUIVALENT.

STANDARD MANHOLE COVER



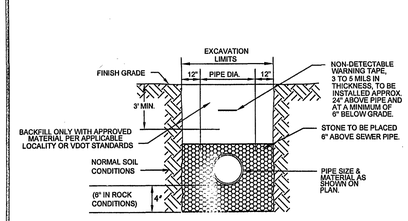
PICKBAR DETAIL

1. BOLT-DOWN MANHOLE COVER MODEL #1040ACLGS BY EAST JORDAN IRON WORKS, INC OR EQUIVALENT.
2. BOLT-DOWN MANHOLE COVERS TO BE USED IN AREAS SUBJECT TO FLOODING, SUCH AS ALONG STREAM OR CREEK BANKS, OR AS DIRECTED BY THE AUTHORITY.

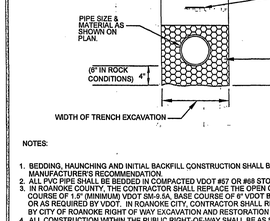
BOLT-DOWN MANHOLE COVER

WESTERN VIRGINIA WATER AUTHORITY – CONSTRUCTION STANDARDS		
REVISION DATE		
07/01/04	WATERTIGHT MANHOLE COVER	S-06
03/01/06		

NOTES:
1. BEDDING, HAUNCHING AND INITIAL BACKFILL CONSTRUCTION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION.
2. ALL PVC PIPE SHALL BE BEDDED IN COMPACTED VDOT #57 OR #68 STONE.
3. IN AREAS NOT SUBJECTED TO VEHICULAR TRAFFIC, BEDDING STONE AND FILL SHALL BE PLACED IN 10" LIFTS AND SHALL BE COMPACTED TO AT LEAST 90% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D 698.
4. ALL SEWER LINE PIPE SHALL BE BEDDED IN COMPACTED GRANULAR MATERIAL. BEDDING REQUIREMENTS FOR DUCTILE SEWER LINE ARE DEPENDENT ON MANUFACTURER'S BEDDING CRITERIA.
5. ALL EXCAVATIONS SHALL COMPLY WITH OSHA TECHNICAL MANUAL, CHAPTER 2, TITLED "EXCAVATIONS: HAZARD RECOGNITION IN TRENCHING AND SHORING."

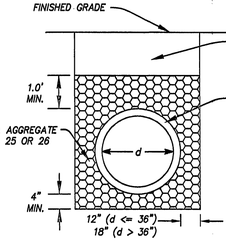


WESTERN VIRGINIA WATER AUTHORITY – CONSTRUCTION STANDARDS		
REVISION DATE		
07/01/04	BEDDING AND BACKFILL OUTSIDE OF PAVED AREAS	S-30
03/01/06		



NOTES:
1. BEDDING, HAUNCHING AND INITIAL BACKFILL CONSTRUCTION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION.
2. ALL PVC PIPE SHALL BE BEDDED IN COMPACTED VDOT #57 OR #68 STONE.
3. IN ROANOKE COUNTY, THE CONTRACTOR SHALL REPLACE THE OPEN CUT WITH A MINIMUM TOP COURSE OF 1.5" MINIMUM VDOT SM-9.5A, BASE COURSE OF 8" VDOT BM-25A, AND SUBBASE OF 10" VDOT 21B, OR AS REQUIRED BY VDOT. IN ROANOKE CITY, CONTRACTOR SHALL REPLACE PAVEMENT AS REQUIRED BY CITY OF ROANOKE RIGHT OF WAY EXCAVATION AND RESTORATION STANDARDS.
4. ALL CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE AS SPECIFIED BY VDOT OR APPLICABLE LOCALITY.
5. PRIOR TO CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR SECURING ALL REQUIRED PERMITS FROM VDOT AND/OR APPLICABLE LOCALITY.
6. IN AREAS SUBJECTED TO VEHICULAR TRAFFIC, BEDDING STONE AND FILL SHALL BE PLACED IN 8" LIFTS AND SHALL BE COMPACTED TO AT LEAST 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D 698.
7. ALL SEWER LINE PIPE SHALL BE BEDDED IN COMPACTED GRANULAR MATERIAL. BEDDING REQUIREMENTS FOR DUCTILE SEWER LINE ARE DEPENDENT ON MANUFACTURE'S BEDDING CRITERIA.
8. BENCHCUT ON EACH SIDE OF PAVEMENT: CITY OF ROANOKE SHALL EQUALS 12", VDOT RIGHT-OF-WAY EQUALS 6".
9. ALL EXCAVATIONS SHALL COMPLY WITH OSHA TECHNICAL MANUAL, CHAPTER 2, TITLED "EXCAVATIONS: HAZARD RECOGNITION IN TRENCHING AND SHORING."

WESTERN VIRGINIA WATER AUTHORITY – CONSTRUCTION STANDARDS		
REVISION DATE		
07/01/04	BEDDING AND BACKFILL UNDER PAVEMENT AND RIGHT-OF-WAY	S-31
03/01/06		

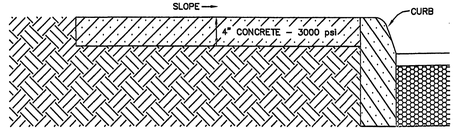


NOTE: THIS DETAIL IS FOR HDPE PIPE WITH NORMAL EARTH FOUNDATIONS AND NO PROJECTION OF PIPE ABOVE THE EXISTING GROUND LINE. FOR OTHER BACKFILL SCENARIOS, SEE VDOT ROAD AND BRIDGE STANDARDS DETAIL PB-1 (107.01).

HDPE PIPE BEDDING

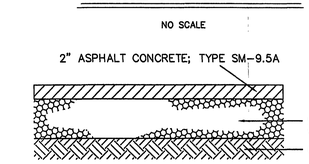
NO SCALE

NOTE:
CURB & SIDEWALK MAY BE POURED MONOLITHICALLY. SIDEWALK WIDTH SHOWN ON PLANS INCLUDE CURB. CONTRACTION JOINTS AT 4' TYPICAL. SCORE TO 25% OF SIDEWALK THICKNESS. EXPANSION JOINTS MAX. 30' APART, TRIM JOINT AND APPLY SEALANT.



TYPICAL SIDEWALK DETAIL

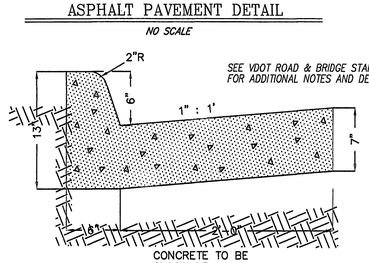
NO SCALE



ASPHALT PAVEMENT DETAIL

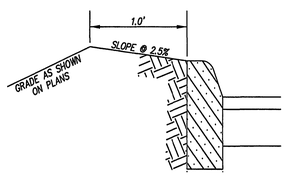
NO SCALE

SEE VDOT ROAD & BRIDGE STANDARDS FOR ADDITIONAL NOTES AND DETAILS.



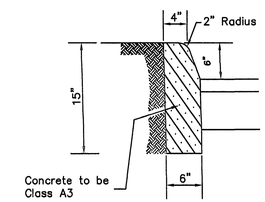
CONCRETE CURB & GUTTER (CG-6)

NO SCALE



BACK OF CURB DETAIL
FOR CG-2 & CG-6 CURB

NO SCALE



CONCRETE CURB (CG-2)

NO SCALE

SITE AND ZONING TABULATIONS

PROPERTY ZONED MX
PROPOSED USE: GENERAL OFFICE
SITE ACREAGE: 0.85 ACRES
MIN LOT AREA = 5,000 SF
MIN LOT FRONTAGE = 50' MIN
MIN. FRONT YARD = 10'
MAX FRONT YARD 30'
MIN SIDE YARD = 5'
MIN REAR YARD = 15'
MAX HEIGHT ALLOWED = 45'
MAX FLOOR AREA RATIO = 1
MAX IMPERVIOUS SURFACE RATIO = 70% (0.6 AC) PROP. 55% (0.47 AC)

REQUIRED PARKING

1 SPACE PER 400 SF OF NET FLOOR AREA (FIRST 4000 SF OF NET FLOOR AREA REDUCED TO 2 SPACES)

EXISTING BUILDING	= 8,190 SF (ALL FLOORS)
PROPOSED BUILDING ADDITION	= 1 ST FLOOR = 2,092 SF 2 ND FLOOR = 2,362 SF
TOTAL	= 8,190 SF + 4,454 SF = 12,644 SF

24 PARKING SPACES REQUIRED
33 EXISTING STANDARD PARKING SPACES
2 EXISTING HANDICAP PARKING SPACES
1 EXISTING PARKING SPACE TO BE REMOVED FOR NEW ISLAND
34 TOTAL PARKING SPACES TO REMAIN (NO NEW PARKING SPACES PROPOSED), INCLUDES 2 HANDICAP SPACES

REQUIRED LANDSCAPING
SEE LANDSCAPE PLAN FOR REQUIREMENTS ON SHEET 5.

GENERAL NOTES

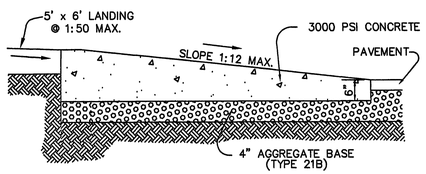
1. THE PROPERTY SHOWN ON THESE PLANS IS LOCATED AT ROANOKE CITY TAX ASSESSMENT MAP No. 6421135, INST. NO. 0000007856
2. OWNER/DEVELOPER: PNC LLC ATTN: BRUCE HEDRICK (540) 366-0622
3. THE BOUNDARY IS THE DIRECT RESULT OF A FIELD SURVEY BY LUMSDEN ASSOCIATES, P.C. DATED 2009.
4. TOPOGRAPHY DATA BASED ON A FIELD SURVEY BY LUMSDEN ASSOCIATES, P.C. IN 2008.
5. NO TITLE REPORT WAS FURNISHED FOR THIS PROJECT.
6. THE DEVELOPMENT SHOWN ON THESE PLANS SHALL BE SERVED BY WESTERN VIRGINIA WATER AUTHORITY WATER AND SANITARY SEWER.
7. THE PROPERTY ON THESE PLANS ARE ACCESSED BY PUBLIC ROADS.
8. ALL EXTERIOR LIGHTS SHALL BE DESIGNED, ARRANGED, AND LOCATED SO AS NOT TO DIRECT GLARE ON ADJACENT RESIDENTIAL PROPERTIES OR RIGHT OF WAYS. THE MAXIMUM LIGHTING DENSITY AT ADJOINING PROPERTIES OR RIGHT OF WAYS SHALL NOT EXCEED 0.5 FOOT CANDLES.
9. A SEPARATE SIGN PERMIT WILL BE REQUIRED FOR EXTERIOR SIGNAGE.
10. NO CONSTRUCTION/FIELD REVISIONS ARE ALLOWED WITHOUT THE APPROVAL OF THE CONSULTING ENGINEER, THE CITY OF ROANOKE, AND/OR THE WESTERN VIRGINIA WATER AUTHORITY.
11. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO CLEAN OUT THE EXISTING STORM SEWER SYSTEM WITHIN EXISTING DEVELOPMENTS SHOULD THESE SYSTEMS BECOME SILTED OR BLOCKED IN ANY WAY DUE TO THE CONSTRUCTION OF THIS PROPOSED DEVELOPMENT.
12. THIS PROPERTY IS NOT LOCATED WITHIN THE LIMITS OF A 100 YEAR FLOOD BOUNDARY AS DESIGNATED BY FEMA. THIS OPINION IS BASED ON AN INSPECTION OF THE FLOOD INSURANCE RATE MAP AND HAS NOT BEEN VERIFIED IN THE FIELD. SEE COMMUNITY PANEL NO.5101300153 G , MAP NUMBER 51161C0153 G. DATED 9-28-07 (UNSHADED ZONE "X")
13. THIS PLAT DOES NOT GUARANTEE THE EXISTENCE OR LOCATION OF ANY UNDERGROUND UTILITIES. STORM DRAIN STRUCTURE, SANITARY SEWER MANHOLES, AND ALL OTHER SURFACE UTILITIES WERE FIELD LOCATED. ALL UNDERGROUND UTILITIES SHOWN WERE ESTABLISHED USING ABOVE GROUND STRUCTURES, MISS UTILITY MARKINGS (SEE MISS UTILITY TICKET (A934600550 REV. 00A DATED DEC. 14, 2009) AND AVAILABLE UTILITY MAPS. ALL UNDERGROUND UTILITY LINES ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO THE START OF ANY CONSTRUCTION.
14. ALL UTILITY SERVICE LATERALS OR SERVICE LINES, INCLUDING ELECTRIC, SHALL BE INSTALLED UNDERGROUND.

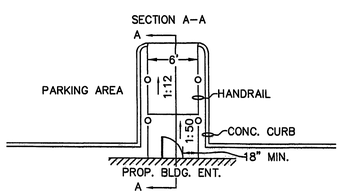
CONSTRUCTION NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF ROANOKE STANDARDS AND SPECIFICATIONS AND THE CURRENT EDITION OF VDOT'S ROAD AND BRIDGE STANDARDS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE OWNER AND THE ENGINEER OF ANY CHANGES OR CONDITIONS ATTACHED TO PERMITS OBTAINED FROM ANY AUTHORITY ISSUING PERMITS.
3. THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY EXISTING CONDITIONS PRIOR TO STARTING CONSTRUCTION.
4. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO STARTING CONSTRUCTION.
5. ALL WATER CONNECTIONS TO EXISTING LINES SHALL BE COORDINATED WITH AND PERFORMED BY THE WESTERN VIRGINIA WATER AUTHORITY.
6. ALL SANITARY SEWER CONNECTIONS TO EXISTING LINES SHALL BE PERFORMED BY THE CONTRACTOR WITH A WESTERN VIRGINIA WATER AUTHORITY INSPECTOR ONSITE.
7. SEE VDOT ROAD AND BRIDGE STANDARDS FOR CONCRETE CURB AND STORM DRAINAGE DETAILS.
8. THE CONTRACTOR AND OR OWNER SHALL PROVIDE A STORAGE CONTAINER FOR TEMPORARY STORAGE AND DISPOSAL OF LAND CLEARANCE DEBRIS AND BUILDING MATERIALS. ON-SITE BURIAL OF MATERIAL SHALL NOT BE PERMITTED.

GRADING NOTES

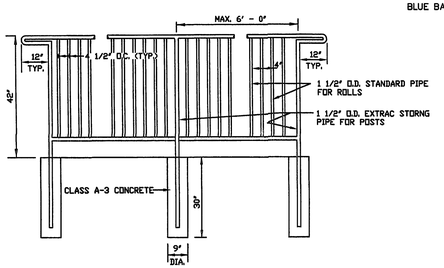
1. AREAS TO BE GRADED SHALL BE CLEARED OF ALL VEGETATION, STRUCTURES, AND OTHER PHYSICAL FEATURES IN PREPARATION OF GRADING.
2. TOPSOIL SHALL BE REMOVED FROM THE CLEARED AREA AND STOCKPILED OFFSITE FOR FUTURE USE. A SEPARATE E & S PLAN MAY BE REQUIRED FOR OFFSITE STOCKPILE.
3. FILL MATERIAL SHALL BE FREE FROM ORGANIC MATTER AND ROCKS LARGER THAN 6 INCHES IN DIAMETER.
4. FILL MATERIAL SHALL BE PLACED AND COMPACTED IN EIGHT (8) INCH LOOSE LIFTS AND COMPACTED TO AT LEAST NINETY-FIVE (95) PERCENT OF THE MATERIAL'S MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698, STANDARD PROCTOR. MAINTAIN MOISTURE CONTENT OF FILL MATERIAL WITHIN THREE (3) PERCENT OF OPTIMUM TO ATTAIN REQUIRED COMPACTION DENSITY.
5. NO SUBSURFACE SOILS INFORMATION HAS BEEN FURNISHED TO THE DESIGNING ENGINEER (LUMSDEN ASSOCIATES, P.C.). A QUALIFIED GEOTECHNICAL ENGINEER, LICENSED IN THE STATE OF VIRGINIA, SHOULD BE CONSULTED CONCERNING SOIL STABILITY, SLOPE STABILIZATION, SOIL COMPACTION, TESTING, AND OTHER SOIL CHARACTERISTICS. LUMSDEN ASSOCIATES ASSUMES NO RESPONSIBILITY OR LIABILITY RELATING TO FAILURES RESULTING FROM SAME.





HANDICAP RAMP DETAIL

NO SCALE



HANDRAIL DETAIL

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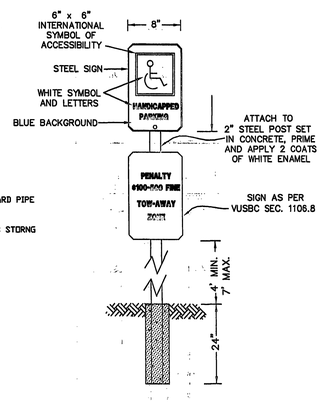

HANDICAP PARKING SIGN

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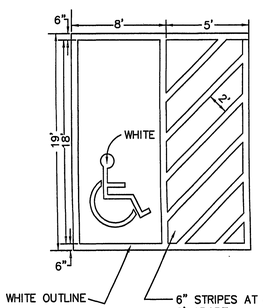
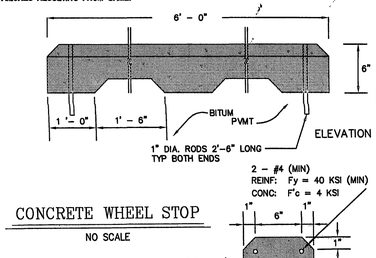


PAINT: DURO KOTE
ACRYLIC LATEX
WHITE

HANDICAP PARKING SPACE



CONCRETE WHEEL STOP

NO SCALE

APPROVED
JUN 29 2010

LUMSDEN ASSOCIATES, P.C.
ENGINEERS-SURVEYORS-PLANNERS
ROANOKE, VIRGINIA
4664 BRAMBLETON AVENUE
P.O. BOX 20669
ROANOKE, VIRGINIA 24018
PHONE: (540) 774-4411
FAX: (540) 772-9445
E-MAIL: MAIL@LUMSDENPC.COM

COMMONWEALTH OF VIRGINIA
THOMAS C. DALE
Lic. No. 033002
6/18/10
PROFESSIONAL ENGINEER

NOTES AND DETAILS

McNICHOLS OFFICE BUILDING EXPANSION
SITUATED AT 3333 PETERS CREEK RD. NW
CITY OF ROANOKE, VIRGINIA
PREPARED FOR
PWC, LLC

REVISIONS		
NO.	DATE	DESCRIPTION
1		
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5		

DATE: June 18, 2010
SCALE: NONE
COMMISSION NO: 09-250
SHEET 2 OF 6

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