

ABBREVIATIONS

| | | | |
|----------|-----------------------------------|-------------|---|
| ABAN | ABANDON, ABANDONED | MECH | MECHANICAL |
| ABUT | ABUTMENT | MFR | MANUFACTURER |
| ADJ | ADJACENT | MH | MANHOLE |
| AGGR | AGGREGATE | MIN | MINIMUM |
| ANC | ANCHOR | MJ | MECHANICAL JOINT |
| APPROX | APPROXIMATE | MON | MONUMENT |
| BIT | BITUMINOUS | MTL | METAL |
| BJ | BELL JOINT | N & C | NAIL AND CAP |
| BL | BASE LINE | NA | NOT APPLICABLE |
| BEG | BEGIN, BEGINNING | NIC | NOT IN CONTRACT |
| BLDG | BUILDING | NO | NUMBER |
| BM | BENCH MARK | NPW | NON POTABLE WATER |
| BSP | BLACK STEEL PIPE | NTS | NOT TO SCALE |
| BV | BUTTERFLY VALVE | OC | ON CENTERS |
| BVCE | BEGIN VERTICAL CURVE ELEVATION | OD | OUTSIDE DIAMETER |
| BVCS | BEGIN VERTICAL CURVE STATION | PVMT | PAVEMENT |
| C & G | CURB AND GUTTER | PC | POINT OF CURVE |
| CI | CAST IRON | PCC | POINT OF COMPOUND CURVE |
| CL | CENTER LINE | PER | PERMETER |
| CONST | CONSTRUCTION | PERF | PERFORATED |
| CMP | CORRUGATED METAL PIPE | PERP | PERPENDICULAR |
| CMU | CONCRETE MASONRY UNITS | PI | POINT OF INTERSECTION |
| CND | CONDUIT | PL | PLATE, PROPERTY LINE |
| CO | CLEANOUT | POL | POINT ON LINE |
| COMB | COMBINATION | PT | POINT OF TANGENCY |
| CONC | CONCRETE (PORTLAND CEMENT) | POT | POINT ON TANGENT |
| CONN | CONNECT, CONNECTION | PP | POWER POLE |
| CONTR | CONTRACTOR | PRC | POINT OF REVERSE CURVE |
| CONV | CONVEYOR | PSI | POUNDS PER SQUARE INCH |
| COR | CORNER | PT | POINT OF TANGENT |
| CR STONE | CRUSHED STONE | PVC | POLYVINYL CHLORIDE |
| CTR | CENTER | PVI | POINT OF VERTICAL INTERSECTION |
| CULV | CULVERT | PUE | PUBLIC UTILITY EASEMENT |
| D | DEPTH OR DEGREE OF CURVE | RR | RADIUS, RISER |
| DE | DRAINAGE EASEMENT | RCP | REINFORCED CONCRETE PIPE |
| DI | DROP INLET, DUCTILE IRON | RDCR | REDUCER |
| DIA | DIAMETER | REINF | REINFORCE, REINFORCEMENT |
| DIM | DIMENSION | REF | REFERENCE |
| DISC | DISCONNECT | REL | RELOCATED |
| DMH | DROP MANHOLE | REQD | REQUIRED |
| DN | DOWN | REVISION | REVISION |
| DTL | DETAIL | RTE | ROUTE |
| DW, D/W | DRIVEWAY | RT | RIGHT |
| DWL | DWELLING | R/W | RIGHT OF WAY |
| DWG | DRAWING | SS | SANITARY SEWER |
| EA | EACH | SAN | SANITARY |
| E.B.L. | EASTBOUND LANE | S/W | SIDEWALK |
| EL. ELEV | ELEVATION | SD | STORM DRAIN |
| ELEC | ELECTRICAL | SE | SLOPE EASEMENT |
| ENGR | ENGINEER | SECT | SECTION |
| ENTR | ENTRANCE | SER | SERVICE |
| EOL | END OF LINE | SH | SHEET |
| EP | EDGE OF PAVEMENT | SPEC | SPECIFICATION |
| EQPT | EQUIPMENT | SPECS | SPECIFICATIONS |
| EVCE | END VERTICAL CURVE ELEVATION | SQ | SQUARE |
| EVCS | END VERTICAL CURVE STATION | SSTL | STAINLESS STEEL |
| EW | EACH WAY, ENDWALL | STR | STREET |
| EXIST | EXISTING | STA | STATION |
| FES | FLARED END SECTION | STD | STANDARD |
| FFE | FINISHED FLOOR | STL | STEEL |
| FIG | FIGURE | STRUCT | STRUCTURAL |
| FL | FLOOR | SUR | SURVEY |
| FLEX | FLEXIBLE | T & B | TOP AND BOTTOM |
| FLG | FLANGE | TELE | TELEPHONE |
| FT | FOOT | TEMP | TEMPORARY |
| FTG | FOOTING | THK | THICK |
| FUT | FUTURE | TP | TELEPHONE POLE |
| GAL | GALLON | TREATED | TREATED |
| GALV | GALVANIZED | TV | TELEVISION |
| GAR | GARAGE | TW | TOP OF WALL |
| GND | GROUND | TYP | TYPICAL |
| GR | GRAVEL | UG | UNDERGROUND |
| GOVT | GOVERNMENT | UON | UNLESS OTHERWISE NOTED |
| GPM | GALLONS PER MINUTE | U.S.C.&G.S. | UNITED STATES COAST AND GEODETIC SURVEY |
| GRGTG | GRATING | V.VAL | VALVE, VENT |
| GV | GATE VALVE | VAR | VARIABLE |
| H&T | HUB AND TAC | VC | VERTICAL CURVE |
| HORIZ | HORIZONTAL | VERT | VERTICAL |
| HPT | HIGH POINT | VECSR | VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS |
| HYD | HYDRANT | VOL | VOLUME |
| ID | INSIDE DIAMETER | VDOT | VIRGINIA DEPARTMENT OF TRANSPORTATION |
| IN | INCH | V.S.D. | VERTICAL SIGHT DISTANCE |
| INSUL | INSULATION | W.B.L. | WESTBOUND LANE |
| INV | INVERT | W | WIDE FLANGE, WIDE, WASTE, WATER |
| IP | IRON PIN (FOUND OR SET NOTED) | W/ | WITH |
| L | LENGTH, LONG | WL | WATER LINE |
| LF | LINEAL FOOT | W/O | WITHOUT |
| LG | LONG | WS | WATER SURFACE |
| LP | LIGHT POLE | WT | WATERTIGHT, WEIGHT |
| LR | LONG RADIUS | WVWA | WESTERN VIRGINIA WATER AUTHORITY |
| MAS | MASONRY OF HIGHWAYS MATL MATERIAL | WVDH | WEST VIRGINIA DEPARTMENT OF HIGHWAYS |
| MAX | MAXIMUM | | |
| MB | MAIL BOX | | |
| MBL | MINIMUM BUILDING LINE | | |

LEGEND / SYMBOLS

| EXISTING | NEW | DESCRIPTION |
|----------|-----|-------------------------------------|
| | | BUILDING WITH PORCH OR STOOP |
| | | FOUNDATION ONLY |
| | | CONTOUR, CONTOUR WITH ELEVATION |
| | | SPOT ELEVATION |
| | | CONCRETE CURB |
| | | CONCRETE CURB & GUTTER |
| | | CONCRETE WALK OR SLAB |
| | | PAVEMENT |
| | | UNPAVED OR GRAVEL ROAD |
| | | CONSTRUCTION EASEMENT |
| | | PERMANENT EASEMENT |
| | | TREE LINE |
| | | TREE OR SHRUB |
| | | FENCE (EXISTING OR PROPOSED NOTED) |
| | | CENTERLINE CREEK, SWALE, DITCH |
| | | PROPERTY LINE |
| | | CENTERLINE OR BASELINE |
| | | FIELD SURVEY TRAVERSE POINT |
| | | P.C. OR P.T. |
| | | GEOLOGIC BORE HOLE |
| | | BENCH MARK (EXISTING OR SET NOTED) |
| | | STORM DRAIN AND ENDWALL |
| | | SANITARY SEWER |
| | | FORCE MAIN |
| | | GAS MAIN OR SERVICE LINE |
| | | WATER MAIN OR SERVICE LINE |
| | | OVERHEAD ELECTRICAL LINE |
| | | OVERHEAD TELEPHONE LINE |
| | | UNDERGROUND ELECTRICAL LINE |
| | | UNDERGROUND TELEPHONE LINE |
| | | PIPE FITTINGS |
| | | FIRE HYDRANT |
| | | GATE VALVE |
| | | CLEANOUT |
| | | MANHOLE |
| | | DROP INLET (CURB AND GRATING TYPES) |
| | | WM - WATER METER |
| | | DWM - DOUBLE WATER METER |
| | | TELEPHONE POLE, GUY AND ANCHOR |
| | | POWER POLE, GUY AND ANCHOR |
| | | LIGHT POLE |
| | | TELEPHONE PEDESTAL |
| | | BURIED TELEPHONE VAULT |
| | | PAVED DITCH |
| | | STORM PIPE (SIZE / TYPE NOTED) |
| | | CULVERT WITH FLARED END SECTION |
| | | AIR RELEASE VALVE / VAULT ASSEMBLY |
| | | BLOW OFF VALVE / VAULT ASSEMBLY |
| | | STEEL ENCASEMENT |
| | | CONCRETE ENCASEMENT |
| | | ABANDON OR REMOVE |
| | | LIMITS OF CONSTRUCTION |

GENERAL NOTES

PROVIDE NEW MATERIALS AND WORKMANSHIP IN CONFORMANCE WITH ALL APPLICABLE CODES, STATE AND FEDERAL LAWS, LOCAL ORDINANCES, INDUSTRY STANDARDS, AND OTHER CRITERIA WHICH WOULD NORMALLY APPLY TO WORK OF THIS NATURE. NOTIFY THE ENGINEER IMMEDIATELY UPON DISCOVERING A CONFLICT IN CODES, ORDINANCES, STANDARDS, OR OTHER CRITERIA. APPLICABLE CODES AND STANDARDS INCLUDE, BUT ARE NOT NECESSARILY LIMITED TO, THE FOLLOWING:

- IBC 2003 (VSUBC)
- ROANOKE CITY
- VDOT - VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS
- VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS AND HANDBOOK,
- OSHA - OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
- ASTM - AMERICAN SOCIETY FOR TESTING AND MATERIALS
- WVWA - WESTERN VIRGINIA WATER AUTHORITY

MAINTAIN A SET OF APPROVED PLANS ON SITE AT ALL TIMES DURING CONSTRUCTION.

OBTAIN EACH REQUIRED PERMIT PRIOR TO COMMENCING THAT PART OF THE WORK. PAY REQUIRED FEES.

NOTIFY THE ENGINEER IMMEDIATELY UPON DISCOVERY OF CONDITIONS WHICH DIFFER FROM THOSE SHOWN ON THE PLANS.

CONTRACTOR TO REPAIR ALL DAMAGE TO ANY UTILITY, PUBLIC OR PRIVATE, CAUSED AS A RESULT OF CONSTRUCTION ACTIVITIES, AT NO ADDITIONAL COST TO OWNER.

THE LOCATION OF EXISTING UTILITIES, INCLUDING UNDERGROUND UTILITIES, IS INDICATED ON THE DRAWINGS IN SO FAR AS THEIR EXISTENCE AND LOCATION WERE KNOWN AT THE TIME OF PREPARATION OF THESE DRAWINGS, HOWEVER, NOTHING IN THESE CONTRACT DOCUMENTS SHALL BE CONSTRUED AS A GUARANTEE THAT SUCH UTILITIES ARE IN THE LOCATION INDICATED OR THAT THEY ACTUALLY EXIST OR THAT OTHER UTILITIES ARE NOT WITHIN THE AREA OF OPERATIONS. THE CONTRACTOR SHALL MAKE ALL NECESSARY INVESTIGATIONS TO DETERMINE THE EXISTENCE AND LOCATIONS OF SUCH UTILITIES. THE CONTRACTOR SHALL PAY FOR ANY DAMAGE TO AND FOR MAINTENANCE AND PROTECTION OF EXISTING UTILITIES AND STRUCTURES.

EXISTING WATER LINE LOCATIONS BOTH HORIZONTAL AND VERTICAL ARE APPROXIMATE. THE LOCATION IS NOT THE RESULT OF A FIELD SURVEY.

THE CONTRACTOR IS DIRECTED TO DIG AND LOCATE ALL UTILITIES IN ADVANCE OF PIPELAYING TO ALLOW FOR ADJUSTMENTS DUE TO CONFLICTS WITH EXISTING UTILITIES. SHOULD A CONFLICT ARISE THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY.

THE CONTRACTOR IS REQUIRED TO NOTIFY "MISS UTILITY" AT 1-800-552-7001 AT LEAST TWO, BUT NOT MORE THAN TEN, WORKING DAYS IN ADVANCE OF CONSTRUCTION. THE CONTRACTOR IS TO COORDINATE THE CONNECTION OF WATER AND SEWER SERVICE WITH THE WESTERN VIRGINIA WATER AUTHORITY.

PAVEMENT, CURBING, AND EXISTING STORM SEWERS THAT MUST BE REMOVED TO INSTALL WATER OR SEWER, SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.

WESTERN VIRGINIA WATER AUTHORITY AVAILABILITY NO: 08-069

ALL UTILITY SERVICE LINES AND LATERALS, INCLUDING ELECTRIC, ARE TO BE INSTALLED UNDERGROUND.

ALL PROPOSED GROUND LEVEL EQUIPMENT IS TO BE SCREENED IN ACCORDANCE WITH SECTION 36.2-649 OF THE CITY OF ROANOKE'S ZONING ORDINANCE.

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**KROGER R-400
FUEL CENTER INSTALLATION
TOWERS MALL
CITY OF ROANOKE, VIRGINIA**

| NO. | DATE | DESCRIPTION | BY |
|-----|----------|---------------------------|-----|
| 1 | 06/05/08 | PER ROANOKE CITY COMMENTS | MCP |

RICHARD C. WHITE
Lic. No. 20021
PROFESSIONAL ENGINEER

| | |
|----------------|----------|
| Designed By | RCW |
| Drawn By | MCP |
| Checked By | RCW |
| Approved By | RCW |
| Submitted By | RCW |
| Drawing | 1997D |
| Date | 03/03/08 |
| Scale | NONE |
| Commission No. | 1997D |
| Sheet | 2 of 12 |

APPROVED
SEP 26 2008