

ABBREVIATIONS

ABAN	ABANDON, ABANDONED	FES	FLARED END SECTION
ABV	ABOVE	FLEX	FLEXIBLE
AFB	ABOVE FINISH FLOOR	FL	FLOOR
ABUT	ABUTMENT	FCO	FLOOR CLEAN-OUT
ACM	ASBESTOS CONTAINING MATERIAL	FD	FLOOR DRAIN
ACT	ACQUSTIC CEILING TILE	FT	FOOT
ADJ	ADJACENT	FTG	FOOTING
AGGR	AGGREGATE	FDN	FOUNDATION
AHU	AIR HANDLING UNIT	FAI	FRESH AIR INTAKE
ALT	ALTERNATE	FUT	FUTURE
ALUM	ALUMINUM	GA	GAGE
ADA	AMERICANS WITH DISABILITIES ACT	GAL	GALLON
ANC	ANCHOR	OPH	GALLONS PER HOUR
ANOD	ANODIZED	GPM	GALLONS PER MINUTE
APPROX	APPROXIMATE	GALV	GALVANIZED
AV	AUDIO VISUAL	GAR	GARAGE
BL	BASE LINE	G	GAS
BYCE	BEGIN VERTICAL CURVE ELEVATION	GV	GATE VALVE
BVCS	BEGIN VERTICAL CURVE STATION	GL	GLASS
BEG	BEGIN, BEGINNING	GOVT	GOVERNMENT
BJ	BELL JOINT	GRTG	GRATING
BEL	BELOW	GR	GRAVEL
BM	BENCH MARK	GRV	GRAVITY ROOF VENT
BTW	BETWEEN	GND	GROUND
BIT	BITUMINOUS	GFI	GROUND FAULT INTERRUPTER
BSP	BLACK STEEL PIPE	GWB	GYPSUM WALL BOARD
BOC	BOTTOM OF CURB	HC	HANDICAPPED ACCESSIBLE
BOS	BOTTOM OF STEP	HDWR	HARDWARE
BOW	BOTTOM OF WALL	HDWD	HARDWOOD
BRDG	BRIDGING	HE	HIGH EFFICIENCY
BTU	BRITISH THERMAL UNIT	HVAC	HEATING VENTILATING & AIR CONDITIONING
BTUH	BTU PER HOUR	HT	HEIGHT
BLDG	BUILDING	HPT	HIGH POINT
BV	BUTTERFLY VALVE	HM	HOLLOW METAL
CAPY	CAPACITY	HS	HOLE STRIP
CPT	CARPET	HORIZ	HORIZONTAL
CI	CAST IRON	HA	HOSE BIBB
CLG	CEILING	HR	HOUR
CTR	CENTER	HT	HUB AND TAC
CL	CENTER LINE	HW	HOT WATER
C TILE	CERAMIC TILE	HYD	HYDRANT
CO	CLEANOUT	IN	INCH
CLR	CLEAR	ID	INSIDE DIAMETER
CW	COLD WATER	INSUL	INSULATION
COL	COLUMN	INV	INVERT
COMB	COMBINATION	IP	IRON PIN (FOUND OR SET NOTED)
CONC	CONCRETE	JT	JOINT
CMU	CONCRETE MASONRY UNIT	J	JUNCTION
COND	CONDENSER/CONDUIT	KVA	KILOVOLT AMPS
CND	CONDUIT	KW	KILOWATT
CONN	CONNECTION	LAM	LAMINATE
CONST	CONSTRUCTION	LVL	LAMINATED VENEER LUMBER
CONT	CONTINUOUS	L	LENGTH, LONG
CONTR	CONTRACTOR	LT	LIGHT
CJ	CONTROL JOINT	LP	LIGHT POLE
CONV	CONVEYOR	LF	LINEAL FOOT
COR	CORNER	LIN	LINEAR
CMP	CORRUGATED METAL PIPE	LG	LONG
CR STONE	CRUSHED STONE	LR	LONG RADIUS
CF	CUBIC FOOT	MB	MAIL BOX
CFM	CUBIC FOOT PER MINUTE	MH	MANHOLE
CULV	CULVERT	MFR	MANUFACTURER
C & G	CURB AND GUTTER	MAS	MASONRY
D	DEPTH OR DEGREE OF CURVE	MCJ	MASONRY CONTROL JOINT
DTL	DETAIL	MO	MASONRY OPENING
DIA	DIAGONAL	MATL	MATERIAL
DIA	DIAMETER	MAX	MAXIMUM
DIFF	DIFFUSER(S)	MECH	MECHANICAL
DIM	DIMENSION	MJ	MECHANICAL JOINT
DISC	DISCONNECT	MFSS	MEDIUM FISSURE
DIV	DIVISION	MBH	MEGA BTU PER HOUR
DBL	DOUBLE	MTL	METAL
DN	DOWN	MIN	MINIMUM
DS	DOWNSPOUT	MBL	MINIMUM BUILDING LINE
DE	DRAINAGE EASEMENT	MISC	MISCELLANEOUS
DWG	DRAWING	MON	MONUMENT
DW	DRIVEWAY	MTD	MOUNTED
DI	DROP INLET, DUCTILE IRON	N & C	NAIL AND CAP
DWH	DROP MANHOLE	NEUT	NEUTRAL
DWL	DWELLING	NOM	NOMINAL
EA	EACH	NPW	NON POTABLE WATER
EW	EACH WAY, ENDWALL	NA	NOT APPLICABLE
ESMT	EASEMENT	NIC	NOT IN CONTRACT
EBL	EASTBOUND LANE	NTS	NOT TO SCALE
EP	EDGE OF PAVEMENT	NO	NUMBER
EW	ELECTRIC WATER COOLER	OC	ON CENTERS
ELEC	ELECTRICAL	OPP	OPPOSITE
ELEV	ELEVATION	OH	OPPOSITE HAND
ENCL	ENCLOSE/ENCLOSURE	OD	OUTSIDE DIAMETER
EOL	END OF LINE	OA	OVER ALL
EYCE	END VERTICAL CURVE ELEVATION	OVHD	OVERHEAD
EVCS	END VERTICAL CURVE STATION	OFCD	OWNER FURNISHED CONTRACTOR
ENGR	ENGINEER	OFCD	OWNER FURNISHED CONTRACTOR
ENR	ENTRANCE	OFCD	OWNER FURNISHED CONTRACTOR
EQ	EQUAL	OFCD	OWNER FURNISHED CONTRACTOR
EQPT	EQUIPMENT	OFCD	OWNER FURNISHED CONTRACTOR
EVAP	EVAPORATIVE(OR)	OFCD	OWNER FURNISHED CONTRACTOR
EXH	EXHAUST	OFCD	OWNER FURNISHED CONTRACTOR
EXG	EXISTING	OFCD	OWNER FURNISHED CONTRACTOR
EXP	EXPANSION	OFCD	OWNER FURNISHED CONTRACTOR
EA	EXPANSION JOINT	OFCD	OWNER FURNISHED CONTRACTOR
EXP ST	EXPOSED STRUCTURE	OFCD	OWNER FURNISHED CONTRACTOR
EXT	EXTERIOR	OFCD	OWNER FURNISHED CONTRACTOR
FB	FACE BRICK	OFCD	OWNER FURNISHED CONTRACTOR
FOS	FACE OF STUD	OFCD	OWNER FURNISHED CONTRACTOR
FF	FIGURE	OFCD	OWNER FURNISHED CONTRACTOR
FF	FINISH FLOOR	OFCD	OWNER FURNISHED CONTRACTOR
FIN	FINISH(ED)	OFCD	OWNER FURNISHED CONTRACTOR
FF	FINISHED FLOOR	OFCD	OWNER FURNISHED CONTRACTOR
FEC	FIRE EXTINGUISHER CABINET	OFCD	OWNER FURNISHED CONTRACTOR
FTRD	FIRE TREATED	OFCD	OWNER FURNISHED CONTRACTOR
FLG	FLANGE	OFCD	OWNER FURNISHED CONTRACTOR

POT	POINT ON TANGENT	PVC	POLYVINYL CHLORIDE
PVC	PORCELAIN TILE	P TILE	PORCELAIN TILE
PSF	POUNDS PER SQUARE FOOT	PSI	POUNDS PER SQUARE INCH
PP	POWER POLE	PP	POWER POLE
PAIR	PRESSURE TREATED	PT	PRESSURE TREATED
PROJ	PROJECTION	PROJ	PROJECTION
PUE	PUBLIC UTILITY EASEMENT	Q TILE	QUARRY TILE
RAD	RADIUS	RR	RAILROAD
REC	RECORD	REC	RECORD
RED	REDUCER	RED	REDUCER
REF	REFERENCE	REF	REFERENCE
REFRIG	REFRIGERATION	REFRIG	REFRIGERATION
REIN	REINFORCE(ED)	REIN	REINFORCE(ED)
RCP	REINFORCED CONCRETE PIPE	RCP	REINFORCED CONCRETE PIPE
REBAR	REINFORCING BAR	REBAR	REINFORCING BAR
REL	RELOCATED	REL	RELOCATED
REQD	REQUIRED	REQD	REQUIRED
REV	REVISION	REV	REVISION
RT	RIGHT	RT	RIGHT
R/W	RIGHT OF WAY	R/W	RIGHT OF WAY
RD	ROAD	RD	ROAD
RD	ROOF DRAIN	RD	ROOF DRAIN
RTU	ROOF TOP UNIT	RTU	ROOF TOP UNIT
RM	ROOM	RM	ROOM
RO	ROUGH OPENING	RO	ROUGH OPENING
RTE	ROUTE	RTE	ROUTE
R TILE	RUBBER TILE	R TILE	RUBBER TILE
SAN	SANITARY	SAN	SANITARY
SS	SANITARY SEWER	SS	SANITARY SEWER
SO	SASH OPENING	SO	SASH OPENING
SCHED	SCHEDULE	SCHED	SCHEDULE
SECT	SECTION	SECT	SECTION
SER	SERVICE	SER	SERVICE
SH	SHEET	SH	SHEET
S/W	SIDEWALK	S/W	SIDEWALK
SIM	SIMILAR	SIM	SIMILAR
SE	SLOPE EASEMENT	SE	SLOPE EASEMENT
SC	SOLID CORE	SC	SOLID CORE
SP	SPACE	SP	SPACE
SPEC	SPECIFICATION	SPEC	SPECIFICATION
SQ	SQUARE	SQ	SQUARE
SSTL	STAINLESS STEEL	SSTL	STAINLESS STEEL
STD	STANDARD	STD	STANDARD
STA	STATION	STA	STATION
STL	STEEL	STL	STEEL
STOR	STORAGE	STOR	STORAGE
SD	STORM DRAIN	SD	STORM DRAIN
STR	STRUCTURAL	STR	STRUCTURAL
SUR	SURVEY	SUR	SURVEY
SUSP	SUSPENDED	SUSP	SUSPENDED
SW	SWITCH	SW	SWITCH
SYM	SYMMETRIC(AL)	SYM	SYMMETRIC(AL)
SYS	SYSTEM	SYS	SYSTEM
TEL	TELEPHONE	TEL	TELEPHONE
TP	TELEPHONE POLE	TP	TELEPHONE POLE
TV	TELEVISION	TV	TELEVISION
TEMP	TEMPORARY	TEMP	TEMPORARY
TSTAT	THERMOSTAT	TSTAT	THERMOSTAT
THK	THICK	THK	THICK
THRU	THROUGH	THRU	THROUGH
T & B	TOP AND BOTTOM	T & B	TOP AND BOTTOM
TOC	TOP OF CURB	TOC	TOP OF CURB
TOP	TOP OF PAVEMENT	TOP	TOP OF PAVEMENT
TOS	TOP OF STEP	TOS	TOP OF STEP
TOW	TOP OF WALL	TOW	TOP OF WALL
TPO	THERMOPLASTIC POLYOLEFIN	TPO	THERMOPLASTIC POLYOLEFIN
TR	TREAD	TR	TREAD
TRTD	TREATED	TRTD	TREATED
TS	TUBULAR STEEL	TS	TUBULAR STEEL
TYP	TYPICAL	TYP	TYPICAL
UND	UNDER	UND	UNDER
UG	UNDERGROUND	UG	UNDERGROUND
UL	UNDERWRITERS LABORATORY	UL	UNDERWRITERS LABORATORY
UFAS	UNIFORM FEDERAL ACCESSIBILITY STANDARDS	UFAS	UNIFORM FEDERAL ACCESSIBILITY STANDARDS
USC&GS	UNITED STATES COAST AND GEODETIC SURVEY	USC&GS	UNITED STATES COAST AND GEODETIC SURVEY
UON	UNLESS OTHERWISE NOTED	UON	UNLESS OTHERWISE NOTED
VAL	VALVE, VENT	VAL	VALVE, VENT
VAR	VARIABLE	VAR	VARIABLE
VTR	VENT THROUGH ROOF	VTR	VENT THROUGH ROOF
VERT	VERTICAL	VERT	VERTICAL
VC	VERTICAL CURVE	VC	VERTICAL CURVE
VSD	VERTICAL SIGHT DISTANCE	VSD	VERTICAL SIGHT DISTANCE
VCT	VINYL COMPOSITION TILE	VCT	VINYL COMPOSITION TILE
VWC	VINYL WALL COVERING	VWC	VINYL WALL COVERING
VDOT	VIRGINIA DEPARTMENT OF TRANSPORTATION	VDOT	VIRGINIA DEPARTMENT OF TRANSPORTATION
VESCR	VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS	VESCR	VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS
VUSBC	VIRGINIA UNIFORM STATEWIDE BUILDING CODE	VUSBC	VIRGINIA UNIFORM STATEWIDE BUILDING CODE
VOL	VOLUME	VOL	VOLUME
WC	WATER CLOSET	WC	WATER CLOSET
WL	WATER LINE	WL	WATER LINE
WR	WATER RESISTANT	WR	WATER RESISTANT
WS	WATER SURFACE	WS	WATER SURFACE
WP	WEATHERPROOF	WP	WEATHERPROOF
WT	WEIGHT	WT	WEIGHT
WVDH	WEST VIRGINIA DEPARTMENT OF HIGHWAYS	WVDH	WEST VIRGINIA DEPARTMENT OF HIGHWAYS
WBL	WESTBOUND LANE	WBL	WESTBOUND LANE
WWA	WESTERN VIRGINIA WATER AUTHORITY	WWA	WESTERN VIRGINIA WATER AUTHORITY
WB	WET BULB	WB	WET BULB
W	WIDE FLANGE, WIDE, WASTE, WATER	W	WIDE FLANGE, WIDE, WASTE, WATER
WDW	WINDOW	WDW	WINDOW
W/O	WITHOUT	W/O	WITHOUT
WD	WOOD	WD	WOOD

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
		STORM DRAIN SEWER MANHOLE
		SANITARY SEWER 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
		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

LEGEND / SYMBOLS

	ROUGH WOOD		GYPSUM DRYWALL
	FINISH WOOD		CONCRETE
	PLYWOOD		CONCRETE MASONRY UNIT
	BATT INSULATION		BRICK
	RIGID INSULATION		

TYPICAL SYMBOLS

	PLAN OR DETAIL SYMBOL
	BUILDING SECTION, WALL SECTION, OR ELEVATION SYMBOL
	SHEET NUMBER WHERE ELEVATION IS DRAWN NORTH ARROWS
	INTERIOR ELEVATION SYMBOL
	DOOR DESIGNATION
	WINDOW DESIGNATION
	DEMOLITION DESIGNATION
	ACM DESIGNATION

GENERAL NOTES

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: 15-205.

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. NO GROUND-LEVEL OR ROOF-MOUNTED EQUIPMENT PLANNED FOR THIS PROJECT OR SITE.

NO DUMPSTER OR SIMILAR REFUSE CONTAINER IS PLANNED FOR THIS PROJECT OR SITE.

NO FIRE SUPPRESSION OR FIRE ALARM ARE REQUIRED OR PLANNED FOR THIS PROJECT.

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:

- UBC 2012 (USE GROUP S-1)
- 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
- WWA - WESTERN VIRGINIA WATER AUTHORITY

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

OBT