ABBREVIATIONS

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

LEGEND / SYMBOLS

EXISTING	NEW	DESCRIPTION
		BUILDING WITH PORCH OR STOOP
		FOUNDATION ONLY
35	35	CONTOUR, CONTOUR WITH ELEVATION
20.0 E OR +1025.00 E	20.0 E OR X 1025	SPOT ELEVATION
		CONCRETE CURB
		CONCRETE CURB & GUTTER
		CONCRETE WALK OR SLAB
		PAVEMENT
		UNPAVED OR GRAVEL ROAD
		CONSTRUCTION EASEMENT
		PERMANENT EASEMENT
		TREE LINE
OR	OR	TREE OR SHRUB
x x	x x	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)
SD	SD	STORM DRAIN AND ENDWALL
SS	SS	SANITARY SEWER
FM	FM	FORCE MAIN
G	G	GAS MAIN OR SERVICE LINE
W	W	WATER MAIN OR SERVICE LINE
OE	OE	OVERHEAD ELECTRICAL LINE
OT	OT	OVERHEAD TELEPHONE LINE
UE	UE	UNDERGROUND ELECTRICAL LINE
UT	UT	UNDERGROUND TELEPHONE LINE
		PIPE FITTINGS
		FIRE HYDRANT
		GATE VALVE
CO	CO	CLEANOUT
S		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
T	T	TELEPHONE PEDESTAL
T	T	BURIED TELEPHONE VAULT
		PAVED DITCH
		STORM PIPE (SIZE / TYPE NOTED)
		CULVERT WITH FLARED END SECTION
PROFILE PLAN	PROFILE PLAN	AIR RELEASE VALVE / VAULT ASSEMBLY
PROFILE PLAN	PROFILE PLAN	BLOW OFF VALVE / VAULT ASSEMBLY
		STEEL ENCASEMENT
		CONCRETE ENCASEMENT
		ABANDON OR REMOVE
		LIMITS OF CONSTRUCTION

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.

EXISTING UTILITIES BELONGING TO N&S RAILROAD WERE NOT LOCATED AT THE TIME OF THIS SURVEY. THE CONTRACTOR IS DIRECTED TO COORDINATE ALL WORK WITH N&S TO ENSURE THAT ALL EXISTING UTILITIES REMAIN UNDISTURBED. THE CURRENT CONTACT IS FRANK IRBY (434-797-6389).

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Engineering
Architecture
Surveying
Landscape Design

STEEL DYNAMICS
WATERLINE EXTENSION
ROANOKE, VIRGINIA

NO.	DATE	DESCRIPTION	BY

ABBREVIATIONS, LEGEND, & GENERAL NOTES

COMMONWEALTH OF VIRGINIA
RICHARD C. WHITE
Lic. No. 20021
11-7-07
PROFESSIONAL ENGINEER

Designed By	RCW
Drawn By.	CHW
Checked By	RCW
Approved By	RCW
Submitted By	RCW
Drawing	ABBREV.
Date	08/06/2007
Scale	NONE
Commission No.	3391
Sheet	2 of 8