

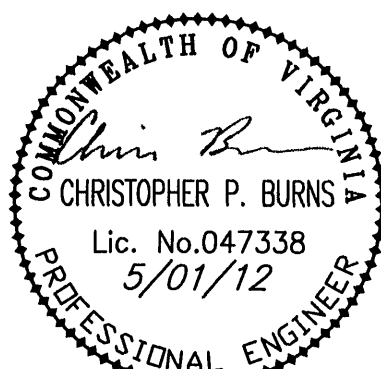
REFLECTING TOMORROW

www.balzer.cc  
New River Valley  
Richmond  
Roanoke  
Shenandoah Valley

RESIDENTIAL LAND DEVELOPMENT ENGINEERING  
SITE DEVELOPMENT ENGINEERING  
LAND USE PLANNING & ZONING  
LANDSCAPE ARCHITECTURE  
LAND SURVEYING  
ARCHITECTURE  
STRUCTURAL ENGINEERING  
GEOTECHNICAL ENGINEERING  
TRANSPORTATION ENGINEERING  
ENVIRONMENTAL & SOIL SCIENCE  
WETLAND DELINEATIONS & STREAM EVALUATIONS

Balzer and Associates, Inc.

1208 Corporate Circle  
Roanoke, VA 24018  
540-772-9580  
FAX 540-772-8050



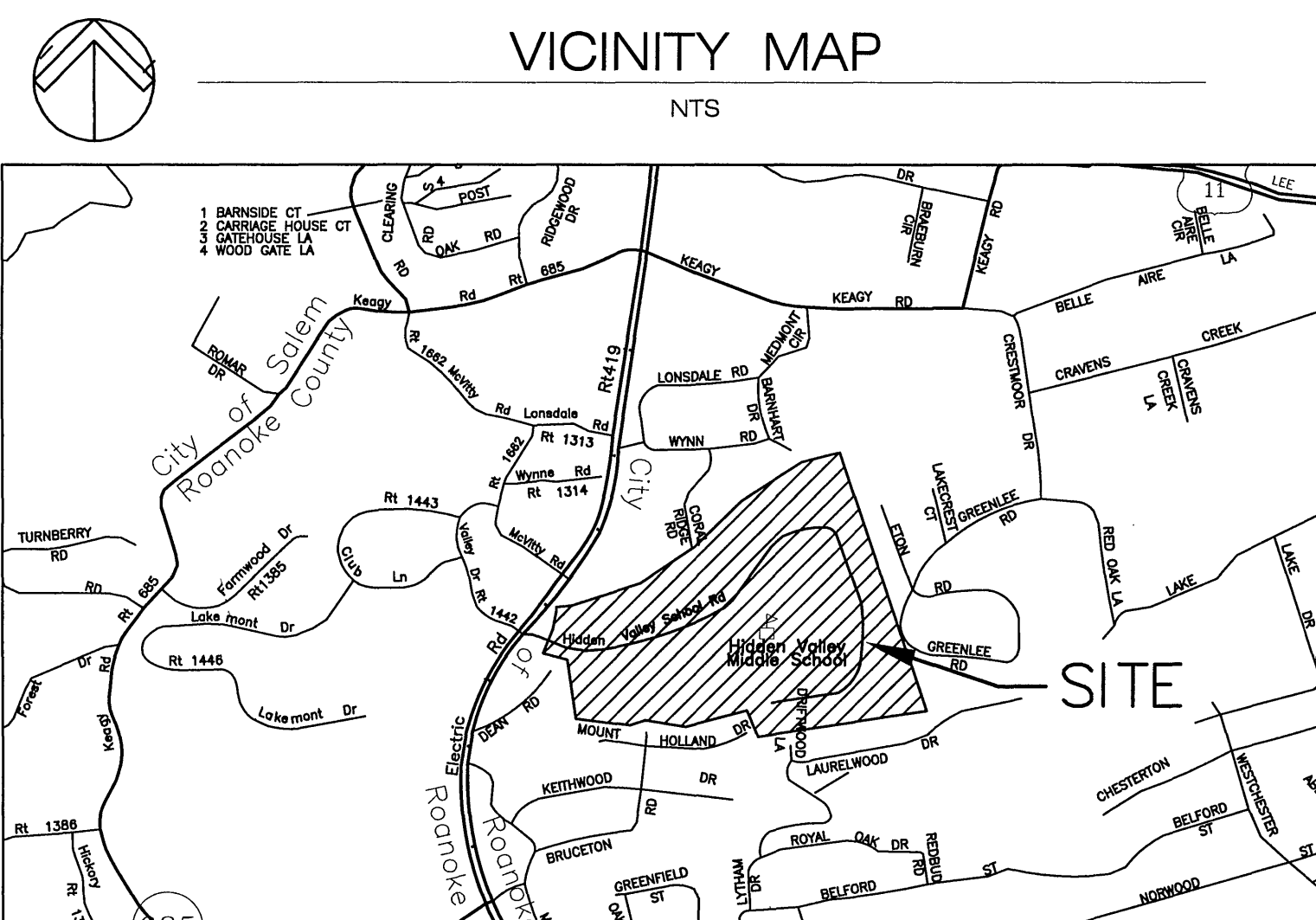
H.V.M.S. WATERLINE  
COVER  
CITY OF ROANOKE, VIRGINIA

DRAWN BY BTC  
DESIGNED BY BTC  
CHECKED BY CPB  
DATE 3-30-12  
SCALE N/A  
REVISIONS:  
5-1-2012

SHEET NO.

C-01

JOB NO. R1200006.00



# HIDDEN VALLEY MIDDLE SCHOOL WATERLINE IMPROVEMENTS

4938 HIDDEN VALLEY SCHOOL ROAD  
ROANOKE, VIRGINIA 24018

## SITE INFORMATION

SITE ADDRESS: 4938 HIDDEN VALLEY SCHOOL ROAD  
ROANOKE, VIRGINIA 24018  
OWNER/DEVELOPER: SCHOOL BOARD OF ROANOKE COUNTY  
4938 HIDDEN VALLEY SCHOOL ROAD  
ROANOKE, VIRGINIA 24018  
Phone: (540) 562-3900  
Contact: MR. MARTY MISICKO  
USE: EDUCATIONAL FACILITY - MIDDLE SCHOOL  
ZONING: INPUD  
OVERLAY DISTRICT: RIVER & CREEK CORRIDOR  
TAX PARCEL NO.: 5120115  
SITE AREA: 40.92  
DISTURBED AREA: 0.82 ACRES  
WATER: EXISTING PUBLIC SERVICE  
SEWER: EXISTING PUBLIC SERVICE  
BUILDING AREA/NO. OF STORIES: EXISTING BUILDING - 122,462 S.F.  
MAX. FLOOR AREA RATIO ALLOWED/PROVIDED: NO CHANGES FROM EXISTING CONDITIONS  
IMPERVIOUS SURFACE RATIO ALLOWED/PROVIDED: NO CHANGES FROM EXISTING CONDITIONS  
MAXIMUM BUILDING HEIGHT ALLOWED/PROPOSED: NO CHANGES FROM EXISTING CONDITIONS  
COMPREHENSIVE SITE PLAN NUMBER: CP120017

## SHEET INDEX

- C-01 COVER
- C-02 UTILITY PLAN 1
- C-03 UTILITY PLAN 2
- C-04 UTILITY PLAN 3
- C-05 E.S.C. DETAILS
- C-06 NOTES & DETAILS
- C-07 MAINTENANCE OF TRAFFIC PLAN

## ENGINEERS NOTES

BALZER AND ASSOCIATES, INC. ASSUMES NO RESPONSIBILITY FOR ADEQUACY OF PLANS OR FOR INFORMATION ON PLANS UNTIL SUCH PLANS HAVE BEEN APPROVED BY THE REQUIRED PUBLIC AGENCIES.

ANY WORK COMMENCED ON A PROJECT PRIOR TO PLAN APPROVAL IS AT SOLE RISK OF THE DEVELOPER.

BALZER AND ASSOCIATES, INC. WILL NOT BE RESPONSIBLE FOR THE CONTRACTORS FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE PLANS OR WILL NOT BE RESPONSIBLE FOR ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR THEIR AGENTS OR EMPLOYEES, OR OF ANY OTHER PERSONS PERFORMING PORTIONS OF THE WORK.

SOURCE OF TOPOGRAPHIC MAPPING IS FIELD SURVEY PERFORMED BY BALZER AND ASSOCIATES, INC., DATED 2012 AND CITY OF ROANOKE AERIAL MAPPING, DATED APRIL, 1996.

## LEGEND

[Symbol]	CONCRETE	[Symbol]	PAVEMENT REPLACEMENT	[Symbol]	PAVERS	[Symbol]	CG-6 (WET)
[Symbol]	ASPHALT PAVING	[Symbol]	GRAVEL / RIPRAP	[Symbol]	WETLAND AREA	[Symbol]	CG-6 (DRY)
[Symbol]	ADJOINER PROPERTY LINE	[Symbol]	PROP. TELEPHONE LINE	[Symbol]	PROP. GAS LINE	[Symbol]	PROP. UNDERGROUND POWER
[Symbol]	SITE PROPERTY LINE	[Symbol]	PROP. WATERLINE	[Symbol]	PROP. SANITARY SEWER LINE	[Symbol]	PROP. STORM SEWER LINE
[Symbol]	CENTERLINE OF ROADS	[Symbol]	PROP. TREELINE	[Symbol]	BENCHMARK	[Symbol]	PROP. TOP & BOTTOM OF CURB
[Symbol]	EXIST. OVERHEAD CABLES	[Symbol]	TC=351.95	[Symbol]	PROP. CONTOURS	[Symbol]	TYPICAL YARD HYDRANT
[Symbol]	8" W WATER LINE	[Symbol]	BC=351.45	[Symbol]	PROP. FIRE HYDRANT	[Symbol]	PROP. SIAMESE CONNECTION
[Symbol]	8" SS SANITARY SEWER	[Symbol]	348	[Symbol]	PROP. YARD LIGHT	[Symbol]	PROP. GATE VALVE
[Symbol]	18" TWP EXIST. STORM SEWER	[Symbol]	345	[Symbol]	PROP. FENCE	[Symbol]	FLOW ARROW
[Symbol]	EXIST. TREELINE	[Symbol]	EXIST. INTERMEDIATE CONTOURS	[Symbol]	PROP. FENCE	[Symbol]	PROPOSED
[Symbol]	EXIST. EDGE OF PAVEMENT	[Symbol]	EXIST. INDEX CONTOURS	[Symbol]	[Symbol]	[Symbol]	[Symbol]
[Symbol]	WETLAND BOUNDARY	[Symbol]	EXIST. POWER POLE	[Symbol]	[Symbol]	[Symbol]	[Symbol]
[Symbol]	348.55 x EXIST. SPOT ELEVATION	[Symbol]	EXIST. TELEPHONE	[Symbol]	[Symbol]	[Symbol]	[Symbol]
[Symbol]	348 EXIST. INTERMEDIATE CONTOURS	[Symbol]	EXIST. LIGHT POLE	[Symbol]	[Symbol]	[Symbol]	[Symbol]
[Symbol]	345 EXIST. INDEX CONTOURS	[Symbol]	EXIST. FEATURES TO BE REMOVED	[Symbol]	[Symbol]	[Symbol]	[Symbol]
[Symbol]	EXIST. POWER POLE	[Symbol]	EX.	[Symbol]	[Symbol]	[Symbol]	[Symbol]
[Symbol]	EXIST. TELEPHONE	[Symbol]		[Symbol]	[Symbol]	[Symbol]	[Symbol]
[Symbol]	EXIST. LIGHT POLE	[Symbol]		[Symbol]	[Symbol]	[Symbol]	[Symbol]
[Symbol]	EXIST. FEATURES TO BE REMOVED	[Symbol]		[Symbol]	[Symbol]	[Symbol]	[Symbol]
[Symbol]	EX.	[Symbol]		[Symbol]	[Symbol]	[Symbol]	[Symbol]

## WESTERN VIRGINIA WATER AUTHORITY NOTES

AVAILABILITY No.: Number requested, to be issued by W.V.W.A.

GENERAL NOTES:  
A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED WITH THE WESTERN VIRGINIA WATER AUTHORITY TO BE HELD AT LEAST ONE (1) DAY PRIOR TO ANY CONSTRUCTION OF THE APPROVED WATER AND SANITARY SEWER FACILITIES.

A MINIMUM COVER OF THREE (3) FEET IS REQUIRED OVER PROPOSED LINES.  
ALL SANITARY SEWER AND WATER CONNECTIONS TO EXISTING LINES SHALL BE COORDINATED WITH AND PERFORMED BY THE WESTERN VIRGINIA WATER AUTHORITY.

CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND UNCOVERING VALVE VAULTS, MANHOLES, ETC. AFTER PAVING AND ADJUSTING TO FINAL GRADE IF NECESSARY.

ALL EXISTING UTILITIES MAY NOT BE SHOWN OR MAY NOT BE SHOWN IN THE EXACT LOCATION. THE CONTRACTOR SHALL COMPLY WITH THE STATE WATER WORKS REGULATIONS, SECTION 12.05.03, WHERE LINES CROSS.

ALL TRENCHES IN EXISTING OR FUTURE HIGHWAY RIGHT-OF-WAYS SHALL BE COMPACTED ACCORDING TO CITY OF ROANOKE STANDARDS. LINES SHALL BE STAKED PRIOR TO CONSTRUCTION.

CONTRACTOR SHALL REFER TO THE WESTERN VIRGINIA WATER AUTHORITY STANDARD WATER AND SEWER REGULATIONS FOR CONSTRUCTION DETAILS AND INSTALLATION METHODS AS REQUIRED TO COMPLETE THE PROPOSED UTILITY FACILITIES AS INDICATED BY THESE DRAWINGS.

FIELD CORRECTIONS SHALL BE APPROVED BY THE WVWA ENGINEERING DIVISION PRIOR TO SUCH CONSTRUCTION.  
THE CONTRACTOR SHALL PROVIDE THE WESTERN VIRGINIA WATER AUTHORITY WITH CORRECT AS-BUILT PLANS PRIOR TO SUBSTANTIAL COMPLETION OF ANY NEW PUBLIC EXTENSIONS.

WATER NOTES:  
WATER MAINS SHALL BE MINIMUM CLASS 350 DUCTILE IRON IN ACCORDANCE WITH AWWA C151 OR DR-14 PVC IN ACCORDANCE WITH AWWA C-900.  
WATER LATERALS FROM THE METER TO THE BUILDING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE.

THE CONSTRUCTION OF THE PROPOSED PUBLIC WATER MAIN AND ALL COMMERCIAL SERVICES SHALL BE IN COMPLIANCE WITH THE CURRENT WESTERN VIRGINIA WATER AUTHORITY REGULATIONS. REFER TO THESE REGULATIONS FOR COMPLETE DETAILS AND INSTALLATION METHODS.

## DEMOLITION NOTES:

DEMOLITION SHALL INCLUDE, UNLESS OTHERWISE NOTED ON DRAWINGS, REMOVAL OF EXISTING OBJECTS OR IMPROVEMENTS, WHETHER INDICATED ON THE DRAWINGS OR NOT, THAT WOULD IN THE OPINION OF THE OWNER, PREVENT OR INTERFERE WITH THE PROGRESS OR COMPLETION OF THE PROPOSED WORK.

PERMITS, FEES AND LICENSES SHALL BE SECURED AND PAID FOR BY THE CONTRACTOR, INCLUDING DISPOSAL CHARGES AS REQUIRED.

WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE GOVERNING AUTHORITIES IN DEMOLITION OF EXISTING PAVEMENT, CURBS AND GUTTERS, DRAINAGE STRUCTURES AND UTILITIES AS MAY BE REQUIRED.

CONTRACTOR SHALL SAW-CUT ALL JOINTS WHERE EXISTING CURBING, PAVEMENT AND SIDEWALK IS TO BE DEMOLISHED AND NEW CONSTRUCTION JOINS THE EXISTING.

ALL EXISTING CURBING, CONCRETE SIDEWALK, ENTRANCES, BUILDING FOUNDATIONS AND TREES AND BRUSH THAT ARE DEMOLISHED SHALL BE REMOVED FROM THE SITE AND DISPOSED OF BY THE CONTRACTOR, BUILDING DEBRIS, ETC. SHALL NOT BE USED AS FILL MATERIAL ON THE SITE.

CONTRACTOR SHALL PROVIDE THE FOLLOWINGS PROTECTIONS AT THE JOB SITE:  
COMPLY WITH GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.

MAKE ARRANGEMENTS, BEFORE INITIATING DEMOLITION, FOR RELOCATING, DISCONNECTION, REROUTING, ABANDONING, OR SIMILAR ACTION AS MAY BE REQUIRED RELATIVE TO UTILITIES AND OTHER UNDERGROUND PIPING, TO PERMIT WORK TO PROCEED WITHOUT DELAY. ARRANGEMENTS SHALL BE MADE IN ACCORDANCE WITH REGULATIONS OF AUTHORITIES OF UTILITIES MENTIONED, SUCH AS OVERHEAD AND UNDERGROUND POWER AND TELEPHONE LINES AND EQUIPMENT, GAS PIPING, STORM SEWERS, SANITARY SEWERS, OR WATER PIPING. CONTRACTOR SHALL NOT USE WATER WHEN IT MAY CREATE HAZARDOUS OR OBJECTIONABLE CONDITIONS, SUCH AS ICE, FLOODING AND/OR POLLUTION.

ENSURE SAFE PASSAGE OF PERSONS AROUND ALL AREAS OF DEMOLITION. CONDUCT OPERATIONS TO PREVENT DAMAGE TO ADJACENT BUILDINGS, STRUCTURES, OTHER FACILITIES, OR INJURY TO PERSONS.

PROMPTLY REPAIR DAMAGES CAUSED TO ADJACENT FACILITIES BY DEMOLITION OPERATIONS AT NO COST TO THE OWNER.

MAINTAIN EXISTING UTILITIES INDICATED TO REMAIN, KEEP IN SERVICE, AND PROTECT AGAINST DAMAGE DURING DEMOLITION OPERATIONS. PREVENT INTERRUPTION OF EXISTING UTILITIES SERVING OCCUPIED OR USED FACILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES AS ACCEPTABLE TO GOVERNING AUTHORITIES.

USE WATER SPRINKLING AND OTHER SUITABLE METHODS TO LIMIT DUST AND DIRT RISING AND SCATTERING IN AIR TO LOWEST PRACTICAL LEVEL.

## STANDARD CITY OF ROANOKE CONSTRUCTION PROCEDURE REQUIREMENTS

NOTICE TO ALL LANDOWNERS, DEVELOPERS, AND CONTRACTORS:  
FAILURE TO COMPLY WITH THE CONSTRUCTION PROCEDURE REQUIREMENTS LISTED BELOW MAY RESULT IN THE COSTLY REMOVAL OF STRUCTURES, TIME DELAYS, OR THE ISSUANCE OF A STOP WORK ORDER.

RIGHT-OF-WAY EXCAVATION PERMIT: PRIOR TO THE COMMENCEMENT OF ANY DIGGING, ALTERATION, OR CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY (STREETS, ALLEYS, PUBLIC EASEMENTS), A RIGHT-OF-WAY EXCAVATION PERMIT SHALL BE APPLIED FOR AND OBTAINED BY THE CONTRACTOR FROM THE CITY OF ROANOKE.

LAND DISTURBANCE PERMIT: AN APPROVED EROSION AND SEDIMENT CONTROL PLAN FOR ANY BORROW/FILL SITES ASSOCIATED WITH THE PROJECT MUST BE SUBMITTED PRIOR TO THE ISSUANCE OF A LAND DISTURBANCE PERMIT.

PLANS AND PERMITS: A COPY OF THE PLANS AS APPROVED BY THE CITY OF ROANOKE (SIGNED BY THE PROPER CITY OFFICIALS) AND ALL PERMITS ISSUED BY THE CITY SHALL BE MADE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES OF ONGOING CONSTRUCTION.

LOCATION OF UTILITIES: THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION.

CONSTRUCTION ENTRANCE: THE CONTRACTOR SHALL INSTALL AN ADEQUATE CONSTRUCTION ENTRANCE FOR ALL CONSTRUCTION RELATED EGRESS FROM THE SITE. SIZE AND COMPOSITION OF THE CONSTRUCTION ENTRANCE SHALL BE AS SHOWN ON THE PLANS.

STREETS TO REMAIN CLEAN: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT THE PUBLIC STREET ADJACENT TO THE CONSTRUCTION ENTRANCE REMAINS FREE OF MUD, DIRT, DUST, AND/OR ANY TYPE OF CONSTRUCTION MATERIALS OR LITTER AT ALL TIMES.

BARRICADES/DITCHES: THE CONTRACTOR SHALL MAINTAIN THE INTEGRITY OF ALL EXCAVATED DITCHES AND SHALL FURNISH AND ENSURE THAT ALL BARRICADES PROPER AND NECESSARY FOR THE SAFETY OF THE PUBLIC ARE IN PLACE.

SEWER AND PAVEMENT REPLACEMENT: CONSTRUCTION OF SANITARY SEWERS AND THE REPLACEMENT OF PAVEMENT SHALL BE IN ACCORDANCE WITH APPROVED STANDARDS AND SPECIFICATIONS OF THE CITY OF ROANOKE AND THE WESTERN VIRGINIA WATER AUTHORITY.

APPROVED PLANS/CONSTRUCTION CHANGES: ANY CHANGE OR VARIATION FROM CONSTRUCTION DESIGN AS SHOWN ON THE OFFICIALLY APPROVED PLANS SHALL BE APPROVED BY THE EROSION AND SEDIMENT CONTROL AGENT PRIOR TO SAID CHANGES OR VARIATION IN CONSTRUCTION BEING MADE.

FINAL ACCEPTANCE/CITY: THE OWNER OR DEVELOPER SHALL FURNISH THE CITY OF ROANOKE'S PLANNING BUILDING AND DEVELOPMENT DEPARTMENT WITH A FIELD SURVEYED FINAL CORRECT SET OF AS-BUILT PLANS OF THE NEWLY CONSTRUCTED STORM DRAIN AND/OR STORMWATER MANAGEMENT FACILITIES PRIOR TO FINAL ACCEPTANCE AND ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE CITY. AS-BUILT PLANS SHALL BE PROVIDED IN THE STATE PLANE VIRGINIA SOUTH COORDINATE SYSTEM, NAD 1983, FIPS 4502 FEET, US SURVEY FEET, DATUM NA 83, IN THE FORM OF 1 PAPER COPY AND 1 DIGITAL AUTOCAD FILE.

Hidden Valley Middle School  
WATERLINE IMPROVEMENTS  
City of Roanoke  
Planning Building and Development  
AS BUILTS 3-22-13  
APPROVED  
Development Reviewer  
7-23-2012

CITY OF ROANOKE APPROVAL BLOCK

## ABBREVIATIONS

AHFH	ARROW HEAD TOP OF FIRE HYDRANT	EW	ENDWALL	SAN	SANITARY
APPROX	APPROXIMATE	EXIST	EXISTING	SBL	SOUTH BOUND LANE
ASPH	ASPHALT	FDN	FOUNDATION	SD	STORM DRAIN
BC	BOTTOM OF CURB	FF	FINISHED FLOOR	SECT	SECTION
BIT	BITUMENOUS	FG	FINISH GRADE	SE	SLOPE EASEMENT
BLD	BUILDING	HOA	HOMEOWNERS ASSOCIATION	SS	SANITARY SEWER
BLK	BLOCK	HPT	HIGH POINT	SSE	SANITARY SEWER EASEMENT
BM	BENCHMARK	INTX	INTERSECTION	STA	STATION
BW	BOTTOM OF WALL	INV	INVERT	STD	STANDARD
CB	CINDER BLOCK	IP	IRON PIN	STO	STORAGE
C&G	CURB & GUTTER	LT	LEFT	SYS	SIDE YARD SETBACK
CMP	CORRUGATED METAL PIPE	MH	MANHOLE	TBM	TEMPORARY BENCHMARK
CONC	CONCRETE	MIN	MINIMUM BUILDING LINE	TBR	TO BE REMOVED
COR	CORNER	MBL	MINIMUM BUILDING LINE	TC	TOP OF CURB
DBL	DOUBLE	MON	MONUMENT	TEL	TELEPHONE
DEFL	DEFLECTION	NBL	NORTH BOUND LANE	TRANS	TRANSFORMER
DI	DROP INLET	PROP	PROPOSED	TW	TOP OF WALL
DIA	DIAMETER	PUE	PUBLIC UTILITY EASEMENT	TYP	TYPICAL
DE	DRAINAGE EASEMENT	PVM	PAVEMENT	VDOT	VIRGINIA DEPARTMENT OF TRANSPORTATION
ELEC	ELECTRIC	R	RADIUS	VERT	VERTICAL
ELEV	ELEVATION	RT	RIGHT	WBL	WEST BOUND LANE
ENTR	ENTRANCE	R.O.W.	RIGHT OF WAY	WWA	WESTERN VIRGINIA WATER AUTHORITY
EP	EDGE OF PAVEMENT	REQD	REQUIRED	YD	YARD
		RR	RAILROAD		
		RYS	REAR YARD SETBACK		