A MINIMUM COVER OF THREE (3) FEET IS REQUIRED OVER PROPOSED LINES.

LINES SHALL BE STAKED PRIOR TO CONSTRUCTION.

CONTRACTORS SHALL NOTIFY UTILITIES OF PROPOSED CONSTRUCTION AT LEAST TWO, BUT NOT MORE THAN TEN WORKING DAYS IN ADVANCE. AREA PUBLIC UTILITIES MAY BE NOTIFIED THROUGH MISS UTILITY AT (800) 552-7001.

THE GENERAL CONTRACTOR SHALL COORDINATE ANY UTILITY CONSTRUCTION WITH THE GRADING, PAVING AND BUILDING CONTRACTORS AS REQUIRED TO MINIMIZE CONFLICTS.

ALL STORM DRAINAGE AND SANITARY SEWER WORK SHALL HAVE RIGHT-OF-WAY OVER ALL ELECTRICAL, WATERLINE, GAS AND TELEPHONE CONSTRUCTION.

IN ORDER TO MINIMIZE RUNOFF OF SEDIMENT LADEN WATER FROM UTILITY EXCAVATION THE CONTRACTOR SHALL OBSERVE THE FOLLOWING: -NO MORE THAN 500 FT OF TRENCH SHALL BE OPEN AT ONE TIME.

-EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF THE TRENCH. -- EFFLUENT OF DEWATERING SYSTEM MUST BE FILTERED. -ALL BACKFILL SHALL BE PROPERLY COMPACTED TO 95% ASTM D-698, STD. PROCTOR. -EXCAVATION AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY.

CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND UNCOVERING VALVE VAULTS AFTER PAVING AND ADJUSTMENT 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 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.

WATER MAIN SHALL BE MINIMUM CLASS 52 DUCTILE IRON IN ACCORDANCE WITH AWWA C151 OR DR-14 PVC IN ACCORDANCE WITH C-900.

CLASS 350 DUCTILE IRON WATER PIPE IS ACCEPTABLE FOR PUBLIC AND PRIVATE LINES, ASSUMING MANUFACTURER'S PRESSURE RATING IS CONSISTENT WITH TEST AND SERVICE PRESSURES ANTICIPATED FOR THE APPLICABLE PIPE RUNS. MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND WESTERN VIRGINIA WATER AUTHORITY STANDARDS AND SPECIFICATIONS PERTAINING THERETO.

ENGINEER'S NOTES

CALDWELL WHITE ASSOCIATES 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 THE SOLE RISK OF THE OWNER.

CALDWELL WHITE ASSOCIATES DOES NOT GUARANTEE THE COMPLETION OR QUALITY OF PERFORMANCE OF THE CONTRACTS BY CONTRACTORS OR OTHER THIRD PARTIES.

SOURCE OF TOPOGRAPHIC MAPPING IS A FIELD SURVEY BY CALDWELL WHITE ASSOCIATES DATED: FEBRUARY, 2010

BOUNDARY DATA SHOWN IS FROM FIELD SURVEY BY CALDWELL WHITE ASSOCIATES DATED: FEBRUARY, 2010

ADJOINING FACILITIES MUST PROCEED AS NORMAL, AND UNIMPEDED.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY SITE CONDITIONS THAT WILL AFFECT THE INSTALLATION OF PROPOSED IMPROVEMENTS.

GENERAL NOTES

COORDINATION WITH OWNER: A) IT IS OF THE UTMOST IMPORTANCE THAT THE CONTRACTOR COORDINATE CLOSELY WITH THE OWNER RELATIVE TO PERMISSIBLE WORK HOURS AND DAYS. B) UNLESS OTHERWISE SCHEDULED WITH THE OWNER IN ADVANCE, BUSINESS OPERATIONS AT THE

C) CERTAIN HOURS OF THE DAY WILL BE MORE CONDUCIVE FOR CERTAIN CONSTRUCTION ACTIVITIES. WORK CLOSELY WITH OWNER TO SCHEDULE ALL ASPECTS OF CONSTRUCTION.

A RIGHT OF WAY EXCAVATION PERMIT IS REQUIRED FOR ALL WORK WITHIN THE ROANOKE CITY RIGHT-OF-WAYS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THIS PERMIT FROM THE CITY OF ROANOKE. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE A SCHEDULE OF CONSTRUCTION FOR THIS PROJECT WHICH SHALL BE SUBJECT TO APPROVAL BY THE CITY OF ROANOKE AND THE DESIGN

A TRAFFIC CONTROL PLAN HAS BEEN PROVIDED WITH THESE CONSTRUCTION PLANS TO THE CITY OF ROANOKE FOR REVIEW AND APPROVAL. THE CONTRACTOR MAY PREPARE, AND SUBMIT A MODIFIED TRAFFIC CONTROL PLAN SPECIFIC TO HIS PROPOSED SCHEDULE OF CONSTRUCTION TO THE CITY TRAFFIC ENGINEERING DEPARTMENT.

THE CONTRACTOR SHALL, TO ALL EXTENTS PRACTICAL, MINIMIZE THE PERIOD OF TIME WHICH THERE WILL BE NO ACCESS ACROSS THE NORFOLK SOUTHERN TRACKS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE CITY OF ROANOKE TO PERFORM WORK IN THE RIGHT-OF-WAY OF JEFFERSON STREET AND RESERVE AVENUE.

ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE CONSTRUCTION STANDARDS AND SPECIFICATIONS OF THE CITY OF ROANOKE, VDOT, AND/OR THE WESTERN VIRGINIA WATER AUTHORITY, AS

AN APPROVED SET OF PLANS AND ALL PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE.

CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AT THE JOB SITE.

NO CONSTRUCTION OR FIELD CHANGES WITHOUT PRIOR APPROVAL OF THE CONSULTING ENGINEER AND THE CITY OF ROANOKE DEPARTMENT OF PLANNING, BUILDING AND DEVELOPMENT.

LOCATION OF UNDERGROUND UTILITIES SHOWN ARE BASED ON FIELD SURVEYS, AS SHOWN BY AVAILABLE RECORDS AND AS LOCATED BY THE UTILITY LOCATOR SERVICE. CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION.

THE SITE WORK AND LANDSCAPING CONTRACTOR(S) SHALL COMPLY WITH LOCAL CODES IN OBSERVING EROSION CONTROL MEASURES, BOTH ON AND OFF THE SITE. REFER TO THE VIRGINIA UNIFORM CODING SYSTEM CONTAINED IN THE VIRGINIA SOIL EROSION AND SEDIMENT CONTROL HANDBOOK, THIRD EDITION, FOR DETAILS AND SPECIFICATIONS OF EROSION CONTROL ITEMS SHOWN ON THESE PLANS.

ALL PAVING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE VIRGINIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS. THE "PAVEMENT" DESIGN SHALL BE AS SHOWN

EXISTING FENCING, UTILITY LINES OR OTHER PHYSICAL FEATURES THAT REQUIRE DEMOLITION SHALL BE REMOVED FROM THE SITE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF ROANOKE. THE CONTRACTOR SHALL SAW-CUT ALL EXISTING FEATURES THAT ARE TO BE DEMOLISHED AND WHERE NEW CONSTRUCTION JOINS THE EXISTING.

CONSTRUCTION DEBRIS SHALL BE CONTAINED IN ACCORDANCE WITH THE VIRGINIA VIRGINIA LITTER CONTROL ACT. NO LESS THAN ONE LITTER RECEPTACLE SHALL BE PROVIDED ON-SITE.

STANDARD CITY OF ROANOKE CONSTRUCTION PROCEDURE REQUIREMENTS

NOTICE: 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.

CONSTRUCTION PROCEDURE REQUIREMENTS

- 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 (SIGNED BY THE PROPER CITY OFFICIALS) AND ALL PERMITS ISSUED BY THE CITY SHALL BE
- 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 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
- 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.
- 8. 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.
- 10. 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 NAD 83, IN THE FORM OF 1-PAPER COPY AND 1-DIGITAL AUTOCAD

STANDARD CITY OF ROANOKE STREET ACCEPTANCE POLICY

THE FOLLOWING CONDITIONS MUST BE MET BEFORE REQUEST OF ACCEPTANCE OF STREETS BY THE CITY OF ROANOKE CAN BE CONSIDERED:

RIGHT OF WAY IMPROVEMENTS MUST HAVE BEEN INSTALLED FOR AT LEAST ONE (1)

MUST BE INSTALLED, INCLUDING BUT NOT LIMITED TO CURB, GUTTER, SIDEWALK, FULL PAVEMENT SECTION, LIGHTS, AND STREET TREES. • ALL PUBLIC UTILITIES WITHIN THE RIGHT OF WAY MUST BE INSTALLED. WATERLINES AND

ALL IMPROVEMENTS WITHIN THE RIGHT-OF-WAY SHOWN ON THE APPROVED SITE PLAN

• ALL STORM DRAIN STRUCTURES AND LINES MUST BE FULLY OPERATIVE AND FREE OF

SANITARY SEWER LINES MUST HAVE RECEIVED FINAL ACCEPTANCE FROM THE WESTERN

• NO UNAUTHORIZED STRUCTURES CAN BE LOCATED WITHIN THE PUBLIC RIGHT OF WAY.

• ALL AREAS OF THE PUBLIC RIGHT OF WAY NOT OTHERWISE COVERED WITH HARDSCAPE MUST BE STABILIZED IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL

ALL CONCRETE WORK MUST BE VOID OF ANY CRACKS.

ALL TESTING RESULTS MUST BE SUBMITTED FOR REVIEW AND APPROVAL. TESTING SHOULD BE SUBMITTED PRIOR TO PAVING TO ENSURE NO ISSUES ARISE AFTER PAVING.

• AN AS-BUILT OF THE PUBLIC STORM DRAIN SYSTEM AND STORMWATER MANAGEMENT FACILITY MUST BE PROVIDED FOR REVIEW AND APPROVAL.

NORFOLK SOUTHERN RAILWAY COORDINATION REQUIREMENTS

1. CONTACT DATA: 524-4274 VIRGINIA DIVISION ENGINEER -MR. RON PATTON -SIGNAL CONSTRUCTION -MR. MARK LITMAN — 529-6117 or MR. JOHN SANTAMARIA - 797-8467 *524–5110* RIGHT OF ENTRY, INSURANCE, ETC - MR. NICK SERVIDO -

- NO WORK SHALL BE PERFORMED WITHIN THE RIGHT-OF-WAY OF N-S (NORFOLK SOUTHERN) UNTIL THE GENERAL CONTRACTOR HAS ACQUIRED THE NECESSARY RIGHT OF ENTRY PERMITS AND N-S INSURANCE.
- THE GENERAL CONTRACTOR SHALL COORDINATE ALL WORK AND SCHEDULING OF ANY WORK WITHIN THE N-S RIGHT-OF-WAY WITH THE OFFICE OF THE VIRGINIA DIVISION ENGINEER.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE OFFICE OF THE VIRGINIA DIVISION ENGINEER FOR DETERMINING THE REQUIREMENTS FOR FLAGMEN. FLAGMEN WILL BE PROVIDED BY N-S. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CHARGES BY N-S FOR THE SERVICES OF THE FLAGMEN.
- ONCE THE EXISTING CROSS ARMS ARE TAKEN OUT OF SERVICE, NO CONSTRUCTION VEHICLES SHALL CROSS THE N-S TRACKS WITHOUT N-S FLAGMEN PRESENT.

LEGEND for CIVIL BASED DRAWINGS

ABBREVIATIONS				
	AHFH	ARROW HEAD TOP OF	MON	MONUMENT
		FIRE HYDRANT	N-S	NORFOLK SOUTHERN
	APPROX	APPROXIMATE	NBL	NORTH BOUND LANE
	ASPH	ASPHALT	PROP	PROPOSED
	BC .	BOTTOM OF CURB	PUE	PUBLIC UTILITY EASEMENT
	BIT	BITUMINOUS	PVMT	PAVEMENT
	BLDG	BUILDING	Ŕ	RADIUS
	BLK	BLOCK	RT	RIGHT
	BM	BENCHMARK	R/W	RIGHT OF WAY
	BW	BOTTOM OF WALL	REQD	REQUIRED
	CB	CINDER BLOCK	RR	RAILROAD
	C&G	CURB & GUTTER	RYS	REAR YARD SETBACK
	CMP	CORRUGATED METAL PIPE	SAN	SANITARY
	CONC	CONCRETE	SBL	SOUTH BOUND LANE
	COR	CORNER	SD	STORM DRAIN
	DBL	DOUBLE	SDMH	STORM DRAIN MANHOLE
	DEFL	DEFLECTION	SECT	SECTION
	Dſ	DROP INLET	SE	SLOPE EASEMENT
	DIA	DIAMETER	SS	SANITARY SEWER
	DE	DRAINAGE. EASEMENT	SSMH	SANITARY SEWER MANHOLE
	EBL	EAST BOUND LINE	STA	STATION
	EG	EDGE OF GRAVEL	STD	STANDARD
	EP	EDGE OF PAVEMENT	STO	STORAGE
	ELEC	ELECTRIC	SWPPP	STORMWATER POLLUTION
	ELEV	ELEVATION		PREVENTION PLAN
	ENTR	ENTRANCE	SYS	SIDE YARD SETBACK
	EW	ENDWALL	TBM	TEMPORARY BENCHMARK
	EX.	EXISTING.	TC	TOP OF CURB
	FDN CC	FOUNDATION FINISHED FLOOR	TEL .	TELEPHONE
	FF CC	FINISH GRADE	TRANS	TRANSFORMER
	FG HPT		TW	TOP OF WALL
	INV	HIGH POINT INVERT	TYP	TYPICAL VIRGINIA EROSION (: SEDIMENT
	IIV IP	IRON PIN	VESCH	CONTROL HANDBOOK
	LT	LEFT	<i>VDOT</i>	VIRGINIA DEPARTMENT OF
	MBL	MINIMUM BUILDING LINE		TRANSPORTATION
	MH	MANHOLE	VERT	VERTICAL
			WDI	WEST BOUND LAND

WEST BOUND LANE

DETAIL BUBBLE

SYMBOLS

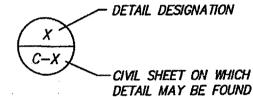
Date

05/05/14

2 06/30/14

3 07/22/14

08/08/14



EXISTING	NEW	• '
100.5	100.5	SPOT ELEVATION
100 - -		CONTOURS
=== 8"SS ===	==== 8"SS=====	SANITARY SEWER LINE
4°W	4"₩	WATERLINE
=== 8"SD ===	===8"SD====	STORM DRAIN
2°G	2"G	GAS LINE
- · - OHE - · -	— · — OHE— · —	OVERHEAD ELECTRIC LINE
· OHT ·	— · — ОНТ— · —	OVERHEAD TELEPHONE LINE
CATV	CATV	OVERHEAD CABLE TELEVISION LINE
UE	-·-UE·UT	UNDERGROUND TEL OR ELEC LINE
m	M.	WATER OR GAS METER
		VALVE
—— ф- F.H.	∳ F.H.	FIRE HYDRANT
─ ≪	<	MANHOLE
——o c.o.	C.O.	CLEANOUT
		DROP INLET (CURB OR GRATE)
ф -	♦—Ⅱ	UTILITY POLE, GUY & ANCHOR
		DITCH OR SWALE
—— <u> </u>	——————————————————————————————————————	CENTERLINE OR BASELINE
	——P——	PROPERTY LINE
Δ	A	SURVEY TRAVERSE POINT
Δ	Δ	DEFLECTION ANGLE
X	4	DIRECT ANGLE
O∳ y.I.	⇔ Y.L.	YARD LIGHTING
○ y.h	⊕ - <i>Y.H.</i>	YARD HYDRANT
©		WELL
•		BENCHMARK
x x		FENCE
		TREE LINE

REVISIONS Remarks Checked By:. PER CITY OF ROANOKE 1st REVIEW PER CITY OF ROANOKE 2nd REVIEW ISSUED FOR BID PER CITY OF ROANOKE 3rd REVIEW __Carilion #1

RAILROAD TRACKS

HANDICAPPED SPACE

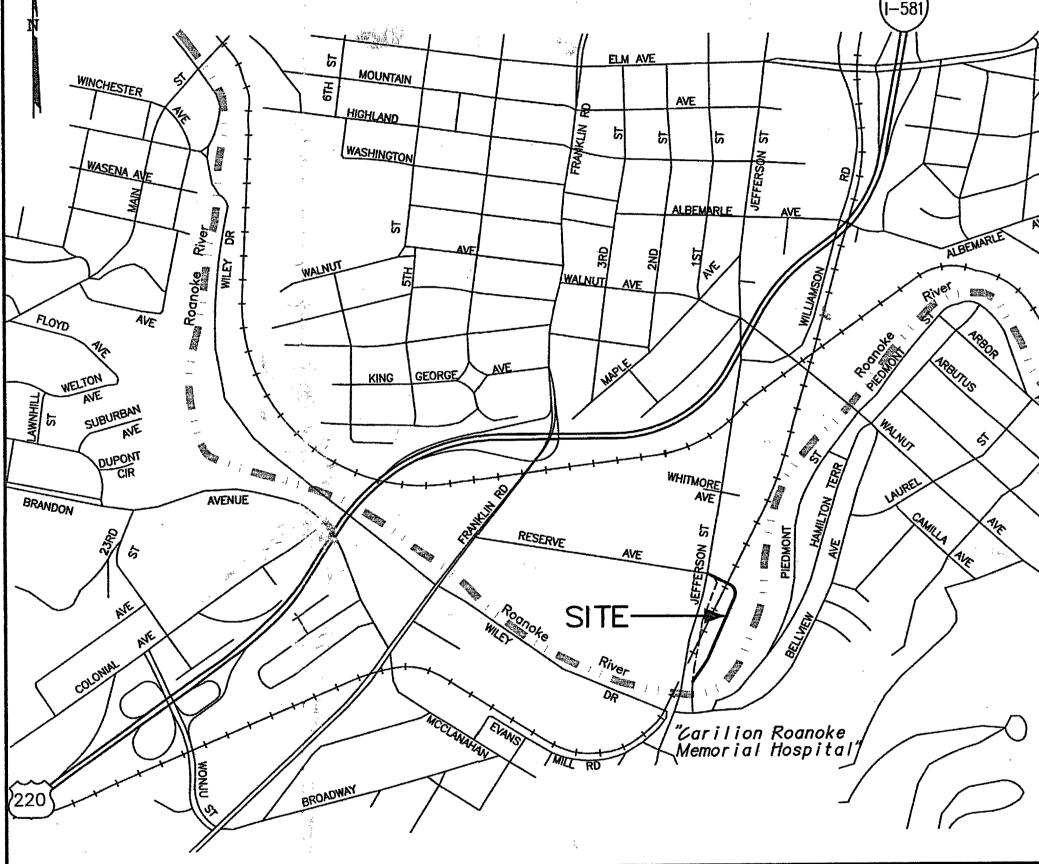
PHASE 1 & 2 CONSTRUCTION PLANS PHASE 3 CONSTRUCTION PLAN AUG 2 1 2014 C-4 EXISTING CONDITIONS & DEMOLITION PLAN EXISTING CONDITIONS & DEMOLITION PLAN C-5 C-6 DIMENSIONAL AND LANDSCAPING PLAN C-7DIMENSIONAL AND LANDSCAPING PLAN GRADING, UTILITIES AND E.S.C. PLAN C-9 GRADING, UTILITIES AND E.S.C. PLAN PROFILES AND CONSTRUCTION DETAILS EROSION & SEDIMENT CONTROL REGULATION INFORMATION C-11 C-12 EROSION & SEDIMENT CONTROL DETAILS GENERAL PERMIT NO.: VAR10 — SUPPLEMENTAL INFORMATION POLLUTION PREVENTION PLAN ANY VARIATION FROM APPROVED PLANS MUST BE APPROVED BY THE CITY OF ROANOKE VICINITY MAP

<u>CIVIL SHEET INDEX</u>

CIVIL TITLE SHEET

SHEET #

C-1



RESERVE AVENUE CITY OF ROANOKE APPROVALS Permit # : CP140010 PROJECT: REALIGNMENT City of Roanoke Planning Building and Development

DEVELOPMENT PLANAPPROVED

Any changes to this approved plan mustibe coordinated with the Agent to the Planning Commission and revisions approved prior to construction.

> FRANK B. CALDWELL.III LIC. NO. 9184 08 Aug. 14

4040410 & 4040503 TAX PARCEL:

CARILION CLINIC, INC. **DEVELOPER:** 1906 BELLVIEW AVENUE, S.E. ROANOKE, VA 24014

SEE VICINITY MAP THIS SHEET FOR: RESERVE AVENUE LOCATION: ROANOKE CITY, VIRGINIA 24014

CONTRACTOR: SUBJECT TO BID

CALDWELL WHITE ASSOCIATES

ENGINEERS / SURVEYORS / PLANNERS 4203 MELROSE AVENUE, N.W. P.O. BOX 6260 ROANOKE, VIRGINIA 24017 (540) 366-3400 EMAIL: CWAROANOKE@AOL.COM

SHEET C-1

Seth tank

1.28-2015

Built as Planned

No notes appen

Date