CONSTRUCTION PROCEDURE REQUIREMENTS

CITY INSPECTIONS: TO ENSURE THE COORDINATION OF TIMELY AND PROPER INSPECTIONS, A PRECONSTRUCTION CONFERENCE SHALL BE INITIATED BY THE CONTRACTOR WITH THE CITY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT. CALL 540/853-2250 TO ARRANGE A CONFERENCE AT LEAST THREE (3) DAYS PRIOR TO ANTICIPATED CONSTRUCTION.

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

CONSTRUCTION ENTRANCE: THE CONTRACTOR SHALL INSTALL AN ADEQUATE CONSTRUCTION ENTRANCE FOR ALL CONSTRUCTION—RELATED EGRESS FROM THE SIZE AND COMPOSITION OF CONSTRUCTION ENTRANCE SHALL BE DETERMINED BY CITY SITE PLAN INSPECTOR.

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

BARRICADES / DITCHES: THE CONTRACTOR SHALL MAINTAIN THE INTEGRITY OF ALL EXCAVATED DITCHES AND SHALL FURNISH AND ENSURE THAT ALL BARRICADES PROPER

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.

APPROVED PLANS/CONSTRUCTION CHANGES: ANY CHANGE OF VARIATION FROM CONSTRUCTION DESIGN AS SHOWN ON THE OFFICIALLY APPROVED PLANS SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO SAID CHANGES OR VARIATIONS IN

FINAL ACCEPTANCE/CITY: THE DEVELOPER OR CONTRACTOR SHALL FURNISH THE CITY OF ROANOKE ENGINEERING DEPARTMENT WITH A FINAL CORRECT SET OF AS-BUILT PLANS PRIOR TO FINAL ACCEPTANCE BY THE CITY.

16'09'57"

S22'06'22''W

DISTANCE

NEW 40 LF

APPROX. LOC. 100° YR.

FLOODPLAIN

ZONE AE

RETAINING WALL-

EXISTING

SWM FACILITY

TOP=999.99

24" INV. IN=995.09

24" INV. OUT=995.09

23.39

14.77

25.00

3.55

7.03

04*59'11"

79.54

913.93

39.79

79.51

N62'33'21''W

APPROX, LOC.

FLOODPLAIN -

UNSHADED

ZONE X EX. RIP RAP

100 YR.

EX. CLEANOUT -

20'46'06''

117.80

325.00

117.16

S03'38'44''W

\S62'26'20''W

N33'42'53''W

N86'46'41''W 19.37'

59.56

NUMBER DIRECTION

DELTA=

RADIUS=

CHORD=

EX. SSMH-

N/F BRANDON AVE. LITTREAL PARTNERSHIP

TAX # 5200104

TOP=997.12

SHELF=989.92 INV IN=989.62

INV OUT=989.42

TANGENT=

BEARING=

DIMENSIONAL NOTES

IN GENERAL DIMENSIONS ARE TO BOTTOM FACE OF CURB, CENTER OF PAINTED LINE, EDGE OF PAVEMENT, FACE OF WALL.

RADII ARE 5.0 UNLESS OTHERWISE NOTED. SEPARATE PARKING SPACES WITH 4" WIDE WHITE PAINTED LINES. USE PAINT MANUFACTURED FOR THE PURPOSE.

4. OD NOT SCALE DIMENSIONS. IF A QUESTION CONCERNING A DIMENSION ARISES, CONTACT THE ENGINEER FOR INTERPRETATION.

1. SEE PAVEMENT SECTION ON SHEET C3.

2. SAW CUT EDGE OF EXISTING PAVEMENT WHERE NEW IS TO MEET EXISTING.

PROVIDE SMOOTH TRANSITION FROM EXISTING TO NEW PAVEMENT AND CURB. 4. THE PAVEMENT DESIGN SHOWN IS BASED ON A SUBGRADE RATING OF CBR 10 OR

ALTERNATE PAVEMENT DESIGN MUST BE APPROVED BY THE CITY OF ROANOKE. 5. DO NOT LAY PAVEMENT BASE STONE UNTIL ALL UTILITIES, INCLUDING STORM SEWER,

GREATER. SHOULD THE ACTUAL SUB GRADE CBR VALUES BE LESS THAN 10, AN

NEW GAS SERVICE

-4.0' SIDEWALK

THIS SIDE OF

BUILDING -

12.0 LF-WALL-

NEW 70 LF-6" SAN LAT

PVC SDR 35 @ 15.6%

SEE ARCH. PLANS

BRANDON AVENUE S.W.

FOR BLDG. DIM.

NEW OFFICE 2,900 SF

LOT 1B

1. IN AREAS OF WATERLINE CONSTRUCTION, GRADES SHALL BE WITHIN SIX (6) INCHES OF FINISHED SUBGRADE PRIOR TO THE COMMENCEMENT OF THIS WORK.

2. ALL CONNECTIONS TO EXISTING WATER MAINS SHALL BE MADE BY THE CITY OF

WATER PIPE SHALL BE DUCTILE IRON WITH PUSH-ON JOINTS. DUCTILE IRON PIPE SHALL CONFORM TO AWWA C-151/ANSI 21/51 AND FITTINGS SHALL CONFORM TO AWWA C-110/ANSI 21.10. THE PIPE AND FITTINGS SHALL BE BITUMINOUS COATED AND CEMENT LINED IN ACCORDANCE WITH AWWA C-104/ANSI 21.40. THE PIPE THICKNESS SHALL CONFORM TO AWWA C-150/ANSI 21/50 AND SHALL BE CLASS 50, AS A MINIMUM, UNLESS SPECIFIED OR INDICATED OTHERWISE.

4. MINIMUM CLEAR COVER OVER ALL WATER PIPE SHALL BE THREE (3) FEET.

5. THE CITY SHALL INSTALL ALL WATER SERVICE CONNECTIONS AND METER BOXES.

SEWER NOTES

EX. SSMH

—NO PARKING SIGN

HANDICAP RAMP

-NEW HANDICAP SIGN

TOP=1023.92

1. PIPE AND FITTINGS SHALL BE POLYVINYL CHLORIDE (PVC) SDR 35 AND SHALL CONFORM TO ASTM D-3034. BEDDING SHALL BE CLASS "B" MINIMUM.

2. CONNECT PIPE TO MANHOLES THROUGH PRECAST OPENINGS AND JOIN WITH EITHER A FLEXIBLE BOOT ADAPTER OR A PIPE SEAL GASKET.

_ EX. SSMH

CURB

R7.50'

TOP=1016.82

SHELF=1007.32

INV IN = 1006.94

INV IN=1006.95

INV IN=1006.87

INV OUT=1006.80

-VERIFY THE LOCATION AND SIZE

EX. CURB AND GUTTER

-EXISTING WATER METER

APPROX. FUTURE SIGN LOCATION

EX.STM. STR. TOP=1007.50

SIGN

15" INV. IN=1003.60

.15" INV. OUT=1003.60

OF THE EXISITING GAS MAIN

STD. CITY OF ROANOKE

COMMERCIAL ENTRANCE

 $-REMOVE \pm 45$ LF OF EX.

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:
 - a. BOCA BASIC CODES
 - 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
 - f. ASTM AMERICAN SOCIETY FOR TESTING AND MATERIALS
- 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
- COMPLY WITH LOCAL ORDINANCES FOR BURNING OF WASTE. TRANSPORT WASTE.
- MATERIALS AND UNSUITABLE MATERIALS FROM OWNER'S PROPERTY. COORDINATE BUILDING DIMENSIONS WITH ARCHITECTURAL PLANS.
- 7. A PRECONSTRUCTION MEETING MUST TAKE PLACE PRIOR TO COMMENCING WORK. AS
- A MINIMUM, THE CONTRACTOR, OWNER'S AGENT AND CITY'S AGENT MUST ATTEND. 8. VERIFY THE LOCATION AND ELEVATION OF EACH EXISTING UNDERGROUND UTILITY IN AREAS OF CONSTRUCTION PRIOR TO COMMENCEMENT OF WORK. CONTACT ENGINEER IMMEDIATELY IF THERE APPEARS TO BE A CONFLICT, UPON DISCOVERY OF A UTILITY WHICH IS NOT SHOWN, AND UPON DISCOVERY OF A LOCATION OR ELEVATION WHICH DIFFERS FROM THAT SHOWN. TO LOCATE UTILITIES, CALL "MISS UTILITY", 1-800-552-7001. UTILITY LOCATIONS SHOWN ARE THE RESULT OF A COMBINATION OF FIELD LOCATION
- AND EXISTING INFORMATION. LOCATIONS ARE APPROXIMATE 9. REPAIR ALL DAMAGE TO ANY UTILITY, PUBLIC OR PRIVATE, CAUSED AS A RESULT OF CONSTRUCTION ACTIVITIES, AT NO ADDITIONAL COST TO OWNER.
- 10. NOTIFY OWNERS OF UTILITIES IN AREAS OF CONSTRUCTION PRIOR TO COMMENCEMENT OF EXCAVATION.
- 11. SIGNAGE SHALL COMPLY WITH THE APPLICABLE REGULATIONS OF THE CITY. A SEPARATE PERMIT IS REQUIRED.
- 12. SITE LIGHTING SHALL CONFORM TO THE APPLICABLE REGULATIONS OF THE
- 13. SCREEN ALL TRANSFORMERS, HEAT PUMPS, AND OTHER MECHANICAL EQUIPMENT. MECHANICAL UNITS LOCATED TO THE REAR OF BUILDINGS MUST BE VISUALLY AND ACOUSTICALLY SCREENED FROM ADJOINING PROPERTIES.
- 14. SCREEN TRASH DUMPSTERS AND CONTAINERS USED FOR RECYCLING WITH ARCHITECTURAL SCREENING ON THREE SIDES (6' HEIGHT, MINIMUM).

SITE SUMMARY

OWNER/ DR. PAUL A. HENNY DEVELOPER: 3531 KEAGY RUAD SW SALEM, VA 24153 774-1577

TAX MAP NUMBER: 5200124 SIZE: 0.503 ACRE ZONING: C2 MINIMUM LOT SIZE REQUIRED: 10,000 SE MINIMUM LOT FRONTAGE REQUIRED: 75 FEET LOT FRONTAGE PROVIDED: 124 FEET SETBACKS: FRONT 25 FEET SIDE 0 REAR 25 FEET MAXIMUM BUILDING HEIGHT: 45 FEET BUILDING HEIGHT PROVIDED: 20.5 FEET MAXIMUM LOT COVERAGE ALLOWED: BUILDINGS: 60% OR 13.146.41 SF

OPEN SPACE: 10% OR 2,192 SF LOT COVERAGE PROVIDED: BUILDINGS: 13.3% OR 2.918.76 SF OPEN SPACE: 60% OR 13.236.18 SF PARKING REQUIRED: 9 SPACES PARKING PROVIDED: 9 SPACES LANDSCAPING REQUIRED: 2 STREET TREES LANDSCAPING PROVIDED: 2 STREET TREES INTERIOR PARKING LOT LANDSCAPING REQUIRED: 95 SF

INTERIOR PARKING LOT LANDSCAPING PROVIDE: 95 SF

GENERAL UTILITY NOTES

- SUPPLY AND INSTALL ALL MATERIALS AND METHODS FOR WATERLINES, SANITARY SEWERS AND STORM DRAINAGE IN ACCORDANCE WITH THE SPECIFICATIONS AND REQUIREMENTS OF THE CITY OF ROANOKE AND THE VIRGINIA DEPARTMENT OF TRANSPORTATION "ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS", LATEST
- 2. OBTAIN ALL REQUIRED PERMITS AND NOTIFY APPROPRIATE OFFICIALS 48 HOURS PRIOR TO COMMENCEMENT OF WORK, OBTAIN INFORMATION FROM THE CITY OF ROANOKE CONCERNING PERMITS AND CONNECTIONS TO EXISTING LINES.
- ALL WORK SHALL BE SUBJECT TO INSPECTION BY THE CITY OF ROANOKE. NOTIFY APPROPRIATE OFFICIALS PRIOR TO COMMENCEMENT OF WORK. 4. SITE SHALL BE TO SUB GRADE PRIOR TO INSTALLATION OF UTILITIES. ALL UTILITIES SHALL BE IN PLACE PRIOR TO PLACEMENT OF PAVEMENT BASE MATERIAL.
- USE SELECT MATERIAL FREE FROM FROST, LARGE CLODS, STONES, AND DEBRIS FOR BACK FILL FROM THE BOTTOM OF THE TRENCH TO TWELVE (12) INCHES ABOVE THE
- MINIMIZE ANY DISTURBANCE TO EXISTING WATER SERVICE, SEWER LINES OR ANY
- OTHER UTILITY DURING CONSTRUCTION AND PROVIDE QUALITY WORKMANSHIP. MAKE ALL PIPE JOINTS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE CITY'S SPECIFICATIONS. MAKE JOINTS BETWEEN DIFFERENT PIPE MATERIALS WITH STANDARD FITTINGS MANUFACTURED FOR THE PURPOSE.
- MAINTAIN ALL WATER LINES AT TEN (10) FEET HORIZONTAL SEPARATION FROM SEWER LINES AND MANHOLES; MEASURE THE DISTANCE EDGE-TO-EDGE. WHEN LOCAL CONDITIONS PREVENT THE DESIRED HORIZONTAL SEPARATION, THE WATERLINE MAY BE LAID CLOSER TO THE SEWER OR MANHOLE PROVIDED THAT THE BOTTOM OF THE WATERLINE SHALL BE AT LEAST EIGHTEEN (18) INCHES ABOVE THE TOP OF THE SEWER. WHERE THIS VERTICAL SEPARATION CANNOT BE OBTAINED, CONSTRUCT THE SEWER OF AWWA APPROVED WATER PIPE AND PRESSURE TREAT IN PLACE PRIOR TO BACKFILLING. THE SEWER MANHOLE SHALL BE OF WATERTIGHT CONSTRUCTION
- 9. SEWER AND WATER TAPS SHALL BE LOCATED BY THE CONTRACTOR AND MADE BY THE CITY AT THE DEVELOPER'S EXPENSE.
- 10. LOCATE AND UNCOVER VALVE VAULTS AND MANHOLES AFTER PAVING AND ADJUST TO FINAL GRADE, IF NECESSARY.
- 11. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS WHERE UTILITIES ENTER THE BUILDING.
- 12. VERIFY THE LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES SHOWN ON THE PLANS IN AREAS OF CONSTRUCTION PRIOR TO STARTING WORK, CONTACT THE ENGINEER IMMEDIATELY IF:

ANY LOCATION OR ELEVATION IS DIFFERENT FORM THAT SHOWN ON THE PLANS.

IF THERE APPEARS TO BE ANY CONFLICT.

UPON DISCOVERY OF ANY UTILITY NOT SHOWN ON THE PLANS.

TO MISS UTILITIES, CALL "MISS UTILITY" OF VIRGINIA (TOLL FREE 1-800-552-7001) 48 HOURS BEFORE YOU DIG. THE CONTRACTOR IS RESPONSIBLE FOR ALL. DAMAGE CAUSED TO ANY UTILITY, PUBLIC OR PRIVATE, AS A RESULT OF THIS WORK. EXISTING UTILITY LOCATIONS SHOWN ARE A RESULT OF A COMBINATION OF EXISTING INFORMATION AND FIELD LOCATION OF SURFACE FEATURES. LOCATIONS ARE APPROXIMATE.

- 13. REPAIR ALL DAMAGE CAUSED TO ANY UTILITY, PUBLIC OR PRIVATE, AS A RESULT OF THIS WORK AT NO ADDITIONAL COST TO OWNER.
- 14. PROVIDE A CONTINUOUS AND UNIFORM BEDDING IN THE TRENCH FOR ALL PIPE. REMOVE STONES AND ROCKS FOUND IN THE TRENCH FOR A DEPTH OF AT LEAST SIX (6) INCHES BELOW THE BOTTOM OF THE PIPE AND TAMP SELECT FILL BEDDING PROVIDED. AFTER THE PIPE HAS BEEN PLACED IN THE TRENCH, BACK FILL THE TRENCH WITH SELECT MATERIAL, THOROUGHLY COMPACT TO 90% (95% UNDER PAVEMENT OR CONCRETE SLAB) OF THE STANDARD PROCTOR (ASTM D-698) USING CARE NOT TO DAMAGE THE PIPE. USE VDOT STANDARD PB-1 TRENCH FOR STORM SEWER AND UB-1 FOR SANITARY SEWER AND WATER.
- 15. PLACE BACK FILL FOR ALL UTILITIES IN ACCORDANCE WITH THE CITY'S SPECIFICATIONS, AND THE FOLLOWING CRITERIA:
 - (1) BACK FILL NO TRENCH UNTIL AUTHORIZED BY THE CITY. MATERIALS USED FOR BACK FILL FROM THE BOTTOM OF THE TRENCH TO TOP OF THE PIPE SHALL BE CRUSHER RUN. OR APPROVED EQUAL MATERIAL. THOROUGHLY AND CAREFULLY COMPACT THE BACK FILL MATERIAL.
 - (2) COMPACT BACK FILL BY MECHANICAL TAMPING THROUGHOUT THE DEPTH OF THE TRENCH TO INSURE A SUITABLE SUBBASE ACCEPTABLE TO THE ROAD. ENGINEER. IF THE MATERIAL TAKEN FROM THE DITCH IS NOT SUITABLE FOR BACK FILLING, REMOVE IT AND USE AN ACCEPTABLE MATERIAL FOR BACK FILLING THE TRENCH.
- 16. IN AREAS OF WATER LINE CONSTRUCTION, GRADES SHALL BE WITHIN SIX (6) INCHES OF FINISHED SUB GRADE PRIOR TO THE COMMENCEMENT OF THIS WORK.
- 17. MINIMUM COVER OVER WATER AND SANITARY SEWER LINES SHALL BE THREE (3) FEET.
- 18. THE CITY OF ROANOKE SHALL MAKE ALL CONNECTIONS TO EXISTING WATER MAINS. 19. THE CONTRACTOR SHALL INSTALL ALL WATER SERVICE CONNECTIONS AND METER BOXES.
- 20. WATER PIPE SHALL BE DUCTILE IRON.
- 21. PIPES AND FITTINGS SHALL BE POLYVINYL

ROGER I. STURGILL No. 033058 10/3/101



 PLANNERS
ARCHITECTS • ENGINEERS • SURVEYORS

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DRAWN BY: DRB DESIGNED BY: JCG CHECKED BY: RIS DATE: SEPT. 17, 2001 REVISIONS: 10-29-01

SCALE: 20' SHEET NO.

JOB NO. R0100173

SITE DIMENSIONAL AND UTILITY PLAN SCALE: 1"=20'

WATER SERVICE R/W VARIES

85 LF GRASS -

SHEET C3

DITCH SEE DETAIL

NEW 75 LF-5/8"

24" INV. OUT=1000.13

SIDEWALK

-3.0' CURB

15" NV. IN=1000.13

EX. STM. MH TOP = 1009.48

15" INV. IN=1005.63 15" INV. OUT=1005.63

EX. STM: STR TOP=1004.88 15" INV. IN=1000.68