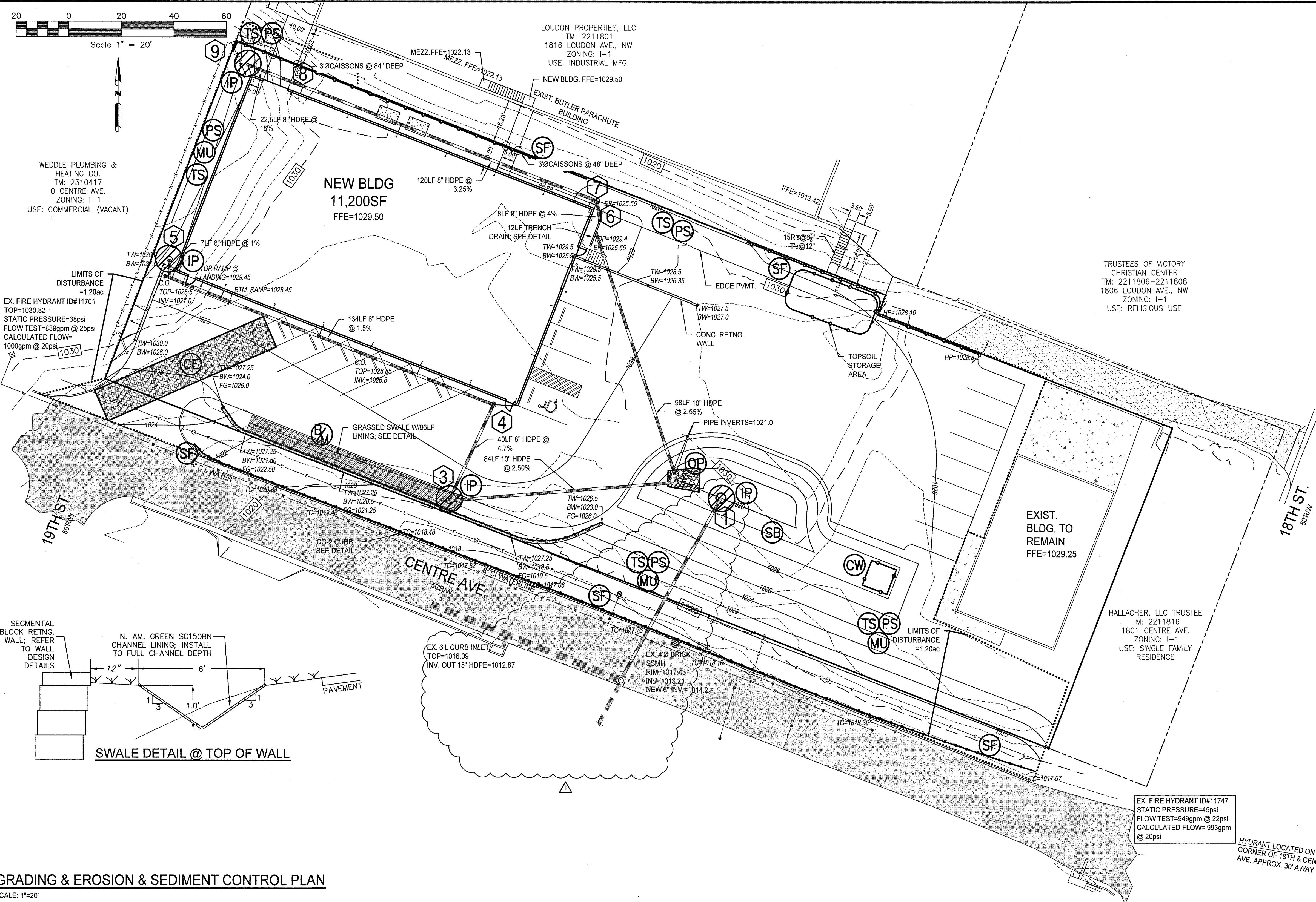
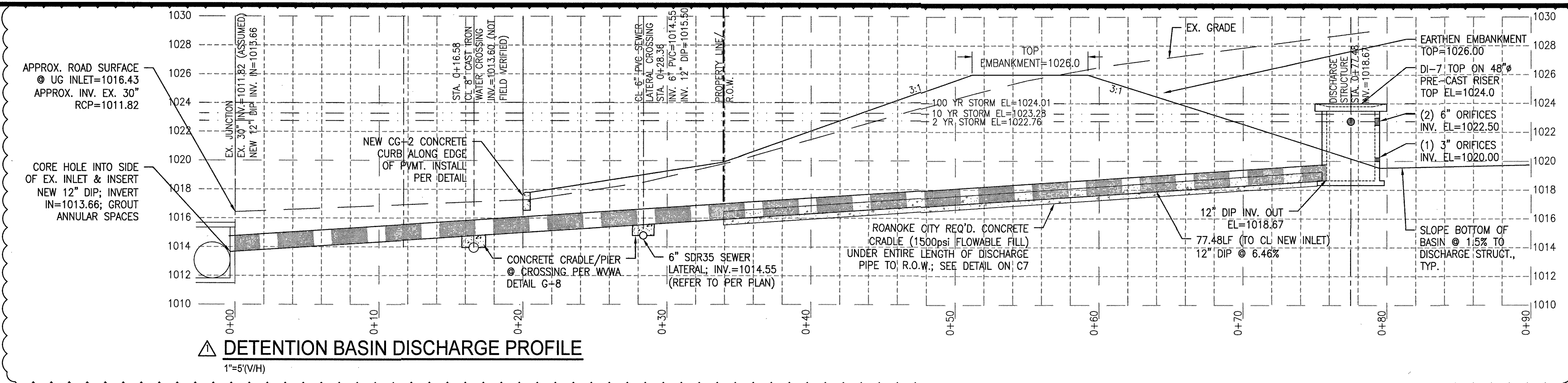




STORM SEWER SCHEDULE	
①	DI-7 TOP ON 4" MH EXTENDED BASE TOP=1024.00 (2)6" INV. IN=1022.5 (1)3" INV. IN=1020.0 12" DIP INV. OUT (to Headwall)=1018.67
②	EW-1PC PRECAST ENDWALL NOT USED 12" HDPE INV. OUT=1018.75 SEE DETAIL
③	24" NYOPLAST DRAIN BASIN STD. GRATE TOP=1025.00 8" HDPE INV. IN=1023.10 10" HDPE INV. OUT (to Basin)=1023.10
④	18" NYOPLAST DRAIN BASIN SOLID 2'x2' H-20 RATED TOP=1029.30 8" HDPE INV. IN=1025.01 6" HDPE INV. IN=1027.00 8" HDPE INV. OUT (to #3)=1024.98
⑤	24" NYOPLAST DRAIN BASIN STD. GRATE TOP=1035.00 8" HDPE INV. OUT (to #4)=1027.15
⑥	12LF TRENCH DRAIN 8" HDPE INV. IN=1023.63 10" INV. OUT=1023.50
⑦	18" NYOPLAST DRAIN BASIN SOLID 18" TOP=1026.00 8" HDPE INV. IN=1024.00 8" HDPE INV. OUT (to #6)=1023.95
⑧	18" NYOPLAST DRAIN BASIN SOLID 18" TOP=1029.50 8" HDPE INV. IN=1028.00 8" HDPE INV. OUT (to #7)=1027.95
⑨	18" NYOPLAST DRAIN BASIN STD. GRATE 18" TOP=1035.0 8" HDPE INV. OUT (to #8)=1031.38

NOTE: REFER TO CALCULATIONS AND NYOPLAST DRAIN BASIN DESIGN DATA FOR DRAIN BASIN CONFIGURATION.

GRADING & CONSTRUCTION NOTES

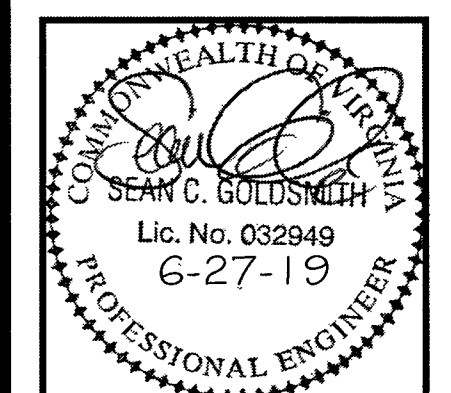
- SLOPES STEEPER THAN 2 TO 1 (HORIZONTAL TO VERTICAL) SHALL BE BENCH OR STEPPED PRIOR TO PLACING FILL ON THEM.
- ON-SITE FILL MATERIAL OR BORROW FILL MATERIAL MAY BE UTILIZED. FILL MATERIAL SOILS, IN GENERAL:
 - SHALL BE COMPACTABLE
 - SHALL BE WITHIN AN ACCEPTABLE RANGE OF MOISTURE CONTENT WHICH IS READILY CONTROLLED
 - SHALL NOT BE HIGHLY SUSCEPTIBLE TO VOLUME CHANGE (SHRINKAGE OR SWELL) OR SETTLEMENT
- FILL MATERIALS CONTAINING ROCKS LARGER THAN SIX (6) INCHES (15.2 CM) SHALL NOT BE USED. THE UPPERMOST TWO (2) FEET (61 CM) SHALL NOT HAVE ANY ROCK LARGER THAN TWO (2) INCHES (5.1 CM) IN DIAMETER.
- THE APPROVED FILL SHALL BE PLACED IN EIGHT (8) INCH LOOSE LIFTS USING EARTHEN MATERIAL. EACH LIFT SHALL BE SPREAD IN UNIFORM LAYERS. FILL SOIL SHALL BE UTILIZED ONLY WITHIN A MOISTURE RANGE OF +/- 5% OF THE OPTIMUM MOISTURE CONTENT. COMPACTION OF THE FILL SHALL BE PERFORMED WITH APPROVED EQUIPMENT. COMPACTION OF THE LAYERS SHALL BE CONTINUOUS AND UNIFORM.
- EMBANKMENT MATERIAL IN FILL AREAS SHALL BE PLACED IN LIFTS NOT EXCEEDING SIX (6) INCHES USING EARTHEN MATERIAL THAT CONTAINS NO ROCKS, ROOTS, OR DEBRIS AND SHALL BE COMPACTED TO A MINIMUM 95% DENSITY IN ACCORDANCE WITH SECTION 303 OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS.
- FIELD DENSITY TESTS ARE TO BE CONDUCTED BY AN INDEPENDENT SOILS TESTING LABORATORY UNDER THE DIRECTION OF A QUALIFIED GEOTECHNICAL ENGINEER. THE RESULTS OF THESE TESTS SHALL BE SUBMITTED TO THE DESIGN ENGINEER. FIELD DENSITY TESTS, AS DIRECTED BY THE ENGINEER, SHALL BE PERFORMED PERIODICALLY (2/LIFT ALONG EARTHEN EMBANKMENT & 2/LIFT PER 10,000sf UNDER PAVING & BUILDING) TO DETERMINE THE DEGREE OF COMPACTION. ANY AREAS FAILING TO MEET THE ABOVE REQUIREMENTS SHALL BE REWORKED AND/OR RECOMPACTED UNTIL THE REQUIRED DEGREE OF COMPACTION IS ACHIEVED.
- ALL DISTURBED AREAS SHALL BE COVERED WITH FOUR (4) INCHES OF TOPSOIL AND SEEDS.
- THE MINIMUM SLOPE OF THE BASIN FLOOR SHALL BE ONE (1) PERCENT GRADED TO DRAIN TO THE PRINCIPAL SPILLWAY.
- NO CONSTRUCTION/FIELD CHANGES ARE ALLOWED WITHOUT THE APPROVAL OF THE CONSULTING ENGINEER AND ROANOKE CITY.
- ANY NEW ALIGNMENTS, CHANGES IN GRADE, ALTERNATIVE PIPE SIZES OR MANHOLES WITHIN STORM DRAIN SYSTEM WILL REQUIRE A NEW SET OF PLANS STAMPED BY THE CONSULTING ENGINEER AND REVIEWED AND APPROVED BY CITY OF ROANOKE. PLAN SHEETS CAN BE 8.5" x 11" IF THE INFORMATION IS LEGIBLE.
- WORK IN RIGHT OF WAY AREAS SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF ROANOKE RIGHT OF WAY EXCAVATION AND RESTORATION STANDARDS.

City of Roanoke
Planning, Building, & Development

COMPREHENSIVE DEVELOPMENT PLAN

FIELD REVISION
APPROVED

Development: 2019.07.09
Engineer: 10.22.03.04.90



Revisions By	Date
1 - UG Storm Disch. Route	6-27-19

INTEGRITY
ENGINEERING

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GRADING & EROSION & SEDIMENT CONTROL PLAN

LOUDON PROPERTIES SITE REDEVELOPMENT

CENTRE AVE.
ROANOKE, VA

Scale: 1"=20'

Date: 3/14/19

Design By: SCG

CAD By: SCG

Checked By:

Project No.: 18003

Sheet No.

C2