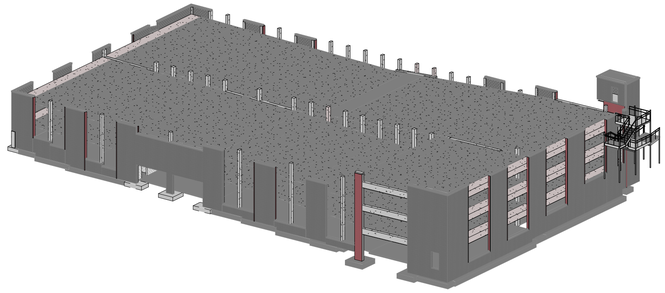
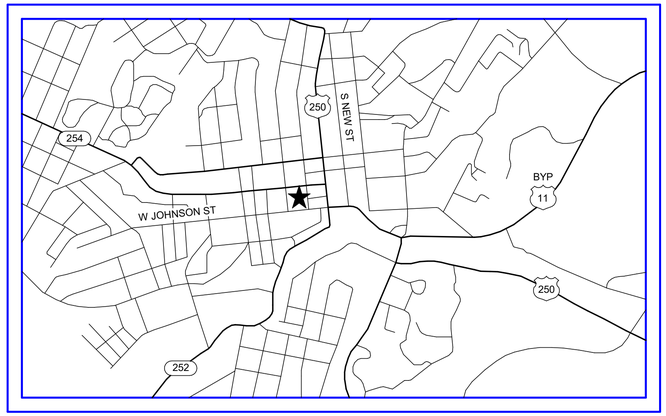
CITY OF STAUNTON
JOHNSON STREET PARKING GARAGE REMEDIAL FLOOD REPAIRS
STAUNTON, VA

ISSUED FOR BID

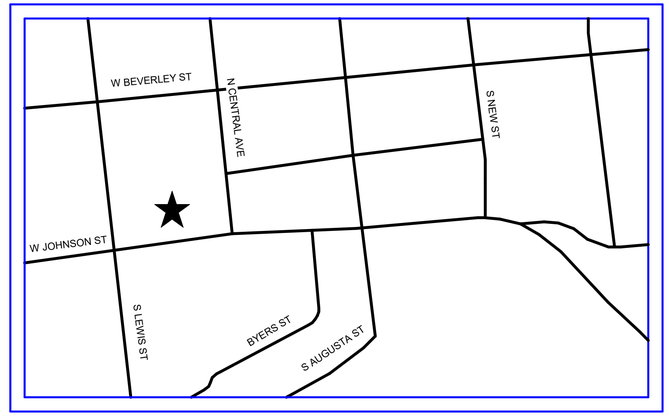
OCTOBER 27, 2020

PROJECT DRAWING LIST					
SHEET NUMBER	SHEET NAME	Sheet Issue Date	REVISION NO.	REVISION DATE	REVISION DESCRIPTION
GENERAL					
G-001	COVER SHEET & DRAWING INDEX	10/27/2020			
G-002	DRAWING SYMBOLS & ABBREVIATIONS	10/27/2020			
STRUCTURAL					
S-001	STRUCTURAL GENERAL NOTES AND SPECIAL INSPECTIONS	10/27/2020			
SD-101	DEMOLITION	10/27/2020			
S-101	FOUNDATION/GROUND FLOOR PLAN	10/27/2020			
S-301	SECTIONS	10/27/2020			
S-501	DETAILS	10/27/2020			
S-502	VDOT STD CG-12 & MODIFIED VDOT CG-2	10/27/2020			
S-503	VDOT STD CG-9A,9B, 9D & CG-11	10/27/2020			





VICINITY MAP



LOCATION MAP

SUBSYSTEM, SEE SHEET TITLE
SHEET TYPE DESIGNATOR
XXX ###
SHEET NUMBERS
DISCIPLINE DESIGNATOR.

DISCIPLINE ORDER & DESIGNATOR

G	GENERAL
S	STRUCTURAL
P	PLUMBING
M	MECHANICAL
E	ELECTRICAL

SHEET TYPE DESIGNATOR

0	GENERAL
1	PLANS
2	ELEVATIONS
3	SECTIONS
4	LARGE-SCALE PLANS, ELEVATIONS, ETC.
5	DETAILS
6	SCHEDULES AND DIAGRAMS
7	MISCELLANEOUS
8	MISCELLANEOUS
9	3D REPRESENTATIONS

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COMM	220124
DATE:	10/27/2020
DRAWN:	DSB DESIGN DSB
CHECK:	DJA

SHEET

COVER SHEET &
DRAWING INDEX

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DRAWING SYMBOLS

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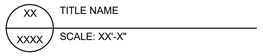
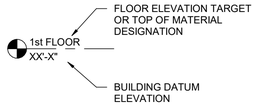


ELEVATION SYMBOL



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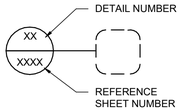

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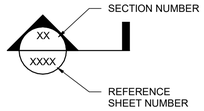

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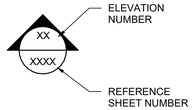

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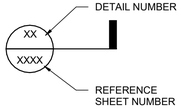

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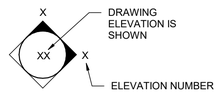

NORTH ARROW

ABBREVIATIONS

A

AB - ANCHOR BOLT
ABBRV - ABBREVIATION
AC - ACOUSTICAL
ACC - ACCESSIBLE
ACS PNL - ACCESS PANEL
ACT - ACOUSTICAL CEILING TILE
ACOUS INSUL - ACOUSTICAL INSULATION
ACU - AIR CONDITIONING UNIT
ADDM - ADDENDUM
AFF - ABOVE FINISH FLOOR
ADJ - ADJUSTABLE, ADJACENT
AHU - AIR HANDLING UNIT
ALUM - ALUMINUM
& - AND
@ - AT
A/C - AIR CONDITION
ARCH - ARCHITECT(URAL)
AWC - ACRYLIC WALL COVERING
ALT - ALTERNATE
ASWG - AMERICAN STEEL WIRE GUAGE
ADA - AMERICAN WITH DISABILITIES ACT
∠ - ANGLE
ANOD - ANODIZE
APPROX - APPROXIMATE
ASB - ASBESTOS

B

BM - BEAM
BMS - BEAMS
BR - BEDROOM
BRG - BEARING
BRG PL - BEARING PLATE
BLDG - BUILDING
BLW - BELOW
BKBD - BACKBOARD
BKD - BACKING
BTWN - BETWEEN
BS - BOTH SIDES
BW - BOTH WAYS
BOT - BOTTOM
BDRY - BOUNDRY
BLDG - BUILDING
BAT - BATTEN, BATTERY
BUR - BUILT UP ROOFING

C

CAB - CABINET
CB - CERAMIC BASE
CLG - CEILING
CLG HT - CEILING HEIGHT
CEM - CEMENT
CTR - CENTER
CLO - CLOSET
CL D - CLOTHES DRYER
CJ - CONTROL JOINT
CORR - CORRIDOR
CONST JT - CONSTRUCTION JOINT
CNTR - COUNTER
COV - COVER
CUST - CUSTODIAN
CER - CERAMIC
CT - CERAMIC TILE
CIR - CIRCLE
B LABEL - CLASS B DOOR
C LABEL - CLASS C DOOR
℄ - CENTER LINE
C TO C - CENTER TO CENTER
CLR - CLEAR
CMU - CONCRETE MASONRY UNIT
COL - COLUMN
CONC - CONCRETE
CONT - CONTINUOUS
COTR - CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE
CPT - CARPET
CRS - COURSE

C CONTINUED

CSWK - CASEWORK
CT - CERAMIC TILE
CORR - CORRIDOR
CONST - CONSTRUCTION
CG - CORNER GUARD
COORD - COORDINATE
CTG - COATING

D

D - DEEP
DBL - DOUBLE
DH - DOUBLE HUNG (DOOR WINDOW)
DET - DETAIL
DEG - DEGREE
DEMO - DEMOLITION
DF - DRINKING FOUNTAIN
DIAG - DIAGONAL
DIM - DIMENSION
DR - DINING ROOM, DOOR, DRAIN
DUPL - DUPLICATE
DW - DISHWASHER
DIST - DISTANCE
DN - DOWN
DS - DOWN SPOUT
DWG - DRAWING

E

EA - EACH
EW - EACH WAY
EWC - ELECTRIC WATER COOLER
EL - ELEVATION
EJ - EXPANSION JOINT
ELEC - ELECTRICAL, ELECTRIC
EWH - ELECTRIC WATER HEATER
ENCL - ENCLOSURE
ENGR - ENGINEER
ELEV - ELEVATOR
ENVIR - ENVIRONMENT
EP - ELECTRICAL PANELBOARD
EQ - EQUAL
EQUIP - EQUIPMENT
ETC - ETCETERA, AND SO FORTH
EXH - EXHAUST
EXIST - EXISTING
EXP - EXPANSION, EXPAND
EXT - EXTERIOR

F

F - FEMALE
FIN FLR - FINISH FLOOR
FF EL - FINISH FLOOR ELEVATION
FNV - FEM. NAPKIN/TAMPON VENDOR
FWC - FABRIC WALLCOVERING
FTD - FACIAL TISSUE DISPENSER
FSTNR - FASTENER
FT - FEET
FE - FIRE EXTINGUISHER
FEC - FIRE EXTINGUISHER CABINET
FR - FIRE RATING, FRAME
FRMG - FRAMING
FIXT - FIXTURE
FLASH - FLASHING
FIN - FINISH
FRT - FIRE RETARDANT TREATED
FLR - FLOOR
FD - FLOOR DRAIN
FDTN - FOUNDATION
FURN - FURNITURE
FF&E - FURNITURE, FIXTURE & EQUIPMENT
FURG - FURRING

G

GALV - GALVANIZED
GLZ - GLAZING
GB - GRAB BAR
GA - GAUGE
GEN - GENERAL
GP - GLAZED PARTITION
GWB - GYPSUM WALL BOARD
GYP BD - GYPSUM BOARD
GOVT - GOVERNMENT

H

HC - HANDICAP
HNDRL - HANDRAIL
HDW - HARDWARE
HDR - HEADER
HC - HOLLOW CORE
HCWD - HOLLOW CORE WOOD DOOR
HB - HOSE BIB
HGT - HEIGHT
HM - HOLLOW METAL
HORIZ - HORIZONTAL
HR - HOUR
H - HIGH

I

INSUL - INSULATION
INSTL - INSTALL
INT - INTERIOR
INV - INVERT
IBC - INTERNATIONAL BUILDING CODE

J

JAN - JANITOR
JAN CLO - JANITOR CLOSET
JS - JANITOR'S CLOSET
JT - JOINT
JST - JOIST

K

KIT - KITCHEN

L

LAM - LAMINATE
LRG - LARGE
LAV - LAVATORY
LT GA - LIGHT GAGE
LR - LIVING ROOM
LOC - LOCATION

M

MACH - MACHINE
MACH RM - MACHINE ROOM
MFR - MANUFACTURER
MAS - MASONRY
MRT - MARBLE THRESHOLD
MAX - MAXIMUM
MECH - MECHANICAL
MECH RM - MECHANICAL ROOM
MEZZ - MEZZANINE
MIN - MINIMUM
MO - MASONRY OPENING
MH - MOUNTING HEIGHT
MISC - MISCELLANEOUS
MTL - METAL
MT - METAL THRESHOLD
MOD - MODEL, MODIFY

N

N - NORTH
NA - NOT APPLICABLE
NIC - NOT IN CONTRACT
NO - NUMBER
NOM - NOMINAL
NL - NIGHT LIGHT
NTS - NOT TO SCALE

O

OC - ON CENTER
OD - OUTSIDE DIAMETER
OH - OVERHEAD
OPNG - OPENING
OPP - OPPOSITE
OPH - OPPOSITE HAND
OA - OVERALL

P

PANEL'G - PANELING
PR - PAIR
PSF - POUNDS PER SQUARE FOOT
PT - PAINT
PNL - PANEL
PL OR ℗ - PLATE
PLAM - PLASTIC LAMINATE
PLYWD - PLYWOOD
PLBG - PLUMBING
PREFIN - PREFINISH
PRMLD - PREMOLDED
PTN - PARTITION
PART - PARTIAL
PLAS - PLASTER, PLASTIC
PTD - PAPER TOWEL DISPENSER
PTR - PAPER TOWEL RECEPTICLE

R

REINF - REINFORCED
REQ - REQUIRE
REQD - REQUIRED
RESIL - RESILIENT
RA GR - RETURN AIR GRILLE
REFL - REFLECT
RCP - REFLECTED CEILING PLAN
REPL - REPLACE
R - RISER/RADIUS
RB - RUBBER BASE
RND - ROUND
RM - ROOM
RO - ROUGH OPENING

S

SCHED - SCHEDULE
SHR - SHOWER
SGL - SINGLE
SC - SOLID CORE
SCWD - SOLID CORE WOOD DOOR
SND INS - SOUND INSULATION
SECT - SECTION
SHT - SHEET
SIM - SIMILAR
SOG - SLAB ON GRADE
SPEC(S) - SPECIFICATIONS
SF - SQUARE FOOT(FEET)
SQ - SQUARE
SQ IN - SQUARE INCH
ST - STREET, STAIRS
STL - STEEL
STD - STANDARD
STR - STRUCTURAL
SST - STAINLESS STEEL
SUSP - SUSPEND, SUSPENDED
SUSP CLG - SUSPENDED CEILING
STOR - STORAGE

T

T - TREAD
TEL - TELEPHONE
THRESD - THRESHOLD
TC - TOP OF CURB
TEMP - TEMPORARY
TOB - TOP OF BEAM
TOC - TOP OF CONCRETE
TOF - TOP OF FLOOR
TOM - TOP OF MASONRY
TOS - TOP OF SLAB, TOP OF STEEL
TOW - TOP OF WALL
TB - TOWEL BAR
TD - TOWEL DESPENSER
TPD - TOILET PAPER DISPENSER
TPH - TOILET PAPER HOLDER
TWC - TEXTILE WALL COVERING
TYP - TYPICAL

U

UL - UNDERWRITERS LABORATORY
UON - UNLESS OTHERWISE NOTED
UNO - UNLESS NOTED OTHERWISE

V

VAR - VARIES
VR - VAPOR RETARDER
VB - VINYL BASE
VEST - VESTIBULE
VERT - VERTICAL
VIF - VERIFY IN FIELD
VCT - VINYL COMPOSITION TILE
VWC - VINYL WALL COVERING

W

WWF - WELDED WIRE FABRIC
W - WIDE
WB - WOOD BASE
WC - WALL COVERING, WATER CLOSET
WF - WIDE FLANGE
W/ - WITH
W/O - WITHOUT
WR - WATER RESISTANT
WD - WOOD, WOOD DOOR
WP - WORK POINT, WATER PUMP

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CITY OF STAUNTON

JOHNSON STREET PARKING GARAGE
- REMEDIAL FLOOD REPAIRS

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SHEET

DRAWING SYMBOLS & ABBREVIATIONS

SHT. NO. G-002

REV. NO.

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STRUCTURAL NOTES

A. GENERAL

1. STRUCTURAL GENERAL NOTES ARE INTENDED TO HIGHLIGHT OR IN SOME CASES SUPPLEMENT PROJECT SPECIFICATIONS. REFER TO THE PROJECT SPECIFICATIONS FOR COMPLETE WORK COVERAGE.
2. THE DESIGN OF THE STRUCTURE COMPLIES WITH THE INTERNATIONAL EXISTING BUILDING CODE 2015, THE 2015 INTERNATIONAL BUILDING CODE, AND THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE "USBC" (2015 EDITION).
3. GRAVITY DESIGN LOADS ARE A FOLLOWS:
   a. LIVE LOADS
      GARAGE – PASSENGER CAR ..... 40 PSF DISTRIBUTED OR 3,000 LBS POINT LOAD
4. IMPOSED CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN LIVE LOADS STATED ABOVE.
5. REPRODUCTION OF THE STRUCTURAL CONTRACT DOCUMENTS IN ANY FASHION AS STRUCTURAL SHOP DRAWING DOCUMENTS IS PROHIBITED.
6. SCALES NOTED ON THE DRAWINGS ARE FOR GENERAL INFORMATION ONLY. NO DIMENSIONAL INFORMATION SHALL BE OBTAINED BY DIRECT SCALING OF THE DRAWINGS.
7. DETAILS, SECTIONS AND NOTES SHOWN ON THESE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR CONDITIONS ELSEWHERE UNLESS OTHERWISE SHOWN OR NOTED.
8. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL RESULTING REVISIONS TO THE STRUCTURAL SYSTEM AS A RESULT OF ACCEPTANCE OF CONTRACTOR PROPOSED ALTERNATIVES OR SUBSTITUTIONS.
9. THE GENERAL CONTRACTOR (OR CONSTRUCTION MANAGER) SHALL SUBMIT SHOP DRAWINGS FOR ALL STRUCTURAL ELEMENTS SHOWN ON THE CONTRACT DOCUMENTS FOR APPROVAL. THE STRUCTURAL ENGINEER WILL NOT BE RESPONSIBLE FOR THE STRUCTURAL CERTIFICATION AND DESIGN OF THE PROJECT IF THE GENERAL CONTRACTOR FAILS TO OBTAIN APPROVAL OF THE SHOP DRAWINGS. SHOP DRAWINGS ARE REVIEWED AS A CONVENIENCE TO THE GENERAL CONTRACTOR AND ARE NOT A CONTRACT DOCUMENT. THE GENERAL CONTRACTOR SHALL STATE ON THE SHOP DRAWINGS THAT CONTRACT DOCUMENT REQUIREMENTS HAVE BEEN MET AND THAT ALL DIMENSIONS, CONDITIONS AND QUANTITIES HAVE BEEN REVIEWED AND VERIFIED AS SHOWN AND/OR CORRECTED ON THE SHOP DRAWINGS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY BRACING AND SHORING, AS REQUIRED, TO ENSURE VERTICAL AND LATERAL STABILITY OF THE ENTIRE STRUCTURE OR PORTION THEREOF DURING CONSTRUCTION.
11. INFORMATION SHOWN REGARDING EXISTING CONDITIONS HAS BEEN OBTAINED BY LIMITED OBSERVATIONS. AREAS NOT VISIBLE HAVE BEEN ASSUMED TYPICAL WITH OBSERVED EXISTING CONDITIONS.
12. THE CONTRACTOR SHALL MEASURE AND PROVIDE ALL DIMENSIONS, ELEVATIONS AND CONDITIONS AT THE JOB SITE PRIOR TO CONSTRUCTION AND THE SUBMISSION OF SHOP DRAWINGS AND SHALL NOTIFY THE STRUCTURAL ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
13. INFORMATION ON THE EXISTING BUILDING IS TAKEN FROM ARCHITECTURAL DRAWINGS SHEETS SP, 1-11, AND 10A BY NEAL S. GOODLOE ARCHITECT DATED JULY 1974. ADDITIONAL INFORMATION WAS TAKEN FROM THE PRECAST CONCRETE SHOP DRAWINGS SHEETS S-1 THROUGH S-41, T1, AND F-1 THROUGH F-3 PREPARED BY SHOCKEY BROTHERS, INC. DATED NOVEMBER 15, 1974.
14. INFORMATION ON THE STRUCTURAL SLAB SPANNING ABOVE THE CREEK WITHIN THE PARKING GARAGE IS TAKEN FROM STAUNTON PARKING GARAGE BOTTOM LEVEL FLOOD DAMAGE REPAIR DRAWINGS SHEETS 1 & 2 PREPARED BY MATTERN & CRAIG DATED SEPTEMBER 2003.
15. PRODUCTS LISTED IN DRAWINGS ARE THE BASIS OF DESIGN. AT CONTRACTOR OPTION, ALTERNATIVE PRODUCTS MAY BE SUBMITTED FOR REVIEW AND APPROVAL AS AN AS EQUAL SUBSTITUTE.

B. DEMOLITION

1. ALL WORK SHALL BE IN GENERAL COMPLIANCE WITH THE INTERNATIONAL BUILDING CODE 2015.
2. FURNISH ALL LABOR AND MATERIALS NECESSARY TO PERFORM THE DEMOLITION WORK IN A COMPLETED MANNER SUCH THAT NEW WORK CAN BE INSTALLED WITH MINIMUM PREPARATION.
3. CONTRACTOR SHALL INCLUDE IN THE SCOPE OF WORK ALL ASPECTS OF REQUIRED DEMOLITION, SHORING OF EXISTING STRUCTURE, STAGING THE REPAIR TASKS AND SCHEDULING THE WORK IN A MANNER APPROVED BY THE OWNER, CLEAN UP AFTER PORTIONS OF WORK ARE PERFORMED AND CLEAN UP AFTER THE ENTIRE REPAIR IS COMPLETED.
4. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL TEMPORARY SHORING AND BRACING REQUIRED FOR DEMOLITION OPERATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF AND PROCEDURES FOR THE REQUIRED TEMPORARY SHORING. TEMPORARY SHORING SHALL BE IN CONFORMANCE WITH OSHA REGULATIONS.
5. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT DAMAGE OF THE EXISTING STRUCTURE. IN THE EVENT OF DAMAGE, CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AND CONTACT THE STRUCTURAL ENGINEER FOR ASSESSMENT OF THE DAMAGE.
6. SCHEDULE ALL WORK IN A CAREFUL MANNER WITH ALL NECESSARY CONSIDERATION FOR FACILITY OPERATIONS, AND FACILITY PERSONNEL. ANY DAMAGE TO PERSON OR PROPERTY AS A RESULT OF DEMOLITION AND RELATED WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
7. DEMOLITION EQUIPMENT FOR CONCRETE SHALL BE LIMITED TO POWER SAWS, CORE DRILLS, AND SMALL CHIPPING HAMMERS (#5).
8. ERECT BARRIERS FENCES, GUARDRAILS, WARNING DEVICES AND SHORING TO PROTECT PERSONNEL WORKING IN THE AREA.
9. SUBMIT PROCEDURES AND SCHEDULE PROPOSED FOR THE ACCOMPLISHMENT OF THE DEMOLITION WORK TO THE OWNER FOR APPROVAL. INCLUDE SAFE CONDUCT OF THE WORK, DISPOSITION OF MATERIALS, PROTECTION OF REMAINING PROPERTY AND COORDINATION WITH OTHER WORK.

C. SOIL SUPPORTED SLABS

1. FOR SOIL SUPPORTED SLABS, VERIFY THAT EXISTING SUBGRADE IS ADEQUATE TO SUPPORT PROPOSED LOADS. MAINTAIN THE SUBGRADE FREE OF STANDING WATER, MUD, AND FROZEN SOIL. ENGAGE A GEOTECHNICAL ENGINEER TO REVIEW THE CONDITION OF THE SOILS PRIOR TO PLACING SUBBASE.
2. PROVIDE A MINIMUM OF 4 INCHES OF GRANULAR MATERIAL SUBBASE BELOW SLABS ON GRADE. PROVIDE ADDITIONAL COMPACTED #21A STONE WHERE REQUIRED TO FILL IN AREAS OF SUBGRADE THAT WERE WASHED OUT IN THE FLOOD.
3. FOR SLAB ON GRADE REINFORCEMENT, PROVIDE WELDED WIRE FABRIC IN FLAT SHEETS.
4. SUPPORT SLAB ON GRADE REINFORCEMENT WITH STANDARD CORROSION RESISTANT HIGH CHAIRS WITH SAND BEARING PLATES.
5. PROVIDE CONSTRUCTION JOINTS OR CRACK CONTROL JOINTS IN EACH DIRECTION FOR SLABS ON GRADE. SPACE JOINTS AT A MAXIMUM OF 36 TIMES THE SLAB THICKNESS OR 12 FEET, WHICHEVER IS LESS. PLACE JOINTS SO THAT PANEL LENGTH TO WIDTH RATIOS ARE LESS THAN 1.5. PROVIDE 3/4" DIAMETER BY 1'-4" SMOOTH DOWELS AT 12 INCHES ON CENTER AT SLAB ON GRADE CONSTRUCTION JOINTS.
6. WHERE SLAB CONTROL JOINTS ARE SHOWN ON THE DRAWINGS, CONSTRUCTION JOINTS MAY BE SUBSTITUTED TO ACCOMODATE THE CONTRACTOR'S PLACEMENT STRATEGY.
7. FREE WATER ON THE SLAB SURFACE DURING FINISHING OPERATIONS IS PROHIBIITED. SOFT CUT CONTROL JOINTS AS SOON AS POSSIBLE - GENERALLY WITHIN 6 HOURS AFTER FINISHING.

D. CONCRETE

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 301 AND ACI 302.
2. PROVIDE CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH (f'_c) OF 5,000 PSI AT 28 DAYS. USE NORMAL WEIGHT AGGREGATES CONFORMING TO ASTM C33 AND TYPE II PORTLAND CEMENT CONFORMING TO ASTM C150. CONCRETE SLABS MIX DESIGN SHALL SATISFY THE REQUIREMENTS FOR THE FOLLOWING EXPOSURE CATEGORIES: F3, S1, P0, C2.
3. FLY ASH CONFORMING TO ASTM C618, TYPE C OR F MAY BE USED AS TO REPLACE A PORTION OF THE PORTLAND CEMENT IN A CONCRETE MIX. THE AMOUNT OF PORTLAND CEMENT CONTENT SHALL NOT BE LESS THAN 75 PERCENT OF THE TOTAL AMOUNT OF CEMENTITIOUS MATERIAL IN THE MIX.
4. GROUND GRANULATED BLAST-FURNACE SLAG CONFORMING TO ASTM C989, MAY BE USED AS TO REPLACE A PORTION OF THE PORTLAND CEMENT IN A CONCRETE MIX. THE AMOUNT OF PORTLAND CEMENT CONTENT SHALL NOT BE LESS THAN 60 PERCENT OF THE TOTAL AMOUNT OF CEMENTITIOUS MATERIAL IN THE MIX.
5. CONCRETE REINFORCEMENT BARS SHALL CONFORM TO ASTM A615, GRADE 60. REINFORCEMENT BARS SHALL NOT BE TACK WELDED, WELDED, HEATED OR CUT UNLESS INDICATED ON THE CONTRACT DOCUMENTS OR APPROVED BY THE STRUCTURAL ENGINEER.
6. PROVIDE WELDED WIRE FABRIC CONFORMING TO ASTM A1064 IN FLAT SHEETS. LAP FABRIC TWO MESHES AT SPLICES.
7. DETAILING OF CONCRETE REINFORCEMENT BARS AND ACCESSORIES SHALL CONFORM TO THE RECOMMENDATIONS OF ACI 315 "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" AND ACI SP-66 "DETAILING MANUAL". PLACING OF REINFORCING BARS SHALL CONFORM TO THE RECOMMENDATIONS OF ACI 315R "MANUAL OF ENGINEERING AND PLACING DRAWINGS FOR REINFORCED CONCRETE STRUCTURES" AND CRSI "MANUAL OF STANDARD PRACTICE".
8. MIX, TRANSPORT AND PLACE CONCRETE PER THE RECOMMENDATIONS OF ACI 301. SHORING UNDER FORMS SHALL NOT BE REMOVED UNTIL THE CONCRETE IT SUPPORTS IS CAPABLE OF SUPPORTING ITSELF AND ALL SUPERIMPOSED LOADS.
9. PROTECT AND CURE ALL CONCRETE SURFACES. BEGIN CURING WALLS IMMEDIATELY AFTER STRIPPING FORMS AND FLATWORK IMMEDIATELY AFTER FINISHING.
10. SLAB SURFACES WITHIN THE PARKING GARAGE ARE TO RECEIVE A CONCRETE SEALANT. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

E. POST-INSTALLED ANCHORS

1. POST-INSTALLED ANCHORS SHALL BE USED WHERE SPECIFIED ON THE CONSTRUCTION DOCUMENTS.
2. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER-OF-RECORD PRIOR TO INSTALLING POST-INSTALLED ANCHORS IN PLACE OF MISSING OR MISPLACED CAST-IN-PLACE ANCHORS.
3. ANCHORAGE TO CONCRETE:
   a. MECHANICAL ANCHORS SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ACI 355.2 AND ICC-ES AC193 FOR CRACKED AND UNCRACKED CONCRETE RECOGNITION.
   b. ADHESIVE ANCHORS SHALL HAVE BEEN TESTED AND QUALIFIED FOR USE IN ACCORDANCE WITH ACE 355.4 AND ICC-ES AC 308 FOR CRACKED AND UNCRACED CONCRETE RECOGNITION.
4. INSTALL ANCHORS PER THE MANUFACTURER INSTRUCTIONS, AS INCLUDED IN THE ANCHOR PACKAGING.
5. ANCHOR CAPACITY IS DEPENDANT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON DRAWINGS.
6. EXISTING REINFORCING BARS IN THE CONCRETE STURCTURE MAY CONFLICT WITH SPECIFIC ANCHOR LOCATIONS. UNLESS NOTED ON THE DRAWINGS THAT THE BARS CAN BE CUT, THE CONTRACTORS SHALL REVIEW THE EXISTING STRUCTURAL DRAWINGS AND SHALL UNDERTAKE TO LOCATE THE POSITION OF THE REINFORCING BARS AT THE LOCATIONS OF THE CONCRETE ANCHORS PRIOR TO ANCHOR INSTALLATION.
7. THE CONTRACTOR SHALL TAKE MEASURES TO COORDINATE THE CONSTRUCTION SUCH THAT I NTERFERENCE OF EXISTING REINFORCING STEEL WITH PLACEMENT OF NEW ANCHORS (DOWELS, EXPANSION BOLTS, ADHESIVE ANCHORS) DOES NOT OCCUR. IF EXISTING REINFORCING STEEL IS ENCOUNTERED DURING DRILLING, ADJUST THE ANCHOR LOCATION IF POSSIBLE AND NOTIFY THE STRUCTURAL ENGINEER. ABANDONED HOLES SHALL BE FILLED WITH GROUT. ANCHORS SHALL BE SET WITHIN 3 INCHES OF THEIR SPECIFIED LOCATION, BUT AT LEAST 1 INCH FROM ANY ABANDONED HOLE. CARE SHALL BE TAKEN NOT TO BREAK OR DAMAGE REINFORCING STEEL DURING DRILLING, UNLESS OTHERWISE DIRECTED BY THE STRUCTURAL ENGINEER.

F. CONSTRUCTION PHASING

1. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL CONSTRUCTION ACTIVITY AND SHALL COOPERATE FULLY WITH OWNER FOR ALL CONSTRUCTION PHASING.
2. THE JOHNSON STREET PARKING GARAGE SHALL REMAIN OPEN TO TRAFFIC DURING REPAIRS EXCEPT FOR THE ENTRANCE ON WEST JOHNSON STREET CLOSEST TO CENTRAL AVENUE AND THE LOWEST LEVEL OF THE PARKING GARAGE FROM THE TICKET BOOTHS DOWNWARD TOWARDS THE LOWEST LEVEL WHERE THE DAMAGED SLABS ARE LOCATED.
3. CONTRACTOR SHALL COORDINATE ALL PARKING CLOSURES WITH OWNER 7 DAYS IN ADVANCE OF WORK.
4. PROTECT PEDESTRIAN TRAFFIC THROUGHOUT STRUCTURE AND ON SIDEWALKS AROUND PERIMETER OF PARKING STRUCTURE.
5. AT LEAST ONE STAIR TOWER MUST REMAIN OPEN AT ALL TIMES WHEN PARKING GARAGE IS OPEN TO THE PUBLIC.
6. ACCESS TO THE ELEVATOR, EXCEPT AT THE LOWEST LEVEL, TO BE MAINTAINED AT ALL TIMES WHEN PARKING GARAGE IS OPEN TO THE PUBLIC.

CONCRETE SPECIAL INSPECTIONS

SPECIAL INSPECTION REQUIRED Y/N	VERIFICATION AND INSPECTION TASK	INSPECTION FREQUENCY		CRITERIA REFERENCE	
		CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED	IBC REFERENCE	REFERENCED STANDARD
Y	1. INSPECT REINFORCING STEEL, INCLUDING PRESTRESSING TENDONS, AND PLACEMENT	---	X	1908.4	ACI 318: 3.5, 7.1-7.7
N	2. INSPECT REINFORCING STEEL WELDING IN ACCORDANCE WITH TABLE 1704.3, ITEM 5B.	---	---	---	AWS D1.4, ACI 318: 3.5.2
Y	3. INSPECT ANCHORS INSTALLED IN HARDENED CONCRETE.	---	X	1912.1	ACI 318: 3.8.6, 8.1.3, 21.2.8
Y	4. VERIFY USE OF REQUIRED DESIGN MIX.	---	X	1904.1, 1904.2, 1908.2, 1908.3	ACI 318: CH. 4, 5.2-5.4
Y	5. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND...	X	---	1908.10	ASTM C 172, ASTM C31, ACI 318: 5.6,...
Y	6. INSPECT MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	---	X	---	ACI 318: 5.11-5.13
N	7. INSPECT PRESTRESSED CONCRETE				
	A. APPLICATION OF PRESTRESSING FORCES	X	---	---	ACI 318: 18.20
	B. GROUTING OF BONDED PRESTRESSING TENDONS IN THE SEISMIC-FORCE-RESISTING SYSTEM.	X	---	---	ACI 318: 18.18.4
N	8. ERECTION OF PRECAST CONCRETE MEMBERS	---	X	---	ACI 318: CH....
N	9. VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND...	---	X	---	ACI 318: 6.2
Y	10. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING...	---	X	---	ACI 318: 6.1.1

SOILS SPECIAL INSPECTIONS

SPECIAL INSPECTION REQUIRED...	VERIFICATION AND INSPECTION TASK	INSPECTION FREQUENCY		
		CONTINUOUS DURING TASK LISTED	PERIODICALLY DURING TASK LISTED	IBC REFERENCE
Y	1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY	---	X	TABLE 1705.6
Y	2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL	---	X	TABLE 1705.6
Y	3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS	---	X	TABLE 1705.6
Y	4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTE...	X	---	TABLE 1705.6
Y	5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY	---	X	TABLE 1705.6

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10/27/20
PROFESSIONAL ENGINEER

CITY OF STAUNTON
JOHNSON STREET PARKING GARAGE
- REMEDIAL FLOOD REPAIRS
STAUNTON, VA

MRK	DATE	REVISION DESCRIPTION

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STRUCTURAL GENERAL NOTES AND SPECIAL INSPECTIONS

SHT. NO. S-001
REV. NO.

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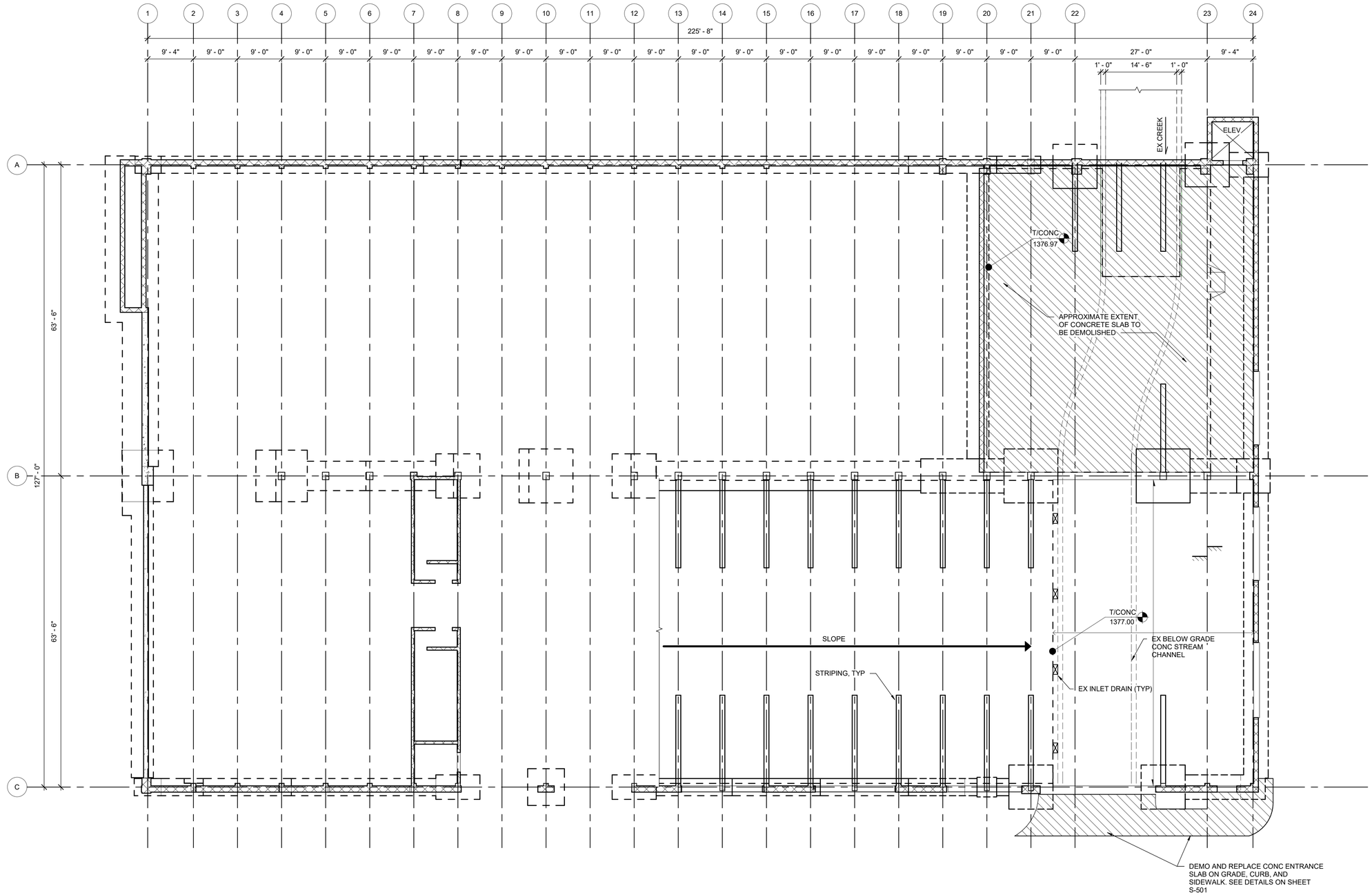

PLAN NORTH

1 FOUNDATION/GROUND FLOOR PLAN

SCALE: 3/32" = 1'-0"

NOTES:
1. UTILITIES RUNNING BELOW THE SLABS TO BE DEMO'ED ARE TO REMAIN AND SHALL BE PROTECTED AS NECESSARY DURING DEMO OPERATIONS.

2. DENOTES APPROXIMATE EXTENT OF DEMOLITION: SEE PLAN AND NOTES FOR ADDITIONAL DETAILS.

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DEMOLITION

SHT. NO. SD-101

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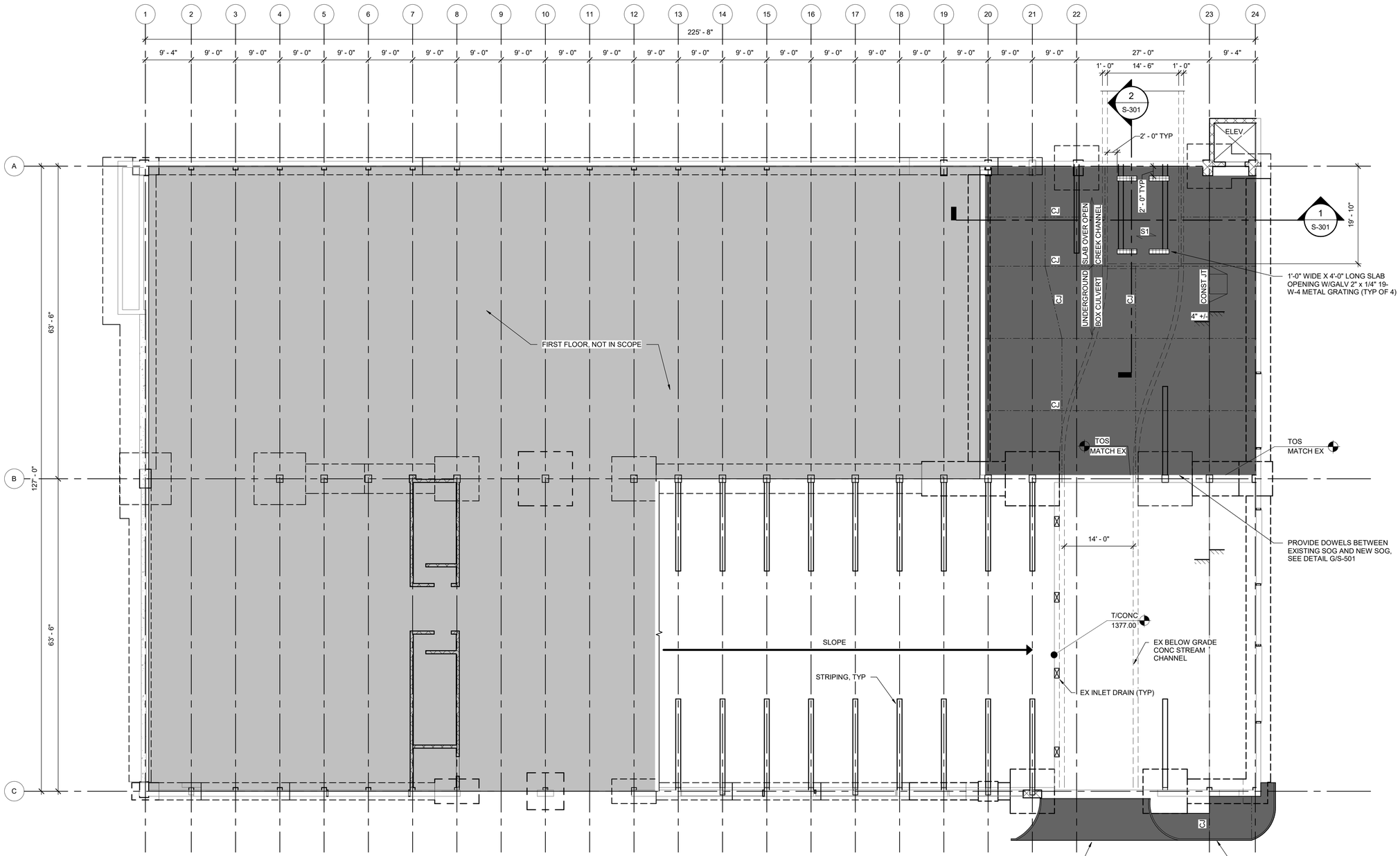

PLAN NORTH

1 FOUNDATION/GROUND FLOOR PLAN

SCALE: 3/32" = 1'-0"

0' 8' 16' 24'

PLAN NOTES:

1. ALL DIMENSIONS AND ELEVATIONS SHOWN ARE APPROXIMATE AND ARE BASED ON ORIGINAL CONSTRUCTION DRAWINGS, FIELD VERIFY.
2. DENOTES APPROXIMATE EXTENT OF NEW CONCRETE WORK: SEE SECTIONS AND DETAILS FOR ADDITIONAL INFORMATION.
3. CONCRETE SLAB ON GRADE SHALL BE A MINIMUM OF 4" THICK REINFORCED WITH 6X6 W2.9 X W2.9 WWF OVER 4" COMPACTED #21A STONE.
4. SEE SCHEDULE ON THIS SHEET FOR STRUCTURAL SLAB THICKNESS AND REINFORCEMENT.
5. UTILITIES RUNNING BELOW SLABS ARE TO REMAIN. TAKE CARE TO PROETECT EXISTING CONDUITS.
6. SEAL SURFACE OF CONCRETE WITH SEALANT, SEE GENERAL NOTES FOR ADDITIONAL INFORMATION.
7. REPAINT PARKING STRIPES TO MATCH ORIGINAL LAYOUT.
8. SEE TYPICAL CURB AND SIDEWALK RAMP DETAILS ON SHEET S-502 FOR ADDITIONAL INFORMATION.

ONE WAY SLAB SCHEDULE

SLAB MARK	SLAB THICKNESS	TOP LEFT	TOP MID	TOP RIGHT	BOTTOM FULL LENGTH	TEMP STEEL
S1	8"	N/A	N/A	N/A	#5 @ 6" OC	#4 @ 12" OC

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FOUNDATION/GROUND FLOOR PLAN

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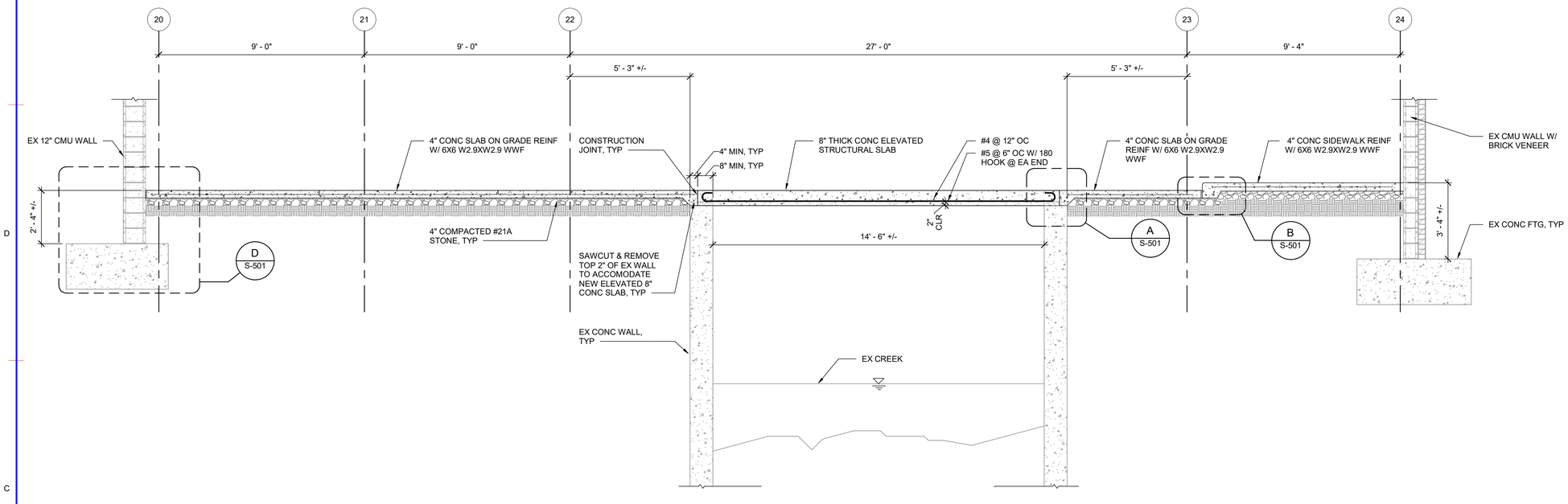
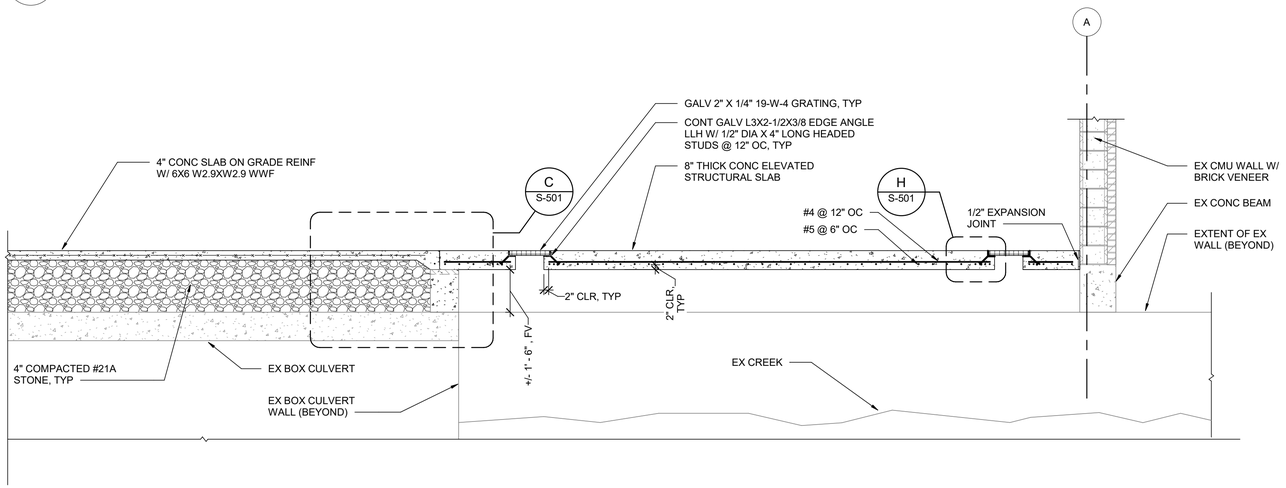


1 SECTION

S-101

SCALE: 3/8" = 1'-0"

0' 2' 4' 6'



2 SECTION

S-101

SCALE: 3/8" = 1'-0"

0' 2' 4' 6'

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SECTIONS

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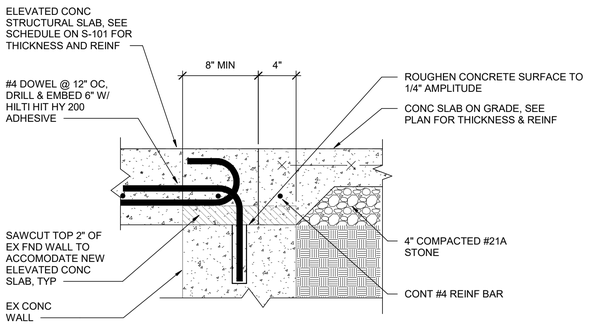
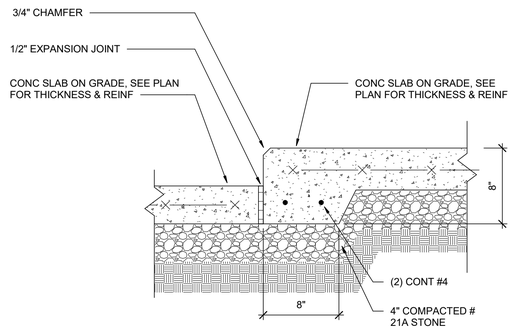
S-301	



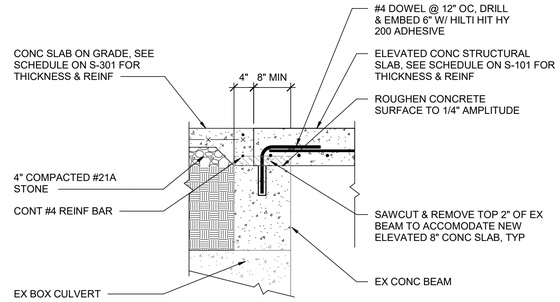
A DETAIL - TYP CONSTRUCTION JOINT @ ELEVATED SLAB

NOT TO SCALE



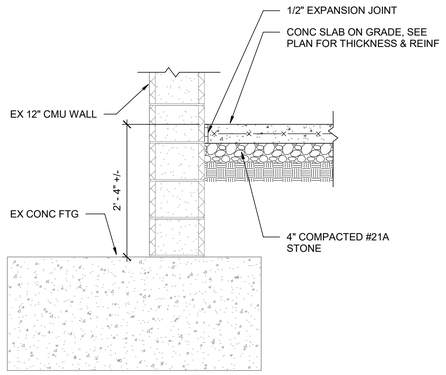
B DETAIL - SOG TO EX SIDEWALK

NOT TO SCALE



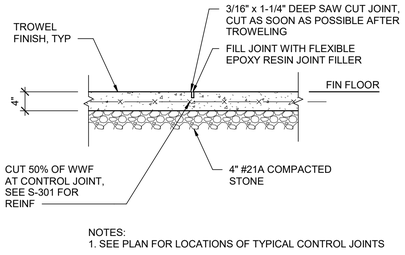
C DETAIL - ELEVATED SLAB TO EX BEAM

NOT TO SCALE



D DETAIL - SOG TO EX WALL

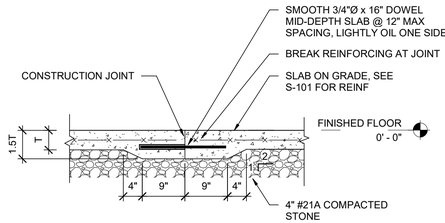
NOT TO SCALE



NOTES:
1. SEE PLAN FOR LOCATIONS OF TYPICAL CONTROL JOINTS

E DETAIL - SOG CONTROL JOINT

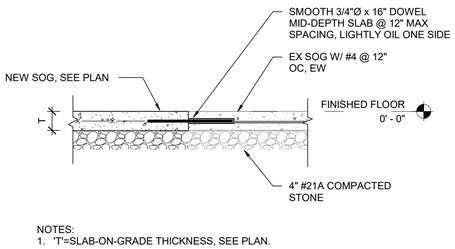
NOT TO SCALE



NOTES:
1. 'T'=SLAB-ON-GRADE THICKNESS, SEE PLAN.
2. TO BE USED AT CONTRACTOR'S OPTION AT ANY CONTROL JOINT LOCATION.

F DETAIL - SOG CONSTRUCTION JOINT

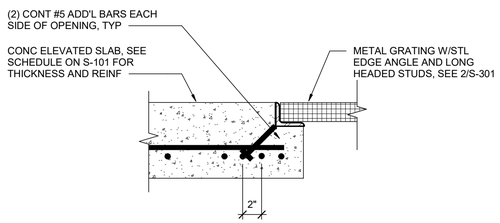
NOT TO SCALE



NOTES:
1. 'T'=SLAB-ON-GRADE THICKNESS, SEE PLAN.

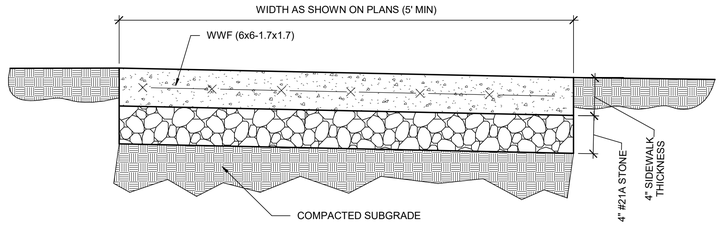
G DETAIL - EXISTING SOG TO NEW SOG DOWEL

NOT TO SCALE



H DETAIL - METAL GRATING SLAB OPENING

NOT TO SCALE



I DETAIL - STANDARD SIDEWALK

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- REMEDIAL FLOOD REPAIRS

STAUNTON, VA

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DETAILS

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S-501	

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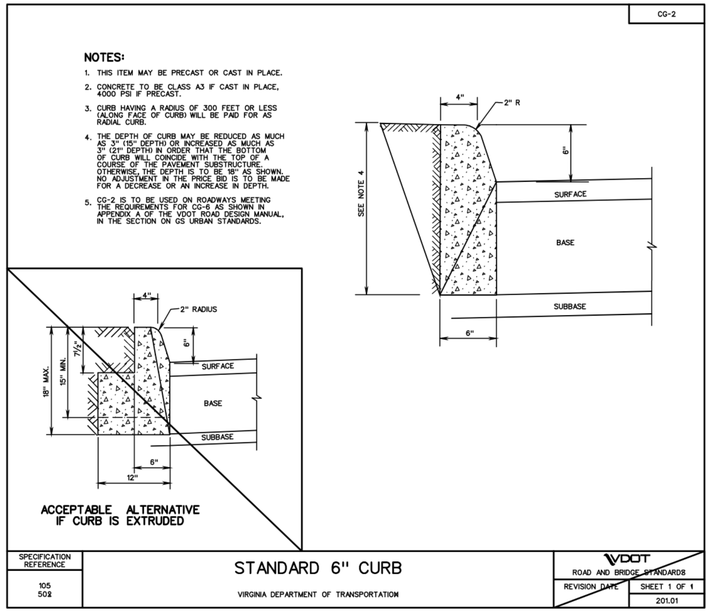
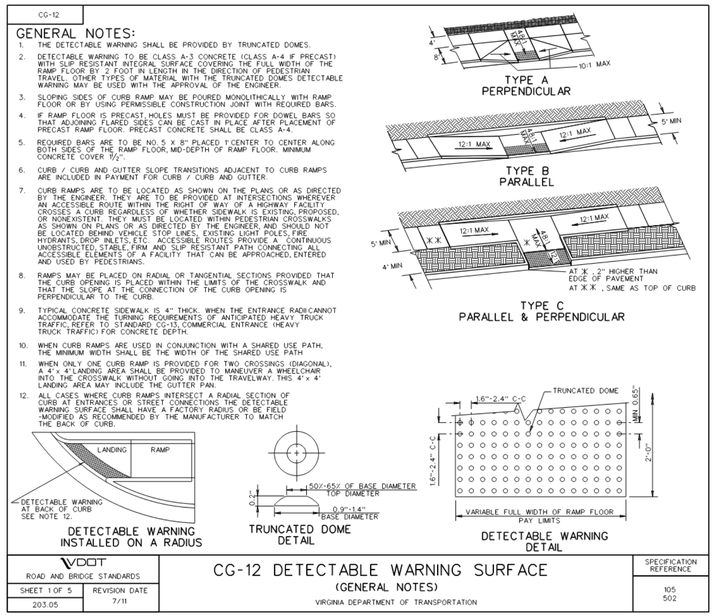


1 DETAIL - STANDARD 6" CURB

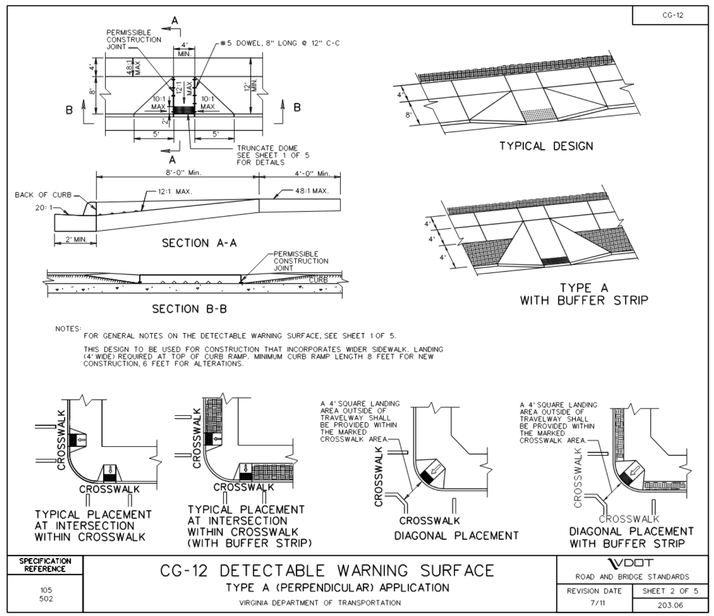
NOT TO SCALE



2 DETAIL - CG-12 DETECTABLE WARNING SURFACE

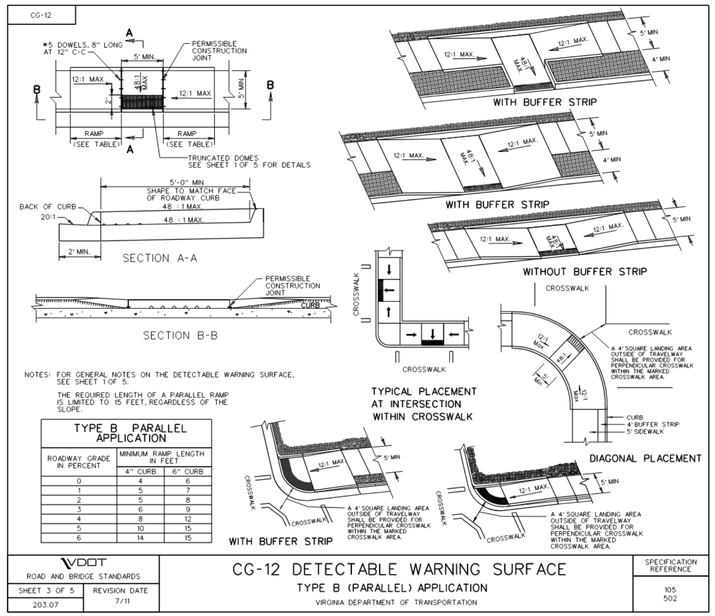
NOT TO SCALE

NOTE:
1. MODIFY VDOT DETAILS AS NECESSARY TO MATCH EXISTING CONDITIONS.



3 DETAIL - CG-12 DETECTABLE WARNING SURFACE (TYPE A)

NOT TO SCALE



4 DETAIL - CG-12 DETECTABLE WARNING SURFACE (TYPE B)

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VDOT STD CG-12 &
MODIFIED VDOT CG-2

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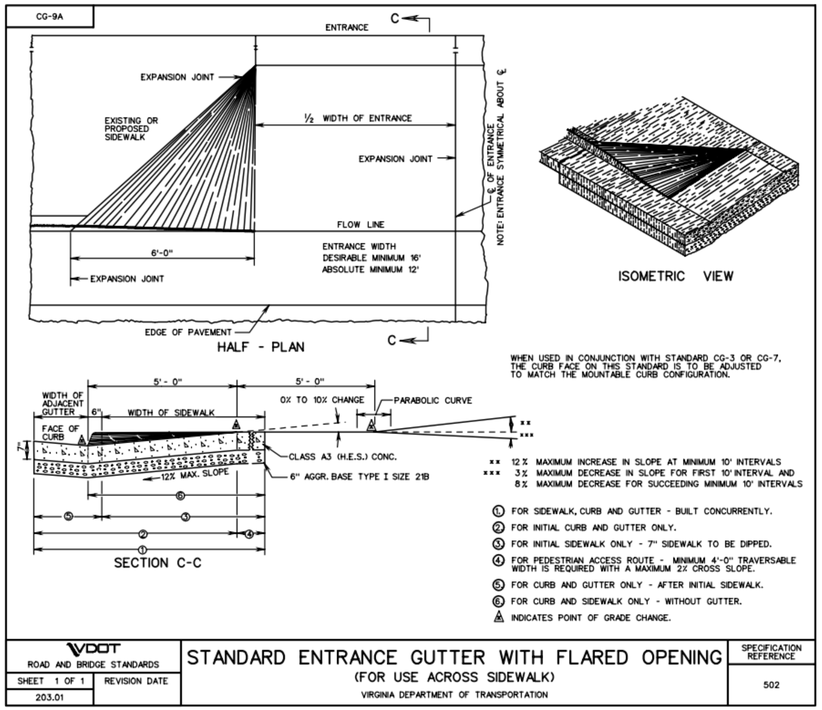
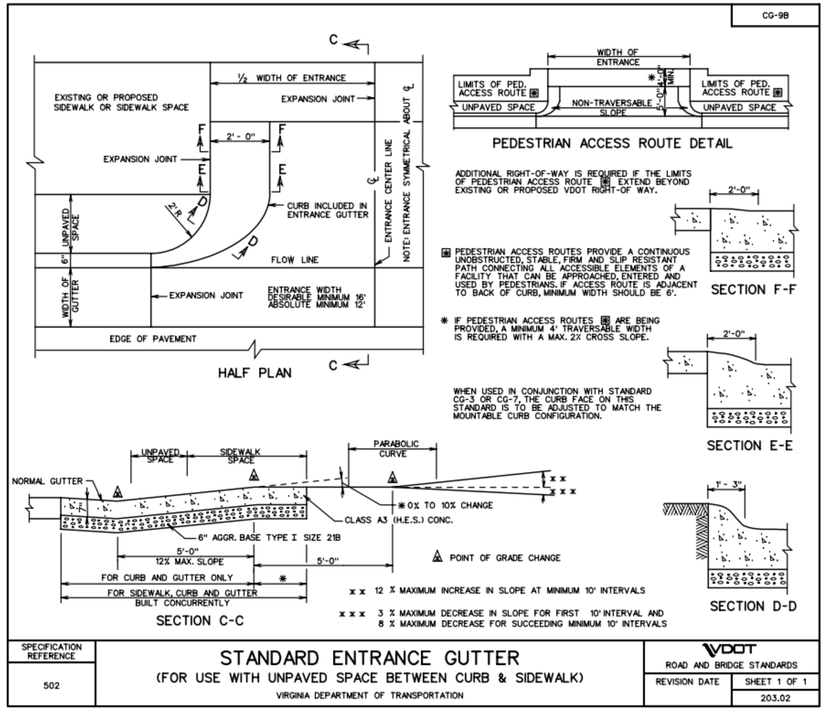


1 DETAIL - STANDARD ENTRANCE GUTTER WITH FLARED OPENING (FOR USE ACROSS SIDEWALK)

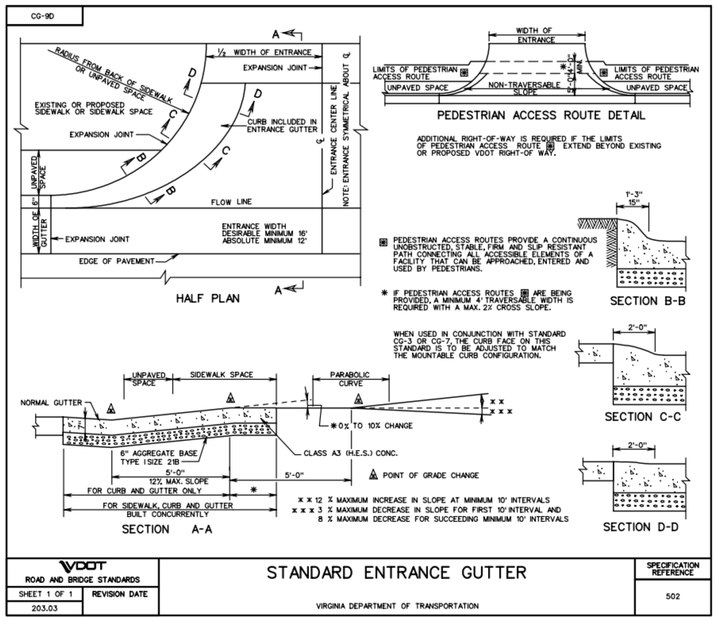
NOT TO SCALE

NOTE:
1. MODIFY VDOT DETAILS AS NECESSARY TO MATCH EXISTING CONDITIONS.



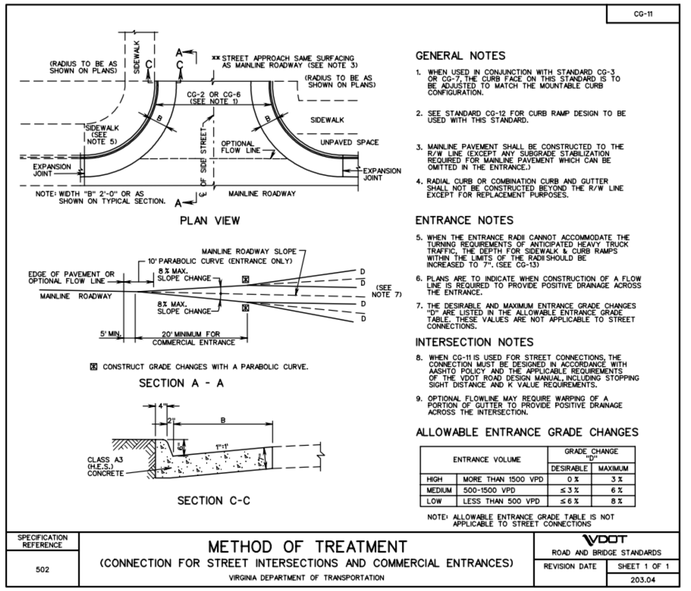
2 DETAIL - STANDARD ENTRANCE GUTTER (FOR USE WITH UNPAVED SPACE)

NOT TO SCALE



3 DETAIL - STANDARD ENTRANCE GUTTER

NOT TO SCALE



4 DETAIL - METHOD OF TREATMENT (CONNECTION FOR STREET AND COMMERCIAL ENTRANCES)

NOT TO SCALE

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VDOT STD CG-9A,9B, 9D & CG-11

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