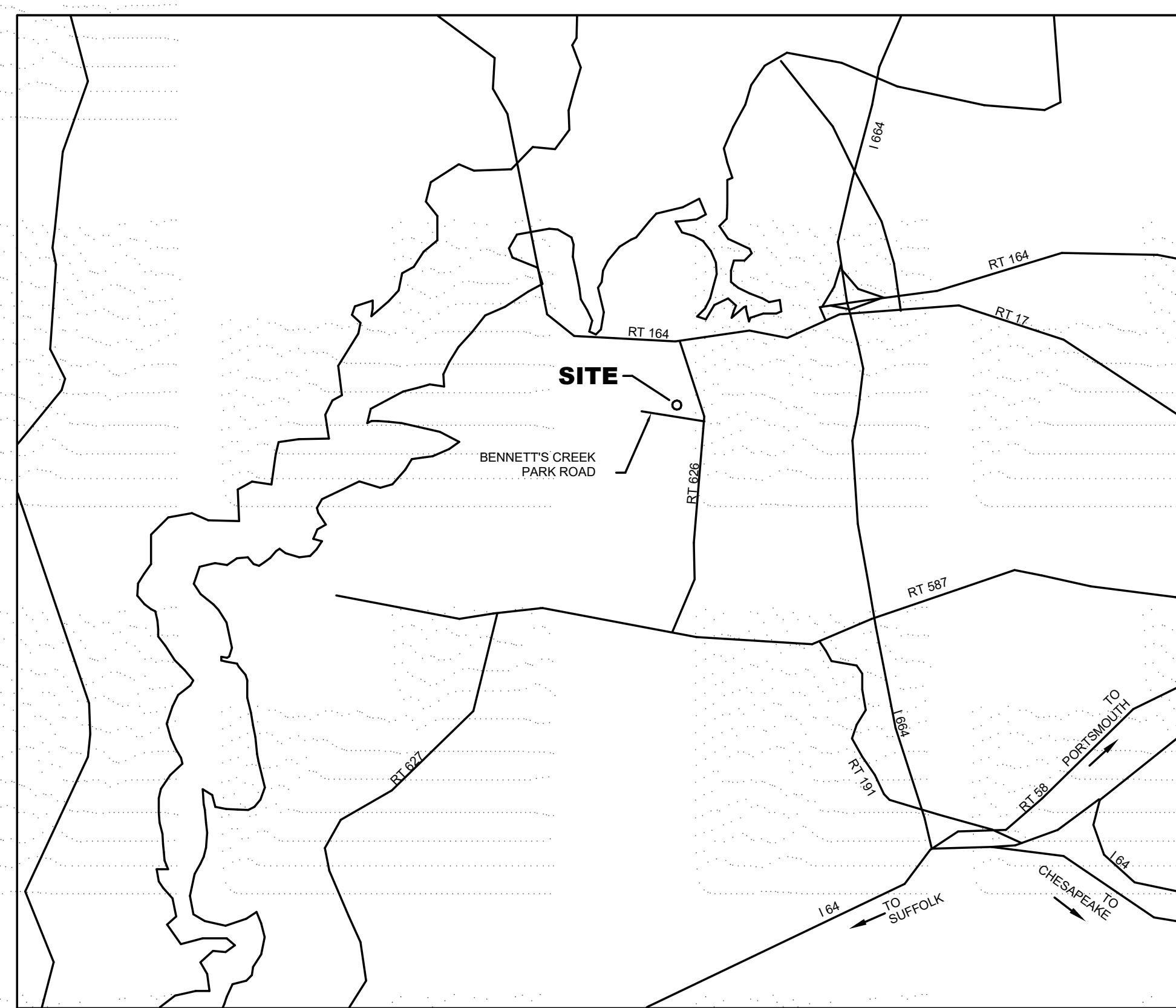
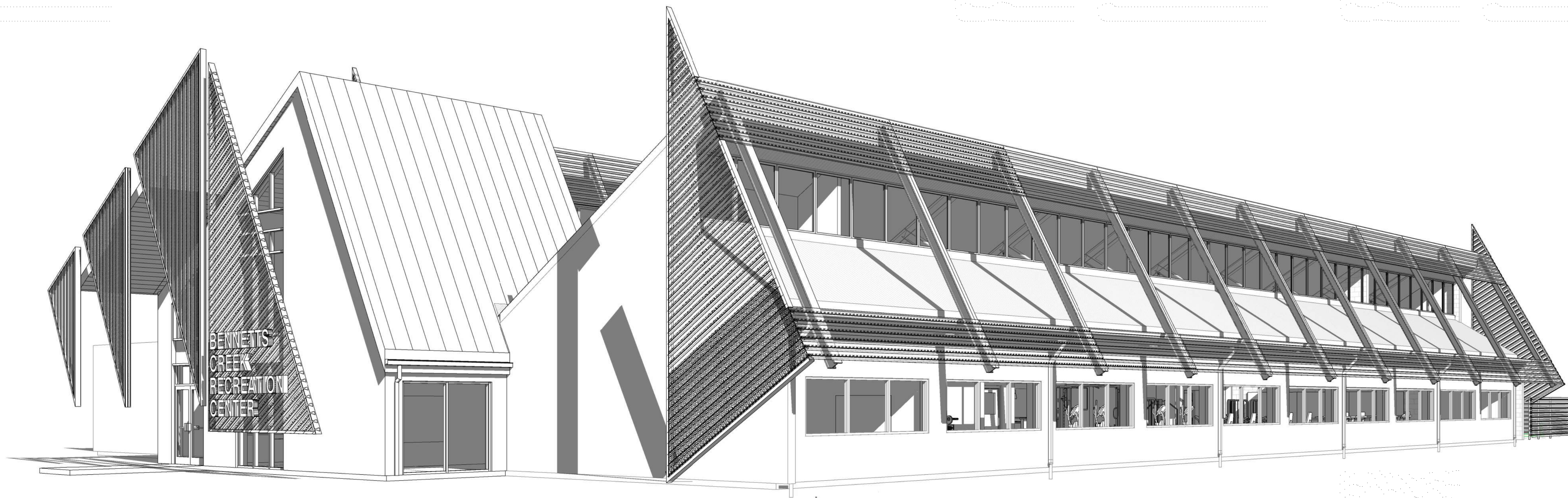


BENNETT'S CREEK RECREATION CENTER RENOVATION

CITY OF SUFFOLK
1500 BENNETTS CREEK PARK RD,
SUFFOLK, VA, 23435

DECEMBER 18TH, 2019

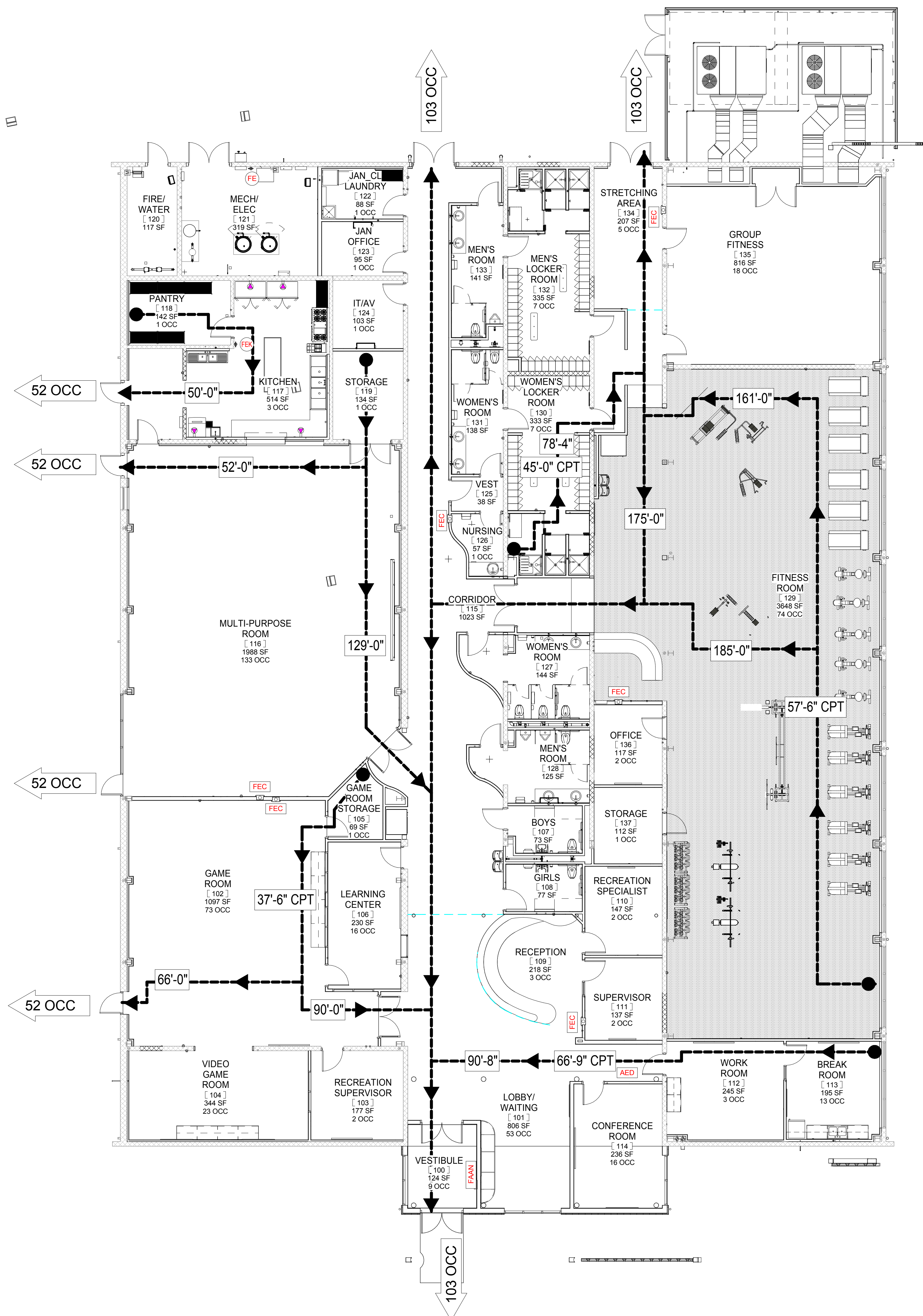


VICINITY MAP

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A-201	RENOVATION BUILDING ELEVATIONS
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E-701	PANEL SCHEDULES
E-702	LUMINAIRE SCHEDULE & CONTROL MATRIX



1 LIFE SAFETY PLAN
SCALE: 1/8" = 1'-0"

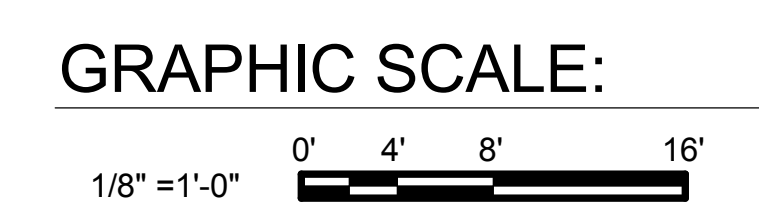
NOTE:
FURNITURE NOT IN SCOPE; FURNITURE SHOWN FOR EGRESS PURPOSES ONLY. SEE LIFE FITNESS DRAWINGS FOR FITNESS CENTER EQUIPMENT.

2015 VUSBC

BUILDING INFORMATION:	
FLOOR AREA PER IBC:	16,600 SF
ACTUAL AREA:	16,600
MEAN HEIGHT:	22'-5"
NUMBER OF STORIES:	ONE
OPEN PERIMETER:	533'-0"
TOTAL PERIMETER:	533'-0"
USE GROUP CLASSIFICATIONS:	
BUILDING USE CLASSIFICATION:	NON-SEPARATED, MIXED-USE
ACCESSORY USES:	A-3 B, S
CONSTRUCTION TYPE:	
TABLE 503:	IIB
ALLOWABLE AREA:	9,500 SF
ALLOWABLE HEIGHT:	55 FT
ALLOWABLE # OF STORIES:	TWO
SECTION 504.2 (W/ SPRINKLERS):	
HEIGHT MODIFICATION INCREASE:	75 FT
STORY MODIFICATION INCREASE:	3 STORIES
SECTION 506 (AREA MODIFICATION):	
PUBLIC WAY (W):	30 FT
OPEN PERIMETER INCREASE:	75%
FIRE SUPPRESSION INCREASE:	300%
TOTAL PERCENTAGE INCREASE:	475%
ALLOWABLE BUILDING AREA:	45,125 SF
TABLE 506.5 (MIXED USE):	
MAX BLDG AREA DETERMINATION:	45,125 SF NON-SEPARATED MIX USE
TABLE 508.1 (AREA MODIFICATION):	
USE GROUP CLASSIFICATION:	NON-SEPARATED MIX USE
ALLOWABLE AREA PER FLOOR:	45,125 SF
TABLE 508.1 (ACCESSORY USES):	
	B, S
TABLE 508.4 (MIXED USE SEPARATION):	
FIRE BARRIER RATING:	N/A
TABLE 509 (INCIDENTAL USE):	
MECHANICAL ROOM RATINGS:	NOT REQUIRED
TABLE 601 (RATINGS):	
STRUCTURAL FRAME:	0 HR
EXTERIOR WALLS:	0 HR
ROOF CONSTRUCTION:	0 HR
TABLE 602 (RATINGS):	
SEPARATION DISTANCE:	0 HR (GREATER THAN 10 FT)
SECTION 903.2	
AUTOMATIC SPRINKLERS:	FIRE AREA EXCEEDS 12,000 SQ. FT. SPRINKLERS ARE REQUIRED
TABLE 1004.1.2 (FLOOR AREA PER OCC)	
STORAGE:	300 SF/OCC
ASSEMBLY:	15 SF/OCC
BUSINESS:	100 SF/OCC
EXERCISE ROOM:	50 SF/OCC
KITCHEN:	200 SF/OCC
LOCKER ROOMS:	50 SF/OCC
CALCULATED OCCUPANT LOAD	
FIRST FLOOR:	464 OCCUPANTS
CALCULATED CAPACITIES:	
SECTION 1005.3.2 (EXIT DOORS):	70" (CALC.) (288" PROVIDED)
SECTION 1005.3.2 (CORRIDOR):	XX" (60" PROVIDED)
TABLE 1014.3	
COMMON PATH OF TRAVEL:	75 FT
TABLE 1015.1 (SPACES W/ 1 EXIT)	
MAXIMUM OCCUPANT PER SPACE:	49 OCCUPANTS (A-3)
- ROOM 102 - 73 OCCUPANTS/ 2 EXITS	
- ROOM 116 - 113 OCCUPANTS/ 3 EXITS	
- ROOM 129 - 74 OCCUPANTS/ 2 EXITS	
TABLE 1016.2 (TRAVEL DISTANCE)	
MAX EXIT ACCESS TRAVEL DISTANCE:	250'-0"
LONGEST PROVIDED:	185'-0"
TABLE 1018.1 (RATINGS)	
CORRIDOR RATINGS (A-3):	0 HR
TABLE 1018.2	
MINIMUM CORRIDOR WIDTH:	44"
SECTION 1018.4 (DEAD ENDS)	
DEAD END CORRIDORS:	N/A
TABLE 1021.2(2)	
MIN NO. OF EXITS PER STORY:	TWO REQUIRED (3 PROVIDED)
SECTION 1021.2.4 (3 OR MORE EXITS)	
OCC LOAD 501 TO 1000 OCCUPANTS:	OCCUPANTS < 501. DESIGN COMPLIES

LIFE SAFETY LEGEND

	EGRESS PATH & DIRECTION		EGRESS START
	### OCC		CALCULATED OCCUPANCY
	### OCC		EGRESS CAPACITY (MAX)
	### OCC		EGRESS DISTANCE
	FAAN FIRE ALARM ANNUNCIATOR PANEL		EXIT LIGHT
	AED AUTOMATIC EXTERNAL DEFIBRILLATOR		EXIT LIGHT (DOUBLE SIDED)
	FEC FIRE EXTINGUISHER CABINET		EXIT LIGHT WITH ARROW
	FE FIRE EXTINGUISHER		EXIT LIGHT (WALL MOUNTED)
	FEK FIRE EXTINGUISHER, KITCHEN		EMERGENCY LIGHT (WALL MOUNTED)
			EMERGENCY LIGHT (CEILING MOUNTED)



LEGEND:

Table with 3 columns: EXISTING, EXISTING, EXISTING. Lists various symbols and their corresponding items such as BENCHMARK, CONTROL POINT, FIRE HYDRANT, TREE, and BUSH.

GENERAL CONSTRUCTION NOTES:

- 1. THE CONTRACTOR SHALL BE FULLY LIABLE FOR ANY DAMAGES TO PUBLIC OR PRIVATE PROPERTY CAUSED BY CONSTRUCTION OPERATION AND SHALL RESTORE DAMAGED PROPERTY TO EXISTING OR BETTER CONDITION AT NO ADDITIONAL COST TO OWNER.

CITY OF SUFFOLK EROSION AND SEDIMENT CONTROL NOTES:

- 1. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (3RD EDITION, 1992) AND THE CITY OF SUFFOLK EROSION AND SEDIMENT CONTROL ORDINANCE.

THE CONTRACTOR SHALL PROVIDE WRITTEN NOTIFICATION TO ALL OWNERS AND RESIDENTS OF PROPERTY ADJACENT TO A DEVELOPMENT OR OFFSITE IMPROVEMENTS, 30 DAYS PRIOR TO COMMENCEMENT OF WORK UNLESS OTHERWISE DIRECTED BY THE CITY.

ALL WORK AREAS AND LANE CLOSURES SHALL BE IN ACCORDANCE WITH THE VIRGINIA WORK AREA PROTECTION MANUAL DATED AUGUST 2011 AND SHALL BE DIRECTED OR APPROVED BY CITY OF SUFFOLK PUBLIC WORKS DEPARTMENT - ENGINEERING DIVISION. NO LANE CLOSURE OPERATION SHALL BE CONDUCTED WITHOUT A RECEIVED WRITTEN REQUEST 48 TO 72 HOURS PRIOR TO OPERATION.

CIVIL NOTES:

- 1. ALL ACTIVITIES ON SITE SHALL BE IN COMPLIANCE WITH SECTION 31-608 OF THE UNIFIED DEVELOPMENT ORDINANCE.

UTILITY NOTES:

- GENERAL
1. ALL PROPOSED WATER AND SEWER SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT OF PUBLIC UTILITIES PUBLIC FACILITIES MANUAL VOLUME II, MOST RECENT REVISION.

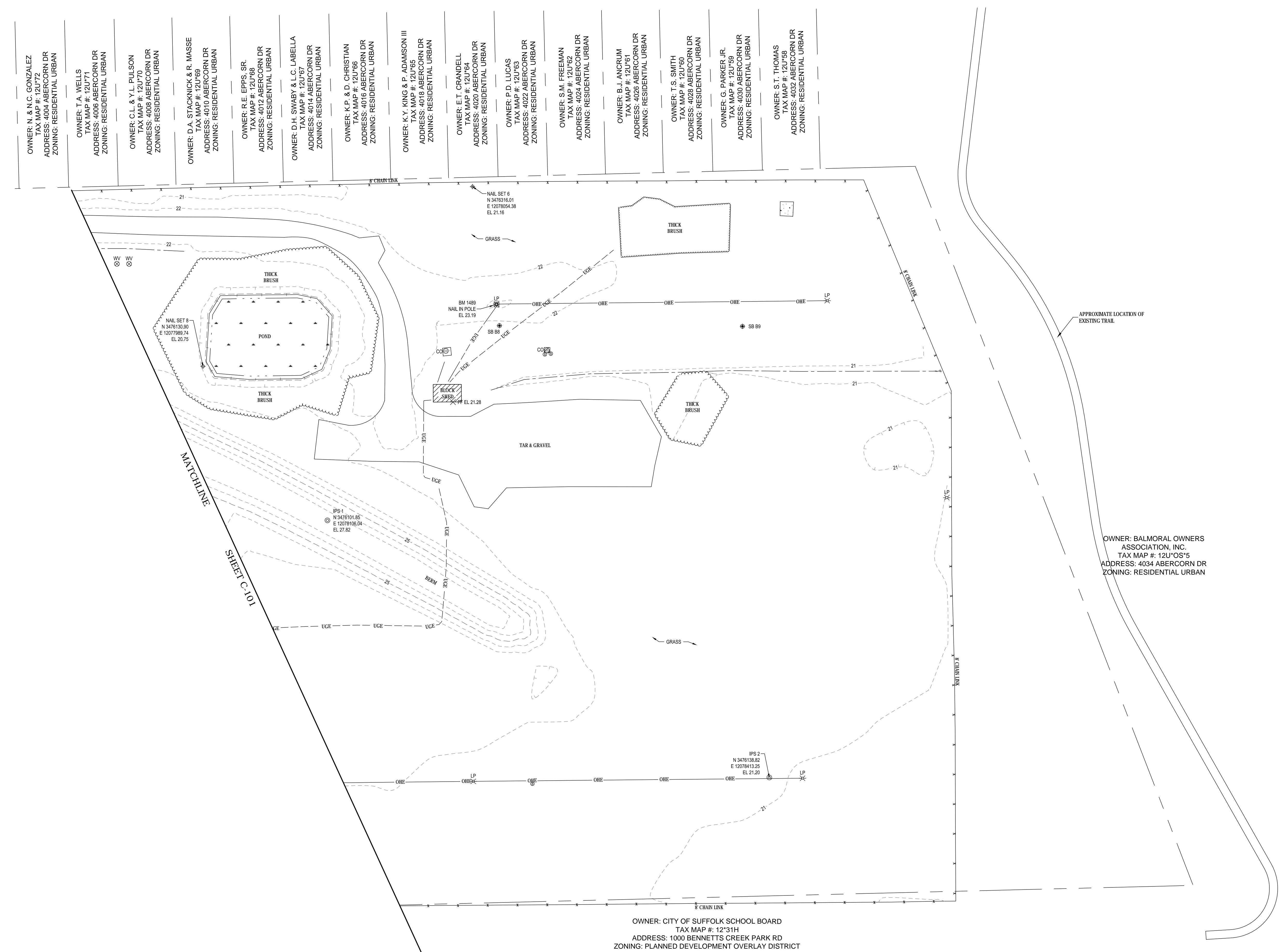
- BACKFLOW DEVICE REQUIREMENTS
FOR DOMESTIC AND FIRE SYSTEMS: RPZ, RPDA, DCVA, AND DCDA:
1. DEVICE MUST MEET A.S.S.E. REQUIREMENTS.



CITY OF SUFFOLK
BENNETT'S CREEK RECREATION CENTER RENOVATION

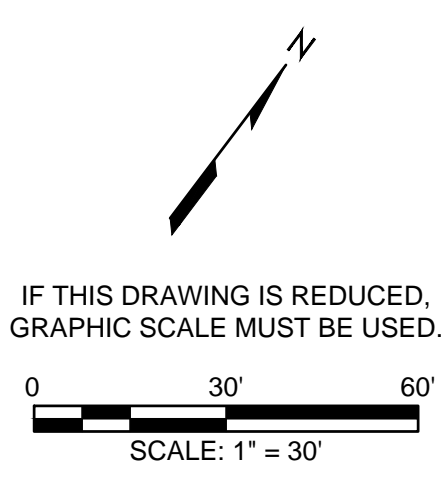
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Table with 2 columns: COMM NO., DATE, DRAWN, DESIGN, CHECK, SHEET TITLE, SHT. NO., REV. NO.



GENERAL NOTES:

- THIS TOPOGRAPHIC SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF, BRIAN S. HARVEY, LS FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION; THAT THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED ON MAY 25, 2016; AND THAT THIS PLAT, MAP, OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.
- SURVEY CONDUCTED BY WILEY|WILSON, MAY, 2016. VERTICAL CONTROL: NAVD 88; HORIZONTAL CONTROL: NAD 83 VIRGINIA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, U.S. SURVEY FOOT.
- ALL EXISTING UNDERGROUND UTILITY LOCATIONS AS SHOWN ON THESE PLANS ARE APPROXIMATE AND MAY NOT REPRESENT ALL UNDERGROUND UTILITIES OR SERVICE LINES. SOURCE OF EXISTING UTILITY MAPPING: UTILITY LOCATIONS ARE BASED ON QUALITY LEVEL "B" AS DEFINED BY ASCE STANDARD 38-02 "STANDARD GUIDELINE FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA". CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXACT LOCATION, DEPTH, SIZE, AND TYPE OF UTILITIES SHOWN AND NOTIFYING ENGINEER OF DISCREPANCIES. CONTRACTOR IS SOLELY RESPONSIBLE FOR DAMAGE TO PROPERTY, UTILITIES, OR PHYSICAL IMPROVEMENTS.
- MISS UTILITY WAS NOT CONTACTED PRIOR TO TOPOGRAPHIC SURVEY.
- CONTRACTOR SHALL CONTACT "MISS UTILITY" AT 1-800-552-7001 PRIOR TO BEGINNING ANY EXCAVATION OR DEMOLITION IN ACCORDANCE WITH THE VIRGINIA UNDERGROUND UTILITY DAMAGE PREVENTION ACT.
- PROPERTY LINE INFORMATION IS BASED ON CORRELATION OF FIELD MEASUREMENTS WITH INFORMATION FOUND IN VARIOUS PLATS AND DEEDS OF RECORD. NO BOUNDARY SURVEY WAS PERFORMED.
- THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS NOT INTENDED TO SHOW ALL EASEMENTS THAT MAY AFFECT THE PROPERTY.
- ALL PROPERTY PINS DISTURBED BY CONTRACTOR ACTIVITIES SHALL BE REPLACED BY A VIRGINIA LICENSED LAND SURVEYOR.
- THE EXISTENCE OF HAZARDOUS WASTE, VEGETATED WETLANDS, OR TIDAL WETLANDS WAS NEITHER INVESTIGATED NOR CONFIRMED DURING THE PERFORMANCE OF THIS SURVEY.



COMM NO.	DATE	REV. NO.
215021	12/18/2019	0
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CHECK: DTS		
SHEET TITLE		
EXISTING CONDITIONS		
SHT. NO.	REV. NO.	
C-102	0	

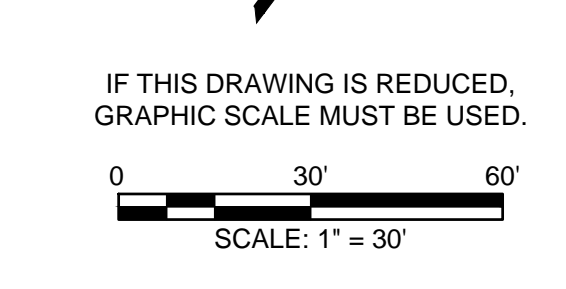
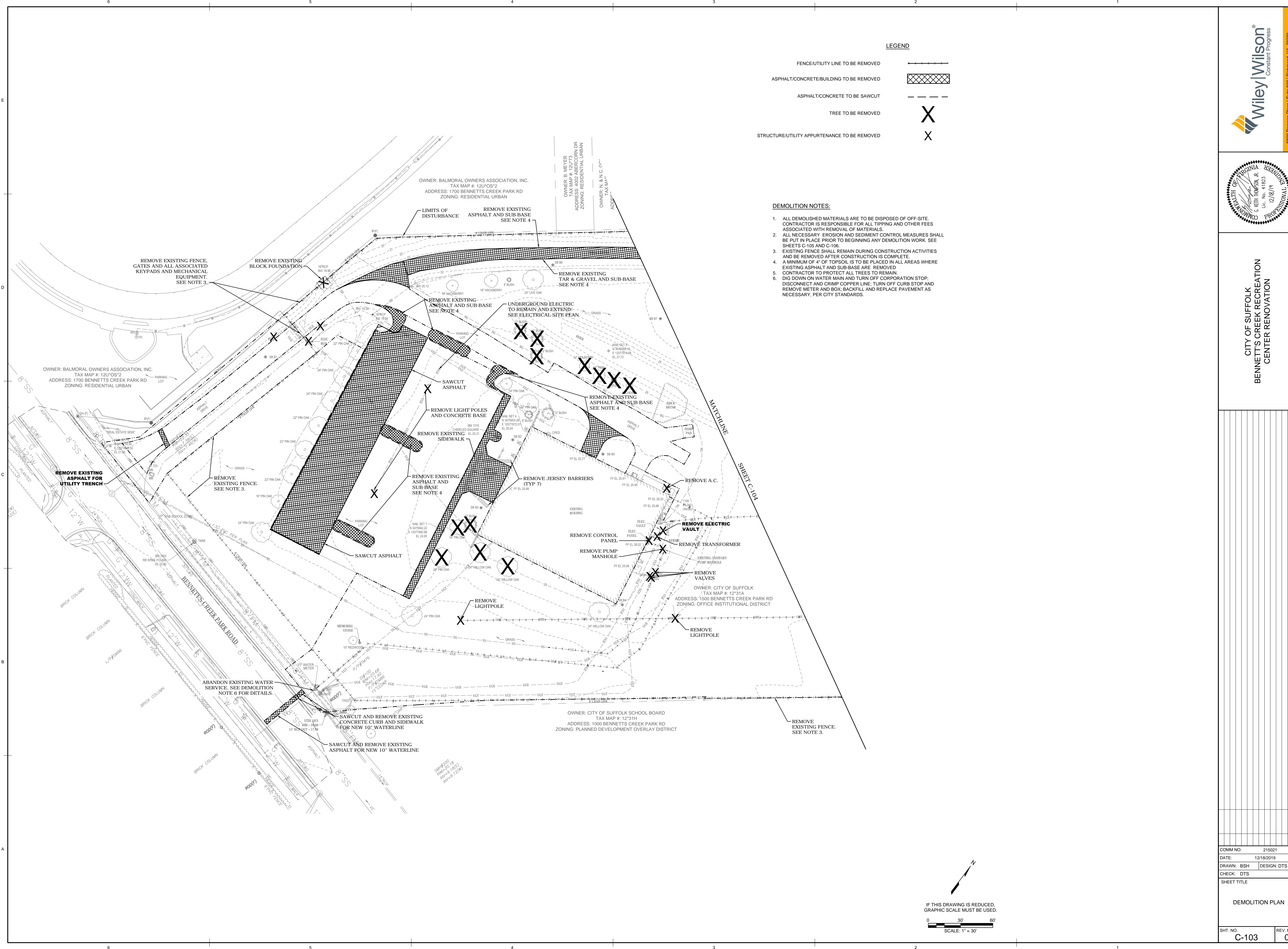
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DATE:	12/18/2019
DRAWN:	BSH
DESIGN:	DTS
CHECK:	DTS
SHEET TITLE:	
DEMOLITION PLAN	
SHT. NO.	C-103
REV. NO.	0

LEGEND

- FENCE/UTILITY LINE TO BE REMOVED
- ASPHALT/CONCRETE/BUILDING TO BE REMOVED
- ASPHALT/CONCRETE TO BE SAWCUT
- TREE TO BE REMOVED
- STRUCTURE/UTILITY APPURTENANCE TO BE REMOVED

DEMOLITION NOTES:

1. ALL DEMOLISHED MATERIALS ARE TO BE DISPOSED OF OFF-SITE. CONTRACTOR IS RESPONSIBLE FOR ALL TIPPING AND OTHER FEES ASSOCIATED WITH REMOVAL OF MATERIALS.
2. ALL NECESSARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PUT IN PLACE PRIOR TO BEGINNING ANY DEMOLITION WORK. SEE SHEETS C-105 AND C-106.
3. EXISTING FENCE SHALL REMAIN DURING CONSTRUCTION ACTIVITIES AND BE REMOVED AFTER CONSTRUCTION IS COMPLETE.
4. A MINIMUM OF 4" OF TOPSOIL IS TO BE PLACED IN ALL AREAS WHERE EXISTING ASPHALT AND SUB-BASE ARE REMOVED.
5. CONTRACTOR TO PROTECT ALL TREES TO REMAIN.
6. DIG DOWN ON WATER MAIN AND TURN OFF CORPORATION STOP; DISCONNECT AND CRIMP COPPER LINE; TURN OFF CURB STOP AND REMOVE METER AND BOX; BACKFILL AND REPLACE PAVEMENT AS NECESSARY, PER CITY STANDARDS.



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NO.	DATE	DESCRIPTION

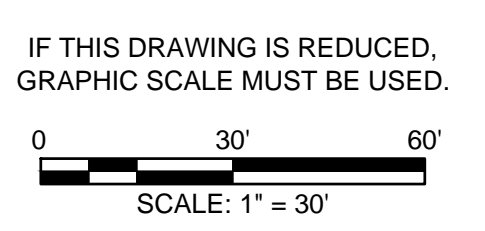
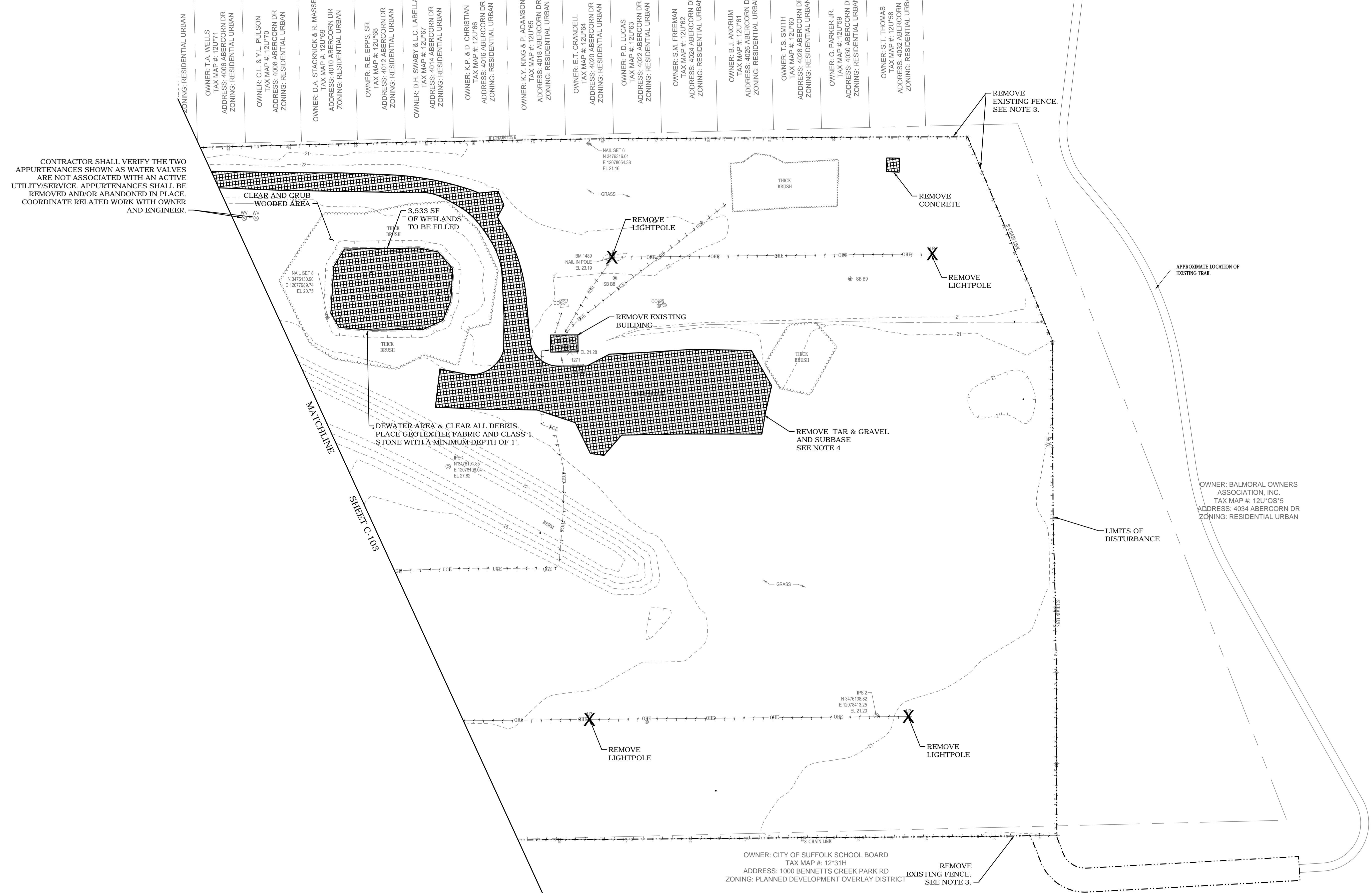
COMM NO: 215021
DATE: 12/18/2019
DRAWN: BSH DESIGN: DTS
CHECK: DTS
SHEET TITLE
DEMOLITION PLAN
SHT. NO. C-104 REV. NO. 0

DEMOLITION NOTES:

1. ALL DEMOLISHED MATERIALS ARE TO BE DISPOSED OF OFF-SITE. CONTRACTOR IS RESPONSIBLE FOR ALL TIPPING AND OTHER FEES ASSOCIATED WITH REMOVAL OF MATERIALS.
2. ALL NECESSARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PUT IN PLACE PRIOR TO BEGINNING ANY DEMOLITION WORK. SEE SHEETS C-105 AND C-106.
3. EXISTING FENCE SHALL REMAIN DURING CONSTRUCTION ACTIVITIES AND BE REMOVED AFTER CONSTRUCTION IS COMPLETE.
4. A MINIMUM OF 4" OF TOPSOIL IS TO BE PLACED IN ALL AREAS WHERE EXISTING ASPHALT AND SUB-BASE ARE REMOVED.

LEGEND

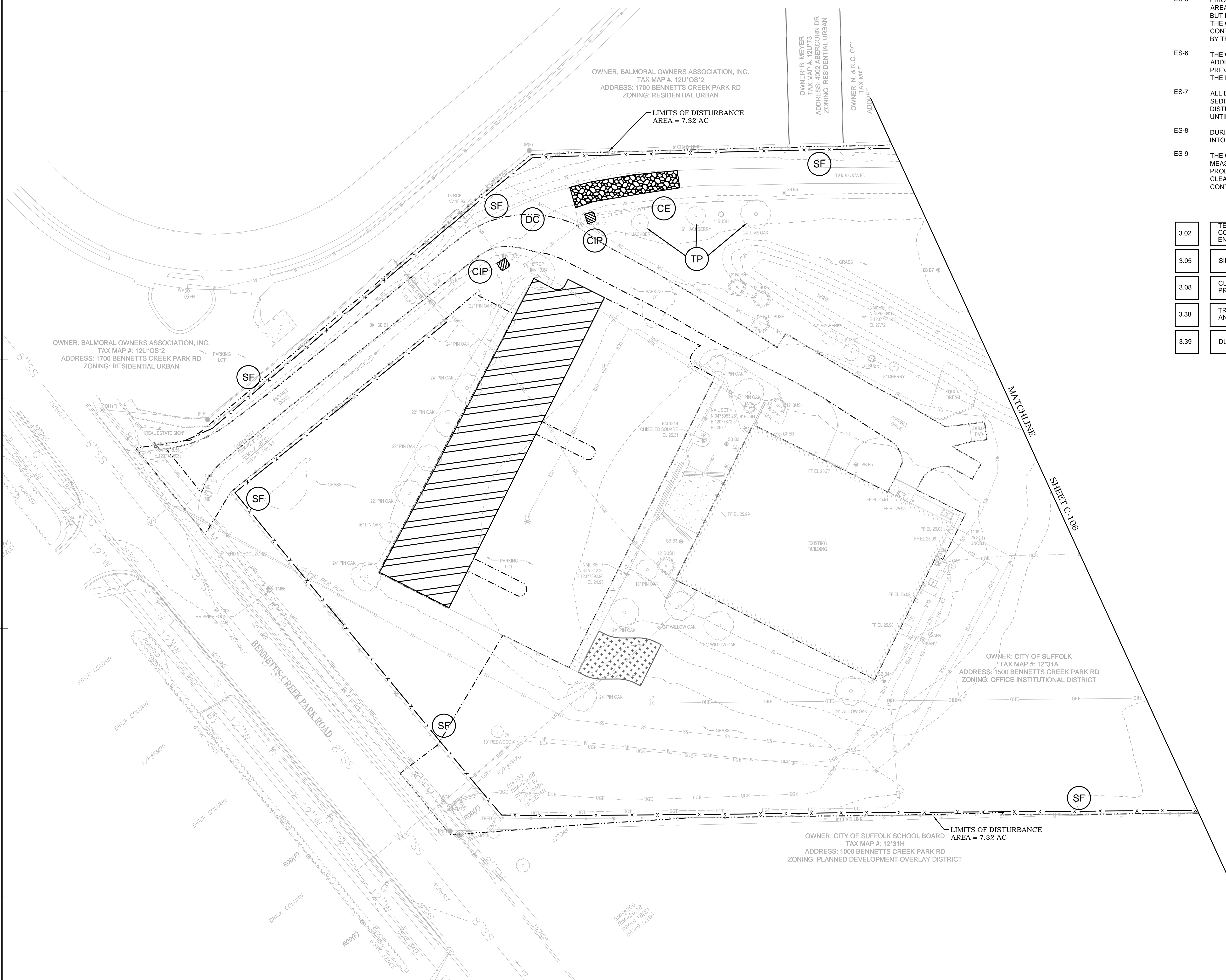
- FENCE/UTILITY LINE TO BE REMOVED
- ASPHALT/CONCRETE/BUILDING TO BE REMOVED
- TREE TO BE REMOVED
- STRUCTURE/UTILITY APPURTENANCE TO BE REMOVED



GENERAL EROSION AND SEDIMENT CONTROL NOTES

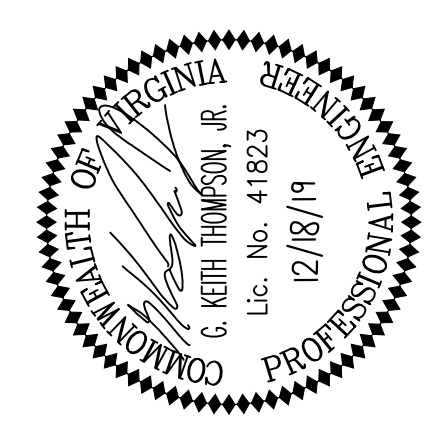
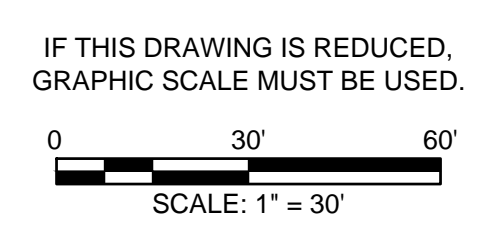
- ES-1 UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK" AND THE VIRGINIA REGULATIONS VR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS.
- ES-2 THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
- ES-3 ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
- ES-4 A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- ES-5 PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
- ES-6 THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.
- ES-7 ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
- ES-8 DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
- ES-9 THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

3.02	TEMPORARY STONE CONSTRUCTION ENTRANCE	CE	
3.05	SILT FENCE	SF	
3.08	CULVERT INLET PROTECTION	CIP	
3.38	TREE PRESERVATION AND PROTECTION	TP	
3.39	DUST CONTROL	DC	



SEQUENCE OF CONSTRUCTION

1. CONSTRUCT THE TEMPORARY STONE CONSTRUCTION ENTRANCES.
2. INSTALL SILT FENCE PRIOR TO EXCAVATING FOR THE PLANNED UTILITY.
3. CLEAR THE PLANNED DISTURBED AREA AND REMOVE DEBRIS TO A SUITABLE LOCATION.
4. INSTALL PLANNED UTILITY.
5. BRING GRADES TO DESIRED ELEVATION.
6. STABILIZE ALL DISTURBED AREAS WITH PERMANENT VEGETATION.
7. EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL RELEASED BY THE GOVERNING AGENCY.
8. REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES.
9. STABILIZE AREAS AFFECTED BY REMOVAL OF THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES.

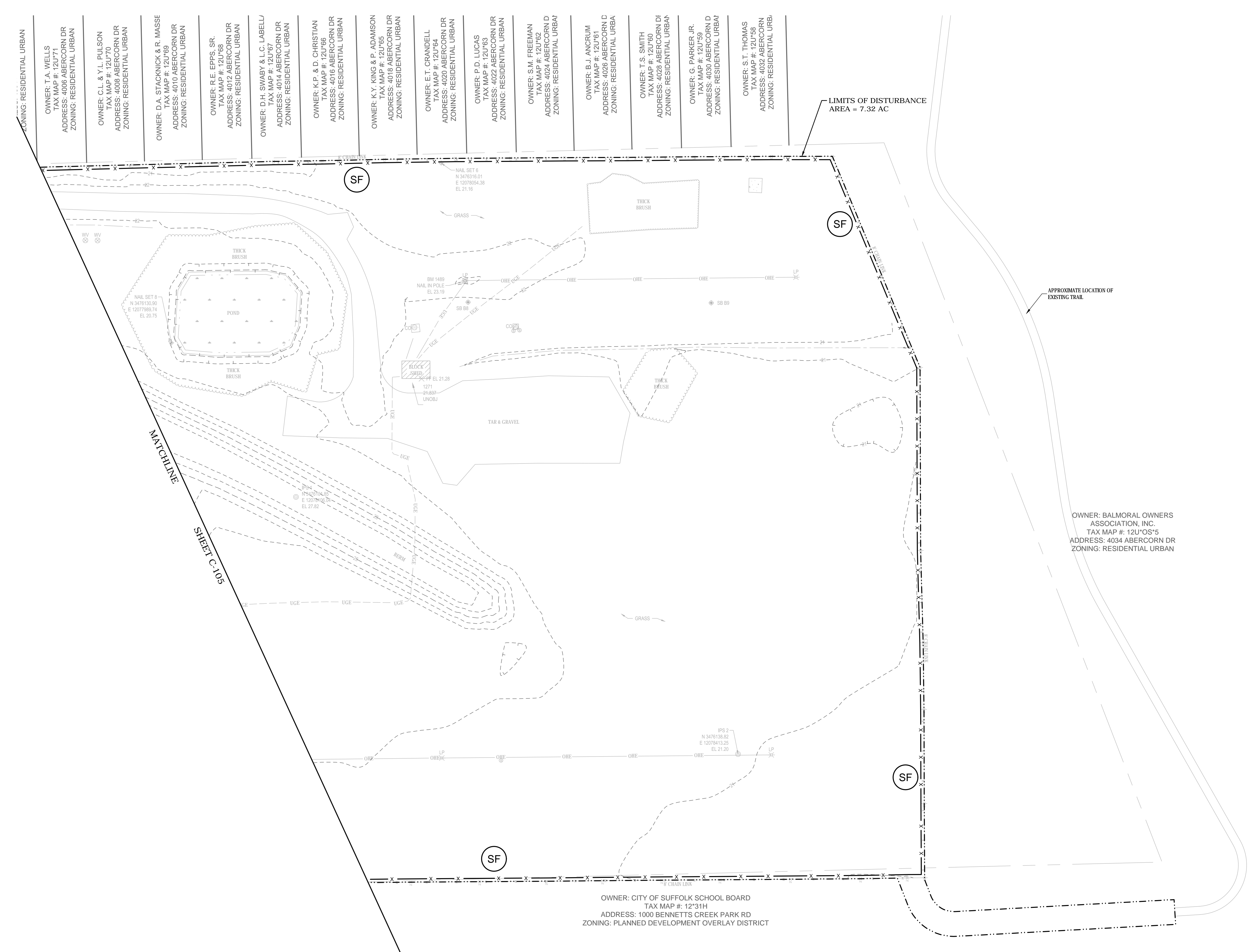


CITY OF SUFFOLK
BENNETT'S CREEK RENOVATION
CENTER RENOVATION

COMM NO:	215021
DATE:	12/18/2019
DRAWN:	BSH
DESIGN:	DTS
CHECK:	DTS
SHEET TITLE	
EROSION & SEDIMENT CONTROL PHASE I	
SHT. NO.	C-105
REV. NO.	0

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3.02	TEMPORARY STONE CONSTRUCTION ENTRANCE	CE	
3.05	SILT FENCE	SF	
3.08	CULVERT INLET PROTECTION	CIP	
3.39	DUST CONTROL	DC	

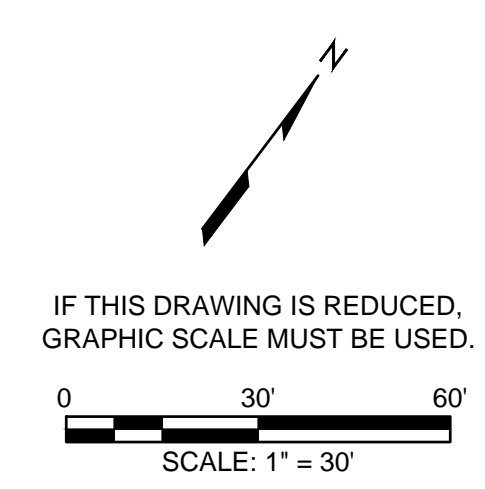


GENERAL EROSION AND SEDIMENT CONTROL NOTES

- ES-1 UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK" AND THE VIRGINIA REGULATIONS VR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS.
- ES-2 THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
- ES-3 ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
- ES-4 A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- ES-5 PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
- ES-6 THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.
- ES-7 ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
- ES-8 DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
- ES-9 THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

SEQUENCE OF CONSTRUCTION

1. CONSTRUCT THE TEMPORARY STONE CONSTRUCTION ENTRANCES.
2. INSTALL SILT FENCE PRIOR TO EXCAVATING FOR THE PLANNED UTILITY.
3. CLEAR THE PLANNED DISTURBED AREA AND REMOVE DEBRIS TO A SUITABLE LOCATION.
4. INSTALL PLANNED UTILITY.
5. BRING GRADES TO DESIRED ELEVATION.
6. STABILIZE ALL DISTURBED AREAS WITH PERMANENT VEGETATION.
7. EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL RELEASED BY THE GOVERNING AGENCY.
8. REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES.
9. STABILIZE AREAS AFFECTED BY REMOVAL OF THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES.



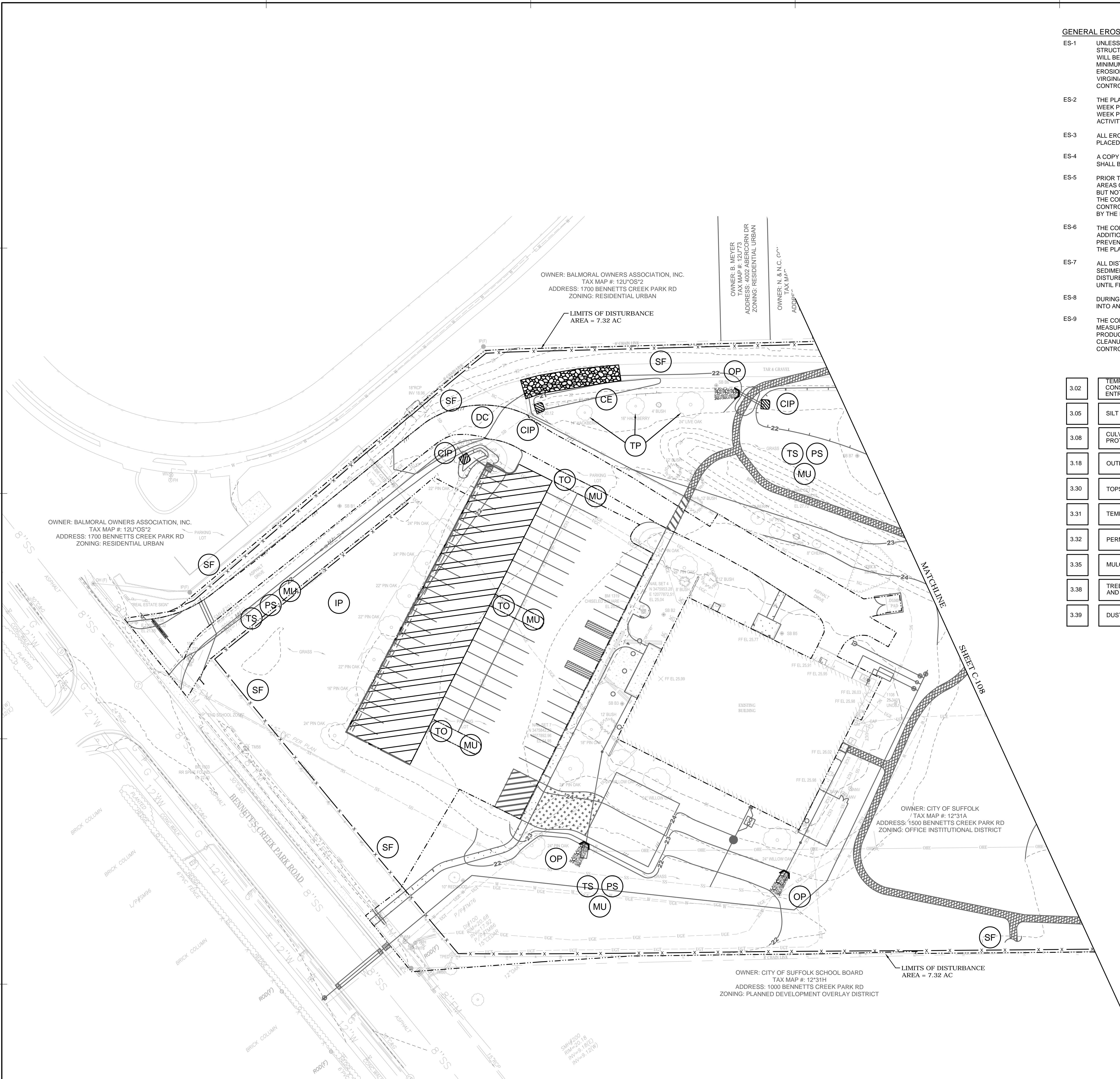
MARK	DATE	REVISION DESCRIPTION

COMM NO:	215021
DATE:	12/18/2019
DRAWN:	BSH
DESIGN:	DTS
CHECK:	DTS
SHEET TITLE	
EROSION & SEDIMENT CONTROL PHASE I	
SHT. NO.	REV. NO.
C-106	0

GENERAL EROSION AND SEDIMENT CONTROL NOTES

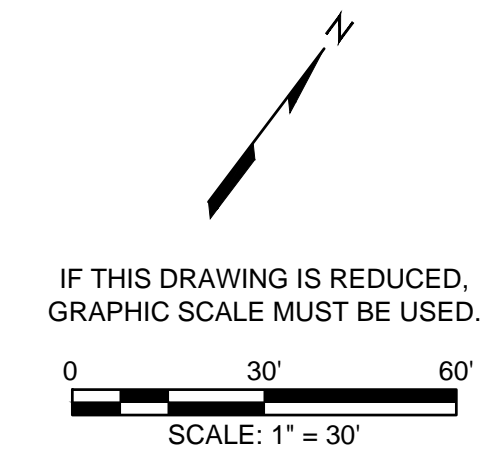
- ES-1 UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK" AND THE VIRGINIA REGULATIONS VR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS.
- ES-2 THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
- ES-3 ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
- ES-4 A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- ES-5 PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
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- ES-9 THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

3.02	TEMPORARY STONE CONSTRUCTION ENTRANCE	CE	
3.05	SILT FENCE	SF	
3.08	CULVERT INLET PROTECTION	CIP	
3.18	OUTLET PROTECTION	OP	
3.30	TOPSOILING	TO	
3.31	TEMPORARY SEEDING	TS	
3.32	PERMANENT SEEDING	PS	
3.35	MULCHING	MU	
3.38	TREE PRESERVATION AND PROTECTION	TP	
3.39	DUST CONTROL	DC	



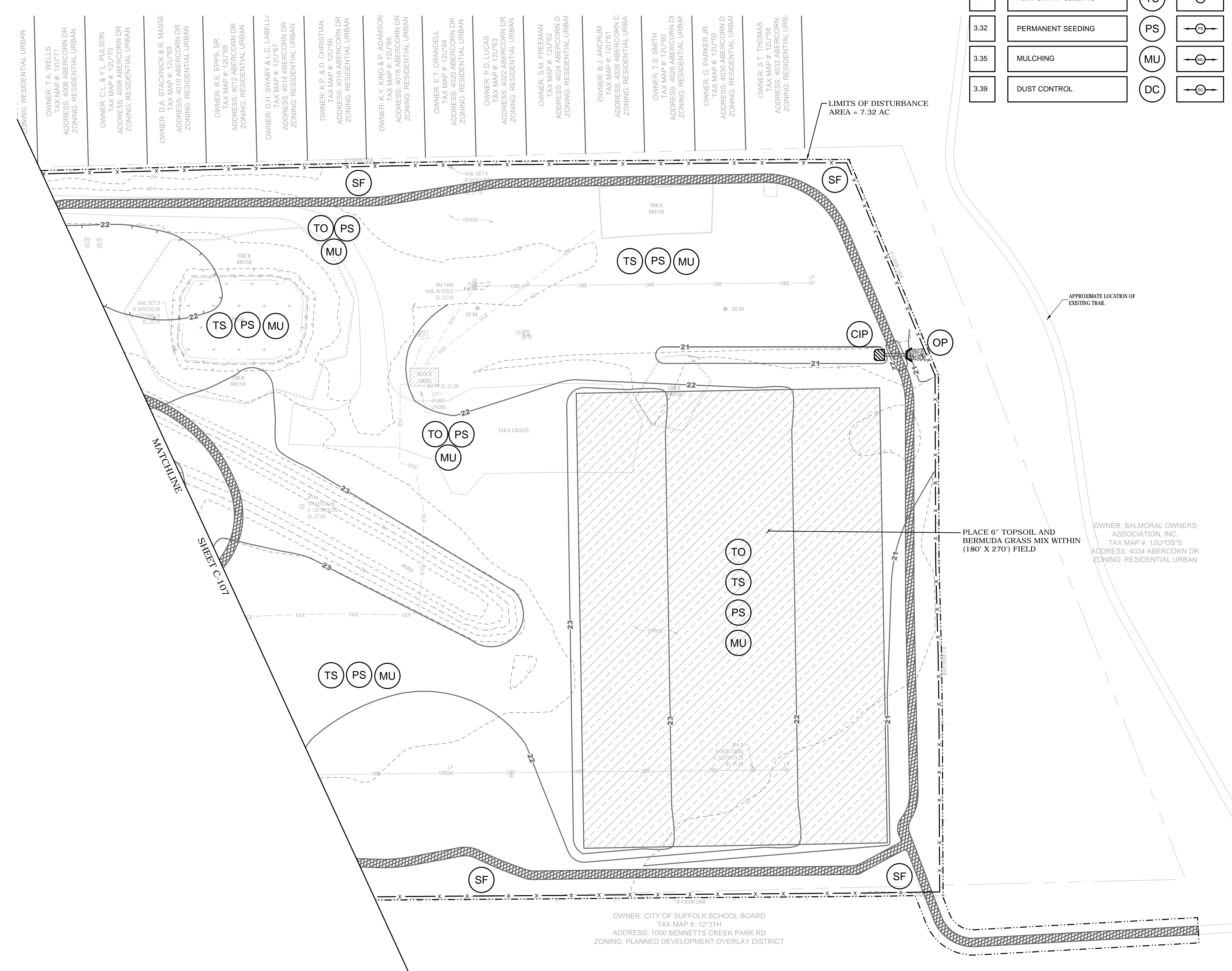
SEQUENCE OF CONSTRUCTION

1. CONSTRUCT THE TEMPORARY STONE CONSTRUCTION ENTRANCE.
2. INSTALL SILT FENCE PRIOR TO EXCAVATING FOR THE PLANNED UTILITY.
3. CLEAR THE PLANNED DISTURBED AREA AND REMOVE DEBRIS TO A SUITABLE LOCATION.
4. INSTALL PLANNED UTILITIES.
5. BRING GRADES TO DESIRED ELEVATION.
6. STABILIZE ALL DISTURBED AREAS WITH PERMANENT VEGETATION.
7. EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL RELEASED BY THE GOVERNING AGENCY.
8. REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES.
9. STABILIZE AREAS AFFECTED BY REMOVAL OF THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES.



COMM NO:	215021
DATE:	12/18/2019
DRAWN:	BSH
DESIGN:	DTS
CHECK:	DTS
SHEET TITLE	
EROSION & SEDIMENT CONTROL PHASE II	
SHT. NO.	C-107
REV. NO.	0

3.02	TEMPORARY STONE CONSTRUCTION ENTRANCE	CE	
3.05	SILT FENCE	SF	
3.08	CULVERT INLET PROTECTION	CIP	
3.18	OUTLET PROTECTION	OP	
3.30	TOPSOILING	TO	
3.31	TEMPORARY SEEDING	TS	
3.32	PERMANENT SEEDING	PS	
3.35	MULCHING	MU	
3.39	DUST CONTROL	DC	

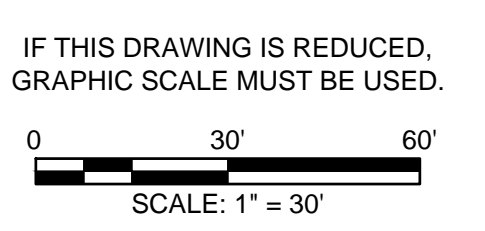


GENERAL EROSION AND SEDIMENT CONTROL NOTES

- ES-1 UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK" AND THE VIRGINIA REGULATIONS VR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS.
- ES-2 THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
- ES-3 ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
- ES-4 A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- ES-5 PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
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- ES-8 DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
- ES-9 THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF PRODUCING RAINFALL EVENT, ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

SEQUENCE OF CONSTRUCTION

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CITY OF SUFFOLK
BENNETT'S CREEK RECREATION
CENTER RENOVATION

NO.	REVISION DESCRIPTION	DATE	MRK.

COMM NO:	215021
DATE:	12/18/2019
DRAWN:	BSH
DESIGN:	DTS
CHECK:	DTS
SHEET TITLE:	EROSION & SEDIMENT CONTROL PHASE II
SHT. NO.	C-108
REV. NO.	0

COMM NO:	215021
DATE:	12/18/2019
DRAWN:	BSH
DESIGN:	DTS
CHECK:	DTS
SHEET TITLE	
SITE PLAN AND DIMENSIONAL LAYOUT PLAN	
SHT. NO.	REV. NO.
C-109	0

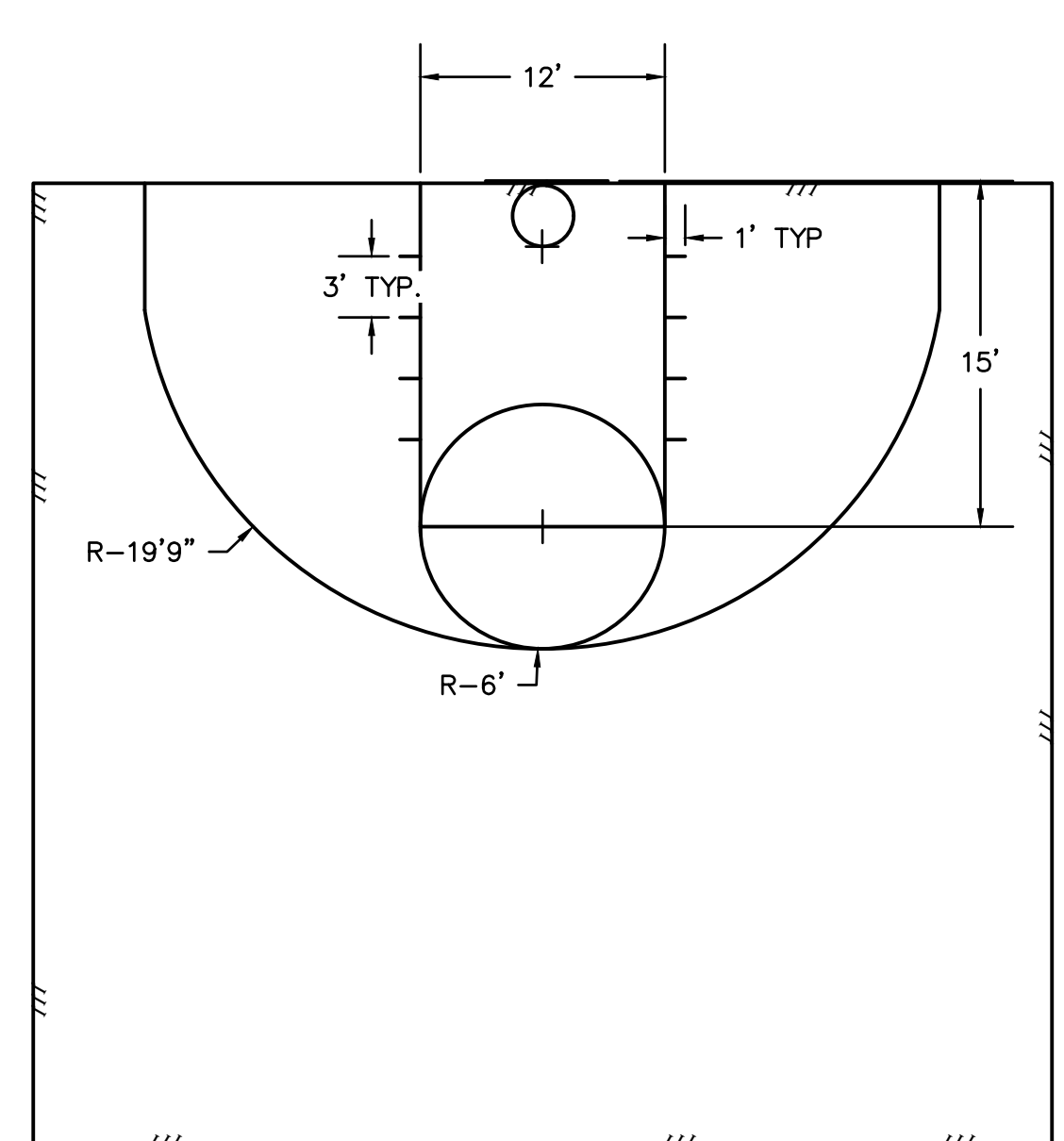
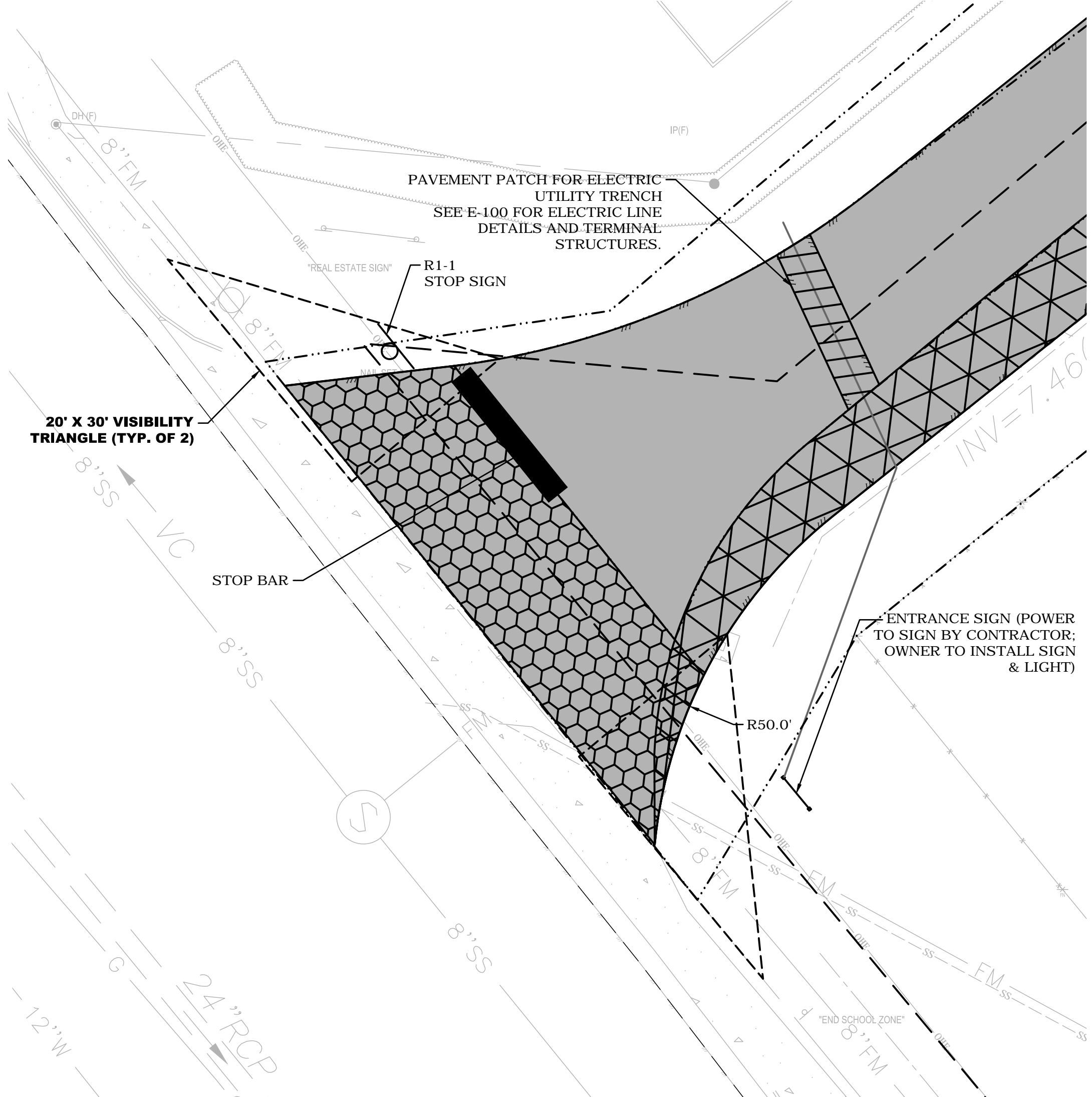
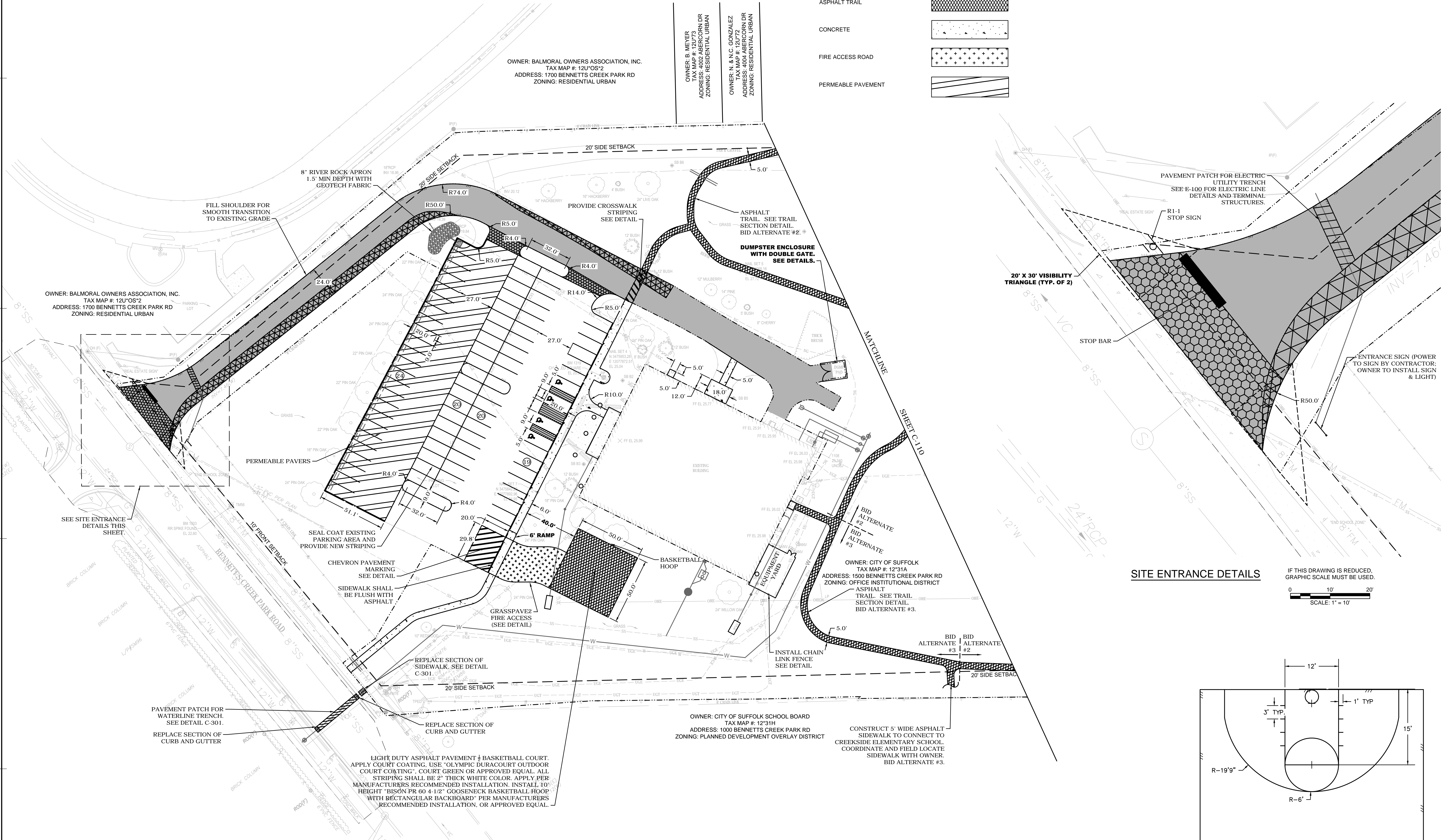
LEGEND

- 2" OVERLAY
- MILL & OVERLAY TRANSITION
- FULL DEPTH HEAVY DUTY ASPHALT
- ASPHALT TRAIL
- CONCRETE
- FIRE ACCESS ROAD
- PERMEABLE PAVEMENT

OWNER: BALMORAL OWNERS ASSOCIATION, INC.
TAX MAP #: 12U'OS'2
ADDRESS: 1700 BENNETT'S CREEK PARK RD
ZONING: RESIDENTIAL URBAN

OWNER: B. MEYER
TAX MAP #: 12U'73
ADDRESS: 4002 ABERCORN DR
ZONING: RESIDENTIAL URBAN

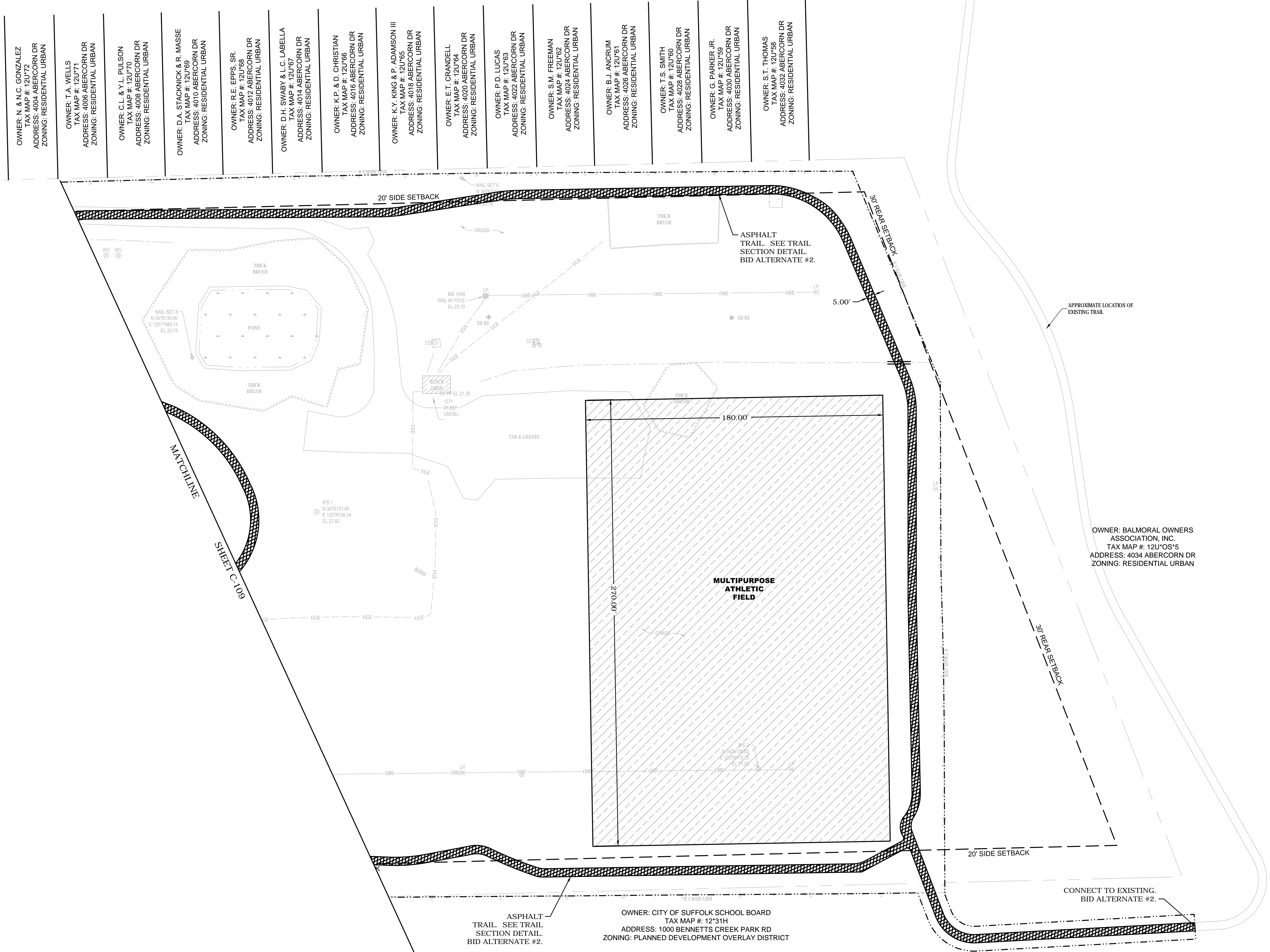
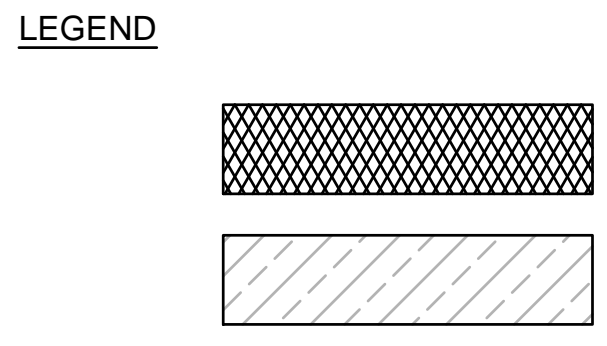
OWNER: N. & C. GONZALEZ
TAX MAP #: 12U'72
ADDRESS: 4004 ABERCORN DR
ZONING: RESIDENTIAL URBAN



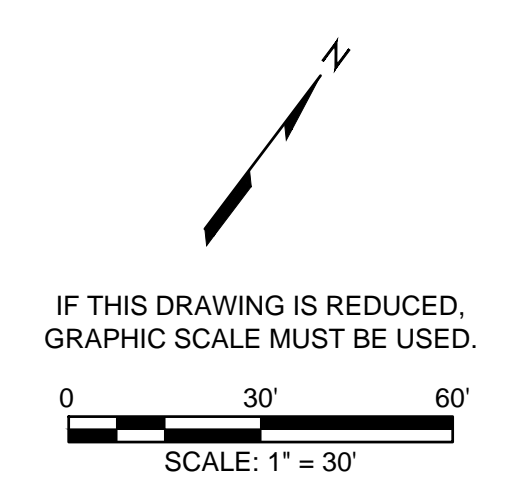
IF THIS DRAWING IS REDUCED,
GRAPHIC SCALE MUST BE USED.

BASKETBALL STRIPING PLAN
NOT TO SCALE

12/26/2013 6:28 AM X:\2015\1215021 Suffolk Bennett Creek Rec Ctr SD\CAD\Civil\Sheets\215021A16_C_109.dwg



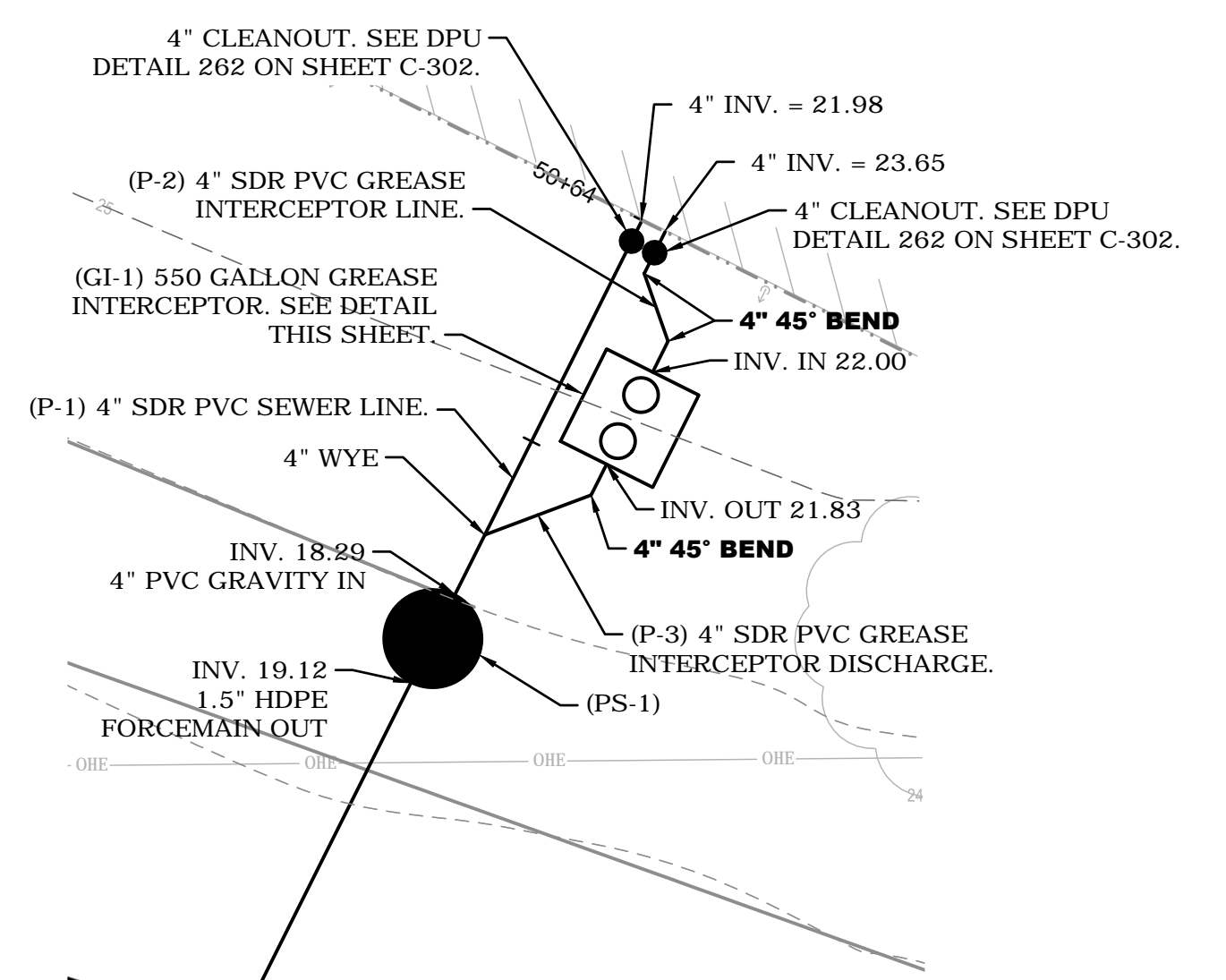
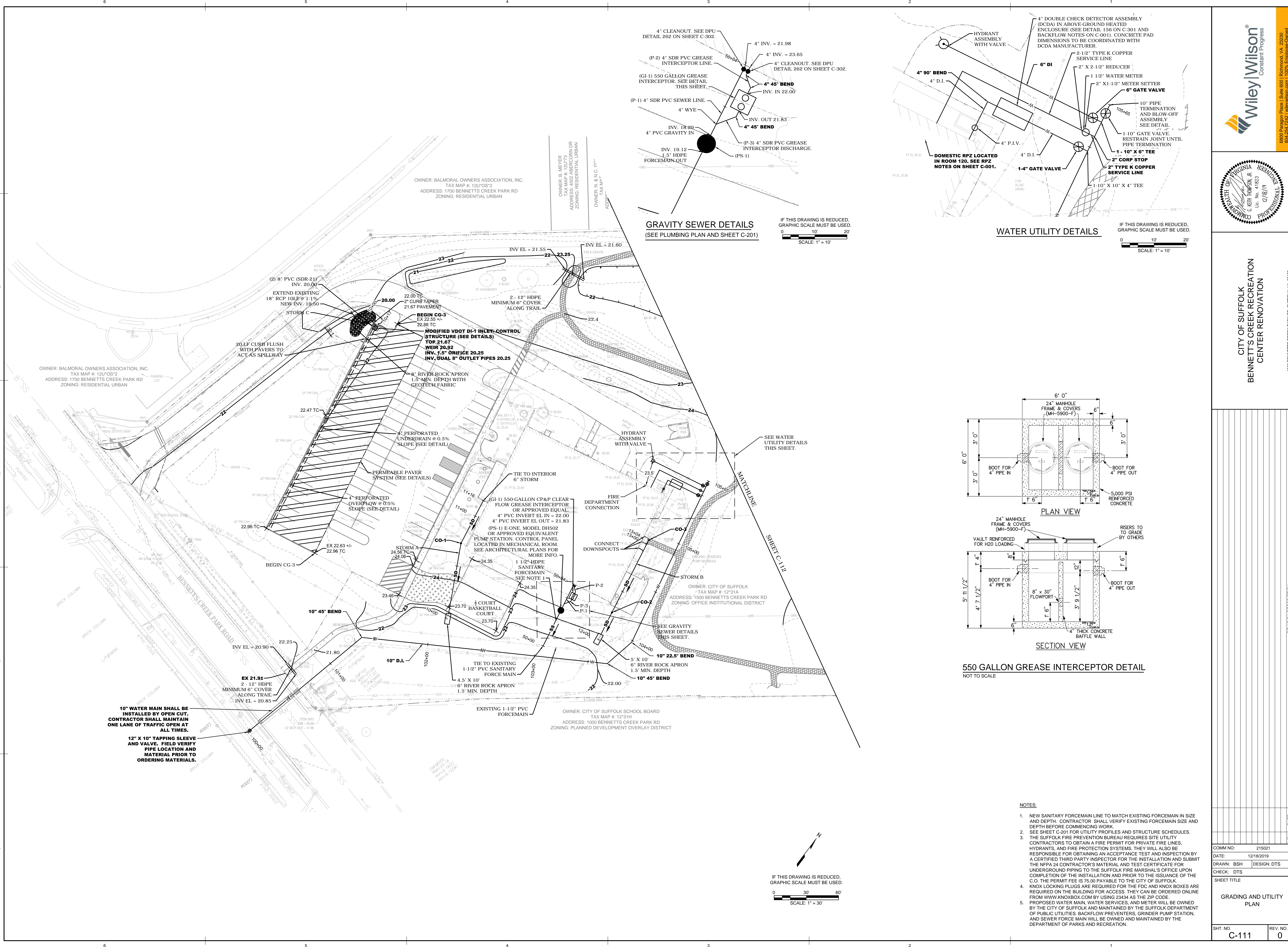
OWNER: N. & M. GONZALEZ ADDRESS: 4004 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: T.A. WELLS TAX MAP #: 12U-71 ADDRESS: 4006 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: C.L. & Y.L. PULSON TAX MAP #: 12U-72 ADDRESS: 4008 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: D.A. STACKNICK & R. MASSE TAX MAP #: 12U-99 ADDRESS: 4010 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: R.E. EPPS, SR. TAX MAP #: 12U-98 ADDRESS: 4012 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: D.H. SWABY & L.C. LABELLA TAX MAP #: 12U-67 ADDRESS: 4014 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: K.P. & D. CHRISTIAN TAX MAP #: 12U-96 ADDRESS: 4016 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: K.Y. KING & P. ADAMSON III TAX MAP #: 12U-95 ADDRESS: 4018 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: E.T. CRANDELL TAX MAP #: 12U-94 ADDRESS: 4020 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: P.D. LUCAS TAX MAP #: 12U-93 ADDRESS: 4022 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: S.M. FREEMAN TAX MAP #: 12U-82 ADDRESS: 4024 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: B.J. ANCRUM TAX MAP #: 12U-61 ADDRESS: 4026 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: T.S. SMITH TAX MAP #: 12U-80 ADDRESS: 4028 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: G. PARKER, JR. TAX MAP #: 12U-79 ADDRESS: 4030 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: S.T. THOMAS TAX MAP #: 12U-58 ADDRESS: 4032 ABERCORN DR ZONING: RESIDENTIAL URBAN
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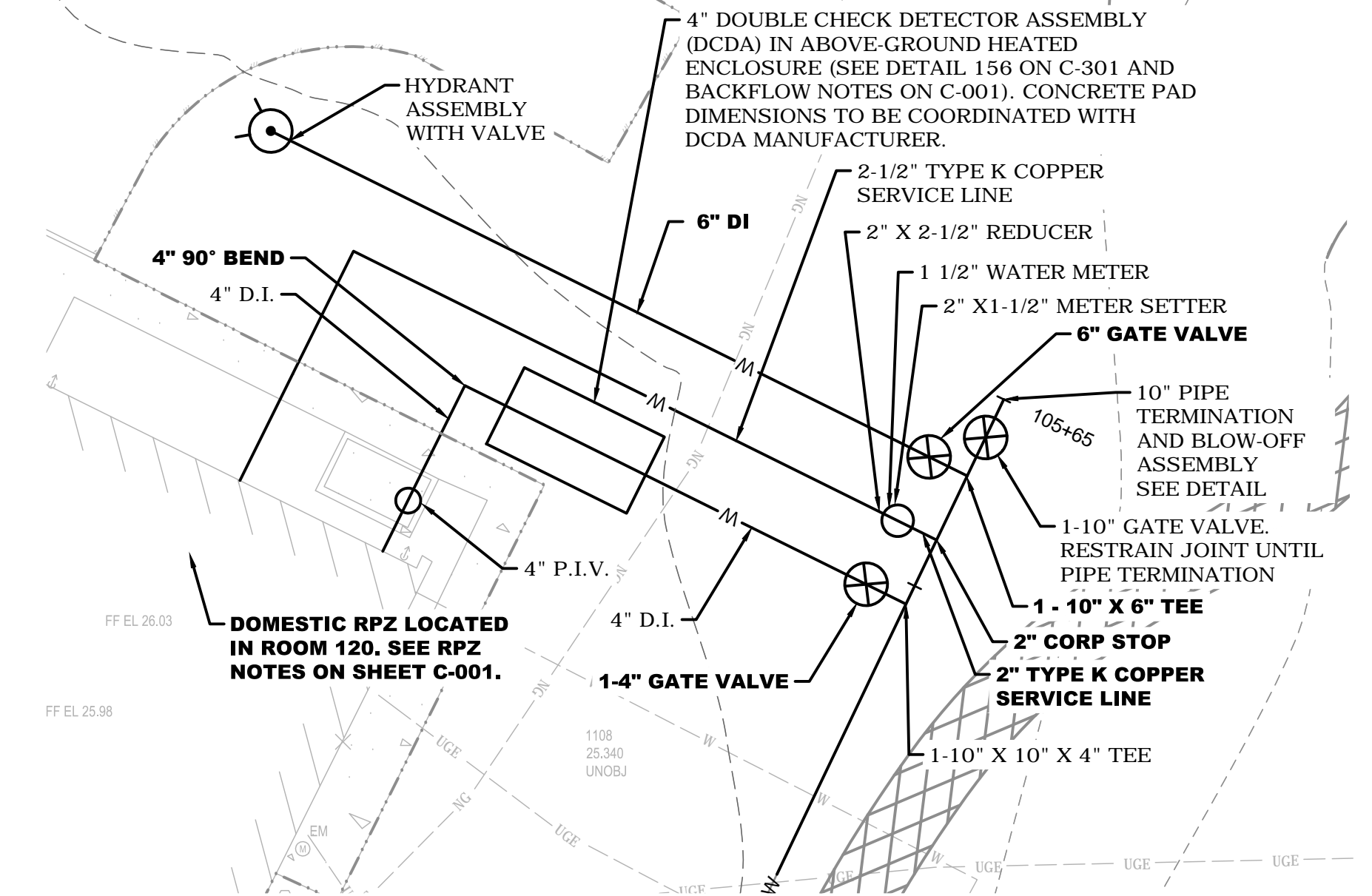
CITY OF SUFFOLK
BENNETT'S CREEK RECREATION
CENTER RENOVATION

REV	DATE	DESCRIPTION

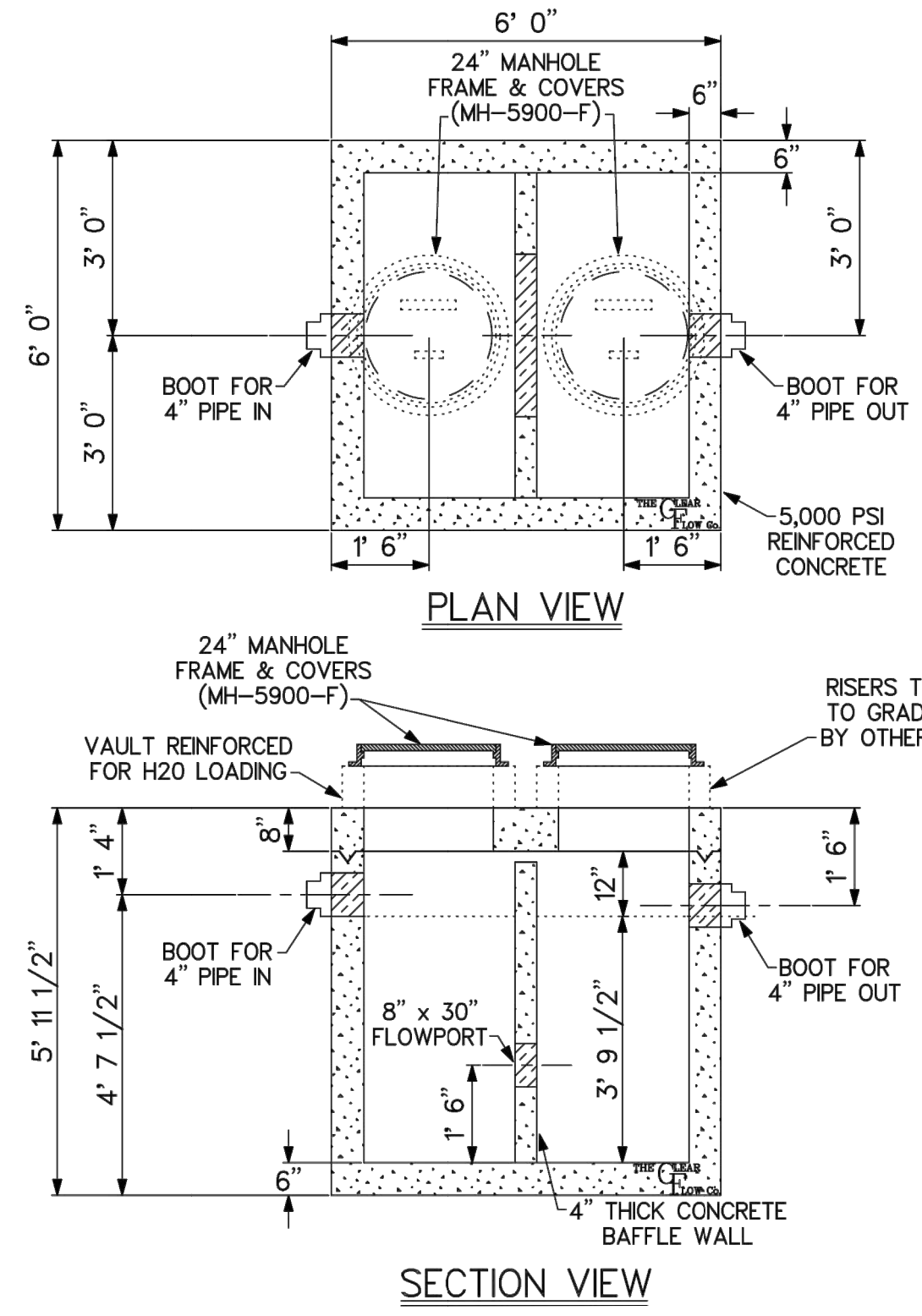
COMM NO: 215021
DATE: 12/18/2019
DRAWN: BSH DESIGN: DTS
CHECK: DTS
SHEET TITLE
SITE PLAN AND DIMENSIONAL LAYOUT PLAN
SHT. NO. C-110 REV. NO. 0



GRAVITY SEWER DETAILS
(SEE PLUMBING PLAN AND SHEET C-201)



WATER UTILITY DETAILS
(SEE PLUMBING PLAN AND SHEET C-201)



550 GALLON GREASE INTERCEPTOR DETAIL
NOT TO SCALE

10" WATER MAIN SHALL BE INSTALLED BY OPEN CUT. CONTRACTOR SHALL MAINTAIN ONE LANE OF TRAFFIC OPEN AT ALL TIMES.
12" X 10" TAPPING SLEEVE AND VALVE. FIELD VERIFY PIPE LOCATION AND MATERIAL PRIOR TO ORDERING MATERIALS.

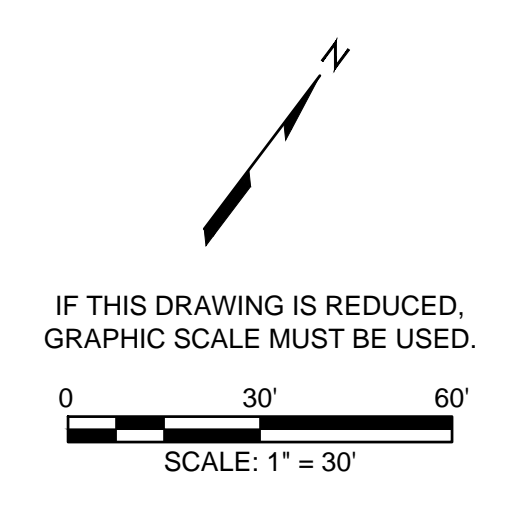
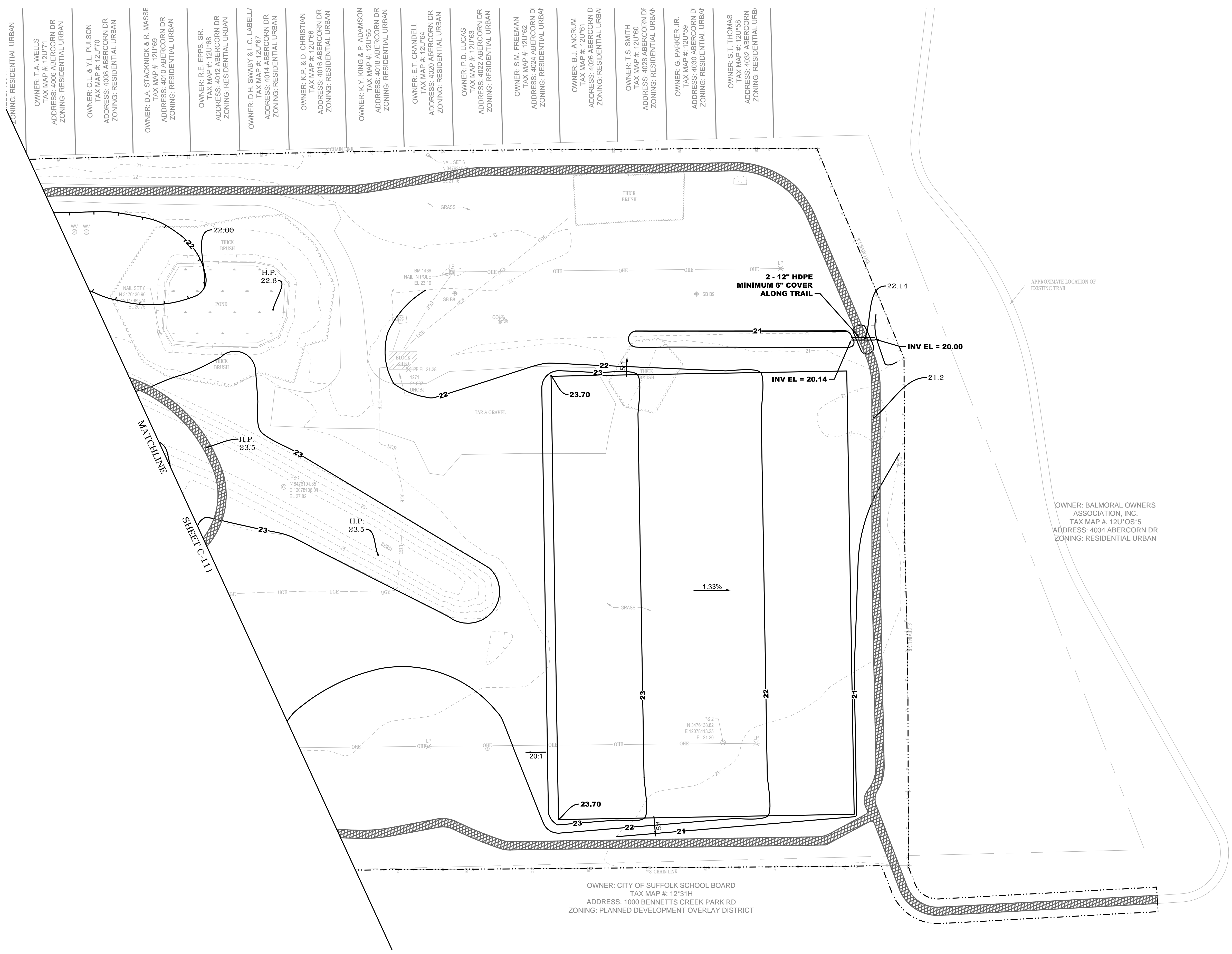
- NOTES:
- NEW SANITARY FORCEMAIN LINE TO MATCH EXISTING FORCEMAIN IN SIZE AND DEPTH. CONTRACTOR SHALL VERIFY EXISTING FORCEMAIN SIZE AND DEPTH BEFORE COMMENCING WORK.
 - SEE SHEET C-201 FOR UTILITY PROFILES AND STRUCTURE SCHEDULES.
 - THE SUFFOLK FIRE PREVENTION BUREAU REQUIRES SITE UTILITY CONTRACTORS TO OBTAIN A FIRE PERMIT FOR PRIVATE FIRE LINES, HYDRANTS, AND FIRE PROTECTION SYSTEMS. THEY WILL ALSO BE RESPONSIBLE FOR OBTAINING AN ACCEPTANCE TEST AND INSPECTION BY A CERTIFIED THIRD PARTY INSPECTOR FOR THE INSTALLATION AND SUBMIT THE NFPA 24 CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING TO THE SUFFOLK FIRE MARSHAL'S OFFICE UPON COMPLETION OF THE INSTALLATION AND PRIOR TO THE ISSUANCE OF THE C.O. THE PERMIT FEE IS 75.00 PAYABLE TO THE CITY OF SUFFOLK.
 - KNOX LOCKING PLUGS ARE REQUIRED FOR THE FDC AND KNOX BOXES ARE REQUIRED ON THE BUILDING FOR ACCESS. THEY CAN BE ORDERED ONLINE FROM WWW.KNOXBOX.COM BY USING 23434 AS THE ZIP CODE.
 - PROPOSED WATER MAIN, WATER SERVICES, AND METER WILL BE OWNED BY THE CITY OF SUFFOLK AND MAINTAINED BY THE SUFFOLK DEPARTMENT OF PUBLIC UTILITIES. BACKFLOW PREVENTERS, GRINDER PUMP STATION, AND SEWER FORCE MAIN WILL BE OWNED AND MAINTAINED BY THE DEPARTMENT OF PARKS AND RECREATION.

WILEY WILSON
Constant Progress

**CITY OF SUFFOLK
BENNETT'S CREEK RECREATION
CENTER RENOVATION**

NO.	DESCRIPTION	DATE

COMM NO: 215021
DATE: 12/18/2019
DRAWN: BSH DESIGN: DTS
CHECK: DTS
SHEET TITLE: GRADING AND UTILITY PLAN
SHT. NO: C-111 REV. NO: 0

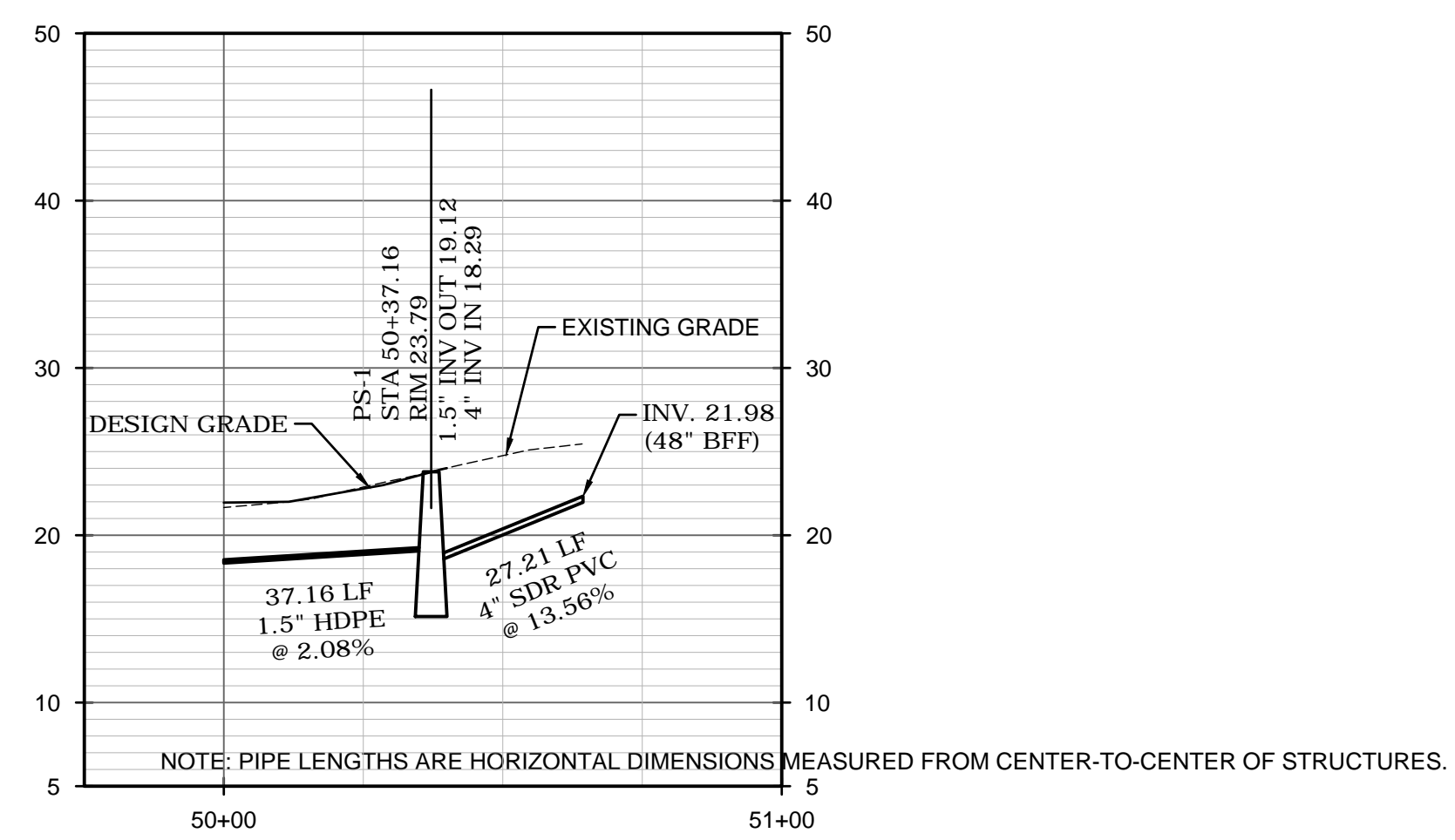


OWNER: T.A. WELLS TAX MAP #: 12U'71 ADDRESS: 4006 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: C.L. & Y.L. PULSON TAX MAP #: 12U'98 ADDRESS: 4009 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: D.A. STACKNICK & R. MASSE TAX MAP #: 12U'99 ADDRESS: 4014 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: R.E. EPPS, SR. TAX MAP #: 12U'95 ADDRESS: 4012 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: D.H. SWABY & L.C. LABELLI TAX MAP #: 12U'87 ADDRESS: 4014 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: K.P. & D. CHRISTIAN TAX MAP #: 12U'96 ADDRESS: 4014 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: K.Y. KING & P. ADAMSON TAX MAP #: 12U'95 ADDRESS: 4018 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: E.T. CRANDELL TAX MAP #: 12U'94 ADDRESS: 4014 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: P.D. LUCAS TAX MAP #: 12U'93 ADDRESS: 4022 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: S.M. FREEMAN TAX MAP #: 12U'82 ADDRESS: 4024 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: B.J. ANCRUM TAX MAP #: 12U'81 ADDRESS: 4026 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: T.S. SMITH TAX MAP #: 12U'80 ADDRESS: 4028 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: G. PARKER, JR. TAX MAP #: 12U'80 ADDRESS: 4030 ABERCORN DR ZONING: RESIDENTIAL URBAN	OWNER: S.T. THOMAS TAX MAP #: 12U'98 ADDRESS: 4032 ABERCORN DR ZONING: RESIDENTIAL URBAN
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OWNER: CITY OF SUFFOLK SCHOOL BOARD
TAX MAP #: 12'314
ADDRESS: 1000 BENNETTS CREEK PARK RD
ZONING: PLANNED DEVELOPMENT OVERLAY DISTRICT

OWNER: BALMORAL OWNERS ASSOCIATION, INC.
TAX MAP #: 12U'05'5
ADDRESS: 4034 ABERCORN DR
ZONING: RESIDENTIAL URBAN

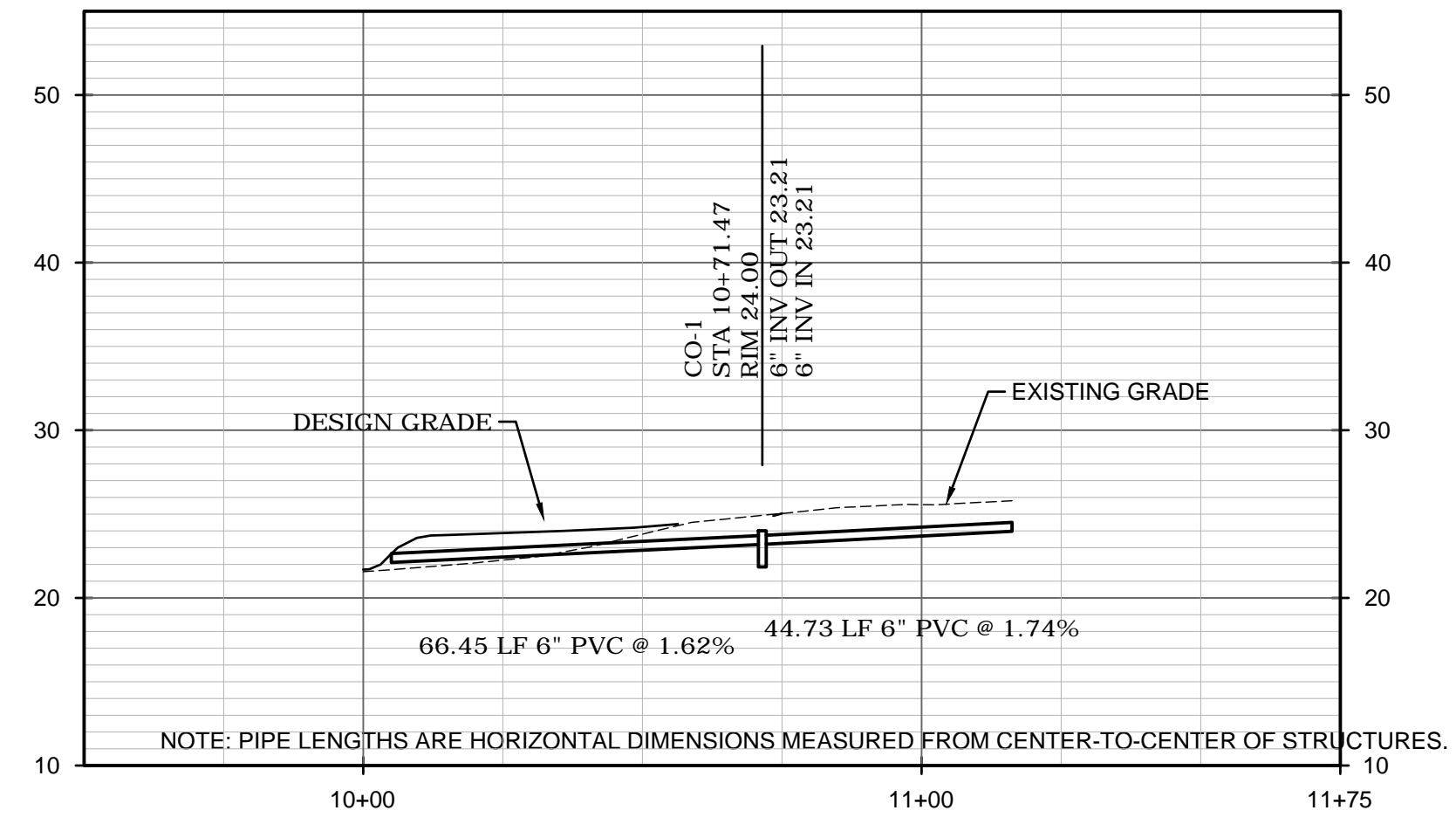
Wiley Wilson Constant Progress	
CITY OF SUFFOLK BENNETT'S CREEK RECREATION CENTER RENOVATION	
	<small>1500 BENNETTS CREEK PARK RD, SUFFOLK, VA 23435</small>
	<small>REVISION DESCRIPTION</small>
	<small>MARK DATE</small>
<small>COMM NO: 215021 DATE: 12/18/2019 DRAWN: BSH DESIGN: DTS CHECK: DTS SHEET TITLE GRADING AND UTILITY PLAN</small>	
<small>SHT. NO. C-112</small>	<small>REV. NO. 0</small>



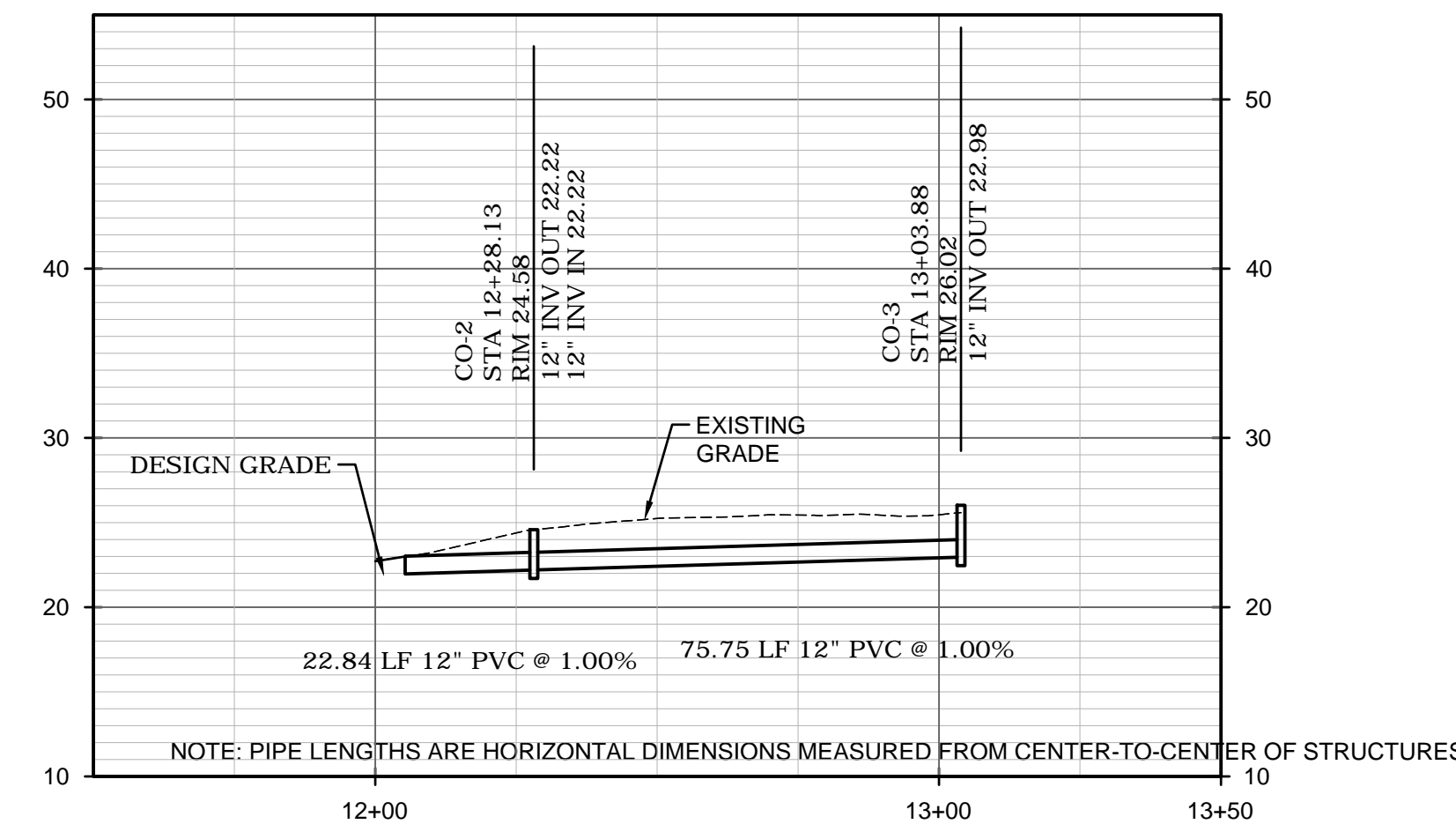
SANITARY

SANITARY STRUCTURE SCHEDULE				
STRUCTURE ID	STRUCTURE TYPE	RIM EL	HEIGHT	OUTFLOW INFLOW
PS-1	E-ONE MODE DH502 PUMP STATION	23.79	8.15'	1.5' 19.12 4' 18.29
GI-1	550 GAL GREASE INTERCEPTOR	25.00	7.63'	4' 21.83 4' 22.00

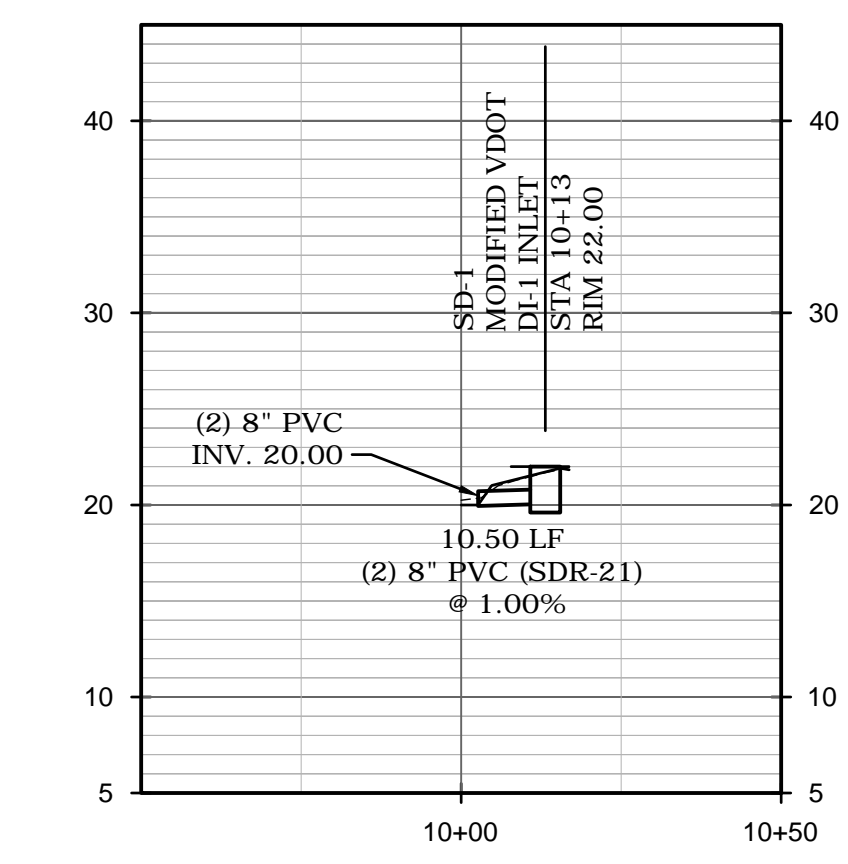
PIPE SCHEDULE			
PIPE ID	DIA/MATERIAL	LENGTH (FT)	SLOPE
P1	4" SDR PVC	27.21	13.56%
P2	4" SDR PVC	8.88	18.50%
P3	4" SDR PVC	8.61	29.00%



STORM A

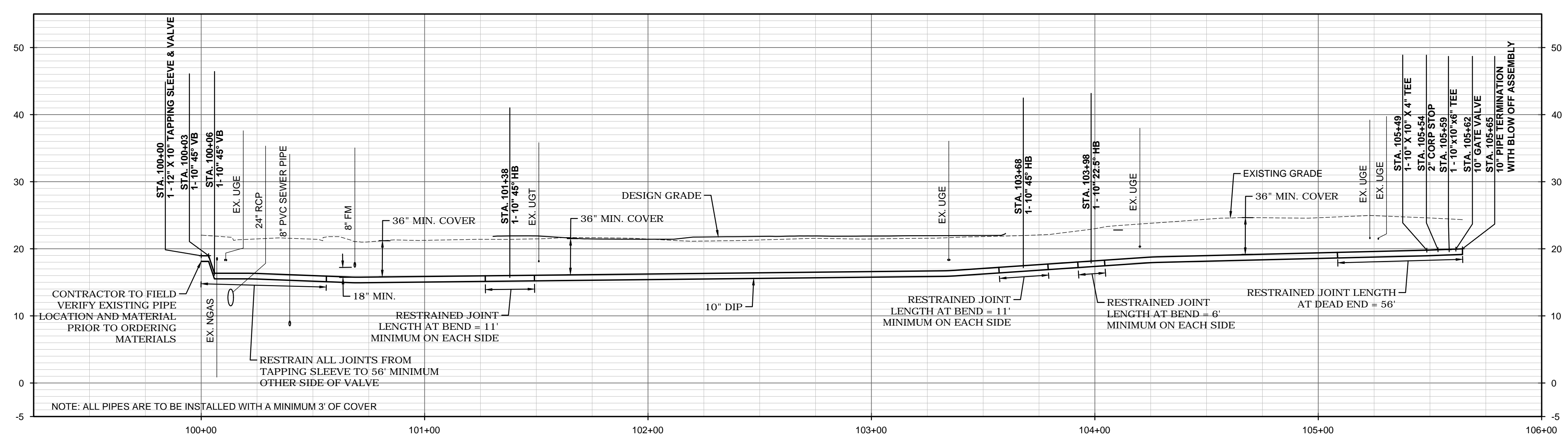


STORM B



STORM C

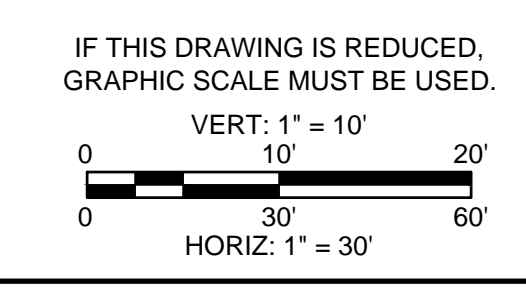
STORM STRUCTURE SCHEDULE				
STRUCTURE ID	STRUCTURE TYPE	RIM EL	HEIGHT	OUTFLOW INFLOW
CO-1	STORM CLEANOUT	24.00	1.65'	6" PVC 23.21 6" PVC 23.21
CO-2	STORM CLEANOUT	24.58	2.38'	12" PVC 22.22 12" PVC 22.22
CO-3	STORM CLEANOUT	26.02	3.07'	12" PVC 22.98



WATER 1

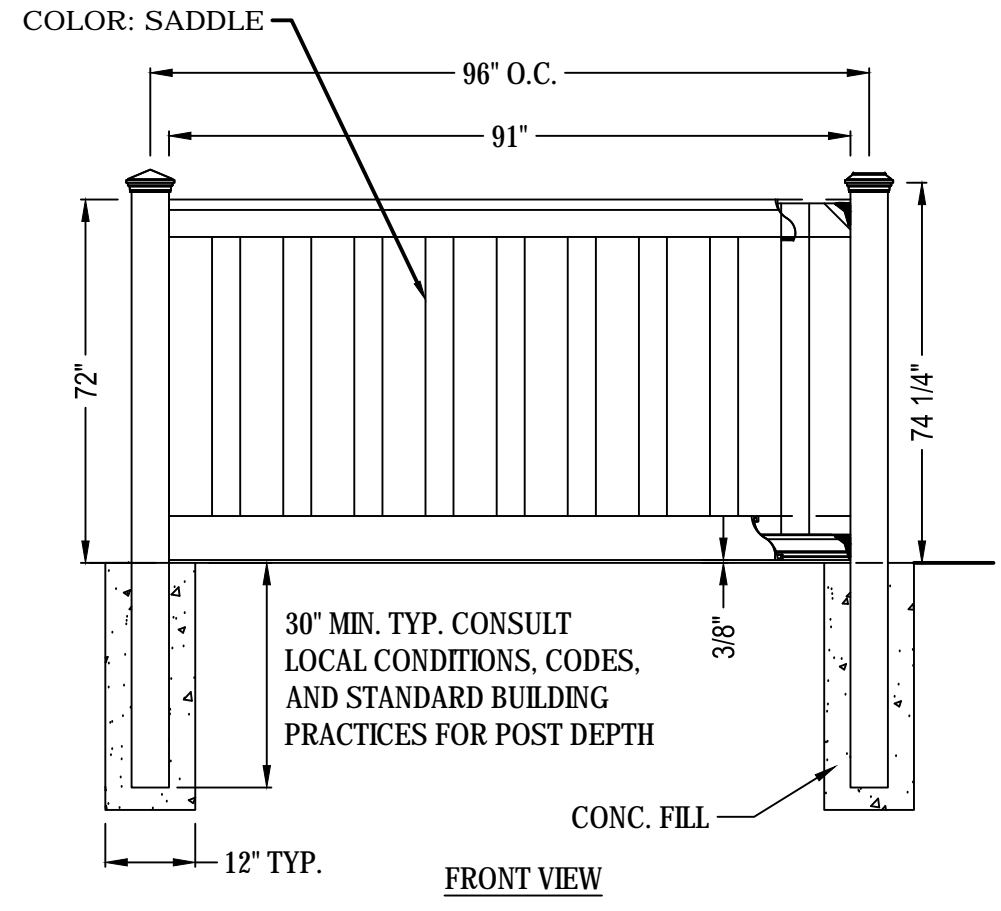
WATERLINE RESTRAINED JOINT TABLE														
FITTING TYPE	PIPE MATERIAL	SOIL TYPE	SAFETY FACTOR	TRENCH TYPE	DEPTH OF BURY	TEST PRESSURE	NOMINAL SIZE	BEND ANGLE	BRANCH SIZE	LENGTH ALONG RUN	REDUCED SIZE	LOWSIDE DEPTH	RESTRAINT LENGTH	RESTRAINT LENGTH 2
12"X12"X10" TEE	DUCTILE IRON	SM	1.5	4	3'	150 PSI	12"		10"	4'			39'	
10"X10"X4" TEE	DUCTILE IRON	SM	1.5	4	3'	150 PSI	10"		4"	5'			1'	
10" DEAG END	DUCTILE IRON	SM	1.5	4	3'	150 PSI	10"						56'	
10" 22.5 DEG BEND	DUCTILE IRON	SM	1.5	4	3'	150 PSI	10"	22.5					6'	
10" 45 DEG BEND	DUCTILE IRON	SM	1.5	4	3'	150 PSI	10"	45					11'	
4" 90 DEG BEND	DUCTILE IRON	SM	1.5	4	3'	150 PSI	4"	90					12'	
10" VERTICAL OFFSET	DUCTILE IRON	SM	1.5	4	3'	150 PSI	10"	45			6'	23'	6'	

NOTES:
1. SEE CALCULATION PACKAGE APPENDIX F-2 FOR MORE DETAILED INFORMATION.
2. ALL VALVES MUST BE RESTRAINED AS DEAD END PIPES.

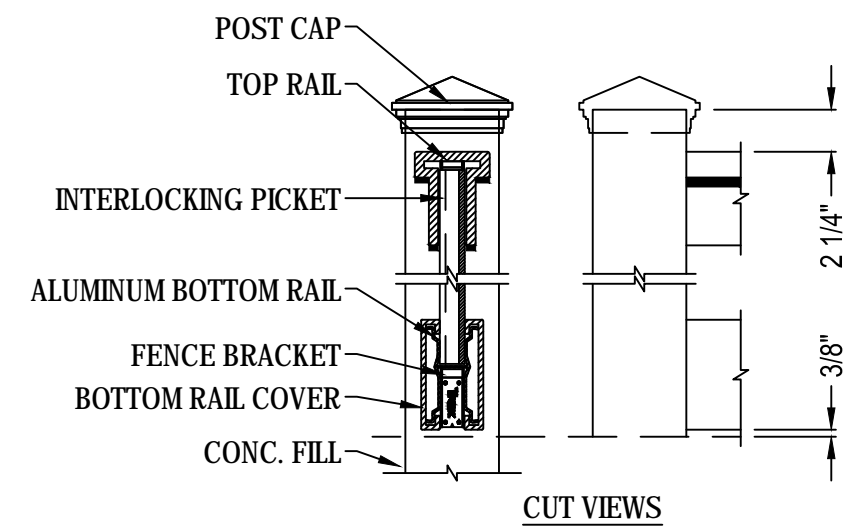
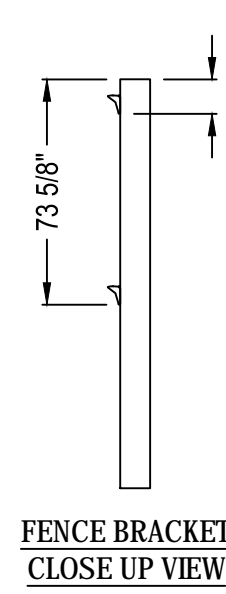


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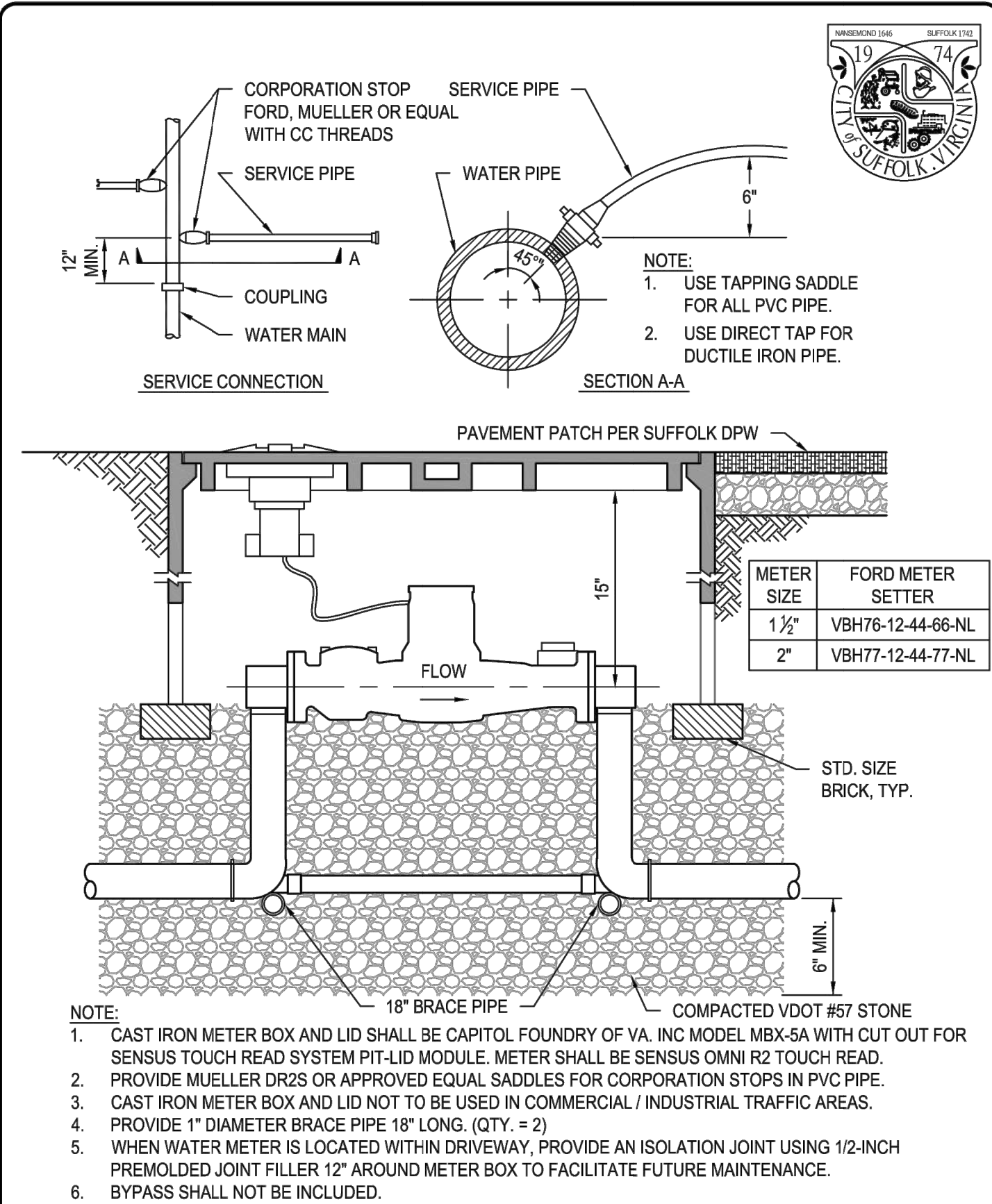
BILL OF MATERIALS	
COMPONENTS	QTY/LENGTH
POST CAP: PYRAMID, FLAT OR CROWN	1
5\"/>	



- NOTES:
- INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
 - DO NOT SCALE DRAWING.
 - THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
 - ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
 - CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 4873-110.

DUMPSTER ENCLOSURE

SCALE: NOT TO SCALE

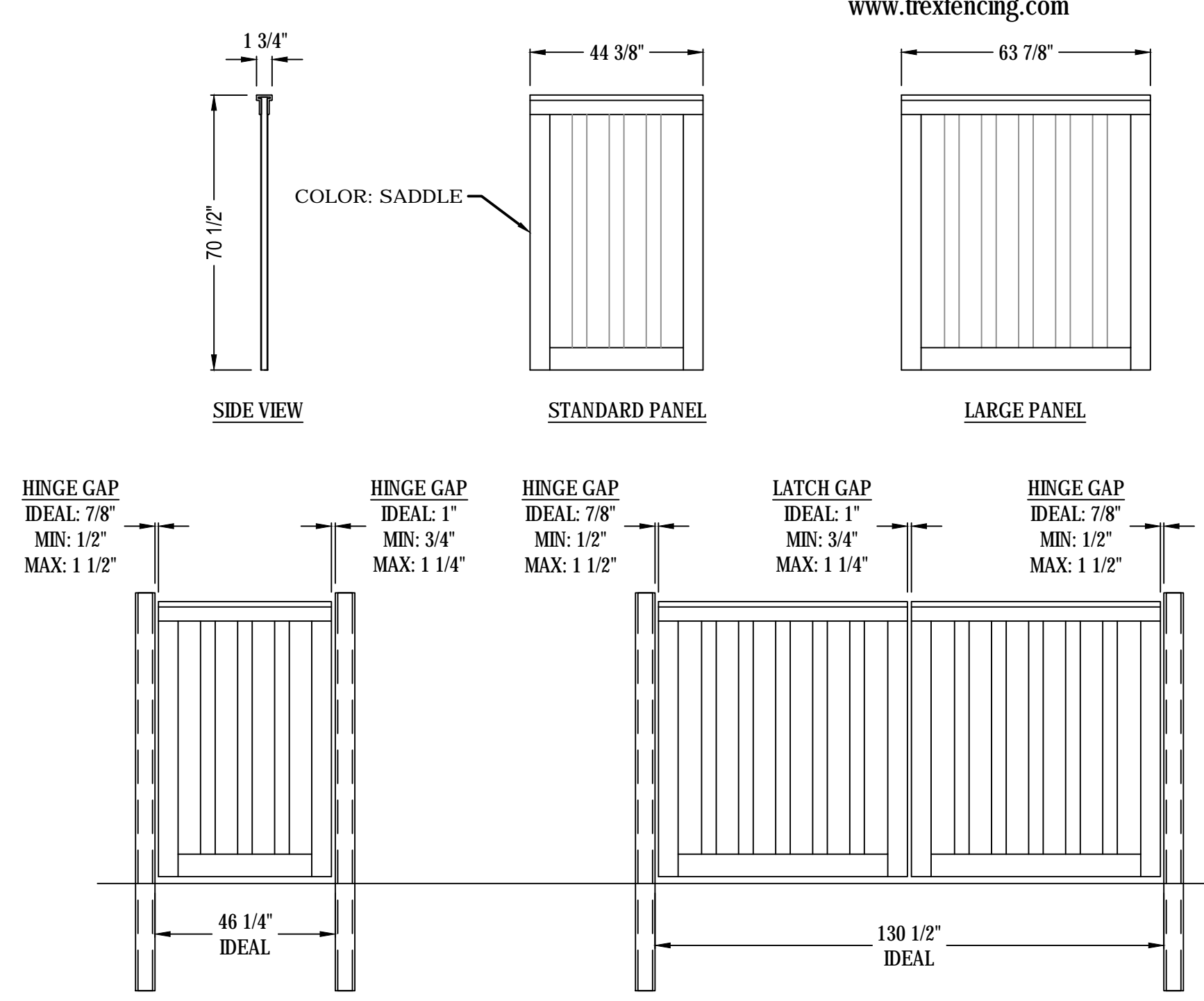


1 1/2" - 2" WATER METER INSTALLATION DETAIL
NOT TO SCALE

REFERENCE	RELEASE 1	CATEGORY	SHEET NO.	DPU DETAIL NO.
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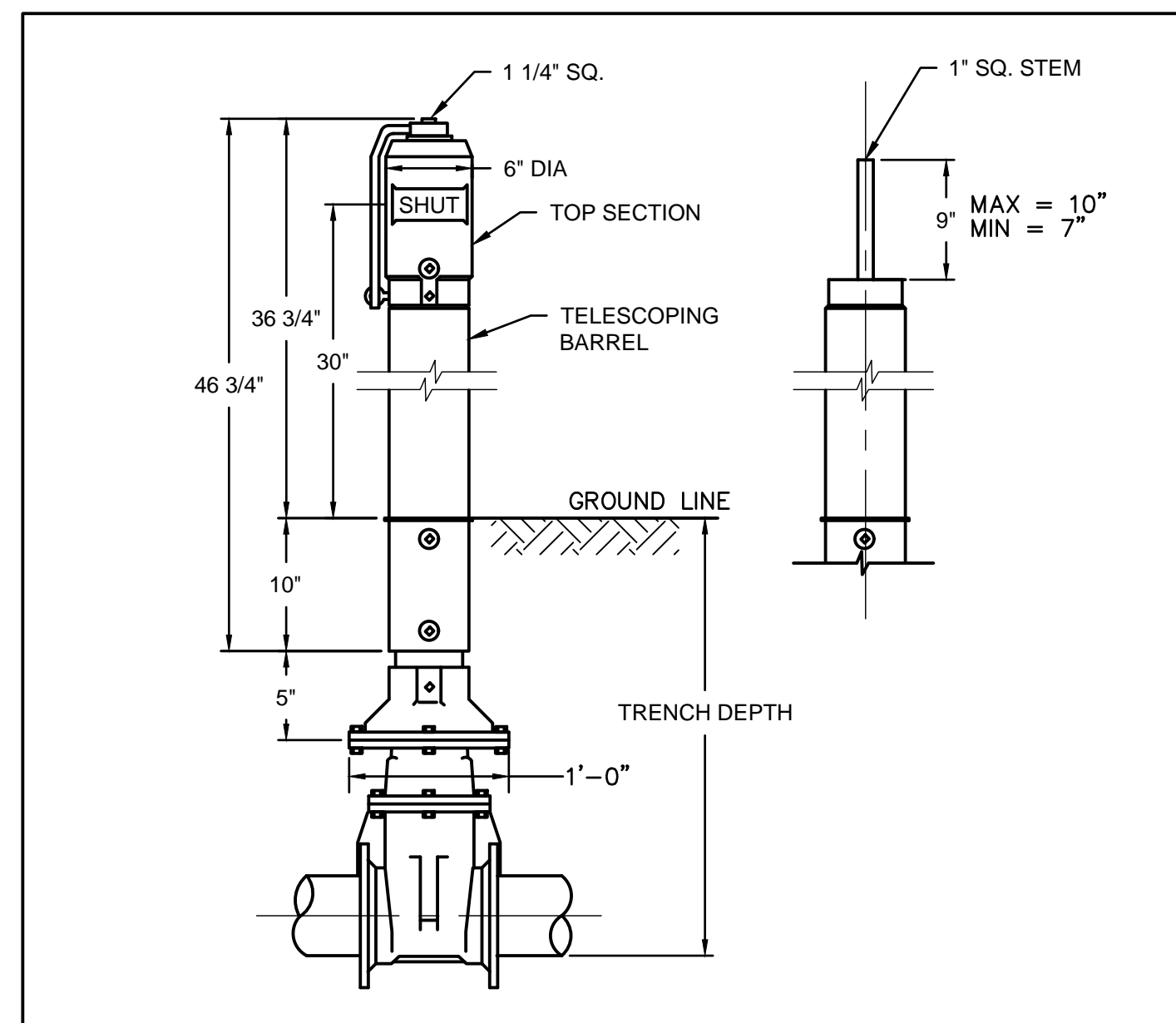


SINGLE GATE OPENING DOUBLE GATE OPENING

- NOTES:
- INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
 - DO NOT SCALE DRAWING.
 - THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY. THIS DRAWING MAY NOT BE USED FOR CONSTRUCTION.
 - ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
 - CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info AND ENTER REFERENCE NUMBER 4873-099.

DUMPSTER ENCLOSURE GATE

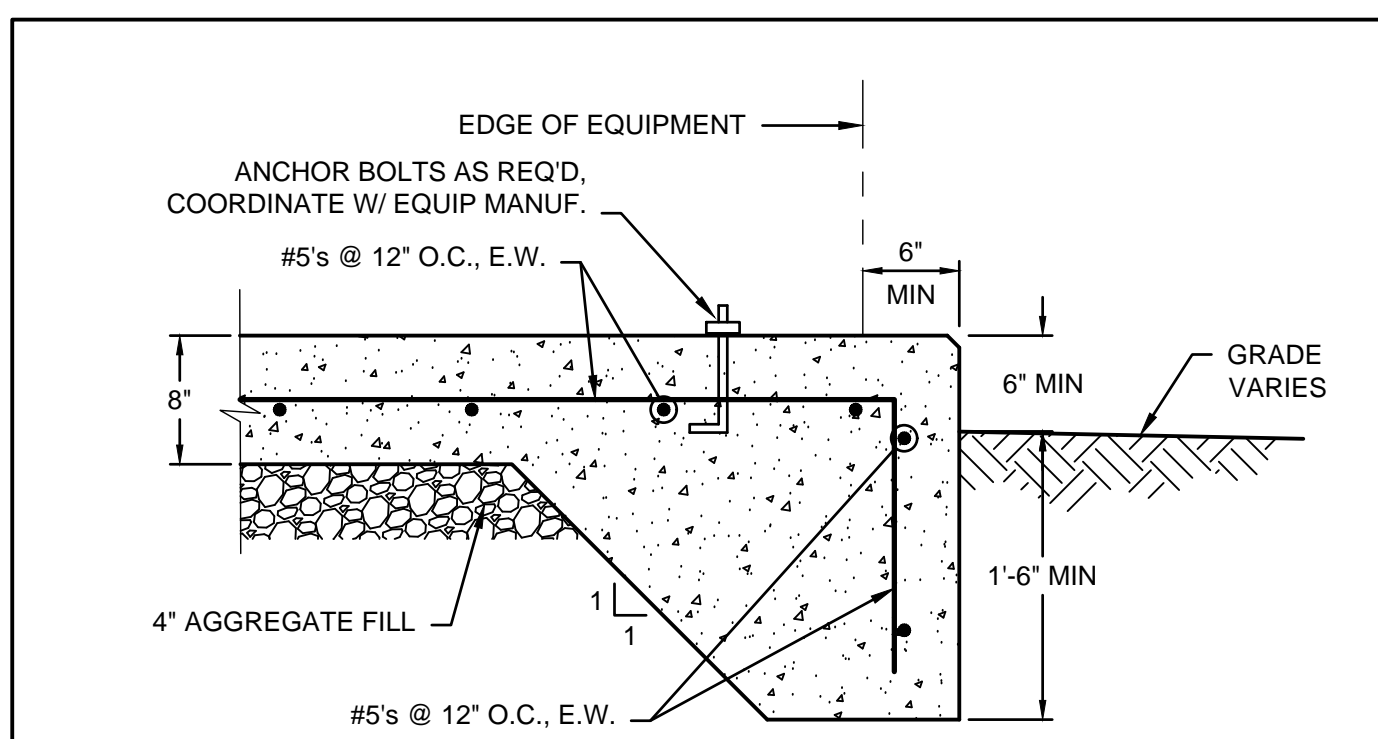
SCALE: NOT TO SCALE



- FIELD ADJUSTMENT INSTRUCTIONS NOTES:
- REMOVE THE TOP SECTION FROM THE TOP OF THE INDICATOR POST ASSEMBLY.
 - LOOSEN THE TELESCOPING BARREL SCREWS AND ADJUST BARREL TO THE GROUND LINE.
 - CUT THE 1" SQ. STEM AT THE DISTANCE OF 9" ABOVE THE TOP OF THE BARREL END.
 - SET THE 'OPEN' AND 'SHUT' TARGETS FOR THE APPROPRIATE VALVE SIZE.
 - REATTACH THE TOP SECTION TO THE TOP OF THE INDICATOR POST ASSEMBLY.

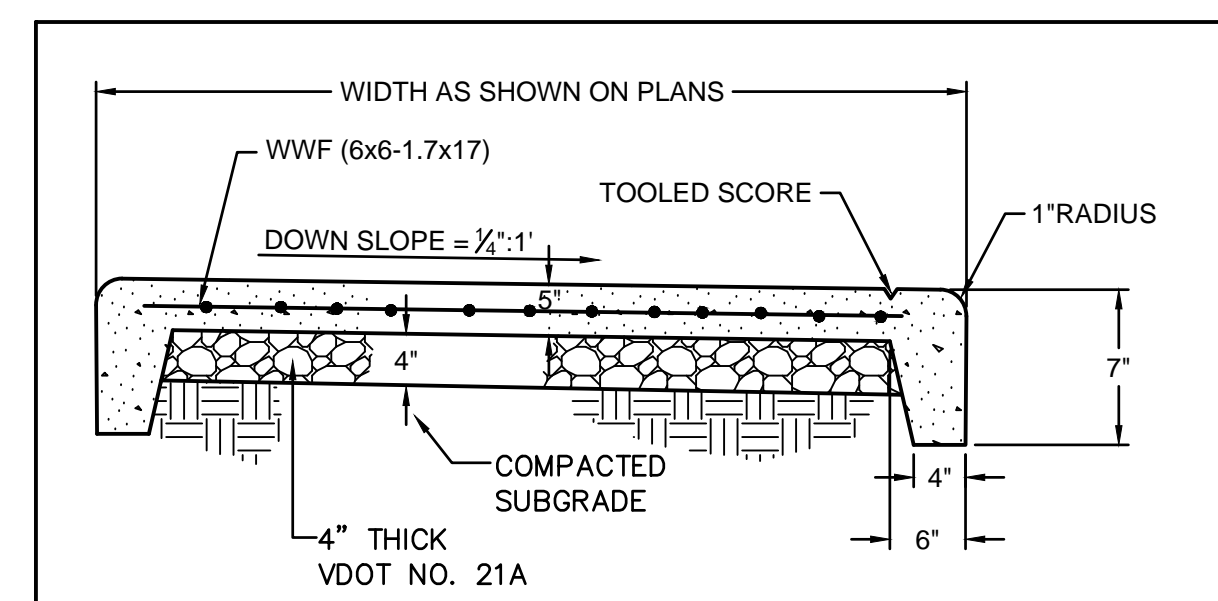
POST INDICATOR VALVE - TELESCOPING BARREL U/FM
SCALE: NOT TO SCALE

REFERENCE	RELEASE 1	CATEGORY	SHEET NO.	DPU DETAIL NO.
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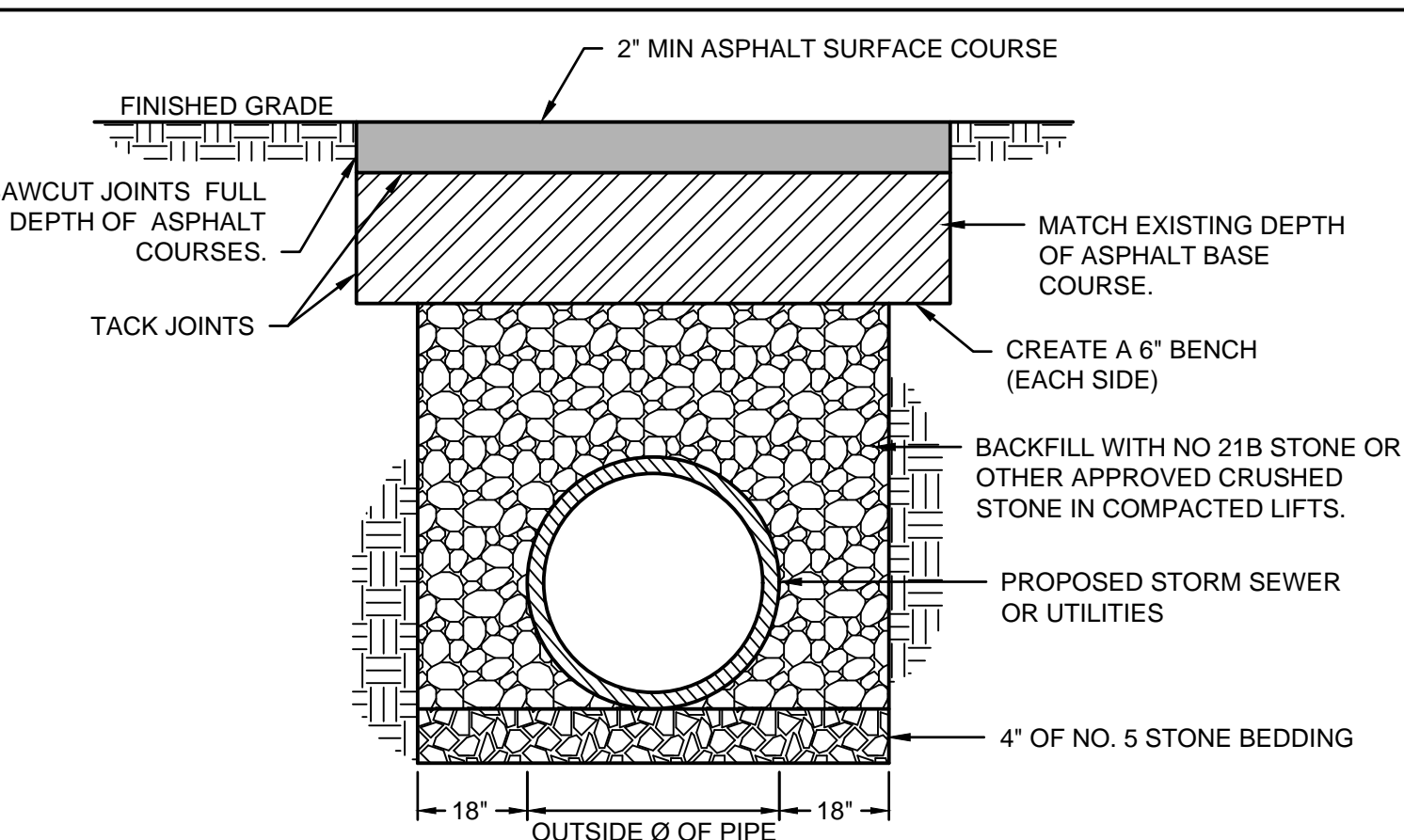
EXTERIOR EQUIPMENT PAD
NOT TO SCALE

REFERENCE	RELEASE 1	CATEGORY	SHEET NO.	DPU DETAIL NO.
PFM Vol. II	2017	WATER	1 of 1	154



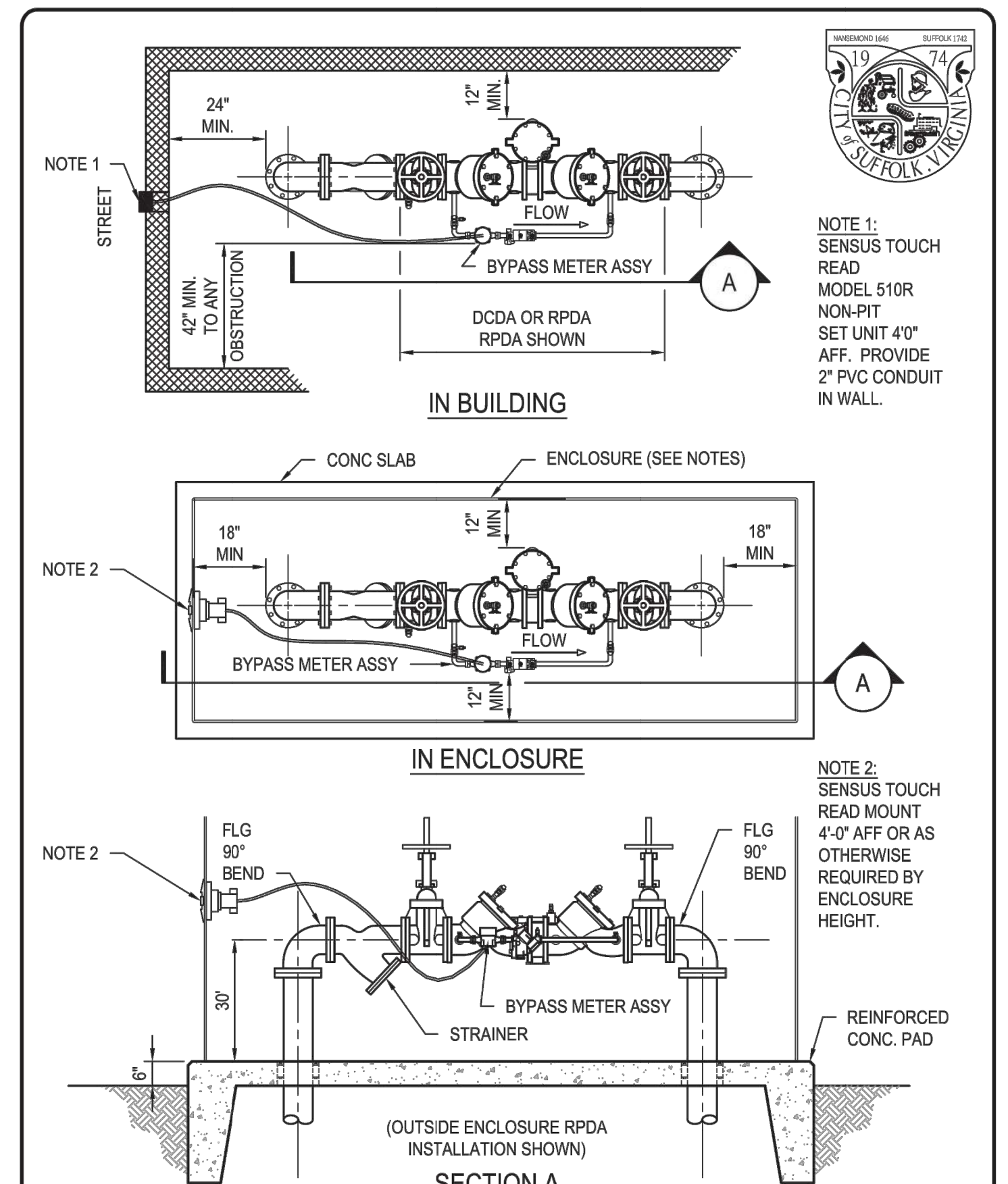
CONCRETE SIDEWALK
NOT TO SCALE

REFERENCE	RELEASE 1	CATEGORY	SHEET NO.	DPU DETAIL NO.
PFM Vol. II	2017	WATER	1 of 2	156-1



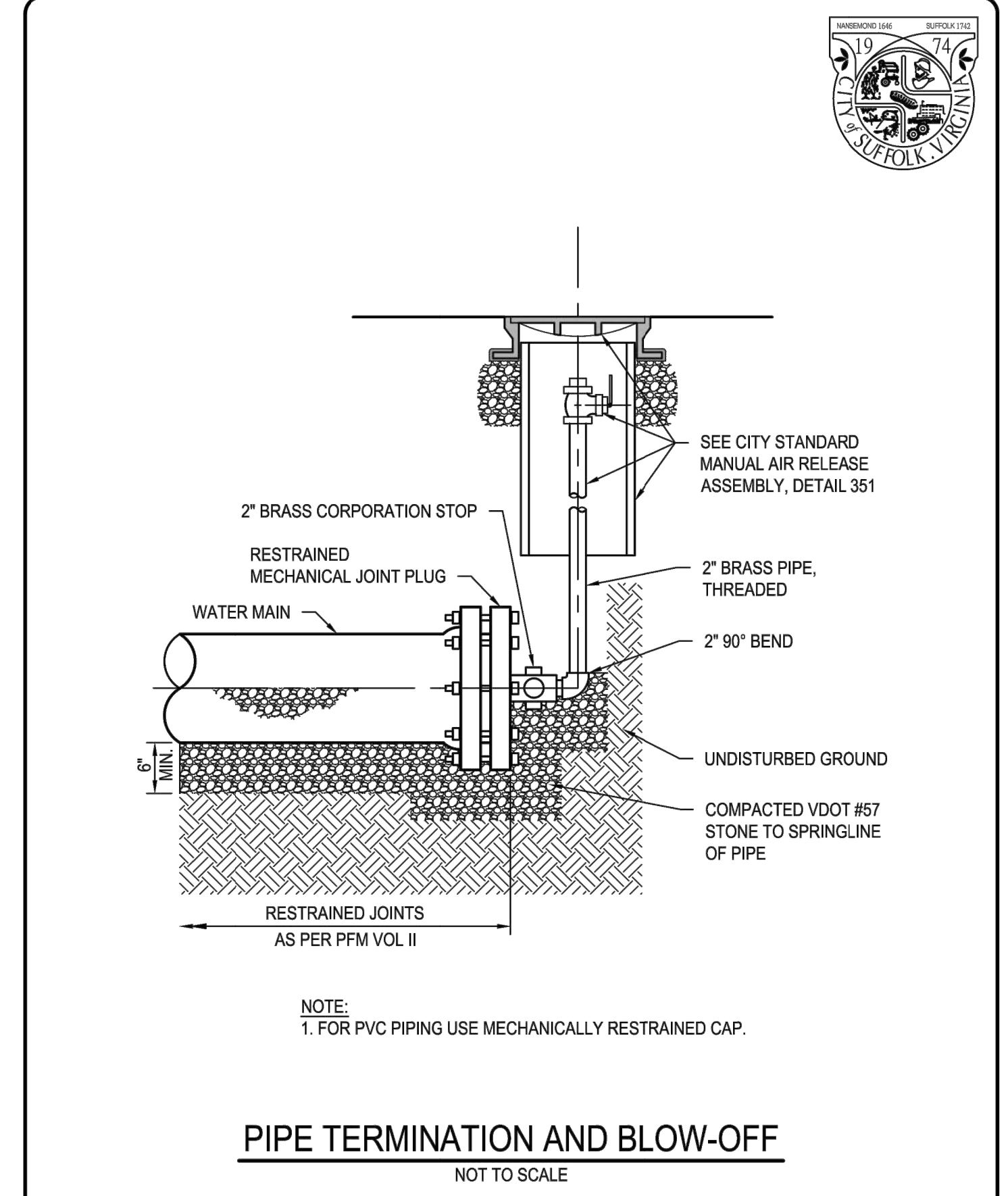
PAVEMENT PATCH FOR PIPE TRENCH
SCALE: NOT TO SCALE

REFERENCE	RELEASE 1	CATEGORY	SHEET NO.	DPU DETAIL NO.
PFM Vol. II	2017	WATER	1 of 2	156-1



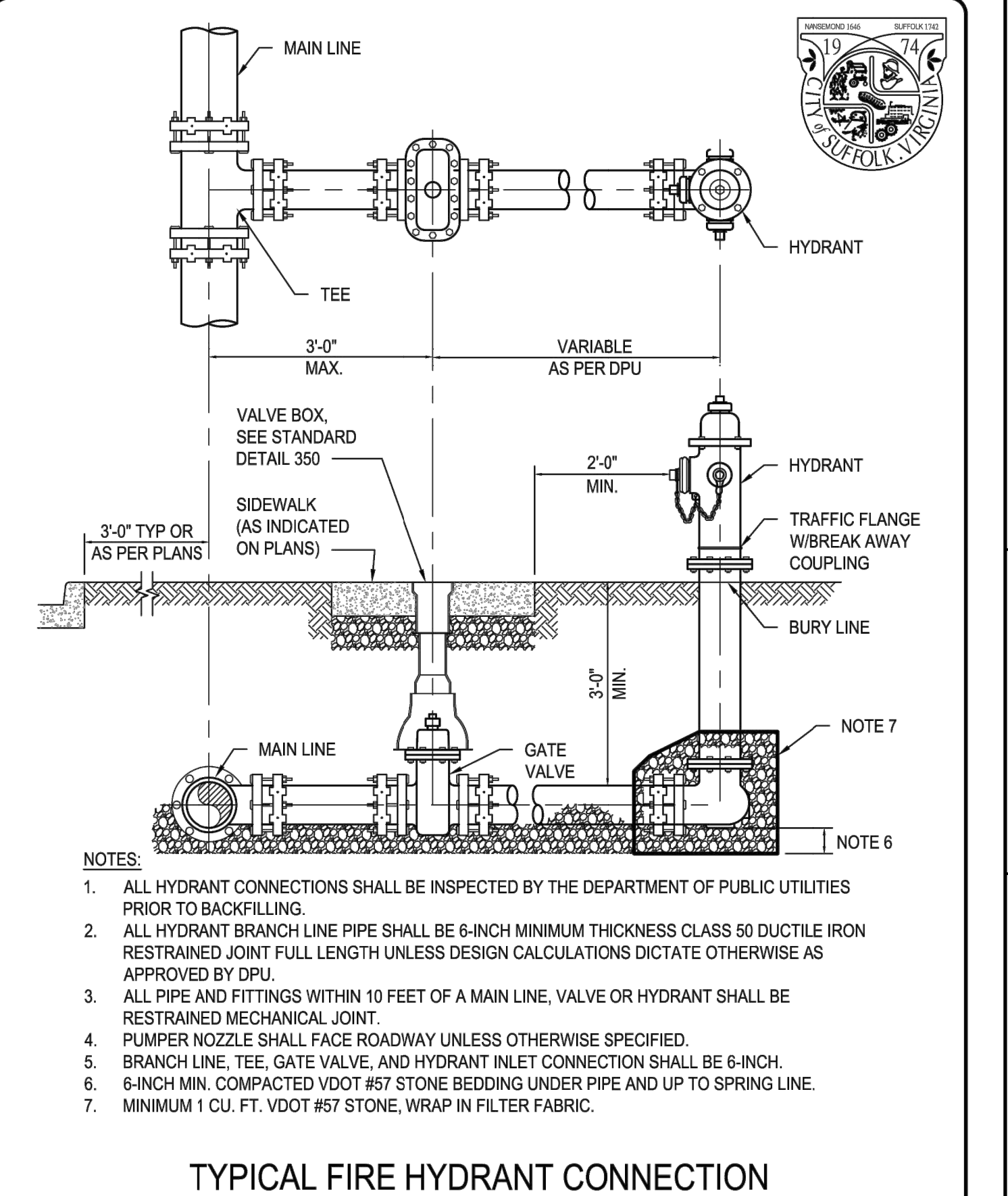
FIRE SERVICE BACKFLOW PREVENTION DETAILS
NOT TO SCALE

REFERENCE	RELEASE 1	CATEGORY	SHEET NO.	DPU DETAIL NO.
PFM Vol. II	2017	WATER	1 of 2	156-1



PIPE TERMINATION AND BLOW-OFF
NOT TO SCALE

REFERENCE	RELEASE 1	CATEGORY	SHEET NO.	DPU DETAIL NO.
PFM Vol. II	2017	WATER	1 of 1	150



TYPICAL FIRE HYDRANT CONNECTION
(MAIN LINE IN UNPAVED AREA)
NOT TO SCALE

REFERENCE	RELEASE 1	CATEGORY	SHEET NO.	DPU DETAIL NO.
PFM Vol. II	2017	WATER	1 of 1	151-1

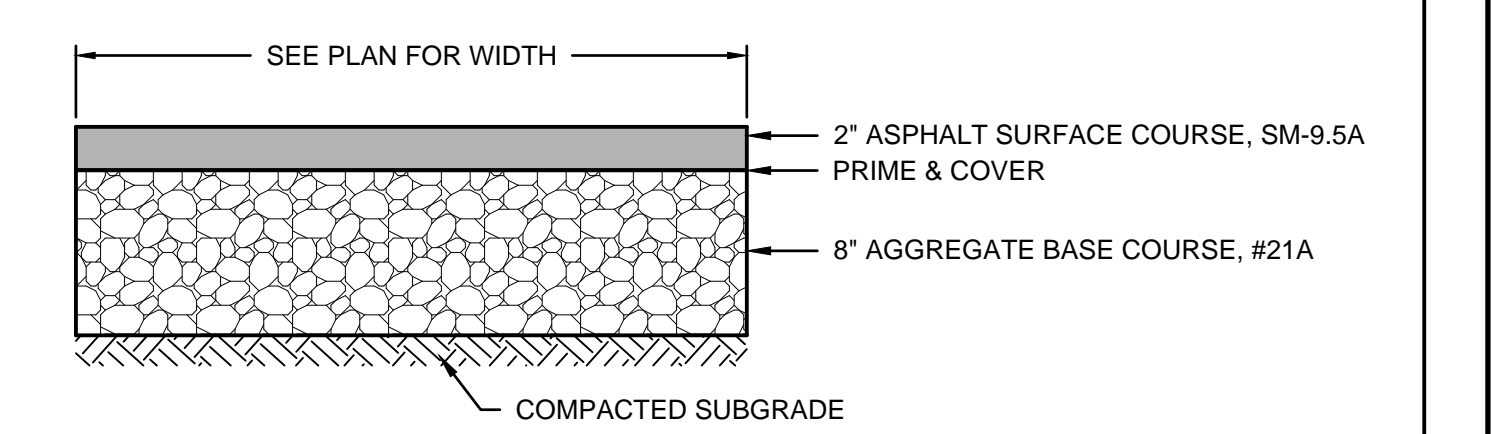
DETECTOR/METER ASSEMBLY NOT REQUIRED FOR THIS PROJECT PER CITY OF SUFFOLK

- NOTES - GENERAL:
- DEGREE OF HAZARD AND SELECTION OF BACKFLOW PROTECTION DEVICE TYPE SHALL BE MADE BY THE DEPARTMENT.
 - BACKFLOW PREVENTER SHALL BE A COMPLETE, TESTABLE ASSEMBLY INCLUDING UL LISTED RESILIENT SEATED OSY SHUTOFF VALVES AND FOUR (4) TEST COCKS.
 - DEVICE SHALL BE INSTALLED ON THE OWNER'S PROPERTY, ABOVE GRADE, ABOVE THE 100-YEAR FLOOD ELEVATION AND BE PROTECTED AGAINST FREEZING.
 - DEVICE SHALL BE INSTALLED INSIDE A BUILDING OR IN A HEATED AND INSULATED FIBERGLASS OR ALUMINUM ENCLOSURE.
 - CONCRETE PAD FOR ENCLOSURE SHALL BE MINIMUM 4000 PSI. REINFORCING STEEL SHALL BE ASTM A-615, GRADE 60, DESIGNED PER ACI-318, LATEST EDITION.
 - ALL PIPE 3-INCHES AND LARGER SHALL BE FLANGED DUCTILE IRON CLASS 50 MINIMUM.
 - PIPE LESS THAN 3-INCHES MAY BE EITHER FLANGED DUCTILE IRON CLASS 50 MINIMUM OR COPPER WITH SOLDERED BRASS FITTINGS.
 - REDUCED PRESSURE ZONE AND REDUCED PRESSURE ZONE DETECTOR ASSEMBLIES SHALL INCLUDE A MEANS OF DRAINING THE WATER DISCHARGED THROUGH THE RELIEF VALVE AND SHALL BE OUTFITTED WITH AN AIR GAP FITTING PIPED TO A FLOOR DRAIN, THROUGH A WALL, OR TO AN ENCLOSURE WALL DRAIN PORT.
 - VERTICAL INSTALLATION INSIDE OF BUILDINGS MAY BE ALLOWED.

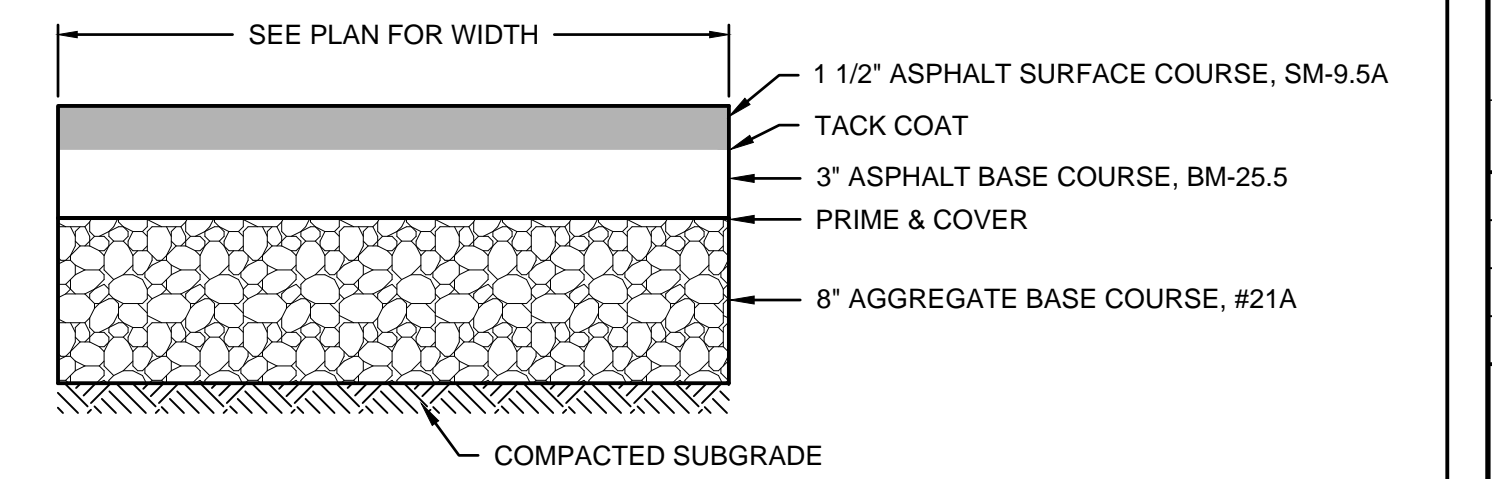
- NOTES - REDUCED PRESSURE ZONE DETECTOR ASSEMBLIES (RPDA) AND DOUBLE CHECK DETECTOR ASSEMBLIES (DCCA):
- BACKFLOW PROTECTION ASSEMBLY WITH BYPASS METER SHALL BE INSTALLED ON FIRE PROTECTION SYSTEMS WHEN CONNECTED TO A POTABLE WATER SUPPLY THAT IS NOT OTHERWISE METERED.
 - THE ASSEMBLY SHALL INCLUDE AN AUXILIARY BYPASS LINE CONSISTING OF AN APPROVED TESTABLE BACKFLOW PREVENTER AND SENSUS IPELR 34\"/>

FIRE SERVICE BACKFLOW PREVENTION NOTES
NOT TO SCALE

REFERENCE	RELEASE 1	CATEGORY	SHEET NO.	DPU DETAIL NO.
PFM Vol. II	2017	WATER	2 of 2	156-2



ASPHALT TRAIL PAVEMENT SECTION
SCALE: NOT TO SCALE



ASPHALT PAVEMENT SECTION
SCALE: NOT TO SCALE

REFERENCE	RELEASE 1	CATEGORY	SHEET NO.	DPU DETAIL NO.
PFM Vol. II	2017	WATER	2 of 2	156-2

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CITY OF SUFFOLK
BENNETT'S CREEK RECREATION
CENTER RENOVATION

1500

REVISION DESCRIPTION

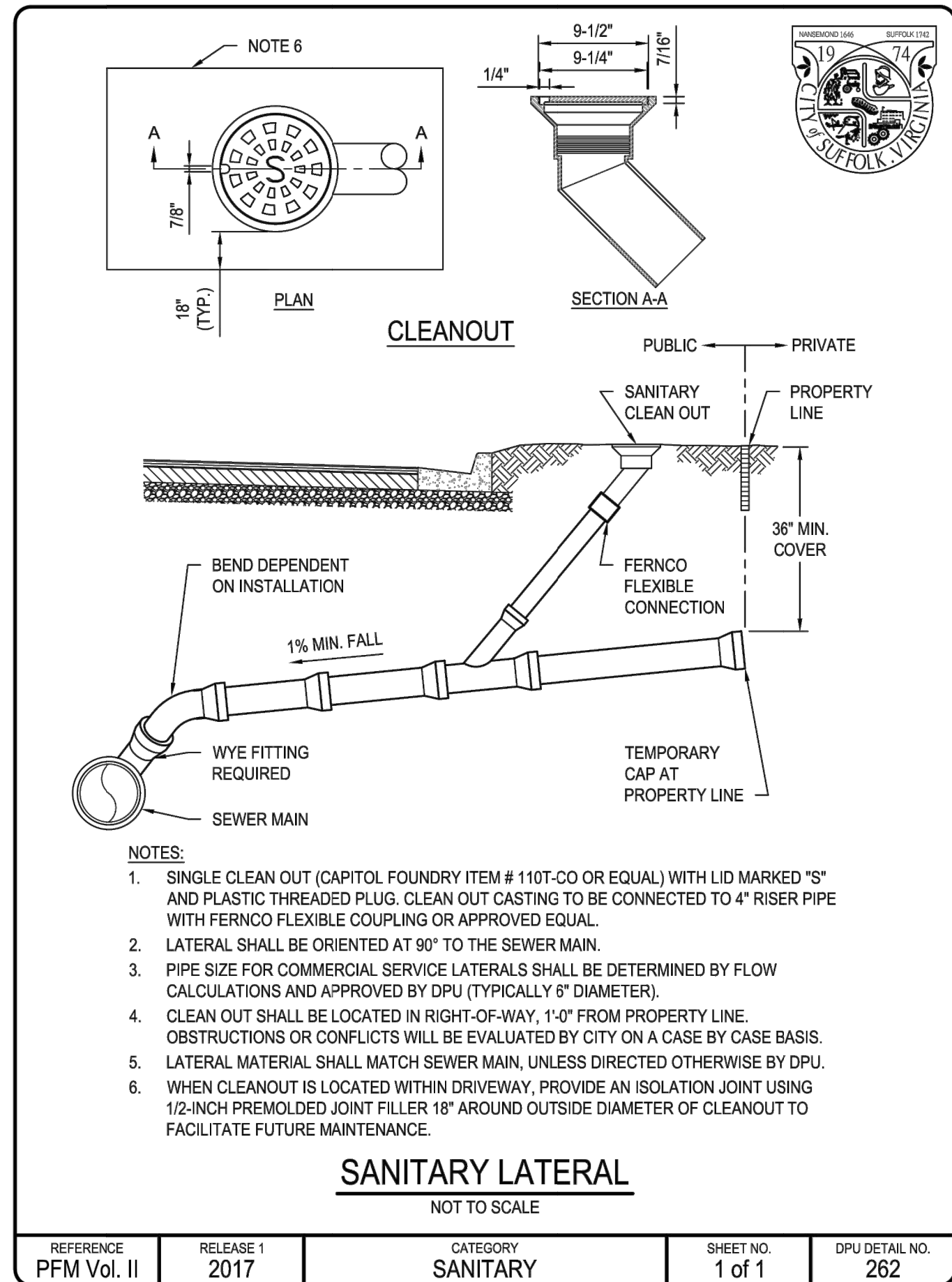
MARK DATE

COMM NO.	215021
DATE:	12/18/2019
DRAWN:	BSH
DESIGN:	DTS
CHECK:	DTS
SHEET TITLE	CIVIL DETAILS

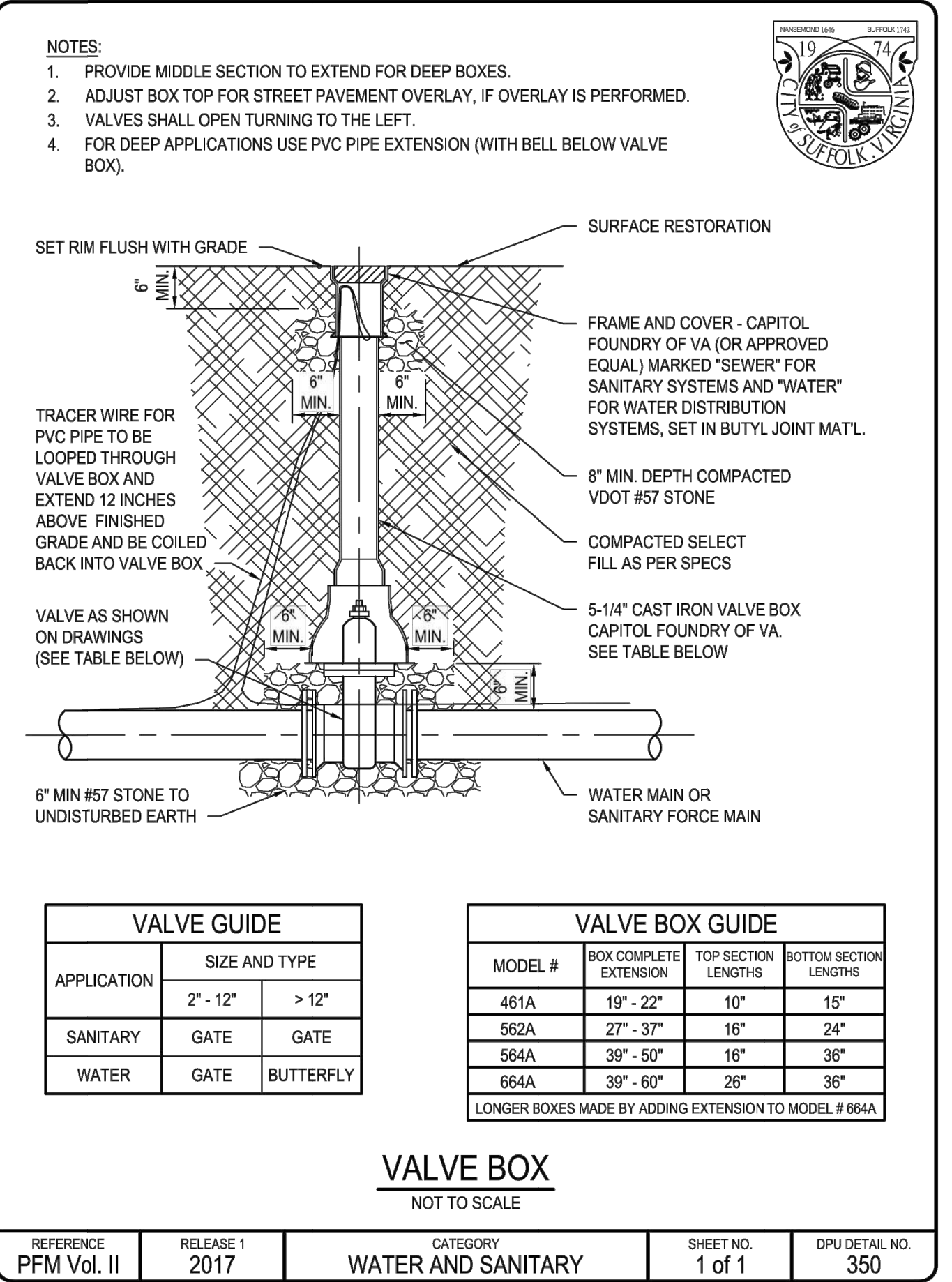
SHT. NO.	REV. NO.
C-301	0

1500

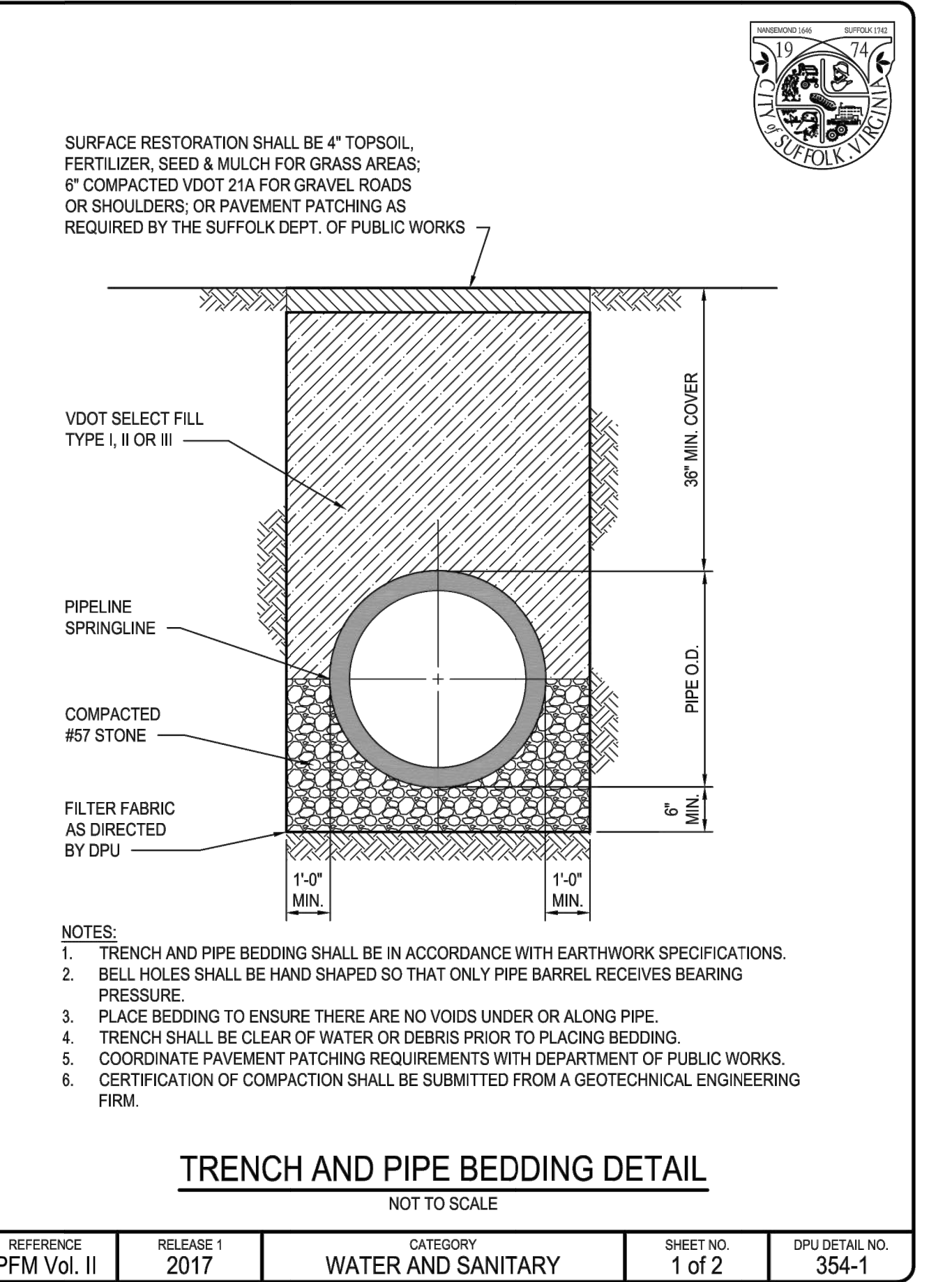
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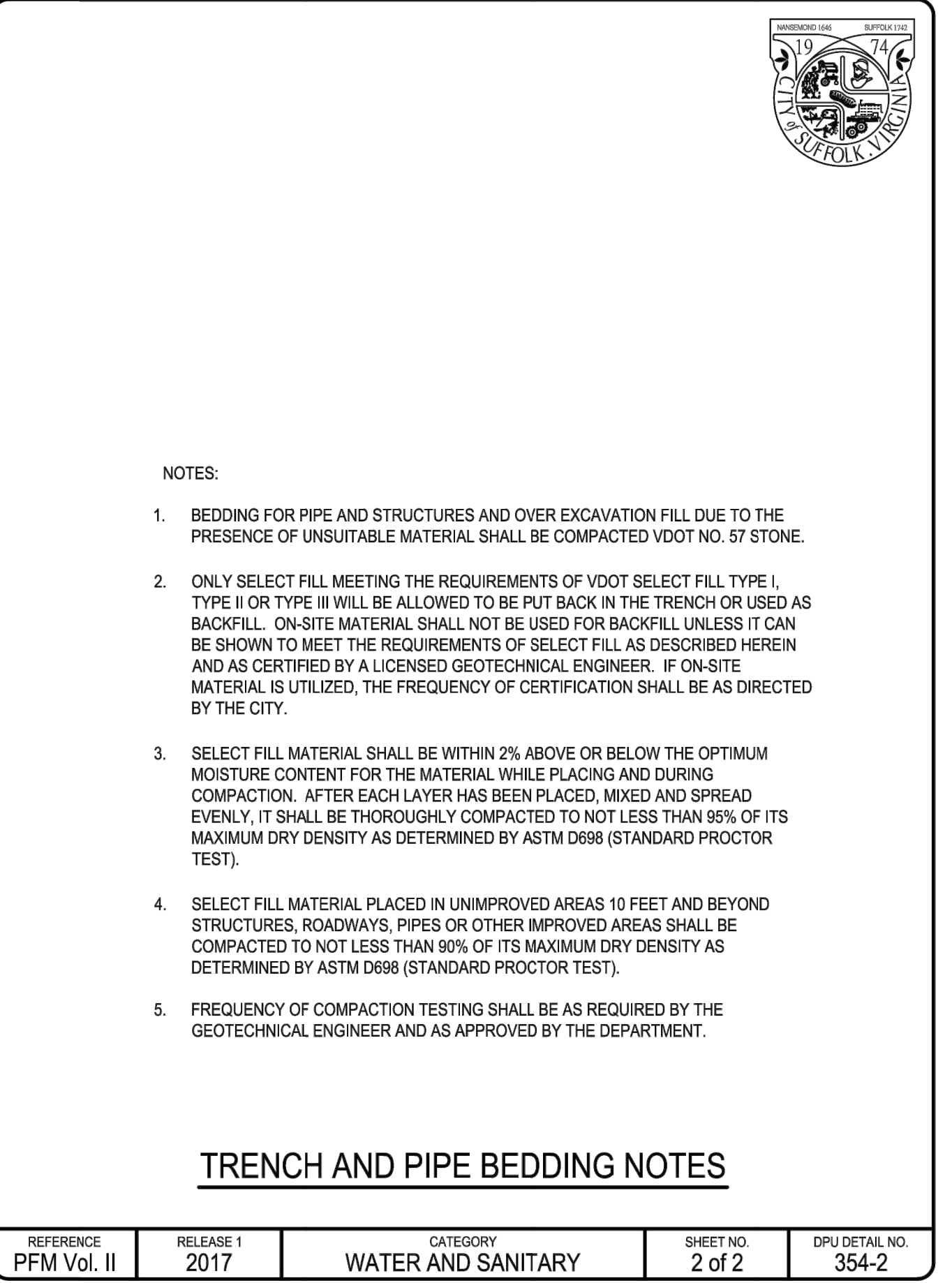
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PFM Vol. II	2017	SANITARY	1 of 1	262



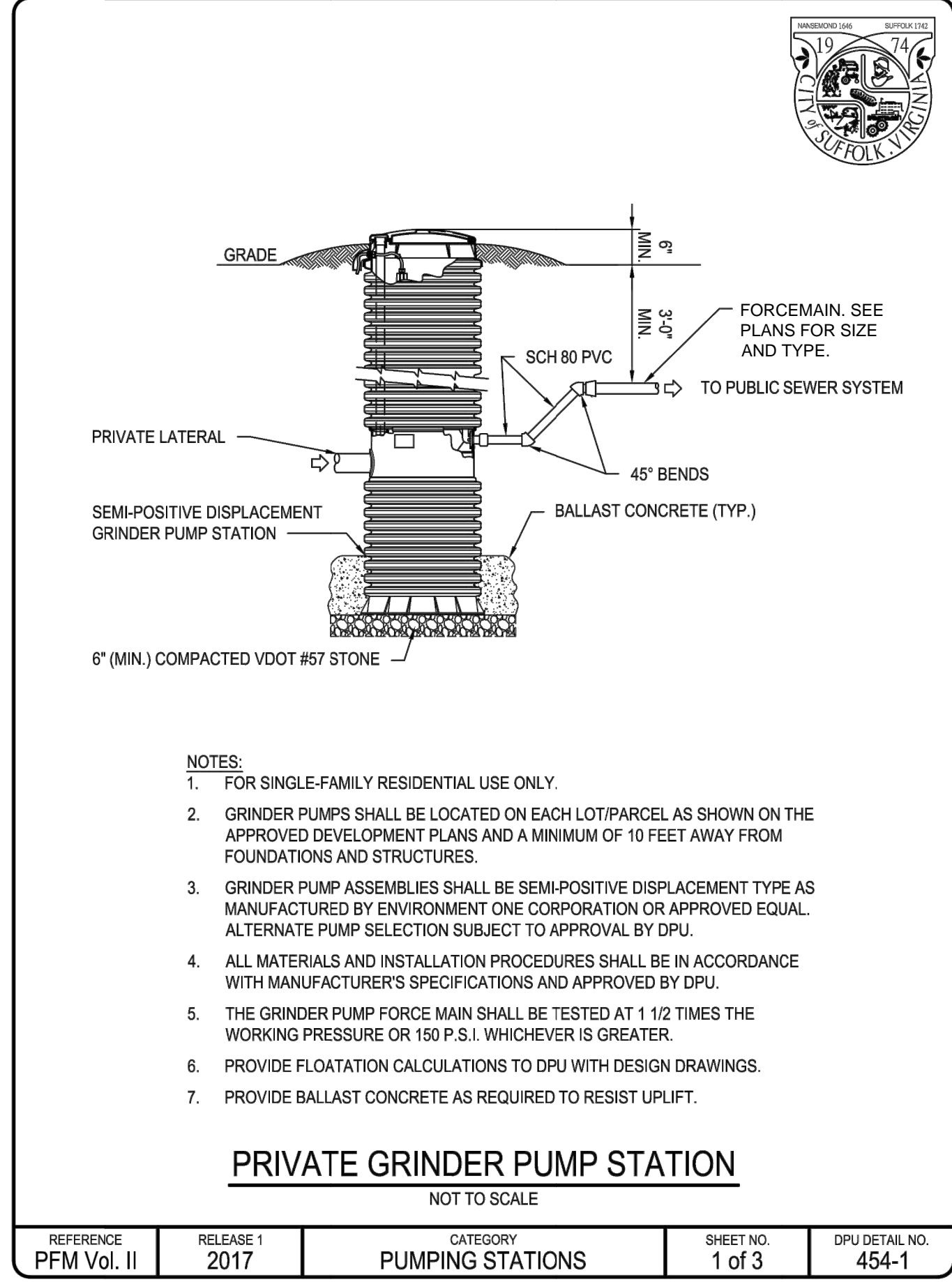
REFERENCE	RELEASE 1	CATEGORY	SHEET NO.	DPU DETAIL NO.
PFM Vol. II	2017	WATER AND SANITARY	1 of 1	350



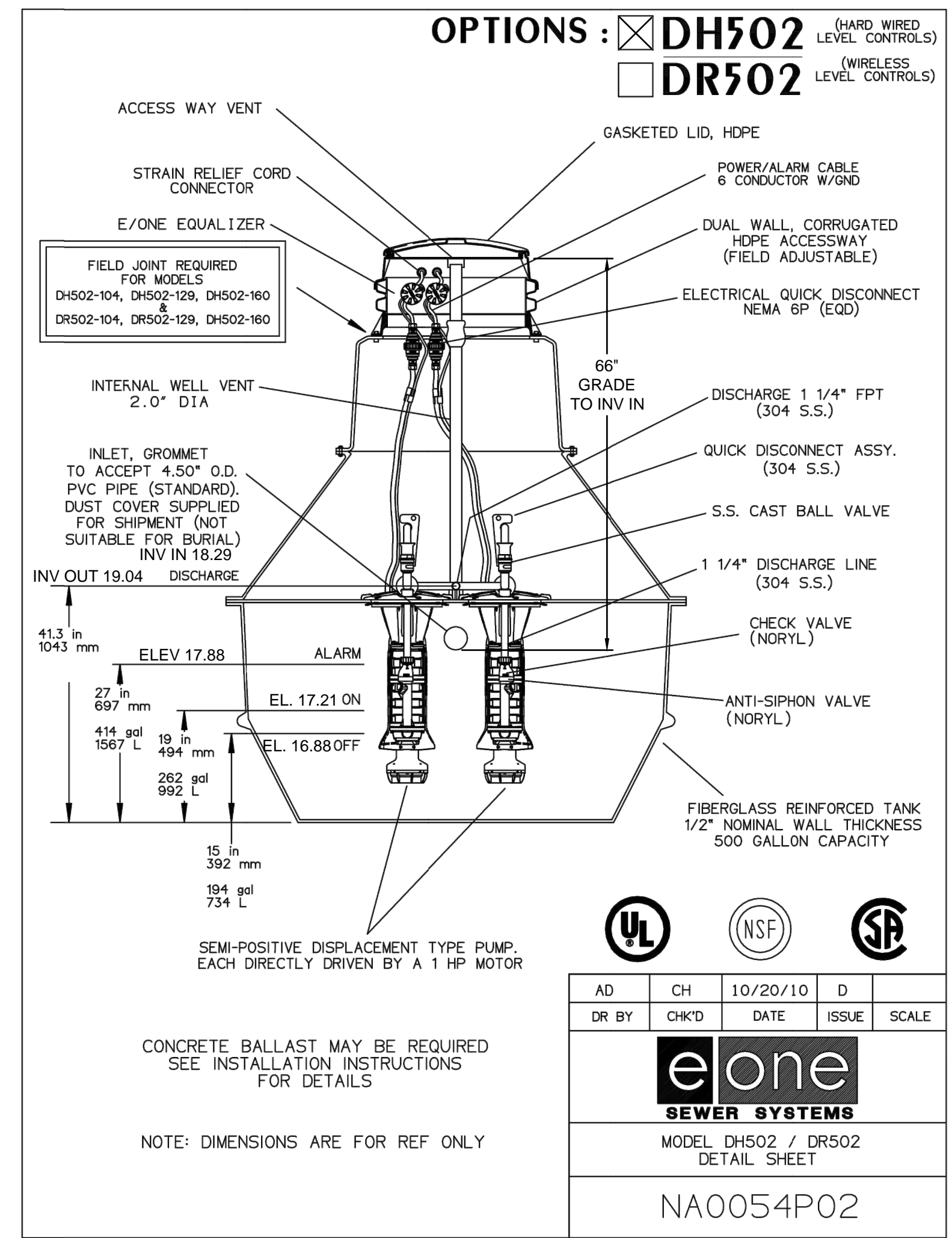
REFERENCE	RELEASE 1	CATEGORY	SHEET NO.	DPU DETAIL NO.
PFM Vol. II	2017	WATER AND SANITARY	1 of 2	354-1



REFERENCE	RELEASE 1	CATEGORY	SHEET NO.	DPU DETAIL NO.
PFM Vol. II	2017	WATER AND SANITARY	2 of 2	354-2

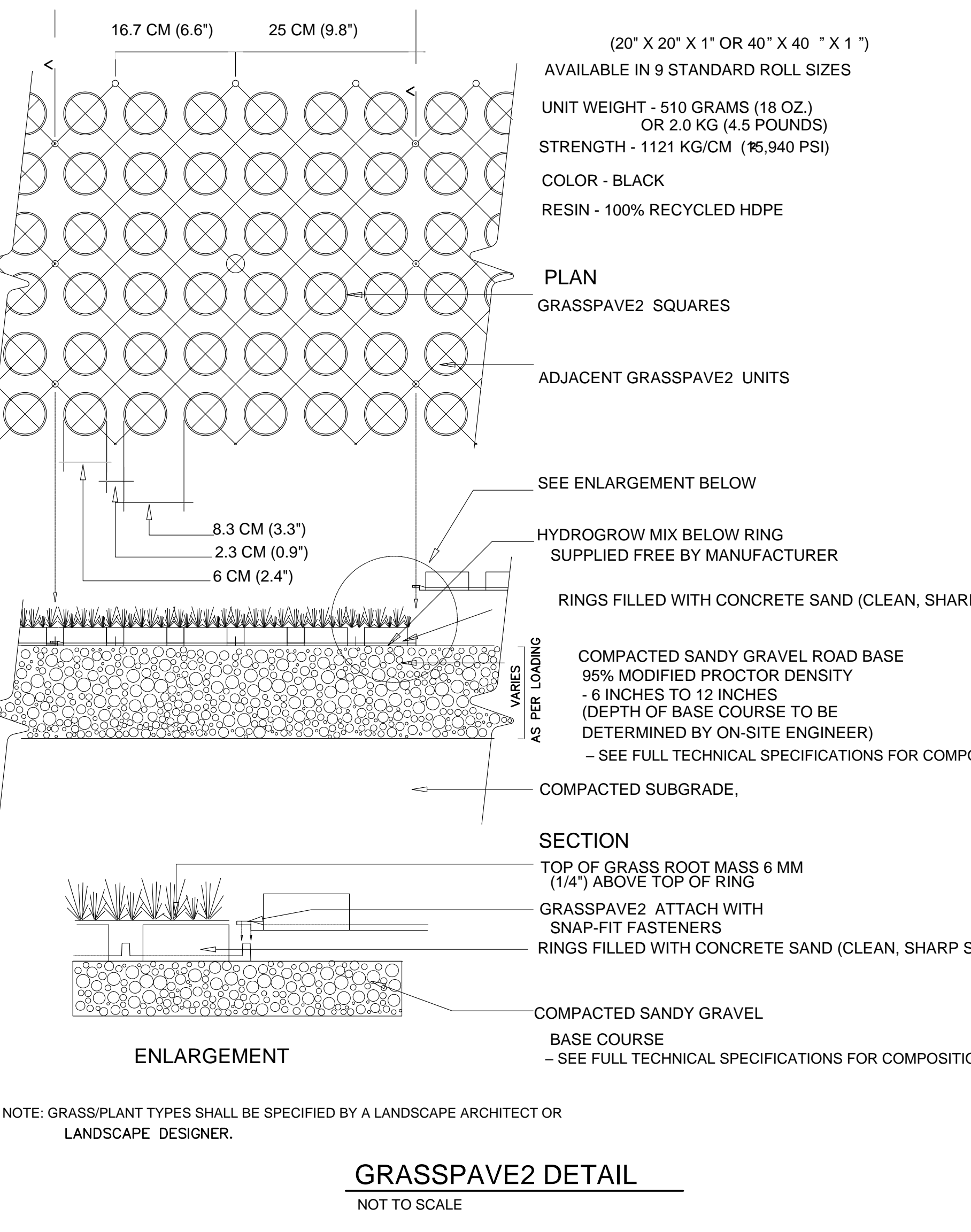


REFERENCE	RELEASE 1	CATEGORY	SHEET NO.	DPU DETAIL NO.
PFM Vol. II	2017	PUMPING STATIONS	1 of 3	454-1

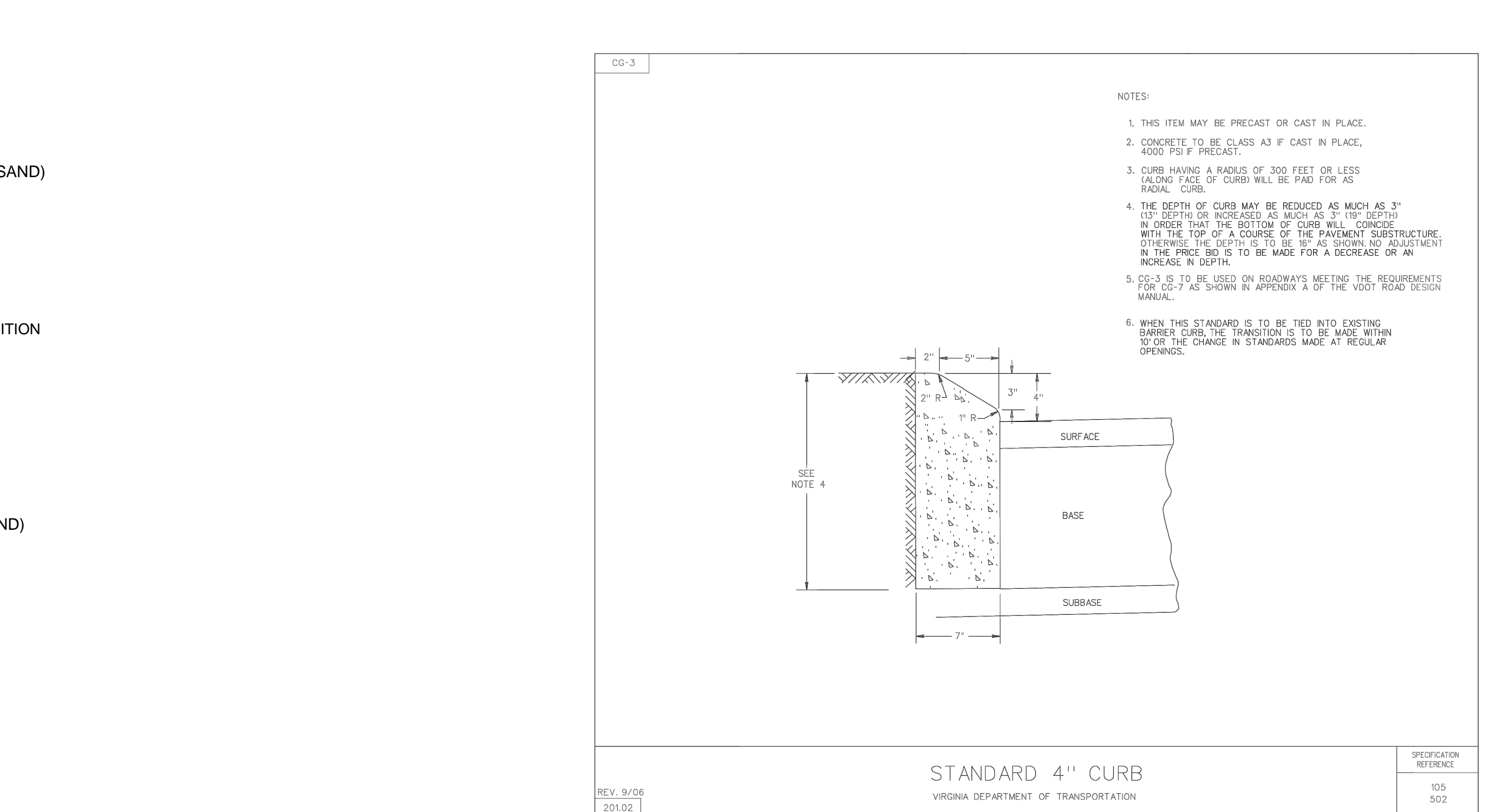
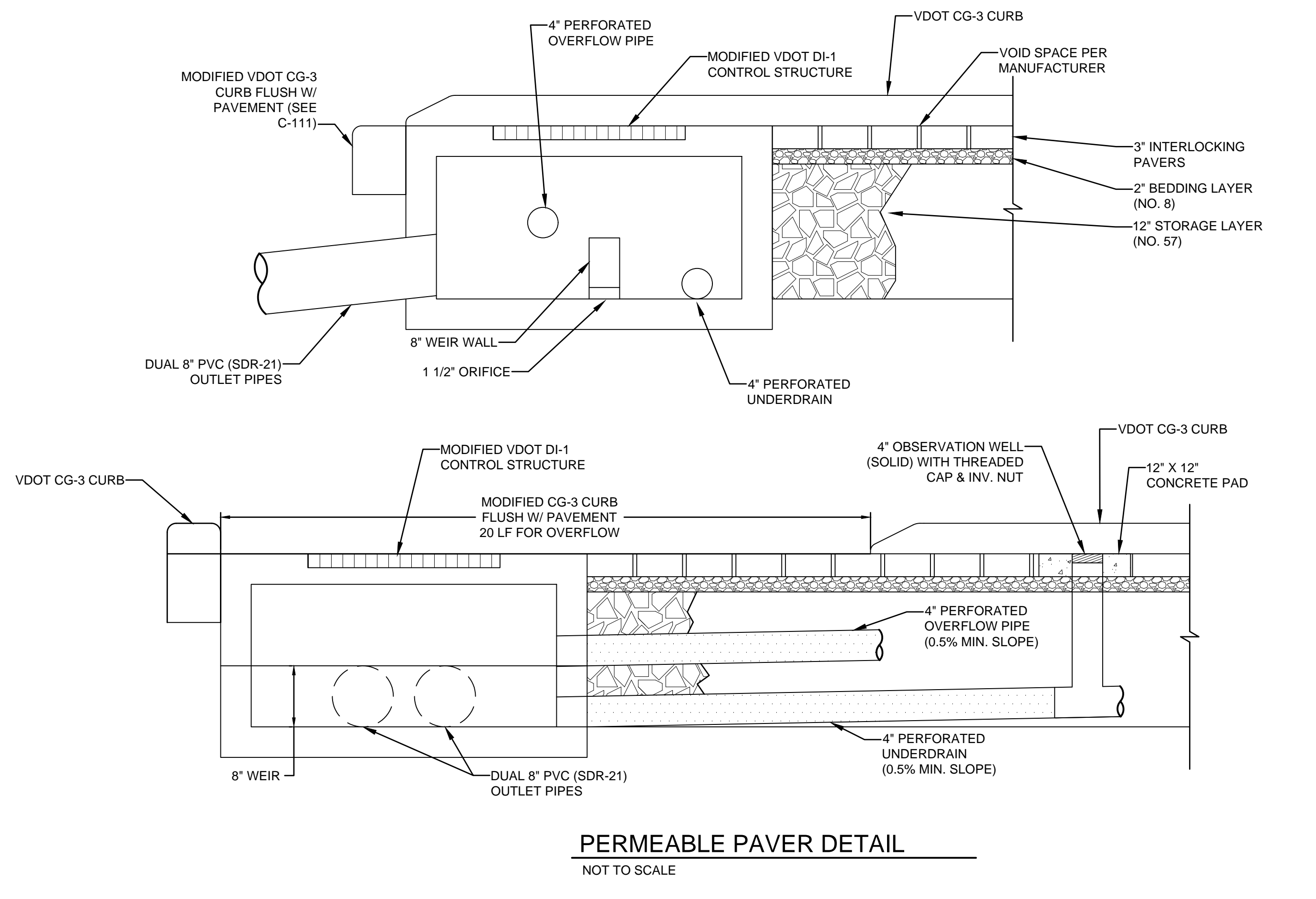


MODEL #	BOX COMPLETE EXTENSION	TOP SECTION LENGTH	BOTTOM SECTION LENGTH
481A	10\"/>		

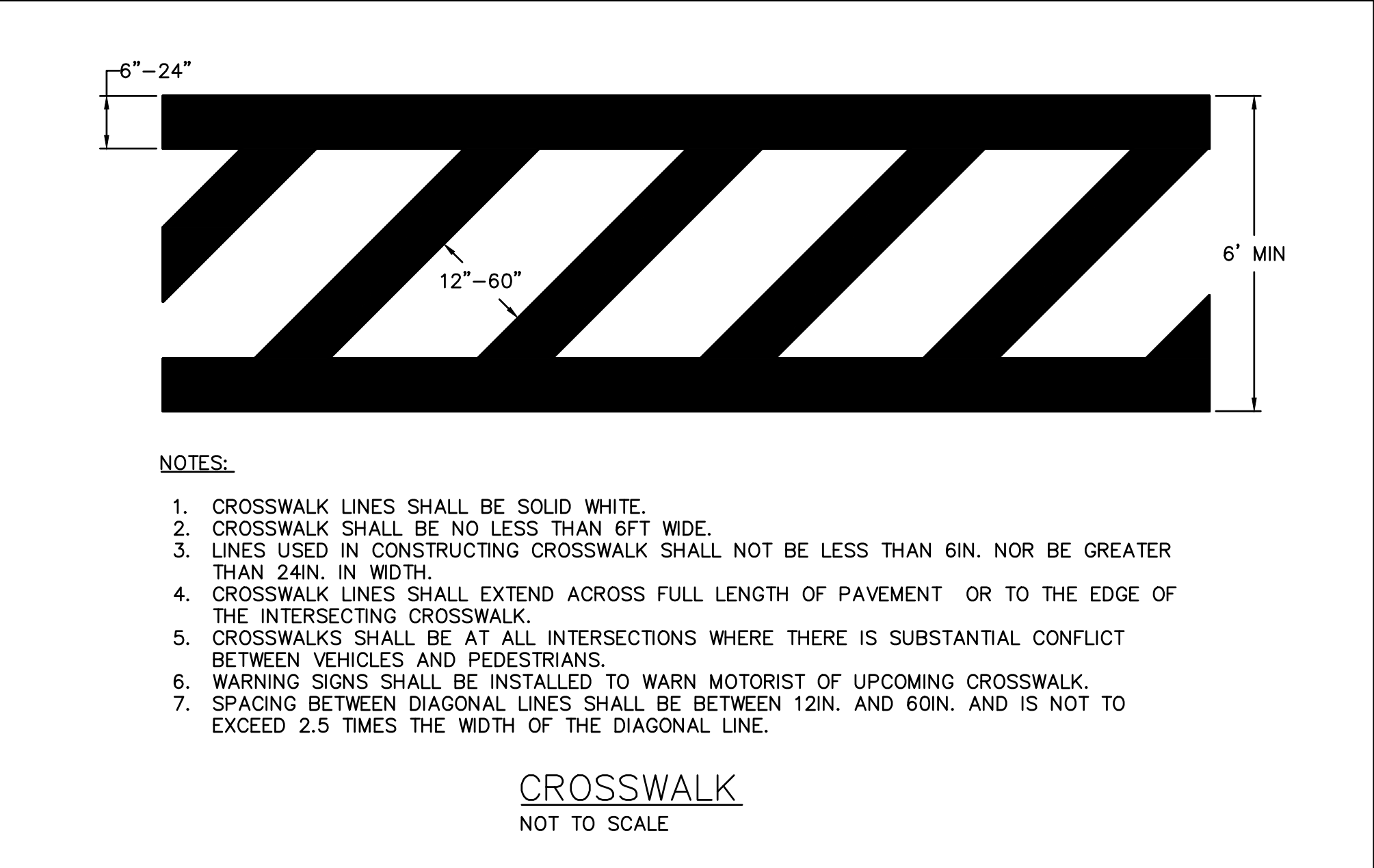
AD	CH	10/20/10	D	SCALE
DR BY	CHK'D	DATE	ISSUE	
eone SEWER SYSTEMS MODEL DH502 / DR502 DETAIL SHEET NA0054P02				



REFERENCE	RELEASE 1	CATEGORY	SHEET NO.	DPU DETAIL NO.
PFM Vol. II	2017	WATER AND SANITARY	1 of 2	354-1



REFERENCE	RELEASE 1	CATEGORY	SHEET NO.	DPU DETAIL NO.
PFM Vol. II	2017	WATER AND SANITARY	1 of 2	354-1



REFERENCE	RELEASE 1	CATEGORY	SHEET NO.	DPU DETAIL NO.
PFM Vol. II	2017	WATER AND SANITARY	1 of 2	354-1

WileyWilson
Constant Progress

PROFESSIONAL
12/18/19
Lic. No. 41823

CITY OF SUFFOLK
BENNETT'S CREEK RECREATION
CENTER RENOVATION

1500 BENNETT'S CREEK PARK RD, SUFFOLK, VA 23065

COMM NO:	215021
DATE:	12/18/2019
DRAWN:	BSH
DESIGN:	DTS
CHECK:	DTS
SHEET TITLE:	CIVIL DETAILS
SHT. NO.	C-302
REV. NO.	0

EROSION & SEDIMENT CONTROL NARRATIVE

I. PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE RENOVATION OF AN EXISTING FACILITY ALONG WITH ALL OF THE RELATED UTILITY IMPROVEMENTS. THE PROJECT ALSO INVOLVES RESTRIPIING THE EXISTING PARKING LOT AND WIDENING THE EXISTING ENTRANCE ROAD. AN EXISTING BERM WILL BE REMOVED AND THE DIRT WILL BE USED TO CONSTRUCT A NEW MULTIPURPOSE ATHLETIC FIELD. SEVERAL OUTDATED STRUCTURES WILL BE DEMOLISHED DURING THE PROJECT. A 5' WIDE ASPHALT WALKING TRAIL WILL BE CONSTRUCTED AROUND THE PERIMETER OF THE PROJECT AREA. A LARGE AREA OF TAR & GRAVEL WILL BE REMOVED DURING THE PROJECT AS WELL. THE PROJECT INVOLVES APPROXIMATELY 7.32 ACRES OF LAND DISTURBANCE.

II. EXISTING SITE CONDITIONS

THIS SITE CONSISTS OF A MIX OF ASPHALT, CONCRETE, TAR & GRAVEL AND GRASSY OPEN SPACE WITH A FEW SMALL AREAS OF THICK VEGETATION.

III. ADJACENT PROPERTIES

THE PROJECT SITE IS BOUNDED BY BENNETTS CREEK PARK ROAD ON THE SOUTH. TO THE NORTH WEST THE PROJECT IS BOUND BY A DEVELOPMENT OF DUPLEXES. TO THE NORTH, THE PROJECT IS BOUND BY AN UNDEVELOPED PARCEL OF LAND. TO THE EAST THE PROJECT IS BOUND BY A VACANT LOT WHICH CONTAINS A STORMWATER MANAGEMENT POND.

IV. OFF-SITE AREAS

FILL MATERIAL WILL BE OBTAINED FROM AREAS OF EXCAVATION CONTAINED WITHIN THE SITE. UNSUITABLE MATERIAL WILL BE HAULED FROM THE SITE AND DISPOSED OF IN AN APPROVED MANNER. THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION AND SEDIMENT CONTROL PLAN TO THE EROSION AND SEDIMENT CONTROL REGULATOR PERTAINING TO OFF-SITE DISTURBED AREAS (IF ANY SUCH AREAS ARE REQUIRED) SUCH AS STOCKPILES, STAGING AREAS, AND SPOIL AREAS THAT ARE USED FOR THIS PROJECT.

V. SOILS

ACCORDING TO USDA SCS SOIL MAPPING, THE PROJECT SITE LIES ON SOIL TYPE WESTON FINE SANDY LOAM. WESTON FINE SANDY LOAM (41s0)
THIS SOIL TYPE IS FOUND MAINLY IN THE SOUTHERN PIEDMONT AREAS. SLOPES RANGE FROM 0% TO 2% AND ARE LOCATED IN MARINE TERRACE AREAS. SOIL PROPERTIES FOR THIS COMPOSITE: WESTON POORLY DRAINED WITH VERY HIGH RUN-OFF. THE FLOODING HAZARD IS RATED AS MODERATE AND THE HYDRIC SOIL GROUP IN CLASSIFIED AS C/D.

VI. CRITICAL AREAS

THERE ARE NO CRITICAL AREAS PRESENT ON THIS PROJECT

VII. EROSION AND SEDIMENT CONTROL MEASURES

ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED BY THE CONTRACTOR IN ACCORDANCE WITH THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. SYMBOLS, DETAILS, AND DIMENSIONS ARE TAKEN FROM THE HANDBOOK, AS WELL AS THE LATEST EDITION OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION'S ROAD AND BRIDGE STANDARDS.

A. STRUCTURAL PRACTICES

1. TEMPORARY STONE CONSTRUCTION ENTRANCE (CE), SPEC. 3.02: A CONSTRUCTION ENTRANCE SHALL BE PROVIDED AS SHOWN ON THE PLANS AT THE EXISTING ROAD. EQUIPMENT WHEELS SHALL BE CLEAN WHEN ENTERING UPON A PAVED ROAD. ALL VEHICLES ENTERING AND EXITING THE PROJECT SITE SHALL USE A CONSTRUCTION ENTRANCE.
2. SILT FENCE (SF), SPEC. 3.05: SILT FENCE BARRIERS SHALL BE PROVIDED WHERE SHOWN AND AS NEEDED TO PREVENT SEDIMENT FROM LEAVING THE SITE.
3. STORM DRAIN INLET PROTECTION (IP), SPEC. 3.07: STORM DRAIN INLET PROTECTION SHALL BE PROVIDED FOR INLETS AS SHOWN ON THE PLANS.
4. CULVERT INLET PROTECTION (CIP), SPEC. 3.08: CULVERT INLET PROTECTION SHALL BE PROVIDED FOR THE CULVERTS AS SHOWN ON THE PLANS.
5. OUTLET PROTECTION (OP), SPEC. 3.18: PROVIDE OUTLET PROTECTION FOR STORM WATER SYSTEM OUTLETS AS SHOWN ON THE PLANS.
6. DUST CONTROL (DC), SPEC. 3.39: PROVIDE DUST CONTROL IN AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST WHERE ON-SITE AND OFF-SITE DAMAGE IS LIKELY TO OCCUR IF PREVENTIVE MEASURES ARE NOT TAKEN.

B. VEGETATIVE PRACTICES

1. TOPSOILING (TO), SPEC. 3.30: TOPSOIL WILL BE STRIPPED FROM AREAS TO BE GRADED AND STOCKPILED FOR LATER USE. STOCKPILES ARE TO BE STABILIZED WITH TEMPORARY VEGETATION AND HAVE SILT FENCE INSTALLED ALONG THE LOWER PERIMETER TO PREVENT DOWNSTREAM AREAS.
2. TEMPORARY SEEDING (TS), SPEC. 3.31: TEMPORARY SEEDING SHALL BE PROVIDED ON SITE TO PROVIDE STABILIZATION UNTIL SITE DEVELOPMENT OCCURS. APPLY SEED BASED ON TEMPORARY SEEDING SCHEDULE SHOWN ON THE PLANS.
3. PERMANENT SEEDING (PS), SPEC. 3.32: PERMANENT SEEDING SHALL BE PROVIDED ON SITE TO PROVIDE STABILIZATION FOR ALL DISTURBED AREAS. APPLY SEED BASED ON TEMPORARY SEEDING SCHEDULE SHOWN ON THE PLANS.
4. SODDING (SO), SPEC. 3.33:
5. MULCHING (MU), SPEC. 3.35: ALL PERMANENT AND TEMPORARY SEEDING SHALL BE STRAW MULCHED IMMEDIATELY UPON COMPLETION OF SEED APPLICATION. STRAW ON STEEP SLOPES SHALL BE ANCHORED UNLESS SEEDING WAS PROVIDED BY MEANS OF A HYDROSEEDING, IN WHICH CASE, MULCHING IS NOT REQUIRED.
6. TREE PRESERVATION AND PROTECTION (TP), SPEC. 3.38: TREES IDENTIFIED ON THE E&S PLAN SHEET SHALL BE PROTECTED DURING CONSTRUCTION.

C. MINIMUM STANDARDS

- MS-1** STABILIZATION OF DENUDED AREAS:
PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 14 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.
- MS-2** STABILIZATION OF SOIL STOCKPILES:
DURING CONSTRUCTION OF THE PROJECT, SOIL STOCK PILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS BORROW AREAS AND SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
- MS-3** PERMANENT VEGETATIVE COVER:
A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.
- MS-4** TIMING AND STABILIZATION OF SILT TRAPPING MEASURES:
SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
- MS-5** CONCENTRATED RUNOFF DOWN CUT OR FILLED SLOPES:
STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
- MS-6** SEDIMENT BASINS AND TRAPS:
SEDIMENT TRAPS AND SEDIMENT BASINS SHALL BE DESIGNED AND CONSTRUCTED BASED UPON THE TOTAL DRAINAGE AREA TO BE SERVED BY THE TRAP OR BASIN.
- MS-7** CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROBLEM IS CORRECTED.
- MS-8** CONCENTRATED RUNOFF DOWN CUT OR FILL SLOPES:
CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.
- MS-9** WATER SEEPAGE FROM A SLOPE FACE:
WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
- MS-10** STORM SEWER INLET PROTECTION:
ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
- MS-11** STABILIZATION OF OUTLETS:
BEFORE NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS OR PIPES ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.
- MS-12** WORK IN LIVE WATERCOURSES:
WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. NONERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COUNTERDAMS. EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NONERODIBLE COVER MATERIALS.
- MS-13** CROSSING A LIVE WATERCOURSE:
WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES MORE THAN TWICE IN ANY SIX-MONTH PERIOD, A TEMPORARY VEHICULAR STREAM CROSSING CONSTRUCTED OF NONERODIBLE MATERIAL SHALL BE PROVIDED.
- MS-14** APPLICABLE REGULATIONS:
ALL APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET.
- MS-15** STABILIZATION OF BED AND BANKS:
THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.
- MS-16** UNDERGROUND UTILITIES:
UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:
A. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPSHILL SIDE OF TRENCHES.
C. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
D. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
E. RE-STABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THIS CHAPTER.
F. APPLICABLE SAFETY REQUIREMENTS SHALL BE COMPLIED WITH.
- MS-17** CONSTRUCTION ACCESS ROUTES:
WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED OR PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE, THE ROAD SURFACE SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL DEVELOPMENT LOTS AS WELL AS TO LARGER LAND-DISTURBING ACTIVITIES.

MS-18

TEMPORARY E&S CONTROL MEASURE REMOVAL:
ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE VESCP AUTHORITY. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.

MS-19

ADEQUACY OF RECEIVING CHANNELS:
PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION AND DAMAGE DUE TO INCREASES IN VOLUME, VELOCITY AND PEAK FLOW RATE OF STORMWATER RUNOFF FOR THE STATED FREQUENCY STORM OF 24-HOUR DURATION IN ACCORDANCE WITH THE FOLLOWING STANDARDS AND CRITERIA: STREAM RESTORATION AND RELOCATION PROJECTS THAT INCORPORATE NATURAL CHANNEL DESIGN CONCEPTS ARE NOT MAN-MADE CHANNELS AND SHALL BE EXEMPT FROM ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS.
A. CONCENTRATED STORMWATER RUNOFF LEAVING A DEVELOPMENT SITE SHALL BE DISCHARGED DIRECTLY INTO AN ADEQUATE NATURAL OR MAN-MADE RECEIVING CHANNEL, PIPE OR STORM SEWER SYSTEM. FOR THOSE SITES WHERE RUNOFF IS DISCHARGED INTO A PIPE OR PIPE SYSTEM, DOWNSTREAM STABILITY ANALYSES AT THE OUTFALL OF THE PIPE OR PIPE SYSTEM SHALL BE PERFORMED.
B. ADEQUACY OF ALL CHANNELS AND PIPES SHALL BE VERIFIED IN THE FOLLOWING MANNER:
(1) THE APPLICANT SHALL DEMONSTRATE THAT THE TOTAL DRAINAGE AREA TO THE POINT OF ANALYSIS WITHIN THE CHANNEL IS ONE HUNDRED TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE PROJECT IN QUESTION.
(2) (A) NATURAL CHANNELS SHALL BE ANALYZED BY THE USE OF A TWO-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP CHANNEL BANKS NOR CAUSE EROSION OF CHANNEL BED OR BANKS.
(B) ALL PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS SHALL BE ANALYZED BY THE USE OF A TEN-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP ITS BANKS AND BY THE USE OF A TWO-YEAR STORM TO DEMONSTRATE THAT STORMWATER WILL NOT CAUSE EROSION OF CHANNEL BED OR BANKS; AND
(C) PIPES AND STORM SEWER SYSTEMS SHALL BE ANALYZED BY THE USE OF A TEN-YEAR STORM TO VERIFY THAT STORMWATER WILL BE CONTAINED WITHIN THE PIPE OR SYSTEM.
C. IF EXISTING NATURAL RECEIVING CHANNELS OR PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS OR PIPES ARE NOT ADEQUATE, THE APPLICANT SHALL:
(1) IMPROVE THE CHANNELS TO A CONDITION WHERE A TEN-YEAR STORM WILL NOT OVERTOP THE BANKS AND A TWO-YEAR STORM WILL NOT CAUSE EROSION TO THE CHANNEL, THE BED, OR THE BANKS; OR
(2) IMPROVE THE PIPE OR PIPE SYSTEM TO A CONDITION WHERE THE TEN-YEAR STORM IS CONTAINED WITHIN THE APPURTENANCES.
(3) DEVELOP A SITE DESIGN THAT WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A TWO-YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A NATURAL CHANNEL OR WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A TEN-YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A MAN-MADE CHANNEL; OR
(4) PROVIDE A COMBINATION OF CHANNEL IMPROVEMENT, STORMWATER DETENTION OR OTHER MEASURES WHICH IS SATISFACTORY TO THE VESCP AUTHORITY TO PREVENT DOWNSTREAM EROSION.
D. THE APPLICANT SHALL PROVIDE EVIDENCE OF PERMISSION TO MAKE THE IMPROVEMENTS.
E. ALL HYDROLOGIC ANALYSES SHALL BE BASED ON THE EXISTING WATERSHED CHARACTERISTICS AND THE ULTIMATE DEVELOPMENT CONDITION OF THE SUBJECT PROJECT.
F. IF THE APPLICANT CHOOSES AN OPTION THAT INCLUDES STORMWATER DETENTION, HE SHALL OBTAIN APPROVAL FROM THE VESCP OF A PLAN FOR MAINTENANCE OF THE DETENTION FACILITIES. THE PLAN SHALL SET FORTH THE MAINTENANCE REQUIREMENTS OF THE FACILITY AND THE PERSON RESPONSIBLE FOR PERFORMING THE MAINTENANCE.
G. OUTFALL FROM A DETENTION FACILITY SHALL BE DISCHARGED TO A RECEIVING CHANNEL, AND ENERGY DISSIPATORS SHALL BE PLACED AT THE OUTFALL OF ALL DETENTION FACILITIES AS NECESSARY TO PROVIDE A STABILIZED TRANSITION FROM THE FACILITY TO THE RECEIVING CHANNEL.
H. ALL ON-SITE CHANNELS MUST BE ADEQUATE:
I. INCREASED VOLUMES OF SHEET FLOWS THAT MAY CAUSE EROSION OR SEDIMENTATION ON ADJACENT PROPERTY SHALL BE DIVERTED TO A STABLE OUTLET, ADEQUATE CHANNEL, PIPE OR PIPE SYSTEM, OR TO A DETENTION FACILITY.
J. IN APPLYING THESE STORMWATER MANAGEMENT CRITERIA, INDIVIDUAL LOTS OR PARCELS IN A RESIDENTIAL, COMMERCIAL OR INDUSTRIAL DEVELOPMENT SHALL NOT BE CONSIDERED TO BE SEPARATE DEVELOPMENT PROJECTS. INSTEAD, THE DEVELOPMENT, AS A WHOLE, SHALL BE CONSIDERED TO BE A SINGLE DEVELOPMENT PROJECT. HYDROLOGIC PARAMETERS THAT REFLECT THE ULTIMATE DEVELOPMENT CONDITION SHALL BE USED IN ALL ENGINEERING CALCULATIONS.
K. ALL MEASURES USED TO PROTECT PROPERTIES AND WATERWAYS SHALL BE EMPLOYED IN A MANNER WHICH MINIMIZES IMPACTS ON THE PHYSICAL, CHEMICAL AND BIOLOGICAL INTEGRITY OF RIVERS, STREAMS AND OTHER WATERS OF THE STATE.
L. ANY PLAN APPROVED PRIOR TO JULY 1, 2014, THAT PROVIDES FOR STORMWATER MANAGEMENT THAT ADDRESSES ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS SHALL SATISFY THE FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS IF THE PRACTICES ARE DESIGNED TO (I) DETAIN THE WATER QUALITY VOLUME AND TO RELEASE IT OVER 48 HOURS; (II) DETAIN AND RELEASE OVER A 24-HOUR PERIOD THE EXPECTED RAINFALL RESULTING FROM THE ONE YEAR, 24-HOUR STORM; AND (III) REDUCE THE ALLOWABLE PEAK FLOW RATE RESULTING FROM THE 1, 2, AND 10-YEAR, 24-HOUR STORMS TO A LEVEL THAT IS LESS THAN OR EQUAL TO THE PEAK FLOW RATE FROM THE SITE ASSUMING IT WAS IN A GOOD FORESTED CONDITION. ACHIEVED THROUGH MULTIPLICATION OF THE FORESTED PEAK FLOW RATE BY A REDUCTION FACTOR THAT IS EQUAL TO THE RUNOFF VOLUME FROM THE SITE WHEN IT WAS IN A GOOD FORESTED CONDITION DIVIDED BY THE RUNOFF VOLUME FROM THE SITE IN ITS PROPOSED CONDITION, AND SHALL BE EXEMPT FROM ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS AS DEFINED IN ANY REGULATIONS PROMULGATED PURSUANT TO § 62.1-44.15.54 OR 62.1-44.15.65 OF THE ACT.

M. FOR PLANS APPROVED ON AND AFTER JULY 1, 2014, THE FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS OF § 62.1-44.15.52 A OF THE ACT AND THIS SUBSECTION SHALL BE SATISFIED BY COMPLIANCE WITH WATER QUANTITY REQUIREMENTS IN THE STORMWATER MANAGEMENT ACT (62.1-44.15.22 ET SEQ. OF THE CODE OF VIRGINIA) AND ATTENDANT REGULATIONS, UNLESS SUCH LAND-DISTURBING ACTIVITIES ARE IN ACCORDANCE WITH 9VAC25-870-48 OF THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSWMP) REGULATIONS.
N. COMPLIANCE WITH THE WATER QUANTITY MINIMUM STANDARDS SET OUT IN 9VAC25-870-58 OF THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSWMP) REGULATIONS SHALL BE DEEMED TO SATISFY THE REQUIREMENTS OF SUBDIVISION 19 OF THIS SUBSECTION.

D. MAINTENANCE: ALL EROSION AND SEDIMENT CONTROL STRUCTURES AND SYSTEMS SHALL BE MAINTAINED, INSPECTED, AND REPAIRED AS NEEDED TO INSURE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED AT THE END OF EACH DAY AND AFTER EVERY RAINFALL EVENT.

1. DAMAGE TO EROSION CONTROL MEASURES CAUSED BY CONSTRUCTION TRAFFIC OR OTHER ACTIVITY SHALL BE REPAIRED BEFORE THE END OF EACH WORKING DAY.
2. MAINTAIN ALL SEEDED AREAS UNTIL A UNIFORM STAND IS ACCEPTED.
3. (SPEC. 3.02) PROVIDE FOR EQUIPMENT WASHINGS AS NEEDED TO PREVENT THE TRANSPORT OF SOIL ONTO EXISTING ASPHALT ROADWAYS. ANY SEDIMENT ON THE PAVEMENT SHALL BE REMOVED IMMEDIATELY.
4. (SPEC. 3.05) SILT FENCE BARRIERS WILL BE CHECKED DAILY FOR UNDERMINING OR DEGRADATION OF THE FABRIC. SEDIMENT SHALL BE REMOVED WHEN THE LEVEL REACHES HALF WAY TO THE TOP OF THE BARRIER.
5. (SPEC. 3.07) SEDIMENT SHALL BE REMOVED FROM AROUND THE INLET PROTECTION TRAP STRUCTURE AND RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH OF THE TRAP. THE TRAP STRUCTURES SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
6. (SPEC. 3.08) AGGREGATE FOR CULVERT INLET PROTECTION, IF OPTIONAL STONE COMBINATION IS USED IN LIEU OF SILT FENCE, SHALL BE REPLACED OR CLEANED WHEN INSPECTION REVEALS THAT CLOGGED VOIDS ARE CAUSING PROBLEMS WHICH INTERFERE WITH ON-SITE CONSTRUCTION.
7. (SPEC. 3.18 & 3.19) RIPRAP INSTALLATIONS SHOULD BE INSPECTED PERIODICALLY TO DETERMINE IF HIGH FLOWS HAVE CAUSED SCOUR BENEATH THE RIPRAP OR GEOTEXTILE FABRIC OR DISLOGGED ANY OF THE STONE.
8. (SPEC. 3.30) TOPSOIL SHALL NOT BE PLACED WHILE IN A FROZEN OR MUDDY CONDITION, WHEN TOPSOIL OR SUBGRADE IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING OR PROPOSED SODDING OR SEEDING. THE TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED TO A MINIMUM COMPACTED DEPTH OF 2-INCHES ON 3:1 OR STEEPER SLOPES AND 4-INCHES ON FLATTER SLOPES.
9. (SPEC. 3.31 & 3.32) AREAS WHICH FAIL TO ESTABLISH VEGETATIVE COVER ADEQUATE TO PREVENT RILL EROSION WILL BE RESEED AS SOON AS SUCH AREAS ARE IDENTIFIED.
10. (SPEC. 3.33) DURING THE 2 TO 3-WEEK ESTABLISHMENT STAGE, SOD SHALL BE WATERED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE IN THE ROOT ZONE AND PREVENT DORMANCY OF SOD. NO MORE THAN ONE-THIRD OF THE SHOOT (GRASS LEAF) SHOULD BE REMOVED IN ANY MOWING. GRASS HEIGHT SHOULD BE MAINTAINED BETWEEN 2 AND 3-INCHES UNLESS OTHERWISE SPECIFIED.
11. (SPEC. 3.35) WHERE EROSION OR WASHOUT IS OBSERVED IN MULCHED AREAS, ADDITIONAL MULCH SHOULD BE APPLIED.
12. (SPEC. 3.38) IF THE SOIL HAS BECOME COMPACTED OVER THE ROOT ZONE OF ANY TREE, THE GROUND SHALL BE AERATED BY PUNCHING HOLES WITH AN IRON BAR. ANY DAMAGE TO THE CROWN, TRUNK, OR ROOT SYSTEM OF ANY TREE RETAINED ON THE SITE SHALL BE REPAIRED IMMEDIATELY. BROADLEAF TREES THAT HAVE BEEN STRESSED OR DAMAGED SHALL RECEIVE A HEAVY APPLICATION OF FERTILIZER TO AID THEIR RECOVERY.
13. (SPEC. 3.39) WATER SHALL BE USED ON DENUDED AREAS THAT CONSTRUCTION VEHICLES TRAVERSE TO MINIMIZE DUST.

- VIII. PERMANENT STABILIZATION**
ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH SEEDING FOLLOWING GRADING IN ACCORDANCE WITH THE MINIMUM STANDARDS. SEEDING SHALL BE IN ACCORDANCE WITH THE TEMPORARY OR PERMANENT SEEDING SCHEDULES SHOWN ON THIS PLAN. IN ALL SEEDING OPERATIONS, TOPSOIL, SEED, FERTILIZER AND LIME SHALL BE APPLIED PRIOR TO INSTALLATION OF MULCHING OR EROSION CONTROL BLANKETS AND MATTING.
- IX. STORMWATER MANAGEMENT**
MANAGEMENT OF STORMWATER RUNOFF DURING CONSTRUCTION WILL COMPLY WITH THE EXISTING VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS 9VAC25-840. THE EROSION AND SEDIMENT CONTROL PLANS INDICATE ALL ACTIVITIES AND STRATEGIES NECESSARY TO MINIMIZE EROSION AND SEDIMENTATION DURING CONSTRUCTION.
MANAGEMENT OF STORMWATER RUNOFF AFTER CONSTRUCTION WILL COMPLY WITH THE EXISTING VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSWMP) REGULATIONS 9VAC25-870. THE STORMWATER MANAGEMENT PLANS INDICATE ALL ACTIVITIES AND STRATEGIES NECESSARY TO COMPLY WITH THE VSWMP REGULATIONS AFTER CONSTRUCTION. SEE STORMWATER REPORT FOR DETAILED CALCULATIONS.
- X. SOIL STOCKPILES AND BORROW AREAS**
FILL MATERIAL SHALL BE OBTAINED FROM AREAS OF EXCAVATION ON SITE. LOCATIONS OF SOIL STOCKPILES SHALL BE DETERMINED BY THE CONTRACTOR WITH THE APPROVAL OF THE OWNER/DEVELOPER. ALL STOCKPILES SHALL BE LOCATED ON SITE AND PROTECTED WITH SURROUNDING SILT FENCING AND STABILIZED WITH A VEGETATIVE COVER. THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION AND SEDIMENT CONTROL PLAN FOR ALL SOILS INTENTIONALLY TRANSPORTED OFFSITE IF THE TRANSPORTED MATERIAL DISTURBS MORE THAN 10,000 SQUARE FEET IN AREA.
- XI. SEQUENCE OF CONSTRUCTION**

1. CONSTRUCT THE TEMPORARY STONE CONSTRUCTION ENTRANCES.
2. INSTALL EROSION AND SEDIMENT CONTROL PRACTICES AS IS PRACTICABLE.
3. CLEAR THE PLANNED DISTURBED AREA AND REMOVE DEBRIS TO A SUITABLE LOCATION.
4. INSTALL UTILITIES, INLET AND OUTLET PROTECTION AS IS PRACTICABLE.
5. BRING GRADES TO DESIRED ELEVATION.
6. STABILIZE ALL DISTURBED AREAS WITH PERMANENT VEGETATION.
7. APPLY SURFACE TREATMENT AS DESIGNED.
8. EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL RELEASED BY THE GOVERNING AGENCY.
9. REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES.
10. STABILIZE AREAS AFFECTED BY THE REMOVAL OF TEMPORARY E&S MEASURES.

TS TEMPORARY SEEDING SCHEDULE

PLANTING SPECIES	SPECIES	RATE (LBS/ACRE)
SEPT 1 - FEB 15	50/50 MIX OF ANNUAL RYEGRASS (LOLIUM MULTIFLORUM) & CEREAL (WINTER) RYE (SECALE CEREALE)	50 - 100
FEB 16 - APR 30	ANNUAL RYEGRASS (LOLIUM MULTIFLORUM)	60 - 100
MAY 1 - AUG 31	GERMAN MILLET (SETARIA ITALICA)	50

PS PERMANENT SEEDING SCHEDULE

MINIMUM LAWN CARE (COMMERCIAL OR RESIDENTIAL)	TOTAL POUNDS PER ACRE
KENTUCKY 31 OR TURF-TYPE TALL FESCUE OR COMMON BERMUDAGRASS**	175-200 LBS
HIGH MAINTENANCE LAWN CARE	
KENTUCKY 31 OR TURF-TYPE TALL FESCUE	200-250 LBS
OR HYBRID BERMUDAGRASS (SEED)**	40 LBS (UNHULLED)
OR HYBRID BERMUDAGRASS (BY OTHER VEGETATIVE ESTABLISHMENT METHOD, SEE STD & SPEC 3.34)	30 LBS (HULLED)

GENERAL SLOPE (3:1 OR LESS)	TOTAL POUNDS PER ACRE
KENTUCKY 31 FESCUE	128 LBS
INDIAN GRASS	2 LBS
SEASONAL NURSE CROP*	20 LBS
	150 LBS

LOW MAINTENANCE SLOPE (STEEPER THAN 3:1)	TOTAL POUNDS PER ACRE
KENTUCKY 31 TALL FESCUE	93-108 LBS
COMMON BERMUDAGRASS**	0-15 LBS
INDIAN GRASS	2 LBS
SEASONAL NURSE CROP*	20 LBS
ROUNDHEADED BUSHCLOVER	20 LBS
	150 LBS


*USE SEASONAL NURSE CROP IN ACCORDANCE WITH SEEDING DATES AS STATED BELOW:
ANNUAL RYE: FEBRUARY, MARCH THROUGH APRIL
FOXTAIL MILLET: MAY 1ST THROUGH AUGUST
ANNUAL RYE: SEPTEMBER, OCTOBER THROUGH NOVEMBER 15TH
WINTER RYE: NOVEMBER 15TH THROUGH JANUARY

**MAY THROUGH OCTOBER, USE HULLED SEED. ALL OTHER SEEDING PERIODS, USE UNHULLED SEED. WEEPING LOVEGRASS MAY BE ADDED TO ANY SLOPE OR LOW MAINTENANCE MIX DURING WARMER SEEDING PERIODS, ADD 10-20 LBS/AC IN MIXES.


LIME & FERTILIZER SPECIFICATIONS:
A SOILS TEST IS REQUIRED PRIOR TO FINAL SITE STABILIZATION, TO DETERMINE LIME AND FERTILIZER APPLICATION RATES FOR THE ESTABLISHMENT OF GRASS ON SITE. CONTACT VIRGINIA COOPERATIVE EXTENSION OR A GEOTECHNICAL FIRM WITH SOIL TESTING FACILITIES TO OBTAIN A SOILS REPORT FOR NUTRIENT APPLICATION.

INCORPORATION:
LIME AND FERTILIZER SHALL BE INCORPORATED INTO THE TOP 4 INCHES OF TOPSOIL BY DISCING OR OTHER MEANS WHENEVER POSSIBLE. FOR EROSION CONTROL, WHEN APPLYING LIME AND FERTILIZER WITH A HYDROSEEDER, APPLY TO A ROUGH, LOOSE SURFACE.

MULCHING:
MULCH WITH STRAW AT A RATE OF 2 TONS/ACRE OR EQUIVALENT.



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CITY OF SUFFOLK
BENNETTS CREEK RECREATION
CENTER RENOVATION

NO.	DATE	REVISION DESCRIPTION

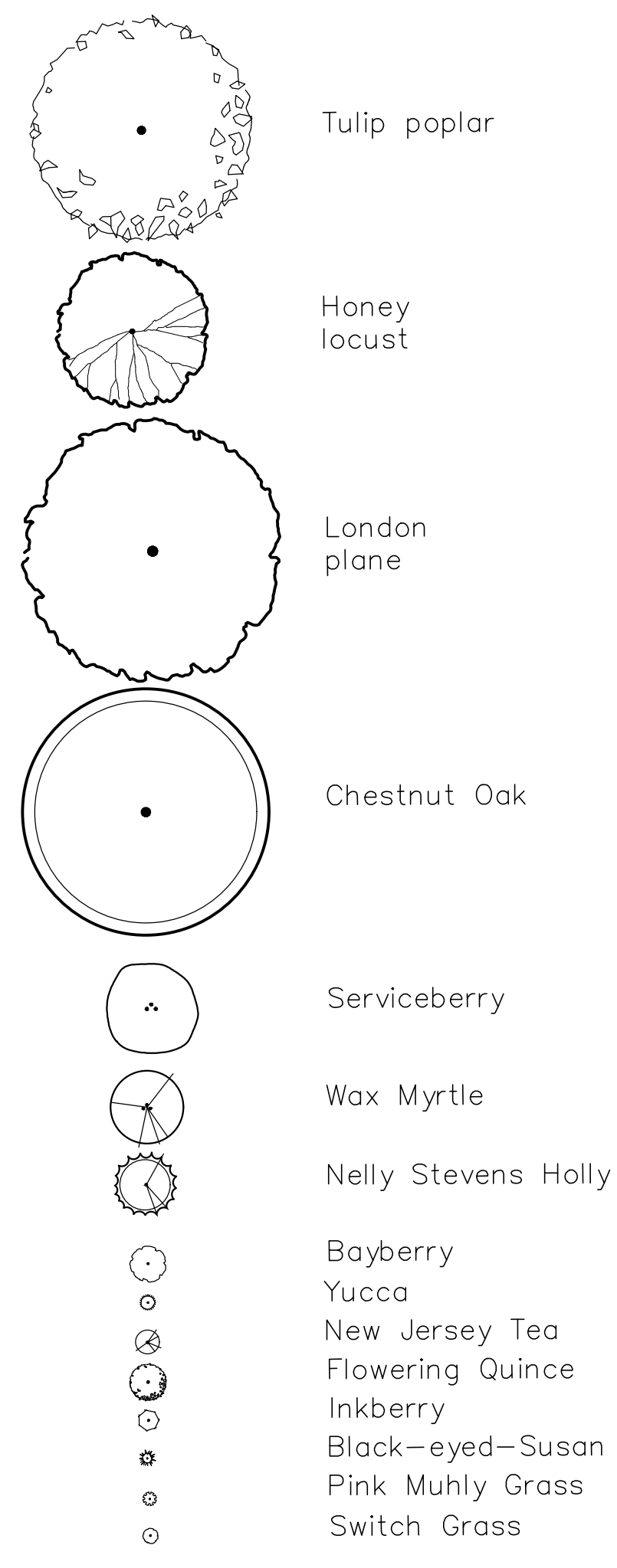
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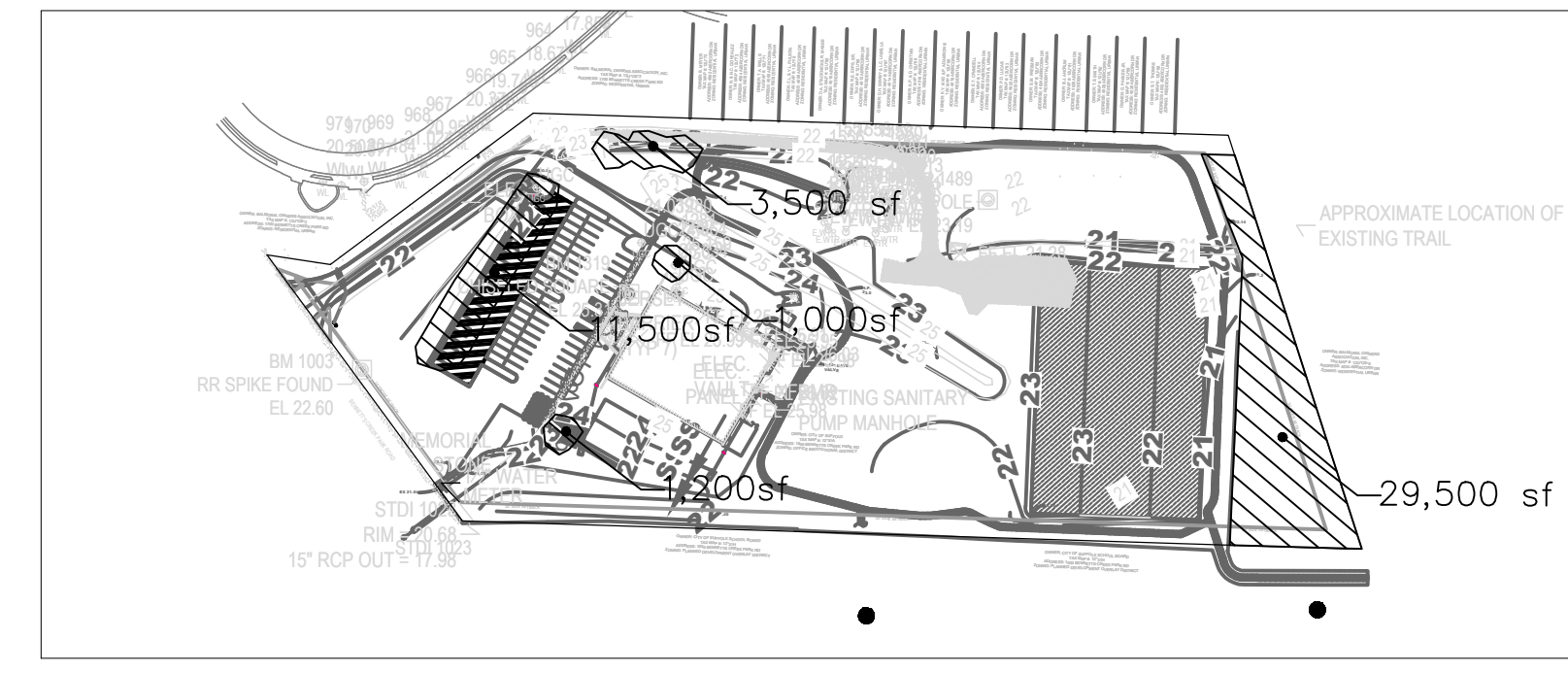
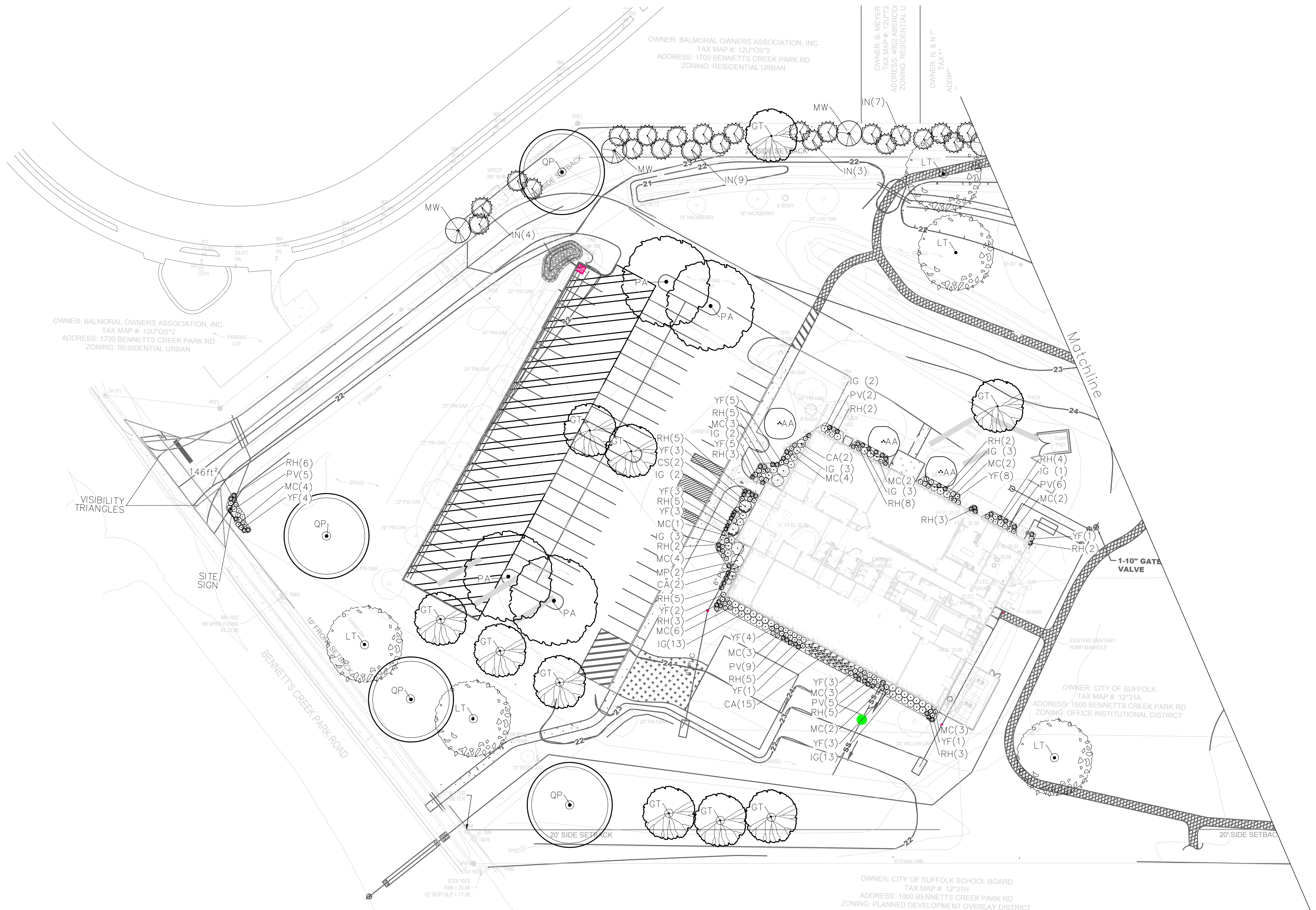
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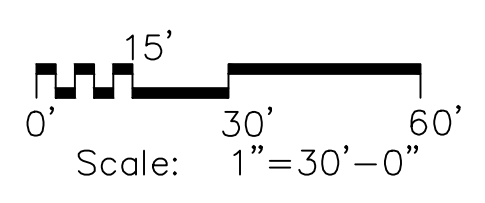
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Suffolk, Virginia									
Land Planning & Design Associates, Inc.									
Landscape Palette									
12/18/2018									
SYMBOL	SCIENTIFIC NAME	COMMON NAME	QTY	SPACING	COND.	SIZE	CANOPY	10YR CANOPY	
Shade Trees									
LT	Liriodendron tulipifera	Tulip poplar	7	AS SHOWN	B&B	3" CAL	400	2800	
PA	Platanus x acerifolia	London Planetree	6	AS SHOWN	B&B	3" CAL	400	2400	
QP	Quercus montana (pinus)	Chestnut Oak	9	AS SHOWN	B&B	3" CAL	400	3600	
Medium/Small Trees									
AA	Amelanchier arborea	Serviceberry	3	AS SHOWN	B&B	3" CAL	250	750	
GT	Gleditsia tincanaria inermis	Thornless Honeylocust	13	AS SHOWN	B&B	3" CAL	300	3900	
MW	Myrica cerifera	Wax myrtle	11	AS SHOWN	B&B	3" CAL	175	1925	
Evergreen Trees									
IN	Ilex 'Nelly R. Stevens'	Nelly Stevens Holly	56	AS SHOWN	B&B	3" CAL	16	896	
Shrubs									
CA	Ceanothus americanus	New Jersey Tea	18	3.5'	#3	18"-24"			
CS	Chaenomeles x speciosa 'O Yashima'	Flowering Quince	2	as shown	#3	24"-30"			
IG	Ilex glabra 'Shamrock'	Inkberry	45	4"	#3	18"-24"			
MP	Myrica pensylvanica 'Bobzam'	Compact Bayberry	4	as shown	#3	18"-24"			
Grasses and perennials									
MC	Muhlenbergia capillaris	Pink Muhlygrass	40	2.5'	#2				
PV	Panicum virgatum	Switch Grass	27	24"	#2				
RH	Rudbeckia hirta	Black Eyed Susan	68	AS SHOWN	6"p				
YF	Yucca filamentosa	Adams Needle	44		#2				
								ADDITIONAL CANOPY COVERAGE:	16271

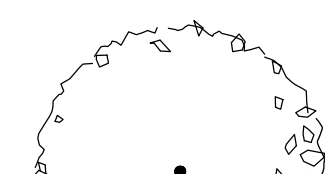
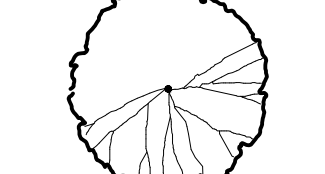
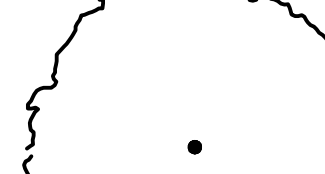
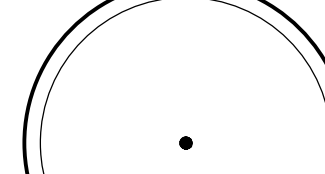
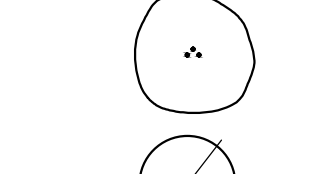
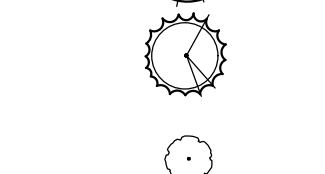
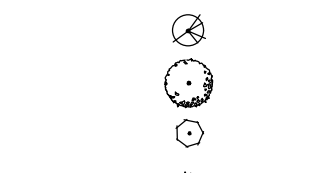
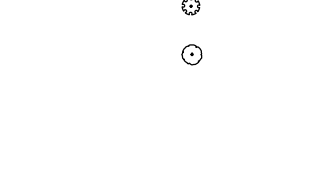




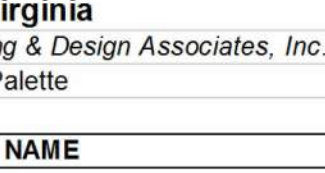
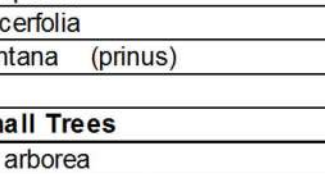
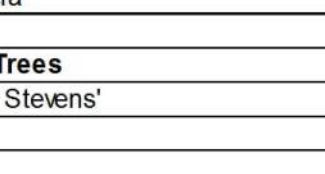


- NOTES:
- All new trees shall be mulched within a minimum two and one-half-foot (2 1/2') radius planting area. All shrubs shall be mulched within a one-half-foot area of the plant.
 - There are 82 parking spaces. At 10 spaces per tree required, there are 9 shade trees within the parking area.

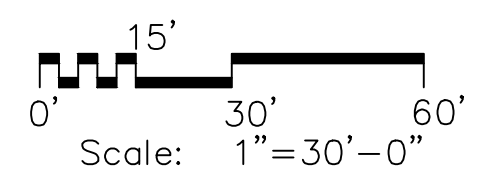
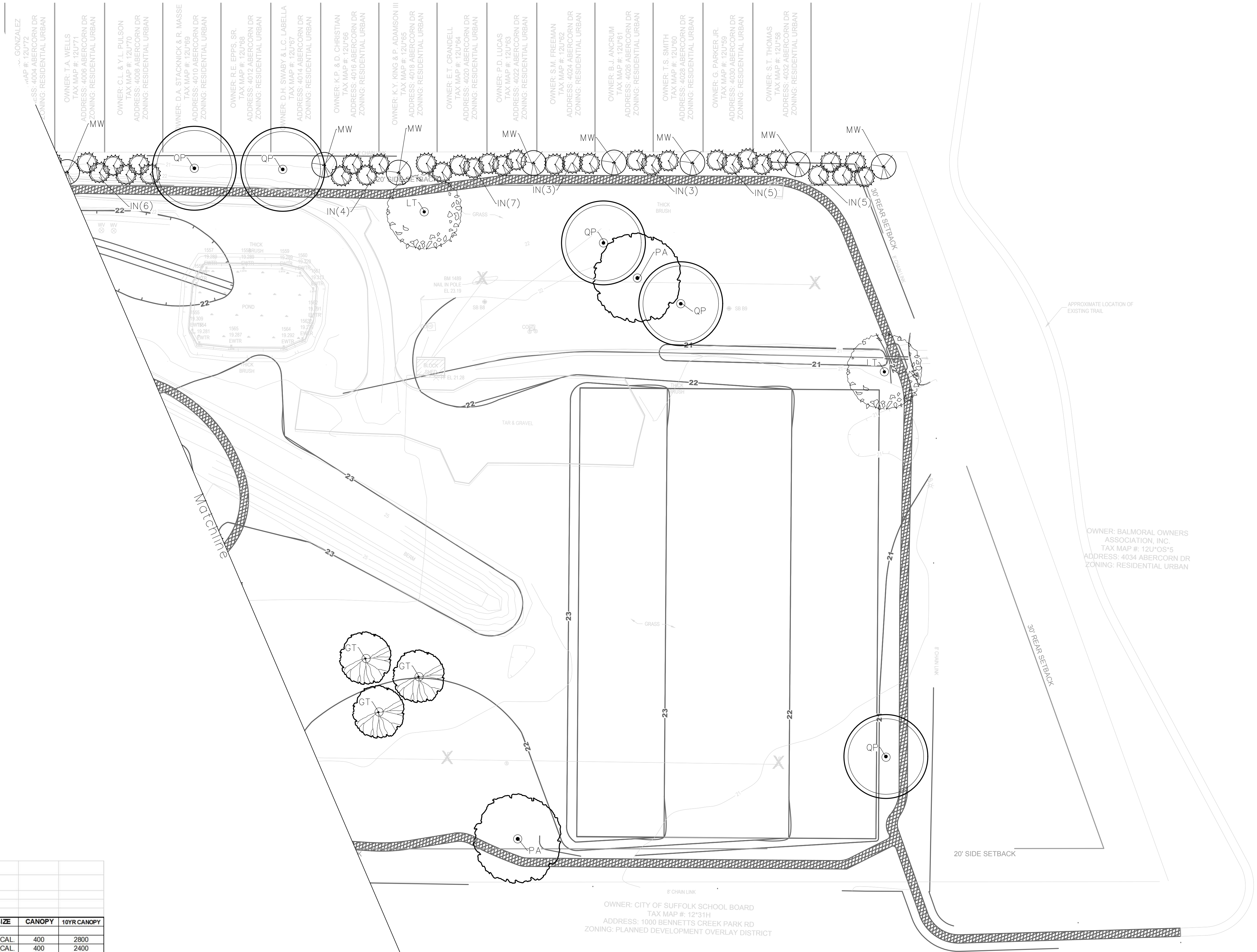


- NOTES:
- Total area of sight 425,981 sf
 - 10 % canopy coverage required per Suffolk UDO section 31-603(e)A
 - 425,981 * .1 = 42,598 sf
 - Existing canopy to remain (estimated based on aerial take off) 46,700 sf
 - additional canopy required 42,598-46,700 = -(4102)
 - no additional canopy required per 31-603(e)A
 - Additional canopy provided 16,271 sf



-  Tulip poplar
-  Honey locust
-  London plane
-  Chestnut Oak
-  Serviceberry
-  Wax Myrtle
-  Nelly Stevens Holly
-  Bayberry
-  Yucca
-  New Jersey Tea
-  Flowering Quince
-  Inkberry
-  Black-eyed-Susan
-  Pink Muhly Grass
-  Switch Grass

Bennetts Creek									
Suffolk, Virginia									
Land Planning & Design Associates, Inc.									
Landscape Palette									
12/18/2018									
SYMBOL	SCIENTIFIC NAME	COMMON NAME	QTY	SPACING	COND.	SIZE	CANOPY	10YR CANOPY	
Shade Trees									
LT	<i>Liriodendron tulipifera</i>	Tulip poplar	7	AS SHOWN	B&B	3" CAL	400	2800	
PA	<i>Platanus x acerifolia</i>	London Planetree	6	AS SHOWN	B&B	3" CAL	400	2400	
QP	<i>Quercus montana (prinus)</i>	Chestnut Oak	9	AS SHOWN	B&B	3" CAL	400	3600	
Medium/Small Trees									
AA	<i>Aamelanchier arborea</i>	Serviceberry	3	AS SHOWN	B&B	3" CAL	250	750	
GT	<i>Gleditsia tricanthus inermis</i>	Thornless Honeylocust	13	AS SHOWN	B&B	3" CAL	300	3900	
MW	<i>Myrica cerifera</i>	Wax myrtle	11	AS SHOWN	B&B	3" CAL	175	1925	
Evergreen Trees									
IN	<i>Ilex 'Nelly R. Stevens'</i>	Nelly Stevens Holly	56	AS SHOWN	B&B	3" CAL	16	896	
Shrubs									
CA	<i>Ceanothus americanus</i>	New Jersey Tea	18	3.5'	#3	18"-24"			
CS	<i>Chaenomeles x speciosa 'O Yashima'</i>	Flowering Quince	2	as shown	#3	24"-30"			
IG	<i>Ilex glabra 'Shamrock'</i>	Inkberry	45	4"	#3	18"-24"			
MP	<i>Myrica pensylvanica 'Bobzam'</i>	Compact Bayberry	4	as shown	#3	18"-24"			
Grasses and perennials									
MC	<i>Muhlenbergia capillaris</i>	Pink Muhlygrass	40	2.5'	#2				
PV	<i>Panicum virgatum</i>	Switch Grass	27	24"	#2				
RH	<i>Rudbeckia hirta</i>	Black Eyed Susan	68	AS SHOWN	0'9"				
YF	<i>Yucca filamentosa</i>	Adams Needle	44		#2				
								ADDITIONAL CANOPY COVERAGE	16271



GENERAL

- 1. THE DESIGN OF THE STRUCTURE COMPLIES WITH THE 2015 VIRGINIA CONSTRUCTION CODE.
2. THE STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE DESIGN CRITERIA OF THE TECHNICAL INSTRUCTIONS AS FOLLOWS:
a. AMERICAN CONCRETE INSTITUTE (ACI) 318
b. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) 14TH EDITION
3. GRAVITY DESIGN LOADS ARE AS FOLLOWS:
a. DEAD LOADS
(1) SUPERIMPOSED 10 PSF
(2) EQUIPMENT WEIGHTS PER MECHANICAL & ELECTRICAL
b. LIVE LOADS
OFFICE SPACE 50 PSF OR 2,000 LBS
ROOF
MINIMUM 20 PSF
SNOW LOADING 30 PSF

4. THE DESIGN OF THE STRUCTURE TO RESIST WIND PRESSURES IS IN ACCORDANCE WITH INTERNATIONAL BUILDING CODES SECTION 1609.0, WHICH IS BASED ON ASCE 7, CHAPTER 6. DESIGN INFORMATION IS AS FOLLOWS:

- a. BASIC 3 SECOND GUST WIND SPEED (FIGURE 6-1) 120 MPH PER HOUR
b. WIND LOAD IMPORTANCE FACTOR (TABLE 6-1) w = 1.0
c. WIND EXPOSURE CATEGORY FOR MAIN RESISTING SYSTEM C
5. THE DESIGN OF THE STRUCTURE TO RESIST SEISMIC FORCES IS IN ACCORDANCE WITH INTERNATIONAL BUILDING CODES SECTION 1613 AND ASCE 7.
a. OCCUPANCY CATEGORY II
b. SEISMIC IMPORTANCE FACTOR (TABLE 11.5-1) Ie = 1.0
c. SPECTRAL RESPONSE ACCELERATIONS (USGS SEISMIC HAZARDS PROGRAM)
(1) AT SHORT PERIODS Sa = 0.15 g
(2) AT ONE SECOND PERIOD S1 = 0.05 g
d. SITE CLASS (TABLE 20.3-1) D
e. SEISMIC DESIGN CATEGORY (TABLES 11.6-1 AND 11.6-2) B
f. ANALYSIS PROCEDURE EQUIVALENT LATERAL FORCE

6. THE FOLLOWING ESTIMATED MECHANICAL EQUIPMENT WEIGHTS ARE COORDINATED WITH THE MECHANICAL ENGINEER'S BASIS OF DESIGN:

- a. DOAS-1 = 3650 POUNDS
b. FOR CASES WHERE THE PURCHASED EQUIPMENT EXCEEDS THE LISTED ESTIMATED EQUIPMENT WEIGHT BY 10%, CONTACT THE STRUCTURAL ENGINEER TO DETERMINE IF STRUCTURAL STRENGTHENING IS REQUIRED.

7. THE GENERAL CONTRACTOR AND SUB-CONTRACTORS SHALL DETERMINE THE SCOPE OF THE STRUCTURAL WORK FROM THE CONTRACT DOCUMENTS DRAWINGS SHALL NOT BE CONSIDERED SEPARATELY FOR PURPOSES OF BIDDING THE STRUCTURAL WORK. DUE CONSIDERATION SHALL BE GIVEN TO OTHER STRUCTURAL WORK OR WORK RELATED TO THE STRUCTURE, INCLUDING NECESSARY COORDINATION DESCRIBED OR IMPLIED BY THE ARCHITECTURAL AND MECHANICAL DRAWINGS.

8. SCALES NOTED ON THE DRAWINGS ARE FOR GENERAL INFORMATION ONLY. NO DIMENSIONAL INFORMATION SHALL BE OBTAINED BY DIRECT SCALING OF THE DRAWINGS.

9. 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.

10. STRUCTURAL MEMBERS HAVE BEEN LOCATED AND DESIGNED TO ACCOMMODATE THE MECHANICAL EQUIPMENT AND OPENINGS SPECIFIED BY THE MECHANICAL ENGINEER. ANY SUBSTITUTIONS RESULTING IN REVISIONS TO THE STRUCTURE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE STRUCTURAL ENGINEER.

11. COORDINATE STRUCTURAL SUPPORT LOCATIONS WITH EQUIPMENT SERVICE ACCESS CLEARANCES PER EACH EQUIPMENT MANUFACTURER AND PER BUILDING CODE.

12. 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.

13. TEMPORARY BRACING SHALL BE PROVIDED FOR ALL WALLS SUBJECT TO PORTION BACKFILL. BRACE WALL PLUMB UNTIL STABILIZING ELEMENT ABOVE IS IN PLACE.

14. ALL COLUMNS AND FOOTINGS SHALL BE CENTERED ON GRIDLINES IN EACH DIRECTION, UNLESS NOTED OTHERWISE.

15. METHODS, PROCEDURES, AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND INSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.

16. CONTRACTOR MUST FABRICATE AND ERECT STEEL IN ACCORDANCE WITH OSHA'S SAFETY REQUIREMENTS, 29 CFR 1926 SAFETY STANDARDS FOR STEEL ERECTION, FINAL RULE.

17. A REGISTERED ENGINEER SHALL DESIGN ALL NON-PRIMARY STRUCTURAL ELEMENTS SUCH AS ARCHITECTURAL PRECAST SYSTEMS, MULLIONS, STAIRS, RAILINGS, PREFABRICATED ROOF TRUSSES AND METAL STUDS TO MEET THE REQUIREMENTS OF THE LOCAL GOVERNING JURISDICTION. SUBMIT CALCULATIONS AND SHOP DRAWINGS WITH THE RESPONSIBLE ENGINEER'S SEAL AND SIGNATURE FOR THE STATE WHERE THE CONSTRUCTION TAKES PLACE.

DEMOLITION

- 1. ALL WORK SHALL BE IN GENERAL COMPLIANCE WITH THE 2015 VIRGINIA CONSTRUCTION CODE.
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 BUILDING MANAGEMENT. 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. ERECT BARRIERS, FENCES, GUARDRAILS, WARNING DEVICES AND SHORING TO PROTECT PERSONNEL WORKING IN THE AREA.
8. SUBMIT PROGRAM AND SCHEDULE PROPOSED FOR THE ACCOMPLISHMENT OF THE DEMOLITION WORK TO THE OWNER FOR APPROVAL. INCLUDE SAFE CONDITIONS OF THE WORK, DISPOSITION OF MATERIALS, PROTECTION OF REMAINING PROPERTY AND COORDINATION WITH OTHER WORK.
9. THE CONTRACTOR SHALL TAKE MEASURES TO COORDINATE THE CONSTRUCTION SUCH THAT INTERFERENCE 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.

FOUNDATIONS AND EARTHWORK

- 1. THE CONTRACTOR SHALL COMPLY WITH THE RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL REPORT AND THE PROJECT SPECIFICATIONS WHEN PERFORMING EXCAVATIONS, FOOTING CONSTRUCTION, AND PREPARING THE SUBGRADE UNDER THE SLAB ON GRADE.
2. IF CONSTRUCTION FOUNDATION CONDITIONS VARY FROM THE GEOTECHNICAL REPORT, BEFORE CONTINUING CONSTRUCTION, NOTIFY THE GEOTECHNICAL ENGINEER, STRUCTURAL ENGINEER AND ARCHITECT.
3. THE FOUNDATION DESIGN FOR THE STRUCTURE IS FOR AN ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF. FOUNDATIONS EXPOSED TO FROST SHALL BEAR A MINIMUM OF 18 INCHES BELOW FINISHED GRADE.
4. DO NOT OVER EXCAVATE THE FOOTPRINT OF SPREAD AND STRIP FOOTINGS. IF OVER EXCAVATION IS REQUIRED BEYOND THE 3 INCH CONSTRUCTION TOLERANCE, FORM THE SIDES OF THE FOOTING.
5. ALWAYS PROVIDE POSITIVE SURFACE WATER DRAINAGE AWAY FROM THE STRUCTURE.

SOIL SUPPORTED SLABS

- 1. FOR SOIL SUPPORTED SLABS, PROPERLY COMPACT AND PROOFRULL SUBGRADE AS RECOMMENDED IN THE GEOTECHNICAL REPORT. MAINTAIN THE SUBGRADE FREE OF STANDING WATER, MELT AND FROZEN SOIL. PROVIDE A MINIMUM OF 6 INCHES OF GRANULAR MATERIAL. COVER GRANULAR MATERIAL WITH A VAPOR RETARDER BEFORE PLACING THE SLAB.
2. FOR RIGID INSULATION PLACED BELOW SOIL SUPPORTED SLABS, PROVIDE A MINIMUM OF A 60 PSI RATING IF PLACED ON # 57 STONE AND 40 PSI IF PLACED ON #21A STONE. FOR RIGID INSULATION PLACED AGAINST BELOW GRADE WALLS, PROVIDE A MINIMUM OF A 25 PSI RATING.
3. FOR SLAB ON GRADE REINFORCEMENT, PROVIDE WELDED WIRE FABRIC IN FLAT SHEETS.
4. PROVIDE CONSTRUCTION JOINTS OR CRACK CONTROL JOINTS AT EACH COLUMN LINE IN EACH DIRECTION FOR SLABS ON GRADE. SPACE ADDITIONAL JOINTS AT A MAXIMUM OF 36 TIMES THE SLAB THICKNESS OR 18 FEET, WHICHEVER IS LESS. PLACE JOINTS SO THAT PANEL LENGTHS ARE LESS THAN 15'. PROVIDE 3/4" DIAMETER BY 1-4" SMOOTH DOWELS AT 12 INCHES ON CENTER AT SLAB ON GRADE CONSTRUCTION JOINTS.
5. WHERE SLAB CONTROL JOINTS (C.J.) ARE SHOWN ON THE DRAWINGS, CONSTRUCTION JOINTS MAY BE SUBSTITUTED TO ACCOMMODATE THE CONTRACTOR'S PROPOSED STRATEGY.

CONCRETE

- 1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 301, ACI 318 AND ACI 302.
2. PROVIDE CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH (fc) AT 28 DAYS AND A MAXIMUM WATER/CEMENT RATIO AS FOLLOWS:
a. FOOTINGS 3,000 PSI 0.45
b. SLABS ON GRADE 4,000 PSI 0.45
USE NORMAL WEIGHT AGGREGATES CONFORMING TO ASTM C33 AND TYPE II PORTLAND CEMENT CONFORMING TO ASTM C150. CONCRETE EXPOSED TO FREEZING SHALL MEET ACI 318, SECTION 4.2.
3. CONCRETE EXPOSED TO WEATHER SHALL BE AIR ENTRAINED.
4. CONCRETE REINFORCEMENT BARS SHALL CONFORM TO ASTM A618, 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.
5. PROVIDE WELDED WIRE FABRIC CONFORMING TO ASTM A1064 IN FLAT SHEETS. LAP FABRIC TWO MESHES AT SPLICES.
6. GROUT UNDER ALL COLUMN BASE PLATES AND BEAM BEARING PLATES WITH NON-SHRINK, NON-METALLIC GROUT WHICH CONFORMS TO CORPS OF ENGINEERS SPECIFICATION CRD-C 821-82 OR ASTM C1107.
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 318R "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.

CONCRETE - CONTINUED

- 9. PROVIDE CONCRETE COVER PROTECTION OF REINFORCEMENT PER ACI 318 SECTION 7.7 WITH STANDARD BAR CHAIRS AND SPACERS REQUIRED TO MAINTAIN MINIMUM CONCRETE PROTECTION. COMMON MINIMUM CONCRETE COVERS APPLYING TO THIS PROJECT:
a. CAST AGAINST AND PERMANENTLY EXPOSED EARTH 3 INCHES
b. CONCRETE EXPOSED TO EARTH OR WEATHER
(1) #6 BARS AND LARGER 2 INCHES
(2) #5 BARS AND SMALLER 1 1/2 INCHES
c. CONCRETE NOT EXPOSED TO WEATHER OR GROUND CONTACT
(1) SLABS, WALLS OR JOISTS 1 1/2 INCHES
(2) #14 BARS AND LARGER 1 1/2 INCHES
(3) #11 BARS AND SMALLER 3/4 INCHES
10. WELDING OF REINFORCEMENT BARS IS NOT PERMITTED.
11. CHAMFER EXPOSED EDGES OF CONCRETE 3/4" UNLESS OTHERWISE NOTED.
12. DO NOT PLACE CONDUIT OR PIPES IN ANY CONCRETE ELEMENTS INCLUDING SLABS, BEAMS, WALLS OR COLUMNS UNLESS INDICATED IN THE STRUCTURAL DOCUMENTS.

STRUCTURAL STEEL

- 1. UNLESS NOTED OTHERWISE, STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING:
a. ANCHOR BOLTS ASTM F1554, GRADE 36
b. WIDE FLANGE SHAPES ASTM A992-01, 50 KSI
c. PLATES ASTM A36
d. HSS RECTANGULAR ASTM A500, GRADE C (Fy = 50 KSI)
e. HSS ROUND ASTM A500, GRADE C (Fy = 46 KSI)
f. STEEL PIPE ASTM A53, GRADE B (Fy = 35 KSI)
g. ROUND BARS ASTM A36
SUBMIT MILL TEST REPORTS FOR REVIEW.
2. BOLTS FOR STRUCTURAL STEEL CONNECTIONS SHALL BE HIGH STRENGTH BOLTS PER THE REQUIREMENTS OF ASTM A325, TYPE N, X, OR SC, UNLESS NOTED OTHERWISE. PROVIDE BOLTS DESIGNED AS BEARING TYPE BOLTS AND INSTALL PER THE "SNUG TIGHT" CONDITION. INSTANTANEOUSLY TIGHTEN UNDER THE ELEMENT TO BE TIGHTENED. FOR "SLIP CRITICAL" TYPE CONNECTIONS, USE COMPRESSIBLE WASHERS COMPLYING WITH ASTM F959 TYPE 325-3 DIRECT TENSION INDICATORS.
3. DETAIL, FABRICATE AND ERECT STRUCTURAL STEEL PER THE AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS," THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" AND THE SAFETY REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION AND THE LOCAL JURISDICTION. PROVIDE TEMPORARY SEATS TO FACILITATE SAFE ERECTION.
4. THE FABRICATOR SHALL PREPARE THE SHOP DRAWINGS BASED ON DESIGN LOADS PROVIDED OR CONNECTION DESIGN INFORMATION SHOWN IN THE TYPICAL DETAILS. THE FABRICATOR IS RESPONSIBLE FOR CHOOSING, DESIGNING AND DETAILING ALL CONNECTIONS PARTIALLY DETAILED IN THE CONTRACT DRAWINGS IN ACCORDANCE WITH PART 10 OF THE AISC "MANUAL OF STEEL CONSTRUCTION" THIRTEENTH EDITION.
5. IF THE FABRICATOR USES ALTERNATE CONNECTION DESIGNS, A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF CONSTRUCTION SHALL SEAL AND SIGN THE CONNECTION DESIGNS AND SUBMIT WITH THE SHOP DRAWINGS.
6. PERFORM WELDING IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY STANDARD D1.1. PROVIDE ELECTRODES FOR SHOP AND FIELD WELDS IN ACCORDANCE WITH AWS A5.1 OR AWS A5.5, CLASS EXXX, LOW HYDROGEN. ALL WELDS SHALL USE FILLER METAL WITH A MINIMUM CVN VALUE OF 20 FT-LSB AT -20 DEGREES FAHRENHEIT.
7. ALL SHOP AND FIELD WELDING SHALL BE EXECUTED BY WELDERS AND WELDING OPERATORS WHO HAVE BEEN PREVIOUSLY QUALIFIED BY TEST AS PRESCRIBED IN AWS D1.1 OF THE AMERICAN WELDING SOCIETY TO PERFORM THE TYPES OF WELDS REQUIRED ON THE PROJECT.
8. RETURN ALL WELDS AT CORNERS TWICE THE NOMINAL SIZE OF THE WELD MINIMUM, UNLESS OTHERWISE NOTED.
9. SEE ARCHITECTURAL AND OTHER ENGINEERING DRAWINGS FOR MISCELLANEOUS STEEL NOT SHOWN ON THE STRUCTURAL DRAWINGS.
10. NO FABRICATION SHALL PROCEED PRIOR TO SHOP DRAWING APPROVAL.
11. NO OPENINGS IN BEAMS OR COLUMNS ARE PERMITTED WITHOUT STRUCTURAL ENGINEER'S WRITTEN APPROVAL.
12. SPLICING OF STRUCTURAL STEEL MEMBERS WHERE NOT DETAILED ON THE CONTRACT DOCUMENTS IS PROHIBITED WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER AS TO LOCATION, TYPE OF SPLICE AND CONNECTION TO BE MADE.
13. THE CONTRACTOR SHALL NOTIFY WILEY WILSON, INC. OF ANY MISFABRICATION STRUCTURAL STEEL PRIOR TO ERECTION OF SAME.

COLD-FORMED STEEL

- 1. ALL GALVANIZED STUDS AND JOISTS 16 GAGE AND HEAVIER SHALL BE FORMED FROM STEEL THAT CONFORMS TO THE REQUIREMENTS OF ASTM A1003, GRADE ST35H, WITH A MINIMUM YIELD STRENGTH OF 50,000 PSI. ALL 18 GAGE STUDS SHALL CONFORM TO ASTM A1003 GRADE ST33H, WITH A MINIMUM YIELD STRENGTH OF 33,000 PSI.
2. ALL GALVANIZED TRACK, BRIDGING, END CLOSURES AND ACCESSORIES SHALL BE FORMED FROM STEEL THAT CONFORMS TO THE REQUIREMENTS OF ASTM A1003, GRADE ST33H, WITH A MINIMUM YIELD STRENGTH OF 33,000 PSI.
3. ALL STUDS AND ACCESSORIES SHALL BE FORMED FROM STEEL HAVING A GALVANIZED COATING WHICH CONFORMS TO ASTM A525 G-60.
4. WELDING OF COLD FORMED STEEL SHALL NOT BE PERMITTED.
5. BOLTING AND SELF DRILLING/SELF TAPPING SCREWS MAY BE EMPLOYED. THE CONTRACTOR SHALL SUBMIT MECHANICAL FASTENER DATA FOR REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER.
6. STUD MEMBERS MAY BE PUNCHED. JOIST AND HEADER MEMBERS SHALL NOT BE PUNCHED.
7. STUD AND TRACK DEPTHS SHALL BE AS INDICATED ON THE DRAWINGS. TRACK SHALL BE 18 GAGE MINIMUM.
8. PRIOR TO PREFABRICATION OF FRAMING, THE CONTRACTOR SHALL SUBMIT FABRICATION AND ERECTION DRAWINGS TO THE ARCHITECT AND/OR STRUCTURAL ENGINEER FOR REVIEW.
9. FRAMING COMPONENTS MAY BE PRE-ASSEMBLED INTO PANELS PRIOR TO ERECTING. PREFABRICATED PANELS SHALL BE SQUARE OR THE APPROPRIATE SHAPE WITH COMPONENTS AND ATTACHED IN A MANNER AS TO PREVENT RACKING.
10. ALL FRAMING COMPONENTS SHALL BE CUT SQUARELY FOR ATTACHMENT TO PERPENDICULAR MEMBERS, OR AS REQUIRED FOR AN ANGULAR FIT AGAINST ABUTTING MEMBER. MEMBERS SHALL BE HELD POSITIVELY IN PLACE UNTIL PROPERLY FASTENED.
11. WIRE TYING SHALL NOT BE PERMITTED.
12. COLD FORMED HEADERS SHALL HAVE STIFFENERS COMPRISED OF 14 GAGE TRACK PLACED VERTICALLY BETWEEN THE FLANGES. CONNECTION BETWEEN THE 2 MEMBERS COMPRISING THE LINTEL, END SPACERS AND STIFFENERS SHALL BE SCREWED AT FIFTH POINTS.
13. STUDS SHALL BE ATTACHED TO TRACK ON TWO SIDES.
14. AT BUILT-UP STUD LOCATIONS, STUDS SHALL BE ATTACHED AT QUARTER POINTS OR 36" MAXIMUM ON CENTER.
15. METAL STUD ERECTOR SHALL BE RESPONSIBLE FOR LOCATION AND ATTACHING CONNECTION PLATES TO ROLLED STEEL SECTIONS.
16. HEADER WITH INTERIOR STIFFENERS SHALL HAVE INDIVIDUAL STIFFENERS INSPECTED PRIOR TO ASSEMBLING THE TWO JOIST MEMBERS.
17. AT TRACK BUTT JOINTS, ABUTTING PIECES OF TRACK SHALL BE SECURELY ANCHORED TO A COMMON STRUCTURAL ELEMENT, OR THEY SHALL BE LAP SPLICED TOGETHER.
18. STUDS SHALL BE PLUMBED, ALIGNED AND SECURELY ATTACHED TO THE FLANGE OR WEBS OF BOTH UPPER AND LOWER TRACKS.
19. WALL STUD BRIDGING SHALL BE ATTACHED IN A MANNER TO PREVENT STUD ROTATION. BRIDGING ROWS SHALL BE SPACED AT THIRD POINTS AND BRIDGING SHALL BE 16 GAGE, 1-1/2" WIDE WITH 9/16" FLANGES.

SPECIAL INSPECTIONS

- 1. AN INDEPENDENT AGENCY SHALL PERFORM SPECIAL INSPECTIONS PER CHAPTER 17 OF THE 2015 VIRGINIA CONSTRUCTION CODE. THE RESPONSIBLE INSPECTOR SHALL BE A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE CONSTRUCTION TAKES PLACE. THESE INSPECTIONS ARE IN ADDITION TO THE INSPECTIONS SPECIFIED IN SECTION 11.3.
2. WRITTEN REPORTS SHALL BE SUBMITTED TO THE BUILDING OFFICIAL AND REGISTERED DESIGN PROFESSIONAL STATING COMPLIANCE OR NON-COMPLIANCE WITH DESIGN DOCUMENTS AND RECOMMENDATIONS. WRITTEN REPORTS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE CONSTRUCTION TAKES PLACE.
3. REQUIRED VERIFICATION AND INSPECTION OF STRUCTURAL STEEL CONSTRUCTION:
a. MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS AND WASHERS:
(1) IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS - PERIODIC.
(2) MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED - PERIODIC.
b. INSPECTION OF HIGH-STRENGTH BOLTING:
(1) BEARING-TYPE CONNECTIONS - PERIODIC.
c. MATERIAL VERIFICATION OF STRUCTURAL STEEL:
(1) IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.
(2) MANUFACTURER'S CERTIFIED MILL TEST REPORTS.
d. MATERIAL VERIFICATION OF WELD FILLER MATERIALS:
(1) IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS.
(2) MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.
e. INSPECTION OF STRUCTURAL STEEL WELDING:
(1) COMPLETE AND PARTIAL PENETRATION GROOVE WELDS - CONTINUOUS.
(2) MULTIPASS FILLET WELDS - CONTINUOUS.
(3) SINGLE-PASS FILLET WELDS GREATER THAN 5/16 INCH - CONTINUOUS.
(4) SINGLE-PASS FILLET WELDS LESS THAN OR EQUAL TO 5/16 INCH - PERIODIC.
(5) FLOOR AND ROOF DECK WELDS - PERIODIC.
f. INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS - PERIODIC.
4. REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION:
a. INSPECTION OF REINFORCING STEEL AND PLACEMENT - PERIODIC.
b. INSPECT BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED - CONTINUOUS.
c. VERIFYING USE OF REQUIRED DESIGN MIX - PERIODIC.
d. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE - CONTINUOUS.
e. INSPECTION OF CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES - CONTINUOUS.
f. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURES AND TECHNIQUES - PERIODIC.
g. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED - PERIODIC.

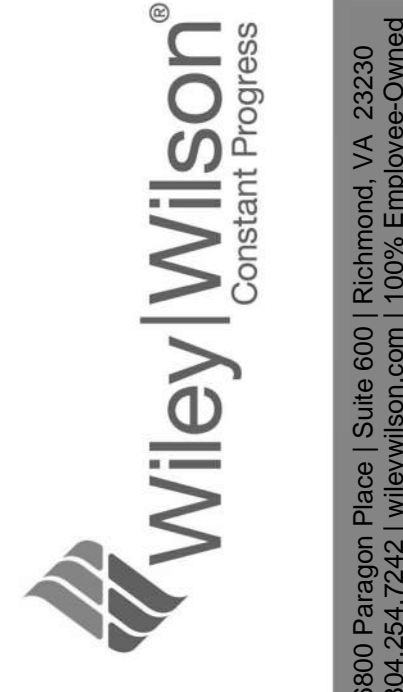
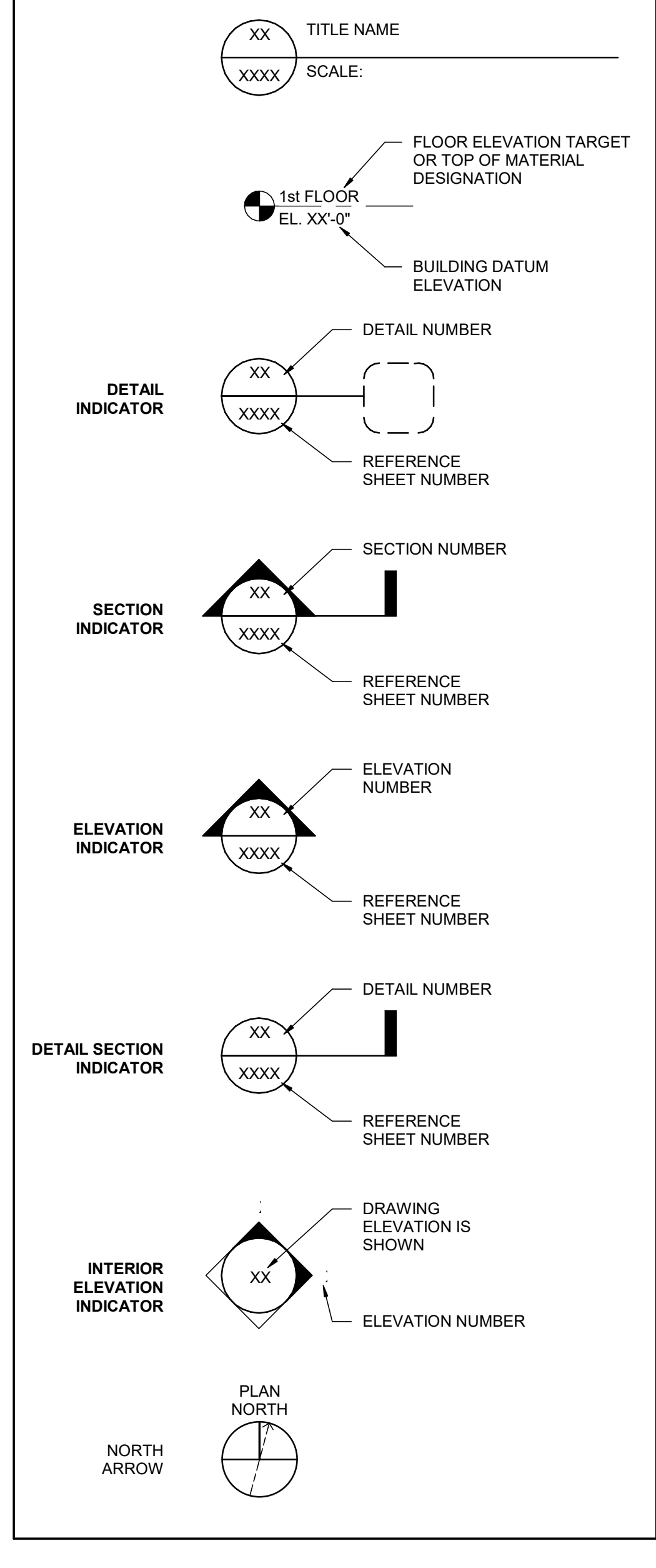
ABBREVIATIONS

Table with columns A, C, G, N, T and rows listing abbreviations for various construction materials and components like AB-ANCHOR BOLT, ACY-ACRYLIC WALL COVERING, etc.

SPECIAL INSPECTIONS - CONTINUED

- 5. REQUIRED LEVEL 1 VERIFICATION AND INSPECTION OF MASONRY CONSTRUCTION:
a. AS MASONRY CONSTRUCTION BEGINS, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:
(1) PROPORTIONS OF SITE-PREPARED MORTAR - PERIODIC.
(2) CONSTRUCTION OF MORTAR JOINTS - PERIODIC.
(3) THE INSPECTION PROGRAM SHALL VERIFY:
(1) SIZE AND LOCATION OF STRUCTURAL ELEMENTS - PERIODIC.
(2) TYPE, SIZE AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES OR OTHER CONSTRUCTION - PERIODIC.
(3) SPECIFIED SIZE, GRADE AND TYPE OF REINFORCEMENT - PERIODIC.
(4) WELDING OF REINFORCING BARS - CONTINUOUS.
(5) PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40 DEGREES F) OR HOT WEATHER (TEMPERATURE ABOVE 90 DEGREES F) - PERIODIC.
c. PRIOR TO GROUTING, THE FOLLOWING SHALL BE VERIFIED TO ENSURE COMPLIANCE:
(1) GROUT SPACE IS CLEAN - PERIODIC.
(2) PLACEMENT OF REINFORCEMENT AND - PERIODIC.
(3) PROPORTIONS OF SITE-PREPARED GROUT - PERIODIC.
(4) CONSTRUCTION OF MORTAR JOINTS - PERIODIC.
(5) GROUT PLACEMENT SHALL BE VERIFIED TO ENSURE COMPLIANCE WITH CODE AND CONSTRUCTION DOCUMENTS PROVISIONS - CONTINUOUS.
e. PREPARATION OF ANY REQUIRED GROUT SPECIMENS, MORTAR SPECIMENS AND/OR PRISMS SHALL BE OBSERVED - CONTINUOUS.
f. COMPLIANCE WITH REQUIRED INSPECTION PROVISIONS OF THE CONSTRUCTION DOCUMENTS AND THE APPROVED SUBMITTALS SHALL BE VERIFIED - PERIODIC.
7. REQUIRED VERIFICATION AND INSPECTION OF SOILS:
a. VERIFY MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY - PERIODIC.
b. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL - PERIODIC.
c. PERFORM CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS - PERIODIC.
d. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL - CONTINUOUS.
e. PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PERIODIC.
8. CONTINUOUS: THE FULL-TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED.
9. PERIODIC: THE PART-TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK HAS BEEN OR IS BEING PERFORMED AND AT THE COMPLETION OF THE WORK.
10. FAILURE TO RETAIN AN INDEPENDENT TESTING AGENCY TO PERFORM THE REQUIRED SERVICES SPECIFIED ABOVE, OR FAILURE TO SUBMIT SIGNED AND SEALED REPORTS, INDICATES NON-COMPLIANCE WITH THE CONTRACT DOCUMENTS.

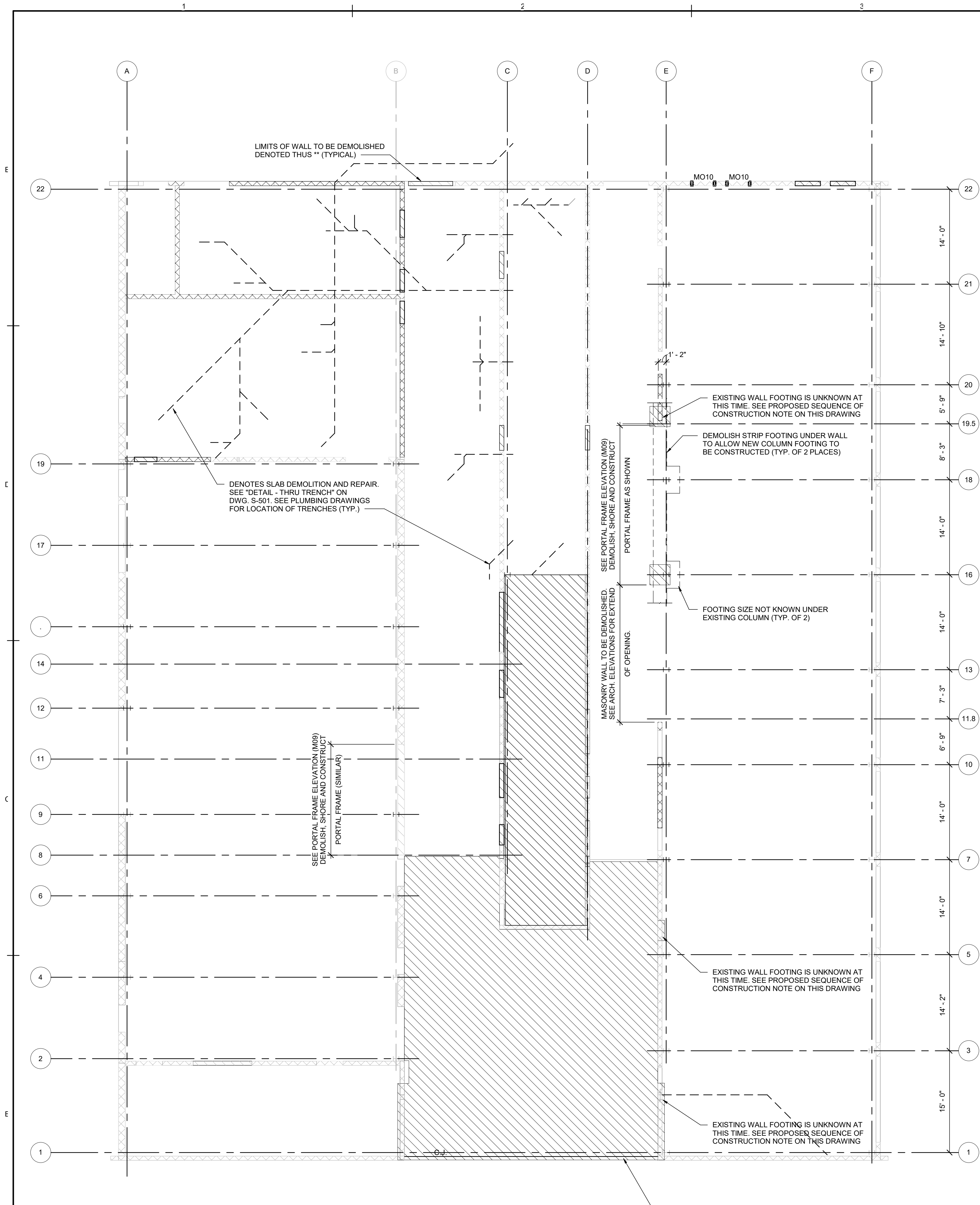
DRAWING SYMBOLS



CITY OF SUFFOLK BENNETT'S CREEK RECREATION CENTER RENOVATION

REVISION DESCRIPTION

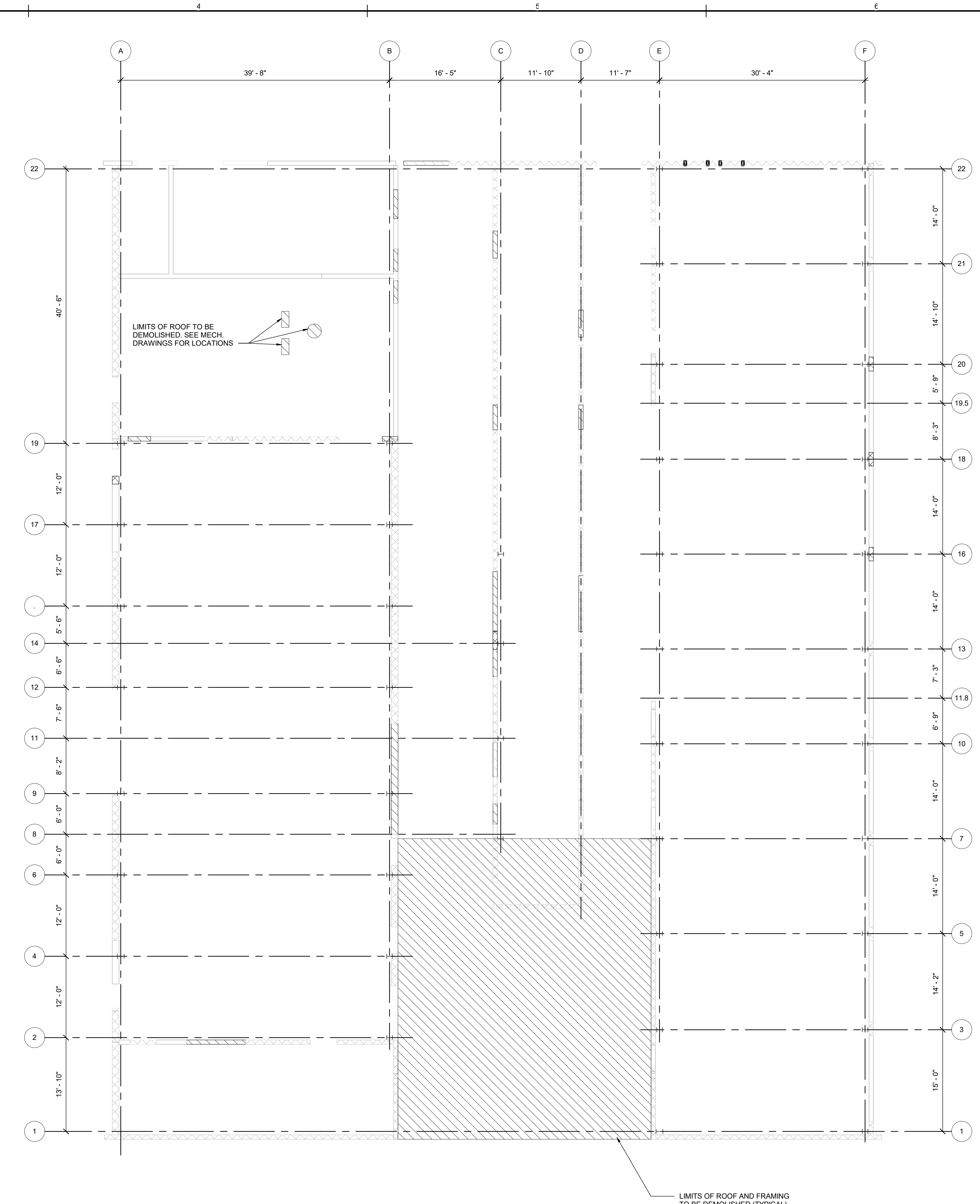
Table with columns for Date, Description, and other revision details. Includes project info like COMM NO: 215021, DATE: 12/18/2019, DRAWN: WJB, DESIGN: WJB, CHECK: WMD, SHEET TITLE: STRUCTURAL GENERAL NOTES, SHT. NO: S-001, REV. NO.



PLAN NORTH
1 FOUNDATION & FIRST FLOOR PLANS - DEMOLITION
 SCALE: 1/8" = 1'-0"

PROPOSED SEQUENCE OF CONSTRUCTION

- DEMOLISH EXISTING SLAB ON GRADE AS NECESSARY TO EXPOSE EXISTING COLUMN / WALL FOOTING EDGE, CORNER AND THICKNESS.
- ONCE THESE ITEMS ARE EXPOSED, NOTIFY THE ARCHITECT OR ENGINEER OF RECORD SO THAT A SITE VISIT CAN BE MADE TO INSPECT AND EVALUATE THESE CONDITIONS.



PLAN NORTH
2 ROOF FRAMING PLAN - DEMOLITION
 SCALE: 1/8" = 1'-0"

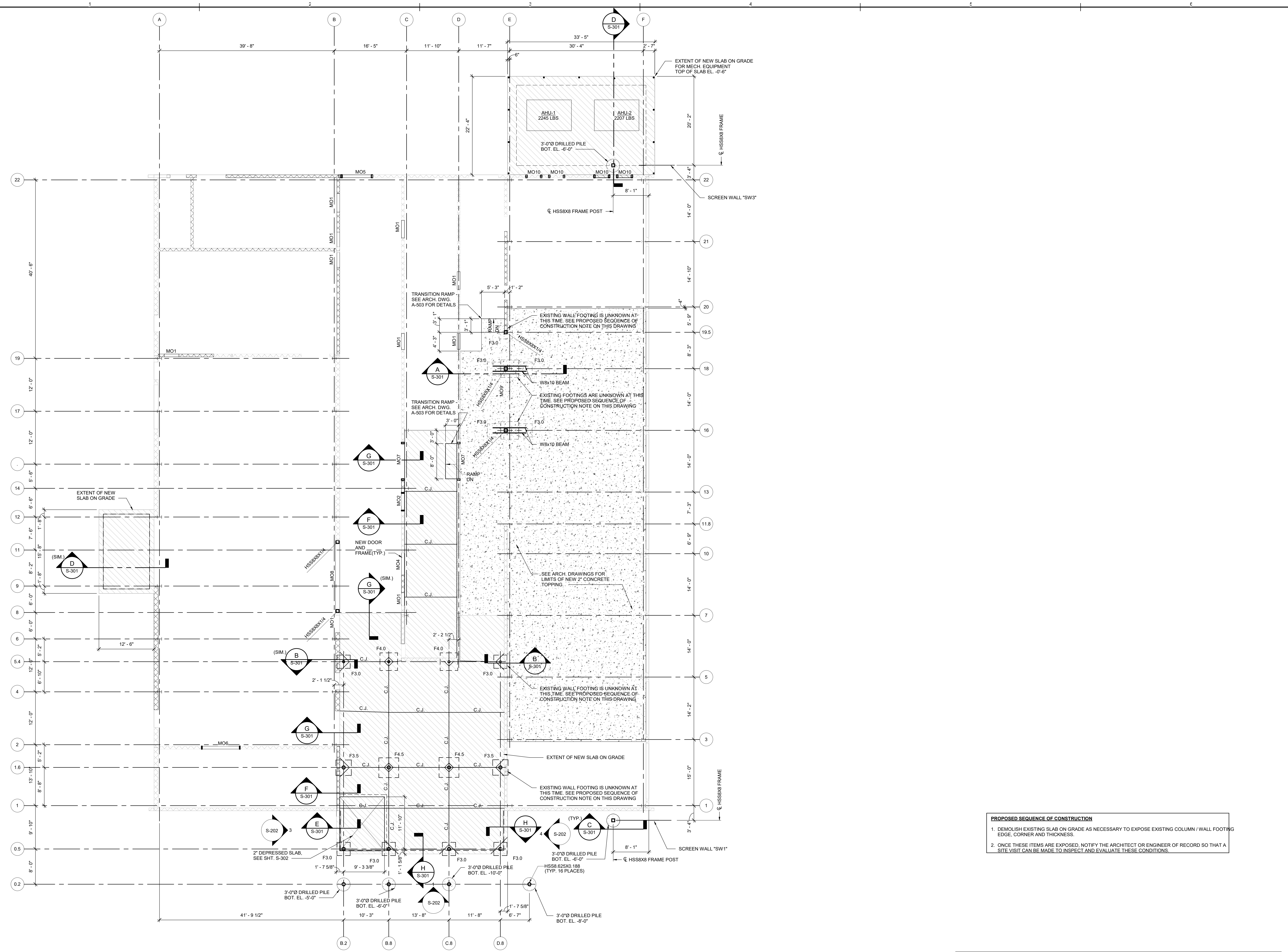


NO.	DATE	REVISION DESCRIPTION
1	12/18/2019	

COMM NO:	215021
DATE:	12/18/2019
DRAWN:	WJB
DESIGN:	WJB
CHECK:	WMD

SHEET TITLE
DEMOLITION SHEET

SHT. NO. **SD-101** REV. NO.



PROPOSED SEQUENCE OF CONSTRUCTION

1. DEMOLISH EXISTING SLAB ON GRADE AS NECESSARY TO EXPOSE EXISTING COLUMN / WALL FOOTING EDGE, CORNER AND THICKNESS.
2. ONCE THESE ITEMS ARE EXPOSED, NOTIFY THE ARCHITECT OR ENGINEER OF RECORD SO THAT A SITE VISIT CAN BE MADE TO INSPECT AND EVALUATE THESE CONDITIONS.

PLAN NORTH
1 FOUNDATION & FIRST FLOOR PLAN

- SCALE: 1/8" = 1'-0"
1. EXISTING FINISH FLOOR ELEVATION = 26'-0". REF. FINISH FLOOR ELEV. 0'-0".
 2. NEW SLAB ON GRADE TO BE 5" THICK, REINF. W6x6-W2.9xW2.9 WITH VAPOR BARRIER AND 6" GRANULAR FILL.
 3. 'C.J.' DENOTES CONTROL JOINT. SEE S-301 FOR DETAIL.
 4. 'MOF' INDICATES NEW MASONRY OPENING. SEE DWG. S-501 FOR NEW OPENING DETAILS.
 5. SEE ARCH. DWGS. FOR LOCATIONS AND SIZES OF NEW OPENINGS, AND DWG. S-501 FOR NEW OPENING DETAILS.
 6. ALL EXPOSED ENDS OF HSS TUBES ARE TO BE COVERED WITH A 1/4" CAP PLATE.



MARK	DIMENSIONS			REINFORCING				REMARKS
	WIDTH	LENGTH	DEPTH	A - BARS		B - BARS		
				QUANTITY	SIZE	QUANTITY	SIZE	
F3.0	3'-0"	3'-0"	1'-0"	3	4	3	4	
F3.5	3'-6"	3'-6"	1'-0"	3	5	3	5	
F4.0	4'-0"	4'-0"	1'-0"	4	5	4	5	
F4.5	4'-6"	4'-6"	1'-0"	5	5	5	5	

COMM NO:	215021
DATE:	12/18/2019
DRAWN:	WJB
DESIGN:	WJB
CHECK:	WMD
SHEET TITLE	
FOUNDATION PLAN & FIRST FLOOR PLAN	
SHT. NO.:	S-101
REV. NO.:	



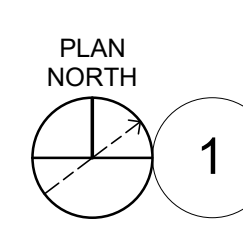
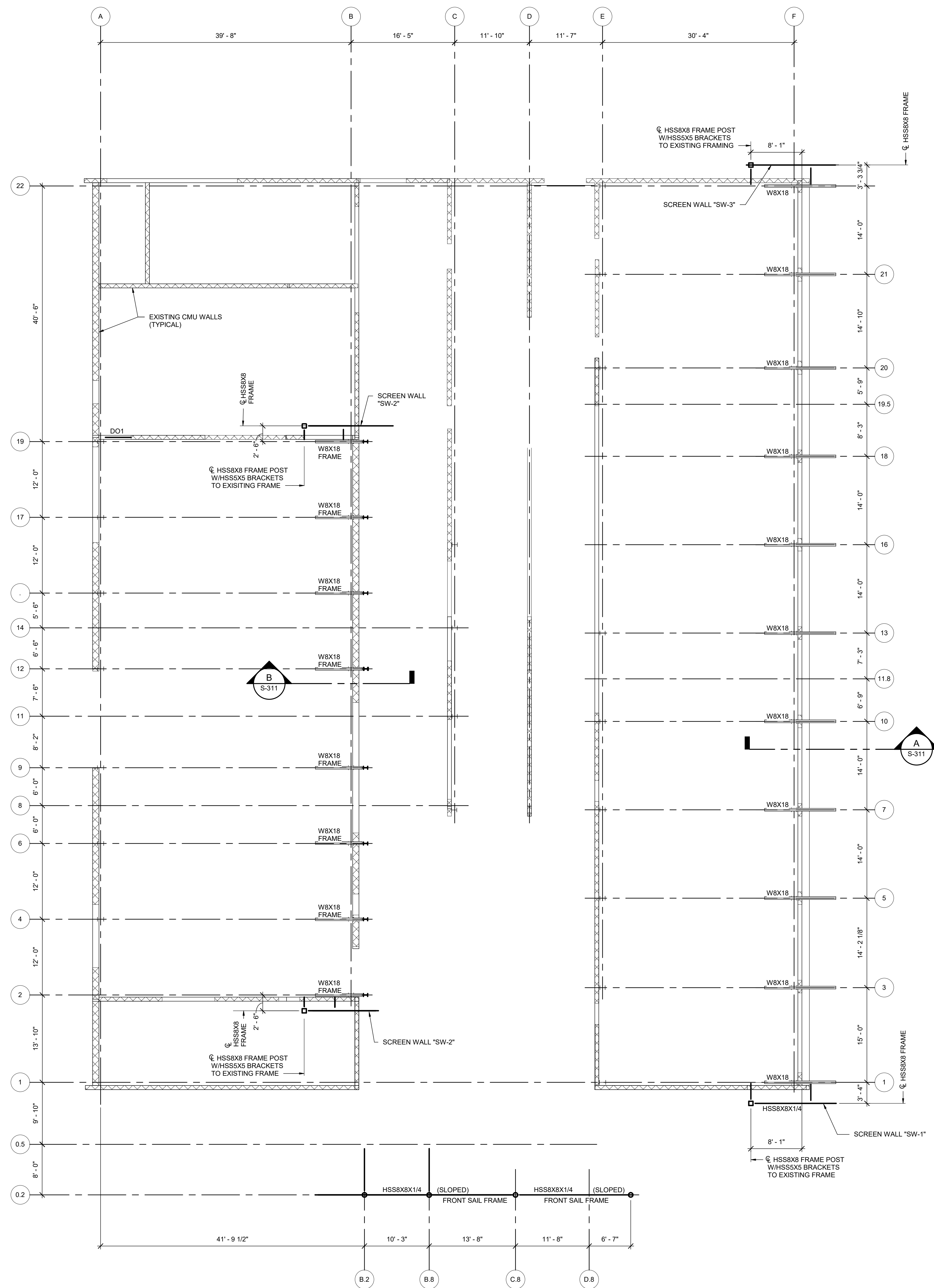
CITY OF SUFFOLK
BENNETT'S CREEK RECREATION
CENTER RENOVATION

1500 BENNETTS CREEK PARK RD. SUFFOLK, VA 23435

REVISION DESCRIPTION

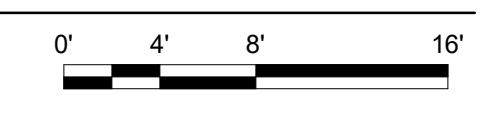
NO.	DATE	DESCRIPTION
1	12/18/2019	

COMM NO: 215021
DATE: 12/18/2019
DRAWN: WJB DESIGN: WJB
CHECK: WMD
SHEET TITLE
SUN SCREEN FRAMING PLAN
SHT. NO: S-103 REV. NO:

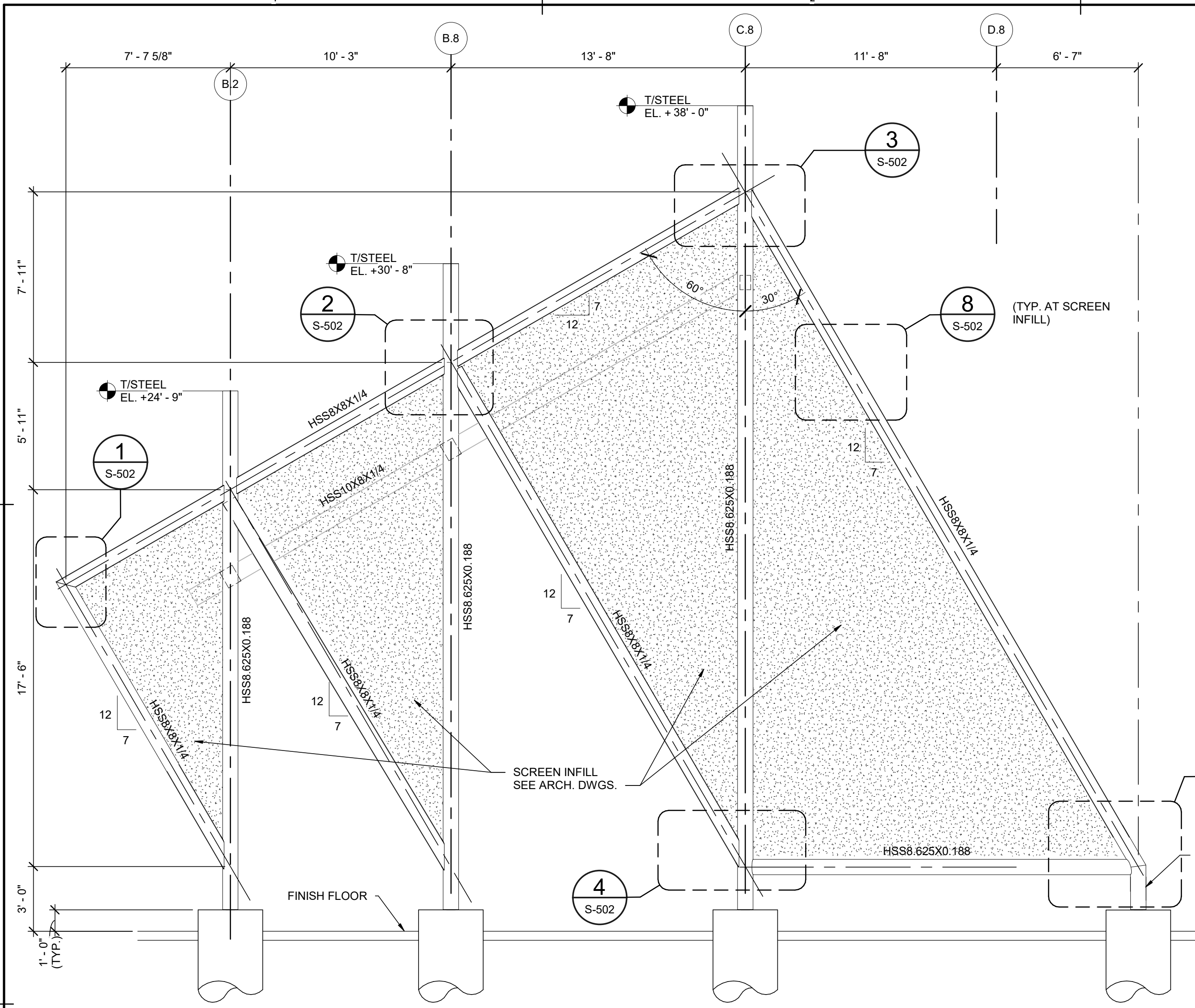


1 SUNSCREEN AND SCREENWALL FRAMING PLANS

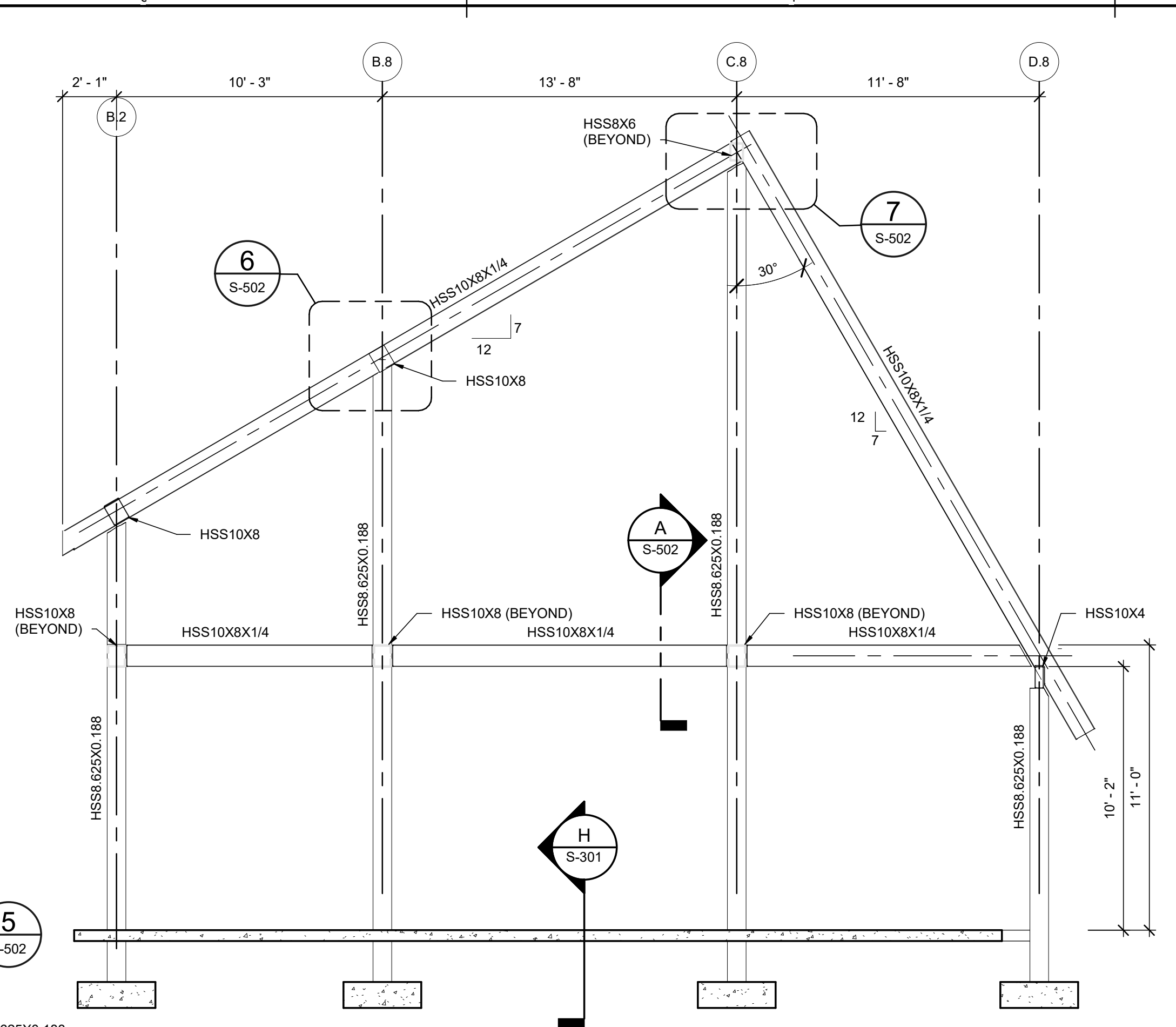
- SCALE: 1/8" = 1'-0"
- EXISTING ROOF FRAMING NOT SHOWN FOR CLARITY.
 - ALL EXPOSED ENDS OF HSS TUBES ARE TO BE COVERED WITH A 1/4" CAP PLATE.



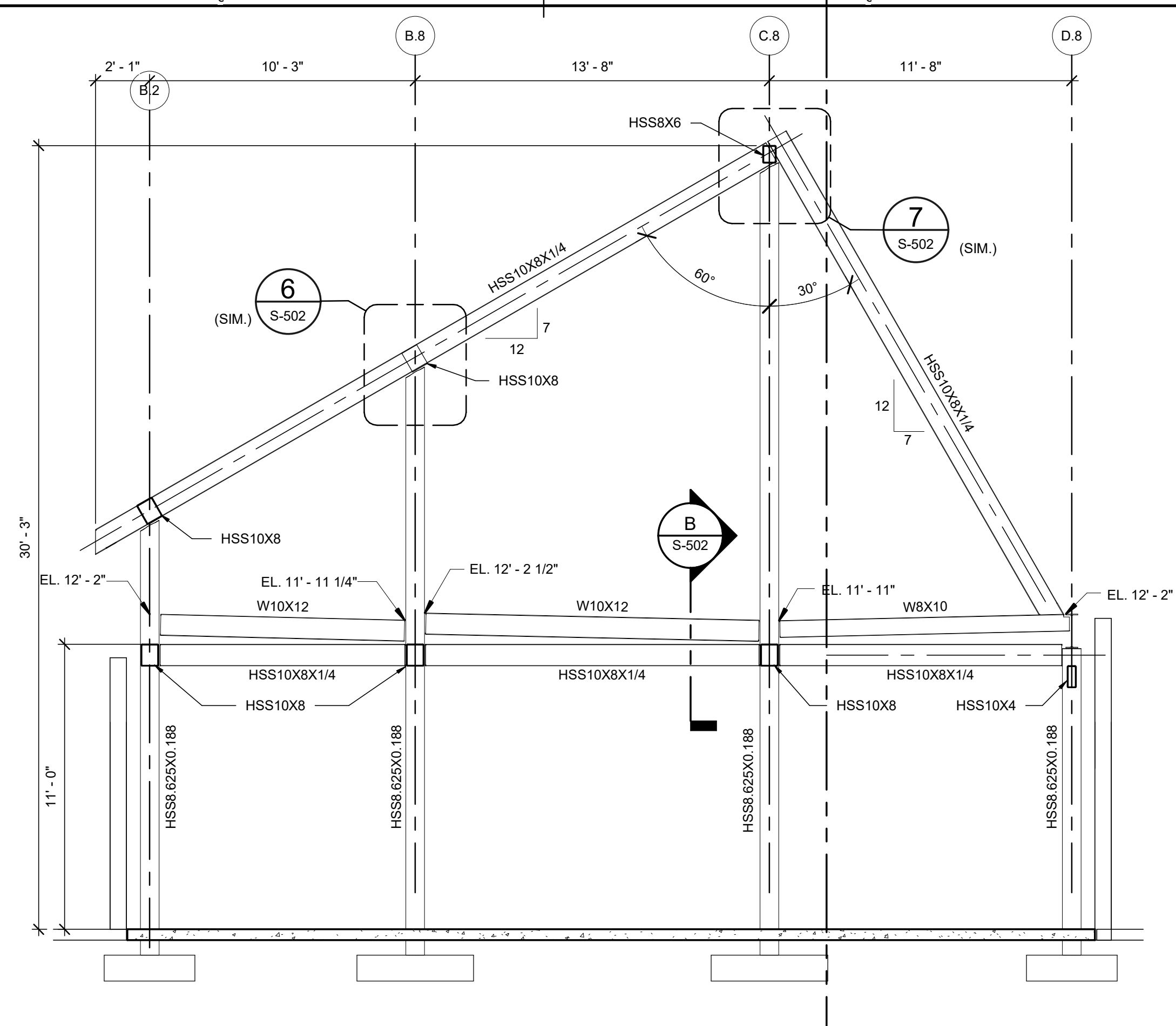
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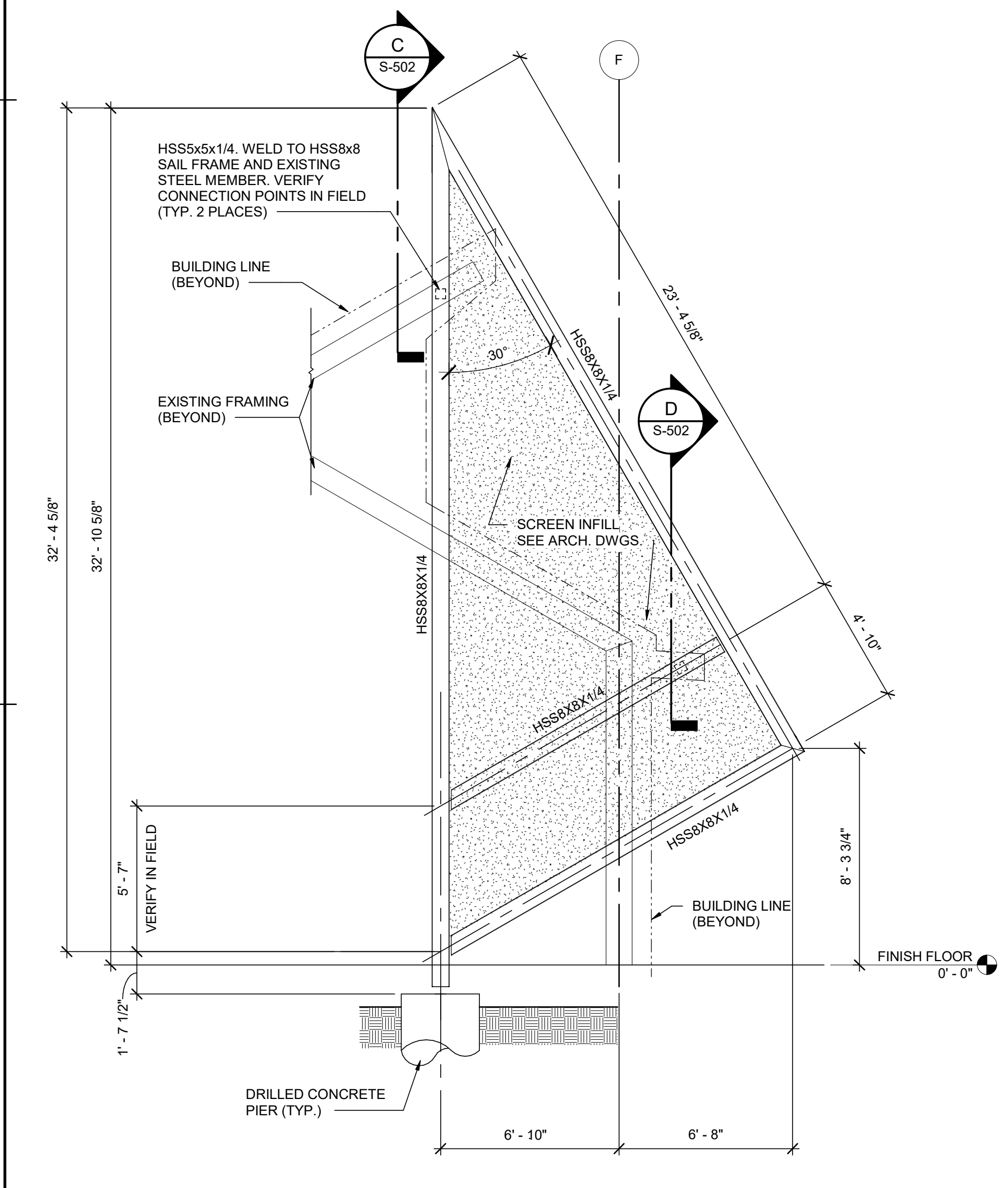
1 ELEVATION - FRONT SAILS AT ENTRANCE
S-102 SCALE: 1/4" = 1'-0"



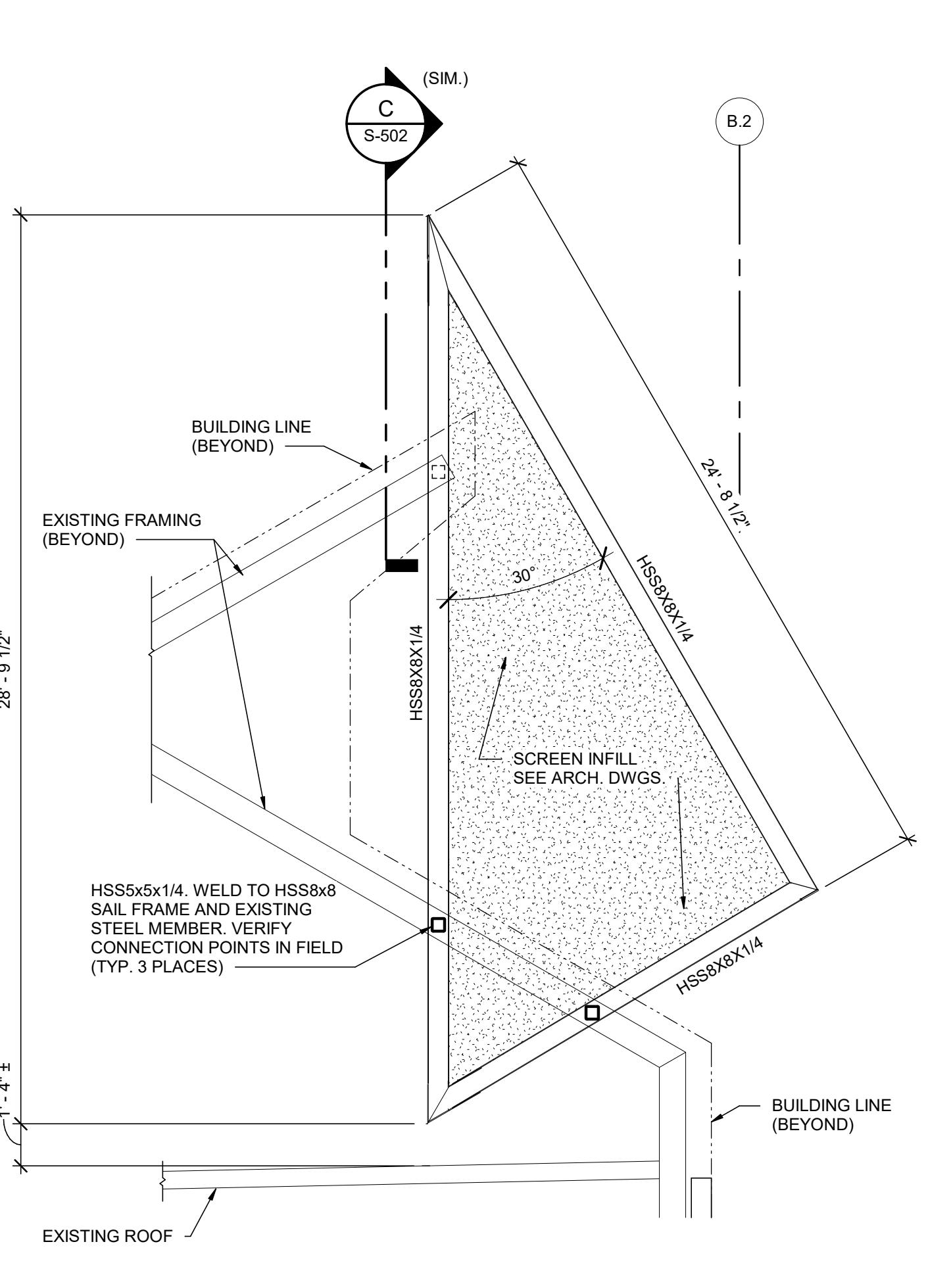
2 ELEVATION - FRONT ENTRANCE
S-102 SCALE: 1/4" = 1'-0"



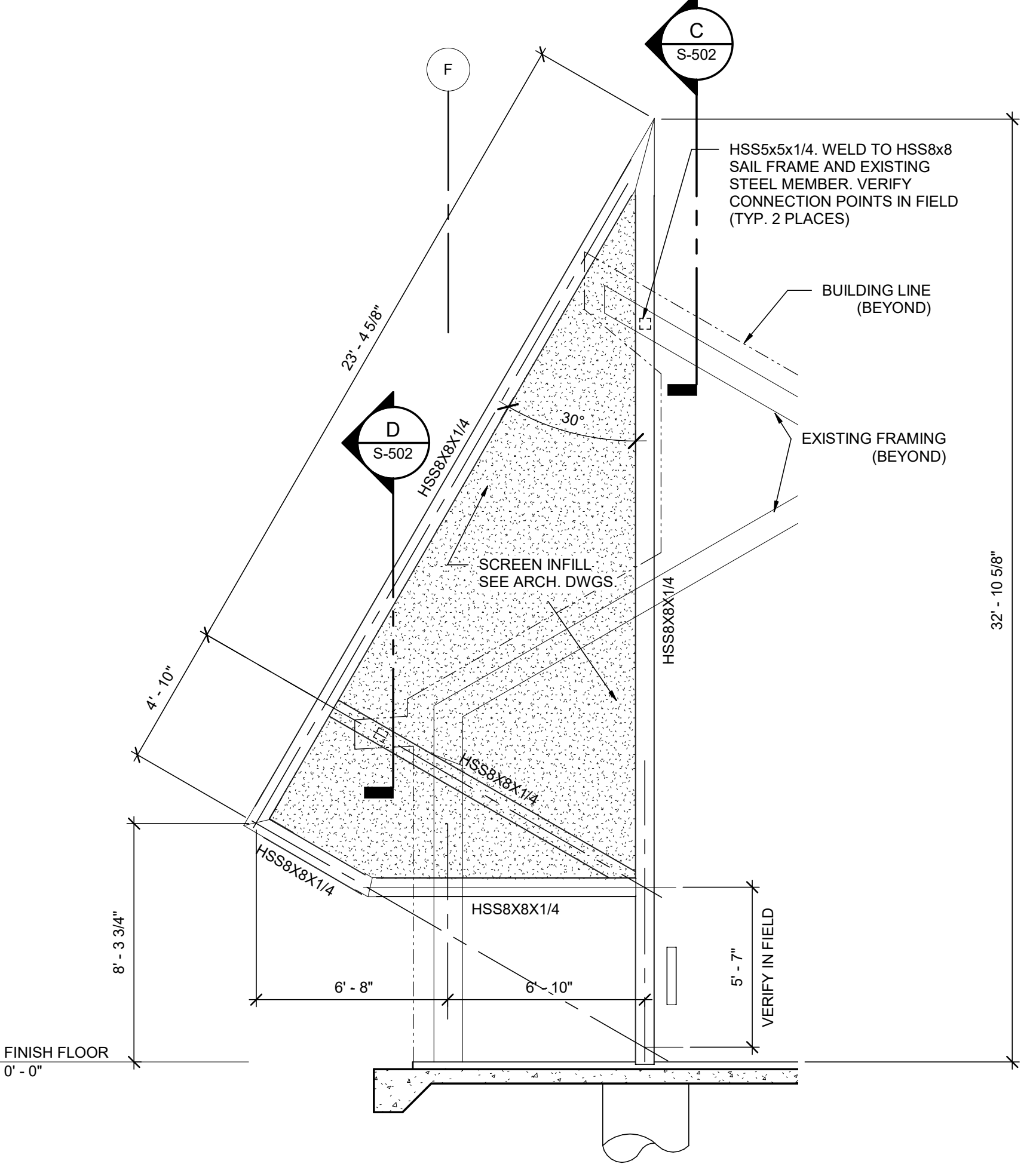
3 ELEVATION
S-102 SCALE: 1/4" = 1'-0"



4 ELEVATION - SCREEN WALL (SW) SW-1
S-102 SCALE: 1/4" = 1'-0"



5 ELEVATION - SCREEN WALL (SW) SW-2
S-102 SCALE: 1/4" = 1'-0"

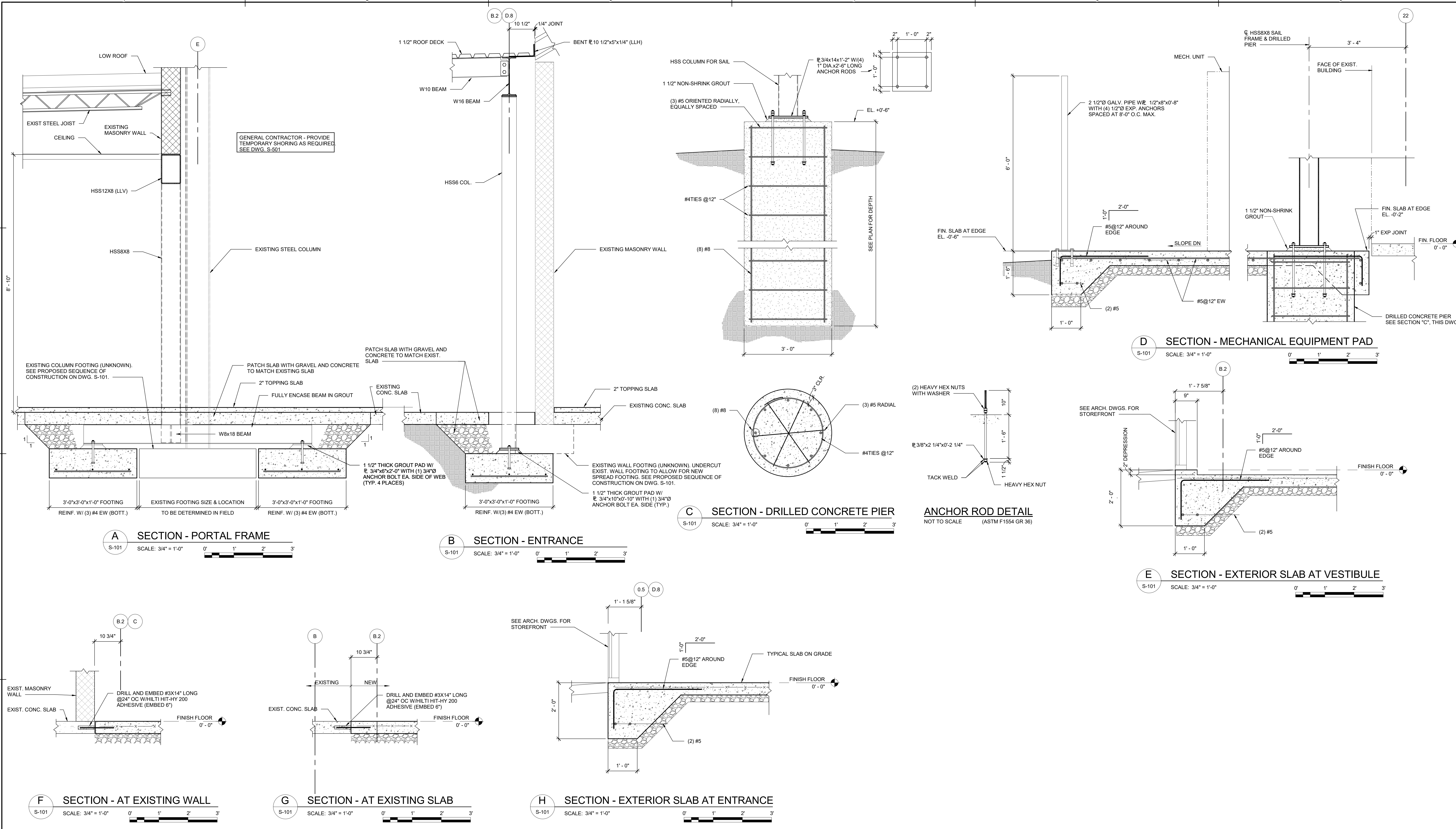


6 ELEVATION - SCREEN WALL (SW) SW-3
S-102 SCALE: 1/4" = 1'-0"

COMM NO:	215021
DATE:	12/18/2019
DRAWN:	WJB
DESIGN:	WJB
CHECK:	WMD
SHEET TITLE	
ELEVATIONS - FRAMES	
SHT. NO:	S-201
REV. NO:	

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1	12/18/2019	
COMM NO: 215021		
DATE: 12/18/2019		
DRAWN: WJB DESIGN: WJB		
CHECK: WMD		
SHEET TITLE		
FOUNDATION SECTIONS AND DETAILS		
SHT. NO:	REV. NO:	
S-301		



GENERAL CONTRACTOR - PROVIDE TEMPORARY SHORING AS REQUIRED. SEE DWG. S-501

EXISTING COLUMN FOOTING (UNKNOWN). SEE PROPOSED SEQUENCE OF CONSTRUCTION ON DWG. S-101.

PATCH SLAB WITH GRAVEL AND CONCRETE TO MATCH EXIST. SLAB

2" TOPPING SLAB

FULLY ENCASE BEAM IN GROUT

EXISTING CONC. SLAB

3'-0"x3'-0"x1'-0" FOOTING REINF. W/ (3) #4 EW (BOT.)

EXISTING FOOTING SIZE & LOCATION TO BE DETERMINED IN FIELD

3'-0"x3'-0"x1'-0" FOOTING REINF. W/ (3) #4 EW (BOT.)

3'-0"x3'-0"x1'-0" FOOTING REINF. W/ (3) #4 EW (BOT.)

1 1/2" THICK GROUT PAD W/ #3/4"x6"x2'-0" WITH (1) 3/4" ANCHOR BOLT EA. SIDE OF WEB (TYP. 4 PLACES)

EXISTING WALL FOOTING (UNKNOWN). UNDERCUT EXIST. WALL FOOTING TO ALLOW FOR NEW SPREAD FOOTING. SEE PROPOSED SEQUENCE OF CONSTRUCTION ON DWG. S-101.

1 1/2" THICK GROUT PAD W/ #3/4"x10"x0'-10" WITH (1) 3/4" ANCHOR BOLT EA. SIDE (TYP.)

EXIST. MASONRY WALL

DRILL AND EMBED #3X14" LONG @24" OC WITH HIT-HY 200 ADHESIVE (EMBED 6")

FINISH FLOOR 0'-0"

EXISTING

NEW

DRILL AND EMBED #3X14" LONG @24" OC WITH HIT-HY 200 ADHESIVE (EMBED 6")

FINISH FLOOR 0'-0"

TYPICAL SLAB ON GRADE

FINISH FLOOR 0'-0"

(2) #5

#5@12" AROUND EDGE

FINISH FLOOR 0'-0"

SEE ARCH. DWGS. FOR STOREFRONT

1'-1 5/8"

10 3/4"

10 3/4"

1'-1 5/8"

0.5 D.8

1'-1 5/8"

1'-1 5/8"

1'-1 5/8"

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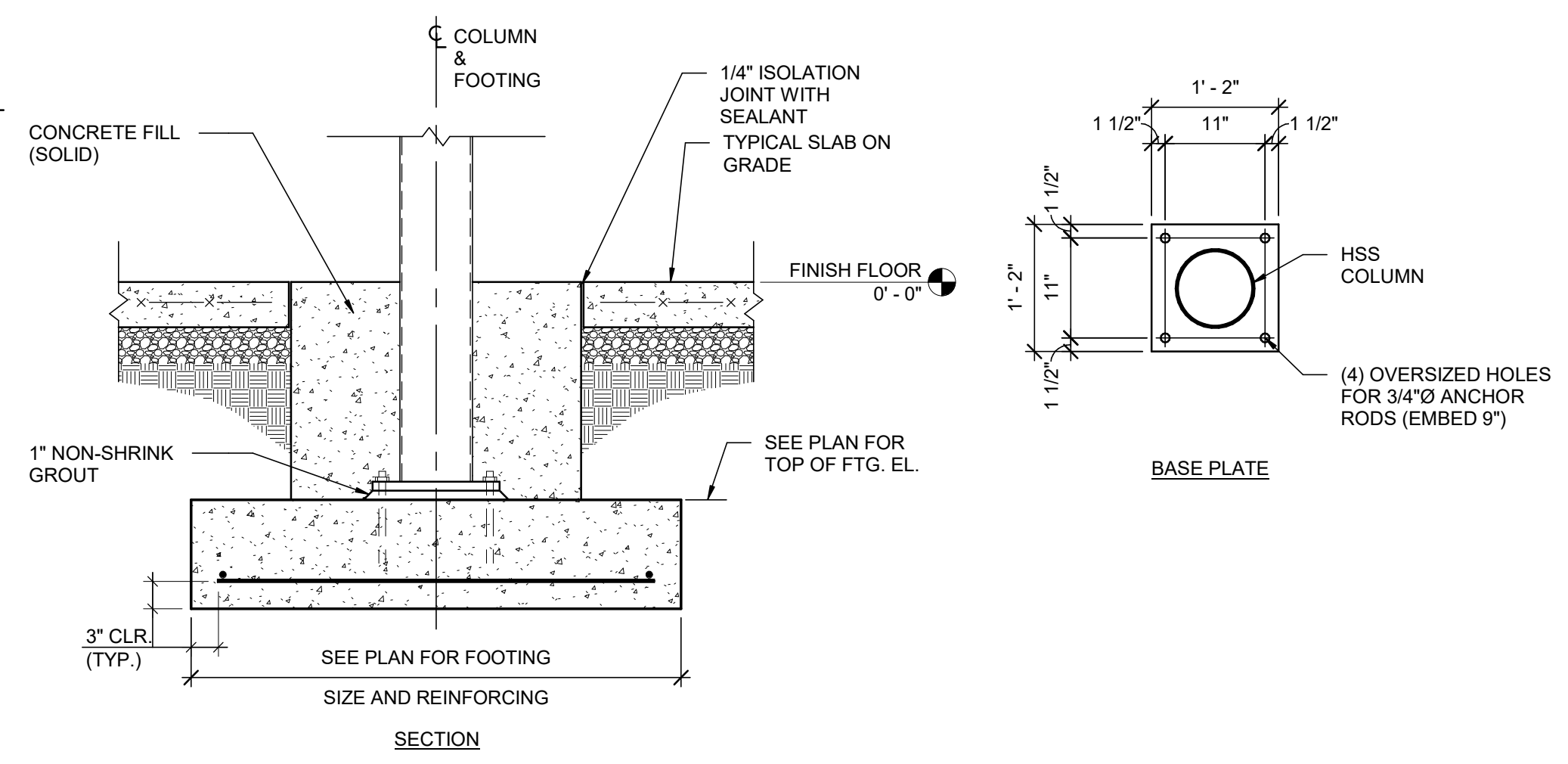
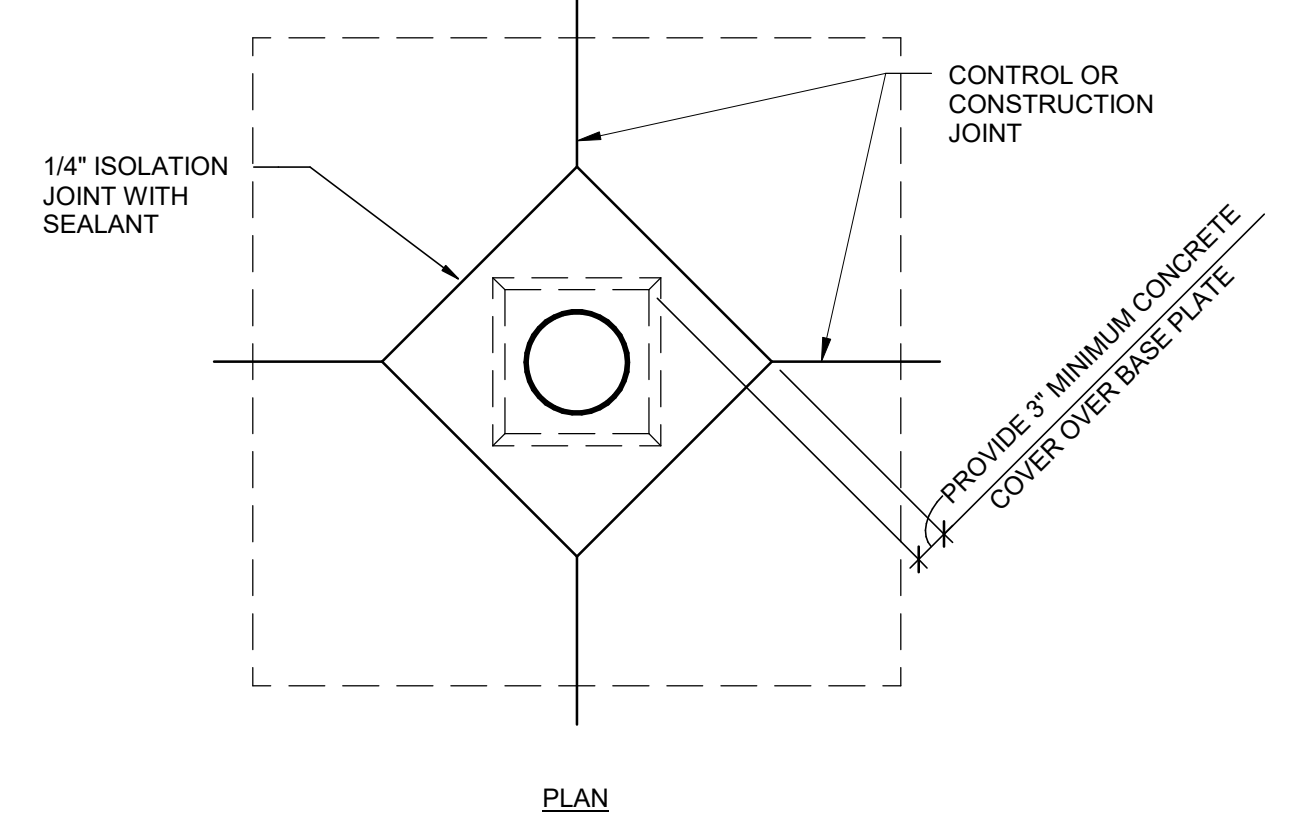
1'-1 5/8"

1'-1 5/8"

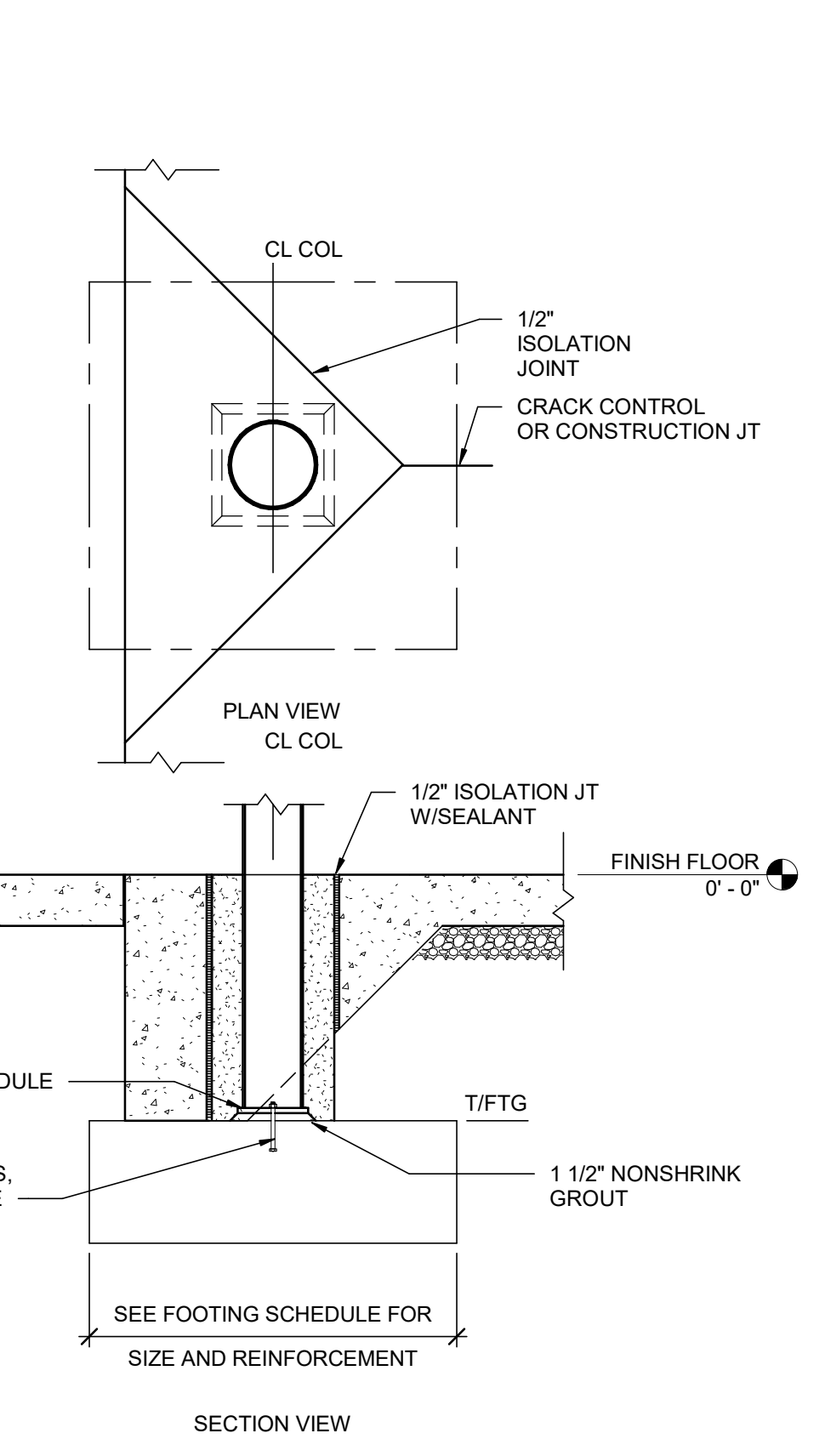
1'-1 5/8"

1'-1 5/8"

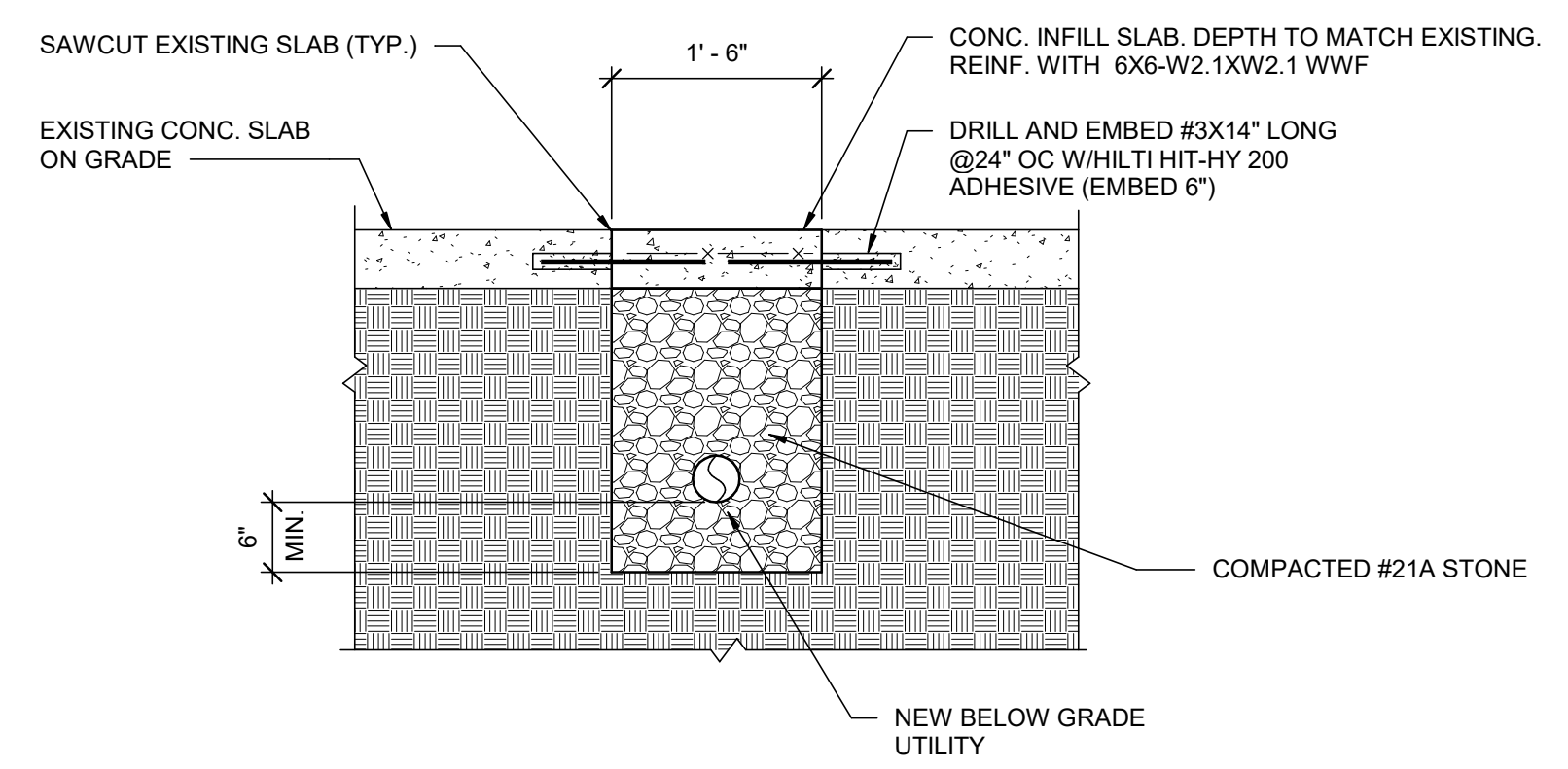
1'-1 5/8"



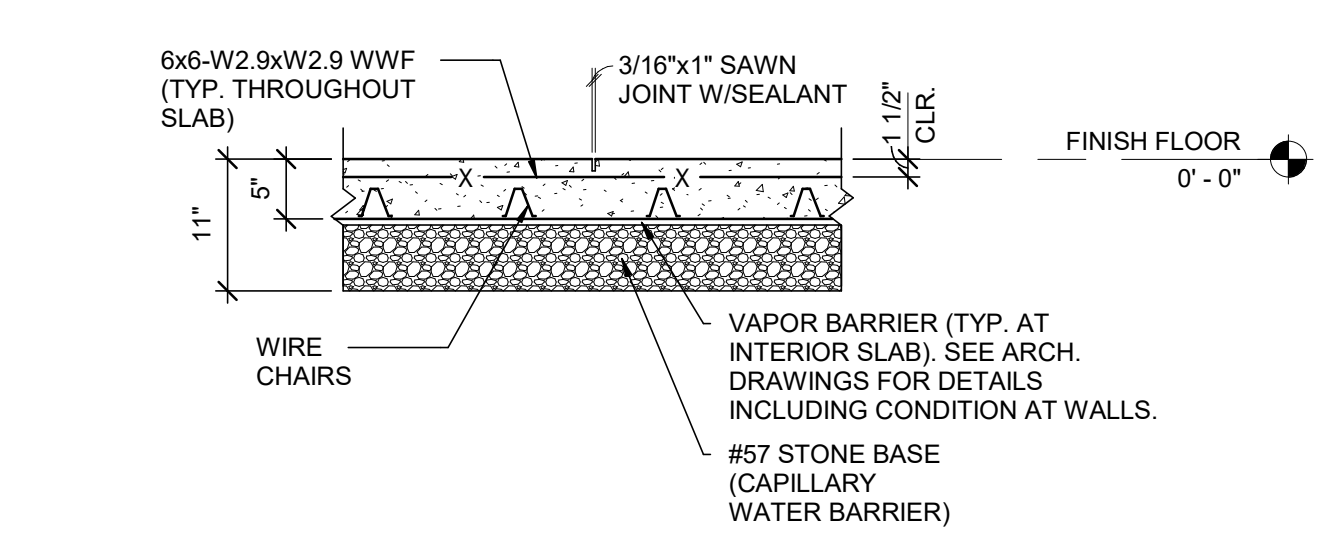
TYPICAL INTERIOR COLUMN FOOTING DETAIL
SCALE: 3/4" = 1'-0"



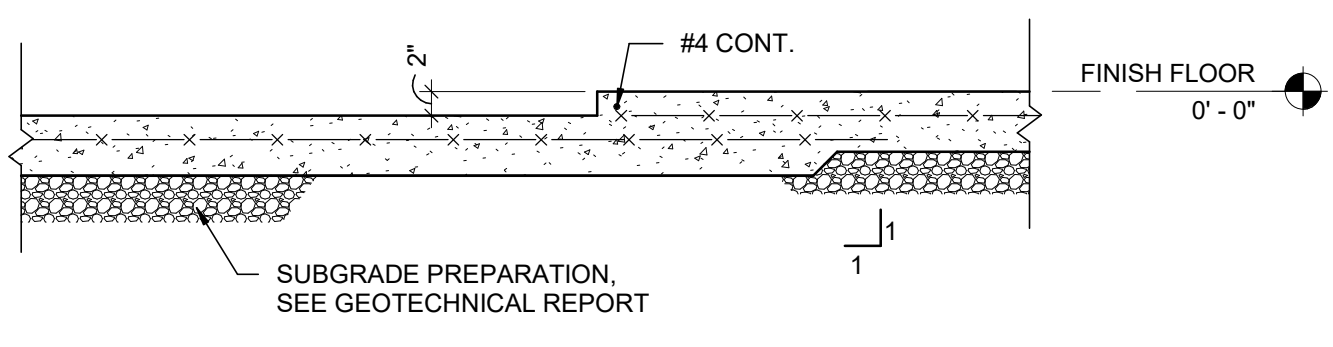
TYPICAL EXTERIOR COLUMN BASE PLATE DETAIL
SCALE: 3/4" = 1'-0"



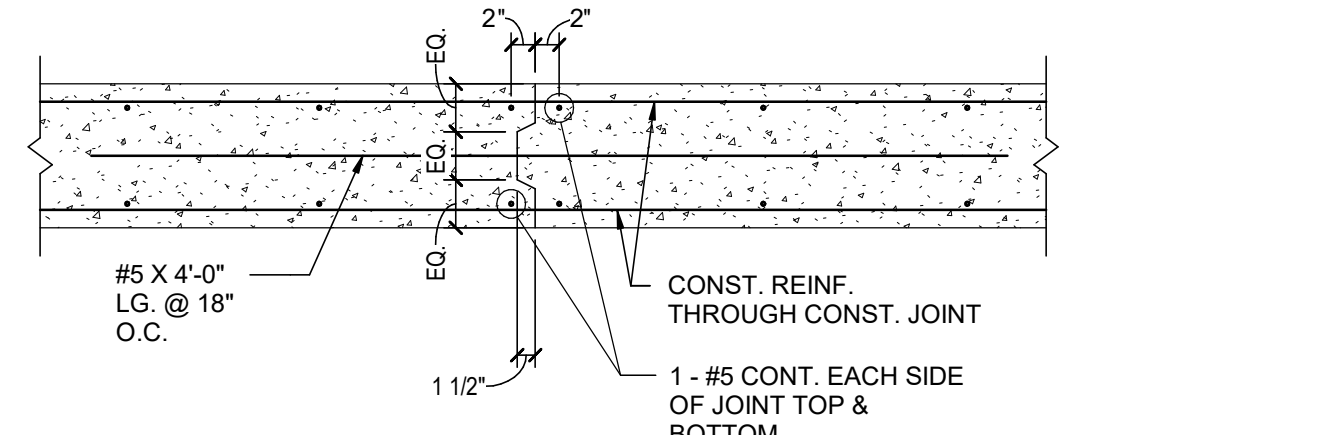
DETAIL - THRU TRENCH
SCALE: 3/4" = 1'-0"



TYPICAL 5" SLAB ON GRADE AND CONTROL JOINT
SCALE: 3/4" = 1'-0"

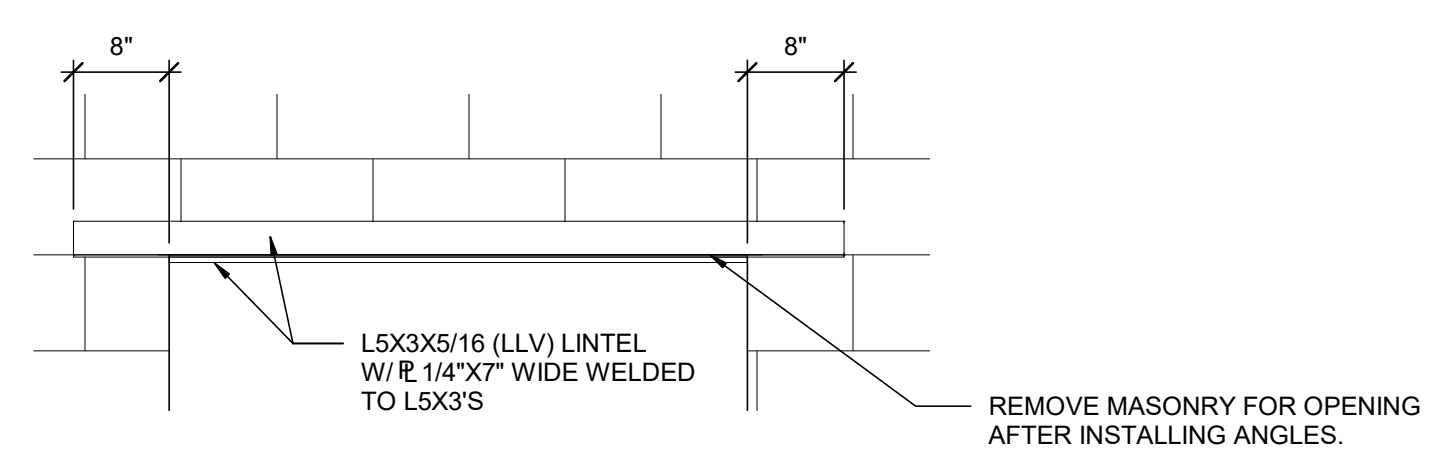


DETAIL - SLAB DEPRESSION
SCALE: 3/4" = 1'-0"



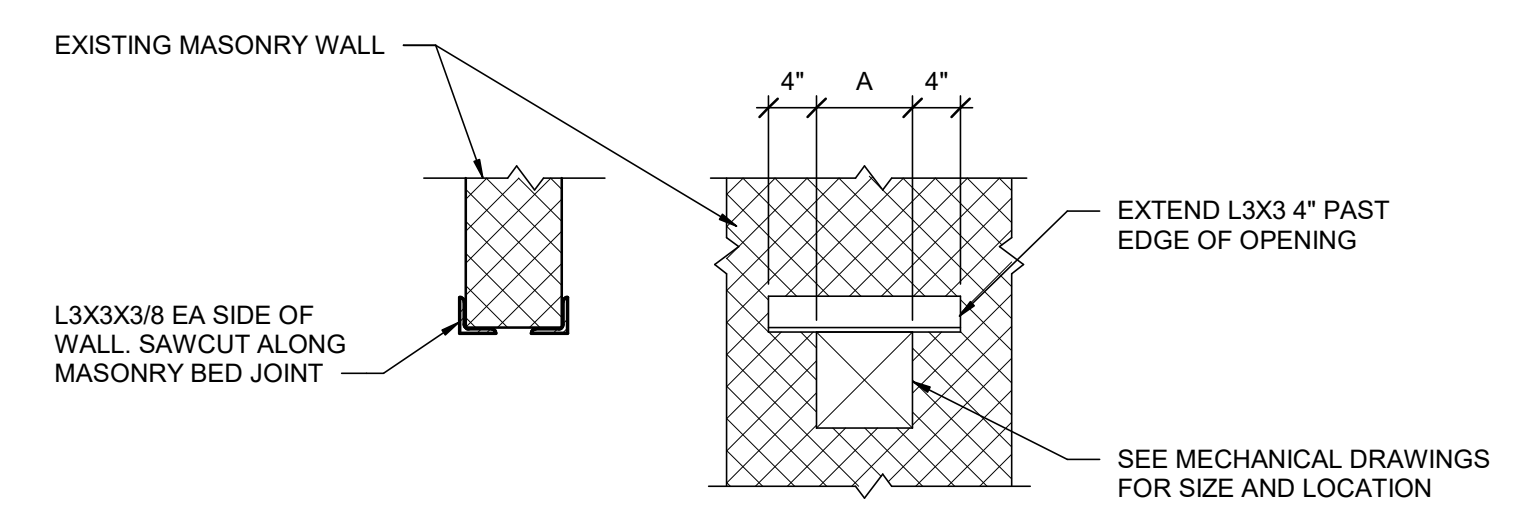
TYPICAL SLAB CONSTRUCTION JOINT

- NOTES:
- CONSTRUCTION JOINT SHALL GENERALLY BE MADE IN CENTER OF SLAB WITH VERTICAL BULKS AND SHEAR KEY AS SHOWN.
 - SUBMIT PROPOSED SLAB JOINT LOCATIONS FOR APPROVAL PRIOR TO POURING SLAB.



NEW MASONRY OPENINGS (M01-M04)
NOT TO SCALE

MARK	W	H	FRAME TYPE
M01	3'-4"	7'-4"	TYPE A
M02	4'-0"	7'-4"	TYPE A
M03	4'-8"	7'-4"	TYPE A
M04	5'-0"	7'-4"	TYPE A
M05	6'-4"	7'-4"	TYPE B
M06	8'-4"	8'-0"	TYPE B
M07	8'-8"	8'-0"	TYPE B
M08	16'-4"	8'-0"	TYPE C
M09	21'-8"	8'-0"	TYPE C
M010	3'-3"	2'-3"	TYPE D



FOR OPENING SIZES WITH "A" DIM. OF 8" TO 24"
(ADD 1 1/2" PER SIDE FOR INSULATION)

FOR OPENINGS WITH "A" DIM. LESS THAN 8", THERE IS NO FRAMING REQUIRED.

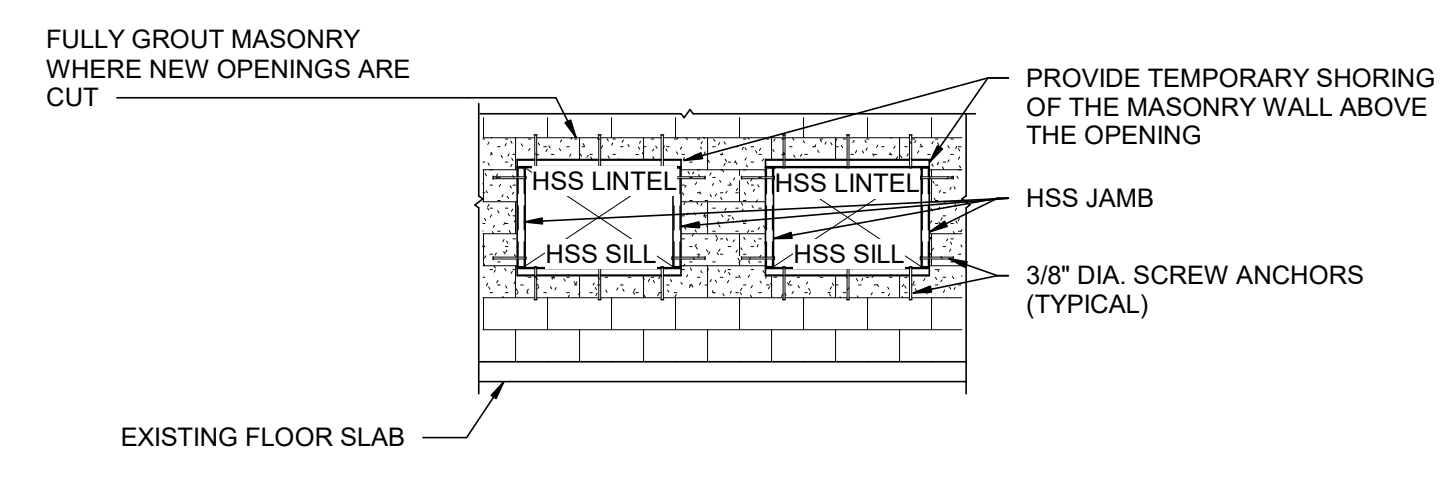
MECHANICAL OPENING FRAME
NOT TO SCALE

SEQUENCE OF CONSTRUCTION

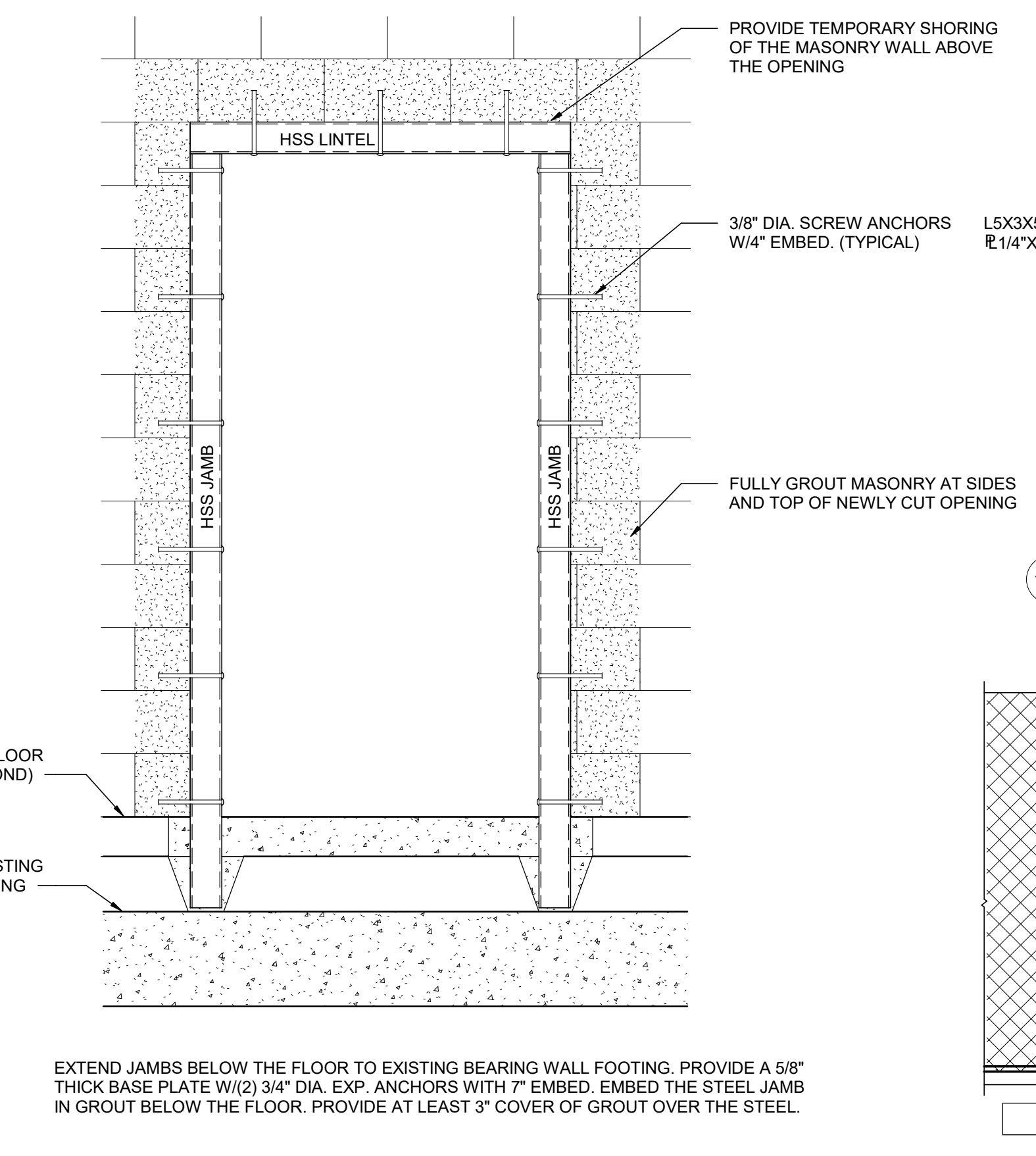
- INSTALL C10X20 EACH SIDE OF EXISTING MASONRY WALL. CUT LEG OF C10 TO ALLOW SLIDE PAST EXISTING COLUMN FLANGE.
- ADD SHORING POST, BEAM AND WOOD BLOCKING EACH SIDE OF WALL TO SUPPORT WALL. ADD CROSS BEAM AT (3) PLACES. CUT HOLE IN MASONRY WALL TO ALLOW BEAM TO PASS THROUGH TO SUPPORT C10'S. PUMP JACK BEAM TIGHT AGAINST BOTTOM OF C10'S.
- SAWCUT ALONG MASONRY BED JOINT AND DEMOLISH PORTION OF WALL TO BE REMOVED.
- CUT SLAB TO ALLOW THE REMOVAL OF FOOTINGS SUPPORTING EXISTING FRAME COLUMNS AND WALL FOOTING OF WALL BEING REMOVED. ADD NEW FOOTINGS TO SUPPORT THE EXISTING FRAME COLUMNS AND NEW COLUMNS SUPPORTING NEW HSS12X6.
- INSTALL HSS8X8 COLUMNS AND HSS12X8 BEAM SUPPORTING MASONRY WALL.
- REMOVE TEMPORARY CROSS BEAMS, COLUMNS, WOOD BLOCKING AND C10X20'S FROM EACH SIDE OF CMU WALL AND PATCH HOLES WITH GROUT.
- PROVIDE ADDITIONAL TEMPORARY SUPPORT TO MAINTAIN WALL SAFELY. RESTORE WALL TO LIKE NEW CONDITION AFTER SHORING IS REMOVED.

○ DENOTES SEQUENCE OF CONSTRUCTION

SECTION - WALL SHORING (M08 & M09)
S-501 NOT TO SCALE

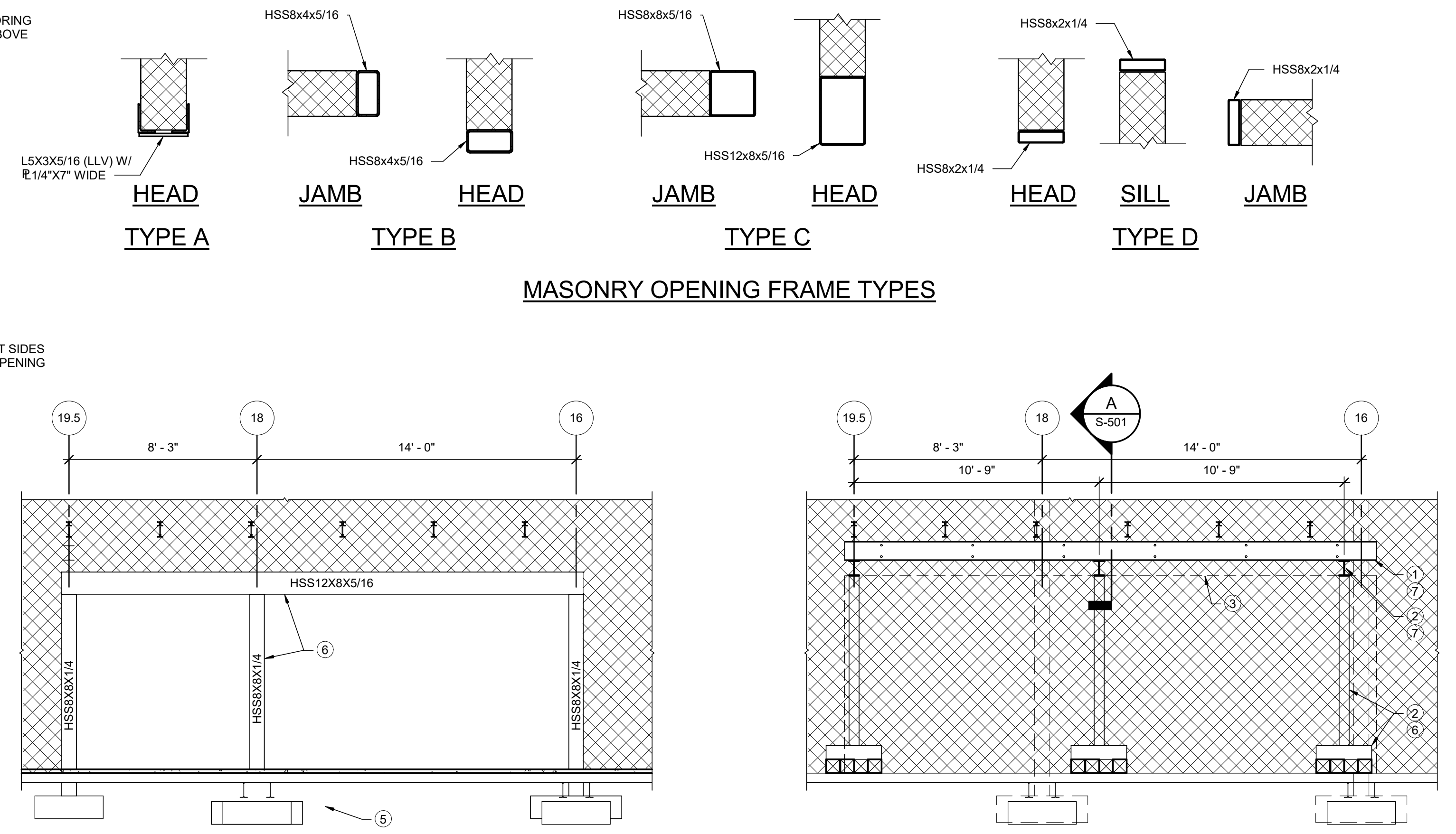


NEW DUCT OPENINGS THRU WALL (M010)
NOT TO SCALE



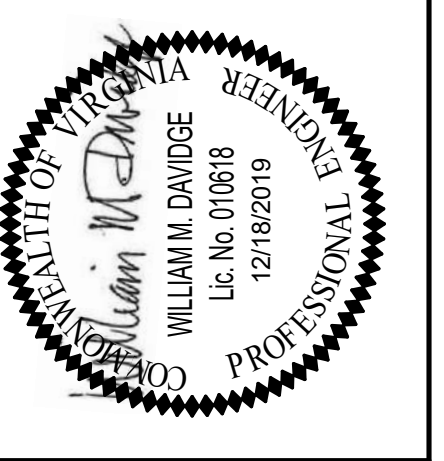
NEW DOORWAY OPENINGS (M05-M07)
NOT TO SCALE

- PATCH THE EXISTING FLOOR SLAB IN-KIND WITH LIKE FINISH. INSTALL 1/2" DIA. DOWELS @ 24" SPACING GROUTED 9" INTO EXISTING SLAB AROUND ALL SIDES OF THE FLOOR PATCH.



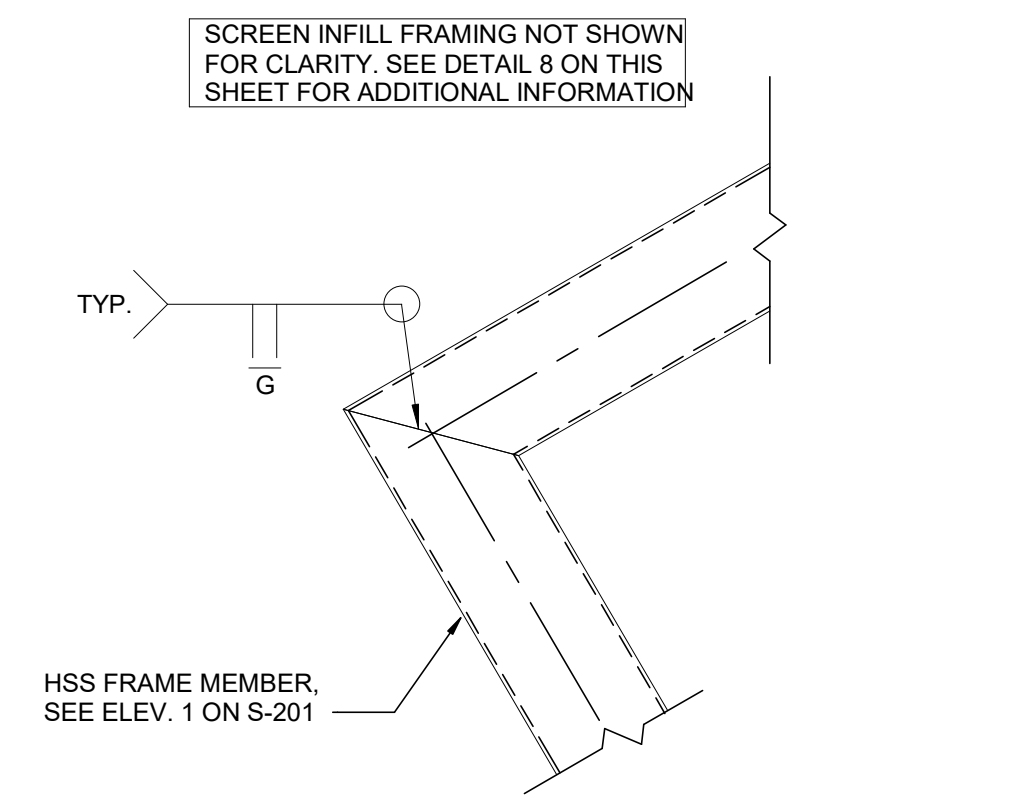
NEW PORTAL FRAME (M09)
NOT TO SCALE (M08 SIMILAR)

SUGGESTED SHORING FOR NEW PORTAL FRAME (M09)
NOT TO SCALE (M08 SIMILAR)

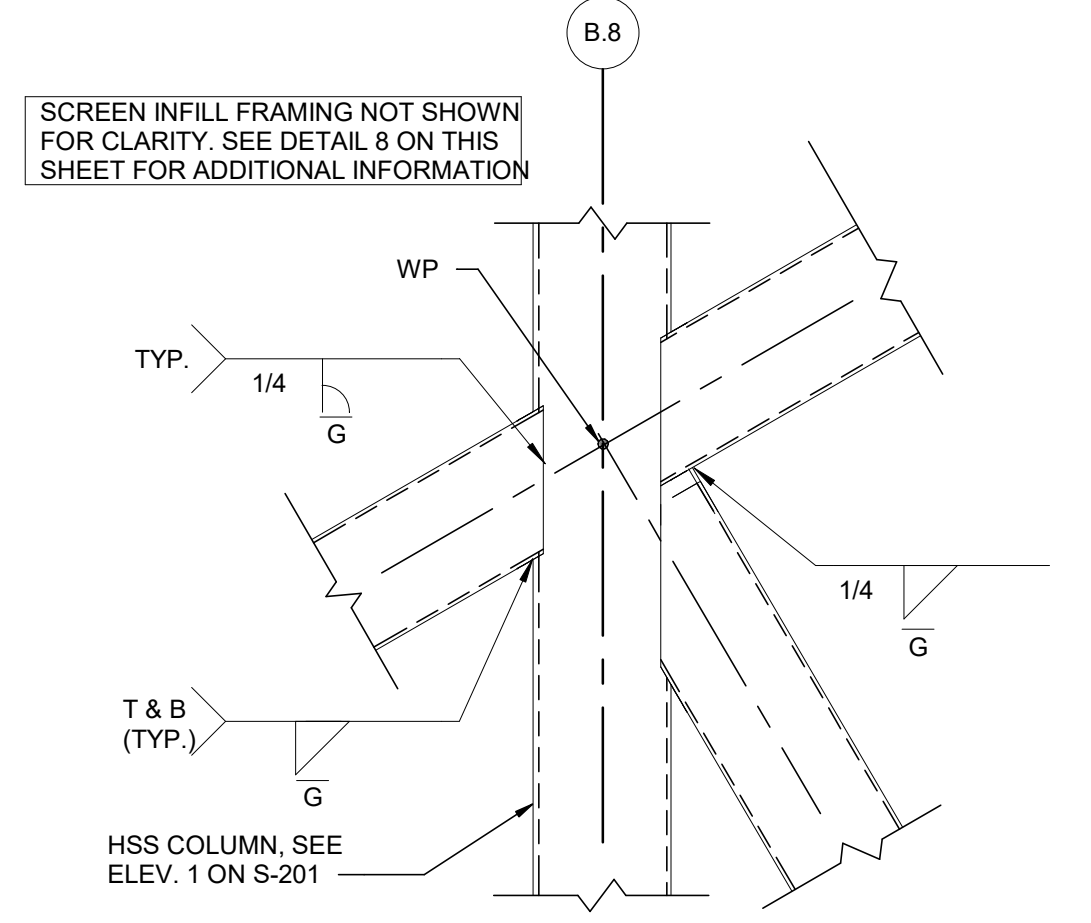


NO.	REVISION DESCRIPTION	DATE
1		12/18/2019

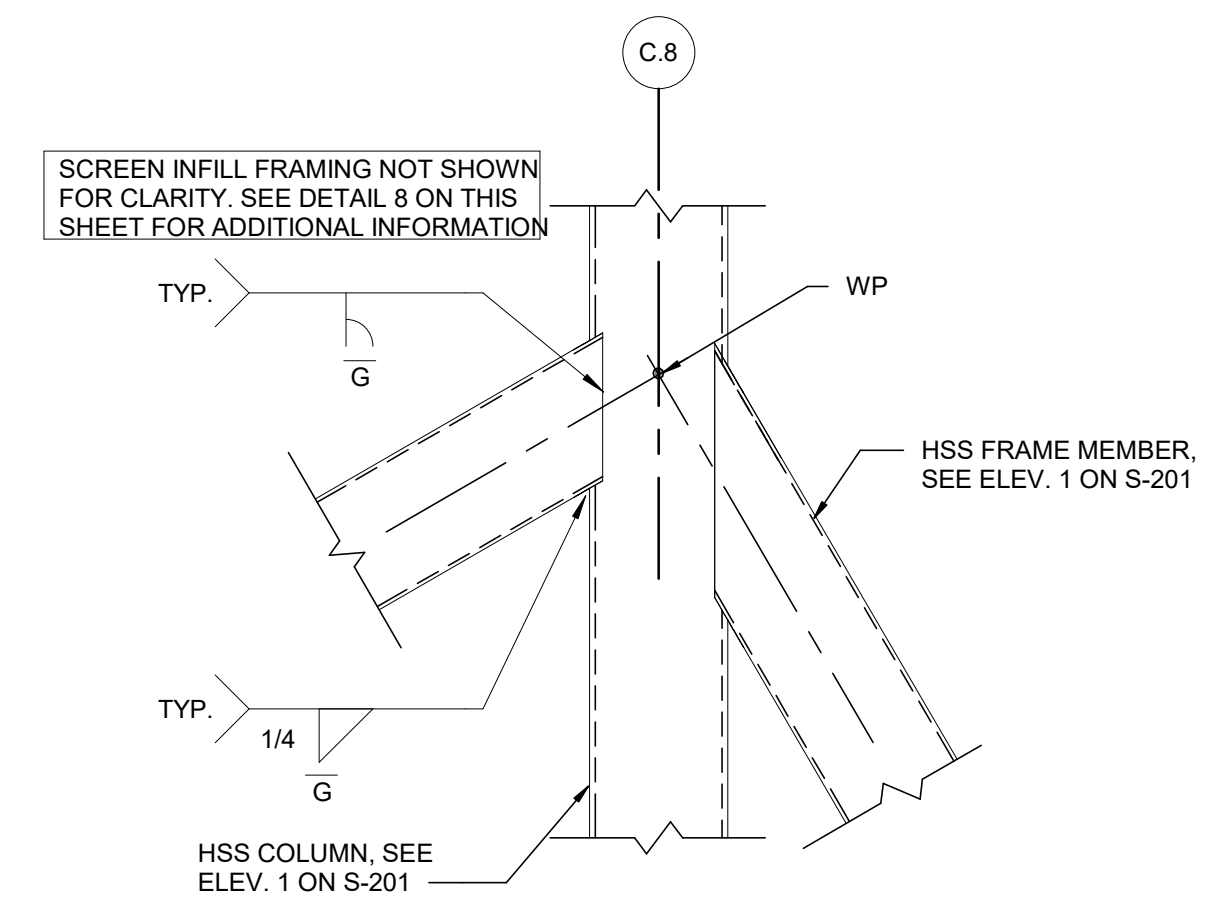
COMM NO: 215021
DATE: 12/18/2019
DRAWN: WJB DESIGN: WJB
CHECK: WMD
SHEET TITLE: TYPICAL FOUNDATION & MASONRY DETAILS
SHT. NO: S-501 REV. NO:



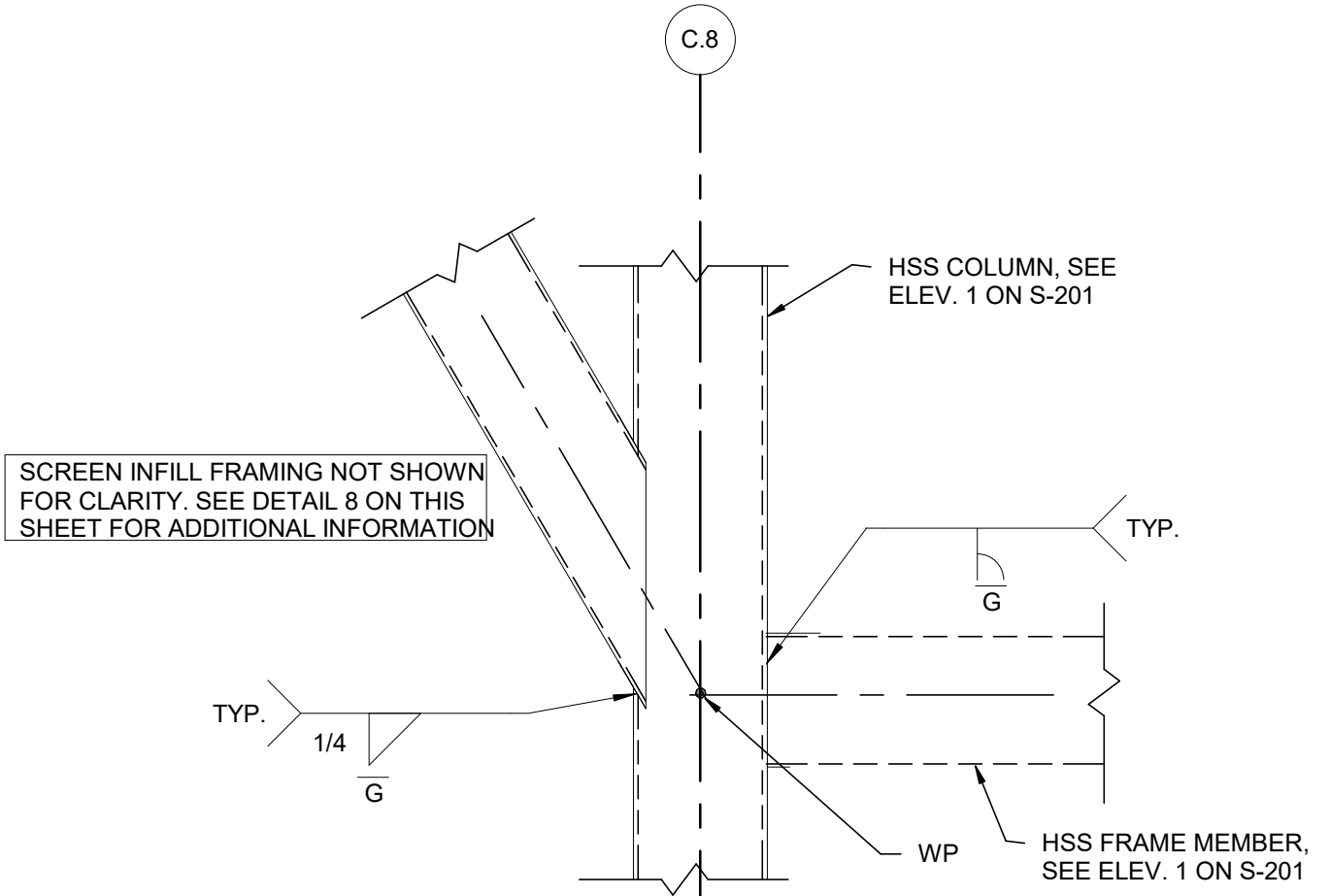
1 DETAIL
S-201 SCALE: 1" = 1'-0"



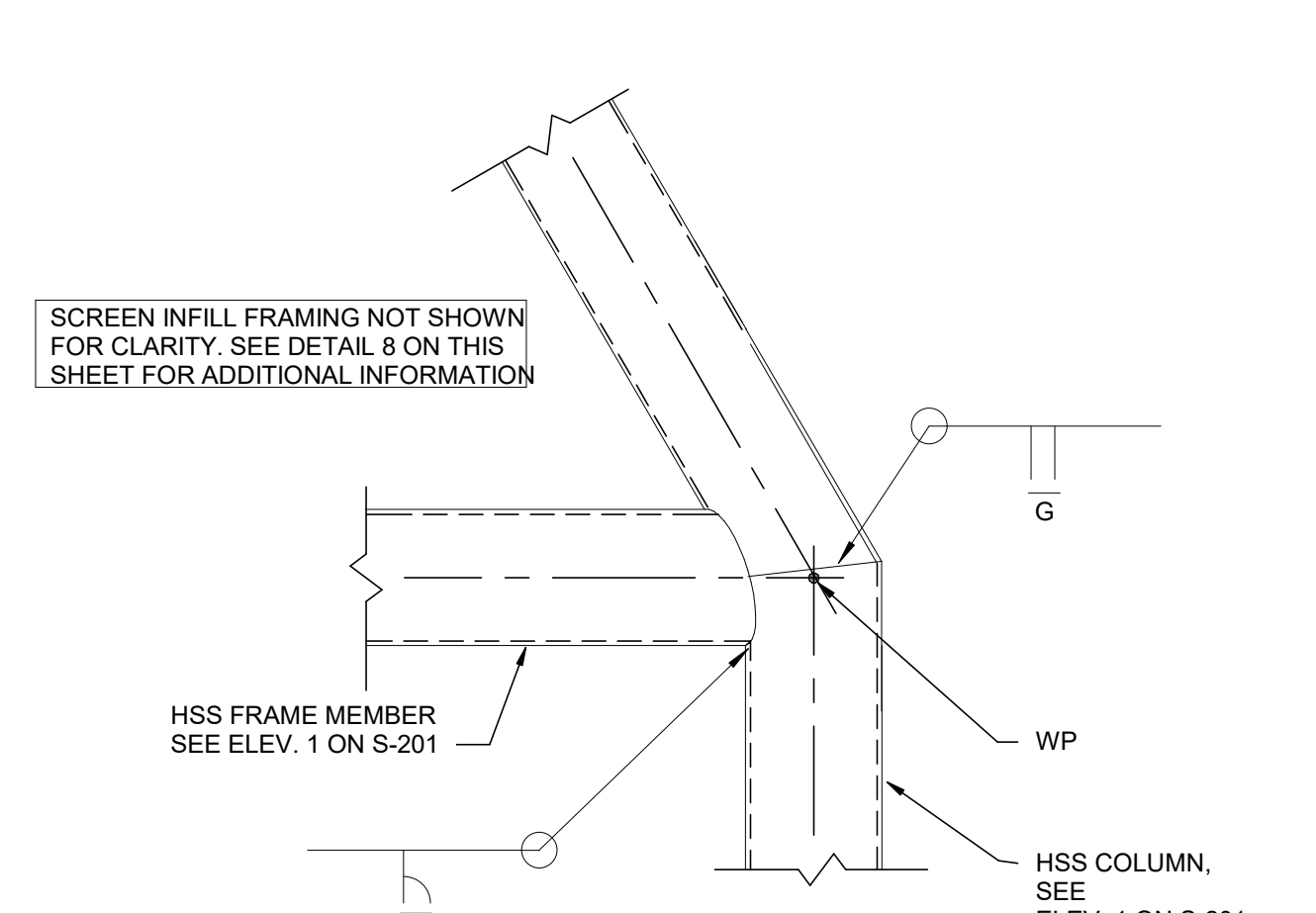
2 DETAIL
S-201 SCALE: 1" = 1'-0"



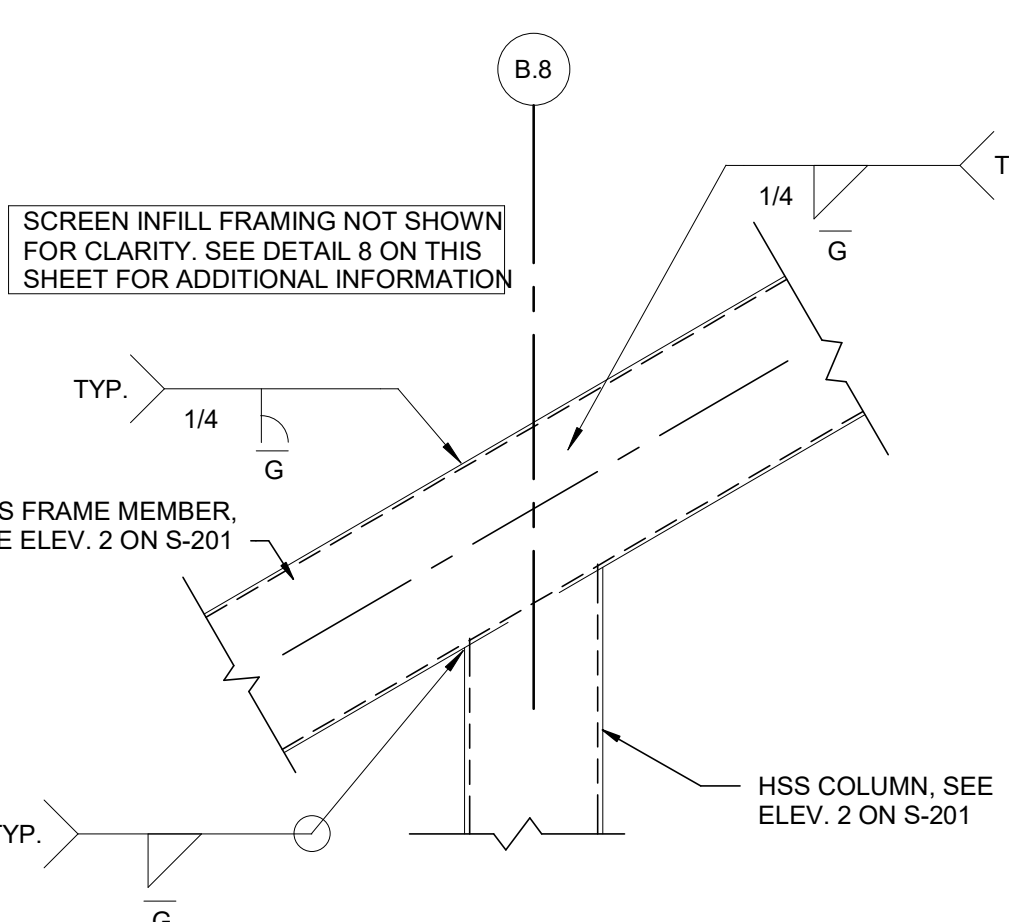
3 DETAIL
S-201 SCALE: 1" = 1'-0"



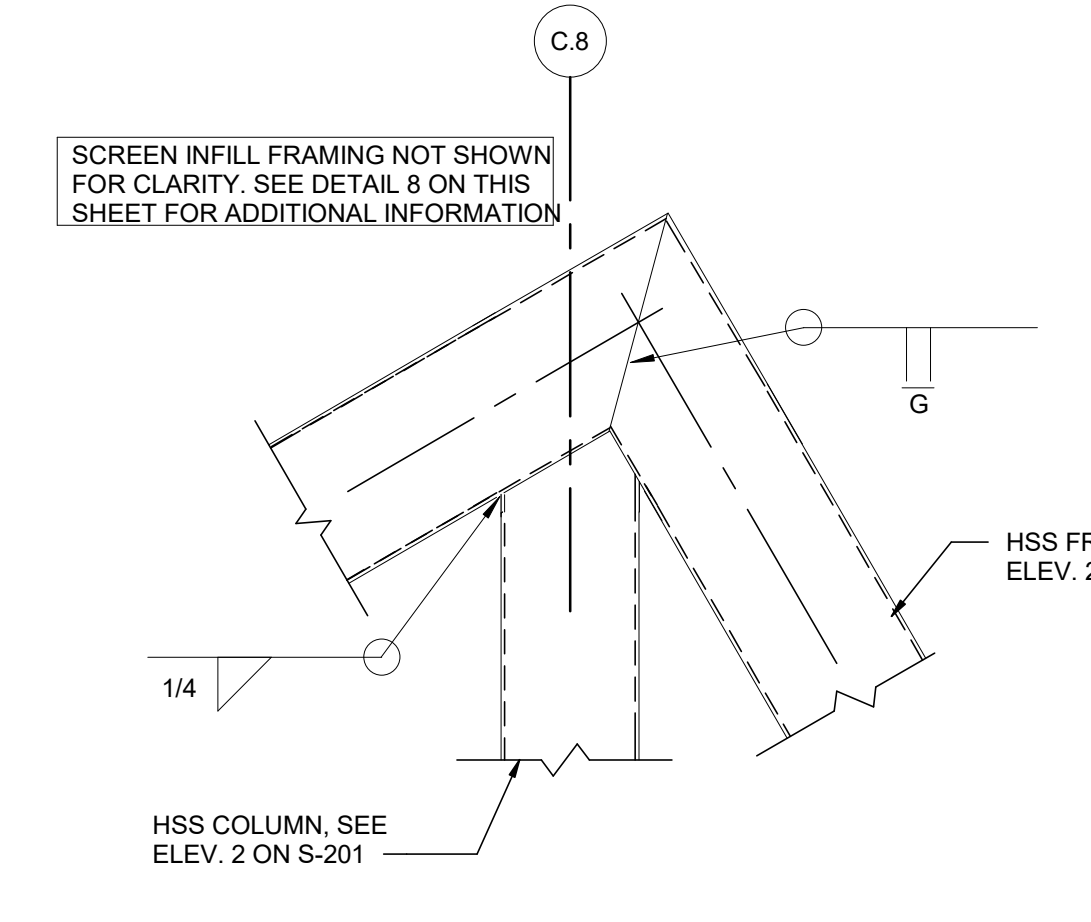
4 DETAIL
S-201 SCALE: 1" = 1'-0"



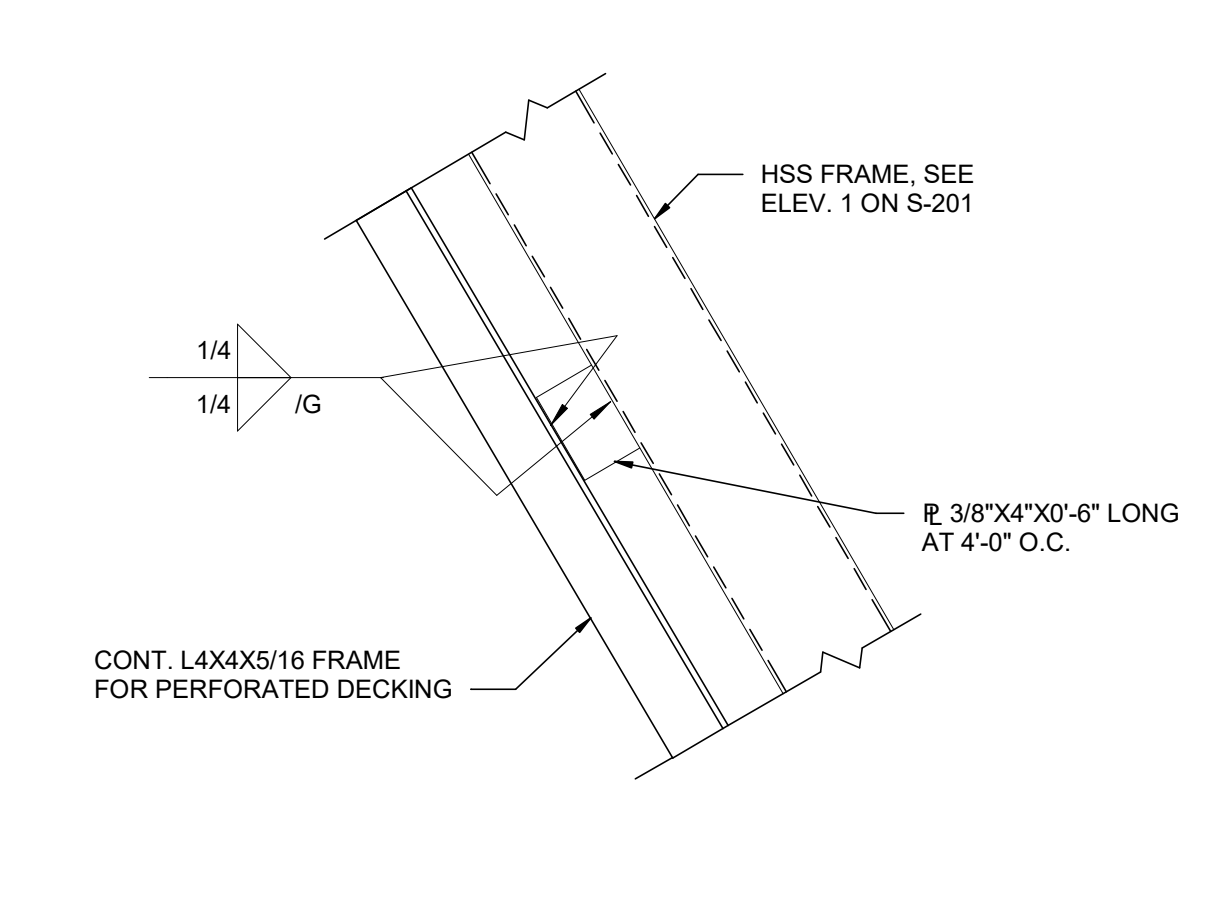
5 DETAIL
S-201 SCALE: 1" = 1'-0"



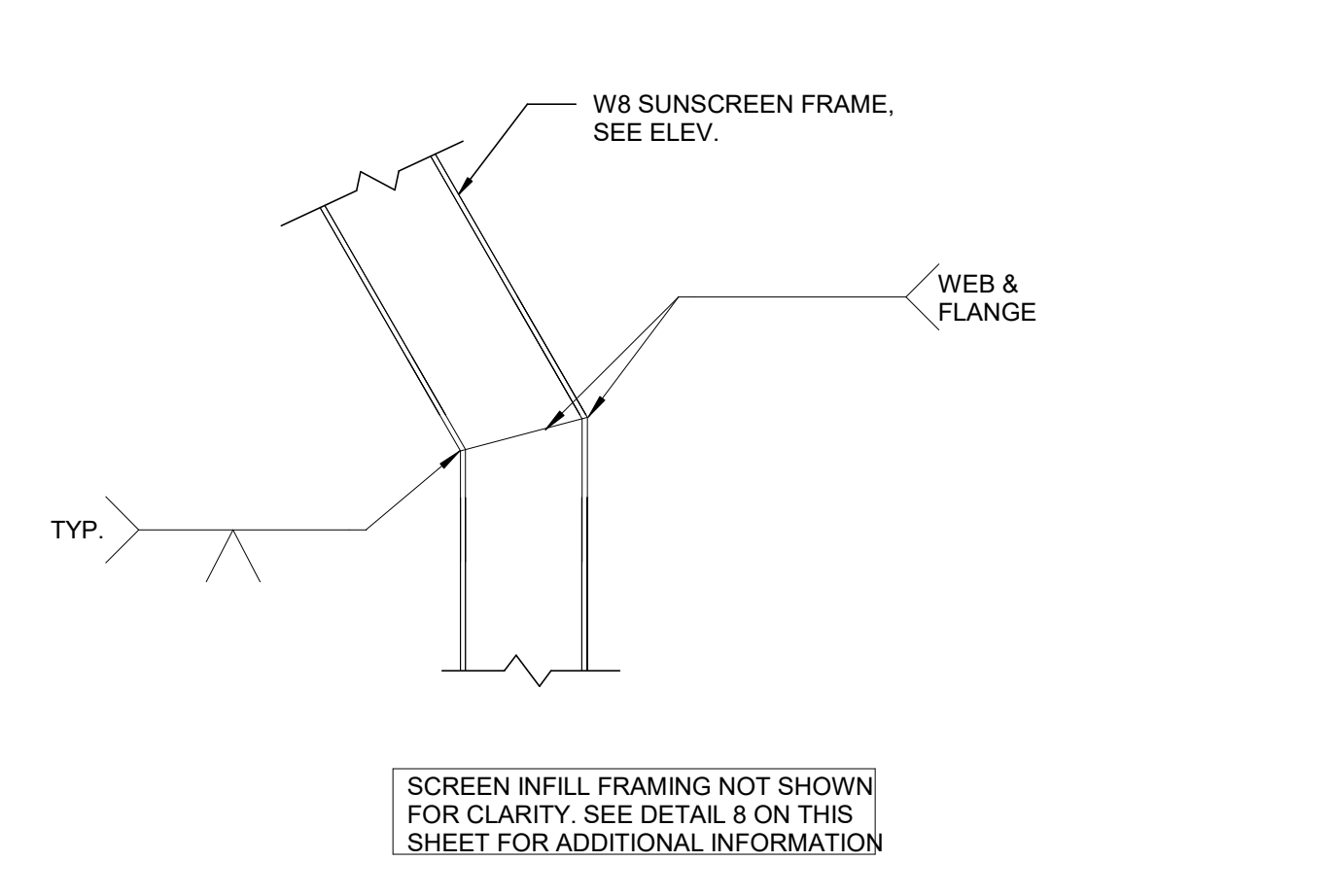
6 DETAIL
S-201 SCALE: 1" = 1'-0"



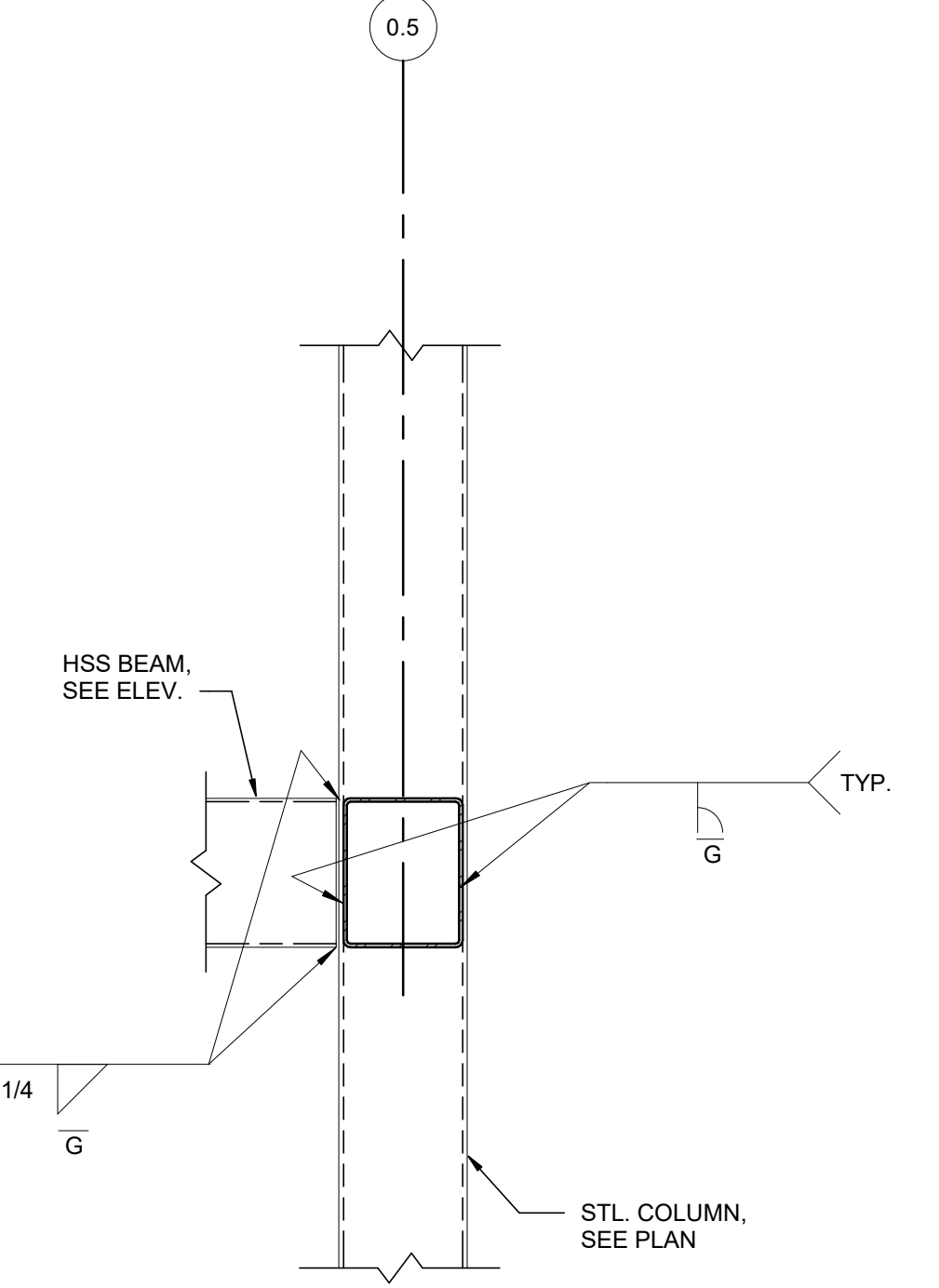
7 DETAIL
S-201 SCALE: 1" = 1'-0"



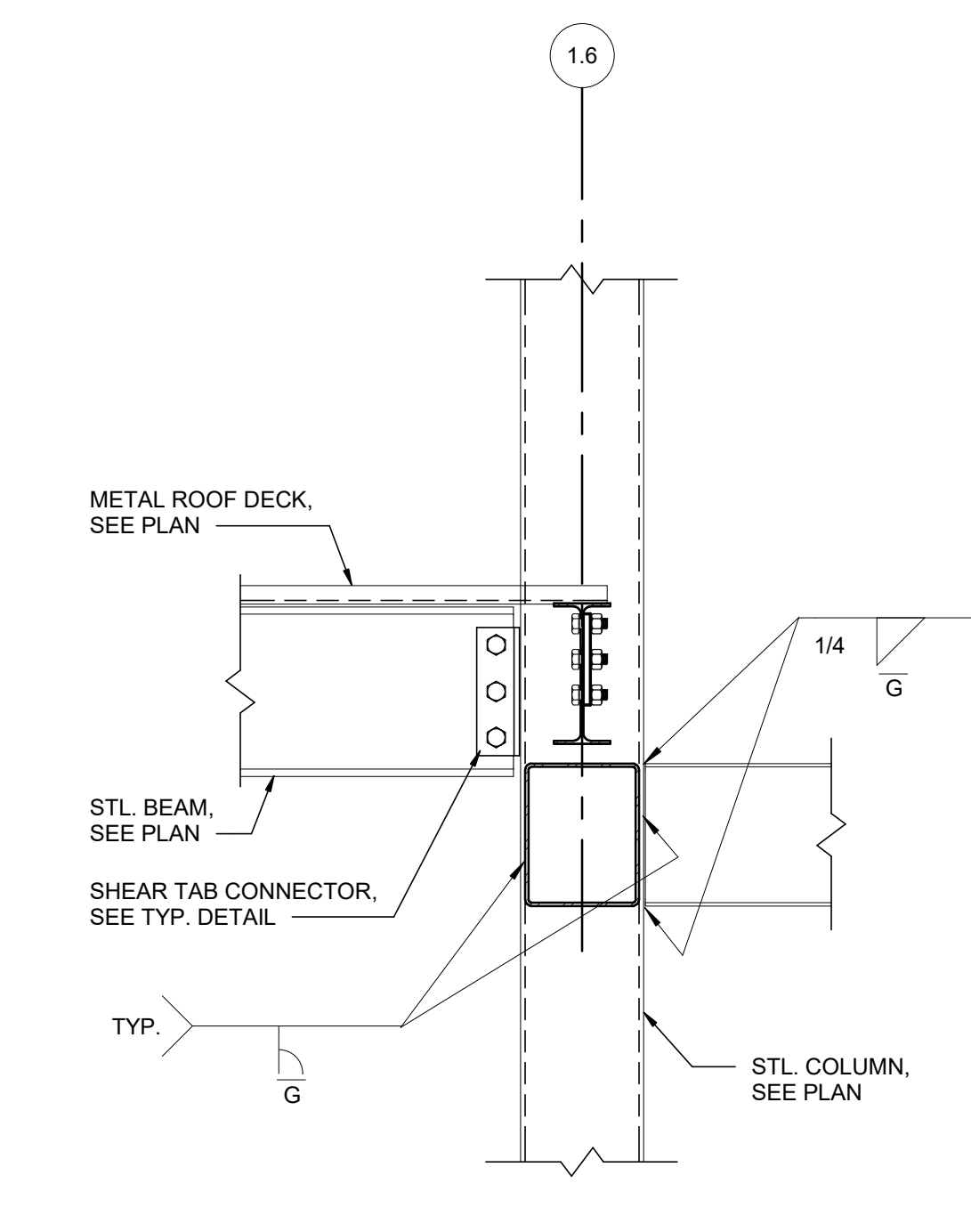
8 DETAIL
S-201 SCALE: 1" = 1'-0"



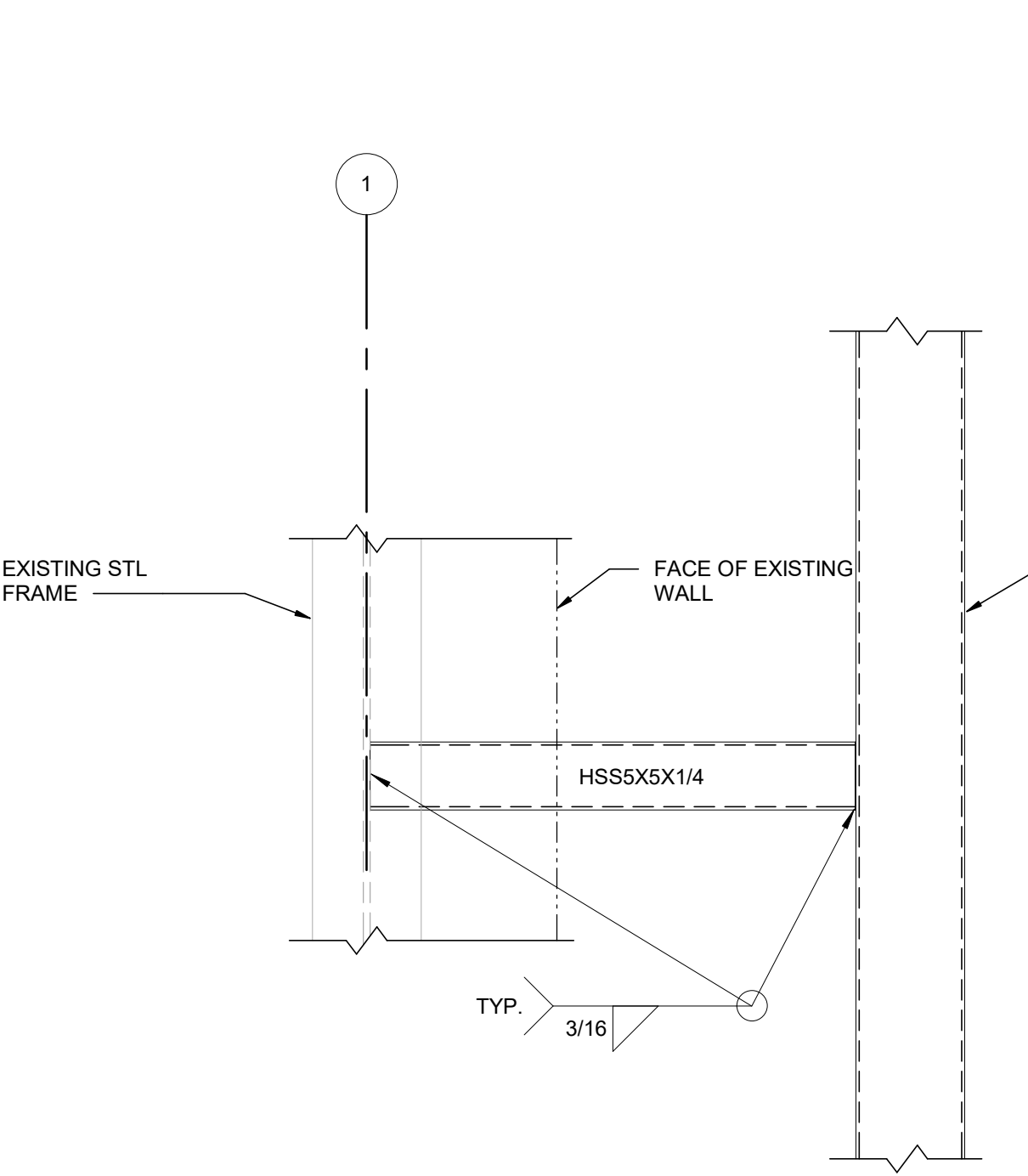
9 DETAIL
S-311 SCALE: 1" = 1'-0"



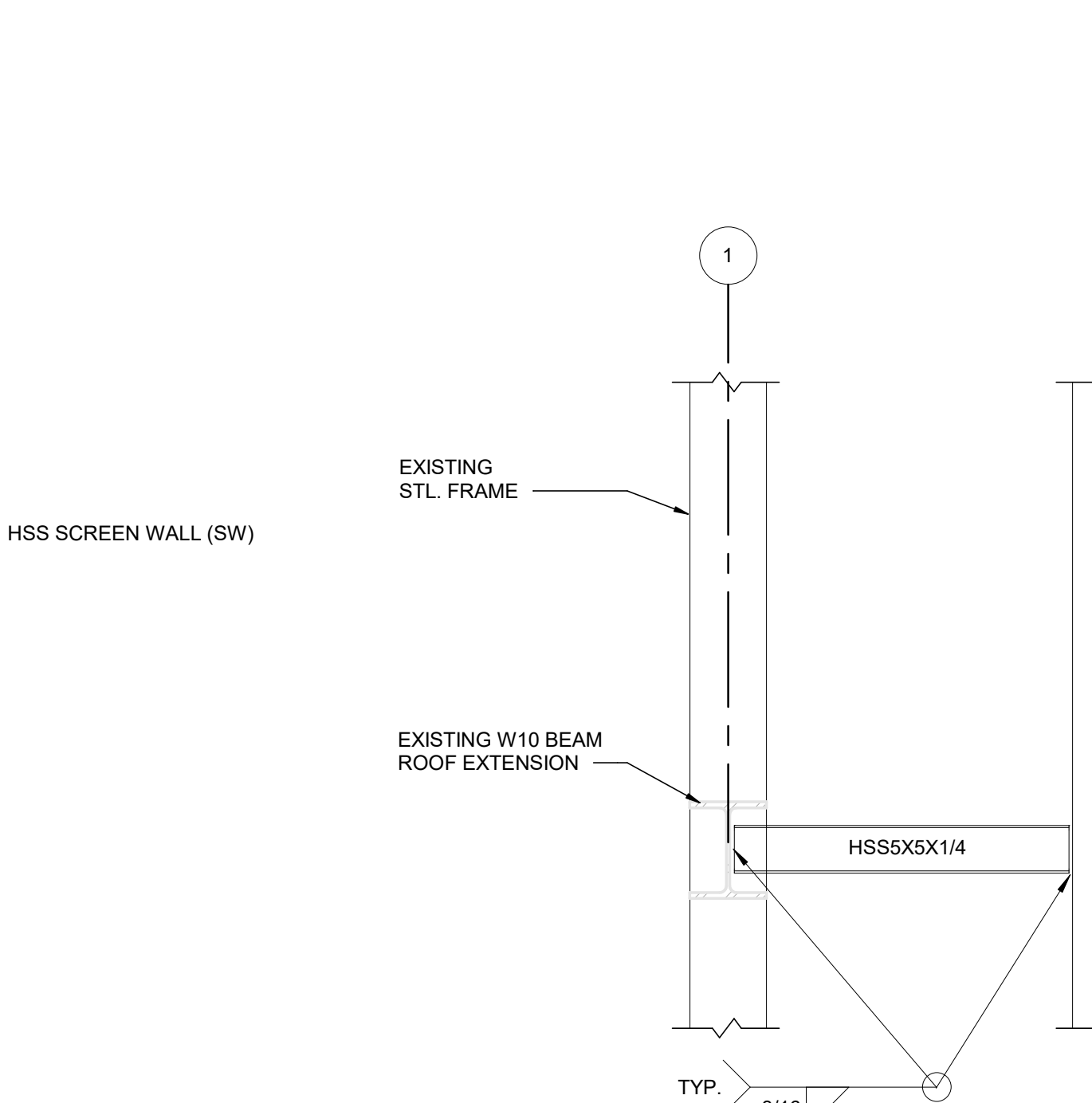
A SECTION
S-102 SCALE: 1" = 1'-0"



B SECTION
S-102 SCALE: 1" = 1'-0"



C SECTION
S-201 SCALE: 1" = 1'-0"



D SECTION
S-102 SCALE: 3/4" = 1'-0"



PICTURE #1



PICTURE #2



PICTURE #3



PICTURE #4



PICTURE #5



PICTURE #6



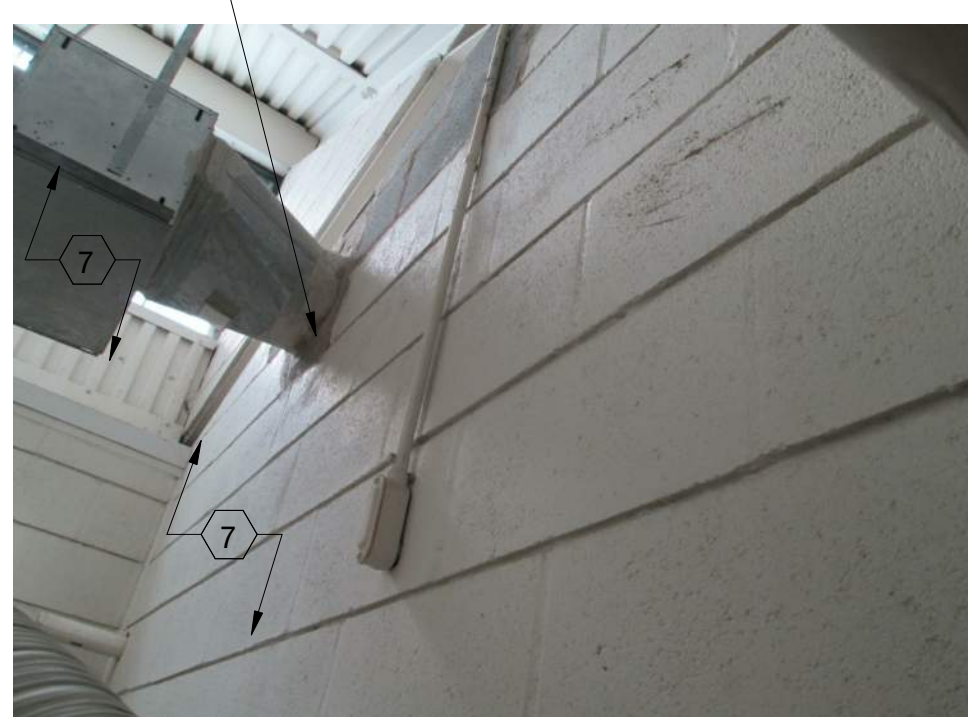
PICTURE #7



PICTURE #8



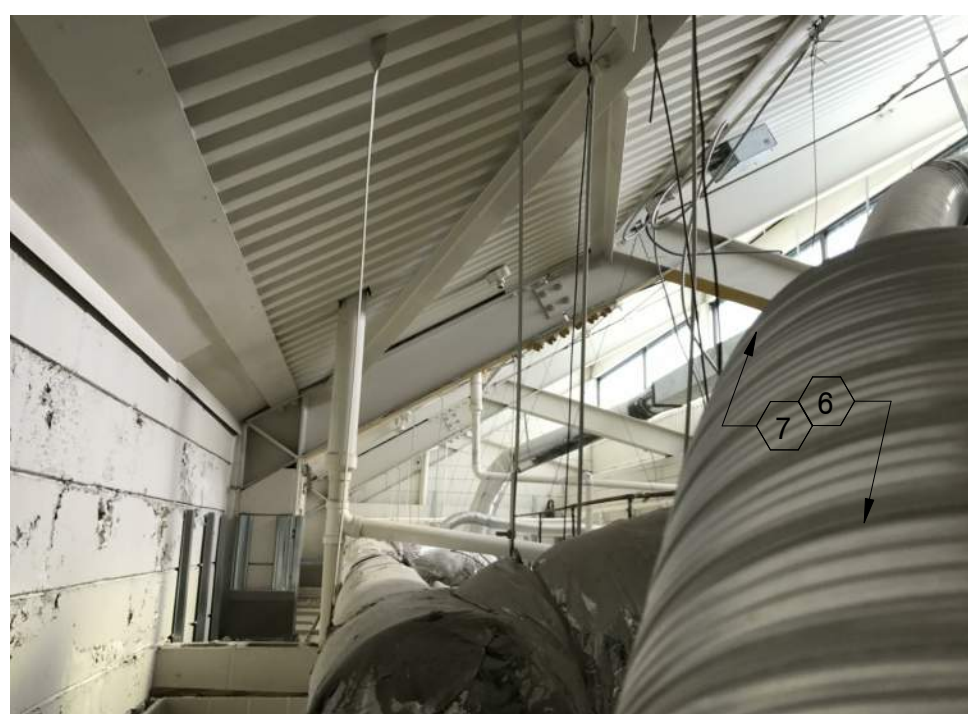
PICTURE #9



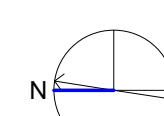
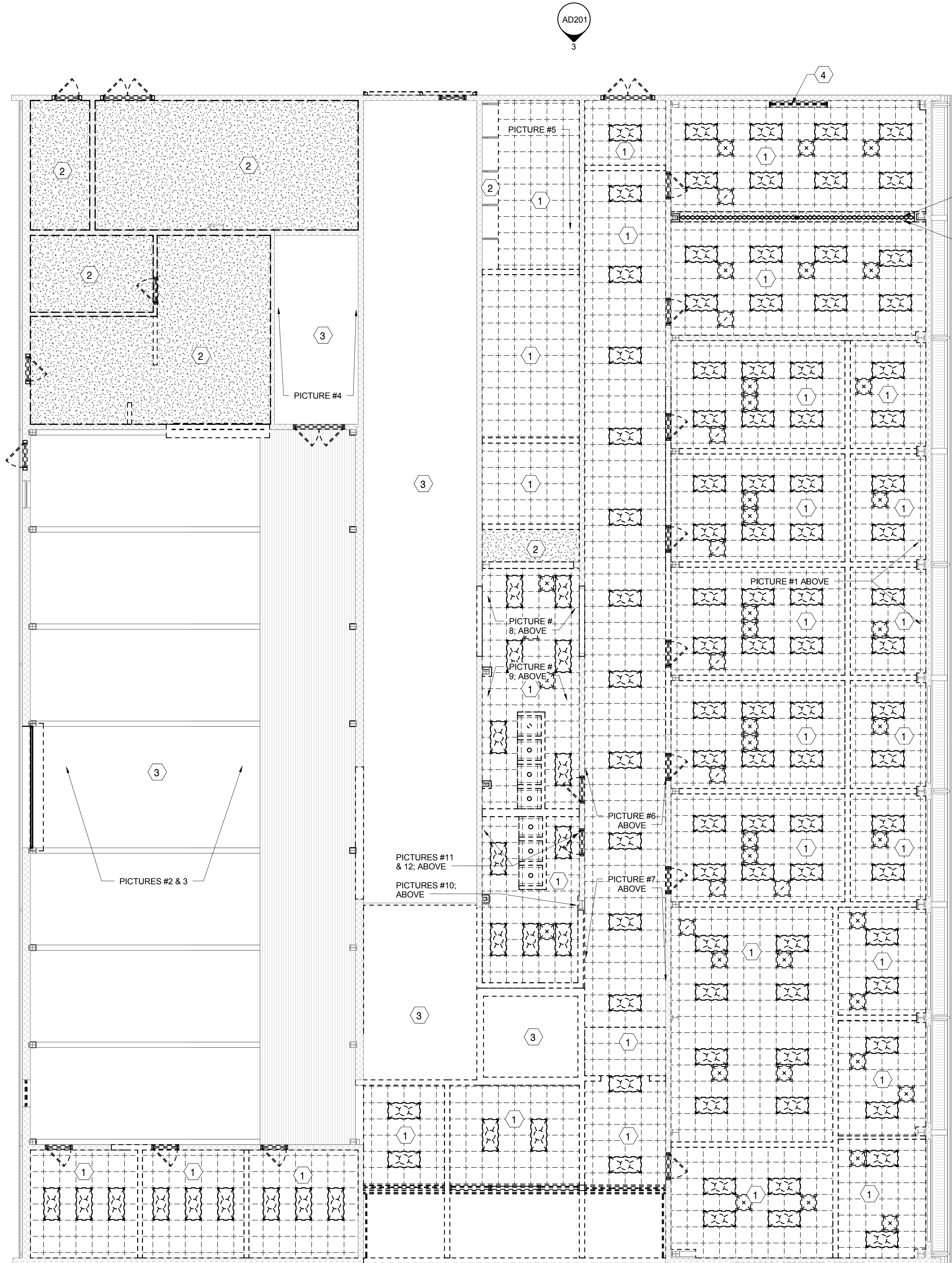
PICTURE #10



PICTURE #11



PICTURE #12



1

DEMOLITION REFLECTED CEILING PLAN

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



AD201

GENERAL RCP DEMOLITION NOTES:

- CONTRACTOR TO VERIFY EXISTING CONDITIONS. THE DEMOLITION PLANS ARE DERIVED FROM EXISTING BUILDING PLANS AND SITE VISITS ARE INTENDED TO REASONABLY REPRESENT EXISTING CONDITIONS. ACTUAL CONDITIONS MAY DEVIATE FROM THAT SHOWN ON THE DRAWINGS. THE DEMOLITION KEYNOTES IDENTIFY SPECIFIC AREAS OF WORK BUT MAY NOT BE COMPLETE IN THE IDENTIFICATION OF ALL REMOVALS. THE CONTRACTOR SHALL VERIFY ACTUAL CONDITIONS AND COORDINATE THE DEMOLITION WITH THE NEW WORK SO THAT DEMOLITION IS COMPLETE.
- REMOVE DEMOLISHED MATERIALS, DEBRIS & RUBBISH FROM SITE AS SOON AS PRACTICAL. DO NOT ACCUMULATE DEBRIS ON THE FLOOR OR AT THE SITE. ALL BUILDING COMPONENTS AND FINISHES WHICH ARE TO REMAIN IN PLACE SHALL BE PROTECTED FROM DAMAGE.
- PATCH AND REPAIR ALL EXISTING CEILING, PARTITIONS, AND FLOORS DISTURBED FOR NEW WORK AND FINISH TO MATCH SURROUNDING AREA. SEE MECHANICAL, ELECTRICAL, AND FIRE PROTECTION DRAWINGS FOR ADDITIONAL DEMOLITION NOTES.
- HAZARDOUS MATERIALS MAY BE PRESENT IN THE EXISTING CONSTRUCTION. A HAZARDOUS MATERIALS REPORT HAS NOT BEEN CONDUCTED AS PART OF THIS PROJECT. A 2014 ENVIRONMENTAL CONDITION OF PROPERTY UPDATE REPORT CONDUCTED FOR THE US GOVERNMENT HAS BEEN INCLUDED IN THE SPECIFICATIONS. IF HAZARDOUS MATERIALS ARE FOUND, COORDINATE ANY ABATEMENT PROCEDURES WITH THE SPECIFICATIONS AND THE OWNER.

RCP DEMOLITION KEYED NOTES:

- REMOVE AND DISPOSE OF EXISTING ACOUSTICAL CEILING TILE, GRID, SUSPENSION SYSTEM, LIGHT FIXTURES AND CEILING MOUNTED DEVICES.
- REMOVE AND DISPOSE OF EXISTING GYPSUM BOARD CEILING, ALL STRUCTURAL SUPPORTS, LIGHT FIXTURES AND CEILING MOUNTED DEVICES.
- EXISTING CEILING AND STRUCTURE TO REMAIN. REMOVE AND DISPOSE OF EXISTING LIGHT FIXTURES AND CEILING MOUNTED DEVICES. REMOVE EXISTING PIPING AND HVAC DUCTS. SEE MECHANICAL DRAWINGS.
- REMOVE EXISTING PROJECTION SCREEN.
- REMOVE EXISTING OPERABLE PARTITION AND ASSOCIATE SUPPORT SYSTEM.
- REMOVE AND DISPOSE OF EXISTING PIPING, EXHAUST FANS AND SUPPORT. SEE MECHANICAL AND PLUMBING DRAWINGS.
- REMOVE AND DISPOSE OF EXISTING LIGHTING, HVAC SYSTEMS AND SUPPORT. SEE MECHANICAL AND ELECTRICAL DRAWINGS.
- REMOVE EXISTING ACOUSTICAL PANELS ABOVE THE CEILING.
- REMOVE 3" ACOUSTICAL WALL PANELS.
- FILL AND PATCH WALL WHERE THRU WALL EQUIPMENT HAS BEEN REMOVED.
- FILL AND PATCH ROOF WITH LIKE MATERIAL WHERE EXISTING PIPING HAS BEEN REMOVED.

COMM NO:	215021
DATE:	12/18/19
DRAWN:	MTG
DESIGN:	RSV
CHECK:	TAH
SHEET TITLE:	

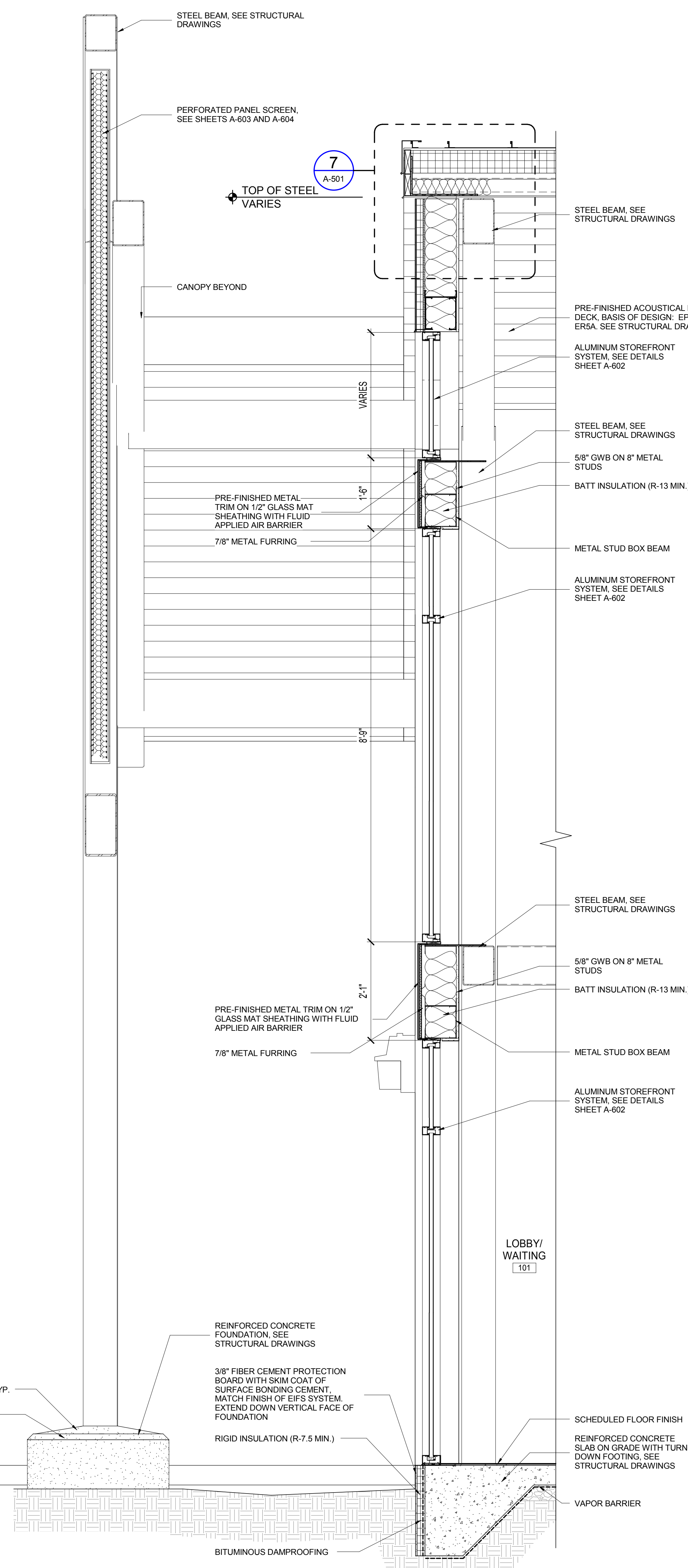
DEMOLITION REFLECTED
CEILING PLAN

SHT. NO. AD111

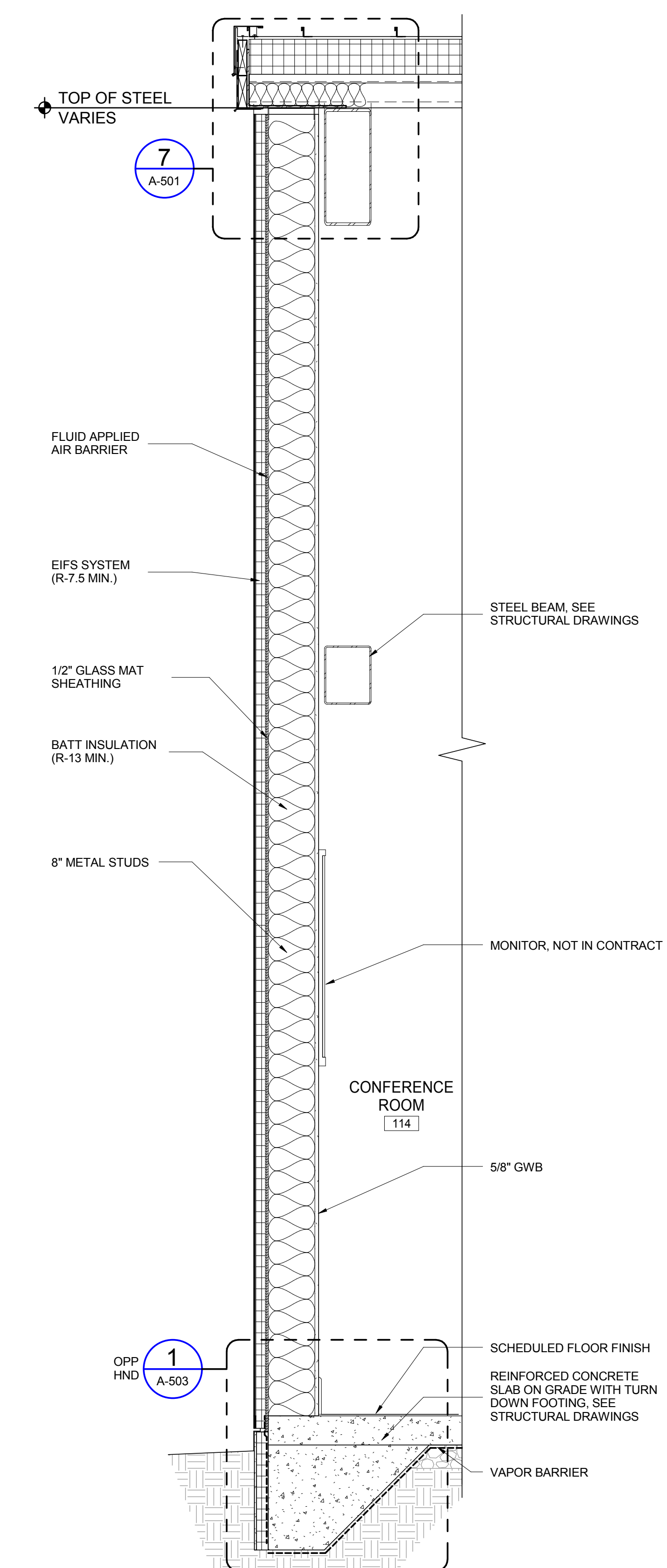
REV. NO.

GRAPHIC SCALE:

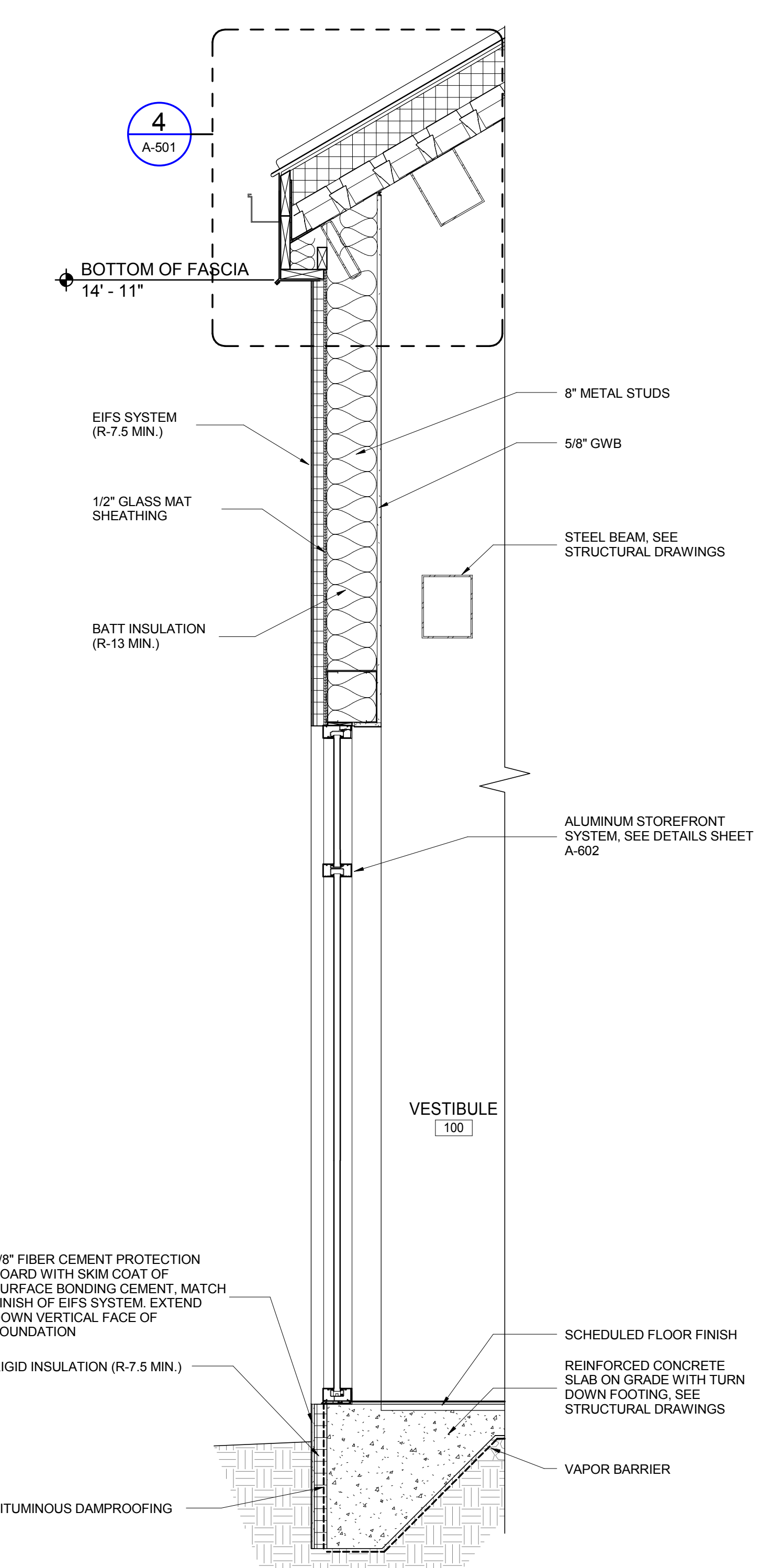




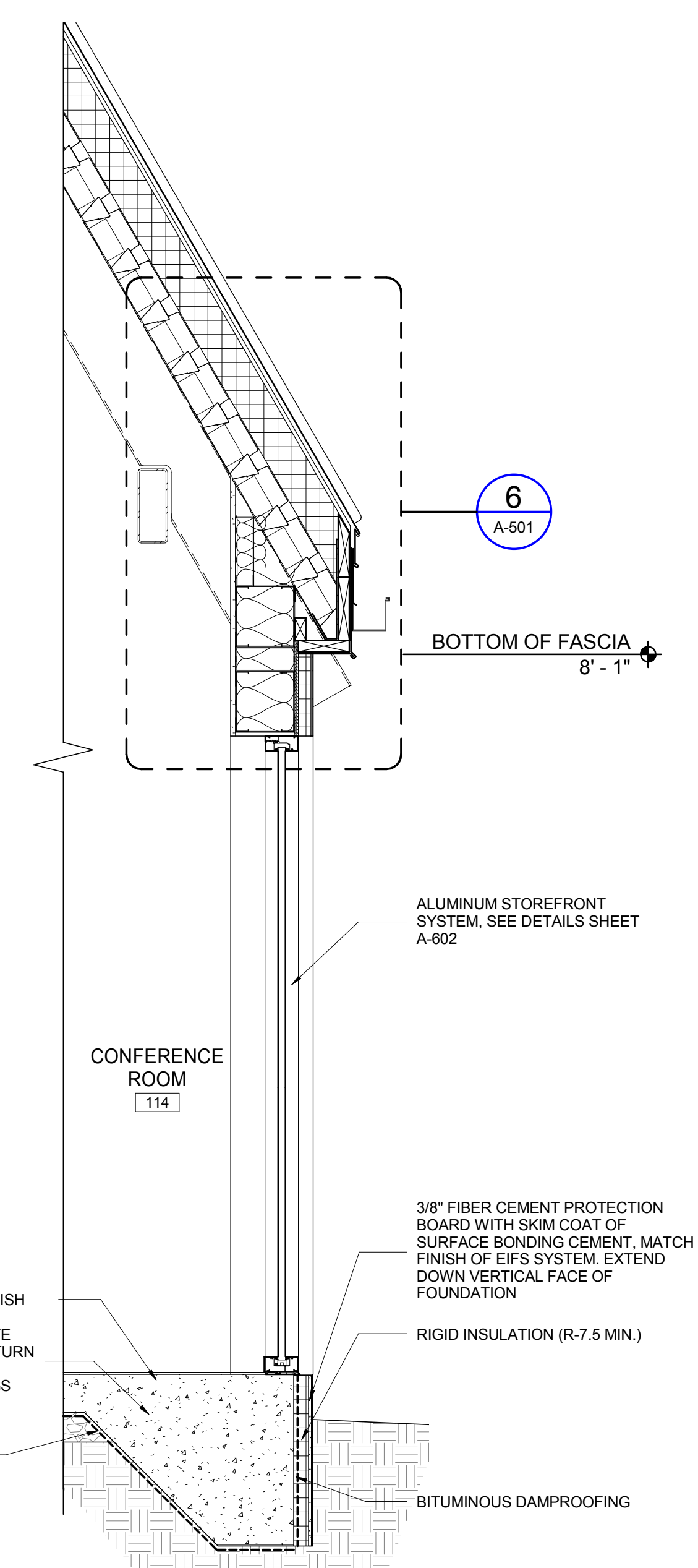
1 WALL SECTION
A-302 SCALE: 3/4" = 1'-0"



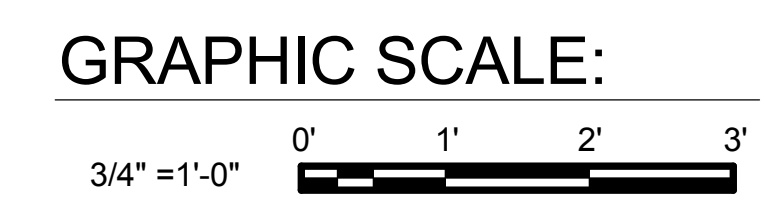
2 WALL SECTION
A-401 SCALE: 3/4" = 1'-0"



3 WALL SECTION
A-302 SCALE: 3/4" = 1'-0"



4 WALL SECTION
A-302 SCALE: 3/4" = 1'-0"



12/18/2019 9:45:10 AM
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