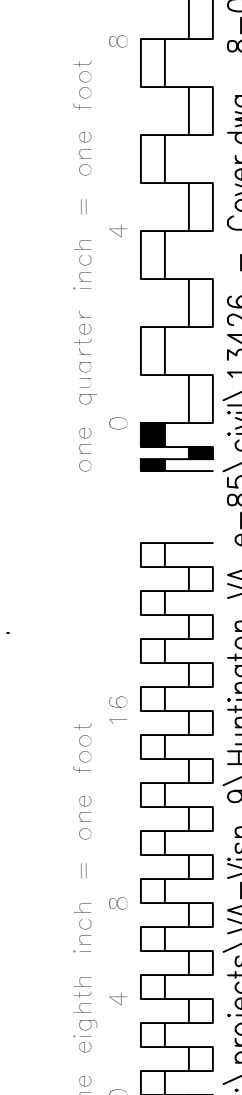
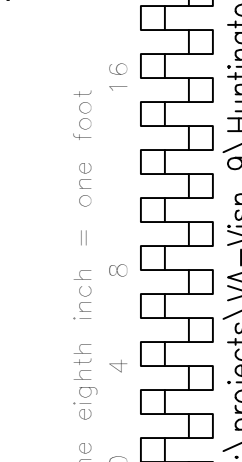


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A
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one eighth inch = one foot



one eighth inch = one foot

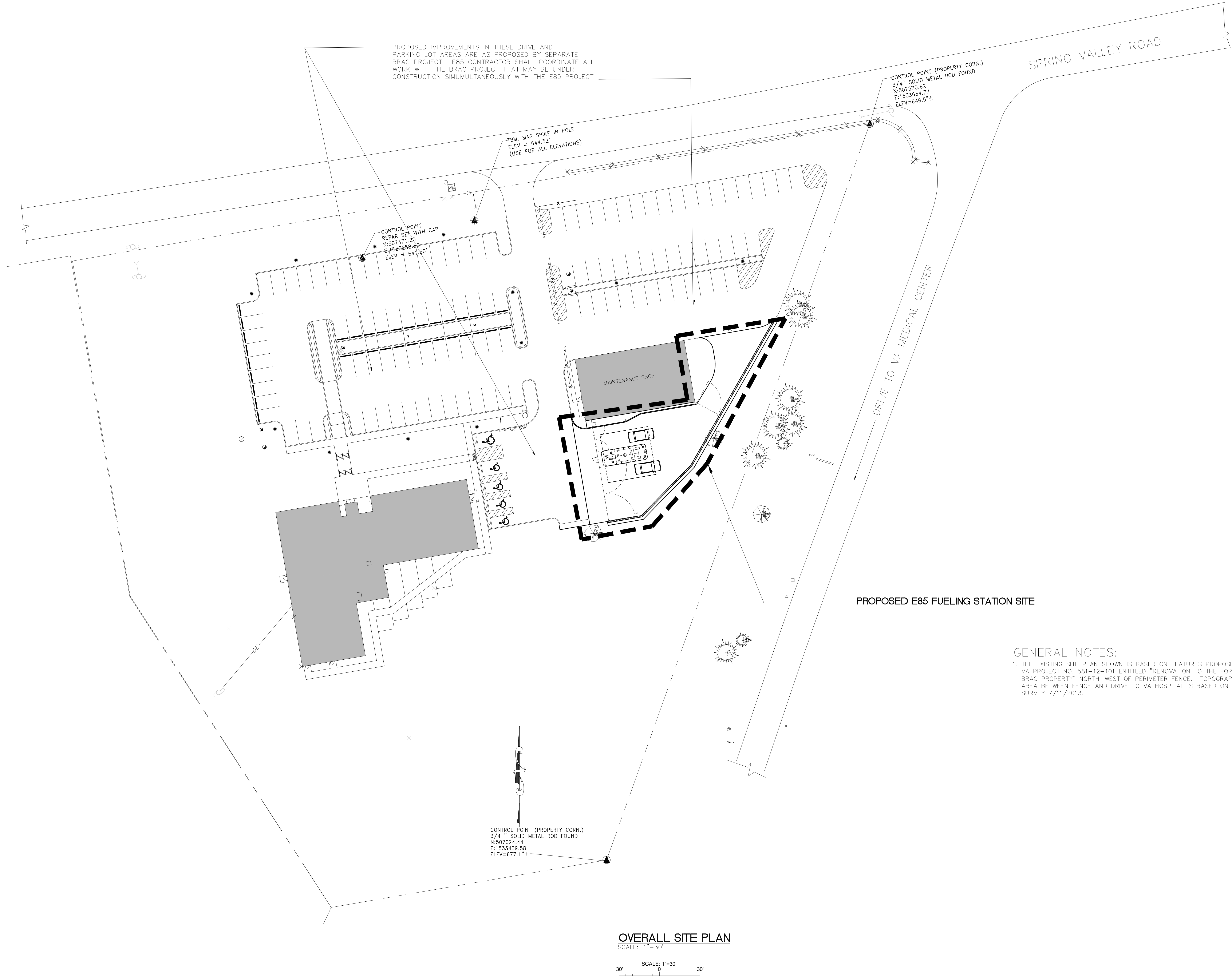
one eighth inch = one foot



three inches = one foot  
one and one half inches = one foot  
one inch = one foot  
three quarters inch = one foot  
one half inch = one foot  
three eighths inch = one foot  
one quarter inch = one foot  
one eighth inch = one foot

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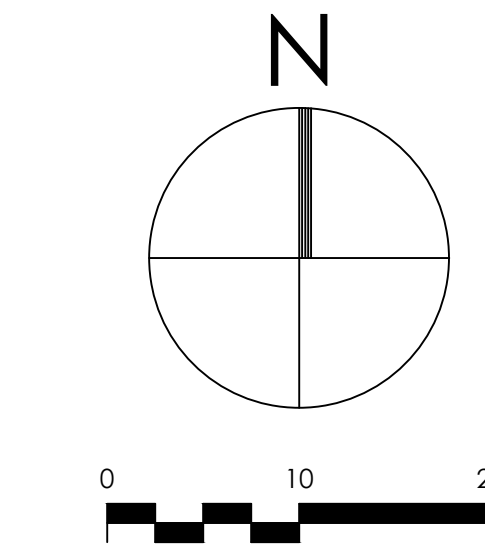


GENERAL NOTES:  
1. THE EXISTING SITE PLAN SHOWN IS BASED ON FEATURES PROPOSED WITH VA PROJECT NO. 581-12-101 ENTITLED "RENOVATION TO THE FORMER BRAC PROPERTY" NORTH-WEST OF PERIMETER FENCE. TOPOGRAPHY IN AREA BETWEEN FENCE AND DRIVE TO VA HOSPITAL IS BASED ON BCCLT SURVEY 7/11/2013.

Revisions:	Date	CONSULTANTS: <b>GUIDON DESIGN</b> 2453 N. DELAWARE ST. INDIANAPOLIS, IN 46205 317.800.6388 WWW.GUIDONDESIGN.COM	<b>bfrmj</b> 620 EUCLID AVENUE SUITE 300 LEXINGTON, KY 40502 PH: (859) 278-6550 FAX: (859) 278-6560 www.bfrmj.com		PROJECT ENGINEERS: <b>BCCLT, Inc.</b> MEP ENGINEERS 601 MAIN STREET SHELBYVILLE, KY 40065 T:502-633-1506 www.BCCLT.com	<b>BCCLT</b> Biagi, Chance, Cummins, London, Titzer consulting engineers	Drawing Title OVERALL SITE LAYOUT	Project Title E-85 FUELING STATION	Project Number 581-305	VETERANS ADMINISTRATION MEDICAL CENTER 	
					Approved for Design Concept:		Location VAMC HUNTINGTON, WV	Building Number	Drawing Number G1102		
								Date 8/8/2013	Checked By:	Drawn By: COM	







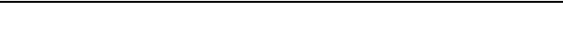
three eighths inch = one foot  
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twelve inches = one foot  
P:\13.1027 - VA Huntington E85 Station - BCCLT\2. Drawings\2-2. Current Drawings\CD101 - SITE DEMOLITION PLAN.dwg 8-07-13 10:04:43 AM kcy



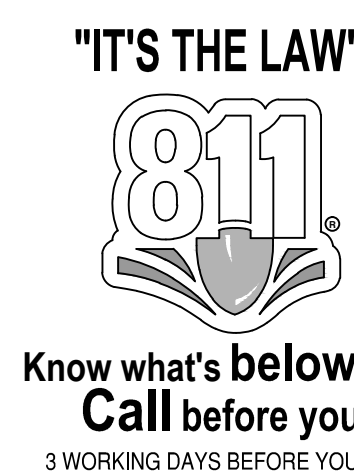
- LEGEND:**
- G --- GAS MAINE
  - W --- WATER MAIN
  - SAN --- SANITARY SEWER
  - STORM --- STORM DRAIN
  - UE --- UNDERGROUND ELECTRIC
  - X-X- CHAIN LINK FENCE

- DEMOLITION NOTES:**
1. THE EXISTING SITE PLAN SHOWN IS BASED ON FEATURES PROPOSED WITH VA PROJECT NO. 581-12-101 ENTITLED "RENOVATION TO THE FORMER BRAC PROPERTY" NORTH- WEST OF PERMETER FENCE. TOPOGRAPHY IN AREA BETWEEN FENCE AND DRIVE TO VA HOSPITAL IS BASED ON BCCLT SURVEY DATED 7/11/2013.
  2. CONTRACTOR SHALL LEGALLY DISPOSE OF ALL DEMOLISHED MATERIALS, GRAVEL, AND MISCELLANEOUS DEBRIS OFF SITE. THE OWNER MAY REQUEST THAT SOME MATERIALS BE STOCKPILED ON THE PROPERTY. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER PRIOR TO DEMOLITION.
  3. THE UTILITIES INDICATED ON THESE CONSTRUCTION PLANS AND ON THE SURVEY MAY NOT BE A COMPLETE INVENTORY OF ALL EXISTING UTILITIES CURRENTLY ON OR NEAR THE SITE. THE SIZE AND LOCATION OF THESE UTILITIES MAY BE APPROXIMATE. THE ENGINEER SHALL NOT BE HELD LIABLE FOR ANY INACCURATE UTILITY INFORMATION INDICATED, OR NOT INDICATED ON THIS SURVEY.
  4. EXISTING TELEPHONE JUNCTION BOXES INDICATED ON PLAN ARE CURRENTLY INACTIVE. CONTRACTOR TO LOCATE AND VERIFY ALL EXISTING UTILITIES PRIOR TO EXCAVATION.
  5. CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES PRIOR TO COMMENCEMENT OF DEMOLITION.
  6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING DAMAGE TO EXISTING BUILDINGS THAT ARE TO REMAIN.
  7. ANY DISCREPANCIES OR CONFLICTS WHICH BECOME APPARENT BEFORE OR DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.

- KEY NOTES:**
- ① REMOVE EXISTING GRAVEL AND MISCELLANEOUS DEBRIS
  - ② CLEAR & GRUB VEGETATED AREAS
  - ③ REMOVE EXISTING FENCE FABRIC, POSTS, AND FOOTINGS
  - ④ REMOVE A PORTION OF EXISTING 4" CPP PIPE
  - ⑤ REMOVE EXISTING BUILDING, SLAB, AND FOUNDATIONS
  - ⑥ REMOVE EXISTING LIGHT POLE AND PROPERLY ABANDON ELECTRICAL SERVICE
  - ⑦ REMOVE EXISTING TREE, INCLUDING ROOT BALL

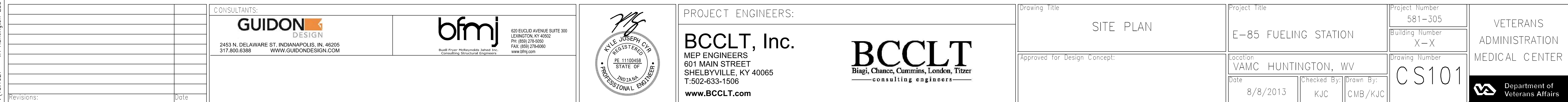
Revisions:	Date	CONSULTANTS:		PROJECT ENGINEERS:		Drawing Title	Project Title	Project Number	VETERANS ADMINISTRATION MEDICAL CENTER 
		 2453 N. DELAWARE ST. INDIANAPOLIS, IN. 46205 317.800.6388 WWW.GUIDONDESIGN.COM	 620 EUCLID AVENUE SUITE 300 LEXINGTON, KY 40502 PH: (606) 278-9500 FAX: (606) 278-6000 www.bfmj.com	 KYLE JOSEPH CYR REGISTERED PROFESSIONAL ENGINEER STATE OF INDIANA PE 11100458	 BCCLT Biagi, Chance, Cummins, London, Titzer consulting engineers	SITE DEMOLITION PLAN	E-85 FUELING STATION	581-305	
					Approved for Design Concept:	Location VAMC HUNTINGTON, WV	Building Number X-X	Drawing Number CD101	
						Date 8/8/2013	Checked By: KJC	Drawn By: CMB/KJC	





1. THE EXISTING SITE PLAN SHOWN IS BASED ON FEATURES PROPOSED WITH VA PROJECT NO. 581-12-101 ENTITLED "RENOVATION TO THE FORMER BRAC PROPERTY" NORTH- WEST OF PERMIER FENCE. TOPOGRAPHY IN AREA BETWEEN FENCE AND DRIVE TO VA HOSPITAL IS BASED ON BCCLT SURVEY DATED 7/11/2013.
2. ANY DISCREPANCIES OR CONFLICTS WHICH BECOME APPARENT BEFORE OR DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
3. WORK SHALL BE GOVERNED BY ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES AND ORDINANCES INCLUDING FIRE CODES AND THE DEPARTMENT OF VETERANS AFFAIR'S REQUIREMENTS AND GUIDELINES.
4. FIELD VERIFY ALL DIMENSIONS ON THE SITE PRIOR TO CONSTRUCTION AND IDENTIFY DISCREPANCIES TO THE ENGINEER.
5. WHERE WORK IS DONE IN EXISTING AREAS, THE EXISTING FINISHED CONDITIONS ARE TO BE REPAIRED OR REPLACED. THESE FINISHED CONDITIONS ARE TO MATCH EXISTING UNLESS OTHERWISE NOTED. WHERE NEW FINISHED CONDITIONS ARE TO BE INSTALLED, EXISTING FINISHED CONDITIONS ARE TO BE REMOVED BY THE CONTRACTOR.
6. SEE SHEET CS501 FOR ALL REFERENCED SITE DETAILS

- ① CONCRETE PAVEMENT
- ② 6" CHAIN LINK (C-L) FENCE W/ BARBED WIRE
- ③ 4" CONCRETE BARRIER POST
- ④ 36' X 36' RAISED CANOPY
- ⑤ INTEGRAL SIDEWALK AND CURB
- ⑥ CONCRETE SWALE
- ⑦ RETAINING WALL (SEE STRUCTURAL PLANS)
- ⑧ E-85 FUELING STATION (SEE MECHANICAL PLANS)
- ⑨ 17.5' DOUBLE ARM C-L SWING GATE
- ⑩ 18' SINGLE ARM C-L SWING GATE
- ⑪ 40' DOUBLE ARM C-L SWING GATE
- ⑫ RAISED CONCRETE ISLAND (SEE STRUCTURAL PLANS)
- ⑬ CONCRETE CONTRACTION JOINTS
- ⑭ CONCRETE EXPANSION JOINTS
- ⑮ 4' SINGLE ARM C-L MAN GATE
- ⑯ 3' SINGLE ARM C-L MAN GATE



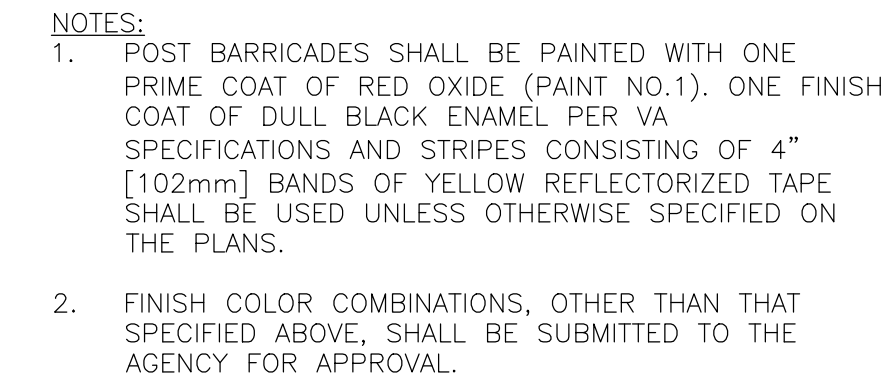




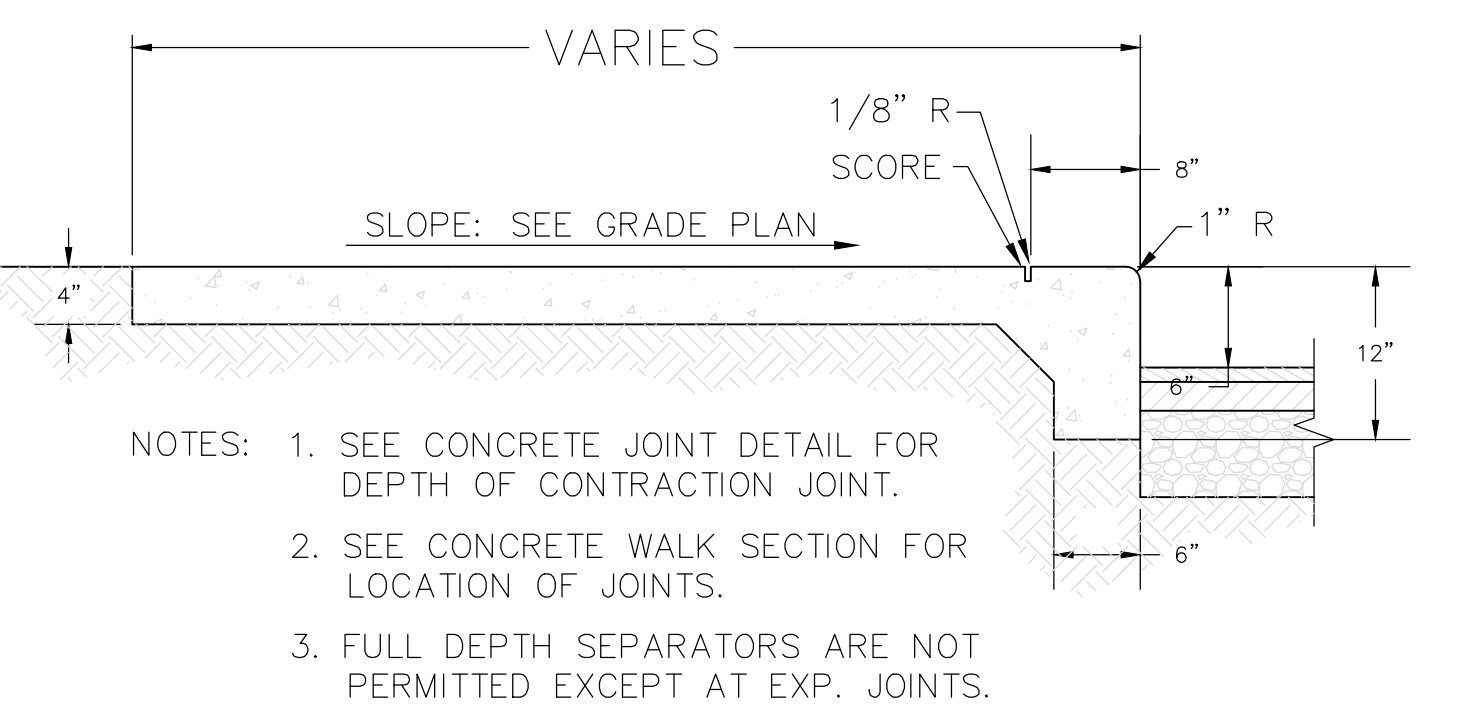
## DOUBLE ARM CHAIN LINK GATE



## SINGLE ARM CHAIN LINK GATE



## CONCRETE POST BARRICADE



## INTEGRAL WALK AND CURB



VETERANS  
ADMINISTRATION  
MEDICAL CENTER

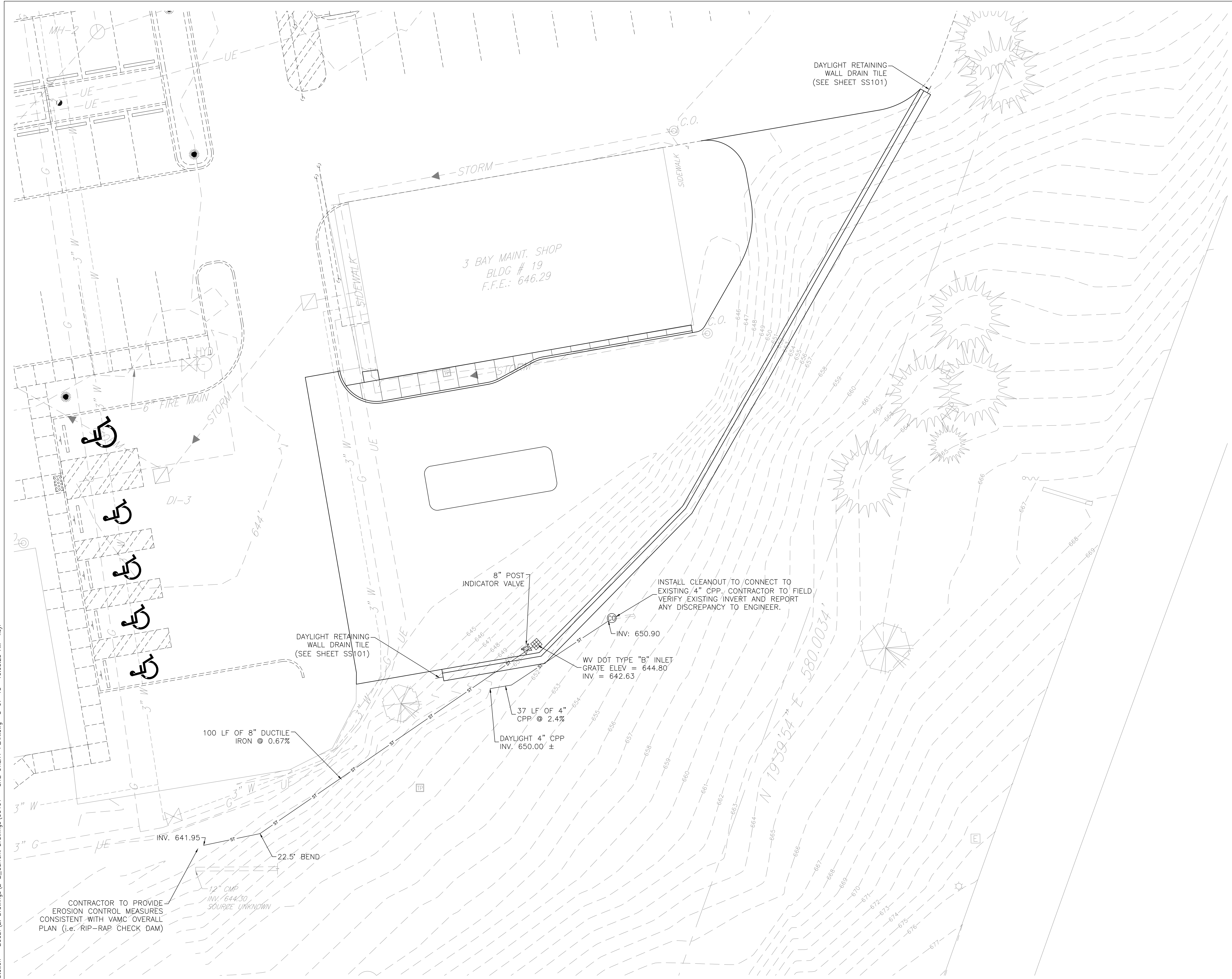
 Department of  
Veterans Affairs







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P: 13.1027 - VA Huntington E85 Station - BCCLT 2. Drawings 2-2, Current Drawings CU101 - SITE UTILITY PLAN.dwg 8-07-13 100523 AM kcyf



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0 10 20

"IT'S THE LAW"

811

Know what's below.  
Call before you dig.  
3 WORKING DAYS BEFORE YOU DIG.

- UTILITY NOTES:
1. THE EXISTING SITE PLAN SHOWN IS BASED ON FEATURES PROPOSED WITH VA PROJECT NO. 581-12-101 ENTITLED "RENOVATION TO THE FORMER BRAC PROPERTY" NORTH- WEST OF PERMETER FENCE. TOPOGRAPHY IN AREA BETWEEN FENCE AND DRIVE TO VA HOSPITAL IS BASED ON BCCLT SURVEY DATED 7/11/2013.
  2. THE UTILITIES INDICATED ON THESE CONSTRUCTION PLANS AND ON THE SURVEY MAY NOT BE A COMPLETE INVENTORY OF ALL EXISTING UTILITIES CURRENTLY ON OR NEAR THE SITE. THE SIZE AND LOCATION OF THESE UTILITIES MAY BE APPROXIMATE. THE ENGINEER SHALL NOT BE HELD LIABLE FOR ANY INACCURATE UTILITY INFORMATION INDICATED, OR NOT INDICATED ON THIS SURVEY.
  3. ANY DISCREPANCIES OR CONFLICTS WHICH BECOME APPARENT BEFORE OR DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
  4. CONTRACTOR IS RESPONSIBLE FOR COORDINATION BETWEEN TRADES. COORDINATE UTILITIES SO THEY ARE INSTALLED IN AN ORDERLY AND UNIFORM MANNER.
  5. PROTECT/RESTORE: PROTECT EXISTING ITEMS, EQUIPMENT, FINISHES, TO REMAIN. REPAIR/REPLACE/RESTORE CONDITIONS THAT ARE DAMAGED OR DISTURBED AS A RESULT OF DEMOLITION AND NEW WORK. THIS INCLUDES (BUT IS NOT LIMITED TO) PATCHING HOLES, CAPPING UTILITIES AFTER REMOVING BRANCHES.
  6. CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS ON SITE USING PUBLIC AND PRIVATE UTILITY LOCATES PRIOR TO ANY CONSTRUCTION.
  7. CONTRACTOR TO PROVIDE EROSION CONTROL MEASURES CONSISTENT WITH VAMC OVERALL PLAN.
  8. SEE SHEET CU501 FOR ALL REFERENCED SITE UTILITY DETAILS.

Revisions:	Date:	CONSULTANTS:		<b>GUIDON DESIGN</b> 2453 N. DELAWARE ST. INDIANAPOLIS, IN. 46205 317.800.6388 WWW.GUIDONDESIGN.COM	<b>bfmtj</b> 620 EUCLID AVENUE SUITE 300 LEXINGTON, KY 40502 PH: (609) 278-9090 FAX: (609) 278-9090 www.bfmtj.com		PROJECT ENGINEERS:		<b>BCCLT, Inc.</b> MEP ENGINEERS 601 MAIN STREET SHELBYVILLE, KY 40065 T: 502-633-1506 www.BCCLT.com	<b>BCCLT</b> Biagi, Chance, Cummins, London, Titzer consulting engineers	Drawing Title	Project Title		Project Number		VETERANS ADMINISTRATION MEDICAL CENTER
		SITE UTILITY PLAN					E-85 FUELING STATION				581-305		Building Number X-X			
Approved for Design Concept:		Location		Drawing Number		Date		Checked By:		Drawn By:		C U101				
		VAMC HUNTINGTON, WV				8/8/2013		KJC		CMB/KJC						







three inches = one foot  
one and one half inches = one foot  
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one quarter inch = one foot  
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A

B

C

D

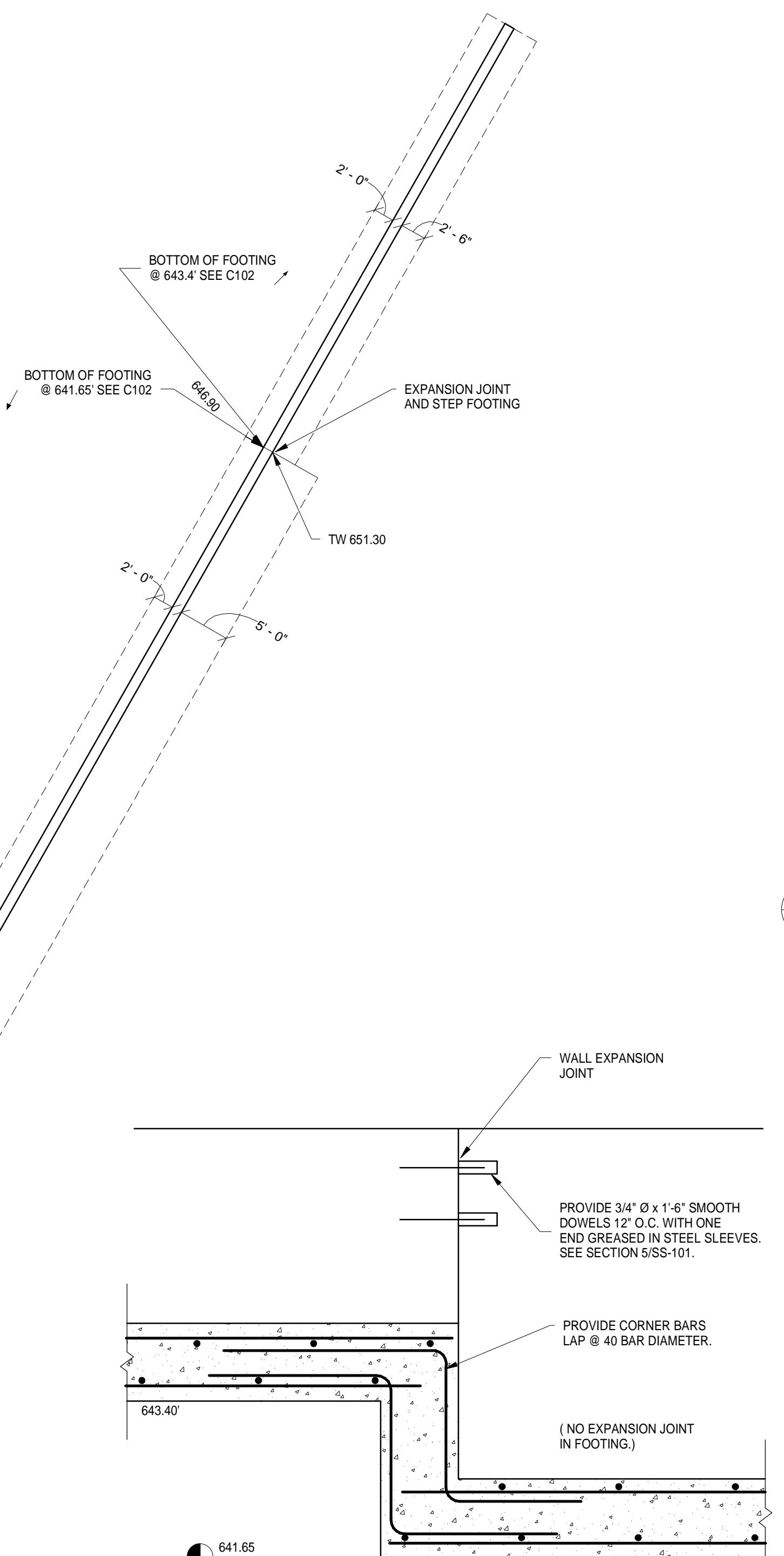
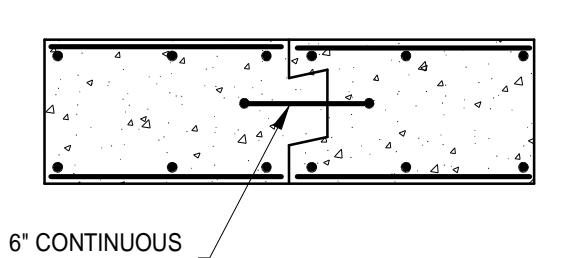
E

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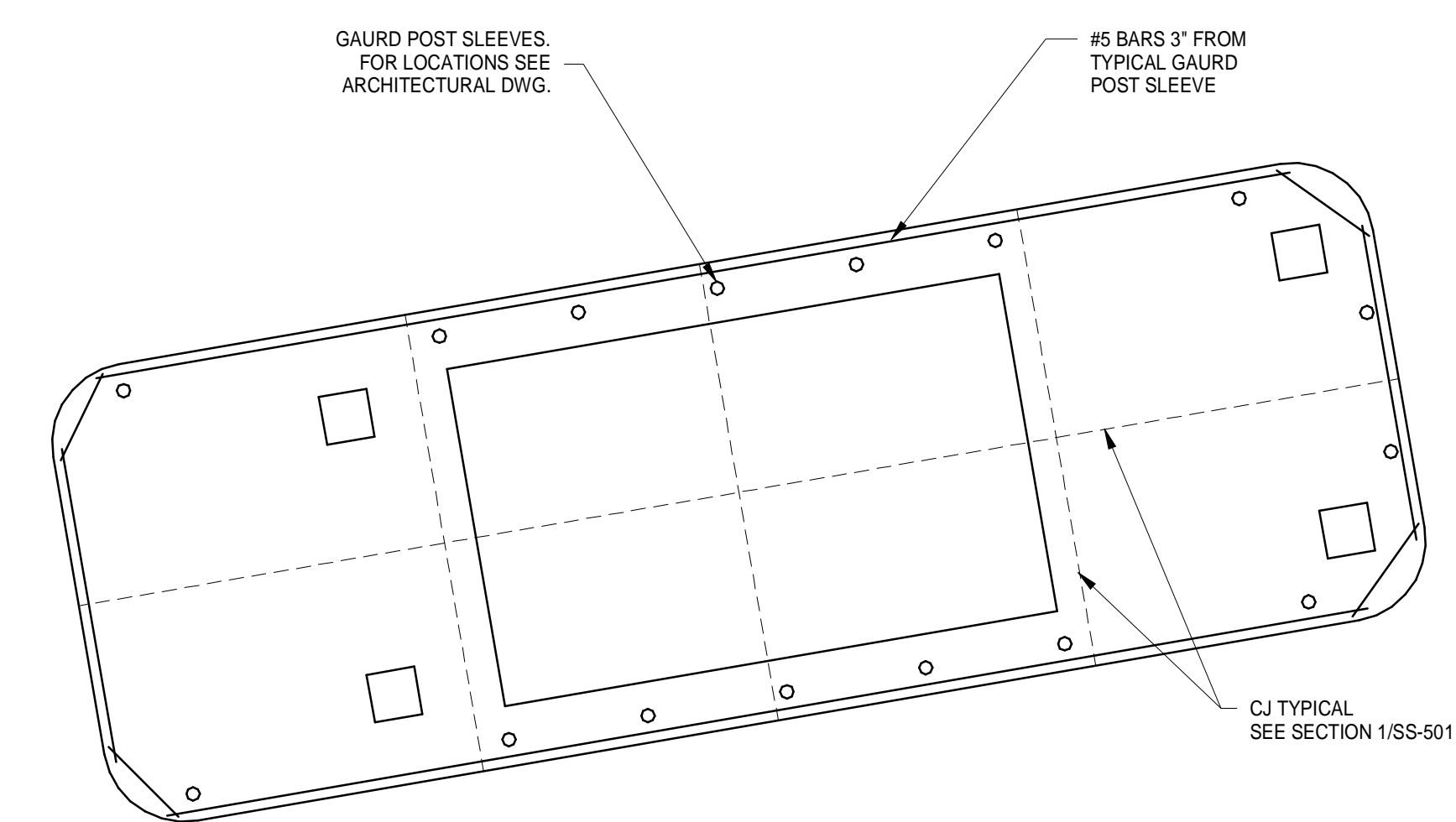
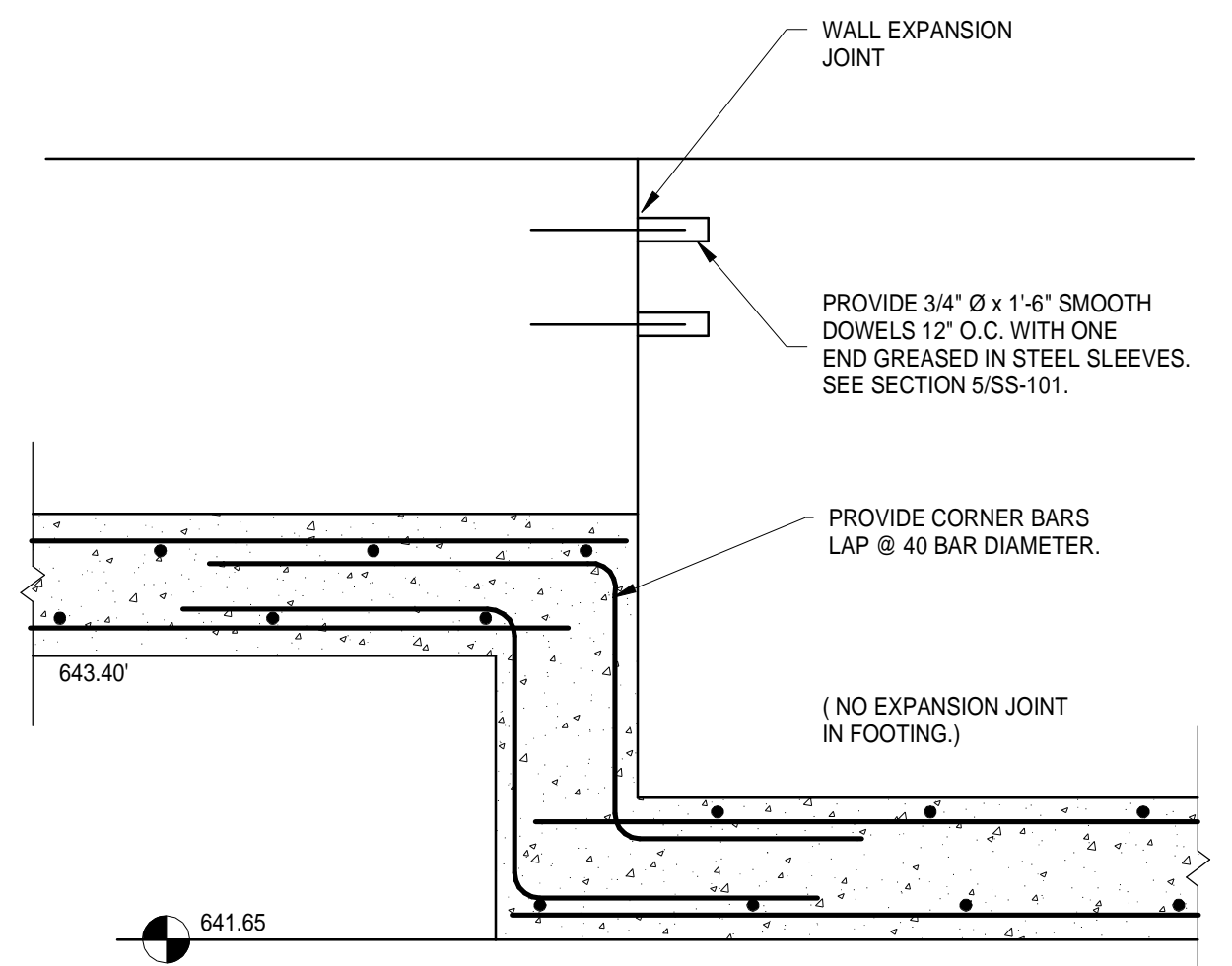
PROVIDE CONTROL OR CONSTRUCTION JOINTS @ 20'-0" OC ALONG THE LENGTH OF THE WALL AT CONTROL / CONSTRUCTION JOINTS HALF THE HORIZONTAL BARS SHALL BE CUT, ALTERNATE BARS ON TWO SIDES OF WALL.

PROVIDE EXPANSION JOINTS @ 60'-0" OC PROVIDE 3/4" Ø x 1'-6" SMOOTH DOWELS 12" OC WITH ONE END GREASED IN STEEL OR PVC SLEEVES. SEE SECTIONS 6SS-101 AND 4SS-101

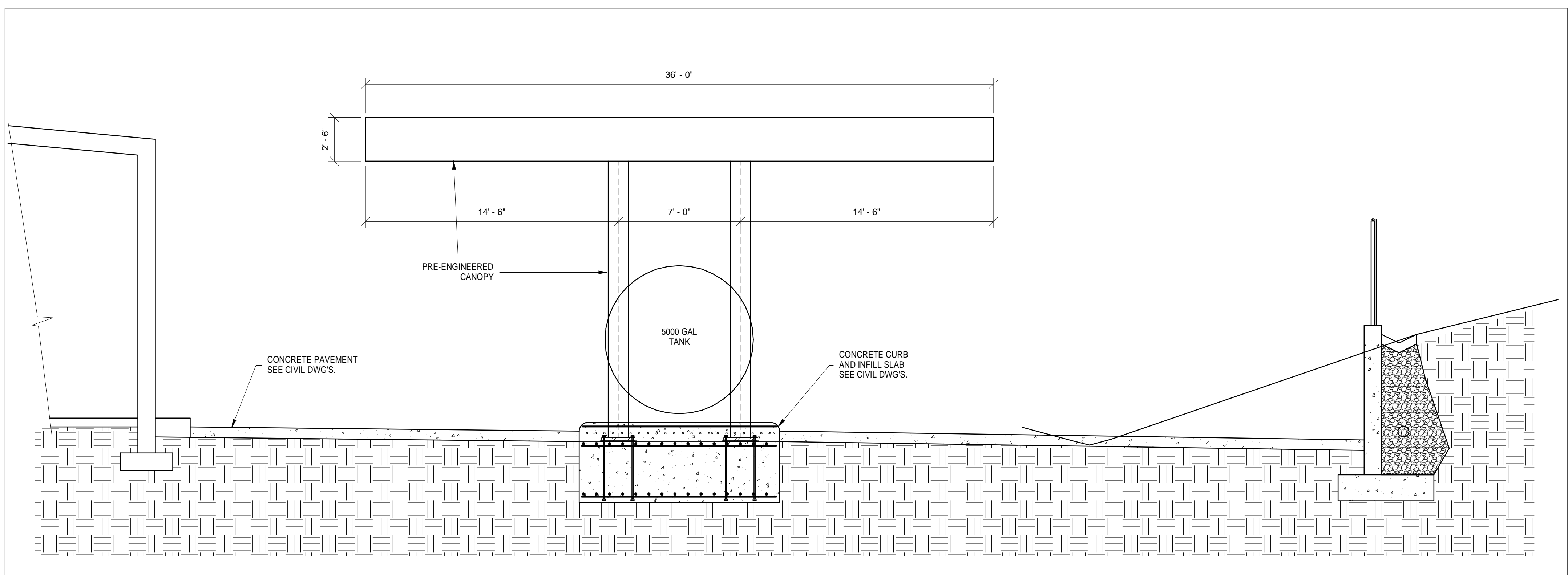
CONSTRUCTION JOINTS DETAIL WILL BE SIMILAR TO 4/SS-101 EXCEPT TO PROVIDE 2 x 6 KEY AND WATER STOP IN THE WALL.



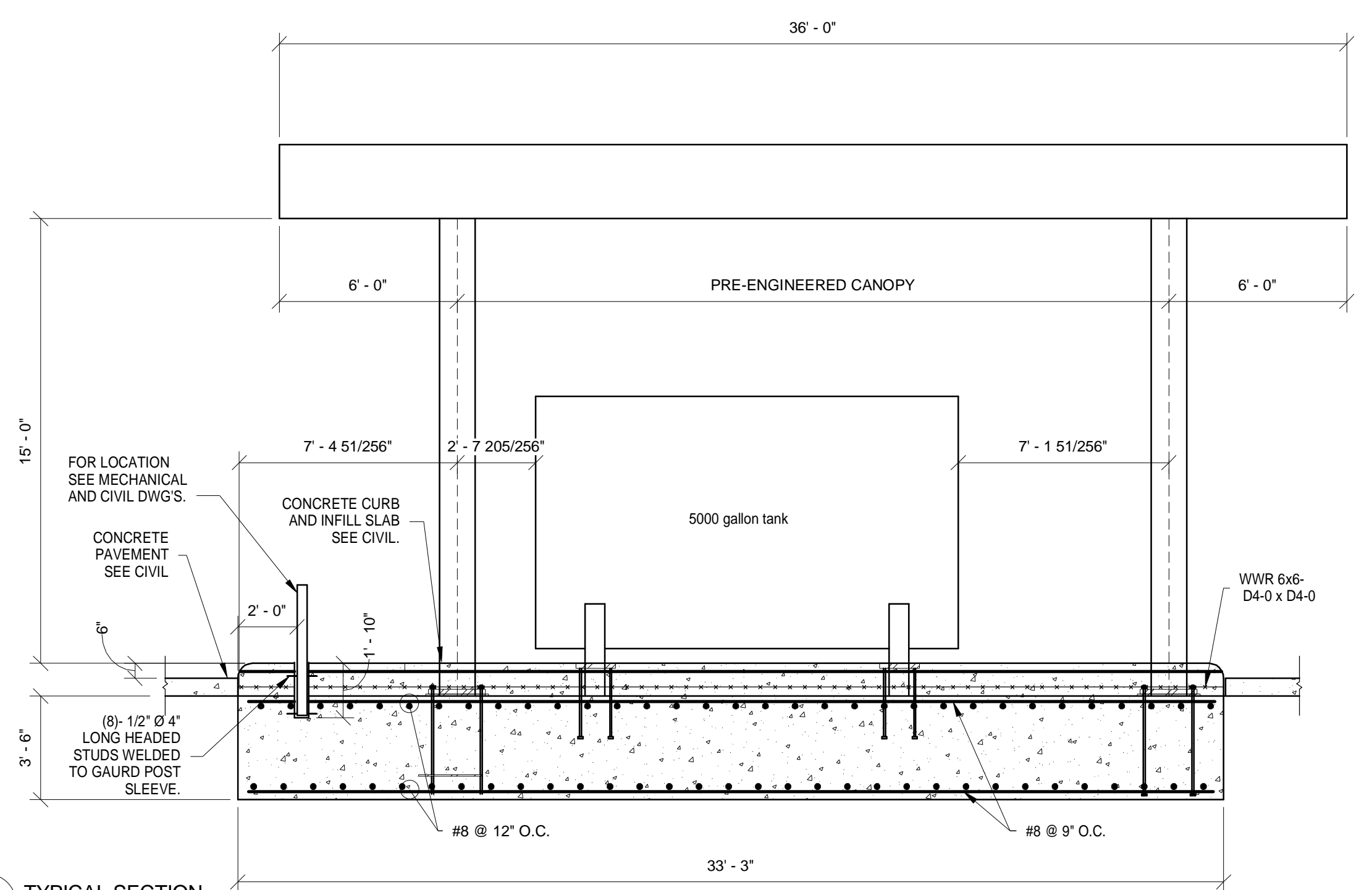
8 SECTION 3/4" = 1'-0"



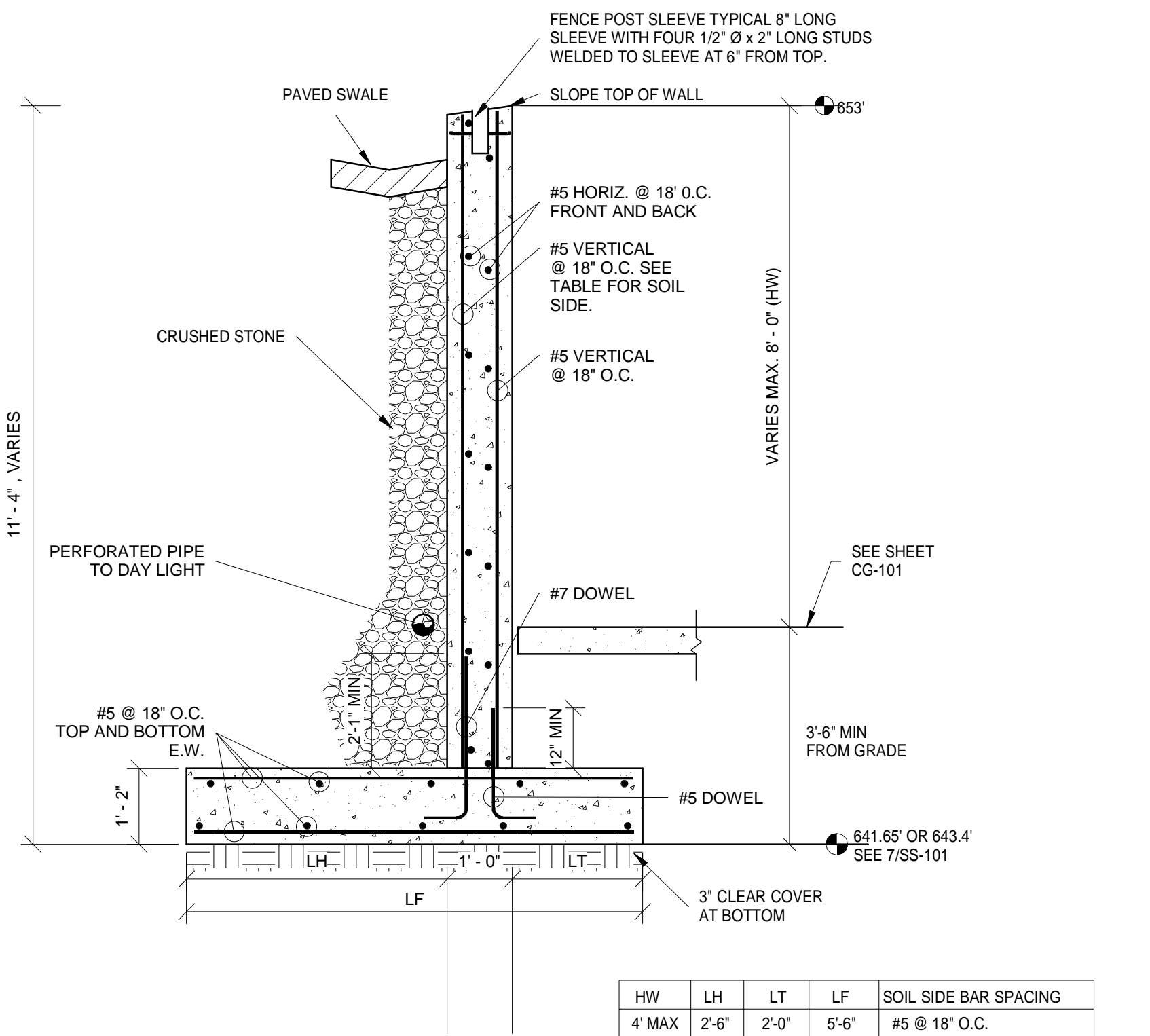
6 PLAN OF CONCRETE FUEL ISLAND 1/4" = 1'-0"



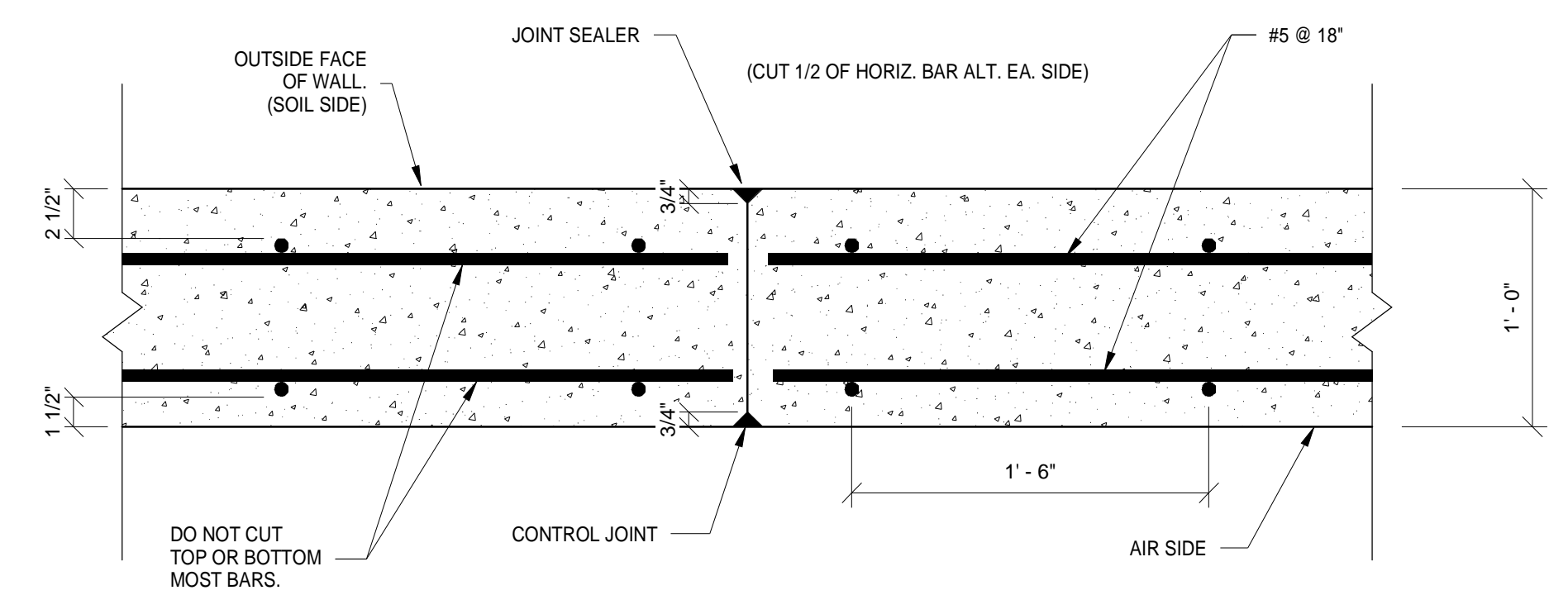
1 TYPICAL SECTION 1/4" = 1'-0"



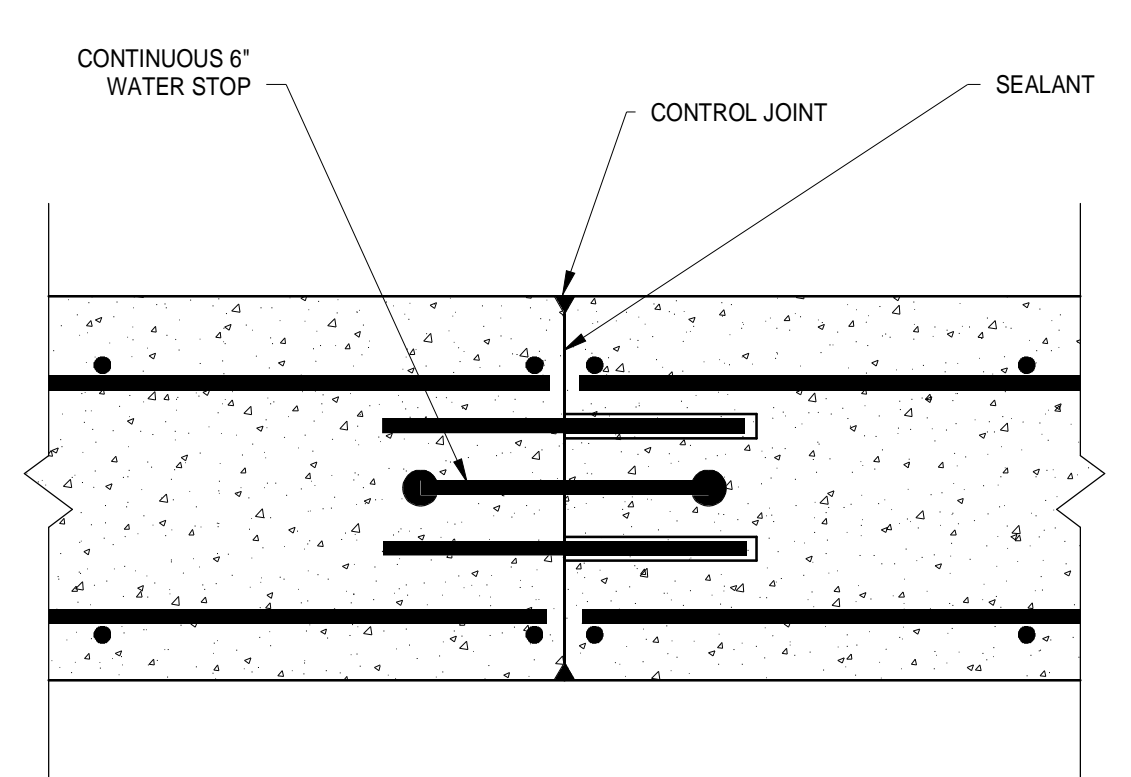
2 TYPICAL SECTION 1/4" = 1'-0"




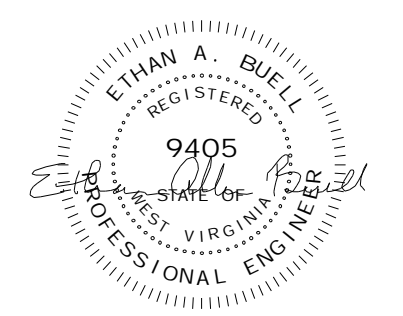

3 TYPICAL SECTION 1/2" = 1'-0"



4 TYPICAL WALL CONTROL JOINT SECTION 1 1/2" = 1'-0"



5 TYPICAL WALL EXPANSION JOINT SECTION 1 1/2" = 1'-0"

Revisions:	Date	CONSULTANTS:	 Buell Fryer McReynolds Jahed Consulting Structural Engineers 620 EUGENE AVENUE LEXINGTON, KY 40502 TEL: (502) 278-5000 FAX: (502) 278-5000 www.bfmj.com BPMJ No. 13028-40		PROJECT ENGINEERS:	Drawing Title	Project Title	Project Number	VETERANS ADMINISTRATION MEDICAL CENTER 	
		2453 N. DELAWARE ST. INDIANAPOLIS, IN. 46205 317.800.6388 WWW.GUIDONDESIGN.COM			BCCLT, Inc. MEP ENGINEERS 601 MAIN STREET SHELBYVILLE, KY 40065 T:502-633-1506 www.BCCLT.com	STRUCTURAL PLAN AND DETAILS	E- 85 FUELING STATION	581- 305		Building Number X - X
					Approved for Design Concept:	Location VAMC HUNTINGTON, WV	Date 8/8/2013	Checked By:	Drawn By:	Drawing Number SS- 101

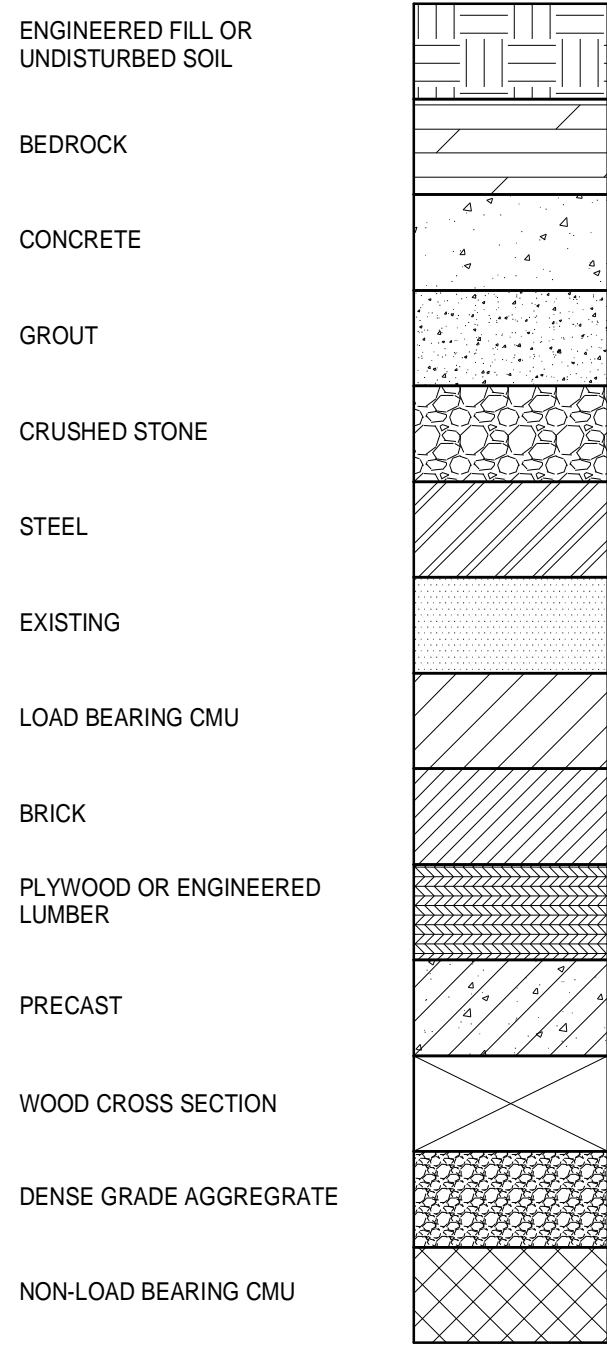


# ABBREVIATIONS

(FOR STRUCTURAL DRAWINGS ONLY)

&	AND	GALV.	GALVANIZED
@	ANCHOR BOLT	GB	GRADE BEAM
AB	ABOVE FINISHED FLOOR	GC	GENERAL CONTRACTOR
AFF	ADHESIVE	GR	GRADE
ADH.	ALTERNATE	HC	HOLLOW CORE
ALT.	ALUMINUM	HS	HEADED STUDS
ALUM	ANCHOR	HSB	HIGH STRENGTH BOLTS
ANCH.	APPROXIMATE	HT	HEIGHT
APPROX.	ARCHITECT/ARCHITECTURAL	HORIZ.	HORIZONTAL
ARCH.	BACK TO BACK	HSS	HOLLOW STRUCTURAL SECTION
BB	BOTTOM OF BEAM ELEVATION	JBE	JOIST BEARING ELEVATION
BBE	BOTTOM OF DRILL SHAFT ELEVATION	JOINT	JOINT
BSE	BOTTOM OF FOOTING ELEVATION	KLF	KIPS PER LINEAR FOOT
BFE	BRICK/BLK/CLK SEAT ELEVATION	KSF	KIPS PER SQUARE FOOT
BKSE	BUILDING	LB	LOAD
BLDG.	BLOCKING	LL	LONG LEG HORIZONTAL
BLKG	BEAM	LLH	LONG LEG VERTICAL
BM	BOTTOM OF PILE ELEVATION	LLV	LONG LEG VERTICAL
BOT.	BEARING	LT	LONG LEG VERTICAL
BPE	BOTTOM OF STEEL ELEVATION	LVL	LAMINATED VENEER LUMBER
BRG	BOTTOM OF WALL ELEVATION	MAS.	MASONRY
BSE	CONCRETE BLOCK	MAX.	MAXIMUM
BWE	CONTROL JOINT	MECH.	MECHANICAL
CB	CENTER LINE	MFG.	MANUFACTURER
CJ	CLEAR	MIN.	MINIMUM
CL	CONCRETE MASONRY UNIT	MISC.	MISCELLANEOUS
CMU	COLUMN	MO	MASONRY OPENING
COL	COMPOSITE	MOM.	MOMENT
COMP.	CONCRETE	MTL	MIDDLE STRIP
CONC.	CONNECTION	NIC	NOT IN CONTRACT
CONV.	CONSTRUCTION	NO. or #	NUMBER
CONSTR.	CONTINUOUS	NTS	NOT TO SCALE
CONTR.	CONTRACTOR	OC	ON CENTER
COORD.	COORDINATE	OPG.	OPENING
CSJ	CONSTRUCTION JOINT	OSF	OUTSIDE FACE
CS	COLUMN STRIP	PCF	POUNDS PER CUBIC FOOT
DB	DEFORMED BAR ANCHORS	PC	PILE CAP
DBA	DOUBLE	PLF	POUNDS PER LINEAR FOOT
DTL	DETAIL	PLYWD.	PLYWOOD
DIA. or Ø	DIAMETER	PSI	POUNDS PER SQUARE INCH
DIAG.	DIAGONAL	PSL	PARALLEL STRAND LUMBER
DM	DIMENSION	R	RADIUS
DN	DOWN	RADIUS	RADIUS
DP	DRILLED PIER	REIN.	REINFORCEMENT
DS	DRILLED SHAFT	REIN.	REINFORCEMENT
DWL	DOWELS	RET.	RETAINING
DWG.	DRAWINGS	SCHED.	SCHEDULE
EA	EACH	SECT.	SECTION
EB	ERECTION BOLT	SHEET	STRUCTURAL ENGINEER OF RECORD
EF	EACH FACE	SHT	SHEET
EJ	EXPANSION JOINT	SM	SIMILAR
ELEV.	ELEVATION	SP	SPACE
EMB	EMBEDMENT	STIFF	STIFFENER
ENGR.	ENGINEER	STD.	STANDARD
EQ	EQUAL	STL	STEEL
EW	EACH WAY	STRUC.	STRUCTURAL
EXIST.	EXISTING	TBE	TOP OF BEAM ELEVATION
EXP.	EXPANSION	TOC	TOP OF COLUMN ELEVATION
EXT.	EXTERIOR	TOE	TOP OF CONCRETE ELEVATION
FDN.	FOUNDATION	TOSE	TOP OF DRILL SHAFT ELEVATION
FFE	FINISHED FLOOR ELEVATION	TSE	TOP OF FOOTING ELEVATION
FN.	FINISHED	TJE	TOP OF JOIST ELEVATION
FL	FLOOR	TPCE	TOP OF PILE CAP ELEVATION
FLGS.	FLANGES	TRE	TOP OF ROCK ELEVATION
FRMG.	FRAMING	TSE	TOP OF SLAB ELEVATION
FOOT	FOOT	TWE	TOP OF WALL ELEVATION
FTG.	FOOTING	TYP.	TYPICAL
FV	FIELD VERIFY	UNO	UNLESS NOTED OTHERWISE
GA	GAUGE	VERT.	VERTICAL
		W/	WITH
		WP	WORKING POINT
		WWR	WELDED WIRE REINFORCEMENT

## LEGEND



■ RX WATER STOP

— KEYWAY - 2" x 4" x CONT. (TYP)

□ ► MOMENT CONNECTION

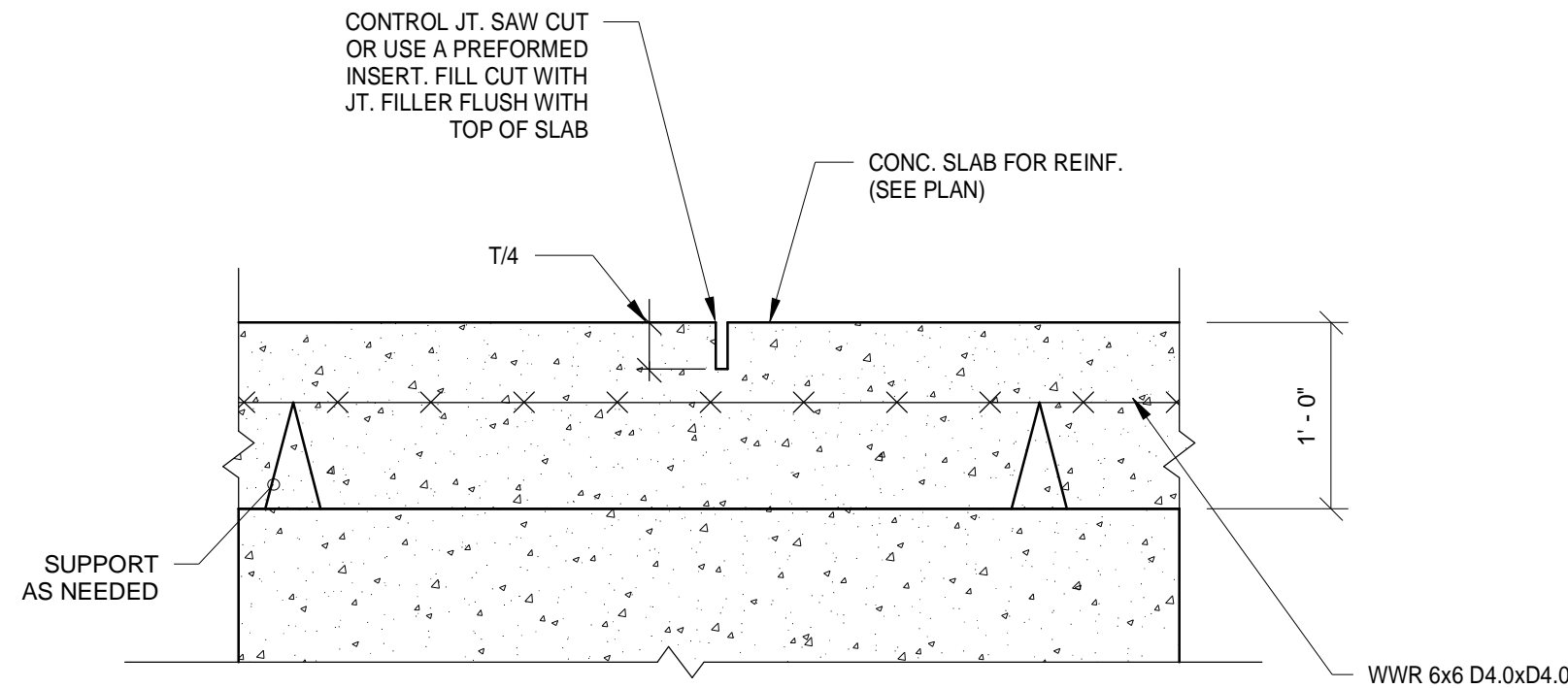
[XX] INDICATES NUMBER OF STUD ANCHORS EQUALLY SPACED OVER ENTIRE LENGTH OF BEAMS.

→ DENOTES DIRECTION OF DECK SPAN

⊗ ELEVATION NOTE

⊗ PLAN NOTE

⊗ REVISIONS



- NOTE:
- SEE 0/SS-101 PLAN FOR CJ LOCATIONS
  - SAW CUT JT. WITHIN 12 HOURS OF POURING CONC.

TYPICAL SLAB ON GRADE CONTROL JOINT SECTION  
1" = 1'-0"

## A. NOTES TO THE CONTRACTOR

- DRAWINGS REPRESENT THE DESIRED RESULT OF CONSTRUCTION. BIDDERS SHALL USE COMPLETE SETS OF BIDDING DOCUMENTS IN PREPARING BIDS. NEITHER THE ENGINEER, OWNER, NOR ARCHITECT ASSUMES RESPONSIBILITY FOR ERRORS OR MISINTERPRETATIONS RESULTING FROM THE USE OF INCOMPLETE SETS OF BIDDING DOCUMENTS.
- THE METHODS OF CONSTRUCTION AND THE RISKS INVOLVED DURING CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL MAINTAIN THE BUILDING'S STRUCTURAL INTEGRITY AT ALL STAGES OF CONSTRUCTION.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS DURING CONSTRUCTION AND REPORT TO THE ARCHITECT/ENGINEER PRIOR TO CONSTRUCTION ANY DISCREPANCIES.
- CONTRACTOR'S PROPOSED SUBSTITUTIONS SHALL BE APPROVED BY THE ARCHITECT/ENGINEER PRIOR TO COMMENCING ANY PERTINENT WORK.
- ALL MATERIALS AND INSTALLATIONS MUST BE TESTED/INSPECTED BY THIRD PARTY AGENCIES APPROVED BY THE STRUCTURAL ENGINEER, BUT EMPLOYED BY THE GENERAL CONTRACTOR. SEE INDIVIDUAL SPECIFICATION SECTIONS FOR SPECIFIC REQUIREMENTS. CONTRACTOR SHALL SUBMIT A LIST OF PROPOSED INSPECTORS SOON AFTER BEING SELECTED AND EARLY ENOUGH SO THAT SI CAN BE SELECTED PRIOR TO START OF CONSTRUCTION. LIST SHALL INCLUDE CREDENTIALS OF INSPECTOR(S) WHO WILL ACTUALLY PERFORM THE WORK.

### 6. SPECIAL INSPECTIONS:

- A SPECIAL INSPECTIONS PROGRAM IS REQUIRED FOR THIS PROJECT. THE STRUCTURAL ENGINEER OF RECORD, BFMJ, MUST APPROVE ALL SPECIAL INSPECTORS FOR STRUCTURAL WORK IN WRITING PRIOR TO BEGINNING ANY FIELD CONSTRUCTION WORK.
- THE SPECIAL INSPECTOR (SI) THAT OVERSEES EACH SPECIAL INSPECTION PROGRAM AREA MUST BE A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF WEST VIRGINIA. HE AND HIS INSPECTION AGENTS SHALL HAVE APPROPRIATE EXPERIENCE AND TRAINING IN THE AREA OF WORK THEY WILL BE PROVIDING SERVICES FOR, INCLUDING THE ABILITY TO READ AND INTERPRET THE CONTRACT DOCUMENTS, INCLUDING CONTRACT DRAWINGS, SPECIFICATIONS AND FIELD ADDENDUMS.
- SPECIAL INSPECTIONS SHALL BE IN ACCORDANCE WITH CHAPTER 17 OF THE IBC 2009 AND WEST VIRGINIA BUILDING CODE.
- ALL MATERIALS SUPPLIERS ARE TO SUBMIT ALL NECESSARY PAPERWORK OR HIRE A SPECIAL INSPECTOR TO MEET THE REQUIREMENTS FOR INSPECTION OF FABRICATORS LISTED IN CHAPTER 17 OF THE IBC 2009 AND WEST VIRGINIA BUILDING CODE.
- THE OWNER IS TO ENGAGE A SPECIAL INSPECTOR OR INSPECTORS THAT WILL OBSERVE AND REPORT ON THE CONSTRUCTION PRACTICES.
- THE CONTRACTOR OR HIS SUBCONTRACTORS ARE TO ENGAGE THE TESTING AGENCIES FOR ALL MATERIAL TESTING REQUIRED IN THEIR SPECIFICATIONS OF WORK.
- DUTIES OF THE SPECIAL INSPECTOR:
  - SPECIAL INSPECTORS AND THE AUTHORIZED AGENT(S) SHALL OBSERVE DESIGNATED WORK TO VERIFY CONFORMANCE WITH THE APPROVED DRAWINGS AND SPECIFICATIONS.
  - THE SI SHALL INFORM ALL PERTINENT PARTIES, INCLUDING THE SER, OF ANY DEVIATIONS FROM COMPLIANCE WITH THE CONTRACT DOCUMENTS IMMEDIATELY.
  - THE SI IS TO PROVIDE PERIODIC INTERIM REPORTS TO THE SER, BFMJ, AND FILE A FINAL REPORT OF SPECIAL INSPECTIONS AT THE COMPLETION OF THE PROJECT TO THE SER AND BUILDING OFFICIAL.
- THE FOLLOWING TYPES OF STRUCTURAL WORK REQUIRE SPECIAL INSPECTION: (REFER TO BUILDING CODE, SPECIFICATIONS, AND SPECIAL INSPECTION LETTER DATED AUGUST 8, 2013 FOR DETAILED INSPECTION REQUIREMENTS):
  - FABRICATORS STRUCTURAL STEEL WORK
  - CONCRETE WORK
  - FOUNDATION WORK

## B. DESIGN CRITERIA

THIS STRUCTURE HAS BEEN DESIGNED ACCORDING TO THE IBC 2009 AND WEST VIRGINIA BUILDING CODE, ASCE 7-05 AND FOR THE SPECIFIC LOADS THAT ARE LISTED BELOW.

### 1. ROOF GRAVITY LOADS

- LIVE LOAD = 20 PSF

### b. SNOW LOADS:

GROUND SNOW LOAD (Pg) = 20 PSF

FLAT-ROOF SNOW LOAD (P) = 20 PSF

EXPOSURE FACTOR (Ce) = 1.0

IMPORTANCE FACTOR (Ih) = 1.0

THERMAL FACTOR (Ct) = 1.0

### 2. FLOOR LOADS

- LIVE LOADS:

- 1) SLAB ON GRADE = 250 PSF

### 3. LATERAL LOADS:

- WIND LOADS:

BASIC WIND SPEED = 90 MPH

IMPORTANCE FACTOR (Ih) = 1

BUILDING CATEGORY = II (SEE BELOW)

BUILDINGS AND OTHER STRUCTURES CONTAINING HIGHLY TOXIC SUBSTANCES SHALL BE ELIGIBLE FOR CLASSIFICATION AS OCCUPANCY CATEGORY II STRUCTURES IF IT CAN BE DEMONSTRATED TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION BY A HAZARD ASSESSMENT AS DESCRIBED IN SECTION 1.5.2 THAT A RELEASE OF THE HIGHLY TOXIC SUBSTANCES DOES NOT POSE A THREAT TO THE PUBLIC. THIS REDUCED CLASSIFICATION SHALL NOT BE PERMITTED IF THE BUILDINGS OR OTHER STRUCTURES ALSO FUNCTION AS ESSENTIAL FACILITIES (ASCE 7-05 BOTTOM OF PAGE LAST NOTE, PAGE 3)

EXPOSURE = C

OPEN BUILDING

IMPORTANCE FACTOR (Ih) = 1.0

ROOF ANGLE WITH HORIZONTAL = 0 DEGREES

### b. SEISMIC LOADS:

THE FOLLOWING EARTHQUAKE DESIGN DATA WAS USED FOR THIS DESIGN ANALYSIS, BASED ON ZIP CODE 25704, AND PER USGS DATA

MAPPED SPECTRAL RESPONSE ACCELERATION  $S_{S1}$  = 20.0% g

MAPPED SPECTRAL RESPONSE ACCELERATION  $S_{S2}$  = 7.3% g

SITE CLASS TYPE = D PER ASCE 7-05 AND IBC 2006 (NO SOIL REPORT)

DESIGN SPECTRAL ACCELERATION FOR SHORT PERIOD ( $S_{D1}$ ) = 16.0% g

DESIGN SPECTRAL ACCELERATION FOR 1-SECOND PERIOD ( $S_{D1}$ ) = 8.20% g

SEISMIC USE GROUP = II (SEE BELOW)

BUILDINGS AND OTHER STRUCTURES CONTAINING HIGHLY TOXIC SUBSTANCES SHALL BE ELIGIBLE FOR CLASSIFICATION AS OCCUPANCY CATEGORY II STRUCTURES IF IT CAN BE DEMONSTRATED TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION BY A HAZARD ASSESSMENT AS DESCRIBED IN SECTION 1.5.2 THAT A RELEASE OF THE HIGHLY TOXIC SUBSTANCES DOES NOT POSE A THREAT TO THE PUBLIC. THIS REDUCED CLASSIFICATION SHALL NOT BE PERMITTED IF THE BUILDINGS OR OTHER STRUCTURES ALSO FUNCTION AS ESSENTIAL FACILITIES (ASCE 7-05 BOTTOM OF PAGE LAST NOTE, PAGE 3)

### CANOPY STRUCTURE

SEISMIC DESIGN CATEGORY, SDC = B

BASIC STRUCTURAL SYSTEM AND SEISMIC-RESISTING SYSTEM (SEE ASCE TABLE 12.2-1): ORDINARY STEEL MOMENT FRAMES (C-4)

RESPONSE MODIFICATION FACTOR (R) = 3.5

IMPORTANCE FACTOR (Ih) = 1.0

SEISMIC RESPONSE COEFFICIENT ( $C_{S1}$ ) = 0.0457

DESIGN BASE SHEAR = 0.0457 x W (DEAD WEIGHT OF THE STRUCTURE)

ANALYSIS PROCEDURE: = EQUIVALENT LATERAL FORCE PROCEDURE

E-85 5,000 GALLON TANK  
THE 5,000 GALLON TANK ANCHORAGE TO FOUNDATION MUST BE DESIGNED TO RESIST SEISMIC SHEAR AND OVERTURNING FORCES PER ASCE 7-05 CHAPTER 15: SEISMIC DESIGN REQUIREMENTS FOR NONBUILDING STRUCTURES.

## C. FOUNDATION, FILLING, AND EXCAVATION (SOIL REPORT)

THE FOLLOWING DESIGN INFORMATION HAS BEEN ASSUMED.

THE FOLLOWING ASSUMED VALUES MUST BE VERIFIED BY A LICENSED GEOTECHNICAL ENGINEER REGISTERED IN THE STATE OF WV.

### 1. SOIL BEARING CAPACITY:

- ISOLATED FOOTINGS = 2000 PSF

- CONTINUOUS FOOTINGS = 2000 PSF

### 2. OTHER ASSUMED SOIL PROPERTIES:

- ANGLE OF INTERNAL FRICTION = 30 DEGREES

- COHESION = 0

- SOIL UNIT DENSITY = 120 PCF

## D. CAST IN PLACE CONCRETE

- PRIOR TO FABRICATION, SUBMIT SHOP DRAWINGS FOR FABRICATION, BENDING AND PLACEMENT OF CONCRETE REINFORCEMENT. COMPLY WITH ACI 315 "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" SHOWING BAR SCHEDULES, STIRRUP SPACING, DIAGRAMS OF BENT BARS, AND ARRANGEMENT OF CONCRETE REINFORCEMENT. INCLUDE SPECIAL REINFORCEMENT REQUIRED AND OPENINGS THROUGH CONCRETE STRUCTURES.

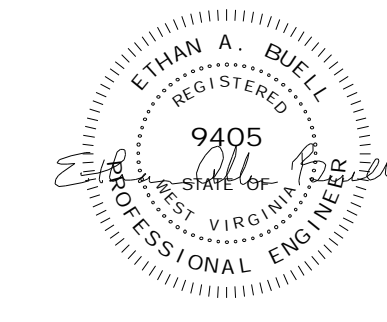
- SUBMIT LABORATORY TEST REPORTS FOR CONCRETE MATERIALS AND MIX DESIGN TEST AS SPECIFIED.

- ALL CONCRETE SHALL DEVELOP 4000 PSI COMPRESSIVE STRENGTH IN 28 DAYS.

- REINFORCING BARS SHALL BE DEFORMED AND SHALL CONFORM TO ASTM A615,  $F_y = 60$  KSI. REINFORCING BARS INDICATED TO BE WELDED SHALL CONFORM TO ASTM A706. WELDED WIRE REINFORCEMENT SHALL CONFORM TO ASTM A185.

- SPLICES IN CONTINUOUS VERTICAL OR HORIZONTAL REINFORCING BARS SHALL BE PER LATEST EDITION OF ACI 318 OR (48) BAR DIAMETER LAP SPLICE WHICHEVER IS GREATER UNLESS NOTED OTHERWISE AND BARS SHALL BE EITHER CONTINUOUS OR SPLICED WITH CORNER BARS AT CORNERS OR TEES (SEE STANDARD DETAILS).

- WELDED WIRE REINFORCEMENT (WWR) SHALL CONFORM TO ASTM A185. ALL MESH/WWR MUST BE SUPPLIED IN



## PROJECT ENGINEERS:

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Revisions:	Date

Drawing Title	Project Title	Project Number	<b>VETERANS ADMINISTRATION MEDICAL CENTER</b>  
STRUCTURAL NOTES	E- 85 FUELING STATION	581- 305	
Approved for Design Concept:	Location VAMC HUNTINGTON, WV	Building Number X- X	
Date 8/8/2013	Checked By:	Drawn By:	Drawing Number SS- 501







LIGHTING FIXTURE SCHEDULE						
SYMBOL	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	WATTS	FIXTURE VOLTAGE	MOUNTING
(A)	HID LIGHTING FIXTURE WITH METAL HALIDE LAMP, DIE-CAST ALUMINUM HOUSING, GASKETED HINGED DOOR, WHITE FINISH, PRISMATIC IMPACT-RESISTANT TEMPERED GLASS DROP PRISMATIC ACRYLIC LENS.	LITHONIA	KACM 150M DPA 120 SF DWH LP1	150 W MH	120	SURFACE MOUNT
(B)	HID FLOODLIGHT FIXTURE WITH METAL HALIDE LAMP, DIE-CAST ALUMINUM HOUSING, GASKETED HINGED DOOR, BRONZE FINISH, SHOCK-RESISTANT CLEAR TEMPERED GLASS LENS, PHOTOCONTROL, PROVIDE WITH ALL MOUNTING HARDWARE TO ALLOW HORIZONTAL AND VERTICAL AIMING.	LITHONIA	TFL 150M TA2 120 LPI SF PE1	150 W MH	120	SURFACE MOUNTED 12 INCHES BELOW WINDOWS WITH ADJUSTABLE BRACKET

ELECTRICAL & SYSTEMS LEGEND:

EMERGENCY POWER OFF SWITCH IN WEATHER ENCLOSURE

----- ELECTRIC CIRCUIT UNDERGROUND

---D--- DATA CIRCUIT UNDERGROUND, CAT 6 CABLE UNDERGROUND RATED, 3/4 INCH CONDUIT.

CEILING OUTLET WITH HID LIGHTING FIXTURE AS SCHEDULED

WALL OUTLET WITH HID LIGHTING FIXTURE AS SCHEDULED

PANELBOARD. DASHED LINE IS NEC CLEARANCE.

WALL OUTLET WITH PHOTO CONTROL FOR CANOPY LIGHT. ADJUST FOR ON AT DUSK/OFF AT DAWN OPERATION

SYMBOL INDICATED LIGHTING FIXTURE TYPE AS SCHEDULED.

PHASE CONDUCTORS  
NEUTRAL  
GROUND

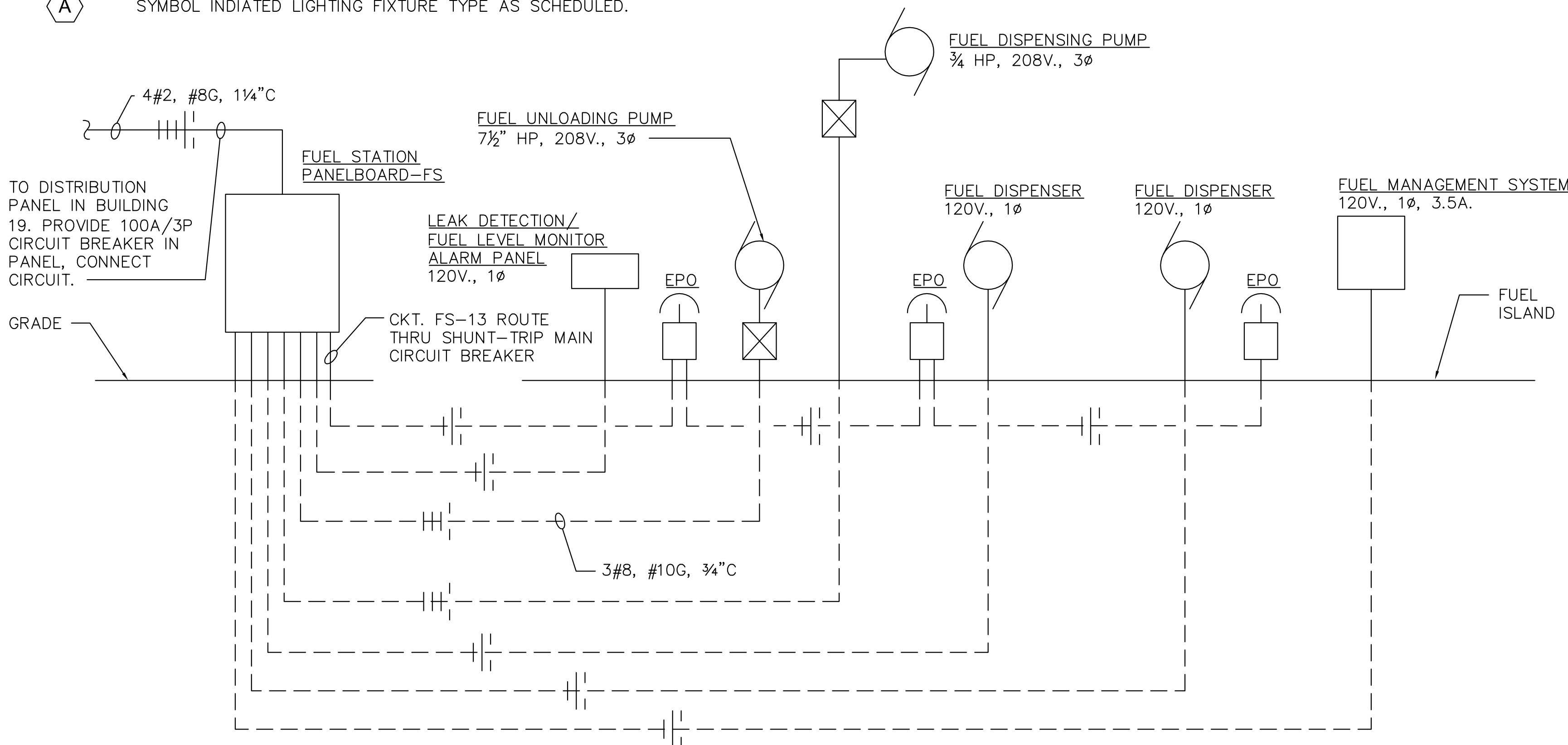
ELECTRIC CIRCUIT. CROSSBARS INDICATE NUMBER OF CONDUCTORS REQUIRED. CONDUIT NOT SIZED IS 1/2", CONDUCTORS NOT SIZED ARE NO. 12.

MOTOR

EMERGENCY PHONE

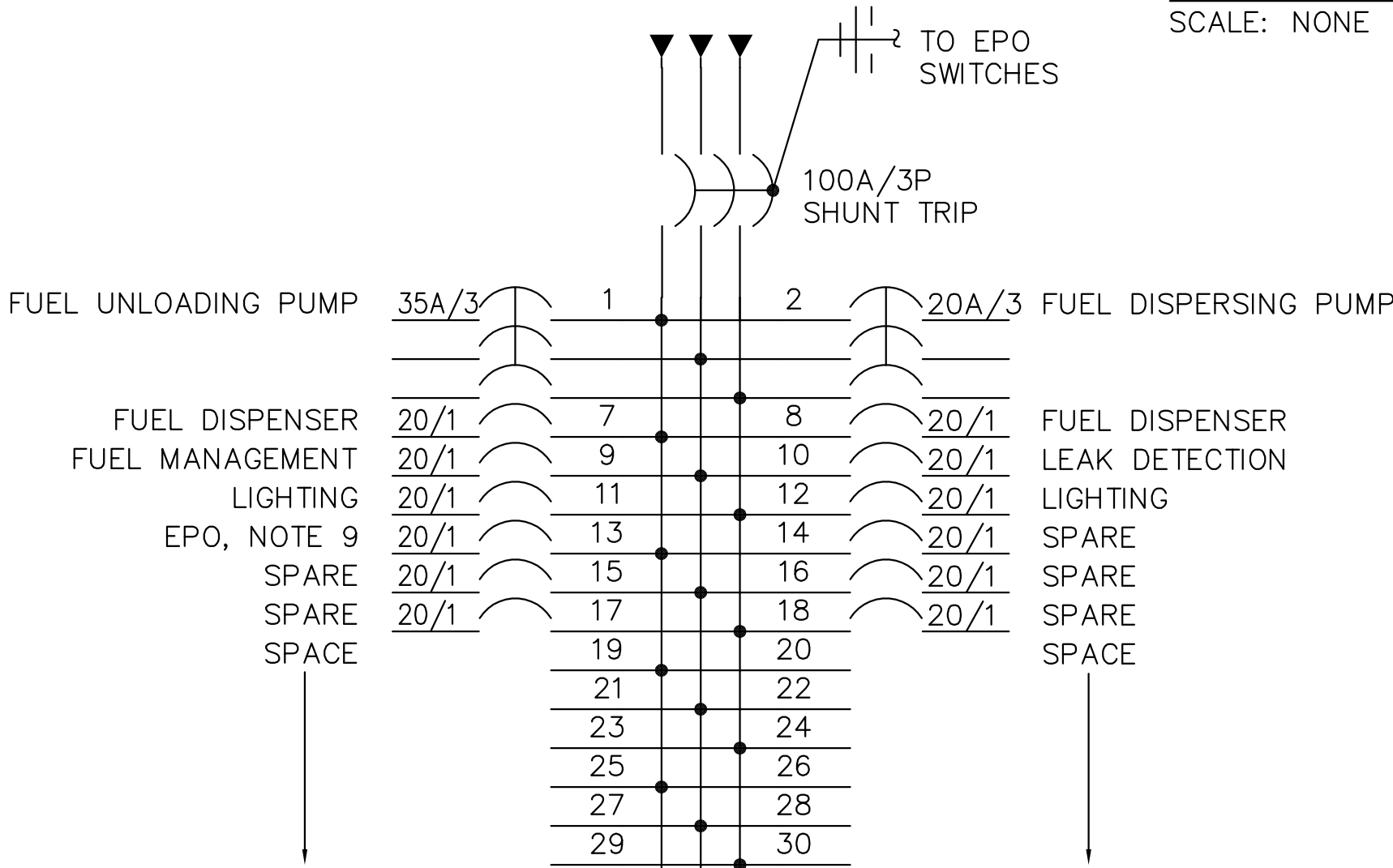
SECURITY CAMERA. CAMERA SHALL BE AXIS P1354-E:1MP/HDTW WITH LIGHTFINDER TECHNOLOGY OR EQUAL. CAMERA MUST BE COMPATIBLE WITH VIDEO MANAGEMENT SYSTEM IN USE AT HOSPITAL. APPROVAL OF LOCAL SECURITY AND IT DEPARTMENT IS REQUIRED PRIOR TO INSTALLATION. PROVIDE ALL WITH MOUNTING HARDWARE .

START-STOP HORSEPOWER RATE MANUAL STARTER TO MATCH MOTOR. NEMA RATED FOR FUEL STATION USE



ONE-LINE DIAGRAM

SCALE: NONE



FUEL STATION PANELBOARD "FS"

120/208V, 3Ø, 4W  
NEMA 3R ENCLOSURE  
100A MAIN SHUNT TRIP CIRCUIT BREAKER  
3Ø CIRCUIT SPACE

GENERAL NOTES:

A. DEVICES AND WIRING SHALL BE CLASS 1, DIVISION 1, UL LISTED. REFER TO NEC ARTICLE 501 FOR CONDUIT SEALING AND DEVICE REQUIREMENTS.

B. PROVIDE TWO SPARE CONDUITS FOR EACH CONDUIT REQUIRED FOR POWER, DATA AND LOW VOLTAGE SYSTEMS WIRING. SPARE CONDUITS SHALL BE THE SAME SIZE AND TYPE AS UTILIZED CONDUITS. PROVIDE SPARE CONDUITS WITH PULL STRING AND CAP ENDS. TURN SPARE CONDUIT UP AT LOCATION DIRECTED BY VA RESIDENT ENGINEER.

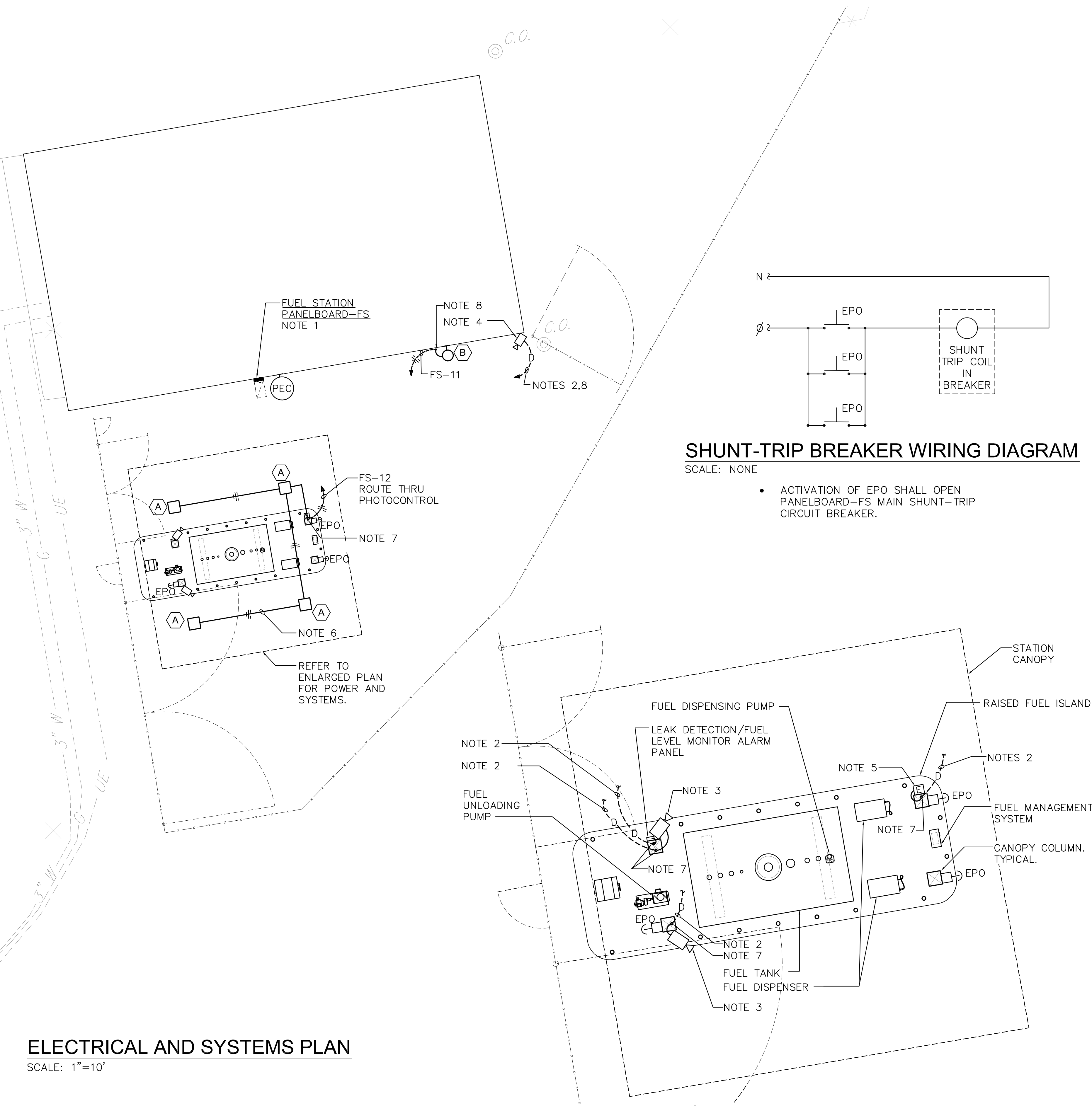
C. PATCH DATA CABLE FROM SURGE PROTECTION UNIT TO DATA PATCH PANEL MATCH LOCAL VA LABELING STANDARD. INSTALLATION AND LABELING TO BE APPROVED BY VA RESIDENT ENGINEER.

D. PROVIDE DATA SURGE PROTECTION UNIT AND CONNECT TO BUILDING GROUND VIA DATA RACK GROUNDING BUS, FOLLOW ALL VA AND GROUNDING STANDARDS.

E. DATA SURGE PROTECTION UNIT SHALL BE ITW LINX CAT5-POE-RJ45 OR EQUAL. SUBMIT PRODUCT INFORMATION IN ACCORDANCE WITH SPECIFICATIONS.

ELECTRICAL AND SYSTEMS PLAN

SCALE: 1"=10'



ENLARGED PLAN

SCALE: 1"=5'

NOTES:

- LOCATION OF PANELBOARD-FS SHALL BE AT DIRECTION OF VA RESIDENT ENGINEER.
- ROUTE DATA CIRCUIT UNDERGROUND TO BUILDING 19. EXTEND CIRCUIT WITHIN BUILDING TO COMMUNICATION CLOSET, LOCATION TO BE DETERMINED BY VA RESIDENT ENGINEER. CAT6 UNDERGROUND RATED CABLE HOME RUN TO DATA SURGE PROTECTOR LOCATED IN DATA RACK. PROVIDE PATCH PANEL AND ALL PATCH CABLES REQUIRED MATCHING LOCAL VA PREFERENCE FOR MANUFACTURER OR EQUAL. CONNECTION TO HOSPITAL NETWORK PROVIDED BY OTHERS.

- VIDEO CAMERA IN HOUSING RATED FOR USE IN EXTERIOR EXPLOSIVE AREA. MOUNT CAMERA TO CANOPY COLUMN IN SUCH A MANNER TO ALLOW NORMAL CAMERA VIEW OF LICENSE PLATE AND REAR OF VEHICLE USING FUEL PUMPS. VIEW TO BE APPROVED BY VA RESIDENT ENGINEER.

- VIDEO CAMERIA IN HOUSING RATED FOR USE IN EXTERIOR AREA. MOUNT VIDEO CAMERA ON BUILDING AT HEIGHT THAT WILL PROVIDE AN OVERALL VIEW OF FUELING STATION SHOWING BOTH FUEL DISPENSER POSITIONS. VIEW TO BE APPROVED BY VA RESIDENT ENGINEER.

- PROVIDE APPROVED EMERGENCY PHONE IN HOUSING RATED FOR USE IN OUTDOOR EXPLOSIVE AREA. PROVIDE EMERGENCY PHONE COMPATIBLE WITH LOCAL VA HOSPITAL PHONE SYSTEM OR TELEPHONE SERVICE AVAILABLE IN BUILDING 19. APPROVAL OF VA RESIDENT ENGINEER IS REQUIRED BEFORE INSTALLATION.

- ROUTE LIGHTING CIRCUIT CONCEALED IN CANOPY.
- CIRCUIT DOWN IN COLUMN AND UNDERGROUND.
- ROUTE CIRCUIT EXPOSED ON FACE OF BUILDING TO UNDERGROUND.
- PROVIDE EPO CIRCUIT BREAKER FS-13 WITH HANDLE LOCK-OFF DEVICE.

SCALE: 1"=10'

Revisions:		Date		CONSULTANTS:		PROJECT ENGINEERS:		Drawing Title		Project Title		Project Number		Building Number		Drawing Number		VETERANS ADMINISTRATION MEDICAL CENTER	
				GUIDON DESIGN		BCCLT, Inc.		ELECTRIC AND SYSTEMS PLAN		E-85 FUELING STATION		581-305				ES101			
				2453 N. DELAWARE ST. INDIANAPOLIS, IN 46205 317.800.6388 WWW.GUIDONDESIGN.COM		MEP ENGINEERS 601 MAIN STREET SHELBYVILLE, KY 40065 T:502-633-1506 www.BCCLT.com		Approved for Design Concept:		Location VAMC HUNTINGTON, WV		Date 8/8/2013		Checked By: JBB		Drawn By: BAK			
				bfmt		BCCLT												Department of Veterans Affairs	