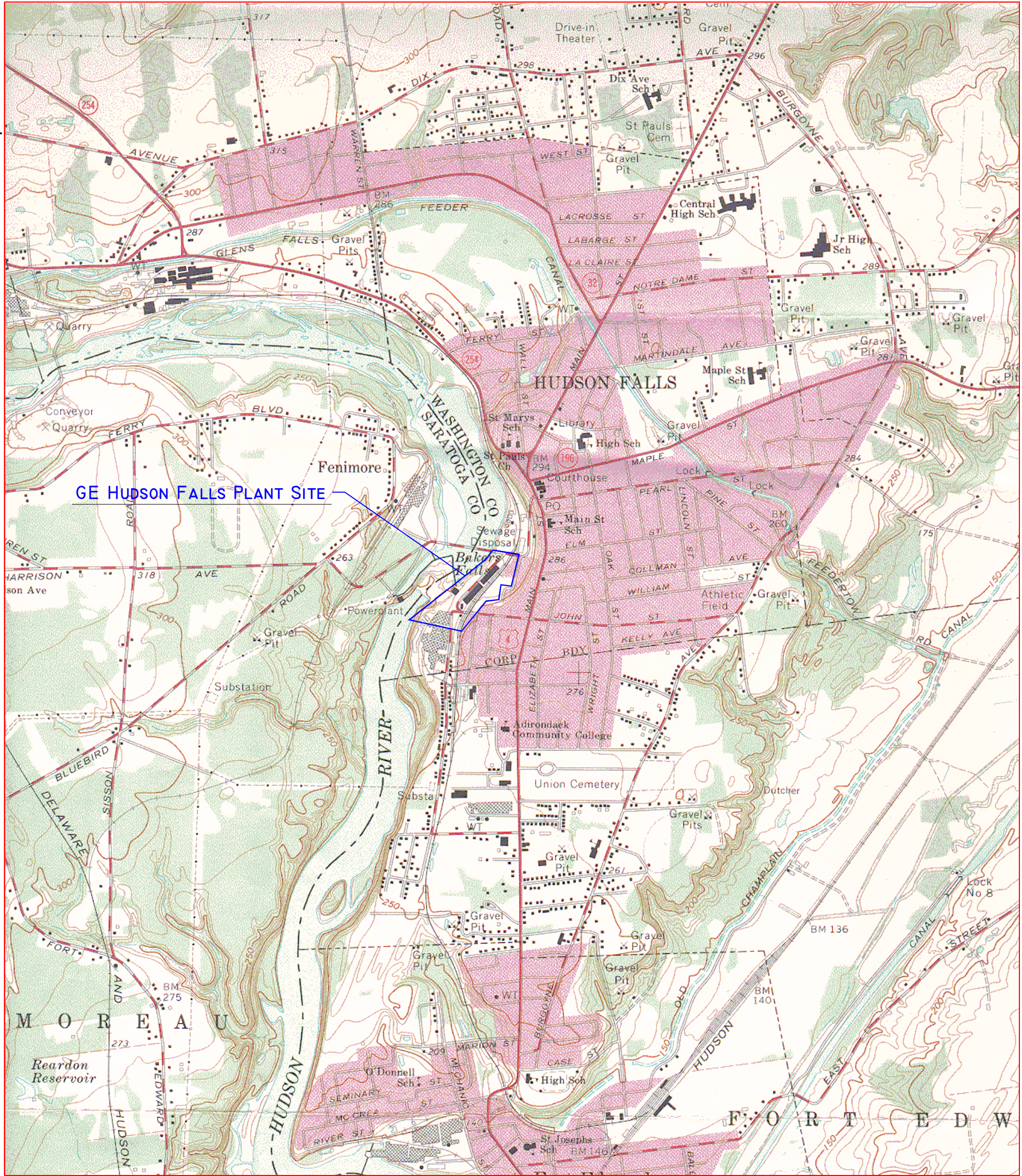


Tunnel Drain Collection System Phase Four Design Collection & Equalization System and TDCS Service Building Hudson Falls Site Hudson Falls, New York



REFERENCE: SCANNED PORTION OF 7.5 MINUTE
USGS HUDSON FALLS QUADRANGLE, NEW YORK 1988



QUADRANGLE LOCATION

Location Map

CONTOUR INTERVAL 10 FEET

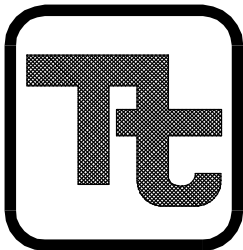


Scale in feet

Prepared for

General Electric Company
320 Great Oaks Boulevard
Albany, New York 12203

Prepared by



**TETRA TECH ENGINEERS, ARCHITECTS
& LANDSCAPE ARCHITECTS, P.C.**

Brierley Associates

DRAWING LIST : FOR COLLECTION AND EQUALIZATION SYSTEM

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G-002	TDCS BUILDING STANDARD SYMBOLS
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C-3	PROPOSED PIPING PLAN AREA BUILDING 1
C-4	PROPOSED PIPING PLAN WATER TREATMENT PLANT AREA
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I-6	RECOVERY WELL PUMP PANEL I/O WIRING
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I-10	NORTH BASIN PUMP STATION I/O WIRING
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DRAWING LIST : FOR TDCS SERVICE BUILDING

C-100	TDCS AREA: EXISTING CONDITIONS, SOIL EROSION & SEDIMENT CONTROL, AND DEMOLITION PLAN
C-101	TDCS AREA: SITE LAYOUT PLAN
C-102	TDCS AREA: SITE GRADING AND UTILITY PLAN
C-200	TDCS AREA: SHAFT UTILITY PLAN
C-500	TDCS AREA: SITE DETAILS - SHEET 1 OF 3
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A-1	CHEMICAL STORAGE BUILDING AND ELEVATIONS AT RW-100, 104, 105 AND NORTH BASIN
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E-110	TDCS BUILDING LIGHTING PLAN
E-111	TDCS BUILDING POWER PLAN
E-500	TDCS BUILDING DETAILS
E-501	TDCS BUILDING DETAILS
E-601	TDCS BUILDING PANEL SCHEDULES
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P-100	TDCS BUILDING FIRST FLOOR PLAN
P-500	TDCS BUILDING PLUMBING DETAILS

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DATE: DECEMBER 21, 2012

CAD FILE: G-001-01299-12001

General Electric Company

TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

TDCS BUILDING
STANDARD SYMBOLS AND ABBREVIATIONS
DRAWING TITLE:

G-001

DRAWING NUMBER:

Site Symbols

	SPOT ELEVATION
	TOP OF CURB ELEVATION
	BOTTOM OF CURB ELEVATION
	EXISTING SPOT ELEVATION
	CONTOUR
	EXISTING CONTOUR
	SOIL TEST BORING
	TEST PIT LOCATION
	TREE OR SHRUB
	TREE OR SHRUB TO REMAIN
	TREE OR SHRUB TO BE REMOVED
	CONCRETE PAVING
	CONCRETE SECTION
	CURBING
	CURBING TO REMAIN
	CURBING TO BE REMOVED
	FENCING
	FENCING TO REMAIN
	FENCING TO BE REMOVED
	SILT FENCING
	TEMPORARY CONSTRUCTION FENCING
	HAY BALES
	TEMPORARY TREE PROTECTION
	UTILITY POLE
	UTILITY POLE TO REMAIN
	UTILITY POLE TO BE REMOVED
	NEW OR RELOCATED FIRE HYDRANT
	FIRE HYDRANT TO REMAIN
	DROP INLET
	CATCH BASIN
	STORM/SANITARY MANHOLE
	DROP INLET TO REMAIN
	MANHOLE/CATCH BASIN/DRYWELL TO REMAIN
	DRYWELL W/ GRATE
	DRYWELL W/ SOLID COVER TO GRADE
	DRYWELL W/ COVER BURIED
	STORM LINE WITH HEADWALL
	STORM LINE WITH ENDWALL
	STORM LINE WITH END SECTION
	STORM PIPE
	STORM PIPE TO REMAIN
	STORM PIPE TO BE REMOVED/ABANDONED
	UNDERDRAIN
	UNDERDRAIN TO REMAIN
	UNDERDRAIN TO BE REMOVED/ABANDONED
	SANITARY LINE
	SANITARY LINE TO REMAIN
	SANITARY LINE TO BE REMOVED/ABANDONED
	GAS LINE
	GAS LINE TO REMAIN
	GAS LINE TO BE REMOVED/ABANDONED
	WATER LINE
	WATER LINE TO REMAIN
	WATER LINE TO BE REMOVED/ABANDONED
	STORM/SANITARY CLEANOUT
	GATE VALVE
	SIGN POST
	UNIVERSAL HANDICAP SYMBOL
	REMOVAL
	RIP-RAP

Architectural Symbols

	EXISTING TO REMAIN
	DEMOLITION WORK
	NEW WORK IN EXISTING (MATERIAL INDICATION VARIES)
	NEW WORK (MATERIAL INDICATION VARIES)
	CMU AND BRICK CAVITY WALL
	CMU WALL
	GYPSON BOARD PARTITION W/ METAL STUD WALL
	GYPSON BOARD PARTITION W/ WOOD STUD WALL
	OPERABLE PARTITION
	DOOR NUMBER (ROOM NO W/ DOOR NO)
	WINDOW TYPE
	WINDOW NUMBER (ROOM NO W/ WINDOW NO)
	EQUIPMENT, FURNITURE, OR CASEWORK NUMBER
	RELOCATED EQUIPMENT FURNITURE OR CASEWORK NUMBER
	PARTITION TYPE
	BOARD UNIT SYMBOL
	FINISH CHANGE
	ROOF SYMBOLS
	AREA OF TAPERED INSULATION.
	EXISTING ROOF DRAIN WITH RETROFIT ROOF DRAIN INSERT IN NEW FACTORY-TAPERED SUMP.
	EJ/CONTROL JOINT.
	DIRECTION OF DOWNWARD SLOPE AND DEGREE OF SLOPE OF TAPERED INSULATION (MINIMUM 1/8"/FT, TYP UNO).
	DIRECTION OF DOWNWARD SLOPE OF TAPERED INSULATION CRICKET (MINIMUM 1/4"/FT, TYP UNO).
	DIRECTION OF DOWNWARD SLOPE OF ROLLED OR SLOPED STRUCTURE.
	TOTAL THICKNESS OF INSULATION.
	TOTAL THICKNESS OF AREA OF FLAT INSULATION.
	DESIGNATES ROOF SYSTEM TYPE.
	WALKWAY PAD.
	SKYLIGHT (REINSTALLED OR REPLACED)
	SMOKE VENT OR ROOF HATCH.
	PIPE PENETRATION.
	ROOFTOP HOOD ON CURB, TYP.
	ROOFTOP EQUIPMENT ON CURB, TYP.
	ROOFTOP EQUIPMENT ON RAILS.
	REFLECTED CEILING SYMBOLS
	BOTTOM OF CEILING AFF
	CEILING HUNG UNIT VENTILATOR OR CEILING HUNG FAN COIL UNIT
	CEILING GRILLE
	CEILING DIFFUSER
	EXIT LIGHT
	EMERGENCY LIGHT
	2 X 4 FIXTURE IN 2 X 2 PATTERN

Standard Symbols

	STANDARD REFERENCE BUBBLE
	DETAIL NUMBER
	DRAWING NUMBER
	FLOOR PLAN
	BUILDING SECTION
	WALL SECTION
	ELEVATION
	INTERIOR ELEVATION
	DETAIL
	ROOM NAME AND NUMBER
	NORTH ARROW
	CONTRACT LIMIT LINE
	PROPERTY LINE
	COLUMN CENTER LINE
	CUT LINE
	MATCH LINE
	CENTER LINE
	DRAWING REVISION NUMBER
	ADA 5' TURNING RADIUS
	EARTH
	GRAVEL
	SAND
	CONCRETE
	CONCRETE MASONRY UNITS
	BRICK
	STONE
	METAL, STEEL
	PLYWOOD
	FINISHED WOOD TRIM
	ROUGH WOOD
	INSULATION (LOOSE OR BATT)
	RIGID INSULATION
	CERAMIC TILE
	ACOUSTICAL PANEL
	GLASS (LARGE SCALE)
	PLASTER, CEMENT, GROUT
	GYPSON WALL BOARD
	RESILIENT FLOORING
	TERRAZZO
	STRUCTURAL GLAZED TILE

NOTE: REFER TO FINISH PLANS FOR ROOM FINISH KEY AND ADDITIONAL ABBREVIATIONS	DP DAMPROOF (ING)	LC LANDSCAPE CONTRACTOR (SITE)	RTU ROOF TOP UNIT
AAC ASBESTOS ABATEMENT CONTRACTOR	DPR DAMPER	LCC LEAD COATED COPPER	RW RAW WATER
AAD AUTOMATIC AIR DAMPER	DR DOOR, DEEP RIB	LDR LEADER	S SOUTH, SUPPLY, SURGE PROTECTED
AB ANCHOR BOLT, AIR BARRIER	DWG DRAWING	LEV LEVEL	SA SUPPLY AIR
AC AIR CONDITIONING, ALTERNATING CURRENT	DS DOWNSPOUT, DRAINAGE STRUCTURE	LF LINEAR FOOT	SAN SANITARY
ACOMP ASPHALT COATED CORR METAL PIPE	DTA DETAIL	LFMC LIQUID-TIGHT FLEXIBLE METAL CONDUIT	SAS SMOOTH ALL SIDES
ACM ASBESTOS CONTAINING MATERIAL	DTL DOWEL	LFNC LIQUID-TIGHT FLEXIBLE NONMETALLIC CONDUIT	SC SOLID CORE, SILL COCK, SEALED CONCRETE
ACT ACoustical CEILING TILE	DW DUMBWATER, DISHWASHER	LG LENGTH, LONG	SCHED SCHEDULE
ACU AIR CONDITIONING UNIT	DWL DRAWER	LGI LARGE GROUP INSTRUCTION	SD STRUCTURAL CLAY TILE
ADA AREA DRAIN	E EAST	LH LEFT HAND	SE STORM DRAIN, SPLITTER DAMPER, SMOKE DAMPER
ADA AMERICAN DISABILITIES ACT	EA EXHAUST AIR, EACH	LN LINEAR	SEC SECTION
ADD ADDENDUM	EAT ENTERING AIR TEMPERATURE	LL LIVE LOAD	SF SQUARE FEET
ADDL ADDITIONAL	EAT EXPANSION BOLT	LP LOW PRESSURE	SGI SMALL GROUP INSTRUCTION
ADDN ADDITION	EC ELECTRICAL CONTRACTOR	LPC LOW PRESSURE CONDENSATE	SG STRUCTURAL GLAZED TILE
ADH ADHESIVE	ECF ENHANCED CONCRETE FLOORING	LPS LOW PRESSURE STEAM	SH SHELF, SHELVEING, SMOKE HATCH
ADJ ADJACENT	EF EACH FACE EXHAUST FAN	LPT LOW POINT	SHR SHOWER, SHEAR WALL
AER ACCESS DOOR	EJ EXPANSION JOINT	LS SHEET	SHT SHEET
AESS ARCH EXPOSED STRUCTURAL STEEL	ELEC ELECTRIC (AL)	LT LIGHT	SHTG SHEATHING
AFF ABOVE FINISH FLOOR	EL ELEMENT	LTL LINTELE	SM SIMILAR
AH AIR HANDLING UNIT	ELEV ELEVATION, ELEVATOR	LTV LOW VOLTAGE	SK SINK
AIB AIR INFILTRATION BARRIER	EM EMERGENCY	LVR LOUVER	SL SOUND LINED, SKYLIGHT
ALT ALTERNATE	ENC ENCLOSURE	LVT LEAVING WATER TEMPERATURE	SLC SILL COCK
ALTB ACOUSTICALLY LINED TRANSFER BOX	ENC EDGE OF DECK	MAN MANUAL	SLV SLEEVE
ALTN ALTERATION ALUM ALUMINUM	EOD EDGE OF DECK	MAS MASONRY	SLVR STORM LOUVER
AMP AMPERE	EOD EDGE OF DECK	MAT MATERIAL	SMH SANITARY MANHOLE
ANOD ANODIZED	EOD EDGE OF DECK	MAU MAKE UP AIR UNIT	SS STAINLESS STEEL
ANT ACID NEUTRALIZATION TANK	EOD EDGE OF DECK	MAT MAKE UP AIR UNIT	SS STAINLESS STEEL
AP ACCESS PANEL	EOD EDGE OF DECK	MAT MAKE UP AIR UNIT	SS STAINLESS STEEL
APPROX APPROXIMATE (LY)	EOD EDGE OF DECK	MAT MAKE UP AIR UNIT	SS STAINLESS STEEL
APC ARCHITECTURAL PRECAST CONCRETE	EOD EDGE OF DECK	MAT MAKE UP AIR UNIT	SS STAINLESS STEEL
ARCH ARCHITECT (URAL)	EOD EDGE OF DECK	MAT MAKE UP AIR UNIT	SS STAINLESS STEEL
AIS AIR SEPARATOR	EOD EDGE OF DECK	MAT MAKE UP AIR UNIT	SS STAINLESS STEEL
ASB ASBESTOS	EOD EDGE OF DECK	MAT MAKE UP AIR UNIT	SS STAINLESS STEEL
ASPH ASPHALT	EOD EDGE OF DECK	MAT MAKE UP AIR UNIT	SS STAINLESS STEEL
ATV ATMOSPHERIC VENT	EOD EDGE OF DECK	MAT MAKE UP AIR UNIT	SS STAINLESS STEEL
AUD AUDITORIUM	EOD EDGE OF DECK	MAT MAKE UP AIR UNIT	SS STAINLESS STEEL
AUTO AUTOMATIC	EOD EDGE OF DECK	MAT MAKE UP AIR UNIT	SS STAINLESS STEEL
AV AIR VENT	EOD EDGE OF DECK	MAT MAKE UP AIR UNIT	SS STAINLESS STEEL
AVE AVERAGE	EOD EDGE OF DECK	MAT MAKE UP AIR UNIT	SS STAINLESS STEEL
AVTR ACID VENT THRU ROOF	EOD EDGE OF DECK	MAT MAKE UP AIR UNIT	SS STAINLESS STEEL
AW ACID WASTE	EOD EDGE OF DECK	MAT MAKE UP AIR UNIT	SS STAINLESS STEEL
B BOILER, BRICK, BOTTOM	F FAHRENHEIT	MIR MIRROR	STN STAIN (ED)
BB BASKETBALL	FAI FRESH AIR INTAKE	MIR MIRROR	STOR STORAGE
BBD BOILER BLOWDOWN	FCU FAN COOLING UNIT	MIR MIRROR	STR STRUCTURAL
BC BOTTOM OF CURB	FDC FLOOR DRAIN, FIRE DAMPER	MIR MIRROR	SURF SURFACE
BCU BLOWER COIL UNIT	FEC FIRE EXTINGUISHER	MIR MIRROR	SUSP SUSPENDED
BCX BOTTOM CHORD EXTENSION	FEC FIRE EXTINGUISHER	MIR MIRROR	SVT SILENT VINYL, STEAM VENT
BD BOARD	FEC FIRE EXTINGUISHER	MIR MIRROR	SW SWITCH, SOFTENED WATER
BDD BACKDRAFT DAMPER	FEC FIRE EXTINGUISHER	MIR MIRROR	SWCI SWITCH WEIGHT CAST IRON
BFP BACK FLOW PREVENTER	FEC FIRE EXTINGUISHER	MIR MIRROR	SYM SYMMETRICAL
BG BOTTOM OF GRILLE	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BIT BITUMINOUS	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BLDG BUILDING BLOCK	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BLDG BLOCKING BLKG	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BM BEAM	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BO BY OTHERS	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BOF BOTTOM OF DUCT	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BOF BOTTOM OF FOOTING	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BOS BOTTOM OF STEEL	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BOT BOTTOM	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BPL BEARING PLATE	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BPT BOTTOM REGISTER	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BRG BRIDGING	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BRK BEARING	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BRK BRICK	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BRSH BRICKSHELF	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BRZ BRONZE	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BS BOTH SIDES, BOTTOM OF STAIR	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BSMT BASEMENT	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BSPL BACKSPLASH	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BT BENT	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BTU BRITISH THERMAL UNITS	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BTUH BRITISH THERMAL UNITS PER HOUR	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BUR BUILT-UP ROOFING	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BW BOTTOM OF WALL	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
BWC BACK WATER CHECK VALVE	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
C CARPET TYPE 1	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
C CONDUIT, CONVECTOR, CONDENSOR, COMMON	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
CA COMPRESSED AIR	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
CAB CABINET	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
CATV CABLE TELEVISION	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
CB CATCH BASIN, CIRCUIT BREAKER, CHALKBOARD	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
CCTV CLOSED CIRCUIT TELEVISION	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
CCTV CEILING DIFFUSER, CONDENSATE DRAIN	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
CEM CEMENT	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
CER CERAMIC OF CUBIC FEET, CEILING FAN	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
CFM CUBIC FEET PER MINUTE	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
CFMF COLD FORMED METAL FRAMING	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
CFI CERAMIC FLOOR TILE TYPE 1	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
CG CEILING GRILLE	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
CHAN CHANNEL	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
CHLV CEILING HUNG UNIT VENTILATOR	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
CI CAST IRON	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
CIP CAST IN PLACE	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
CIRC CIRCUMFERENCE	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
CJC CONTROL JOINT	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
CL CENTER LINE	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
CLG CEILING	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
CLKG CAULKING	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
CLL CONTRACT LIMIT LINE	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
CLQ CLEAR (ING) (NCE)	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC
CLRM CLASSROOM	FEC FIRE EXTINGUISHER	MIR MIRROR	SYN SYNTHETIC

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Hudson Falls, New York

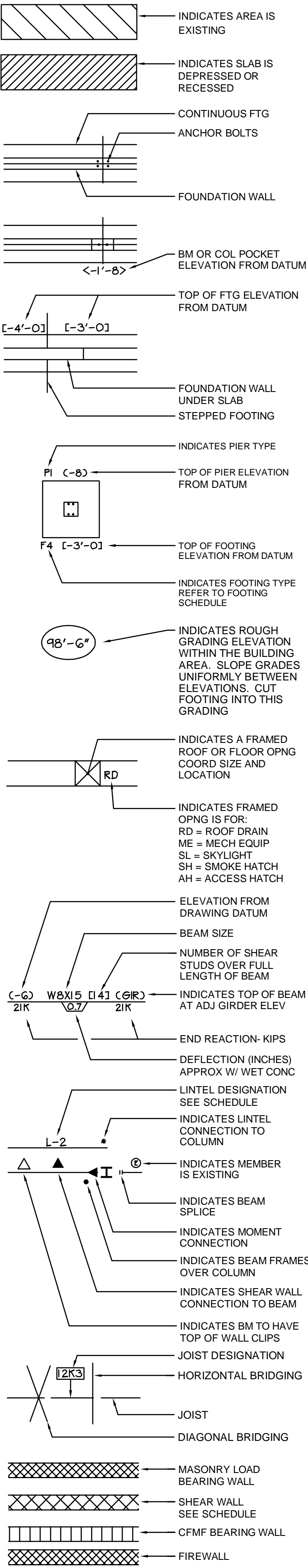
TDCS BUILDING
STANDARD SYMBOLS

DRAWING TITLE:

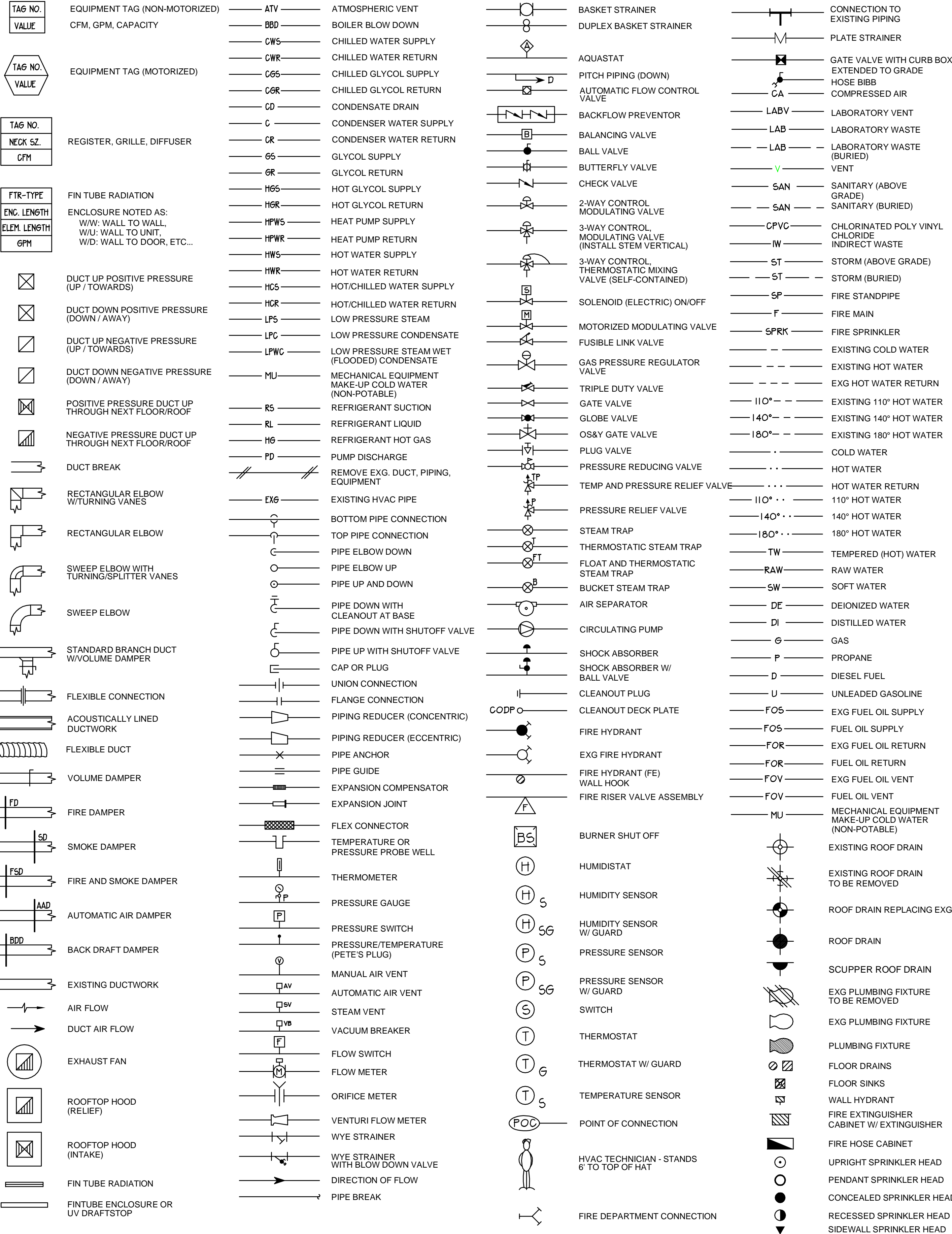
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G-002

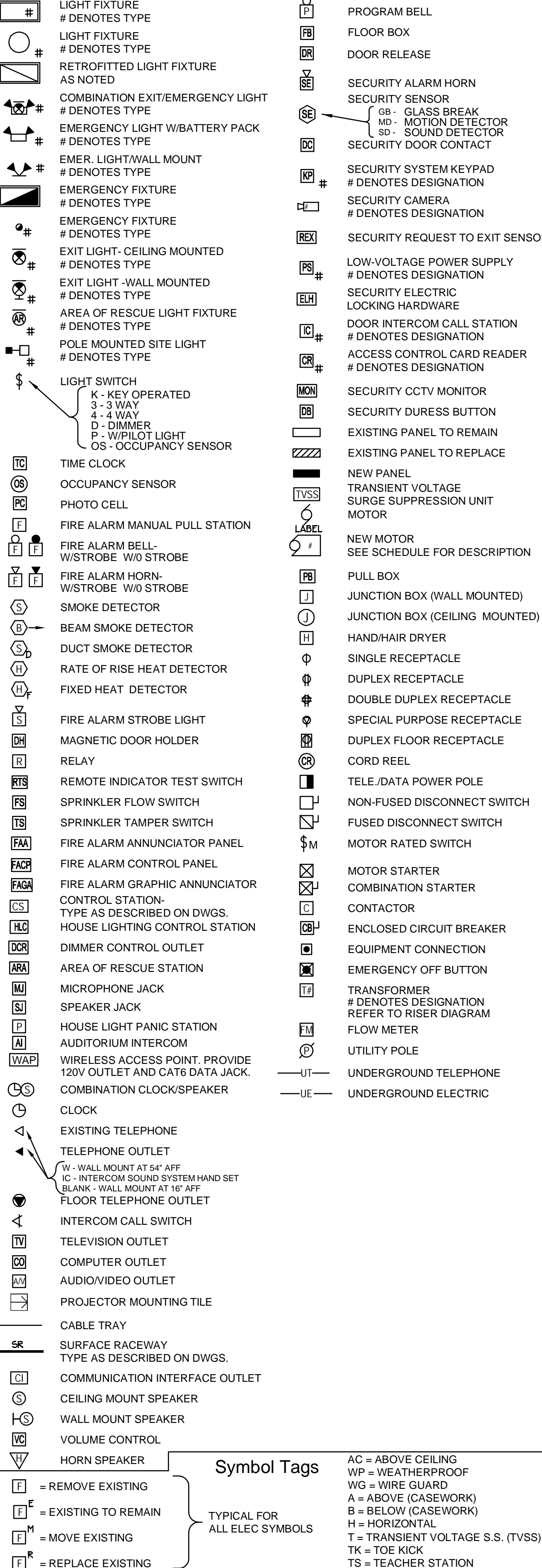
Structural Symbols



Mechanical Symbols



Electrical and Technology Symbols





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SCALE:	1"=50'-0"
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DATE:	DECEMBER 21, 2012
CAD FILE:	See Stamp

General Electric Company

TDCS
PHASE FOUR
DESIGN

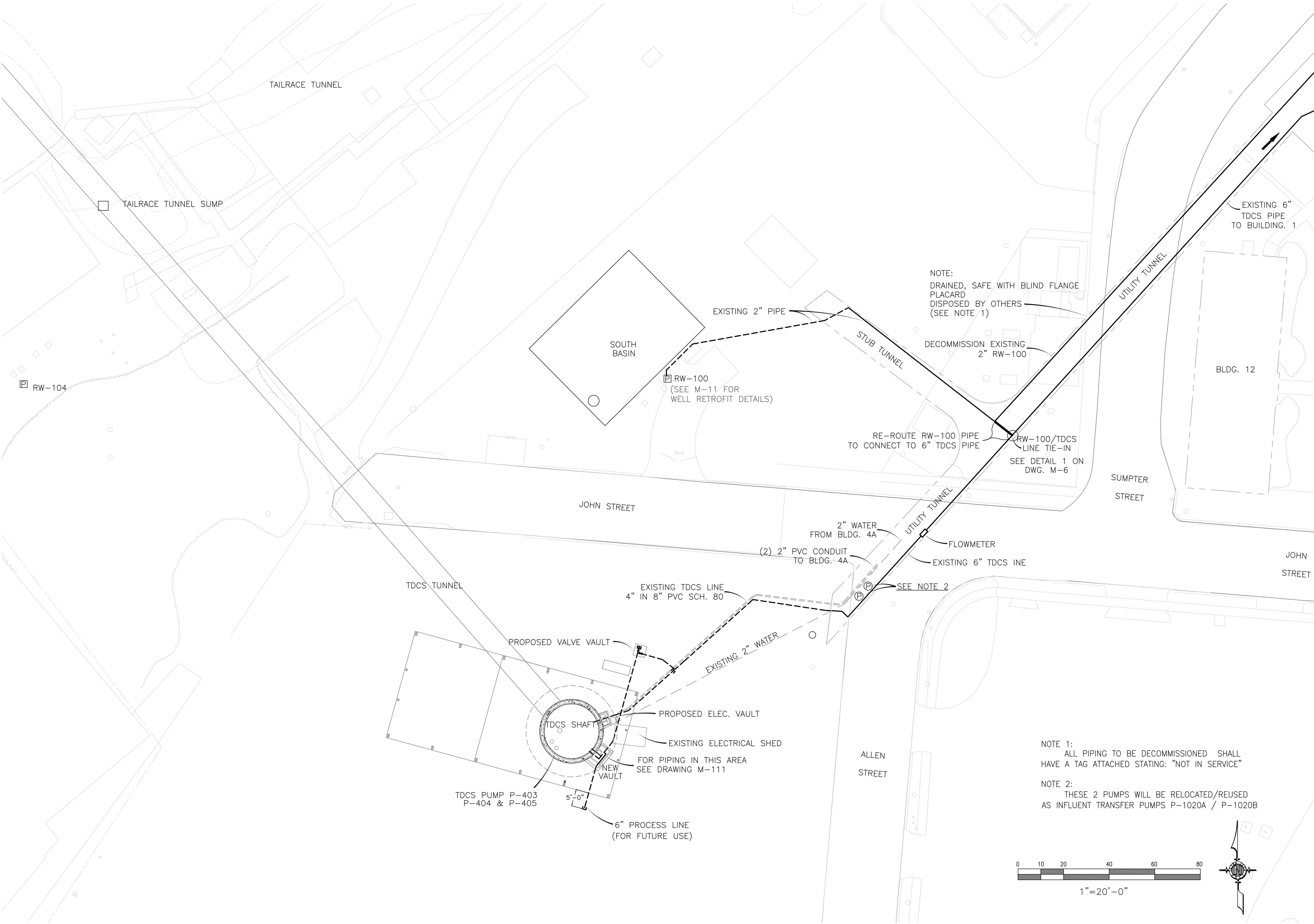
Hudson Falls, New York

DRAWING TITLE:

DRAWING NUMBER:

C-1

pre



PROPOSED PIPING PLAN – RW-100, TDCS

REVISIONS

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SCALE: 1"=20'-0"
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TDCS
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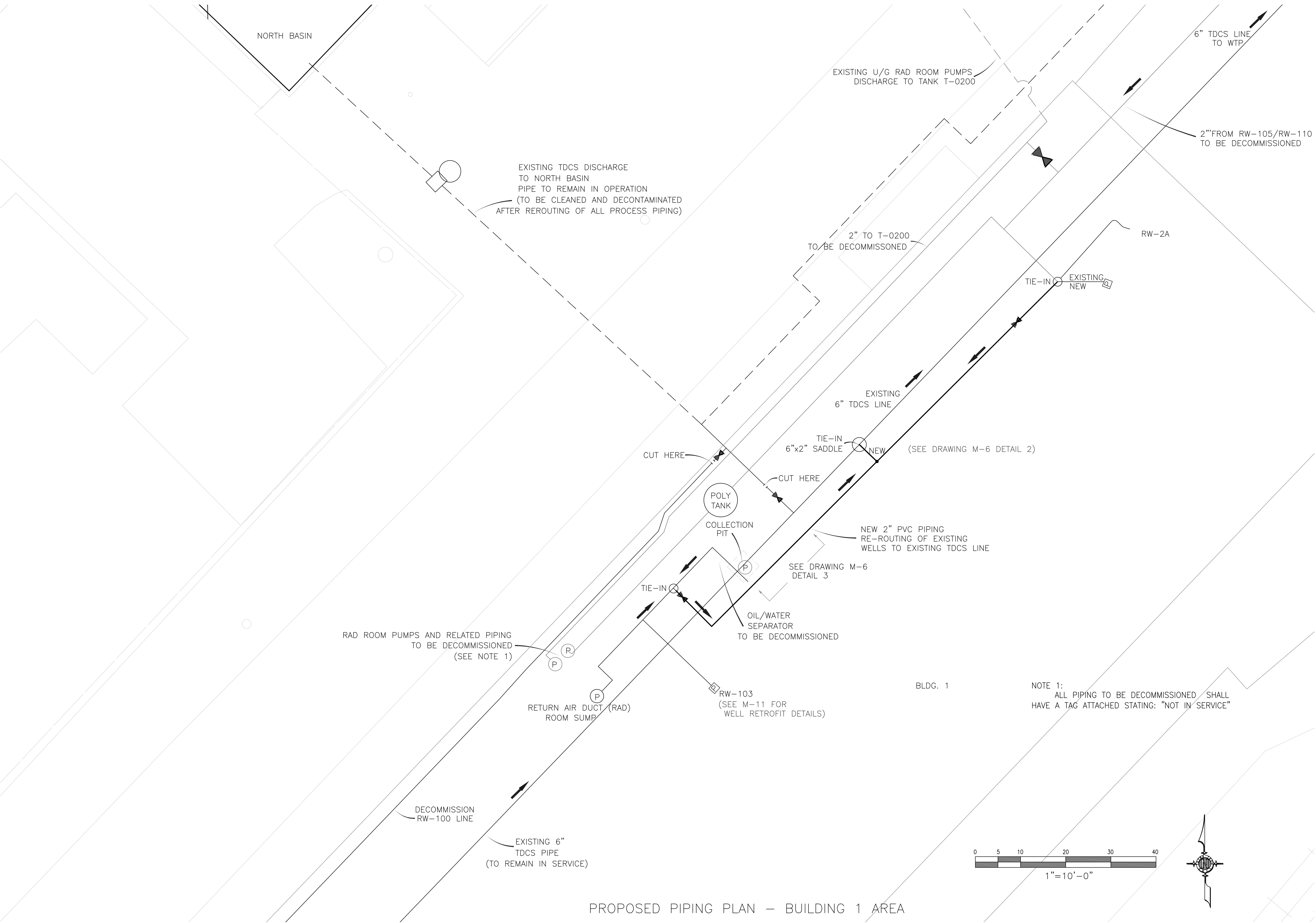
Hudson Falls, New York

PROPOSED PIPING PLAN
TDCS AREA

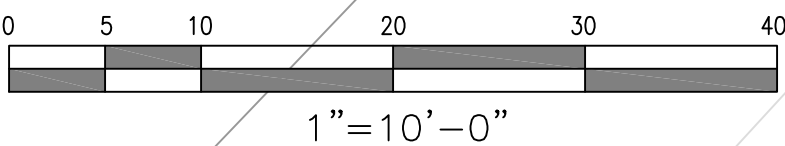
DRAWING TITLE:

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C-2
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PROPOSED PIPING PLAN – BUILDING 1 AREA



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CAD FILE: See Stamp

General Electric Company

TDCS
PHASE FOUR
DESIGN

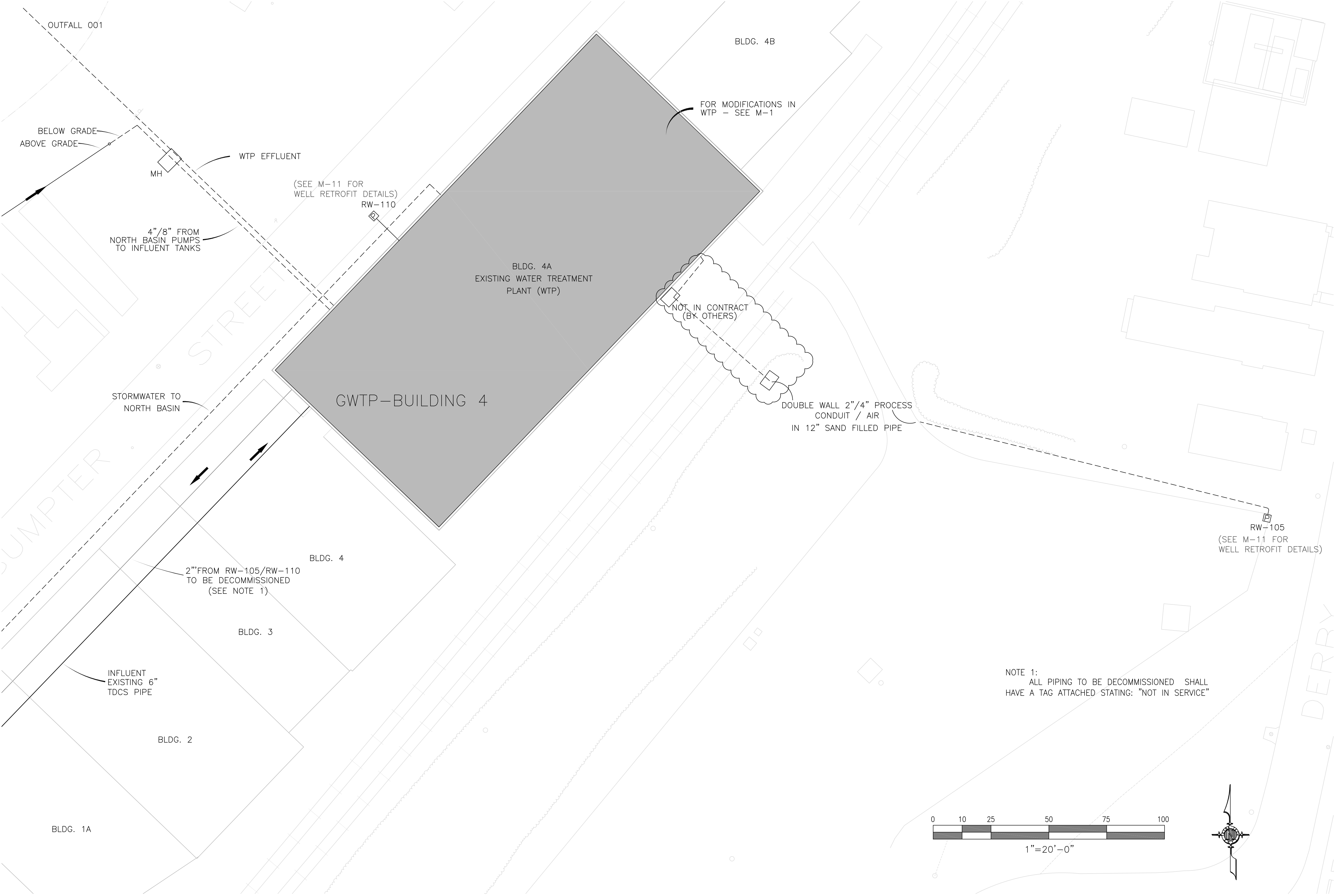
Hudson Falls, New York

PROPOSED PIPING PLAN
BUILDING 1 AREA

DRAWING TITLE:

DRAWING NUMBER:

C-3
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PROPOSED PIPING PLAN

REVISIONS

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CAD FILE:	See Stamp

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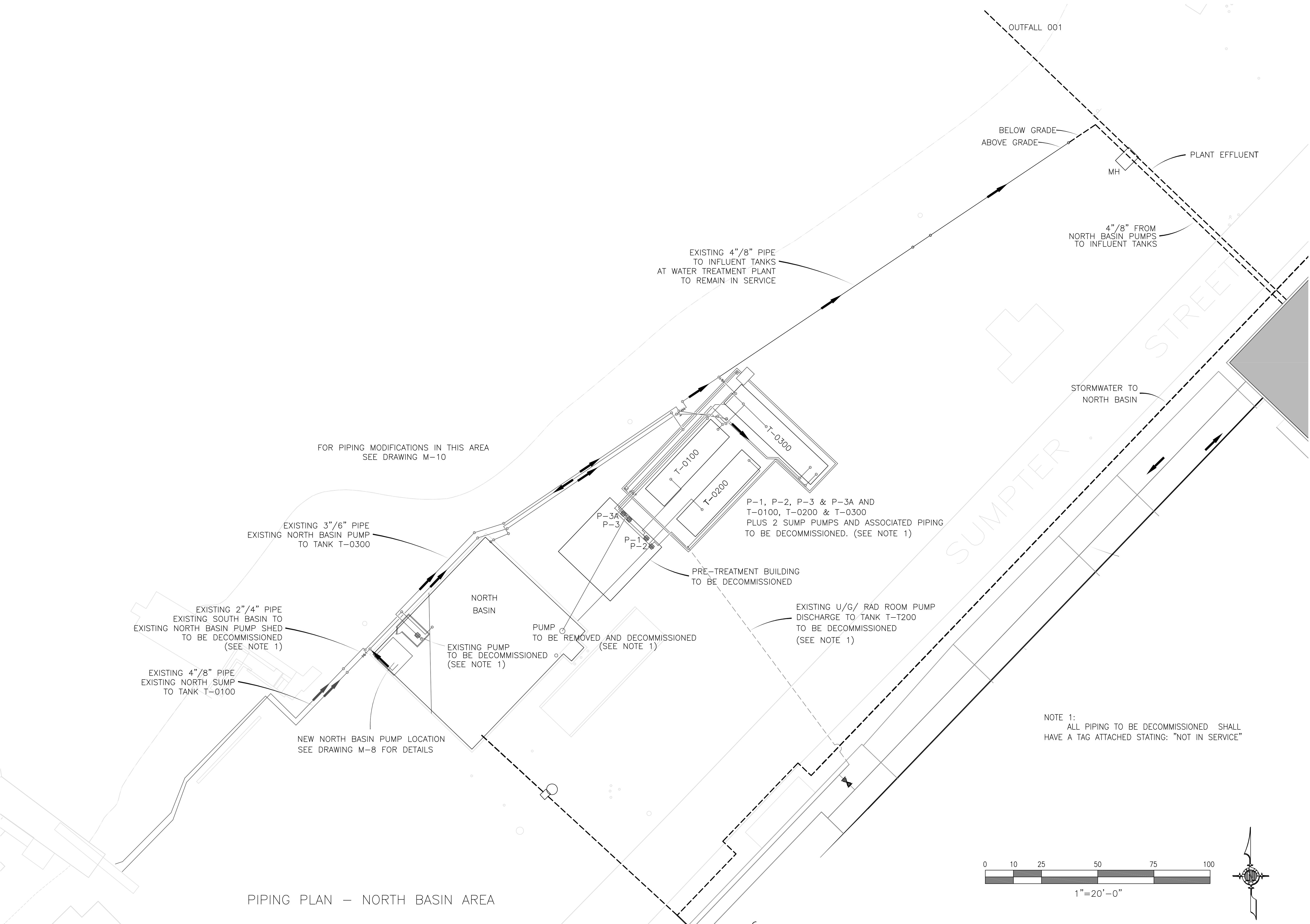
**TDCS
PHASE FOUR
DESIGN**

Hudson Falls, New York

PROPOSED PIPING PLAN
WATER TREATMENT PLANT AREA

DRAWING TITLE:

DRAWING NUMBER: C-4



PIPING PLAN – NORTH BASIN AREA

REVISIONS

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RCN: 112IC04086

DRAWN BY: SNL

CHECKED BY: HKM

SCALE: 1"=20'-0"

APPROVED BY: HKM

DATE: DECEMBER 21, 2012

CAD FILE: See Stamp

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DESIGN

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PIPING PLAN
NORTH BASIN AREA

DRAWING TITLE:

DRAWING NUMBER:

C-5
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RCN: 112IC04086

DRAWN BY: SNL

CHECKED BY: HKM

SCALE: 1"=40'-0"

APPROVED BY: HKM

DATE: DECEMBER 21, 2012

CAD FILE: See Stamp

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PHASE FOUR
DESIGN

Hudson Falls, New York

TEMPORARY PUMPING SYSTEM
TDCS AREA/NORTH BASIN

DRAWING TITLE:

DRAWING NUMBER:

C-6


REVISIONS

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DRAWN BY:	SNL
CHECKED BY:	HKM
SCALE:	NTS
APPROVED BY:	HKM
DATE:	DECEMBER 21, 2012
CAD FILE:	See Stamp

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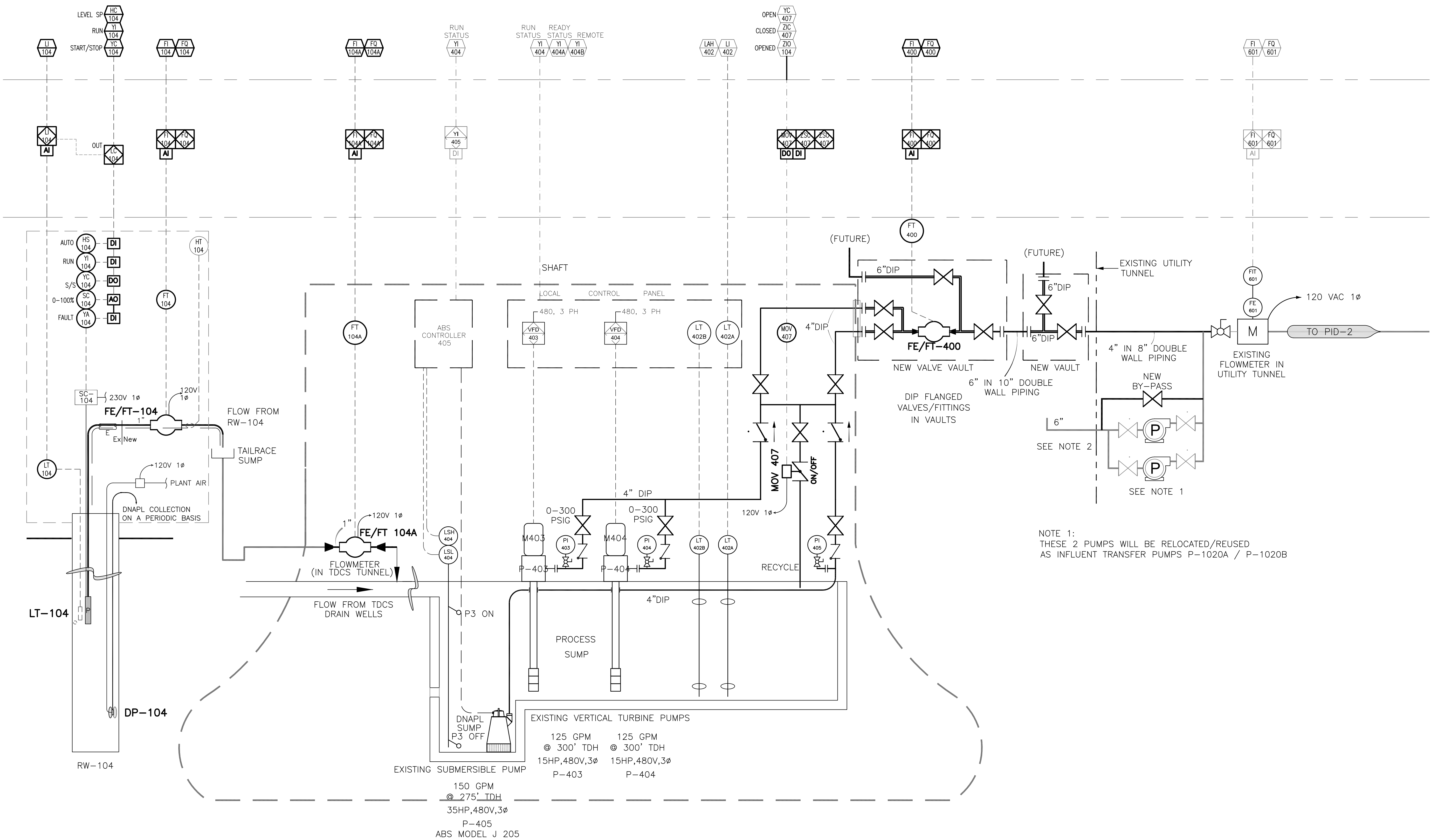
TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

PROCESS & INSTRUMENTATION DIAGRAM
TUNNEL DRAIN COLLECTION SYSTEM

DRAWING TITLE: _____

DRAWING NUMBER: 1 1211



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CHECKED BY:	HKM
SCALE:	NTS
APPROVED BY:	HKM
DATE:	DECEMBER 21, 2012
CAD FILE:	See Stamp

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TDCS
PHASE FOUR
DESIGN

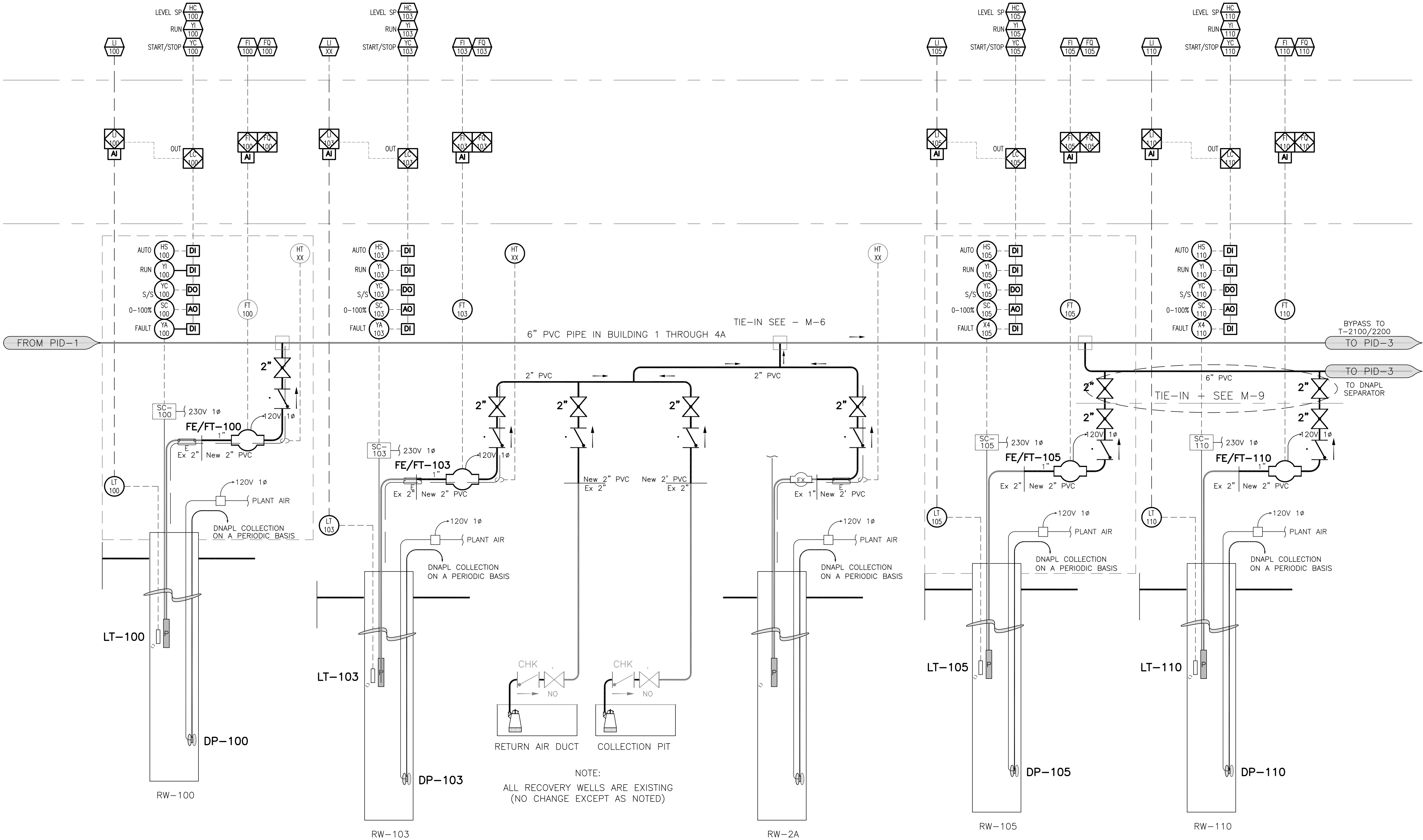
Hudson Falls, New York

PROCESS & INSTRUMENTATION DIAGRAM
RECOVERY WELLS

DRAWING TITLE:

DRAWING NUMBER:

PID-2



NOTE:
ALL PIPING SCH. 80 PVC UNLESS NOTED OTHERWISE

PROCESS & INSTRUMENTATION DIAGRAM – RECOVERY WELLS

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RCN:	112IC04086
DRAWN BY:	SNL
CHECKED BY:	HKM
SCALE:	NTS
APPROVED BY:	HKM
DATE:	DECEMBER 21, 2012
CAD FILE:	See Stamp

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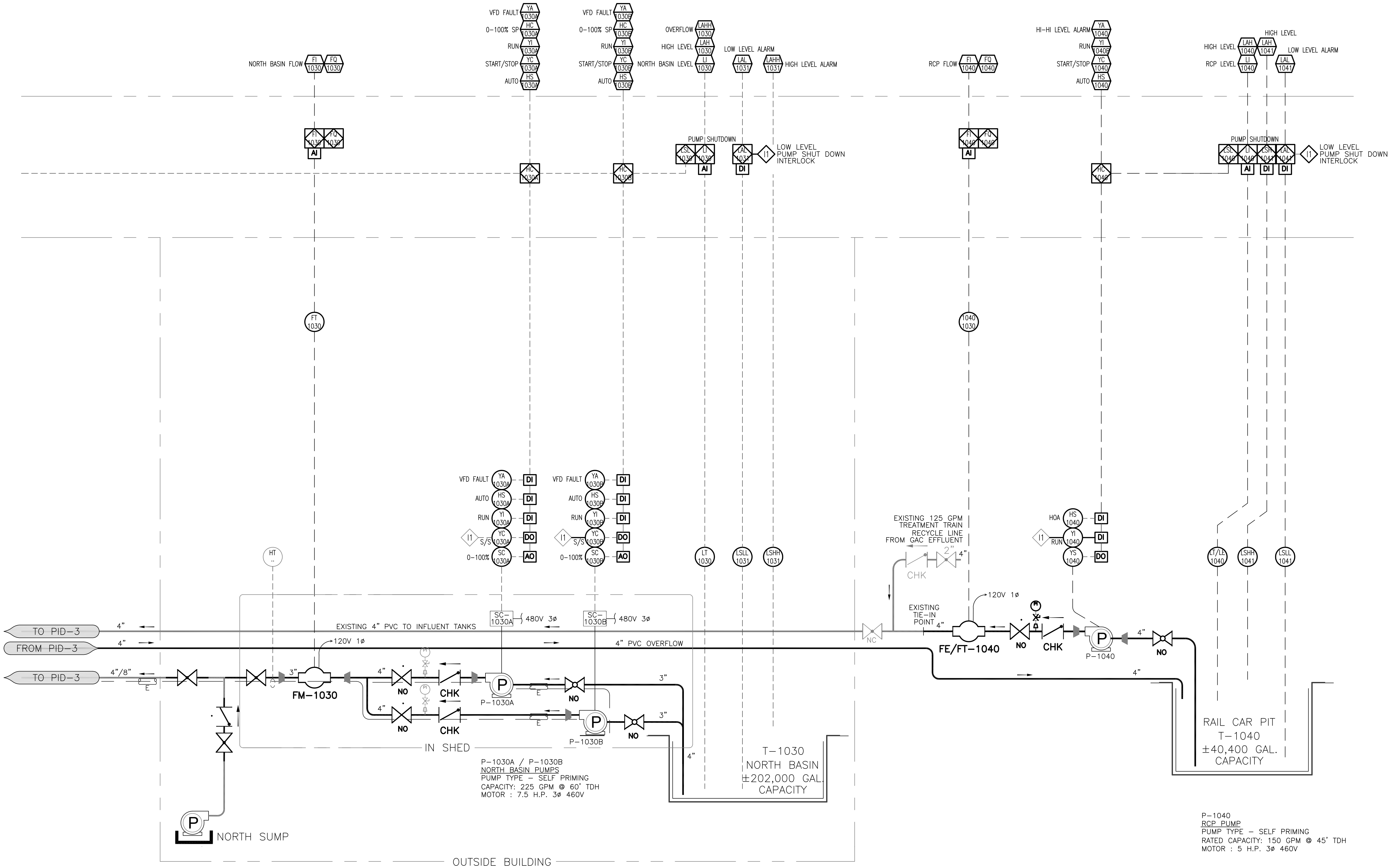
TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

PROCESS & INSTRUMENTATION DIAGRAM
NORTH BASIN & RCP STORAGE

DRAWING TITLE:

DRAWING NUMBER:



PROCESS & INSTRUMENTATION DIAGRAM – NORTH BASIN & RAIL CAR PIT STORAGE



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RCN: 112IC04086

DRAWN BY: KJF

CHECKED BY: _____ DRH

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

APPROVED BY: _____ DRH

DATE: DECEMBER 21, 2012

CAD FILE: S-1-01299-1200

General Electric Company

TDCS
PHASE IV
DESIGN

Hudson Falls, New York

WATER TREATMENT PLANT FLOOR PLAN
DRAWING TITLE:

DRAWING NUMBER:

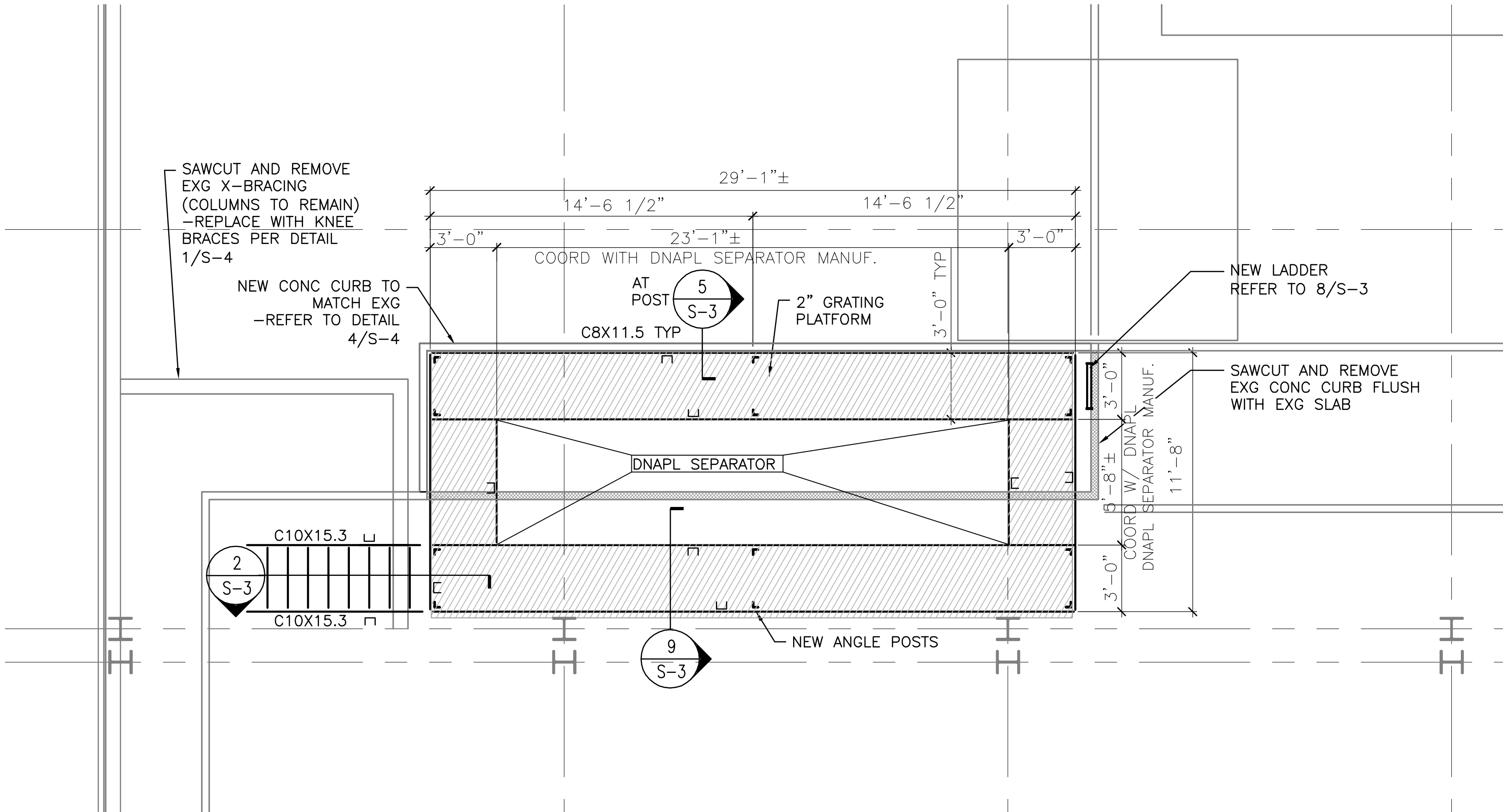
S -

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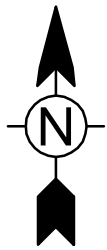
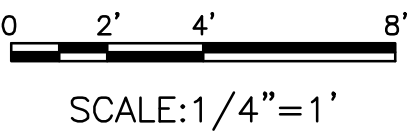
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1 WATER TREATMENT PLANT - DNAPL SEPARATOR PLATFORM PLAN
1/4" = 1'-0"
REFER TO S-600 FOR GENERAL NOTES AND SCHEDULES
ON ALL STEEL AT DNAPL PLATFORM PROVIDE HIGH PERFORMANCE COATING SYSTEM PER SPEC. SECT 09960 FINAL COAT TO BE "SAFETY YELLOW."



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RCN:	112IC04086
DRAWN BY:	KJR
CHECKED BY:	DRH
SCALE:	1/4" = 1'-0"
APPROVED BY:	DRH
DATE:	DECEMBER 21, 2012
CAD FILE:	S-2-01299-12001

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PHASE FOUR
DESIGN

Hudson Falls, New York

WATER TREATMENT PLANT
ENLARGED PLANS

DRAWING TITLE:

S-2

DRAWING NUMBER:

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RCN: 112IC04086

DRAWN BY: KJR

CHECKED BY: DRH

SCALE: NTS

APPROVED BY: DRH

DATE: DECEMBER 21, 2012

CAD FILE: S-4-01299-12001

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TDCS
PHASE FOUR
DESIGN

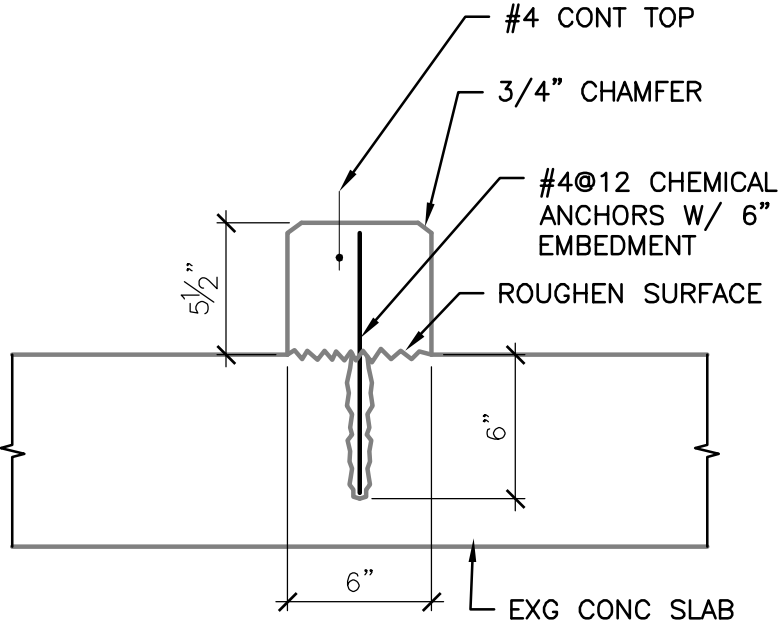
Hudson Falls, New York

STRUCTURAL DETAILS

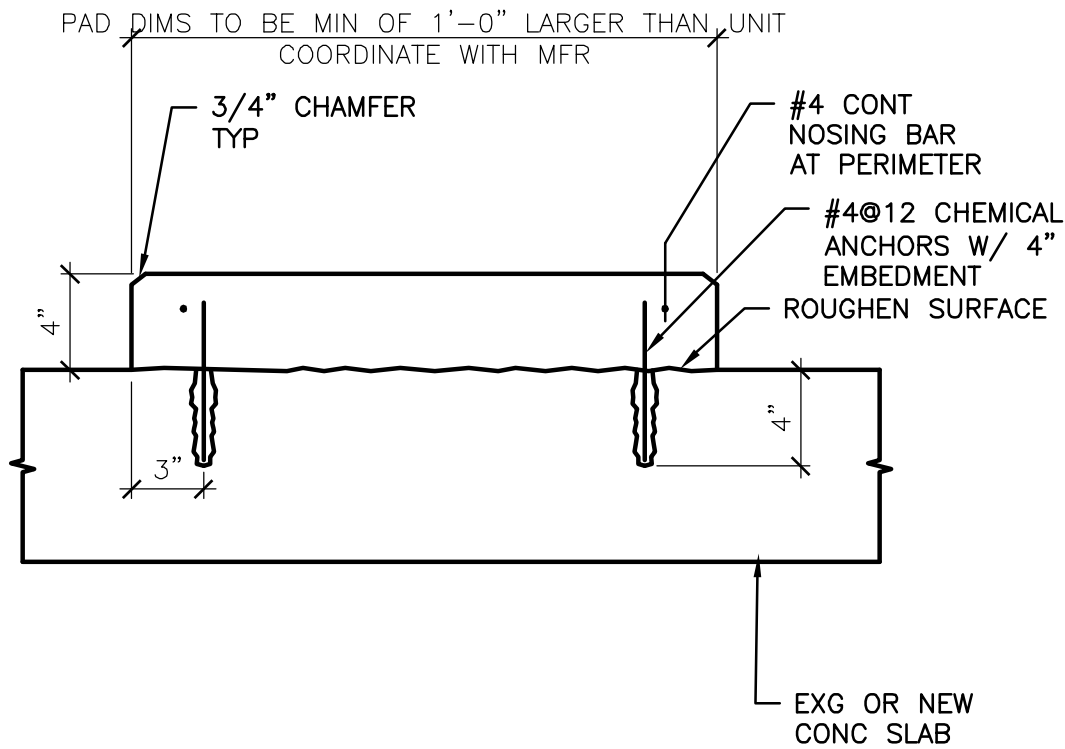
DRAWING TITLE:

S-4

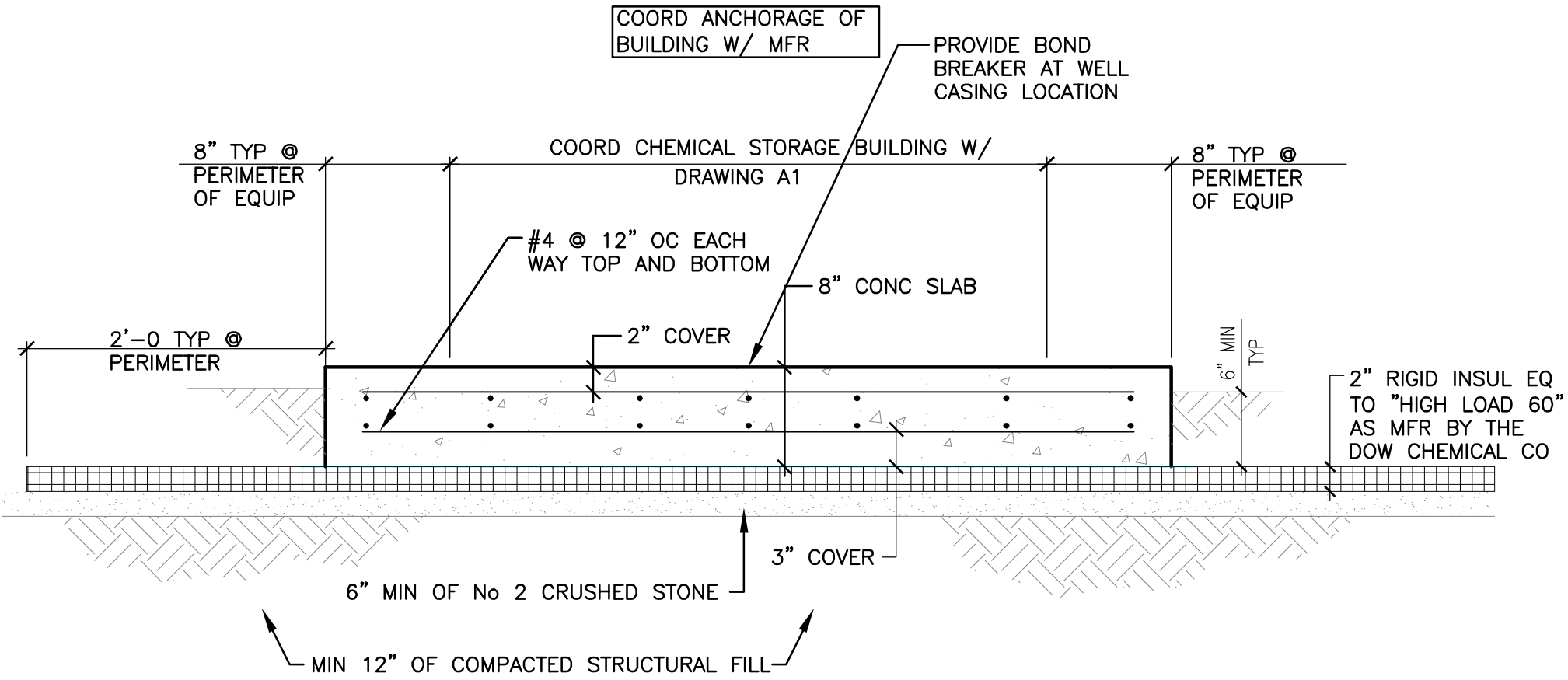
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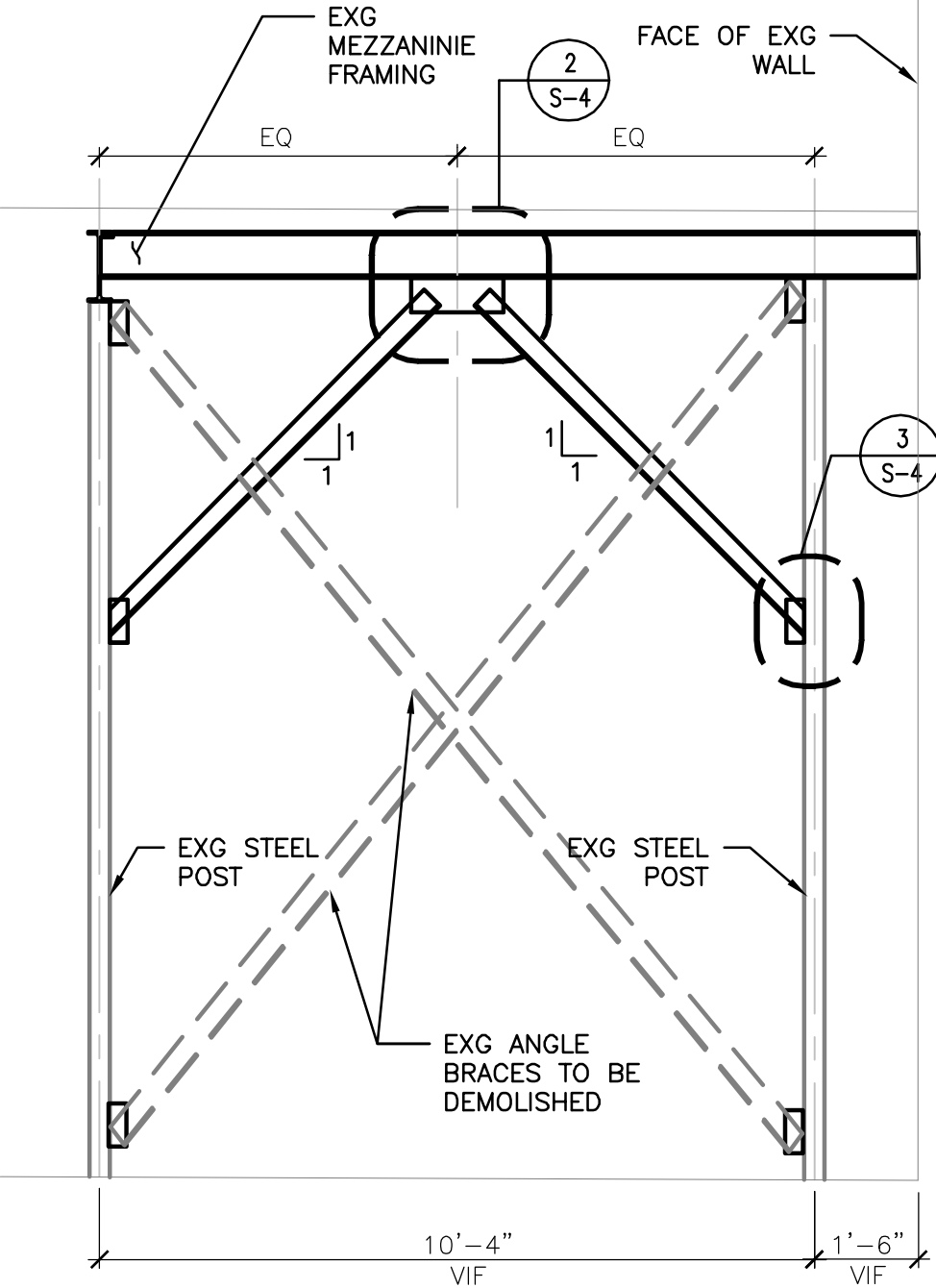
4 Typical Curb Detail
1 1/2"=1'-0"



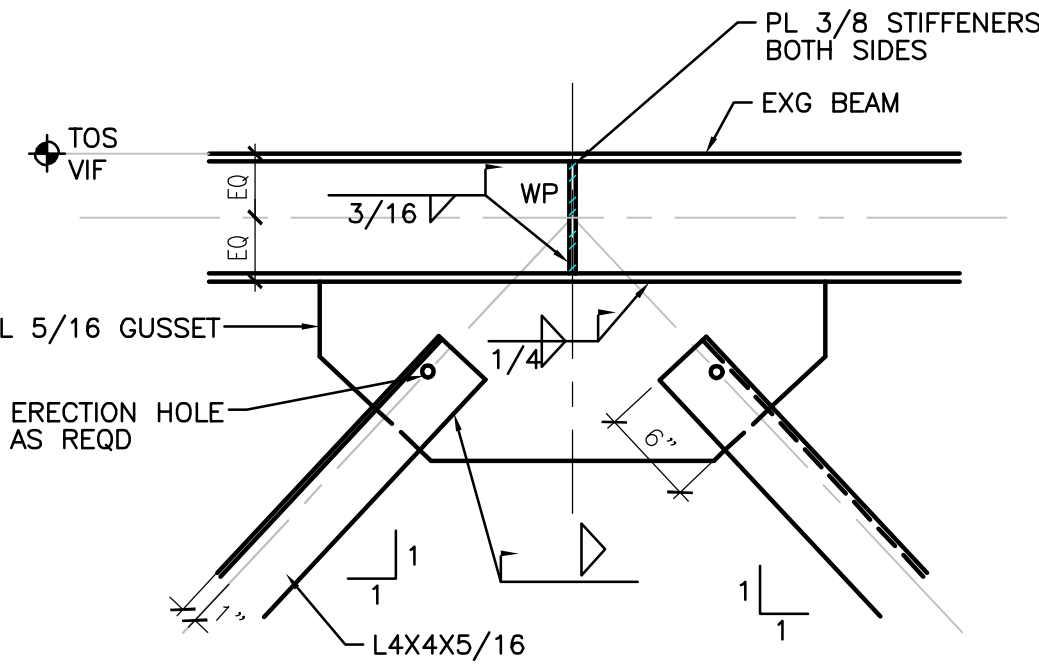
5 Typical Housekeeping Pad Detail
1 1/2"=1'-0"



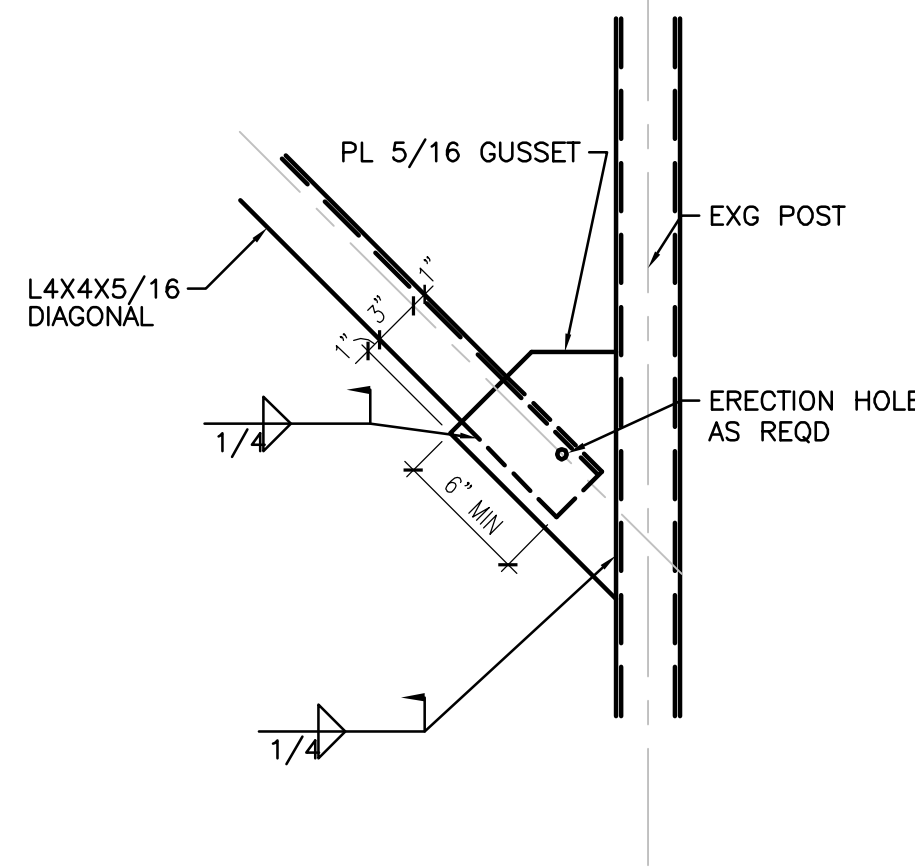
6 Exterior Pad For Chemical Storage Buildings RW-100, 104, 105 and North Basin
1" = 1'-0"



1 Braced Frame Elevation
3/8"=1'-0"



2 Braced Frame Detail
1"=1'-0"



3 Braced Frame at Base
1"=1'-0"



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SCALE:	NTS
APPROVED BY:	HKM
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Hudson Falls, New York

DRAWING TITLE:

DRAWING NUMBER:

M-1 C0408

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SCALE: NTS

APPROVED BY: HKM

DATE: DECEMBER 21, 2012

CAD FILE: See Stamp

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TDCS
PHASE FOUR
DESIGN

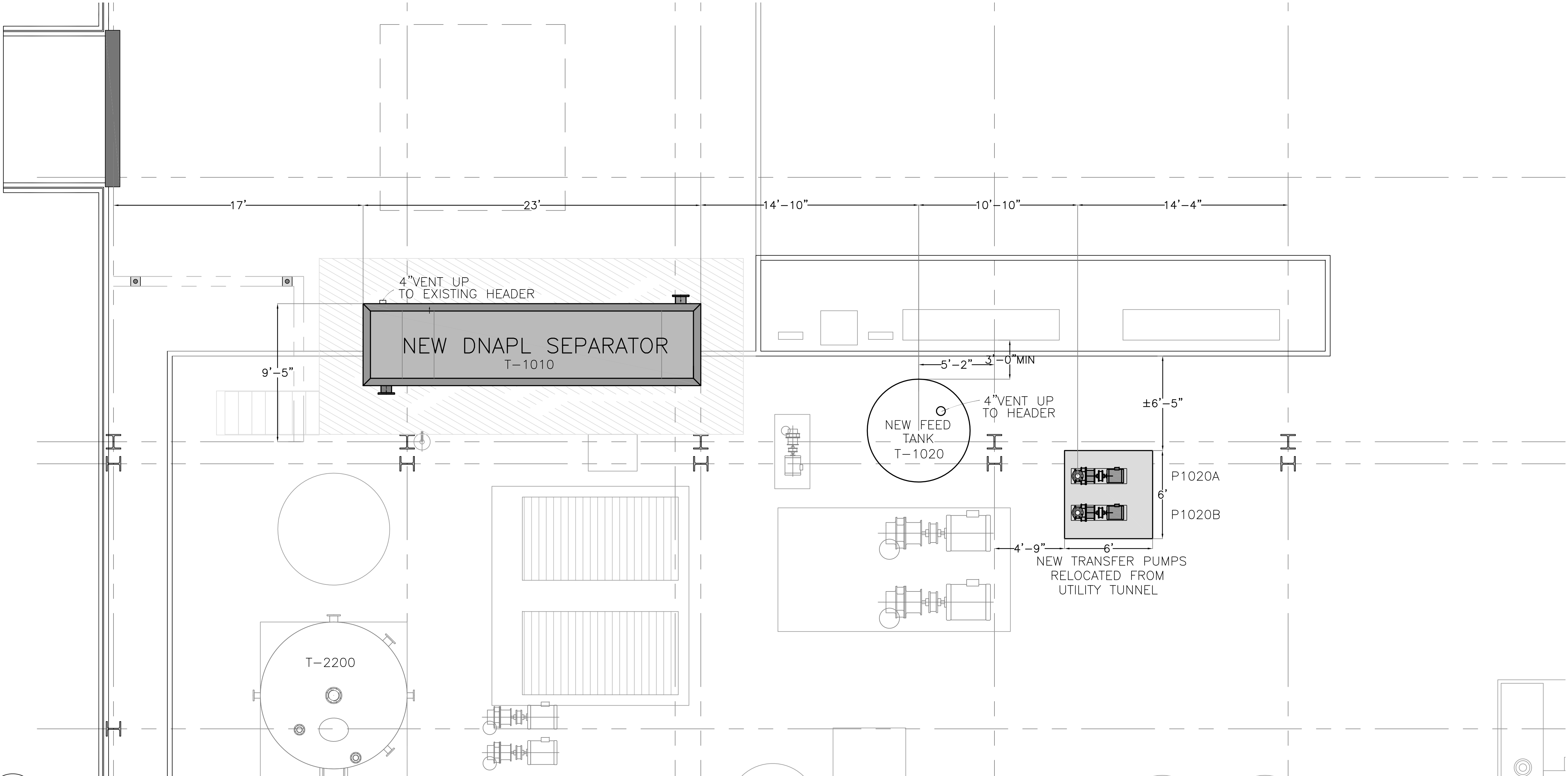
Hudson Falls, New York

PROPOSED EQUIPMENT LAYOUT PLAN
WATER TREATMENT PLANT

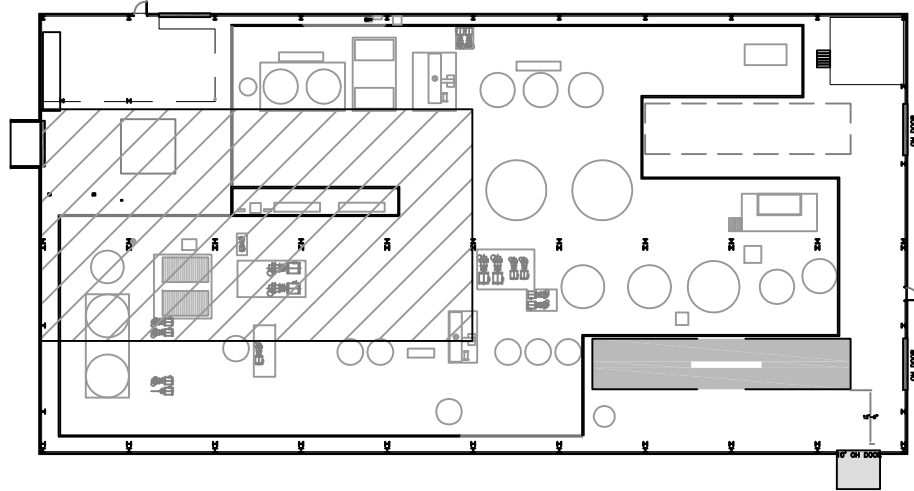
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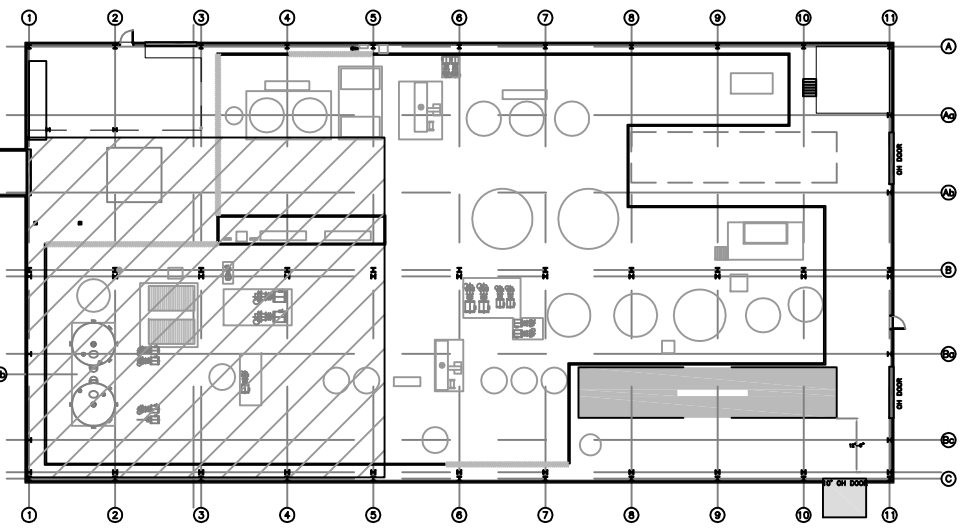
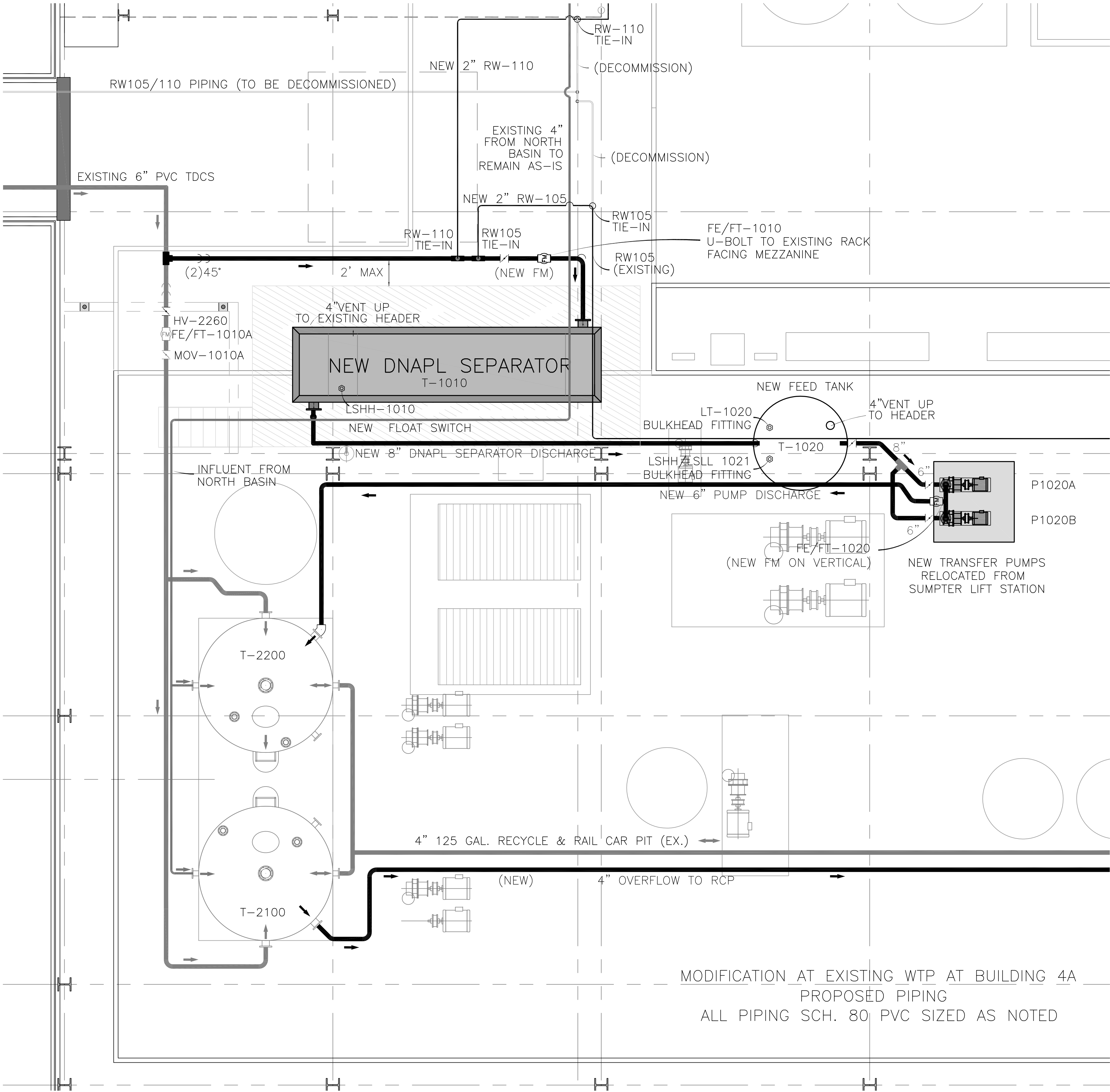
M-2



PROPOSED EQUIPMENT LAYOUT



KEYPLAN



KEYPLAN

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PHASE FOUR
DESIGN

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PROPOSED EQUIPMENT/PIPING LAYOUT PLAN
WATER TREATMENT PLANT

DRAWING TITLE:

DRAWING NUMBER:

M-3

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DRAWN BY: SNL

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SCALE: 1/4"=1'-0"

APPROVED BY: HKM

DATE: DECEMBER 21, 2012

CAD FILE: See Stamp

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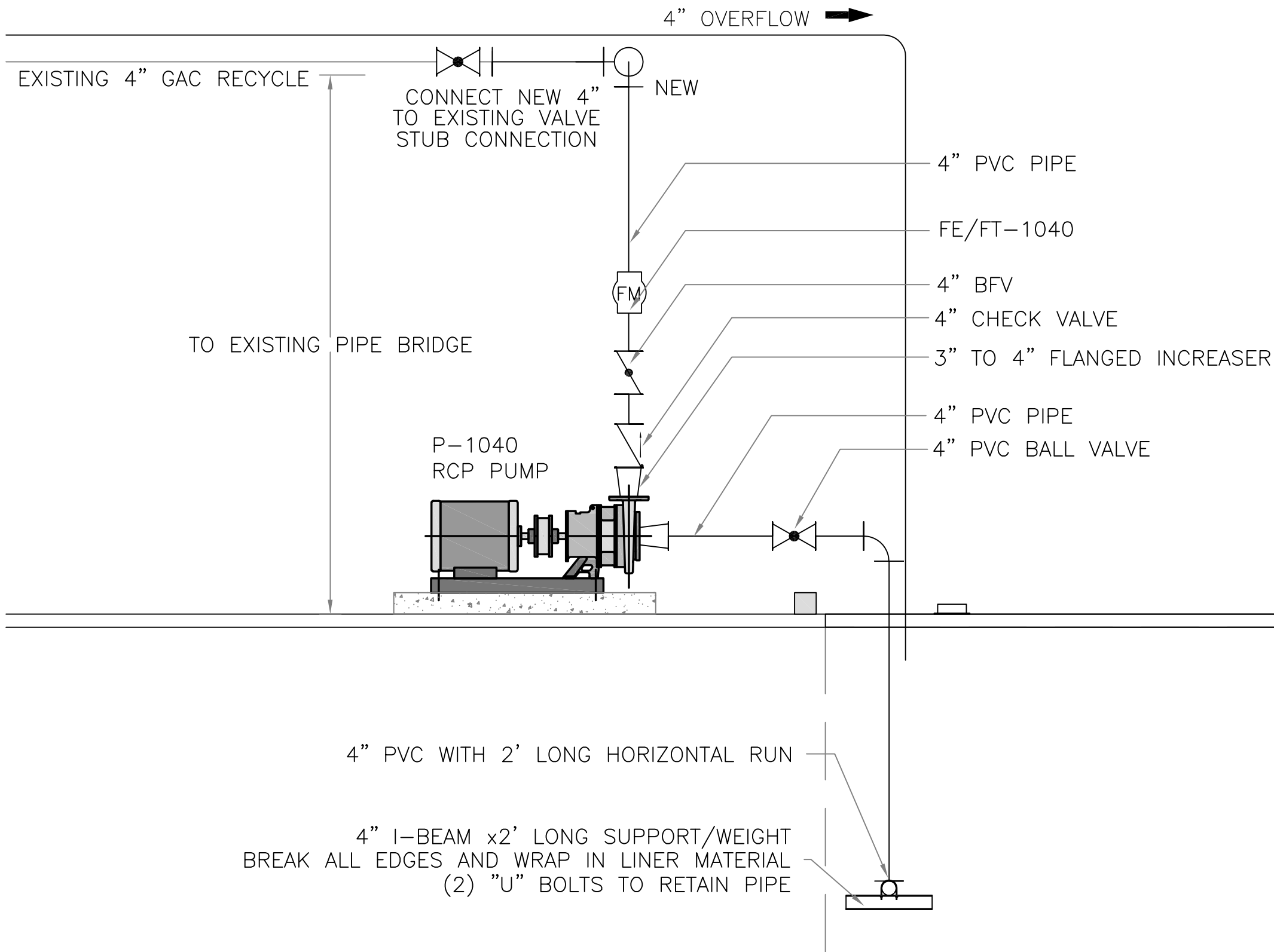
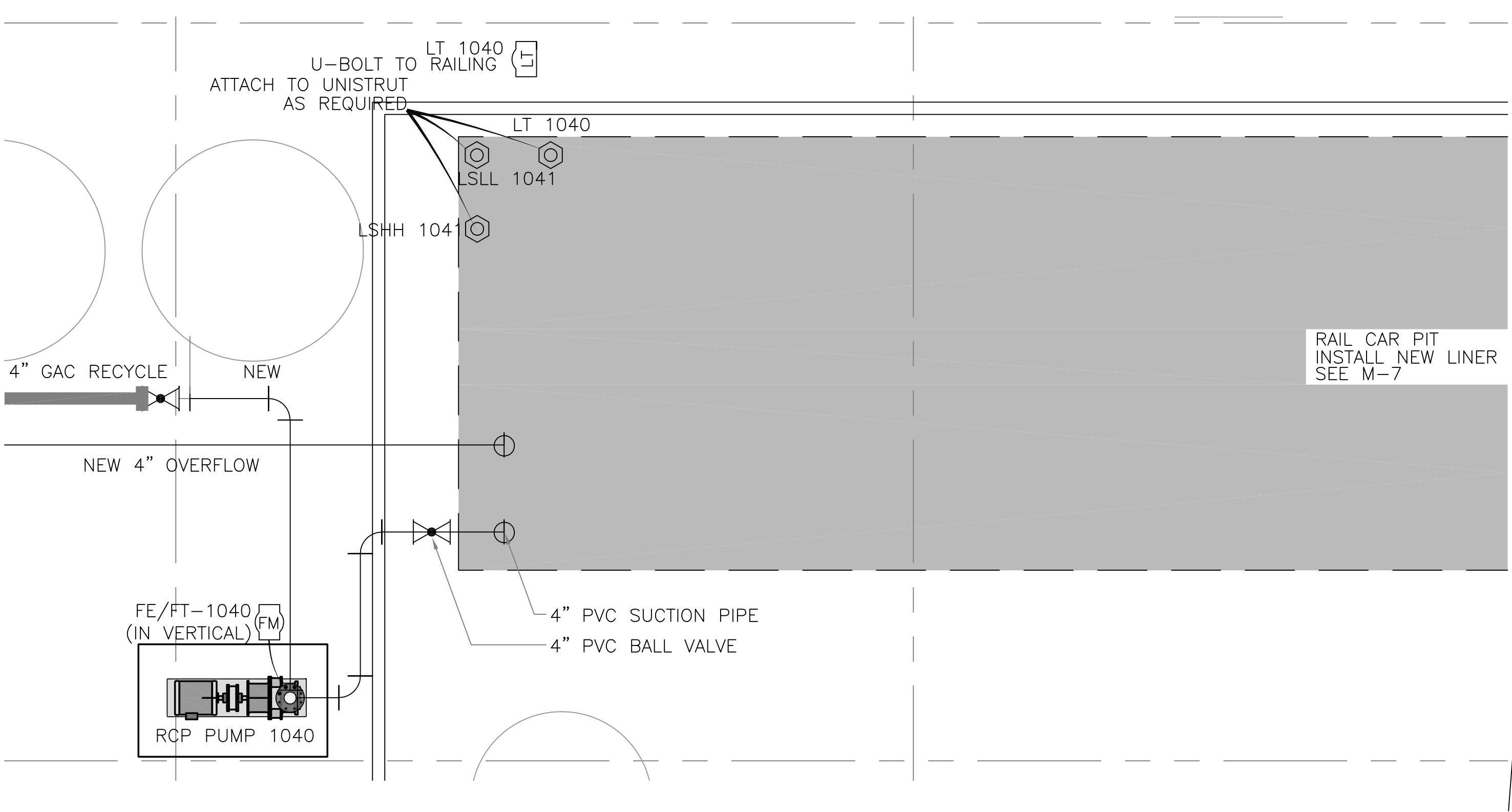
Hudson Falls, New York

PROPOSED MODIFICATIONS
RAIL CAR PIT MODIFICATIONS

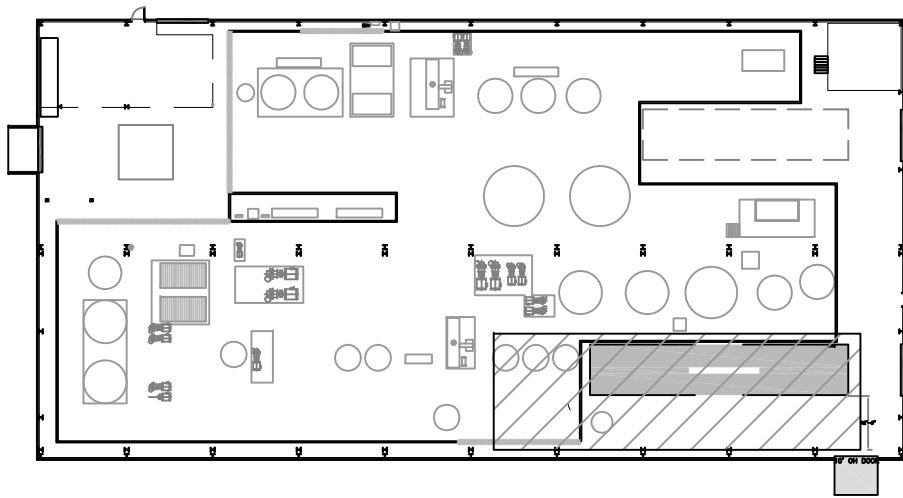
DRAWING TITLE:

DRAWING NUMBER:

M-4



RAIL CAR PIT RENOVATIONS



KEYPLAN

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SCALE: NTS

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CAD FILE: See Stamp

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PHASE FOUR
DESIGN

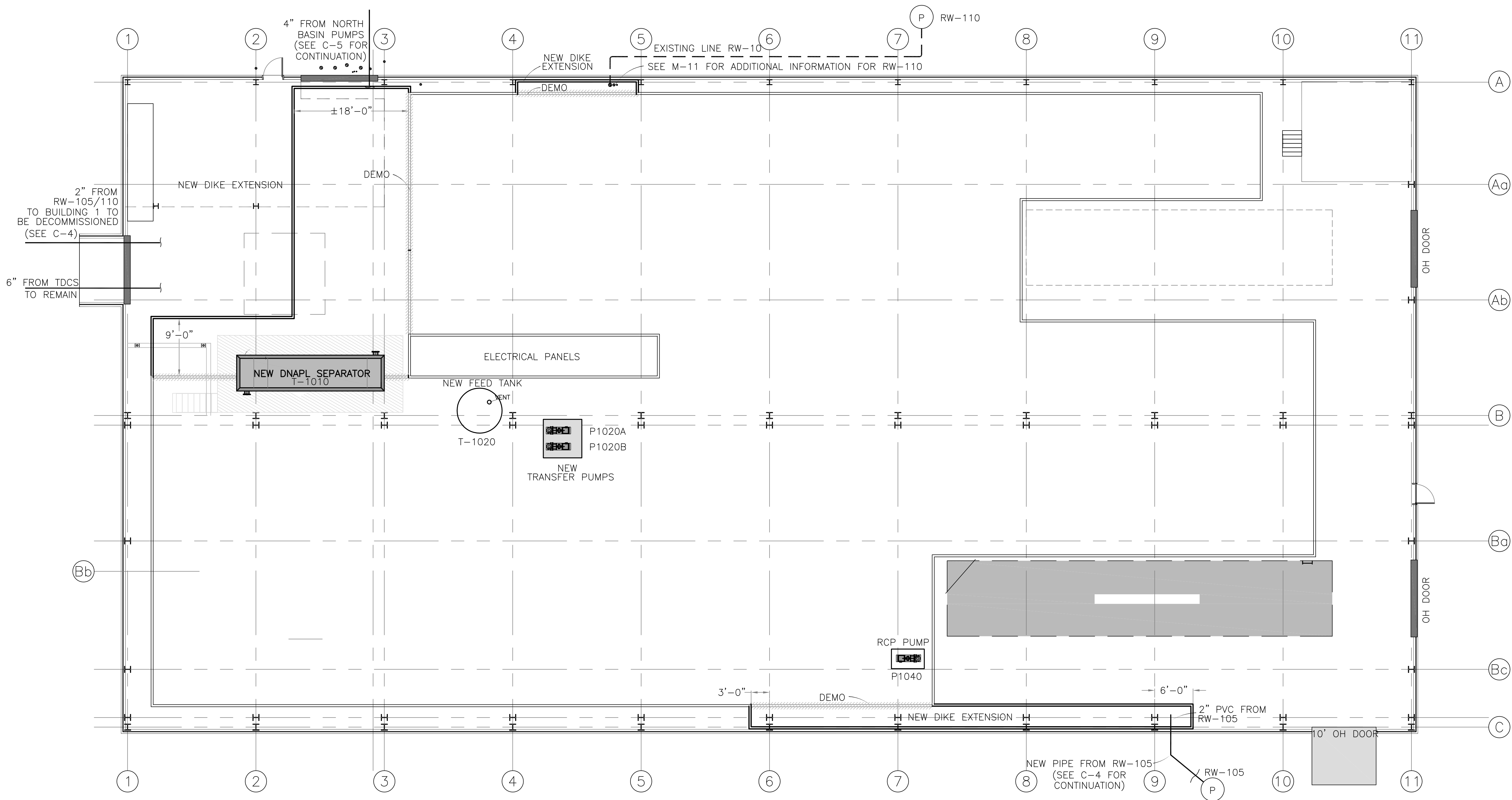
Hudson Falls, New York

PROPOSED CONTAINMENT DIKE MODIFICATIONS
WATER TREATMENT PLANT

DRAWING TITLE:

DRAWING NUMBER:

M-5



MODIFICATION AT EXISTING WTP AT BUILDING 4A
PROPOSED CONTAINMENT DIKE MODIFICATIONS

NOTE: NEW DIKE TO MATCH EXISTING

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CAD FILE: See Stamp

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TDCS
PHASE FOUR
DESIGN

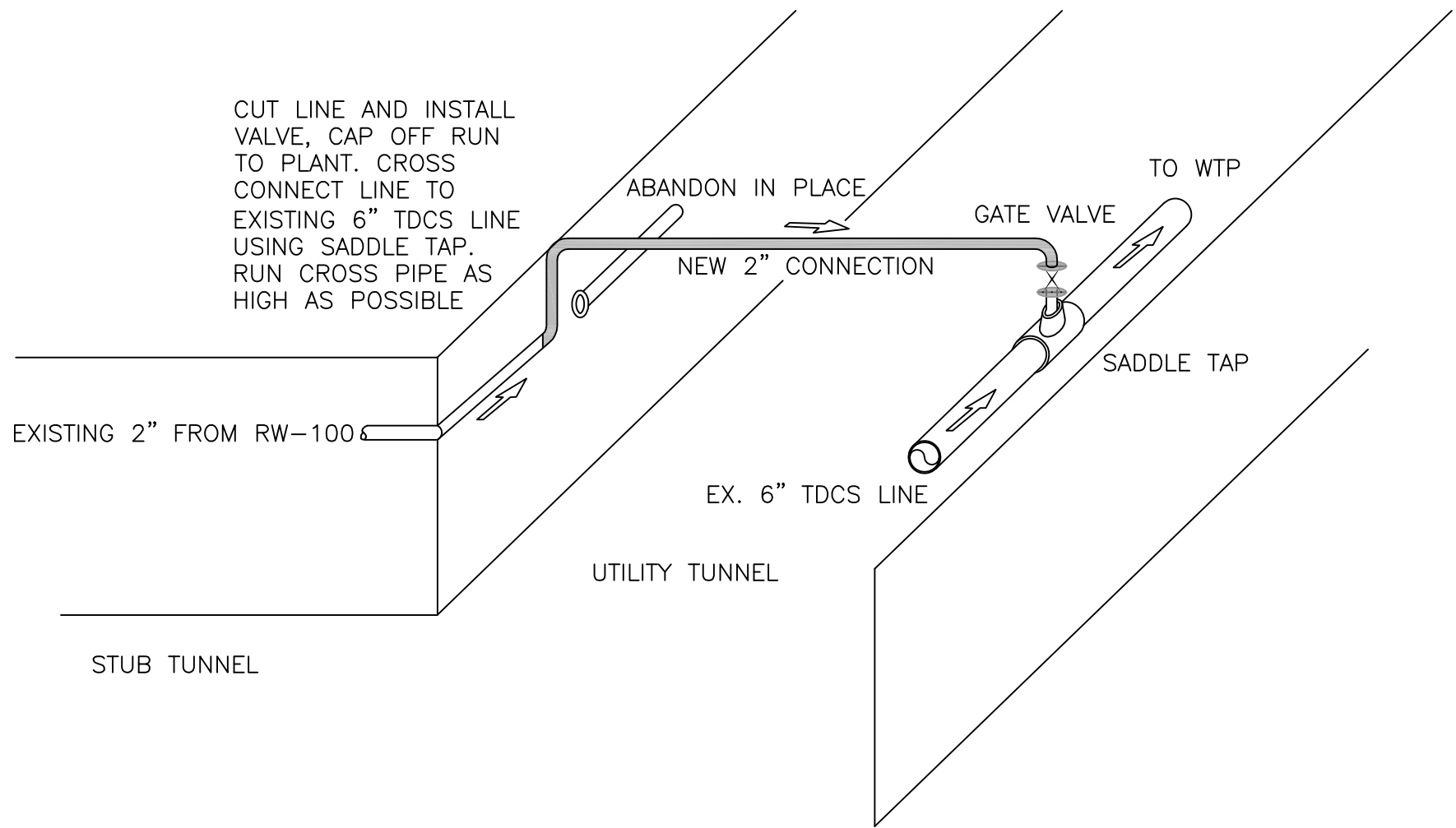
Hudson Falls, New York

PROPOSED IN-BUILDING TIE-IN MODIFICATIONS
WATER TREATMENT PLANT

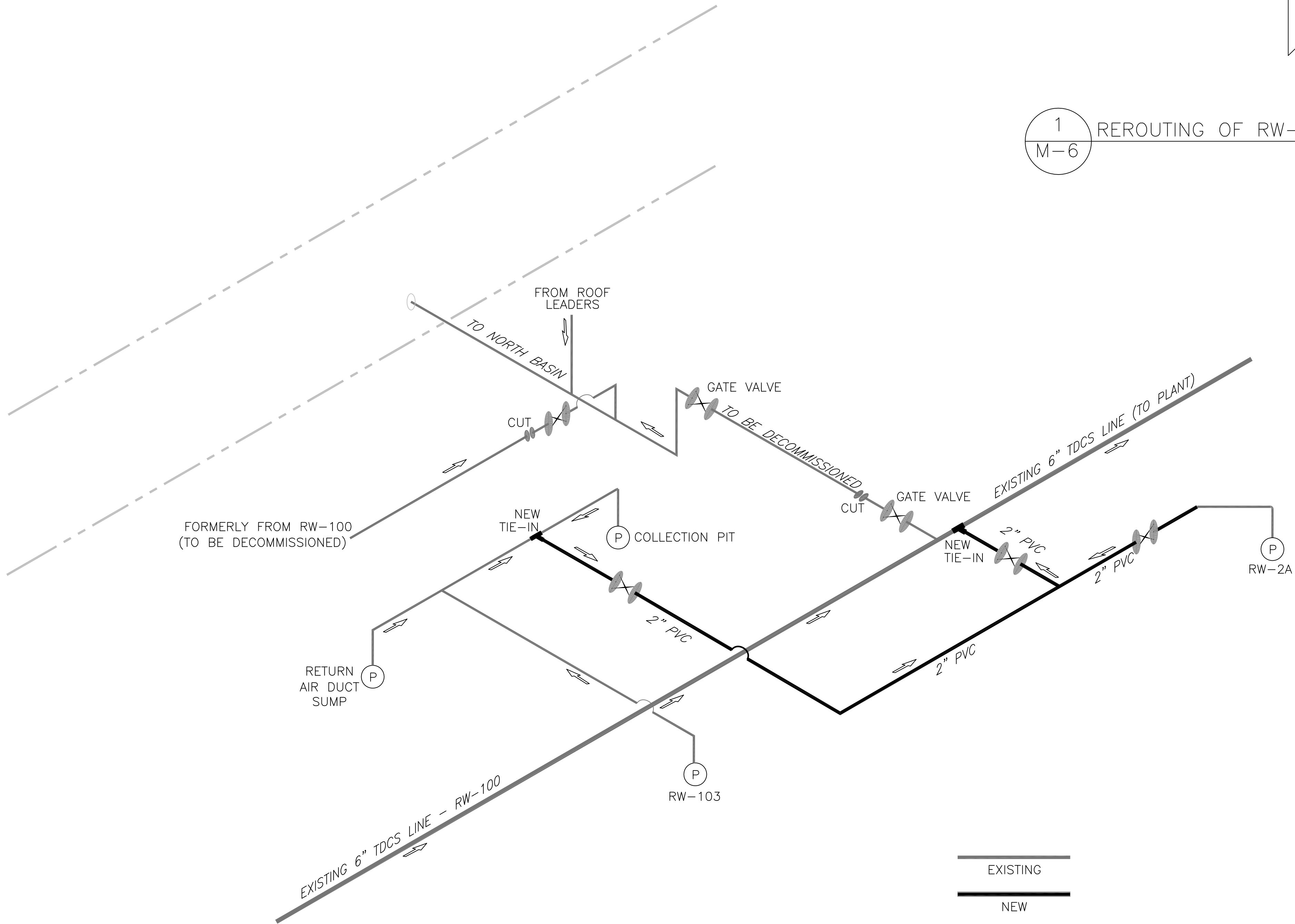
DRAWING TITLE:

DRAWING NUMBER:

M-6



1
M-6 REROUTING OF RW-100 PIPE TO TDCS PIPE



NOTE:
ALL PIPING TO BE DECOMMISSIONED
SHALL HAVE A TAG ATTACHED STATING
"NOT IN SERVICE"

2
M-6 TDCS TIE-IN IN BLD. 1 BASEMENT

MODIFICATION IN EXISTING BUILDINGS
TIE-IN DETAILS

REVISIONS

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RCN: 112IC04086

DRAWN BY: SNL

CHECKED BY: HKM

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

APPROVED BY: HKM

DATE: DECEMBER 21, 2012

CAD FILE: See Stamp

General Electric Company

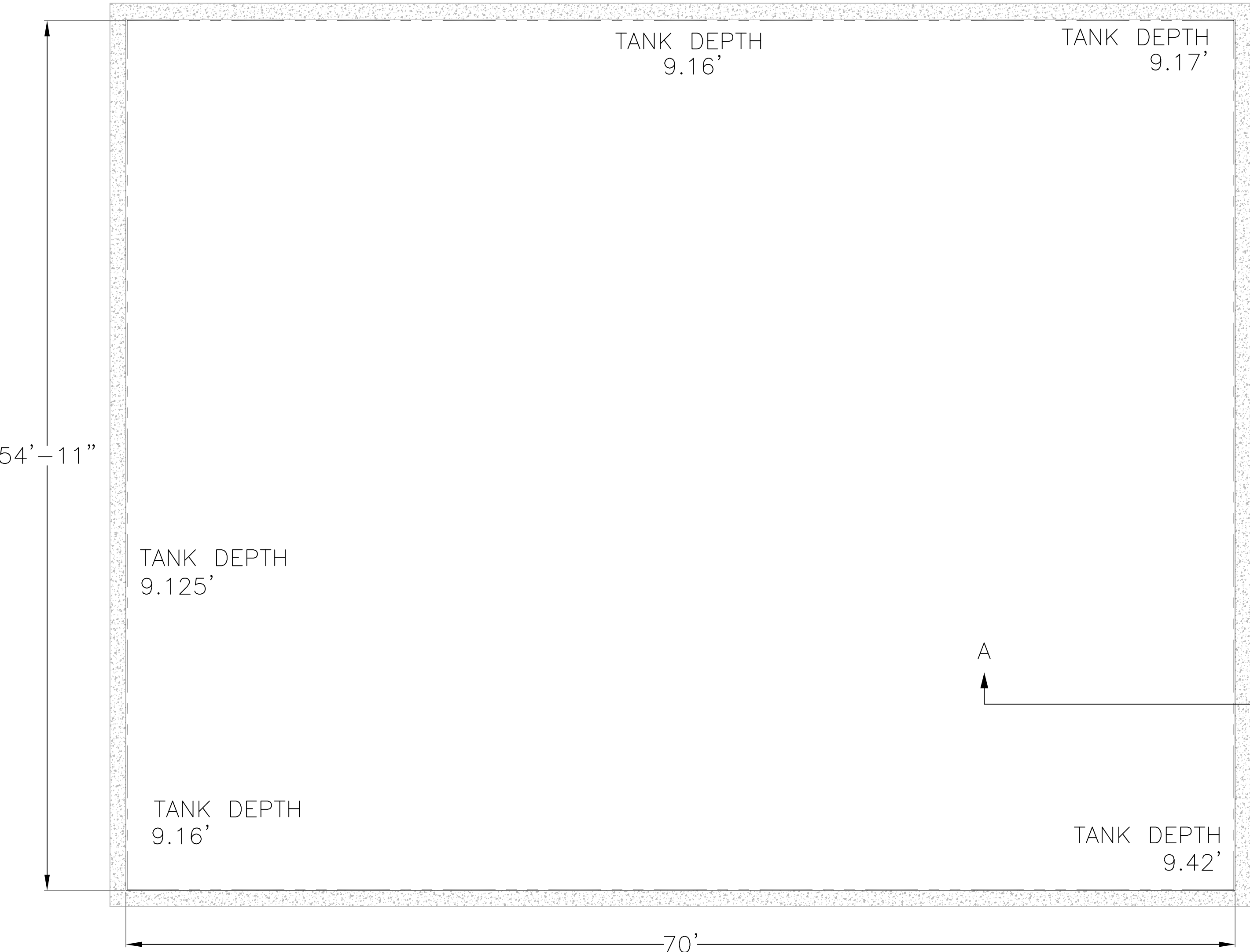
TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

PROPOSED MODIFICATIONS
NORTH BASIN LINER

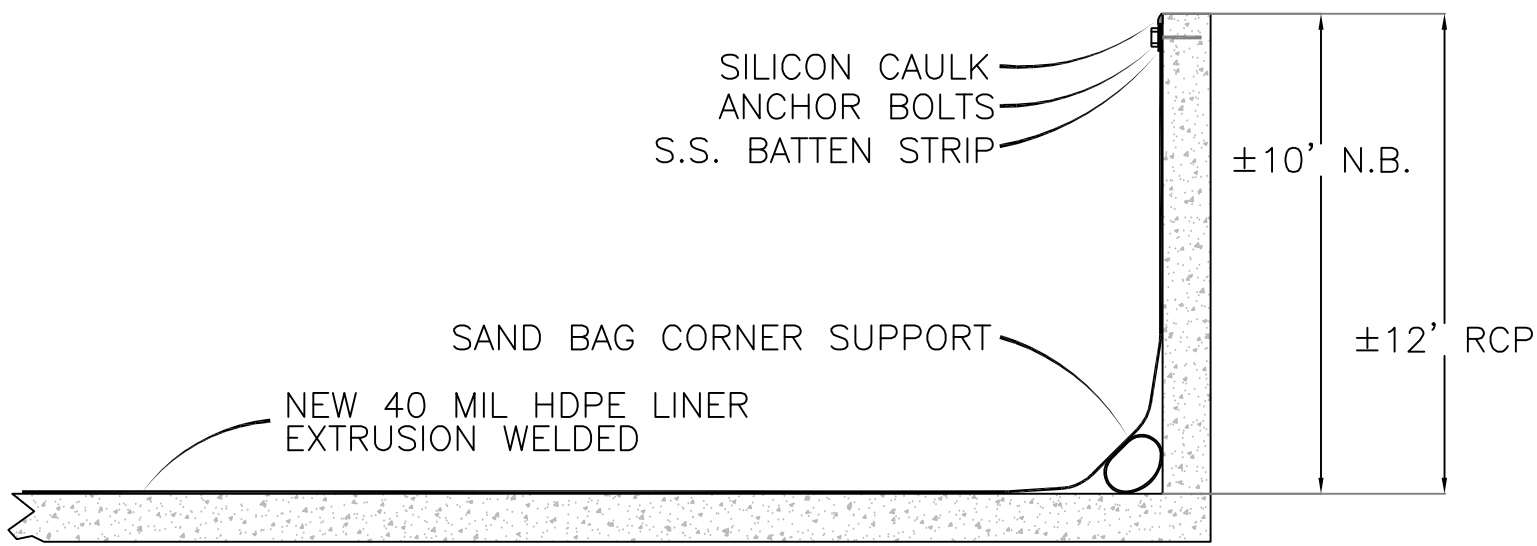
DRAWING TITLE:

DRAWING NUMBER:



NORTH BASIN PLAN VIEW

TANK DEPTHS ARE TO THE BOTTOM OF THE BASIN
CONTRACTOR TO FIELD VERIFY BASIN DIMENSIONS AFTER CLEANING.



SECTION A-A

SECTION (TYP.)

LINER INSTALLATION

REVISIONS

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RCN: 112IC04086
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TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

PROPOSED MODIFICATIONS
NORTH BASIN

DRAWING TITLE:

DRAWING NUMBER:

M-8

FOR PIPING MODIFICATIONS IN THIS AREA
SEE DRAWING M-10

NSWP

4" PVC SCH 80 FLANGED PIPE

4" FLANGED BALL VALVE

4" PVC SCH 80 FLANGED PIPE

3" FLANGED FLOWMETER

4" PVC SCH 80 FLANGED PIPE

FE/FT-1030

NEW 12'x12' SHED
REFER TO DRAWING A-1

P-1030A

3"

3"

4"

4"

4"

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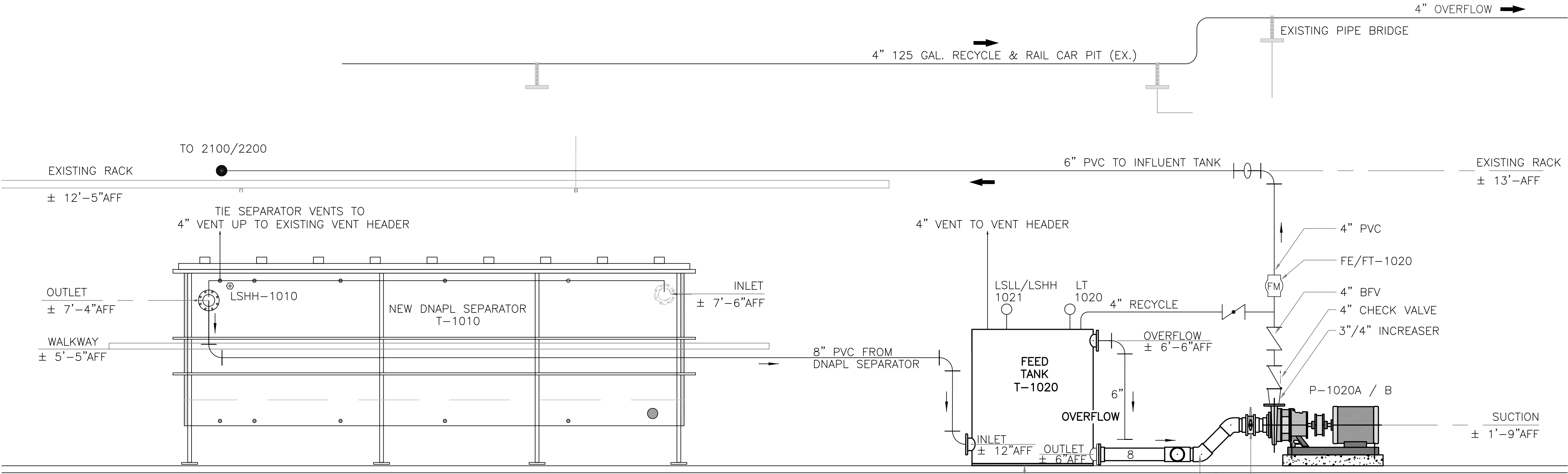
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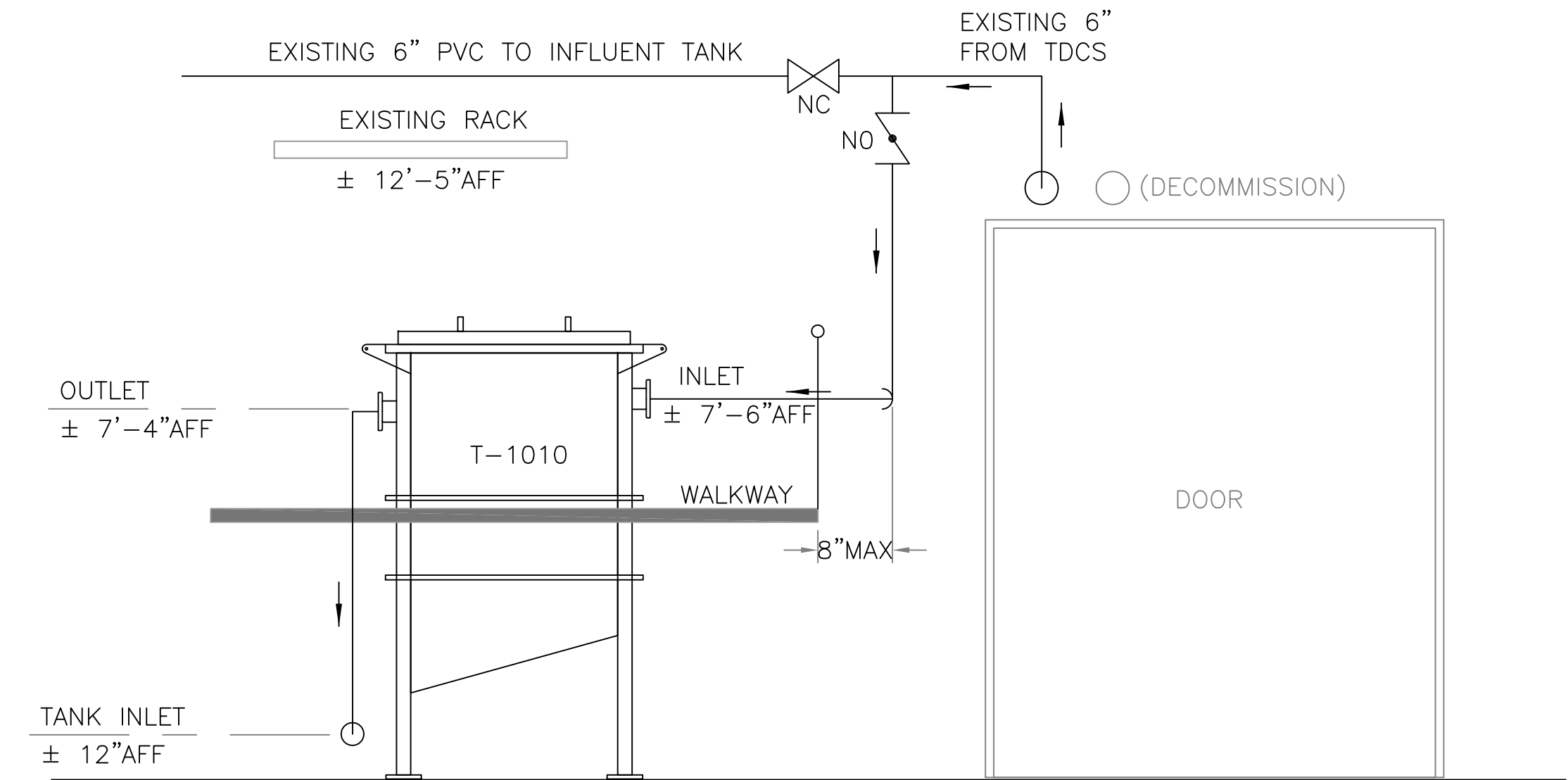
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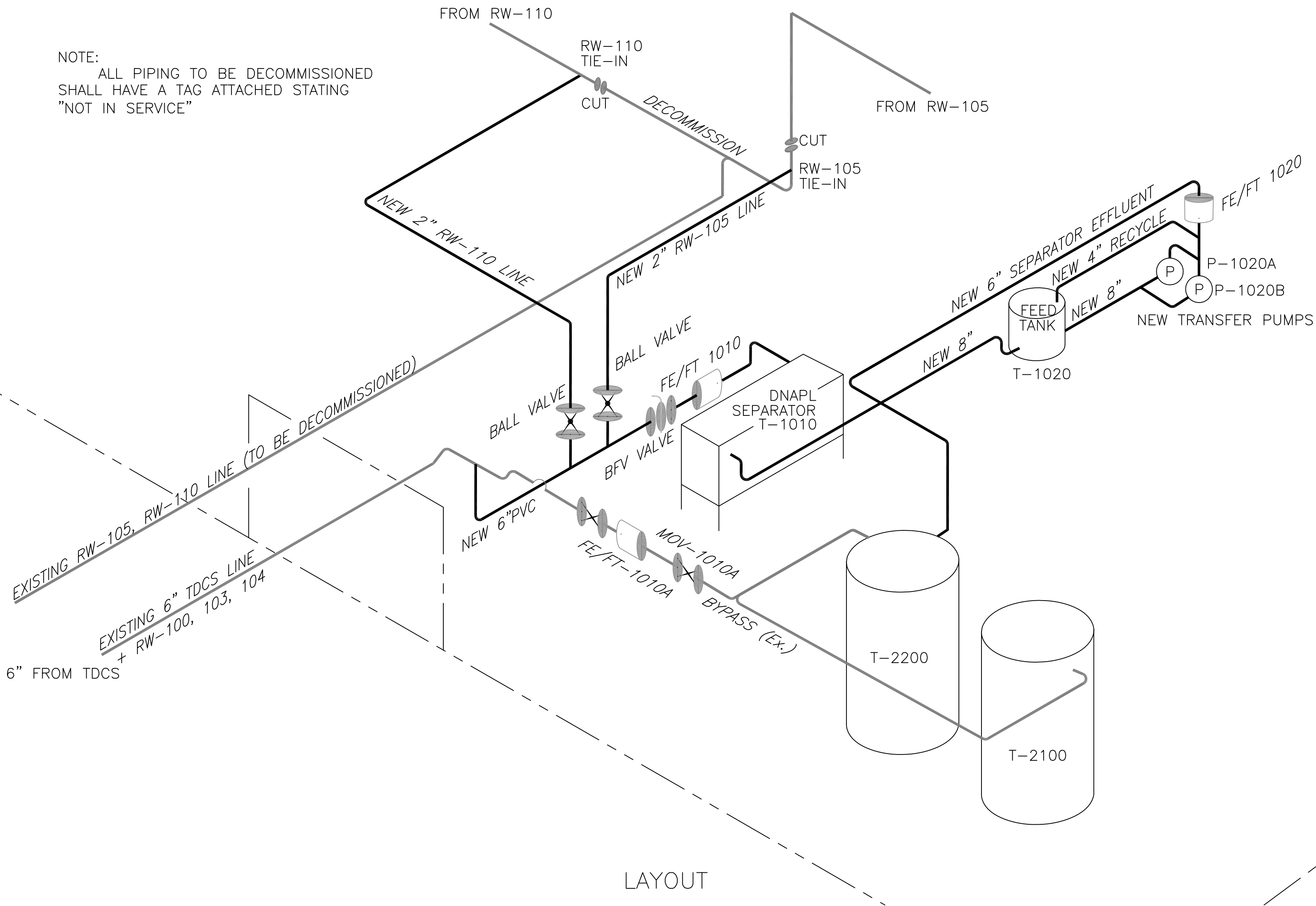


ELEVATION



NOTE: SUPPORT NEW PIPING AT DNAPL SEPERATOR FROM NEW PLATFORM STEEL

ELEVATION



LAYOUT

REVISIONS

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RCN: 112IC04086
DRAWN BY: SNL
CHECKED BY: HKM
SCALE: 1/4"=1'-0"
APPROVED BY: HKM
DATE: DECEMBER 21, 2012
CAD FILE: See Stamp

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TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

EQUIPMENT/PIPING LAYOUT/ELEVATION
WATER TREATMENT PLANT

DRAWING TITLE:

DRAWING NUMBER:

M-9

REVISIONS

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SCALE:	NTS
APPROVED BY:	HKM
DATE:	DECEMBER 21, 2012
CAD FILE:	See Stamp

General Electric Company

TDCS
 PHASE FOUR
 DESIGN

Hudson Falls, New York

RW DETAILS
 WATER TREATMENT PLANT

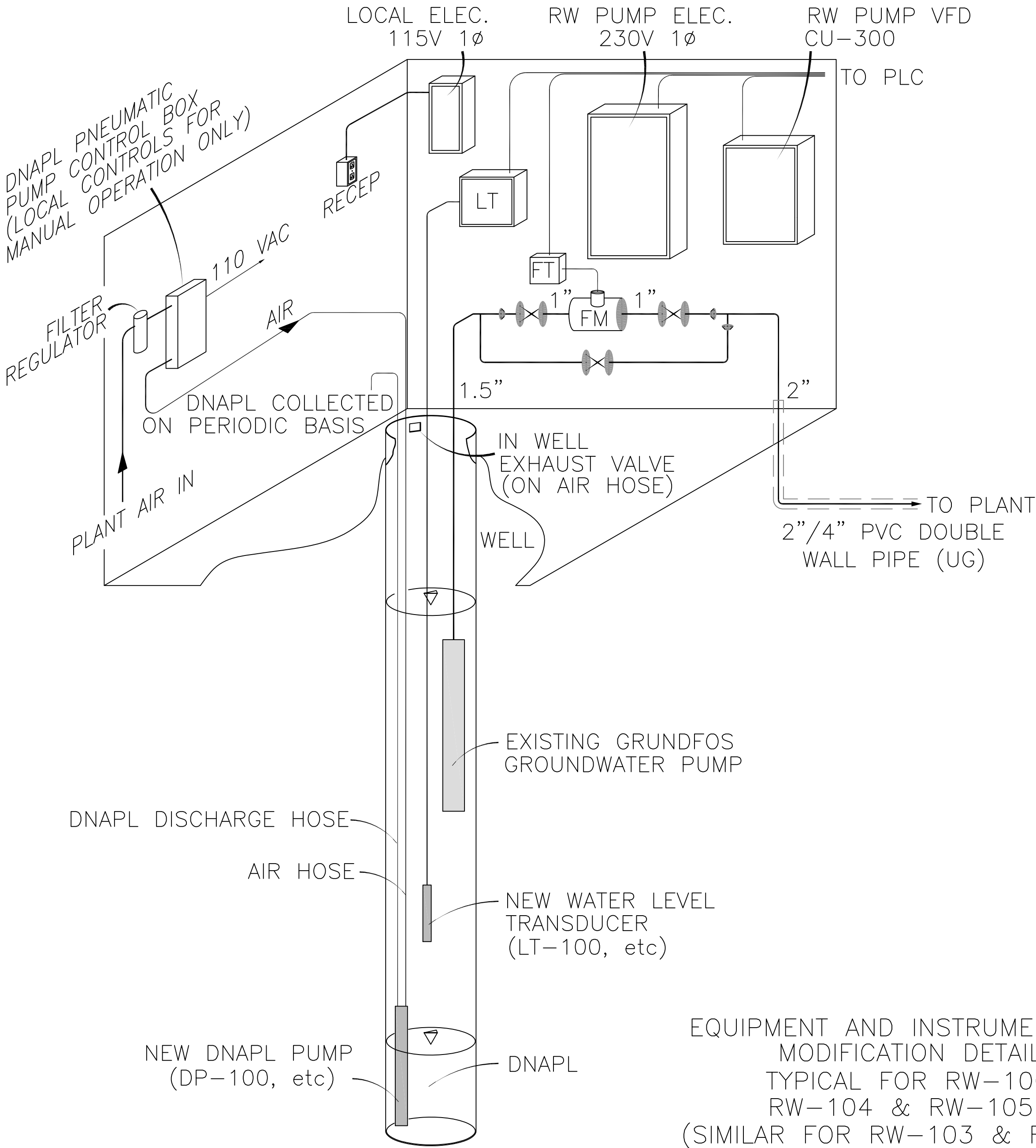
DRAWING TITLE:

DRAWING NUMBER:

M-11

PRE-FABRICATED RW WELL HOUSE
 (TYPICAL FOR RW-100, 104 & 105)
 REFER TO DRAWING A-1

IN WELL HOUSES PROVIDE:
 115V LIGHT, HEATER AND EXHAUST



NOTE:

FOR RW-103 & RW-110, FIELD LOCATE
 INSTRUMENTS AND PANELS INSIDE BUILDING

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SCALE: _____ AS NOTED

DATE: DECEMBER 21, 2012

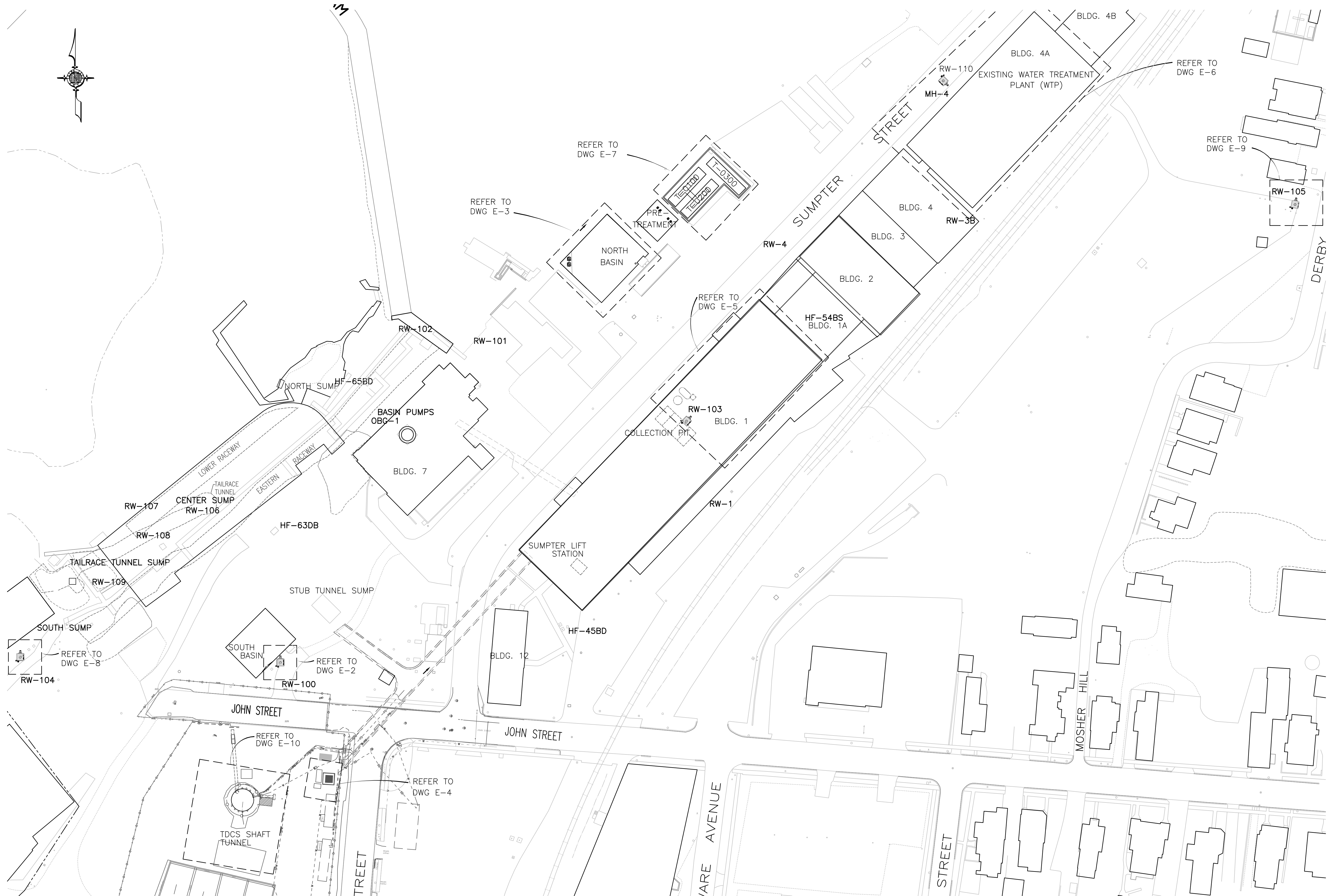
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Hudson Falls, New York

DRAWING TITLE

DRAWING NUMBER

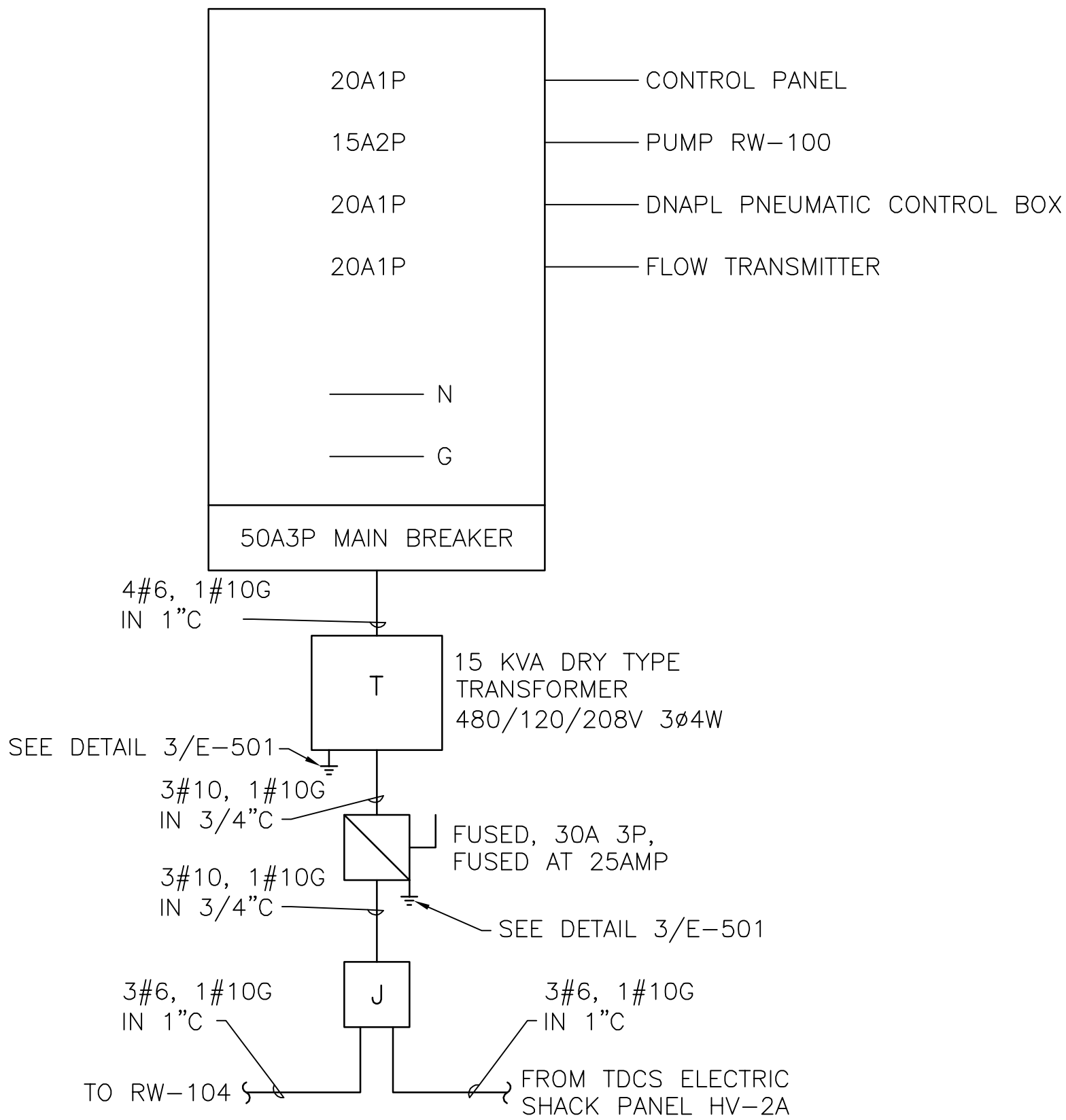
E-



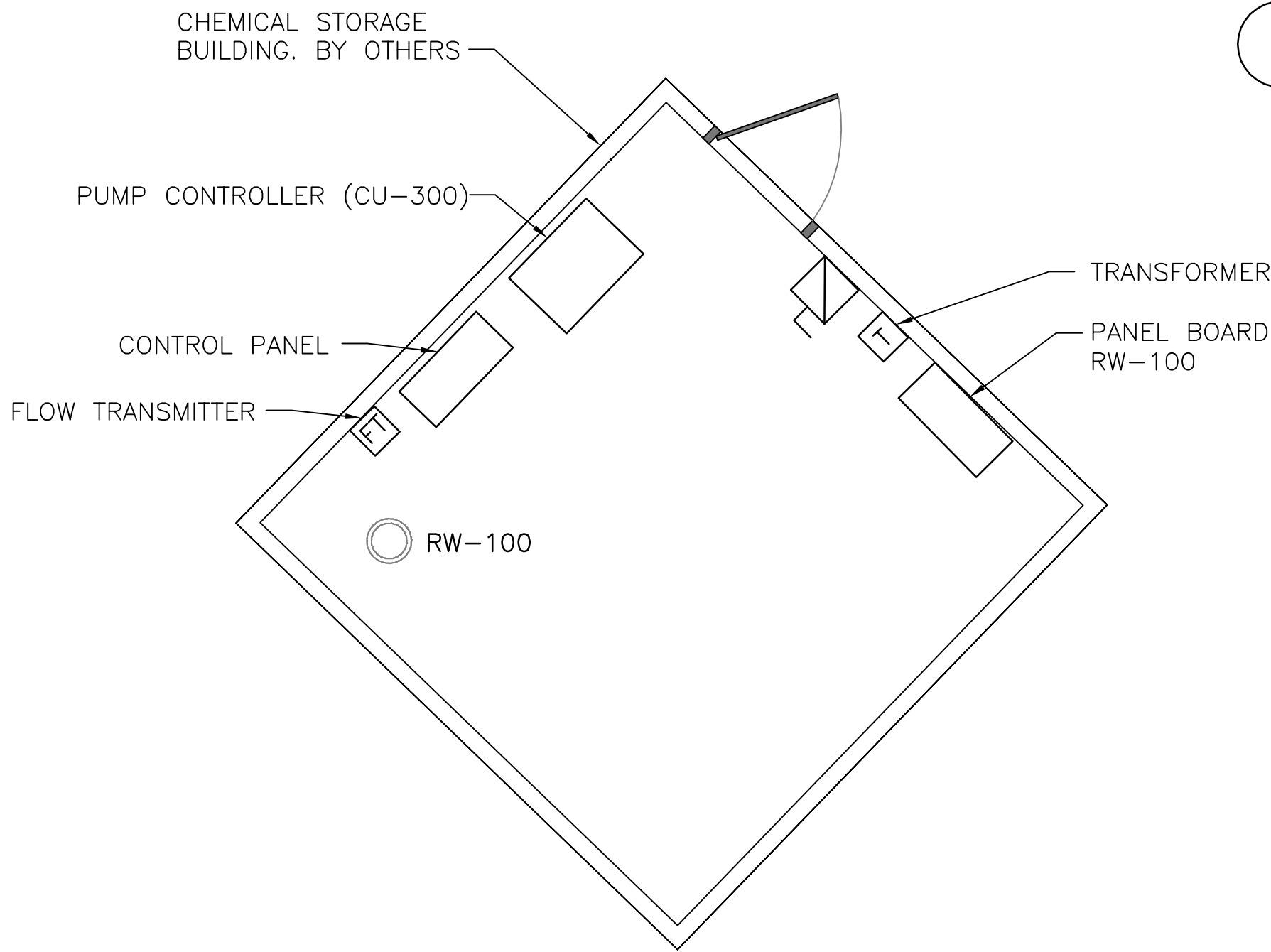
1 OVERALL SITE PLAN
1" = 50'-0"



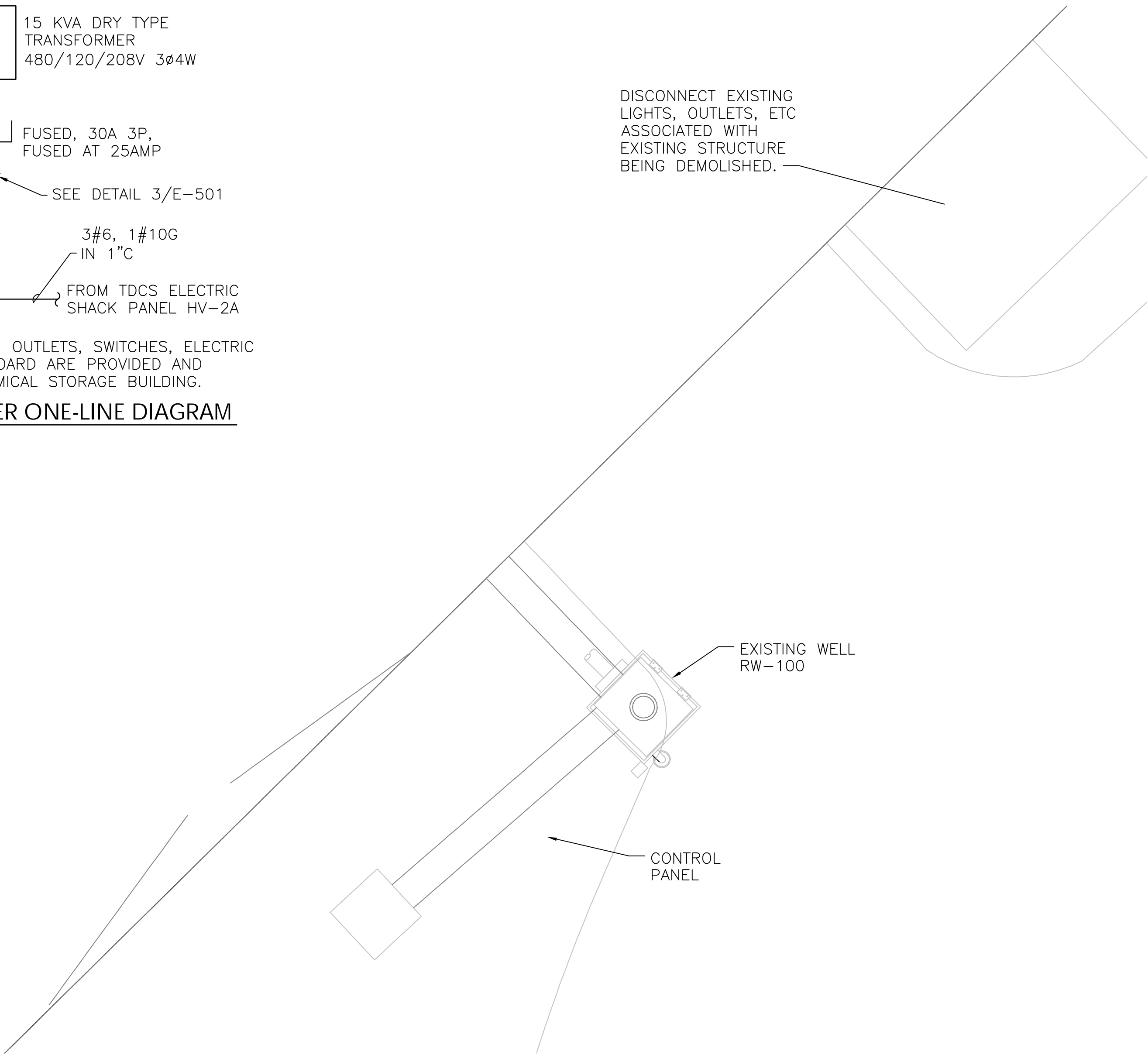
PANEL BOARD RW-100
120/208V, 3ø 4W
PROVIDED WITH CHEMICAL
STORAGE BUILDING



3 RW-100 POWER ONE-LINE DIAGRAM
NO SCALE



2 RW-100 DNAPL PUMP - PLAN
3/8" = 1'-0"



1 RW-100 DNAPL PUMP - DEMOLITION PLAN
3/8" = 1'-0"

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Hudson Falls, New York

RW-100 BUILDING
SITE PLAN

DRAWING TITLE:

DRAWING NUMBER:

E-2

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DATE: DECEMBER 21, 2012

CAD FILE: E-3-01299-12001

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**TDCS
PHASE FOUR
DESIGN**

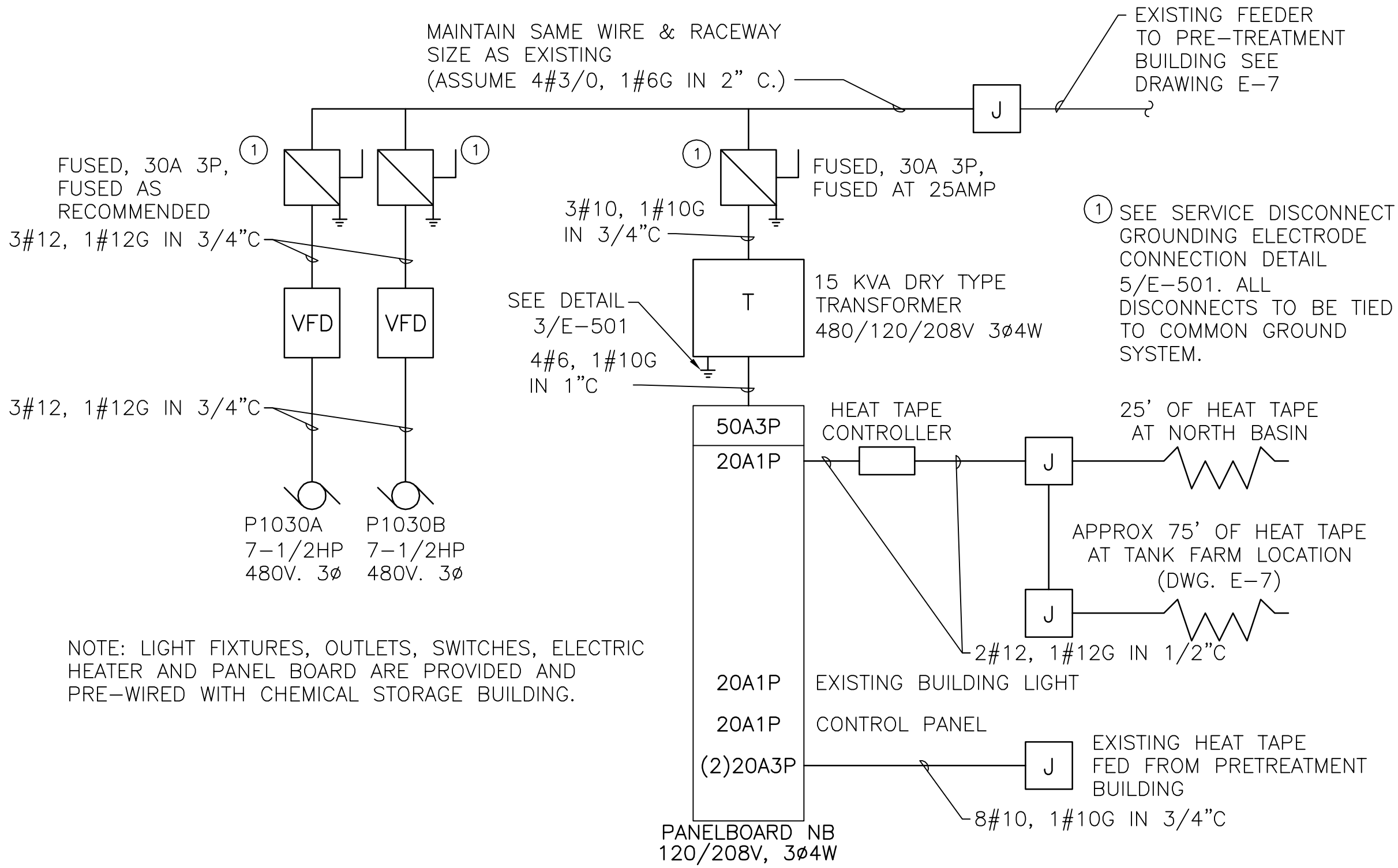
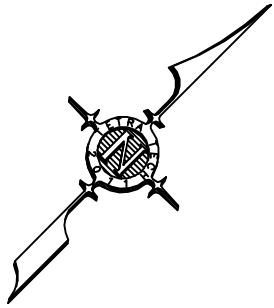
Hudson Falls, New York

NORTH BASIN
PARTIAL SITE PLAN

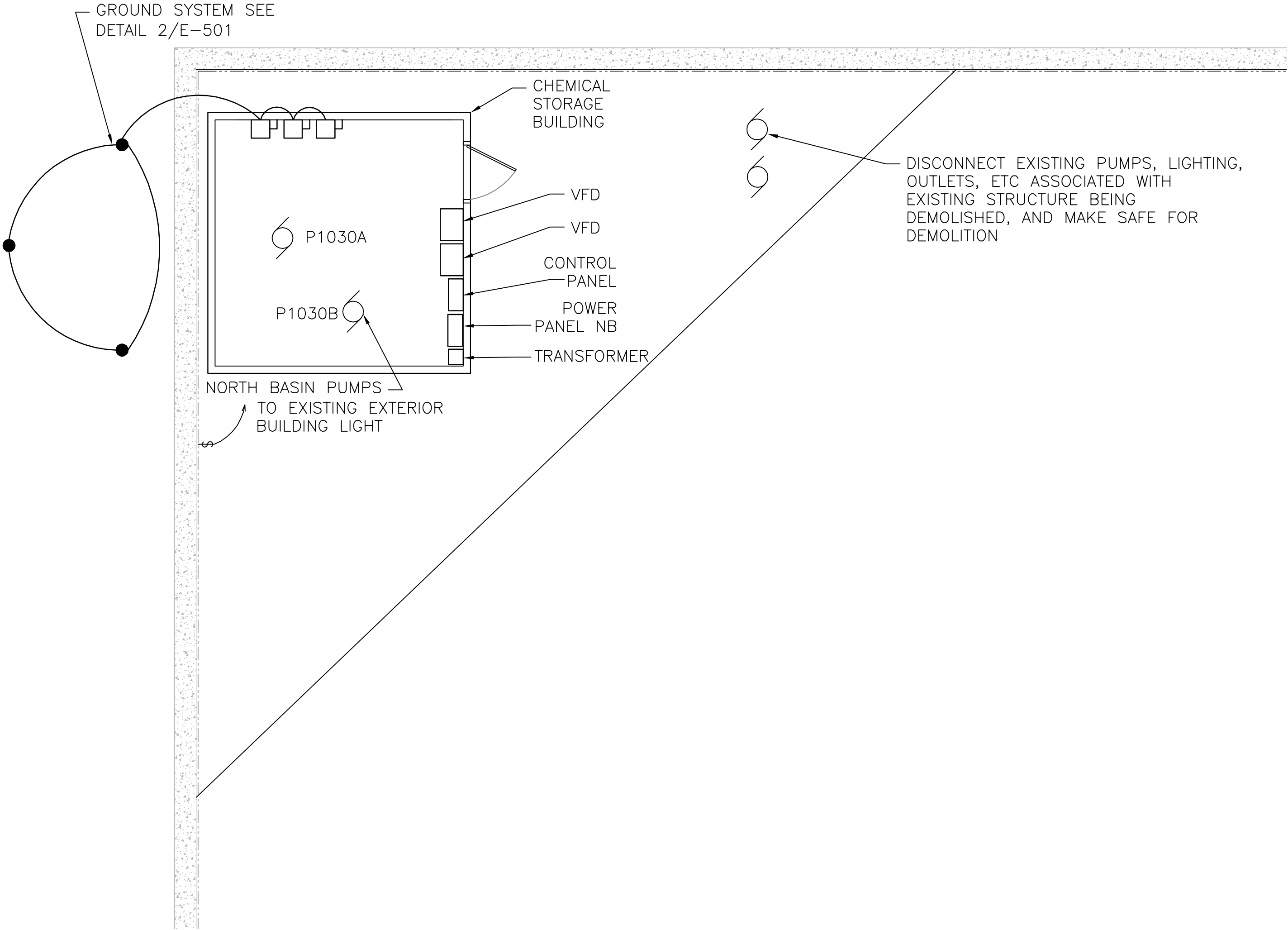
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DRAWING NUMBER:

E-3

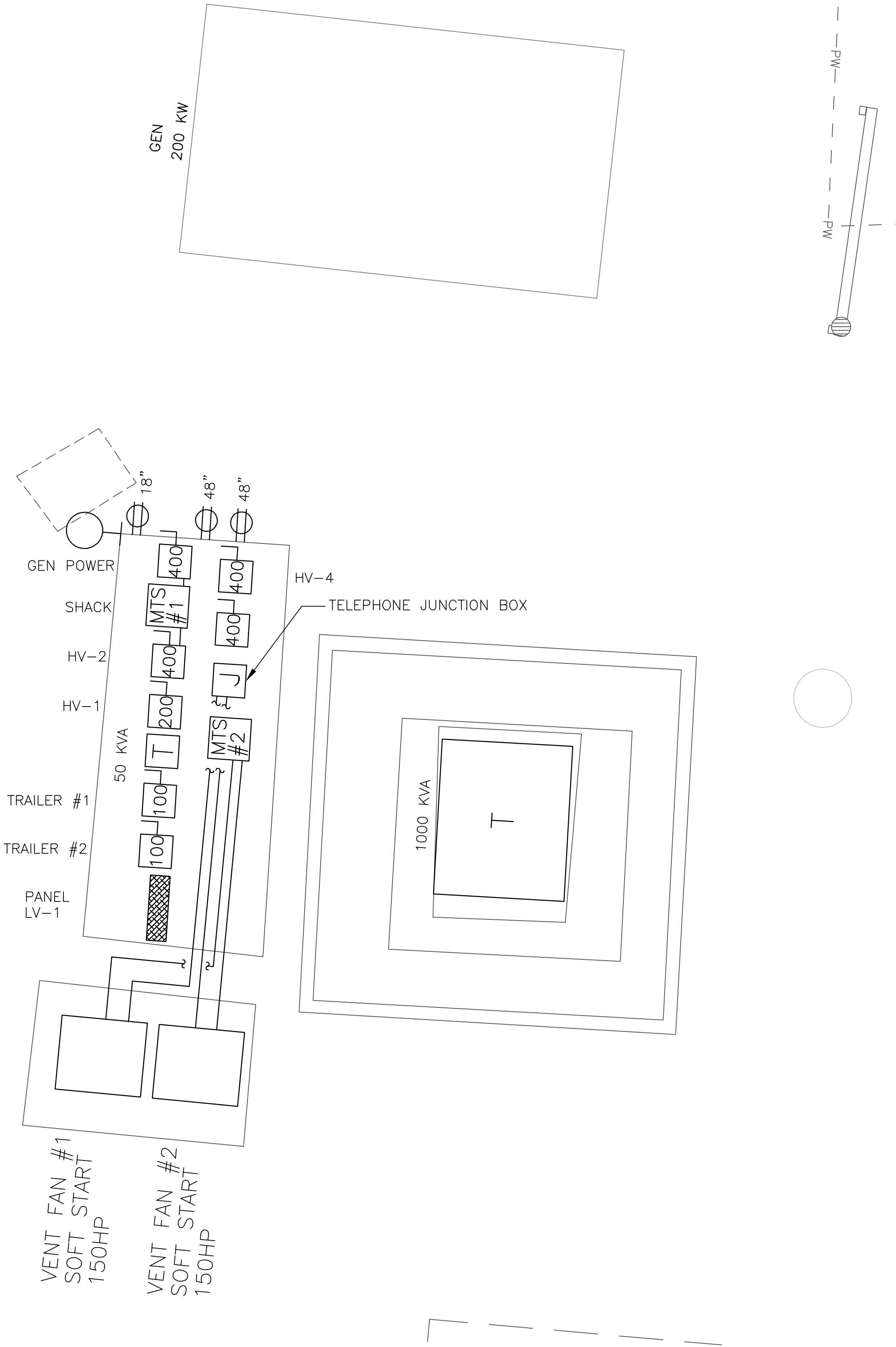


2 NORTH BASIN POWER ONE-LINE DIAGRAM
NO SCALE



1 NORTH BASIN PARTIAL SITE PLAN
1/4" = 1'-0"

P:\01299\143-01299-12001\CAD\SheetFiles\TDCS BUILDING\Elec\E-3-01299-12001.dwg 12/20/2012 09:29



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CAD FILE:	E-4-01299-1200

General Electric Company

TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

PARTIAL TDCS SITE PLAN

DRAWING TITLE:

DRAWING NUMBER

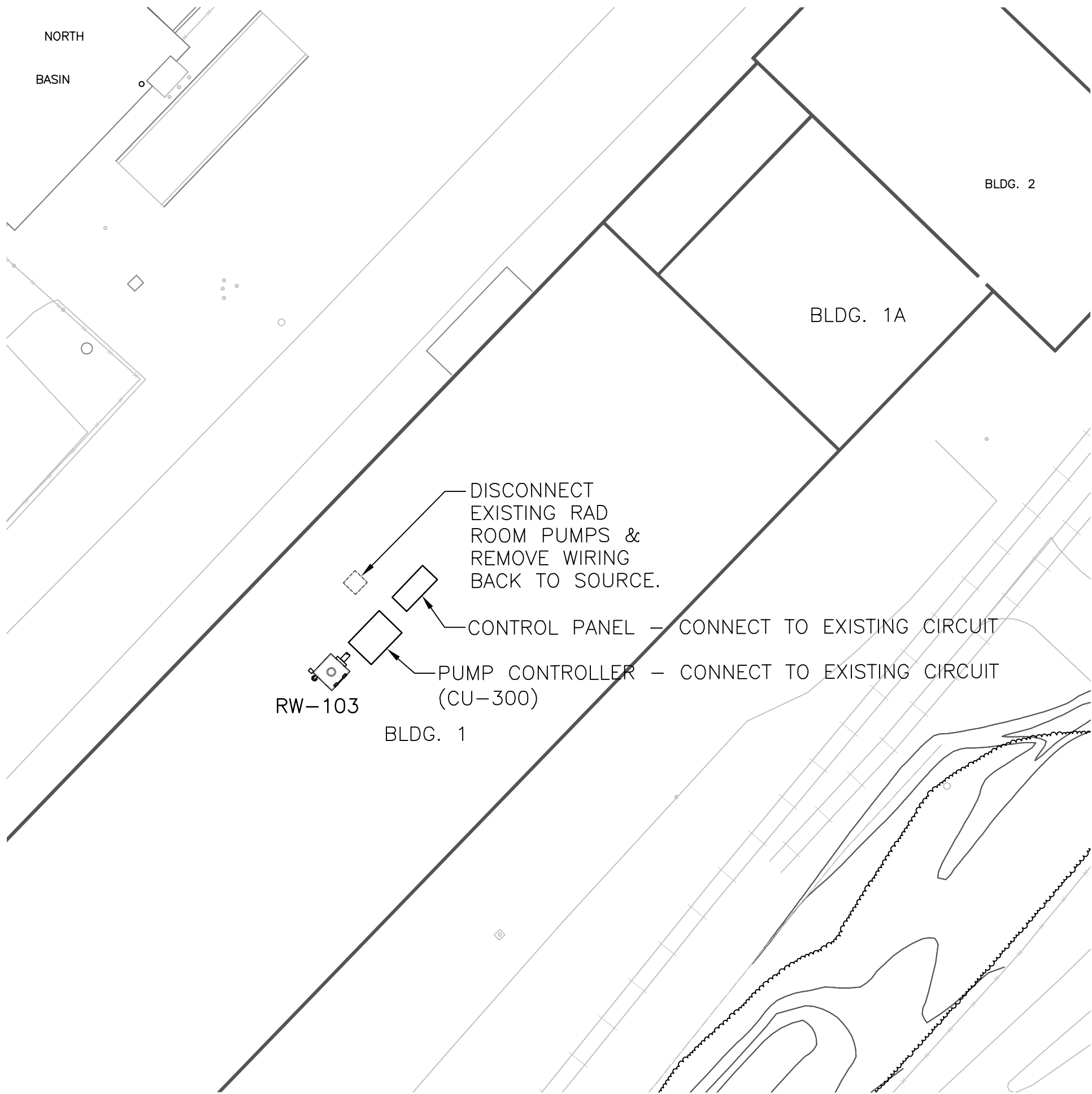
E-4



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1 **BUILDING 1 (RW-103) PARTIAL PLAN**
3/8" = 1'-0"

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CHECKED BY: DJS

SCALE: AS NOTED

APPROVED BY: DRH

DATE: DECEMBER 21, 2012

CAD FILE: E-5-01299-12001

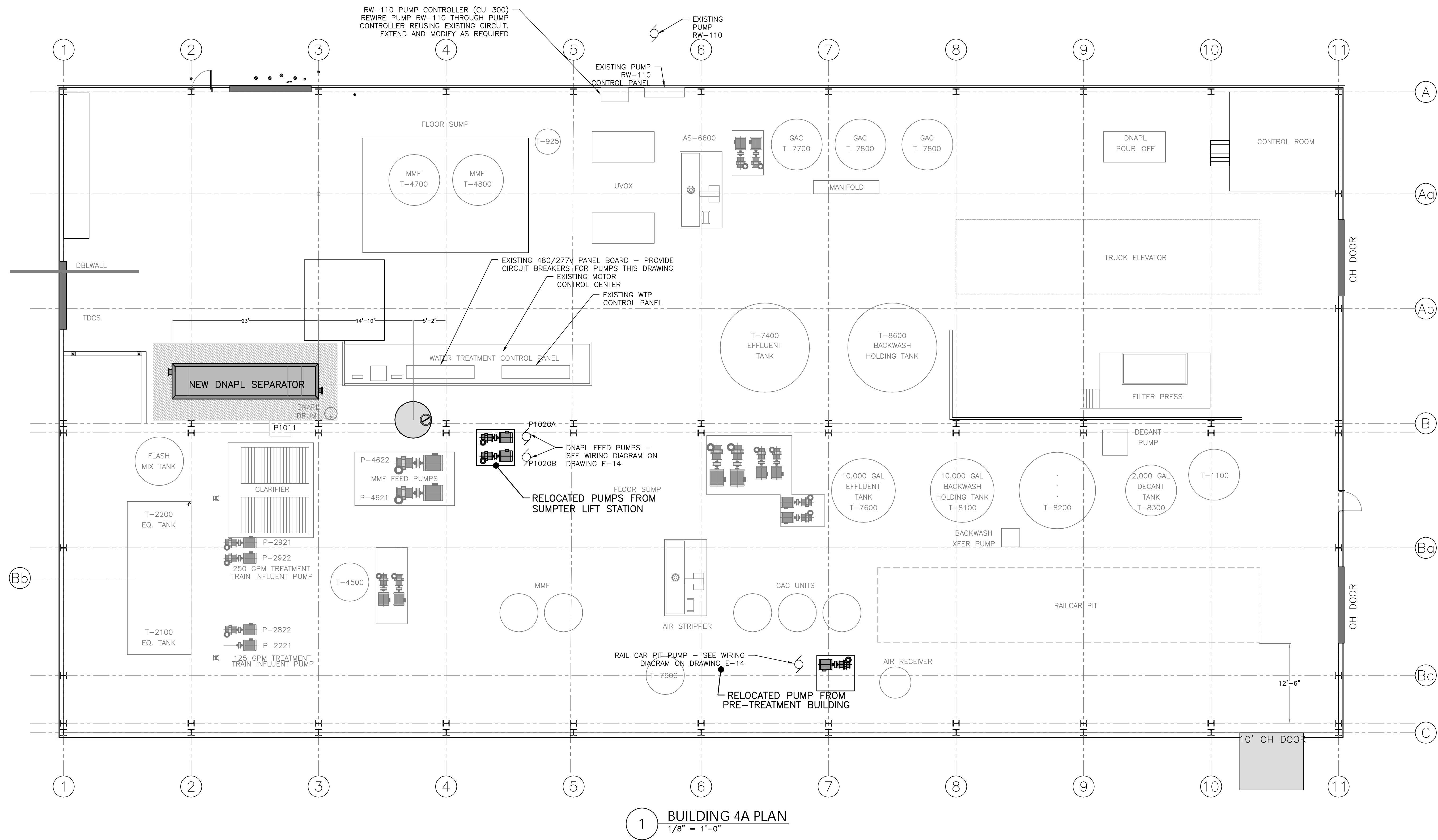
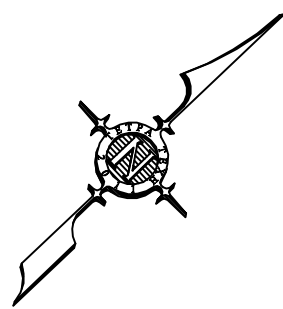
General Electric Company

**TDCS
PHASE FOUR
DESIGN**

Hudson Falls, New York

BUILDING 1 PARTIAL BASEMENT PLAN
DRAWING TITLE:

DRAWING NUMBER:
E-5



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CAD FILE: E-6-01299-12001

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PHASE FOUR
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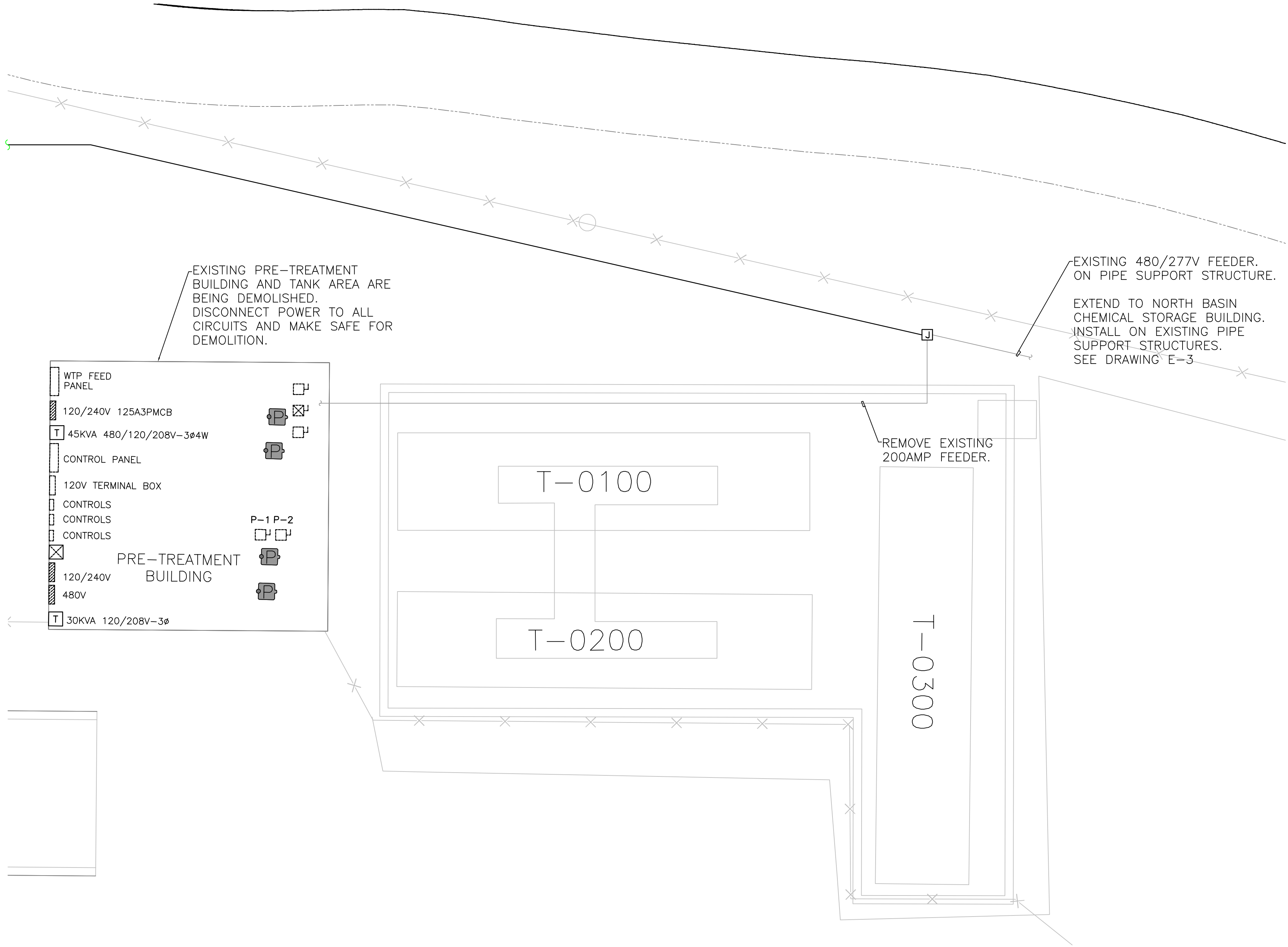
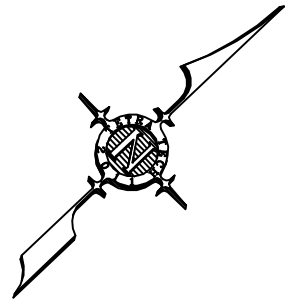
Hudson Falls, New York

BUILDING 4A PLAN

DRAWING TITLE:

DRAWING NUMBER:

E-6



1 PRE-TREATMENT AND TANK FARM DEMOLITION PLAN
1/8" = 1'-0"

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SCALE: AS NOTED
APPROVED BY: DRH
DATE: DECEMBER 21, 2012
CAD FILE: E-7-01299-12001

General Electric Company

TDCS
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DESIGN

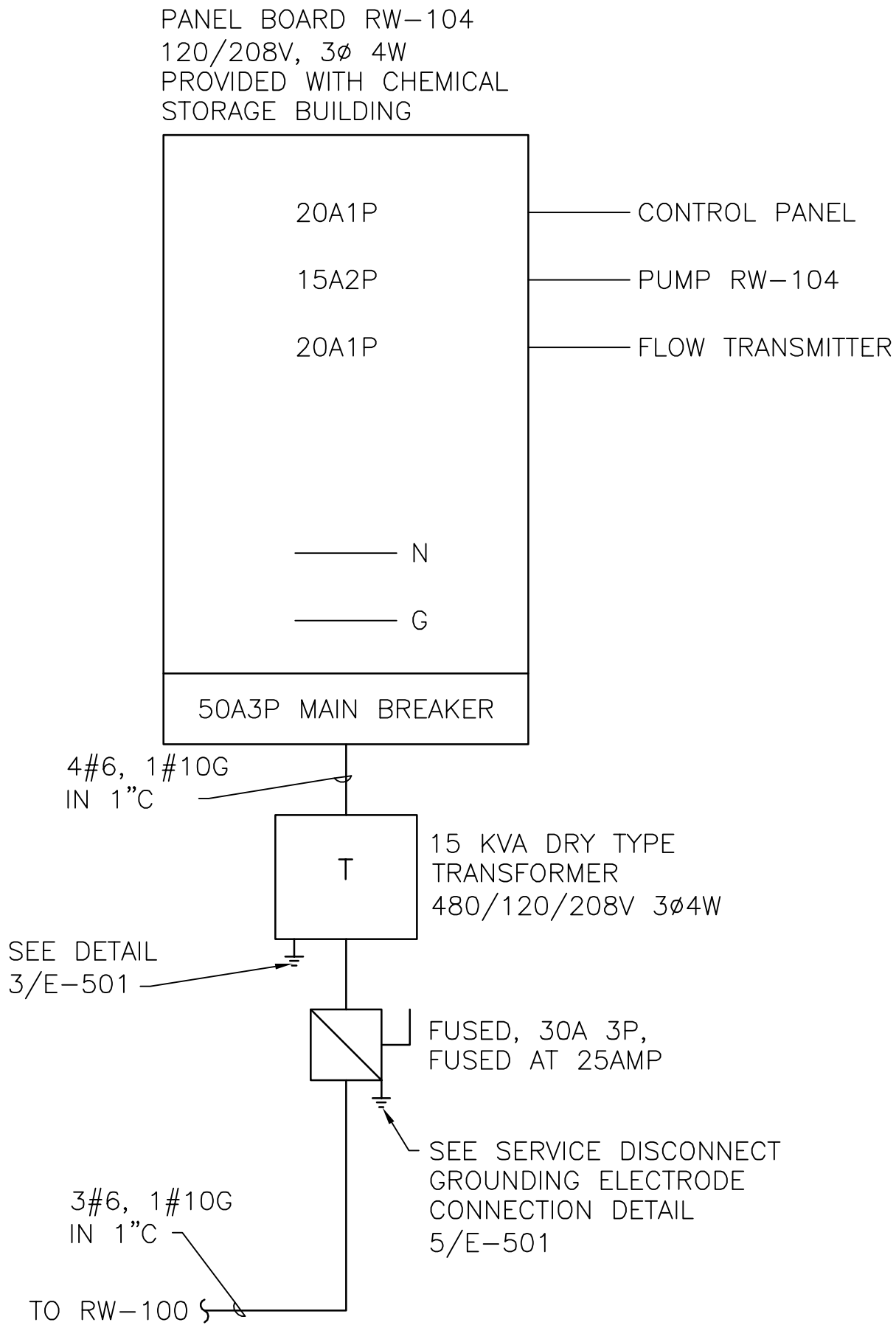
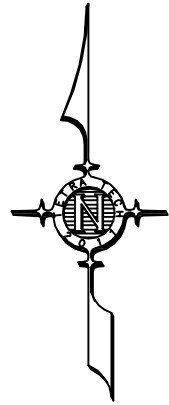
Hudson Falls, New York

PRE-TREATMENT AND
TANK FARM DEMOLITION PLAN

DRAWING TITLE:

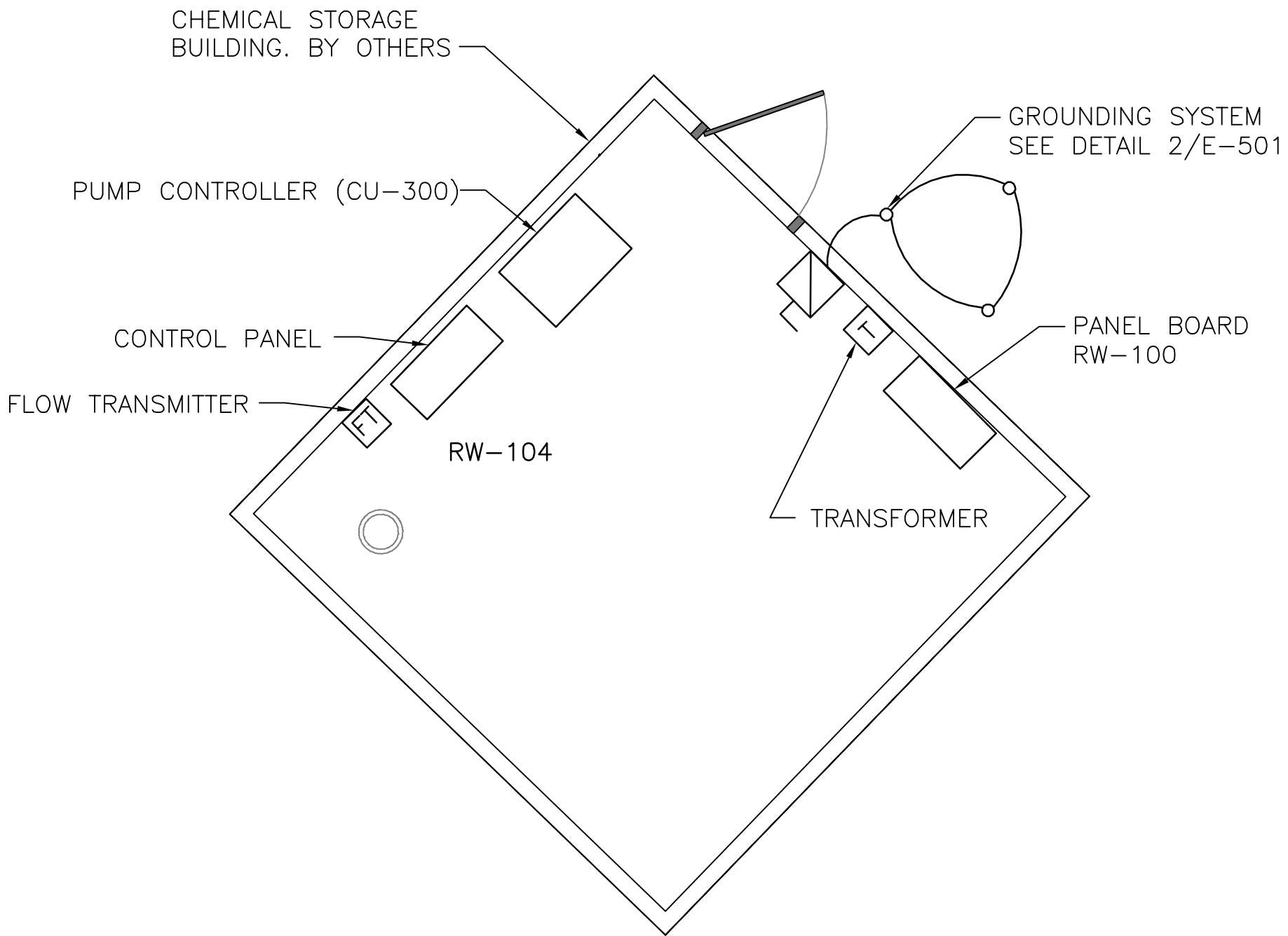
DRAWING NUMBER:

E-7



NOTE: LIGHT FIXTURES, OUTLETS, SWITCHES, ELECTRIC
HEATER AND PANEL BOARD ARE PROVIDED AND
PRE-WIRED WITH CHEMICAL STORAGE BUILDING.

2 RW-104 DNAPL PUMP ONE-LINE DIAGRAM
NO SCALE



1 RW-104 DNAPL PUMP - PLAN
3/8" = 1'-0"

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TDCS
PHASE FOUR
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Hudson Falls, New York

RW-104 DNAPL PUMP PLAN

DRAWING TITLE:

DRAWING NUMBER:

E-8



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SCALE: AS NOTED

APPROVED BY: DRH

DATE: DECEMBER 21, 2012

CAD FILE: E-9-01299-12001

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TDCS
PHASE FOUR
DESIGN

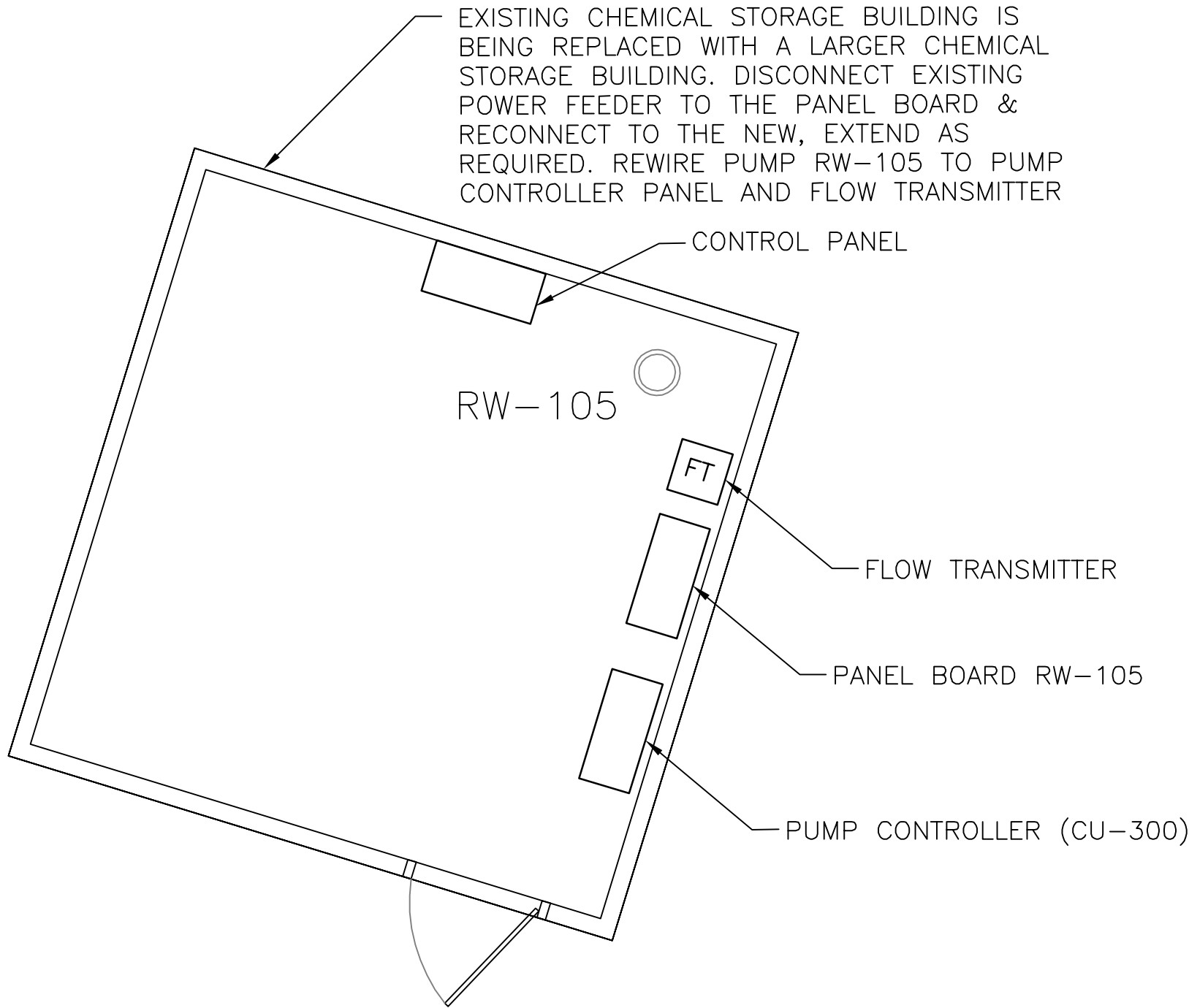
Hudson Falls, New York

RW-105 DNAPL PUMP PLAN

DRAWING TITLE:

DRAWING NUMBER:

E-9



1 RW-105 DNAPL PUMP - PLAN
3/8" = 1'-0"

NOTES:
LIGHT FIXTURES, OUTLETS, SWITCHES, ELECTRIC HEATER
AND PANEL BOARD ARE PROVIDED AND PRE-WIRED
WITH PREFABRICATED BUILDING.

DISCONNECT EXISTING PUMP RW-105 POWER AND
CONTROL WIRING.

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CAD FILE: E-10-01299-12001

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DESIGN

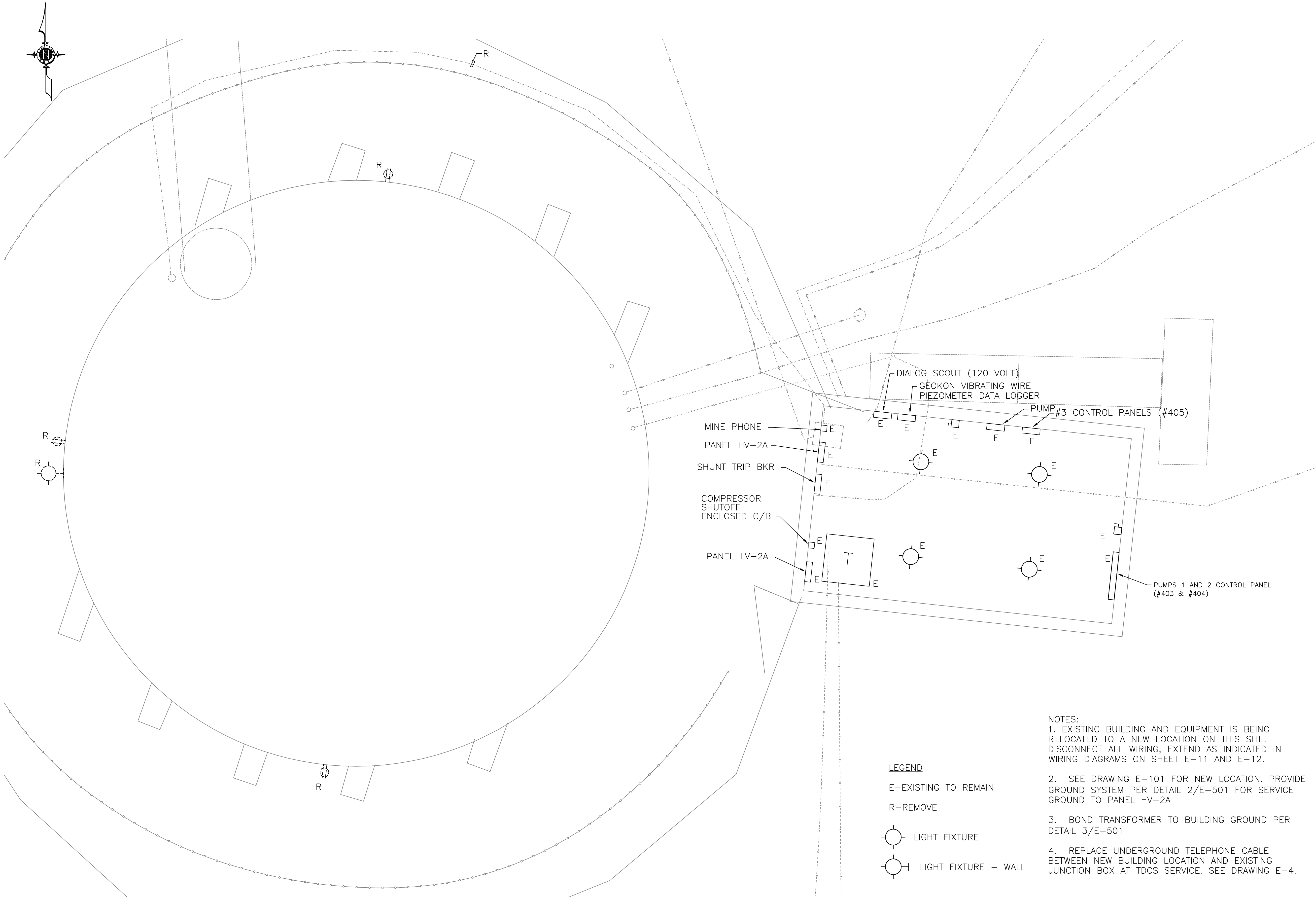
Hudson Falls, New York

ELECTRIC SHACK PLAN

DRAWING TITLE:

DRAWING NUMBER:

E-10



1 ELECTRIC SHACK PLAN
1/2" = 1'-0"

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CAD FILE: E-12-01299-12001

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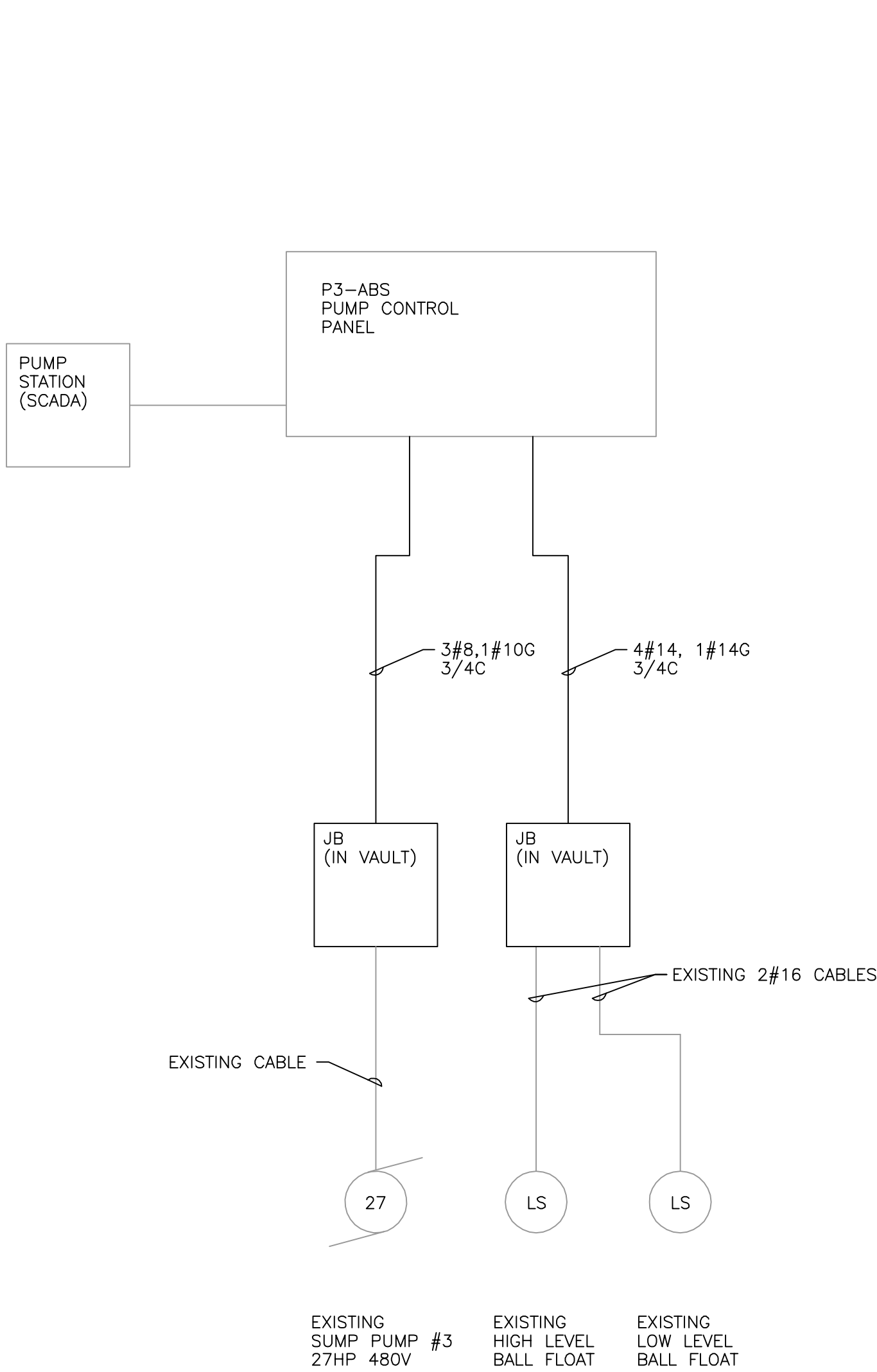
TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

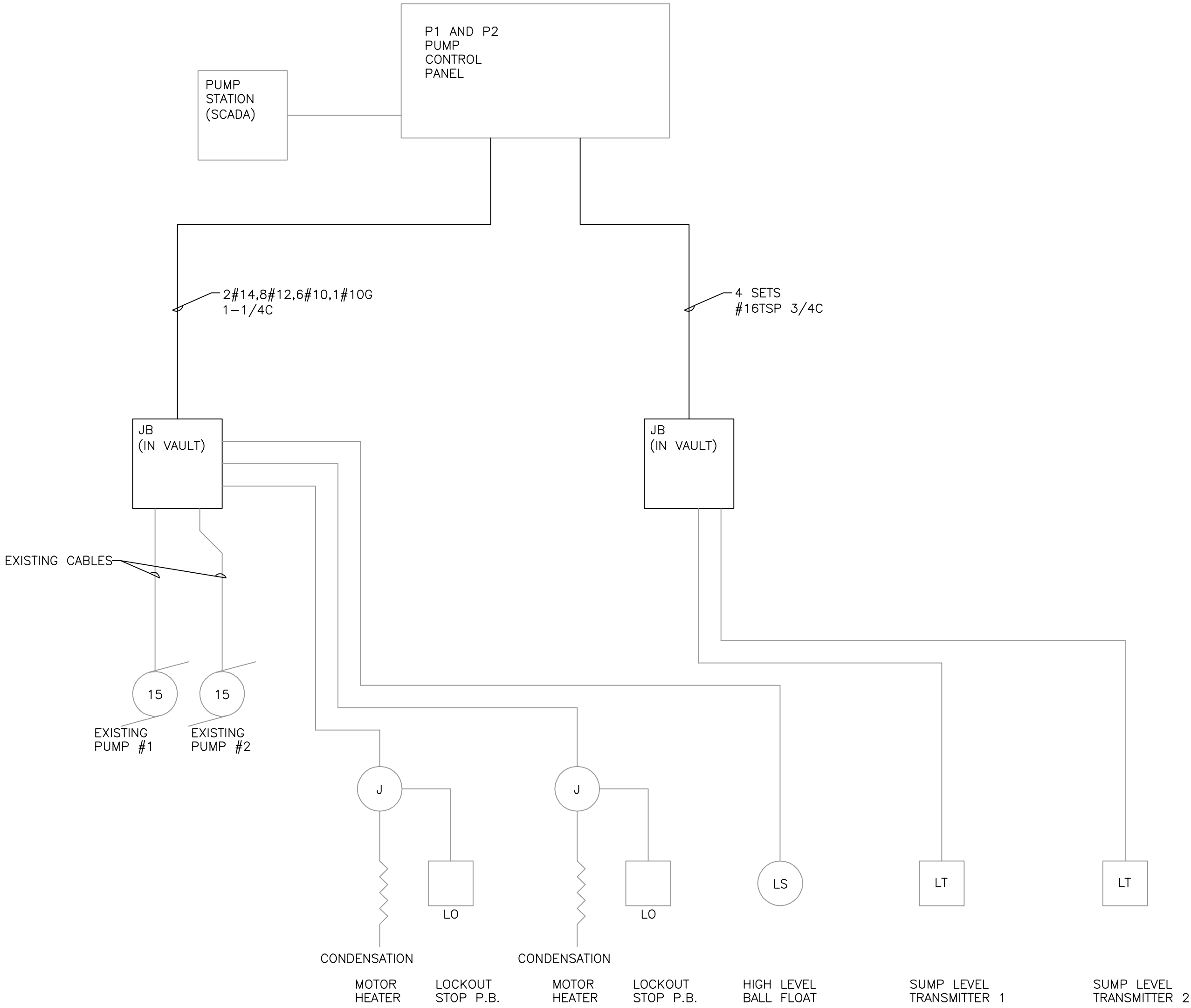
WIRING DIAGRAMS

DRAWING TITLE:

DRAWING NUMBER:



2 TDCS PUMP #3 (#405) WIRING DIAGRAM
NO SCALE



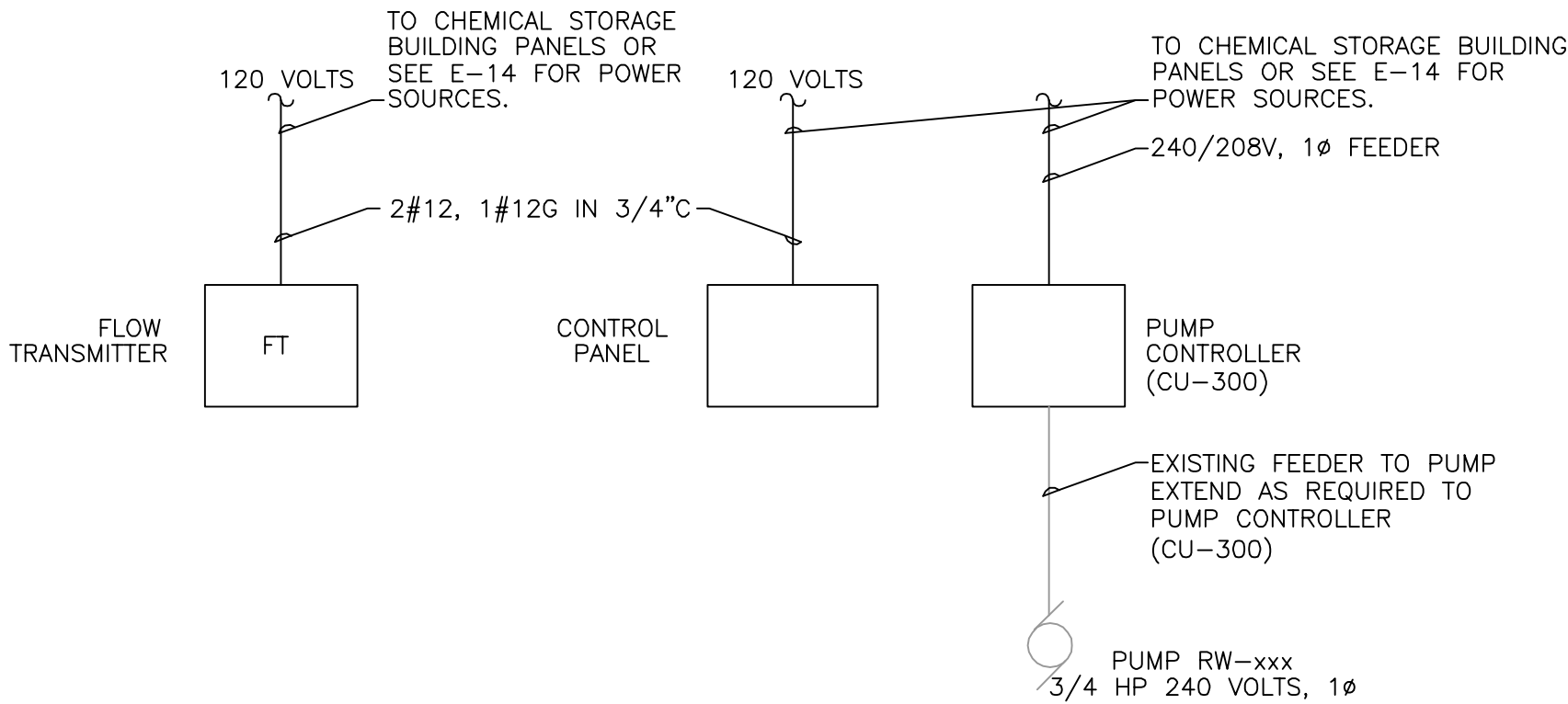
1 TDCS PUMPS #1 AND #2 (#403 & #404) WIRING DIAGRAM
NO SCALE

REVISIONS

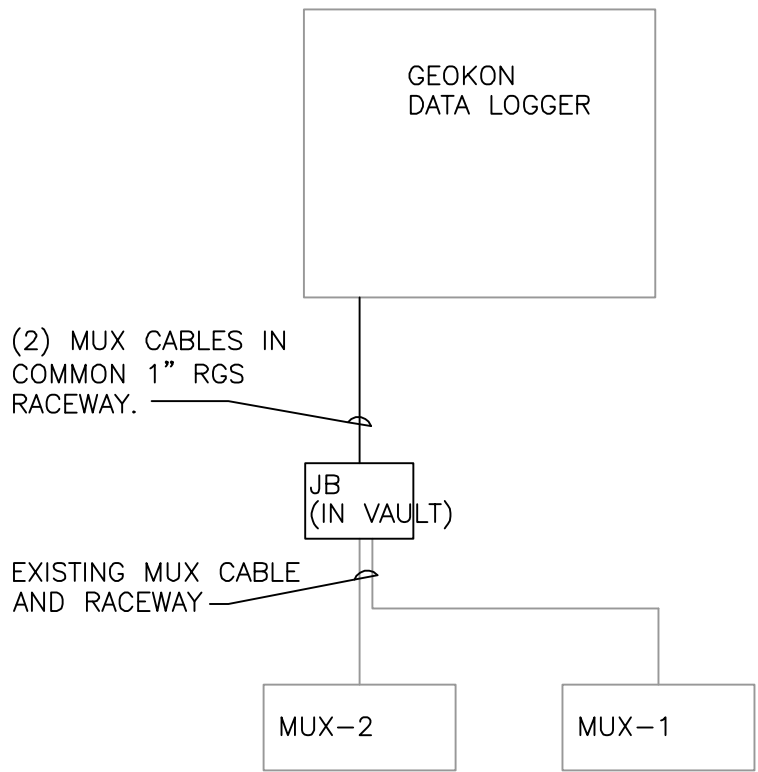
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2 TYPICAL RECOVERY WELL WIRING DIAGRAM
NO SCALE
(TYPICAL OF 5)



1 GEOKON VIBRATING WIRE PIEZOMETER WIRING DIAGRAM
NO SCALE

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TDCS
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DESIGN

Hudson Falls, New York

WIRING DIAGRAMS

DRAWING TITLE:

E-12

DRAWING NUMBER:

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Hudson Falls, New York

TDCS ONE-LINE DIAGRAM

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E-13

DRAWING NUMBER:

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CHECKED BY: DJS

SCALE: AS NOTED

APPROVED BY: DRH

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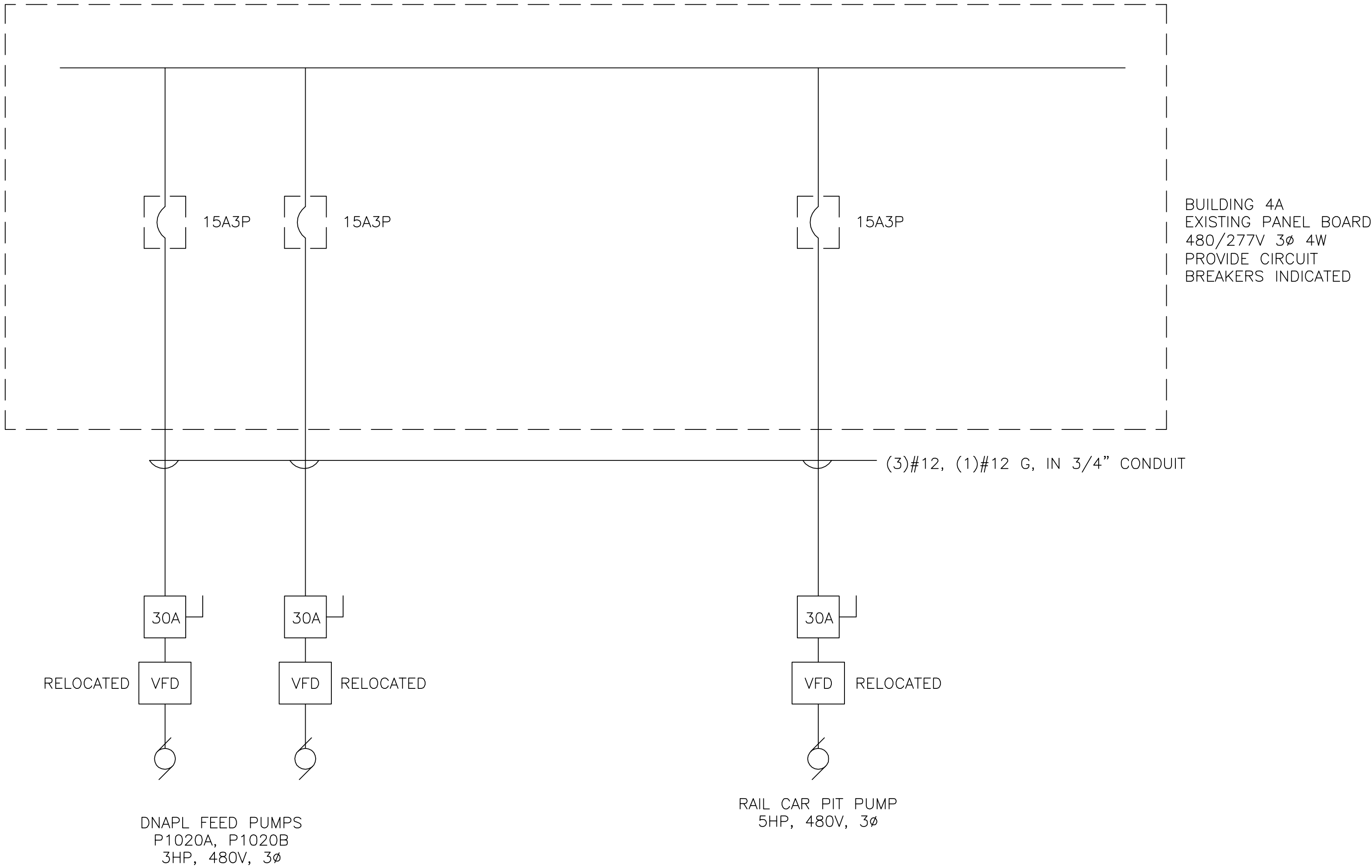
TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

BUILDING 4A ONE-LINE DIAGRAM
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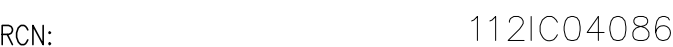
E-14



1 BUILDING 4A ONE-LINE DIAGRAM
NO SCALE



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Hudson Falls, New York

RECOVERY WELL PUMP
PANEL SYSTEM ARCHITECTURE

DRAWING TITLE:

DRAWING NUMBER:

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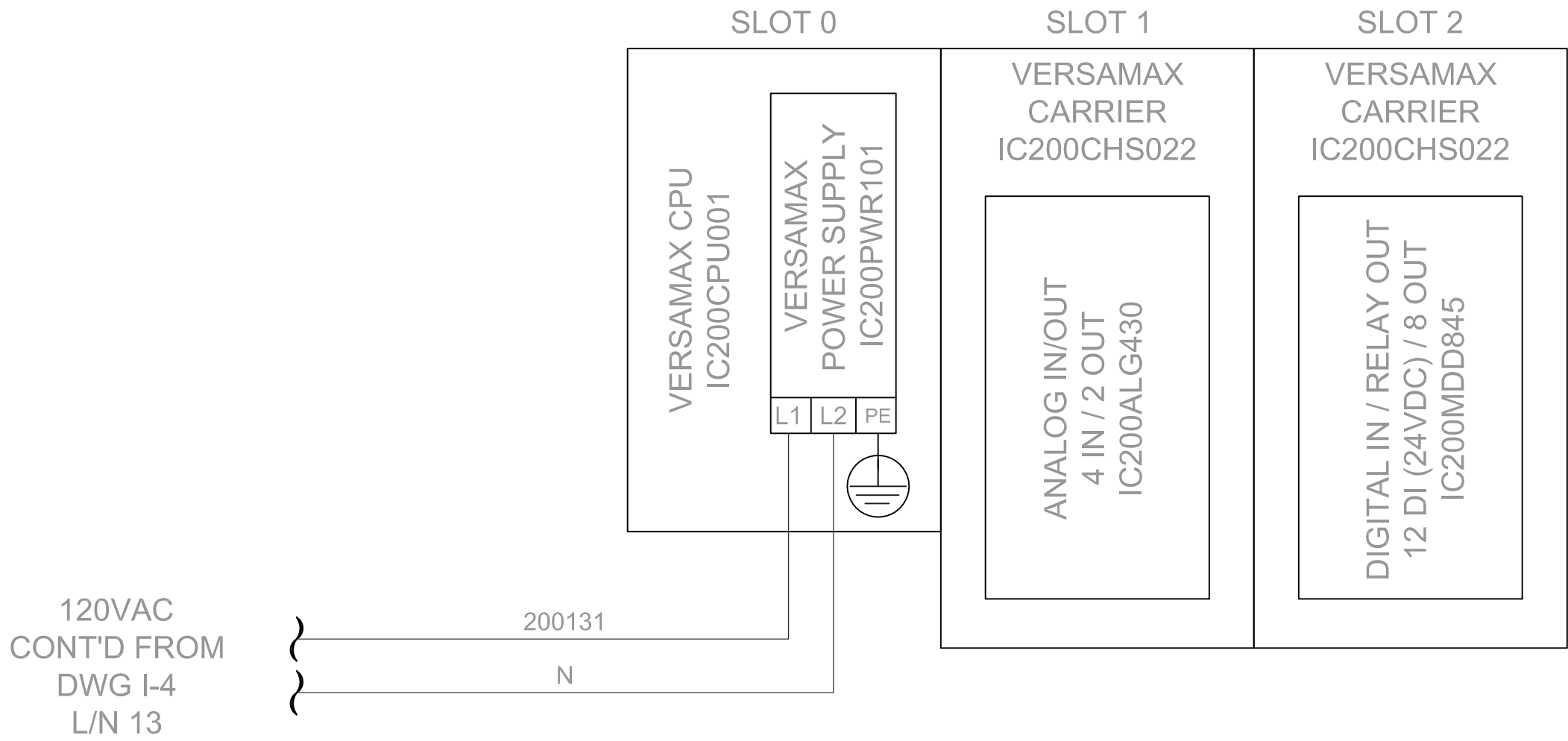
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RECOVERY WELL PUMP
PANEL CABLE DIAGRAM

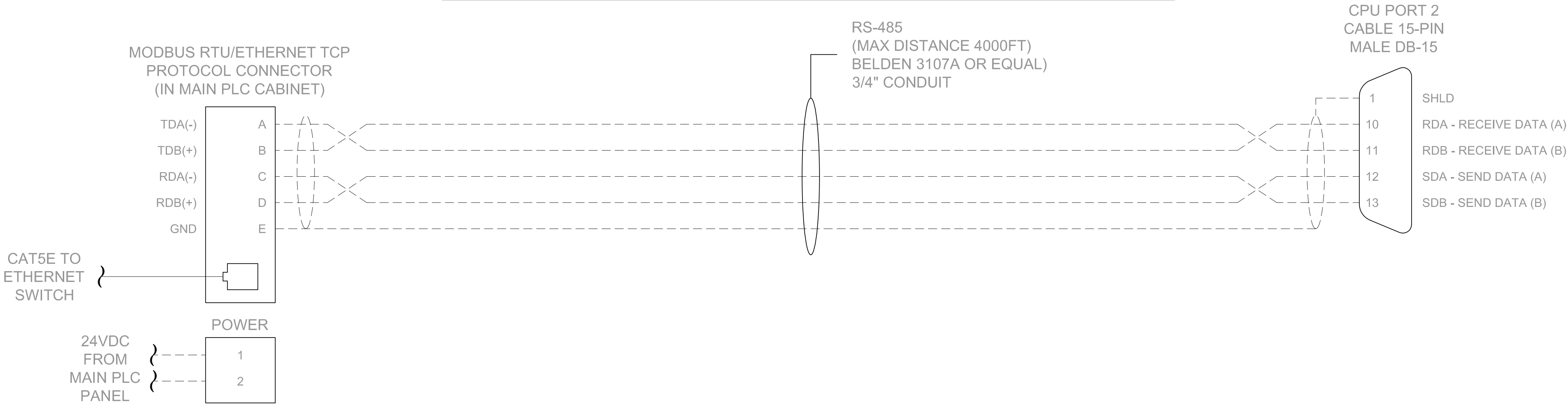
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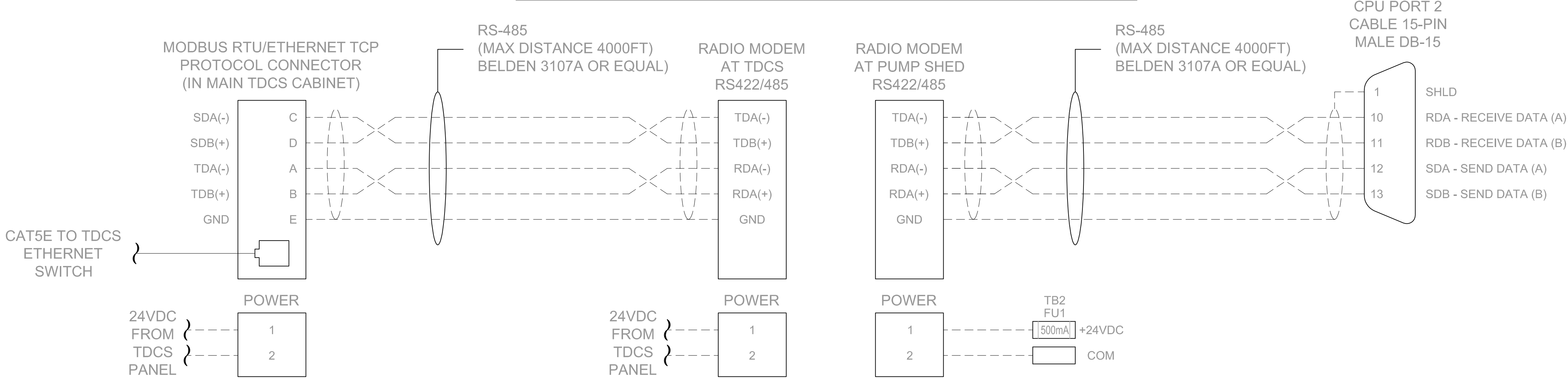
1-2
A



COMMUNICATION CABLE (TYPICAL FOR RW-105, RW-103, RW-110)



COMMUNICATION CABLE (TYPICAL FOR RW-100, RW-104)



(REF DWG I-19)

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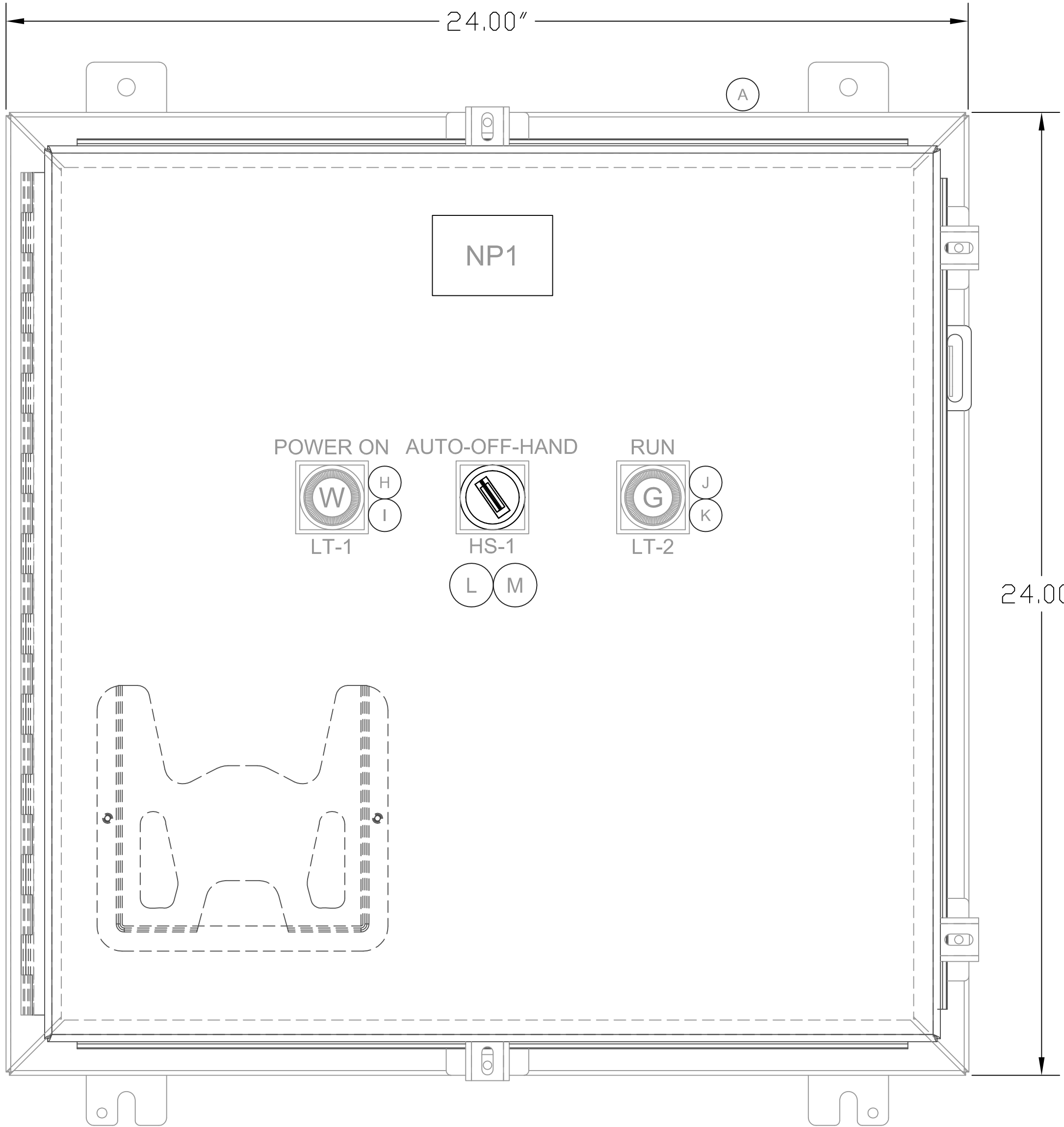
Hudson Falls, New York

RECOVERY WELL
PUMP PANEL ARRANGEMENT

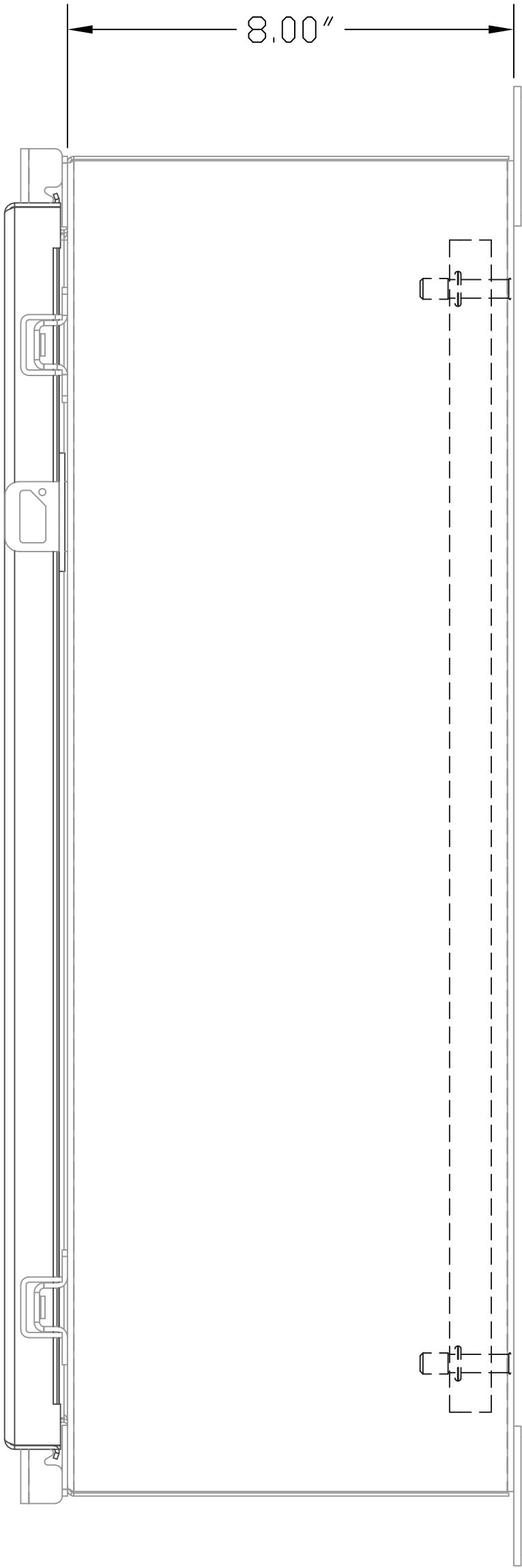
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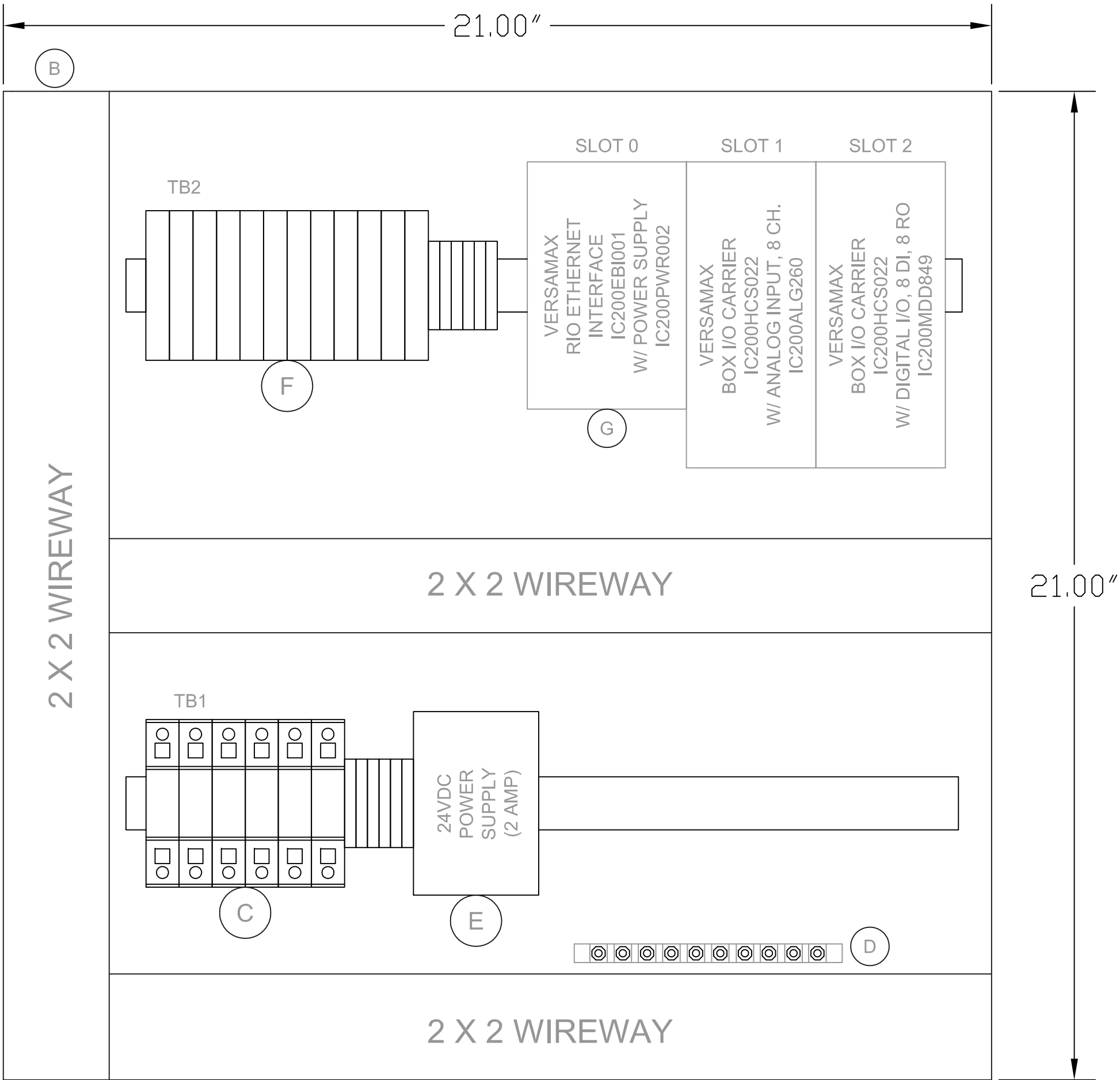
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FRONT VIEW



RIGHT SIDE VIEW



SUB PANEL

NOTE 1: TYPICAL FOR RW-100, RW-103, RW-104,
RW-105, RW-110.

NOTE 2: WIRE TO BE THHW OR MTW MIN 18AWG

AC L1 - BLACK
AC N - WHITE
AC SIG - RED
DC(+) - BLUE
DC(-) - BLUE/WHT
DC SIG - DK BLUE

LOCATION	NP#	TEXT	SIZE	COLOR
RW-100	NP1	RW-100	2" X 3"	WHITE w/BLACK LETTERS
RW-103	NP1	RW-103	2" X 3"	WHITE w/BLACK LETTERS
RW-104	NP1	RW-104	2" X 3"	WHITE w/BLACK LETTERS
RW-105	NP1	RW-105	2" X 3"	WHITE w/BLACK LETTERS
RW-110	NP1	RW-110	2" X 3"	WHITE w/BLACK LETTERS

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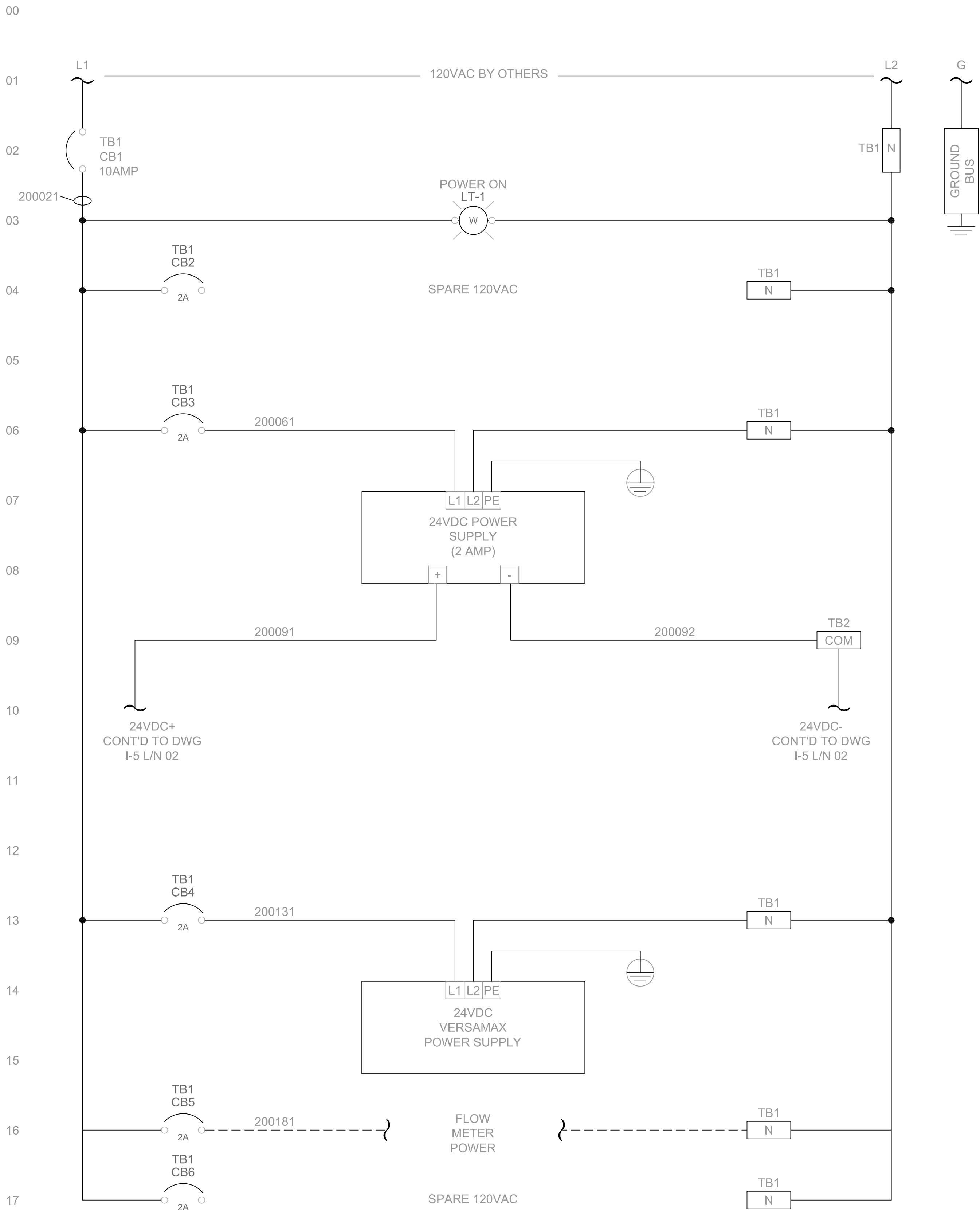
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RECOVERY WELL PUMP PANEL POWER DISTRIBUTION

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DRAWING NUMBER: _____ A



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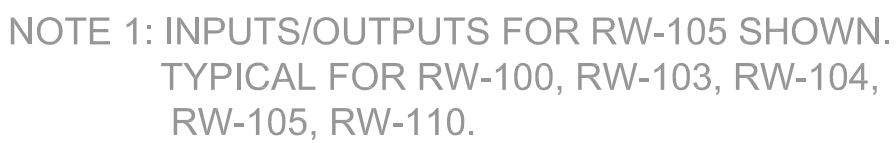
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RECOVERY WELL PUMP PANEL
I/O WIRING

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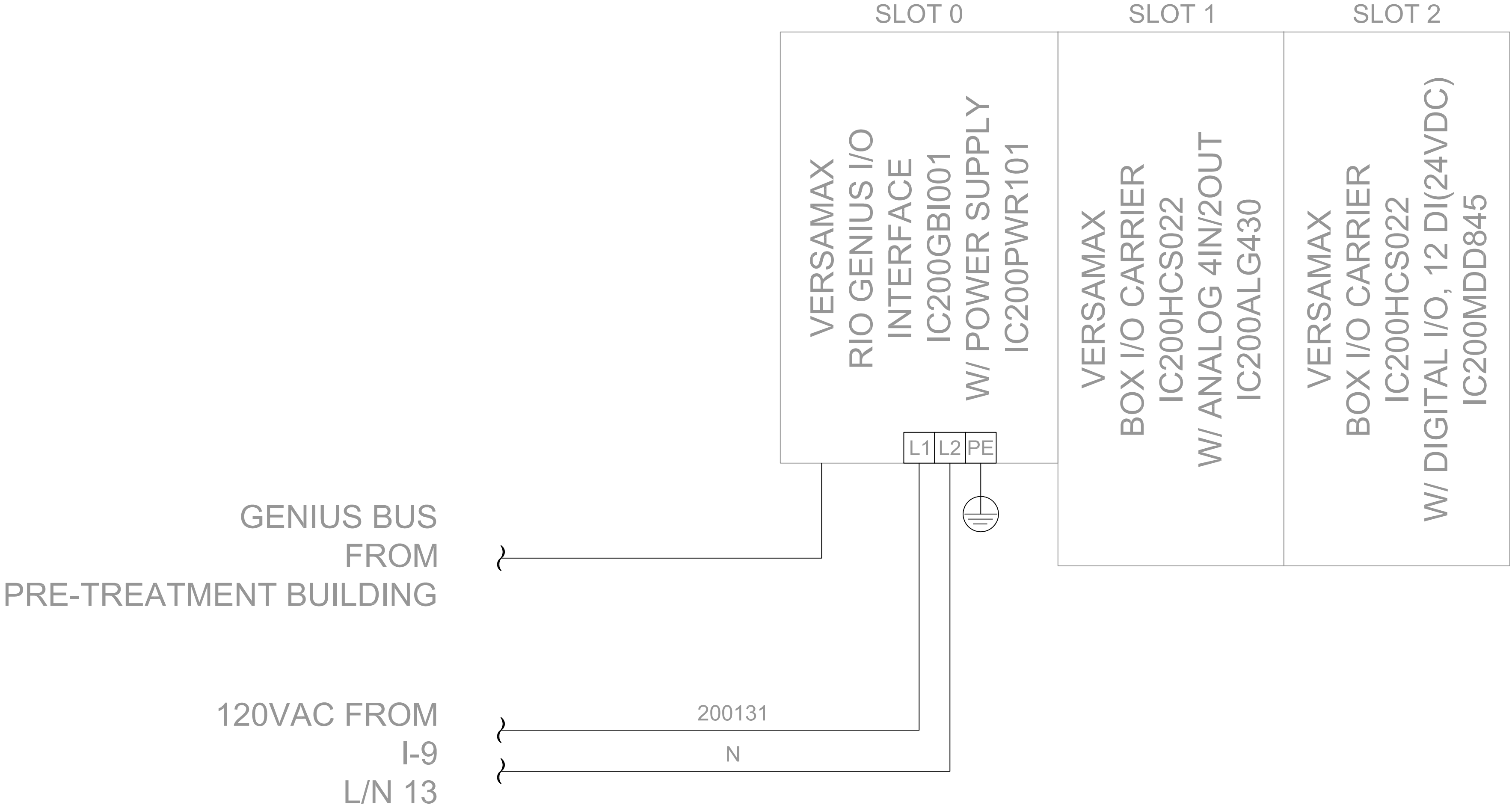
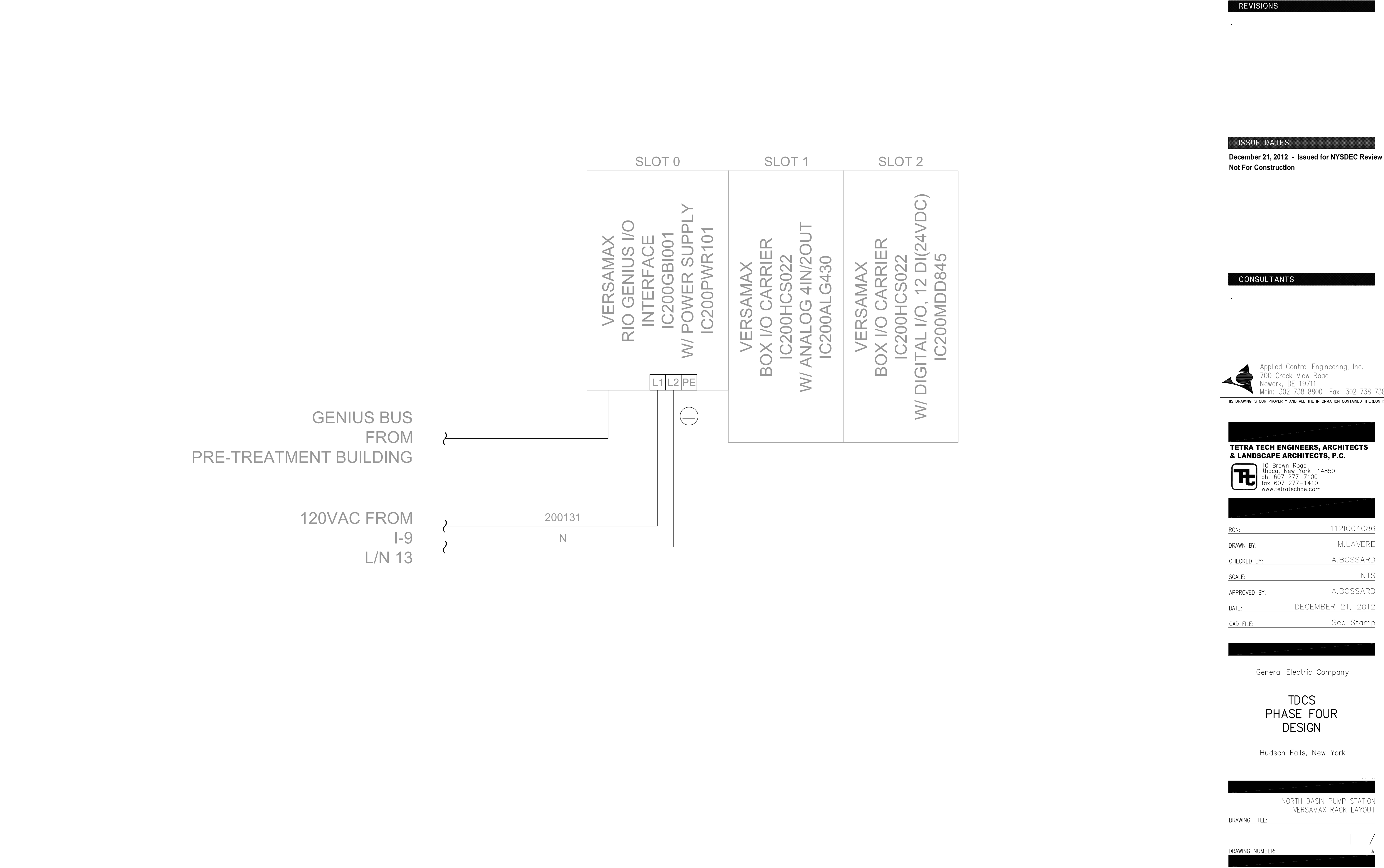
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PHASE FOUR
DESIGN

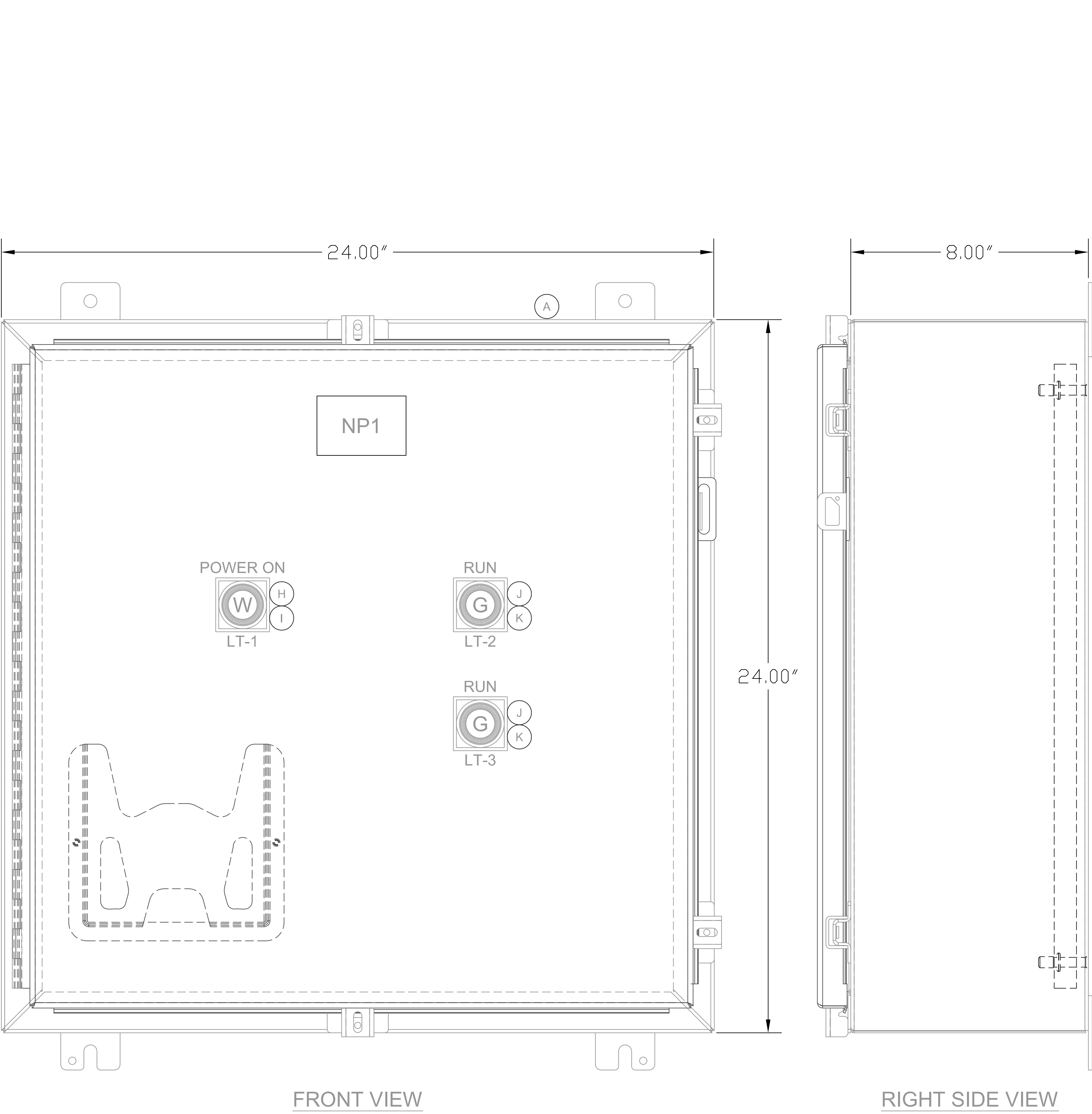
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RECOVERY WELL PUMP PANEL
I/O WIRING

DRAWING TITLE

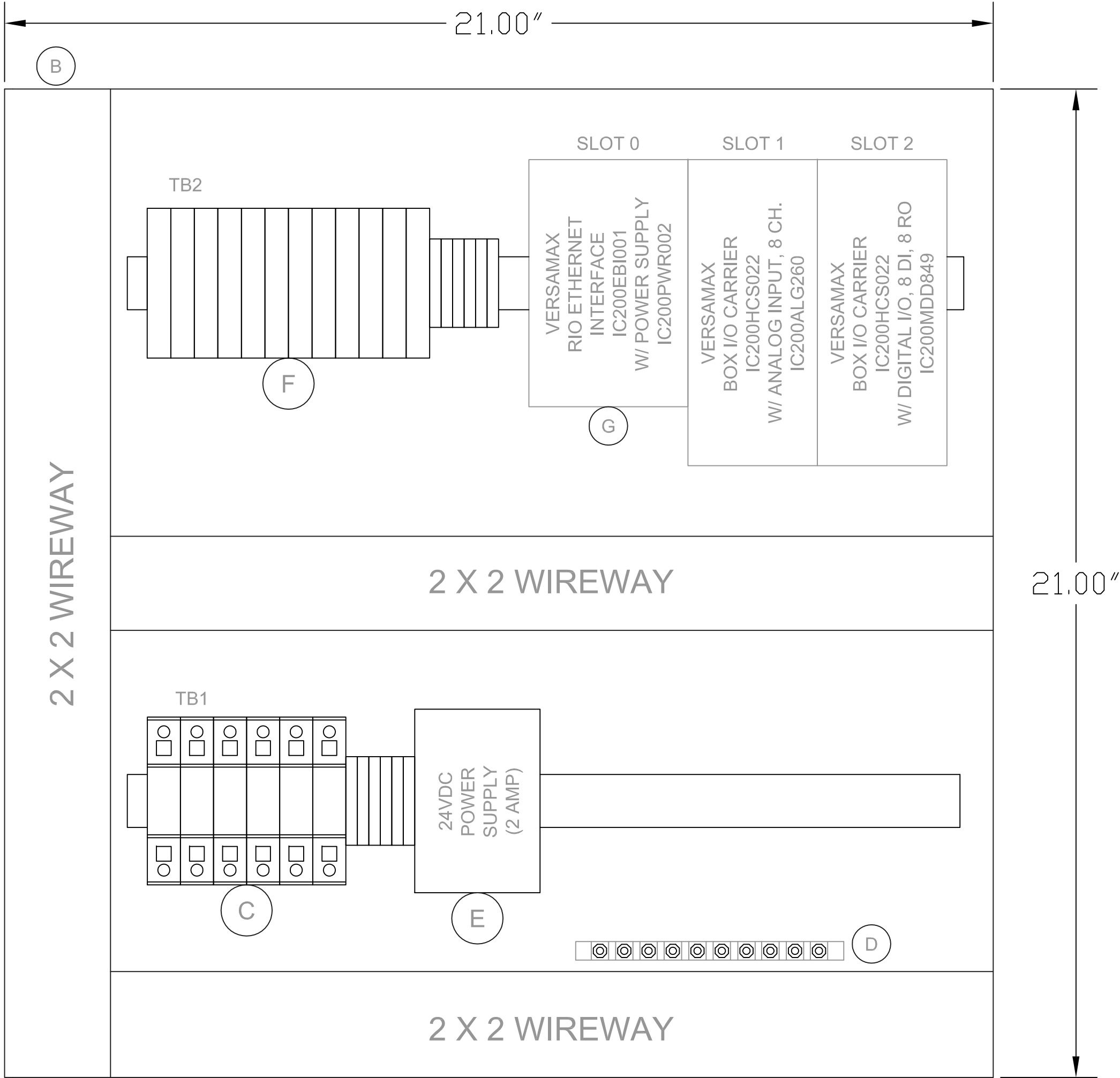
DRAWING NUMBER





NP#	TEXT	SIZE	COLOR
NP1	NORTH BASIN	2" X 3"	WHITE w/BLACK LETTERS

North Basin I/O Enclosure			
Item	Qty	Description	Manufacture
Enclosure			
A	1	NEMA 4 Wall-Mount Enclosure, 24"H x 24" W x 8"D	Hoffman
B	1	Backpanel, 21"H x 21"W	Hoffman
A-C Power Distribution			
C	1	Main Breaker, 10 Amp	Allen-Bradley
	5	Breaker, 2 Amp	Allen-Bradley
	6	Through Terminal	Allen-Bradley
D	1	Ground Bus (6 screw minimum)	
E	1	24vdc Power Supply, 2 Amp, MINI-PS-100-240AC/24DC/2	Phoenix
24VDC Distribution			
F	12	Fuse Block, LED Ind.	Allen-Bradley
	6	Through Terminal	Allen-Bradley
VersaMax PLC (for Flow Monitoring/Control)			
G	1	Remote I/O Genius Network Interface	GE Fanuc
	1	POWER SUPPLY 120vac INPUT	GE Fanuc
	2	Compact I/O carrier box style	GE Fanuc
	1	Analog In/Out Module, 4 Chn IN, 2 Chn Out	GE Fanuc
		Mixed 24VDC POS LOG input group 16 point / isolated 2 amp relay output 8 point	GE Fanuc
H	1	Pilot Light, Push-to-Test, White, 240V AC/DC, (LT-1)	Allen-Bradley
I	1	Legend Plate, POWER ON	Allen-Bradley
J	2	Pilot Light, Push-to-Test, Green, 24V AC/DC, (LT-2, LT-3)	Allen-Bradley
K	2	Legend Plate, RUN	Allen-Bradley
L	A/R	DIN Rail, Wire, Wireway, Labels, end barriers, etc.	



NOTE 1: WIRE TO BE THHW OR MTW MIN 18AWG

AC L1 - BLACK
 AC N - WHITE
 AC SIG - RED
 DC(+) - BLUE
 DC(-) - BLUE/WHT
 DC SIG - DK BLUE

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 PHASE FOUR
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Hudson Falls, New York

NORTH BASIN PUMP STATION
 PANEL LAYOUT

DRAWING TITLE:

1-8
 A

DRAWING NUMBER:

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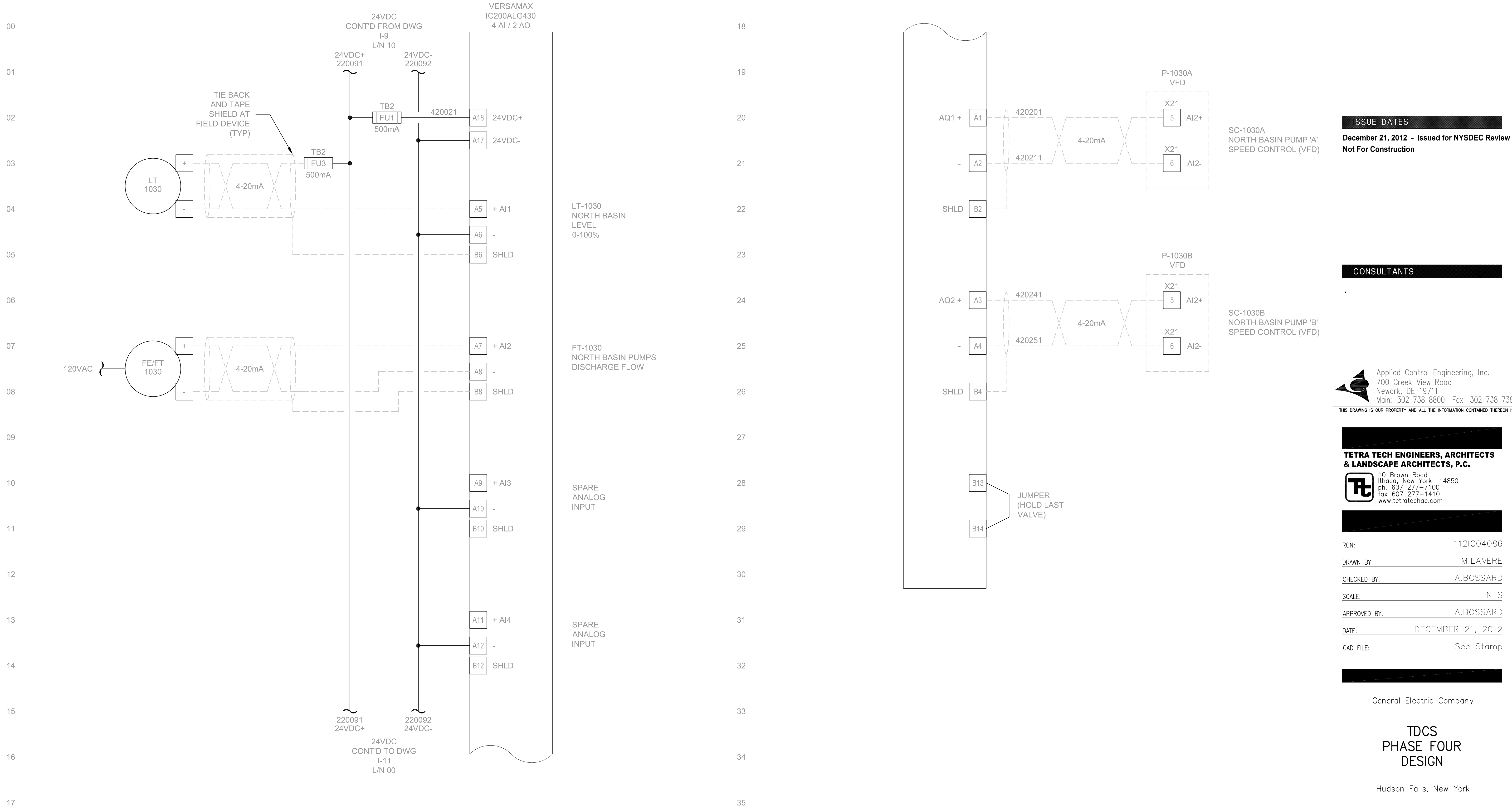
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PUMP STATION
POWER DISTRIBUTION

DRAWING TITLE:

DRAWING NUMBER:

1-9
A



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NORTH BASIN PUMP PANEL
I/O WIRING

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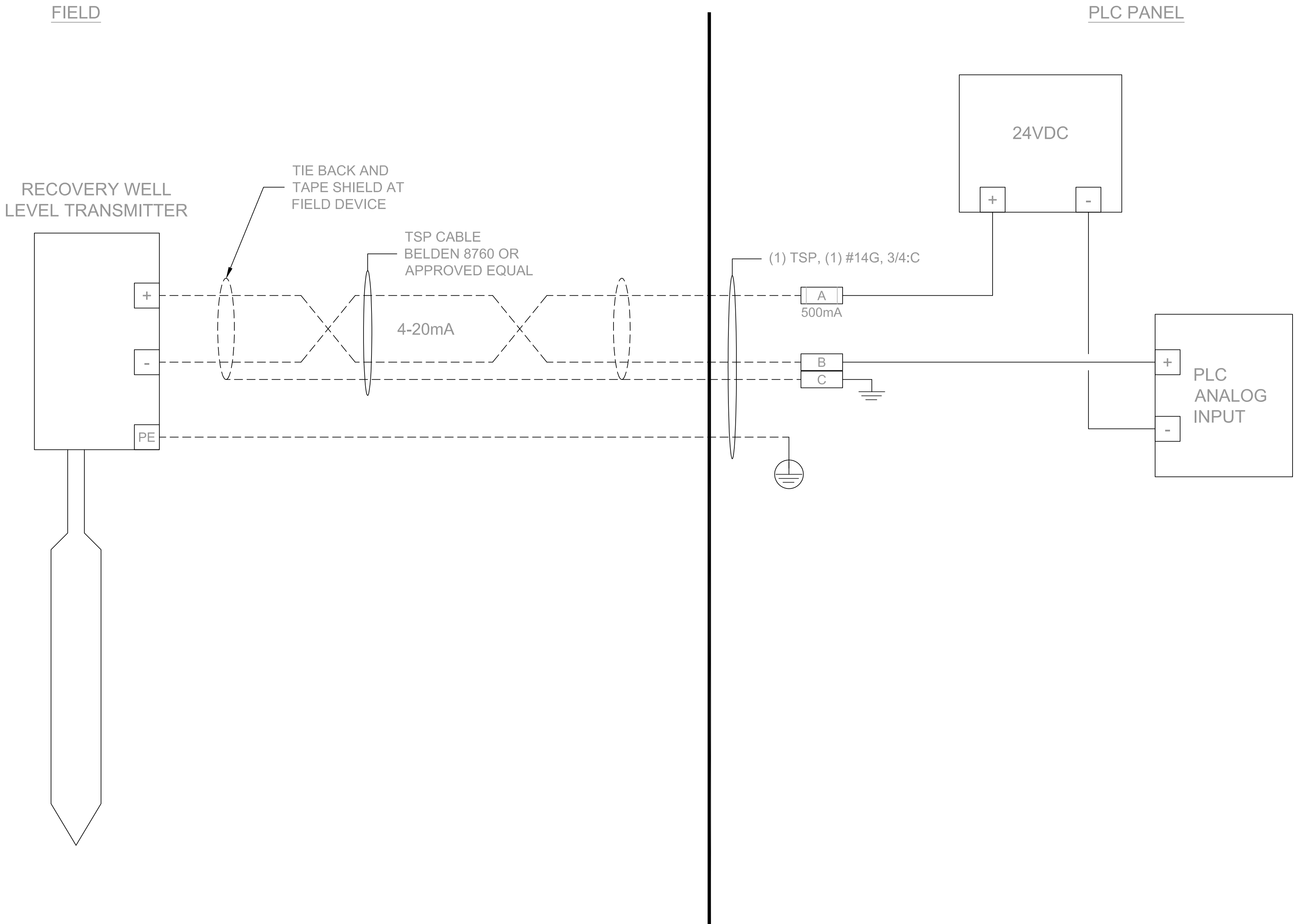
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DRAWING TITLE

DRAWING NUMBER

RECOVERY WELL LEVEL TRANSMITTER (TYP 4)



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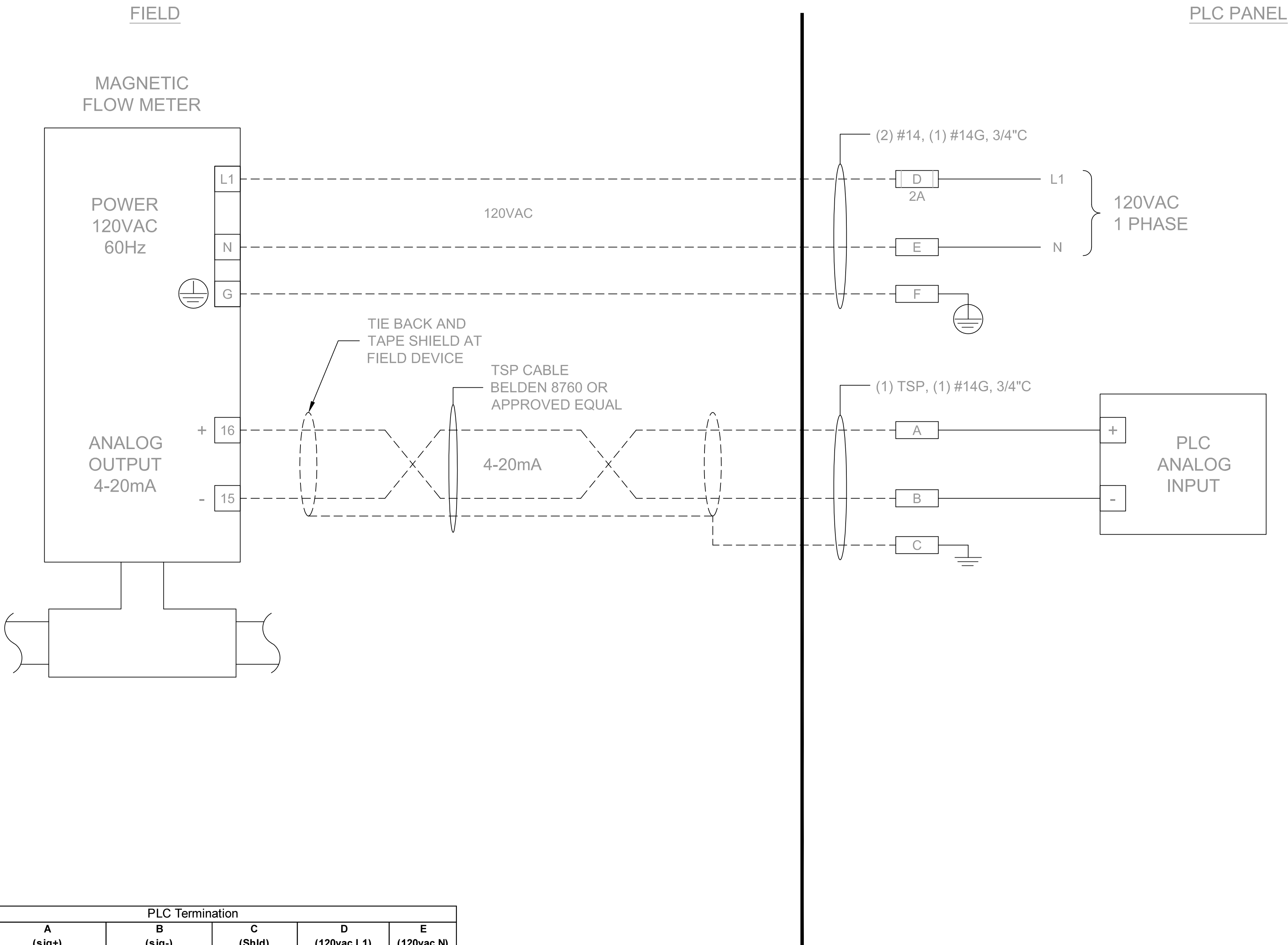
LOOP DIAGRAM
RW LEVEL

DRAWING TITLE:

DRAWING NUMBER:

Field Inst.	PLC Tag	Description	Location	PLC Termination		
				A (sig+)	B (sig-)	C (Shld)
LT-100	LI-100	Recovery Well RW-100 Level	RW-100	TB2-FU3	Slot1-A5 (AI1+)	Slot1-B6 (SHLD)
LT-103	LI-103	Recovery Well RW-103 Level	RW-103	TB2-FU3	Slot1-A5 (AI1+)	Slot1-B6 (SHLD)
LT-104	LI-104	Recovery Well RW-104 Level	RW-104	TB2-FU3	Slot1-A5 (AI1+)	Slot1-B6 (SHLD)
LT-105	LI-105	Recovery Well RW-105 Level	RW-105	TB2-FU3	Slot1-A5 (AI1+)	Slot1-B6 (SHLD)
LT-110	LI-110	Recovery Well RW-110 Level	RW-110	TB2-FU3	Slot1-A5 (AI1+)	Slot1-B6 (SHLD)

MAGNETIC FLOW METER (TYP 12)



				PLC Termination				
Field Inst.	PLC Tag	Description	Location	A (sig+)	B (sig-)	C (Shld)	D (120vac L1)	E (120vac N)
FE/FT-100	FI-100	Recovery Well RW-100 FLOW	RW-100	Slot1-A7 (AI2+)	Slot1-A8 (AI2-)	Slot1-B8 (SHLD)	TB1-CB5	TB1-N
FE/FT-103	FI-103	Recovery Well RW-103 FLOW	RW-103	Slot1-A7 (AI2+)	Slot1-A8 (AI2-)	Slot1-B8 (SHLD)	TB1-CB5	TB1-N
FE/FT-104	FI-104	Recovery Well RW-104 FLOW	RW-104	Slot1-A7 (AI2+)	Slot1-A8 (AI2-)	Slot1-B8 (SHLD)	TB1-CB5	TB1-N
FE/FT-105	FI-105	Recovery Well RW-105 FLOW	RW-105	Slot1-A7 (AI2+)	Slot1-A8 (AI2-)	Slot1-B8 (SHLD)	TB1-CB5	TB1-N
FE/FT-110	FI-110	Recovery Well RW-110 FLOW	RW-110	Slot1-A7 (AI2+)	Slot1-A8 (AI2-)	Slot1-B8 (SHLD)	TB1-CB5	TB1-N
FE/FT-104A	FI-104A	Recovery Well RW-104 and Tail Race Flow	TDCS	Slot1-A8 (I3+)	Slot1-A9 (RTN3)	GND Buss	TB1-L1*	N*
FE/FT-400	FI-400	TDCS Discharge Flow	TDCS	Slot1-A11 (I4+)	Slot1-A12 (RTN4)	GND Buss	TB1-L2*	N*
FE/FT-1030	FI-1030	Noth Basin Discharge Flow	North Basin	Slot1-A7 (AI2+)	Slot1-A8 (AI2-)	Slot1-B8 (SHLD)	TB1-CB5	TB1-N
FE/FT-1010	FI-1010	DNA PL Tank T-1010 Influent Flow	WTP Exp Main CP	TB1-2977	TB1-2450B***	TB1-SH	F-2584**	TB1-N**
FE/FT-1010A	FI-1010A	DNA PL Tank T-1010 Bypass Flow ****	WTP Exp Main CP	TB1-2904	TB1-2450B***	TB1-SH	F-2563**	TB1-N**
FE/FT-1020	FI-1020	Feed Tank Discharge Flow	WTP Exp Main CP	TB1-3019	TB1-2450B***	TB1-SH	F-2587**	TB1-N**
FE/FT-1040	FI-1040	Railcar Pit Discharge Flow	WTP Exp Main CP	TB1-3030	TB1-2450B***	TB1-SH	F-2587**	TB1-N**

* NOTE: Add (2) Fuse terminals and (2) N terminals to TDSC panel TB1

** NOTE: OBG dw g I-25 I/n 2587

*** Note: Add (3) 24vdc- terminals [2405B] to TB-1

**** Note: Re-use existing Flow Meter FT-2241

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Hudson Falls, New York

LOOP DIAGRAM
MAG FLOW METER

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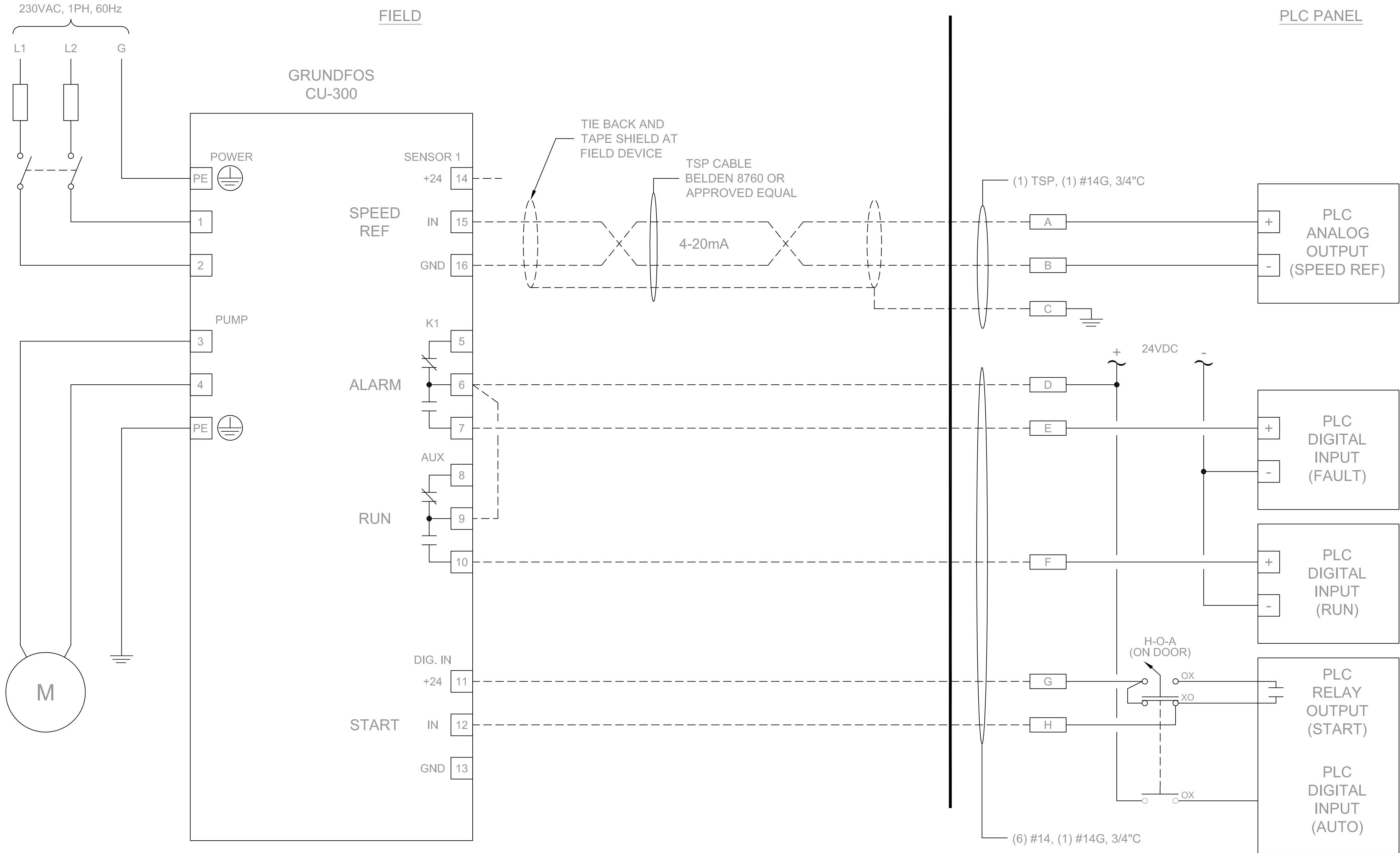
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LOOP DIAGRAM
RW VFD

DRAWING TITLE:

DRAWING NUMBER:

RECOVERY WELL PUMP VFD (TYP 5)

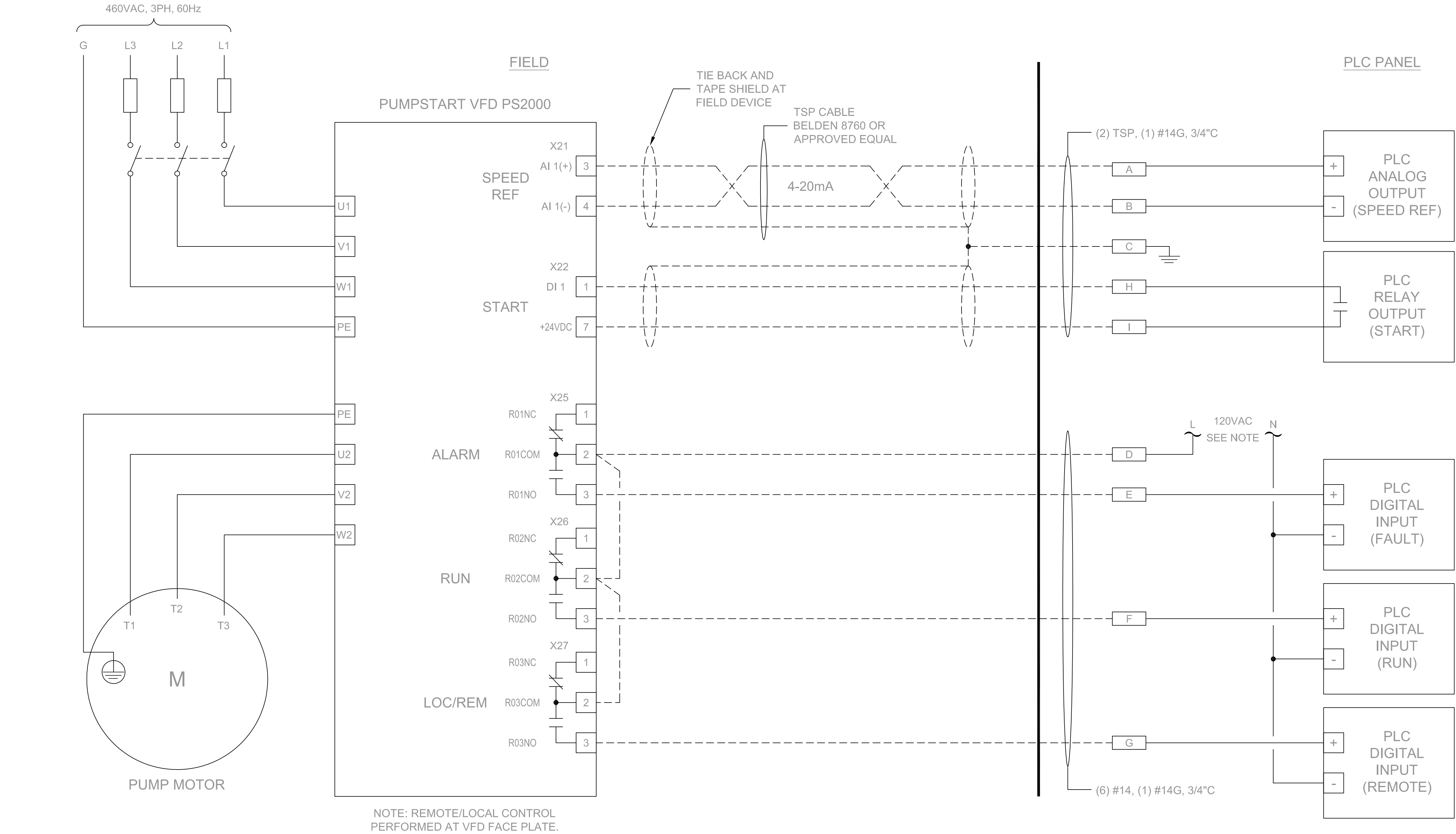



PLC Terminations														
				Speed Ref.			Pump Alarm			Pump Run		Pump Start		
Field Inst.	Description	Location	PLC Tag	A (sig+)	B (sig-)	C SHLD	PLC Tag	D (24vdc+)	E (DI+)	PLC Tag	F (DI+)	PLC Tag	G (Com)	H (NO)
SC-100	Recovery Well RW-100 VFD	RW-100	SC-100	Slot1-A1 (AQ1+)	Slot1-A2 (AQ1-)	Slot1-B2 (SHLD)	YA-100	TB2-FU8	Slot2-B2 (In2)	YI-100	TB2-13	YC-100	TB2-14	TB2-15
SC-103	Recovery Well RW-103 VFD	RW-103	SC-103	Slot1-A1 (AQ1+)	Slot1-A2 (AQ1-)	Slot1-B2 (SHLD)	YA-103	TB2-FU8	Slot2-B2 (In2)	YI-103	TB2-13	YC-103	TB2-14	TB2-15
SC-104	Recovery Well RW-104 VFD	RW-104	SC-104	Slot1-A1 (AQ1+)	Slot1-A2 (AQ1-)	Slot1-B2 (SHLD)	YA-104	TB2-FU8	Slot2-B2 (In2)	YI-104	TB2-13	YC-104	TB2-14	TB2-15
SC-105	Recovery Well RW-105 VFD	RW-105	SC-105	Slot1-A1 (AQ1+)	Slot1-A2 (AQ1-)	Slot1-B2 (SHLD)	YA-105	TB2-FU8	Slot2-B2 (In2)	YI-105	TB2-13	YC-105	TB2-14	TB2-15
SC-110	Recovery Well RW-110 VFD	RW-110	SC-110	Slot1-A1 (AQ1+)	Slot1-A2 (AQ1-)	Slot1-B2 (SHLD)	YA-110	TB2-FU8	Slot2-B2 (In2)	YI-110	TB2-13	YC-110	TB2-14	TB2-15

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PUMPSMART VFD (TYP 4)




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LOOP DIAGRAM
 PUMP SMART VFD

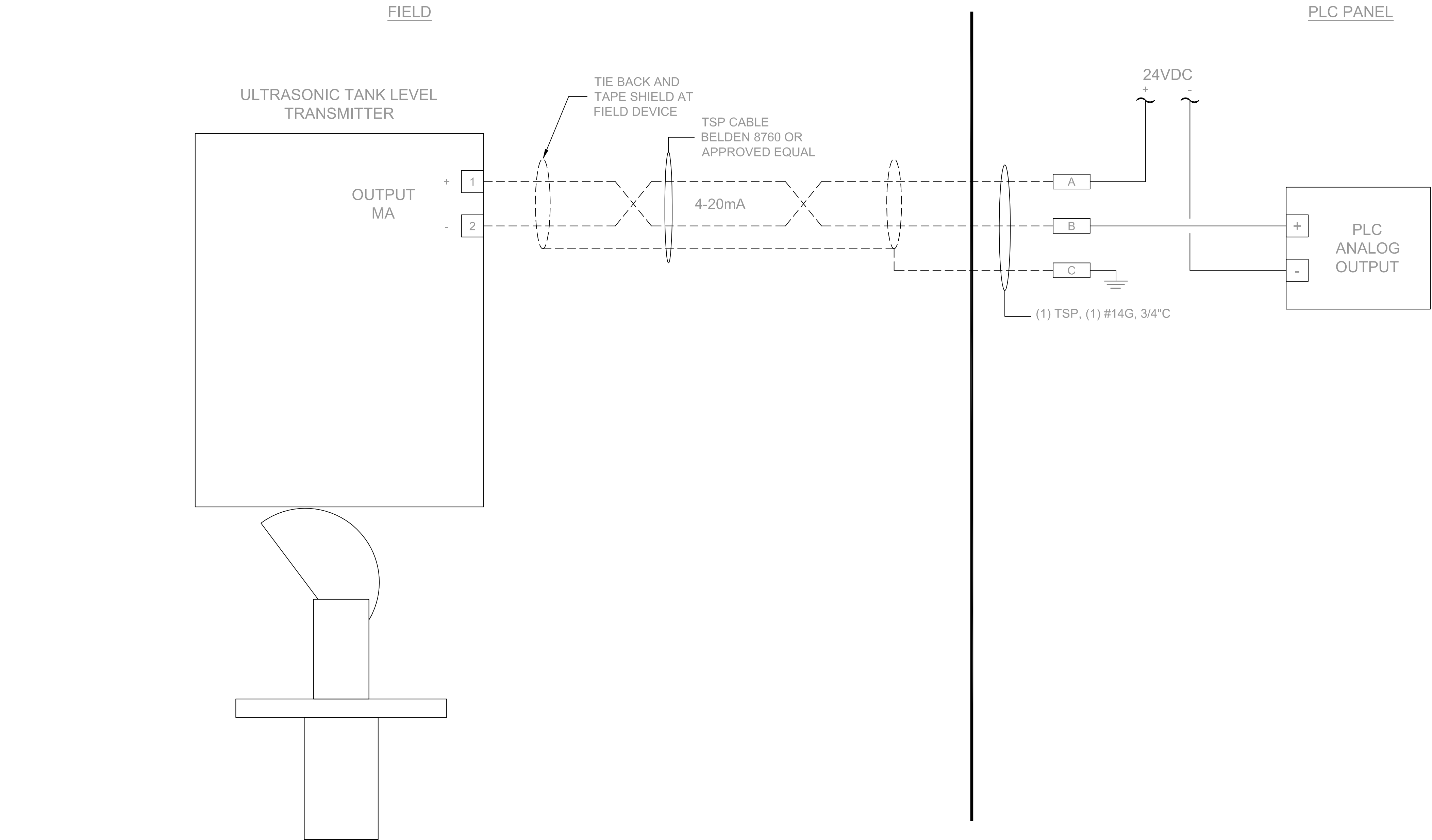
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DRAWING NUMBER: A

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TANK LEVEL TRANSMITTER



Field Inst.	PLC Tag	Description	Location	PLC Termination		
				A (sig+)	B (sig-)	C (Shld)
LT-1030	LI-1030	Noth Basin Level	North Basin	TB2-FU3	Slot1-A5 (A1I+)	Slot1-B6 (SHLD)
LT-1020	LI-1020	Feed Tank Level	WTP Exp Main CP	TB1-2459	TB1-3023	TB1-SH
LT-1040	LI-1040	RCP Level	WTP Exp Main CP	TB1-2459	TB1-3025	TB1-SH

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DRAWN BY: M.LAVERE

CHECKED BY: A.BOSSARD

SCALE: NTS

APPROVED BY: A.BOSSARD

DATE: DECEMBER 21, 2012

CAD FILE: See Stamp

General Electric Company

TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

LOOP DIAGRAM
ULTRASONIC LEVEL

DRAWING TITLE:

I-16

DRAWING NUMBER:

REVISIONS

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General Electric Company

TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

LOOP DIAGRAM
 LEVEL SWITCH

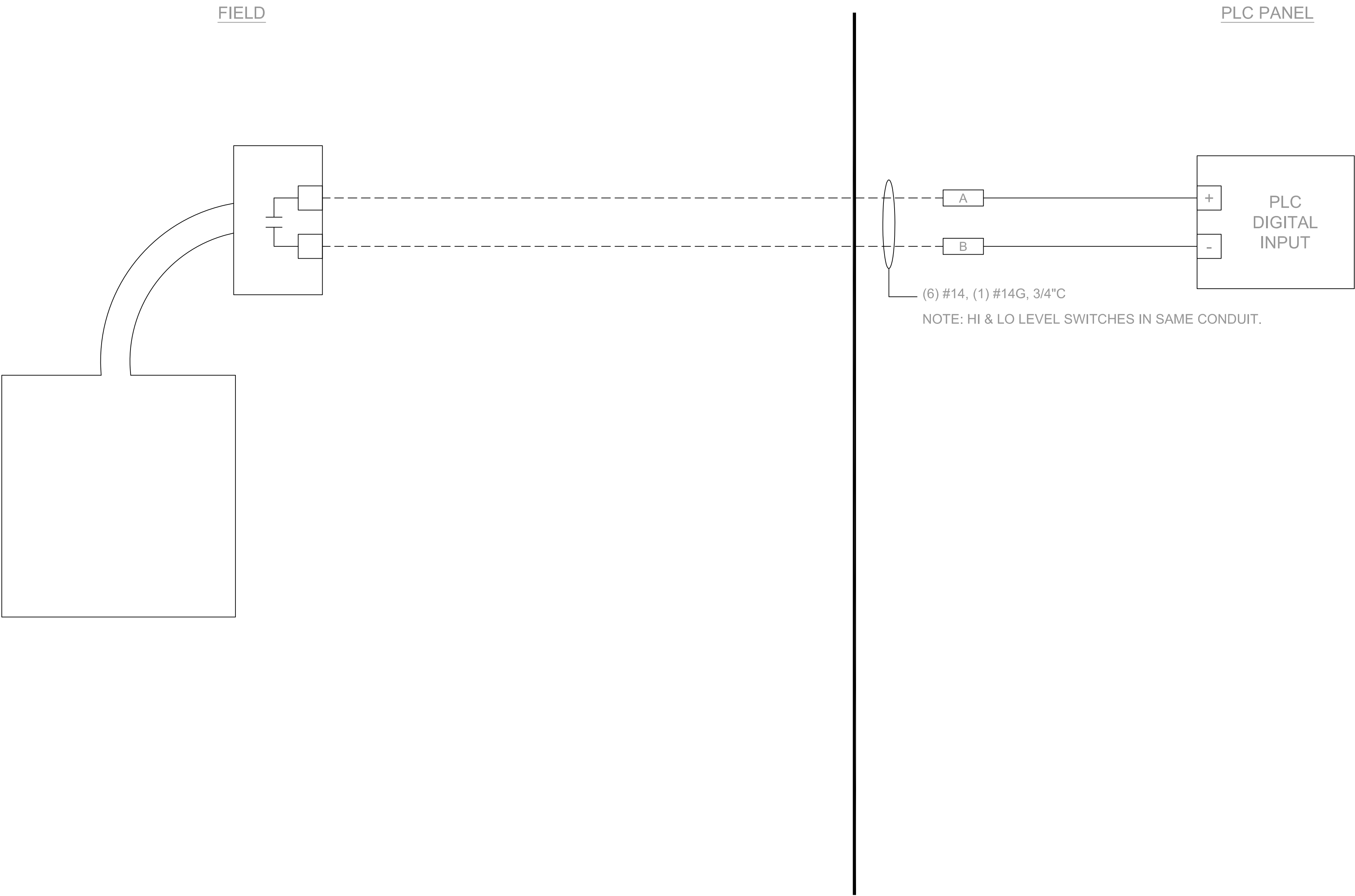
DRAWING TITLE:

DRAWING NUMBER:

1-17

A

LEVEL FLOAT SWITCH (TYP 5)



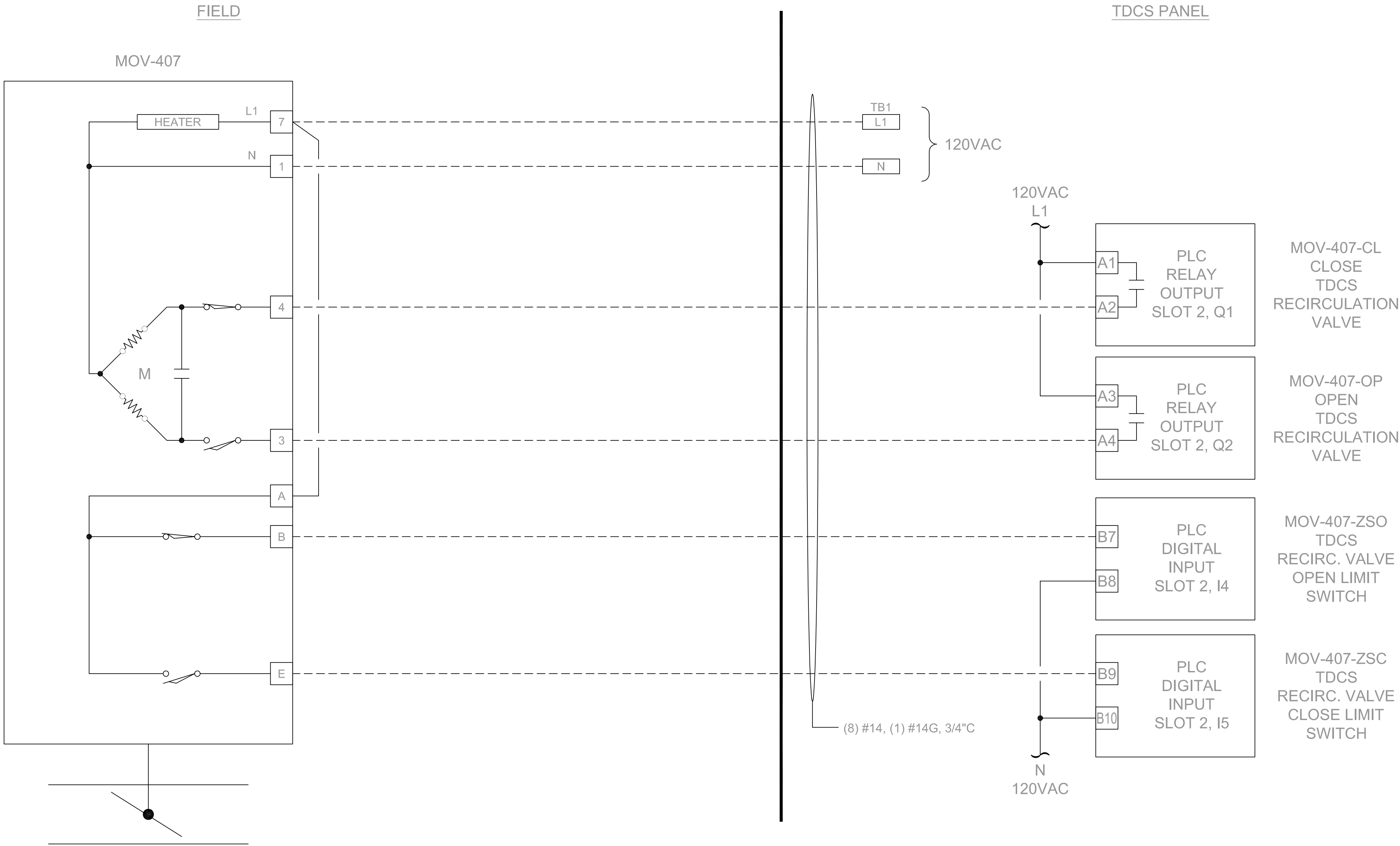
LEVEL (FLOAT) SWITCH (Typ. 5)

Field Inst.	PLC Tag	Description	Location	PLC Termination	
				A (sig+)	B (sig-)
LSHH-1031	LAHH-1031	North Basin High-High Level (Alarm)	North Basin	TB2-FU7	Slot2-B1 (In1)
LSLL-1031	LALL-1031	North Basin Low -Low Level (Pump Shutdown)	North Basin	TB2-FU9	Slot2-B5 (In5)
LSHH-1041	LAHH-1041	RCP High-High Level (Alarm)	WTP Exp Main CP	TB11-2522	TB11-3676
LSLL-1041	LALL-1041	RCP Low -Low Level (Pump Shutdown)	WTP Exp Main CP	TB11-2522	TB11-3678
LSHH-1010	LALL-1010	Oil/Water Separator High-High Level	WTP Exp Main CP	TB11-2522	TB11-3630

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MOTOR OPERATED VALVE (TYP 1)



NOTE: ADD JUMPERS IN TDCS PANEL
FOR 120VAC (L1) AND 120VAC (N)

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TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

LOOP DIAGRAM
MOV

DRAWING TITLE:

1-18

DRAWING NUMBER:

A

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TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

WIRELESS
DETAIL

DRAWING TITLE:

DRAWING NUMBER:

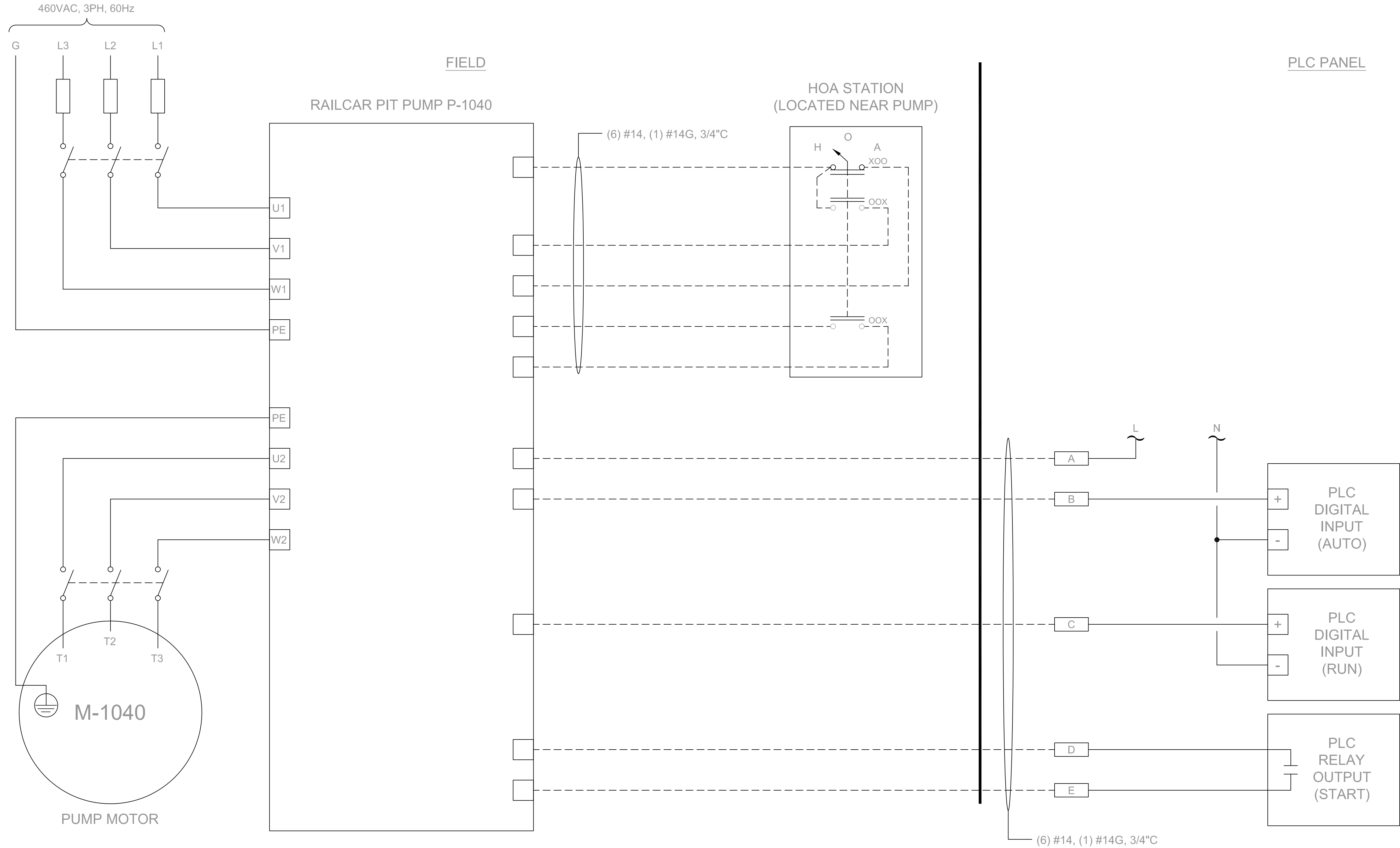
1-19

A


REVISIONS

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RAILCAR PIT PUMP



Rail Car Pit Pump P-1040										
			PLC Terminations							
			Pump AUTO			Pump Run		Pump Start		
Field Inst.	Description	Location	PLC Tag	A (120vac)	B (DI+)	PLC Tag	C (DI+)	PLC Tag	D (Out-1)	E (Out-2)
P-1040	RCP Tank Pump P-1040	WTP Exp Main CP	HS-1040	TB12-2524 (120vac)	TB12-3734	YI-1040	TB12-3732	YC-1040	DO3-OUT15-11	DO3-OUT15-14


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TDCS
 PHASE FOUR
 DESIGN

Hudson Falls, New York

LOOP DIAGRAM
 RAILCAR PIT PUMP

DRAWING TITLE:

DRAWING NUMBER:

1-20

REVISIONS

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CAD FILE: See Stamp

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TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

LOOP DIAGRAM
CAPACITIVE LEVEL SWITCH

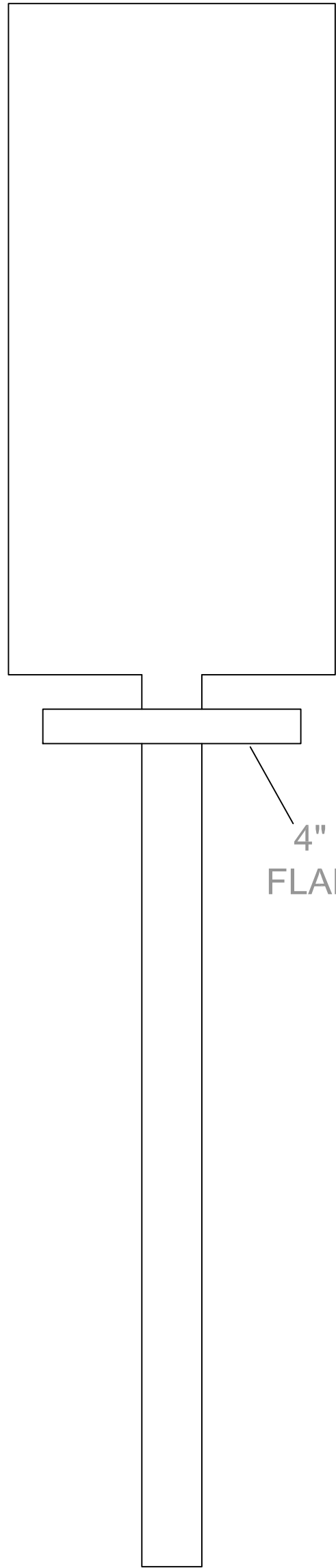
DRAWING TITLE:

1-21

DRAWING NUMBER:

A

MULTI-POINT
LEVEL SWITCH

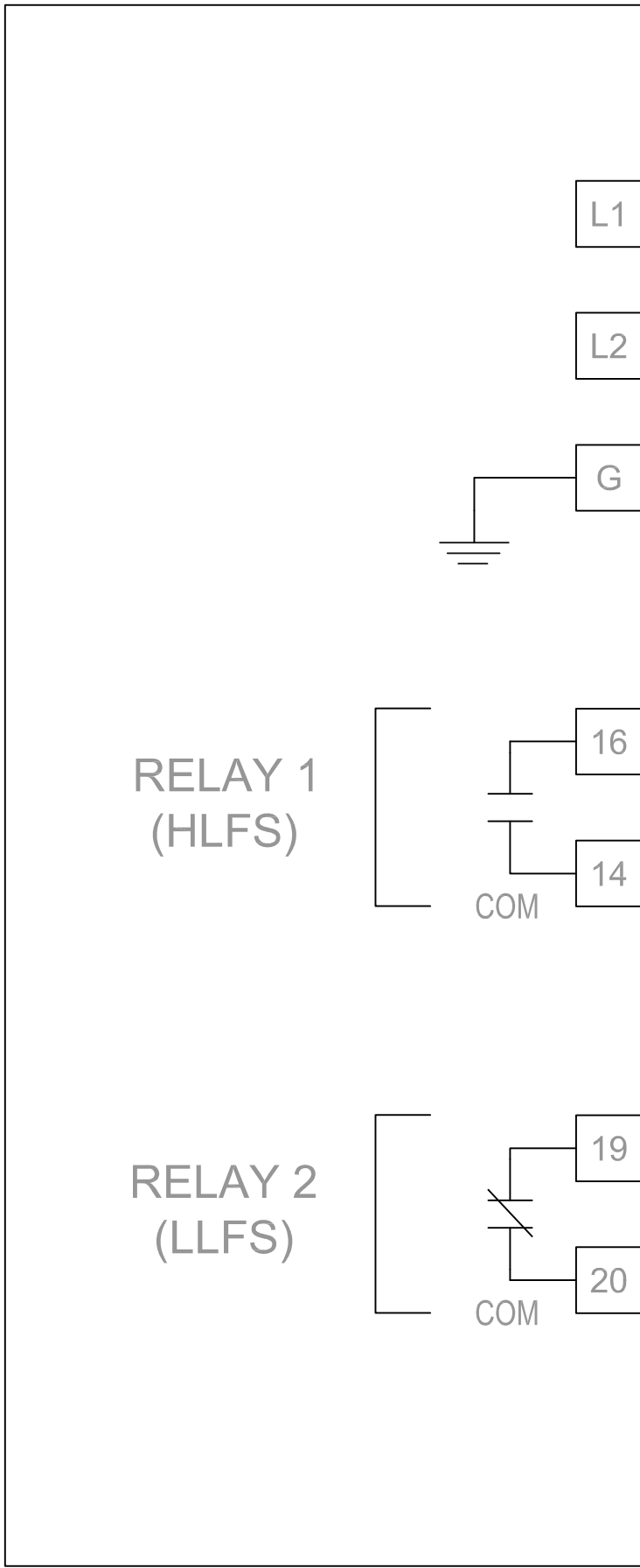


4" RF
FLANGE

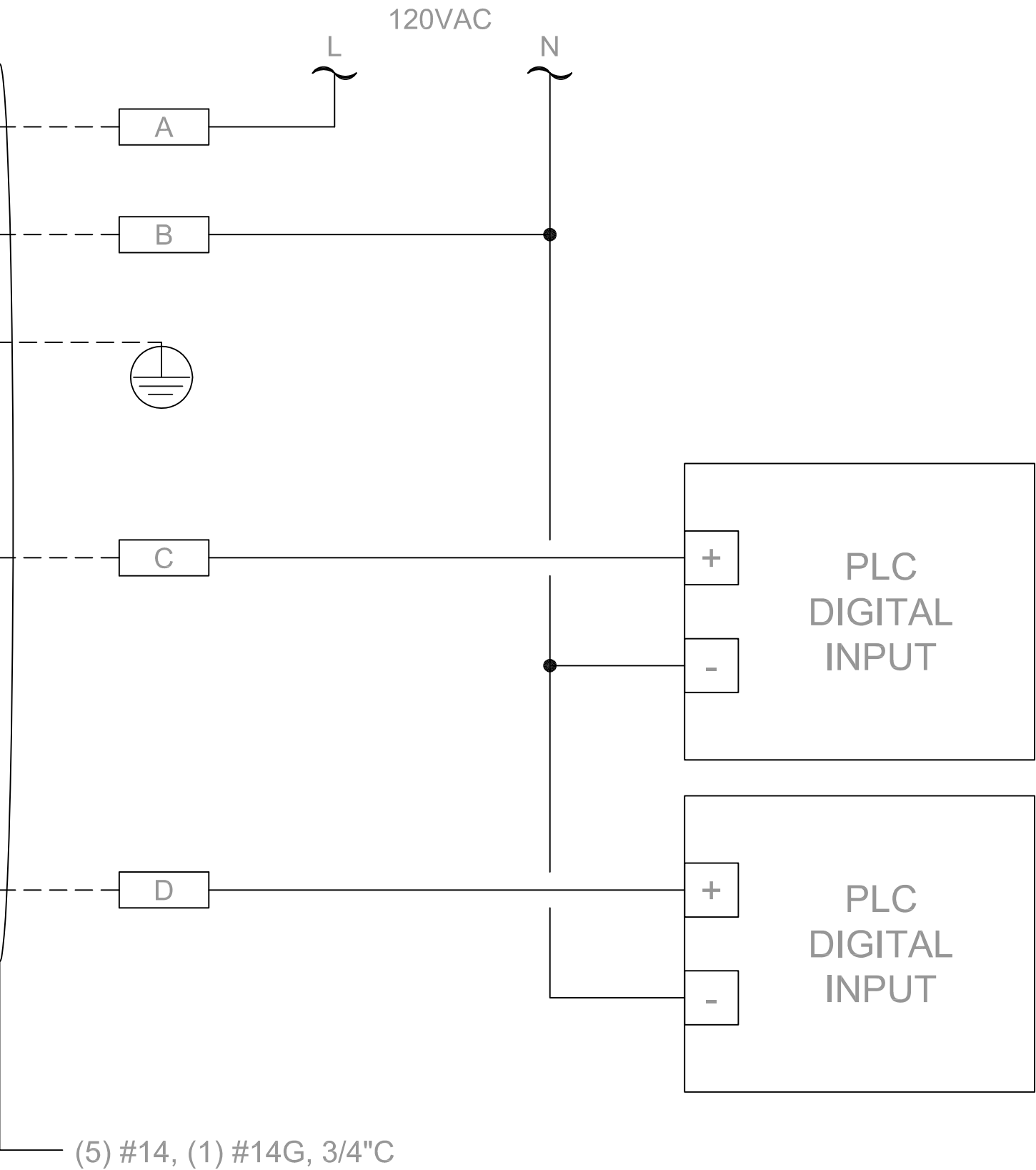
CAPACITIVE LEVEL SWITCH

FIELD

LEVEL SWITCH



PLC PANEL



(5) #14, (1) #14G, 3/4"C

LAHH-1021
FEED TANK
HIGH-HIGH
LEVEL
(HI-HI = 0)

LALL-1021
FEED TANK
LOW-LOW
LEVEL
(LO-LO = 0)

LEVEL SWITCH (PROBE)

Field Inst.	PLC Tag	Description	Location	PLC Termination			
				A (L)	B (N)	C (LAHH)	D (LALL)
LSHH/LSLL-1021	LAHH/LALL-1021	Feed Tank High-High Level/Low -Low Level	WTP Exp Main CP	TB10-2520	TB13-N	TB10-3632	TB10-3634

ISSUE DATES

ACCESS SHAFT
EXISTING CONDITIONS

BRIERLEY ASSOCIATES
Creating Space Underground

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& LANDSCAPE ARCHITECTS, P.C.**



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SCALE: AS SHOWN

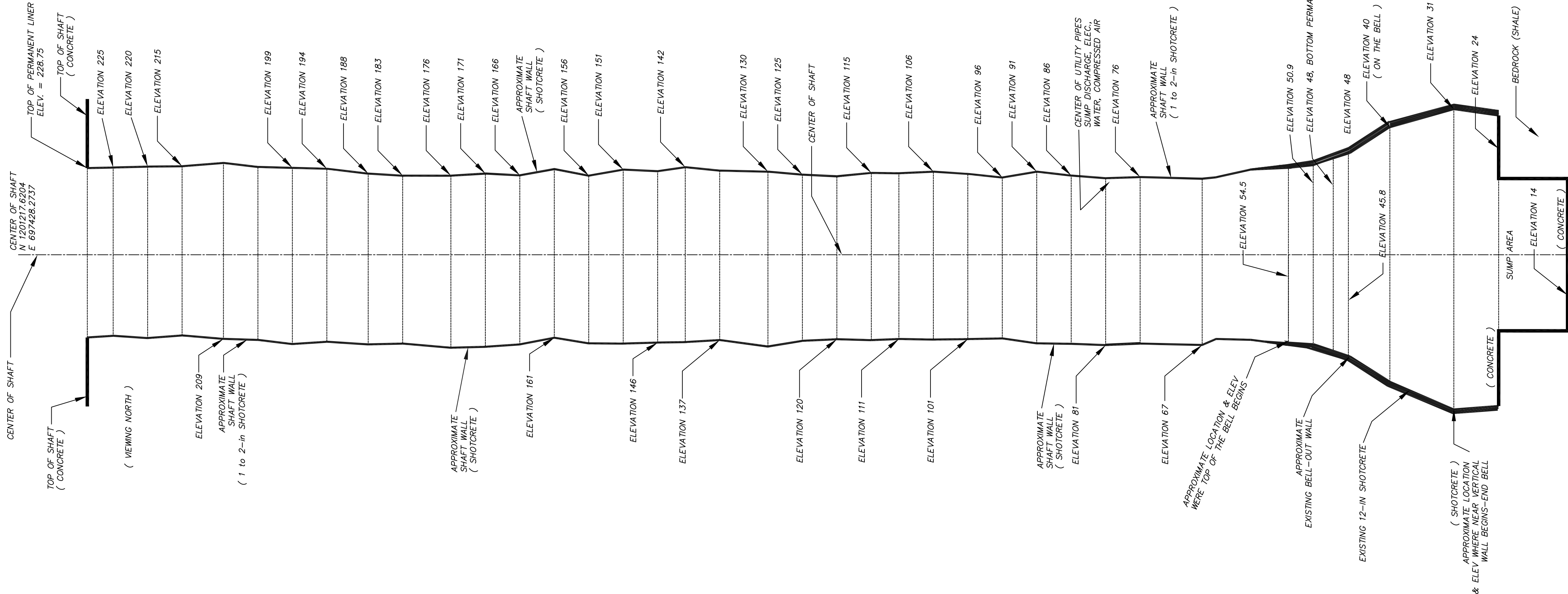
DATE: DECEMBER 21, 2012

TDCS
PHASE FOUR
DESIGN

ACCESS SHAFT
EXISTING CONDITIONS

DRAWING NUMBER: _____

DRAWING NUMBER: _____



0 10 20 30 40

SCALE IN FEET

1. EXISTING CONDITIONS BASED ON DETAILS FROM ELECTRONIC PLAN ENTITLED "FINAL AS-BUILT PLAN, SHOWING OVERALL SHAFT PLAN AND ELEVATION, TUNNEL/DRAIN COLLECTION SYSTEM, GENERAL ELECTRIC COMPANY" PREPARED BY W.J.ROURKE ASSOCIATES.
2. EXISTING CONDITIONS IN VICINITY OF BELLOUT SUPPLEMENTED BY FIELD MEASUREMENTS OBTAINED BY BRIERLEY ASSOCIATES DURING NOVEMBER 2012
3. EXISTING CONDITIONS PROFILE PROVIDED FOR CONTRACTOR'S CONVENIENCE. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
4. ORIGINAL GEOLOGIC MAPPING DATA COLLECTED DURING SHAFT CONSTRUCTION AVAILABLE UPON REQUEST.

REVISIONS

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TDCS
PHASE FOUR
DESIGN

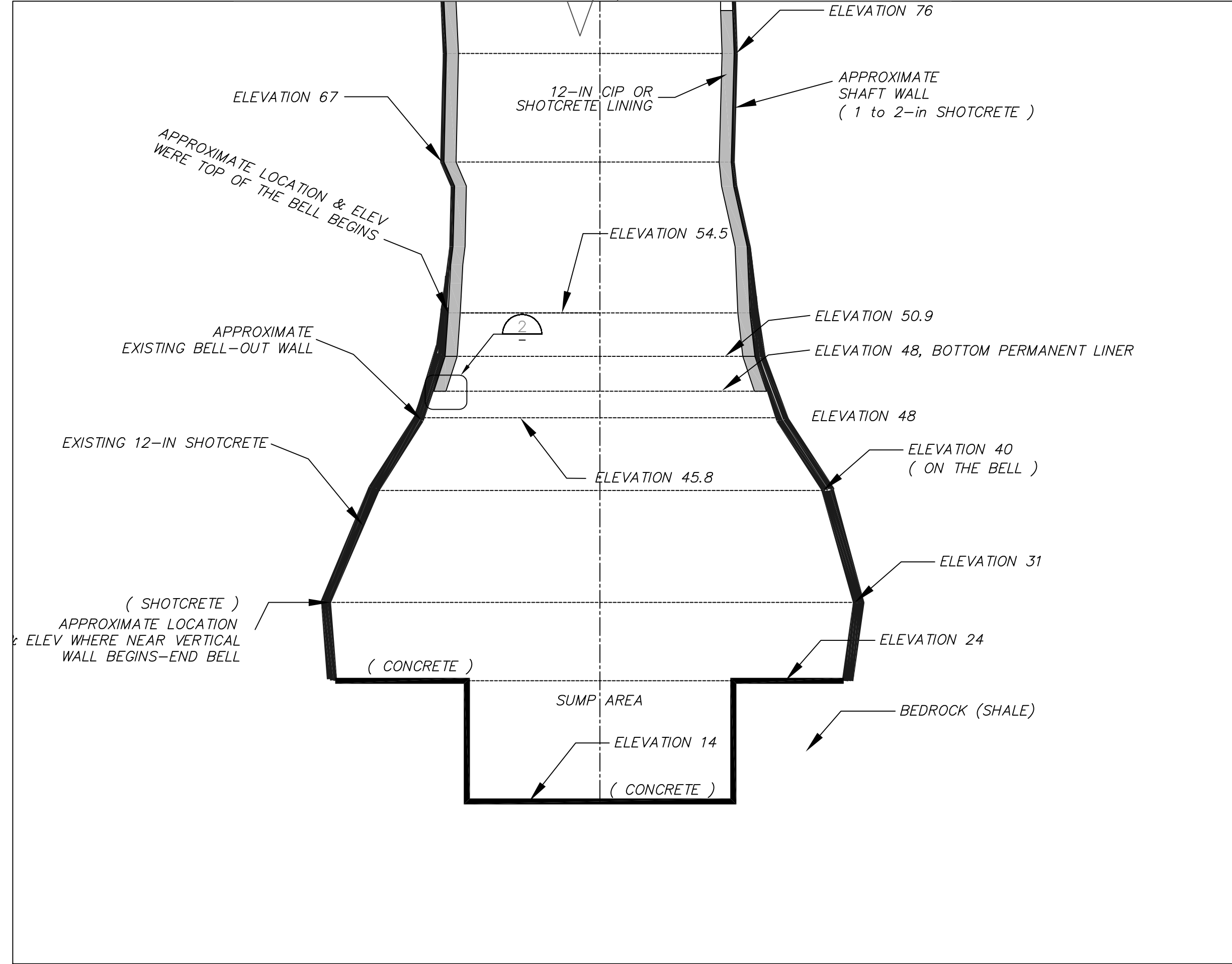
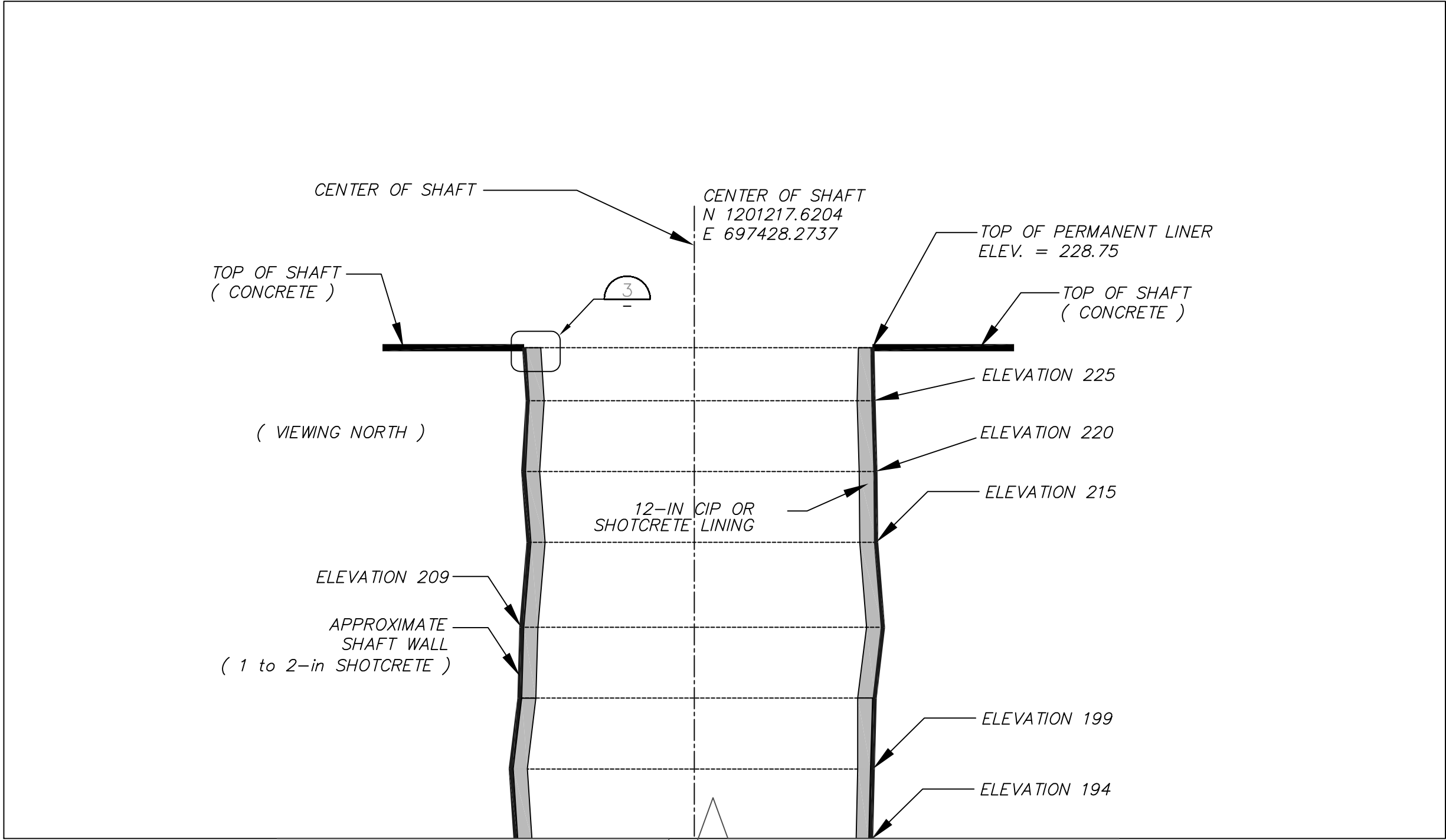
Hudson Falls, New York

ACCESS SHAFT
PERMANENT LINING

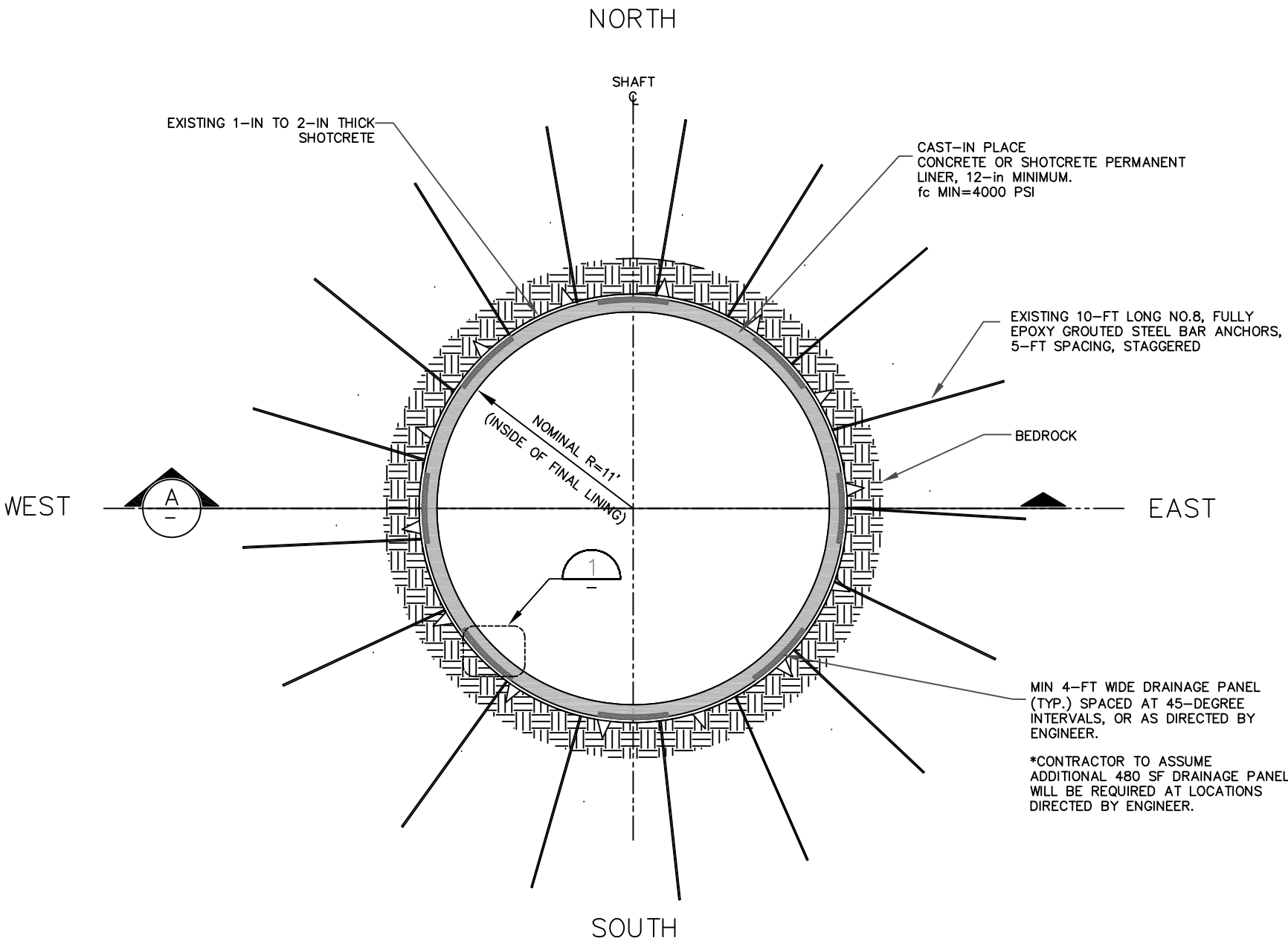
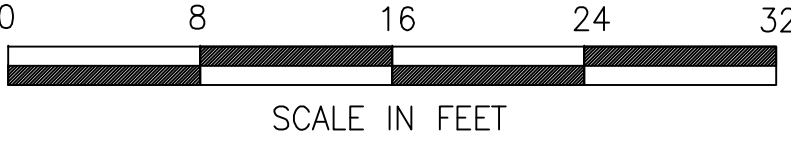
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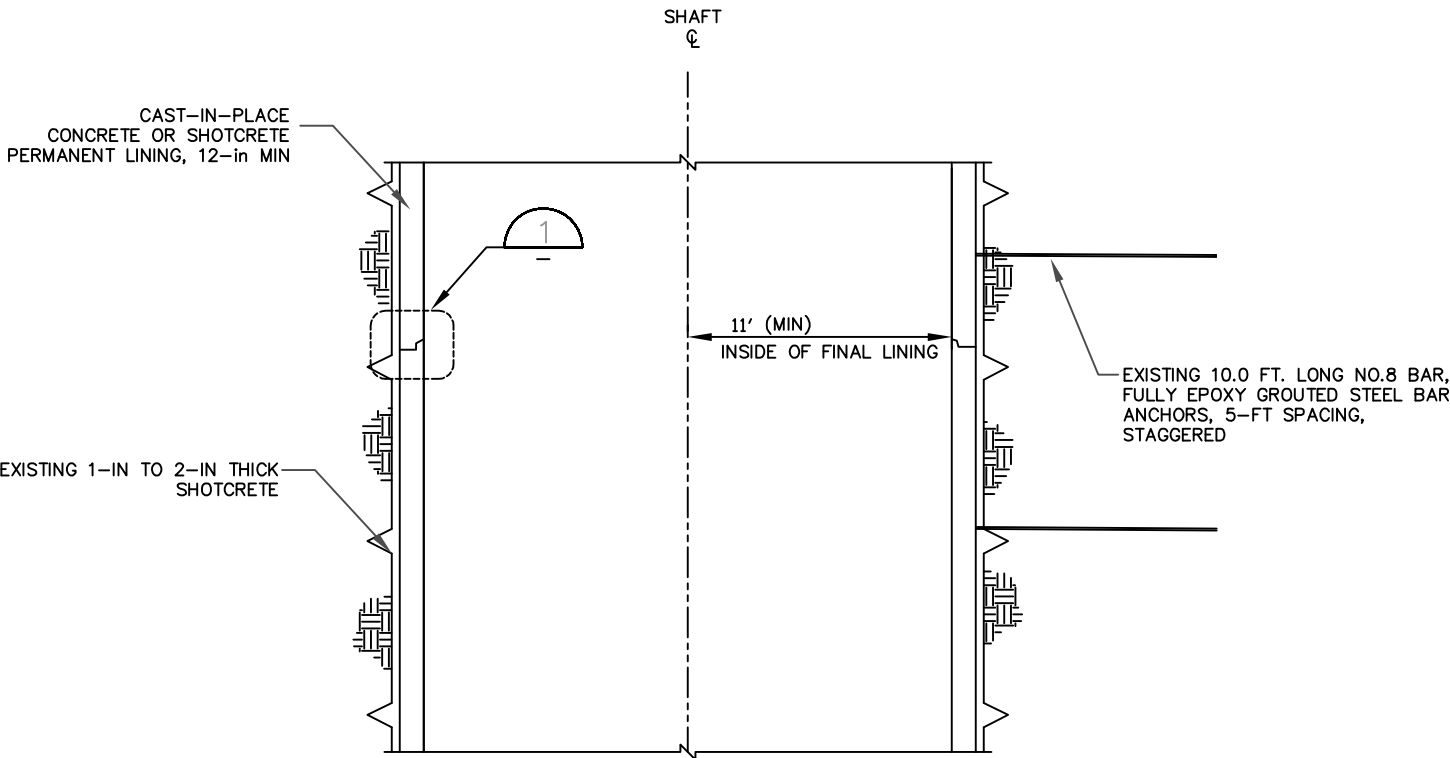
ST-2



1 SECTION: SHAFT CROSS-SECTION
1" = 8'



2 PLAN: SHAFT
1" = 8'



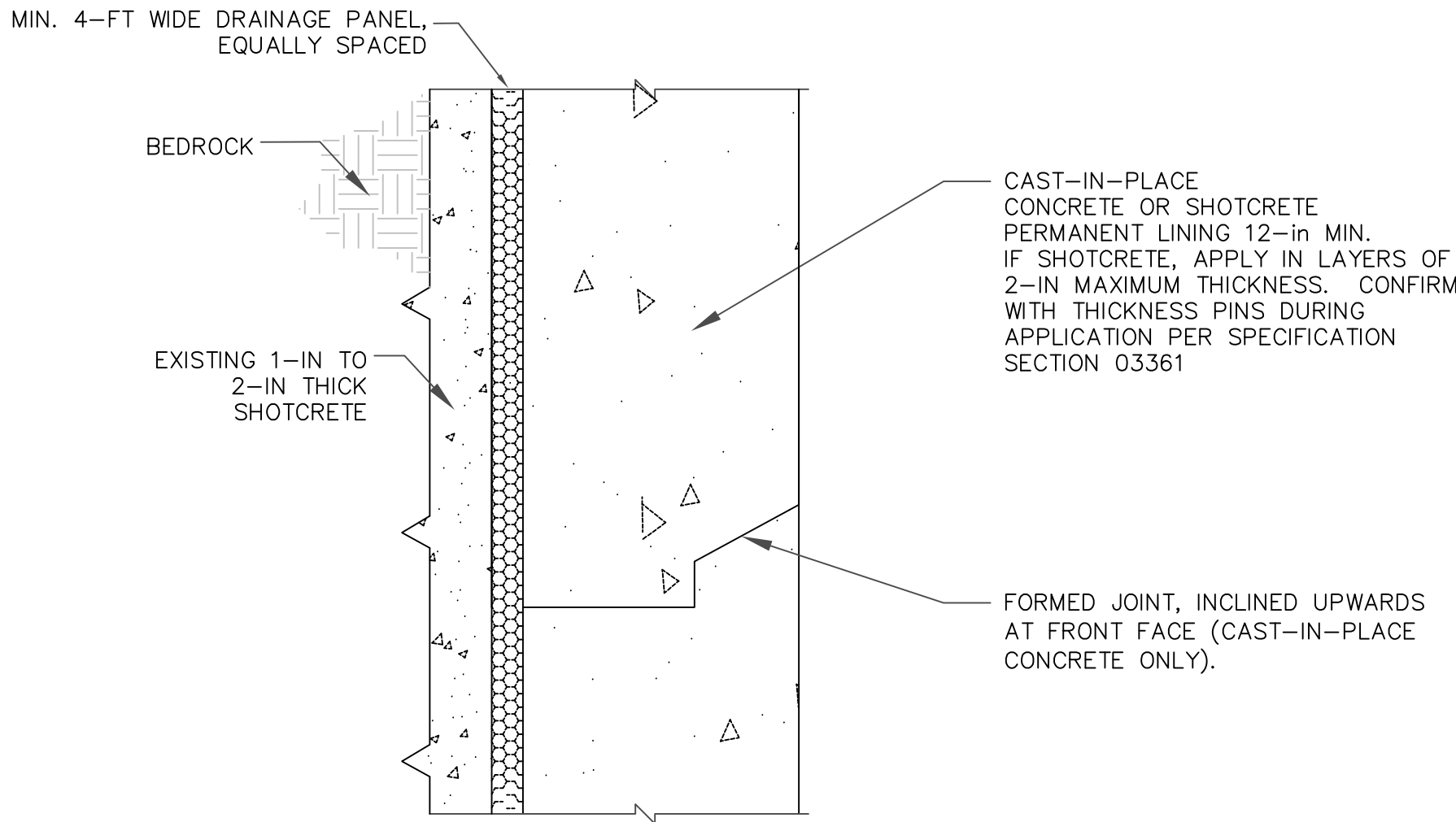
A CROSS SECTION: SHAFT
1" = 8'

NOTES:

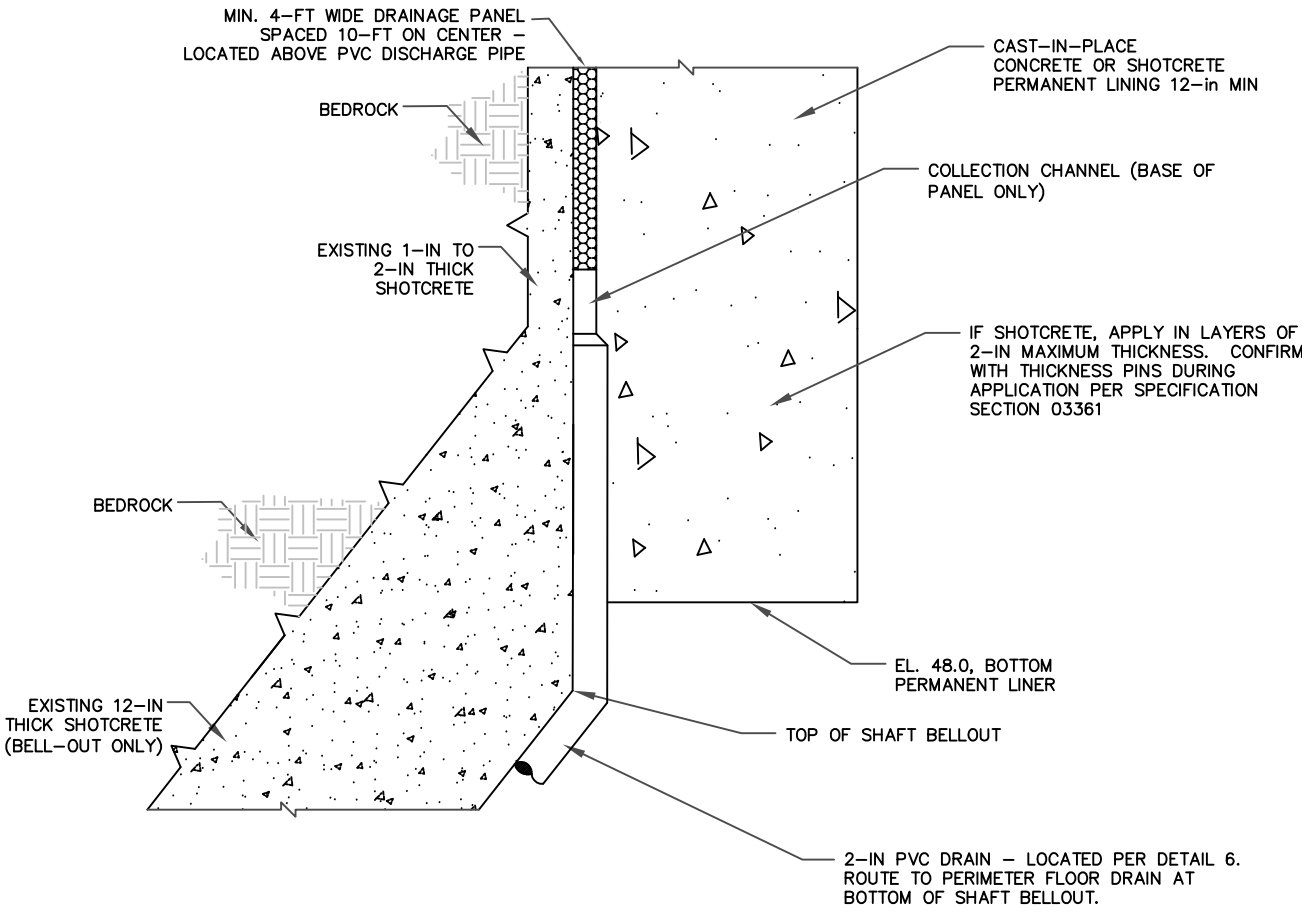
- EXISTING CONDITIONS BASED ON DETAILS FROM ELECTRONIC PLAN ENTITLED "FINAL AS-BUILT PLAN, SHOWING OVERALL SHAFT PLAN AND ELEVATION, TUNNEL/DRAIN COLLECTION SYSTEM, GENERAL ELECTRIC COMPANY" PREPARED BY W.J.ROURKE ASSOCIATES.
- EXISTING CONDITIONS IN VICINITY OF BELLOUT SUPPLEMENTED BY FIELD MEASUREMENTS OBTAINED BY BRIERLEY ASSOCIATES DURING NOVEMBER 2012
- PLACE DRAINAGE MAT IN ACCORDANCE WITH SPECIFICATION SECTION 03310 OR 03361, AS APPLICABLE.
- PERMANENT SHAFT LINER SHALL CONSIST OF 12-IN THICK CAST-IN-PLACE CONCRETE, OR 12-IN THICK SHOTCRETE. PLACE CAST-IN-PLACE LINER IN ACCORDANCE WITH SPECIFICATION SECTION 03310. PLACE SHOTCRETE LINER IN ACCORDANCE WITH SPECIFICATION SECTION 03361.
- PRE-CONSTRUCTION FIELD TESTING OF CONCRETE/SHOTCRETE MIX, MUST BE COMPLETED AT LEAST 30 DAYS PRIOR TO START OF PRODUCTION WORK. REFER TO SPECIFICATION SECTION 03310/03361.
- PROVIDE TEMPORARY PUMPING SYSTEM PER SPECIFICATION SECTION 01500.
- PROTECT EXISTING PUMPING SYSTEM AND SHAFT/BELLOUT FACILITIES. REFER TO DRAWING M-6 AND SPECIFICATION SECTION 01500.
- PROVIDE ADDITIONAL VENTILATION DUCT, IN-KIND, AS REQUIRED FOR REINSTALLATION AT FINAL ARRANGEMENT.

NOTES:

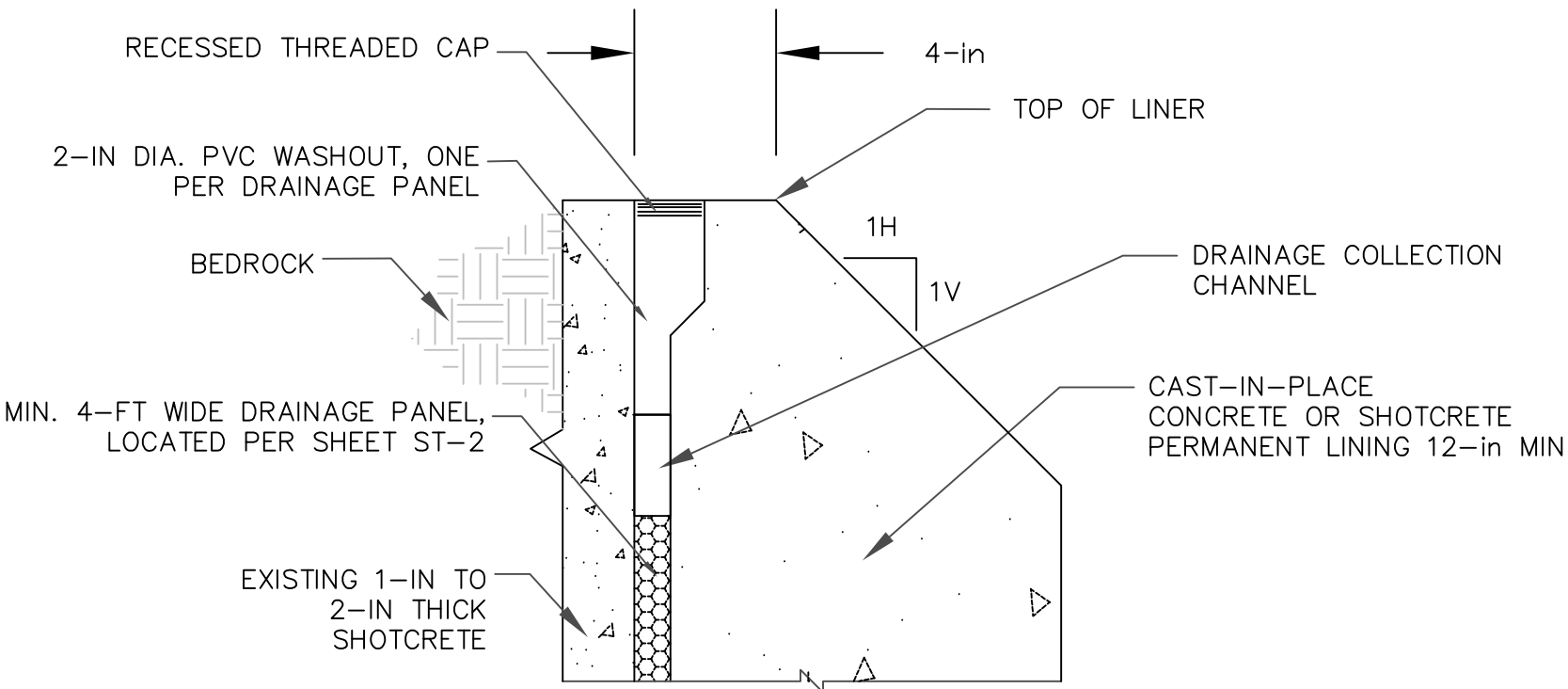
1. REFER TO NOTES ON DRAWING ST-2



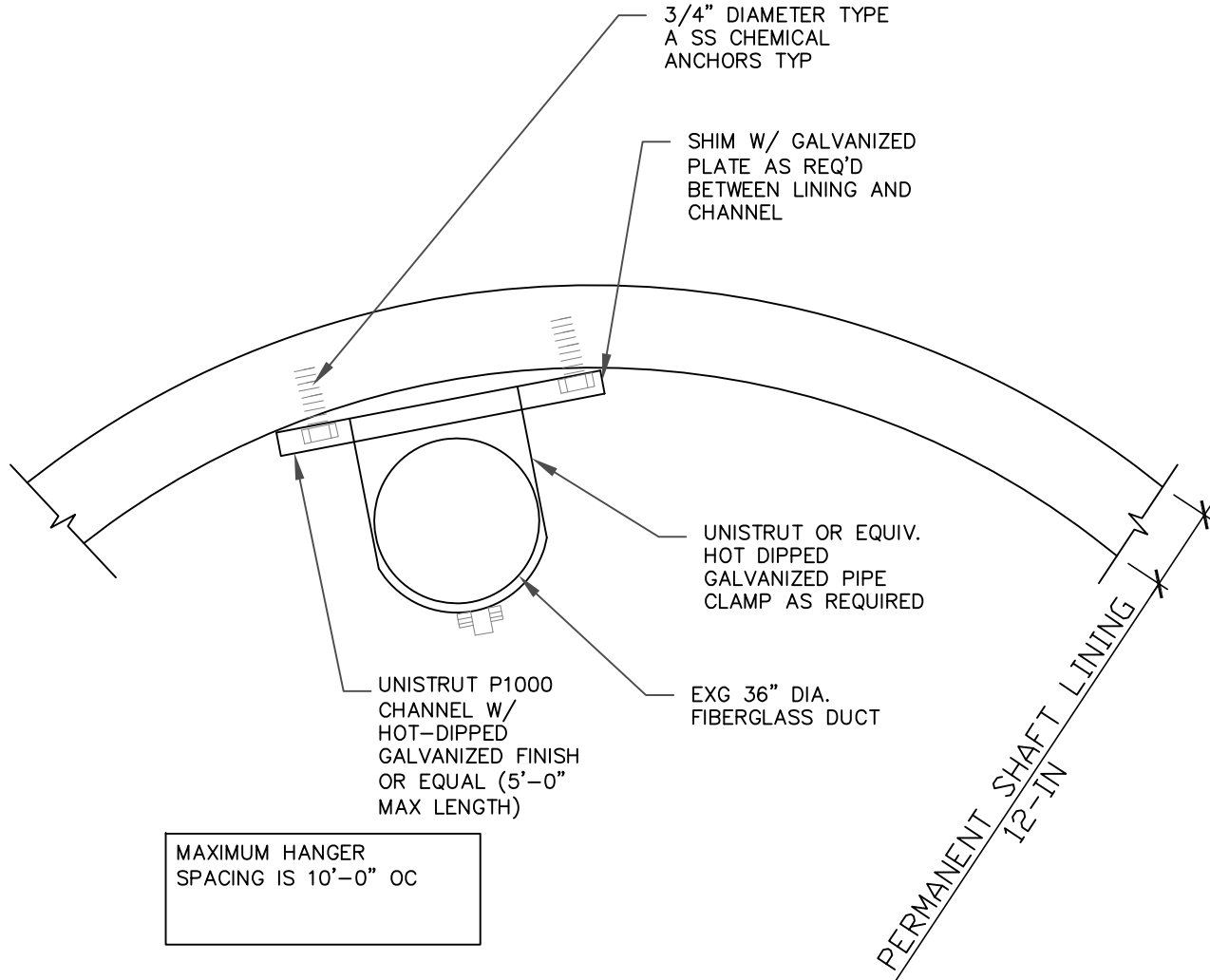
1
 ST-3 / NTS
 DETAIL: TYPICAL LINER SECTION AND CIP JOINT



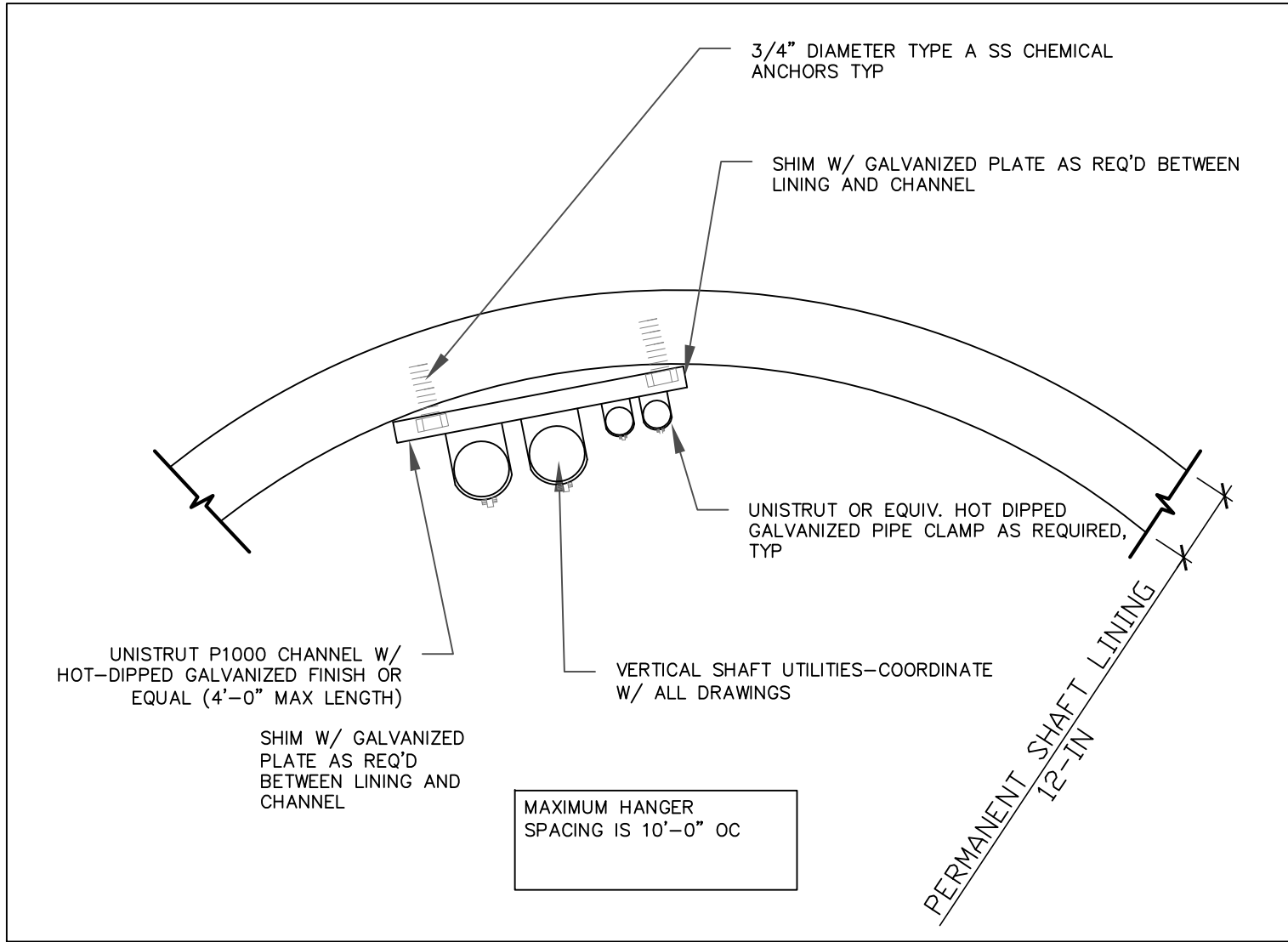
2
 ST-3 / NTS
 DETAIL: LINER TOE IN AND DRAIN



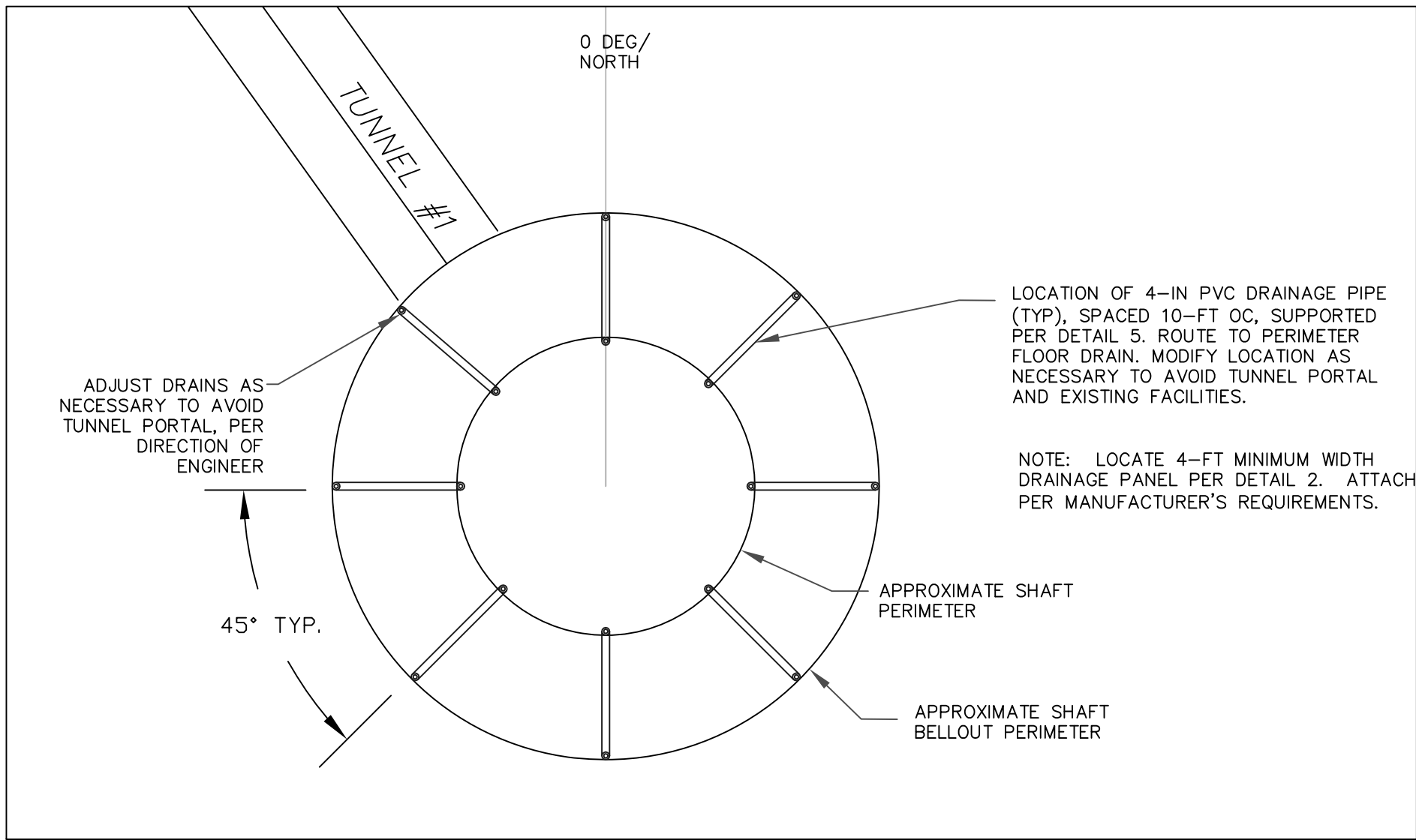
3
 ST-3 / NTS
 DETAIL: TYPICAL LINE SECTION AND JOINT



4
 ST-3 / NTS
 DETAIL: SHAFT DUCT SUPPORT DETAIL



5
 ST-3 / NTS
 DETAIL: SHAFT UTILITY SUPPORT DETAIL



6
 ST-3 / NTS
 DETAIL: DRAINAGE PANEL DRAIN LOCATIONS

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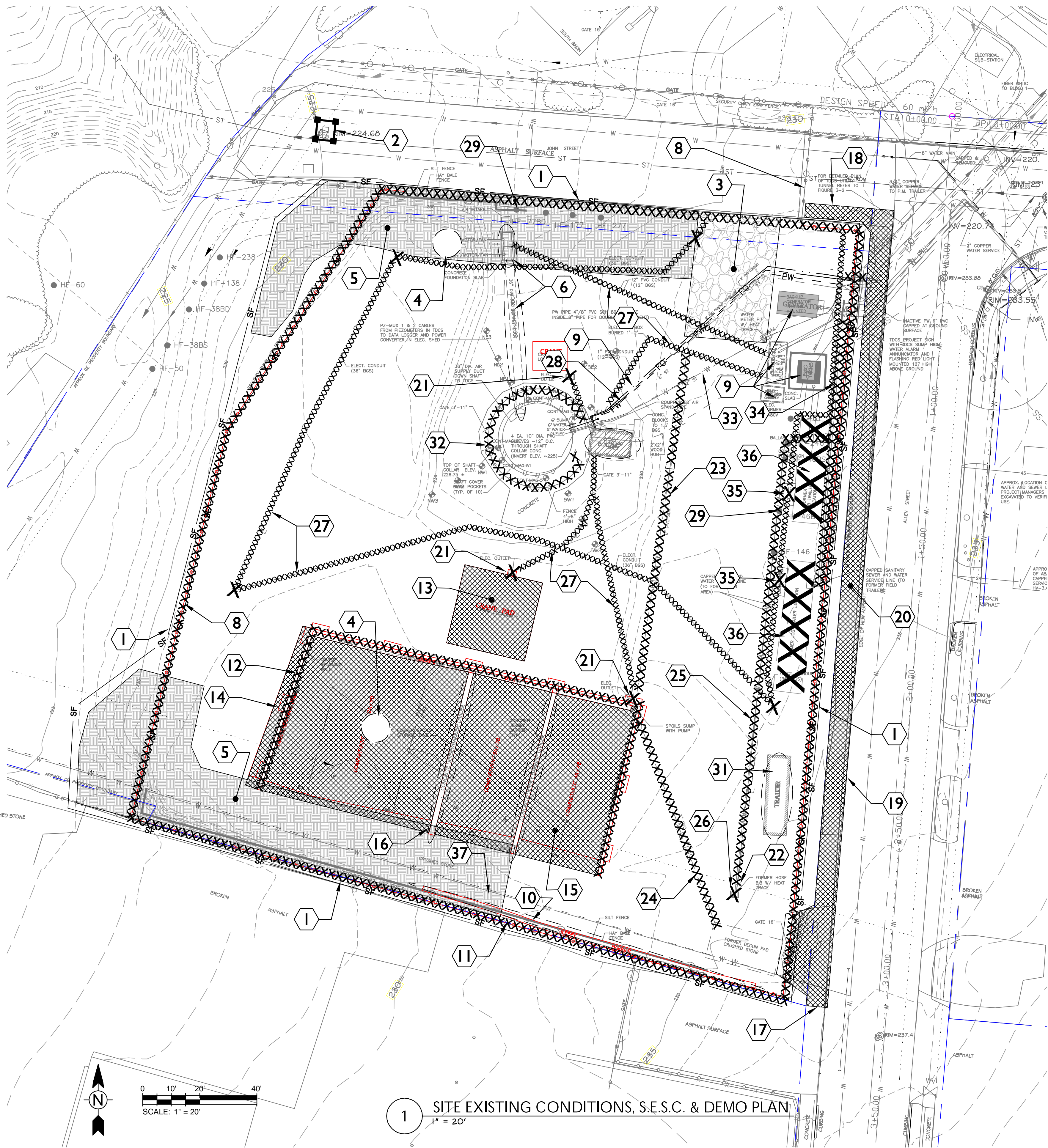
TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

ACCESS SHAFT
PERMANENT LINING DETAILS
DRAWING TITLE:

DRAWING NUMBER:

ST-3



Site Utility Notes (cont.)

- 28 EXISTING TDCS PROCESS WATER LINE. REFER TO PROCESS WATER DRAWINGS FOR PORTION BACK TO SHAFT TO BE REMOVED AND/OR ABANDONED IN PLACE AFTER NEW CONNECTION IS INSTALLED. PROTECT REMAINING.
- 29 EXISTING MONITORING WELL. PROTECT. (TYPICAL)
- 30 REMOVE AND DISPOSE OF LEGALLY OFFSITE, EXISTING SITE PERIMETER CHAINLINK FENCING (775 LF +/-), INCLUDING GATES, HARDWARE, SUPPORT POSTS, FABRIC AND CONCRETE BASES. SEE SITE PREPARATION NOTE #9.
- 31 EXISTING JOB TRAILER (TO BE RELOCATED BY OWNER). PROTECT.
- 32 REMOVE AND DISPOSE OF LEGALLY OFFSITE, EXISTING SHAFT SAFETY BOLLARDS AND FENCING, INCLUDING GATES, SUPPORT POSTS, FABRIC, STEEL, AND HARDWARE. CUT FLANGE BOLTS FLUSH TO EXISTING CONCRETE AT GRADE. CUT EXISTING BOLLARDS TO CONCRETE AT GRADE.
- 33 PROTECT EXISTING 2" WATER SERVICE PIPING AND APPURTANCES, INCLUDING WATER METER, FROM SHAFT TO TDCS UTILITY TUNNEL WHERE INDICATED.
- 34 REMOVE EXISTING TEMPORARY WATER AND SANITARY SERVICE PIPING AND APPURTANCES, TO FORMER TEMPORARY JOB TRAILER LOCATIONS TO TDCS UTILITY TUNNEL AND/OR R.O.W. WHERE INDICATED, AND OR R.O.W. CAP REMAINING PIPING AT TUNNEL AND/OR R.O.W. SEE SITE PREPARATION NOTE #9.
- 35 REMOVE FORMER TEMPORARY JOB TRAILER EQUIPMENT CONCRETE PAD. SEE SITE PREPARATION NOTE #9.
- 36 REMOVE FORMER TEMPORARY JOB TRAILER BASE MATERIALS AND REMNANTS. SEE SITE PREPARATION NOTE #9.
- 37 EXISTING WATER LINE. PROTECT.
- 38 RELOCATE EXISTING ELECTRICAL SHED. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS.

General Site Notes

- 1. REFER TO DRAWING C-500 FOR SITE GENERAL NOTES.

Site Preparation & Demolition Notes

- 1. THE INTENT OF THIS DRAWING IS TO INDICATE PREPARATORY WORK, REMOVALS AND DEMOLITION NECESSARY TO CONSTRUCT THE PROJECT AS SHOWN ON THE REST OF THE CONTRACT DRAWINGS. SOME NOTES ARE GENERAL IN NATURE AND IT SHALL BE UNDERSTOOD THAT IT IS NOT FEASIBLE TO INDICATE EACH AND EVERY SPECIFIC REMOVAL.
- 2. WHEN A SITE FEATURE IS INDICATED TO REMAIN, IT SHALL BE PROTECTED AS INDICATED AND/OR SPECIFIED. WHEN ANY DISTURBANCE OCCURS AROUND AN EXISTING FEATURE, THE CONTRACTOR SHALL USE ADDITIONAL PRECAUTIONS AS NECESSARY TO PROTECT THE FEATURE.
- 3. ACCESS ROADS AND CONSTRUCTION ENTRANCES ARE TO BE KEPT CLEAR AT ALL TIMES.
- 4. STAGING, CONSTRUCTION ACCESS ROADS AND TEMPORARY PARKING AREAS TO BE CONSTRUCTED WITH 12" MIN APPROVED AGGREGATE WITH AN UNDERLAYMENT OF GEOTEXTILE STABILIZATION FABRIC UNLESS OTHERWISE NOTED.
- 5. STAGING AREAS SHALL REMAIN IN PLACE THROUGHOUT PROJECT UNLESS OTHERWISE DIRECTED BY OWNER.
- 6. LOAD EXCAVATED EARTH AND DEMOLISHED MATERIALS FOR DISPOSAL BY OWNER INTO CONTAINERS PROVIDED BY OWNER. DEMOLISH CONCRETE AND TIMBER INTO SIZES NOT GREAT THAN 4-FEET. DEMOLISH PIPING INTO LENGTHS NOT GREATER THAN 10-FEET.
- 7. REFER TO DRAWING C-500 FOR SOIL EROSION AND SEDIMENT CONTROL NOTES AND SEQUENCE OF CONSTRUCTION.
- 8. PROTECT EXISTING ABOVE AND BELOW GRADE UTILITIES SLATED TO REMAIN. PROTECT EXISTING ABOVE AND BELOW GRADE UTILITIES SLATED FOR DEMOLITION / RELOCATION UNTIL DIRECTED TO PROCEED BY OWNER. (TYPICAL ALL UTILITIES, APPROXIMATE LOCATION SHOWN - VERIFY DEPTH AND LOCATION OF ALL UTILITIES PRIOR TO EXCAVATION.
- 9. LOAD EXCAVATED EARTH AND DEMOLISHED MATERIALS FOR DISPOSAL BY OWNER INTO CONTAINERS PROVIDED BY OWNER. DEMOLISH CONCRETE AND TIMBER INTO SIZES NOT GREAT THAN 4-FEET. DEMOLISH PIPING INTO LENGTHS NOT GREATER THAN 10-FEET.

Site Utility Notes

- 1 PROVIDE SILT FENCE WHERE SPECIFIED AND/OR INDICATED. SEE DETAIL 4, C-500. (TYPICAL)
- 2 PROTECT ALL CATCH BASIN INLETS WITH APPROVED INLET PROTECTOR. "FLEXSTORM INLET FILTER", OR EQUAL. SEE DETAIL 7, C-500. WRAPPING INLET STRUCTURE FRAMES AND GRATES WITH FILTER FABRIC IS NOT PERMITTED. (TYPICAL)
- 3 PROVIDE STABILIZED CONSTRUCTION ENTRANCE AT ALL R.O.W. ACCESS POINTS TO SITE. SEE DETAIL 2, C-500. (TYPICAL)
- 4 PROVIDE TEMPORARY DROP INLET SEDIMENT TRAP AT INLET INSTALLATION LOCATION. SEE DETAIL 3, C-500.
- 5 PROVIDE ROLLED EROSION CONTROL MATTING WHERE SPECIFIED AND/OR INDICATED. SEE DETAIL 1, C-500.
- 6 FOR INFORMATION REGARDING RELOCATION / DEMOLITION OF EXISTING 36" DIAMETER AIR SUPPLY DUCT PIPING, SUPPORTS, AIR SUPPLY FANS, AND CONCRETE SUPPORT BASE, REFER TO THE MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS.
- 7 PROTECT ALL EXISTING UTILITY SERVICES TO SHAFT.
- 8 PROTECT EXISTING CHAIN LINK FENCE AND GATE ACROSS JOHN STREET EXTENSION FROM DAMAGE.
- 9 PROTECT EXISTING UNDERGROUND UTILITIES (TYPICAL ALL UTILITIES, APPROXIMATE LOCATION SHOWN). *VERIFY DEPTH AND LOCATION OF ALL UTILITIES PRIOR TO EXCAVATION.*
- 10 REMOVE EXISTING PREVIOUSLY INSTALLED AND COMPROMISED SILT FENCE AND STRAW BALES ALONG CHAIN LINK FENCING. DISPOSAL BY OWNER. COORDINATE WITH OWNER ON THE OFF-SITE DISPOSAL OF ANY MATERIALS.
- 11 REMOVE EXISTING TRAFFIC / PARKING SIGNAGE, PROTECT, STORE, AND REINSTALL. MAINTAIN CHAINLINK SECURITY FENCING DURING EARTHWORK OPERATIONS. AFTER EMBANKMENT REGRAIDING IS COMPLETE, REMOVE AND DISPOSE OF EXISTING GALVANIZED CHAIN LINK FENCE POSTS, FABRIC AND MOUNTING HARDWARE.
- 12 REMOVE APPROXIMATELY 240 LF EXISTING TIMBER RETAINING WALL. DISPOSAL BY OWNER. COORDINATE WITH OWNER REGARDING LOADING AND REMOVAL OF MATERIALS. COORDINATE WITH OWNER REGARDING FINAL LOCATION.
- 13 REMOVE 28' X 28' TIMBER CRANE PAD. DISPOSAL BY OWNER. COORDINATE WITH OWNER ON THE OFF-SITE DISPOSAL OF ANY MATERIALS.
- 14 RELOCATE ON-SITE (20) EXISTING 2'X2'X6" CONCRETE BALLAST BLOCKS (1500' MAX DIST). COORDINATE WITH OWNER REGARDING FINAL LOCATION.
- 15 FORMER SPOILS STRUCTURE - REMOVE EXISTING 130' x 56' CONCRETE PAD (12" NOMINAL THICKNESS) COLLECTION GUTTER AND FOOTING. DISPOSAL BY OWNER. COORDINATE WITH OWNER ON THE OFF-SITE DISPOSAL OF ANY MATERIALS.
- 16 RELOCATE ON-SITE (12) EXISTING CONCRETE JERSEY BARRIERS (1500' MAX DIST) COORDINATE WITH OWNER REGARDING FINAL LOCATION.
- 17 SAW CUT EXISTING ROAD PAVEMENT TO FORM CLEAN EDGE.
- 18 SAW CUT EXISTING ROAD PAVEMENT AROUND BROKEN ASPHALT TO FORM CLEAN EDGE, AS DIRECTED BY OWNER. (APPROXIMATE LOCATION)
- 19 SAW CUT EXISTING ROAD EDGE AT RAISED SHOULDER TO FORM CLEAN EDGE. SEE DETAIL 8, SHEET C-300.
- 20 IN ROADSIDE HATCHED AREA REMOVE ALL EXISTING SURFACE SEDIMENT AND VEGETATION, TOPSOIL, ASPHALT PAVEMENT BINDER AND TOP COURSE,, AND CONCRETE CURB/GUTTER REMNANTS. REMOVE EXISTING SUBBASE / SUBGRADE SUFFICIENT TO INSTALL PROPOSED CURB/GUTTER. DISPOSE OF MATERIALS OFF-SITE. *SUBBASE IN PAVED SHOULDER AREA TO REMAIN. VERIFY EXISTING DEPTH AND INFORM OWNER.*
- 21 DISCONNECT ELECTRIC SERVICE FROM PANEL TO EXISTING OUTLET. REMOVE ELECTRICAL OUTLET, CONDUIT AND WIRING TO BELOW GRADE. SEE NOTE 27.
- 22 DISCONNECT ELECTRIC SERVICE FROM PANEL TO EXISTING OUTLET. REMOVE ELECTRICAL OUTLET, CONDUIT AND WIRING TO LIMIT OF EXCAVATION REQUIRED TO REMOVE INDICATED PORTION OF COPPER WATER LINE REMOVAL. SEE NOTE 27.
- 23 REMOVE APPROX. 85LF 6" PVC. DISPOSAL BY OWNER.
- 24 REMOVE APPROX. 80LF 3" PVC. DISPOSAL BY OWNER.
- 25 REMOVE ¾" COPPER WATER SERVICE. CAP EXISTING WHERE INDICATED. DISPOSAL BY OWNER. "SEE DEMOLITION NOTE #6."
- 26 REMOVE HOSE BIB AND WOOD ENCLOSURE. DISPOSAL BY OWNER.
- 27 FOR INFORMATION REGARDING DEMOLITION OF EXISTING ELECTRICAL WIRING, CONDUIT, EQUIPMENT, POLES, ETC., REFER TO THE ELECTRICAL DRAWINGS AND SPECIFICATIONS.

REVISIONS

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SCALE: 1" = 20'

APPROVED BY: DRH

DATE: DECEMBER 21, 2012

CAD FILE: C-100-01299-12001

General Electric Company

TDCS
PHASE FOUR
DESIGN

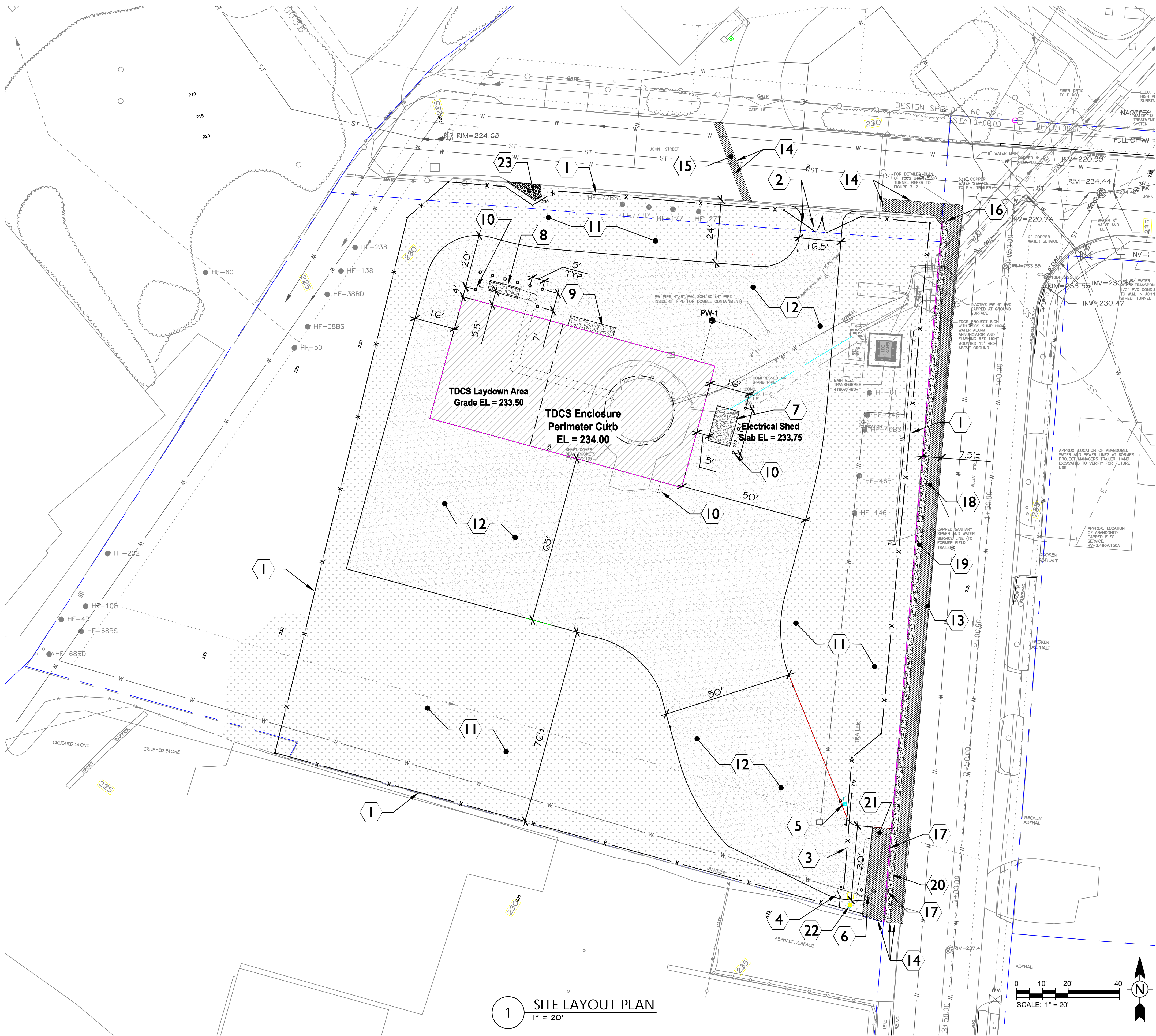
Hudson Falls, New York

TDCS AREA- EXISTING CONDITIONS, SOIL EROSION
SEDIMENT CONTROL, AND DEMOLITION PLAN

DRAWING TITLE:

C-100

DRAWING NUMBER:



General Site Notes

1. REFER TO DRAWING C-500 FOR GENERAL SITE NOTES.

Site Layout Notes

- 1 880 LF 6'-HIGH GALVANIZED CHAIN LINK PERIMETER FENCE (6' NOMINAL FENCING WITH ADDITIONAL 1'-HIGH, 3-STRAND BARBED WIRE TOP). SEE DETAIL G, C-502.
- 2 30'-WIDE GALVANIZED CHAINLINK DOUBLE SWING GATE. SEE DETAIL G, C-502.
- 3 GALVANIZED CHAIN LINK CANTILEVERED GATE (24' OPEN WIDTH). SEE DETAILS G AND 9, C-502. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR GATE ACTUATOR AND CARD READER INFORMATION.
- 4 3'-WIDE GALVANIZED CHAIN LINK SWING GATE. SEE DETAIL G, C-502.
- 5 18"X36" CONCRETE PAD FOR CANTILEVER GATE ACTUATOR. SEE DETAIL 8, C-502. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR GATE ACTUATOR INFORMATION AND COORDINATION.
- 6 18" X 18" CONCRETE PAD FOR GATE CARD READER PEDESTAL. SEE DETAIL 8, C-502. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR GATE CARD READER INFORMATION AND COORDINATION.
- 7 9' X 14' CONCRETE PAD FOR RELOCATED ELECTRICAL SHED. SEE DETAIL 8, C-502. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ELECTRICAL SHED RELOCATION INFORMATION AND COORDINATION.
- 8 4' X 12' CONCRETE PAD FOR SHAFT AIR SUPPLY DUCT FAN. SEE DETAIL 8, C-502. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR SHAFT AIR SUPPLY DUCT FAN INFORMATION AND COORDINATION.
- 9 4' X 18' CONCRETE ENTRANCE PAD APRON. SEE DETAILS 4 AND 7, C-502.
- 10 STEEL PIPE BOLLARD. SEE DETAIL I, C-502 (TYPICAL OF TEN (10)).
- 11 FINAL SURFACE TO BE TOPSOIL AND APPROVED LAWN SEED AND MULCH.
- 12 FINAL SURFACE TO BE APPROVED GRAVEL AGGREGATE. REFER TO DETAIL 5, SHEET C-502.
- 13 SAW CUT EXISTING ROAD EDGE AT RAISED SHOULDER TO FORM CLEAN EDGE TO MATCH FLUSH WITH PROPOSED ASPHALT PAVING SECTION. REFER TO DETAIL 10 SHEET C-502.
- 14 SAW CUT EXISTING ROAD PAVEMENT TO FORM CLEAN EDGE TO MATCH FLUSH WITH PROPOSED ASPHALT PAVING SECTION. REFER TO DETAILS 10 AND 11 SHEET C-502.
- 15 PROVIDE ASPHALT PAVING PATCH PER DETAIL 11 SHEET C-502. MATCH FLUSH WITH EXISTING.
- 16 TRANSITION GUTTER TO TAPER TO DISCHARGE FLUSH TO ASPHALT PAVEMENT IN THIS LOCATION.
- 17 TRANSITION VERTICAL FACED CURB AND GUTTER TO MOUNTABLE CURB AND GUTTER IN THIS LOCATION.
- 18 PROVIDE ASPHALT PAVING AND SUB BASE SECTION PER TO DETAIL 12, SHEET C-502. COORDINATE WITH VILLAGE OF HUDSON FALLS DEPARTMENT OF PUBLIC WORKS PRIOR TO CONSTRUCTION.
- 19 PROVIDE 275 LF CAST-IN-PLACE CONCRETE CURB AND GUTTER. REFER TO DETAIL G, SHEET C-501. SEE SITE LAYOUT NOTE 2.
- 20 USE MOUNTABLE CURB AND GUTTER AT ENTRANCE AREA. USE VERTICAL FACED CURB AND GUTTER ALL OTHER AREAS. REFER TO DETAIL G, SHEET C-501.
- 21 PROVIDE HEAVY DUTY ASPHALT PAVING AND SUB BASE SECTION AT ENTRANCE APRON AREA. REFER TO DETAIL 11, SHEET C-502.
- 22 OVERHEAD SITE LIGHTING POLE AND FIXTURE. REFER TO ELECTRICAL PLANS.
- 23 ANGLE FENCE IN THIS AREA TO ACCOMMODATE STORM DISCHARGE HEADWALL RIP-RAP APRON

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TDCS
PHASE FOUR
DESIGN

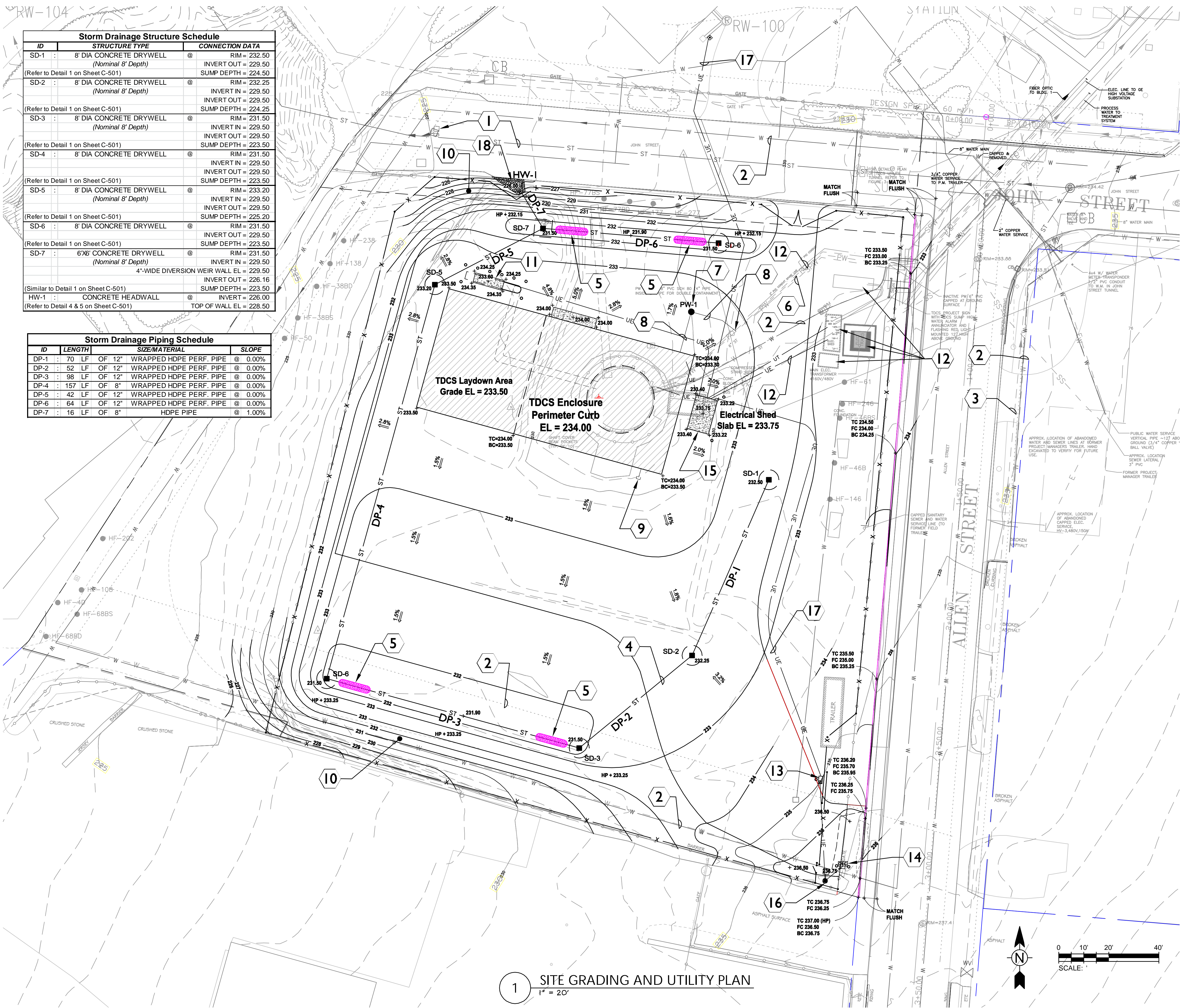
Hudson Falls, New York

TDCS AREA: SITE LAYOUT PLAN

DRAWING TITLE:

DRAWING NUMBER:

C-101



Site General Notes

1. REFER TO DRAWING C-500 FOR SITE GENERAL NOTES.

Grading and Drainage Notes

- SUBMIT IMPORTED FILL AND TOPSOIL MATERIALS FOR APPROVAL PRIOR TO PLACEMENT. FOR ALL MATERIAL PLACE FILL IN MAXIMUM 6" LIFTS AND COMPACTED TO 95% MODIFIED PROCTOR.
- SPREAD TOPSOIL TO A MINIMUM DEPTH OF 4" CONTINUOUS SETTLED DEPTH OVER AREAS OF THE SITE WHERE EARTH HAS BEEN DISTURBED, EXCEPT WHERE PAVING OR AGGREGATE SURFACING IS PROPOSED.
- AREAS NOT SPECIFICALLY INDICATED TO RECEIVE IMPROVED SURFACING WITHIN THE CONTRACT LIMIT LINE SHALL BE FINE GRADED, SEEDED OR SODDED AS LAWN, FERTILIZED AND MULCHED.
- AFTER FINE GRADING IS COMPLETED, INFORM THE OWNER SO THAT AN INSPECTION OF THE FINE GRADING CAN TAKE PLACE BEFORE SEEDING IS BEGUN. IF INSPECTION DOES NOT TAKE PLACE, APPROVAL OF LAWN MAY BE DELAYED OR DENIED.
- CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR NATURAL AND PAVED AREAS.
- PROVIDE GRADE ADJUSTING RINGS OR BRICK SHIMS AT DROP-INLETS, CATCH BASINS AND MANHOLES IN AREAS SCHEDULED FOR REPAVING OR REGRADING TO BRING RMS UP TO LEVEL OF NEW FINISHED GRADE. MINIMUM 2 COURSES.

Site Utility Notes

- EXISTING STORM INLET AND PIPING (TYPICAL). PROTECT.
- EXISTING WATER LINE PIPING (TYPICAL). PROTECT.
- EXISTING SANITARY LINE PIPING (TYPICAL). PROTECT.
- STORM WATER COLLECTION PIPING. SEE PIPE TRENCH DETAIL 2, C-501. (TYPICAL)
- PROVIDE WATER QUALITY SAND FILTER (TYPICAL OF 4). SEE DETAIL G, C-500. EACH WQ SURFACE AREA TO BE 4' X 15'.
- EXISTING PROCESS WATER PIPING TO SHAFT. PROTECT.
- PROVIDE PROCESS WATER MANHOLE. SEE DETAIL 3, C-501. REFER TO PROCESS WATER "M" DRAWINGS AND SPECIFICATIONS FOR FOR ADDITIONAL INFORMATION.
- PROCESS WATER PIPING AND CONNECTION TO EXISTING TDCS PROCESS WATER LINE. REFER TO PROCESS WATER "M" DRAWINGS AND SPECIFICATIONS FOR PIPING INVERT, SIZE, MATERIALS, BEDDING AND ADDITIONAL INFORMATION.
- STUB AND CAP 5' OUT FROM FOUNDATION LIMITS FOR FUTURE USE, PROCESS WATER PIPING. REFER TO PROCESS WATER "M" DRAWINGS AND SPECIFICATIONS FOR FOR ADDITIONAL INFORMATION. PROVIDE AS-BUILT LOCATION TIES TO OWNER.
- REVISE EXISTING GRADING AS SHOWN, MAINTAINING FINAL TOE-OF-SLOPE TO PROPERTY LINE DISTANCE OF 18" MIN. MAXIMUM 3:1 SLOPE OF EMBANKMENT. PROVIDE JUTE MESH EROSION CONTROL BLANKET ON ALL SLOPES 3:1 OR GREATER. REFER TO GRADING AND DRAINAGE NOTES AND SITE PREPARATION / DEMOLITION NOTE #9 ON DRAWING C-100 FOR ADDITIONAL EARTHWORK REQUIREMENTS.
- RELOCATED AIR SUPPLY DUCT FAN AND DUCT PIPING. REFER TO MECHANICAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- EXISTING POWER AND COMMUNICATIONS LINES, AND EQUIPMENT. PROTECT. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- CANTILEVER GATE ACTUATOR. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- CANTILEVER GATE CARD READER. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- RELOCATED ELECTRICAL SHED. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- LIGHT POLE AND FIXTURE. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- ELECTRICAL SERVICE LINE. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- PROVIDE CONCRETE HEADWALL AND CONDUIT OUTLET PROTECTION RIP-RAP. SEE DETAILS 4 + 5, C-501.

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CAD FILE: C-100-01299-12001

General Electric Company

TDCS PHASE FOUR DESIGN

Hudson Falls, New York

TDCS AREA: SITE GRADING & UTILITY PLAN

DRAWING TITLE:

DRAWING NUMBER:

C-102

REVISIONS

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RCN: 112IC04086

DRAWN BY: KJR

CHECKED BY: DRH

SCALE: 1/4" = 1'-0"

APPROVED BY: DRH

DATE: DECEMBER 21, 2012

CAD FILE: C-200-01299-12001

General Electric Company

TDCS
PHASE FOUR
DESIGN

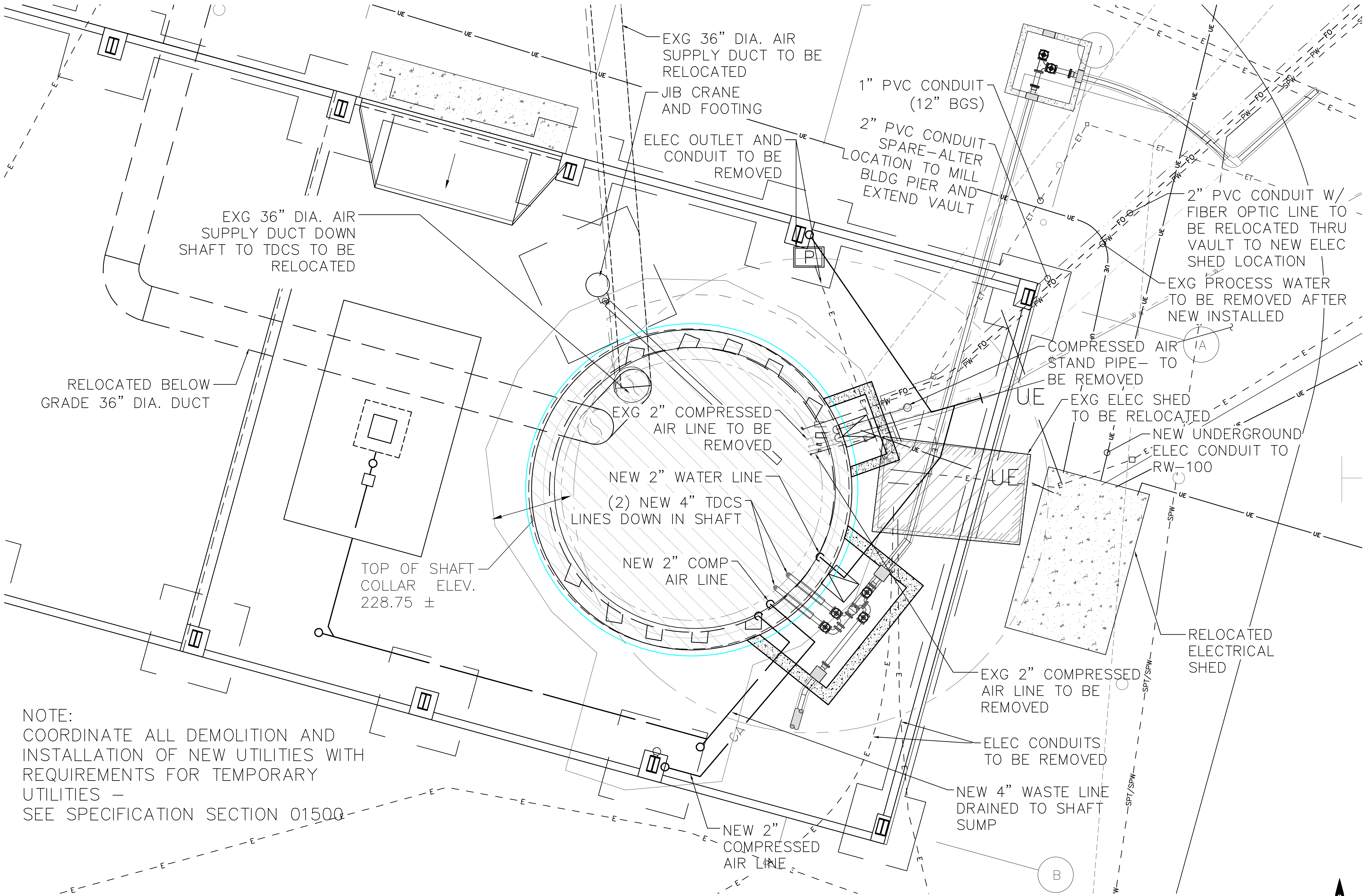
Hudson Falls, New York

TDCS BUILDING
SHAFT UTILITY PLAN

DRAWING TITLE:

DRAWING NUMBER:

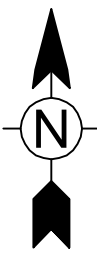
C-200

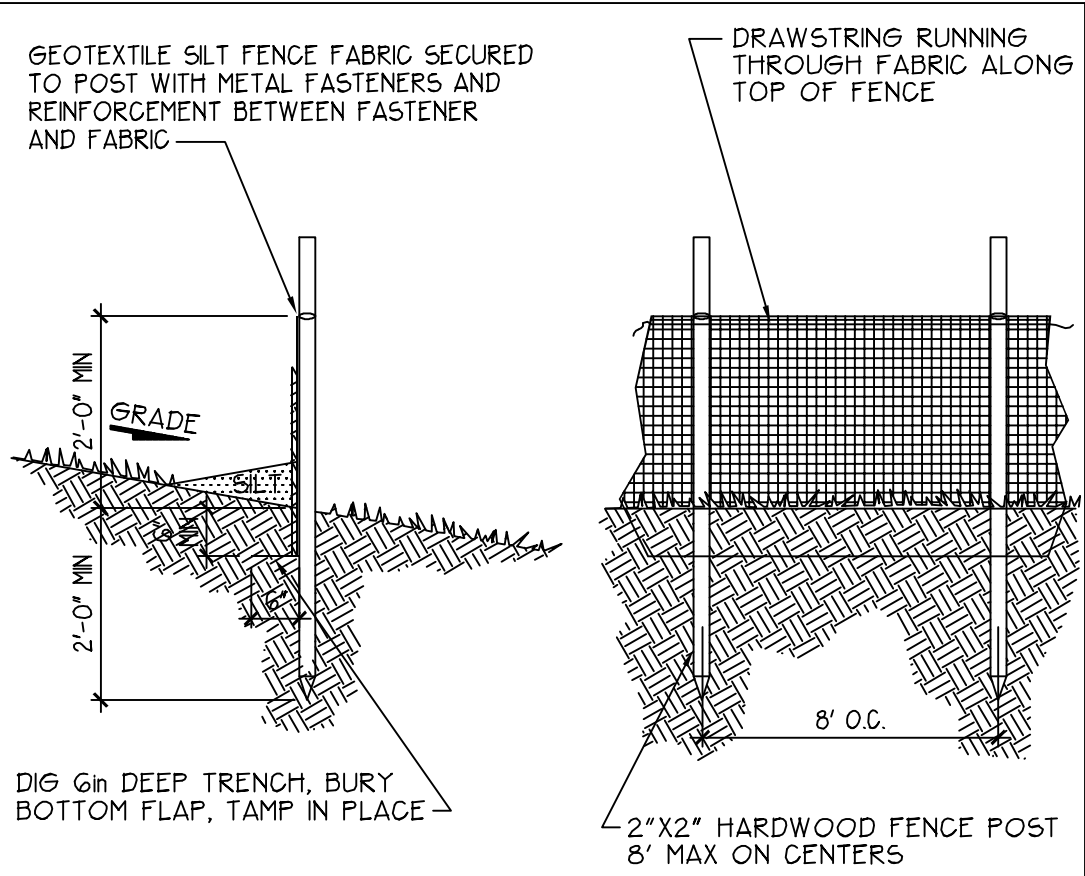


NOTE:
COORDINATE ALL DEMOLITION AND
INSTALLATION OF NEW UTILITIES WITH
REQUIREMENTS FOR TEMPORARY
UTILITIES –
SEE SPECIFICATION SECTION 01500

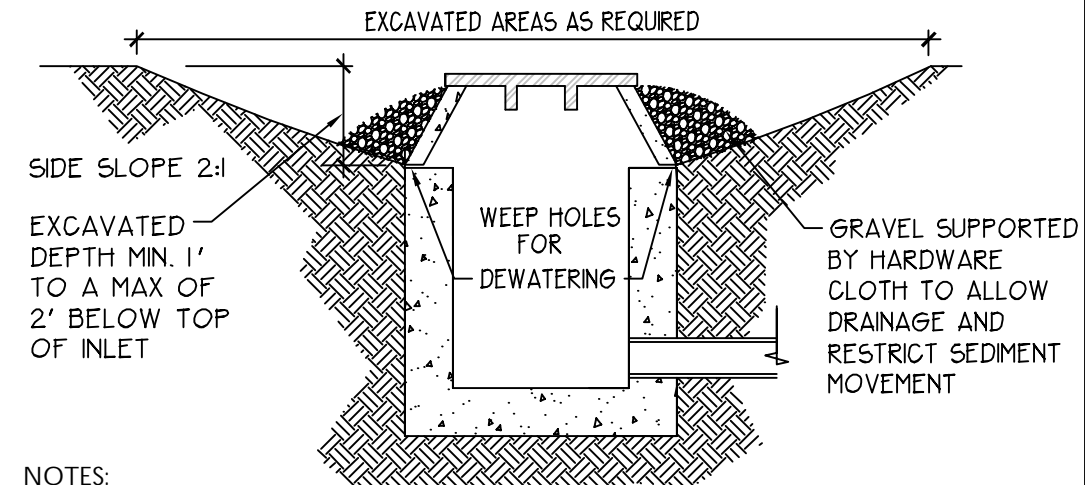
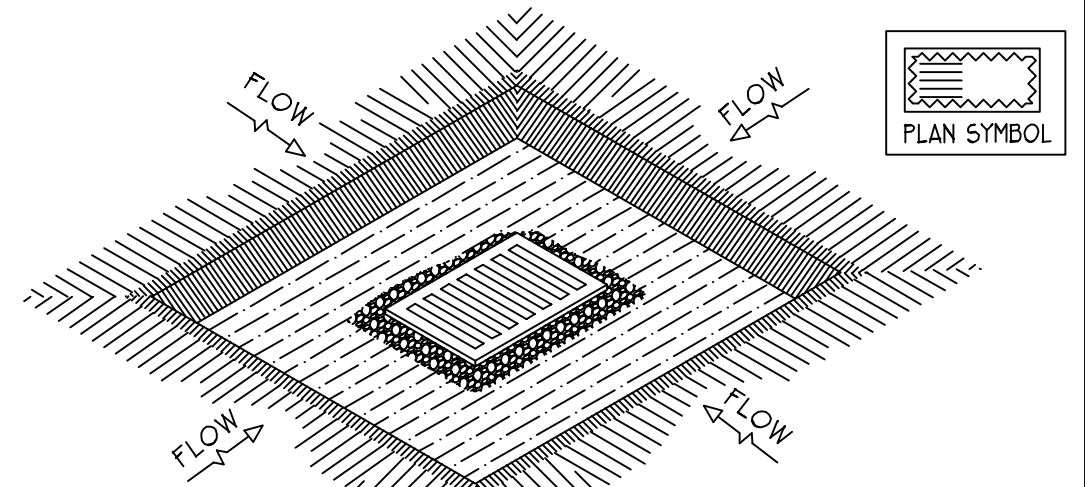
1 SHAFT UTILITY PLAN
1/4" = 1'-0"

0 2" 4" 8"
SCALE: 1/4" = 1'



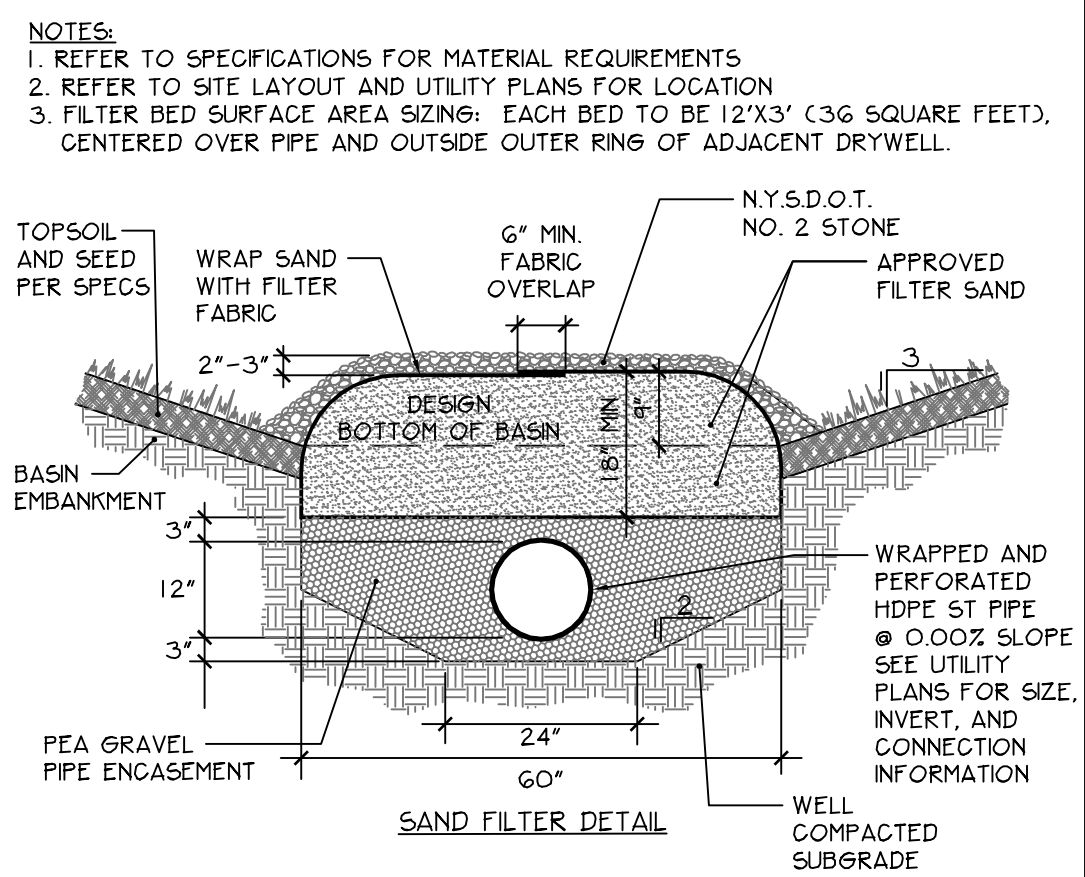


4 Silt Fence Detail
N.T.S.

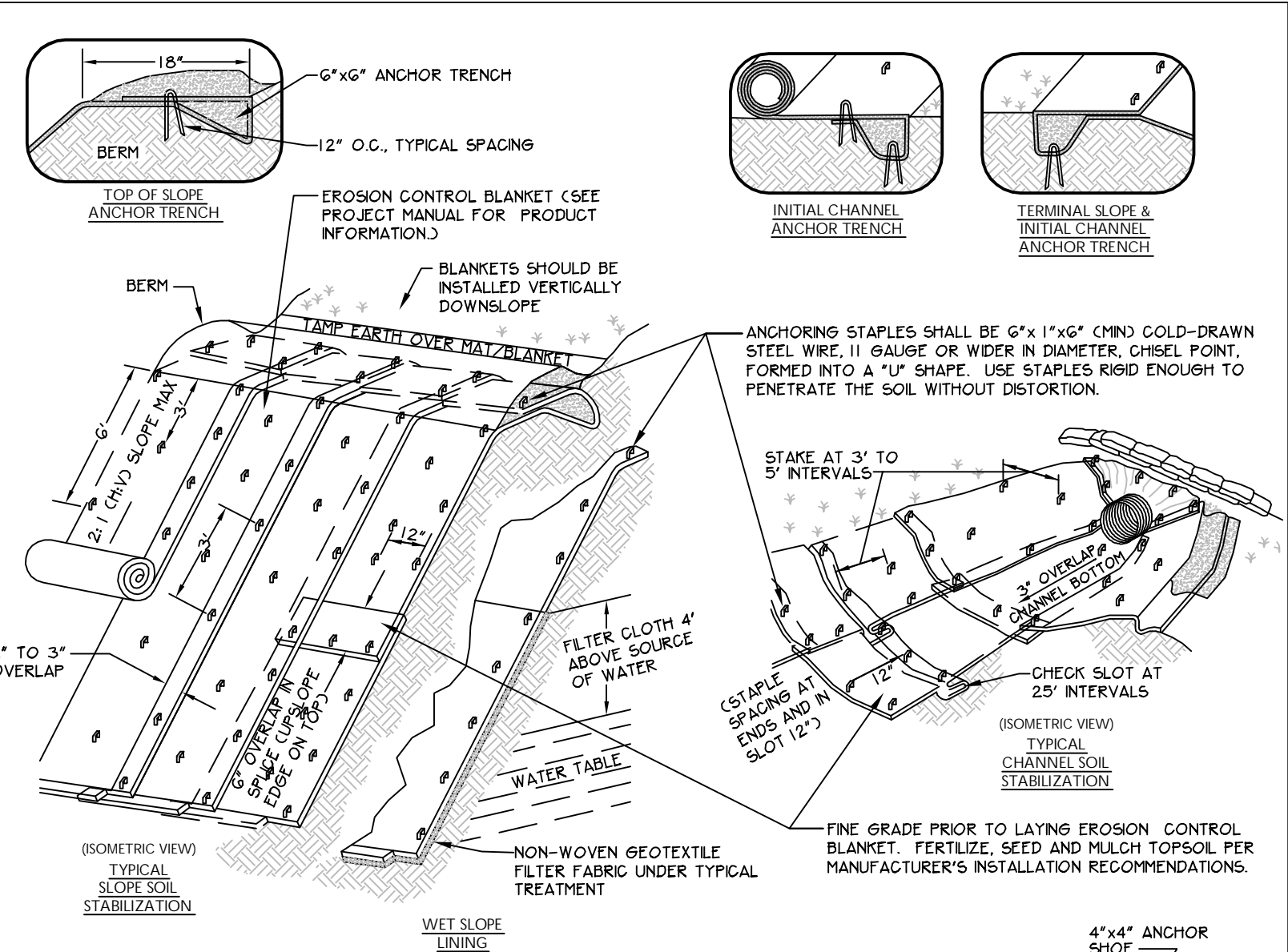


- NOTES:
- 1) CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER EXCAVATION
 - 2) GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN.
 - 3) WEEP HOLES SHALL BE PROTECTED BY GRAVEL.
 - 4) UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, SEAL WEEP HOLES, FILL EXCAVATION WITH STABLE SOIL TO FINAL GRADE, COMPACT IT PROPERLY AND STABILIZE WITH PERMANENT SEEDING.
- MAXIMUM DRAINAGE AREA 1 ACRE

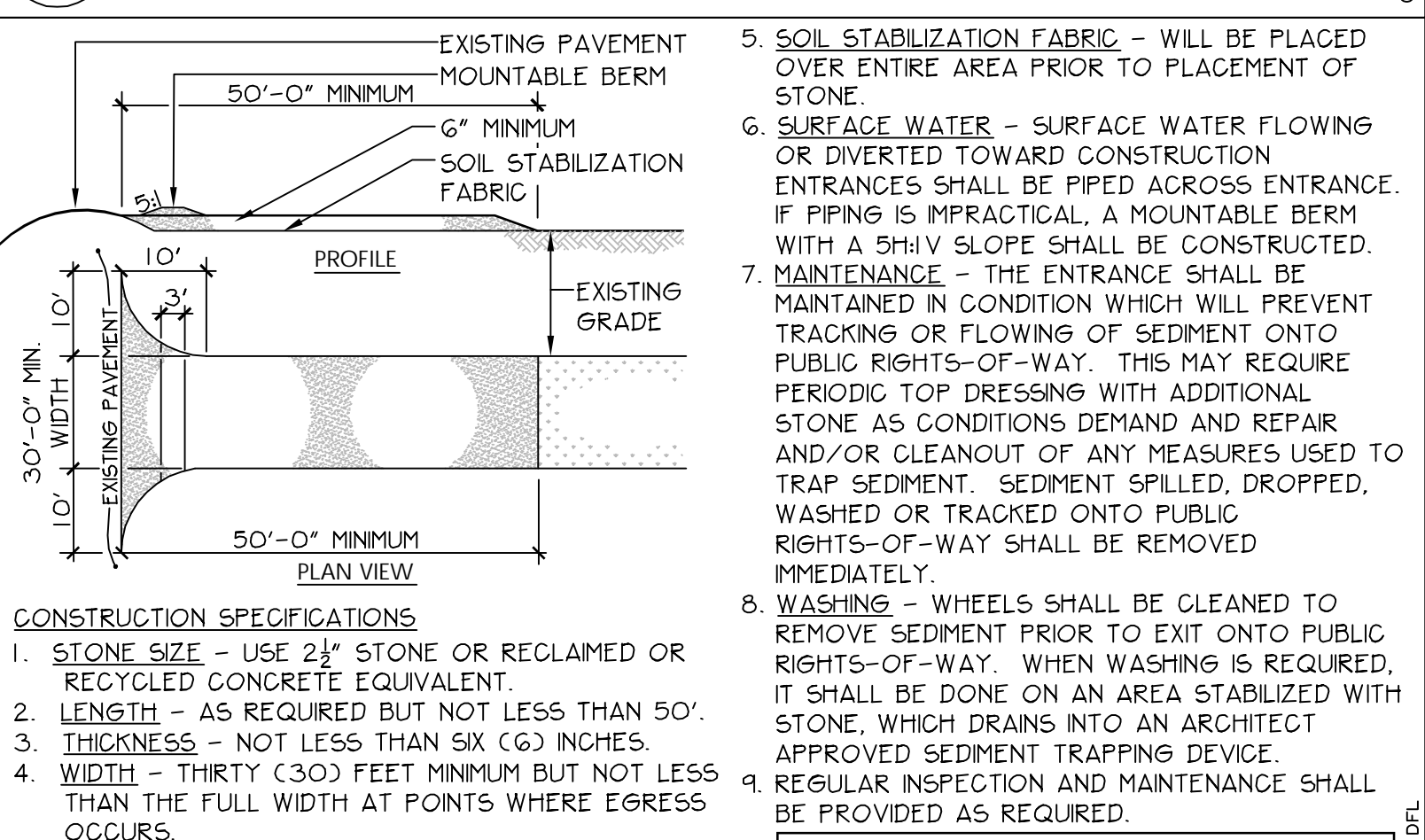
5 Drop Inlet Sediment Trap
N.T.S.



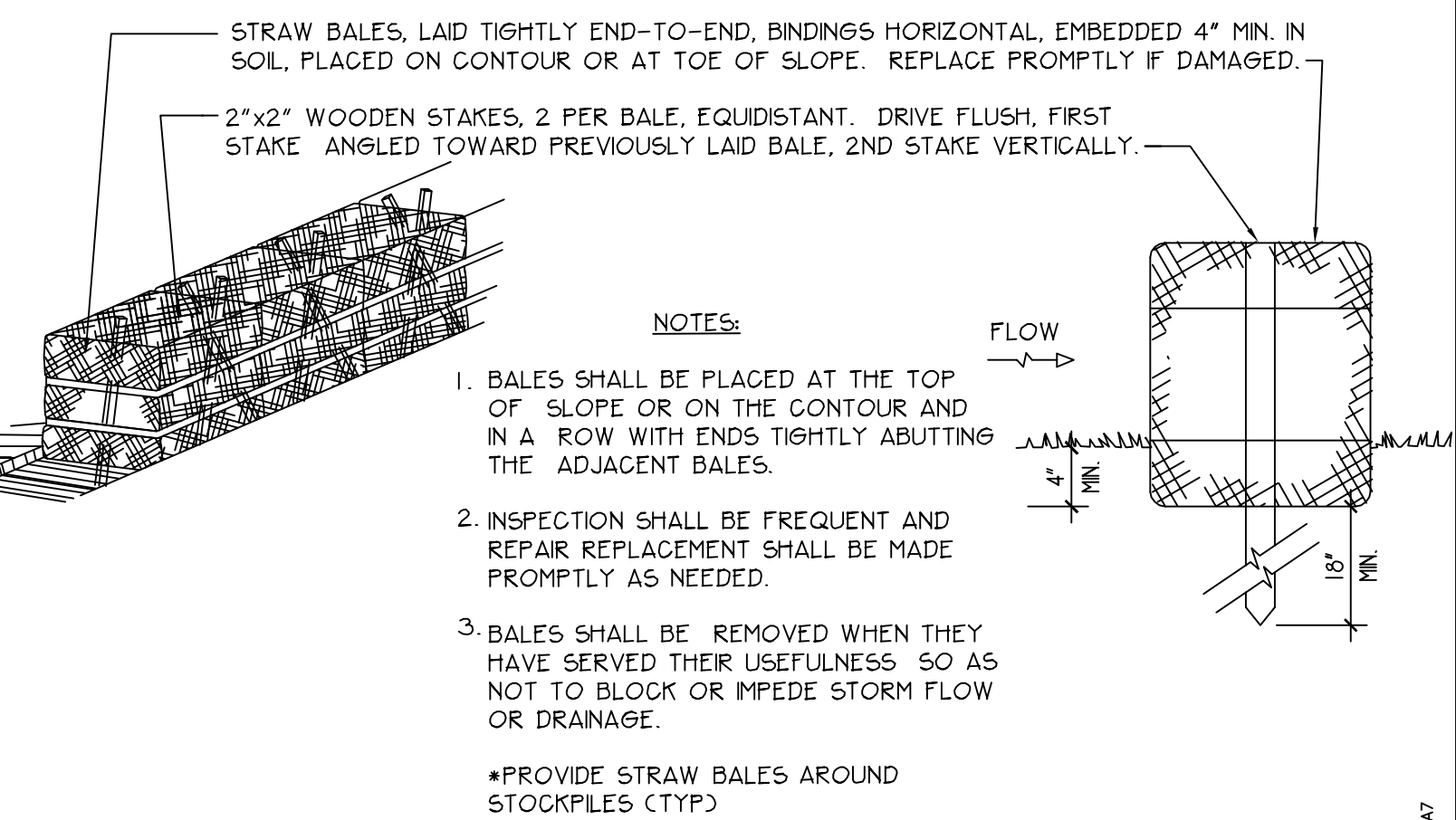
6 Basin Mound Sand Filter
N.T.S.



- NOTES:
1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. BLANKETS SHALL HAVE GOOD SOIL CONTACT.
 2. LAY BLANKETS LOOSELY AND STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
 3. FOR JUTE MESH APPLICATION, BIODEGRADABLE ANCHOR STAPLES PER MANUFACTURER'S RECOMMENDATIONS MAY BE SUBSTITUTED FOR STAPLES.
 4. CONSTRUCT CHECK SLOTS PER MANUFACTURER'S RECOMMENDATIONS.
 5. STAPLING LAYOUT AS SHOWN, OR PER MANUFACTURER'S RECOMMENDATIONS.
 6. INSTALL BLANKETS PER MANUFACTURER'S RECOMMENDATIONS.
- 1 Rolled Erosion Control Blanket - Typical
NTS
(FOR GEOTEXTILE & BIODEGRADABLE APPLICATIONS)



2 Stabilized Construction Entrance
N.T.S.



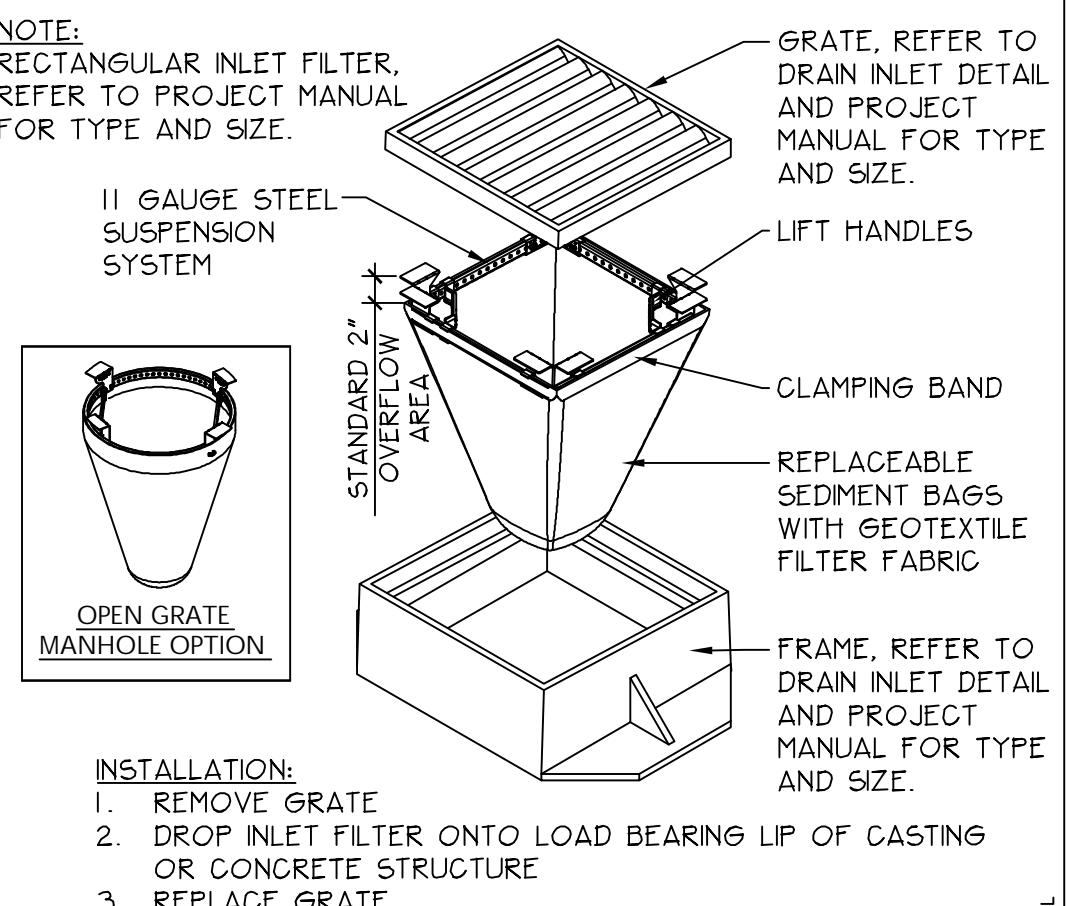
3 Straw Bale Dike Detail
N.T.S.

Site Erosion & Sediment Control Sequence

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE PAD.
2. INSTALL SILT FENCE.
3. INSTALL TEMPORARY STORM SEWER INLET PROTECTION AT ALL EXISTING DRAINAGE INLETS THAT WILL BE RECEIVING STORM DRAINAGE FROM CONSTRUCTION ACTIVITIES.
4. PREPARE CONTRACTOR ACCESS DRIVES, PARKING AND STAGING AREAS WITH APPROVED GRANULAR FILL OR OTHER SURFACING THAT WILL PREVENT EROSION OF THESE AREAS. STRIP TOPSOIL AND STOCKPILE IN AREA DESIGNATED BY OWNER.
5. SURROUND ALL STOCKPILES WITH SILT FENCE OR HAY BALE BARRIER, THROUGHOUT GRADING OPERATIONS. REFER TO DETAILS 3 AND 4, DRAWING C-500.
6. PROVIDE TEMPORARY AND PERMANENT SEEDING PER SOIL EROSION AND SEDIMENT CONTROL NOTES NOS. 2, 3, AND 4.
7. AFTER SLOPES ARE CUT OR FILLED, IMMEDIATELY PROVIDE ROLLED EROSION CONTROL BLANKET MATTING AT ALL SLOPES THAT ARE THREE HORIZONTAL TO ONE VERTICAL AND STEEPER.
8. PROVIDE ADDITIONAL EROSION CONTROL MEASURES AS REQUIRED TO MEET NEW YORK STANDARDS OR AS REQUIRED BY SOIL CONSERVATION DISTRICT AND THE NYSDEC.
9. UPON OWNER APPROVAL, REMOVE TEMPORARY SOIL + EROSION CONTROL MEASURES AFTER PERMANENT MEASURES ARE IN PLACE AND FUNCTIONING EFFECTIVELY.

General Site Notes

1. THESE GENERAL SITE NOTES APPLY TO ALL DRAWINGS.
2. PRIOR TO CONSTRUCTION, OWNER WILL LOCATE AND PROMINENTLY MARK THE PROPERTY LINES IN THE FIELD. PROTECT PROPERTY LINE MARKING AND MONUMENTS DURING CONSTRUCTION UNTIL FINAL ACCEPTANCE.
3. PRIOR TO STARTING WORK IN VILLAGE R.O.W. OR STREET, PROCURE ALL REQUIRED PERMITS NECESSARY TO PERFORM THE WORK.
4. THE SURVEY(S) AND TOPOGRAPHIC INFORMATION INCLUDED IN THESE DOCUMENTS ARE PROVIDED FOR INFORMATION ONLY AND ARE THE BASE INFORMATION USED TO PREPARE THE WORK INDICATED ON THESE DRAWINGS. THE DATA INDICATED REGARDING EXISTING CONDITIONS IS NOT INTENDED AS REPRESENTATIONS OR WARRANTIES OF THEIR ACCURACY. BY INCLUSION OF THE SURVEY(S) IN THIS SET OF DOCUMENTS, TETRA TECH AND THE OWNER DO NOT ASSUME RESPONSIBILITY FOR ACCURACY OF THE SURVEY, NOR FOR INTERPRETATIONS OR CONCLUSIONS DRAWN THEREFROM BY THE CONTRACTOR.
5. THE CONTRACTOR SHALL FIELD VERIFY EXISTING FEATURES, CONDITIONS, UTILITIES, PROPERTY LINES AND TOPOGRAPHY PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES WHICH WILL AFFECT THE WORK REQUIRED AS PART OF THE CONTRACT DOCUMENTS SHALL BE IMMEDIATELY REPORTED IN WRITING TO THE ARCHITECT. COMMENCEMENT OF WORK WITHOUT THIS WRITTEN NOTIFICATION SHALL CONSTITUTE CONTRACTOR ACCEPTANCE OF THE EXISTING INFORMATION INDICATED ON THE DRAWINGS AS ACCURATE. NO ADJUSTMENTS TO THE CONTRACT WILL BE MADE FOR THE DISCREPANCIES BROUGHT TO THE OWNER'S ATTENTION AFTER WORK HAS BEGUN.
6. NO ATTEMPT HAS BEEN MADE TO VERIFY ALL UNDERGROUND UTILITIES ON THIS DRAWING. CONTACT UNDERGROUND UTILITY LOCATION ORGANIZATION AND LOCAL UTILITY COMPANIES TO VERIFY THE LOCATION OF UTILITIES PRIOR TO EARTHWORK, TRENCHING OR EXCAVATION OPERATIONS.
7. CONTRACT LIMIT LINE SHALL BE TEN FEET OUTSIDE OF LIMITS OF WORK INDICATED ON THESE DRAWINGS AND NOT TO EXTEND BEYOND THE PROPERTY LINE UNLESS OTHERWISE INDICATED.
8. CONTRACTOR SHALL PROVIDE CONSTRUCTION/PROTECTIVE FENCING, CONES, BARRELS AND BARRICADES AS INDICATED ON DRAWINGS AND/OR OTHER MEANS NECESSARY TO PROTECT WORK AND TO ENSURE SAFETY OF THE PUBLIC, PEDESTRIANS AND VEHICULAR TRAFFIC DURING CONSTRUCTION.



7 Storm Inlet Protection - Drop In Filter
NTS

Site Erosion and Sediment Control Notes

1. INSTALL ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES IN ACCORDANCE WITH THE STANDARDS SPECIFIED IN THE NEW YORK GUIDELINES FOR URBAN EROSION AND SEDIMENT CONTROL, AND IN PROPER SEQUENCE. MAINTAIN UNTIL PERMANENT STABILIZATION IS ESTABLISHED.
2. ANY DISTURBED AREA THAT WILL BE LEFT EXPOSED FOR MORE THAN THIRTY DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PROHIBITS TEMP. SEEDING, THE DISTURBED AREA WILL BE MULCHED WITH SALT HAY OR EQUIVALENT AND BOUND IN ACCORDANCE WITH THE NY STANDARDS.
3. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, TEMPORARY SEED ALL CRITICAL AREAS SUBJECT TO EROSION IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT ACCORDING TO THE NY STANDARDS
4. PROVIDE SOIL TESTING OF IMPORTED TOPSOIL: FURNISH SOIL ANALYSIS BY A QUALIFIED SOIL-TESTING LABORATORY STATING PERCENTAGE AND PH OF ORGANIC MATTER. IF PH DOES NOT FALL BETWEEN 6.5 TO 7.5, SOIL REPORT IS TO INCLUDE WRITTEN RECOMMENDATIONS ON ADJUSTMENT REQUIRED. IF ORGANICS ARE BELOW 3%, SOIL REPORT IS TO INCLUDE WRITTEN RECOMMENDATION ON ADJUSTMENT REQUIRED TO BRING ORGANICS UP TO MINIMUM 3%.
5. STABILIZATION SPECIFICATIONS:
 - A. SOIL AMENDMENTS:

LIME - PROVIDE GROUND LIMESTONE TO PH OF 6.0.

FERTILIZER - 14 LBS/1,000 SF., 5-10-10 OR EQUIVALENT WORKED INTO SOIL A MINIMUM OF 4".
 - B. PLANTING SCHEDULE: PLANT BETWEEN MARCH 1 AND MAY 15 OR BETWEEN AUGUST 15 AND OCTOBER 1. USE WINTER RYE IF SEEDING IN OCT/NOV.
 - C. TEMPORARY SEEDING: ANNUAL RYEGRASS 30 LBS/ACRE.
 - D. PERMANENT SEEDING: SEED VARIETIES TO HAVE A MEAN RANKING OF 6.0 OR HIGHER ON THE NATIONAL TURFGRASS EVALUATION PROGRAM (NTEP). PROVIDE CONSERVATION SEED BLEND AS FOLLOWS OR ALTERNATE BLEND APPROVED BY OWNER:
 1. TALL FESCUE: 5 LB/1000 SQ. FT.
 2. PERENNIAL RYEGRASS: 1 LB/1000 SQ. FT.
 3. BIRDFOOT TREFOIL: 0.25 LB/1000 SQ. FT.
 4. COMMON WHITE CLOVER: 0.25 LB/1000 SQ. FT.
 - E. MULCHING: SALT HAY OR SMALL GRAIN STRAW AT A RATE OF 90 LBS/1,000 SF., TO BE APPLIED ACCORDING TO THE NY STANDARDS. MULCH SHALL BE SECURED BY WOOD FIBER MULCH (HYDROMULCH) AT 11-17 LBS/1,000 SF. WOOD FIBER MULCH MUST BE APPLIED THROUGH A HYDROSEEDER IMMEDIATELY AFTER MULCHING.
 - F. SEEDING RATE: SOW SEED AT A TOTAL RATE OF 6 LB/1000 SQ. FT.
 - G. MAINTENANCE: MAINTAIN AND ESTABLISH TURF BY WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING, REPLANTING, AND PERFORMING OTHER OPERATIONS AS REQUIRED TO ESTABLISH HEALTHY, VIABLE TURF UNTIL TURF IS ACCEPTED BY OWNER.
 - H. TURF COVERAGE: FOR ACCEPTANCE OF TURF, COVERAGE IS TO BE MINIMUM OF 90%.
 - I. WARRANTY PERIOD: 12 MONTHS AFTER ACCEPTABLE TURF IS ESTABLISHED, AS DETERMINED BY THE OWNER
6. GRADE AND MAINTAIN SITE SUCH THAT ALL STORM WATER RUN-OFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES. DIVERT RUN-OFF FROM ALLEN STREET AWAY FROM SITE.
7. INSPECT AND MAINTAIN ALL SEDIMENTATION STRUCTURES EVERY 7 DAYS AND/OR AS NECESSARY.
8. PROTECT ALL CATCH BASIN INLETS WITH APPROVED INLET PROTECTOR. *FLEXSTORM INLET FILTER*, OR EQUAL, OR OTHER NYSDEC APPROVED METHOD.
9. PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.
10. UPON PROJECT COMPLETION, STABILIZED CONSTRUCTION ENTRANCE AND CONSTRUCTION ACCESS AREAS TO BE RESTORED TO SPECIFIED GRAVEL AND STONE.

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General Electric Company

**TDCS
PHASE FOUR
DESIGN**

Hudson Falls, New York

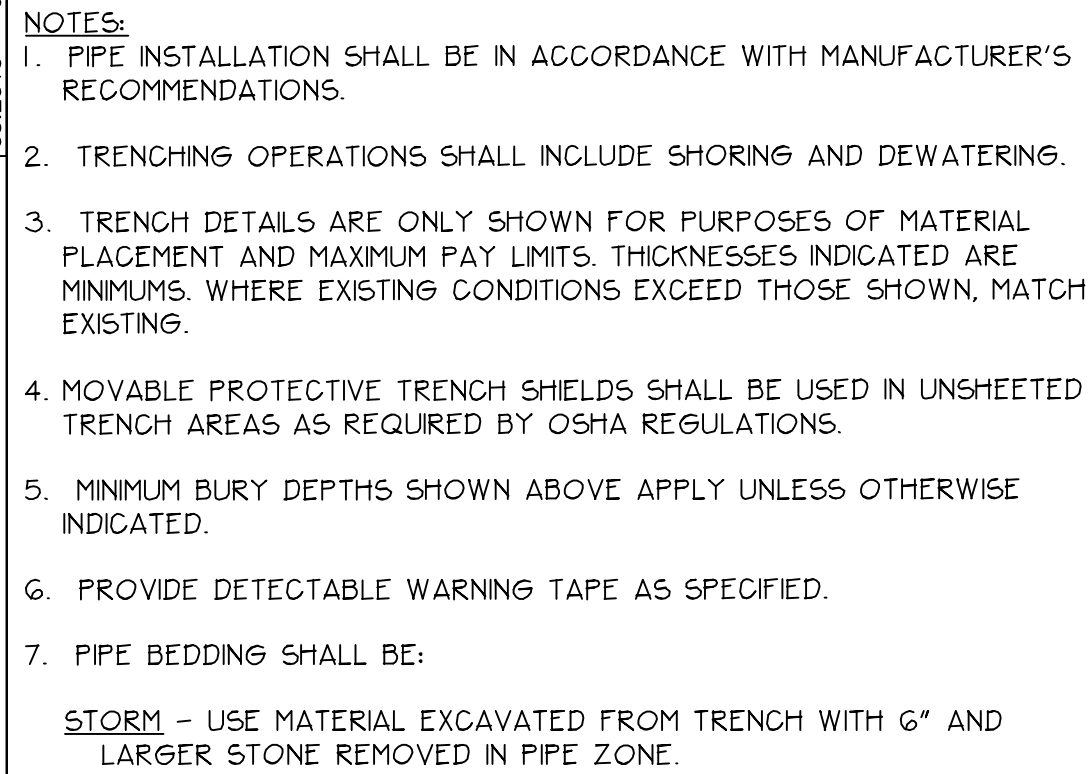
TDCS AREA: SITE DETAILS
(Sheet 1 of 3)

DRAWING TITLE:

DRAWING NUMBER:



6	Cast-In-Place Concrete Curb and Gutter	N.T.S.
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ISSUE DATES

**TETRA TECH ENGINEERS, ARCHITECTS
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CHECKED BY: _____ PLF

SCALE: VARIES

APPROVED BY: _____ DRH

DATE: DECEMBER 21, 2012

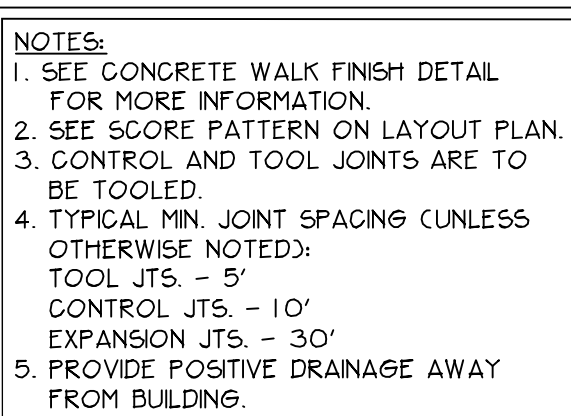
CAD FILE: C-100-01299-1200

TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

DRAWING TITLE

DRAWING NUMBER



N.T.S

SECTION



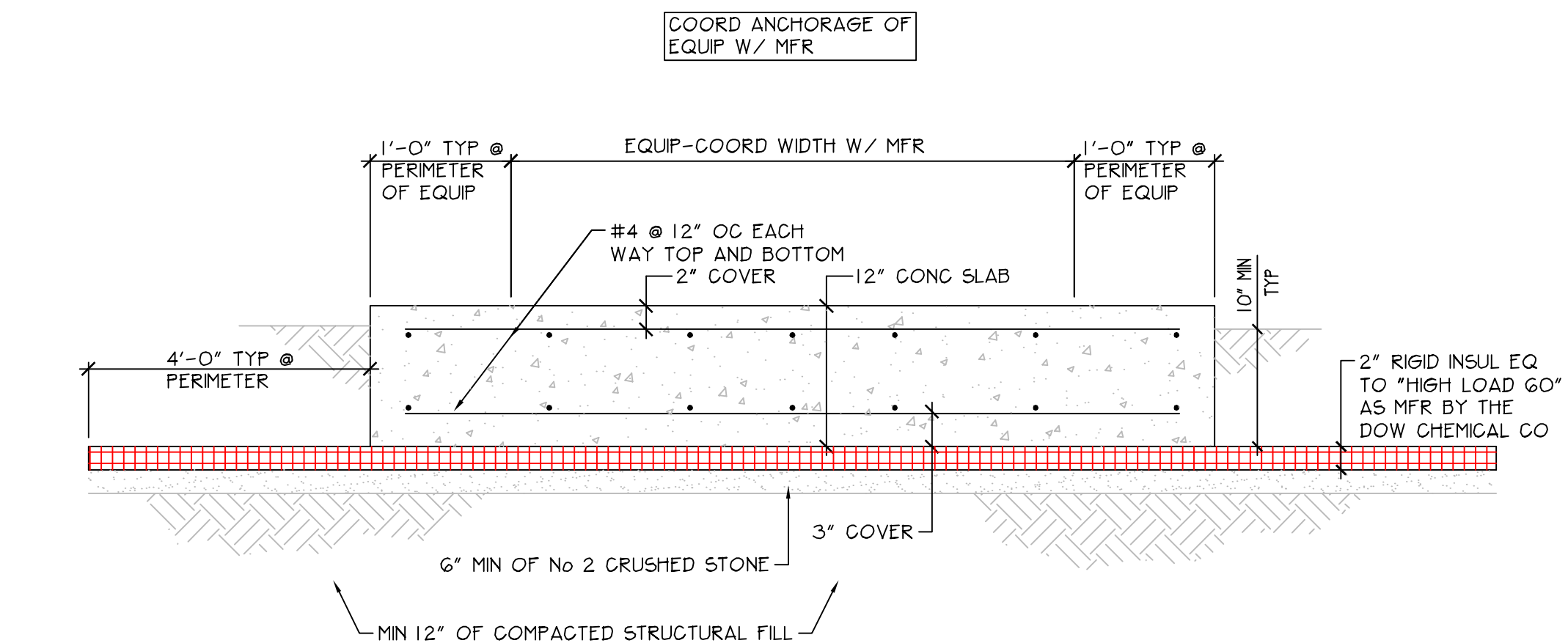
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N.T.S.



N.T.S.



N.T.S

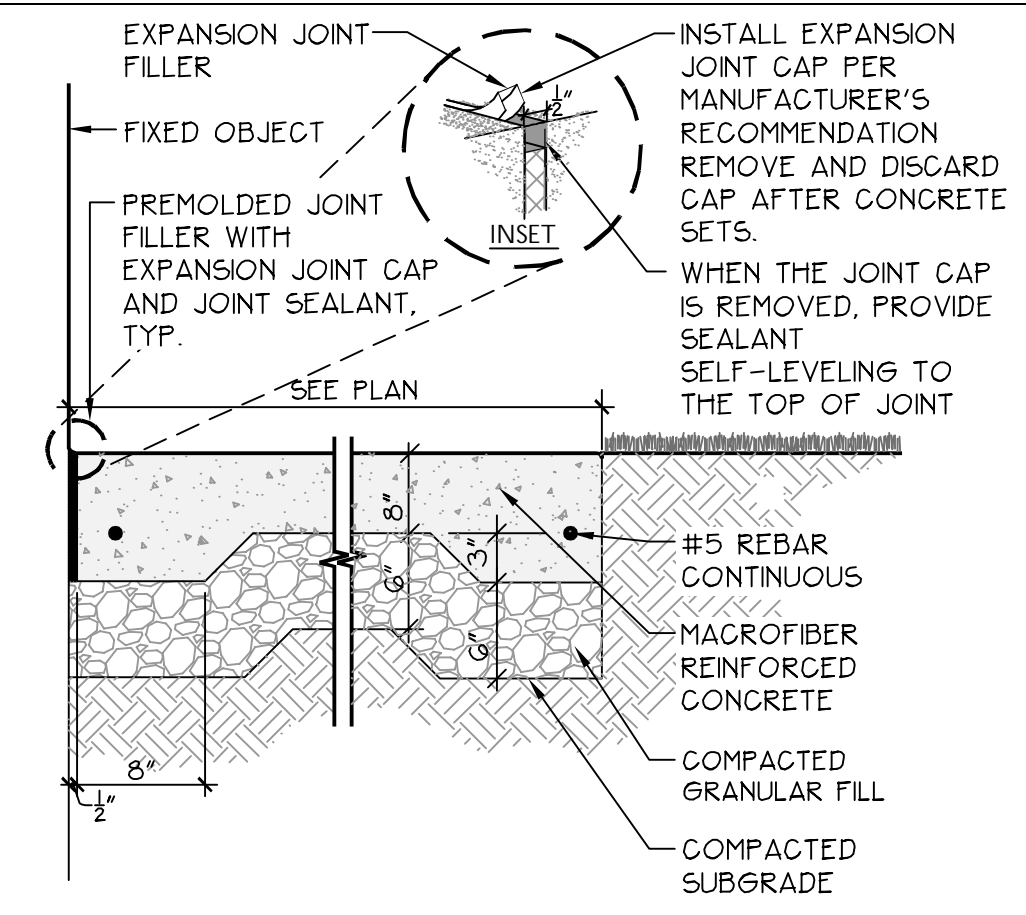
SECTION



N.T.S.



N.T.S.



N.T.S

SECTION



NTS

The drawing consists of two parts: a Plan View at the top and an Elevation at the bottom.

Plan View: Shows the top-down layout of the gate. It features a central section labeled "TO OPEN" with a dashed arrow pointing to the right. Below this, a dimension line indicates "DISTANCE EQUALS NORMAL WIDTH OF GATE". To the right, another dimension line indicates "SEE CHART FOR DISTANCES".

Elevation: Shows the side view of the gate. It depicts a structure with vertical posts and horizontal rails. The gate panels are filled with a cross-hatch pattern. The structure is supported by a base. Dimensions on the right side indicate a height of "3'-6\"/>

Not to Scale



NTS

REVISIONS

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RCN: 1121C04086

DRAWN BY: TS

CHECKED BY: SJM

SCALE: 1/2" = 1'-0"

APPROVED BY: DRH

DATE: DECEMBER 21 2012

CAD FILE: A-105-01299-12001

General Electric Company

TDCS
PHASE FOUR
DESIGN

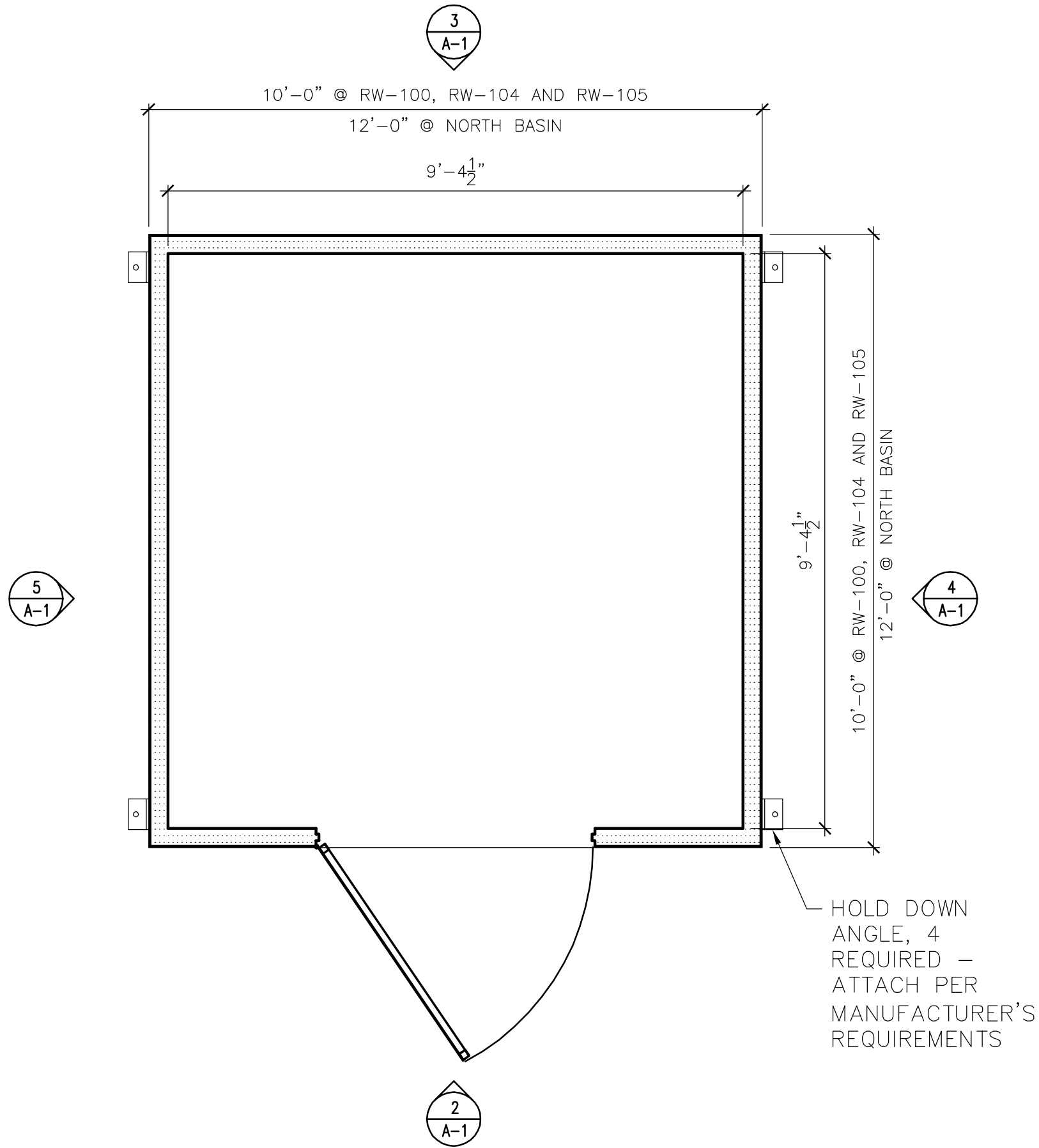
Hudson Falls, New York

CHEMICAL STORAGE BUILDING PLAN AND ELEVATIONS
AT RW-100, 104,105 AND NORTH BASIN

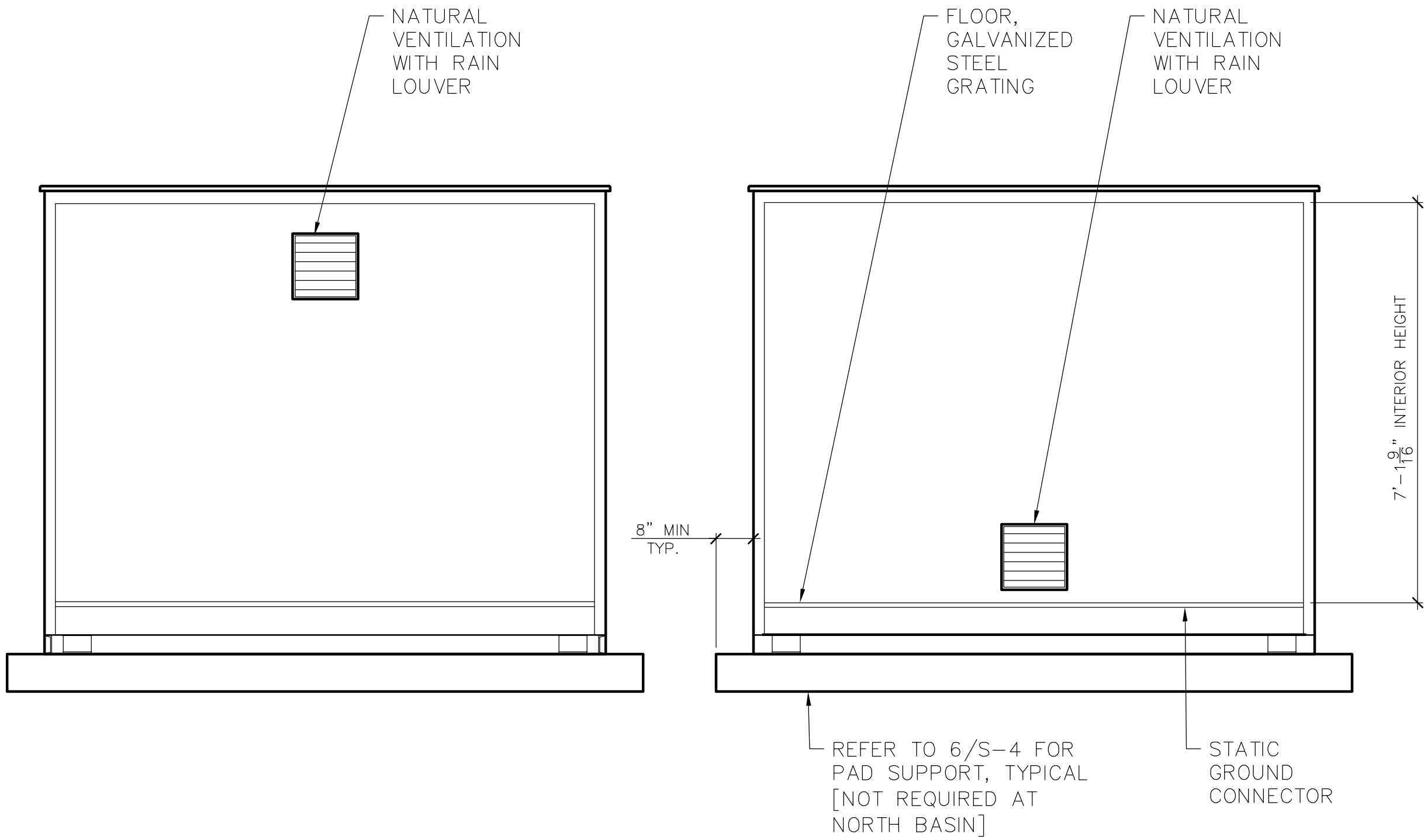
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DRAWING NUMBER:

A-1

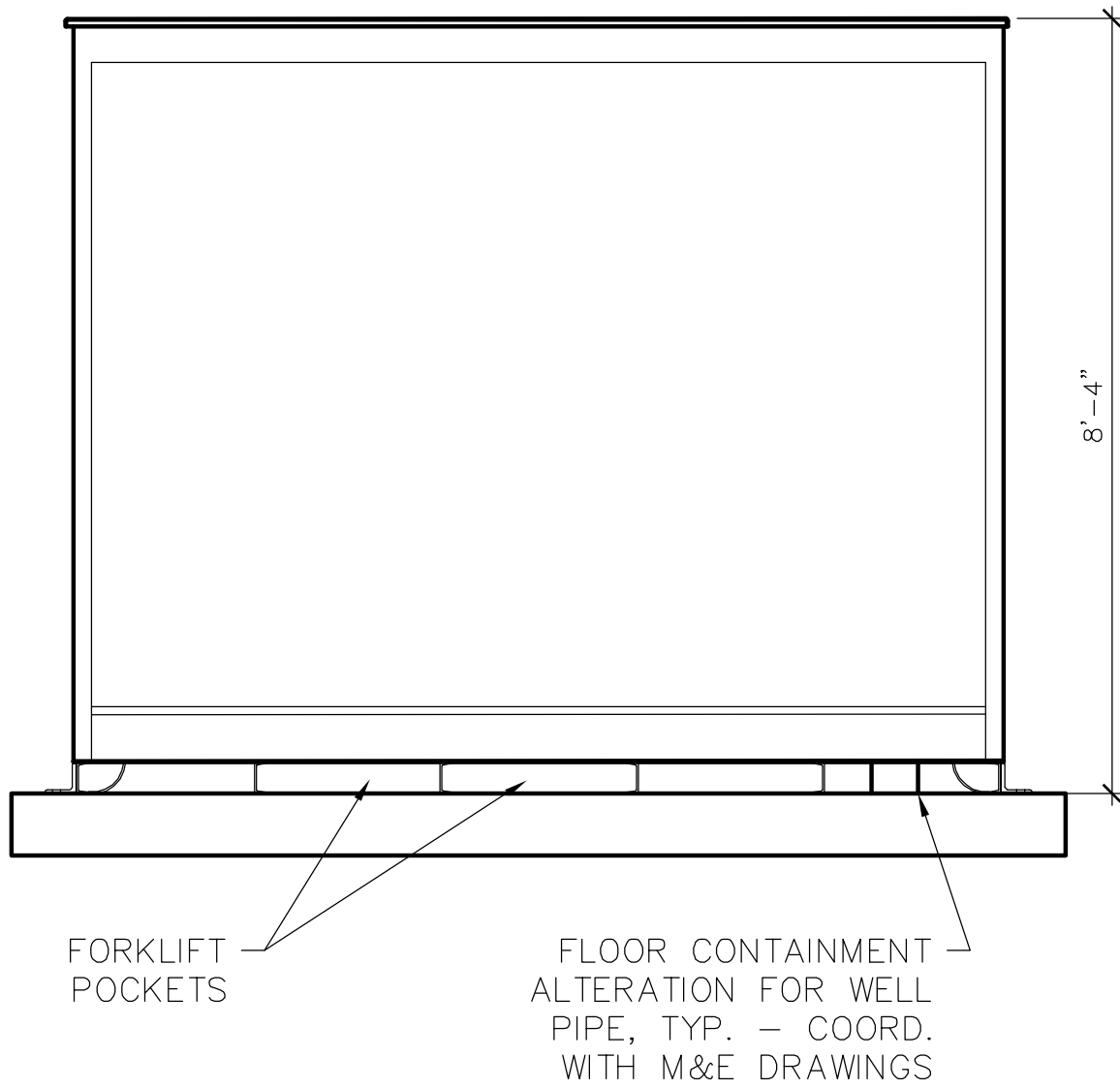


1 FLOOR PLAN
1/2" = 1'-0"

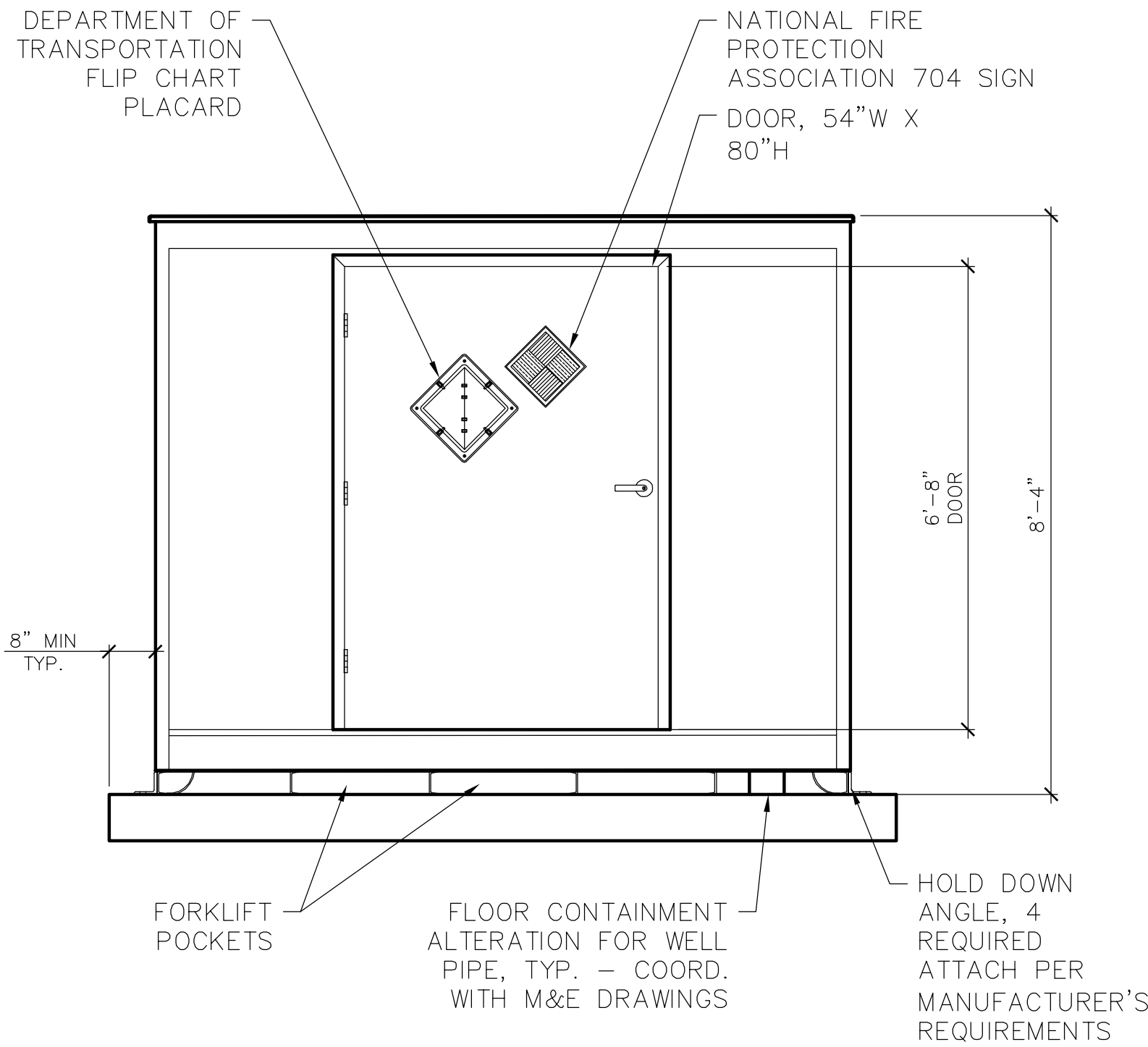


5 LEFT ENDWALL ELEVATION
1/2" = 1'-0"

4 RIGHT ENDWALL ELEVATION
1/2" = 1'-0"



3 REAR ELEVATION
1/2" = 1'-0"



2 FRONT ELEVATION
1/2" = 1'-0"

Notes

- A. DO NOT SCALE DRAWINGS TO OBTAIN DIMENSIONS.
- B. TAKE FIELD MEASUREMENTS TO FIT THE WORK PROPERLY. VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS IN THE FIELD.
- C. REFER INCONSISTENCIES TO ARCHITECT PRIOR TO COMMENCING THE WORK IN AFFECTED AREA.
- D. ITEMS ARE SHOWN DIAGRAMMATICALLY ON DRAWINGS. VERIFY SPACE REQUIREMENTS AND DIMENSIONS TO FIT THE WORK PROPERLY.
- E. NOTES SHOWN ON ONE DRAWING APPLY TO ALL SIMILAR DRAWINGS.

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TDCS
PHASE FOUR
DESIGN

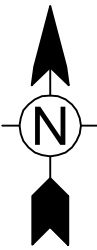
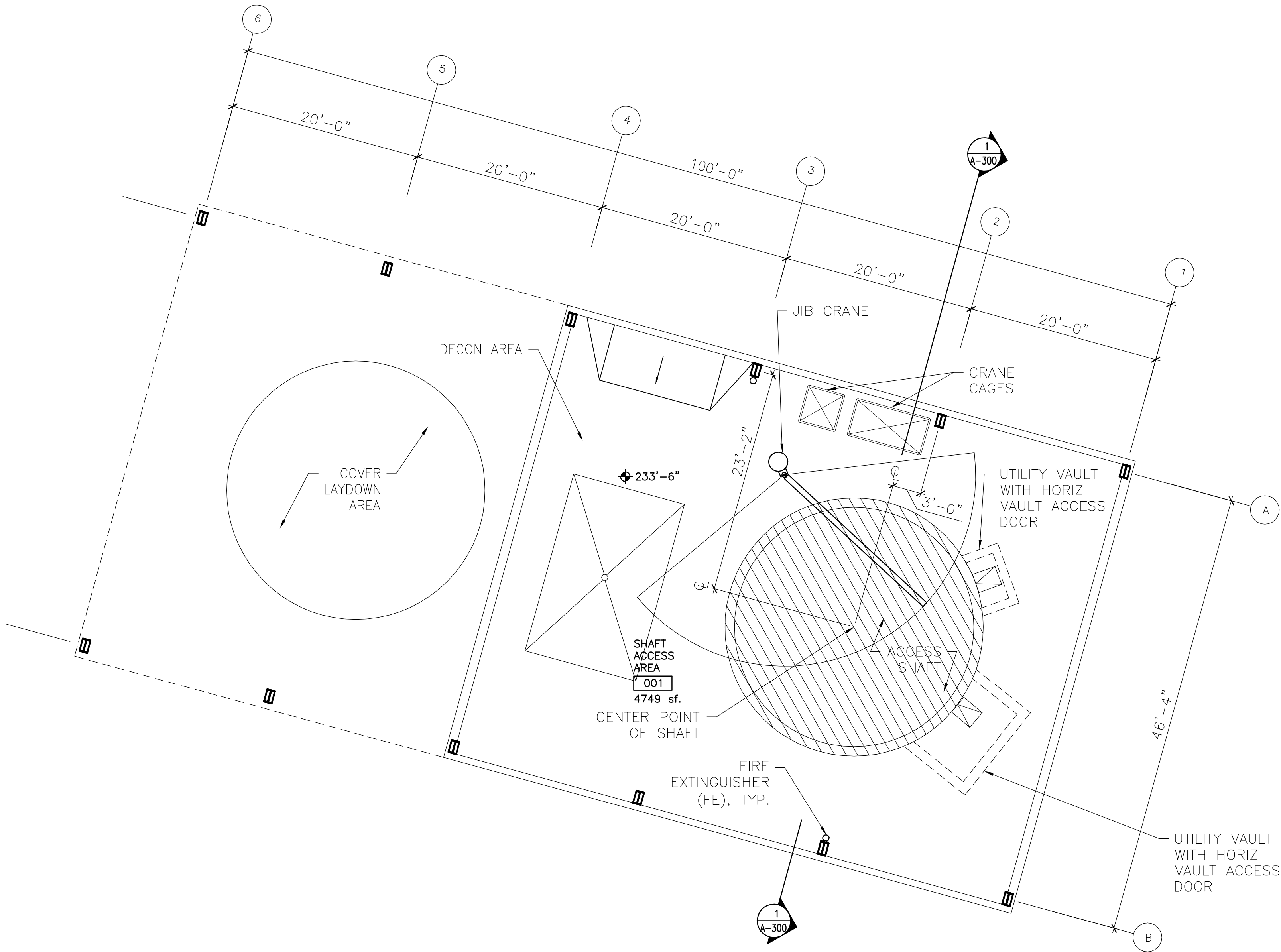
Hudson Falls, New York

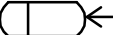
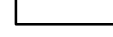
TDCS BUILDING
FLOOR PLAN

DRAWING TITLE:

DRAWING NUMBER:

A-100



Ceiling Types	(2011-03) arch-city
C	PAINTED EXPOSED STEEL SECTION OR LINTEL.
D	PAINTED EXPOSED STRUCTURAL SYSTEM, SUPPORT MATERIALS AND FASTENERS, MECHANICAL SYSTEM, ELECTRICAL ITEMS AND PIPING.
	DESIGNATES BOTTOM OF CEILING ABOVE FINISHED FLOOR AT THAT POINT UNO.
	DESIGNATES CEILING TYPE (SEE LIST ABOVE)

REVISIONS

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RCN: 1121C04086

DRAWN BY: TS

CHECKED BY: SJM

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

APPROVED BY: DRH

DATE: DECEMBER 21, 2012

CAD FILE: A-102-01299-12001

General Electric Company

TDCS
PHASE FOUR
DESIGN

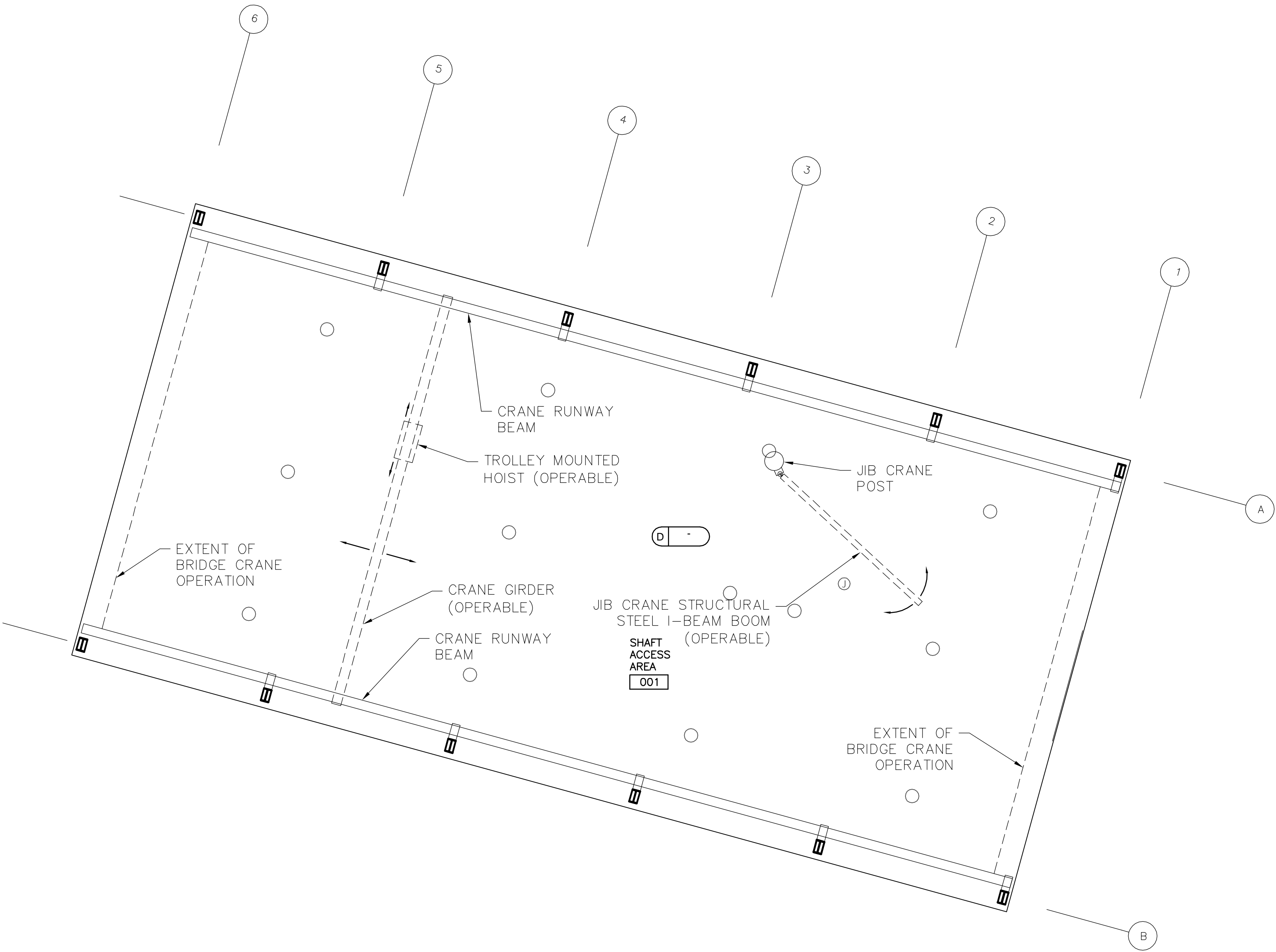
Hudson Falls, New York

TDCS BUILDING
REFLECTED CEILING PLAN

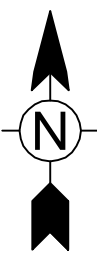
DRAWING TITLE:

DRAWING NUMBER:

A-102



1 REFLECTED CEILING PLAN
1/8" = 1'-0"



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RCN: 1121C04086

DRAWN BY: TS

CHECKED BY: SJM

SCALE: AS NOTED

APPROVED BY: DRH

DATE: DECEMBER 21, 2012

CAD FILE: A-300-01299-12001

General Electric Company

TDCS
PHASE FOUR
DESIGN

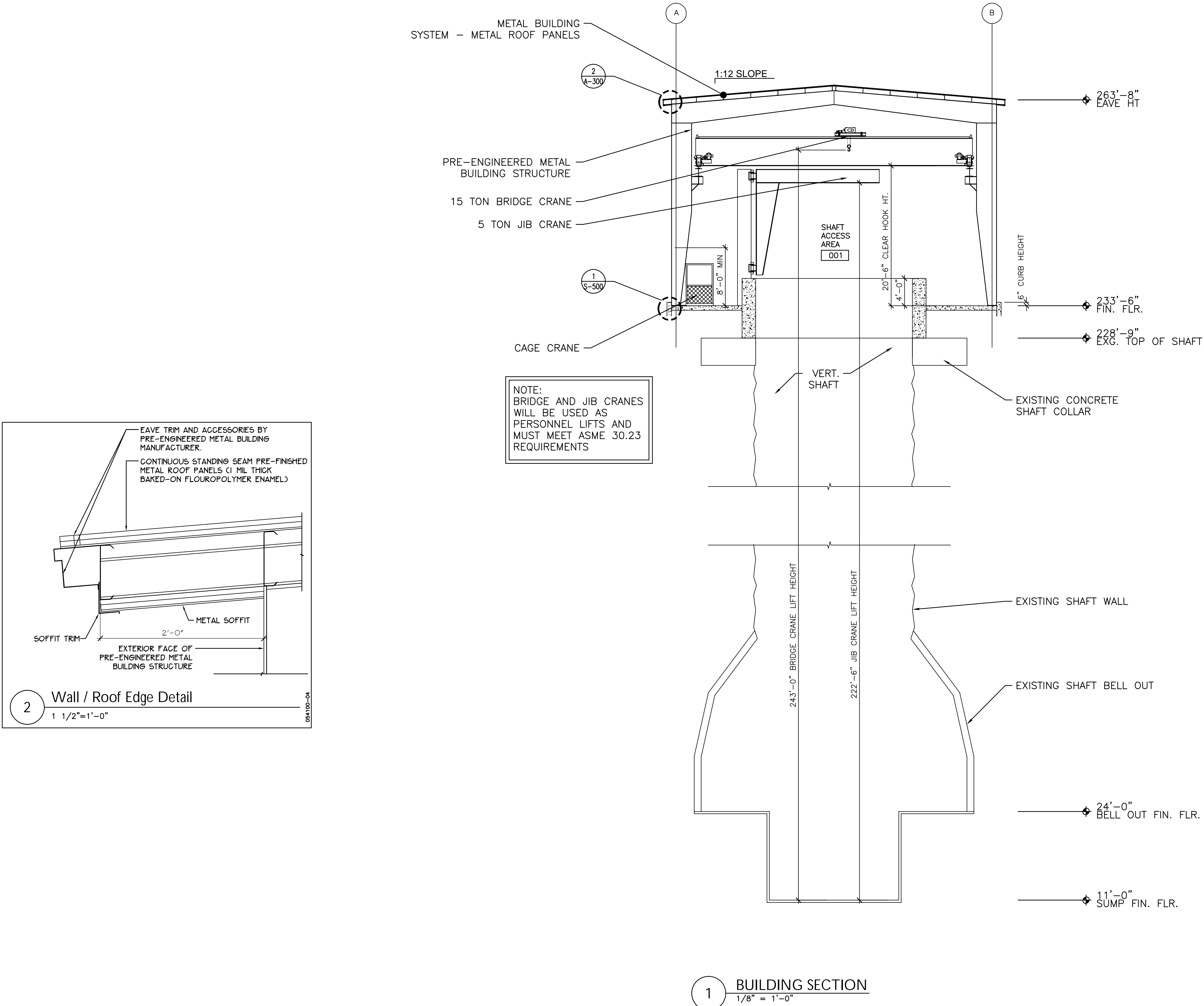
Hudson Falls, New York

TDCS BUILDING
BUILDING SECTION

DRAWING TITLE:

DRAWING NUMBER:

A-300





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RCN: 1121C04086

DRAWN BY: MHH

CHECKED BY: SJM

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

APPROVED BY: DRH

DATE: DECEMBER 21, 2012

CAD FILE: A-100-01299-12001

General Electric Company

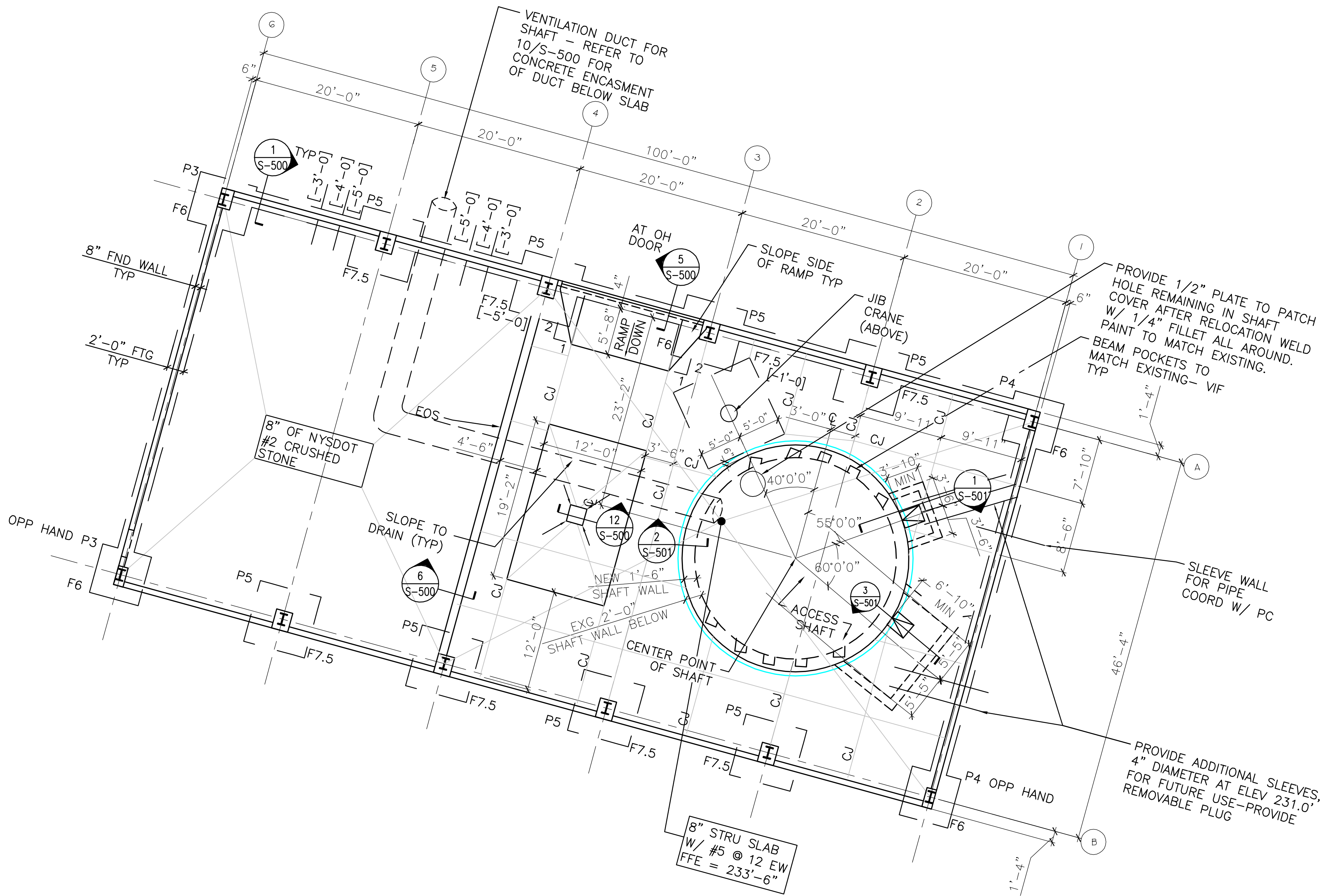
TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

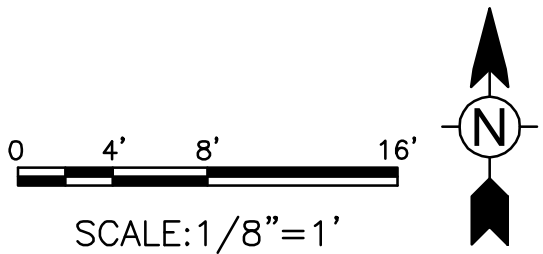
TDCS BUILDING
FINISH PLAN

DRAWING TITLE: _____

DRAWING NUMBER: _____



1 FOUNDATION PLAN
1/8" = 1'-0"



NOTES

1. ALL UNDERGROUND UTILITIES WITHIN THE NEW BUILDING FOOTPRINT ARE TO BE REMOVED PRIOR TO BEGINNING FOUNDATION WORK IN THAT AREA (UNLESS NOTED OTHERWISE). REFER TO "C" AND "M" DWGS FOR REMOVAL.
2. COORDINATE SIZE, LOCATION AND INVERT ELEVATION OF ALL PIPE SLEEVES PASSING THROUGH FOUNDATION WALLS AND BREAKS IN FOOTINGS WITH OTHER TRADES AND CONTRACT DOCUMENTS.
3. TOP OF FOOTING ELEVATION IS [-3'-0"] FROM DATUM ELEVATION 234'-0", UNLESS INDICATED AS [-XX'-XX] ON PLAN.
4. ALL CONTINUOUS FOOTINGS ARE 2'-0" WIDE UNLESS OTHERWISE NOTED.
5. REFER TO SHEET S-601 FOR GENERAL NOTES, PIER, FOOTING AND COLUMN SCHEDULES.
6. TOP OF FOUNDATION WALL ELEVATION IS EQUAL TO DATUM ELEVATION 234'-0" UNO.
7. TOP OF PIER ELEVATION IS (-0) FROM DATUM ELEVATION 234'-0", UNLESS INDICATED AS (-XX'-XX) ON PLAN.
8. REFER TO SHEETS S-500 FOR TYPICAL FOUNDATION WALL AND SLAB DETAILS.
9. CONTROL JOINTS ARE SHOWN IN THE SLAB ON GRADE FOR:
 - AREAS IN WHICH THE JOINTS IN THE SLAB ARE TO BE COORDINATED WITH JOINTS IN FLOOR FINISH
 - FOR CERTAIN EXPOSED SLAB AREASDIAMOND ISOLATION JOINT AROUND COLUMNS ARE NOT SHOWN ON PLAN FOR CLARITY. JOINTS IN OTHER AREAS ARE NOT SHOWN, INSTALL PER SPEC AND DETAILS. SEE TYPICAL DETAILS ON SHEET S-500.
10. FINISHED FLOOR DATUM ELEVATION OF 234'-0", AS SHOWN ON ARCHITECTURAL AND STRUCTURAL DRAWINGS, CORRESPONDS TO ELEVATION 234'-0", AS SHOWN ON SITE AND SURVEY DRAWINGS.
11. ALL SLABS ON GRADE ARE TO BE, 3500 PSI FIBER REINFORCED CONCRETE UNLESS OTHERWISE NOTED ON PLANS.

NOTE:
THE FOUNDATION DESIGN (INCLUDING ANCHOR BOLT DESIGN) IS BASED ON PRELIMINARY DESIGN DATA AND IS SUBJECT TO CHANGE ACCORDING TO FINAL DESIGN DATA OBTAINED FROM THE PRE-ENGINEERED BUILDING MANUFACTURER.

PRIOR TO EXCAVATION FOR AND CONSTRUCTION OF FOUNDATION, CONTRACTOR TO COORDINATE PRE-ENGINEERED BUILDING REQUIREMENTS WITH ARCH TO DETERMINE IF ANY MODIFICATIONS TO FOUNDATION AND/OR ANCHOR BOLTS ARE REQUIRED.

CONTRACTOR TO COORDINATE DIMENSIONS WITH ARCH DRAWINGS AND PRE-ENGINEERED BUILDING MANUFACTURER.

PRE-ENGINEERED BUILDING NOTES:

1. PRE-ENGINEERED BUILDING MANUFACTURER TO PROVIDE CONNECTION FOR BRIDGE CRANE RAIL TO STRUCTURE COORDINATE WITH BRIDGE CRANE MANUFACTURER.
2. MAX LOAD AT EACH BUILDING BENT COLUMN FROM BRIDGE CRANE TO BE 55 KIPS.

UNSUITABLE SOIL NOTES

UNSUITABLE SOILS EXIST WITHIN THE NEW BUILDING FOOTPRINT IN THIS AREA. WHERE THESE UNSUITABLE SOILS ARE PRESENT BELOW THE NEW FOOTING BEARING ELEVATIONS THEY WILL BE REQUIRED TO BE REMOVED AND REPLACED WITH TYPE I FILL - REFER TO SPEC SECTION 02300.

IN ADDITION TO THE EXCAVATION WORK REQUIRED TO PLACE FOUNDATIONS, SLABS AND STRUCTURES AS SHOWN ON THE DRAWINGS, INCLUDE IN THE CONTRACT BASE BID THE COST OF EXCAVATION AND REPLACEMENT OF:

1. 300 CUBIC YARDS OF UNSUITABLE SOIL (REPLACED WITH TYPE I FILL, PLACED AND COMPACTED PER SPECIFICATION SECTION 02300).

COST IS TO INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, ETC. REQUIRED TO EXCAVATE, REMOVE AND LEGALLY DISPOSE OF (OFF SITE). THE UNSUITABLE SOILS, AND REPLACE WITH TYPE I FILL AS INDICATED ABOVE. THIS WORK IS TO BE PERFORMED IN ACCORDANCE WITH APPLICABLE SPECIFICATION SECTIONS. DURING CONSTRUCTION, THE OWNERS GEOTECHNICAL ENGINEER WILL DETERMINE THE EXACT EXTENT OF THE UNSUITABLE SOIL TO BE REMOVED.

CONTRACTORS OPTIONS:
FLOWABLE FILL (SUBMIT TO A/E FOR APPROVAL) MAY BE USED IN LIEU OF TYPE I FILL AT NO ADDITIONAL OCST TO THE OWNER.

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

APPROVED BY: DRH

DATE: DECEMBER 21, 2012

CAD FILE: S-100-01299-12001

General Electric Company

TDCS
PHASE IFOUR
DESIGN

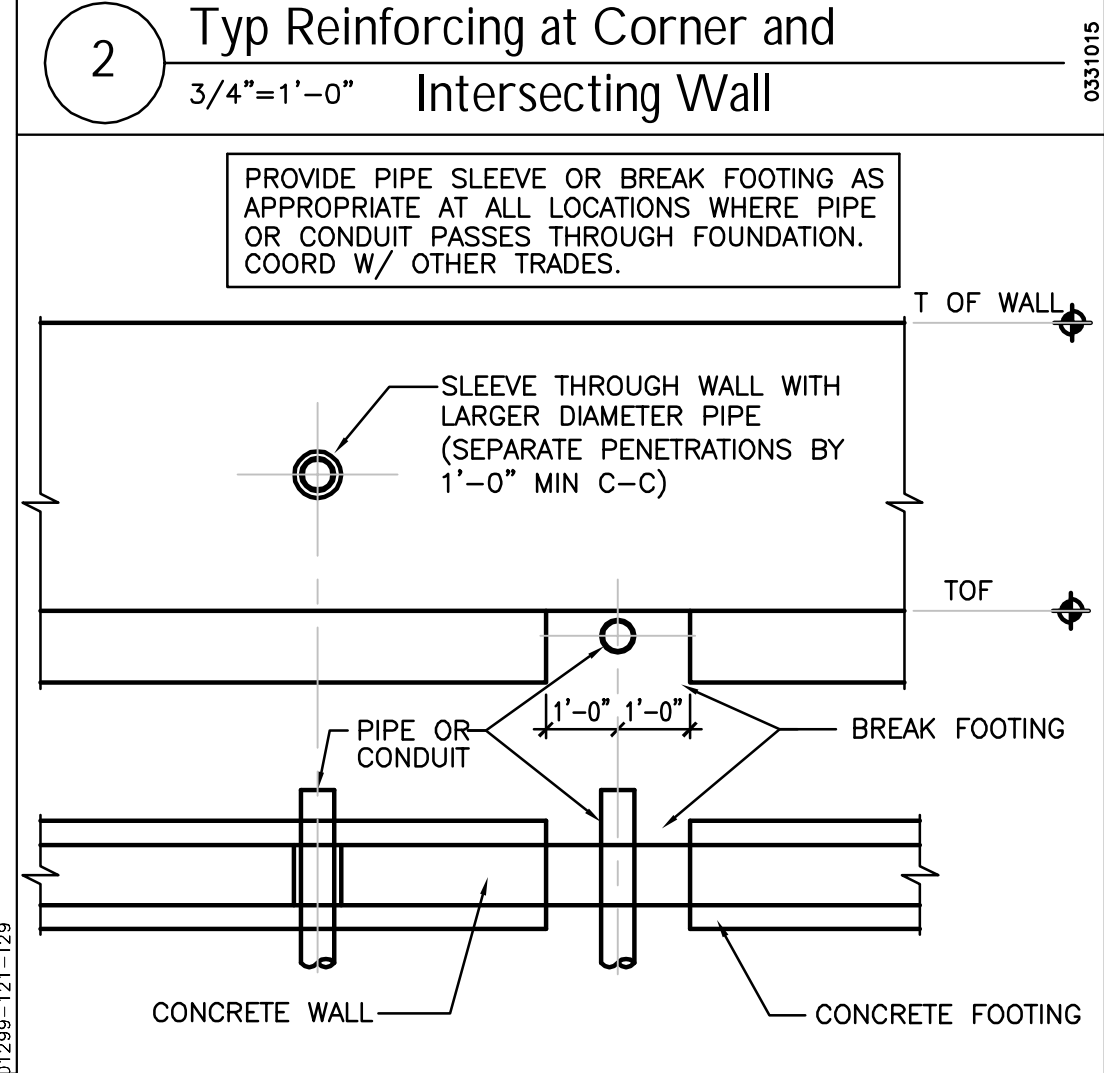
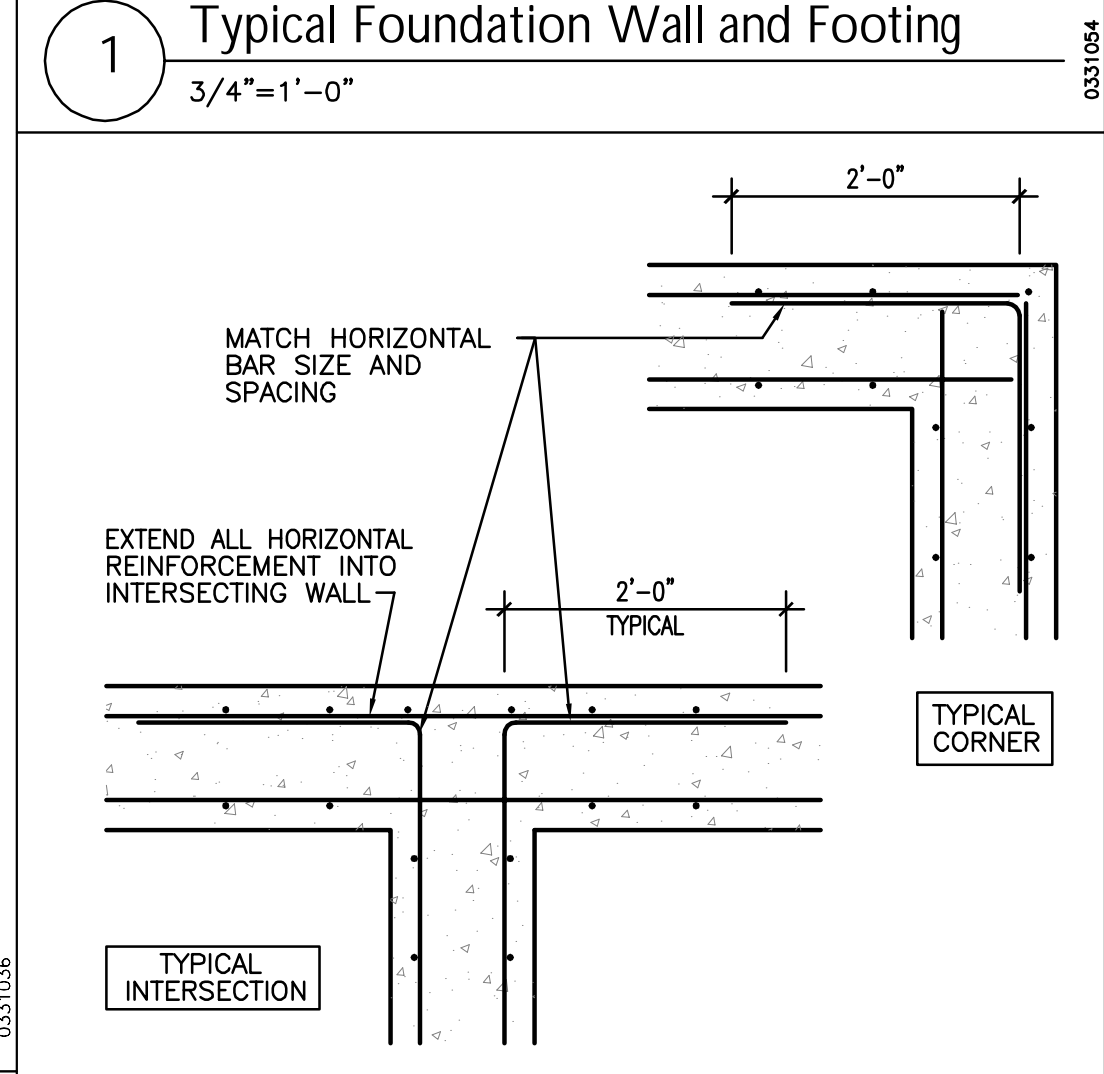
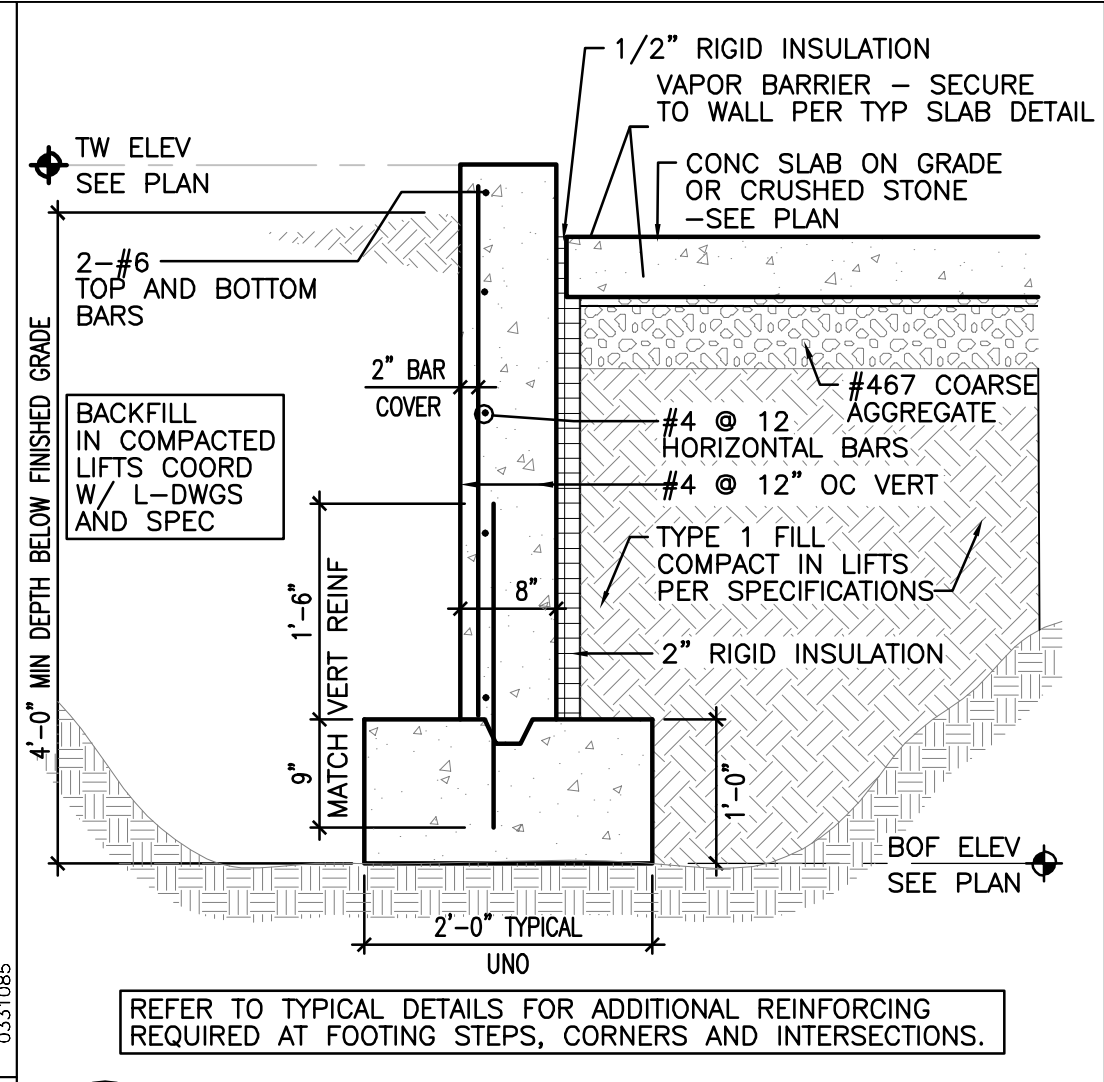
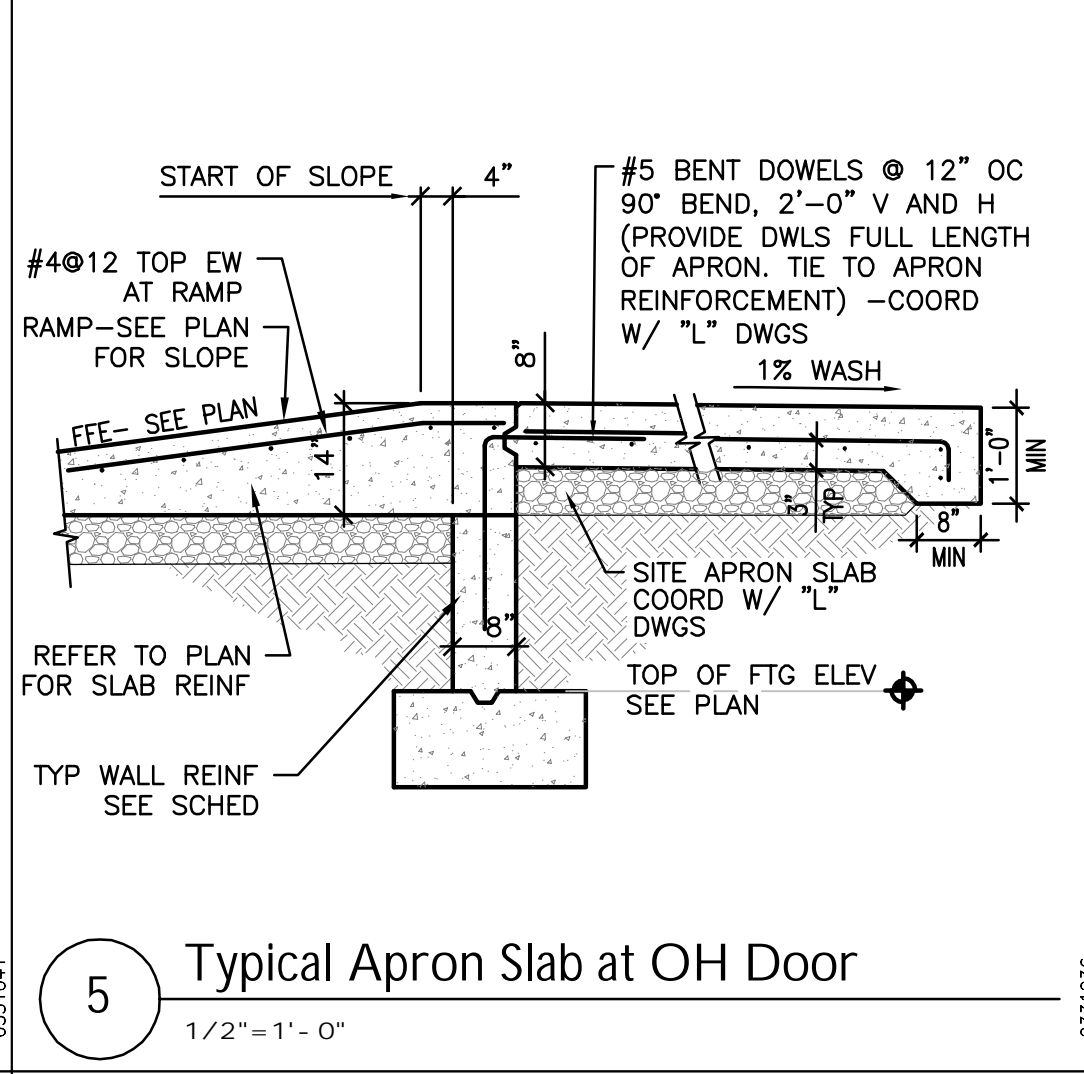
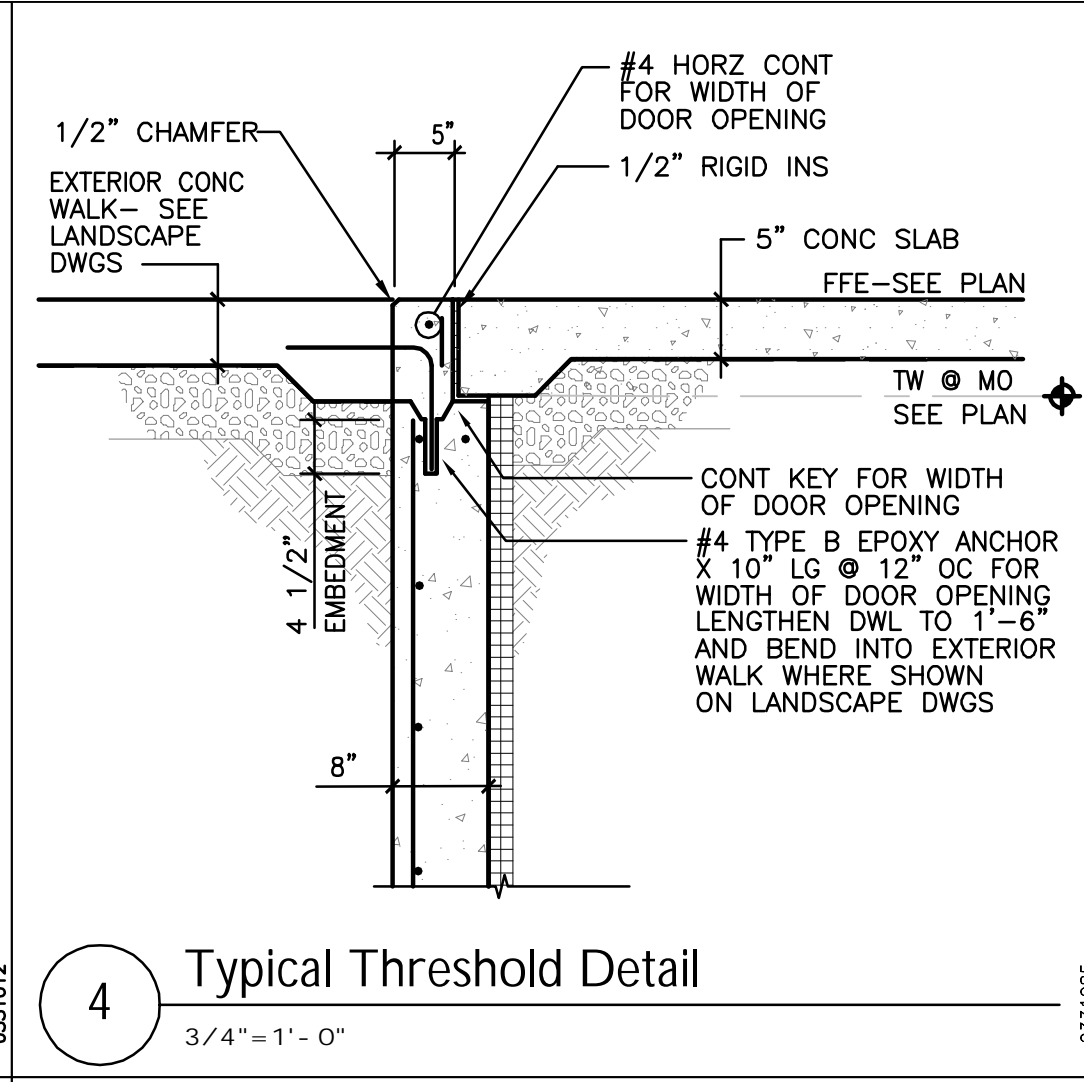
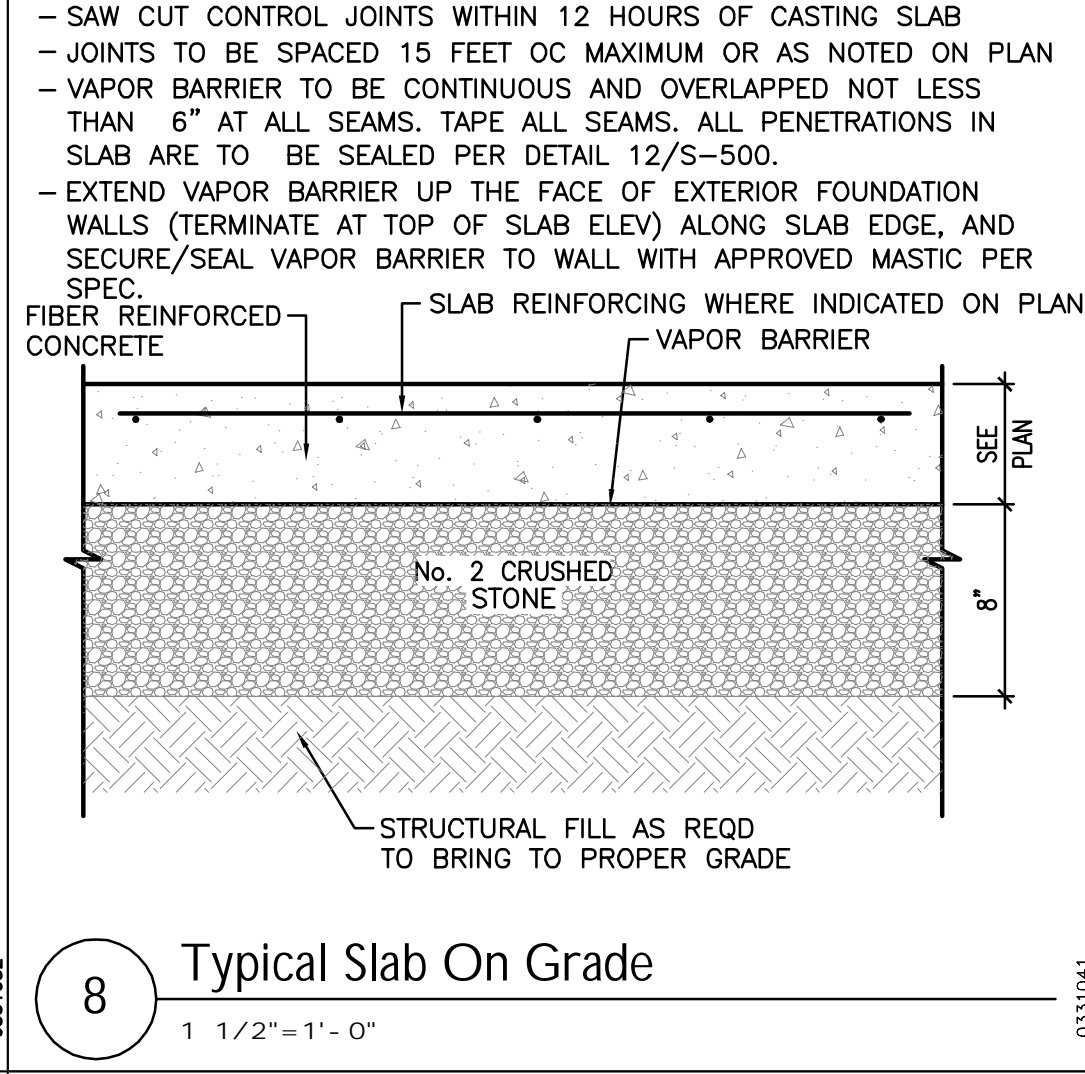
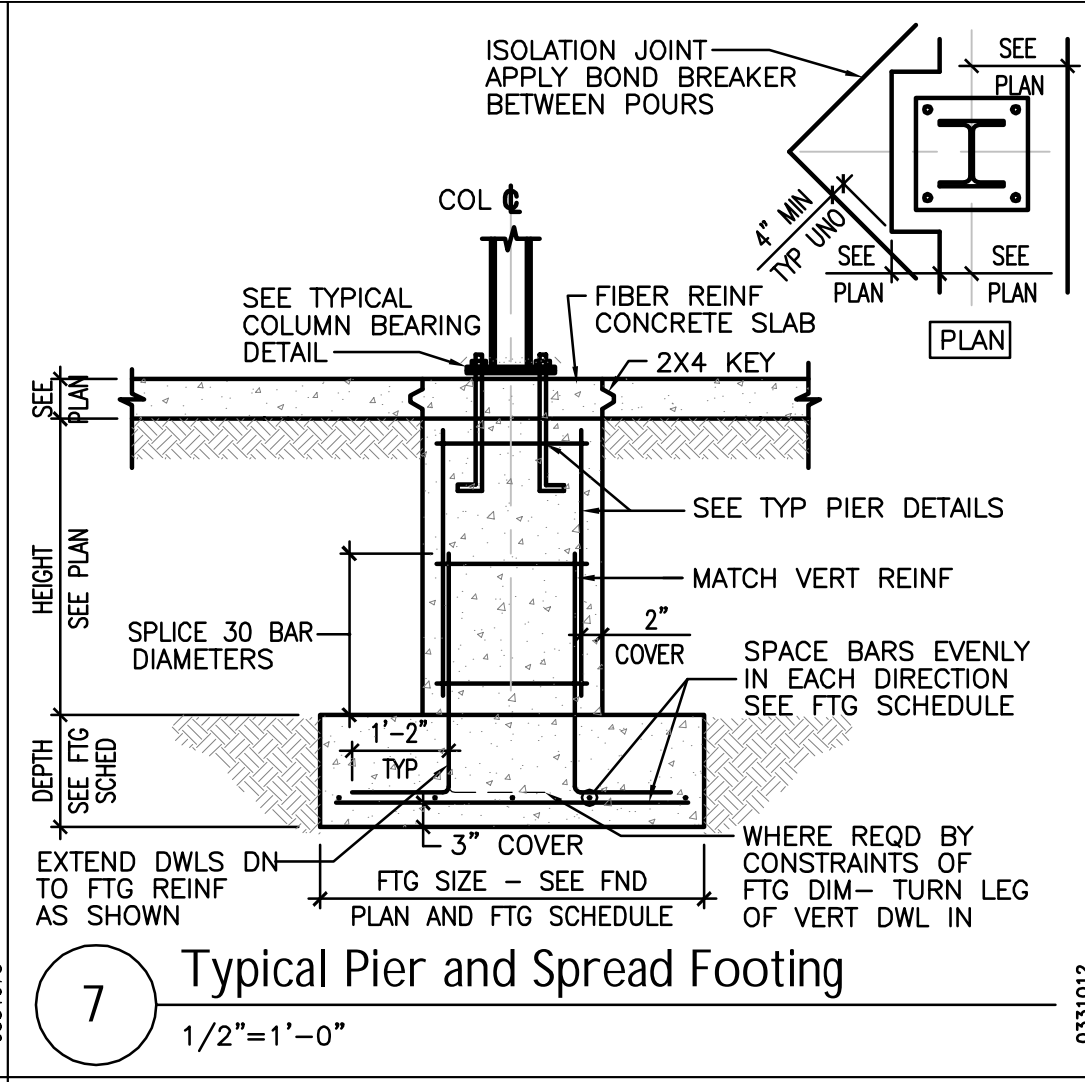
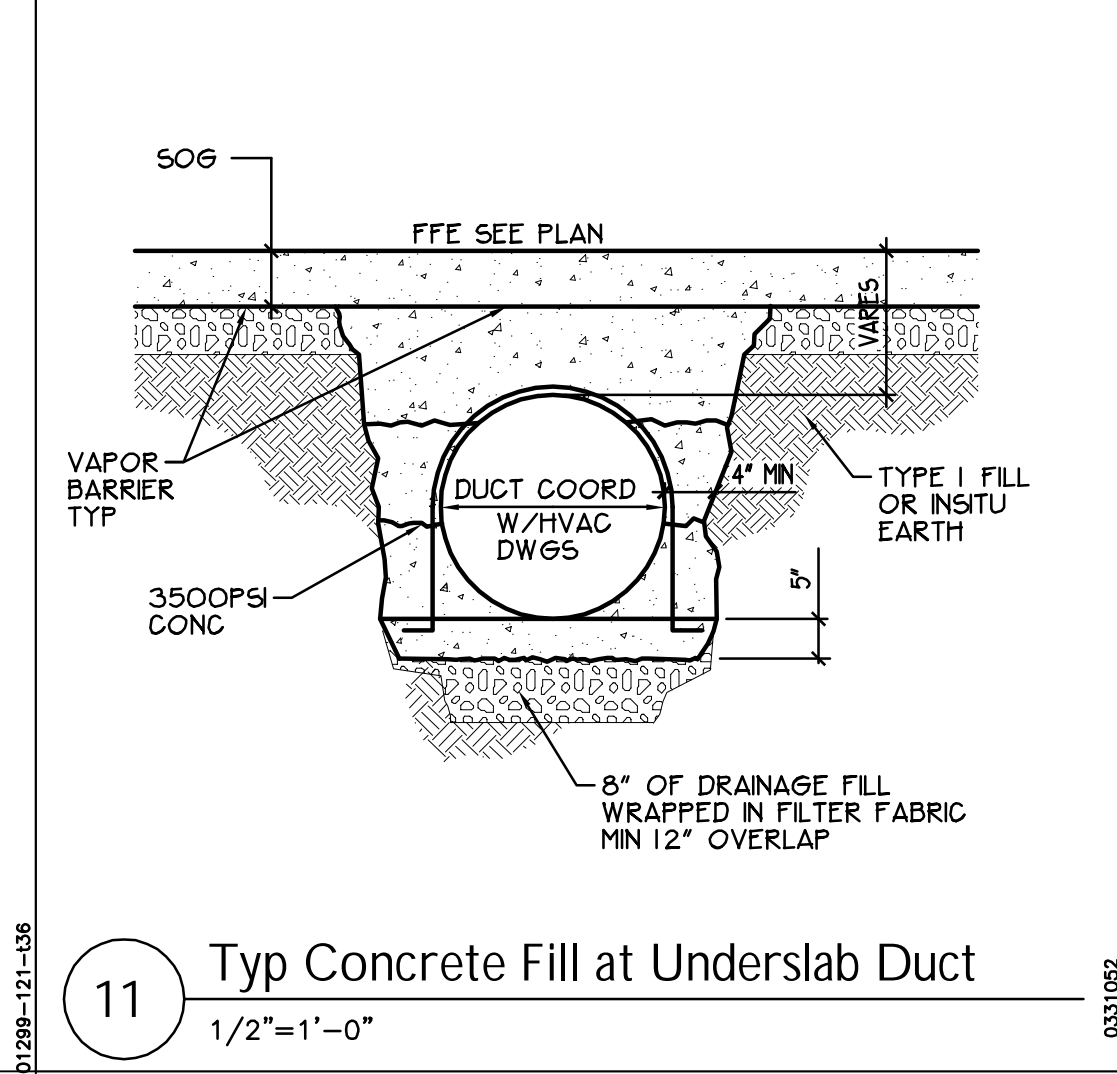
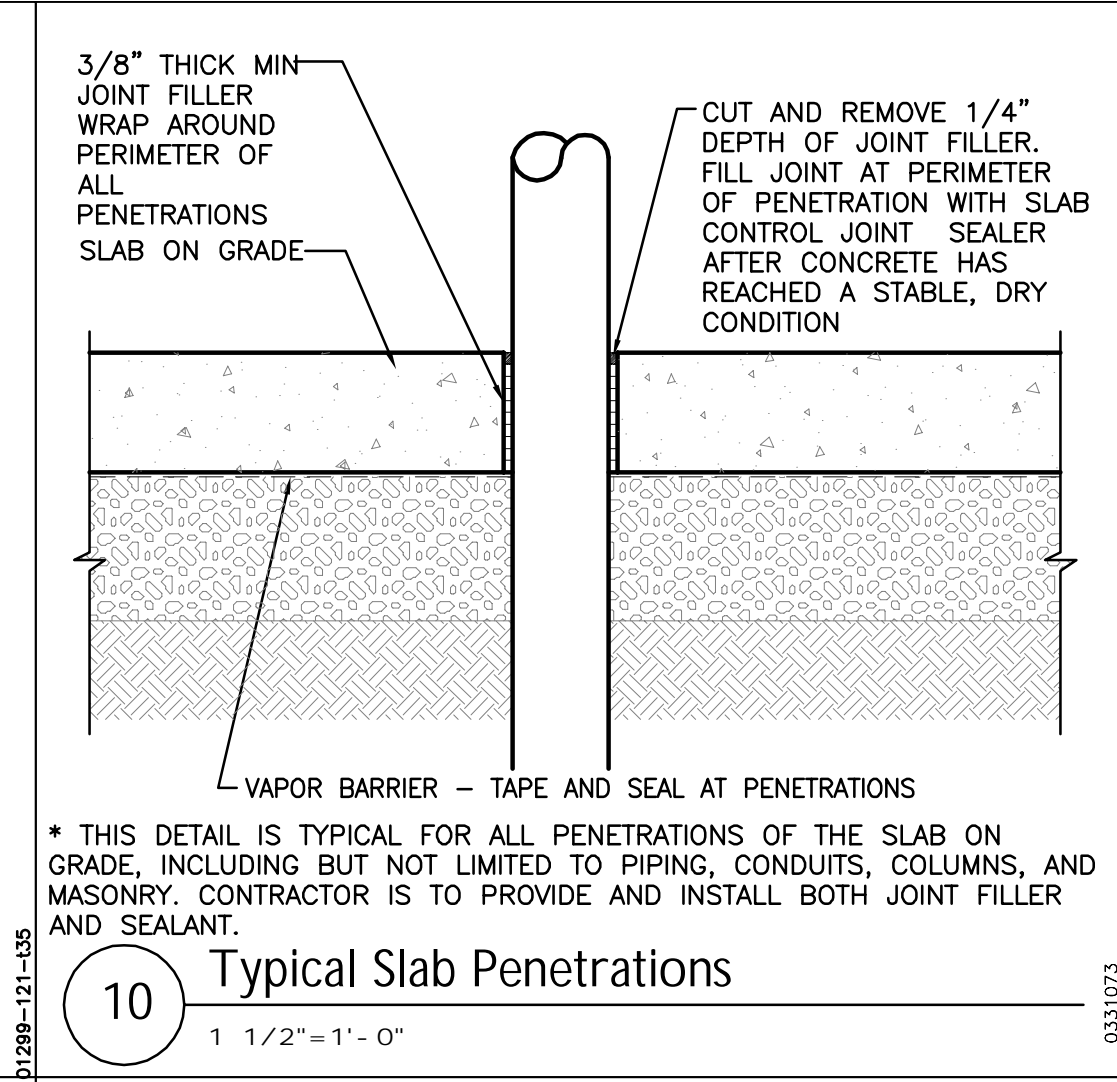
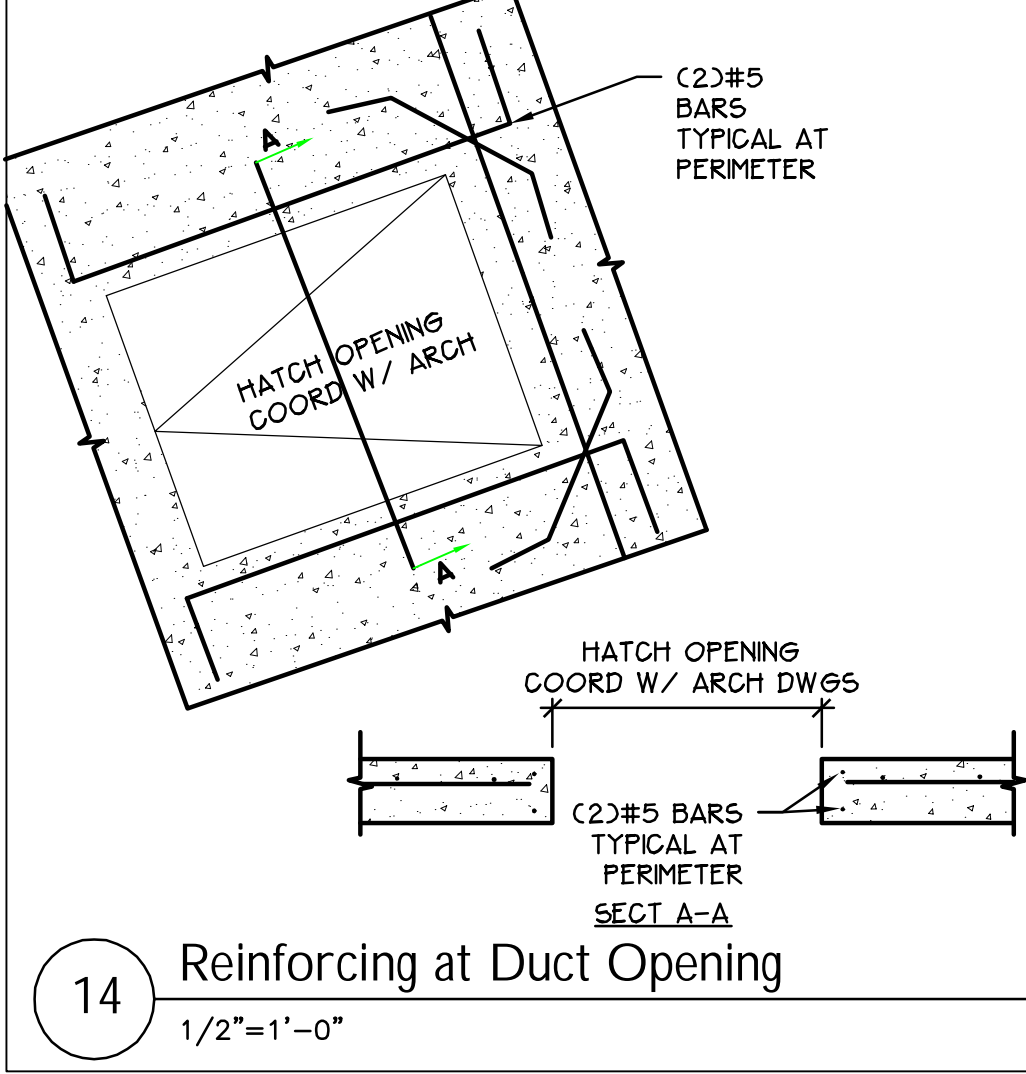
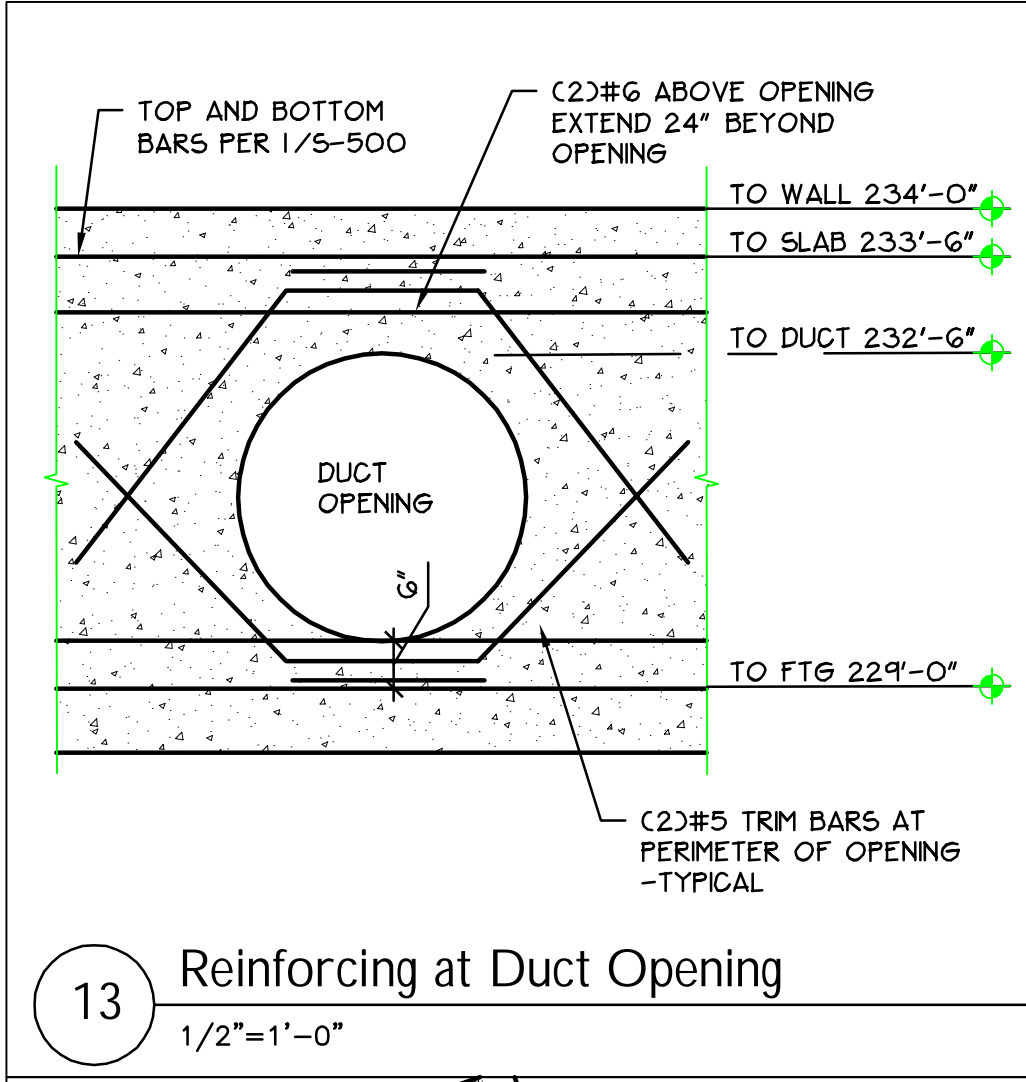
Hudson Falls, New York

TDCS BUILDING
FOUNDATION PLAN

DRAWING TITLE:

S-100

DRAWING NUMBER:



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DRAWN BY:

KJR

CHECKED BY:

DRH

SCALE:

NTS

APPROVED BY:

DRH

DATE:

DECEMBER 21, 2012

CAD FILE:

S-500-01299-12001

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TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

TDCS BUILDING
TYPICAL DETAILS

DRAWING TITLE:

S-500

DRAWING NUMBER:

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SCALE: NTS

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DATE: DECEMBER 21, 2012

CAD FILE: S-501-01299-12001

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TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

TDCS BUILDING
STRUCTURAL DETAILS

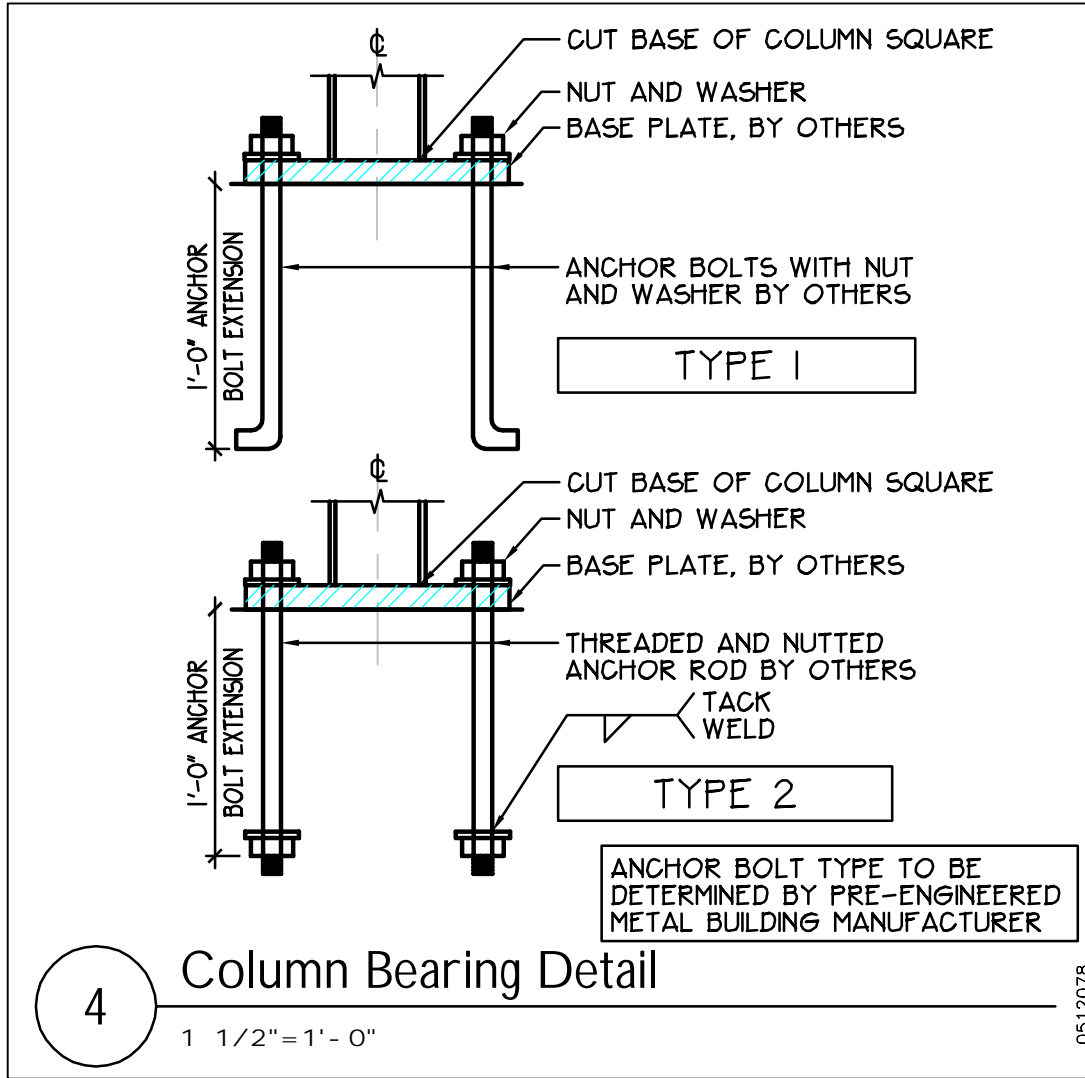
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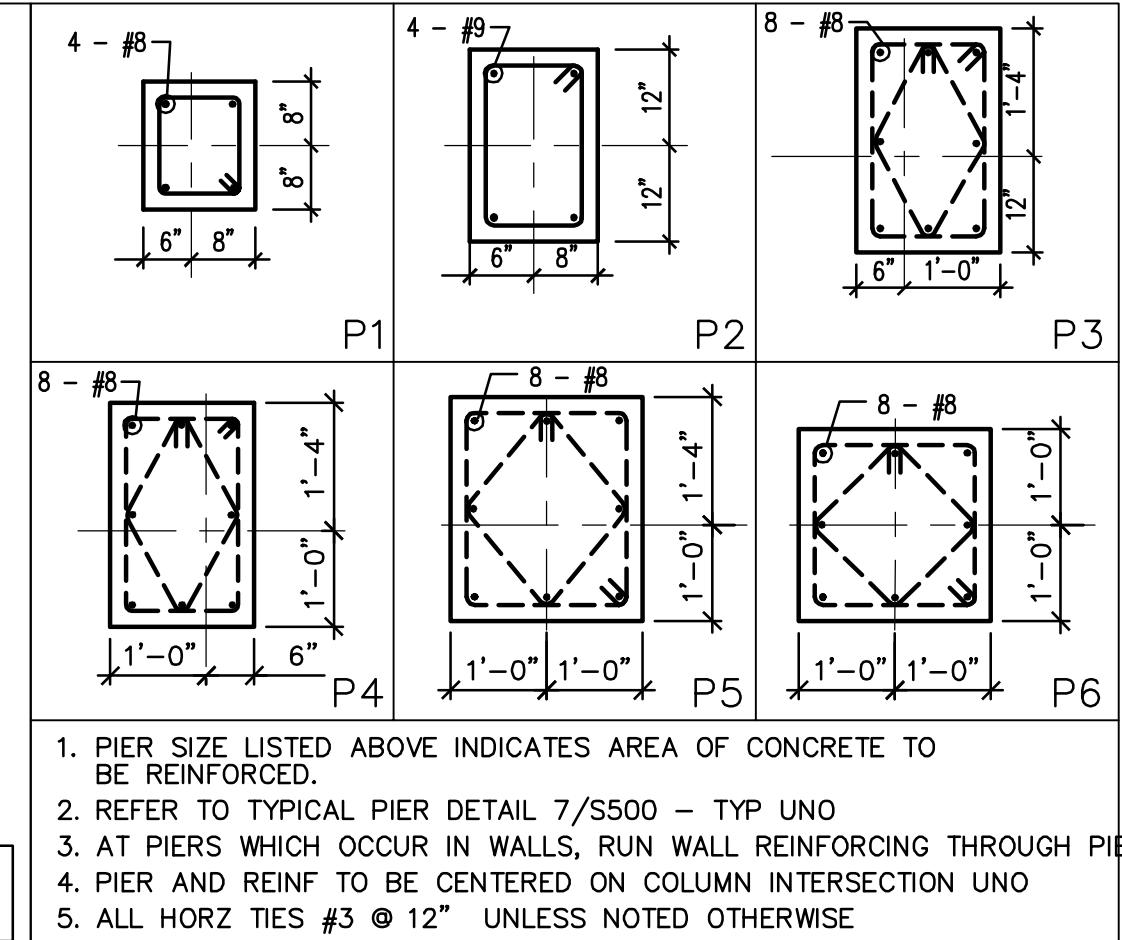
REVISIONS

FOUNDATION NOTES



Column Bearing Detail

1 1/2"=1'-0"



Typical Pier Details

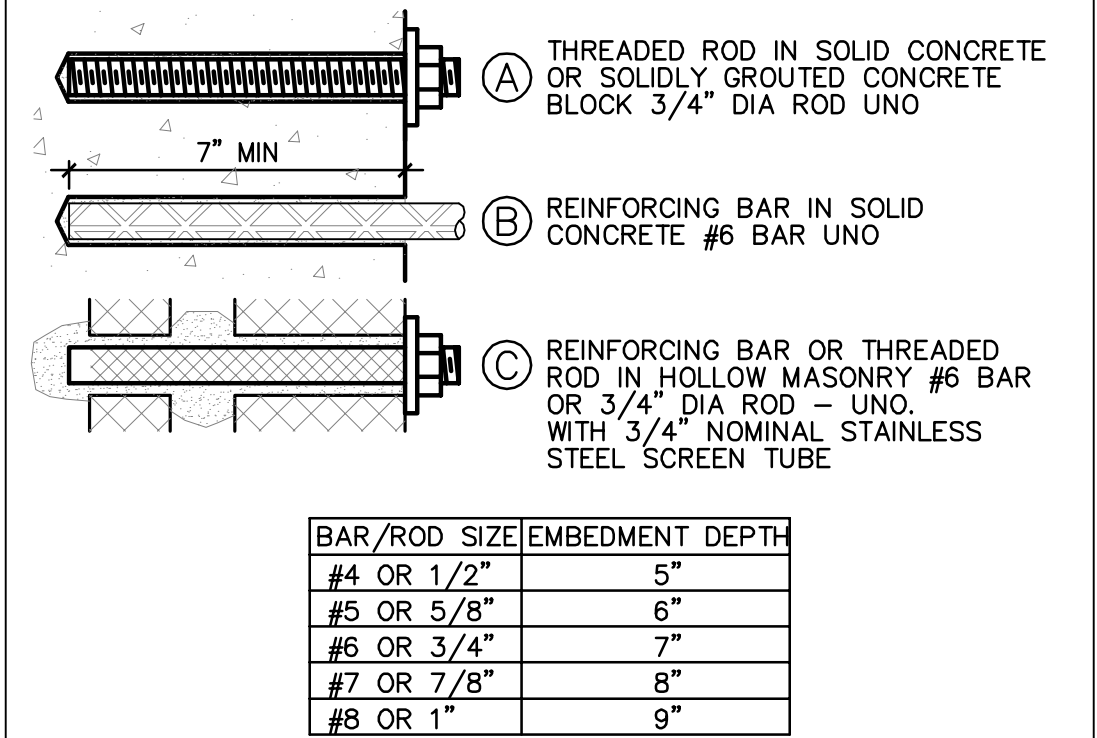
1/2"=1'-0"

FTG MARK	FOOTING SIZE	THICK-NESS	MAT BARS EACH WAY		
			QUANTITY OF BARS	BAR SIZE	SPACING c/c (in)
F3	3'-0" X 3'-0"	12"	4	#4	12.0
F4	4'-0" X 4'-0"	12"	6	#4	8.4
F5	5'-0" X 5'-0"	12"	7	#4	9.0
F6	6'-0" X 6'-0"	12"	8	#4	9.4
F7	7'-0" X 7'-0"	14"	7	#5	13.0
F7.5	7'-6" X 7'-6"	15"	6	#6	16.8
F8	8'-0" X 8'-0"	16"	9	#5	11.3
F9	9'-0" X 9'-0"	18"	8	#6	14.6
F9.5	9'-6" X 9'-6"	18"	7	#7	18.0
F10	10'-0" X 10'-0"	19"	8	#7	16.3
F11	11'-0" X 11'-0"	20"	9	#7	15.75
F10A	10'-0" X 10'-0"	48"	9 T + B	#7	14.25

REFER TO TYPICAL SPREAD FOOTING DETAIL FOR BAR CONFIGURATION.

Typ Spread Footing Reinforcement

Full 2000 PSF BEARING PRESSURE



GENERAL NOTES

- FOR ACCEPTABLE ADHESIVE PRODUCTS REFER TO SPECIFICATIONS.
- COMPLY WITH MANUFACTURERS REQUIREMENTS FOR INSTALLATION.

Typical Chemical Anchors

3"=1'-0"

STRUCTURAL LOADS			
A. LIVE LOADS	OCCUPANCY OR USE	INTERNATIONAL BUILDING CODE 1607	
		UNIFORM	CONCENTRATED
		CLASSROOMS	40 PSF 1000 LBS
		OFFICES	50 PSF 2000 LBS
		COMPUTER ROOM	0 PSF 0 LBS
		CORRIDORS (FIRST FLOOR)	100 PSF 1000 LBS
		CORRIDORS (ABOVE FIRST FLOOR)	80 PSF 1000 LBS
		ELEVATED PLATFORM	60 PSF 300 LBS
		LIGHT FLOOR PLATE CONSTRUCTION	0 PSF 200 LBS
		LOCKER ROOMS	60 PSF
B. ROOF LOADS	MINIMUM ROOF LIVE LOAD	INTERNATIONAL BUILDING CODE 1607.11	
		20 PSF	
		RAIN LOAD	
		RAIN SURCHARGE LOAD HAS BEEN APPLIED TO AREAS WHERE PONDING OCCURS IN ACCORDANCE WITH SECTION 1611.	
C. SNOW LOADS	GROUND SNOW, Pg (FIGURE 1608.2)	INTERNATIONAL BUILDING CODE 1608	
		50 PSF	
		FLAT ROOF SNOW LOAD, Pf (ASCE 7)	
		31.5 PSF	
		SNOW EXPOSURE FACTOR, Ce	
		0.9	
		THERMAL FACTOR, Ct	
		1	
		SNOW LOAD IMPORTANCE FACTOR, Is	
		1	
D. WIND LOAD DESIGN CRITERIA	BASIC WIND SPEED (3 SECOND GUST), V	INTERNATIONAL BUILDING CODE 1609	
		90 MPH	
		OCCUPANCY CATEGORY (TABLE 1604.5)	
		II	
		WIND LOAD IMPORTANCE FACTOR, Iw	
		1	
		EXPOSURE CATEGORY	
		C	
		INTERNAL PRESSURE COEFFICIENT, GCPI	
		0 +/-	
E. SEISMIC DESIGN CRITERIA	OCCUPANCY CATEGORY	INTERNATIONAL BUILDING CODE 1609	
		II	
		SEISMIC IMPORTANCE FACTOR, Is	
		1	
		MAPPED SPECTRAL RESPONSE ACCELERATION	
		AT SHORT PERIODS, Ss	
		0.269	
		AT 1 SECOND PERIOD, S1	
		0.077	
		SITE CLASS	
F. DESIGN SPECTRAL RESPONSE ACCELERATION	AT SHORT PERIODS, SDs	E	
		0.437	
		AT 1 SECOND PERIOD, SD1	
		0.179	
		SEISMIC DESIGN CATEGORY	
		C	
		BASIC SEISMIC-FORCE-RESISTING SYSTEM:	
		(WITH CORRESPONDING RESPONSE MODIFICATION FACTOR, R AND SEISMIC RESPONSE COEFFICIENT, Cs)	
		MOMENT-RESISTING FRAME SYSTEM	
		ORDINARY STEEL MOMENT FRAMES	
G. DESIGN BASE SHEAR, V	ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE	
		32 KIPS	
		R =	
		3.5	
		Cs =	
		0.118	

- A. MATERIAL
- DESIGN BEARING PRESSURE IS ASSUMED TO BE 2000 PSF. IF OWNERS GEOTECHNICAL ENGINEER DETERMINES THAT INSUFFICIENT BEARING IS ENCOUNTERED AT ELEVATION SHOWN ON PLANS, NOTIFY ARCHITECT BEFORE PROCEEDING.
 - DO NOT PLACE FILL UNTIL SUBMITTAL FOR FILL MATERIAL IS APPROVED BY ARCHITECT.
 - INTERIOR BACKFILL IS TO CONSIST OF STRUCTURAL FILL TO BE WITHIN 6" OF BOTTOM SLAB. THE NEXT 6" LAYER ABOVE THIS WILL BE No. 2 CRUSHED STONE UNLESS NOTED OTHERWISE. PROVIDE A VAPOR BARRIER BETWEEN THE No. 2 CRUSHED STONE AND THE SLAB FOR ALL INTERIOR SLABS UNLESS NOTED OTHERWISE. BACKFILL WILL BE PLACED IN MAXIMUM 8" LOOSE LAYERS (MAXIMUM 4" LOOSE LAYERS FOR HAND OPERATED COMPACTION EQUIPMENT) AND COMPACTED TO A DRY DENSITY EQUAL TO 95 PERCENT OF THE MATERIAL DRY DENSITY AS DEFINED BY THE MODIFIED PROCTOR COMPACTION TEST (ASTM D1557). STRUCTURAL FILL AND STONE ARE TO BE IMPORTED FROM OFF SITE. REFER TO PROJECT MANUAL FOR OTHER FILL MATERIAL TYPES.

B. INSTALLATION

- AFTER TOPSOIL IS STRIPPED, ALL AREAS WITHIN THE BUILDING FOOTPRINT ARE TO BE PROOF ROLLED WITH A SELF-PROPELLED, SMOOTH DRUM, VIBRATORY COMPACTOR WITH A MINIMUM STATIC WEIGHT OF TEN TONS. PROOF ROLLING WILL BE PERFORMED BY COMPLETING A MINIMUM OF SIX PASSES WITH THE ROLLER OPERATING IN ITS VIBRATORY MODE OVER ALL SUBGRADE AREA. SOFT OR LOOSE SOILS IDENTIFIED DURING THIS ROLLING SHOULD BE EXCAVATED AND REPLACED WITH STRUCTURAL FILL AS DIRECTED BY THE ARCHITECT. SUCH ADDITIONAL EXCAVATION AND BACKFILL WILL BE MEASURED AS DIRECTED BY THE ARCHITECT AND PAID FOR BY THE OWNER AS A CHANGE IN THE WORK. PROOF ROLLING OPERATIONS ARE TO BE PREFORMED UNDER THE SUPERVISION OF THE OWNERS GEOTECHNICAL ENGINEER.
- AFTER TRENCHING EXCAVATION, BACKFILL WITH ACCEPTABLE FILL (SEE SPEC) TO WITHIN 1'-0" OF FINISH GRADE / FLOOR. ALL TRENCHING WORK WITHIN THE BUILDING FOOTPRINT IS TO BE COORDINATED. THE CONTRACTOR RESPONSIBLE FOR THE SLAB ON GRADE, MUST ACCEPT IN WRITING THE QUALITY OF THE TRENCH BACKFILL AS PERFORMED BY OTHERS BEFORE BEGINNING HIS WORK OVER TOP OF THE TRENCH.
- FOOTINGS ARE TO BEAR AT THE ELEVATIONS SHOWN ON THE PLANS. BEARING TO BE ON VIRGIN SOIL OR COMPACTED STRUCTURAL FILL.
- THE ON SITE SOILS ARE SUSCEPTIBLE TO LOSS OF STRENGTH DUE TO WATER AND EXCESSIVE TRAFFIC BY WORKERS AND EQUIPMENT. EXCAVATION AND BACKFILL OPERATIONS ARE TO BE MAINTAINED IN A DRY CONDITION. SURFACE AND INFILTRATING WATER ARE TO BE REMOVED BY SITE GRADING AND PUMPING FROM SUMPS AS REQUIRED. THE REMOVAL AND REPLACEMENT OF SOILS RENDERED UNSTABLE DUE TO EXCESSIVE TRAFFIC OR LACK OF DEWATERING PROCEDURES ARE TO BE PAID FOR BY THE CONTRACTOR.

UNSUITABLE SOIL NOTES

UNSUITABLE SOILS EXIST WITHIN THE NEW BUILDING FOOTPRINT IN THIS AREA. WHERE THESE UNSUITABLE SOILS ARE PRESENT BELOW THE NEW FOOTING BEARING ELEVATIONS THEY WILL BE REQUIRED TO BE REMOVED AND REPLACED WITH TYPE I FILL - REFER TO SPEC SECTION 02300.

IN ADDITION TO THE EXCAVATION WORK REQUIRED TO PLACE FOUNDATIONS, SLABS AND STRUCTURES AS SHOWN ON THE DRAWINGS, INCLUDE IN THE CONTRACT BASE BID THE COST OF EXCAVATION AND REPLACEMENT OF:

- 300 CUBIC YARDS OF UNSUITABLE SOIL (REPLACED WITH TYPE I FILL, PLACED AND COMPACTED PER SPECIFICATION SECTION 02300).

COST IS TO INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, ETC, REQUIRED TO EXCAVATE, REMOVE AND LEGALLY DISPOSE OF (OFF SITE), THE UNSUITABLE SOILS, AND REPLACE WITH TYPE I FILL AS INDICATED ABOVE. THIS WORK IS TO BE PERFORMED IN ACCORDANCE WITH APPLICABLE SPECIFICATION SECTIONS. DURING CONSTRUCTION, THE OWNERS GEOTECHNICAL ENGINEER WILL DETERMINE THE EXACT EXTENT OF THE UNSUITABLE SOIL TO BE REMOVED.

CONTRACTORS OPTIONS: FLOWABLE FILL (SUBMIT TO A/E FOR APPROVAL) MAY BE USED IN LIEU OF TYPE I FILL AT NO ADDITIONAL COST TO THE OWNER.

ISSUE DATES

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CONSULTANTS

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RCN: 112IC04086

DRAWN BY: KJR

CHECKED BY: DRH

SCALE: NTS

APPROVED BY: DRH

DATE: DECEMBER 21, 2012

CAD FILE: S-600-01299-12001

General Electric Company

TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

TDCS BUILDING
GENERAL NOTES AND SCHEDULES
DRAWING TITLE:

S-600

DRAWING NUMBER:

REVISIONS

ISSUE DATES

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RCN: 112IC04086

DRAWN BY: BNL

CHECKED BY: JLM

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

APPROVED BY: DRH

DATE: DECEMBER 21, 2012

CAD FILE: M-100-01299-12001

General Electric Company

TDCS
PHASE FOUR
DESIGN

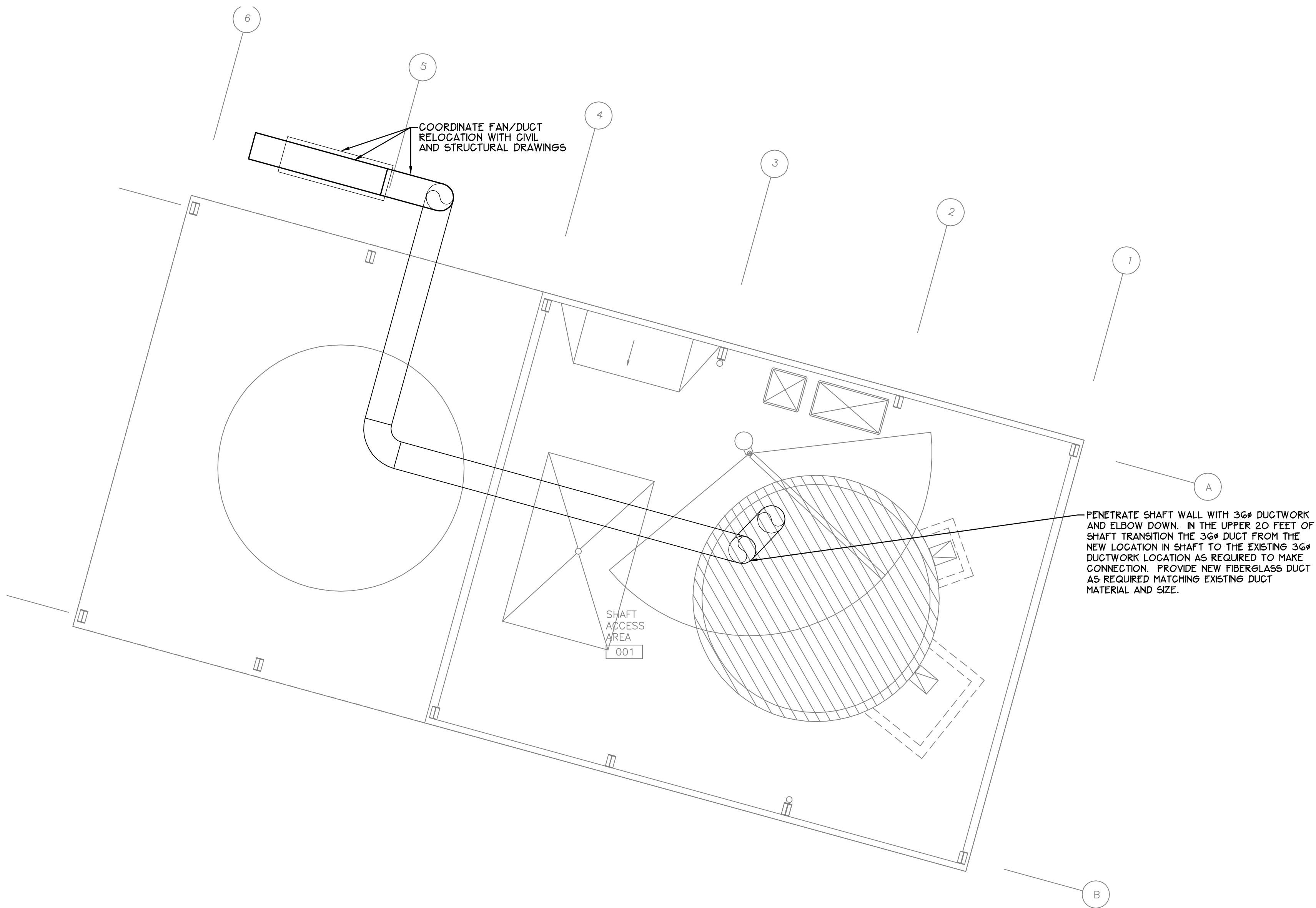
Hudson Falls, New York

TDCS BUILDING
FLOOR PLAN

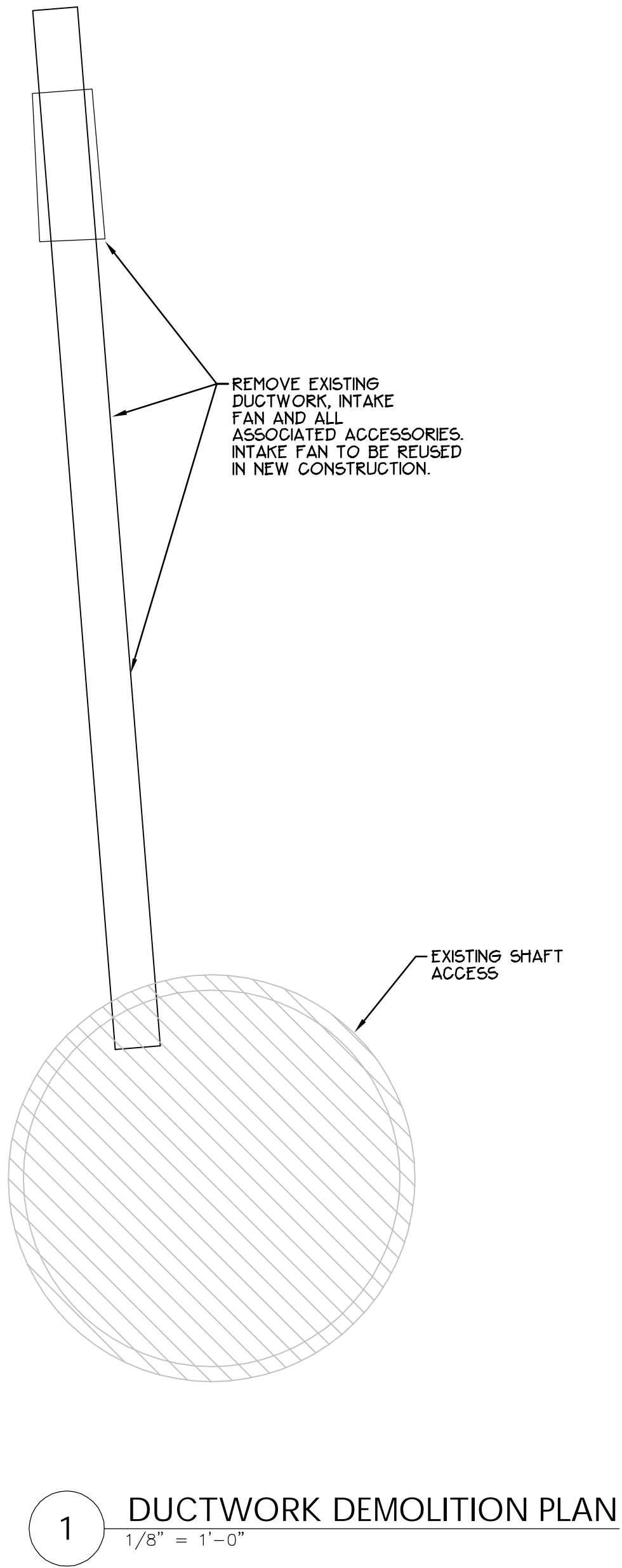
DRAWING TITLE:

M-100

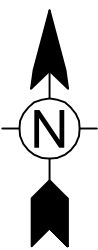
DRAWING NUMBER:



2 FLOOR PLAN
1/8" = 1'-0"



1 DUCTWORK DEMOLITION PLAN
1/8" = 1'-0"

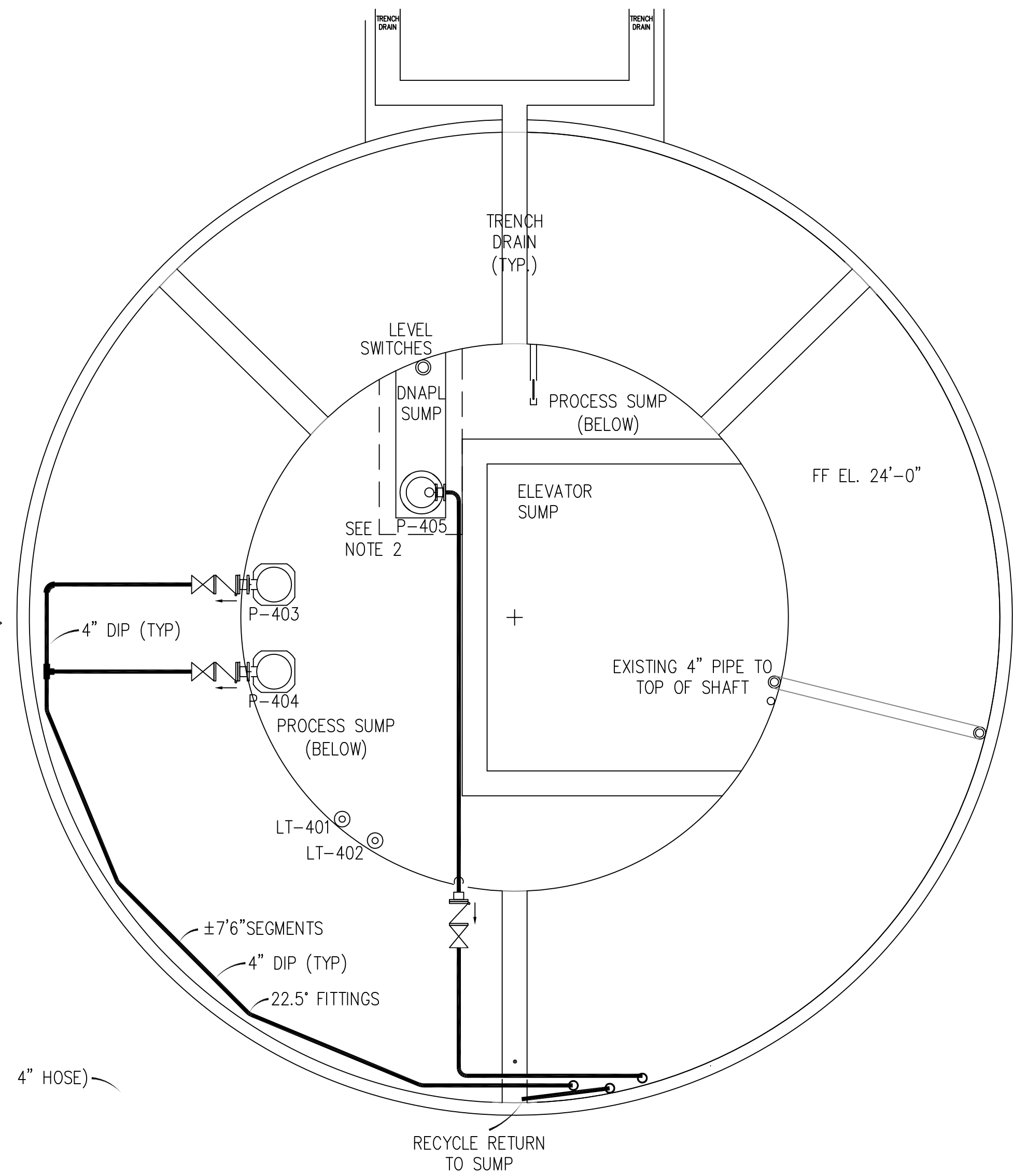
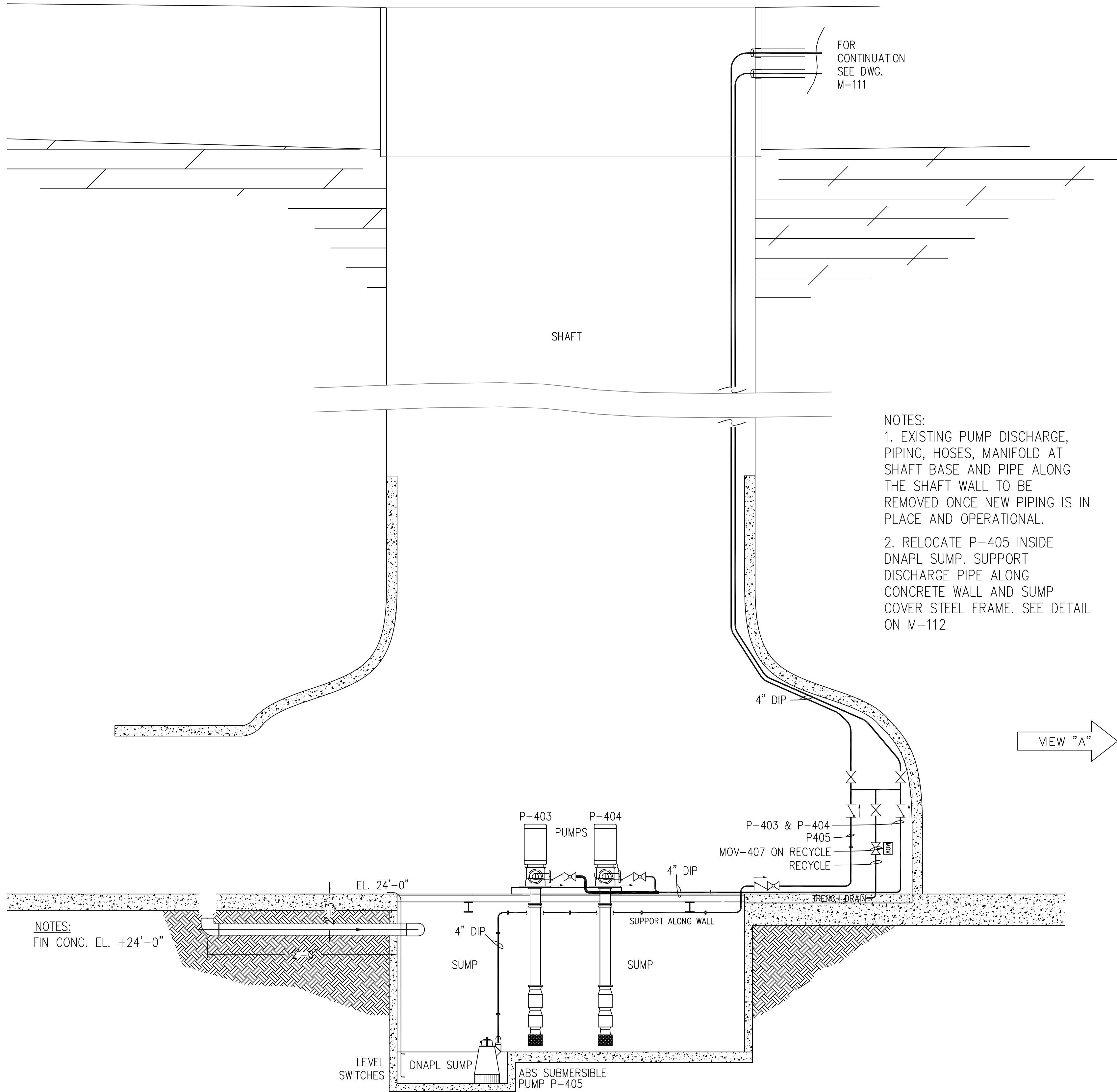


REVISIONS

ISSUE DATES

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1 ELEVATION: TDCS SUMP
M-6 SCALE: 1/4" = 1'-0" VIEW "A"

2 PLAN: TDCS SUMP
M-6 SCALE: 1/4" = 1'-0"

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DRAWN BY: SNL

CHECKED BY: _____ HKM

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

APPROVED BY: _____ HKM

DATE: DECEMBER 21, 2012

CAD FILE: See Stamp

General Electric Company

TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

PROPOSED MODIFICATIONS

TDCS

DRAWING TITLE: _____

M-11C

DRAWING NUMBER: _____

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CHECKED BY: HKM

SCALE: AS NOTED

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DATE: DECEMBER 21, 2012

CAD FILE: See Stamp

General Electric Company

TDCS
PHASE FOUR
DESIGN

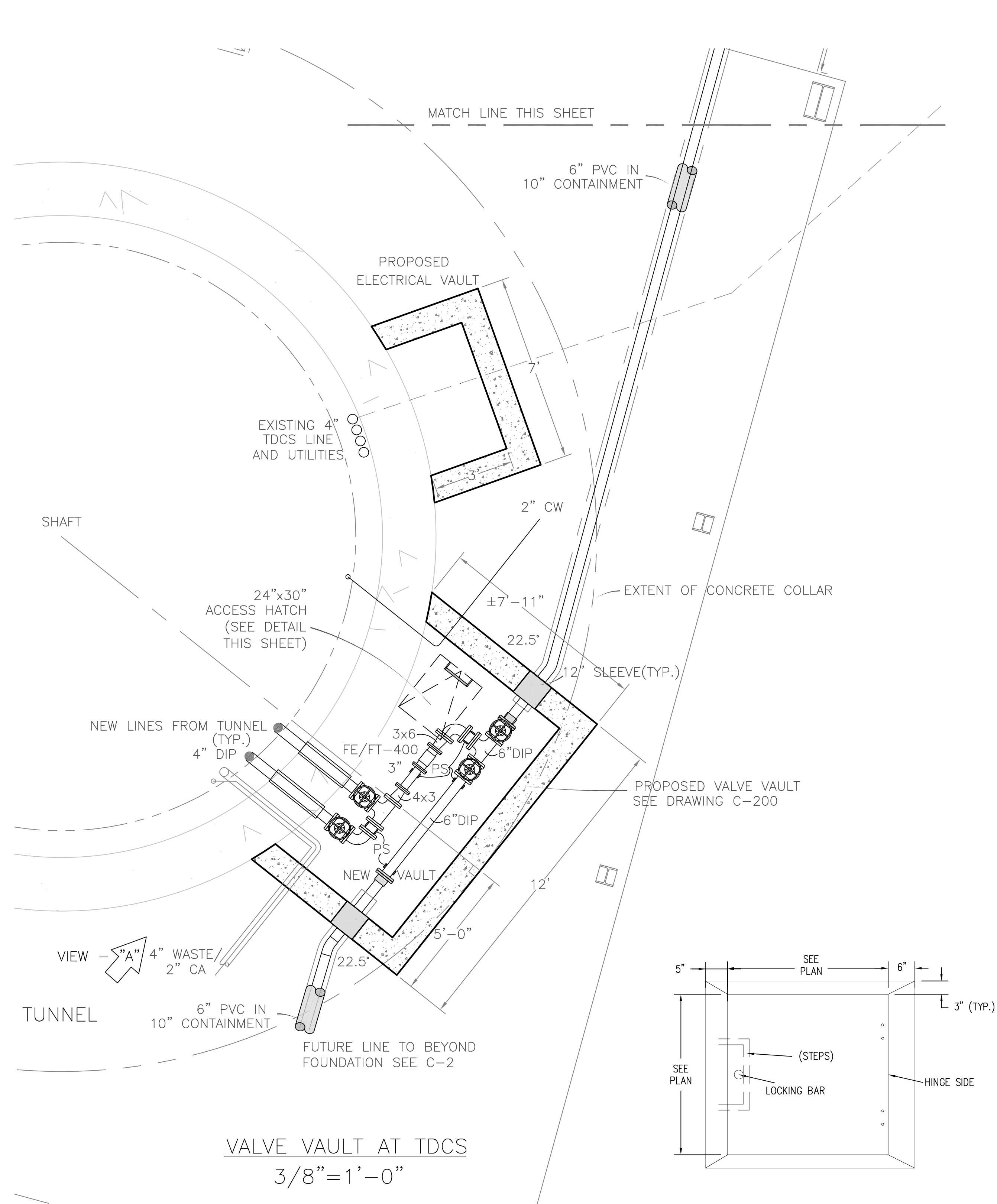
Hudson Falls, New York

PIPING TIE-IN/VAULT DETAIL
WATER TREATMENT PLANT

DRAWING TITLE:

DRAWING NUMBER:

M-111

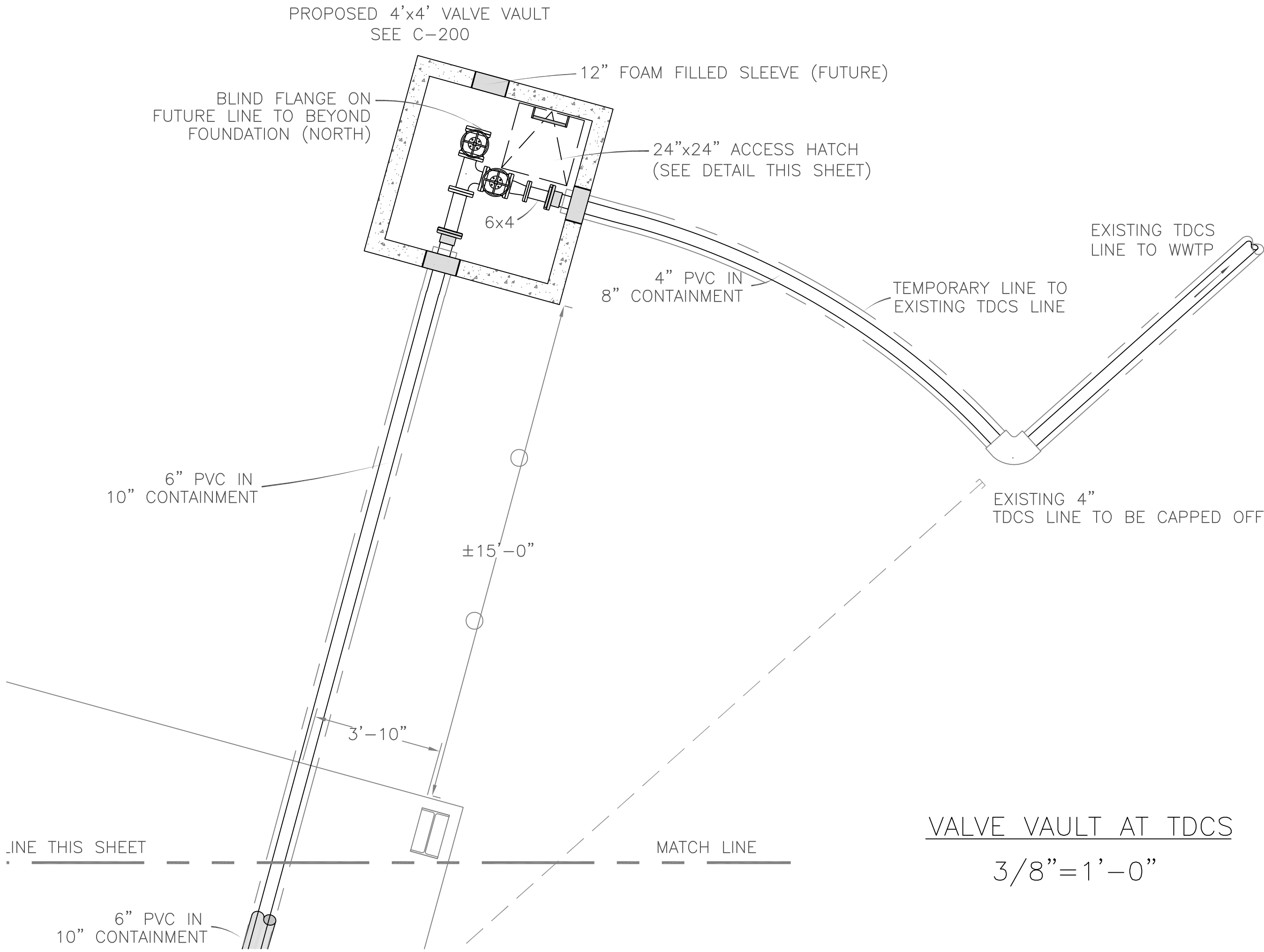


VALVE VAULT AT TDCS
3/8"=1'-0"

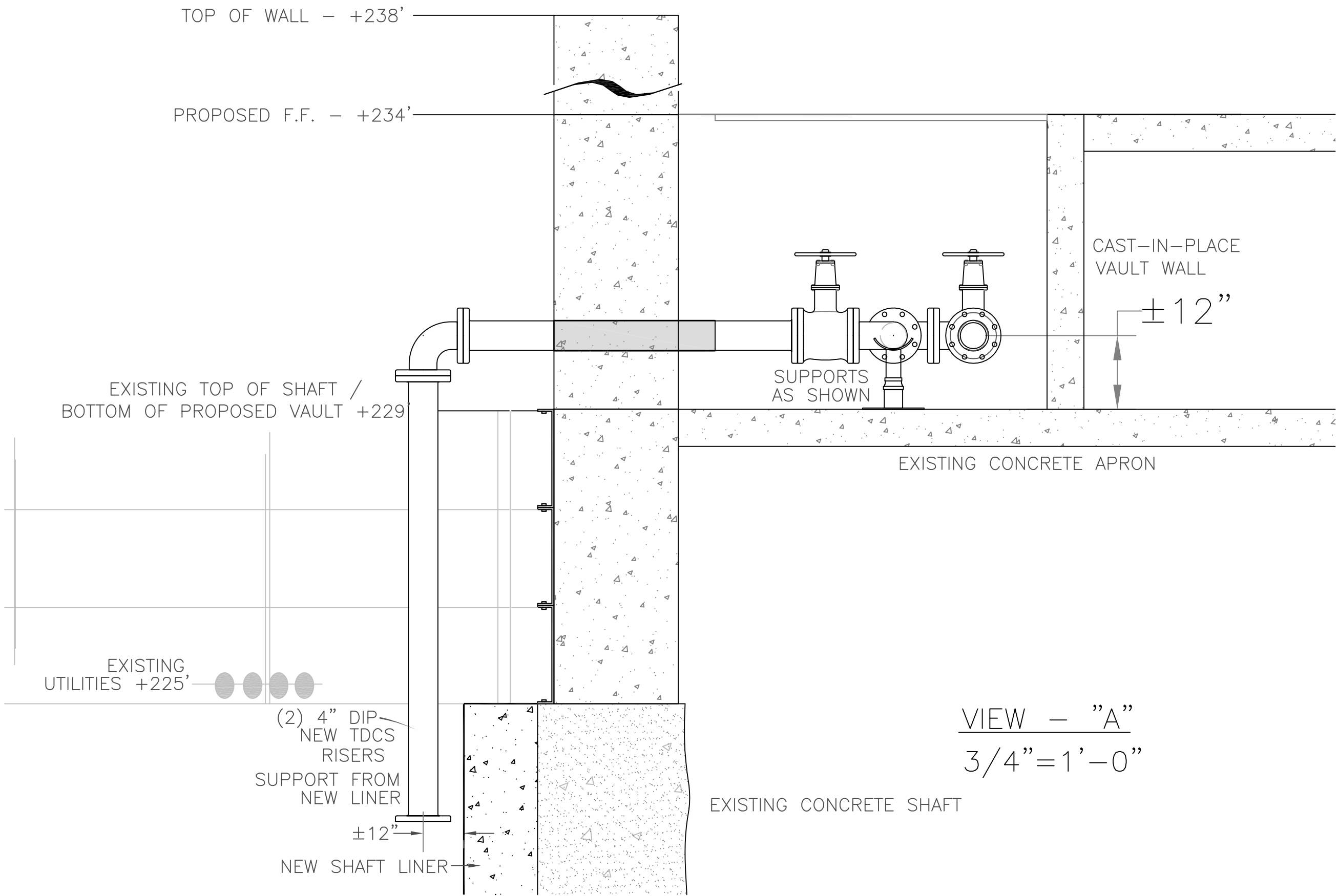
SPECIFICATION FOR VAULT ACCESS COVER

PROVIDE H1W (SINGLE LEAF) ACCESS FRAME AND COVER AS MANUFACTURED BY HALLIDAY PRODUCTS, INC. OF ORLANDO, FLORIDA OR APPROVED EQUAL. COVER SHALL HAVE A 1/4" THICK, MILL FINISH, EXTRUDED ALUMINUM FRAME, INCORPORATING EMBED ANCHOR PLATES. THE DOOR PANEL SHALL BE 1/4" ALUMINUM DIAMOND PLATE, REINFORCED TO ACHIEVE AN H20 LOAD RATING. DOOR SHALL OPEN TO 90° AND AUTOMATICALLY LOCK WITH A STAINLESS STEEL HOLD OPEN ARM WITH ALUMINUM RELEASE HANDLE. DOOR SHALL CLOSE FLUSH WITH THE FRAME. DOOR SHALL PROVIDE SPRING ASSIST FOR OPENING. HINGES AND ALL FASTENING HARDWARE SHALL BE STAINLESS STEEL. UNIT SHALL LOCK WITH A NON-CORROSIVE LOCKING BAR AND HAVE A NON-CORROSIVE HANDLE. UNIT SHALL INCLUDE OPTIONAL SLAM LOCK WITH KEY AND PLUG. UNIT SHALL BE GUARANTEED AGAINST DEFECTS IN MATERIAL AND/OR WORKMANSHIP FOR A PERIOD OF 10 YEARS.

ACCESS COVER DETAIL
(N.T.S.)



VALVE VAULT AT TDCS
3/8"=1'-0"



VIEW - "A"
3/4"=1'-0"

REVISIONS

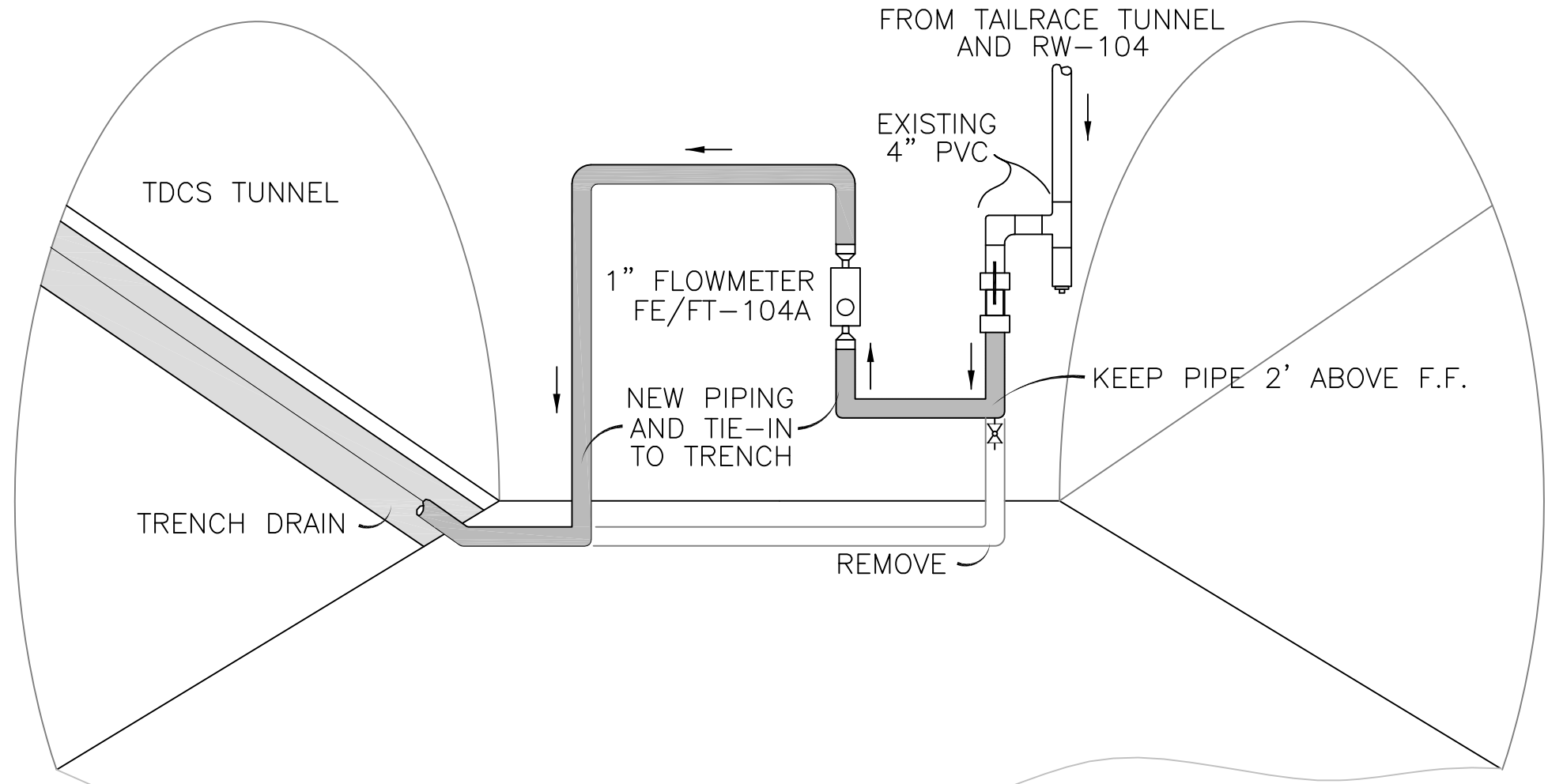
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ISSUE DATES

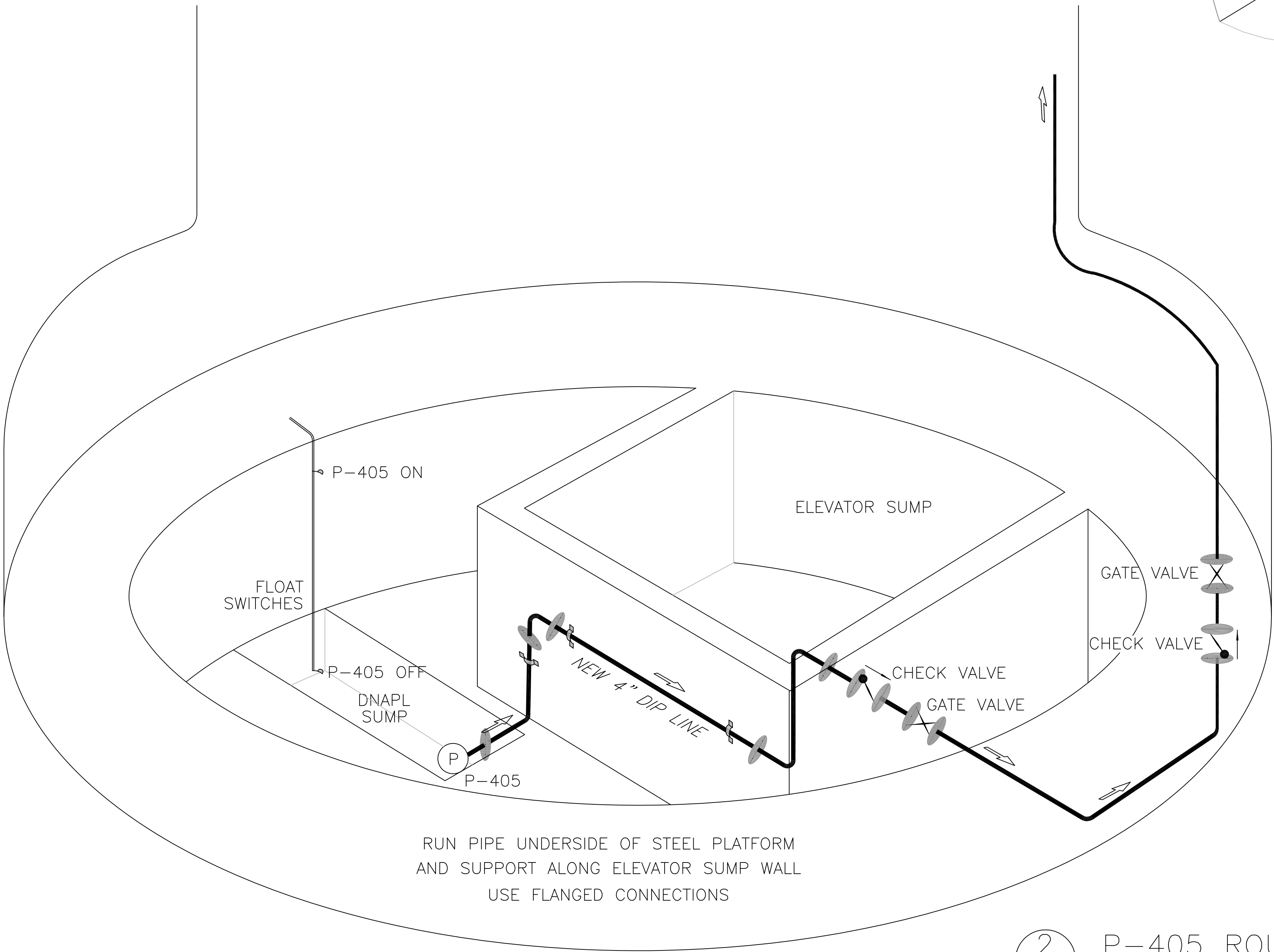
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.



1 FE/FT-104A FLOWMETER TIE-IN DETAIL
M-112 (IN TDCS TUNNEL)



2 P-405 ROUTING IN TDCS
M0112

TETRA TECH ENGINEERS, ARCHITECTS
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RCN:	112IC04086
DRAWN BY:	SNL
CHECKED BY:	HKM
SCALE:	1/8"=1'-0"
APPROVED BY:	HKM
DATE:	DECEMBER 21, 2012
CAD FILE:	See Stamp

General Electric Company

TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

P-405 / FLOWMETER TIE IN
TDCS

DRAWING TITLE:

DRAWING NUMBER:

M-112



CONSULTANTS

CAD FILE: E-100-01299-1200

TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

三-100

DRAWING NUMBER

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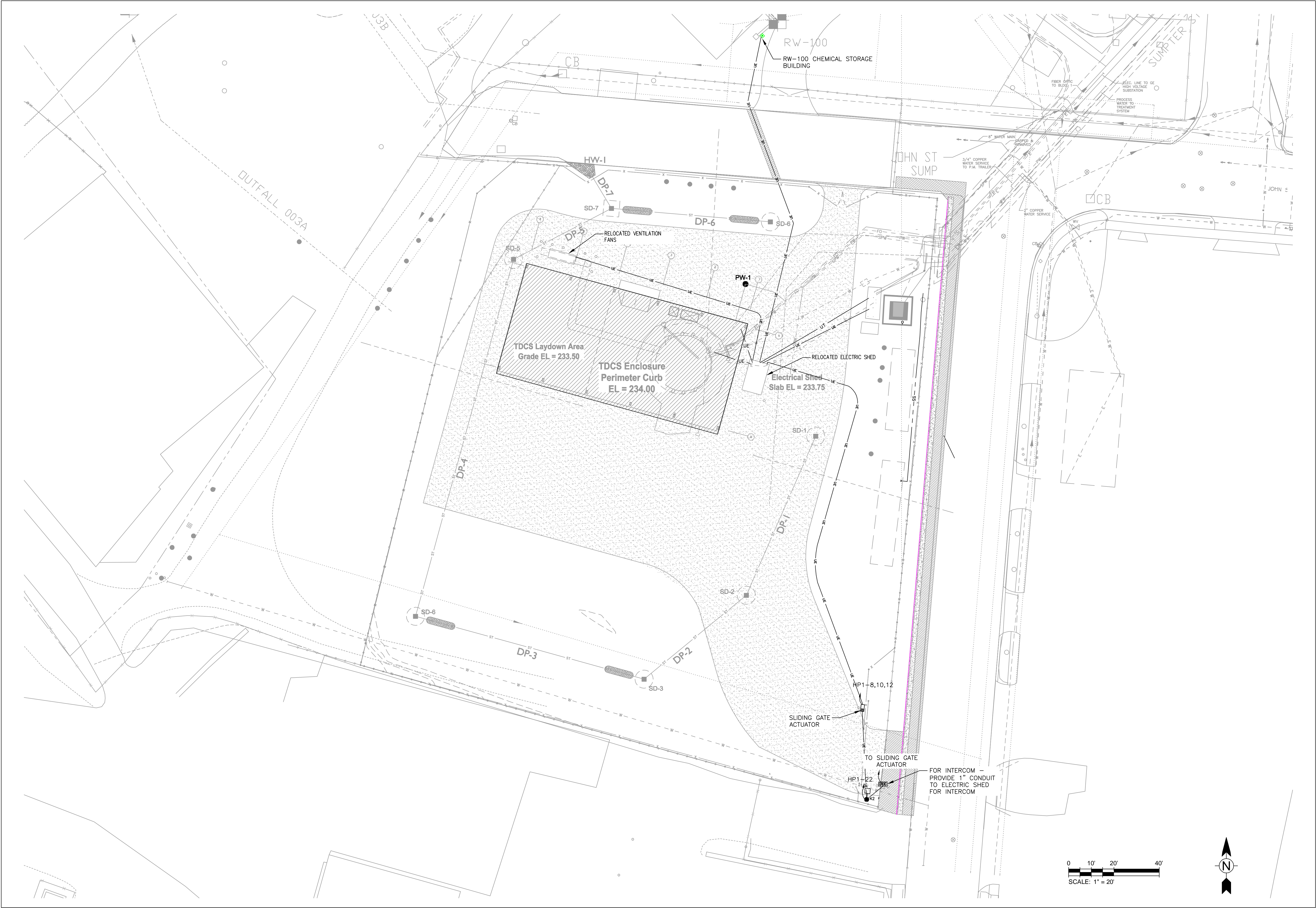
**TDCS
PHASE FOUR
DESIGN**

Hudson Falls, New York

TDCS BUILDING
ELECTRICAL SITE NEW WORK PLAN
DRAWING TITLE:

E-101

DRAWING NUMBER:





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APPROVED BY: KCT

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CAD FILE: E-110-01299-12001

General Electric Company

TDCS
PHASE FOUR
DESIGN

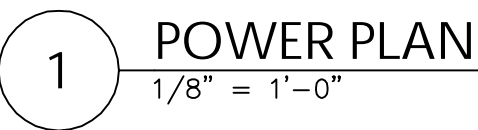
Hudson Falls, New York

TDCS BUILDING
LIGHTING PLAN

DRAWING TITLE:

E-110

DRAWING NUMBER:



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CAD FILE: E-111-01299-1200

Hudson Falls, New York

DRAWING TITLE

DRAWING NUMBER

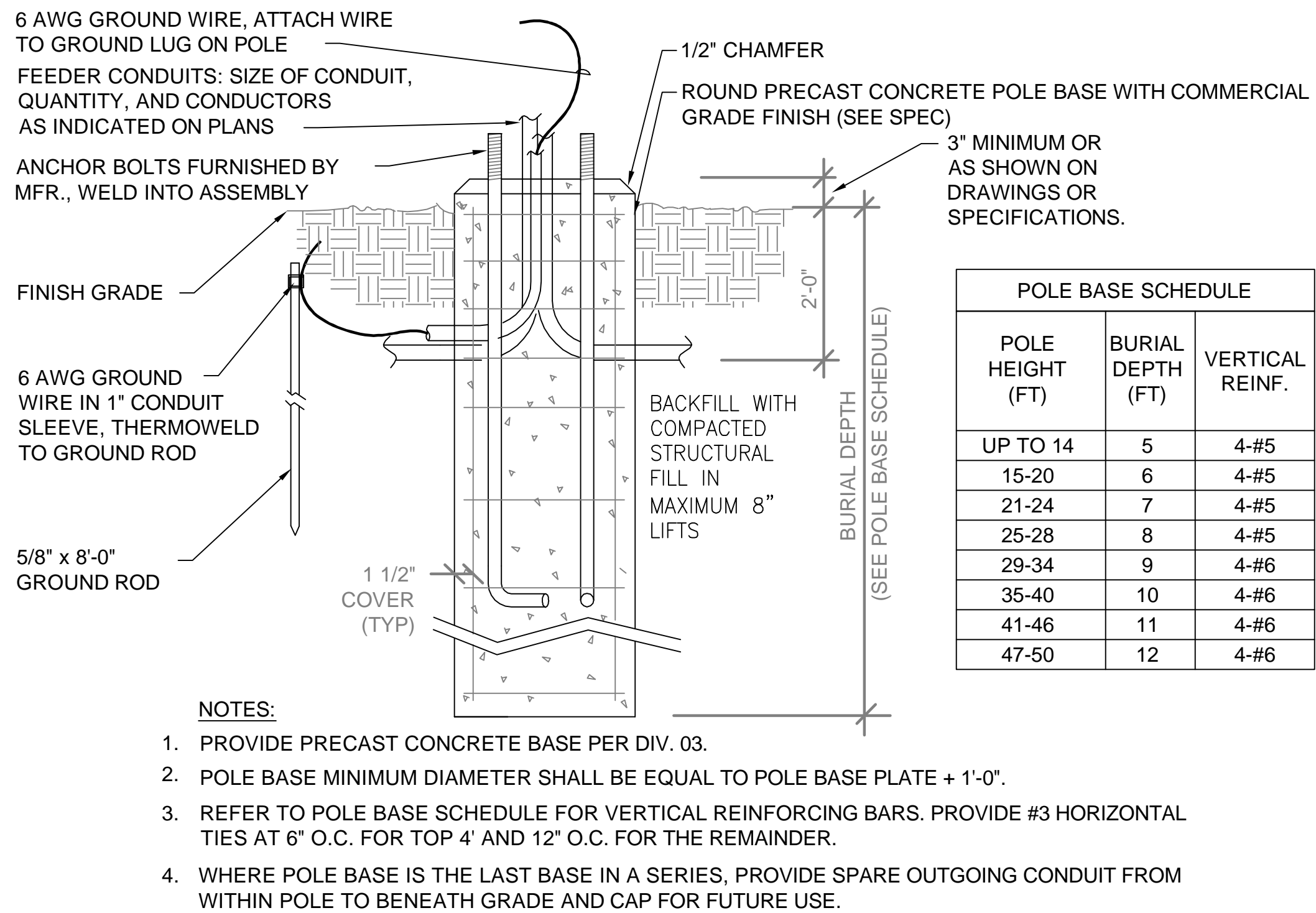
E-11

REVISIONS

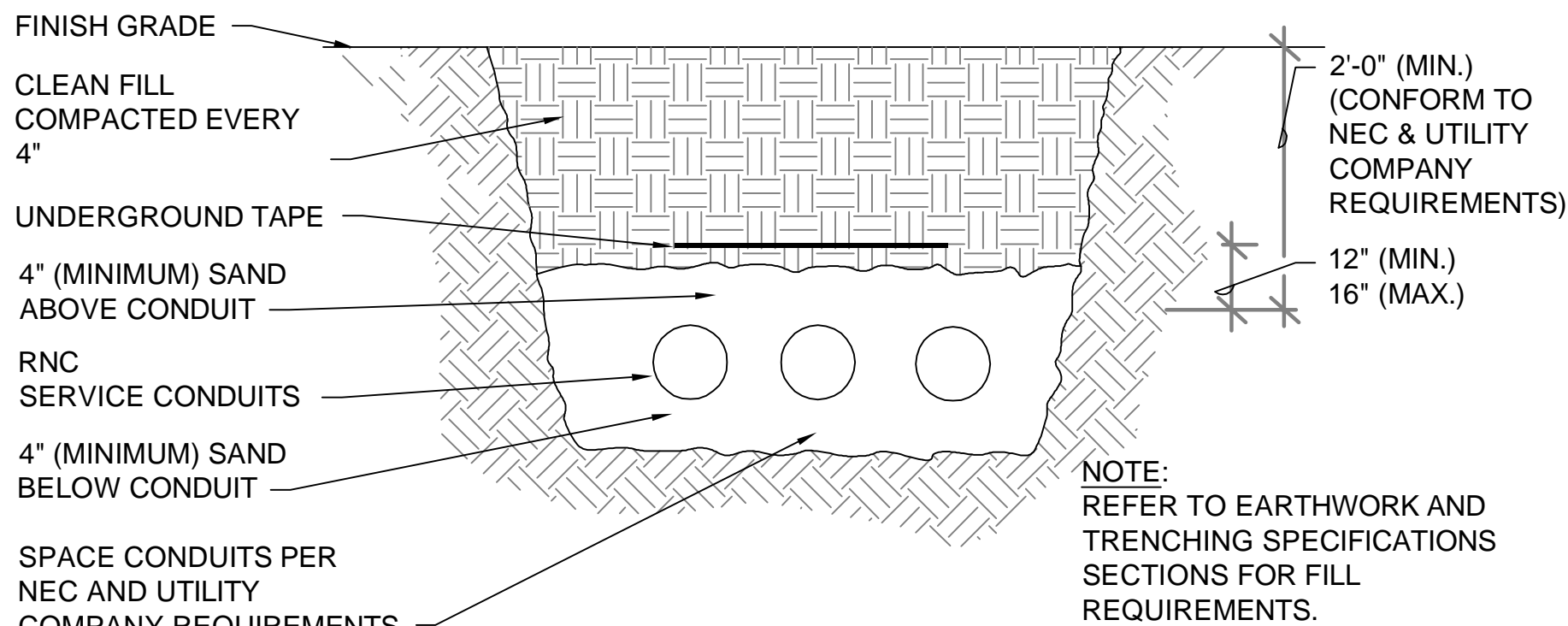
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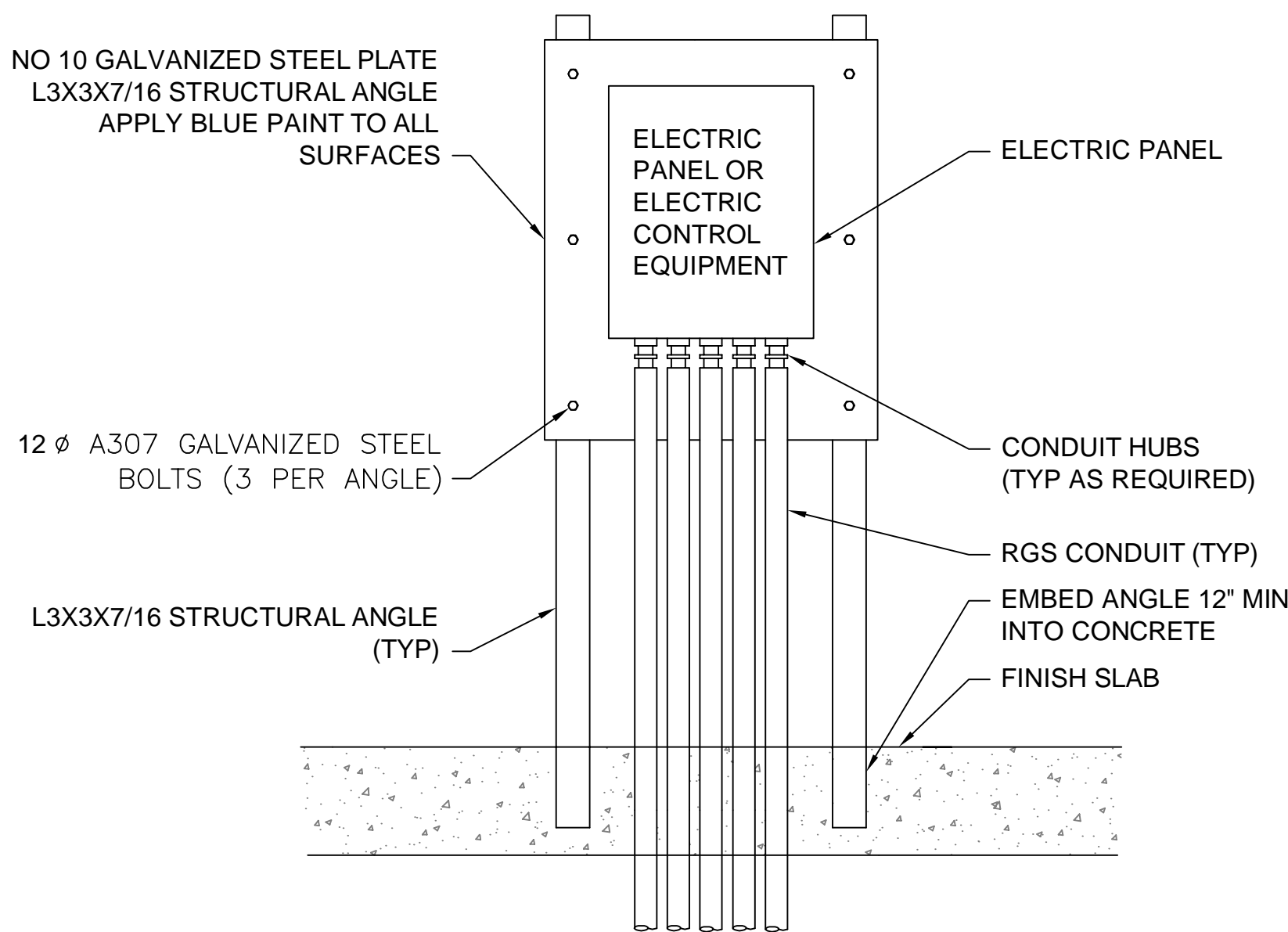
CONSULTANTS



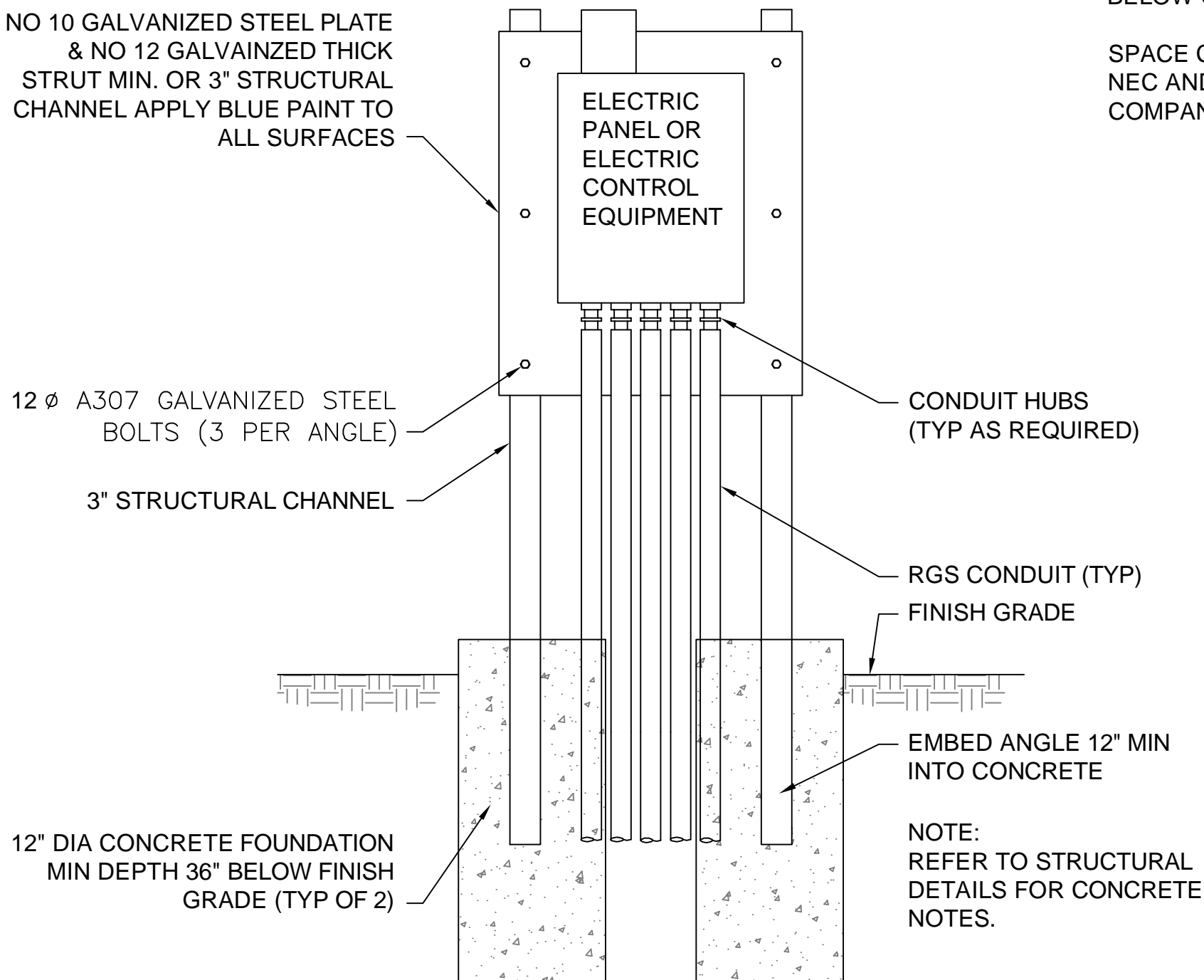
1) TYPICAL POLE BASE DETAIL - NON-PAVED AREAS
N.T.S.



2 SECONDARY SERVICE TRENCH DETAIL
N.T.S.



6 ELECTRICAL EQUIPMENT MOUNTING DETAIL - INTERIOR
N.T.S.



5 ELECTRICAL EQUIPMENT MOUNTING DETAIL - EXTERIOR
N.T.S.



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APPROVED BY: KCT

DATE: DECEMBER 21, 2012

CAD FILE: E-500-01299-1200

General Electric Company

TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

TDCS BUILDING
DETAILS

DRAWING TITLE

DRAWING NUMBER

E-500

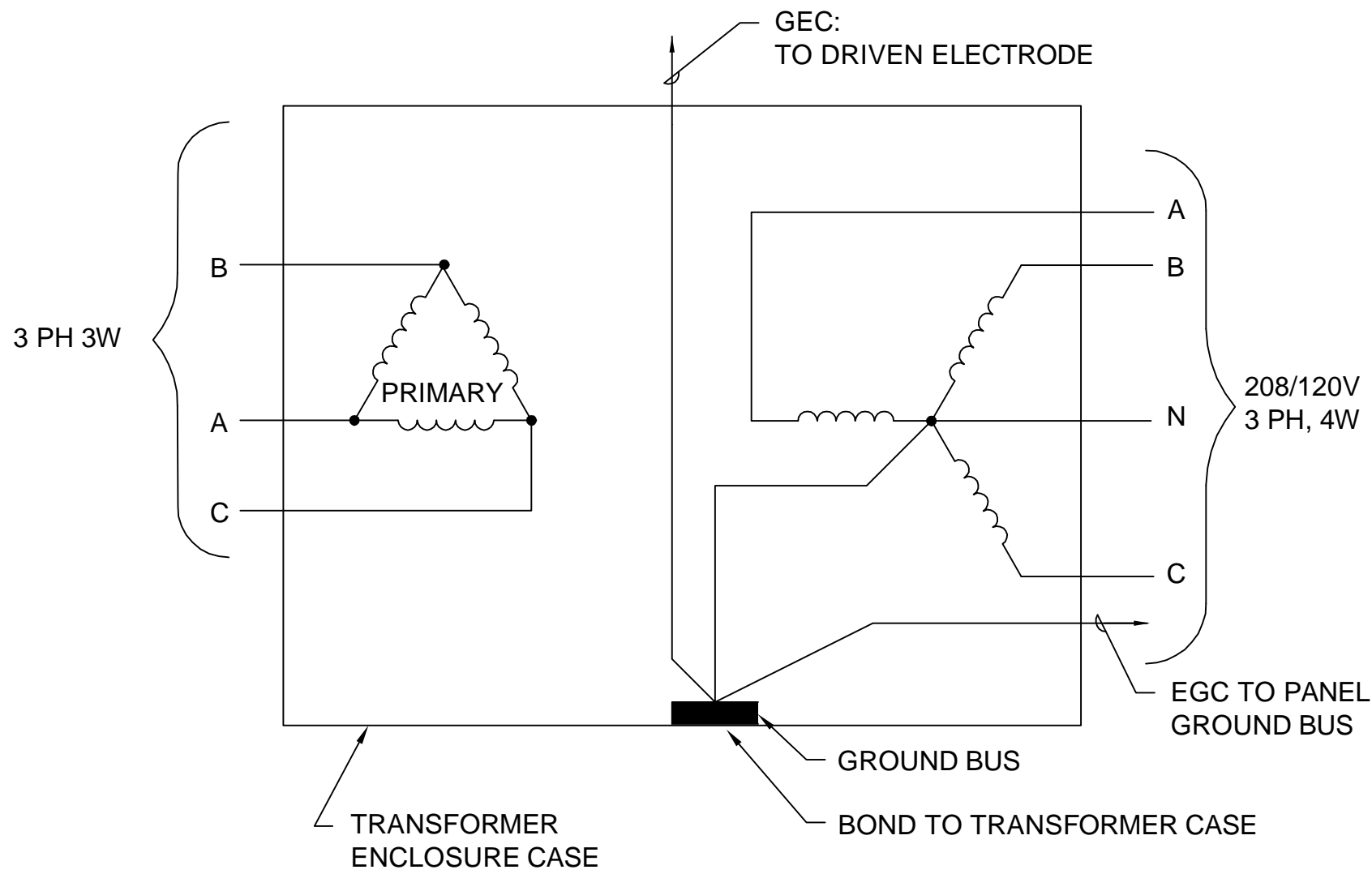
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REVISIONS

ISSUE DATES

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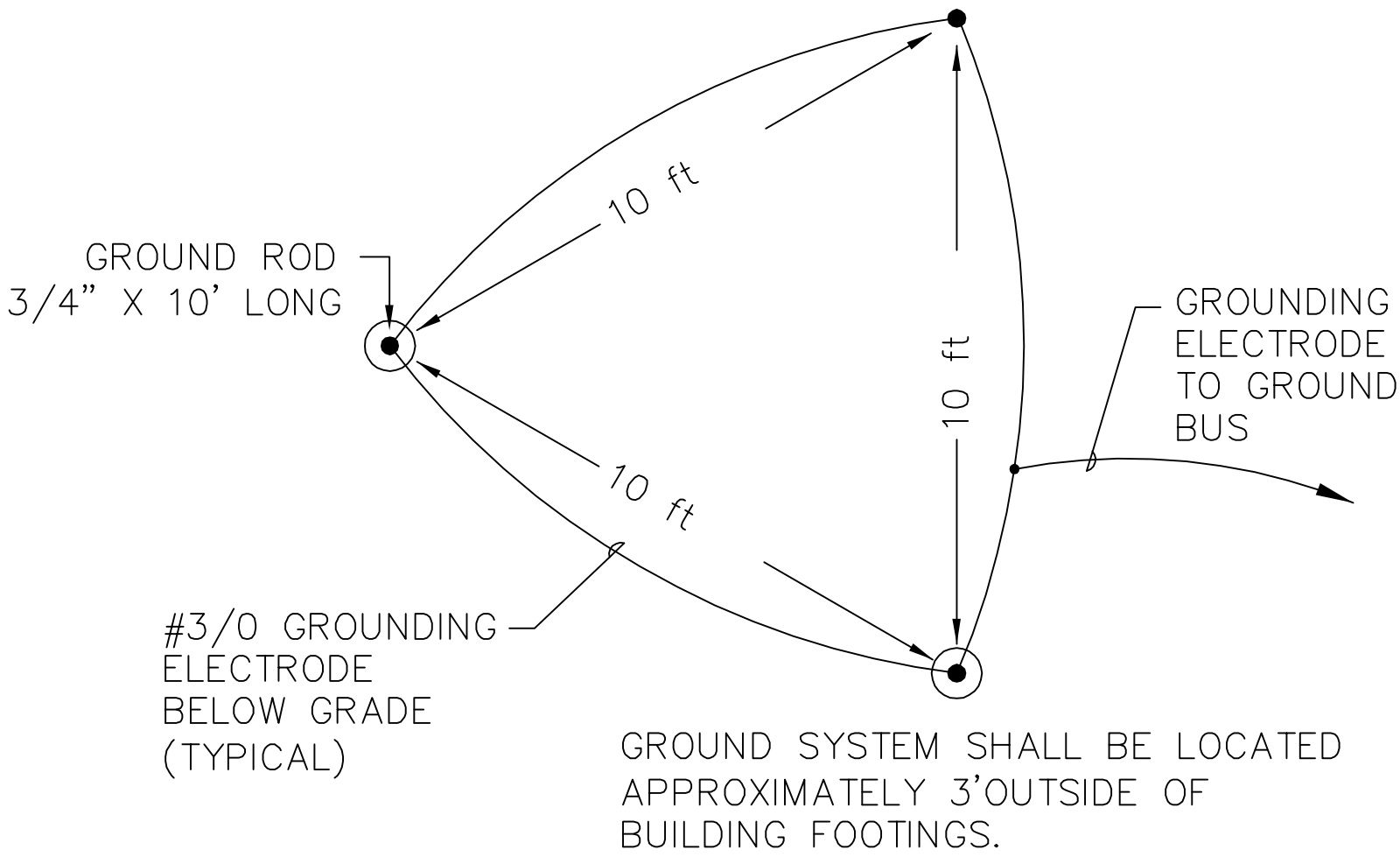
CONSULTANTS



GENERAL NOTES:

- A. GROUNDING ELECTRODE CONDUCTOR (GEC) SIZED PER NEC TABLE 250-94.
- B. EQUIPMENT GROUNDING CONDUCTOR (EGC) SIZED PER NEC TABLE 250-95.

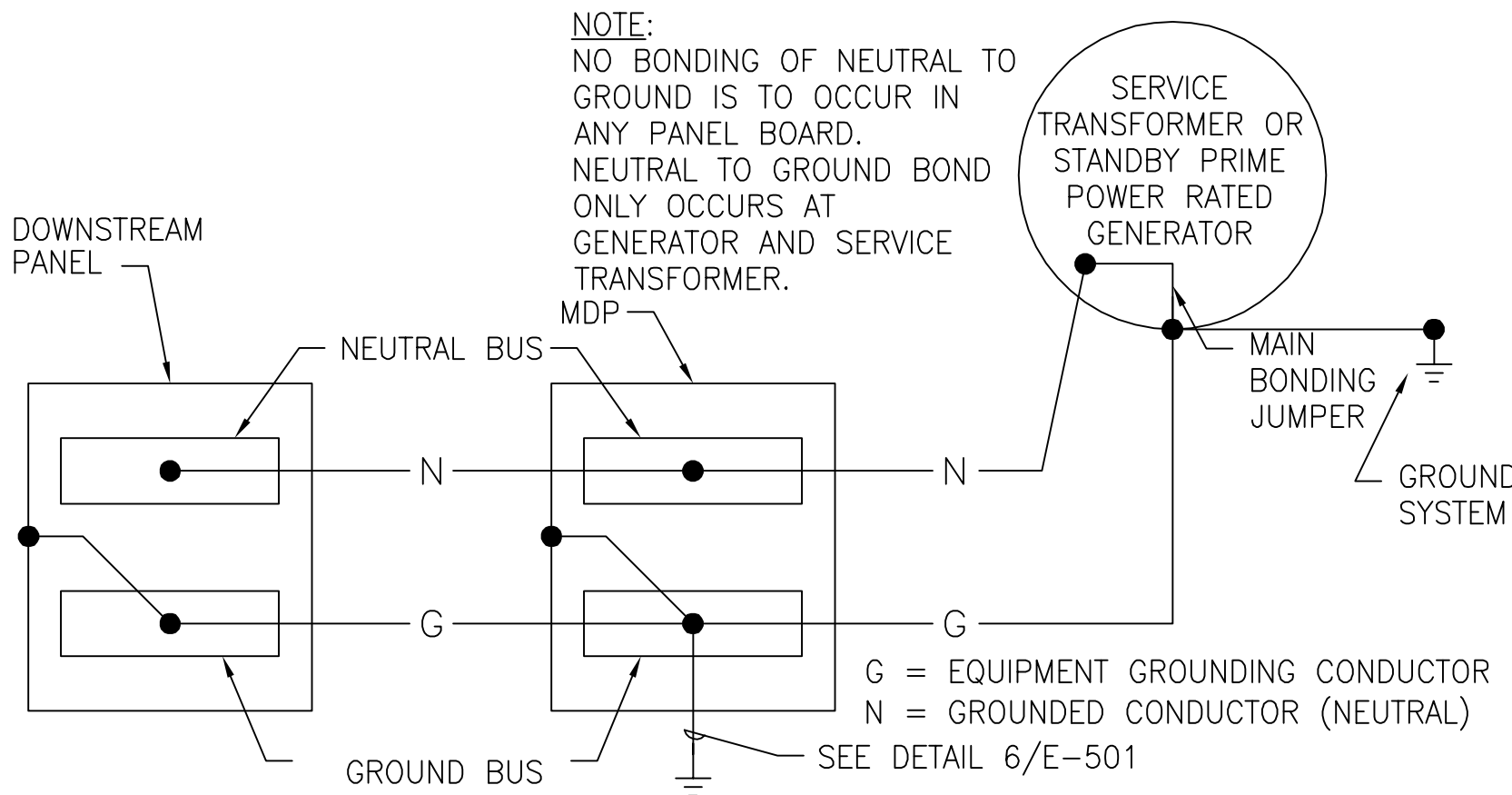
3 TYPICAL TRANSFORMER CONNECTION SEPARATELY DERIVED SYSTEM
N.T.S.



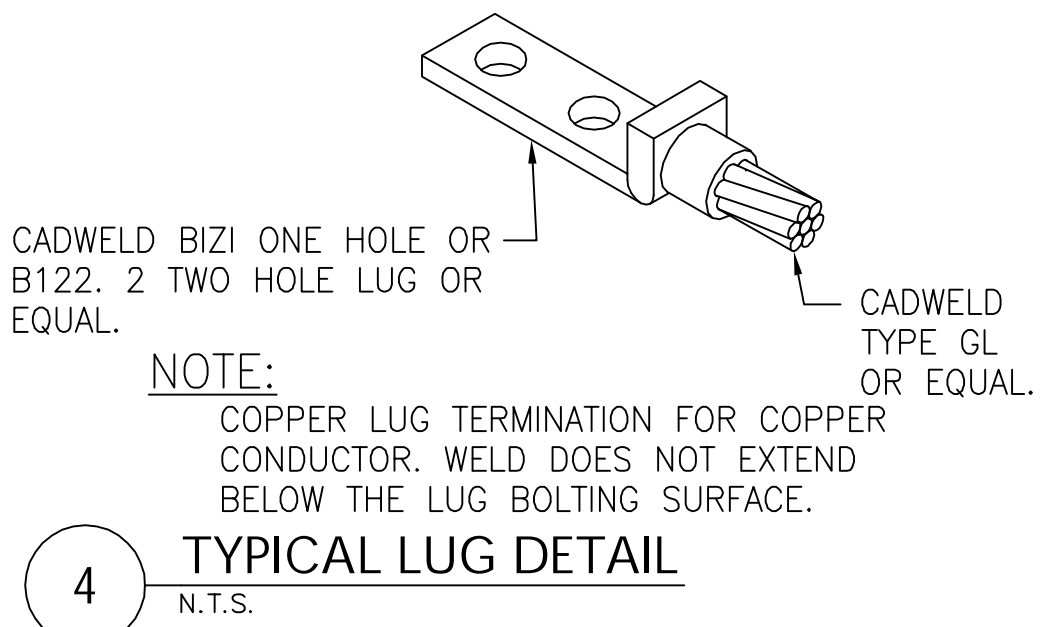
2 GROUND SYSTEM
N.T.S.

SERVICE CONDUCTOR SIZE	GROUNDING ELECTRODE CONDUCTOR SIZE
#8	#8
#3/0	#4
#2	#8

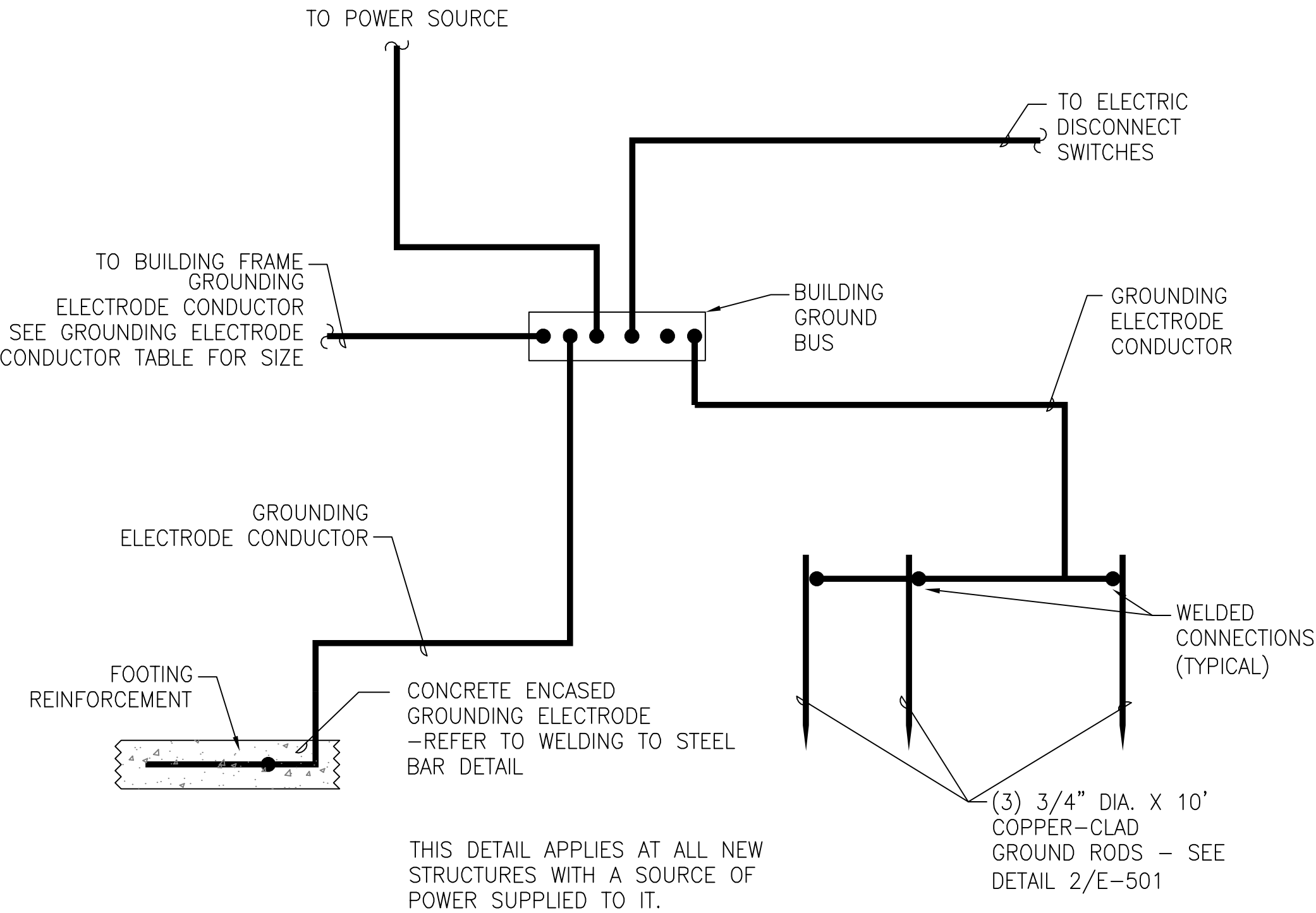
1 GROUNDING ELECTRODE CONDUCTOR SIZE TABLE
N.T.S.



5 DISTRIBUTION SYSTEM GROUNDING
N.T.S.



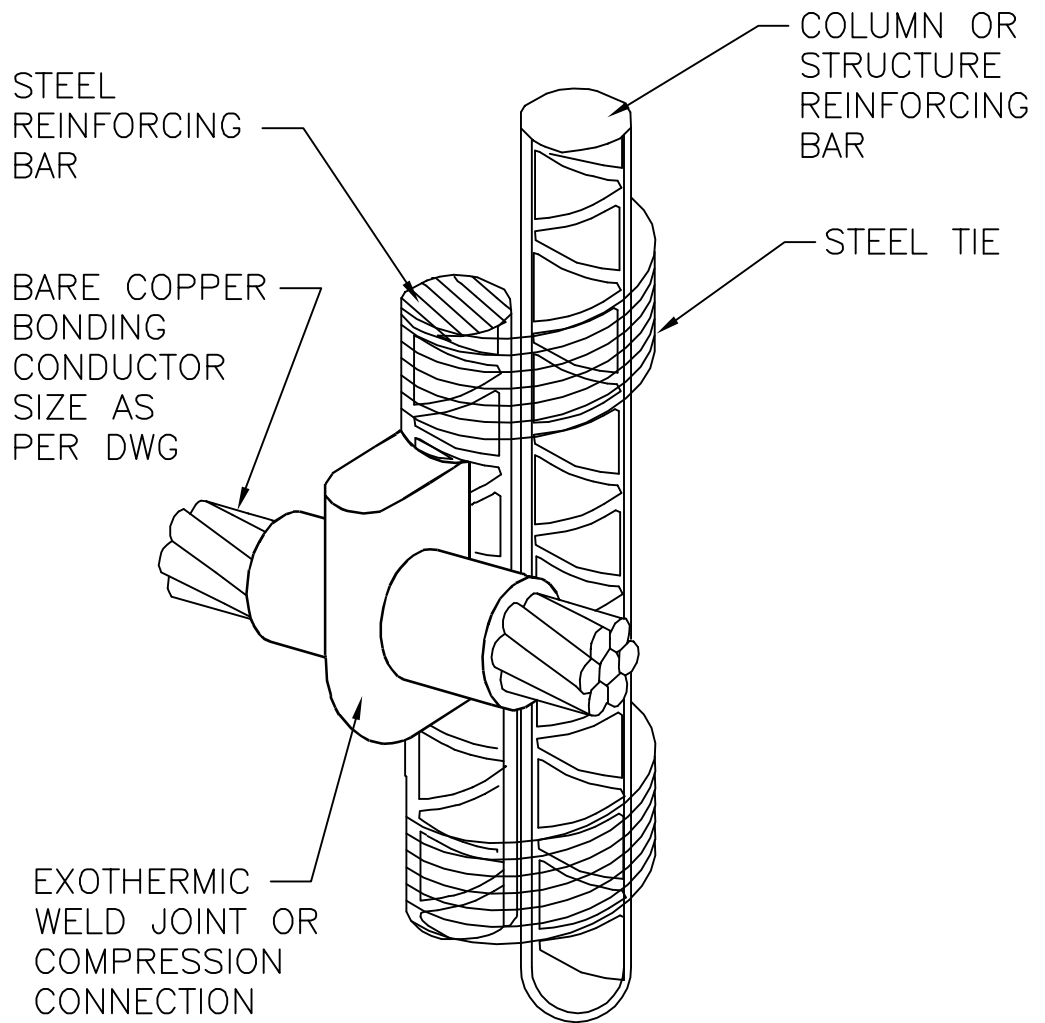
4 TYPICAL LUG DETAIL
N.T.S.



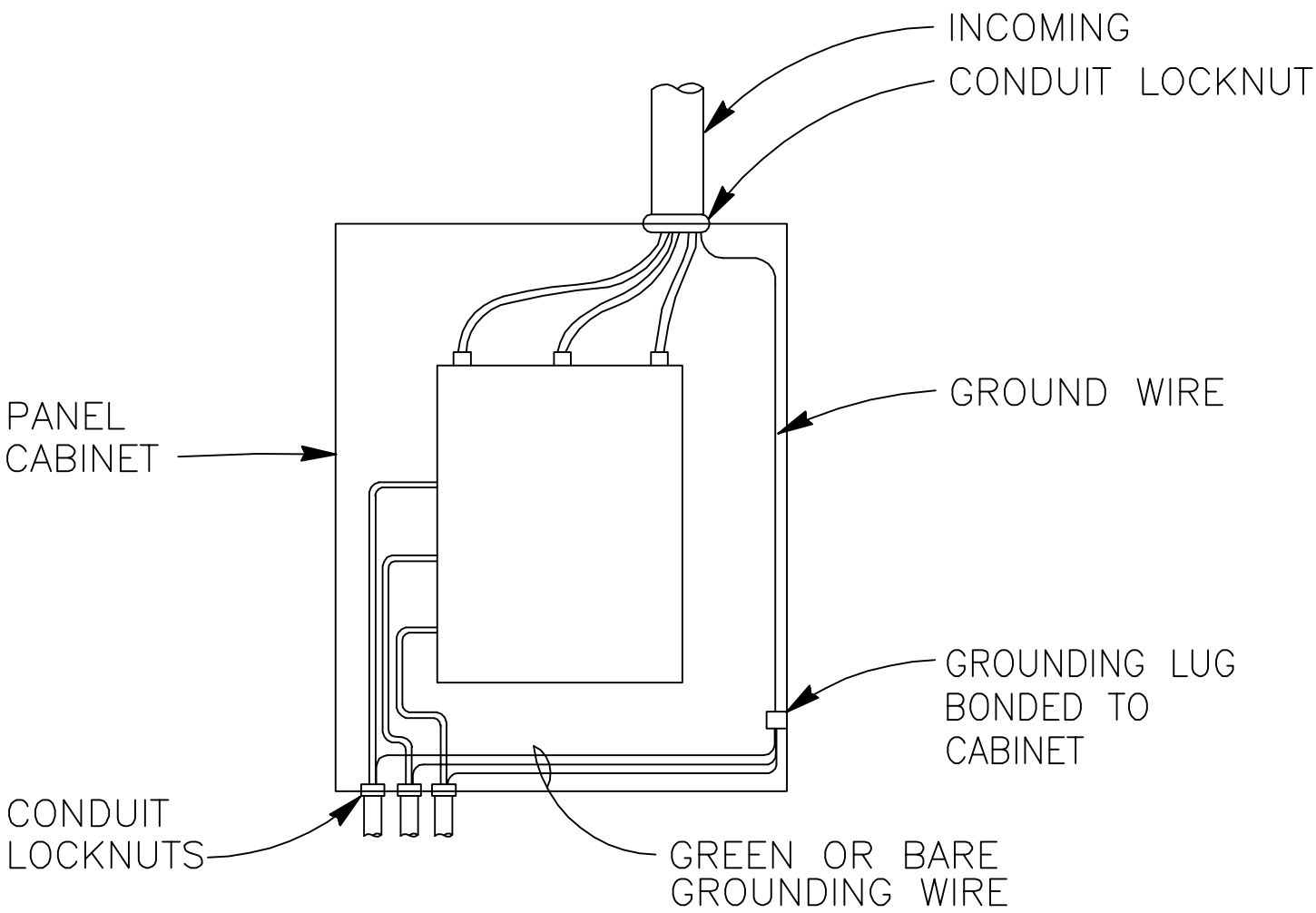
NOTES:

- BOND OTHER METAL PIPING GROUND TERMINALS TO THE SERVICE GROUNDING ELECTRODE SYSTEM.
- THE GROUNDING ELECTRODE CONDUCTOR SHALL ONLY BE CONNECTED TO GROUNDING ELECTRODES THAT ARE AVAILABLE ON THE PREMISES.
- PROTECT GROUNDING ELECTRODE CONDUCTOR WITH NONMETALLIC RACEWAY WHEN CONDUCTOR PENETRATES FLOOR SLABS AND WALLS.
- ALL GROUNDING ELECTRODE CONDUCTORS, BONDING JUMPERS AND GROUNDING CONDUCTORS SHALL BE COPPER.

6 BUILDING DISCONNECT GROUNDING ELECTRODE CONNECTION
N.T.S.



8 WELDING TO STEEL REINFORCING BAR DETAIL
N.T.S.



NOTES:

- ALL WIRES TO BE NEATLY LACED.
- AT THE POINT OF ATTACHMENT OF THE GROUNDING LUG TO THE CABINET, THE SURFACES SHALL BE SCRAPPED FREE OF PAINT AND THOROUGHLY CLEANED TO INSURE PROPER BONDING.
- NEUTRAL CONDUCTOR NOT SHOWN FOR CLARITY.

7 TYPICAL PANEL GROUNDING DETAIL
N.T.S.

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RCN: 112IC04086

DRAWN BY: SES

CHECKED BY: DJS

SCALE: AS NOTED

APPROVED BY: KCT

DATE: DECEMBER 21, 2012

CAD FILE: E-501-01299-12001

General Electric Company

TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

TDCS BUILDING DETAILS

DRAWING TITLE:

DRAWING NUMBER:

E-501

REVISIONS

PANELBOARD

HP

LOCATION

Shaft Access Area

SURFACE

MOUNTED

22000

SYM. A.I.C.MIN.

ENCLOSURE TYPE:

AMP MAIN LUGS (OR)

100

AMP MAIN BREAKER WITH

100

AMP TRIP

X

NEMA 1

480Y/277

VOLTS

3

PHASE

4

WIRE

60

HERTZ

AMP BUS

SE LABEL

CKT. NO.	NO. POLES	TRIP AMPS	WIRE AWG	# OF WIRES	GND. AWG	CONDUIT INCH	LOAD SERVED	LOAD VA & PHASE			LOAD SERVED	CONDUIT INCH	GND. AWG	# OF WIRES	WIRE AWG	TRIP AMPS	NO. POLES	CKT. NO.
								VA		VA								
1	1	20	12	2	12	3/4	SHAFT AREA LIGHTING	2200	A	3878								2
3	1	20	12	2	12	3/4	SHAFT AREA LIGHTING	2200	B	3878	JIB CRANE	3/4	10	4	8	35	3	4
5	1	20	12	2	12	3/4	SHAFT AREA LIGHTING	440	C	3878								6
7	1	20	12	2	12	3/4	GATE SITE LIGHTING	440	A	250								8
9	1	20	12	2	12	3/4	EXTERIOR LIGHTING	1650	B	250	GATE MOTOR	1-3/4	12	4	12	20	3	10
11	1	20					SPARE		C	250								12
13	1	20					SPARE		A	7590								14
15	1	20					SPARE		B	7590	BRIDGE CRANE	1	10	4	6	60	3	16
17	1	20					SPARE		C	7590								18
19	1	20					SPARE		A		SPARE					20	1	20
21	1	20					SPARE		B		SPARE					20	1	22
23	1	20					SPARE		C		SPARE					20	1	24
25	1	20					SPARE		A		SPARE					20	1	26
27	1	20					SPARE		B		SPARE					20	1	28
29	1	20					SPARE		C		SPARE					20	1	30
31	1	20					SPARE		A		SPARE					20	1	32
33	1	20					SPARE		B		SPARE					20	1	34
35	1	20					SPARE		C		SPARE					20	1	36
37	1	20					SPARE		A		SPARE					20	1	38
39	1	20					SPARE		B		SPARE					20	1	40
41	1	20					SPARE		C		SPARE					20	1	42

CONNECTED LOAD PER PHASE (VA)

14358

15568

12158

A

B

C

* -GFCI BREAKER ** - SHUNT TRIP BREAKER

- PROVIDE BREAKER AS REQUIRED BY PANELBOARD MANUFACTURER FOR TVSS

TOTAL CONNECTED LOAD:

42.084 kVA

50.64 Amps

SUPPLIED FROM:

HV-2A

ISSUE DATES

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RCN: 112IC04086

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SCALE: AS NOTED

APPROVED BY: KCT

DATE: DECEMBER 21, 2012

CAD FILE: E-601-01299-12001

General Electric Company

TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

TDCS BUILDING
PANEL SCHEDULES

DRAWING TITLE:

E-601

DRAWING NUMBER:

REVISIONS

LIGHT FIXTURE SCHEDULE										
KEY	SYMBOL	DESCRIPTION	VOLTAGE/PH	LAMPS **			BALLAST		MANUFACTURERS (OR EQUAL) *	
				NO.	WATTAGE	TYPE	NO.	TYPE	NAME	MODEL OR SERIES
1		HIGH BAY INDUSTRIAL FIXTURE	277/1	1	400W	METAL HALIDE	1	ELECTRONIC	LITHONIA	TPGE 400M PG16GLE S 277 SCWA LCPP PPH277
1B		HIGH BAY INDUSTRIAL FIXTURE	277/1	1	400W	METAL HALIDE	1	ELECTRONIC	LITHONIA	TPGE 400M PG16GLE C 277 SCWA QRS LCPP PPH277
41		EXTERIOR WALL PACK (MOUNT 25' A.F.G.)	277/1	1	250	METAL HALIDE	1	SCWA PULSE START	LITHONIA	TWF2 250M 277 SCWA SF PE LPI
42		EXTERIOR POLE MOUNTED 30', 5" SQUARE STRAIGHT STEEL	277/1	1	400	METAL HALIDE	1	SCWA PULSE START	LITHONIA	KS1 400M 30C R4SC 5C SCWA PER SF P67
									* MANUFACTURER AND MODEL NUMBER ARE PROVIDED TO SHOW BASIS OF DESIGN ONLY.	

ISSUE DATES

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RCN: 112IC04086

DRAWN BY: SES

CHECKED BY: DJS

SCALE: AS NOTED

APPROVED BY: KCT

DATE: DECEMBER 21, 2012

CAD FILE: E-602-01299-12001

General Electric Company

TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

TDCS BUILDING
LIGHT FIXTURE SCHEDULE

DRAWING TITLE:

E-602

DRAWING NUMBER:

REVISIONS

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RCN: 112IC04086

DRAWN BY: BCL

CHECKED BY: GPD

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

APPROVED BY: DRH

DATE: DECEMBERr 21, 2012

CAD FILE: P-100-01299-12001

General Electric Company

TDCS
PHASE FOUR
DESIGN

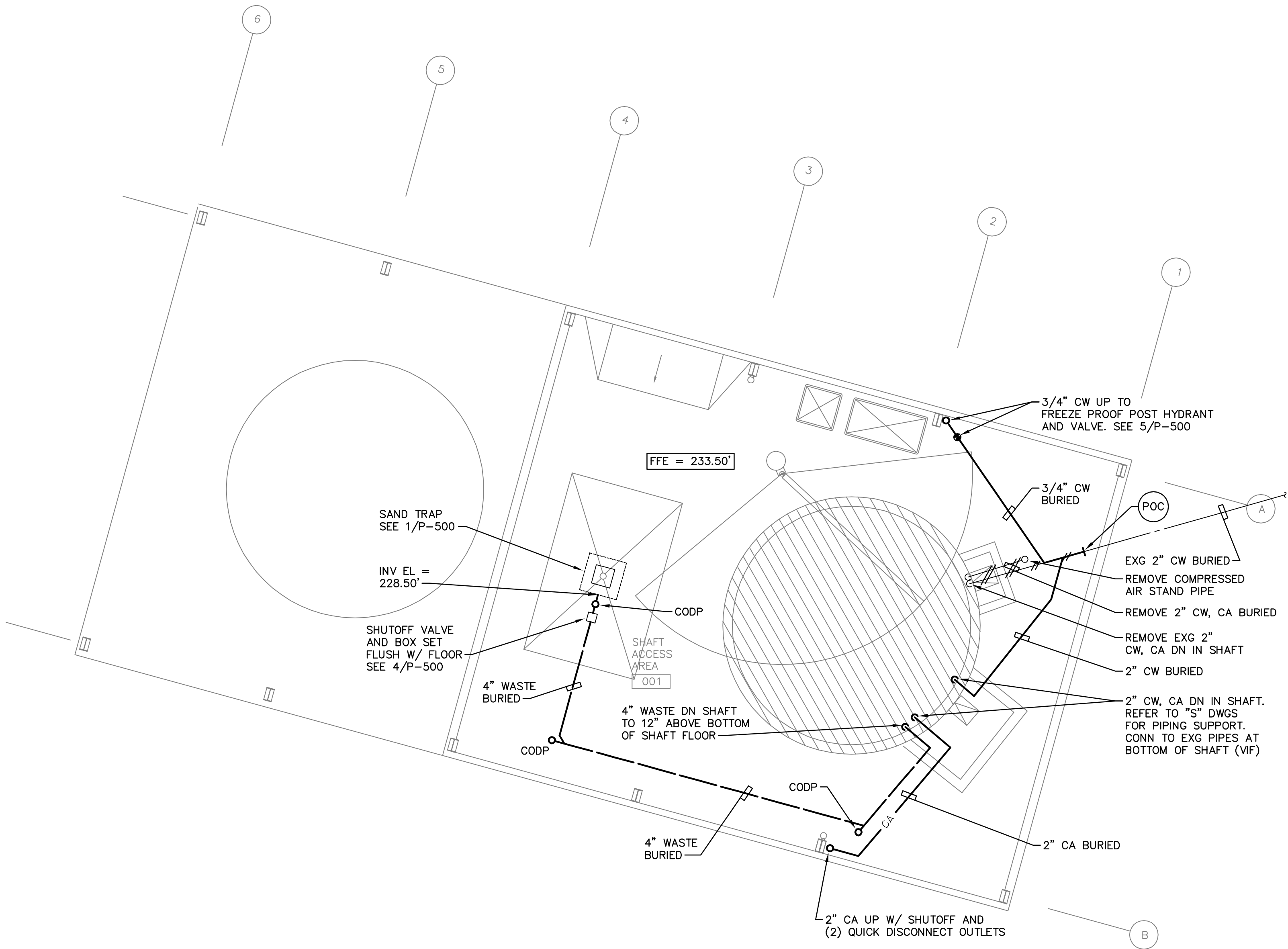
Hudson Falls, New York

TDCS BUILDING
FIRST FLOOR PLAN

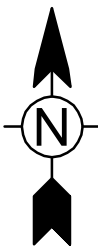
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P-100

DRAWING NUMBER:

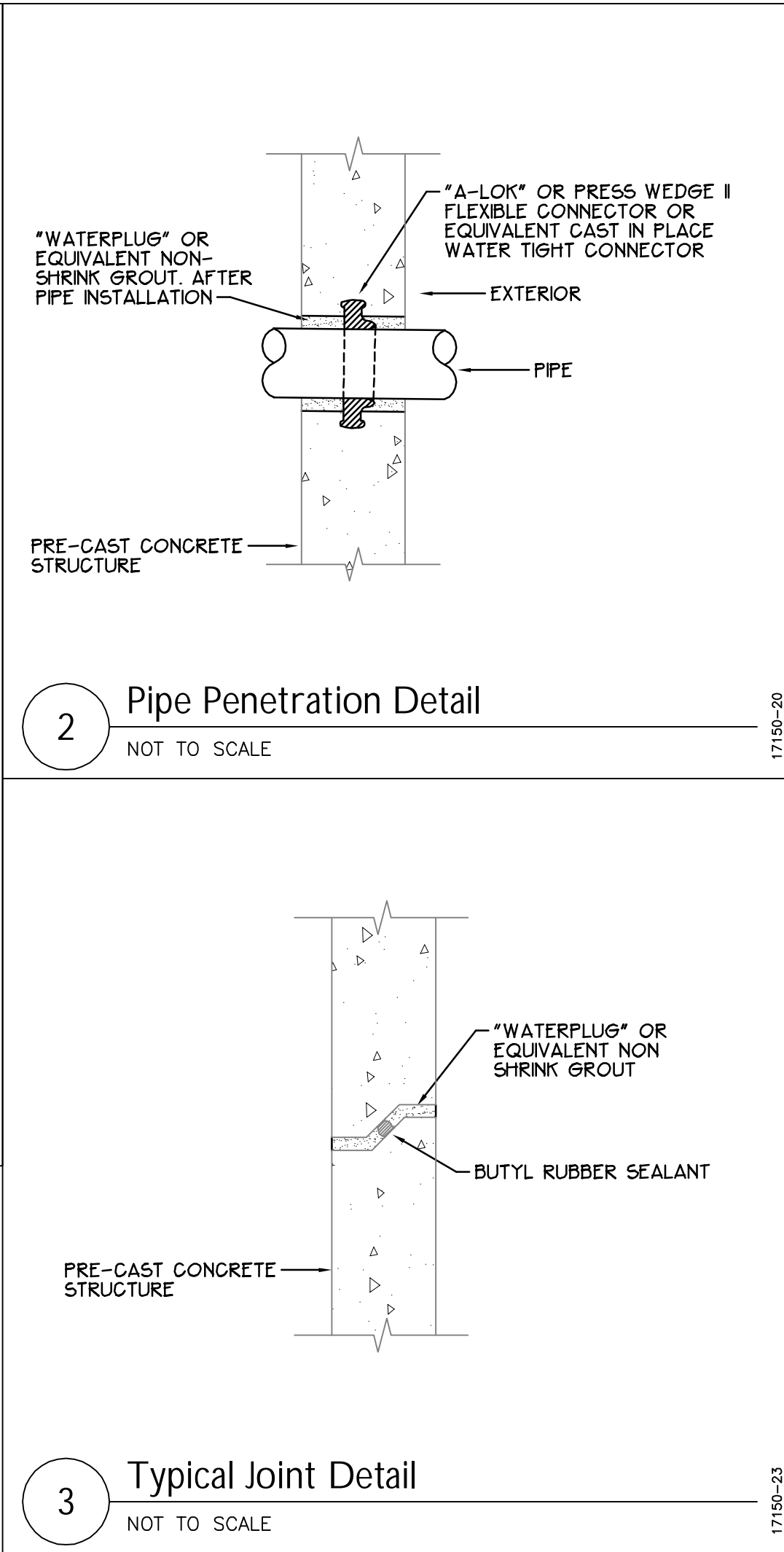
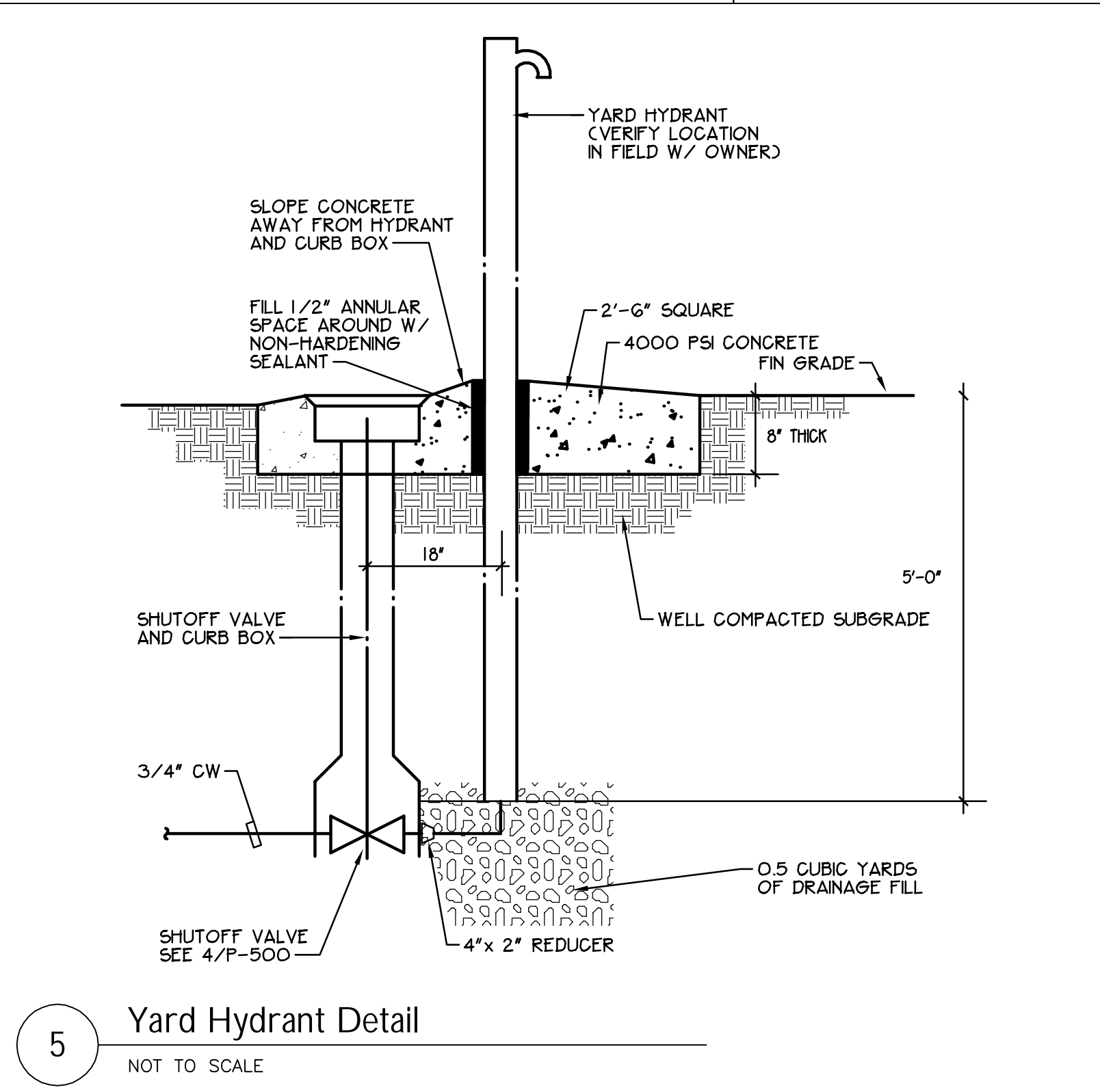
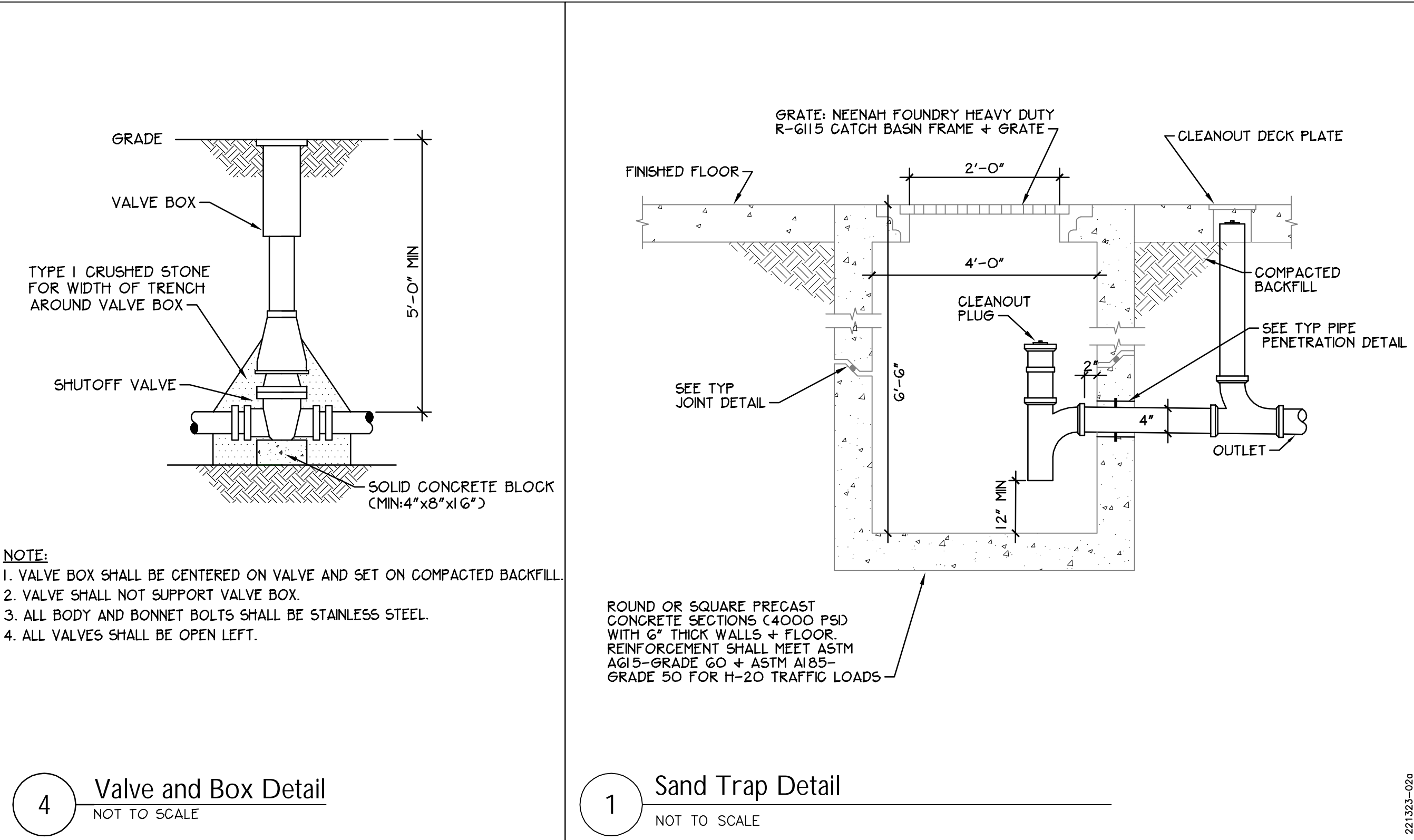


1 FIRST FLOOR PLAN
1/8" = 1'-0"



0 4' 8' 16'

SCALE: 1/8"=1'



REVISIONS

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RCN: 112IC04086

DRAWN BY: BCL

CHECKED BY: GPD

SCALE: NOT TO SCALE

APPROVED BY: DRH

DATE: DECEMBER 21, 2012

CAD FILE: P-500-01299-12001

General Electric Company

TDCS
PHASE FOUR
DESIGN

Hudson Falls, New York

TDCS BUILDING
PLUMBING DETAILS

DRAWING TITLE:

P-500

DRAWING NUMBER: