



TOLLGATE SUBSTATION

ISSUED FOR CONSTRUCTION

SYMBOLS LEGEND

	BREAK LINE	SECTION CALL OUT	
	BILL OF MATERIAL CALL OUT		SECTION LETTER
	REVISION CALL OUT		SHEET SECTION DRAWN ON
	COLUMN GRID CALL OUT	SECTION DESCRIPTION	
	BAR SCALE		DESCRIPTION
	WORK POINT		SCALE
	INDICATES APPROXIMATE SIGN LOCATION	LINE TYPES	
	NORTH ARROW		1019 CONTOUR LINE - NEW
	POWER POLE		1019 CONTOUR LINE - EXISTING
	SOIL BORING LOCATION		CULVERT
	BIO ROLL		EASEMENT
	FLOW DIRECTION		FENCE LINE - NEW
	SEEDED AND MULCHED OR EROSION CONTROL BLANKET		FENCE LINE - EXISTING
	AREAS NOT TO BE DISTRIBUTED		PROPERTY LINE - EXISTING
			PROPERTY LINE - NEW
			RIGHT OF WAY LINE
			SECTION LINE
			SILT FENCE
			WETLAND BOUNDARY

ABBREVIATIONS

AB	ANCHOR BOLT	MAS	MASONRY
AD	ADDRESS SIGN	MAX	MAXIMUM
BC	BURIED CABLE SIGN, BOLT CIRCLE	NIC	NOT IN CONTRACT
BLDG	BUILDING	NS	NEAR SIDE
BM	BEAM, BENCH MARK	NT	NO TRESPASSING SIGN
CJ	CONTROL JOINT	NTS	NOT TO SCALE
CL/C	CENTER LINE	OC	ON CENTER
CMP	CORRUGATED METAL PIPE	PJF	PREFORMED JOINT FILLER
CMU	CONCRETE MASONRY UNIT	PROJ	PROJECTION
COL	COLUMN	RAD/R	RADIUS
CONC	CONCRETE	RCP	REINFORCED CONCRETE PIPE
CP	CONCRETE PIPE	REF	REFERENCE
Ø, DIA	DIAMETER	REINF	REINFORCING, REINFORCEMENT
DIM	DIMENSION	RO	ROUGH OPENING
EEE	ELECTRICAL EQUIPMENT ENCLOSURE	SCHED	SCHEDULE
EF	EACH FACE	SEC	SECTION
EL	ELEVATION	SH	SHEET
EXT	EXTERIOR	SPEC(S)	SPECIFICATION(S)
FD	FIELD DRILL	SO	SQUARE
FLG	FLANGE	STRUCT	STRUCTURE, CIVIL
FS	FAR SIDE	STD	STANDARD
FT	FEET	STL	STEEL
GALV	GALVANIZED	TOC	TOP OF CONC
HAS	HEADED ANCHOR STUD	TOM	TOP OF MASONRY
ID	IDENTIFICATION SIGN	TOS	TOP OF STEEL
IN	INCH	TP	TRANSMISSION POLE
JT	JOINT	TYP	TYPICAL
K	KIP (1000 LBS.)	UNO	UNLESS NOTED OTHERWISE
LB	POUND	WR	WARNING SIGN
LLH	LONG LEG HORIZONTAL		
LLV	LONG LEG VERTICAL		

PROJECT REVISION AND DESCRIPTION

REVISION	WBS LEVEL 4	PROJECT DESCRIPTION
REV A	A.0010122.053.001.002	IFC-TOLLGATE ELR MCSG1-DCP-CMT - REMOVE AND REPLACE EXISITING CHAIN LINK FENCE WITH 9'-0" HIGH CHAINLINK FENCE AS NOTED. SAVE AND REPAIR EXISTING WOODEN FENCE AND COLUMNS. SAVE AND RE-INSTALL ALL SIGNS FROM EXISTING GATES. MOVE SECONDARY GATE 20'-0" WEST OF EXISTING LOCATION.

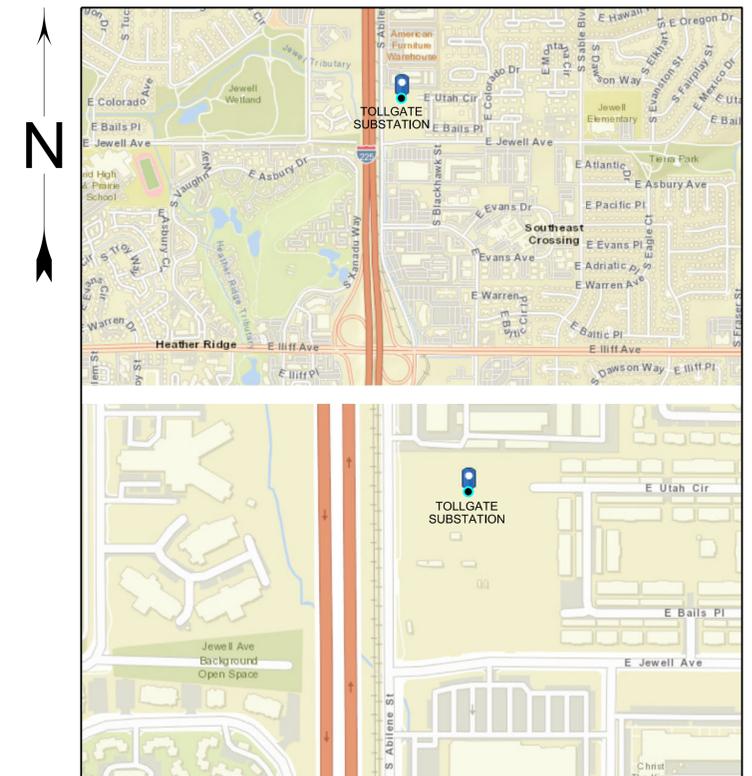
GENERAL NOTES:

1. REVISION LETTERS IN THIS TABLE CORRESPOND TO THE WORK THAT IS TO BE COMPLETED FOR EACH WBS NUMBER LISTED. THESE REVISION LETTERS WILL BE USED THROUGHOUT THE ISSUED DRAWING PACKAGE.
2. THESE LETTERS SEPARATE MULTIPLE WORK ORDER NUMBERS, ISSUED WITHIN THE DRAWING PACKAGE.
3. FOR DRAWING REFERENCE AND REVISION INFORMATION SEE INDEX SHEET.

CONTACT INFORMATION

NAME / TITLE	CONTACT INFORMATION
NAME: MARIO JIMENEZ COMPANY NAME: HDR PROJECT ROLE: CIVIL DESIGNER	OFFICE: (763) 278-5929
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NAME: JAMIE STAHLAK COMPANY NAME: HDR PROJECT ROLE: ENGINEER OF RECORD	OFFICE: (608) 888-5859
NAME: TIM WACHHOLZ COMPANY NAME: XCEL ENERGY PROJECT ROLE: CMT CIVIL SPONSOR	OFFICE: (612) 385-9554
NAME: ROB SENN COMPANY NAME: XCEL ENERGY PROJECT ROLE: PROJECT MANAGER	OFFICE: (540) 461-3448

VICINITY MAP



SUBSTATION ADDRESS: 1800 S ABILENE ST, AURORA, CO 80012
TELEPHONE NUMBER: (303) 755-2275
SUBSTATION GPS: LATITUDE: 39.683308, LONGITUDE: -104.827598

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TOLLGATE SUBSTATION
COVER & INDEX SHEET - CIVIL
CIVIL GRADING COVER SHEET

TOLL

0072-000.000S01

SCALE: NONE
REV: 5A

REV	DATE	WBS 4	REVISION DESCRIPTION	REV	DATE	WBS 4	REVISION DESCRIPTION	REV	DATE	WBS 4	REVISION DESCRIPTION
				2A	2020/03/20	D.0001984.009.001.008	IFR-4VVO TOLLGATE REPLACE LTC CONTROLLER@MCD	4	2021/12/17	NA	IFR - UPDATE TO NEW STANDARD
				3	2020/10/19	D.0000565.024.001.006	IFR -MRO UPDATE	5A	2025/05/02	A.0010122.053.001.002	IFC-TOLLGATE ELR MCSG1-DCP-CMT

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FENCE SIGN SCHEDULE

QTY. REQD	QTY.	CALL OUT	XP#	DESCRIPTION	MOUNTING LOCATION
1		AD	01-001	911 ADDRESS SIGNS	MOUNTED BELOW SUBSTATION IDENTIFICATION SIGN. SEE DETAIL ON 002.011502
14		BC	SGN062	BURIED CABLE SIGN (EX. CONTROL, FIBER, HG VOLTAGE, PHONE)	MOUNTED ON EACH SIDE OF FENCE, BACK TO BACK AND APPROXIMATELY 3'-6" FROM GRADE TO TOP OF SIGNS.
22		NT	SGN071	NO TRESPASSING SIGN	MOUNTED 5'-0" FROM GRADE TO TOP OF SIGN, NO MORE THAN 50' APART AND NO MORE THAN 20' FROM ANY CORNER. SIGN SHALL BE PLACED ADJACENT TO THE WARNING SIGN. ONE SIGN SHOULD BE PLACED ON THE INSIDE & OUTSIDE OF EACH GATE.
22		WR	SGN055	WARNING SIGN	MOUNTED 5'-0" FROM GRADE TO TOP OF SIGN, NO MORE THAN 50' APART AND NO MORE THAN 20' FROM ANY CORNER. SIGN SHALL BE PLACED ADJACENT TO THE NO TRESPASSING SIGN. ONE SIGN SHOULD BE PLACED ON THE INSIDE & OUTSIDE OF EACH GATE.
2		MT	01-002	MATERIAL THEFT SIGN	MOUNTED 5'-0" FROM GRADE TO TOP OF SIGN AND ADJACENT TO TEXT TO ENTER SIGN ON GATE. SEE DETAIL 2 ON 002.011502
2		BNP	01-003	NO PARKING SIGN	MOUNTED 5'-0" FROM GRADE TO TOP OF SIGN AND ADJACENT TO TEXT TO ENTER SIGN ON GATE. SEE DETAIL 5 ON 002.011502

NOTE
1. ENGINEERING AND DESIGN TO ORDER NEW FENCE SIGNS TO REPLACE ALL OLD AND OUT OF DATE SIGNS AS NECESSARY.

CONSTRUCTION NOTE:
BURIED CABLE SIGN (BC) LOCATIONS ARE APPROXIMATE. CONSTRUCTION TO LOCATE CABLES AND PLACE SIGNS AT THOSE LOCATIONS, AS-BUILT DWGS AS NEEDED.

CONSTRUCTION NOTE:
VERIFY ALL FENCE DIMENSIONS AND FENCE CORNER COORDINATES FOR AS BUILT DRAWINGS.

CONSTRUCTION NOTE:
REPLACE EXISTING SIGNS ON ALONG THE EXISTING SOUTH, WEST AND NORTH FENCELINES.

CONSTRUCTION NOTE:
REPLACE WOOD FENCE ON THE SOUTH SIDE REMOVED DURING SWITCH GEAR INSTALLATION.

CONSTRUCTION NOTE:
SAVE AND RE-INSTALL ALL SIGNS FROM EXISTING GATE.

CONSTRUCTION NOTE:
NEW SECONDARY GATE WILL BE MOVED 20'-0" WEST FROM EXISTING LOCATION. REMOVE AND INSTALL WOOD FENCE TO MATCH NEW CHAINLINK FENCE AND GATE.

CONSTRUCTION NOTE:
SAVE WOOD FENCE PILASTERS AND REPAIR WOOD FENCE. INSTALL NEW CHAINLINK FENCE BEHIND WOODEN FENCE.

CONSTRUCTION NOTE:
INSTALL 9'-0" PERIMETER FENCE IN SAME LOCATION AS EXISTING FENCE.

CONSTRUCTION NOTE:
SAVE AND RE-INSTALL ALL SIGNS FROM EXISTING GATE.

- GENERAL NOTES**
- FENCE - 9'-0" HIGH CHAIN LINK FABRIC w/ 1" MESH.
 - ALL GATES DESIGNED TO OPEN OUTWARD.
 - SEE 0072-002.011502 FOR FENCE & FOUNDATION DETAILS.

- LEGEND**
- PROPERTY LINE
 - ROADWAY CENTERLINE
 - EDGE OF PAVEMENT
 - NEW CHAINLINK FENCE
 - OHE --- OVERHEAD ELECTRIC
 - S --- SANITARY SEWER
 - UGE --- UNDERGROUND ELECTRIC
 - WTR --- WATER MAIN
 - PROPERTY CORNER
 - GRADING/SURVEYPOINT
 - SIGN
 - PP POWERPOLE
 - EXISTING WOOD FENCE
 - EXISTING WOOD FENCE PILASTER

- PRE-EXCAVATION PROCEDURE**
- CAUTION: THERE MAY BE UNDERGROUND UTILITIES/OBSTRUCTIONS IN THIS AREA. THE UNDERGROUND UTILITIES SHOWN ON THE PROVIDED ELECTRICAL REFERENCE DRAWINGS SHALL NOT BE ASSUMED COMPLETE OR ACCURATE. CONSTRUCTION SHALL LOCATE AND CLEARLY MARK THE LOCATION PRIOR TO ANY EXCAVATION ACTIVITY. 811 SHALL BE CALLED FOR EVERY EXCAVATION PROJECT AT LEAST THREE (3) BUSINESS DAYS PRIOR TO EXCAVATION WORK.
 - FOR UNDERGROUND UTILITY LOCATES INSIDE THE SUBSTATION FENCE, REQUEST LOCATES FROM SYSTEMS TESTING DEPARTMENT VIA EMAIL AT LDC-TEST-CREW-NOTIFICATION@xcelenergy.com, AT LEAST TEN (10) BUSINESS DAYS PRIOR TO EXCAVATION WORK.
 - SEE REFERENCE DRAWINGS 0072-002.004S01, 0072-004.001S01, 0072-010.001S01 FOR KNOWN UNDERGROUND UTILITIES.
 - REFER TO CONSTRUCTION SPECIFICATION SECTION 7010 AND THE PROJECT MANUAL FOR ADDITIONAL LOCATE INFORMATION.
 - DRAWINGS SHALL NOT BE RELIED ON AS THE SOLE SOURCE OF INFORMATION REGARDING UNDERGROUND UTILITIES.

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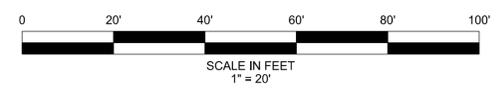
FOR DRAWING REFERENCE AND REVISION INFORMATION SEE CIVIL INDEX SHEET.

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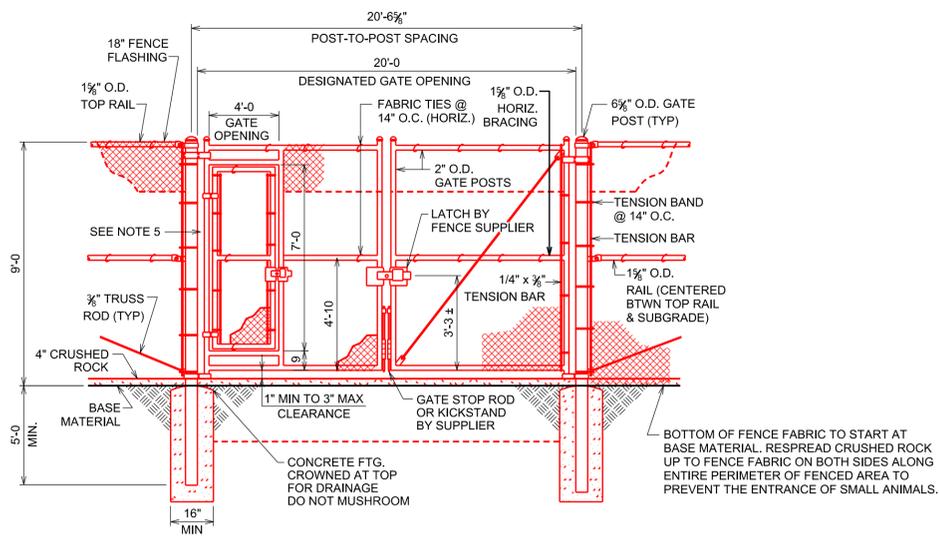
**TOLLGATE SUBSTATION
FENCE LAYOUT
FENCE PLAN**

XcelEnergy 0072-002.011S01 SCALE 1"=20'-0" REV 0



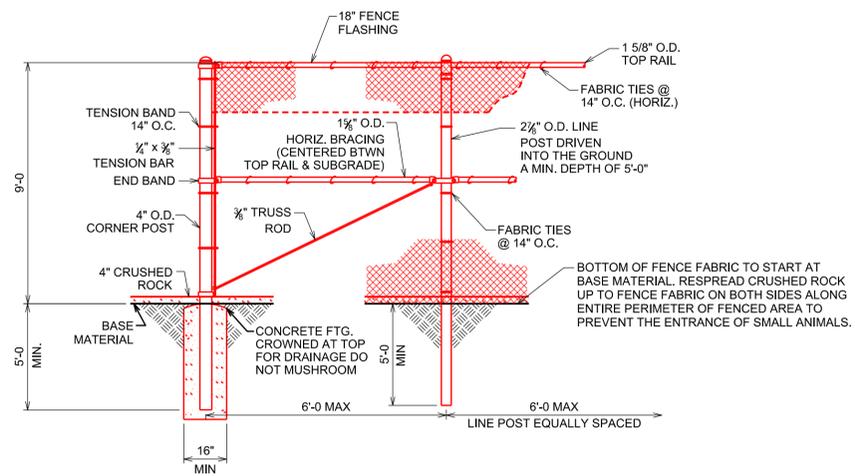
REV	DATE	WBS 4	REVISION DESCRIPTION	REV	DATE	WBS 4	REVISION DESCRIPTION	REV	DATE	WBS 4	REVISION DESCRIPTION
DA	2025/05/02	A.0010122.053.001.002	IFC-TOLLGATE ELM MCS01-DGP-CMT								

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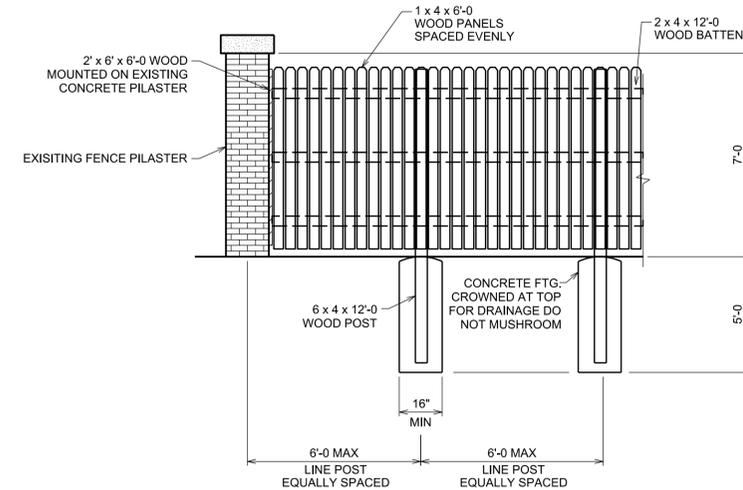
DRIVE GATE W/ SNOW GATE
SCALE: NONE

- NOTES:**
1. FENCE DESIGNED PER XCEL ENERGY CIVIL STRUCTURAL DESIGN CRITERIA.
 2. FENCE FABRIC TO BE 9 GAUGE, 1" GALVANIZED DIAMOND MESH CHAIN LINK STYLE.
 3. FENCE FABRIC SHALL BE TWISTED BARBED SELVAGE AT THE TOP AND BOTTOM.
 4. ALL GATE CONNECTIONS ARE WELDED.
 5. PIPE OR TENSION BAR INSTALLED TO FILL GAP BETWEEN THE GATE POST & GATE.
 6. FENCE FLASHING TO BE 24 GA W/ 1" HEM TOP & BOTTOM MOUNTED OUTSIDE OF FENCE ON TOP.
 7. ATTACH FLASHING TO TOP RAIL WITH 12 GAUGE STEEL TIES AND TO THE FABRIC WITH 9 GAUGE STEEL HOG RINGS.
 8. ALL PIPE MATERIAL IS SCH. 40.

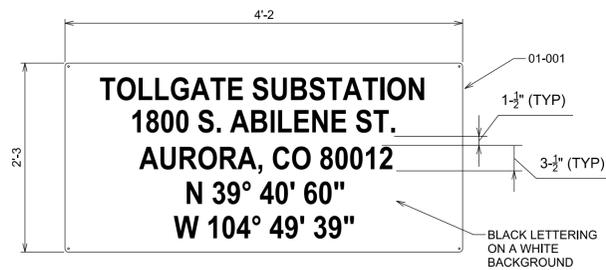


CORNER AND LINE POST
SCALE: NONE

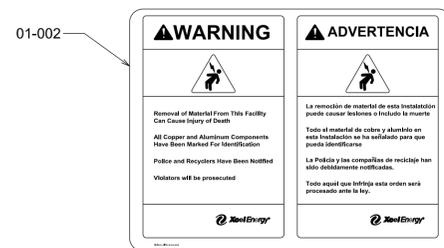
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EXTERIOR WOOD FENCE DETAIL
SCALE: NONE



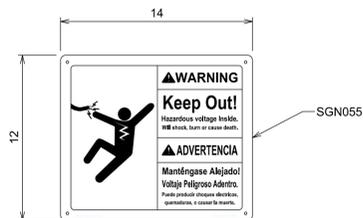
1 **DETAIL - TYPICAL NAMEPLATE SIGN (AD)**
NOT TO SCALE



2 **DETAIL - TYPICAL MATERIAL THEFT SIGN (MT)**
NOT TO SCALE



3 **DETAIL - TYPICAL NO TRESPASSING SIGN (NT)**
NOT TO SCALE



4 **DETAIL - TYPICAL NAMEPLATE SIGN (WR)**
NOT TO SCALE



5 **TYPICAL NO PARKING SIGN DETAIL (NP)**
NOT TO SCALE

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TOLLGATE SUBSTATION	TOLL
FENCE LAYOUT	DETAILS
0072-002.011S02	SCALE: NONE REV: 0

REV	DATE	WBS #	REVISION DESCRIPTION	REV	DATE	WBS #	REVISION DESCRIPTION	REV	DATE	WBS #	REVISION DESCRIPTION
DA	2025/05/02	A.0010122.053.001.002	IFC-TOLLGATE ELM MCSG1-DGP-CMT								

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