

PUBLIC SERVICE COMPANY OF COLORADO, LOT 2

A PORTION OF THE NORTHWEST QUARTER SECTION 18, T1N, R68W OF THE 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, COLORADO

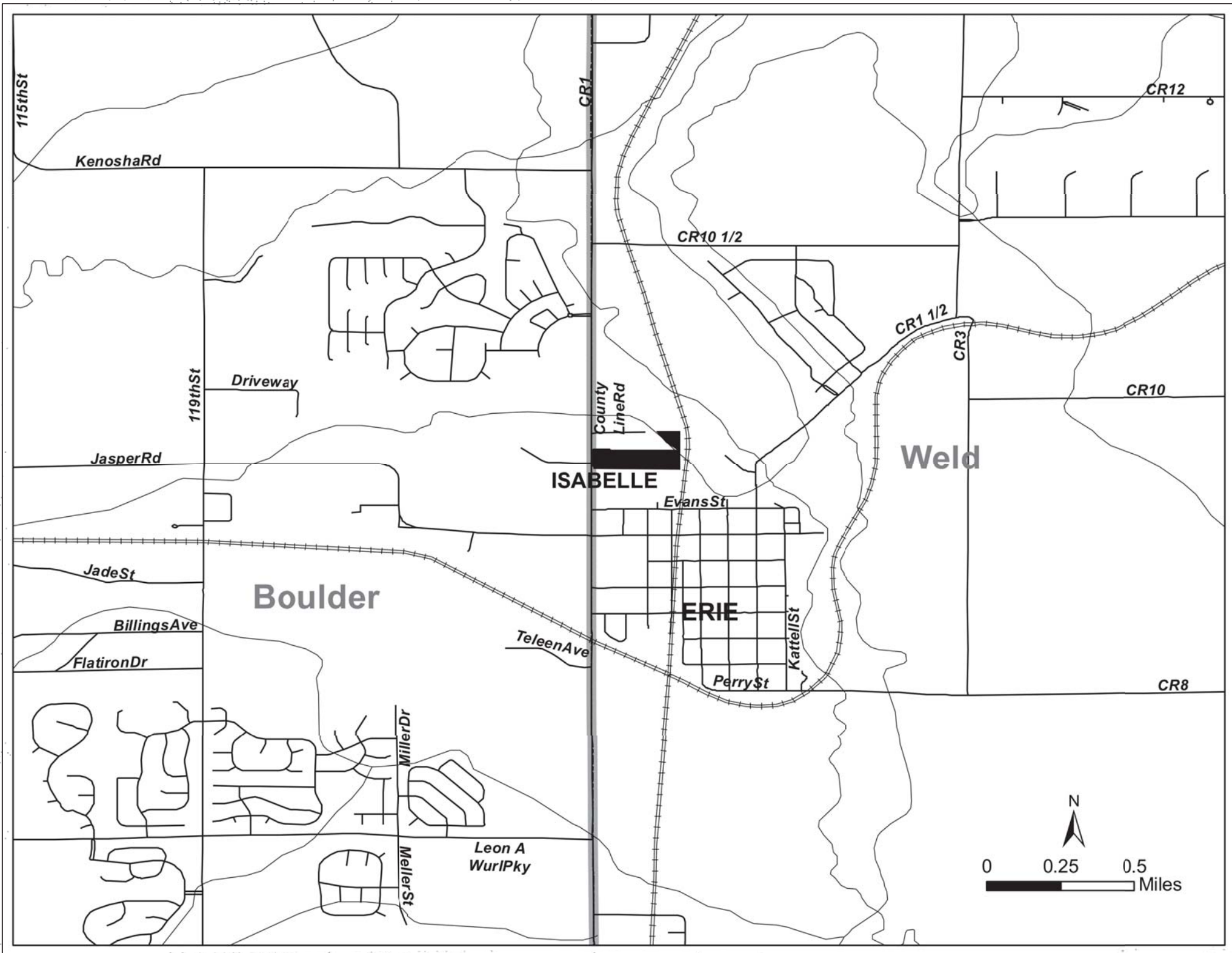
8.935 ACRES

SITE PLAN - SP 07-006

SHEET 1 OF 15

SITE PLAN AMENDMENT - SPAA-001050-2019

SPECIAL REVIEW USE - SRU-001049-2019



VICINITY MAP

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SITE DATA SUMMARY CHART		
ITEM	SQUARE FOOTAGE	% OF GROSS SITE
GROSS SITE AREA	471,188	100%
ROAD (INCLUDES ENTRY & ACCESS ROAD)	16,509	3%
SUBSTATION EQUIPMENT	75,398	16%
ROAD & EQUIPMENT TOTAL	92,907	19%
PLANTED AREA	21,854	5%
SEEDING AREA	166,796	45%
EXISTING VEGETATION	177,445	46%
LANDSCAPE TOTAL	380,058	77%
ROAD RIGHT-OF-WAY	19,254	4%
ITEM	DESCRIPTION	
BUILDING (UNOCCUPIED FACILITY)	N/A	
PARKING (UNOCCUPIED FACILITY)	NONE REQUIRED	

LEGAL DESCRIPTION

KNOW ALL MEN BY THESE PARTIES THAT THE UNDERSIGNED, BEING THE OWNER OF CERTAIN LANDS, DESCRIBED AS FOLLOWS:

LOT B, RECORDED EXEMPTION No. 1467-18-2 RE-4161, COUNTY OF WELD, STATE OF COLORADO. BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF SAID LOT B; THENCE ALONG THE PERIMETER OF SAID LOT B FOR THE FOLLOWING NINE (9) COURSES:
1) THENCE S89°55'15"W, A DISTANCE OF 1248.30 FEET BEING ON THE EAST LINE OF THE NORTHWEST QUARTER OF SECTION 18, TOWNSHIP 1 NORTH, RANGE 68 WEST OF THE 6th P.M.;
2) THENCE N00°10'00"E ALONG SAID WEST LINE, A DISTANCE OF 320.33 FEET
3) THENCE N89°24'38"E, A DISTANCE OF 1212.66 FEET;
4) THENCE N33°23'24"W, A DISTANCE OF 23.03 FEET;
5) THENCE N46°43'24"W, A DISTANCE OF 84.10 FEET;
6) THENCE N57°43'24"W, A DISTANCE OF 99.12 FEET;
7) THENCE N33°33'24"W, A DISTANCE OF 248.18 FEET;
8) THENCE S88°56'05"E, A DISTANCE OF 324.58 FEET;
9) THENCE S00°26'41"E, A DISTANCE OF 661.68 FEET TO THE TRUE POINT OF BEGINNING.

CONTAINING 10.817 ACRES, MORE OR LESS

BENCHMARK & BASIS OF BEARING

BENCHMARK:
MUELLER NUT ON FIRE HYDRANT ON WEST SIDE OF PROPERTY,
ELEVATION = 4963.35 (NGVD 1929 DATUM)

BASIS OF BEARINGS:
THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 18,
BEARING N00°10'00"E, A DISTANCE OF 2652.54 FEET.

OWNER

XCEL ENERGY
550 15TH STREET, SUITE 200
DENVER, COLORADO 80202

ENGINEER

J.F. SATO & ASSOCIATES
5898 SOUTH RAPP STREET
LITTLETON, COLORADO 80120

SURVEYOR

POWER SURVEYING
7800 MILLER DRIVE
FREDERICK, COLORADO 80504

PLANNER

EDAW
1809 BLAKE STREET
DENVER, COLORADO 80202

LANDSCAPE ARCHITECT

EDAW
1809 BLAKE STREET
DENVER, COLORADO 80202

PLANNER - SITE PLAN AMENDMENT

PUBLIC SERVICE CO OF COLORADO
1800 LARIMER ST., SUITE 400
DENVER, COLORADO 80202

ENGINEER - SITE PLAN AMENDMENT

ULTEG
5575 DTC PARKWAY SUITE 200
GREENWOOD VILLAGE, COLORADO 80111

TOWN OF ERIE GENERAL NOTES

- ENCANA OIL & GAS (USA) INC. GAS LINE EASEMENT EXISTS ACROSS LOTS 1 AND 2.
- UTILITY AND ACCESS EASEMENTS EXIST ACROSS LOTS 1 AND 2.
- TEMPORARY LANDSCAPE EASEMENT EXISTS ON LOT 1.

SPECIAL REVIEW USE SITE PLAN APPROVAL CERTIFICATE

THIS SPECIAL REVIEW USE SITE PLAN HAS BEEN REVIEWED AND FOUND TO BE COMPLETE AND IN ACCORDANCE WITH APPLICABLE TOWN OF ERIE REGULATIONS.

Planning Commission - Chairman

Date

Board of Trustees - Mayor

Date

The undersigned as the owner or owner's representative of the lands described herein, hereby agrees on behalf of himself/herself, their heirs, successors, and assigns to develop and maintain the property described hereon in accordance with this approved Site Plan and in compliance with the Town of Erie Unified Development Code and Municipal Code.

(owner signature)

(owner name printed)

Acknowledged before me this _____ day of _____, 20__

by _____ as _____.

Witness my hand and official seal

Notary Public

(seal)

My commission expires: _____

SITE PLAN AMENDMENT NO.1

- Title block revised to include SPAA-001050-2019 and SRU-001049-2019 and added to all sheets.
- Approval certificates revised.
- Site data summary chart revised.
- Planner and Engineer contract information revised.
- FAN monopole and H-Frame drawing added to all sheets.
- Grading and drainage note added to Sheets 4 & 5.
- Fan monopole elevations added to Sheet 8.
- Landscape note added to Sheets 9-15.

Xcel Energy
PUBLIC SERVICE COMPANY

EDAW

JFSSA
J.F. SATO AND ASSOCIATES

Engineering, Environmental, and
Program Management Services
5898 South Rapp Street
Littleton, Colorado 80120
Phone 303.797.1200 Fax 303.797.1187

PUBLIC SERVICE COMPANY OF COLORADO
230 KV NEIGHBORHOOD ELECTRIC SUBSTATION
COVER SHEET
SITE PLAN AMENDMENT - SPAA-001050-2019
SPECIAL REVIEW USE - SRU-001049-2019

DATE: 11/13/07

JOB NO.: JF0671

DRAWN BY: BCD

CHECKED BY: GSE

APPROVED BY: GSE

ISSUED: 9/04/07

REVISED: 11/13/07

AMENDMENT REVISION

DATE: 03/08/19

DRAWN BY: IF

CHECKED BY: KH

APPROVED BY: LKC

DRAWING TITLE:

COVER
SHEET

1.0

SHEET NUMBER

1 of 15

SCALE: HOR. 1"=1"
VERT. 1"=1"

PUBLIC SERVICE COMPANY OF COLORADO, LOT 2

A PORTION OF THE NORTHWEST QUARTER SECTION 18, T1N, R68W OF THE 6TH P.M.

TOWN OF ERIE, COUNTY OF WELD, COLORADO

8.935 ACRES

SITE PLAN - SP 07-008

SHEET 2 OF 15

SITE PLAN AMENDMENT - SPAA-001050-2019

SPECIAL REVIEW USE - SRU-001049-2019

Xcel Energy
PUBLIC SERVICE COMPANY

EDAW

JFS&A
J. F. SUTHERLAND & ASSOCIATES

Engineering, Environmental, and
Program Management Services
5898 South Rapo Street
Littleton, Colorado 80120
Phone 303.797.1200 Fax 303.797.1187

PUBLIC SERVICE COMPANY OF COLORADO
230 kV NEIGHBORHOOD ELECTRIC SUBSTATION
SITE PLAN
SITE PLAN AMENDMENT - SPAA-001050-2019
SPECIAL REVIEW USE - SRU-001049-2019

DATE: 11/13/07
JOB NO.: JF0671
DRAWN BY: BCD
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ISSUED: 9/04/07
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DATE: 03/08/19
DRAWN BY: IF
CHECKED BY: KH
APPROVED BY: LKC

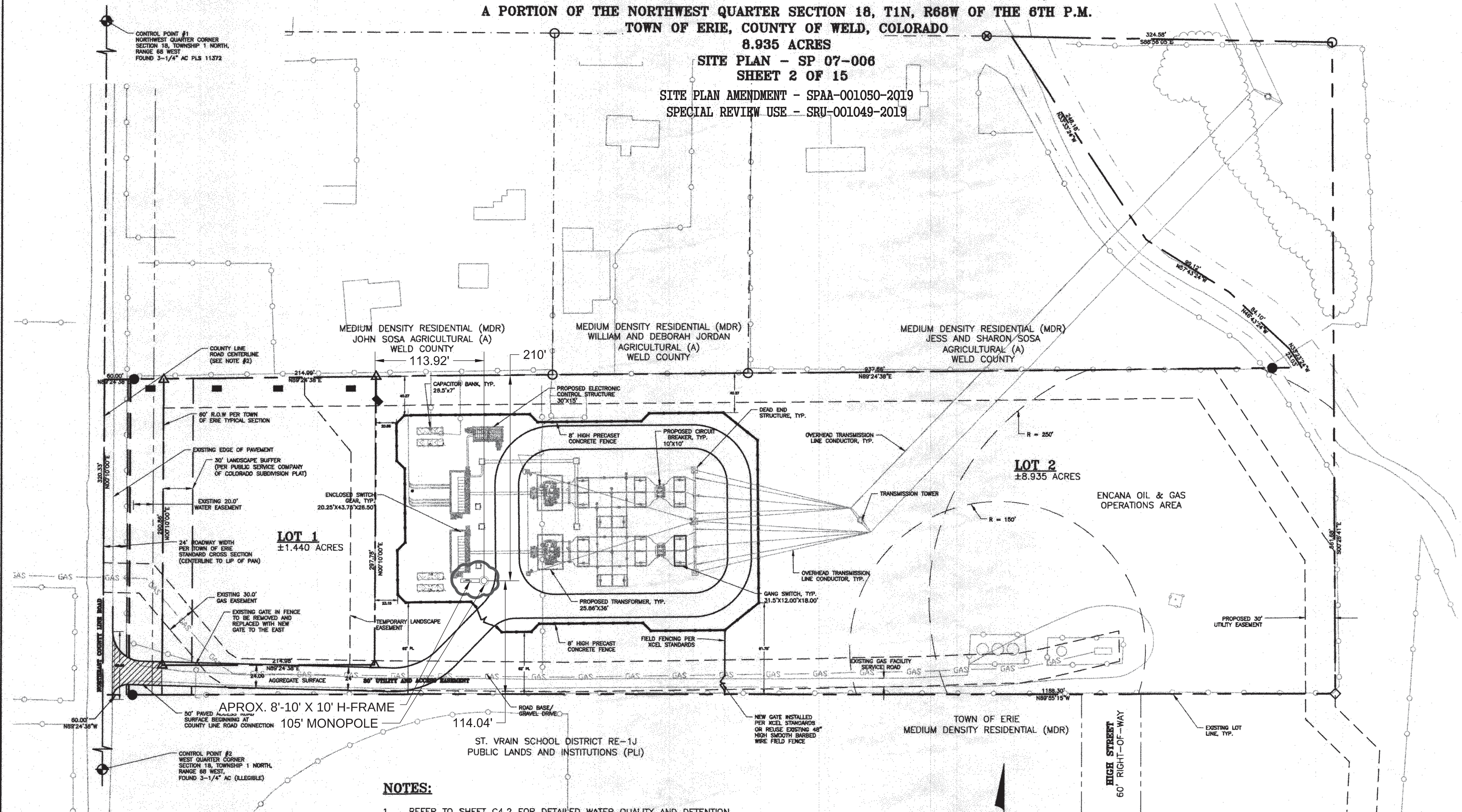
DRAWING TITLE:

SITE
PLAN

2.0

SHEET NUMBER
2 of 15

SCALE: HOR. 1"=50'
VERT. 1"=50'



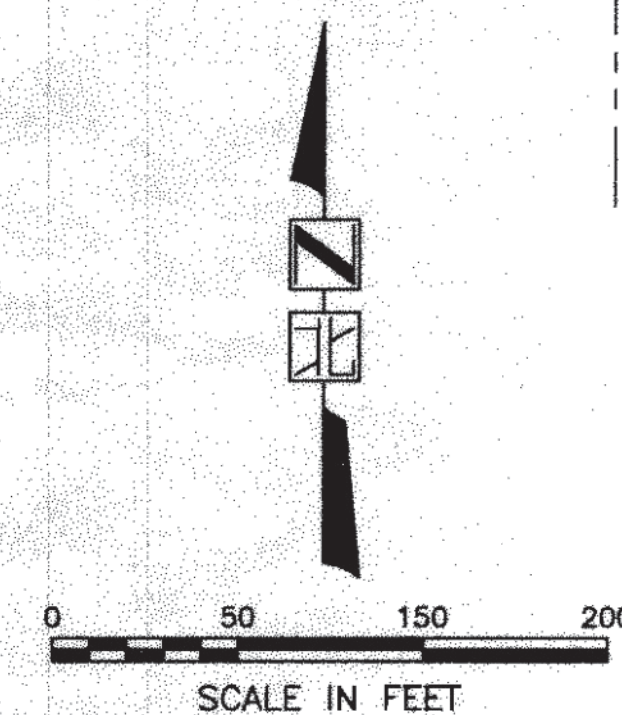
NOTES:

1. REFER TO SHEET C4.2 FOR DETAILED WATER QUALITY AND DETENTION POND INFORMATION.
2. COUNTY LINE ROAD CENTERLINE IS ASSUMED TO BE THE SECTION LINE.
3. NEW FENCE SURROUNDING ENCANA OIL & GAS FACILITIES SHALL CONFORM TO TOWN OF ERIE FENCE STANDARDS FOR O/G FACILITIES.
4. ALL DISTURBED AREAS SHALL BE RE-VEGETATED WITH THE TOWN'S NATIVE SEED MIX OR SEED MIXES THAT HAVE BEEN APPROVED IN THE LANDSCAPE PLANS.

BENCHMARK & BASIS OF BEARING

BENCHMARK:
MUELLER NUT ON FIRE HYDRANT ON WEST SIDE OF PROPERTY,
ELEVATION = 4963.35 (NGVD 1929 DATUM)

BASIS OF BEARINGS:
THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 18,
BEARING N00°10'00"E, A DISTANCE OF 2652.54 FEET.



LEGEND

EXISTING FENCE
EASEMENT LINE
EXISTING GAS LINE

PUBLIC SERVICE COMPANY OF COLORADO, LOT 2

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TOWN OF ERIE, COUNTY OF WELD, COLORADO

8.935 ACRES

SITE PLAN - SP 07-008

SHEET 3 OF 15

SITE PLAN AMENDMENT - SPAA-001050-2019

SPECIAL REVIEW USE - SRU-001049-2019

Xcel Energy
PUBLIC SERVICE COMPANY

EDAW

JFSSA
JF AND ASSOCIATES

Engineering, Environmental, and
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3908 South Regis Street
Littleton, Colorado 80120
Phone 303.797.1200 Fax 303.797.1187

PUBLIC SERVICE COMPANY OF COLORADO
230 kV NEIGHBORHOOD ELECTRIC SUBSTATION
OVERALL UTILITY PLAN
SITE PLAN AMENDMENT - SPAA-001050-2019
SPECIAL REVIEW USE - SRU-001049-2019

DATE: 11/13/07
JOB NO.: JF0671
DRAWN BY: BCD
CHECKED BY: GSE
APPROVED BY: GSE
ISSUED: 9/04/07
REVISED: 11/13/07

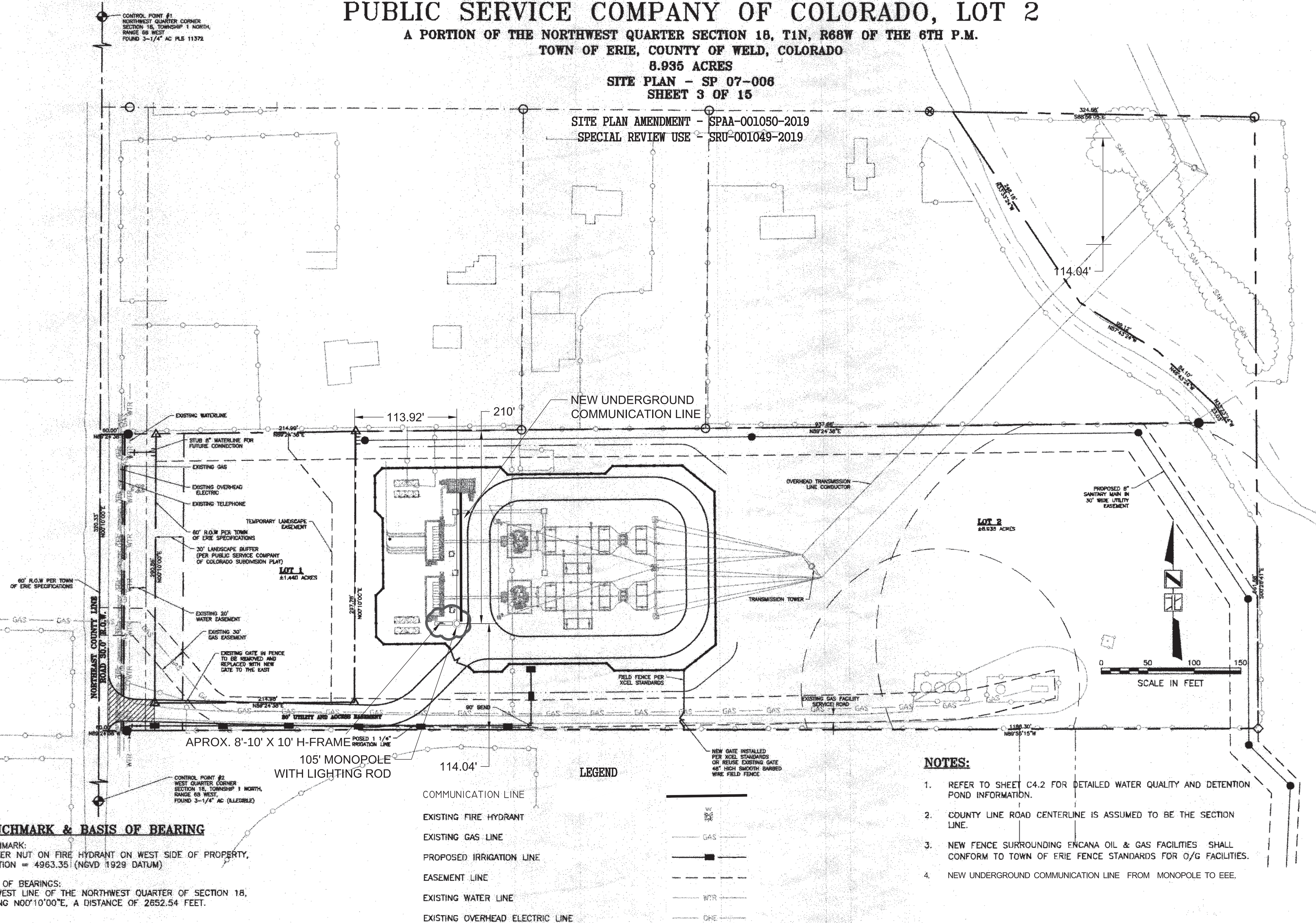
AMENDMENT REVISION
DATE: 03/08/19
DRAWN BY: IF
CHECKED BY: KH
APPROVED BY: LRC

DRAWING TITLE:
OVERALL
UTILITY
PLAN

3.0

SHEET NUMBER
3 of 15

SCALE: HOR. 1"=50'
VERT. 1"=50'



PUBLIC SERVICE COMPANY OF COLORADO, LOT 2

A PORTION OF THE NORTHWEST QUARTER SECTION 18, T1N, R88W OF THE 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, COLORADO

8.935 ACRES

SITE PLAN - SP 07-008

SHEET 4 OF 15

SITE PLAN AMENDMENT - SPAA-001050-2019

SPECIAL REVIEW USE - SRU-001049-2019

Xcel Energy
PUBLIC SERVICE COMPANY

EDAW

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Littleton, Colorado 80120
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PUBLIC SERVICE COMPANY OF COLORADO
230 KV NEIGHBORHOOD ELECTRIC SUBSTATION
FINAL GRADING PLAN
SITE PLAN AMENDMENT - SPAA-001050-2019
SPECIAL REVIEW USE - SRU-001049-2019

DATE: 11/13/07
JOB NO.: JF0671
DRAWN BY: BCD
CHECKED BY: GSE
APPROVED BY: GSE
ISSUED: 9/04/07
REVISED: 11/13/07

AMENDMENT REVISION
DATE: 03/08/19
DRAWN BY: IF
CHECKED BY: KH
APPROVED BY: LKC

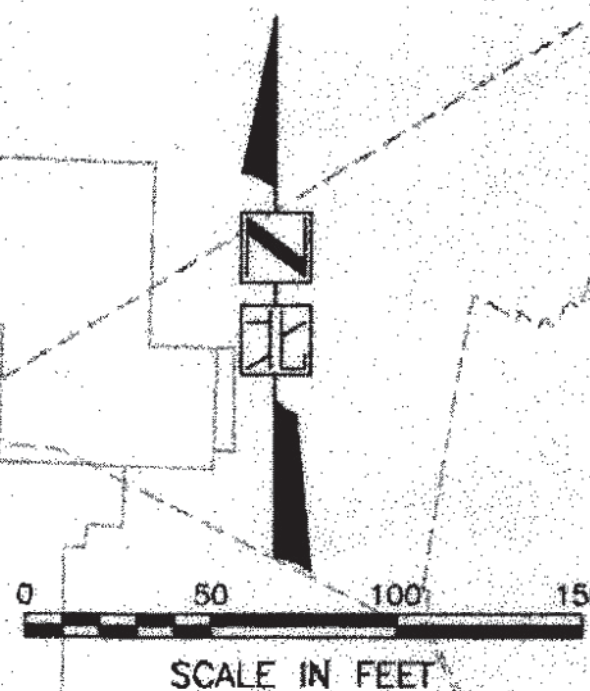
DRAWING TITLE:
FINAL
GRADING
PLAN

4.0

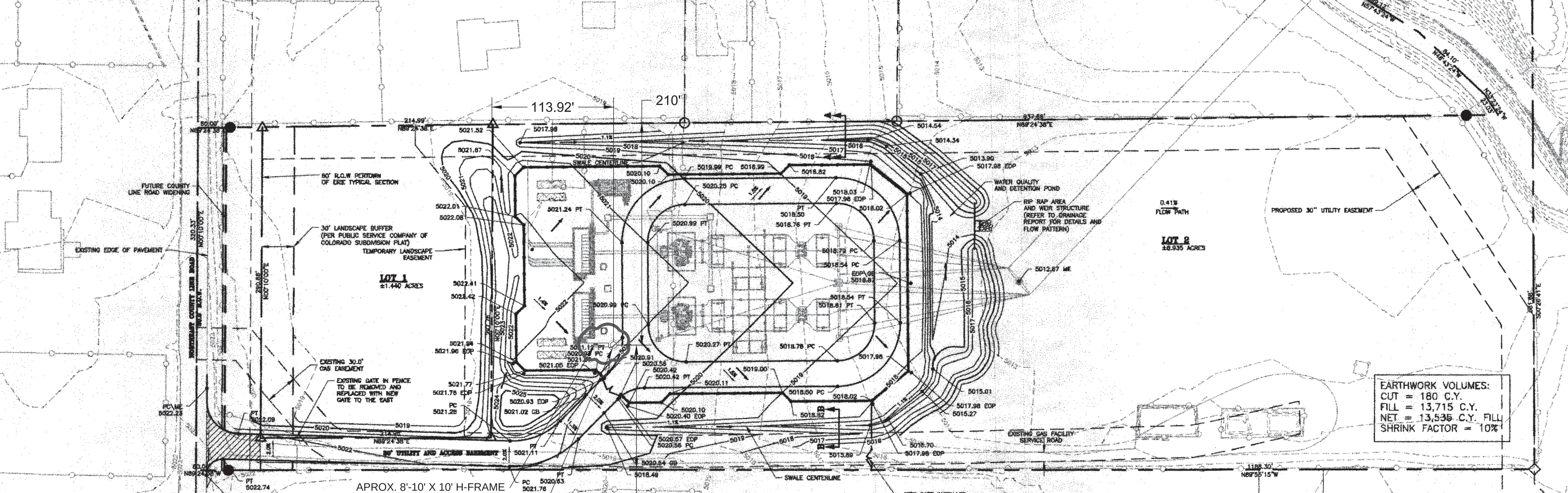
SHEET NUMBER
4 of 15

SCALE: HOR. 1"=50'
VERT. 1"=50'

CONTROL POINT #1
NORTHWEST QUARTER CORNER
SECTION 18, TOWNSHIP 1 NORTH,
RANGE 88 WEST
FOUND 3-1/4" AC PLS 11372
N 4002.97
E 7544.36
ELEV 5019.04



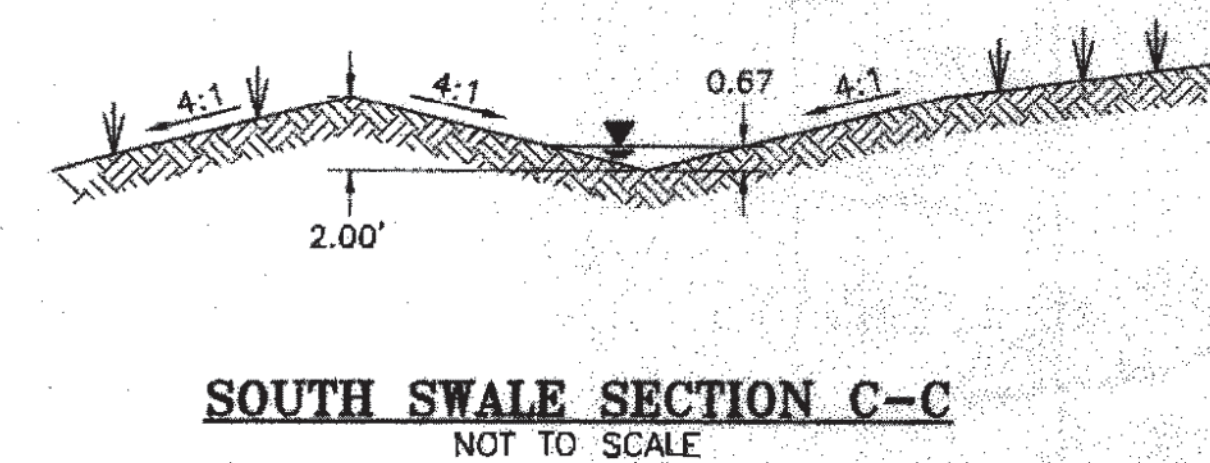
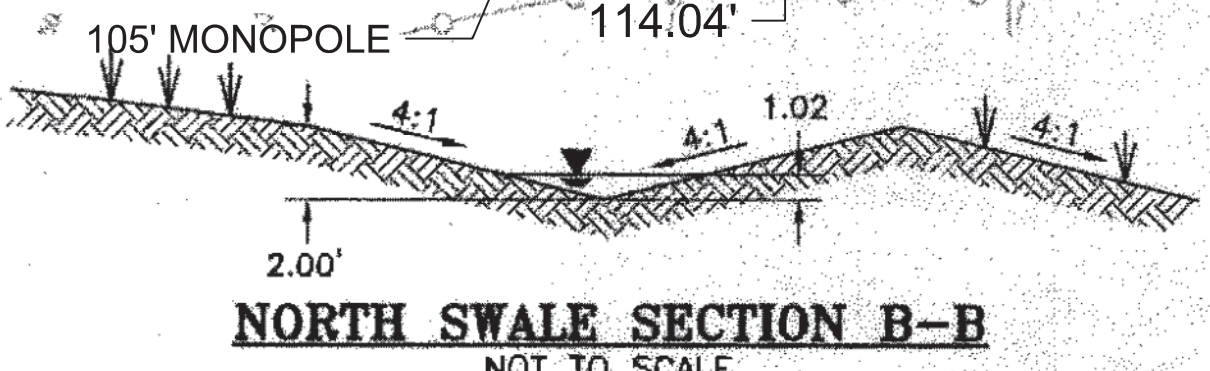
SCALE IN FEET



BENCHMARK & BASIS OF BEARING

BENCHMARK:
MUELLER NUT ON FIRE HYDRANT ON WEST SIDE OF PROPERTY,
ELEVATION = 4963.35 (NGVD 1929 DATUM)

BASIS OF BEARINGS:
THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 18,
BEARING N00°10'00"E, A DISTANCE OF 2652.54 FEET.



NOTES:

- ELEVATIONS SHOWN ON THE GRADING PLAN WITHIN THE SUBSTATION SECURITY FENCE AND A DISTANCE OF 3' BEYOND, ARE THE TOP SURFACE OF THE CDOH SECTION 703.03 - CLASS 6 AGGREGATE BASE COURSE CAP, 6" IN DEPTH, TO BE KNOWN AS "SUBGRADE". 3" DEPTH OF AGGREGATE YARD SURFACING WILL BE APPLIED TO THE SUBGRADE AS DESCRIBED IN THE PUBLIC SERVICE STANDARD CONSTRUCTION SPECIFICATION FOR SUBSTATIONS DIVISION 2 - SITE WORK SECTION 2.4 YARD SURFACING PARAGRAPH 4.3 AND 5.3.
- REFER TO SHEET C4.2 FOR DETAILED WATER QUALITY AND DETENTION POND INFORMATION.
- COUNTY LINE ROAD CENTERLINE IS ASSUMED TO BE THE SECTION LINE.
- ALL DISTURBED AREAS SHALL BE RESEED WITH THE TOWN'S NATIVE SEED MIX, AS SPECIFIED IN PUBLIC WORKS CONSTRUCTION STANDARDS AND SPECIFICATIONS, SECTION 1000 OR WITH MIXES APPROVED IN THE LANDSCAPE PLAN.
- AREA WITHIN SUBSTATION PRECAST PERIMETER FENCE AND BERMED AREA WILL BE FILL. DRAINAGE SWALES WILL BE CUT TO PROMOTE DRAINAGE TO DETENTION POND AREA.
- THE GRADING AND DRAINAGE WILL BE UNCHANGED AS A RESULT OF THE FAN MONOPOLE. DURING CONSTRUCTION OF THE FAN MONOPOLE CREWS WILL EXCAVATE FOR THE FOUNDATION AND SPOIL PILE WILL BE WITHIN THE SUBSTATION. ANY REMAINING MATERIAL FROM SPOIL PILE WILL BE REMOVED AND HAULED TO A LANDFILL.

LEGEND

- | | |
|---------------------------|-----|
| EXISTING MAJOR CONTOUR | --- |
| EXISTING MINOR CONTOUR | --- |
| PROPOSED MAJOR CONTOUR | --- |
| PROPOSED MINOR CONTOUR | --- |
| DRAINAGE SWALE FLOW LINE | --- |
| EDGE OF PAD (OR PAVEMENT) | EOP |
| POINT OF CURVATURE | PC |
| POINT OF TANGENCY | PT |
| GRADE BREAK | GB |
| MATCH EXISTING | ME |

PUBLIC SERVICE COMPANY OF COLORADO, LOT 2

A PORTION OF THE NORTHWEST QUARTER SECTION 18, T1N, R68W OF THE 6TH P.M.
TOWN OF ERIE, COUNTY OF WELD, COLORADO

8.935 ACRES

SITE PLAN - SP 07-008

SHEET 5 OF 15

SITE PLAN AMENDMENT - SPAA-001050-2019

SPECIAL REVIEW USE - SRU-001049-2019

CONTROL POINT #1
NORTHWEST CORNER
SECTION 18, TOWNSHIP 1 NORTH,
RANGE 68 WEST
FOUND 3-1/4" AC PLS 11372

EXISTING 20.0'
WATER EASEMENT

TEMPORARY LANDSCAPE
EASEMENT

60' ROW PER TOWN
OF ERIE TYPICAL SECTION

OS 1
1.61 0.70

FUTURE COMMERCIAL DEVELOPMENT

NORTH SWALE SECTION A-A
NOT TO SCALE

SOUTH SWALE SECTION B-B
NOT TO SCALE

APPROX. 8'-10' X 10' H-FRAME

EXISTING 30.0'
GAS EASEMENT

105' MONOPOLE

ACCESS ROAD

LEGEND

EXISTING INDEX CONTOUR	5280
EXISTING INTERMEDIATE CONTOUR	5281
PROPOSED INDEX CONTOUR	5280
PROPOSED INTERMEDIATE CONTOUR	5281
SUB-BASIN BOUNDARY	
SWALE FLOWLINE	
EASEMENT	
PROPERTY LINE	
DIRECTION OF FLOW ARROW	
DESIGN POINT	
BASIN DESIGNATION	
5-YR RUNOFF COEFFICIENT	
BASIN AREA IN ACRES	
LIMITS OF 100-YR PONDING	

PROPOSED GRASS-
LINED SWALE
S=1.06%

EXISTING GAS
TO REMAIN

RUNOFF SUMMARY TABLE

BASIN ID	DESIGN POINT	AREA (AC)	RUNOFF COEFFICIENT			DESIGN FLOWS (CFS)		
			C _s	C ₁₀	C ₁₀₀	Q _s	Q ₁₀	Q ₁₀₀
A	1	1.21	0.32	0.39	0.58	1.36	2.03	4.67
B	2	1.15	0.31	0.39	0.57	1.27	1.91	4.38
C	3	0.53	0.25	0.34	0.54	0.48	0.78	1.96
OS 1	4	1.61	0.70	0.74	0.82	3.96	5.05	8.78

DETENTION POND SUMMARY TABLE

	WQCV	10-YR	100-YR
STORAGE VOLUME (AF)	0.043	0.17	0.34
DEPTH (FT)	1.14	2.22	3.12
WATER SURFACE ELEVATION (FT)	5014.38	5015.46	5016.36
RELEASE RATE (CFS)	VARIES*	1.35	4.50

* WQCV DERIVED OVER A 40-HOUR PERIOD

NOTES:

- THIS DRAWING SHOWN AT 1" TO 30' FOR CLARITY.
- REVEGETATION IS SHOWN ON THE SITE MATERIALS PLAN, SHEET 7 OF 15.
- THE GRADING AND DRAINAGE WILL BE UNCHANGED AS A RESULT OF THE FAN MONOPOLE. DURING CONSTRUCTION OF THE FAN MONOPOLE CREWS WILL EXCAVATE FOR THE FOUNDATION AND SPOIL PILE WILL BE WITHIN THE SUBSTATION. ANY REMAINING MATERIAL FROM SPOIL PILE WILL BE REMOVED AND HAULED TO A LANDFILL.

BENCHMARK & BASIS OF BEARING

BENCHMARK:
MUELLER NUT ON FIRE HYDRANT ON WEST SIDE OF PROPERTY,
ELEVATION = 4963.35 (NGVD 1929 DATUM)

BASIS OF BEARINGS:
THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 18,
BEARING N00°10'00"E, A DISTANCE OF 2652.54 FEET.

Xcel Energy
PUBLIC SERVICE COMPANY OF COLORADO

EDAW

JFSSA
J.F. SMITH AND ASSOCIATES

Engineering, Environmental, and
Program Management Services
1858 South Rapo Street
Littleton, Colorado 80120
Phone 303.797.1200 Fax 303.797.1387

PUBLIC SERVICE COMPANY OF COLORADO
230 KV NEIGHBORHOOD ELECTRIC SUBSTATION
DRAINAGE PLAN
SITE PLAN AMENDMENT - SPAA-001050-2019
SPECIAL REVIEW USE - SRU-001049-2019

DATE: 11/13/07
JOB NO.: JF0871
DRAWN BY: BCD
CHECKED BY: GSE
APPROVED BY: GSE
ISSUED: 9/04/07
REVISED: 11/13/07

AMENDMENT REVISION
DATE: 03/08/19
DRAWN BY: JF
CHECKED BY: KH
APPROVED BY: LKC

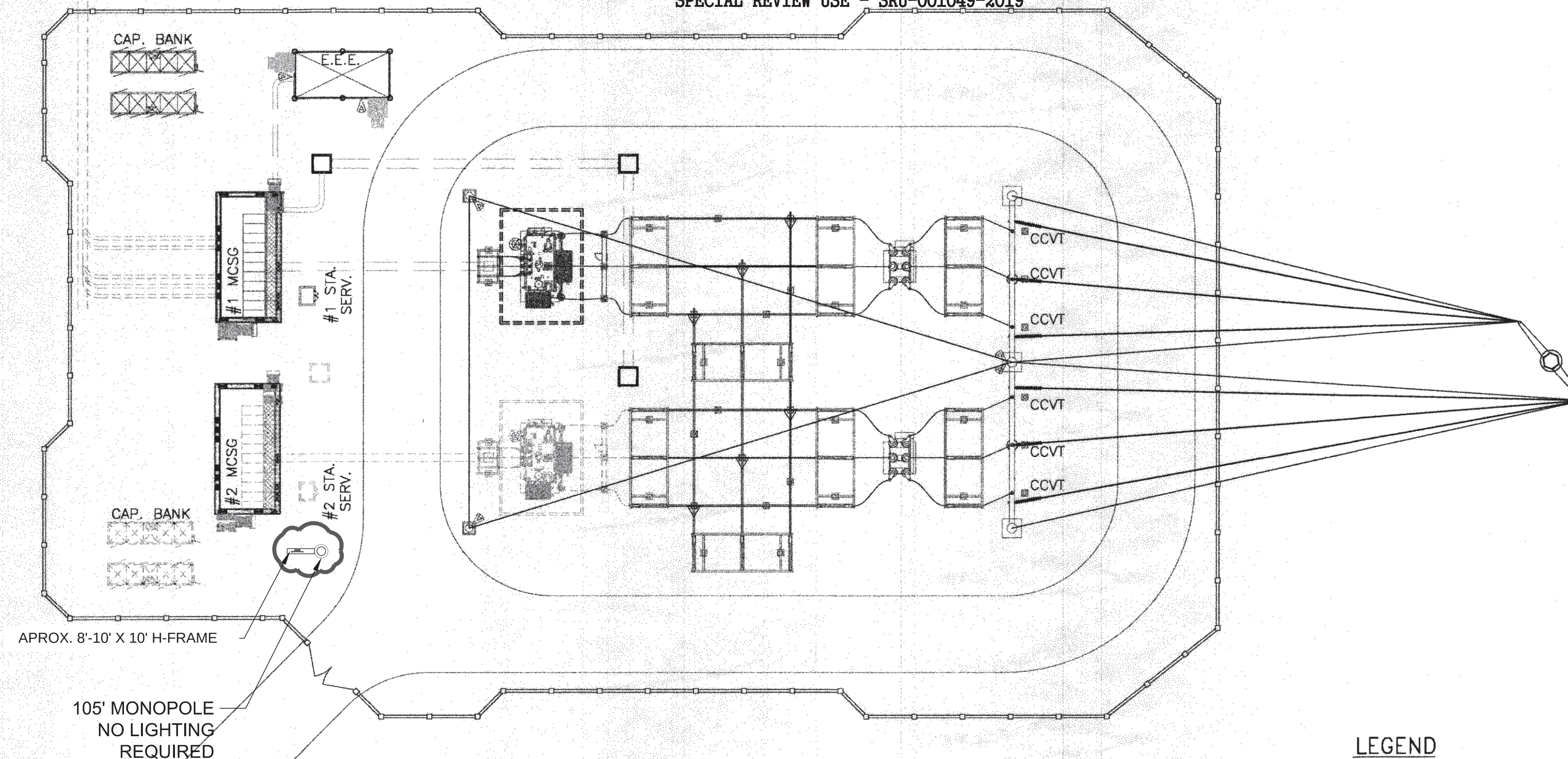
DRAWING TITLE:
DRAINAGE
PLAN

5.0

SHEET NUMBER
5 of 15

SCALE: HOR. 1"=30'
VERT. 1"=30'

PUBLIC SERVICE COMPANY OF COLORADO, LOT 2
A PORTION OF THE NW 1/4 SECTION 18, T1N, R68W OF the 6th P.M.
TOWN OF ERIE, COUNTY OF WELD, COLORADO
8.935 ACRES
SITE PLAN - SP07-006
SITE PLAN AMENDMENT - SPAA-001050-2019
SPECIAL REVIEW USE - SRU-001049-2019



LEGEND

△ LIGHT

70W HIGH PRESSURE
SODIUM WALL MOUNTED
LIGHT FIXTURE. LIGHTS ON ONLY
FOR EMERGENCY MAINTENANCE.

BUILDING WALL

LIGHTING OPERATION NOTES:
ANY REGULARLY USED (NOT -
EMERGENCY) LIGHTING THAT MIGHT BE
ADDED AT A LATER DATE MUST BE IN
CONFORMANCE WITH THE TOWN OF
ERIE DEVELOPMENT AND DESIGN
STANDARDS

DETAIL A DOUBLE YARD LIGHTS

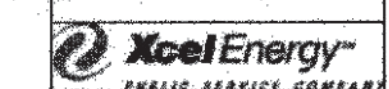
DETAIL TYPICAL FOR D.E. STRUCTURE
NOT TO SCALE

DETAIL B SINGLE YARD LIGHTS

DETAIL TYPICAL FOR STATIC MAST STRUCTURE
NOT TO SCALE

DETAIL C BUILDING LIGHTS

NOT TO SCALE



Engineering, Environmental, and
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5995 South Holly Street
Littleton, Colorado 80120
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PUBLIC SERVICE COMPANY OF COLORADO
230 kV NEIGHBORHOOD ELECTRIC SUBSTATION
SITE IMPROVEMENT PLAN
SITE PLAN AMENDMENT - SPAA-001050-2019
SPECIAL REVIEW USE - SRU-001049-2019

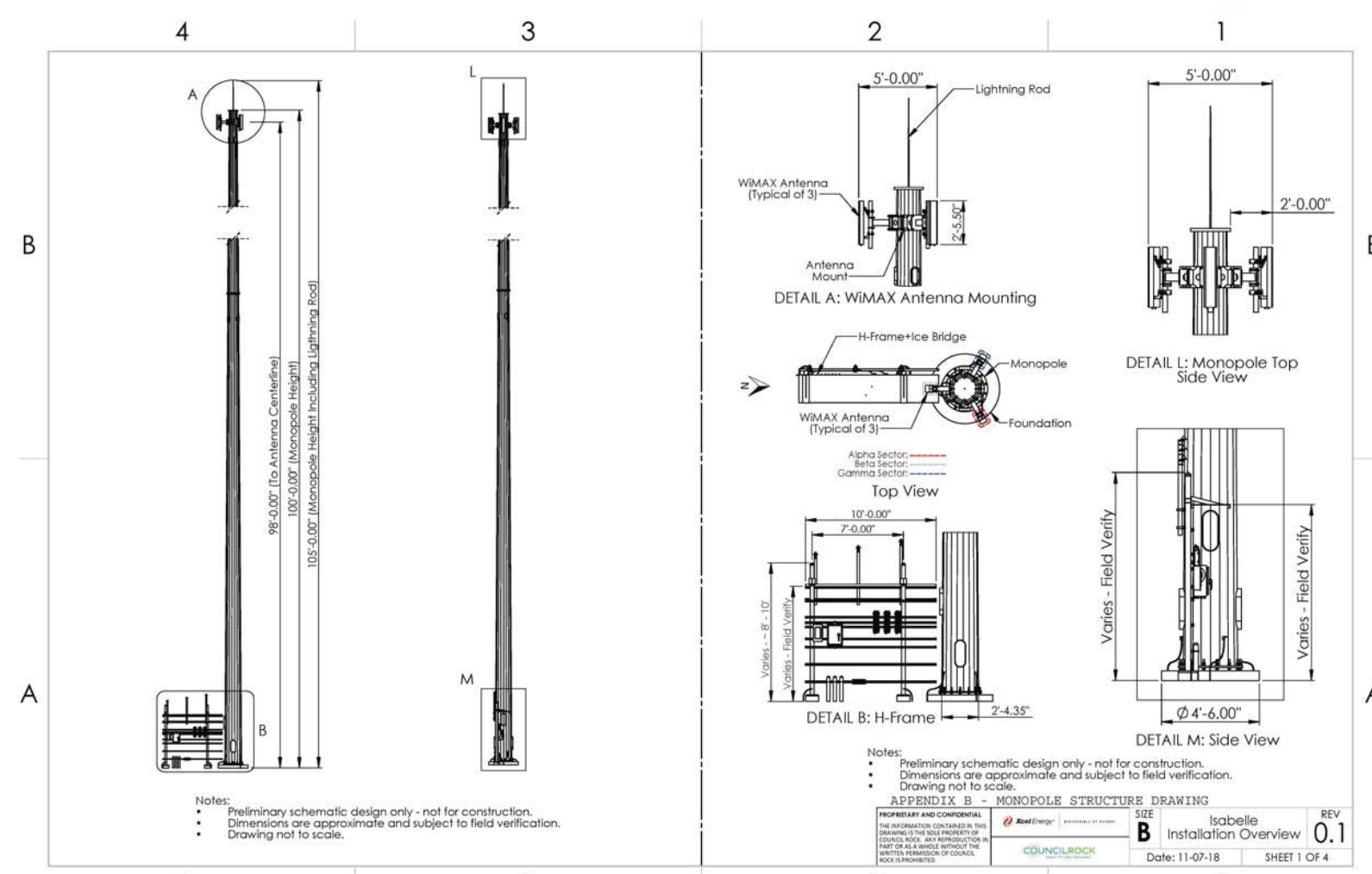
DATE: 12/07/07
JOB NO.: 03180082
DRAWN BY: TS/JK
CHECKED BY: CL
APPROVED BY: CL
ISSUED: 12/07/07
REVISED: 12/07/07

AMENDMENT REVISION
DATE: 03/08/19
DRAWN BY: JF
CHECKED BY: KH
APPROVED BY: LKC

DRAWING TITLE:
PHOTO-
METRIC
PLAN

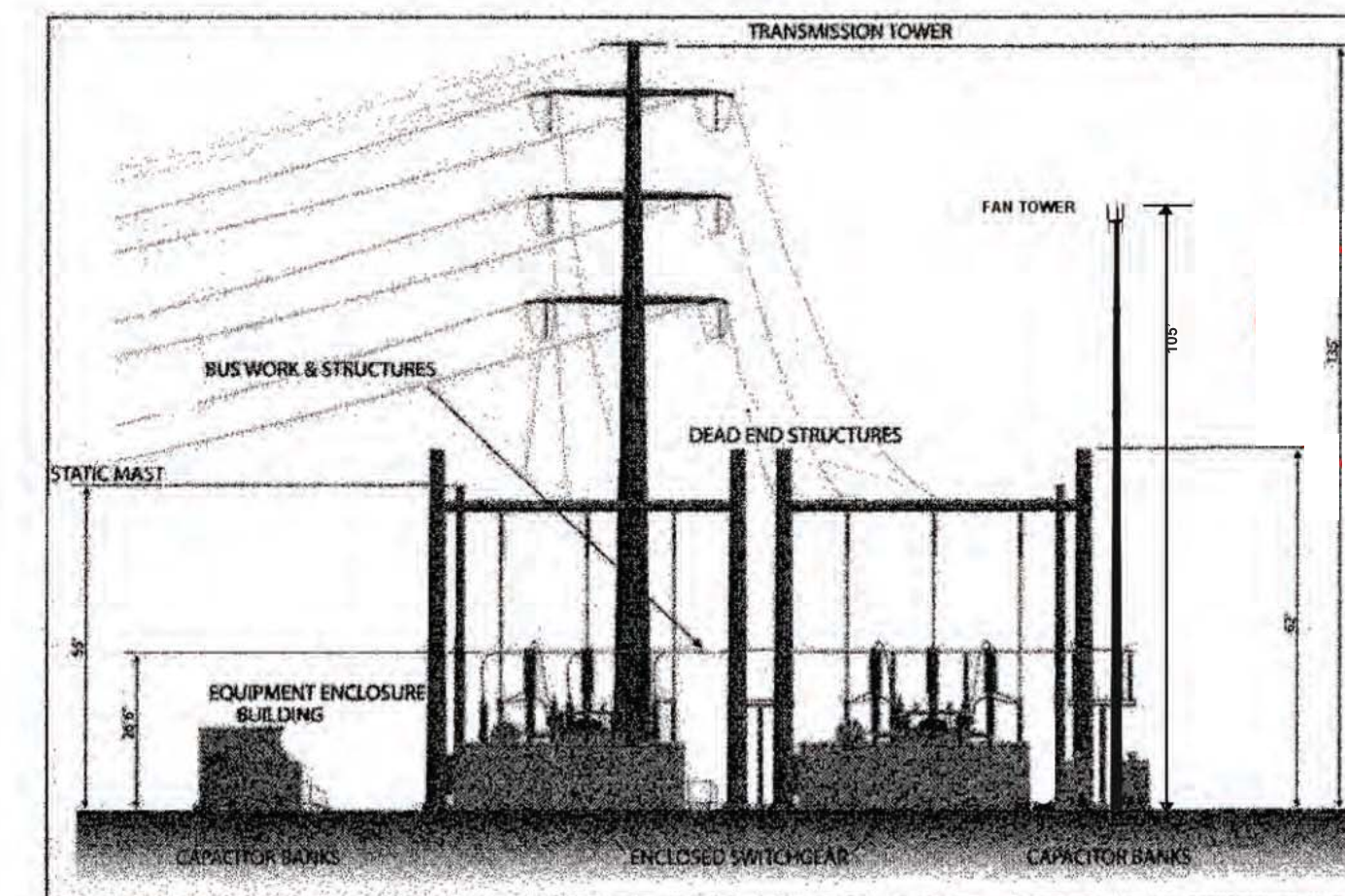
SHEET

SHEET NUMBER
6 of 15



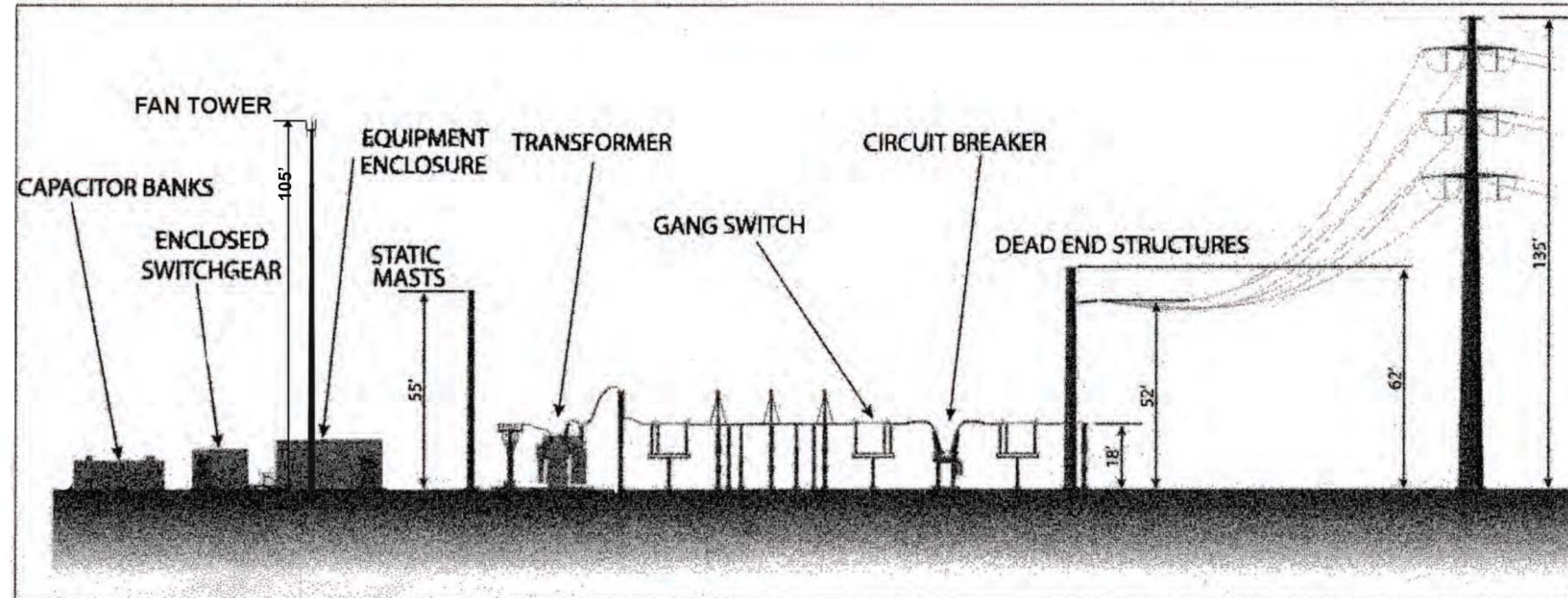
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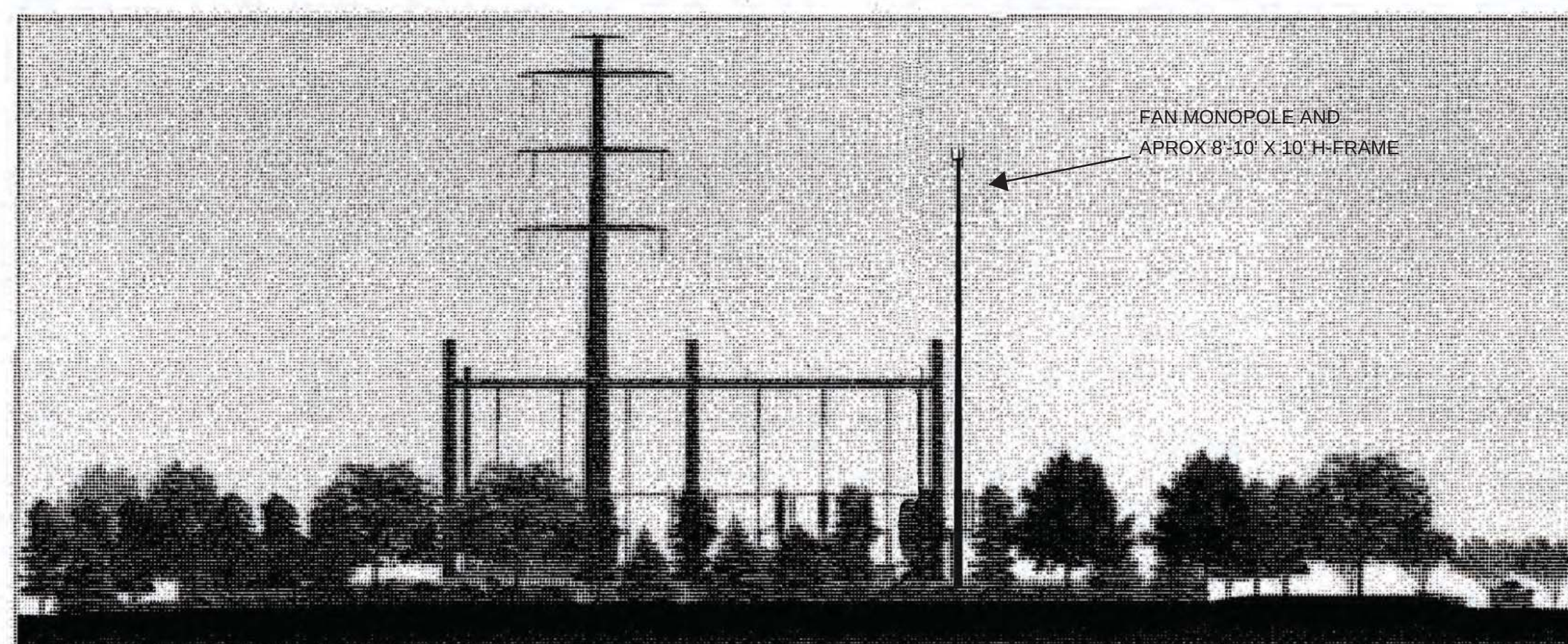


NOTE:
 1. TRANSMISSION TOWER IS APPROVED TO 135 FEET IN SITE PLAN. TOWER WAS ACTUALLY CONSTRUCTED TO 85 FEET.
 2. FAN MONOPOLE HEIGHT IS 105 FEET.

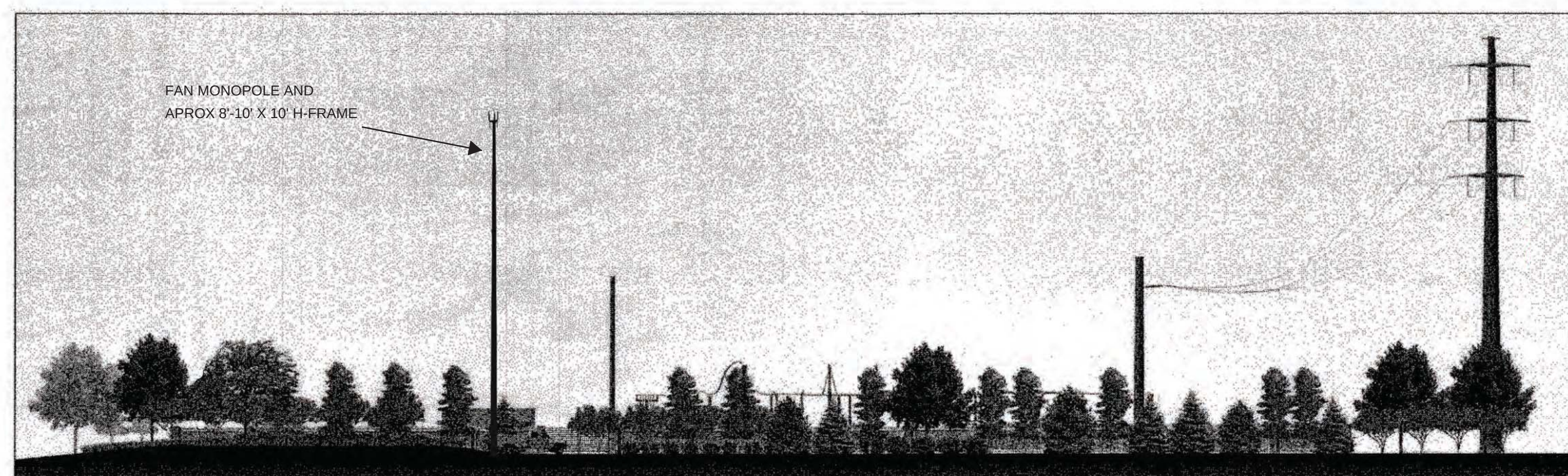
FRONT ELEVATION - EQUIPMENT ONLY
 SCALE: NTS



SIDE ELEVATION - EQUIPMENT ONLY
 SCALE: NTS



FRONT ELEVATION WITH LANDSCAPE
 SCALE: NTS



SIDE ELEVATION WITH LANDSCAPE
 SCALE: NTS

Engineering, Environmental, and Program Management Services
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 Phone 303.797.1200 Fax 303.797.1187

PUBLIC SERVICE COMPANY OF COLORADO
230 KV NEIGHBORHOOD ELECTRIC SUBSTATION
SITE IMPROVEMENT PLAN
SITE PLAN AMENDMENT - SPAA-001050-2019
SPECIAL REVIEW USE - SRU-001049-2019

DATE:	12/07/07
JOB NO.:	03180082
DRAWN BY:	TS/JK
CHECKED BY:	CL
APPROVED BY:	CL
ISSUED:	12/07/07
REVISED:	12/07/07
AMENDMENT REVISION	
DATE:	03/08/19
DRAWN BY:	IF
CHECKED BY:	KH
APPROVED BY:	LKC

DRAWING TITLE:
SUBSTATION ELEVATIONS

SHEET

SHEET NUMBER
8 of 15

SCALE: HOR. 1"=20'
 VERT. 1"=5'

PUBLIC SERVICE COMPANY OF COLORADO, LOT 2
A PORTION OF THE NW 1/4 SECTION 18, T1N, R68W OF the 6th P.M.
TOWN OF ERIE, COUNTY OF WELD, COLORADO
8.935 ACRES
SITE PLAN - SP07-006

SITE PLAN AMENDMENT - SPAA-001050-2019
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PLANT SCHEDULE

LARGE DECIDUOUS TREES							
Abbr.	No.	Genus	Species	Common Name	Min. Size	Min. Spacing	Notes
GDI	6	Gleditsia	tricanthos 'inermis'	Thornless Honeylocust	1.5"-3" CAL	30' O.C.	
TCO	14	Tilia	cordata	Littleleaf Linden	1.5"-3" CAL	25' O.C.	
LARGE EVERGREEN TREES							
Abbr.	No.	Genus	Species	Common Name	Min. Size	Min. Spacing	Notes
PNI	10	Pinus	nigra	Austrian Pine	8'	20' O.C.	
PNI	5	Pinus	nigra	Austrian Pine	9'	20' O.C.	
PNI	13	Pinus	nigra	Austrian Pine	10'	20' O.C.	
SMALL EVERGREEN TREES							
Abbr.	No.	Genus	Species	Common Name	Min. Size	Min. Spacing	Notes
PPU	11	Picea	pungens	Colorado Spruce	7'	15' O.C.	
PED	3	Pinus	edulis	Pinyon Pine	6'	20' O.C.	
PED	5	Pinus	edulis	Pinyon Pine	7'	20' O.C.	
SMALL DECIDUOUS TREES							
Abbr.	No.	Genus	Species	Common Name	Min. Size	Min. Spacing	Notes
AAU	18	Amelanchier	spp. 'Autumn Brilliance'	Autumn Brilliance Serviceberry	2' CAL	12' O.C.	
DECIDUOUS SHRUBS							
Abbr.	No.	Genus	Species	Common Name	Min. Size	Min. Spacing	Notes
CWO	28	Cercocarpus	montanus	Common Mountain Mahogany	5 GAL	5' O.C.	
CSB	105	Cornus	stolonifera 'Bailey'	Bailey Red Twig Dogwood	3 GAL	3' O.C.	
PMO	20	Physocarpus	monogynus	Ninebark	3 GAL	3' O.C.	

NOTE:

- QUANTITIES IN THE SCHEDULE ARE FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY ALL QUANTITIES ON PLANS.
- PLANT WITH SIZE VARIETIES SHALL BE SELECTIVELY PLACED IN THE FIELD BY ED&W.
- IN THE EVENT OF A DISCREPANCY BETWEEN THE PLAN GRAPHIC AND THE LANDSCAPE LEGEND, THE PLANT MATERIAL QUANTITY AS DETERMINED BY THE PLAN GRAPHIC SHALL TAKE PRECEDENCE.

Upland Mix							
Scientific Name	Common Name	Lb/ac (PLS)	% PLS/ac	Seeds/lb	Seeds/ac	Seeds/ft ²	season
Bouteloua gracilis	Blue grama, Alnu	1.5	3.19	825,000	1,237,500	28.41	warm
Bouteloua curtipendula	Sideoats grama	6	12.77	191,000	1,146,000	26.31	warm
Buchloe dactyloides	Buffalograss	12	25.53	56,000	672,000	15.43	warm
Calamovilfa longifolia	Prairie Sandreed	5	10.64	273,000	1,365,000	31.34	warm
Oryzopsis hymenoides	Indian Ricegrass	2	4.26	141,000	282,000	6.47	cool
Pascopyrum smithii	Western wheatgrass, Arriba	9	19.15	110,000	990,000	22.73	cool
Schizachyrium scoparium	Little bluestem	5	10.64	260,000	1,300,000	29.84	warm
Sporobolus airoides	Alkali sacaton	0.5	1.06	1,758,000	879,000	20.18	warm
Nassella viridula	Green Needlegrass Lodorn	6	12.77	181,000	1,086,000	24.93	cool
	Total	47	100.00	3,795,000	8,957,500	205.64	
Coreopsis tinctoria	Plains coreopsis	0.1	10.00	1,400,000	140,000	3.21	
Dalea purpureum var. purpureum	Purple prairie clover	0.2	20.00	210,000	42,000	0.96	
Gallardia aristata	Blanketflower	0.3	30.00	132,000	39,600	0.91	
Liatris spicata	Gaylather	0.3	30.00	138,000	41,400	0.95	
Ratibida columnifera	Prairie coneflower	0.1	10.00	1,230,000	123,000	2.82	
	Total	1	100.00	3,110,000	386,000	9	
	Grand Total	48					
Lowland Overflow Mix							
Scientific Name	Common Name	Lb/ac (PLS)	% PLS/ac	Seeds/lb	Seeds/ac	Seeds/ft ²	season
Andropogon gerardii	Big Bluestem	6	15.00	130,000	780,000	17.91	warm
Bouteloua gracilis	Blue grama, Alnu	2	5.00	825,000	1,650,000	37.88	warm
Helianthus maximiliani	Maximilian Sunflower	2	5.00	225,000	450,000	10.33	
Nassella viridula	Green Needlegrass Lodorn	2.5	6.25	181,000	452,500	10.39	cool
Panicum virgatum	Switchgrass	3.5	8.75	389,000	1,361,500	31.26	warm
Pascopyrum smithii	Western wheatgrass, Arriba	9	22.50	110,000	990,000	22.73	cool
Puccinellia atrovirens	Alkali Grass	1	2.50	1,200,000	1,200,000	27.55	cool
Sorghastrum nutans	Yellow Indian Grass	7	17.50	170,000	1,190,000	27.32	warm
Spartina pectinata	Prairie Cordgrass	7	17.50	197,000	1,379,000	31.66	warm
	Total	40	100.00	3,427,000	9,453,000	217.01	

PLANTING NOTES

- All plant materials shall conform to the guidelines established by the American Standard for Nursery Stock, current edition, published by the American Association of Nurserymen, Inc.
- All plants will be balled and burlapped or container grown. Bare root or spaded plants will not be accepted.
- Supply all plant material in quantities sufficient to complete the planting bed as shown on the drawings.
- All plants will be inspected and approved by the Owner's Representative prior to delivery to the site.
- Proposed substitutions of plant materials shall be approved by the Landscape Architect prior to ordering.
- Obtain Landscape Architects approval of fine grading prior to the start of planting.
- Stake locations of all proposed trees and edges of planting beds for approval by the Landscape Architect prior to the start of planting.
- Landscape Contractor shall be responsible for locating and protecting all underground utilities, pipes and structures. The Landscape Contractor shall contact all utility companies and call for locates for field location of underground utility lines prior to any excavation. Landscape Contractor shall take responsibility for costs of utility repair due to damage caused by his operations.
- Do not proceed with construction when it is apparent that unknown obstructions and/or grade differences exist that may not have been known during design. Such conditions shall be immediately brought to the attention of the Owner's Representative. The Landscape Contractor shall assume full responsibility for all necessary revisions due to failure to give such notification.
- Landscape Contractor shall be responsible for any coordination with the work of other trades and subcontractors as required to complete the work of this project.
- See specifications for planting requirements, soil preparation and testing requirements. Arrange for visit of Landscape Architect for review and approval a minimum of 48 hours prior to installation.
- See details for staking method, plant pit dimensions and backfill requirements.
- Provide unit prices for every type and size of plant material specified, as shown in the planting plan. Unit price shall include the plant material, installation, including amendments, fertilizers and warranty, as detailed and specified for each type of plant.
- Landscape Contractor is responsible to perform quantity takeoffs for all plant materials.
- The Landscape Contractor shall be responsible to maintain positive drainage throughout the site with accurately set line and grade. Low spots resulting in ponding of surface water will not be accepted in the final work.
- Coordinate installation of plant material with adjacent structures, utilities, light poles and pavements. Any damage caused to improvements by others is the responsibility of the Landscape Contractor to repair or replace.
- The Landscape Contractor shall allow for the addition of specified quantities of soil amendments, conditioners and mulch in soil preparation and finish grading.
- Imported soil shall be used to supplement the existing soil as necessary to meet the finish grade requirements at planting areas.
- The Landscape Contractor shall procure soil tests at his expense, prior to soil preparation and planting and will follow the testing lab's approved recommendations for required soil amendments.
- The Landscape Contractor shall receive the specified finish grade within one tenth ($\frac{1}{10}$) of a foot from specified finish grade. The Landscape Contractor shall be responsible to furnish and install amended or imported soil in any planting areas as necessary to achieve the specified finish grades unless otherwise noted on plans or specs.
- The Landscape Architect reserves the right to adjust the location of plant material before, during or after installation as appropriate to the project.
- Contractor shall familiarize himself with the layout, grading and civil engineering documents prior to starting work.
- Contractor shall furnish plant materials free of pests or plant diseases. It is the contractor's obligation to warranty all plant materials per the specifications.
- Supply all plant material in quantities sufficient to complete the planting bed as shown on the drawings.
- All the plants will be inspected and approved by the owner's representative prior to delivery to the site.
- Maintenance Statement:
All landscaping shown on this plan shall be maintained in a neat and professional manner. Required maintenance activities shall include, but not be limited to, mowing of lawns, trimming of edges, adequate irrigation, replacement of dead, diseased or unsightly landscaping, removal of weeds from planted areas, and appropriate pruning of plant materials.
- All landscaped areas shall be irrigated with an automatic irrigation system. Lawn areas will be sprayed and shrubs will be drip irrigated. Natural areas, such as those with native types of grasses and native shrub species, are designed to irrigate through grow-in and then be shut off except during severe drought. Contractor shall be responsible for taps, backflow prevention and winterization systems, sleeving under paved areas and all sprinkler system components necessary for a fully functional system.
- Mulch all tree wells and shrubs with humus compost mulch as detailed. Overseed with Upland Seed Mix in and around trees and shrubs.

MAINTENANCE CHART

TYPE	PLANT REPLACEMENT WITHIN	
	1 YEAR	2+ YEARS
TREE - DECIDUOUS	INCREASE CALIPER BY 1"	INCREASE CALIPER BY 1.5"
TREE - CONIFEROUS	INCREASE CALIPER BY 1.5"	INCREASE CALIPER BY 2"
SHRUB	REPLACE WITH PLANTS OF AT LEAST 1/2 MATURE SIZE	REPLACE WITH PLANTS OF AT LEAST 1/2 MATURE SIZE

NOTE:

LANDSCAPING SHALL BE PLANTED AND MAINTAINED IN A NEAR, CLEAN AND HEALTHY CONDITION BY THE OWNER. THIS SHALL INCLUDE PROPER PRUNING, REPLACEMENTS OF MULCH, WEEDING, REMOVAL OF LITTER AND THE REGULAR WATERING OF ALL PLANTS. IRRIGATION SHALL BE MAINTAINED TO MAXIMIZE WATER CONSUMPTION. SHOULD ANY PLANT MATERIAL DIE, THE OWNER, SUCCESSOR, OR ASSIGNS SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF PLANT(S) WITHIN ONE PLANTING SEASON. REPLACEMENT OF PLANT MATERIALS SHALL OCCUR AT THE RATE ABOVE.

THERE IS NO NEW LANDSCAPING ASSOCIATED WITH SITE PLAN AMENDMENT.



ED&W

JFS&A
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APPROVED BY: LKC

DRAWING TITLE:
PLANTING
SCHEDULE
& NOTES

SHEET

SHEET NUMBER

9 of 15

 Xcel Energy™
PUBLIC SERVICE COMPANY

EDAW

JFSA
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LEGEND

	LIMIT OF WORK
	GAS LINE
	IRRIGATION LINE
	PROPOSED SEWER WITH MANHOLE
	LARGE DECIDUOUS TREE
	EVERGREEN TREE
	ORNAMENTAL TREE
	DECIDUOUS SHRUB

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APPROVED BY:	LKC

SHEET

SHEET NUMBER

10 of 15

Notes:

1. Setbacks from property line are shown on the site plan.
2. Substation equipment is identified on the site plan.
3. The revegetation area shown is approximate. The final area will be based on actual field disturbance. Xcel Energy will work with contractor to minimize disturbance.
4. Existing perimeter property line fence to remain.
5. There is no new landscaping associated with Site Plan Amendment.

Diagram illustrating the installation of a tree in a pit, showing the following components and instructions:

- PLANT CROWN 1" ABOVE FINISH GRADE
- 3" DEEP HUMUS COMPOST MULCH, 2" IF IN CF, SEE PLANS
- PLANTING MIX 12" DEPTH, MIN.
- ADJACENT SEED AREA
- SCARIFY SIDES OF HOLE PRIOR TO BACK-FILLING
- REMOVE PLANT FROM CONTAINER OR PEEL BACK BURLAP AND REMOVE TWINE/WIRE FROM ROOTBALL AFTER 2/3 BURIED IN PIT
- PLACE ON UNDISTURBED SUBGRADE
- NOTE: INCORPORATE LIQUID ROOT STIMULANT
- 2 x ROOTBALL WIDTH

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Diagram illustrating a tree planting method using a wire basket. The diagram shows a tree being planted in a hole, with a wire basket (labeled '2 X ROOTBALL DIAMETER') placed around the rootball. The basket is supported by '2'-6" LONG STAKES DRIVEN FLUSH GRADE'. The basket is filled with 'PLANTING MIX'. The tree is secured by 'NYLON STRAPPING' and 'GUY WIRE'. The basket is placed over a '3" DEEP HUMUS COMPOST MULCH' layer. The tree crown is positioned '3" ABOVE FINISH GRADE'. A 'WHITE PVC PIPE OVER GUY WIRE' is shown. A 'TEMPORARY 3" HIGH WATER RING' is also indicated. A note states: 'NOTE: INCORPORATE LIQUID ROOT STIMULANT AS PART OF PLANTING OPERATION'. The diagram also shows 'FOR SLOPE PLANTING, BALANCE CUT AND FILL'.

- NYLON STRAPPING
- GUY WIRE
- PLANT CROWN 3" ABOVE FINISH GRADE, DO NOT PLACE SOIL OR MULCH AGAINST TRUNK
- 3" DEEP HUMUS COMPOST MULCH
- WHITE PVC PIPE OVER GUY WIRE
- TEMPORARY 3" HIGH WATER RING
- FOR SLOPE PLANTING, BALANCE CUT AND FILL
- NOTE: INCORPORATE LIQUID ROOT STIMULANT AS PART OF PLANTING OPERATION
- 2'-6" LONG STAKES DRIVEN FLUSH GRADE
- PLANTING MIX
- ANGLE AND SCARIFY SIDES OF HOLE PRIOR TO BACK-FILLING
- REMOVE ENTIRE WIRE BASKET
- 2 X ROOTBALL DIAMETER
- 12" MIN.
- 3" MIN.

NOTE: The following information is for informational purposes only and is not intended to be used for clinical decision-making.

-

8' STONETREE WALL SYSTEM ELEVATION
SHEET 1 OF 2

974-001c
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www.CADdetails.com

8' STONETREE PANEL/COLUMN ELEVATION
SHEET 2 OF 2

974-001d
PROTECTED BY COPYRIGHT - 12/03/05

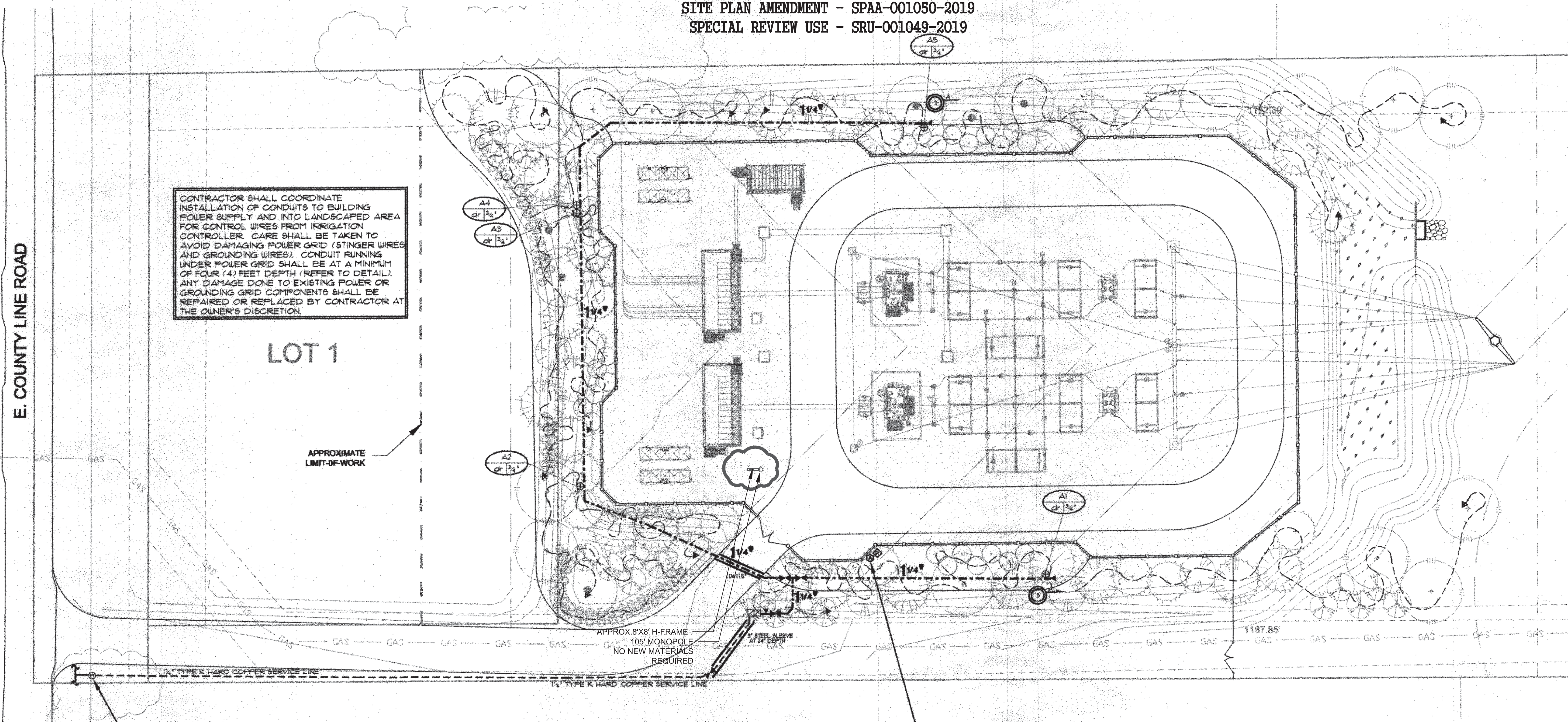
www.EAExotics.com

SHEET NUMBER
11 of 15

NOTE:
There is no new landscaping associated with Site Plan Amendment.

PUBLIC SERVICE COMPANY OF COLORADO, LOT 2
A PORTION OF THE NW 1/4 SECTION 18, T1N, R68W OF the 6th P.M.
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CONTRACTOR SHALL COORDINATE
INSTALLATION OF CONDUITS TO BUILDING
POWER SUPPLY AND INTO LANDSCAPED AREA
FOR CONTROL WIRES FROM IRRIGATION
CONTROLLER. CARE SHALL BE TAKEN TO
AVOID DAMAGING POWER GRID (STINGER WIRES
AND GROUNDING WIRES). CONDUIT RUNNING
UNDER POWER GRID SHALL BE AT A MINIMUM
OF FOUR (4) FEET DEPTH (REFER TO DETAIL).
ANY DAMAGE DONE TO EXISTING POWER OR
GROUNDING GRID COMPONENTS SHALL BE
REPAIRED OR REPLACED BY CONTRACTOR AT
THE OWNER'S DISCRETION.

LOT 1

APPROXIMATE
LIMIT-OF-WORK

APPROX. 8'X8' H-FRAME
105' MONOPOLE
NO NEW MATERIALS
REQUIRED

POINT OF CONNECTION #1 - 3/4"

PEAK FLOW REQUIREMENT: 14 GPM. REQUIRED STATIC PRESSURE: 76 PSI

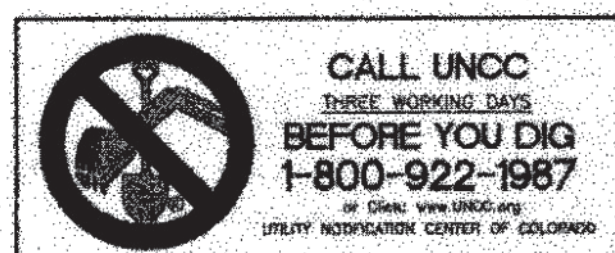
CONTRACTOR TO INSTALL ONE 3/4" WET TAP ON TOWN OF ERIE DOMESTIC WATER LINE AT THIS APPROXIMATE LOCATION. EXTEND 3/4" TYPE K COPPER TO THE METER LOCATION AND INSTALL ONE 3/4" METER PER TOWN OF ERIE SPECIFICATIONS AND STANDARDS. EXTEND 1/4" TYPE K SOFT COPPER APPROXIMATELY AT 48" MINIMUM DEPTH TO BACKFLOW PREVENTER LOCATION INSIDE PROPERTY LINE AS SHOWN, APPROXIMATELY 310 LF TO THE EAST. INSTALL ONE 3/4" STOP AND WASTE VALVE, ONE 3/4" REDUCED PRESSURE BACKFLOW PREVENTER AND PROTECTIVE ENCLOSURE, ONE 3/4" MANUAL DRAIN VALVE, ONE QUICK COUPLING VALVE AND EXTEND MAINLINE AS SHOWN. STREET CUT AND PATCH, BACKFILLING AND COMPACTION OPERATIONS FOR WET TAP SHALL CONFORM TO LOCAL REGULATIONS AND STANDARDS. TRAFFIC CONTROL ASSOCIATED WITH WORK IS THE RESPONSIBILITY OF THE CONTRACTOR. WORK SHALL CONFORM TO LOCAL CODE. FEES AND PERMITS ASSOCIATED WITH WORK ARE TO BE OBTAINED AND PAID FOR BY CONTRACTOR. FINAL BACKFLOW PREVENTER SHALL BE APPROVED BY CONSULTANT PRIOR TO START OF WORK.

NOTE:
THERE IS NO NEW LANDSCAPING ASSOCIATED WITH SITE PLAN AMENDMENT.

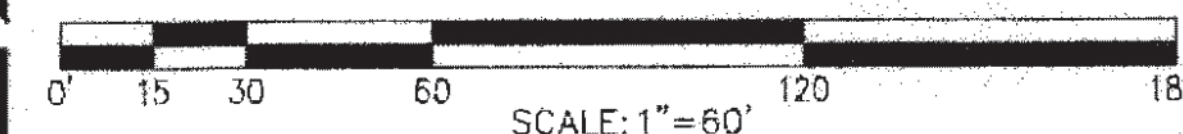
CONTROLLER LOCATION 'A'

PEDESTAL MOUNT ONE 8 STATION HUNTER ICC CONTROLLER (ICC-8020M-PUB-PED SERIES) AT INDICATED LOCATION. 120 VOLT POWER WILL BE PROVIDED BY XCEL ENERGY OUTSIDE OF WALL WITHIN 20' LF. OF CONTROLLER LOCATION. ELECTRICAL METER WIRE/CONDUIT, STEP DOWN TRANSFORMER (IF REQUIRED) AND POWER CONNECTION TO CONTROLLER IS BY CONTRACTOR WITH WORK CONFORMING TO LOCAL CODES. FEES AND PERMITS ASSOCIATED WITH WORK ARE TO BE OBTAINED AND PAID BY CONTRACTOR. FINAL CONTROLLER LOCATION SHALL BE APPROVED BY CONSULTANT PRIOR TO INSTALLATION. MOUNT ONE HUNTER WIRELESS RAIN CLIK DEVICE ON WALL WHERE THERE IS 20' FT. OF CLEARANCE FROM ANY OVERHANG OR OBSTRUCTING FEATURE. INSTALL RECEIVER INSIDE CONTROLLER ENCLOSURE. FINAL RAIN SENSOR LOCATION SHALL BE APPROVED BY CONSULTANT PRIOR TO INSTALLATION.

REVIEW -
NOT FOR
CONSTRUCTION



REFER TO SHEET I-2 FOR IRRIGATION SCHEDULE AND CONSTRUCTION NOTES
REFER TO SHEET I-2, I-3, AND I-4 FOR IRRIGATION DETAILS



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Xcel Energy

EDAW

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IRRIGATION
PLAN

SHEET

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SCALE: 1"=30'

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Irrigation Schedule				
SYMBOL	MANUFACTURER	MODEL NO.	DESCRIPTION	DETAIL NO.
⊕	RAIN BIRD	XCZ-875-PRF W/ BALL VALVE	DRIP VALVE ASSEMBLY	1
▶			DRIP LINE BLOW-OUT STUB	3
---	IRRITROL	DURA-POL	POLY DRIP TUBING-3/4" MIN. WITH	2
N/S	RAIN BIRD	XERI-BUG	DRIP EMITTERS	2
▼	RAIN BIRD	44 LRC	QUICK COUPLING VALVE	4
⬇		LINE SIZE	GATE VALVE	5
N/S	MATCO	20IX	MANUAL DRAIN VALVE	6
⬆	FEBCO	875YA	BACKFLOW PREVENTER	7
N/S	GUARD SHACK	G6-5	BACKFLOW PREVENTER ENCLOSURE	8
N/S	AT MC DONALD	6101	STOP AND DRAIN VALVE AT BFP	7
Ⓜ	HUNTER	ICC SERIES	ELECTRIC CONTROLLER	9
Ⓜ	HUNTER	RAIN CLK	WIRELESS RAIN SHUT OFF DEVICE	10
---		CLASS 200 BE - 2 1/2" & SMALLER	PVC MAINLINE	11
---		CLASS 200 BE	PVC LATERAL	11
---		CLASS 160	PVC SLEEVING	12
Ⓜ			WATER METER	
CONTROLLER & STATION NO. CONTROL VALVE SIZE				
A (controller) NUMBER OF SPARE WIRES - 2 CONTROL AND 1 SPARE WIRES TO WHICH CONTROLLER - SEE CONSTRUCTION NOTES				

Irrigation Construction Notes

- DRAWINGS AND BASE INFORMATION** - ALL BASE AND PLANTING INFORMATION HAVE BEEN PROVIDED BY EDAW. THE CONTRACTOR IS RESPONSIBLE TO NOTIFY HYDROSYSTEMS/KDI OF ANY DISCREPANCIES BETWEEN THE UTILITY OR PLANTING PLANS AND THE IRRIGATION PLAN. IF CONTRACTOR FAILS TO NOTIFY HYDROSYSTEMS/KDI AND MAKES CHANGES TO THE IRRIGATION SYSTEM DESIGN, HE ASSUMES ALL COSTS AND LIABILITIES ASSOCIATED WITH THOSE FIELD CHANGES. REFER TO SPECIFICATIONS FOR ADDITIONAL PROJECT REQUIREMENTS.
- SYSTEM PRESSURE** - HYDROSYSTEMS/KDI HAS CONTACTED THE LOCAL WATER DISTRICT THAT SERVES THIS SITE AND THEY HAVE BEEN TOLD THAT THE STATIC WATER PRESSURE IN THIS AREA SHOULD BE 75 PSI. THE CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY PRESSURE PRIOR TO COMMENCING ANY CONSTRUCTION AND NOTIFY HYDROSYSTEMS/KDI OF ANY VARIANCE FROM THE STATED PRESSURE. IF CONTRACTOR FAILS TO FIELD VERIFY PRESSURE AND/OR NOTIFY HYDROSYSTEMS/KDI OR ANY VARIATIONS FROM THIS PRESSURE, THEN HE ASSUMES ALL CONSTRUCTION AND ENGINEERING COSTS ASSOCIATED WITH SYSTEM MODIFICATIONS REQUIRED TO ACCOMMODATE ACTUAL SITE PRESSURE. THIS SYSTEM HAS BEEN DESIGNED FOR A REQUIRED STATIC PRESSURE OF 75 PSI MINIMUM.
- IRRIGATION SYSTEM OPERATION INTENT** - THIS IRRIGATION SYSTEM HAS BEEN DESIGNED TO IRRIGATE THE ESTABLISHED LANDSCAPE WITHIN A SIX HOUR PER WEEK, SIX HOUR PER NIGHT WATERING WINDOW. ESTABLISHMENT WATERING WILL REQUIRE UP TO TWICE AS MUCH IRRIGATION FOR A FOUR TO SIX WEEK PERIOD. THE DESIGN IS BASED ON THE FOLLOWING PROJECTED WEEKLY APPLICATION RATES AFTER ESTABLISHMENT. THESE FIGURES ARE BASED ON A 30-YEAR AVERAGE WEATHER DATA AND WILL NEED TO BE ADJUSTED DUE TO SEASONAL CHANGES AND WEATHER CONDITIONS ABOVE AND BELOW THE AVERAGE VALUES UTILIZED.
BLUEGRASS TURF 1.75" PER WEEK PEAK SEASON
NATIVE SEED MIXES 1.00" PER WEEK PEAK SEASON (TWO SEASONS)
NOTE: IT IS THE INTENT OF THIS DESIGN THAT NATIVE AREAS WOULD ONLY BE IRRIGATED FOR ESTABLISHMENT.
- IT IS THE INTENT OF THIS DESIGN THAT ALL IRRIGATION EQUIPMENT BE INSTALLED WITHIN PROPERTY LIMITS AND WITHIN LANDSCAPED AREAS. ANY EQUIPMENT SHOWN OUTSIDE OF THESE LIMITS IS SHOWN IN THAT LOCATION FOR GRAPHICAL CLARITY ONLY. ALL VALVE BOXES SHALL BE INSTALLED A MINIMUM OF 2'-0" FROM EDGE OF ANY PAVED SURFACES. ALL VALVE BOXES SHALL BE PLACED A MINIMUM OF 3'-0" FROM THE CENTERLINE OF ANY DRAINAGE SWALE.
- SLEEVING** - ALL SLEEVING UNDER PAVED SURFACES SHOWN ON PLANS IS BY CONTRACTOR UNLESS OTHERWISE NOTED. SLEEVING SHALL BE INSTALLED IN THE SIZES AND QUANTITIES SHOWN ON PLANS OR BASED ON THE SCHEDULE BELOW. WHERE SLEEVES ARE SHOWN, BUT NOT LABELED, FOLLOW THE SCHEDULE BELOW. ALL MAINLINE, CONTROL WIRES AND DRIP LINES UNDER PAVED SURFACES ARE TO BE INSTALLED IN SLEEVING.

SLEEVED PIPE SIZE/WIRE QUANTITY	REQUIRED SLEEVE SIZE AND (QUANTITY)
3/4" - 1 1/4" PIPING	2" PVC (1)
1 1/2" - 2" PIPING	4" PVC (1)
1-25 CONTROL WIRES	2" PVC (1)
- DRIP IRRIGATION** - REFER TO IRRIGATION DETAIL SHEET FOR DRIP EMITTER QUANTITIES AND PLACEMENT.
- SPARE CONTROL WIRES** - CONTRACTOR SHALL EXTEND THREE SPARE WIRES (ONE COMMON AND 2 CONTROL WIRES) FROM EACH CONTROLLER TO THE END OF THE MAINLINE SERVING THAT CONTROLLER OR AS SHOWN ON THE PLANS. INSTALL SPARE WIRES IN 10" ROUND VALVE BOX WITH QUICK COUPLING VALVE. REFER TO SPECIFICATIONS FOR WIRE COLOR. SEE IRRIGATION SCHEDULE FOR ADDITIONAL INFORMATION.
- CONTRACTOR SHALL FINE TUNE/ADJUST THE IRRIGATION SYSTEM TO REDUCE/AVOID OVERSPRAY ONTO HARD SURFACES BY ADJUSTING NOZZLE DIRECTION AND NOZZLE RADII.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING AND PAYING FOR TESTING OF BACKFLOW PREVENTER. CONTRACTOR SHALL RE-TEST EQUIPMENT, AT NO ADDITIONAL COST TO OWNER UNTIL BACKFLOW PREVENTER IS APPROVED. CONTRACTOR SHALL SUBMIT WRITTEN COPIES OF TEST RESULTS AND CERTIFICATIONS TO OWNER'S REPRESENTATIVE PRIOR TO SUBSTANTIAL COMPLETION.

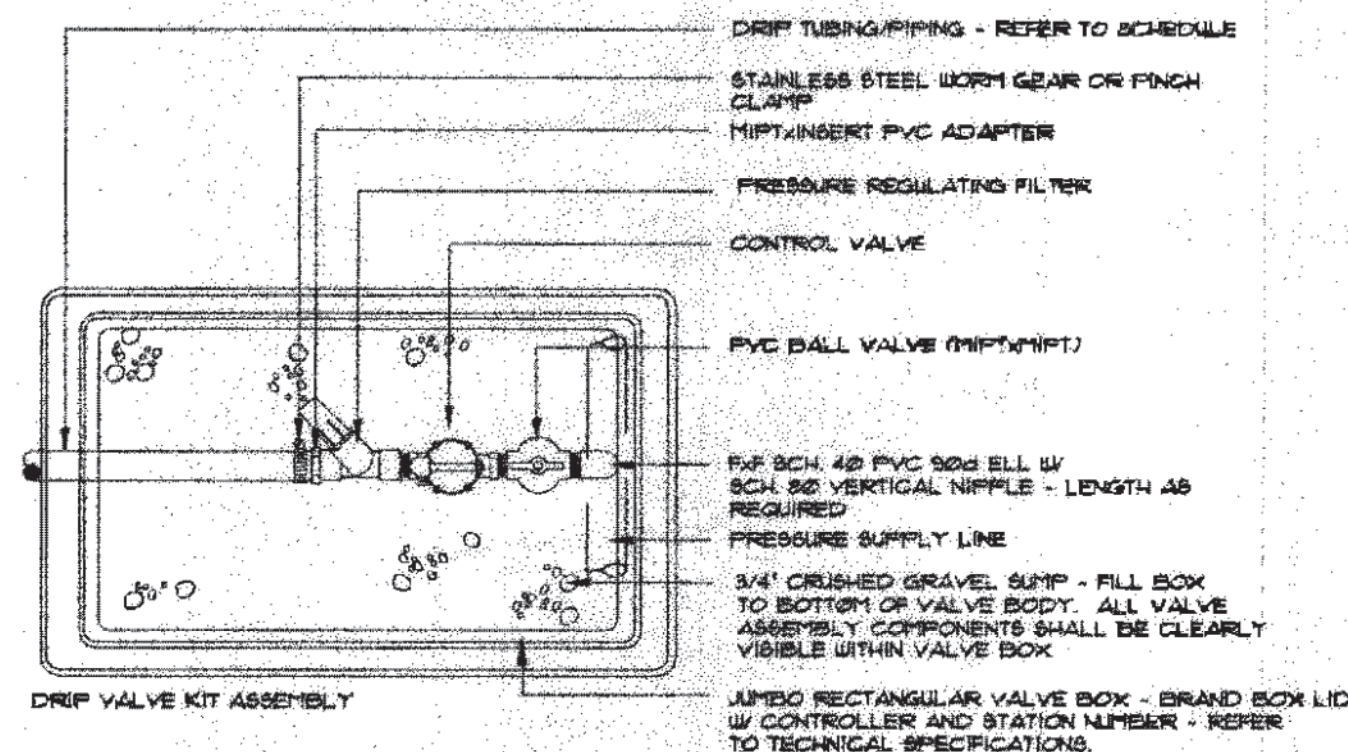
Project Name: And Erie Substation
Project Location: Item C31

Revised Rate Use and Peak Flow Projections
Prepared By: HydroSystems/KDI, Inc.

Date: 31-Oct-17

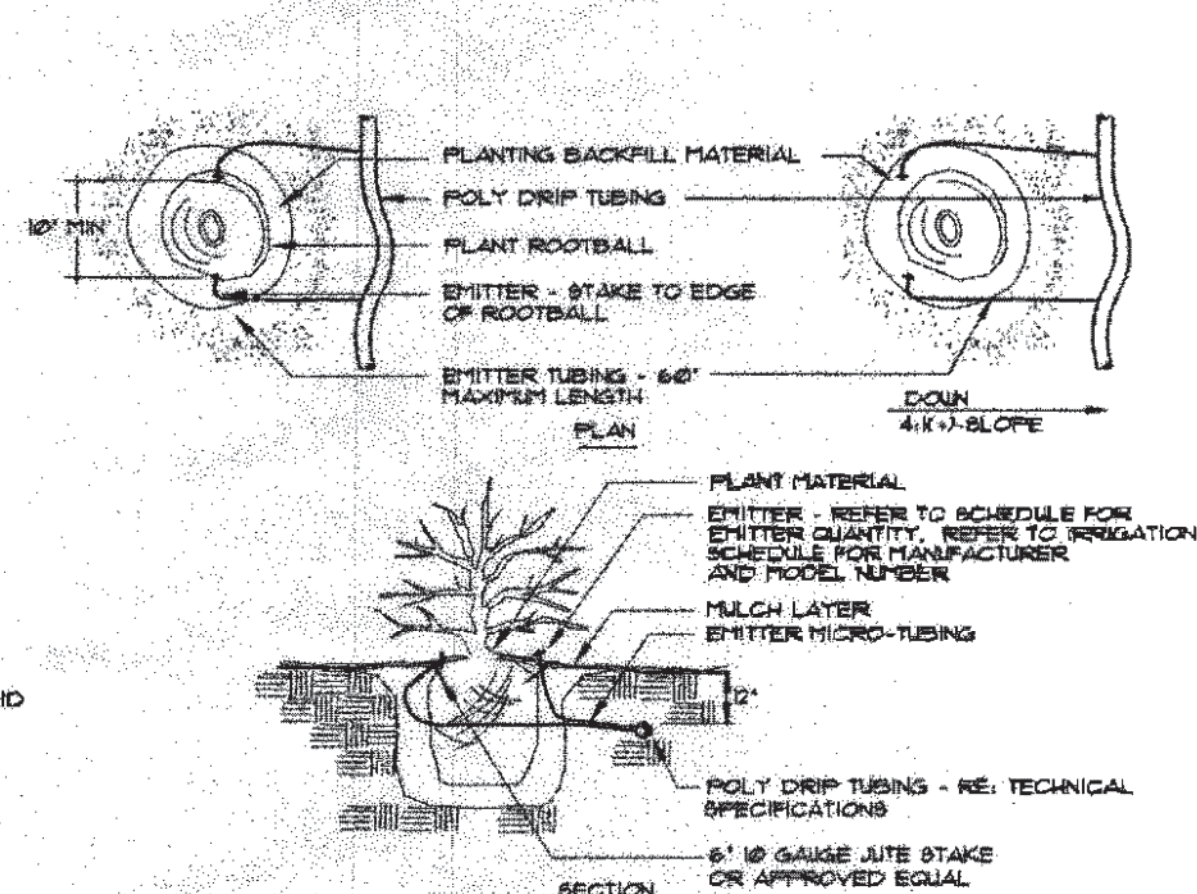
Description	Irrigated Acres	Month	Application Rate (in. month)	Monthly water use (gallons)	Maximum Required Flow (GPM)
Irrigated Turf Bluegrass Seed	0.03	April	1.85	0	0
		May	3.54	0	
		June	3.54	0	
		July	3.08	0	
		August	6.13	0	
		Sept.	3.69	0	
		October	1.85	0	
annual sub-total			29.69 /yr	0 /yr	0.00 acre-feet
Irrigated Native Seed	0.00	April	0.92	0	0
		May	1.77	0	
		June	2.77	0	
		July	3.54	0	
		August	3.08	0	
		Sept.	1.80	0	
		October	0.82	0	
annual sub-total			14.85 /yr	0 /yr	0.00 acre-feet
Irrigated Shrubs and Perennials Spray Irrigated	0.00	April	0.92	0	0
		May	1.77	0	
		June	2.77	0	
		July	3.54	0	
		August	3.08	0	
		Sept.	1.85	0	
		October	0.92	0	
annual sub-total			14.85 /yr	0 /yr	0.00 acre-feet
Irrigated Shrubs Drip Irrigated	0.04	April	0.92	23,516	11.8
		May	1.77	43,072	
		June	2.77	70,540	
		July	3.54	90,145	
		August	3.08	76,327	
		Sept.	1.85	47,013	
		October	0.92	23,516	
annual sub-total			14.85 /yr	378,215 /yr	1.16 acre-feet
Site Totals			8.94 irrigated acres	378,215 gal/yr	
			3/4" tap	1.14 acre-feet/yr	
				12 GPM - peak	

Properties are based on a six day per week, six hour per day peak season watering schedule. Peak season application for bluegrass is 1.75" per week.
Peak season application for spray irrigated shrubs and perennials is 1.00" per week.
Peak season application for drip irrigated shrubs is 1.00" per week.
Peak season application for irrigated native grass is 1.00" per week.



NOTE:
INSTALL ASSEMBLY TO REST ON GRAVEL SURF.
CONTAIN ENTIRE ASSEMBLY WITHIN BOX.
NO VALVE BOX EXTENSIONS WILL BE ACCEPTED.
PROVIDE 9'-4" CLEARANCE BETWEEN TOP OF CONTROL VALVE SOLENOID AND BOTTOM OF TOP OF VALVE BOX TO BE FLUSH WITH FINISH GRADE.
VALVE BOX SHALL NOT REST ON DRIP TUBING.

DRIP VALVE ASSEMBLY



DRIP EMITTER

PLANT SIZE	EMITTER FLOW RATE	EMITTER QTY. AT MULCHED BED LOCATIONS	EMITTER QTY. AT NATIVE SEED LOCATIONS
1 GALLON MATERIAL	6.5 GPH	ONE EACH	ONE EACH
5 GALLON MATERIAL	6.5 GPH	TWO EACH	TWO EACH
1 1/2" CALIPER TREE	10 GPH	THREE EACH	FOUR EACH
2" CALIPER TREE	10 GPH	FOUR EACH	SIX EACH
2 1/2" CALIPER TREE	10 GPH	SIX EACH	EIGHT EACH
3" CALIPER TREE	10 GPH	EIGHT GPH EACH	TEN EACH
3 1/2" CALIPER TREE	10 GPH	NINE GPH EACH	ELEVEN EACH
4" CALIPER TREE	10 GPH	TEN EACH	TWELVE EACH
6 FT. CONIFEROUS TREE	10 GPH	FOUR EACH	SIX EACH
8 FT. CONIFEROUS TREE	10 GPH	SIX EACH	NINE EACH
10 FT. CONIFEROUS TREE	10 GPH	EIGHT EACH	TWELVE EACH
12 FT. CONIFEROUS TREE	10 GPH	TEN EACH	FOURTEEN EACH

NOTES:
INSTALL EMITTERS ON OPPOSING SIDES OF ROOTBALL. THREE OR MORE EMITTERS SHALL BE EQUALLY SPACED AROUND ROOT BALL.
EMITTERS ARE TO BE INSTALLED TO CLEAR SURFACE BY A MINIMUM OF 1" AND A MAXIMUM OF 2".
FLUSH ALL LINES THOROUGHLY, INCLUDING EMITTER MICRO-TUBING PRIOR TO EMITTER INSTALLATION.
IF PLANTING ON A 4:1 SLOPE OR STEEPER, INSTALL BOTH EMITTERS ON UPHILL SIDE OF ROOT BALL.
EMITTERS SHALL BE SELF-FLUSHING, PRESSURE COMPENSATING-TYPE UNLESS NOTED OTHERWISE WITH TECHNICAL SPECIFICATIONS.

NOTE:
THERE IS NO NEW LANDSCAPING ASSOCIATED WITH SITE PLAN AMENDMENT.

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Xcel Energy

EDAW

JFSA

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2608 South Regis Street
Littleton, Colorado 80120
Phone 303.797.1200 Fax 303.797.1187

PUBLIC SERVICE COMPANY OF COLORADO
230 KV NEIGHBORHOOD ELECTRIC SUBSTATION
SITE IMPROVEMENT PLAN
SITE PLAN AMENDMENT - SPAA-001050-2019
SPECIAL REVIEW USE - SRU-001049-2019

DATE: 12/7/07
JOB NO.: 03180082
DRAWN BY: DFB
CHECKED BY: KJD
APPROVED BY: KJD
ISSUED: 12/7/07
REVISED: 12/7/07

AMENDMENT REVISION
DATE: 03/08/19
DRAWN BY: IF
CHECKED BY: KH
APPROVED BY: LKC

DRAWING TITLE:
IRRIGATION
DETAILS

SHEET

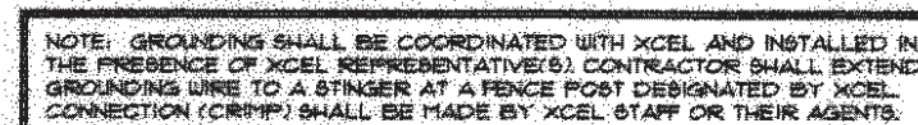
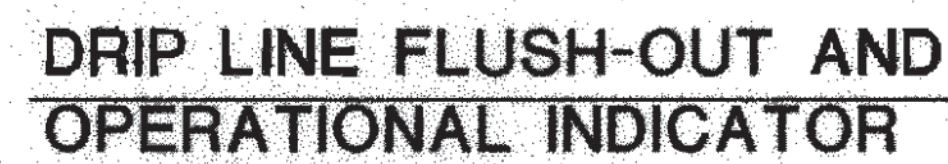
SHEET NUMBER

13 of 15

SCALE: NONE

8.935 ACRES
SITE PLAN - SP07-006

SITE PLAN AMENDMENT - SPAA-001050-2019
SPECIAL REVIEW USE - SRU-001049-2019



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SITE IMPROVEMENT PLAN
SITE PLAN AMENDMENT - SPAA-001050-2019
SPECIAL REVIEW USE - SRU-001049-2019

AMENDMENT REVISION

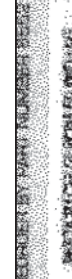
DRAWING TITLE:
**IRRIGATION
DETAILS**

SHEET

SHEET NUMBER
14 of 15
SCALE: NONE

[illegible]

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E-mail: jacob@ucsd.edu



1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

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1. *Journal of the American Medical Association*, 1997; 278: 1039-1044.



Abstract

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^a *Staphylococcus aureus* ATCC 29222.

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