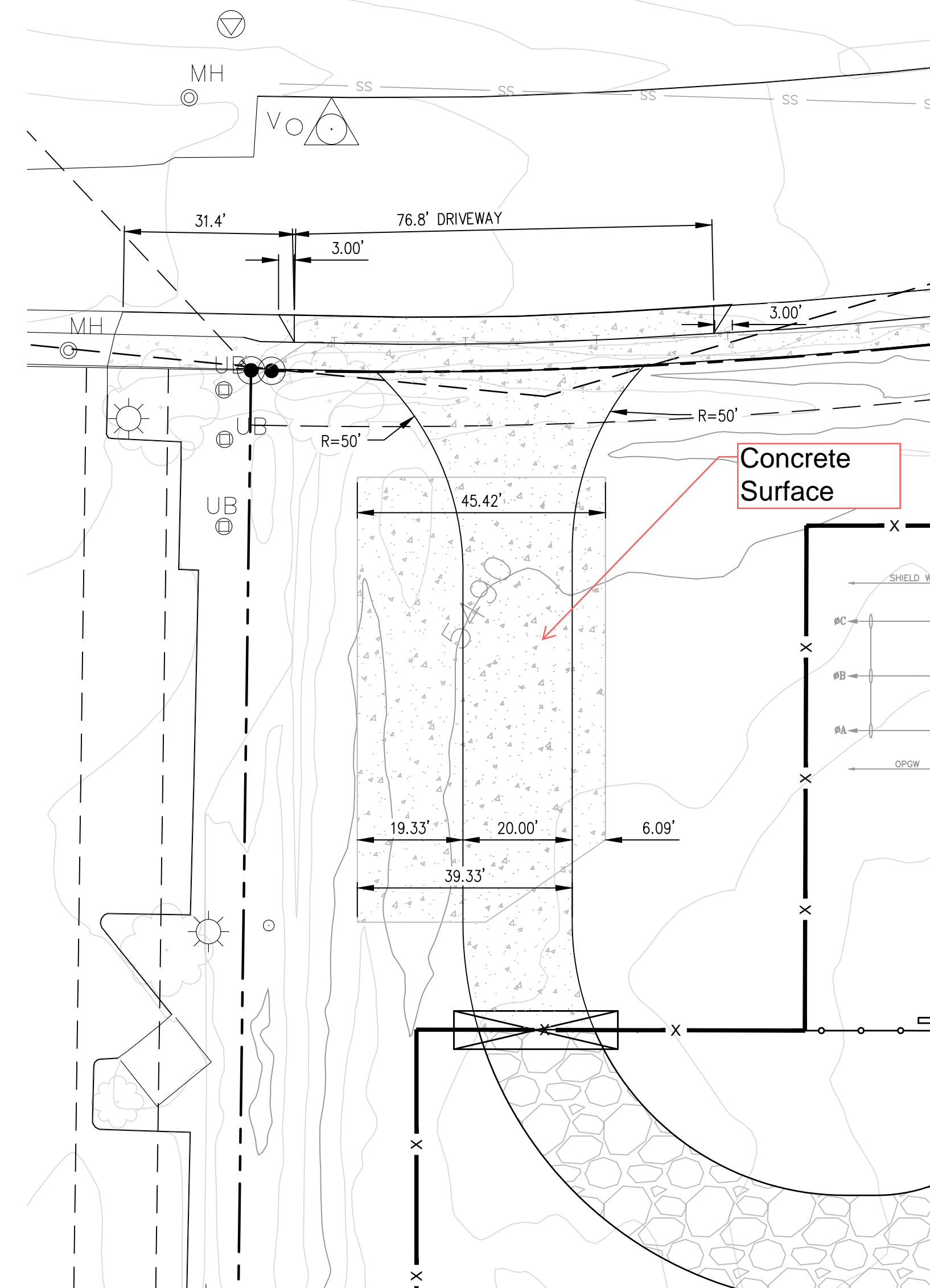
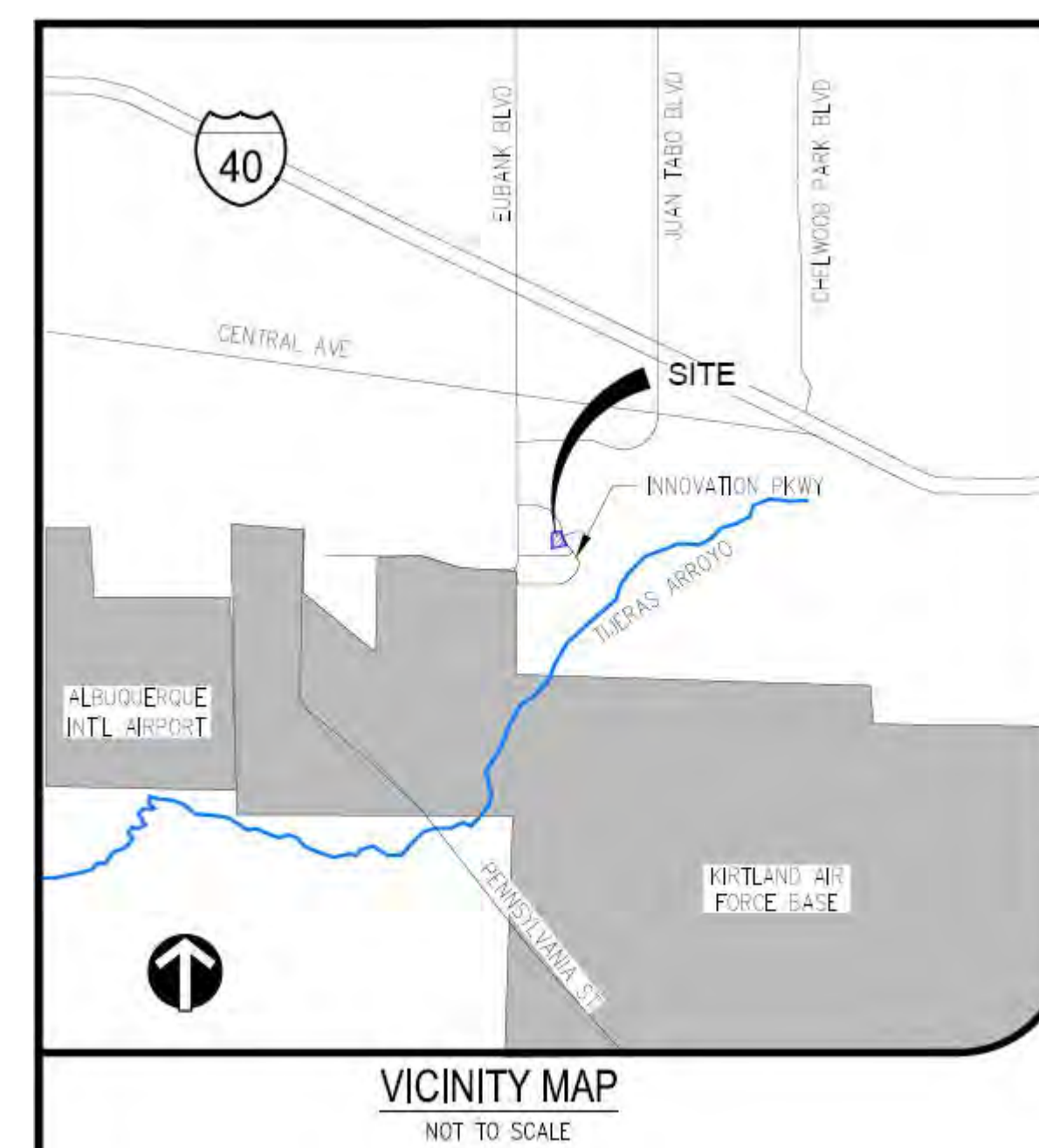


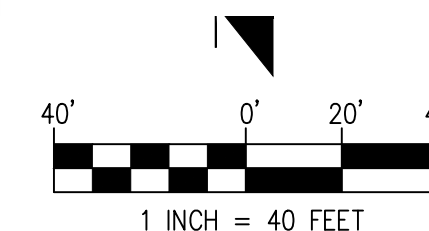
# GENERAL SITE PLAN



DRIVEWAY DETAIL  
SCALE: 1"=20'



VICINITY MAP  
NOT TO SCALE



LEGEND	
SYMBOL	DESCRIPTION
---	PROPERTY LINE
---	EXISTING EASEMENT
AC AC	UNDERGROUND AC
X	PERIMETER WALL (DESIGN BY OTHERS)
---	SUBSTATION FENCE
---	LIMIT OF DISTURBANCE
---	AUGMENTATION GROUP 1
---	AUGMENTATION GROUP 2
---	AUGMENTATION GROUP 3
---	AUGMENTATION GROUP 4
---	AUGMENTATION GROUP 5
---	POWER CONTROLLER
---	EX STRUCTURES
---	EX TREES/VEGETATIONS
---	EX MINOR CONTOUR
---	EX MAJOR CONTOUR
---	STORM DRAIN MAIN AND STRUCTURE
---	PROPOSED CONCRETE
---	PROPOSED GRAVEL ROADWAY
---	PROPOSED DRAINAGE SWALE
---	PROPOSED STORMWATER BASIN
---	EX WELL
---	DETECTABLE WARNING

PUBLIC SERVICE COMPANY OF NEW MEXICO  
SANDIA BESS SITE - 90% DESIGN SET  
PROJECT SITE PLAN  
CONSTRUCTION DOCUMENTS  
APN 1-021-055-162-512-2-06-67



DATE: 12/18/2024  
SCALE: 1"=40'  
HORZ. N/A  
VERT. N/A  
DESIGNED BY: AMP  
REVIEWED BY: SDG  
C3.00  
PAGE 8 OF 13

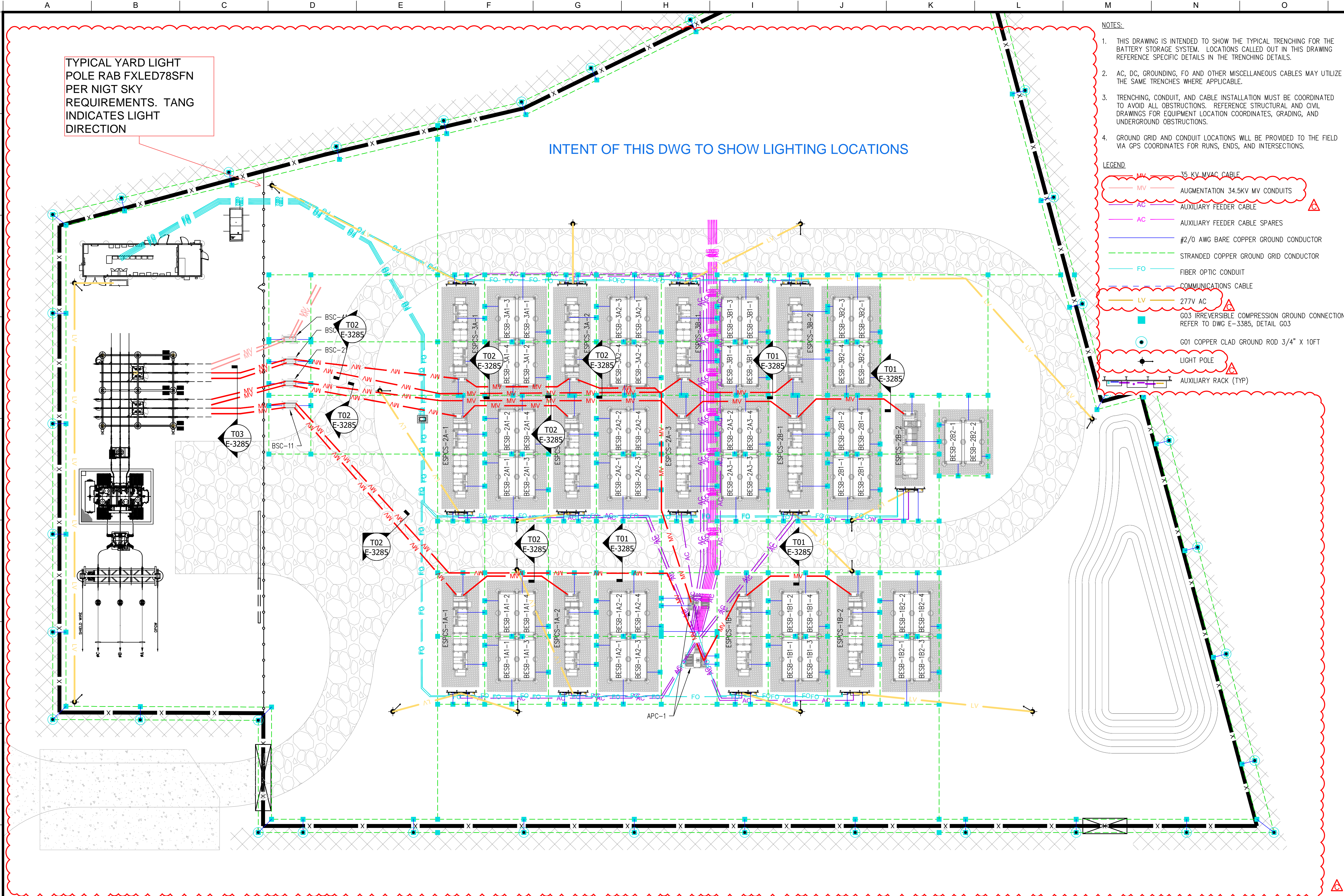




**GRADING NARRATIVE:**  
THE EXISTING SITE IS UNDEVELOPED AND RANGES FROM ELEVATIONS 5489 TO 5495. THE ADJACENT PROPERTY IS FLAT WITH OFFICE BUILDINGS TO THE WEST AND SOUTH AND ROADWAYS, INNOVATION PARKWAY TO THE EAST SLOPES TOWARDS THE EAST INTERSECTION OF INNOVATION PARKWAY AND GIBSON BLVD. GIBSON BLVD TO THE NORTH SLOPES TOWARDS THE WEST. THE PROPOSED PROJECT WILL BE GRADED WITH A 2:1 MAX SLOPE FROM EXISTING GROUND UP TO ELEVATION 5496-5499 TO PROTECT THE PROPOSED INFRASTRUCTURE.



J:\depcom-engineering\public service of new mexico\nm240b4 - sandia\EPC\electrical\nm240b4\_E-3050 - 9/30/2024 5:57 PM

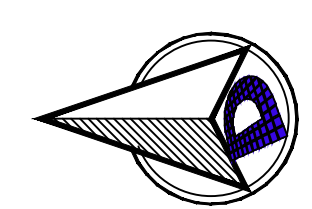
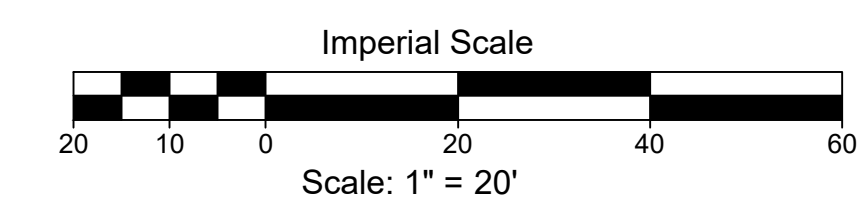


- NOTES:
1. THIS DRAWING IS INTENDED TO SHOW THE TYPICAL TRENCHING FOR THE BATTERY STORAGE SYSTEM. LOCATIONS CALLED OUT IN THIS DRAWING REFERENCE SPECIFIC DETAILS IN THE TRENCHING DETAILS.
  2. AC, DC, GROUNDING, FO AND OTHER MISCELLANEOUS CABLES MAY UTILIZE THE SAME TRENCHES WHERE APPLICABLE.
  3. TRENCHING, CONDUIT, AND CABLE INSTALLATION MUST BE COORDINATED TO AVOID ALL OBSTRUCTIONS. REFERENCE STRUCTURAL AND CIVIL DRAWINGS FOR EQUIPMENT LOCATION COORDINATES, GRADING, AND UNDERGROUND OBSTRUCTIONS.
  4. GROUND GRID AND CONDUIT LOCATIONS WILL BE PROVIDED TO THE FIELD VIA GPS COORDINATES FOR RUNS, ENDS, AND INTERSECTIONS.

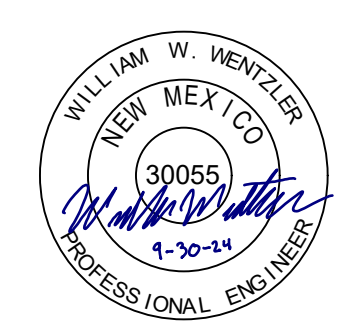
- LEGEND:
- MV 35 KV MVAC CABLE
  - MV AUGMENTATION 34.5KV MV CONDUITS
  - AC AUXILIARY FEEDER CABLE
  - AC AUXILIARY FEEDER CABLE SPARES
  - #2/0 AWG BARE COPPER GROUND CONDUCTOR
  - STRANDED COPPER GROUND GRID CONDUCTOR
  - FO FIBER OPTIC CONDUIT
  - COMMUNICATIONS CABLE
  - LV 277V AC
  - G03 IRREVERSIBLE COMPRESSION GROUND CONNECTION REFER TO DWG E-3385, DETAIL G03
  - G01 COPPER CLAD GROUND ROD 3/4" X 10FT
  - LIGHT POLE
  - AUXILIARY RACK (TYP)

# UNDERGROUND RACEWAY PLAN

SCALE: 1" = 20'



THIS DRAWING CONTAINS PROPRIETARY AND CONFIDENTIAL INFORMATION OF DEPCOM POWER, INCORPORATED. DEPCOM POWER RETAINS ALL COPYRIGHT RIGHTS TO IT UNDER 17 U.S.C. SECTION 106 AND IS PROTECTED BY U.S. AND INTERNATIONAL LAW. ANY REPRODUCTION, DERIVATIVE WORKS, DISTRIBUTION, PUBLIC DISPLAY, DISCLOSURE, AND/OR USE OF ANY PORTION OF THIS DRAWING IN ANY FORM WITHOUT WRITTEN AUTHORIZATION FROM DEPCOM POWER IS STRICTLY PROHIBITED.



9185 E PIMA CENTER PARKWAY #100  
SCOTTSDALE, AZ 85258  
PHONE: (480) 270-6910  
WWW.DEPCOMPOWER.COM

A KOCH ENGINEERED SOLUTIONS COMPANY

SANDIA BESS  
(60MW/240MWh)  
ALBUQUERQUE,  
BERNALILLO COUNTY  
NM, USA

TITLE:

NOT FOR CONSTRUCTION

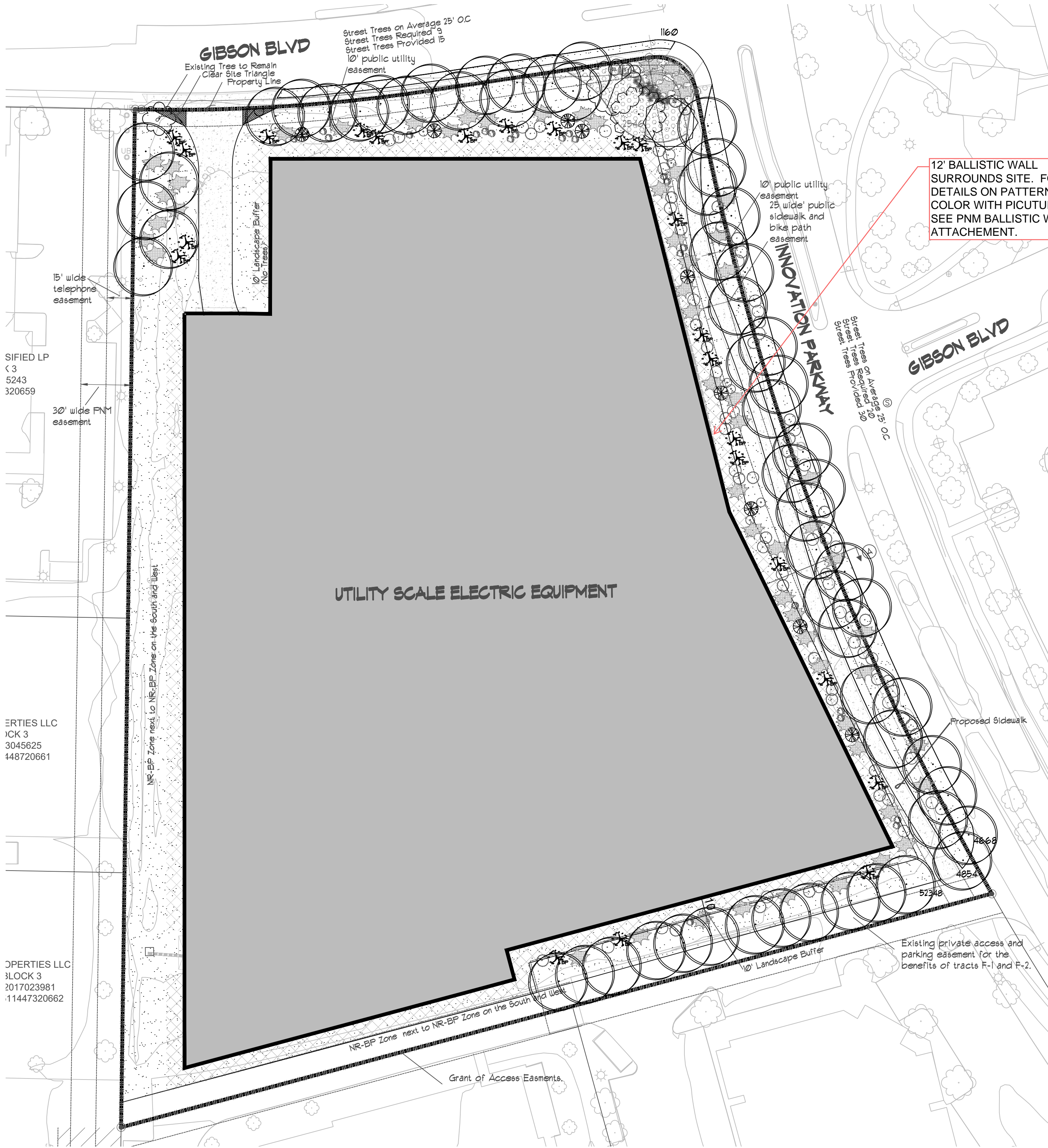
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C	09-27-24	ISSUED FOR 90% REVIEW (FR)	LC	CV	WW
A	07-10-24	ISSUED FOR 60% REVIEW (FR)	TDN	CV	WW

SHEET TITLE:

UNDERGROUND RACEWAY PLAN

ENGINEER: WALKER WENTZLER	DR. BY: LC	CHK. BY: CV
DEPCOM JOB No: 23-0024-00	SCALE: AS NOTED	
DEPCOM PROJECT CODE: NM240b4		
DRAWING NUMBER: E-3050	REV: C	
SHEET 20	OF 49	





LANDSCAPE LEGEND

TREES						
QTY.	SIZE	COMMON/BOTANICAL NAME	DIMS	WATER USE	COVERAGE	TOTAL COVERAGE
1		Existing Tree to Remain			310	310.00
59	2" CAL	Modesto Ash <i>Fraxinus velutina</i>	40'x35'	M	96162	56135.58
1	2" CAL	Gold Rain Tree <i>Koeleruteria paniculata</i>	25'x25'	M	490.62	490.62
1	2" CAL	Flowering Pear <i>Pyrus calleryana</i>	35'x25'	M	490.62	490.62
1	2" CAL	Cockspur Hawthorn <i>Crataegus persimilis</i>	25'x25'	M	490.62	490.62
62		TOTAL TREES:				58517.44
		TOTAL COVERAGE:				

SHRUBS & GROUNDCOVERS

QTY.	SIZE	COMMON/BOTANICAL NAME	DIMS	WATER USE	COVERAGE	TOTAL COVERAGE
22	5 Gal	India hawthorne <i>Raphiolepis indica</i>	3'x4'	M	1256	216.32
5	5 Gal	Gro-Low Sumac <i>Rhus aromatica 'Gro-Low'</i>	3'x8'	M	50.24	251.20
23	5 Gal	Yellow Bird of Paradise <i>Caesalpinia gillesii</i>	8'x10'	RW	18.5	1805.50
1	5 Gal	Blue Mist <i>Caryopteris x clandonensis</i>	3'x5'	M	19.62	131.34
9	5 Gal	Lilac <i>Syringa vulgaris</i>	8'x8'	M	50.24	452.16
60	5 Gal	Buffalo Juniper <i>Juniperus tamariscifolia 'Buffalo'</i>	1'x12'	M	113.04	6182.40
40	5 Gal	Apache Plume <i>Fallugia paradoxa</i>	6'x5'	L	19.62	784.80
40	5 Gal	Chamisa <i>Chrysothamnus nauseosus</i>	5'x5'	L	19.62	784.80
15	5 Gal	Red Yucca <i>Hesperaloe parviflora</i>	3'x3'	RW	1.06	105.90
221		TOTAL SHRUBS:				11380.42
		TOTAL COVERAGE:				

Gravel and Other Landscape Covers

8	Boulders Buy 1/3 Moss Rock or Equal, To be placed at contractor discretion
61870	Santa Fe Brown Landscape Gravel/Filter Fabric 3/4" Crushed - 3" Depth
2546	Oversize Landscape Gravel / Filter Fabric 2-4" Mountain Rose
64416.00	TOTAL LANDSCAPING:
59148.00	TOTAL ON-SITE LANDSCAPING:

LANDSCAPE CALCULATIONS

TOTAL LOT AREA	2334816
TOTAL FENCED STORAGE AREA (SF)	165092.4
TOTAL NET LOT AREA (SF)	683892.0
LANDSCAPE REQUIREMENT	15%
TOTAL LANDSCAPE REQUIRED	10258

TOTAL ON-SITE LANDSCAPE PROVIDED (SF)	59148.00
TOTAL VEGETATIVE COVERAGE REQUIRED (SF)	44811
TOTAL VEGETATIVE COVERAGE PROVIDED (SF)	69891.86
TOTAL GROUND VEGETATIVE COVERAGE REQUIRED (SF)	11203
TOTAL GROUND VEGETATIVE COVERAGE PROVIDED (SF)	11380.42

Street Tree Notes:

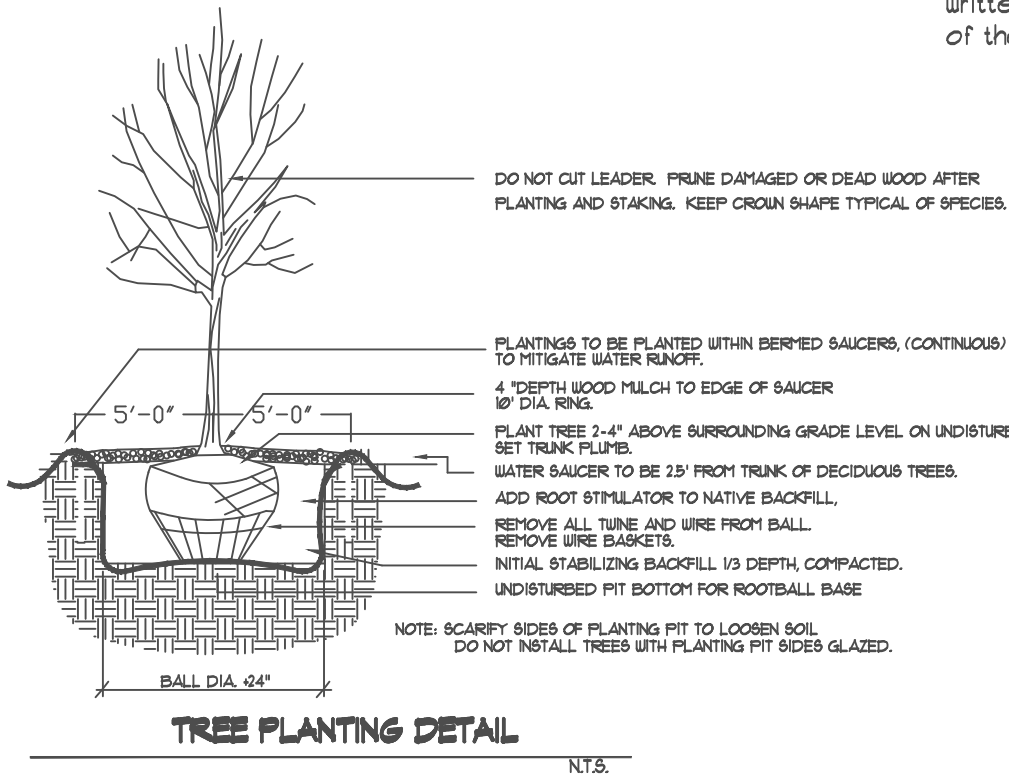
Per Section 5-6(D) (1) (a) Required Street Trees. Trees are GENERALLY required along street frontages every 25 feet on center unless otherwise specified in Part 6-2-2 of ROA 1994 (Street Trees)

Section 6-6-2-5 Street Trees (A)

- Size of the trees at maturity should be in proportion to the planting space provided for them. - Smaller species of trees will require closer spacing, and larger trees will require greater spacing. Spacing shall be approved as part of the plan approval process.
- On sites where evenly spaced street trees are not possible, or do not conform to the overall design objectives of the site, provided that the number of trees equals or exceeds the number that would be required if the trees were evenly spaced

Clear Site Triangle Note:

Landscaping and signage will not interfere with clear site requirements. Signs, walls, trees and shrubbery between 3 and 8 feet tall, (as measured from the gutter pan) are not included within the clear site triangle.



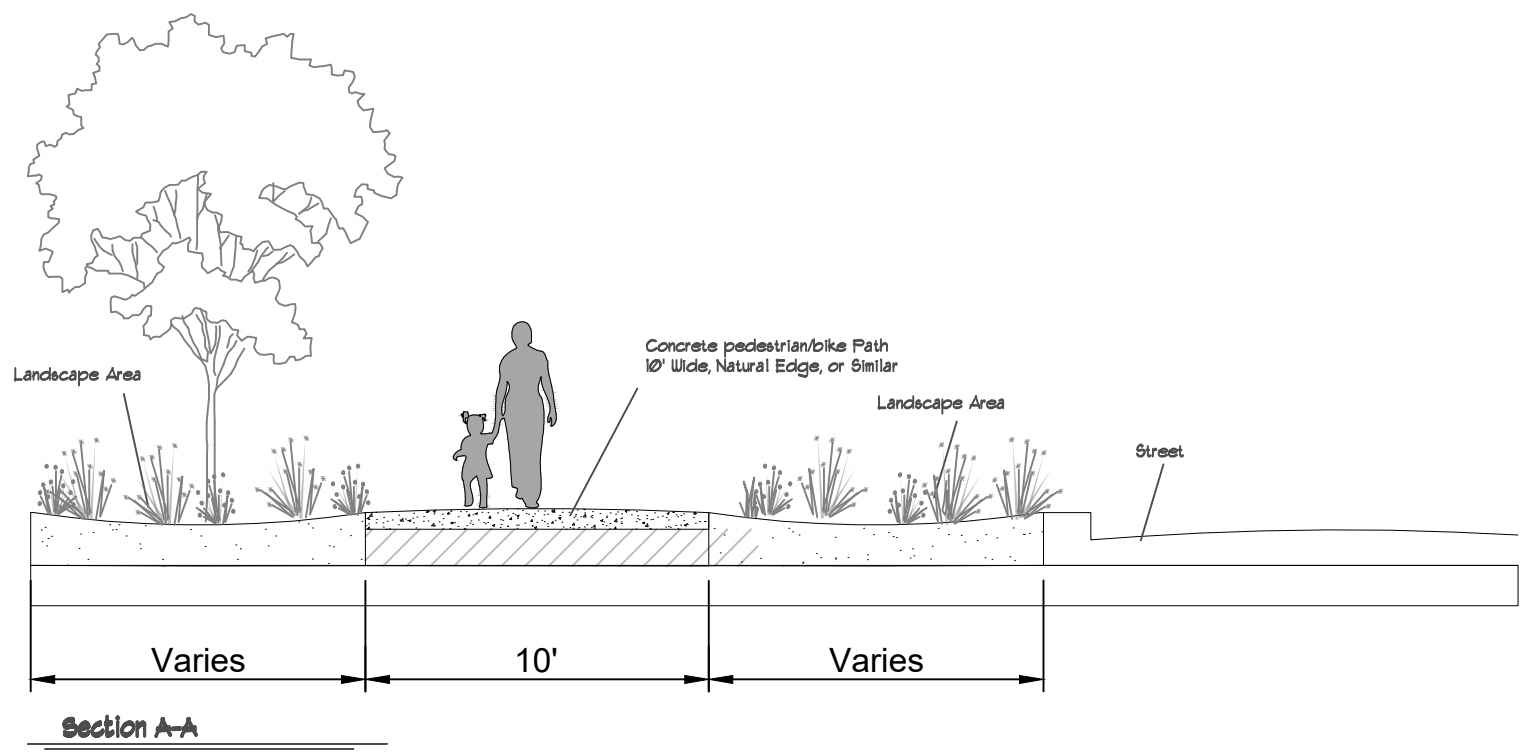
Vicinity Map

Vegetated perimeter length: 1241'  
Provided # of Trees: 62  
Existing Trees to Remain: 1  
Total Trees Shown on the plan: 624+63

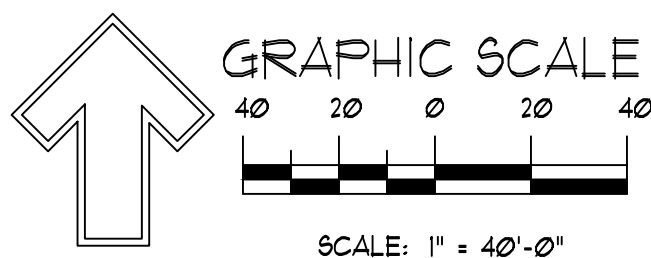
LANDSCAPE NOTES:

- Landscape maintenance shall be the responsibility of the Property Owner.
- The Property Owner shall maintain landscaping in a living, healthy, and attractive condition. Shrubs shall be left to grow in to natural form, and shall not be pruned, sheared or otherwise decimated. Trees shall not be pollarded. Only licensed, insured Certified Arborist shall be allowed to prune or shape trees.
- It is the intent of this plan to comply with the City Of Albuquerque Water, IDO Ordinance.
- It is the intent of this plan to comply with the City of Albuquerque Landscape Regulations Applicable to Apartments and Nonresidential Development, Revised 6/24.
- Water management is the sole responsibility of the Property Owner.
- Landscape Gravel over Filter Fabric to a minimum depth of 3" shall be placed in all landscape areas which are not designated to receive native seed, or other treatment.
- Contractor shall supply to the owner samples of various gravel samples for approval prior to installing.
- 25% of landscape area shall be covered with organic mulch per City of Albuquerque mandates. Mulch shall be a minimum of 4" deep in areas as shown on the plan. Landscape maintenance providers shall ensure that all organic mulch areas are maintained and refreshed on a regular basis. Filter Fabric shall not be placed in areas to receive organic mulch.
- Landscape shall be watered by a complete underground irrigation system operated by automatic timer.
- Trees and shrubs shall be zoned separately.
- Landscape shall be installed according to the approved plan. Installation shall be completed within 60 days of the related project's completion.
- No substitutions or alterations to this plan without the express written permission of the Landscape Architect, and approval of the City of Albuquerque, approved permit set.

Responsibility of maintenance by PNM



90% Not For Construction



AGENCY

DESCRIPTION

DATE

NO.

11/25/2024

Landscape Architect

STATE OF NEW MEXICO  
DANNY D. MITCHELL  
239  
REGISTERED  
LANDSCAPE ARCHITECT  
11/25/2024

PUBLIC SERVICE COMPANY OF NEW MEXICO  
SANDIA BESS SITE - 90% DESIGN SET

CONSTRUCTION DOCUMENTS  
APN 1-021-055-162-512-2-06-67

CITY OF ALBUQUERQUE

Mitchell Associates, Inc.  
DANNY MITCHELL  
danny@psaconsultants.com  
505.839.9581

11-25-2024

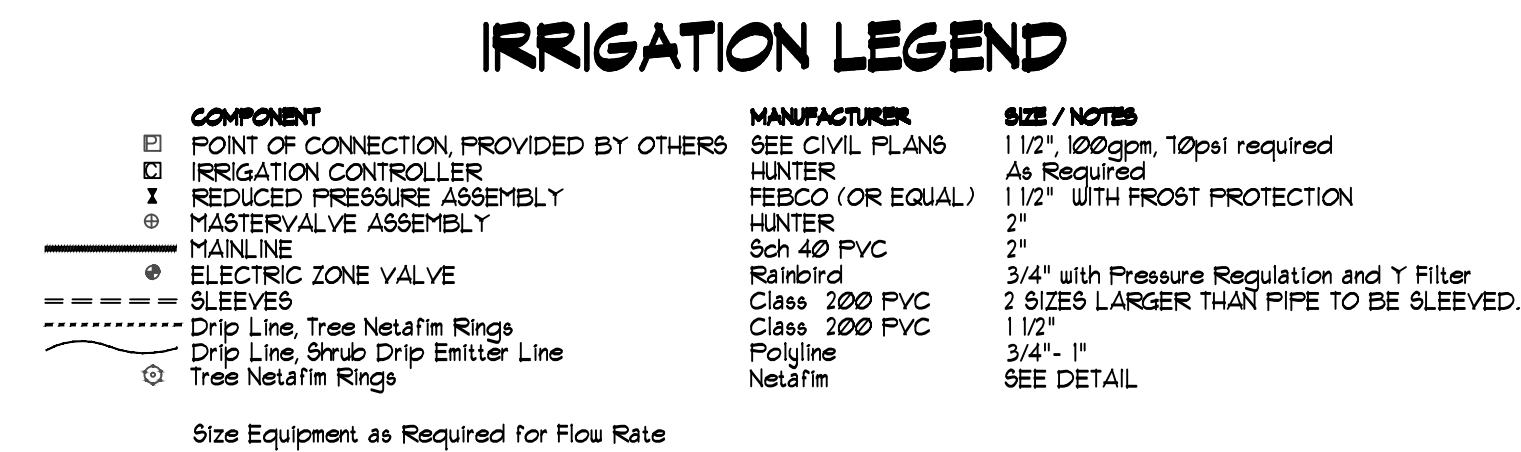
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HORZ. 1"=40'  
VERT. N/A

DESIGNED BY: DM

REVIEWED BY: DM

Landscape Plan 60% **LS-101**  
Project Number: 2024-0950  
PAGE 1 OF 3





1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, EQUIPMENT QUANTITIES, AND UTILITY LOCATIONS PRIOR TO BEGINNING WORK.
2. CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES IN PLANS OR SPECIFICATIONS PRIOR TO BEGINNING OR CONTINUING WORK.
3. THE IRRIGATION CONTRACTOR SHALL MAKE NO SUBSTITUTIONS, DELETIONS, OR ADDITIONS TO THIS PLAN WITHOUT APPROVAL OF THE LANDSCAPE ARCHITECT.
4. ALL CONSTRUCTION SHALL CONFORM TO CITY, COUNTY, STATE, AND FEDERAL REQUIREMENTS; IT SHALL BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR TO ENSURE THAT ALL IRRIGATION EQUIPMENT MEETS GOVERNMENT REGULATIONS; CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ANY NECESSARY PERMITS OR APPROVALS.
5. THIS PLAN IS SCHEMATIC AND DUE TO THE NATURE OF CONSTRUCTION SLIGHT FIELD MODIFICATIONS MAY BE NECESSARY TO IMPLEMENT PLAN.
6. IRRIGATION SYSTEMS CONNECTED TO POTABLE WATER SUPPLY, SHALL HAVE A BACKFLOW PREVENTER INSTALLED.
7. IRRIGATION LATERAL LINES, MAIN LINES AND EQUIPMENT MAY BE SHOWN OUTSIDE PROPERTY LINES ON THIS PLAN, ALL IRRIGATION LINES AND EQUIPMENT ARE TO BE WITHIN AND INSTALLED WITHIN THE LIMITS OF THE PROPERTY LINE.
8. ALL IRRIGATION SLEEVING TO BE THE RESPONSIBILITY OF THE IRRIGATION CONTRACTOR. ELECTRICAL WIRES FOR IRRIGATION VALVES AND IRRIGATION LINES ARE TO BE PLACED IN SEPARATE SLEEVES. SEE IRRIGATION DETAIL.
9. SUPPLY LINE AND WATER METER TO BE PROVIDED BY OWNER/BACKFLOW PREVENTOR TO BE PROVIDED BY IRRIGATION CONTRACTOR. IRRIGATION CONTRACTOR'S POINT OF CONNECTION TO BEGIN DOWNSTREAM OF THE IRRIGATION WATER METER.

1. Irrigation shall be a complete underground system.
2. Trees and shrubs shall be on separate valves.
3. Point of connection for irrigation system shall be as indicated on the Utility Plan. Civil drawings. Landscape Contractor point of connection and responsibility shall begin downstream of the point of connection.
4. Irrigation will be operated by smart- Irrigation system automatic controller, capable of multi-programming ability.
5. Location of controller to be field determined and power source for controller to be provided by the owner.
6. Irrigation maintenance shall be the responsibility of the Property Owner.
7. Water and Power source for Irrigation system shall be the responsibility of the Property Owner.
8. Per 5-6(C)(1)(a), Irrigation systems shall comply with Section of the ABCWA Legislation and Ordinances (Cross Connection Prevention and Control Ordinance).
9. Per 5-6(C)(1)(b), all Irrigation systems shall be designed to minimize the use of water.
10. 5-6(C)(1)(c), all non-residential landscape Irrigation shall have automatic times and/or programmable settings to avoid overwatering.
11. Per 5-6(C)(1)(d), the Irrigation system shall not spray or irrigate impervious surfaces, including sidewalks, driveways, drive aisles, streets, and parking and loading areas.





N.T.S.



## NETAFIM DETAIL

N.T.S.



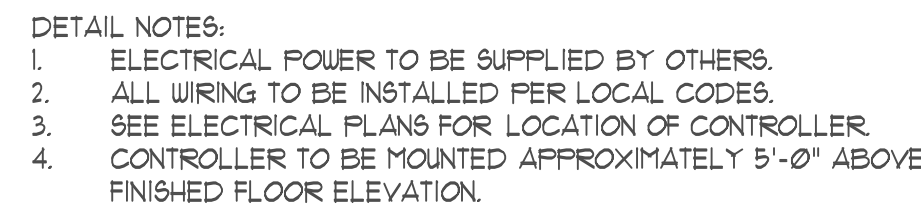
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N.T.S.



N.T.S.



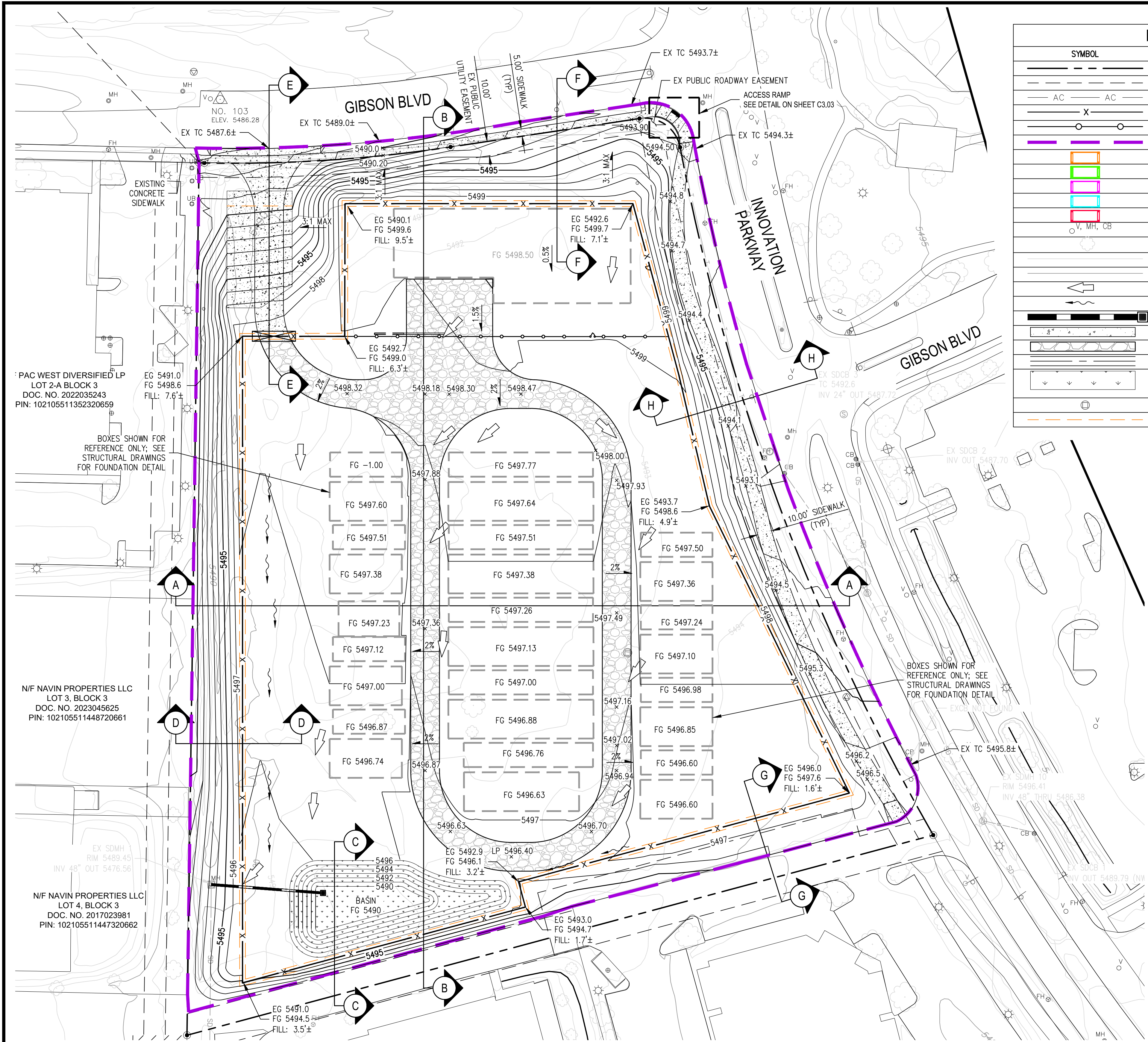
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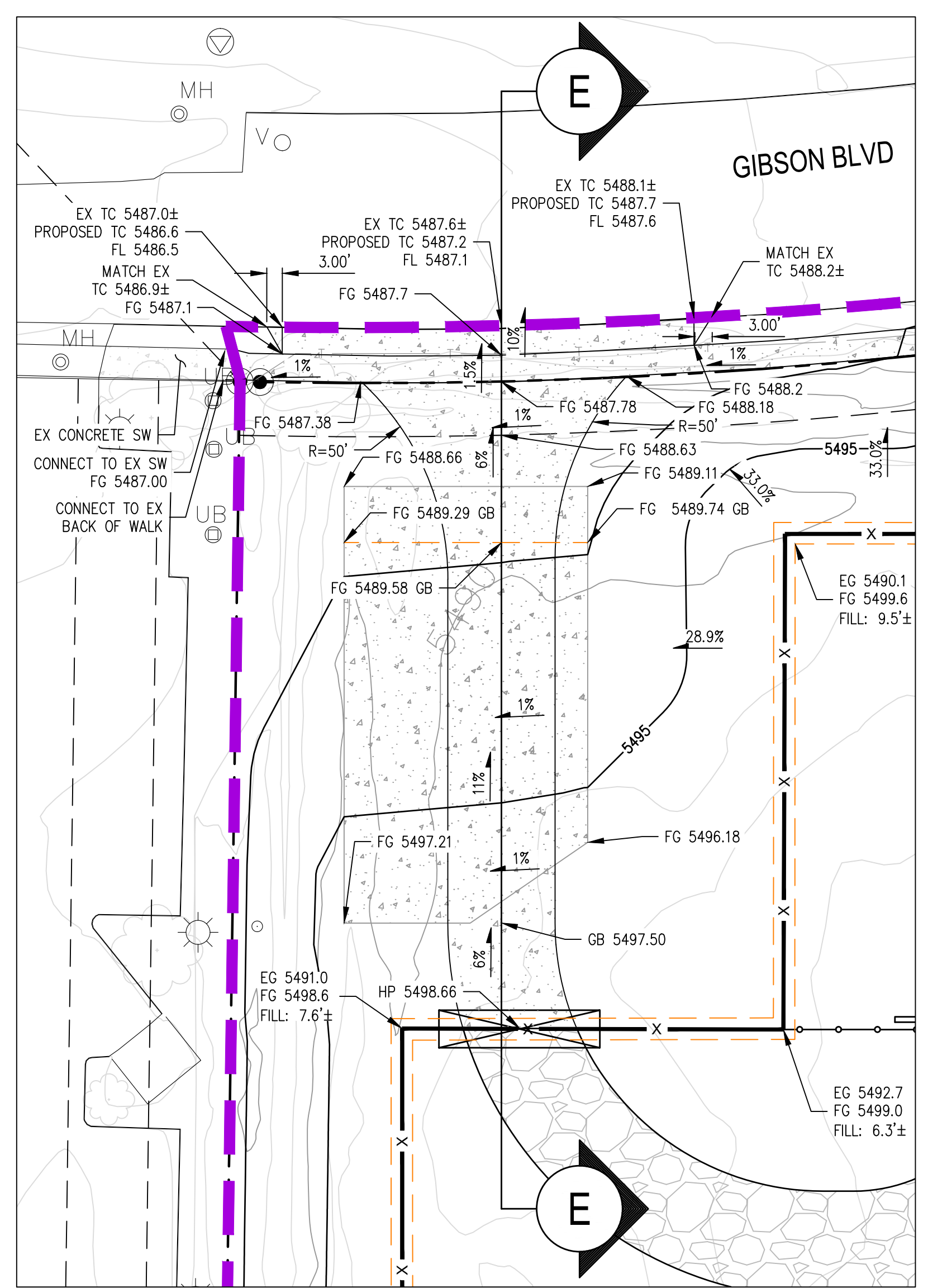


N.T.S.





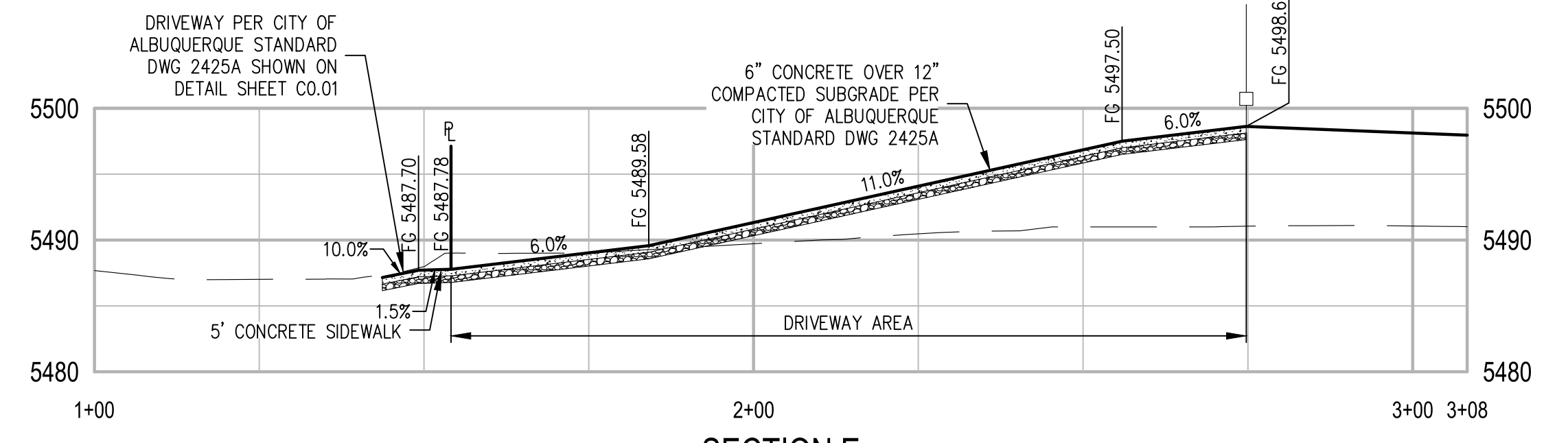
LEGEND	
SYMBOL	DESCRIPTION
---	PROPERTY LINE
---	EXISTING EASEMENT
---	UNDERGROUND AC
X	PERIMETER WALL (DESIGN BY OTHERS)
○	SUBSTATION FENCE
---	LIMIT OF DISTURBANCE
---	AUGMENTATION GROUP 1
---	AUGMENTATION GROUP 2
---	AUGMENTATION GROUP 3
---	AUGMENTATION GROUP 4
---	AUGMENTATION GROUP 5
---	EX STRUCTURES
---	EX TREES/VEGETATIONS
---	EX MINOR CONTOUR
---	EX MAJOR CONTOUR
---	OVERLAND DRAINAGE DIRECTION
---	DRAINAGE SWALE
---	STORM DRAIN MAIN AND STRUCTURE
---	PROPOSED CONCRETE
---	PROPOSED GRAVEL ROADWAY
---	PROPOSED DRAINAGE SWALE
---	PROPOSED STORMWATER BASIN
○	EX WELL
---	GRADE BREAK



DRIVEWAY DESIGN DETAIL

SCALE: 1"=20'

NOTE: DRIVEWAY SECTION PER CITY OF ALBUQUERQUE STANDARD DWG 2425A SHOWN ON DETAIL SHEET C0.01



SECTION E

HORIZ: 1"=20'  
VERT: 1"=10'

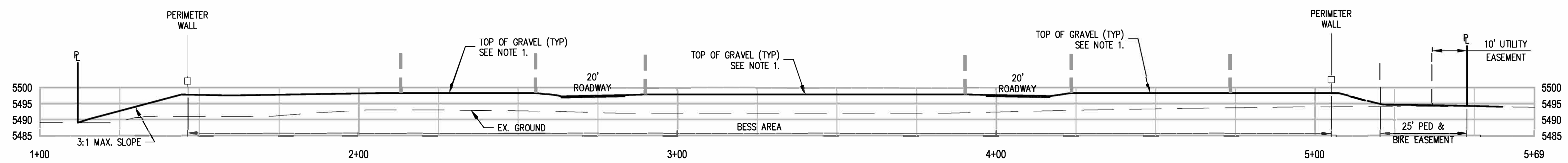
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dk JOB NO: 24-1013

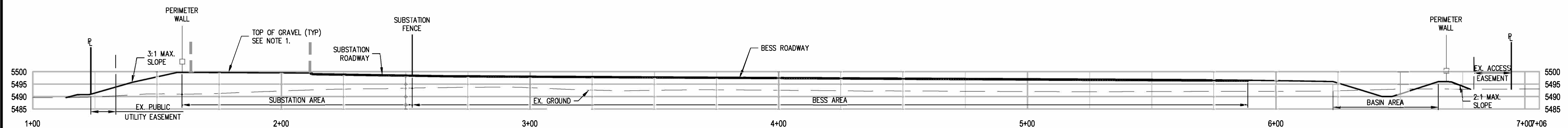
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NEW MEXICO	01/10/2025	29498	STACEY GELLA PROFESSIONAL ENGINEER
PUBLIC SERVICE COMPANY OF NEW MEXICO SANDIA BESS SITE - 90% DESIGN SET SITE LAYOUT AND GRADING PLAN CONSTRUCTION DOCUMENTS APN 1-021-055-162-512-2-06-67			
NEW MEXICO CITY OF ALBUQUERQUE			
ENGINEERING SURVEYING • PLANNING 1821 SAN ANGELO DRIVE, SUITE 100 ALBUQUERQUE, NEW MEXICO 87102 PHONE: (505) 836-8888 WWW.PSCE-NEWMEX.COM			
DATE: 12/18/2024			
SCALE: HORZ: 1"=40' VERT: N/A			
DESIGNED BY: AMP			
REVIEWED BY: SDG			
C3.01			
PAGE 9 OF 13			





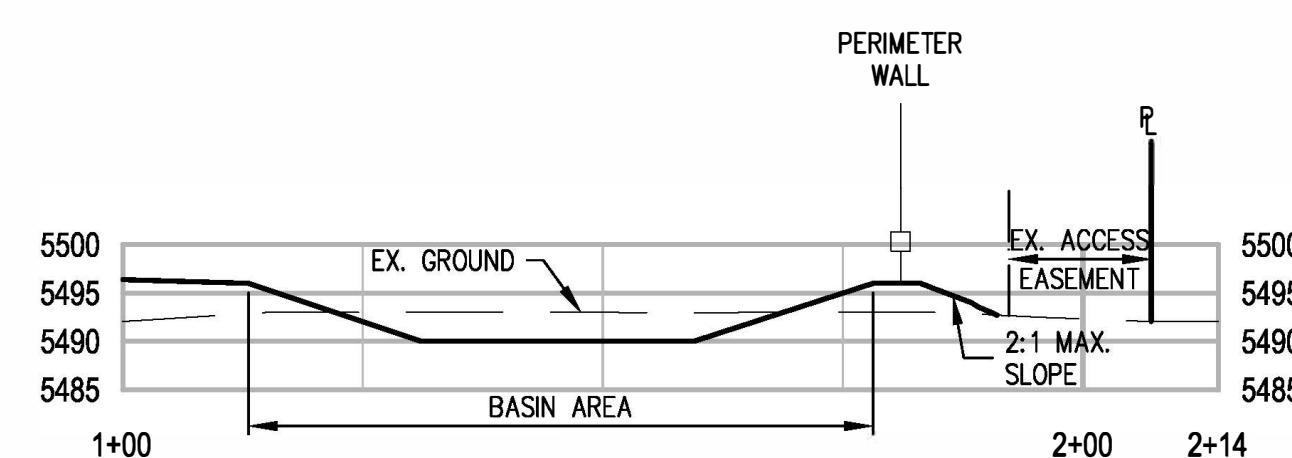
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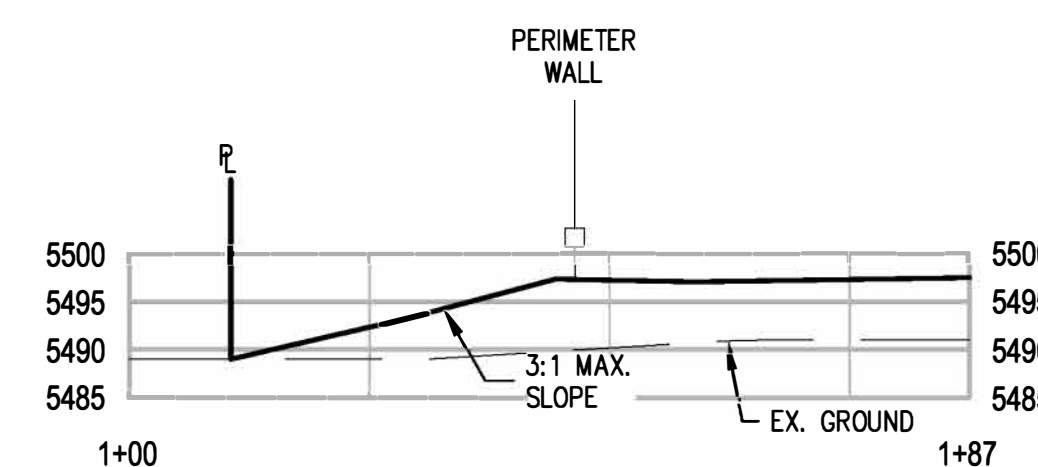
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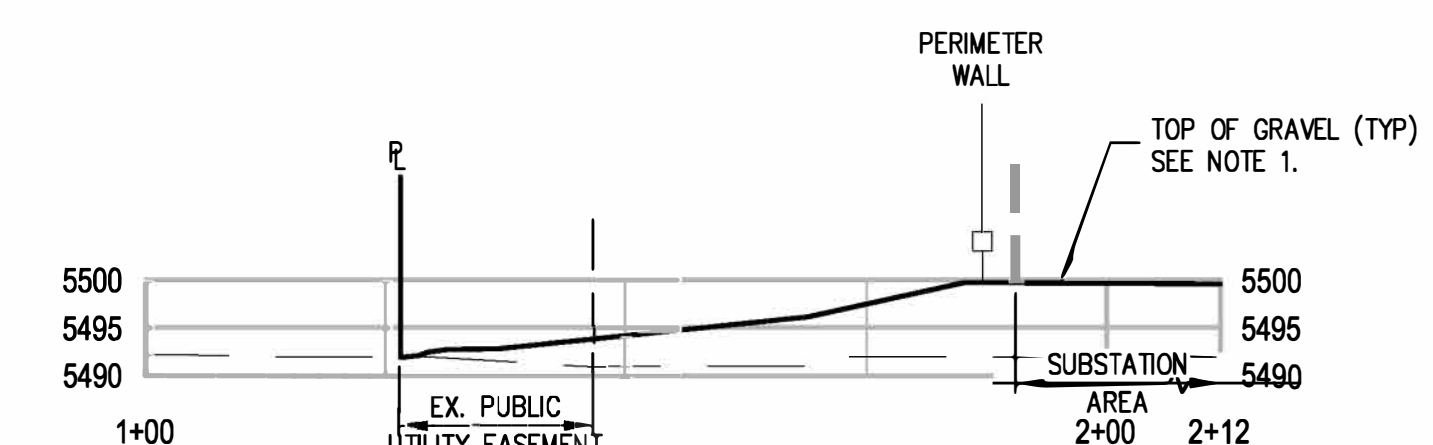
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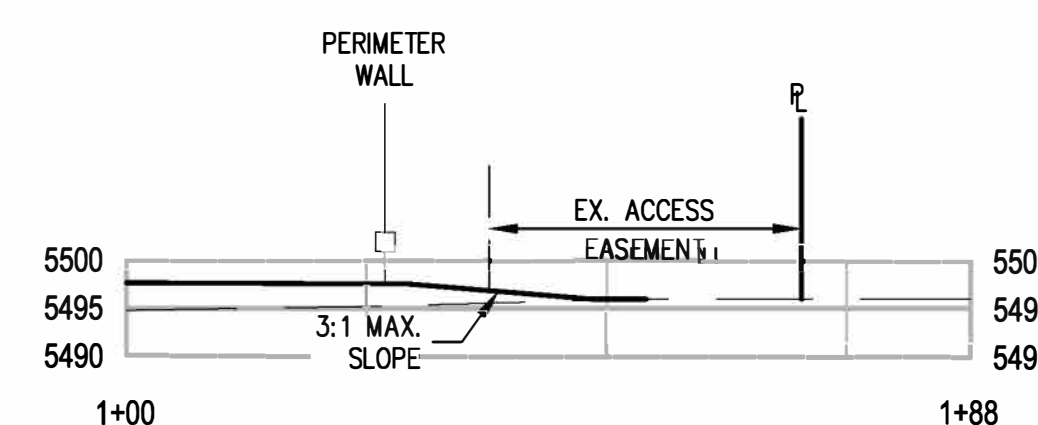
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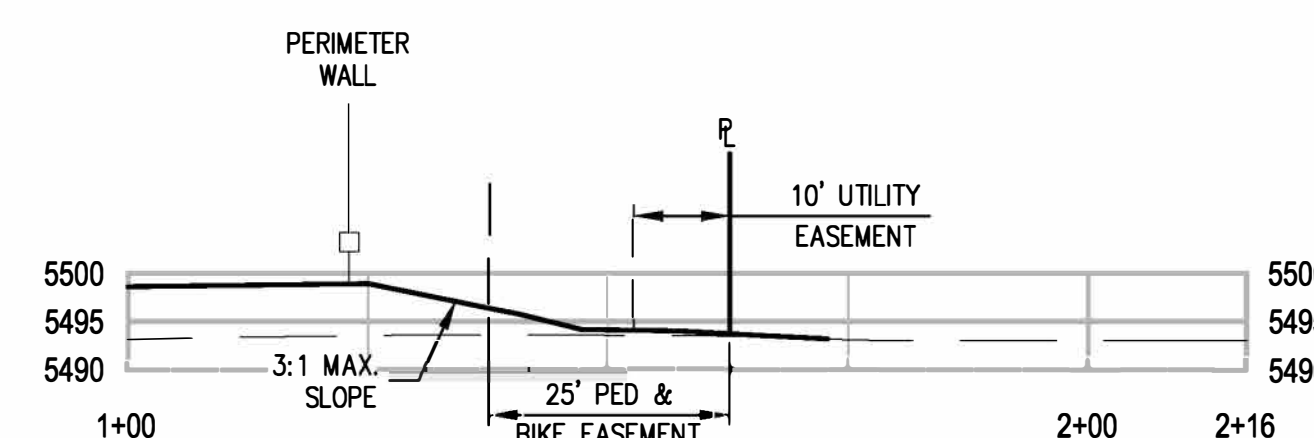
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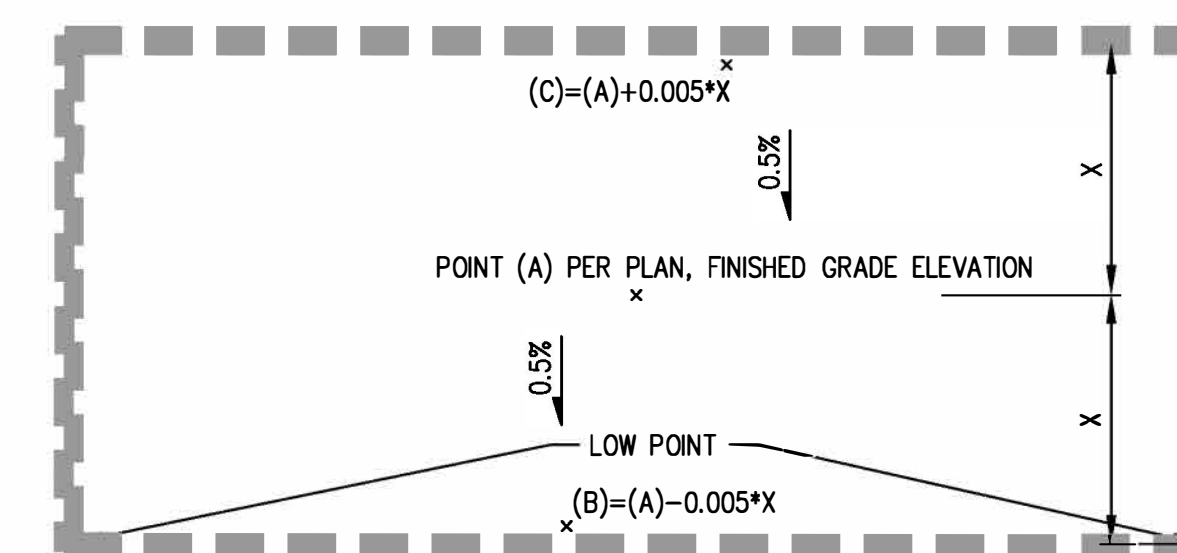
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VERT: 1"=20'



## SECTION H

HORZ: 1"=20'  
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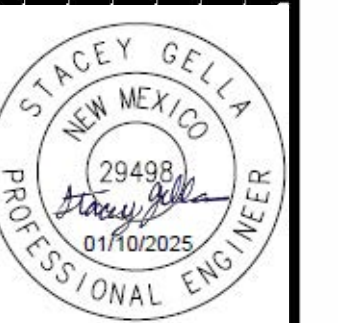


### TYPICAL BESS GRADING DETAIL

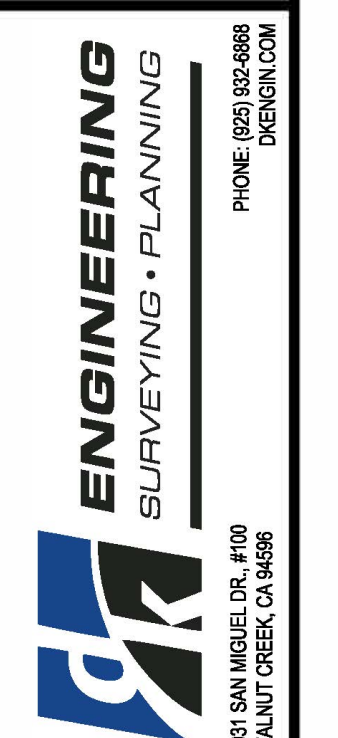
NOT TO SCALE

NOTE:

1. SEE STRUCTURAL PLANS FOR TYPICAL FOUNDATION SECTIONS FOR BESS, PCS, AND SUB-STATION.



**SANDIA BESS SITE - 90% DESIGN SET**  
**GRADING SECTIONS**  
**PUBLIC SERVICE COMPANY OF NEW MEXICO**  
**CONSTRUCTION DOCUMENTS**  
APN 1-021-055-182-512-2-06-67  
CITY OF ALBUQUERQUE  
NEW MEXICO



DATE: 12/18/2024

SCALE:  
HORZ. 1"=40'  
VERT. N/A

DESIGNED BY: AMP

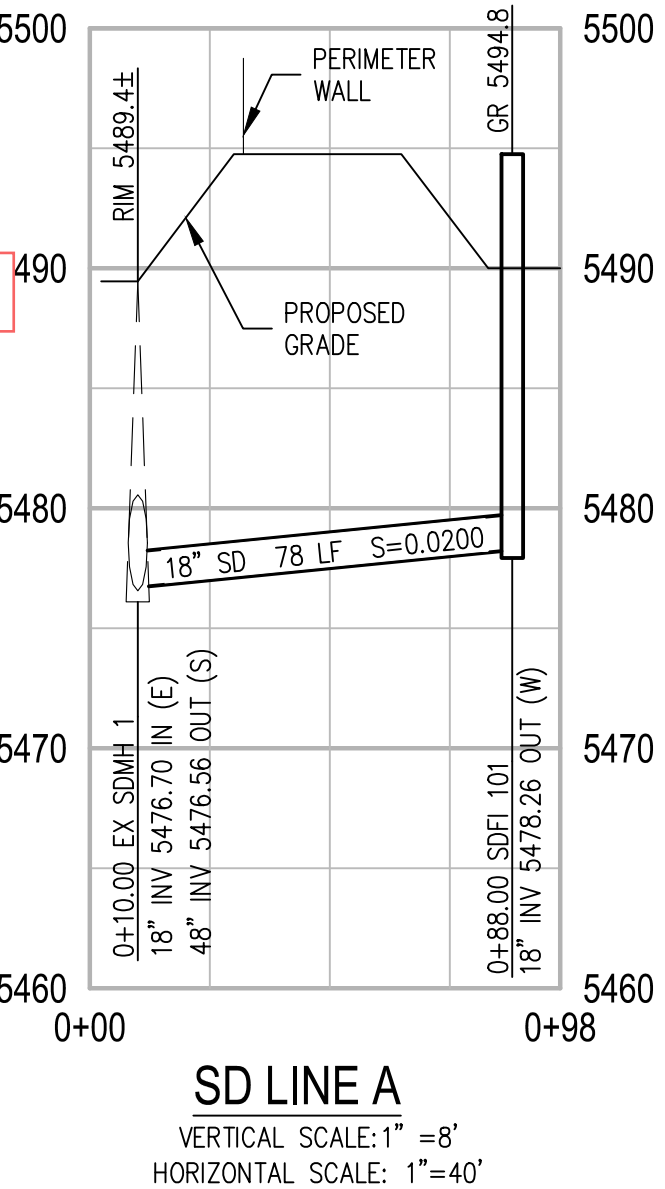
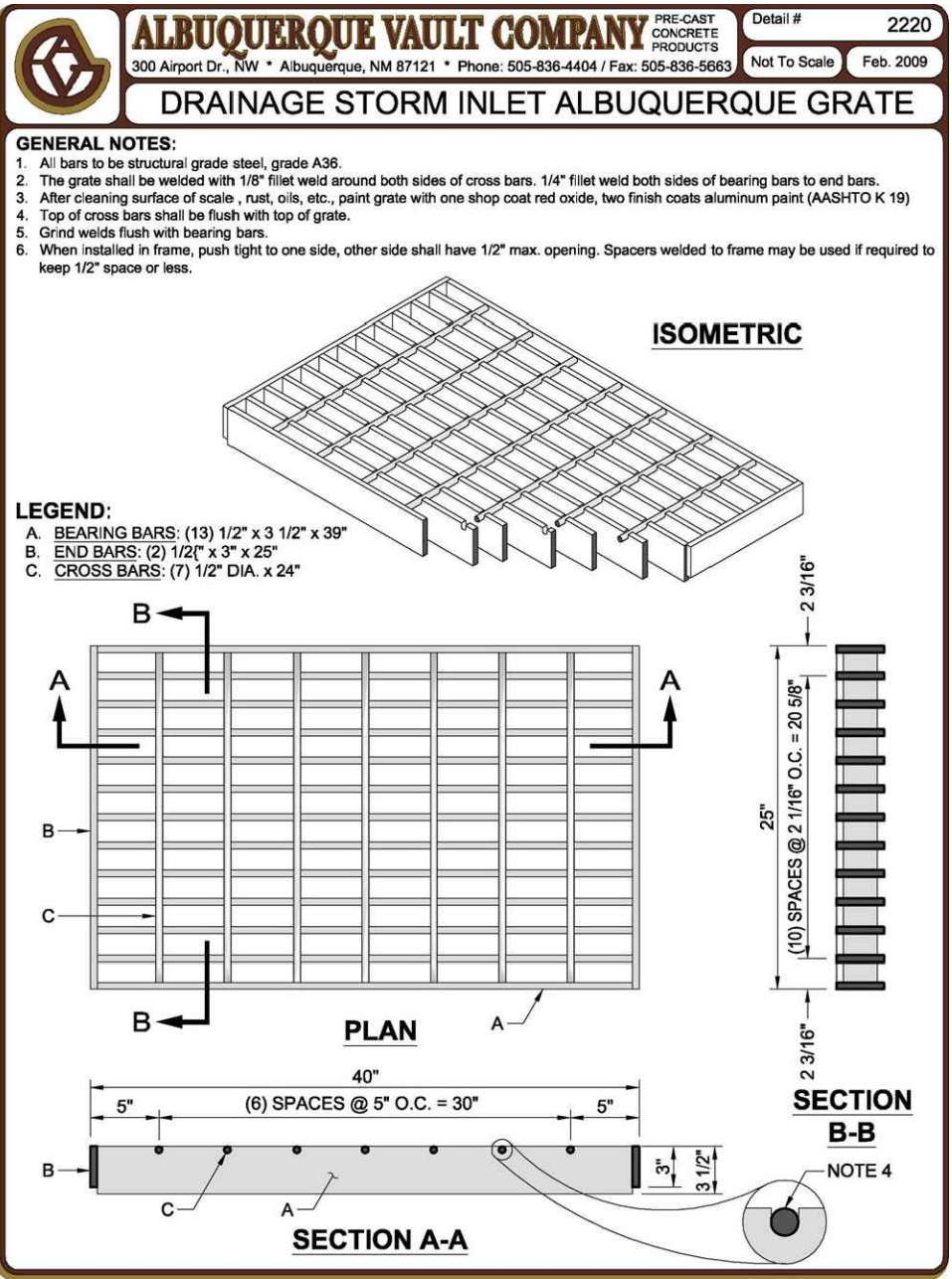
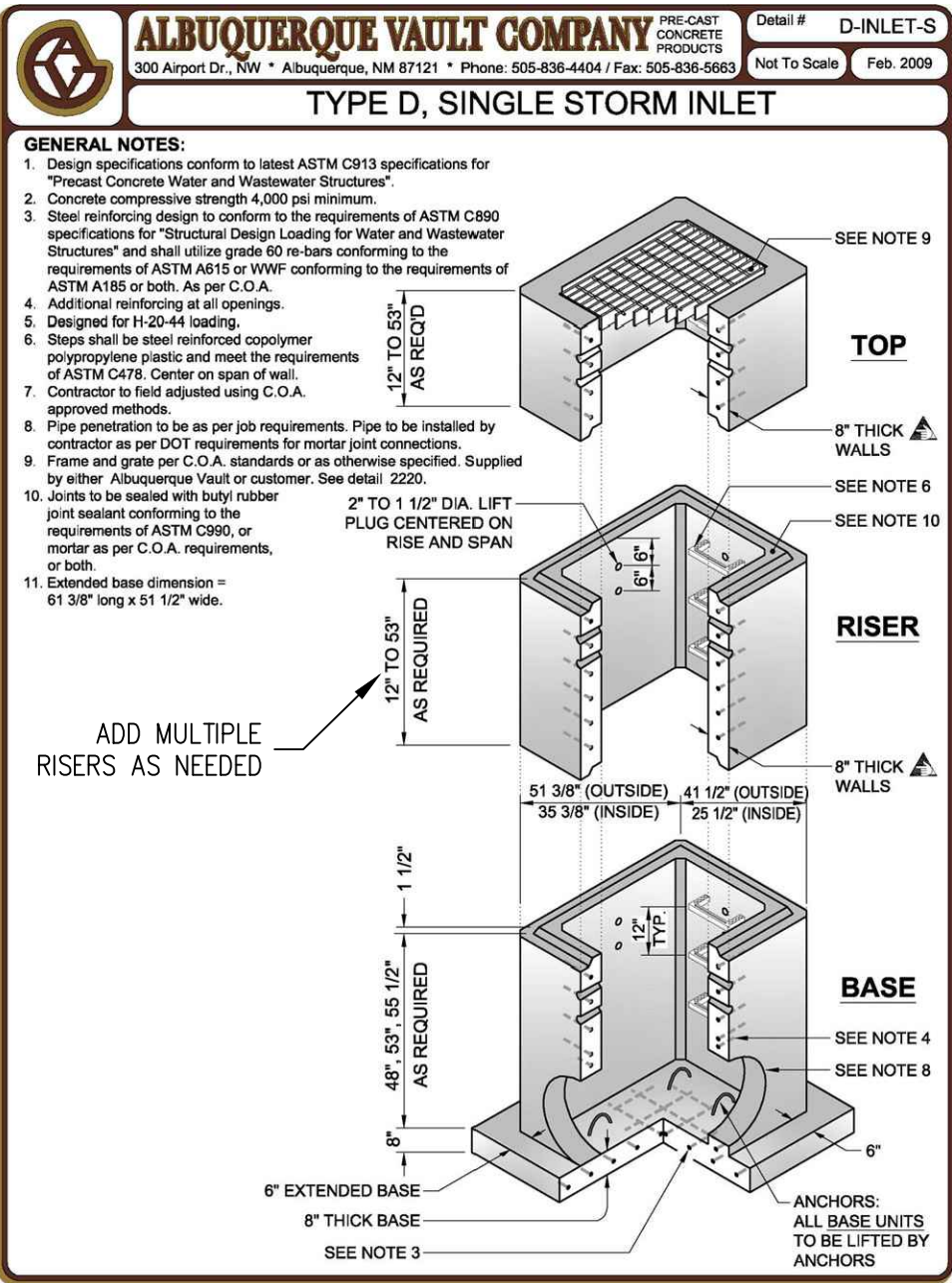
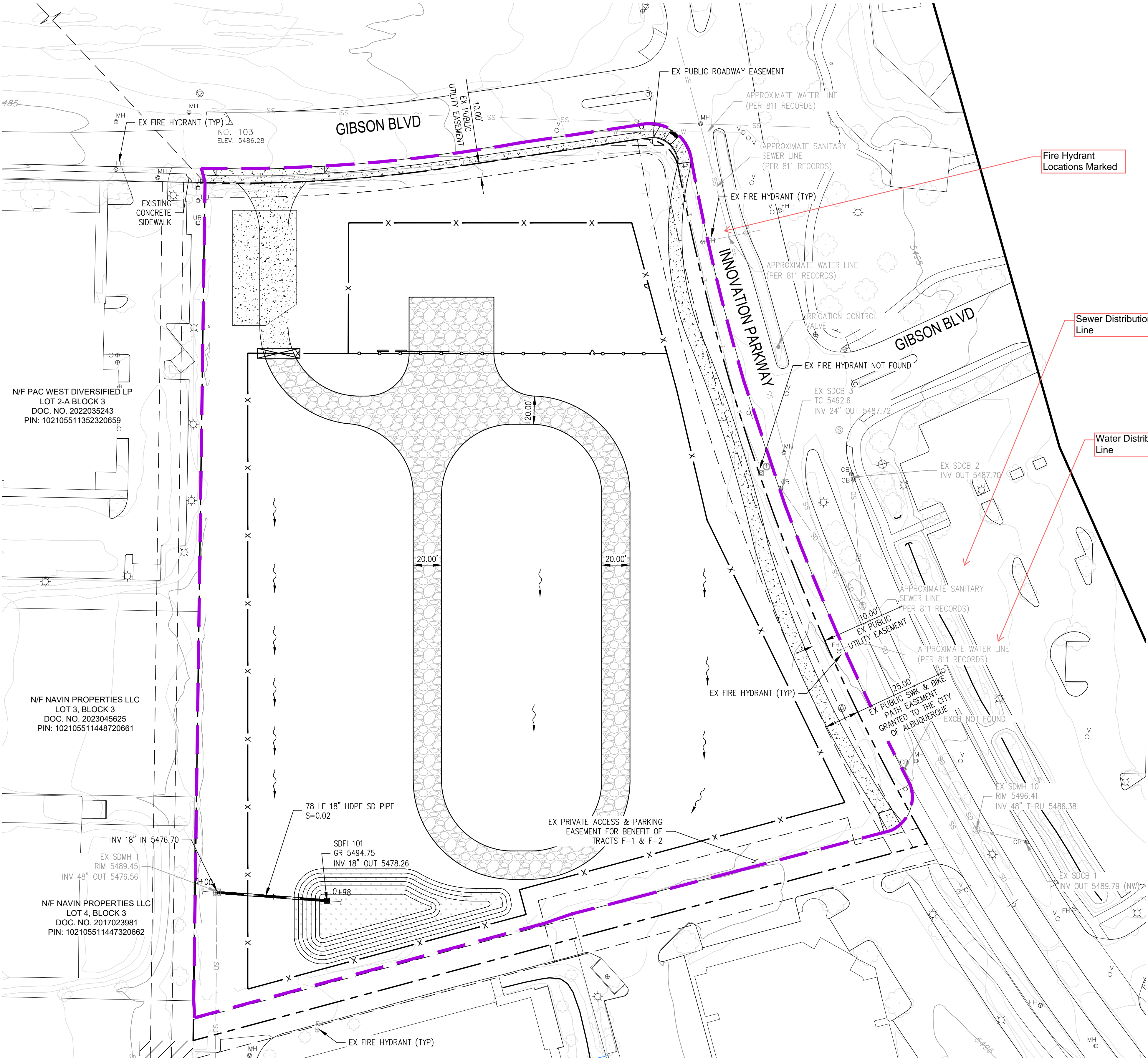
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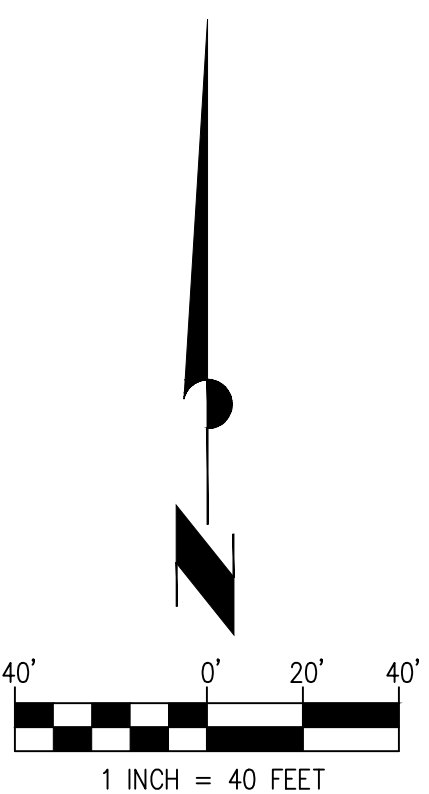


dk JOB NO: 24-1013



LEGEND	
SYMBOL	DESCRIPTION
---	PROPERTY LINE
- - - -	EXISTING EASEMENT
X	PERIMETER WALL (DESIGN BY OTHERS)
○	SUBSTATION FENCE
---	LIMIT OF DISTURBANCE
○, MH, CB	EX STRUCTURES
○	EX TREES/VEGETATIONS
---	EX MINOR CONTOUR
---	EX MAJOR CONTOUR
---	DRAINAGE SWALE
---	STORM DRAIN MAIN AND STRUCTURE
---	PROPOSED CONCRETE
---	PROPOSED GRAVEL ROADWAY
---	PROPOSED BASIN
FH	EX FIRE HYDRANT
SS	EX SEWER MAIN LINE
SD	EX STORM DRAIN MAIN LINE
W	EX WATER MAIN LINE
T	EX COMMUNICATIONS LINE

STORM DRAIN SCHEDULE			
DESCRIPTION	STRUCTURE	DETAIL	QUANTITY
ALBUQUERQUE VAULT COMPANY DRAINAGE STORM INLET ALBUQUERQUE GRATE	SDFI 101	SEE THIS SHEET	1 EA
ALBUQUERQUE VAULT COMPANY TYPE D, SINGLE STORM INLET	SDFI 101	SEE THIS SHEET	1 EA
PIPES			
18" PVC (SDR 35)			78 LF



AGENCY

DESCRIPTION

NO.

DATE

STACEY GELLA  
NEW MEXICO  
29498  
01/02/2025  
PROFESSIONAL ENGINEER

PUBLIC SERVICE COMPANY OF NEW MEXICO  
SANDIA BESS SITE - 90% DESIGN SET  
UTILITY PLAN  
CONSTRUCTION DOCUMENTS  
APN 1-021-055-162-512-2-06-67  
NEW MEXICO  
CITY OF ALBUQUERQUE

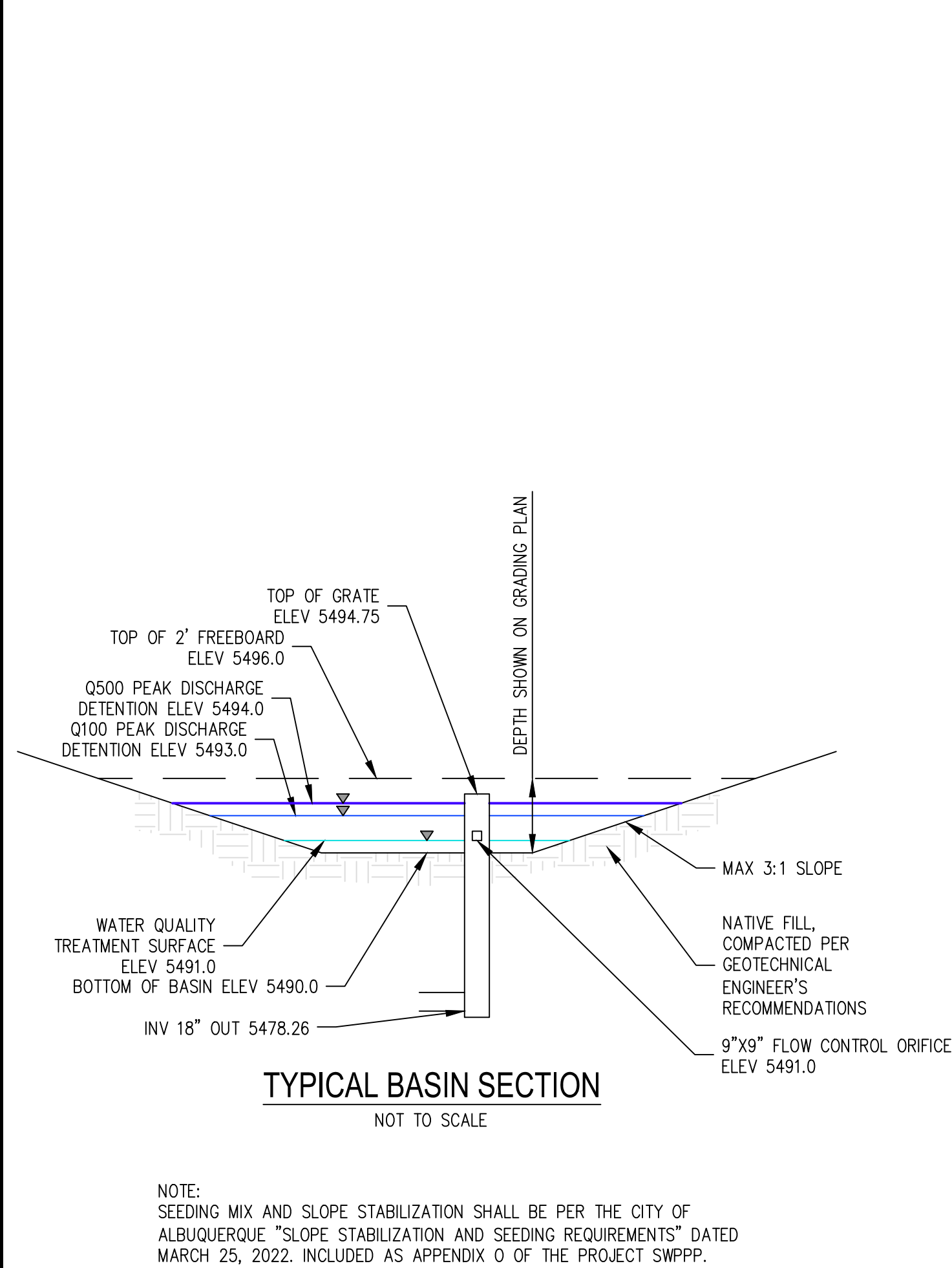
ENGINEERING  
SURVEYING • PLANNING  
1801 SAN ANGELO DRIVE, SUITE 100  
ALBUQUERQUE, NEW MEXICO 87102  
PHONE: (505) 832-8888  
FAX: (505) 832-8888  
WWW.PNM.COM

DATE: 12/18/2024  
SCALE:  
HORZ. 1"=40'  
VERT. N/A  
DESIGNED BY: AMP  
REVIEWED BY: SDG  
C4.00  
PAGE 12 OF 13





dk JOB NO: 24-1013

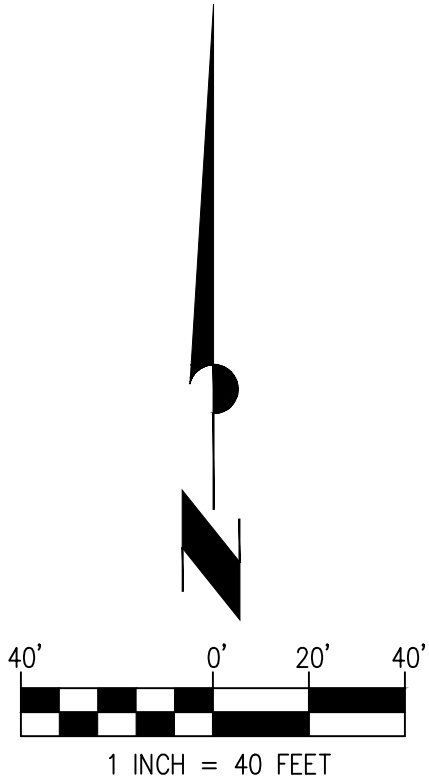


DMA 1 SUMMARY:  
TOTAL AREA: 160,422 SF  
CONCRETE, IMPERVIOUS SURFACE: 29,153 SF  
GRAVEL SURFACE AREA: 90,383 SF  
TOTAL PERVIOUS AREA: 40,886 SF

DMA 1 AREA SUMMARY			
TOTAL TREATABLE AREA	IMPERVIOUS AREA	REQUIRED TREATMENT	PROVIDED TREATMENT
159,378 SF	21,410 SF	0.017 AC-FOOT	0.036 AC-FOOT

CITY OF ALBUQUERQUE DESIGN MANUAL DATED 2020:  
FOR REQUIRED TREATMENT VOLUME, MULTIPLY THE PROPOSED IMPERVIOUS AREA BY 0.42 INCHES.

LEGEND	
SYMBOL	DESCRIPTION
	PROPOSED TREATMENT AREA
	PROPOSED IMPERVIOUS AREA TREATED BY BASIN
	PROPOSED BASIN FOOTPRINT
	PROPOSED IMPERVIOUS AREA OUTSIDE TREATMENT AREA, DIRECTED TO ADJACENT LANDSCAPING



STACEY GELLA  
NEW MEXICO  
29498  
01/10/2025  
PROFESSIONAL ENGINEER

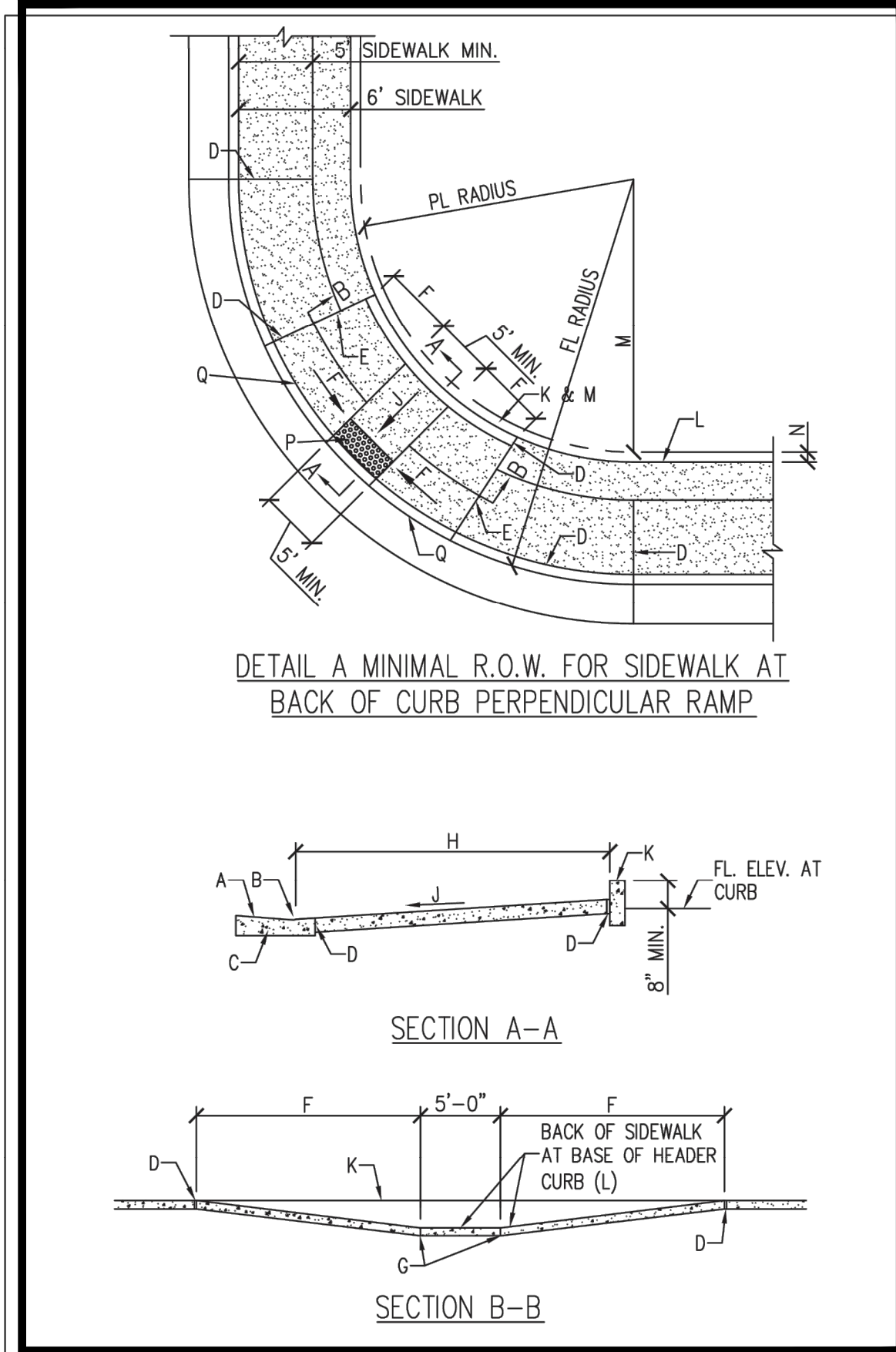
PUBLIC SERVICE COMPANY OF NEW MEXICO  
SANDIA BESS SITE - 90% DESIGN SET  
STORMWATER CONTROL PLAN  
CONSTRUCTION DOCUMENTS  
NEW MEXICO  
CITY OF ALBUQUERQUE APN 1-021-055-162-512-2-06-67

PNM

ENGINEERING  
SURVEYING • PLANNING  
1821 SAN ANGELO DRIVE  
ALBUQUERQUE, NEW MEXICO 87106  
PHONE (505) 852-8888  
DAN@ENRPLAN.COM

DATE: 12/18/2024  
SCALE:  
HORZ. 1"=40'  
VERT. N/A  
DESIGNED BY: AMP  
REVIEWED BY: SDG  
C5.00  
PAGE 13 OF 13  
12/18/2024









## TECHNICAL REPORT

**PROJECT:** DEPCOM – Sandia

**JOB NUMBER:** 23231

**SUBJECT:** Site Lighting Study

**CALC NO.:** E-416

**BY:** ASSET Engineering

**DATE:** 11/12/24

**SHEET NO.:** 1 OF 6

**REV:** B

# SITE LIGHTING STUDY

*(Issued For Construction)*





**TECHNICAL REPORT**

**PROJECT:** DEPCOM – Sandia  
**JOB NUMBER:** 23231

**SUBJECT:** Site Lighting Study

**CALC NO.:** E-416

**BY:** ASSET Engineering

**DATE:** 11/12/24

**SHEET NO.:** 2 OF 6

**REV:** B

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2.0	Design Requirements .....	3
3.0	Design Methodology.....	3
4.0	Design Results .....	4
5.0	References.....	5
6.0	Revision Control .....	5



**SUBJECT:** Site Lighting Study**CALC NO.:** E-416**BY:** ASSET Engineering**DATE:** 11/12/24**SHEET NO.:** 3 OF 6**REV:** B

## **1.0 Purpose and Scope**

The Purpose of this Site Lighting Study is to determine the lighting levels within the DEPCOM POWER 115/34.5 kV Substation, which is in Sandia Heights, New Mexico.

The Scope of this Study includes determining **general lighting levels**, fixtures, lamps, etc. for the areas directly associated with the substation yard which includes the control building's exterior lights, as detailed on the design drawings. The study does not account for light from existing sources, but this study does account for "dark sky" measures.

## **2.0 Design Requirements**

Lighting levels are established in general accordance with the NESC/IEEE standards and with good engineering practice. NESC Foot-candle Recommendations are presented in Attachment C "Table 111-1 – Illumination levels". Lighting levels range from 0.2 foot-candles (fc) for general orientation in remote areas, to 2 fc for general exterior.

For the ranges of foot-candle values presented, the lower end value incorporates the Light Loss Factor (LLF) as described in Section 3.3 below, and represents the minimum target-maintained level. Values are horizontal values measured at the walking surface.

All lights used in the yard are dark sky compliant to conform with the "Outdoor Lighting Code for North Albuquerque Acres and Sandia Heights".

## **3.0 Design Methodology**

### **3.1 Computer Software**

Lighting calculations are determined using Visual 2020 (Version 2.11.0094) computer software by Acuity Brands Lighting, Inc. This software allows the user to import a CAD file of the facility, locate lighting fixtures in plan, assign fixture/lamp properties, and set the mounting height and orientation (direction and tilt angle) of the fixtures. The software also allows the user to assign a Light Loss Factor (LLF), which is described further in this section.

### **3.2 Fixtures and Mounting**

Two different types of fixtures are used throughout the facility: LED wall mount lights, and ALED Field-Adjustable Area Lights. Lighting fixture information in the form of catalog cut sheets is included in Attachment A.

### **3.3 Light Loss Factor**

A Light Loss Factor (LLF) is used to compensate for the physical conditions of the design. A LLF value of 1.00 indicates that there are no "real world" losses or gains compared to the design,



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while values less than or greater than 1.00 indicate “real world” losses or gains compared to the design. The LLF is the product of several loss factors, including the following:

- Lamp Lumen Depreciation (LLD), which accounts for the diminished light output (lumens) as the lamp ages. This value is largely dependent on the lamp type (mercury vapor, metal halide, etc.).
- Luminaire Dirt Depreciation (LDD), which accounts for dirt accumulation on lamps and fixtures. A LDD factor of 0.80 is used for outdoor, which reflects cleaning every two years in a “Dirty” environment.
- Voltage Effects (VE), which accounts for the variation of light output (lumens) due to the variation in supply voltage. A VE factor of 0.95 is used for outdoor lighting.

The resulting  $LLF = LLD * LDD * VE$  is calculated to be 0.60 for LED fixtures.

### 3.4 Design Clarifications

The following design assumptions and limitations are noted:

1. Outdoor lighting designs consider direct lighting only and do not consider reflectance.
2. The mounting angle of the lights are at a fixed angle of 45°.
3. RAB Field-Adjustable Flood lights are at a height of 35’.
4. The study will be updated with the control building’s exterior lights evaluated once vendor drawings are received.

## 4.0 **Design Results**

Design Results are presented in Attachment B in the form of a plan view, which shows spot lighting levels (and in some cases contoured lighting levels) plotted at the walking surface. A summary of the results with design recommendations follows:

### 4.1 General Yard Lighting

Results of the lighting study are shown on the overall plan view in Attachment B, with contoured lighting levels drawn at 0.2 and 2 fc. The minimum target lighting levels of 0.2 fc for remote areas and 2 fc for General Yard Lighting are well maintained. Lighting levels are lost around the East, and West fence line which is acceptable.

### 4.2 Other Considerations

1. LED lamps are rated for many thousands of hours and should not need to be replaced for several years. The lead time for lamps is expected to be relatively short, perhaps stock to two weeks. It is recommended that new lamps be ordered at the time of the first failure, and that





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all lamps be replaced at one time for preventive maintenance. Stocking of spare lamps is at the Customer’s discretion.

2. It is recommended that fixtures be cleaned as part of a regularly scheduled maintenance plan.

5.0 References

- 5.1 *National Electric Safety Code, 2023 Edition.*
- 5.2 *Visual 2020 (version 2.11.0094).*
- 5.3 *Outdoor Lighting Code for the City of Tucson, Arizona and Prima County Arizona, 2012.*

6.0 Revision Control

Rev. No.	By	Date	Purpose	Description
A	CTW	08/21/24	Issued For Construction	Original Issue
B	CTW	11/12/24	Issued For Construction	Original Issue





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<u>Attachment</u>	<u>Description</u>	<u>Page No.</u>
A	Lighting Fixture Information	7
B	Design Results	10
C	Selected Project Data	12





## TECHNICAL REPORT

**PROJECT:** DEPCOM – Sandia

**JOB NUMBER:** 23231

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# Attachment A

## Lighting Fixture Information





Color: Bronze

Weight: 21.6 lbs

Project:

Type:

Prepared By:

Date:

Driver Info

Type	Constant Current
120V	0.78A
208V	0.45A
240V	0.39A
277V	0.34A
Input Watts	78.9W

LED Info

Watts	78W
Color Temp	4000K (Neutral)
Color Accuracy	74 CRI
L70 Lifespan	100,000 Hours
Lumens	10,195 lm
Efficacy	129.2 lm/W

Technical Specifications

Compliance

UL Listed:

Suitable for wet locations. Suitable for mounting within 4ft (1.2m) of the ground.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

IP Rating:

Ingress protection rating of IP66 for dust and water

Performance

Lifespan:

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

Wattage Equivalency:

Equivalent to 250W Metal Halide

LED Characteristics

LEDs:

Long-life, high-efficacy, surface-mount LEDs

Color Stability:

LED color temperature is warrantied to shift no more than 200K in color temperature over a 5-year period

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Construction

EPA:

2

Ambient Temperature:

Suitable for use in up to -40°C (-40°F) to 40°C (104°F)

Lens:

Tempered glass lens included

Housing:

Die-cast aluminum housing and door frame

Mounting:

Heavy-duty slipfitter for 2 3/8"OD pipe

Finish:

Formulated for high durability and long-lasting color

Tilt Increment:

Rotates in 6 degree increments

Other

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at [rablighting.com/warranty](http://rablighting.com/warranty).

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Electrical

Driver:

Constant Current, Class 2, 120-277V, 50/60 Hz, 120V: 0.66A, 208V: 0.38A, 240V: 0.33A, 277V: 0.29A

THD:

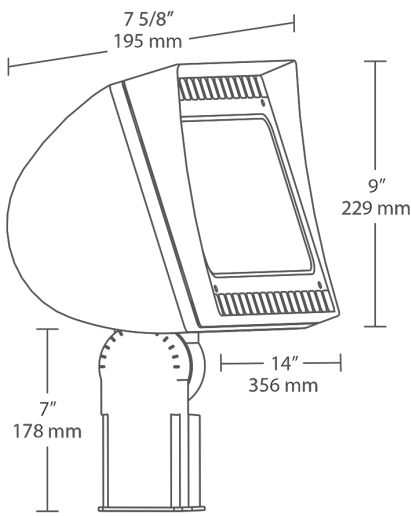
6.1% at 120V, 7.67% at 277V

Power Factor:

99.8% at 120V, 95% at 277V



Dimensions



Features

- 66% energy cost savings vs. HID
- NEMA Type - 6H x 6V
- "Air-Flow" technology heat dissipation
- 100,000-hour LED lifespan
- 5-Year, No-Compromise Warranty

Ordering Matrix

Family	Wattage	Mounting	Color Temp	Finish	Driver	Options	Other Option
FXLED	78	SF	N				
	105 = 105W 125 = 125W 150 = 150W 78 = 78W	SF = Slipfitter T = Trunnion	Blank = 5000K Cool N = 4000K Neutral Y = 3000K Warm	W = White Blank = Bronze	Blank = Standard /D10 = 0-10V Dimming /BL = Bi-Level /480 = 480V	Blank = No Option /LC = Lightcloud Controller /PCT = 100-277V Twistlock /PCT4 = 480V Twistlock	Blank = Standard USA = BAA Compliant





## TECHNICAL REPORT

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# Attachment B

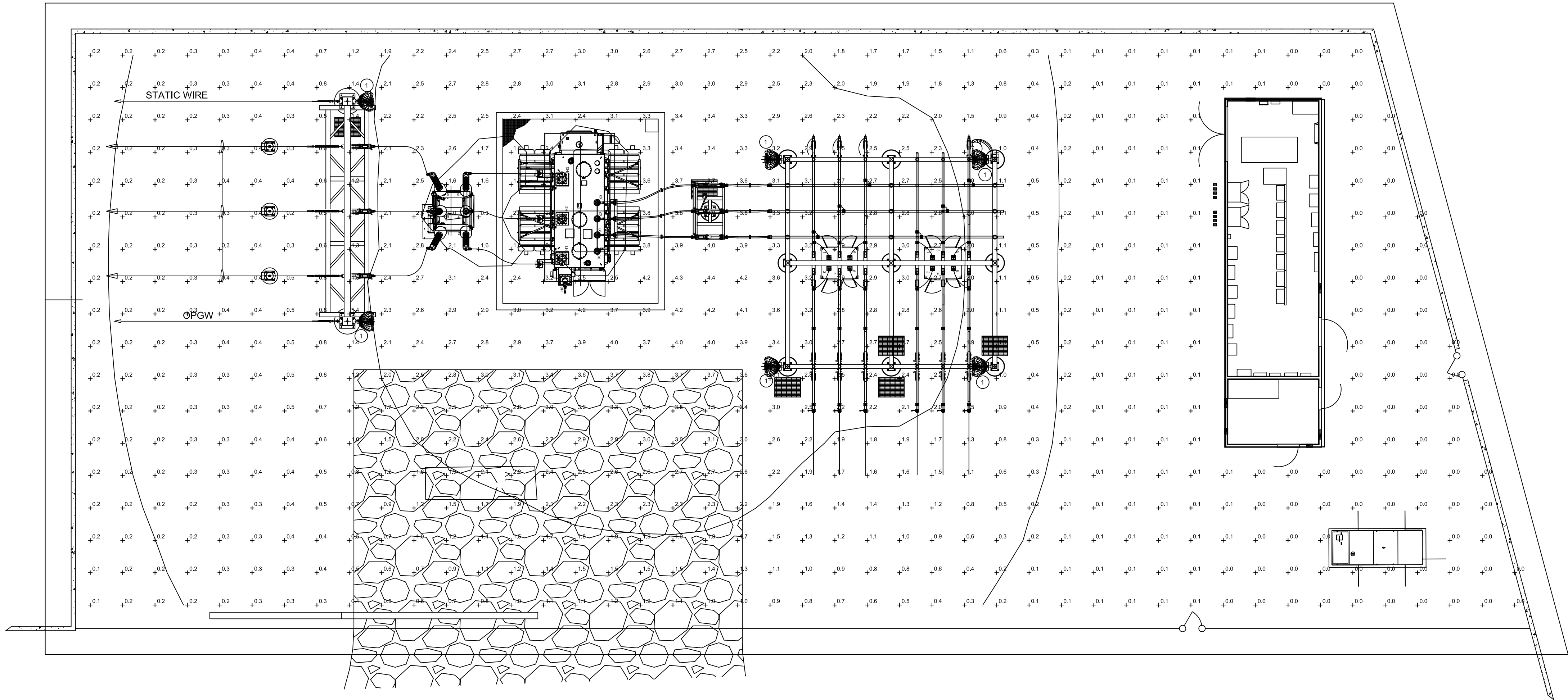
## Design Results


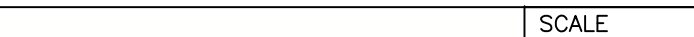





- SCHEDULE:
- 1

RAB FIELD-ADJUSTABLE FLOOD LIGHTS MOUNTED AT 35', TILTED AT A 45 DEGREE ANGLE FROM GROUND.



						<div>STAMP</div> <div><div><div><div><div>DEPCOM POWER®</div><div>9185 E PIMA CENTER PKWY, SUITE 100 SCOTTSDALE, AZ 85258 WWW.DEPCOMPPOWER.COM</div></div><div><div><div>ASSET ENGINEERING</div><div>750 WOODLANDS PKWY, RIDGELAND, MS 39157 WWW.ASSETCOMPANY.COM</div></div><div><div><div>PNN®</div><div>THIS DRAWING OR BILL OF MATERIAL IS CONFIDENTIAL AND MAY NOT BE LOANED, REPRODUCED OR COPIED, EITHER WHOLLY OR IN PART, OR MADE PUBLIC IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF ASSET ENGINEERING.</div></div></div></div></div></div></div>	SCALE NTS	PROJECT DEPCOM POWER-SANDIA SUBSTATION STORAGE PROJECT 115/34.5kV SUBSTATION	FILE NAME 23231-E-415
							DATE 11/27/23	TITLE SUBSTATION LIGHTING PLAN	JOB NUMBER 23231
							DRAWN CTW		DRAWING NUMBER E-415
							CHECKED JAM		
B	11/05/24	90% DESIGN REVIEW	CTW	JAM	ADJ		APPROVED RDJ	LOCATION ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO	
A	08/21/24	60% DESIGN REVIEW	CTW	JAM	ADJ				
REV	DATE	DESCRIPTION	DRN	CKD	APP				





## TECHNICAL REPORT

**PROJECT:** DEPCOM – Sandia

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# Attachment C

## Selected Project Documentation



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### **Sec. 30-181. Title.**

This division shall be known as the North Albuquerque Acres and Sandia Heights Light Pollution Ordinance.  
(Ord. No. 1997-18, § 1, 11-4-97)

### **Sec. 30-182. Declaration of necessity.**

WHEREAS, the regulation of the use of outdoor light fixtures can reduce light pollution and conserve energy;  
and

WHEREAS, the night sky is an important aspect of our environment; and

WHEREAS, it is pleasing to the senses and intellect of mankind to be able to gaze at the night sky with  
minimum interference from light pollution; and

WHEREAS, many of the residents of North Albuquerque Acres and Sandia Heights enjoy amateur astronomy,  
but light pollution interferes with their enjoyment; and

WHEREAS, light pollution interferes with astronomical research facilities which are engaged in the study of  
planets, comets, stars, galaxies, and satellites; and

WHEREAS, the residents of North Albuquerque Acres and Sandia Heights reside in an area of the  
unincorporated area of Bernalillo County that contain highly significant views; and

WHEREAS, North Albuquerque Acres and Sandia Heights are bounded on the North by the Sandia Indian  
Reservation; on the South by the City of Albuquerque; on the East by the Sandia Mountain and the West by the  
City of Albuquerque.

NOW, THEREFORE, the Board of County Commissioners for the County of Bernalillo hereby, finds and  
declares that the night sky is an important aspect of our environment and that it is essential for the County of  
Bernalillo to regulate the use of outdoor light fixtures in North Albuquerque Acres and Sandia Heights.

(Ord. No. 1997-18, § 2, 11-4-97)

### **Sec. 30-183. Intent and purpose.**

This division is intended to create standards for outdoor lighting so that its use does not unreasonably  
interfere with the enjoyment of adjacent property owners, and with astronomical observations, and to promote  
energy conservation without jeopardizing safety, utility, security and productivity. The purpose of this division is to  
minimize light pollution, which has a detrimental effect on the night sky environment, interferes with the  
enjoyment of the night sky, and causes unnecessary illumination of adjacent properties.

(Ord. No. 1997-18, § 3, 11-4-97)

### **Sec. 30-184. Conformance with applicable codes.**

All outdoor electrically powered illuminating devices within the area controlled by this division, including  
outdoor light fixtures on facilities or lands owned, operated, controlled or protected by the State of New Mexico,  
the County of Bernalillo, the City of Albuquerque, or other public entity or public agencies, must comply with the  
requirements of this division, unless exempted through the provisions of section 30-190 of this division, and shall  
be installed and thereafter maintained in conformance with the provisions of this division, the Zoning Ordinance,  
the Building Code, the Electrical Code and all other applicable provisions of the Bernalillo County Code.



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Federally funded and state funded roadway construction projects, such as Paseo Del Norte and its intersections with other local streets and roadways are exempted from the requirements of this division only to the extent it is necessary to comply with federal and state requirements.

(Ord. No. 1997-18, § 4, 11-4-97)

## **Sec. 30-185. Definitions.**

The following words, terms and phrases, when used in this division, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning. The "IES" (Illuminating Engineering Society of North America) Lighting Handbook, 1981 most recent edition Application Volume, the Bernalillo County Zoning Ordinance, Building Code, and Electrical Code shall be used for the definition of terms used in this division but not defined herein. In the case where a definition of a term of this division is found to be in conflict with a definition of a term of any other ordinance, "IES" handbook or regulation, the more restrictive definition will apply.

*Automatic timing device* means a device that automatically controls the operation of a light fixture or fixtures, circuit or circuits. Photocells and light and or motion sensors shall be considered automatic-timing devices

*Cutoff* means a light fixture designed, installed, and operated so that the light distribution meets the following criteria: the candlepower per 1,000 lamp lumens does not numerically exceed 25 (2½ percent) at an angle of 90 degrees above nadir (horizontal), and 100 (10 percent) at an angle of 80 degrees above nadir. This applies to any lateral angle around the light fixture.

*Filtration* means outdoor light fixtures, which have glass, acrylic or translucent enclosures.

*Installed* means the attachment or assembly fixed in place whether or not connected to a power source.

*Light pollution* means artificial light which causes a detrimental effect on the night sky environment, interferes with astronomical observation, or diminishes enjoyment of the night sky.

*Outdoor light fixtures* means outdoor electrically powered illuminating devices, outdoor lighting, internally illuminated or reflective surfaces, bare lamps, and similar devices, permanently installed or portable. Such devices may be used for but are not limited to:

- (1) Outdoor lighting of buildings and structures, including building overhangs and canopies;
- (2) Outdoor lighting of recreational areas or parking lots;
- (3) Security lighting;
- (4) On-premises signs;
- (5) Street lighting;
- (6) Landscape lighting;
- (7) Building mounted area lighting; and
- (8) Building facade lighting.

*Person* means any individual, firm, co-partnership, joint venture, association, social club, fraternal organization, corporation, estate, trust, business trust, receiver, syndicate, political subdivision, or other group or combination, acting as a unit.

*Premises* means a tract, lot or parcel of land together with all buildings and structures thereon.

*Private area light* means a light installed by a public utility company under a public utility company's rate schedule for private use and owned by the public utility company.



---

*Semicutoff* means a light fixture designed, installed, and operated so that the light distribution meets the following criteria: the candlepower per 1000 lamp lumens does not numerically exceed 50 (five percent) at an angle of 90 degrees above nadir (horizontal) and 200 (20 percent) at a vertical angle of 80 degrees above nadir. This applies to any lateral angle around the light fixture.

*Shielded* means a technique or method of construction which causes all the light emitted from an outdoor light fixture to be projected below a horizontal plane passing through the fixture.

*Shielded aimable* means a technique or method of construction which causes all the light emitted to be directed to the surface or area to be illuminated, so that the emanating source of light is not visible from any angle except those angles that exist between the fixture and the target to be illuminated. The emanating source shall not be visible from any adjacent properties or roadways to minimize light pollution.

(Ord. No. 1997-18, § 5, 11-4-97)

### **Sec. 30-186. General requirements.**

Searchlights, spotlights, floodlights or lighting fixtures used to illuminate off-premises signs are hereby prohibited. Any other outdoor light fixtures or illuminated on-premises signs installed after the effective date of this division shall comply with all applicable county ordinances and with the following:

- (1) All outdoor light fixtures and illuminated on-premises signs shall be (1) designed and operated as cutoff or shielded aimable fixtures, (2) equipped with and controlled by light and motion sensors or automatic timing devices, and (3) shall remain off between 11:00 p.m. and sunrise except for illuminating walkways or driveways.
- (2) Outdoor light poles and standards shall not exceed 16 feet in height above existing grade. Public streetlight poles and standards are exempt from this height requirement.
- (3) All outdoor lighting fixtures mounted on buildings or structures shall be mounted at a height no more than 16 feet above finished grade.
- (4) All outdoor lighting systems shall be designed, or re-designed, and operated so that the area ten feet beyond the property line of the premises receives no more than 0.25 (one quarter) of a footcandle of light from the premises lighting system.

(Ord. No. 1997-18, § 6, 11-4-97)

### **Sec. 30-187. Approved materials and methods of installation.**

The provisions of this division are not intended to prevent the use of any design, material or method of installation or operation not specifically prohibited by this division, provided such alternative design, material or method conforms with the intent of this division and has been approved by the zoning administrator.

- (1) The zoning administrator may approve any such proposed alternative design provided he finds that;
  - a. It complies with the applicable specific requirements of this division; or
  - b. It has been designed or approved by a registered professional engineer and complies with the intent of this division.
- (2) Such determination shall be made in accordance with the procedures in the Administrative Section 24.A.4, of the Bernalillo County Zoning Ordinance.

(Ord. No. 1997-18, § 7, 11-4-97)



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### **Sec. 30-188. Nonconforming outdoor fixtures.**

All non-conforming outdoor fixtures installed prior to and operable on the effective date of this division shall be removed or converted to a conforming use within three years for non-residential use and five years for residential use.

(Ord. No. 1997-18, § 8, 11-4-97)

### **Sec. 30-189. Exemptions.**

Existing public streetlights installed before the effective date of this division are exempt from the requirements of this division; however, when they become unrepairable, their replacements are subject to all provisions of this division.

(Ord. No. 1997-18, § 9, 11-4-97)

### **Sec. 30-190. Administrative exemption.**

Any person may submit an application for an administrative exemption from the requirements of the division. This request shall be done in accordance with the procedures enumerated in the Administrative Section 24.A.4, of the Bernalillo County Zoning Ordinance. In addition the request shall state fully:

- (1) The circumstances and conditions relied upon as grounds for administrative exemptions; and
- (2) The circumstances and conditions by which strict application of the provisions of this division would deprive the applicant reasonable use of the land, building or outdoor light fixtures; and
- (3) The grounds by which the granting of the administrative exemption will not be injurious to the neighborhood or otherwise detrimental to the public welfare.

(Ord. No. 1997-18, § 10, 11-4-97)

### **Sec. 30-191. Penalty.**

Any owner, tenant, agent, or person in charge of any premises or any other person who violates any of the provisions of this division, shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punished by a fine not exceeding \$300.00 per day of the violation, or imprisonment in the county jail for a period not exceeding 90 days, or both fine and imprisonment. Unless otherwise specified, each day that a prohibited condition exists shall constitute a separate offense.

(Ord. No. 1997-18, § 11, 11-4-97)

### **Sec. 30-192. Severability.**

The provisions of this division are severable, and if any provision, sentence, clause, section, or part thereof is held illegal, invalid, unconstitutional, or inapplicable to any person or circumstance, the illegality, invalidity, unconstitutionality, or inapplicability shall not affect or impair any of the remaining provisions, sentences, clauses, sections or parts of this division or their application to the persons or circumstances.

It is hereby declared to be the intent of the board of county commissioners that this division would have been adopted if such illegal, invalid, or unconstitutional provision, sentence, clause, section, or part had not been



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included therein, and if the person or circumstance to which this division or part thereof is inapplicable had been specifically exempted therefrom.

(Ord. No. 1997-18, § 12, 11-4-97)

**Secs. 30-193—30-200. Reserved.**



E. Receptacles in damp or wet locations

All 120 V ac permanent receptacles shall be provided with one or more of the following:

1. Ground-fault circuit interrupter (GFCI) protection.
2. Be on a grounded circuit that is tested at such intervals as experience has shown to be necessary.
3. Be applied in conjunction with a GFCI device between the receptacle and the load.

**Table 111-1—Illumination levels**

Location	footcandles	lux
Generating station (interior)		
Highly critical areas occupied most of the time <sup>1</sup>	25	270
Areas occupied most of the time <sup>2</sup>	15	160
Critical areas occupied infrequently <sup>3</sup>	10	110
Areas occupied infrequently <sup>4</sup>	5	55

Table 111-1—Illumination levels (continued)

Location	footcandles	lux
<b>Generating station (exterior)</b>		
Building pedestrian main entrance	10	110
Critical areas <sup>5</sup>	5	55
Areas occupied occasionally by pedestrians <sup>6</sup>	2	22
Areas occupied occasionally by vehicles <sup>7</sup>	1	11
Areas occupied infrequently <sup>8</sup>	0.5	5.5
Remote areas <sup>9</sup>	0.2	2.2
<b>Substation</b>		
Control building interior	5	55
General exterior horizontal and equipment vertical	2	22
Remote areas <sup>10</sup>	0.2	2.2

<sup>1</sup> Such as: Chemical laboratory, large centralized control room 66 in (1.68 m) above floor, section of duplex facing away from operator, bench boards (horizontal level), dispatch boards—horizontal plane (desk level), dispatch boards—vertical face of board [48 in (1.22 m) above floor, facing operator]—system load dispatch room.

<sup>2</sup> Such as: Ordinary control room 66 in (1.68 m) above floor, secondary dispatch room, turbine room.

<sup>3</sup> Such as: Auxiliaries, battery areas, boiler feed pumps, tanks, compressors, gage area, burner platforms, hydrogen and carbon dioxide manifold area, screen house, power switchgear, communications equipment room, turbine bay sub-basement, visitors' gallery, water treating area.

<sup>4</sup> Such as: Air-conditioning equipment, air preheater and fan floor, ash sluicing, boiler platforms, cable room, circulator, or pump bay, coal conveyor, crusher, feeder, scale area, pulverizer, fan area, transfer tower, condensers, de-aerator floor, evaporator floor, heater floors, area inside duplex switchboards, rear of all switchboard panels (vertical), precipitators, soot or slag blower platform, steam headers and throttles, piping tunnels or galleries.

<sup>5</sup> Such as: Coal unloading dock (loading or unloading zone), coal unloading car dumper, gate house conveyor entrance, fuel-oil delivery headers, platforms—boiler, turbine deck.

<sup>6</sup> Such as: Catwalks, coal unloading tippie, conveyors, secondary building entrances.

<sup>7</sup> Such as: Oil storage tanks, roadway between or along buildings.

<sup>8</sup> Such as: Coal unloading barge storage area, roadway not bordered by buildings.

<sup>9</sup> Such as: Cinder dumps, fence, open yard.

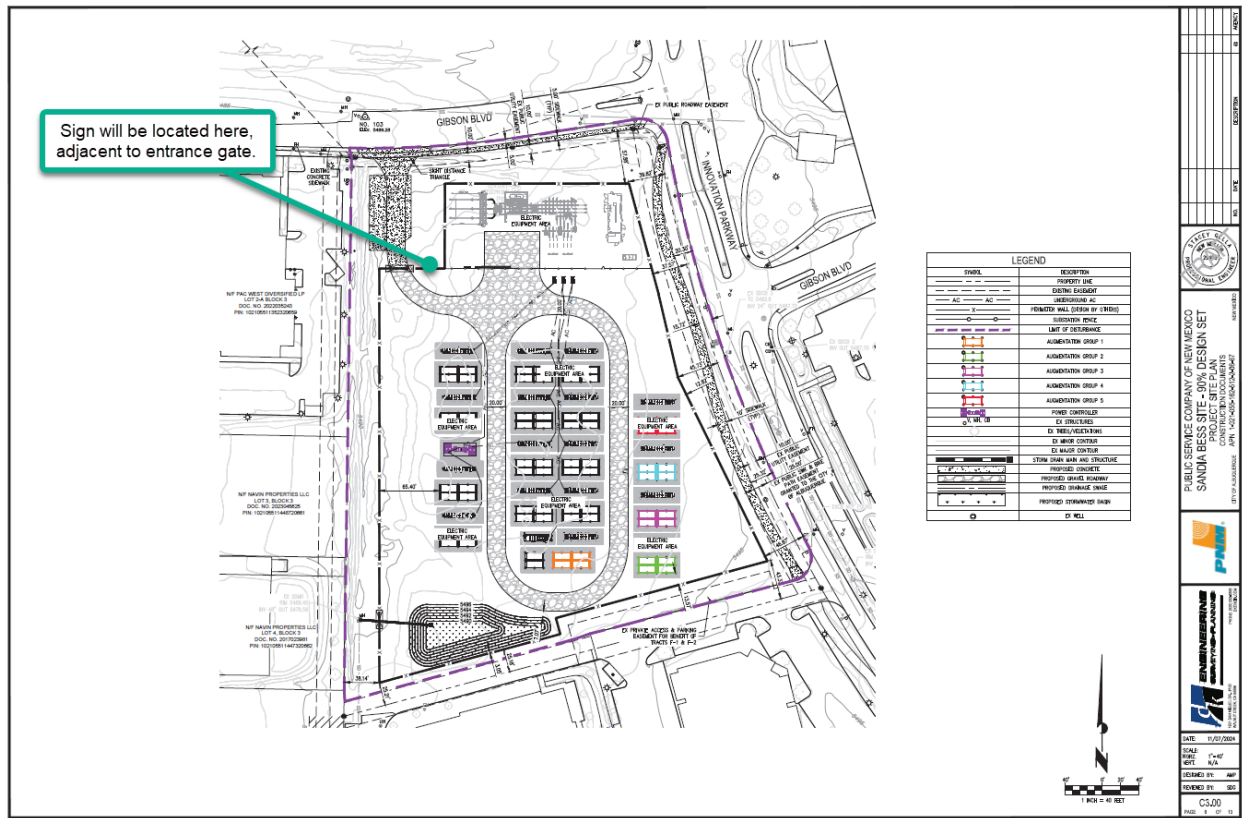
<sup>10</sup> Such as: Fence, open yard.



STANDARD PNM BALLISTIC WALL, 12' TALL,  
PRECAST CONCRETE  
Panel color: Iced Mocha SW9092  
Column color: Jute Brown SW6096  
Caulking is SIKA PL375  
Wall Pattern : Ledgestone  
Column Pattern: Ashlar

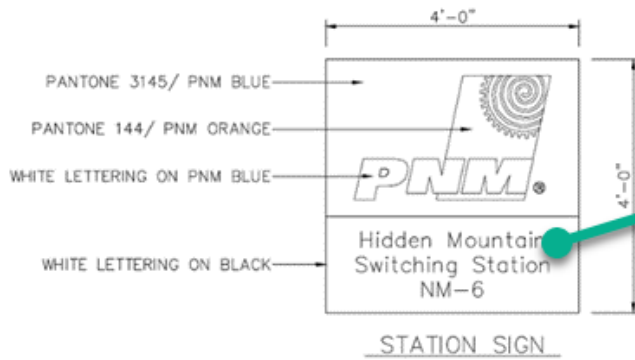


## SANDIA PROJECT SIGNAGE



1. Entrance Sign by Gate (Left Side) : "Sandia Energy Center" 4' x 4' (See example Below)
  - a. Sign should be lighted at night.
  - b. PNM LOGO attached.
  - c. Sign should utilize Klavika Fonts (Attached)
  - d. Sign should utilize PNM Colors
    - i. Pantone 3145 = PNM Blue
    - ii. Pantone 144 = PNM Orange
  - e. The logo provided has PNM Blue Letters, this will be White on PNM Blue Background, as example shows... Logo is intended for Graphic purposes....
2. Also provide 8 of the attached 12" x 18" "No Trespassing" Signs. Posting location TBD
3. At the entrance also provide the 2' x 10" Warning Sign found below






Should Read "Sandia Energy Center" Klavika Font






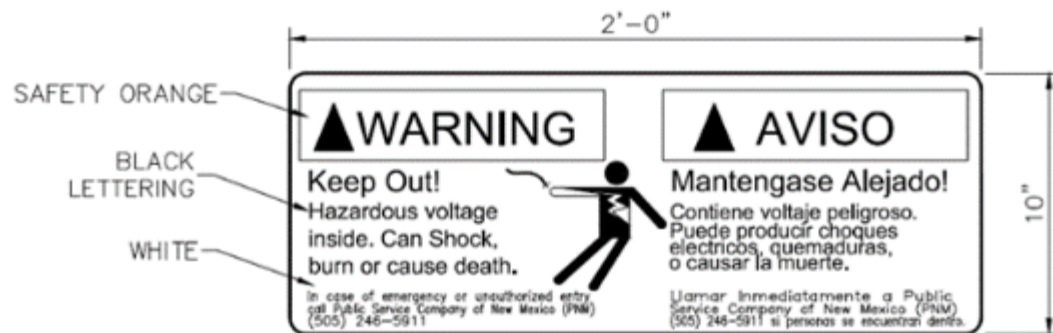
Pantone 144 C Color | Hex color Code ...

 iColorpalette




Pantone 3145 C Color | Hex color Code #...

 iColorpalette



WARNING SIGN



<b>MISCELLANEOUS APPLICATIONS</b>		<input type="checkbox"/> Extension of Infrastructure List or IIA ( <i>Form S3</i> )	
<input type="checkbox"/> Site Plan Administrative DFT ( <i>Forms SP &amp; P2</i> )		<b>PRE-APPLICATIONS</b>	
<input type="checkbox"/> Final EPC Sign-off for Master Development/Site Plans - EPC ( <i>Form P2</i> )		<input type="checkbox"/> Sketch Plat Review and Comment ( <i>Form S3</i> )	
<input type="checkbox"/> Infrastructure List or Amendment to Infrastructure List ( <i>Form S3</i> )		<input type="checkbox"/> Sketch Plan Review and Comment ( <i>Form S3</i> )	
<input type="checkbox"/> Temporary Deferral of S/W ( <i>Form S3</i> )		<b>APPEAL</b>	
<input type="checkbox"/> Extension of IIA: Temp. Def. of S/W ( <i>Form S3</i> )		<input type="checkbox"/> Decision of Site Plan Administrative DFT ( <i>Form A</i> )	
<b>BRIEF DESCRIPTION OF REQUEST</b>			
<b>APPLICATION INFORMATION</b>			
Applicant/Owner:		Phone:	
Address:		Email:	
City:	State:	Zip:	
Professional/Agent (if any):		Phone:	
Address:		Email:	
City:	State:	Zip:	
Proprietary Interest in Site:		List <u>all</u> owners:	
<b>SITE INFORMATION (Accuracy of the existing legal description is crucial! Attach a separate sheet if necessary.)</b>			
Lot or Tract No.:		Block:	Unit:
Subdivision/Addition:		MRGCD Map No.:	UPC Code:
Zone Atlas Page(s):	Existing Zoning:		Proposed Zoning
# of Existing Lots:	# of Proposed Lots:		Total Area of Site (Acres):
<b>LOCATION OF PROPERTY BY STREETS</b>			
Site Address/Street:		Between:	and:
<b>CASE HISTORY (List any current or prior project and case number(s) that may be relevant to your request.)</b>			
I certify that the information I have included here and sent in the required notice was complete, true, and accurate to the extent of my knowledge.			
Signature: 		Date:	
Printed Name:		<input type="checkbox"/> Applicant or <input type="checkbox"/> Agent	

**FORM P2: SITE PLAN ADMINISTRATIVE – Development Facilitation Team (DFT) as of 12/25/2022****\_ SITE PLAN ADMINISTRATIVE – DFT**

A Single PDF file of the complete application including all documents being submitted must be emailed to [PLNDRS@cabq.gov](mailto:PLNDRS@cabq.gov). Zipped files or those over 9 MB cannot be delivered via email, in which case the PDF must be provided to City Staff using other online resources such as Dropbox or FTP. The PDF shall be organized in the number order below. Divide the PDF with a title sheet for each of the three documentation sections in **bold** below.

**SITE PLAN DOCUMENTATION**

- \_\_\_ 1) DFT Application form completed, signed, and dated
- \_\_\_ 2) Form P2 with all the submittal items checked/marked
- \_\_\_ 3) Form SP with signatures from Hydrology, Transportation, and ABCWUA
- \_\_\_ 4) Zone Atlas map with the entire site clearly outlined and labeled
- \_\_\_ 5) Site Plan and related drawings (include a Site Plan key of the sheets submitted)
- \_\_\_ 6) Copy of the original approved Site Plan or Master Development Plan (for amendments to or Extensions of the Site Plan)
- \_\_\_ 7) Infrastructure List, if required for building of public infrastructure
- \_\_\_ 8) Sensitive Lands Site Analysis for new site design in accordance with IDO Section 5-2(C) (The Sensitive Lands Site Analysis form can be obtained online at):  
[https://documents.cabq.gov/planning/development-review-board/Sensitive\\_lands\\_analysis\\_form.pdf](https://documents.cabq.gov/planning/development-review-board/Sensitive_lands_analysis_form.pdf)
- \_\_\_ 9) Responses to climatic and geographic responsive design considerations (Recommended to promote sustainability, but not required. The Climatic and Geographic Responsiveness form can be obtained online at): [https://documents.cabq.gov/planning/IDO/SubmittalFormIDO5-2\(D\)ClimaticGeographic\\_Responsiveness.pdf](https://documents.cabq.gov/planning/IDO/SubmittalFormIDO5-2(D)ClimaticGeographic_Responsiveness.pdf)

**SUPPORTIVE DOCUMENTATION**

- \_\_\_ 10) Completed Site Plan Checklist
- \_\_\_ 11) Letter of authorization from the property owner if application is submitted by an agent
- \_\_\_ 12) Justification letter describing and justifying the request per the criteria in IDO Section 16-6-5(G)(3)
- \_\_\_ 13) Explanation and justification of requested deviations, if any, in accordance with IDO Section 14-16-6-4(P). *Note: If requesting more than allowed by deviation, a Variance – ZHE or Waiver –DHO will be required, as applicable*
- \_\_\_ 14) Sites 5 acres or greater: Archaeological Certificate in accordance with IDO Section 14-16-6-5(A) *(not required for Extension)*



\_\_\_\_ 15) Landfill disclosure statement per IDO Section 14-16-6-4(S)(5)(d)(2)(d) if site is within a designated landfill buffer zone

\_\_\_\_ 16) Architectural Review Committee approval letter if the site is located within a Master Development Plan area or a Framework Plan area

**PUBLIC NOTICE DOCUMENTATION**

\_\_\_\_ 17) Sign Posting Agreement

\_\_\_\_ 18) Proof of a Pre-Submittal Neighborhood Meeting per IDO 6-4(C)(1)(b) for new building or multiple new buildings that include a total of more than 100 multi-family residential dwelling units or more than 50,000 square feet of non-residential development

\_\_\_ Office of Neighborhood Coordination neighborhood meeting inquiry response

\_\_\_ Proof of email with read receipt OR Certified Letter offering meeting to applicable associations

\_\_\_ Completed neighborhood meeting request form(s)

\_\_\_ If a meeting was requested or held, copy of sign-in sheet and meeting notes

\_\_\_\_ 19) Required Content of Notice at Submittal per IDO Section 14-16-6-4(K)(1) (not required for an extension)

\_\_\_ Office of Neighborhood Coordination notice inquiry response

\_\_\_ Completed notification form(s), proof of additional information provided in accordance with IDO Section 6-4(K)(1)(b)

\_\_\_ Proof of emailed notice to affected Neighborhood Association representatives

**\_ FINAL SIGN-OFF FOR MASTER DEVELOPMENT PLANS AND SITE PLANS – EPC**

A Single PDF file of the complete application including all documents being submitted must be emailed to [PLNDRS@cabq.gov](mailto:PLNDRS@cabq.gov) prior to making a submittal. Zipped files or those over 9 MB cannot be delivered via email, in which case the PDF must be provided to City Staff using other online resources such as Dropbox or FTP. The PDF shall be organized in the number order below.

- \_\_\_ 1) DFT Application form completed, signed, and dated
- \_\_\_ 2) Form P2 with all the submittal items checked/marked
- \_\_\_ 3) Zone Atlas map with the entire site clearly outlined and labeled
- \_\_\_ 4) Site Plan and related drawings
- \_\_\_ 5) Infrastructure List, if require
- \_\_\_ 6) Copy of EPC Notice of Decision and letter explaining how each EPC condition has been met
- \_\_\_ 7) Letter of authorization from the property owner if application is submitted by an agent
- \_\_\_ 8) Solid Waste Department signature on Site Plan
- \_\_\_ 9) Signed Form DRWS Drainage Report, Grading and Drainage Plan, and Water & Sewer Availability Statement filing information
- \_\_\_ 10) Approved Grading and Drainage Plan
- \_\_\_ 11) Copy of Site Plan with Fire Marshal's stamp, i.e. "Fire 1" plan (*not required for Master Development Plans*)



**FORM SP: PRE-APPROVALS/SIGNATURES**

(Revised 10/26/23)

**Legal Description & Location:** TR F-2A PLAT OF TRACTS F-2A AND F-2B SANDIA SCIENCE & TECHNOLOGY PARK CONT 5.3533 AC

1401 Innovation Parkway SE Albuquerque NM 87123

**Request Description:** Site Plan - Administrative for the Sandia Energy Storage System (ESS) - PR-2024-011242 / SI-2024-00106☐ **Hydrology:**

- |                                     |                        |                  |
|-------------------------------------|------------------------|------------------|
| • Sensitive Lands Analysis (5-2(C)) | <u>      </u> Approved | <u>  X  </u> NA  |
| • Grading and Drainage Plan         | <u>  X  </u> Approved  | <u>      </u> NA |
| • AMAFCA                            | <u>      </u> Approved | <u>  X  </u> NA  |
| • Bernalillo County                 | <u>      </u> Approved | <u>  X  </u> NA  |
| • NMDOT                             | <u>      </u> Approved | <u>  X  </u> NA  |
| • MRGCD                             | <u>      </u> Approved | <u>  X  </u> NA  |

  
Hydrology Department

11/21/2024  
Date

☐ **Transportation:**

- |                                      |                        |                  |
|--------------------------------------|------------------------|------------------|
| • Traffic Circulations Layout (TCL)  | <u>  X  </u> Approved  | <u>      </u> NA |
| • Traffic Impact Study (TIS)         | <u>      </u> Approved | <u>  X  </u> NA  |
| • Neighborhood Impact Analysis (NIA) | <u>      </u> Approved | <u>  X  </u> NA  |
| • Bernalillo County                  | <u>      </u> Approved | <u>  X  </u> NA  |
| • MRCOG                              | <u>      </u> Approved | <u>  X  </u> NA  |
| • NMDOT                              | <u>      </u> Approved | <u>  X  </u> NA  |
| • MRGCD                              | <u>      </u> Approved | <u>  X  </u> NA  |

  
Transportation Department

1/14/2025  
Date

☐ **Albuquerque Bernalillo County Water Utility Authority (ABCWUA):**

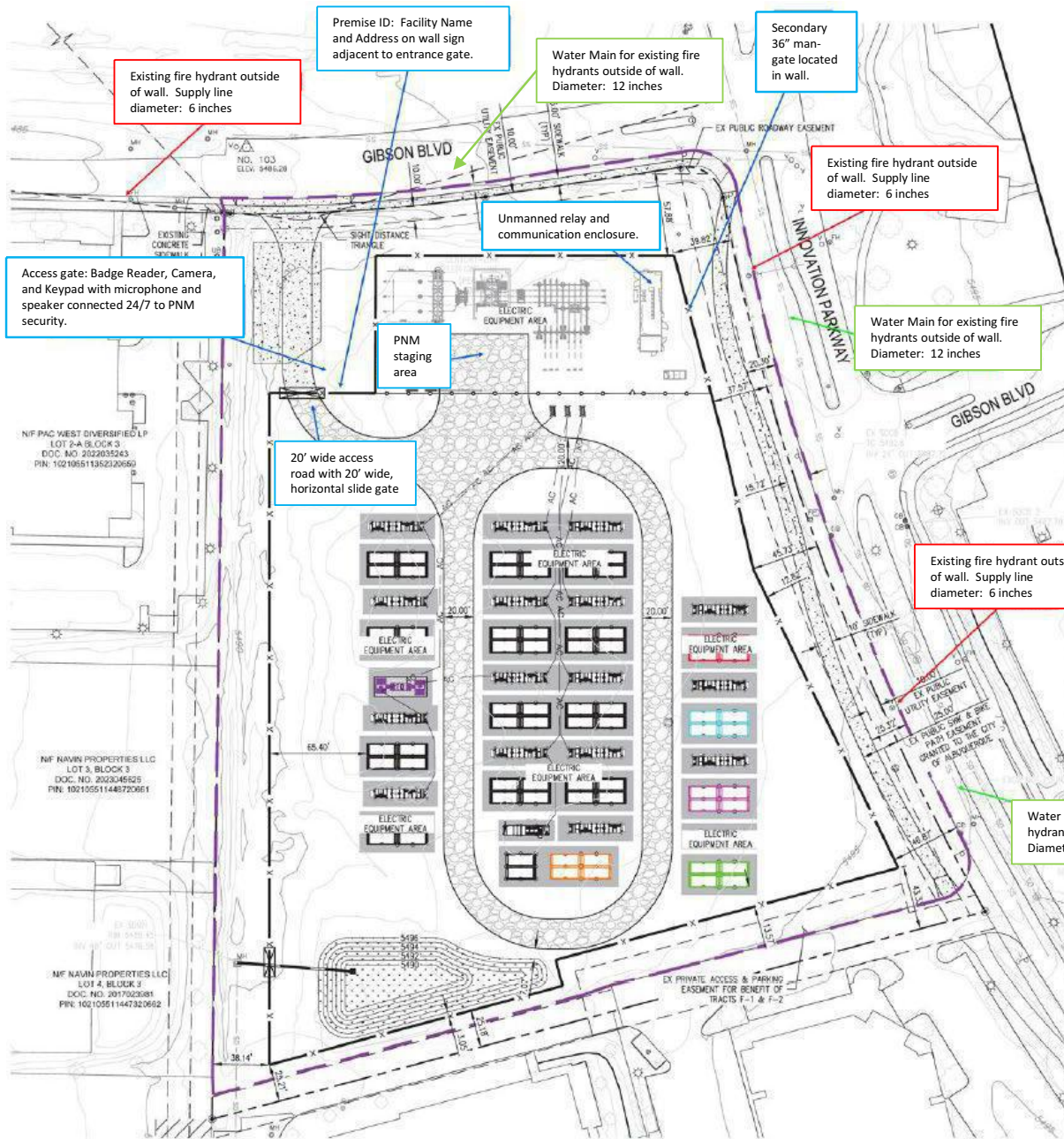
- Request for Availability submitted?        Yes        No   X   NA
- Availability Statement/Serviceability Letter Number N/A (Irrigation Only)
- Note: Commitment for service is required prior to application approval.

  
ABCWUA

1/8/2025  
Date

- |   |                        |                  |
|---|------------------------|------------------|
| <input type="checkbox"/> Infrastructure Improvements Agreement (IIA*) | <u>      </u> Approved | <u>      </u> NA |
| <input type="checkbox"/> Solid Waste Department Signature on the Plan | <u>      </u> Approved | <u>      </u> NA |
| <input type="checkbox"/> Fire Marshall Signature on the Plan          | <u>      </u> Approved | <u>      </u> NA |

\* Prior to **Final Site Plan** approval submittals (include a copy of the recorded IIA)



**ALBUQUERQUE FIRE MARSHAL'S  
DIVISION OFFICE PLANS  
CHECKING DIVISION**

**PERMIT**

**PERMIT NUMBER: FP-24-022842**

**APPROVED DATE: 01/02/25**

**APPROVED**

THESE CONSTRUCTION DOCUMENTS WERE REVIEWED AND APPROVED BY THE ALBUQUERQUE FIRE MARSHAL'S OFFICE IN ACCORDANCE WITH THE CITY ORDINANCE, THE INTERNATIONAL FIRE CODE, AND NFPA STANDARDS. THIS PERMIT IS VALID FOR 180 DAYS. FINAL INSPECTION IS REQUIRED.

## SANDIA ENERGY CENTER FIRE 1 PLAN

LEGEND	
SYMBOL	DESCRIPTION
---	PROPERTY LINE
---	EXISTING EASEMENT
---	UNDERGROUND AC
---	PERIMETER WALL (DESIGN BY OTHERS)
---	SUBSTATION FENCE
---	LIMIT OF DISTURBANCE
---	AUGMENTATION GROUP 1
---	AUGMENTATION GROUP 2
---	AUGMENTATION GROUP 3
---	AUGMENTATION GROUP 4
---	AUGMENTATION GROUP 5
---	POWER CONTROLLER
---	EX STRUCTURES
---	EX TREES/VEGETATIONS
---	EX MINOR CONTOUR
---	EX MAJOR CONTOUR
---	STORM DRAIN MAIN AND STRUCTURE
---	PROPOSED CONCRETE
---	PROPOSED GRAVEL ROADWAY
---	PROPOSED DRAINAGE SWALE
---	PROPOSED STORMWATER BASIN
---	EX WELL



Internal drive surfaces designed for AASHTO HS-20 truck loads and can withstand loads of a 65-ton wheel-mounted crane. All underground conduits are encased in concrete-embedded conduits.







## FINANCIAL GUARANTY AMOUNT

January 14, 2025

Type of Estimate: I.I.A. Procedure B Non Work Order with FG

Project Description:

Project ID #: 673782 PNM Sandia Energy Storage site

Requested By: Russell Brito

Approved Estimate Amount: \$ 79,438.08

Contingency Amount: 10.00% \$ 7,943.81

Subtotal: \$ 87,381.89

NMGRT: 7.625% \$ 6,662.87

Subtotal: \$ 94,044.76

Engineering Fee: 6.60% \$ 6,206.95

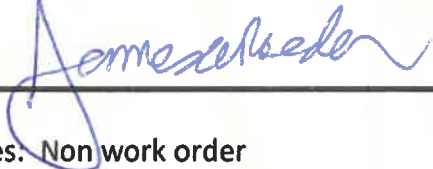
Testing Fee: 2.00% \$ 1,880.90

Subtotal: \$ 102,132.61

FINANCIAL GUARANTY RATE: 1.25

TOTAL FINANCIAL GUARANTY REQUIRED: \$ **127,665.76**

APPROVAL:

  
\_\_\_\_\_

DATE:

Jan. 14, 2025

Notes: Non work order

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov



# PNM - Sandia ESS

PROJECT NO. 673782 DATE 01/13/2025

SHEET 1 OF 1

[illegible]

Estimate approved as basis of financial guaranty amount, Jan. 14, 2025

Ameghino

Current DRC  
Project Number:

673782

DRAFT

Approved infrastructure list required prior to IIA submittal.  
Scope of approved IL must be verified to match.

FIGURE 12

INFRASTRUCTURE LIST

(Rev. 2-16-18)

EXHIBIT "A"

TO SUBDIVISION IMPROVEMENTS AGREEMENT

DEVELOPMENT FACILITATION TEAM (DFT) REQUIRED INFRASTRUCTURE LIST

Date Submitted:  
Date Site Plan Approved:  
Date Preliminary Plat Approved:  
Date Preliminary Plat Expires:  
DFT Project No.:  
DFT Application No.:

SI-2024-01606

PNM Sandia Energy Center

PROPOSED NAME OF PLAT AND/OR SITE DEVELOPMENT PLAN

TR F-2A PLAT OF TRACTS F-2A AND F-2B SANDIA SCIENCE & TECHNOLOGY PARK (A REPLAT OF TRACT F-2, SANDIA SCIENCE AND TECHNOLOGY PARK) CONT 5.3533 AC

EXISTING LEGAL DESCRIPTION PRIOR TO PLATTING ACTION

Following is a summary of PUBLIC/PRIVATE Infrastructure required to be constructed or financially guaranteed for the above development. This Listing is not necessarily a complete listing. During the SIA process and/or in the review of the construction drawings, if the DRC Chair determines that appurtenant items and/or unforeseen items have not been included in the infrastructure listing, the DRC Chair may include those items in the listing and related financial guarantee. Likewise, if the DRC Chair determines that appurtenant or non-essential items can be deleted from the listing, those items may be deleted as well as the related portions of the financial guarantees. All such revisions require approval by the DRC Chair, the User Department and agent/owner. If such approvals are obtained, these revisions to the listing will be incorporated administratively. In addition, any unforeseen items which arise during construction which are necessary to complete the project and which normally are the Subdivider's responsibility will be required as a condition of project acceptance and close out by the City.

Financially Guaranteed DRC #	Constructed Under DRC #	Size	Type of Improvement	Location	From	To	Construction Certification		
							Inspector	Private	City Cnst Engineer
		10' x4' x4"	2 qty ADA Ramps @ 4.81yds 4.81yds x 69.55 = 1321.45 x 2 = \$2642.9	Corner of Gibson and Innovation PRKWY			/	/	/
		10' x 500' x 4"	340.01 SDWK, 4", PCC @ 185.9yds 185.19yds x 69.55 = \$12880	10' Sidewalk adjacent to Innovation Pkwy			/	/	/
		5' x 250' x 4"	340.01 SDWK, 4", PCC @ 139yds 139yds x 69.55 = \$1321.45	5' Wide Sidewalk adjacent to Gibson			/	/	/
		77' x 10' x 6"	340.02 DRV/PD, 6", PCC @ 86yds 86yds x 101.72 = \$8747.92	Gibson Entrance Driveway			/	/	/
			801.059 PRESS CONN, w/FIT, WL \$2059.18	Pressurized Water connection			/	/	/
			802.621" WTR SVC, SGL \$2312.27	1" Water Service Line, new single connection to existing watermain, cip			/	/	/
		10' x 4' x 4"	343.085 SDWK, 4" PCC, R & D 4.81yds x 13.91 = 66.90	Removal of existing ADA ramp cmr of Gibson and Innovation			/	/	/
			6.05 MOB 4.26% of \$27,718.35 = \$1180.80	Construction Mobilization, compl.			/	/	/
			4.01 Staking 1.43% of \$27,718.35 = \$396.37	Construction Staking, Complete			/	/	/



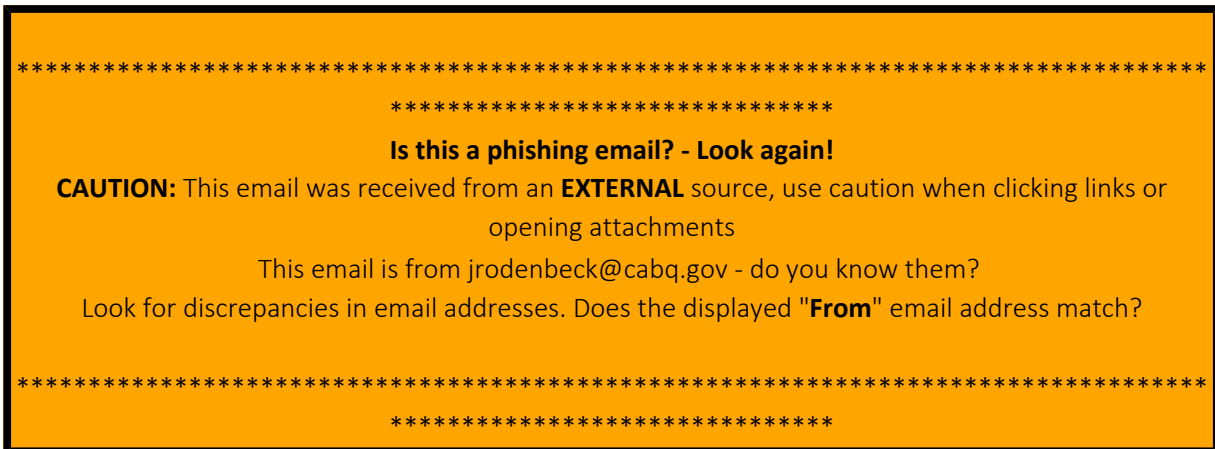






**From:** [Rodenbeck, Jay B.](#)  
**To:** [Chen, Tiequan](#); [Wolfley, Jolene](#)  
**Cc:** [Brito, Russell](#)  
**Subject:** [External] RE: Sandia Energy Storage System (SI-2024-01606)  
**Date:** Thursday, November 21, 2024 2:48:45 PM  
**Attachments:** [image002.png](#)  
[image004.png](#)  
[image005.png](#)

---



Good afternoon Russell,

Thanks for the Sensitive Lands Analysis for the proposed Sandia Energy Storage System, your Analysis confirms that no sensitive lands are affected by the proposed development. You will need to include this Analysis in your Site Plan submittal.

**Tiequan,** you can go ahead and sign Form SP provided there are no outstanding issues preventing you from signing the form.



**Jay Rodenbeck**

Planning Manager

Development Review Services

o (505) 924-3994

c (505) 553-0682

e [jrodenbeck@cabq.gov](mailto:jrodenbeck@cabq.gov)

[cabq.gov/planning](http://cabq.gov/planning)

---

**From:** Chen, Tiequan <[tchen@cabq.gov](mailto:tchen@cabq.gov)>

**Sent:** Thursday, November 21, 2024 2:07 PM

**To:** Wolfley, Jolene <[jwolfley@cabq.gov](mailto:jwolfley@cabq.gov)>; Rodenbeck, Jay B. <[jrodenbeck@cabq.gov](mailto:jrodenbeck@cabq.gov)>

**Cc:** Russell Brito PNM <[Russell.Brito@pnm.com](mailto:Russell.Brito@pnm.com)>

**Subject:** Fw: Sandia Energy Storage System (SI-2024-01606)

Hi Jolene and Jay:

Could you please review this sensitive lands analysis report and let me know if this is good enough for me to sign the form SP?

Thanks!



**TIEQUAN CHEN, P.E.**

principal engineer, hydrology

development review services

o 505.924.3695

e [tchen@cabq.gov](mailto:tchen@cabq.gov)

[cabq.gov/planning](http://cabq.gov/planning)

---

**From:** Brito, Russell <[Russell.Brito@pnm.com](mailto:Russell.Brito@pnm.com)>

**Sent:** Wednesday, November 20, 2024 4:55 PM

**To:** Chen, Tiequan <[tchen@cabq.gov](mailto:tchen@cabq.gov)>; Planning Development Review Services <[PLNDRS@cabq.gov](mailto:PLNDRS@cabq.gov)>

**Cc:** Montoya, Anthony <[amontoya@cabq.gov](mailto:amontoya@cabq.gov)>; Martinez, Richard <[richardmartinez@cabq.gov](mailto:richardmartinez@cabq.gov)>; Webb, Robert L. <[rwebb@cabq.gov](mailto:rwebb@cabq.gov)>; Wolfley, Jolene <[jwolfley@cabq.gov](mailto:jwolfley@cabq.gov)>; Rodenbeck, Jay B. <[jrodenbeck@cabq.gov](mailto:jrodenbeck@cabq.gov)>

**Subject:** Sandia Energy Storage System (SI-2024-01606)

**[EXTERNAL]** Forward to [phishing@cabq.gov](mailto:phishing@cabq.gov) and delete if an email causes any concern.

Tiequan,

Please find attached the Sensitive Lands Analysis and the Drainage Report for the Sandia Energy Storage System at 1401 Innovation Parkway SE (SI-2024-01606) for your review and for the file.

Thank you,

*Russell Brito*

Land Use & Permitting Administrator



Environmental Services & Land Use Permitting  
2401 Aztec Rd NE, Albuquerque NM 87107  
505.241.2798



---

**From:** Brito, Russell <[Russell.Brito@pnm.com](mailto:Russell.Brito@pnm.com)>  
**Sent:** Friday, November 15, 2024 9:49 AM  
**To:** Chen, Tiequan <[tchen@cabq.gov](mailto:tchen@cabq.gov)>; Planning Development Review Services <[PLNDRS@cabq.gov](mailto:PLNDRS@cabq.gov)>  
**Cc:** Montoya, Anthony <[amontoya@cabq.gov](mailto:amontoya@cabq.gov)>; Martinez, Richard <[richardmartinez@cabq.gov](mailto:richardmartinez@cabq.gov)>  
**Subject:** RE: [External] Re: Form P: Pre-Approvals/Signatures

Tiequan,

Please find attached the 1401 Innovation Parkway SE 90% G&D Plan for your review and approval for the form SP signature. Also attached is the DTIS form.

Thank you,

*Russell Brito*

Land Use & Permitting Administrator  
Environmental Services & Land Use Permitting  
2401 Aztec Rd NE, Albuquerque NM 87107  
505.241.2798



---

**From:** Chen, Tiequan <[tchen@cabq.gov](mailto:tchen@cabq.gov)>  
**Sent:** Thursday, November 14, 2024 1:35 PM  
**To:** Planning Development Review Services <[PLNDRS@cabq.gov](mailto:PLNDRS@cabq.gov)>; Brito, Russell <[Russell.Brito@pnm.com](mailto:Russell.Brito@pnm.com)>  
**Cc:** Montoya, Anthony <[amontoya@cabq.gov](mailto:amontoya@cabq.gov)>; Martinez, Richard <[richardmartinez@cabq.gov](mailto:richardmartinez@cabq.gov)>  
**Subject:** Re: [External] Re: Form P: Pre-Approvals/Signatures

Yes, it requires an application, new G&D for site plan for building permit. Sorry I forgot to ask Russell submitting the DTIS.

Hi Russell:

Please fill in the DTIS form

(<https://documents.cabq.gov/planning/DevelopmentReviewServices/DRAINAGE%20AND%20TRANSPORTATION%20APPLICATION.pdf>) and resubmit.

Thanks!



**TIEQUAN CHEN, P.E.**

principal engineer, hydrology

development review services

o 505.924.3695

e [tchen@cabq.gov](mailto:tchen@cabq.gov)

[cabq.gov/planning](http://cabq.gov/planning)

---

**From:** Montoya, Yolanda <[yolandamontoya@cabq.gov](mailto:yolandamontoya@cabq.gov)> on behalf of Planning Development Review Services <[PLNDRS@cabq.gov](mailto:PLNDRS@cabq.gov)>

**Sent:** Thursday, November 14, 2024 1:15 PM

**To:** Brito, Russell <[Russell.Brito@pnm.com](mailto:Russell.Brito@pnm.com)>

**Cc:** Montoya, Anthony <[amontoya@cabq.gov](mailto:amontoya@cabq.gov)>; Martinez, Richard <[richardmartinez@cabq.gov](mailto:richardmartinez@cabq.gov)>; Chen, Tiequan <[tchen@cabq.gov](mailto:tchen@cabq.gov)>

**Subject:** RE: [External] Re: Form P: Pre-Approvals/Signatures

Tiequan,

Does this submittal require an application? If yes what type.

---

**From:** Brito, Russell <[Russell.Brito@pnm.com](mailto:Russell.Brito@pnm.com)>

**Sent:** Thursday, November 14, 2024 1:11 PM

**To:** Planning Development Review Services <[PLNDRS@cabq.gov](mailto:PLNDRS@cabq.gov)>

**Cc:** Montoya, Anthony <[amontoya@cabq.gov](mailto:amontoya@cabq.gov)>; Martinez, Richard <[richardmartinez@cabq.gov](mailto:richardmartinez@cabq.gov)>; Chen, Tiequan <[tchen@cabq.gov](mailto:tchen@cabq.gov)>

**Subject:** RE: [External] Re: Form P: Pre-Approvals/Signatures

**[EXTERNAL]** Forward to [phishing@cabq.gov](mailto:phishing@cabq.gov) and delete if an email causes any concern.

Tiequan,



Please find attached the 1401 Innovation Parkway SE 90% G&D Plan for your review and approval for the form SP signature. Let me know if you have any questions and/or need more information.

Thank you,

*Russell Brito*

Land Use & Permitting Administrator

Environmental Services & Land Use Permitting

2401 Aztec Rd NE, Albuquerque NM 87107

505.241.2798



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**From:** Brito, Russell  
**Sent:** Thursday, November 14, 2024 10:41 AM  
**To:** Chen, Tiequan <[tchen@cabq.gov](mailto:tchen@cabq.gov)>  
**Cc:** Montoya, Anthony <[amontoya@cabq.gov](mailto:amontoya@cabq.gov)>; Martinez, Richard <[richardmartinez@cabq.gov](mailto:richardmartinez@cabq.gov)>  
**Subject:** RE: [External] Re: Form P: Pre-Approvals/Signatures

Tiequan,

Please find attached the 90% G&D Plan for your review and approval for the form SP signature. Let me know if you have any questions and/or need more information.

Thank you,

*Russell Brito*

Land Use & Permitting Administrator

Environmental Services & Land Use Permitting

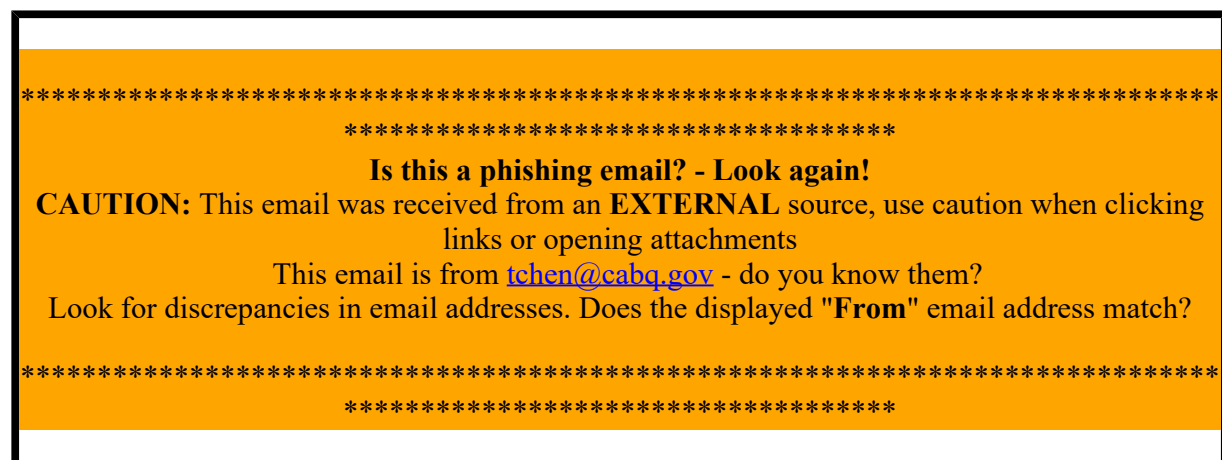
2401 Aztec Rd NE, Albuquerque NM 87107

505.241.2798



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**From:** Chen, Tiequan <[tchen@cabq.gov](mailto:tchen@cabq.gov)>  
**Sent:** Friday, November 8, 2024 8:15 AM  
**To:** Brito, Russell <[Russell.Brito@pnmresources.com](mailto:Russell.Brito@pnmresources.com)>  
**Cc:** Montoya, Anthony <[amontoya@cabq.gov](mailto:amontoya@cabq.gov)>; Martinez, Richard <[richardmartinez@cabq.gov](mailto:richardmartinez@cabq.gov)>  
**Subject:** [External] Re: Form P: Pre-Approvals/Signatures



Hi Mr. Brito:

Please see answers below.

Thanks!





**TIEQUAN CHEN, P.E.**

principal engineer, hydrology

development review services

o 505.924.3695

e [tchen@cabq.gov](mailto:tchen@cabq.gov)

[cabq.gov/planning](http://cabq.gov/planning)

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**From:** Brito, Russell <[Russell.Brito@pnmresources.com](mailto:Russell.Brito@pnmresources.com)>

**Sent:** Thursday, November 7, 2024 4:09 PM

**To:** Chen, Tiequan <[tchen@cabq.gov](mailto:tchen@cabq.gov)>

**Subject:** Form P: Pre-Approvals/Signatures

[EXTERNAL] Forward to [phishing@cabq.gov](mailto:phishing@cabq.gov) and delete if an email causes any concern.

Tiequan,

PNM is preparing a Site Plan – Administrative application for a new Energy Storage System at 1401 Innovation Parkway SE in the Sandia Science & Technology Park. I have a few questions:

Would a 90% G&D Plan be sufficient for your review and signature on the form P: Pre-Approvals? - Yes, if the plan was approved by Hydrology. If not, please submit it as conceptual G&D to us for review and approval. Form P evolved to form SP now, I believe. You do need the Planning group approval for sensitive lands analysis prior to Hydrology signature.

And who do we contact at AMAFCA for that approval? Or are you designated to review for AMAFCA? - Please contact Jared Romero, P.E., CFM, Albuquerque Metropolitan Arroyo Flood Control Authority, Drainage Engineer, [jromero@amafca.org](mailto:jromero@amafca.org), (505) 884-2215.

Please provide your guidance.

Thank you,

*Russell Brito*

Land Use & Permitting Administrator

Environmental Services & Land Use Permitting

2401 Aztec Rd NE, Albuquerque NM 87107

505.241.2798



□ **Hydrology:**

- |                             |       |          |       |    |
|-----------------------------|-------|----------|-------|----|
| • Grading and Drainage Plan | _____ | Approved | _____ | NA |
| • AMAFCA                    | _____ | Approved | _____ | NA |
| • Bernalillo County         | _____ | Approved | _____ | NA |
| • NMDOT                     | _____ | Approved | _____ | NA |
| • MRGCD                     | _____ | Approved | _____ | NA |

\_\_\_\_\_  
Hydrology Department

\_\_\_\_\_  
Date



City of Albuquerque - Planning Department  
 600 2<sup>nd</sup> St. NW, Suite 300  
 Albuquerque, New Mexico 87102  
[www.cabq.gov/planning](http://www.cabq.gov/planning)  
[planningdepartment@cabq.gov](mailto:planningdepartment@cabq.gov)

Updated 11/2/2020

### SENSITIVE LANDS ANALYSIS FORM

The following administrative instructions outline submittal requirements that must accompany an application for subdivision of land or site design, as applicable, for sensitive lands (ref. §14-16-5-2 of the IDO). The analysis should be conducted and signed by the professional(s) skilled in that landform, i.e., civil engineer, landscape architect, or geotechnical engineer.

Applications must include:

1. An inventory of each sensitive land feature, including:
  - a. Location of features on a scaled map overlaid on an aerial photo;
  - b. Photographs to capture all angles of the feature(s);
  - c. Pertinent dimensional descriptions (see detail in table); and
  - d. Other details (see table).
2. For each sensitive land featured, identify those features that will be saved. Identify how the feature will be protected during construction. For any features that will not be saved, provide justification as to why it is not practicable to save this feature.

Sensitive Lands Table

FEATURE	MAP LOCATION	PHOTOS	DIMENSIONS	OTHER DETAILS
Floodplains and flood hazard areas	X			FEMA map, LOMR
Steep slopes	X	X	Percentage or vertical to horizontal rise	Description of erosive forces
Unstable soils	X	X	Geotechnical report ref. existence of clay, blowing sand, and/or high-water table	Description of soil characteristics
Wetlands (constant supply of water)	X	X		Description of animal and plant species in ecosystem
Arroyos	X	X	Historical CFS Side slopes Width and depth	Identify the arroyo in the natural drainage system
Irrigation facilities (acequias)	X	X	Height and width of levee Location of tope of slope Is it a community or MRGCD facility?	Identify the acequia in the irrigation system
Escarpment	X	X	Slope Length	Existence of petroglyphs; description of escarpment face
Rock outcroppings	X	X	Height, length and width	Describe co-existence of trees and shrubs
Large stands of mature trees	X	X	Trunk caliper by species Number in each cluster Native species and non-native species?	Identify tree species and health <i>*Evaluation of City Forrester required</i>
Archeological sites	X			>5 acres, archeological certificate



The Sensitive Lands Analysis is based on these Comprehensive Plan Goals:

#### POLICY 11.3.1

Natural and Cultural Features:

Preserve and enhance the natural and cultural characteristics and features that contribute to the distinct identity of communities, neighborhoods, and cultural landscapes. [ABC]

- a) Minimize negative impacts and maximize enhancements and design that complement the natural environment, particularly features unique to Albuquerque, in development and redevelopment in light of the relationship to and effect upon the following:
  - i. Indigenous vegetation and other materials appropriate to landscapes;
  - ii. Topography and landscape features such as arroyos, the Rio Grande and Bosque, the foothills, and escarpments;
  - iii. Soils and erosion potential;
  - iv. Colors and textures of the natural environment; and
  - v. Scenic views from the public right-of-way
- b) Minimize the visibility of structures in highly scenic areas and on the western horizon as seen throughout the city through building design and materials that blend with the natural colors of the landscape and limit reflectivity.
- c) Protect important views from public rights-of-way through regulations on street orientation, site layout, building height, and signs.
- d) Encourage site design that enhances and leverages views to cultural landscapes.
- e) Encourage appropriate edge treatments, transitions, and buffers through site design and development standards for development adjacent to Open Space.
- f) Plat single-loaded streets to maintain scenic edges next to Open Space.
- g) Encourage reconstruction and revegetation to a natural setting.

11.3.1.1 Adopt site development standards and/or view protection overlays for orientation of new streets, building and wall height and placement, massing, frontage, color, signs, utilities, and/or tree preservation as needed to protect cultural landscapes and significant views from the public right-of-way along key corridors. [ABC]

#### POLICY 11.3.3

Bosque: Regulate development on adjacent lands to preserve and enhance the Bosque as an important cultural landscape that contributes to the history and distinct identity of the region, as well as nearby neighborhoods. [ABC]

- a) Minimize grading, changes to natural topography, and land disturbance to preserve natural features.
- b) Encourage reconstruction and revegetation to a natural setting on lands adjacent to the Bosque.

#### POLICY 11.3.6

Volcano Mesa: Preserve open space, natural and cultural landscapes, and other features of the natural environment within Volcano Mesa. [A]

- a) Respect Albuquerque's culture and history, including Hispanic and Native American, through context-sensitive development.
- b) Encourage development that is sensitive to the open, natural character of the area and geological and cultural conditions.
- c) Protect important views, vistas, and view corridors from within Volcano Mesa to the Rio Grande basin, across the city of Albuquerque, and to the Sandia Mountains.
- d) Protect the area's natural and archaeological resources, including the Monument and significant rock outcroppings, while encouraging urban development in the Volcano Heights Urban Center to create a vibrant, walkable district with an identity, character, and sense of place inextricably linked to the volcanic landscape.



November 20, 2024

Tiequan Chen, P.E.  
Principal Engineer, Hydrology  
c/o CABQ Planning Department via Electronic Mail

Subject: Sensitive Lands Analysis – SI-2024-01606 (1401 Innovation Parkway SE)

Dear Mr. Chen,

Please accept this as the Sensitive Lands Analysis for a Site Plan – Administrative for the Sandia Energy Storage System (ESS) facility.

Attached is a map from AGIS showing flood zones and photos of from the center of the site to the four cardinal directions.

Also attached is a Drainage Modeling Summary that contains specific details about the existing site conditions and the proposed site conditions that are reflected on the Grading and Drainage Plan submitted for your review.

The site has been previously graded and may of the features in the sensitive lands section of the Integrated Development Ordinance (14-16-5-2(C)).

Please let me know if you need any additional information.

Thank you,

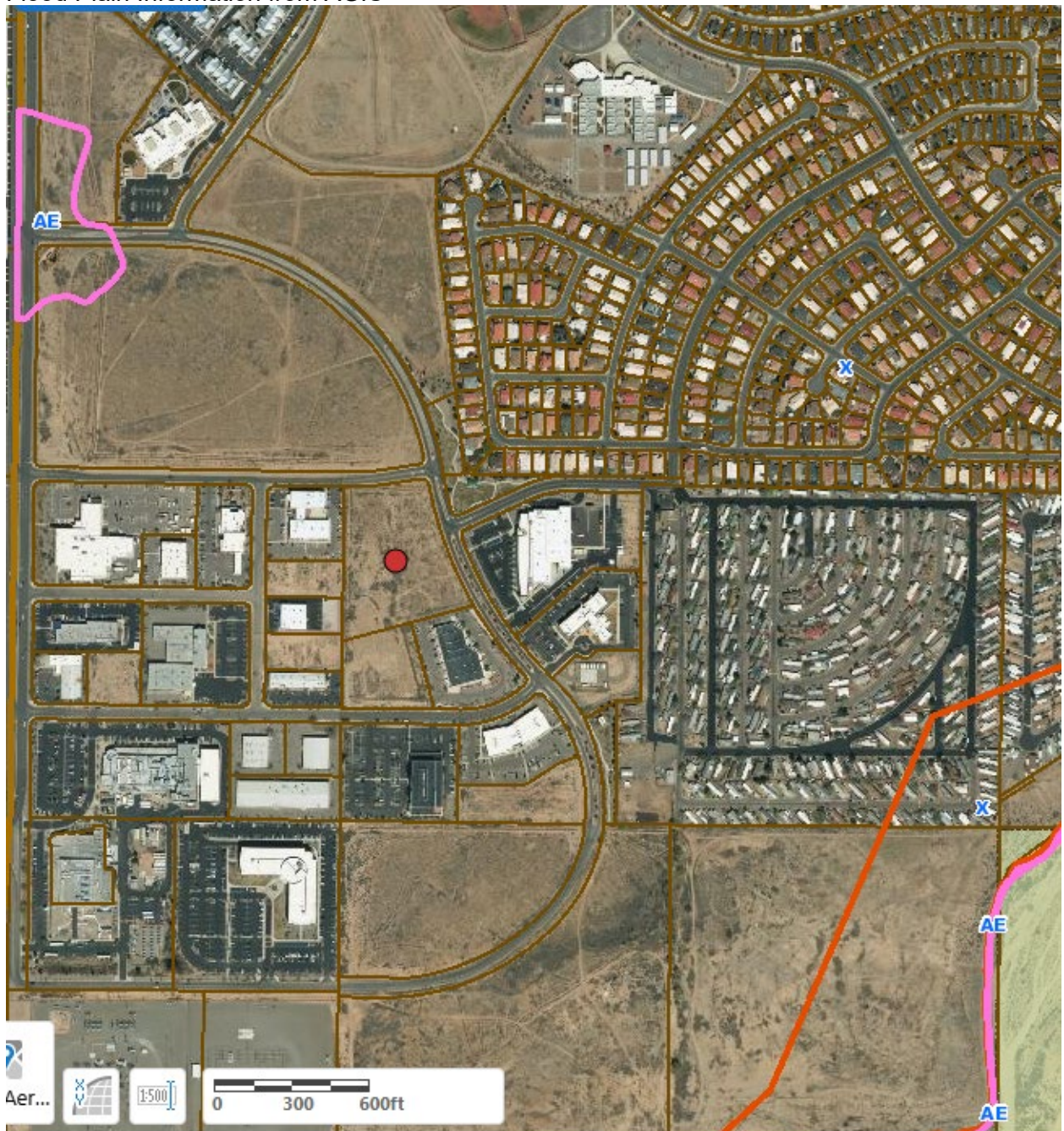
A handwritten signature in black ink, appearing to read "R. Brito". The signature is written in a cursive, flowing style.

Russell Brito  
Land Use and Permitting Administrator  
Public Service Company of New Mexico

FEATURE	MAP LOCATION	PHOTOS	DIMENSIONS	OTHER DETAILS
Floodplains and flood hazard areas	X			The site is not in a floodplain or flood hazard area (see AGIS map and Drainage Modeling Summary).
Steep slopes	X	X	Percentage or vertical to horizontal rise	Previously graded, the site gently slopes gradually to the west and south (see Drainage Modeling Summary).
Unstable soils	X	X	Geotechnical report ref. existence of clay, blowing sand, and/or high-water table	Site soils are HSGs A (20%) and B (80%) with moderate to high infiltration and low runoff tendency (see Drainage Modeling Summary).
Wetlands (constant supply of water)	X	X		The site is not located in a wetland area.
Arroyos	X	X	Historical CFS Side slopes Width and depth	The site is not located adjacent to nor drains to any arroyos.
Irrigation facilities (acequias)	X	X	Height and width of levee Location of tope of slope Is it a community or MRGCD facility?	The site is not located adjacent to nor near any irrigation facilities (acequias).
Escarpment	X	X	Slope Length	The site is not located adjacent to nor near any escarpment.
Rock outcroppings	X	X	Height, length and width	There are no rock outcroppings on the site.
Large stands of mature trees	X	X	Trunk caliper by species Number in each cluster Native species and non-native species?	There are no large stands of mature trees on the site.
Archeological sites	X			>5 acres, archeological certificate



# Flood Plain Information from AGIS



## Photos



View North





View West





View South



View East

# SITE PLAN CHECKLIST

Project #: PR-2024-011242 Application #: \_\_\_\_\_

This checklist will be used to verify the completeness of site plans submitted for review by the Planning Department. **Because development proposals vary in type and scale, there may be submittal requirements that are not specified here. Also there may additional requirements if a site is located in CPO, HPO, and/or VPO or if located in DT-UC-MS or PT areas. See the IDO or AGIS for boundaries.** Nonetheless, applicants are responsible for providing a complete submittal. Certification as specified below is required.

***I CERTIFY THAT THE SUBMITTED SITE PLAN IS COMPLETE AND ACCURATE, AND THAT ALL APPLICABLE INFORMATION AS SPECIFIED IN THIS CHECKLIST IS PROVIDED. FURTHER, I UNDERSTAND THAT THIS APPLICATION IS BEING ACCEPTED PROVISIONALLY AND THAT INACCURATE AND/OR INCOMPLETE INFORMATION MAY RESULT IN THE SUBSEQUENT REJECTION OF THE APPLICATION OR IN A DELAY OF ONE MONTH OR MORE IN THE DATE THE APPLICATION IS SCHEDULED FOR PUBLIC HEARING.***



13 January 2025

**Applicant or Agent Signature / Date**

Site plan packets shall be composed of the following plan sheets (unless otherwise approved in writing prior to submittal by the Planning Department):

1. Site Plan (including utilities and easements)
2. Landscaping Plan
3. Grading and Drainage Plan
4. Utility Plan
5. Building and Structure Elevations
6. Previously approved Development Plan (if applicable)

**The electronic format must be organized in the above manner.**

The following checklist describes the minimum information necessary for each plan element. **The Applicant must include all checklist items on their site plan drawings and confirm inclusion by checking off the items below. Non-applicable items must be labeled "N/A."** Each non-applicable designation must be explained by notation on the Checklist.

**NOTE: There may be addition information required if site is located with a CPO, VPO or HPO and/or any other special areas as defined by the IDO.**

**NOTE: If there requests for deviations (Section 14-16-6-4(O), they must be clearly labelled on the site plan (Sheet 1) as well as addressed in the application letter made with the submittal.**

## SHEET #1 - SITE PLAN

### A. General Information

- |          |    |                                      |                           |
|----------|----|--------------------------------------|---------------------------|
| <u>X</u> | 1. | Date of drawing and/or last revision |                           |
| <u>X</u> | 2. | Scale:                               | 1.0 acre or less 1" = 10' |
|          |    | 1.0 - 5.0 acres                      | 1" = 20'                  |
|          |    | Over 5 acres                         | 1" = 50' 5.3 Acres 1=40   |
|          |    | Over 20 acres                        | 1" = 100'                 |



# SITE PLAN CHECKLIST

- X 3. Bar scale
- X 4. North arrow
- X 5. Legend
- X 6. Scaled vicinity map
- X 7. Property lines (clearly identify)
- X 8. Existing and proposed easements (identify each)
- N/A 9. Phases of development, if applicable

## B. Proposed Development

### 1. Structural

- X A. Location of existing and proposed structures (distinguish between existing & proposed) and include any accessory structures
- X B. Square footage of each structure *There is only one structure that will allow physical entry, we have listed SQFT*
- X C. Proposed use of each structure
- X D. Signs (freestanding) and other improvements
- X E. Walls, fences, and screening: indicate height, length, color and materials *See Wall Detail attachment for details on Wall pattern and color*
- X F. Dimensions of all principal site elements or typical dimensions
- N/A G. Loading facilities
- X H. Site lighting (indicate height & fixture type) *Included an extra page on site plan showing locations, see lighting study for details on type of fixture.*
- X I. Indicate structures within 20 feet of site
- N/A J. Elevation drawing of refuse container and enclosure, if applicable.
- X K. Existing zoning/land use of all abutting properties

### 2. Parking, Loading and Internal Circulation

- N/A A. Parking layout with spaces numbered per aisle and totaled. *No designated parking, unmanned facility*
  - 1. Location and typical dimensions, including motorcycle spaces, bicycle spaces, ADA accessible spaces, and compact spaces
  - 2. Calculations: spaces required and proposed (include any reduction calculations) for motorcycle, bicycle, compact and ADA spaces
  - 3. On street parking spaces
- N/A B. Bicycle parking & facilities
  - 1. Bicycle racks – location and detail
  - 2. Other bicycle facilities, if applicable
- X C. Vehicular Circulation (Refer to DPM and IDO)
  - X    1. Ingress and egress locations, including width and curve radii dimensions
  - N/A    2. Drive aisle locations, including width and curve radii dimensions
  - N/A    3. End aisle locations, including width and curve radii dimensions
  - N/A    4. Location & orientation of refuse enclosure, with dimensions
  - N/A    5. Loading, service area, and refuse service locations and dimensions
- X D. Pedestrian Circulation
  - X    1. Location and dimensions of all sidewalks and pedestrian paths (including ADA connection from ROW to building and from ADA parking to building)

## SITE PLAN CHECKLIST

- ☒ 2. Location and dimension of drive aisle crossings, including paving treatment
- ☒ 3. Location and description of amenities, including patios, benches, tables, etc.
- ☒ E. Off-Street Loading
  - ☐ 1. Location and dimensions of all off-street loading areas
- ☒ F. Vehicle Stacking and Drive-Through or Drive-Up Facilities
  - ☐ 1. Location and dimensions of vehicle stacking spaces and queuing lanes
  - ☐ 2. Landscaped buffer area if drive-through lanes are adjacent to public R/W
  - ☐ 3. Striping and Sign details for one-way drive through facilities

### 3. Streets and Circulation

- ☒ A. Locate and identify adjacent public and private streets and alleys.
  - ☒ 1. Existing and proposed pavement widths, right-of-way widths and curve radii
  - ☒ 2. Identify existing and proposed turn lanes, deceleration lanes and similar features related to the functioning of the proposal, with dimensions
  - ☒ 3. Location of traffic signs and signals related to the functioning of the proposal
  - ☒ 4. Identify existing and proposed medians and median cuts
  - ☒ 5. Sidewalk widths and locations, existing and proposed
  - ☐ 6. Location of street lights
  - ☒ 7. Show and dimension clear sight triangle at each site access point
  - ☒ 8. Show location of all existing driveways fronting and near the subject site.
- ☒ B. Identify Alternate transportation facilities within site or adjacent to site
  - ☒ 1. Bikeways and bike-related facilities
  - ☒ 2. Pedestrian trails and linkages
  - ☒ 3. Transit facilities, including routes, bus bays and shelters existing or required

### 4. Phasing

- ☒ A. Proposed phasing of improvements and provision for interim facilities. Indicate phasing plan, including location and square footage of structures and associated improvements including circulation, parking and landscaping.

## SHEET #2 - LANDSCAPING PLAN

- ☒ 1. Scale - must be same as scale on sheet #1 - Site plan
- ☒ 2. Bar Scale
- ☒ 3. North Arrow
- ☒ 4. Property Lines
- ☒ 5. Existing and proposed easements [Can be found on site plan](#)
- ☒ 6. Identify nature of ground cover materials
  - ☒ A. Impervious areas (pavement, sidewalks, slope pavings, curb and gutters, etc.)
  - ☒ B. Pervious areas (planting beds, gravel areas, grass, ground cover vegetation, etc.)
  - ☒ C. Ponding areas either for drainage or landscaping/recreational use [No other than found grading and drainage](#)

## SITE PLAN CHECKLIST

- X 7. Identify type, location and size of plantings (common and/or botanical names).
  - X A. Existing, indicating whether it is to be preserved or removed.
  - X B. Proposed, to be established for general landscaping.
  - X C. Proposed, to be established for screening/buffering.
- X 8. Describe irrigation system – Phase I & II . . .
- X 9. Planting Beds, indicating square footage of each bed
- N/A 10. Turf Area - only 20% of landscaped area can be high water turf; provide square footage and percentage.
- X 11. Responsibility for Maintenance (statement)
- X 12. Landscaped area requirement; square footage and percent (specify clearly on plan)
- X 13. Landscaped buffer areas provided; dimensions, label clearly that it is a landscape buffer, square footage and percent (specify clearly on plan)
- X 14. Planting or tree well detail
- X 15. Street Trees (only trees from the Official Albuquerque Plant Palette and Sizing list or 8 inch caliper or larger will be counted)
- N/A 16. Parking lot edges and interior – calculations, dimensions and locations including tree requirements
- X 17. Show Edge Buffer Landscaping (14-16-5-6(D)) – location, dimensions and plant material

### SHEET #3 –GRADING AND DRAINAGE PLAN

A separate grading and drainage plan (and drainage report) must be submitted to the DRS Hydrology Section prior to the DRB submittal for a site plan (See DRWS Form).

#### A. General Information

- X 1. Scale - must be same as Sheet #1 - Site Plan
- X 2. Bar Scale
- X 3. North Arrow
- X 4. Property Lines
- X 5. Existing and proposed easements [See Site plan for easement details](#)
- N/A 6. Building footprints [No bulidings exist by electrical equipment pads are pictured](#)
- X 7. Location of Retaining walls

#### B. Grading Information

- X 1. On the plan sheet, provide a narrative description of existing site topography, proposed grading improvements and topography within 100 feet of the site.
- X 2. Indicate finished floor elevation and provide spot elevations for all corners of the site (existing and proposed) and points of maximum cut or fill exceeding 1 foot.
- X 3. Identify ponding areas, erosion and sediment control facilities.
- X 4. Cross Sections  
Provide cross section for all perimeter property lines where the grade change is greater than 4 feet at the point of the greatest grade change. Provide one additional cross section in each direction within no more than 100 feet of the reference point.



# SITE PLAN CHECKLIST

## SHEET #4- UTILITY PLAN

- ☒ A. Fire hydrant locations, existing and proposed. (or submit signed off Fire One Plan)
- ☒ B. Distribution lines
- ☒ C. Right-of-Way and easements, existing and proposed, on the property and adjacent to the boundaries, with identification of types and dimensions. [See Site plan for easement details](#)
- ☒ D. Existing water, sewer, storm drainage facilities (public and/or private). [Unmanned site has no onsite facilities, water planned only for landscaping outside of Wall.](#)
- ☒ E. Proposed water, sewer, storm drainage facilities (public and/or private)
- ☒ F. Existing electric lines both overhead and underground. Power Poles shown with dimensions to proposed buildings and structures must be clearly shown. [No building are proposed, site will only contain utility scale electrical equipment.](#)

## SHEET #5 - BUILDING AND STRUCTURE ELEVATIONS

### A. General Information

[N/A](#) There are no buildings planned on the site, the site will consist of a Swithyard, Relay Enclosure, Battery Containers, and Inverters. The site is unmanned; no water, no sewer and no living facilities of any kind exist on site.

- [N/A](#) A. Scale
- [N/A](#) B. Bar Scale
- [N/A](#) C. Detailed Building Elevations for each facade
  - ☐ 1. Identify facade orientation
  - ☐ 2. Dimensions of facade elements, including overall height and width
  - ☐ 3. Location, material and colors of windows, doors and framing
  - ☐ 4. Materials and colors of all building elements and structures
  - ☐ 5. Location and dimensions of mechanical equipment (roof and/or ground mounted)

### B. Building Mounted Signage

[See Sandia Project Sinage Document](#)

- ☒ 1. Site location(s)
- ☒ 2. Sign elevations to scale
- ☒ 3. Dimensions, including height and width
- ☒ 4. Sign face area - dimensions and square footage clearly indicated
- ☒ 5. Lighting
- ☒ 6. Materials and colors for sign face and structural elements.
- ☒ 7. List the sign restrictions per the IDO



January 9, 2025

City of Albuquerque Development Facilitation Team  
600 Second Street NW  
Albuquerque NM 87102

Subject: Site Plan Administrative - Sandia Energy Storage System – 16-6-5(G)(3)

Dear DFT Members,

Public Service Company of New Mexico (PNM) respectfully requests approval of a Site Plan – Administrative for the Sandia Energy Storage System (ESS) located in the Sandia Science & Technology Park (SS&TP). Modern society depends on safe and reliable electric service to protect the health, safety, and welfare of residents, businesses, and institutions.

The State of New Mexico recently adopted the Energy Transition Act (ETA) that requires all energy generation to be emissions-free by 2045. PNM is leading the way to a carbon free future in New Mexico and PNM's corporate goal is to fully achieve this transition to renewable generation by 2040. To meet this goal, PNM is retiring its dated carbon resources and investing in new renewable energy generation and complementary energy storage.

### **The Project**

The Sandia ESS Project is a PNM owned 60MW 4Hour resource approved by the New Mexico Public Regulation Commission (NMPRC) as one of the replacement resources for the retired San Juan Generating Station. The resource will interconnect to the existing Sandia Substation to store excess renewable generation on the system and help serve the increasing loads of the Southeast quadrant, Sandia National Labs, and the Sandia Science & Technology Park (SS&TP).

### **Site Location and Zoning**

The subject site is at 1401 Innovation Parkway SE in the SS&TP at the intersection of Gibson Ave. and Innovation Parkway. Per the City's Integrated Development Ordinance (IDO), Energy Storage Systems (ESSs) are permissive land uses in all Zone Districts, including the subject site's NR-BP (non-residential business park) Zone District.

### **Land Ownership**

PNM owns the site, TR F-2A PLAT OF TRACTS F-2A AND F-2B SANDIA SCIENCE & TECHNOLOGY PARK (A REPLAT OF TRACT F-2, SANDIA SCIENCE AND TECHNOLOGY PARK) CONT 5.3533 AC.

## **Project Description**

The Sandia ESS is a state-of-the-art facility that will increase the reliability of the Sandia load center by providing immediately available energy storage. Due to the importance of the loads the Sandia Substation serves, this location has been identified for the first PNM owned transmission interconnected battery facility. This 5.3-acre ESS facility located at Gibson Blvd and Innovation Parkway is approximately ½ mile to the north of the existing Sandia Substation, which is also located in the SS&TP.

The Sandia ESS will consist of 72, 20' long battery containers with each housing 530AH of rechargeable lithium-ion batteries, together capable of acting as 60MW of controllable load for a duration of 4 hours. The batteries represent the newest generation in Lithium-Ion battery systems and provide a robust and reliable storage solution that fits the growth profile. These batteries will employ that latest safety, control, and regulation equipment available on the market today.

The site will be surrounded by a 12' tall ballistic rated wall that will comply with PNM standards and will visibly shield the energy containers behind the wall. The wall is aesthetically pleasing and provides an appropriate backdrop for the adjacent types of properties. The site will also house various transformers, inverters, communication enclosures and other utility scale electrical equipment which will not extend above the elevation of the wall and cannot be seen from street level.

The only structures that will be visible above the wall be the buss-works and tower structures that interconnects to the 115KV High Voltage line. The wall also ensures any electrical equipment sounds are contained and the site remains conducive to the business nature of the immediate neighbors. The site is designed to be unmanned and controlled remotely, therefore, except for construction, there will not be any daily PNM traffic or trucks regularly accessing the site.

### **6-5(G) Site Plan – Administrative**

This application for Site Plan – Administrative meets all of the Review and Decision Criteria contained in 6-5(G)(3):

**6-5(G)(3)(a) The Site Plan complies with all applicable standards in this IDO, the DPM, other adopted City regulations, and any conditions specifically applied to development of the property in a prior permit or approval affecting the property.**

#### Response:

The site plan depicts an ESS facility designed per the IDO's applicable Use Specific Standards (USS) 14-16-4-3(E)(9):

- (a) The facility is surrounded by a 12 feet high perimeter security wall, cast-in-place with pilasters at least every 20 feet and is set back at least 10 feet to allow a landscaped buffer area per (4-3(E)(9)(b).
- (b) Landscaped buffer area.
  - 1. There is at least 1 tree for every 25 feet along the lot line.
  - 2. The landscaped buffer complies with the safety and maintenance requirements for an ESS as follows:



- a. A 115KV Monopole transmission line is proposed to interconnect to the site along the West side of the property and proceed due South to the Sandia Substation. For maintenance and ongoing safety purposes on the private west side of the site, a surface of crushed rock without any vegetation under the HV lines helps ensure the safe operation and maintenance of the facility.
  - b. The site is encumbered by an access easement on the south/southwest side of the site that benefits the abutting property. To avoid encumbering this easement, trees from this area and the west side of the site are moved to the north and east public facing sides of the site. The sidewalks along Gibson and Innovation Parkway and the intersection of these streets benefit from these “reallocated” trees from the west and south/southwest sides of the site. This will result in a very pleasing, public-facing frontage for this new ESS facility while maintaining the safety and maintenance requirements for this ESS.
3. The site is not in a Residential zone district.
  4. The landscape buffer is at least 10 feet wide
- (c) All onsite utility lines and associated equipment is underground or pad mounted, except the main service connections and new interconnection equipment, including transmission poles.
  - (d) This project is a new ESS and not an expansion.
  - (e) PNM will remove all ESS facilities not in use for 1 year within the following six months and will revegetate the site and notify the City when removal of the ESS occurs.
  - (f) This use is on the same premises as a substation located inside the same perimeter security wall. The Site Plan meets all USSs for Substations, which mirror but are fewer and less detailed than those for an ESS.
  - (g) No geothermal energy use.
  - (h) No solar generation use.
  - (i) No wind energy use.
  - (j) Not in a Residential zone district.

The proposed curb cut from Gibson Blvd, the new sidewalks and pedestrian ramps along Gibson Blvd and Innovation Parkway, and the grading and drainage plan are designed per the applicable standards from the Development Process Manual (DPM).

There is no prior permit or approval for this site.

**6-5(G)(3)(b)** The City's existing infrastructure and public improvements, including but not limited to its street, trail, drainage, and sidewalk systems, have adequate capacity to serve the proposed development or the applicant has agreed to install required infrastructure and public improvements pursuant to Subsection 14-16-1-7(B)(2) and 14-16-5-4(N) and/or a signed an Infrastructure Improvements Agreement (IIA) pursuant to Subsection 14-16-5-4(O) to add adequate capacity.

Response:

This project will install sidewalks and ramps per DPM standards and will comply with all drainage requirements as detailed on the Grading and Drainage Plan. PNM agrees to install this required infrastructure and public improvements per an IIA.

**6-5(G)(3)(c) If the subject property is within an approved Master Development Plan, the Site Plan shall meet any relevant standards in the Master Development Plan in addition to any IDO standards applicable in the zone district the subject property is in.**

Response:

There are no buildings and there will be no public access to this facility. The Site Plan design meets the relevant standards of the Sandia Science & Technology Park Master Plan, including:

**Streetscape and Landscape treatments:** The landscaping plan is designed to conform to the local vegetation and aesthetic requirements of the IDO, the Sandia Science & Tech Park Master Plan, and surrounding infrastructure. A winding sidewalk will continue from the adjacent properties through a canopy of trees and irrigated vegetation on each side of the sidewalk along the Gibson Blvd and Innovation Parkway frontages.

**Screening/Buffering:** The facility is surrounded by a 12 feet high perimeter security wall, cast-in-place with pilasters at least every 20 feet and is set back at least 10 feet to allow a landscaped buffer area. The internal, utility-scale equipment is screened from pedestrians and motorists.

**Signage:** As there will be no public access, there are no monument or advertising signs proposed for this ESS facility. Building mounted safety and identification signage is proposed at the entry gate area from Gibson Blvd, intended for visibility to Albuquerque Fire and Rescue and other first responders (please see approved Fire 1 Plan).

**6-5(G)(3)(d) If the subject property is within an approved Framework Plan, the Site Plan shall meet any relevant standards in the Framework Plan in addition to any IDO standards applicable to the type of development.**

Response:

The property is not within an approved Framework Plan.

**Conclusion**

PNM requests approval of this Site Plan for the Sandia ESS because it meets all relevant SS&TP, DPM, and IDO design standards per the applicable IDO Review and Decision Criteria.

Sincerely,



Russell Brito  
Land Use and Permitting Administrator  
Public Service Company of New Mexico



## City of Albuquerque

P.O. Box 1293 Albuquerque, NM 87103

### Planning Department

Alan Varela, Interim Director

Tim Keller, Mayor  
Sarita Nair, CAO

**DATE:** November 25, 2024

**SUBJECT:** Albuquerque Archaeological Ordinance - Compliance Documentation

**Case Number(s):** PR-2024-011242 SI-2024-01644

**Agent:**

**Applicant:** PNM

**Legal Description:** R F-2A PLAT OF TRACTS F-2A AND F-2B SANDIA SCIENCE & TECHNOLOGY PARK

**Zoning:** NR-BP

**Acreage:** 5.35

**Zone Atlas Page(s):** M-21-Z

**CERTIFICATE OF NO EFFECT:** ☒ Yes ☐ No

**CERTIFICATE OF APPROVAL:** ☐ Yes ☒ No

**SUPPORTING DOCUMENTATION:**

Historic Google Earth Images, ARMS/NMCRIS Records

**SITE VISIT:** N/A

**RECOMMENDATIONS:**

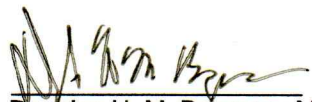
ARMS/NMCRIS records show the property was surveyed under NMCRIS 35346 with no significant finds, therefore

CERTIFICATE OF NO EFFECT ISSUED-under 6-5(A) (3)(a) criterion 1 "an archaeological investigation has been conducted..."

**SUBMITTED BY:**

**SUBMITTED TO:**

Planning, Development Services



11-25-2024

Douglas H. M. Boggess, MA, RPA Date

Senior Principal Investigator

Acting City Archaeologist

Lone Mountain Archaeological Services, Inc.



## **DFT SIGN POSTING AGREEMENT – A PUBLIC NOTICE REQUIREMENT**

All development applications are required to complete public notice under the Integrated Development Ordinance, Section 6-1, Table 6-1-1. <https://www.cabq.gov/planning/codes-policies-regulations/integrated-development-ordinance-1> All applicants are obligated to satisfy all of the public notice requirements, i.e., sending email notifications, mailing notices, and posting signage on the subject property. **This form covers posting signs.** Adherence to sign posting requirements will inform the public of a proposed project and relevant project details.

Signs should be picked up at the Development Review Services office, located at 600 2nd St in the Plaza Del Sol building. Signs are available upon the acceptance of the application. The cost for the signs is included in the project application fee. It is critical that the signs be prominently located and clearly visible without any obstructions from each street frontage.

Applicants are responsible to maintain posting from time of application through the appeal period (15 days following a final decision on the application). Signs must be posted within 3 days of application acceptance and remain for at least 15 days. Evidence of the sign posting must also be provided within 3 days. In addition, applicants must ensure that required signs are in place during the 15-day appeal period after the project approval. Evidence of posting includes: Time stamped photographs of the sign at the location must be submitted as a supplement to the application.

Failure to install or replace the signs during the required timeframe may result in your application being deferred.

### **LOCATION**

- A. The sign shall be conspicuously located, i.e, within twenty feet of the public sidewalk (or edge of a street).
- B. The face of the sign shall be parallel to the street.
- C. No barrier shall prevent a person from coming within five feet of the sign to read it.

### **NUMBER**

- A. One sign shall be posted on each street frontage.
- B. If the land does not abut a public street, a sign shall be placed at the edge of the public right-of-way of the nearest paved street, in addition to the sign placed on the property.

### **PHYSICAL POSTING**

- A. A heavy stake with two crossbars or a full plywood backing works best to keep the sign in place, especially during high winds.
- B. Large nails or staples are best for attaching signs to a post or backing; the sign tears out less easily.

I have read and understand all of the public notice requirements. By my signature, I acknowledge that: I understand (A) I have read the sign posting requirements; (B) I understand my obligation to keep the signs posted for (15) days at the time of application, and (15) days after application approval, (C) where/how the sign(s) should be posted, and (D) agree to provide evidence of posting.

I further certify that the required public notice signs were posted per the instructions above.

**SIGNATURE & DATE:**



13 January 2025

**PROJECT NUMBER & ADDRESS:**

PR-2024-011242    1401 Innovation Parkway SE 87123

**From:** [Flores, Suzanna A.](#)  
**To:** [Brito, Russell](#)  
**Subject:** [External] 1401 INNOVATION PKWY SE \_Public Notice Inquiry Sheet Submission  
**Date:** Tuesday, January 7, 2025 11:18:18 AM  
**Attachments:** [image001.png](#)  
[Sandia ESS - Zone Atlas M-21.pdf](#)

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**Is this a phishing email? - Look again!**

**CAUTION:** This email was received from an **EXTERNAL** source, use caution when clicking links or opening attachments

This email is from [Suzannaflores@cabq.gov](mailto:Suzannaflores@cabq.gov) - do you know them?

Look for discrepancies in email addresses. Does the displayed "**From**" email address match?

\*\*\*\*\*

Dear Applicant:

As of January 7, 2025 there are **NO** neighborhood associations to notify. You will need to attach a copy of this e-mail from the Office of Neighborhood Coordination (ONC) to your application when you submit it to the Planning Department.

Please note that the ONC does not have any jurisdiction over any other aspect of your application beyond this neighborhood contact information. We can't answer questions about sign postings, pre-construction meetings, permit status, site plans, buffers, or project plans, so we encourage you to contact the Planning Department at: 505-924-3857 Option #1, e-mail: [devhelp@cabq.gov](mailto:devhelp@cabq.gov), or visit: <https://www.cabq.gov/planning/online-planning-permitting-applications> with those types of questions.

Thank you,

*Suzie*



**Suzie Flores**

Senior Administrative Assistant

Office of Neighborhood Coordination (ONC) | City Council Department | City of Albuquerque  
(505) 768-3334 Office  
E-mail: [suzannaflores@cabq.gov](mailto:suzannaflores@cabq.gov)  
Website: [www.cabq.gov/neighborhoods](http://www.cabq.gov/neighborhoods)

**From:** webmaster@cabq.gov <webmaster@cabq.gov>  
**Sent:** Tuesday, January 7, 2025 9:19 AM  
**To:** Office of Neighborhood Coordination <Russell.Brito@pnm.com>  
**Cc:** Office of Neighborhood Coordination <onc@cabq.gov>  
**Subject:** Public Notice Inquiry Sheet Submission

[EXTERNAL] Forward to [phishing@cabq.gov](mailto:phishing@cabq.gov) and delete if an email causes any concern.

Public Notice Inquiry For:

Administrative Decision

If you selected "Other" in the question above, please describe what you are seeking a Public Notice Inquiry for below:

Contact Name

Russell Brito

Telephone Number

5052412798

Email Address

[Russell.Brito@pnm.com](mailto:Russell.Brito@pnm.com)

Company Name

PNM

Company Address

2401 Aztec Rd NE

City

Albuquerque

State

NM

ZIP

87107

Legal description of the subject site for this project:

TR F-2A PLAT OF TRACTS F-2A AND F-2B SANDIA SCIENCE & TECHNOLOGY PARK (A REPLAT OF TRACT F-2, SANDIA SCIENCE AND TECHNOLOGY PARK)  
CONT 5.3533 AC

Physical address of subject site:

1401 INNOVATION PKWY SE ALBUQUERQUE NM 87123

Subject site cross streets:

Gibson Blvd / Innovation Parkway

Other subject site identifiers:

This site is located on the following zone atlas page:

M-21

Captcha

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