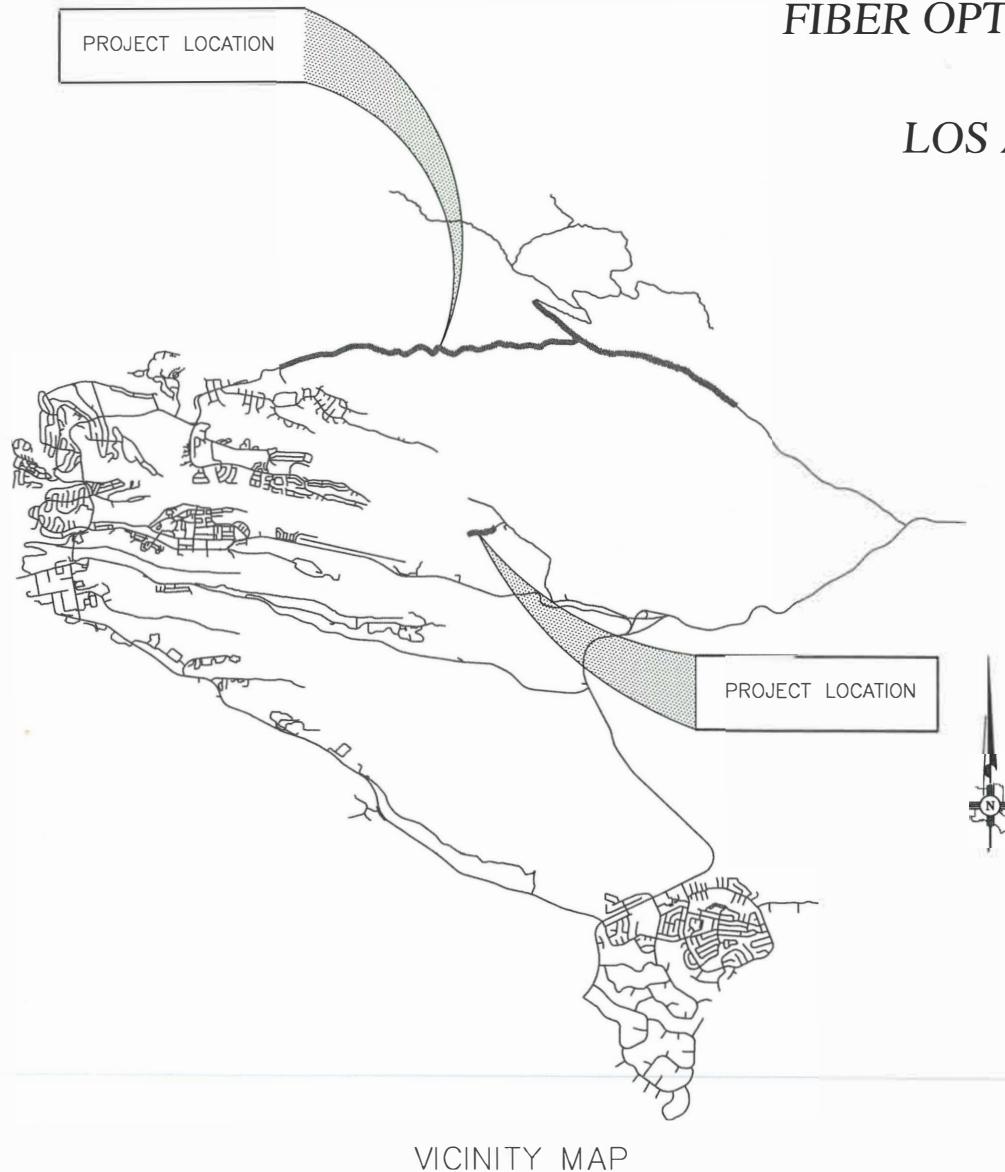


**GUAJE CANYON & BAYO BOOSTER
FIBER OPTIC LINE INSTALLATION**
IFB 26-24
LOS ALAMOS COUNTY
DW-6368



SHEET INDEX

- 1 TITLE SHEET AND SHEET INDEX
- 2 GENERAL NOTES AND QUANTITY SHEET
- 3 PROJECT SUMMARY SHEET
- 4 PLAN SUMMARY SHEET
- 5 RENDIJA STA 0+00 TO STA 75+00
- 6 RENDIJA STA 75+00 TO STA 150+00
- 7 RENDIJA STA 150+00 TO STA 220+96
- 8 GUAJE STA 25+00 TO 100+00
- 9 GUAJE STA 100_00 TO STA 129+68
- 10 CONNECTION TO EXISTING FIBER OPTIC LINE BARRANCA
- 10A CONNECTION TO EXISTING FIBER SOUTHWEST OF ROUND-A-BOUT
- 11 GUAJE BOOSTER NO. 3 AND BARRANCA TANK NO. 2
- 12 GUAJE BOOSTER NO. 2
- 13 GUAJE WELL NO. 4A AND GUAJE BOOSTER NO. 1
- 14 GUAJE WELL NO. 5A
- 15 GUAJE WELL NO. 3A
- 16 GUAJE WELL NO. 2A
- 17 BAYO BOOSTER STATION FIBER OPTIC LINE EXTENSION
- 18 BAYO BOOSTER STATION FIBER OPTIC LINE EXTENSION
- 19 DETAILS SHEET
- 20 DETAILS SHEET
- 21 DETAILS SHEET

APPROVED BY:

DEPARTMENT OF PUBLIC
UTILITIES PROJECT ENGINEER

DEPARTMENT OF PUBLIC UTILITIES
PROJECT MANAGER

DATE 09/15/2025

9/15/25



INCORPORATED COUNTY
OF LOS ALAMOS
DEPARTMENT OF PUBLIC
UTILITIES
1000 CENTRAL AVE., SUITE 130
LOS ALAMOS, NEW MEXICO 87544
(505) 662-8333 FAX: (505) 662-8005

SHEET
1

IFB 26-24
GUAJE CANYON & BAYO BOOSTER
FIBER OPTIC LINE INSTALLATION
TITLE SHEET AND SHEET INDEX

DESIGNED BY:	JJA	REVISION DESCRIPTION
DRAWN BY:	LAM	NO.
APPROVED BY:	JJA	1
DATE:	08/13/2025	2
SCALE:	N/A	3
		4
		5

GENERAL NOTES

1. THE NEW FIBER OPTIC LINES WILL BE UNDERHUNG ON AN EXISTING 13.2 KV POWERLINE. CONTRACTOR SHALL COMPLY WITH THE NATIONAL ELECTRIC SAFETY CODE (NESC) AND OTHER APPLICABLE CODES IN PERFORMING WORK.
2. THE NEW FIBER OPTIC LINE WILL SPLICING INTO A FIBER OPTIC LINE OWNED BY LOS ALAMOS COUNTY. TWO WEEKS PRIOR TO SPLICING THE ACTIVE FIBER OPTIC LINE THE CONTRACTOR SHALL PARTICIPATE IN A COORDINATION MEETING WITH THE PROJECT MANAGER AND A REPRESENTATIVE OF THE LOS ALAMOS COUNTY INFORMATION MANAGEMENT DIVISION WHO OPERATES THE FIBER OPTIC SYSTEM.
3. ALL TESTING OF THE NEW FIBER OPTIC LINE SHALL BE WITNESSED BY THE OWNER.
4. 20 FEET CLEARANCE FROM THE GROUND TO THE NEW FIBER OPTIC LINE IS REQUIRED AT ROAD CROSSINGS.
5. THE NEW FIBER OPTIC LINE SHALL BE 15' ABOVE THE EXISTING GRADE IN ALL LOCATIONS.

DEPARTMENT OF ENERGY / LOS ALAMOS NATIONAL LABORATORY JURISDICTION

1. APPROXIMATELY 7,400 FEET OF THE WORK WILL TAKE PLACE ON LANDS OWNED BY THE DOE / LANL IN THE AREA OF THE SHOOTING RANGE. REFER TO SHEET 5 AND SHEET 6 OF THE PLAN SET.
2. CONTRACTOR SHALL HAVE A STAFF MEMBER ONSITE AT ALL TIMES WHO HAS COMPLETED THE LANL EXCAVATION SAFETY TRAINING. A LANL BADGE AND Z NUMBER IS REQUIRED TO TAKE THE TRAINING. THE TRAINING IS COMPUTER BASED AND TAKES LESS THAN AN HOUR.
3. THE CONTRACTOR, WITH ASSISTANCE FROM THE COUNTY'S PROJECT MANAGER, WILL SUBMIT AN APPLICATION FOR A LANL EXCAVATION PERMIT FOR GROUND DISTURBING ACTIVITIES. THE APPLICATION SHALL BE SUBMITTED ONE MONTH PRIOR TO SCHEDULED GROUND DISTURBING ACTIVITIES TO AVOID DELAYS. INSTALLATION OF EIGHT (8) GUY WIRE ANCHORS ARE THE GROUND DISTURBING ACTIVITIES THAT APPLY.
4. LANL'S EXCAVATION PERMIT PROCESS IS THE PROCESS TO HAVE LANL LOCATE THEIR UNDERGROUND UTILITIES.

TRAFFIC CONTROL

1. THE CONTRACTOR SHALL PREPARE A TRAFFIC CONTROL PLAN AND SECURE A TRAFFIC CONTROL PERMIT FROM THE LOS ALAMOS COUNTY TRAFFIC DIVISION FOR THE WORK THAT WILL TAKE PLACE ON SAN ILDEFONSO ROAD AND PASEO PENASCO (APPROXIMATELY 1,400 FEET). THE TRAFFIC CONTROL PERMIT REQUIREMENTS CAN BE FOUND AT THE FOLLOWING LINK.

<https://www.losalamosnm.us/files/sharedassets/public/v2/departments/public-works/documents/traffic-permit-form-and-traffic-control-guidelines-rev-1-13-2017.pdf>

2. CONTRACTOR SHALL PREPARE A TYPICAL TRAFFIC CONTROL PLAN FOR WORK IN RENDIJA CANYON AND GUAJE CANYONS AND SUBMIT TO THE PROJECT MANAGER. ROADS IN RENDIJA AND GUAJE CANYONS ARE DIRT FOREST ROADS. NO PERMITS ARE REQUIRED IN THIS AREA.

Item No.	Description	Quantity	Unit
GUAJE CANYON			
1	288 - Strand Self Supporting Single Mode Fiber Optic Line	14,740	Feet
2	144 - Strand Self Supporting Single Mode Fiber Optic Line	20,405	Feet
3	12 - Strand Self Supporting Single Mode Fiber Optic Line	5,335	Feet
4	Guy Wires Complete in Place	50	Each
5	35 Foot Wood Pole Complete in Place	6	Each
7	4'x4'x4' Composite Vault	2	Each
8	4'x4'x6' Concrete Vault	1	Each
9	Pole Riser; 4" RGS, mounting hardware, 3 each 1-1/4" Interduct, pull tape and weatherhead.	3	Each
10	4" SCH-40 PVC conduit, trench, backfill, compaction, locate wire and warning tape.	100	Feet
11	Splice 4 Strands in Existing 48 Strand Splice Box in Existing Vault	1	Each
12	Splice 4 Strands in New 288 Strand Splice Box in Vault	1	Each
13	Splice 144 Strands in New 288 Strand Splice Box in Vault	1	Each
15	Splice 4 strands in New 144 Strand Aerial Splice Box	6	Each
16	Guaje Booster 3 / Barranca Booster: Interior and exterior 1" RMC & fittings, 12 strand patch panel, mounting hardware and wall penetration complete in place.	1	Lump Sum
17	Guaje Booster 2: Interior and exterior 1" RMC & fittings, 12 strand patch panel, mounting hardware and wall penetration complete in place.	1	Lump Sum
18	Guaje Booster 1 / Guaje Well 4A: Interior and exterior 1" RMC & fittings, 2 Each 12 strand patch panel, mounting hardware and wall penetration complete in place.	1	Lump Sum
19	Guaje Well 5A: Interior and exterior 1" RMC & fittings, 12 strand patch panel, mounting hardware and wall penetration complete in place.	1	Lump Sum
20	Guaje Well 3A: Interior and exterior 1" RMC & fittings, 12 strand patch panel, mounting hardware and wall penetration complete in place.	1	Lump Sum
21	Guaje Well 2A: Interior and exterior 1" RMC & fittings, 12 strand patch panel, mounting hardware and wall penetration complete in place.	1	Lump Sum
BAYO BOOSTER			
22	12 - Strand Self Supporting Single Mode Fiber Optic Line	3,025	Feet
23	35 Foot Wood Pole Complete in Place	2	Each
24	Guy Wire Complete in Place	3	Each
25	Bayo Booster: Attach to existing mast, 1" RMC & fittings, mounting hardware complete in place.	1	Lump Sum
26	2" RGS Exterior mast with weatherhead	1	Each

NO.	REVISION DESCRIPTION
1	
2	
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DESIGNED BY:	JJA
DRAWN BY:	LAM
APPROVED BY:	JJA
DATE:	08/13/2025
SCALE:	N/A

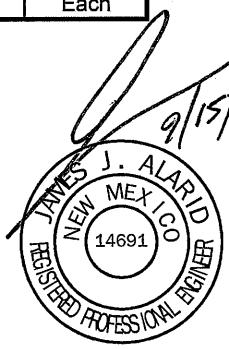
IFB 26-24	GUAJE CANYON & BAYO BOOSTER
FIBER OPTIC LINE INSTALLATION	GENERAL NOTES AND QUANTITY SHEET

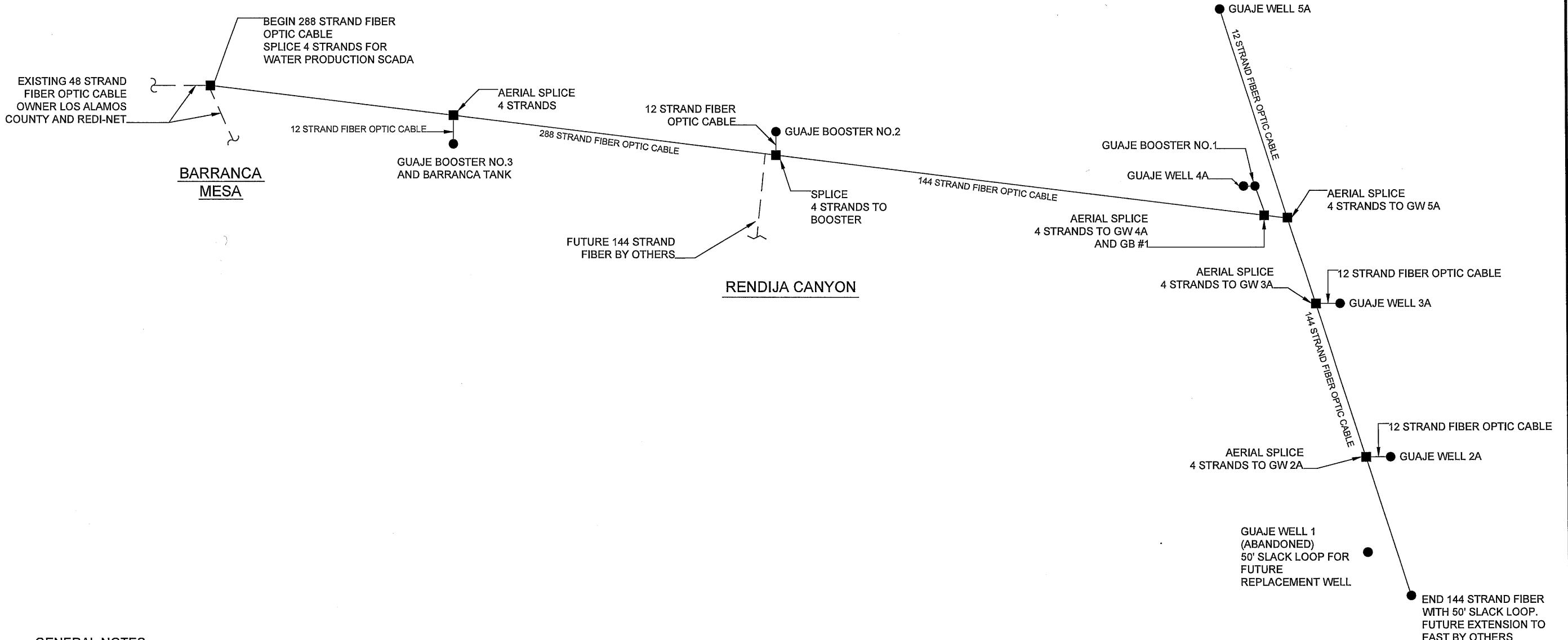


LOS ALAMOS

INCORPORATED COUNTY OF LOS ALAMOS
DEPARTMENT OF PUBLIC UTILITIES
1000 CENTRAL AVE., SUITE 130
LOS ALAMOS, NEW MEXICO 87544

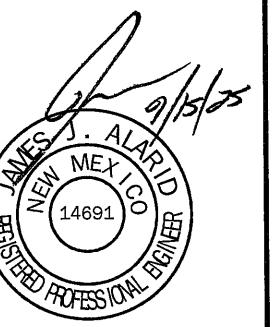
(505) 662-8333 FAX: (505) 662-8005





GENERAL NOTES

1. EXISTING FIBER OPTIC NETWORK OWNED AND OPERATED BY LOS ALAMOS COUNTY IN PARTNERSHIP WITH REDI-NET.
2. PROJECT WILL PLACE 4 DEDICATED FIBER STRANDS FOR THE WATER PRODUCTION SUPERVISORY CONTROLS AND DATA ACQUISITION SYSTEM (SCADA) OWNED AND OPERATED BY LOS ALAMOS COUNTY DEPARTMENT OF PUBLIC UTILITIES
3. THE FIBER COUNT HAS BEEN INCREASED TO 288 STRANDS FROM THE EXISTING 48 STRAND SYSTEM ON BARRANCA MESA UP TO EA-4 POWERLINE TO SOUTH. THEN 144 TO SAN ILDEFONSO PROPERTY LINE TO THE PROJECT TERMINATION IN GUAJE CANYON AT THE LOS ALAMOS COUNTY/PUEBLO DE SAN ILDEFONSO BOUNDARY. THIS 144 STRAND SECTION WILL BE FOR FUTURE UTILITY SCALE SERVICE TO LOS ALAMOS.
4. ALL NEW FIBER OPTIC LINE WILL BE ATTACHED TO ELECTRIC POWER POLES OWNED BY LOS ALAMOS COUNTY DEPARTMENT OF PUBLIC UTILITIES.



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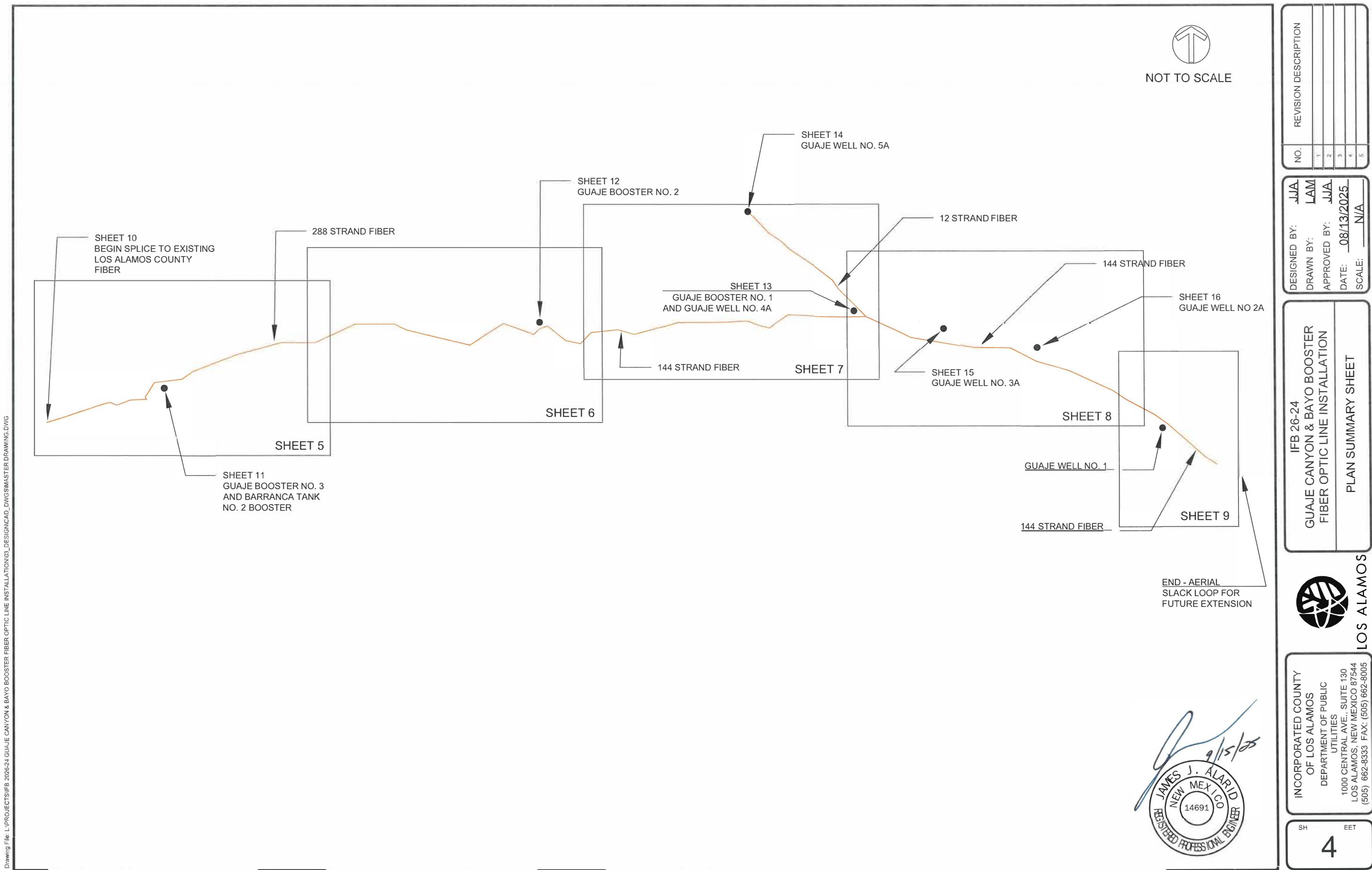
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IFB 26-24
GUAJE CANYON & BAYO BOOSTER
FIBER OPTIC LINE INSTALLATION
PROJECT SUMMARY SHEET

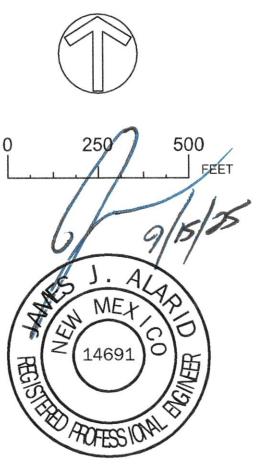
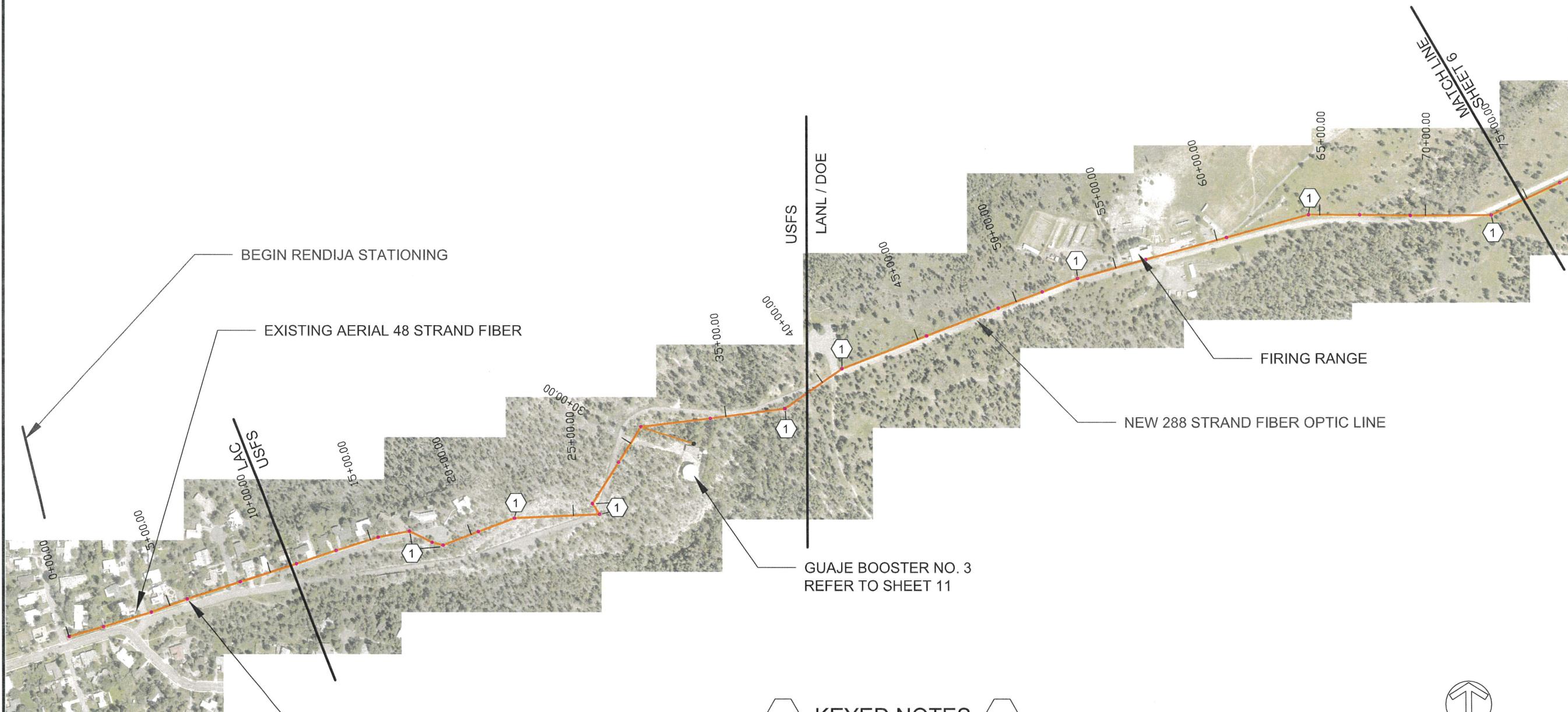


NO.	REVISION DESCRIPTION
1	
2	
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DESIGNED BY: J.J.A.	DRAWN BY: L.A.M.
APPROVED BY: J.J.A.	
DATE: 8/14/2025	SCALE: N/A



RENDIJA CANYON



INCORPORATED COUNTY
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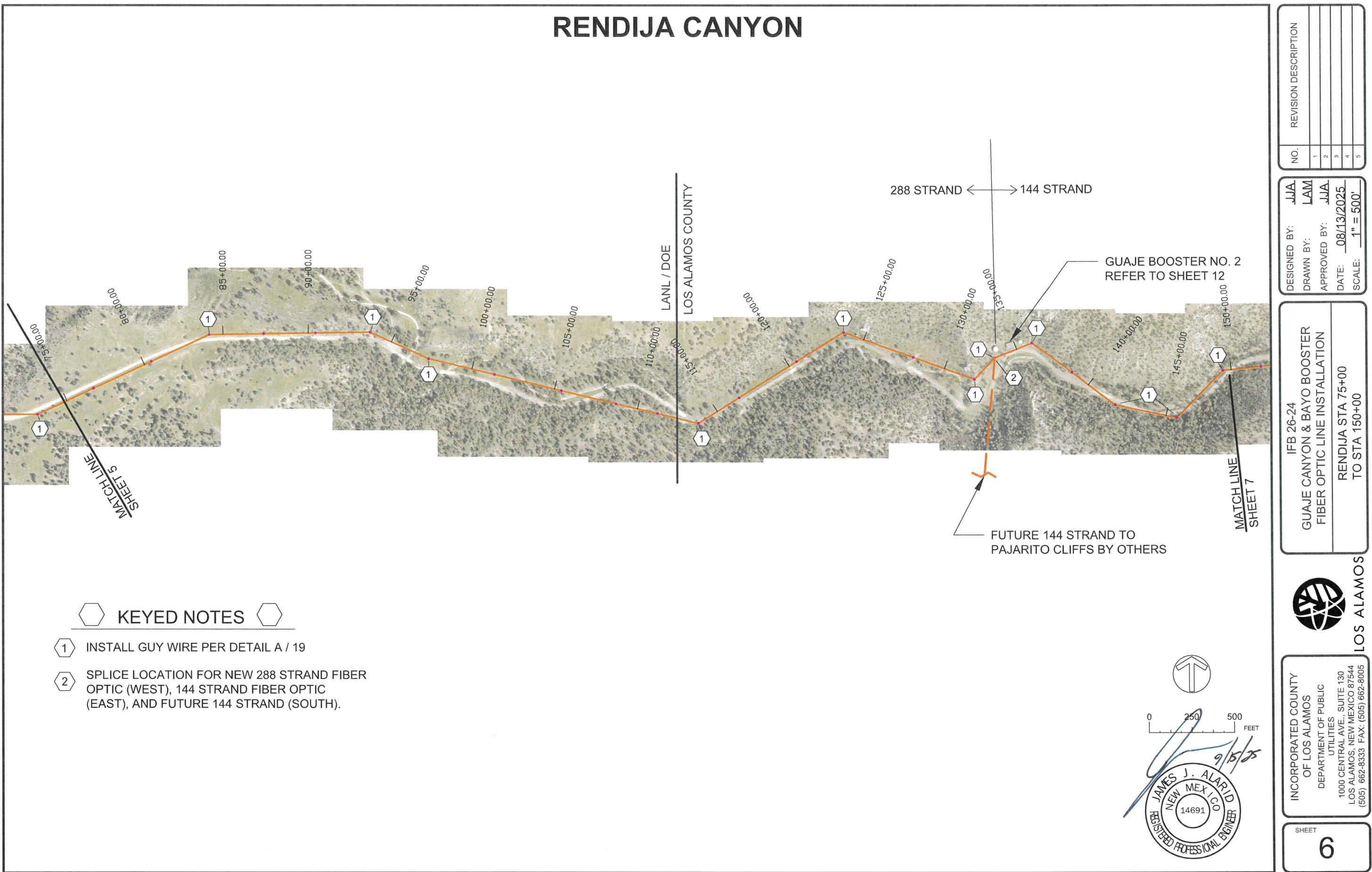
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IFB 26-24
GUAJE CANYON & BAYO BOOSTER
FIBER OPTIC LINE INSTALLATION
RENDIJA STA 0 + 00
TO STA 75 + 00

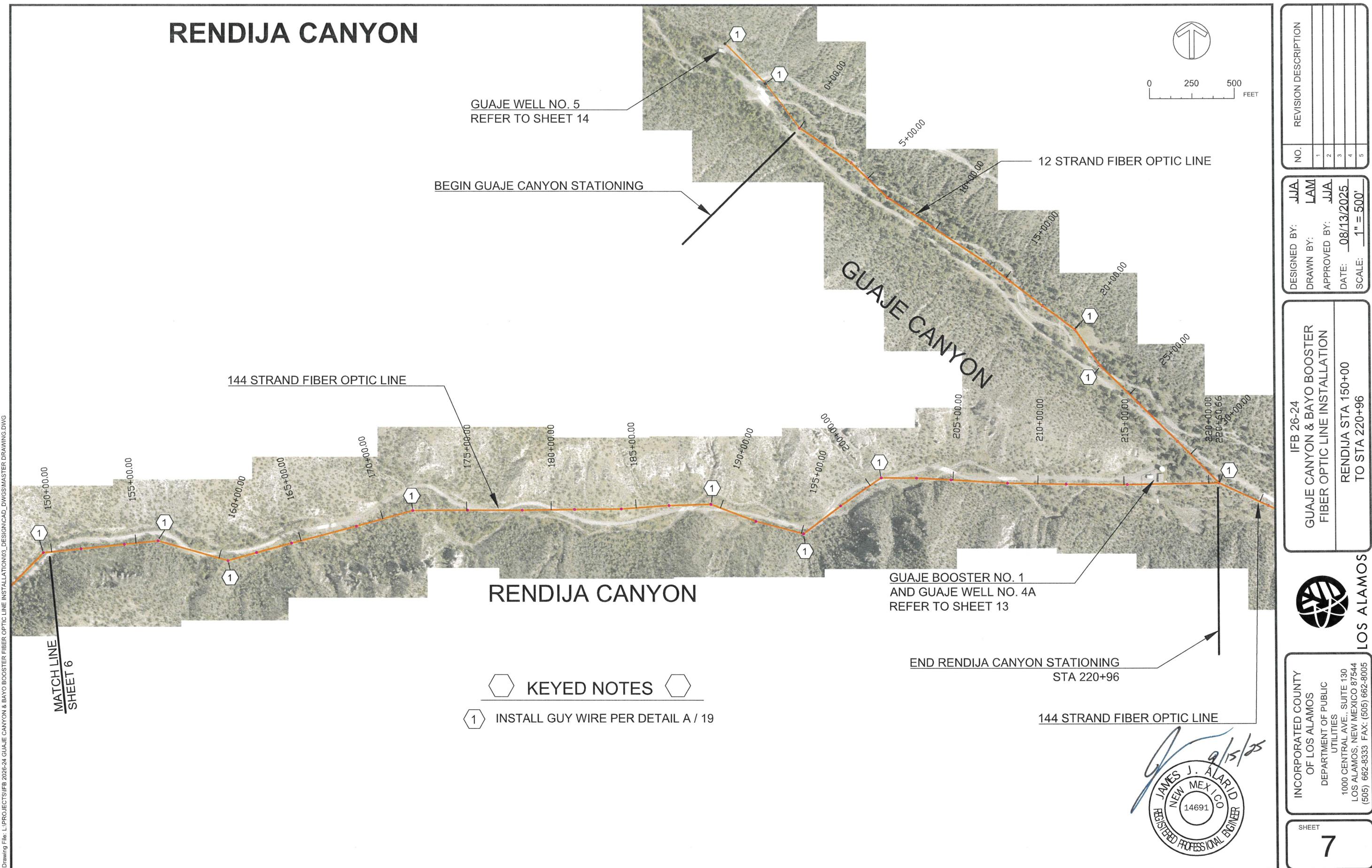
DESIGNED BY: JJA
DRAWN BY: LAM
APPROVED BY: JJA
DATE: 08/13/2025
SCALE: 1" = 500'

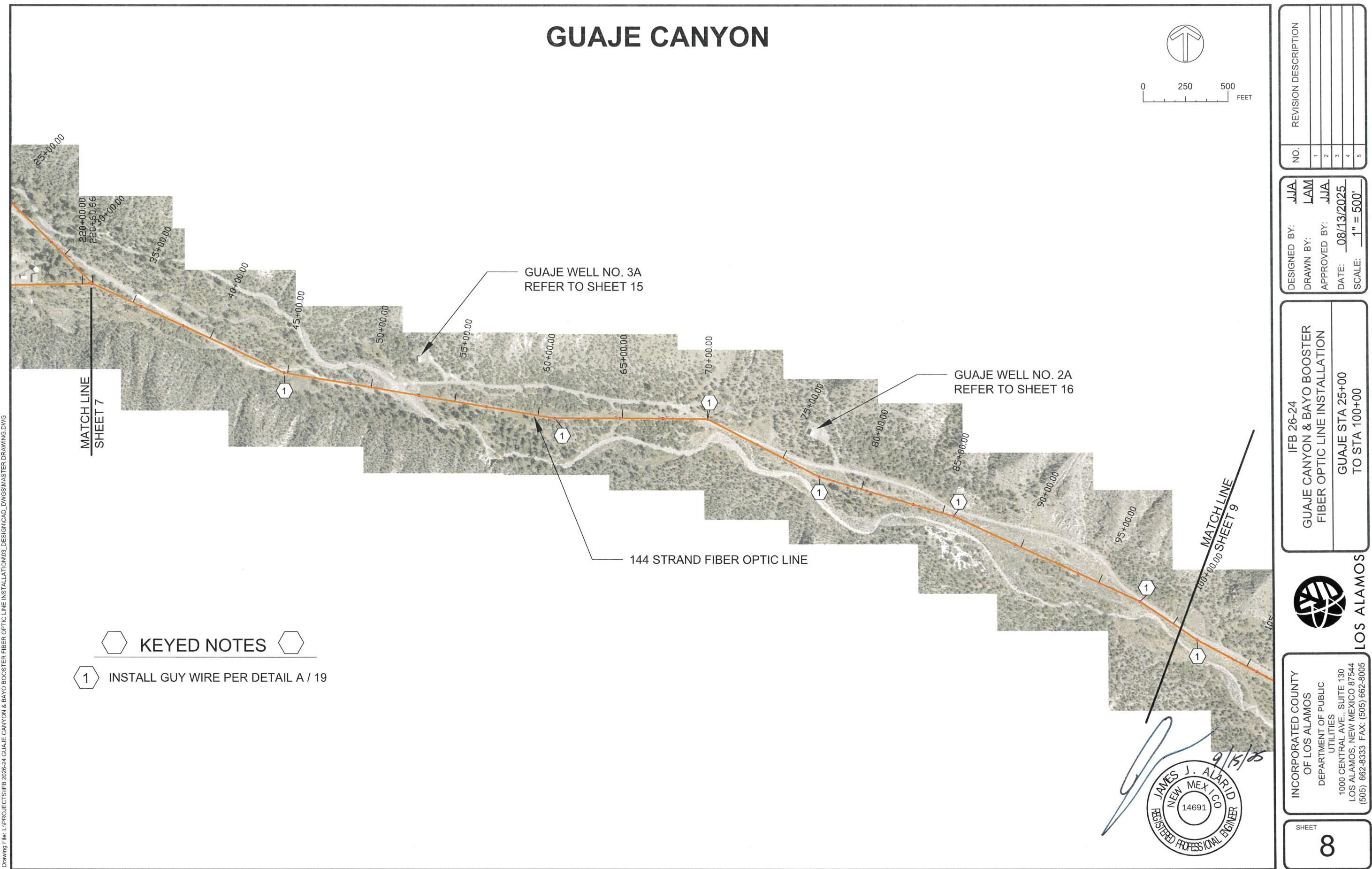
RENDIJA CANYON

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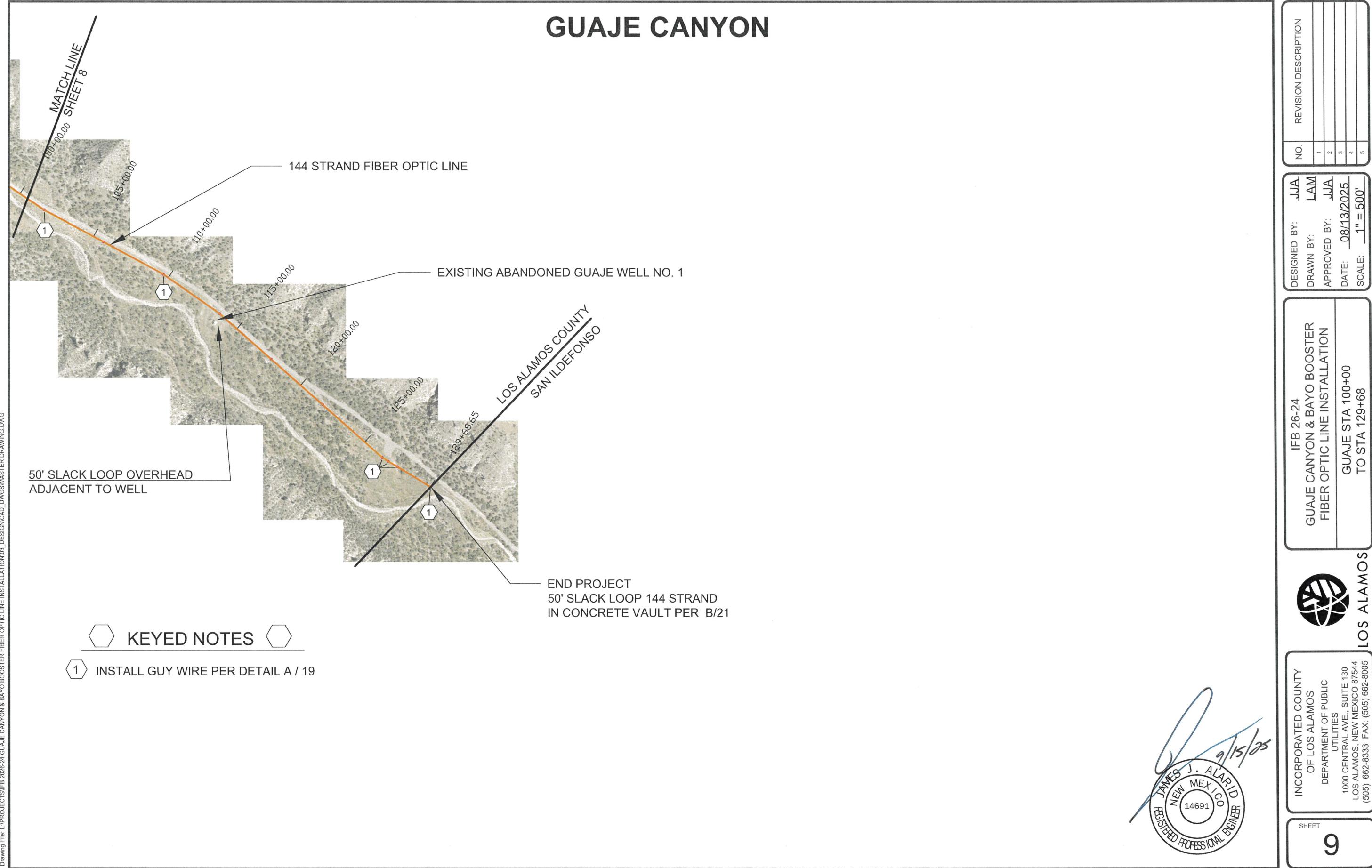


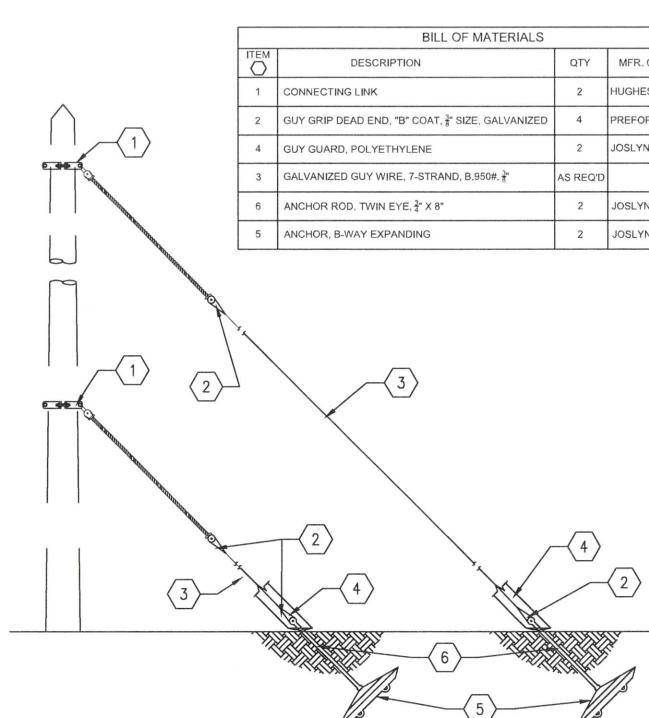
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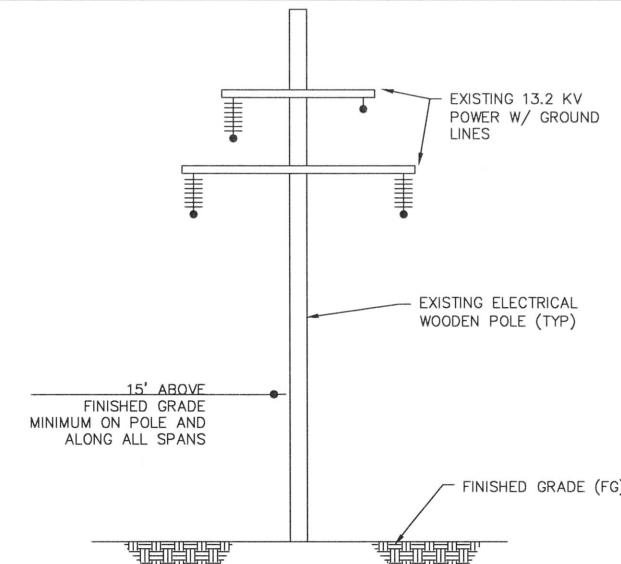


GUAJE CANYON





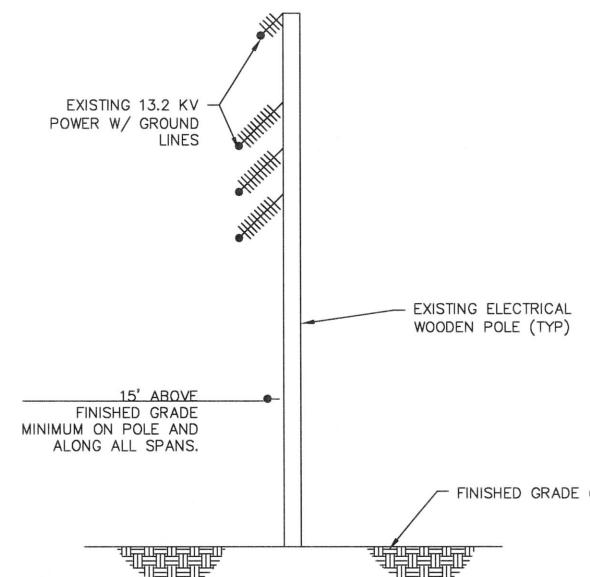
A GUY WIRE DETAIL
19



NOTES:

1. ALL EXISTING POLE AND LINE DIMENSIONS ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND DOCUMENT ON PROJECT AS-BUILT DRAWINGS.
2. ALL 13 KV LINES ARE ENERGIZED. CONTRACTOR SHALL INSTALL NEW FIBER OPTIC CABLE PER ALL NFPA 70E AND INDUSTRY SAFETY CODES. IF CONTRACTOR REQUIRES DE-ENERGIZATION OF LINES DURING INSTALLATION OF FIBER OPTIC CABLE, CONTRACTOR SHALL NOTIFY AND COORDINATE WITH OWNER.
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4. INSTALL ALL FIBER OPTIC HARDWARE PER FIBER OPTIC MANUFACTURE REQUIREMENTS. ALL FIBER OPTIC SUPPORT HARDWARE SHALL BE FROM SAME MANUFACTURE AS FIBER OPTIC CABLE.

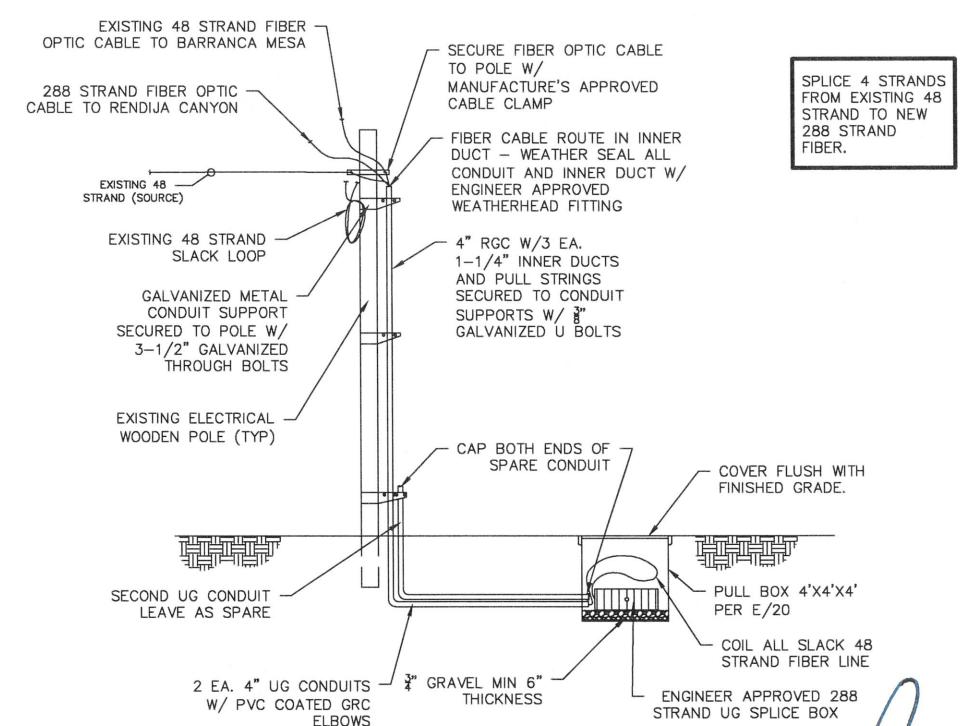
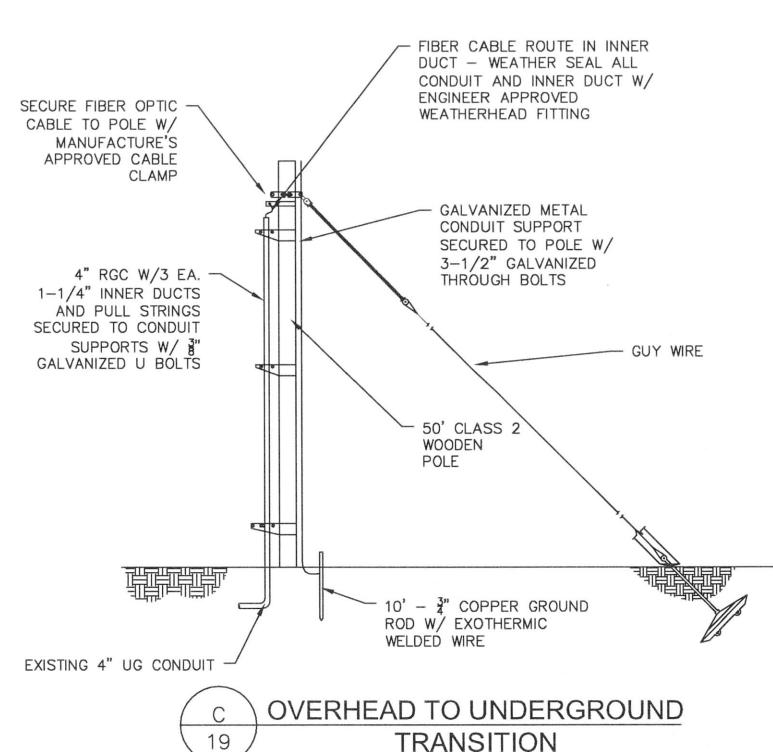
B FIBER OPTIC PLACEMENT - TYPE 1
19



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4. INSTALL ALL FIBER OPTIC HARDWARE PER FIBER OPTIC MANUFACTURE REQUIREMENTS. ALL FIBER OPTIC SUPPORT HARDWARE SHALL BE FROM SAME MANUFACTURE AS FIBER OPTIC CABLE.

D FIBER OPTIC PLACEMENT - TYPE 2
19



NOTES:

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4. INSTALL ALL FIBER OPTIC HARDWARE PER FIBER OPTIC MANUFACTURE REQUIREMENTS. ALL FIBER OPTIC SUPPORT HARDWARE SHALL BE FROM SAME MANUFACTURE AS FIBER OPTIC CABLE.
5. REFER TO SPLICE CHART FOR SPLICING INFORMATION.

F SPLICE LOCATION BARRANCA MESA
19



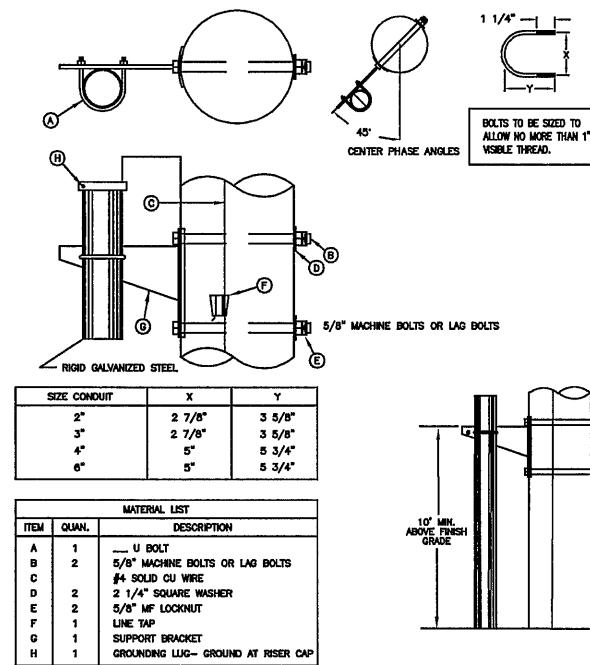
INCORPORATED COUNTY
OF LOS ALAMOS
DEPARTMENT OF PUBLIC
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1000 CENTRAL AVE., SUITE 130
LOS ALAMOS, NEW MEXICO 87544
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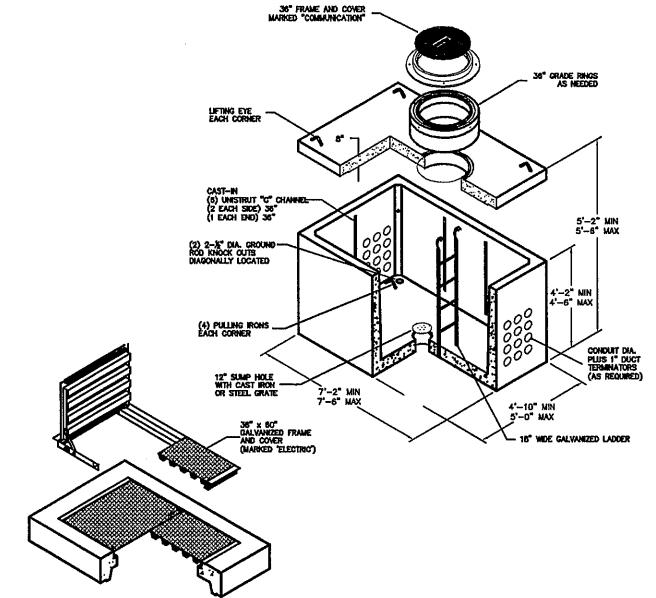
REVISION DESCRIPTION
NO. 1
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DESIGNED BY: JJA
DRAWN BY: LAM
APPROVED BY: JJA
DATE: 08/13/2025
SCALE: N/A

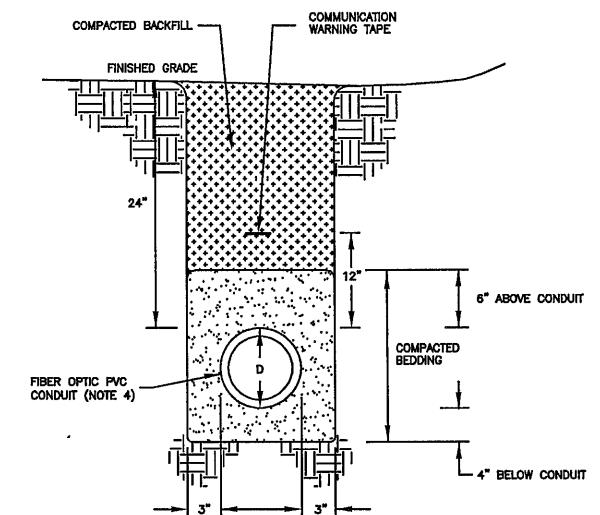
IFB 26-24
GUAJE CANYON & BAYO BOOSTER
FIBER OPTIC LINE INSTALLATION
DETAILS SHEET



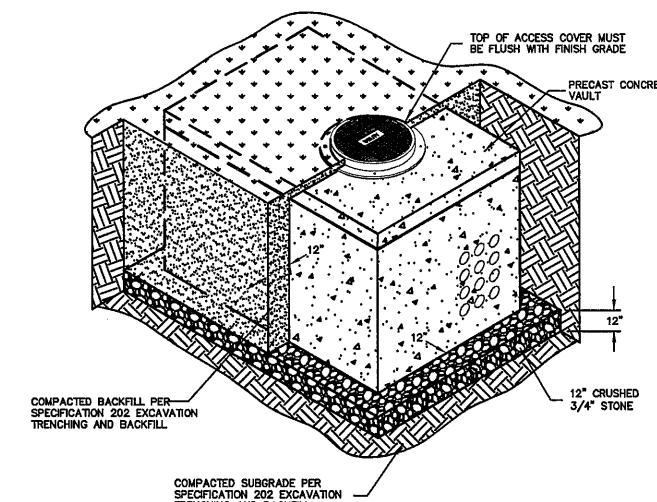
A RISER SUPPORT BRACKET
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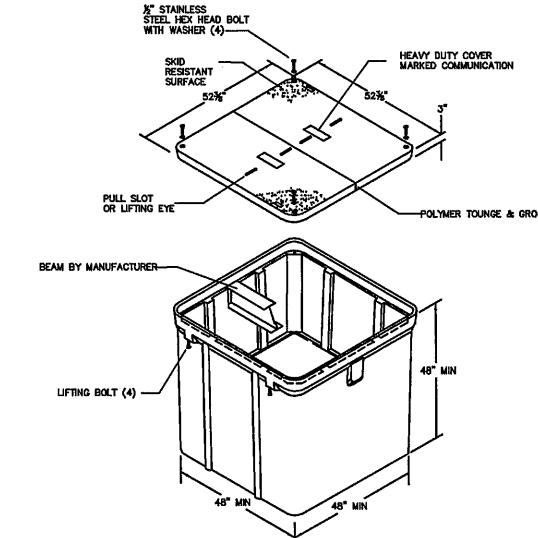
B 6' x 4' x 4' CONCRETE VAULT
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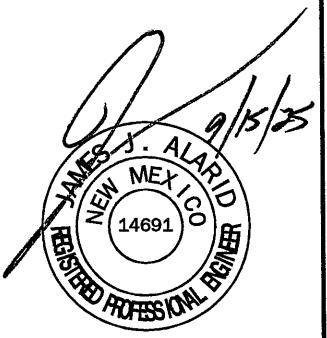
C FIBER OPTIC TRENCH DETAIL
20



D PRE-CAST VAULT INSTALLATION
20



E 48" x 48" x 48" OPEN BOTTOM
POLYMER CONCRETE VAULT
20

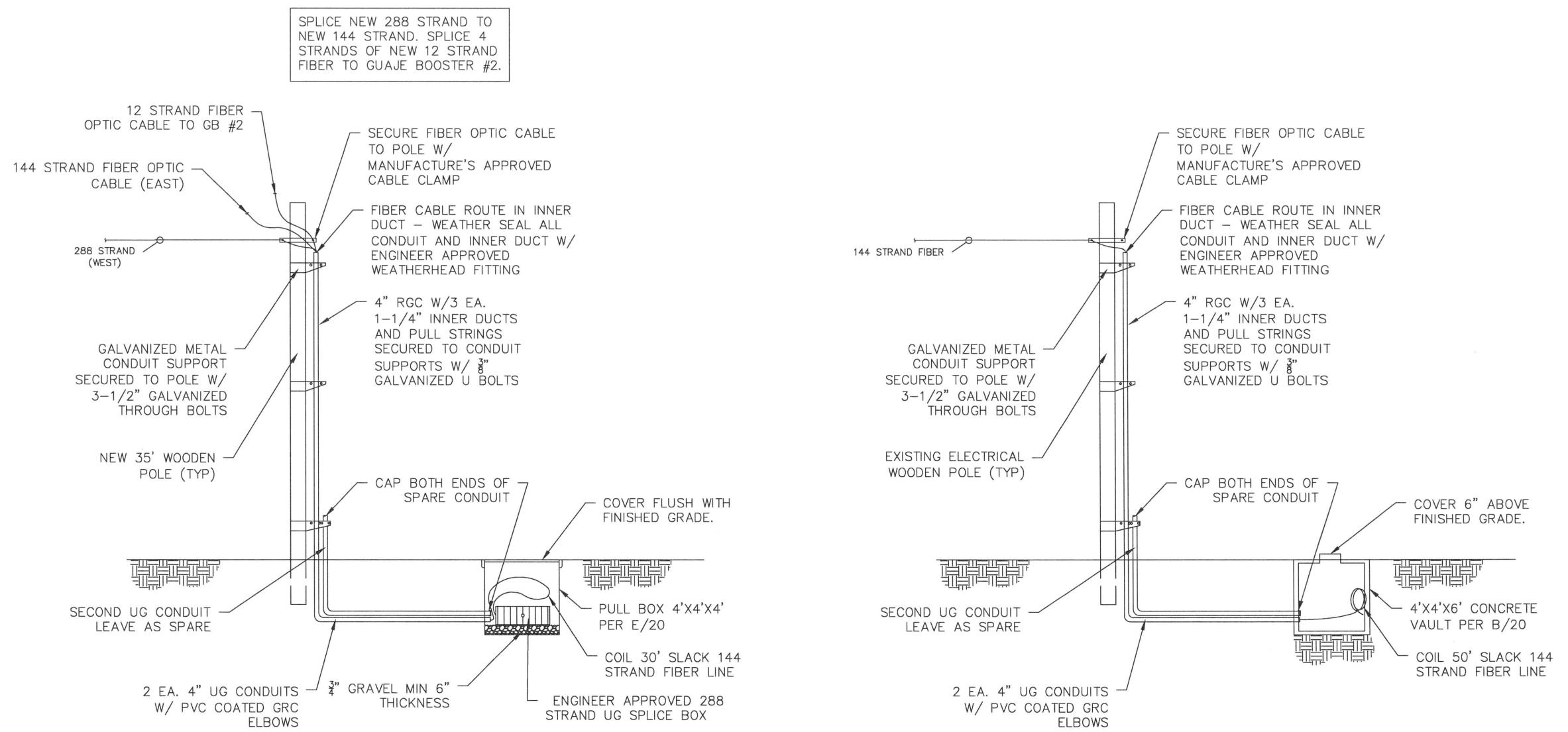


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(505) 662-8333 FAX: (505) 662-8005

SHEET
20

DESIGNED BY:	JIA
DRAWN BY:	JIA
APPROVED BY:	JIA
DATE:	08/13/2025
SCALE:	N/A

IFB 26-24
GUAJE CANYON & BAYO BOOSTER
FIBER OPTIC LINE INSTALLATION
DETAILS SHEET



NOTES:

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3. NEW FIBER OPTIC CABLE IS TO BE INSTALLED BELOW LOWEST 13KV CABLE AS REQUIRED BY NFPA 70E AND NATIONAL ELECTRICAL SAFETY CODE REQUIREMENTS.
4. INSTALL ALL FIBER OPTIC HARDWARE PER FIBER OPTIC MANUFACTURE REQUIREMENTS. ALL FIBER OPTIC SUPPORT HARDWARE SHALL BE FROM SAME MANUFACTURE AS FIBER OPTIC CABLE.
5. REFER TO SPLICING CHART FOR SPLICING INFORMATION
6. GUY WIRE REQUIRED

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21

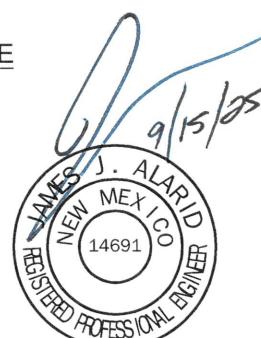
NEW 35' POLE AND SPLICE AT GUAJE BOOSTER NO. 2

NOTES:

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5. REFER TO SPLICING CHART FOR SPLICING INFORMATION

B
21

END 144 STRAND FIBER AT SAN ILDEFONSO PROPERTY LINE



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SHEET
21

IFB 26-24
GUAJE CANYON & BAYO BOOSTER
FIBER OPTIC LINE INSTALLATION
DETAILS SHEET

DESIGNED BY:	JJA	REVISION DESCRIPTION
DRAWN BY:	LAM	NO.
APPROVED BY:	JJA	1
DATE:	08/13/2025	2
SCALE:	N/A	3
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LOS ALAMOS