

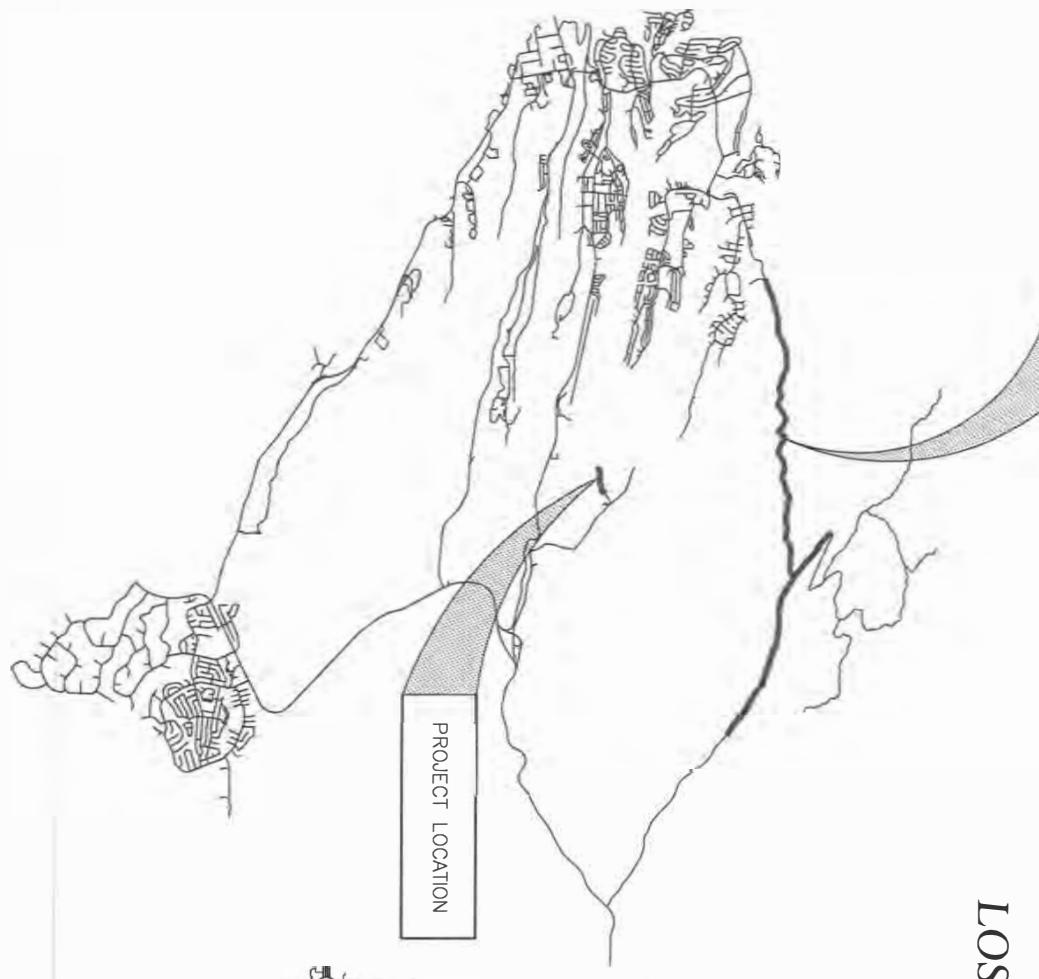
**GUAJE CANYON & BAYO BOOSTER
FIBER OPTIC LINE INSTALLATION**

IFB 26-24

LOS ALAMOS COUNTY

DW-6368

PROJECT LOCATION

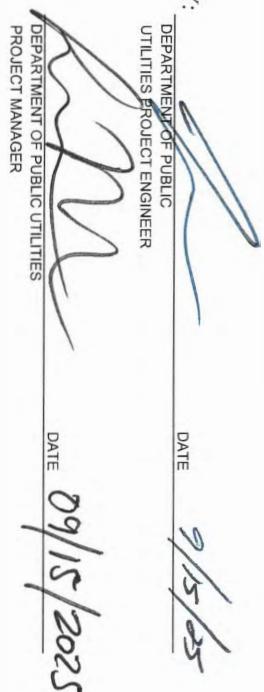


VICINITY MAP

APPROVED BY:

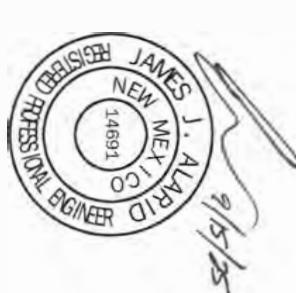
DEPARTMENT OF PUBLIC
UTILITIES PROJECT ENGINEER

DATE 09/15/2025



SHEET INDEX

NO.	REVISION DESCRIPTION
1	TITLE SHEET AND SHEET INDEX
2	GENERAL NOTES AND QUANTITY SHEET
3	PROJECT SUMMARY SHEET
4	PLAN SUMMARY SHEET
5	RENDUA STA 0+00 TO STA 75+00
6	RENDUA STA 75+00 TO STA 150+00
7	RENDUA 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-ABOUT
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
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18	BAYO BOOSTER STATION FIBER OPTIC LINE EXTENSION
19	DETAILS SHEET
20	DETAILS SHEET
21	DETAILS SHEET



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



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

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

NO.	REVISION DESCRIPTION
1	
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GENERAL NOTES

- 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.
- THE NEW FIBER OPTIC LINE WILL SPLICED 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.
- ALL TESTING OF THE NEW FIBER OPTIC LINE SHALL BE WITNESSED BY THE OWNER.
- 20 FEET CLEARANCE FROM THE GROUND TO THE NEW FIBER OPTIC LINE IS REQUIRED AT ROAD CROSSINGS.
- THE NEW FIBER OPTIC LINE SHALL BE 15' ABOVE THE EXISTING GRADE IN ALL LOCATIONS.

DEPARTMENT OF ENERGY / LOS ALAMOS NATIONAL LABORATORY JURISDICTION

- 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.
- 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.
- 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.
- LANL'S EXCAVATION PERMIT PROCESS IS THE PROCESS TO HAVE LANL LOCATE THEIR UNDERGROUND UTILITIES.

TRAFFIC CONTROL

- 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-works/documents/traffic-permit-form-and-traffic-control-guidelines-rev-1-13-2017.pdf>
- CONTRACTOR SHALL PREPARE A TYPICAL TRAFFIC CONTROL PLAN FOR WORK IN RENDJA CANYON AND GUAJE CANYONS AND SUBMIT TO THE PROJECT MANAGER. ROADS IN RENDJA 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	4x4x4' Composite Vault	2	Each
8	4x4x6' 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 5B: 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
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

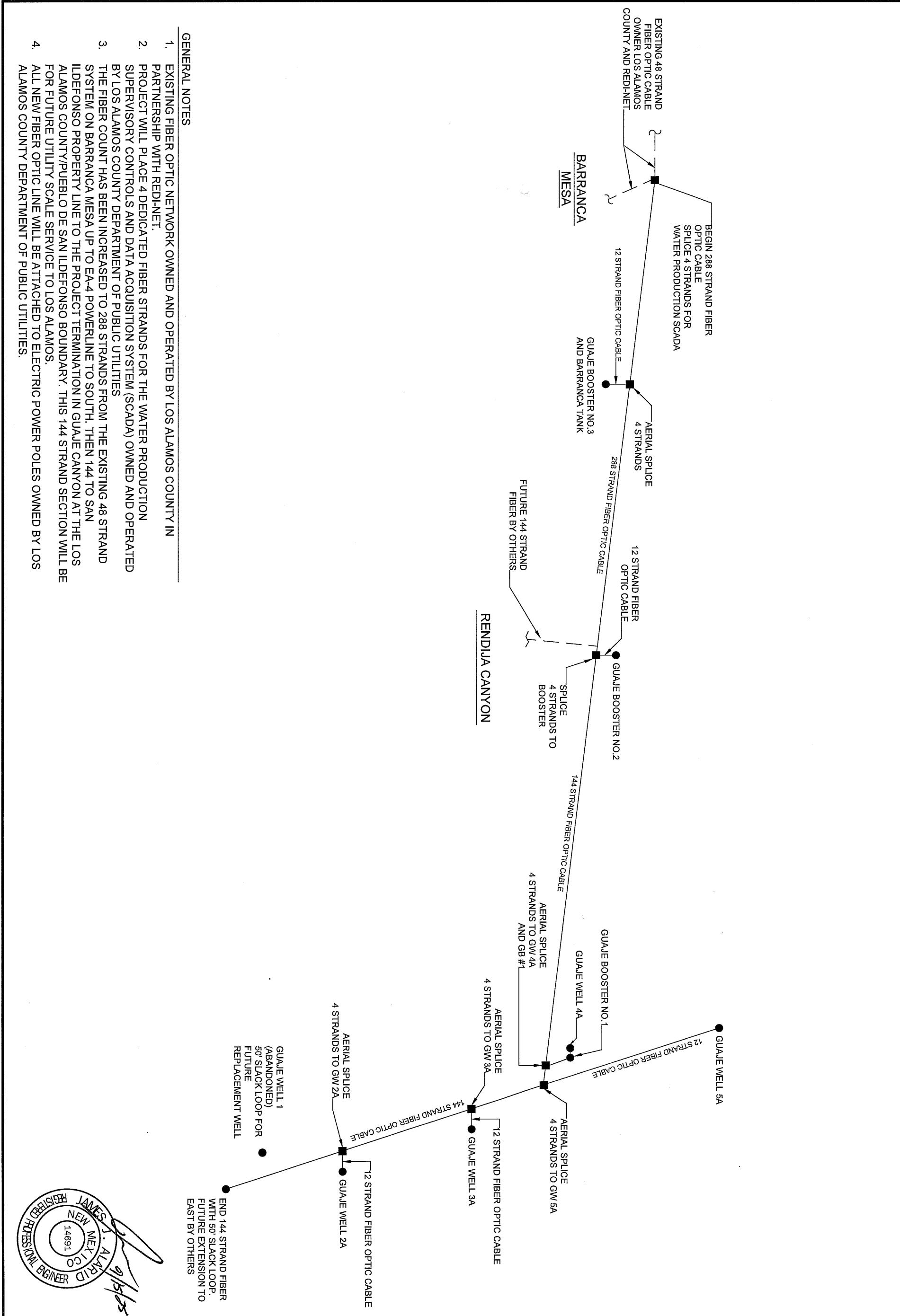
DESIGNED BY:	JJA	REVISION DESCRIPTION
DRAWN BY:	LAM	
APPROVED BY:	JJA	
DATE:	08/13/2025	
SCALE:	N/A	

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

LOS ALAMOS
PROFESSIONAL ENGINEER
JAMES J. ALVARADO
14691
9/15/25

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

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



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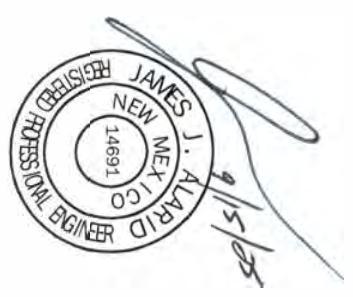
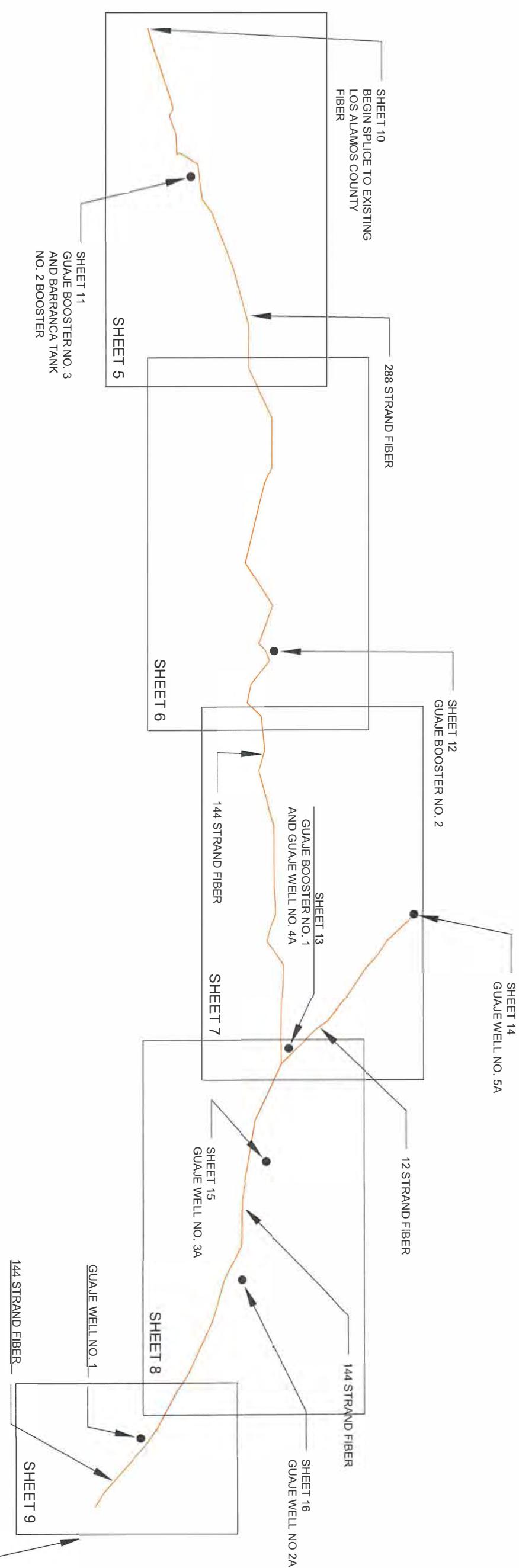
LOS ALAMOS

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

DESIGNED BY: J.J.A.
DRAWN BY: L.A.M.
APPROVED BY: J.J.A.
DATE: 8/14/2025
SCALE: N/A

NO.	REVISION DESCRIPTION
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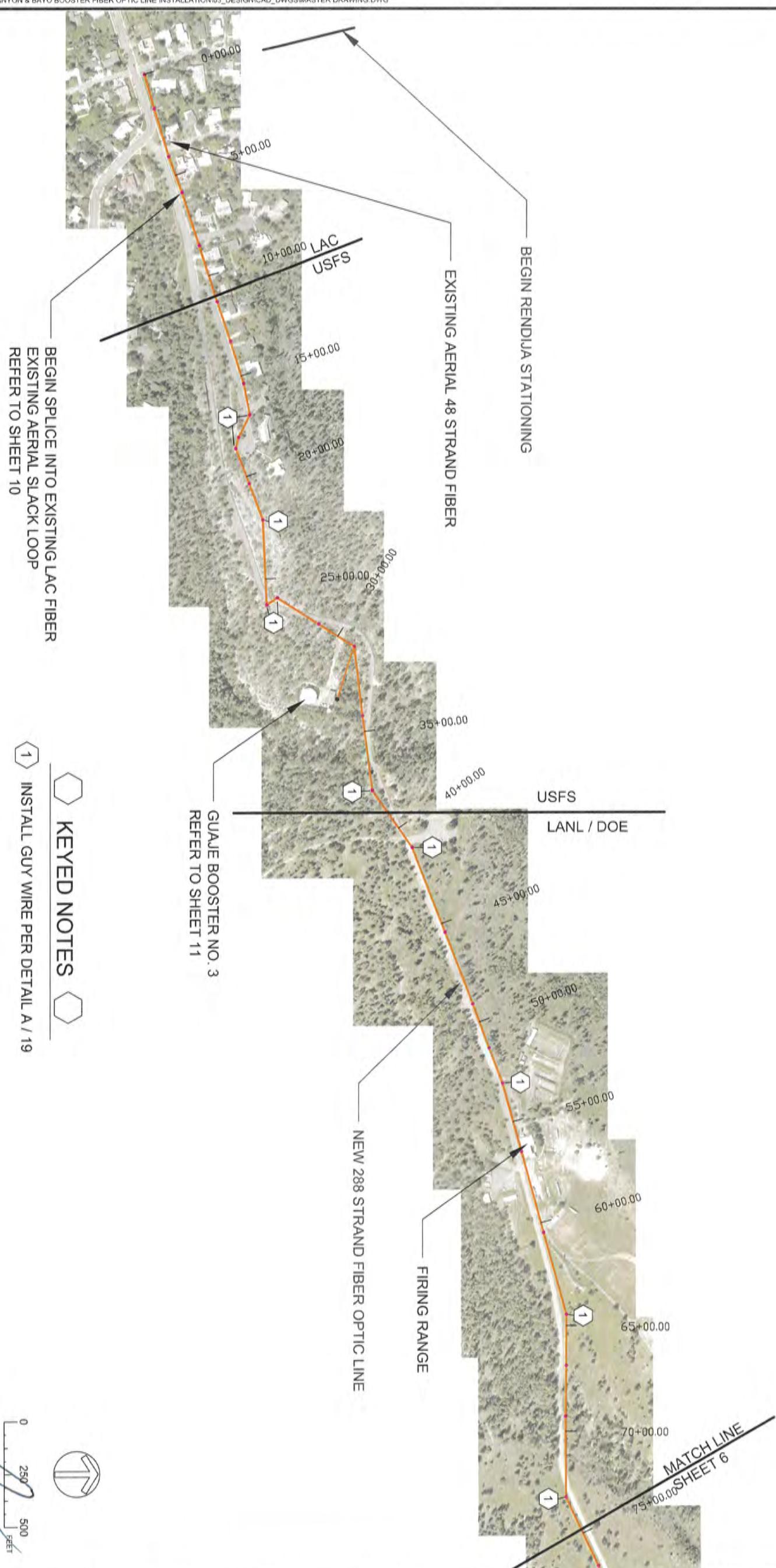
NOT TO SCALE



END - AERIAL
SLACK LOOP FOR
FUTURE EXTENSION

RENDIJA CANYON

Drawing File: L:\PROJECTS\IFB 2026-24 GUAJE CANYON & BAYO BOOSTER FIBER OPTIC LINE INSTALLATION\03_DESIGN\CAD_DWG\MASTER DRAWING.DWG



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INCORPORATED COUNTY
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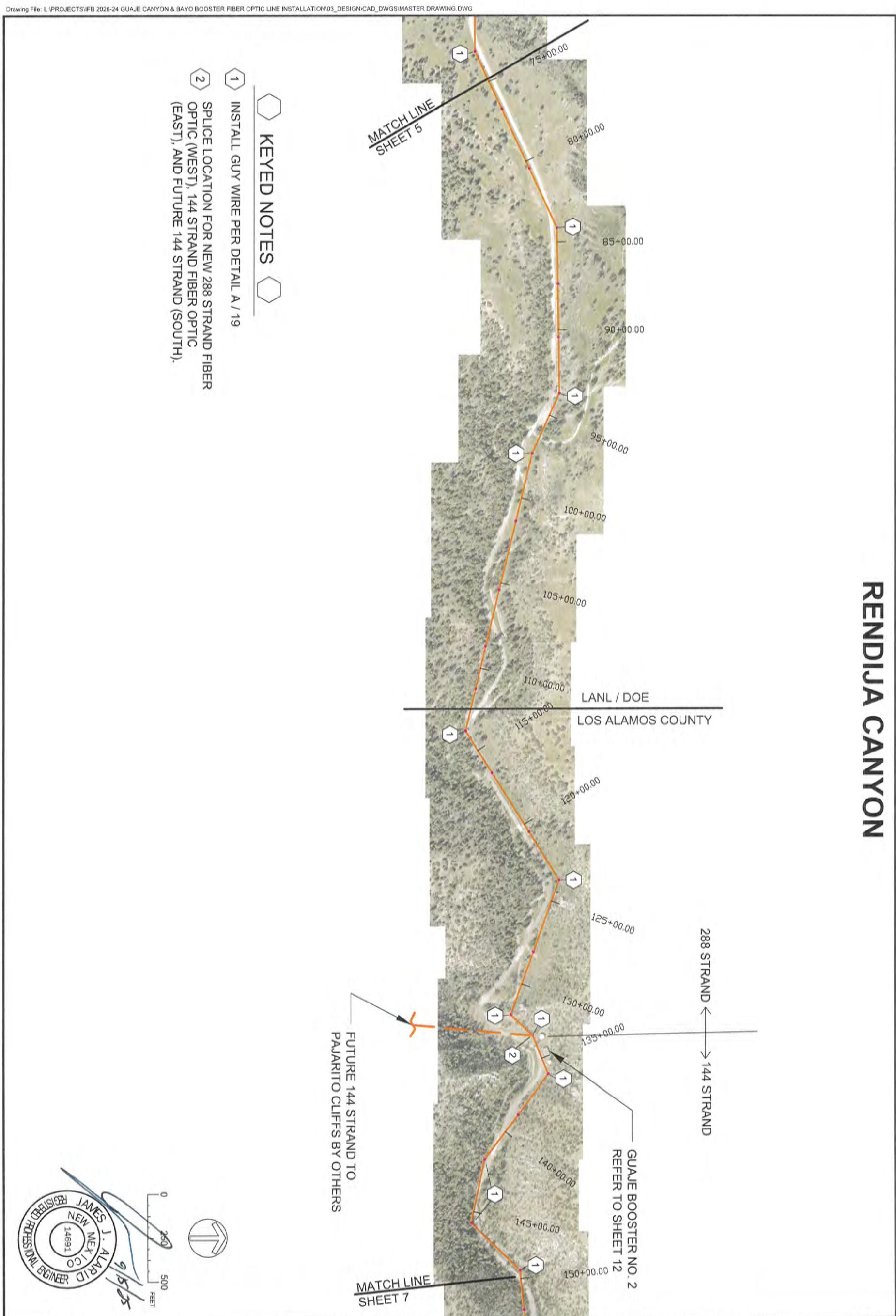


IFB 26-24
GUAJE CANYON & BAYO BOOSTER
FIBER OPTIC LINE INSTALLATION
RENDIJA STA 0 + 00
TO STA 75 + 00

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

NO.	REVISION DESCRIPTION
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RENDIJA CANYON



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SHEET

INCORPORATED COUNTY
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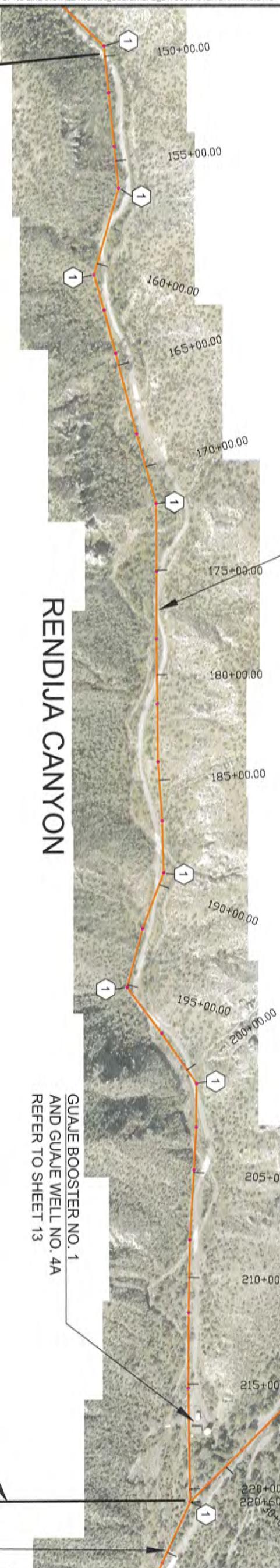
IFB 26-24
GUAJE CANYON & BAYO BOOSTER
FIBER OPTIC LINE INSTALLATION
RENDIJA STA 75+00
TO STA 150+00

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

NO.	REVISION DESCRIPTION
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RENDIJA CANYON

MATCH LINE
SHEET 6



144 STRAND FIBER OPTIC LINE

BEGIN GUAJE CANYON STATIONING

GUAJE WELL NO. 5
REFER TO SHEET 14

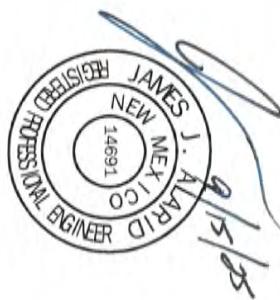
144 STRAND FIBER OPTIC LINE

0
250
500
FEET



RENDIJA CANYON

KEYED NOTES
① INSTALL GUY WIRE PER DETAIL A / 19



INCORPORATED COUNTY
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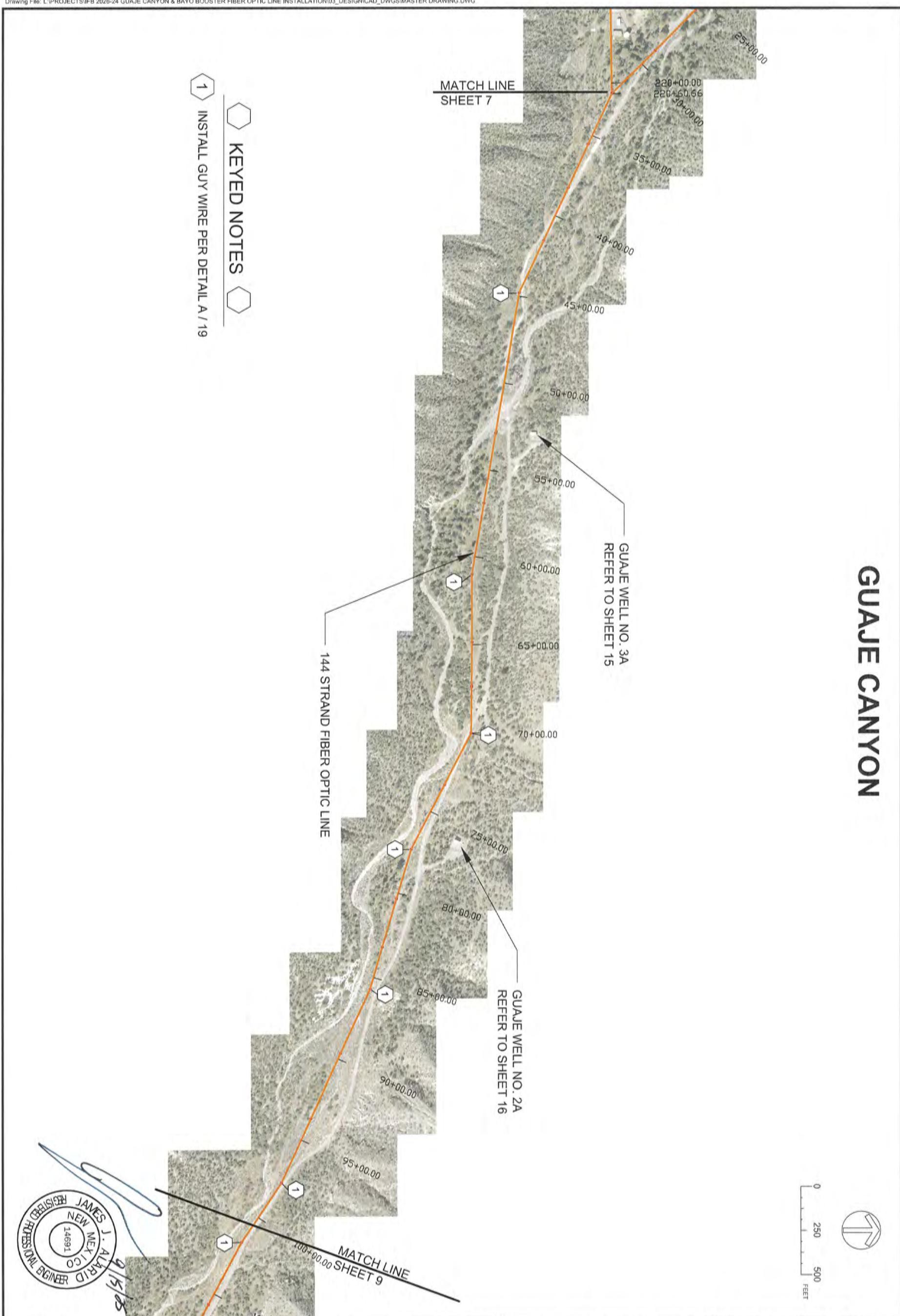
LOS ALAMOS

IFB 26-24
GUAJE CANYON & BAYO BOOSTER
FIBER OPTIC LINE INSTALLATION
RENDIJA STA 150+00
TO STA 220+96

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

NO.	REVISION DESCRIPTION
1	
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GUAJE CANYON



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

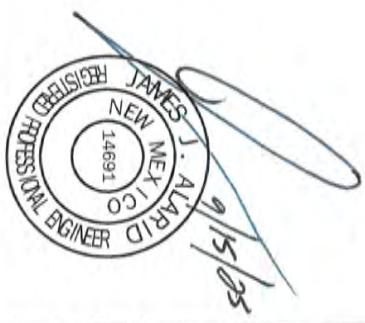
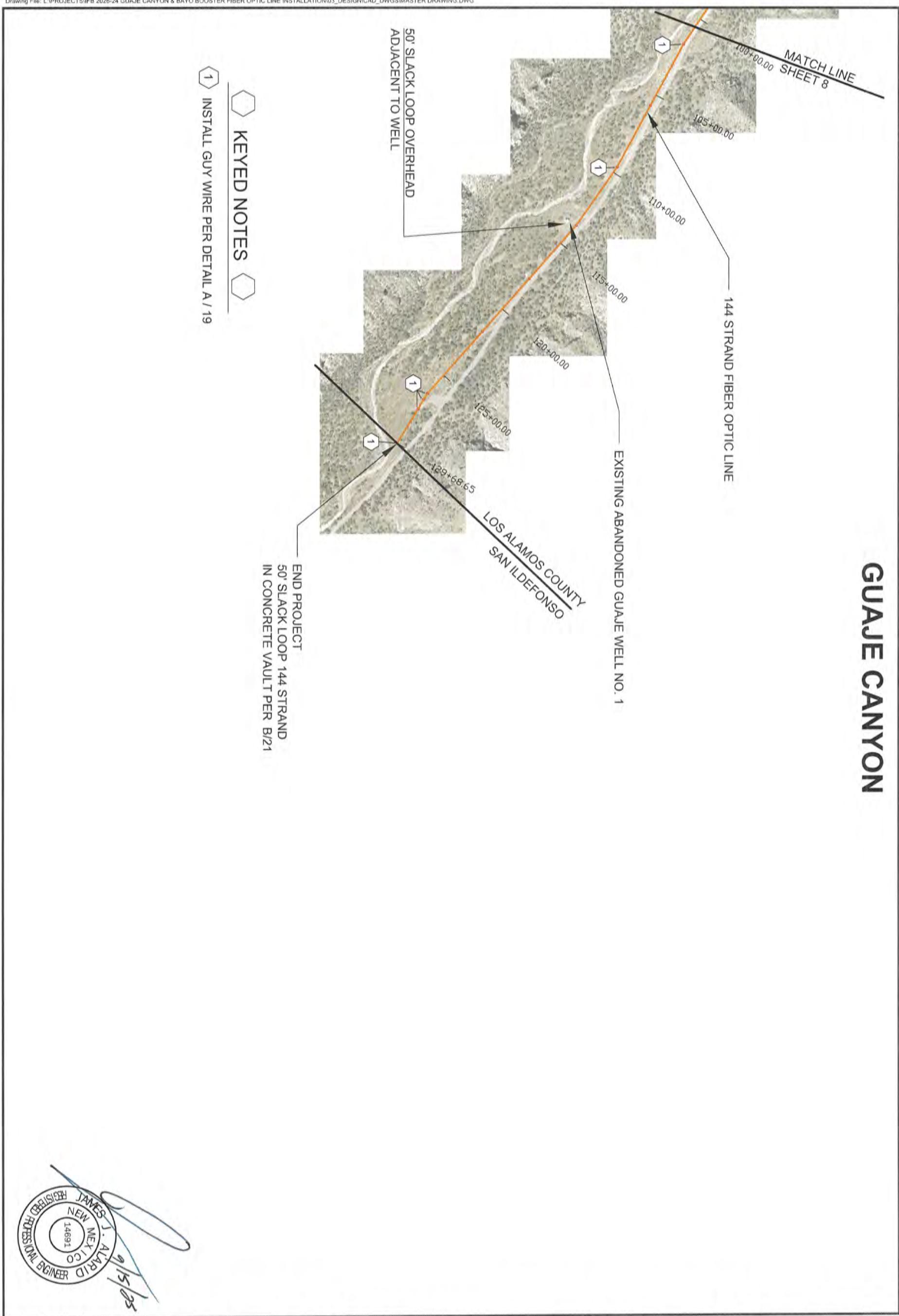


**IFB 26-24
GUAJE CANYON & BAYO BOOSTER
FIBER OPTIC LINE INSTALLATION
GUAJE STA 25+00
TO STA 100+00**

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

NO.	REVISION DESCRIPTION
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GUAJE CANYON



633

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



LOS ALAMOS

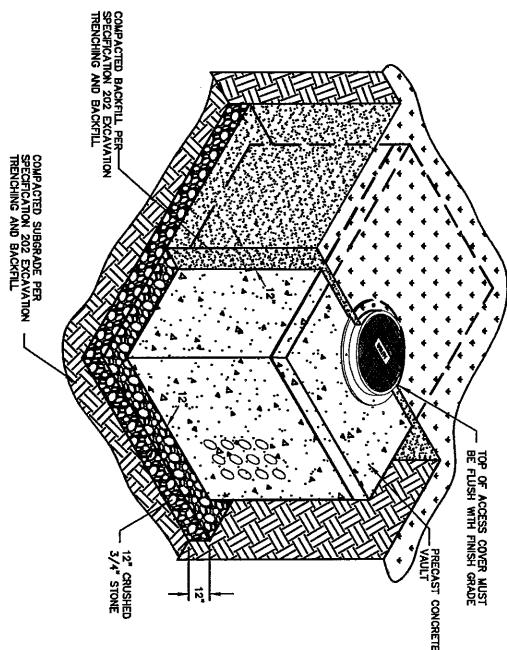
IFB 26-24
GUAJE CANYON & BAYO BOOSTER
FIBER OPTIC LINE INSTALLATION

GUAJE STA 100+00
TO STA 129+68

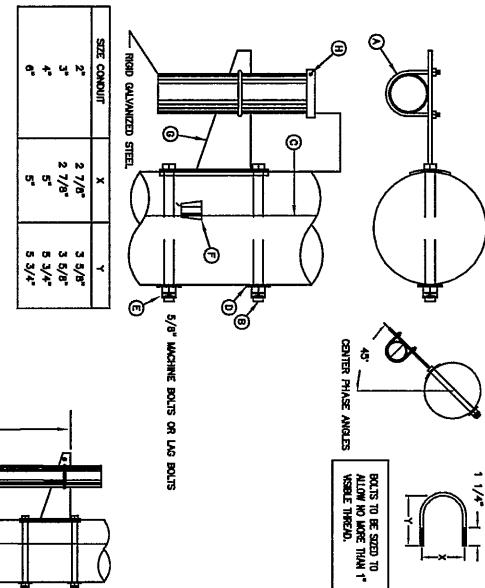
DESIGNED BY: JJA
DRAWN BY: LAM
APPROVED BY: JJA
DATE: 08/13/2025
SCALE: 1" = 500'

NO.	REVISION DESCRIPTION
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NOTES:
 1. SITE OF VAULT AND EXCAVATION DETERMINED PER PLANS AND THE CONDITIONS OF THE SITE AND ROUTING OF CONDUITS.
 2. VAULT EXCAVATION AND BACKFILL TO CONFORM TO REQUIREMENT OF PUBLIC UTILITIES SPECIFICATIONS.
 3. PRECAST CONCRETE VAULTS SHALL CONFORM WITH THE REQUIREMENT OF THE DEPARTMENT OF PUBLIC UTILITIES CONSTRUCTION STANDARDS - SPECIFICATION 401: UNDERGROUND DUCTBANK SYSTEMS.
 4. FIELD CUT BOX AS NEEDED TO RECEIVE CONDUITS.



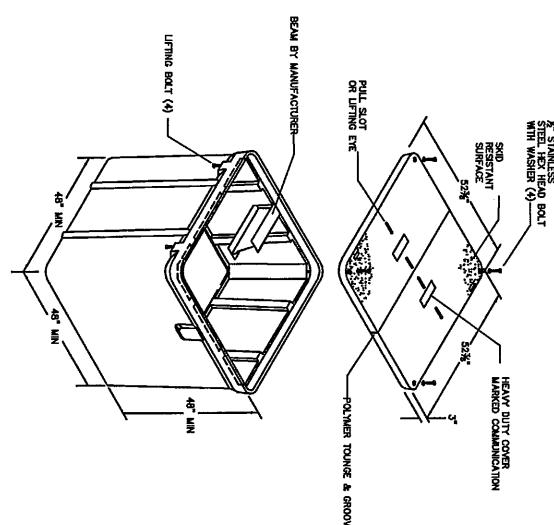
SIZE CONDUIT	X	Y
2"	2 7/8"	3 5/8"
3"	2 7/8"	3 5/8"
4"	5"	5 3/4"
5"	5"	5 3/4"
6"	5"	5 3/4"



A RISER SUPPORT BRACKET

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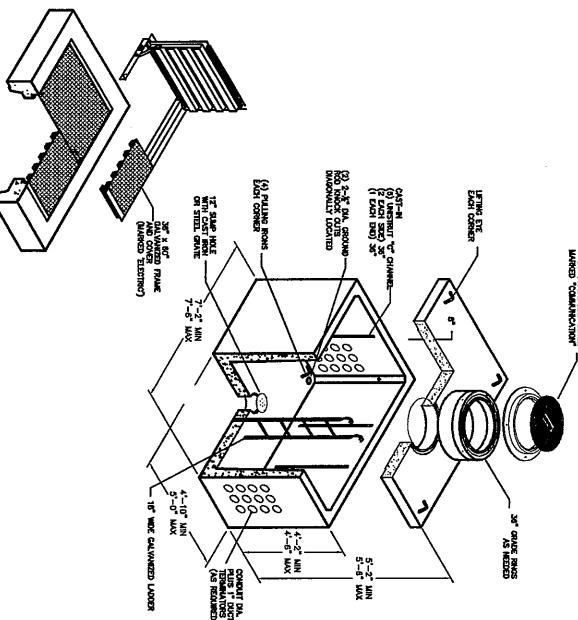
NOTES:
 1. VAULT TO BE USED FOR H-20 TRAFFIC DESIGN LOADING. ALL LIVE LOADS SHALL BE FOR HS-20-44 (HS-18)
 AS PER ASHTO STANDARD SPECIFICATION, DIV. 3.
 2. BURIED SECTION AND EXCAVATION AND BACKFILL TO CONFORM TO LOS ALAMOS COUNTY UTILITY SPECIFICATIONS
 3. BURIED SECTION AND EXCAVATION AND BACKFILL TO CONFORM TO LOS ALAMOS COUNTY UTILITY SPECIFICATIONS
 4. CONDUITS SHALL BE MARKED "COMMUNICATION" AND "FIELD CUT BOX" AS NEEDED TO RECEIVE CONDUITS.
 5. LIDS TO BE MARKED "COMMUNICATION"
 6. ALL HEIGHTS TO BE CLEARLY MARKED
 7. INSTALL GROUNDING AND PROVIDE ATTACHMENT WITHIN VAULT
 8. 2/0 CU GROUNDING GRID IS REQUIRED IN THIS VAULT
 9. DELIVERY OF THE VAULT REQUIRES COORDINATION WITH LOS ALAMOS COUNTY UTILITIES ENGINEERING
 PRECAST CONCRETE VAULTS SHALL CONFORM WITH LOS ALAMOS COUNTY UTILITIES CONSTRUCTION STANDARD,
 SECTION - SPECIFICATION 401: UNDERGROUND DUCTBANK SYSTEMS.
 10. FIELD CUT BOX AS NEEDED TO RECEIVE CONDUITS.



B 6' x 4' x 4' CONCRETE VAULT

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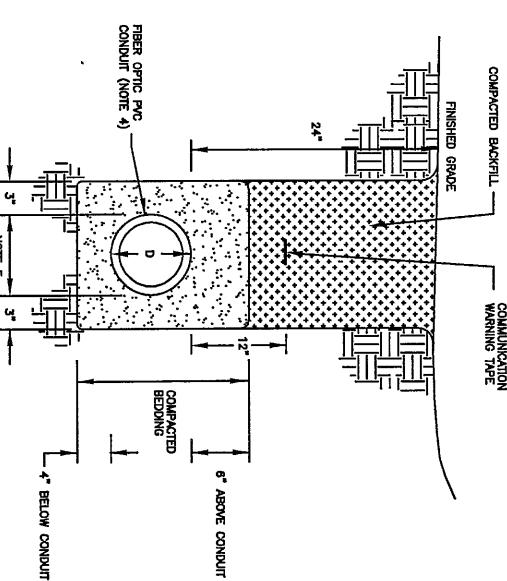
NOTES:
 1) VAULT TO BE USED FOR H-20 TRAFFIC DESIGN LOADING. ALL LIVE LOADS SHALL BE FOR HS-20-44 (HS-18)
 AS PER ASHTO STANDARD SPECIFICATION, DIV. 3.
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 PRECAST CONCRETE VAULTS SHALL CONFORM WITH LOS ALAMOS COUNTY UTILITIES CONSTRUCTION STANDARD,
 SECTION - SPECIFICATION 401: UNDERGROUND DUCTBANK SYSTEMS.
 10) FIELD CUT BOX AS NEEDED TO RECEIVE CONDUITS.



C FIBER OPTIC TRENCH DETAIL

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NOTES:
 1) 95% COMPACTION REQUIRED UNDER PAVED ROADS, SIDEWALK AND CURB, PER LOS ALAMOS COUNTY UTILITIES CONSTRUCTION STANDARD, SECTION - SPECIFICATION 202.
 2) 65% COMPACTION REQUIRED AT ALL LOCATIONS NOT IN NOTE 1, PER LOS ALAMOS COUNTY UTILITIES CONSTRUCTION STANDARD, SECTION - SPECIFICATION 202.
 3) CONDUIT PER LOS ALAMOS COUNTY UTILITIES CONSTRUCTION STANDARD, SECTION - SPECIFICATION 401.
 4) NUMBER OF CONDUITS AS SHOWN ON PLANS.
 5) TRENCH WIDTH SHALL BE DISTANCE FROM OUTSIDE FACE OF OUTER MOST CONDUITS PLUS 6 INCHES.



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

NO.	REVISION DESCRIPTION
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20

D PRE-CAST VAULT INSTALLATION

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

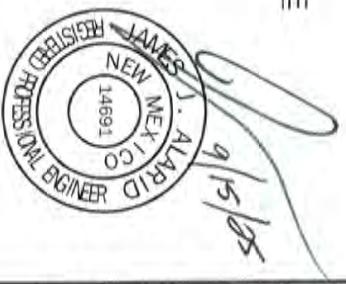
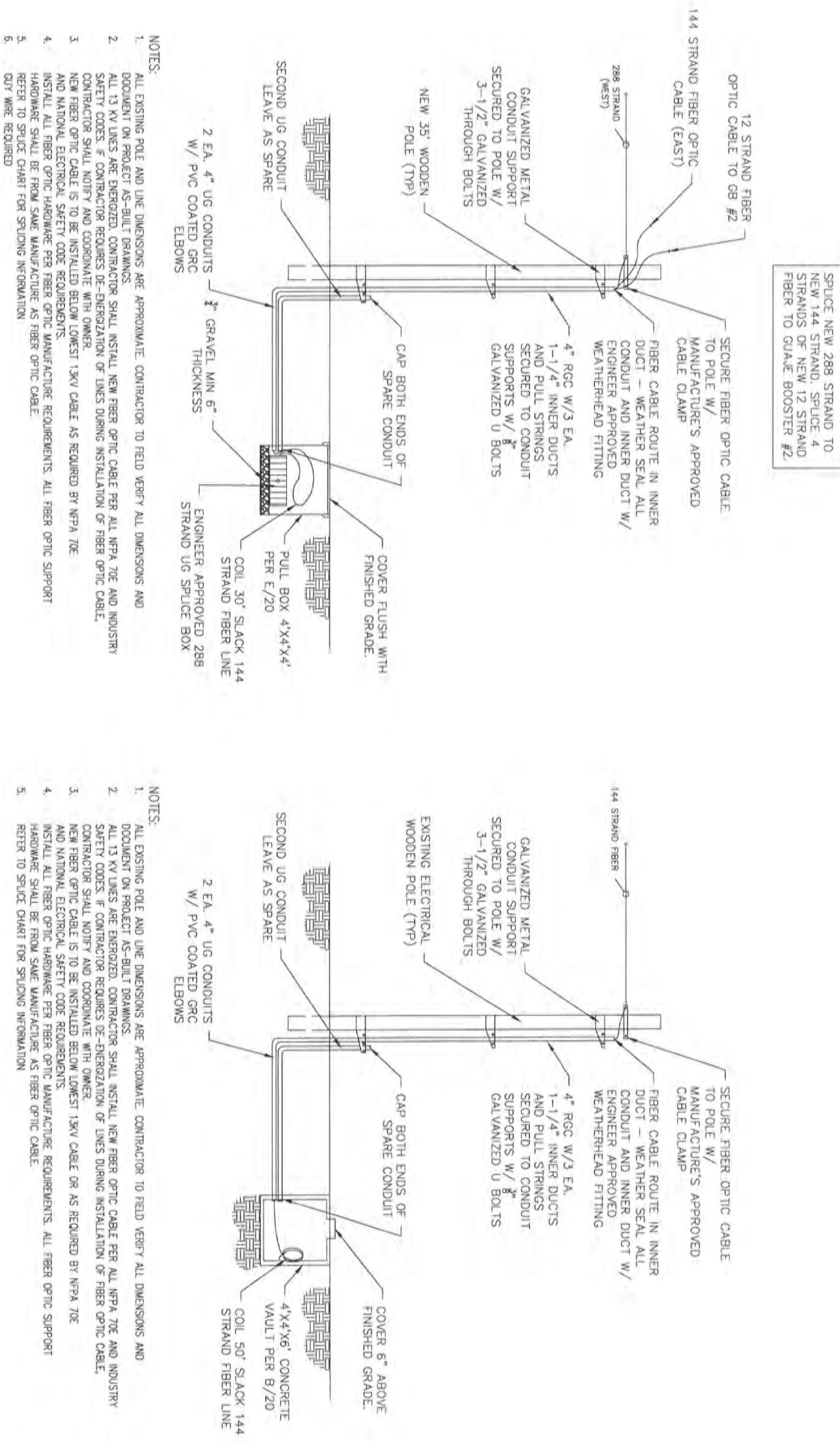
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*James J. Alvarado, PE, CID, N.M. Reg. No. 14691
 Incorporated County of Los Alamos, New Mexico
 Department of Public Utilities
 1000 Central Ave., Suite 130
 Los Alamos, New Mexico 87544
 (505) 662-8333 FAX: (505) 662-8005*



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

Attachment A



INCORPORATED COUNTY
OF LOS ALAMOS
DEPARTMENT OF PUBLIC
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1000 CENTRAL AVE., SUITE 130
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DETAILS SHEET

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SCALE: N/A

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