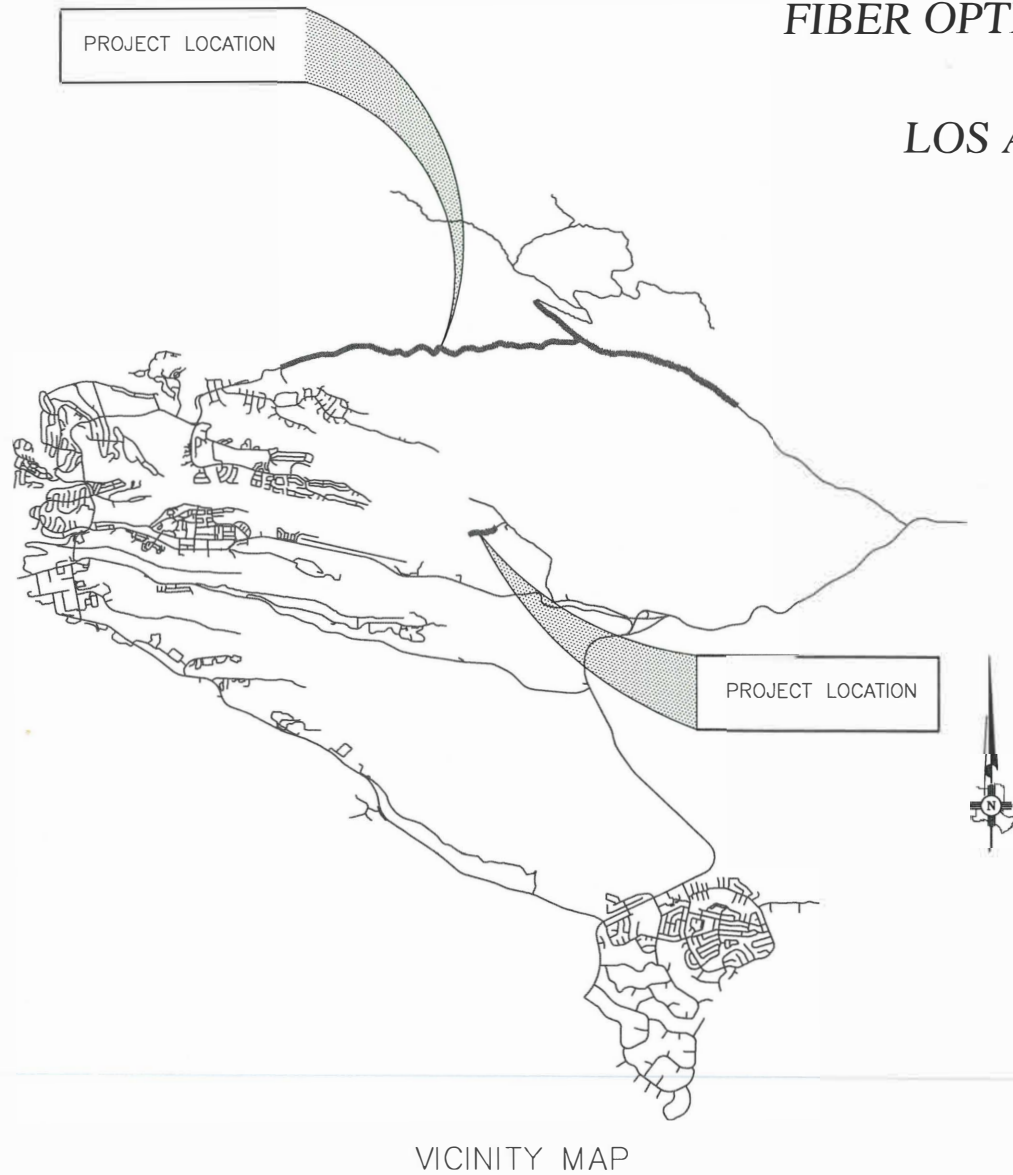


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GUAJE CANYON & BAYO BOOSTER
FIBER OPTIC LINE INSTALLATION
IFB 26-24
LOS ALAMOS COUNTY
DW-6368

SHEET INDEX

- | | |
|-----|---|
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| 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-BOU |
| 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

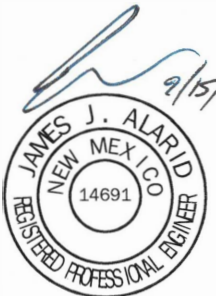
DATE

9/15/25

DEPARTMENT OF PUBLIC UTILITIES
PROJECT MANAGER

DATE

09/15/2025



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



LOS ALAMOS

REVISION DESCRIPTION

NO.

1

2

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4

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DESIGNED BY: JJA

DRAWN BY: LAM

APPROVED BY: JJA

DATE: 08/13/2025

SCALE: N/A

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

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 SPLICE 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

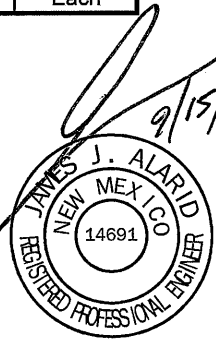
1. APPROXIMATELY 7,400 FEET OF THE WORK WILL TAKE PLACE ON LANDS OWNED BY THE DOE / LANL IN THE AREA OF THE SHOOTING RANGE. REFER TO SHEET 5 AND SHEET 6 OF THE PLAN SET.
2. CONTRACTOR SHALL HAVE A STAFF MEMBER ONSITE AT ALL TIMES WHO HAS COMPLETED THE LANL EXCAVATION SAFETY TRAINING. A LANL BADGE AND 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/v/2/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



REVISION DESCRIPTION

NO.	1	2	3	4	5

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

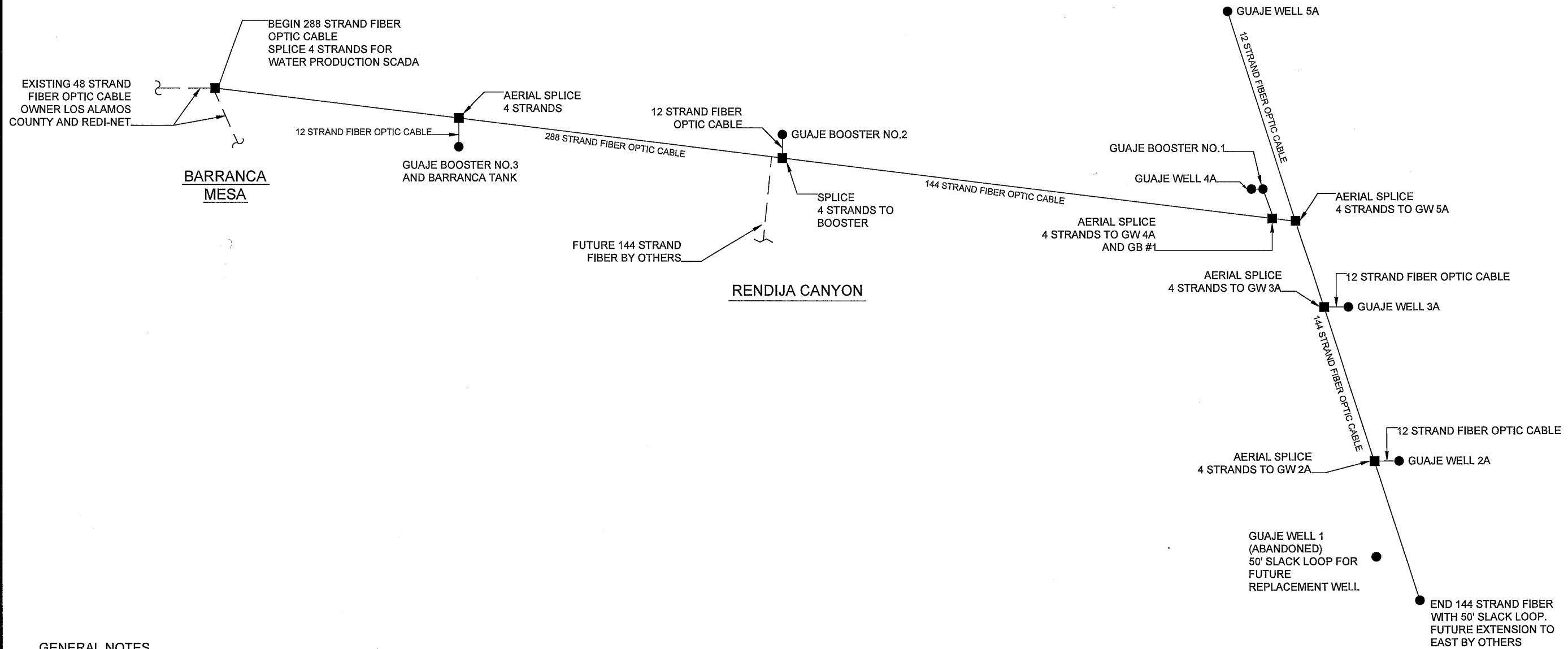
LOS ALAMOS

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

SHEET

2

Drawing File: L:\PROJECTS\IFB 2025-24 GUAJE CANYON & BAYO BOOSTER FIBER OPTIC LINE INSTALLATION\03_DESIGN\CAD_DWG\SUPR_SITE_PLANS\DRAWING1.DWG



GENERAL NOTES

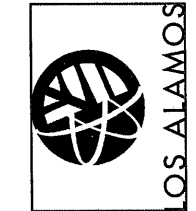
1. EXISTING FIBER OPTIC NETWORK OWNED AND OPERATED BY LOS ALAMOS COUNTY IN PARTNERSHIP WITH REDI-NET.
2. PROJECT WILL PLACE 4 DEDICATED FIBER STRANDS FOR THE WATER PRODUCTION SUPERVISORY CONTROLS AND DATA ACQUISITION SYSTEM (SCADA) OWNED AND OPERATED BY LOS ALAMOS COUNTY DEPARTMENT OF PUBLIC UTILITIES
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.



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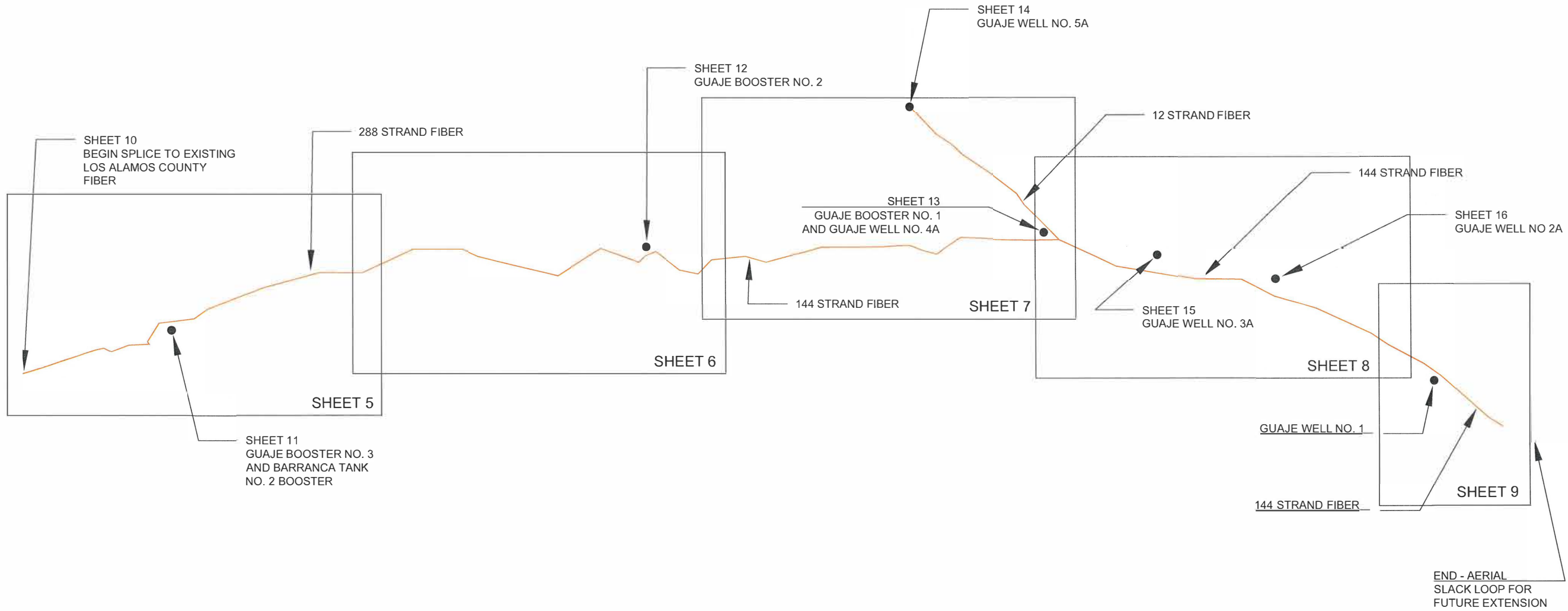
DESIGNED BY: J.J.A.	L.A.M.
DRAWN BY: J.J.A.	
APPROVED BY: J.J.A.	
DATE: 8/14/2025	
SCALE: N/A	

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



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



NOT TO SCALE

9/15/25
JAMES J. ALARID
NEW MEXICO
REGISTERED PROFESSIONAL ENGINEER
14691

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

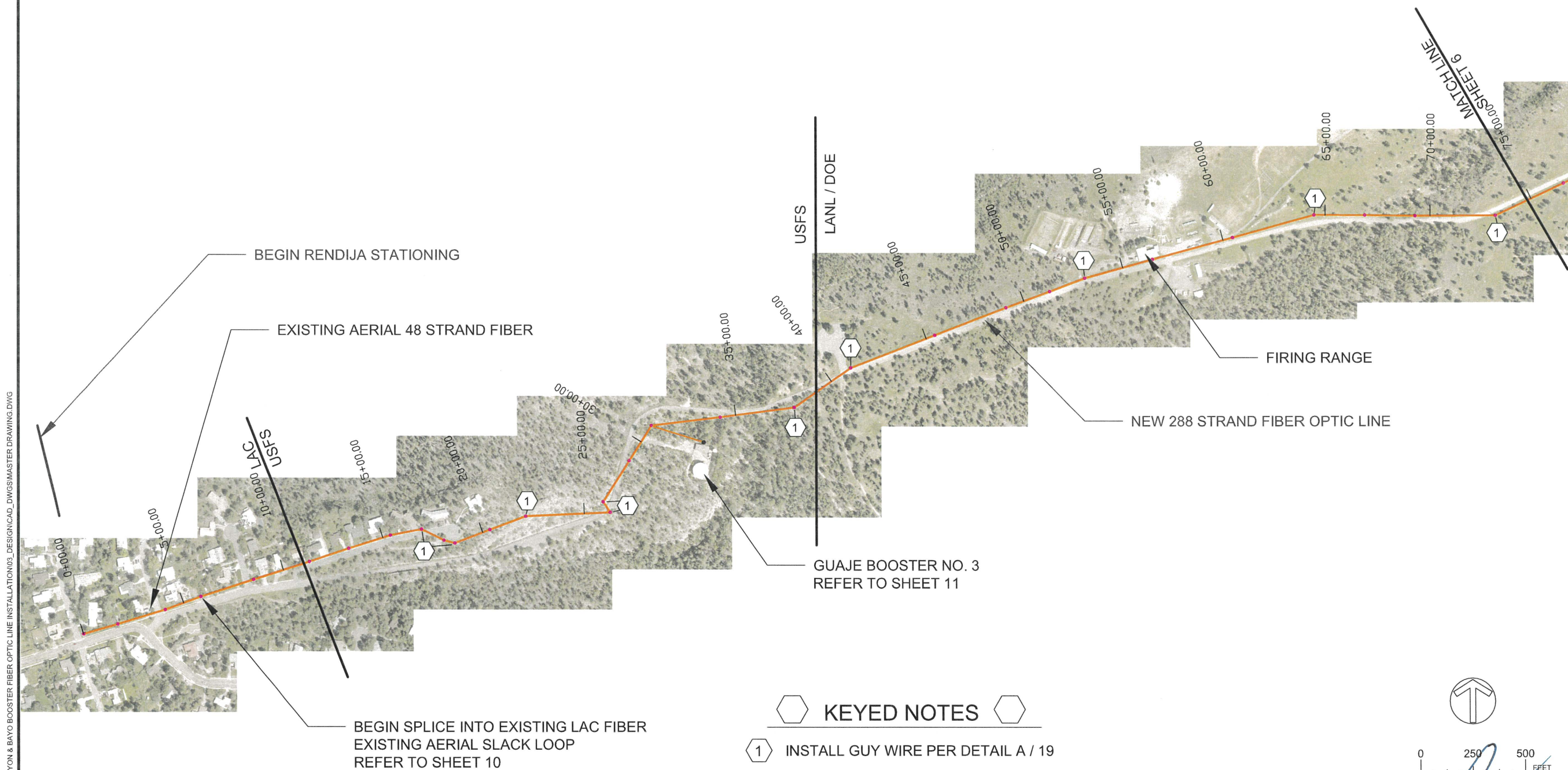
IFB 26-24
GUAJE CANYON & BAYO BOOSTER
FIBER OPTIC LINE INSTALLATION
PLAN SUMMARY SHEET



INCORPORATED COUNTY
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RENDIJA CANYON



- KEYED NOTES**
- 1 INSTALL GUY WIRE PER DETAIL A / 19

0 250 500 FEET

9/15/25

JAMES J. ALARID
NEW MEXICO
14691
REGISTERED PROFESSIONAL ENGINEER

NO.	REVISION DESCRIPTION
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DESIGNED BY: JJA
DRAWN BY: LAM
APPROVED BY: JJA
DATE: 08/13/2025
SCALE: 1" = 500'

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

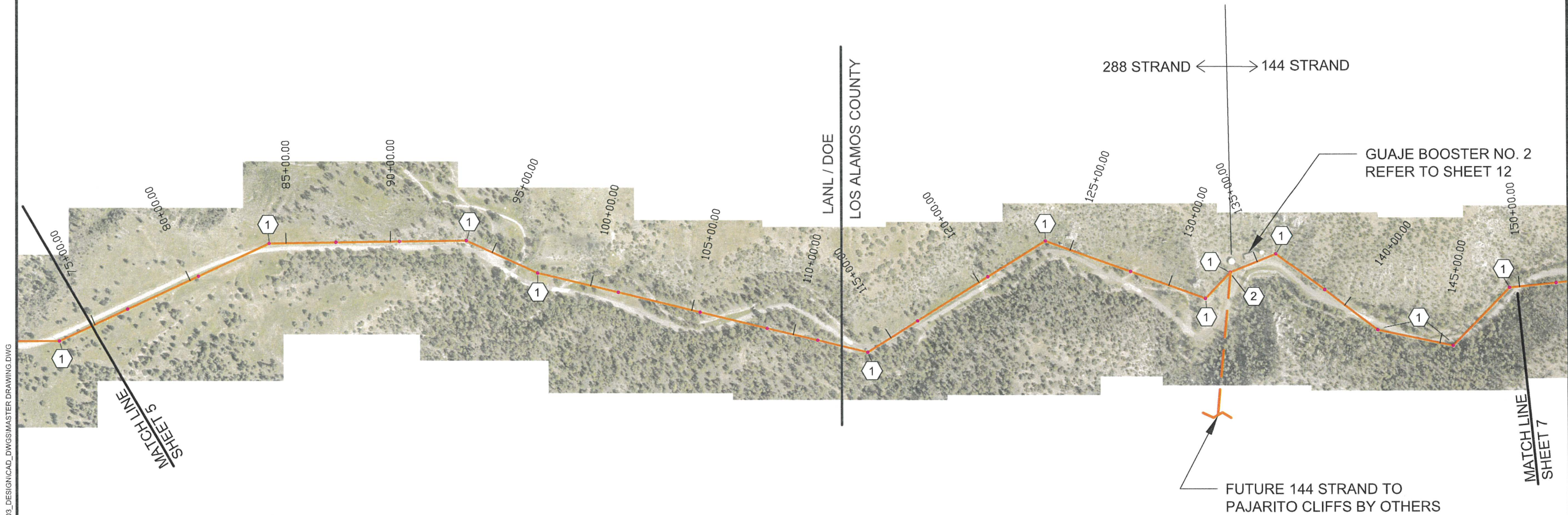
RENDIJA STA 0 + 00
TO STA 75 + 00



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

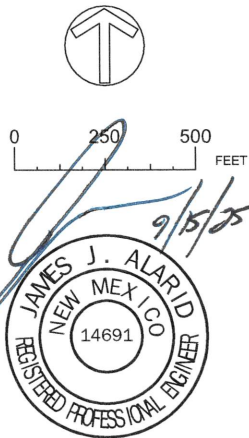
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RENDIJA CANYON



KEYED NOTES

- 1 INSTALL GUY WIRE PER DETAIL A / 19
- 2 SPLICE LOCATION FOR NEW 288 STRAND FIBER OPTIC (WEST), 144 STRAND FIBER OPTIC (EAST), AND FUTURE 144 STRAND (SOUTH).



NO.	REVISION DESCRIPTION
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DESIGNED BY: JJA	LAM
DRAWN BY: JJA	LAM
APPROVED BY: JJA	LAM
DATE: 08/13/2025	
SCALE: 1" = 500'	

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

SHEET 6

Drawing File: L:\PROJECTS\IFB 2025-24 GUAJE CANYON & BAYO BOOSTER FIBER OPTIC LINE INSTALLATION\03_DESIGN\CAD_DWG\MASTER DRAWING.DWG

RENDIJA CANYON

GUAJE WELL NO. 5
REFER TO SHEET 14

BEGIN GUAJE CANYON STATIONING

12 STRAND FIBER OPTIC LINE

144 STRAND FIBER OPTIC LINE

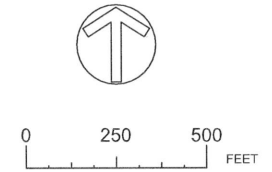
GUAJE BOOSTER NO. 1
AND GUAJE WELL NO. 4A
REFER TO SHEET 13

END RENDIJA CANYON STATIONING
STA 220+96

144 STRAND FIBER OPTIC LINE

KEYED NOTES

1 INSTALL GUY WIRE PER DETAIL A / 19



MATCH LINE
SHEET 6

NO.	REVISION DESCRIPTION
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DESIGNED BY: JJA
DRAWN BY: LAM
APPROVED BY: JJA
DATE: 08/13/2025
SCALE: 1" = 500'

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



LOS ALAMOS

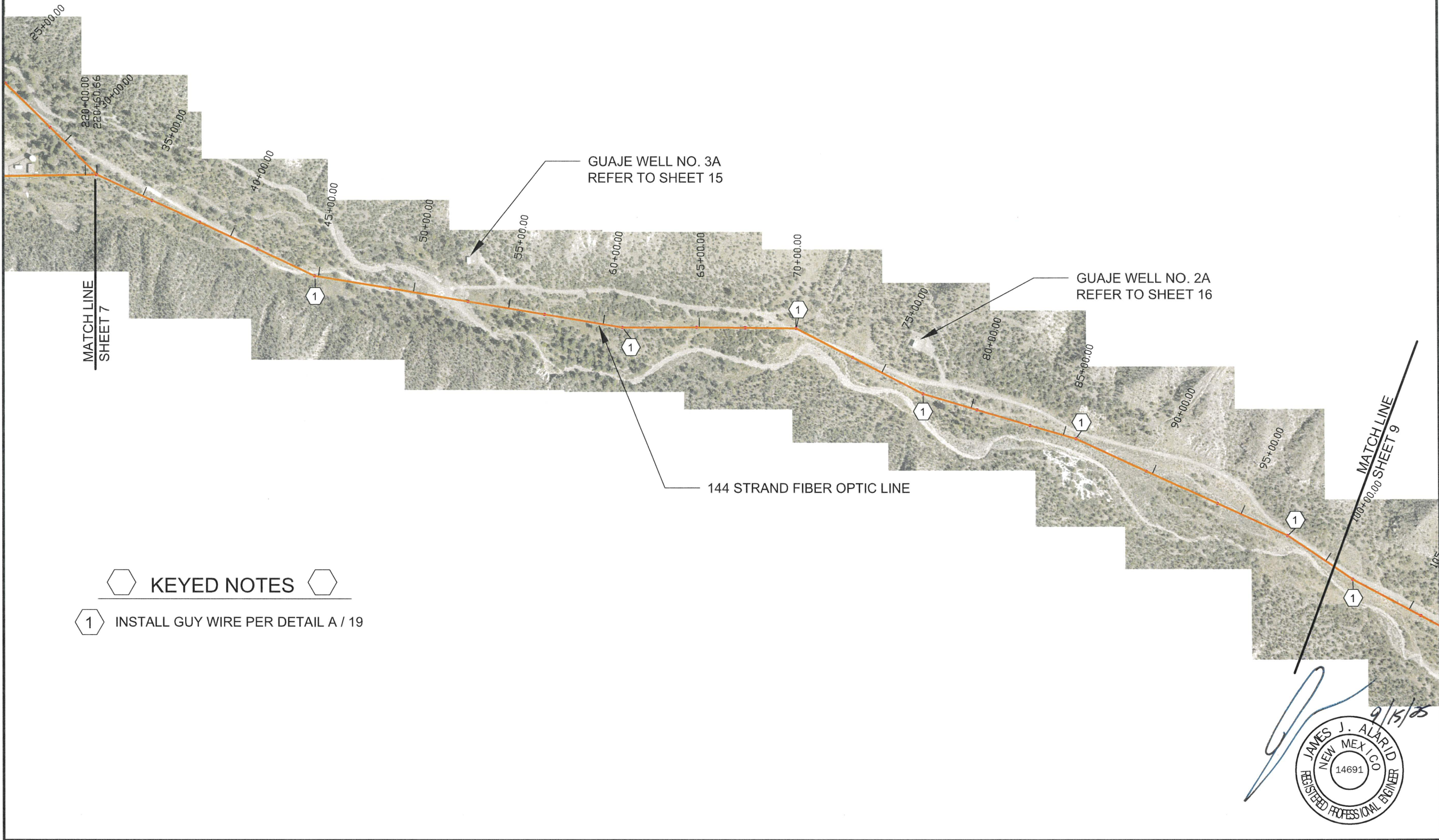
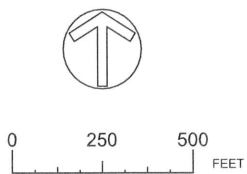
INCORPORATED COUNTY
OF LOS ALAMOS
DEPARTMENT OF PUBLIC
UTILITIES
1000 CENTRAL AVE., SUITE 130
LOS ALAMOS, NEW MEXICO 87544
(505) 662-8333 FAX: (505) 662-8005



SHEET
7

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

GUAJE CANYON



KEYED NOTES

- 1 INSTALL GUY WIRE PER DETAIL A / 19

NO.	REVISION DESCRIPTION
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DESIGNED BY: JJA	LAM
DRAWN BY: JJA	LAM
APPROVED BY: JJA	LAM
DATE: 08/13/2025	
SCALE: 1" = 500'	

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

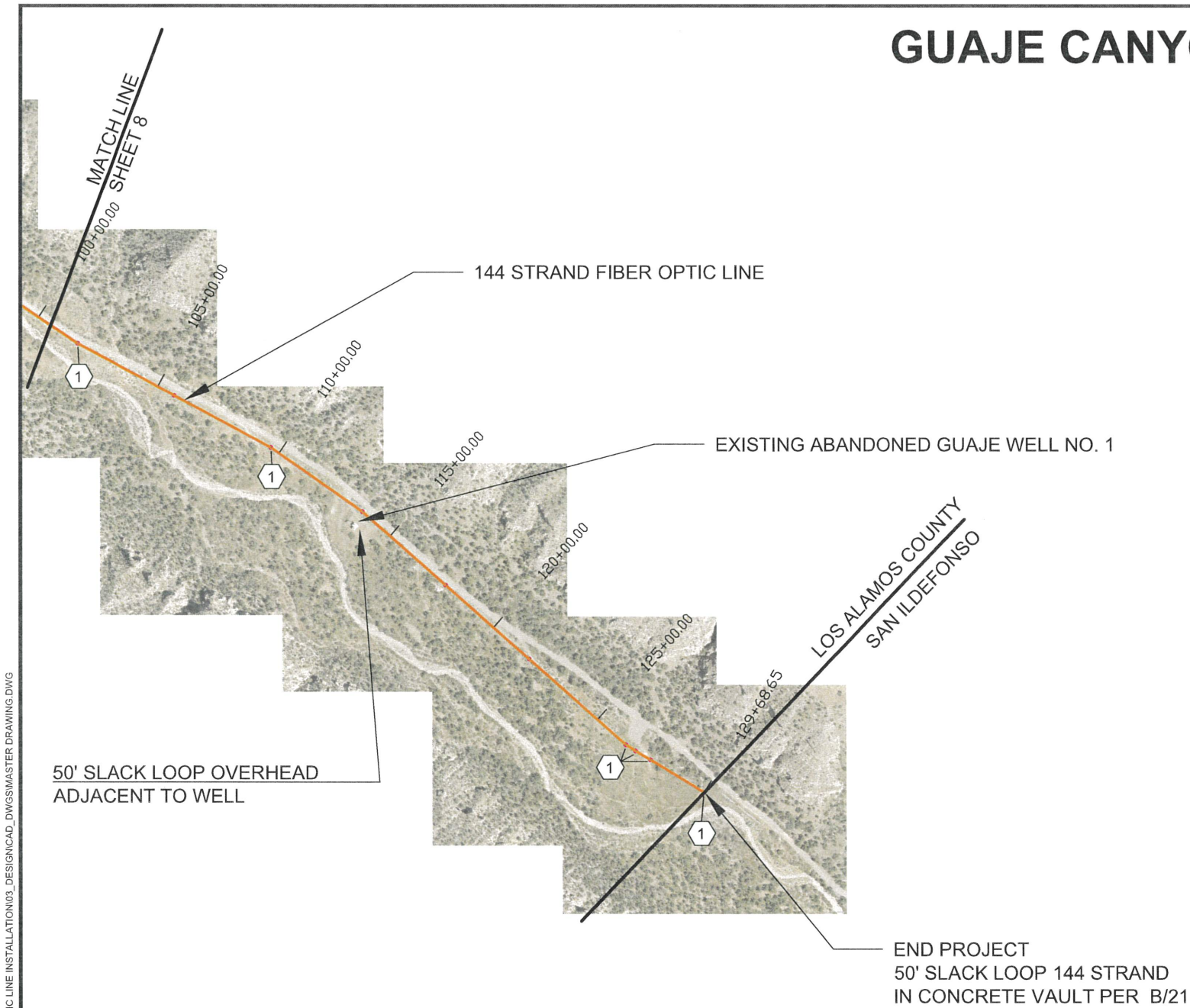


SHEET

8

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

GUAJE CANYON



- KEYED NOTES**
- 1 INSTALL GUY WIRE PER DETAIL A / 19

[Signature]
9/15/25
JAMES J. ALARID
NEW MEXICO
REGISTERED PROFESSIONAL ENGINEER
14691

NO.	REVISION DESCRIPTION
1	
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DESIGNED BY: JJA
DRAWN BY: LAM
APPROVED BY: JJA
DATE: 08/13/2025
SCALE: 1" = 500'

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

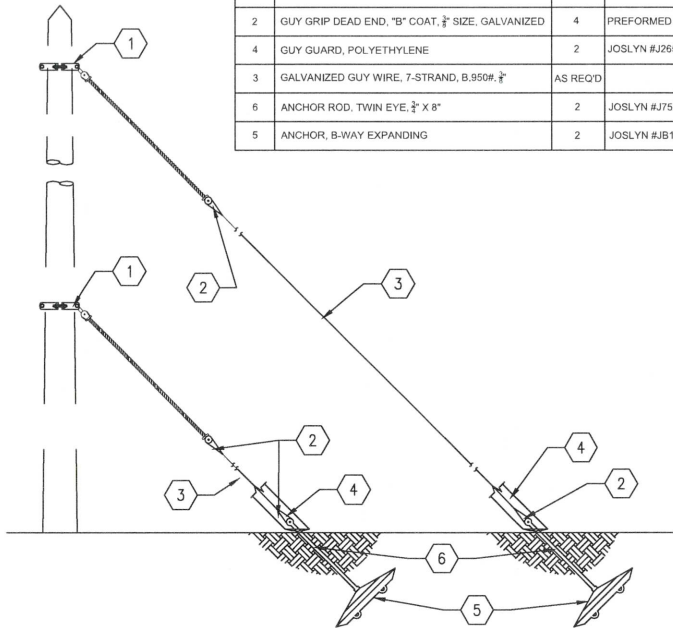
GUAJE STA 100+00
TO STA 129+68



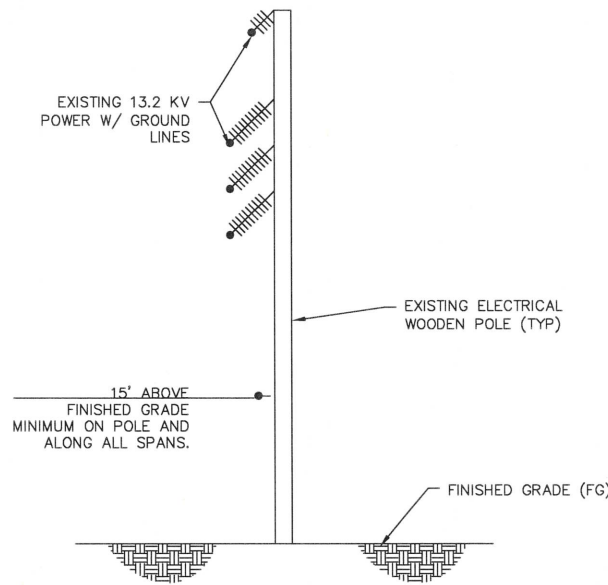
INCORPORATED COUNTY
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1000 CENTRAL AVE., SUITE 130
LOS ALAMOS, NEW MEXICO 87544
(505) 662-8333 FAX: (505) 662-8005

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BILL OF MATERIALS			
ITEM	DESCRIPTION	QTY	MFR. CATALOG NO.
1	CONNECTING LINK	2	HUGHES #3170
2	GUY GRIP DEAD END, "B" COAT, 3/8" SIZE, GALVANIZED	4	PREFORMED # CDE3115
4	GUY GUARD, POLYETHYLENE	2	JOSLYN #J26520-BY
3	GALVANIZED GUY WIRE, 7-STRAND, B.950H, 3/8"	AS REQ'D	
6	ANCHOR ROD, TWIN EYE, 3/8" X 8"	2	JOSLYN #J7528
5	ANCHOR, B-WAY EXPANDING	2	JOSLYN #JB135

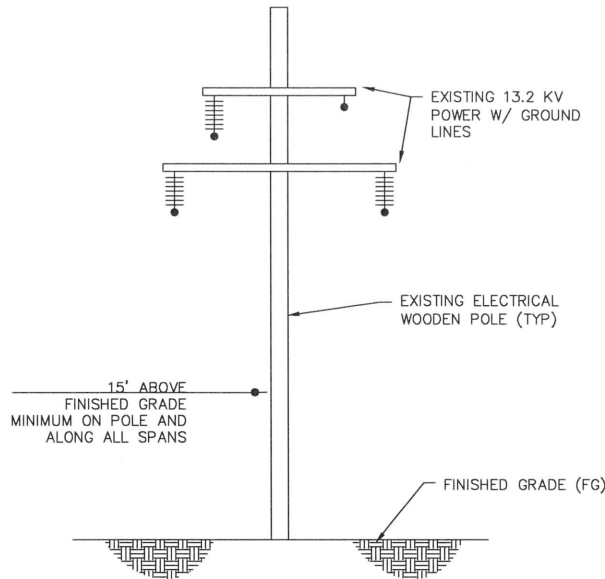


A GUY WIRE DETAIL

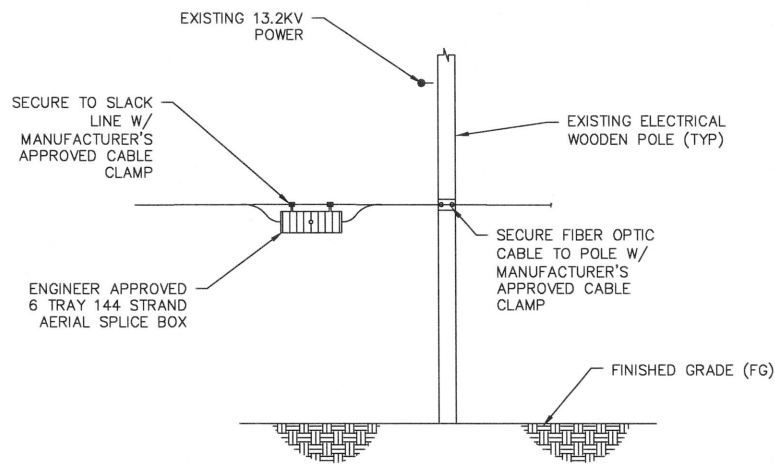


D FIBER OPTIC PLACEMENT - TYPE 2

- NOTES:
- ALL EXISTING POLE AND LINE DIMENSIONS ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND DOCUMENT ON PROJECT AS-BUILT DRAWINGS.
 - 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.
 - NEW FIBER OPTIC CABLE IS TO BE INSTALLED BELOW LOWEST 13KV CABLE AS REQUIRED BY NFPA 70E AND NATIONAL ELECTRICAL SAFETY CODE REQUIREMENTS.
 - INSTALL ALL FIBER OPTIC HARDWARE PER FIBER OPTIC MANUFACTURE REQUIREMENTS. ALL FIBER OPTIC SUPPORT HARDWARE SHALL BE FROM SAME MANUFACTURE AS FIBER OPTIC CABLE.

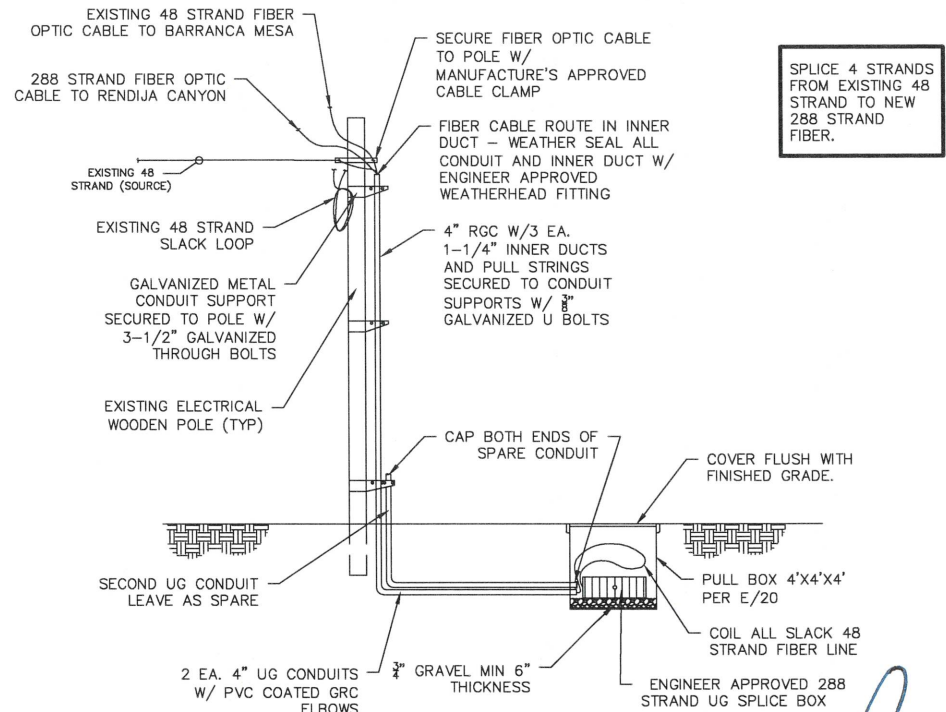


B FIBER OPTIC PLACEMENT - TYPE 1



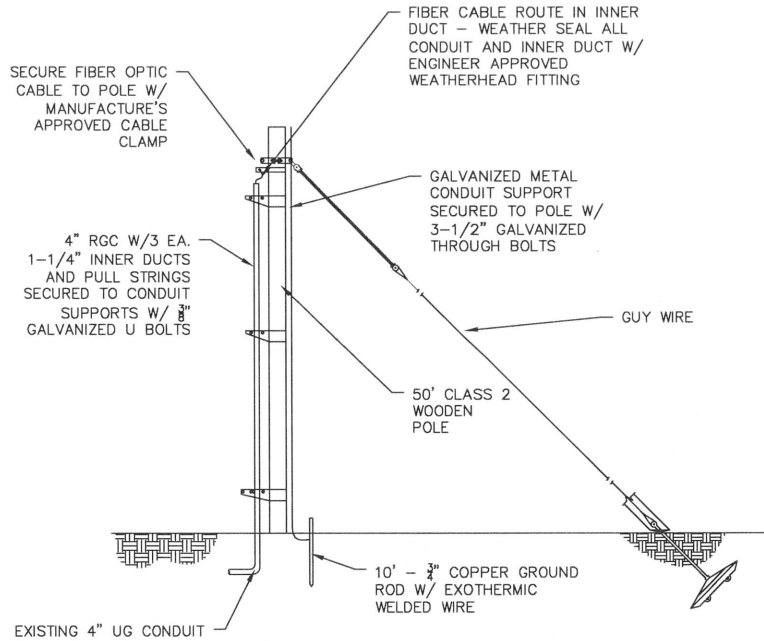
E AERIAL SPLICE BOX

- NOTES:
- ALL EXISTING POLE AND LINE DIMENSIONS ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND DOCUMENT ON PROJECT AS-BUILT DRAWINGS.
 - 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.
 - NEW FIBER OPTIC CABLE IS TO BE INSTALLED BELOW LOWEST 13KV CABLE AS REQUIRED BY NFPA 70E AND NATIONAL ELECTRICAL SAFETY CODE REQUIREMENTS.
 - INSTALL ALL FIBER OPTIC HARDWARE PER FIBER OPTIC MANUFACTURE REQUIREMENTS. ALL FIBER OPTIC SUPPORT HARDWARE SHALL BE FROM SAME MANUFACTURE AS FIBER OPTIC CABLE.



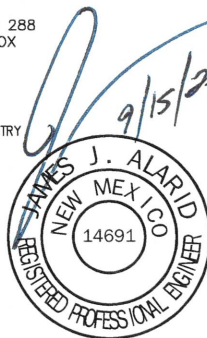
- NOTES:
- ALL EXISTING POLE AND LINE DIMENSIONS ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS AND DOCUMENT ON PROJECT AS-BUILT DRAWINGS.
 - ALL 13 KV LINES ARE ENERGIZED. CONTRACTOR SHALL INSTALL NEW FIBER OPTIC CABLE PER ALL NFPA 70E AND INDUSTRY SAFETY CODES. IF CONTRACTOR REQUIRES DE-ENERGIZATION OF LINES DURING INSTALLATION OF FIBER OPTIC CABLE, CONTRACTOR SHALL NOTIFY AND COORDINATE WITH OWNER.
 - NEW FIBER OPTIC CABLE IS TO BE INSTALLED BELOW LOWEST 13KV CABLE OR AS REQUIRED BY NFPA 70E AND NATIONAL ELECTRICAL SAFETY CODE REQUIREMENTS.
 - INSTALL ALL FIBER OPTIC HARDWARE PER FIBER OPTIC MANUFACTURE REQUIREMENTS. ALL FIBER OPTIC SUPPORT HARDWARE SHALL BE FROM SAME MANUFACTURE AS FIBER OPTIC CABLE.
 - REFER TO SPLICE CHART FOR SPLICING INFORMATION

F SPLICE LOCATION BARRANCA MESA



C OVERHEAD TO UNDERGROUND TRANSITION

SPLICE 4 STRANDS FROM EXISTING 48 STRAND TO NEW 288 STRAND FIBER.



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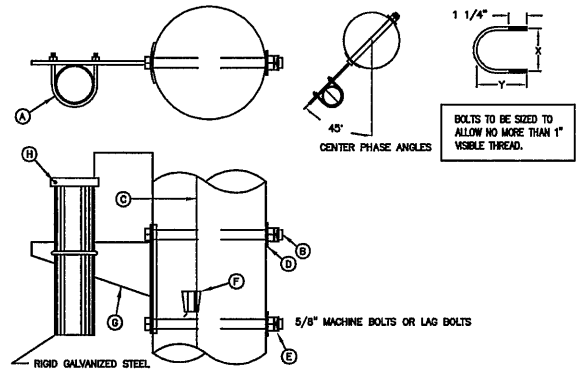
DESIGNED BY:	JJA
DRAWN BY:	LAM
APPROVED BY:	JJA
DATE:	08/13/2025
SCALE:	N/A

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



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

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



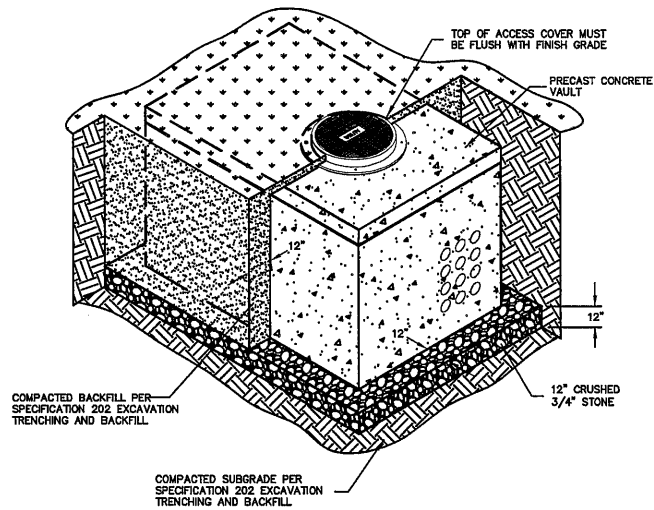
SIZE CONDUIT	X	Y
2"	2 7/8"	3 5/8"
3"	2 7/8"	3 5/8"
4"	5"	5 3/4"
6"	5"	5 3/4"

MATERIAL LIST		
ITEM	QUAN.	DESCRIPTION
A	1	U BOLT
B	2	5/8" MACHINE BOLTS OR LAG BOLTS
C		#4 SOLID CU WIRE
D	2	2 1/4" SQUARE WASHER
E	2	5/8" MF LOCKNUT
F	1	LINE TAP
G	1	SUPPORT BRACKET
H	1	GROUNDING LUG- GROUND AT RISER CAP

- NOTES:
- BRACKET TO BE FASTENED TO POLE WITH 5/8" GALVANIZED MACHINE BOLTS.
 - BRACKET SUITABLE FOR TWO 2", OR ONE 3" TO 6" CONDUIT.
 - TWO HOLE STRAPS ATTACHED AT 30" INTERVALS WITH 2" LAG SCREW MAY BE USED INSTEAD OF THE SUPPORT BRACKET WHEN THE CONDUIT IS 1" OR LESS. A MAXIMUM OF TWO CONDUITS MAY BE STRAPPED DIRECTLY TO THE POLE. MULTIPLE CONDUITS MUST BE ON SAME POLE QUADRANT.
 - BRACKET MAY BE FASTENED WITH LAG BOLTS

A
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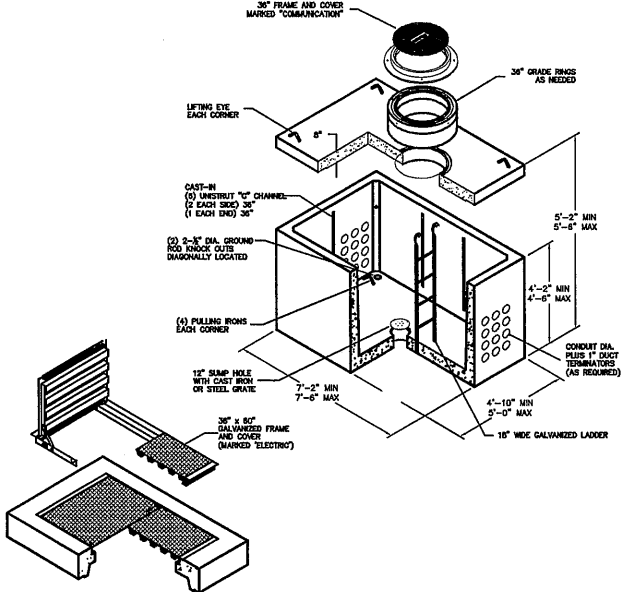
RISER SUPPORT BRACKET



- NOTES:
- SIZE OF VAULT AND EXCAVATION DETERMINED PER PLANS AND THE CONDITIONS OF THE SITE AND ROUTING OF CONDUITS.
 - VAULT EXCAVATION AND BACKFILL TO CONFORM TO DEPARTMENT OF PUBLIC UTILITIES SPECIFICATIONS.
 - PRECAST CONCRETE VAULTS SHALL COMPLY WITH DEPARTMENT OF PUBLIC UTILITIES CONSTRUCTION STANDARDS - SPECIFICATION 401, UNDERGROUND DUCT/BANK SYSTEMS.

D
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PRE-CAST VAULT INSTALLATION

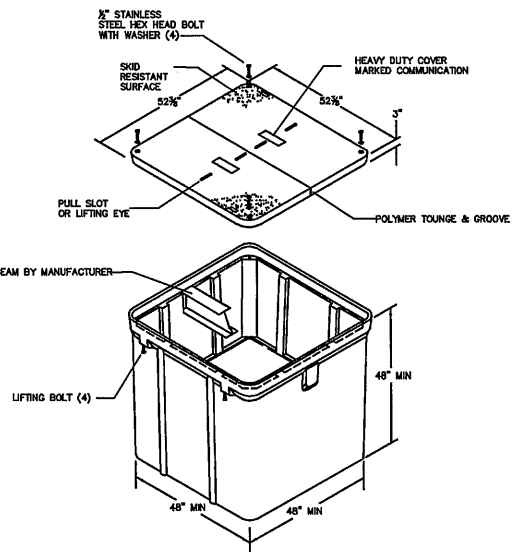


VAULT CONSTRUCTION NOTES

- VAULT TO BE USED FOR H-20 TRAFFIC DESIGN LOADING. ALL LIVE LOADS SHALL BE FOR HS-20-44 (MS-18) AS PER AASHTO STANDARD SPECIFICATION, DIV 1, SEC. 3.
- VAULT EXCAVATION AND BACKFILL TO CONFORM TO LOS ALAMOS COUNTY UTILITIES SPECIFICATIONS.
- BUTYL RUBBER OR NEOPRENE GASKET SEAL REQUIRED BETWEEN VAULT SECTION AND OR EXTENSIONS.
- UNISTRUT OR 1/2" INSERTS WILL BE CAST INTO VAULT WALL.
- IDS TO BE MARKED "COMMUNICATION"
- ALL WEIGHTS TO BE CLEARLY MARKED
- INSTALL GROUNDING AND PROVIDE ATTACHMENT WITHIN VAULT
- 2/0 CU GROUNDING GRID IS REQUIRED IN THIS VAULT
- DELIVERY OF THE VAULT REQUIRES COORDINATION WITH LOS ALAMOS COUNTY UTILITIES ENGINEERING
- PRECAST CONCRETE VAULTS SHALL COMPLY WITH LOS ALAMOS COUNTY UTILITIES CONSTRUCTION STANDARD, SECTION - SPECIFICATION 401, UNDERGROUND DUCT/BANK SYSTEMS.
- FIELD CUT BOX AS NEEDED TO RECEIVE CONDUITS.

B
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6' x 4' x 4' CONCRETE VAULT

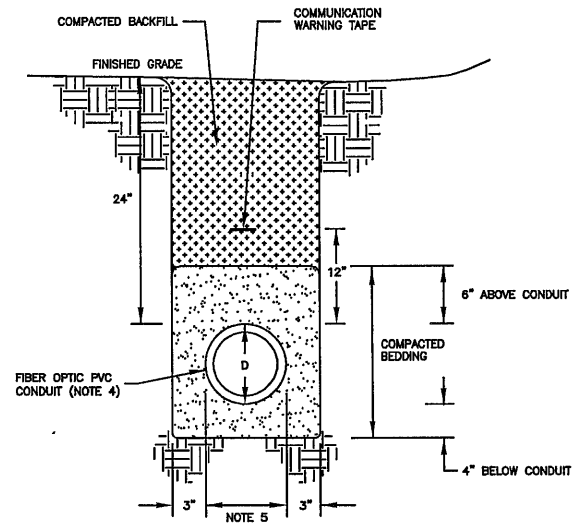


VAULT CONSTRUCTION NOTES

- VAULT TO BE USED FOR H-20 TRAFFIC DESIGN LOADING. ALL LIVE LOADS SHALL BE FOR HS-20-44 (MS-18) AS PER AASHTO STANDARD SPECIFICATION, DIV 1, SEC. 3.
- VAULT EXCAVATION AND BACKFILL TO CONFORM TO LOS ALAMOS COUNTY UTILITIES SPECIFICATIONS.
- BUTYL RUBBER OR NEOPRENE GASKET SEAL REQUIRED BETWEEN VAULT SECTION AND OR EXTENSIONS.
- IDS TO BE MARKED "COMMUNICATION"
- ALL WEIGHTS TO BE CLEARLY MARKED
- DELIVERY OF THE VAULT REQUIRES COORDINATION WITH LOS ALAMOS COUNTY UTILITIES ENGINEERING
- POLYMER CONCRETE VAULTS SHALL COMPLY WITH LOS ALAMOS COUNTY UTILITIES CONSTRUCTION STANDARD, SECTION - SPECIFICATION 401, UNDERGROUND DUCT/BANK SYSTEMS.
- FIELD CUT BOX AS NEEDED TO RECEIVE CONDUITS.

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



NOTES:

- 95% COMPACTION REQUIRED UNDER PAVED ROADS, SIDEWALK AND CURB, PER LOS ALAMOS COUNTY UTILITIES CONSTRUCTION STANDARD, SECTION - SPECIFICATION 202.
- 85% COMPACTION REQUIRED AT ALL LOCATIONS NOT IN NOTE 1, PER LOS ALAMOS COUNTY UTILITIES CONSTRUCTION STANDARD, SECTION - SPECIFICATION 202.
- CONDUIT PER LOS ALAMOS COUNTY UTILITIES CONSTRUCTION STANDARD, SECTION - SPECIFICATION 401.
- NUMBER OF CONDUITS AS SHOWN ON PLANS.
- TRENCH WIDTH SHALL BE DISTANCE FROM OUTSIDE FACE OF OUTER MOST CONDUITS PLUS 8 INCHES.

C
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FIBER OPTIC TRENCH DETAIL



REVISION DESCRIPTION	
NO.	
1	
2	
3	
4	
5	

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

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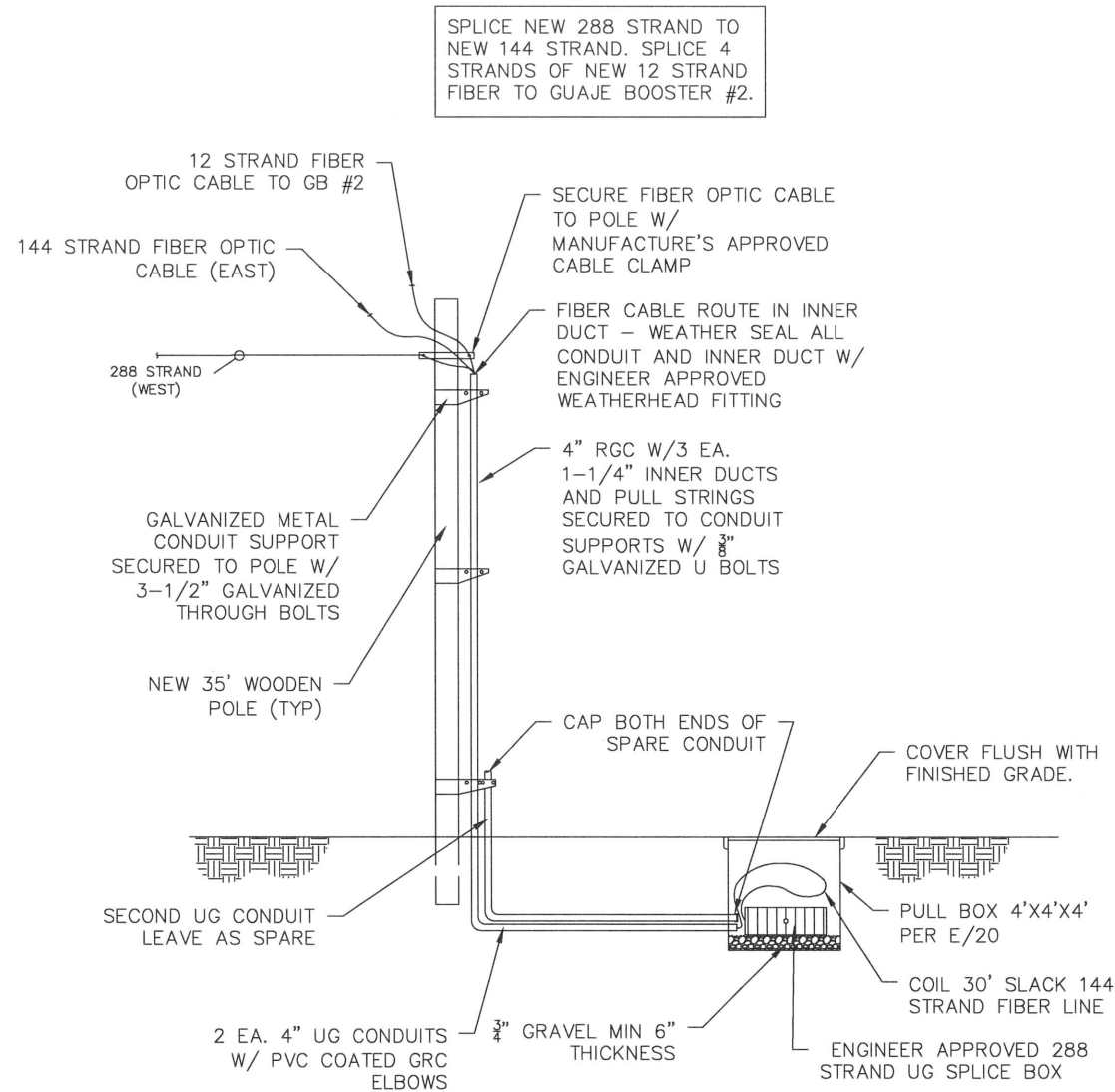
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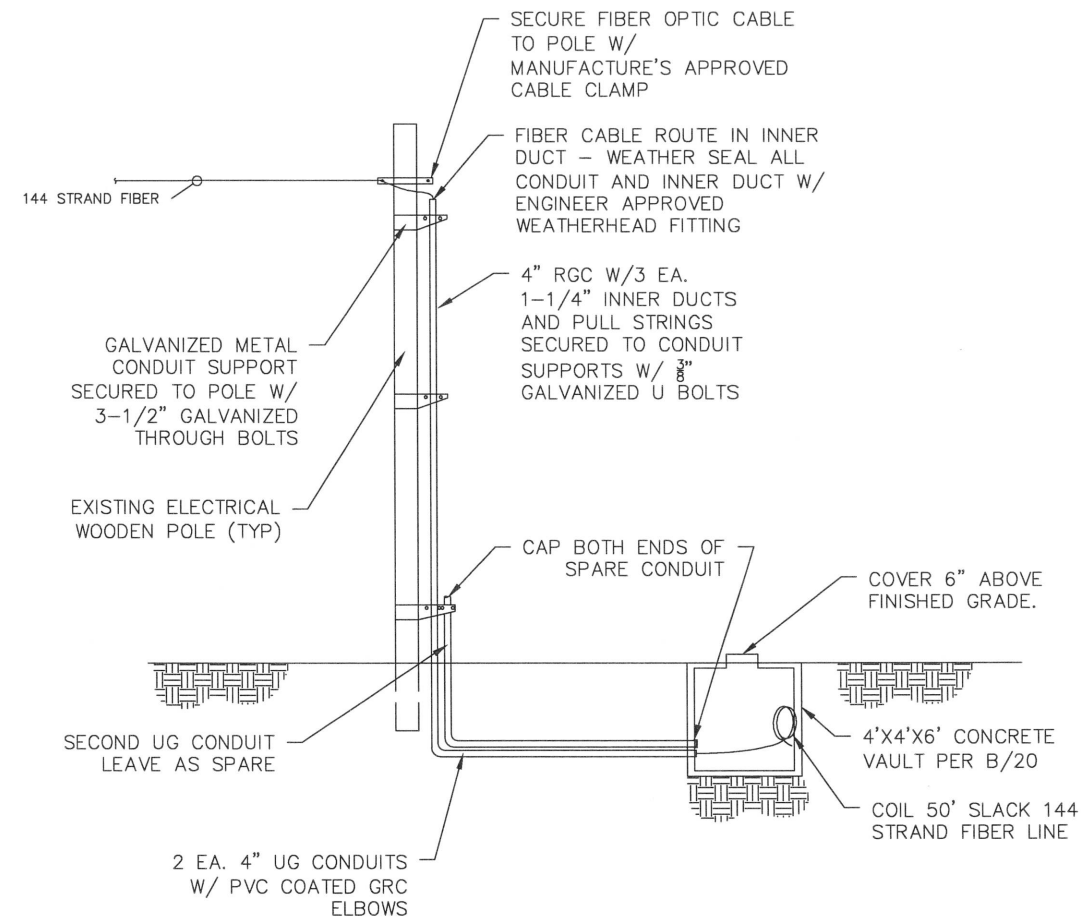


NOTES:

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.
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 SPLICE CHART FOR SPLICING INFORMATION
6. GUY WIRE REQUIRED

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

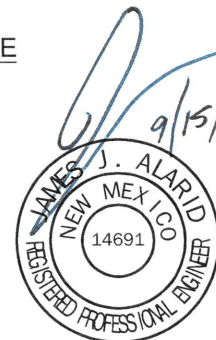


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5. REFER TO SPLICE CHART FOR SPLICING INFORMATION

B
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END 144 STRAND FIBER AT SAN ILDEFONSO PROPERTY LINE



REVISION DESCRIPTION					
NO.	1	2	3	4	5

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