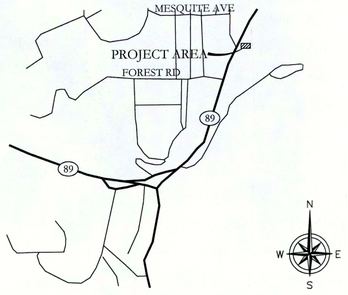
T-Mobile

ORCHARDS INN
PH37650A
254 N. STATE ROUTE 89A
SEDONA, ARIZONA 86336
COCONINO COUNTY

SITE DIRECTIONS

DEPART 2625 S PLAZA DR, TEMPE, AZ 85282 ON S PLAZA DR (EAST). TURN LEFT (NORTH) ONTO S PRIEST DR. TURN LEFT (WEST) ONTO W BROADWAY RD. TAKE RAMP (RIGHT) ONTO I-10 [US-60]. AT EXIT 143A-B, TURN RIGHT ONTO RAMP. TAKE RAMP (RIGHT) ONTO I-17 [ARIZONA VETERANS MEMORIAL HWY]. AT EXIT 262, TURN RIGHT ONTO RAMP. ROAD NAME CHANGES TO AZ-69 [S HIGHWAY 69]. TURN RIGHT (EAST) ONTO AZ-169 [E CHERRY RD]. TAKE RAMP (LEFT) ONTO I-17 [ARIZONA VETERANS HWY]. AT EXIT 298, TURN LEFT ONTO RAMP. TURN LEFT (WEST) ONTO AZ-179 [NF-618]. AT ROUNDABOUT, TAKE THE SECOND EXIT ONTO AZ-179 [RED ROCK SCENIC BYWAY]. AT ROUNDABOUT, TAKE THE SECOND EXIT ONTO AZ-179 [HIGHWAY 179]. AT ROUNDABOUT, TAKE THE SECOND EXIT ONTO AZ-179 [RED ROCK SCENIC BYWAY]. AT ROUNDABOUT, TAKE THE SECOND EXIT ONTO AZ-179 [HIGHWAY 179]. AT ROUNDABOUT, TAKE THE SECOND EXIT ONTO AZ-179 [STATE ROUTE 179]. AT ROUNDABOUT, TAKE THE SECOND EXIT ONTO AZ-179 [HIGHWAY 179]. AT ROUNDABOUT, TAKE THE FIRST EXIT ONTO AZ-89 ALT [N STATE ROUTE 89A]. ARRIVE 254 N STATE ROUTE 89A, SEDONA, AZ 86336.

VICINITY MAP



PROJECT DESCRIPTION

THE PROJECT CONSISTS OF DECOMMISSIONING AND REMOVE METROSITE, INSTALL L2100: FSMF, FRIE U1900: FSMF, FXFCX2. RAC24 TO HOUSE NEW CSR, FPMA (2X)POWER PLANT. INSTALL (3) NEW ANTENNAS MOUNTED ON A NEW TRIPOD MOUNT. DEVELOPMENT AND CONSTRUCTION OF THIS PROJECT WILL COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES.

THIS PROJECT DOES NOT INCLUDE WATER OR SEWER.

EXISTING PARKING IS NOT AFFECTED BY THIS PROJECT.

SHEET INDEX

- T-1 PROJECT INFORMATION AND DATA
- LS-1 SITE SURVEY
- LS-2 SITE SURVEY
- A-1 SITE PLAN
- A-2 ENLARGED SITE PLAN
- A-3 EXISTING ELEVATIONS
- A-4 NEW ELEVATIONS
- A-4 DETAILS
- E-1 ELECTRICAL SITE PLAN AND NOTES
- E-2 ONE LINE DIAGRAM AND GROUNDING PLAN
- S-1 PLATFORM DETAILS

CLIENT

T-MOBILE
2625 S. PLAZA DRIVE #400
TEMPE, AZ 85282
CONTACT: MARK QUINTEN
PHONE: (602) 380-5457

PROPERTY OWNER

ORCHARDS NEWCO LLC
7001 N. SCOTTSDALE ROAD,
SUITE 2050
SCOTTSDALE, AZ 85253

CONSTRUCTION MANAGER

T-MOBILE
2625 S. PLAZA DRIVE #400
TEMPE, AZ 85282
CONTACT: MARK QUINTEN
PHONE: (602) 380-5457

SITE ACQUISITION

PINNACLE CONSULTING
1426 N. MARVIN STREET # 101
GILBERT, AZ 85233
KAY HENNESSY
PHONE: (480) 204-8390

DESIGNER

PINNACLE CONSULTING
1426 N. MARVIN STREET #101
GILBERT, AZ 85233
JEREMY WATTERBERG
PHONE: (602) 910-6030

PROJECT DATA

ZONING:	0520-MOTEL W/RESTAURANT
APN:	401-120-01A
USE:	MOTEL W/RESTAURANT
PARENT PARCEL:	39,639 SQ. FT
LEASE AREA:	500 SQ. FT
JURISDICTION:	CITY OF SEDONA
BUILDING CODES:	2012 IBC W/ COUNTY AMENDMENTS 2012 IMC W/ COUNTY AMENDMENTS 2011 NEC W/ COUNTY AMENDMENTS 2012 IFC W/ COUNTY AMENDMENTS

NEW ANTENNA LOCATIONS

NEW ALPHA SECTOR LOCATION
LATITUDE: 34° 52' 09.800" NORTH (NAD83)
LONGITUDE: 111° 45' 37.403" WEST (NAD83)
ELEVATION @ FINISH FLOOR = 4535.2' (NAVD88)

NEW BETA & GAMMA SECTOR LOCATION
LATITUDE: 34° 52' 09.600" NORTH (NAD83)
LONGITUDE: 111° 45' 37.317" WEST (NAD83)
ELEVATION @ FINISH FLOOR = 4535.2' (NAVD88)

GENERAL NOTES

1. THIS WIRELESS TELECOMMUNICATIONS FACILITY WILL MEET THE HEALTH AND SAFETY STANDARDS FOR ELECTROMAGNETIC FIELD EMISSIONS AS ESTABLISHED BY THE FEDERAL COMMUNICATIONS COMMISSION OR ANY SUCCESSOR THEREOF, AND ANY OTHER FEDERAL OR STATE AGENCY.
2. THIS WIRELESS TELECOMMUNICATIONS FACILITY WILL MEET THE REGULATIONS OF THE FEDERAL COMMUNICATIONS COMMISSION REGARDING PHYSICAL AND ELECTROMAGNETIC INTERFERENCE.
3. LIGHTING OR SIGNS WILL BE PROVIDED ONLY AS REQUIRED BY FEDERAL OR STATE AGENCIES.

APPROVALS

T-MOBILE (RF): _____ DATE:_____

T-MOBILE (CONST.): _____ DATE:_____

T-MOBILE (RE): _____ DATE:_____

LANDLORD: _____ DATE:_____

PREPARED FOR:

T-Mobile

2625 S. PLAZA DRIVE #400
TEMPE, AZ 85282

CONSULTING FIRM

PINNACLE CONSULTING, INC.
Construction - Project Management - Site Development

1426 N. MARVIN STREET # 101
GILBERT, AZ 85233

PROJECT NO:	0000
DRAWN BY:	TE
CHECKED BY:	GH

REV	DATE	DESCRIPTION
1	05/10/16	REISSUE FOR SUBMITTAL
0	4/29/15	ISSUE FOR SUBMITTAL
A	09/24/14	ISSUE FOR REVIEW

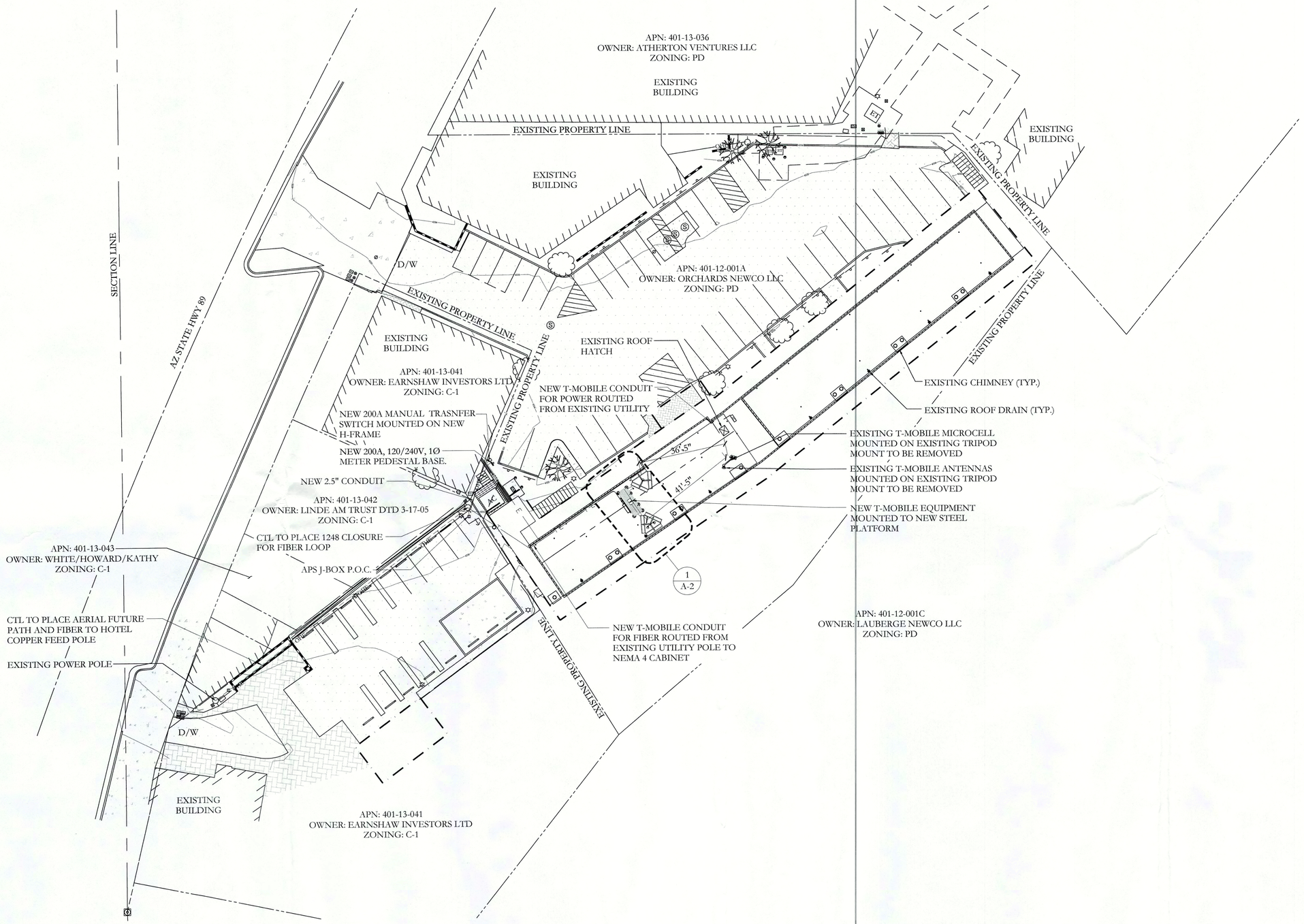
Registered Professional Engineer
25047
GLEN L. HUNT III
Date 07. 2016
ARIZONA U.S.A.
EXP. 6/30/18

ORCHARDS INN
PH37650A

254 N. STATE ROUTE 89A
SEDONA, ARIZONA 86336
COCONINO COUNTY

SHEET TITLE
PROJECT INFORMATION AND DATA

SHEET NUMBER
T-1



SITE PLAN

24"x36" SCALE: 1" = 20'-0"
11"x17" SCALE: 1" = 40'-0"

20' 10' 0" 20'

1

PREPARED FOR:

T-Mobile

2625 S. PLAZA DRIVE #400
TEMPE, AZ 85282

CONSULTING FIRM

PINNACLE CONSULTING, INC.
Construction - Project Management - Site Development

1426 N. MARVIN STREET # 101
GILBERT, AZ 85233

PROJECT NO:	0000
DRAWN BY:	TE
CHECKED BY:	GH

REV	DATE	DESCRIPTION
1	05/10/16	REISSUE FOR SUBMITTAL
0	4/29/15	ISSUE FOR SUBMITTAL
A	09/24/14	ISSUE FOR REVIEW

EXP. 6/30/16

ORCHARDS INN
PH37650A

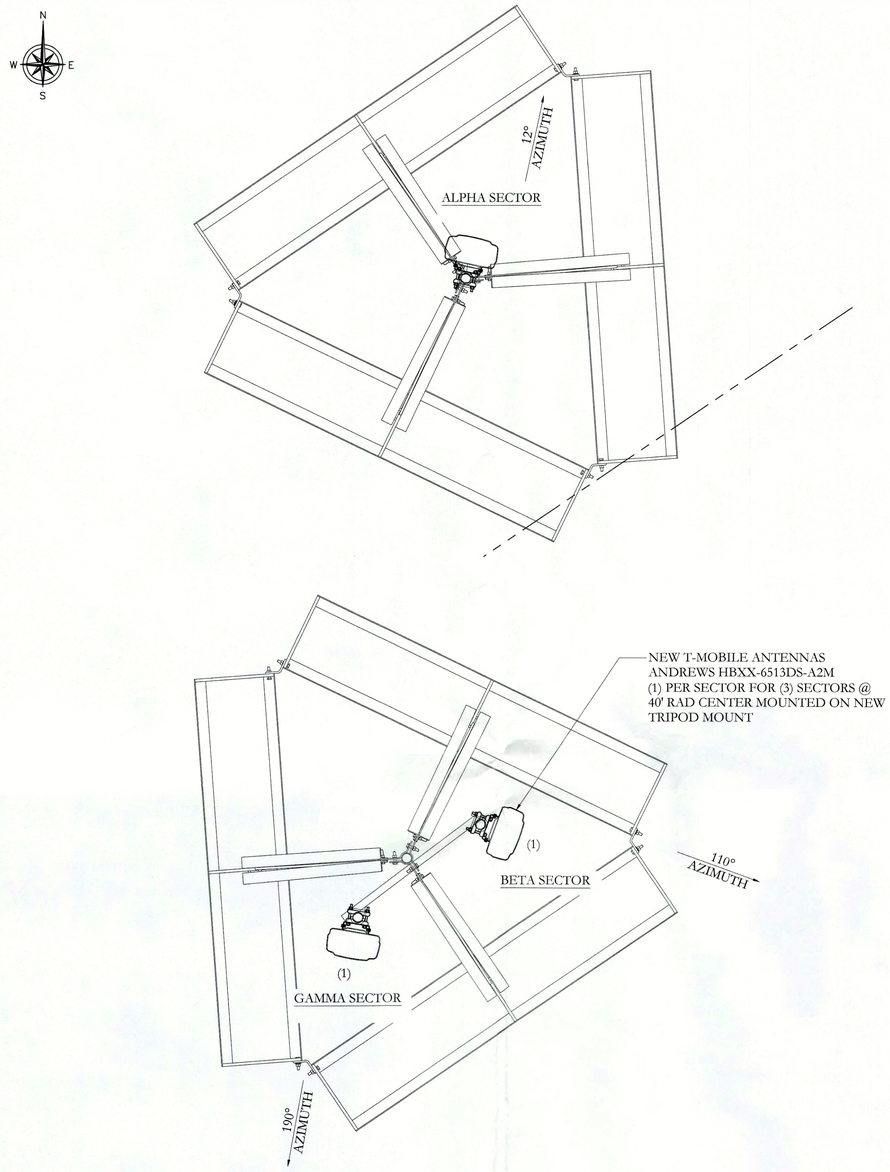
254 N. STATE ROUTE 89A
SEDONA, ARIZONA 86336
COCONINO COUNTY

SHEET TITLE

SITE PLAN

SHEET NUMBER

A-1

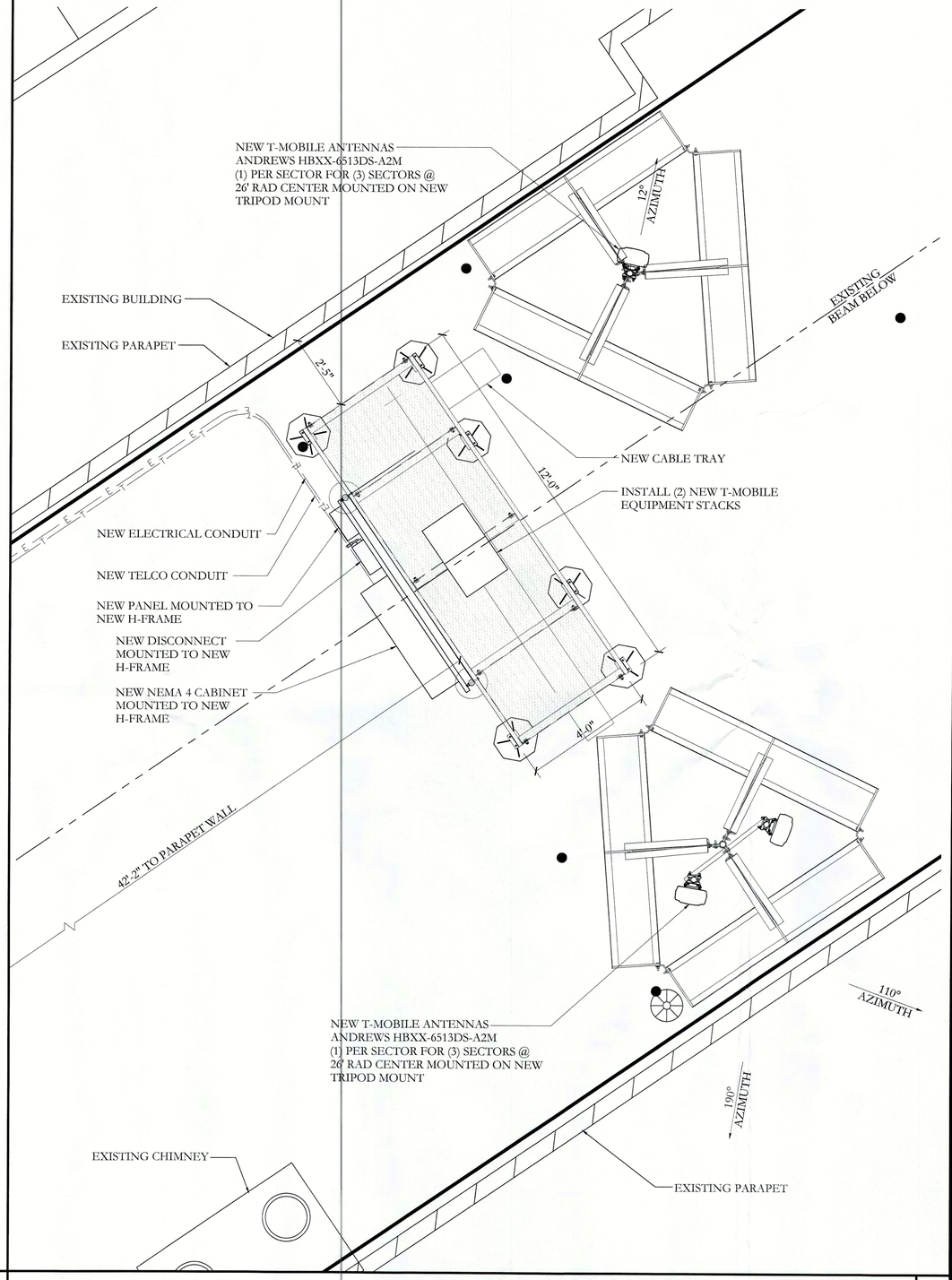


ANTENNA SECTOR	ANTENNA POSITION	AZIMUTH	ANTENNA MAKE/MODEL	TECHNOLOGY	ANTENNA CENTERLINE	CABLE QTY. & SIZE	COAX CABLE LENGTH	FIBER QTY.	FIBER LENGTH
SECTOR 1	1	12°	ANDREWS HBXX-6513DS-A2M	LTE AWS / UMTS PCS	26' A.G.L.	(4) LDF4-50A	15'-3"	-	-
SECTOR 2	1	110°	ANDREWS HBXX-6513DS-A2M	LTE AWS / UMTS PCS	26' A.G.L.	(4) LDF4-50A	8'-6"	-	-
SECTOR 3	1	190°	ANDREWS HBXX-6513DS-A2M	LTE AWS / UMTS PCS	26' A.G.L.	(4) LDF4-50A	8'-6"	-	-

NEW ANTENNA PLAN

24"x36" SCALE: 1/2" = 1'-0"
11"x17" SCALE: 1/4" = 1'-0"
2' 1' 0" 2'

2



ENLARGED SITE PLAN

24"x36" SCALE: 1/2" = 1'-0"
11"x17" SCALE: 1/4" = 1'-0"
2' 1' 0" 2'

1

PREPARED FOR:

T-Mobile

2625 S. PLAZA DRIVE #400
TEMPE, AZ 85282

CONSULTING FIRM

PINNACLE CONSULTING, INC.
Construction - Project Management - Site Development

1426 N. MARVIN STREET # 101
GILBERT, AZ 85233

PROJECT NO:	0000
DRAWN BY:	TE
CHECKED BY:	GH

REV	DATE	DESCRIPTION
1	05/10/16	REISSUE FOR SUBMITTAL
0	4/29/15	ISSUE FOR SUBMITTAL
A	09/24/14	ISSUE FOR REVIEW

Registered Professional Engineer
35047
GLEN L. HUNT III
Date 07. 2016
Registered
ARIZONA U.S.A.
EXP. 6/30/18

ORCHARDS INN
PH37650A

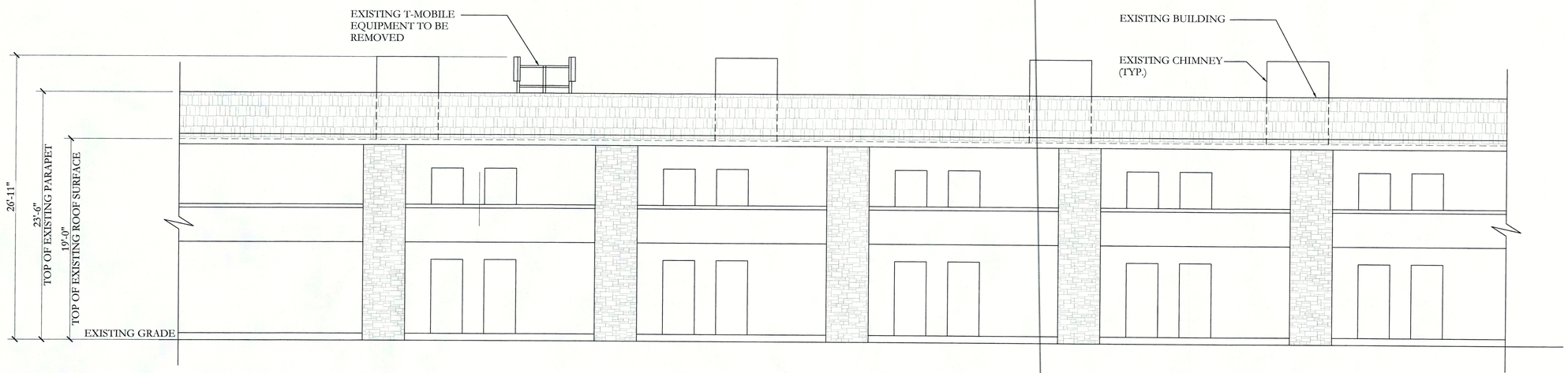
254 N. STATE ROUTE 89A
SEDONA, ARIZONA 86336
COCONINO COUNTY

SHEET TITLE

ENLARGED SITE PLAN

SHEET NUMBER

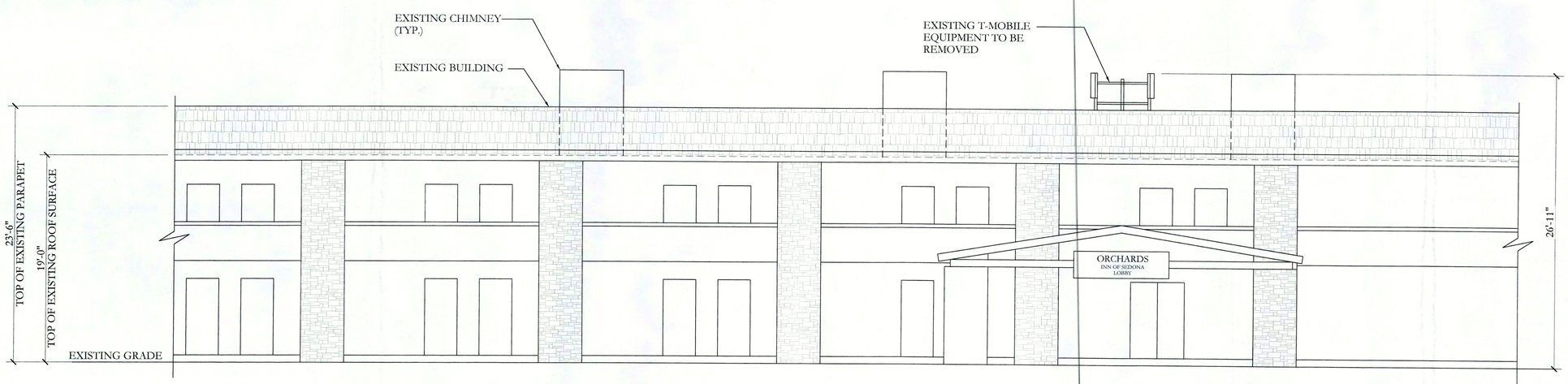
A-2



EXISTING SOUTHEAST ELEVATION

24"x36" SCALE: 3/16" = 1'-0"
11"x17" SCALE: 3/32" = 1'-0"
4' 2' 0" 4'

1



EXISTING NORTHWEST ELEVATION

24"x36" SCALE: 3/16" = 1'-0"
11"x17" SCALE: 3/32" = 1'-0"
4' 2' 0" 4'

2

PREPARED FOR:

T··Mobile·

2625 S. PLAZA DRIVE #400
TEMPE, AZ 85282

CONSULTING FIRM

PINNACLE CONSULTING, INC.

Construction - Project Management - Site Development

1426 N. MARVIN STREET # 101
GILBERT, AZ 85233

PROJECT NO:	0000
DRAWN BY:	TE
CHECKED BY:	GH

REV	DATE	DESCRIPTION
1	05/10/16	REISSUE FOR SUBMITTAL
0	4/29/15	ISSUE FOR SUBMITTAL
A	09/24/14	ISSUE FOR REVIEW

Professional Engineer
STATE OF ARIZONA
35047
GLEN L. HUNT III
Date Oct. 07, 2016
Registered
ARIZONA, U.S.A.

EXP. 6/30/18

ORCHARDS INN
PH37650A

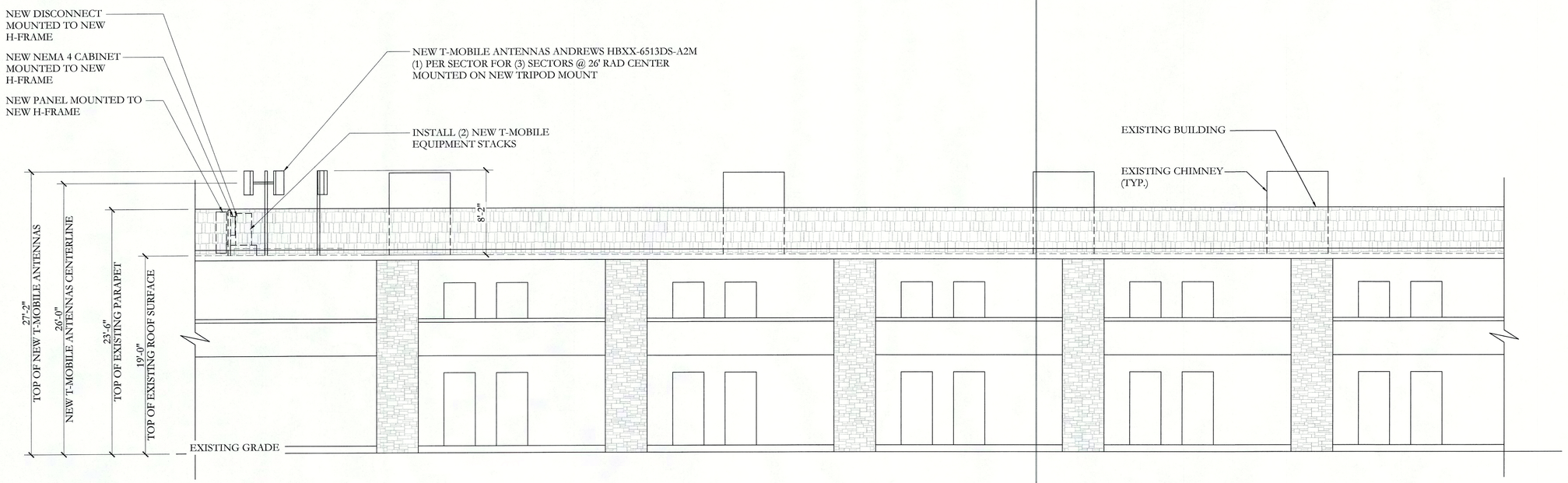
254 N. STATE ROUTE 89A
SEDONA, ARIZONA 86336
COCONINO COUNTY

SHEET TITLE

EXISTING ELEVATIONS

SHEET NUMBER

A-3



NEW SOUTHEAST ELEVATION

24"x36" SCALE: 3/16" = 1'–0"
11"x17" SCALE: 3/32" = 1'–0"
4' 2' 0" 4'

1

NEW NORTHWEST ELEVATION

24"x36" SCALE: 3/16" = 1'–0"
11"x17" SCALE: 3/32" = 1'–0"
4' 2' 0" 4'

2

PREPARED FOR:

T-Mobile

2625 S. PLAZA DRIVE #400
TEMPE, AZ 85282

CONSULTING FIRM

PINNACLE CONSULTING, INC.
Construction - Project Management - Site Development

1426 N. MARVIN STREET # 101
GILBERT, AZ 85233

PROJECT NO:	0000
DRAWN BY:	TE
CHECKED BY:	GH

REV	DATE	DESCRIPTION
1	05/10/16	REISSUE FOR SUBMITTAL
0	4/29/15	ISSUE FOR SUBMITTAL
A	09/24/14	ISSUE FOR REVIEW

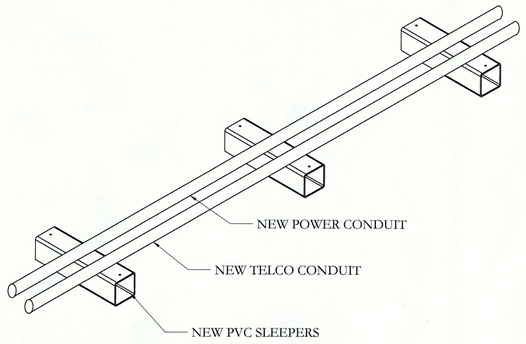
Professional Engineer
GLEN L. HUNT III
Date Signed June 07, 2016
ARIZONA U.S.A.
EXP. 6/30/18

ORCHARDS INN
PH37650A

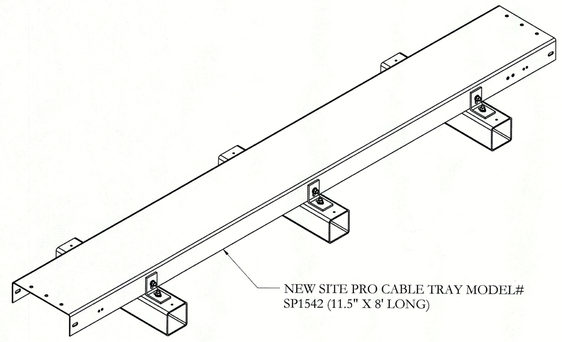
254 N. STATE ROUTE 89A
SEDONA, ARIZONA 86336
COCONINO COUNTY

SHEET TITLE
NEW ELEVATIONS

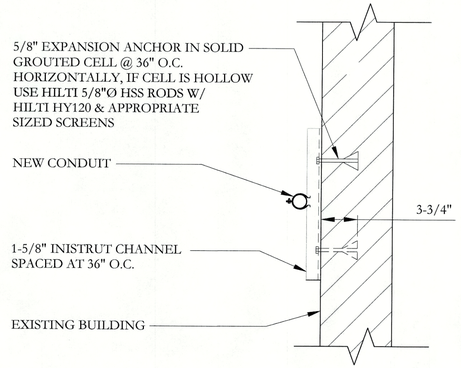
SHEET NUMBER
A-4



NEW CONDUIT DETAIL | SCALE: N.T.S. | 5



NEW CABLE TRAY DETAIL | SCALE: N.T.S. | 3



CONDUIT MOUNTED TO WALL DETAIL | SCALE: N.T.S. | 1

NOT USED | SCALE: N.T.S. | 6

NOT USED | SCALE: N.T.S. | 4

NOT USED | SCALE: N.T.S. | 2

PREPARED FOR:

T-Mobile

2625 S. PLAZA DRIVE #400
TEMPE, AZ 85282

CONSULTING FIRM

PINNACLE CONSULTING, INC.

Construction - Project Management - Site Development

1426 N. MARVIN STREET # 101
GILBERT, AZ 85233

PROJECT NO:	0000
DRAWN BY:	TE
CHECKED BY:	GH

REV	DATE	DESCRIPTION
1	05/10/16	REISSUE FOR SUBMITTAL
0	4/29/15	ISSUE FOR SUBMITTAL
A	09/24/14	ISSUE FOR REVIEW

Registered Professional Engineer
25047
GLEN L. HUNT III
Date Signed June 07, 2016
ARIZONA U.S.A.
EXP. 6/30/18

ORCHARDS INN
PH37650A

254 N. STATE ROUTE 89A
SEDONA, ARIZONA 86336
COCONINO COUNTY

SHEET TITLE

DETAILS

SHEET NUMBER

A-5

SUBMITTAL OF BID INDICATES THAT THE CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED UNDER THIS CONTRACT.

CONTRACTOR SHALL PERFORM ALL VERIFICATIONS, OBSERVATION TESTS, AND EXAMINATION WORK PRIOR TO ORDERING OF ANY EQUIPMENT AND THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE PROJECT MANAGER LISTING ALL MALFUNCTIONS, FAULTY EQUIPMENT AND DISCREPANCIES.

VERIFY HEIGHTS WITH PROJECT MANAGER PRIOR TO INSTALLATION.

THESE PLANS ARE DIAGRAMMATIC ONLY, FOLLOW AS CLOSELY AS POSSIBLE.

COORDINATE ALL WORK BETWEEN TRADES AND ALL OTHER SCHEDULING AND PROVISIONARY CIRCUMSTANCES SURROUNDING THE PROJECT.

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION CONSTRUCTION TOOLS, TRANSPORTATION, ETC., FOR COMPLETE AND FUNCTIONALLY OPERATING SYSTEMS ENERGIZED AND READY FOR USE THROUGHOUT AS INDICATED ON DRAWINGS, AS SPECIFIED HEREIN AND/OR AS OTHERWISE REQUIRED.

ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN PERFECT CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. ELECTRICAL MATERIALS SHALL BE LISTED AND APPROVED BY UNDERWRITER'S LABORATORIES AND SHALL BEAR THE INSPECTION LABEL "J" WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH APPROVAL OF ALL GOVERNING BODIES HAVING JURISDICTION OVER THE CONSTRUCTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH ALL CURRENT APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA AND NBFU. ALL MATERIALS AND EQUIPMENT SHALL BE APPROVED FOR THEIR INTENDED USE AND LOCATION.

ALL WORK SHALL COMPLY WITH ALL APPLICABLE GOVERNING STATE, COUNTY AND CITY CODES AND OSHA, NFPA, NEC & ASHRAE REQUIREMENTS.

ENTIRE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF JOB ACCEPTANCE. ALL WORK, MATERIAL AND EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR.

PROPERLY SEAL ALL PENETRATIONS USING WATER-TIGHT SILICONE SEALANT.

DELIVER ALL BROCHURES, OPERATING MANUALS, CATALOGS AND SHOP DRAWINGS TO THE PROJECT MANAGER AT JOB COMPLETION. PROVIDE MAINTENANCE MANUALS FOR MECHANICAL EQUIPMENT. AFFIX MAINTENANCE LABELS TO MECHANICAL EQUIPMENT.

ALL CONDUCTORS SHALL BE COPPER. MINIMUM CONDUCTOR SIZE SHALL BE #12 AWG., UNLESS OTHERWISE NOTED. CONDUCTORS SHALL BE TYPE THHN, RATED IN ACCORDANCE WITH NEC 110-14(c).

ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING NOT LESS THE MAXIMUM INTERRUPTING CURRENT TO WHICH THEY MAY BE SUBJECTED.

THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE; ARTICLES 250 & 810 AND THE UTILITY COMPANY STANDARDS.

CONDUIT:

RIGID CONDUIT SHALL BE U.L. LABEL GALVANIZED ZINC COATED WITH ZINC INTERIOR AND SHALL BE USED WHEN INSTALLED IN OR UNDER CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS OR EXPOSED ON BUILDING EXTERIOR. RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE 1/2 LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO. 3.

ELECTRICAL METALLIC TUBING SHALL HAVE U.L. LABEL, FITTINGS SHALL BE GLAND RING COMPRESSION TYPE. EMT SHALL BE USED ONLY FOR INTERIOR RUNS.

LIQUID-TIGHT FLEXIBLE METAL CONDUIT SHALL BE U.L. LISTED AND SHALL BE USED AT FINAL CONNECTIONS TO MECHANICAL EQUIPMENT & RECTIFIERS AND WHERE PERMITTED BY CODE. ALL CONDUIT IN EXCESS OF SIX FEET IN LENGTH SHALL CONTAIN A FULL-SIZE GROUND CONDUCTOR.

CONDUIT RUNS SHALL BE SURFACE MOUNTED ON CEILINGS OR WALLS UNLESS NOTED OTHERWISE. ALL CONDUIT SHALL RUN PARALLEL OR PERPENDICULAR TO WALLS, FLOOR, CEILING, OR BEAMS. VERIFY EXACT ROUTING OF ALL EXPOSED CONDUIT WITH THE PROJECT MANAGER PRIOR TO INSTALLING.

PVC CONDUIT MAY BE PROVIDED ONLY WHERE SHOWN, OR IN UNDERGROUND INSTALLATIONS. PROVIDE UV-RESISTANT CONDUIT WHERE EXPOSED TO THE ATMOSPHERE. PROVIDE GROUND CONDUCTOR IN ALL PVC RUNS; EXCEPT WHERE PERMITTED BY CODE TO OMIT.

ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS. BACKGROUND SHALL BE BLACK WITH WHITE LETTERS; EXCEPT AS REQUIRED BY CODE TO FOLLOW A DIFFERENT SCHEME.

UPON COMPLETION OF WORK, CONDUCT CONTINUITY, SHORT CIRCUIT, AND FALL OF POTENTIAL GROUNDING TESTS FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. GROUNDING SYSTEM RESISTANCE SHALL NOT EXCEED 5 OHMS. IF THE RESISTANCE VALUE IS EXCEEDED, NOTIFY THE PROJECT MANAGER FOR FURTHER INSTRUCTION ON METHODS FOR REDUCING THE RESISTANCE VALUE.

CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNDAMAGED CONDITION. LEGALLY DISPOSE OF ALL REMOVED, UNUSED AND EXCESS MATERIAL GENERATED BY THE WORK OF THIS CONTRACT. DELIVER ITEMS INDICATED ON THE DRAWINGS TO THE OWNER IN GOOD CONDITION. OBTAIN SIGNED RECEIPT UPON DELIVERY.

COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOKUP COSTS SHALL BE PAID BY THE CONTRACTOR.

VERIFY ALL EXISTING CIRCUITRY PRIOR TO REMOVAL AND NEW WORK. MAINTAIN POWER TO ALL OTHER AREAS & CIRCUITS NOT SCHEDULED FOR REMOVAL.

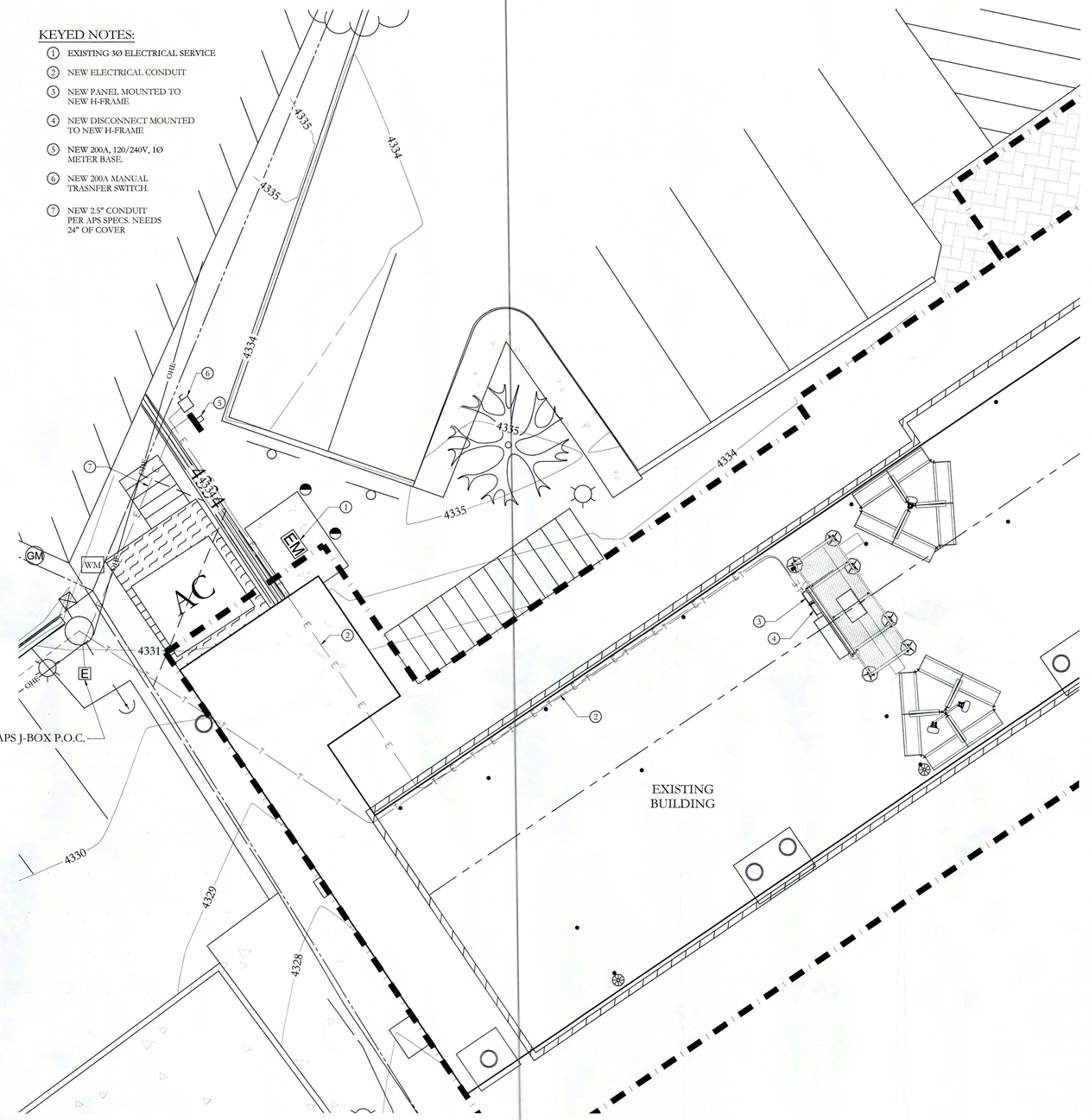
NOTES

SCALE: N.T.S.

2

KEYED NOTES:

1. EXISTING 3Ø ELECTRICAL SERVICE
2. NEW ELECTRICAL CONDUIT
3. NEW PANEL MOUNTED TO NEW H-FRAME
4. NEW DISCONNECT MOUNTED TO NEW H-FRAME
5. NEW 200A, 120/240V, 1Ø METER BASE.
6. NEW 200A MANUAL TRASNFER SWITCH.
7. NEW 2.5" CONDUIT PER APS SPECS. NEEDS 24" OF COVER



ELECTRICAL SITE PLAN

24"x36" SCALE: 1/16" = 1'-0"
11"x17" SCALE: 1/32" = 1'-0"
16' 12' 8' 4' 0" 16'

1

PREPARED FOR:

T-Mobile

2625 S. PLAZA DRIVE #400
TEMPE, AZ 85282

CONSULTING FIRM

PINNACLE CONSULTING, INC.
Construction - Project Management - Site Development

1426 N. MARVIN STREET # 101
GILBERT, AZ 85233

PROJECT NO:	0000
DRAWN BY:	TE
CHECKED BY:	GH

REV	DATE	DESCRIPTION
1	05/10/16	REISSUE FOR SUBMITTAL
0	4/29/15	ISSUE FOR SUBMITTAL
A	09/24/14	ISSUE FOR REVIEW

Registered Professional Engineer
25047
GLEN L. HUNT III
June 07, 2016
ARIZONA U.S.A.

EXP: 6/30/18

ORCHARDS INN
PH37650A

254 N. STATE ROUTE 89A
SEDONA, ARIZONA 86336
COCONINO COUNTY

SHEET TITLE

ELECTRICAL SITE PLAN AND NOTES

SHEET NUMBER

E-1

PANEL T	200 AMP	120/240V, 1Ø, 3W	MAIN 200/2	NEMA 3R	SURF MTG
LOCATION	SEE PLAN	TYPE P.O.	BREAKER RATING	10,000 AIC	

USE/AREA SERVED	CB	No	LOAD L1	LOAD L2	No	CB	USE/AREA SERVED
RAC24	20/2	1	2400	-	2		SPACE
		3	-	2400	4		SPACE
FPMA - 1	20/2	5	2400	-	6		SPACE
		7	-	2400	8		SPACE
FPMA - 2	20/2	9	2400	-	10		SPACE
		11	-	2400	12		SPACE
SPACE	20/2	13	-	-	14		SPACE
		15	-	-	16		SPACE
SPACE	20/2	17	-	-	18		SPACE
		19	-	-	20		SPACE
SPACE		21	-	-	22		SPACE
SPACE		23	-	-	24		SPACE
TOTAL (CONNECTED)			7200	7200			
25% CONTINUOUS		*	1800	1800			
			-	-			
TOTAL (CODE)			9000	9000	9000 VA / 120 V =		75.0 A

NOTE:
THE EXISTING ELECTRICAL SERVICE FOR THE INN IS 800A, 3Ø. THIS SERVICE IS 1Ø. PER NEC 230.2(D) MULTIPLE SERVICES ARE ALLOWED ON A BUILDING WHEN THE PHASES ARE DIFFERENT.

MAXIMUM AVAILABLE FAULT
CURRENT 40,481A SYMMETRICAL
BASED ON 167KVA TRANSFORMER

F1

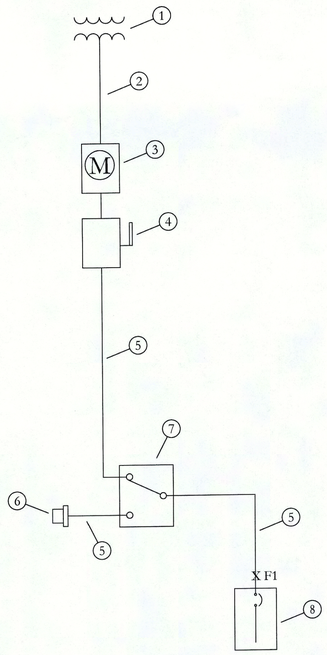
I_{AFC} = 40481A E_{LL} = 240V L = 80'
C = 7293 #1 CU, STEEL CONDUIT

$$F = \frac{2 \times L \times I}{C \times E_{LL}} = \frac{2 \times 80' \times 40481}{7293 \times 240} = 3.700$$

$$M = \frac{1}{1 + F} = \frac{1}{1 + 3.700} = 0.213$$

I_{SCA} = I X M = 40481 X 0.213 = 8622A

VOLTAGE DROP PER IEEE STD. 141:
DESIGN CONDITIONS: 60A, 0.85PF, 75°C
$E_{LL\,DROP}$ = 1.59V $\%E_{LL\,DROP}$ = 0.66%



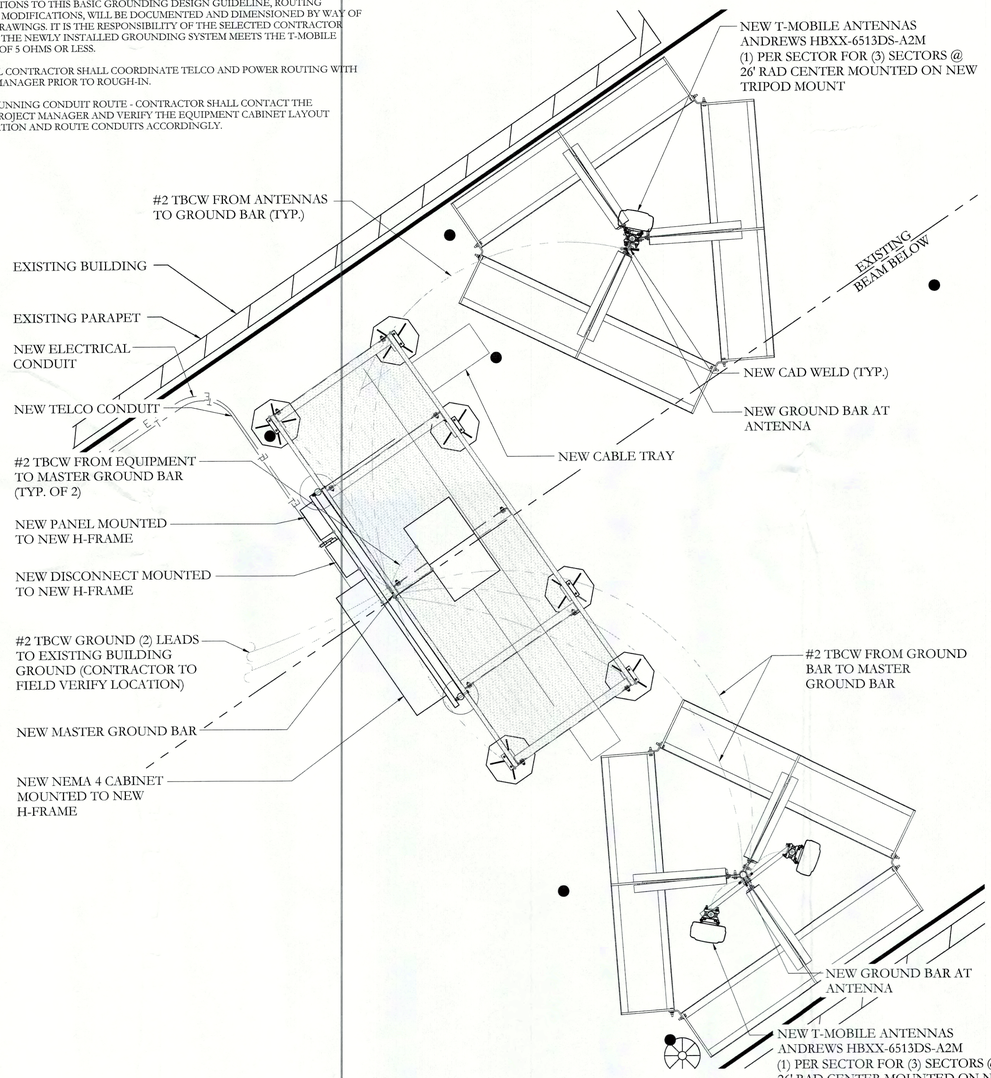
KEYED NOTES:

1. UTILITY TRANSFORMER.
2. SERVICE LATERAL RACEWAY PER UTILITY REQUIREMENTS.
3. 200A, 120/240V, 1Ø METER BASE.
4. 200/2 HEAVY DUTY SAFETY SWITCH WITH 100A LPJ FUSES. PROVIDE A #4 CU MAIN BONDING JUMPER, A #4 METALLIC PIPING BOND, AND A #4 CU BOND TO THE GROUND BUS IN THE MAIN SERVICE FOR THE BUILDING. PROVIDE ENGRAVED PLAQUES ON THIS DISCONNECT AND ON THE EXISTING SERVICE COMPLYING WITH NEC 230.2(E).
5. 3 #4/0 CU, #4 CU E.G.C., 2" C.
6. 200A, 120/240V, 1Ø GENERATOR INLET. PROVIDE AN ENGRAVED PLAQUE READING "REMOVE ANY NEUTRAL TO GROUND JUMPER IN THE GENERATOR BEFORE CONNECTING TO THIS INLET".
7. 200A, 2 POLE MANUAL TRANSFER SWITCH.
8. NEW PANEL 'A', 200A, 120/240V, 1Ø, 200/2 MAIN.

ONE LINE DIAGRAM | SCALE: N.T.S. | 2

GENERAL NOTES

1. ALL GROUNDING LEADS INSTALLED TO ENSURE A SMOOTH PATH TO COUNTERPOISE WITHOUT KINKS OR SHARP BENDS OR RETURN UPWARDS.
2. CONTRACTOR WILL UTILIZE THE "FALL OF POTENTIAL MEASUREMENT METHOD" PER NETA STANDARDS, UTILIZING THE AEMC-4500 MEASURING DEVICE OR APPROVED T-MOBILE EQUAL. ALL GROUND TESTING TO BE PERFORMED BEFORE CONNECTING TO POWER UTILITY GROUND AND PRIOR TO ANY BACKFILL OF GROUNDING TRENCHES. ELECTRICAL CONTRACTOR WILL PROVIDE A MINIMUM OF ONE (1) INSPECTION PORT FOR TESTING GROUNDING RESISTANCE. CONTRACTOR WILL INSTALL THE MINIMUM NUMBER OF GROUND RODS INDICATED, SEE GROUNDING PLAN FOR APPROX. LOCATIONS. CONTRACTOR WILL INSTALL ADDITIONAL GROUNDING AS REQUIRED TO ACHIEVE 5 OHMS OR LESS TO GROUND.
3. IT IS THE INTENT THAT AT NO TIME ARE THE GROUND LEADS TO BE INSTALLED BELOW THE SURFACE OF THOSE AREAS DESIGNATED FOR FUTURE DISASSOCIATED PADS OR SHELTERS.
4. THE CONTRACTOR WILL DOCUMENT MEGGER TEST RESULTS, REDLINE THE DRAWINGS FOR THE LOCATION OF ALL UNDERGROUND GROUNDING COMPONENTS AND PHOTOGRAPH WITH A DIGITAL CAMERA THE ENTIRE NEWLY INSTALLED GROUNDING SYSTEM PRIOR TO BACKFILL OF ANY OPEN TRENCHES.
5. ANY EXCEPTIONS TO THIS BASIC GROUNDING DESIGN GUIDELINE, ROUTING DESIGN, OR MODIFICATIONS, WILL BE DOCUMENTED AND DIMENSIONED BY WAY OF RED LINE DRAWINGS. IT IS THE RESPONSIBILITY OF THE SELECTED CONTRACTOR TO ENSURE THE NEWLY INSTALLED GROUNDING SYSTEM MEETS THE T-MOBILE STANDARD OF 5 OHMS OR LESS.
6. ELECTRICAL CONTRACTOR SHALL COORDINATE TELCO AND POWER ROUTING WITH BUILDING MANAGER PRIOR TO ROUGH-IN.
7. PRIOR TO RUNNING CONDUIT ROUTE - CONTRACTOR SHALL CONTACT THE T-MOBILE PROJECT MANAGER AND VERIFY THE EQUIPMENT CABINET LAYOUT CONFIGURATION AND ROUTE CONDUITS ACCORDINGLY.



ELECTRICAL SITE PLAN | 24"x36" SCALE: 1/2" = 1'-0" | 11"x17" SCALE: 1/4" = 1'-0" | 2' 1' 0" 2' | 1

PREPARED FOR:

T-Mobile

2625 S. PLAZA DRIVE #400
TEMPE, AZ 85282

CONSULTING FIRM

PINNACLE CONSULTING, INC.
Construction - Project Management - Site Development

1426 N. MARVIN STREET # 101
GILBERT, AZ 85233

PROJECT NO:	0000
DRAWN BY:	TE
CHECKED BY:	GH

REV	DATE	DESCRIPTION
1	05/10/16	REISSUE FOR SUBMITTAL
0	4/29/15	ISSUE FOR SUBMITTAL
A	09/24/14	ISSUE FOR REVIEW

Registered Professional Engineer
GLEN L. HUNT III
35047
Date 07, 2016
ARIZONA U.S.A.
EXP. 6/30/18

ORCHARDS INN
PH37650A

254 N. STATE ROUTE 89A
SEDONA, ARIZONA 86336
COCONINO COUNTY

SHEET TITLE
ONE LINE DIAGRAM AND GROUNDING PLAN

SHEET NUMBER
E-2