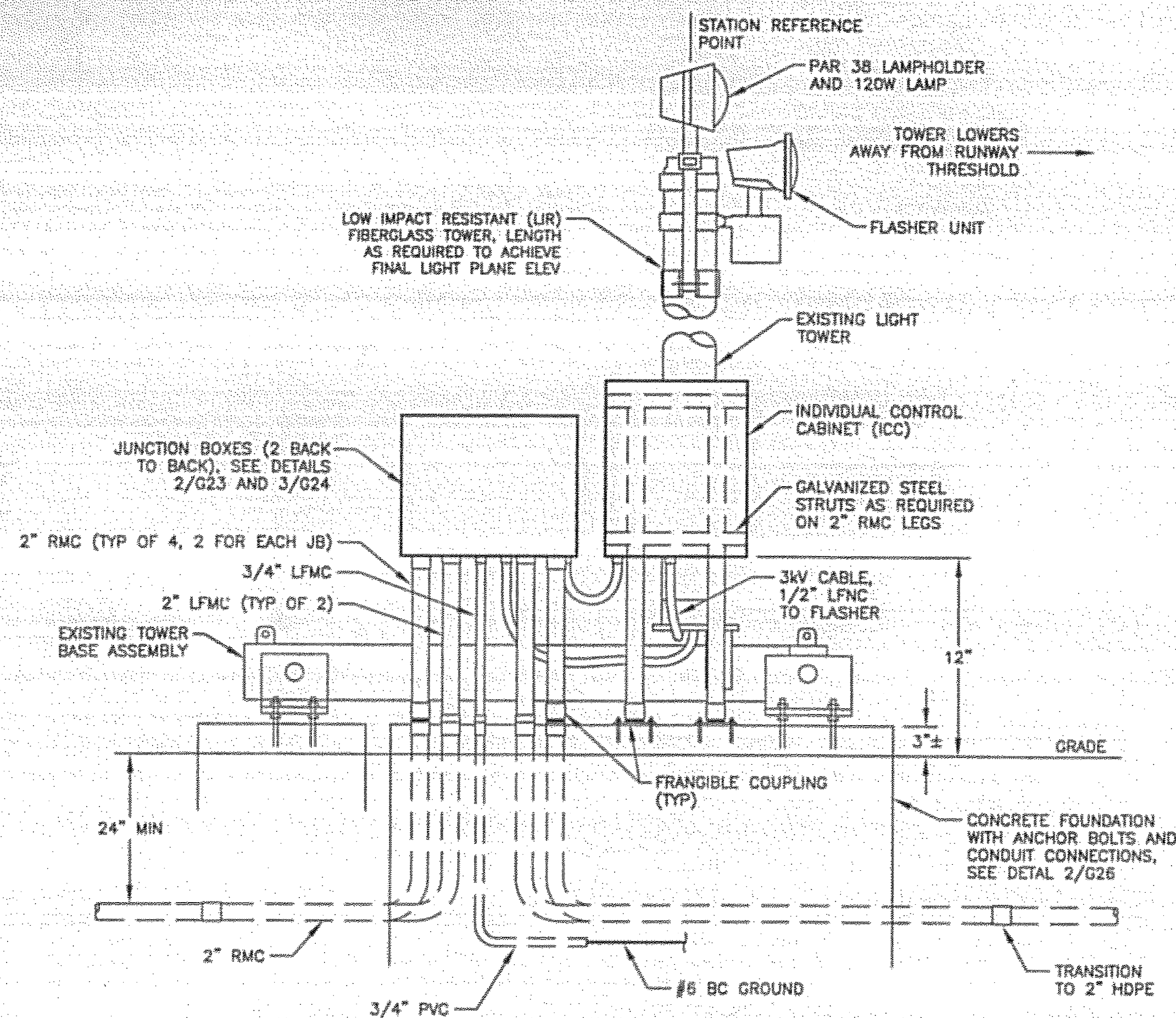
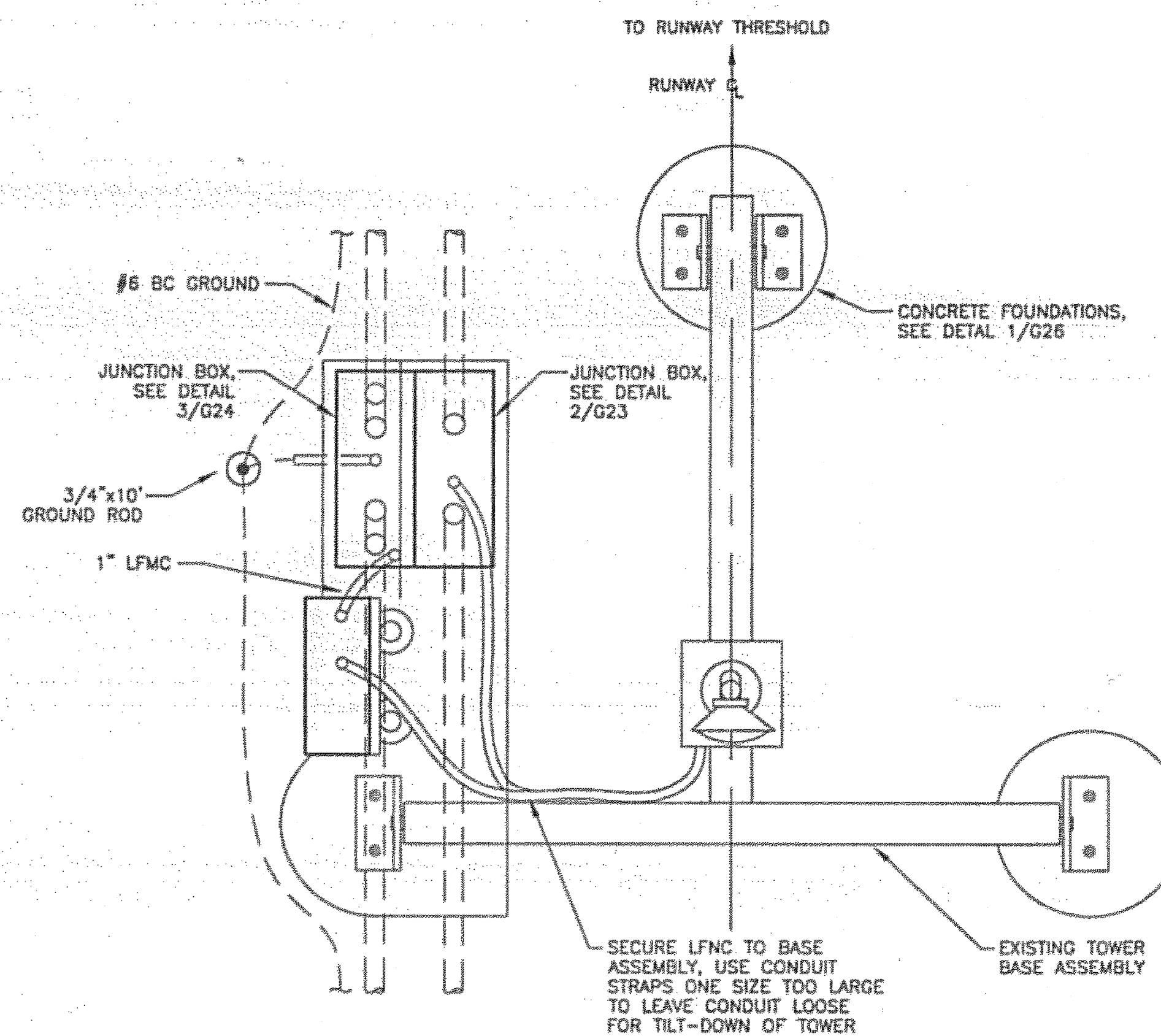




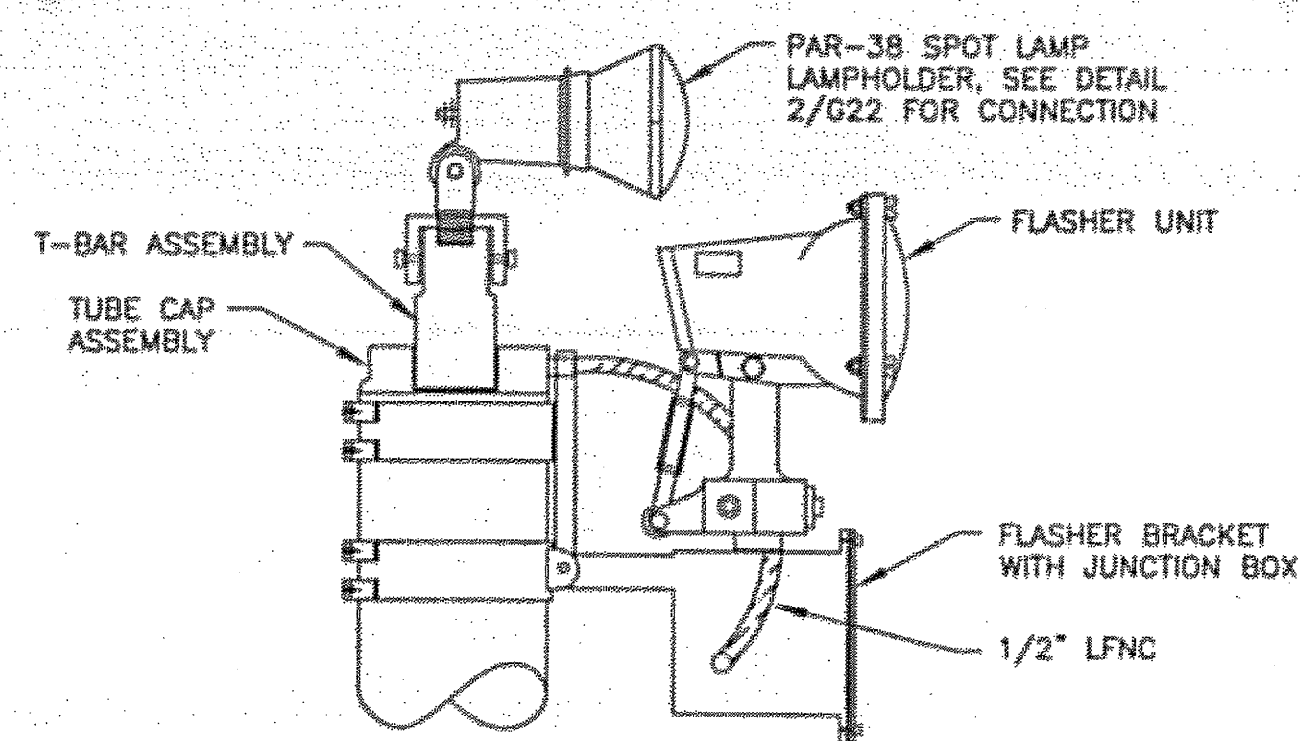
1 LIGHT BAR/FLASHER TOWER DETAILS - WITH GUY WIRES
G24 N.T.S.

NOTE:
GUY WIRES NOT SHOWN FOR CLARITY

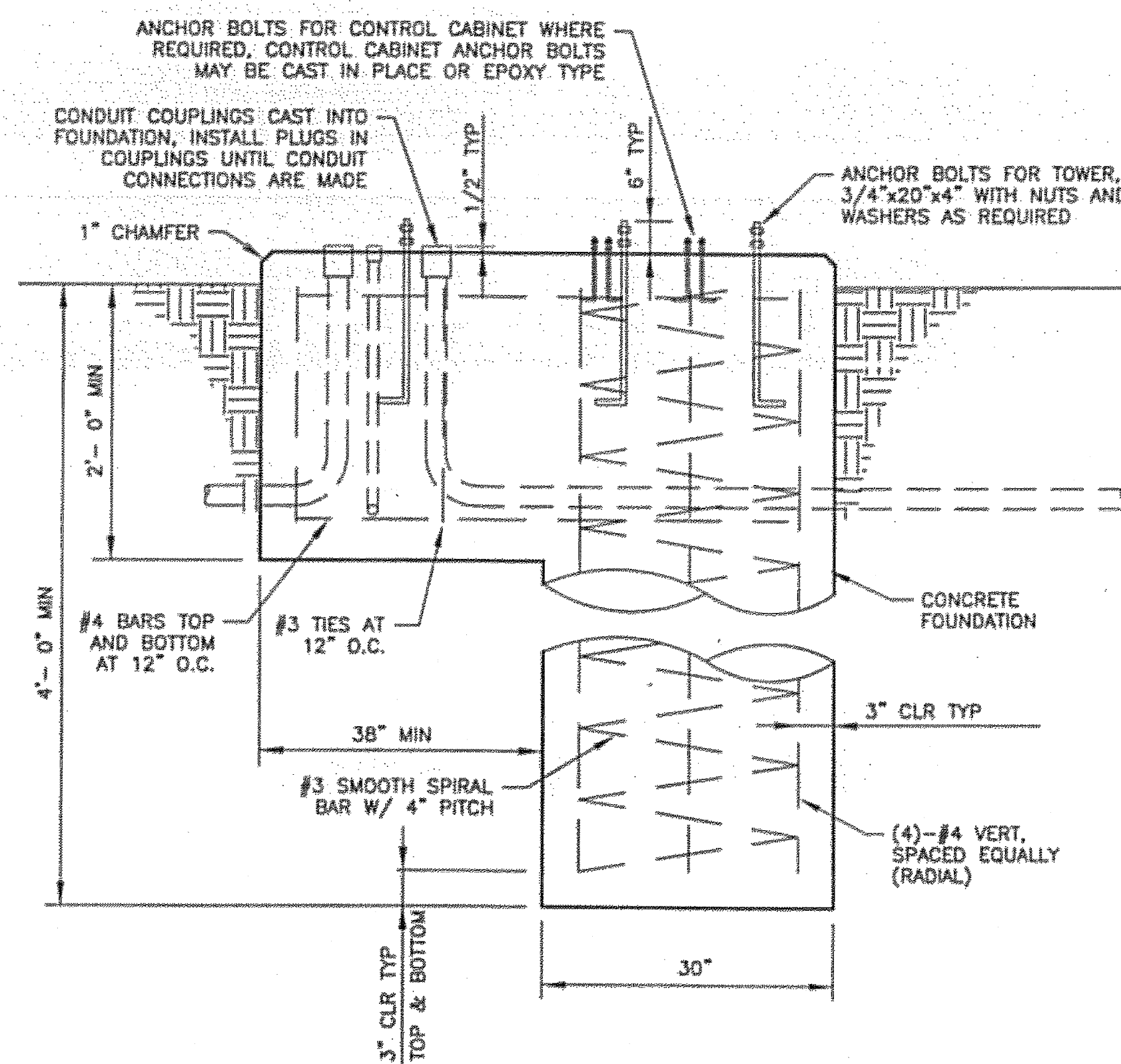


2 TOWER FOUNDATION LAYOUT
G25 N.T.S.

NOTE:
CONCRETE ANCHOR BOLT LOCATIONS SHOWN FOR NEW JAQUITH MG-20 BASE ASSEMBLY, ADJUST DIMENSIONS AS REQUIRED WHEN REUSING EXISTING EQUIPMENT



4 LIGHT BAR/FLASHER UNIT DETAIL
G25 N.T.S.



3 TOWER FOUNDATION DETAIL
G25 N.T.S.

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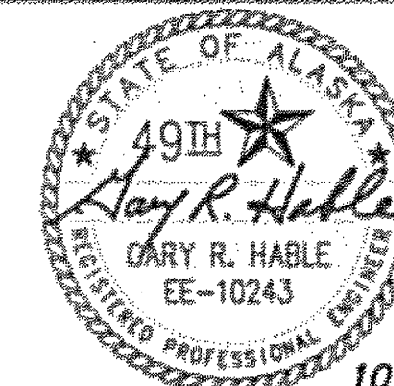
No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

MALSR DETAILS

PREPARED BY: USKH INC.

CHECKED BY: GRH



DESIGNED BY: LPS

DRAWN BY: LPS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

MALSR DETAILS

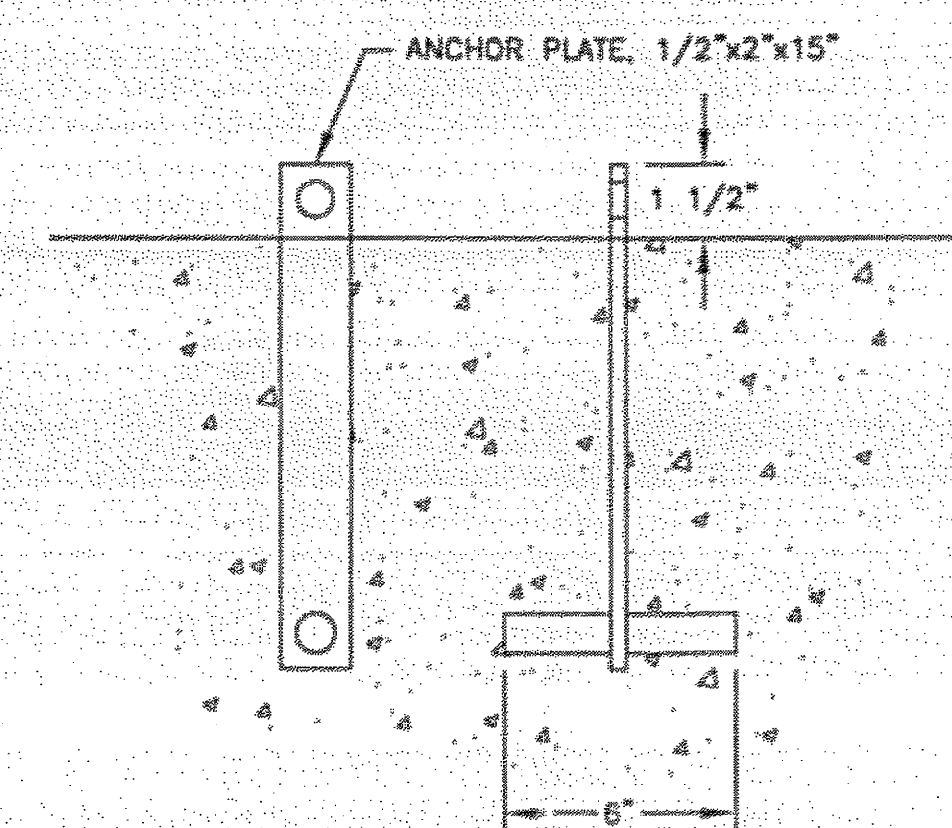
PROJECT DESIGNATION

AIP NO. 3-02-0144-1606

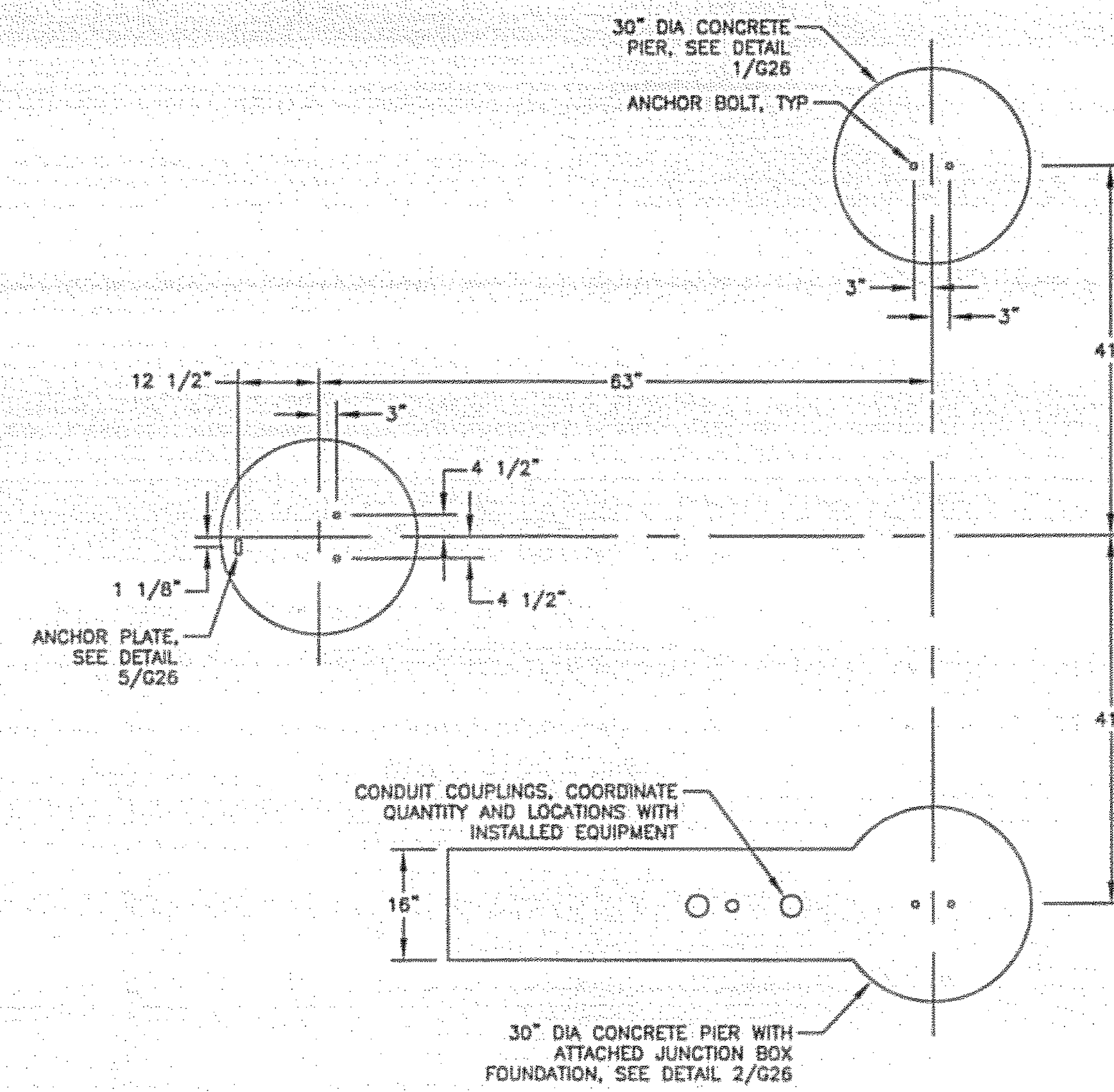
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ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
G25	131

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

See attached Electrical Asbuilts

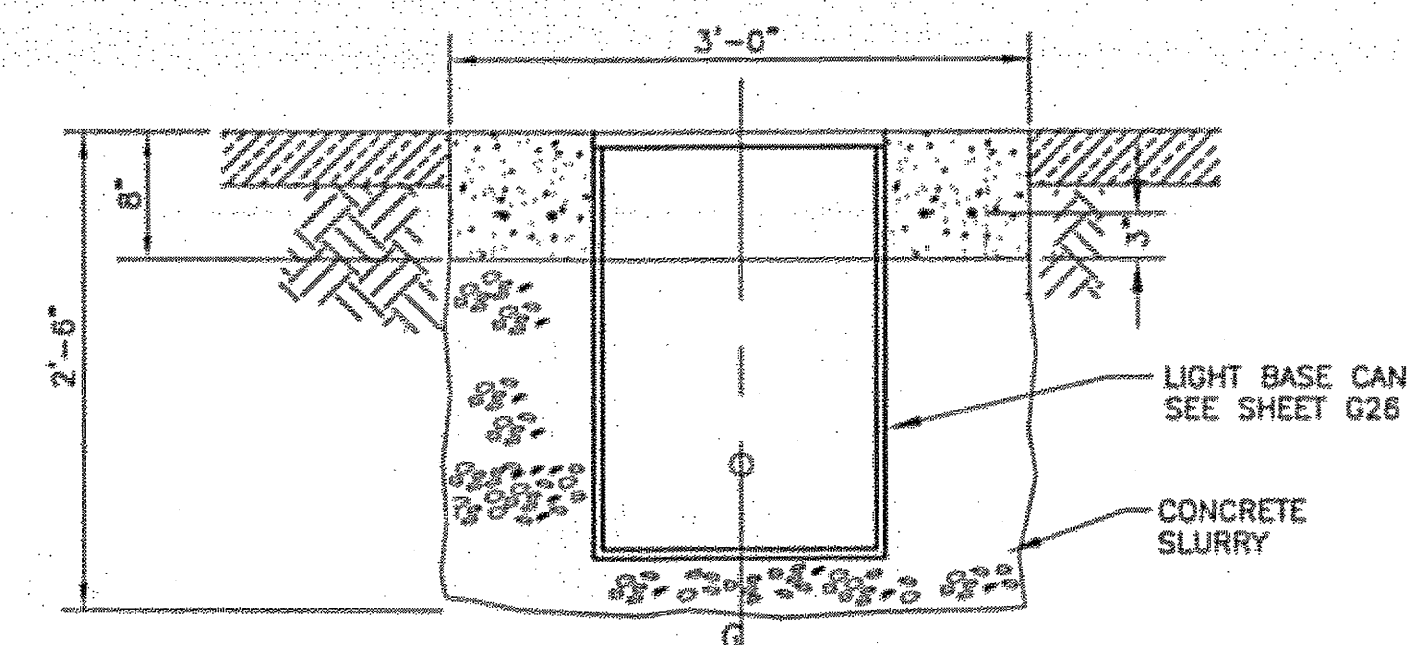


5 ANCHOR PLATE DETAIL
G26 N.T.S.

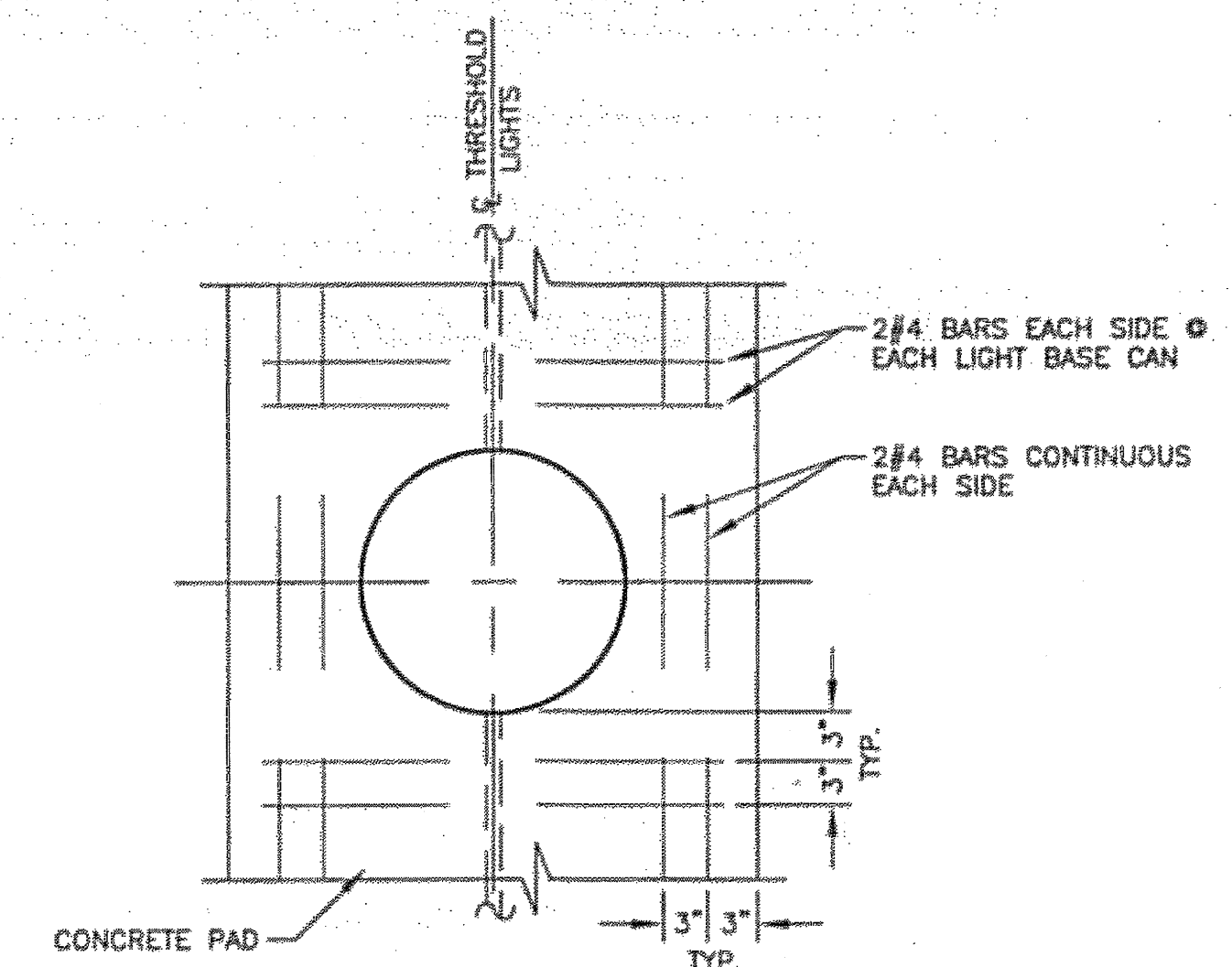


3 TOWER FOUNDATION LAYOUT
G26 N.T.S.

NOTE:
CONCRETE PIER AND ANCHOR BOLT LOCATIONS SHOWN FOR NEW JACUITH MC-30/40 BASE ASSEMBLY, ADJUST DIMENSIONS AS REQUIRED WHEN REUSING EXISTING EQUIPMENT

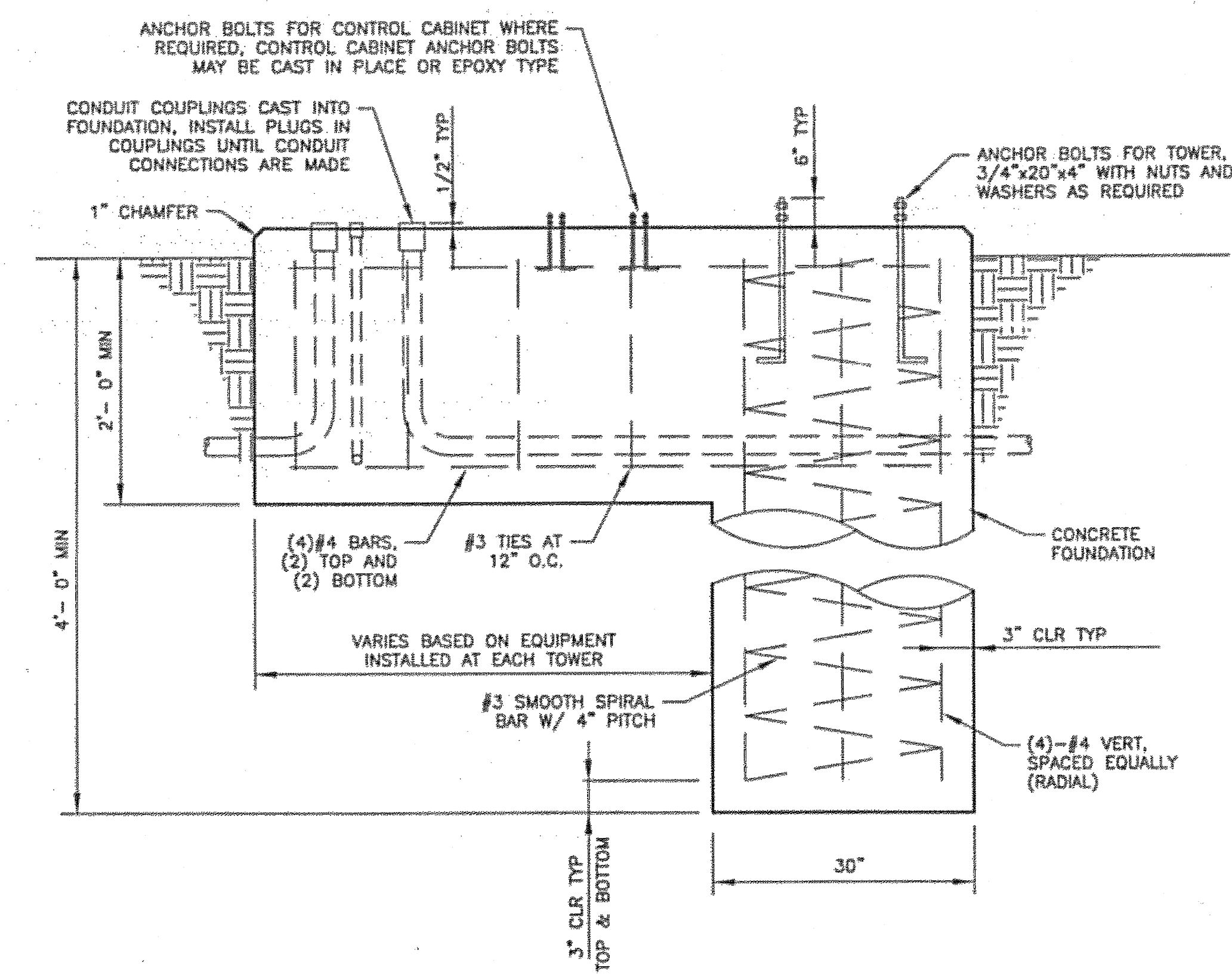


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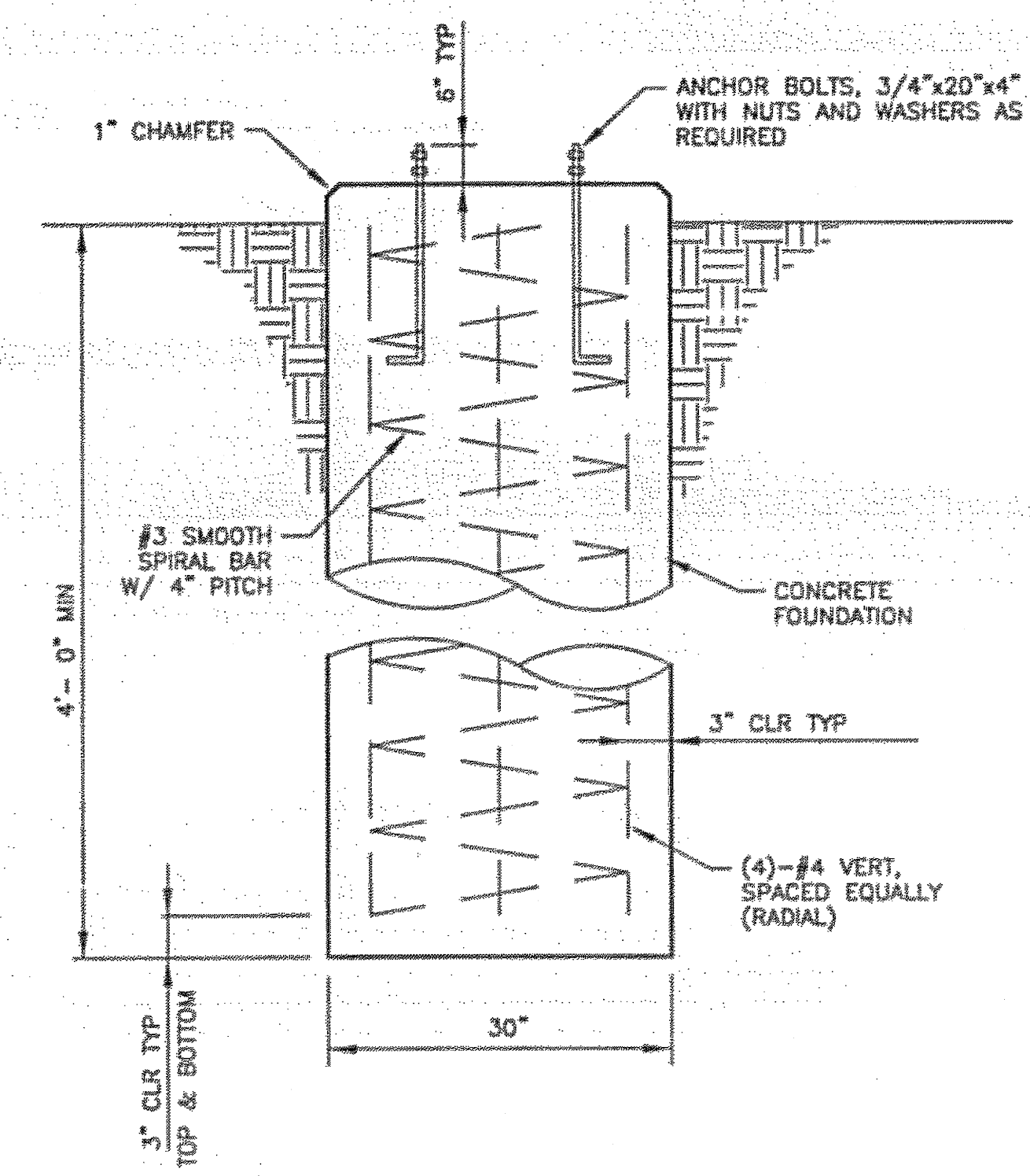


PLAN VIEW

4 BASE MOUNTED LIGHT FOUNDATION DETAILS
G26 N.T.S.



2 CONCRETE PIER WITH JUNCTION BOX FOUNDATION DETAIL
G26 N.T.S.



1 CONCRETE PIER DETAIL
G26 N.T.S.

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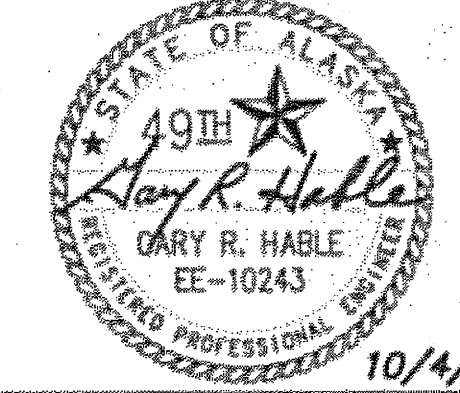
RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

MALSR DETAILS

PREPARED BY: USKH INC.
CHECKED BY: GRH


 DESIGNED BY: LPS
 DRAWN BY: LPS
 STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION
 10/4/06

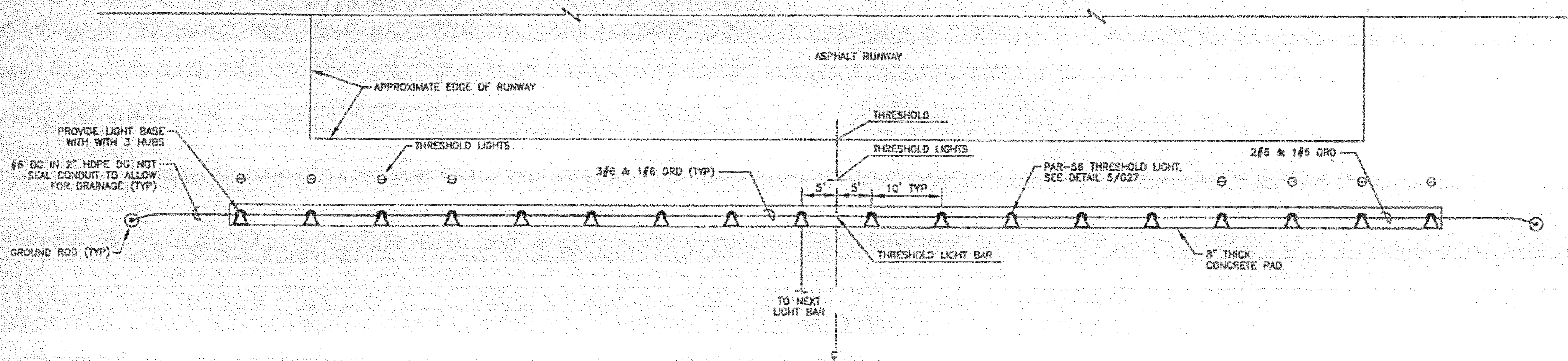
MALSR DETAILS

PROJECT DESIGNATION
AIP NO. 3-02-0144-1606

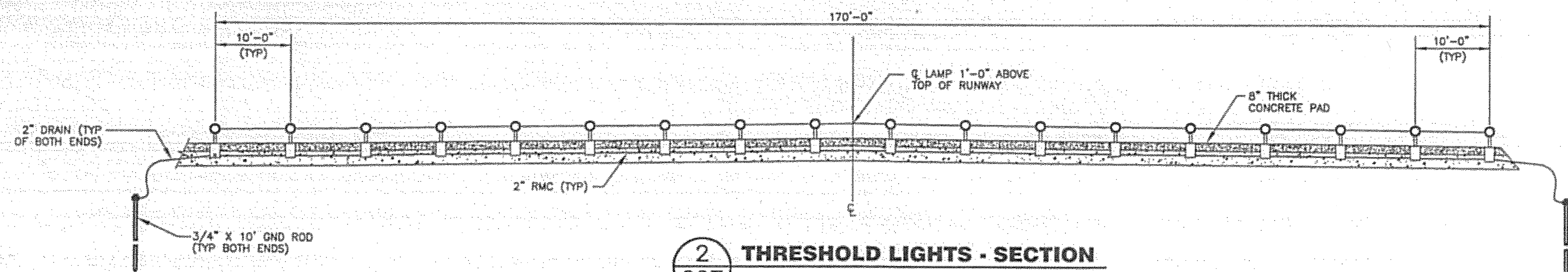
STATE	YEAR
ALASKA	2006

SHEET NUMBER	TOTAL SHEETS
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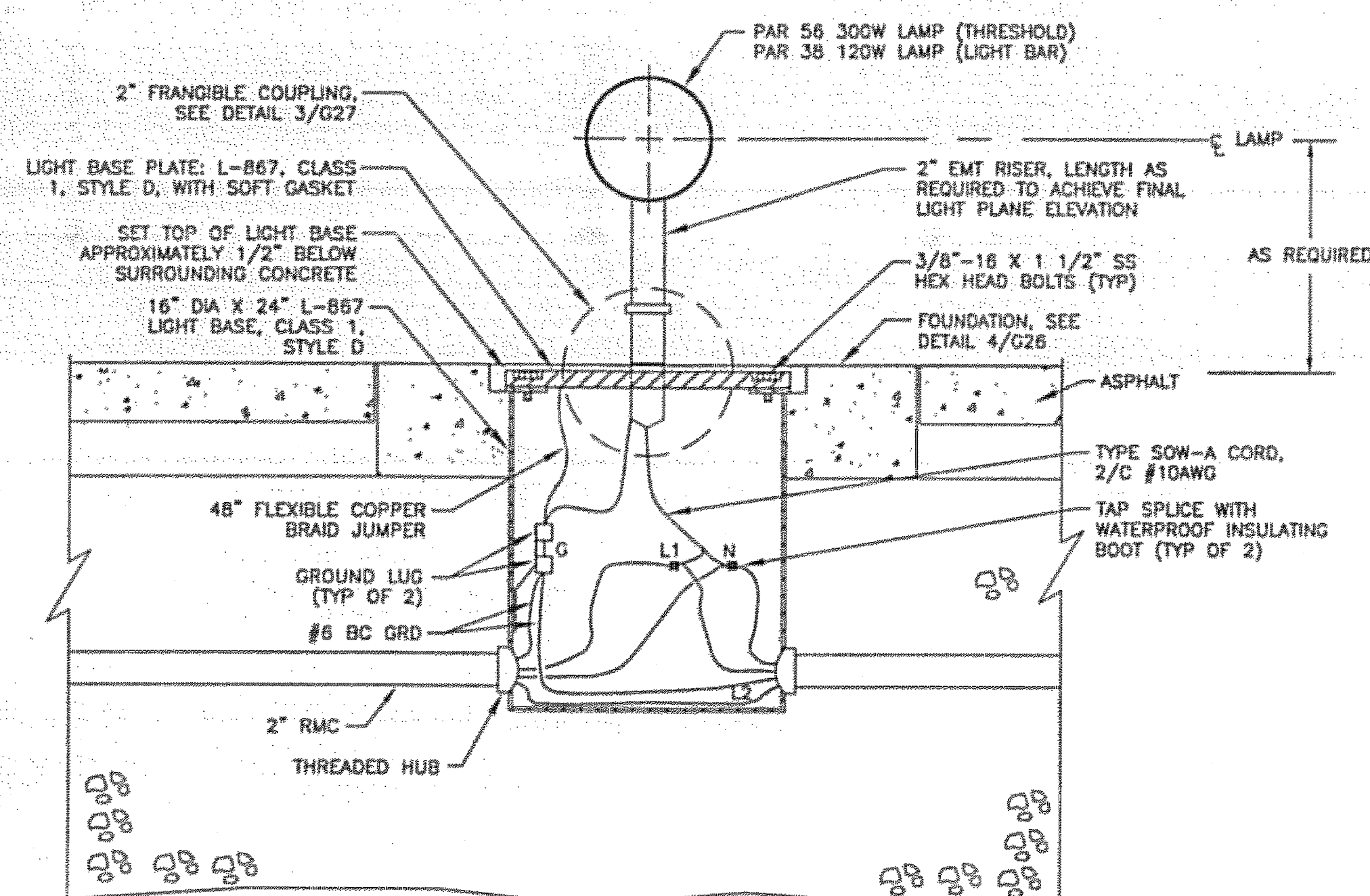
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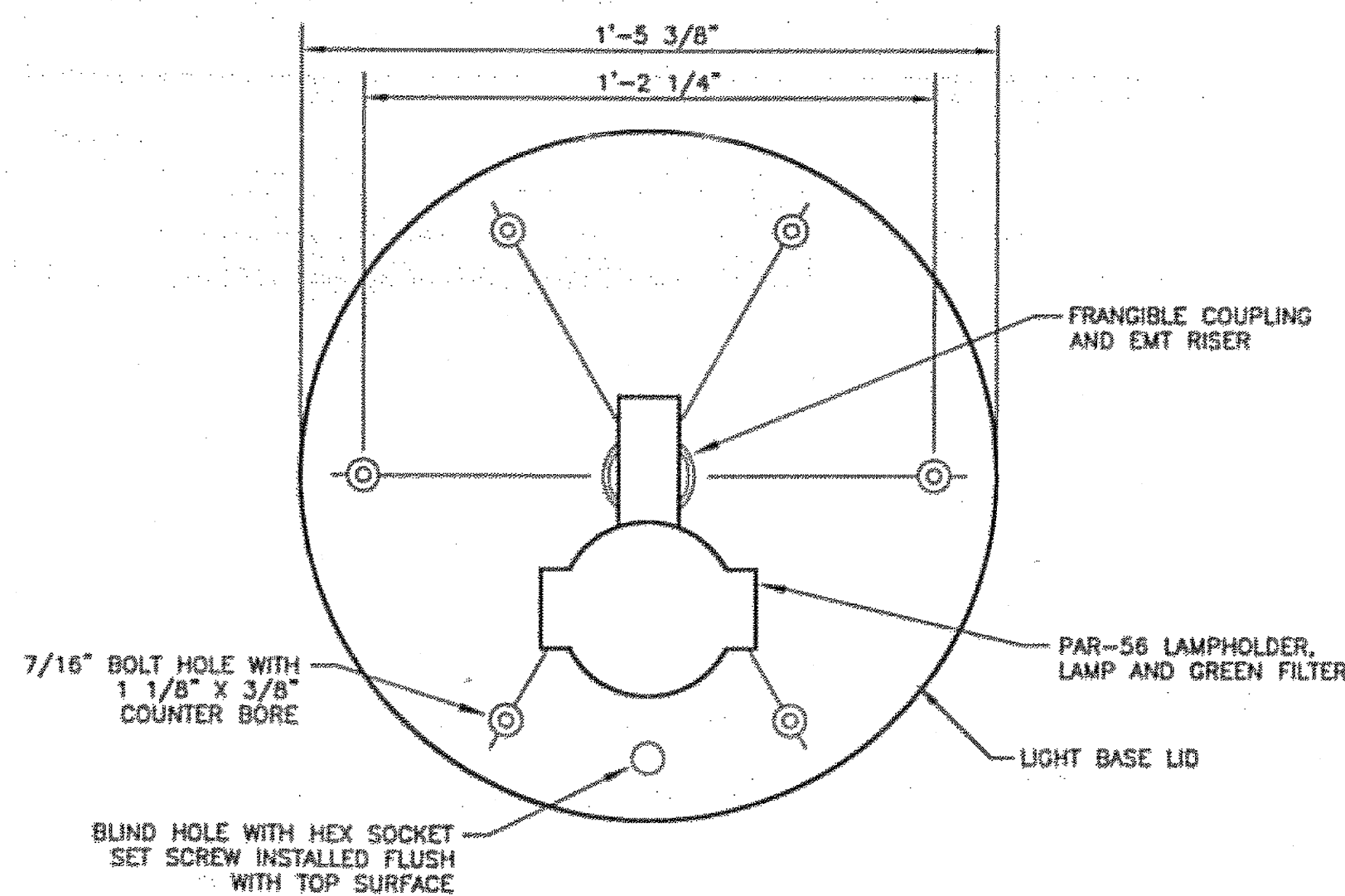
1 THRESHOLD LIGHTS - PLAN
G27 N.T.S.



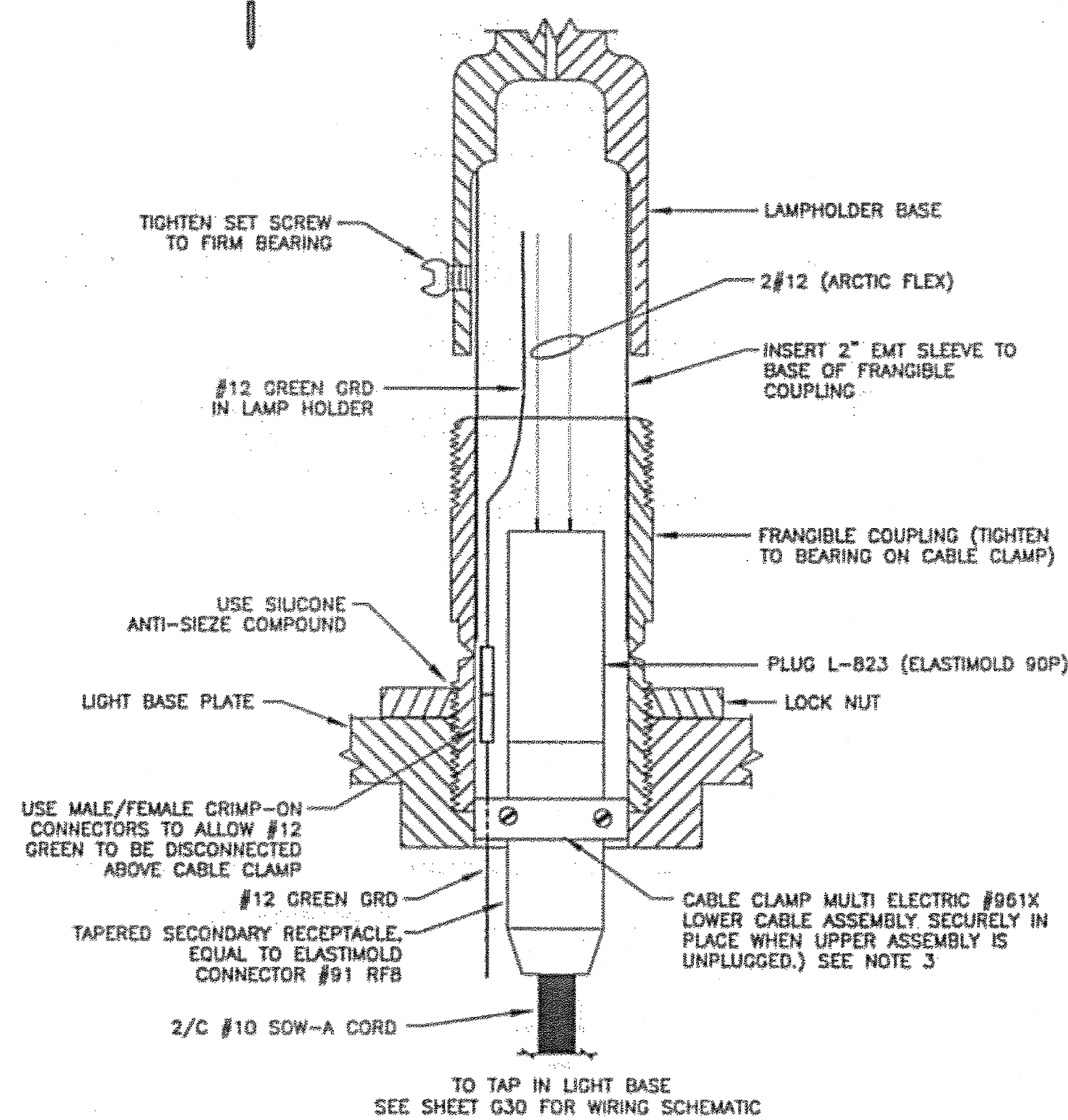
2 THRESHOLD LIGHTS - SECTION
G27 N.T.S.



5 BASE MOUNTED LIGHT - SECTION
G27 N.T.S.



4 BASE MOUNTED LIGHT - PLAN
G27 N.T.S.



3 FRANGIBLE COUPLING DETAIL
G27 N.T.S.

NOTES:

1. RELOCATE THE EXISTING THRESHOLD LIGHTS (RW 11) TO THE NEW RUNWAY THRESHOLD OR INSTALL NEW THRESHOLD LIGHTS (RW 29). PROVIDE NEW THRESHOLD LIGHT BASES AND CIRCUITING AS SHOWN.
2. CONDUITS BELOW GRADE SHALL BE HDPE, EXCEPT INSTALL RIGID GALVANIZED STEEL (RMC) UNDER PADS AND ROADWAYS.
3. DRILL HOLE IN CABLE CLAMP AND INSTALL GREEN INSULATED GROUND CONDUCTOR FROM GROUND LUG IN LIGHT BASE TO LAMP HOLDER. CARE SHOULD BE TAKEN NOT TO INSTALL CABLE CLAMP UPSIDE DOWN SO THAT WHEN THE FRANGIBLE COUPLING IS SCREWED IN, IT WILL NOT TWIST THE CLAMP AND RECEPTACLE SO AS NOT TO SHORT THE WIRING.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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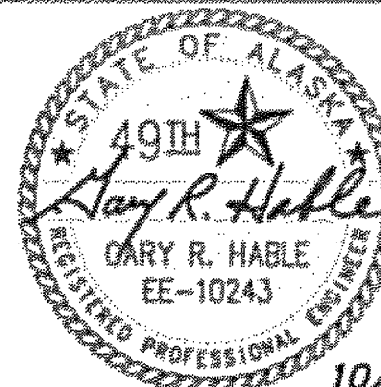
No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

MALSR DETAILS

PREPARED BY: USKH INC.

CHECKED BY: GRH



DESIGNED BY: LPS

DRAWN BY: LPS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

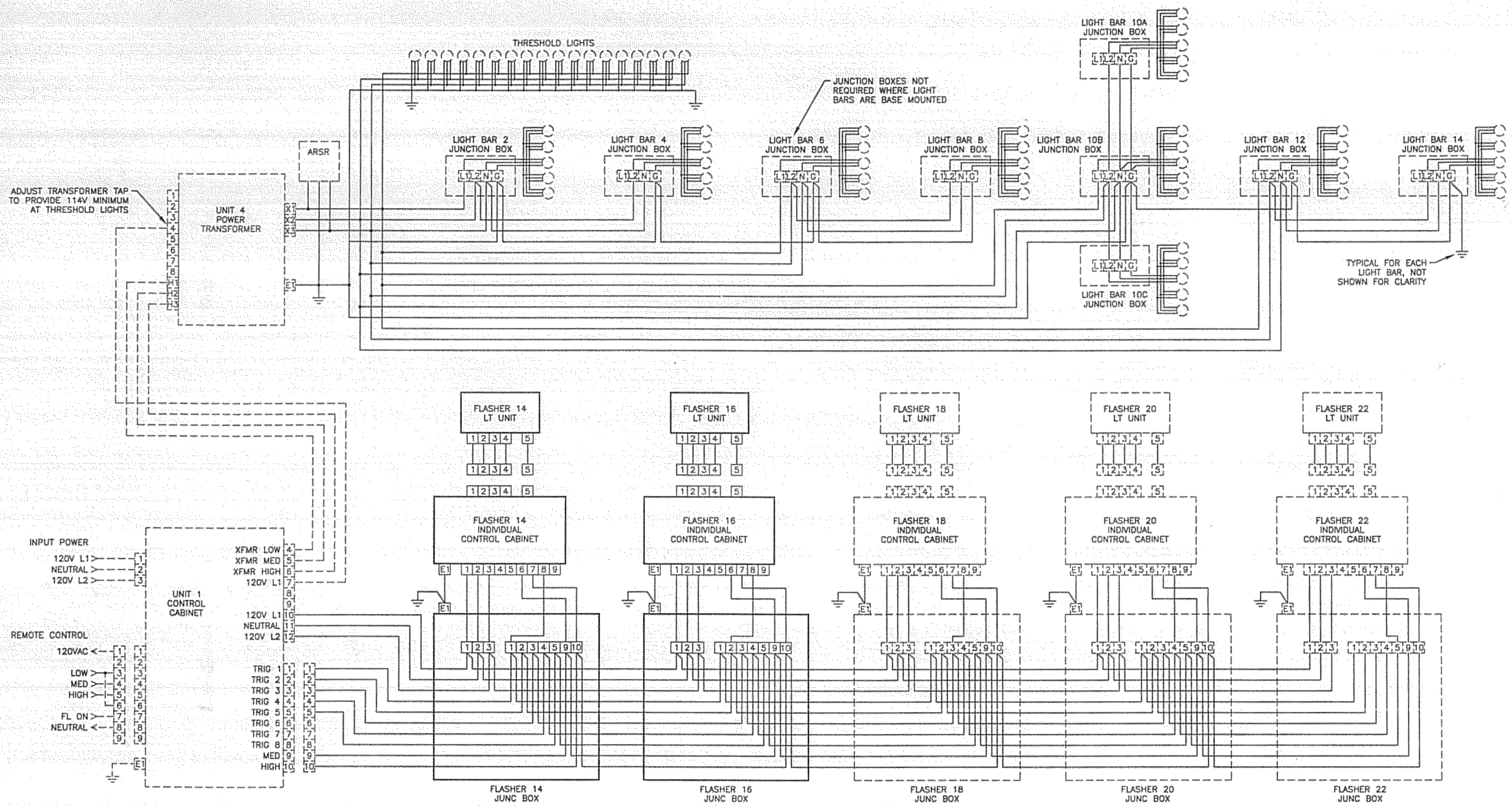
MALSR DETAILS

PROJECT DESIGNATION

AIP NO. 3-02-0144-1606

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
G27	131

See attached Electrical Asbuilts



1
G28 N.T.S. **MALSR WIRING DIAGRAM - RW 11**

NOTE:
ARRANGEMENT AND CONNECTION OF EQUIPMENT IS SCHEMATIC; SEE SHEET G19 FOR ACTUAL ARRANGEMENT AND CONDUCTORS

WIRING DIAGRAM LEGEND
 --- EXISTING EQUIPMENT TO REMAIN OR TO BE REINSTALLED
 ——— NEW WORK

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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ADDENDUM NUMBER
 ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
 RUNWAY SAFETY AREA EXPANSION
 & RUNWAY OVERLAY
 PROJECT NO. 68306

MALSR WIRING DIAGRAM - RW 11

PREPARED BY: USKH INC.
 CHECKED BY: GRH

DESIGNED BY: LPS
 DRAWN BY: LPS

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION

MALSR WIRING DIAGRAM - RW 11

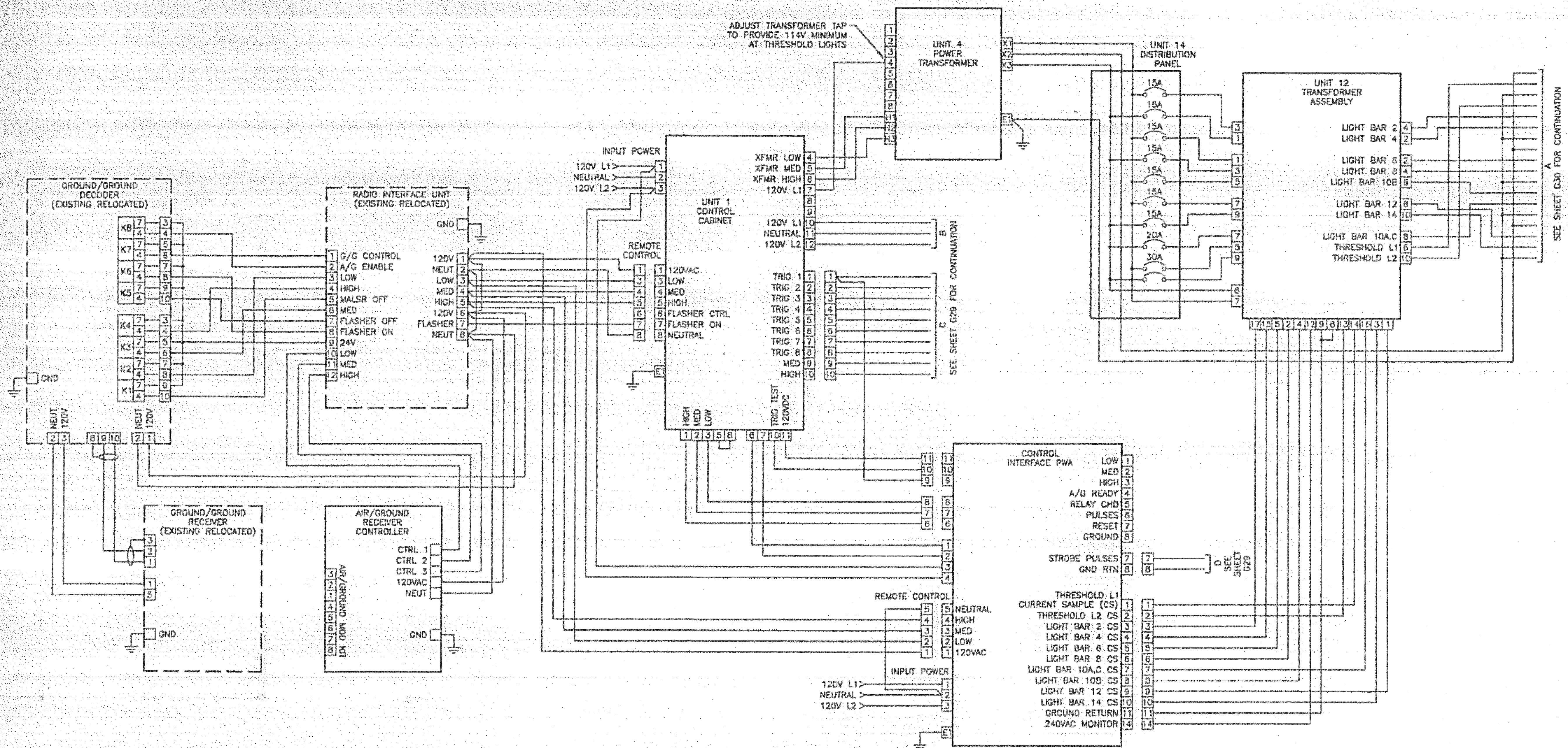
PROJECT DESIGNATION
 AIP NO. 3-02-0144-1606

STATE	YEAR
ALASKA	2006

SHEET NUMBER	TOTAL SHEETS
G28	131

10/4/06

See attached Electrical Asbuilts



SEE SHEET G30 FOR CONTINUATION

1
G29 N.T.S. **MALSR WIRING DIAGRAM - RW 29**

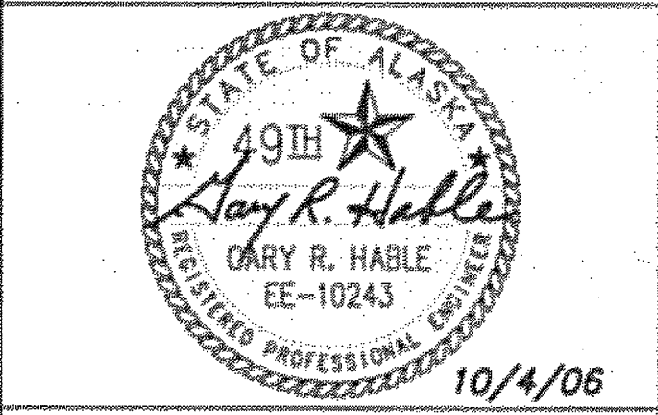
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RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

MALSR WIRING DIAGRAM - RW 29

PREPARED BY: USKH INC.
CHECKED BY: GRH



DESIGNED BY: LPS
DRAWN BY: LPS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

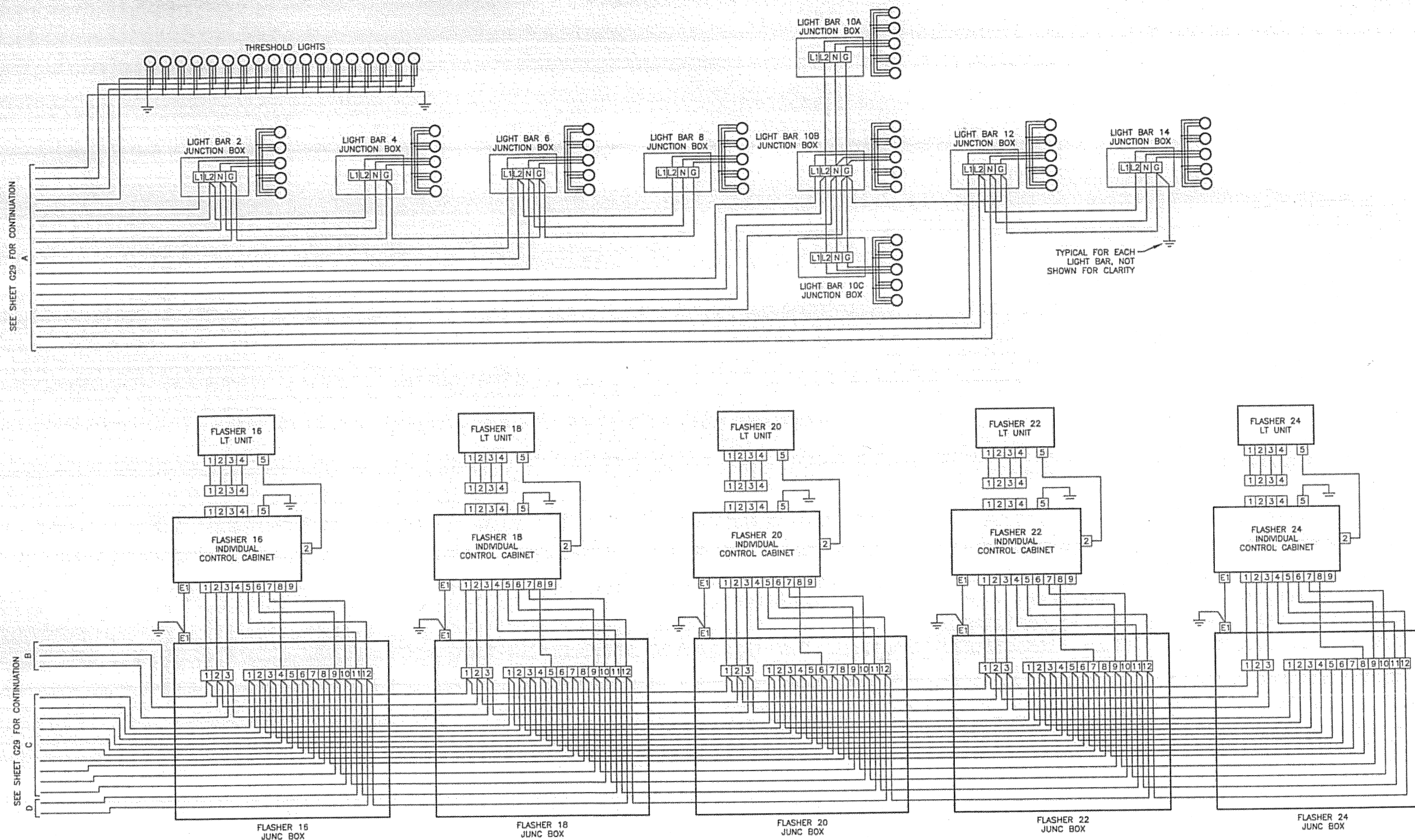
**MALSR WIRING
DIAGRAM - RW 29**

PROJECT DESIGNATION
AIP NO. 3-02-0144-1606

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
G29	131

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

See attached Electrical Asbuilts



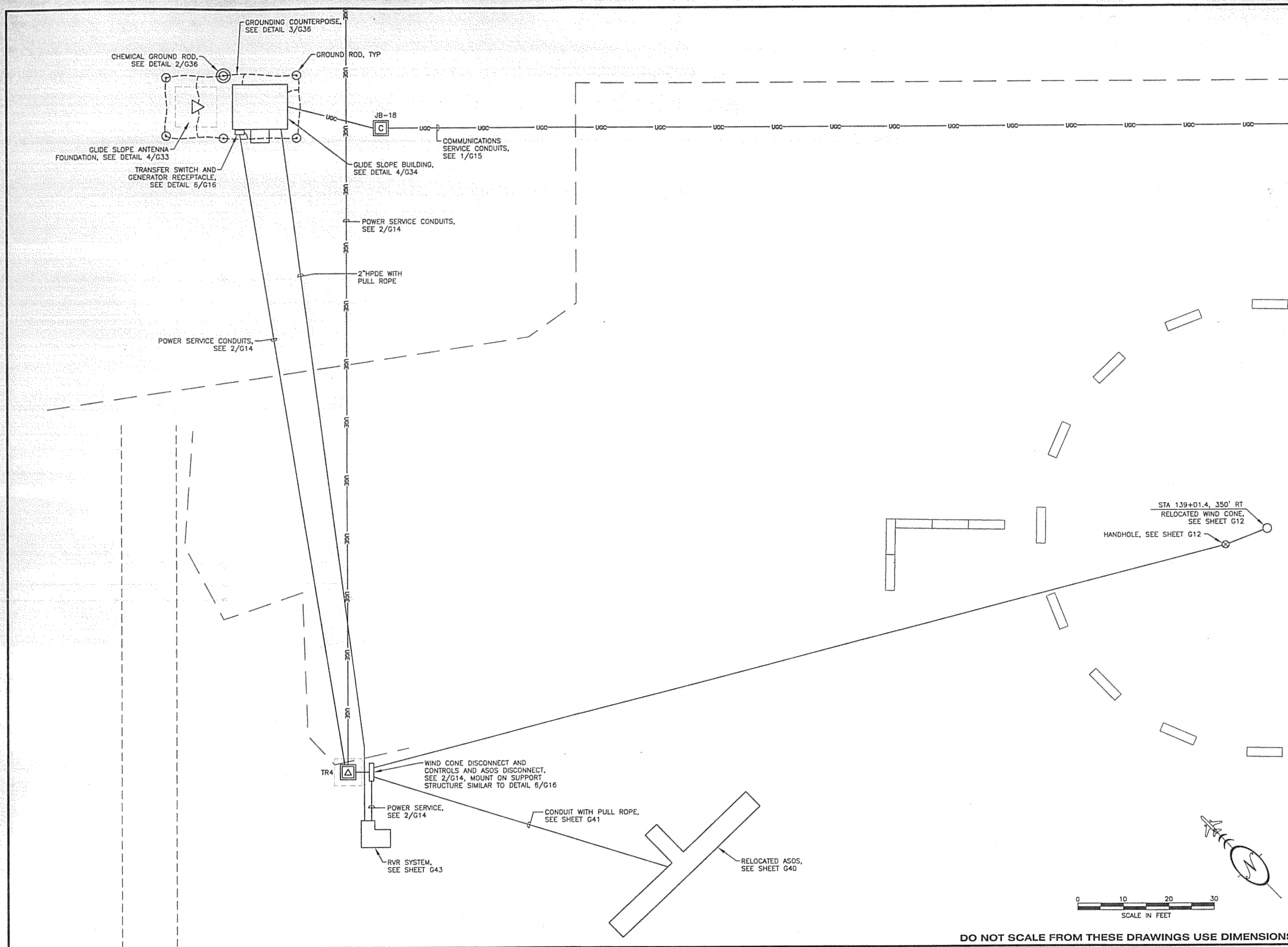
1 MALSR WIRING DIAGRAM - RW 29
G30 N.T.S.

NOTE:
ARRANGEMENT AND CONNECTION OF EQUIPMENT
IS SCHEMATIC, SEE SHEET G19 FOR ACTUAL
ARRANGEMENT AND CONDUCTORS

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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No.	DATE	DESCRIPTION
KETCHIKAN AIRPORT RUNWAY SAFETY AREA EXPANSION & RUNWAY OVERLAY PROJECT NO. 68306		
MALSR WIRING DIAGRAM - RW 29		
PREPARED BY: USKH INC.		
CHECKED BY: GRH		
DESIGNED BY: LPS		
DRAWN BY: LPS		
STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES DESIGN & ENGINEERING SERVICES DIVISION-SOUTHEAST REGION		
MALSR WIRING DIAGRAM -RW 29		
PROJECT DESIGNATION		
AIP NO. 3-02-0144-1606		
STATE	YEAR	
ALASKA	2006	
SHEET NUMBER	TOTAL SHEETS	
G30	131	

See attached Electrical Asbuilts



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ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
 RUNWAY SAFETY AREA EXPANSION
 & RUNWAY OVERLAY
 PROJECT NO. 68306

GLIDE SLOPE AREA ENLARGED PLAN

PREPARED BY: USKH INC.
 CHECKED BY: GRH

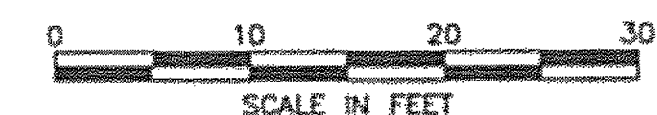
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STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION
 & PUBLIC FACILITIES
 DESIGN & ENGINEERING SERVICES
 DIVISION-SOUTHEAST REGION

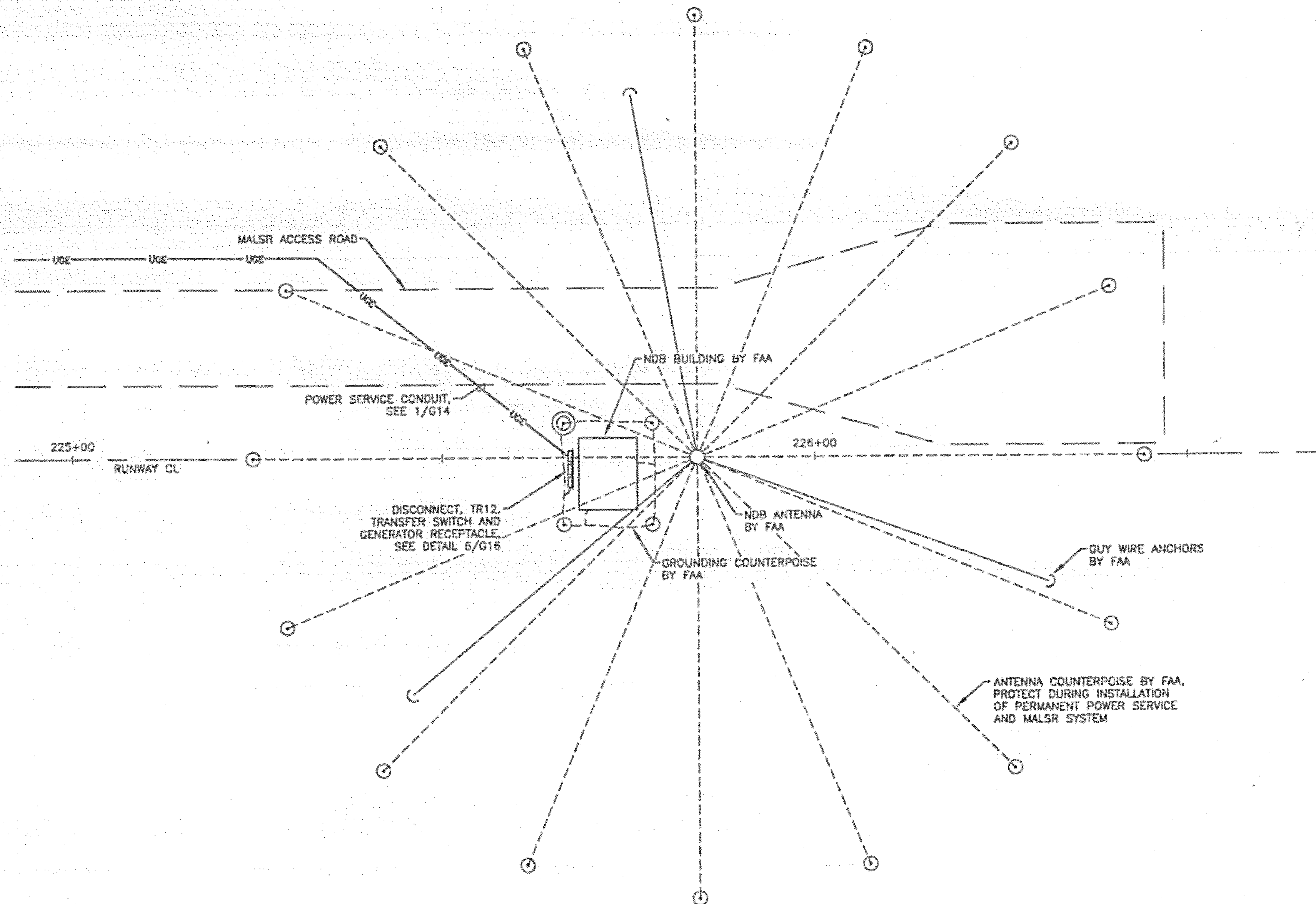
GLIDE SLOPE AREA
 ENLARGED PLAN

PROJECT DESIGNATION
 AIP NO. 3-02-0144-1606

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
G31	131



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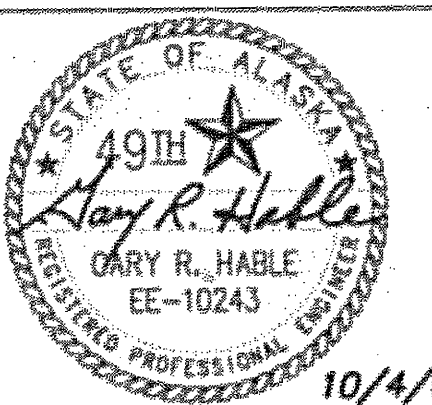
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KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

NDB AREA ENLARGED PLAN

PREPARED BY: USKH INC.

CHECKED BY: GRH



DESIGNED BY: LPS

DRAWN BY: LPS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

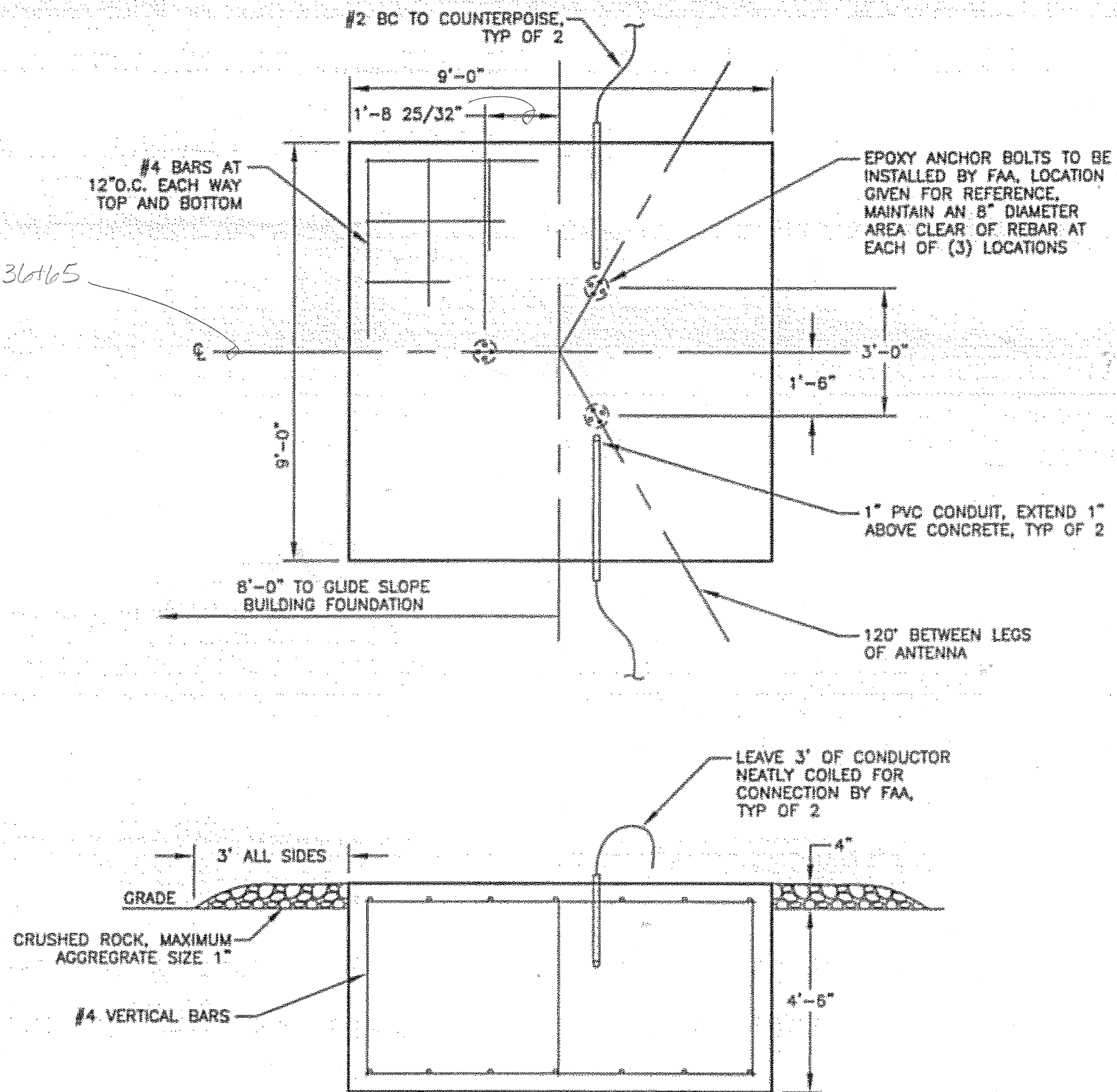
**NDB AREA
ENLARGED PLAN**

PROJECT DESIGNATION
AIP NO. 3-02-0144-1606

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
G32	131

See attached Electrical Asbuilts

STATION 9-27-07
250' RT @ STA 136465



1 GLIDE SLOPE ANTENNA TOWER FOUNDATION DETAIL
G33 N.T.S.

- FOUNDATION NOTES:**
1. CONCRETE SHALL DEVELOP 3000PSI IN 28 DAYS WITH A MAXIMUM SLUMP OF 3". MAXIMUM AGGREGATE SIZE SHALL BE 3/4".
 2. IF FILL OR GRADING IS REQUIRED, IT SHALL BE BUILT UP IN LAYERS NOT EXCEEDING 6". EACH LAYER SHALL BE THOROUGHLY TAMPED AND COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM WATER CONTENT. GRADING OF SOIL AND ROCK SHOULD BE SUCH THAT ALL DRAINAGE IS AWAY FROM FOUNDATION.
 3. MAINTAIN A MINIMUM OF 3" OF CONCRETE COVER OVER ALL REINFORCING STEEL.
 4. FOUNDATION SURFACE SHALL BE LEVEL $\pm 1/8"$ AND HAVE A BROOMED FINISH.
 5. REINFORCING STEEL SHALL BE ASTM A615 GRADE 40 DEFORMED BARS.
 6. ALL FORMS MUST BE REMOVED BEFORE PLACING COMPACTED BACKFILL.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

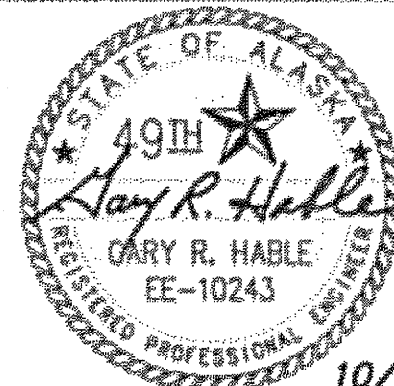
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RECORD OF REVISIONS		
No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

NAVAID FOUNDATION DETAILS

PREPARED BY: USKH INC.
CHECKED BY: GRH



DESIGNED BY: LPS
DRAWN BY: LPS

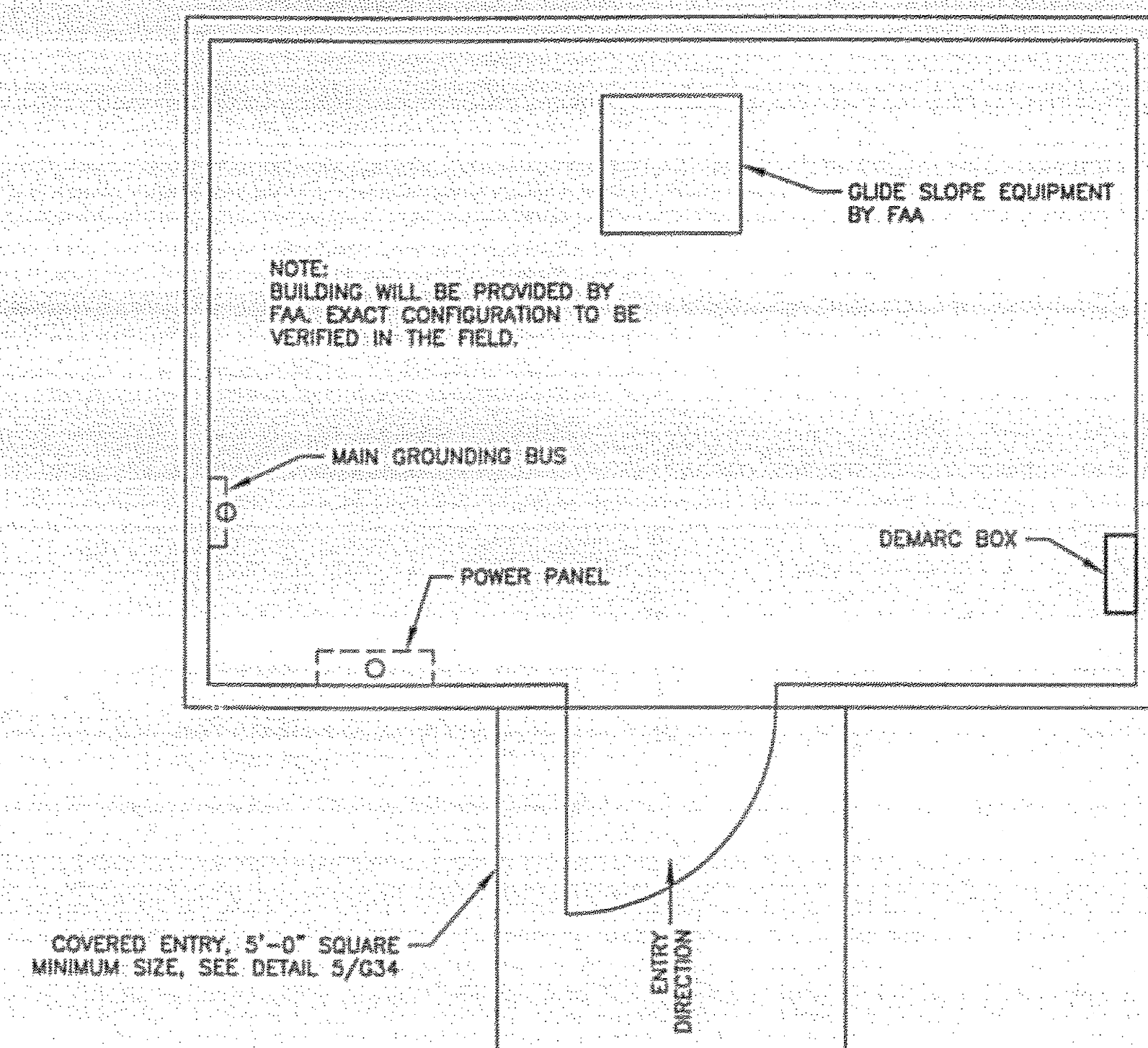
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION - SOUTHEAST REGION

**NAVAID
FOUNDATION
DETAILS**

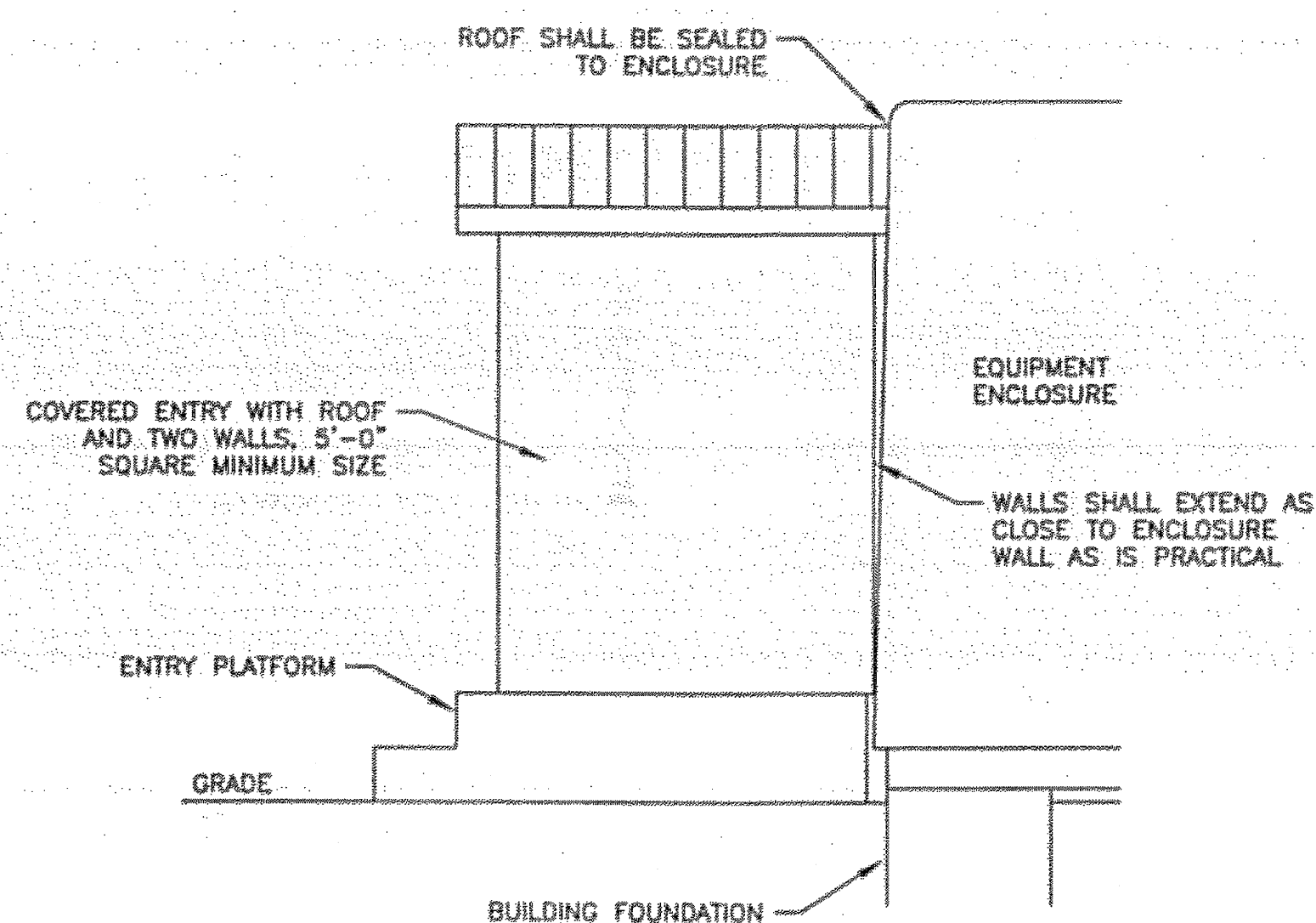
PROJECT DESIGNATION
AIP NO. 3-02-0144-1606

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
G33	131

See attached Electrical Asbuilts



4 GLIDE SLOPE EQUIPMENT ENCLOSURE
G34 N.T.S.

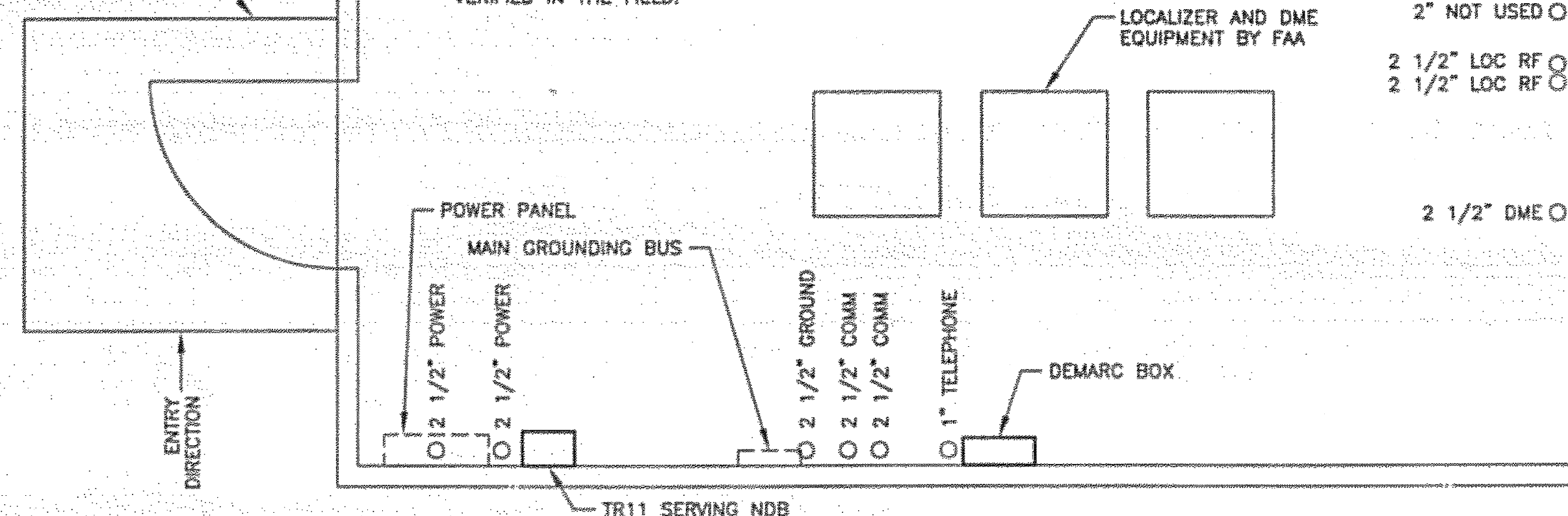


5 COVERED ENTRY DETAIL
G34 N.T.S.

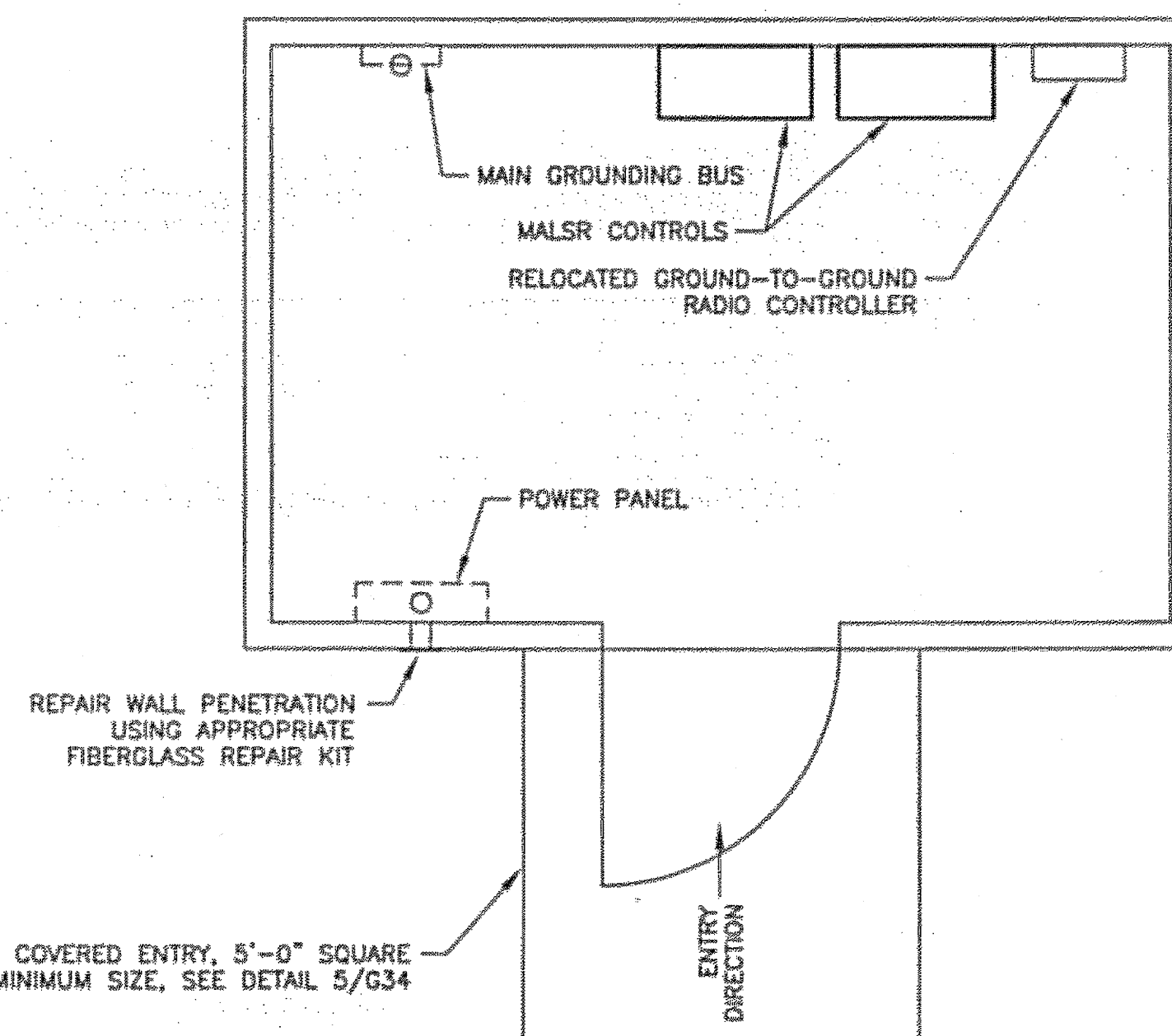
COVERED ENTRY NOTES:

- COVERED ENTRIES MAY BE PREFABRICATED FIBERGLASS UNITS OR CONSTRUCTED ON SITE.
- FIELD CONSTRUCTED ENTRIES SHALL BE CONSTRUCTED OF ALL-WEATHER TREATED WOOD STRUCTURE, METAL OR FIBERGLASS ROOF AND WALL PANELS, AND FIBERGLASS FLOOR GRATING. OTHER MATERIALS MAY BE USED UPON APPROVAL OF THE ENGINEER.
- THE ENTRY PLATFORM MAY BE CONSTRUCTED AS DESCRIBED ABOVE OR MAY BE POURED OR PRECAST CONCRETE. MAXIMUM STEP HEIGHT SHALL BE 8".
- ONE PREFABRICATED FIBERGLASS ENTRY IS AVAILABLE FOR SALVAGE FROM THE EXISTING LOCALIZER BUILDING.
- COORDINATE ENTRY CONSTRUCTION AND CONNECTION TO ENCLOSURE WITH EXISTING ENCLOSURE PENETRATIONS, VENTILATION HOODS, ENTRY DOOR, ETC.

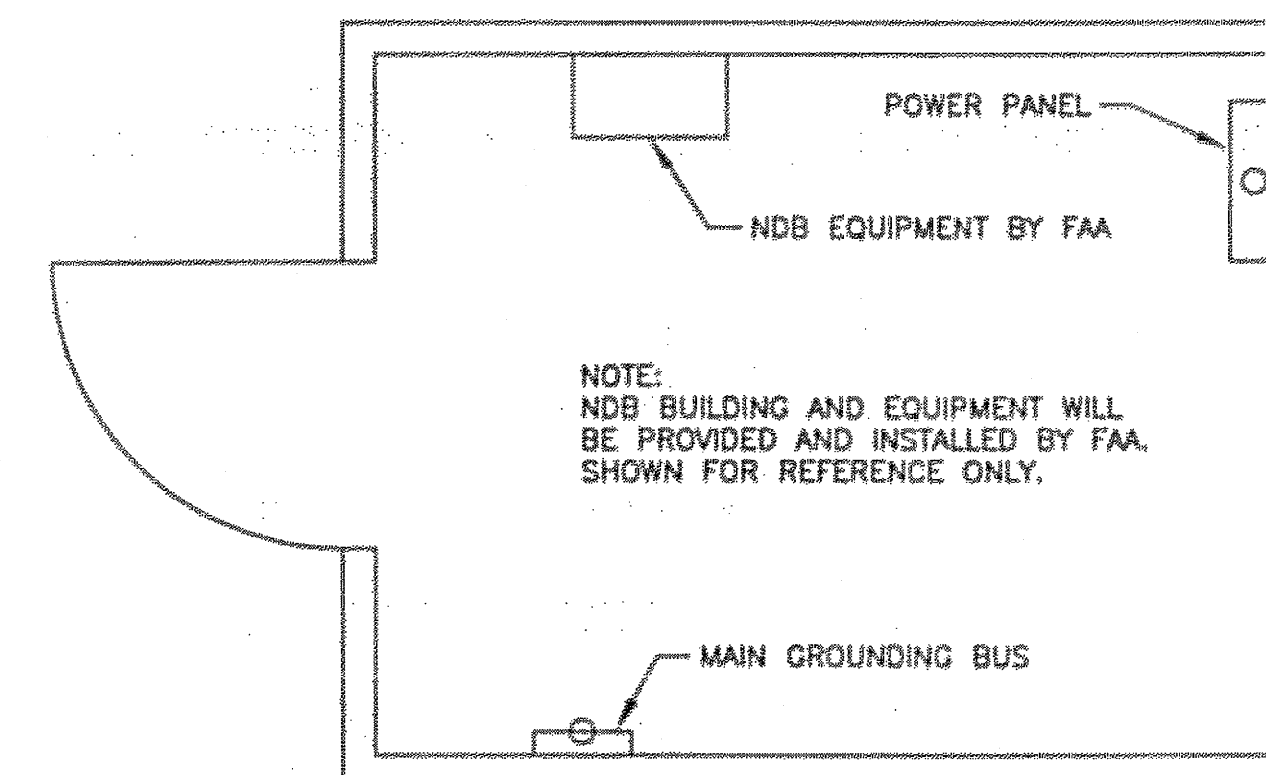
COVERED ENTRY, 5'-0" SQUARE
MINIMUM SIZE, SEE DETAIL 5/G33



1 LOCALIZER EQUIPMENT ENCLOSURE
G34 N.T.S.



3 MALS EQUIPMENT ENCLOSURE
G34 N.T.S.



2 NDB EQUIPMENT ENCLOSURE
G34 N.T.S.

BUILDING NOTES:

- LAYOUTS SHOWN ARE TAKEN FROM AS-BUILT INFORMATION AND SITE INVESTIGATIONS. DIMENSIONS, LOCATIONS, AND LAYOUT SHOULD BE VERIFIED IN THE FIELD PRIOR TO STARTING CONSTRUCTION.
- BUILDING PENETRATIONS SHALL BE MADE THROUGH THE FLOOR ONLY. EXISTING BUILDING PENETRATIONS SHALL BE REUSED WHENEVER POSSIBLE. ADDITIONAL PENETRATIONS SHALL NOT BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER.
- EXACT LAYOUT OF EQUIPMENT AND CONDUIT ENTRY POINTS SHALL BE COORDINATED IN THE FIELD BASED ON EXISTING AND FIELD CONDITIONS.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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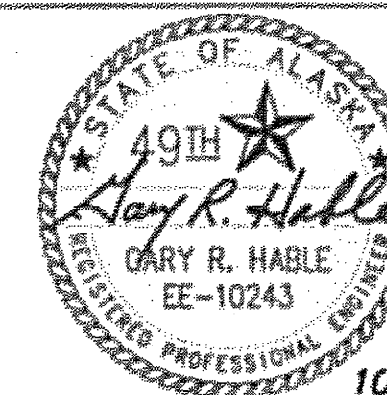
No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

EQUIPMENT ENCLOSURE PLANS

PREPARED BY: USKH INC.

CHECKED BY: GRH



DESIGNED BY: LPS

DRAWN BY: LPS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

EQUIPMENT ENCLOSURE PLANS

PROJECT DESIGNATION

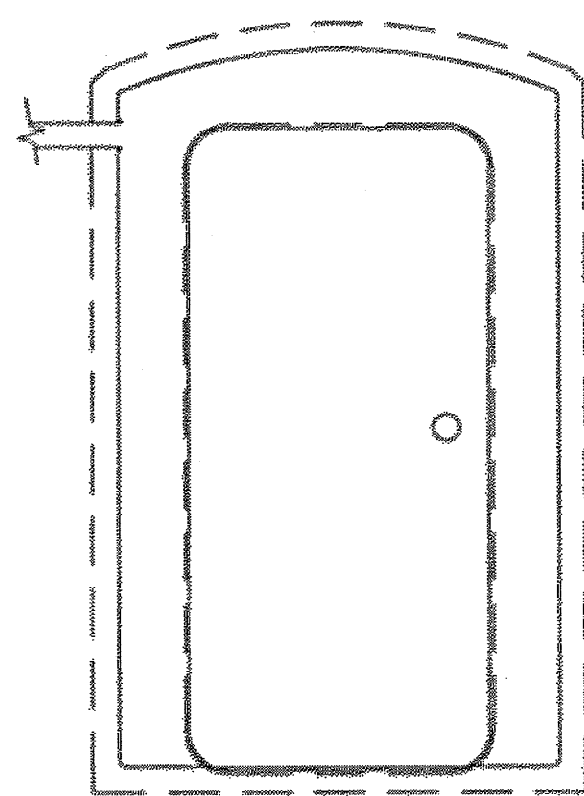
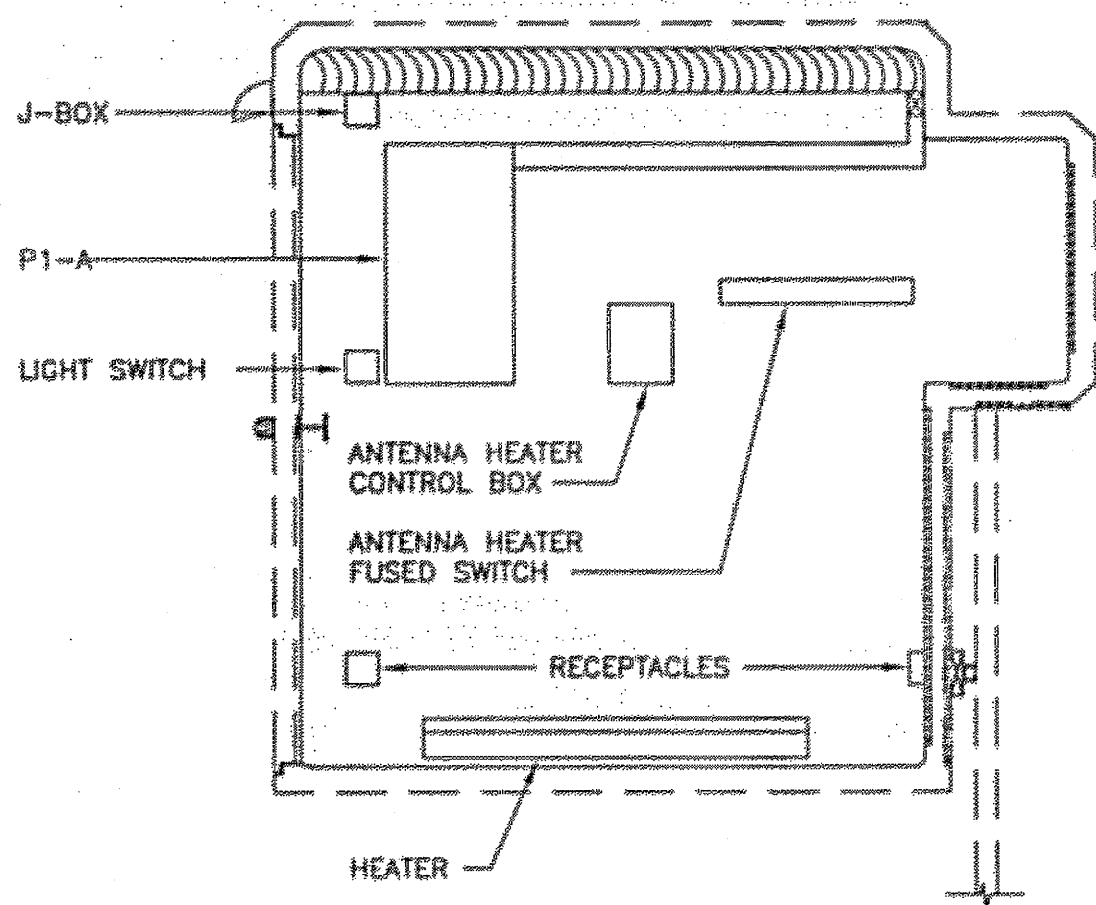
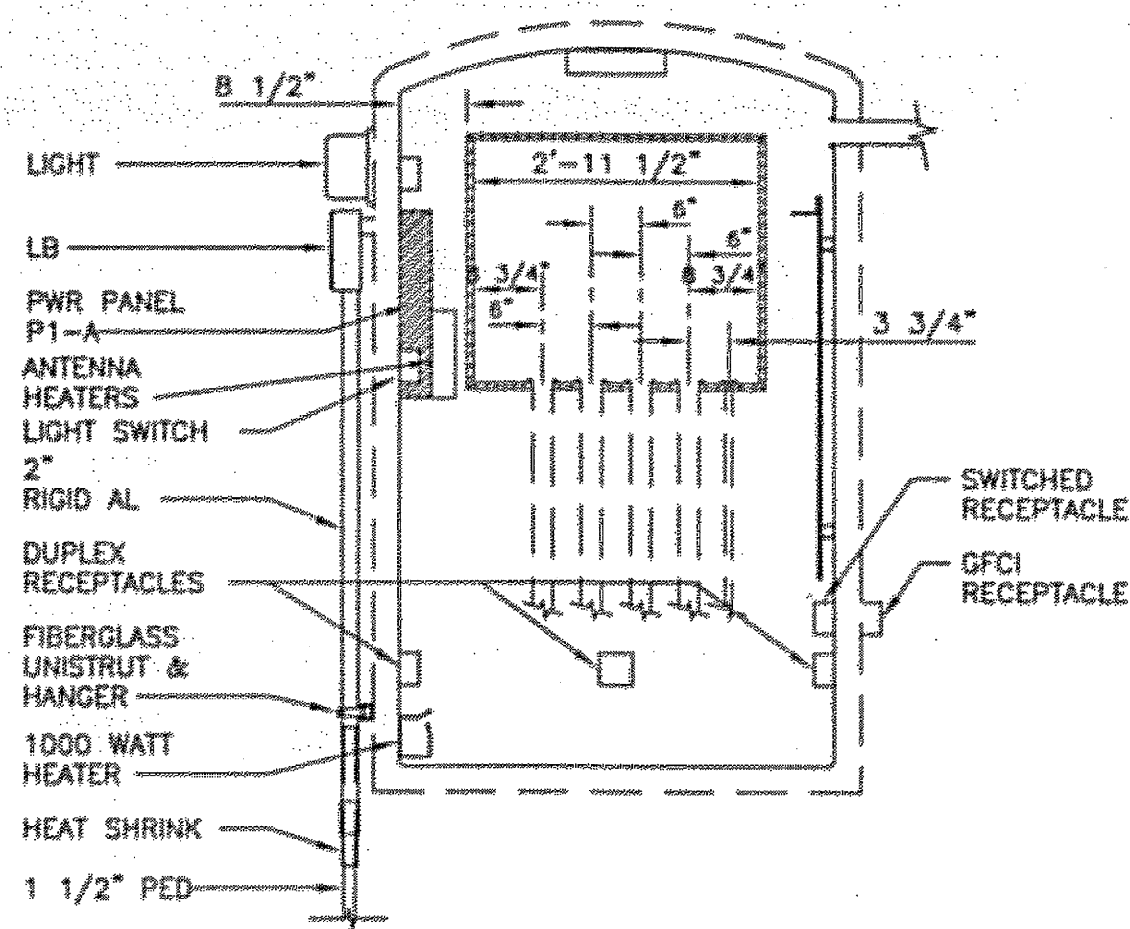
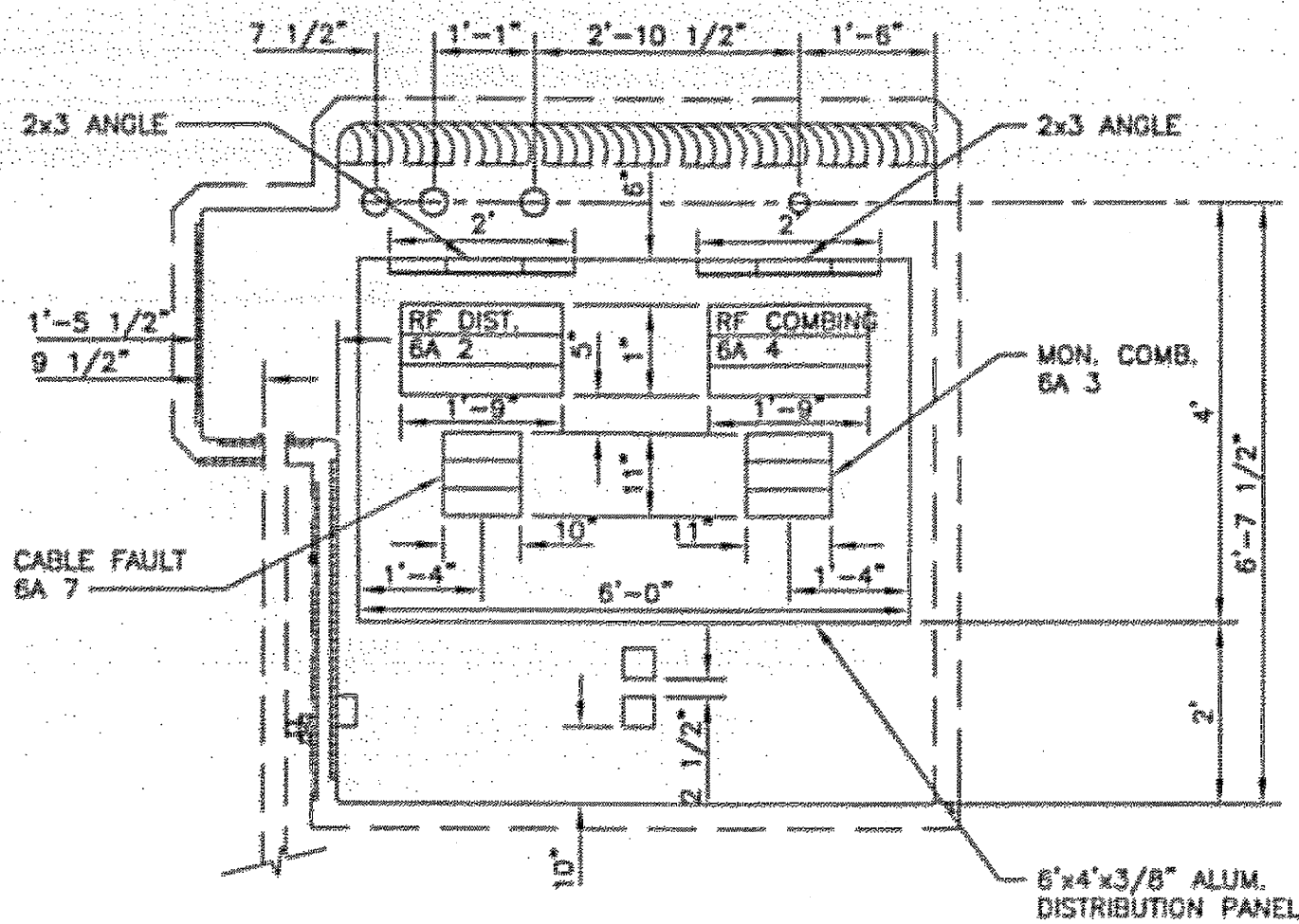
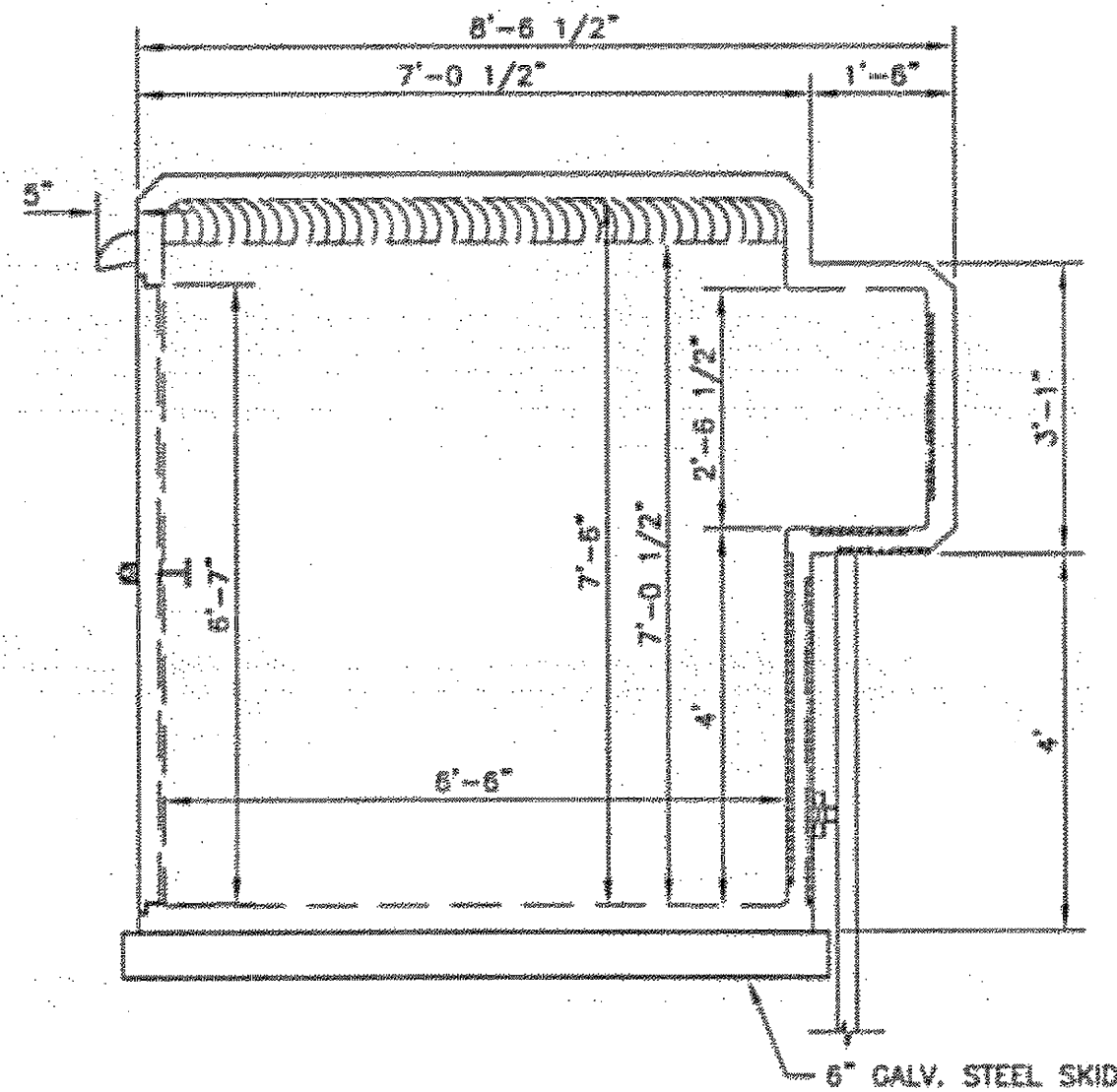
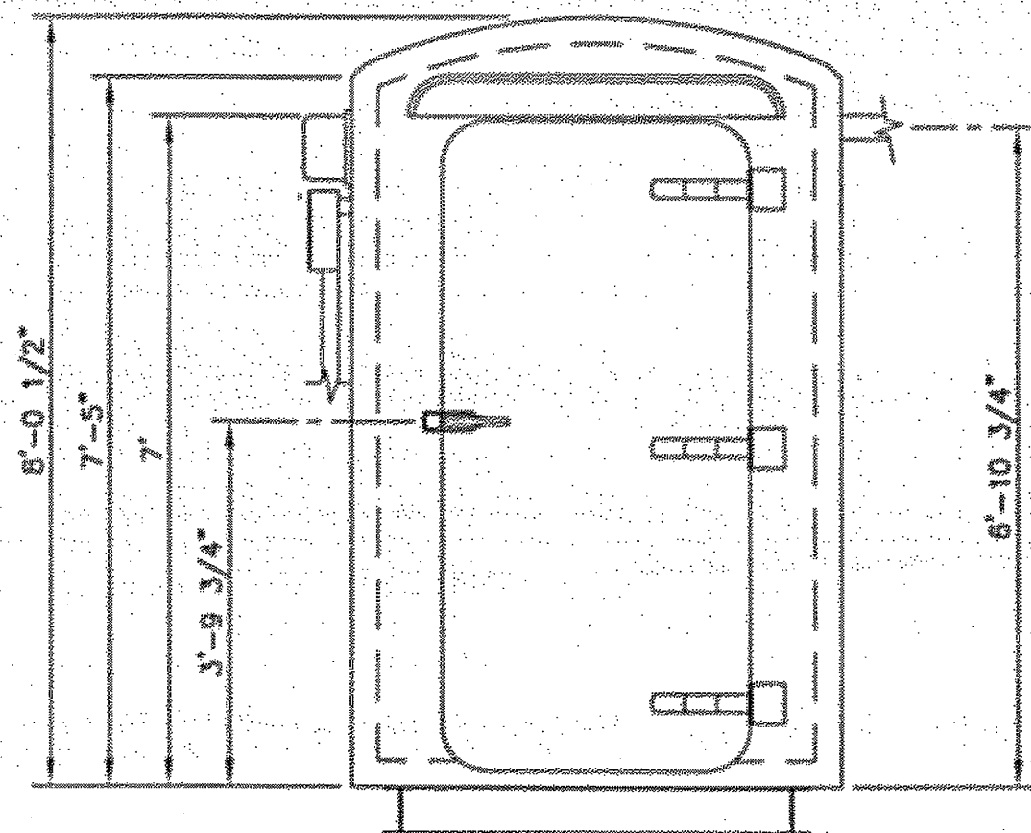
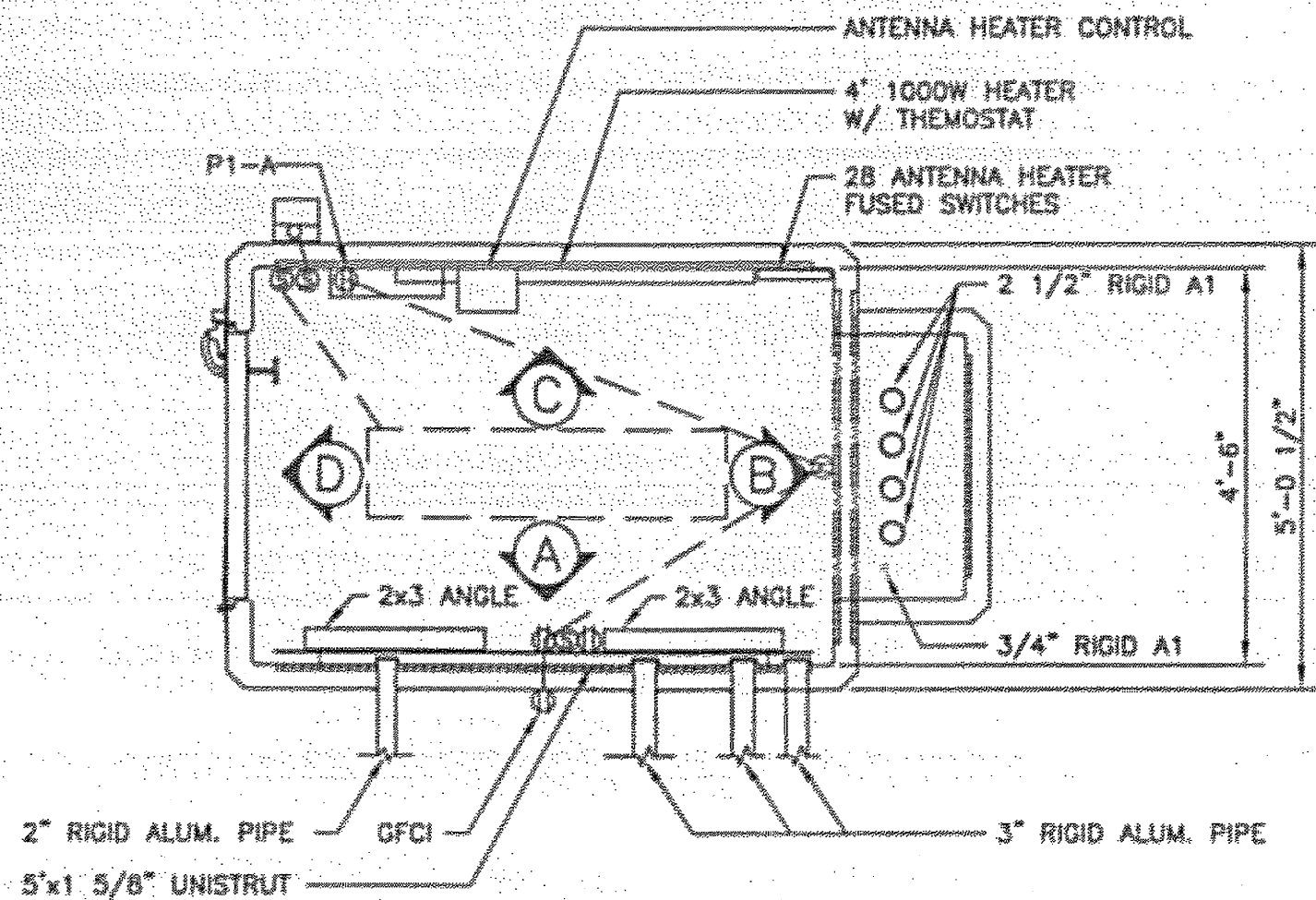
AIP NO. 3-02-0144-1606

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
G34	131

See attached Electrical Asbuilts

NOTES:

1. 3/4" SOLID WALL, FIBERGLASS CONSTRUCTION.
2. 3/4" PLYWOOD BACKING
3. PANELBOARD P-1A SCHEDULE.
- | 120/240V | | 1PH | |
|----------------------------|-------|----------------------|-------|
| 1. SERVICE DC | DP60A | 2. BASEBOARD HTR | DP20A |
| 3. SERVICE DC | DP60A | 4. BASEBOARD HTR | DP20A |
| 5. LIGHTS | 20A | 6. ANT. HTRS | DP20A |
| 7. OUTLETS | 20A | 8. ANT. HTRS | DP20A |
| 9. OUTLETS | 20A | 10. THERMOSTAT | 20A |
| 11. EQUIP. OUTLET AND GFCI | 20A | 12. OBSTRUCTION LTS. | 20A |
4. THE EXISTING LOCALIZER RF DISTRIBUTION/COMBINING BUILDING IS TO BE REUSED. THESE DRAWINGS OF THE EXISTING BUILDING ARE FOR REFERENCE ONLY. EXISTING BUILDING PENETRATIONS SHALL BE REUSED - NO NEW BUILDING PENETRATIONS SHALL BE MADE.



PATH: I:\823400\Draws\E\Sheets\G35-C1.dwg

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TAB: G12

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ATTACHMENT NUMBER

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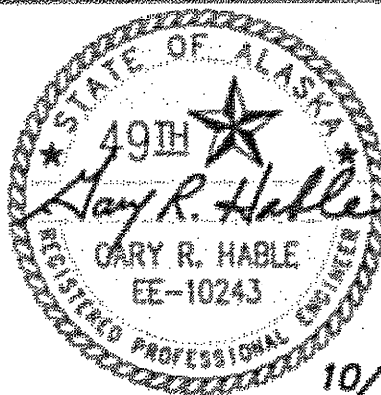
No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

LOCALIZER RF DISTRIBUTION/COMBINING UNIT

PREPARED BY: USKH INC.

CHECKED BY: GRH



DESIGNED BY: LPS

DRAWN BY: LPS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

LOCALIZER
DISTRIBUTION/
COMBINING UNIT

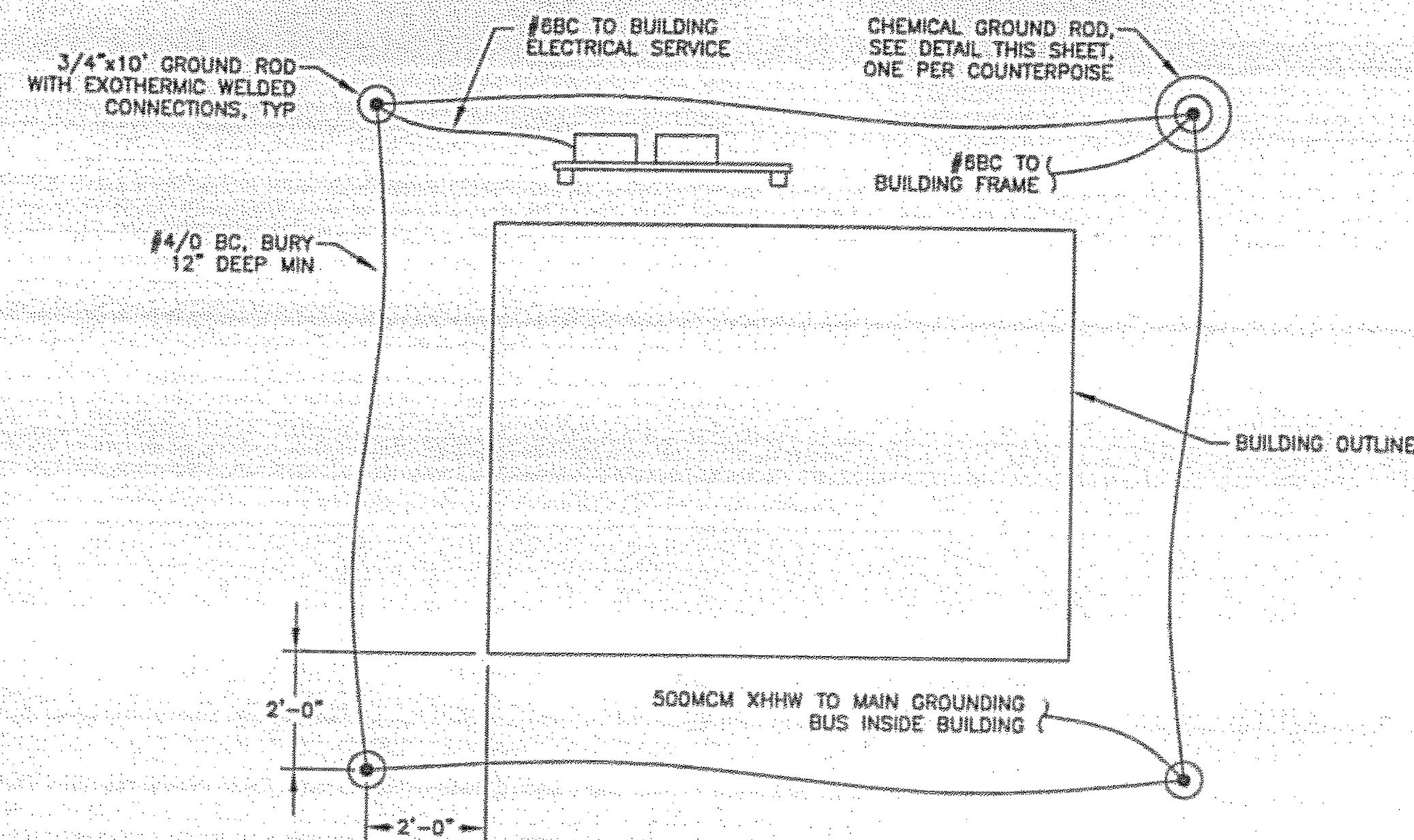
PROJECT DESIGNATION

AIP NO. 3-02-0144-1606

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
G35	131

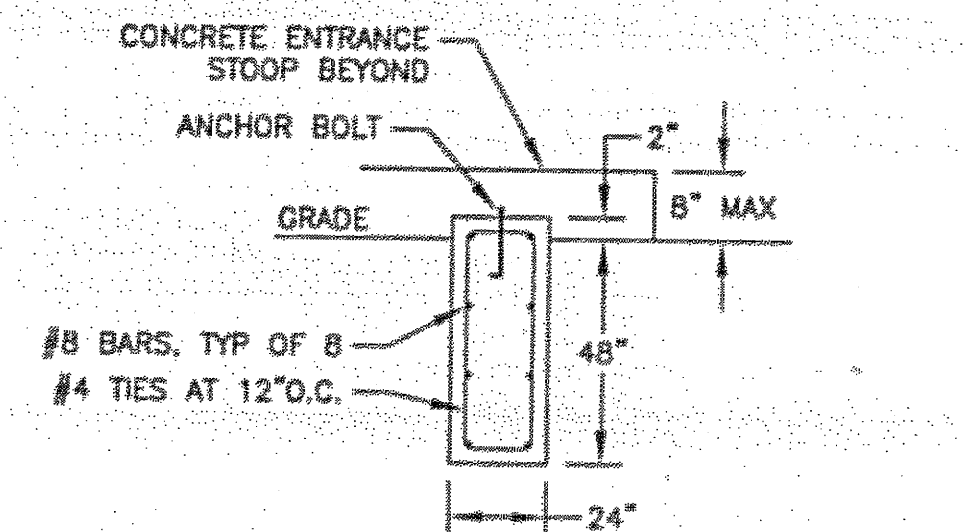
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

See attached Electrical Asbuilts

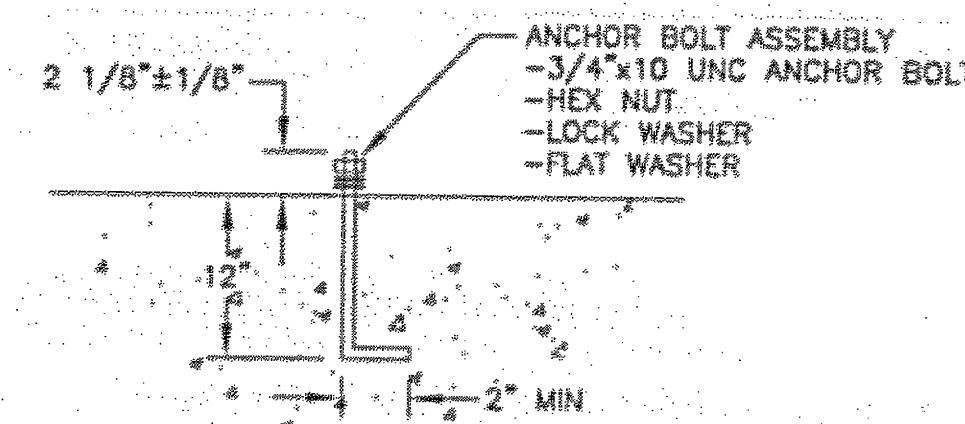


NOTE:
DETAIL IS TYPICAL, SEE PLANS FOR EXACT CONFIGURATION AND CONNECTION POINTS

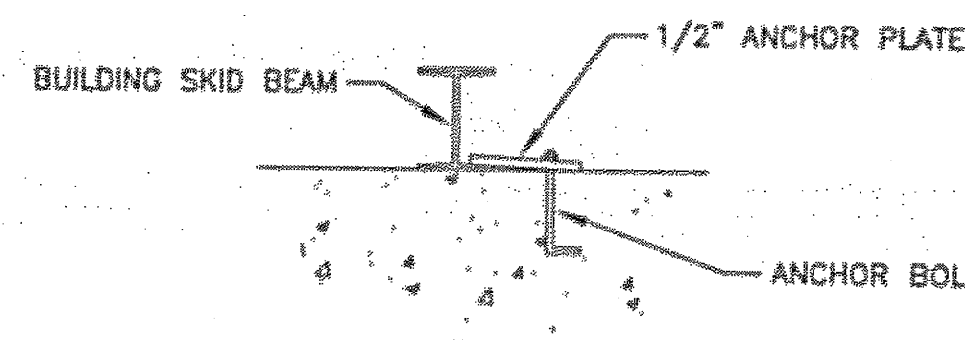
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G36 N.T.S. **GROUNDING COUNTERPOISE DETAIL**



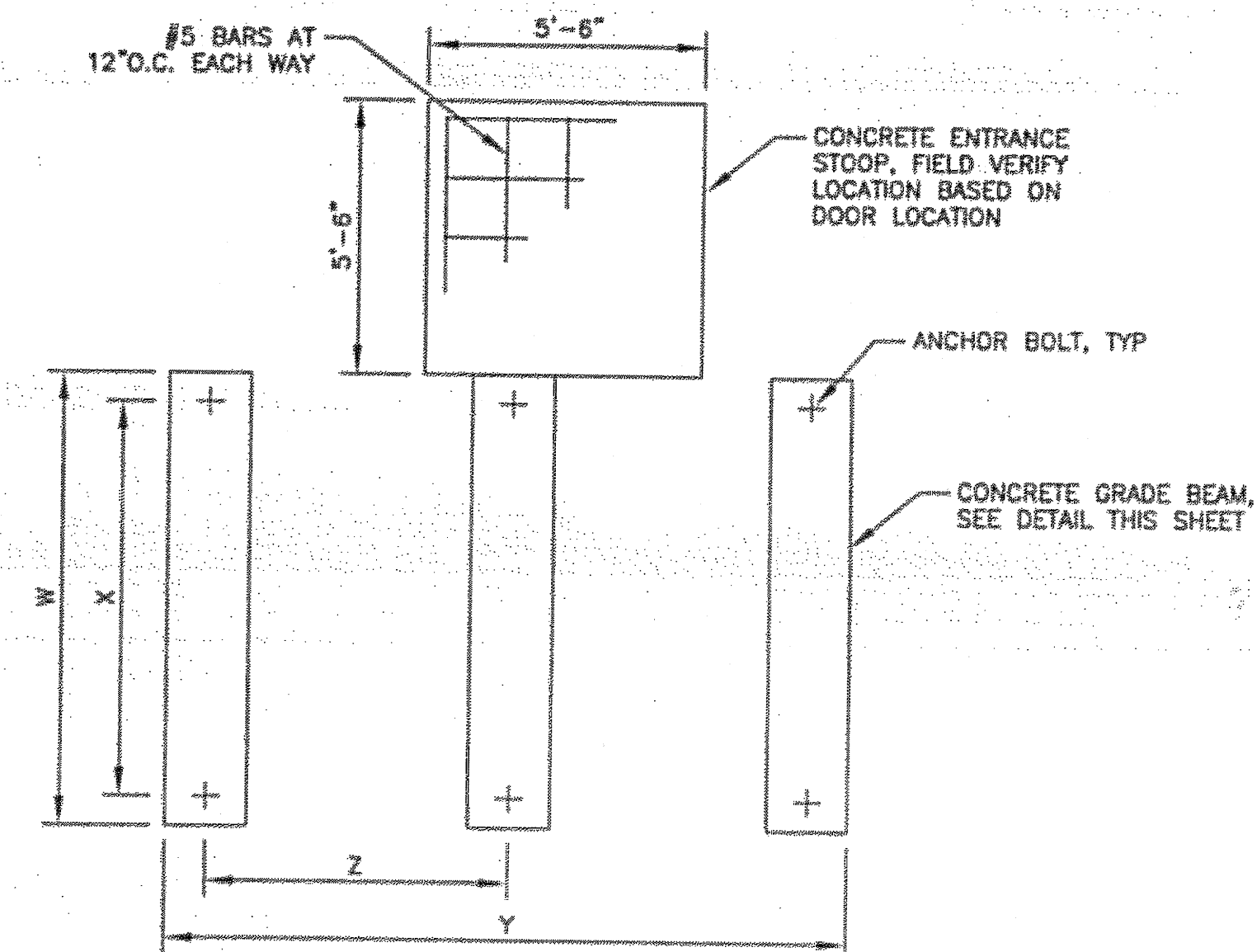
CONCRETE GRADE BEAM



ANCHOR BOLT DETAIL



SHELTER ANCHOR DETAIL

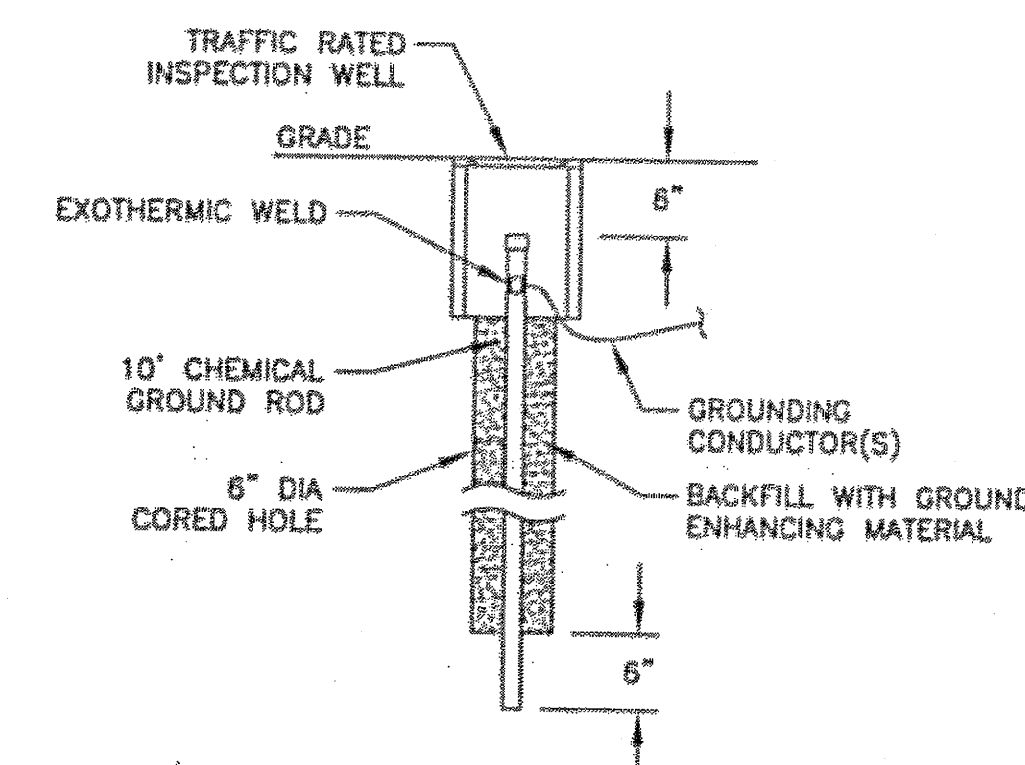


BUILDING FOUNDATION NOTES:

1. FIELD VERIFY ALL DIMENSIONS WITH BUILDINGS BEING INSTALLED
2. CONCRETE SHALL DEVELOP 3000PSI IN 28 DAYS WITH A MAXIMUM SLUMP OF 3". MAXIMUM AGGREGATE SIZE SHALL BE 3/4".
3. IF FILL OR GRADING IS REQUIRED, IT SHALL BE BUILT UP IN LAYERS NOT EXCEEDING 6". EACH LAYER SHALL BE THOROUGHLY TAMPED AND COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM WATER CONTENT. GRADING OF SOIL AND ROCK SHOULD BE SUCH THAT ALL DRAINAGE IS AWAY FROM FOUNDATIONS.
4. ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE HOT DIP GALVANIZED STEEL PER ASTM A153 AND A325.
5. MAINTAIN A MINIMUM OF 3" OF CONCRETE COVER OVER ALL REINFORCING STEEL.
6. GRADE BEAM FOUNDATION ELEVATIONS SHALL BE HORIZONTALLY LEVEL WITH EACH OTHER ± 1/4". INDIVIDUAL GRADE BEAM SURFACES MUST BE LEVEL ± 1/8".
7. ANCHOR BOLTS MAY BE REPLACED WITH EPOXY ANCHORED THREADED ROD AT THE CONTRACTOR'S OPTION. EPOXY SHALL HAVE A MINIMUM TENSION SHEAR OF 4500PSI WHEN SET. THREADED ROD SHALL BE 3/4"-10 UNC STAINLESS STEEL. INSTALL ROD PER MANUFACTURER'S RECOMMENDATIONS LEAVING 2 1/8" ABOVE CONCRETE.
8. FOUNDATION ELEVATION SHALL BE FIELD VERIFIED AND RECORDED ON THE AS-BUILT DRAWINGS.

BUILDING	W	X	Y	Z	NO OF BEAMS
LOCALIZER	10'-0"	9'-3"	20'-0"	4'-6"	5
MALSR	8'-0"	7'-3"	12'-0"	5'-0"	3
GLIDE SLOPE	10'-0"	9'-3"	14'-0"	4'-0"	4
DIST/COMB	5'-0"	4'-3"	7'-0"	5'-0"	2
GENERATOR	FIELD VERIFY MODULE SIZE 4'-0" MAX				

1
G36 N.T.S. **TYPICAL BUILDING FOUNDATION DETAILS**



2
G36 N.T.S. **CHEMICAL GROUND ROD DETAIL**

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH:
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TAB: G12

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ATTACHMENT NUMBER

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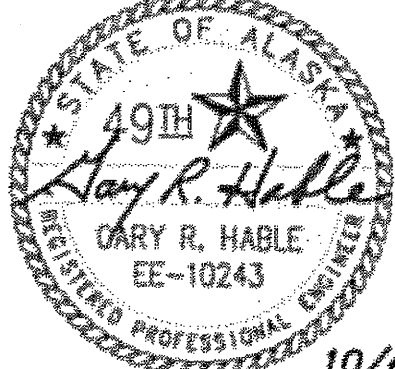
No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

EQUIPMENT ENCLOSURE DETAILS

PREPARED BY: USKH INC.

CHECKED BY: GRH



DESIGNED BY: LPS

DRAWN BY: LPS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

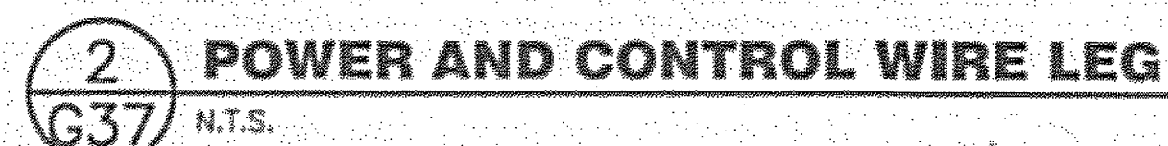
**EQUIPMENT
ENCLOSURE
DETAILS**

PROJECT DESIGNATION

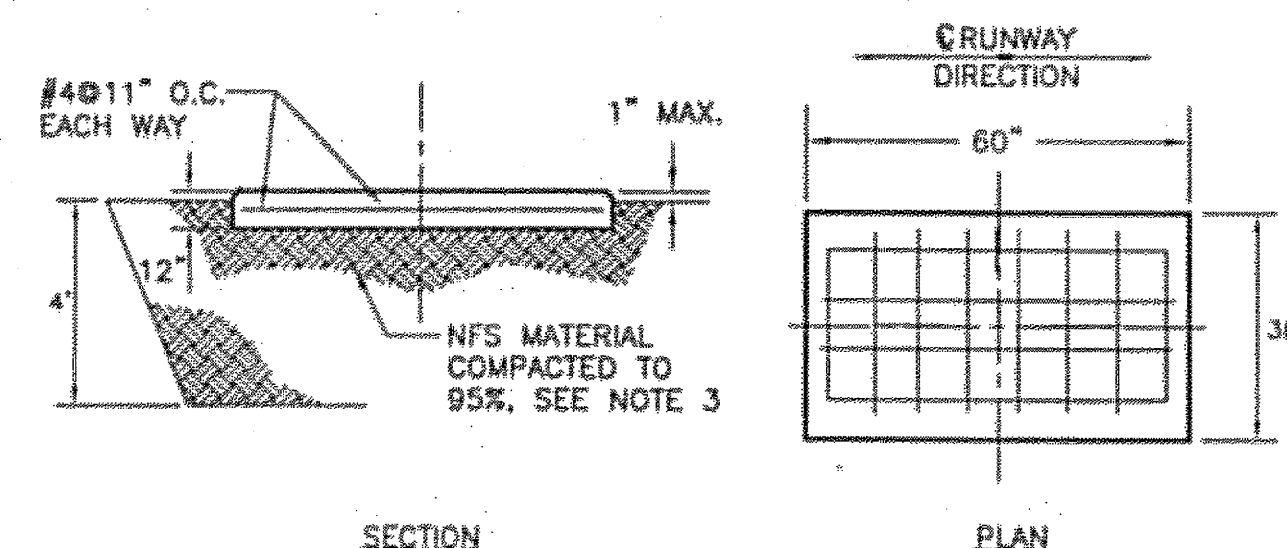
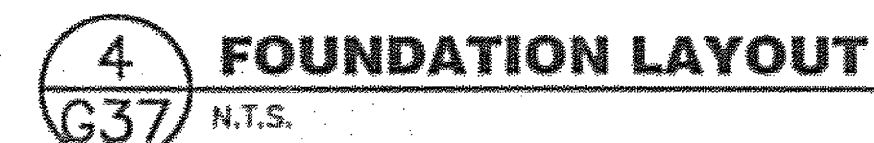
AIP NO. 3-02-0144-1606

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
G36	131

See attached Electrical Asbuilts



1. INSTALL PAPI FURNISHED BY FAA (RW 29) AND REINSTALL EXISTING PAPI SYSTEM (RW 11).
FAA WILL AIM AND CERTIFY PAPI SYSTEMS AFTER INSTALLATION IS COMPLETE.
2. SEE CONCRETE SPECIFICATIONS FOR CONCRETE REQUIREMENTS.
3. PRIOR TO PLACING FORMS, ENSURE ONLY NFS MATERIAL COMPACTED TO 95% IS BELOW ALL FOUNDATIONS. IF NFS MATERIAL IS NOT PRESENT, EXCAVATE AS REQUIRED TO PROVIDE A MINIMUM OF 4 FEET OF NFS MATERIAL BENEATH PAPI FOUNDATIONS. PLACE FILL IN 8" LIFTS AND COMPACT TO 95% OF MAXIMUM DENSITY AS DETERMINED BY WAGC FOP FOR AASHTO T 99/T 180.
4. REINFORCING STEEL SHALL BE ASTM A615, GRADE 60, DEFORMED STEEL BARS.
5. DRILL HOLES AND INSTALL ADHESIVE ANCHOR RODS WHEN PAPI UNITS HAVE BEEN ACCURATELY LOCATED.
6. COORDINATE PLACEMENT OF CONDUIT STUB-UPS WITH FAA.
7. FOLD BACK UNUSED SHIELDED PAIRS AND TAPE IN THE LHA.
8. ALL MOUNTINGS TO BE 2 INCH FRANGIBLE COUPLINGS.
9. 2" RMC LENGTH IS REQUIRED SO THAT THE BEAM CENTERS OF ALL LIGHT UNITS SHALL BE WITHIN 1 INCH OF A HORIZONTAL PLANE. THIS HORIZONTAL PLANE SHALL BE WITHIN 1 FOOT OF THE ELEVATION OF THE RUNWAY CROWN ADJACENT TO THE PAPI UNITS.
10. PROVIDE ANTI-SLIZE COMPOUND ON THE ADJUSTABLE LEG THREADS, NSN# 8030-00-251-3980 MANUFACTURED BY JET-LUBE, INC., HOUSTON, TX OR EQUAL.
11. ENSURE 18" MIN OF FREE DRAINING MATERIAL IS UNDER PULL BOX. SEE SPECIFICATIONS FOR PULL BOX REQUIREMENTS.
12. ALL UNITS IN A BAR SHALL BE LOCATED ON A LINE PERPENDICULAR TO THE RUNWAY CENTERLINE. THE FRONT FACES OF EACH LIGHT UNIT MUST BE WITHIN $\pm 6"$ OF THIS LINE.
TO OUTSIDE FACE OF BEAM



6 PAPI FOUNDATION
G37 N.T.S.

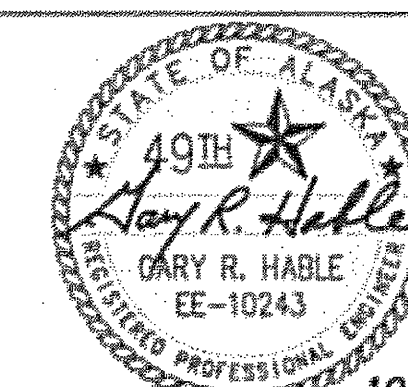


KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

PAPI PLANS AND DETAILS

PREPARED BY: USKH INC

CHECKED BY: GRH



10/4/06

DESIGNED BY: LPS

DRAWN BY: LPS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

PAPI PLANS AND DETAILS

PROJECT DESIGNATION

AIP NO. 3-02-0144-1606

STATE	YEAR
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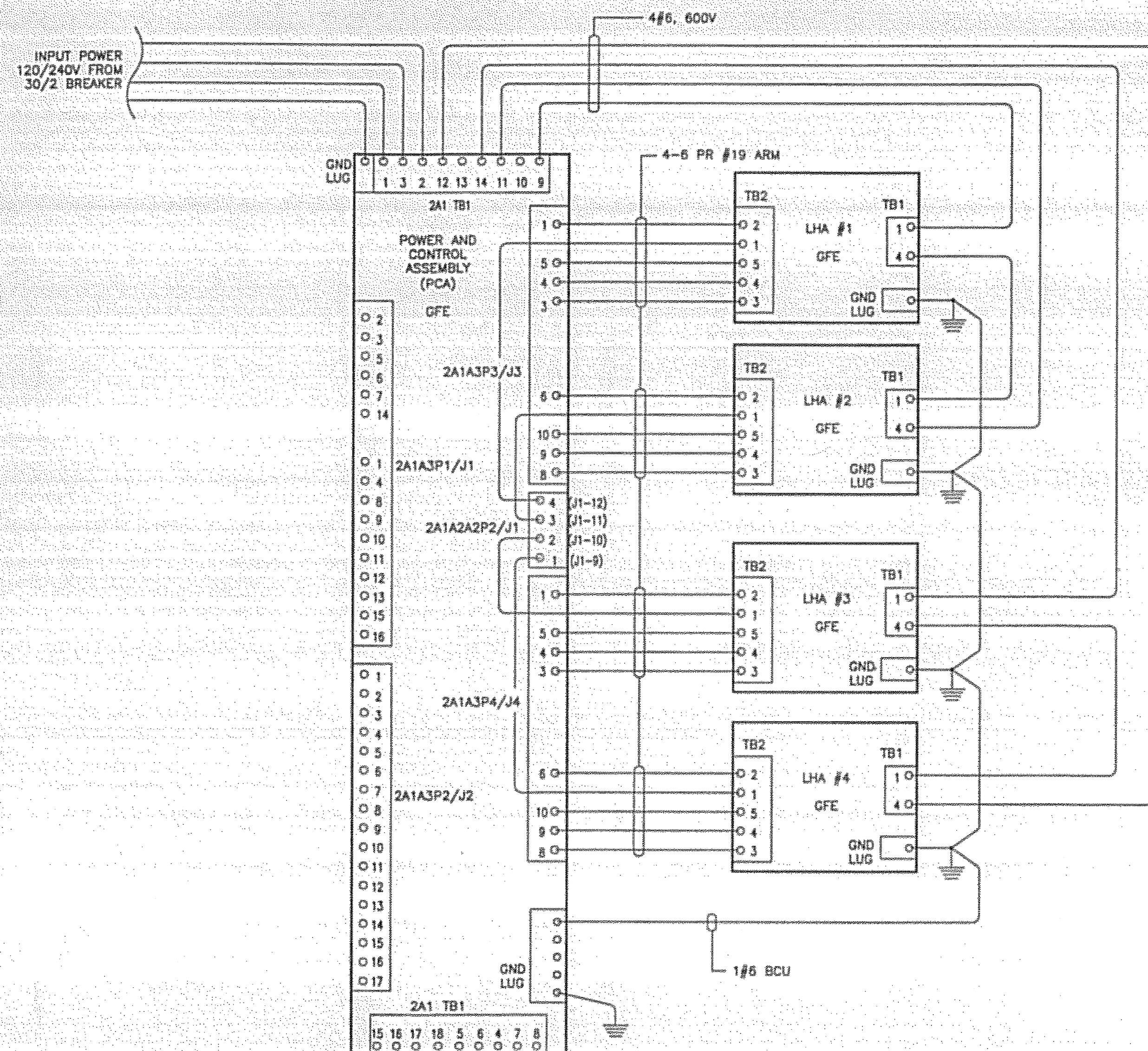
ALASKA	2006
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SHEET NUMBER	TOTAL SHEETS
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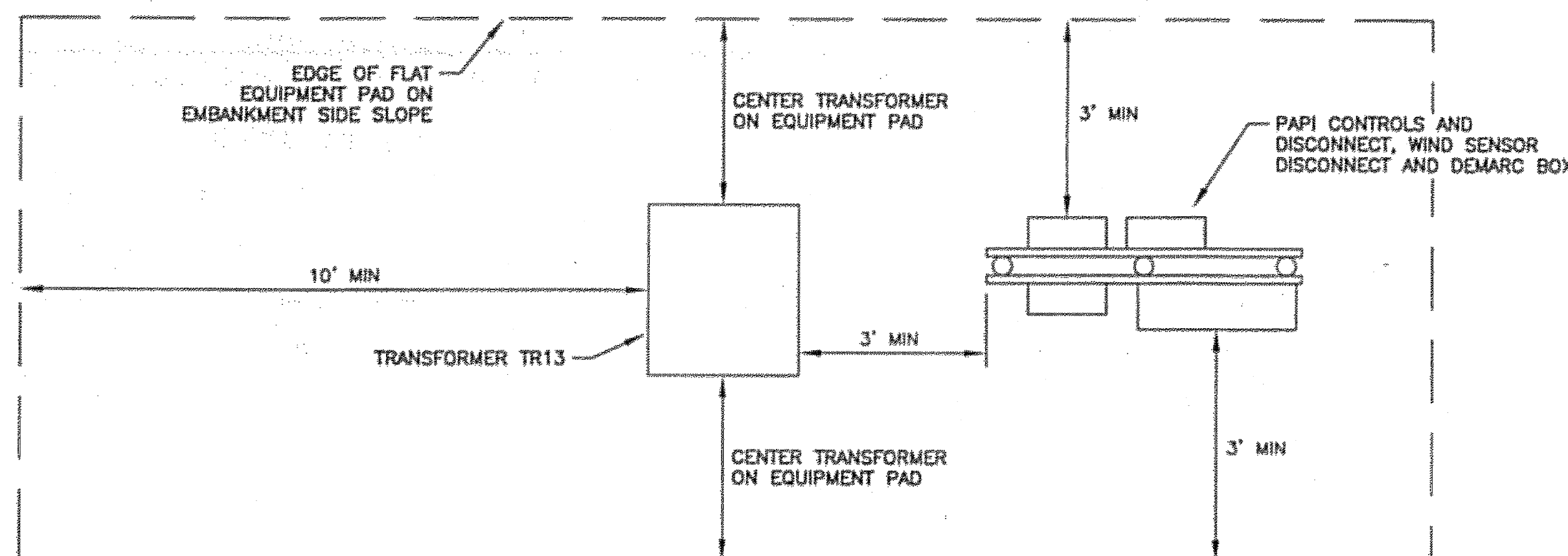
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5	687	181
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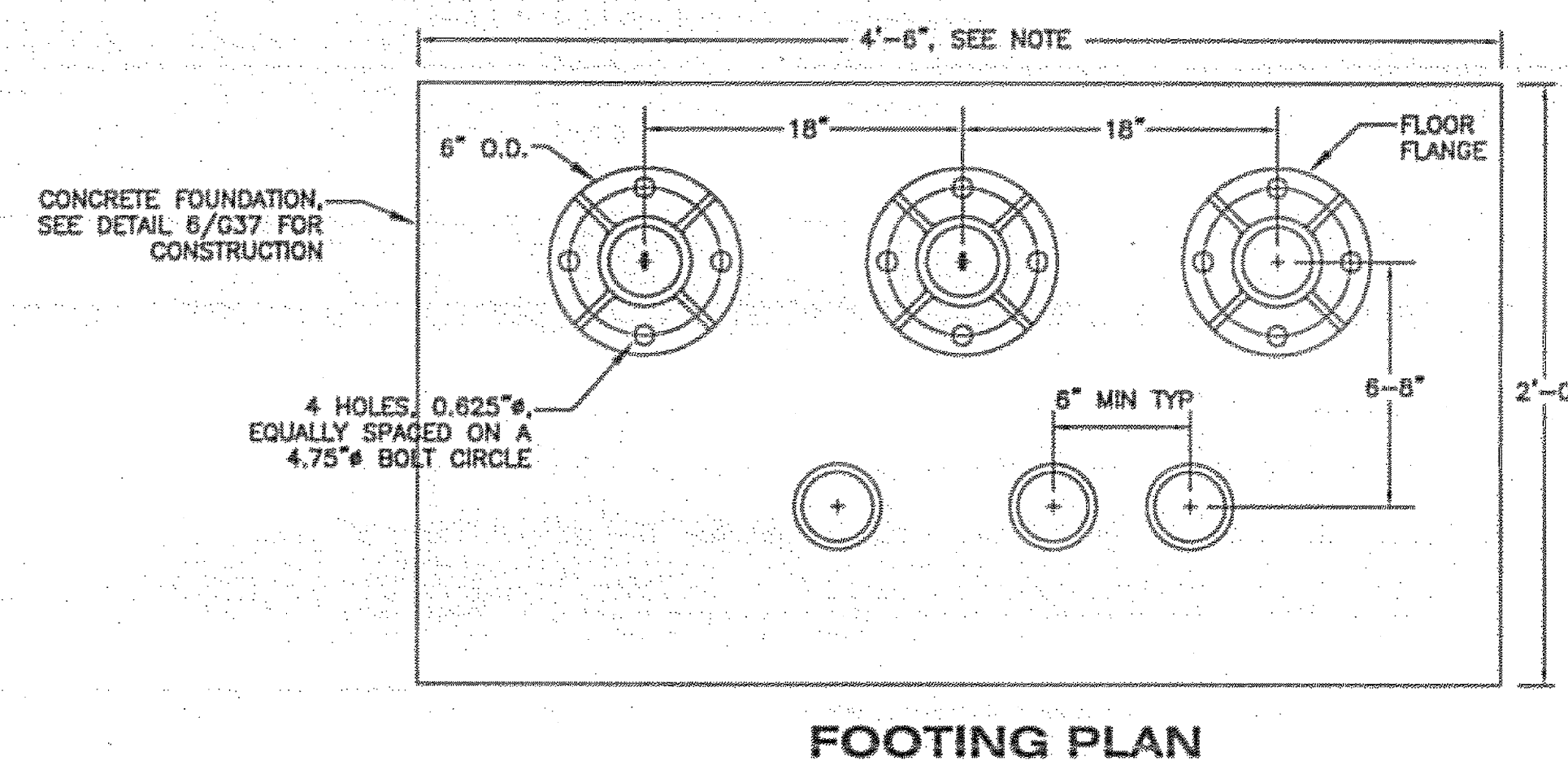
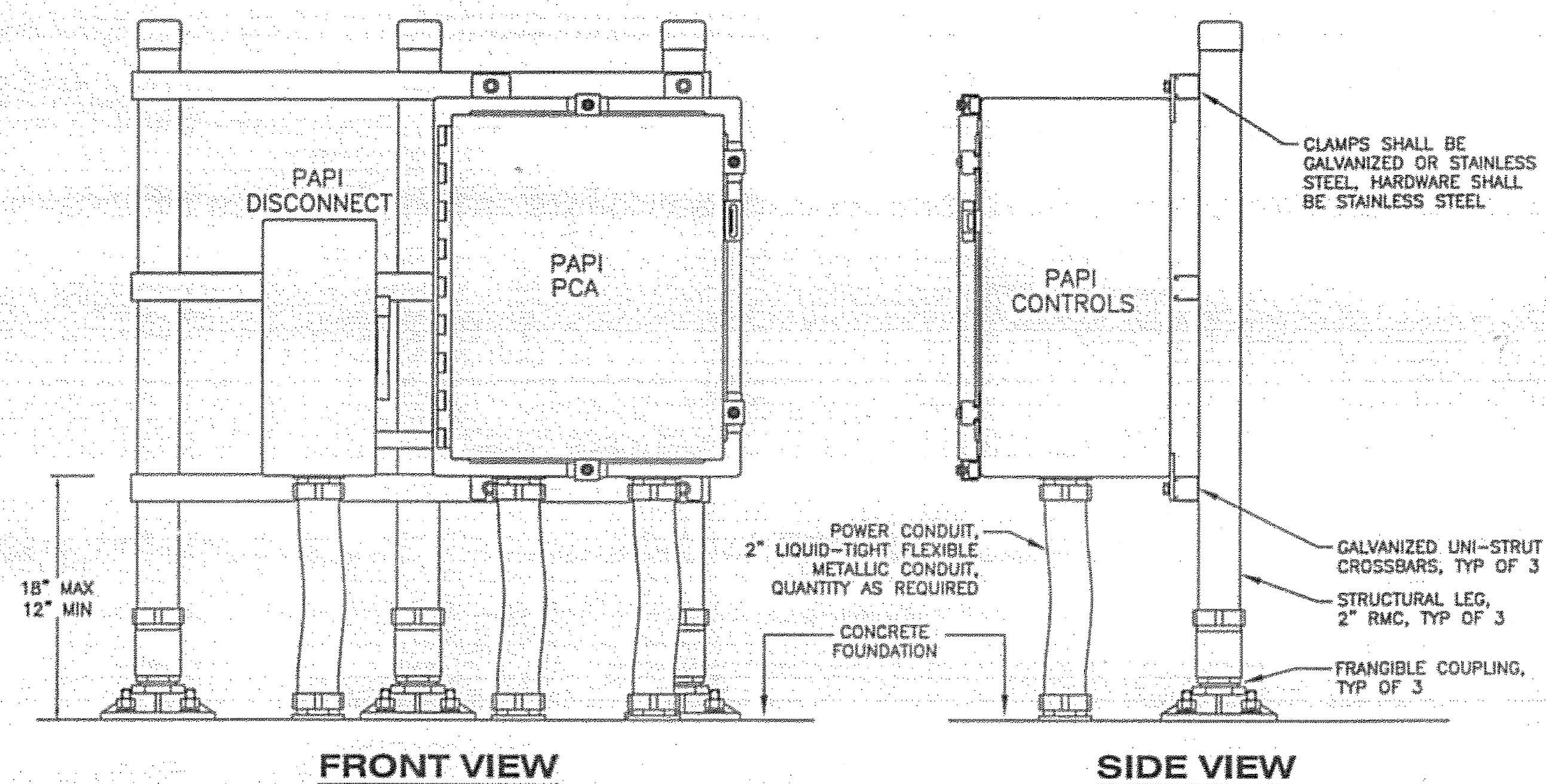
See attached Electrical Asbuilts



2 PAPI SCHEMATIC WIRING DIAGRAM
G38 N.T.S.



3 PAPI EQUIPMENT PAD LAYOUT - RW 29
G38 N.T.S.



1 PAPI CONTROLS MOUNTING DETAILS
G38 N.T.S.

NOTE:
AT RW 29 LOCATION, INCREASE LENGTH OF SUPPORT STRUCTURE AND FOUNDATION TO ALLOW MOUNTING OF F420 WIND SENSOR POWER DISCONNECT AND TELECOM DEMARC BOX. ALTERNATELY, WIND SENSOR DISCONNECT AND DEMARC BOX MAY BE MOUNTED ON ADDITIONAL CROSSBARS ON THE OPPOSITE SIDE OF THE STRUCTURE.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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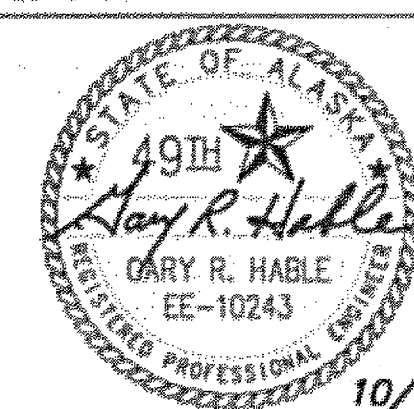
No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

PAPI DETAILS

PREPARED BY: USKH INC.

CHECKED BY: GRH



DESIGNED BY: LPS

DRAWN BY: LPS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

PAPI DETAILS

PROJECT DESIGNATION

AIP NO. 3-02-0144-1606

STATE YEAR

ALASKA 2006

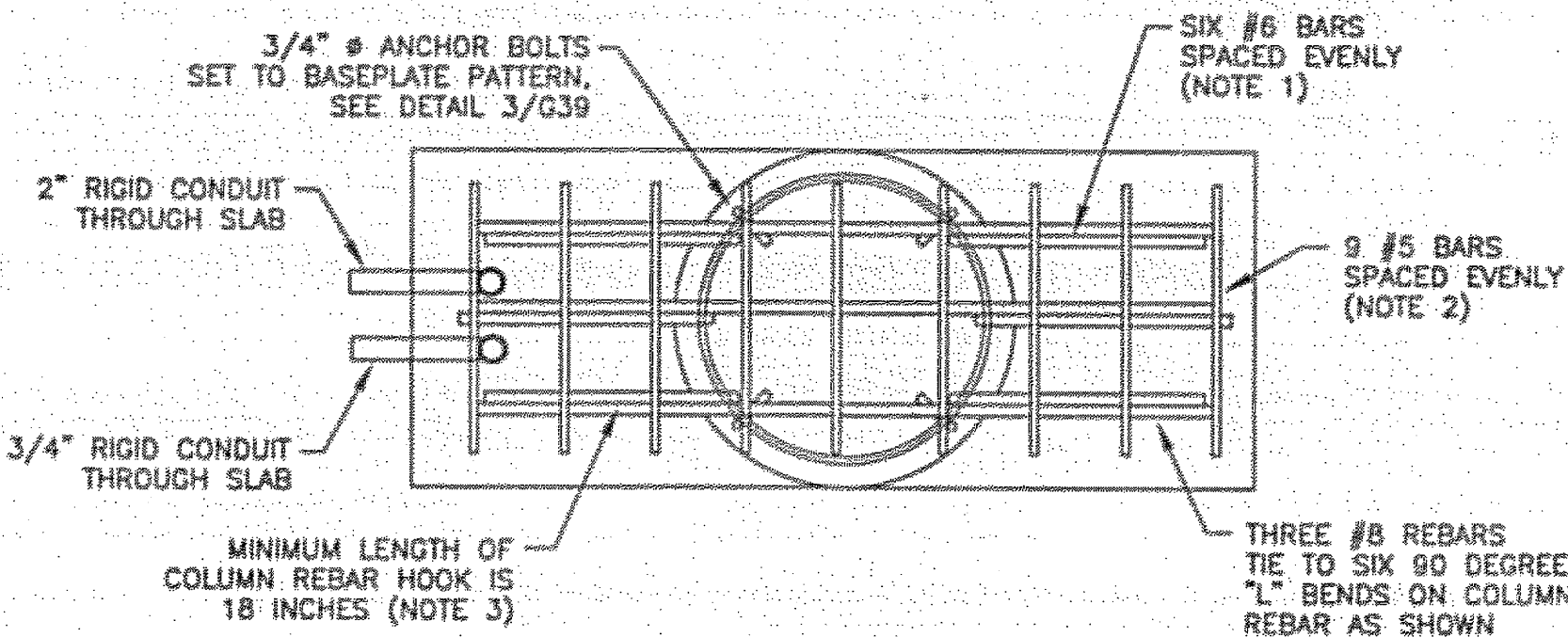
SHEET NUMBER TOTAL SHEETS

G38 131

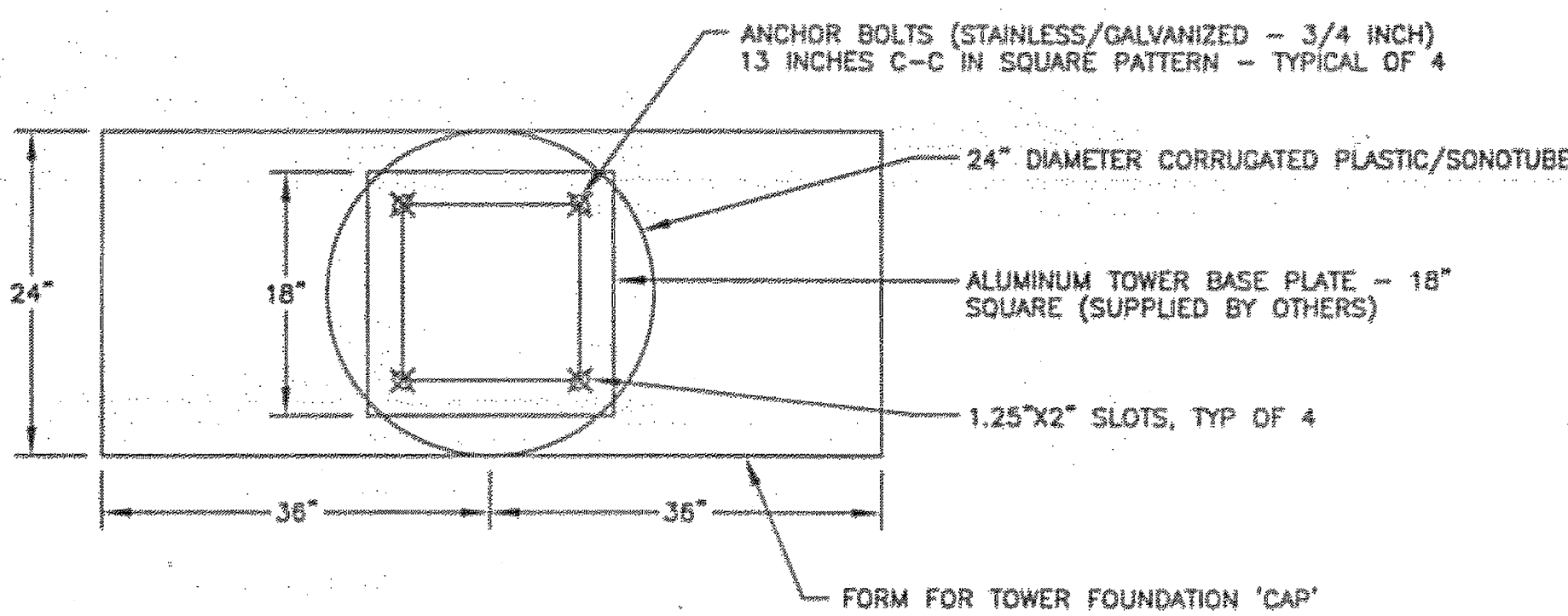
See attached Electrical Asbuilts

NOTES:

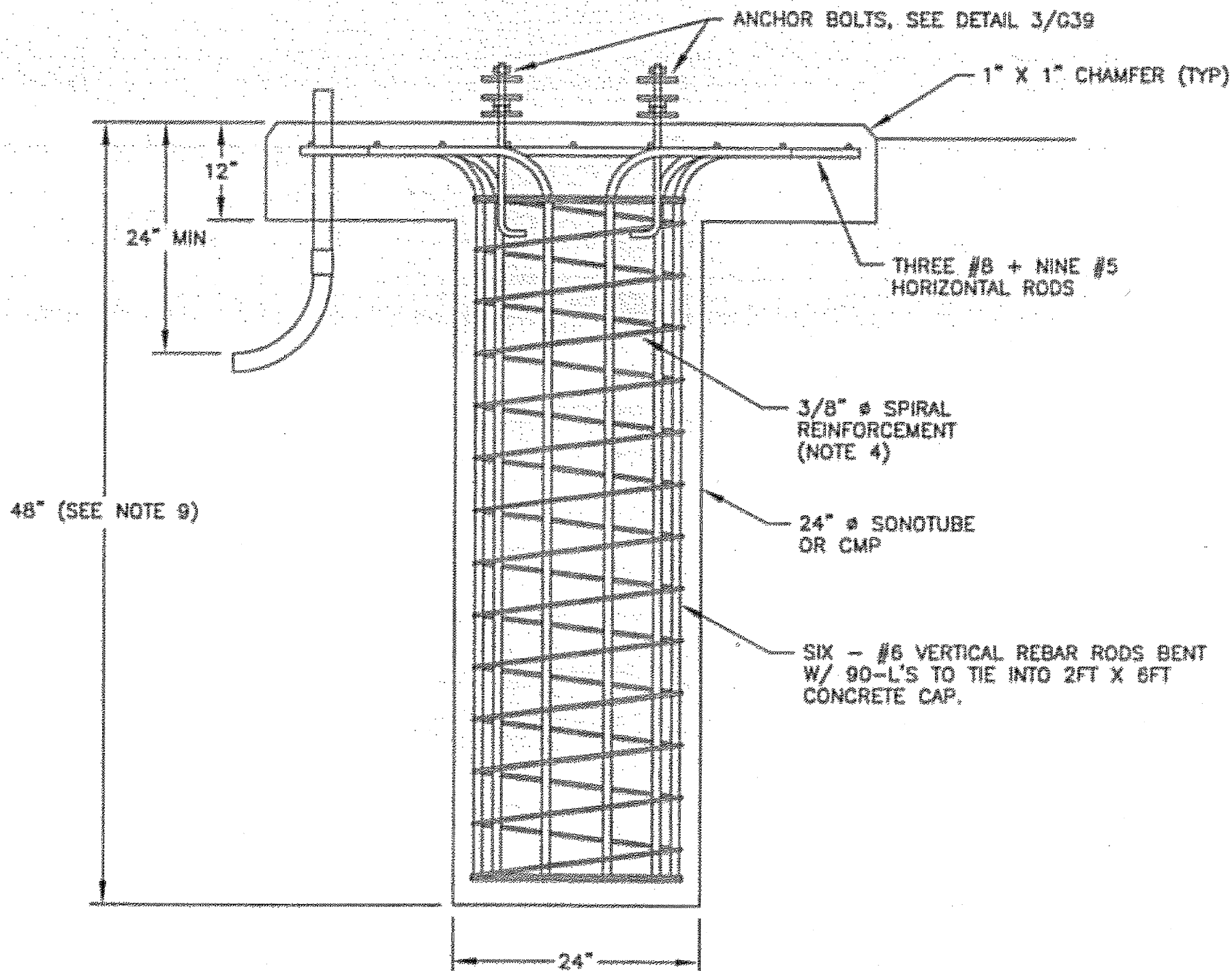
- #6 VERTICAL COLUMN REINFORCEMENT WITH 6" ϕ BENDS TO FORM 90-"L" HOOKS.
- PROVIDE A MINIMUM OF 2" CLEAR COVER OVER ALL REINFORCING STEEL AND CONDUITS.
- MINIMUM DEVELOPMENT LENGTH ASSUMES GRADE 40 REINFORCING STEEL.
- CLEAR SPACING BETWEEN SPIRALS SHALL NOT EXCEED THREE INCHES NOR BE LESS THAN 1" INCH. ANCHORAGE OF OF SPIRAL REINFORCEMENT SHALL BE PROVIDED BY 1-1/2 EXTRA TURNS OF SPIRAL BAR OR WIRE AT THE EACH END OF A SPIRAL UNIT.
- CONDUIT PENETRATIONS THROUGH CONCRETE SLAB CAP ARE USED AS FOLLOWS:
A) TWO INCH CONDUIT SWEEP - TWO RUNS OF 1/2-INCH HELIAX (ANDREW LDF4-50A OR EQUIV) FOR DME RF COMM.
B) 3/4-INCH CONDUIT SWEEP - ONE GROUND WIRE (#6 BARE, STRANDED CU) BONDED TO LOC/DME BUILDING GROUND CONUTERPOISE.
C) 3/4-INCH CONDUIT SWEEP - ONE CIRCUIT (120VAC) FOR DME TOWER OBSTRUCTION LIGHT.
- EIGHTEEN INCH DME TOWER BASE PLATE TO BE FABRICATED BY OTHERS AND INSTALLED BY FAA. ANCHOR BOLT PATTERN IS 13-INCH SPACING - SQUARE PATTERN OF 4-3/4 INCH ANCHOR BOLTS AS SHOWN. A PLYWOOD TEMPLATE IS SUGGESTED IN ORDER TO PROPERLY PLACE ANCHOR BOLTS. VERTICALLY STUB UP ANCHOR BOLTS APPROXIMATELY 6 INCHES OUT OF CONCRETE SURFACE.
- CONDUIT STUBS SHALL PENETRATE THE WEST SIDE OR LEFT SIDE (AS ONE FACES NORTH) OF THE SLAB CAP. POUR SLAB CAP SUCH THAT ITS LONG AXIS IS PARALLEL TO THE LONG AXIS OF THE LOC/DME BUILDING ON SITE.
- FOR THE REPRESENTATIVE CONCRETE FOUNDATION SHOWN:
A. CONCRETE STRENGTH = 3000 PSI @ 28 DAYS (MIN.)
B. SECURELY PLACE ANCHOR BOLTS PRIOR TO PLACING CONCRETE. TIE TO REINFORCEMENT.
C. PLACE ALL CONCRETE ON UNDISTURBED SOIL OR COMPACTED BACKFILL. BACKFILL TO BE COMPACTED TO 92%
D. DEPTH OF CONCRETE PIER = 4 FT IN SAND/GRAVEL OR BELOW FROST LEVEL.
E. REINFORCEMENT STEEL PER ASTM A615, GR. 60, TIE WIRE TO BE 16 GAUGE OR LARGER ANNEALED IRON.
F. ALL ANCHORAGE BOLTS AND PLATES TO BE HOT-DIPPED GALV. AFTER FABRICATION. COLD-GALV SPRAY TO BE APPLIED AFTER INSTALLATION TO ALL FASTENING HARDWARE AFTER INSTALLATION COMPLETED.
- FOUNDATION EXCAVATION SHALL BE DUG AND BACKFILLED WITH NON-FROST SUSCEPTIBLE MATERIAL OR AUGERED AT INDICATED DIAMETER.
- REBAR IS BENT AT THE TOP AND WIRE-TIED WITH THE HORIZONTAL CROSS-SUPPORT REBAR.



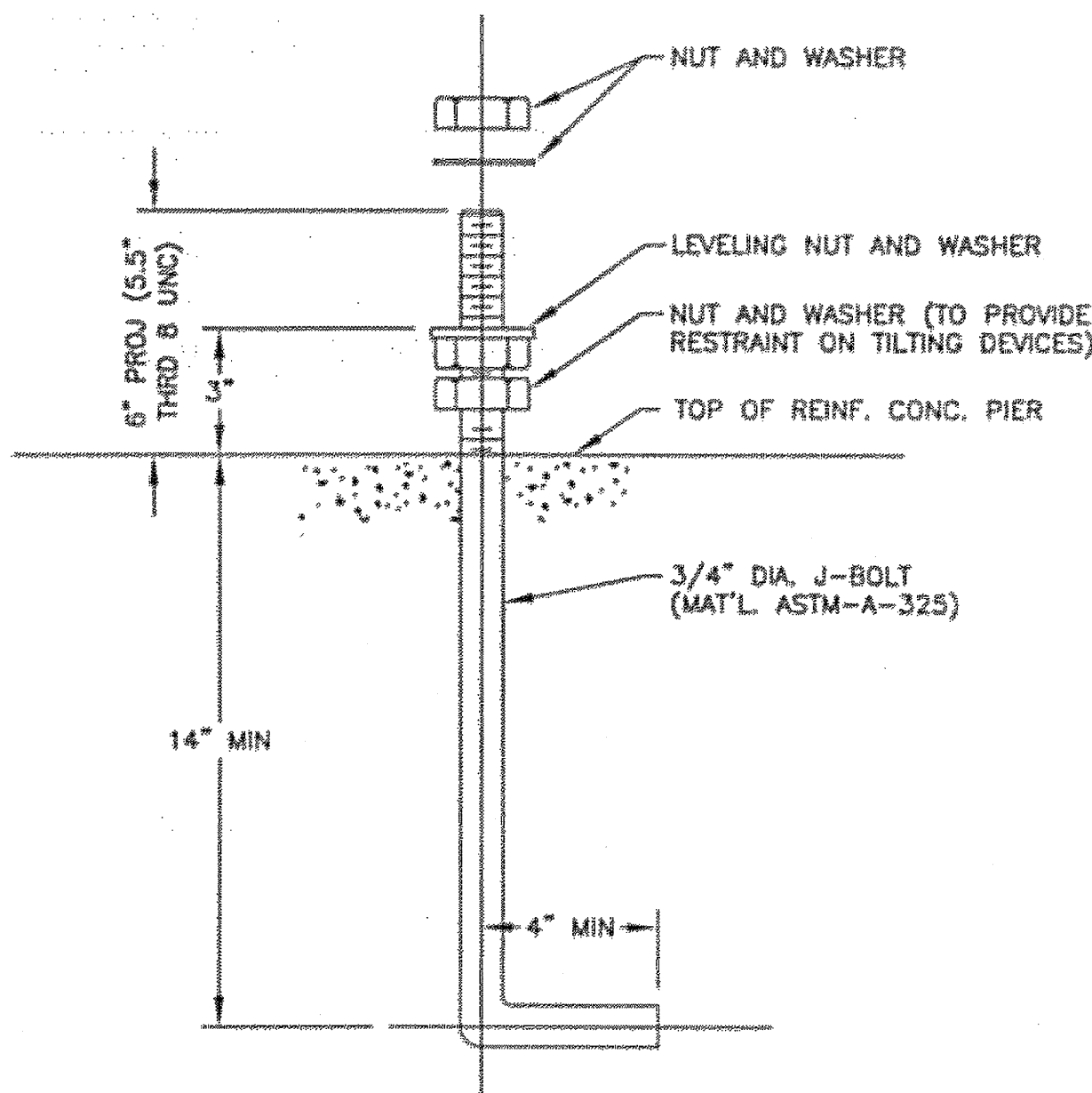
2 REINFORCING PLAN
G39 N.T.S.



1 FOUNDATION PLAN
G39 N.T.S.



4 FOUNDATION SECTION
G39 N.T.S.



3 ANCHOR BOLT DETAIL
G39 N.T.S.

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ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

DME FOUNDATION DETAILS

PREPARED BY: USKH INC.
CHECKED BY: GRH

DESIGNED BY: LPS
DRAWN BY: LPS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

10/4/06

DME FOUNDATION DETAILS

PROJECT DESIGNATION
AIP NO. 3-02-0144-1606

STATE	YEAR
ALASKA	2006

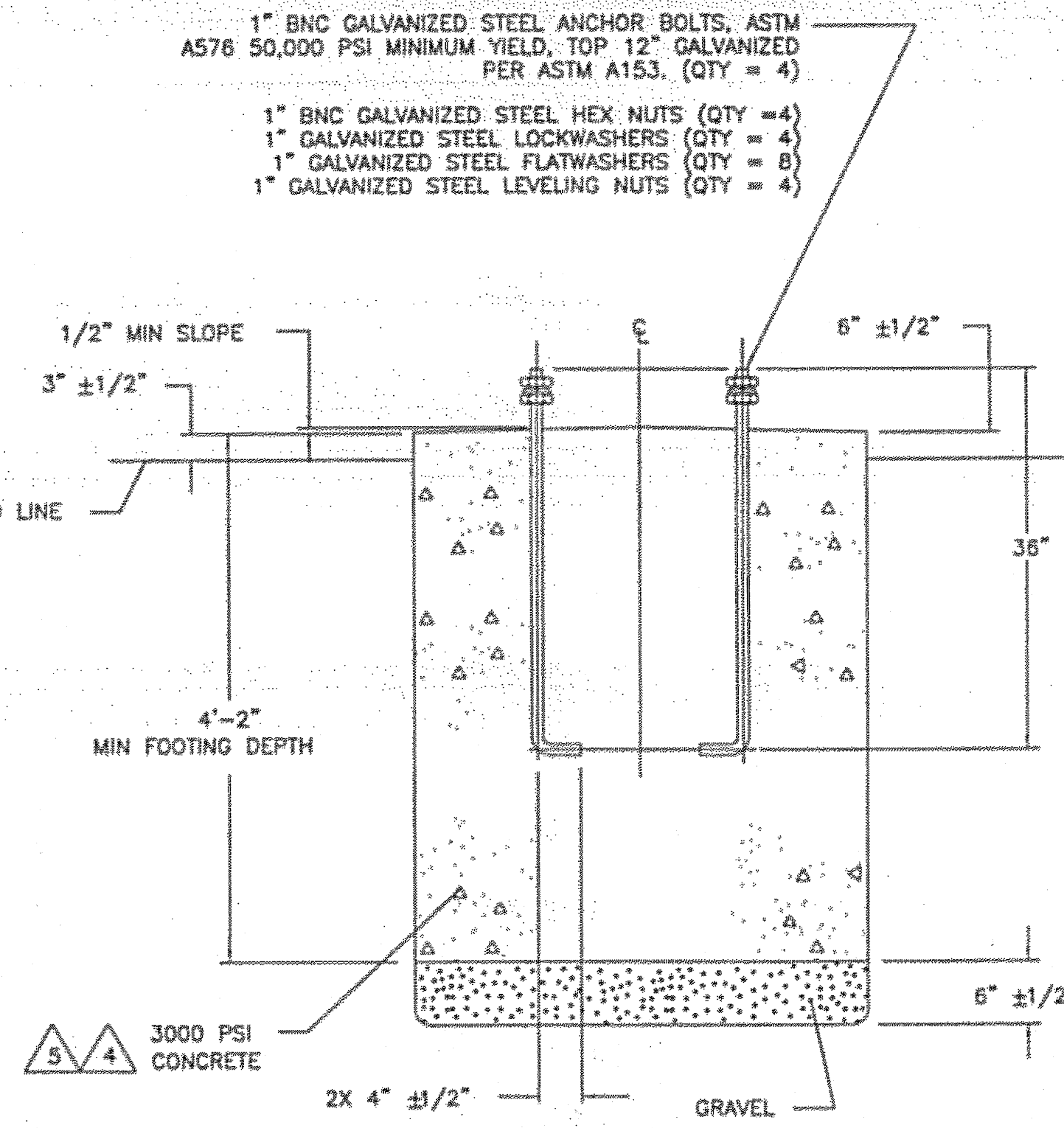
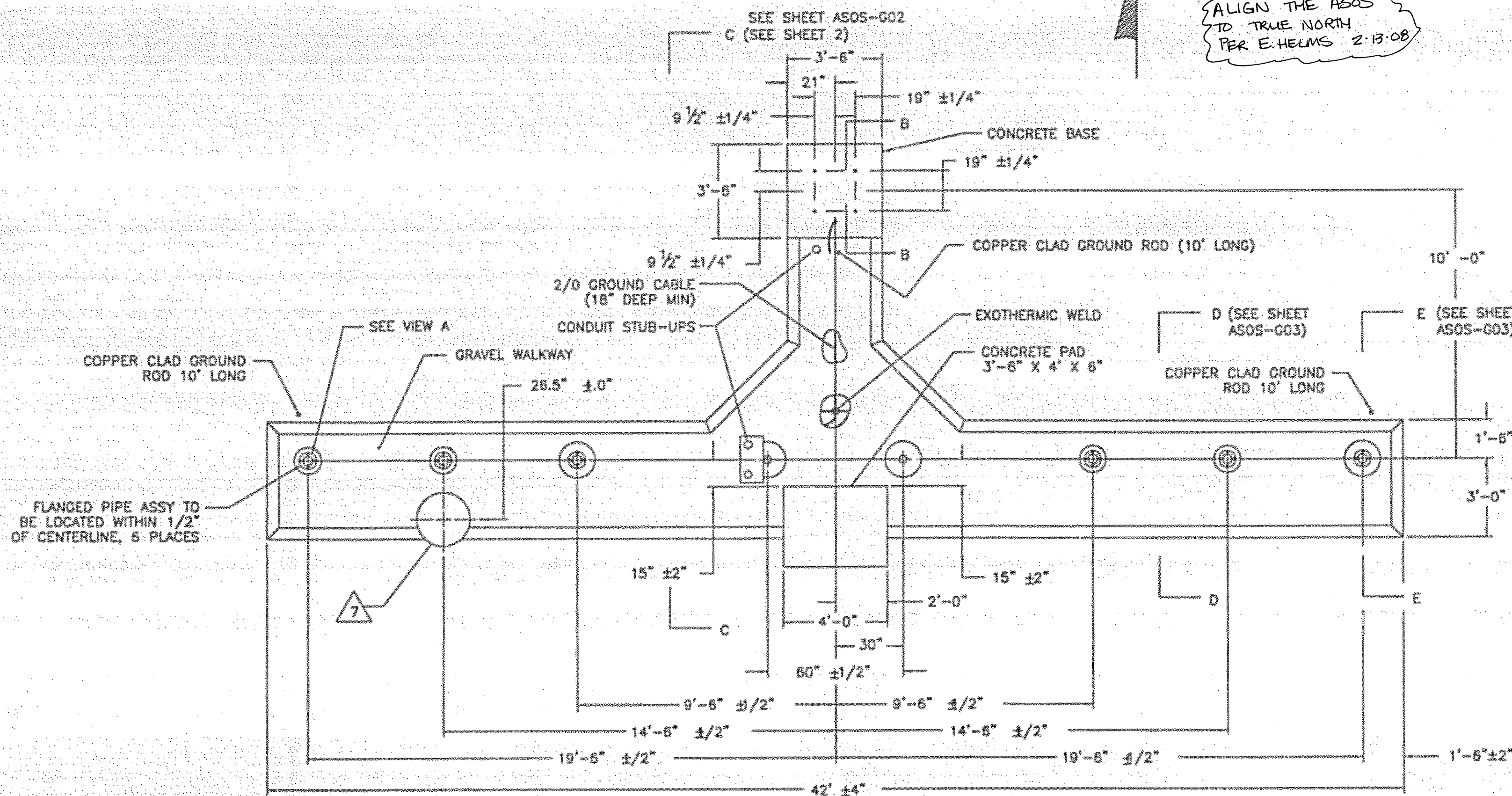
SHEET NUMBER	TOTAL SHEETS
G39	131

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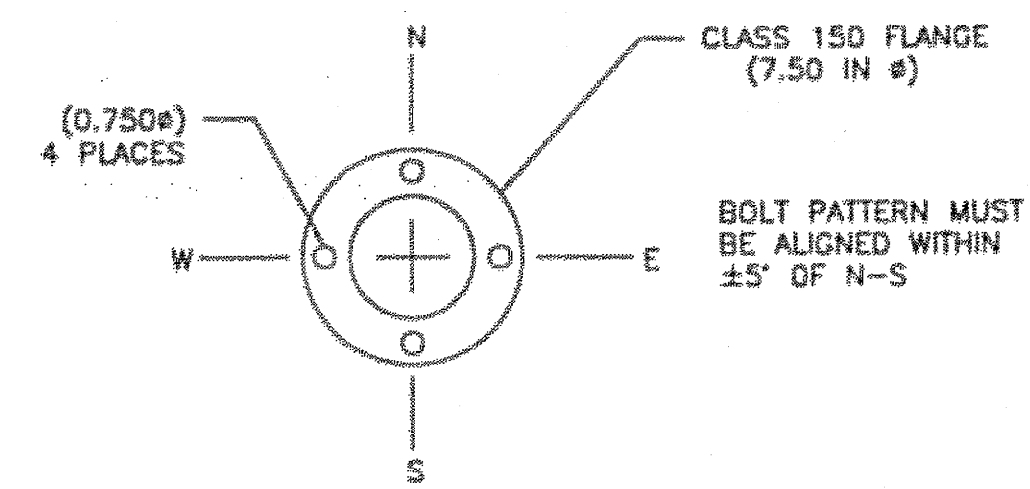
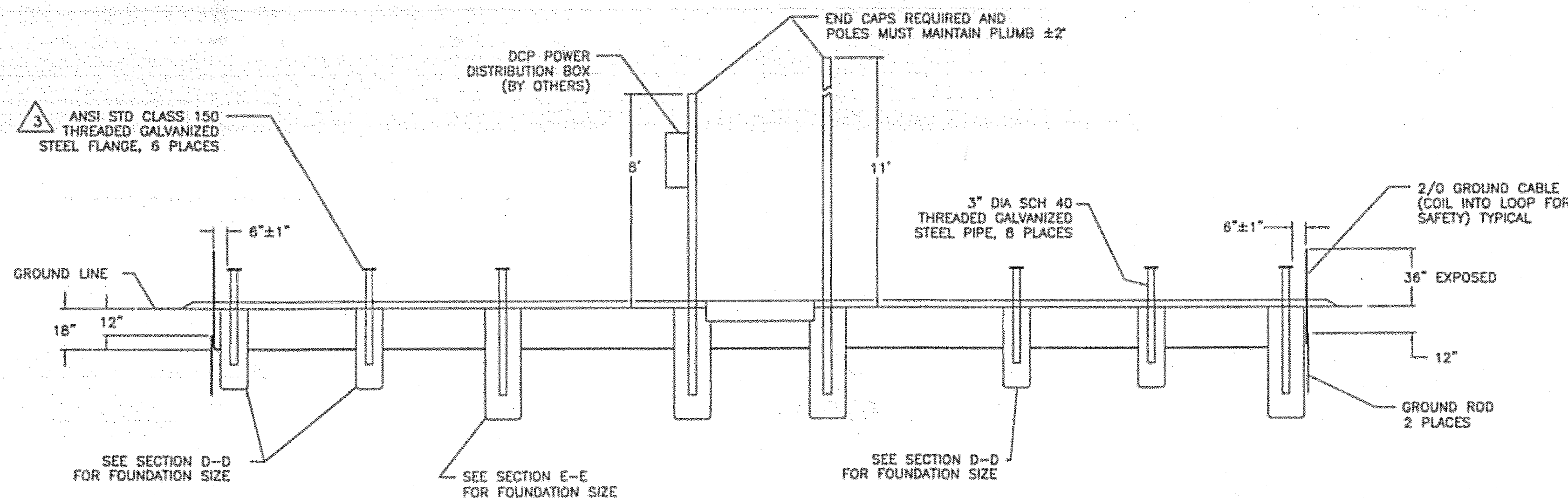
- 3 PROTECT FLANGE ASSEMBLIES AGAINST WATER INCURSION.
- 4 POUR CONCRETE FOUNDATION AGAINST UNDISTURBED EARTH OR USE FORM.
- 5 POUR TOWER AND PEDESTAL FOUNDATION ON UNDISTURBED SOIL.
- 7 THIS AREA (±2.0 FT) TO BE FREE OF GRAVEL AND VEGETATION BARRIER.

ASOS
ALIGNMENT
TRUE NORTH -
PER E. HELMS
2-13-08

ALIGN THE ASOS
TO TRUE NORTH
PER E. HELMS 2-13-08



SECTION B-B
SCALE: 1/8



VIEW A
SCALE: 1/4

1
G40 N.T.S.

ASOS PLOT PLAN

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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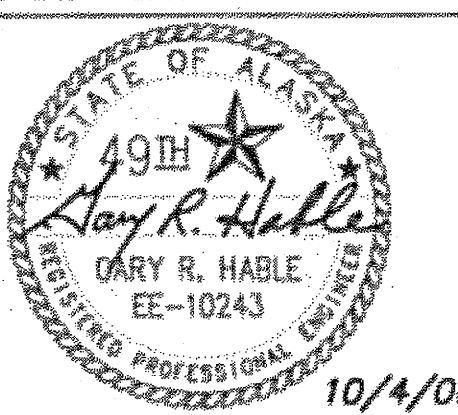
No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

ASOS PLOT PLAN

PREPARED BY: USKH INC.

CHECKED BY: GRH



DESIGNED BY: LPS

DRAWN BY: LPS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

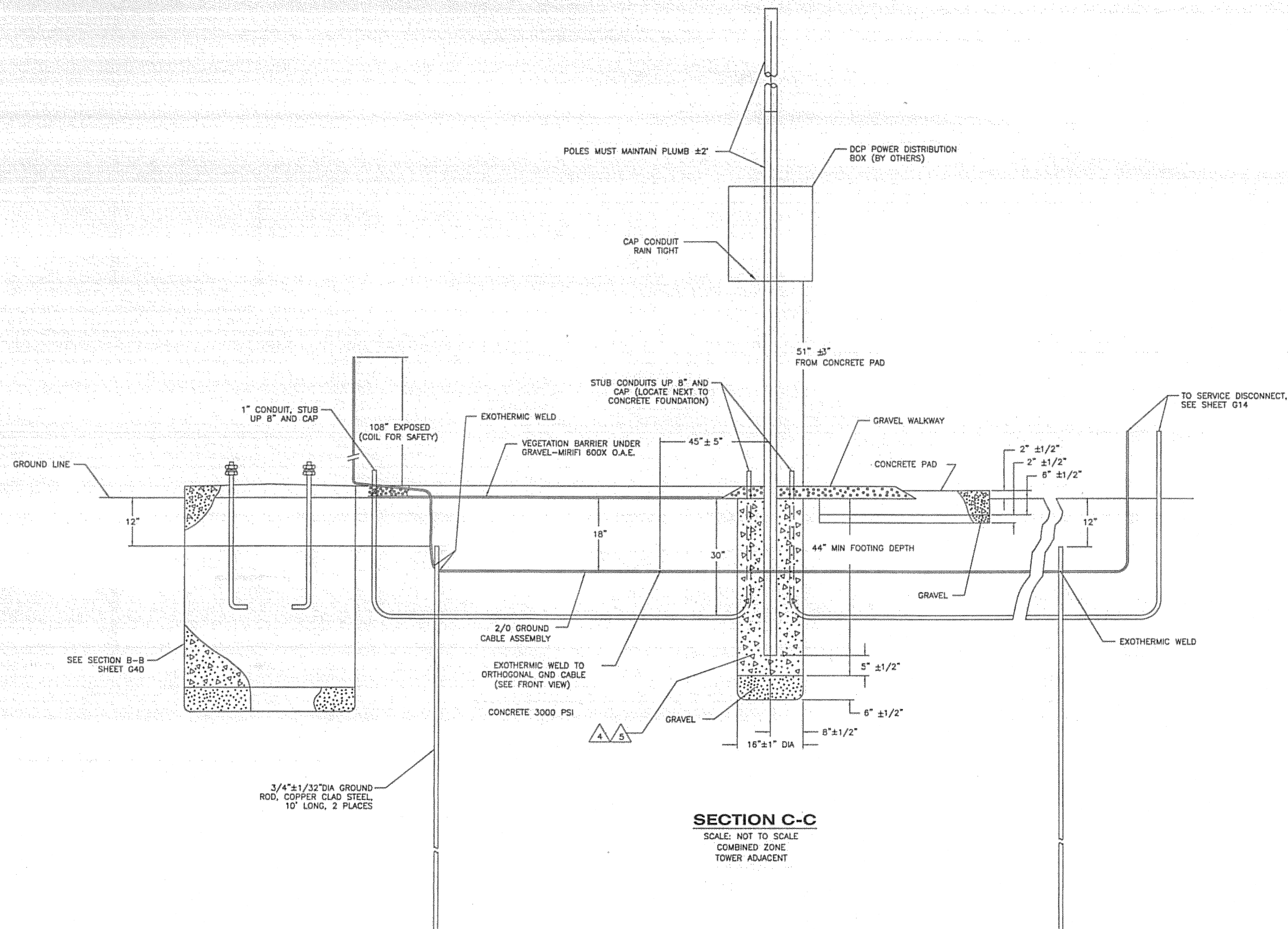
ASOS PLOT PLAN

PROJECT DESIGNATION

AIP NO. 3-02-0144-1606

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
G40	131

See attached Electrical Asbuils



SECTION C-C

SCALE: NOT TO SCALE
COMBINED ZONE
TOWER ADJACENT

1 ASOS SECTION VIEW
G41 N.T.S.

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RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

ASOS SECTION

PREPARED BY: USKH INC.
CHECKED BY: GRH

STATE OF ALASKA
49th
DARY R. HABLE
EE-10243
REGISTERED PROFESSIONAL ENGINEER
10/4/06

DESIGNED BY: LPS
DRAWN BY: LPS

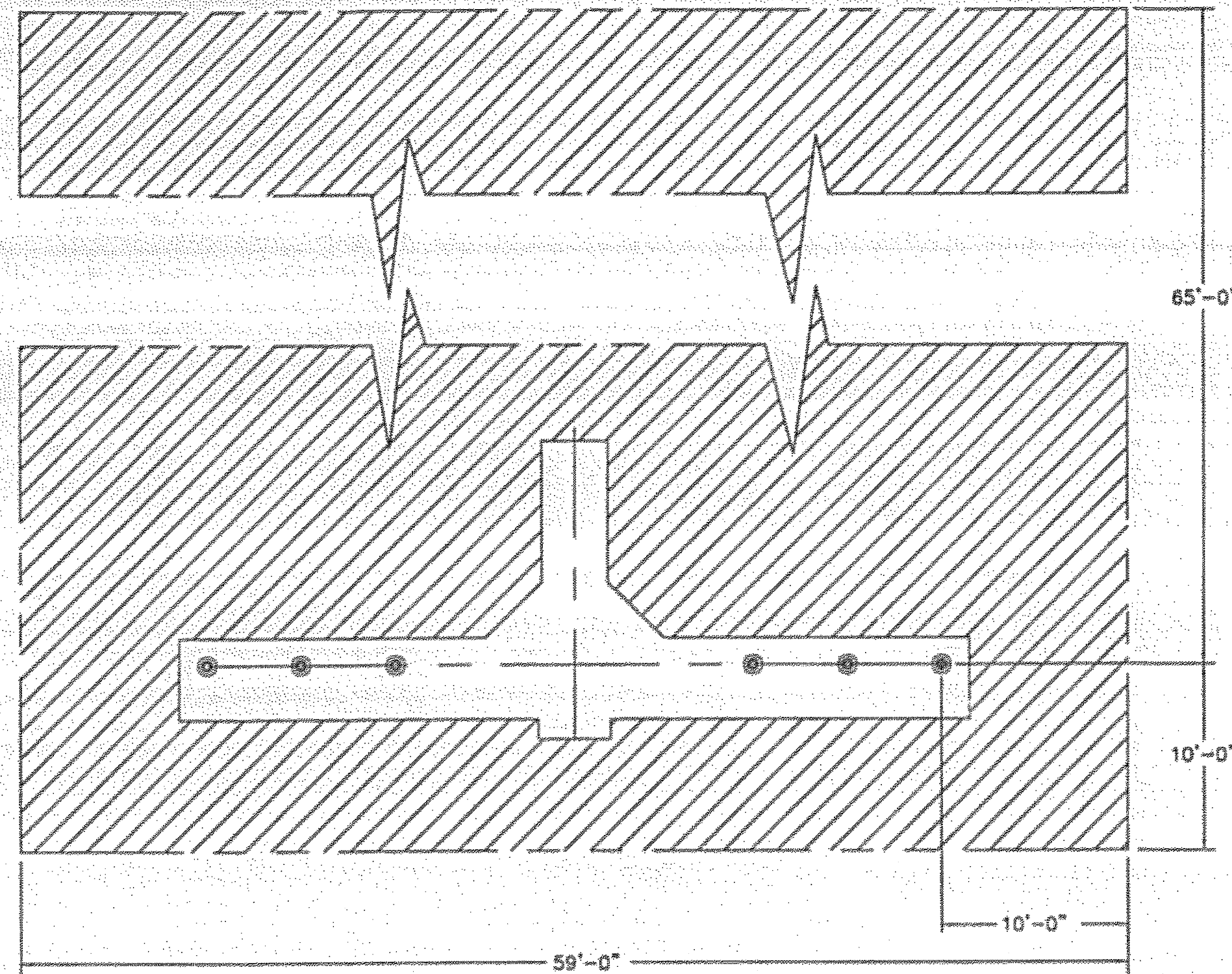
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

ASOS SECTION

PROJECT DESIGNATION
AIP NO. 3-02-0144-1606

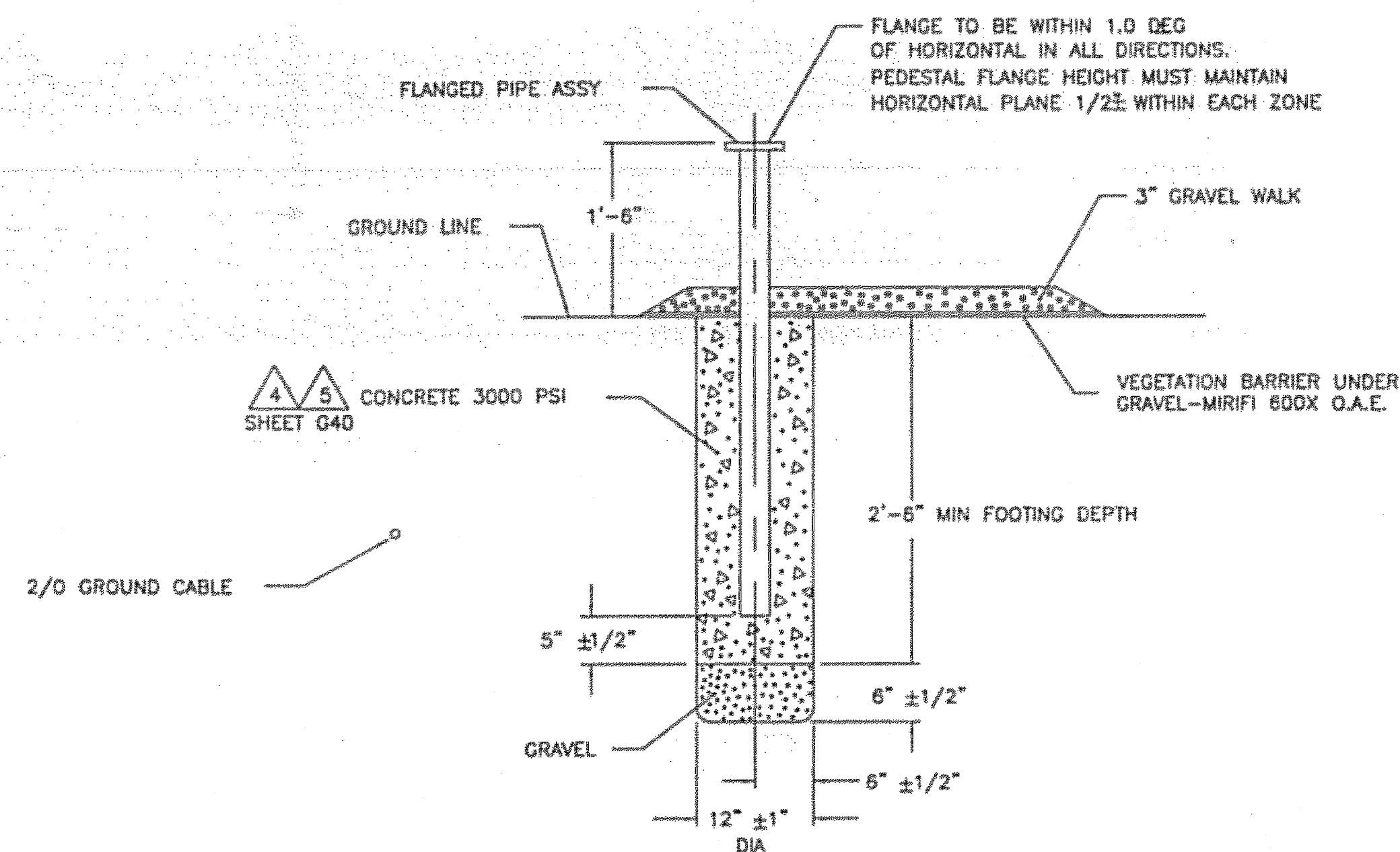
STATE	YEAR
ALASKA	2006

SHEET NUMBER	TOTAL SHEETS
G41	131

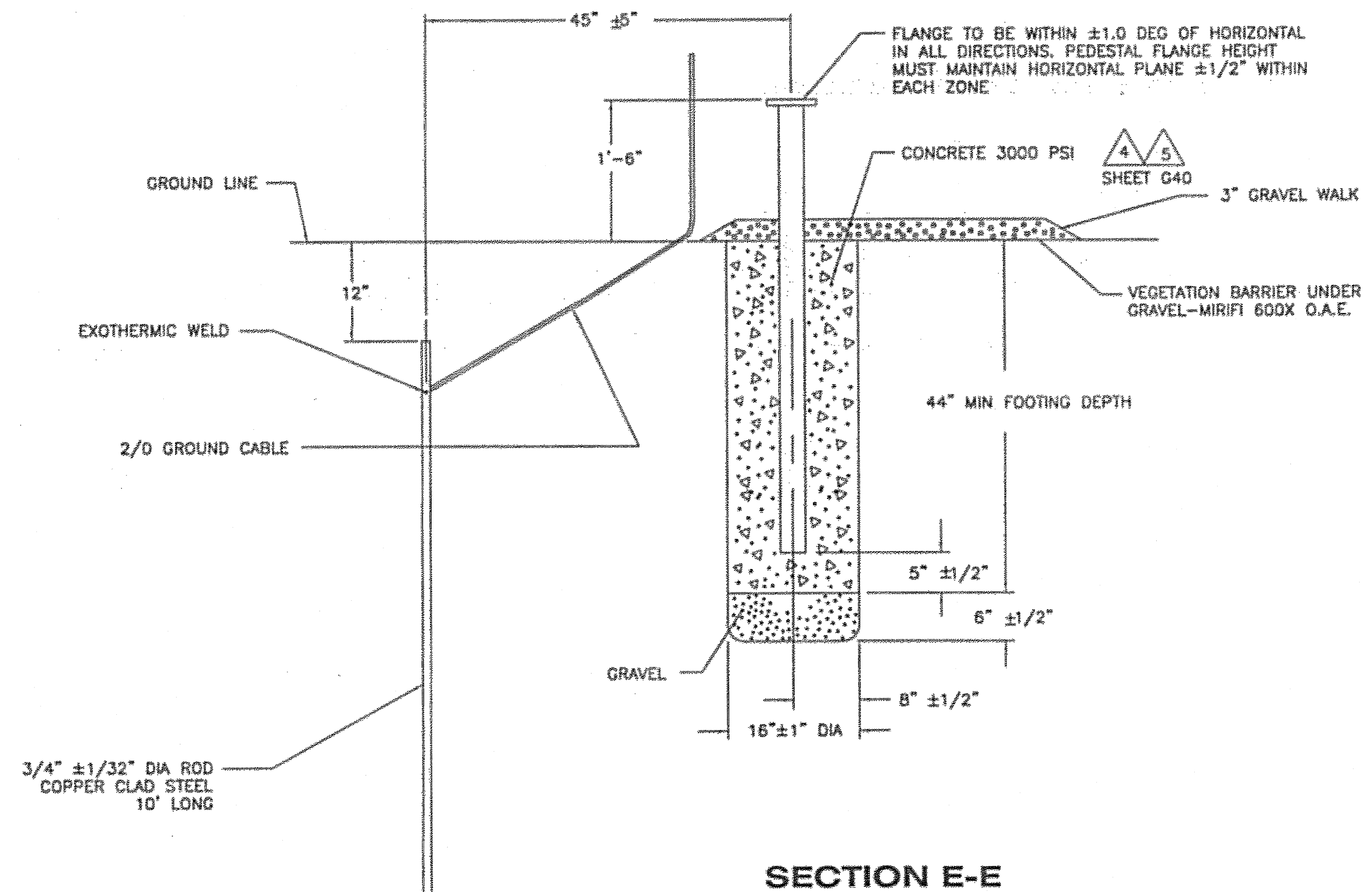


THE CROSS-HATCHED AREA SHOWN SHOULD BE CLEAR OF ABOVE GROUND OBSTRUCTIONS, REFLECTIVE SURFACES AND LIGHT SOURCES.

1 ASOS CLEARING AREA G42 N.T.S.



SECTION D-D
SCALE: NOT TO SCALE



SECTION E-E
SCALE: NOT TO SCALE
ROTATED 90° CCW

2 ASOS FOUNDATION DETAILS G42 N.T.S.

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ATTACHMENT NUMBER

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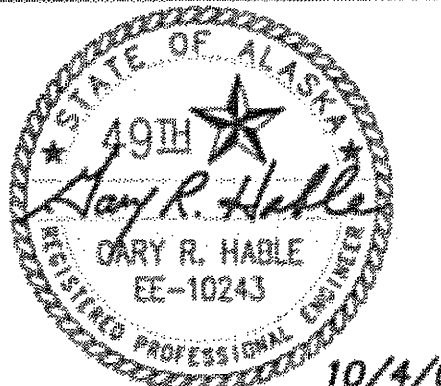
No.	DATE	DESCRIPTION

KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

ASOS DETAILS

PREPARED BY: USKH INC.

CHECKED BY: GRH



DESIGNED BY: LPS

DRAWN BY: LPS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

ASOS DETAILS

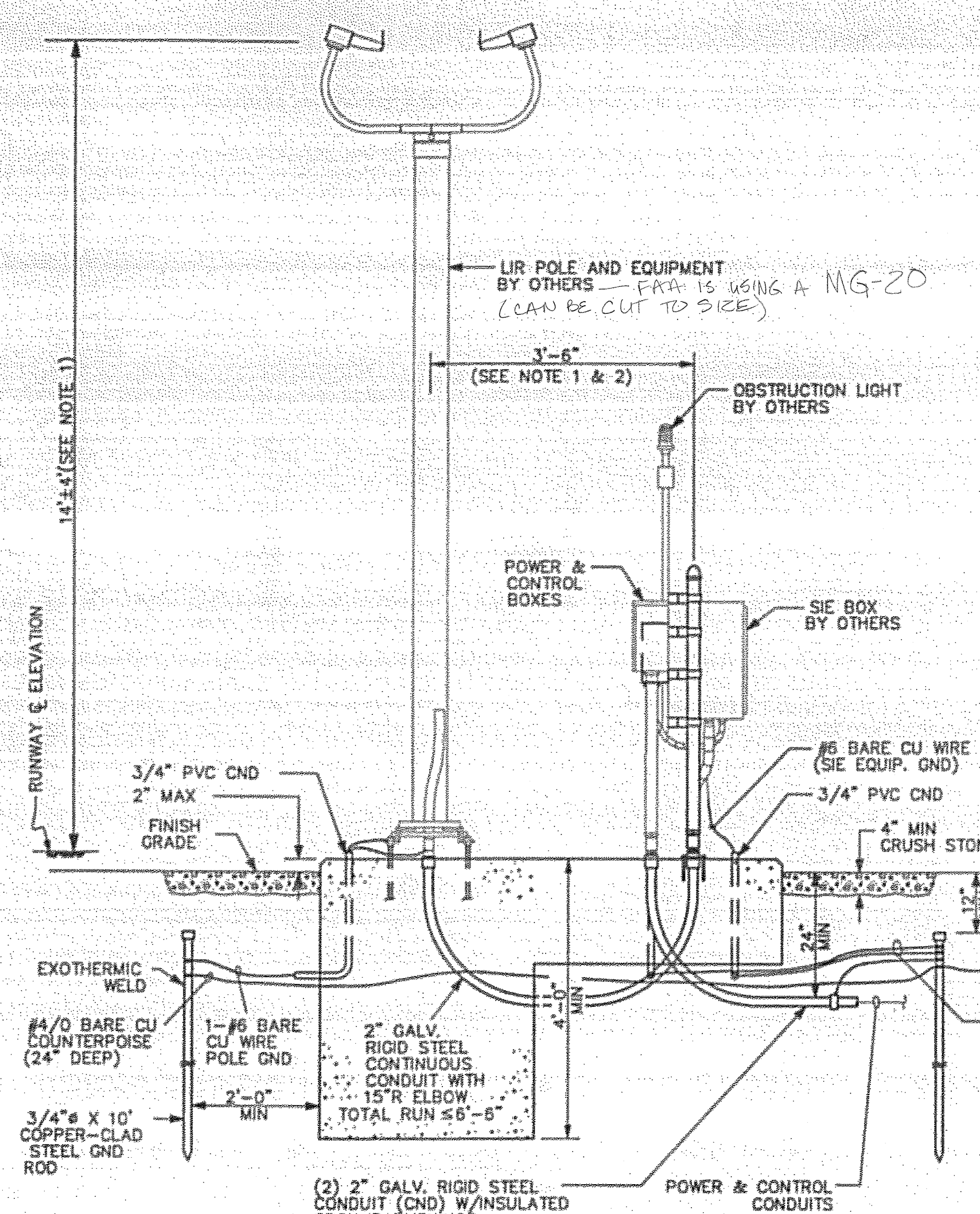
PROJECT DESIGNATION
AIP NO. 3-02-0144-1606

STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS

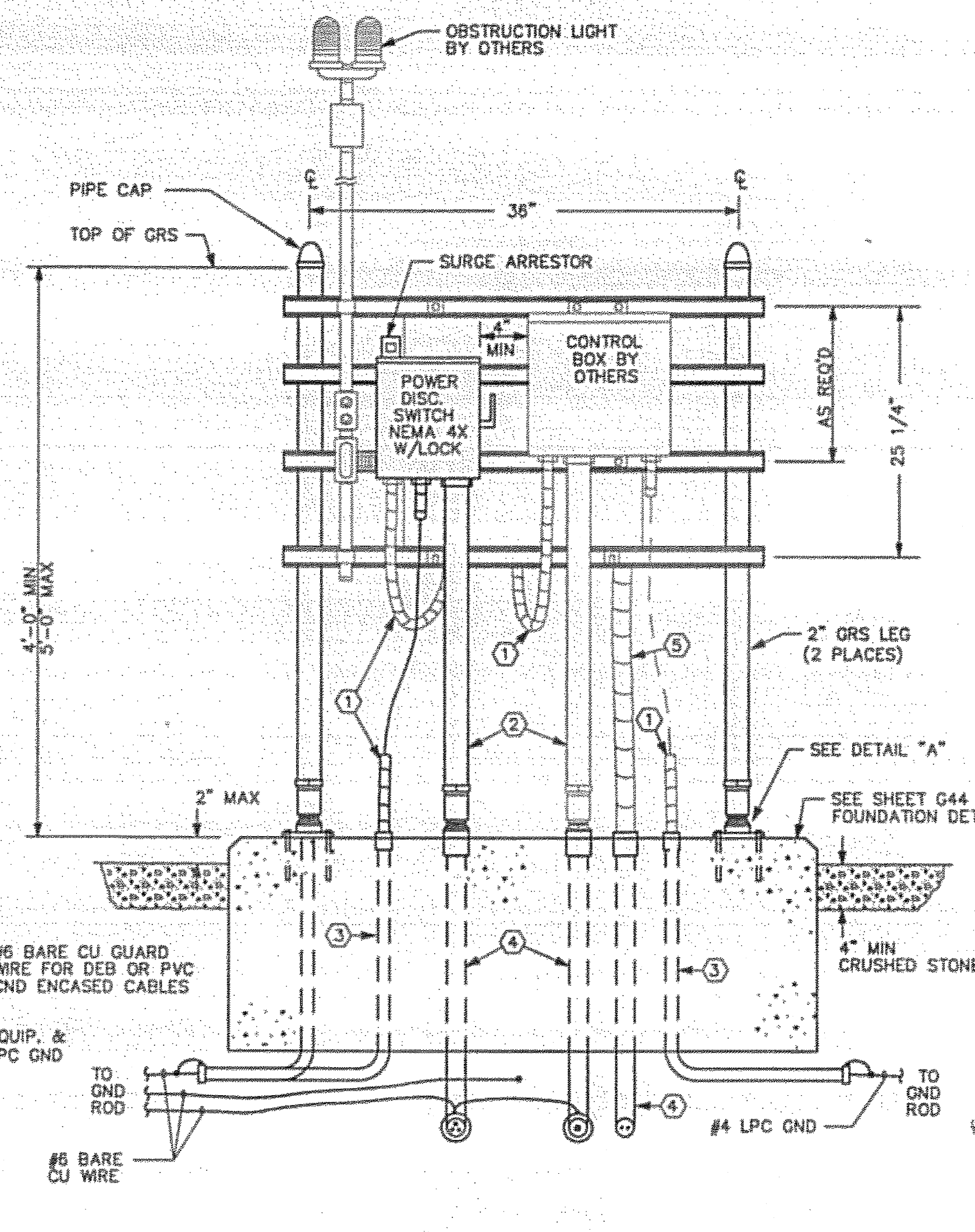
G42 131

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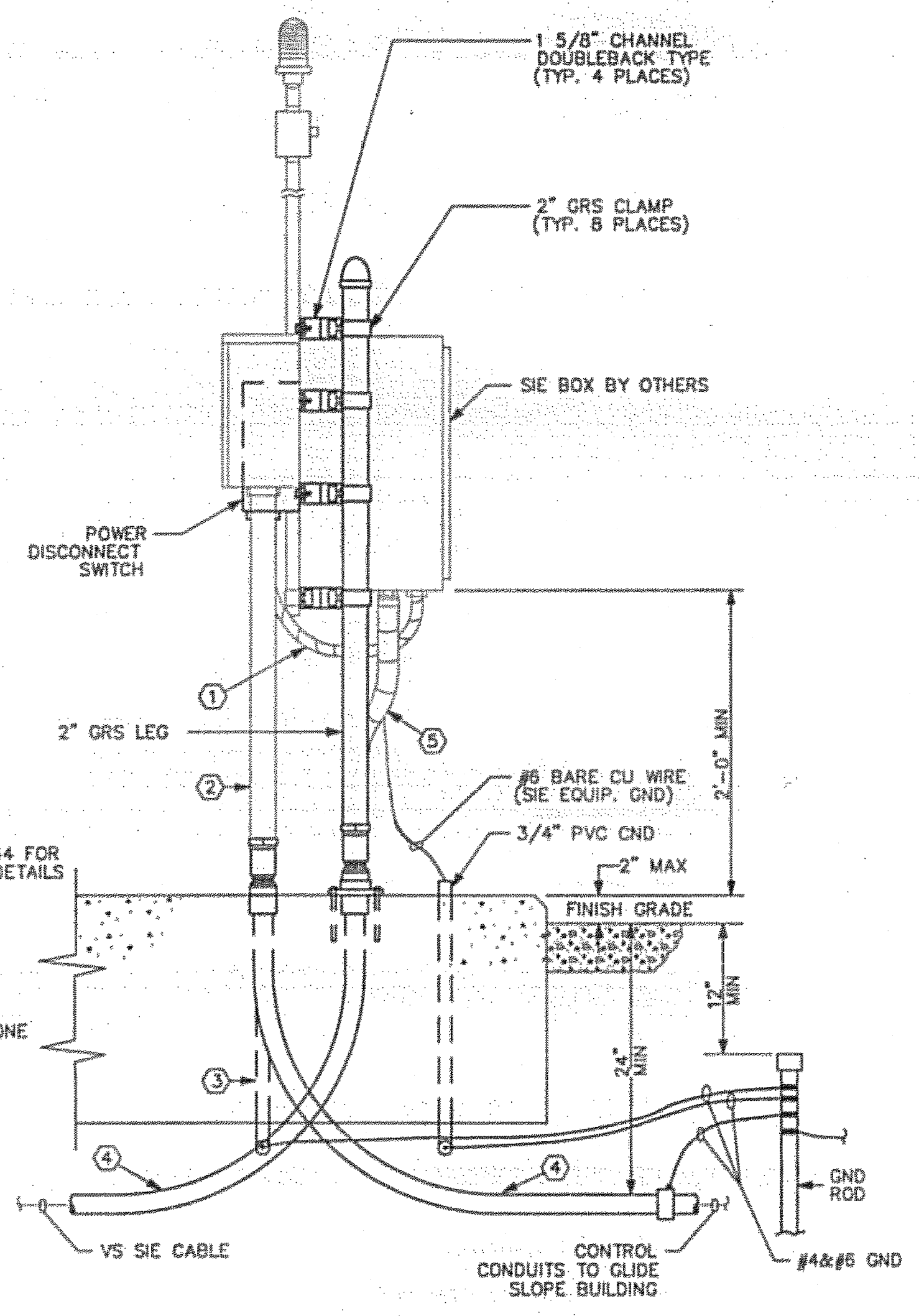
See attached Electrical Asbuilts



ELEVATION VIEW (PROFILE)
LIR POLE AND SIE BOX SUPPORT

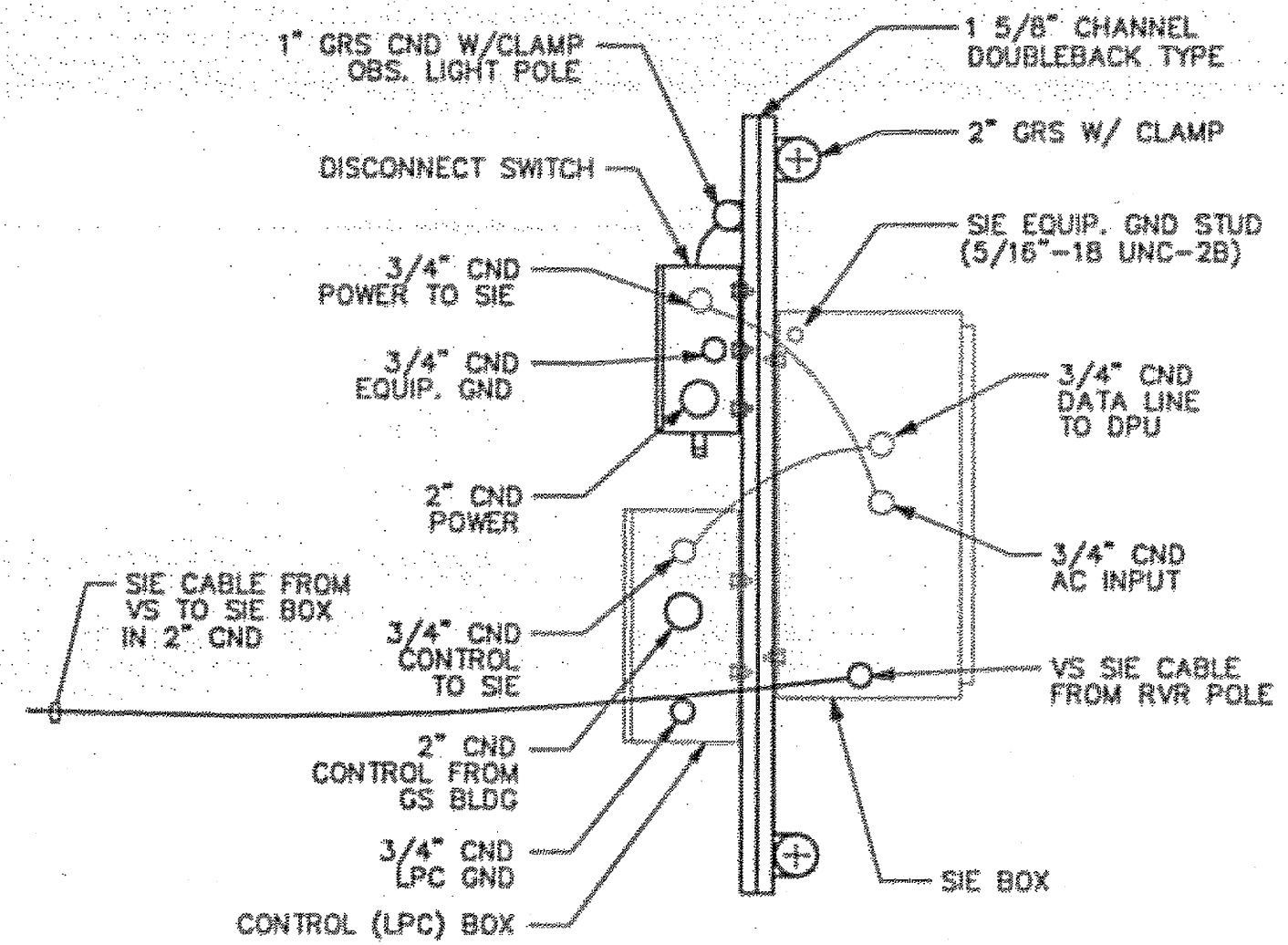


REAR ELEVATION VIEW
SIE BOX SUPPORT

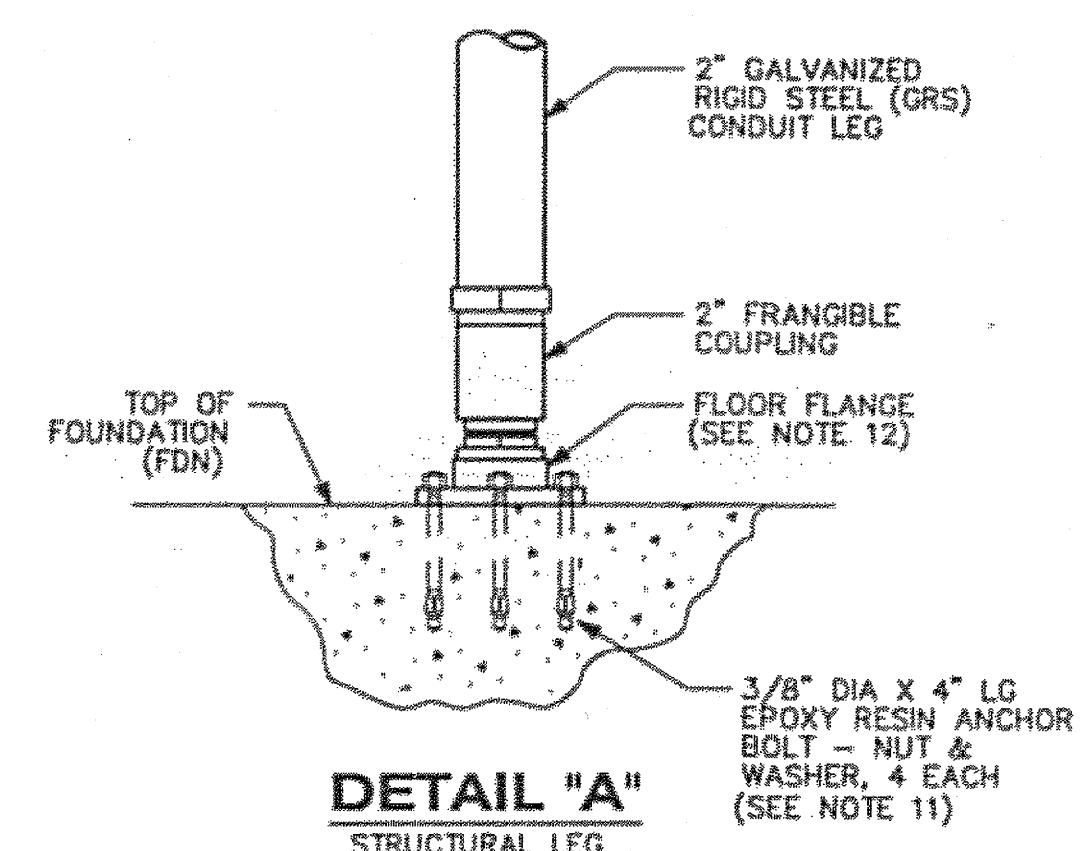


PARTIAL SIDE ELEVATION VIEW
SIE BOX SUPPORT

1 RVR INSTALLATION DETAILS
G43 N.T.S.



PARTIAL PLAN VIEW
FOUNDATION NOT SHOWN



DETAIL "A"
STRUCTURAL LEG

LEGEND:

- ① 3/4" DIA FLEXIBLE LIQUID TIGHT CONDUIT WITH COUPLINGS
- ② 2" DIA GALVANIZED RIGID STEEL CONDUIT (GRS) WITH FRANGIBLE COUPLINGS
- ③ 3/4" DIA GRS CONDUIT WITH COUPLINGS
- ④ 2" DIA GRS CONDUIT WITH COUPLINGS
- ⑤ 2" DIA FLEXIBLE LIQUID TIGHT CONDUIT WITH COUPLINGS

NOTES:

1. BASIC REQUIREMENTS FOR TOUCHDOWN, MIDPOINT AND ROLLOUT RVR INSTALLATIONS ARE AS FOLLOWS:
A. HEIGHT FROM CENTERLINE OF TRANSMITTER/RECEIVER IS 14 FEET ±4 FEET ABOVE ELEVATION OF RUNWAY CENTERLINE PERPENDICULAR TO STRUCTURE.
2. DISTANCE FROM CENTER OF LIR POLE TO SIE BOX GRS LEG IS DETERMINED BY HEIGHT OF VS AND SIE BOX ABOVE GRADE. VERTICAL CABLE RUN BELOW GRADE, AND A 1 FOOT MINIMUM CABLE SLACK, APPROXIMATELY 2.6 FEET OF THE 37 FOOT VS CABLE WILL RUN THRU THE VS FORK ASSEMBLY.
3. SEE SITE DRAWINGS FOR LOCATION AND ORIENTATION RESTRICTIONS.
4. VISIBILITY SENSOR RECEIVER MUST FACE IN A NORTHERLY DIRECTION. ROTATE VS FORK ASSEMBLY TO TRUE NORTH OR TO WITHIN ±10 DEGREES OF TRUE NORTH.
5. NOT USED.
6. SIE UNIT SUPPORT FRAME SHOWN MAY BE LOCATED ON OPPOSITE SIDE OF RVR POLE TO FACILITATE EASY ACCESS TO POWER AND CONTROL LINES. MUST BE LOCATED CLEAR OF RVR POLE TILT DIRECTION.
7. NOT USED.
8. ALL METAL PARTS, CONDUITS, EQUIPMENT AND JUNCTION BOXES SHALL BE GROUNDED IN ACCORDANCE WITH FAA-STD-019.
9. ALL EXTERIOR ENCLOSURES, CHANNELS, CLAMPS AND MOUNTING HARDWARE SHALL BE STAINLESS STEEL.
10. DRILL HOLES AND INSTALL EPOXY TYPE ANCHOR BOLTS WHEN SIE BOX SUPPORTS HAVE BEEN ACCURATELY LOCATED.
11. COAT FLOOR FLANGE SURFACE RESTING ON CONCRETE WITH AN ASPHALT COMPOUND FOR METAL PROTECTION.
12. ALL FAA STANDARDS AND ORDERS REFERENCED IN THESE DRAWINGS SHALL BE THE LATEST VERSION.
13. PORTIONS OF THE SYSTEM NOT INSTALLED UNDER THIS CONTRACT AND NON-APPLICABLE NOTES ARE SHOWN FOR REFERENCE ONLY.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

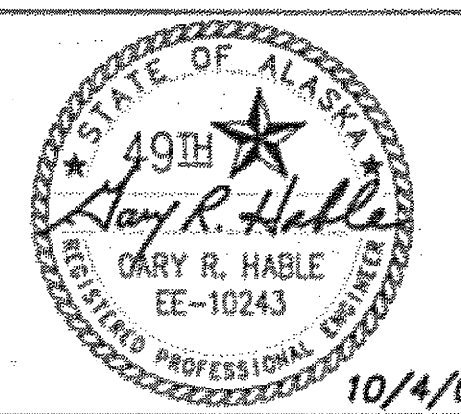
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KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

RVR INSTALLATION DETAILS

PREPARED BY: USKH INC.
CHECKED BY: GRH



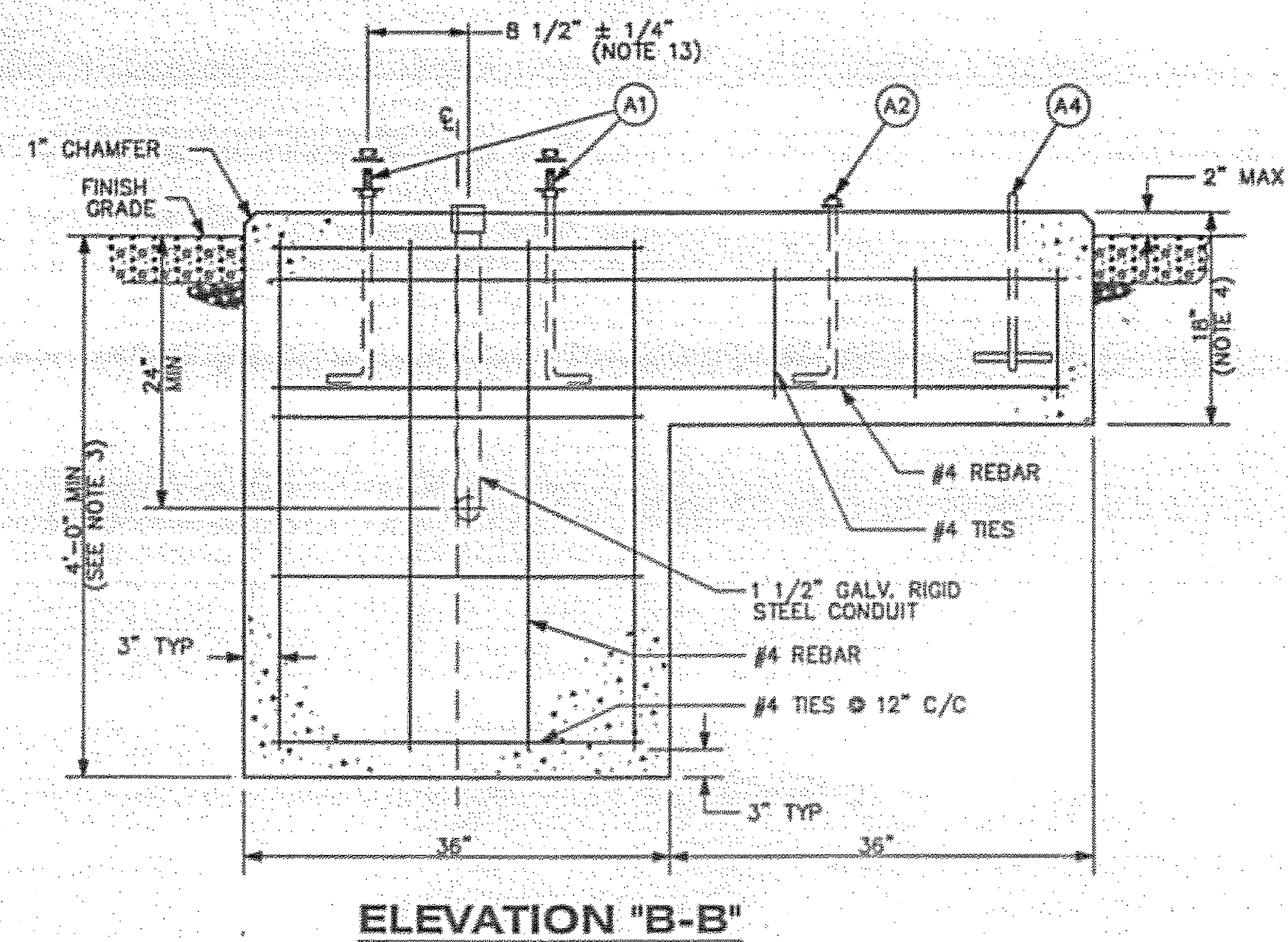
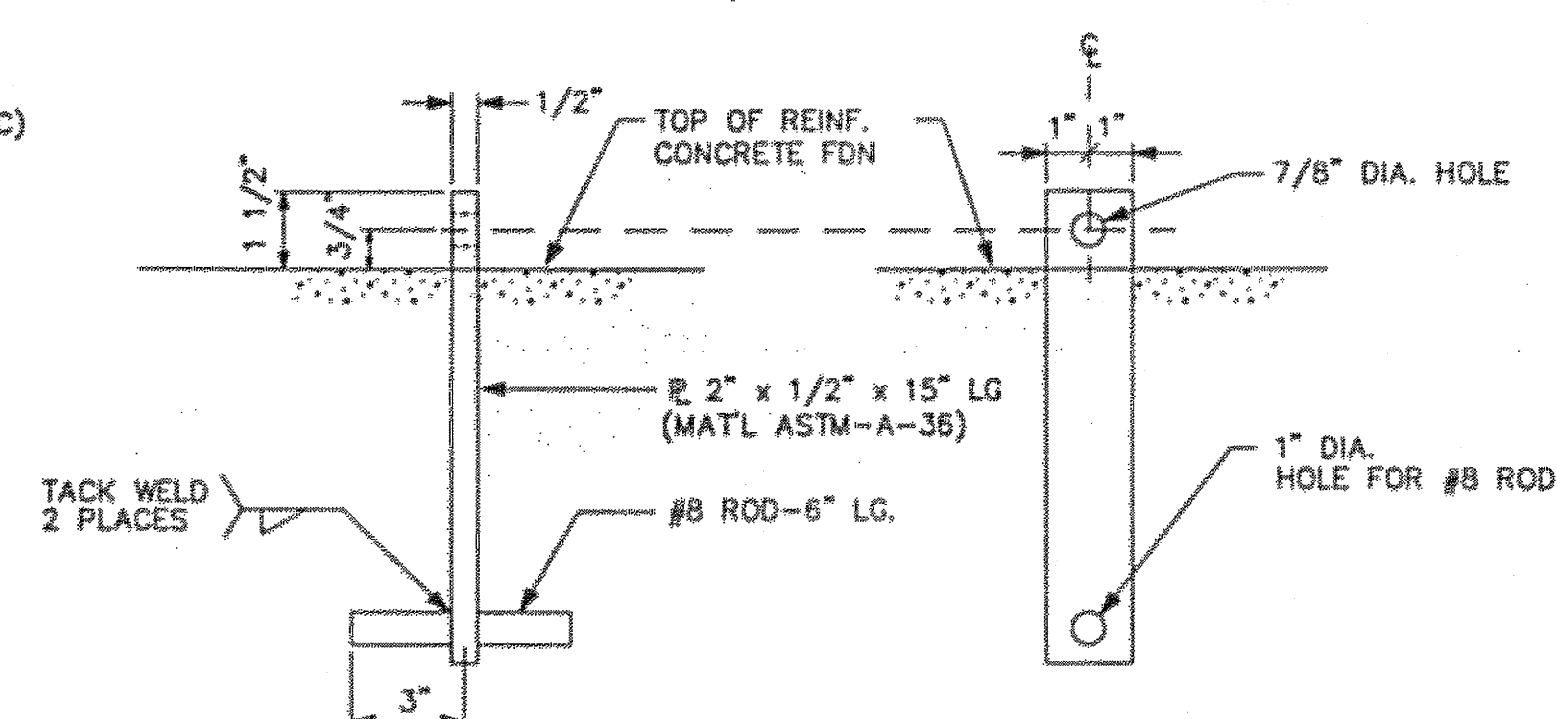
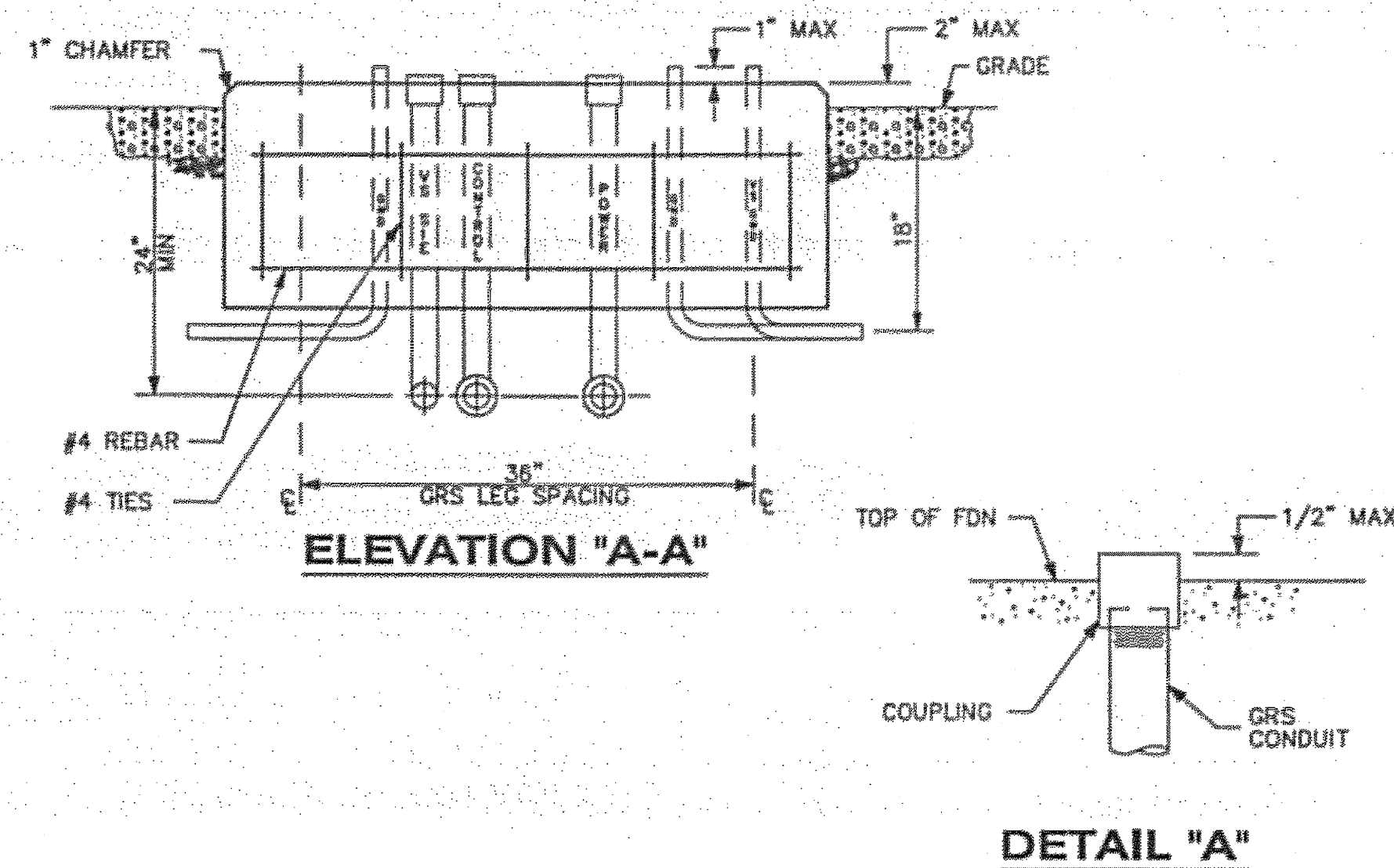
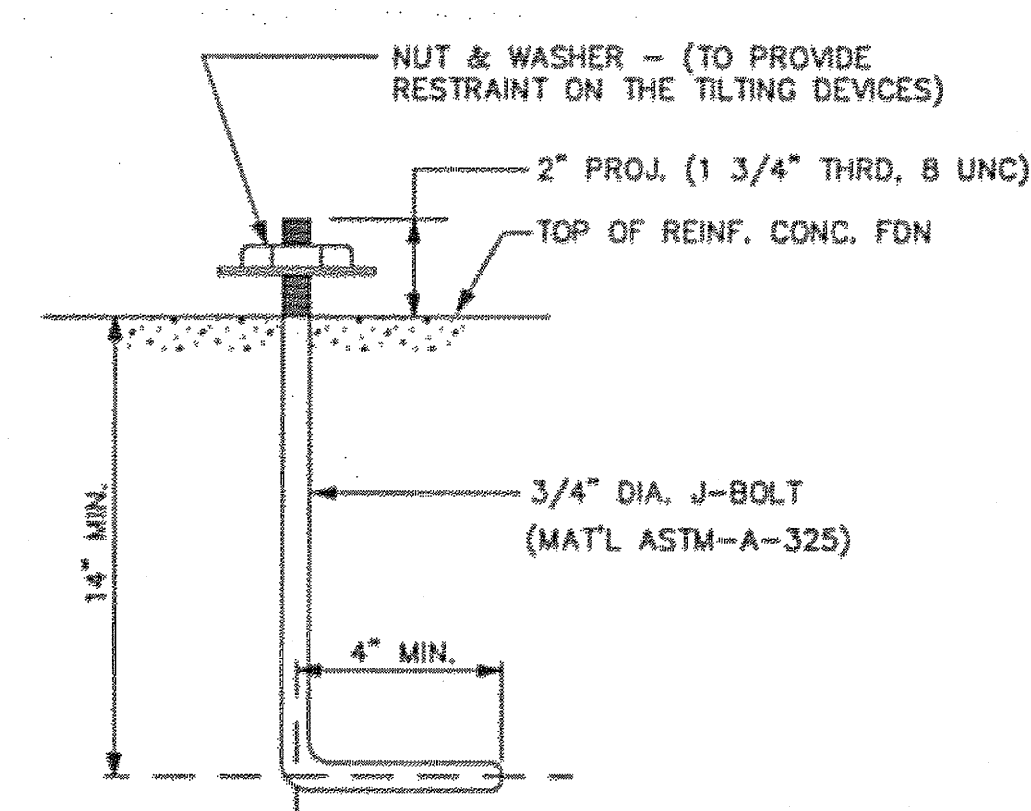
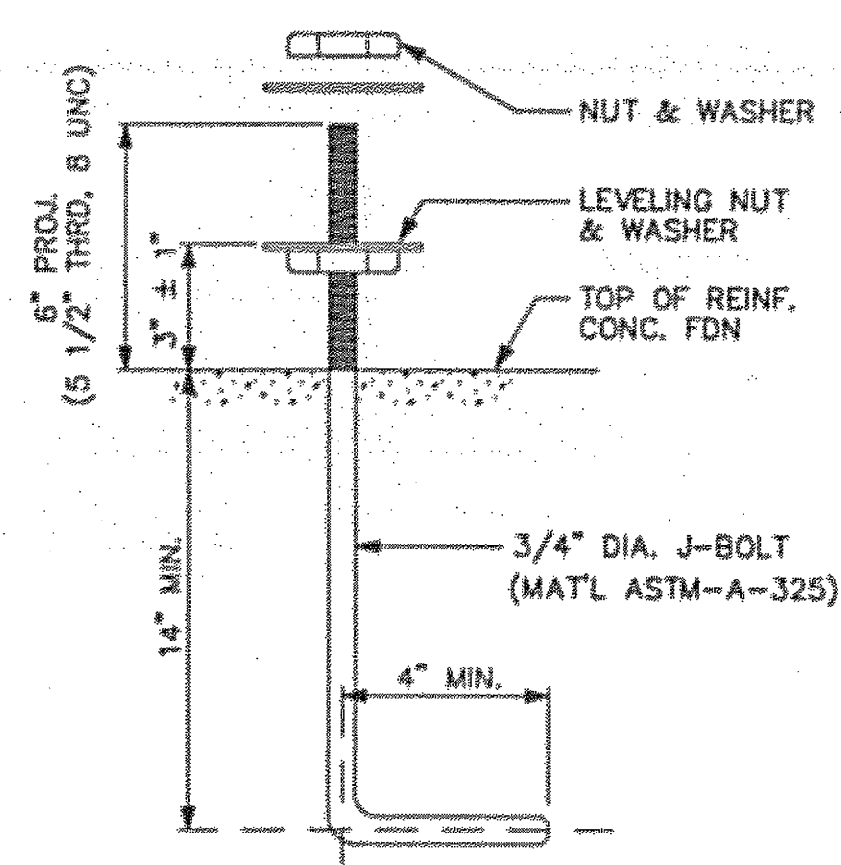
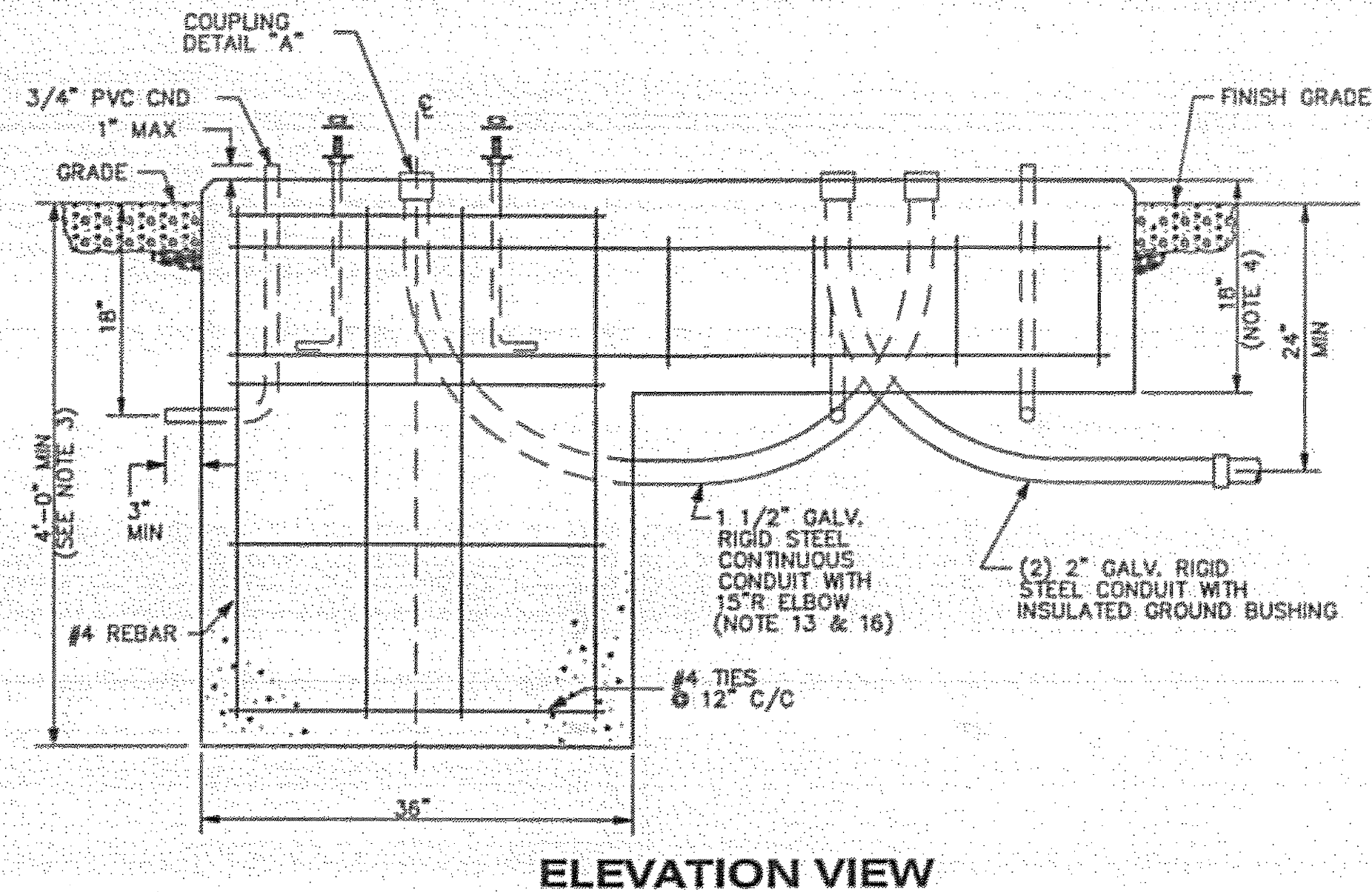
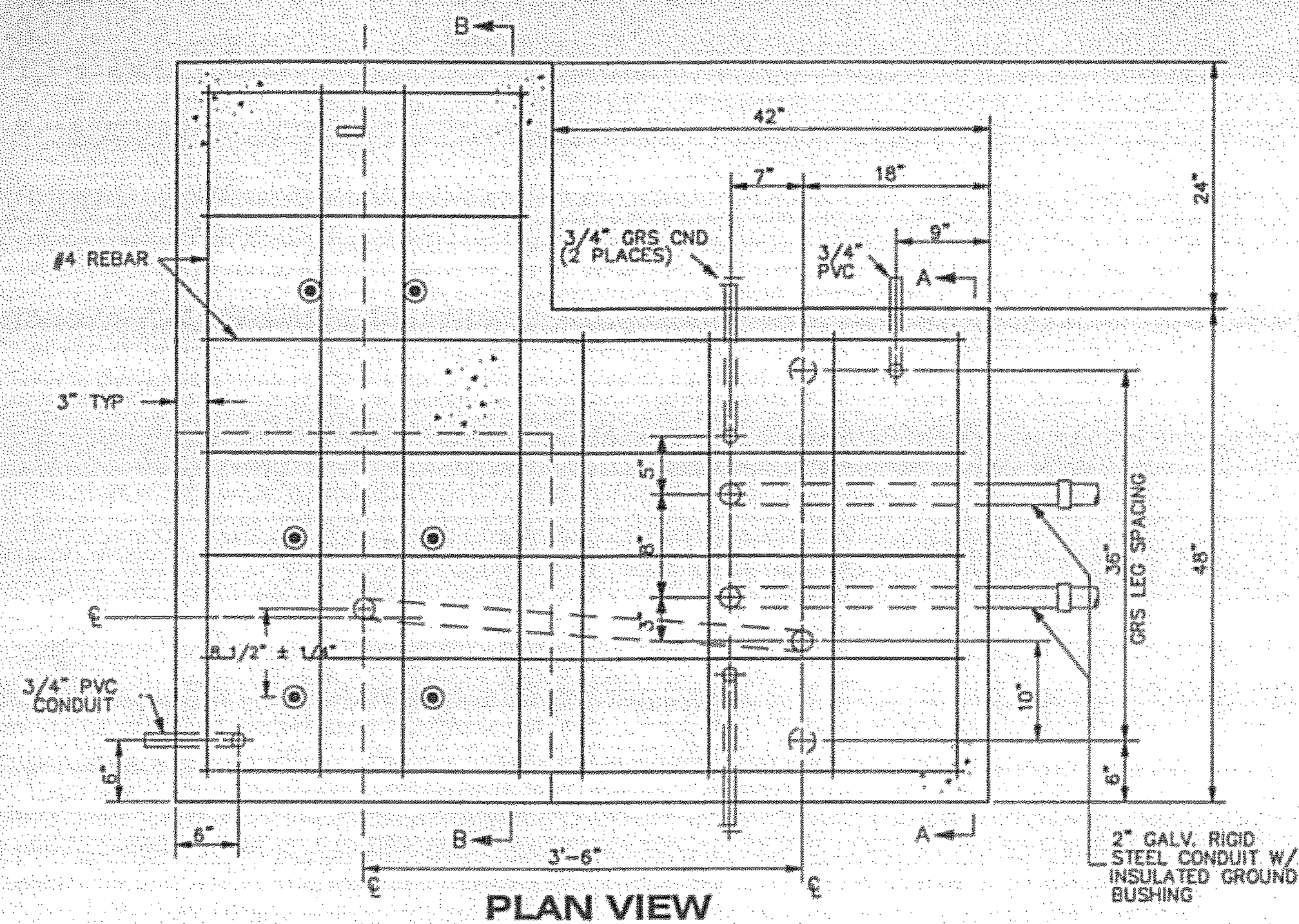
DESIGNED BY: LPS
DRAWN BY: LPS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

RVR INSTALLATION DETAILS

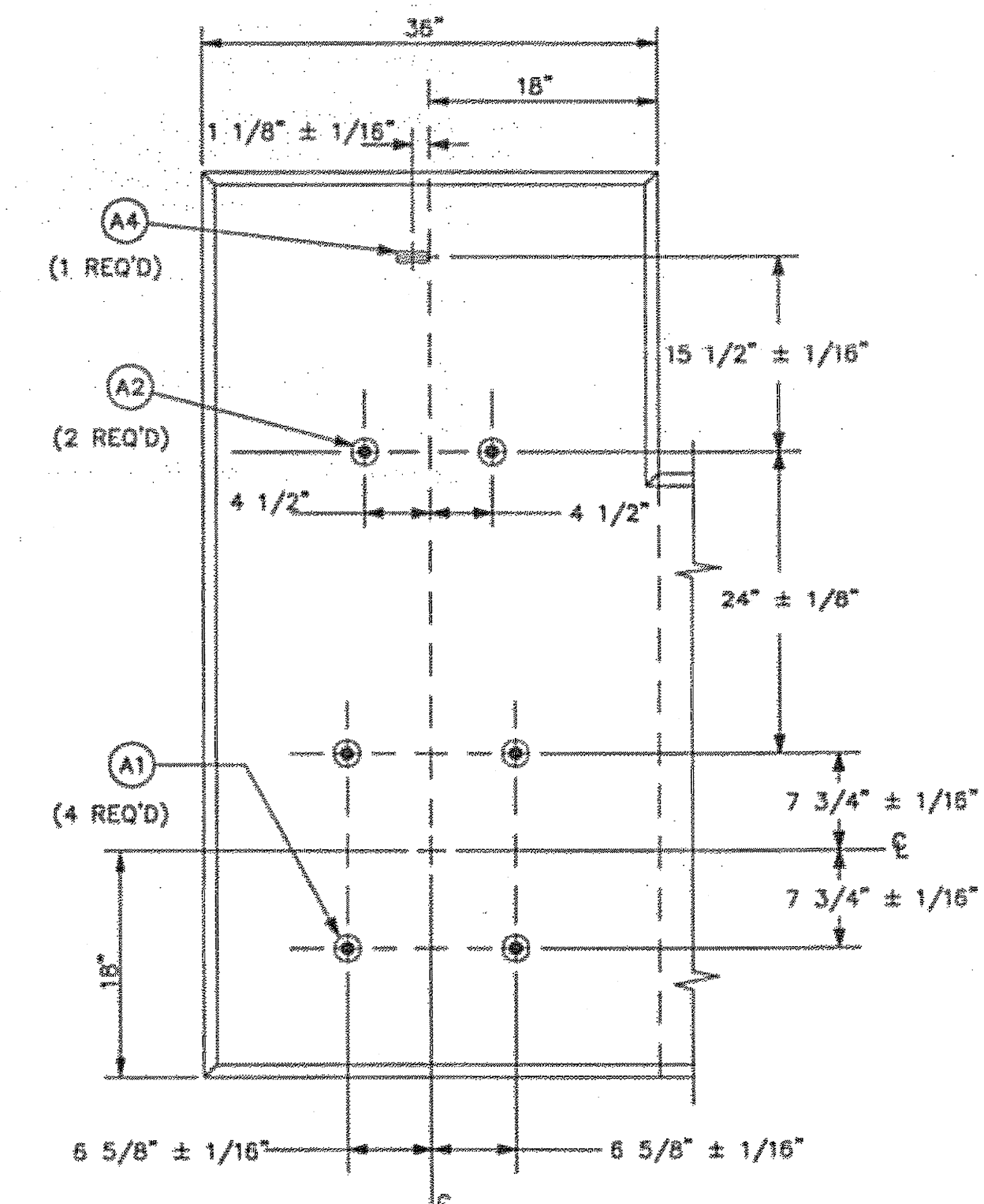
PROJECT DESIGNATION	
AIP NO. 3-02-0144-1606	
STATE	YEAR
ALASKA	2006
SHEET NUMBER	TOTAL SHEETS
G43	131

See attached Electrical Asbuilts



- NOTES:**

1. CONCRETE SHALL DEVELOP A MINIMUM STRENGTH OF 3000 PSI IN 28 DAYS WITH MAXIMUM SLUMP OF 3 INCHES. MAXIMUM AGGREGATE SIZE SHALL BE 3/4 INCH.
2. SOIL BEARING CAPACITY SHALL BE A MINIMUM OF 3000 POUNDS PER SQUARE FOOT OR AS LOCAL SOIL CONDITIONS DICTATE. SOIL INVESTIGATION SHALL BE CONDUCTED AT SITE PRIOR TO CONSTRUCTION. ALL CONCRETE SHALL BE PLACED ON UNDISTURBED SOIL.
3. MINIMUM DEPTH OF CONCRETE FOUNDATION SHALL BE 4 FEET OR MINIMUM 1 FOOT BELOW LOCAL FROST LEVEL, WHICHEVER IS GREATER. EXCEPT IN LOCATIONS WHERE THERE IS A FIRM BEDROCK LESS THAN THIS DEPTH, THE BOTTOM OF ALL EXCAVATIONS SHALL BE FREE OF WATER AND LOOSE EARTH.
4. OPTIONAL, EXTEND 18" CONCRETE DEPTH TO 48" BELOW FINISHED GRADE OR MINIMUM 12" BELOW FROST LEVEL.
5. FOUNDATIONS SHALL BE FORMED TO FULL DEPTH BELOW FINISHED GRADE.
6. WELDED STEEL WIRE FABRIC (WWF) SHALL BE FABRICATED IN ACCORDANCE WITH ASTM-A185 AND SHALL BE HOT-DIPPED GALVANIZED PER ASTM-A153.
7. ALL PLATES, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE HOT DIPPED GALVANIZED OR STAINLESS STEEL.
8. FOUNDATION MAY BE MODIFIED AS DICTATED BY LOCAL SOIL AND CLIMATIC CONDITIONS. IF REGIONALLY REQUIRED, AN OPTIONAL APPROVED SCREW ANCHOR FOUNDATION DESIGN (NOT SHOWN) MAY BE USED.
9. FOUNDATION AREA MAY REQUIRE CUT OPERATION TO MEET RVR POLE HEIGHT REQUIREMENTS. FILL SHALL BE PLACED IN LAYERS NOT EXCEEDING 6 INCHES AND EACH LAYER SHALL BE THOROUGHLY COMPACTED TO 95% OF MAXIMUM DENSITY OF OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH AASHTO-T99. IF FILL MATERIAL IS REQUIRED WITHIN R/W SAFETY AREA, WORK MUST COMPLY WITH FAA AC 150/5300-13.
10. ALL REINFORCING STEEL SHALL BE DEFORMED BILLET STEEL BARS CONFORMING TO ASTM A615 GRADE 60.
11. TOP OF 3/4" PVC CONDUIT SHOULD NOT EXTEND MORE THAN ONE INCH ABOVE CONCRETE SURFACE. EXTEND UNDERGROUND END OF CONDUIT A MINIMUM OF 3" BEYOND CONCRETE FOUNDATION.
12. 1 1/2" RIGID CONDUIT MUST BE LOCATED AS SHOWN TO ALIGN WITH 2" HOLE IN THE BASE PLATE ASSEMBLY.
13. TOTAL UNDERGROUND VS CABLE RUN SHALL NOT EXCEED 6'-6".
14. CONCRETE REINFORCEMENT MAY BE SHIFTED TO ALLOW FOR PLACEMENT OF ANCHOR BOLTS, INSERTS AND CONDUITS.
15. GRADING OF SOIL AND ROCK SHOULD BE THAT ALL DRAINAGE IS AWAY FROM FOUNDATION.
16. ALL FAA STANDARDS AND ORDERS REFERENCED IN THESE DRAWINGS SHALL BE THE LATEST VERSION.



ANCHOR BOLT AND PLATE LAYOUT

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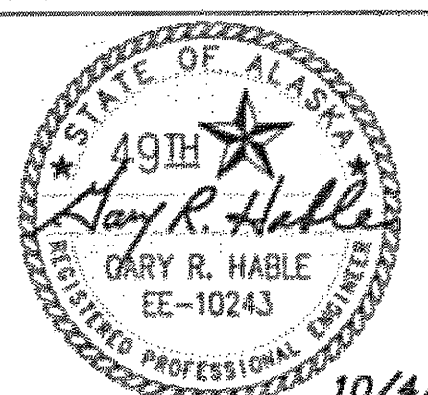
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KETCHIKAN AIRPORT
RUNWAY SAFETY AREA EXPANSION
& RUNWAY OVERLAY
PROJECT NO. 68306

RRVR FOUNDATION DETAILS

PREPARED BY: USKH INC.

CHECKED BY: GRH



DESIGNED BY: LPS

DRAWN BY: LPS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

RVR FOUNDATION DETAILS

PROJECT DESIGNATION

AIP NO. 3-02-0144-1606

STATE	YEAR
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ALASKA	2006
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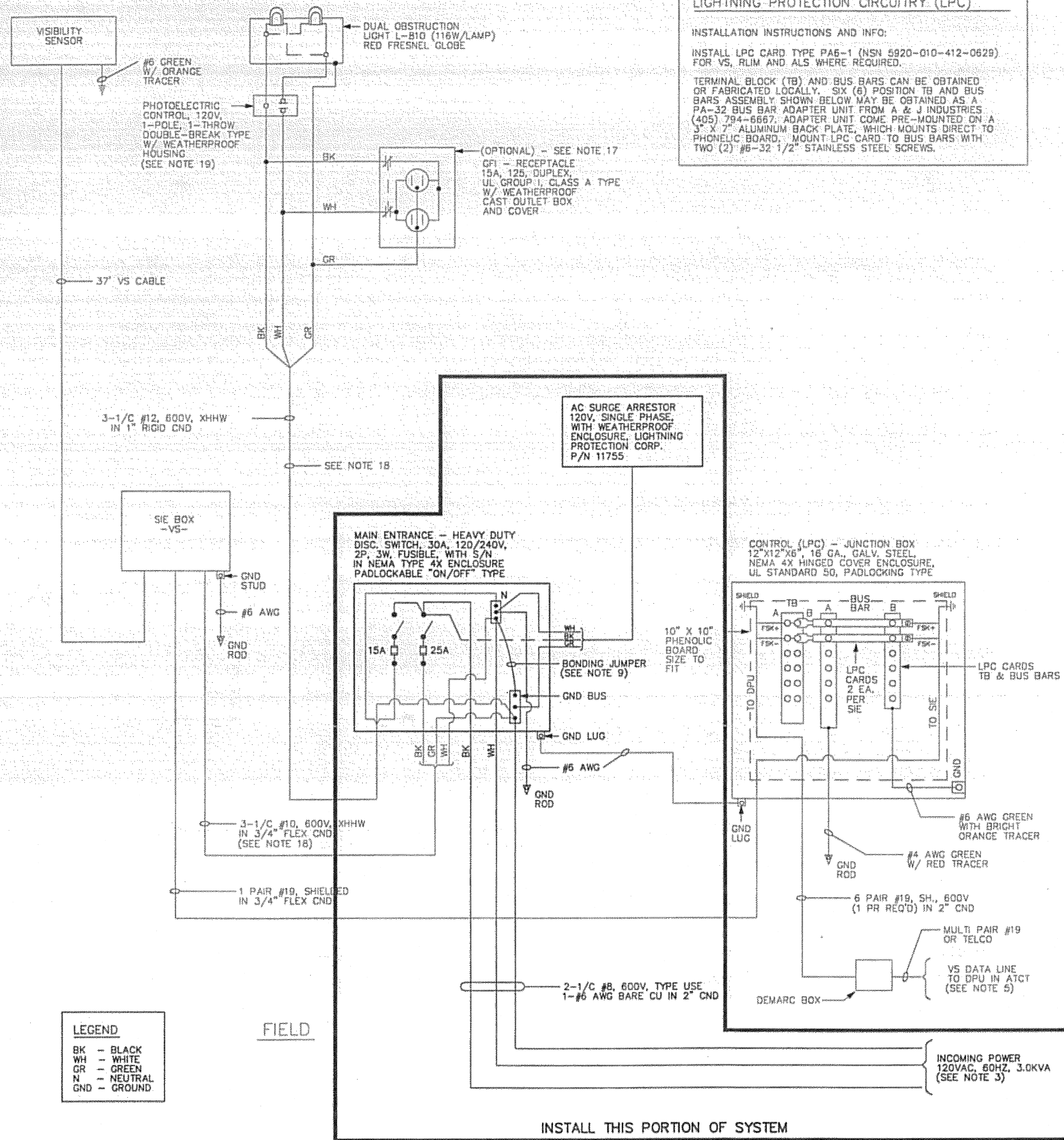
SHEET NUMBER	TOTAL SHEETS
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DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

See attached Electrical Asbuilts

1 RVR FOUNDATION DETAILS
G44 N.T.S.



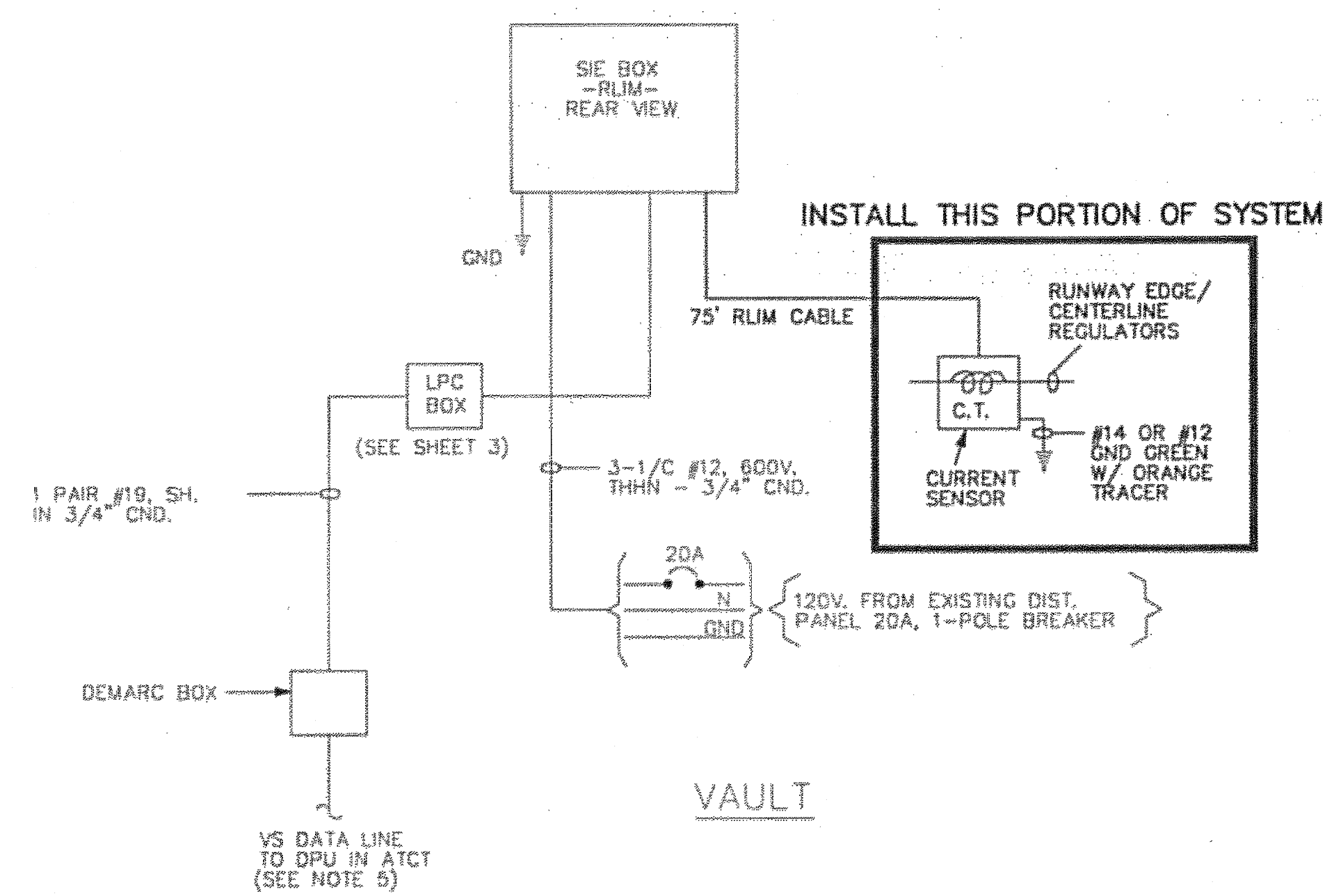
LIGHTNING PROTECTION CIRCUITRY (LPC)

INSTALLATION INSTRUCTIONS AND INFO:

INSTALL LPC CARD TYPE PA6-1 (NSN 5920-010-412-0629) FOR VS, RLM AND ALS WHERE REQUIRED.

TERMINAL BLOCK (TB) AND BUS BARS CAN BE OBTAINED OR FABRICATED LOCALLY. SIX (6) POSITION TB AND BUS BARS ASSEMBLY SHOWN BELOW MAY BE OBTAINED AS A PA-32 BUS BAR ADAPTER UNIT FROM A & J INDUSTRIES (405) 794-6667. ADAPTER UNIT COME PRE-MOUNTED ON A 3" X 7" ALUMINUM BACK PLATE, WHICH MOUNTS DIRECT TO PHENOLIC BOARD. MOUNT LPC CARD TO BUS BARS WITH TWO (2) #6-32 1/2" STAINLESS STEEL SCREWS.

- NOTES:**
- CONTRACTOR SHALL TERMINATE POWER AND CONTROL CABLES BY LOOPING BACK AND WEATHERPROOFING ENDS WHEN HOOKUP IS TO BE PERFORMED BY FAA.
 - POWER AND CONTROL SOURCE(S) SHALL BE REGIONALLY DETERMINED. POWER REQUIREMENT FOR SIE(VS, ALS, RLM) IS 120VAC, 60HZ, 3KVA, SINGLE PHASE.
 - IF VOLTAGE DROP EXCEEDS 5% INCREASE THE VOLTAGE SOURCE VIA TRANSFORMER OR CABLE SIZE TO REDUCE VOLTAGE DROP.
 - EACH VS, RLM, AND ALS SHALL REQUIRE A MINIMUM 1 PAIR SHIELDED #19, 600V, REGIONALLY DETERMINED NUMBER OF SPARES WITH AT LEAST 1 PAIR FOR BACKUP. IF ALS IS COLLOCATED WITH VS A MINIMUM 2 PAIR #19 SHALL BE REQUIRED.
 - INSTALL REQUIRED SIZE PULL WIRE IN EACH CONDUIT RUN IN ACCORDANCE WITH SPECIFICATION FAA-C-1391.
 - ALL WORK SHALL BE DONE IN ACCORDANCE WITH FAA-STD-019, FAA-C-1217, LATEST NATIONAL ELECTRICAL CODES, AND OTHER APPLICABLE LOCAL CODES AND REGULATIONS.
 - NEUTRAL BUS IS TO BE INSULATED FROM ENCLOSURE AND IS GROUNDED ONLY AT THE MAIN ENTRANCE DISCONNECT SWITCH AND POWER COMPANY TRANSFORMER.
 - EQUIPMENT GROUND AND NEUTRAL BUS IS TO BE BONDED TOGETHER AT THE MAIN SERVICE ENTRANCE SWITCH ONLY. BONDING JUMPER SHALL BE SIZED IN ACCORDANCE WITH THE LATEST NEC.
 - ALL ENCLOSURES, FITTINGS, AND OTHER NONCURRENT CARRYING METAL PARTS SHALL BE EFFECTIVELY GROUNDED WHERE NECESSARY TO ASSURE ELECTRICAL CONTINUITY AND CAPACITY TO HANDLE ANY FAULT CURRENT THAT MAY BE ANTICIPATED. USE SPLIT BOLT CONNECTIONS OR GROUNDING LUGS.
 - PRIOR TO GROUNDING, REMOVE ANY NONCONDUCTIVE PAINT, ENAMEL, OR FOREIGN MATERIAL FROM CONTACT SURFACES.
 - ALL CONDUITS TERMINATING IN BOXES, PANELS, AND ENCLOSURES SHALL HAVE DOUBLE LOCKNUTS AND INSULATED BUSHINGS.
 - ALL CONDUITS SHALL BE RIGID HOT DIPPED GALVANIZED STEEL, UNLESS OTHERWISE INDICATED.
 - GROUND ROD SHALL BE 3/4" X 10' LONG COPPER CLAD STEEL. CONNECTIONS TO GROUND RODS SHALL BE EXOTHERMICALLY WELDED.
 - ALL EXTERIOR ENCLOSURES, NUTS, BOLTS, AND MISCELLANEOUS MOUNTING HARDWARE SHALL BE STAINLESS STEEL, UNLESS NOTED OTHERWISE.
 - #6 AWG BARE COPPER GROUND WIRE MAY BE SOLID OR STRANDED UNLESS OTHERWISE INDICATED.
 - EACH SIE CONTAINS ONE 120V/15A 6P DUPLICATION RECEPTACLE.
 - DUAL OBSTRUCTIONS LIGHT MAY BE OPTIONALLY POWERED DIRECTLY FROM A TERMINAL BLOCK IN THE SIE.
 - CONTROL DEVICES MUST ENERGIZE AT 35 FOOT CANDLES AND DE-ENERGIZE AT 60 FOOT CANDLES PER AC 70/7460-1.
 - AIR TERMINALS ARE NOT REQUIRED FOR RVR VISIBILITY SENSORS WHEN MOUNTED ON AIR MASTS.
 - ALL FAA STANDARDS AND ORDERS REFERENCED IN THESE DRAWINGS SHALL BE THE LATEST VERSION.
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& RUNWAY OVERLAY
PROJECT NO. 68306

RVR DETAILS

PREPARED BY: USKH INC.
CHECKED BY: GRH

DESIGNED BY: LPS
DRAWN BY: LPS

STATE OF ALASKA
49th
GARY R. HABLE
EE-10243
REGISTERED PROFESSIONAL ENGINEER
10/4/06

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
DESIGN & ENGINEERING SERVICES
DIVISION-SOUTHEAST REGION

RVR DETAILS

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