

CITY OF PHOENIX

AVIATION DEPARTMENT

DESIGN & CONSTRUCTION SERVICES



PROJECT NAME **PSHIA INFIELD UTILITY ACCESS UPGRADES AND PAVING TAXIWAY E & F INFIELDS (ES9, ES10, FN9, FN10)**

ADDRESS **3400 EAST SKY HARBOR BOULEVARD, PHOENIX, AZ 85034**

PROJECT NUMBER **AV08000074 ADOT**

ADOT GRANT NUMBER **E3S2J01C**

MAYOR
KATE GALLEG0

VICE MAYOR
YASSAMIN ANSARI

CITY COUNCIL

DISTRICT NO. 1 ANN O'BRIEN	DISTRICT NO. 5 BETTY GUARDADO
DISTRICT NO. 2 JIM WARING	DISTRICT NO. 6 KEVIN ROBINSON
DISTRICT NO. 3 DEBRA STARK	DISTRICT NO. 7 YASSAMIN ANSARI
DISTRICT NO. 4 LAURA PASTOR	DISTRICT NO. 8 KESHA HODGE WASHINGTON

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JEFFREY BARTON

CITY ENGINEER

ERIC J. FROBERG, P.E.

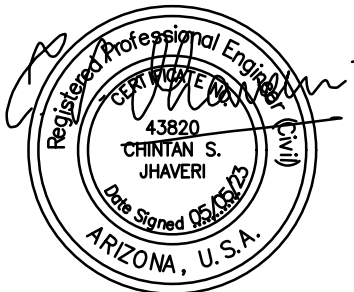
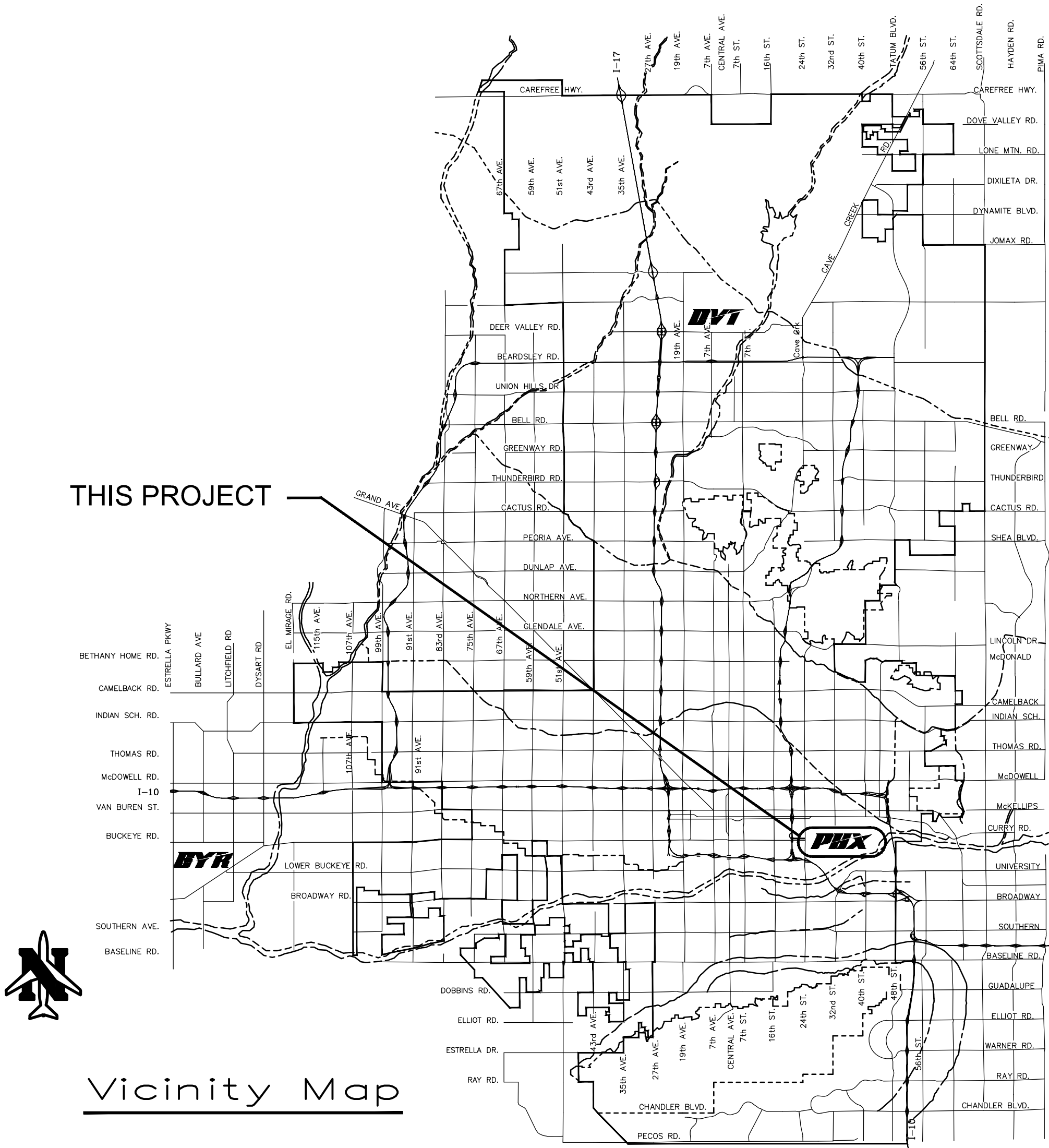
DIRECTOR OF AVIATION SERVICES

CHAD R. MAKOVSKY, C.M.

APPROVALS

DEPUTY AVIATION DIRECTOR
DESIGN & CONSTRUCTION SERVICES DIVISION

DATE



APPROXIMATE QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
C-100	CONTRACTOR QUALITY CONTROL PROGRAM (CQCP)	LS	1
C-102-6.1	STORMWATER POLLUTION PREVENTION	LS	1
C-105	MOBILIZATION	LS	1
SP-30.1	CONSTRUCTION SURVEY LAYOUT	LS	1
SP-32.1	RAISE EXISTING COP UTILITY VAULT	EA	4
SP-33.1	REMOVE AND SALVAGE EXISTING CONCRETE LID AND APRON	EA	13
SP-34.1	CONSTRUCT NEW PRECAST CONCRETE LID AND APRON	EA	13
SP-35.1	SAWCUT ASPHALT PAVEMENT (FULL DEPTH)	LF	6,426
SP-36-8.1	AIRPORT SAFETY AND SECURITY (M-003)	LS	1
P-101-5.7	REMOVE EXISTING CATCH BASIN (DOUBLE GRATE)	EA	1
P-403-7.1	ASPHALT CONCRETE PAVEMENT (MAG D 1/2 INCH)	TON	6,364
D-751-6.1	CONSTRUCT NEW CONCRETE CATCH BASIN (TRIPLE GRATE)	EA	1
L-100-5.1	REMOVE AND SALVAGE EXISTING AIRFIELD GUIDANCE SIGN AND ISOLATION TRANSFORMER, REMOVE CONCRETE SIGN BASE	EA	14
L-100-5.2	REMOVE EXISTING CABLE, CONDUIT TO REMAIN	LF	2,845
L-100-5.3	EXCAVATE AND REMOVE EXISTING CONDUIT (CONTINGENCY ITEM)	LF	200
L-100-5.4	INSTALL SALVAGED RUNWAY DISTANCE REMAINING SIGN AND ISOLATION TRANSFORMER ON NEW 7.5', SIZE 4 RDR CONCRETE SIGN BASE	EA	1
L-100-5.5	INSTALL SALVAGED AIRFIELD GUIDANCE SIGN AND ISOLATION TRANSFORMER ON NEW 10.5', 2-MODULE CONCRETE SIGN BASE	EA	10
L-100-5.6	INSTALL SALVAGED AIRFIELD GUIDANCE SIGN AND ISOLATION TRANSFORMER ON NEW 14', 3-MODULE CONCRETE SIGN BASE	EA	3
L-100-5.7	INSTALL NEW MANHOLE ID PLAQUE ON NEW OR EXISTING MANHOLE COVER	EA	16
L-108-5.1	L-824, TYPE C, 2/C #8 AWG, 5KV CABLE (W/ BARE #6 STRANDED CU. GROUND)	LF	3,050
L-110-5.1	SINGLE-WAY, (1) - 2" CONDUIT, SLURRY ENCASED (CONTINGENCY ITEM)	LF	200

INDEX OF SHEETS

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04	GI-004	LEGEND AND ABBREVIATIONS
05	GI-401	KEY MAP
06	GC-401	PROJECT LAYOUT PLAN
07	VF-401	SURVEY CONTROL PLAN
08	CS-501	TYPICAL SECTIONS
09	CS-502	PAVING DETAILS
10	CS-503	DRAINAGE DETAILS
11	CS-504	UTILITY ADJUSTMENT DETAILS
12	CG-101	TAXIWAY F INFIELDS UTILITY ACCESS UPGRADES AND PAVING
13	CG-102	TAXIWAY F INFIELDS UTILITY ACCESS UPGRADES AND PAVING
14	CG-103	TAXIWAY E INFIELDS UTILITY ACCESS UPGRADES AND PAVING
15	CG-104	TAXIWAY E INFIELDS UTILITY ACCESS UPGRADES AND PAVING
16	EA-001	ELECTRICAL LEGEND AND NOTES
17	EA-101	PARTIAL AIRFIELD ELECTRICAL SITE PLAN
18	EA-102	PARTIAL AIRFIELD ELECTRICAL SITE PLAN
19	EA-103	PARTIAL AIRFIELD ELECTRICAL SITE PLAN
20	EA-104	PARTIAL AIRFIELD ELECTRICAL SITE PLAN
21	EA-501	AIRFIELD GUIDANCE SIGN BASE INSTALLATION DETAIL
22	EA-502	RDR SIGN BARGE INSTALLATION AND MANHOLE DETAILS
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QUANTITY SUMMARY AND SHEET INDEX

SHEET
REFERENCE
NUMBER:

GI-002

SHEET 02 OF 23

PRIME CONSULTANT

SUB CONSULTANT

"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX"

THE CITY OF PHOENIX

AIC

PHX DVT BYR
CITY OF PHOENIX AVIATION DEPARTMENT

**PSHIA INFIELD
UTILITY ACCESS UPGRADES
AND PAVING**

ADOT GRANT NO. : E3S2.101C

Designed by: C. SHAW

Drawn by: A. SANTILLI

Checked by: C. J. Haverbeke

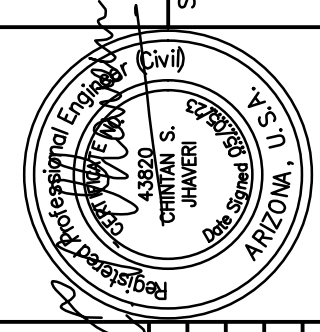
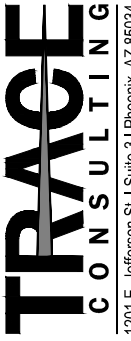
Date: 05/05/2022

Dina et al. / NTG

Contact Arizona 811 at least two full working days before you begin excavation










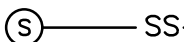




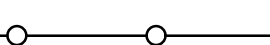

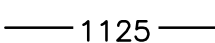

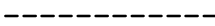


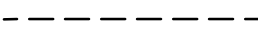






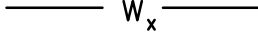

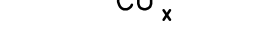









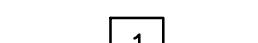




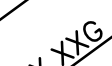
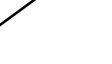


ARIZONA 811

Call 811 or click Arizona811.com



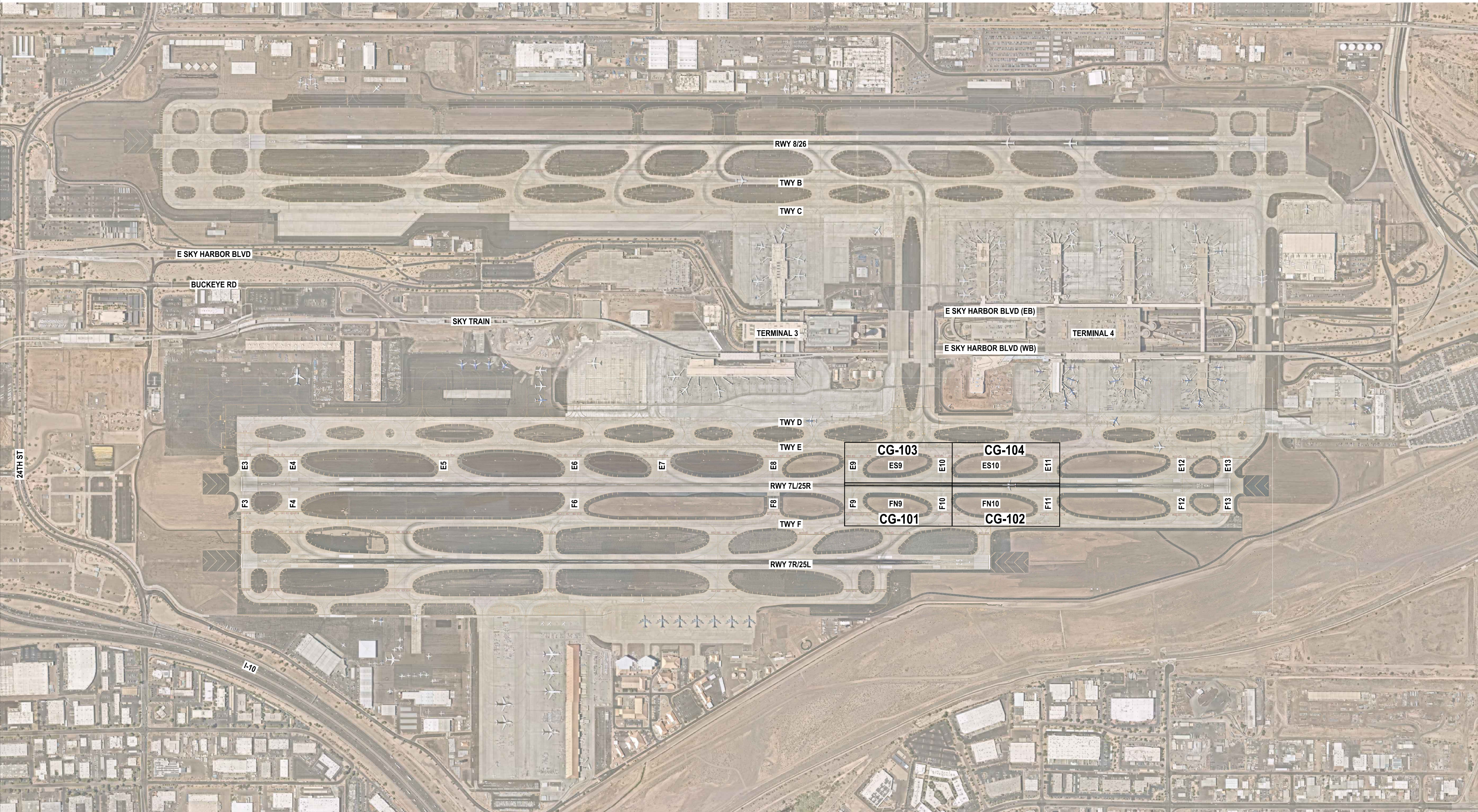
ABBREVIATIONS	
ABBREVIATIONS	DEFINITIONS
7L/25R	RUNWAY DESIGNATION
ABC	AGGREGATE BASE COURSE
AC	ASPHALTIC CONCRETE
ADOT	ARIZONA DEPARTMENT OF TRANSPORTATION
AIP	AIRPORT IMPROVEMENT PROGRAM
APS	ARIZONA PUBLIC SERVICE
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS
CL OR \mathbb{C}	CENTER LINE
C TO C	CENTER TO CENTER
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
CF OR CU FT	CUBIC FEET
CY	CUBIC YARDS
CZ	CLEAR ZONE
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
D ₅₀	DIAMETER OF 50% ROCK SIZE
E	EAST OR EASTING
EA	EACH
ELEC	ELEC/ELECTRICAL
EL OR ELEV	ELEVATION
EX OR EXST	EXISTING
FAA	FEDERAL AVIATION ADMINISTRATION
FIN	FINISHED
FL OR $\overline{\mathbb{L}}$	FLOW LINE
FT	FOOT
GPM	GALLONS PER MINUTE
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
JB	JUNCTION BOX
L	LENGTH OR LEFT
LBS	POUNDS
LF	LINEAL FOOT
LS	LUMP SUM
LT	LEFT
MAG	MARICOPA ASSOCIATION OF GOVERNMENTS
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
N	NORTH OR NORTHING
NO.	NUMBER
NPI	NON-PAY-ITEM
NTS	NOT TO SCALE
N/A	NON APPLICABLE
OC	ON CENTER
OD	OUTSIDE DIAMETER
PROP	PROPOSED
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
R	RADIUS OR RIGHT
RCP	REINFORCED CONCRETE PIPE
REINF	REINFORCING
ROW	RIGHT-OF-WAY
RSA	RUNWAY SAFETY AREA
RT	RIGHT
RWY	RUNWAY
S	SOUTH OR SLOPE
SAL	SAFETY AREA LIMITS
SD	STANDARD DETAIL OR STORM DRAIN
SECT	SECTION
SHT	SHEET
SPECS	SPECIFICATIONS
STA	STATION
SY	SQUARE YARDS
T	TANGENT LENGTH
T.C.	TOP OF CONCRETE
TSA	TAXIWAY SAFETY AREA
TWY	TAXIWAY
TYP	TYPICAL
UG	UNDERGROUND
VCP	VITRIFIED CLAY PIPE
W	WEST OR WATER
w	WATT
WT	WEIGHT
#	REBAR SIZE NUMBER

ABBREVIATIONS	
ABBREVIATIONS	DEFINITIONS
Ⓢ	AT
ILS	INSTRUMENT LANDING SYSTEM
HP	HIGH POINT
GALV	GALVANIZED
GAL	GALLON
GA	GAUGE
EVC	END VERTICAL CURVE
ESMT	EASEMENT
CONST	CONSTRUCTION
CFS	CUBIC FEET PER SECOND
BVC	BEGIN VERTICAL CURB
BOT	BOTTOM
BC	BEGIN CURVE
ATCT	AIR TRAFFIC CONTROL TOWER
APPROX	APPROXIMATE
ARFF	AIRPORT RESCUE AND FIRE FIGHTING
AOA	AIR OPERATIONS AREA
ALT	ALTERNATE
CTB	CEMENT TREATED BASE
SWPPP	STORM WATER POLLUTION PREVENTION PLAN
SCHD	SCHEDULE
PSHIA	PHOENIX SKY HARBOR INTERNATIONAL AIRPORT
RGRCP	RUBBER GASKET REINFORCED CONCRETE PIPE
KV	KILOVOLT
NAVD	NORTH AMERICAN VERTICAL DATUM
CLSM	CONTROLLED LOW STRENGTH MATERIAL
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOC.
NOTAM	NOTICE TO AIRMAN
TBM	TEMPORARY BENCH MARKS
COP	CITY OF PHOENIX
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PCC	PORTLAND CEMENT CONCRETE
PCCP	PORTLAND CEMENT CONCRETE PAVEMENT
PETRO	PETROLEUM
PT	POINT OF TANGENCY
PVI	POINT OF VERTICAL INTERSECTION
CPM	CRITICAL PATH METHOD
ADEQ	ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
SF	SQUARE FEET OR SEMI-FLUSH
STD	STANDARD
VC	VERTICAL CURVE
V OR VERT	VERTICAL
TOFA	TAXIWAY OBJECT FREE AREA
N.O.T.	NOTICE OF TERMINATION
N.O.I.	NOTICE OF INTENT
SIDA	SECURITY IDENTIFICATION DISPLAY AREA
DVT	DEER VALLEY AIRPORT
CPM	CRITICAL PATH METHOD

LEGEND		
DESCRIPTION	EXISTING	PROPOSED
CONCRETE SIGN BASE		
RUNWAY/TAXIWAY EDGE LIGHT		
FLUSH RUNWAY/TAXIWAY EDGE LIGHT		
RUNWAY GUARD LIGHT		
SANITARY SEWER AND MANHOLE		
STORM DRAIN, MANHOLE & INLET		
RUNWAY/TAXIWAY CENTERLINE		
CHAIN LINK FENCE		
MAJOR CONTOUR LINES		
MINOR CONTOUR LINES		
FIBER OPTIC		
GRADE BREAK		
FLOW LINE		
APS MANHOLE		
MONITORING WELL		
WATER LINE		
TELEPHONE		
GAS LINE		
FAA		
ELECTRICAL		
RUNWAY SAFETY AREA		
TAXIWAY SAFETY AREA		
CONSTRUCTION NOTE		
REFERENCE NOTE OR STORM DRAIN CONSTRUCTION NOTE		
ADJUSTMENT/REMOVAL/DEMOLITION NOTE		
SPOT ELEVATION		
SPOT ELEVATION-CATCH BASIN GRATE		
SAWCUT FULL DEPTH AND MATCH EXISTING		
MATCH EXISTING		

SHEET OVERVIEW TITLE	Designed by: G. SHAW	<div>PHX DVT BYA</div> <div>CITY OF PHOENIX AVIATION DEPARTMENT</div> <div>PSHIA INFIELD UTILITY ACCESS UPGRADES AND PAVING</div> <div>AV 08000074 ADOT</div> <div>ADOT GRANT NO.: E3S2J01C</div>	<div>NO</div> <div>REVISIONS / SUBMISSIONS</div> <div>DATE</div>	<div>PRIME CONSULTANT</div> <div>TRACE CONSULTING</div> <div>100 E. Jefferson St. Suite 11 Phoenix, AZ 85004</div>		
	Drawn by: A. SANTILLI					
	Checked by: C. JHAVERI					
	Date: 05/05/2023					
	Dwg scale: NTS					
LEGEND AND ABBREVIATIONS	SHEET REFERENCE NUMBER: <div>GI-004</div>			<div>PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED BY THE OBLIGATIONS OF CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX</div> <div>NO</div> <div>REVISIONS / SUBMISSIONS</div> <div>DATE</div>	<div>PROFESSIONAL ENGINEER</div> <div>STATE OF ARIZONA</div> <div>15056</div> <div>05/05/2025</div> <div>G. SHAW</div>	<div>SUB CONSULTANT</div>
	SHEET 04 OF 23					

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PRIME CONSULTANT

TRACE CONSULTING

1301 E. Jefferson St., Suite 1 Phoenix, AZ 85005

SUB CONSULTANT

PHX DOT BYR

CITY OF PHOENIX AVIATION DEPARTMENT

PSHIA INFIELD UTILITY ACCESS UPGRADES AND PAVING

AV 08000074 ADOT

ADOT GRANT NO.: E3S2J01C

DESIGNED BY: C. SHAW

DRAWN BY: A. SANTILLI

CHECKED BY: C. JHAVERI

DATE: 05/05/2023

DWG SCALE: 1"=500'

SHEET OVERVIEW TITLE

KEY MAP

SHEET REFERENCE NUMBER:

GI-401

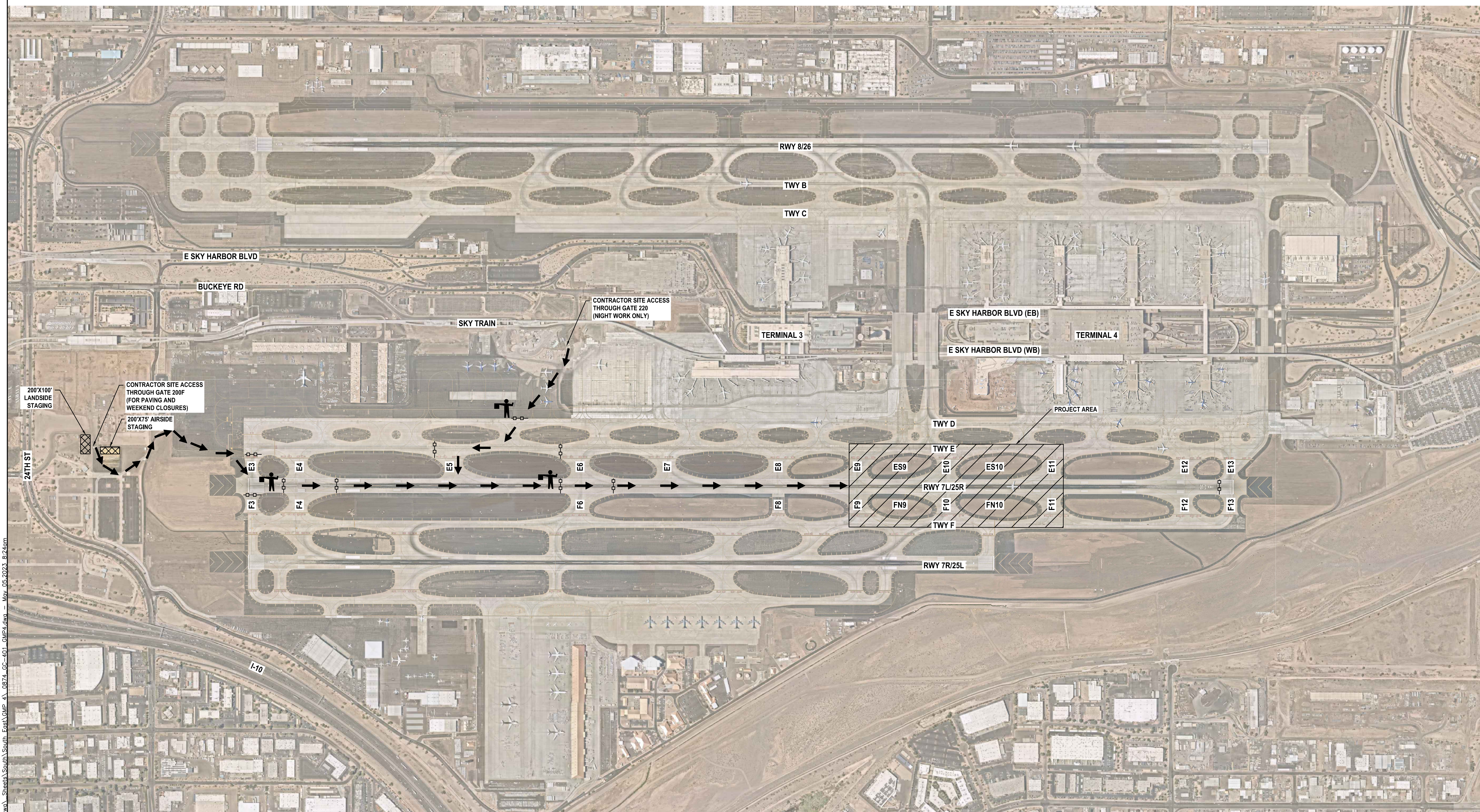
SHEET 05 OF 23

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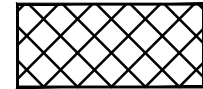
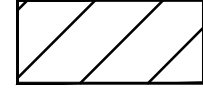

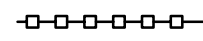
NO	REVISIONS / SUBMISSIONS	DATE



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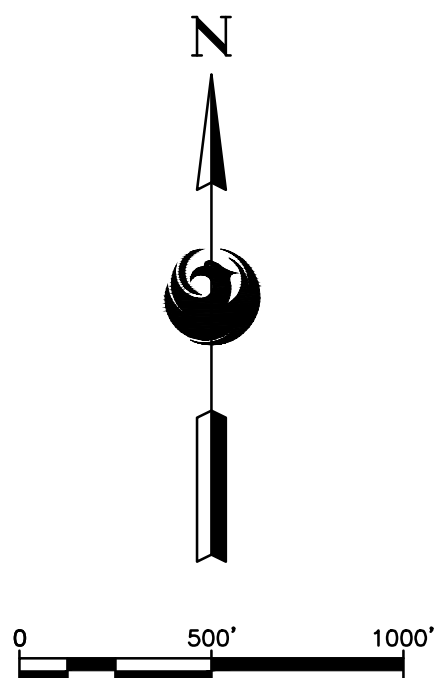


LEGEND

-  CONTRACTOR HAUL ROUTE
-  CONTRACTOR STAGING AREA
-  PROJECT AREA
-  FLAGGER
-  LOW LEVEL BARRICADES

NOTES:

- AREAS SHOWN ARE INTENDED TO BE AN APPROXIMATE GEOGRAPHICAL REPRESENTATION.
- THE CONTRACTOR SHALL COORDINATE THE LIMITS OF THE STAGING AND STORAGE AREA, THE LIMITS OF THE EMPLOYEE PARKING AND ANY TEMPORARY FENCING WITH AIRPORT OPERATIONS PRIOR TO CONSTRUCTION.
- CONTRACTOR CAN ACCESS THE SITE THROUGH GATE 200F. CONTRACTOR SHALL COORDINATE WITH AND OBTAIN APPROVAL FROM AIRPORT OPERATIONS REGARDING USE OF ANY GATE. AIRPORT OPERATIONS MAY ALLOW ACCESS FROM OTHER GATES, BASED ON AVAILABILITY OF SECURITY STAFF.
- CONTRACTOR TO ENSURE THAT NO CONSTRUCTION TRAFFIC ENTERING SITE BACKS UP ON OR BLOCKS ANY PUBLIC STREET.
- ANY EXISTING PAVEMENT AREA ALONG ANY HAUL ROUTE SHALL BE ADEQUATELY PROTECTED PER CIVIL TECHNICAL SPECIFICATION 36 PRIOR TO ANY HAULING ACTIVITIES.



SHEET OVERVIEW TITLE

PROJECT LAYOUT PLAN

Designed by: C. SHAW
Drawn by: A. SANTILLI
Checked by: C. JHAVERI
Date: 05/05/2023
Dwg scale: 1"=500'

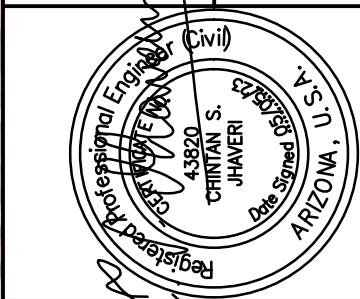
SHEET
REFERENCE
NUMBER:

GC-401
SHEET 06 OF 23

PHX DOT BYR
CITY OF PHOENIX AVIATION DEPARTMENT
**PSHIA INFIELD
UTILITY ACCESS UPGRADES
AND PAVING**
AV 08000074 ADOT
ADOT GRANT NO.: E3S2J01C

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NO	REVISIONS / SUBMISSIONS	DATE



PRIME CONSULTANT

SUB CONSULTANT

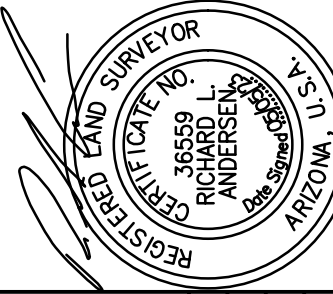
TRACE
CONSULTING
1201 E. Jefferson St., Suite 100 Phoenix, AZ 85005

<div style="text-align: center;">  SURVEY CONTROL POINTS </div>				
POINT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
111	884602.75	674293.03	1124.03	SET-PK NAIL IN ASPHALT
113	884615.53	673995.18	1122.84	SET-PK NAIL IN ASPHALT
115	884181.84	674151.32	1121.62	SET-PK NAIL IN ASPHALT
116	884380.16	674409.26	1123.80	SET-PK NAIL IN ASPHALT
117	884614.48	673255.55	1121.78	SET-PK NAIL IN ASPHALT
120	884177.32	673275.54	1120.49	SET-PK NAIL IN ASPHALT

CP 6, A BRASS CAP IN THE NORTHEAST CORNER OF A SANITARY SEWER MANHOLE STRUCTURE, PER THE CITY OF PHOENIX SKY HARBOR INTERNATIONAL AIRPORT CONTROL PLAN DATED SEPTEMBER 27, 2001 BY AZTEC ENGINEERING, PROJECT NO. AZ0011402 HAVING AN ELEVATION OF 1123.93.

SHEET 07 OF 23

SUB CONSULTANT



"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX"

	THE CITY OF LOS ANGELES
NQ	REVISIONS / SUBMISSIONS DATE

PHX DVI GVR
CITY OF PHOENIX AVIATION DEPARTMENT

**PSHIA INFIELD
UTILITY ACCESS UPGRADES
AND PAVING**
AV 08000074 ADOT
ADOT GRANT NO.: E3S2J01C

Designed by: C. SHAW

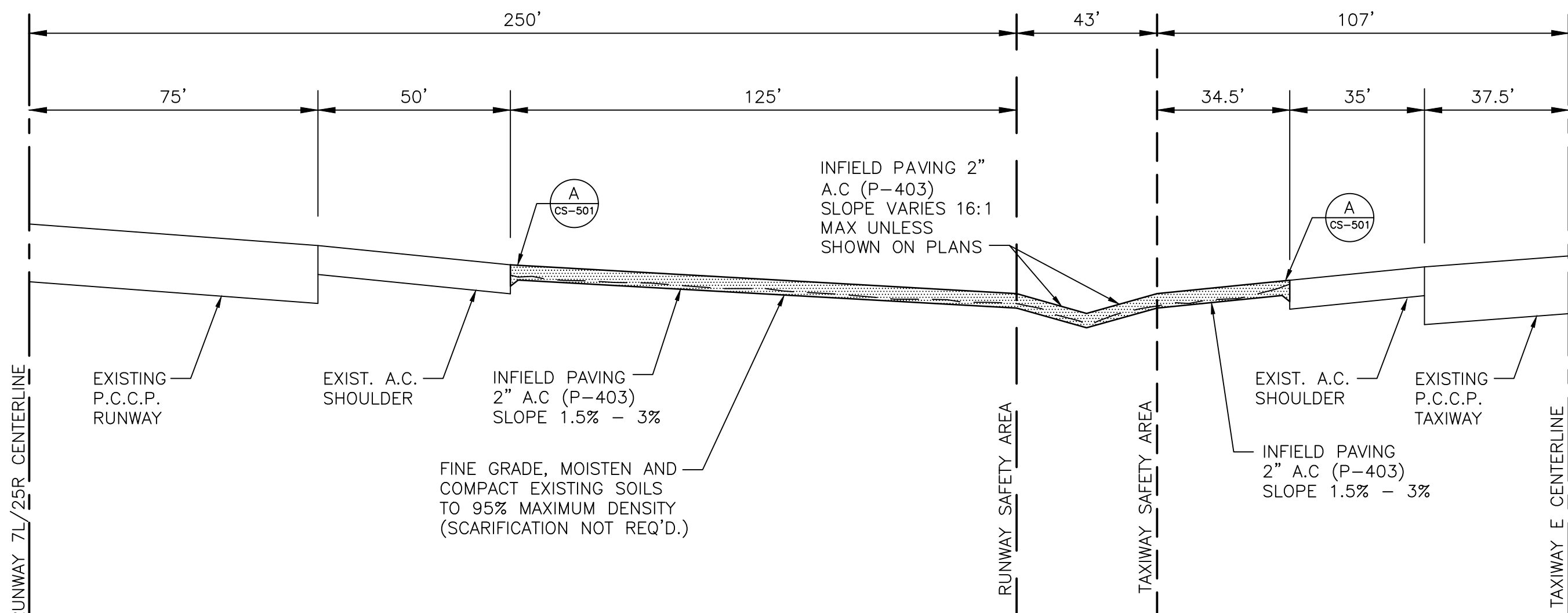
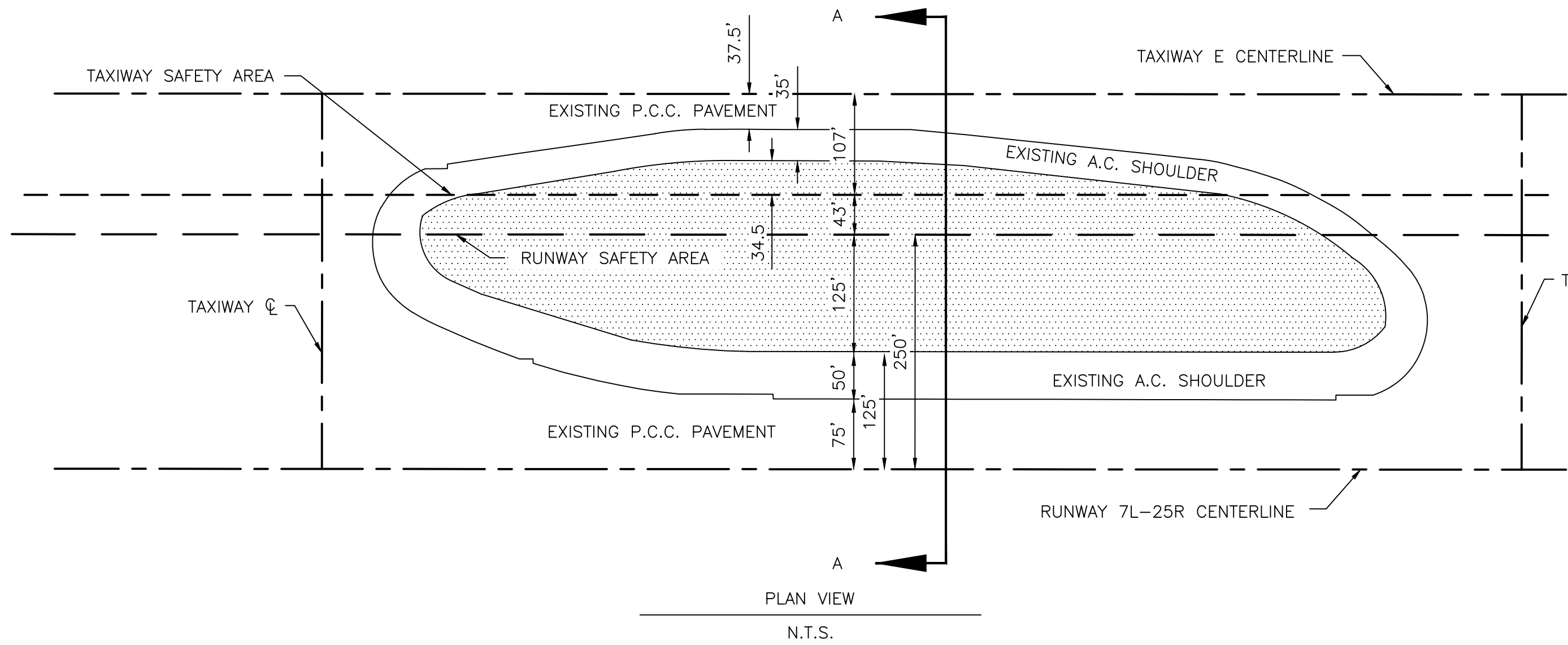
Drawn by: A SANTI

Checked by: C. JHAVERI

Date: 05/05/2022

Dwg scale: 1"=400'

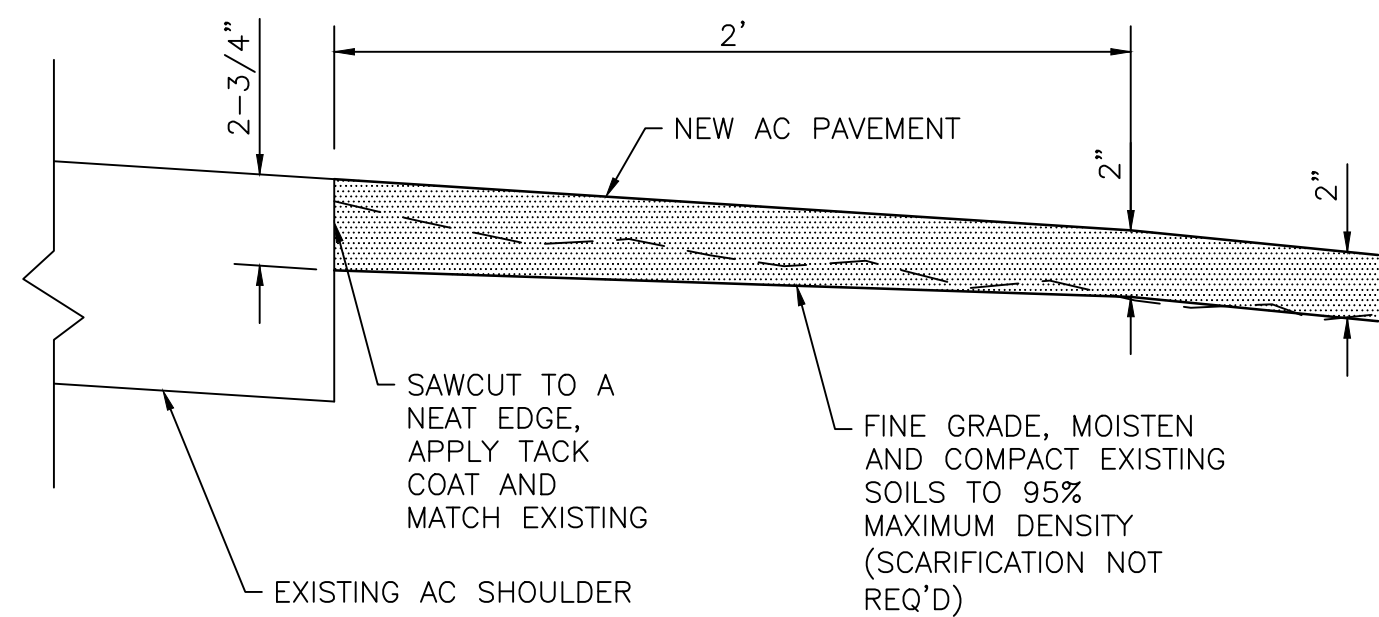
N:\2015\150106 - PHX Infield Utilities and Pavement\Drawings\Sheets\South\South East\GMP 4\ 0874_CS-501_GMP4.dwg - May 04 2023 3:39pm



TYPICAL SECTION A-A

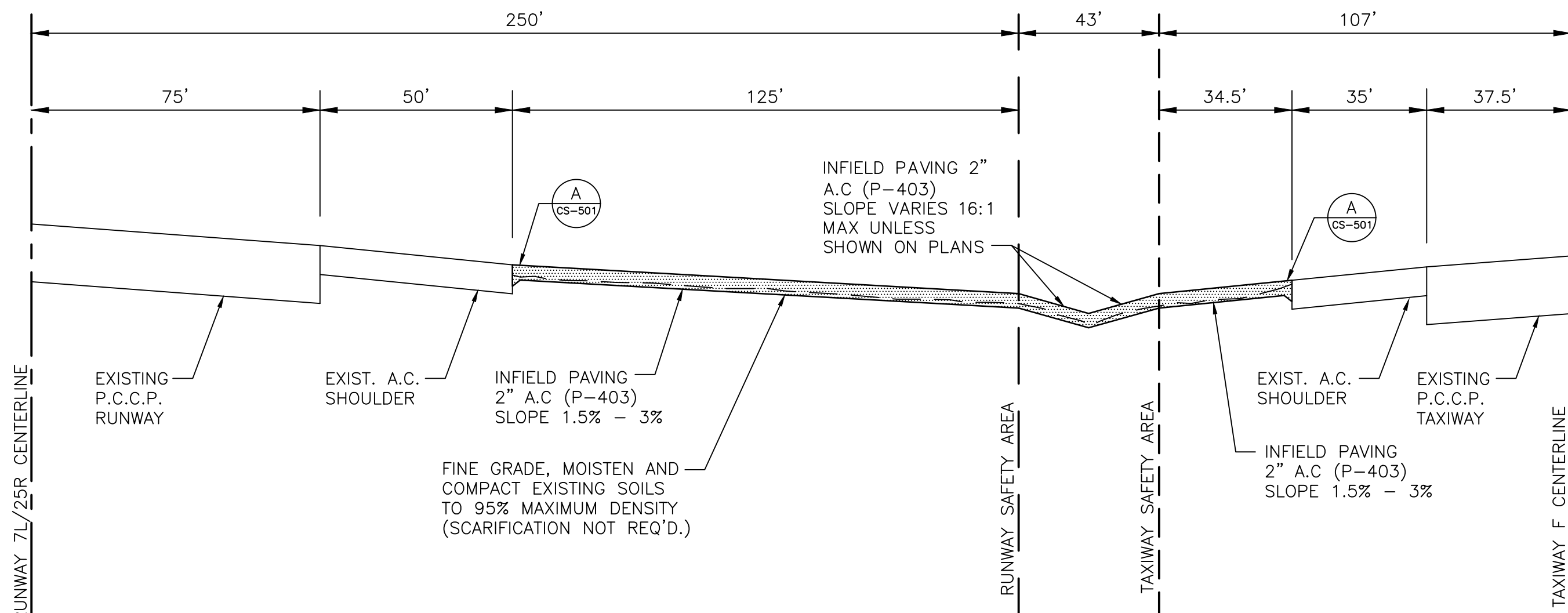
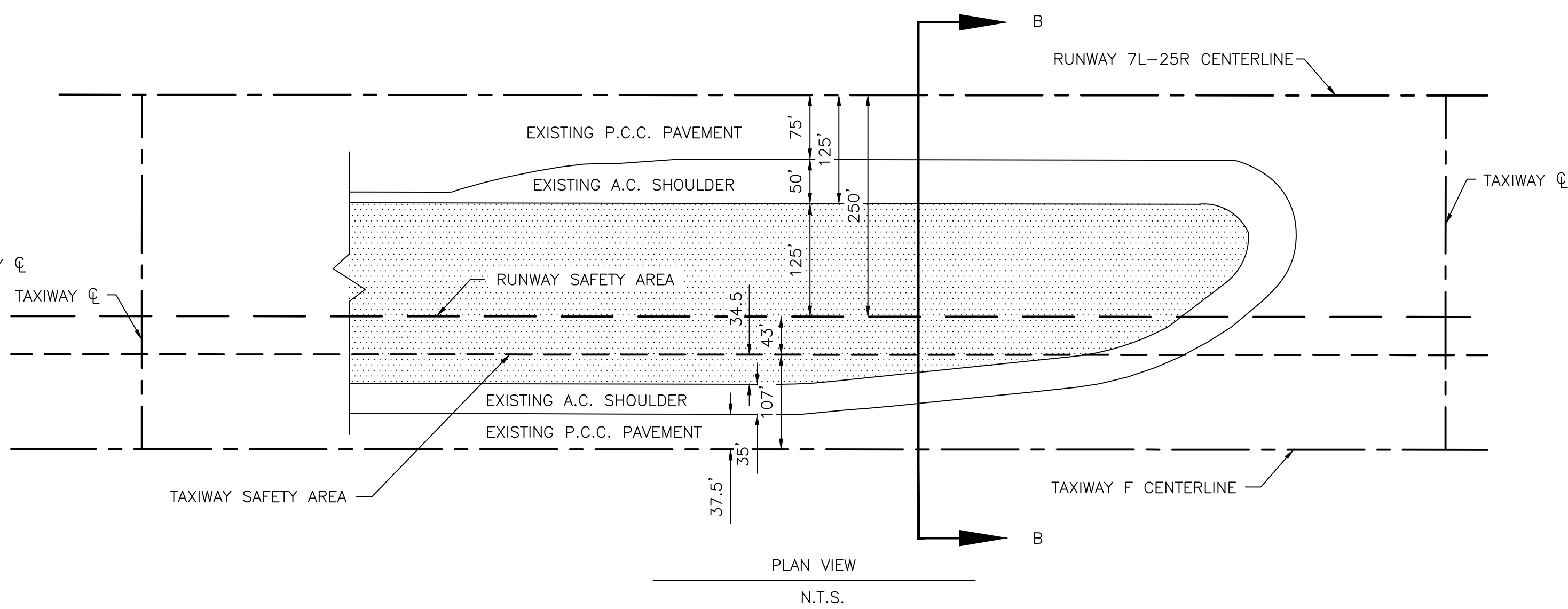
TYPICAL "E" INFIELD DETAIL

N.T.S.



A MATCH EXISTING PAVEMENT DETAIL

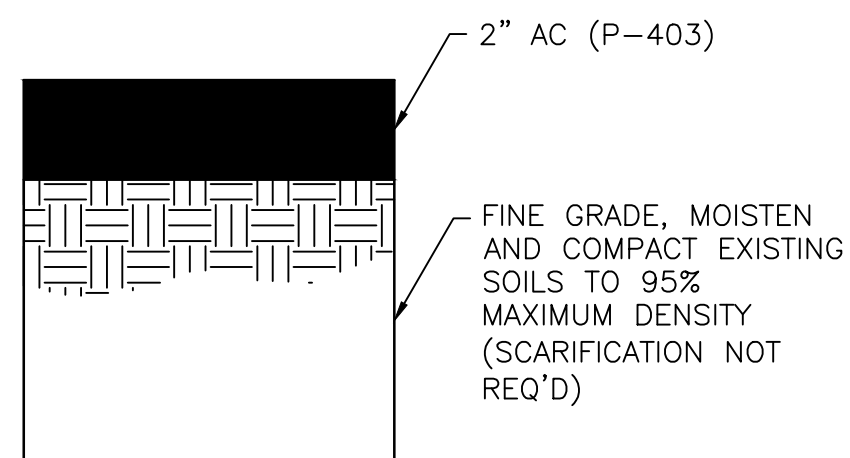
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TYPICAL SECTION B-B

TYPICAL "F" INFIELD DETAIL

N.T.S.

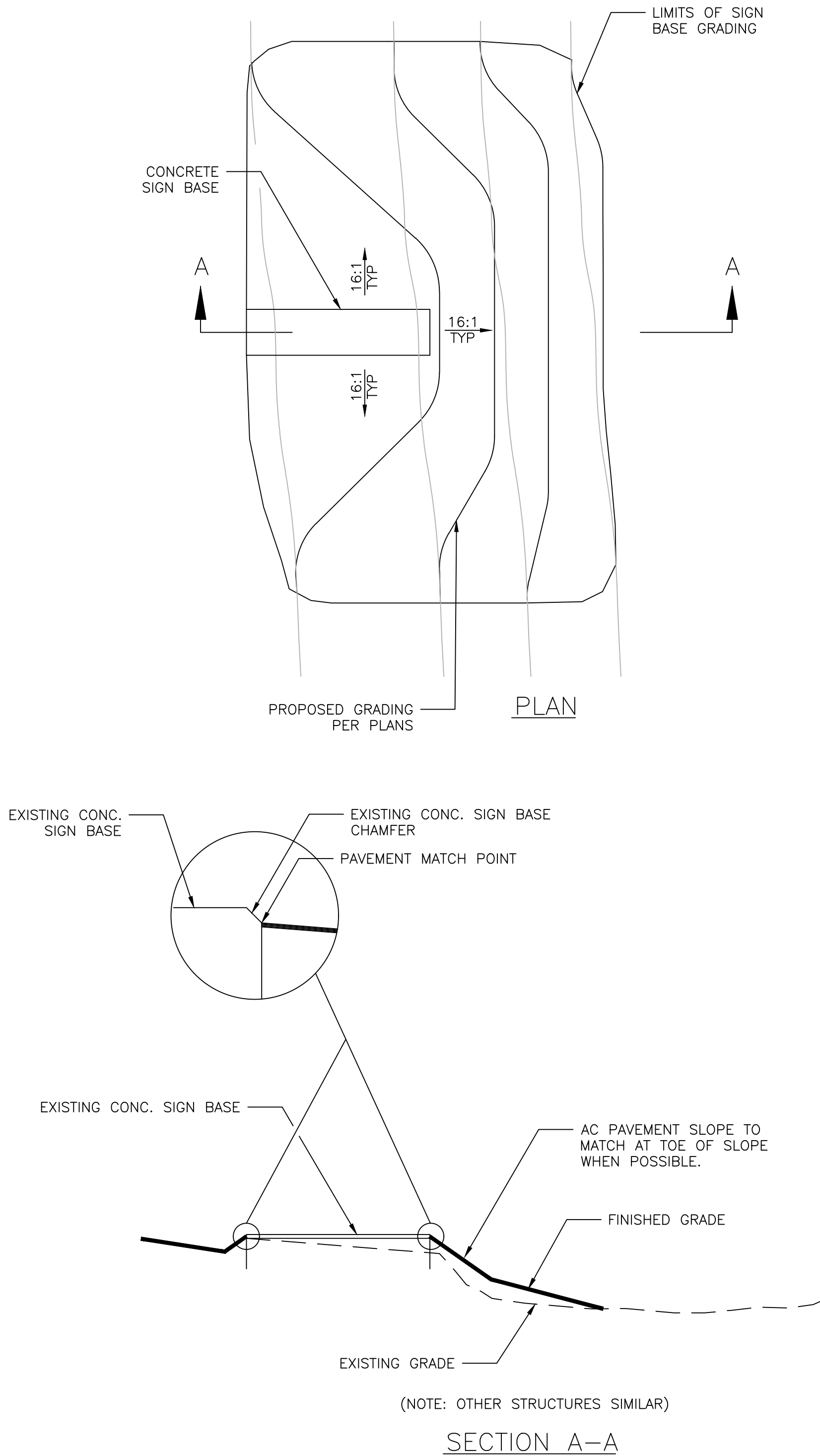


STRUCTURAL SECTION NO. 1

N.T.S.

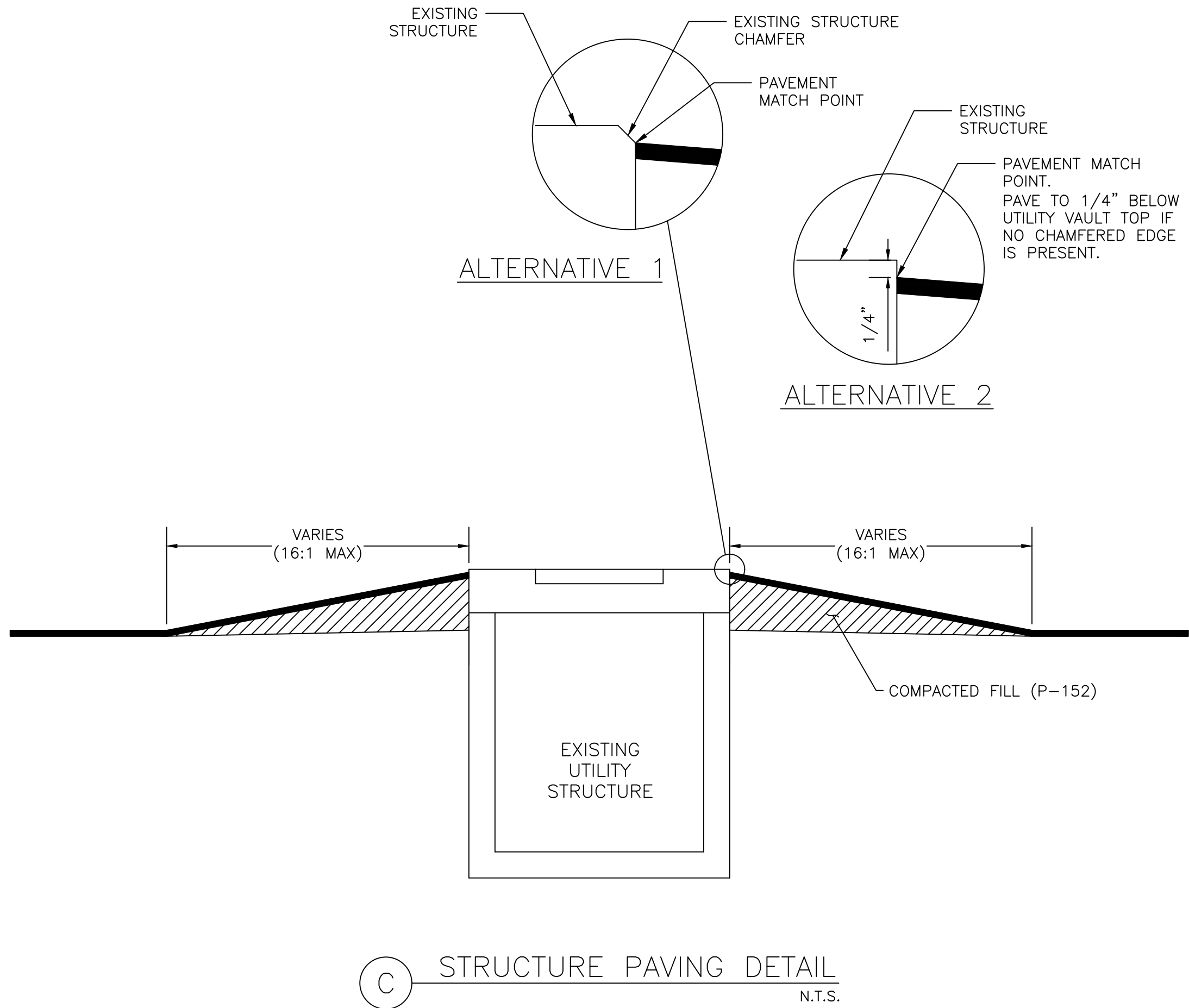
SHEET OVERVIEW TITLE	PRIME CONSULTANT TRACE CONSULTING 1201 E. Jefferson St., Suite 1 Phoenix, AZ 85005	
	SUB CONSULTANT	
DESIGNED BY: C. SHAW DRAWN BY: A. SANTILLI CHECKED BY: C. JHAVERI DATE: 05/05/2023 DWG SCALE: NTS	CITY OF PHOENIX AVIATION DEPARTMENT PSHIA INFIELD UTILITY ACCESS UPGRADES AND PAVING AV 08000074 ADOT ADOT GRANT NO.: E3S2J01C	
	TYPICAL SECTIONS	
SHEET REFERENCE NUMBER: CS-501		
SHEET 08 OF 23		

N:\2015\150106 - PHX Infield Utilities and Pavement\Drawings\Sheets\South\South East\GMP 4\ 0874_CS-502_GMP4.dwg -- May 04 2023 3:39pm



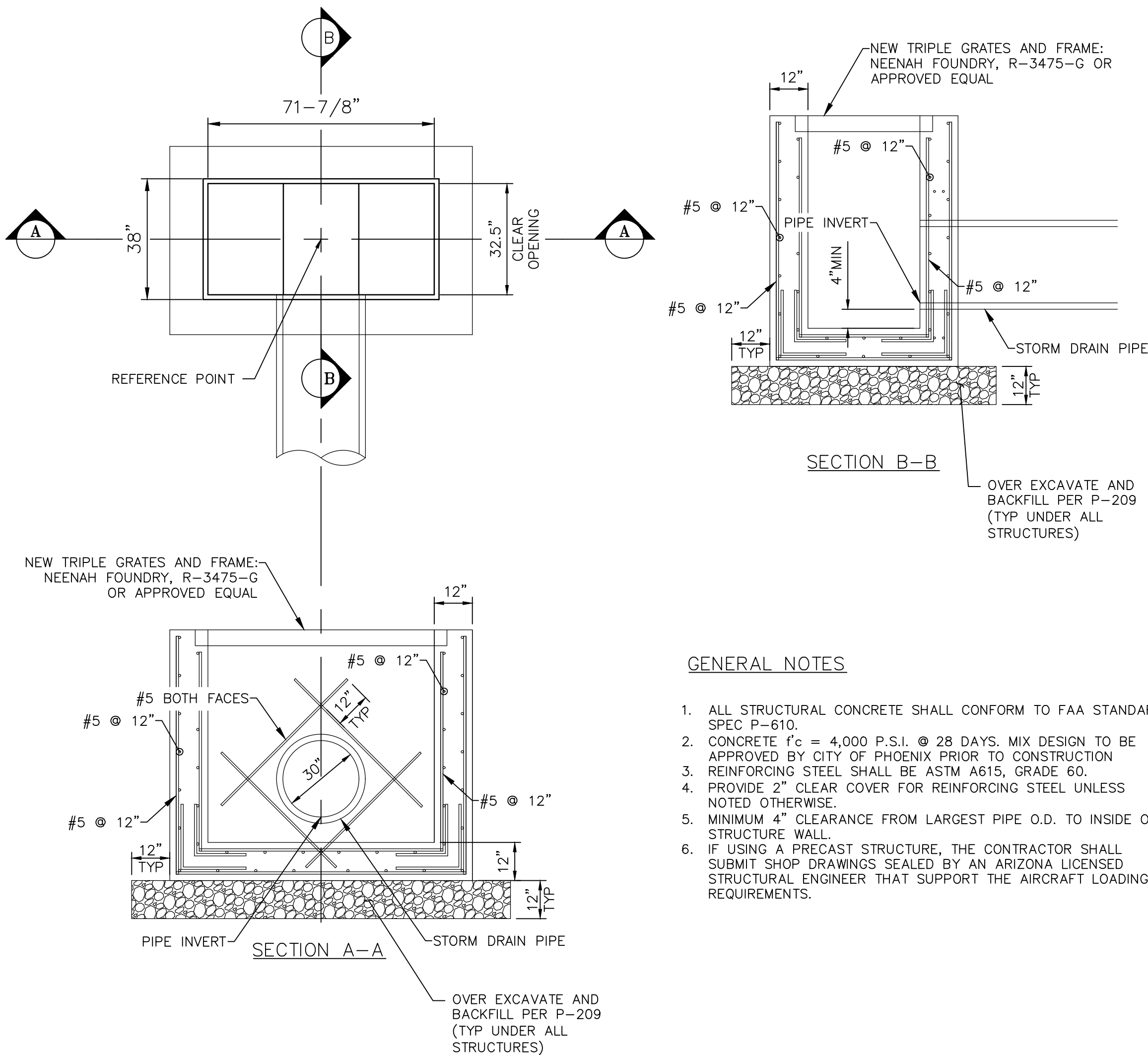
NOTE: 16:1 SLOPE IS TYPICAL FOR ALL SIGN BASES. SLOPES UP TO 4:1 MAY BE USED IN LOCATIONS WHERE 16:1 SLOPE IS IMPRACTICAL DUE TO PROXIMITY OF OTHER STRUCTURES WITH ENGINEER'S APPROVAL.

B SIGN BASE PAVING DETAIL
N.T.S.



SHEET OVERVIEW TITLE	PAVING DETAILS	SHEET REFERENCE NUMBER: CS-502 SHEET 09 OF 23	Designed by: C. SHAW	Drawn by: A. SANTILLI	Checked by: C. JHAVERI	Date: 05/05/2023	Dwg scale: NTS
			PHX INFIELD PSHIA INFIELD CITY OF PHOENIX AVIATION DEPARTMENT UTILITY ACCESS UPGRADES AND PAVING AV 08000074 ADOT ADOT GRANT NO.: E3S2J01C				
PRIME CONSULTANT TRACE CONSULTING 1301 E. Jefferson St., Suite 1 Phoenix, AZ 85015			SUB CONSULTANT			PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.	
			NO		REVISIONS / SUBMISSIONS		DATE

N:\2015\150106 - PHX Infield Utilities and Pavement\Drawings\Sheets\South\South_Fos\GMP 4\ 0874_CS-503_GMP4.dwg -- May 04,2023 3:39pm



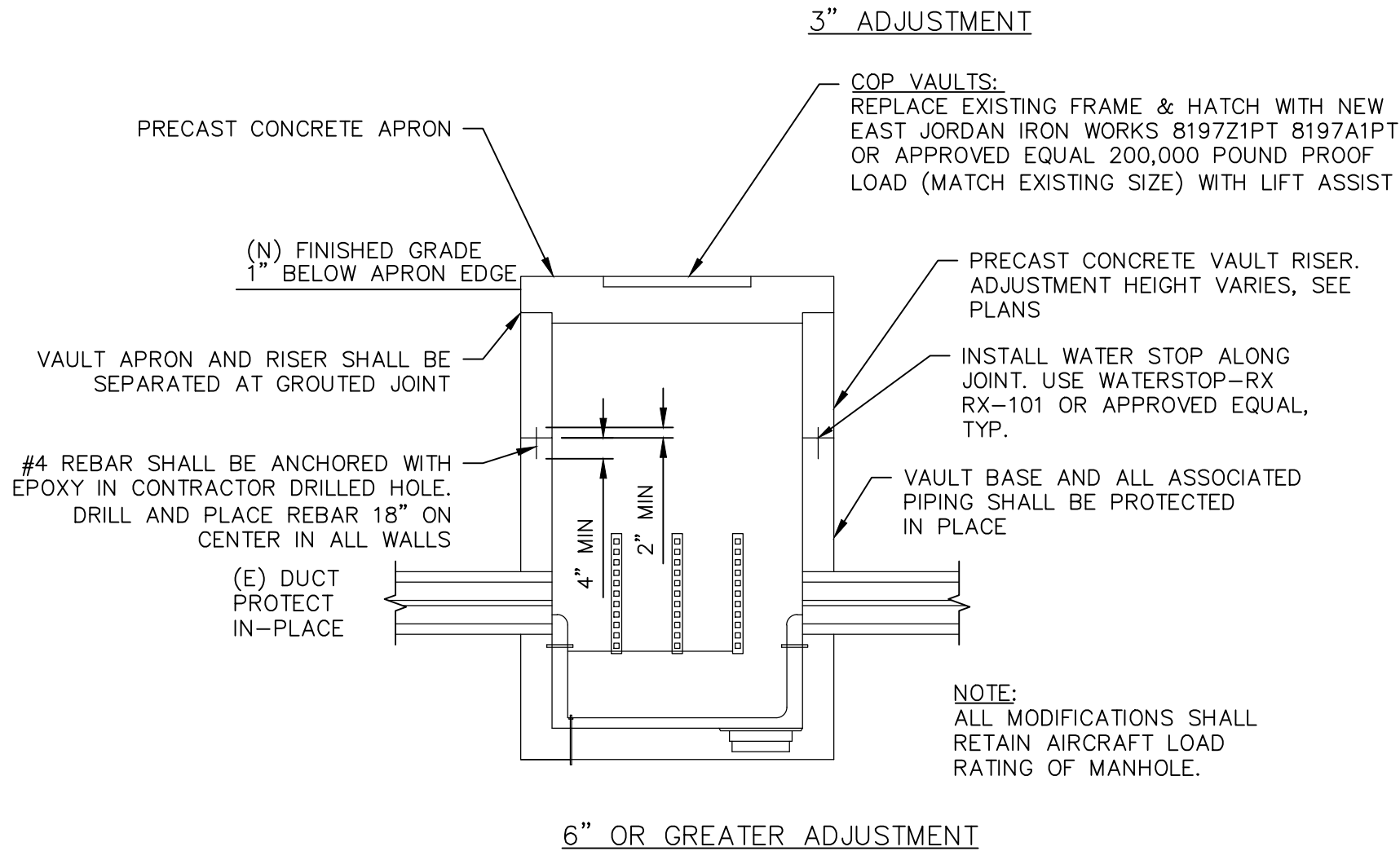
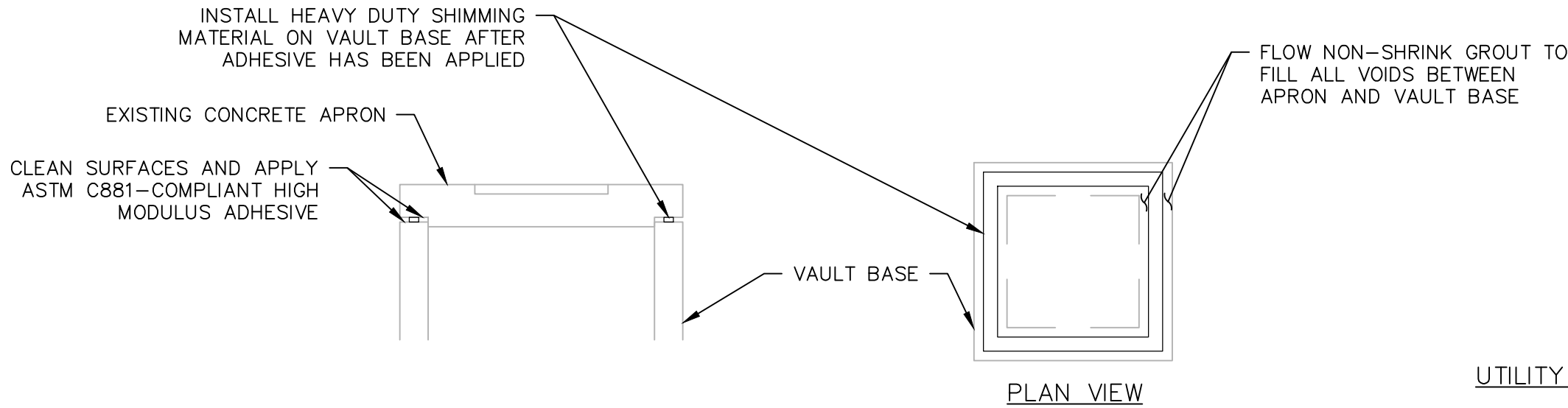
GENERAL NOTES

1. ALL STRUCTURAL CONCRETE SHALL CONFORM TO FAA STANDARD SPEC P-610.
2. CONCRETE $f'_c = 4,000$ P.S.I. @ 28 DAYS. MIX DESIGN TO BE APPROVED BY CITY OF PHOENIX PRIOR TO CONSTRUCTION
3. REINFORCING STEEL SHALL BE ASTM A615, GRADE 60.
4. PROVIDE 2" CLEAR COVER FOR REINFORCING STEEL UNLESS NOTED OTHERWISE.
5. MINIMUM 4" CLEARANCE FROM LARGEST PIPE O.D. TO INSIDE OF STRUCTURE WALL.
6. IF USING A PRECAST STRUCTURE, THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS SEALED BY AN ARIZONA LICENSED STRUCTURAL ENGINEER THAT SUPPORT THE AIRCRAFT LOADING REQUIREMENTS.

D NEW TRIPLE GRATE CATCH BASIN
N.T.S.

SHEET OVERVIEW TITLE	SHEET REFERENCE NUMBER: CS-503	SHEET 10 OF 23	DESIGNED BY: C. SHAW DRAWN BY: A. SANTILLI CHECKED BY: C. JHAVERI DATE: 05/05/2023 DWG SCALE: NTS	PHX AVIATION DEPARTMENT CITY OF PHOENIX PSHIA INFIELD UTILITY ACCESS UPGRADES AND PAVING AV 08000074 ADOT ADOT GRANT NO.: E3S2J01C	PRIME CONSULTANT TRACE CONSULTING 1301 E. Jefferson St., Suite 3 Phoenix, AZ 85005	SUB CONSULTANT	PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.	REVISIONS / SUBMISSIONS			DATE
								NO			

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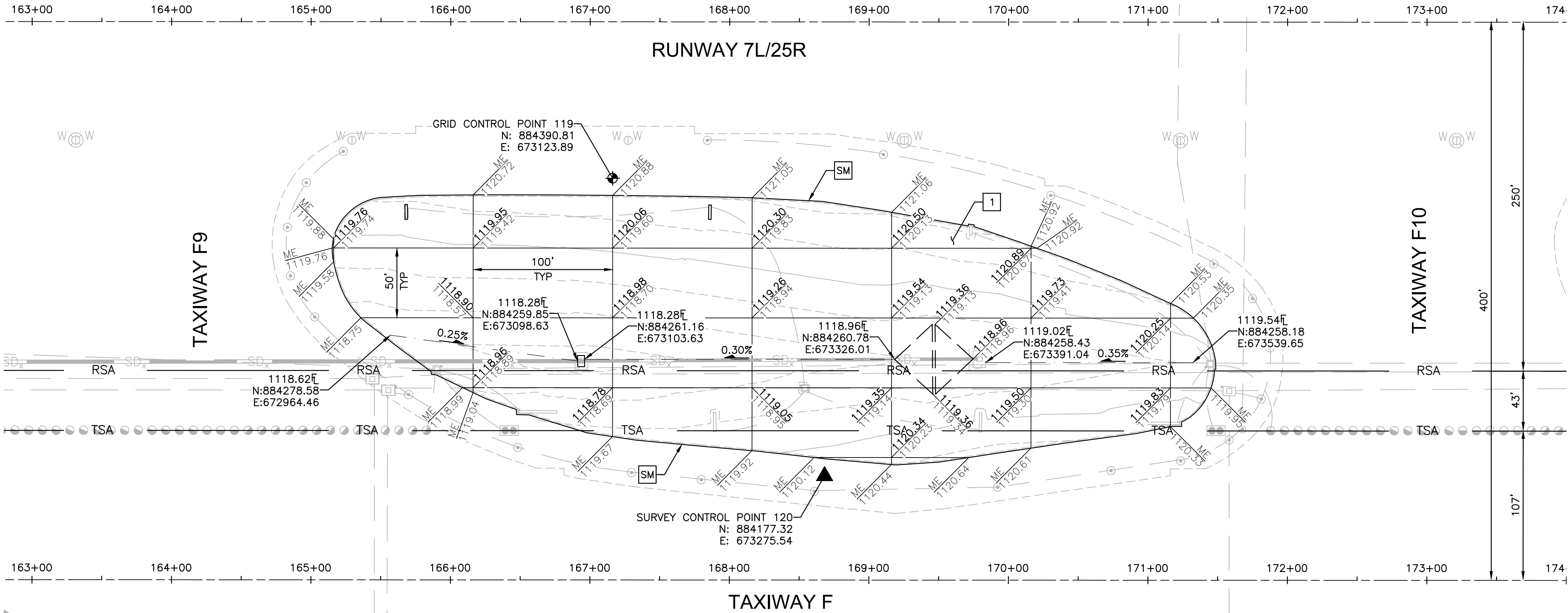
E UTILITY VAULT EXTENSION
N.T.S.

UTILITY VAULT NOTES

1. ALL STEEL, OTHER THAN REBAR, TO BE HOT DIPPED GALVANIZED AFTER FABRICATION.
2. GROUT ALL CONDUIT PENETRATIONS.
3. PROVIDE MANUFACTURER'S DRAWINGS AND STRUCTURAL CALCULATIONS FOR ALL CONCRETE ELEMENTS OF UTILITY VAULTS AND FABRICATED TRAFFIC LIDS.
4. DO NOT CONNECT COUNTERPOISE TO GROUNDING SYSTEM.
5. AFTER ADJUSTING THE UTILITY VAULT TO GRADE, THE CONTRACTOR SHALL REPLACE THE LADDER (SEE NOTE 6) AS NECESSARY TO ENSURE THAT IT IS THE CORRECT LENGTH FOR THE NEW DEPTH OF THE VAULT.
6. ALL REPLACED LADDERS TO BE FIBERGLASS WITH MOUNTED HOOKS AT TOP. A PERMANENT MOUNTED TOP STEP TO BE INSTALLED WITHIN THE VAULT COLLAR TO HOOK LADDERS TO.
7. ALL UTILITIES WITHIN EXISTING UTILITY VAULTS SHALL BE PROTECTED IN PLACE. EXISTING UTILITIES DAMAGED AS A RESULT OF CONSTRUCTION SHALL BE FIXED BY CONTRACTOR AT NO COST TO THE CITY.
8. THE HINGE OF THE LID SHALL BE FACING THE NEAREST RUNWAY OR PARALLEL TAXIWAY PAVEMENT.
9. REFER TO SHEET EA-502 FOR VAULT NAME PLATE INSTALLATION DETAIL.

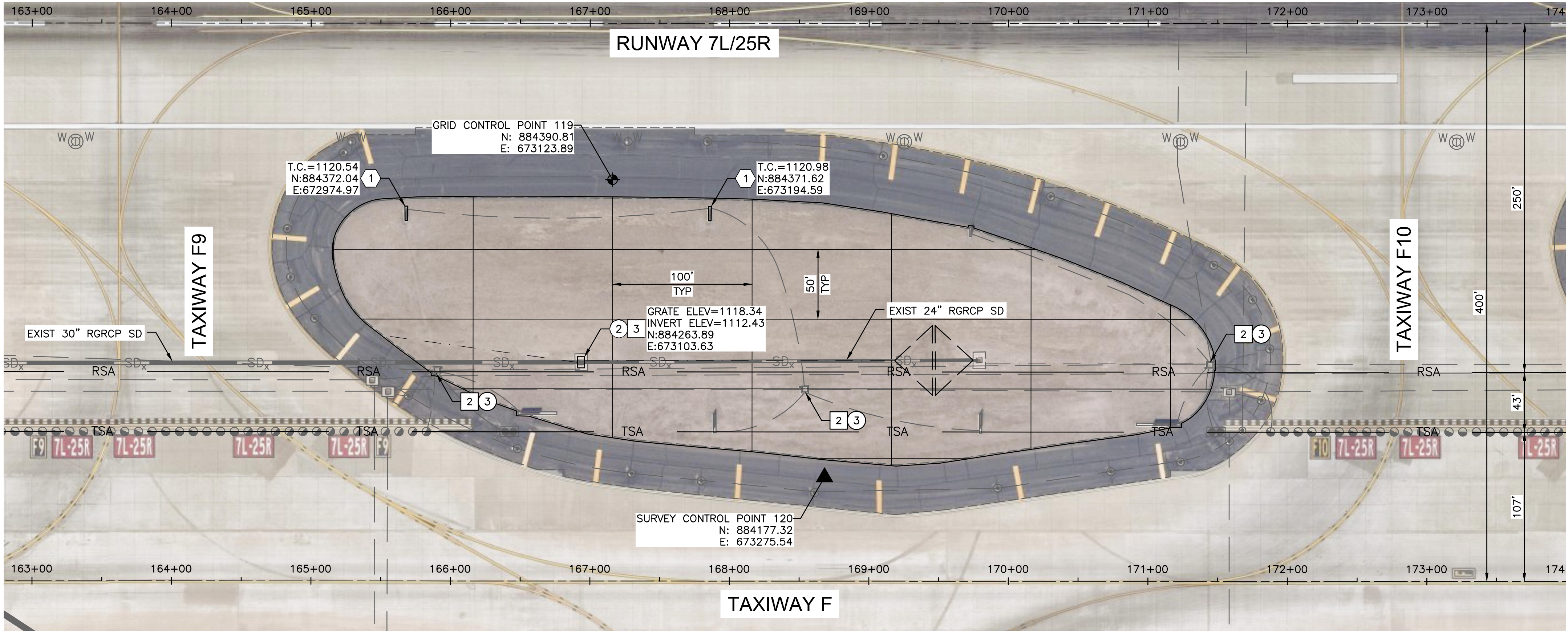
SHEET OVERVIEW TITLE	DESIGNED BY: C. SHAW DRAWN BY: A. SANTILLI CHECKED BY: C. JHAVERI DATE: 05/05/2023 DWG SCALE: NTS	CITY OF PHOENIX AVIATION DEPARTMENT PSHIA INFIELD UTILITY ACCESS UPGRADES AND PAVING AV 08000074 ADOT ADOT GRANT NO.: E3S2J01C	PRIME CONSULTANT TRACE CONSULTING 1301 E. JEFFERSON ST. SUITE 3 PHOENIX, AZ 85015	SUB CONSULTANT
SHEET REFERENCE NUMBER: CS-504	UTILITY ADJUSTMENT DETAILS	PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.		REVISIONS / SUBMISSIONS
SHEET 11 OF 23				DATE

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INFIELD PAVING & GRADING

INFIELD FN-9



UTILITY ACCESS UPGRADES

ADJUSTMENT & REMOVAL NOTES

ITEM	DESCRIPTION	QTY
②	REMOVE EXISTING CATCH BASIN (DOUBLE GRATE)	1 EA
③	REMOVE AND SALVAGE EXISTING CONCRETE LID AND APRON	3 EA

CONSTRUCTION NOTES

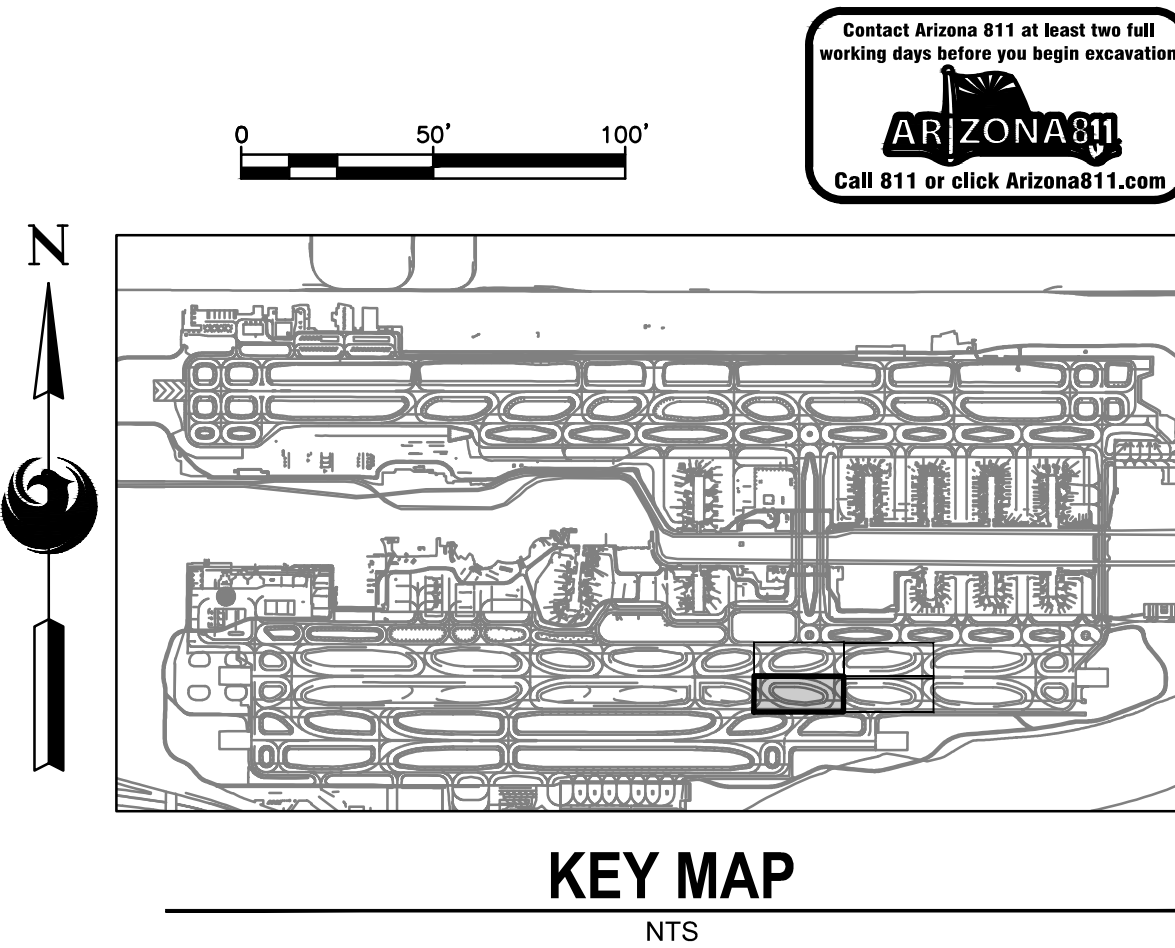
ITEM	DESCRIPTION	QTY
1	CONSTRUCT ASPHALT PAVEMENT PER STRUCTURAL SECTION NO. 1, SHEET CS-501	1,335 TON
2	CONSTRUCT NEW PRECAST CONCRETE LID AND APRON	3 EA
3	CONSTRUCT NEW CONCRETE CATCH BASIN (TRIPLE BASIN) PER DETAIL D, SHEET CS-503	1 EA
SM	SAWCUT ASPHALT PAVEMENT (FULL DEPTH)	1,420 LF

REFERENCE NOTES

- ① SEE ELECTRICAL PLANS FOR SIGN BASE NOTES

GENERAL NOTES

- RUNWAY AND TAXIWAY STATIONING SHOWN FOR REFERENCE ONLY.
- AERIAL PHOTOGRAPH SHOWN IS INTENDED TO PROVIDE CLARITY FOR VAULT LOCATING AND IS INTENDED TO BE USED FOR REFERENCE ONLY.
- EXISTING INFIELD UTILITIES AND STRUCTURES SHALL BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.



PRIME CONSULTANT

TRACE CONSULTING

1801 E. Jefferson St., Suite 1 Phoenix, AZ 85005

SUB CONSULTANT

PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-2-28, THESE PLANS ARE FOR INFORMATION ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.

DATE

REVISIONS / SUBMISSIONS

NO

PHX **PHX** BYR

CITY OF PHOENIX AVIATION DEPARTMENT

PSHIA INFIELD UTILITY ACCESS UPGRADES AND PAVING

AV 08000074 ADOT

ADOT GRANT NO.: E3S2J01C

Designed by: C. SHAW

Drawn by: A. SANTILLI

Checked by: C. JHAVERI

Date: 05/05/2023

Dwg scale: 1"=50'

SHEET OVERVIEW TITLE

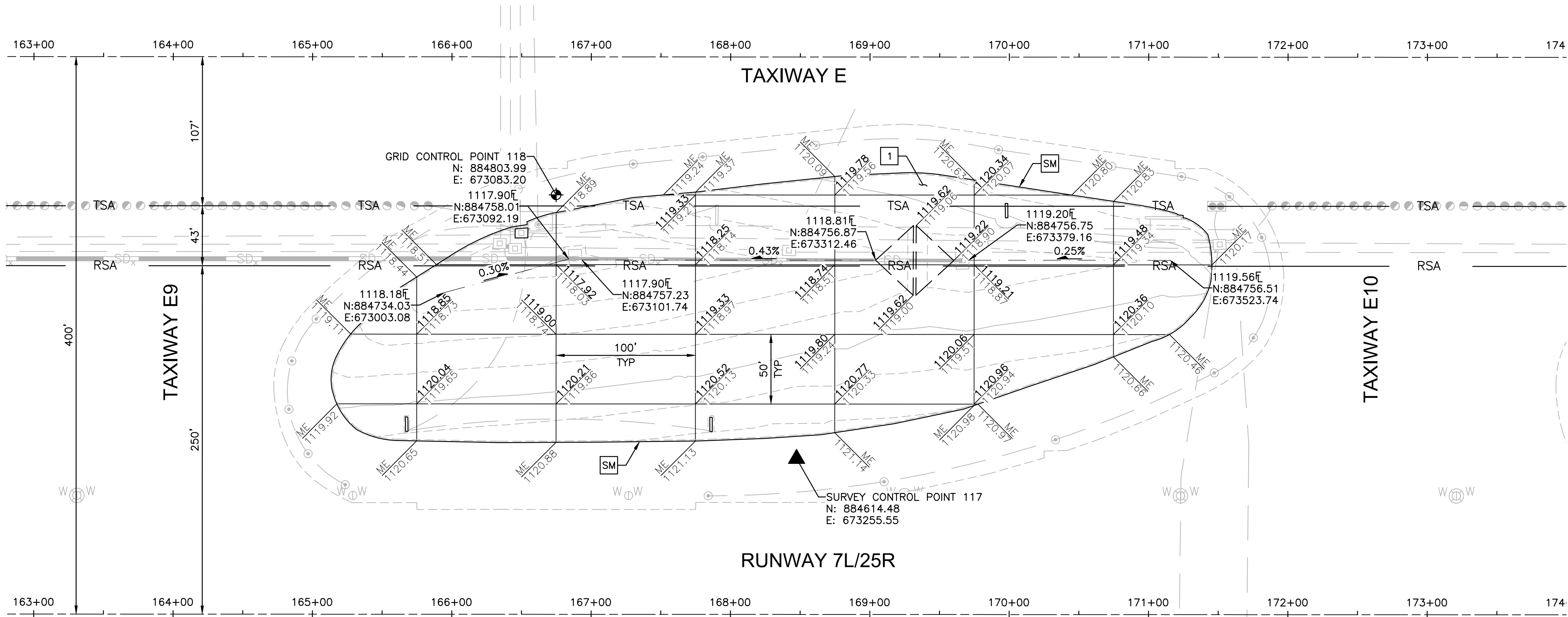
TAXIWAY F INFIELDS UTILITY ACCESS UPGRADES AND PAVING

SHEET REFERENCE NUMBER:

CG-101

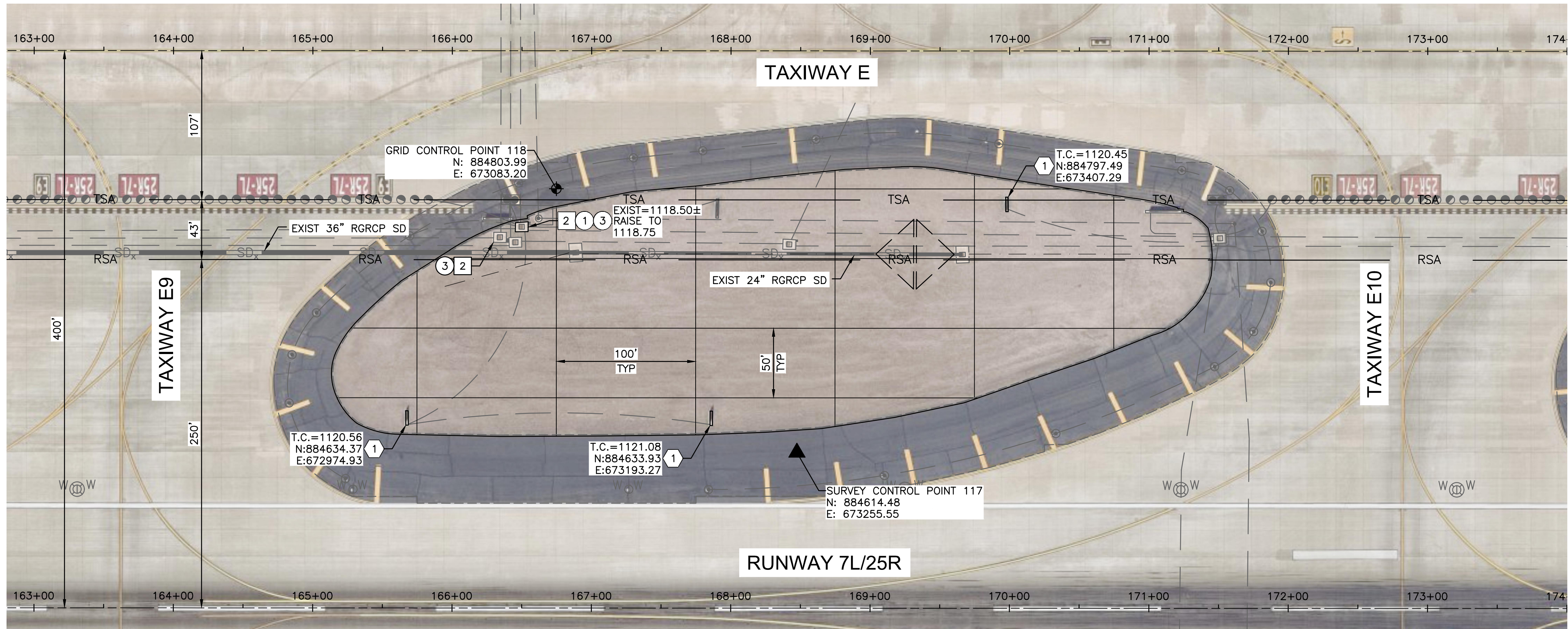
SHEET 12 OF 23

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INFIELD PAVING & GRADING

INFIELD ES-9



UTILITY ACCESS UPGRADES

ADJUSTMENT & REMOVAL NOTES

ITEM	DESCRIPTION	QTY
①	RAISE EXISTING UTILITY VAULT PER DETAIL E, SHEET CS-504	1 EA
③	REMOVE AND SALVAGE EXISTING CONCRETE LID AND APRON	2 EA

CONSTRUCTION NOTES

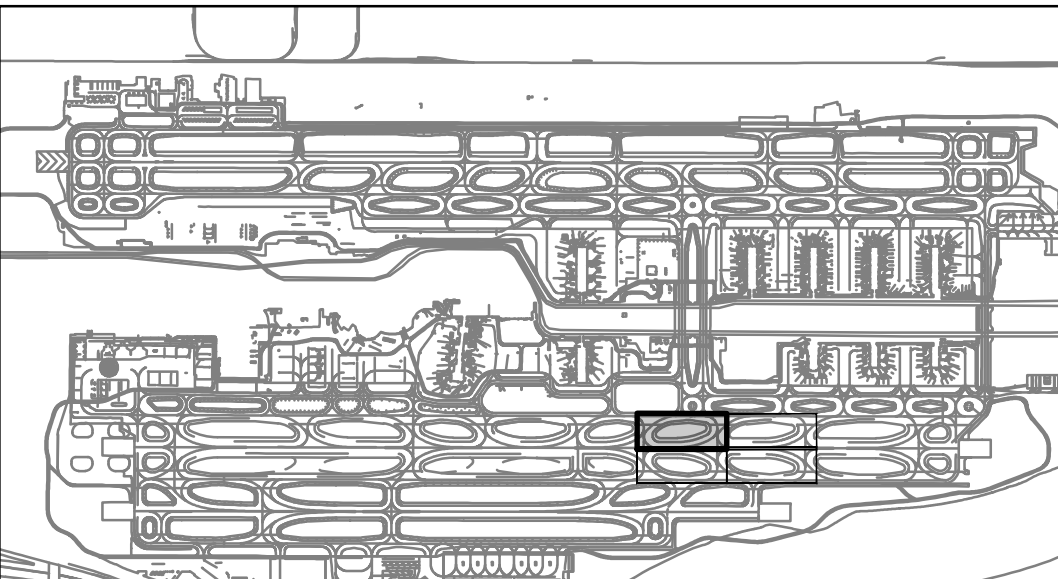
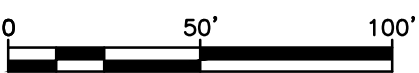
ITEM	DESCRIPTION	QTY
①	CONSTRUCT ASPHALT PAVEMENT PER STRUCTURAL SECTION NO. 1, SHEET CS-501	1,328 TON
②	CONSTRUCT NEW PRECAST CONCRETE LID AND APRON	2 EA
SM	SAWCUT ASPHALT PAVEMENT (FULL DEPTH)	1,412 LF

REFERENCE NOTES

- ① SEE ELECTRICAL PLANS FOR SIGN BASE NOTES

GENERAL NOTES

- RUNWAY AND TAXIWAY STATIONING SHOWN FOR REFERENCE ONLY.
- AERIAL PHOTOGRAPH SHOWN IS INTENDED TO PROVIDE CLARITY FOR VAULT LOCATING AND IS INTENDED TO BE USED FOR REFERENCE ONLY.
- EXISTING INFIELD UTILITIES AND STRUCTURES SHALL BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.



KEY MAP

NTS

PRIME CONSULTANT

TRACER CONSULTING

SUB CONSULTANT

100' 0" 1" = 100'

100' 0" 1" = 100'

PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.

NO

REVISIONS / SUBMISSIONS

DATE

PHX BYR

CITY OF PHOENIX AVIATION DEPARTMENT

PSHIA INFIELD UTILITY ACCESS UPGRADES AND PAVING

AV 08000074 ADOT

ADOT GRANT NO.: E3S2J01C

Designed by: C. SHAW

Drawn by: A. SANTILLI

Checked by: C. JHAVERI

Date: 05/05/2023

Dwg scale: 1"=50'

SHEET OVERVIEW TITLE

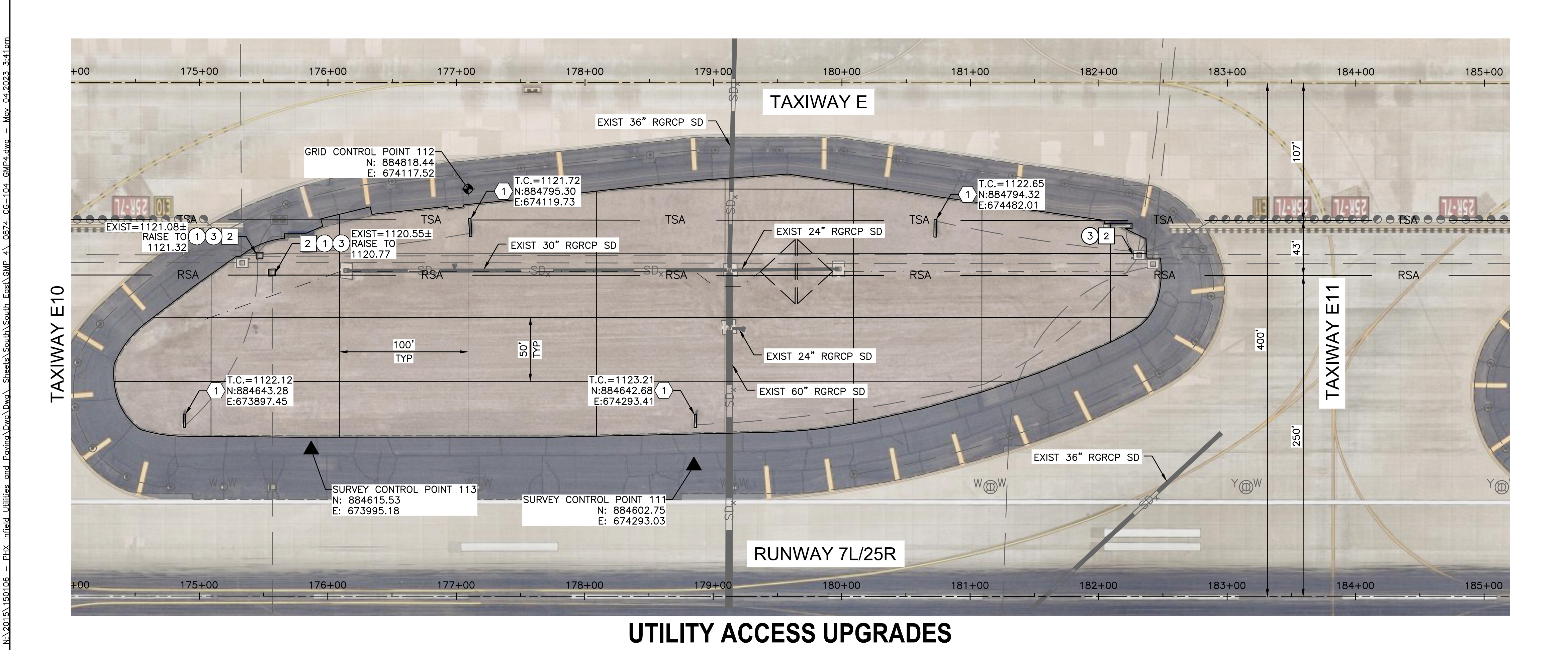
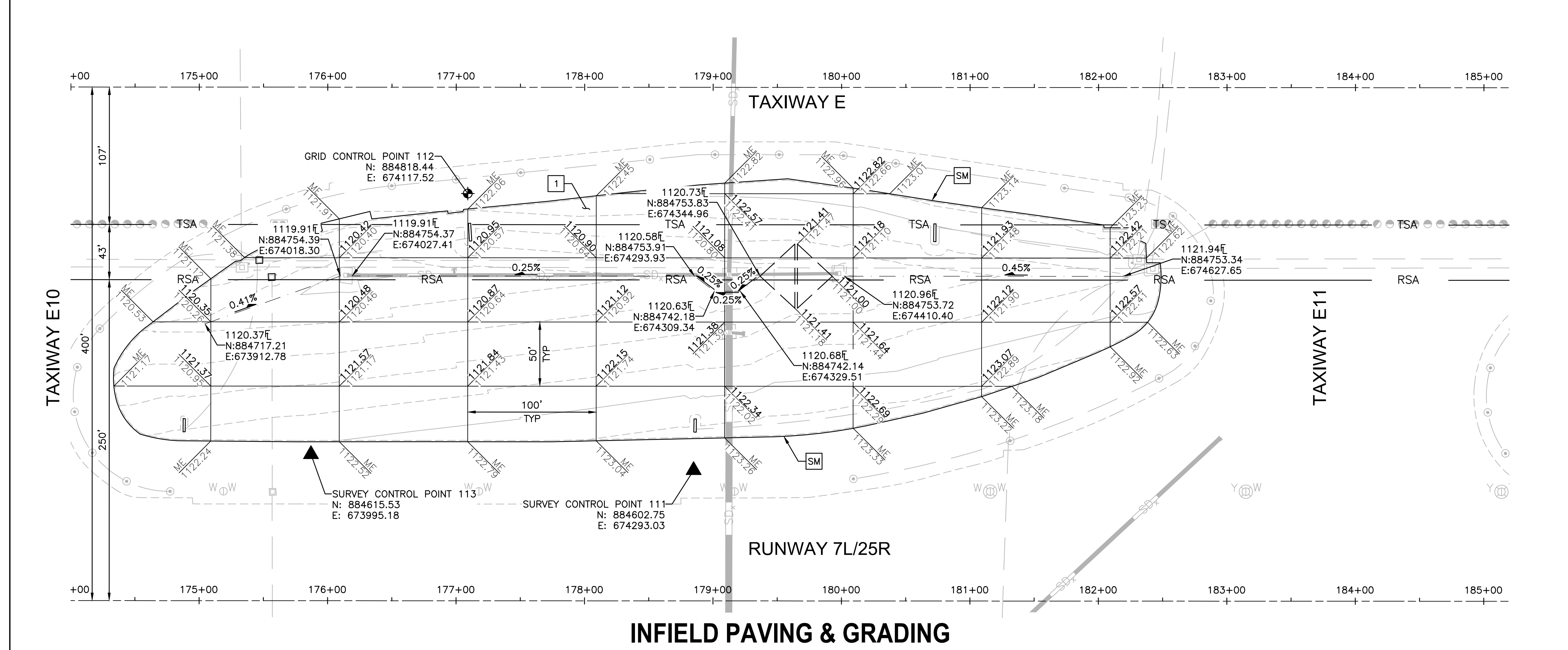
TAXIWAY E INFIELDS UTILITY ACCESS UPGRADES AND PAVING

SHEET REFERENCE NUMBER:

CG-103

SHEET 14 OF 23

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ADJUSTMENT & REMOVAL NOTES

ITEM	DESCRIPTION	QTY
①	RAISE EXISTING UTILITY VAULT PER DETAIL E, SHEET CS-504	2 EA
③	REMOVE AND SALVAGE EXISTING CONCRETE LID AND APRON	3 EA

CONSTRUCTION NOTES

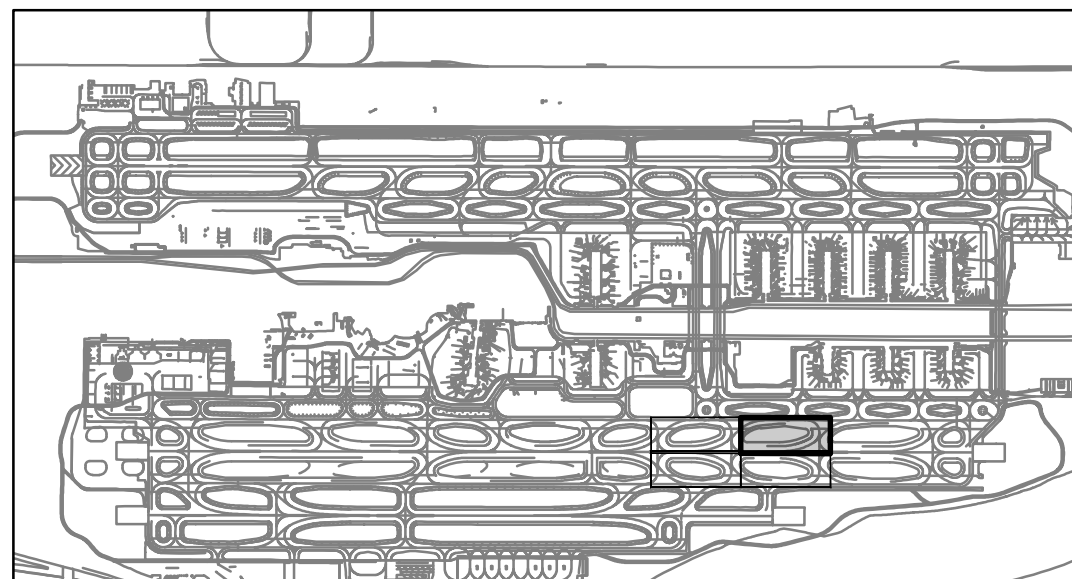
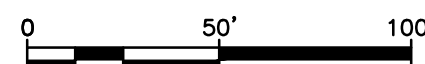
ITEM	DESCRIPTION	QTY
①	CONSTRUCT ASPHALT PAVEMENT PER STRUCTURAL SECTION NO. 1, SHEET CS-501	1,851 TON
②	CONSTRUCT NEW PRECAST CONCRETE LID AND APRON	3 EA
SM	SAWCUT ASPHALT PAVEMENT (FULL DEPTH)	1,817 LF

REFERENCE NOTES

- ① SEE ELECTRICAL PLANS FOR SIGN BASE NOTES

GENERAL NOTES

- RUNWAY AND TAXIWAY STATIONING SHOWN FOR REFERENCE ONLY.
- AERIAL PHOTOGRAPH SHOWN IS INTENDED TO PROVIDE CLARITY FOR VAULT LOCATING AND IS INTENDED TO BE USED FOR REFERENCE ONLY.
- EXISTING INFIELD UTILITIES AND STRUCTURES SHALL BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.



KEY MAP

NTS

TRACER CONSULTING
201 E. Jefferson St., Suite 1 Phoenix, AZ 85005

PRIME CONSULTANT
SUB CONSULTANT

PHX BYR
CITY OF PHOENIX AVIATION DEPARTMENT

PSHIA INFIELD UTILITY ACCESS UPGRADES AND PAVING
AV 08000074 ADOT
ADOT GRANT NO.: E3S2J01C

Designed by: C. SHAW
Drawn by: A. SANTILLI
Checked by: C. JHAVERI
Date: 05/05/2023
Dwg scale: 1"=50'

SHEET OVERVIEW TITLE
TAXIWAY E INFIELDS UTILITY ACCESS UPGRADES AND PAVING

SHEET REFERENCE NUMBER:
CG-104

SHEET 15 OF 23

ELECTRICAL ABBREVIATIONS:











APS	ARIZONA PUBLIC SERVICE
BCC	BARE COPPER CONDUCTOR
CE	CONCRETE ENCASED
CKT	CIRCUIT
FAA	FEDERAL AVIATION ADMINISTRATION
GRS	GALVANIZED RIGID STEEL
ID	INNER DIAMETER OR IDENTIFICATION
LED	LIGHT EMITTING DIODE
LF	LINEAR FEET
MALSR	MEDIUM-INTENSITY APPROACH LIGHTING SYSTEM WITH RUNWAY ALIGNMENT INDICATOR LIGHTS
PAPI	PRECISION APPROACH PATH INDICATOR
PVC	POLY-VINYL CHLORIDE
R2S	RUNWAY 2 (MANDATORY SIGNS)
RDR	RUNWAY DISTANCE REMAINING
RGL	RUNWAY GUARD LIGHT
SE	SLURRY ENCASED
SGN	SIGN
TYP	TYPICAL
TES	TAXIWAY ECHO SIGNS
TFS	TAXIWAY FOXTROT SIGNS

ELECTRICAL DEMOLITION GENERAL NOTES

1. WITHIN AREAS OF DEMOLITION AND AS OTHERWISE SHOWN, REMOVE IDENTIFIED SIGN BASES, ISOLATION TRANSFORMERS AND OTHER INDICATED ITEMS.
2. CABLE REMOVAL
 - A. DIRECT BURIAL: REMOVE FROM WITHIN MANHOLES AND HANDHOLES AND REMOVE IN AREAS WHERE EXCAVATION REQUIRES DISTURBING, ABANDON ELSEWHERE.
 - B. IN CONDUIT: REMOVE COMPLETELY BETWEEN NEAREST BASES, HANDHOLES OR MANHOLES.
3. AT INDICATED DEVICES TO BE REMOVED OR IN DEMOLITION AREAS INDICATED, REMOVE ALL CONDUCTORS BACK TO NEAREST MANHOLE OR HANDHOLE OUTSIDE DEMOLITION AREA.
4. SIGNS AND/OR SIGN BASES, CABLES, CONDUITS, DUCTS, ETC. WHICH ARE NOT SPECIFICALLY INDICATED TO BE REMOVED (OR WHICH ARE SHOWN TO REMAIN WITHIN AREAS OF GENERAL DEMOLITION) SHALL REMAIN IN-PLACE AND FUNCTIONAL.
5. CONTRACTOR SHALL VERIFY EQUIPMENT AND CABLE DESIGNATIONS AND STATUS PRIOR TO REMOVAL OR DISCONNECTING.
6. UNLESS OTHERWISE NOTED, ALL REMOVED MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH APPLICABLE LOCAL ORDINANCES.
7. DRAWINGS MAY NOT DETAIL ALL EXISTING FACILITIES IN AREAS OF DEMOLITION. CONTRACTOR SHALL REVIEW THE SITE AND RECORD DRAWINGS TO VERIFY THE DEMOLITION EFFORT INVOLVED.
8. EXISTING SIGNS MUST REMAIN OPERATIONAL DURING CONSTRUCTION. TEMPORARY CONNECTIONS TO EXISTING SIGNS REQUIRED DURING RELOCATION. TEMPORARY MOUNTING OF EXISTING SIGNS REQUIRED WHERE NEW LOCATION CONFLICTS WITH EXISTING LOCATION.

ELECTRICAL LEGEND:

(UNLESS OTHERWISE NOTED ON PLANS)

	PVC W/#8-5KV L-824 TYPE "C" CABLE PER INDICATED LIGHTING CIRCUIT. (QUANTITY AND SIZE AS INDICATED ON PLAN SHEETS)
	EXISTING ELECTRICAL CONDUIT AND CONDUCTOR
	EXISTING ELEVATED EDGE LIGHT
	EXISTING LIGHT CAN WITH COVER
	EXISTING RUNWAY GUARD LIGHT
	EXISTING IN-PAVEMENT RUNWAY GUARD LIGHT
	EXISTING AIRFIELD GUIDANCE SIGN
	RELOCATED EXISTING AIRFIELD GUIDANCE SIGN
	EXISTING ELECTRICAL HANDHOLE
	EXISTING ELECTRICAL MANHOLE

ELECTRICAL SHEET INDEX

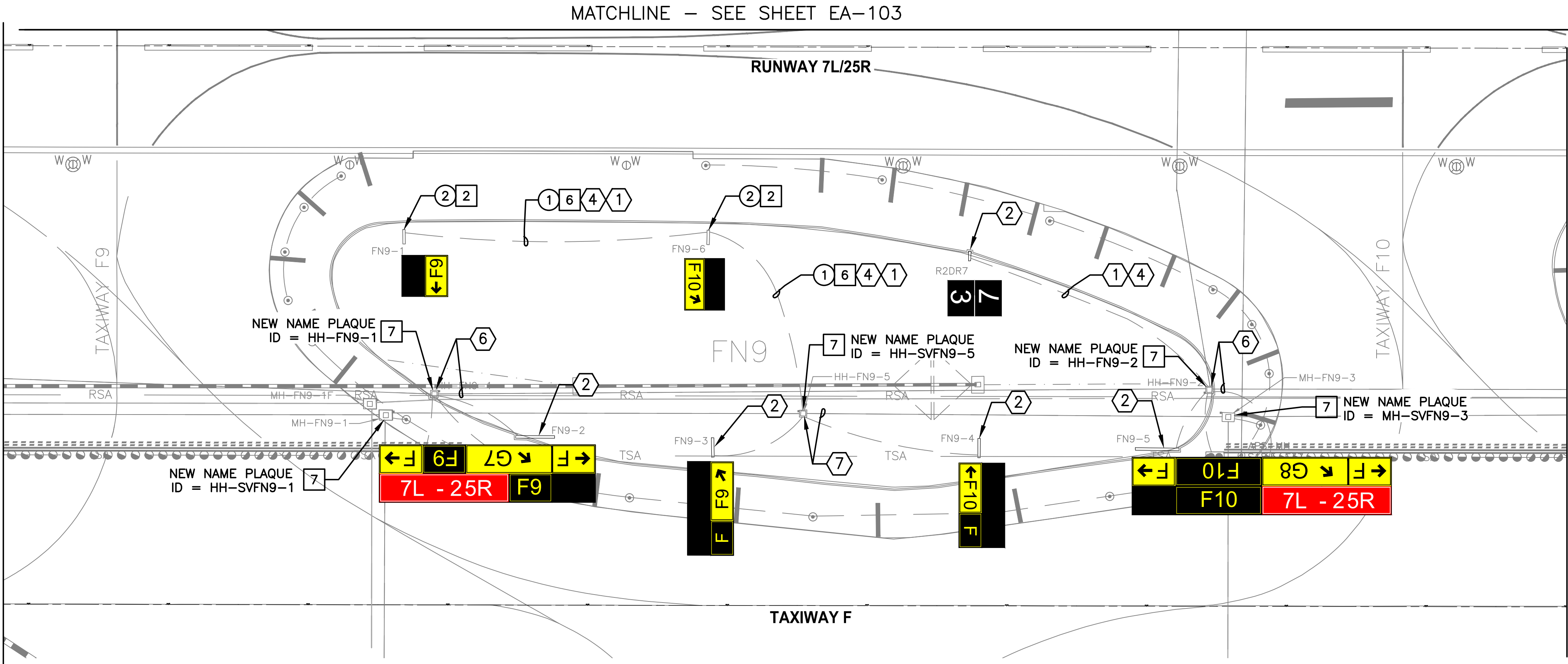
EA-001	ELECTRICAL LEGEND AND NOTES
EA-101	PARTIAL AIRFIELD ELECTRICAL SITE PLAN
EA-102	PARTIAL AIRFIELD ELECTRICAL SITE PLAN
EA-103	PARTIAL AIRFIELD ELECTRICAL SITE PLAN
EA-104	PARTIAL AIRFIELD ELECTRICAL SITE PLAN
EA-501	AIRFIELD GUIDANCE SIGN BASE INSTALLATION DETAIL
EA-502	RDR SIGN BASE INSTALLATION AND MANHOLE DETAILS
EA-503	SPLICING AND GROUNDING DETAILS

ADVISORY CIRCULARS FOR AIRPORT PROJECTS (MOST RECENT VERSION):

150/5340-18	STANDARDS FOR AIRPORT SIGN SYSTEMS
150/5340-30	DESIGN & INSTALLATION DETAILS FOR AIRPORT VISUAL AIDS
150/5345-7	SPECIFICATION FOR L-824 UNDERGROUND ELECTRICAL CABLE FOR AIRPORT LIGHTING CIRCUITS
150/5345-26	SPECIFICATION FOR L-823 PLUG AND RECEPTACLE, CABLE CONNECTORS
150/5345-42	SPECIFICATION FOR AIRPORT LIGHT BASES, TRANSFORMER HOUSINGS, JUNCTION BOXES, AND ACCESSORIES
150/5345-44	SPECIFICATION FOR RUNWAY AND TAXIWAY SIGNS
150/5345-47	SPECIFICATION FOR SERIES TO SERIES ISOLATION TRANSFORMERS FOR AIRPORT LIGHTING SYSTEMS
150/5345-53	AIRPORT LIGHTING EQUIPMENT CERTIFICATION PROGRAM
150/5370-2	OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION
150/5370-10	STANDARDS FOR SPECIFYING CONSTRUCTION OF AIRPORTS
ADDENDUM	AIRPORT LIGHTING EQUIPMENT CERTIFICATION PROGRAM (PUBLISHED MONTHLY AND LISTING APPROVED SUPPLIERS)

SHEET OVERVIEW TITLE	Designed by: SW	PHX DVT BYR CITY OF PHOENIX AVIATION DEPARTMENT PSHIA INFIELD UTILITY ACCESS UPGRADES AND PAVING AV 080000074 ADOT ADOT GRANT NO.: E3S2J01C
	Drawn by: JBW	
ELECTRICAL LEGEND AND NOTES	Checked by: CA	NO REVISIONS / SUBMISSIONS DATE
	Date: 05/05/2023	
SHEET REFERENCE NUMBER: EA-001	Dwg scale: NTS	

G:\PROJECTS\14000\14069 PSHIA Infield Access Upgrades and Paving\CAD\SHEETS\Phase 3_CAD sheets\GMP4_100% SUBMITTAL CAD FILES\ GMP4_EA-101.dwg -- May 04 2023 4:13pm



ADJUSTMENT & REMOVAL NOTES

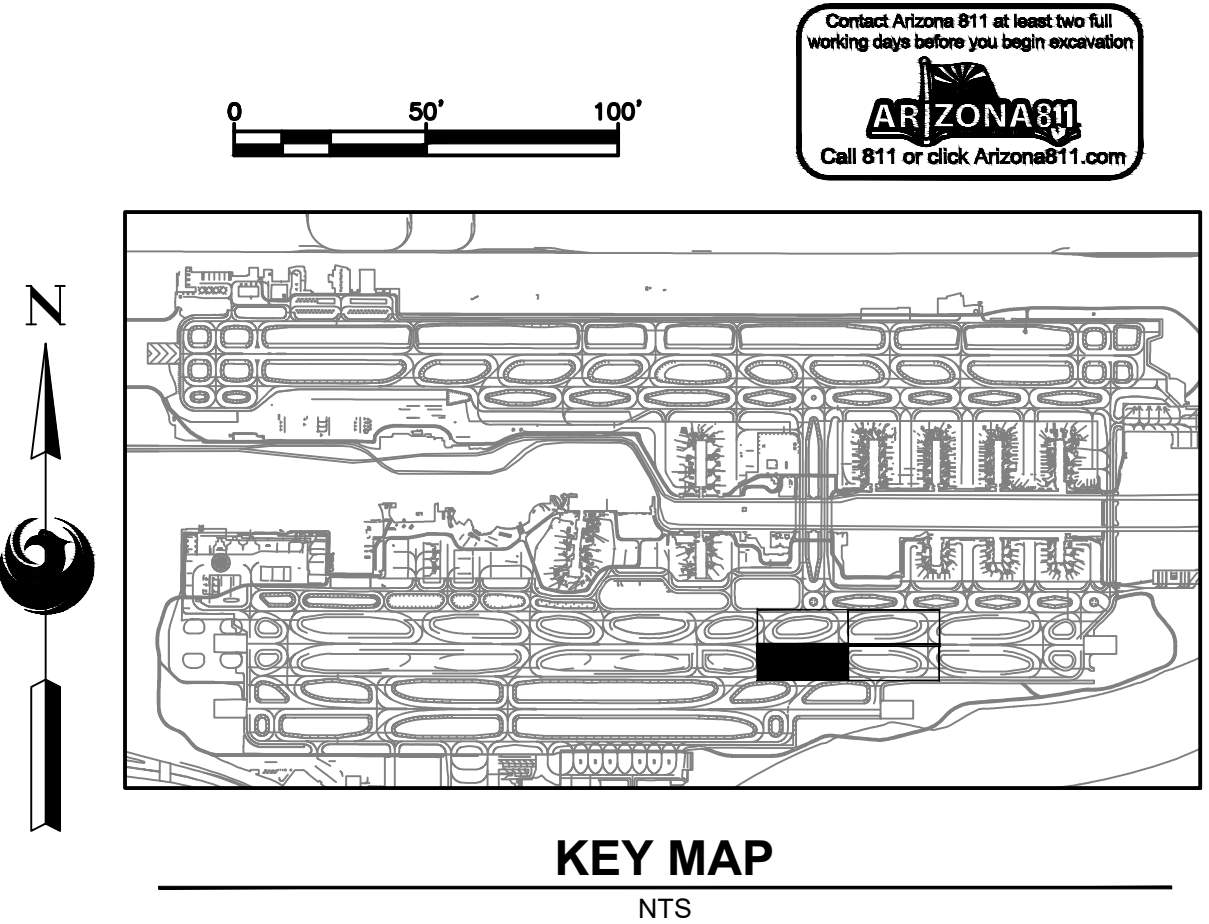
ITEM	DESCRIPTION	QTY
①	REMOVE EXISTING CABLE BACK TO HANDHOLE AND RECONNECT TO MAINTAIN CIRCUIT, EXISTING CONDUIT TO REMAIN.	380 LF
②	REMOVE AND SALVAGE EXISTING SIGN AND ISOLATION TRANSFORMER, REMOVE CONCRETE SIGN BASE.	2 EA

CONSTRUCTION NOTES

ITEM	DESCRIPTION	QTY
②	CONSTRUCT NEW CONCRETE AIRFIELD SIGN BASE FOR 2-MODULE SIGN (PER DETAIL 919, SHEET EA-501) AND RECONNECT EXISTING CONDUIT. INSTALL SALVAGED AIRFIELD SIGN AND ISOLATION TRANSFORMER.	2 EA
⑥	NEW 2/C, #8, L-824 TYPE C AIRFIELD LIGHTING CABLE WITH #6 BCC GROUND	410 LF
⑦	INSTALL NEW MANHOLE ID PLAQUE PER DETAIL 576, SHEET EA-502.	5 EA

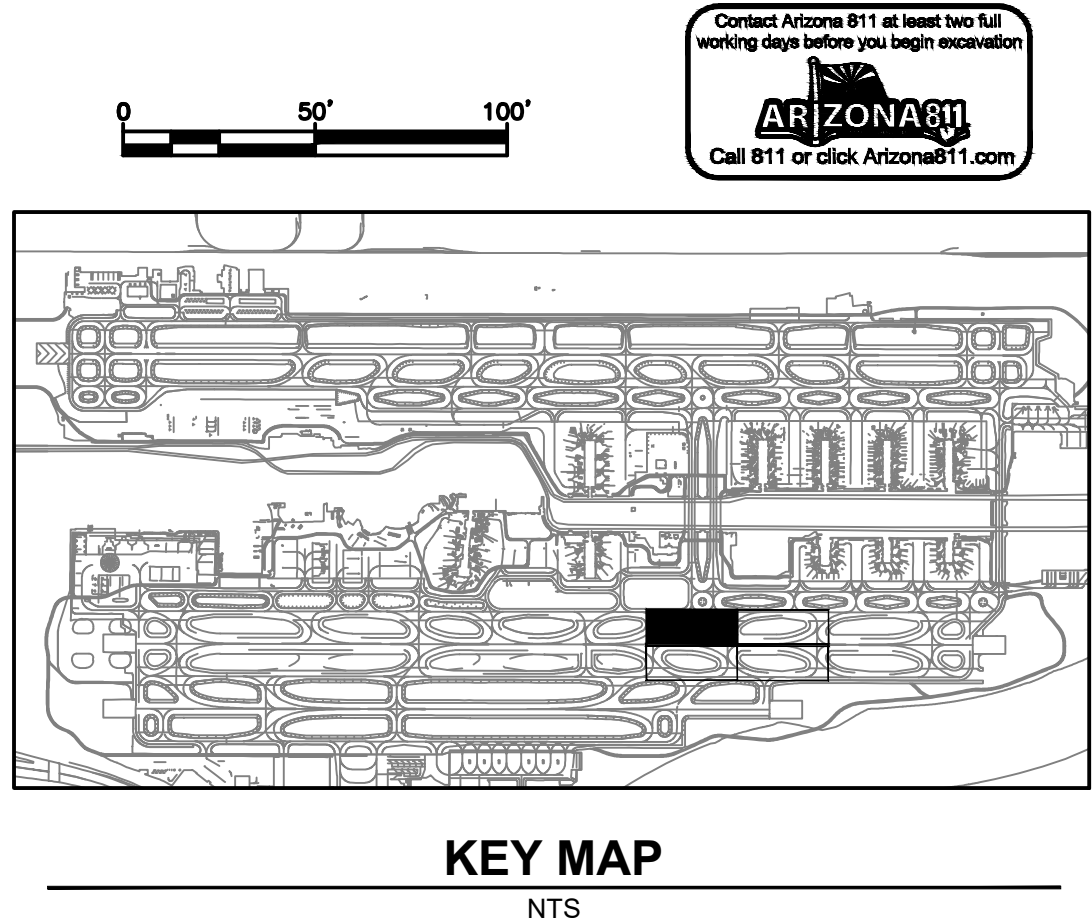
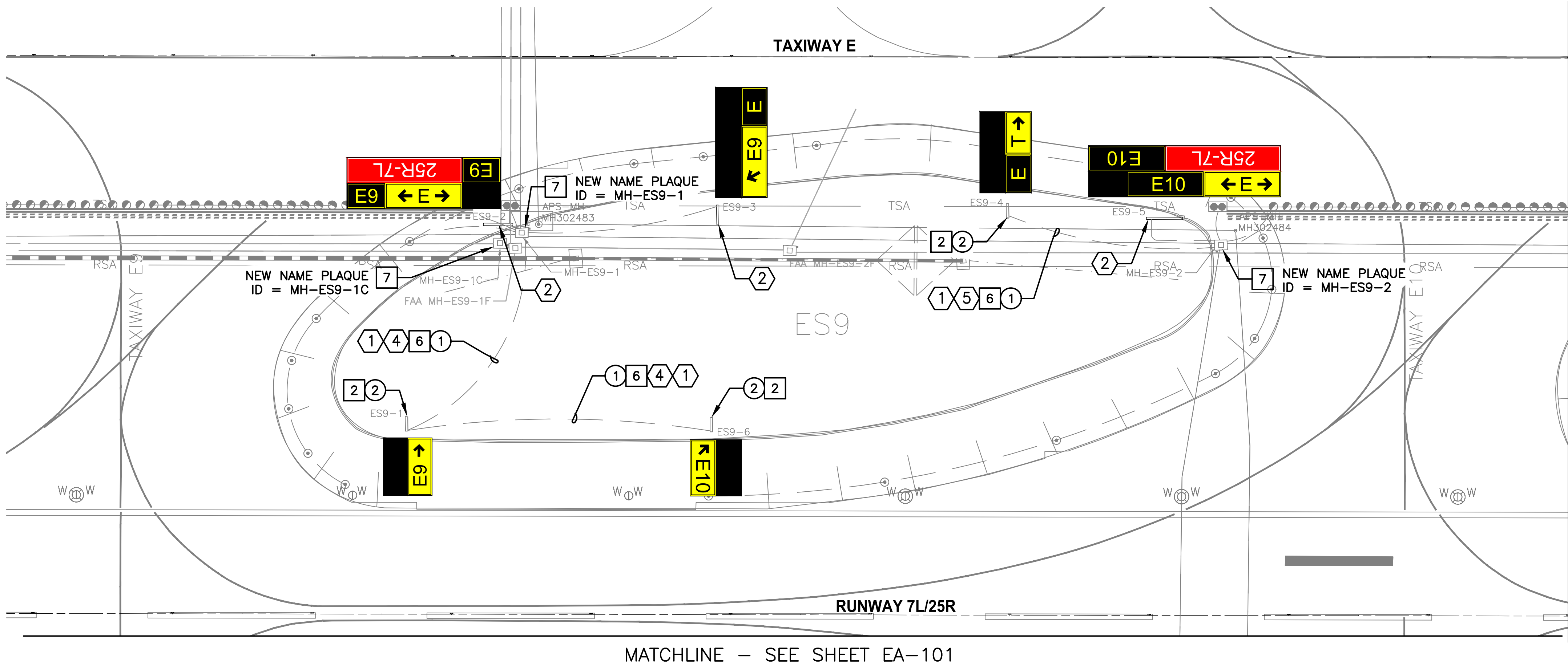
REFERENCE NOTES

ITEM	DESCRIPTION
①	EXISTING CONDUIT/DUCTBANK
②	EXISTING SIGN TO REMAIN
④	CKT R2S
⑥	NORTHERN DUCTBANK AND MANHOLES FOR CENTER RUNWAY (R2) FROM CENTER AIRFIELD LIGHTING VAULT.
⑦	SOUTHERN DUCTBANK AND MANHOLES FOR TAXIWAY F FROM SOUTH AIRFIELD LIGHTING VAULT.



PRIME CONSULTANT TRAGE CONSULTING 1071 E. Jefferson St., Suite 3 Phoenix, AZ 85004	SUB CONSULTANT CR engineers 16719 East Palisades Blvd., Suite 202 Fountain Hills, AZ 85268 Phone: (480) 816-5541 Fax: (480) 816-5540 www.creng.com	PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.	
		NO	DATE
PHX PHX PHX CITY OF PHOENIX AVIATION DEPARTMENT PSHIA INFILDEED UTILITY ACCESS UPGRADES AND PAVING AV 08000074 ADOT ADOT GRANT NO.: E3S2J01C		Designed by: SW	
		Drawn by: JBW	
		Checked by: CA	
		Date: 05/05/2023	
		Dwg scale: 1"=50'	
SHEET OVERVIEW TITLE		PARTIAL AIRFIELD ELECTRICAL SITE PLAN	
SHEET REFERENCE NUMBER: EA-101		SHEET 17 OF 23	

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ADJUSTMENT & REMOVAL NOTES

ITEM	DESCRIPTION	QTY
①	REMOVE EXISTING CABLE BACK TO HANDHOLE AND RECONNECT TO MAINTAIN CIRCUIT, EXISTING CONDUIT TO REMAIN.	560 LF
②	REMOVE AND SALVAGE EXISTING SIGN AND ISOLATION TRANSFORMER, REMOVE CONCRETE SIGN BASE.	3 EA

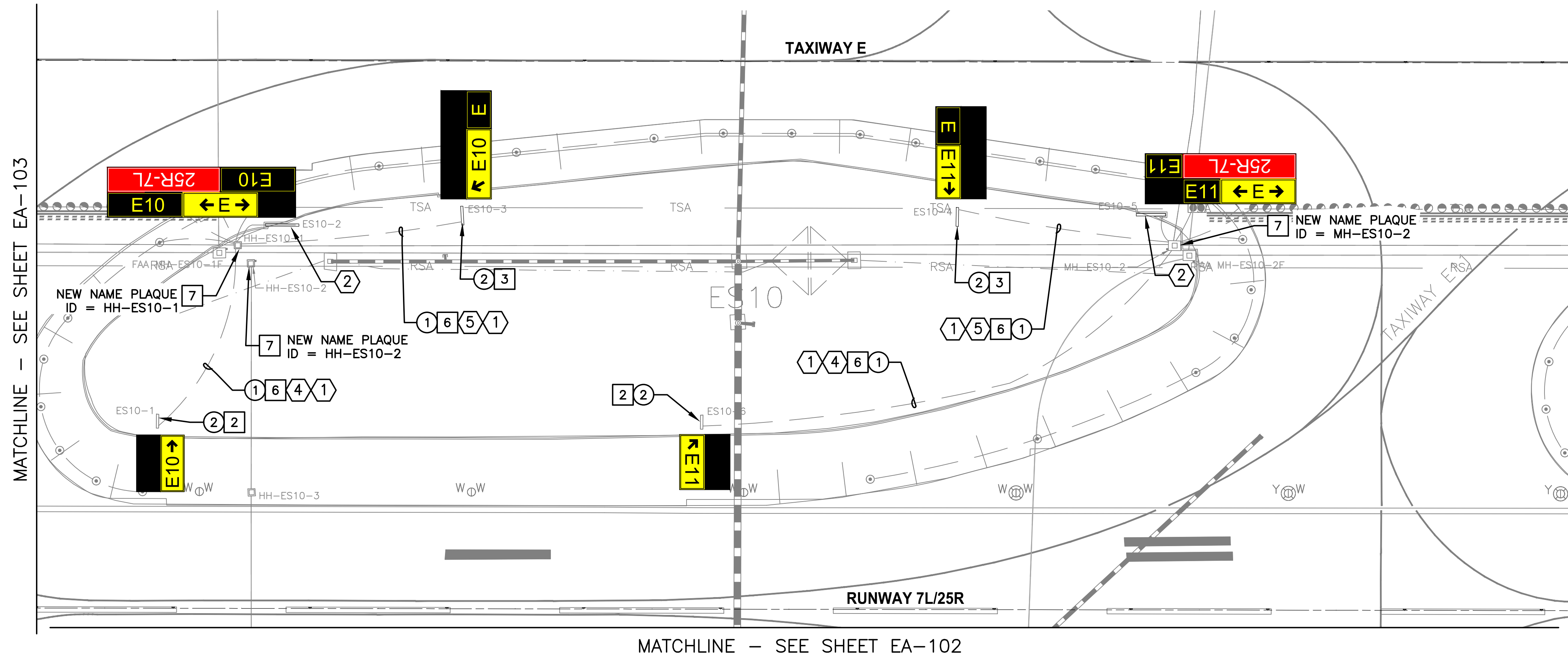
CONSTRUCTION NOTES

ITEM	DESCRIPTION	QTY
②	CONSTRUCT NEW CONCRETE AIRFIELD SIGN BASE FOR 2-MODULE SIGN (PER DETAIL 919, SHEET EA-501) AND RECONNECT EXISTING CONDUIT. INSTALL SALVAGED AIRFIELD SIGN AND ISOLATION TRANSFORMER.	3 EA
⑥	NEW 2/C, #8, L-824 TYPE C AIRFIELD LIGHTING CABLE WITH #6 BCC GROUND	610 LF
⑦	INSTALL NEW MANHOLE ID PLAQUE PER DETAIL 576, SHEET EA-502.	3 EA

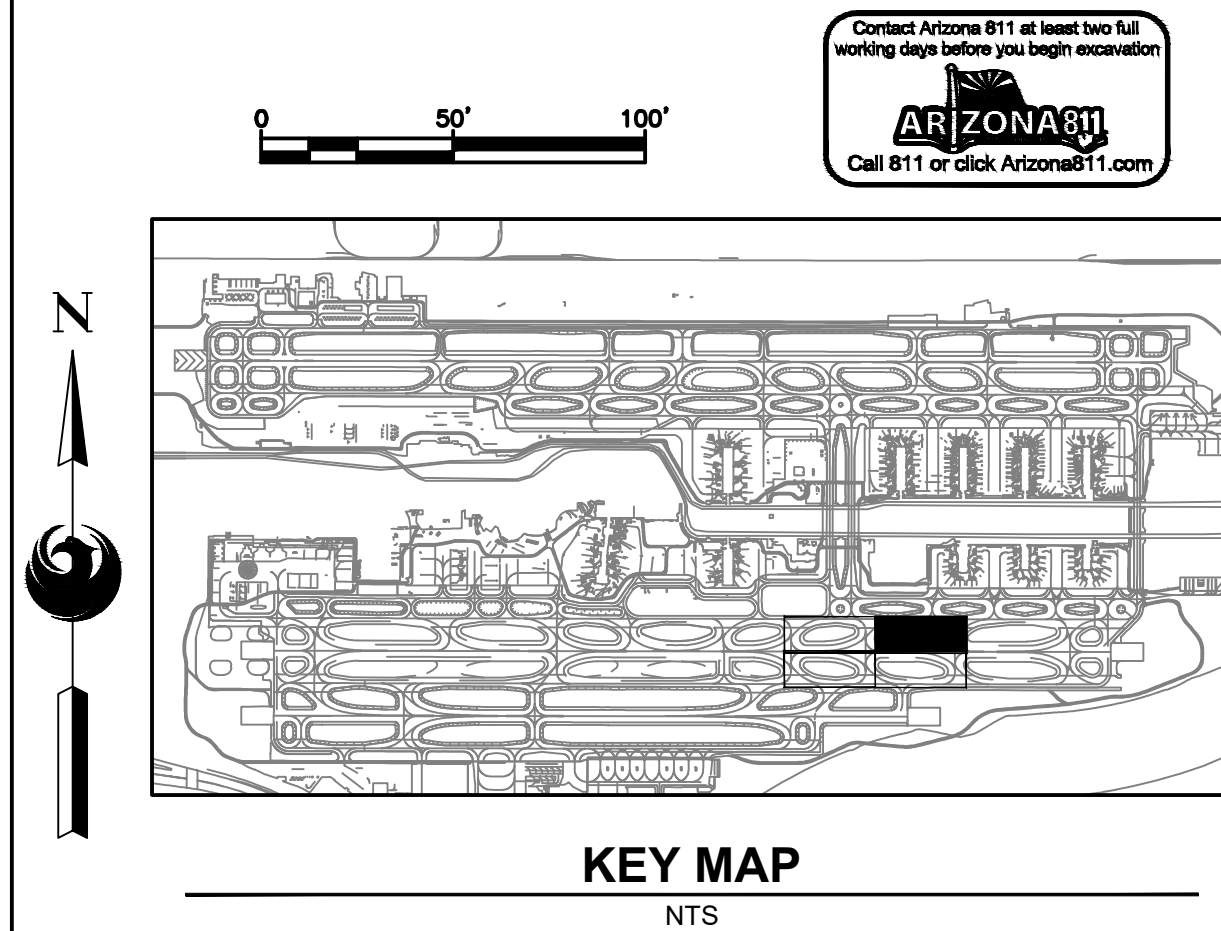
REFERENCE NOTES

ITEM	DESCRIPTION
①	EXISTING CONDUIT/DUCTBANK
②	EXISTING SIGN TO REMAIN
④	CKT R2S
⑤	CKT TES



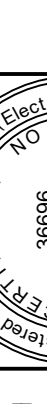


SHEET OVERVIEW TITLE	DESIGNED BY: SW	PAX MW BYR CITY OF PHOENIX AVIATION DEPARTMENT PSHIA INFILDE UTILITY ACCESS UPGRADES AND PAVING AV 08000074 ADOT ADOT GRANT NO.: E3S2J01C	SHEET REFERENCE NUMBER: EA-103 SHEET 19 OF 23
	Drawn by: JBW Checked by: CA Date: 05/05/2023 Dwg scale: 1"=50'		
<div>PRIME CONSULTANT TRAGE CONSULTING 1071 E. Jefferson St. Suite 31 Phoenix, AZ 85004 16719 East Palisades Blvd., Suite 202 Fountain Hills, AZ 85268 Phone: (480) 816-5541 Fax: (480) 816-5540 www.trage.com</div> <div>SUB CONSULTANT CR engineers 1071 E. Jefferson St. Suite 31 Phoenix, AZ 85004 16719 East Palisades Blvd., Suite 202 Fountain Hills, AZ 85268 Phone: (480) 816-5541 Fax: (480) 816-5540 www.creng.com</div>			

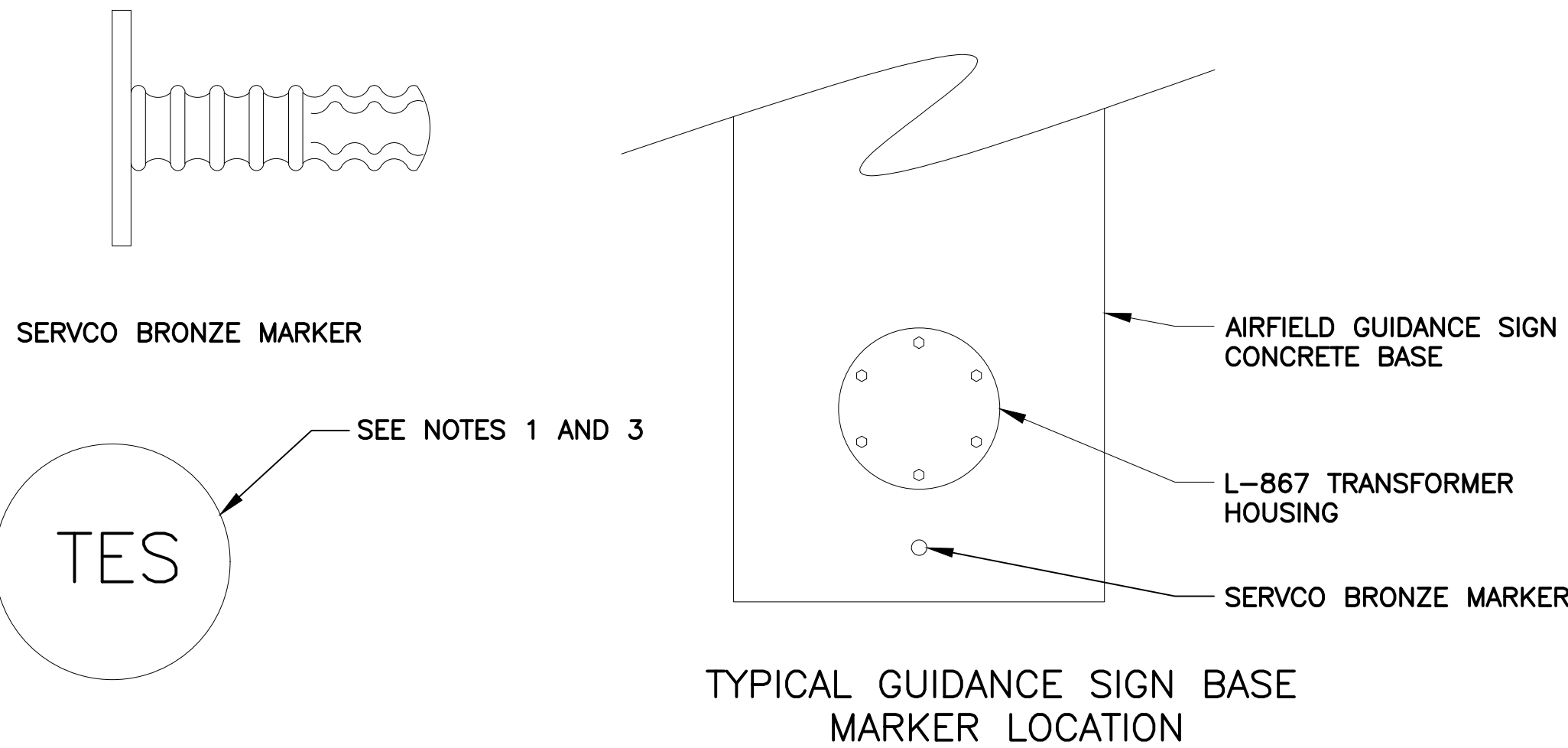


MATCHLINE - SEE SHEET EA-103



ADJUSTMENT & REMOVAL NOTES		
ITEM	DESCRIPTION	QTY
①	REMOVE EXISTING CABLE BACK TO HANDHOLE AND RECONNECT TO MAINTAIN CIRCUIT, EXISTING CONDUIT TO REMAIN.	880 L
②	REMOVE AND SALVAGE EXISTING SIGN AND ISOLATION TRANSFORMER, REMOVE CONCRETE SIGN BASE.	4 EA
CONSTRUCTION NOTES		
ITEM	DESCRIPTION	QTY
②	CONSTRUCT NEW CONCRETE AIRFIELD SIGN BASE FOR 2-MODULE SIGN (PER DETAIL 919, SHEET EA-501) AND RECONNECT EXISTING CONDUIT. INSTALL SALVAGED AIRFIELD SIGN AND ISOLATION TRANSFORMER.	2 EA
③	CONSTRUCT NEW CONCRETE AIRFIELD SIGN BASE FOR 3-MODULE SIGN (PER DETAIL 919, SHEET EA-501) AND RECONNECT EXISTING CONDUIT. INSTALL SALVAGED AIRFIELD SIGN AND ISOLATION TRANSFORMER.	2 EA
⑥	NEW 2/C, #8, L-824 TYPE C AIRFIELD LIGHTING CABLE WITH #6 BCC GROUND	940 LF
⑦	INSTALL NEW MANHOLE ID PLAQUE PER DETAIL 576, SHEET EA-502.	3 EA

SHEET REFERENCE NUMBER: EA-104	PARTIAL AIRFIELD ELECTRICAL SITE PLAN	Designed by: SW Drawn by: JWB Checked by: CA Date: 05/05/2023 Dwg scale: 1"=50'	 CITY OF PHOENIX AVIATION DEPARTMENT PISHIA INFIELD UTILITY ACCESS UPGRADES AND PAVING AV 08000074 ADOT ADOT GRANT NO.: E3S2J01C	"PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX"					SUB CONSULTANT	PRIME CONSULTANT	 1201 E. Jefferson St. Suite 41 Phoenix, AZ 85004
				NO REVISIONS / SUBMISSIONS DATE							



919 NEW CAST-IN-PLACE GUIDANCE SIGN BASE DETAIL
TYP NTS

1. NEW CAST-IN-PLACE TAXIWAY GUIDANCE SIGN BASE DETAIL SHOWN WITH A TWO MODULE SIGN FOR ILLUSTRATIVE PURPOSES ONLY. SEE FIGURE 1.1 FOR ACTUAL LENGTH OF BASE NEEDED FOR MULTIPLE MODULE SIGNS.
2. BASE SHALL BE LEVEL CONSTRUCTED 1" ABOVE HIGHEST POINT OF SURROUNDING GRADE OR EDGE OF TAXIWAY SHOULDER PAVEMENT AS APPLICABLE.
3. TRANSFORMER HOUSING SHALL BE ORIENTED AT RUNWAY/TAXIWAY EDGE PER PSRIA STANDARDS, UNLESS OTHERWISE NOTED.
4. 4000 PSI MINIMUM STRENGTH CONCRETE AT 28 DAYS.

* THE HEIGHT REFERRED TO IN THIS COLUMN IS THE DISTANCE FROM TOP OF THE SIGN TO GRADE MEASURED AT THE SIDE OF THE SIGN THAT IS NEAREST TO THE APPLICABLE RUNWAY, TAXIWAY, OR APRON. IN ACCORDANCE WITH PARAGRAPH 1.14, THIS HEIGHT SHOULD BE REDUCED, IF NECESSARY, TO PROVIDE THE REQUIRED 12-INCH CLEARANCE BETWEEN THE TOP OF THE SIGN AND THE CRITICAL AIRCRAFT (AS NOTED IN PARAGRAPH 1.14.3).

THE HEIGHT REFERRED TO IN THIS COLUMN IS THE DISTANCE FROM TOP OF THE SIGN TO GRADE MEASURED AT THE SIDE OF THE SIGN THAT IS NEAREST TO THE APPLICABLE RUNWAY, TAXIWAY, OR APRON. IN ACCORDANCE WITH PARAGRAPH 1.14, THIS HEIGHT SHOULD BE REDUCED, IF NECESSARY, TO PROVIDE THE REQUIRED 12-INCH CLEARANCE BETWEEN THE TOP OF THE SIGN AND THE CRITICAL AIRCRAFT (AS NOTED IN PARAGRAPH 1.14.3).

(SEE FAA ADVISORY CIRCULAR 150/5340-18(LATEST REVISION) FOR FURTHER INFORMATION AND CLARIFICATION))

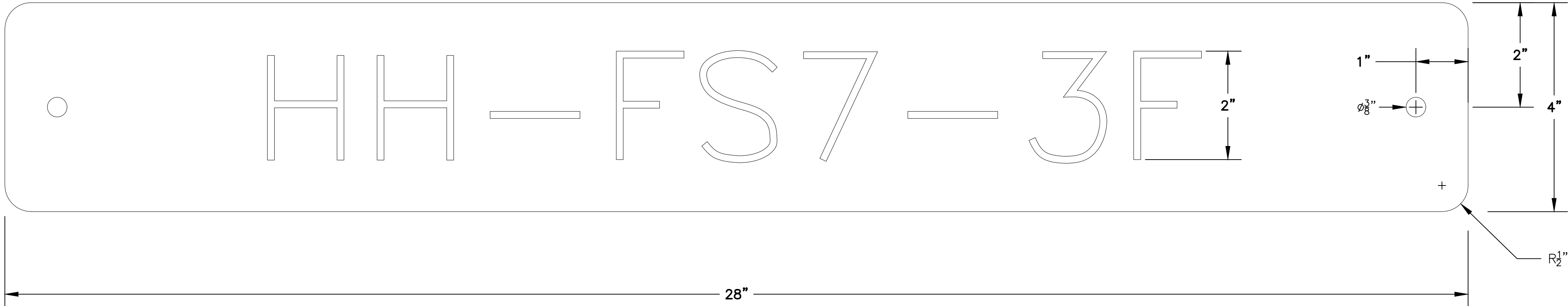
*ALL LENGTHS SHOWN ARE MINIMUM

SIZE 4 RDR	BASE LENGTH = 7.5' / 90"
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*ALL LENGTHS SHOWN ARE MINIMUM

SHEET OVERVIEW TITLE	AIRFIELD GUIDANCE SIGN BASE INSTALLATION DETAIL															
	SHEET REFERENCE NUMBER: EA-501															
	SHEET 21 OF 23															
	Designed by: SW															
	Drawn by: JGW															
	Checked by: CA															
Date: 05/05/2023																
Dwg scale: NTS																
PBX DVI BYR CITY OF PHOENIX AVIATION DEPARTMENT PSHIA INFIELD UTILITY ACCESS UPGRADES AND PAVING AV 08000074 ADOT ADOT GRANT NO.: E3S2J01C																
*PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE OBLIGATIONS OF CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX																
<div><div><div><div>PRIME CONSULTANT</div><div><div>100 E. Jefferson St Suite 300 Phoenix, AZ 85004</div></div></div><div><div>SUB CONSULTANT</div><div><div>16719 East Polaris Blvd., Suite 202 Fountain Hills, AZ 85208 Phone: (480) 816-5541 Fax: (480) 816-5540 www.creng.com</div></div></div></div><div><div>A circular professional engineer seal for Catherine M. Alcorn, License No. 36698, State of Arizona. The seal includes the text "Registered Professional Engineer (Electrical)", "STATE OF ARIZONA", "CATHERINE M. ALCORN", "No. 36698", and "Date Expired 06/30/2024". A signature is written over the seal.</div><div>Catherine M. Alcorn</div></div></div>																
<table><thead><tr><th>NO</th><th>REVISIONS / SUBMISSIONS</th><th>DATE</th></tr></thead><tbody><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></tbody></table>		NO	REVISIONS / SUBMISSIONS	DATE												
NO	REVISIONS / SUBMISSIONS	DATE														

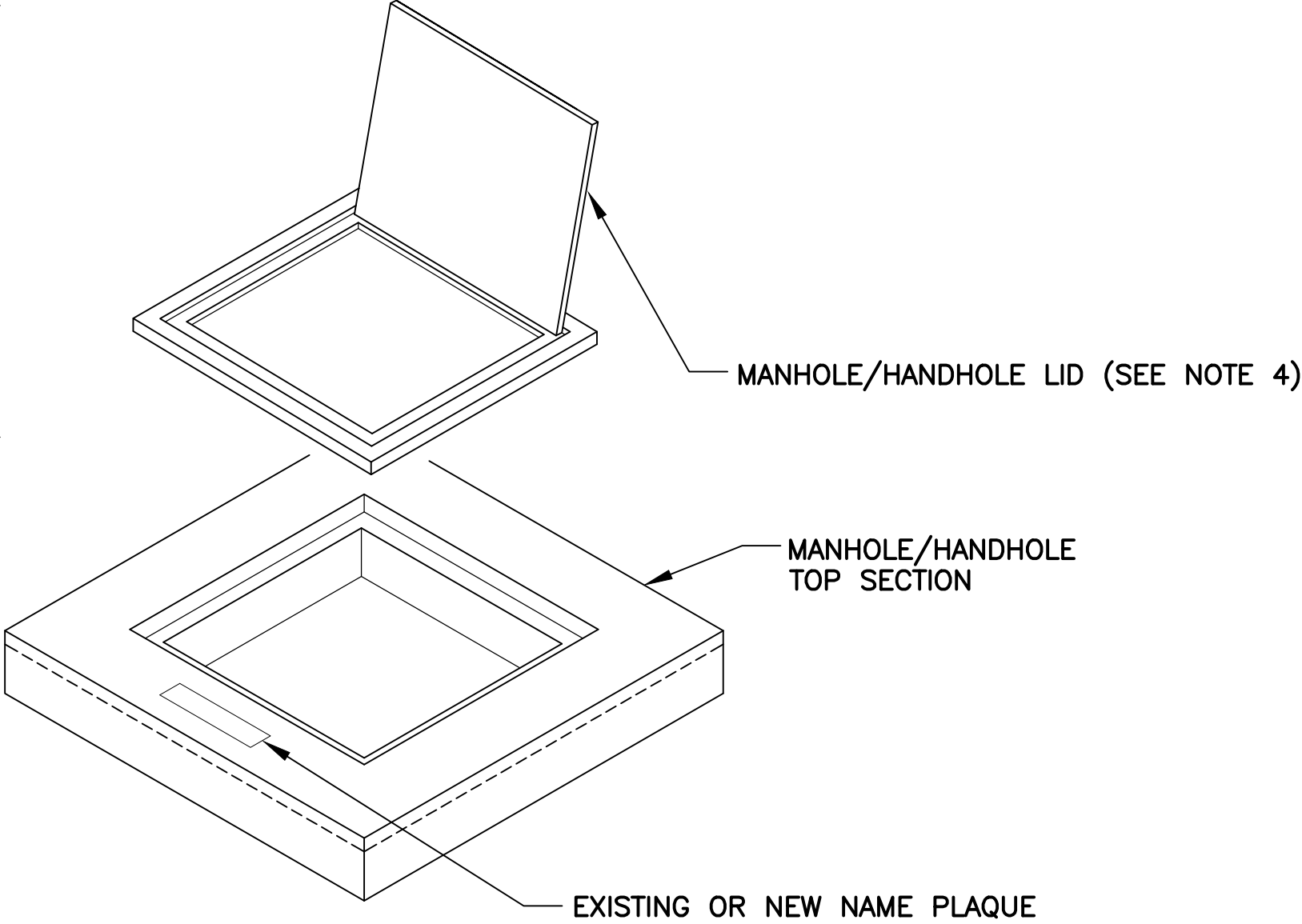
G:\PROJECTS\14000\14069 PSHA Infield Access Upgrades and Paving\CAD\SHEETS\Phase 3 CAD sheets\GMP4 100% SUBMITTAL CAD FILES\ GMP4 EA-502.dwg -- Mon, 02/20/2023 9:22am



576 NAME PLAQUE
TYP NTS

NOTES:

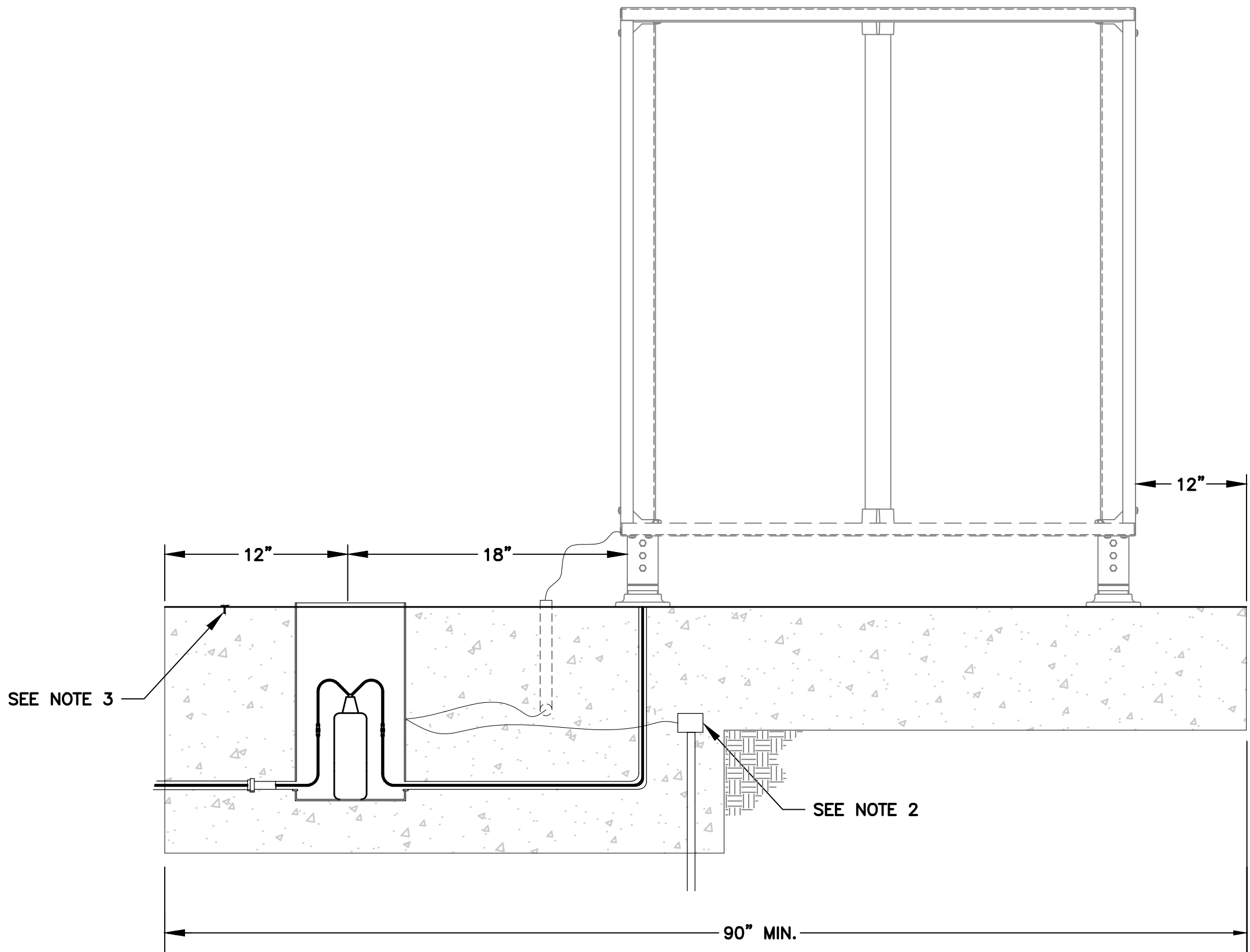
1. NAME PLAQUE IS TO BE 4" IN HEIGHT, 28" IN WIDTH, AND 1/8" THICK. THE NAME PLAQUE SHALL BE ALUMINUM.
2. LETTERING IS TO BE 2" IN HEIGHT, AND 1 1/4" IN WIDTH. LETTERING IS TO BE CENTERED VERTICALLY AND HORIZONTALLY ON THE PLAQUE.
3. LETTERING SHOULD BE CUT BY A COMPUTER-AIDED PLASMA CUTTER, OR SIMILAR DEVICE, TO INSURE THE EDGES ARE STRAIGHT AND CLEAN.
4. 3/8" DIA. HOLES WILL BE PROVIDED ON BOTH ENDS, TO ALLOW THE USE OF CONCRETE ANCHOR SCREWS, TO ATTACH TO THE CONCRETE TOP SECTION OF THE MANHOLE/HANDHOLE.
5. EXISTING AIRFIELD ELECTRICAL MANHOLE/HANDHOLE ID NAME PLAQUES SHALL BE REMOVED FROM EXISTING LIDS FOR REINSTALLATION ON NEW MANHOLE/HANDHOLE LIDS
6. NEW NAME PLAQUES ARE REQUIRED WHERE NEW MANHOLE/HANDHOLE DESIGNATIONS HAVE BEEN ASSIGNED.
7. REFER TO CIVIL PLAN SHEETS FOR MANHOLE/HANDHOLE LOCATIONS AND ELEVATIONS.



NAME PLAQUE PLACEMENT
NTS

NOTES:

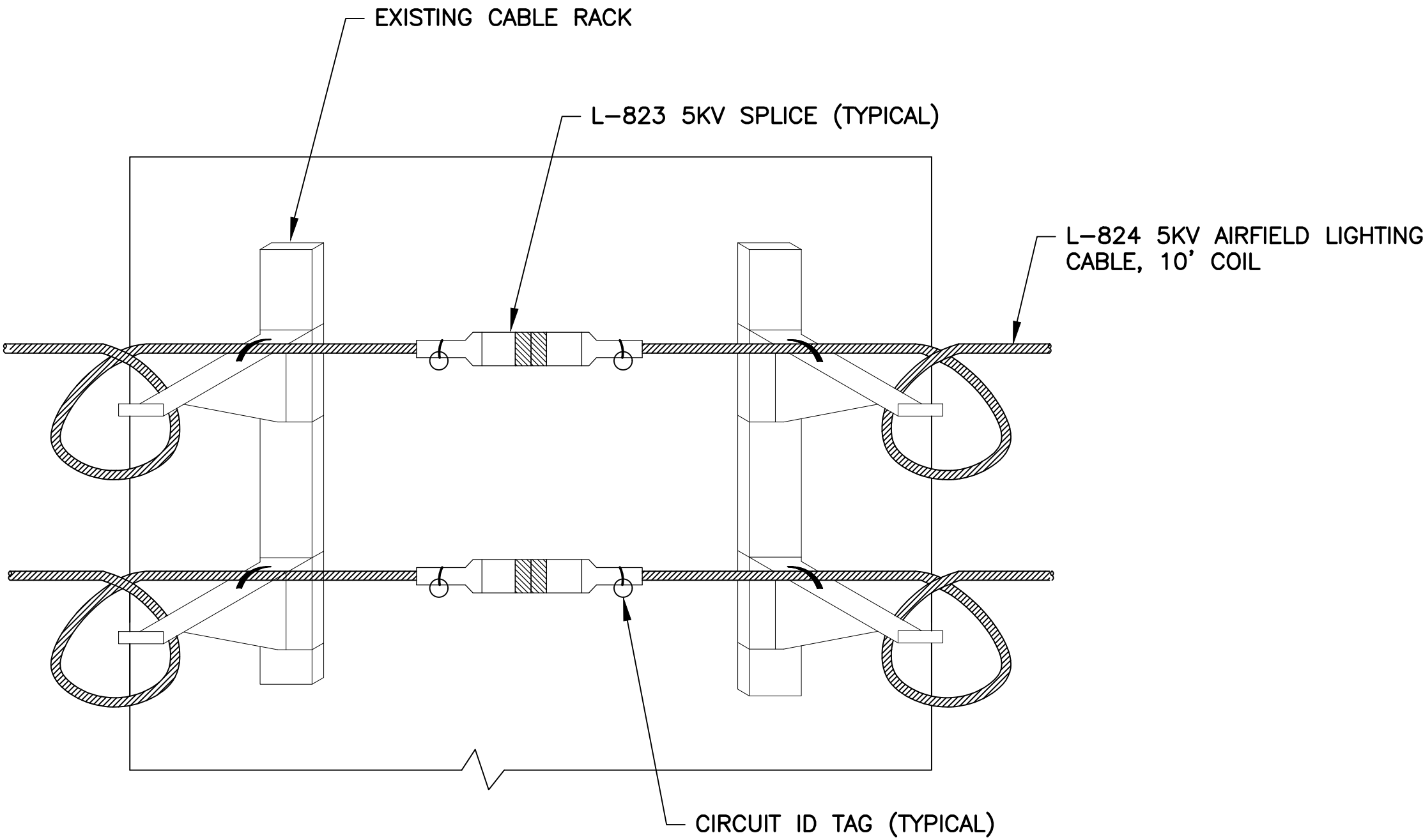
1. PLACE NAME PLAQUE ON THE FRONT OF THE MANHOLE/HANDHOLE, AS THE LID OPENS.
2. NAME PLAQUE IS TO BE CENTERED HORIZONTALLY AND VERTICALLY, AS SHOWN.
3. REMOVAL AND REINSTALLATION OF NAME PLAQUES IS CONSIDERED INCIDENTAL TO THE INSTALLATION OF NEW HAND HOLE LIDS.
4. ALL HATCH/LID HINGES SHALL BE ORIENTED ON RUNWAY OR TAXIWAY SIDE OF STRUCTURE.



920 RUNWAY DISTANCE REMAINING SIGN - REMOTE MOUNT
TYP NTS

NOTES:

1. REINSTALL EXISTING RUNWAY DISTANCE REMAINING SIGN ON NEW CONCRETE SIGN BASE.
2. PROVIDE AND INSTALL NEW GROUND ROD WITH #6 COPPER GROUND AT SIGN. BOND TO TRANSFORMER HOUSING AND SIGN.
3. STAMP CIRCUIT IDENTIFICATION INTO MARKER WITH 1/2" CHARACTERS.



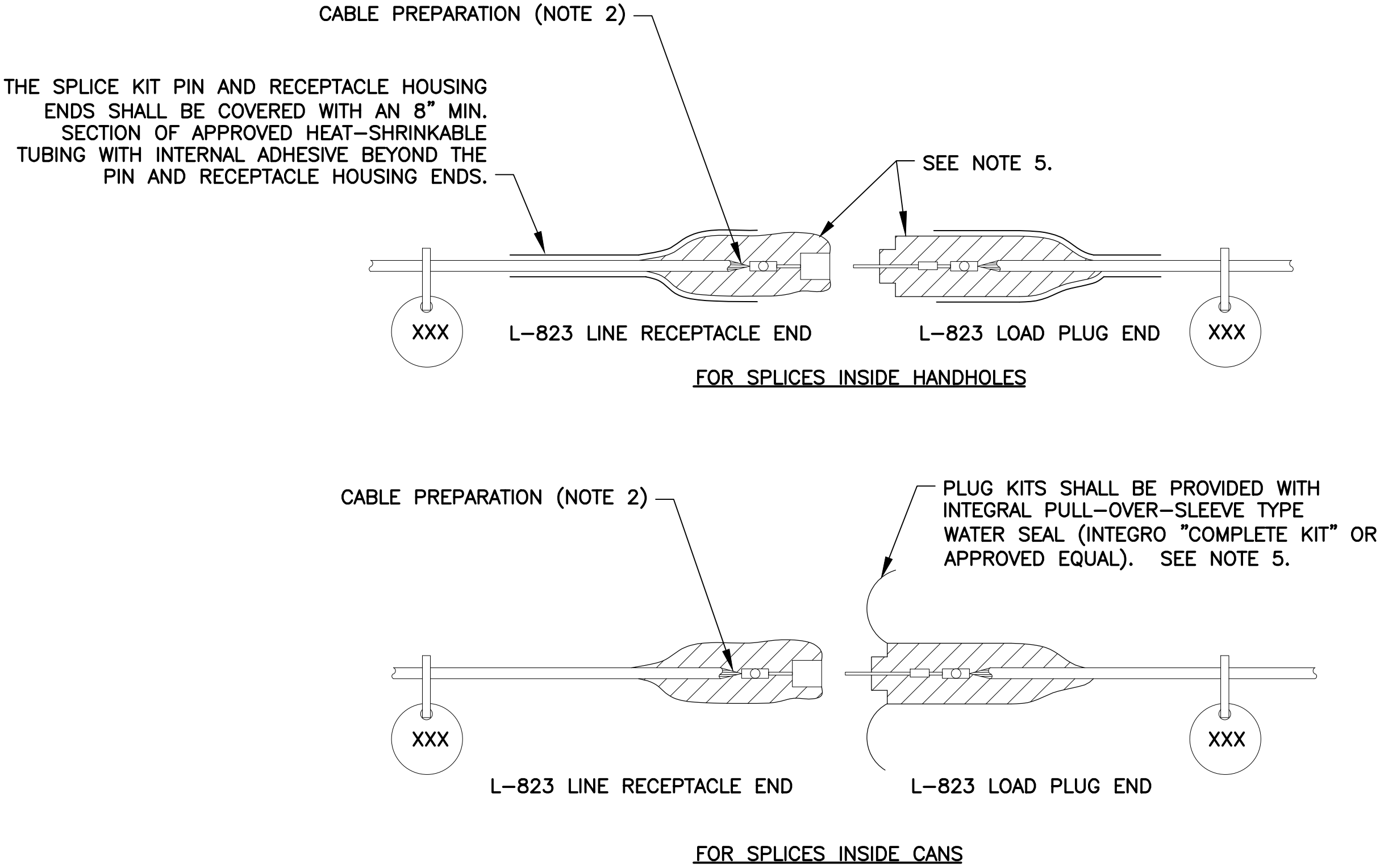
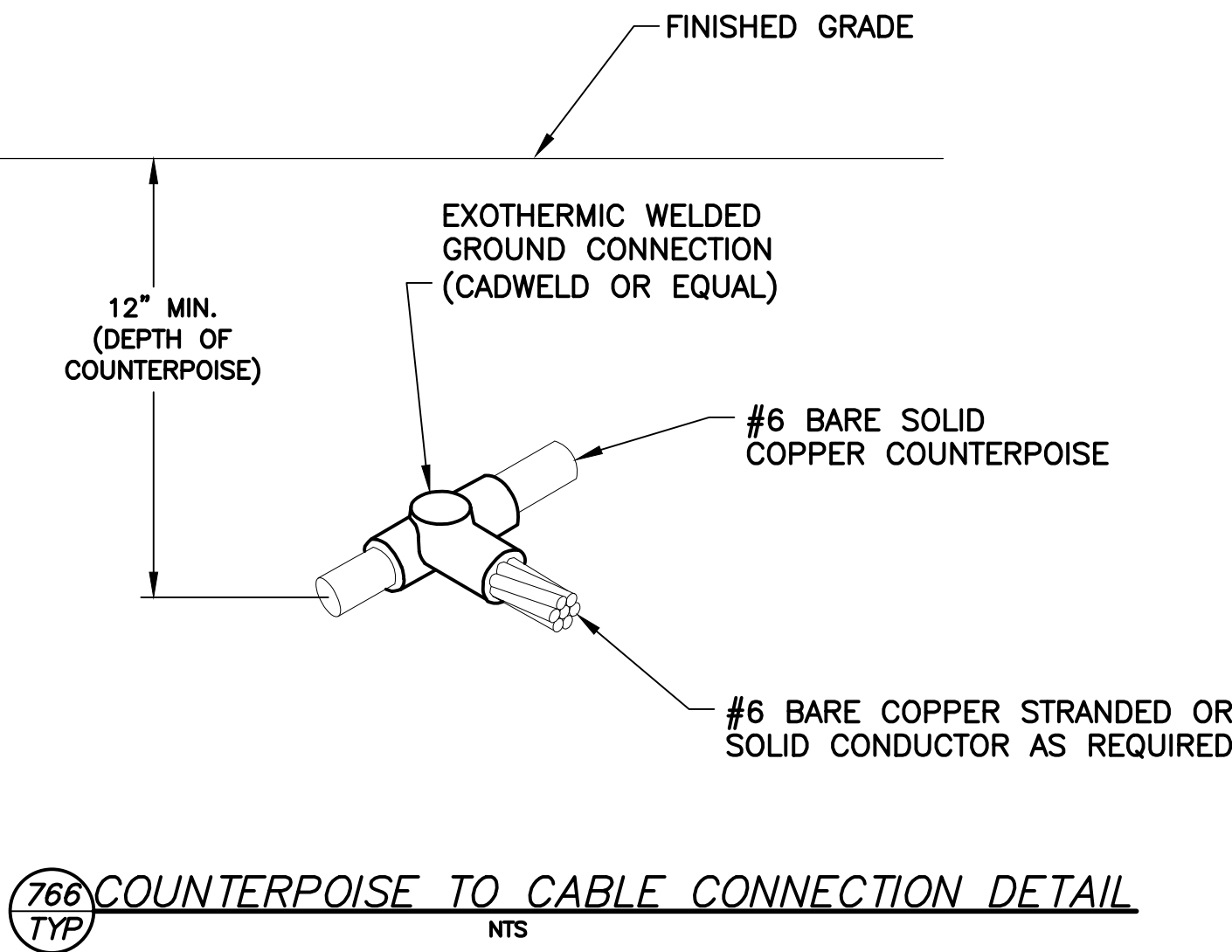
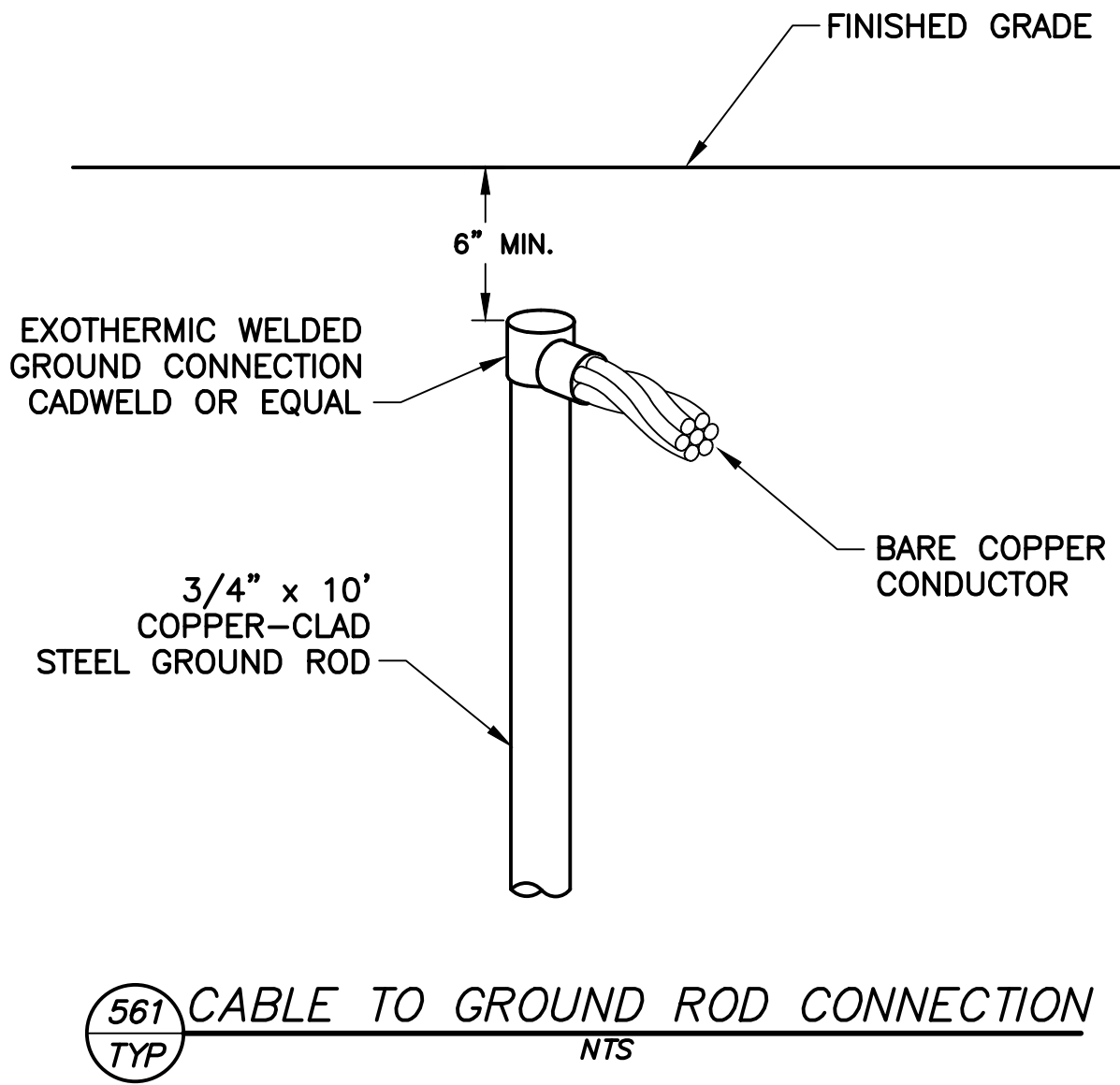
CABLE RACKING DETAIL

NOTES:

1. CONTRACTOR SHALL RACK NEW CABLES IN EXISTING HANDHOLES. PROVIDE CIRCUIT ID TAGS AND COLOR IDENTIFICATION TO MATCH EXISTING.
2. PROVIDE NEW L-823, PRIMARY CONNECTOR KITS FOR NEW CABLES.

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			NO	REVISIONS / SUBMISSIONS	DATE		
PHX AVI BYR CITY OF PHOENIX AVIATION DEPARTMENT PSHIA INFIELD UTILITY ACCESS UPGRADES AND PAVING AV 08000074 ADOT ADOT GRANT NO.: E3S2J01C			Designed by: SW	Drawn by: JBW	Checked by: CA	Date: 05/05/2023	Dwg scale: NTS
SHEET OVERVIEW TITLE RDR SIGN BASE INSTALLATION AND MANHOLE DETAILS			SHEET REFERENCE NUMBER: EA-502 SHEET 22 OF 23				

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- NOTES**
1. PROVIDE MALE AND FEMALE L-823 CONNECTORS AS REQUIRED ON EACH CONDUCTOR IN EACH BASE, HANDHOLE, OR MANHOLE TO ALLOW ISOLATION OF HOMERUN CIRCUIT, NO STRAIGHT-THROUGH ALLOWED.
 2. ALL CABLE ENDS SHALL BE PREPARED WITH THE USE OF A TAPERING TOOL SPECIFICALLY DESIGNED FOR USE WITH L-824 CABLES.
 3. PLUG AND RECEPTACLE END FITTINGS SHALL BE CRIMPED ONTO THE CONDUCTOR BY USE OF AN AIRPORT PERSONNEL ACCEPTED RATCHETING TYPE CRIMPING TOOL.
 4. AT THE POINT OF CONNECTION WITH THE EXISTING FIELD CIRCUITS, INSTALL NEW L-823 PLUGS ON BOTH THE NEW AND EXISTING CABLES. VERIFY INSULATION TYPES OF BOTH NEW & EXISTING CABLES AND COORDINATE WITH TERMINATION KITS TO ASSURE PROPER AND WATERPROOF FIT.
 5. INSTALL THREE (3) TAPE LAYERS OVER L-823 CONNECTIONS AFTER PULLING SLEEVE OVER COMPLETE KIT (SCOTCH OR EQUAL):
1ST LAYER - 33+ VINYL ELECTRICAL TAPE
2ND LAYER - 130C RUBBER SPLICING TAPE
3RD LAYER - 33+ VINYL ELECTRICAL TAPE
 6. THERE SHALL BE NO SPLICES BETWEEN LIGHTS, ONLY IN BASES OR HANDHOLES.
 7. PROVIDE AND INSTALL NON-CONDUCTIVE CIRCUIT IDENTIFICATION TAGS ATTACHED TO EACH SIDE OF ALL CONNECTOR KITS.
 8. ON THE CABLES FOR THE RUNWAY AND SIGNAGE CIRCUITS, TAPE FROM THE BACK END OF THE CONNECTOR KIT ONTO CABLE FOR 3" EACH, RED THEN WHITE PHASE TAPE FOR SIGNS, RED ONLY PHASE TAPE FOR RUNWAY EDGE LIGHTS, FOR FASTER IDENTIFICATION AND MATCH EXISTING MANHOLE LAYOUTS.
 9. ON THE CABLES FOR THE TAXIWAY AND SIGNAGE CIRCUITS, TAPE FROM THE BACK END OF THE CONNECTOR KIT ONTO CABLE FOR 3" EACH, BLUE THEN WHITE PHASE TAPE FOR SIGNS, BLUE ONLY PHASE TAPE FOR TAXIWAY EDGE LIGHTS, FOR FASTER IDENTIFICATION AND MATCH EXISTING MANHOLE LAYOUTS.

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DESIGNED BY: SW DRAWN BY: JBW CHECKED BY: CA DATE: 05/05/2023 DWG SCALE: NTS			
SHEET OVERVIEW TITLE			
PSHING AND GROUNDING DETAILS			
SHEET REFERENCE NUMBER: EA-503 SHEET 23 OF 23			