

CITY OF PHOENIX

AVIATION DEPARTMENT

DESIGN & CONSTRUCTION SERVICES

PROJECT NAME:

**PHOENIX GOODYEAR AIRPORT TAXIWAY A
REHABILITATION AND STRENGTHENING PROJECT**

PROJECT NUMBER:

AV41000075-IFAA

FAA AIP NUMBER:

3-04-0018-023-2018



MAYOR
GREG STANTON

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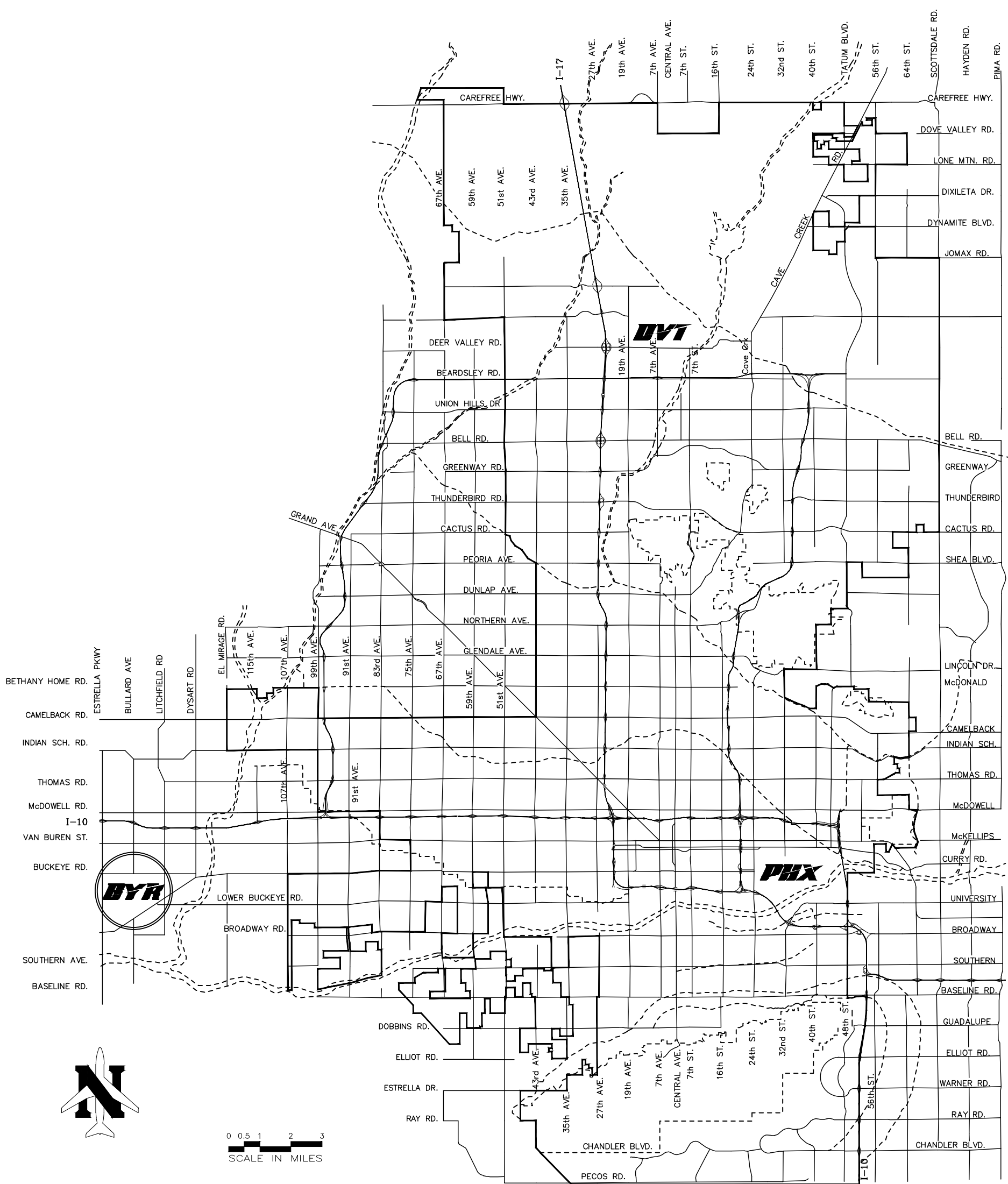
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CITY ENGINEER KINI KNUDSON, P.E.

APPROVALS KYLE KOTCHOU

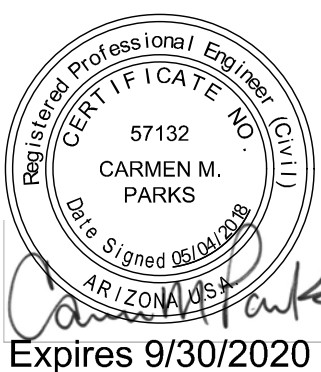
ACTING DEPUTY AVIATION DIRECTOR
DESIGN & CONSTRUCTION SERVICES DIVISION

DATE



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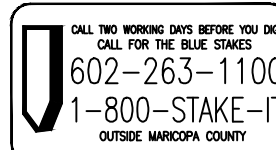
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AV41000075-IFAA **FAA NO. 3-04-0018-023-2018**



















PHX AVT CYR
CITY OF PHOENIX AVIATION DEPARTMENT

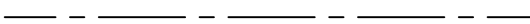






















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CIVIL SYMBOLS LEGEND

EXIST	NEW	DESCRIPTION
		SURVEY MONUMENT
		BORING LOCATION
		SPOT ELEVATION
		SANITARY SEWER MANHOLE
		STORM SEWER MANHOLE
		DRAINAGE INLET
		ELECTRICAL JUNCTION CAN
		MONITORING WELL
		CAP

LINE TYPE	DESCRIPTION
	CENTERLINE
	EXISTING EDGE OF STRUCTURAL PAVEMENT
	PROPOSED EDGE AC SHOULDER
	EXISTING CURB AND GUTTER
	EXISTING CONDUIT
	PROPOSED CONDUIT
	EXISTING FUEL LINE
	EXISTING GAS LINE
	EXISTING SANITARY SEWER
	EXISTING WATER LINE
	PROPOSED WATER LINE
	EXISTING STORM DRAIN
	PROPOSED STORM DRAIN
	RUNWAY SAFETY AREA (RSA) BOUNDARY
	RUNWAY OBJECT FREE AREA (ROFA) BOUNDARY
	EXISTING CHAIN LINK FENCE
	PROPOSED LOW LEVEL BARRICADES
	EXISTING UNDERGROUND ELECTRIC
	EXISTING CONTOUR
	PROPOSED CONTOUR
	EXISTING SWALE

ELECTRICAL SYMBOLS LEGEND

EXIST	NEW	DESCRIPTION
		RUNWAY EDGE LIGHT (ELEVATED)
		RUNWAY EDGE LIGHT (SEMI-FLUSH)
		RUNWAY THRESHOLD LIGHT
		RUNWAY DISTANCE (REMAINING TO GO SIGN)
		DUCT MARKER
		TAXIWAY CENTERLINE LIGHT
		TAXIWAY EDGE LIGHT (ELEVATED)
		TAXIWAY EDGE LIGHT (SEMI-FLUSH)
		TAXIWAY GUIDANCE SIGN (MODULES VARY)
		RUNWAY END IDENTIFIER LIGHT (REIL)
		PRECISION APPROACH PATH INDICATOR (PAPI)
		SUPPLEMENTAL WINDCONE
		MANHOLE
		HANDHOLE
		PULL BOX
		JUNCTION BOX
		GROUND ROD
		EARTH GROUND

AIRFIELD CIRCUITS (CKTS)

PPN - PAPI NORTH
PPS - PAPI SOUTH
RGL - RUNWAY GUARD LIGHT
RLN - REIL NORTH
RLS - REIL SOUTH
RW - RUNWAY
SG - SIGN
TWN - TAXIWAY NORTH
TWS - TAXIWAY SOUTH

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REVISIONS / SUBMISSIONS

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PHOENIX DEPT CYR
CITY OF PHOENIX AVIATION DEPARTMENT
R AIRPORT TW A REHAB &
STRENGTHENING
AV41000075-IFAA

Designed by:	KB
Drawn by:	TGJ
Checked by:	JM
Date:	05/2018
Dwg scale:	NTS
MMI Proj. No.: 8131.022	

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Reference
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G-002

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PER CITY OF PHOENIX CITY
CODE CHAPTER 2, SECTION
2-2-28, THESE PLANS ARE FOR
OFFICIAL USE ONLY AND MAY
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OTHERS EXCEPT AS
REQUIRED TO FULFILL THE
OBLIGATIONS OF
CONTRACTOR'S CONTRACT
WITH THE CITY OF PHOENIX.

DATE _____

SUBMISSIONS

REVISIONS /

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LYR
DEPARTMENT
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DVI
DENIX AVIATION
PORT TW A
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PHX
CITY OF PHOENIX
GYR AIRPORT
STR
AV41

W: KB
TGJ
: JM
05/2018
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Designed by:	
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INDEX & STRENGTHENING

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GENERAL NOTES

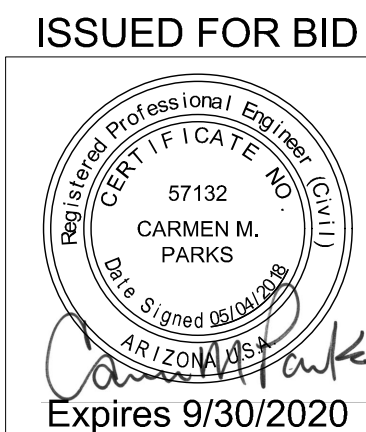
1. The Contractor shall comply with all federal and local safety regulations.
 2. Construction of this project shall be in accordance with all applicable Federal Aviation Administration's Standards and Specifications, City of Phoenix Supplementary Conditions, City of Phoenix Supplements, latest revision to the MAG Uniform Standard Governments' (MAG) Uniform standard specifications and Uniform Standard Details, latest revision. In the event of any conflict between the Contract Documents for this project and the MAG Standard Specifications and Details and/or the City of Phoenix Supplements to the MAG Standards, the Contract Documents for this project shall prevail.
 - a. The precedence of the Contract Documents are contained in the Supplementary Conditions.
 3. Calculated dimensions will govern over scaled dimensions.
 4. The Contractor shall comply with all City, County, and State traffic regulations concerning the use of streets and roadways for hauling. Any damage done to the roadways due to the Contractor's equipment or hauling operations shall be repaired to the Owner's satisfaction at no cost to the Owner.
 5. These plans show items to be constructed under this Contract. Actual field conditions, grades, locations, and other features may differ from conditions indicated in these documents.
 6. Haul routes - the location of haul routes on the Airport shall be as shown on the Construction Safety and Phasing Plan (CSPP) and shall be approved by the City of Phoenix Aviation Department and Phoenix Goodyear Airport (GYR). It is the Contractor's responsibility to coordinate off-site haul routes with the party having jurisdiction over the affected route. On-site haul routes will be maintained by the Contractor and shall be restored to their original condition upon completion of being used as a haul route. Fencing, drainage, grading or other work necessary to construct haul routes on the Airport is the Contractor's responsibility and must be approved by the Engineer and Airport prior to the work.
 7. Excess soils placement - excess soils will be kept on-site in designated area noted in Project Layout or as agreed upon between Contractor and City of Phoenix. The construction area shall be maintained in accordance with the Dust Control Plan. Concrete, concrete rubble, and unsuitable excavation shall be tested and disposed of off-site according to local laws and regulations. The Contractor shall be responsible for all placement and disposal. No material shall be wasted or stockpiled on the Airport unless noted above or approved by the Engineer and Airport.
- Costs associated with these materials are considered incidental to the contract. The Contractor shall provide written documentation to the City of Phoenix Aviation Department indicating the location and quantity of any material disposed of off Phoenix Goodyear Airport (GYR) property.
- Any removal items of value are to remain the property of Phoenix unless otherwise indicated.
8. Salvaged items - any items on the plans noted to be salvaged are to remain the property of Airport (see special provision specifications).
 9. All recycled items and material must be tracked and reported to the City of Phoenix.
 10. Stockpiled material shall be constrained in a manner to prevent movement as a result of aircraft operations or wind.
 11. Contractor generated debris, waste and loose material capable of causing damage to aircraft landing gear, propellers and rotors, or of being ingested by jet engines shall not be left on active movement areas. Material dropped within these areas shall be removed immediately and continuously by the Contractor during working hours.
 12. The Contractor shall be responsible for the preservation of all City of Phoenix and Goodyear Airport property and shall locate and protect carefully from damage or disturbance all benchmarks, land monuments and property markers. If damage or disturbance to property does occur during the work, the Contractor shall restore at his own expense, such property to a condition similar or equal to that existing before such damage or disturbance was done by rebuilding or restoring as directed by the City of Phoenix Aviation Department, and Goodyear Airport and the Engineer.
 13. The Contractor is advised that other construction may be in progress during all or part of this project. **The Contractor shall coordinate his work with the work of other Contractors at GYR.** See Contract Documents for other requirements and procedures to be followed during construction.
 14. The Contractor is responsible for all construction surveying. Any deviations from existing grades and/or locations as shown on the plans shall be immediately reported to the Engineer and Airport. Existing Airport survey monuments are located throughout the construction area. The Contractor shall at his expense have a Registered Land Surveyor replace any disturbed monument using first order techniques. Replaced monuments shall be located at least 10' but not more than 50' from the original monument.
 15. Contractor shall establish temporary benchmarks (TBM) at intervals not greater than 1000' along the project prior to beginning any construction requiring locations or grades. TBM's shall be placed where they will not be disturbed by construction. TBM data shall be provided to the Engineer.
 16. Safety and security - safety and security is the Contractor's responsibility and shall be coordinated with the FAA tower personnel, Airport operations, City of Phoenix Aviation Department, Goodyear Airport, the State, and the Engineer. See Construction Safety and Phasing Plan (CSPP) for requirements of Goodyear Airport.
 17. The Contractor shall not enter onto any area outside of the construction limits, staging areas or designated haul routes without the written approval of the Engineer and Airport.
 18. The Contractor shall notify the Goodyear Airport and City of Phoenix Aviation Department in writing, through the Engineer, a minimum of seventy-two (72) hours in advance to obtain clearance for work. The

Contractor shall submit a Critical Path Method (CPM) schedule for approval at the pre-construction conference.

19. The Owner reserves the right to make revisions to the finished elevations, gradients, and locations. If changes are necessary, the Owner/Engineer will furnish a revised grading or paving plan. Unit prices shall govern for revised quantities.
20. Specifications are provided which require the Contractor to apply water, chemicals, vegetation or other materials to prevent the occurrence of dust which is objectionable to the operations or users of the area. These shall include but not be limited to Airport Operations, Maintenance, Aircraft Operations, and Airfield Operations, and Land Side Operations. The Contractor shall also discontinue operations, which violate existing laws and regulations or create a unique hazard to air traffic. All cost for controlling dust or pollutants to the air of any kind shall be incidental to the Contract.
21. Prior to the Notice to Proceed, the Dust Control Plan and Notice of Intent forms shall be submitted to the City of Phoenix before being submitted to the County and State.
22. Existing utility information, lighting ducts, and cables shown on the plans concerning the type size, and location were compiled based on a ground survey and the best available utility records to the Engineer and Airport. The Contractor shall provide a utility locator and verify the actual location prior to construction. It shall be the responsibility of the Contractor to protect all existing utilities in place unless noted otherwise or specified. The Owner and Engineer bear no responsibility for utilities not shown on the plans or not in the location shown on the plans. Any and all damage to existing utilities shall be repaired at the Contractor's expense. Excavation immediately near utilities shall be done by hand. Utilities interfering with construction shall be reset or relocated by the utility company concerned unless noted otherwise. Contractor shall contact the following utility companies at least seventy-two (72) hours prior to beginning construction:
- | | | |
|--------------------------------------|----------------|------------------------------|
| Arizona Public Service | (602) 371-6140 | Contact: Operator |
| FAA Facilities | (520) 429-9432 | Contact: Mark Farrington |
| Phone | (866) 864-2255 | CenturyLink |
| Gas | (877) 860-6020 | Southwest Gas |
| COP Environmental | (602) 273-3396 | Contact: Rebecca Godley |
| All Emergency, Fire, Police, Medical | (602) 273-3311 | Contact: Operator |
| COP Communications | (602) 273-3300 | Contact: Operator |
| COP Communications | (602) 273-3302 | Contact: Operator |
| COP Comm Center Work Order | (602) 273-2000 | Contact: Operator |
| Local GYR Tower | (602) 379-6565 | Contact: Dan Moss |
| Goodyear Tire & Rubber | (602) 760-2450 | Contact: Paula Chang Panzino |
| Haley & Aldrich | (602) 370-3443 | Contact: Pejman Eshraghi |
- (Project Manager Environmental/Remediation - Under contract with Goodyear Tire & Rubber)
23. Power, control cables and fixtures for airfield lighting and navigational aids may be located in the construction areas. The Contractor's personnel shall become familiar with these cable and fixture locations and keep vehicles and equipment clear of them at all times. Adherence to aviation lockout/tagout procedures shall be strictly followed. (See Electrical Plans and specifications for Procedures).
24. Any damage to the existing Airport lighting system caused by construction operations shall be immediately reported to the Owner and repaired by the Contractor at its own expense.
25. The Contractor shall maintain access to all fire hydrants at all times.
26. The Contractor shall not draw water from any fire hydrant for use on the work without first obtaining a written permit from the controlling Fire Department.
27. The Contractor will be required to coordinate with the Goodyear Airport and City of Phoenix Aviation Department on the precise location and limits of the staging area, as well as any special requirements for fencing, security or access. It is the Contractor's responsibility to provide all utilities and hookups necessary for the Contractor's use and for all project field offices as required in Specification M-002.
28. The exact limits, lighting, and security requirements of the Contractor's staging and storage area shall be established by the Contractor with the approval of the Engineer and Airport in the areas generally as shown on the plans. Any and all required utilities for the Contractor's operations shall be arranged for and paid for by the Contractor and paid directly to the appropriate utility. Utility arrangements shall be subject to the approval of the Engineer and Airport. The Contractor shall use the storage and staging areas shown on the CSPP for their shop, material and equipment storage and other project related activities. All costs associated with preparing the storage and staging area site shall be borne by the Contractor. This includes, but is not limited to, clearing and grading of the site, construction of all temporary utilities, access roads, all security fencing, clean-up and restoration of site to original condition.
29. The Contractor shall investigate the availability of an adequate supply of suitable water, make all arrangements (permits) for the purchase of the water, and provide necessary facilities to furnish water for use during construction, solely at their expense.
30. The Contractor shall complete clean up and restoration of entire project area, including staging and storage areas, as approved by the Engineer and Airport within 15 days of Contract completion date.
31. The Contractor shall conduct the final cleaning of affected Airport pavements prior to reopening the pavements to air traffic. The Contractor is responsible for continuous daily cleanup of their work area. The Contractor shall conduct power vacuum cleaning of affected Airport pavements prior to reopening each phase to air traffic, and for active taxiways and runways immediately following any access onto or

crossing of the pavement by construction traffic.

32. The Contractor's Superintendent shall be on the construction site at all times during working hours while this project is in progress. The Contractor's Superintendent shall be the Designated Responsible Contractor Representative and shall be available in case of emergencies on a 24-hour daily basis.
33. The Contractor's Superintendent shall be on the construction site at all times during working hours while this project is in progress. The Contractor's Superintendent shall be the Designated Responsible Contractor Representative and shall be available in case of emergencies on a 24-hour daily basis.
34. Most construction work in this project will occur within the Air Operations Area (AOA) and is subject to operational safety and security requirements of the Goodyear Airport and the FAA. Any additional requirements as may be deemed necessary by Goodyear Airport Management or the FAA will be complied with by the Contractor at no cost to the Owner.
35. The Contractor shall be responsible for transporting employees to and from the project site if necessary.
36. Roads used as Contractor routes may be used by other Airport vehicles. The Contractor shall not interfere with other vehicle traffic and shall yield to emergency vehicles along any of the Airport or public roads.
37. Each Contractor/Subcontractor, including each Contractor/Subcontractor employee, who operates a ground vehicle on any portion of the AOA at the Airport must be familiar with:
- GYR rules and regulations.
 - GYR procedures for the operation of ground vehicles.
 - The consequences of non-compliance with the GYR rules and regulations and/or procedures for the operation of ground vehicles, and must attend a movement area operating procedures class.
38. All Contractor vehicles, including hauling vehicles, construction equipment (ie, rollers, backhoes, scrapers, etc.) that are authorized to operate on the Airport within the designated limits of construction or haul routes as defined herein, shall display in full view above the vehicle a 3'x3' or larger orange and white checkerboard flag, each checkerboard color being 1' square. When operating during periods of darkness or limited visibility, Contractor's vehicles shall be equipped with rotating or flashing amber lights. During such periods, hauling vehicles not so equipped shall be escorted by a vehicle so supplied.
39. All vehicles and equipment shall be kept within the work areas established for each work shift unless traveling to or from the site. All vehicles and equipment shall be parked in staging areas as approved by the Engineer and Airport.
40. Contractor shall provide trained flaggers to coordinate and control construction traffic when operating across any active taxiway. Flaggers shall have the sole responsibility of flagging at all times and shall be equipped with radios on ground control frequency and shall allow traffic crossings on active taxiways only upon specific authorization by Air Traffic Control. Flaggers shall also be provided for controlling equipment entering and leaving the project area.
41. The Contractor shall at no time cross an active runway or taxiway unless escorted by a Goodyear radio escort as defined in the specifications. Violation could result in permanent ejection from the Airport property and/or the assessment of fines.
42. Construction equipment shall not penetrate the height restriction for FAR Part 77. Contractor shall comply with height limits shown on the CSPP or FAA form 7460-1.
43. All surface runoff from the staging area or the areas under construction shall be collected and adequately filtered before discharge into the existing drainage system. Contractor shall mitigate the impacts of runoff from the site in conformance with the Specifications.
44. No adjustment for additional compensation and time will be made for time lost in work areas contiguous to taxiways and taxilanes due to aircraft traffic.
45. Contractor shall note on the Record Drawings any and all pipes, ducts and cables found during excavation. Indicate exact position, elevation, direction, size, material, purpose and active status, if known.
46. Contractor shall maintain the water and the solar lights in all placed low level barricades on a daily basis. They shall also fuel and maintain all generators essential to the operation of the lighted X's.
47. In addition to General Note 20 requirements, the Contractor's attention is directed to the Special Provisions regarding dust control of construction activities. Dust control requirements are also contained in Technical Specifications item P-156(A) and individual technical specification paragraphs related to foreign object debris (FOD) control, base course placement and paving.
48. If an active burrowing owl burrow is discovered within 100 feet of the construction zone during construction, the City of Phoenix Office of Environmental Programs (602-534-1775) shall be contacted immediately and a 100-foot buffer zone shall be established around the active burrow within which all heavy machinery and foot traffic will be excluded until the owls can be relocated by Wild At Heart. Contact Mary Hart at (480) 775-4753.
49. Testing for the presence of lead and asbestos must be completed prior to the start of construction activity. Areas found to be contaminated must not be disturbed. COP Environmental and the General Contractor will initiate the proper remediation process.
- ISSUED FOR BIDDING
- Professional Engineer
EXPIRATION DATE



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PER CITY OF PHOENIX CITY
CODE CHAPTER 2, SECTION
2-28, THESE PLANS ARE FOR
OFFICIAL USE ONLY AND MAY
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OTHERS EXCEPT AS
REQUIRED TO FULFILL THE
OBLIGATIONS OF
CONTRACTOR'S CONTRACT
WITH THE CITY OF PHOENIX.

NO.	REVISIONS / SUBMISSIONS	DATE

PHX DVT CYR
CITY OF PHOENIX AVIATION DEPARTMENT
GYR AIRPORT TW A REHAB &
STRENGTHENING
AV41000075-IFAA

Designed by: CMP
Drawn by: TÇJ
Checked by: JM
Date: 05/2018
Dwg scale: N.T.S.
MMI Proj. No.: 8131.022

GENERAL NOTES

Sheet
Reference
Number:

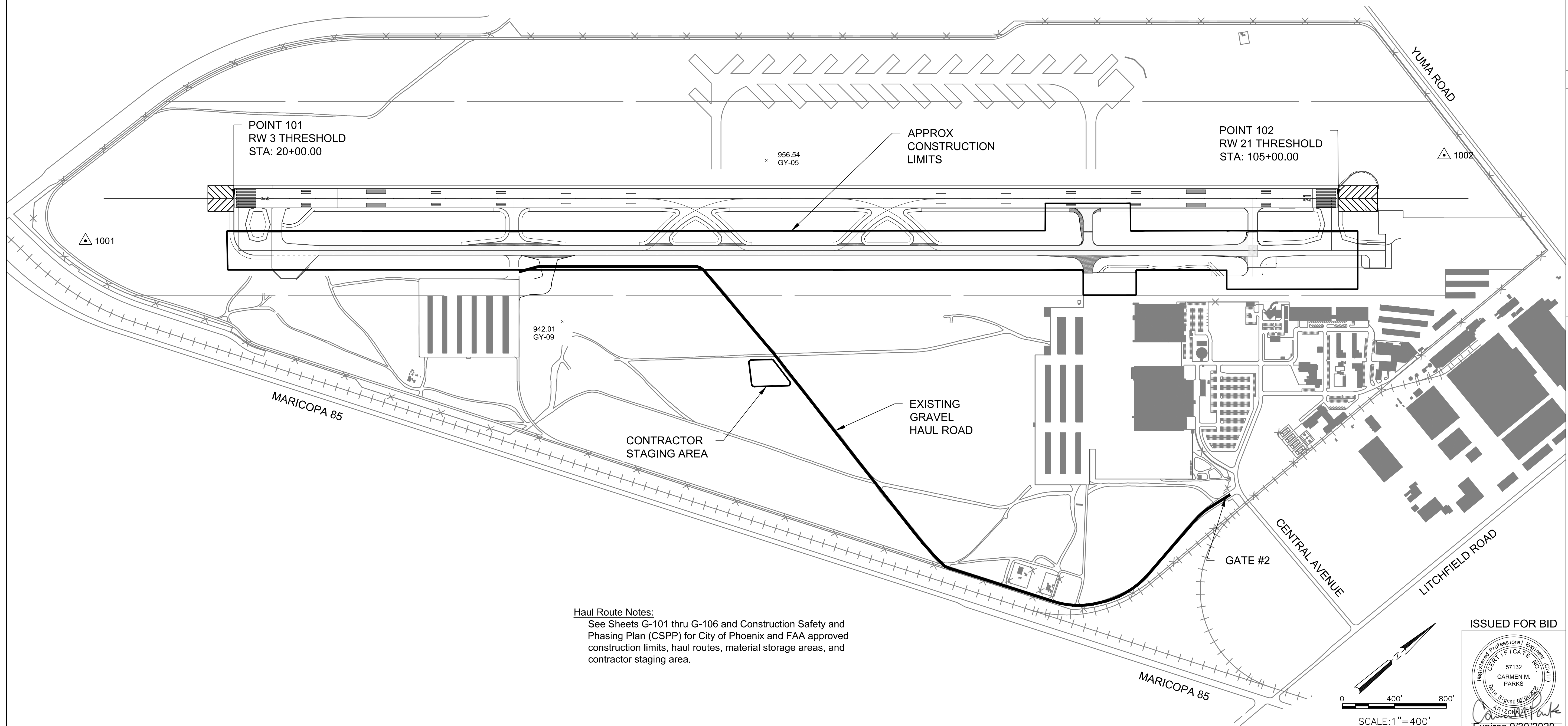
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1. AZTEC CONTROL NETWORK COORDINATES LISTED ARE NAD 83 (1992 EPOCH) STATE PLANE GROUND COORDINATES, ARIZONA CENTRAL ZONE, STANDARD TRANSVERSE MERCATOR PROJECTION, WITH A SCALE ORIGIN POINT OF X=0.000, Y=0.000, USING A GRID ADJUSTMENT FACTOR OF 1.00012. THESE COORDINATES CAN BE UTILIZED AS GROUND DATUM. TO CONVERT BACK TO GRID COORDINATES DIVIDE THESE VALUES BY 1.00012.
2. UNITS = INTERNATIONAL FEET (1 FOOT = .3048 METER EXACTLY)
3. THE FIELD PORTION OF THE RUNWAY SHIFT SURVEY WAS PERFORMED DURING THE MONTH OF MAY 2013.
4. THE FIELD PORTION OF THE TAXIWAY A REHAB PROJECT WAS PERFORMED DURING THE MONTH OF JANUARY 2018.
5. THE COORDINATES PRESENTED ON THIS SURVEY ARE SHOWN TO FOUR DECIMAL PLACES FOR CALCULATION PURPOSES AND ARE NOT A REPRESENTATION OF THE PRECISION OF THE SURVEY MEASUREMENTS.

GROUND CONTROL MONUMENTS (Used For Design)				
AZTEC CONTROL NETWORK DATA				
POINT	NORTHING	EASTING	ELEVATION	
GY-05	882011.8247	559795.3259	956.62	BRASS CAP IN CONCRETE
GY-09	880011.8159	559795.3547	942.01	BRASS CAP IN CONCRETE
101	878617.3650	557481.1860	942.49	BRASS CAP IN CONCRETE
102	885283.8830	562754.4420	968.75	BRASS CAP IN CONCRETE

GEODETIC CONTROL (ESTABLISHED IN NOVEMBER 2017)					
NAME	NORTHING	EASTING	ELEVATION	DESCRIPTION	RECOVERY REMARKS
1001	877519.48	557028.86	938.76	TSM	2.5" WOOLPERT ALUMINUM
1002	886129.09	562998.32	972.40	TSM	2.5" WOOLPERT ALUMINUM
SALT	918012.53	593020.34	1061.82	BM	ASDT DISC
Z 519	880839.57	577185.68	972.43	BM	NGS VERTICAL CONTROL MARK DISK



Haul Route Notes:
See Sheets G-101 thru G-106 and Construction Safety and Phasing Plan (CSPP) for City of Phoenix and FAA approved construction limits, haul routes, material storage areas, and contractor staging area.

**Morrison
Maierle**
engineers • surveyors • planners • scientists

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Phoenix, AZ 85034
602.273.2800
www.m-m.net

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OTHERS EXCEPT AS
REQUIRED TO FULFILL THE
OBLIGATIONS OF
CONTRACTOR'S CONTRACT
WITH THE CITY OF PHOENIX.

NO.	REVISIONS / SUBMISSIONS	DATE

PHX **AV1** **LYR**
CITY OF PHOENIX AVIATION DEPARTMENT
GYR AIRPORT TW A REHAB &
STRENGTHENING
AV41000075-IFAA

Drawn by: TGJ
Checked by: JM
Date: 05/2018
Dwg scale: 1" = 400'
MMI Proj. No.: 8131.022

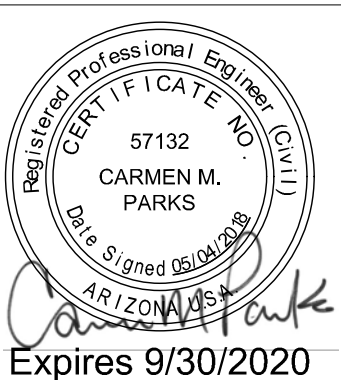
AIRPORT SURVEY CONTROL, PROJECT LAYOUT & HAUL ROUTES

Sheet
Reference
Number:

G-005

Sheet 05 of 66

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The image displays two views of a traffic safety barrier. The left view is a side profile, showing the barrier's length and its distinctive orange and white diagonal stripes. It features a red reflective marker on top and a red reflective cap on the end. The right view is a front-facing perspective, highlighting the barrier's width and the same safety features: orange and white stripes, a red reflective marker, and a red reflective cap.

BARRICADE DIMENSIONS: 10"H x 96"L x 10"W

CONSTRUCTION STAGING *

LOW LEVEL BARRICADES
(ONE FLASHING RED LIGHT)

RUNWAY LIGHTED X EXAMPLES



A large, illuminated X-shaped light structure, possibly a runway or taxiway marker, is visible at night. The structure is composed of many small, bright lights arranged in a large 'X' pattern. A small vehicle, likely a car or truck, is positioned in the center of the 'X', directly in front of the light structure. The background is dark, suggesting a night scene.

NIGHTTIME LIGHTED X

PATTERN	DIMENSION		A	B	C	D	E	F	G
	SYMBOL	TYPE							
A	CLOSED RUNWAY		10' [3M]*	25' [7.5M]	60' [18M]	-	-	-	-
B	CLOSED RUNWAY (ALTERNATE)		-	-	-	48' [14.4M]	120' [36M]	6' [1.8M]	129.25' [39M]
C	CLOSED TAXIWAY		5' [1.5M]**	12.5' [3.8M]	30' [9M]	-	-	-	-
D	CLOSED TAXIWAY (ALTERNATE)		-	-	-	24' [7.2M]	60' [18M]	3' [0.9M]	64.6' [20M]

ALL DIMENSIONS ARE IN FEET AND METERS (M)

NOTE: BOTH SYMBOLS ARE ALWAYS PAINTED YELLOW.

1. CLOSURES, VEHICLE MARKING, COMMUNICATIONS AND OTHER SAFETY REQUIREMENTS SHALL BE IN PROFORMANCE WITH THE CONTRACTOR'S SAFETY PLAN COMPLIANCE DOCUMENT, WHICH IS SPECIFIED IN THE CONTRACT. THE SAFETY PLAN COMPLIANCE DOCUMENT SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO NOTICE-TO-PROCEED BEING ISSUED. THE SAFETY PLAN COMPLIANCE DOCUMENT WILL BE DISCUSSED AT THE PRE-CONSTRUCTION CONFERENCE. THE SAFETY PLAN COMPLIANCE DOCUMENT AND/OR THE WORK PHASING SHOWN HEREON MAY BE MODIFIED AT ANY TIME BY THE AIRPORT MANAGER, OR THE GYR AVIATION SUPERVISOR.
2. THE AIRPORT CONTACT FOR THIS PROJECT IS THE AIRPORT MANAGER, BRADLEY HAGAN, (602) 683-3630. ALL NOTAMS REQUIRED DURING CONSTRUCTION SHALL BE FILED BY THE GYR AVIATION SUPERVISOR OR HIS AUTHORIZED AGENT.
3. THE ENGINEER FOR THIS PROJECT IS MORRISON-MAIERLE, INC. THE PROJECT MANAGER FOR MORRISON-MAIERLE, INC. IS CARMEN PARKS, 480-319-5744.
4. THE CONTRACTOR SHALL NOTIFY THE GYR AVIATION SUPERVISOR AND THE ENGINEER A MINIMUM OF 72 HOURS BEFORE COMMENCING ANY CONSTRUCTION THAT WILL HAVE DIRECT OR INDIRECT IMPACT TO AIRCRAFT OPERATIONS OR INVOLVE MOVEMENT OF MEN AND EQUIPMENT IN AIR OPERATIONS AREAS (AOA). AT NO TIME SHALL THE CONTRACTOR PENETRATE THE RUNWAY OBSTACLE FREE ZONE (ROFZ), RUNWAY OBJECT FREE AREA (ROFA), RUNWAY SAFETY AREA (RSA), TAXIWAY OBJECT FREE AREA (TOFA) OR THE TAXIWAY SAFETY AREA (TSA) WITHOUT PRIOR APPROVAL FROM THE ENGINEER OR GYR AVIATION SUPERVISOR. THIS PROJECT WILL REQUIRE PARTIAL AND/OR COMPLETE RUNWAY CLOSURES. REFER TO SHEET G-102 FOR CONSTRUCTION INFORMATION, INCLUDING HAUL ROADS, STAGING AREA, AND LOCATIONS FOR PLACEMENT OF MILLINGS.
5. EQUIPMENT MAINTENANCE, FUEL STORAGE AND OTHER ACTIVITIES OF THE CONTRACTOR CONDUCTED ON AIRPORT PROPERTY WHICH MAY DIRECTLY OR INDIRECTLY IMPACT AIR OPERATIONS OR SAFETY SHALL BE SUBJECT TO REVIEW BY THE AIRPORT MANAGER OR THE AVIATION SUPERVISOR. THE AIRPORT MANAGER AND THE AVIATION SUPERVISOR SHALL HAVE THE AUTHORITY TO REQUIRE THE CONTRACTOR TO TAKE REASONABLE PRECAUTIONS TO PROTECT THE INTERESTS OF THE TOWN OF GOODYEAR, THE CITY OF PHOENIX AND THE USERS OF PHOENIX-GOODYEAR AIRPORT.
6. TEMPORARILY STOCKPILED MATERIALS AND CONSTRUCTION EQUIPMENT SHALL BE PROMINENTLY MARKED AND LIGHTED DURING HOURS OF RESTRICTED VISIBILITY OR DARKNESS. STOCKPILES SHALL BE REMOVED ON A DAILY BASIS, OR PRIOR TO OPENING THE RUNWAY FOR NORMAL AIRCRAFT OPERATIONS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING ONSITE UTILITIES AND OWNERSHIP OF UTILITIES PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR DETAILED UTILITY LOCATIONS IN ALL WORK AREAS.
8. CONTRACTOR STAGING AREA AND FIELD OFFICES/TRAILERS SHALL BE LOCATED AS DEPICTED ON SHEET G-102. THE LOCATIONS ARE SUBJECT TO APPROVAL BY THE AIRPORT MANAGER AND WILL BE FINALIZED AT THE PRE-CONSTRUCTION CONFERENCE.
9. ACCESS TO THE AIRPORT BY THE CONTRACTOR, SUBCONTRACTORS AND SUPPLIERS IS LIMITED TO THE LOCATION SHOWN ON SHEET G-102 AND IS SUBJECT TO APPROVAL BY THE AIRPORT MANAGER. THE CONTRACTOR SHALL ENSURE ALL ACCESS GATES ARE CLOSED AND SECURE AFTER ENTERING OR EXITING THE AIRPORT. CONTRACTOR, SUBCONTRACTORS, AND SUPPLIERS SHALL ADHERE TO THE HAUL ROUTE(S) IDENTIFIED ON THE DRAWINGS. THE IDENTIFIED ROUTES ARE SUBJECT TO THE AIRPORT MANAGER'S APPROVAL. ACCESS ACROSS THE APRON AREAS, TAXIWAYS OR RUNWAY IS STRICTLY PROHIBITED. THE CONTRACTOR SHALL CONTACT THE AIRPORT MANAGER OR ENGINEER IF THERE IS NEED TO CROSS ACTIVE AIRFIELD PAVEMENT.
10. THE CONTRACTOR SHALL LIMIT OPERATIONS TO THE CONSTRUCTION AREAS AND PHASING IDENTIFIED IN THE PLANS. ALL OTHER AREAS OF THE AIRPORT ARE RESTRICTED. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE AWARE OF NAVAID LOCATIONS AND SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING NAVAID FACILITIES. THE CONTRACTOR SHALL RECEIVE PERMISSION FROM THE AIRPORT MANAGER OR HIS AUTHORIZED AGENT PRIOR TO WORKING OR TRAVELING IN UNAUTHORIZED AREAS OF THE AIRPORT.
11. ALL WORK AND MATERIALS NECESSARY TO MEET THE REQUIREMENTS OF THE CONSTRUCTION SAFETY AND PHASING PLAN ARE SUMMARIZED IN ITEM M-003-8.1 AIRPORT SAFETY AND SECURITY.

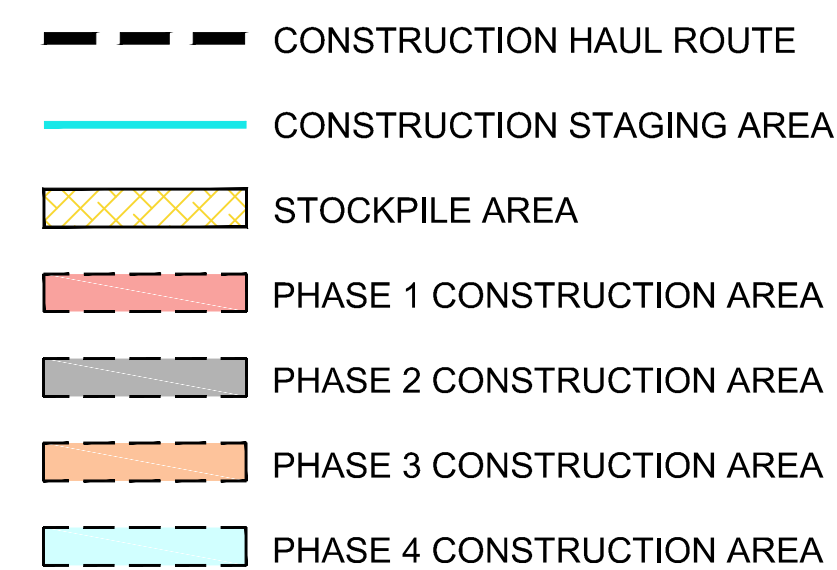
RUNWAY OR TAXIWAY CENTERLINE

ALTERNATE

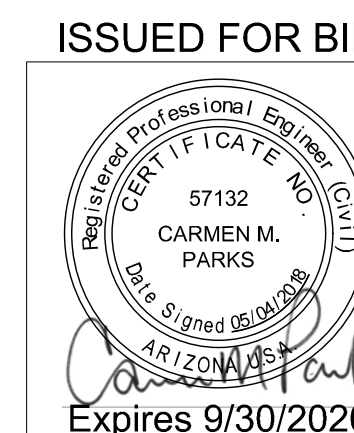
Registered Professional Engineer (Civil)
 CERTIFICATE NO. 57132
 CARMEN M. PARKS
 Date Signed 05/04/2020
 ARIZONA
 Expires 9/30/2020

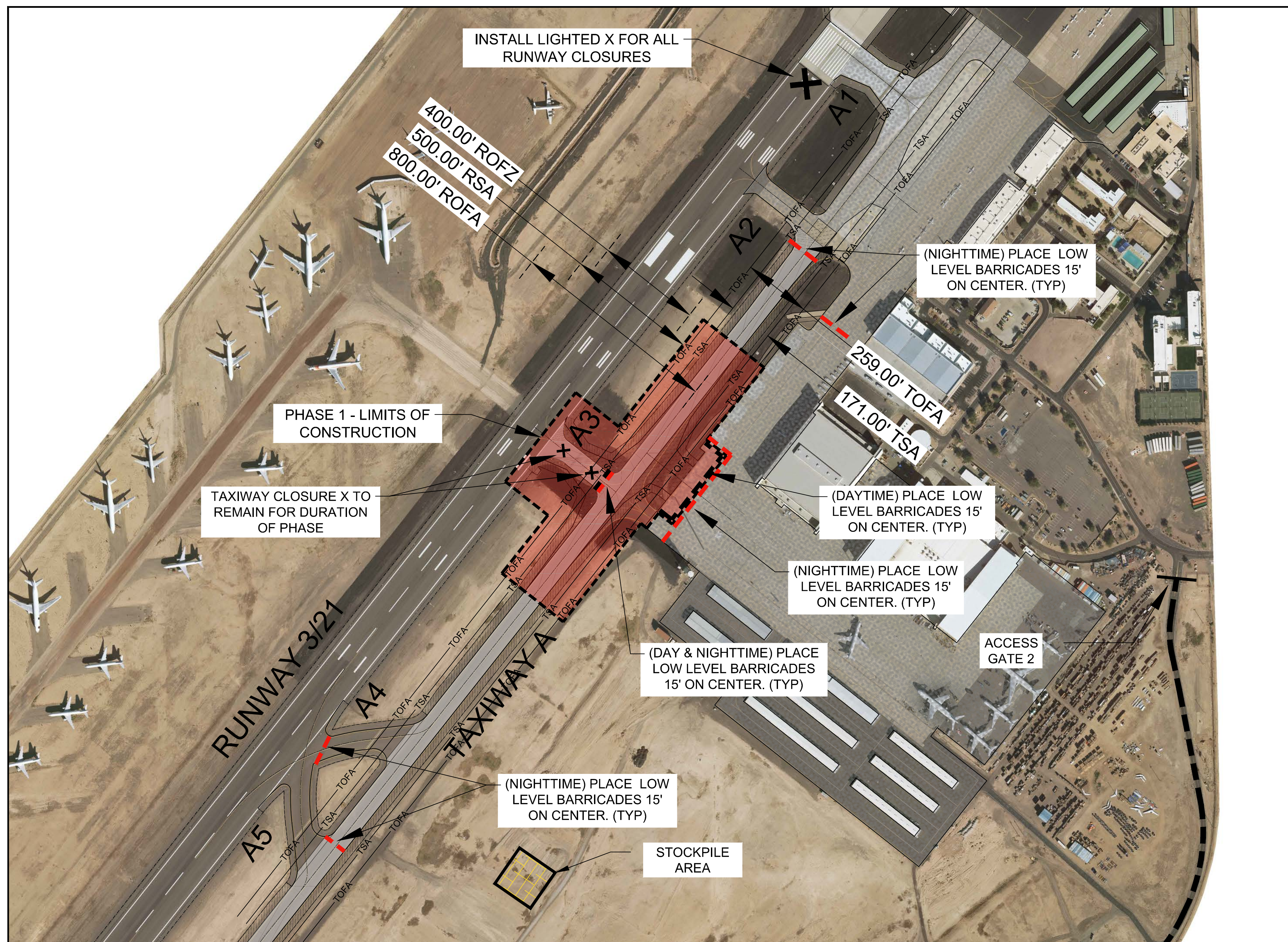
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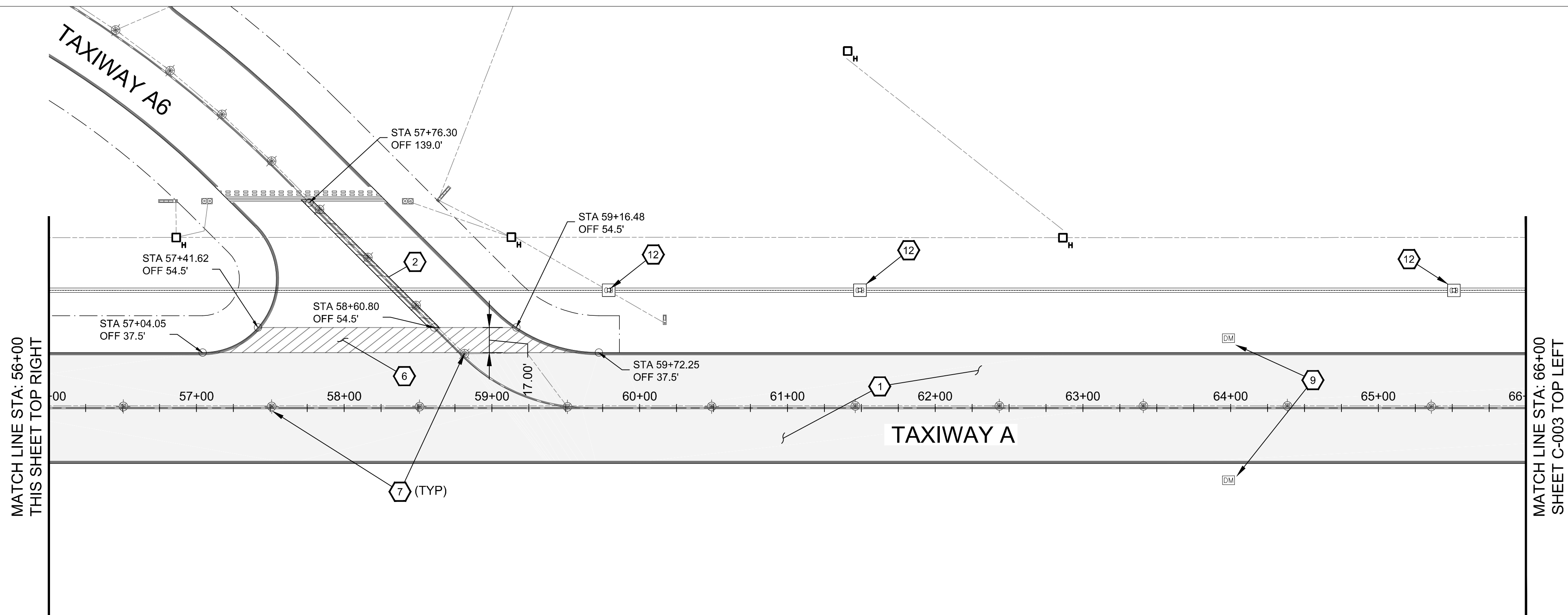
1. Runway 3/21 shall be closed when construction is taking place within the RSA.
2. Taxiway A rehabilitation work is limited to areas shown on the plans.
3. All millings shall be placed adjacent to existing paved surfaces or as directed by the GYR Aviation Supervisor. Contractor shall spread, roll, and stabilize millings in the infield areas, or as directed.
4. Coordinate closure NOTAM with GYR Aviation Supervisor. Contractor must provide a 72 hour notice.
5. Closure X's shall be placed as shown and additional barricading will be required when directed by GYR Aviation Supervisor or Engineer to define work area or aircraft movement areas. Lighted X's shall be supplied, set-up and maintained by Airport Operations Personnel.
6. Following completion of the rehabilitation work, pavement markings shall be placed as indicated on the plans.
7. Taxiway access for milling and overlay operations shall be from the designated haul route to Taxiway A. Barricades and flag persons will be required as necessary to direct traffic.

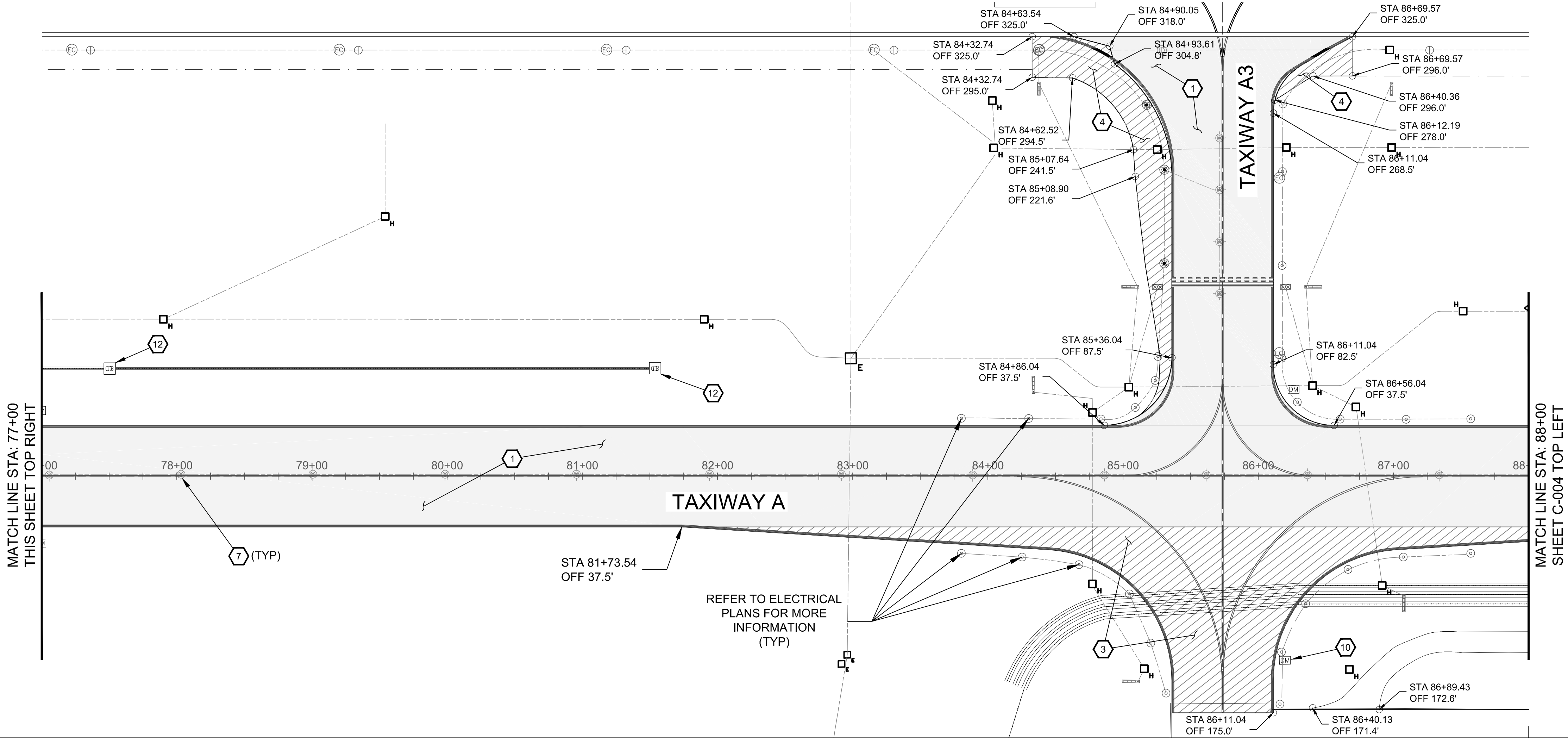
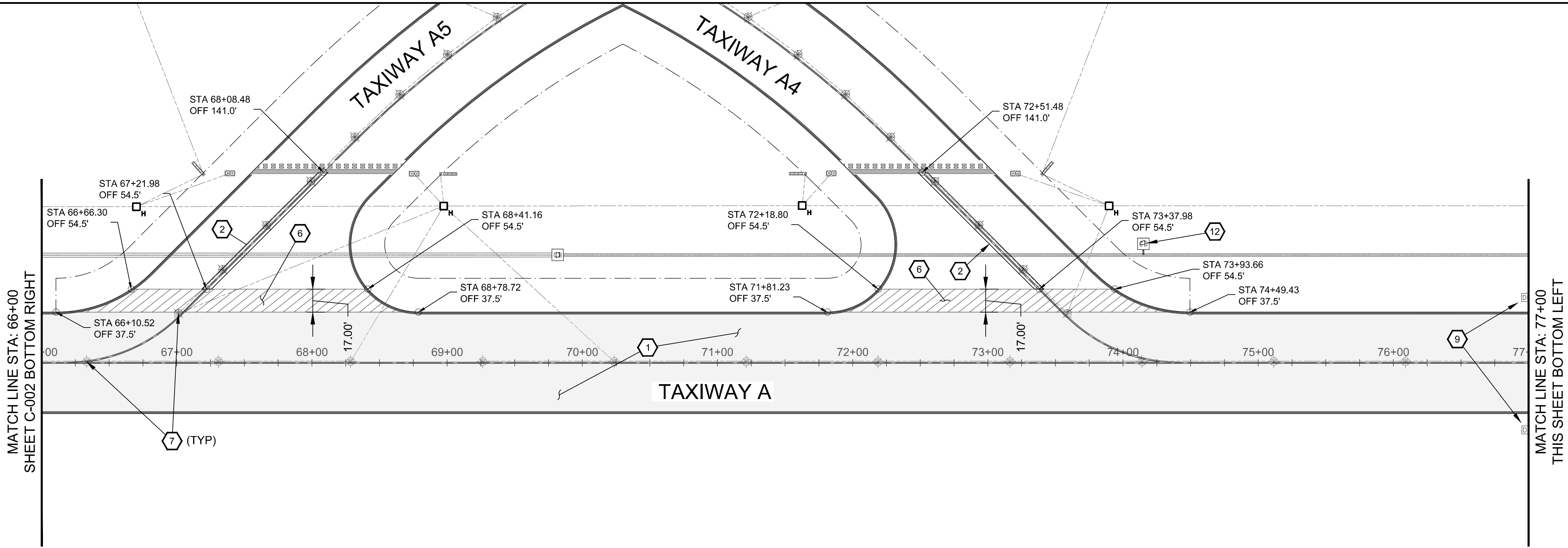


1. RUNWAY 3/21 AND TAXIWAY CLOSURES:
 - a. Runway Safety Area (RSA) 250' from Runway Centerline
 - b. Runway Object Free Area (ROFA) 400' from Runway Centerline
 - c. Runway Obstacle Free Zone (ROFZ) 200' from Runway Centerline
2. TAXIWAY A GROUP IV EXISTING CRITICAL AREAS:
 - a. Taxiway Safety Area (TSA) 85.5' from Taxiway Centerline
 - b. Taxiway Object Free Area (TOFA) 129.5' from Taxiway Centerline
3. RUNWAY 3/21 AND TAXIWAY CLOSURES:
 - a. Runway and taxiway closures will be necessary when working within RSA and/or TSA. Taxiway A closures typically allowed only at night 2100 hrs to 0600 hrs, Sunday through Thursday, and as longer duration rolling closures as specified in 3b below.
 - b. The project schedule anticipates three separate rolling closures to complete the Taxiway A rehabilitation project:
 - i. Phase 1 will require one 57-hour rolling closure that includes a runway closure starting at 2100 Sunday night & reopening at 0600 Wednesday morning.
 - ii. Phase 2 will not require a runway closure. No work will take place within the RSA.
 - iii. Phases 3 & 4 will each require a 57-hour rolling closure of Taxiway A while the runway remains open starting at 2100 Sunday night & reopening at 0600 on Wednesday morning.
4. TAXIWAY REHABILITATION CONSTRUCTION NOTES:
 - a. Taxiway A pavement will be rehabilitated from existing edge of PCP STA 26+54 to the existing edge of PCCP at STA 98+04, a total of 71 LF by 75 FT wide plus the construction of 30-foot shoulders. Additionally, a 75' square concrete section along Taxiway A within the Taxiway A2 alignment will be reconstructed.
 - b. From the south, the four phase sections of Taxiway A to be rehabilitated are:
 - i. Phase 3 - STA 26+54 to STA 51+21 for a total of 2,467 LF.
 - ii. Phase 4 - STA 51+21 to STA 80+55 for a total of 2,934 LF.
 - iii. Phase 1 - STA 80+55 to STA 93+00 for a total of 1,245 LF.
 - iv. Phase 2 - STA 93+00 to STA 98+79 for a total of 579 LF.
 - c. 2" of PFC on Taxiway A shall be milled and replaced with 3" of P-40 asphalt concrete. Taxiway A and connector taxiway grades shall be transitioned as shown on the plans.
 - d. Temporary striping shall be placed on the new AC pavement at the conclusion of each rolling closure period. Permanent striping will be placed 30 days following the completion of Phase 4.
 - e. All phases will involve some electrical work as outlined on the subsequent sheets.



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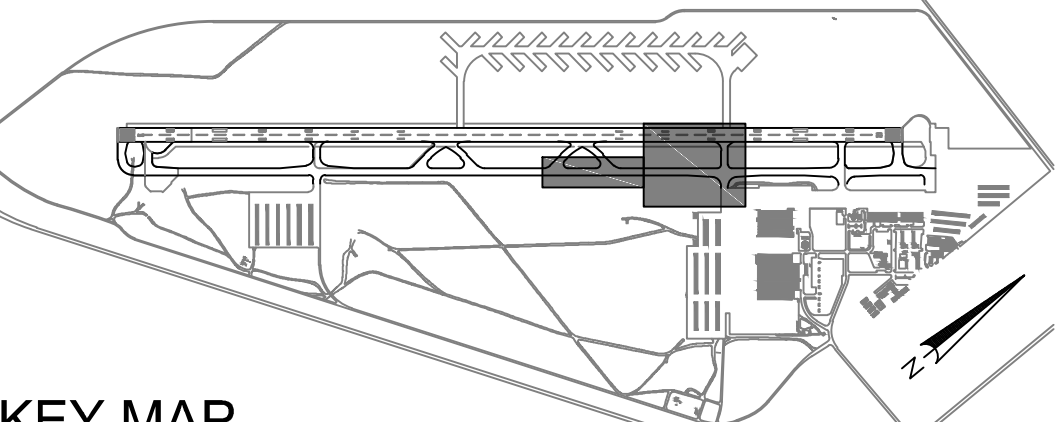


DEMOLITION KEY NOTES

- 1 MILL 2-INCH DEPTH TO REMOVE PFC AND STOCK PILE FOR AIRPORT USE.
- 2 OBLITERATE TAXIWAY CENTERLINE MARKINGS BETWEEN STATIONS & OFFSETS SHOWN ON THE PLAN.
- 3 DEMO EXISTING RAMP 3 TO LIMITS SHOWN. MILL AC PAVEMENT AND SPREAD, ROLL AND STABILIZE MILLINGS IN INFIELD AREAS, AS DIRECTED BY GYR OPERATIONS.
- 4 DEMO CONNECTOR TAXIWAY A3 SHOULDER TO LIMITS SHOWN. MILL AC AND STOCK PILE FOR AIRPORT USE.
- 6 MMILL CONNECTOR TAXIWAY AS SHOWN PER DETAIL 1 ON SHEET C-501.
- 7 REMOVE AND SALVAGE EXISTING FIXTURE MILL AROUND EXISTING TAXIWAY CENTERLINE LIGHT BASE CAN AND CONCRETE COLLAR (SEE ELECTRICAL).
- 9 REMOVE AND INSTALL NEW DUCT BANK MARKERS AS SHOWN ON ELECTRICAL CONSTRUCTION PLANS (2 EA).
- 10 REMOVE AND DISPOSE OF DUCT BANK MARKER (1 EA).
- 12 PROTECT EXISTING CATCH BASIN IN PLACE (3 EA).
- 13 DEMO EXISTING ASPHALT PAVEMENT TO LIMITS SHOWN.

DEMOLITION GENERAL NOTES

1. STATION AND OFFSET INFORMATION REFERENCE THE TAXIWAY A CENTERLINE.
2. ASPHALT CONCRETE SHALL BE MILLED TO THE LIMITS SHOWN ON THE PLANS.
3. PROTECT EXISTING PCCP DURING MILL AND OVERLAY OPERATIONS.
4. REMOVE ALL EXISTING CENTERLINE LIGHTS AND PROTECT EXISTING BASE CANS DURING MILLING OPERATIONS.
5. REFER TO ELECTRICAL SHEETS FOR MORE INFORMATION ABOUT TAXIWAY EDGE LIGHTS, CENTERLINE LIGHTS, HANDHOLES, DUCT MARKERS, CONDUIT RUNS, & SIGNS.
6. CONTRACTOR IS TO COORDINATE ALL PAINT REMOVAL WITH CITY OF PHOENIX AVIATION DEPARTMENT AND ENVIRONMENTAL DEPARTMENT PRIOR TO REMOVAL.
7. PAINT SHALL BE REMOVED USING WATER-BLASTING AND SHALL BE IN ACCORDANCE WITH FAA AC 150/5340-1L.
8. PAVEMENT DAMAGE DURING REMOVAL OF PAVEMENT MARKINGS SHALL BE REPAIRED/RESTORED AS AGREED TO BY PHOENIX AVIATION.
9. CONTRACTOR TO VERIFY THE LOCATION OF EXISTING UTILITIES, AIRFIELD LIGHTING DUCTS, CONDUIT, CONDUCTORS, AND STORM DRAINS BEFORE THE START OF ANY CONSTRUCTION ACTIVITIES.



KEY MAP
N.T.S.

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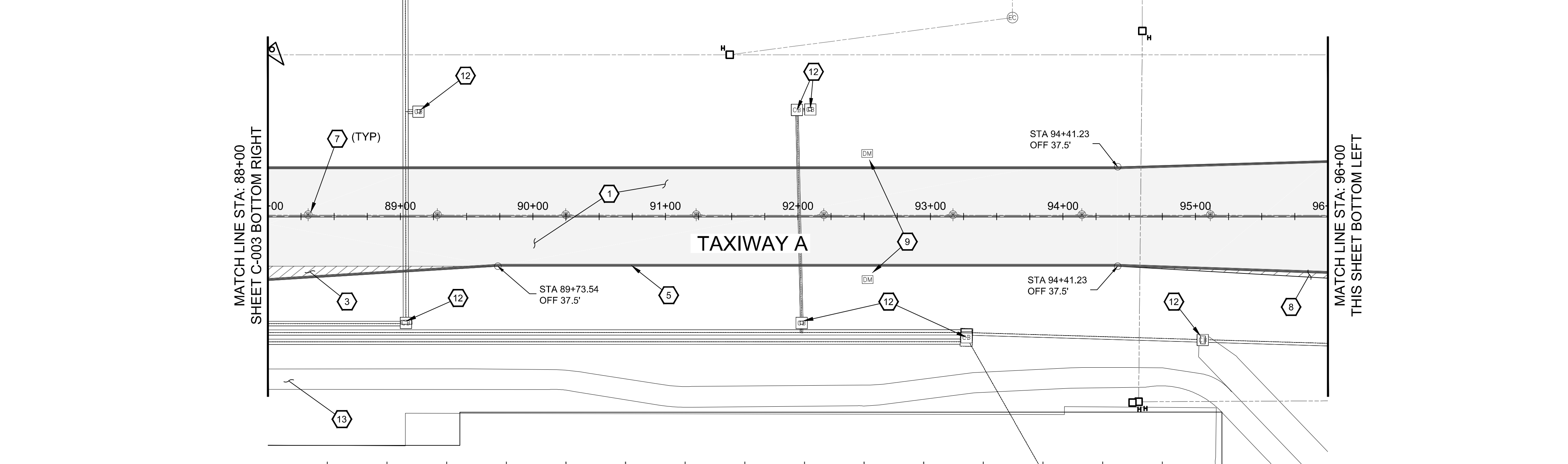
NO.	REVISIONS / SUBMISSIONS	DATE

PHX DVI CYR
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GYR AIRPORT TW A REHAB & STRENGTHENING
AV41000075-JFAA

Designed by: CMP	Drawn by: TQJ
Checked by: JM	Date: 05/20/18
Dwg scale: 1" = 50'	MMI Proj. No.: 8131.022

CIVIL DEMOLITION PLAN
STA 66+00 TO STA 88+00

Sheet Reference Number:
C-003
Sheet 14 of 66



GYR AIRPORT TW A REHAB & STRENGTHENING

CIVIL DEMOLITION PLAN

STA 88+00 TO STA 106+00

Sheet Reference Number:

C-004

Sheet 15 of 66

Designed by: CWP	Drawn by: TGU	Checked by: JM	Date: 05/2018	Dwg scale: 1" = 50'
MMI Proj. No.: 8131.022				

PHX AVIATION

CITY OF PHOENIX AVIATION DEPARTMENT

GYR AIRPORT TW A REHAB & STRENGTHENING

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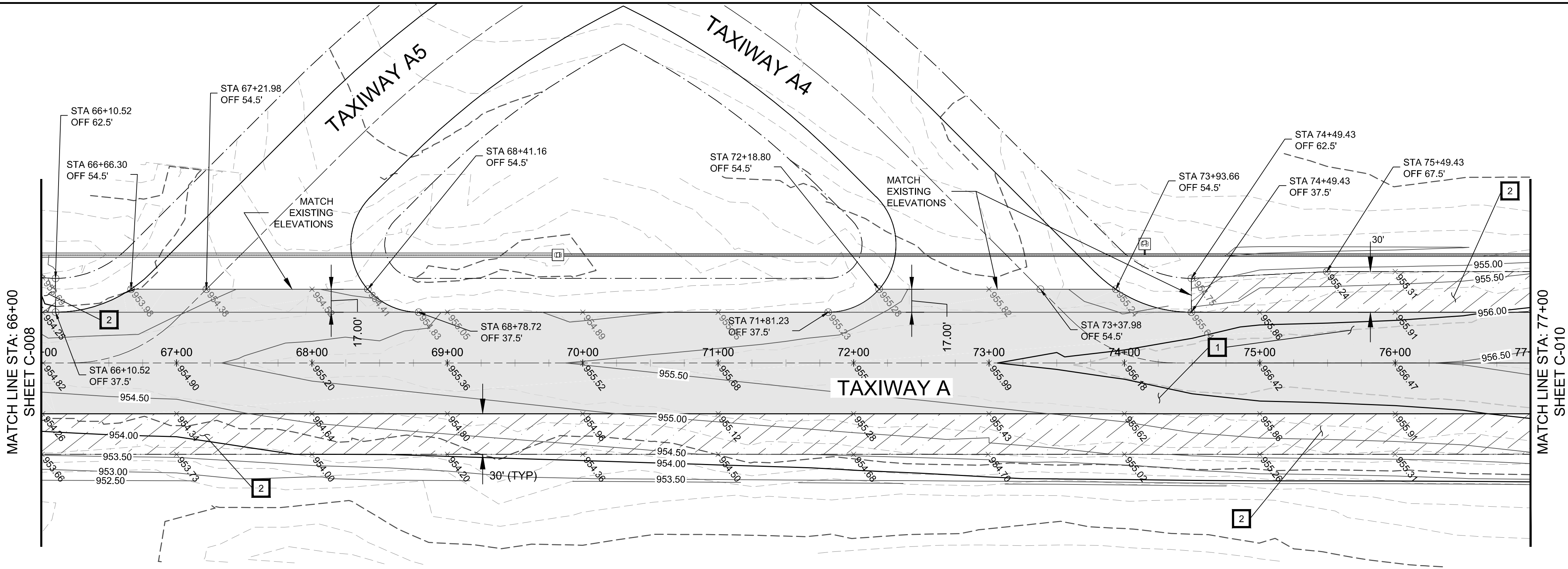
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CONTRACT IS NONTRANSFERABLE. P.C. 2015

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REVISIONS / SUBMISSIONS _____

DATE _____



- ### CONSTRUCTION KEY NOTES
- PAVE ASPHALT CONCRETE OVERLAY FOR TAXIWAY A PER TAXIWAY TYPICAL SECTION ON SHEET C-501.
 - CONSTRUCT ASPHALT CONCRETE SHOULDERS PER TYPICAL SECTION ON SHEET C-501.

LEGEND

NEW P-401 SHOULDERS

NEW P-401 OVERLAY

EXISTING PCCP PAVEMENT

PROPOSED GRADE CONTOUR

EXISTING GRADE CONTOUR

PROPOSED ELEVATION

EXISTING ELEVATION

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NO.	REVISIONS / SUBMISSIONS	DATE

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CITY OF PHOENIX AVIATION DEPARTMENT
GYR AIRPORT TW A REHAB & STRENGTHENING
AV41000075-JFAA

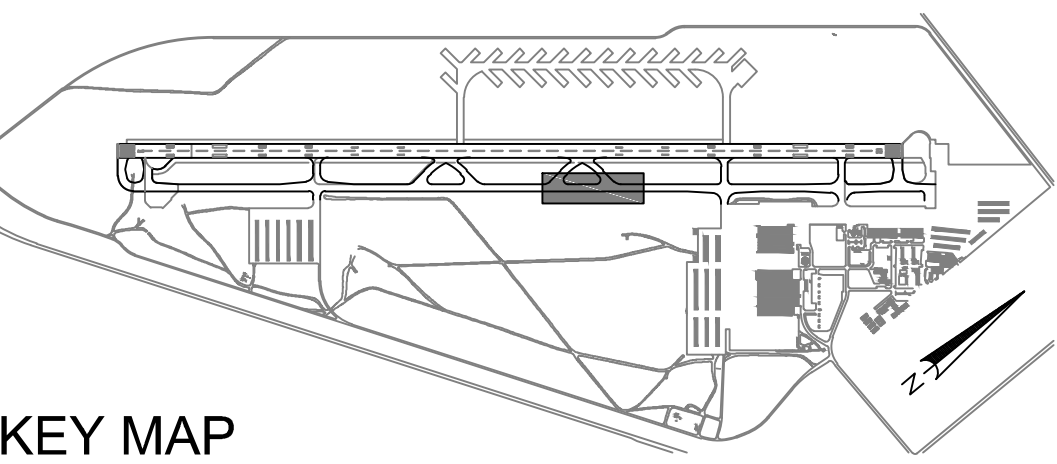
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Dwg scale: 1" = 50'	MMI Proj. No.: 8131.022

GYR AIRPORT TW A REHAB & STRENGTHENING

TAXIWAY A PLAN AND PROFILE
STA 66+00 TO STA 77+00

Sheet Reference Number:
C-009
Sheet 20 of 66

- ### CONSTRUCTION GENERAL NOTES
- STATION AND OFFSET INFORMATION REFERENCE THE TAXIWAY A CENTERLINE.
 - SEE CONSTRUCTION SAFETY PLAN FOR SEQUENCING OF CONSTRUCTION.
 - SEE CONSTRUCTION SAFETY DRAWINGS G-103 THRU G-107 FOR WORK AREA AND BARRICADING PLAN
 - SEE SPECIAL PROVISION 34 AND SPECIFICATION P-100 FOR CONSTRUCTION SURVEYING, LAYOUT AND ESTABLISHMENT OF FINISHED GRADE.
 - REFER TO ELECTRICAL SHEETS EA-101 THRU EA-106 FOR ELECTRICAL FIXTURE CONSTRUCTION.

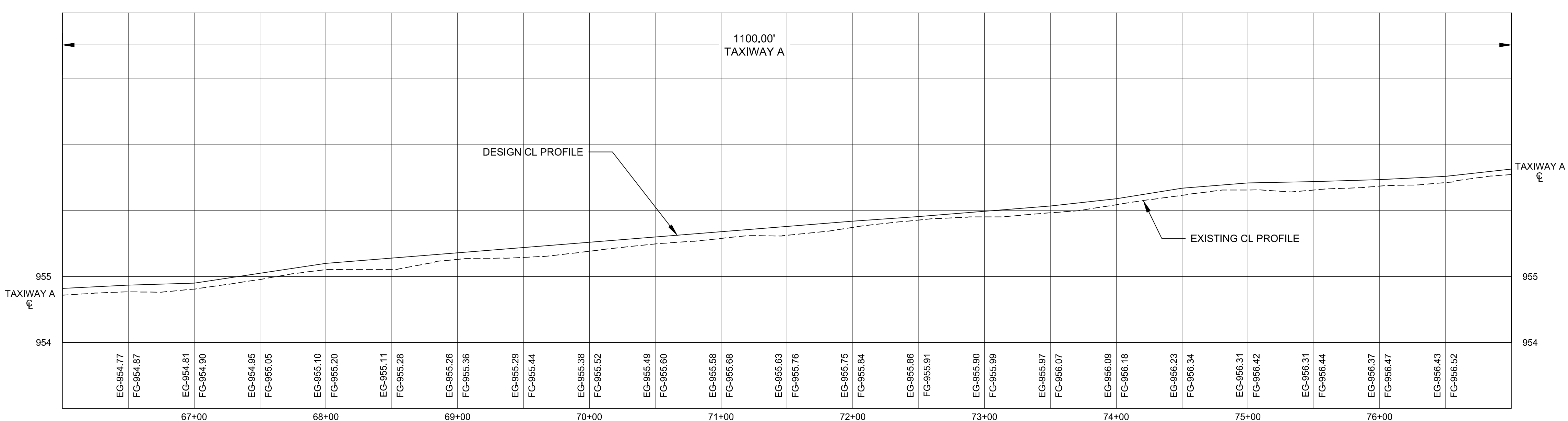


KEY MAP
N.T.S.

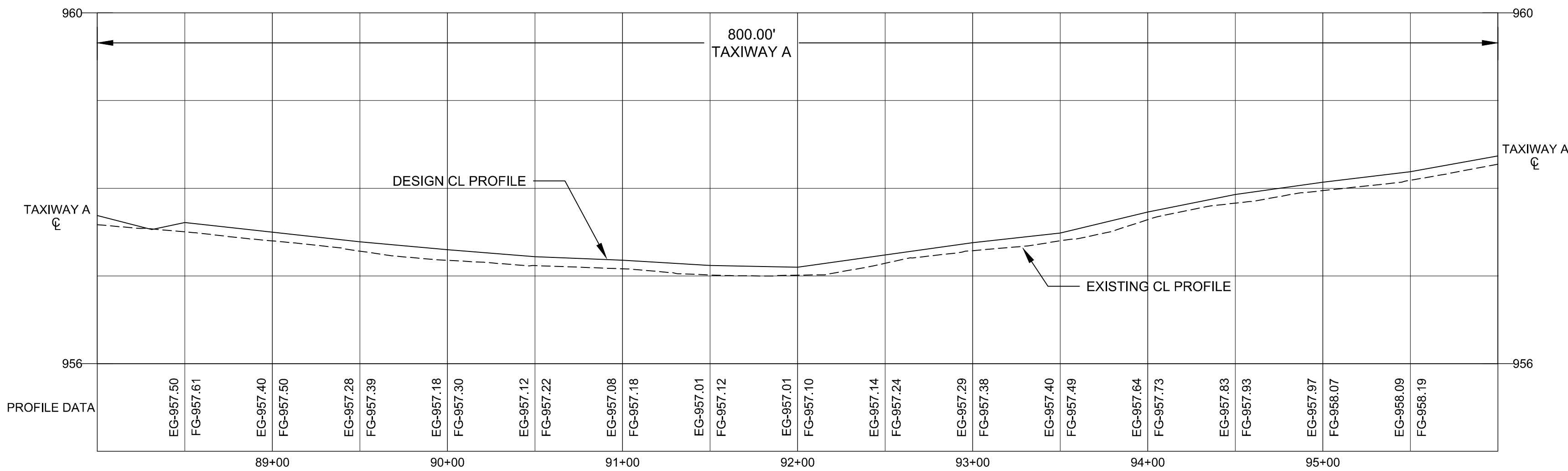
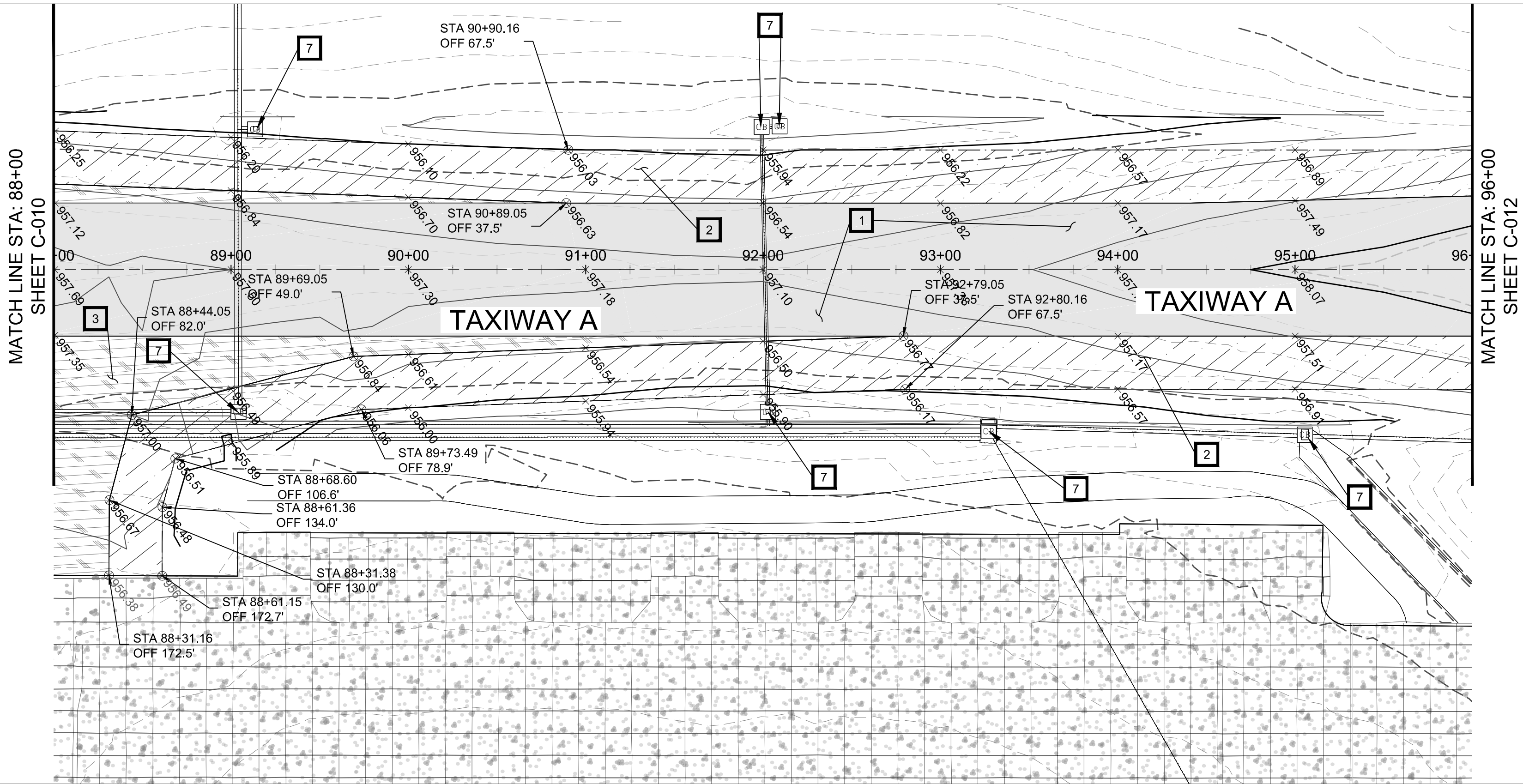
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0 50' 100'
SCALE: 1"=50'

Expires 9/30/2020



TAXIWAY A PROFILE LINE (STA: 66+00 TO STA: 77+00)



TAXIWAY A PROFILE LINE (STA: 88+00 TO STA: 96+00)

CONSTRUCTION KEY NOTES

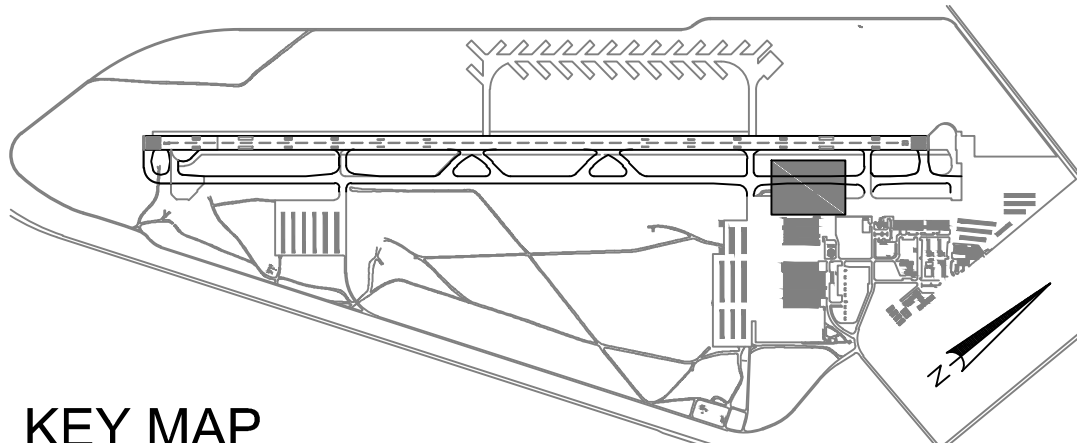
- 1 PAVE ASPHALT CONCRETE OVERLAY FOR TAXIWAY A PER TAXIWAY TYPICAL SECTION ON SHEET C-501.
- 2 CONSTRUCT ASPHALT CONCRETE SHOULDERS PER TYPICAL SECTION ON SHEET C-501.
- 3 CONSTRUCT CONNECTOR TAXIWAY A3 PER TAXIWAY A3 TYPICAL SECTION ON SHEET C-501.
- 7 PROTECT CATCH BASIN IN PLACE. VARY TAXIWAY SHOULDER SLOPE NEAR CATCH BASIN TO MATCH EXISTING GRATE ELEVATION (7 EA).

LEGEND

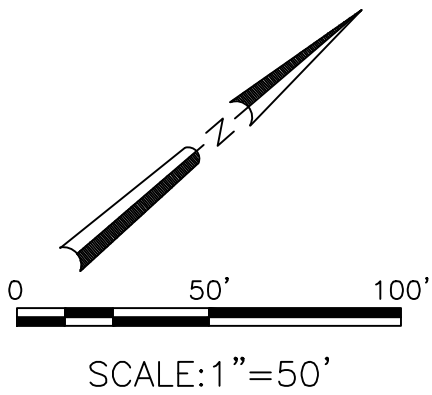
- NEW P-401 SHOULDERS
- NEW P-401 OVERLAY
- NEW P-401 PAVEMENT SECTION
- EXISTING PCOP PAVEMENT
- PROPOSED CONTOUR
- EXISTING GRADE CONTOUR
- PROPOSED ELEVATION
- EXISTING ELEVATION

CONSTRUCTION GENERAL NOTES

1. STATION AND OFFSET INFORMATION REFERENCE THE TAXIWAY A CENTERLINE.
2. SEE CONSTRUCTION SAFETY PLAN FOR SEQUENCING OF CONSTRUCTION.
3. SEE CONSTRUCTION SAFETY DRAWINGS G-103 THRU G-107 FOR WORK AREA AND BARRICADING PLAN
4. SEE SPECIAL PROVISION 34 AND SPECIFICATION P-100 FOR CONSTRUCTION SURVEYING, LAYOUT AND ESTABLISHMENT OF FINISHED GRADE.
5. REFER TO ELECTRICAL SHEETS EA-101 THRU EA-106 FOR ELECTRICAL FIXTURE CONSTRUCTION.



KEY MAP
N.T.S.



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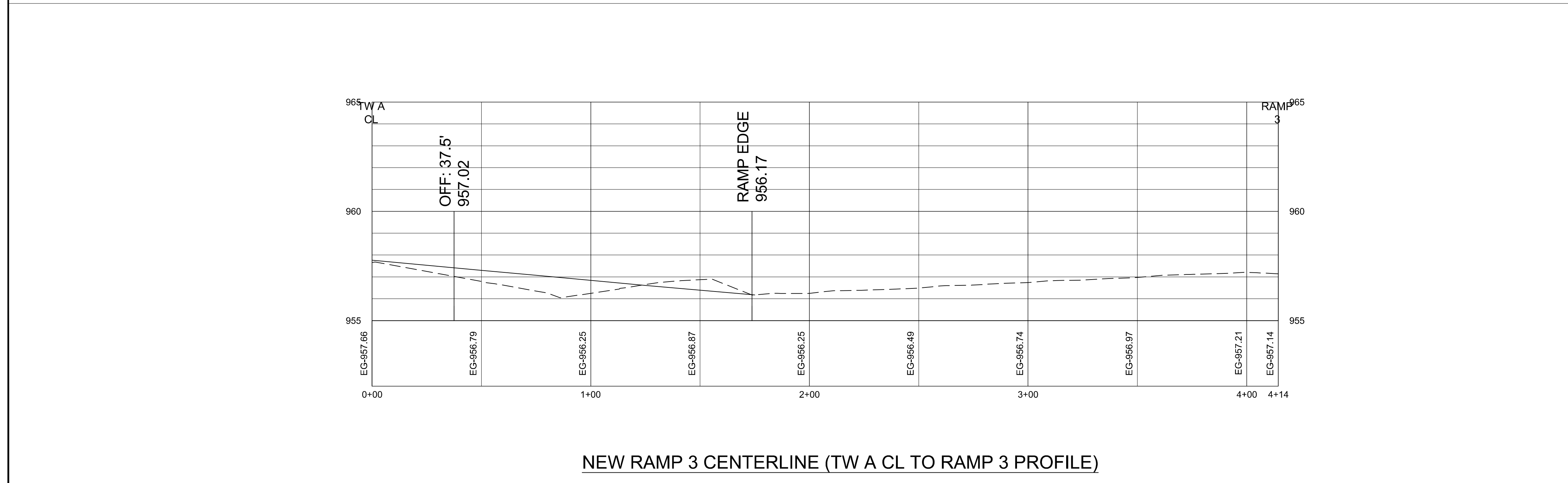
NO.	REVISIONS / SUBMISSIONS	DATE

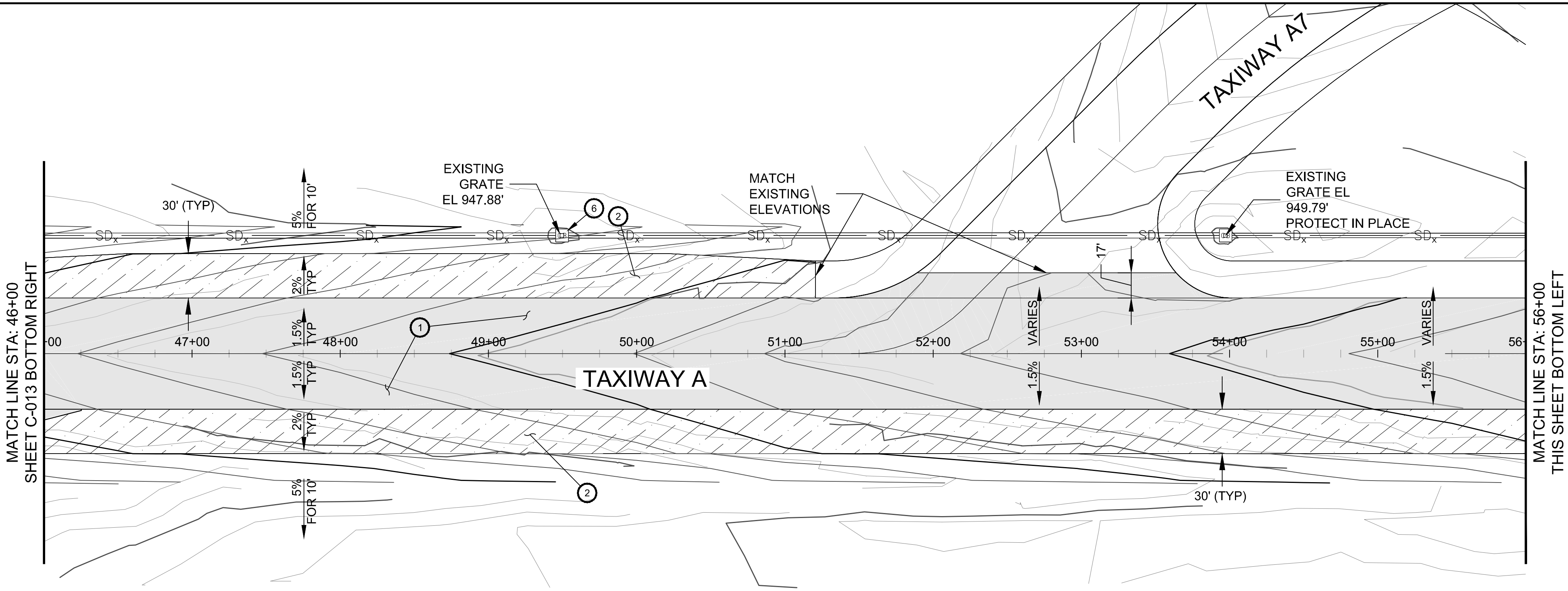
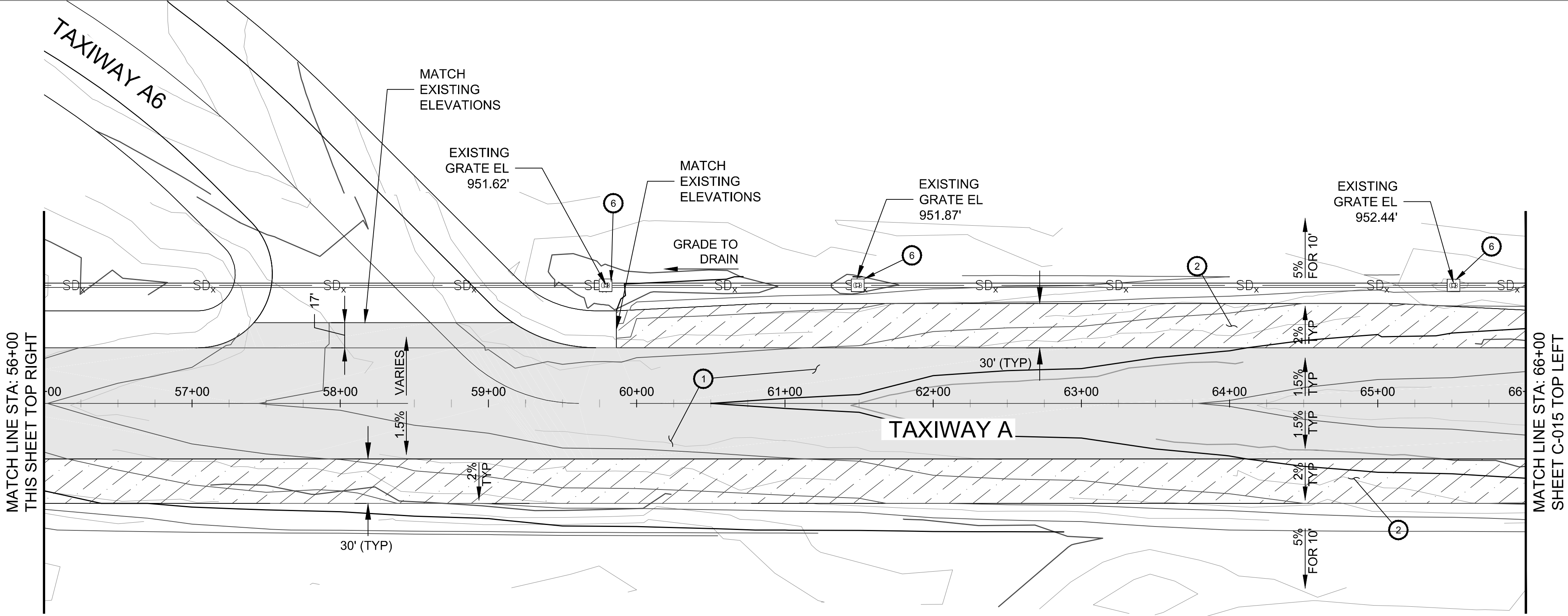
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Designed by: CMP	MMI Proj. No.: 8131.022
Drawn by: TCJ	
Checked by: JM	
Date: 05/2018	
Dwg scale: 1" = 50'	

TAXIWAY A PLAN AND PROFILE
STA 88+00 TO STA 96+00

Sheet Reference Number:
C-011
Sheet 22 of 66

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CONSTRUCTION KEY NOTES

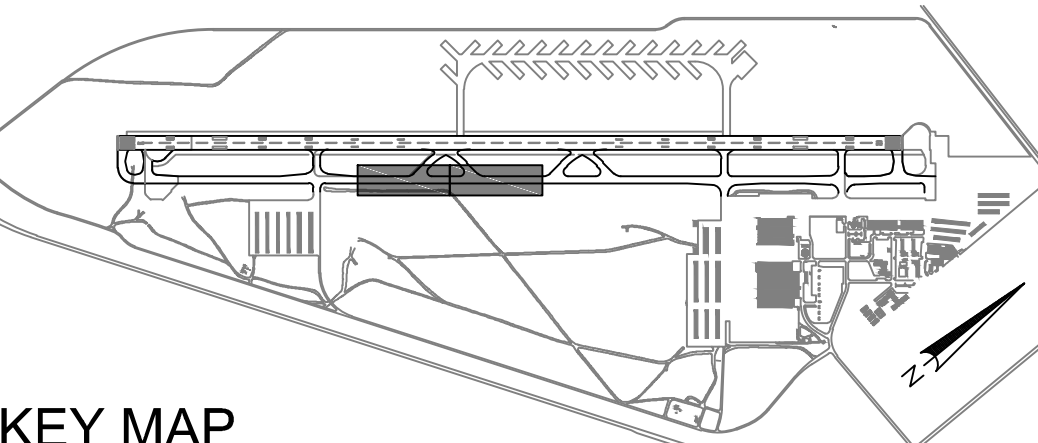
- PAVE ASPHALT CONCRETE OVERLAY FOR TAXIWAY A PER TAXIWAY TYPICAL SECTION ON SHEET C-501.
- CONSTRUCT ASPHALT CONCRETE SHOULDERS PER TYPICAL SECTION ON SHEET C-501.
- PROTECT CATCH BASIN IN PLACE AND MATCH SURROUNDING GRADE TO CATCH BASIN ELEVATION. (4 EA)

LEGEND

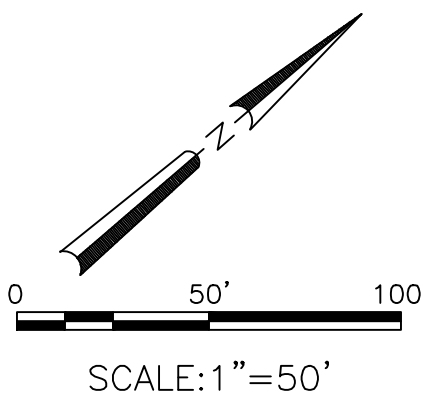
- NEW P-401 SHOULDERS
- NEW P-401 OVERLAY
- PROPOSED GRADE CONTOUR
- EXISTING GRADE CONTOUR
- PROPOSED ELEVATION
- EXISTING ELEVATION

CONSTRUCTION GENERAL NOTES

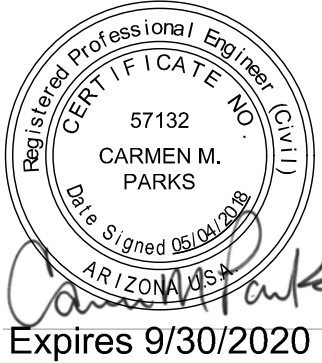
- STATION AND OFFSET INFORMATION REFERENCE THE TAXIWAY A CENTERLINE.
- SEE CONSTRUCTION SAFETY PLAN FOR SEQUENCING OF CONSTRUCTION.
- SEE CONSTRUCTION SAFETY DRAWINGS G-103 THRU G-107 FOR WORK AREA AND BARRICADING PLAN
- SEE SPECIAL PROVISION 34 AND SPECIFICATION P-100 FOR CONSTRUCTION SURVEYING, LAYOUT AND ESTABLISHMENT OF FINISHED GRADE.
- REFER TO ELECTRICAL SHEETS EA-101 THRU EA-106 FOR ELECTRICAL FIXTURE CONSTRUCTION INCLUDING EDGE LIGHTS, CENTERLINE LIGHTS, HAND HOLES, AN DUCT MARKERS.



KEY MAP
N.T.S.



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NO.	REVISIONS / SUBMISSIONS	DATE

PHX DVI CYR
CITY OF PHOENIX AVIATION DEPARTMENT
GYR AIRPORT TW A REHAB & STRENGTHENING
AV41000075-JFAA

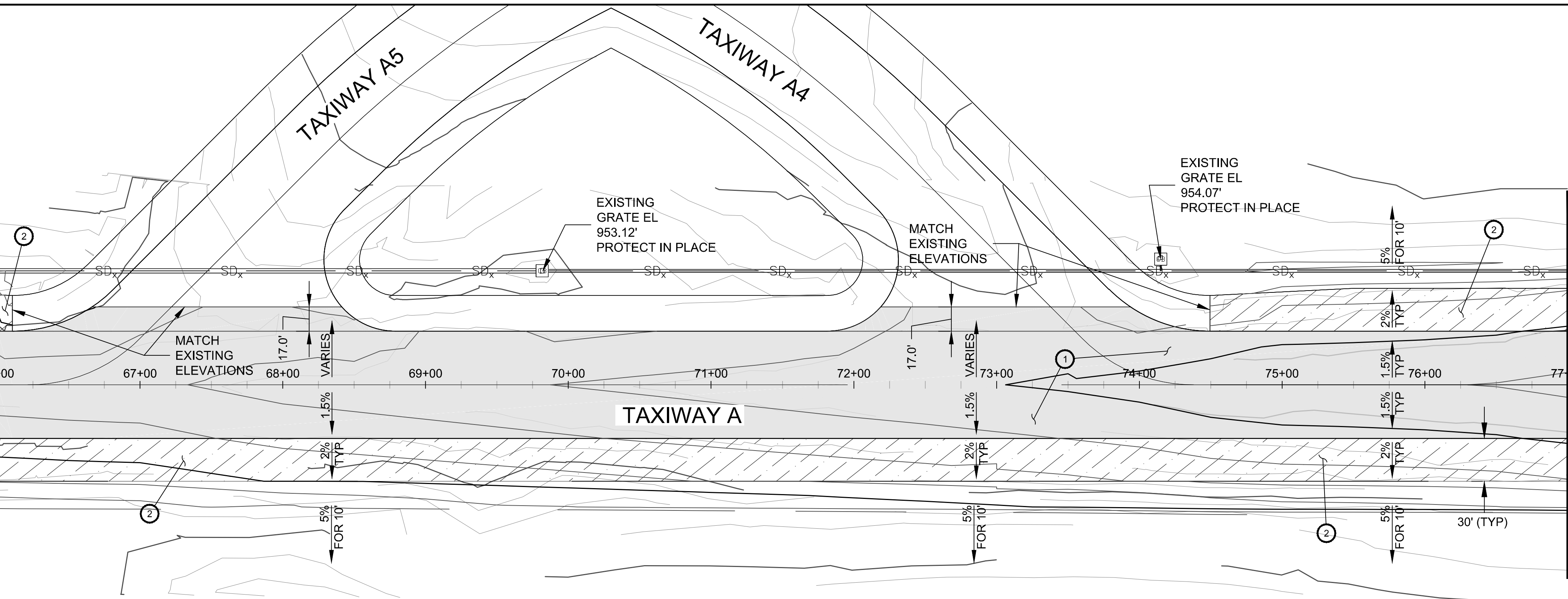
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Checked by: JM	Date: 05/2018
Dwg scale: 1" = 50'	
MMI Proj. No.: 8131.022	

TAXIWAY A GRADING DRAINAGE & PAVING PLAN
STA 46+00 TO STA 66+00

Sheet Reference Number:
C-015

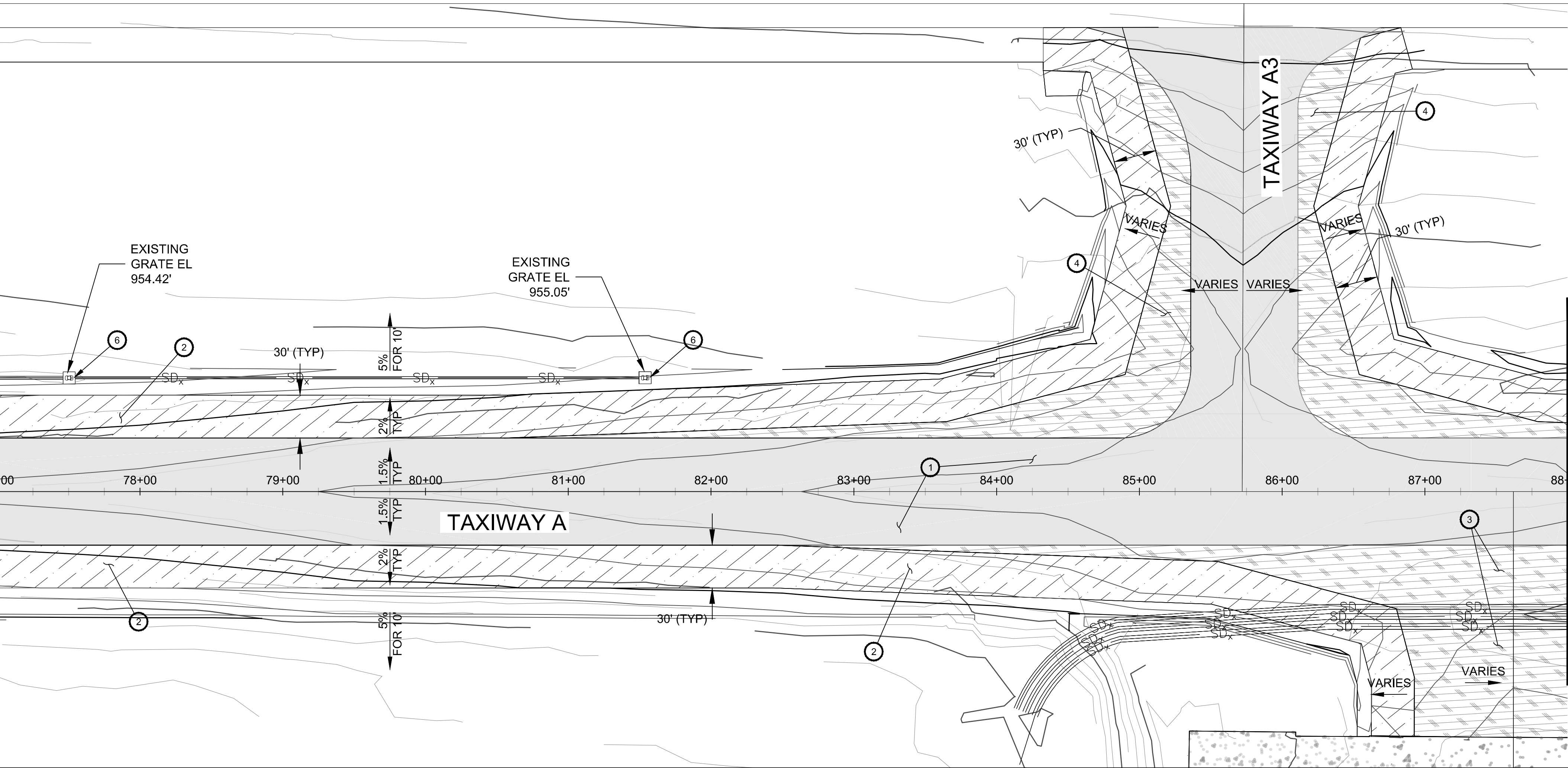
Sheet 26 of 66

MATCH LINE STA: 66+00
SHEET C-014 BOTTOM RIGHT



MATCH LINE STA: 77+00
THIS SHEET BOTTOM LEFT

MATCH LINE STA: 77+00
THIS SHEET TOP RIGHT



MATCH LINE STA: 88+00
SHEET C-016 TOP LEFT

CONSTRUCTION KEY NOTES

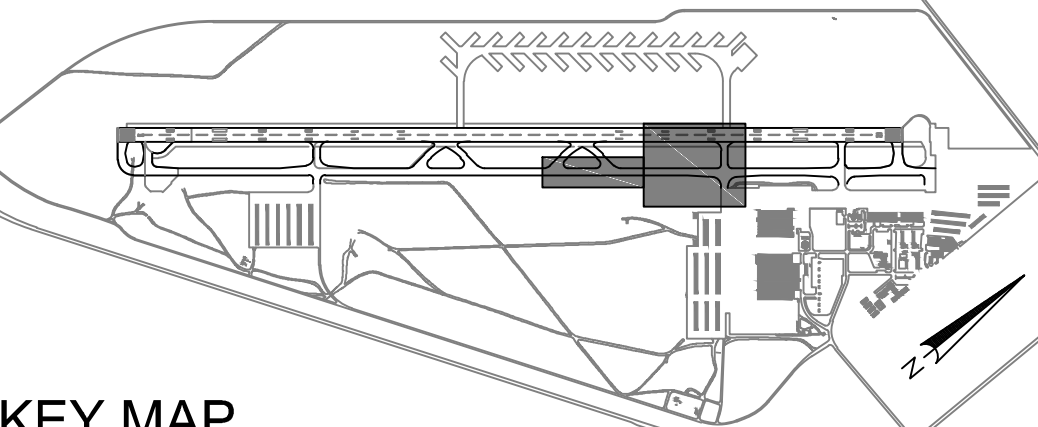
1. PAVE ASPHALT CONCRETE OVERLAY FOR TAXIWAY A PER TAXIWAY TYPICAL SECTION ON SHEET C-501.
2. CONSTRUCT ASPHALT CONCRETE SHOULDERS PER TYPICAL SECTION ON SHEET C-501.
3. CONSTRUCT RAMP 3 PER TAXIWAY RAMP 3 TYPICAL SECTION ON SHEET C-501.
4. CONSTRUCT CONNECTOR TAXIWAY A3 WIDENING AND SHOULDER PAVEMENT PER TAXIWAY A3 WIDENING TYPICAL SECTION ON SHEET C-501.
6. PROTECT CATCH BASIN IN PLACE AND MATCH SURROUNDING GRADE TO CATCH BASIN ELEVATION. (2 EA)

LEGEND

- NEW P-401 SHOULDERS
- NEW P-401 OVERLAY
- NEW P-401 PAVEMENT SECTION
- EXISTING PCOP PAVEMENT
- EXISTING AC PAVEMENT
- PROPOSED GRADE CONTOUR
- EXISTING GRADE CONTOUR
- PROPOSED ELEVATION
- EXISTING ELEVATION

CONSTRUCTION GENERAL NOTES

1. STATION AND OFFSET INFORMATION REFERENCE THE TAXIWAY A CENTERLINE.
2. SEE CONSTRUCTION SAFETY PLAN FOR SEQUENCING OF CONSTRUCTION.
3. SEE CONSTRUCTION SAFETY DRAWINGS G-103 THRU G-107 FOR WORK AREA AND BARRICADING PLAN
4. SEE SPECIAL PROVISION 34 AND SPECIFICATION P-100 FOR CONSTRUCTION SURVEYING, LAYOUT AND ESTABLISHMENT OF FINISHED GRADE.
5. REFER TO ELECTRICAL SHEETS EA-101 THRU EA-106 FOR ELECTRICAL FIXTURE CONSTRUCTION INCLUDING EDGE LIGHTS, CENTERLINE LIGHTS, HAND HOLES, AND DUCT MARKERS.



KEY MAP
N.T.S.

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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 CONTRACTORS OBLIGATION TO THE CITY OF PHOENIX.

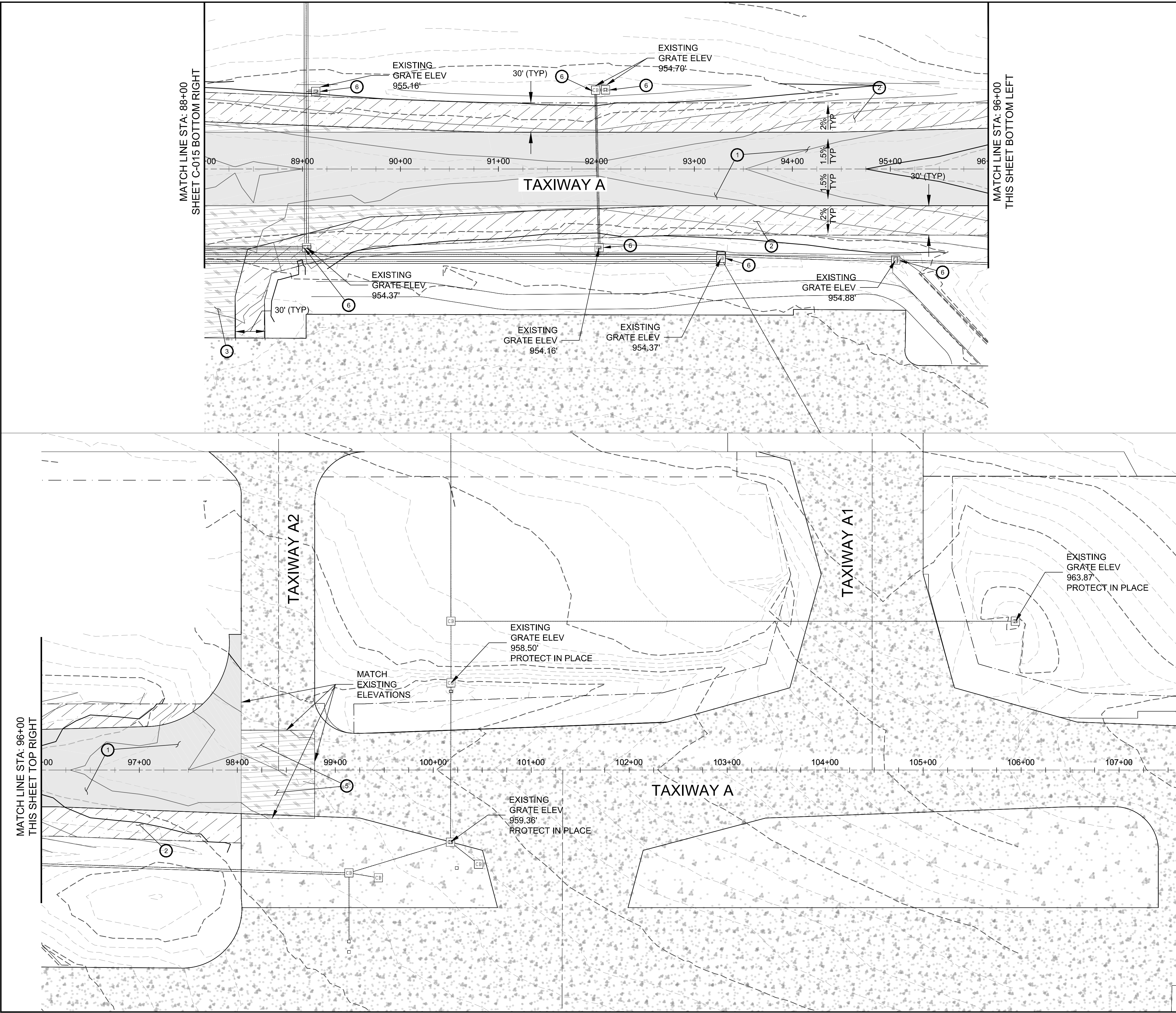
NO.	REVISIONS / SUBMISSIONS	DATE

PHX DVI CYR
CITY OF PHOENIX AVIATION DEPARTMENT
GYR AIRPORT TW A REHAB & STRENGTHENING
AV41000075-IFAA

Designed by: CMP	Drawn by: TCJ
Checked by: JM	Date: 05/2018
Dwg scale: 1" = 50'	MMI Proj. No.: 8131.022

TAXIWAY A GRADING
DRAINAGE & PAVING PLAN
STA 66+00 TO STA 88+00

Sheet Reference Number:
C-016
Sheet 27 of 66

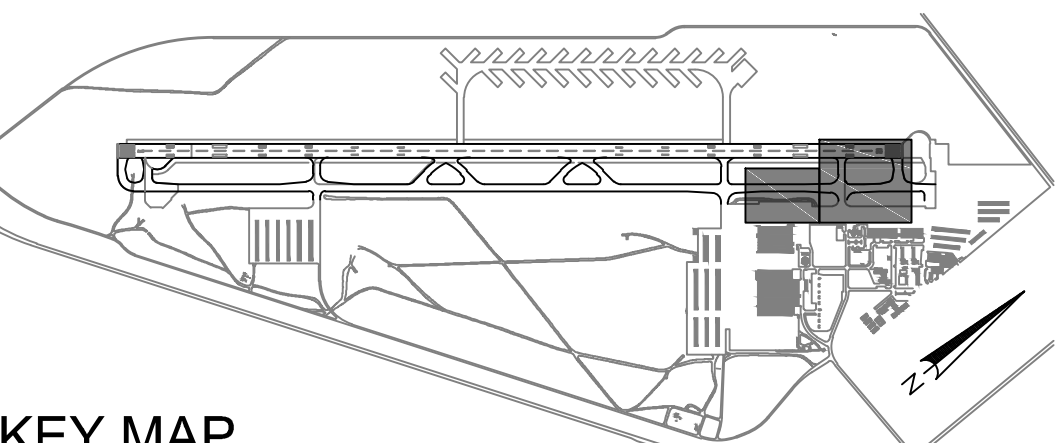


- ### CONSTRUCTION KEY NOTES
- PAVE ASPHALT CONCRETE OVERLAY FOR TAXIWAY A PER TAXIWAY TYPICAL SECTION ON SHEET C-501.
 - CONSTRUCT ASPHALT CONCRETE SHOULDERS PER TYPICAL SECTION ON SHEET C-501.
 - CONSTRUCT RAMP 3 PER TAXIWAY RAMP 3 TYPICAL SECTION ON SHEET C-501.
 - CONSTRUCT TAXIWAY A PAVEMENT PER TYPICAL SECTION ON SHEET C-501.
 - PROTECT CATCH BASIN IN PLACE AND MATCH SURROUNDING GRADE TO CATCH BASIN ELEVATION. (7 EA)

LEGEND

	NEW P-401 SHOULDERS
	NEW P-401 OVERLAY
	NEW P-401 PAVEMENT SECTION
	EXISTING PCOP PAVEMENT
	EXISTING AC PAVEMENT
	PROPOSED GRADE CONTOUR
	EXISTING GRADE CONTOUR
	PROPOSED ELEVATION
	EXISTING ELEVATION

- ### CONSTRUCTION GENERAL NOTES
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KEY MAP
N.T.S.

SCALE: 1"=50'

ISSUED FOR BID

Registered Professional Engineer
57132
CARMEN M. PARKS
Date Signed 06/04/2018
Expires 9/30/2020

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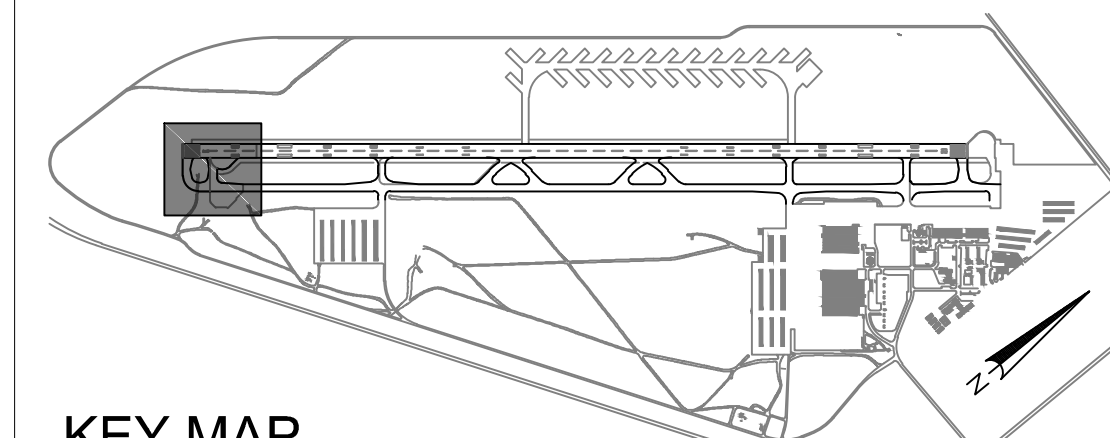
NO.	REVISIONS / SUBMISSIONS	DATE

PHX DVI CYR
CITY OF PHOENIX AVIATION DEPARTMENT
GYR AIRPORT TW A REHAB & STRENGTHENING
AV41000075-IFAA

Designed by: CMP
Drawn by: TCJ
Checked by: JM
Date: 05/2018
Dwg scale: 1" = 50'
MMI Proj. No.: 8131.022

TAXIWAY A GRADING DRAINAGE & PAVING PLAN
STA 88+00 TO STA 106+00

Sheet Reference Number:
C-017
Sheet 28 of 66

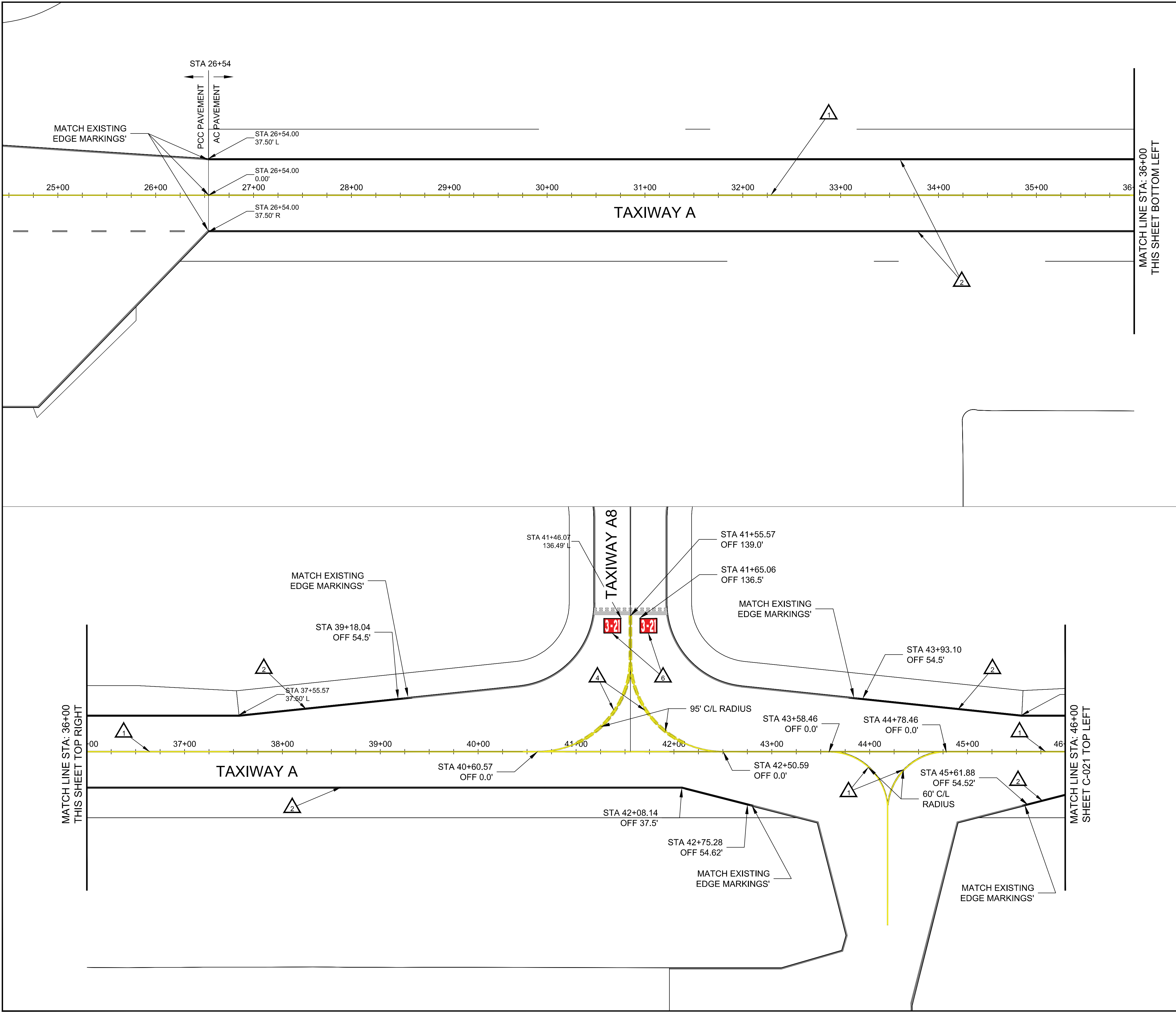


Sheet
Reference
Number:

C-018

Sheet 29 of 66

PHX DVT CYR
CITY OF PHOENIX AVIATION DEPARTMENT
GYR AIRPORT TW A REHAB &
STRENGTHENING
AV41000075-IFAA

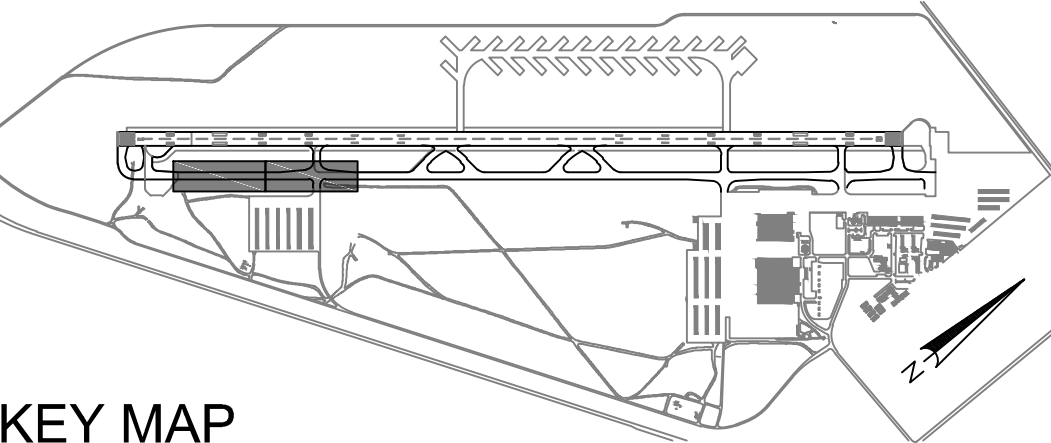


MARKING KEY NOTES

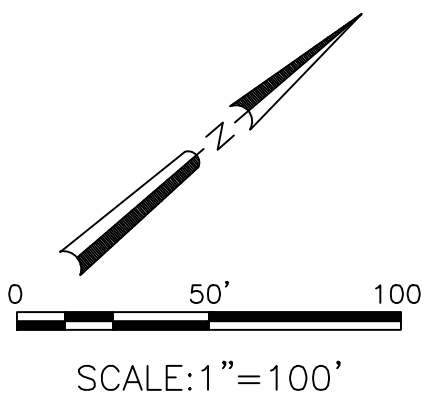
- 1 INSTALL 12" WIDE YELLOW TAXIWAY CENTERLINE PAVEMENT MARKING PER DETAIL 1 ON SHEET C-504.
- 2 INSTALL TAXIWAY PAVEMENT EDGE MARKING PER DETAIL 2 ON SHEET C-504.
- 4 INSTALL ENHANCED CENTERLINE MARKING PER DETAIL 5 ON SHEET C-504.
- 6 INSTALL SURFACE PAINTED HOLD POSITION SIGNS PER DETAIL 6 ON SHEET C-504

MARKING GENERAL NOTES

- STATION AND OFFSET INFORMATION REFERENCE THE TAXIWAY A CENTERLINE.
- PAVEMENT MARKING DETAILS SHALL CONFORM TO THE LATEST EDITION OF THE FEDERAL AVIATION ADMINISTRATION'S ADVISORY CIRCULAR AC 150/5340-1L. IF A CONFLICT OCCURS BETWEEN THESE PLANS AND THE ADVISORY CIRCULAR, THE ADVISORY CIRCULAR SHALL TAKE PRECEDENCE.
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KEY MAP
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NO.	REVISIONS / SUBMISSIONS	DATE

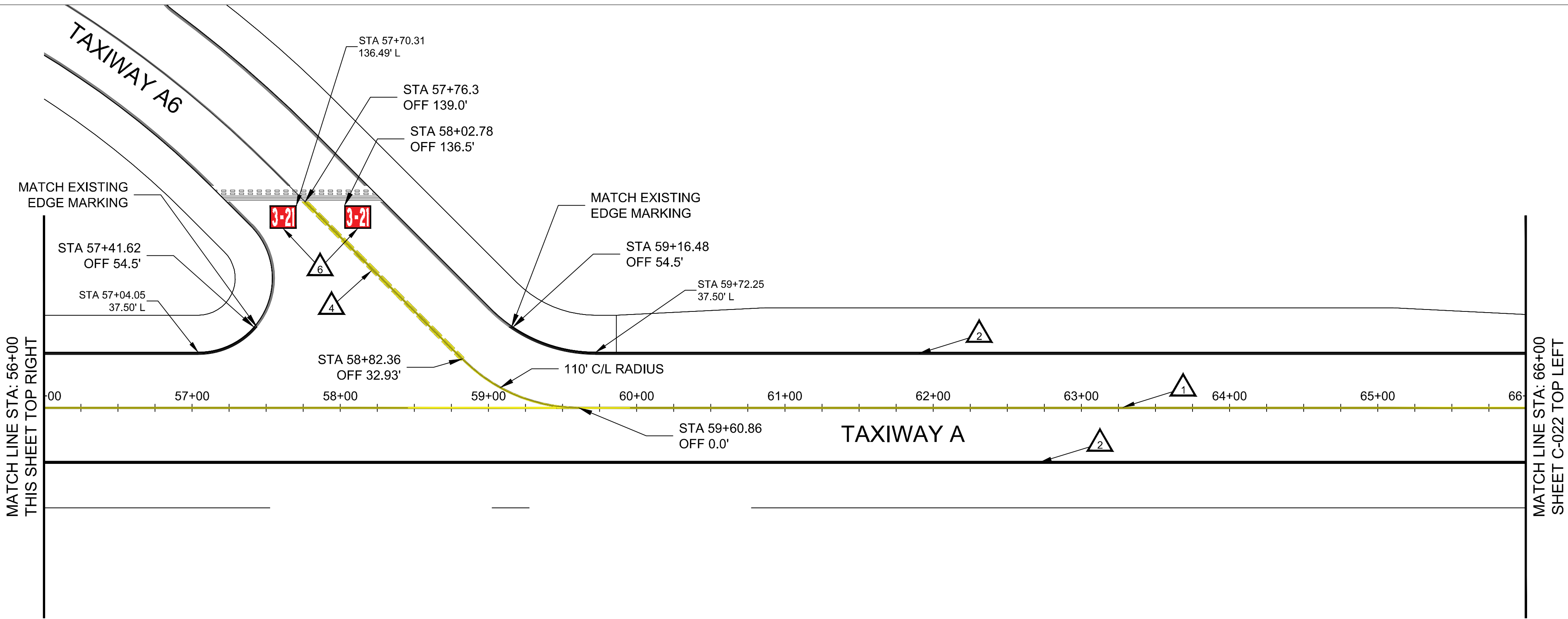
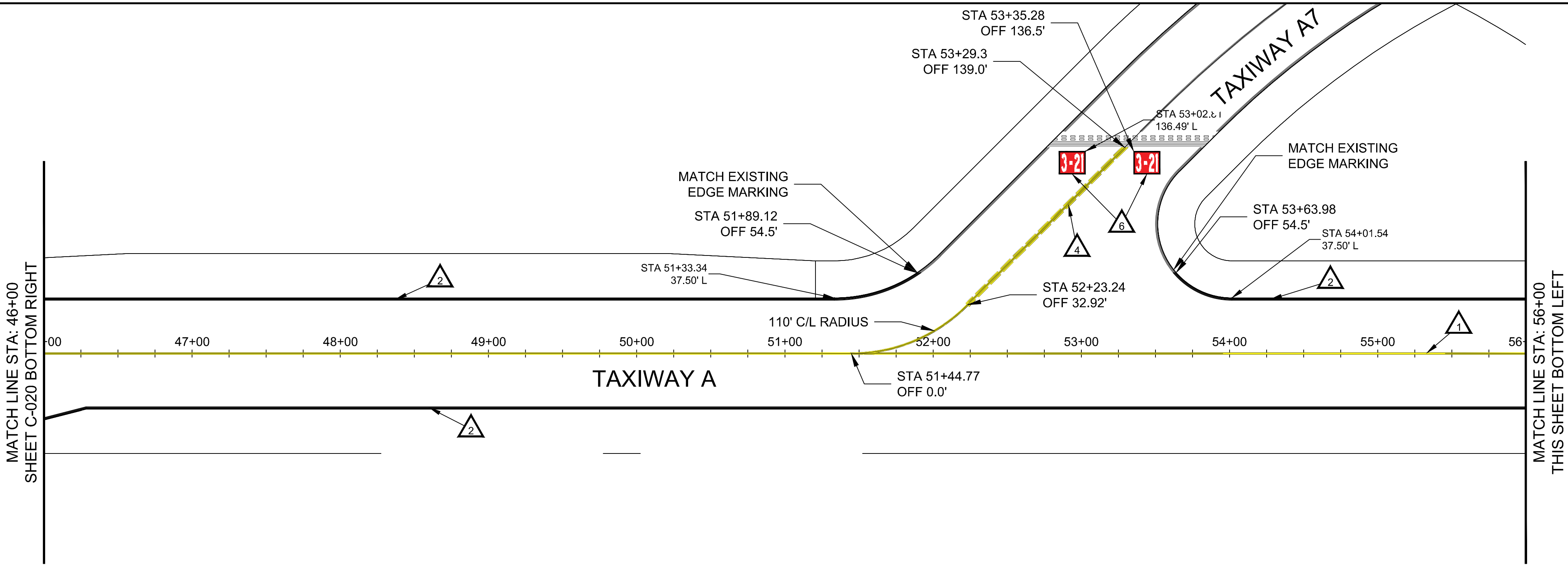
PHX DVI CYR
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GYR AIRPORT TW A REHAB & STRENGTHENING
AV41000075-JFAA

Designed by: CMP	Drawn by: TCJ
Checked by: JM	Date: 05/2018
Dwg scale: 1" = 50'	MMI Proj. No.: 8131.022

GYR AIRPORT TW A REHAB & STRENGTHENING

PAVEMENT MARKING
PLAN STA 26+00 TO 46+00

Sheet Reference Number:
C-019
Sheet 30 of 66

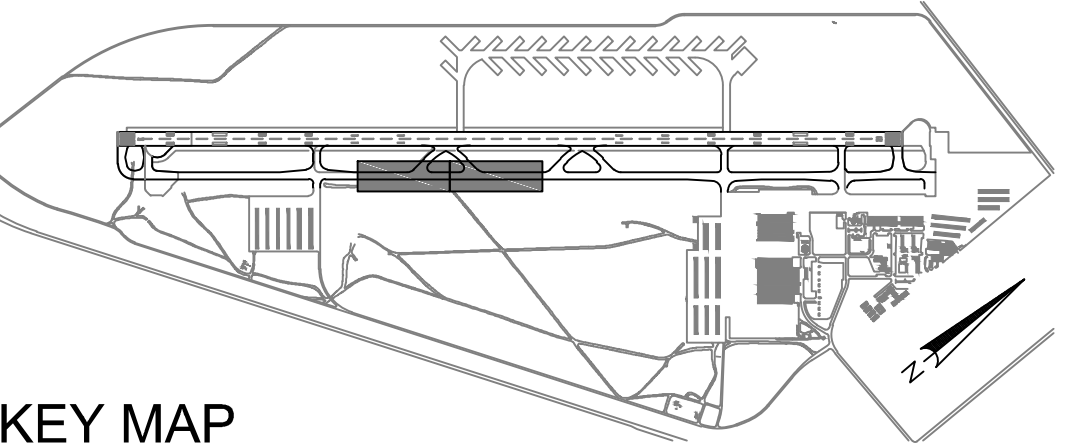


MARKING KEY NOTES

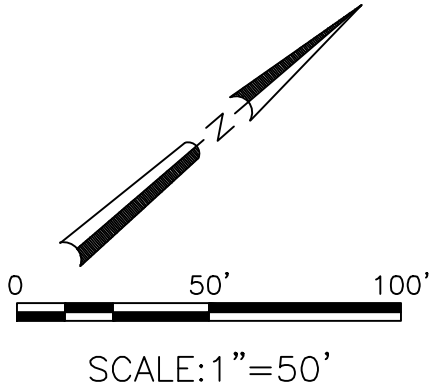
- 1 INSTALL 12" WIDE YELLOW TAXIWAY CENTERLINE PAVEMENT MARKING PER DETAIL 1 ON SHEET C-504.
- 2 INSTALL TAXIWAY PAVEMENT EDGE MARKING PER DETAIL 2 ON SHEET C-504.
- 4 INSTALL ENHANCED CENTERLINE MARKING PER DETAIL 5 ON SHEET C-504.
- 6 INSTALL SURFACE PAINTED HOLD POSITION SIGNS PER DETAIL 6 ON SHEET C-504.

MARKING GENERAL NOTES

- STATION AND OFFSET INFORMATION REFERENCE THE TAXIWAY A CENTERLINE.
- PAVEMENT MARKING DETAILS SHALL CONFORM TO THE LATEST EDITION OF THE FEDERAL AVIATION ADMINISTRATION'S ADVISORY CIRCULAR AC 150/5340-1L. IF A CONFLICT OCCURS BETWEEN THESE PLANS AND THE ADVISORY CIRCULAR, THE ADVISORY CIRCULAR SHALL TAKE PRECEDENCE.
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KEY MAP
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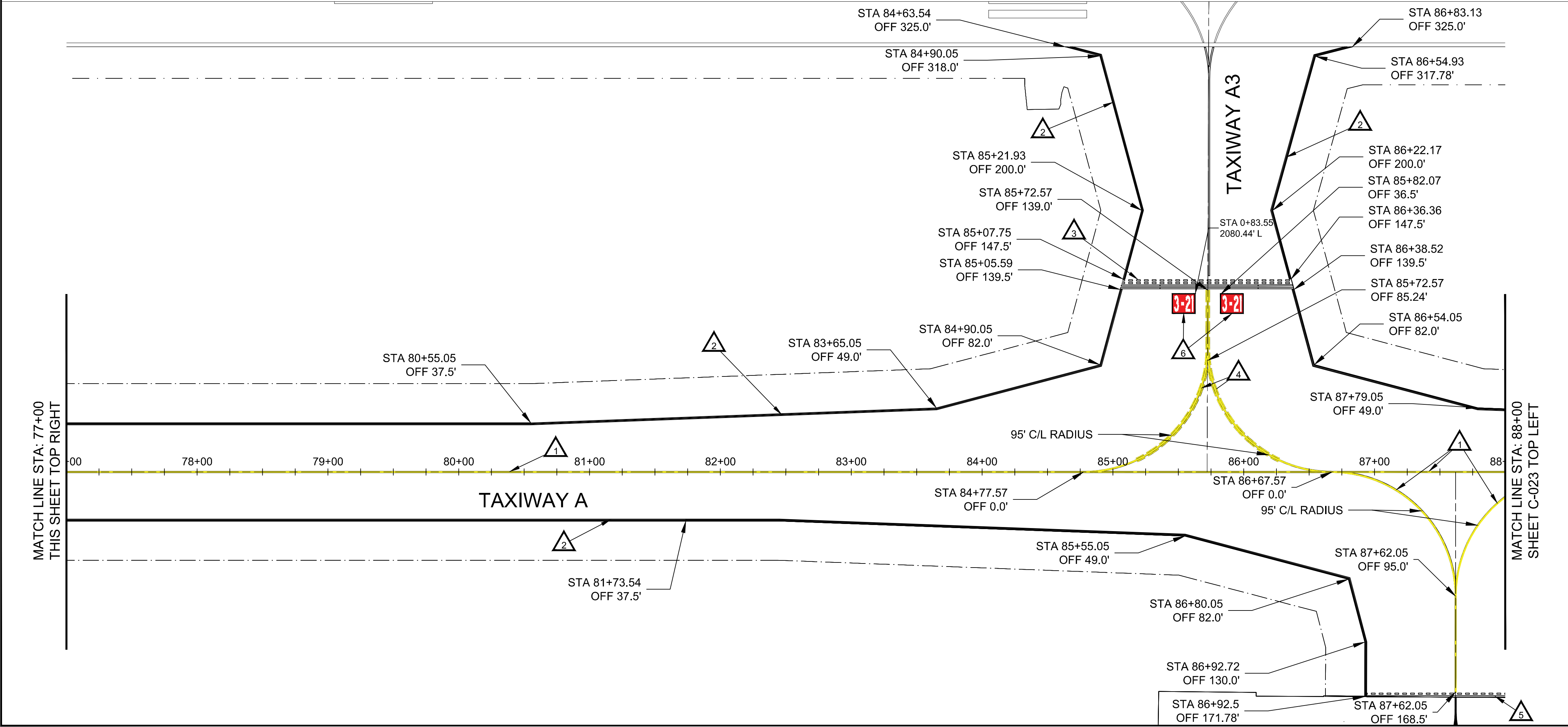
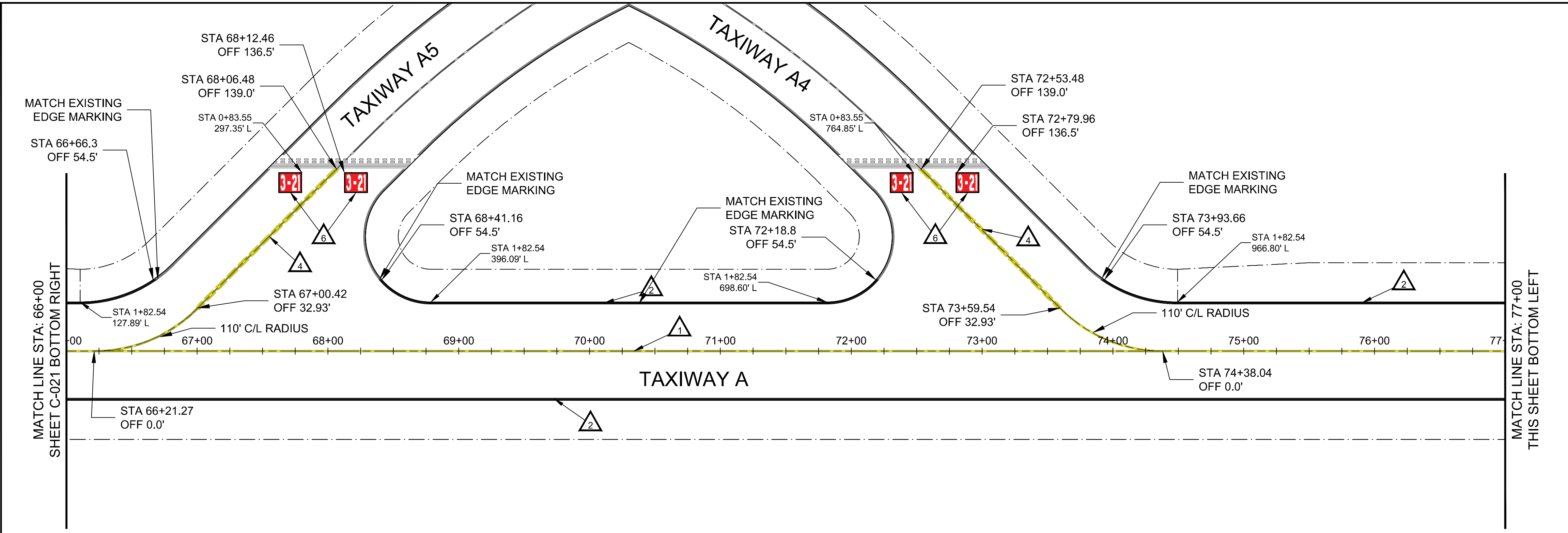
NO.	REVISIONS / SUBMISSIONS	DATE

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GYR AIRPORT TW A REHAB & STRENGTHENING
AV41000075-JFAA

Designed by: CMP	Drawn by: TCJ
Checked by: JM	Date: 05/20/18
Dwg scale: 1" = 50'	MMI Proj. No.: 8131.022

GYR AIRPORT TW A REHAB & STRENGTHENING
PAVEMENT MARKING PLAN
STA 46+00 TO 66+00

Sheet Reference Number:
C-020
Sheet 31 of 66



- ### MARKING KEY NOTES
- 1. INSTALL 12" WIDE YELLOW TAXIWAY CENTERLINE PAVEMENT MARKING PER DETAIL 1 ON SHEET C-502.
 - 2. INSTALL TAXIWAY PAVEMENT EDGE MARKING PER DETAIL 2 ON SHEET C-502.
 - 3. INSTALL HOLD BAR MARKING PER DETAIL 4 ON SHEET C-502.
 - 4. INSTALL ENHANCED CENTERLINE MARKING PER DETAIL 5 ON SHEET C-502.
 - 5. INSTALL NON-MOVEMENT AREA MARKING PER DETAIL 3 ON SHEET C-502.
 - 6. INSTALL SURFACE PAINTED HOLD POSITION SIGNS PER DETAIL 6 ON SHEET C-502.

- ### MARKING GENERAL NOTES
- STATION AND OFFSET INFORMATION REFERENCE THE TAXIWAY A CENTERLINE.
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KEY MAP

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SCALE: 1"=50'

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NO.	REVISIONS / SUBMISSIONS	DATE

CITY OF PHOENIX AVIATION DEPARTMENT

GYR AIRPORT TW A REHAB & STRENGTHENING

AV41000075-JFAA

Designed by: CMP
Drawn by: TCJ
Checked by: JM
Date: 05/2018
Dwg scale: 1" = 50'

MMI Proj. No.: 8131.022

GYR AIRPORT TW A REHAB & STRENGTHENING

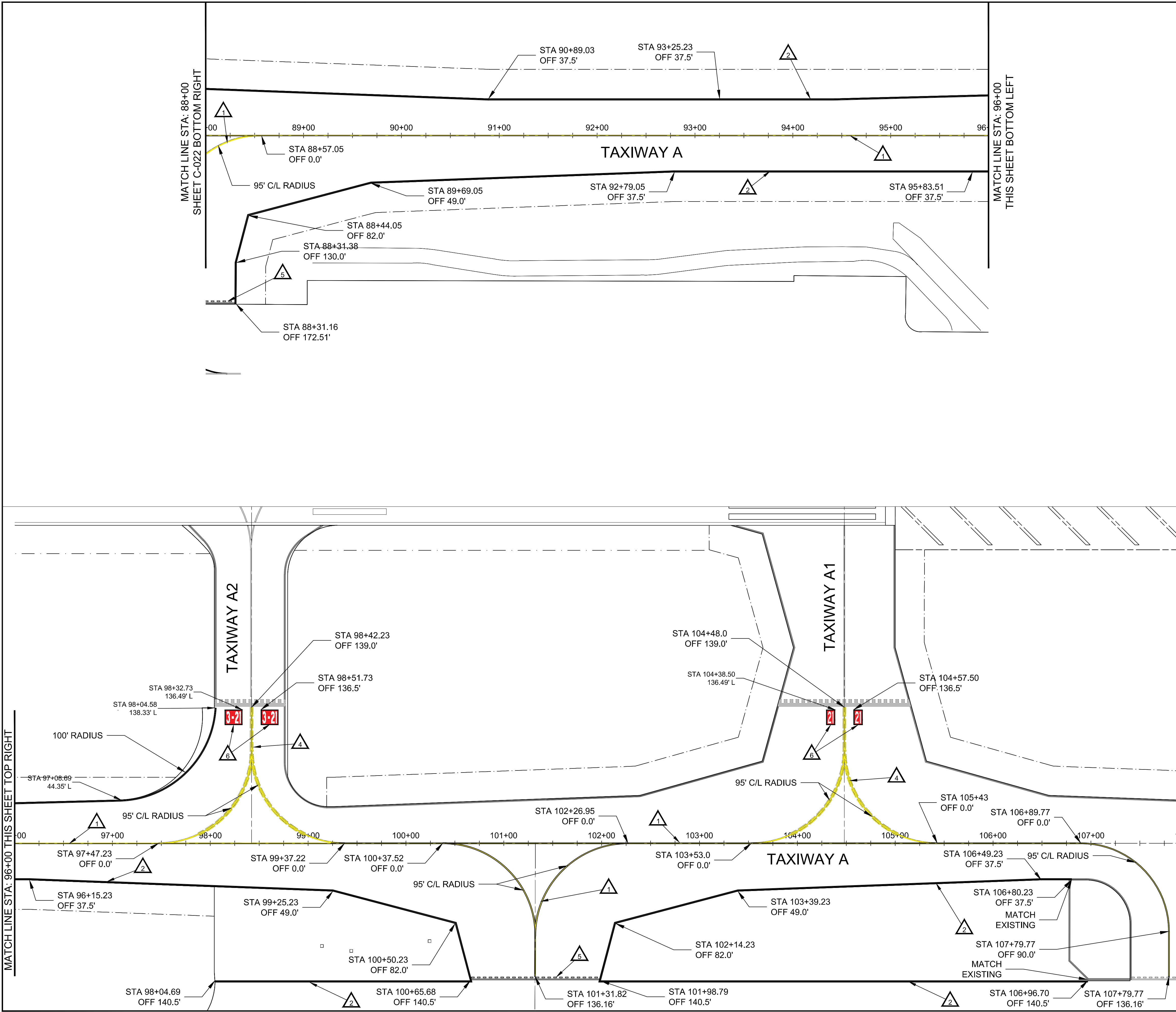
PAVEMENT MARKING

PLAN STA 66+00 TO 88+00

Sheet Reference Number:

C-021

Sheet 32 of 66

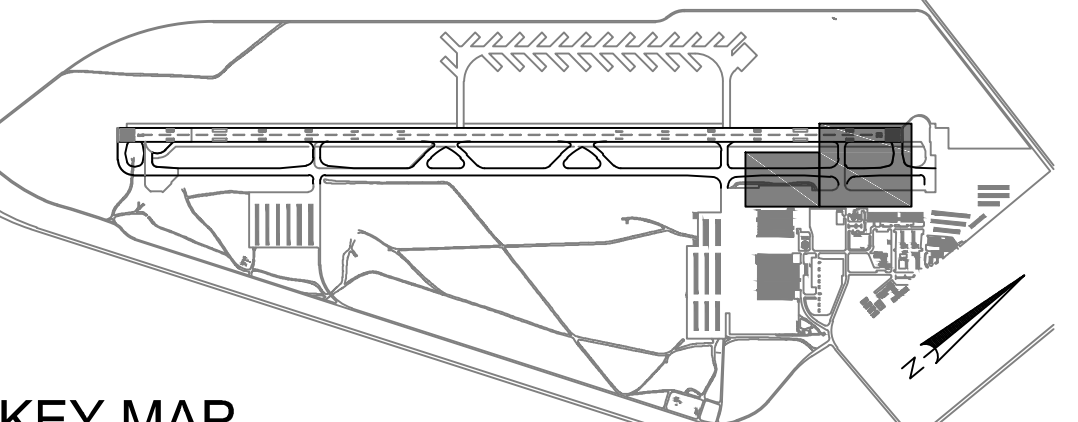


MARKING KEY NOTES

1. INSTALL 12" WIDE YELLOW TAXIWAY CENTERLINE PAVEMENT MARKING PER DETAIL 1 ON SHEET C-504.
2. INSTALL TAXIWAY PAVEMENT EDGE MARKING PER DETAIL 2 ON SHEET C-504.
3. INSTALL HOLD BAR MARKING PER DETAIL 4 ON SHEET C-504.
4. INSTALL ENHANCED CENTERLINE MARKING PER DETAIL 5 ON SHEET C-504.
5. INSTALL NON-MOVEMENT AREA MARKING PER DETAIL 3 ON SHEET C-504.
6. INSTALL SURFACE PAINTED HOLD POSITION SIGNS PER DETAIL 6 ON SHEET C-504.

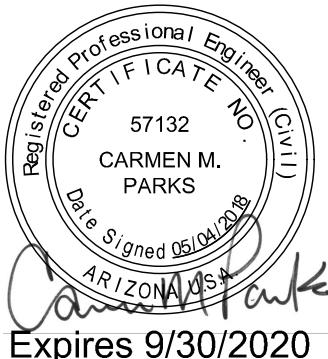
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KEY MAP
N.T.S.

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NO.	REVISIONS / SUBMISSIONS	DATE

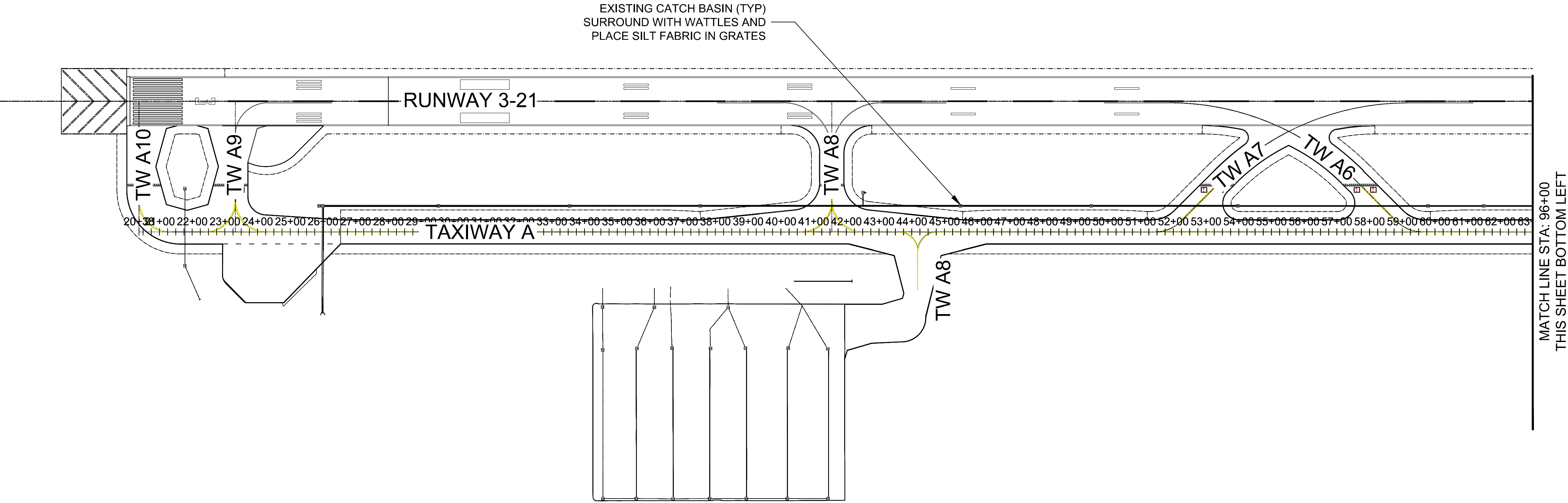
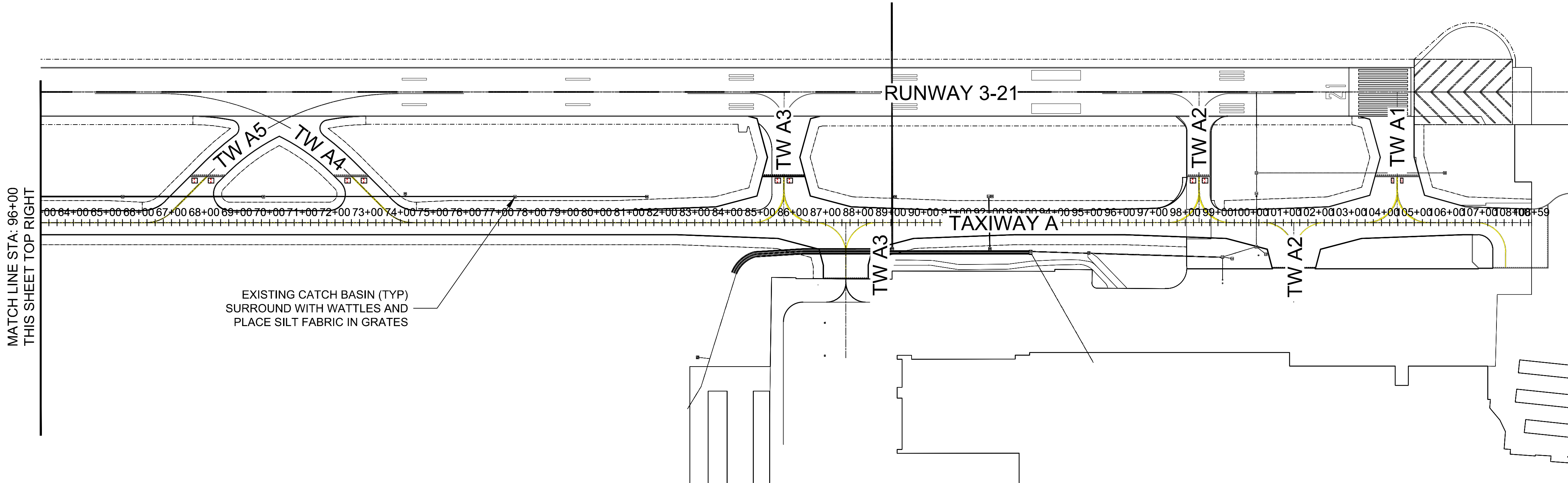
PHX DVI CYR
CITY OF PHOENIX AVIATION DEPARTMENT
GYR AIRPORT TW A REHAB & STRENGTHENING
AV41000075-JFAA

Designed by: CMP
Drawn by: TCJ
Checked by: JM
Date: 05/2018
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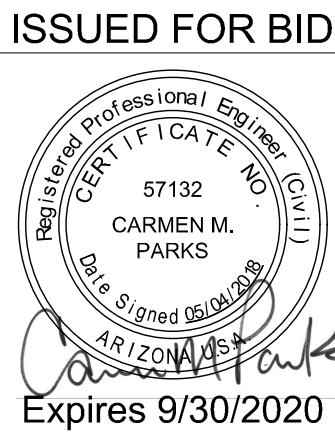
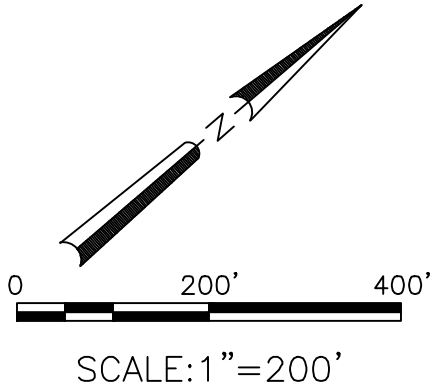
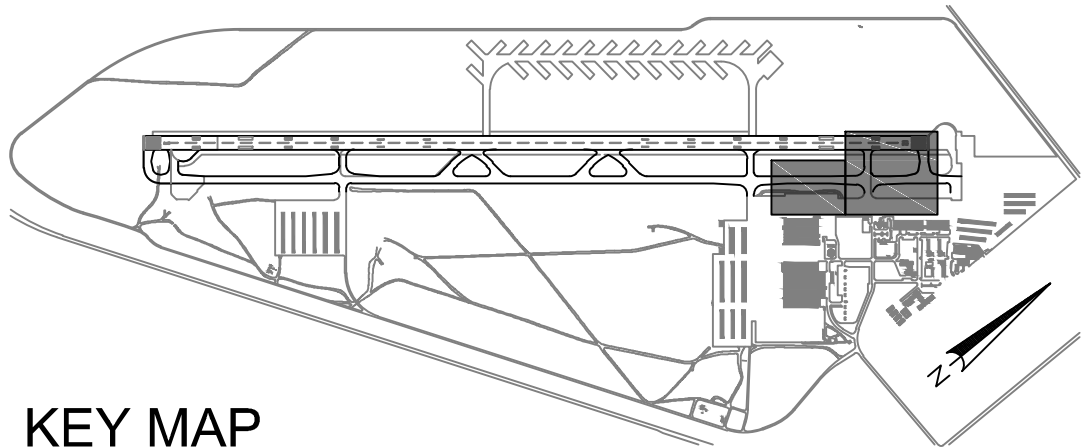
PAVEMENT MARKING PLAN
STA 88+00 TO 106+00

Sheet Reference Number:
C-022
Sheet 33 of 66

MATCH LINE STA: 96+00
THIS SHEET TOP RIGHT



KEY MAP
N.T.S.



SWPPP GENERAL NOTES

- ALL STORMWATER CONTROLS SHALL BE PLACED PRIOR TO COMMENCEMENT OF ANY EARTH DISTURBING ACTIVITIES AND SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL THE NOTICE OF TERMINATION HAS BEEN FILED BY THE ENGINEER.
- ANY MODIFICATIONS TO STORMWATER CONTROLS MUST BE APPROVED BY THE ENGINEER.
- CONTRACTOR SHALL SUPPLY A DETAILED SWPPP CONFORMING TO THE REQUIREMENTS OUTLINED IN AC 150/5 320-15. THE SWPPP SHALL BE TURNED OVER TO THE CITY OF PHOENIX AT THE COMPLETION OF ALL CONSTRUCTION WORK.
- NEW AND EXISTING STORM DRAIN INLET STRUCTURES SHALL BE PROTECTED WITH A WATTLE SURROUNDING THE STRUCTURE AND SILT FABRIC INSTALLED IN THE GRATE IN CONSTRUCTION AREAS.
- CONTRACTOR SHALL REVIEW THE FOLLOWING BMP'S IN THE MARICOPA COUNTY DRAINAGE DESIGN MANUAL AND IMPLEMENT AS REQUIRED:
 - EC-1 EROSION CONTROL MATS
 - EC-5 STABILIZED CONSTRUCTION ENTRANCE
 - EC-6 CONSTRUCTION ROAD STABILIZATION
 - EC-7 DUST CONTROL
 - EC-11 OUTLET PROTECTION, VELOCITY DISSIPATION DEVICES
 - SPC-1 ORGANIC FILTER BARRIER (WATTLE)
 - SPC-5 SILT FENCE
 - SPC-7 STORM DRAIN INLET PROTECTION
 - GH-1 CHEMICAL MANAGEMENT
 - GH-2 SOLID WASTE MANAGEMENT
 - GH-3 EQUIPMENT MAINTENANCE MANAGEMENT
 - GH-4 DESIGNATED WASHDOWN AREAS
 - GH-5 SPILL CONTAINMENT PLAN
 - GH-6 ROAD SWEEPING / TRACKOUT CLEANING

LEGEND

- CONCRETE WASHOUT AREA
TO BE DETERMINED IN THE FIELD IF NEEDED

NOTE

SEE SHEET C-024 FOR SWPPP DETAILS

Designed by: CMP
Drawn by: TCJ
Checked by: JM
Date: 05/2018
Dwg scale: 1" = 200'
MMI Proj. No.: 8131.022

STORM WATER POLLUTION PREVENTION PLAN

Sheet
Reference
Number:

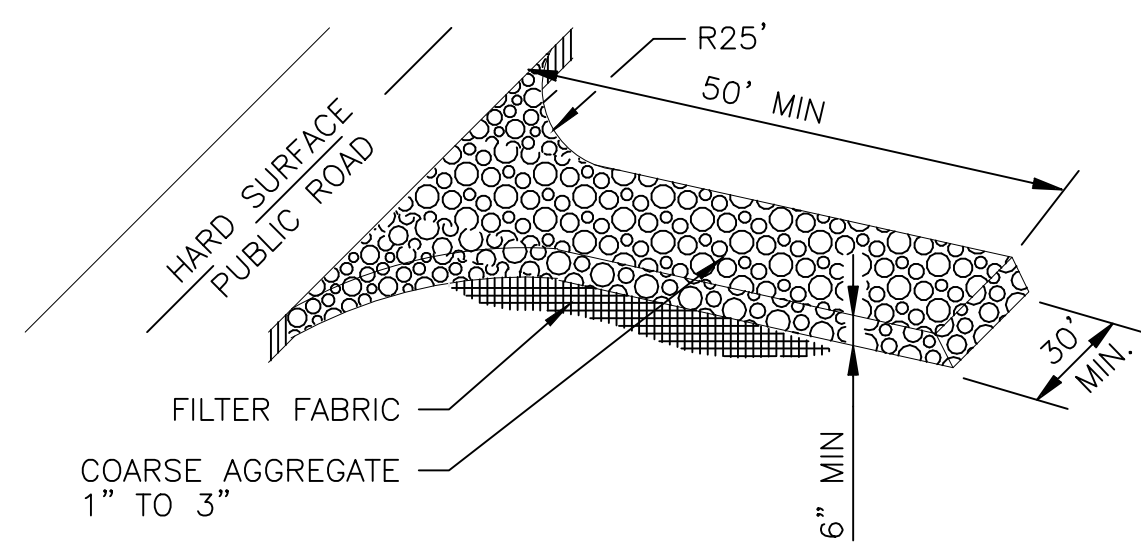
C-023

Sheet 34 of 66

PHX DVI CYR
CITY OF PHOENIX AVIATION DEPARTMENT
GYR AIRPORT TW A REHAB &
STRENGTHENING
AV41000075-JFAA

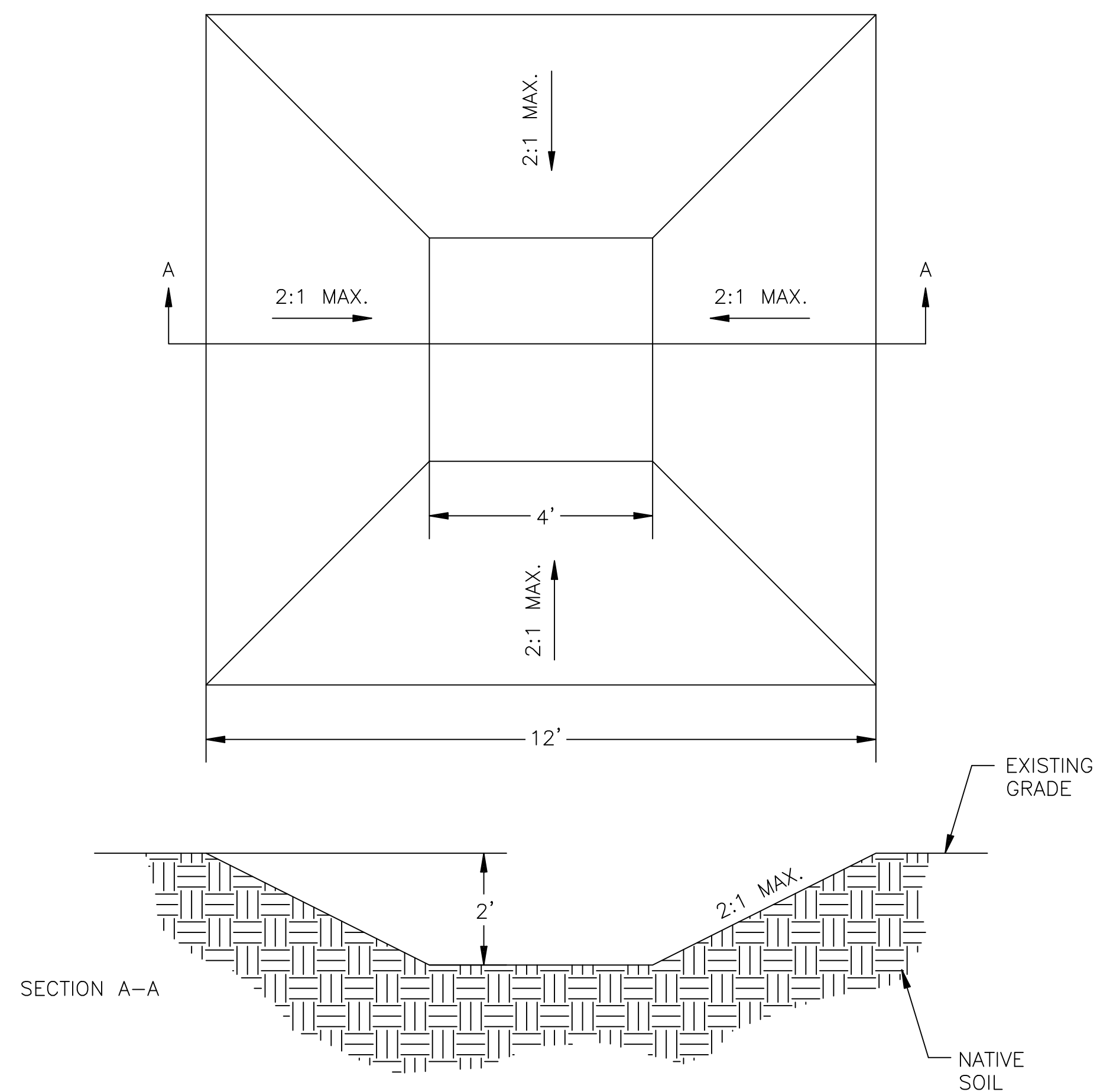
PER CITY OF PHOENIX CITY
CODE CHAPTER 2, SECTION
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OBLIGATIONS OF THE
CONTRACTOR'S CONTRACT
WITH THE CITY OF PHOENIX.

NO.	REVISIONS / SUBMISSIONS	DATE



A C-024 STABILIZED CONSTRUCTION ENTRANCE DETAILMARICOPA COUNT STD.

STABILIZED CONSTRUCTION ENTRANCES AND/OR WASH RACKS WILL BE PLACED AT TIME OF CONSTRUCTION AS DIRECTED BY AIRPORT OPERATIONS STAFF TO PREVENT FOREIGN OBJECT DEBRIS (FOD) ON AIRPORT PAVEMENT AREAS



B CONCRETE WASHOUT SUMP DETAIL

1. ALL CONCRETE WASHOUTS SHALL TAKE PLACE WITHIN SPECIFIED SUMP. CONCRETE WASHOUT IS NOT PERMITTED AT ANY OTHER AREA ON THE SITE.
2. SUMP SHALL BE MAINTAINED BY CONTRACTOR AND EMPTIED AS NECESSARY TO ALLOW CONCRETE WASHOUT TO OCCUR IN SUMP.
3. SUMP SHALL HAVE AN HDPE LINER, OR APPROVED EQUAL.

Sheet
Reference
Number:

C-024

Sheet 35 of 66

STORM WATER POLLUTION PREVENTION PLAN DETAILS

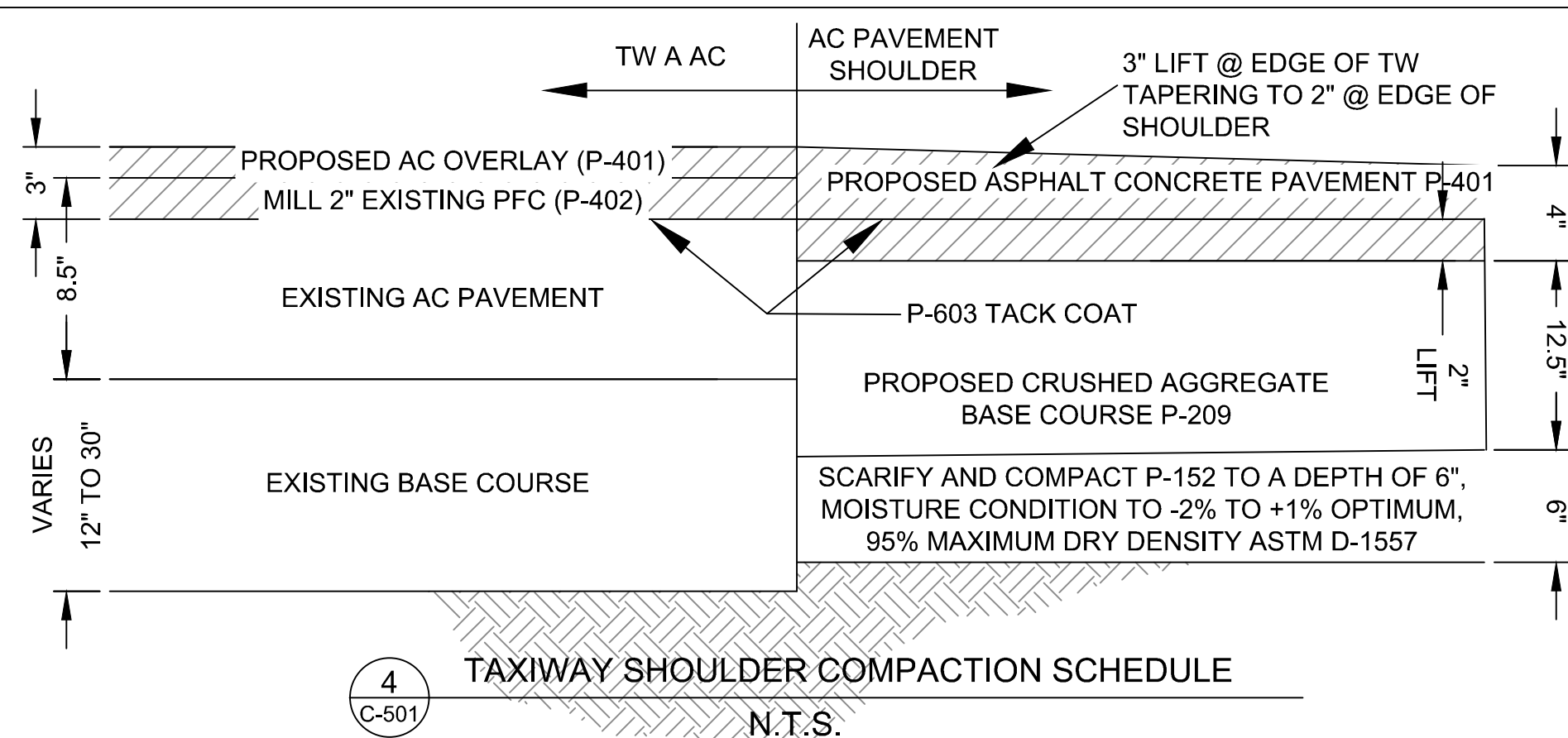
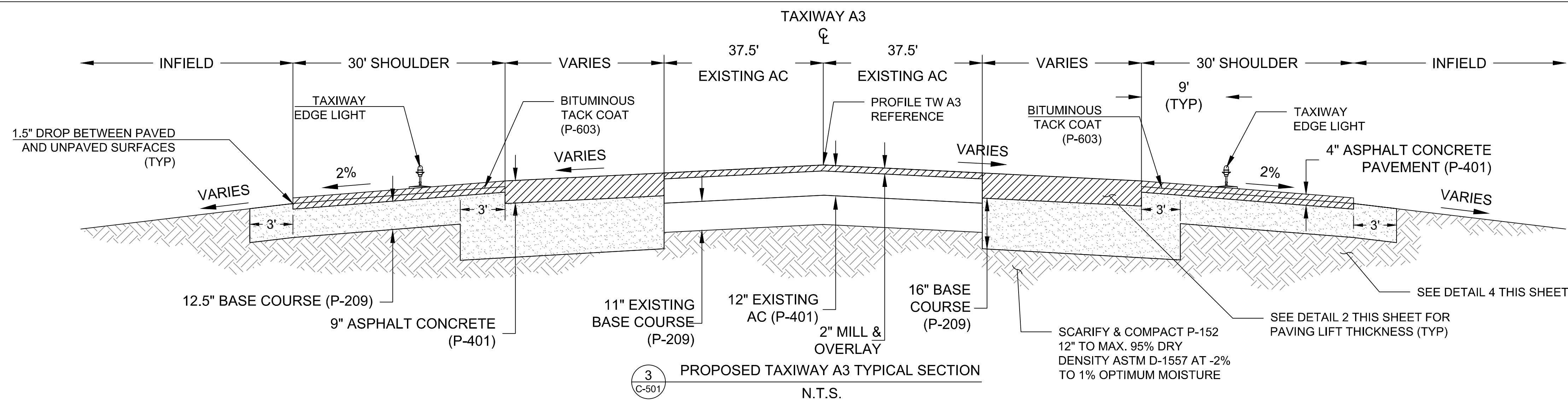
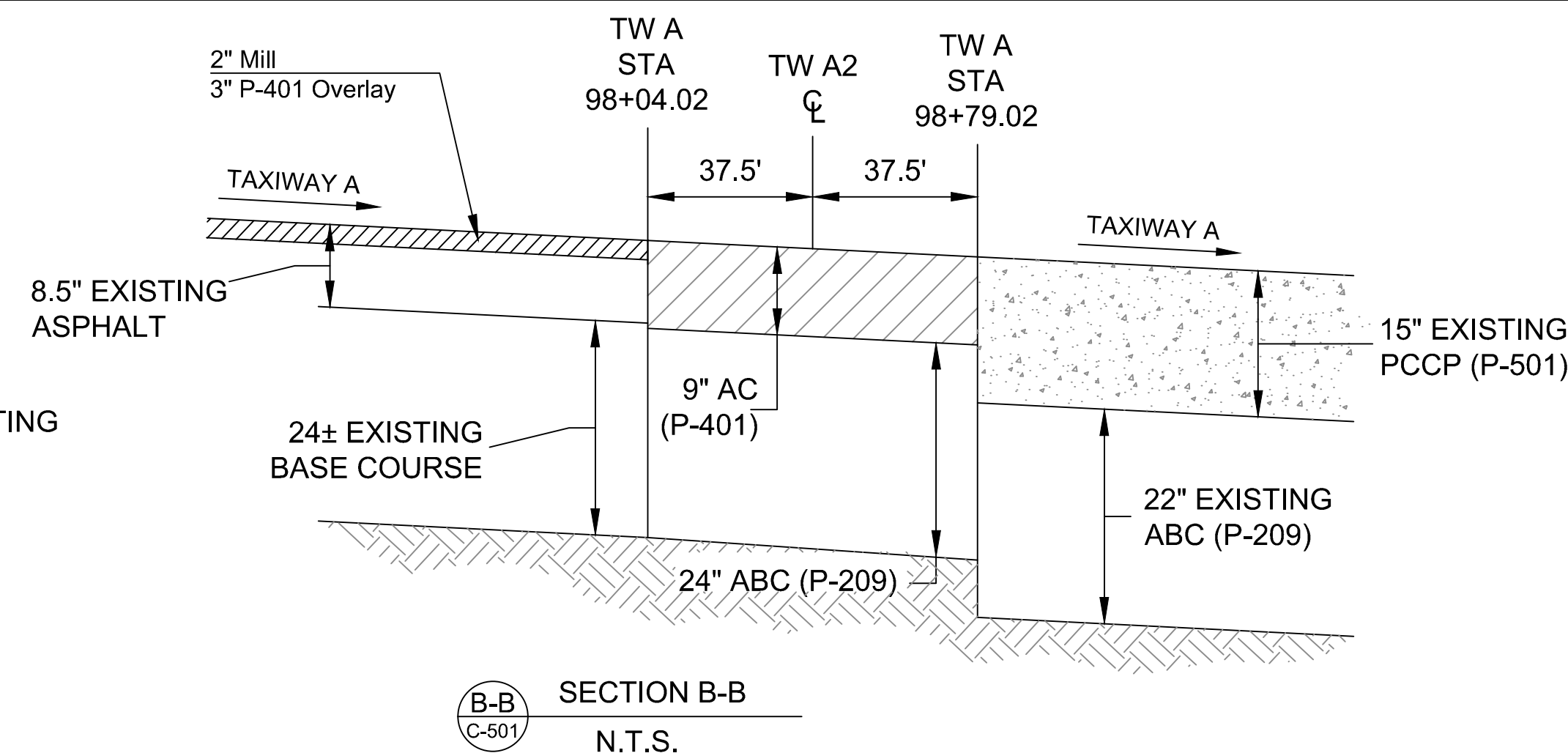
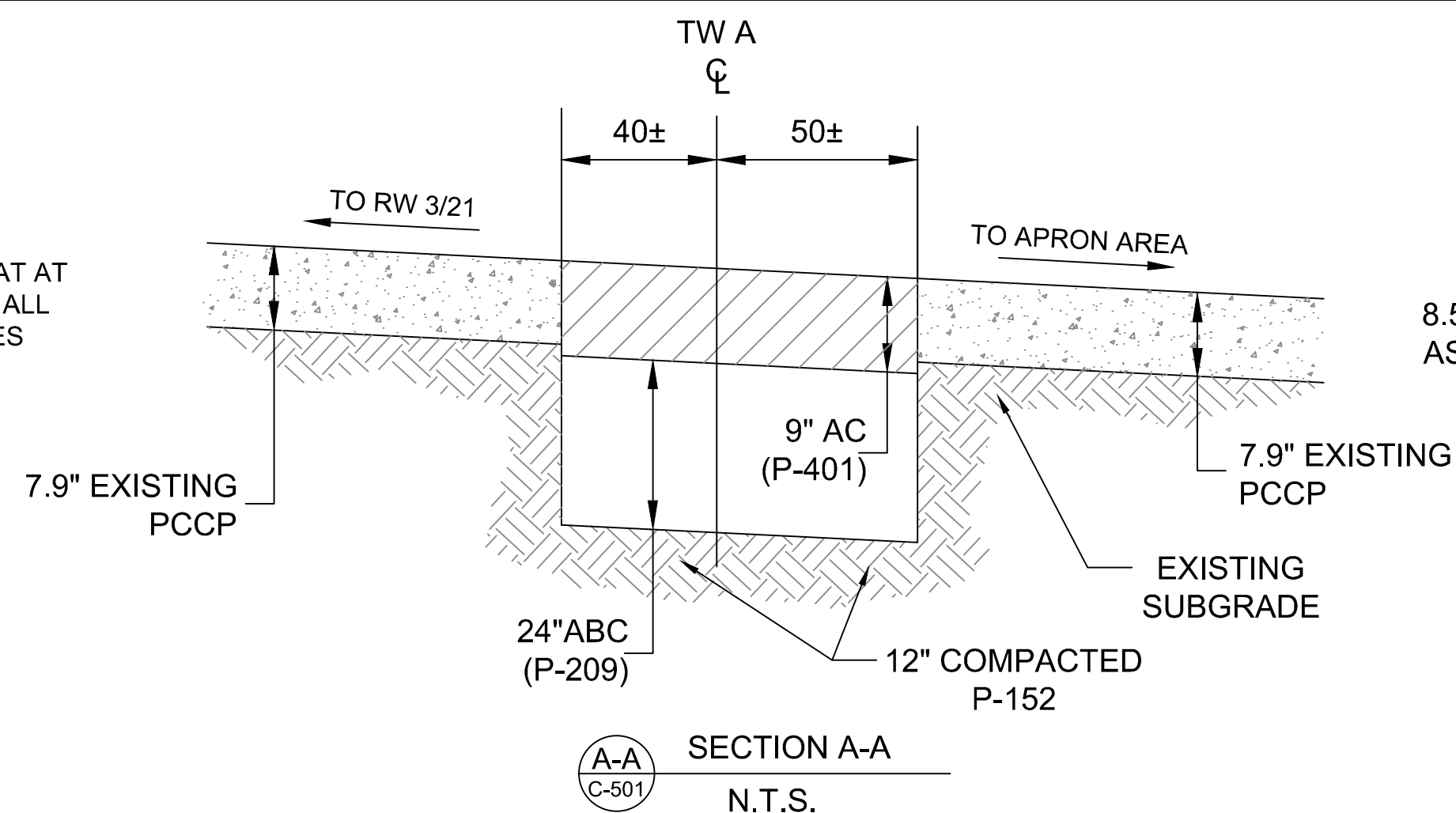
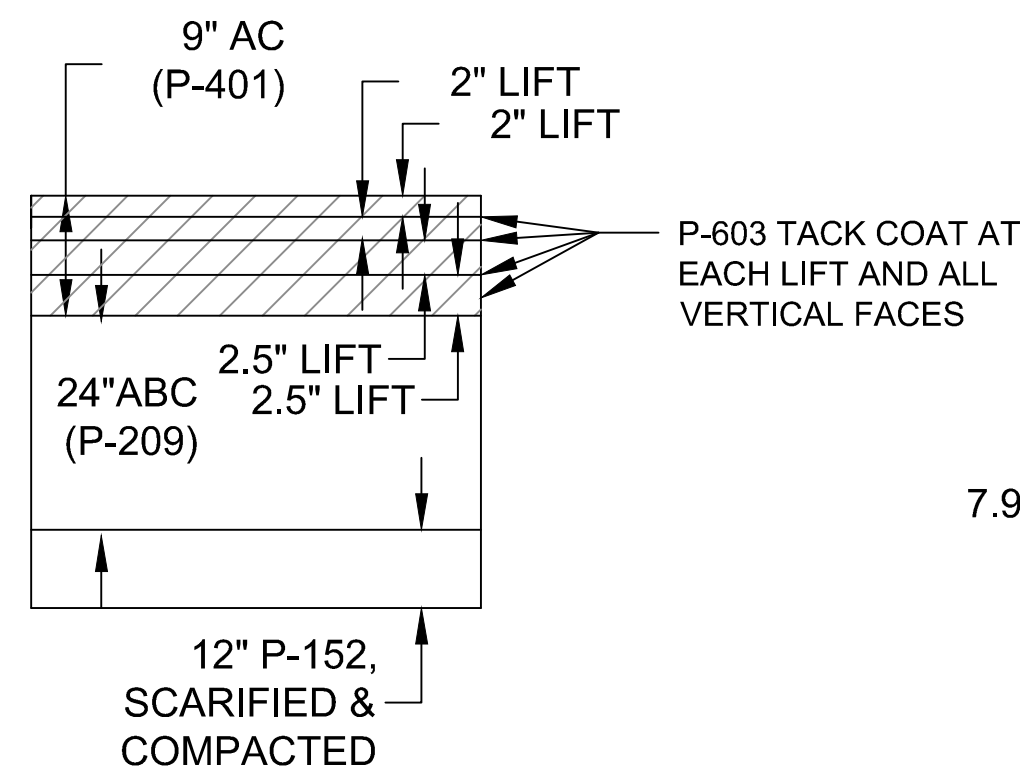
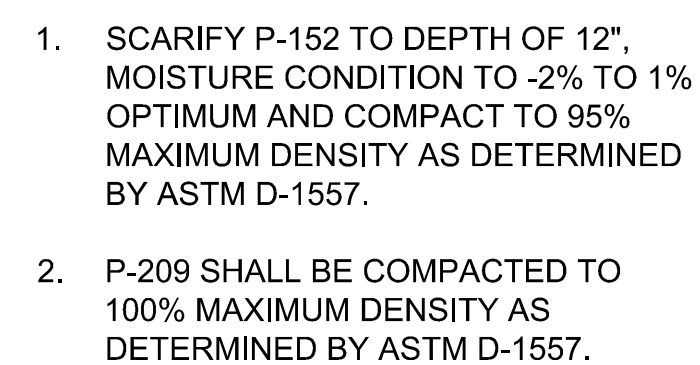
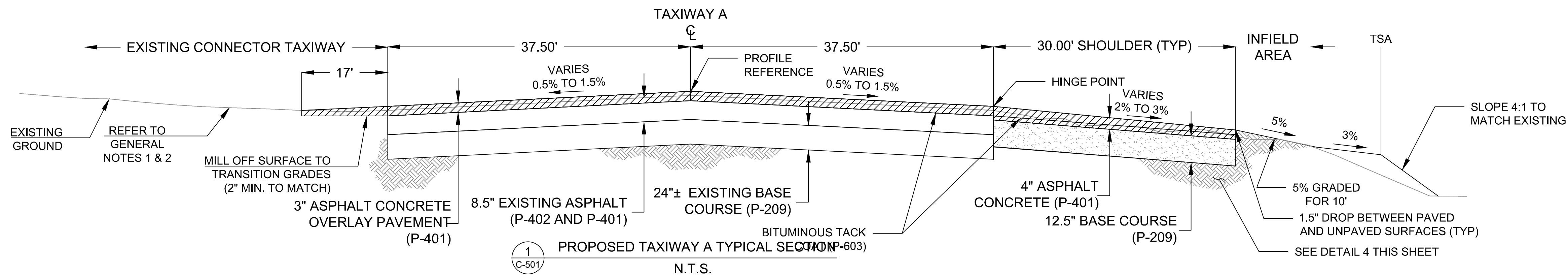
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Date: 05/2018
Dwg scale: N.T.S.
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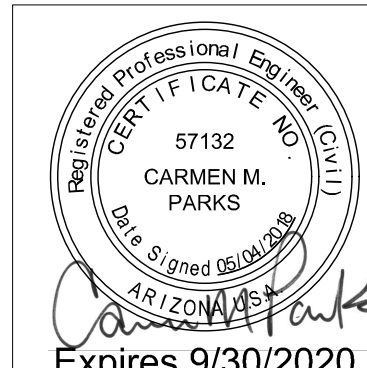
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GENERAL NOTES

1. EXISTING TAXIWAYS A8, A7, A6, A5 & A4 HAVE AN HMA THICKNESS OF 7" FOR THE TAXIWAY PAVEMENT AND 3" FOR THE SHOULDER PAVEMENT.
2. EXISTING BASE COURSE THICKNESS FOR TAXIWAYS A8, A7, A6, A5, & A4 IS EITHER 9" P-304 CEMENT TREATED BASE OR 18" P-209 AGGREGATE BASE COURSE.
3. EXISTING BASE THICKNESS FOR TAXIWAY SHOULDERS AT TAXIWAYS A8, A7, A6, A5 & A4 IS 9" P-304 OR 17" P-209.
4. THE PROPOSED TAXIWAY A GRADE PROFILE IS 1" ABOVE EXISTING GRADE.
5. TACK VERTICAL FACE OF EXISTING OR NEW VERTICAL CONSTRUCTION JOINTS WITH P-603 ASPHALT TACK COAT.

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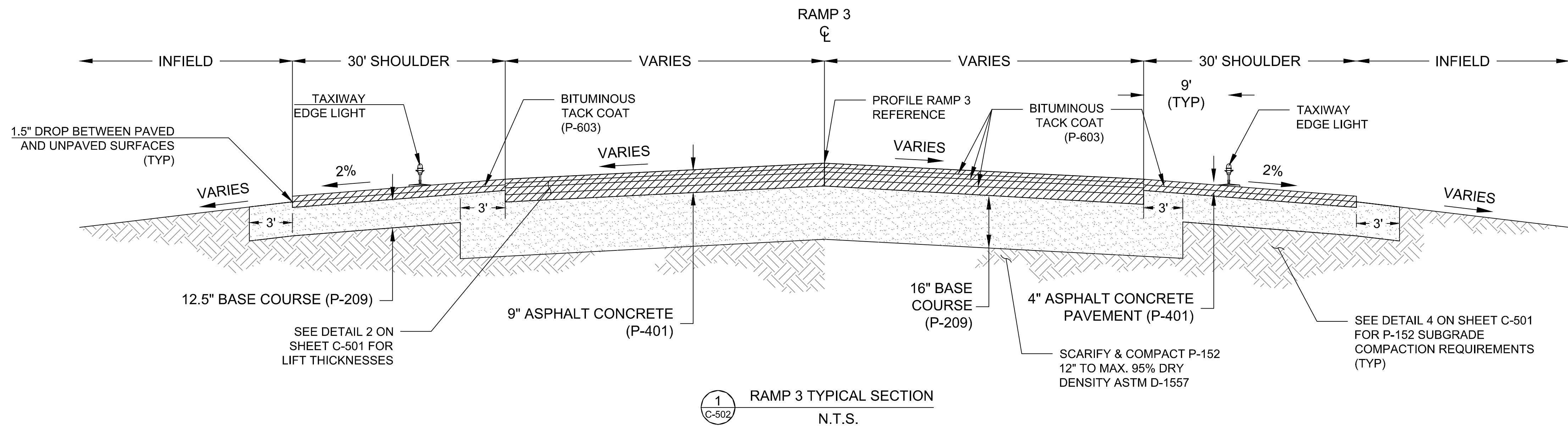
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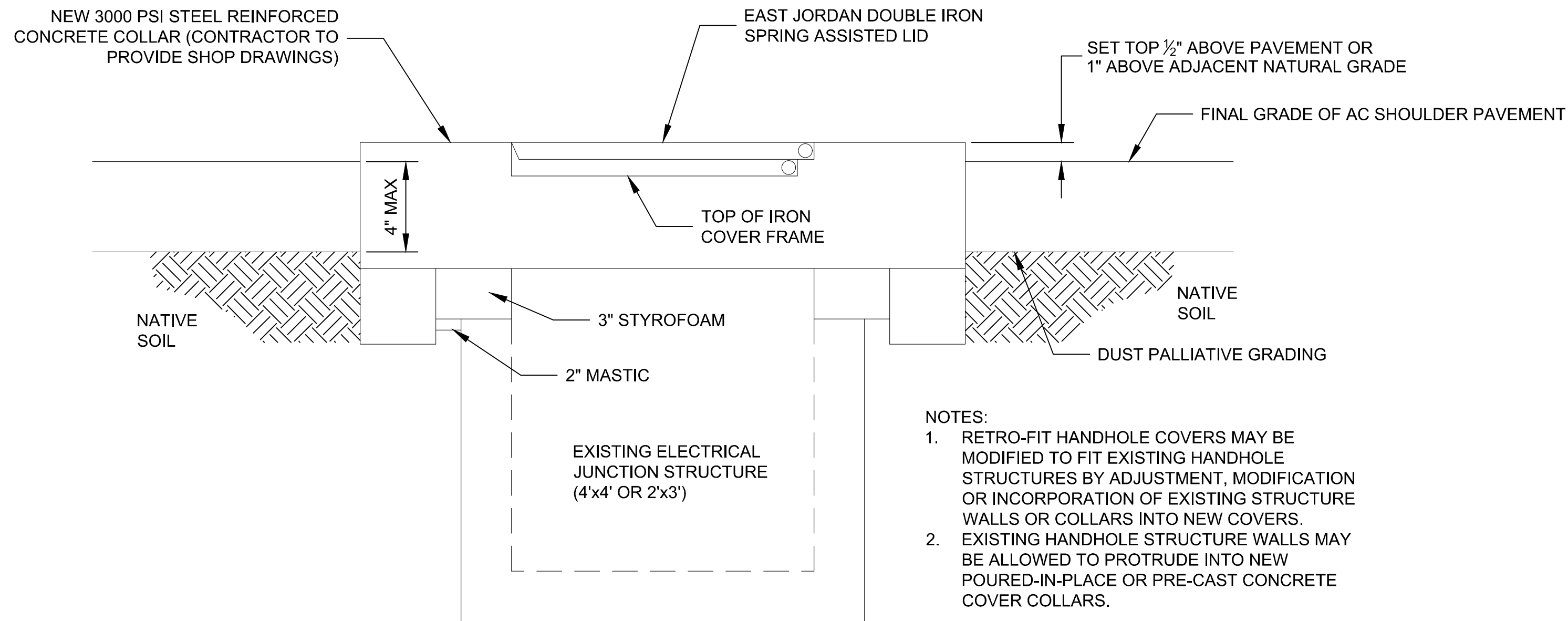
15YR AIRPORT TW A REHAB & STRENGTHENING

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C-50

Sheet 36 of 1

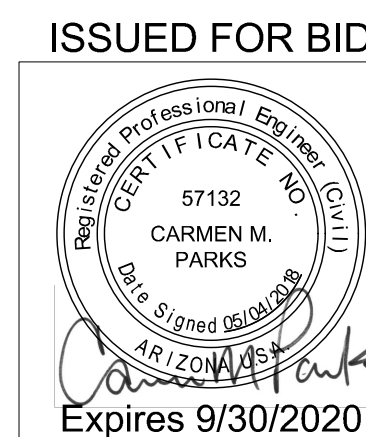


1. SCARIFY P-152 TO DEPTH OF 12", MOISTURE CONDITION TO -2% TO 1% OPTIMUM AND COMPACT TO 95% MAXIMUM DENSITY AS DETERMINED BY ASTM D-1557.
2. P-209 SHALL BE COMPACTED TO 100% MAXIMUM DENSITY AS DETERMINED BY ASTM D-1557.
3. TACK VERTICAL FACE OF EXISTING AND NEW VERTICAL CONSTRUCTION JOINTS WITH P-603 ASPHALT TACK COAT.



- NOTES:
1. ALL NEW VAULTS, VAULT LIDS, AND ADJUSTMENTS OF EXISTING VAULTS WITHIN THE SHOULDER PAVEMENT SHALL BE SET $\frac{1}{2}$ " ABOVE PAVEMENT ELEVATION. CONTRACTOR TO VERIFY PAVEMENT GRADE FOR FINAL LID ELEVATION.
 2. CONTRACTOR SHALL FIELD VERIFY EXISTING VAULTS TO BE ADJUSTED PRIOR TO CONSTRUCTION. VAULT ADJUSTMENTS WILL BE NO MORE THAN SIX (6") INCHES. CONTRACTOR TO FIELD VERIFY TOP OF VAULT AND EXISTING GRADE TO DETERMINE NUMBER OF ADJUSTMENT RINGS AND HEIGHT OF RINGS.

2 RAISE HAND HOLE AND INSTALL COVER
C-502 N.T.S.



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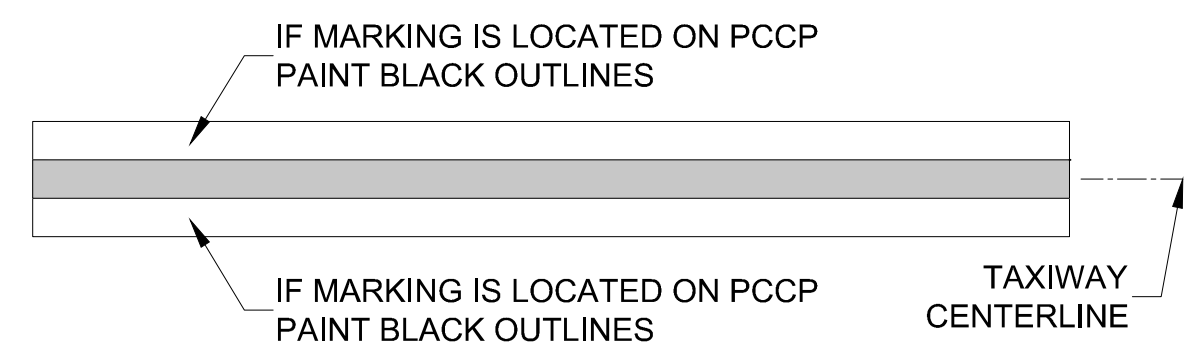
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GYR AIRPORT TW A REHAB & STRENGTHENING

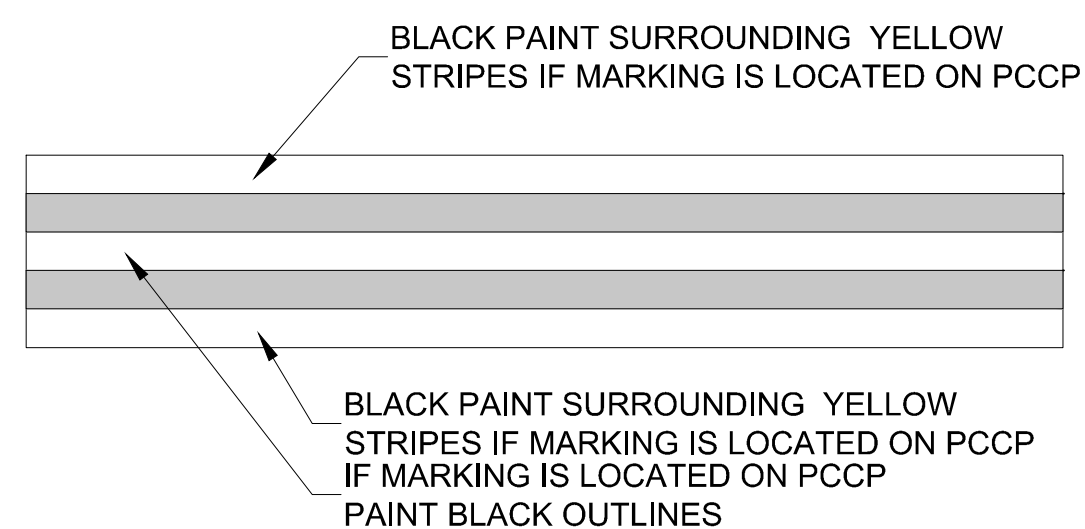
RAMP 3 TYPICAL SECTION
HAND HOLE ADJUSTMENT

Sheet Reference Number:
C-502

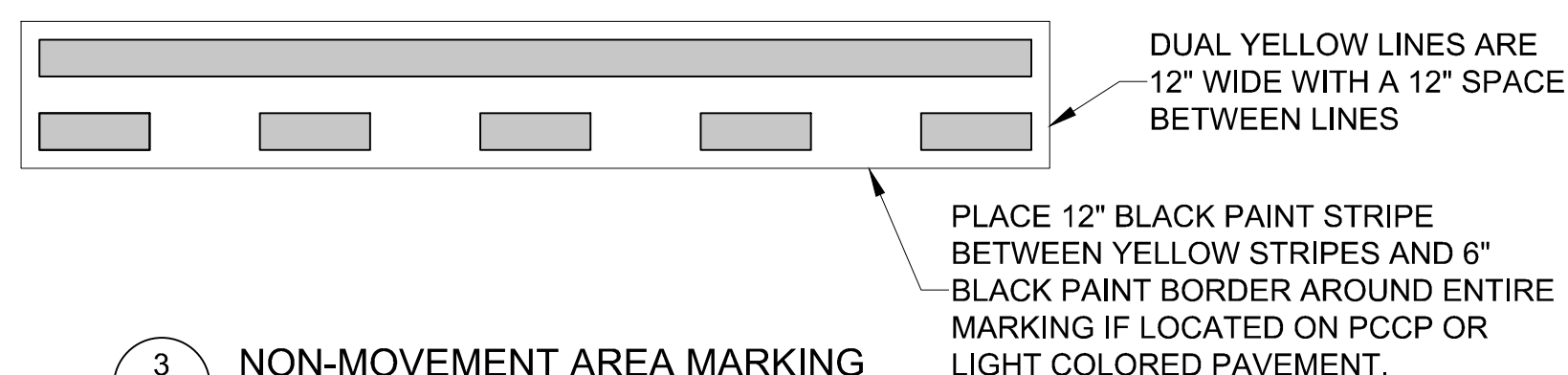
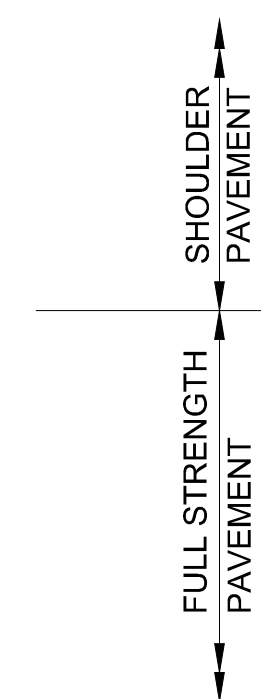
Sheet 39 of 66



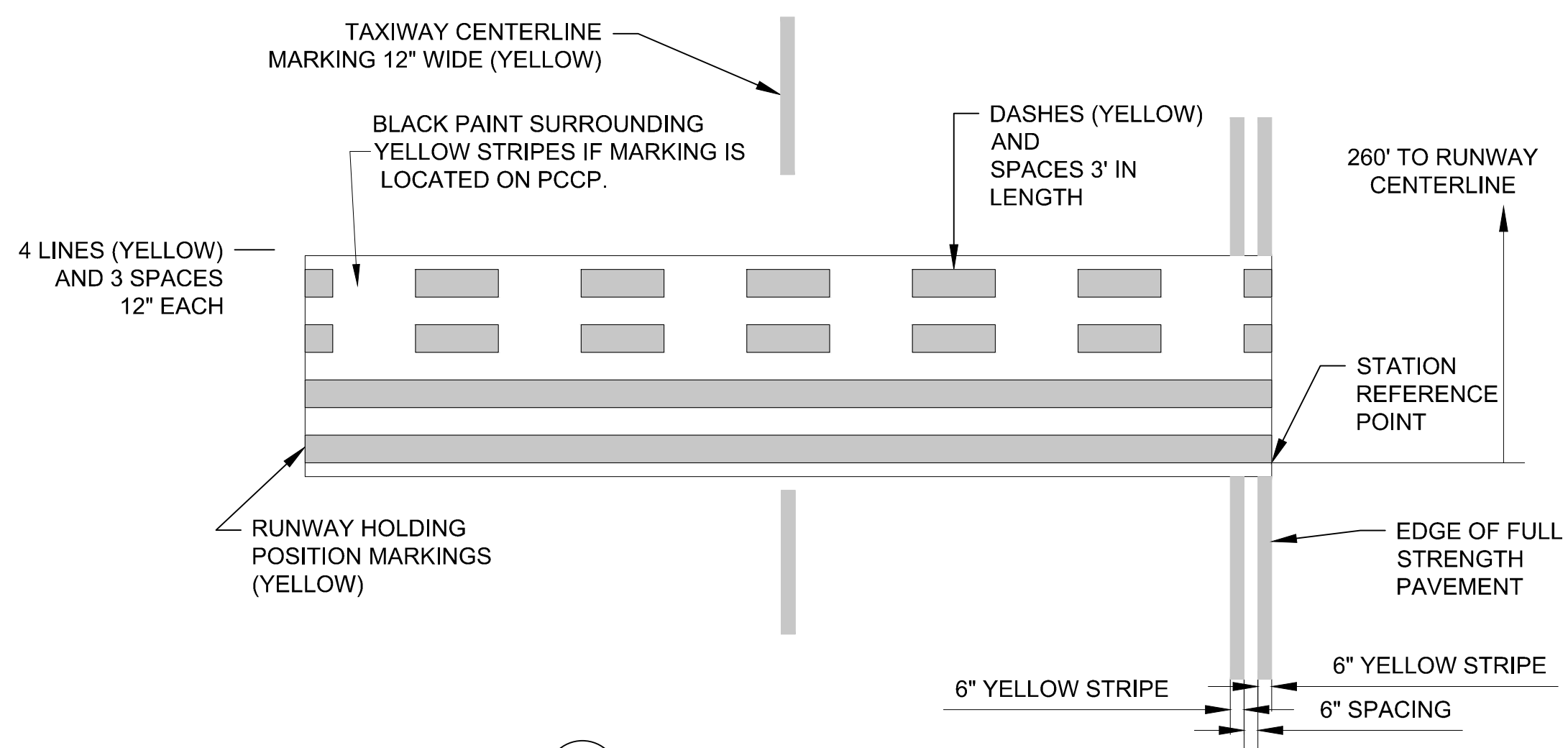
1	TAXIWAY CENTERLINE MARKING
C-504	N.T.S.



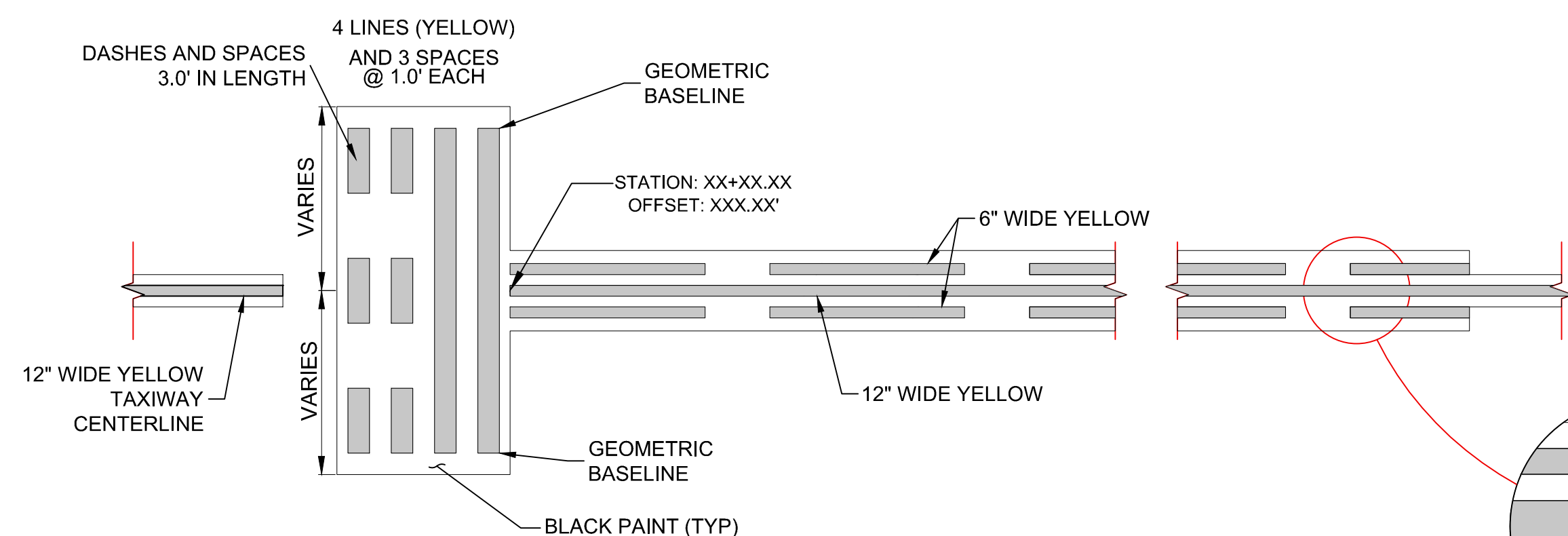
2	TAXIWAY EDGE PAVEMENT MARKING
C-504	N.T.S.



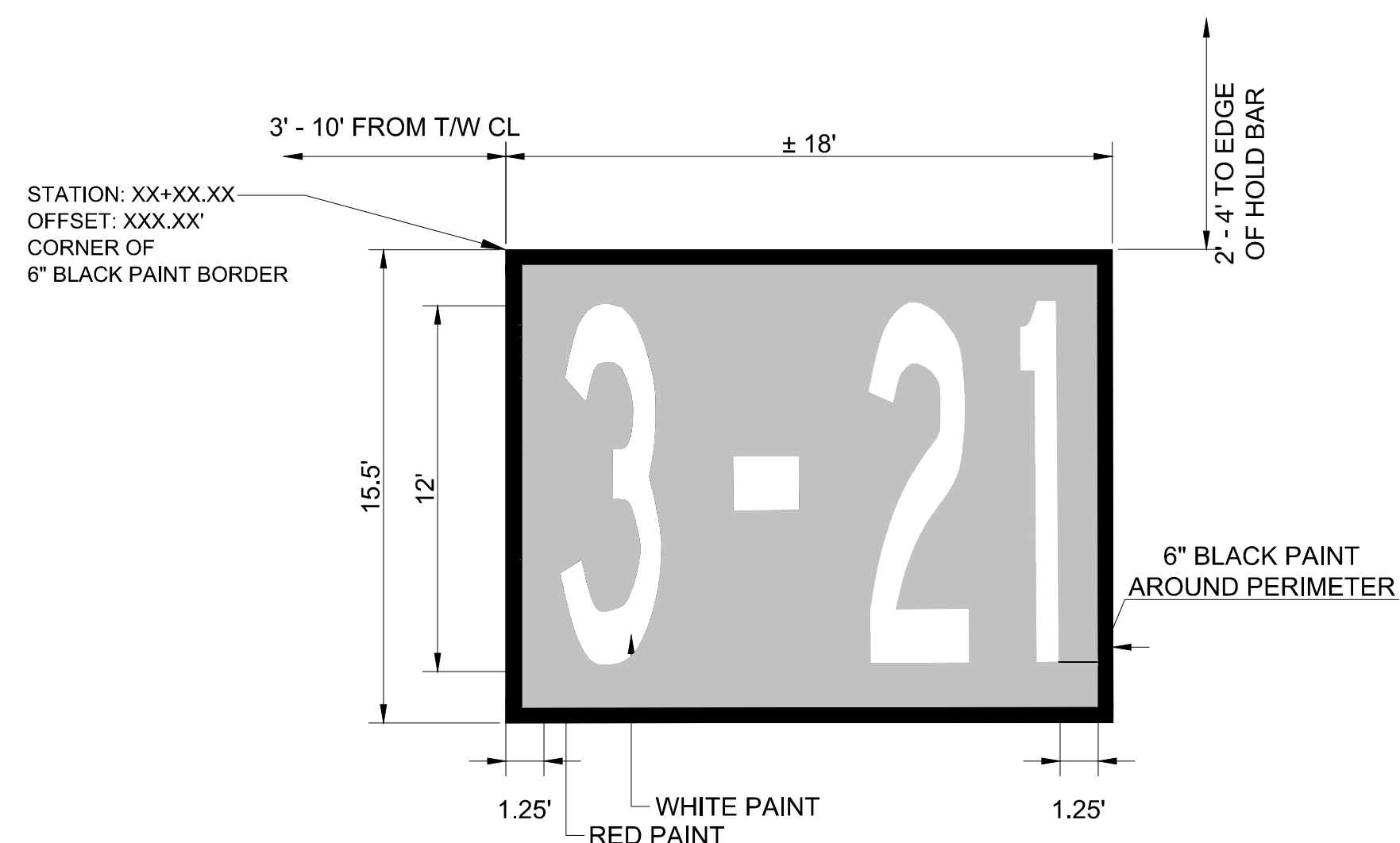
3	NON-MOVEMENT AREA MARKING
C-504	N.T.S.



4 HOLD POSITION MARKING
C 504 N.T.S.



5 ENHANCED RUNWAY HOLD BAR AND ENHANCED CENTERLINE DETAIL
C-504 N.T.S.



6 SURFACE PAINTED HOLD POSITION MARKING
C-504 N T S

- NOTES:
1. INSCRIPTIONS MUST BE 12'.
 2. RED PAINT MUST EXTEND 15" BEYOND THE INSCRIPTION ON ALL SIDES.
 3. SURFACE PAINTED HOLD POSITION MARKINGS SHALL HAVE A 6" BLACK BORDER.

GENERAL MARKING NOTES

1. TYPE IV GRADE A GLASS BEADS SHALL BE USED FOR ALL PERMANENT FAA PAVEMENT MARKINGS EXCEPT BLACK PAINT.
2. FAA PAVEMENT MARKING DETAILS SHALL CONFORM TO THE LATEST EDITION OF THE FEDERAL AVIATION ADMINISTRATION'S (FAA) ADVISORY CIRCULAR AC-150/5340-1. IF A CONFLICT OCCURS BETWEEN THESE PLANS AND THE ADVISORY CIRCULAR, THE ADVISORY CIRCULAR SHALL GOVERN FOR FAA REQUIRED MARKINGS.
3. ALL MARKINGS SHALL MATCH EXISTING MARKINGS AT LIMITS OF CONSTRUCTION.
4. ALL MARKINGS ON PCCP AND OLD AC PAVEMENT SHALL BE OUTLINED IN BLACK.

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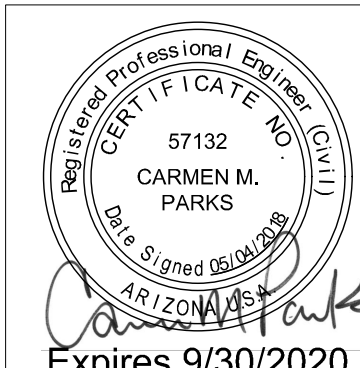
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PAVEMENT MARKING DETAILS

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BCC	BARE COPPER GROUND
CE	CONCRETE ENCASED
CKT	CIRCUIT
FAA	FEDERAL AVIATION ADMINISTRATION
FMC	FLEXIBLE METAL CONDUIT
GRS	GALVANIZED RIGID STEEL
LED	LIGHT EMITTING DIODE
LF	LINEAR FEET
OFA	OBJECT FREE AREA
PAPI	PRECISION APPROACH PATH INDICATOR
PVC	POLY-VINYL CHLORIDE
REIL	RUNWAY END INDICATOR LIGHT
RGL	RUNWAY GUARD LIGHT
RSA	RUNWAY SAFETY AREA
SE	SLURRY ENCASED
SES	SERVICE ENTRANCE SECTION
SGN	SIGN
TSA	TAXIWAY SAFETY AREA
TYP	TYPICAL

(UNLESS OTHERWISE NOTED ON PLANS)

EXISTING ELECTRICAL CONDUIT AND CONDUCTOR

 EXISTING RUNWAY GUARD LIGHT

 EXISTING AIRFIELD GUIDANCE SIGN

EXISTING TAXIWAY EDGE LIGHT

EXISTING RUNWAY EDGE LIGHT

 EXISTING TAXIWAY CENTERLINE LIGHT

☐ EXISTING HANDHOLE

 EXISTING IN-PAVEMENT TAXIWAY LIGHT

PPN	PAPI NORTH	RW	RUNWAY
PPS	PAPI SOUTH	SG	SIGN
RGL	RUNWAY GUARD LIGHT	TWN	TAXIWAY NORTH
RLN	REIL NORTH	TWS	TAXIWAY SOUTH
RLS	REIL SOUTH		

⊘ EXISTING L-868 BASE CAN WITH LID


○ NEW L-867E (24" DIA) JUNCTION CAN WITH BLANK COVER

RELOCATED EXISTING ELEVATED RUNWAY GUARD LIGHT

NEW HANDHOLE

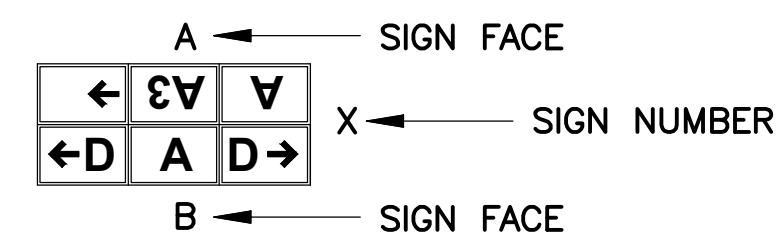
 NEW L-858(L) LED AIRFIELD GUIDANCE SIGN

● L-861T(LED) ELEVATED TAXIWAY EDGE LIGHT
ON NEW L-867 BASE



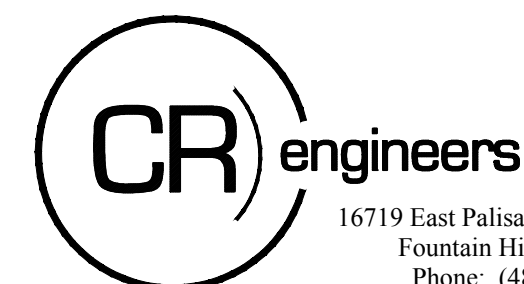
SALVAGED TAXIWAY CENTERLINE LIGHT REINSTALLED
ON EXISTING BASE.

 SALVAGED IN-PAVEMENT TAXIWAY LIGHT
REINSTALLED ON EXISTING BASE

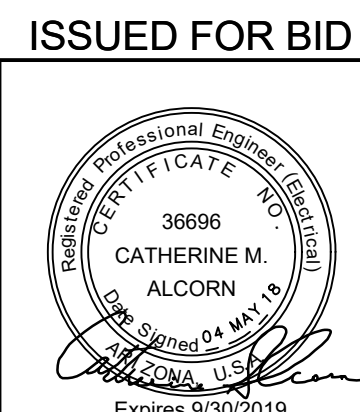


150/5340-18F	STANDARDS FOR AIRPORT SIGN SYSTEMS
150/5340-30J	DESIGN AND INSTALLATION DETAILS FOR AIRPORT VISUAL AIDS
150/5345-7F	SPECIFICATION FOR L-824 UNDERGROUND ELECTRICAL CABLE FOR AIRPORT LIGHTING CIRCUITS
150/5345-26D	SPECIFICATION FOR L-823 PLUG AND RECEPTACLE, CABLE CONNECTORS
150/5345-42H	SPECIFICATION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

E-001	ELECTRICAL LEGEND
E-002	ELECTRICAL NOTES
ED101 – ED106	AIRFIELD ELECTRICAL DEMOLITION PLANS
EA101 – EA106	AIRFIELD ELECTRICAL PLANS
EA501 – EA511	ELECTRICAL DETAILS
EA601	AIRFIELD GUIDANCE SCHEDULE
EA602	EQUIPMENT DATA TABLES



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ELECTRICAL LEGEND AND NOTES

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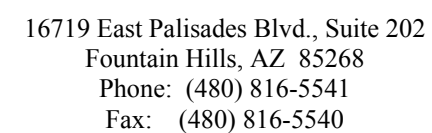
1. WITHIN AREAS OF DEMOLITION AND AS OTHERWISE SHOWN, REMOVE IDENTIFIED SIGN BASES, ISOLATION TRANSFORMERS AND OTHER INDICATED ITEMS.
2. CABLE REMOVAL
 - A. DIRECT BURIAL: REMOVE FROM WITHIN MANHOLES AND HANDHOLES AND REMOVE IN AREAS WHERE EXCAVATION REQUIRES DISTURBING, ABANDON ELSEWHERE.
 - B. IN CONDUIT: 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. REMOVED LIGHT FIXTURE AND SIGNS NOT DESIGNATED FOR RE-INSTALLATION SHALL BE OFFERED TO AIRPORT FOR RETURN UNLESS OTHERWISE NOTED.
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.

THE PURPOSE OF THIS POLICY IS TO STANDARDIZE THE LOCKOUT/TAGOUT PROCEDURES BETWEEN ELECTRICAL CONTRACTORS, GOODYEAR AIRPORT ELECTRICIANS, OPERATIONS AND AIR TRAFFIC CONTROL TOWER (ATCT).

- THIS PROCEDURAL CHECKLIST MUST BE FOLLOWED TO THE LETTER

1. CONTRACTOR SHALL COORDINATE ALL WORK WITH AIRPORT MAINTENANCE, AIRPORT OPERATIONS, AND THE ENGINEER AS NECESSARY.
2. CONTRACTOR SHALL GIVE 72 HOURS NOTICE PRIOR TO WORKING ON OR AROUND ANY DUCTBANKS, HANDHOLES, ETC.
3. CONTRACTOR SHALL MAINTAIN OR HAVE SUFFICIENT MATERIAL/ EQUIPMENT REQUIRED TO PROVIDE TEMPORARY LIGHTING AND CIRCUIT EXTENSIONS. THIS INCLUDES, BUT IS NOT LIMITED TO FIXTURES, TRANSFORMERS, BASES, CONDUIT, L-824 CABLE & L-823 SPLICE KITS. THESE ITEMS WILL NOT BE AVAILABLE FROM THE GOODYEAR MAINTENANCE SHOP.
4. THE CONTRACTOR SHALL MAINTAIN QUALIFIED PERSONNEL WITH THE APPROPRIATE EQUIPMENT, FOR THE INSTALLATION AND SPLICING OF AIRFIELD LIGHTING. SUCH PERSONNEL SHALL BE CAPABLE OF 60 MINUTE RESPONSE TIME IF THEY ARE NOT ALREADY PRESENT ON THE AIRFIELD.
5. TURN OFF AND COVER EXISTING SIGNAGE THAT MAY POTENTIALLY MISDIRECT AIRCRAFT MOVEMENT INTO CLOSED AREAS BARRICADED FOR CONSTRUCTION. SIGNAGE REQUIRING PARTIAL COVERAGE WITH TAXIWAY LOCATION PANELS REMAINING VISIBLE SHALL REMAIN ON WITH ONLY DIRECTIONAL PORTIONS COVERED WITH SECTIONS OF DARK COLORED TARP OR DOUBLE-LAYERED BURLAP THAT DOES NOT PERMIT VISIBILITY OF COVERED PORTION OF ARRAY DAY OR NIGHT. COVERS SHALL BE SECURELY HELD IN PLACE BY RATCHETING LASHING STRAPS, NO TAPE OR ADHESIVES WILL BE PERMITTED. SEE PHASING PLANS FOR PLACEMENT OF SIGN COVERS.
6. COVER EXISTING ELEVATED EDGE LIGHT FIXTURES IN CLOSED AREA BARRICADED FOR CONSTRUCTION WITH 4" PVC PIPE. COVER SHALL EXTEND 2" MIN. ABOVE TOP OF FIXTURE.
7. PROVIDE ANY TEMPORARY AIRFIELD CIRCUIT JUMPERS REQUIRED TO MAINTAIN OPERATION OF ALL CIRCUITS AFFECTED BY CONSTRUCTION PRIOR TO START OF DEMOLITION. TEMPORARY CIRCUIT JUMPERS SHALL BE SLEEVED IN 2" CONDUIT, SANDBAGGED OR SECURED TO LOW-LEVEL BARRICADES. TEMPORARY CIRCUIT JUMPERS MAY BE ROUTED THROUGH NEW TAXIWAY CROSSINGS OR EXISTING SPARE CONDUITS AS REQUIRED AND SHALL BE COMPLETELY REMOVED WHEN NO LONGER REQUIRED FOR OPERATION. TEMPORARY JUMPER PLACEMENT SHALL NOT AFFECT AIRCRAFT MOVEMENT OR AIRPORT OPERATIONS.
8. UNCOVER SIGNS AND EDGE LIGHT FIXTURES, REMOVE TEMPORARY JUMPERS, AND VERIFY OPERATION AT THE END OF PROJECT.

1. GROUNDS RODS AND COUNTERPOISE WIRE ARE CONSIDERED INCIDENTAL TO FIXTURE AND CONDUIT INSTALLATION.
2. ELECTRICAL CONTRACTOR SHALL COORDINATE ALL DEMOLITION AND CONSTRUCTION WITH CIVIL CONTRACTOR TO REDUCE CONFLICTS THAT AFFECT CONSTRUCTION PHASING AND SCHEDULING.
3. CONTRACTOR SHALL FIELD VERIFY ALL FIXTURE STATION AND OFFSETS AND CONFIRM ALL LOCATIONS ARE WITHIN SPECIFICATION TOLERANCES.



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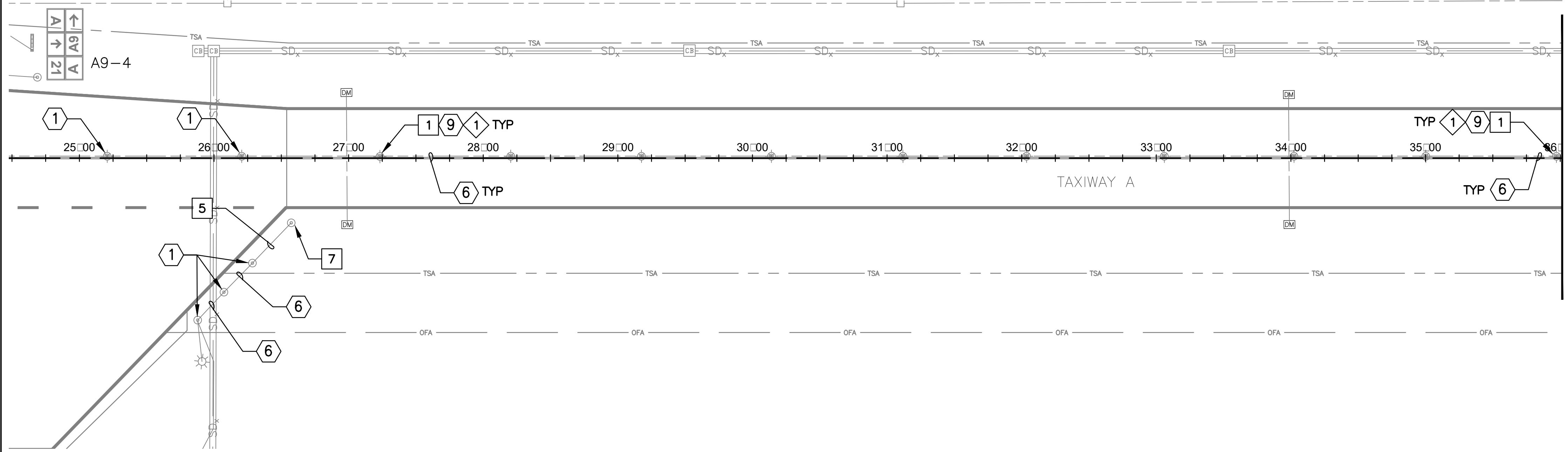
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MMI Proj. No.: 8131.022

ELECTRICAL NOTES

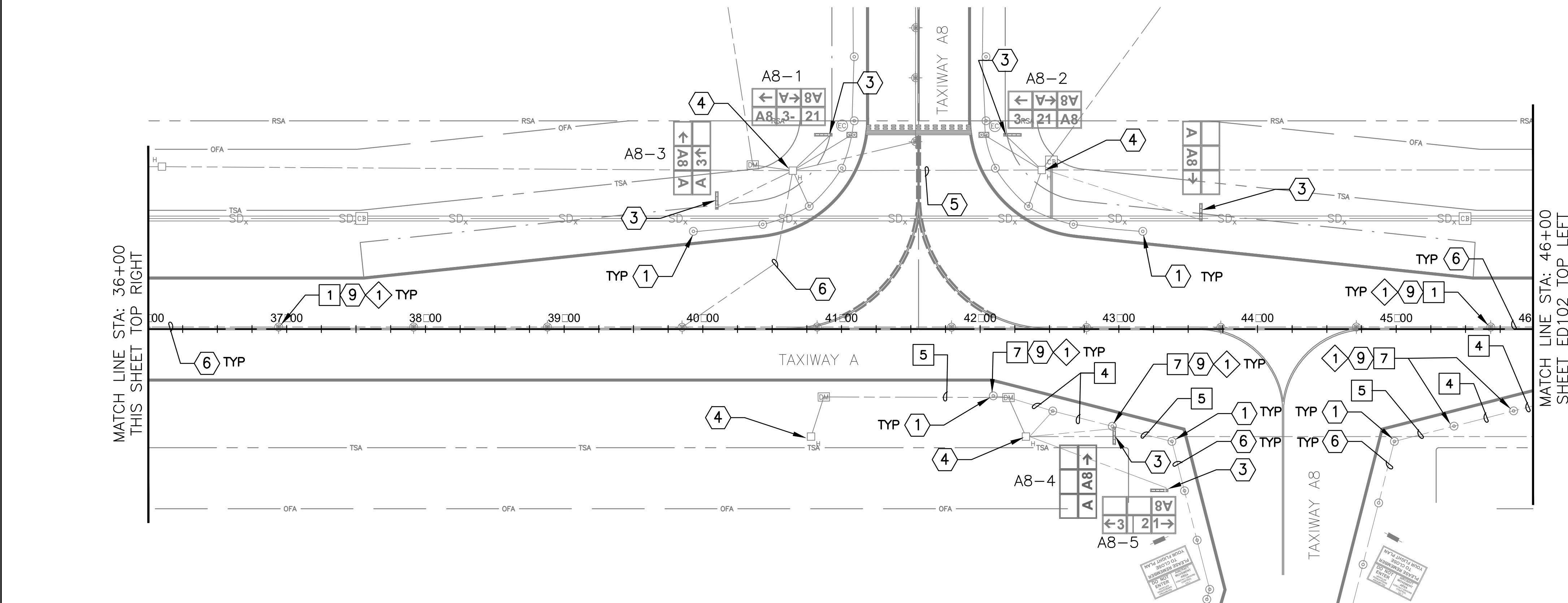
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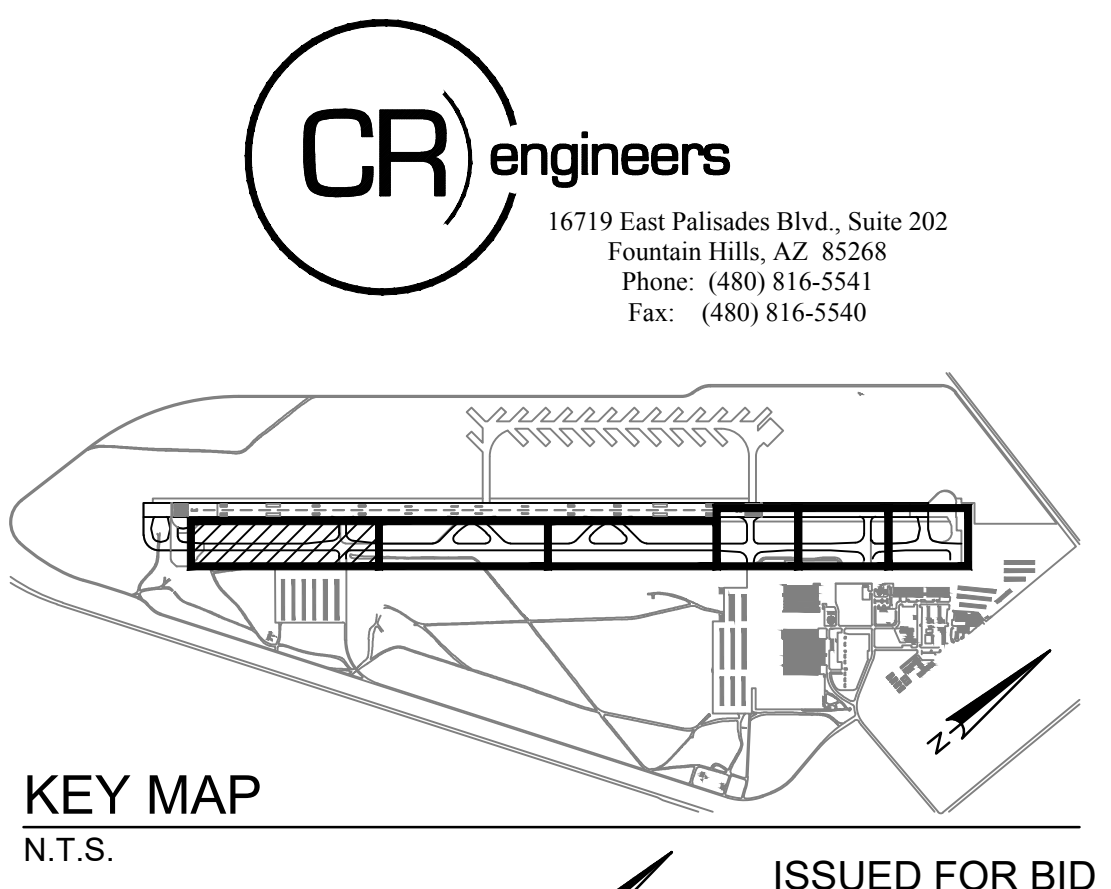
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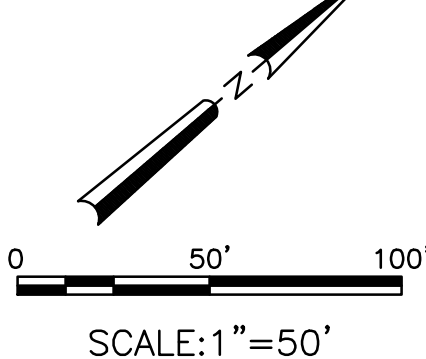
- DEMOLITION NOTES
- 1 REMOVE AND SALVAGE IN-PAVEMENT TAXIWAY CENTERLINE LIGHT AND FLANGE, INSTALL TEMPORARY STEEL COVER ON EXISTING BASE. RECONNECT CIRCUIT THROUGH BASE CAN. (20 TOTAL)
 - 4 EXCAVATE AND REMOVE EXISTING CONDUIT AND CONDUCTOR. (245 LF TOTAL)
 - 5 REMOVE EXISTING CONDUCTOR TO NEAREST HANDHOLE/BASE CAN, CONDUIT TO REMAIN. (342 LF TOTAL)
 - 7 REMOVE AND SALVAGE ELEVATED TAXIWAY EDGE LIGHT AND ISOLATION TRANSFORMER, DEMOLISH BASE CAN. (6 TOTAL)

- REFERENCE NOTES
- 1 EXISTING LIGHT TO REMAIN - PROTECT IN PLACE.
 - 3 EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN - PROTECT IN PLACE.
 - 4 EXISTING HANDHOLE TO REMAIN - PROTECT IN PLACE.
 - 5 EXISTING CONDUIT DUCTBANK TO REMAIN - PROTECT IN PLACE.
 - 6 EXISTING CONDUIT AND CABLE TO REMAIN - PROTECT IN PLACE.
 - 9 COORDINATE WITH AIRPORT FOR LOCKOUT/TAGOUT OF AFFECTED CIRCUIT(S).

- CIRCUIT IDENTIFICATION
- 1 CIRCUIT TWS



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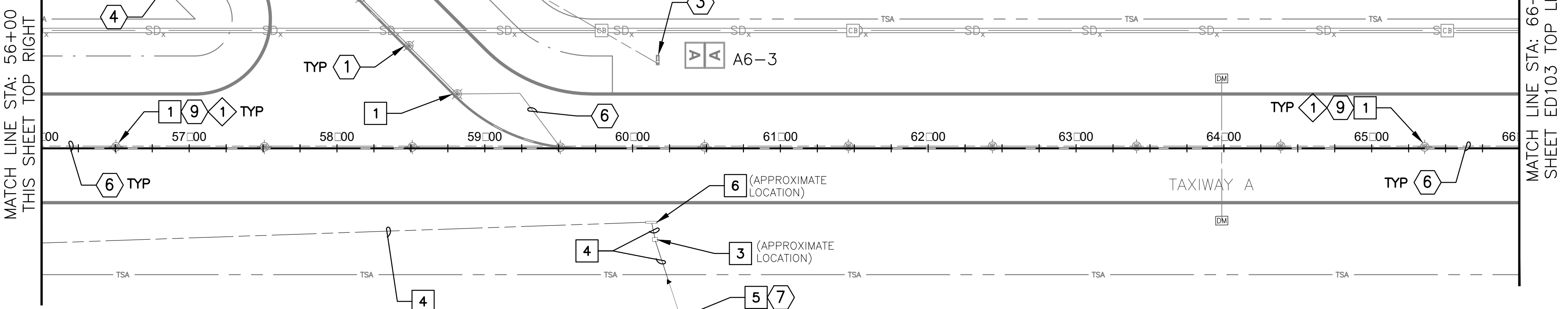
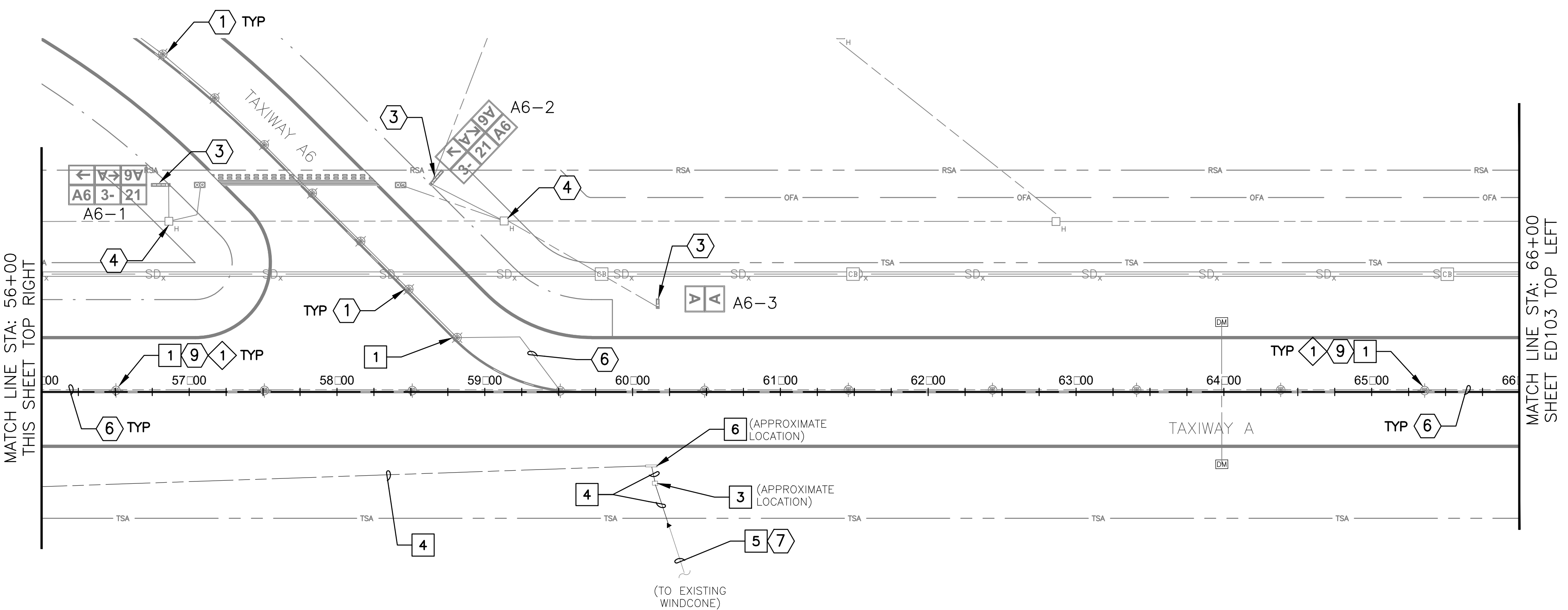
NO.	REVISIONS / SUBMISSIONS	DATE

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CITY OF PHOENIX AVIATION DEPARTMENT
GYR AIRPORT TW A REHAB & STRENGTHENING
AV41000075 FAA

Designed by: CA
Drawn by: JWB
Checked by: RD
Date: 05/2018
Dwg scale: AS NOTED
MMI Proj. No.: 8131-022

AIRFIELD ELECTRICAL DEMOLITION PLAN

Sheet Reference Number:
ED101
Sheet 42 of 66



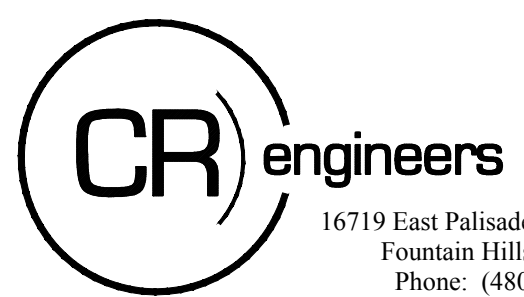
MATCH LINE STA: 56+00
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- | | DEMOLITION NOTES | |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1 | REMOVE AND SALVAGE IN-PAVEMENT TAXIWAY CENTERLINE LIGHT AND FLANGE, INSTALL TEMPORARY STEEL COVER ON EXISTING BASE. RECONNECT CIRCUIT THROUGH BASE CAN. (22 TOTAL) | |
| 3 | EXCAVATE AND REMOVE EXISTING PULL BOX. (2 TOTAL) | |
| 4 | EXCAVATE AND REMOVE EXISTING CONDUIT AND CONDUCTOR. (1,210 LF TOTAL) | |
| 5 | REMOVE EXISTING CONDUCTOR TO NEAREST HANDHOLE/BASE CAN, CONDUIT TO REMAIN. (645 LF TOTAL) | |
| 6 | REMOVE EXISTING SIGN BASE. (2 TOTAL) | |
| 7 | REMOVE AND SALVAGE ELEVATED TAXIWAY EDGE LIGHT AND ISOLATION TRANSFORMER, DEMOLISH BASE CAN. (1 TOTAL) | |

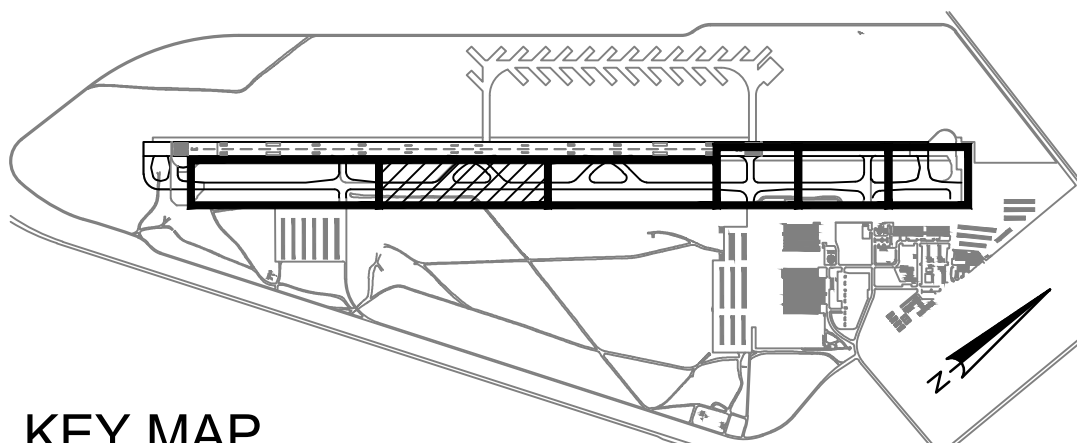
- ## REFERENCE NOTES
- 1 EXISTING LIGHT TO REMAIN – PROTECT IN PLACE.
 - 2 EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN – PROTECT IN PLACE.
 - 3 EXISTING HANDHOLE TO REMAIN – PROTECT IN PLACE.
 - 4 EXISTING CONDUIT DUCTBANK TO REMAIN – PROTECT IN PLACE.
 - 5 EXISTING CONDUIT AND CABLE TO REMAIN – PROTECT IN PLACE.
 - 6 PROVIDE TEMPORARY JUMPERS TO MAINTAIN CIRCUIT (WINDCONE) OPERATION AS REQUIRED.
 - 7 COORDINATE WITH AIRPORT FOR LOCKOUT/TAGOUT OF AFFECTED CIRCUIT(S).

◇ CIRCUIT IDENTIFICATION ◇

1 CIRCUI TWS

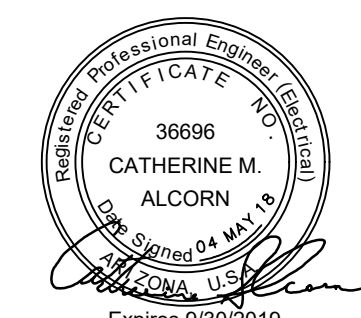
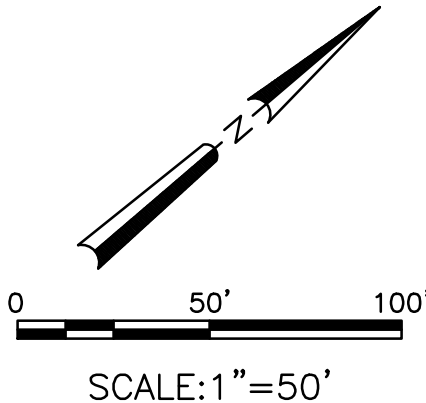
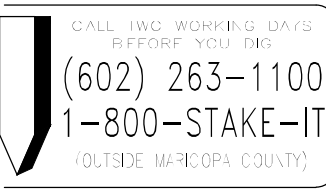


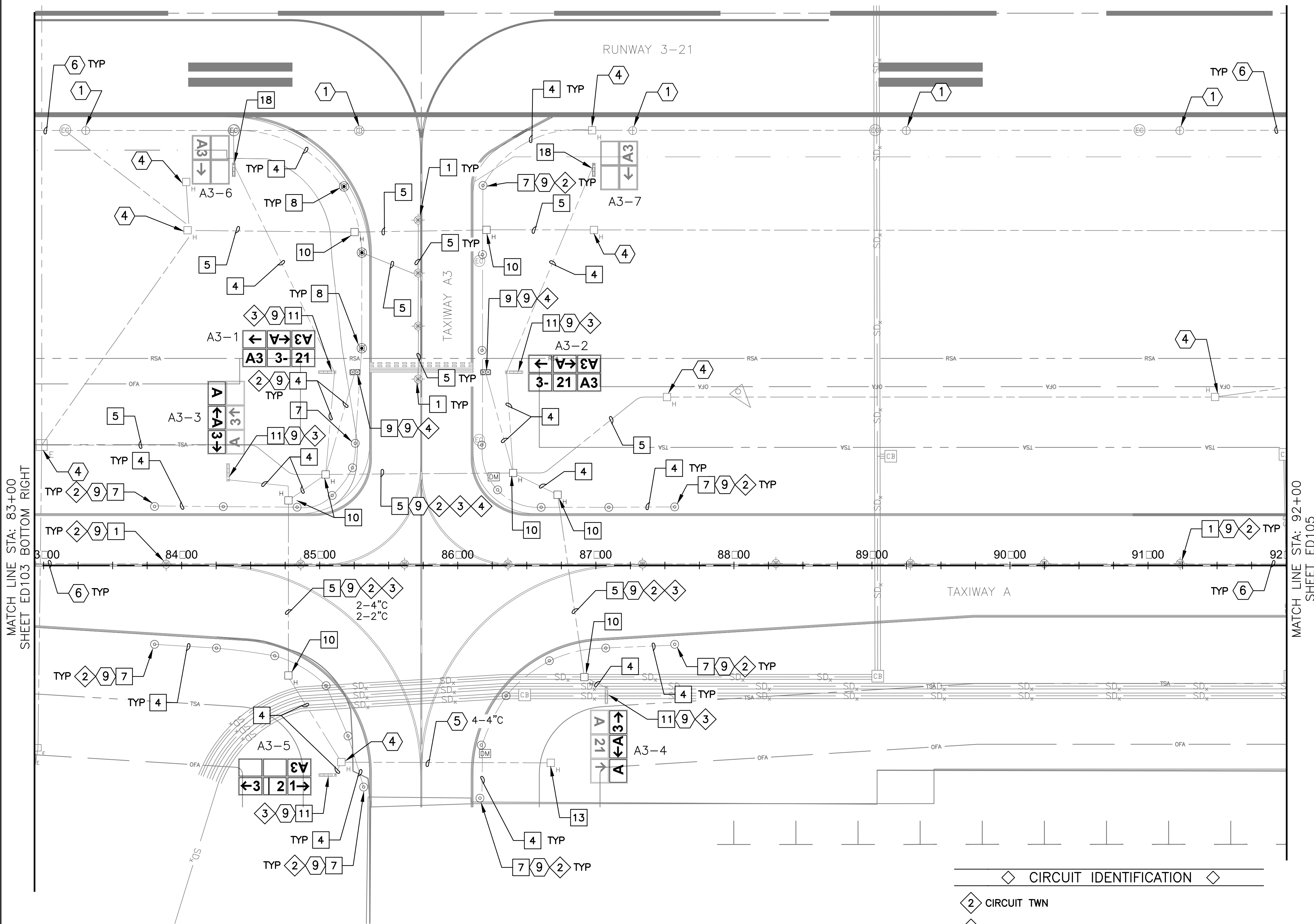
16719 East Palisades Blvd., Suite 202
Fountain Hills, AZ 85268
Phone: (480) 816-5541
Fax: (480) 816-5540



KEY MAP
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ISSUED FOR BID

[illegible]



MATCH LINE STA: 83+00
SHEET ED103 BOTTOM RIGHT

MATCH LINE STA: 92+00
SHEET ED105

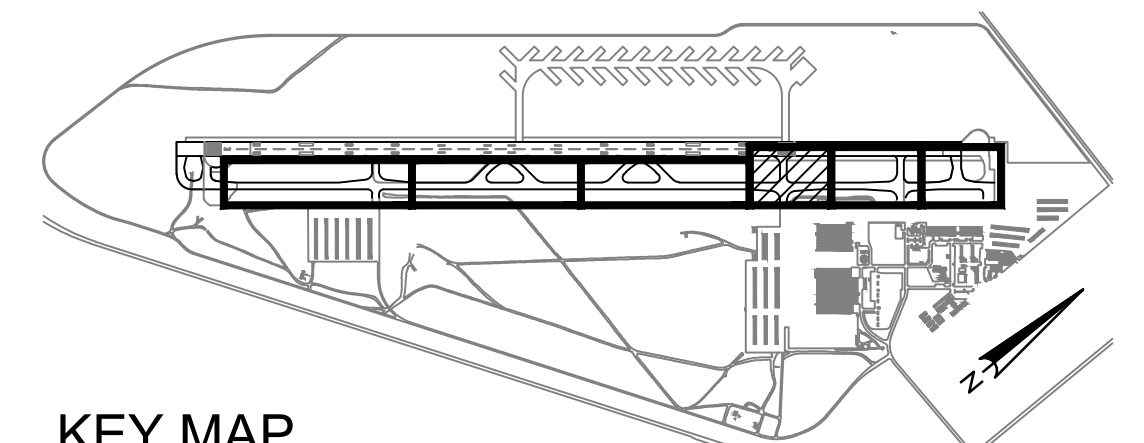
- ◇ CIRCUIT IDENTIFICATION ◇
- ◇ 2 CIRCUIT TWN
 - ◇ 3 CIRCUIT SG
 - ◇ 4 CIRCUIT RGL
 - ◇ 6 CIRCUIT RLN (REIL NORTH)
 - ◇ 7 CIRCUIT PPN

- DEMOLITION NOTES
- 1 REMOVE AND SALVAGE IN-PAVEMENT TAXIWAY CENTERLINE LIGHT AND FLANGE, INSTALL TEMPORARY STEEL COVER ON EXISTING BASE. RECONNECT CIRCUIT THROUGH BASE CAN. (13 TOTAL)
 - 4 EXCAVATE AND REMOVE EXISTING CONDUIT AND CONDUCTOR. (2,445 LF TOTAL)
 - 5 REMOVE EXISTING CONDUCTOR TO NEAREST HANDHOLE/BASE CAN, CONDUIT TO REMAIN. (1,350 LF TOTAL)
 - 7 REMOVE AND SALVAGE ELEVATED TAXIWAY EDGE LIGHT AND ISOLATION TRANSFORMER, DEMOLISH BASE CAN. (26 TOTAL)
 - 8 REMOVE AND SALVAGE IN-PAVEMENT TAXIWAY EDGE LIGHT AND ISOLATION TRANSFORMER, DEMOLISH BASE CAN. (3 TOTAL)
 - 9 REMOVE AND SALVAGE ELEVATED RUNWAY GUARD LIGHT AND ISOLATION TRANSFORMER, DEMOLISH BASE CAN. (2 TOTAL)
 - 10 EXCAVATE AND REMOVE EXISTING HANDHOLE AND RECONNECT REMAINING CONDUITS. (8 TOTAL)
 - 11 REMOVE AND SALVAGE EXISTING TAXIWAY GUIDANCE SIGN AND ISOLATION TRANSFORMER, DEMOLISH SIGN BASE. (5 TOTAL)
 - 13 REMOVE EXISTING HANDHOLE LID. (1 TOTAL)
 - 18 REMOVE AND SALVAGE EXISTING SIGN FOR REINSTALLATION UPON CONSTRUCTION PHASE COMPLETION. (2 TOTAL)

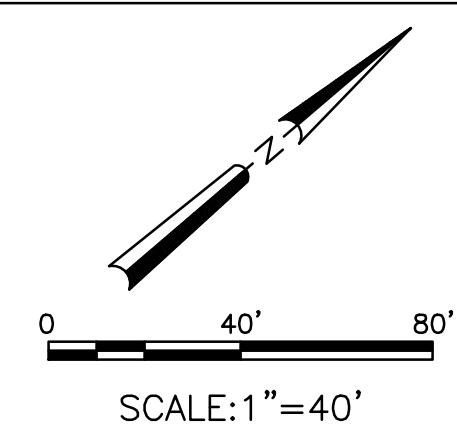
- REFERENCE NOTES
- 1 EXISTING LIGHT TO REMAIN - PROTECT IN PLACE.
 - 2 EXISTING CONDUIT TO REMAIN - PROTECT IN PLACE.
 - 3 EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN - PROTECT IN PLACE.
 - 4 EXISTING HANDHOLE TO REMAIN - PROTECT IN PLACE.
 - 5 EXISTING CONDUIT DUCTBANK TO REMAIN - PROTECT IN PLACE.
 - 6 EXISTING CONDUIT AND CABLE TO REMAIN - PROTECT IN PLACE.
 - 9 COORDINATE WITH AIRPORT FOR LOCKOUT/TAGOUT OF AFFECTED CIRCUIT(S).



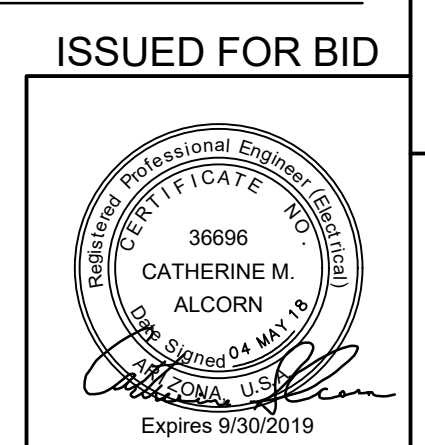
16719 East Palisades Blvd., Suite 202
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Fax: (480) 816-5540



KEY MAP
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SCALE: 1" = 40'



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PHX **AVIATION** **CR**
CITY OF PHOENIX AVIATION DEPARTMENT
GYR AIRPORT TW A REHAB &
STRENGTHENING
AV41000075 FAA

NO.	REVISIONS / SUBMISSIONS	DATE

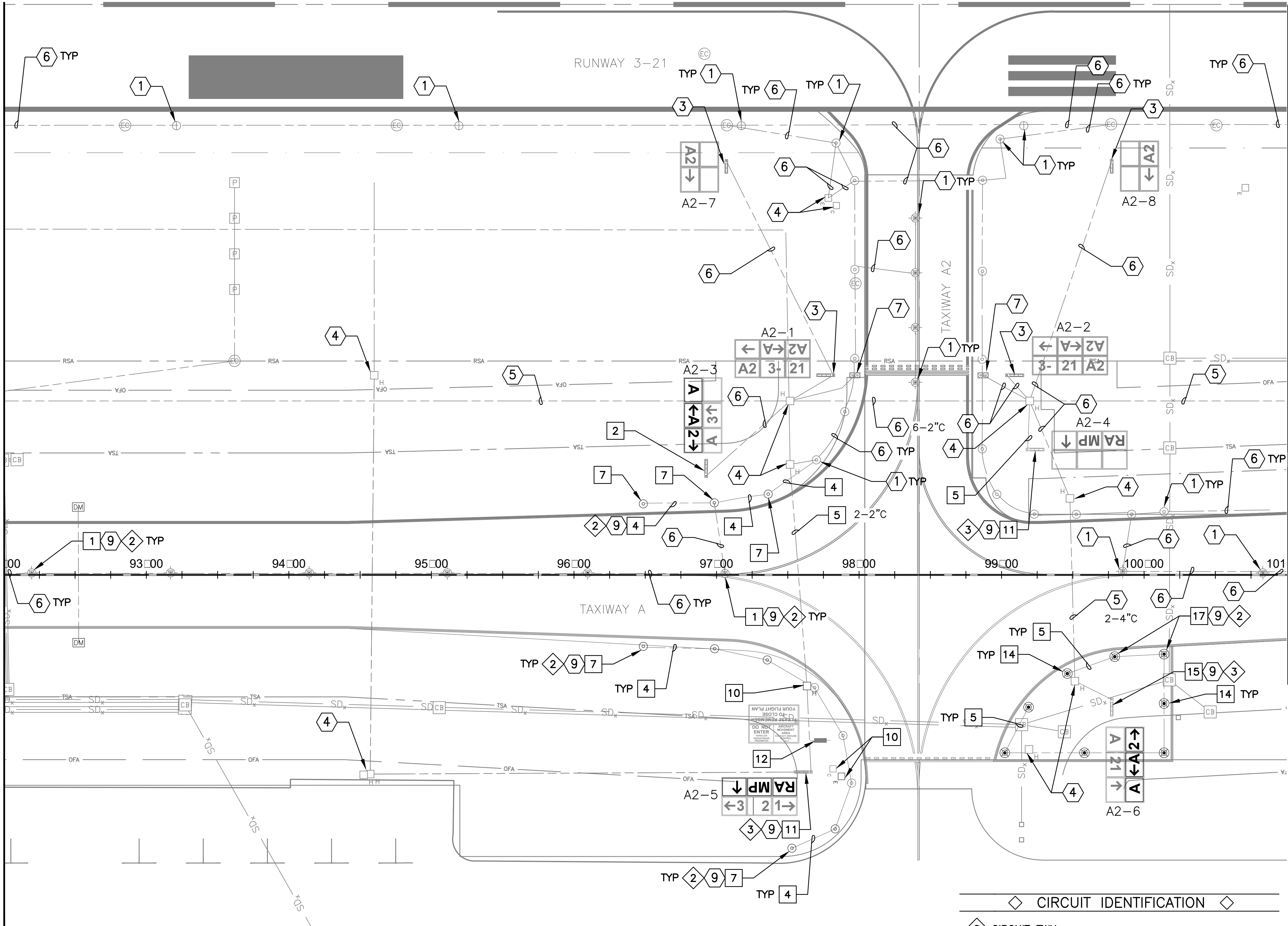
Designed by: CA
Drawn by: JBW
Checked by: SW
Date: 05/2018
Dwg scale: AS NOTED
MMI Proj. No.: 8131-022

**AIRFIELD ELECTRICAL
DEMOLITION PLAN**

Sheet
Reference
Number:
ED104

Sheet 45 of 66

MATCH LINE STA: 92+00
SHEET ED104

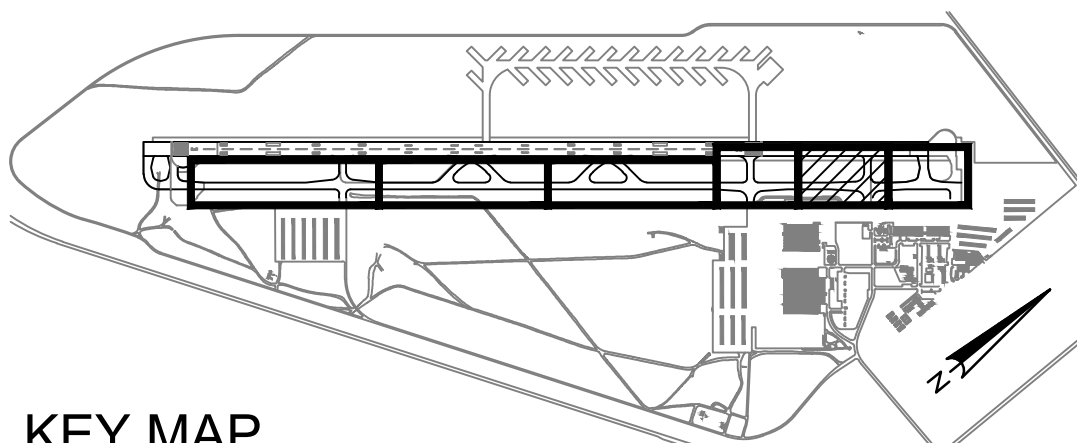
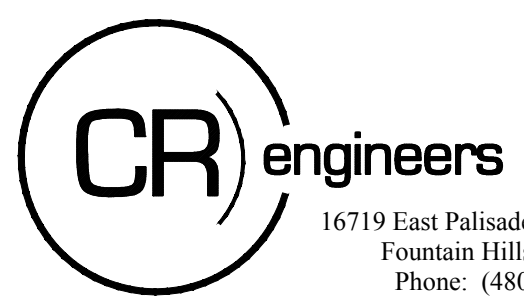


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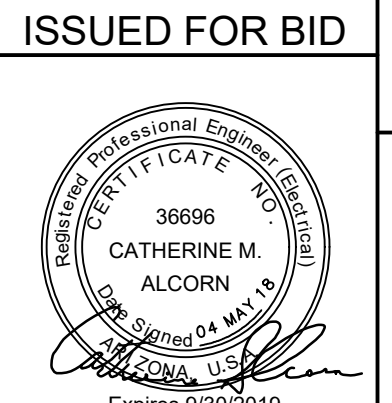
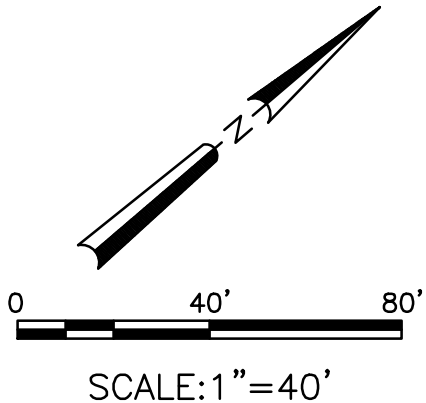
- ◇ CIRCUIT IDENTIFICATION ◇
- ◇ 2 CIRCUIT TWN
 - ◇ 3 CIRCUIT SG
 - ◇ 4 CIRCUIT RGL

- DEMOLITION NOTES
- 1 REMOVE AND SALVAGE IN-PAVEMENT TAXIWAY CENTERLINE LIGHT AND FLANGE, INSTALL TEMPORARY STEEL COVER ON EXISTING BASE. RECONNECT CIRCUIT THROUGH BASE CAN. (6 TOTAL)
 - 2 REMOVE EXISTING SIGN PANELS FOR REPLACEMENT. SEE AIRFIELD GUIDANCE SIGN SHEET SERIES EA600. (3 TOTAL)
 - 4 EXCAVATE AND REMOVE EXISTING CONDUIT AND CONDUCTOR. (418 LF TOTAL)
 - 5 REMOVE EXISTING CONDUCTOR TO NEAREST HANDHOLE/BASE CAN, CONDUIT TO REMAIN. (560 LF TOTAL)
 - 7 REMOVE AND SALVAGE ELEVATED TAXIWAY EDGE LIGHT AND ISOLATION TRANSFORMER, DEMOLISH BASE CAN. (11 TOTAL)
 - 10 EXCAVATE AND REMOVE EXISTING HANDHOLE AND RECONNECT REMAINING CONDUITS. (3 TOTAL)
 - 11 REMOVE AND SALVAGE EXISTING TAXIWAY GUIDANCE SIGN AND ISOLATION TRANSFORMER, DEMOLISH SIGN BASE. (2 TOTAL)
 - 12 REMOVE AND SALVAGE EXISTING NON-LIT SIGN (1 TOTAL)
 - 14 REMOVE AND SALVAGE IN-PAVEMENT TAXIWAY EDGE LIGHT AND INSTALL PERMANENT STEEL COVER ON EXISTING BASE. (6 TOTAL)
 - 15 REMOVE AND SALVAGE EXISTING TAXIWAY GUIDANCE SIGN AND ISOLATION TRANSFORMER, SIGN BASE TO REMAIN. (1 TOTAL)
 - 17 REMOVE AND SALVAGE IN-PAVEMENT TAXIWAY EDGE LIGHT AND ISOLATION TRANSFORMER, FILL WITH CONCRETE AND INSTALL STEEL COVER. (2 TOTAL)

- REFERENCE NOTES
- 1 EXISTING LIGHT TO REMAIN - PROTECT IN PLACE.
 - 3 EXISTING AIRFIELD GUIDANCE SIGN TO REMAIN - PROTECT IN PLACE.
 - 4 EXISTING HANDHOLE TO REMAIN - PROTECT IN PLACE.
 - 5 EXISTING CONDUIT DUCTBANK TO REMAIN - PROTECT IN PLACE.
 - 6 EXISTING CONDUIT AND CABLE TO REMAIN - PROTECT IN PLACE.
 - 7 EXISTING RUNWAY GUARD LIGHT TO REMAIN - PROTECT IN PLACE.
 - 9 COORDINATE WITH AIRPORT FOR LOCKOUT/TAGOUT OF AFFECTED CIRCUIT(S).



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NO.	REVISIONS / SUBMISSIONS	DATE

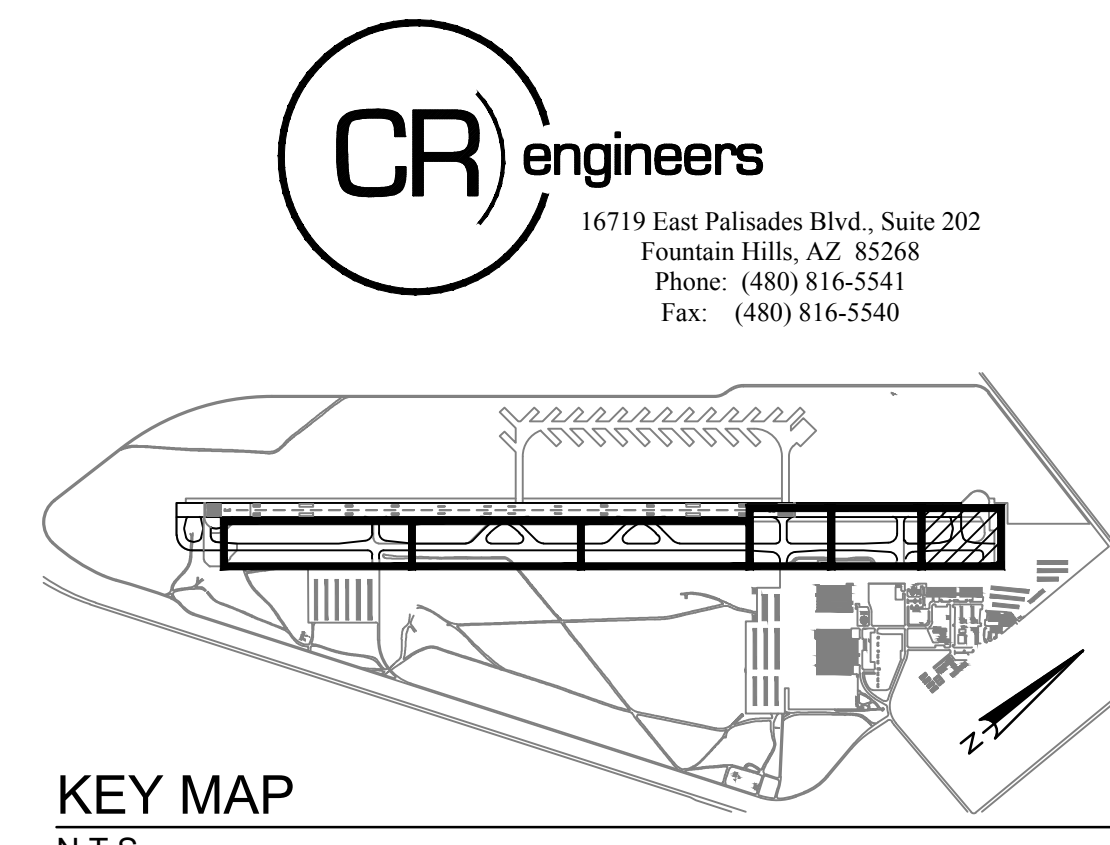
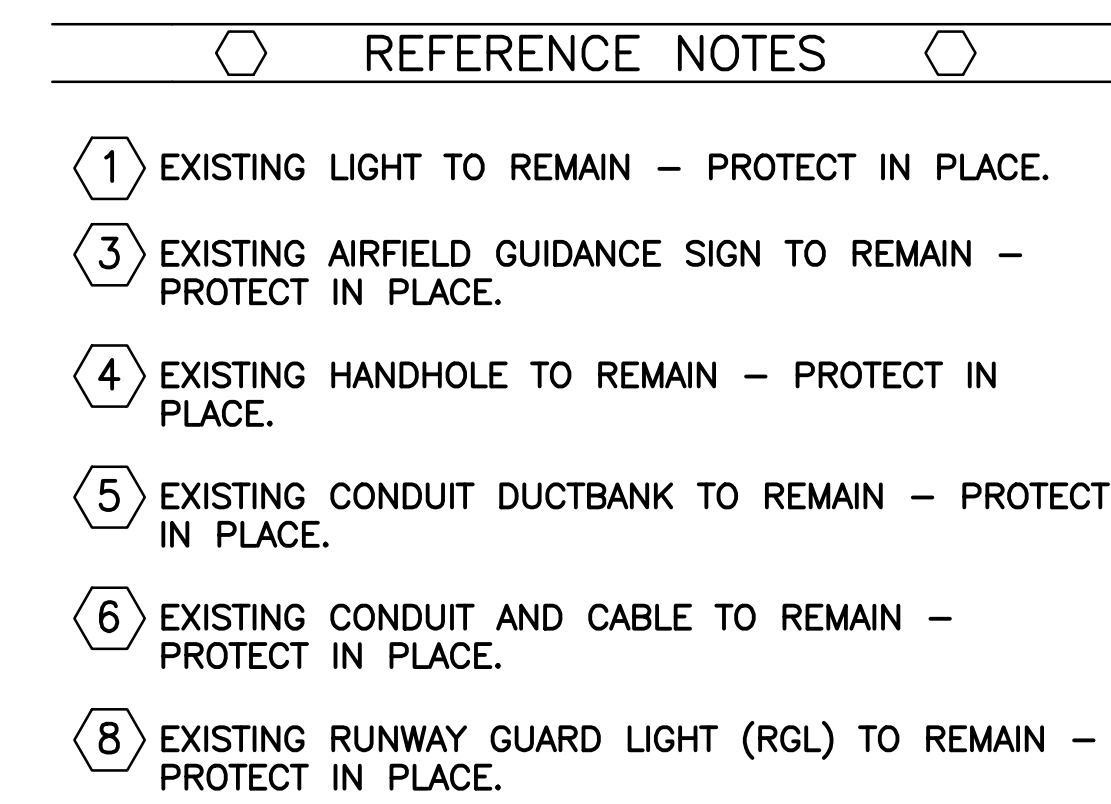
PHX DVI CYR
CITY OF PHOENIX AVIATION DEPARTMENT
GYR AIRPORT TW A REHAB & STRENGTHENING
AV41000075 FAA

Designed by: CA	MMI Proj. No.: 8131.022
Drawn by: JBW	
Checked by: SW	
Date: 05/2018	
Dwg scale: AS NOTED	

AIRFIELD ELECTRICAL DEMOLITION PLAN

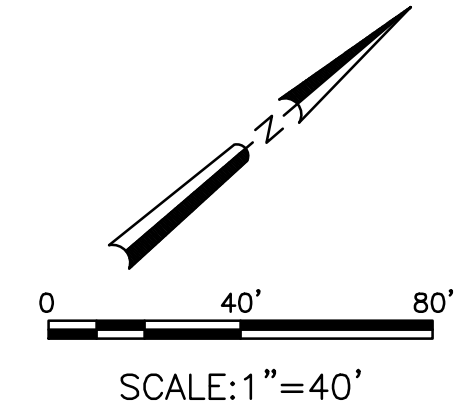
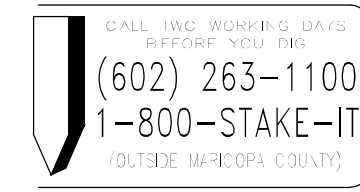
Sheet Reference Number:
ED105

Sheet 46 of 66



KEY MAP
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OBLIGATIONS OF
CONTRACTOR'S CONTRACT
WITH THE CITY OF PHOENIX.

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PHX DVT CYR
CITY OF PHOENIX AVIATION DEPARTMENT
CYR AIRPORT TW A REHAB &
STRENGTHENING
AV41000075 FAA

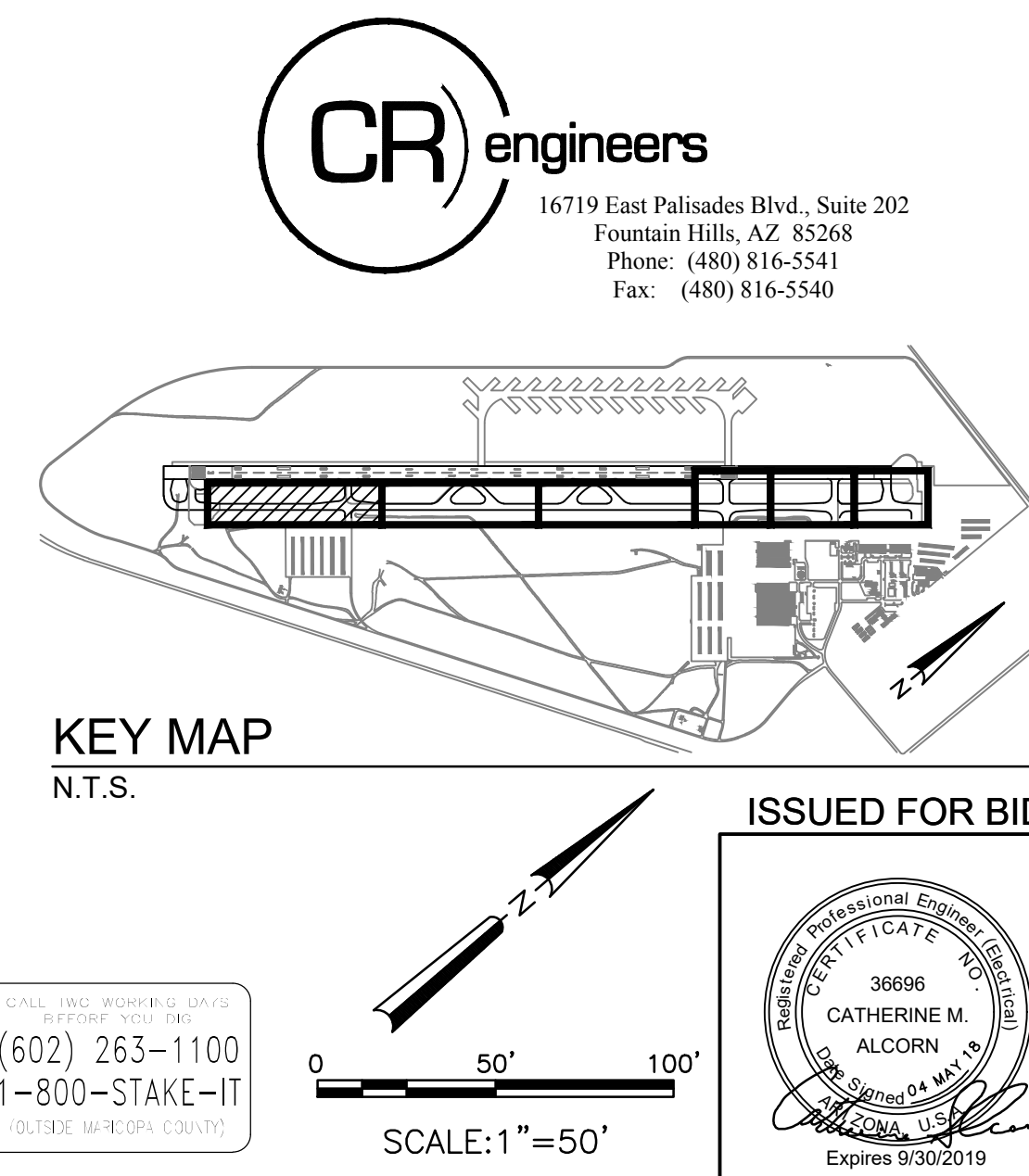
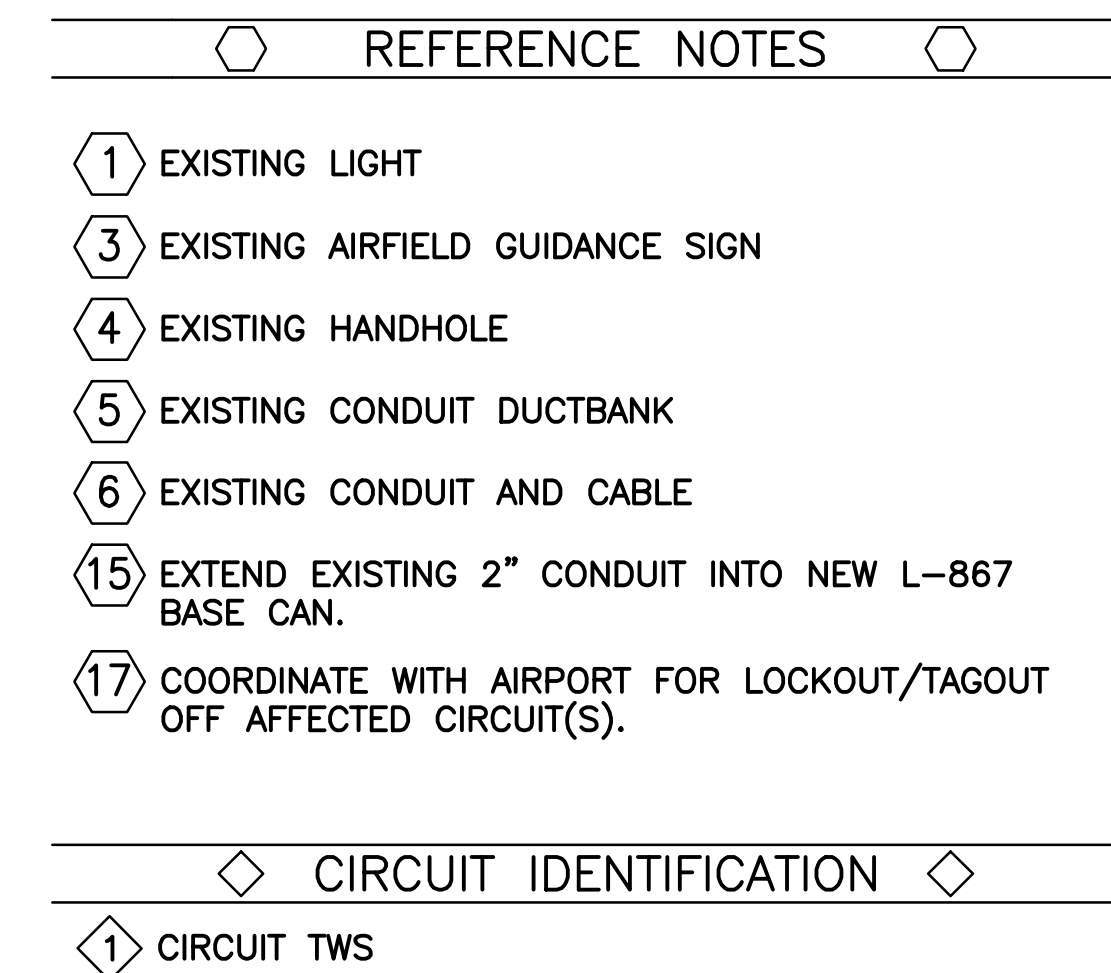
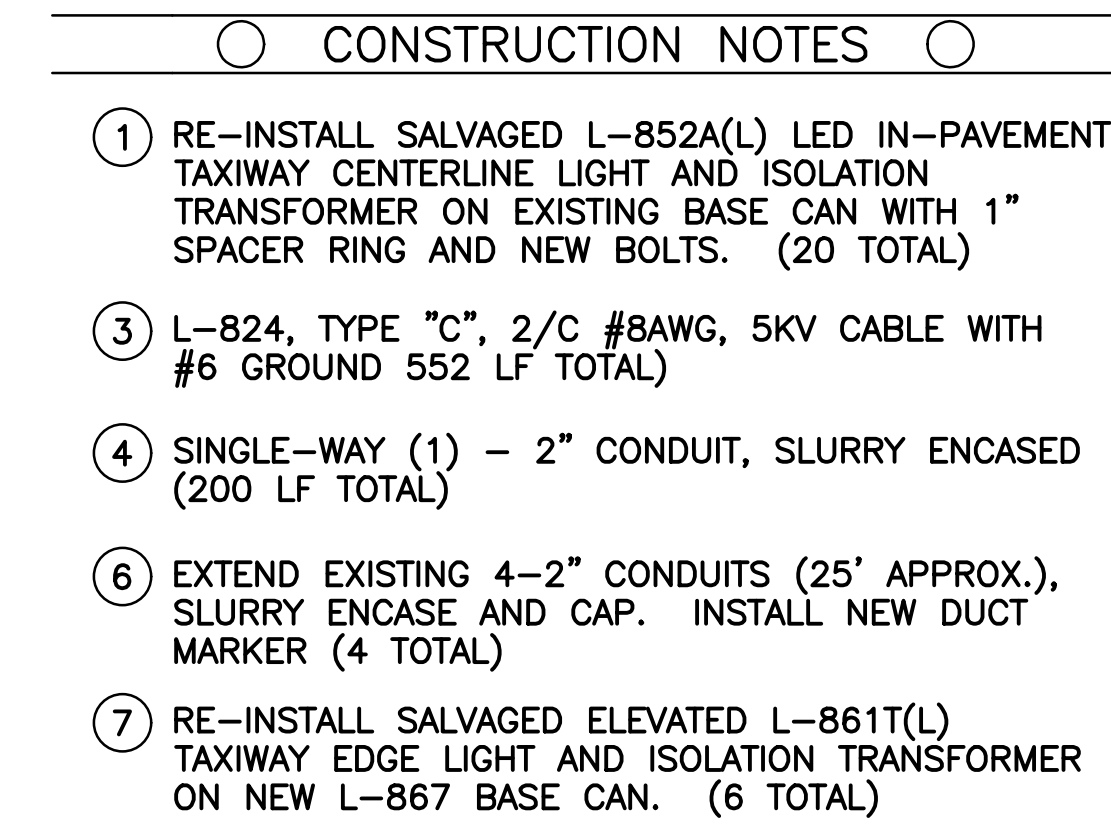
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Drawn by: JBW
Checked by: SW
Date: 05/2018
Dwg scale: AS NOTED
MMI Proj. No.: 8131-022

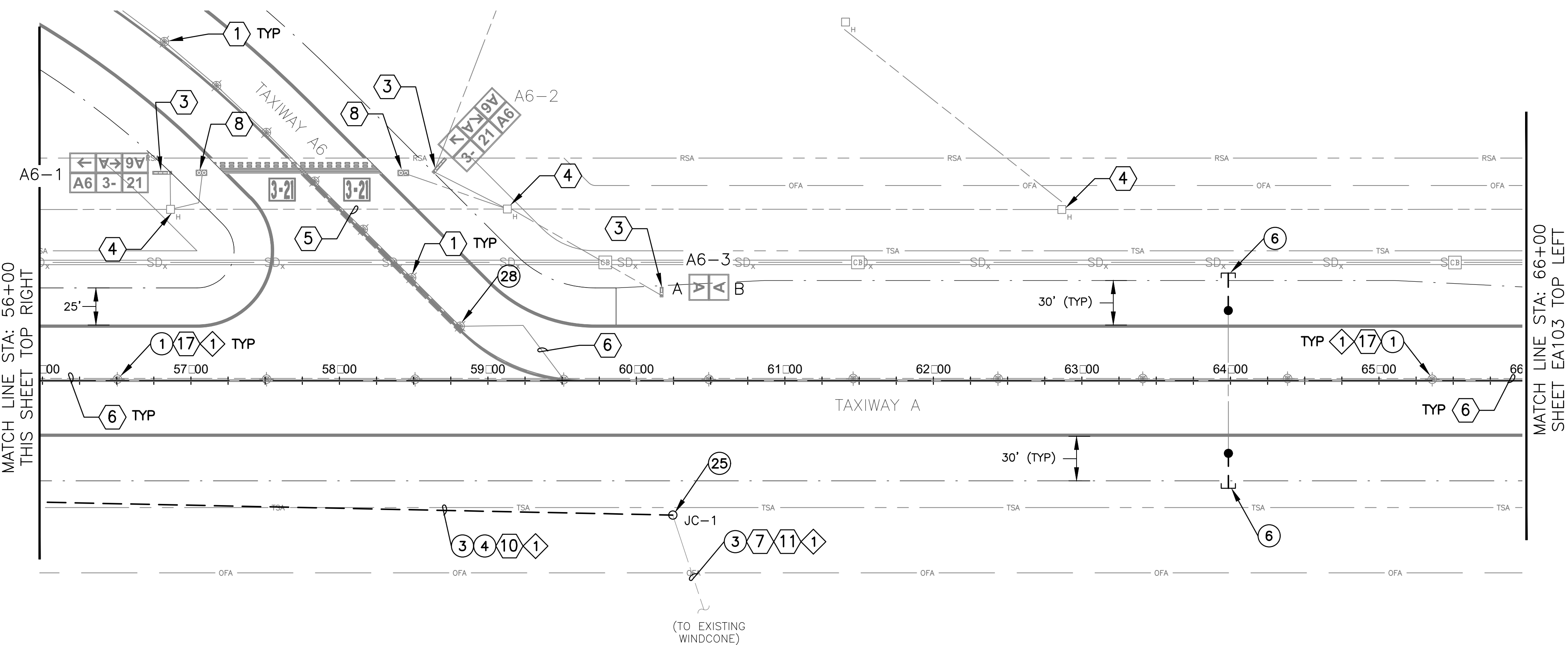
GYR AIRPORT TW A REHAB & STRENGTHENING

Sheet
Reference
Number:

ED106

Sheet 47 of 66





○ CONSTRUCTION NOTES

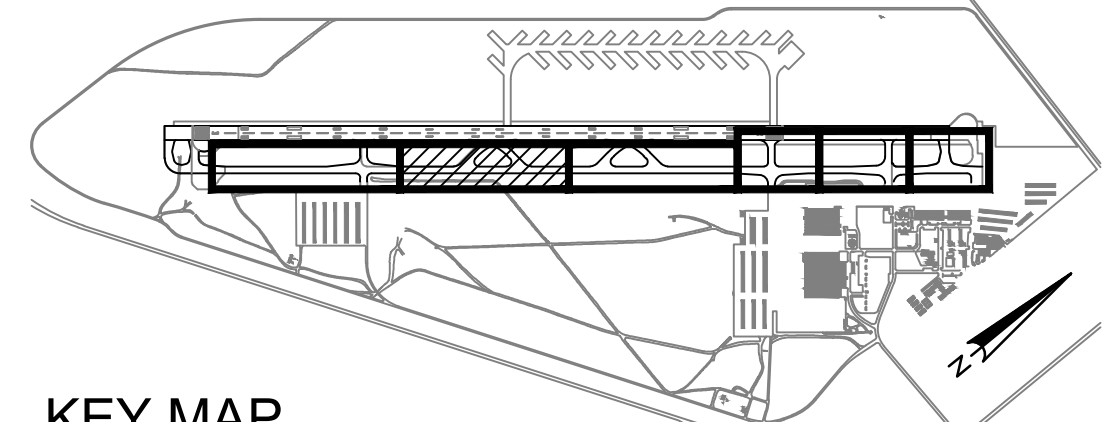
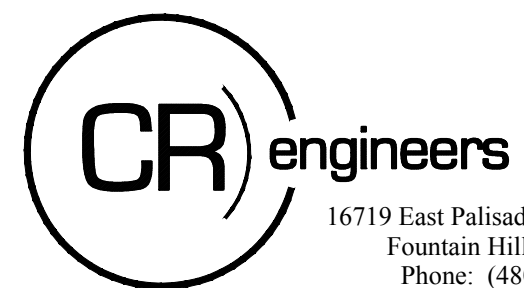
- ① RE-INSTALL SALVAGED L-852A(L) LED IN-PAVEMENT TAXIWAY CENTERLINE LIGHT AND ISOLATION TRANSFORMER ON EXISTING BASE CAN WITH 1" SPACER RING AND NEW BOLTS. (20 TOTAL)
- ③ L-824, TYPE "C", 2/C #8AWG, 5KV CABLE WITH #6 GROUND (1,658 LF TOTAL)
- ④ SINGLE-WAY (1) - 2" CONDUIT, SLURRY ENCASED (820 LF TOTAL)
- ⑥ EXTEND EXISTING 4-2" CONDUITS (25' APPROX.), SLURRY ENCASE AND CAP. INSTALL NEW DUCT MARKER (2 TOTAL)
- ⑦ RE-INSTALL SALVAGED ELEVATED L-861T(L) TAXIWAY EDGE LIGHT AND ISOLATION TRANSFORMER ON NEW L-867 BASE CAN. (1 TOTAL)
- ②⑤ NEW L-867E (24" DIA.) JUNCTION CAN WITH BLANK COVER. (2 TOTAL)
- ②⑧ RE-INSTALL SALVAGED L-852D(L) LED IN-PAVEMENT TAXIWAY CENTERLINE LIGHT AND ISOLATION TRANSFORMER ON EXISTING BASE CAN WITH NEW BOLTS. (2 TOTAL)

REFERENCE NOTES

- ② EXISTING LIGHT
- ③ EXISTING AIRFIELD GUIDANCE SIGN
- ④ EXISTING HANDHOLE
- ⑤ EXISTING CONDUIT DUCTBANK
- ⑥ EXISTING CONDUIT AND CABLE
- ⑦ PROVIDE TEMPORARY JUMPERS TO MAINTAIN CIRCUIT (WINDCONE) OPERATION AS REQUIRED.
- ⑧ EXISTING RUNWAY GUARD LIGHT (RGL)
- ⑨ APPROXIMATE SPLICE POINT OF CONDUIT AND COUNTERPOISE — ENCASE IN CONCRETE
- ⑩ SEE SHEET EA501 FOR CONDUIT DUCTBANK INSTALLATION DETAILS.
- ⑪ CONTRACTOR SHALL TRACE EXISTING CONDUIT PATH TO WINDCONE AND INTERCEPT EXISTING CONDUIT, SPLICING BOTH CONDUIT AND COUNTERPOISE, TO RECONNECT WINDCONE TO CIRCUIT TWS.
- ⑮ EXTEND EXISTING 2" CONDUIT INTO NEW L-867 BASE CAN.
- ⑰ COORDINATE WITH AIRPORT FOR LOCKOUT/TAGOUT OFF AFFECTED CIRCUIT(S).

◇ CIRCUIT IDENTIFICATION

- 1 CIRCUIT TWS

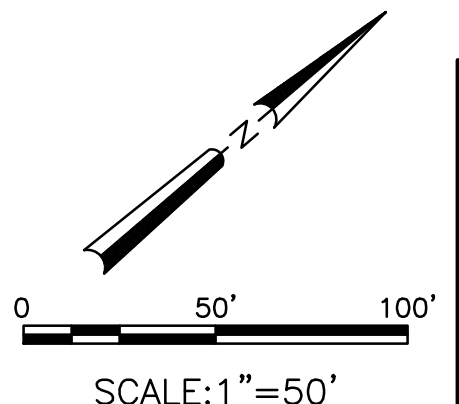


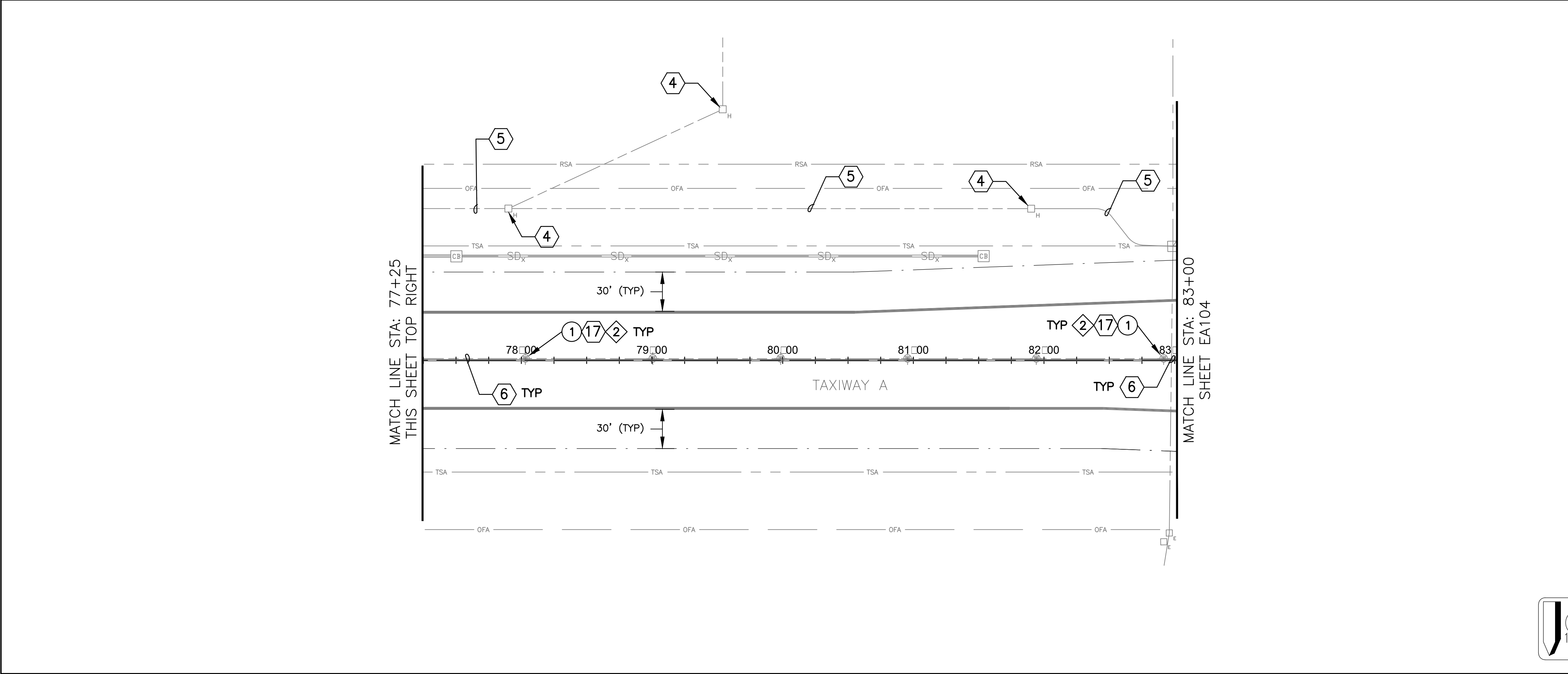
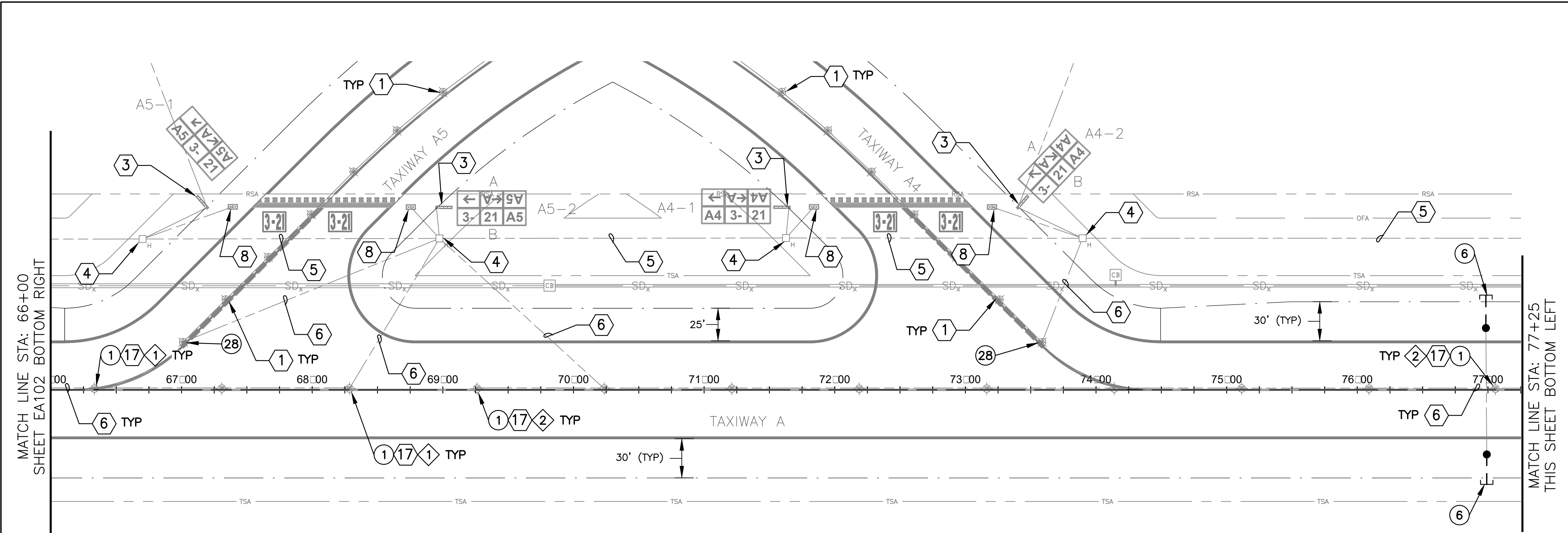
KEY MAP
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(OUTSIDE MARICOPA COUNTY)

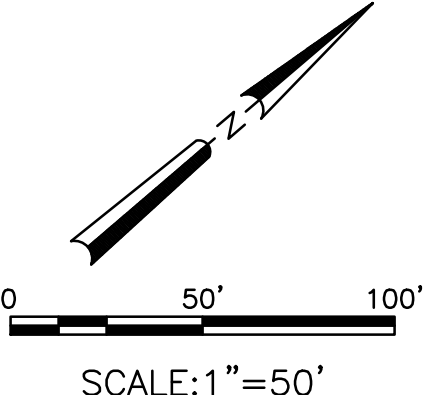
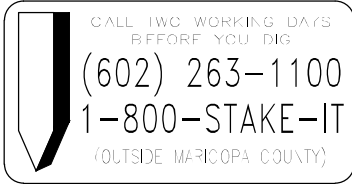
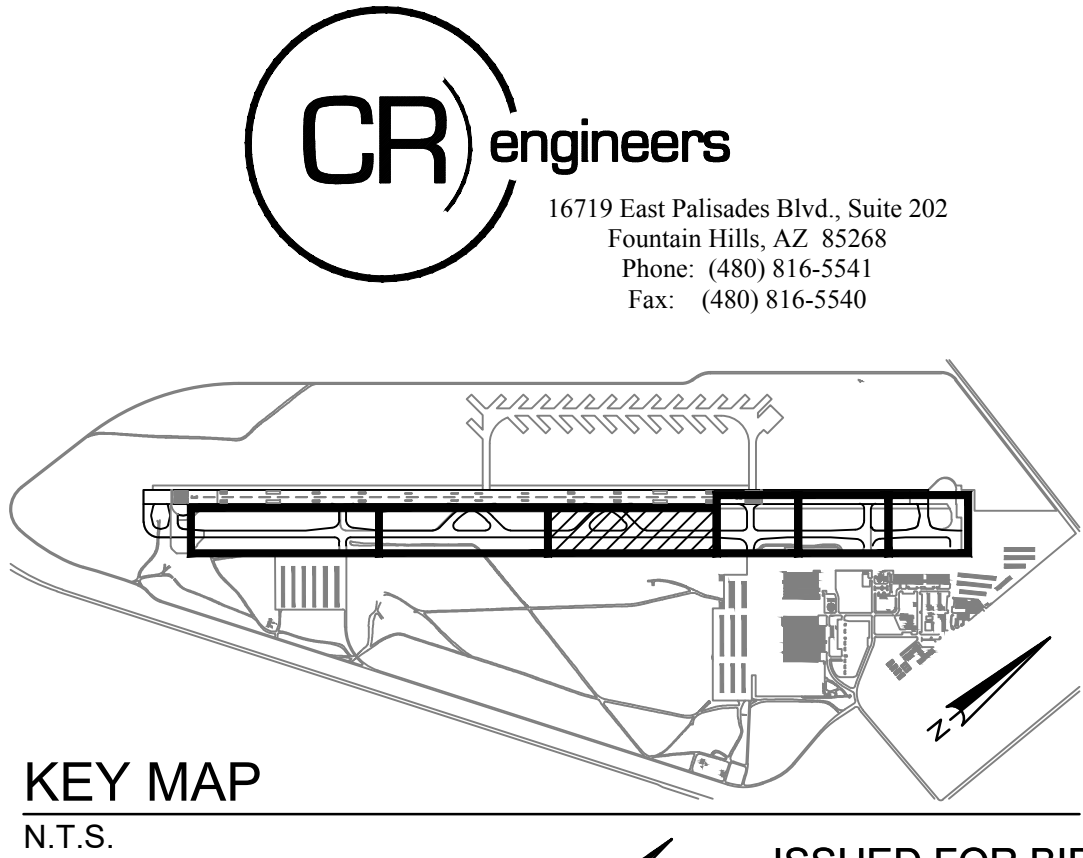




- CONSTRUCTION NOTES ○
- ① RE-INSTALL SALVAGED L-852A(L) LED IN-PAVEMENT TAXIWAY CENTERLINE LIGHT AND ISOLATION TRANSFORMER ON EXISTING BASE CAN WITH 1" SPACER RING AND NEW BOLTS. (18 TOTAL)
 - ⑥ EXTEND EXISTING 4-2" CONDUITS (25' APPROX.), SLURRY ENCASE AND CAP. INSTALL NEW DUCT MARKER (2 TOTAL)
 - ②⑧ RE-INSTALL SALVAGED L-852D(L) LED IN-PAVEMENT TAXIWAY CENTERLINE LIGHT AND ISOLATION TRANSFORMER ON EXISTING BASE CAN WITH NEW BOLTS. (2 TOTAL)

- REFERENCE NOTES ○
- ① EXISTING LIGHT
 - ③ EXISTING AIRFIELD GUIDANCE SIGN
 - ④ EXISTING HANDHOLE
 - ⑤ EXISTING CONDUIT DUCTBANK
 - ⑥ EXISTING CONDUIT AND CABLE
 - ⑧ EXISTING RUNWAY GUARD LIGHT (RGL)
 - ①⑦ COORDINATE WITH AIRPORT FOR LOCKOUT/TAGOUT OFF AFFECTED CIRCUIT(S).

- ◇ CIRCUIT IDENTIFICATION ◇
- ① CIRCUIT TWS
 - ② CIRCUIT TWN



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NO.	REVISIONS / SUBMISSIONS	DATE

PHX DVI CYR
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GYR AIRPORT TW A REHAB & STRENGTHENING
AV41000075 FAA

Designed by: CA	AIRFIELD ELECTRICAL PLAN
Drawn by: JBW	
Checked by: RD	
Date: 05/2018	
Dwg scale: AS NOTED	
MMI Proj. No.: 8131.022	Sheet Reference Number: EA103 Sheet 50 of 66

CONSTRUCTION NOTES CONTINUED.....

- (29) RE-INSTALL SALVAGED L-852B(L) LED IN-PAVEMENT CENTERLINE LIGHT AND ISOLATION TRANSFORMER ON EXISTING BASE CAN WITH NEW BOLTS. (4 TOTAL)
- (30) MULTIPLE WAY (2) - 4" CONDUIT AND 2-2" CONDUIT, CONCRETE ENCASED (130 LF TOTAL)
- (31) REPLACE HANDHOLE LID AND TOP SECTION 4'x4' WITH AIRCRAFT-RATED LID. (1 TOTAL)
- (32) MULTIPLE WAY (2) - 4" CONDUIT AND 2-2" CONDUIT, SLURRY ENCASED (60 LF TOTAL)
- (36) REINSTALL SALVAGED AIRFIELD GUIDANCE SIGN UPON CONSTRUCTION PHASE COMPLETION. (2 TOTAL)

CIRCUIT IDENTIFICATION

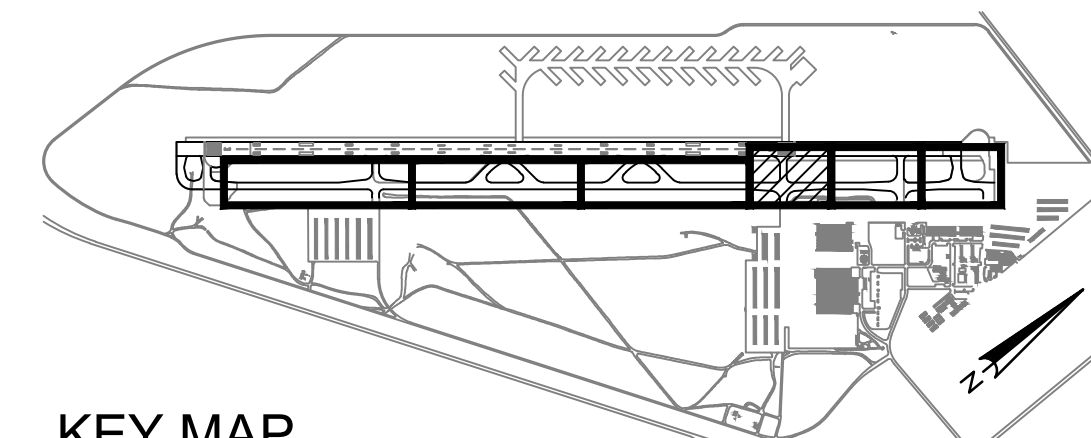
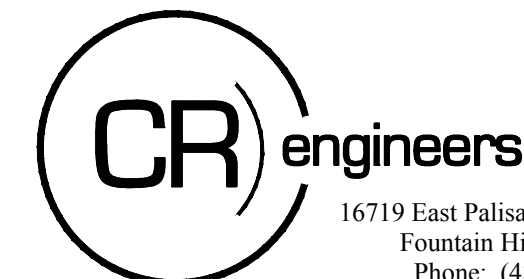
- (2) CIRCUIT TWN
- (3) CIRCUIT SG
- (4) CIRCUIT RGL
- (6) CIRCUIT RLN (REIL NORTH)
- (7) CIRCUIT PPN (PAPI NORTH)

CONSTRUCTION NOTES

- (1) RE-INSTALL SALVAGED L-852A(L) LED IN-PAVEMENT TAXIWAY CENTERLINE LIGHT AND ISOLATION TRANSFORMER ON EXISTING BASE CAN WITH 1" SPACER RING AND NEW BOLTS. (9 TOTAL)
- (3) L-824, TYPE "C", 2/C #8AWG, 5KV CABLE WITH #6 GROUND (8,756 LF TOTAL)
- (4) SINGLE-WAY (1) - 2" CONDUIT, SLURRY ENCASED (3,345 LF TOTAL)
- (5) NEW 4'x4'x4' HANDHOLE, TYPE-1, AIRCRAFT-RATED, FURNISHED AND INSTALLED WITH AIRCRAFT-RATED LID. (5 TOTAL)
- (7) RE-INSTALL SALVAGED ELEVATED L-861T(L) TAXIWAY EDGE LIGHT AND ISOLATION TRANSFORMER ON NEW L-867 BASE CAN. (26 TOTAL)
- (9) RE-INSTALL SALVAGED L-804(L) ELEVATED RUNWAY GUARD LIGHT AND ISOLATION TRANSFORMER ON NEW L-867 BASE CAN. (2 TOTAL)
- (10) NEW ELEVATED L-861T(L) LED TAXIWAY EDGE LIGHT AND ISOLATION TRANSFORMER ON NEW L-867 BASE CAN. (16 TOTAL)
- (11) RE-INSTALL SALVAGED L-858 SIZE 2, 3-MODULE AIRFIELD GUIDANCE SIGN AND ISOLATION TRANSFORMER WITH NEW PANELS AND FACE INSERT CHANNELS ON NEW SIGN BASE. (5 TOTAL)
- (12) INSTALL NEW CIRCUIT ISOLATION BOXES AND CONDUIT IN HANDHOLE FOR RGL CIRCUIT. (2 TOTAL)
- (13) NEW L-858(L) LED SIZE 2, 3-MODULE AIRFIELD GUIDANCE SIGN AND ISOLATION TRANSFORMER ON NEW SIGN BASE. (1 TOTAL)
- (14) MULTIPLE WAY (2)-2" CONDUIT, SLURRY ENCASED (190 LF TOTAL)
- (15) MULTIPLE WAY (2) - 2" CONDUIT, CONCRETE ENCASED (145 LF TOTAL)
- (16) SINGLE WAY (1)-2" CONDUIT, CONCRETE ENCASED (40 LF TOTAL)
- (17) MULTIPLE WAY (2) - 4" CONDUIT, CONCRETE ENCASED (270 LF TOTAL)

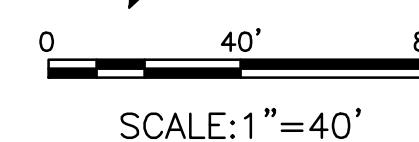
REFERENCE NOTES

- (1) EXISTING LIGHT
- (2) EXISTING CONDUIT
- (3) EXISTING AIRFIELD GUIDANCE SIGN
- (4) EXISTING HANDHOLE
- (5) EXISTING CONDUIT DUCTBANK
- (6) EXISTING CONDUIT AND CABLE

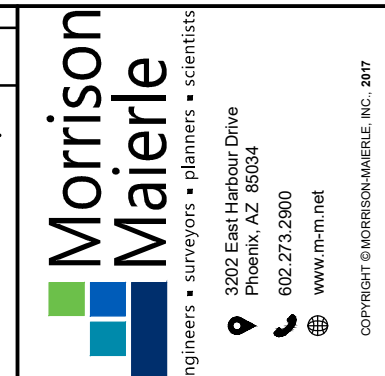


KEY MAP
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SCALE: 1"=40'



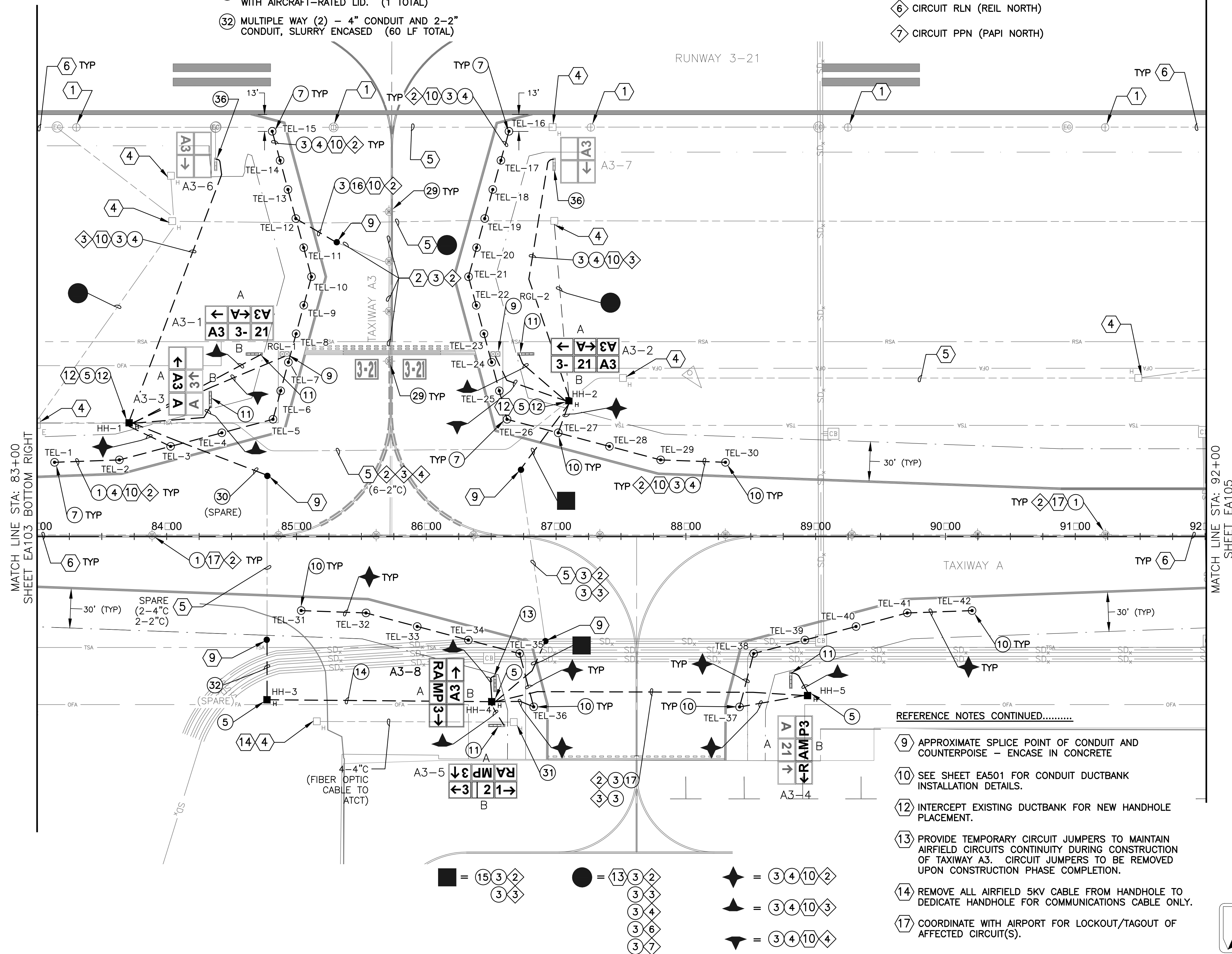
PER CITY OF PHOENIX CITY CODE CHAPTER 2, SECTION 2-28, THESE PLANS ARE FOR OFFICIAL USE ONLY AND MAY NOT BE SHARED WITH OTHERS EXCEPT AS REQUIRED TO FULFILL THE CONTRACTOR'S CONTRACT WITH THE CITY OF PHOENIX.

NO.	REVISIONS / SUBMISSIONS	DATE

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CITY OF PHOENIX AVIATION DEPARTMENT
GYR AIRPORT TW A REHAB & STRENGTHENING
AV41000075 FAA

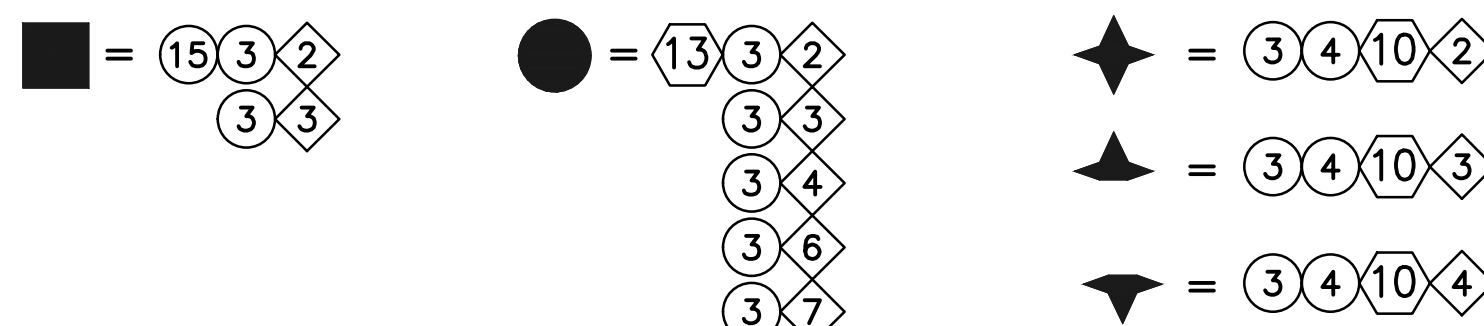
Designed by: CA	Drawn by: JBW	Checked by: RD	Date: 05/2018	Dwg scale: AS NOTED	MMI Proj. No.: 8131-022
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AIRFIELD ELECTRICAL PLAN
Sheet Reference Number:
EA104
Sheet 51 of 66



REFERENCE NOTES CONTINUED.....

- (9) APPROXIMATE SPLICE POINT OF CONDUIT AND COUNTERPOISE - ENCASE IN CONCRETE
- (10) SEE SHEET EA501 FOR CONDUIT DUCTBANK INSTALLATION DETAILS.
- (12) INTERCEPT EXISTING DUCTBANK FOR NEW HANDHOLE PLACEMENT.
- (13) PROVIDE TEMPORARY CIRCUIT JUMPERS TO MAINTAIN AIRFIELD CIRCUITS CONTINUITY DURING CONSTRUCTION OF TAXIWAY A3. CIRCUIT JUMPERS TO BE REMOVED UPON CONSTRUCTION PHASE COMPLETION.
- (14) REMOVE ALL AIRFIELD 5KV CABLE FROM HANDHOLE TO DEDICATE HANDHOLE FOR COMMUNICATIONS CABLE ONLY.
- (17) COORDINATE WITH AIRPORT FOR LOCKOUT/TAGOUT OF AFFECTED CIRCUIT(S).



CONSTRUCTION NOTES CONTINUED.....

- (26) NEW L-852A(L) LED IN-PAVEMENT TAXIWAY CENTERLINE LIGHT AND ISOLATION TRANSFORMER ON NEW L-868 BASE CAN (2 TOTAL)
- (27) SINGLE-WAY (1) - 2" CONDUIT, CONCRETE ENCASED (RETROFIT IN EXISTING ASPHALT) (105 LF TOTAL)
- (33) MULTIPLE-WAY (4) - 2" DIRECTIONAL BORE, CONCRETE ENCASED (170 LF TOTAL)
- (35) RE-INSTALL UNLIT SIGN (1 TOTAL)

◇ CIRCUIT IDENTIFICATION ◇

- 2 CIRCUIT TWN
- 3 CIRCUIT SG
- 4 CIRCUIT RGL
- 5 CIRCUIT RW 3-21

○ CONSTRUCTION NOTES ○

- 1 RE-INSTALL SALVAGED L-852A(L) LED IN-PAVEMENT TAXIWAY CENTERLINE LIGHT AND ISOLATION TRANSFORMER ON EXISTING BASE CAN WITH 1" SPACER RING AND NEW BOLTS. (6 TOTAL)
- 2 NEW SIZE 2 SIGN PANELS AND FACE INSERT CHANNELS INSTALLED IN EXISTING SIGN. SEE AIRFIELD GUIDANCE SIGN SCHEDULE SHEET SERIES EA600. (3 TOTAL)
- 3 L-824, TYPE "C", 2/C #8AWG, 5KV CABLE WITH #6 GROUND (4,315 LF TOTAL)
- 4 SINGLE-WAY (1) - 2" CONDUIT, SLURRY ENCASED (200 LF TOTAL)
- 5 NEW 4'x4'x4' HANDHOLE, TYPE-1, AIRCRAFT-RATED, FURNISHED AND INSTALLED WITH AIRCRAFT-RATED LID. (1 TOTAL)
- 6 EXTEND EXISTING 4-2" CONDUITS (25' APPROX.), SLURRY ENCASE AND CAP. INSTALL NEW DUCT MARKER (2 TOTAL)
- 7 RE-INSTALL SALVAGED ELEVATED L-861T(L) TAXIWAY EDGE LIGHT AND ISOLATION TRANSFORMER ON NEW L-867 BASE CAN. (3 TOTAL)
- 8 RE-INSTALL SALVAGED L-852T(L) IN-PAVEMENT TAXIWAY EDGE LIGHT AND ISOLATION TRANSFORMER ON NEW SHALLOW L-868 BASE CAN (RETROFIT IN EXISTING FULL STRENGTH CONCRETE PAVEMENT). (6 TOTAL)
- 16 SINGLE-WAY (1) - 2" CONDUIT, CONCRETE ENCASED (110 LF TOTAL)
- 18 MULTIPLE WAY (2) - 4" CONDUIT, CONCRETE ENCASED (RETROFIT IN EXISTING FULL STRENGTH CONCRETE PAVEMENT) (70 LF TOTAL)
- 19 SINGLE WAY (1) - 2" CONDUIT, CONCRETE ENCASED (RETROFIT IN EXISTING FULL STRENGTH CONCRETE PAVEMENT) (420 LF TOTAL)
- 20 MULTIPLE WAY (2) - 2" CONDUIT, CONCRETE ENCASED (RETROFIT IN EXISTING FULL STRENGTH CONCRETE PAVEMENT) (235 LF TOTAL)
- 21 NEW 4'x4'x4' HANDHOLE, TYPE-1, WITH AIRCRAFT-RATED LID FURNISHED AND INSTALLED (RETROFIT IN EXISTING FULL STRENGTH CONCRETE PAVEMENT). (1 TOTAL)
- 22 NEW L-858(L) LED SIZE 2, 3-MODULE AIRFIELD GUIDANCE SIGN WITH NEW SHALLOW TRANSFORMER HOUSING (RETROFIT IN EXISTING FULL STRENGTH CONCRETE PAVEMENT). (1 TOTAL)
- 23 RE-INSTALL EXISTING 3-MODULE AIRFIELD GUIDANCE SIGN WITH NEW SHALLOW TRANSFORMER HOUSING (RETROFIT IN EXISTING FULL STRENGTH CONCRETE PAVEMENT). (1 TOTAL)

REFERENCE NOTES

- 1 EXISTING LIGHT
- 3 EXISTING AIRFIELD GUIDANCE SIGN
- 4 EXISTING HANDHOLE
- 5 EXISTING CONDUIT DUCTBANK
- 6 EXISTING CONDUIT AND CABLE
- 8 EXISTING RUNWAY GUARD LIGHT (RGL)
- 9 APPROXIMATE SPLICE POINT OF CONDUIT AND COUNTERPOISE - ENCASE IN CONCRETE
- 10 SEE SHEET EA501 FOR CONDUIT DUCTBANK INSTALLATION DETAILS.

- 12 INTERCEPT EXISTING DUCTBANK FOR NEW HANDHOLE PLACEMENT.

- 16 EXISTING L-868 BASE CAN WITH LID, PROTECT IN PLACE. (6 TOTAL)

- 17 COORDINATE WITH AIRPORT FOR LOCKOUT/TAGOUT OFF AFFECTED CIRCUIT(S).

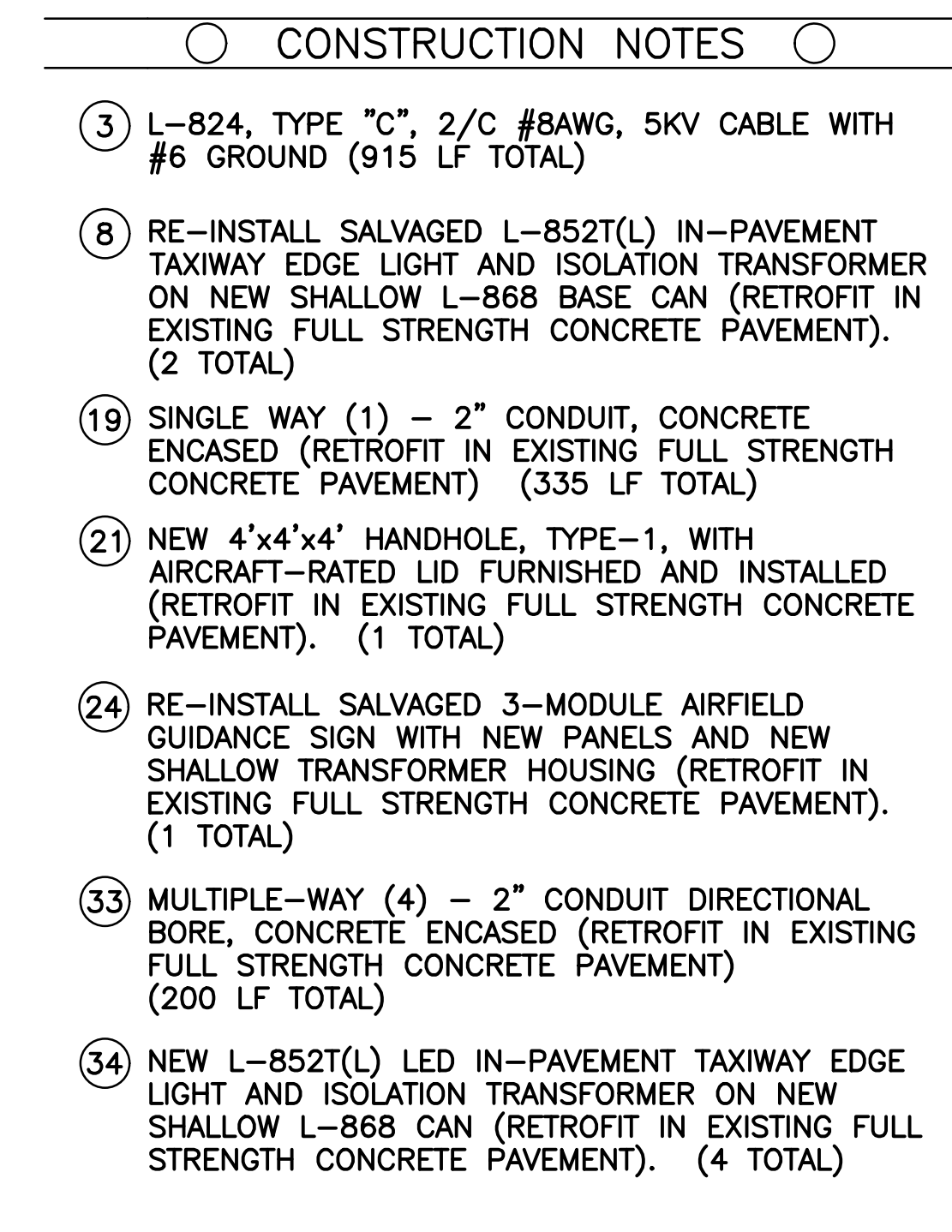


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KEY MAP
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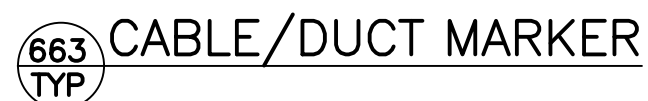
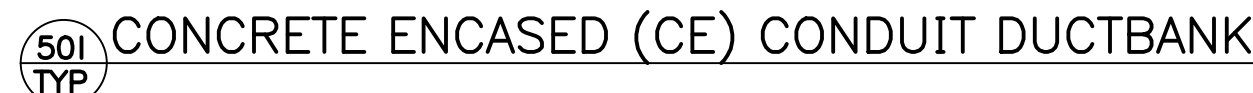
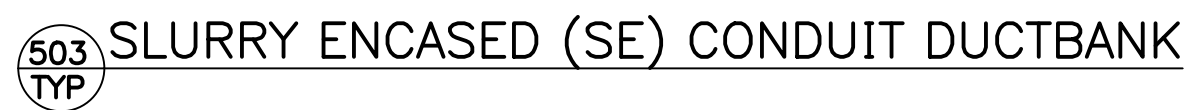


- | | |
|------------------------|-------------|
| CIRCUIT IDENTIFICATION | |
| 2 | CIRCUIT TWN |
| 3 | CIRCUIT SG |

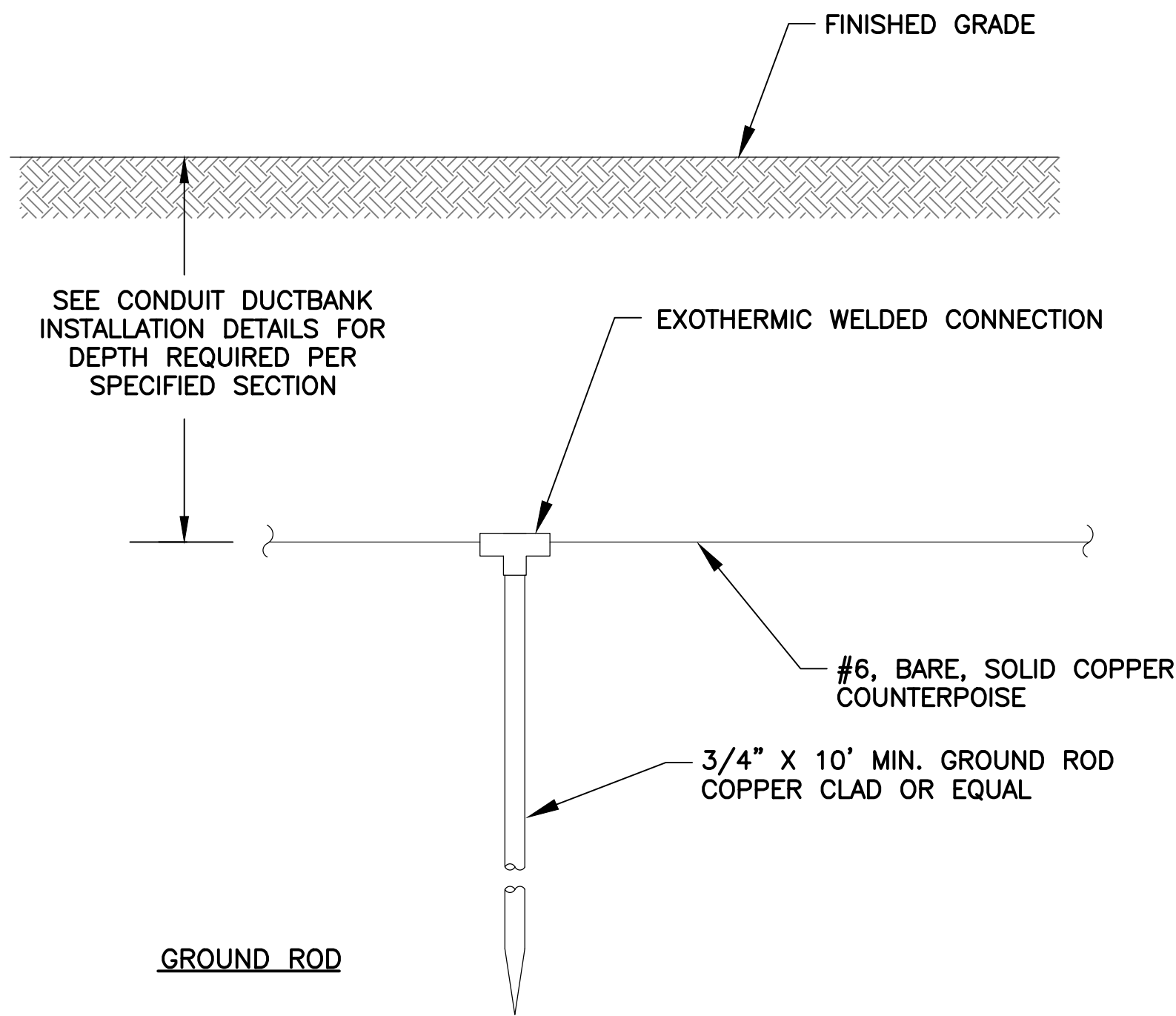
A key map showing the railway line between Basingstoke and Winchester. A red rectangle highlights the proposed station location on the line. A north arrow is located in the bottom right corner.

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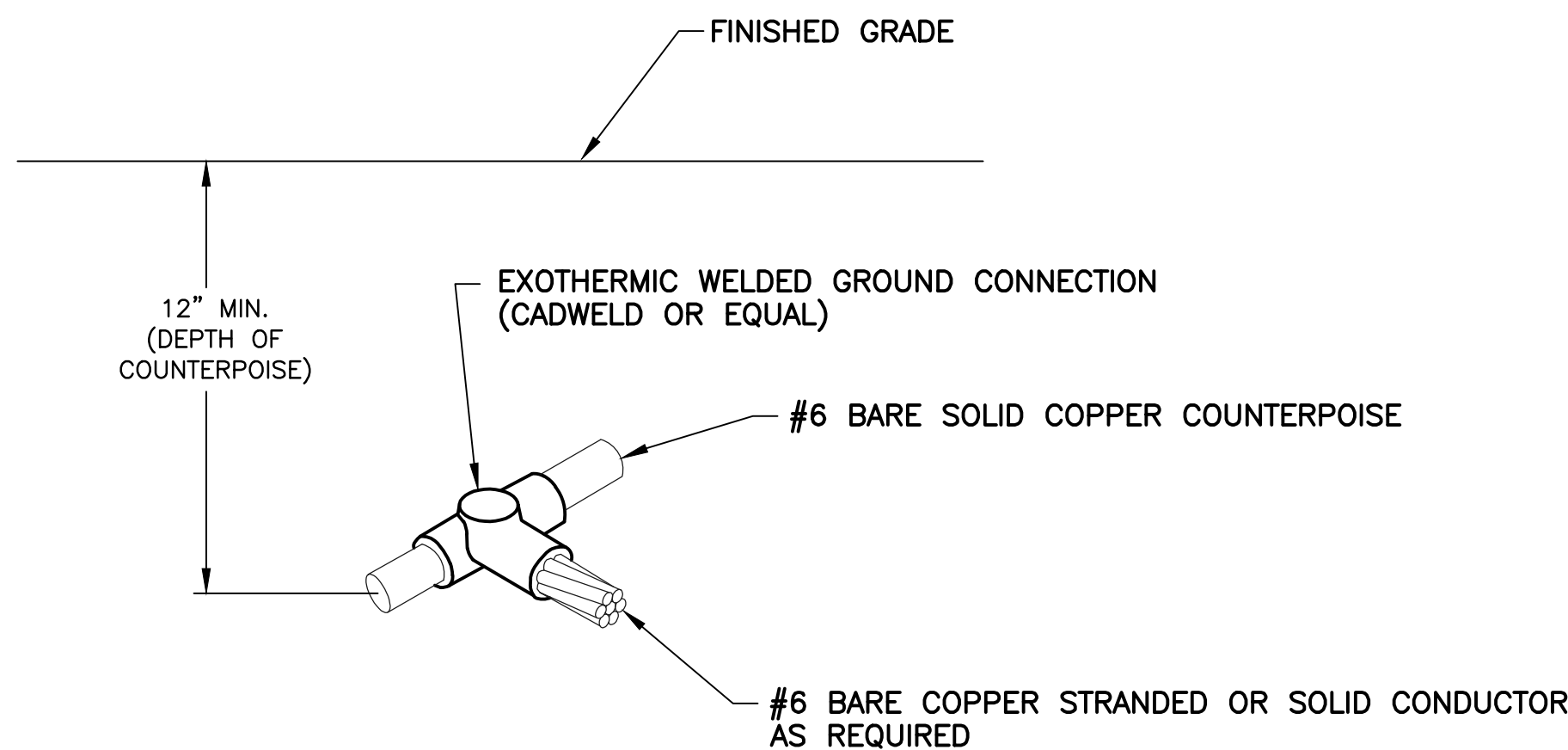
Sheet 54 of 66



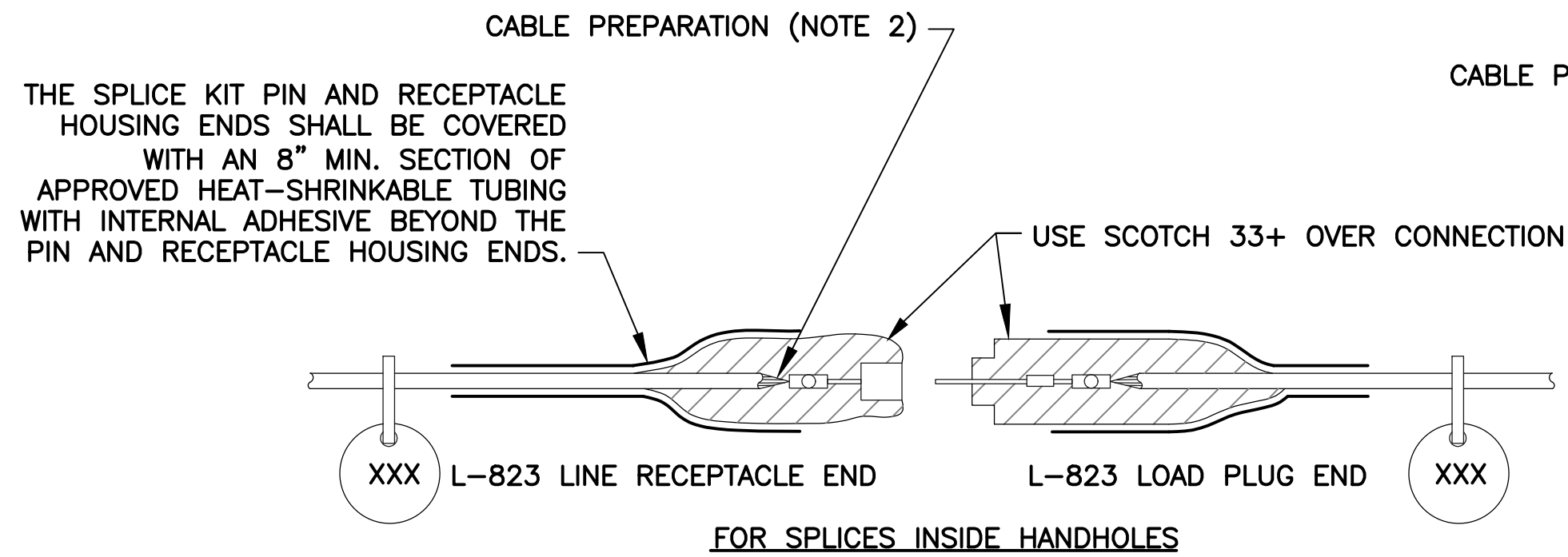
761
TYP COUNTERPOISE INSTALLATION DETAIL

NOTES

1. COST OF GROUND RODS SHALL BE INCIDENTAL TO THE ASSOCIATED ITEMS REQUIRING GROUNDING UNLESS OTHERWISE SPECIFIED.
2. WHERE POSSIBLE, NEW COUNTERPOISE SYSTEM SHALL BE CONNECTED TO ANY EXISTING COUNTERPOISE SYSTEM ENCOUNTERED.
3. GROUNDING ELECTRODES INSTALLED AS PART OF THE COUNTERPOISE SYSTEM SHALL BE SPACED AT DISTANCES NO GREATER THAN 500 FT. (MAX).
4. REFER TO DETAILS 501 AND 504, SHEET E-501, FOR CONCRETE ENCASED CONDUITS. REFER TO DETAIL 503, SHEET E-501 FOR SLURRY ENCASED CONDUITS.
5. MAINTAIN SIX INCH (MINIMUM) VERTICAL SEPARATION BETWEEN COUNTERPOISE AND TYPE "C" CABLE IN 2" CONDUIT.
6. PROVIDE GROUND ROD FOR EXOTHERMICALLY WELDING TO COUNTERPOISE AT END OF SINGLE CONDUITS TERMINATING AT FIXTURE OR SIGN BASES IF DISTANCE IS GREATER THAN 100' FROM HANDHOLE OR LAST INSTALLED COUNTERPOISE ROD.



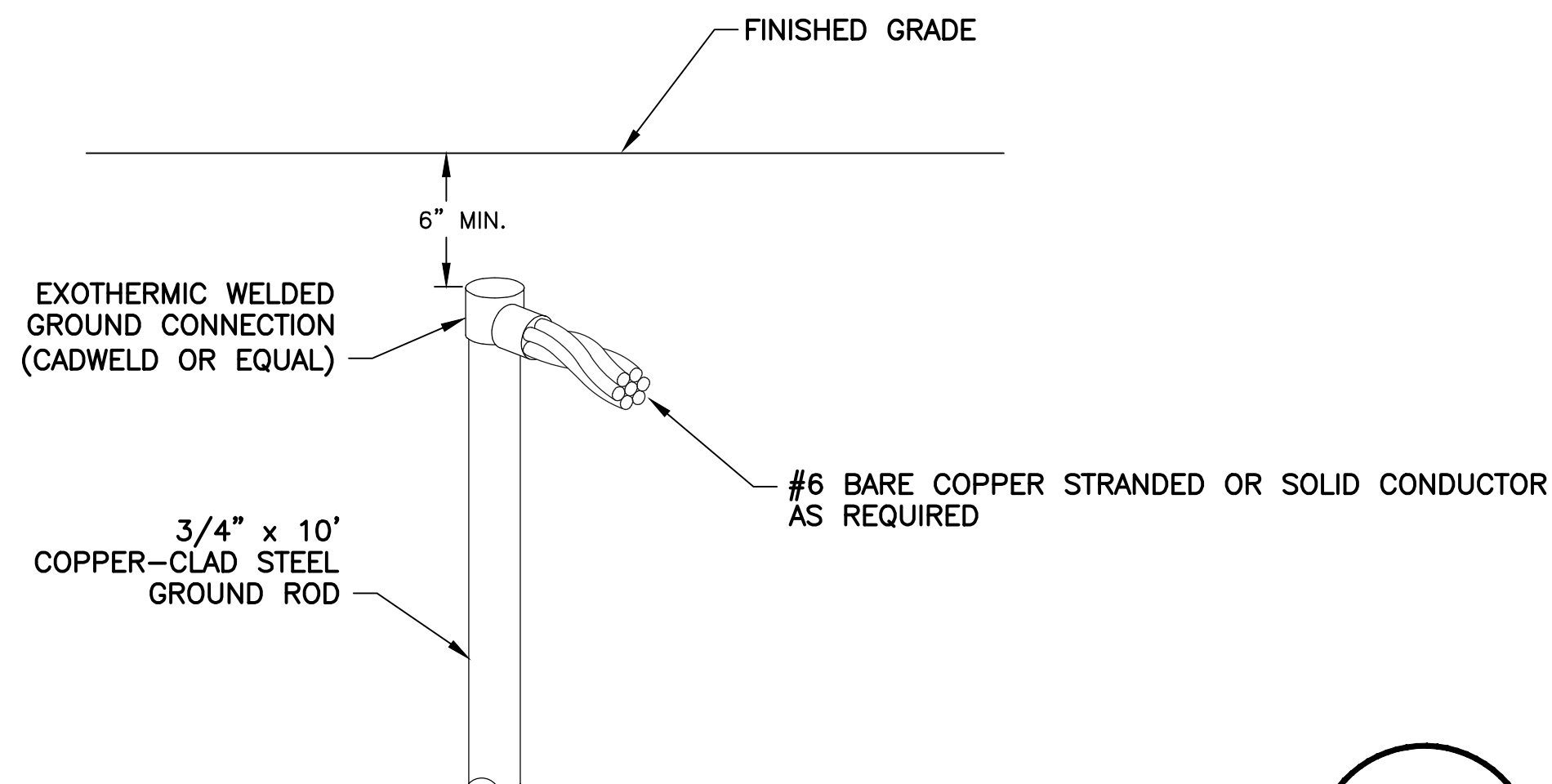
766
TYP COUNTERPOISE TO CABLE CONNECTION DETAIL



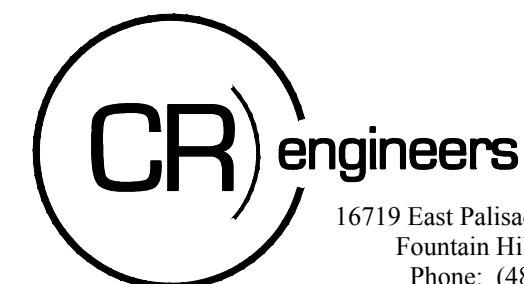
NOTES

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 SCOTCH 33+ VINYL ELECTRICAL TAPE ON CONNECTION AFTER PULLING SLEEVE OVER COMPLETE KIT.
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 CIRCUIT, TAPE FROM THE BACK END OF THE CONNECTOR KIT ONTO CABLE FOR 3" EACH, RED PHASE TAPE 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.

925
TYP TYPICAL 5KV CABLE SPLICE



767
TYP CABLE TO GROUND ROD CONNECTION DETAIL

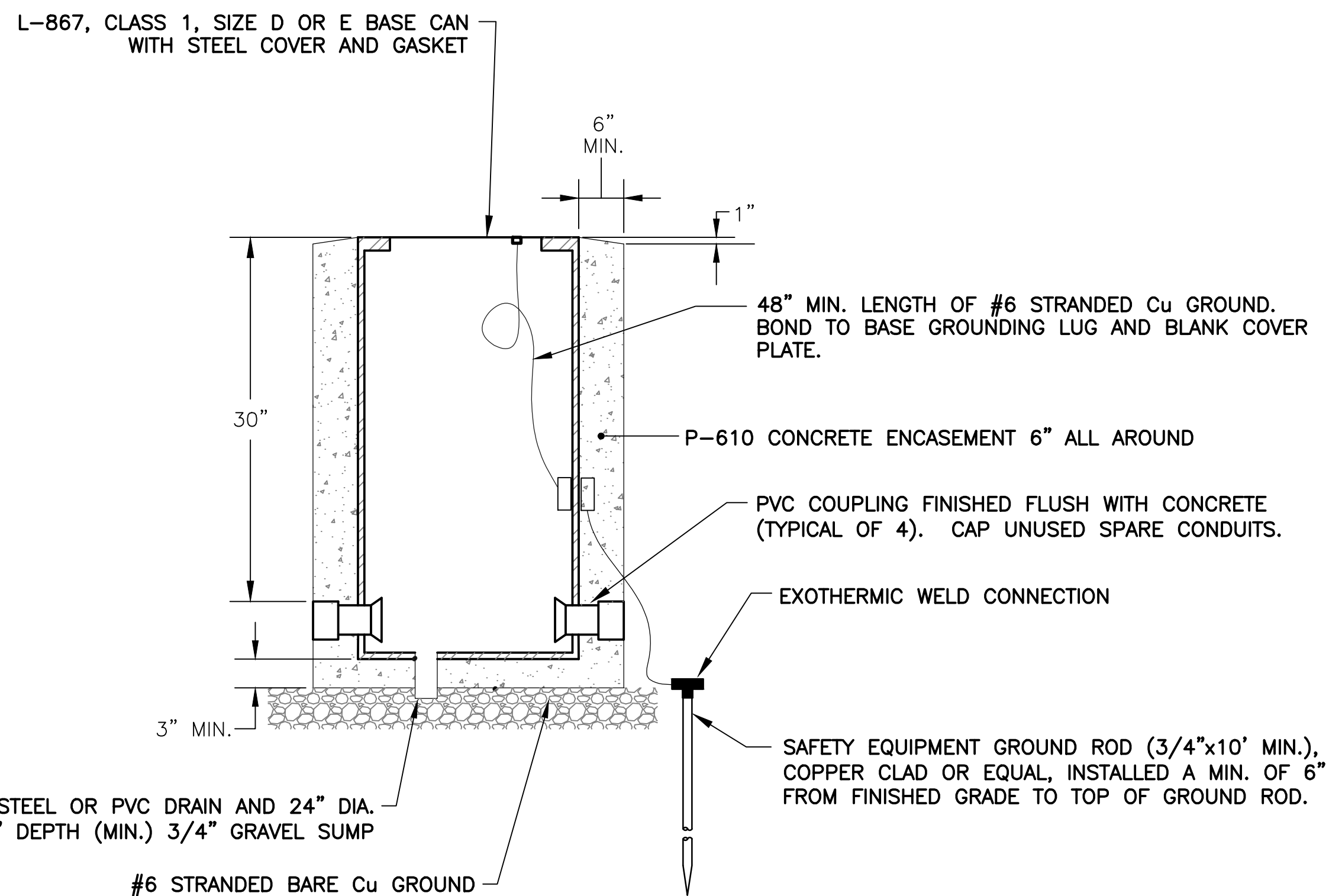


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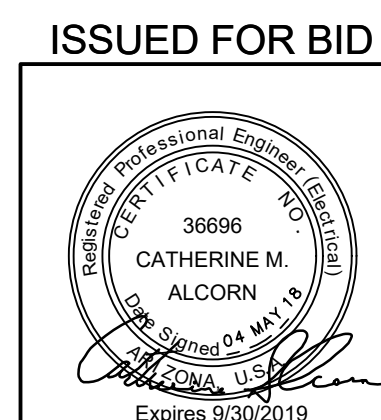
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Designed by: CA	MMI Proj. No.: 8131-0022
Drawn by: JBW	
Checked by: RD	
Date: 05/2018	
Dwg scale: NTS	
ELECTRICAL DETAILS	
Sheet Reference Number: EA502	
Sheet 55 of 66	

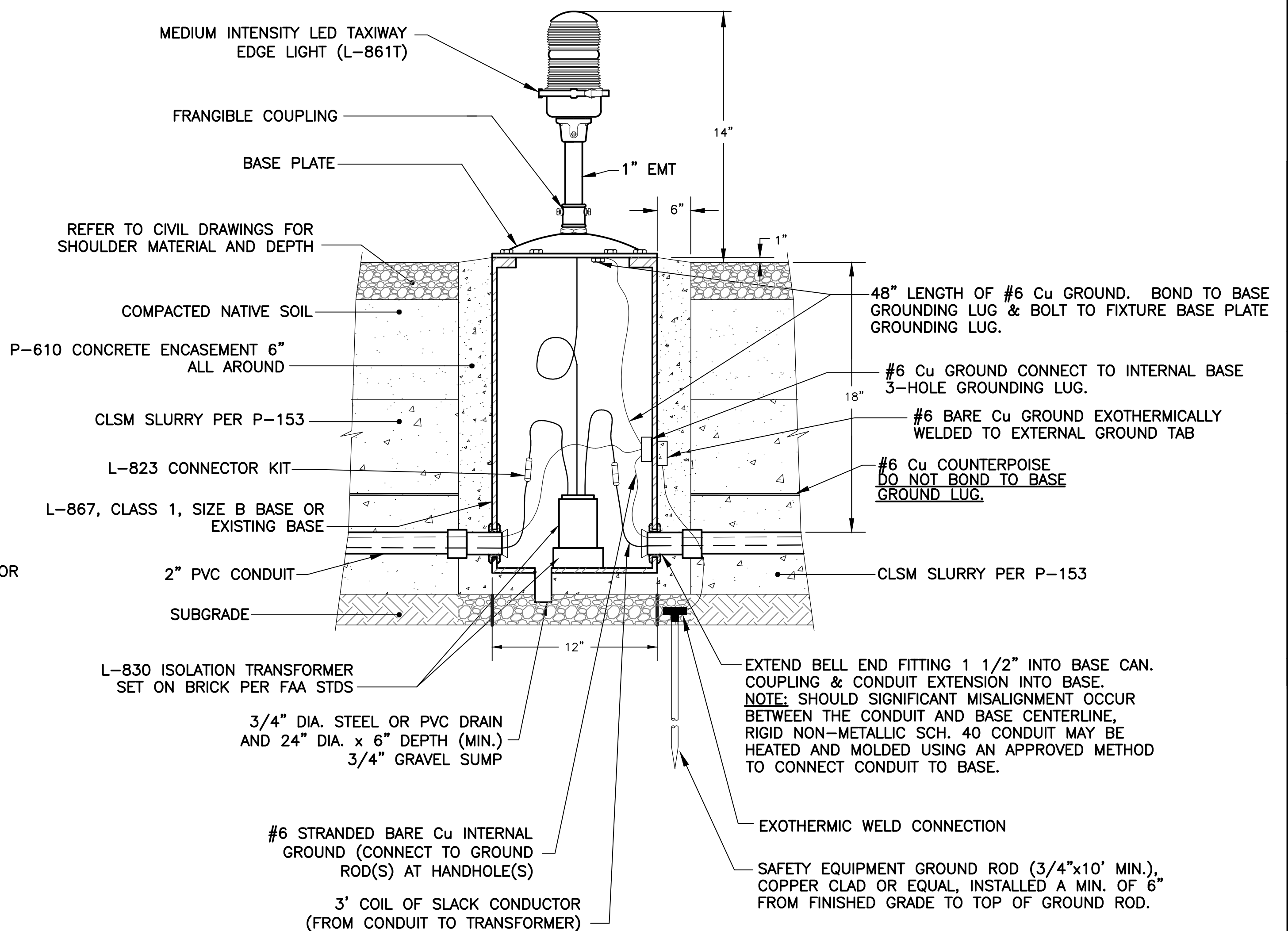
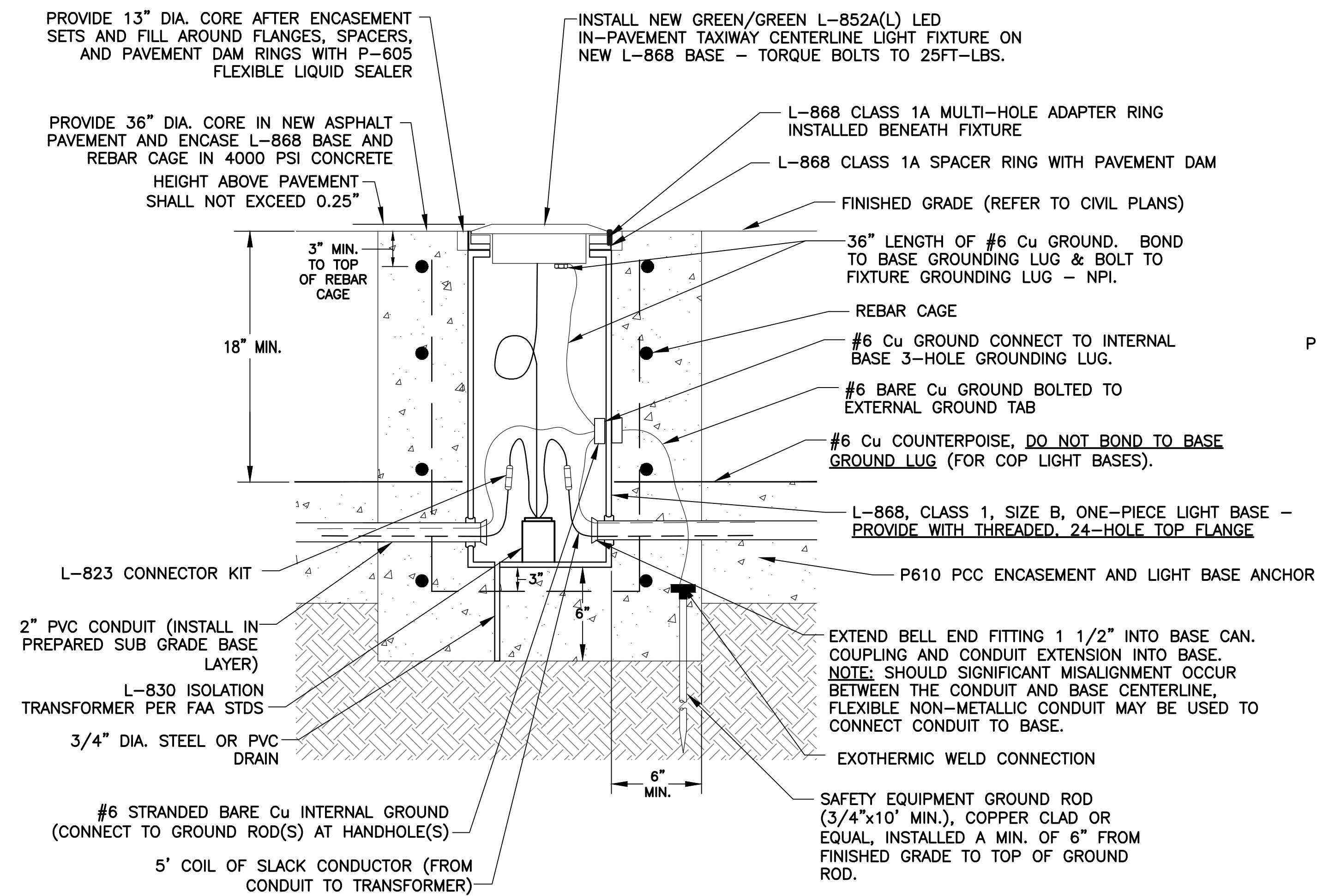


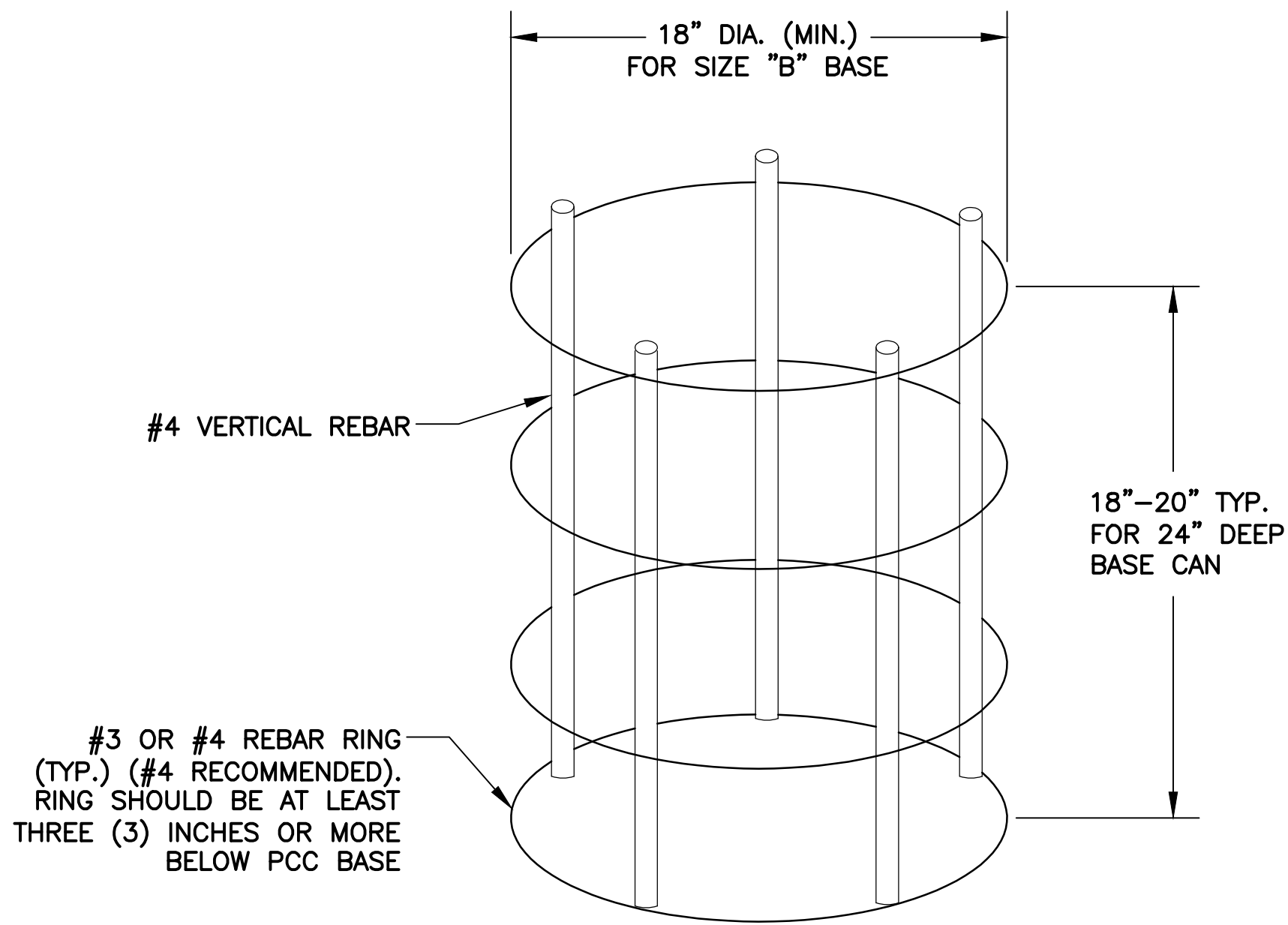
JUNCTION CAN GENERAL NOTES:

- NOTES:

1. CONTRACTOR MAY FURNISH PRE-CAST CONCRETE JUNCTION CANS AND FIXTURE BASES FOR INSTALLATION IN UNPAVED SHOULDERS AND INFIELDS OR RETROFIT IN EXISTING PAVED SHOULDERS. REFER TO CIVIL PLANS FOR FINISHED GRADE AND MATERIALS.
2. ONE-PIECE SONOTUBES OF CORRECT DIAMETER FOR 6" MIN. CONCRETE SURROUND MAY BE UTILIZED FOR ONE-TIME USE ONLY FOR SIZE B CANS. ROUND COLUMN FORMS SPECIFICALLY DESIGNED FOR MULTIPLE USE MAY BE USED.
3. CONTRACTOR SHALL SUBMIT ON SPECIFIC PRE-CAST MEANS AND METHODS FOR ENGINEER REVIEW AND APPROVAL.
4. STATION AND OFFSET COORDINATES ON SHEET EA602 IS THE CENTER OF JUNCTION CAN.



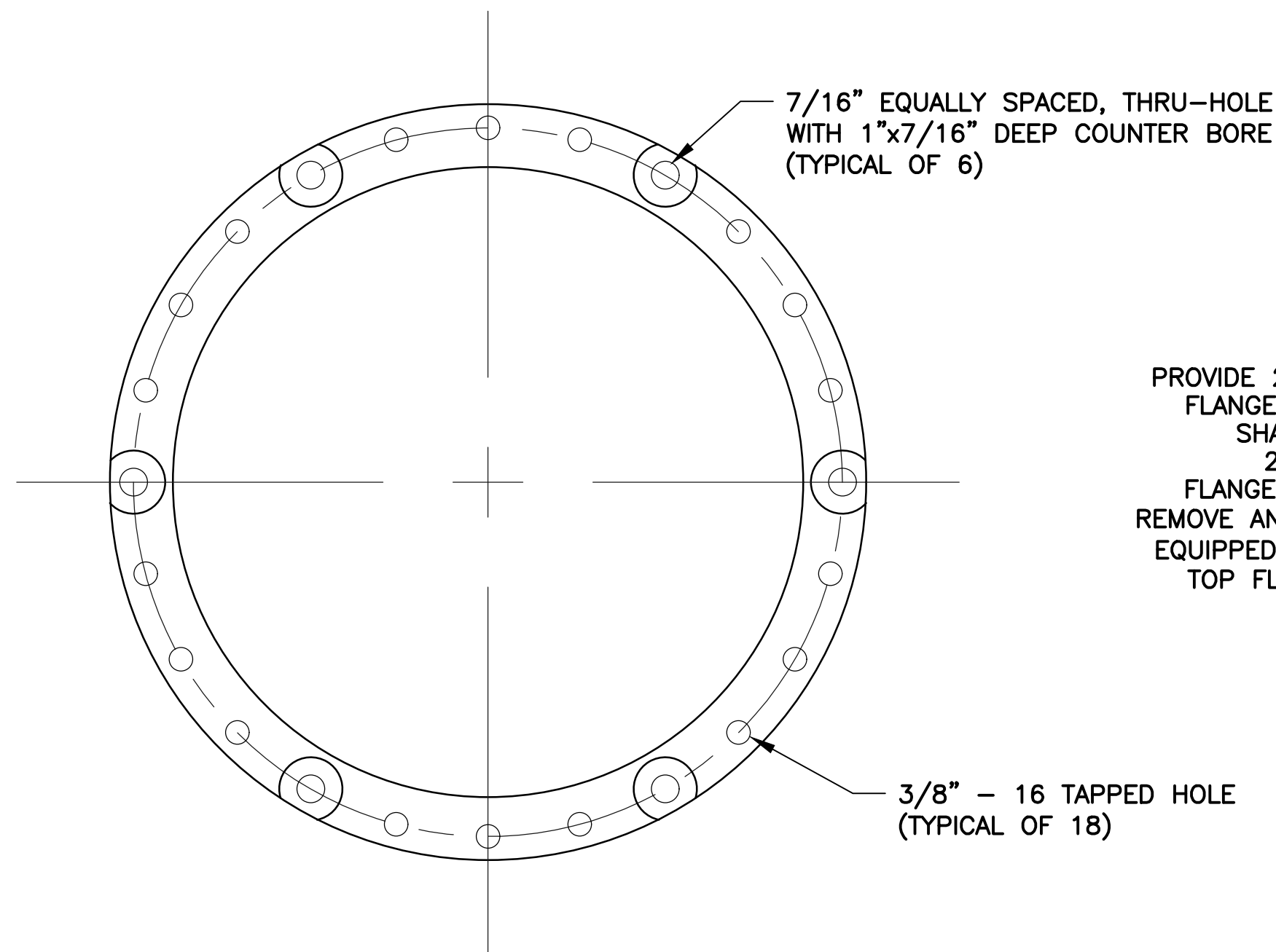




NOTE

1. PROVIDE THREE (3) INCH MINIMUM CONCRETE COVER FOR REBAR FOR FUTURE MILL AND OVERLAY MAINTENANCE.

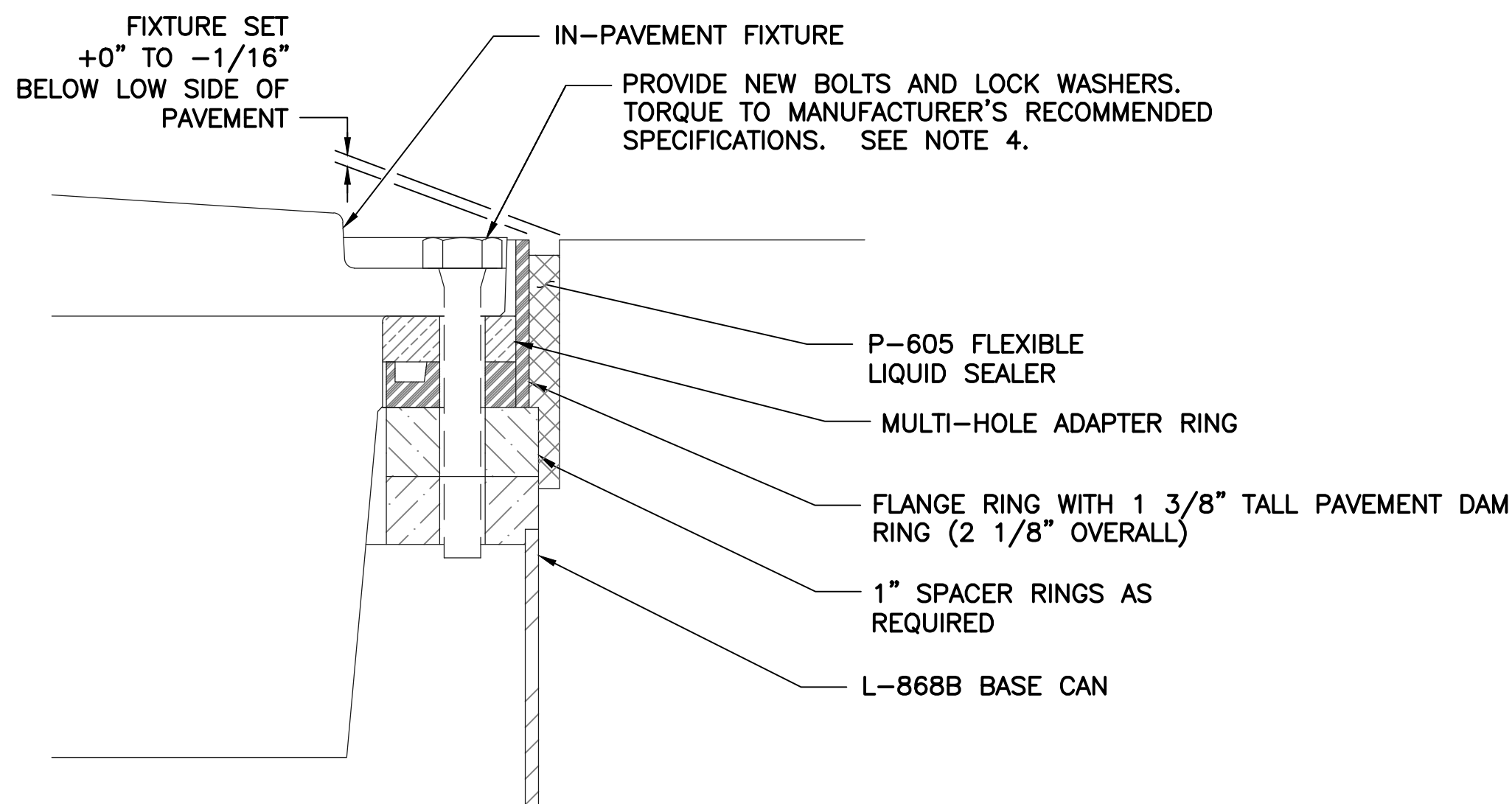
903 LIGHT BASE REBAR CAGE DETAIL
TYP



NOTE

1. FOR USE ON L-852A TAXIWAY CENTERLINE LIGHTS.
2. JAQUITH INDUSTRIES, INC. TYPE AA5423MEM OR EQUAL.

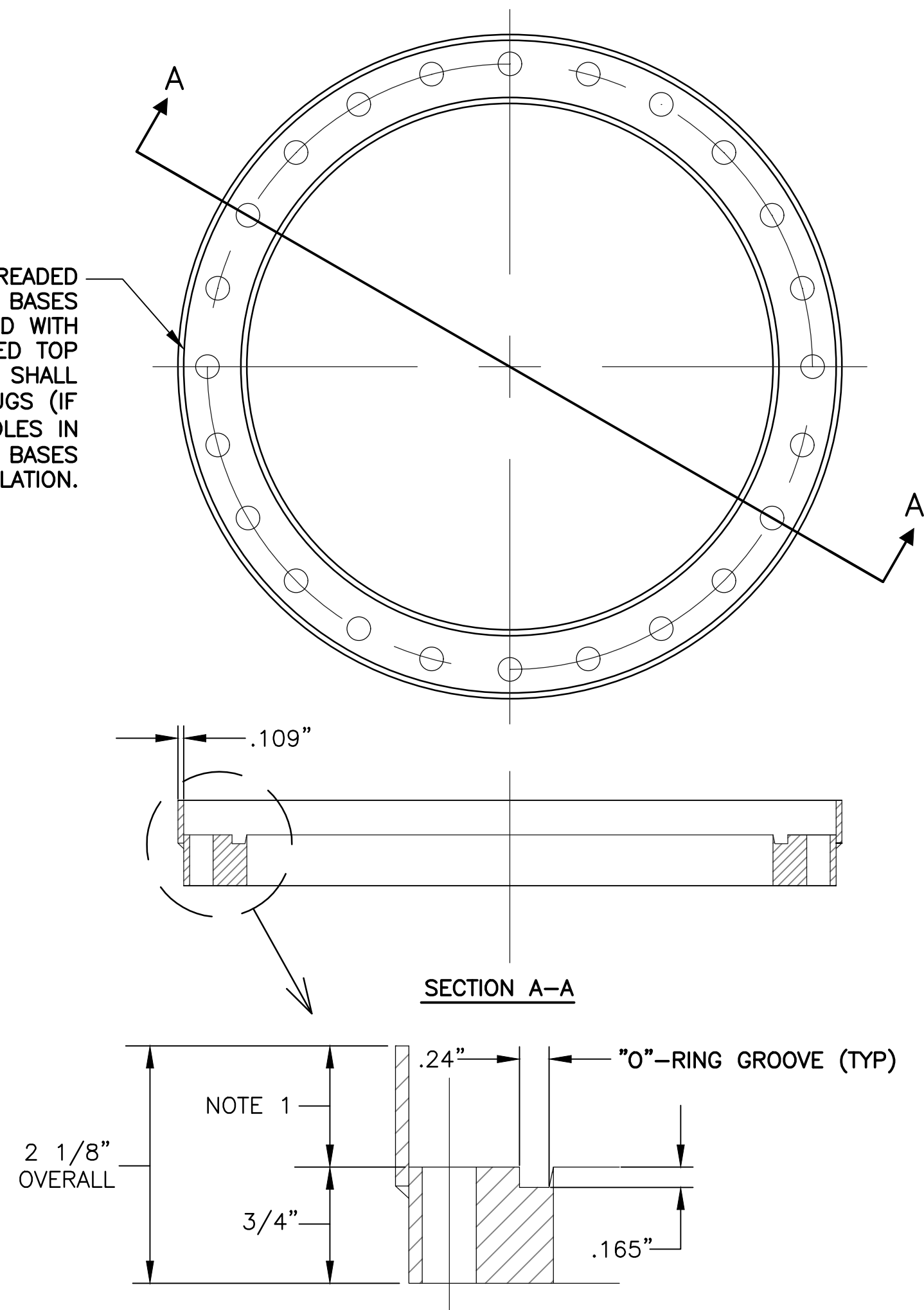
904 MULTI-HOLE ADAPTER
TYP



NOTES:

1. THE BASIC PACKAGE TO BE USED FOR PLANNING THE INSTALLATION OF ALL L-868 BASE CANS WITH L-852A FIXTURES INSTALLED SHALL BE: (1) FIXTURE, (1) 3/4" FLANGE RING WITH 1 3/8" TALL PAVEMENT DAM RING, (1) 1" SPACER, AND (1) MULTI-HOLE ADAPTER RING ON TOP OF THE L-868 BASE CAN. THE BASIC SPACER RING PACKAGE, AS DENOTED ABOVE, SHALL BE PROVIDED BY CONTRACTOR.
2. TO MEET FINAL GRADE REQUIREMENTS SHOWN ON THIS DETAIL, CONTRACTOR (AT CONTRACTOR'S EXPENSE) WILL BE REQUIRED TO PROVIDE ALTERNATE SPACER RINGS (MAXIMUM 1" THICKNESS, MINIMUM 1/16" THICKNESS). THE FINAL INSTALLATION SHALL USE NOT MORE THAN 3 SPACER RINGS UNDER THE FLANGE RING.
3. FINAL FIXTURE HEIGHT (OR SNOW PLOW RING, WHEN USED), RELATIVE TO THE PAVEMENT, SHALL BE CHECKED ON THE LOW SIDE OF PAVEMENT.
4. CONTRACTOR SHALL INSTALL NEW FLUOROPOLYMER COATED, GRADE 5, MEDIUM CARBON STEEL BOLTS AND STAINLESS STEEL, ONE-PIECE SPLIT LOCK WASHERS - TORQUE TO 25 FT LBS.

906 IN-PAVEMENT LIGHT FIXTURE INSTALLATION DETAIL
TYP



NOTE

1. 1-3/8" TALL PAVEMENT DAM FOR L-852A TAXIWAY CENTERLINE LIGHT FIXTURE INSTALLED ON TOP OF 3/4" THICK MULTI-HOLE ADAPTER RING.

905 FLANGE RING WITH PAVEMENT DAM
TYP



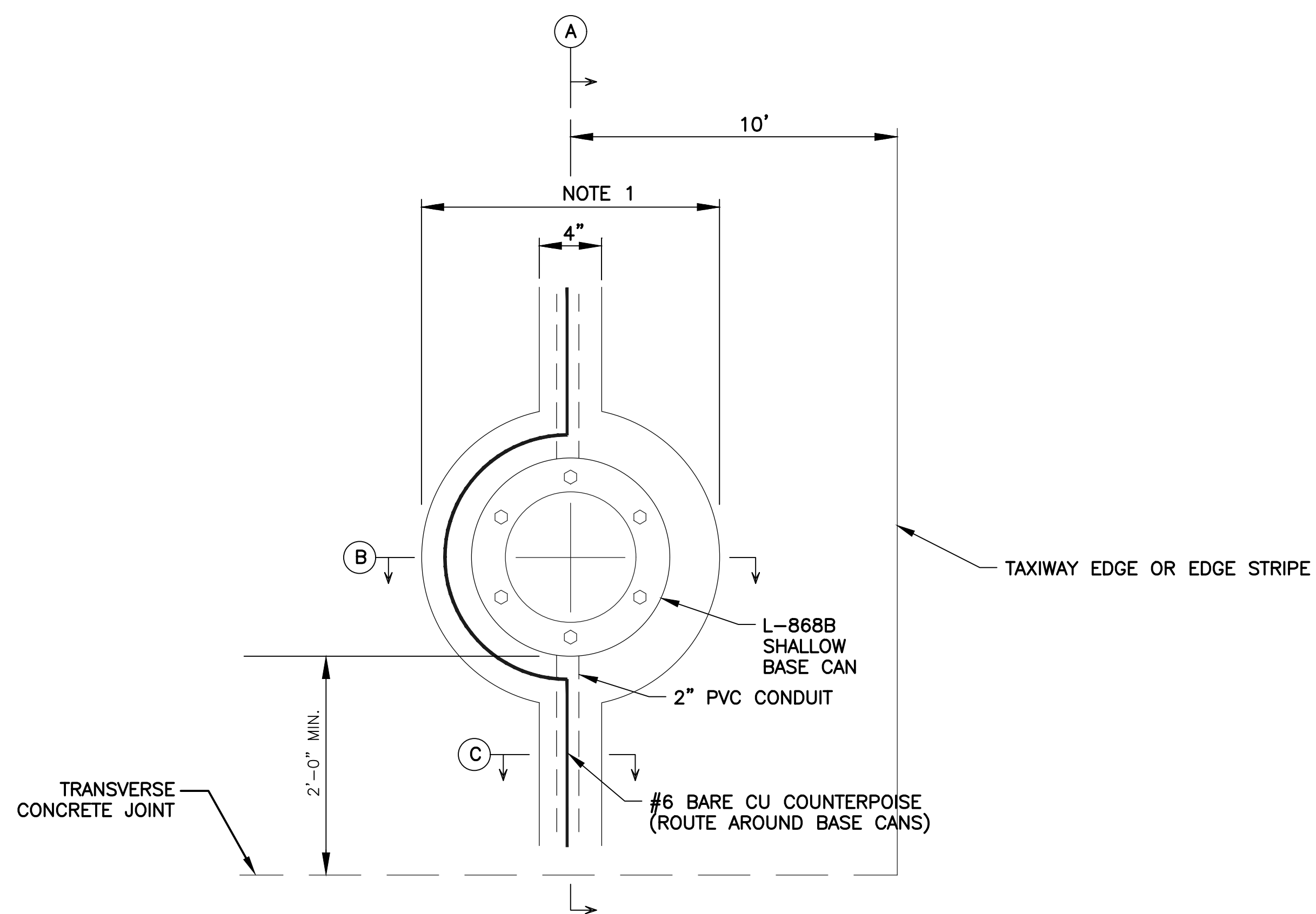
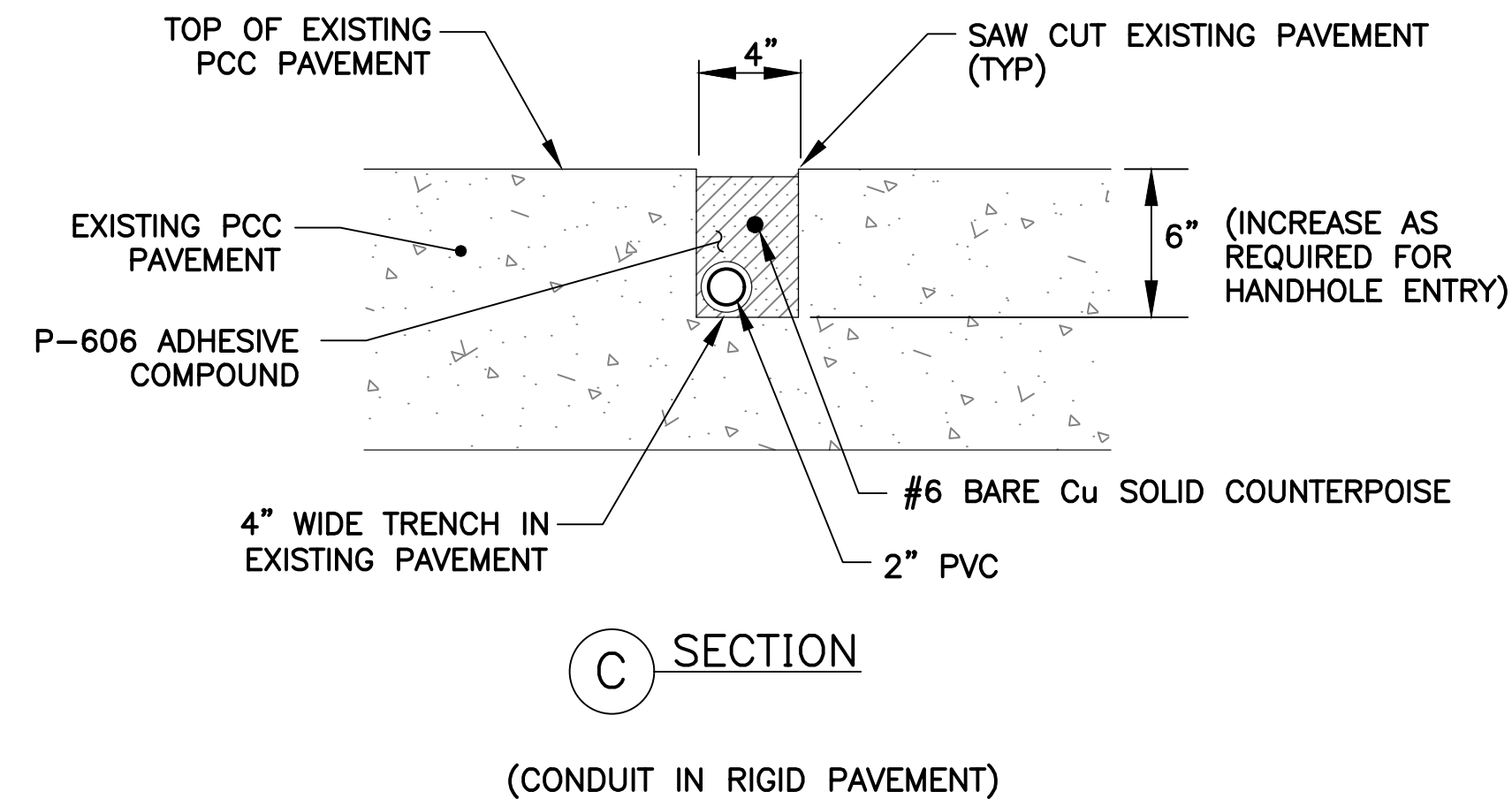
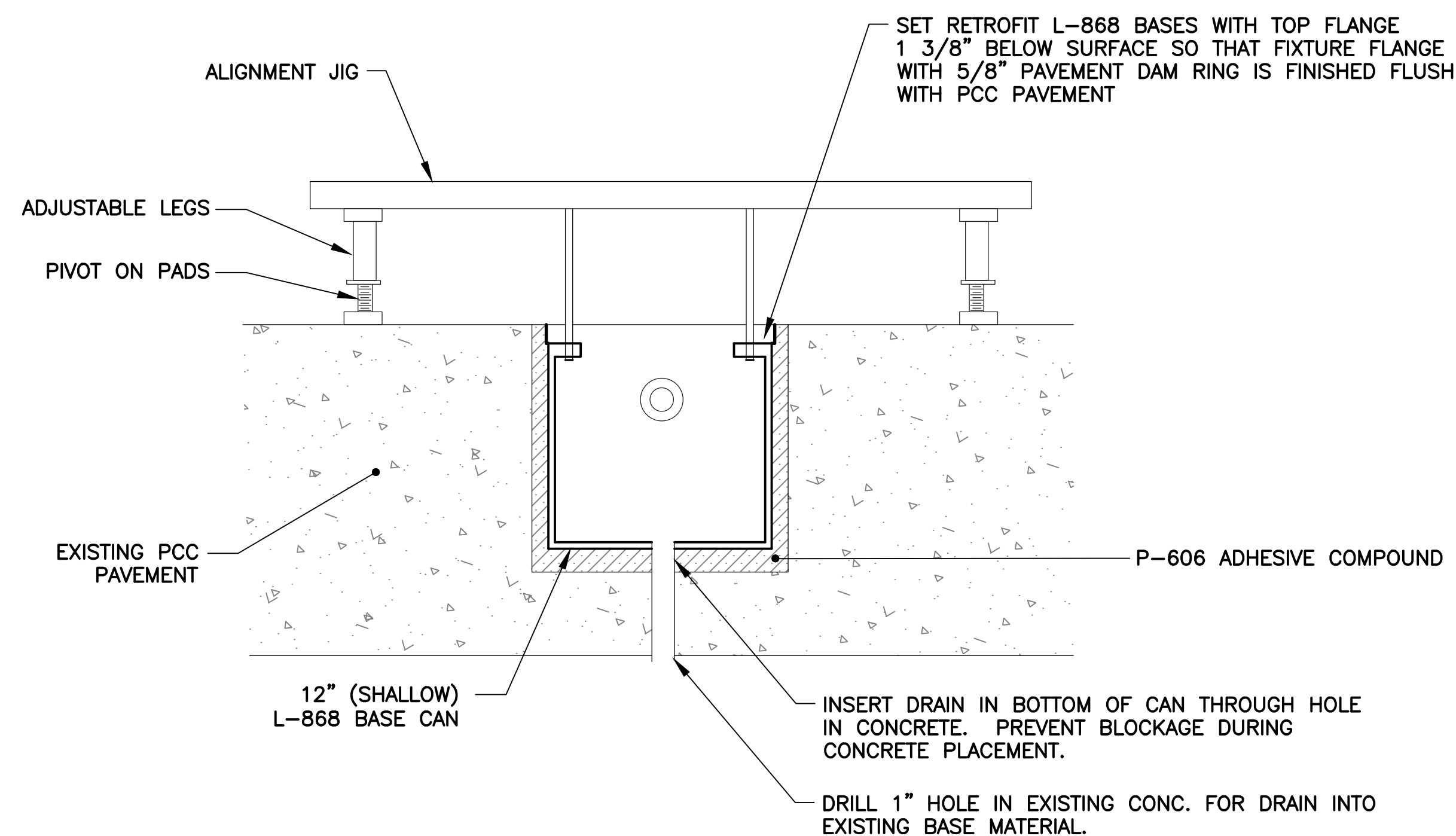
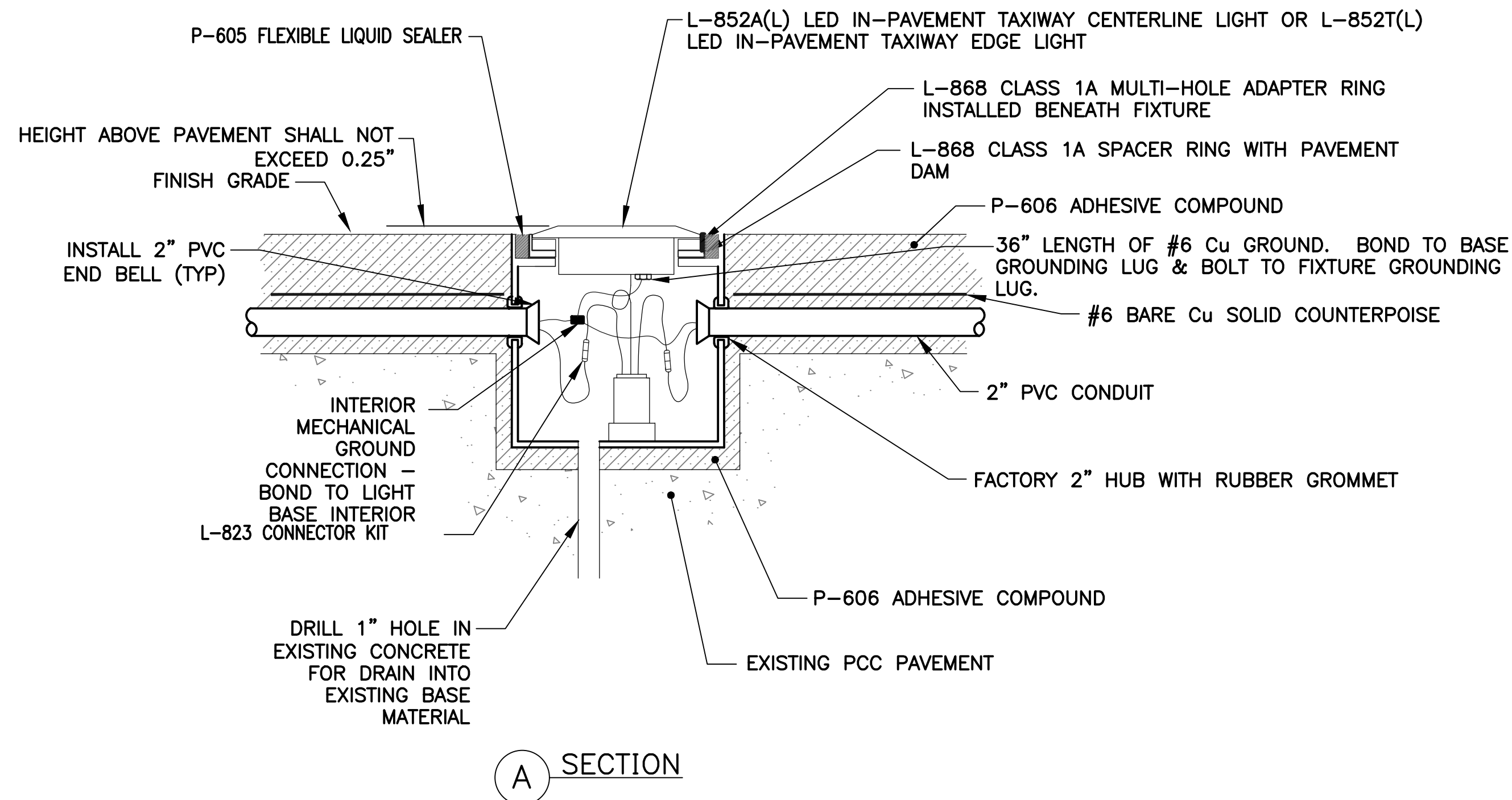
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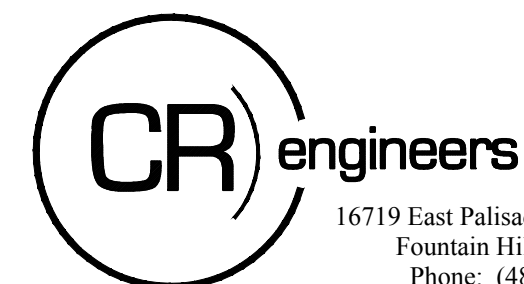
Designed by: CA	Drawn by: JBW	Checked by: RD	Date: 05/2018	Dwg scale: NTS	MMI Proj. No.: 8131.022
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907
TYP L-868 BASE MOUNTING IN EXISTING PCC PAVEMENT

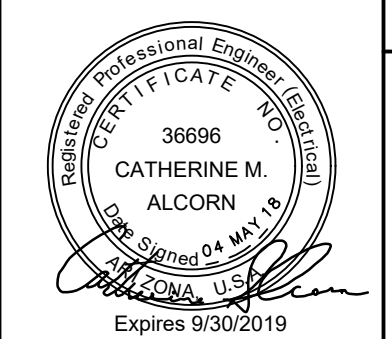
NOTES:

1. CORE LIGHT BASE OUTER DIAMETER + 2" MINIMUM IN EXISTING PAVEMENT.
2. L-868 BASE, 12" DIAMETER, 12" DEEP CAN
3. HUBS SHALL BE 2" FACTORY HUB WITH RUBBER GROMMET OR FIELD DRILLED AS REQUIRED.
4. LIGHT BASE SHALL CONFORM TO FAA ADVISORY CIRCULAR 150/5345/42G, SPECIFICATION FOR AIRPORT LIGHT BASES AND TRANSFORMER HOUSINGS.
5. ALL GROUND CONNECTIONS SHALL BE INSPECTED BY CONSTRUCTION MANAGER PRIOR TO PLACEMENT OF CONCRETE OR EPOXY.
6. COUNTERPOISE SHALL BE INSTALLED A MINIMUM OF 2" BELOW PAVEMENT SURFACE, DO NOT CONNECT TO LIGHT BASE.
7. SECURE CONDUIT TO BOTTOM OF CHANNEL WITH 1-HOLE STRAPS ANCHORED TO CONCRETE AT 5' INTERVALS.
8. PROVIDE FLANGE RINGS WITH PAVEMENT DAM RINGS TO FACILITATE FUTURE FLUSH BLANK PLATE INSTALLATION.



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ELECTRICAL DETAILS

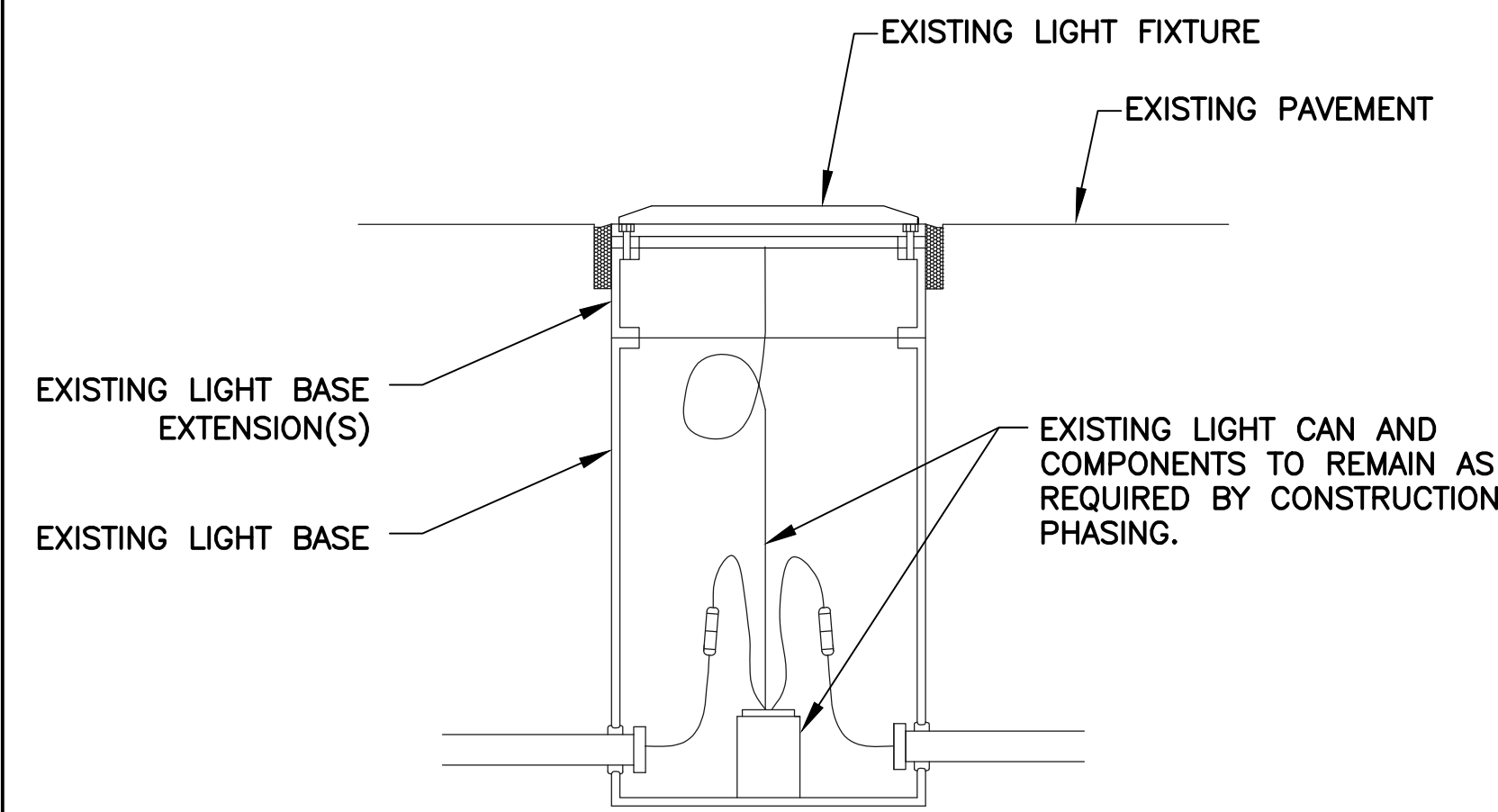
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Reference
Number:
EA507
Sheet 60 of 66

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Drawn by: JBW
Checked by: RD
Date: 05/2018
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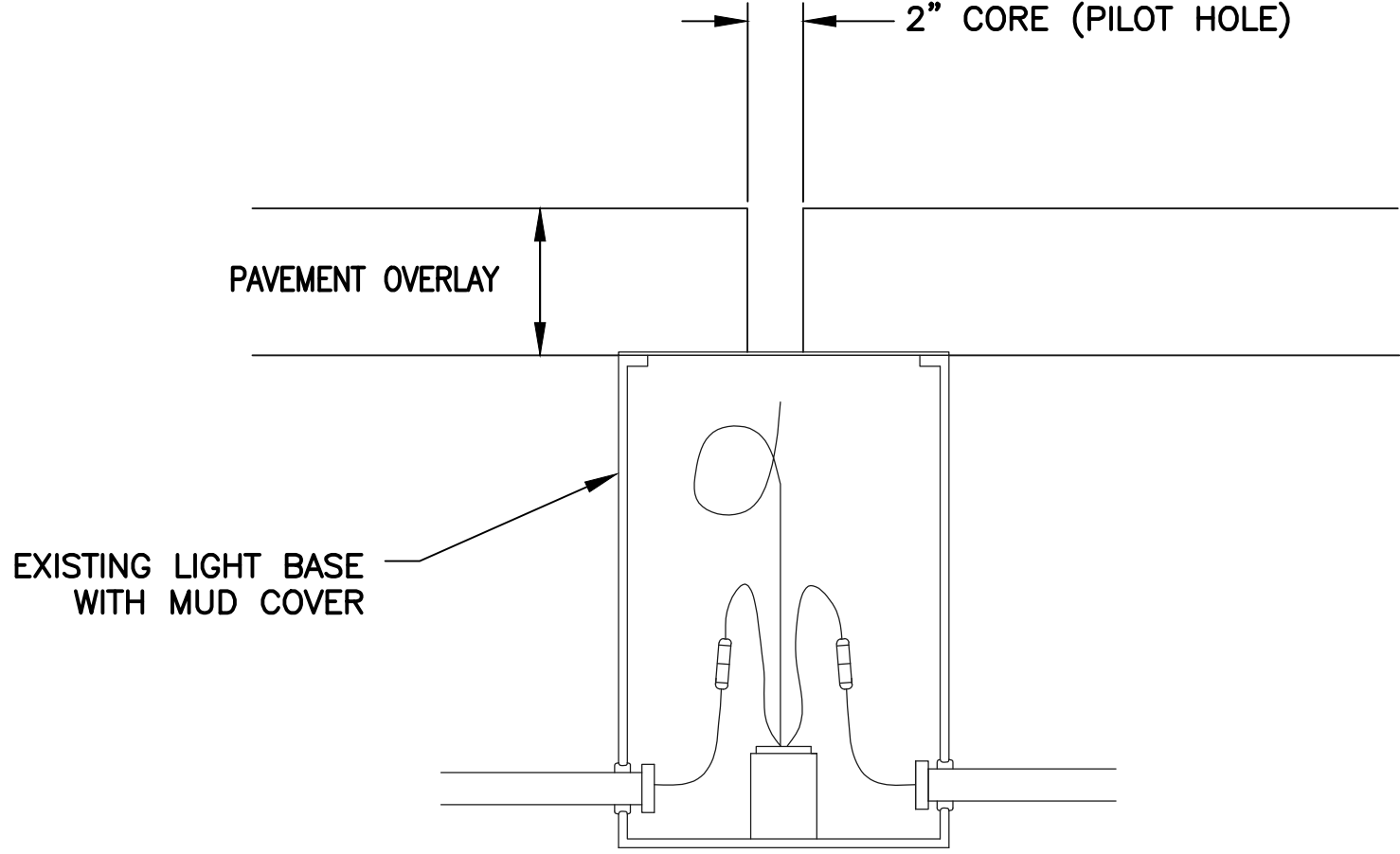
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2-28, THESE PLANS ARE FOR
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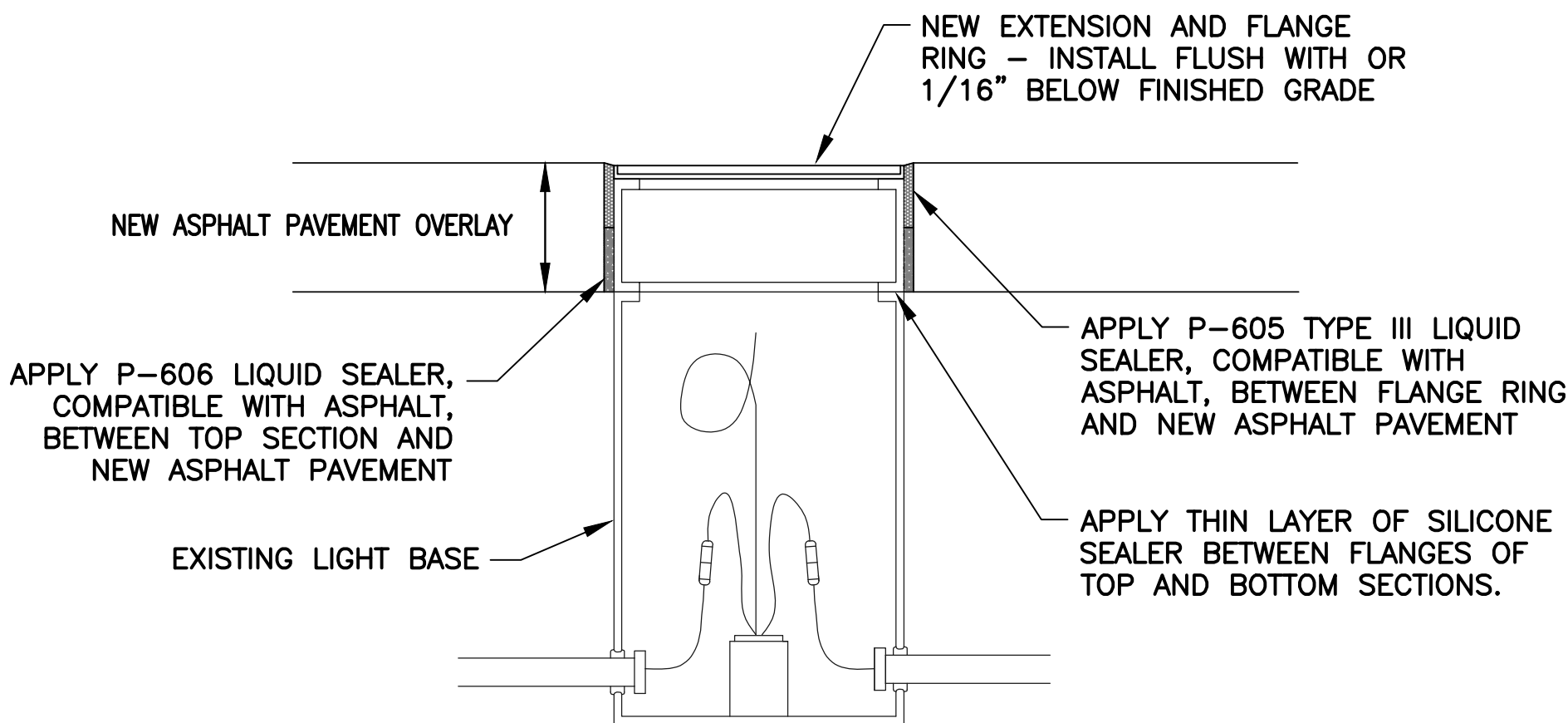
STEP 1

1. REMOVE AND STORE EXISTING LIGHT FIXTURE.
2. PROTECT AND RECONNECT CABLES AND COMPONENTS IN LIGHT CAN AS REQUIRED.
3. REMOVE BASE EXTENSION(S) AS REQUIRED FOR PAVEMENT MILL AND OVERLAY/RECONSTRUCTION.
4. INSTALL TEMPORARY MUD COVER ON LIGHT BASE PRIOR TO MILL AND OVERLAY TO PREVENT FILLING WITH PAVEMENT/DEBRIS.
5. COVER MUD PLATE WITH SHINGLE OR OTHER THIN ARTICLE WHEN TACK COAT IS APPLIED. REMOVE SHINGLE AND WIPE COVER WITH VEGETABLE OIL PRIOR TO PAVING.



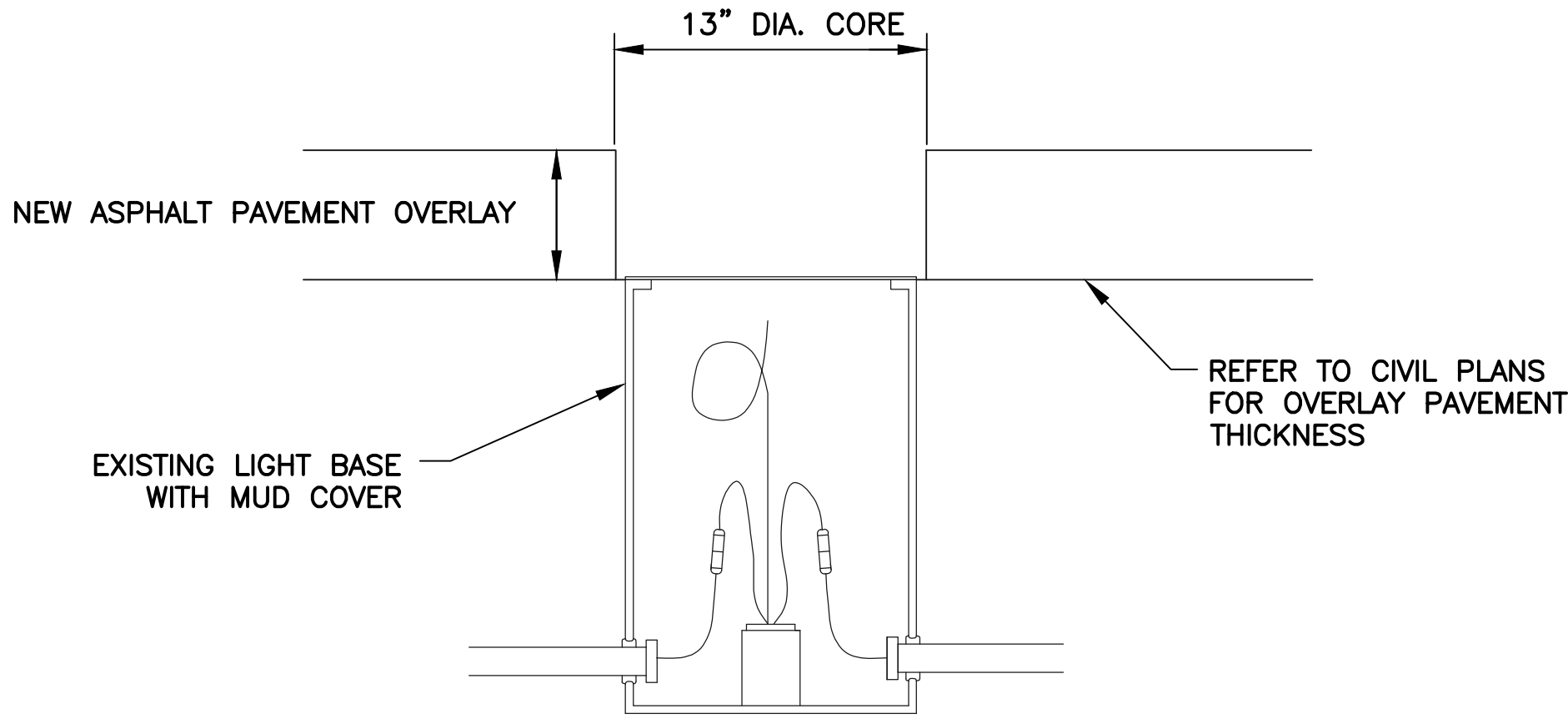
STEP 2

1. AFTER PAVEMENT OVERLAY, CORE 2" DIA PILOT HOLE TO LOCATE CENTERING MARK ON MUD COVER.



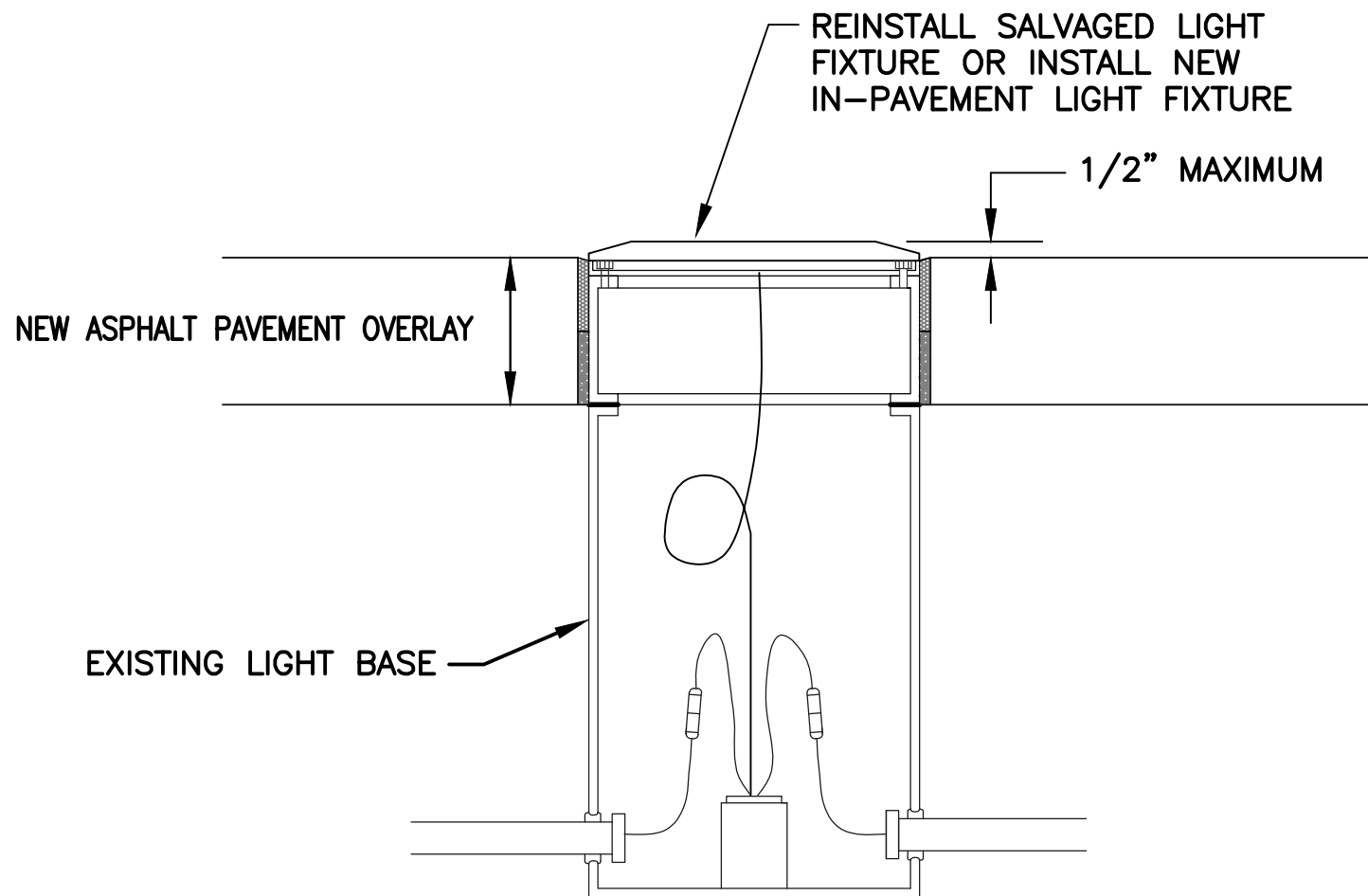
STEP 4

1. INSTALL NEW L-868 BASE EXTENSION WITH 1 3/8" THICK FIXTURE FLANGE WITH PAVEMENT DAM RING USING NEW 3/8" STAINLESS STEEL BOLTS WITH ANTI-SEIZE - TORQUE AS REQUIRED BY MANUFACTURER (15 FT LBS). CONTRACTOR TO REPAIR ANY DAMAGED THREADS.
2. OVERALL HEIGHT OF NEW L-868 EXTENSION AND FIXTURE FLANGE ANTICIPATED TO BE APPROXIMATELY 1" NOMINAL. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION. CONTRACTOR SHALL HAVE ON HAND SUFFICIENT SPACER RINGS FOR SHIMMING EXTENSION TO GRADE. MAXIMUM AMOUNT OF THREE SPACER RINGS ALLOWABLE PER FAA.
3. INSTALL SPACER RINGS BETWEEN TOP SECTION AND FIXTURE FLANGE TO ALLOW FOR FUTURE ADJUSTMENTS TO LOWER FIXTURE IF PAVEMENT SLUMPS IN WARM TEMPERATURES OR UNDER HEAVY TRAFFIC.



STEP 3

1. AFTER LOCATING CENTER OF MUD COVER, CORE 13" (MAX.) DIAMETER HOLE IN OVERLAYED PAVEMENT AND REMOVE MUD COVER.



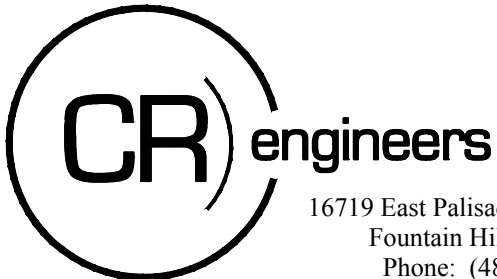
STEP 5

1. RE-INSTALL LIGHT FIXTURE ASSEMBLY AND RECONNECT PRIOR TO TAXIWAY/RUNWAY REOPENING.
2. INSTALL NEW COATED GRADE 5 CORROSION-RESISTANT MOUNTING BOLTS AND ONE-PIECE SPLIT LOCK WASHERS. TORQUE TO 25 FT LBS.

909 TYP LIGHT ADJUSTMENT DETAILS (IN ASPHALT)

NOTES

1. THESE LIGHT ADJUSTMENT DETAILS ARE FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL DIMENSIONS, ELEVATIONS AND ADJUSTMENT HEIGHTS, AND PROVIDING SHOP DRAWINGS FOR APPROVAL BY THE ENGINEER.

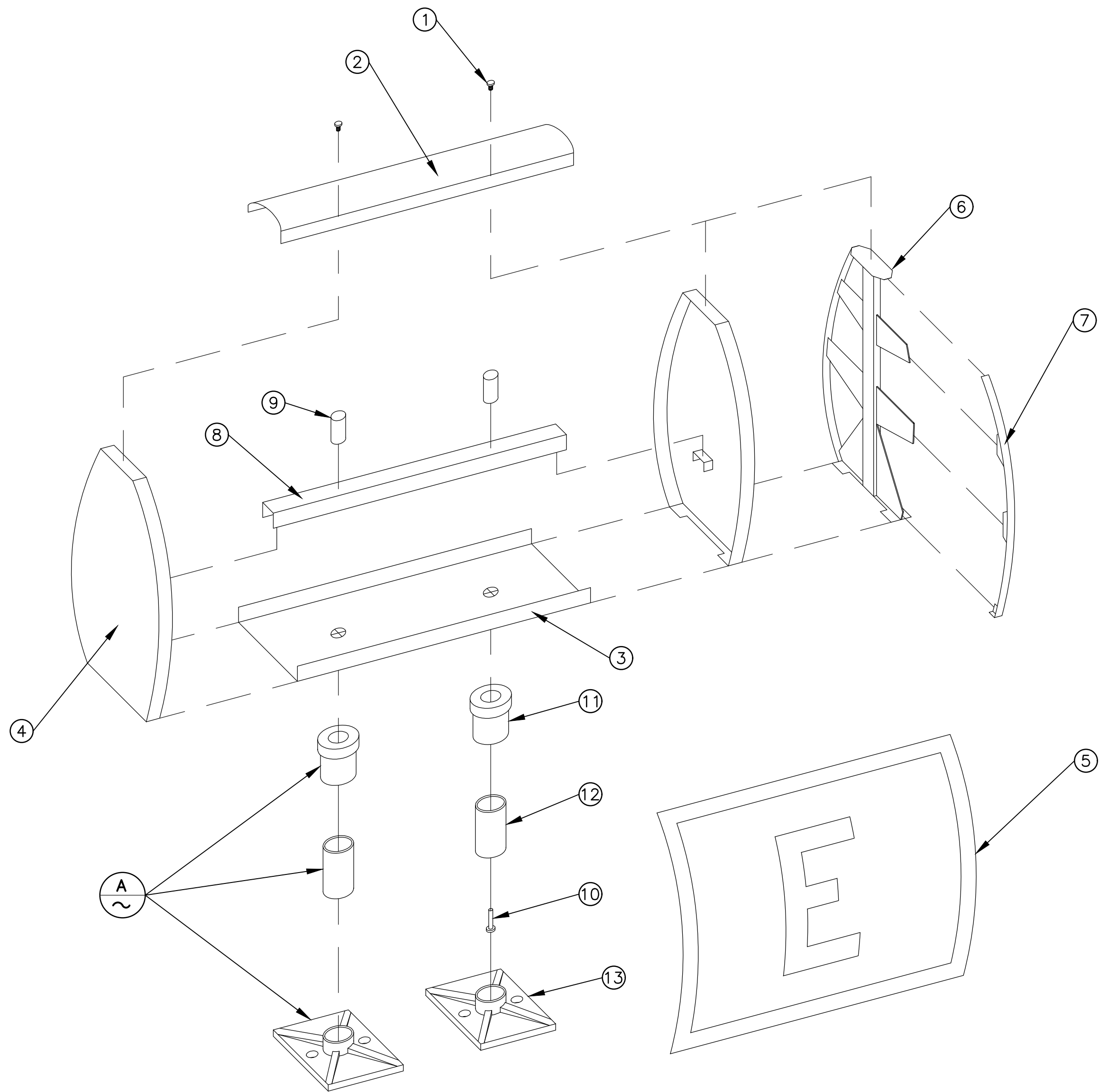


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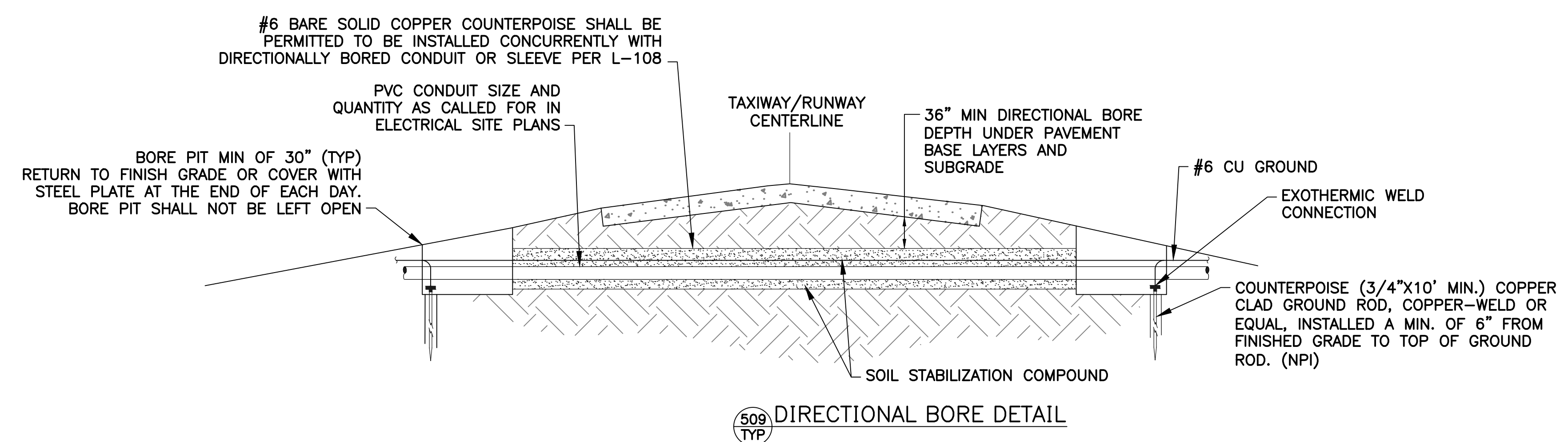
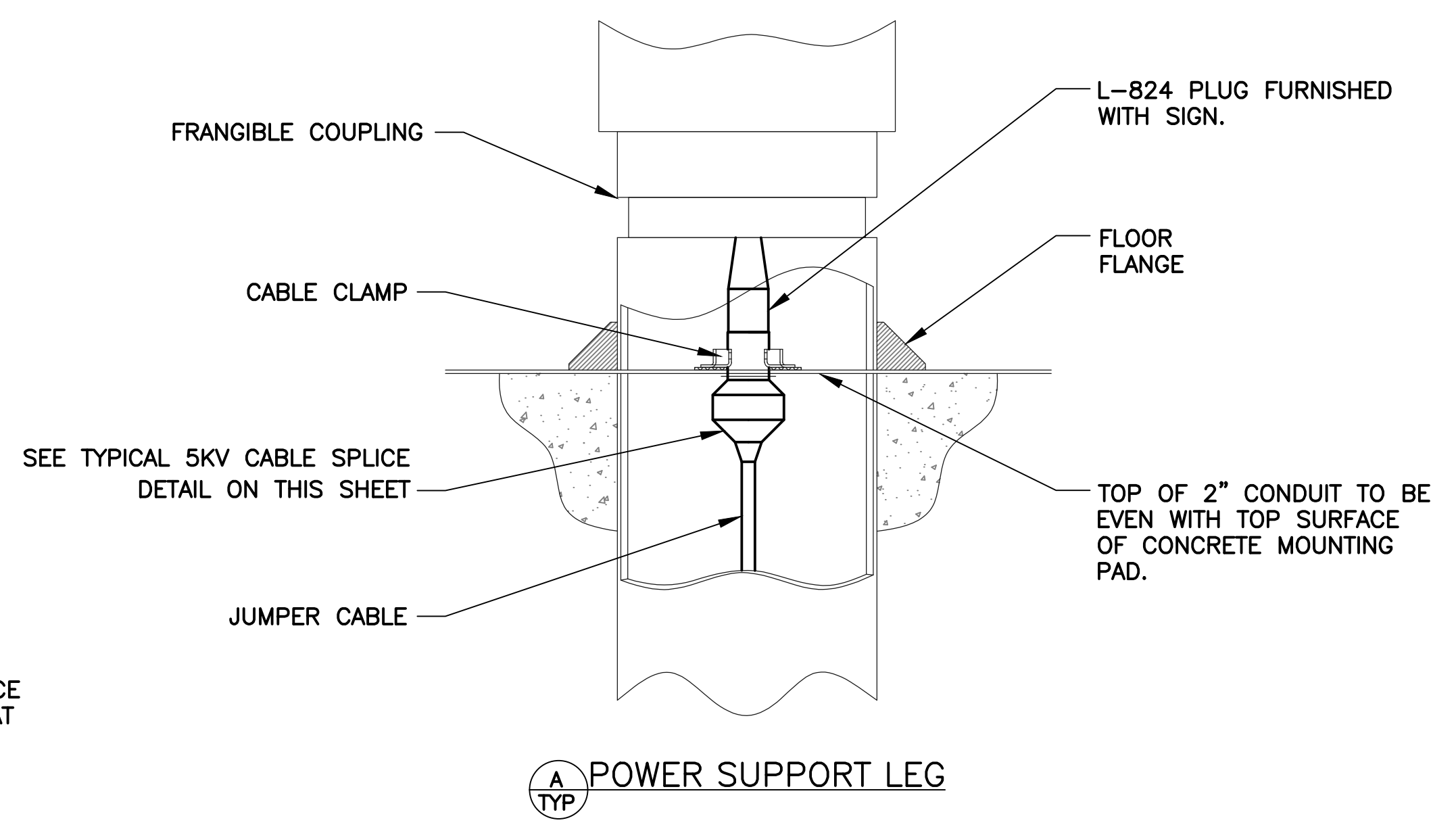


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	NO.
PHX DVI CYR CITY OF PHOENIX AVIATION DEPARTMENT GYR AIRPORT TW A REHAB & STRENGTHENING AV41000075 FAA	
Designed by: CA	MMI Proj. No.: 8131.022
Drawn by: JBW	
Checked by: RD	
Date: 05/2018	
Dwg scale: NTS	
ELECTRICAL DETAILS	
Sheet Reference Number: EA508	
Sheet 61 of 66	



1. TURN FASTENERS
2. TOP COVER (SEE NOTE 4)
3. BASE (SIGN BOTTOM)
4. END PANEL (SEE NOTE 3)
5. LEGEND PANEL
6. SUPPORT JUNCTION
7. FACE INSERT PANEL JOINT
8. LAMP MOUNTING BAR
9. LAMP SOCKET
10. FAA L-823 PLUG
11. SLIP FLANGE
12. FRANGIBLE COUPLING (6" LENGTH)
13. FLOOR FLANGE

- NOTES:**
1. NEW AIRFIELD SIGNS SHALL BE OF A CURVED FACE DESIGN TO MAINTAIN SIMILAR APPEARANCE TO THAT OF EXISTING SIGNAGE AND TO FACILITATE ARRAY MODIFICATIONS.
 2. WHEN JOINING TWO (2) SIGNS FOR ONE ARRAY, PROVIDE NEW SIZE 1 SUPPORT JUNCTION (TREE) AND SIZE 2 FACE INSERT PANEL JOINT (TRACK) OF THE CORRECT COLOR ADDED. DO NOT PROVIDE END PANELS IN THE MIDDLE OF THE ARRAY.
 3. PROVIDE EXTERNAL DISCONNECT SWITCH IN WEATHERPROOF ENCLOSURE.
 4. PROVIDE CURVED SIGN TOPS THAT PROVIDE ADDITIONAL SIGN PANEL SUPPORT IF AVAILABLE BY MANUFACTURER.



509 TYP DIRECTIONAL BORE DETAIL

- NOTES:**
1. CONTRACTOR SHALL RETURN GRADES TO MEET FAA SAFETY AREA REQUIREMENTS AT THE END OF EACH SHIFT, PRIOR TO RUNWAY OPENING.

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36696
CATHERINE M. ALCORN
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EA510
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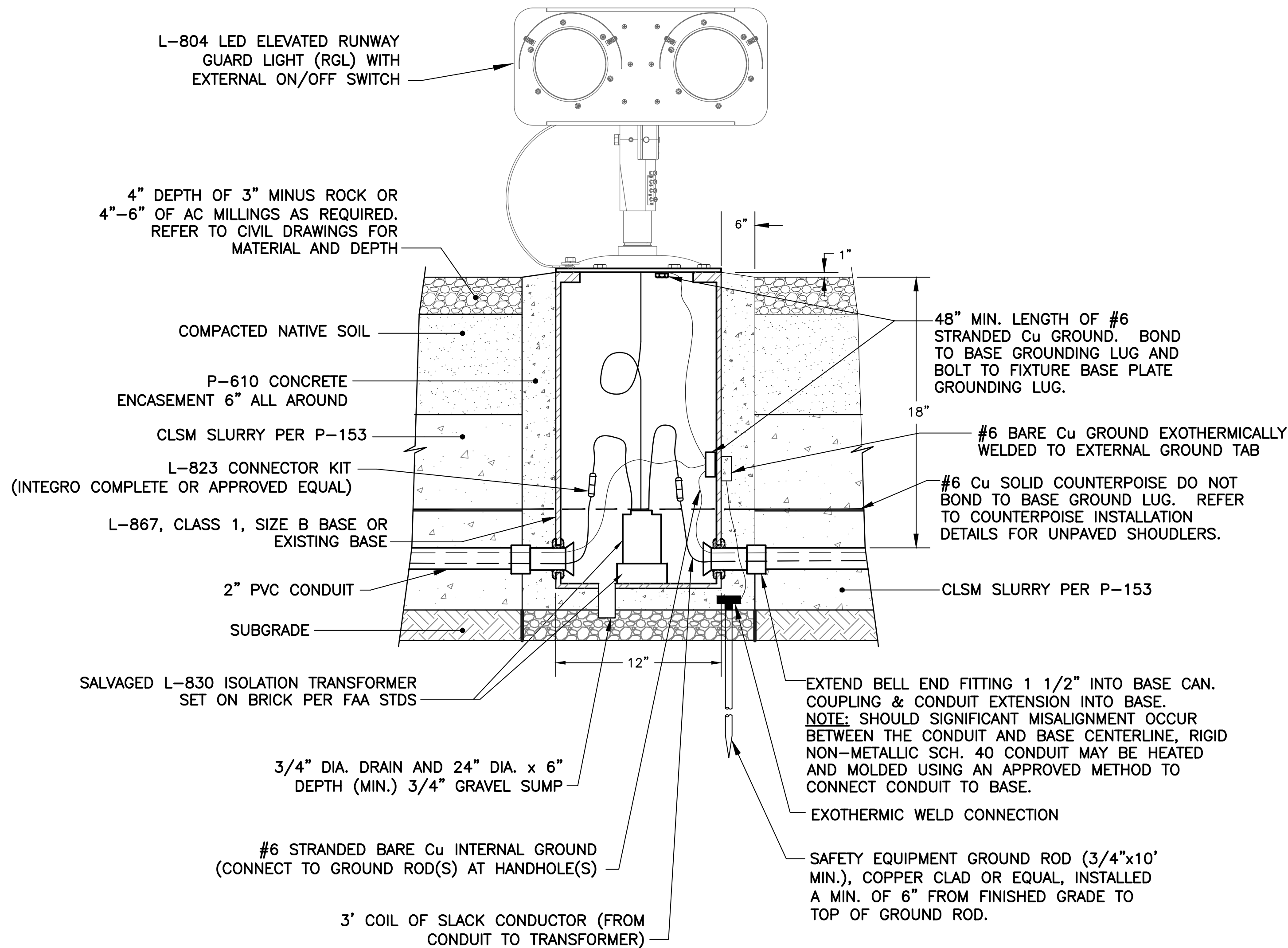
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GYR AIRPORT TW A REHAB & STRENGTHENING
AV41000075 FAA

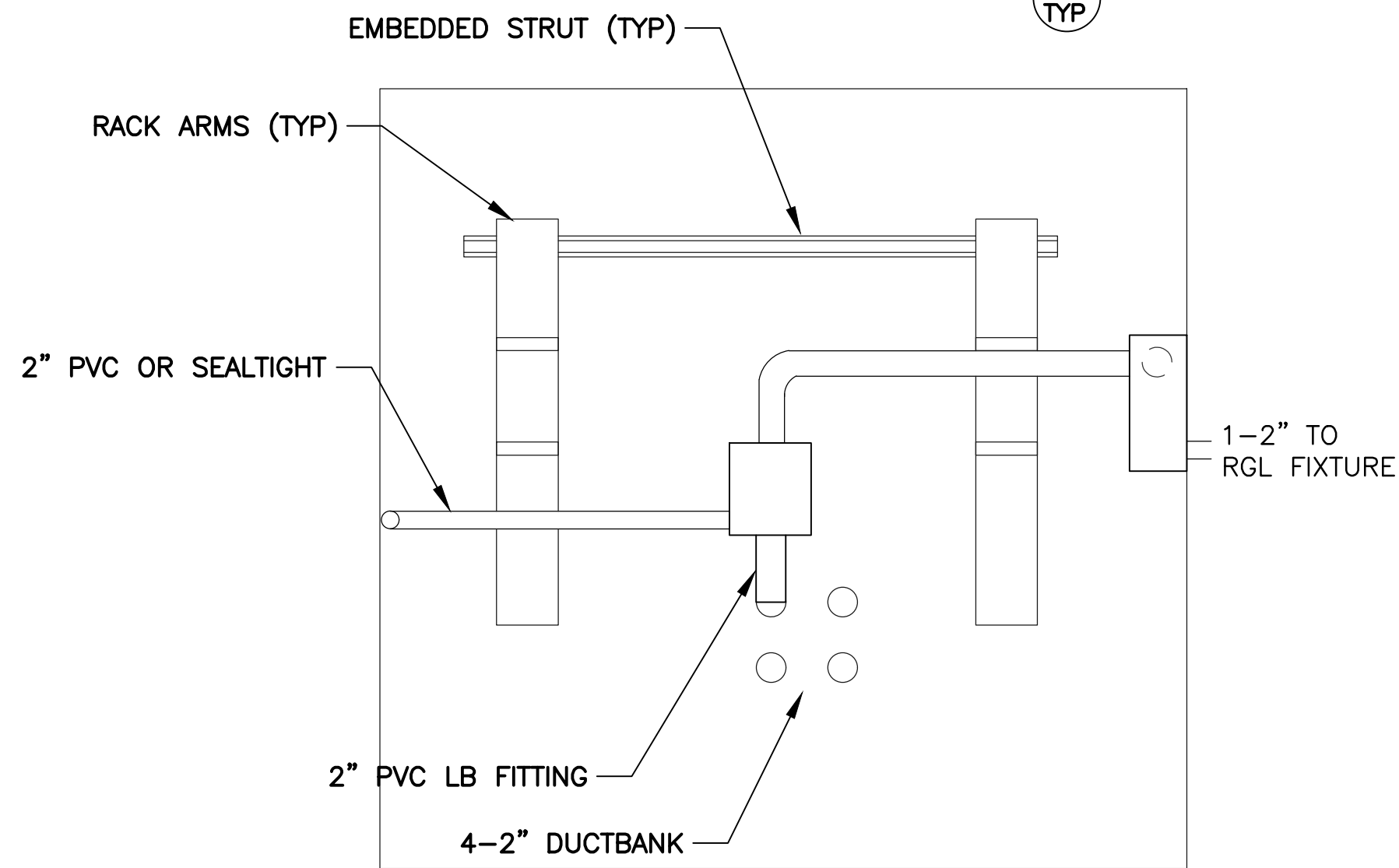
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Date: 05/2018	
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GYR AIRPORT TW A REHAB & STRENGTHENING

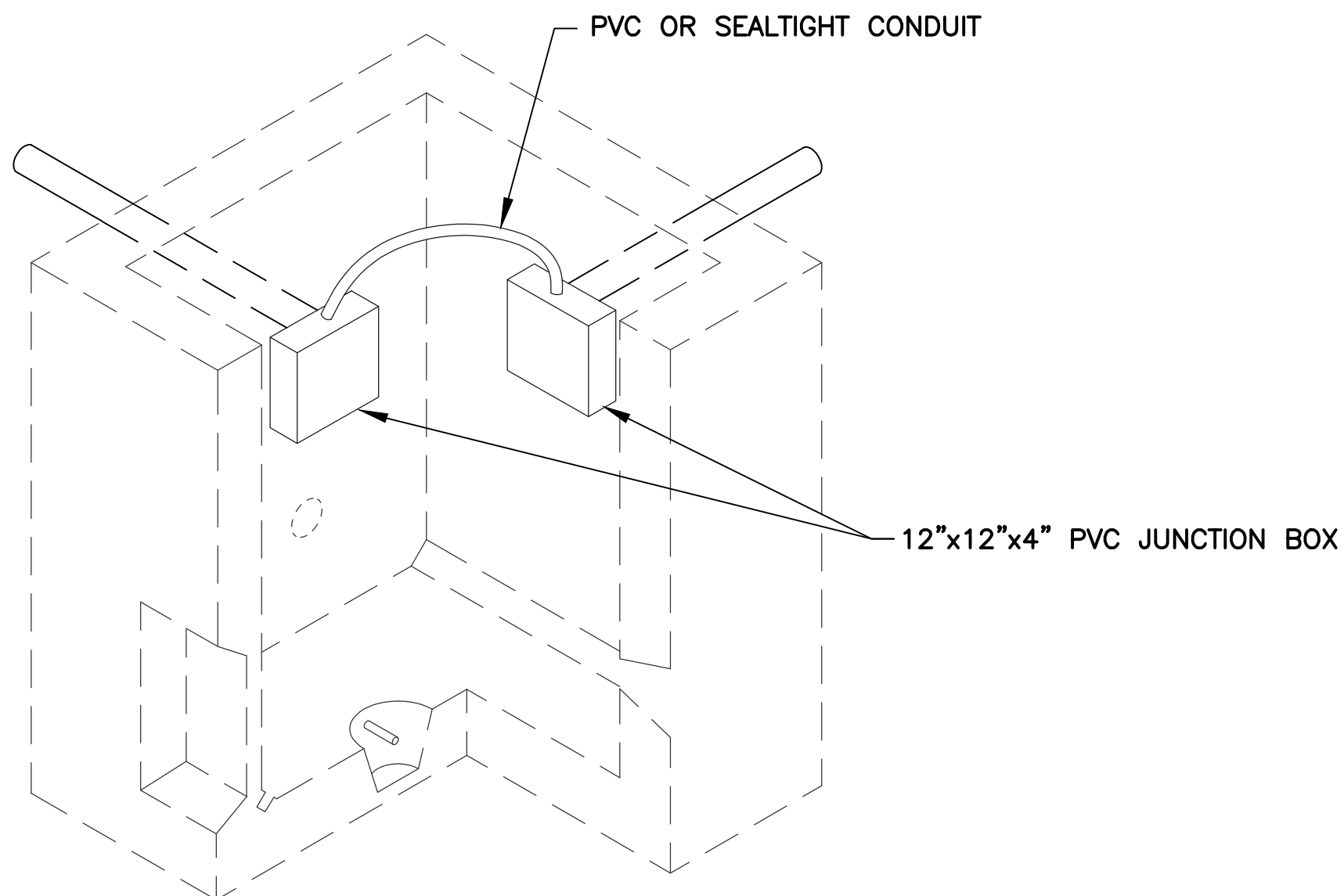
ELECTRICAL DETAILS



870 TYP ELEVATED RUNWAY GUARD LIGHT DETAIL



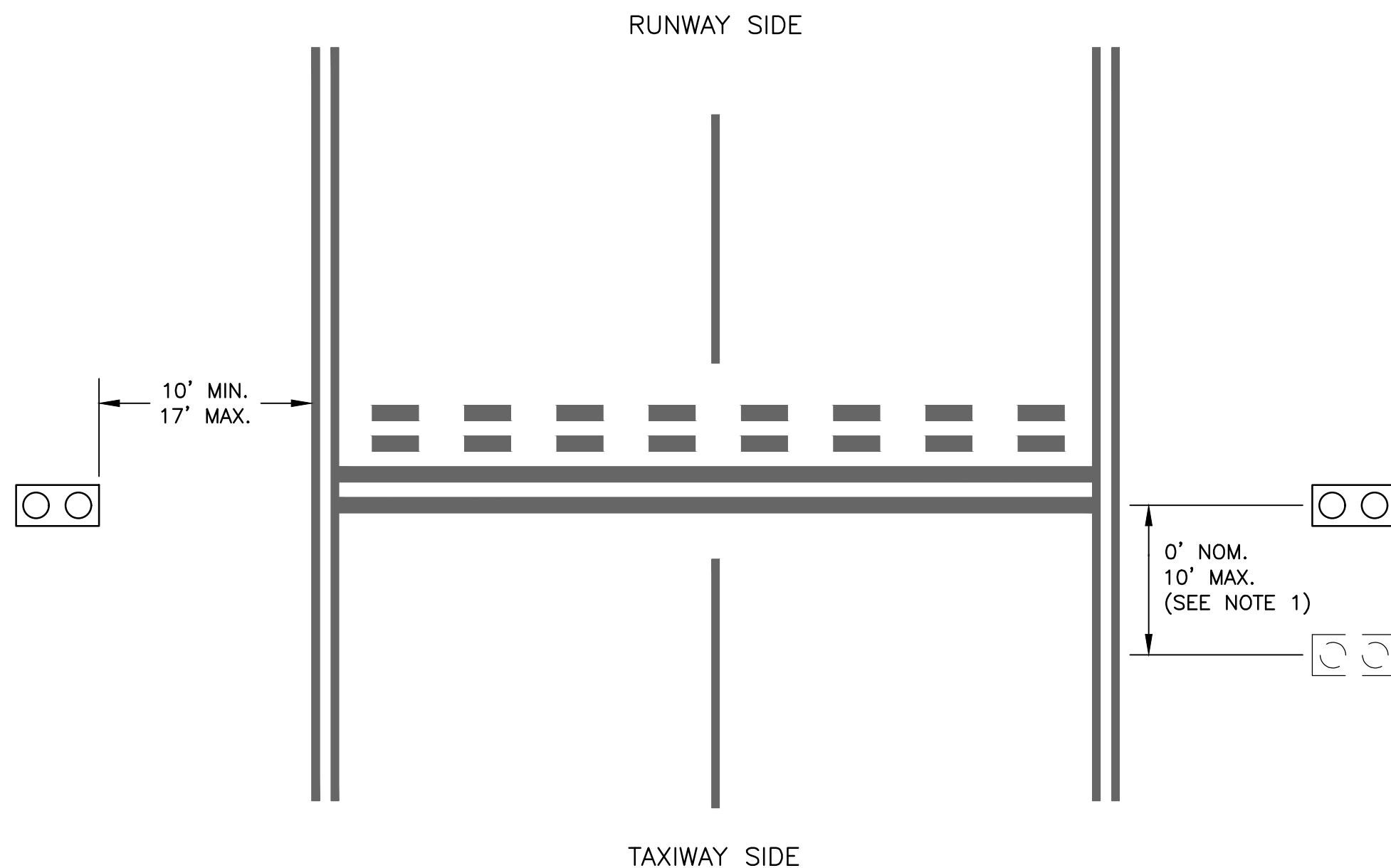
INTERIOR ELEVATION



872 TYP RGL CIRCUIT ISOLATION SYSTEM DETAIL

NOTES:

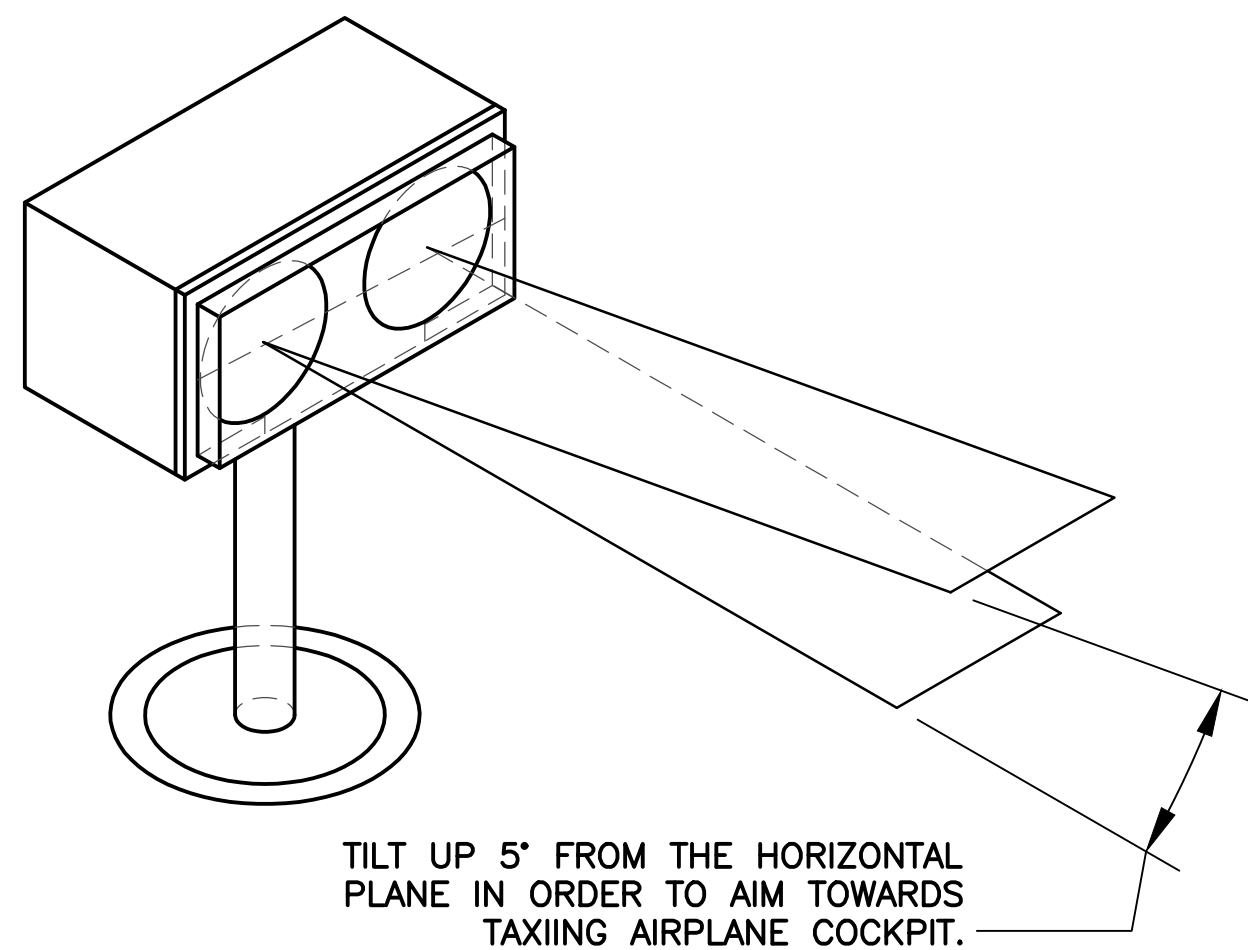
1. RUNWAY GUARD LIGHT CIRCUITS SHALL BE CONTAINED IN PVC JUNCTION BOXES OR CONDUIT BODIES CONNECTED WITH 2" PVC CONDUIT FOR SEALTIGHT CONDUIT BETWEEN RGL CIRCUIT CONDUIT ENTRIES WITHIN ALL MANHOLES/HANDHOLES.
2. INSTALL NEW CONDUITS WITHIN HANDHOLES AGAINST WALLS AND ROUTE AS REQUIRED TO AVOID RACK ARMS.
3. CONNECT NEW RGL BYPASS ROUTE CONDUIT TO EXISTING PVC JUNCTION BOXES AT EXISTING HANDHOLES.



876 TYP RUNWAY GUARD LIGHT CONFIGURATION

NOTES:

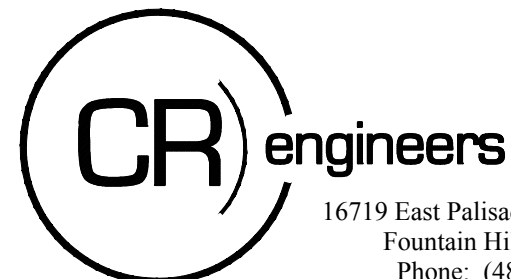
1. THE ELEVATED RUNWAY GUARD LIGHT MAY BE MOVED UP TO 10 FEET MAX. AWAY FROM THE RUNWAY TO AVOID UNDESIRABLE SPOTS. CONTRACTOR SHALL OBTAIN APPROVAL FROM ENGINEER FOR EACH SUCH ADJUSTMENT.
2. CONTRACTOR SHALL ACCURATELY SURVEY AND MEASURE THE ACTUAL CONSTRUCTED LOCATION OF EACH RGL AND INCLUDE IN THE PROJECT RECORD DRAWINGS.
3. SEE SHEET EA602 FOR EQUIPMENT LOCATION STANDARDS TABLE.



871 TYP ELEVATED RUNWAY GUARD LIGHT AIMING DETAIL

NOTES:

1. AIM THE CENTER OF THE LIGHT BEAM INWARD, TOWARD THE T/W CENTERLINE/AIRCRAFT COCKPIT WHEN THE AIRCRAFT IS BETWEEN 150' AND 200' FROM THE HOLDING POSITION, ALONG THE PREDOMINANT PATH/T/W CENTERLINE TO THE HOLDING POSITION. FIELD VERIFY ALL MEASUREMENTS AND AIMING ANGLES SINCE THE TAXIWAYS HAVE DIFFERENT CONFIGURATIONS.
2. AT LOCATIONS WHERE A DISTANT AIMING POINT IS NOT PRACTICAL, AIM THE LIGHTS PARALLEL TO THE ASSOCIATED TAXIWAY CENTERLINE OR AS DIRECTED BY THE AIRPORT OPERATIONS.












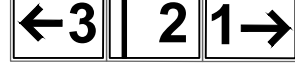










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GYR AIRPORT TW A REHAB & STRENGTHENING	ELECTRICAL DETAILS

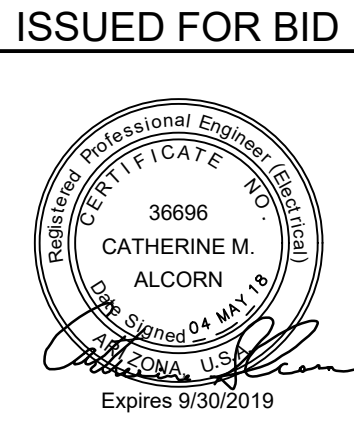
SIGN NUMBER	SIGN WITH FACE DESIGNATIONS	FACE A MESSAGE	FACE B MESSAGE	FACE A COLOR	FACE B COLOR	STYLE	CLASS	SIZE	SHEET NUMBER	SCOPE OF WORK
A3-1	A  B 	A3 < A >	A3 3- 21	Y/B B/Y B/Y	Y/B W/R W/R		EXISTING		EA104	INSTALL SALVAGED AIRFIELD GUIDANCE SIGN AND ISOLATION TRANSFORMER ON NEW SIGN BASE. ADD NEW PANELS AND FACE INSERT CHANNELS SHOWN.
A3-2	A  B 	A3 < A >	3- 21 A3	Y/B B/Y B/Y	W/R W/R Y/B		EXISTING		EA104	INSTALL SALVAGED AIRFIELD GUIDANCE SIGN AND ISOLATION TRANSFORMER ON NEW SIGN BASE. ADD NEW PANELS AND FACE INSERT CHANNELS AS SHOWN.
A3-3	A  B 	< A3 A	EXISTING SIGN PANELS	Y/B B/Y B/Y	EXISTING SIGN PANELS		EXISTING		EA104	INSTALL SALVAGED AIRFIELD GUIDANCE SIGN AND ISOLATION TRANSFORMER ON NEW SIGN BASE. ADD NEW PANELS AND FACE INSERT CHANNELS AS SHOWN.
A3-4	A  B 	EXISTING SIGN PANELS	< R AM P3	EXISTING SIGN PANELS	B/Y B/Y B/Y		EXISTING		EA104	INSTALL SALVAGED AIRFIELD GUIDANCE SIGN AND ISOLATION TRANSFORMER ON NEW SIGN BASE. ADD NEW PANELS AND FACE INSERT CHANNELS AS SHOWN.
A3-5	A  B 	RA MP 3 up	< 3 2 1 with right arrow	B/Y B/Y B/Y	B/Y B/Y B/Y		EXISTING		EA104	INSTALL SALVAGED AIRFIELD GUIDANCE SIGN AND ISOLATION TRANSFORMER ON NEW SIGN BASE. ADD NEW PANELS AND FACE INSERT CHANNELS AS SHOWN.
A3-8	A  B 	RA MP 3 with right arrow	BLANK A3 >	B/Y B/Y B/Y	B B/Y B/Y	2	5	1	EA104	INSTALL NEW L-858(L) LED SIZE 2, 3-MODULE AIRFIELD GUIDANCE SIGN AND ISOLATION TRANSFORMER ON NEW SIGN BASE.
A2-3	A  B 	< A2 A	EXISTING SIGN PANELS	B/Y B/Y Y/B	EXISTING SIGN PANELS		EXISTING		EA105	INSTALL NEW PANELS AND FACE INSERT CHANNELS TO EXISTING SIGN ON EXISTING BASE AS SHOWN.
A2-4	A  B 	RA MP 3 with right arrow	BLANK A2 >	B/Y B/Y B/Y	B B/Y B/Y	2	5	1	EA105	INSTALL NEW L-858(L) LED SIZE 2, 3-MODULE AIRFIELD GUIDANCE SIGN AND ISOLATION TRANSFORMER ON NEW SIGN BASE.
A2-5	A  B 	RA MP 2 up	EXISTING SIGN PANELS	B/Y B/Y B/Y	EXISTING SIGN PANELS		EXISTING		EA105	INSTALL SALVAGED AIRFIELD GUIDANCE SIGN AND ISOLATION TRANSFORMER ON NEW SIGN BASE. ADD NEW PANELS AND FACE INSERT CHANNELS AS SHOWN.
A2-6	A  B 	EXISTING SIGN PANELS	< R AM P2	EXISTING SIGN PANELS	B/Y B/Y B/Y		EXISTING		EA106	INSTALL SALVAGED AIRFIELD GUIDANCE SIGN AND ISOLATION TRANSFORMER ON NEW SIGN BASE. ADD NEW PANELS AND FACE INSERT CHANNELS AS SHOWN.

- NOTES
- MODULE SIZES ARE GIVEN FOR ESTIMATION ONLY AND ARE SUBJECT TO CHANGE BY SIGN MANUFACTURER
 - CONTRACTOR SHALL PERFORM AND SUBMIT COMPLETE FIELD SURVEY/RECORD DRAWINGS FOR ALL EQUIPMENT PRIOR TO FINAL PAYMENT.

CR

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CHECKED BY: SW
DATE: 05/2018
DWG SCALE: NTS
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AIRFIELD GUIDANCE SIGN SCHEDULE

Sheet Reference Number:
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Sheet 65 of 66

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NO.

FIXTURE #	STATION	OFFSET	CIRCUIT	BASE	LAMP	TRANSFORMER	TYPE
TEL-1	83+13.61	57.10' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-2	83+63.57	58.95' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-3	84+03.02	69.37' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-4	84+42.46	79.78' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-5	84+81.91	90.19' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-6	84+87.84	112.15' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-7	84+93.77	134.12' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-8	84+93.77	156.08' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-9	85+05.64	178.04' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-10	85+11.57	200.00' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-11	85+05.52	222.40' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-12	84+99.47	244.80' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-13	84+93.42	267.20' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-14	84+87.37	289.60' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-15	84+81.31	312.00' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-16	86+63.71	312.00' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-17	86+57.47	289.59' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-18	86+51.24	267.18' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-19	86+45.01	244.77' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-20	86+38.77	222.37' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-21	86+32.54	199.96' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-22	86+38.47	178.01' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-23	86+44.40	156.05' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-24	86+50.33	134.10' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-25	86+56.27	112.15' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-26	86+62.20	90.19' LT	TAXIWAY ALPHA	L-867		EXISTING	
TEL-27	87+01.64	79.78' LT	TAXIWAY ALPHA	L-867	LED	10/15W	L-861T
TEL-28	87+41.09	69.37' LT	TAXIWAY ALPHA	L-867	LED	10/15W	L-861T
TEL-29	87+80.53	58.95' LT	TAXIWAY ALPHA	L-867	LED	10/15W	L-861T
TEL-30	88+30.50	57.10' LT	TAXIWAY ALPHA	L-867	LED	10/15W	L-861T
TEL-31	85+03.61	57.10' RT	TAXIWAY ALPHA	L-867	LED	10/15W	L-861T
TEL-32	85.53.57	85.95' RT	TAXIWAY ALPHA	L-867	LED	10/15W	L-861T
TEL-33	85+93.00	69.36' RT	TAXIWAY ALPHA	L-867	LED	10/15W	L-861T
TEL-34	86+32.44	79.77' RT	TAXIWAY ALPHA	L-867	LED	10/15W	L-861T
TEL-35	86+71.87	90.18' RT	TAXIWAY ALPHA	L-867	LED	10/15W	L-861T
TEL-36	86+82.72	131.27' RT	TAXIWAY ALPHA	L-867	LED	10/15W	L-861T
TEL-37	88+41.37	131.32' RT	TAXIWAY ALPHA	L-867	LED	10/15W	L-861T
TEL-38	88+52.23	90.18' RT	TAXIWAY ALPHA	L-867	LED	10/15W	L-861T
TEL-39	88+91.66	79.77' RT	TAXIWAY ALPHA	L-867	LED	10/15W	L-861T
TEL-40	89+31.10	69.63' RT	TAXIWAY ALPHA	L-867	LED	10/15W	L-861T
TEL-41	89+70.53	58.95' RT	TAXIWAY ALPHA	L-867	LED	10/15W	L-861T
TEL-42	90+20.49	57.10' RT	TAXIWAY ALPHA	L-867	LED	10/15W	L-861T
TEL-43	96+48.62	79.80' LT	TAXIWAY ALPHA	L-867		EXISTING	

FIXTURE #	STATION	OFFSET	CIRCUIT	BASE	LAMP	TRANSFORMER	TYPE
TEL-44	96+98.41	50.52' LT	TAXIWAY ALPHA	L-867	EXISTING		
TEL-45	97+36.22	56.66' LT	TAXIWAY ALPHA	L-867	EXISTING		
TEL-46	98+73.80	55.10' RT	TAXIWAY ALPHA	L-868	EXISTING		
TEL-47	99+24.05	56.96' RT	TAXIWAY ALPHA	L-868	EXISTING		
TEL-48	99+63.70	67.43' RT	TAXIWAY ALPHA	L-868	EXISTING		
TEL-49	100+01.79	77.50' RT	TAXIWAY ALPHA	L-868	EXISTING		
TEL-50	100+43.69	88.55' RT	TAXIWAY ALPHA	L-868	EXISTING		
TEL-51	100+50.96	116.11' RT	TAXIWAY ALPHA	L-868	EXISTING		
TEL-52	102+14.16	116.28' RT	TAXIWAY ALPHA	L-868	LED	10/15W	L-852T
TEL-53	102+21.53	88.34' RT	TAXIWAY ALPHA	L-868	LED	10/15W	L-852T
TEL-54	102+63.59	77.24' RT	TAXIWAY ALPHA	L-868	LED	10/15W	L-852T
TEL-55	103+01.53	67.23' RT	TAXIWAY ALPHA	L-868	LED	10/15W	L-852T
TEL-56	103+41.52	56.92' RT	TAXIWAY ALPHA	L-868	EXISTING		
TEL-57	103+90.61	55.10' RT	TAXIWAY ALPHA	L-868	EXISTING		
TEL-58	26+57.40	48.04' RT	TAXIWAY ALPHA	L-867	EXISTING		
TEL-59	42+09.43	48.15' RT	TAXIWAY ALPHA	L-867	EXISTING		
TEL-60	42+52.37	59.10' RT	TAXIWAY ALPHA	L-867	EXISTING		
TEL-61	42+95.30	70.05' RT	TAXIWAY ALPHA	L-867	EXISTING		
TEL-62	45+41.70	70.00' RT	TAXIWAY ALPHA	L-867	EXISTING		
TEL-63	45+84.70	59.02' RT	TAXIWAY ALPHA	L-867	EXISTING		
TEL-64	46+27.71	48.03' RT	TAXIWAY ALPHA	L-867	EXISTING		

EQUIPMENT TYPE	LOCATION STANDARD	NOTES
TAXIWAY EDGE LIGHT	2'–10'	MEASURE TO CENTER OF LIGHT FIXTURE STATION/OFFSET GIVEN IS CENTER OF LIGHT FIXTURE
TAXIWAY CENTERLINE LIGHT	2.5'	MEASURE TO CENTER OF LIGHT FIXTURE FROM RUNWAY CENTERLINE – INLINE WITH EXISTING TAXIWAY CENTERLINE LIGHT FIXTURES. STATION/OFFSET GIVEN IS CENTER OF LIGHT FIXTURE.
SIZE 2 AIRFIELD GUIDANCE SIGNS	20' – 35'	MEASURE TO SIGN EDGE CLOSEST TO TAXIWAY EDGE/OUTER TAXIWAY EDGE MARKING
RUNWAY GUARD LIGHT (RGL)	10' – 17' (NEAR SIDE OF INSTALLED FIXTURE)	STATION/OFFSET GIVEN IS CENTER OF BASE CAN ON WHICH RGL FIXTURE IS MOUNTED. MEASURE FROM TAXIWAY EDGE/OUTER TAXIWAY EDGE MARKING.
HANDHOLE		STATION/OFFSET GIVEN IS CENTER OF HANDHOLE LID
JUNCTION CAN		STATION/OFFSET GIVEN IS CENTER OF JUNCTION CAN

1. EQUIPMENT NUMBERS SHOWN ARE FOR CONSTRUCTION REFERENCE ONLY. COORDINATE WITH AIRPORT MAINTENANCE FOR LABELING OF ALL EQUIPMENT.
2. CONTRACTOR SHALL VERIFY AND MAINTAIN 2.5' MINIMUM FROM THE CENTER OF THE NEW BASE CANS INSTALLED IN EXISTING FULL STRENGTH PAVEMENT TO THE NEAREST CONCRETE PAVEMENT JOINT. ALL FIELD ADJUSTMENTS WILL REQUIRE ENGINEER APPROVAL.
3. CONTRACTOR TO ENSURE NEW TAXIWAY EDGE LIGHT LOCATIONS DO NOT EXCEED 10 FEET FROM EDGE OF FULL STRENGTH PAVEMENT OR OUTER EDGE OF TAXIWAY EDGE MARKING – PERFORM FIELD ADJUSTMENTS AS NECESSARY.

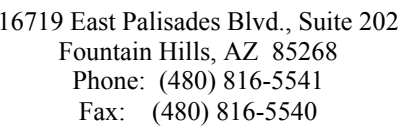
TCL-#	STATION	OFFSET
TCL-1	97+98.80	2.50' LT
TCL-2	98+91.78	2.50' LT

JC-#	STATION	OFFSET
JC-1	52+50.69	74.71' RT

RGL-#	STATION	OFFSET
RGL-1	84+90.86	140.50' LT
RGL-2	86+53.24	140.50' LT

HH-X	STATION	OFFSET
HH-1	83+71.10	87.51' LT
HH-2	87+09.91	104.50' LT
HH-3	84+77.29	125.77' RT
HH-4	86+50.43	127.26' RT
HH-5	88+93.73	122.54' RT
HH-6	97+64.26	91.45' RT
HH-7	99+66.87	123.79' RT
HH-8	102+74.54	125.21' RT

SIGN	STATION	OFFSET
A3-1	84+70.86	140.50' LT
A3-2	86+73.25	140.50' LT
A3-3	84+33.71	102+13' LT
A3-4	88+80.83	107.29' RT
A3-5	86+57.64	145.52' RT
A3-8	86+52.96	109.85' RT
A2-4	99+89.18	100.88' RT
A2-5	100+22.43	109.27' RT
A2-6	102+57.33	105.62' RT

[illegible]