ADDENDUM NO. 1

TO THE CONTRACT DOCUMENTS
FOR THE CONSTRUCTION OF

PAVEMENT REHABILITATION (APMS 1 & 2)
TAXIWAY B4/C5

AT

IMPERIAL COUNTY AIRPORT
IMPERIAL, CALIFORNIA

TO ALL HOLDERS OF CONTRACT DOCUMENTS:

Your attention is directed to the following interpretations of, changes in, and additions to the Contract Documents for the **PAVEMENT REHABILITATION (APMS 1 & 2) TAXIWAY B4/C5** Contract.

GENERAL

1. The pre-bid meeting minutes are included as Attachment 'A'.

IN THE SPEC BOOK/PROPOSAL:

1. Proposal Bid Form **REPLACE with** Attachment 'B'.

2. **ADD** Attachment 'C' specification for Item P-207 In-place Full Depth Reclamation (FDR) Recycled Asphalt Aggregate Base Course.

ON THE CONTRACT DRAWINGS:

1. **REPLACE** Sheet CG-301 with Attachment 'D'.

2. **REPLACE** Sheet EL-101 with Attachment 'E'.

END OF ADDENDUM NO. 1

C&S Engineers, Inc.

REGISTERED PROFESSIONAL ENGINEER
RICHARD D. GRAHAM
No. C 72089
EXP. 06-30-24
CIVIL
STATE OF CALIFORNIA

06/30/2023

ATTACHMENT 'A'

June 27, 2023

PRE-BID MEETING MINUTES
FOR
TAXIWAY B4/C5 RECONSTRUCTION
AT
IMPERIAL COUNTY AIRPORT
IMPERIAL, CA

I. INTRODUCTION

A. Welcome to the Pre-Bid Meeting for the Taxiway B4/C5 Reconstruction project at Imperial County Airport.

B. Individual attendee introduction and affiliation.

C. Attendees please fill out name, affiliation, mailing address and phone number on the sign-in sheet for correspondence.

D. A site visit will be conducted immediately following this meeting.

II. PROJECT DESCRIPTION

A. General Description: The project generally consists of reconstructing the existing taxiway pavement section and replacing pavement markings. New geometry standards change the overall footprint of the taxiway, which affects edge lights and guidance signs. Erosion protection rock will also be added to protect the taxiway shoulders.

B. Special Items:

1. 3D Digital Terrain Model Files (DTM) will be provided to the successful bidder after award for the existing, finished and other applicable design models along with the survey control data in electronic format. Refer to Section 20-16 and Item P-152 for detailed information.
2. Prospective bidders are directed to Section 200 of the General Provisions which modifies other sections of the General Provisions.
3. This contract does not allow for price increase due to escalation in cost of unit bid items. The Contractor shall take this into consideration when preparing unit prices for bid.

III. SAFETY AND OPERATIONAL REQUIREMENTS

A. Safety during construction is the No. 1 priority for the protection of the Airport users, employees and the contractors employees. The Contractor is responsible for safety during Construction on Airport Projects.

1. The Contractor is responsible for his employees and for compliance with OSHA standards, rules and regulations.
2. Barricades must be placed prior to start of construction.
3. No deviations of men and equipment from designated work areas and access routes will be allowed.
4. Under no circumstances will the contractor be allowed to travel on or across active airport operating surfaces.

B. Prevention of Foreign Object Damage (FOD) is extremely important as ingestion of material into jet engines and prop-wash will cause extensive damage.

1. Work areas must be kept clean and pavements must be continually swept to prevent the accumulation of dirt and debris.
2. Dust control measures must be implemented by the Contractor.
3. Trash and debris must be placed in appropriate containers.

C. Security

1. Contractor must provide padlocks for the access gate and gate must be kept locked at all times.
2. If a gate is left open, the contractor must post a guard to ensure no unauthorized entry.
3. Open, unattended gates are subject to fines by the FAA of up to $10,000.00. Fines incurred by the Owner will be passed on to and become the responsibility of the contractor.

IV. DBE & CIVIL REQUIREMENTS

A. DBE participation goal for this contract is 8.19%. Proof of good faith efforts is required if that goal cannot be met.

B. EEO participation goals for this contract are 16.2% minority and 6.9% female. Goals must be met unless otherwise approved.

C. Other civil rights requirements are contained in the Code of Federal Regulations, Title 49 - Transportation, Part 23 – Participation of Disadvantaged Business Enterprises in Airport Concessions, and in Part 26 - Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs.

Google search "Electronic Code of Federal Regulations" or enter "http://ecfr.gpoaccess.gov" in your browser bar.
Select Title 49 – Transportation from the drop down menu, press go.
Under Subtitle A, select 1-99
Scroll down and select Part 23, or,
Scroll down and select Part 26

V. LABOR REQUIREMENTS

A. Contractor must pay the higher prevailing wage rate as a minimum in accordance with the current Federal and State Wage Rate Schedules.
   a. Weekly certified payrolls will be required for the prime and all subcontractors

B. Additional labor requirements are as contained in the Code of Federal Regulations, Title 49 - Transportation, Part 18, Section 18.36.
   Google search "Electronic Code of Federal Regulations" or enter "http://ecfr.gpoaccess.gov" in your browser bar.
   Select Title 49 – Transportation from the drop down menu, press go.
   Under Subtitle A, select 1-99
   Scroll down and select Part 18
   Scroll down and select Section 18.36 Procurement

VI. ADDENDA

A. Any changes or modifications identified at this meeting will be made by addendum to all prospective bidders no later than 2:30pm on July 11, 2023.

B. Other questions raised after this meeting must be submitted in writing to **both** Jenell Guerrero at Imperial County JenellGuerrero@co.imperial.ca.us and Richard Graham, PE at C&S rgraham@cscos.com to be considered for future addendum.

VII. QUESTIONS & GENERAL DISCUSSION

A. Bids are due on July 14, 2023 at 2:30PM to the Clerk of the Board of Supervisors, 940 Main St., Suite 209, El Centro, CA 92243.

B. Open for general discussion and questions.

1. Questions are due by July 3, 2023 at 5:00pm
2. Engeo will be performing QA testing on behalf of the airport. Contractor to choose different firm for QC testing.

C. Questions discussed during the site visit.

1. Engineer's estimate is $1,472,000
2. Materials can be stockpiled in the staging area as shown on the plans. For spoils, unused millings and existing base course materials are to be stockpiled in the staging area. Excess native material is to be disposed of off airport property at the contractor's expense.
3. A vacuum sweeper is not necessarily required 24/7 for the project, but all aircraft movement areas must be keep clean and free from FOD while they are open to traffic.
4. There are two possible water sources for the project – one near the fire station north of the project area and one near the terminal parking lot.

ATTENDEES LIST
IMPERIAL COUNTY AIRPORT
TAXIWAY B4/C5 RECONSTRUCTION PROJECT

MANDATORY PRE-BID MEETING

June 27, 2023

NAME	AFFILIATION	E-MAIL ADDRESS	PHONE
Steven Sanchez	Granite Construction	Steven.Sanchez3@gcinc.com Joe.Richardson@gcinc.com	760-501-5799 760-578-3139
BRYAN SEEGER	HAZARD CONSTRUCTION	BSEEGER@HAZARDCONSTRUCTION.COM	858-587-3600
Richard Graham	C4S Engineers, Inc.	rgraham@cscos.com	623-451-2432
Carlos Villarino	Rove Engineering Inc.	Cvillarino@roveengineering.com	760-442-3827
Jenell Guerrero	IPL / AIRPORT	jenellguerrero@co.imperial.ca.us	442-265-3221

ITEM NO.	FAA SPEC NO.	QUANTITY	ITEM LIST ITEM DESCRIPTION (PRICE WRITTEN IN WORD)	UNIT PRICE IN FIGURES DOLLARS	 CENTS	TOTAL AMOUNT DOLLARS	 CENTS
1	C-101	1 LS	CONTRACTOR QUALITY CONTROL PROGRAM (CQCP) AT PER LUMP SUM				
2	C-102	1,525LF	INSTALLATION AND REMOVAL OF SILT FENCE AT PER LINEAR FOOT				
3	C-102	2 EA	INSTALLATION AND REMOVAL OF STORM DRAIN INLET PROTECTION AT PER EACH				
4	C-102	5,700 SY	4" CRUSHED AGGREGATE SHOULDER AND SLOPE PROTECTION AT PER SQUARE YARD				
5	C-105	1 LS	MOBILIZATION (10% MAXIMUM) AT PER LUMP SUM				
6	C-106	1 LS	SAFETY, SECURITY, AND MAINTENANCE OF TRAFFIC AT PER LUMP SUM				
7	P-101	4,900 SY	AC PAVEMENT REMOVAL AT PER SQUARE YARD				
8	P-152	3,375 CY	UNCLASSIFIED EXCAVATION AT PER CUBIC FOOT				
9	P-154	6,000 SY	STRUCTURAL GEOGRID REINFORCEMENT AT PER SQUARE YARD				

ITEM NO.	FAA SPEC NO.	QUANTITY	ITEM LIST ITEM DESCRIPTION (PRICE WRITTEN IN WORD)	UNIT PRICE IN FIGURES DOLLARS	 CENTS	TOTAL AMOUNT DOLLARS	 CENTS
10	P-154	6,000 SY	GEOTEXTILE FABRIC AT PER SQUARE YARD				
11	P-209	6,300 SY	CRUSHED AGGREGATE BASE COURSE, 6" THICK AT PER SQUARE YARD				
12	P-207	6,000 SY	RECYCLED ASPHALT AGGREGATE BASE COURSE AT PER SQUARE YARD				
13	P-401	1,420 TON	BITUMINOUS SURFACE COURSE, GRADATION 2 (4" THICK) AT PER TON				
14	P-602	1,890 GAL	EMULSIFIED ASPHALT PRIME COAT AT PER GALLON				
15	P-603	445 GAL	EMULSIFIED ASPHALT TACK COAT AT PER GALLON				
16	P-620	5,245 SF	MARKINGS AT PER SQUARE FOOT				
17	P-620	1 LS	OBLITERATE EXISTING PAVEMENT MARKINGS AT PER LUMP SUM				
18	L-108	2,490 LF	NO. 8 AWG, 5KV, 1/C AIRFIELD LIGHTING CABLE AT PER LINEAR FOOT				

ITEM NO.	FAA SPEC NO.	QUANTITY	ITEM LIST ITEM DESCRIPTION (PRICE WRITTEN IN WORD)	UNIT PRICE IN FIGURES DOLLARS	 CENTS	TOTAL AMOUNT DOLLARS	 CENTS
19	L-108	2,040 LF	COUNTERPOISE WIRE, TRENCH AND BACKFILL AT PER LINEAR FOOT				
20	L-110	2,490 LF	2-INCH DIA. PVC CONDUIT AT PER LINEAR FOOT				
21	L-110	2,300 LF	REMOVE EXISTING ELECTRICAL CONDUIT AT PER LINEAR FOOT				
22	L-115	2 EA	EXISTING ELECTRICAL PULLBOX TO BE MODIFIED AT PER EACH				
23	L-125	27 EA	REMOVE EXISTING TAXIWAY EDGE LIGHT, BASE MOUNTED AT PER EACH				
24	L-125	39 EA	MEDIUM INTENSITY TAXIWAY EDGE LIGHT, BASE MOUNTED AT PER EACH				
25	L-125	8 EA	REMOVE EXISTING LIGHTED GUIDANCE SIGN AT PER EACH				
26	L-125	6 EA	RELOCATE EXISTING LIGHTED GUIDANCE SIGN AT PER EACH				
27	L-125	2 EA	PROPOSED GUIDANCE SIGN AT PER EACH				
TOTAL PRICE (WRITTEN IN WORD) - BASE BID					DOLLARS		CENTS

ATTACHMENT 'C'

Item P-207 In-place Full Depth Reclamation (FDR) Recycled Asphalt Aggregate Base Course

DESCRIPTION

207-1.1 This item consists of a recycled asphalt aggregate base course resulting from the in-place full depth reclamation (FDR) of the existing pavement section (asphalt wearing surface and aggregate base), plus mechanical stabilization with additional aggregate or chemical stabilization with cement, asphalt emulsion or fly ash when required.

MATERIALS

207-2.1 Aggregate. The FDR shall consist of materials produced by recycling (pulverizing and mixing) the existing asphalt pavement, aggregate base, subgrade, and any additional aggregate as necessary. Material larger than 2 inches in any dimension shall not be permitted in the recycle asphalt aggregate base course.

The FDR shall meet the gradation in the table below.

FDR Gradation

Sieve	Minimum Percentage by weight passing sieves
2 inch (51 mm)	100
No. 4 (4.75 mm)	55
No. 200 (75 μm)	0-15

a. Deleterious substances. Materials for aggregate base shall be kept free from weeds, sticks, grass, roots and other foreign matter.

b. Uniformity. The materials shall be thoroughly recycled (pulverized and mixed) to ensure a uniform gradation.

207-2.2 Stabilization.

a. Mechanical stabilization. Not required.

b. Chemical Stabilization. Stabilizing agent is not required. Materials shall be handled, stored, and applied in accordance with all federal, state, and local requirements.

207-2.3 Water. Water used in mixing or curing shall be from potable water sources. Other sources shall be tested in accordance with ASTM C1602 prior to use.

207-2.4 Quality Control (QC) Sampling and testing. The Contractor shall take at least two FDR samples per day of production in the presence of the Resident Project Representative (RPR) to check the gradation. Sampling shall be per ASTM D75. Material shall meet the requirements in paragraph 207-2.1. Samples shall be taken from the in-place, un-compacted material at random sampling locations per ASTM D3665.

CONSTRUCTION METHODS

207-3.1 Milling. The existing asphalt pavement shall be milled to a depth of approximately 2 inches below surface grade.

207-3.2 Control Strip. The first half-day of construction shall be considered the control strip. The Contractor shall demonstrate, in the presence of the RPR, that the materials, equipment, and construction processes meet the requirements of the specification. The sequence and manner of rolling necessary to obtain specified density requirements shall be determined. Control strips that do not meet specification requirements shall be reworked, re-compacted, or removed and replaced at the Contractor's expense. Full operations shall not begin until the control strip has been accepted by the RPR. Upon acceptance of the control strip by the RPR, the Contractor shall use the same equipment, materials, and construction methods for the remainder of construction, unless adjustments made by the Contractor are approved in advance by the RPR.

207-3.3 Recycling (Pulverization and mixing). The asphalt pavement, aggregate base and subgrade shall be recycled (pulverized and mixed) into a uniformly blended mixture with water to the depth indicated on the plans. All material over approximately 2 inches (50 mm) shall be removed by the Contractor. The mixture shall be brought to the desired moisture content.

The maximum lift thickness of the recycled aggregate base course material to be compacted shall be 4 inches.

207-3.4 Grading and compaction. Immediately upon completion of recycling (pulverization and mixing), the material shall be shaped and graded in accordance with the project plans. The recycled asphalt aggregate base course shall be compacted within the same day to an in-place density of 95% as determined by ASTM D1557. The moisture content of the material during compaction shall be within ±2% of the optimum moisture content as determined by ASTM D2216. The number, type and weight of rollers shall be sufficient to compact the material to the required density. Maximum density refers to maximum dry density at optimum moisture content unless otherwise specified.

207-3.5 Finishing. The surface of the aggregate base course shall be finished by blading or with automated equipment designed for this purpose. If the top layer is 1/2 inch (12 mm) or more below grade, the top layer shall be scarified to a depth of at least 3 inches (75mm), new material added, and the layer blended and re-compacted to bring it to grade. The addition of layers less than 3 inches (75mm) shall not be allowed.

207-3.6 Proof rolling. Compacted asphalt aggregate base course shall be proof rolled with a tandem axle dual wheel dump truck loaded to the legal limit with tires inflated to 80 psi (550 kPa) in the presence of the RPR. Soft areas that deflect greater than 0.5 inch (12 mm) or show permanent deformation greater than 0.5 inch (12 mm) shall be removed and reworked at the Contractor's expense.

207-3.7 Weather limitations. When weather conditions detrimentally affect the construction process and/or quality of the materials, the Contractor shall stop construction. Cement or fly ash shall not be applied when wind conditions affect the distribution of the materials. When the aggregates contain frozen materials or when the underlying course is frozen or wet, the construction shall be stopped. Construction shall not be performed unless the atmospheric temperature is above 35°F (2°C) and rising or approved by the RPR. When the temperature falls below 35°F (2°C), protect all completed areas against detrimental effects of freezing by approved methods. Correct completed areas damaged by freezing, rainfall, or other weather conditions to meet specified requirements.

207-3.8 Maintenance. The asphalt aggregate base course shall be maintained in a satisfactory condition until the work is accepted by the RPR. Equipment used in the construction of an adjoining section may be routed over completed sections of asphalt aggregate base course, provided that no damage results and

equipment is routed over the full width of the completed asphalt aggregate base course. Any damage to the recycled asphalt aggregate base course shall be repaired by the Contractor at the Contractor's expense.

207-3.9 Surface tolerances. The finished surface shall be tested for smoothness and accuracy of grade. Any area failing smoothness or grade shall be scarified to a depth of at least 3 inches (75 mm), reshaped and re-compacted by the Contractor at the Contractor's expense.

a. Smoothness. The finished surface shall not vary more than 3/8-inch (9 mm) when tested with a 12-foot (3.7-m) straightedge applied parallel with and at right angles to the centerline. The straightedge shall be moved continuously forward at half the length of the 12-foot (3.7-m) straightedge for the full length of each line on a 50-foot (15-m) grid.

b. Grade. The grade shall be measured on a 50-foot (15-m) grid and shall be within +0 and -1/2 inch (12 mm) of the specified grade.

207-3.10 Acceptance sampling and testing for density. FDR base course shall be accepted for density and thickness on an area basis. One (1) test for density and thickness will be made for each 1200 square yds. Sampling locations will be determined on a random basis in accordance with ASTM D3665.

a. Density. The Contractor's laboratory shall perform all density tests in the RPR's presence and provide the test results upon completion to the RPR for acceptance.

Each area will be accepted for density when the field density is at least 95% of the maximum density of the FDR base course in accordance with ASTM D1557. The in-place field density shall be determined in accordance with ASTM D1556 or ASTM D6938 using Procedure A, the direct transmission method, and ASTM D6938 shall be used to determine the moisture content of the material. The machine shall be calibrated in accordance with ASTM D6938. If the specified density is not attained, the area represented by the failed test must be reworked and/or recompacted and two additional random tests made. This procedure shall be followed until the specified density is reached. Maximum density refers to maximum dry density at optimum moisture content unless otherwise specified.

b. Thickness. The thickness of the base course shall be within +0 and -1/2 inch (12 mm) of the specified thickness as determined by depth tests taken by the Contractor in the presence of the RPR for each area. Where the thickness is deficient by more than 1/2-inch (12 mm), the Contractor shall correct such areas at no additional cost by scarifying to a depth of at least 3 inches (75 mm), adding new material, and recompacted to grade. The Contractor shall replace, at his expense, base material where depth tests have been taken.

METHOD OF MEASUREMENT

207-4.1 The quantity of FDR asphalt aggregate base course shall be measured by the number of square yards of material in compliance with the plans and specifications.

BASIS OF PAYMENT

207-5.1 Payment shall be made at the contract unit price per square yard for recycling the existing asphalt pavement, aggregate base course, subgrade and mixing with stabilizing agent, if required, spreading, compacting, and maintaining the recycled material to the compacted thickness as indicated on the drawings. This price shall be full compensation for furnishing all materials, for preparing and placing these materials, and for all labor, equipment tools and incidentals to complete the item.

Payment will be made under:

Item P207-5.1	Recycled Asphalt Aggregate base Course –per square yard

ATTACHMENT 'C'

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

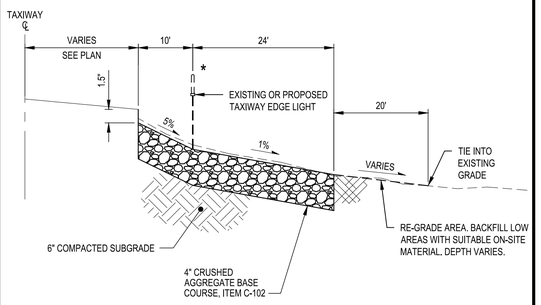
ASTM C29	Unit Weight of Aggregate
ASTM C88	Soundness of Aggregates by Use of Sodium or Magnesium Sulfate
ASTM C117	Materials Finer than 75-µm (No. 200) Sieve in Mineral Aggregate by Washing
ASTM C131	Resistance to abrasion of Small Size Coarse Aggregate by Use of Los Angeles Machine
ASTM C136	Sieve or Screen Analysis of Fine and Coarse Aggregate
ASTM C150	Standard Specification for Portland Cement
ASTM C595	Standard Specification for Blended Hydraulic Cements
ASTM C1602	Standard Specification for Mixing Water Used in the Production of Hydraulic Cement Concrete
ASTM D75	Sampling Aggregate
ASTM D558	ASTM D558 Standard Test Methods for Moisture-Density (Unit Weight) Relations of Soil-Cement Mixtures
ASTM D698	Moisture Density Relations of Soils and Aggregate using 5.5 lb Rammer and 12 in drop
ASTM D977	Standard Specification for Emulsified Asphalt
ASTM D1556	Test Method for Density and Unit Weight of Soil in Place by the Sand Cone Method
ASTM D1557	Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort
ASTM D2216	Test Methods for Laboratory Determination of Water (Moisture) Soil and Rock by Mass
ASTM D2419	Test Method for Sand Equivalent Value of Soils and Fine Aggregate
ASTM D2487	Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)
ASTM D3665	Standard Practice for Random Sampling of Construction Materials
ASTM D4318	Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM D4491	Standard Test Methods for Water Permeability of Geotextiles by Permittivity
ASTM D4751	Standard Test Methods for Determining Apparent Opening Size of a Geotextile

ASTM D5821	Standard Test Method for Determining the Percentage of Fractured Particles in Coarse Aggregate
ASTM D6938	Standard Test Method for In-Place Density and Water Content of Soil and Soil Aggregate by Nuclear Methods (Shallow Depth)

American Association of State Highway and Transportation Officials (AASHTO)

M288	Standard Specification for Geosynthetic Specification for Highway Applications

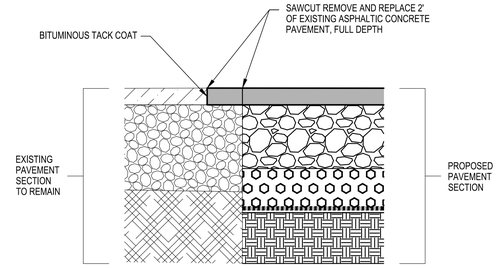
END OF ITEM P-207



★ CAUTION:
CONTRACTOR IS TO PROTECT EXISTING EDGE LIGHTS FROM DAMAGE DURING CONSTRUCTION.

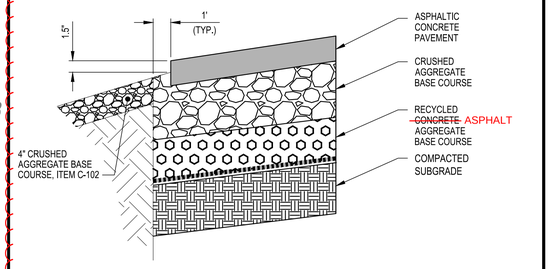
C1 CRUSHED AGGREGATE INFIELD PROTECTION DETAIL

SCALE: NOT TO SCALE



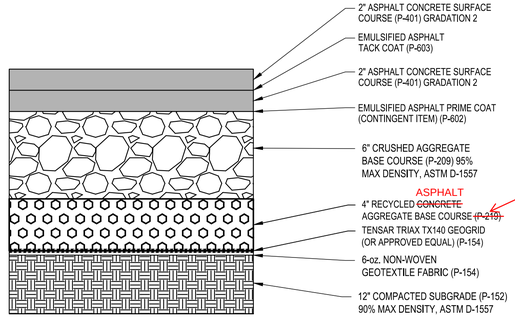
C2 TYPICAL MATCH EXISTING PAVEMENT DETAIL

SCALE: NOT TO SCALE



B1 TYPICAL PAVEMENT EDGE DETAIL

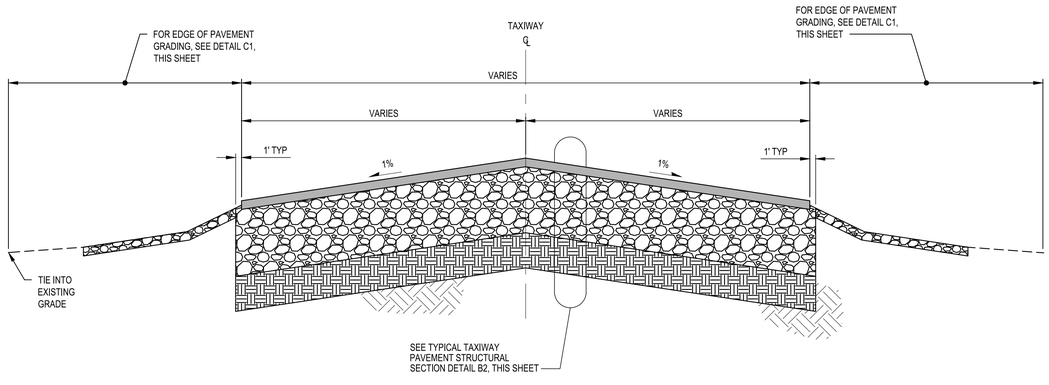
SCALE: NOT TO SCALE



1

B2 TYPICAL TAXIWAY PAVEMENT STRUCTURAL SECTION

SCALE: NOT TO SCALE



A1 TYPICAL TAXIWAY SECTION - SAFETY AREA IMPROVEMENTS

SCALE: NOT TO SCALE

C&S COMPANIES
C&S Engineers, Inc.
2355 Northside Drive, Suite 350
San Diego, California 92108
Phone: 619-296-9373
Fax: 619-296-5683
www.cscos.com

REGISTERED PROFESSIONAL ENGINEER
RICHARD D. GRAHAM
No. C 72089
EXP. 06-30-24
CIVIL
STATE OF CALIFORNIA
5-16-2023

IMPERIAL COUNTY CALIFORNIA

IMPERIAL, CALIFORNIA
IMPERIAL COUNTY AIRPORT
IPL
PAVEMENT REHABILITATION
(APMS 1 & 2) TAXIWAY B4/C5

MARK	DATE	DESCRIPTION
1	6/30/23	Rev. Addendum No. 1

REVISIONS

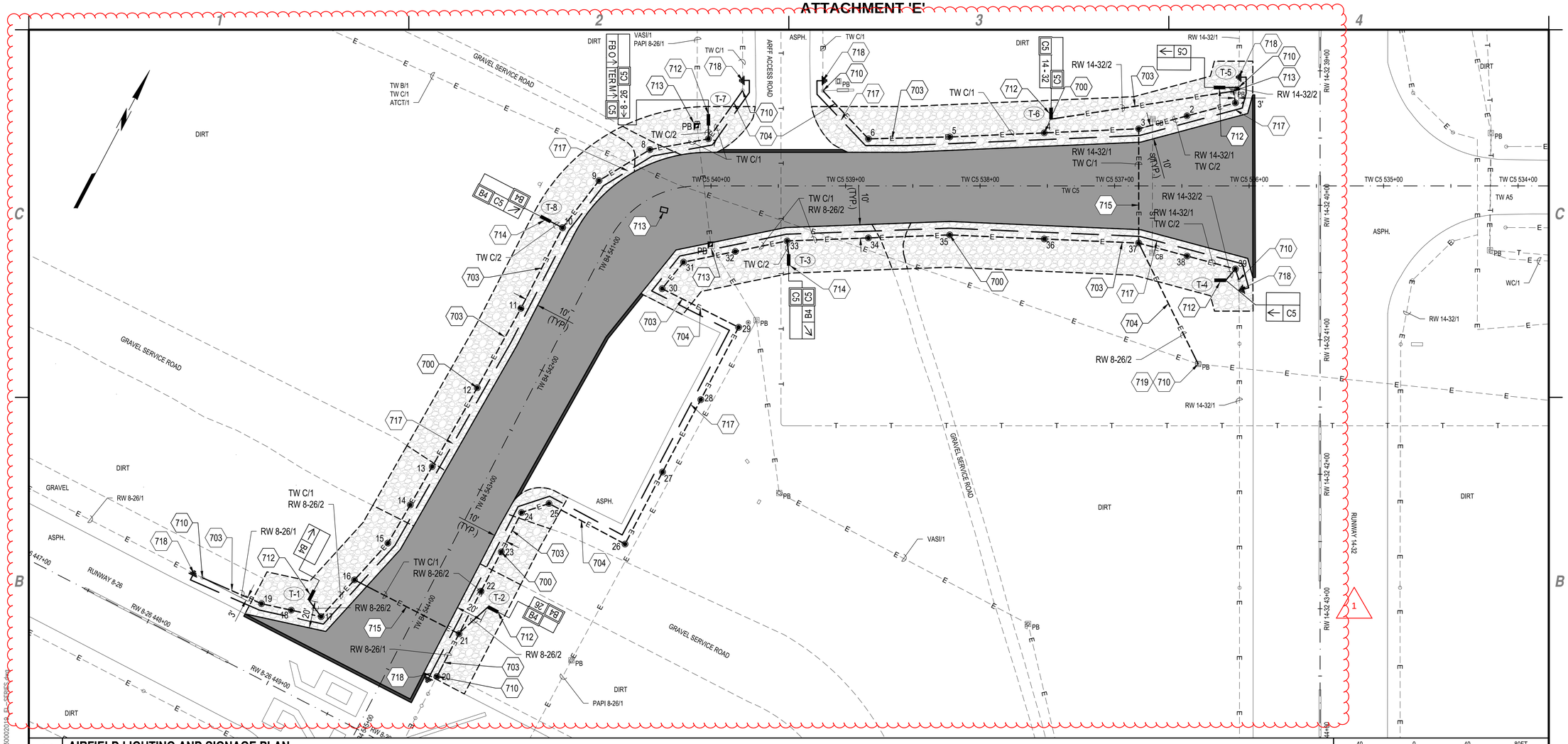
PROJECT NO: K30002019
DATE: MAY 2023
DRAWN BY: G.C. HAYDEN
DESIGNED BY: M.E. BARR
CHECKED BY: S.L. UNDERWOOD

TYPICAL SECTIONS

CG301
13 of 21

August 3, 2022 - 3:15PM
F:\Project\K30 - Imperial County, CA\K30002019 - Pavement Rehabilitation (Design)\Design\CADD (Package 2)\Sheet Files\K30002019_CG-SERIES.dwg

ATTACHMENT 'E'



B1 AIRFIELD LIGHTING AND SIGNAGE PLAN

SCALE: 1" = 40'

40 0 40 80FT.
40'

700. ELEVATED BASE MOUNTED L-861T TAXIWAY EDGE LIGHT, ITEM L-125 (TYP.). SEE DETAIL B3/EL501

703. NO. 8 AWG, 5KV, 1/C AIRFIELD LIGHTING CABLE(S), ITEM L-108, IN 2" PVC CONDUIT IN GRAVEL, ITEM L-110. SEE CONDUIT TRENCHING DETAIL A3/EL501.

704. NO. 8 AWG, 5KV, 1/C AIRFIELD LIGHTING CABLE(S), ITEM L-108, IN 2" PVC CONDUIT IN DIRT, ITEM L-110. SEE CONDUIT TRENCHING DETAIL A3/EL501

710. CONNECT TO EXISTING CIRCUIT IN EXISTING LIGHT BASE OR PULL BOX

712. RELOCATED GUIDANCE SIGN ON NEW FOUNDATION, ITEM L-125. SEE DETAIL C3/EL501

713. ELECTRICAL PULLBOX TO BE MODIFIED, ITEM L-115. SEE DETAIL B1/EL502

714. PROPOSED GUIDANCE SIGN, ITEM L-125. SEE DETAIL A1/EL501

715. NO. 8 AWG, 5KV, 1/C AIRFIELD LIGHTING CABLE(S), ITEM L-108, IN 2" PVC CONDUIT IN ASPHALT PAVEMENT, ITEM L-110. SEE CONDUIT TRENCHING DETAIL A3/EL501

717. COUNTERPOISE WIRE AND TRENCH, ITEM L-108. SEE DETAIL A1/EL502

718. CONNECT PROPOSED COUNTERPOISE WIRE TO EXISTING COUNTERPOISE WIRE

719. CONTRACTOR TO VERIFY EXISTING CIRCUITING

A1 KEYED NOTES

SCALE: NOT TO SCALE

EDGE LIGHT TABLE		
NUMBER	NORTHING	EASTING
1	1,883,926.67	6,769,204.29
2	1,883,901.44	6,769,176.93
3	1,883,876.22	6,769,149.58
4	1,883,840.92	6,769,088.80
5	1,883,805.62	6,769,028.02
6	1,883,776.25	6,768,975.11
7	1,883,721.00	6,768,869.77
8	1,883,693.66	6,768,834.95
9	1,883,655.70	6,768,812.18
10	1,883,612.11	6,768,804.45
11	1,883,544.66	6,768,804.92
12	1,883,477.25	6,768,803.57
13	1,883,409.87	6,768,801.14

EDGE LIGHT TABLE		
NUMBER	NORTHING	EASTING
14	1,883,376.99	6,768,799.95
15	1,883,344.11	6,768,798.42
16	1,883,308.36	6,768,789.11
17	1,883,272.62	6,768,779.80
18	1,883,266.60	6,768,757.96
19	1,883,260.59	6,768,736.11
20	1,883,273.29	6,768,876.80
21	1,883,308.99	6,768,876.56
22	1,883,344.65	6,768,876.31
23	1,883,377.52	6,768,876.08
24	1,883,410.39	6,768,875.80
25	1,883,425.85	6,768,890.81
26	1,883,425.40	6,768,954.84

EDGE LIGHT TABLE		
NUMBER	NORTHING	EASTING
27	1,883,485.76	6,768,954.64
28	1,883,546.66	6,768,954.82
29	1,883,607.33	6,768,954.74
30	1,883,606.37	6,768,891.06
31	1,883,631.24	6,768,895.97
32	1,883,656.10	6,768,926.40
33	1,883,680.95	6,768,956.83
34	1,883,711.02	6,769,009.33
35	1,883,741.09	6,769,061.84
36	1,883,771.04	6,769,125.44
37	1,883,800.98	6,769,189.04
38	1,883,809.15	6,769,225.35
39	1,883,817.32	6,769,261.65

A2 EDGE LIGHT TABLE

SCALE: NOT TO SCALE

SIGN NO.	NO. OF CHARACTERS		SIDE 1		SIDE 2
T-1	2	DESIGNATION		←B4	
		TYPE		Y	
T-2	2	DESIGNATION	B4	2 6	B4
		TYPE	L	R	L
T-3	3	DESIGNATION	↙B4	C5	C5
		TYPE	Y	L	L
T-4	2	DESIGNATION		←C5	
		TYPE		Y	
T-5	2	DESIGNATION			C5→
		TYPE			Y
T-6	3	DESIGNATION	C5	1 4 - 3 2	C5
		TYPE	L	R	L
T-7	5	DESIGNATION	FBO ↑	TERM ↑ C5	← 8 - 2 6 C5
		TYPE	Y	Y L	Y L
T-8	3	DESIGNATION		B4 C5↗	B4
		TYPE		L Y	L

THIS END OF SIGN TOWARD PAVEMENT EDGE

R - INDICATES L-858R MANDATORY INSTRUCTION SIGN (WHITE INSCRIPTION ON A RED BACKGROUND)

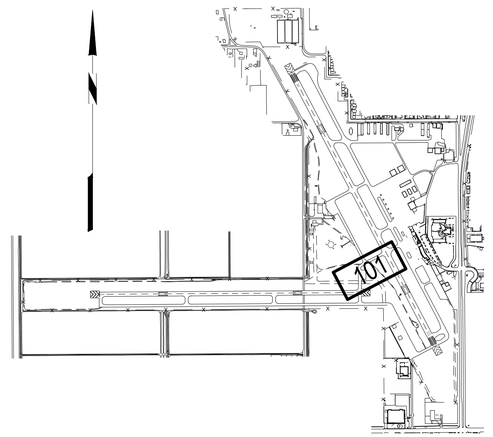
L - INDICATES L-858L LOCATION SIGN (YELLOW INSCRIPTION ON A BLACK BACKGROUND)

Y - INDICATES L-858Y DIRECTION SIGN (BLACK INSCRIPTION ON A YELLOW BACKGROUND)

■ - INDICATES BLANK PANEL OR BLANK AREA OF PANEL

A3 GUIDANCE SIGN INDEX

SCALE: NOT TO SCALE



A4 KEY MAP

SCALE: NOT TO SCALE

C&S COMPANIES

C&S Engineers, Inc.
2355 Northside Drive, Suite 350
San Diego, California 92108
Phone: 619-296-9373
Fax: 619-296-5683
www.cscos.com

REGISTERED PROFESSIONAL ENGINEER
RICHARD D. GRAHAM
No. C 72089
EXP. 06-30-24
CIVIL
STATE OF CALIFORNIA
5-16-2023

IMPERIAL COUNTY
CALIFORNIA

IMPERIAL, CALIFORNIA

IMPERIAL COUNTY AIRPORT

PAVEMENT REHABILITATION
(APMS 1 & 2) TAXIWAY B4/C5

IPL

MARK	DATE	DESCRIPTION
1	6/30/23	Rev. Addendum 1

REVISIONS

PROJECT NO:	K30002019
DATE:	MAY 2023
DRAWN BY:	G.C. HAYDEN
DESIGNED BY:	M.E. BARR
CHECKED BY:	S.L. UNDERWOOD

AIRFIELD LIGHTING AND SIGNAGE PLAN

EL101
16 of 21

May 23, 2023 – 11:36AM
F:\Projects\K30 – Imperial County, CA\K30002019 – Pavement Rehabilitation (Design)\Design\CADD (Package 2)\Sheet Files\K30002019_EL_SERIES.dwg