



ALABAMA DEPARTMENT OF TRANSPORTATION

1409 Coliseum Boulevard, Montgomery, Alabama 36110
Bureau of Office Engineer
Plans and Proposals Section
Telephone: 334-242-6444 FAX: 334-264-7976
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Kay Ivey
Governor

John R. Cooper
Transportation Director

September 19, 2022

MEMORANDUM

To: Proposal Holders
From: Bryan E. Nichols *Bryan E Nichols*
Assistant Bureau Chief *By: BEMP*
Subject: CRPAA-0042(543)
Mobile County
September 30, 2022 Letting

Enclosed are the Revised Plan Sheet Nos. 1A & 2C for the above referenced project. See the attached letter from Mr. Stanley Biddick, P.E., dated September 19, 2022.

Prospective bidders are advised to download the amended .ebs files from the ALDOT website or the Bid Express website.

It is the bidder's responsibility to notify vendors, suppliers and subcontractors of this change.

This change must be incorporated into your proposal and used in the preparation of your bid. Failure to do so may cause your bid to be considered irregular and non-responsive and may result in the automatic rejection of your bid.

BEN/jss

Attachment

cc: Mr. Matthew Ericksen, P.E. Tracy Hamil, P.E. on behalf of
State Construction Engineer



ALABAMA DEPARTMENT OF TRANSPORTATION

Design Bureau - Traffic Engineering Division
1409 Coliseum Boulevard, Montgomery, Alabama 36110
P. O. Box 303050, Montgomery, Alabama 36130-3050
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Kay Ivey
Governor

John R. Cooper
Transportation Director

September 19, 2022

MEMORANDUM

TO: Joe H. Lister, Jr., P.E.
State Office Engineer

FROM: Stanley C. Biddick, P.E.
State Design Engineer

BY: R. Taylor Stoudenmire, P.E. *RTS*
Traffic Design Engineer

RE: Project No. CRPAA-0042(543)
Upgrade Roadway Lighting Luminaires in Bankhead Tunnel
Mobile County
CN Ref. No. 100075364

Attached is a full-size print of the revised plan sheets numbered 1A and 2C. This project is scheduled for the August 2022 letting.

The changes are as follows:

SHEET 1A Revised Index
SHEET 2C Revised Lighting Design Criteria to add additional approved product and note.

Please notify the prospective bidders of this change.

SCB/RTS/CLH

Cc: Mathew J. Ericksen, Southwest Region Engineer (w/o attachments)
Design Bureau Project File (w/o attachments)
TDS Project File (w/o attachments)

INDEX TO SHEETS AND SPECIAL AND STANDARD DRAWINGS

REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
CRPAA-0042(543)	2022	1A

INDEX TO SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
1A	INDEX TO SHEETS AND SPECIAL AND STANDARD DRAWINGS
1B	GEOMETRIC LAYOUT SHEET
2	LIGHTING PLAN NOTES
2A	GENERAL TRAFFIC CONTROL PLAN NOTES
2B	ELECTRICAL LEGEND AND ABBREVIATIONS
2C	LIGHTING DESIGN CRITERIA
3 - 3E	SUMMARY OF QUANTITIES
4 - 11	TUNNEL LIGHTING DEMOLITION PLAN
12	ROADWAY LIGHTING DEMOLITION PLAN
13 - 20	REQUIRED TUNNEL LIGHTING PLAN
21	REQUIRED ROADWAY LIGHTING PLAN
22	REQUIRED TUNNEL SINGLE LINE WIRING DIAGRAM
23 - 29	REQUIRED SINGLE LINE WIRING DIAGRAM
30 - 32	OMIT
33	SPECIAL PROJECT DETAIL - LUMINAIRE AND CONDUIT INSTALLATION DETAIL
33A	SPECIAL PROJECT DETAIL - LUMINAIRE AND CONDUIT INSTALLATION DETAIL WITH METAL PLATE COVERING
34 - 36	EXISTING TUNNEL LIGHTING CONTROL PLAN
37	SEQUENCE OF CONSTRUCTION
38 - 40	TEMPORARY TRAFFIC CONTROL PLAN SHEET
41 - 45	DETOUR: BANKHEAD TUNNEL (SR-42/US-98)

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INDEX NO.	STD. OR SPECIAL DWG NO.	DESCRIPTION
THE FOLLOWING ARE SPECIAL OR STANDARD DRAWINGS CONTAINED IN THE ALABAMA DEPARTMENT OF TRANSPORTATION SPECIAL & STANDARD HIGHWAY DRAWINGS BOOK (U.S. CUSTOMARY UNITS OF MEASUREMENT) DATED 2022 WHICH APPLY TO THIS PROJECT:		
71017	IHS-710-12	DETAILS OF ROADWAY SIGN POST (SMALL CHANNEL AND TUBULAR SECTION)
71032	IHS-710-21	DETAIL FOR LOCATION AND MOUNTING OF STANDARD FLAT PANEL SIGNS ON U-CHANNEL AND TUBULAR POSTS
71035	IHS-710-23	LIGHTWEIGHT STRUCTURAL SIGN SUPPORT INSTALLATIONS
71067	SHS-8	STANDARD HIGHWAY SIGNS
71069	SHS-10	STANDARD HIGHWAY SIGNS
71082	SHS-19	STANDARD HIGHWAY SIGNS
71083	SHS-20	STANDARD HIGHWAY SIGNS
71084	SHS-21	STANDARD HIGHWAY SIGNS
71093	SHS-29	STANDARD HIGHWAY SIGNS
71095	SHS-31	STANDARD HIGHWAY SIGNS
74001	B-107-2	PREFORATED SQUARE STEEL TUBING (PSST) BARRICADES TYPE I, TYPE II, TYPE III & VERTICLE PANELS TYPE I AND TYPE II
74007	TCD-100	DETAILS FOR TRAFFIC CHANNELIZATION DEVICES
74201	PCMS-710 (SHEET 1 OF 3)	DETAILS OF PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)
74202	PCMS-710 (SHEET 2 OF 3)	DETAILS OF PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)
74203	PCMS-710 (SHEET 3 OF 3)	DETAILS OF PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)

1 REV. 9/16/22 CLH REV. LIGHTING DESIGN CRITERIA TO ADD ALTERNATE APPROVED LUMINAIRES

RESPONSIBLE PE:	SUPERVISOR:	DESIGNER:	PLAN SUBMITTAL	ALABAMA DEPARTMENT OF TRANSPORTATION	NOT TO SCALE	SHEET TITLE	ROUTE
DATE:	DATE:	DATE:	OFFICE ENGINEER	TRAFFIC DESIGN SECTION		INDEX TO SHEETS AND SPECIAL AND STANDARD DRAWINGS	US-98

LIGHTING DESIGN CRITERIA

REFERENCE PROJECT NO	FISCAL YEAR	SHEET NO
CRPAA-0042(543)	2022	2C

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LIGHTING DESIGN CRITERIA - ALT 1

ROADWAY CLASSIFICATION	AVERAGE MAINTAINED LUMINATION	UNIFORMITY RATIOS			REMARKS
		AVG/MIN	MAX/MIN	AVG _r /AVG _w	
US-98 URBAN TUNNEL (THRESHOLD STAGE 4)	226.9 (HORIZONTAL)	1.54 :1	2.15 :1	0.72	HOLOPHANE
US-98 URBAN TUNNEL (THRESHOLD STAGE 3)	97.6 (HORIZONTAL)	1.59 :1	2.25 :1	0.73	HOLOPHANE
US-98 URBAN TUNNEL (THRESHOLD STAGE 2)	38.5 (HORIZONTAL)	1.74 :1	2.69 :1	0.68	HOLOPHANE
US-98 URBAN TUNNEL (THRESHOLD STAGE 1)	10.3 (HORIZONTAL)	1.66 :1	2.29 :1	0.70	HOLOPHANE
LUMINAIRE FIXTURE	IES DISTRIBUTION CLASSIFICATION	LUMENS USED	WATTAGE	MAINT. FACTOR	PHOTOMETRIC CURVE NUMBERS
LED, LOW PROFILE UNDERPASS SURFACE MOUNT, 250 WATT EQUIVALENT LUMINAIRE	CLN	9271	70	0.92	TNLEDMED_PK2_4K_XVOLT_CLN_DGRA_SCRW_TW
LED, LOW PROFILE UNDERPASS SURFACE MOUNT, 400 WATT EQUIVALENT LUMINAIRE	CLN	34486	323	0.88	TNLEDMED_PK9_4K_XVOLT_CLN_DGRA_SCRW_TW
LED, 250 WATT EQUIVALENT ROADWAY LUMINAIRE	S-C-II	36950	263	0.96	ATB2_P604_MVOLT_R3

LIGHTING CONTROL CRITERIA EAST ENTRANCE

LIGHTING STAGES	ZONE LABEL (LENGTH OF ZONE) (LUMINANCE cd/m ²)			
	ZONE 1 251 FT.	ZONE 2 154 FT.	ZONE 3 205 FT.	ZONE 4 50 FT.
STAGES 1 - 4	227.5	90.0	41.0	12.2
STAGES 1 - 3	98.3	31.8	18.6	9.2
STAGES 1 - 2	41.1	13.3	10.6	9.2
STAGE 1	10.4	10.4	10.4	9.1

WEST ENTRANCE

LIGHTING STAGES	ZONE LABEL (LENGTH OF ZONE) (LUMINANCE cd/m ²)			
	ZONE 1 251 FT.	ZONE 2 154 FT.	ZONE 3 50 FT.	ZONE 4
STAGES 1 - 4	209.8	91.5	39.5	EXISTING
STAGES 1 - 3	89.68	36.5	9.8	EXISTING
STAGES 1 - 2	38.8	9.8	9.8	EXISTING
STAGE 1	9.6	9.6	9.6	EXISTING

EMERGENCY LIGHTING

LIGHTING STAGES	ZONE LABEL (LENGTH OF ZONE) (ILLUMINANCE f _c)				MINIMUM ILLUMINANCE (f _c)	UNIFORMITY (MAX:MIN)
	ZONE 1 251 FT.	ZONE 2 154 FT.	ZONE 3 205 FT.	ZONE 4 50 FT.		
WEST ENTRANCE	3.83	2.8	4.8	EXITING	0.6	15.2
EAST ENTRANCE	3.2	3.4	3.2	3.1	0.6	15.5

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LIGHTING DESIGN CRITERIA - ALT 2

ROADWAY CLASSIFICATION	AVERAGE MAINTAINED LUMINATION	UNIFORMITY RATIOS			REMARKS
		AVG/MIN	MAX/MIN	AVG _r /AVG _w	
US-98 URBAN TUNNEL (THRESHOLD STAGE 4)	222.3 (HORIZONTAL)	1.36 :1	1.80 :1	0.72	COOPER LIGHTING
US-98 URBAN TUNNEL (THRESHOLD STAGE 3)	89.36 (HORIZONTAL)	1.38 :1	1.86 :1	0.73	COOPER LIGHTING
US-98 URBAN TUNNEL (THRESHOLD STAGE 2)	37.7 (HORIZONTAL)	1.74 :1	2.69 :1	0.68	COOPER LIGHTING
US-98 URBAN TUNNEL (THRESHOLD STAGE 1)	9.8 (HORIZONTAL)	1.66 :1	2.29 :1	0.70	COOPER LIGHTING
LUMINAIRE FIXTURE	IES DISTRIBUTION CLASSIFICATION	LUMENS USED	WATTAGE	MAINT. FACTOR	PHOTOMETRIC CURVE NUMBERS
LED, LOW PROFILE UNDERPASS SURFACE MOUNT, 250 WATT EQUIVALENT LUMINAIRE	CLN	9510	64	0.99	IFLD-S-SA2A-740-U-Y-RW
LED, LOW PROFILE UNDERPASS SURFACE MOUNT, 400 WATT EQUIVALENT LUMINAIRE	CLN	37292	314	0.99	IFLD-M-SA4E-740-U-Y-RW
LED, 250 WATT EQUIVALENT ROADWAY LUMINAIRE	S-C-IV	35294	273	0.96	ARCH-L-PA3-270-740-U-T3

1 NOTE: ADDITIONAL MANUFACTURERS MAY SUBMIT PRODUCTS FOR CONSIDERATION BUT WILL HAVE TO BE EVALUATED PRIOR TO LETTING.

1 REV. 9/16/22 CLH REV. LIGHTING DESIGN CRITERIA TO ADD ALTERNATE APPROVED LUMINAIRES AND NOTE.