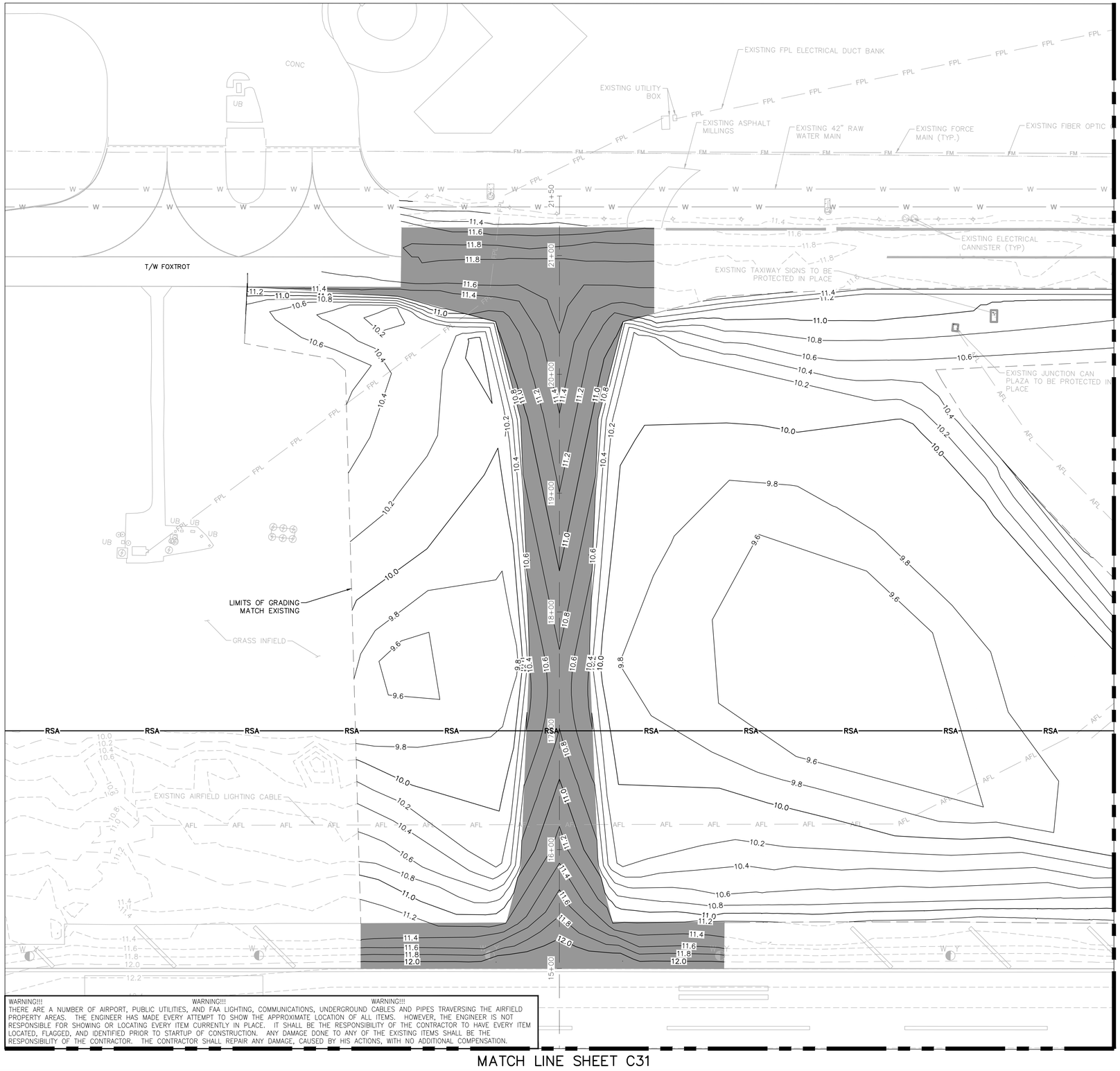
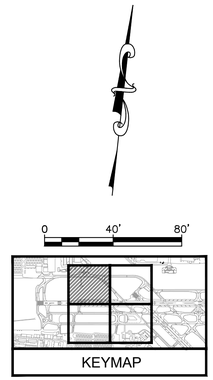




NOTES

1. UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR TO OBTAIN UNDERGROUND UTILITY LOCATION AS REQUIRED BY LAW. SEE GENERAL NOTES SHEET C01. ALL FACILITIES ARE TO REMAIN EXCEPT WHERE OTHERWISE SHOWN. TAKE CARE DURING CONSTRUCTION TO AVOID DAMAGE TO EXISTING ABOVE GROUND AND UNDERGROUND FACILITIES.
2. CONTRACTOR SHALL GRADE AROUND ALL EXISTING STRUCTURES TO REMAIN, INCLUDING BUT NOT LIMITED TO TAXIWAY AND RUNWAY SIGNAGE, WIND SOCKS, DRAINAGE INLETS AND ELECTRICAL MANHOLES.
3. REFER TO SHEETS C19–C22 FOR DEMOLITION REQUIREMENTS.
4. SEE "TYPICAL SECTIONS" SHEET C16.
5. CONTRACTOR WILL PROTECT ALL TAXIWAY EDGE LIGHTS DURING CONSTRUCTION.
6. IN CASE WHERE GEOMETRY IS NOT DELINEATED BY STATION/OFFSET, IT SHALL MATCH THE EXISTING LAYOUT OF THE MILLED EDGE OF PAVEMENT.
7. REFER TO THE ELECTRICAL PLAN SHEETS FOR TAXIWAY EDGE LIGHTS AND SIGNAGE TO BE RELOCATED.
8. REFER TO SHEET ELECTRICAL PLAN SHEETS FOR SIGNS FILL AND GRADING DETAIL.

THE ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
TO CONVERT THE ELEVATIONS HEREON TO NATIONAL GEODETIC VERTICAL DATUM (NGVD29) ADD 1.585 FEET.

LEGEND

- BENCHMARK
- ELECTRIC HAND HOLE
- TAXIWAY SIGN
- TAXIWAY EDGE LIGHT
- EXISTING FIBER PULL BOX
- CANNISTER
- RUNWAY LIGHT
- 11.00' EXISTING CONTOUR
- 13.00' PROPOSED CONTOUR
- PROPOSED PAVEMENT
- RSA RUNWAY SAFETY AREA

WARNING!!! WARNING!!! WARNING!!!
THERE ARE A NUMBER OF AIRPORT, PUBLIC UTILITIES, AND FAA LIGHTING, COMMUNICATIONS, UNDERGROUND CABLES AND PIPES TRAVERSING THE AIRFIELD PROPERTY AREAS. THE ENGINEER HAS MADE EVERY ATTEMPT TO SHOW THE APPROXIMATE LOCATION OF ALL ITEMS. HOWEVER, THE ENGINEER IS NOT RESPONSIBLE FOR SHOWING OR LOCATING EVERY ITEM CURRENTLY IN PLACE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE EVERY ITEM LOCATED, FLAGGED, AND IDENTIFIED PRIOR TO STARTUP OF CONSTRUCTION. ANY DAMAGE DONE TO ANY OF THE EXISTING ITEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL REPAIR ANY DAMAGE, CAUSED BY HIS ACTIONS, WITH NO ADDITIONAL COMPENSATION.

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.
CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
2251 VISTA PARKWAY SUITE L-9
WEST PALM BEACH, FL 33411
561-210-9224
LICENSE NO. CA30805

100% SUBMITTAL SET

State of Florida
Professional Engineer
License No. 044693108
THOMAS F. ODONNELL

DRAWN BY:	DATE:	SCALE:
RB	06/30/2025	AS NOTED
DESIGNED BY:	CHECKED BY:	FIELD BOOK:
ADC	TFO	

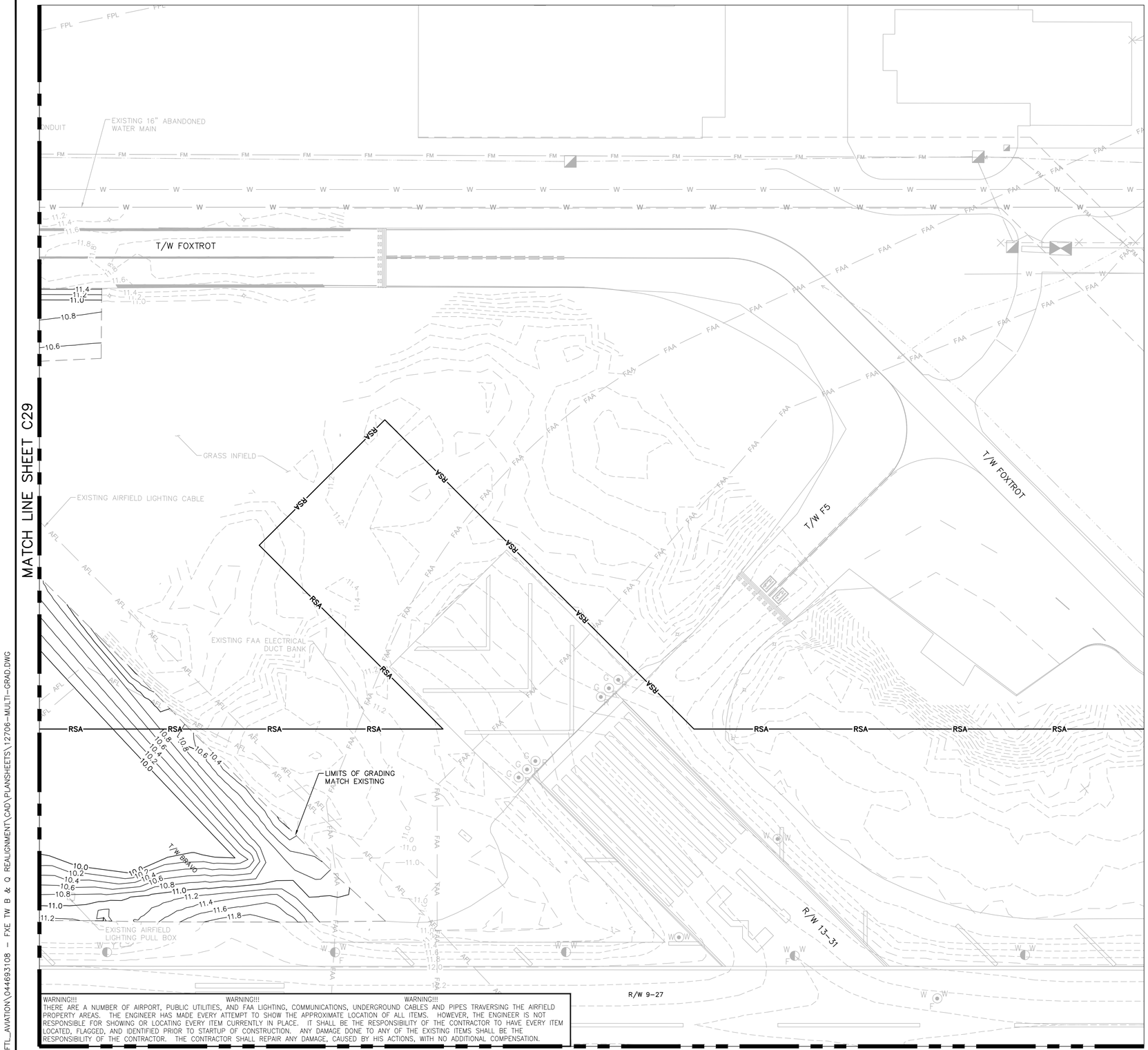
CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS				
NO.	DATE	BY	CHK'D	DESCRIPTION

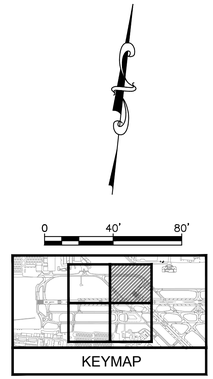
PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
GRADING PLAN

SHEET NO.	OF
C29	
TOTAL:	41
CAD FILE: 12706–MULTI–GRAD	
DRAWING FILE NO.	

K:\FTL_AVIATION\044693108 – FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706–MULTI–GRAD.DWG



WARNING!!! WARNING!!! WARNING!!!
THERE ARE A NUMBER OF AIRPORT, PUBLIC UTILITIES, AND FAA LIGHTING, COMMUNICATIONS, UNDERGROUND CABLES AND PIPES TRAVERSING THE AIRFIELD PROPERTY AREAS. THE ENGINEER HAS MADE EVERY ATTEMPT TO SHOW THE APPROXIMATE LOCATION OF ALL ITEMS. HOWEVER, THE ENGINEER IS NOT RESPONSIBLE FOR SHOWING OR LOCATING EVERY ITEM CURRENTLY IN PLACE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE EVERY ITEM LOCATED, FLAGGED, AND IDENTIFIED PRIOR TO STARTUP OF CONSTRUCTION. ANY DAMAGE DONE TO ANY OF THE EXISTING ITEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL REPAIR ANY DAMAGE, CAUSED BY HIS ACTIONS, WITH NO ADDITIONAL COMPENSATION.



NOTES

1. UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR TO OBTAIN UNDERGROUND UTILITY LOCATION AS REQUIRED BY LAW. SEE GENERAL NOTES SHEET C01. ALL FACILITIES ARE TO REMAIN EXCEPT WHERE OTHERWISE SHOWN. TAKE CARE DURING CONSTRUCTION TO AVOID DAMAGE TO EXISTING ABOVE GROUND AND UNDERGROUND FACILITIES.
2. CONTRACTOR SHALL GRADE AROUND ALL EXISTING STRUCTURES TO REMAIN, INCLUDING BUT NOT LIMITED TO TAXIWAY AND RUNWAY SIGNAGE, WIND SOCKS, DRAINAGE INLETS AND ELECTRICAL MANHOLES.
3. REFER TO SHEETS C19–C22 FOR DEMOLITION REQUIREMENTS.
4. SEE "TYPICAL SECTIONS" SHEET C16.
5. CONTRACTOR WILL PROTECT ALL TAXIWAY EDGE LIGHTS DURING CONSTRUCTION.
6. IN CASE WHERE GEOMETRY IS NOT DELINEATED BY STATION/OFFSET, IT SHALL MATCH THE EXISTING LAYOUT OF THE MILLED EDGE OF PAVEMENT.
7. REFER TO THE ELECTRICAL PLAN SHEETS FOR TAXIWAY EDGE LIGHTS AND SIGNAGE TO BE RELOCATED.
8. REFER TO SHEET ELECTRICAL PLAN SHEETS FOR SIGNS FILL AND GRADING DETAIL.

THE ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
TO CONVERT THE ELEVATIONS HEREON TO NATIONAL GEODETIC VERTICAL DATUM (NGVD29) ADD 1.585 FEET.

LEGEND

- BENCHMARK
- ELECTRIC HAND HOLE
- TAXIWAY SIGN
- TAXIWAY EDGE LIGHT
- EXISTING FIBER PULL BOX
- CANNISTER
- RUNWAY LIGHT
- EXISTING CONTOUR (11.00)
- PROPOSED CONTOUR (13.00)
- PROPOSED PAVEMENT
- RUNWAY SAFETY AREA (RSA)

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.
CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
2751 VISTA PARKWAY SUITE 1-9
WEST PALM BEACH, FL 33411
561-210-9224
LICENSE NO. CA36805

100% SUBMITTAL SET

State of Florida
Professional Engineer
License No. 044693108
THOMAS F. ODONNELL

DRAWN BY:	DATE:
RB	06/30/2025
DESIGNED BY:	SCALE:
ADC	AS NOTED
CHECKED BY:	
TFO	
FIELD BOOK:	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS			
NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
GRADING PLAN

SHEET NO.	OF
C30	
TOTAL:	41
CAD FILE: 12706–MULTI–GRAD	
DRAWING FILE NO.	

K:\FTL_AVIATION\044693108 – FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706–MULTI–GRAD.DWG

MATCH LINE SHEET C29

MATCH LINE SHEET C32

R/W 9-27

LIMITS OF GRADING

LIMITS OF GRADING
MATCH EXISTING

GRASS INFIELD

EXISTING AIRFIELD
LIGHTING PULL BOX

RSA

T/W ALPHA

T/W E6

T/W ECHO

EXISTING FIBER OPTIC
PULL BOX

EXISTING FIBER OPTIC CONDUIT

EXISTING FIBER OPTIC CONDUIT

EXISTING 8" RAW
WATER MAIN

8" RAW WATER MAIN

B.M.

14+00

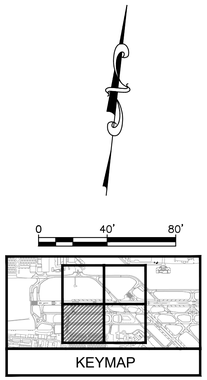
13+00

12+00

11+00

10+00

WARNING!!! WARNING!!! WARNING!!!
THERE ARE A NUMBER OF AIRPORT, PUBLIC UTILITIES, AND FAA LIGHTING, COMMUNICATIONS, UNDERGROUND CABLES AND PIPES TRAVERSING THE AIRFIELD PROPERTY AREAS. THE ENGINEER HAS MADE EVERY ATTEMPT TO SHOW THE APPROXIMATE LOCATION OF ALL ITEMS. HOWEVER, THE ENGINEER IS NOT RESPONSIBLE FOR SHOWING OR LOCATING EVERY ITEM CURRENTLY IN PLACE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE EVERY ITEM LOCATED, FLAGGED, AND IDENTIFIED PRIOR TO STARTUP OF CONSTRUCTION. ANY DAMAGE DONE TO ANY OF THE EXISTING ITEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL REPAIR ANY DAMAGE, CAUSED BY HIS ACTIONS, WITH NO ADDITIONAL COMPENSATION.



NOTES

1. UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR TO OBTAIN UNDERGROUND UTILITY LOCATION AS REQUIRED BY LAW. SEE GENERAL NOTES SHEET C01. ALL FACILITIES ARE TO REMAIN EXCEPT WHERE OTHERWISE SHOWN. TAKE CARE DURING CONSTRUCTION TO AVOID DAMAGE TO EXISTING ABOVE GROUND AND UNDERGROUND FACILITIES.
2. CONTRACTOR SHALL GRADE AROUND ALL EXISTING STRUCTURES TO REMAIN, INCLUDING BUT NOT LIMITED TO TAXIWAY AND RUNWAY SIGNAGE, WIND SOCKS, DRAINAGE INLETS AND ELECTRICAL MANHOLES.
3. REFER TO SHEETS C19-C22 FOR DEMOLITION REQUIREMENTS.
4. SEE "TYPICAL SECTIONS" SHEET C16.
5. CONTRACTOR WILL PROTECT ALL TAXIWAY EDGE LIGHTS DURING CONSTRUCTION.
6. IN CASE WHERE GEOMETRY IS NOT DELINEATED BY STATION/OFFSET, IT SHALL MATCH THE EXISTING LAYOUT OF THE MILLED EDGE OF PAVEMENT.
7. REFER TO THE ELECTRICAL PLAN SHEETS FOR TAXIWAY EDGE LIGHTS AND SIGNAGE TO BE RELOCATED.
8. REFER TO SHEET ELECTRICAL PLAN SHEETS FOR SIGNS FILL AND GRADING DETAIL.

THE ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
TO CONVERT THE ELEVATIONS HEREON TO NATIONAL GEODETIC VERTICAL DATUM (NGVD29) ADD 1.585 FEET.

LEGEND

- BENCHMARK
- ELECTRIC HAND HOLE
- TAXIWAY SIGN
- TAXIWAY EDGE LIGHT
- EXISTING FIBER PULL BOX
- CANNISTER
- RUNWAY LIGHT
- EXISTING CONTOUR (11.00')
- PROPOSED CONTOUR (13.00')
- PROPOSED PAVEMENT
- RSA — RUNWAY SAFETY AREA

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.
CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

100% SUBMITTAL SET

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
2751 VISTA PARKWAY SUITE I-9
WEST PALM BEACH, FL 33411
561-210-9224
LICENSE NO. CA30805

State of Florida
Professional Engineer
License No. 044693108
THOMAS F. ODONNELL

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

DRAWN BY: RB | DATE: 06/30/2025
DESIGNED BY: ADC | SCALE: AS NOTED
CHECKED BY: TFO | FIELD BOOK:

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

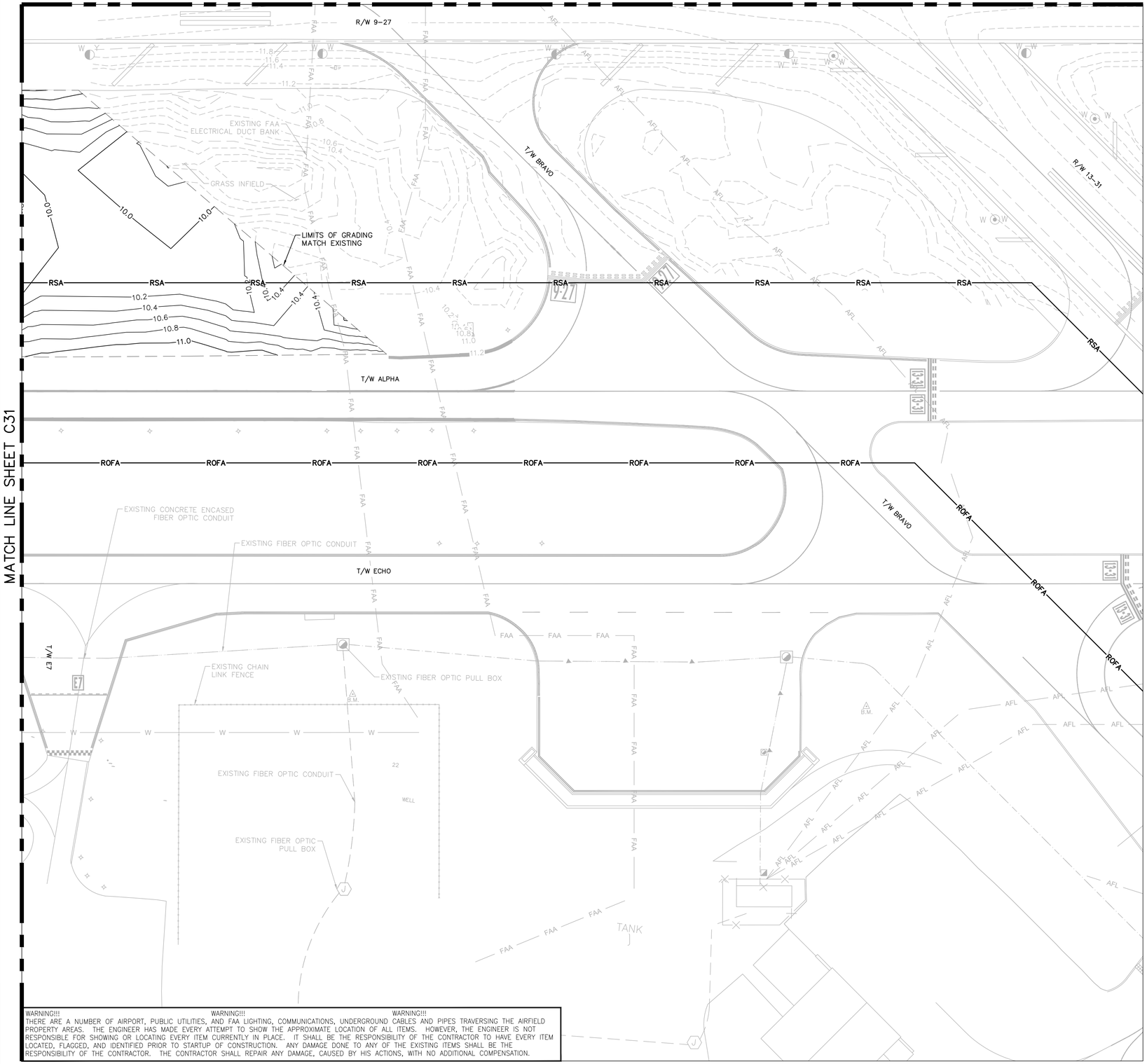
PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
GRADING PLAN

SHEET NO. C31 OF
TOTAL: 41
CAD FILE: 12706-MULTI-GRAD
DRAWING FILE NO.

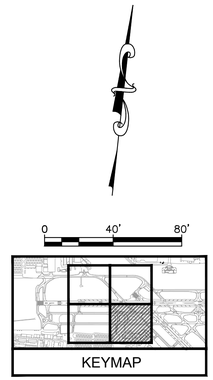
K:\FTL_AVIATION\044693108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-MULTI-GRAD.DWG

MATCH LINE SHEET C30

MATCH LINE SHEET C31



WARNING!!! WARNING!!! WARNING!!!
THERE ARE A NUMBER OF AIRPORT, PUBLIC UTILITIES, AND FAA LIGHTING, COMMUNICATIONS, UNDERGROUND CABLES AND PIPES TRAVERSING THE AIRFIELD PROPERTY AREAS. THE ENGINEER HAS MADE EVERY ATTEMPT TO SHOW THE APPROXIMATE LOCATION OF ALL ITEMS. HOWEVER, THE ENGINEER IS NOT RESPONSIBLE FOR SHOWING OR LOCATING EVERY ITEM CURRENTLY IN PLACE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE EVERY ITEM LOCATED, FLAGGED, AND IDENTIFIED PRIOR TO STARTUP OF CONSTRUCTION. ANY DAMAGE DONE TO ANY OF THE EXISTING ITEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL REPAIR ANY DAMAGE, CAUSED BY HIS ACTIONS, WITH NO ADDITIONAL COMPENSATION.



NOTES

1. UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR TO OBTAIN UNDERGROUND UTILITY LOCATION AS REQUIRED BY LAW. SEE GENERAL NOTES SHEET C01. ALL FACILITIES ARE TO REMAIN EXCEPT WHERE OTHERWISE SHOWN. TAKE CARE DURING CONSTRUCTION TO AVOID DAMAGE TO EXISTING ABOVE GROUND AND UNDERGROUND FACILITIES.
2. CONTRACTOR SHALL GRADE AROUND ALL EXISTING STRUCTURES TO REMAIN, INCLUDING BUT NOT LIMITED TO TAXIWAY AND RUNWAY SIGNAGE, WIND SOCKS, DRAINAGE INLETS AND ELECTRICAL MANHOLES.
3. REFER TO SHEETS C19–C22 FOR DEMOLITION REQUIREMENTS.
4. SEE "TYPICAL SECTIONS" SHEET C16.
5. CONTRACTOR WILL PROTECT ALL TAXIWAY EDGE LIGHTS DURING CONSTRUCTION.
6. IN CASE WHERE GEOMETRY IS NOT DELINEATED BY STATION/OFFSET, IT SHALL MATCH THE EXISTING LAYOUT OF THE MILLED EDGE OF PAVEMENT.
7. REFER TO THE ELECTRICAL PLAN SHEETS FOR TAXIWAY EDGE LIGHTS AND SIGNAGE TO BE RELOCATED.
8. REFER TO SHEET ELECTRICAL PLAN SHEETS FOR SIGNS FILL AND GRADING DETAIL.

THE ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
TO CONVERT THE ELEVATIONS HEREON TO NATIONAL GEODETIC VERTICAL DATUM (NGVD29) ADD 1.585 FEET.

LEGEND

- BENCHMARK
- ELECTRIC HAND HOLE
- TAXIWAY SIGN
- TAXIWAY EDGE LIGHT
- EXISTING FIBER PULL BOX
- CANNISTER
- RUNWAY LIGHT
- EXISTING CONTOUR (11.00')
- PROPOSED CONTOUR (13.00')
- PROPOSED PAVEMENT
- RSA — RUNWAY SAFETY AREA

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
2255 VISTA PARKWAY SUITE 1-9
WEST PALM BEACH, FL 33411
561-210-9224
LICENSE NO. CA30805

100% SUBMITTAL SET

State of Florida
Professional Engineer
License No. 044693108
THOMAS F. ODONNELL

DRAWN BY:	RB
DATE:	06/30/2025
DESIGNED BY:	ADC
SCALE:	AS NOTED
CHECKED BY:	TFO
FIELD BOOK:	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

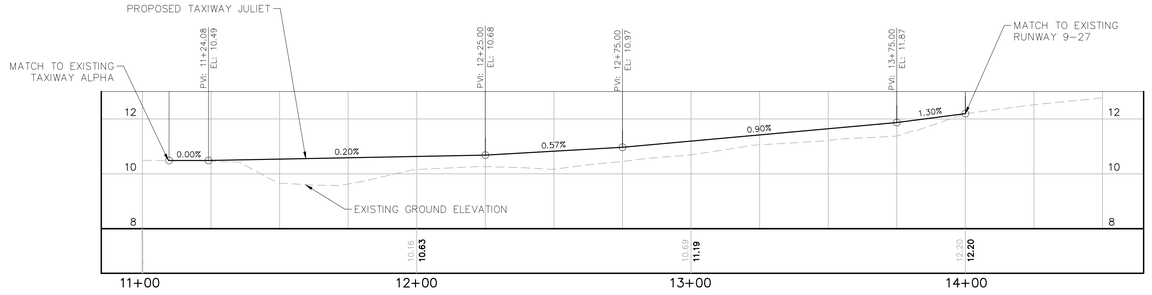
REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

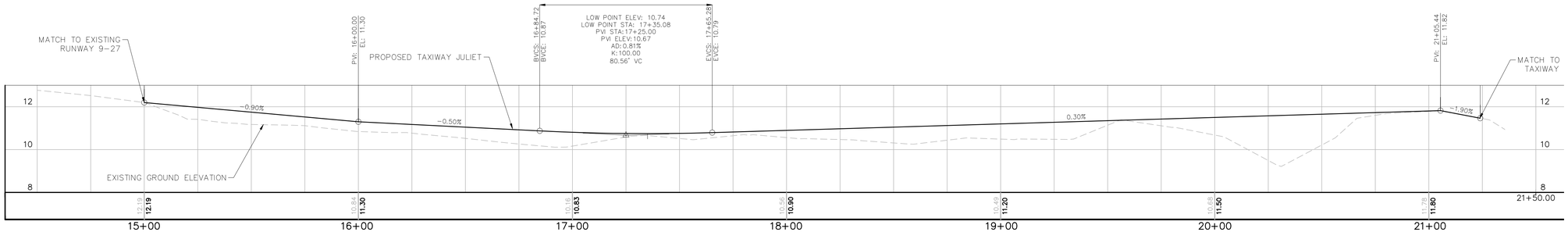
PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
GRADING PLAN

SHEET NO. C32 OF
TOTAL: 41
CAD FILE: 12706–MULTI–GRAD
DRAWING FILE NO.

K:\FTL_AVIATION\044693108 – FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706–MULTI–GRAD.DWG



NEW TAXIWAY JULIET SOUTH OF RUNWAY 09-27



NEW TAXIWAY JULIET NORTH OF RUNWAY 09-27

NOTES:

1. REFERENCE SHEETS C24 – C27 FOR GEOMETRY LAYOUT.
2. UNDERGROUND UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR TO OBTAIN UNDERGROUND UTILITY LOCATION AS REQUIRED BY LAW. SEE GENERAL NOTES SHEET C01. ALL FACILITIES ARE TO REMAIN EXCEPT WHERE OTHERWISE SHOWN. TAKE CARE DURING CONSTRUCTION TO AVOID DAMAGE TO EXISTING ABOVE GROUND AND UNDERGROUND FACILITIES.

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.
CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
2251 VISTA PARKWAY SUITE I-9
WEST PALM BEACH, FL 33411
561-210-9224
LICENSE NO. CA30805

100% SUBMITTAL SET

State of Florida
Professional Engineer
License No. 044693108
THOMAS F. ODONNELL

DRAWN BY: RB
DATE: 06/30/2025
DESIGNED BY: ADC
SCALE: AS NOTED
CHECKED BY: TFO
FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

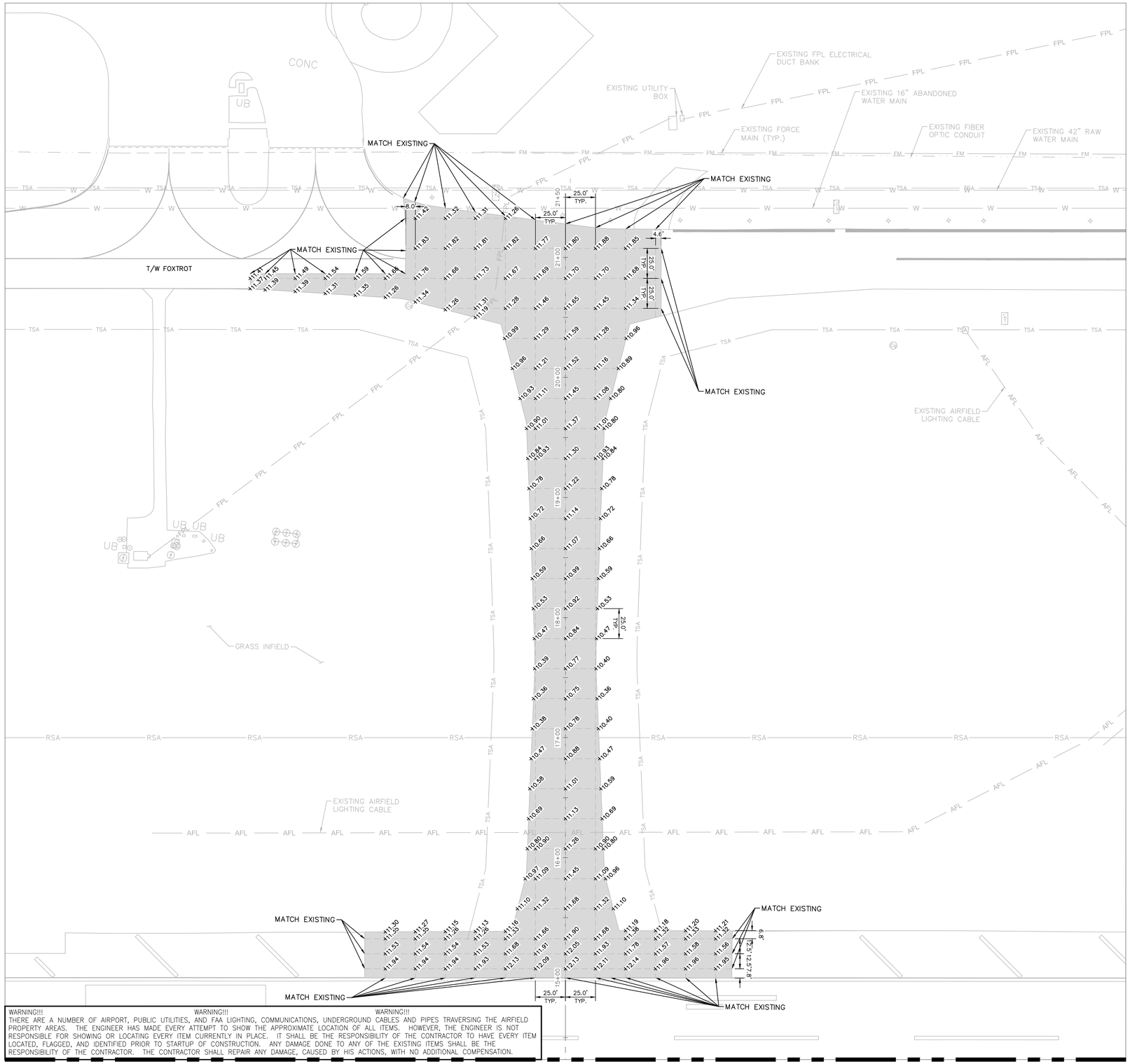
REVISIONS

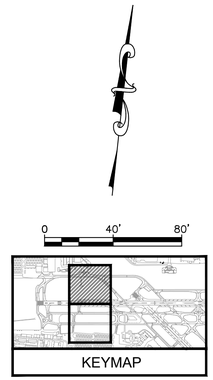
NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
GRADING PROFILES

SHEET NO. C33 OF
TOTAL: 41
CAD FILE: 12706-MULTI-PROF-TW
DRAWING FILE NO.

K:\FTL_AVATION\044693108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-MULTI-PROF-TW.DWG





NOTES

1. REFER TO SHEETS C24 TO C27 FOR PAVING AND GEOMETRY PLANS.
2. REFER TO SHEETS C29 TO C32 FOR GRADING PLANS.
3. REFER TO SHEET C23 FOR DEMOLITION REQUIREMENTS.
4. SEE "TYPICAL SECTIONS" SHEET NO. C16.
5. GRID IS 25' (VERTICAL) X 25' (HORIZONTAL) UNLESS OTHERWISE NOTED.

LEGEND (WORK)

CONSTRUCT NEW PAVEMENT SECTION TO GRADE

LEGEND (SYMBOL)

+11.6 SPOT ELEVATION

RSA RUNWAY SAFETY AREA

TSA TAXIWAY SAFETY AREA

THE ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). TO CONVERT THE ELEVATIONS HEREON TO NATIONAL GEODETIC VERTICAL DATUM (NGVD29) ADD 1.51 FEET.

WARNING!!! WARNING!!! WARNING!!!
THERE ARE A NUMBER OF AIRPORT, PUBLIC UTILITIES, AND FAA LIGHTING, COMMUNICATIONS, UNDERGROUND CABLES AND PIPES TRAVERSING THE AIRFIELD PROPERTY AREAS. THE ENGINEER HAS MADE EVERY ATTEMPT TO SHOW THE APPROXIMATE LOCATION OF ALL ITEMS. HOWEVER, THE ENGINEER IS NOT RESPONSIBLE FOR SHOWING OR LOCATING EVERY ITEM CURRENTLY IN PLACE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE EVERY ITEM LOCATED, FLAGGED, AND IDENTIFIED PRIOR TO STARTUP OF CONSTRUCTION. ANY DAMAGE DONE TO ANY OF THE EXISTING ITEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL REPAIR ANY DAMAGE, CAUSED BY HIS ACTIONS, WITH NO ADDITIONAL COMPENSATION.

MATCH LINE SHEET C35

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
8201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
2751 VISTA PARKWAY SUITE I-9
WEST PALM BEACH, FL 33411
561-210-9224
LICENSE NO. CA36805

100% SUBMITTAL SET

State of Florida
Professional Engineer
License No. 044693108
THOMAS F. ODONNELL

DRAWN BY: RB | DATE: 06/30/2025
DESIGNED BY: ADC | SCALE: AS NOTED
CHECKED BY: TFO | FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

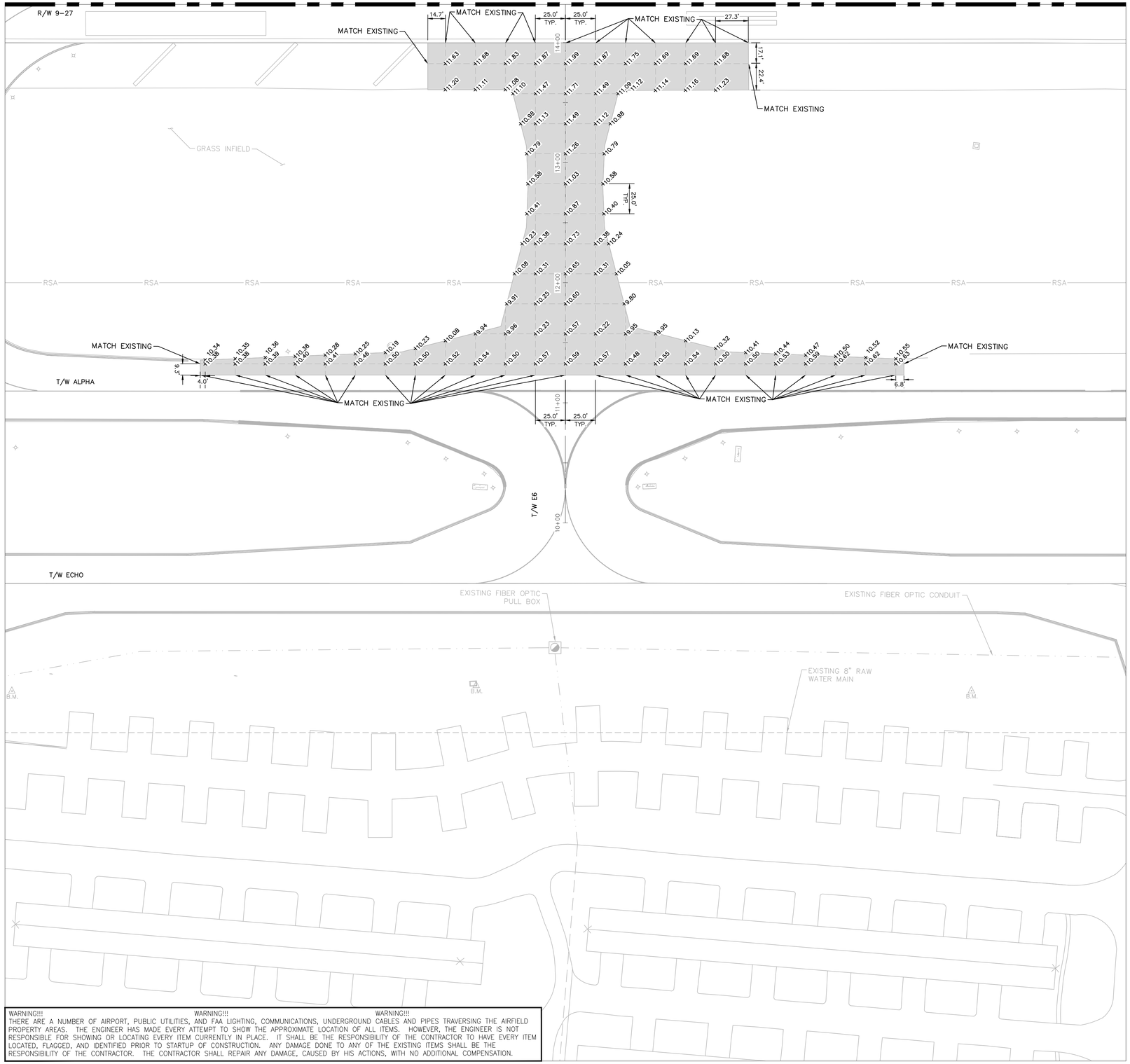
NO.	DATE	BY	CHK'D	DESCRIPTION

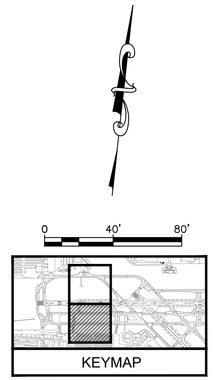
PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
SPOT ELEVATION PLAN

SHEET NO. C34 OF
TOTAL: 41
CAD FILE: 12706-MULTI-ELEV
DRAWING FILE NO.

K:\FTL_AVIATION\044693108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-MULTI-ELEV.DWG

MATCH LINE SHEET C34





NOTES

1. REFER TO SHEETS C24 TO C27 FOR PAVING AND GEOMETRY PLANS.
2. REFER TO SHEETS C29 TO C32 FOR GRADING PLANS.
3. REFER TO SHEET C23 FOR DEMOLITION REQUIREMENTS.
4. SEE "TYPICAL SECTIONS" SHEET NO. C16.
5. GRID IS 25' (VERTICAL) X 25' (HORIZONTAL) UNLESS OTHERWISE NOTED.

LEGEND (WORK)

CONSTRUCT NEW PAVEMENT SECTION TO GRADE

LEGEND (SYMBOL)

+11.6 SPOT ELEVATION

RSA RUNWAY SAFETY AREA

TSA TAXIWAY SAFETY AREA

THE ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). TO CONVERT THE ELEVATIONS HEREON TO NATIONAL GEODETIC VERTICAL DATUM (NGVD29) ADD 1.51 FEET.

WARNING!!! WARNING!!! WARNING!!!
THERE ARE A NUMBER OF AIRPORT, PUBLIC UTILITIES, AND FAA LIGHTING, COMMUNICATIONS, UNDERGROUND CABLES AND PIPES TRAVERSING THE AIRFIELD PROPERTY AREAS. THE ENGINEER HAS MADE EVERY ATTEMPT TO SHOW THE APPROXIMATE LOCATION OF ALL ITEMS. HOWEVER, THE ENGINEER IS NOT RESPONSIBLE FOR SHOWING OR LOCATING EVERY ITEM CURRENTLY IN PLACE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE EVERY ITEM LOCATED, FLAGGED, AND IDENTIFIED PRIOR TO STARTUP OF CONSTRUCTION. ANY DAMAGE DONE TO ANY OF THE EXISTING ITEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL REPAIR ANY DAMAGE, CAUSED BY HIS ACTIONS, WITH NO ADDITIONAL COMPENSATION.

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.
CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
8201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
2751 VISTA PARKWAY SUITE I-9
WEST PALM BEACH, FL 33411
561-210-9224
LICENSE NO. CA36805

100% SUBMITTAL SET

State of Florida
Professional Engineer
License No. 044693108
THOMAS F. ODONNELL

DRAWN BY:	DATE:
RB	06/30/2025
DESIGNED BY:	SCALE:
ADC	AS NOTED
CHECKED BY:	
TFO	
FIELD BOOK:	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

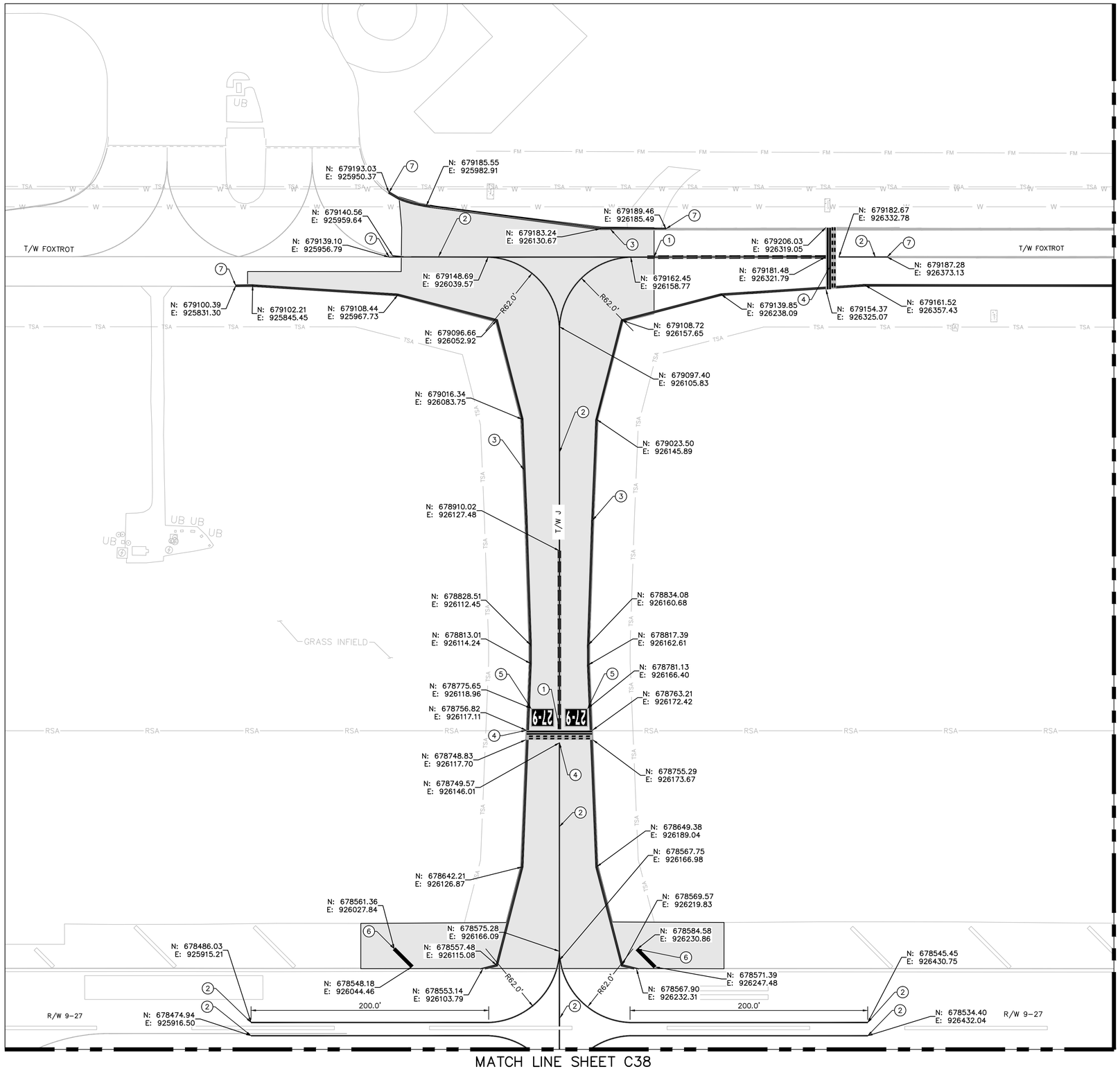
REVISIONS

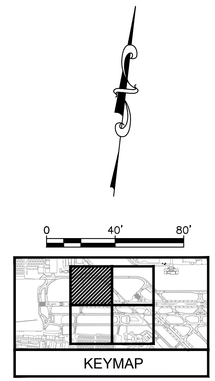
NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
SPOT ELEVATION PLAN

SHEET NO.	OF
C35	
TOTAL:	41
CAD FILE: 12706-MULTI-ELEV	
DRAWING FILE NO.	

K:\FTL_AVIATION\044693108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-MULTI-ELEV.DWG





LEGEND

- LIMITS OF NEW PAVEMENT
- RSA — RUNWAY SAFETY AREA
- TSA — TAXIWAY SAFETY AREA
- BRL — BUILDING RESTRICTION LINE
- TOFA — TAXIWAY OBJECT FREE AREA
- (1) ENHANCED TAXIWAY CENTERLINE MARKING,. SEE DETAIL, SHEET C40.
- (2) TAXIWAY CENTERLINE MARKING (6"). SEE DETAIL, SHEET C40.
- (3) TAXIWAY EDGE MARKING, CONTINUOUS. SEE DETAIL, SHEET C40.
- (4) RUNWAY HOLDING POSITION MARKING. SEE DETAIL, SHEET C40.
- (5) SURFACE PAINTED HOLDING POSITION SIGN. SEE DETAIL SHEET C40.
- (6) SHORT RUNWAY SHOULDER MARKING. SEE DETAIL SHEET C40.
- (7) MATCH EXISTING STRIPING.

NOTES:

1. FOR SURVEY REFERENCE POINT LOCATION, SEE DETAILS, SHEETS C40.

100% SUBMITTAL SET

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.
CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
8201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM
Electrical Engineering, Inc.
2293 VISTA PARKWAY SUITE F-9
WEST PALM BEACH, FL 33411
561-210-9224
LICENSE NO. CA36805

State of Florida
Professional Engineer
License No. 044693108
THOMAS F. ODONNELL

DRAWN BY:	DATE:
RB	06/30/2025
DESIGNED BY:	SCALE:
ADC	AS NOTED
CHECKED BY:	FIELD BOOK:
TFO	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS			
NO.	DATE	BY	CHK'D

DESCRIPTION

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
PAVEMENT MARKING PLAN

SHEET NO.	OF
C36	
TOTAL:	41
CAD FILE: 12706-MULTI-MARK	
DRAWING FILE NO.	

K:\FTL_AVIATION\044693108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-MULTI-MARK.DWG

MATCH LINE SHEET C36

T/W FOXTROT

N: 679192.56
E: 926630.35

GRASS INFIELD

T/W F5

T/W FOXTROT

R/W 13-31

R/W 9-27

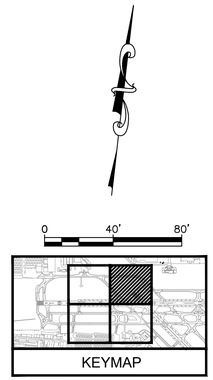
N: 678640.51
E: 926730.95

N: 678652.02
E: 926830.29

N: 678628.35
E: 926746.29

N: 678639.86
E: 926845.62

MATCH LINE SHEET C40



LEGEND

- LIMITS OF NEW PAVEMENT
- RSA — RUNWAY SAFETY AREA
- TSA — TAXIWAY SAFETY AREA
- BRL — BUILDING RESTRICTION LINE
- TOFA — TAXIWAY OBJECT FREE AREA
- (1) ENHANCED TAXIWAY CENTERLINE MARKING,. SEE DETAIL, SHEET C40.
- (2) TAXIWAY CENTERLINE MARKING (6"). SEE DETAIL, SHEET C40.
- (3) TAXIWAY EDGE MARKING, CONTINUOUS. SEE DETAIL, SHEET C40.
- (4) RUNWAY HOLDING POSITION MARKING. SEE DETAIL, SHEET C40.
- (5) SURFACE PAINTED HOLDING POSITION SIGN. SEE DETAIL SHEET C40.
- (6) SHORT RUNWAY SHOULDER MARKING. SEE DETAIL SHEET C40.
- (7) MATCH EXISTING STRIPING.

NOTES:

1. FOR SURVEY REFERENCE POINT LOCATION, SEE DETAILS, SHEETS C40.

CALL 48 HOURS BEFORE YOU DIG

IT'S THE LAW! DIAL 811

Know what's below. Call before you dig.

SUNSHINE STATE ONE CALL OF FLORIDA, INC.

CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
8201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
2751 VISTA PARKWAY SUITE I-9
WEST PALM BEACH, FL 33411
561 210-9224
LICENSE NO. CA36805

100% SUBMITTAL SET

State of Florida
Professional Engineer
License No. 044693108
THOMAS F. ODONNELL

DRAWN BY: RB
DESIGNED BY: ADC
CHECKED BY: TFO
DATE: 06/30/2025
SCALE: AS NOTED
FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
PAVEMENT MARKING PLAN

SHEET NO. C37 OF

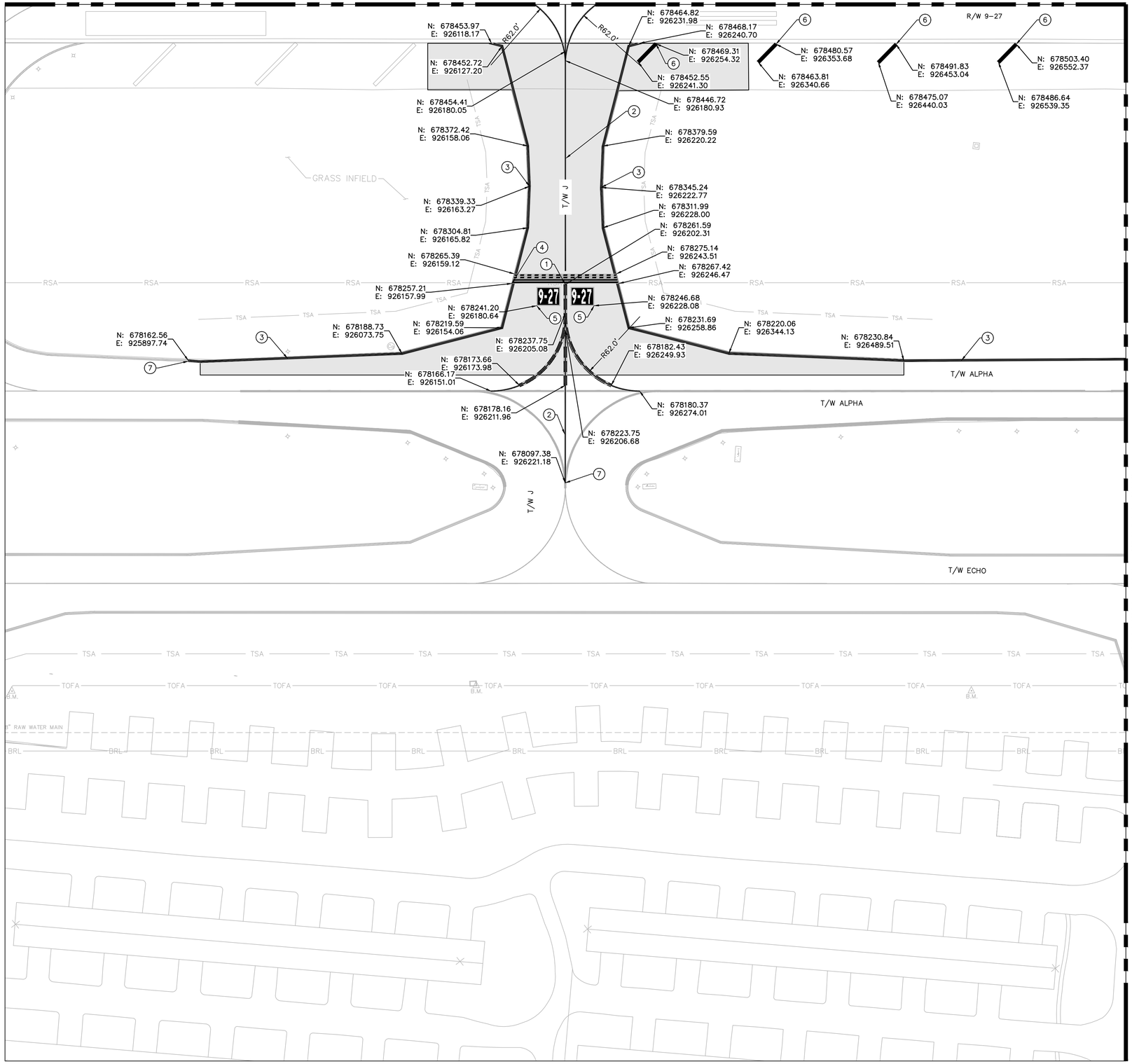
TOTAL: 41

CAD FILE: 12706-MULTI-MARK

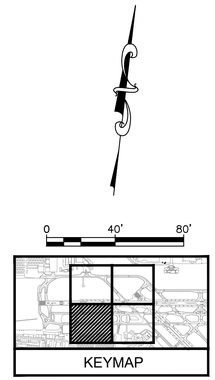
DRAWING FILE NO.

K:\FTL_AVIATION\044693108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-MULTI-MARK.DWG

MATCH LINE SHEET C36



MATCH LINE SHEET C39



LEGEND

- LIMITS OF NEW PAVEMENT
- RSA — RUNWAY SAFETY AREA
- TSA — TAXIWAY SAFETY AREA
- BRL — BUILDING RESTRICTION LINE
- TOFA — TAXIWAY OBJECT FREE AREA
- (1) ENHANCED TAXIWAY CENTERLINE MARKING,. SEE DETAIL, SHEET C40.
- (2) TAXIWAY CENTERLINE MARKING (6"). SEE DETAIL, SHEET C40.
- (3) TAXIWAY EDGE MARKING, CONTINUOUS. SEE DETAIL, SHEET C40.
- (4) RUNWAY HOLDING POSITION MARKING. SEE DETAIL, SHEET C40.
- (5) SURFACE PAINTED HOLDING POSITION SIGN. SEE DETAIL SHEET C40.
- (6) SHORT RUNWAY SHOULDER MARKING. SEE DETAIL SHEET C40.
- (7) MATCH EXISTING STRIPING.

NOTES:

1. FOR SURVEY REFERENCE POINT LOCATION, SEE DETAILS, SHEETS C40.

100% SUBMITTAL SET

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
8201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
2751 VISTA PARKWAY SUITE I-9
WEST PALM BEACH, FL 33411
561 210-9224
LICENSE NO. CA36805

State of Florida
Professional Engineer
License No. 044693108
THOMAS F. ODONNELL

DRAWN BY:	DATE:	SCALE:
RB	06/30/2025	AS NOTED
DESIGNED BY:	CHECKED BY:	FIELD BOOK:
ADC	TFO	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

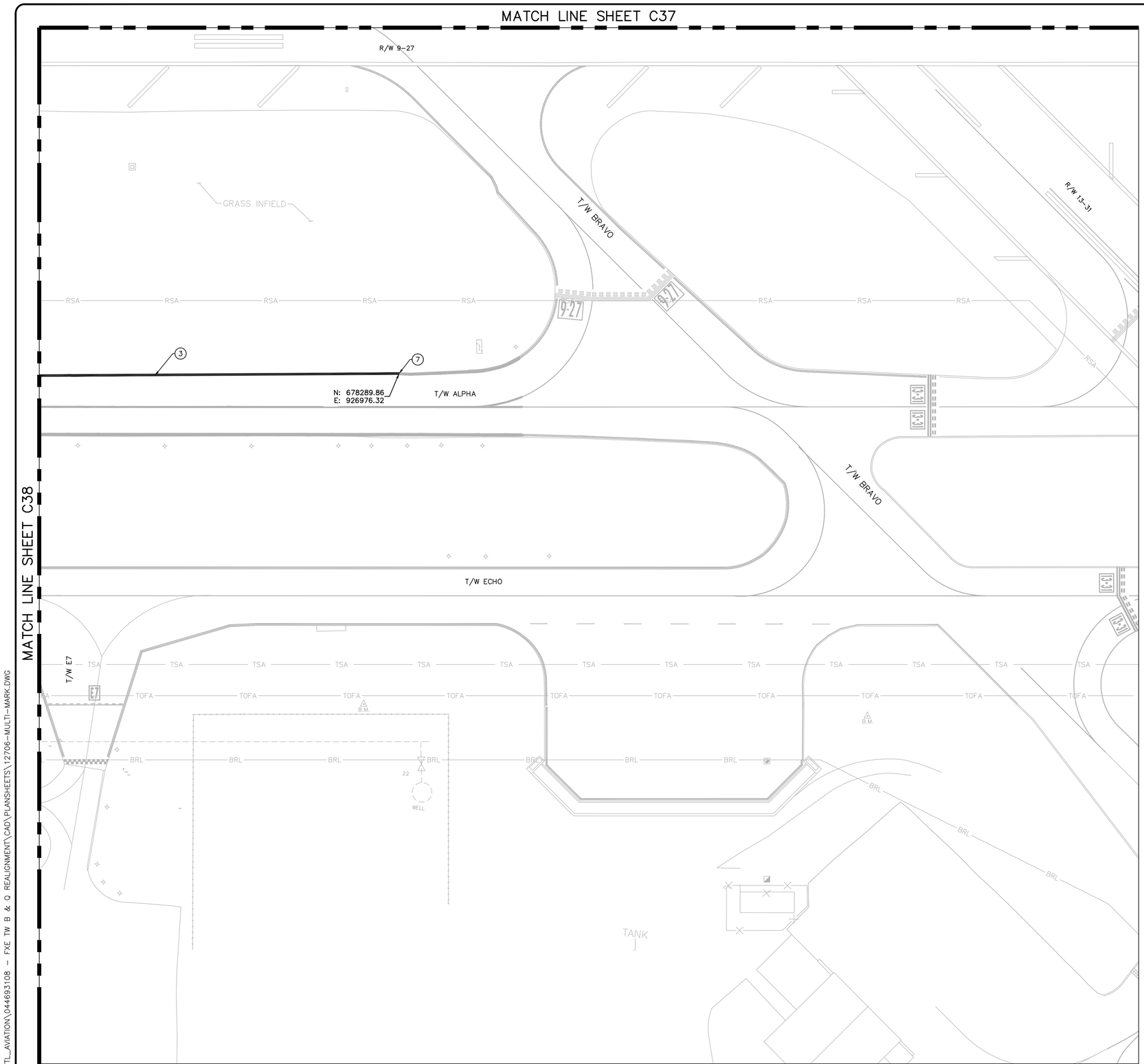
REVISIONS

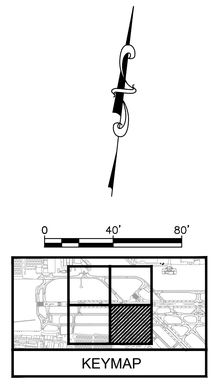
NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
PAVEMENT MARKING PLAN

SHEET NO.	OF
C38	
TOTAL:	41
CAD FILE: 12706-MULTI-MARK	
DRAWING FILE NO.	

K:\FTL_AVIATION\044693108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-MULTI-MARK.DWG





LEGEND

- LIMITS OF NEW PAVEMENT
- RSA — RUNWAY SAFETY AREA
- TSA — TAXIWAY SAFETY AREA
- BRL — BUILDING RESTRICTION LINE
- TOFA — TAXIWAY OBJECT FREE AREA
- (1) ENHANCED TAXIWAY CENTERLINE MARKING,. SEE DETAIL, SHEET C40.
- (2) TAXIWAY CENTERLINE MARKING (6"). SEE DETAIL, SHEET C40.
- (3) TAXIWAY EDGE MARKING, CONTINUOUS. SEE DETAIL, SHEET C40.
- (4) RUNWAY HOLDING POSITION MARKING. SEE DETAIL, SHEET C40.
- (5) SURFACE PAINTED HOLDING POSITION SIGN. SEE DETAIL SHEET C40.
- (6) SHORT RUNWAY SHOULDER MARKING. SEE DETAIL SHEET C40.
- (7) MATCH EXISTING STRIPING.

NOTES:

1. FOR SURVEY REFERENCE POINT LOCATION, SEE DETAILS, SHEETS C40.

CALL 48 HOURS BEFORE YOU DIG

IT'S THE LAW! DIAL 811

Know what's **below.** **Call** before you dig.

SUNSHINE STATE ONE CALL OF FLORIDA, INC.

CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
8201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
2761 VISTA PARKWAY SUITE I-9
WEST PALM BEACH, FL 33411
561-210-9224
LICENSE NO. CA36805

100% SUBMITTAL SET

State of Florida
Professional Engineer
License No. 044693108
THOMAS F. ODONNELL

DRAWN BY:	DESIGNED BY:	CHECKED BY:
RB	ADC	TFO

DATE: 06/30/2025
SCALE: AS NOTED
FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
PAVEMENT MARKING PLAN

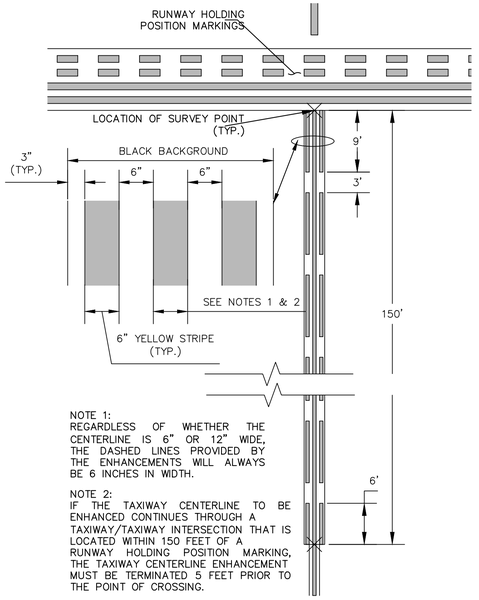
SHEET NO. C39 OF

TOTAL: 41

CAD FILE: 12706-MULTI-MARK

DRAWING FILE NO.

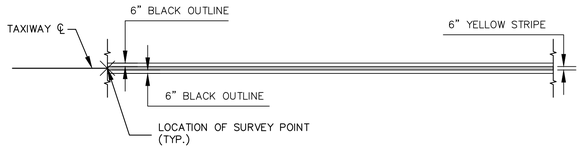
K:\FTL_AVIATION\044693108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-MULTI-MARK.DWG



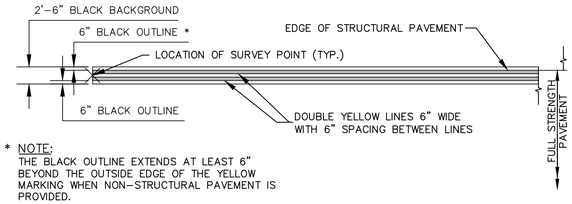
NOTE 1:
REGARDLESS OF WHETHER THE CENTERLINE IS 6" OR 12" WIDE, THE DASHED LINES PROVIDED BY THE ENHANCEMENTS WILL ALWAYS BE 6 INCHES IN WIDTH.

NOTE 2:
IF THE TAXIWAY CENTERLINE TO BE ENHANCED CONTINUES THROUGH A TAXIWAY/TAXIWAY INTERSECTION THAT IS LOCATED WITHIN 150 FEET OF A RUNWAY HOLDING POSITION MARKING, THE TAXIWAY CENTERLINE ENHANCEMENT MUST BE TERMINATED 5 FEET PRIOR TO THE POINT OF CROSSING.

① ENHANCED TAXIWAY CENTERLINE MARKING
N.T.S.

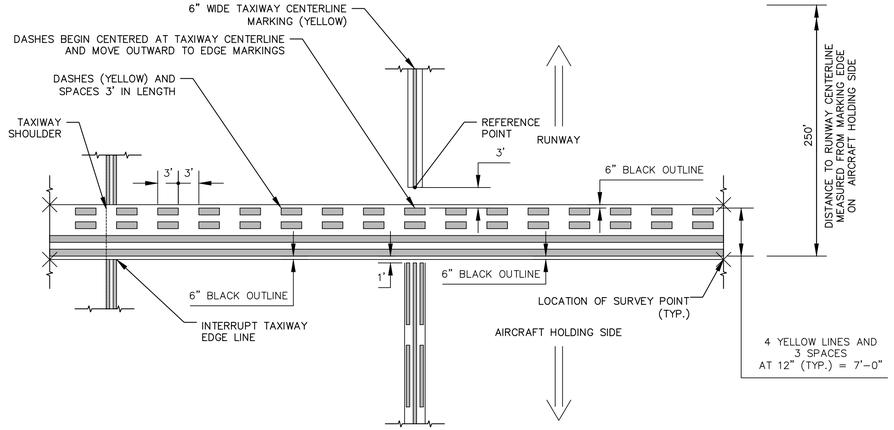


② TAXIWAY CENTERLINE MARKINGS
N.T.S.

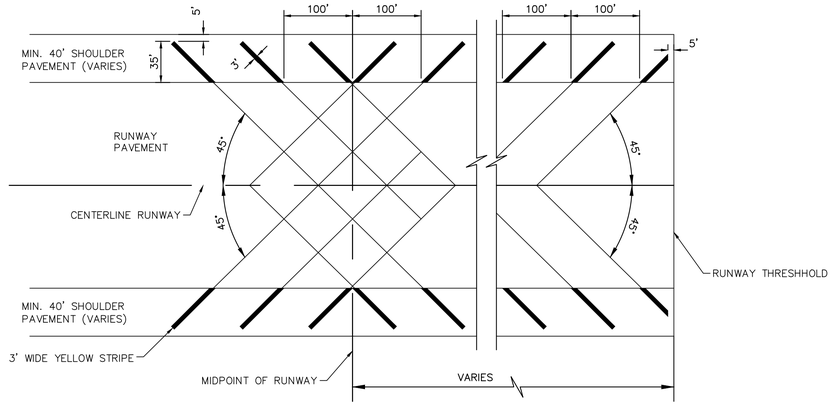


* NOTE:
THE BLACK OUTLINE EXTENDS AT LEAST 6" BEYOND THE OUTSIDE EDGE OF THE YELLOW MARKING WHEN NON-STRUCTURAL PAVEMENT IS PROVIDED.

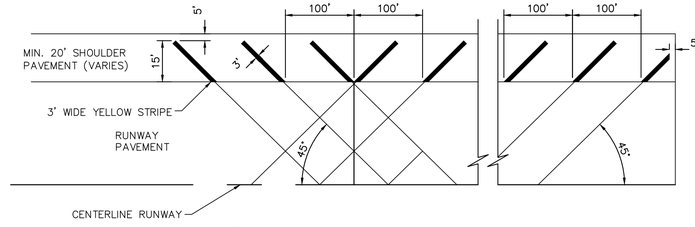
③ TAXIWAY EDGE MARKINGS, CONTINUOUS
N.T.S.



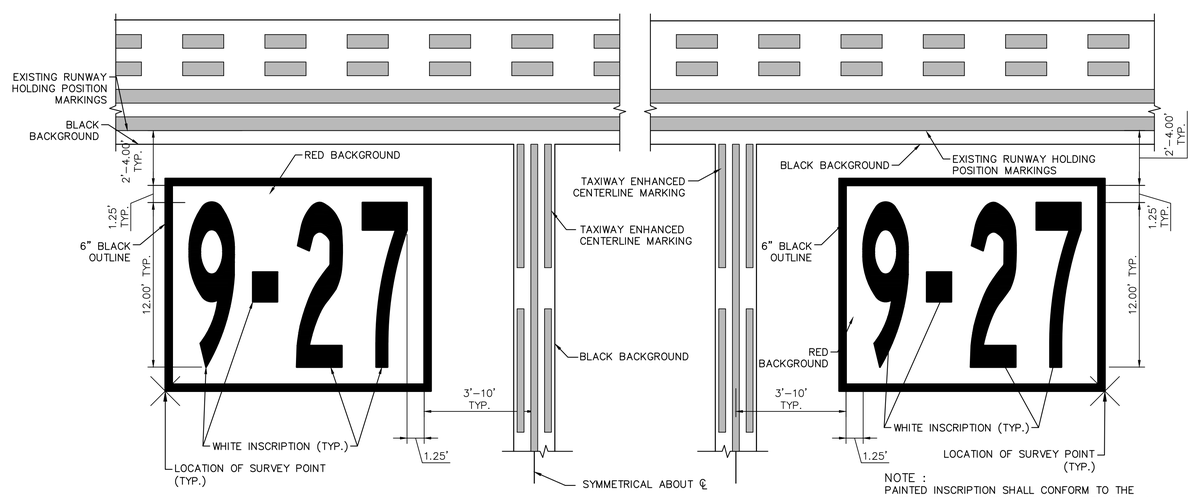
④ RUNWAY HOLDING POSITION MARKINGS
N.T.S.



⑥ RUNWAY SHOULDER MARKINGS
VP SCALE: 1"=50' N.T.S.



⑦ SHORT RUNWAY SHOULDER MARKINGS
VP SCALE: 1"=50' N.T.S.



NOTE :
PAINTED INSCRIPTION SHALL CONFORM TO THE LATEST EDITION OF THE FAA AC NO 150/5340-1L.

⑤ SURFACE PAINTED HOLDING POSITION SIGN LOCATION DETAIL
N.T.S.

NOTES:

1. REFLECTORIZED (GLASS BEADS) PAINT SHALL BE USED FOR ALL PERMANENT PAVEMENT MARKINGS EXCEPT BLACK OUTLINE. SEE SPECIFICATION P-620 FOR GLASS BEAD TYPE AND APPLICATION RATE FOR EACH PAINT COLOR.
2. SEE PAVEMENT GEOMETRY PLANS, SHEETS C24 THROUGH C27 FOR HORIZONTAL LAYOUT.
3. PAVEMENT MARKING DETAILS SHALL CONFORM TO THE LATEST EDITION OF THE FEDERAL AVIATION ADMINISTRATION ADVISORY CIRCULAR 150/5340-1M; IF A CONFLICT OCCURS BETWEEN THESE PLANS AND THE CIRCULAR THE ADVISORY CIRCULAR WILL TAKE PRECEDENCE.
4. ALL TAXIWAY MARKINGS ARE YELLOW.
5. MEASURED QUANTITY PAID TO THE CONTRACTOR SHALL BE MEASUREMENT OF FINAL VISIBLE PAINT MARKINGS ACCORDING TO SPECIFICATION P-620.

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.
CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
2251 VISTA PARKWAY SUITE I-9
WEST PALM BEACH, FL. 33411
561-210-9224
LICENSE NO. EA36805

100% SUBMITTAL SET

State of Florida
Professional Engineer
License No. 044693108
THOMAS F. ODONNELL

DRAWN BY:	DATE:
RB	06/30/2025
DESIGNED BY:	SCALE:
ADC	AS NOTED
CHECKED BY:	
TFO	
FIELD BOOK:	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
PAVEMENT MARKING DETAILS

SHEET NO.	OF
C40	

TOTAL: 41

CAD FILE:
12706-MULTI-MARK-DETL

DRAWING FILE NO.

K:\FTL_AVIATION\044693108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-MULTI-MARK-DETL.DWG

GENERAL NOTES

1. THE ELECTRICAL CONTRACTOR SHALL COMPLETE ALL ITEMS ON THE FOLLOWING ELECTRICAL SHEETS:

1.1. CONTRACTOR SHALL DEMOLISH THE EXISTING AIRFIELD LIGHTING AND GUIDANCE SIGNAGE SYSTEMS, COMPLETE, AS SHOWN ON PLANS.

1.2. CONTRACTOR SHALL PROVIDE AND INSTALL AIRFIELD LIGHTING AND GUIDANCE SIGNAGE SYSTEMS, COMPLETE IN PLACE, AS SHOWN ON PLANS.

2. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS AND LABOR TO INSTALL THE ELECTRICAL SYSTEMS AS INDICATED ON THE DRAWINGS. ITEMS NOT SHOWN BUT OBVIOUSLY NECESSARY FOR COMPLETION OF THE WORK SHALL BE INCLUDED.

3. THE INSTALLATION SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, LOCAL CODES, CITY CODES, ALL LATEST FEDERAL AVIATION ADMINISTRATION STANDARDS AND ADVISORIES, AND ALL CITY OF FORT LAUDERDALE FLORIDA BUILDING CODES.

4. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, INSPECTIONS, AND APPROVALS.

5. THE CONTRACTOR SHALL COORDINATE THEIR WORK WITH THE ENGINEER, RESIDENT PROJECT REPRESENTATIVE (RPR), CITY OF FORT LAUDERDALE AND FAA.

6. THE CONTRACTOR SHALL, BEFORE SUBMITTING THEIR BID, VISIT THE SITE OF THE PROJECT AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS. NO ALLOWANCE WILL BE MADE FOR EXISTING CONDITIONS OR FAILURE OF THE CONTRACTOR TO OBSERVE THEM.

7. IT IS THE CONTRACTORS RESPONSIBILITY TO COORDINATE BEFORE BIDDING WITH ALL LOCAL UTILITIES INCLUDING THE POWER, TELEPHONE, FEDERAL AVIATION ADMINISTRATION, FUEL PIPE LINES, WATER AND SEWER MAINS AND TO MEET ALL OF THEIR INSTALLATION REQUIREMENTS. ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO MEET THESE REQUIREMENTS IS TO BE INCLUDED IN THE BID. THE CONTRACTOR SHALL OBTAIN, DELIVER AND INSTALL ALL CONDUITS, PULLBOXES AND EQUIPMENT REQUIRED BY THE UTILITIES TO THEIR SPECIFICATIONS.

8. FXE REPRESENTATIVES ARE AS FOLLOWS:
8.1. CITY OF FORT LAUDERDALE PROJECT MANAGER – KHANT MYAT, P.E. – 954–828–5061

9. GROUNDING SHALL BE INSTALLED IN ACCORDANCE WITH SPEC SECTION L–108. THE COUNTEROISE GROUNDING SYSTEM SHALL NOT EXCEED 25 OHMS. THE EARTH SHALL BE DRY FOR 48 HOURS PRIOR TO TESTING. GROUNDING AND BONDING SHALL NOT BE PAINTED.

10. AN EQUIPMENT GROUND WIRE SIZED PER NEC SHALL BE PULLED IN ALL AIRFIELD VAULT ELECTRICAL CONDUITS, POWER AND CONTROL, WHETHER OR NOT INDICATED ON DRAWINGS.

11. ALL EQUIPMENT SHALL BE NEW AND UNUSED, U.L. LISTED AND FAA APPROVED.

12. SHOP DRAWINGS SHALL BE SUBMITTED FOR THE FOLLOWING EQUIPMENT: LIGHTING ASSEMBLIES, BASE CANS, GUIDANCE SIGNS, SPLICE KITS, CONDUITS, CABLES, TRANSFORMERS, GROUNDING AND OTHERS AS REQUESTED.

13. THE CONTRACTOR IS RESPONSIBLE TO TEST ALL SYSTEMS AND REPAIR OR REPLACE ALL DEFECTIVE WORK TO THE SATISFACTION OF THE ENGINEER AND CITY OF FORT LAUDERDALE.

14. ALL EQUIPMENT FURNISHED AND INSTALLED BY THE CONTRACTOR SHALL BE GUARANTEED AGAINST DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE OF ENTIRE PROJECT.

15. COORDINATE ALL ELECTRICAL EQUIPMENT, LOCATIONS, AND POWER REQUIREMENTS AND VERIFY ALL OBSTRUCTIONS WITH ALL SUBCONTRACTORS AND EQUIPMENT SUPPLIERS PRIOR TO ANY INSTALLATION.

16. THE DRAWINGS ARE NOT INTENDED TO SHOW THE EXACT LOCATION OF CONDUIT RUNS. THESE ARE TO BE COORDINATED WITH OTHER TRADES SO THAT CONFLICTS ARE AVOIDED PRIOR TO INSTALLATIONS.

17. AIRFIELD CONDUCTORS SHALL BE FAA APPROVED 5KV L–824 CABLE. GROUND CONDUCTORS SHALL BE 600V, XHHW. COUNTERPOISE SHALL BE BARE #6 SOLID COPPER UNLESS OTHERWISE INDICATED.

18. SCHEDULE 40 PVC SHALL BE USED UNDERGROUND. ALL ABOVE GROUND CONDUITS SHALL BE RIGID GALVANIZED STEEL. MINIMUM CONDUIT SIZE SHALL BE 3/4".

19. FLEXIBLE CONDUITS SHALL BE USED TO TERMINATE ALL MOTORS AND OTHER VIBRATING EQUIPMENT AND SHALL BE BETWEEN 18" AND 3' IN LENGTH.

20. TYPEWRITTEN PANEL SCHEDULES SHALL BE INSTALLED IN EACH PANELBOARD AND TERMINAL BLOCK SCHEDULES IN EACH CONTROL CABINET.

21. ALL REFERENCES TO A MANUFACTURER ARE GIVEN ON AN "FAA APPROVED EQUAL" BASIS.

22. ALL SPARE CONDUITS SHALL HAVE PULL STRINGS AND BE CAPPED WITH A PVC CAP.

23. ALL CIRCUITS SHALL BE IDENTIFIED IN PULL BOXES, LIGHTING FIXTURES, MANHOLES, BASE CANS, JUNCTION CANS, AND PANELBOARDS. IDENTIFICATIONS SHALL MATCH PANEL SCHEDULE.

24. EXPOSED RUNS OF CONDUITS SHALL BE INSTALLED WITH RUNS PARALLEL OR PERPENDICULAR TO WALL, STRUCTURAL MEMBERS OR INTERSECTIONS OF VERTICAL PLANES AND CEILINGS, WITH RIGHT ANGLE TURNS CONSISTING OF SYMMETRICAL BENDS OR PULL BOXES AS INDICATED ON THE DRAWINGS. BENDS AND OFFSETS SHALL BE AVOIDED WHERE POSSIBLE.

25. ALL CONDUITS PENETRATING RATED FIRE WALLS OR RATED FIRE FLOORS SHALL BE U.L. APPROVED DEVICES TO MAINTAIN THE FIRE RATING OF THE FLOOR OR WALL PENETRATED.

26. BALANCE ALL LOADS AT END OF PROJECT WITH ALL LIGHTS ON.

GENERAL INSTALLATION NOTES:

1. INFORMATION PROVIDED ON THE DRAWINGS FOR EXISTING UTILITIES, CABLES, DUCTS, MANHOLES, FIXTURES, ETC. ARE APPROXIMATE AND ARE NOT INTENDED TO PROVIDE EXACT LOCATIONS, TYPE OF COMPONENT OR MANNER OF CONSTRUCTION AND SHOULD NOT BE SCALED FROM DRAWINGS. THE LOCATION OF MANHOLES, PULL BOXES, JUNCTION BOXES, ETC. ALONG WITH THE ROUTE(S) (AND IDENTIFICATION) FOR CIRCUITS SHOWN ON THE DRAWINGS SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND SATISFY HIMSELF/HERSELF AS TO THE LOCATION OF ALL UNDERGROUND FACILITIES WITHIN THE AREA OF CONSTRUCTION. THE CONTRACTOR SHALL REQUEST TO THE RESIDENT OF PROJECT REPRESENTATIVE IN WRITING FOR ALL RECORD DRAWINGS OF THE AREA IN CONSTRUCTION. THE CONTRACTOR SHALL REVIEW ALL RECORD DRAWINGS AND BECOME FAMILIAR WITH EXISTING CONDITIONS PRIOR TO ANY CONSTRUCTION. ALL EXISTING UTILITIES, CABLES, EQUIPMENT, DEVICES DAMAGED IN THE COURSE OF THIS CONTRACT SHALL BE IMMEDIATELY REPAIRED AT THE EXPENSE OF THE CONTRACTOR TO THE SATISFACTION OF THE OWNER. WHERE ANY ITEM IS FOUND TO BE LOCATED DIFFERENTLY THAN IS SHOWN ON THE DRAWINGS, THE ACTUAL LOCATION SHALL BE IMMEDIATELY MEASURED AND RECORDED ON THE RECORD DRAWING.

2. VARIOUS DIRECT BURIED FAA CABLES PASS THROUGH THE WORK AREA. THESE CABLES SERVE FAA FACILITIES (NAVAIDS) WHICH ARE CRITICAL FOR SAFE AIRPORT OPERATION. IT IS OF THE UTMOST IMPORTANCE THAT DAMAGE TO THESE CABLES BE PREVENTED. CABLE LOCATIONS SHOWN ON THE DRAWINGS ARE BASED ON THE BEST INFORMATION AVAILABLE, BUT ARE NOT INTENDED TO BE PRECISE. THE CONTRACTOR IS SPECIFICALLY WARNED AGAINST SCALING FAA CABLE LOCATIONS FROM THE APPROXIMATE DATA SHOWN ON DRAWINGS. THE CONTRACTOR SHALL KEEP THE RESIDENT PROJECT REPRESENTATIVE INFORMED OF HIS EXCAVATION SCHEDULE AND OPERATIONS AT LEAST FIVE WORKING DAYS IN ADVANCE. THE CONTRACTOR SHALL NOTIFY THE FAA AND OTHER UTILITY COMPANIES AND REQUEST THAT THE CABLES AND UTILITIES BE STAKED IN THE FIELD. EVEN AFTER THE CABLES AND UTILITIES ARE STAKED, THE CONTRACTOR SHALL USE ELECTRONIC DETECTION DEVICES AND CAREFUL HAND EXCAVATION TO LOCATE CABLES AND UTILITIES. AFTER CABLES AND UTILITIES ARE LOCATED, CONTRACTOR SHALL SPECIFY EXACT LOCATIONS (STATIONING, OFFSET, ELEVATION, AND TYPE OF CABLE AND UTILITIES) AND SHALL BE ACCURATELY MEASURED AND RECORDED ON THE RECORD DRAWING. COPIES OF THIS MEASUREMENT AND RECORDING OF THE DATA SHALL BE CONSIDERED AN IMPORTANT PART OF THE CONTRACT REQUIREMENTS. WHEN ENCASING EXISTING FAA CABLES IN DUCT OR OTHERWISE EXCAVATING IN THEIR VICINITY, CONTRACTOR SHALL USE EXTREME CAUTION TO AVOID DAMAGING CABLES AND UTILITIES. ANY DAMAGE, EVEN IF APPEARING TO BE SUPERFICIAL, SHALL BE IMMEDIATELY REPORTED TO THE RESIDENT PROJECT REPRESENTATIVE.

3. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING UTILITY COMPANIES AND FAA TO IDENTIFY AND LOCATE ANY UNDERGROUND UTILITIES AND/OR CABLE WITHIN THE PROJECT LIMITS. THE CONTRACTOR SHALL ASSIST UTILITY COMPANIES IN EFFORTS TO FIELD VERIFY UNDERGROUND UTILITIES. THE CONTRACTOR SHALL REVIEW ALL AIRFIELD UTILITIES WITH AIRFIELD MAINTENANCE BEFORE BEGINNING WORK.

4. TEMPORARY WIRING SHALL BE REQUIRED TO MAINTAIN THE TAXIWAY EDGE LIGHTING SYSTEM AND RUNWAY EDGE LIGHT SYSTEMS INCLUDING LIGHTED SIGNS AND HOLD BARS. EDGE LIGHTING, SIGNS AND HOLD BARS TEMPORARY TAKEN OUT OF SERVICE SHALL BE RETURNED TO OPERATING CONDITION AT THE END OF EACH WORK PERIOD. CONTRACTOR SHALL PROVIDE TEMPORARY CABLES DURING CONSTRUCTION FOR TEMPORARY LIGHTS. TAXIWAY/RUNWAY EDGE LIGHTS SHALL REMAIN IN OPERATING CONDITION FOR ALL TAXIWAYS WHICH ARE OR COULD BE OPENED TO TRAFFIC AT THE END OF THE WORK PERIOD. OTHER LIGHTING SYSTEMS WITHIN THE WORK AREA, WHICH WILL BE TAKEN OUT OF SERVICE WHEN REQUIRED BY CONSTRUCTION SHALL BE RESTORED AT THE EARLIEST POSSIBLE DATE. IT IS NOT PERMISSIBLE TO ALLOW PORTIONS OF EXISTING SYSTEMS EXTENDING BEYOND THE WORK AREA TO BE AFFECTED. TEMPORARY WIRING SHALL BE PROVIDED TO MAINTAIN CONTINUITY OF TAXIWAY EDGE LIGHTS, SIGNAGE AND RUNWAY EDGE LIGHTS, ETC. EXTENDING BEYOND THE WORK AREA.

5. TEMPORARY CABLE SHALL BE INSTALLED IN CONDUIT AND ANCHORED AT FREQUENT INTERVALS TO PREVENT MOVING. IF TEMPORARY CABLES MUST BE INSTALLED IN AREAS SUBJECT TO VEHICULAR TRAFFIC, CABLES SHALL BE INSTALLED IN RIGID GALVANIZED STEEL CONDUIT ANCHORED AT FREQUENT INTERVALS TO PREVENT MOVING. ALL TEMPORARY CABLES SHALL BE CLEARLY LABELED AND MARKED SO AS TO BE VISIBLE FROM A DISTANCE. SOME JUMPERS MAY BE OF SIGNIFICANT LENGTH, SEE PHASING DRAWINGS FOR ADDITIONAL INFORMATION.

6. PRIOR TO WORKING ON ANY CIRCUIT, THE CONTRACTOR SHALL PROVIDE TO THE ELECTRICAL MAINTENANCE DEPARTMENT A WRITTEN LOCKOUT PROCEDURE FOR APPROVAL. THE ELECTRICAL MAINTENANCE DEPARTMENT SHALL REVIEW AND STATE FINAL LOCKOUT RULES. CONTRACTOR SHALL NOT RELY UPON DEACTIVATION OF THE CIRCUITS BY THE TOWER OR BY OTHERS. CONTRACTOR SHALL NOTIFY ELECTRICAL MAINTENANCE 48 HOURS PRIOR TO LOCKOUT/TAGOUT.

7. THERE SHALL BE NO SPLICES OF CONDUCTORS BETWEEN LIGHTS OR IN CONDUITS OR DUCTS. SPLICES SHALL BE PERMITTED IN MANHOLES, JUNCTION BOXES, LIGHT BASES, AND OTHER APPROVED LOCATIONS USING L–823 CONNECTORS.

8. CONTRACTOR SHALL IDENTIFY ALL CABLES IN AFFECTED MANHOLES AND BASE CANS. CONTRACTOR SHALL USE A MINIMUM OF OF 1–STAINLESS STEEL TAG PER CABLE AND 1–TAG ON EACH SIDE OF A L–823 CONNECTOR.WHEN CONTRACTOR IS WORKING WITH EXISTING CONDUITS, HE/SHE SHALL REMOVE ALL ABANDONED CABLES WITHIN PROJECT LIMITS AND IDENTIFY ALL ACTIVE CIRCUITS ON RECORD DRAWINGS.

9. CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING ALL CABLE ROUTING AND CIRCUIT DESIGNATIONS ON THE RECORD DRAWINGS.

10. CONTRACTOR SHALL PROVIDE AND INSTALL CONCRETE DUCT/CABLE MARKERS AS PER FAA SPECIFICATIONS. CONTRACTOR SHALL MARK THE LOCATION OF ALL NEW DUCT BANKS WITH CONCRETE DUCT MARKERS IN UNPAVED AREAS SPACED NOT MORE THAN 200' APART AND WITH PAINTED MARKINGS AT THE EDGE OF PAVED AREAS.

11. CONTRACTOR SHALL PROVIDE ALL CONNECTOR KITS, TESTING, STAINLESS TAGS, AND ALL INCIDENTALS THAT WILL ALLOW FOR QUALITY ASSURANCE OF SUCCESSFULLY DISCONNECTING AND RECONNECTING CIRCUITS.

12. COLOR CODE ALL PHASE WIRING BY THE USE OF COLORED WIRE INSULATION AND/OR COLORED TAPE. WHERE TAPE IS USED, THE WIRE INSULATION SHALL BE BLACK. BLACK, RED AND BLUE SHALL BE USED FOR THREE–PHASE, 120/208V SYSTEMS. NEUTRAL CONDUCTORS, SIZE NO. 6 AWG OR SMALLER, SHALL BE IDENTIFIED BY A CONTINUOUS WHITE OR NATURAL GRAY OUTER FINISH ALONG ITS ENTIRE LENGTH. NEUTRAL CONDUCTORS LARGER THAN NO. 6 AWG SHALL BE IDENTIFIED EITHER BE CONTINUOUS WHITE OR NATURAL GRAY OUTER FINISH ALONG ITS ENTIRE LENGTH OR BY THE USE OF WHITE TAPE AT ITS TERMINATIONS AND INSIDE ACCESSIBLE WIREWAYS.

13. ALL IDENTIFICATION OF CONTROL PANEL INSTALLATIONS, CONSTANT CURRENT REGULATORS, BREAKER LABELS, ETC. SHALL BE PERFORMED BY THE CONTRACTOR. THE CONTRACTOR SHALL RECORD ALL CALLOUT CHANGES ON THE "RECORD" DRAWINGS FOR THIS PROJECT.

14. NAMEPLATES SHALL BE PROVIDED FOR ALL ELECTRICAL EQUPMENT TO IDENTIFY FUNCTION, CIRCUIT, VOLTAGE, AND PHASE. WHERE EQUIPMENT CONTAINS FUSES, INCLUDE THE FUSE RATINGS.

15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL CABLES AND UTILITIES, THEIR DEPTHS, ETC. INCLUDING THE USE OF SOFT DIG, GROUND PENETRATING RADAR OR OTHER MEANS AVAILABLE TO ACCURATELY LOCATE ALL CABLES AND UTILITIES AND TO SURVEY AND STAKE THOSE CABLES AND UTILITIES ON RECORD DRAWINGS PRIOR TO CONSTRUCTION.

16. ALL EXISTING CONDUCTORS SHALL BE TESTED FOR INSULATION RESISTANCE PRIOR TO WORKING ON CIRCUIT, USING A 1000V MEGOHMMETER AND SHALL BE RETURNED TO SERVICE WITH MATCHING OR BETTER INSULATION RESISTANCE READINGS. ALL PROPOSED CONDUCTORS SHALL BE TESTED FOR INSULATION RESISTANCE PRIOR TO CONNECTING TO EXISTING CIRCUIT, USING A 1000V MEGOHMMETER. CIRCUITS OR NEW PORTIONS OF CIRCUITS SHALL BE AS COMPLETE AS POSSIBLE FOR TESTING. ALL TESTING SHALL BE WITNESSED BY THE RESIDENT PROJECT REPRESENTATIVE AND REPORT TURNED OVER TO OWNER.

17. CONNECTION OF CONDUCTORS MUST BE MADE BY USING CRIMP CONNECTORS AND CRIMPING TOOL APPROVED BY THE CONNECTOR/LUG MANUFACTURER. THE TOOL MUST PRODUCE A COMPLETE CRIMP BEFORE IT CAN BE REMOVED. THE CRIMPING TOOL USED MUST BE LISTED BY THE L–823 KIT MANUFACTURER. MAKE THE NUMBER AND TYPE OF CRIMPS PER KIT MANUFACTURER'S INSTRUCTIONS. ELECTRICIANS THAT WILL BE MAKING CONNECTOR KIT TERMINATIONS SHALL BE TRAINED AND CERTIFIED BY THE CONNECTOR KIT MANUFACTURER.

18. THE OWNER SHALL HAVE THE RIGHT TO SALVAGE MATERIALS THAT ARE TO BE REMOVED IN THE DEMOLITION PLANS. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER PRIOR TO DEMOLITION AND DELIVER SALVAGE MATERIAL TO THE AIRPORT ELECTRICAL MAINTENANCE.

19. CONTRACTOR SHALL INSTALL NEW CARBON STEEL COATED BOLTS COLORED ORANGE IN ALL EXISTING LIGHT BASE CANS, SIGN CANS, JUNCTION CANS, JUNCTION CAN PLAZAS AND ETC., THAT THE CONTRACTOR UTILIZES TO INSTALL CABLE. ADDITIONALLY, THE CONTRACTOR SHALL DRILL AND TAP OUT ANY DAMAGED AND/OR MISSING BOLTS AT THESE LOCATIONS AND INSTALL NEW STAINLESS STEEL (SS) ID TAGS AS REQUIRED. COST SHALL BE INCIDENTAL TO THE LINE ITEMS FOR INSTALLATION/INTERCEPTION.

20. ALL BOLTS FOR LIGHT FIXTURES, SIGNS AND JUNCTION CANS SHALL BE FLUOROPOLYMER METALLIC–CERAMIC COATED SAE J429 GRADE 5 CARBON STEEL BOLTS PER FAA ENGINEERING BRIEF 84A AND MEET FAA REQUIREMENTS. BOLT COATING PREFERENCE SHALL BE ORANGE. THE BASE CAN COVER MOUNTING BOLTS SHALL EXTEND THRU THE BASE CAN MOUNTING FLANGE INTO THE BASE CAN A MINIMUM OF 0.75 INCH BEYOND MACHINED THREAD SYSTEM. THE BOLTS SHALL HAVE ENOUGH THREAD LENGTH SO THEY DO NOT SHOULDER OUT BEFORE THE COVER IS SECURELY TIGHTENED.

21. CONTRACTOR TO USE LOCTITE LB8023 MARINE GRADE ANTI–SEIZE OR APPROVED EQUAL ON COUPLINGS AND ANY APPLICATION WHERE ANTI–SEIZE IS REQUIRED. ANTI–SEIZE SHALL NOT BE USED WITH COATED CARBON STEEL BOLTS.

22. UPON A COMPLETION OF THE INSTALLATION AND PRIOR TO A SUBSTANTIAL COMPLETION INSPECTION THE CONTRACTOR SHALL CLEAN AND VACUUM ALL JUNCTION/ BASE CANS, NEW AND EXISTING,THAT WERE INSTALLED/ AFFECTED IN THE PROJECT. CANS SHALL BE LEFT FREE OF ALL TRASH, DIRT AND DEBRIS.

23. ALL COSTS ASSOCIATED WITH THE CIRCUIT IDENTIFICATION AS SHOWN IN THE DRAWINGS, INCLUDING BUT NOT LIMITED TO STAINLESS STEEL CIRCUIT TAGS, COLORED TAPE/HEAT SHRINK, CONCRETE DUCT MARKERS, JUNCTION CAN PLAZA IDENTIFICATION AND FIXTURE MARKER TAGS SHALL BE INCLUSIVE TO THE PAY ITEM FOR THE ITEM BEING INSTALLED NO SEPARATE PAYMENT WILL BE MADE.

24. AFTER LEVELING, THE CONTRACTOR SHALL ADJUST THE ASYMMETRIC LENS OF EACH OPTICAL SYSTEM SO THAT THE TWO CONCENTRATED BEAMS OF LIGHT SHINE UP AND DOWN THE RUNWAY OR TAXIWAY AND ARE "TOED IN" SYMMETRICALLY TOWARD THE CENTERLINE OF RUNWAY OR TAXIWAY. FINAL ADJUSTMENT OF ASYMMETRIC LENSES SHALL BE MADE AT NIGHT AND SHALL BE TO THE SATISFACTION OF THE RPR.

25. THE FINISHED PAVEMENT SURFACE SHALL BE PROTECTED FROM FOREIGN SUBSTANCES WHICH COULD CAUSE STAINING, I.E., OIL, P–605, JOINT SEALING FILLER ETC. THE CONTRACTOR SHALL IMMEDIATELY CLEAN ALL SPILLS AND CORRECT/CLEAN ANY STAINED SURFACES AT THE CONTRACTOR'S EXPENSE.

26. SODDING OF DISTURBED AREAS SHALL BE AS SPECIFIED IN SPECIFICATION T–904 SODDING. COST OF SODDING SHALL BE INCLUSIVE TO THE ELECTRICAL PAY ITEM INSTALLED.

State of Florida
Professional Engineer
License No. 73735
AMY CHAMPAGNE-BAKER

DRAWN BY: RJC | DATE: 06/30/2025
DESIGNED BY: ALC | SCALE: AS NOTED
CHECKED BY: JWK | FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

100% SUMBITTAL

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
ELECTRICAL GENERAL NOTES

SHEET NO. E001 | OF
TOTAL: 21
CAD FILE: 12706–E001–NOTE
DRAWING FILE NO.

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
5571 N. University Dr., Suite 101
Coral Springs, FL 33067
561–210–9224
LIC.CENSE NO. CA/30805

C:\USERS\ACHAM\QEE DROPBOX\QUANTUM PROJECTS\KHA KIMLEY HORN\KHA2403 FXE TAXIWAY B AND Q\DWG\12706–E003–KMAP.DWG

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	NEW L-861T(L), LED, MITL, ELEVATED T/W EDGE LIGHT MOUNTED ON A NEW L-867 BASE CAN INSTALLED IN EARTH/ROCK WITH PROPERLY SIZED L-830 TRANSFORMER AND L-823 CONNECTORS.
EP	NEW L-861T(L), LED, MITL, ELEVATED T/W EDGE LIGHT MOUNTED ON A NEW TELESCOPIC L-867 BASE CAN INSTALLED IN EXISTING PAVEMENT WITH PROPERLY SIZED L-830 TRANSFORMER AND L-823 CONNECTORS.
Y W	NEW L-862(L),LED LAMP, HIRL, ELEVATED RUNWAY EDGE LIGHT MOUNTED ON A EXISTING L-868 BASE CAN WITH A NEW SPACER RINGS, NEW BASE PLATE AND PROPERLY SIZED L-830 TRANSFORMER AND L-823 CONNECTORS. VERIFY BOLT PATTERN W Y = WHITE/YELLOW LENS W W = WHITE/WHITE
Y W EP	RE-INSTALL L-862(L),LED LAMP, HIRL, ELEVATED RUNWAY EDGE LIGHT MOUNTED ON A NEW L-867 TELESCOPIC BASE CAN INSTALLED IN EXISTING PAVEMENT WITH NEW PROPERLY SIZED L-830 TRANSFORMER AND L-823 CONNECTORS. W Y = WHITE/YELLOW LENS W W = WHITE/WHITE
	NEW DIRECT BURIED SCHEDULE 40 PVC CONDUIT INSTALLED IN EARTH, COUNTERPOISE SHALL BE INSTALLED ABOVE CONDUIT PER DETAIL. SEE PLANS FOR AMOUNT/SIZE AND LOCATION OF CONDUITS.
	NEW CONCRETE ENCASED SCHEDULE 40 PVC CONDUIT INSTALLED IN NEW FULL STRENGTH PAVEMENT, COUNTERPOISE SHALL BE INSTALLED ABOVE CONDUIT PER DETAIL. SEE PLANS FOR AMOUNT/SIZE AND LOCATION OF CONDUITS.
	NEW CONCRETE ENCASED SCHEDULE 40 PVC CONDUIT INSTALLED IN EXISTING FULL STRENGTH PAVEMENT, COUNTERPOISE SHALL BE INSTALLED ABOVE CONDUIT PER DETAIL. SEE PLANS FOR AMOUNT/SIZE AND LOCATION OF CONDUITS. CONTRACTOR SHALL REPAIR PAVEMENT ACCORDINGLY.
#	NEW L-858(L), LED, SIZE 1 AIRFIELD GUIDANCE SIGN ON NEW CONCRETE BASE INSTALLED IN EARTH. REFER TO LIGHTED SIGN SCHEDULES FOR ADDITIONAL INFORMATION. # = SIGN NUMBER
EP #	NEW L-858(L), LED, SIZE 1 AIRFIELD GUIDANCE SIGN ON NEW CONCRETE BASE INSTALLED IN EXISTING PAVEMENT. REFER TO LIGHTED SIGN SCHEDULES FOR ADDITIONAL INFORMATION. # = SIGN NUMBER
#	REPANEL EXISTING L-858(L), LED, SIZE 1 AIRFIELD GUIDANCE SIGN. REFER TO LIGHTED SIGN SCHEDULES FOR ADDITIONAL INFORMATION. # = SIGN NUMBER
#	NEW L-867 16" DIA X 24" DEEP BOTTOMLESS JUNCTION CAN PLAZA INSTALLED IN EARTH. SEE JUNCTION CAN SCHEDULE FOR NUMBER OF CAN PER PLAZA AND CIRCUIT FOUND IN EACH CAN. SYMBOL SHOW IS TYPICAL OF A 6 CAN JUNCTION CAN PLAZA.
	NEW 3/4" X 20' MIN. GROUND ROD, EXOTHERMICALLY WELDED AND CONNECTED TO COUNTERPOISE SYSTEM AT A MAX OF 500' SPACING
2-X 1C #-1W2"	2-X – 2 INDICATES NUMBER OF CONDUCTORS, X INDICATES CIRCUIT ID 1C – 1 INDICATES NUMBER OF #6 SOLID COUNTERPOISE 1W2" – 1 INDICATES NUMBER OF CONDUITS, 2 INDICATES CONDUIT SIZE #= QUANTITY OF CONDUITS
2-X 1W2"	2-X – 2 INDICATES NUMBER OF CONDUCTORS, X INDICATES CIRCUIT ID 1W2" – 1 INDICATES NUMBER OF EXISTING CONDUITS, 2 INDICATES EXISTING CONDUIT SIZE
	DEMOLISH OR MODIFY ITEM, SEE NOTES FOR INFORMATION
# Yx (#) Yx	SEE DEMOLITION AND INSTALLATION NOTES # = INDICATES THE NOTE NUMBER Yx = INDICATES THE QUANTITY OF NOTES PER LOCATION
	EXISTING ELEVATED TAXIWAY EDGE LIGHT
	EXISTING RUNWAY EDGE LIGHT
	EXISTING INPAVEMENT FLUSH MOUNTED RUNWAY GUARD LIGHT
	EXISTING ELEVATED RUNWAY GUARD LIGHT
#	EXISTING AIRFIELD GUIDANCE SIGN # = SIGN NUMBER
M	EXISTING FAA MALS THRESHOLD LIGHT
B	EXISTING JUNCTION CAN
	EXISTING WINDCONE
	EXISTING L-867 JUNCTION CAN PLAZA.
	EXISTING CONDUIT SYSTEM
AFL	EXISTING AIRFIELD LIGHTING DUCTBANK
FAA	EXISTING FAA CABLE/CONDUIT
FPL	EXISTING FPL CABLE/CONDUIT
FOC	EXISTING COMMUNICATIONS CONDUIT/DUCTBANK
TSA	TAXIWAY SAFETY AREA
RSA	RUNWAY SAFETY AREA
TOFA	TAXIWAY OBJECT FREE AREA

NOTE: SYMBOL SIZES ARE NOT SHOWN TO SCALE FOR CLARITY ON THE PLAN SHEETS.

DEMOLITION NOTES

1. CONTRACTOR SHALL DISCONNECT, REMOVE AND DISPOSE OF THE EXISTING ELEVATED EDGE LIGHT, CONDUCTORS, TRANSFORMER AND BASE CAN. BACKFILL AND RESTORE SOD/PAVEMENT ACCORDINGLY. PROVIDE, MAINTAIN AND INSTALL TEMPORARY CONDUITS AND CONDUCTOR SYSTEMS TO MAINTAIN CIRCUITS BEYOND WORK AREA IN OPERATIONAL CONDITION AT ALL TIMES DURING CONSTRUCTION. THE LINE ITEM COST SHALL INCLUDE DEWATERING EXISTING CONDUITS, DUCTBANKS, BASE CANS AND MANHOLE.

2. CONTRACTOR SHALL DISCONNECT, REMOVE AND DISPOSE OF THE EXISTING ELEVATED EDGE LIGHT, CONDUCTORS AND TRANSFORMER. PROVIDE AND INSTALL NEW L-867 COVER AND ABANDON CAN IN PLACE. PROVIDE, MAINTAIN AND INSTALL TEMPORARY CONDUITS AND CONDUCTOR SYSTEMS TO MAINTAIN CIRCUITS BEYOND WORK AREA IN OPERATIONAL CONDITION AT ALL TIMES DURING CONSTRUCTION. THE LINE ITEM COST SHALL INCLUDE DEWATERING EXISTING CONDUITS, DUCTBANKS, BASE CANS AND MANHOLE.

3. CONTRACTOR SHALL DISCONNECT AND REMOVE THE EXISTING FLUSH MOUNTED EDGE LIGHT AND TRANSFORMER AND DELIVER TO OWNER. CORE DRILL, REMOVE AND DISPOSE OF EXISTING TOP SECTION, SPACER RINGS AND DAM RING. THE EXISTING BASE CAN BOTTOM SECTION SHALL REMAIN. DRILL AND TAP EXISTING BOLT HOLES TO REMOVE BROKEN BOLTS. PROVIDE AND INSTALL A NEW ELEVATED EDGE LIGHT FIXTURE, TRANSFORMER, TOP SECTION AND SPACER RINGS ON EXISTING BASE CAN BOTTOM SECTION. PROVIDE, MAINTAIN AND INSTALL TEMPORARY CONDUITS AND CONDUCTOR SYSTEMS TO MAINTAIN CIRCUITS BEYOND WORK AREA IN OPERATIONAL CONDITION AT ALL TIMES DURING CONSTRUCTION. THE LINE ITEM COST SHALL INCLUDE DEWATERING EXISTING CONDUITS, DUCTBANKS, BASE CANS AND MANHOLES.

4. CONTRACTOR SHALL DISCONNECT THE EXISTING AIRFIELD GUIDANCE SIGN FROM THE LIGHTING CIRCUIT, AND PULL BACK THE EXISTING CONDUCTORS TO THE EXISTING LIGHT FIXTURE/JUNCTION CAN/MANHOLE AND RECONNECT THE EXISTING CONDUCTORS TO REMOVE THE SIGN FROM THE CIRCUIT. REMOVE AND DISPOSE OF THE EXISTING CONCRETE BASE, TRANSFORMER, CONDUITS, CABLES AND SIGN. BACKFILL AND RESTORE SOD ACCORDINGLY. PROVIDE, MAINTAIN AND INSTALL TEMPORARY CONDUITS AND CONDUCTOR SYSTEMS TO MAINTAIN CIRCUITS BEYOND WORK AREA IN OPERATIONAL CONDITION AT ALL TIMES DURING CONSTRUCTION. SEE THE PHASING PLANS FOR SEQUENCING OF WORK. THE LINE ITEM COST SHALL INCLUDE DEWATERING OF EXISTING CONDUITS, DUCTBANKS, BASE CANS AND MANHOLES.

5. CONTRACTOR SHALL REMOVE AND DISPOSE OF THE EXISTING GUIDANCE SIGN LEGEND AND REPANEL GUIDANCE SIGN, REFER TO SIGN SCHEDULE FOR ADDITIONAL INFORMATION.

6. CONTRACTOR SHALL DISCONNECT THE EXISTING AIRFIELD GUIDANCE SIGN FROM THE LIGHTING CIRCUIT, AND PULL BACK THE EXISTING CONDUCTORS TO THE EXISTING LIGHT FIXTURE/JUNCTION CAN/MANHOLE AND RECONNECT THE EXISTING CONDUCTORS TO REMOVE THE SIGN FROM THE CIRCUIT. REMOVE AND DISPOSE OF THE EXISTING TRANSFORMER, CONDUITS, CABLES AND SIGN. ABANDON EXISTING SIGN PAD IN PLACE. PROVIDE, MAINTAIN AND INSTALL TEMPORARY CONDUITS AND CONDUCTOR SYSTEMS TO MAINTAIN CIRCUITS BEYOND WORK AREA IN OPERATIONAL CONDITION AT ALL TIMES DURING CONSTRUCTION. SEE THE PHASING PLANS FOR SEQUENCING OF WORK. THE LINE ITEM COST SHALL INCLUDE DEWATERING OF EXISTING CONDUITS, DUCTBANKS, BASE CANS AND MANHOLES.

7. CONTRACTOR SHALL SURVEY THE EXISTING LIGHT FIXTURE LOCATION, DISCONNECT FIXTURE AND STORE FOR RE-INSTALLATION. DISCONNECT, REMOVE AND DISPOSE OF THE EXISTING BASE CAN, CONDUCTORS AND TRANSFORMER. CONTRACTOR SHALL BACKFILL WITH CONCRETE. PROVIDE, MAINTAIN AND INSTALL TEMPORARY CONDUITS AND CONDUCTOR SYSTEMS TO MAINTAIN CIRCUITS BEYOND WORK AREA IN OPERATIONAL CONDITION AT ALL TIMES DURING CONSTRUCTION. THE LINE ITEM COST SHALL INCLUDE DEWATERING EXISTING CONDUITS, DUCTBANKS, BASE CANS AND MANHOLE.

8. CONTRACTOR SHALL HAND EXCAVATE AND CONCRETE ENCASE THE EXISTING FPL 1W2" CONDUIT WITH A MINIMUM OF A 3" CONCRETE ENCASEMENT. BACKFILL AND RESTORE SOD ACCORDINGLY.

INSTALLATION NOTES:

1. CONTRACTOR SHALL HAND EXCAVATE, LOCATE AND INTERCEPT EXISTING CONDUIT SYSTEM AND EXTEND TO NEW LIGHT BASE/JUNCTION CAN/SIGN. CLEAN OUT AND DEWATER THE EXISTING CONDUIT SYSTEM. CONTRACTOR SHALL INCLUDE DEWATERING IN THE LINE ITEM COST FOR THE INTERCEPTION OF THE CONDUIT SYSTEM.

2. CONTRACTOR SHALL HAND EXCAVATE, CORE DRILL THE EXISTING JUNCTION CAN/BASE CAN AND PROVIDE AND INSTALL NEW CONDUIT AND CONDUCTOR SYSTEM, COMPLETE. SEAL, PATCH AND REPAIR JUNCTION CAN/BASE CAN, BACKFILL AND SOD ACCORDINGLY AND MAKE ALL NECESSARY CONNECTIONS FOR A COMPLETE WORKING SYSTEM IN PLACE.

3. CONTRACTOR SHALL IDENTIFY AND INTERCEPT THE EXISTING CIRCUIT CONDUCTORS IN THE EXISTING BASE CAN/MANHOLE/JUNCTION CAN AND PROVIDE AND INSTALL NEW SPLICE KITS AND EXTEND THE NEW CIRCUIT CONDUCTORS ACCORDINGLY. MAKE ALL NECESSARY CONNECTIONS FOR A COMPLETE WORKING SYSTEM IN PLACE.

JUNCTION CAN IDENTIFICATION WITH CIRCUIT ID			
JCP ID	1	2	3
JCP-45	FW	FW	SP
JCP-46	FW	FW	SP
JCP-47	A	A	SP
JCP-48	A	A	SP
SP = SPARE CODUIT			

CIRCUIT ID:	TYPE OF CABLE	CABLE JACKET COLOR	CABLE TAPE COLOR
9W = RUNWAY 9-27 WEST CIRCUIT	#8, L-824, 5KV CABLE	BLACK	BLUE
A = TAXIWAY ALPHA CIRCUIT	#8, L-824, 5KV CABLE	BLACK	RED
FW = TAXIWAY FOXTROT WEST CIRCUIT	#8, L-824, 5KV CABLE	BLACK	BLACK

NOTE: PROVIDE AND INSTALL COLORED PHASE TAPE (3M ELECTRICAL VINYL) ON CABLES LOCATED IN EACH BASE CAN/ JUNCTION CAN/ MANHOLE. COLOR SHALL BE AS NOTED IN THE SCHEDULE ABOVE (CABLE ID COLOR). PROVIDE 1/2" WIDE TAPE WITH A MINIMUM OF 4 LAPS. THERE SHALL BE A MINIMUM OF ONE COLORED ID TAPE PER CABLE WHEN NO CONNECTOR KITS ARE PRESENT. WHEN CONNECTOR KITS ARE PRESENT, THERE SHALL BE ONE COLORED ID TAPE ON EACH CABLE END.

100% SUMBITTAL

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
8201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
5571 N. University Dr., Suite 101
Coral Springs, FL 33067
561-210-9224
LICENSE/NO. CA/30065

State of Florida
Professional Engineer
License No. 73735
AMY CHAMPAGNE-BAKER

DRAWN BY: RJC | DATE: 06/30/2025
DESIGNED BY: ALC | SCALE: AS NOTED
CHECKED BY: JWK | FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

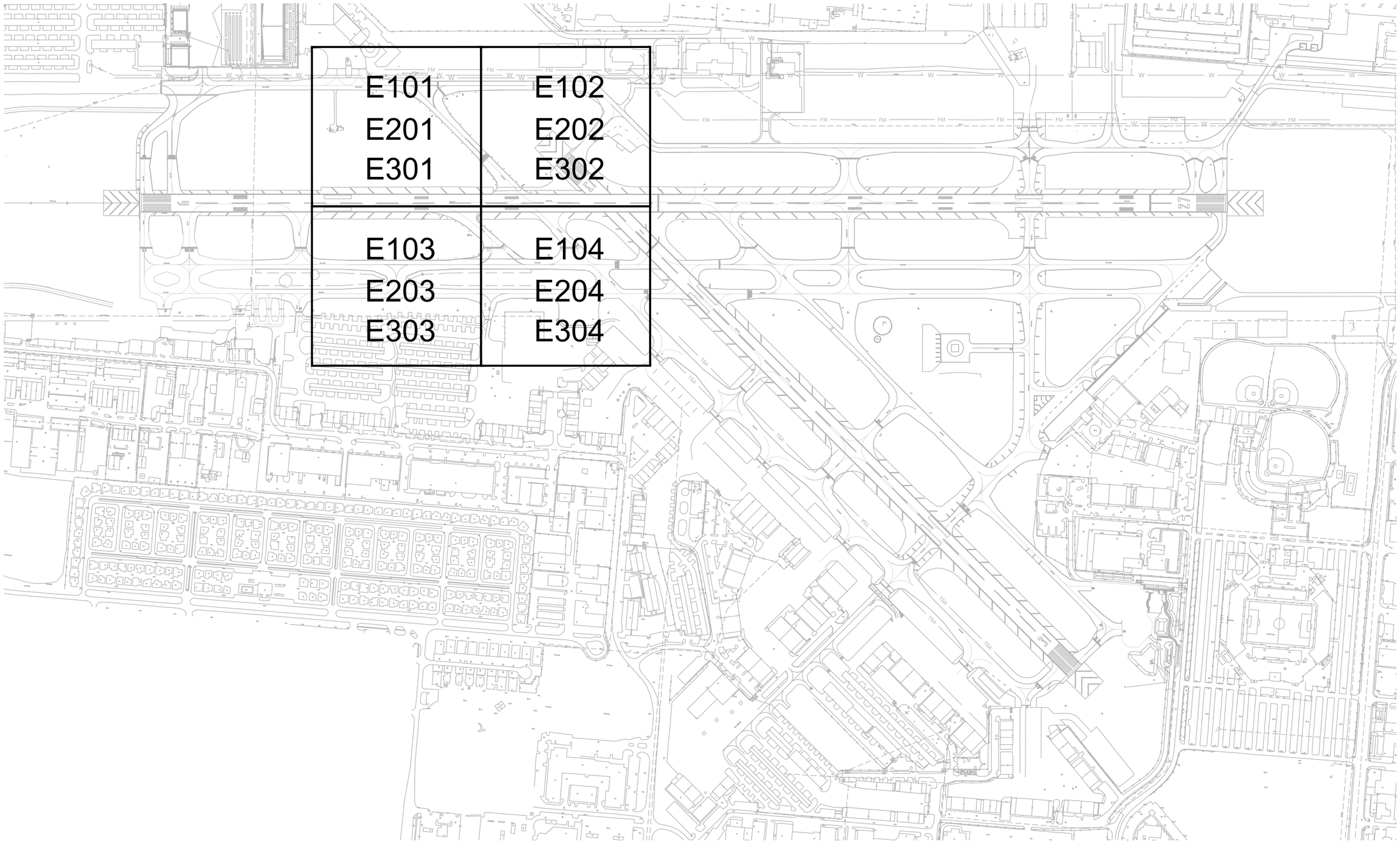
REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
ELECTRICAL LEGEND AND NOTES

SHEET NO. E002 | OF
TOTAL: 21
CAD FILE: 12706-E002-LEGD
DRAWING FILE NO.

C:\USERS\ACHAM\QEE DROPBOX\QUANTUM PROJECTS\KHA KIMLEY HORN\KHA2403 FXE TAXIWAY B AND Q\DWG\12706-E003-KMAP.DWG



State of Florida
Professional Engineer
License No. 73735

AMY
CHAMPAGNE-BAKER

DRAWN BY: RJC
DATE: 06/30/2025
DESIGNED BY: ALC
SCALE: AS NOTED
CHECKED BY: JWK
FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
ELECTRICAL KEY MAP

SHEET NO. E003 OF

TOTAL: 21

CAD FILE: 12706-E003-KMAP

DRAWING FILE NO.

100% SUMBITTAL

0 200' 400'

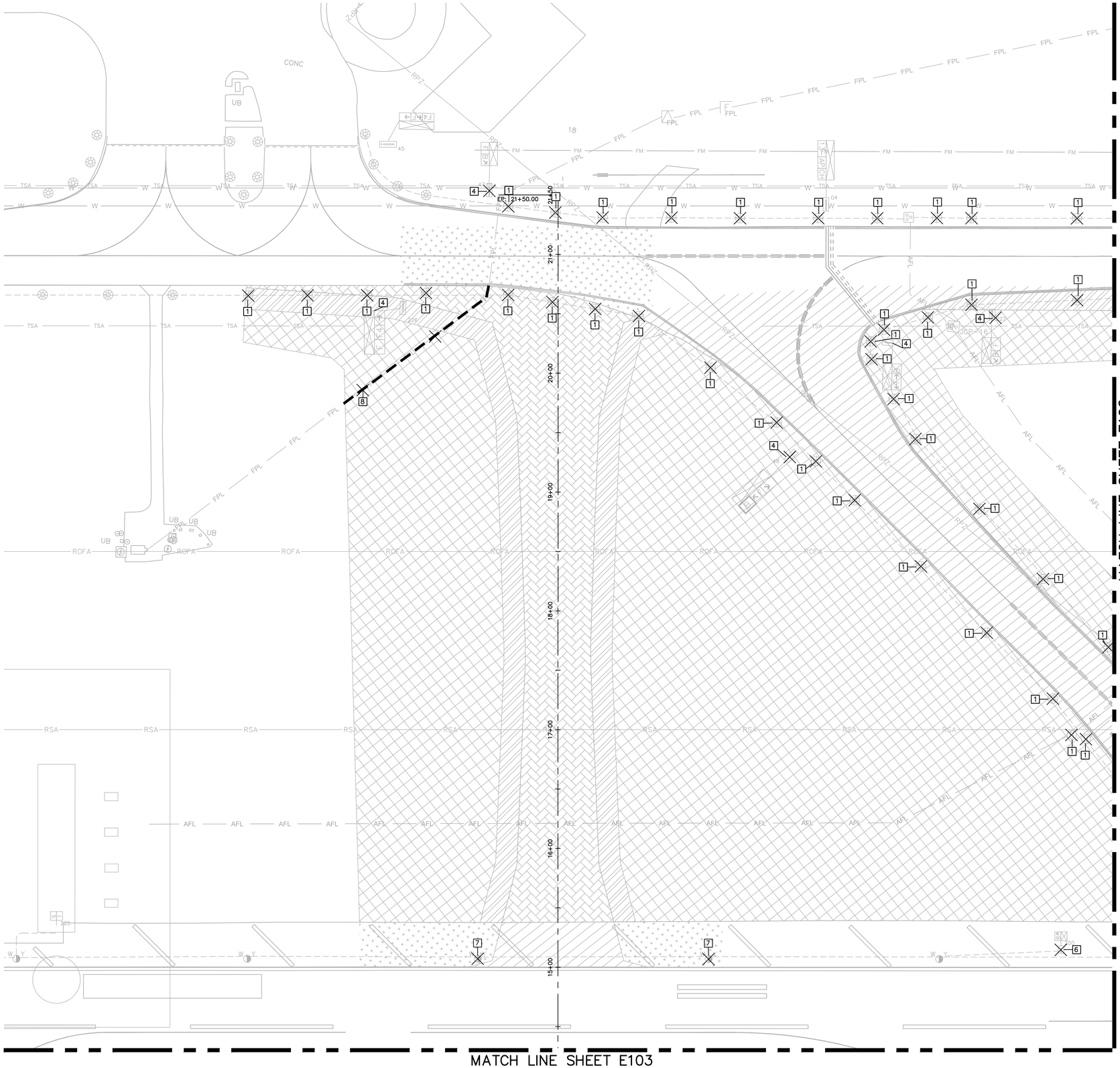
CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

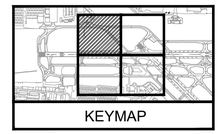
CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
5571 N. University Dr., Suite 101
Coral Springs, FL 33067
561-239-9224
LICENSE NO. CA30865

C:\USERS\ACHAM\QEE DROPBOX\QUANTUM PROJECTS\KHA KIMLEY HORN\KHA2403 FXE TAXIWAY B AND Q\DWG\12706-E003-KMAP.DWG





0 40' 80'

LEGEND (WORK)

- TAXIWAY BRAVO FULL DEPTH ASPHALT PAVEMENT REMOVAL.
- TAXIWAY ALPHA 4 FULL DEPTH ASPHALT PAVEMENT REMOVAL.
- CLEARING, GRUBBING AND REGRADING.
- FULL DEPTH EXCAVATION FOR NEW FULL STRENGTH TAXIWAY CONSTRUCTION.
- MAX 2" NOMINAL MILLING
- FULL DEPTH EXCAVATION FOR NEW STABILIZED SHOULDER

NOTES

1. SEE SHEET E002 FOR DEMOLITION NOTES AND LEGEND.

WARNING!!! WARNING!!! WARNING!!!
THERE ARE A NUMBER OF AIRPORT, PUBLIC UTILITIES, AND FAA LIGHTING, COMMUNICATIONS, UNDERGROUND CABLES AND PIPES TRAVERSING THE AIRFIELD PAVEMENTS AREAS. THE ENGINEER HAS MADE EVERY ATTEMPT TO SHOW THE APPROXIMATE LOCATION OF ALL ITEMS. HOWEVER, THE ENGINEER IS NOT RESPONSIBLE FOR SHOWING OR LOCATING EVERY ITEM CURRENTLY IN PLACE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE EVERY ITEM LOCATED, FLAGGED, AND IDENTIFIED PRIOR TO STARTUP OF CONSTRUCTION. ANY DAMAGE DONE TO ANY OF THE EXISTING ITEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL REPAIR ANY ITEM DAMAGED, CAUSED BY THEIR ACTIONS, WITH NO ADDITIONAL COMPENSATION.

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.
CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
8201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
5571 N. University Dr., Suite 101
Coral Springs, FL, 33067
561-210-9224
LICENSE NO. CA16805

100% SUMBITTAL

State of Florida
Professional Engineer
License No. 73735
AMY CHAMPAGNE-BAKER

DRAWN BY:	RJC
DATE:	06/30/2025
DESIGNED BY:	ALC
SCALE:	AS NOTED
CHECKED BY:	JWK
FIELD BOOK:	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

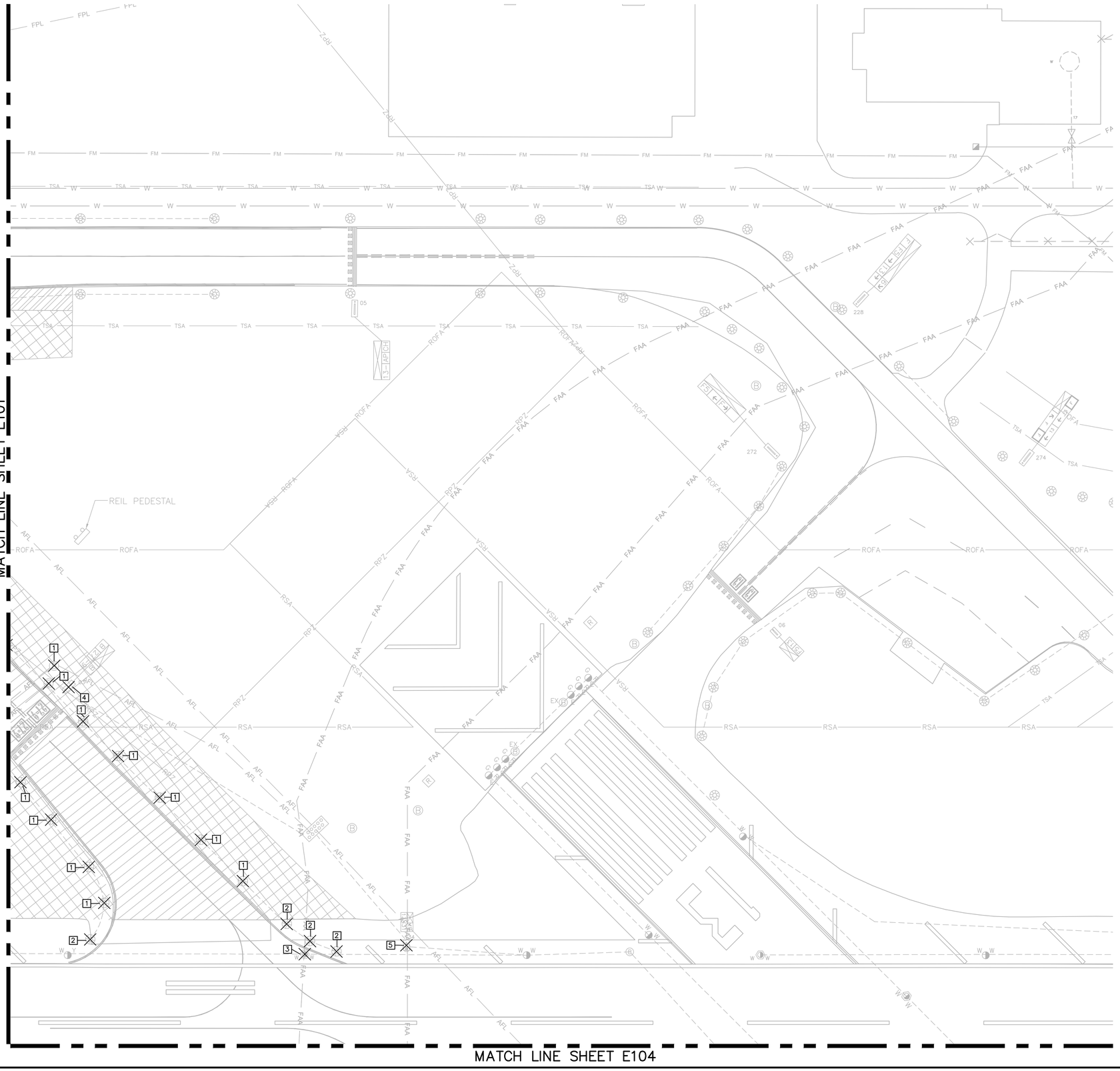
NO.	DATE	BY	CHKD

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
ELECTRICAL DEMOLITION PLAN

SHEET NO.	OF
E101	
TOTAL:	21
CAD FILE: 12706-MULTI-ELEC1	
DRAWING FILE NO.	

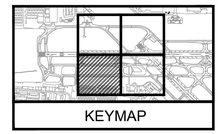
C:\USERS\ACHAM\QEE DROPBOX\QUANTUM PROJECTS\KHA KIMLEY HORN\KHA2403 FXE TAXIWAY B AND Q\DWG\12706-E003-KMAP.DWG

MATCH LINE SHEET E101


FPL
RPZ
FM
TSA
W
FAA
RSA
ROFA
AFL
REIL PEDESTAL
05
06
13-APCH
228
272
274
EXIST. CONTROL BUILDING
EXIST. GENERATOR
EXIST. FUEL FARM
EXIST. ELEVATED WATER TANK
EXIST. ELECTRICAL VAULT
EXIST. ELECTRICAL MANHOLE
EXIST. ELECTRICAL HANDHOLE
EXIST. ELECTRICAL PULLBOX
EXIST. ELECTRICAL TRANSFORMER
EXIST. ELECTRICAL SWITCHGEAR
EXIST. ELECTRICAL CONCRETE ENCASEMENT
EXIST. ELECTRICAL CONDUIT
EXIST. ELECTRICAL DUCTBANK

MATCH LINE SHEET E101

MATCH LINE SHEET E104



0 40' 80'

LEGEND (WORK)

- TAXIWAY BRAVO FULL DEPTH ASPHALT PAVEMENT REMOVAL.
- TAXIWAY ALPHA 4 FULL DEPTH ASPHALT PAVEMENT REMOVAL.
- CLEARING, GRUBBING AND REGRADING.
- FULL DEPTH EXCAVATION FOR NEW FULL STRENGTH TAXIWAY CONSTRUCTION.
- MAX 2" NOMINAL MILLING
- FULL DEPTH EXCAVATION FOR NEW STABILIZED SHOULDER

NOTES

1. SEE SHEET E002 FOR DEMOLITION NOTES AND LEGEND.

WARNING!!! WARNING!!! WARNING!!!
THERE ARE A NUMBER OF AIRPORT, PUBLIC UTILITIES, AND FAA LIGHTING, COMMUNICATIONS, UNDERGROUND CABLES AND PIPES TRAVERSING THE AIRFIELD PAVEMENTS AREAS. THE ENGINEER HAS MADE EVERY ATTEMPT TO SHOW THE APPROXIMATE LOCATION OF ALL ITEMS. HOWEVER, THE ENGINEER IS NOT RESPONSIBLE FOR SHOWING OR LOCATING EVERY ITEM CURRENTLY IN PLACE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE EVERY ITEM LOCATED, FLAGGED, AND IDENTIFIED PRIOR TO STARTUP OF CONSTRUCTION. ANY DAMAGE DONE TO ANY OF THE EXISTING ITEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL REPAIR ANY ITEM DAMAGED, CAUSED BY THEIR ACTIONS, WITH NO ADDITIONAL COMPENSATION.

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
5571 N. University Dr., Suite 101
Coral Springs, FL 33067
561-210-9224
LICENSE NO. CA30605

100% SUMBITTAL

State of Florida
Professional Engineer
License No. 73735
AMY CHAMPAGNE-BAKER

DRAWN BY:	DATE:
RJC	06/30/2025
DESIGNED BY:	SCALE:
ALC	AS NOTED
CHECKED BY:	
JWK	
FIELD BOOK:	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHKD	DESCRIPTION

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
ELECTRICAL DEMOLITION PLAN

SHEET NO.	OF
E103	

TOTAL: 21

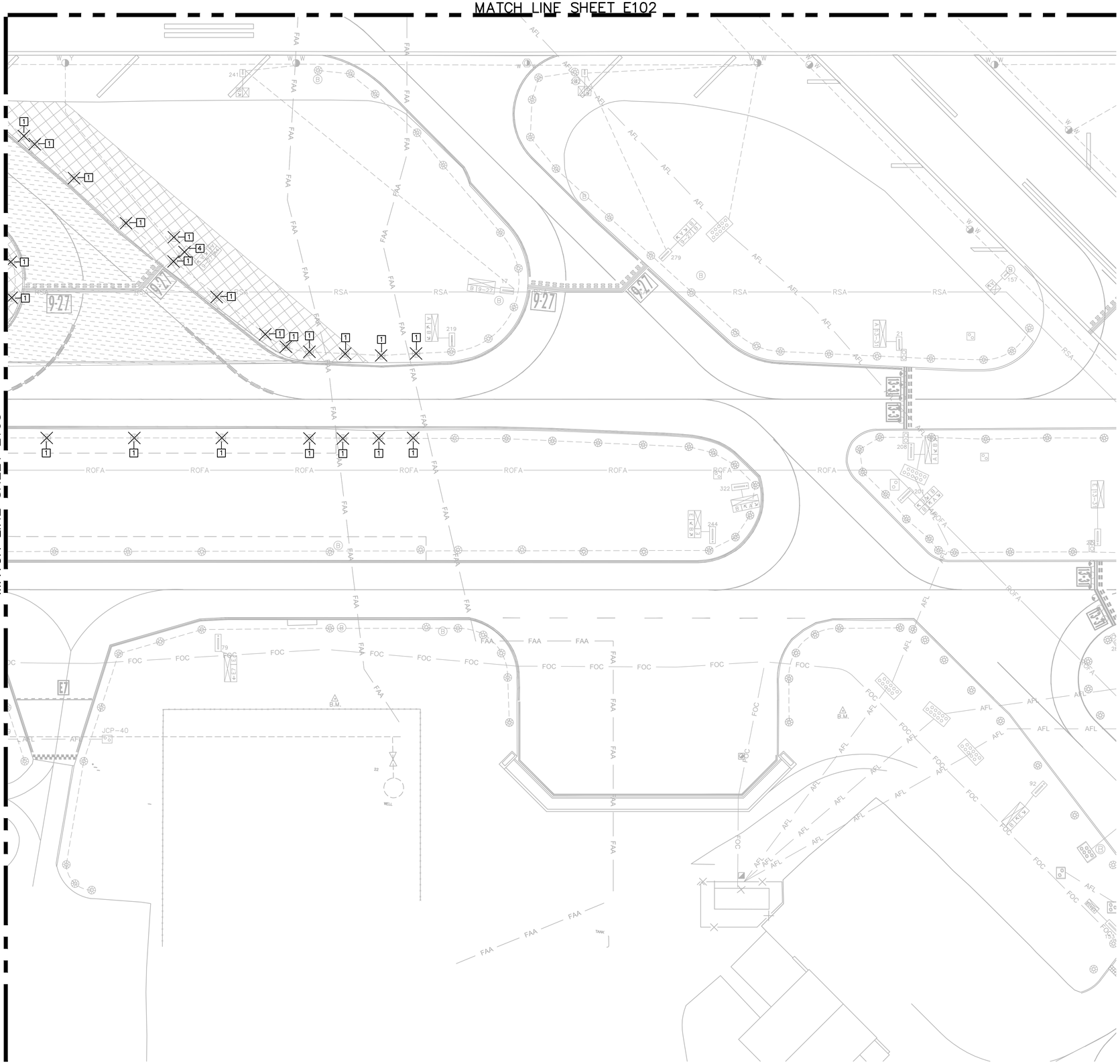
CAD FILE: 12706-MULTI-ELEC1

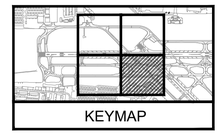
DRAWING FILE NO.

C:\USERS\ACHAM\QEE DROPBOX\QUANTUM PROJECTS\KHA KIMLEY HORN\KHA2403 FXE TAXIWAY B AND Q\DWG\12706-E003-KMAP.DWG

MATCH LINE SHEET E102

MATCH LINE SHEET E103





0 40' 80'

LEGEND (WORK)

- TAXIWAY BRAVO FULL DEPTH ASPHALT PAVEMENT REMOVAL.
- TAXIWAY ALPHA 4 FULL DEPTH ASPHALT PAVEMENT REMOVAL.
- CLEARING, GRUBBING AND REGRADING.
- FULL DEPTH EXCAVATION FOR NEW FULL STRENGTH TAXIWAY CONSTRUCTION.
- MAX 2" NOMINAL MILLING
- FULL DEPTH EXCAVATION FOR NEW STABILIZED SHOULDER

NOTES

1. SEE SHEET E002 FOR DEMOLITION NOTES AND LEGEND.

WARNING!! WARNING!! WARNING!!
THERE ARE A NUMBER OF AIRPORT, PUBLIC UTILITIES, AND FAA LIGHTING. COMMUNICATIONS, UNDERGROUND CABLES AND PIPES TRAVERSING THE AIRFIELD PAVEMENTS AREAS. THE ENGINEER HAS MADE EVERY ATTEMPT TO SHOW THE APPROXIMATE LOCATION OF ALL ITEMS. HOWEVER, THE ENGINEER IS NOT RESPONSIBLE FOR SHOWING OR LOCATING EVERY ITEM CURRENTLY IN PLACE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE EVERY ITEM LOCATED, FLAGGED, AND IDENTIFIED PRIOR TO STARTUP OF CONSTRUCTION. ANY DAMAGE DONE TO ANY OF THE EXISTING ITEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL REPAIR ANY ITEM DAMAGED, CAUSED BY THEIR ACTIONS, WITH NO ADDITIONAL COMPENSATION.

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
5571 N. University Dr., Suite 101
Coral Springs, FL 33067
561-210-9224
LICENSE NO. CA#8065

100% SUMBITTAL

State of Florida
Professional Engineer
License No. 73735
AMY CHAMPAGNE-BAKER

DRAWN BY:	DATE:
RJC	06/30/2025
DESIGNED BY:	SCALE:
ALC	AS NOTED
CHECKED BY:	
JWK	
FIELD BOOK:	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
ELECTRICAL DEMOLITION PLAN

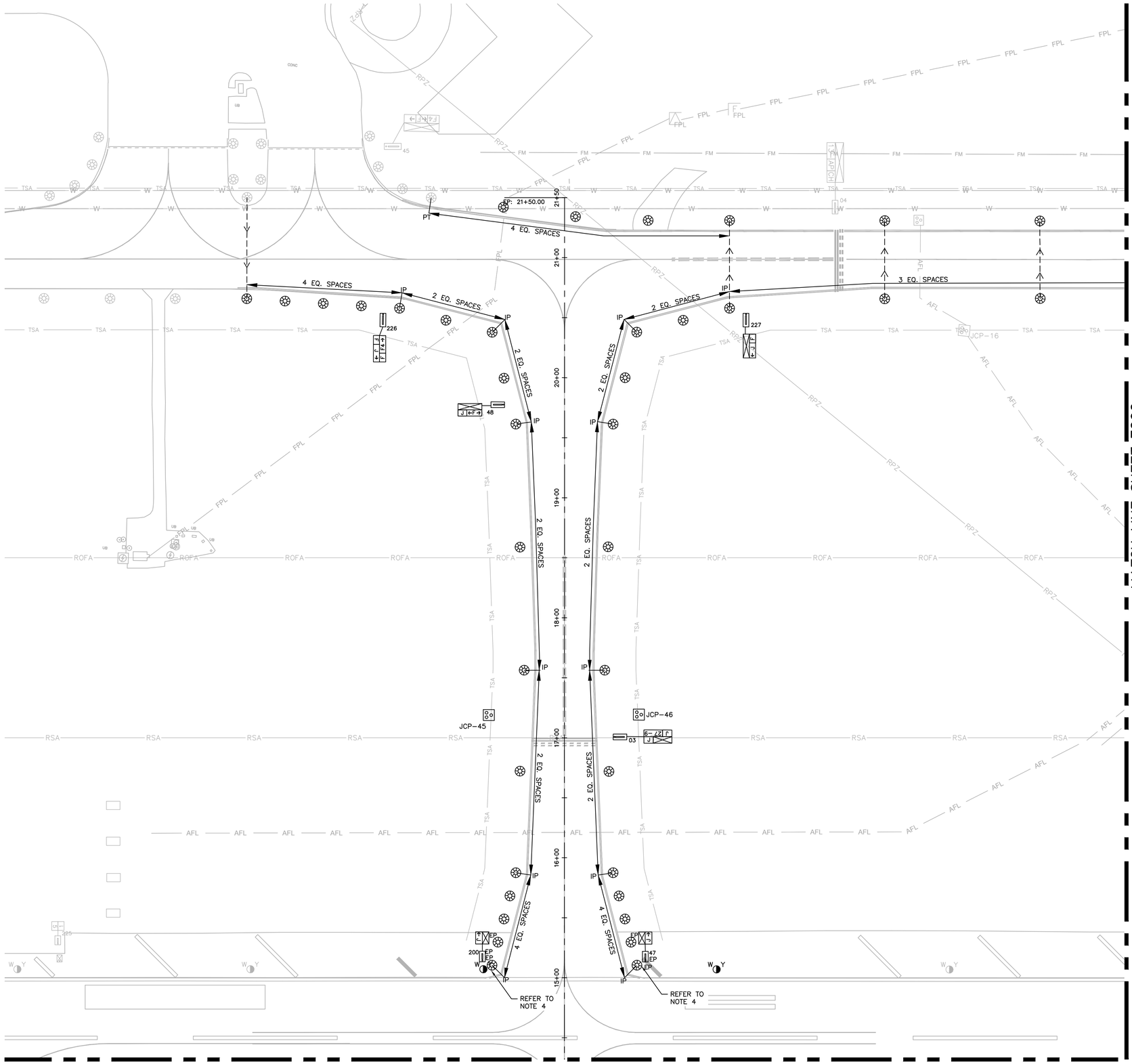
SHEET NO.	OF
E104	

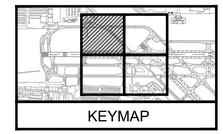
TOTAL: 21

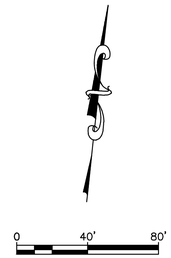
CAD FILE: 12706-MULTI-ELEC1

DRAWING FILE NO.

C:\USERS\ACHAM\QEE DROPBOX\QUANTUM PROJECTS\KHA KIMLEY HORN\KHA2403 FXE TAXIWAY B AND Q\DWG\12706-E003-KMAP.DWG







NOTES:

1. REFER TO TYPICAL TAXIWAY EDGE LIGHT CONFIGURATION DETAIL FOR LAYOUT AND INSTALLATION INFORMATION OF NEW EDGE LIGHTS AND BASE CANS. STANDARD OFFSET SHALL BE 8' FORM EDGE OF PAVEMENT/OUTER EDGE OF STRIPE.
2. CONTRACTOR SHALL UTILIZE EQUAL SPACING, IP(s) AND PT(s) FOR THE LIGHTING LAYOUT. PT AND IP LOCATIONS SHALL BE PER GEOMETRY PLAN.
3. TYPICAL NEW SIGN OFFSET TO BE INSTALLED AT 15' FROM EDGE OF FULL STRENGTH PAVEMENT UNLESS NOTED OTHERWISE. SEE SIGN DETAILS AND NOTES FOR ADDITIONAL INFORMATION.
4. THE LAST TAXIWAY EDGE LIGHT AT THIS LOCATION SHALL BE INSTALLED 3' FROM THE RUNWAY EDGE LIGHT OFFSET LINE.

WARNING!! WARNING!! WARNING!!
THERE ARE A NUMBER OF AIRPORT, PUBLIC UTILITIES, AND FAA LIGHTING. COMMUNICATIONS, UNDERGROUND CABLES AND PIPES TRAVERSING THE AIRFIELD PAVEMENTS AREAS. THE ENGINEER HAS MADE EVERY ATTEMPT TO SHOW THE APPROXIMATE LOCATION OF ALL ITEMS. HOWEVER, THE ENGINEER IS NOT RESPONSIBLE FOR SHOWING OR LOCATING EVERY ITEM CURRENTLY IN PLACE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE EVERY ITEM LOCATED, FLAGGED, AND IDENTIFIED PRIOR TO STARTUP OF CONSTRUCTION. ANY DAMAGE DONE TO ANY OF THE EXISTING ITEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL REPAIR ANY ITEM DAMAGED, CAUSED BY THEIR ACTIONS, WITH NO ADDITIONAL COMPENSATION.

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.
CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6241 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
5571 N. University Dr., Suite 101
Coral Springs, FL 33067
561-210-9224
LICENSE NO. CA30065

100% SUMBITTAL

State of Florida
Professional Engineer
License No. 73735
AMY CHAMPAGNE-BAKER

DRAWN BY:	DATE:
RJC	06/30/2025
DESIGNED BY:	SCALE:
ALC	AS NOTED
CHECKED BY:	
JWK	
FIELD BOOK:	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

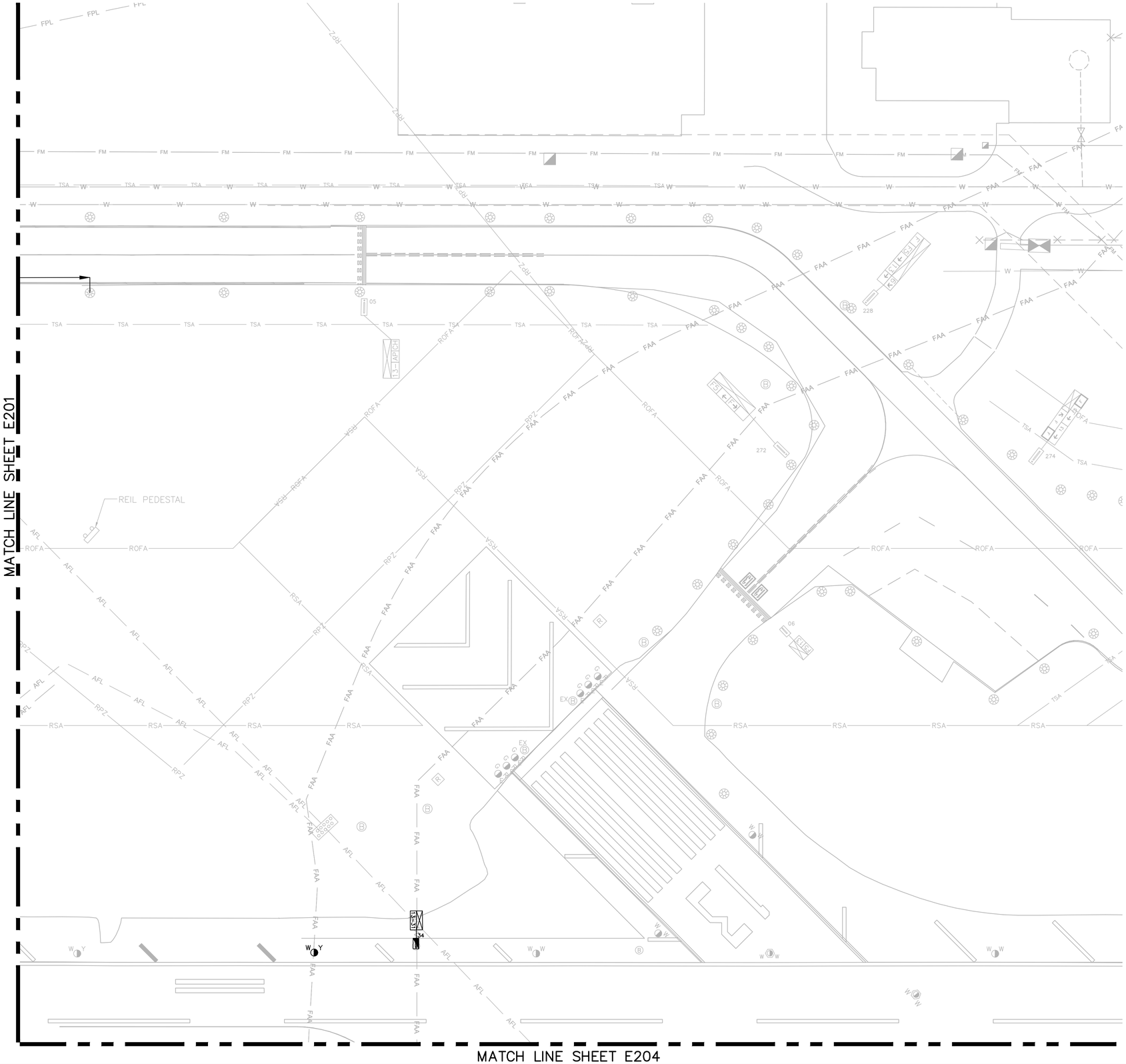
NO.	DATE	BY	CHK'D	DESCRIPTION

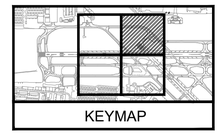
REVISIONS

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
ELECTRICAL LIGHT & SIGN LAYOUT

SHEET NO.	OF
E201	
TOTAL:	21
CAD FILE: 12706-MULTI-ELEC2	
DRAWING FILE NO.	

C:\USERS\ACHAM\QEE DROPBOX\QUANTUM PROJECTS\KHA KIMLEY HORN\KHA2403 FXE TAXIWAY B AND Q\DWG\12706-E003-KMAP.DWG





NOTES:

1. REFER TO TYPICAL TAXIWAY EDGE LIGHT CONFIGURATION DETAIL FOR LAYOUT AND INSTALLATION INFORMATION OF NEW EDGE LIGHTS AND BASE CANS. STANDARD OFFSET SHALL BE 8' FORM EDGE OF PAVEMENT/OUTER EDGE OF STRIPE.
2. CONTRACTOR SHALL UTILIZE EQUAL SPACING, IP(s) AND PT(s) FOR THE LIGHTING LAYOUT. PT AND IP LOCATIONS SHALL BE PER GEOMETRY PLAN.
3. TYPICAL NEW SIGN OFFSET TO BE INSTALLED AT 15' FROM EDGE OF FULL STRENGTH PAVEMENT UNLESS NOTED OTHERWISE. SEE SIGN DETAILS AND NOTES FOR ADDITIONAL INFORMATION.
4. THE LAST TAXIWAY EDGE LIGHT AT THIS LOCATION SHALL BE INSTALLED 3' FROM THE RUNWAY EDGE LIGHT OFFSET LINE.

WARNING!!! WARNING!!! WARNING!!!
THERE ARE A NUMBER OF AIRPORT, PUBLIC UTILITIES, AND FAA LIGHTING, COMMUNICATIONS, UNDERGROUND CABLES AND PIPES TRAVERSING THE AIRFIELD PAVEMENTS AREAS. THE ENGINEER HAS MADE EVERY ATTEMPT TO SHOW THE APPROXIMATE LOCATION OF ALL ITEMS. HOWEVER, THE ENGINEER IS NOT RESPONSIBLE FOR SHOWING OR LOCATING EVERY ITEM CURRENTLY IN PLACE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE EVERY ITEM LOCATED, FLAGGED, AND IDENTIFIED PRIOR TO STARTUP OF CONSTRUCTION. ANY DAMAGE DONE TO ANY OF THE EXISTING ITEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL REPAIR ANY ITEM DAMAGED, CAUSED BY THEIR ACTIONS, WITH NO ADDITIONAL COMPENSATION.

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
4201 PETERS RD., SUITE 2000, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
5571 N. University Dr., Suite 101
Coral Springs, FL 33067
561-210-9224
LICENSE NO. CA30005

100% SUMBITTAL

State of Florida
Professional Engineer
License No. 73735
AMY CHAMPAGNE-BAKER

DRAWN BY:	DATE:
RJC	06/30/2025
DESIGNED BY:	SCALE:
ALC	AS NOTED
CHECKED BY:	
JWK	
FIELD BOOK:	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

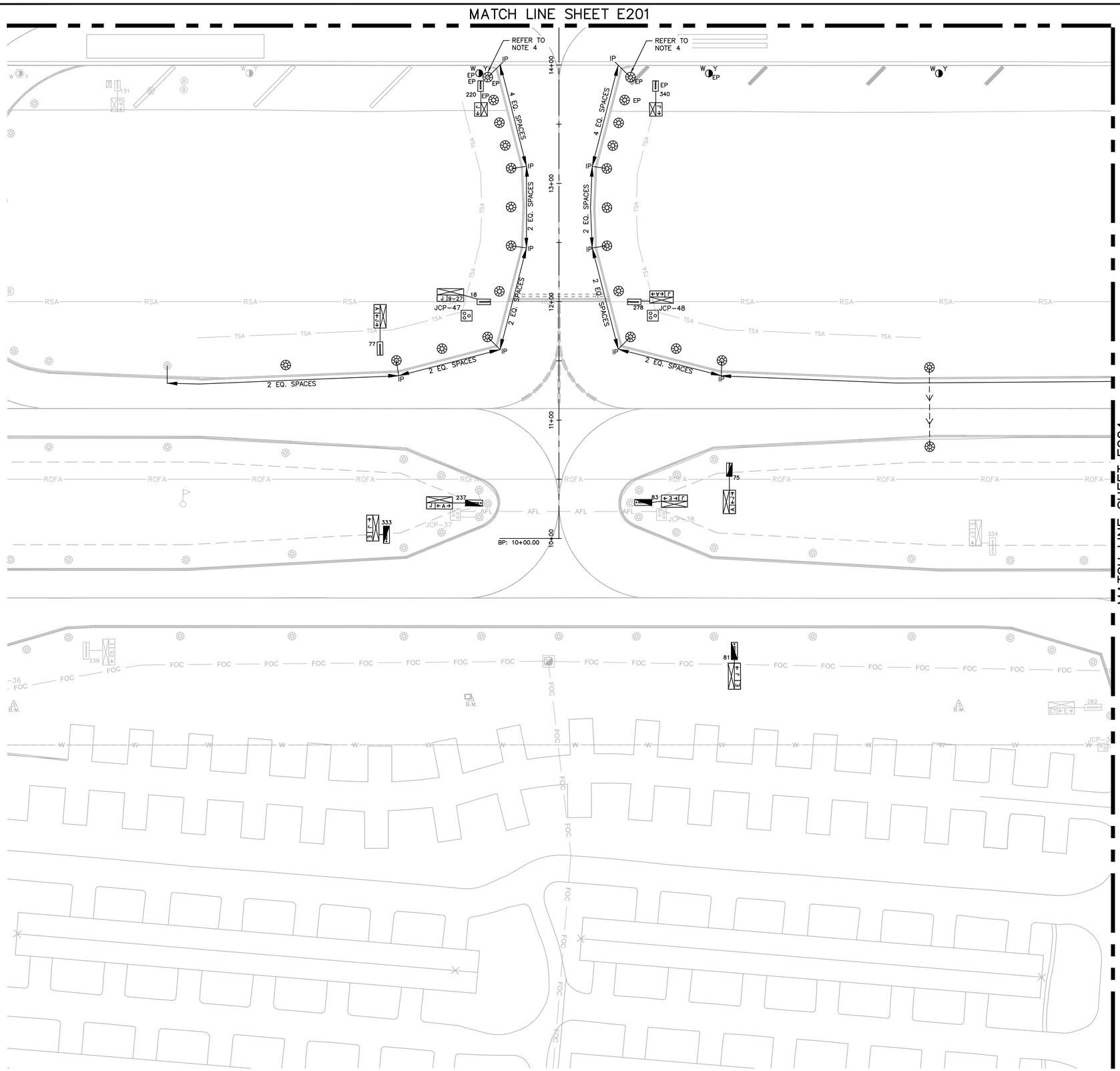
REVISIONS

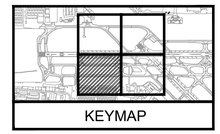
NO.	DATE	BY	CHK'D	DESCRIPTION

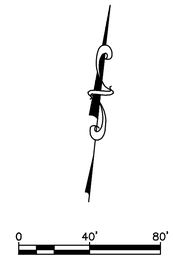
PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
ELECTRICAL LIGHT & SIGN LAYOUT

SHEET NO.	OF
E202	
TOTAL:	21
CAD FILE: 12706-MULTI-ELEC2	
DRAWING FILE NO.	

C:\USERS\ACHAM\QEE DROPBOX\QUANTUM PROJECTS\KHA KIMLEY HORN\KHA2403 FXE TAXIWAY B AND Q\DWG\12706-E003-KMAP.DWG







NOTES:

1. REFER TO TYPICAL TAXIWAY EDGE LIGHT CONFIGURATION DETAIL FOR LAYOUT AND INSTALLATION INFORMATION OF NEW EDGE LIGHTS AND BASE CANS. STANDARD OFFSET SHALL BE 8' FORM EDGE OF PAVEMENT/OUTER EDGE OF STRIPE.
2. CONTRACTOR SHALL UTILIZE EQUAL SPACING, IP(s) AND PT(s) FOR THE LIGHTING LAYOUT. PT AND IP LOCATIONS SHALL BE PER GEOMETRY PLAN.
3. TYPICAL NEW SIGN OFFSET TO BE INSTALLED AT 15' FROM EDGE OF FULL STRENGTH PAVEMENT UNLESS NOTED OTHERWISE. SEE SIGN DETAILS AND NOTES FOR ADDITIONAL INFORMATION.
4. THE LAST TAXIWAY EDGE LIGHT AT THIS LOCATION SHALL BE INSTALLED 3' FROM THE RUNWAY EDGE LIGHT OFFSET LINE.

WARNING!!! WARNING!!! WARNING!!!
THERE ARE A NUMBER OF AIRPORT, PUBLIC UTILITIES, AND FAA LIGHTING, COMMUNICATIONS, UNDERGROUND CABLES AND PIPES TRAVERSING THE AIRFIELD PAVEMENTS AREAS. THE ENGINEER HAS MADE EVERY ATTEMPT TO SHOW THE APPROXIMATE LOCATION OF ALL ITEMS. HOWEVER, THE ENGINEER IS NOT RESPONSIBLE FOR SHOWING OR LOCATING EVERY ITEM CURRENTLY IN PLACE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE EVERY ITEM LOCATED, FLAGGED, AND IDENTIFIED PRIOR TO STARTUP OF CONSTRUCTION. ANY DAMAGE DONE TO ANY OF THE EXISTING ITEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL REPAIR ANY ITEM DAMAGED, CAUSED BY THEIR ACTIONS, WITH NO ADDITIONAL COMPENSATION.

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
5571 N. University Dr., Suite 101
Coral Springs, FL. 33067
561-210-9214
LICENSE NO. CA30605

100% SUMBITTAL

State of Florida
Professional Engineer
License No. 73735
AMY CHAMPAGNE-BAKER

DRAWN BY:	DATE:
RJC	06/30/2025
DESIGNED BY:	SCALE:
ALC	AS NOTED
CHECKED BY:	
JWK	
FIELD BOOK:	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHKD	DESCRIPTION

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
ELECTRICAL LIGHT & SIGN LAYOUT

SHEET NO.	OF
E203	

TOTAL: 21

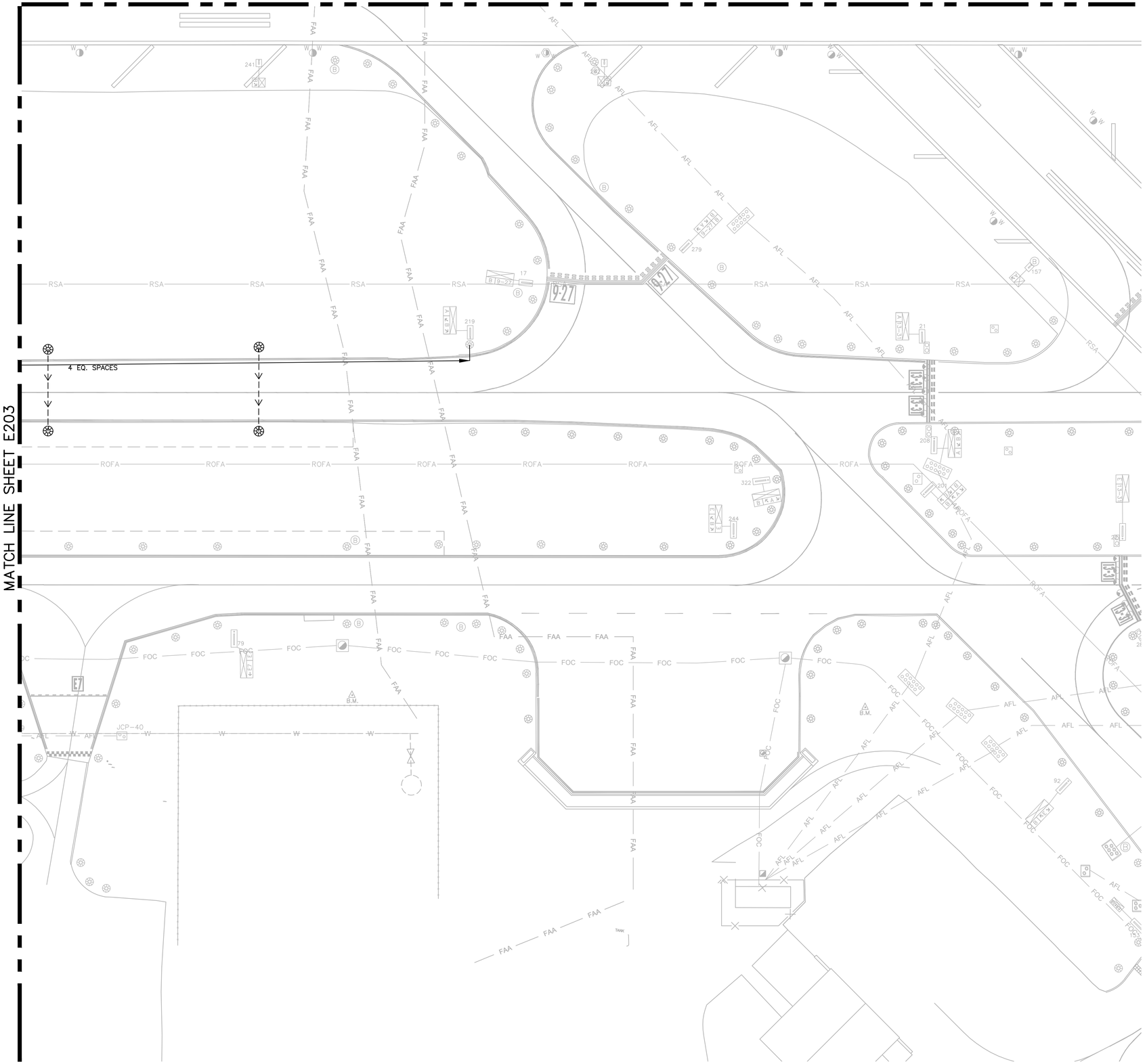
CAD FILE: 12706-MULTI-ELEC2

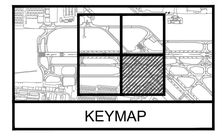
DRAWING FILE NO.

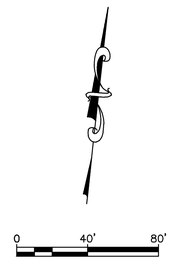
C:\USERS\ACHAM\QEE DROPBOX\QUANTUM PROJECTS\KHA KIMLEY HORN\KHA2403 FXE TAXIWAY B AND Q\DWG\12706-E003-KMAP.DWG

MATCH LINE SHEET E202

MATCH LINE SHEET E203







NOTES:

1. REFER TO TYPICAL TAXIWAY EDGE LIGHT CONFIGURATION DETAIL FOR LAYOUT AND INSTALLATION INFORMATION OF NEW EDGE LIGHTS AND BASE CANS. STANDARD OFFSET SHALL BE 8' FORM EDGE OF PAVEMENT/OUTER EDGE OF STRIPE.
2. CONTRACTOR SHALL UTILIZE EQUAL SPACING, IP(s) AND PT(s) FOR THE LIGHTING LAYOUT. PT AND IP LOCATIONS SHALL BE PER GEOMETRY PLAN.
3. TYPICAL NEW SIGN OFFSET TO BE INSTALLED AT 15' FROM EDGE OF FULL STRENGTH PAVEMENT UNLESS NOTED OTHERWISE. SEE SIGN DETAILS AND NOTES FOR ADDITIONAL INFORMATION.
4. THE LAST TAXIWAY EDGE LIGHT AT THIS LOCATION SHALL BE INSTALLED 3' FROM THE RUNWAY EDGE LIGHT OFFSET LINE.

WARNING!! WARNING!! WARNING!!
THERE ARE A NUMBER OF AIRPORT, PUBLIC UTILITIES, AND FAA LIGHTING. COMMUNICATIONS, UNDERGROUND CABLES AND PIPES TRAVERSING THE AIRFIELD PAVEMENTS AREAS. THE ENGINEER HAS MADE EVERY ATTEMPT TO SHOW THE APPROXIMATE LOCATION OF ALL ITEMS. HOWEVER, THE ENGINEER IS NOT RESPONSIBLE FOR SHOWING OR LOCATING EVERY ITEM CURRENTLY IN PLACE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE EVERY ITEM LOCATED, FLAGGED, AND IDENTIFIED PRIOR TO STARTUP OF CONSTRUCTION. ANY DAMAGE DONE TO ANY OF THE EXISTING ITEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL REPAIR ANY ITEM DAMAGED, CAUSED BY THEIR ACTIONS, WITH NO ADDITIONAL COMPENSATION.

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
5571 N. University Dr., Suite 101
Coral Springs, FL 33067
561-210-9224
LICENSE NO. CA30065

100% SUMBITTAL

State of Florida
Professional Engineer
License No. 73735
AMY CHAMPAGNE-BAKER

DRAWN BY:	DATE:
RJC	06/30/2025
DESIGNED BY:	SCALE:
ALC	AS NOTED
CHECKED BY:	
JWK	
FIELD BOOK:	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

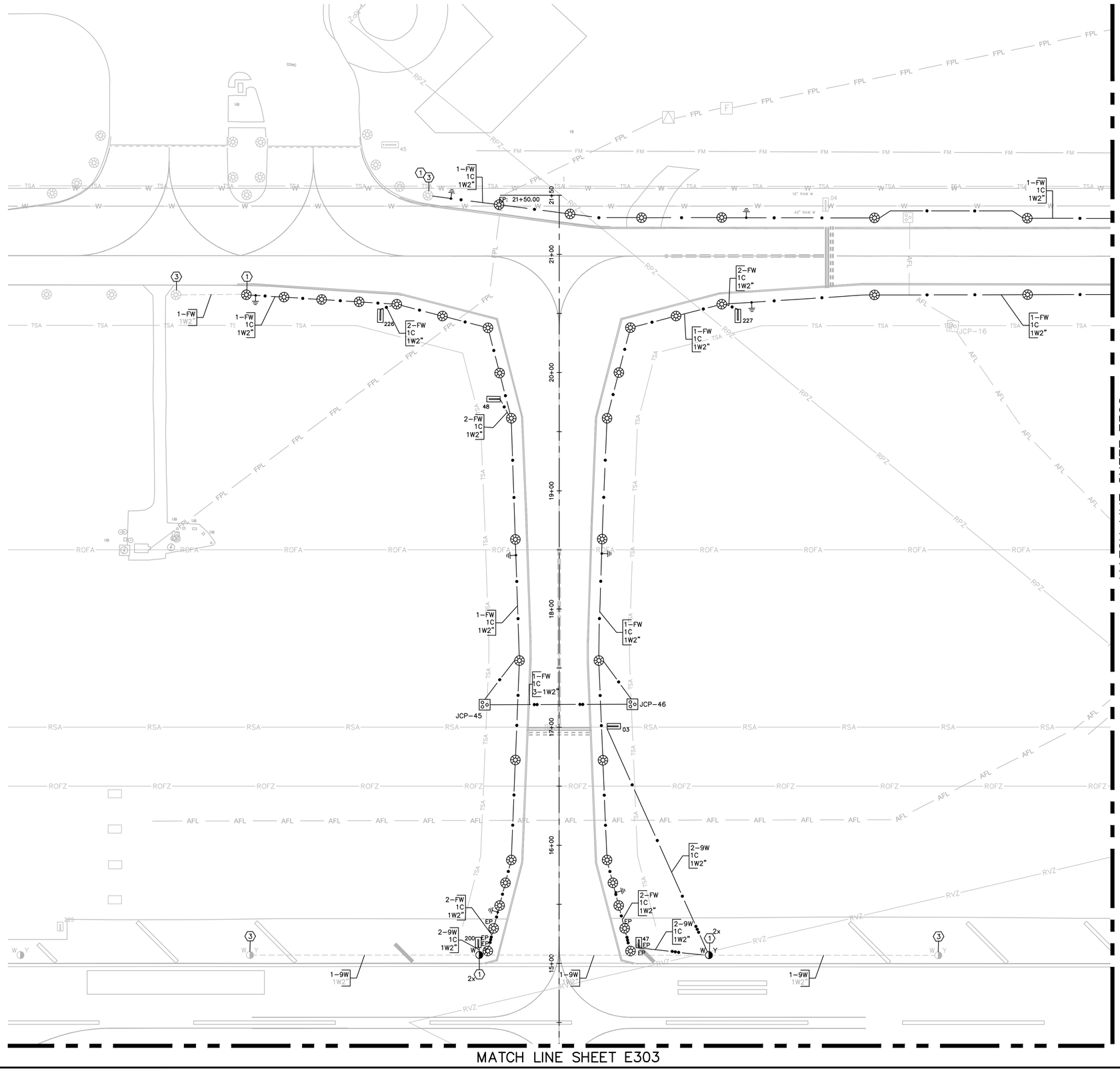
REVISIONS

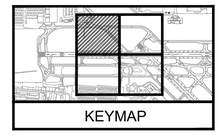
NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
ELECTRICAL LIGHT & SIGN LAYOUT

SHEET NO.	OF
E204	
TOTAL:	21
CAD FILE: 12706-MULTI-ELEC2	
DRAWING FILE NO.	

C:\USERS\ACHAM\QEE DROPBOX\QUANTUM PROJECTS\KHA KIMLEY HORN\KHA2403 FXE TAXIWAY B AND Q\DWG\12706-E003-KMAP.DWG





0 40' 80'

NOTES

1. SEE SHEET E002 FOR INSTALLATION NOTES AND LEGEND.

WARNING!!! WARNING!!! WARNING!!!
THERE ARE A NUMBER OF AIRPORT, PUBLIC UTILITIES, AND FAA LIGHTING. COMMUNICATIONS, UNDERGROUND CABLES AND PIPES TRAVERSING THE AIRFIELD PAVEMENTS AREAS. THE ENGINEER HAS MADE EVERY ATTEMPT TO SHOW THE APPROXIMATE LOCATION OF ALL ITEMS. HOWEVER, THE ENGINEER IS NOT RESPONSIBLE FOR SHOWING OR LOCATING EVERY ITEM CURRENTLY IN PLACE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE EVERY ITEM LOCATED, FLAGGED, AND IDENTIFIED PRIOR TO STARTUP OF CONSTRUCTION. ANY DAMAGE DONE TO ANY OF THE EXISTING ITEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL REPAIR ANY ITEM DAMAGED, CAUSED BY THEIR ACTIONS, WITH NO ADDITIONAL COMPENSATION.

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.
CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
8201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
5571 N. University Dr., Suite 101
Coral Springs, FL 33067
561-210-9224
LICENSE NO: CA30805

100% SUMBITTAL

State of Florida
Professional Engineer
License No. 73735
AMY CHAMPAGNE-BAKER

DRAWN BY:	DATE: 06/30/2025
DESIGNED BY:	SCALE: AS NOTED
CHECKED BY:	
FIELD BOOK:	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

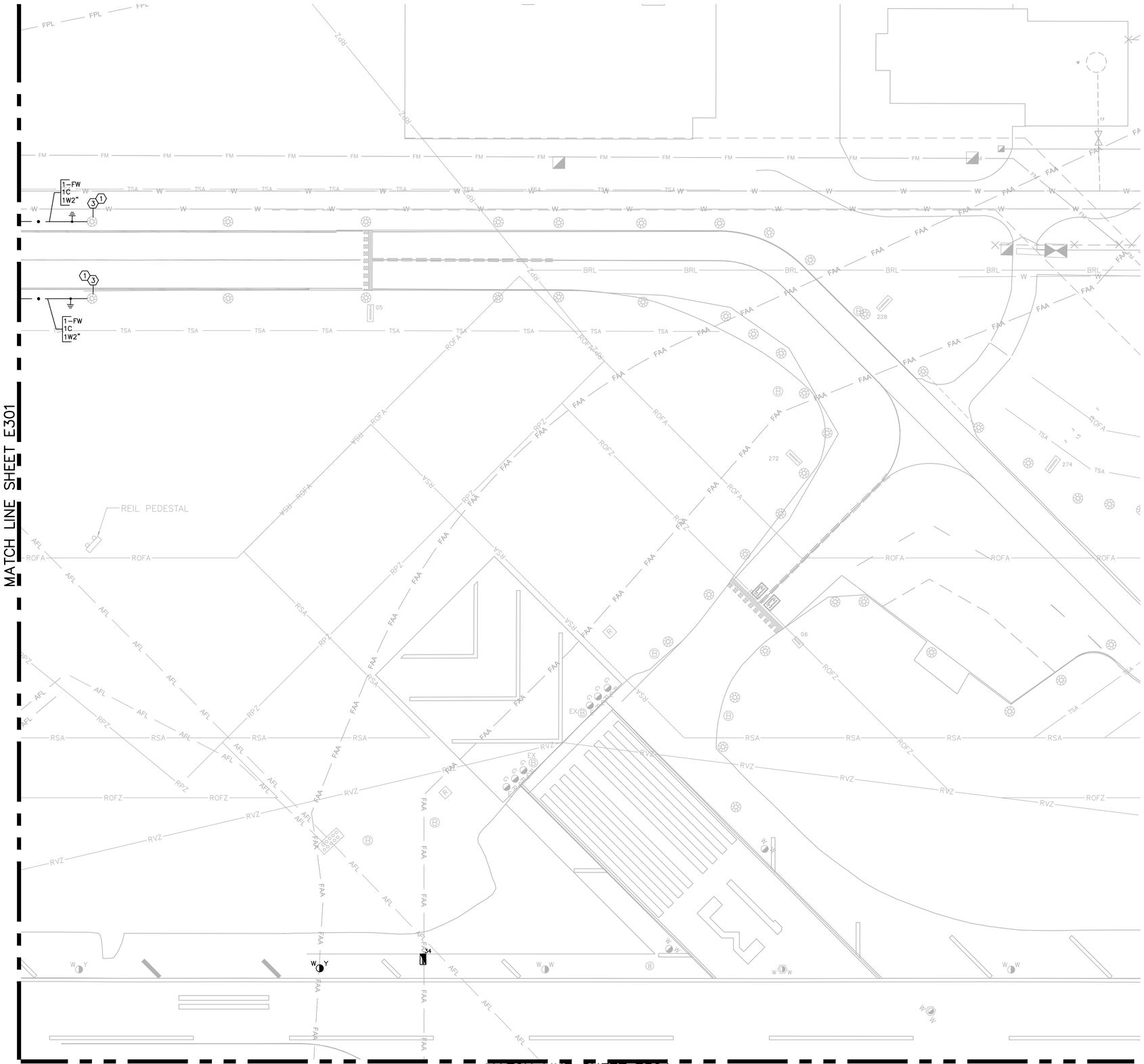
NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
ELECTRICAL CIRCUITRY PLAN

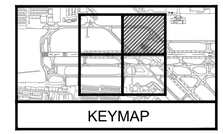
SHEET NO.	OF
E301	
TOTAL:	21
CAD FILE: 12706-MULTI-ELEC3	
DRAWING FILE NO.	

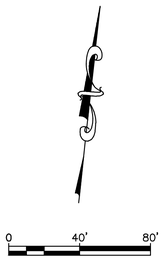
C:\USERS\JKAPP\QEE DROPBOX\QUANTUM PROJECTS\KHA KIMLEY HORN\KHA2403 FXE TAXIWAY B AND Q\DESIGN\DWG\100%\12706-MULTI-ELEC3.DWG

MATCH LINE SHEET E301



MATCH LINE SHEET E304





NOTES

1. SEE SHEET E002 FOR INSTALLATION NOTES AND LEGEND.

WARNING!!! WARNING!!! WARNING!!!
THERE ARE A NUMBER OF AIRPORT, PUBLIC UTILITIES, AND FAA LIGHTING, COMMUNICATIONS, UNDERGROUND CABLES AND PIPES TRAVERSING THE AIRFIELD PAVEMENTS AREAS. THE ENGINEER HAS MADE EVERY ATTEMPT TO SHOW THE APPROXIMATE LOCATION OF ALL ITEMS. HOWEVER, THE ENGINEER IS NOT RESPONSIBLE FOR SHOWING OR LOCATING EVERY ITEM CURRENTLY IN PLACE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE EVERY ITEM LOCATED, FLAGGED, AND IDENTIFIED PRIOR TO STARTUP OF CONSTRUCTION. ANY DAMAGE DONE TO ANY OF THE EXISTING ITEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL REPAIR ANY ITEM DAMAGED, CAUSED BY THEIR ACTIONS, WITH NO ADDITIONAL COMPENSATION.

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
5523 N. University Dr., Suite 101
Coral Springs, FL 33067
561-210-9224
LIC#2532; NO. CA/30605

100% SUMBITTAL

State of Florida
Professional Engineer
License No. 73735
AMY CHAMPAGNE-BAKER

DRAWN BY:	DATE:
RJC	06/30/2025
DESIGNED BY:	SCALE:
ALC	AS NOTED
CHECKED BY:	
JWK	
FIELD BOOK:	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

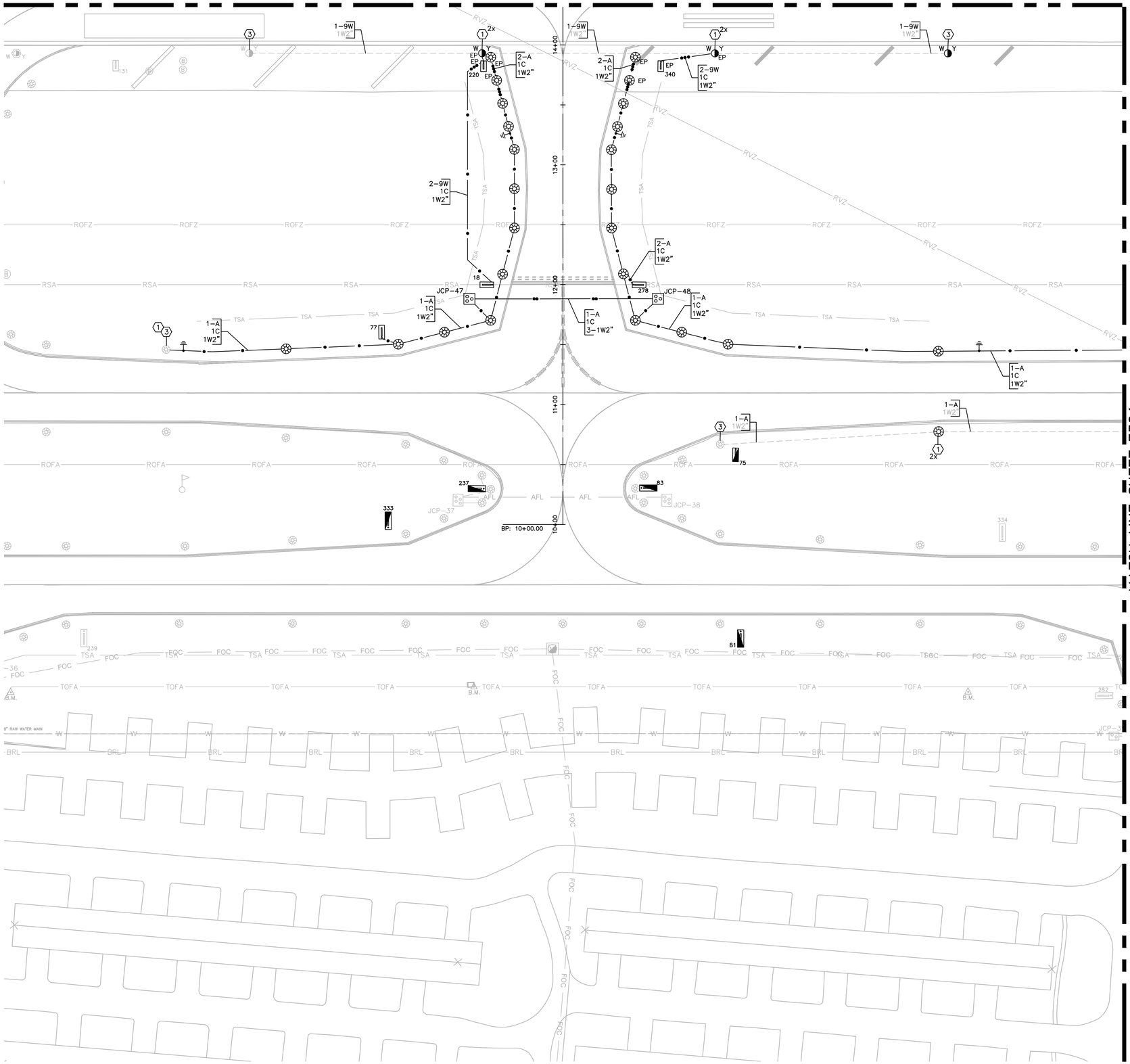
NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
ELECTRICAL CIRCUITRY PLAN

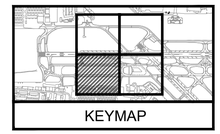
SHEET NO.	OF
E302	
TOTAL:	21
CAD FILE: 12706-MULTI-ELEC3	
DRAWING FILE NO.	

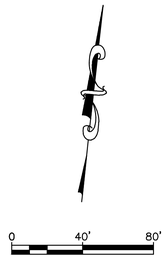
C:\USERS\JKAPP\QEE DROPBOX\QUANTUM PROJECTS\KHA KIMLEY HORN\KHA2403 FXE TAXIWAY B AND Q\DESIGN\DWG\100%\12706-MULTI-ELEC3.DWG

MATCH LINE SHEET E301



MATCH LINE SHEET E304





NOTES

1. SEE SHEET E002 FOR INSTALLATION NOTES AND LEGEND.

WARNING!!! WARNING!!! WARNING!!!
THERE ARE A NUMBER OF AIRPORT, PUBLIC UTILITIES, AND FAA LIGHTING, COMMUNICATIONS, UNDERGROUND CABLES AND PIPES TRAVERSING THE AIRFIELD PAVEMENTS AREAS. THE ENGINEER HAS MADE EVERY ATTEMPT TO SHOW THE APPROXIMATE LOCATION OF ALL ITEMS. HOWEVER, THE ENGINEER IS NOT RESPONSIBLE FOR SHOWING OR LOCATING EVERY ITEM CURRENTLY IN PLACE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE EVERY ITEM LOCATED, FLAGGED, AND IDENTIFIED PRIOR TO STARTUP OF CONSTRUCTION. ANY DAMAGE DONE TO ANY OF THE EXISTING ITEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL REPAIR ANY ITEM DAMAGED, CAUSED BY THEIR ACTIONS, WITH NO ADDITIONAL COMPENSATION.

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
5571 N. University Dr., Suite 101
Coral Springs, FL. 33067
561-210-9214
LICENSE NO. CA30605

100% SUMBITTAL

State of Florida
Professional Engineer
License No. 73735
AMY CHAMPAGNE-BAKER

DRAWN BY:	DATE:
RJC	06/30/2025
DESIGNED BY:	SCALE:
ALC	AS NOTED
CHECKED BY:	
JWK	
FIELD BOOK:	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHKD	DESCRIPTION

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
ELECTRICAL CIRCUITRY PLAN

SHEET NO.	OF
E303	

TOTAL: 21

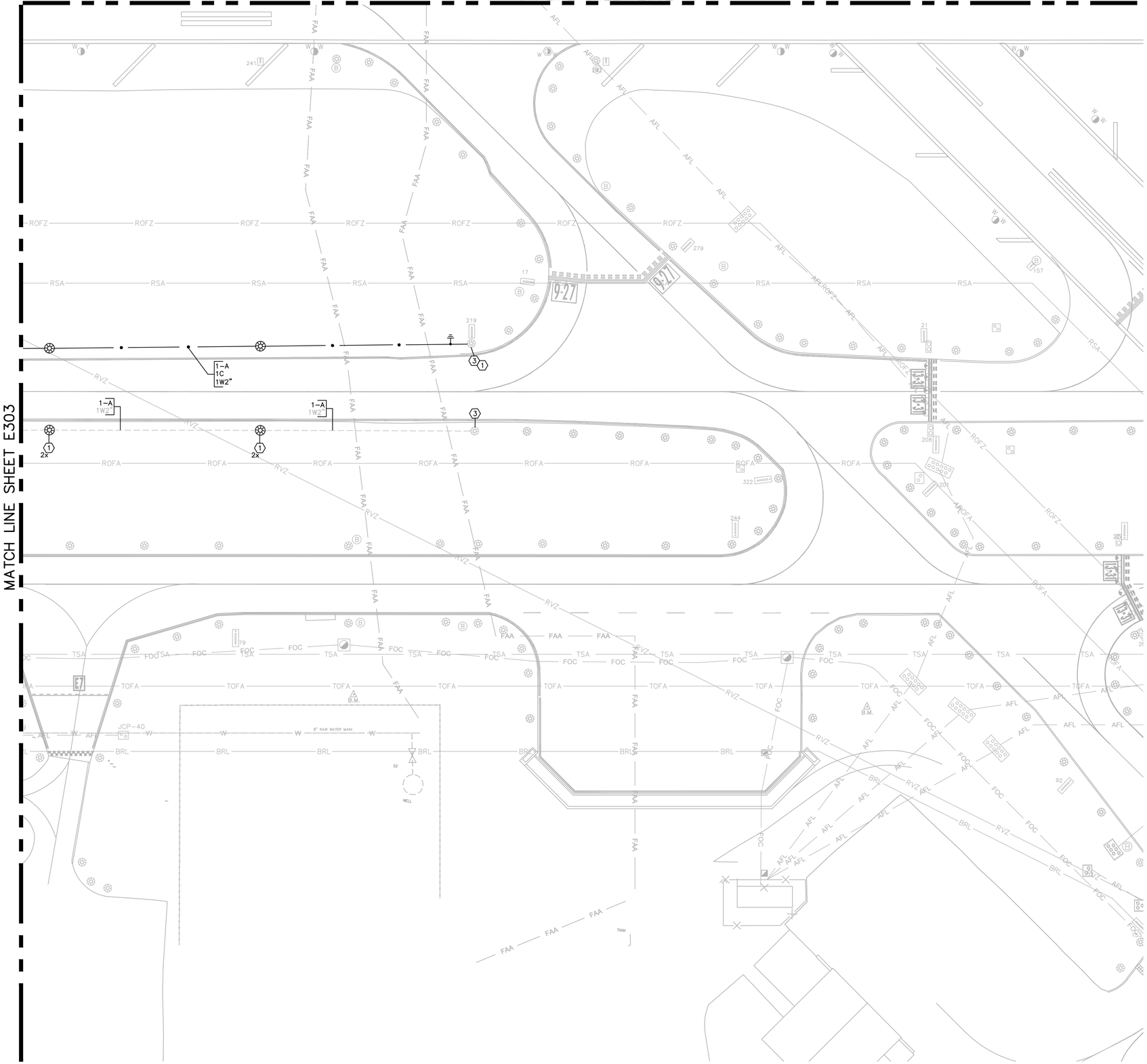
CAD FILE: 12706-MULTI-ELEC3

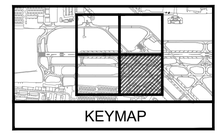
DRAWING FILE NO.

C:\USERS\JKAPP\QEE DROPBOX\QUANTUM PROJECTS\KHA KIMLEY HORN\KHA2403 FXE TAXIWAY B AND Q\DESIGN\DWG\100%\12706-MULTI-ELEC3.DWG

MATCH LINE SHEET E302

MATCH LINE SHEET E303





0 40' 80'

NOTES

1. SEE SHEET E002 FOR INSTALLATION NOTES AND LEGEND.

WARNING!! WARNING!! WARNING!!
THERE ARE A NUMBER OF AIRPORT, PUBLIC UTILITIES, AND FAA LIGHTING, COMMUNICATIONS, UNDERGROUND CABLES AND PIPES TRAVERSING THE AIRFIELD PAVEMENTS AREAS. THE ENGINEER HAS MADE EVERY ATTEMPT TO SHOW THE APPROXIMATE LOCATION OF ALL ITEMS. HOWEVER, THE ENGINEER IS NOT RESPONSIBLE FOR SHOWING OR LOCATING EVERY ITEM CURRENTLY IN PLACE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE EVERY ITEM LOCATED, FLAGGED, AND IDENTIFIED PRIOR TO STARTUP OF CONSTRUCTION. ANY DAMAGE DONE TO ANY OF THE EXISTING ITEMS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL REPAIR ANY ITEM DAMAGED, CAUSED BY THEIR ACTIONS, WITH NO ADDITIONAL COMPENSATION.

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
5571 N. University Dr., Suite 101
Coral Springs, FL 33067
561-210-9224
LICENSE NO: CA30065

100% SUMBITTAL

State of Florida
Professional Engineer
License No. 73735
AMY CHAMPAGNE-BAKER

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

DRAWN BY:	DATE:
RJC	06/30/2025
DESIGNED BY:	SCALE:
ALC	AS NOTED
CHECKED BY:	
JWK	
FIELD BOOK:	

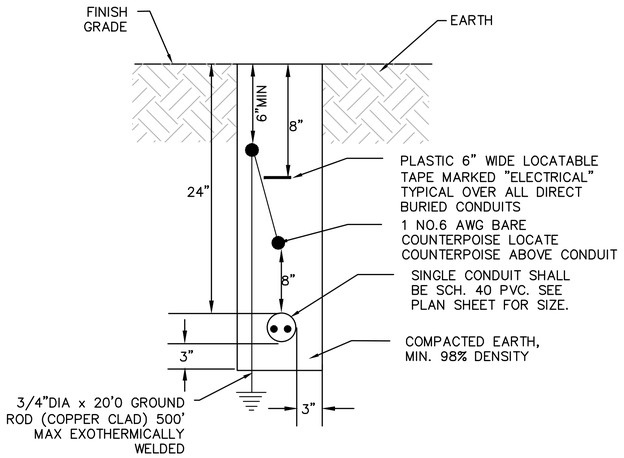
REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
ELECTRICAL CIRCUITRY PLAN

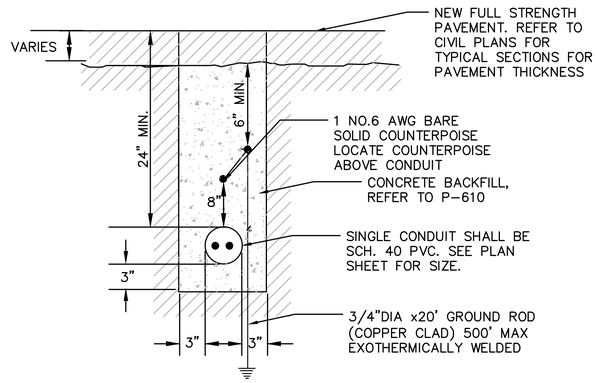
SHEET NO.	OF
E304	
TOTAL:	21
CAD FILE: 12706-MULTI-ELEC3	
DRAWING FILE NO.	

C:\USERS\JKAPP\QEE DROPBOX\QUANTUM PROJECTS\KHA KIMLEY HORN\KHA2403 FXE TAXIWAY B AND Q\DESIGN\DWG\100%\12706-MULTI-ELEC3.DWG



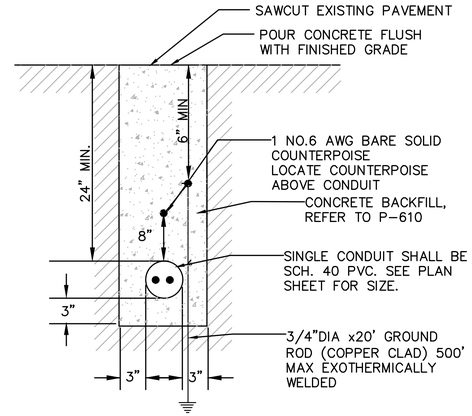
TYPICAL CONDUIT INSTALLATIONS IN EARTH

NOT TO SCALE



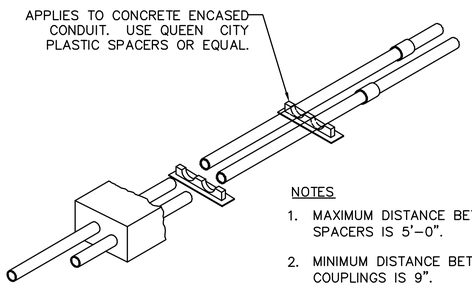
TYPICAL CONDUIT INSTALLED IN NEW FULL STRENGTH PAVEMENT

NOT TO SCALE



TYPICAL CONDUIT INSTALLED IN EXISTING FULL STRENGTH PAVEMENT

NOT TO SCALE

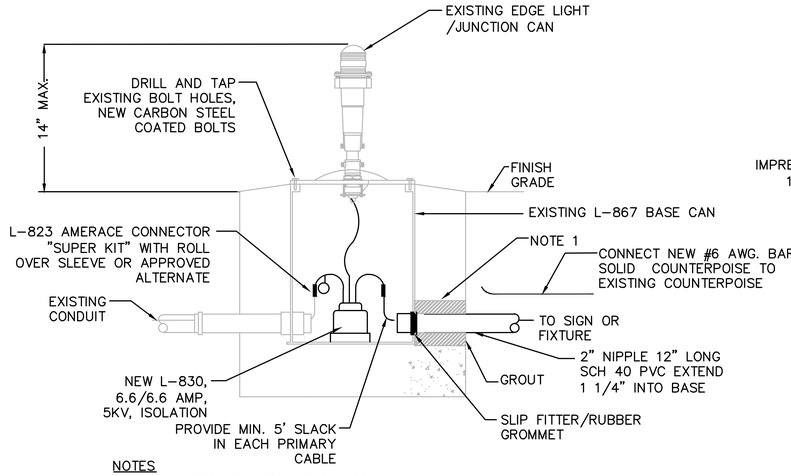


NOTES

1. MAXIMUM DISTANCE BETWEEN SPACERS IS 5'-0".
2. MINIMUM DISTANCE BETWEEN COUPLINGS IS 9".

HORIZONTAL STAGGERING OF SPACERS AND JOINTS

NOT TO SCALE

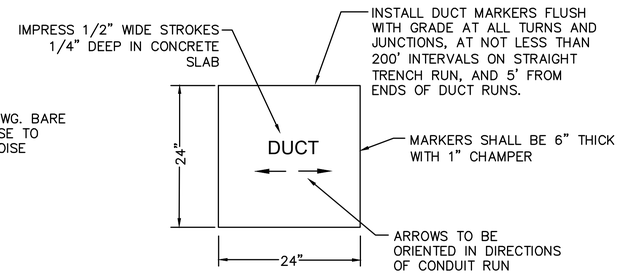


NOTES

1. USE CORE DRILL TO PENETRATE BASE CAN ANCHOR.
2. USE HOLE SAW TO CUT HOLE IN BASE CAN. REPAIR DAMAGED GALVANIZED SURFACES. PROTECT EXISTING CABLES, TRANSFORMERS, ETC. FROM DAMAGE.
3. TERMINATE CONDUIT IN BASE CAN UTILIZING AN ENDBELL AND SLIP FITTER/RUBBER GROMMET.
4. FOR EDGE LIGHTS LOCATED IN SHOULDER PAVEMENT BACKFILL CONDUIT TRENCH WITH P-610.
5. PROVIDE AND INSTALL TRANSFORMER AND CONNECTOR KITS.

EXTENDING DUCT/CONDUIT FROM EXISTING L-867 BASE CAN

NOT TO SCALE



DUCT MARKERS

NOT TO SCALE

State of Florida
Professional Engineer
License No. 73735
AMY CHAMPAGNE-BAKER

DRAWN BY: RJC | DATE: 06/30/2025
DESIGNED BY: ALC | SCALE: AS NOTED
CHECKED BY: JWK | FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
ELECTRICAL DETAILS

SHEET NO. E501 | OF

TOTAL: 21

CAD FILE: 12706-E501-DETL

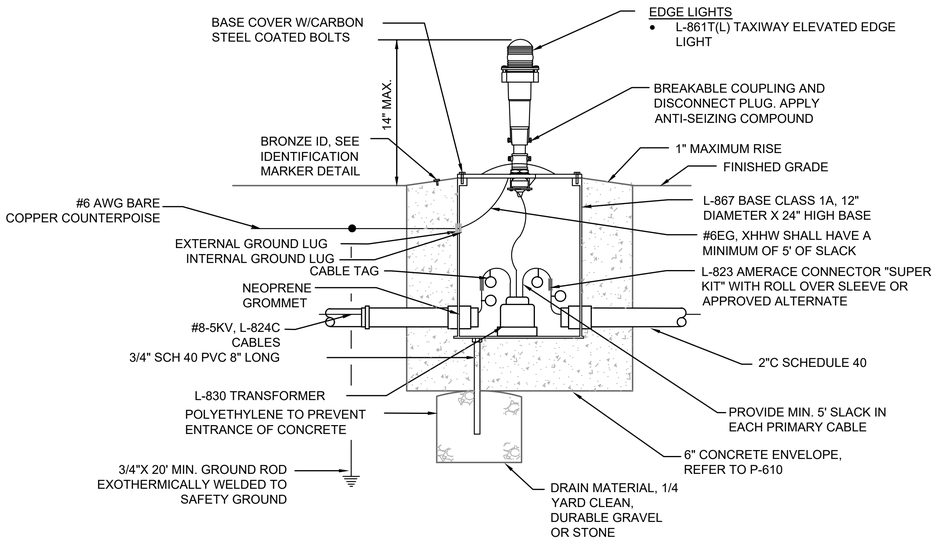
DRAWING FILE NO.

100% SUMBITTAL

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

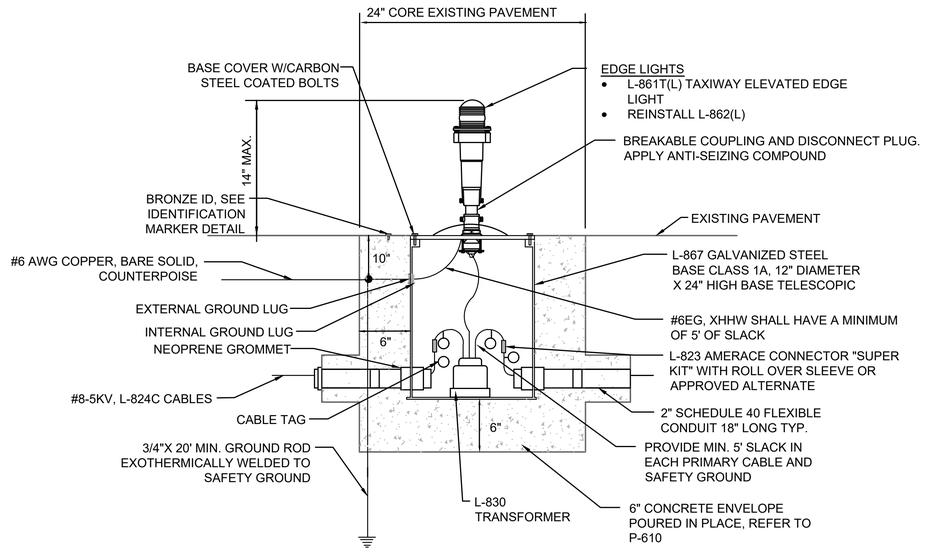
QUANTUM Electrical Engineering, Inc.
5573 N. University Dr., Suite 101
Coral Springs, FL 33067
561-210-9224
LICENSE NO. CA30005

C:\USERS\ACHAM\QEE DROPBOX\QUANTUM PROJECTS\KHA KIMLEY HORN\KHA2403 FXE TAXIWAY B AND Q\DWG\12706-E003-KMAP.DWG



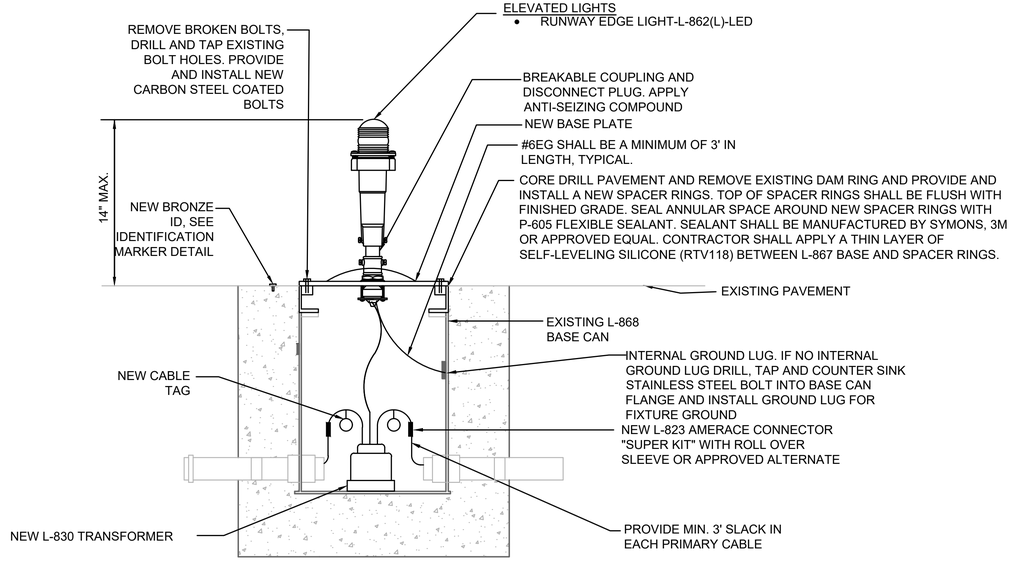
NEW ELEVATED TAXIWAY BASE MOUNTED LIGHT ON NEW BASE CAN IN EARTH

NOT TO SCALE



NEW ELEVATED LIGHT ON NEW BASE CAN IN EXISTING PAVEMENT

NOT TO SCALE



NEW ELEVATED RUNWAY LIGHT INSTALLED ON EXISTING BASE CAN

NOT TO SCALE

State of Florida
Professional Engineer
License No. 73735
AMY CHAMPAGNE-BAKER

DRAWN BY: RJC
DESIGNED BY: ALC
CHECKED BY: JWK
DATE: 06/30/2025
SCALE: AS NOTED
FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
ELECTRICAL DETAILS

100% SUMBITTAL

SHEET NO. E502 OF

TOTAL: 21

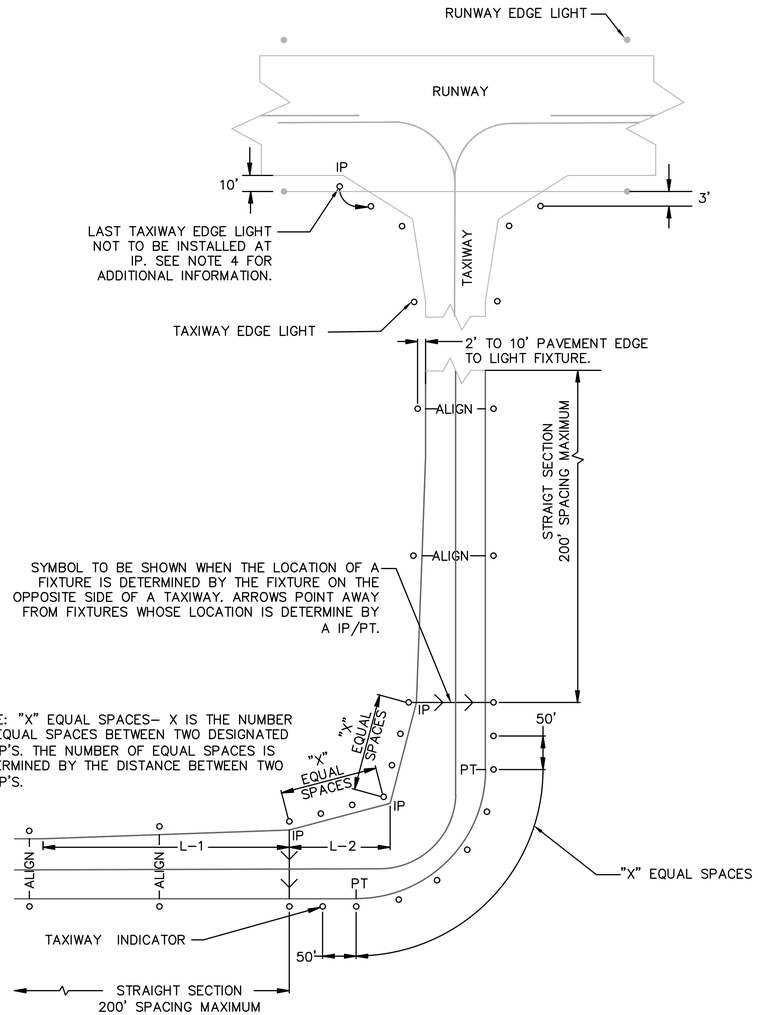
CAD FILE: 12706-E502-DETL

DRAWING FILE NO.

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
4201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
5571 N. University Dr., Suite 101
Coral Springs, FL 33067
561-210-9224
LICENSE NO. CA30005

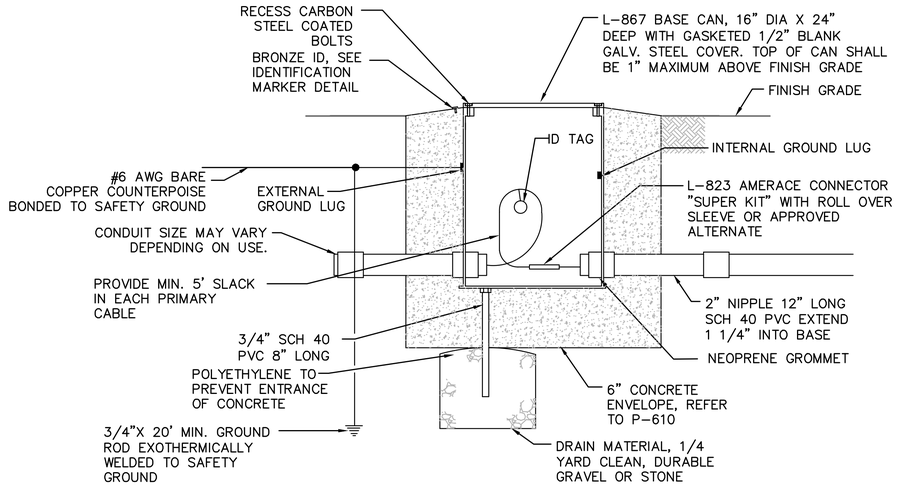
C:\USERS\ACHAM\OEE DROPBOX\QUANTUM PROJECTS\KHA KIMLEY HORN\KHA2403 FXE TAXIWAY B AND Q\DWG\12706-E003-KMAP.DWG



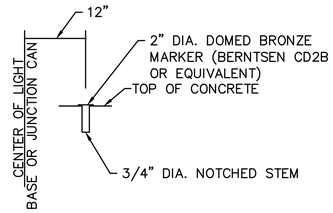
TYPICAL TAXIWAY EDGE LIGHTING CONFIGURATION
NOT TO SCALE

EDGE LIGHT CONFIGURATION NOTES:

1. EDGE LIGHTS INSTALLED IN NEW SHOULDER/FULL STRENGTH PAVEMENT OR EARTH SHALL BE INSTALLED AT 8' FROM OUTSIDE EDGE OF TAXIWAY/RUNWAY EDGE STRIPE TO CENTER OF LIGHT FIXTURE.
2. EDGE LIGHTS INSTALLED IN THE EXISTING FULL STRENGTH/SHOULDER PAVEMENT OR EARTH SHALL MATCH THE EXISTING LIGHT OFFSET FROM OUTSIDE EDGE OF TAXIWAY/RUNWAY EDGE STRIPE, NOT TO EXCEED 10' TO CENTER OF LIGHT FIXTURE. SHOULD NEW OFFSET DIFFER FROM EXISTING OFFSET, CONTRACTOR SHALL COORDINATE AND VERIFY OFFSETS WITH ENGINEER/OWNER PRIOR TO INSTALLATION.
3. ALL EDGE LIGHTS SHALL BE INSTALLED PER FAA AC150/5340–30, LATEST EDITION. LIGHTS INSTALLED ON OPPOSITE SIDES OF RUNWAYS AND STRAIGHT SECTIONS OF TAXIWAYS ARE ALIGNED SUCH THAT OPPOSING LIGHTS ARE IN A LINE PERPENDICULAR WITH THE CENTERLINE.
4. THE LAST TAXIWAY EDGE LIGHT AT A RUNWAY/TAXIWAY EDGE INTERSECTION MUST BE PLACED AT AN ADDITIONAL 3 FEET FROM THE RUNWAY EDGE LIGHT OFFSET LINE. THE OFFSET IS NECESSARY TO MINIMIZE ANY POTENTIAL CONFLICT WITH RUNWAY EDGE LIGHTS.



L-867 JUNCTION CAN DETAIL
NOT TO SCALE



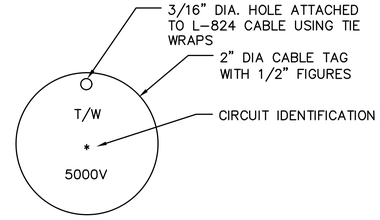
IDENTIFICATION MARKER
NOT TO SCALE

NOTES FOR IDENTIFICATION MARKER:

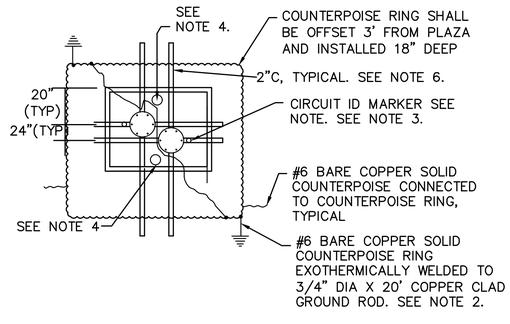
1. IDENTIFICATION SHALL BE STAMPED USING 1/2" FIGURES AND LETTERS UNIFORMLY SPACED ON THE BRONZE MARKER.
2. IDENTIFICATION MARKERS SHALL BE UNIFORMLY INSTALLED INSET TO THE CONCRETE ENVELOPE SURROUNDING BASE CAN.

NOTES:

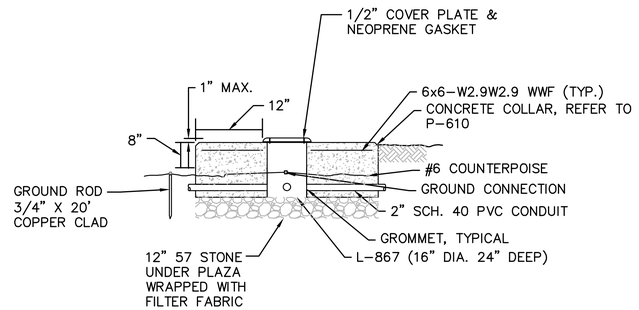
1. NUMBER AND ORIENTATION OF CONDUITS VARY. SEE PLAN SHEETS FOR DETAILS.
2. INSTALL GROUND RODS AT ALL JUNCTION CAN PLAZAS AS SHOWN. TWO GROUND RODS PER PLAZA LOCATED AT OPPOSITE CORNERS SHALL BE PROVIDED.
3. CONTRACTOR SHALL PROVIDE A 2" DIA DOMED BRONZE MARKER AT EACH JUNCTION CAN AS SHOWN. MARKER SHALL BE STAMPED WITH CIRCUIT IDENTIFICATION AS COORDINATED WITH AIRPORT AND ENGINEER. IF CAN IS LEFT EMPTY INSTALL A BLANK MARKER FOR FUTURE USE.
4. CONTRACTOR SHALL PROVIDE A 2" DIA DOMED BRONZE MARKER STAMPED WITH THE PLAZA IDENTIFICATION NUMBER AS SHOWN ON THE DRAWINGS.
5. EACH CAN SHALL HAVE A MINIMUM OF FOUR OPENINGS, LOCATIONS OF OPENINGS CAN BE AT 0, 45, 90, 135, 180, 225, 270 AND 315 DEGREES THAT EXTEND 3 FEET BEYOND PLAZA EDGE. LOCATIONS WILL VARY DEPENDING ON SIZE OF JUNCTION CAN PLAZA. CONDUIT OPENINGS AT 45, 135, 225 AND 315 DEGREES WILL HAVE A 3" OFFSET FROM THE REMAINING THREE OPENINGS. CONTRACTOR SHALL COORDINATE OPENINGS PRIOR TO INSTALLATION. CANS SHALL NOT BE CONNECTED TOGETHER INSIDE JUNCTION PLAZA. ALL CONDUITS EXITING THE CANS SHALL BE DEDICATED. CONDUITS WHICH ARE NOT USED IN THIS PROJECT SHALL BE CAPPED.
6. CONDUITS WHICH ARE NOT USED IN THIS PROJECT SHALL BE CAPPED 3' OUTSIDE OF PLAZA CONCRETE.
7. CONTRACTOR SHALL COORDINATE THE ORIENTATION OF THE PLAZA WITH THE ENGINEER AND OAR PRIOR INSTALLATION.
8. SEE DETAIL FOR CONNECTION TO JUNCTION CANS.



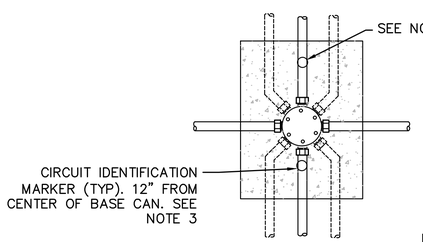
STAINLESS STEEL CABLE ID TAG DETAIL
NOT TO SCALE



2 JUNCTION CAN PLAZA
NOT TO SCALE



JUNCTION CAN PLAZA ELEVATION
NOT TO SCALE



PLAN VIEW
NOT TO SCALE

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
5571 N. University Dr., Suite 101
Coral Springs, FL 33067
561-210-9224
LICENSE NO: CA33605

100% SUMBITTAL

State of Florida
Professional Engineer
License No. 73735
AMY CHAMPAGNE-BAKER

DRAWN BY: RJC
DATE: 06/30/2025
DESIGNED BY: ALC
SCALE: AS NOTED
CHECKED BY: JWK
FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

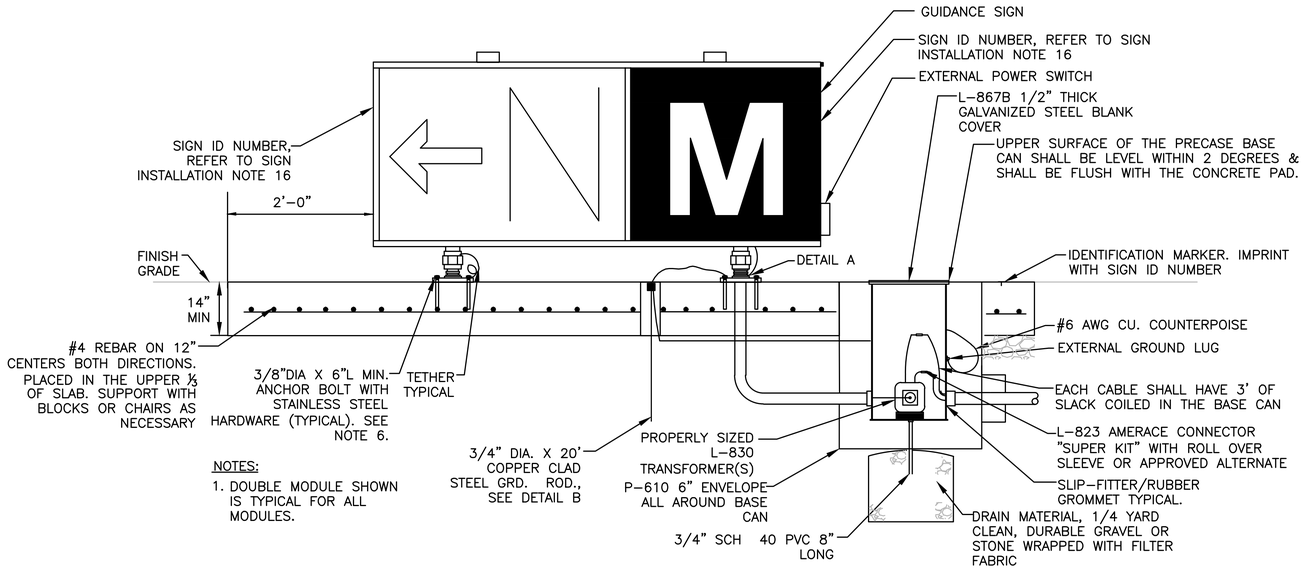
REVISIONS

NO.	DATE	BY	CHKD	DESCRIPTION

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
ELECTRICAL DETAILS

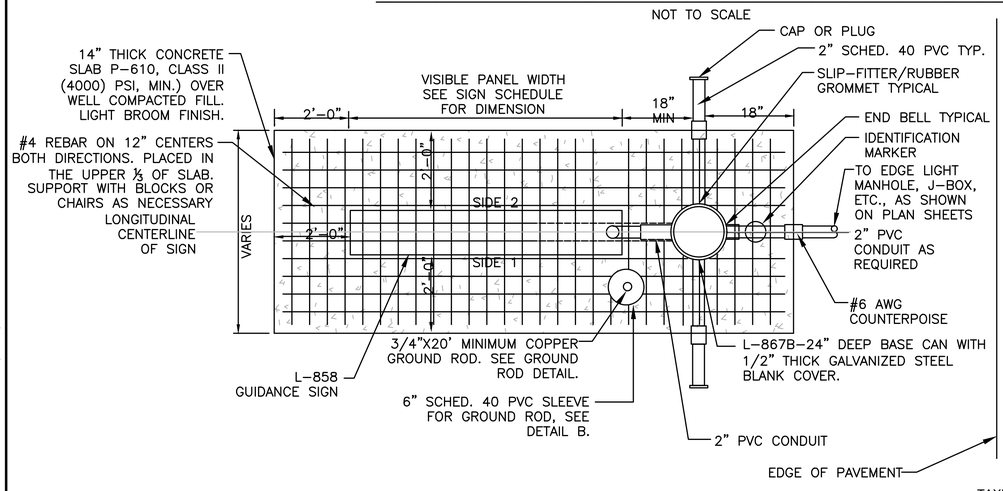
SHEET NO. E503 OF
TOTAL: 21
CAD FILE: 12706-E503-DETL
DRAWING FILE NO.

C:\USERS\ACHAM\QEE DROPBOX\QUANTUM PROJECTS\KHA KIMLEY HORN\KHA2403 FXE TAXIWAY B AND Q\DWG\12706-E003-KMAP.DWG



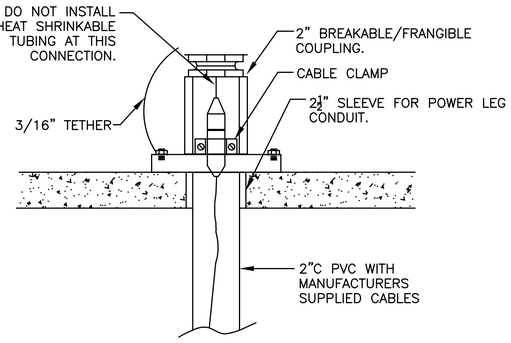
L-858 GUIDANCE SIGN AND CONCRETE BASE DETAIL

NOT TO SCALE



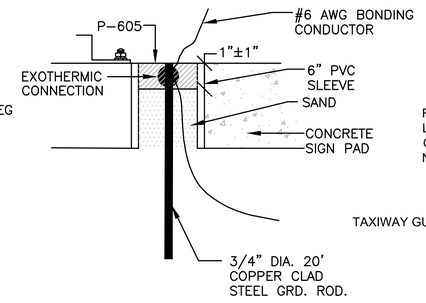
L-858 GUIDANCE SIGN PLAN VIEW

NOT TO SCALE



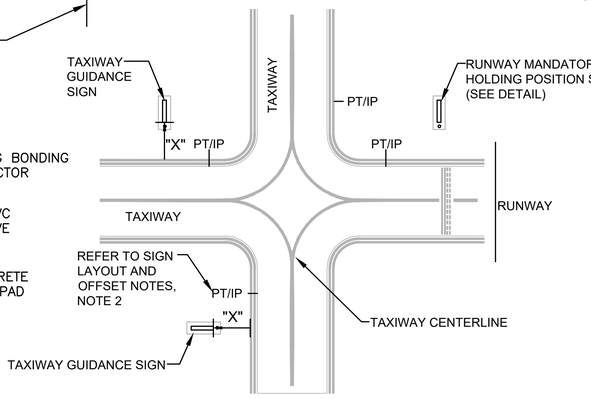
DETAIL "A"

NOT TO SCALE



DETAIL "B"

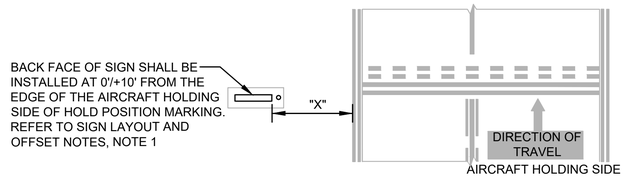
NOT TO SCALE



GUIDANCE SIGN TYPICAL OFFSET AND POSITIONS

EXAMPLE OF A PERPENDICULAR TAXIWAY CONNECTOR LESS THAN 150' WIDE
NOT TO SCALE

"X" = OFFSET DISTANCE FROM DEFINED PAVEMENT EDGE (OUTSIDE EDGE OF OUTBOARD STRIPE) TO THE NEAREST EDGE OF THE GUIDANCE SIGN FRAME.
SIZE 1 SIGNS = 10'-20'



RUNWAY MANDATORY HOLDING POSITION SIGN LAYOUT DETAIL

EXAMPLE OF A PERPENDICULAR TAXIWAY CONNECTOR LESS THAN 150' WIDE
NOT TO SCALE

"X" = OFFSET DISTANCE FROM DEFINED PAVEMENT EDGE (OUTSIDE EDGE OF OUTBOARD STRIPE) TO THE NEAREST EDGE OF THE GUIDANCE SIGN FRAME.
SIZE 1 SIGNS = 10'-20'

SIGN INSTALLATION NOTES

1. ALL MATERIALS, SIGN BASE DETAILS, ETC. SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
2. THE CONCRETE SHALL COMPLY WITH P-610 SPECIFICATION, CLASS II.
3. P-610 CONCRETE STEEL REINFORCEMENT SHALL BE TYPE ASTM A615 GRADE 60. ALL REINFORCEMENTS SHALL HAVE A 2" MINIMUM CONCRETE COVER. REINFORCEMENT MAY BE ADJUSTED TO MISS INTERFERENCES.
4. REFER TO LIGHTING LAYOUT PLANS FOR LOCATION AND ORIENTATION OF SIGN AND PRECAST BASE.
5. THE ORIENTATION, INSTALLATION AND DEPTH OF THE 2" CONDUIT FOR SIGN CIRCUITS SHALL BE COORDINATED WITH THE PLANS.
6. METHODS OF SIGN INSTALLATION INCLUDING BOLT PATTERNS, ANCHOR METHODS AND ATTACHMENT DETAILS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS.
7. ALL SIGNS SHALL BE INSTALLED WITH TETHERS ON A MINIMUM OF 2 LEGS PER SIGN. TETHERS SHALL BE 3/16" STAINLESS STEEL AIRCRAFT CABLE WITH A FORMED EYE ON BOTH ENDS. THE TETHER SHALL OF SUFFICIENT LENGTH TO HAVE 2" LACK (MIN.) WHEN ATTACHED BETWEEN SIGN AND THE FIXTURE PLATE.
8. SIDE VIEW, PLAN VIEW, GRADE AND FILL DETAILS AND DETAILS A AND B ARE TYPICAL FOR SIGNS.
9. ALL CONDUIT SHALL BE 2" SCHEDULE 40 PVC UNLESS NOTED OTHERWISE.
10. THE CONTRACTOR SHALL VERIFY THAT THE 6" SLEEVE IS LARGE ENOUGH TO ACCOMMODATE THE EXOTHERMIC CONNECTION. THE TOP OF THE GROUND ROD SHALL BE FLUSH WITH THE TOP OF THE SLAB. THE GROUND ROD SHALL NOT BE DRIVEN AFTER THE GROUNDING CONNECTION HAS BEEN MADE.
11. SIGN LOCATIONS INDICATED ON THE PLANS ARE 10' MIN TO 20' MAX PERPENDICULAR DISTANCE FROM THE TAXIWAY/RUNWAY EDGE STRIPE TO THE NEAREST SIDE OF SIGN. SIGNS SHALL BE STAKED IN THE FIELD, ORIENTATION AND LOCATION SHALL BE APPROVED BY RPR PRIOR TO INSTALLATION.
12. THE SIGN TETHER AND BONDING CONDUCTOR SHALL NOT BE ATTACHED AT THE SAME ANCHOR BOLT. AN APPROVED MECHANICAL OR COMPRESSION LUG SHALL BE USED TO CONNECT THE BONDING CONDUCTOR TO THE SIGN FLANGE AND SIGN. THE TETHERS AND BONDING CONDUCTORS SHALL BE OF SUFFICIENT LENGTH TO ALLOW THE FRANGIBLE COUPLING TO OPERATE WITHOUT RESTRICTIONS AND TO ALLOW THE CABLE TO UNPLUG IF THE SIGN FALLS OVER.
13. STRUCTURAL FILL FOR SIGN CONCRETE BASE SHALL BE FREE-DRAINING, AS APPROVED BY THE ENGINEER SHALL BE PLACED IN HORIZONTAL LIFTS NOT TO EXCEED 4" IN LOOSE DEPTH AND COMPACT TO 95% MAXIMUM DENSITY AT 0 TO 2% ABOVE OPTIMUM MOISTURE AS DETERMINED BY ASTM D698 PAYMENT FOR EMBANKMENT MATERIALS AND PLACEMENT SHALL BE INCIDENTAL TO SIGN BID ITEM. SLOPE SHALL NOT EXCEED 1:20 WITHOUT PERMISSION OF THE ENGINEER.
14. ALL AREAS FOR THE LEG FLANGE PLATES SHALL BE IN THE SAME PLANE.
15. MINIMUM BURIAL DEPTH OF 2" SCHEDULE 40 PVC CONDUIT IS 24".
16. PROVIDE 3-M SCOTCH-LITE OR APPROVED EQUIVALENT 3-INCH-HIGH, DIE CUT LABELS FOR EACH SIGN, LABELS SHALL BE REFLECTIVE FILM, WITH PRESSURE-SENSITIVE ADHESIVE BACKING, SUITABLE FOR EXTERIOR APPLICATIONS. LABELS SHALL BE UV RESISTANT. LABELS SHALL BE WHITE FOR INSTALLATION ON BLACK SURFACE, BLACK FOR INSTALLATION ON OTHER SURFACES. TEXT SHALL BE: NUMBER AND LETTER STYLE; HELVETICA MEDIUM, UPPER CASE, 3 INCHES IN HEIGHT.
17. THE CONTRACTOR SHALL PLACE SOD ALONG THE PERIMETER OF EACH SIGN BASE. SEED AND MULCH SHALL BE USED TO RESTORE ALL REMAINING DISTURBED AREAS. PAYMENT SHALL BE INCLUDED IN PRICE FOR SIGNS.

State of Florida
Professional Engineer
License No. 73735
AMY CHAMPAGNE-BAKER

DRAWN BY: RJC | DATE: 06/30/2025
DESIGNED BY: ALC | SCALE: AS NOTED
CHECKED BY: JWK | FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
ELECTRICAL DETAILS

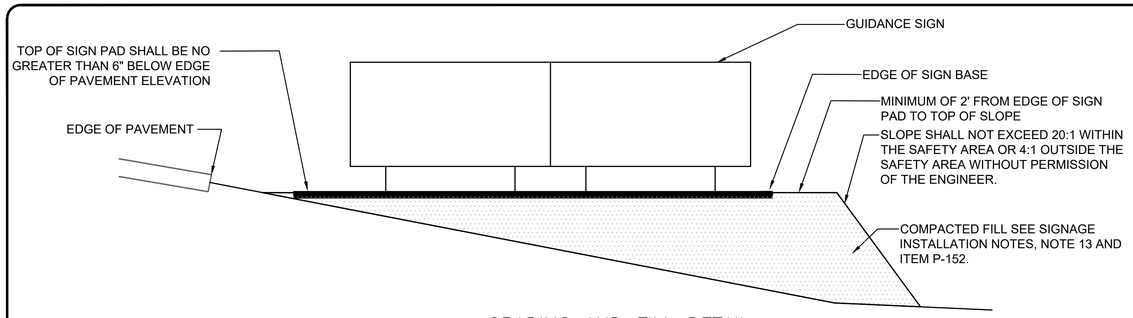
100% SUMBITTAL

SHEET NO. E504 | OF
TOTAL: 21
CAD FILE: 12706-E504-DETL
DRAWING FILE NO.

Kimley»Horn
Kimley-Horn and Associates, Inc.
©2025 KIMLEY-HORN AND ASSOCIATES, INC
8201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
1521 N. University Dr., Suite 101
Coral Springs, FL 33067
561-210-9224
LICENSE NO. CA33005

C:\USERS\ACHAM\QEE DROPBOX\QUANTUM PROJECTS\KHA KIMLEY HORN\KHA2403 FXE TAXIWAY B AND Q\DWG\12706-E003-KMAP.DWG



GRADING AND FILL DETAIL

NOT TO SCALE

NEW LIGHTED SIGN PANEL SCHEDULE

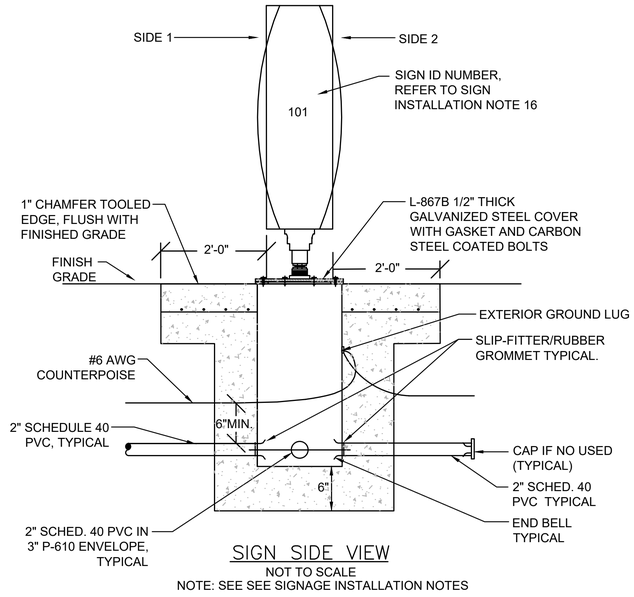
SIGN NO.	NO. OF CHARACTERS	SIZE	STYLE	LAMP	COLOR SIDE 1 LEGEND	COLOR SIDE 2 LEGEND	CIRCUIT	SHEET NO.	REMARKS
03	5	1	2	LED	L: J / R: 27-9	L: J / B:	9W	E201	
18	5	1	2	LED	L: J / R: 9-27	B:	9W	E203	
47	2	1	2	LED	B:	Y: J→	9W	E201	EXISTING PAVEMENT
48	4	1	2	LED	L: J / Y: ←F→	B:	FW	E201	
77	4	1	2	LED	L: A / Y: ←J→	B:	A	E203	
200	2	1	2	LED	Y: ←J	B:	9W	E201	EXISTING PAVEMENT
220	2	1	2	LED	B:	Y: J→	9W	E203	EXISTING PAVEMENT
226	4	1	2	LED	L: F / Y: F4→	L: F / Y: J→	FW	E201	
227	3	1	2	LED	Y: ←J / L: F	B:	FW	E201	
278	4	1	2	LED	L: J / Y: ←A→	B:	A	E203	
340	2	1	2	LED	Y: ←J	B:	9W	E203	EXISTING PAVEMENT

LIGHTED SIGN PANEL REPLACEMENT SCHEDULE

SIGN NO.	NO. OF MODULES	SIZE	STYLE	LAMP	COLOR EXISTING SIDE 1 LEGEND	COLOR EXISTING SIDE 2 LEGEND	COLOR NEW SIDE 1 LEGEND	COLOR NEW SIDE 2 LEGEND	CIRCUIT	EXISTING MANUFACTURER	SHEET NO.	REMARKS
34	3	1	2	LED	R: 13-31	Y: B↗ / B:	R: 13-31	B:	9W		E203	REPANEL SIDE 2
75	2	1	2	LED	Y: ←E6 / L: A	B:	L: A / Y: ←J→	B:	A	ADB	E203	REPANEL SIDE 1
81	2	1	2	LED	L: E / Y: E6→	B:	L: E / Y: J→	B:	E	ADB	E203	REPANEL SIDE 1
83	3	1	2	LED	L: E6 / Y: ←E→	B:	L: J / Y: ←E→	B:	E	ADB	E203	REPANEL SIDE 1
237	3	1	2	LED	L: E6 / Y: ←A→		L: J / Y: ←A→	B:	E		E203	REPANEL SIDE 1
333	2	1	2	LED	Y: ←E6 / L: E	B:	Y: ←J / L: E	B:	E		E203	REPANEL SIDE 1

SIGN LAYOUT AND OFFSET NOTES:

1. RUNWAY MANDATORY HOLDING POSITION SIGNS AND ILS POSITION SIGNS ARE LOCATED IN-LINE WITH THE FIRST STRIPE CLOSEST TO THE TAXIWAY CENTERLINE OF THE HOLDING POSITION MARKINGS WITH A TOLERANCE OF +10FT FARTHER AWAY FROM HOLD POSITION MARKING, SEE FAA AC150/5340-18, LATEST EDITION.
2. RUNWAY EXIT SIGNS AND TAXIWAY GUIDANCE SIGNS SHALL BE TYPICALLY LOCATED 15' PRIOR TO THE POINT OF TANGENCY (PT)/INTERSECTION POINT (IP). SEE GEOMETRY PLANS FOR PT/IP LOCATIONS. ALL SIGNS SHALL BE STAKED IN THE FIELD AND THE FINAL LOCATION APPROVED BY RPR PRIOR TO INSTALLATION.
3. ALL SIZE 1 SIGNS SHALL BE INSTALLED AT 15' FROM THE DEFINED EDGE OF PAVEMENT TO THE NEAREST EDGE OF THE GUIDANCE SIGN FRAME. IF A SIGN CANNOT BE INSTALLED AT ITS STANDARD LOCATION DUE TO AN OBSTRUCTION, A TOLERANCE OF 10 TO 20 FEET FROM THE DEFINED EDGE OF PAVEMENT TO THE NEAREST EDGE OF THE GUIDANCE SIGN FRAME IS ALLOWED AS STATED IN FAA AC150/5340-18 LATEST EDITION.



SIGN SIDE VIEW

NOT TO SCALE

NOTE: SEE SEE SIGNAGE INSTALLATION NOTES

SIGN LEGEND NOTES:

L = TAXI LOCATION SIGN, BLACK BACKGROUND WITH YELLOW LETTERING AND A YELLOW BORDER.

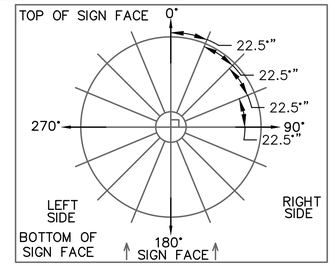
D = RUNWAY DISTANCE TO GO SIGN, BLACK BACKGROUND WITH WHITE LETTERING.

Y = TAXIWAY DIRECTIONAL SIGN, YELLOW BACKGROUND WITH BLACK LETTERING.

R = MANDATORY HOLD SIGN, RED BACKGROUND WITH WHITE LETTERING OUTLINED IN BLACK.

I = INFORMATIONAL SIGN WITH YELLOW BACKGROUND WITH BLACK LETTERING

ARROW ROTATION ANGLE DATA AS VIEWED LOOKING AT SIGN FACE



SIGN PANEL NOTES:

1. ARROWS INDICATE DIRECTION OF TAXIWAYS.
2. IT IS THE RESPONSIBILITY OF CONTRACTOR TO ENSURE THAT THE DIRECTIONAL ARROWS ON ANGLED TAXIWAYS (NOT 90°) MATCHES CENTERLINE OF REFERENCED TAXIWAY TO THE NEAREST 22.5°: SEE ROSE COMPASS FOR GUIDANCE.
3. CONTRACTOR SHALL PROVIDE ALL SIGN LEGENDS AND BLANK PANELS REQUIRED BY THE SIGN PANEL SCHEDULE, MANUFACTURER AND FAA AC150/5340-18, LATEST EDITION.
4. CONTRACTOR SHALL PROVIDE MESSAGE DIVIDERS ON NEW AND EXISTING SIGNS TO BE REPANELED PER AC150/5340-18, LATEST EDITION. MESSAGE DIVIDERS SHALL BE INCLUSIVE TO THE LINE ITEMS FOR SIGNAGE.
5. SIGNS SHALL BE PAID BY CHARACTER, UNLESS OTHERWISE INDICATED. ONE CHARACTER SHALL BE DEFINED AS 1 LETTER, NUMERAL OR SPECIAL CHARACTER/PUNCTUATION REGARDLESS OF TEXT OR BACKGROUND COLOR CHANGES. SIGNS SHALL BE PAID FOR BY THE SIGN SIDE THAT HAS THE GREATEST NUMBER OF CHARACTERS AND SHALL NOT ACCOUNT FOR MESSAGE DIVIDERS OR CHANGE OF BACKGROUND COLOR. PANELS FOR BOTH SIDES OF SIGN SHALL BE INCLUSIVE TO THE LINE ITEM.

Kimley»Horn
Kimley-Horn and Associates, Inc.
©2025 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2000, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
5571 N. University Dr., Suite 101
Coral Springs, FL 33067
561-210-9224
LICENSE NO. CA30005

100% SUMBITTAL

State of Florida
Professional Engineer
License No. 73735
AMY CHAMPAGNE-BAKER

DRAWN BY: RJC | DATE: 06/30/2025
DESIGNED BY: ALC | SCALE: AS NOTED
CHECKED BY: JWK | FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
ELECTRICAL DETAILS

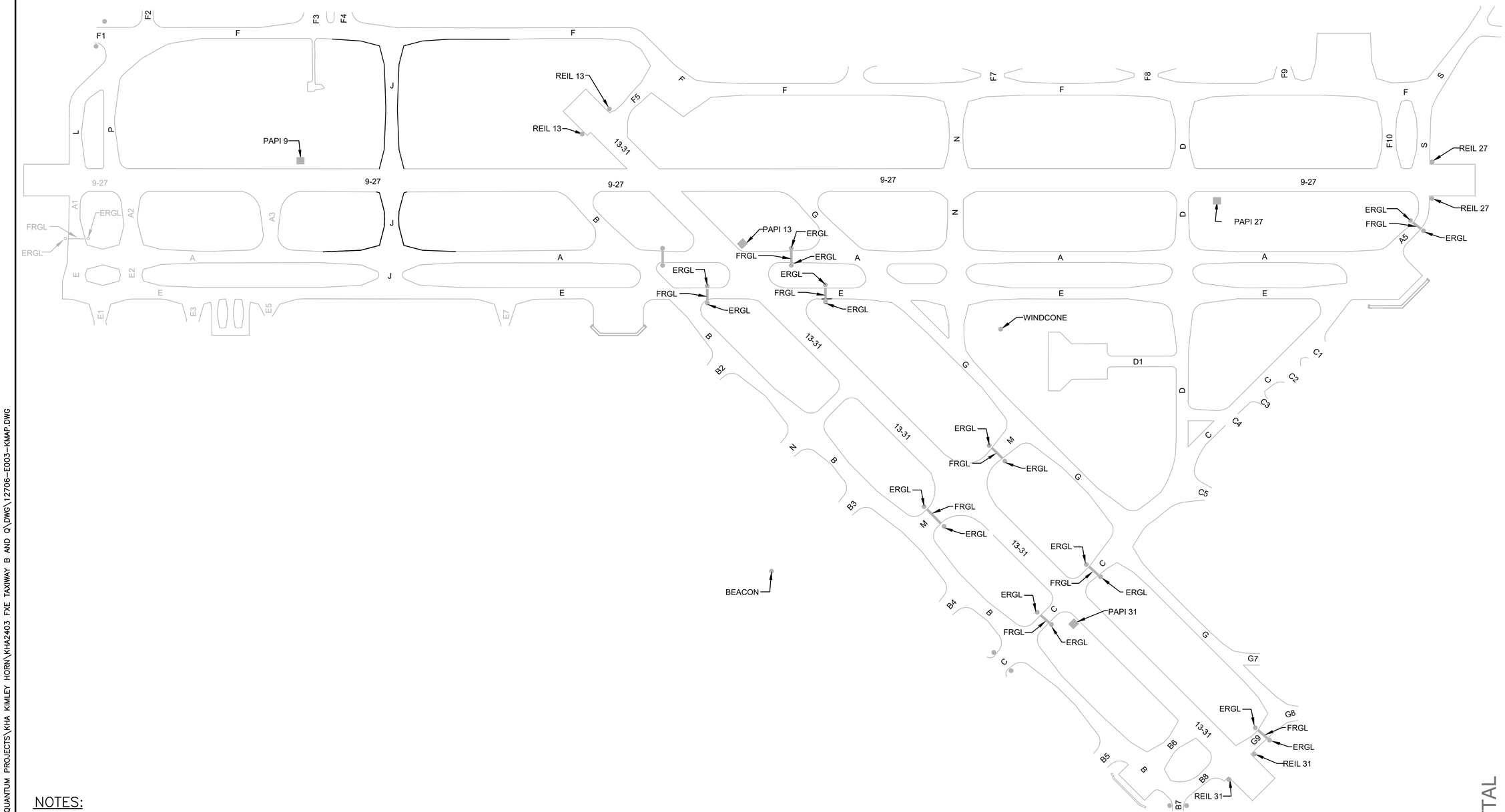
SHEET NO. E505 | OF

TOTAL: 21

CAD FILE: 12706-E505-DETL

DRAWING FILE NO.

C:\USERS\ACHAM\QEE DROPBOX\QUANTUM PROJECTS\KHA KIMLEY HORN\KHA2403 FXE TAXIWAY B AND Q\DWG\12706-E003-KMAP.DWG



NOTES:

1. CONTRACTOR SHALL UTILIZE THE ABOVE GRAPHIC FOR MODIFICATIONS TO THE EXISTING TOUCH SCREENS AND LAPTOP SYSTEMS.
2. THE EXISTING COMPUTERIZED AIRFIELD LIGHTING CONTROL AND MONITORING SYSTEM (ALCMS) WAS MANUFACTURED BY ADB SAFEGATE. THE CONTRACTOR SHALL CONTRACT THE MANUFACTURER TO MAKE ALL MODIFICATIONS TO THE HARDWARE, SOFTWARE AND TOUCH SCREEN GRAPHICS FOR THE EXISTING AIRFIELD LIGHTING CONTROL SYSTEM IN THE AIRFIELD VAULT, LAPTOP AND TOWER. ADDITIONS AND CHANGES SHALL INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:
   2.1. PROGRAMMING
   2.2. GRAPHICS UPDATES
3. EQUIPMENT, SOFTWARE, TRAVEL AND EXPENSES, SHIPPING AND TAXES SHALL BE INCLUSIVE TO THE ALLOWANCE ACCOUNT. THE EXISTING ALCMS SHALL REMAIN IN OPERATION AT ALL TIMES DURING MODIFICATIONS.

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
5571 N. University Dr., Suite 101
Coral Springs, FL 33067
561-210-9224
LIC.EC#32 NO. CA/8065

100% SUMBITTAL

State of Florida
Professional Engineer
License No. 73735
AMY CHAMPAGNE-BAKER

DRAWN BY:	DATE:
RJC	06/30/2025
DESIGNED BY:	SCALE:
ALC	AS NOTED
CHECKED BY:	
JWK	
FIELD BOOK:	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

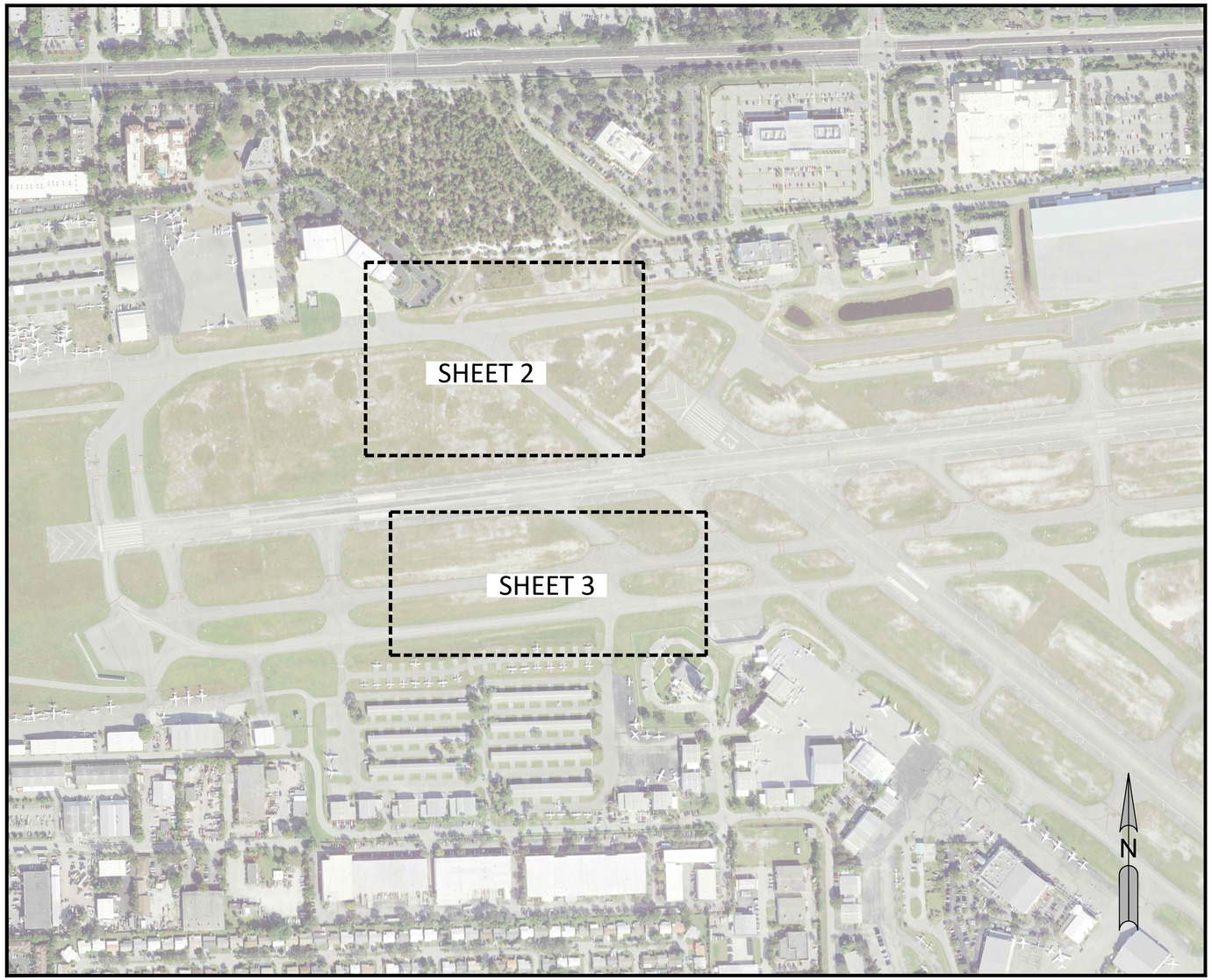
REVISIONS			
NO.	DATE	BY	CHK'D	DESCRIPTION

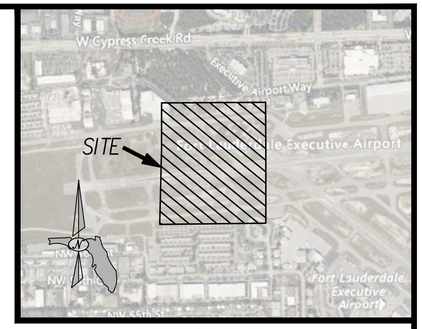
PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
ELECTRICAL DETAILS

SHEET NO.	OF
E506	
TOTAL:	21
CAD FILE: 12706-E506-DETL	
DRAWING FILE NO.	

C:\USERS\ACHAM\QEE DROPBOX\QUANTUM PROJECTS\KHA KIMLEY HORN\KHA2403 FXE TAXIWAY B AND Q\DWG\12706-E003-KMAP.DWG

LEGEND	
BENCHMARK	
BACKFLOW PREVENTER	
BLUE TAXIWAY LIGHT	
BOLLARD	
BORING	
CANISTER	
CATCH BASIN	
CLEANOUT	
CONCRETE LIGHT POLE	
ELECTRIC BOX	
ELECTRIC PANEL	
GATE POST	
KEYPAD	
LIGHT	
MANHOLE DRAINAGE	
METAL LIGHT POLE	
METAL POST	
SENSOR	
SEWER VALVE	
SIGN	
TRAFFIC SIGNAL BOX	
TRANSFORMER	
U.G. CABLE MARKER	
WATER METER	
WATER VALVE	
FENCE-CHAINLINK	
EDGE OF WATER	
TOE OF SLOPE	
TOP OF BANK	
U/G LOCATES-RED PAINT	
U/G LOCATES-UNKNOWN	
ASPHALT	
BUILDING	
CONCRETE	
STAIRS	





VICINITY MAP
NOT TO SCALE

SURVEY REPORT:

1. THIS IS A SPECIFIC PURPOSE SURVEY, PREPARED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF THE STANDARDS OF PRACTICE SET FORTH IN RULE 5J-17.051 THROUGH 5J-17.053, FLORIDA ADMINISTRATIVE CODE.
   THE FIELD WORK WAS COMPLETED ON DECEMBER 12, 2024

   THIS IS NOT A BOUNDARY SURVEY.

2. THE SURVEY WAS BASED ON AIRPORT PACS & SACS CONTROL & DIRECTION FROM THE CLIENT.

3. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE COMMITMENT.

   NO SEARCH OF THE PUBLIC RECORDS HAS BEEN PERFORMED BY BROWN & PHILLIPS, INC.

   THERE MAY BE ADDITIONAL EASEMENTS AND/OR RESTRICTIONS NOT SHOWN ON THIS SURVEY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF BROWARD COUNTY.

4. THIS SURVEY WAS PREPARED FOR THE SPECIFIC PURPOSE OF SHOWING THE EXISTING CONDITIONS.

5. THE CONTRACTED PURPOSE OF THIS SURVEY IS FOR DESIGN OF RUNWAY IMPROVEMENTS. THIS SURVEY IS NOT VALID FOR ANY OTHER USE.

6. ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.

7. THIS SURVEY WAS PREPARED FOR THE PARTIES LISTED BELOW AND IS NOT ASSIGNABLE:
   -KIMLEY-HORN
   -CITY OF FORT LAUDERDALE

   THE USE OF THE DATA SHOWN HEREON BY ANY OTHER PARTY IS PROHIBITED.

8. THIS MAP IS INTENDED TO BE DISPLAYED AT A SCALE OF 1"=40', ON A 24"x 36" SHEET.

9. SOME TOPOGRAPHIC FEATURES MAY BE EXAGGERATED IN SCALE FOR CLARITY. THE CENTER OF THE SYMBOL OF SUCH FEATURES IS THE CORRECT LOCATION.

10. NO UNDERGROUND INSTALLATIONS OR IMPROVEMENTS HAVE BEEN LOCATED AS PART OF THIS SURVEY.

11. ELEVATIONS SHOWN HEREON ARE IN NORTH AMERICAN VERTICAL DATUM OF 1988, AND ARE REFERENCED TO FORT LAUDERDALE EXECUTIVE AIRPORT BENCHMARK "11127" FOUND MAG NAIL AND DISK, ELEVATION=11.65'.

12. $\times^{100}$ DENOTES SPOT ELEVATION, REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988.

13. FLOOD ZONE INFORMATION OBTAINED FROM FEMA'S NATIONAL FLOOD HAZARD WEBSITE:
    "https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd";
    CURRENT FLOOD ZONE: "AH"

14. STATE PLANE COORDINATES
    A. COORDINATES SHOWN ARE GRID
    B. DATUM - NAD 83, 1990 ADJUSTMENT
    C. ZONE - FLORIDA EAST
    D. LINEAR UNIT - US SURVEY FOOT
    E. COORDINATE SYSTEM 1983/1990 STATE PLANE
    F. TRANSVERSE MERCATOR PROJECTION
    G. ALL DISTANCES ARE GROUND, UNLESS NOTED OTHERWISE

15. THE UNDERLYING 2024 BROWARD COUNTY AERIAL PHOTO IS SHOWN FOR INFORMATION ONLY AND IS NOT A PART OF THE SURVEY.

16. © COPYRIGHT 2025 BY BROWN & PHILLIPS, INC.
    REPRODUCTIONS OF THIS SURVEY ARE NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND STAMP, OR A DIGITALLY VERIFIED ELECTRONIC SIGNATURE AND SEAL, OF A FLORIDA LICENSED SURVEYOR AND MAPPER EMPLOYED BY BROWN & PHILLIPS, INC.

ABBREVIATIONS:
PG. - PAGE
R/W - RIGHT-OF-WAY
℄ - CENTERLINE
U/G - UNDERGROUND
IR - IRON ROD
IR/C - IRON ROD WITH CAP AS NOTED
IP - IRON PIPE
C.M. - 4"x4" CONCRETE MONUMENT
N/D - NAIL & DISK
NTT - NAIL & TIN TAB
PK - PARKER KALON NAIL
PRM - PERMANENT REFERENCE MONUMENT
NAD - NORTH AMERICAN DATUM
LB - LICENSED BUSINESS
WM - WATER MAIN
TOW - TOP OF WALL
EL. - ELEVATION
INV - INVERT
BTM - BOTTOM

BROWN & PHILLIPS, INC.
PROFESSIONAL SURVEYING SERVICES
CERTIFICATE OF AUTHORIZATION # LB 6473
1860 OLD OKEECHOBEE ROAD, SUITE 509, WEST PALM BEACH, FLORIDA 33409 561-615-3988

DATE	REVISIONS	#

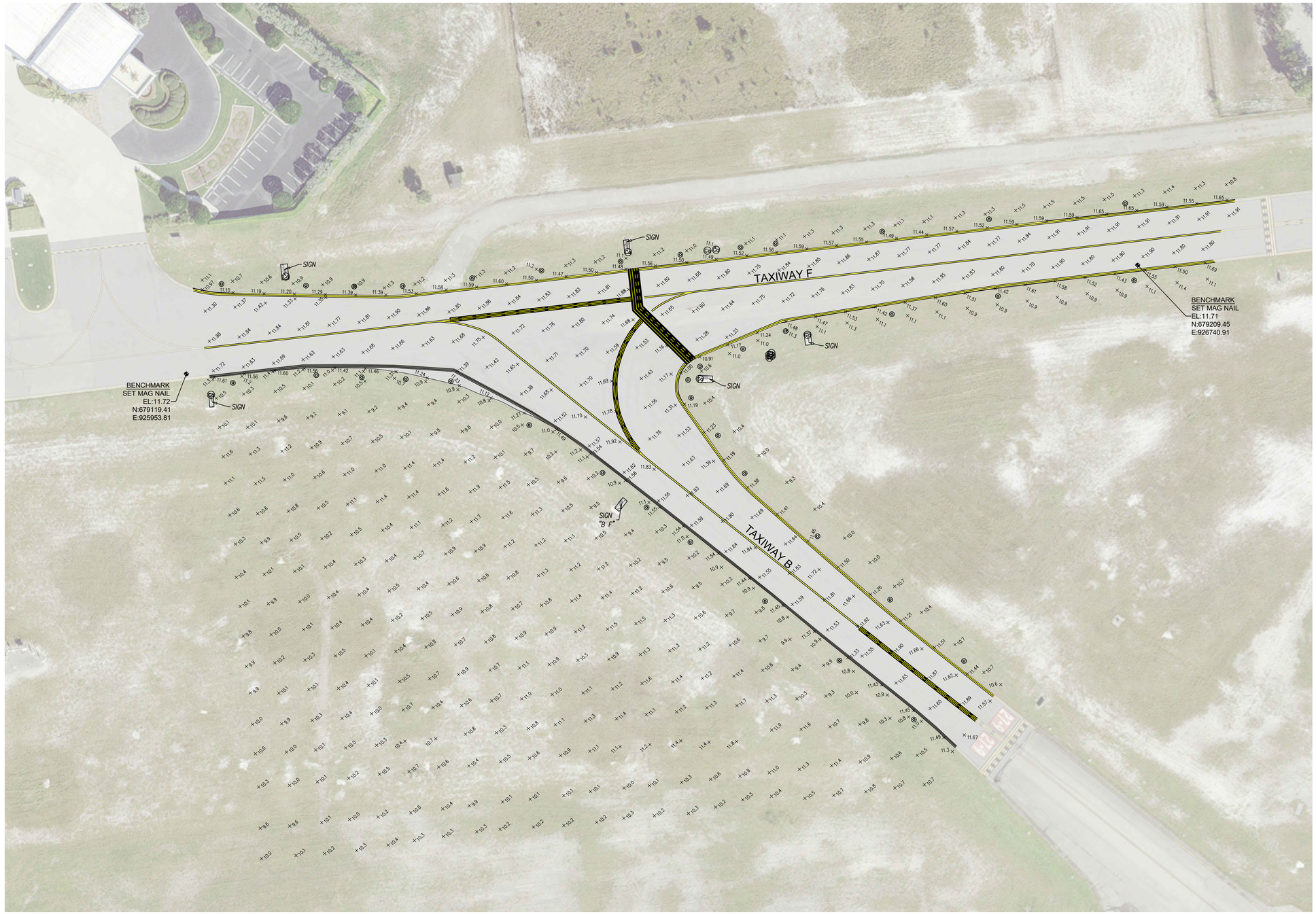
SKETCH OF SPECIFIC PURPOSE SURVEY

FORT LAUDERDALE EXECUTIVE AIRPORT TAXIWAY BRAVO & QUEBEC REALIGNMENT PROJECT

DRAWN: PL
CHECKED: JP
F.B. #24-1
PAGE: 9-11

PROJ. #24-117
SCALE: NA
DATE: JAN 2025
SHEET 1 of 3

JOHN E. PHILLIPS III
PROFESSIONAL LAND SURVEYOR
STATE OF FLORIDA No. 4826
DATE:



BROWN & PHILLIPS, INC.
PROFESSIONAL SURVEYING SERVICES
CERTIFICATE OF AUTHORIZATION # LB 6473
1860 OLD OKEECHOBEE ROAD, SUITE 509, WEST PALM BEACH, FLORIDA 33409 561-615-3988

DATE	REVISIONS	#

SKETCH OF
SPECIFIC PURPOSE
SURVEY

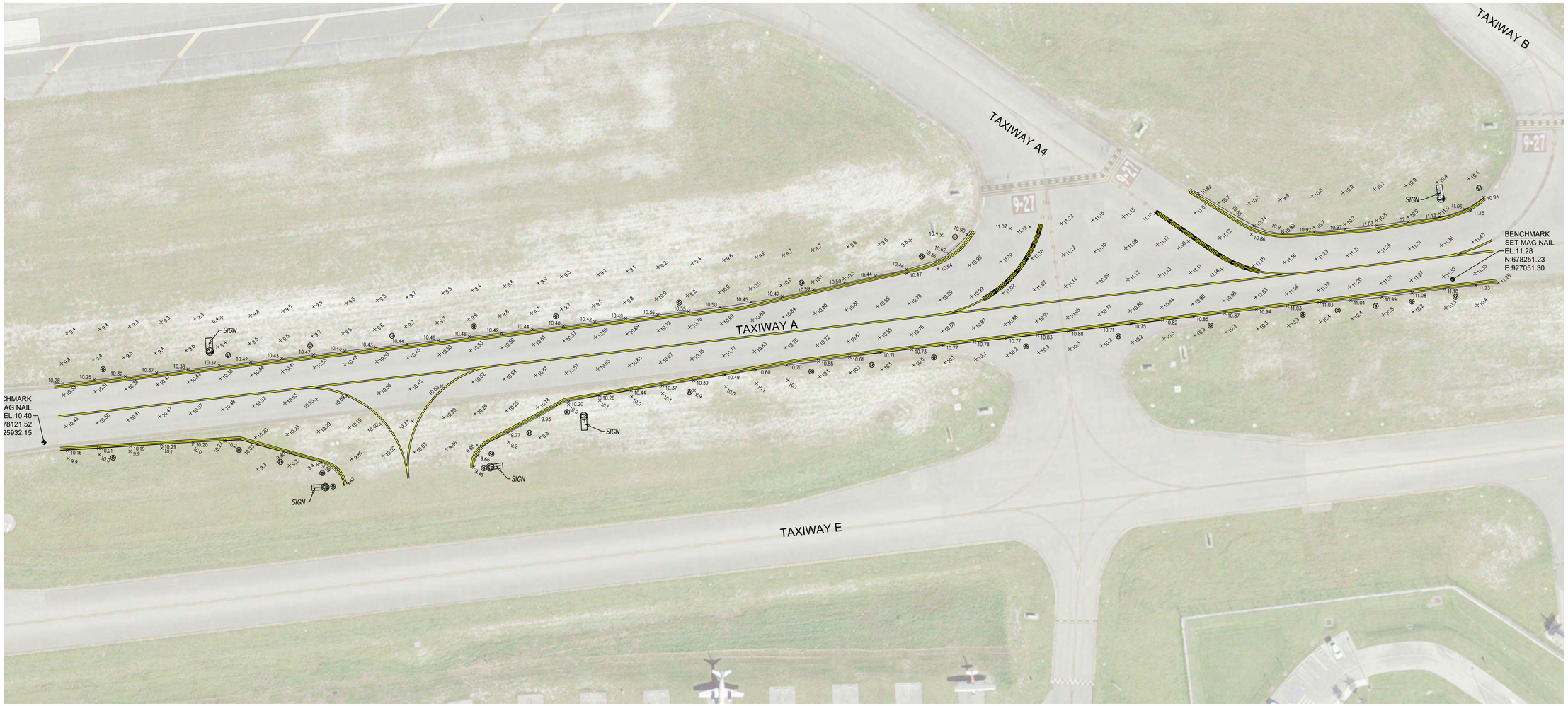
FORT LAUDERDALE
EXECUTIVE AIRPORT
TAXIWAY BRAVO & QUEBEC
REALIGNMENT PROJECT

DRAWN: PL
CHECKED: JP
F.B. #24-1
PAGE: 9-11

PROJ. #24-117
SCALE: 1"=40'
DATE: JAN 2025
SHEET 2 of 3

N

0 10 20 40
SCALE: 1" = 40'



BROWN & PHILLIPS, INC.
PROFESSIONAL SURVEYING SERVICES
CERTIFICATE OF AUTHORIZATION # LB 6473
1860 OLD OKEECHOBEE ROAD, SUITE 509, WEST PALM BEACH, FLORIDA 33409 561-615-3988

DATE	REVISIONS	#

SKETCH OF
SPECIFIC PURPOSE
SURVEY

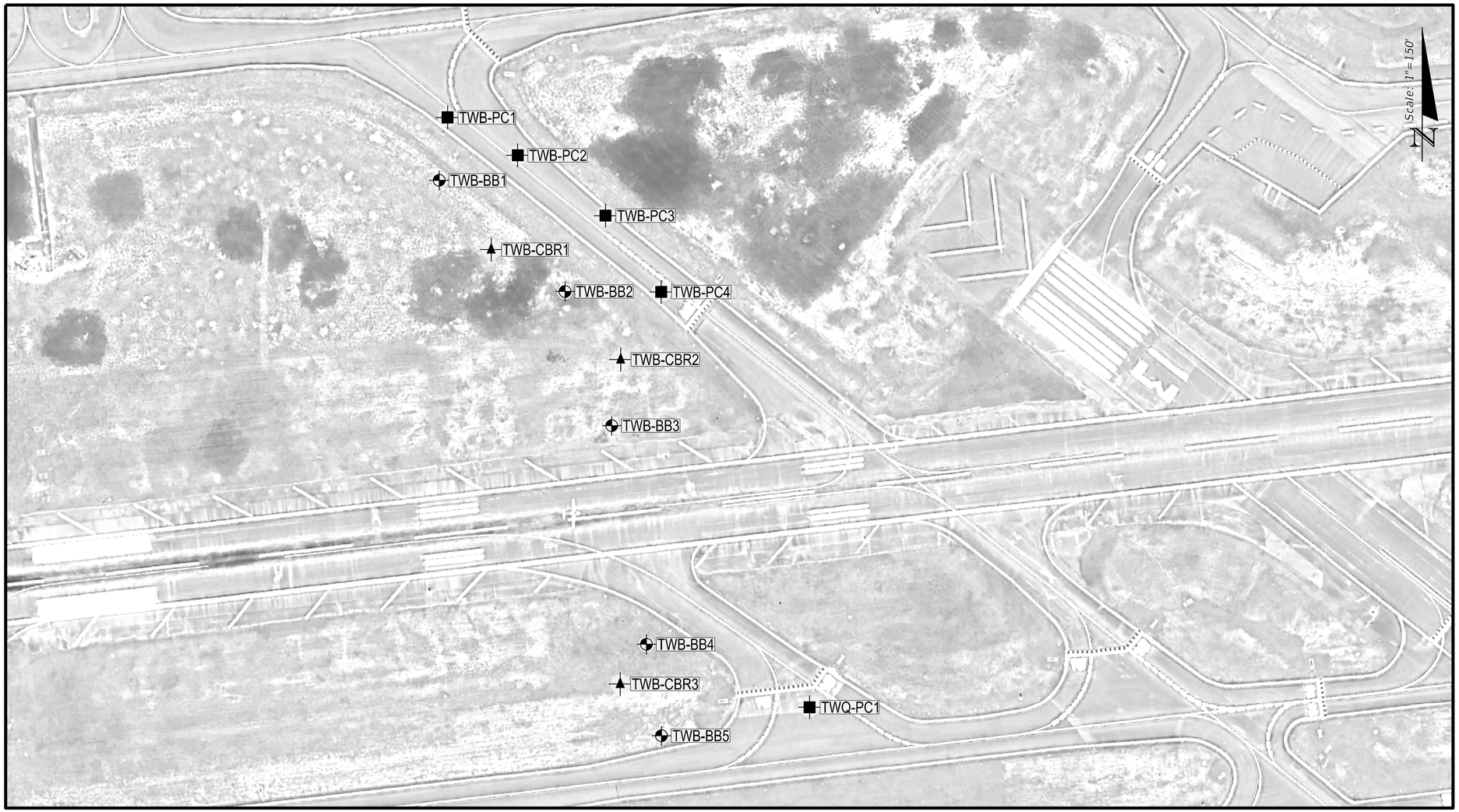
FORT LAUDERDALE
EXECUTIVE AIRPORT
TAXIWAY BRAVO & QUEBEC
REALIGNMENT PROJECT

DRAWN: PL
CHECKED: JP
F.B. #24-1
PAGE: 9-11

PROJ. #24-117
SCALE: 1"=40'
DATE: JAN 2025
SHEET 3 of 3

N

0 10 20 40
SCALE: 1" = 40'

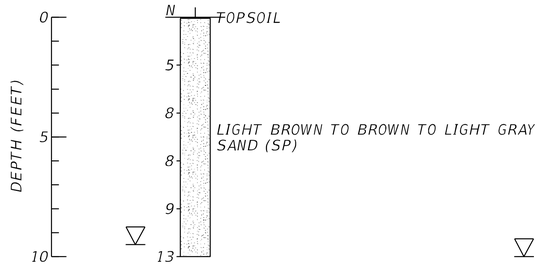


- Approximate Location of Standard Penetration Test (SPT) Boring
- Approximate Location of Pavement Core
- Approximate Location of California Bearing Ratio (CBR) Sample

DRAWN BY: JO CHECKED BY: EJ	APPROVED BY: RV DATE: 1/18/2025	ENGINEER OF RECORDS RAMAKUMAR VEDULA, P.E. FLORIDA LICENSE NO.: 54873	TIERRA SOUTH FLORIDA 2765 VISTA PARKWAY, STE-10 WEST PALM BEACH, FL 33411	SCALE: NTS	PROJECT NUMBER: 7111-24-280	BORING LOCATION PLAN FXE TAXIWAY B AND Q REALIGNMENT DESIGN PHASE SERVICES FORT LAUDERDALE, FLORIDA	SHEET NO. 1

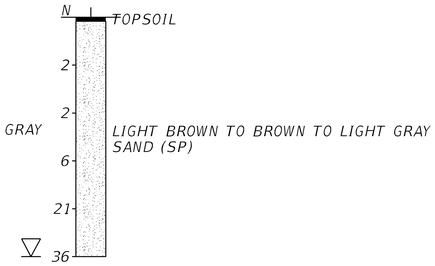
1/18/2025 11:12:27 AM joliva
J:\Tierra Documents\Projects\TSF 2024\7111-24-280\Taxiway B and Q Realignment Design Phase Services @ FXE (KHA)\Geotechnical\7111_24_280_sPlan_sProfiles.dgn

Bore # TWB-BB-1
Date 12/15/2024
Driller Y.PINO
Hammer Auto
Rig B-57
Latitude 26.199197
Longitude 80.176192



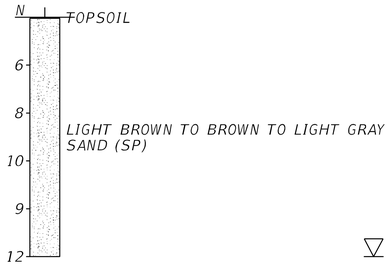
Boring Terminated at Depth of 10ft

Bore # TWB-BB-2
Date 12/15/2024
Driller Y.PINO
Hammer Auto
Rig B-57
Latitude 26.198633
Longitude 80.175692



Boring Terminated at Depth of 10ft

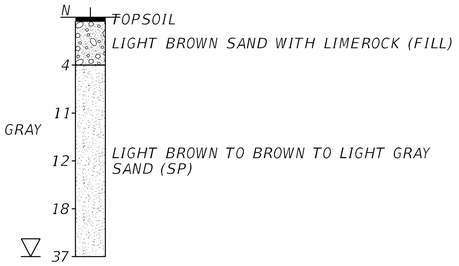
Bore # TWB-BB-3
Date 12/15/2024
Driller Y.PINO
Hammer Auto
Rig B-57
Latitude 26.198436
Longitude 80.175542



GNE

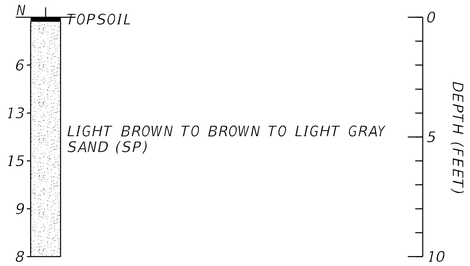
Boring Terminated at Depth of 10ft

Bore # TWB-BB-4
Date 12/15/2024
Driller Y.PINO
Hammer Auto
Rig B-57
Latitude 26.197717
Longitude 80.175569



Boring Terminated at Depth of 10ft

Bore # TWB-BB-5
Date 12/15/2024
Driller Y.PINO
Hammer Auto
Rig B-57
Latitude 26.197339
Longitude 80.175344



GNE

Boring Terminated at Depth of 10ft

LEGEND

- Topsoil
- Sand
- ▽ Encountered Groundwater Table
- GNE Groundwater Not Encountered in upper 10 feet
- (SP) Unified Soil Classification System (ASTM D 2488)
- N Indicate SPT Value (12" Penetration-140 lb Hammer)

NOTES

1. STRATA BOUNDARIES ARE APPROXIMATE AND MAY VARY BETWEEN OR AWAY FROM BORING LOCATIONS.
2. BORING LOCATIONS WERE MARKED IN THE FIELD USING A HANDHELD GPSMap GARMIN 78s. ACTUAL LOCATIONS AND THEIR COORDINATES ARE APPROXIMATE.
3. DEPTH SHOWN ARE IN FEET FROM EXISTING GROUND SURFACE
4. SPT N-VALUES SHOWN ABOVE WERE OBTAINED USING AUTOMATIC HAMMERS. GENERALLY DESIGN CORRELATIONS AND PROGRAMS USE SAFETY HAMMERS N-VALUES. HENCE, THE ABOVE N-VALUES NEED TO BE MULTIPLIED BY 1.24 TO OBTAIN EQUIVALENT SAFETY HAMMER N-VALUES FOR DESIGN PURPOSE.
5. CAVING SOILS MAY BE ENCOUNTERED DURING EXCAVATION AND FLUID LEVEL MAY BE DIFFICULT TO MAINTAIN.

DRAWN BY:	APPROVED BY:	ENGINEER OF RECORDS		SCALE:	PROJECT NUMBER:		SHEET NO.
JO	RV	RAMAKUMAR VEDULA, P.E.	TIERRA SOUTH FLORIDA	NTS	7111-24-280	SOIL PROFILES	2
CHECKED BY: EJ	DATE: 1/18/2025	FLORIDA LICENSE NO.: 54873	2765 VISTA PARKWAY, STE-10 WEST PALM BEACH, FL 33411			FXE TAXIWAY B AND Q REALIGNMENT DESIGN PHASE SERVICES FORT LAUDERDALE, FLORIDA	

1/18/2025 11:12:31 AM joliva
J:\Tierra Documents\Projects\TSF 2024\7111-24-280\Taxiway B and Q Realignment Design Phase Services @ FXE (KHA)\Geotechnical\7111_24_280_sPlan_sProfiles.dgn

CONSTRUCTION SAFETY AND PHASING PLAN

Fort Lauderdale Executive Airport (FXE)

TAXIWAY B & Q REALIGNMENT

June 30th, 2025

100% Submittal

Prepared For:

City of Fort Lauderdale

Prepared By:

Kimley-Horn and Associates, Inc.
8201 Peters Road, Suite 2200
Plantation, FL 33324

Thomas F. O'Donnell, P.E.
FL P.E. No. 62478
© Kimley-Horn and Associates, Inc., 2025

Kimley»Horn

Kimley»Horn

Table of Contents

Page

GENERAL INFORMATION AND SCOPE OF WORK 2
CONSTRUCTION PHASING AND SAFETY PLAN REQUIREMENTS 4
1. Coordination 4
2. Phasing 5
3. Areas and Operations Affected by Construction Activity 7
4. Protection of Navigation Aids (NAVAIDs) 9
5. Contractor Access 9
6. Wildlife Management 12
7. Foreign Object Debris (FOD) Management 12
8. Hazardous Materials (HAZMAT) Management 12
9. Notification of Construction Activities 13
10. Inspection Requirements 14
11. Underground Utilities 15
12. Penalties 15
13. Special Conditions 15
14. Runway and Taxiway Visual Aids, Marking, Lighting, Signs, and Visual NAVAIDs 15
15. Marking and Signs for Access Routes 16
16. Hazard Marking and Lighting 16
17. Protection of Runway and Taxiway Safety Areas, Object Free Areas, Obstacle Free Zones, and Approach/Departure Surfaces 17
18. Other Limitations on Construction 17

Appendix A – Airspace Protection Plan, Safety Notes and Details

Appendix B – Access and Staging Plan

Appendix C – Phasing Plans

Appendix D – Construction Daily Safety Inspection Checklist

kimley-horn.com 8201 Peters Road, Suite 2200, Plantation, FL 33324 954 535 5100

GENERAL INFORMATION AND SCOPE OF WORK

This project is for the relocation of Taxiway Bravo and A4 and associated taxiway geometry updates at the Fort Lauderdale Executive Airport (FXE), located in Fort Lauderdale, Florida. The work outlined in this Construction Safety and Phasing Plan (CSPP) consists of the relocation of Taxiway Bravo and A4 by conducting a full depth demolition of the existing Taxiway Bravo and Taxiway A4 and constructing new full depth taxiways in their new location.

- Base Bid:
  - The full-depth demolition of approximately 7,192 square yards (SY) of Asphalt Pavement and its underlying Limerock layer on existing Taxiway Bravo.
  - The full-depth demolition of approximately 4,535 square yards (SY) of Asphalt Pavement and its underlying Limerock layer on existing Taxiway A4.
  - The full-depth asphalt pavement construction of approximately 6,060 square yards (SY) of new Taxiway consisting of a section of Subbase, Limerock and Asphalt on new Taxiway Juliet north of RW 9-27.
  - The full-depth taxiway pavement construction of approximately 3,598 square yards (SY) of new Taxiway consisting of a section of Subbase, Limerock and Asphalt on relocated Taxiway Juliet south of Runway 9-27.
  - The mill and overlay of approximately 1,998 square yards (SY) of Asphalt Pavement on existing Taxiway Foxtrot.
  - The mill and overlay of approximately 1,826 square yards (SY) of Asphalt Pavement on existing Runway 9-27.
  - The mill and overlay of approximately 903 square yards (SY) of Asphalt Pavement on existing Taxiway Alpha.
  - The construction of approximately 6,396 square yards (SY) of stabilized shoulders for new Taxiway Juliet.

kimley-horn.com | 8201 Peters Road, Suite 2200, Plantation, FL 33324 | 954 535 5100

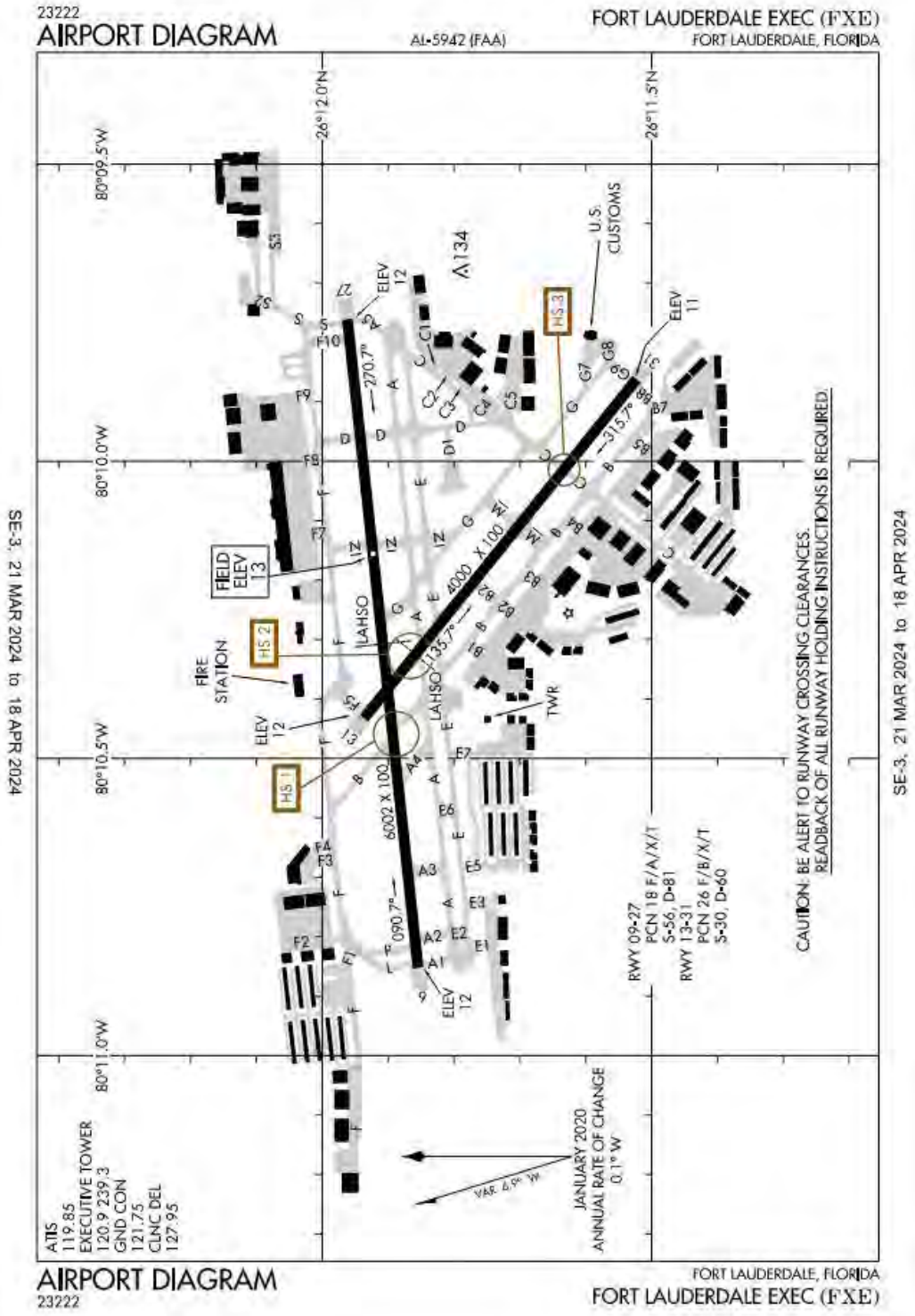


Figure 1: FAA Airport Diagram for FXE

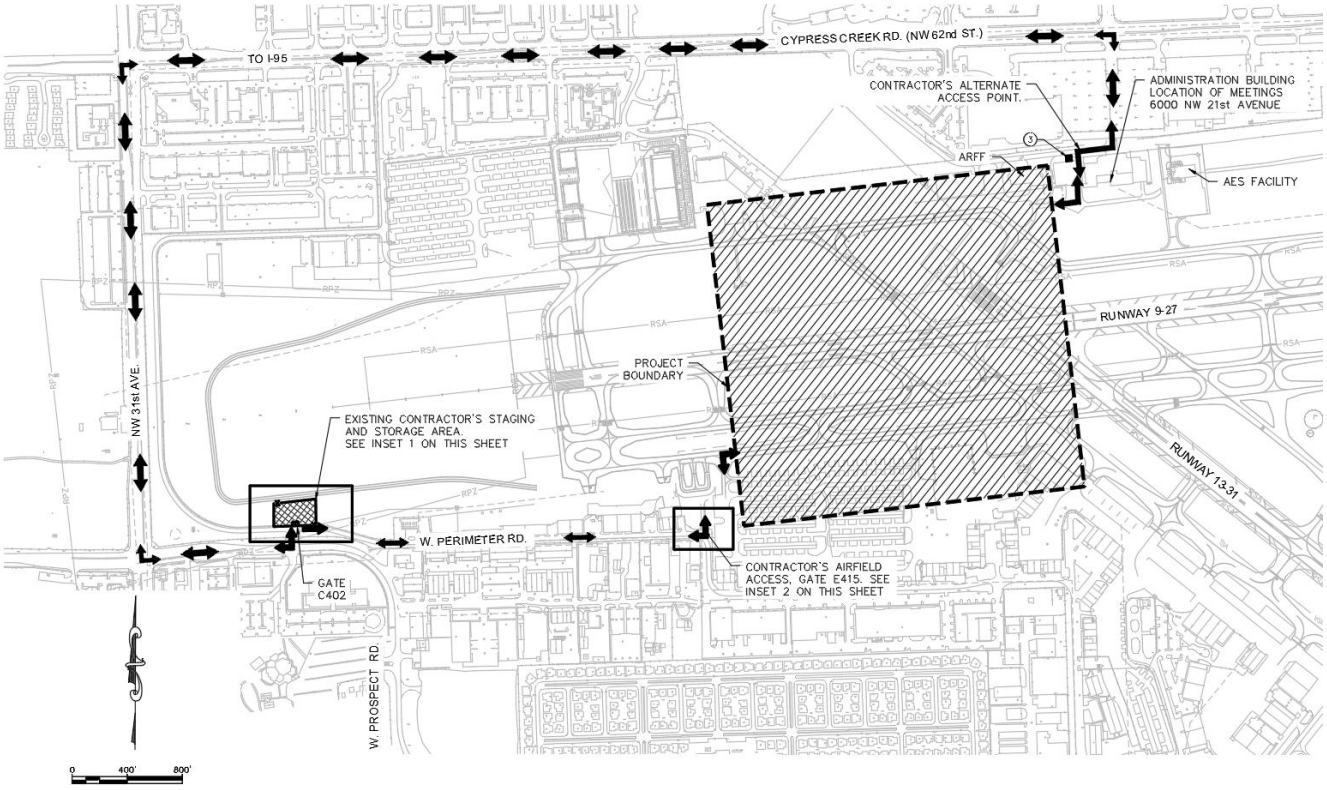


Figure 2: Limits of Work (HATCHED)

CONSTRUCTION PHASING AND SAFETY PLAN REQUIREMENTS

1. Coordination

a. Pre-Construction Meeting – Prior to the Commencement of Construction the Contractor will attend a pre-construction meeting at Fort Lauderdale Executive Airport (FXE) Administration Building. This facility is located at 6000 NW 21st Ave, Fort Lauderdale, Florida. It is anticipated that the following attendees will be present at this meeting: FXE's Assistant Director, FXE's Airport Engineer, FXE's Airport Operations staff, a representative from the Air Traffic Control Tower (ATCT) staff, FXE's consultants, and the resident project representative. This meeting will be held during the Mobilization Phase at a date prior to commencement of construction activities. The intent of the meeting is for all parties to be well coordinated during the Administrative and Construction Phases of the project.

The agenda for this meeting will likely address the following:

- Project scope
- Responsibilities of all parties
- Contacts and personnel (including the identification of the Contractor's Security and Safety Officer (CSSO)
- Correspondence requirements
- Safety during construction and compliance with the FAA AC 150/5370-2G "Operational Safety on Airports during Construction" (latest edition), the

CSPP, SPCD, and other City requirements; including the responsibility for marking and lighting of closed and hazardous areas
- Submittal requirements
- The Contractor's schedule including the scheduling of work and the need to perform certain items at various times during the project
- Invoicing procedures
- Procedures for submitting requests for information (RFI)
- Procedures for Change Orders.
- Work required prior to the Commencement of Construction
- Construction NTP date
- Contractor access and haul routes
- Security and badging requirements
- Any other items the parties deem necessary

b. Contractor Progress Meetings – Weekly construction progress meetings will be held with the Contractor, airport personnel, ATCT personnel, consultant, and other affected parties to coordinate work activities. All meetings will be held in person at the Airport's Administration Building. The meeting's agenda items will likely include, but not be limited to, current project status, upcoming project three-week look a-head schedule, construction issues, RFIs Contractor coordination and NOTAM's, change orders, and clean-up/foreign object debris (FOD) control. The Consultant will provide meeting minutes, which will be provided to all attendees within one week.

c. Scope or Schedule Changes – Any changes to the work scope or the construction schedule will be reviewed by the proper airport personnel and consultant to determine if such modifications are warranted and to judge their potential impact on the project. Once reviewed, the Construction Safety and Phasing Plan (CSPP) will be revised to include such changes if necessary.

d. FAA ATO Coordination – The scope of work of this project will require coordination with the Federal Aviation Administration (FAA) Air Traffic Organization (ATO). The FAA ATO must be coordinated with to schedule airfield shutdowns and restarts, changes to navigational aids (NAVAIDS), and grading changes in NAVAID critical areas. During the design phase, the City's consultant has started coordinating with FXE's Air Traffic Control Tower (ATCT) staff alerting them to the general scope of work, schedule, and timing of the project. The ATCT manager has started assembling a Runway Safety Action Team (RSAT) and is starting the early phases of preparing to perform Safety Risk Management (SRM) for this project. Upon the successful completion of the bid process, the selected Contractor will be required to participate in all SRM programs and continue to coordinate with the FAA ATO through the life of the project.

2. Phasing

a. Phase Elements – Access routes to the construction site and Phasing for the construction is included in Appendix C. A summary of phasing is provided as follows:

- **BASE BID:**

  - **Mobilization** – During the mobilization phase, the Contractor may establish the staging area, temporary site access controls, obtain security badges, and establish temporary utilities. The Safety Plan Compliance Document (SPCD), shop drawings, mix designs, quality control program, safety plan, and long lead items shall be submitted in this phase as applicable.

  - **Phase 1 –** This phase will consist of conducting work West of existing Taxiway Bravo North of Runway 9-27 and South of Taxiway Foxtrot and will not require the closure of any airport infrastructure. The work will consist of the full depth excavation of existing infield, compaction of in situ subgrade and the installation of P-154 subbase and P-211 limerock. There will also be electrical installation work and the installation of P-154 stabilized shoulders.

  - **Phase 2A –** This phase will consist of installing barricades in areas that will require the closure of Existing Taxiway Bravo North of the Runway 9-27 RSA and South of the Taxiway Foxtrot TOFA. The work will consist of the full depth demolition of existing pavement and full depth excavation of existing infield, compaction of in situ subgrade and the installation of P-154 subbase and P-211 limerock. There will also be electrical demolition and installation work and the installation of P-154 stabilized shoulders.

  - **Phase 2B –** This phase will consist of installing barricades in areas that will require the closure of Taxiway Alpha and Taxiway A4 South of the Runway 9-27 RSA. The work will consist of the full depth demolition of existing pavement and full depth excavation of existing infield, compaction of in situ subgrade and the installation of P-154 subbase and P-211 limerock. There will also be electrical demolition and installation work and the installation of P-154 stabilized shoulders and hydroseed.

  - **Phase 3A -** This phase will consist of installing barricades and lighted X's in the areas that will require the closure of Runway 9-27 and Taxiway Foxtrot West of Runway 13-31. The work will consist of the full depth demolition of existing pavement and full depth excavation of existing infield, compaction of in situ subgrade and the installation of P-154 subbase and P-211 limerock. There will also be electrical demolition and installation work and the installation of P-154 stabilized shoulders. The paving of P-401 asphalt in this area will follow earthwork and milling and then there will be the installation of temporary pavement markings, sod and hydroseed.

  - **Phase 3B -** This phase will consist of installing barricades and lighted X's in the areas that will require the closure of Runway 9-27 and

kimley-horn.com 8201 Peters Road, Suite 2200, Plantation, FL 33324 954 535 5100

Taxiway Alpha West of Runway A4. The work will consist of the full depth demolition of existing pavement and full depth excavation of existing infield, compaction of in situ subgrade and the installation of P-154 subbase and P-211 limerock. There will also be electrical demolition and installation work and the installation of P-154 stabilized shoulders. The paving of P-401 asphalt in this area will follow earthwork and milling and then there will be the installation of temporary pavement markings, sod and hydroseed.

- **Phase 4** - This phase will consist of rolling closures throughout the project limits to conduct permanent final pavement markings, completion of punchlist items. This phase is to sequentially follow the completion of Phase 3A and 3B and a 30 day asphalt cure period.

b. Construction Safety Drawings – Construction safety drawings, notes, and details with airspace protective surfaces are shown in Appendix A. The scope of this project will require the closure of one of the airport's runways for certain phases. As such, airfield lighted Xs are required to shut down the runway infrastructure. Low level airfield barricades will also be required for the delineation of work areas. The Contractor is required to maintain these items throughout the entirety of the project. Appendix A provides information regarding protected imaginary airfield surfaces.

3. Areas and Operations Affected by Construction Activity

a. Identification of Affected Areas:

- **Closing, or partial closing, of runways, taxiways and aprons:** The Scope of Work for this project will require the permanent closure of existing Taxiway Bravo north of the Runway 9-27 edge in Phase 2A and existing Taxiway A4 in Phase 2B. This project will also require temporary nightly closures of Taxiway Foxtrot and Runway 9-27 during Phase 3A and Taxiway Alpha and Runway 9-27 during Phase 3B. The project limits will have rolling closures throughout Phase 4 that will be coordinated with airport staff. See Appendix C for aircraft movement and closing or partial closing of runways, taxiways, and/ or aprons. Contractor to continuously coordinate with airport staff to ensure NOTAMS are issued for all closures.
- **Closing access routes used by airport airline support vehicles:** FXE is a general aviation airport. Accordingly, airport airline support vehicles are not anticipated during construction. However, Contractor will maintain access to routes used by airport and stakeholder vehicles.
- **Interruption of utilities:** The interruption of utilities is not anticipated to complete the project's Scope of Work. However, if interruption of utilities is deemed necessary, the Contractor is to coordinate shut-off procedures for utilities services as necessary. Contractor to protect all existing utilities within active project limits.
- **Approach/ departure surfaces affected by heights and objects:** Even though there are some phases for the project that will require a temporary

closure to Runway 9-27, Runway 13-31 will remain active. During this time, the Contractor is to maintain all active runway approach/departure surfaces unobstructed at all times. Contractor to comply with all requirements of 14 CFR Part 77, *Safe, Efficient Use, and Preservation of the Navigable Airspace* and notify the FAA accordingly. See Appendix C for protected Part 77 surfaces. Throughout the remainder of the project, when both Runways remain active, all approach/departure surfaces and Part 77 surfaces are to remain unobstructed as well.

b. Mitigation of Effects:

- **Temporary changes to runway and/or taxi operations:** See Appendix C for Aircraft Movement during temporary changes to runway and taxiway operations.
- **Maintenance of essential utilities:** It shall be the responsibility of the Contractor to contact Operations for all utilities that are located within the project limits. The Contractor shall locate all utilities within the project limits and protect them from damage, whether shown on the Contract Drawings or not. Prior to performing any site work, the Contractor will supply to the Owner's Representative a comprehensive checklist of utility facility owner's contacts including telephone number, contact name, date contacted, and date utility was flagged at site. No construction activities at the project site for any work areas will proceed without the Owner's Representatives written approval of the comprehensive utility locate checklist. Additionally, prior to any work proceeding at the project site(s), the Contractor will flag or paint the location of all utilities (water, sewer, FAA cables, power, telephone fuel, gas, and all others) in the field that are located within the proximity of the work limits of this project in order to locate any possible conflicts. The Contractor will provide written approval that flagged locations of utilities have been completed to the Owner's Representative prior to proceeding with construction activities.

  It is possible that direct buried FAA and other airport/utility cables may pass through the work area. Some of these cables serve FAA facilities (such as NAVAIDs) and other airport facilities which are critical for the safe operation of the airport. It is of the utmost importance that damage to these cables be prevented. Cable locations shown on the plans are based upon the best information available but are not precise. Scaling dimensional data from the Contract Drawings is specifically prohibited. Dimensional data necessary for the construction of the project has been provided on the Contract Drawings. The Contractor will keep the Owner's Representative informed of their excavation plans at least fourteen (14) working days in advance. The Contractor will notify the FAA and request that existing cables be staked in the field. The Contractor is responsible to coordinate with all other utility owners. The Contractor will maintain all cable locations marked in the field. Even after the cables are staked, the Contractor will use electronic detection devices and carefully hand excavate to locate cables. After cables are located, Contractor will specify exact location (stationing, offset, elevation and type of cable) and shall accurately measure and record their location data on the As-Built drawings. Copies of this measurement and recording of the data shall be

considered an important part of the contract requirements. When encasing existing FAA cables in split duct or otherwise excavating in their vicinity, Contractor will hand dig and use extreme caution to avoid damaging cables. All damage, even if superficial, will be reported to the Owner's Representative. In many cases superficial cable nicks may be inexpensively repaired, but if not repaired will lead to failure of the cable. The Owners' Representative will make the determination if the repair or replacement of the damaged utility is necessary. Replacement shall be at the Owner's sole discretion. All repair methods must be acceptable to the FAA and document as such by the Owner's Representative. All repairs will be made at the Contractor's expense. See the electrical related requirements of this contract for additional utility protection requirements.

- **Temporary changes to air traffic control procedures:** The Scope of Work for this project will require the permanent closure of existing Taxiway Bravo north of the Runway 9-27 edge in Phase 2A and existing Taxiway A4 in Phase 2B. This project will also require temporary nightly closures of Taxiway Foxtrot and Runway 9-27 during Phase 3A and Taxiway Alpha and Runway 9-27 during Phase 3B. The project limits will have rolling closures throughout Phase 4 that will be coordinated with airport staff. See Appendix C for aircraft movement and closing or partial closing of runways and taxiways. Contractor to continuously coordinate with airport staff to ensure NOTAMS are issued for all closures. Additionally, the Contractor needs to coordinate their work schedule closely with the ATCT staff.

4. Protection of Navigation Aids (NAVAIDs)

There are no anticipated impacts to NAVAIDs for this project. Contractor to protect in place any FAA infrastructure or NAVAIDs if necessary. Any potential conflicts or impacts to NAVAIDs are to be brought to the attention of the airport and engineer/design team.

5. Contractor Access

a. Location of Stockpiled Construction Materials – The Contractor will not be permitted to stockpile materials or construction equipment within the Air Operations Area (AOA). Millings, demolished concrete, and other demolished project elements will be removed from the site and taken to the Contractor's staging area for disposal off-site (See Appendix B). Airport staff and the design Team will submit FAA form 7460-1 *Notice of Proposed Construction or Alteration* for anticipated equipment and stockpiled material which penetrates Part 77 notification criteria. These objects may also require lighting and marking, by the Contractor, during periods of low visibility and/or darkness. Contractor must also verify that materials are stabilized and stored at location so as not to be a hazard to aircraft operations and to prevent attraction of wildlife and foreign object damage. The Contractor is to provide appropriate erosion and sedimentation measures to protect stockpiles in accordance with the Contract Documents.

b. Vehicle and Pedestrian Operations – Vehicle and pedestrian access routes for airport construction projects must be controlled to prevent inadvertent or unauthorized entry of persons, vehicles, or animals onto the AOA.

(1) **Construction site parking.** Vehicle parking for Contractor personnel will be provided by the Contractor in their staging area or offsite at their own employee parking. It is the Contractor's responsibility to shuttle employees to and from the parking area and job site.

(2) **Construction equipment parking.** While in the AOA, the Contractor must park and service all construction equipment/vehicles in an area designated by the Owner's Representative and Airfield Operations, outside all object free areas, and never in the safety area of an active runway/taxiway or an object free area of an active runway/taxiway. Contractor should park all construction vehicles outside the object free area of an active runway or an active taxiway when not in use by construction personnel. Equipment/vehicles parking areas must not obstruct clear line of sight buy the ATCT to any runways, taxiways, taxilanes, or aprons under air traffic control nor obstruct any runway visual aids, signs, or navigation aids. The FAA must also study those areas to determine effects on airport design criteria surfaces established by 145 CFR Part 77, Safe, Efficient Use, and Preservation of Navigable Airspace (Part 77), and on NAVAIDs and Instrument Approach Procedures (IAP),

(3) **Access and haul roads.** Project access is limited to approved entrances as shown on Appendix C. All hauling operations are to be performed via approved roads. Hauling routes to the site shall be clearly marked by the Contractor. Contractor to always give right of way to airport vehicles. Construction traffic on haul roads will not interfere with NAVAIDs or approach surfaces of operational runways

(4) **Marking and lighting vehicles.** Construction vehicles will be marked and lighted in accordance with AC 150/5210-5, *Painting, Marking, and Lighting of Vehicles Used on an Airport* (latest edition).

(5) **Description of proper vehicle operations.** Contractor's employees shall take Airport required training classes to properly prepare themselves to drive in authorized areas of the airport under normal, lost communications, and emergency conditions.

(6) **Required escorts.** No vehicles or equipment will be allowed on the active airfield without escort from employees with whom have previously attended and passed escort training provided by airport staff.

(7) **Training requirements for vehicle drivers.** Prior to operating vehicles on the airfield, Contractor's personnel will be required to take movement area training classes.

(8) **Situational awareness.** Vehicle drivers must confirm by personal observation that no aircraft is approaching their position (either in the air or on the ground) when given clearance to cross a runway, taxiway, or any other area open to airport operations. In addition, it is the responsibility of the escort vehicle driver to verify the movement/position of all escorted vehicles at any given time.

(9) **Two-way radio communication procedures.**

a. General. All communication with the ATCT or other elements of the airport shall be the Contractor's responsibility. The Contractor's key staff must monitor radio communication at all times. The Contractor will be required to understand the airports procedures for two-way radio communication.

The Contractor must ensure that personnel, engaged in activities involving unescorted operation on aircraft movement areas, observe the proper procedures for communications, including using appropriate radio frequencies. When operating vehicles on or near open runways or taxiways, construction personnel must understand the critical importance of maintaining radio contact, as directed by the airport operator, with:

(i) Airport operations
(ii) ATCT
(iii) Common Traffic Advisory Frequency (CTAF), which may include UNICOM, MULTICOM.
(iv) Automatic Terminal Information Service (ATIS). This frequency is useful for monitoring conditions on the airport. Local air traffic will broadcast information regarding construction related runway closures and "shortened" runways on the ATIS frequency.

b. Areas requiring two-way radio communication with the ATCT. Vehicular traffic crossing active movement areas must be controlled either by two-way radio with the ATCT, escort, flagman, signal light, or other means appropriate for the particular airport.
c. Frequency to be used. Frequency 121.75 will be used to communicate and monitor ground ATCT.
d. Proper radio usage. Proper radio usage will include reading back all instructions from ATCT.
e. Proper phraseology. Proper radio phraseology will include the use of the International Phonetic Alphabet.
f. Light gun signals. Even though radio communication is maintained, escort vehicle drivers must also familiarize themselves with ATCT light gun signals in the event of radio failure. See the FAA safety placard "Ground Vehicle Guide to Airport Signs and Markings." This safety placard may be downloaded through the Runway Safety Program Web site at http://www.faa.gov/airports/ runway_safety/publications/ (See "Signs & Markings Vehicle Dashboard Sticker".) or obtained from the FAA Airports Regional Office.

(10) Maintenance of secured area of the airport, including:

a. Fencing and gates. The Contractor must take care to maintain security during construction when access points are created in the security fencing to permit the passage of construction vehicles or personnel. Temporary gates should be equipped so they can be securely closed and locked to prevent access by animals and unauthorized people. Procedures should be in place to ensure that only authorized persons and vehicles have access to the AOA and to prohibit "piggybacking" behind another person or vehicle. Contractor will be responsible for maintaining the security fencing and gates during construction. A guard will be stationed at this gate to prevent any unauthorized access.
b. Badging requirements. Prior to proceeding with construction activities all of the Contractor's supervisory staff must obtain security badges from the airport. These badges are to be worn at all times while on the airside.

Badged employees who are escorting non-badged employees must always maintain control of their staff. Any person not wearing a badge and unescorted will be asked to show his badge or leave the site.

6. Wildlife Management

a. Trash – Contractor will be required to remove any waste/food material that may attract wildlife as well as avoid construction activities that will create wildlife hazards at the Airport during construction. The Contractor will emphasize to his employees the need for daily foreign object debris (FOD) checks on or near active airfield pavements. FOD checks will be conducted daily at the end of each construction shift.

b. Standing Water – Contractor will be required to avoid any activities that may cause standing water at the construction site and attract wildlife. Maintain existing drainage during all construction activities.

c. Tall Grass and Seeds – Sodding on the project will comply with standard FAA Sodding Technical Specification, Item T-904, Sodding. All efforts will be made by the Contractor to reduce the attraction of birds during the sodding operation. Contractor is also responsible for maintaining and controlling vegetation within the Limits of Work. Periodic mowing of existing grass may be required. Seeding will not be permitted on the project.

d. Poorly Maintained Fencing and Gates – Contractor will be responsible for maintaining and replacing any damaged portion of the security fencing and gates during construction.

e. Disruption of Existing Wildlife Habitat – Contractor shall make every effort to minimize disruption to the existing wildlife. If the Contractor should come into contact with wildlife habitat at the site, he shall immediately cease operations and inform the Airport. There is high likelihood of encountering gopher tortoises or burrowing owls at this airport. Both species are protected, if the presence of nests or burrows or other applicable wildlife signs are discovered within the limits of work for this project, coordination with necessary environmental agencies will be required.

7. Foreign Object Debris (FOD) Management

Waste and loose materials, commonly referred to as FOD, are capable of causing damage to aircraft landing gears, propellers, and jet engines. The Contractor must not leave or place FOD on or near active aircraft movement areas. Materials capable of creating FOD must be continuously removed during the construction project.

Contractor will be required to conduct periodic FOD walks and maintain a vacuum sweeper on site to remove any FOD from the work and adjacent area. Prior to leaving the work area, the Contractor will be required to inspect the site to determine if the site is clear of FOD. If the area is not clear, the Contractor must take corrective action.

8. Hazardous Materials (HAZMAT) Management

Contractors operating construction vehicles and equipment on the airport must be prepared to expeditiously contain and clean-up spills resulting from fuel or hydraulic fluid leaks. The Contractor will be required to provide a spill prevention and clean-up plan in case of a fuel or hydraulic fluid leak on the Airport prior to being allowed on the work site. Transport and handling of other hazardous materials on an airport also requires special procedures. See AC 150/5320-15A, *Management of Airport Industrial Waste.*

9. Notification of Construction Activities

The Contractor's Safety Plan Compliance Document (SPCD) must detail procedures for the immediate notification of airport users and the FAA of any conditions adversely affecting the operational safety of the airport. It must address the notification actions described below, as applicable:

a. Maintenance List of Responsible Representatives/Points of Contact – Contractor will be required to submit a contact list of all involved parties to include cell/phone numbers for contact after hours.

b. Notices to Airmen (NOTAM) – Airport staff will issue, maintain and cancel NOTAM's issued as part of the construction activities and coordinate said NOTAM's with tenants. Airport operator will also be responsible for providing information to the FAA Flight Service Station (FSS). The airport will be the only entity that can close or open a runway.

c. Emergency Notification Procedures – Emergency contact information for medical, firefighting, and police must be determined by the Contractor. Contractor to submit this information with the Contractor's Safety Plan Compliance Document (SPCD).

d. Coordination with Aircraft Rescue and Fire Fighting (ARFF) Personnel – Coordination with ARFF personnel, mutual aid providers, and other emergency services must be maintained for the duration of this project. If construction activities require the deactivation of water lines/hydrants, blocking of emergency access routes, or use of hazardous materials, Contractor must contact ARFF personnel (et al) prior to engaging in this work. Contractor to coordinate with the Fort Lauderdale Fire Rescue ARFF team (City of Fort Lauderdale Fire-Rescue Station No. 53.)

e. Notification to the FAA:

- **Part 77.** Any person proposing construction or alteration of objects that affect navigable airspace, as defined in Part 77, must provide notice to the FAA. This includes but is not limited to construction equipment, stockpiled material, proposed parking areas for this equipment (i.e. cranes, graders, other equipment) on airports, etc. FAA Form 7460-1, *Notice of Proposed Construction or Alteration*, is to be used for this purpose and submitted to the FAA Orlando District Office by airport staff and the engineering/design team prior to the award of the construction contract. All alterations during the construction of the project shall be resubmitted by the Contractor for the airport staff and engineering/ design team approval.
- **Navigational Aids (NAVAID).**
  Impacts to NAVAIDs are not anticipated for this project. In the event that an unforeseen impact occurs, refer to the information below. For emergency (short-notice) notification about impacts to both airport owned and FAA owned NAVAIDs, contact: 866-432-2622.

  (1) Airport Owned/FAA Maintained. If construction operations require a shutdown of 24 hours or greater in duration, or more than 4 hours daily on consecutive days, of a NAVAID owned by the airport but maintained by the FAA, provide a 45-day minimum notice to FAA ATO/Technical Operations prior to facility shutdown, using Strategic Event Coordination (SEC) Form 6000.26 contained within FAA Order 6000.15, *General Maintenance Handbook for National Airspace System (NAS) Facilities*.

  (2) FAA Owned.
  1. The airport operator must notify the appropriate FAA ATO Service Area Planning and Requirements (P&R) Group a minimum of 45 days prior to implementing an event that causes impacts to NAVAIDs, using SEC Form 6000.26.
  2. Coordinate work for an FAA owned NAVAID shutdown with the local FAA ATO/Technical Operations office, including any necessary reimbursable agreements and flight checks. Detail procedures that address unanticipated utility outages and cable cuts that could impact FAA NAVAIDs. Refer to active Service Level Agreement with ATO for specifics.

10. Inspection Requirements

a. Daily (or more frequent) inspections – Inspections should be conducted at least daily, but more frequently, if necessary, to ensure conformance with the CSPP. See Appendix D - Construction Project Daily Inspection Checklist sample.

b. Interim inspections – Inspections should be conducted of all areas to be opened to aircraft traffic to ensure the proper condition of the area and absence of FOD. The Contractor should conduct an inspection of the work area with airport staff and the engineer/design team. The Contractor should ensure that all construction materials have been secured, all pavement surfaces have been swept clean, all transition ramps have been properly constructed, and that surfaces have been

appropriately marked for aircraft to operate safely. Only if all items on the list meet with the airport operator's approval should the area be reopened to aircraft operations. The Contractor shall be required to retain a suitable workforce and the necessary equipment at the work area for any last-minute cleanup that may be requested by the airport operator prior to opening the area.

c. Final inspections – A final inspection will be held with the Contractor, airport staff, the engineer/design team, RPR prior to formal acceptance of the project.

11. Underground Utilities

The Contractor will be required to coordinate with local utility locating services, FAA ATO, FAA Technical Operations, and the airport to locate and protect any underground services (including but not limited to utilities, cables, wires, pipelines, etc.) prior to beginning any excavations onsite. Once locations have been established, the Contractor shall make all necessary arrangements to ensure that the facilities remain in a safe and operable condition during construction. Note that "One Call" services will not locate utilities on airfields.

Should an existing utility be taken out of service due to construction activities, Contractor will be responsible for its immediate repair at their expense.

12. Penalties

Penalties will be in accordance with the Contract Documents. Contractor personnel entering a movement area without authorization shall be levied a fine and a Notice to Appear in Court as well as removal from the job site. Personnel found to be on the jobsite without an airport issued identification badge will be immediately removed from job site. If a security access gate is found to be left unstaffed and unlocked or should a guard under the employment of the Contractor allow access to the work site without verifying the proper identification, the Contractor shall be fined for each occurrence.

The Contractor shall be responsible for payment of any fines assessed to the Fort Lauderdale Executive Airport (FXE) or City of Fort Lauderdale due to the Contractor's violation of FAA or TSA operating safety/security requirements while working on the airport.

13. Special Conditions

Any security breach and/or Vehicle/Pedestrian Deviation (VPD) by the Contractor or their personnel will cause the airport to suspend work until such matters are resolved to the airport's satisfaction and corrective measures have been taken by the Contractor. All construction activity will be suspended in the event of an incident involving an aircraft in distress or airfield accident.

14. Runway and Taxiway Visual Aids, Marking, Lighting, Signs, and Visual NAVAIDs

a. General – Contractor will ensure that construction operations will not obscure or damage existing markings, lighting, signage, and visual NAVAIDs. These objects must be kept clearly visible to pilots, not misleading, confusing, or deceptive. In addition, all new lighting and signage will be secured in place to prevent movement

by prop wash, jet blast, wing vortices, and other wind currents. Items used to secure these objects must be constructed of materials that will minimize damage to an aircraft in the event of inadvertent contact and colored like the object which they are protecting.

b. Markings – All airfield markings will follow A/C 150-5340-1M. Runways that will be temporarily closed to airport operations during construction will be marked with yellow lighted "X" placed on the runway designation numbers (see Appendix C). Taxiway closure will be designated by low-level, lighted barricades placed at the entrance to the closed taxiway from the runway (see Appendix C). These barricades will be maintained by the contractor.

c. Lighting and Visual NAVAIDs – All lighting will conform to AC 150/5340-30 and AC 150/5345-50. Light fixtures will be removed from the closed taxiway and lighting circuits will be disconnected.

d. Signs – The Contractor shall be required to provide, maintain, and install temporary signage systems for all existing systems that are removed or deactivated during construction that are required to be in operation at the end of each workday.

15. Marking and Signs for Access Routes

Airfield pavement markings will conform to AC 150/5340-18F as indicated on the plans and specifications. Signs that will be installed adjacent to active taxiways/runways shall have frangible couplings meeting the criteria of AC 150/5220-23A. All Contractor signage shall meet the requirements of the Manual of Uniform Traffic Control Devices (MUTCD), latest edition.

16. Hazard Marking and Lighting

a. Purpose – To prevent pilots from entering construction areas that are closed to aircraft as well as prevent construction personnel from entering areas that are open to aircraft operations by use of warning indicators for both pilots and Contractor personnel.

b. Equipment
- Runway lighted X's will be used to close the Runway during phases that require Runway closures and serve as a visual indicator to pilots that the Runway is closed.
- Low-level airfield barricades equipped with flashing red-lights and flags will be used to close the work area to aircraft. The barricades shall be spaced no greater than 20' center-to-center. Sandbags will be used to hold the barricades in place against prop wash/jet blast.
- Type II barricades equipped with flashing yellow lights will be used to delineate the haul road and access route to the work site. Sandbags will be used to hold the barricades in place against prop wash/jet blast.

The Contractor will be responsible for maintaining lights, barricades, and fence in working order throughout the project and shall have replacement flags, lights,

batteries, and fencing on-site as well as a designated employee that will be on call 24-hours per day to maintain the barricades and/ or fence.

17. Work zone lighting for nighttime construction

The Contractor will be required to provide sufficient artificial lighting, in accordance with the Technical Specifications, during nighttime operations (or other similar times of poor visibility) to perform their work and for the work to be reviewed by the proper airport personnel and consultant. During nighttime paving operations, the Contractor must comply with the requirements of FAA Standard Technical Specification P-401-4.16. Contractor to maintain artificial lighting system in good working order and ensure that at no time does the system interfere with airport operations. Light heads are to be aimed down and away from air traffic and air traffic control. Contractor to provide shielding as necessary. When not in operation, light pole booms are to be lowered and the lighting powerhouse is to be moved to a location where it will not obstruct air operations.

18. Protection of Runway and Taxiway Safety Areas, Object Free Areas, Obstacle Free Zones, and Approach/Departure Surfaces

The Contractor is required to discuss proposed methods of identifying, demarcating, and protecting airport surfaces including:

a. Runway Safety Area (RSA) – The project will require work within the RSA of Runway 9-27. As such, the Runway will be closed during these operations and proper notices issued via NOTAM's.

b. Runway Object Free Area (ROFA) – All construction equipment will be removed from the ROFA at the end of the workday. In addition, no materials will be allowed to be stockpiled within the ROFA.

c. Taxiway Safety Area (TSA) – The project will require work within Taxiway Safety Areas (TSA). As such, the Taxiways will be closed during these operations and proper notices issued via NOTAM's.

d. Taxiway Object Free Area (TOFA) – All construction equipment will be removed from the TOFA at the end of the workday. In addition, no materials will be allowed to be stockpiled within the TOFA.

e. Obstacle Free Zone (OFZ) – The project will require work within the ROFZ of Runway 9-27. As such, the Runway will be closed during these operations and proper notices issued via NOTAM's.

f. Runway approach/ departure surfaces – The project will require access to and from the work site that will be within the approach/departure surfaces of Runway 9-27. Airport operations will coordinate movement within these areas with ATCT personnel and issue the proper NOTAM's.

19. Other Limitations on Construction

a. Prohibitions – The following prohibitions will be in place during construction: No use of tall equipment such as cranes will be allowed unless a 7460-1 has been

filed with the FAA; no open flame welding or torches will be allowed; no blasting on Airport property; and no use of flare pots within AOA.

b. Restrictions – Contractor will not be allowed access to any areas outside of the work site without escort by Airport staff. In addition, the Contractor will submit a Hurricane Preparedness Plan detailing how the Contractor will secure the work area equipment and materials to prevent damage to the work and prevent materials and equipment from becoming a hazard to persons and property on the airfield.

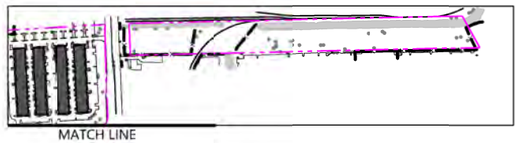
kimley-horn.com 8201 Peters Road, Suite 2200, Plantation, FL 33324 954 535 5100

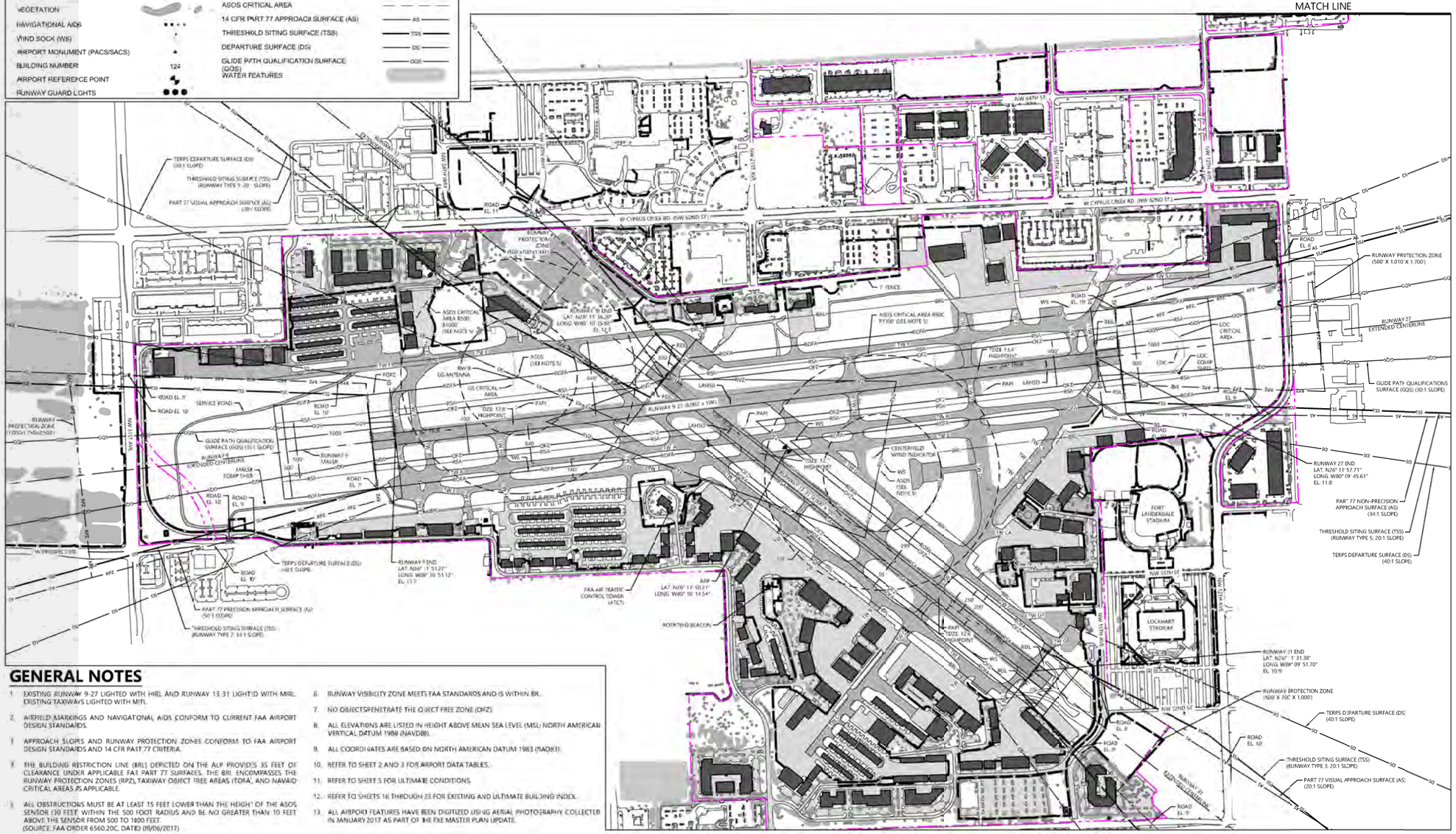
APPENDIX A

Airspace Protection Plan, Safety Notes and Details

LEGEND

FEATURE	EXISTING	FEATURE	EXISTING
AIRPORT PROPERTY LINE		ILS LOCALIZER CRITICAL AREA	
AIRFIELD PAVEMENT		ILS GLIDE SLOPE CRITICAL AREA	
ON-AIRPORT BUILDINGS		RUNWAY SAFETY AREA (RSA)	RSA
OFF-AIRPORT BUILDINGS		RUNWAY OBJECT FREE AREA (ROFA)	ROFA
BUILDINGS TO BE DEMOLISHED	N/A	RUNWAY OBJECT FREE ZONE (ROFZ)	OFZ
OBJECT/PAVEMENT TO BE DEMOLISHED	N/A	APPROACH RUNWAY PROTECTION ZONE (RPZ)	RPZ
ROADS & PARKING		DEPARTURE RUNWAY PROTECTION ZONE (RPZ)	N/A
AOA/SECURITY/OTHER FENCING		RUNWAY VISIBILITY ZONE (RVZ)	RVZ
TERRAIN CONTOURS		PRECISION OBJECT FREE ZONE (POFZ)	
VEGETATION		BUILDING RESTRICTION LINE (BRL)	BRL
NAVIGATIONAL AIDS		ASOS CRITICAL AREA	
WIND SOCK (WS)		14 CFR PART 77 APPROACH SURFACE (AS)	AS
AIRPORT MONUMENT (PACS/SACS)		THRESHOLD SITING SURFACE (TSS)	TSS
BUILDING NUMBER	124	DEPARTURE SURFACE (DS)	DS
AIRPORT REFERENCE POINT		GLIDE PATH QUALIFICATION SURFACE (GQS)	GQS
RUNWAY GUARD LIGHTS		WATER FEATURES	





GENERAL NOTES

1. EXISTING RUNWAY 9-27 LIGHTED WITH HIRL AND RUNWAY 13-31 LIGHTED WITH MIRL. EXISTING TAXIWAYS LIGHTED WITH MITL.
2. AIRFIELD MARKINGS AND NAVIGATIONAL AIDS CONFORM TO CURRENT FAA AIRPORT DESIGN STANDARDS.
3. APPROACH SLOPES AND RUNWAY PROTECTION ZONES CONFORM TO FAA AIRPORT DESIGN STANDARDS AND 14 CFR PART 77 CRITERIA.
4. THE BUILDING RESTRICTION LINE (BRL) DEPICTED ON THE ALP PROVIDES 35 FEET OF CLEARANCE UNDER APPLICABLE FAR PART 77 SURFACES. THE BRL ENCOMPASSES THE RUNWAY PROTECTION ZONES (RPZ), TAXIWAY OBJECT FREE AREAS (TOFA), AND NAVAID CRITICAL AREAS AS APPLICABLE.
5. ALL OBSTRUCTIONS MUST BE AT LEAST 15 FEET LOWER THAN THE HEIGHT OF THE ASOS SENSOR (30 FEET) WITHIN THE 500 FOOT RADIUS AND BE NO GREATER THAN 10 FEET ABOVE THE SENSOR FROM 500 TO 1800 FEET. (SOURCE: FAA ORDER 6560.20C, DATED 09/06/2017)
6. RUNWAY VISIBILITY ZONE MEETS FAA STANDARDS AND IS WITHIN BR.
7. NO OBJECTS PENETRATE THE OJECT FREE ZONE (OFZ).
8. ALL ELEVATIONS ARE LISTED IN HEIGHT ABOVE MEAN SEA LEVEL (MSL) NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88).
9. ALL COORDINATES ARE BASED ON NORTH AMERICAN DATUM 1983 (NAD83).
10. REFER TO SHEET 2 AND 3 FOR AIRPORT DATA TABLES.
11. REFER TO SHEET 5 FOR ULTIMATE CONDITIONS.
12. REFER TO SHEETS 16 THROUGH 23 FOR EXISTING AND ULTIMATE BUILDING INDEX.
13. ALL AIRPORT FEATURES HAVE BEEN DIGITIZED USING AERIAL PHOTOGRAPHY COLLECTED IN JANUARY 2017 AS PART OF THE FXE MASTER PLAN UPDATE.

FXE
FORT LAUDERDALE EXECUTIVE AIRPORT

N

0 200 400 800
GRAPHICAL SCALE IN FEET

RICONDO
RICONDO & ASSOCIATES, INC.

NO.	REVISIONS	DATE

EXISTING AIRPORT LAYOUT PLAN

DRAWN BY: JA
CHECKED BY: SC

PREPARED BY:
RICONDO & ASSOCIATES, INC.

PREPARED FOR:
CITY OF FORT LAUDERDALE

DATE:
AUGUST 2019

SHEET 4 OF 26

CONSTRUCTION SAFETY NOTES:

1. ALL CONSTRUCTION FOR THIS PROJECT SHALL CONFORM TO THE GUIDELINES SET FORTH IN FEDERAL AVIATION ADMINISTRATION (FAA) AC150/5370-2G "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION", AND THESE PLANS AND SPECIFICATIONS.
2. CONSTRUCTION ACTIVITIES ARE NOT PERMITTED WITHIN THE RUNWAY SAFETY AREA (RSA) OF ANY RUNWAY THAT IS OPEN FOR AIRCRAFT OPERATIONS. (SEE SECTION 2.22, AC 150/5370-2G, CHAPTER 2)
3. CONSTRUCTION ACTIVITIES ARE NOT PERMITTED WITHIN TAXIWWAY OBJECT FREE AREA (TOFA) OF AN ACTIVE TAXIWAY. (SEE SECTION 2.22, AC No. 150/5370-2G, CHAPTER 2)
4. NO CONSTRUCTION TRAFFIC SHALL ENTER OR CROSS ANY ACTIVE AIRPORT OPERATIONAL AREA EXCEPT UPON AUTHORIZATION BY THE OWNER. THIS SPECIFICALLY INCLUDES THE RUNWAY PROTECTION ZONES AND THE RUNWAY AND TAXIWAY CONSTRUCTION SAFETY LIMITS IDENTIFIED IN CONSTRUCTION NOTES 2 AND 3 ABOVE.
5. NO CONSTRUCTION TRAFFIC SHALL ENTER OR CROSS ANY LOCALIZER OR GLIDE SLOPE CRITICAL AREA EXCEPT UPON AUTHORIZATION BY THE OWNER.
6. IN ORDER FOR THE CONTRACTOR TO OPERATE WITHIN THE AIR OPERATIONS AREA, APPROPRIATE NOTICE TO AIR MISSIONS (NOTAMS) MUST BE ISSUED BY THE OWNER THROUGH THE FAA FLIGHT SERVICE STATION. THESE NOTICES PROVIDE INFORMATION ON CLOSED, LIMITED, OR HAZARDOUS CONDITIONS TO AIRMEN AND USERS OF THE AIRPORT. A 72-HOUR NOTICE IS REQUIRED FOR ISSUANCE OF THE NOTAM. ALL CONSTRUCTION OPERATIONS MUST BE CLOSELY COORDINATED WITH THE OWNER FOR NOTAM ISSUANCE.
7. AIRCRAFT OPERATIONS SHALL AT ALL TIMES HAVE PRIORITY OVER ALL VEHICLES, EQUIPMENT AND PERSONNEL. THE CONTRACTOR SHALL EMPLOY STRICT MEASURES TO PREVENT ANY CONFLICT BETWEEN ITS PERSONNEL AND AIRCRAFT ON ANY ACTIVE AIRFIELD PAVEMENT. THE CONTRACTOR SHALL REMAIN CLEAR OF ACTIVE RUNWAYS AND TAXIWAYS.
8. ALL CONTRACTOR VEHICLES, INCLUDING HAULING VEHICLES, THAT ARE AUTHORIZED TO OPERATE WITHIN THE SECURITY FENCE 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 EQUIPPED.
9. CONTRACTOR SHALL CONTROL THE ON-AIRPORT MOVEMENT AND ACTIVITIES OF ITS EMPLOYEES AND SUBCONTRACTORS.
10. OPEN-FLAME WELDING OR TORCH-CUTTING OPERATIONS ARE PROHIBITED UNLESS ADEQUATE FIRE AND SAFETY PRECAUTIONS ARE PROVIDED AND HAVE BEEN APPROVED BY THE OWNER.
11. OPEN TRENCHES, EXCAVATIONS AND STOCKPILED MATERIALS AT THE CONSTRUCTION SITE SHALL BE PROMINENTLY MARKED WITH ORANGE FLAGS AND LIGHTED WITH FLASHING AMBER LIGHT UNITS (ACCEPTABLE TO THE OWNER) DURING HOURS OF RESTRICTED VISIBILITY OR DARKNESS.
12. STOCKPILED MATERIAL SHALL BE CONSTRAINED IN A MANNER TO PREVENT MOVEMENT AS A RESULT OF AIRCRAFT, WIND, AND/OR OTHER REASON.
13. ANY DAMAGE TO THE EXISTING AIRPORT LIGHTING SYSTEM CAUSED BY CONSTRUCTION OPERATIONS SHALL BE IMMEDIATELY NOTED TO THE OWNER AND REPAIRED BY THE CONTRACTOR AT ITS OWN EXPENSE.
14. CONTRACTOR GENERATED DEBRIS, WASTE AND LOOSE MATERIAL IS CAPABLE OF CAUSING DAMAGE TO AIRCRAFT LANDING GEAR, PROPELLERS AND ROTORS, OR OF BEING INGESTED BY JET ENGINES AND SHALL NOT BE LEFT ON ACTIVE AIRCRAFT MOVEMENT AREAS. MATERIAL DROPPING WITHIN THESE AREAS SHALL BE REMOVED IMMEDIATELY AND CONTINUOUSLY DURING WORKING HOURS.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR INFORMING ALL PERSONS UNDER ITS CONTROL THAT UNAUTHORIZED CONSTRUCTION PERSONNEL FOUND IN RESTRICTED AREAS OF THE AIRPORT SHOWN ON THE SAFETY PLAN ARE SUBJECT TO ARREST FOR A PUNISHABLE FEDERAL OFFENSE AND WILL PROMPTLY AND PERMANENTLY BE REMOVED FROM THE JOB.
16. CONTRACTOR ACCESS GATES SHALL BE CONTROLLED BY A CONTRACTOR SUPPLIED GATE GUARD OR REMAIN LOCKED AT ALL TIMES. APPROVED GATE GUARD SHALL CONTROL ACCESS TO ALLOW ONLY AUTHORIZED CONSTRUCTION TRAFFIC TO ENTER THE SITE.
17. AIRPORT STAFF SHALL CONTROL AND ESCORT ALL CONSTRUCTION TRAFFIC ENTERING THE SECURED AREA OF THE AIRPORT TO PREVENT CONFLICTS WITH AIRCRAFT OPERATIONS. NO PRIVATE VEHICLES WILL BE ALLOWED ON THE AIRPORT.
18. SPECIAL ACCESS REQUIREMENTS AND OPERATING LIMITATIONS ARE REQUIRED INSIDE THE SECURITY FENCE. THE CONTRACTOR WILL CONFINE PERSONNEL, EQUIPMENT AND MATERIALS OUTSIDE OF ACTIVE AREAS OF THE AIRPORT.
19. CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY LIGHTED BARRICADES EVERY 30 FEET ON BOTH SIDES OF HAUL ROAD TO CLEARLY MARK THE DESIGNATED ACCESS ROUTES TO AFFECTED AREAS OF AIRPORT PROPERTY. CONTRACTOR SHALL CONTROL ACCESS TO THE WORKING AREA BY CONSTRUCTION VEHICLES AS DELINEATED ON THIS PLAN.
20. THE CONTRACTOR SHALL HAVE ACCESS TO THE SECURED AREA OF THE AIRPORT ONLY AT THE LOCATION DESIGNATED ON THE PLANS OR APPROVED BY THE OWNER. ALL OTHER ACCESS SHALL BE BY SPECIAL REQUEST AND SUBJECT TO APPROVAL BY THE OWNER. THE CONTRACTOR SHALL PROVIDE FLAGMEN TO COORDINATE AND CONTROL CONSTRUCTION TRAFFIC WHEN OPERATING ACROSS ANY ACTIVE AREAS OF THE AIRPORT.
21. THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN FLASHING LIGHTS AND BARRICADES ALONG PAVEMENT EDGES WHEREVER OPEN EXCAVATIONS OR IRREGULAR GRADES ARE LEFT WITHIN THE SAFETY AREA OF AN ACTIVE PAVEMENT OR WHERE TEMPORARY PAVEMENT CLOSURES OR AIRCRAFT LIMITATIONS ARE REQUIRED. BARRICADES SHALL BE PLACED IN A CONTINUOUS LINE OR AS NOTED ALONG THE AFFECTED PAVEMENT EDGE OR ACROSS THE PAVEMENT OF A CLOSED TAXIWAY. THE CONTRACTOR SHALL DAILY MAINTAIN THE LIGHTS AND BARRICADES IN AN OPERABLE CONDITION FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL FURNISH THE OWNER A CONTACT NUMBER FOR 24-HOUR MAINTENANCE OF LIGHTS AND BARRICADES.
22. THE CONTRACTOR SHALL PERFORM CONSTRUCTION OPERATIONS AS NECESSARY TO PREVENT ATTRACTION TO BIRDS CAUSED BY PONDED WATER AND GRASS SEED.
23. REFER TO THE GENERAL NOTES FOR REQUIREMENTS PERTAINING TO STORAGE OF CONSTRUCTION EQUIPMENT AND MATERIALS WHEN NOT IN USE.
24. THE CONTRACTOR SHALL COMPLY WITH ALL SECURITY REQUIREMENTS SPECIFIED HEREIN OR MANDATED BY FAA OR TSA. THE CONTRACTOR SHALL DESIGNATE IN WRITING TO THE OWNER THE NAME OF ITS "CONTRACTOR SECURITY OFFICER". THE CONTRACTOR SECURITY OFFICER SHALL REPRESENT THE CONTRACTOR ON THE SECURITY REQUIREMENTS OF THE CONTRACT.
25. THE CONTRACTOR'S SECURITY OFFICER SHALL BE RESPONSIBLE FOR BRIEFING ALL CONTRACTOR PERSONNEL ON THESE REQUIREMENTS. CONTRACTOR EMPLOYEES WHO REQUIRE ACCESS TO THE SECURE AREA OF THE AIRPORT SHALL ATTEND THE OWNER'S SECURITY TRAINING SESSION AND SHALL BE BRIEFED ON THESE REQUIREMENTS PRIOR TO WORKING IN THE CONSTRUCTION AREAS.
26. ALL CONTRACTOR PERSONNEL WHO REQUIRE ACCESS TO THE SECURE AREA OF THE AIRPORT SHALL HAVE OWNER ISSUED IDENTIFICATION BADGES DISPLAYED AT ALL TIMES WHEN WORKING INSIDE THE AIRCRAFT OPERATIONS AREA. THE AIRPORT ID PROGRAM IS UNDER CONSTANT REVIEW BY THE FAA AND AIRPORT STAFF. ALL CONTEMPORARY REQUIREMENTS WILL GOVERN. THE CONTRACTOR SHALL ASSIGN THE CONTRACTOR SECURITY OFFICER DESCRIBED ABOVE AS THE SINGLE POINT CONTACT FOR ALL IDENTIFICATION BADGING REQUIREMENTS. PERSONNEL, SUCH AS TRUCKERS, WHO ARE NOT BAGGED, MAY BE PERMITTED TO ACCESS THE SECURE AREA UNDER THE DIRECT ESCORT OF AIRPORT STAFF OR BAGGED CONTRACTOR PERSONNEL WITH ESCORT AUTHORITY.
27. THE CONTRACTOR SHALL ACQUAINT ITS SUPERVISORS AND EMPLOYEES WITH THE AIRPORT ACTIVITIES AND OPERATIONS THAT ARE INHERENT AT THIS AIRPORT AND SHALL CONDUCT ITS CONSTRUCTION ACTIVITIES TO CONFORM TO ALL ROUTINE AND EMERGENCY AIR TRAFFIC REQUIREMENTS AND TO THE GUIDELINES ON SAFETY.
28. ITEMS FOR CONTROL OF SAFETY DURING CONSTRUCTION SUCH AS VEHICLE LIGHTING, ETC. SHALL BE PAID FOR IN ACCORDANCE WITH SPECIFICATION S-102 AND SHALL BE CONSIDERED AS A SUBSIDIARY OBLIGATION FOR THE CONTRACTOR COVERED UNDER THESE ITEMS.
29. SEE PHASING PLANS FOR BARRICADE LOCATIONS.

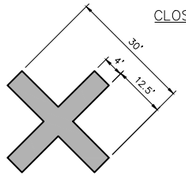
(8) LOW LEVEL AIRFIELD BARRICADE DETAIL & NOTES

N.T.S.

1. BARRICADES SHALL BE PLACED AS SHOWN ON THE PHASING PLANS TO DELINEATE THE CONTRACTOR'S WORK AREAS. EXACT BARRICADE LOCATION AND QUANTITY TO BE COORDINATED WITH AIRPORT.
2. BARRICADE SECTIONS CAN BE WHITE OR ORANGE WITH WHITE AND ORANGE RETRO-REFLECTIVE MARKING OR STICKERS. BARRICADES WILL BE LIGHTED AND FLAGGED.
3. ALL BARRICADES SHALL BE CHECKED VISUALLY FOR SIGNS OF WEAR AND TEAR ON A WEEKLY BASIS AND SHALL BE REPAIRED OR REPLACED WHEN DEEMED APPROPRIATE BY THE RPR OR OWNER. THE CONDITIONS OF LIGHTING UNITS SHALL BE CHECKED DAILY. ALL LIGHT FIXTURES SHALL BE VERIFIED OPERATING BY THE CONTRACTOR ON A DAILY BASIS BEFORE THE CONTRACTOR CEASES OPERATION FOR THE DAY. THE AREAS AROUND ALL BARRICADES SHALL BE CLEANED AS DIRECTED IN THE GENERAL NOTES AND THE SAFETY NOTES.
4. BARRICADES ALONG ACTIVE APRON OR TAXIWAY PAVEMENT SHALL BE PLACED APPROXIMATELY 4 FEET FROM THE EDGE OF THE FULL STRENGTH PAVEMENT. BARRICADES SHALL BE PLACED IN A CONTINUOUS LINE.
5. ALTERNATE FORMS OF BARRICADES MAY BE PROPOSED BY THE CONTRACTOR WHICH MEET THESE FUNCTIONAL REQUIREMENTS. APPROVALS OF ANY SUCH SUBSTITUTION (IF GRANTED) SHALL BE BY THE OWNER AT NO ADDITIONAL COST TO THE OWNER.
6. THE FINAL LOCATION FOR THE BARRICADES SHALL BE ESTABLISHED IN THE FIELD AS DIRECTED BY THE OWNER.
7. THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, RELOCATE AND REMOVE ALL BARRICADES. ALL WORK SHALL BE INCIDENTAL TO S-102 IN THE A.O.A.
8. THE CONTRACTOR SHALL MAINTAIN THE LIGHTS AND THE BARRICADES IN OPERABLE CONDITION AT ALL TIMES.. THE CONTRACTOR SHALL HAVE REPLACEMENT LIGHTS AND BATTERIES ON SITE AND SHALL REPLACE LIGHTS AND/OR BATTERIES WITHIN ONE HOUR OF NOTIFICATION BY THE RPR OR OWNER. CONTRACTOR SHALL FURNISH THE OWNER WITH THE NAME AND TELEPHONE NUMBER FOR AN ON-CALL REPRESENTATIVE 24 HOURS PER DAY, SEVEN DAYS PER WEEK TO REPLACE BATTERIES AND INOPERATIVE LIGHTS AND MAINTAIN THE BARRICADES.
9. FLASHING LIGHTS SHALL BE PLACED AT THE ENDS AND AT CORNERS OF EACH LINE OF BARRICADES, ALL OTHER LIGHTS ON BARRICADES SHALL BE STEADY-BURN.

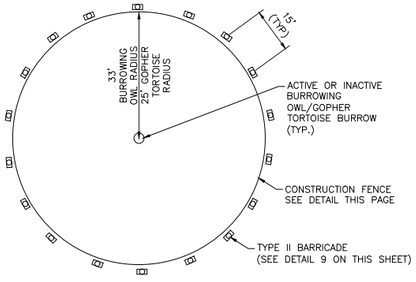
CLOSED TAXIWAY MARKER NOTES:

1. TEMPORARY CLOSED TAXIWAY MARKER SHALL BE CONSTRUCTED OF AN EASILY REMOVABLE MATERIAL, SUCH AS PLYWOOD OR FABRIC, AND HELD IN PLACE WITH SAND BAGS PAINTED YELLOW. TEMPORARY CLOSED TAXIWAY MARKER SHALL BE YELLOW IN COLOR.
2. THE CONTRACTOR SHALL PLACE TEMPORARY CLOSED TAXIWAY MARKER ON THE CENTERLINE OF THE FACILITY TO BE CLOSED AS SHOWN ON PLANS OR AS DIRECTED BY THE OWNER.
3. NO PAYMENT WILL BE MADE FOR RELOCATIONS OF TEMPORARY CLOSED TAXIWAY MARKER.
4. PAYMENT FOR ITEM IS INCLUDED IN S-102. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS ITEM.



(1) TEMPORARY TAXIWAY CLOSURE MARKER

N.T.S.

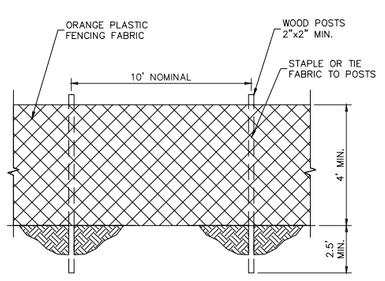


NOTE:

1. PAYMENT FOR ITEM IS INCLUDED IN S-102. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS ITEM.

(2) BURROWING OWL AND GOPHER TORTOISE FENCING PROTECTION DETAIL

N.T.S.



(3) CONSTRUCTION FENCE DETAIL

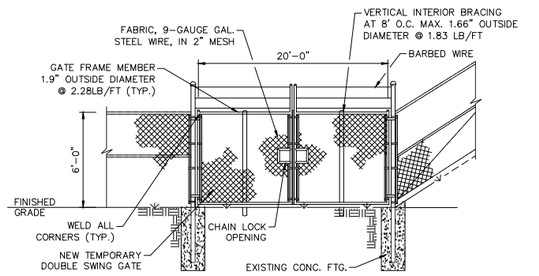
N.T.S.

NOTES:

1. THE CONTRACTOR SHALL PROVIDE FULLY FUNCTIONING PORTABLE LIGHTED RUNWAY CLOSURE MARKERS FOR THE PROJECT.
2. THE FUEL AND MAINTENANCE COSTS ASSOCIATED WITH USING THE PORTABLE LIGHTED RUNWAY CLOSURE MARKERS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR THROUGHOUT THE CONSTRUCTION. THIS INCLUDES REPLACING THE ENGINE AND/OR GENERATOR. ANY REPAIRS REQUIRED TO THE PORTABLE LIGHTED RUNWAY CLOSURE MARKERS SHALL BE AT THE CONTRACTOR'S EXPENSE, WITH NO ADDITIONAL COMPENSATION.
3. THE CONTRACTOR SHALL CLEAN, REPAIR AND REPLACE ANY DAMAGED PARTS ON THE PORTABLE LIGHTED RUNWAY CLOSURE MARKERS.
4. PAYMENT FOR ITEM IS INCLUDED IN S-102. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS ITEM.

(4) CONTRACTOR-FURNISHED PORTABLE LIGHTED RUNWAY CLOSURE MARKER

N.T.S.

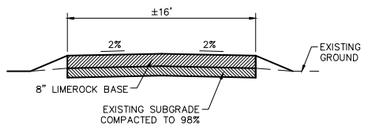


(5) TEMPORARY SECURITY DOUBLE SWING GATE

N.T.S.

NOTES:

1. TEMPORARY GATES ARE TO BE REMOVED AFTER CONSTRUCTION IS COMPLETE. COST OF GATES ARE TO BE INCLUDED IN MOBILIZATION PAY ITEM, C-105. EXACT LOCATION OF GATES TO BE COORDINATED WITH OWNER.
2. TEMPORARY GATE DETAIL SHOW MAX WIDTH, AND LIKELY HEIGHT. CONTRACTOR TO MEASURE ALL ACTUAL DIMENSIONS IN FIELD PRIOR TO FABRICATION.

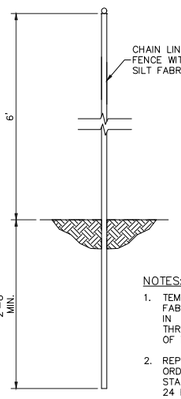


(6) TEMPORARY ACCESS ROAD SECTION

N.T.S.

ACCESS ROAD NOTES:

1. THE EXACT LIMITS AND LOCATION OF THE ACCESS ROAD WILL BE COORDINATED WITH FXE OPERATIONS STAFF AND SHALL BE APPROVED IN THE FIELD BY THE ENGINEER.
2. THE ACCESS ROAD SHALL BE 8" THICK.
3. AFTER COMPLETION OF CONSTRUCTION, THE ACCESS ROAD SHALL BE RETURNED TO ITS ORIGINAL CONDITION OR BETTER. THE CONTRACTOR WILL SOD LIMITS.
4. ROAD TO BE PAID FOR AS INCIDENTAL TO MOBILIZATION C-105.

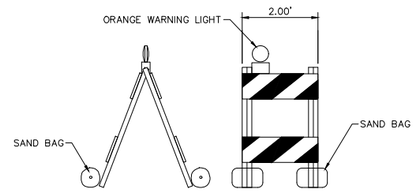


NOTES:

1. TEMPORARY FENCE AND SILT FABRIC MUST BE MAINTAINED IN GOOD WORKING ORDER THROUGHOUT THE DURATION OF THE CONSTRUCTION.
2. REPAIRS, AS REQUIRED OR AS ORDERED BY THE AIRPORT STAFF, WILL BE MADE WITHIN 24 HRS OF NOTICE.

(7) TEMPORARY SECURITY FENCE DETAIL

N.T.S.



(9) TYPE II BARRICADE DETAIL

N.T.S.

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.
CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
600 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
270 YEW'S PARKWAY SUITE # 2
WEST PALM BEACH, FL 33411
TEL: 561-203-9256
LICENSE NO. C-26000

100% SUBMITTAL SET

K:\FTL_AVIATION\044693108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-C05-SAFE.DWG

State of Florida
Professional Engineer
License No. 044693108
THOMAS F. O'DONNELL

DRAWN BY: RB
DESIGNED BY: ADC
CHECKED BY: TFO
FIELD BOOK:
DATE: 06/30/2025
SCALE: AS NOTED

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, 33301

NO.	DATE	BY	CHK'D	DESCRIPTION
REVISIONS				

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
SAFETY NOTES AND DETAILS

SHEET NO. C05 OF
TOTAL: 41
CAD FILE: 12706-C05-SAFE
DRAWING FILE NO.

APPENDIX B

Access and Staging Plan

LEGEND

ACCESS / HAUL ROUTE

CONTRACTOR'S STAGING AND STORAGE AREA. MAXIMUM EQUIPMENT HEIGHT = 20'

PROJECT BOUNDARY AREA

EXISTING TEMPORARY SECURITY FENCE. SEE DETAIL 7 SHEET C05.

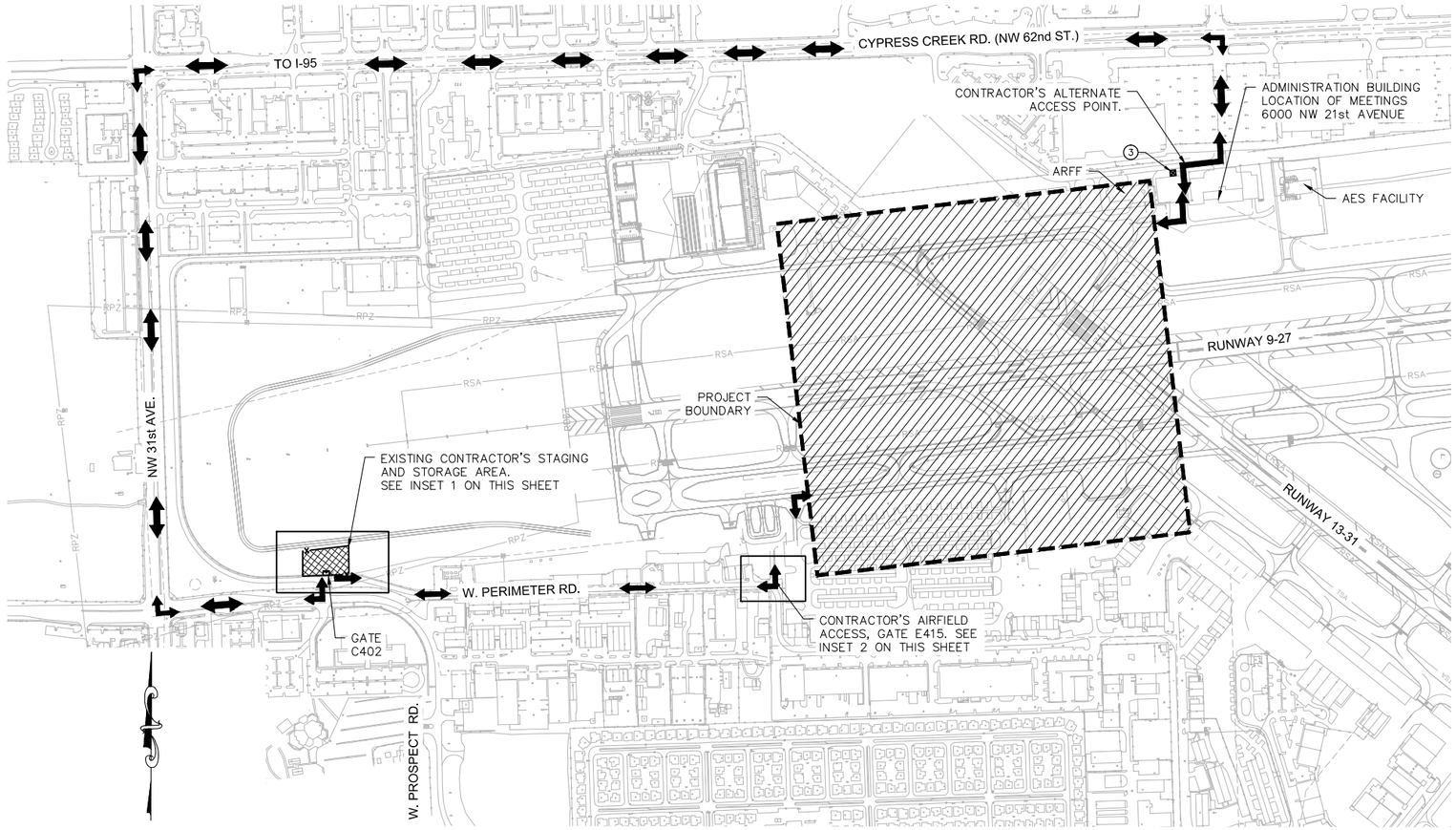
RSA — RUNWAY SAFETY AREA

(1) EXISTING CONTRACTOR'S STAGING AND STORAGE AREA. CONTRACTOR TO INSTALL FENCE FABRIC ON EXISTING SECURITY FENCE. EMPLOYEE VEHICLES SHALL NOT GO BEYOND CONTRACTORS FENCED STAGING AREA.

(2) EXISTING CONTRACTOR'S ACCESS GATE.

(3) CONTRACTOR'S SECURITY GUARD SHACK LOCATION (OPTIONAL).

[S] CONSTRUCTION TRAFFIC SIGN

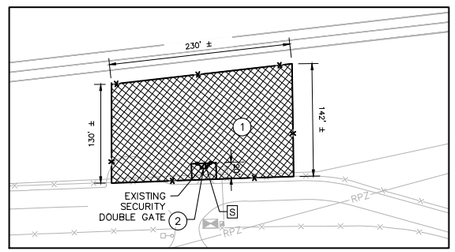


CONTRACTOR STAGING AREA NOTES:

1. THERE IS AN EXISTING STAGING AREA WITH A STABILIZED SURFACE AND FENCING IN THE GENERAL LOCATION AND LIMITS SHOWN ON THIS SHEET. THE EXISTING STAGING AREA FENCING WILL NEED NEW SILT FABRIC TO BE INSTALLED FOR THIS PROJECT DURING THE MOBILIZATION PHASE. THIS IS INCIDENTAL TO THE MOBILIZATION PAY ITEM, C-105-6.1. ANY AND ALL REQUIRED UTILITIES FOR THE CONTRACTOR'S OPERATIONS SHALL BE ARRANGED FOR AND PAID FOR BY THE CONTRACTOR DIRECTLY WITH THE APPROPRIATE UTILITY AGENCIES. UTILITY ARRANGEMENTS SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER. THE CONTRACTOR SHALL USE THE STORAGE AND STAGING AREA SHOWN ON THE PLANS FOR ITS FIELD OFFICE, SHOP, MATERIAL AND EQUIPMENT STORAGE AND OTHER PROJECT RELATED ACTIVITIES INCLUDING EMPLOYEE PARKING. AT THE COMPLETION OF THE PROJECT, THE STAGING AREA AND ITS FENCING WILL BE RETURNED TO EXISTING CONDITION OR BETTER AT NO ADDITIONAL COST TO THE OWNER. THIS WORK IS INCIDENTAL TO THE MOBILIZATION PAY ITEM, C-105-6.1.

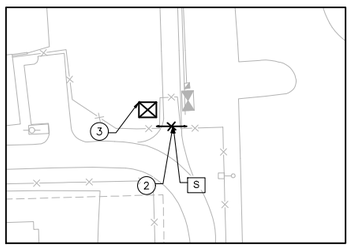
ACCESS AND HAUL ROAD NOTES:

1. HAUL ROADS TO BE USED UNDER THIS PROJECT SHALL BE THOSE INDICATED ON THE DRAWINGS OR OTHERWISE SPECIFICALLY AUTHORIZED BY THE OWNER. IN GENERAL, THE CONTRACTOR SHALL CONFINE EQUIPMENT AND HAULING TO THE AREAS UNDER CONSTRUCTION. NO DEBRIS SHALL BE ALLOWED ON THE ROADWAYS OR AIRPORT PAVED SURFACES. ACTIVE TAXIWAYS SHALL BE KEPT FREE OF DEBRIS AT ALL TIMES. CONTRACTOR SHALL MAINTAIN VACUUM SWEEPERS ON SITE FOR THAT USE. OTHER PAVEMENTS SHALL BE CLEANED BY THE CONTRACTOR DAILY, AND AS REQUIRED, USING VACUUM SWEEPERS TO KEEP ALL ACCESS AND CONSTRUCTION AREAS CLEAR OF SOILS, CLODS OR OTHER DEBRIS.
2. THE ACCESS POINTS TO THE PROJECT SITE ARE SHOWN ON THE PLANS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING ALL AIRPORT SERVICE ROADS TO THEIR PRECONSTRUCTION CONDITION WHERE SUCH ROADS ARE USED BY THE CONTRACTOR FOR HAULING OPERATIONS.
4. THE CONTRACTOR SHALL RESTORE ALL TURFED AND PAVED AREAS USED FOR HAUL ROADS TO THEIR ORIGINAL CONDITION, INCLUDING THE ESTABLISHMENT OF TURF. ALL COSTS FOR CONSTRUCTING, REMOVING AND RESTORING OF HAUL ROADS REQUIRED FOR THE COMPLETION OF THE WORK SHALL BE BORNE BY THE CONTRACTOR AND ARE INCIDENTAL TO MOBILIZATION PAY ITEM C-105-6.1.
5. THE CONTRACTOR SHALL NOT PERMIT ANY UNAUTHORIZED CONSTRUCTION PERSONNEL OR TRAFFIC ON THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL TO AND FROM THE VARIOUS CONSTRUCTION AREAS ON THE SITE. THE CONTRACTOR IS RESPONSIBLE FOR THE IMMEDIATE CLEAN-UP OF ANY DEBRIS DEPOSITED AT THE PROJECT SITE AND ALONG ANY ROAD AS A RESULT OF HIS/HER CONSTRUCTION TRAFFIC. DIRECTIONAL SIGNAGE AT THE ACCESS GATE AND ALONG THE DELIVERY ROUTE TO THE STORAGE AREA OR WORK SITE SHALL BE APPROVED BY THE OWNER.
   ALL CONTRACTOR'S MATERIAL ORDERS FOR DELIVERY TO THE SITE SHALL BE DIRECTED TO THE ACCESS POINTS IDENTIFIED.
6. ON EXISTING AIRPORT PAVEMENTS TO REMAIN, ONLY RUBBER TIRE VEHICLES SHALL BE PERMITTED.
7. THE CONTRACTOR, THROUGH THE CONTRACTOR SECURITY OFFICER, SHALL ESTABLISH AND MAINTAIN A LIST OF CONTRACTOR AND SUBCONTRACTOR VEHICLES AUTHORIZED TO OPERATE ON THE SITE. VEHICLE PERMITS SHALL BE ASSIGNED IN ACCORDANCE WITH AIRPORT SECURITY PROCEDURES.
8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE OFF-SITE ROUTES (STATE HIGHWAYS, COUNTY ROADS OR CITY STREETS) WITH THE APPROPRIATE OWNER WHO HAS JURISDICTION OVER THE AFFECTED ROUTE.
9. ALL CONTRACTOR VEHICLES AND TRAFFIC SHALL REMAIN WITHIN THE DESIGNATED CONSTRUCTION AREAS, STAGING AREAS OR HAUL ROUTES.
10. ALL CONTRACTOR VEHICLES SHALL DISPLAY IN FULL VIEW LOGOS CONSPICUOUSLY PLACED ON EACH SIDE OF THE VEHICLE WITH 4" MINIMUM LETTER HEIGHT . ALL VEHICLES OPERATING IN THE ACTIVE AOA DURING HOURS OF LOW VISIBILITY OR DARKNESS SHALL BE EQUIPPED WITH A FLASHING AMBER (YELLOW) DOME-TYPE LIGHT MOUNTED ON TOP OF THE VEHICLE AND OF SUCH INTENSITY TO CONFORM TO AIRPORT CODES FOR MAINTENANCE AND EMERGENCY VEHICLES.
11. NO CONTRACTOR VEHICLES ARE TO CROSS ACTIVE RUNWAYS, NAVAID CRITICAL AREAS, TAXIWAYS AND APPROACH CLEAR ZONES UNLESS THE ESCORT IS UNDER THE DIRECT CONTROL OF THE AIRPORT GROUND CONTROLLER. CONTRACTOR VEHICLES TO HAVE A WORKING STROBE LIGHT ON AT ALL TIMES. IT SHALL BE UNDERSTOOD BY THE CONTRACTOR THAT AIRPORT TRAFFIC ON RUNWAYS, TAXIWAYS AND APRONS SHALL HAVE PRIORITY OVER CONTRACTOR'S TRAFFIC.
12. CONTRACTOR SHALL PROVIDE PROFESSIONALLY PAINTED SIGNS TO DIRECT MATERIAL SUPPLIERS AND EMPLOYEES TO THE CONSTRUCTION SITE. SIGN AT ENTRANCE GATE SHALL BE PROFESSIONALLY PAINTED 4' X 8' AND READ "CONSTRUCTION VEHICLES ONLY – NO VENDORS ALLOWED."
13. CONTRACTOR ACCESS GATES SHALL BE GUARDED OR LOCKED. CONTRACTOR SHALL PROVIDE GATE GUARDS.
14. CONTRACTOR SHALL OBTAIN AT HIS OWN EXPENSE ANY PERMITS, INCLUDING BUT NOT LIMITED TO DRIVEWAY PERMITS, FOR USE OF ACCESS GATE.
15. ACCESS GATE LOCATION DIFFERENT FROM EXISTING IS SUBJECT TO APPROVAL BY OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH RELOCATION OF EXISTING ACCESS GATE.
16. UPON COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL REMOVE TEMPORARY ACCESS GATES AND RESTORE FENCE, SWALES, SOD ETC. TO ORIGINAL CONDITION.
17. COVER EXISTING UTILITIES IN AREAS OF TRUCK TRAFFIC WITH MINIMUM 12" OF LIMEROCK, INCLUDE IN PAY ITEM FOR MOBILIZATION, C-105-6.1.
18. DISPOSAL OF MILLING WILL BE ON SITE FOR USE TO CONSTRUCT SERVICE ROADS, FOR DISPOSAL IN AREAS SHOWN ON PLANS, OR IN OTHER ON AIRPORT SITES AS DIRECTED BY OWNER. ROUTING OF VEHICLES FOR DISPOSAL OF MILLING WILL BE AS APPROVED BY OWNER AND ATCT AND MAY REQUIRE RADIO CONTACT WITH ATCT DURING HAULING OPERATIONS.
    THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAULING THE MILLINGS NOT USED ON THE AIRPORT OFFSITE AT NO COST TO THE OWNER.



INSET 1: EXISTING CONTRACTOR STAGING AND STORAGE AREA

0 80' 160'



INSET 2: ENTRANCE GATE AREA

0 60' 120'

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.
CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
2601 FACTORY RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35105

QUANTUM Electrical Engineering, Inc.
4750 TOWN CENTER BLVD. SUITE 1
WEST PALM BEACH, FL 33411
561-296-9224
LICENSE NO. EC13010

100% SUBMITTAL SET

PROJECT # 12706
TAXIWAY B AND Q REALIGNMENT
ACCESS AND STAGING PLAN

SHEET NO. C04 OF
TOTAL: 41
CAD FILE: 12706-C04-STAG
DRAWING FILE NO.

REVISIONS

NO.	DATE	BY (CHK'D)	DESCRIPTION

DRAWN BY: RB
DESIGNED BY: ADC
CHECKED BY: TFO
FIELD BOOK:
DATE: 06/30/2025
SCALE: AS NOTED

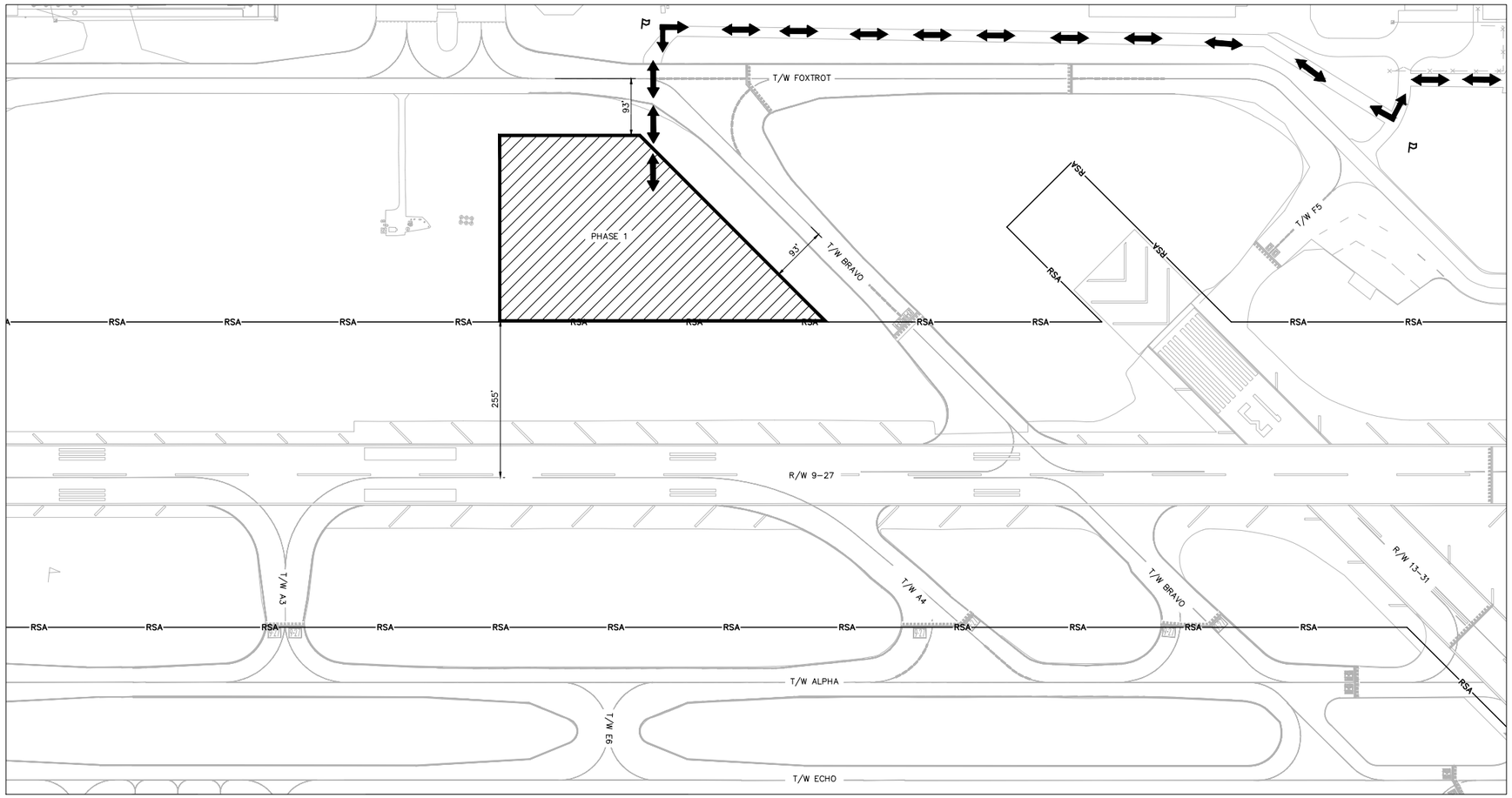
CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, 33301

State of Florida
Professional Engineer
License No. 0446931108
THOMAS F. O'DONNELL

K:\FTL_AVIATION\044693108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-C04-STAG.DWG

APPENDIX C

Phasing Plans



LEGEND

- PHASE 1 WORK LIMITS
- LOW LEVEL AIRFIELD BARRICADES SEE DETAIL 8 SHEET C06.
- TEMP. TAXIWAY CLOSURE MARKER SEE DETAIL 1 SHEET C06.
- TEMP. LIGHTED RUNWAY CLOSURE MARKER SEE DETAIL 4 SHEET C06.
- RSA — RUNWAY SAFETY AREA
- FLAG MAN
- HAUL ROUTE
- (1) LOCATION OF LIGHTED RUNWAY CLOSURE "X"
- (2) LOCATION OF TAXIWAY CLOSURE "X"
- (3) LOW LEVEL AIRFIELD BARRICADE AS REQUIRED TO CLOSE TAXIWAY. IN PLACE FOR DURATION OF SPECIFIED PHASE.
- (X) PHASE NUMBER

PRIMARY ITEMS OF WORK*

1. SUBMIT AND COMPLETE THE REVIEW PROCESS FOR ALL SHOP DRAWINGS AND SUBMITTALS.
2. INSTALL ANY SIGNAGE AS REQUIRED.
3. PREPARE EXISTING STAGING AREA.
4. INSTALL FABRIC TO EXISTING STAGING AREA FENCING AND IMPLEMENT OTHER SECURITY MEASURES.
5. PERFORM PRE-CONSTRUCTION SURVEY VERIFICATION.
6. INSTALL STORMWATER POLLUTION PREVENTION (SWPP) MEASURES.
7. PERFORM CONTRACTOR'S QUALITY CONTROL WORKSHOP.
8. PROCURE AND RECEIVE ALL ELECTRICAL ITEMS AND COMPONENTS. INVENTORIED, STAGED, AND STORED ON SITE.
9. PERFORM PRE-CONSTRUCTION MEETING.
10. COVER EXISTING LIGHTS THAT ARE TO REMAIN.

PRIMARY ITEMS OF WORK*

1. PERFORM FULL DEPTH INFIELD EXCAVATION.
2. COMPACT IN SITU SUBGRADE, INSTALL P-154 SUBBASE AND P-211 LIMEROCK.
3. PERFORM ELECTRICAL INSTALLATION.
4. INSTALL P-154 STABILIZED SHOULDERS.

*THIS LIST IS NOT EXHAUSTIVE NOR SEQUENTIAL; IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE PROJECT AND CONTRACT DOCUMENTS TO PERFORM ALL REQUIRED WORK IN ITS APPROPRIATE SEQUENCE.

PHASE M (MOBILIZATION)

OPERATIONS

ALL WORK, WITH THE EXCEPTION OF THE PRE-CONSTRUCTION SURVEY VERIFICATION AND INSTALLATION OF SWPP MEASURES, WILL BE PERFORMED OUTSIDE OF THE AIRPORT SAFETY AREAS AND PROTECTED SURFACES. ALL AIRPORT INFRASTRUCTURE TO REMAIN OPEN. WORK WILL BE PERFORMED 8.5 HOURS PER DAY, MONDAY THROUGH FRIDAY, 7:30 AM TO 4:00 PM.

FOR THE PRE-CONSTRUCTION SURVEY VERIFICATION AND INSTALLATION OF SWPP MEASURES, THE CONTRACTOR IS TO COORDINATE WITH AIRPORT STAFF REGARDING ACCESS AND CLOSURE OF AIRPORT INFRASTRUCTURE. ALL CLOSURES WILL BE "ROLLING" AND CONTROLLED BY AIRPORT OPERATIONS STAFF. CONTRACTOR TO COORDINATE CLOSELY WITH AIRPORT OPERATIONS STAFF DURING CLOSURES. WORK TIMES ARE REFERENCED FROM START OF SHIFT.

LIMITS OF WORK

WITH THE EXCEPTION OF THE PRE-CONSTRUCTION SURVEY VERIFICATION AND INSTALLATION OF SWPP MEASURES, THE LIMITS OF THIS WORK AREA WILL CONSIST OF THE EXISTING ACCESS POINT AND THE CONTRACTOR'S STAGING AREA. FOR THE PRE-CONSTRUCTION SURVEY VERIFICATION, THE LIMITS OF WORK WILL BE WITHIN THE AIRPORT'S SAFETY AREAS INCLUDING THE RUNWAY 9-27 SAFETY AREA. FOR THE INSTALLATION OF SWPP MEASURES THE LIMITS OF WORK WILL BE THE INFIELD AREA SOUTH OF TAXIWAY ECHO, EAST OF TAXIWAY DELTA AND WEST OF TAXILANE CHARLIE.

WORK SEQUENCING

WORK IN THIS AREA WILL BE PERFORMED SEQUENTIALLY AFTER NTP.

PHASE 1

OPERATIONS

CONSTRUCTION IN THE WORK AREA SHOWN WILL NOT REQUIRE THE CLOSURE TO ANY EXISTING RUNWAYS OR TAXIWAYS. CROSSINGS OF ACTIVE TAXIWAYS WILL BE COORDINATING WITH AIRPORT OPERATIONS. WORK WILL BE PERFORMED FROM 7:30 AM TO 4:30 PM MONDAY THROUGH FRIDAY. WORK TIMES ARE REFERENCED FROM START OF SHIFT.

CONTRACTOR TO COORDINATE BARRICADE PLACEMENT WITH AIRPORT STAFF AND RESIDENT PROJECT REPRESENTATIVE. BARRICADE LOCATIONS ARE SCHEMATIC AND MAY BE ADJUSTED OR ADDED IN THE FIELD AS NECESSARY FOR THE COMPLETION OF THE WORK.

LIMITS OF WORK

THE LIMITS OF THIS PHASE ARE 93' WEST OF THE EXISTING TAXIWAY BRAVO CENTERLINE NORTH OF THE RUNWAY 9-27 RSA.

WORK SEQUENCING

WORK IN THIS AREA WILL BE PERFORMED SEQUENTIALLY AFTER THE COMPLETION OF THE MOBILIZATION PHASE AFTER CONSTRUCTION NTP IS PROVIDED.

0 60' 120'

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
4581 WESTON RD., SUITE 230, WESTON, FL 33331
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
LICENSE NO. EJ13000

100% SUBMITTAL SET

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
PHASING PLAN 1

SHEET NO. C06 OF
TOTAL: 41
CAD FILE: 12706-C06-PHAS1
DRAWING FILE NO.

REVISIONS

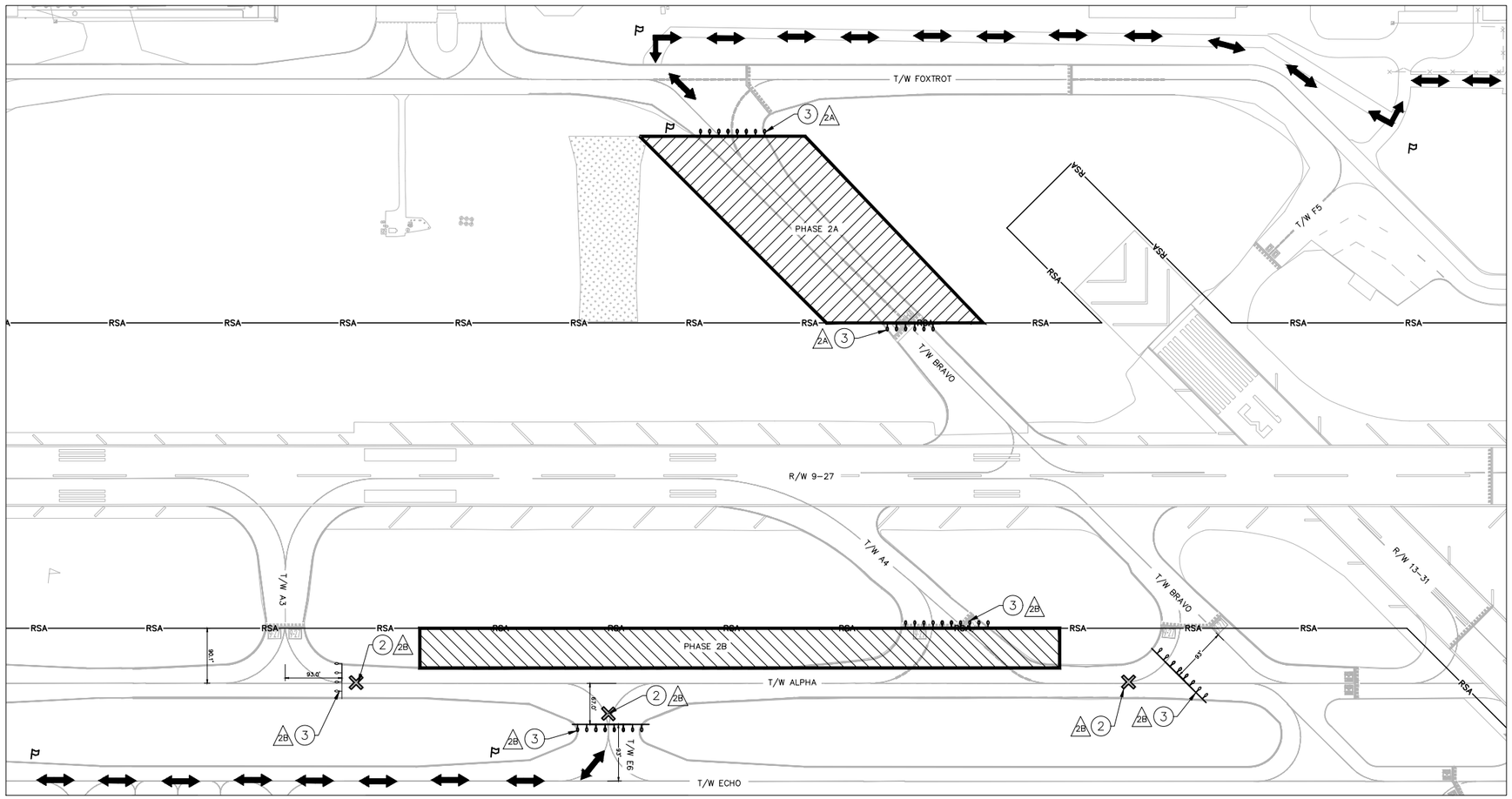
NO.	DATE	BY	CHK'D	DESCRIPTION

DRAWN BY: RB
DESIGNED BY: ADC
CHECKED BY: TFO
FIELD BOOK:
DATE: 06/30/2025
SCALE: AS NOTED

State of Florida
Professional Engineer
License No. 0446931108
THOMAS F. O'DONNELL

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

K:\FTL_AVIATION\044693108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-C06-PHAS1.DWG



LEGEND

- PHASE 2A WORK LIMITS
- PHASE 2B WORK LIMITS
- COMPLETED WORK
- LOW LEVEL AIRFIELD BARRICADES SEE DETAIL 8 SHEET C06.
- TEMP. TAXIWAY CLOSURE MARKER SEE DETAIL 1 SHEET C06.
- TEMP. LIGHTED RUNWAY CLOSURE MARKER SEE DETAIL 4 SHEET C06.
- RSA — RUNWAY SAFETY AREA
- FLAG MAN
- HAUL ROUTE
- (1) LOCATION OF LIGHTED RUNWAY CLOSURE "X"
- (2) LOCATION OF TAXIWAY CLOSURE "X"
- (3) LOW LEVEL AIRFIELD BARRICADE AS REQUIRED TO CLOSE TAXIWAY. IN PLACE FOR DURATION OF SPECIFIED PHASE.
- (X) PHASE NUMBER

PHASE 2A

PRIMARY ITEMS OF WORK*

1. INSTALL BARRICADES AS DIRECTED BY FXE OPERATIONS.
2. PERFORM P-101 FULL DEPTH PAVEMENT DEMOLITION AND P-152 INFIELD EXCAVATION.
3. PERFORM ELECTRICAL DEMOLITION.
4. COMPACT IN SITU SUBGRADE, INSTALL P-154 SUBBASE, AND P-211 LIME ROCK BASE COURSES.
5. PERFORM ELECTRICAL INSTALLATION.
6. INSTALL P-154 STABILIZED SHOULDERS.
7. INSTALL P-152 EMBANKMENT, T-904 SOD, AND S-906 HYDROSEED.

*THIS LIST IS NOT EXHAUSTIVE NOR SEQUENTIAL; IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE PROJECT AND CONTRACT DOCUMENTS TO PERFORM ALL REQUIRED WORK IN ITS APPROPRIATE SEQUENCE.

OPERATIONS

CONSTRUCTION IN THE PHASE SHOWN WILL REQUIRE THE PERMANENT CLOSURE OF EXISTING TAXIWAY BRAVO NORTH OF THE RUNWAY 9-27 RSA. TAXIWAY FOXTROT AND RUNWAY 9-27 WILL REMAIN OPEN DURING THIS PHASE. CONTRACTOR TO ADDRESS ALL DROPOFFS WITH LIMEROCK WEDGES AS DIRECTED BY OWNER OR RPR. WORK WILL BE PERFORMED 8.5 HOURS PER DAY, MONDAY THROUGH FRIDAY, 7:30 AM TO 4:00 PM.

CONTRACTOR TO COORDINATE BARRICADE PLACEMENT WITH AIRPORT STAFF AND RESIDENT PROJECT REPRESENTATIVE. BARRICADE LOCATIONS ARE SCHEMATIC AND MAY BE ADJUSTED OR ADDED IN THE FIELD AS NECESSARY FOR THE COMPLETION OF THE WORK.

LIMITS OF WORK

THE LIMITS OF THIS PHASE IS THE AREA NORTH OF THE RUNWAY 9-27 RSA AND SOUTH OF 93' SOUTH OF THE TAXIWAY FOXTROT CENTERLINE. THE HORIZONTAL LIMITS OF THIS PHASE MATCH THE PROJECT LIMITS IN THIS AREA.

WORK SEQUENCING

WORK IN THIS PHASE WILL BE PERFORMED SEQUENTIALLY AFTER THE COMPLETION OF PHASE 1.

PHASE 2B

PRIMARY ITEMS OF WORK*

1. INSTALL BARRICADES AS DIRECTED BY FXE OPERATIONS.
2. PERFORM P-101 FULL DEPTH PAVEMENT DEMOLITION AND P-152 INFIELD EXCAVATION.
3. PERFORM ELECTRICAL DEMOLITION.
4. COMPACT IN SITU SUBGRADE, INSTALL P-154 SUBBASE AND P-211 LIMEROCK.
5. PERFORM ELECTRICAL INSTALLATION.
6. INSTALL P-154 STABILIZED SHOULDERS.
7. INSTALL T-905 TOPSOIL, T-904 SOD, AND S-906 HYDROSEED.

*THIS LIST IS NOT EXHAUSTIVE NOR SEQUENTIAL; IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE PROJECT AND CONTRACT DOCUMENTS TO PERFORM ALL REQUIRED WORK IN ITS APPROPRIATE SEQUENCE.

OPERATIONS

CONSTRUCTION IN THE PHASE SHOWN WILL REQUIRE THE PERMANENT CLOSURE OF TAXIWAY A4 AND THE NIGHTLY CLOSURE OF TAXIWAY ALPHA AND E6 IN THE LIMITS SHOWN ABOVE. CONTRACTOR TO ADDRESS ALL DROPOFFS WITH LIMEROCK WEDGES AS DIRECTED BY OWNER OR RPR. WORK WILL ALLOW TAXIWAY ALPHA AND E6 TO BE REOPENED EACH MORNING AT 6:00 AM. WORK WILL BE PERFORMED NIGHTLY, FROM 10:00 PM TO 6:00 AM.

CONTRACTOR TO COORDINATE BARRICADE PLACEMENT WITH AIRPORT STAFF AND RESIDENT PROJECT REPRESENTATIVE. BARRICADE LOCATIONS ARE SCHEMATIC AND MAY BE ADJUSTED OR ADDED IN THE FIELD AS NECESSARY FOR THE COMPLETION OF THE WORK.

LIMITS OF WORK

THE LIMITS OF THIS PHASE ARE SOUTH OF THE RUNWAY 9-27 RSA AND NORTH OF THE NORTH EDGE OF TAXIWAY ALPHA, THE HORIZONTAL LIMITS OF THIS PHASE MATCH THE PROJECT LIMITS IN THIS AREA.

WORK SEQUENCING

WORK IN THIS AREA WILL BE PERFORMED SEQUENTIALLY AFTER THE COMPLETION OF THE COMPLETION OF PHASE 2A

0 60' 120'

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
4581 WESTON RD., SUITE 230, WESTON, FL 33331
REGISTRY No. 35105

QUANTUM Electrical Engineering, Inc.
3750 VETA BARRON BLVD S.E.
WEST PALM BEACH, FL 33403
561-200-5224
LICENSE NO. EA0000187

100% SUBMITTAL SET

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
PHASING PLAN 2

SHEET NO.	OF
C07	
TOTAL:	41
CAD FILE: 12706-C07-PHAS2	
DRAWING FILE NO.	

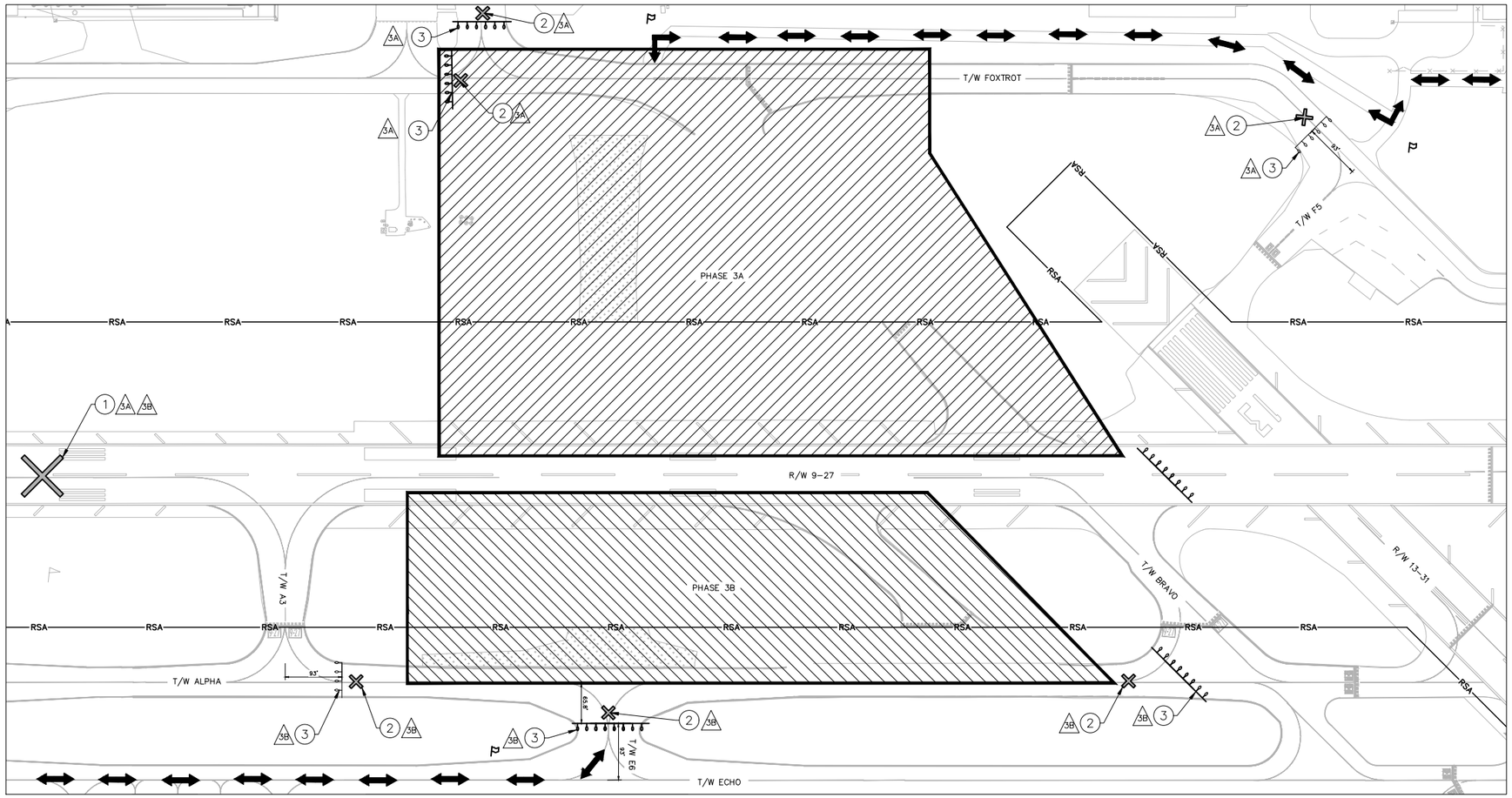
REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION

DRAWN BY: RB
DESIGNED BY: ADC
CHECKED BY: TFO
FIELD BOOK:
DATE: 06/30/2025
SCALE: AS NOTED

State of Florida
Professional Engineer
License No. 0446931108
THOMAS F. O'DONNELL

K:\FTL_AVIATION\044693108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-C07-PHAS2.DWG



LEGEND

- PHASE 2A WORK LIMITS
- PHASE 2B WORK LIMITS
- COMPLETED WORK
- LOW LEVEL AIRFIELD BARRICADES SEE DETAIL 8 SHEET C06.
- TEMP. TAXIWAY CLOSURE MARKER SEE DETAIL 1 SHEET C06.
- TEMP. LIGHTED RUNWAY CLOSURE MARKER SEE DETAIL 4 SHEET C06.
- RSA — RUNWAY SAFETY AREA
- FLAG MAN
- HAUL ROUTE
- (1) LOCATION OF LIGHTED RUNWAY CLOSURE "X"
- (2) LOCATION OF TAXIWAY CLOSURE "X"
- (3) LOW LEVEL AIRFIELD BARRICADE AS REQUIRED TO CLOSE TAXIWAY. IN PLACE FOR DURATION OF SPECIFIED PHASE.
- (X) PHASE NUMBER

PRIMARY ITEMS OF WORK*

1. INSTALL BARRICADES AS DIRECTED BY FXE OPERATIONS.
2. PERFORM P-101 FULL DEPTH PAVEMENT DEMOLITION AND P-152 INFIELD EXCAVATION.
3. PERFORM ELECTRICAL DEMOLITION.
4. COMPACT IN SITU SUBGRADE, INSTALL P-154 SUBBASE, AND P-211 LIME ROCK BASE COURSES.
5. PERFORM ELECTRICAL INSTALLATION.
6. INSTALL P-154 STABILIZED SHOULDERS.
7. PERFORM P-401 PAVING.
8. INSTALL P-620 TEMPORARY PAVEMENT MARKINGS.
9. INSTALL T-905 TOPSOIL, T-904 SOD AND S-906 HYDROSEED.

*THIS LIST IS NOT EXHAUSTIVE NOR SEQUENTIAL; IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE PROJECT AND CONTRACT DOCUMENTS TO PERFORM ALL REQUIRED WORK IN ITS APPROPRIATE SEQUENCE.

PHASE 3A

OPERATIONS

CONSTRUCTION IN THE PHASE SHOWN WILL REQUIRE THE NIGHTLY CLOSURE OF RUNWAY 9-27 AND TAXIWAY FOXTROT BETWEEN TW F5 AND THE WESTERN BARRICADE SHOWN ABOVE. CONTRACTOR TO ADDRESS ALL DROPOFFS WITH LIMEROCK WEDGES AS DIRECTED BY OWNER OR RPR. WORK AND WILL ALLOW RUNWAY 9-27 AND TAXIWAY FOXTROT TO BE REOPENED EACH MORNING AT 6:00 AM. WORK WILL BE PERFORMED NIGHTLY, FROM 10:00 PM TO 6:00 AM.

CONTRACTOR TO COORDINATE BARRICADE PLACEMENT WITH AIRPORT STAFF AND RESIDENT PROJECT REPRESENTATIVE. BARRICADE LOCATIONS ARE SCHEMATIC AND MAY BE ADJUSTED OR ADDED IN THE FIELD AS NECESSARY FOR THE COMPLETION OF THE WORK.

LIMITS OF WORK

THE LIMITS OF THIS PHASE IS THE AREA NORTH OF THE RUNWAY 9-27 NORTH EDGE AND SOUTH OF THE TAXIWAY FOXTROT CENTERLINE. THE HORIZONTAL LIMITS OF THIS PHASE MATCH THE PROJECT LIMITS IN THIS AREA.

WORK SEQUENCING

WORK IN THIS PHASE WILL BE PERFORMED SEQUENTIALLY AFTER THE COMPLETION OF PHASE 2B.

PHASE 3B

OPERATIONS

CONSTRUCTION IN THE PHASE SHOWN WILL REQUIRE THE NIGHTLY CLOSURE OF RUNWAY 9-27 AND TAXIWAY ALPHA BETWEEN TW A3 AND THE EASTERN BARRICADE SHOWN ABOVE. CONTRACTOR TO ADDRESS ALL DROPOFFS WITH LIMEROCK WEDGES AS DIRECTED BY OWNER OR RPR. WORK WILL ALLOW RUNWAY 9-27 AND TAXIWAY ALPHA TO BE REOPENED EACH MORNING AT 6:00 AM. WORK WILL BE PERFORMED NIGHTLY, FROM 10:00 PM TO 6:00 AM.

CONTRACTOR TO COORDINATE BARRICADE PLACEMENT WITH AIRPORT STAFF AND RESIDENT PROJECT REPRESENTATIVE. BARRICADE LOCATIONS ARE SCHEMATIC AND MAY BE ADJUSTED OR ADDED IN THE FIELD AS NECESSARY FOR THE COMPLETION OF THE WORK.

LIMITS OF WORK

THE LIMITS OF THIS PHASE ARE SOUTH OF THE RUNWAY 9-27 SOUTH EDGE AND NORTH OF THE TAXIWAY ALPHA CENTERLINE. THE HORIZONTAL LIMITS OF THIS PHASE MATCH THE PROJECT LIMITS IN THIS AREA.

WORK SEQUENCING

WORK IN THIS AREA WILL BE PERFORMED SEQUENTIALLY AFTER THE COMPLETION OF THE COMPLETION OF PHASE 3A.

0 60' 120'

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.
CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
2601 FACTORS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35105

QUANTUM Electrical Engineering, Inc.
4750 TOWN CENTER BLVD. SUITE 1-3
WEST PALM BEACH, FL 33411
561-290-9224
LICENSE NO. EC13010

100% SUBMITTAL SET

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
PHASING PLAN 3

SHEET NO. C08 OF
TOTAL: 41
CAD FILE: 12706-C08-PHAS3
DRAWING FILE NO.

REVISIONS

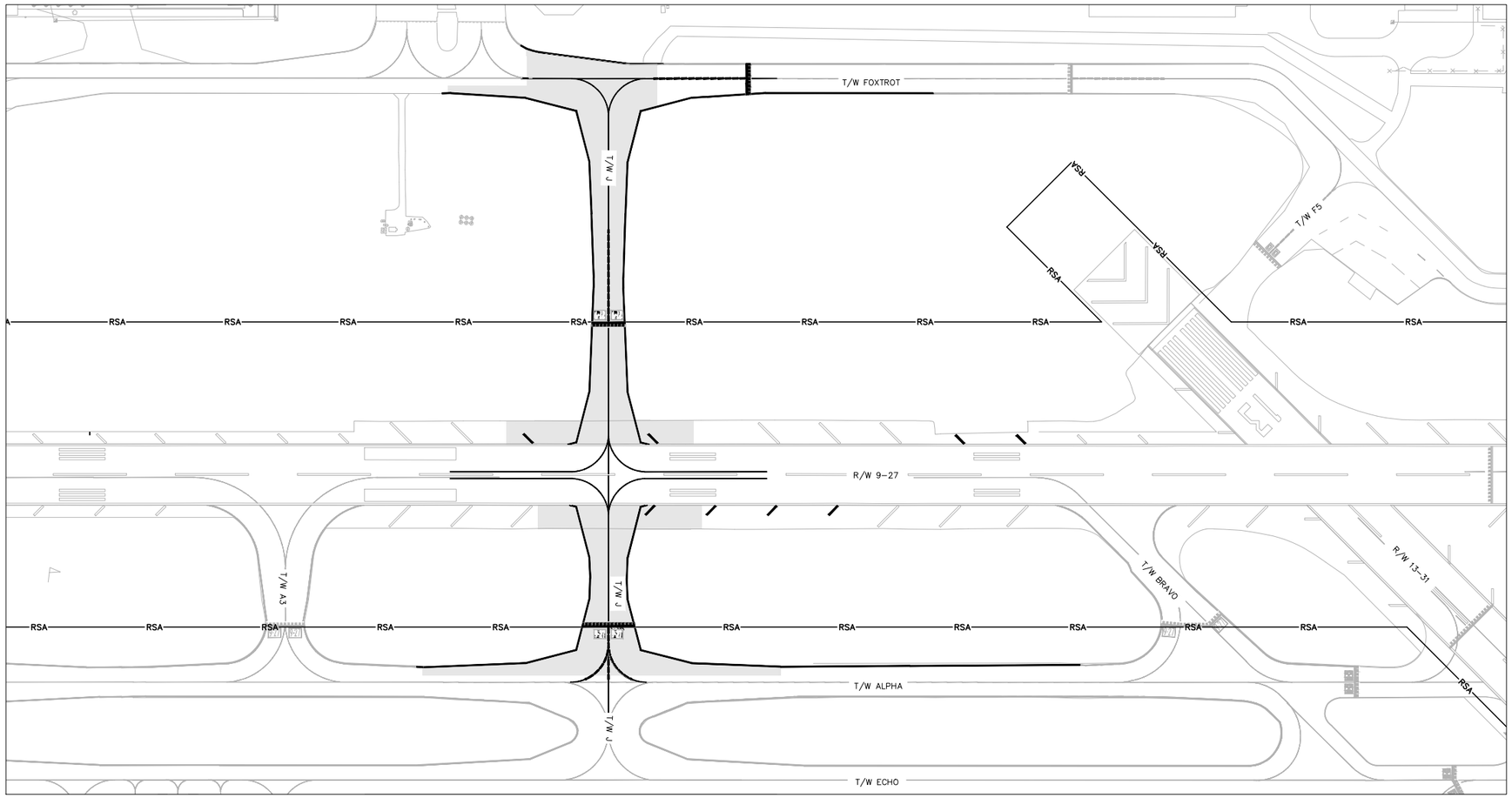
NO.	DATE	BY	CHK'D	DESCRIPTION

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, 33301

DRAWN BY: RB
DESIGNED BY: ADC
CHECKED BY: TFO
FIELD BOOK:
DATE: 06/30/2025
SCALE: AS NOTED

State of Florida
Professional Engineer
License No. 0446931108
THOMAS F. O'DONNELL

K:\FTL_AVIATION\0446931108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-C08-PHAS3.DWG



LEGEND

- LIMITS OF NEW PAVEMENT
- LOW LEVEL AIRFIELD BARRICADES SEE DETAIL 8 SHEET C06.
- TEMP. TAXIWAY CLOSURE MARKER SEE DETAIL 1 SHEET C06.
- TEMP. LIGHTED RUNWAY CLOSURE MARKER SEE DETAIL 4 SHEET C06.
- RSA — RUNWAY SAFETY AREA
- FLAG MAN
- HAUL ROUTE
- (1) LOCATION OF LIGHTED RUNWAY CLOSURE "X"
- (2) LOCATION OF TAXIWAY CLOSURE "X"
- (3) LOW LEVEL AIRFIELD BARRICADE AS REQUIRED TO CLOSE TAXIWAY. IN PLACE FOR DURATION OF SPECIFIED PHASE.
- (X) PHASE NUMBER

PHASE 4

PRIMARY ITEMS OF WORK*

1. PERFORM PUNCHLIST WORK.
2. INSTALL P-620 PERMANENT PAVEMENT MARKINGS.

*THIS LIST IS NOT EXHAUSTIVE NOR SEQUENTIAL; IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE PROJECT AND CONTRACT DOCUMENTS TO PERFORM ALL REQUIRED WORK IN ITS APPROPRIATE SEQUENCE.

OPERATIONS

CONSTRUCTION IN THE PHASE SHOWN WILL BE CONDUCTED ON ROLLING CLOSURES AND PULLBACK WORK. CONTRACTOR TO COORDINATE WITH AIRPORT OPERATIONS STAFF AND RPR FOR LIMITS.

LIMITS OF WORK

THE LIMITS OF THIS PHASE ARE THE FULL LIMITS OF THE PROJECT ON A PULL BACK BASIS WITH ROLLING CLOSURES.

WORK SEQUENCING

WORK IN THIS AREA WILL BE PERFORMED SEQUENTIALLY AFTER THE COMPLETION OF PHASE 3A AND 3B. PERMANENT PAINT MARKING INSTALLATION WILL BE PERFORMED SEQUENTIALLY AFTER THE 30 DAY ASPHALT CURING PERIOD.

0 60' 120'

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6671 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
3776 VINELAND BLVD STE E
WEST PALM BEACH, FL 33407
561.249.9258
LIC #EC13011451, CA#6660

100% SUBMITTAL SET

K:\FTL_AVIATION\044693108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-C09-PHAS4.DWG

State of Florida
Professional Engineer
License No. 0446931108
THOMAS F. O'DONNELL

DRAWN BY: RB
DESIGNED BY: ADC
CHECKED BY: TFO
DATE: 06/30/2025
SCALE: AS NOTED
FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS			
NO.	DATE	BY (CHK'D)	DESCRIPTION

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
PHASING PLAN 4

SHEET NO. C09 OF
TOTAL: 41
CAD FILE: 12706-C09-PHAS4
DRAWING FILE NO.

APPENDIX D

Construction Daily Safety Inspection Checklist

AIRPORT DAILY SAFETY SELF-INSPECTION CHECKLIST

DATE: _____ **DAY**: _____ √ Satisfactory
X Unsatisfactory

Day Inspector/Time: _____ **Night Inspector/Time:** _____

FACILITIES	CONDITIONS	D	N	REMARKS	RESOLVED BY (Date/Initials)
§139.305 Paved areas	Pavement lips over 3"				
	Hole – 5" diam. 3" deep				
	Cracks/spalling/heaves				
	FOD: gravel/debris/sand				
	Rubber deposits				
	Ponding/edge dams				
	Drainage				
	Vegetative growth				
	Surface variations				
§139.307 Unpaved areas	Slope from edge				
	Full strength compaction				
	Holes, depressions				
	FOD, loose aggregate				
§139.309 Safety areas	Ruts/humps/erosion				
	Drainage/construction				
	Support equipment/aircraft				
	Frangible bases, grading				
	Unauthorized objects				
	Wildlife damage/evidence				
	Construction equipment/material				
§139.311 Marking	Clearly visible/standard				
	Runway markings Correct? Color?				
	Taxiway markings Correct? Color?				
	Holding position markings				
	Glass beads				
	Movement/non-movement area separation markings				

FACILITIES	CONDITIONS	D	N	REMARKS	RESOLVED BY (Date/Initials)
§139.311 Signs	Standard/meet sign plan location/position				
	Obscured/operable				
	Damaged/retroreflective				
	Faded, color				
	Tethers intact				
§139.311 Lighting	Obscured/dirty/operable				
	Consistent intensity				
	Damaged/missing				
	Faulty aim/adjustment				
	Runway lighting x				
	Precision runway lighting				
	Taxiway lighting				
	Pilot control lighting				
	Appropriate shielding				
139.313 Snow & ice control	Surface conditions				
	Snowbank clearances				
	Lights & signs obscured				
	NAVAIDs free and clear				
	Emergency ARFF access				
	Braking conditions				
§139.315; .317; .319 Aircraft rescue and fire fighting	Equipment/crew availability				
	Communications/alarms				
	Response routes affected				
§139.321 Handling and storing of hazardous substances and materials (Fueling Operations)	Fencing/gates/signs				
	Fuel marking/labeling				
	Fire extinguishers				
	Frayed wires				
	Fuel leaks/vegetation				
	Abraded hoses				
	Condition of mobile fuelers				
§139.331 Obstructions	Obstruction lights operable				
	Cranes/trees				
	Vegetation				

FACILITIES	CONDITIONS	D	N	REMARKS	RESOLVED BY (Date/Initials)
§139.333 Protection of NAVAIDs	Rotating beacon operable				
	Wind indicators: Number? Lighted at night?				
	RENLs/VGSI systems				
	Electronic components operational				
§139.335 Public protection	Fencing/gates/signs				
	Jet blast problems				
§139.337 Wildlife hazard management	Wildlife present/location				
	Complying with WHMP				
	Dead birds/other evidence				
§139.341 Identifying, marking, and lighting construction and other unserviceable areas	Barricades/lights				
	Equipment parking				
	Material stockpiles				
	Confusing signs/markings				
	Index capability				

Comments/Remarks: _____

Airfield map on reverse

AIRPORT DAILY SAFETY SELF-INSPECTION CHECKLIST

DATE:_____**DAY**:_____ ✔ Satisfactory ✕ Unsatisfactory

Day Inspector/Time: _____Night Inspector/Time: _____

FACILITIES	CONDITIONS	D	N	REMARKS	RESOLVED BY (Initial & date)
Pavement Areas	Pavement lip over 3"				
	Hole - 5" diam. 3" deep				
	Cracks/spalling/heaves				
	FOD: gravel/debris/sand				
	Ponding/edge dams				
Safety Areas	Ruts/humps/erosion				
	Drainage/construction				
	Support equipment/aircraft				
	Frangible bases				
	Unauthorized objects				
Markings	Clearly visible/standard				
	Runway markings				
	Taxiway markings				
	Holding position markings				
	SPHPS/ETCL markings				
	Glass beads				
Signs	Standard/IAW Sign Plan				
	Obscured/inoperable				
	Damaged/retroreflective				
Lighting	Obscured/dirty/inoperable				
	Damaged/missing/aiming				
	Lighting systems inoperable				
	IAW FAA standards				
	Pilot Control Lighting				
NAVAIDS	Rotating beacon inoperable				
	Wind indicators				
	VASI/PAPI/REIL systems				
	FAA ILS system/ALS/VGSI				
Obstructions	Obstruction lights operable				
	New cranes not reported				
Snow & Ice	Surface conditions				
	Snowbank clearance				
	Signs obscured				
	NAVAID interference				
	NOTAMs current				
Public Protection	Fencing/gates/signs				
	Jet blast problems				
Wildlife Hazards	Wildlife present/location				
	Complying with WHMP				

Airfield Map/Airport Diagram on Reverse

SUPPLEMENTAL CONDITIONS

[THIS PAGE LEFT INTENTIONALLY BLANK]

SUPPLEMENTAL CONDITIONS
PROJECT 12706
FORT LAUDERDALE EXECUTIVE AIRPORT
TAXIWAY BRAVO AND QUEBEC REALIGNMENT

1. SUPPLEMENTAL CONDITIONS

The supplemental conditions included herein are intended to address items of work not included or addressed in the Construction Specifications. In case of a conflict, the Construction Specifications shall be *subordinate* to corresponding sections of the Supplemental Conditions.

2. CONSTRUCTION PROJECT COORDINATION PLAN

The purpose of the following outline is to establish guidelines to ensure operational safety during construction activities on the Fort Lauderdale Executive Airport. The primary document of reference, which is also made a part of these specifications and shall be adhered to by the Contractor is the U. S. Department of Transportation Federal Aviation Administration Advisory Circular 150/5370-2E (or latest revision) and its references.

It is the intent of the notes contained in this outline to establish a plan for construction on the Airport in order to maximize safety and minimize time and economic loss to the aviation community, along with construction contractors and others directly affected by the project. The following objectives should be targeted by the Contractor and must be considered when planning construction schedules and operational activities.

A. Keep the Airport operational for all user aircraft.
B. Minimize delays for aircraft operations.
C. Maintain safety of aircraft operations.
D. Minimize delays to construction operations.
E. Minimize aircraft operation/construction activity conflicts.

Maximum, safe utilization of the Airport during construction is the ultimate goal to be achieved through communication and cooperative coordination between Contractor, jobsite Inspector (as a representative of the Engineer), the Airport Management, and the ATCT, as described herein.

2.1 All operations in airfield area to be performed only in coordination with the ATCT, Airport Management, and the Inspector assigned to the project.

2.2 Construction equipment regularly operating in the airfield area shall be marked with a flag on a staff, at least 36” square and a flashing amber light. Flag shall consist of a checkered pattern of international orange and white squares of not less than 1 foot on each side (in accordance with FAA AC 150/5210-5).

Vehicles (including all cars, trucks, construction equipment, etc.) are forbidden to penetrate aircraft movement areas or runway approach areas unless they are escorted by an authorized vehicle having the required radio, or are controlled by flagmen under a control plan approved in advance. Communication on radios shall be restricted to safety and coordination communications with the ATCT, and shall not be used for routine construction communications between contractor’s personnel. All vehicles must obtain clearance from the control tower before entering aircraft movement areas. The control tower shall be informed of all activity within the aircraft movement areas

Any vehicle or contractor personnel crossing any aircraft movement areas without notifying ATCT personnel shall be fined the maximum amount of $5000.00 and shall not be allowed back on the construction site.

2.3 Materials stockpile and storage, vehicle parking, location of construction office (if requested), and storage of equipment when not in use shall be as directed by the Engineer. The Contractor shall dispose of all surplus materials and facilities removed from the limits of work in a manner and to a location acceptable to the Engineer and Airport Management.

Materials to be reused shall be stockpiled as directed above, and salvaged facilities desired to be retained by the Airport shall be stored as directed by the Engineer. Other removed materials shall be placed in approved spoil areas or other approved locations. Any surplus fill so removed shall be neatly graded as directed by the Engineer.

2.4 The Contractor shall ascertain the location of and protect all existing and new FAA cables, airport lighting cables and facilities, and appurtenant facilities during construction and ensure that all circuits and facilities are maintained in a safe and properly operable condition. The local FAA Airway Facilities Sector Field Office (AFSFO) personnel will, upon request, mark all FAA cables in the vicinity of construction once, prior to the start of work. Contact number to call to request locations is (954) 467-7099. At least two weeks should be allowed for requested work to be completed. The Contractor shall be responsible for protecting cable location markings, and shall be responsible for any damage to cables within three feet of the marked cable route.

The Contractor shall also ascertain the location of all utility services (water, sewer, gas, electrical, power, telephone, etc.) within the work limits and ensure that continual and equal service is maintained during all construction activities.

Should any FAA, FP&L, AT&T, or other outside utility company's cable or facility be inadvertently cut, damaged, or disrupted, the owner of that cable or facility shall be notified immediately. The Contractor shall not make any splices or repairs in such cables or facilities unless specifically authorized by the owner of that cable or facility. The Contractor shall be responsible for the cost of any repairs required.

All locations indicated on the plans are approximate and shall be field verified prior to beginning construction.

2.5 The Contractor's activities must not degrade in any way the security provided by the airport perimeter fence, unless Airport Management approves specific exemptions to this provision in advance of construction activities. Any temporary gates installed or fencing relocated for the Contractor at his expense shall maintain this project in a secure condition at all times. The Contractor shall provide a security guard at each of his access points to the airport, unless they are locked and secured, in order to prevent unauthorized persons from entering and to direct authorized construction vehicles on the proper route to their destination within the airport. A portable guard house shall be utilized at all construction gates and shall be located in close proximity to the gate. An employee siting in a car “watching the gate” shall not be acceptable. If any gate is found to be unlocked without a guard in place, or should the guard allow any access without varifiying the proper authority for access, the Contractor shall be fined $500 for each occurance.

2.6 The Contractor shall be responsible for controlling smoke and dust or blowing sand or soil caused by construction activities using one or a combination of the following methods, to the satisfaction of the Engineer and the Airport Management:

A. Application of water and/or calcium chloride (minimum of three times per day or as directed by the Engineer).
B. Exposing the minimum area of erodible earth at one time.
C. Applying temporary mulch with or without seeding (only in locations as approved by Airport Management).
D. Using covered haul trucks.

Additionally, contractor shall be required to keep a vacuum sweeper vehicle with operator on duty during all hauling operations across pavement in use by aircraft. No additional compensation will be provided for dust or sand control.

2.7 Attractions for birds in the area of construction, such as trash, unprotected grass seeding, or ponded water must be avoided.

2.8 All electrical work shall be in strict accordance with the National Electric Code, latest edition. Electrical sub-contractor must furnish after hours contact phone number in case of emergency. This number must be an actual number and not an answering service.

2.9 Definitions:

Air Operations Area (AOA) - An AOA is any area of the airport used or intended to be used for landing, takeoff, or surface maneuvering of aircraft. An AOA shall include such paved or unpaved areas that are intended to be used for the unobstructed movement of aircraft in addition to its associated runway, taxiway, or apron.

NOTAM (Notice to Airmen) - NOTAMs are advisories issued by FAA Flight Service Station when conditions at an airport exist that could adversely affect safe aircraft operations such as construction related closures or hazardous conditions.

Any construction activity within 200 feet from runway centerline or within 65 feet from taxiway centerline will be considered to be within the AOA and will require closure of the affected areas (the exception being work specifically approved by Airport Management and FAA up to active aprons and taxiways). Such closures of an AOA must be coordinated with **Airport Management at least 48 hours** prior to commencing proposed work in order that arrangements can be made for issuance of applicable NOTAMs. The Contractor shall not close an AOA until so authorized by Airport Management and until the necessary temporary barricades and closure markings are in place. The sequence of construction phases and updated work schedules shall be provided to the Engineer to enable close coordination with aircraft routing and operations and maintain the currency of NOTAMs during the construction period. The Contractor shall also advise the Airport Management when situations have been improved to a point where NOTAMs may be cancelled.
Any closure of Taxiways or Runways require at least 2 weeks notice. **Once a NOTAM has been issued, Contractor shall adhere strictly to the construction schedule agreed to for the NOTAM.**

2.10 At times when Runway 9-27 threshold is displaced, or equipment is operating in the ILS critical zone, the ILS must be taken off the air or ILS operations restricted by the ATCT. Also, when equipment is operating between a localizer antenna and its associated threshold, that localizer must be taken off the air. Due to such requirements, such work must be closely coordinated with the Airport Management requiring timing described above necessary for the issuance of applicable NOTAMs. If construction operations

require shutdown of a navigational aid from service for more than 24 hours or in excess of 4 hours daily on consecutive days, a 45-day minimum notice is desirable prior to the facility shutdown. Additionally, the Contractor shall cease construction and remove all equipment from the critical area when directed by the FAA or airport personnel due to weather or other special operating conditions.

2.11 Definition:

Federal Aviation Regulations (FAR) Part 77 - Objects Affecting Navigable Airspace - Applicable section of this advisory establishes standards for determining obstructions in navigable airspace by establishing imaginary surfaces with relation to the airport and to each runway.

No penetrations of the imaginary surfaces defined in FAR Part 77 shall be allowed unless approval is obtained from Airport Management and the FAA. When penetrations are unavoidable, approval should be requested as far in advance as is practical to allow, if such penetrations are acceptable, sufficient time for issuance of applicable NOTAMs. The Contractor shall prepare appropriate sketches with precise locations shown on the Airport Layout Plan along with elevations depicting the obstructing objects' relationship to the imaginary surfaces. Special approval must be obtained from Airport Management and the FAA for use of equipment exceeding a height of 30 feet. All exceptionally tall equipment (such as cranes, derricks, etc.) operating on the airport shall be in direct radio communication with the control tower (e.g., two-way radios, ground control frequency of 121.75 Mhz, operators proficient in English, experienced or trained in such communication and required response).

2.12 All excavations exceeding 3 inches depth and width or slopes greater than 5% within runway or taxiway or runway/taxiway safety areas shall be backfilled or covered prior to reopening the runway or taxiway. No open trenches (exceeding 3 inches depth and width) will be permitted overnight or over weekends within the runway/taxiway safety areas. The Engineer and Airport Management must approve any deviation from the requirements. All open trenches, stockpiled material, and excavation not within the areas described above shall be permanently marked with orange flags and lighted with flashing amber light units which shall operate continuously.

2.13 Runways and taxiways shall be kept free of all debris, dirt, trash, refuse, water bottles, soda cans, etc., at all times. Material tracked onto these areas shall be removed immediately. Contractor must keep a vacuum sweeper vehicle with operator on site with operator on duty during all hauling operations across pavement in use by aircraft. Continuous inspections will be made. See item 2.6 for approved methods of debris control.

2.14 Work on the airport is also in close proximity to potable water supply wellfields, requiring that extreme care be taken when handling fuel, oils, etc. Any spillages should be promptly and properly cleaned up. The stipulations of the Broward County Water Resources Management Division "Checklist for Surface Water Management" are permit requirements and dictate preventative measures necessitated by construction in such wellfield areas.

2.15 Open flame welding or torch-cutting operations are prohibited unless adequate fire and safety precautions are provided and have been approved by the Engineer.

2.16 Construction safety meetings shall be established for the life of the contract to monitor, coordinate and adopt safety measures, on all matters of airport safety relating to this

contract. Meetings will be scheduled by the Engineer at least once every week to discuss project schedule and applicable safety measures. These meetings shall be composed of the Contractor's superintendent, the Inspector, Airport Management, and (if available) the FAA/FDOT. In addition, representatives of the Fixed Base Operator (FBO) tenants may be invited, their attendance optional, and at their own discretion. The Owner reserves the right to amend the plan as necessary to maintain an acceptable level of safety during construction. Sub-contractors shall also be required to attend these meetings if they are scheduled to be performing any work on the project.

2.17 During the pre-construction Meeting, the Owner, the Contractor, the FAA, and the Engineer shall each designate a representative to be responsible for the safety aspects of the project. Each representative shall be available on a 24-hour basis. In addition, the Contractor shall designate a responsible representative on call 24 hours per day for emergency maintenance of airport hazard lighting and barricades.

2.18 In addition to the appropriate notification procedures, temporary runway and taxiway closures require that the applicable lighting circuits be disconnected during the closure period. Temporarily closed taxiways are usually treated as unusable, or hazardous, areas (as described below).

2.19 Hazardous areas, in which no part of an aircraft may enter, are indicated by use of barricades with alternate orange and white markings. The barricades are supplemented with orange flags at least 20 by 20 inches square and made and installed so that they are always in the extended position and properly oriented. For nighttime use, the barricades are to be supplemented with flashing red lights. The intensity of the lights and spacing for barricades, flags, and lights must be such that they adequately delineate the hazardous area.

3. PROTECTION OF WILDLIFE AND NATURAL HABITAT

The Contractor shall make provisions to protect the existing wildlife on the airport within the limits of this project. Known nests for burrowing owls and turtles are marked with a white PVC **T** in the ground. Contractor shall investigate the stockpile area, work area, and haul routes for marked and unmarked nests before storing materials and beginning construction. All unmarked nests shall be marked with a white PVC **T.** Existing markers shall not be removed without Engineer's approval. Nests shall be protected with the construction of temporary safety fencing. Said fencing to be placed within a 50-foot radius of nesting holes, to be approximately 3 feet in height, and to be made out of orange PVC material.

All reasonable efforts must be made by the Contractor to protect the existing wildlife and their nests. Nests that lie directly in the construction area that cannot co-exist with construction must be brought to the Engineer's attention. Nests may not be displaced or destroyed without the Engineer's approval.

Work areas and access to work areas shall be clearly delineated by the Contractor to avoid vehicliar movement in turf areas that may contain nests or other features that could be damaged or destroyed by unnecessary traffic. All construction traffic shall be confined to paved areas to the greatest extent possible.

4. PORTABLE CONSTRUCTION LIGHTING.

The Contractor is responsible for providing work area lighting of sufficient quality and quantity to construct the Work to the quality standards called for in the Plans and Specifications. At a minimum the construction lighting shall meet the following requirements:

a. For any construction that will be performed during nighttime hours the Contractor shall ensure that the work areas are adequately illuminated. A minimum of 10-foot candles of illumination shall be provided in the work areas, using maneuverable light plants with 1,000-watt metal halide floodlights, mounted as high as practicality will allow. The Contractor shall determine the number of light plants and their required spacing to achieve the illumination levels specified herein.

   The light should be positioned to provide the most natural color illumination and contrast with a minimum of shadows. The pavement area shall be lighted at a maximum spacing of 100 feet from both sides to eliminate objectionable shadows. A demonstration of the adequacy of the lighting will be required prior to beginning any night work. The Contractor shall work with Airport Operations when determining positions for each portable light unit so that the lighting will not interfere with the vision of pilots or Air Traffic Control Tower personnel.

b. For night work, the Contractor shall equip all paving machines, rollers, distributor trucks, and other equipment with artificial illumination to safely illuminate the area immediately surrounding their work areas.

c. Contractor shall remove all equipment and store in the staging areas during non-working hours, and prior to the re-opening of the Runways.

8. PRE-PHASE COORDINATION MEETINGS.

At least 10 calendar days prior to beginning each phase of the Work, the Contractor shall hold a planning meeting to discuss, at a minimum, operational restrictions, work to be performed, haul routes (including Contractor signing and marking), closures, safety, testing requirements, submittal requirements, inspection requirements, schedule, communications, erosion control, stockpile locations and disposal schedule, location of stand-by equipment, salvaged materials container location, barricade layout, barricade placement schedule (including barricade storage areas during non-working hours) and other topics as appropriate. The Contractor shall submit a plan for all of the elements described above, to the Engineer for review, no less than 10 calendar days prior to each pre-phase meeting.

The Contractor shall prepare a construction traffic control plan for each haul route. The Contractor's traffic control plan shall conform to the requirements of the City traffic engineer, and shall be approved by the Engineer. The plan shall be included in Contractor's submittal for the pre-phase coordination meeting. When the haul route is not in use, all traffic control signs shall either be covered or removed and stored. The Contractor shall remove all construction signs after the completion of the work.

9. SCHEDULING AND DAILY OPERATIONS.

All work hours will be subject to written approval of the Engineer and Airport Operations, and in accordance with the approved work schedule. The Contractor shall also provide weekly and daily work plans. The Contractor shall have equipment and personnel staged and ready to occupy the site at the start time listed. **No runway closure will take place until the Contractor's equipment and personnel are in place as close as practical to the work area and ready to proceed into the work area and begin operatons.** Prior to the end of each work shift, the Contractor shall arrange to have Airport Operations inspect the site to confirm that the site is being left in a satisfactory condition. The Contractor shall allow sufficient time to make

any corrections and or cleanup items found to be deficient before opening at the required times listed. Any runway or taxiway safety area that does not pass the operations inspection shall remain closed until corrective measures are complete and approved by Airport Operations.

10. OPERATING CONDITIONS AND SAFETY.

All Contractor operations and activities shall comply with the requirements contained or identified in the Plans and these Specifications. Night work shall require use of sufficient portable light towers to provide safe and efficient operation conditions.

PROCUREMENT CONTRACTS (NON-AIP)

REQUIRED FEDERAL PROVISIONS:

A. GENERAL CIVIL RIGHTS PROVISIONS

In all its activities within the scope of its airport program, the Contractor agrees to comply with pertinent statutes, Executive Orders, and such rules as identified in Title VI List of Pertinent Nondiscrimination Acts and Authorities to ensure that no person shall, on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

The above provision binds the Contractor and subcontractors from the bid solicitation period through the completion of the contract.

B. CIVIL RIGHTS – TITLE VI ASSURANCE

1. Title VI Solicitation Notice

Title VI Solicitation Notice:

The **City of Fort Lauderdale,** in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that for any contract entered into pursuant to this advertisement, [select businesses, or disadvantaged business enterprises or airport concession disadvantaged business enterprises] will be afforded full and fair opportunity to submit bids in response to this invitation and no businesses will be discriminated against on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability in consideration for an award.

2. Title VI List of Pertinent Nondiscrimination Acts and Authorities

Insert this list in every contract or agreement, unless the Sponsor has determined and the FAA concurs, that the contract or agreement is not subject to the Nondiscrimination Acts and Authorities. This list can be omitted if the FAA has determined that the contractor or company is already subject to nondiscrimination requirements, which is a rare occurrence.

Title VI List of Pertinent Nondiscrimination Acts and Authorities

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 USC § 2000d *et seq*., 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin);
- 49 CFR part 21 (Non-discrimination in Federally-Assisted programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964);
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 USC § 4601) (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Section 504 of the Rehabilitation Act of 1973 (29 USC § 794 *et seq*.), as amended (prohibits discrimination on the basis of disability); and 49 CFR part 27 (Nondiscrimination on the Basis of Disability in Programs or Activities Receiving Federal Financial Assistance);
- The Age Discrimination Act of 1975, as amended (42 USC § 6101 *et seq*.) (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982 (49 USC § 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987 (PL 100-259) (broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act of 1990 (42 USC § 12101, et seq) (prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities) as implemented by U.S. Department of Transportation regulations at 49 CFR parts 37 and 38;
- The Federal Aviation Administration's Nondiscrimination statute (49 USC § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (ensures nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations);
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to

ensure that LEP persons have meaningful access to your programs [70 Fed. Reg. 74087 (2005)];
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 USC § 1681, et seq).

3. Compliance with Nondiscrimination Requirements:

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor"), agrees as follows:

1. **Compliance with Regulations:** The Contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts and Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. **Nondiscrimination:** The Contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.

3. **Solicitations for Subcontracts, including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Contractor of the contractor's obligations under this contract and the Nondiscrimination Acts and Authorities on the grounds of race, color, or national origin.

4. **Information and Reports:** The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts and Authorities and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the Sponsor or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

5. **Sanctions for Noncompliance:** In the event of a Contractor's noncompliance with the non-discrimination provisions of this contract, the Sponsor will impose

such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:

a. Withholding payments to the Contractor under the contract until the Contractor complies; and/or
b. Cancelling, terminating, or suspending a contract, in whole or in part.

6. **Incorporation of Provisions:** The Contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations, and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the Sponsor or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Contractor may request the Sponsor to enter into any litigation to protect the interests of the Sponsor. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

4. Clause for Construction/Use/Access to Real Property Acquired Under the Activity, Facility or Program

The following clauses will be included in deeds, licenses, permits, or similar instruments/agreements entered into by City of Fort Lauderdale pursuant to the provisions of the Airport Improvement Program grant assurances.

A. The (grantee, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, “as a covenant running with the land”) that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, (3) that the (grantee, licensee, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the Title VI List of Pertinent Nondiscrimination Acts and Authorities.
B. With respect to (licenses, leases, permits, etc.), in the event of breach of any of the above Non-discrimination covenants, City of Fort Lauderdale will have the right to terminate the (license, permit, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same as if said (license, permit, etc., as appropriate) had never been made or issued.*

C. With respect to deeds, in the event of breach of any of the above Non-discrimination covenants, City of Fort Lauderdale will there upon revert to and vest in and become the absolute property of City of Fort Lauderdale and its assigns.*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

C. OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

All contracts and subcontracts that result from this solicitation incorporate by reference the requirements of 29 CFR Part 1910 with the same force and effect as if given in full text. The employer must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The employer retains full responsibility to monitor its compliance and their subcontractor's compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (29 CFR Part 1910). The employer must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health Administration.

D. CERTIFICATION REGARDING DOMESTIC PREFERENCES FOR PROCUREMENTS

The Bidder or Offeror certifies by signing and submitting this bid or proposal that, to the greatest extent practicable, the Bidder or Offeror has provided a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including, but not limited to, iron, aluminum, steel, cement, and other manufactured products) in compliance with 2 CFR § 200.322.

AFFIDAVIT OF COMPLIANCE WITH FOREIGN ENTITY LAWS
(Florida Statute- §287.138, 692.201, 692.202, 692.203, and 692.204)

The undersigned, on behalf of the entity listed below ("Entity"), hereby attests under penalty of perjury as follows:

1. Entity is not owned by the government of a foreign country of concern as defined in Section 287.138, Florida Statutes. (Source:§ 287.138(2)(a), Florida Statutes)
2. The government of a foreign country of concern does not have a controlling interest in Entity. (Source:§ 287.138(2)(b), Florida Statutes)
3. Entity is not organized under the laws of, and does not have a principal place of business in, a foreign country of concern. (Source: § 287.138(2)(c), Florida Statutes)
4. Entity is not owned or controlled by the government of a foreign country of concern, as defined in Section 692.201, Florida Statutes. (Source:§ 288.007(2), Florida Statutes)
5. Entity is not a partnership, association, corporation, organization, or other combination of persons organized under the laws of or having its principal place of business in a foreign country of concern, as defined in Section 692.201, Florida Statutes, or a subsidiary of such entity. (Source: § 288.007(2), Florida Statutes)
6. Entity is not a foreign principal, as defined in Section 692.201, Florida Statutes. (Source: § 692.202(5)(a)(l), Florida Statutes)
7. Entity is in compliance with all applicable requirements of Sections 692.202, 692.203, and 692.204, Florida Statutes.
8. ***(Only applicable if purchasing real property)*** Entity is not a foreign principal prohibited from purchasing the subject real property. Entity is either (a) not a person or entity described in Section 692.204(1)(a), Florida Statutes, or (b) authorized under Section 692.204(2), Florida Statutes, to purchase the subject property. Entity is in compliance with the requirements of Section 692.204, Florida Statutes. (Source:§§ 692.203(6)(a), 692.204(6)(a), Florida Statutes)

The undersigned is authorized to execute this affidavit on behalf of Entity.

Name: _____ Title:_____ Entity: _____

Signature: _____ Date: _____

NOTARY PUBLIC ACKNOWEDGEMENT SECTION

STATE OF _____

COUTY OF _____

The foregoing instrument was acknowledged before me, by means of □ physical presence or □ online notarization, this ____ day of _____20__, by _____, as

_____ for _____, who is

personally known to me or who has produced _____as identification.

Notary Public Signature: _____ (Notary Seal)

Print Name:_____ My commission expires:_____

QUESTIONNAIRE SHEET

PLEASE PRINT OR TYPE:

Firm Name:

President

Business Address:

Telephone:

Fax:

E-Mail Address:

What was the last project of this nature which you completed? Include the year, description, and contract value.

The following are named as three corporations and representatives of those corporations for which you have performed work similar to that required by this contract, and which the City may contact as your references (include addresses, telephone numbers and e-mail addresses). Include the project name, year, description, and contract value.

How many years has your organization been in business?

Have you ever failed to complete work awarded to you; if so, where and why?

The name of the qualifying agent for the firm and his position is:

Certificate of Competency Number of Qualifying Agent:

Effective Date: Expiration Date:

Licensed in:

Engineering Contractor's License # (County/State)

Expiration Date:

NOTE: To be considered for award of this contract, the bidder must submit a financial statement upon request.

NOTE: Contractor must have proper licensing and shall provide copy of same with his proposal.

QUESTIONNAIRE SHEET

1. Have you personally inspected the proposed work and have you a complete plan for its performance?

2. Will you sublet any part of this work? If so, list the portions or specialties of the work that you will.

	Subcontractor Name	Description of Work
a)		
b)		
c)		
d)		
e)		
f)		
g)		

3. What equipment do you own that is available for the work?

4. What equipment will you purchase for the proposed work?

5. What equipment will you rent for the proposed work?

CITY OF FORT LAUDERDALE BID/PROPOSAL CERTIFICATION

Please Note: It is the sole responsibility of the bidder/proposer to ensure that their response is submitted electronically through the City's on-line strategic sourcing platform prior to the bid opening date and time listed. Paper bid submittals will not be accepted. All fields below must be completed. If the field does not apply to you, please note N/A in that field.

If you are a foreign corporation, you may be required to obtain a certificate of authority from the department of state, in accordance with Florida Statute §607.1501 (visit http://www.dos.state.fl.us/).

Company: (Legal Registration) _____ EIN (Optional): _____

Address: _____

City: _____State: _____ Zip: _____

Telephone No.: _____ FAX No.: _____ Email: _____

Delivery: Calendar days after receipt of Purchase Order: _____

ADDENDUM ACKNOWLEDGEMENT - Proposer acknowledges that the following addenda have been received and are included in the proposal:

Addendum No.	Date Issued	Addendum No.	Date Issued	Addendum No.	Date Issued	Addendum No.	Date Issued

VARIANCES: If you take exception or have variances to any term, condition, specification, scope of service, or requirement in this competitive solicitation you must specify such exception or variance in the space provided below or reference in the space provided below all variances contained on other pages within your response. Additional pages may be attached if necessary. No exceptions or variances will be deemed to be part of the response submitted unless such is listed and contained in the space provided below. The City does not, by virtue of submitting a variance, necessarily accept any variances. If no statement is contained in the below space, it is hereby implied that your response is in full compliance with this competitive solicitation. If you do not have variances, simply mark N/A.

The below signatory hereby agrees to furnish the following article(s) or services at the price(s) and terms stated subject to all instructions, conditions, specifications addenda, legal advertisement, and conditions contained in the bid/proposal. I have read all attachments including the specifications and fully understand what is required. By submitting this signed proposal, I will accept a contract if approved by the City and such acceptance covers all terms, conditions, and specifications of this bid/proposal. The below signatory also hereby agrees, by virtue of submitting or attempting to submit a response, that in no event shall the City's liability for respondent's direct, indirect, incidental, consequential, special or exemplary damages, expenses, or lost profits arising out of this competitive solicitation process, including but not limited to public advertisement, bid conferences, site visits, evaluations, oral presentations, or award proceedings exceed the amount of Five Hundred Dollars ($500.00). This limitation shall not apply to claims arising under any provision of indemnification or the City's protest ordinance contained in this competitive solicitation.

Submitted by:

_____ _____

Name (printed) Signature

_____ _____

Date Title

CONTRACT PAYMENT METHOD

The City of Fort Lauderdale has implemented a Procurement Card (P-Card) program which changes how payments are remitted to its vendors. The City has transitioned from traditional paper checks to credit card payments via MasterCard or Visa as part of this program.

This allows you as a vendor of the City of Fort Lauderdale to receive your payments fast and safely. No more waiting for checks to be printed and mailed.

In accordance with the contract, payments on this contract will be made utilizing the City's P-Card (MasterCard or Visa). Accordingly, bidders must presently have the ability to accept the credit card or take whatever steps necessary to implement acceptance of a card before the start of the contract term, or contract award by the City.

All costs associated with the Contractor's participation in this purchasing program shall be borne by the Contractor. The City reserves the right to revise this program as necessary.

By signing below, you agree with these terms.

Please indicate which credit card payment you prefer:

____ MasterCard

____ Visa

_____
Company Name

_____ _____
Name (Printed) Signature

_____ _____
Title Date

DISADVANTAGED BUSINESS ENTERPRISE (DBE) PREFERENCE

Section 2-185, Code of Ordinances of the City of Fort Lauderdale, provides for a disadvantaged business preference.

In order to be considered for a DBE Preference, a bidder must include a certification from a government agency, as applicable to the DBE Preference class claimed **at the time of bid submittal**.

Upon formal request of the City, based on the application of a DBE Preference the Bidder shall, within ten (10) calendar days, submit the following documentation to the DBE Class claimed:

A) Copy of City of Fort Lauderdale current year business tax receipt, **or** Broward County current year business tax receipt, **or** State of Florida active registration **and/or**

B) List of the names of all employees of the bidder and evidence of employees' residence within the geographic bounds of the City of Fort Lauderdale or Broward County, as the case may be, such as current Florida driver license, residential utility bill (water, electric, telephone, cable television), or other type of similar documentation acceptable to the City.

Failure to comply at time of bid submittal shall result in the bidder being found ineligible for the disadvantaged business preference.

THE COMPLETE DBE PREFERENCE ORDINANCE MAY BE FOUND ON THE CITY'S WEB SITE AT THE FOLLOWING LINK: https://www.fortlauderdale.gov/home/showpublisheddocument?id=56883

Definitions

a. The term "disadvantaged class 1 enterprise" shall mean any disadvantaged business enterprise that has established and agrees to maintain a permanent place of business located in a non-residential zone, staffed with full-time employees within the limits of the city, and provides supporting documentation of its City of Fort Lauderdale business tax and disadvantaged certification as established in the City's Procurement Manual.

b. The term "disadvantaged class 2 enterprise" shall mean any disadvantaged business enterprise that has established and agrees to maintain a permanent place of business within the limits of the city with a full-time employees and provides supporting documentation of its City of Fort Lauderdale business tax and disadvantaged certification as established in the City's Procurement Manual.

c. The term "disadvantaged class 3 enterprise" shall mean any disadvantaged business enterprise that has established and agrees to maintain a permanent place of business located in a non-residential zone, staffed with full-time employees within the limits of the Tri-County area and provides supporting documentation of its City of Fort Lauderdale business tax and disadvantaged certification as established in the City's Procurement Manual.

d. The term "disadvantaged class 4 enterprise" shall mean any disadvantaged business enterprise that does not qualify as a Class A, Class B, or Class C business, but is located in the State of Florida and provides supporting documentation of its disadvantaged certification as established in the City's Procurement Manual.

DISADVANTAGED BUSINESS ENTERPRISE CERTIFICATION STATEMENT

The Business identified below certifies that it qualifies for the disadvantaged business enterprise price preference classification as indicated herein, and further certifies and agrees that it will re-affirm its preference classification annually no later than thirty (30) calendar days prior to the anniversary of the date of a contract awarded pursuant to this solicitation. Violation of the foregoing provision may result in contract termination.

(1) _____ is a disadvantaged class 1 enterprise as defined in the City of Fort Lauderdale Ordinance Section 2-185 disadvantaged business enterprise that has established and agrees to maintain a permanent place of business located in a non-residential zone, staffed with full-time employees within the limits of the city, and provides supporting documentation of its City of Fort Lauderdale business tax and disadvantaged certification as established in the City's Procurement Manual.

Business Name

(2) _____ is a disadvantaged class 2 enterprise as defined in the City of Fort Lauderdale Ordinance Section 2-185 disadvantaged business enterprise that has established and agrees to maintain a permanent place of business within the limits of the city with a full-time employee(s) and provides supporting documentation of its City of Fort Lauderdale business tax and disadvantaged certification as established in the City's Procurement Manual.

Business Name

(3) _____ is a disadvantaged class 3 enterprise as defined in the City of Fort Lauderdale Ordinance Section 2-185 disadvantaged business enterprise that has established and agrees to maintain a permanent place of business located in a non-residential zone, staffed with full-time employees within the limits of the Tri-County area and provides supporting documentation of its City of Fort Lauderdale business tax and disadvantaged certification as established in the City's Procurement Manual.

Business Name

(4) _____ is a disadvantaged class 4 enterprise as defined in the City of Fort Lauderdale Ordinance Section 2-185 disadvantaged business enterprise that does not qualify as a Class A, Class B, or Class C business, but is located in the State of Florida and provides supporting documentation of its disadvantaged certification as established in the City's Procurement Manual.

Business Name

(5) _____ is not considered a Disadvantaged Enterprise Business as defined in the City of Fort Lauderdale Ordinance Sec.2-185 and does not qualify for DBE Preference consideration.

Business Name

BIDDER'S COMPANY: _____

AUTHORIZED COMPANY PERSON: _____

PRINT NAME SIGNATURE DATE

E-VERIFY AFFIRMATION STATEMENT

Solicitation/Bid /Contract No: _____

Project Description:

Contractor/Proposer/Bidder acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of,

A. all persons employed by Contractor/Proposer/Bidder to perform employment duties within Florida during the term of the Contract, and,

B. all persons (including subcontractors/vendors) assigned by Contractor/Proposer/Bidder to perform work pursuant to the Contract.

The Contractor/Proposer/Bidder acknowledges and agrees that use of the U.S. Department of Homeland Security's E-Verify System during the term of the Contract is a condition of the Contract.

Contractor/Proposer/ Bidder Company Name: _____

Authorized Company Person's Signature: _____

Authorized Company Person's Title: _____

Date: _____

NON-COLLUSION STATEMENT

By signing this offer, the vendor/contractor certifies that this offer is made independently and *free* from collusion. Vendor shall disclose below any City of Fort Lauderdale, FL officer or employee, or any relative of any such officer or employee who is an officer or director of, or has a material interest in, the vendor's business, who is in a position to influence this procurement.

Any City of Fort Lauderdale, FL officer or employee who has any input into the writing of specifications or requirements, solicitation of offers, decision to award, evaluation of offers, or any other activity pertinent to this procurement is presumed, for purposes hereof, to be in a position to influence this procurement.

For purposes hereof, a person has a material interest if they directly or indirectly own more than 5 percent of the total assets or capital stock of any business entity, or if they otherwise stand to personally gain if the contract is awarded to this vendor.

In accordance with City of Fort Lauderdale, FL Policy and Standards Manual, 6.10.8.3,

> 3.3. City employees may not contract with the City through any corporation or business entity in which they or their immediate family members hold a controlling financial interest (e.g., ownership of five (5) percent or more).
>
> 3.4. Immediate family members (spouse, parents, and children) are also prohibited from contracting with the City subject to the same general rules.

Failure of a vendor to disclose any relationship described herein shall be reason for debarment in accordance with the provisions of the City Procurement Code.

NAME	RELATIONSHIPS
_____	_____
_____	_____
	_____
	_____

In the event the vendor does not indicate any names, the City shall interpret this to mean that the vendor has indicated that no such relationships exist.

_____ _____

Authorized Signature Title

_____ _____

Name (Printed) Date

CONTRACTOR'S CERTIFICATE OF COMPLIANCE WITH NON-DISCRIMINATION PROVISIONS OF THE CONTRACT

The completed and signed form should be returned with the Contractor's submittal. If not provided with submittal, the Contractor must submit within three business days of City's request. Contractor may be deemed non-responsive for failure to fully comply within stated timeframes.

Pursuant to City Ordinance Sec. 2-17(a)(i)(ii), bidders must certify compliance with the Non-Discrimination provision of the ordinance.

A. Contractors doing business with the City shall not discriminate against their employees based on the employee's race, color, religion, gender (including identity or expression), marital status, sexual orientation, national origin, age, disability, or any other protected classification as defined by applicable law.

   Contracts. Every Contract exceeding $100,000, or otherwise exempt from this section shall contain language that obligates the Contractor to comply with the applicable provisions of this section.

   The Contract shall include provisions for the following:

   (i) The Contractor certifies and represents that it will comply with this section during the entire term of the contract.

   (ii) The failure of the Contractor to comply with this section shall be deemed to be a material breach of the contract, entitling the City to pursue any remedy stated below or any remedy provided under applicable law.

_____ _____

Authorized Signature Print Name and Title

_____

Date

CITY OF FORT LAUDERDALE

SWORN STATEMENT PURSUANT TO SECTION 287.087, FLORIDA STATUTES, ON PREFERENCE TO BUSINESS WITH DRUG-FREE WORK PLACE PROGRAMS

I certify that I have established a Drug Free Work Place program and have complied with the following

a. Published and distributed to each employee a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibitions.

b. Required all new employees to undergo laboratory testing as a condition of employment and will require all employees, as a condition of their continued employment, to undergo laboratory testing to detect illegal drug or alcohol use according to Florida Statutes 440.101 and 440.102.

c. Ensured that applicants with a confirmed positive drug or alcohol screening test result are not considered for employment.

d. Have tested employees when reasonably suspected of illegal drug or alcohol use.

e. Ensured that any employee refusing to take a drug or alcohol screening test in violation of the Drug Free Work Place Policy is subject to dismissal for failure to abide by the provisions of the Policy.

f. Informed employees about the dangers of drug abuse in the workplace, the business' policy of maintain a drug-free workplace, any available drug counseling, rehabilitation and employee assistance programs and the penalties that may be imposed upon employees for drug abuse violations.

g. In the statement specified in subparagraph a, notified the employees that, as a condition of their employment, the employee will abide by the terms of the statement and will notify their employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States of any state, for a violation occurring in the workplace no later than 5 days after such conviction.

h. Have required all employees to sign a copy of this statement of compliance acknowledging their understanding and agreeing to abide with the requirements of the Drug Work Place Policy.

i. Will impose a sanction on or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community by, any employee who is so convicted.

j. Am making a good faith effort to continue to maintain a Drug Free Work Place through implementation of this document.

BY: _____ DATE: _____

NAME (Printed) _____ TITLE: _____

COMPANY NAME:_____

Affix Company Seal

City of Fort Lauderdale

REFERENCES FORM

A minimum of three (3) references shall be provided

NOTE: - items with asterisk (*) are mandatory

Bidder Company Name*			
Key Contact Name*		**Title**	
Email*		**Phone***	

References

Note: References will be contacted via emails with Key Contact Copied

1. Ref. Company Name			
Address			
Contact Name		Title	
Email*		Phone	
Contract/Project Value ($)		Year	
Project Title*			
Project Description			

2. Ref. Company Name			
Address			
Contact Name		Title	
Email*		Phone	
Contract/Project Value ($)		Year	
Project Title*			
Project Description			

3. Ref. Company Name			
Address			
Contact Name		Title	
Email*		Phone	

City of Fort Lauderdale

REFERENCES FORM

A minimum of three (3) references shall be provided

Contract/Project Value ($)		Year	
Project Title			
Project Description			

4. Ref. Company Name			
Address			
Contact Name		Title	
Email*		Phone	
Contract/Project Value ($)		Year	
Project Title*			
Project Description			

5. Ref. Company Name			
Address			
Contact Name		Title	
Email*		Phone	
Contract/Project Value ($)		Year	
Project Title*			
Project Description			

CITY OF FORT LAUDERDALE

ANTI-HUMAN TRAFFICKING AFFIDAVIT

Rev Date: 01/13/2025

The undersigned, on behalf of _____,
(Print complete name incorporated with suffix: INC, LLC, LTD, LP, PA, etc.)
a _____ (*State corporation is registered*) _____ (Type of entity: profit or non-profit), ("Nongovernmental Entity"), under penalty of perjury, hereby deposes and says:

1. My name is _____.
(Print complete name of corporate officer/authorized representative)
2. I am an ☐ officer or ☐ authorized representative (Select one) of the Nongovernmental Entity. My title is: _____.
(Print title of corporate officer/authorized representative)
3. I attest that the Nongovernmental Entity does not use coercion for labor or services as defined in Section 787.06, Florida Statutes (2024), as may be amended or revised.

Under penalties of perjury, I declare that I have read the foregoing Anti-Human Trafficking Affidavit and that the facts stated in it are true.

Signature of Officer or Representative: _____

Office Address: _____

Email Address: _____

Main Phone Number: _____ FEIN No.: _____

STATE OF _____
COUNTY OF _____

Sworn to and subscribed before me by means of ❑ physical presence or ❑ online notarization, this ____ day of _____, 2026, by _____.
(Print name of corporate officer/representative)

_____
(Signature of Notary Public – State of _____)

(NOTARY SEAL)

_____
Print, Type or Stamp Commissioned Name of Notary Public)

Personally Known ☐ OR Produced Identification ☐

Type of Identification Produced_____

SAMPLE

Executive Summary Report

Of

Event: 595-1 - FXE Taxiway Bravo & Quebec Realignment Project

Buyer: SANTRECIA HARDEN

Date Range: 04/13/2026 02:00:00 PM - 05/18/2026 02:00:00 PM

Suppliers Notified: 520

Notified Suppliers Responding: 3

All Suppliers Responding: 3

Suppliers Responding

Supplier	Contact	Phone Number	E Mail	City	State Or Province	Total Bid Amount	Total Awarded	Response Attachment Exists
Weekley Asphalt Paving, Inc.	Daniel Weekley	305-680-8005	eduardo@weekleyasp.com	Pembroke Oines	FL	3,889,061.15	0.00	Yes
Ranger Construction Industries, Inc.	Steve Skubal	5617939400	estimating@rangerconstruction.com	West Palm Beach	FL	4,194,646.10	0.00	No
General Asphalt Co., LLC	Daniel Sanchez	305-592-3480	Daniel@generalasphalt.com	Miami	FL	4,050,553.30	0.00	No

Event Lines And Responses

Item	Description	Unit of Measure	Quantity
CONTRACTOR QUALITY CONTROL PROGR-	CONTRACTOR QUALITY CONTROL PROGRAM (CQCP) (C-100-14.1 V1): The Contractor shall establish, provide, and maintain an effective Contractor Quality Control Program (CQCP) that details the methods and procedures that will be taken to assure that all materials and completed construction required by this contract conform to contract plans, technical specifications, and other requirements, whether manufactured by the Contractor, or procured from subcontractors or vendors. Although guidelines are established and certain minimum requirements are specified here and elsewhere in the contract technical specifications, the Contractor shall assume full responsibility for accomplishing the stated purpose.	LS	1.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	1.0000	LS	57,778.000	0.00
Ranger Construction Industries, Inc.	1.0000	LS	80,000.000	0.00
General Asphalt Co., LLC	1.0000	LS	100,000.000	0.00

Item	Description	Unit of Measure	Quantity
TEMPORARY AIR AND WATER POLLUTIO-	TEMPORARY AIR AND WATER POLLUTION, SOIL EROSION, AND SILTATION CONTROL (C-102-5.1 V1): This item shall consist of temporary control measures as shown on the plans or as ordered by the Resident Project Representative (RPR) during the life of a contract to control pollution of air and water, soil erosion, and siltation through the use of silt fences, berms, dikes, dams, sediment basins, fiber mats, gravel, mulches, grasses, slope drains, and other erosion control devices or methods.	LS	1.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	1.0000	LS	48,188.000	0.00

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Ranger Construction Industries, Inc.	1.0000	LS	450,000.000	0.00
General Asphalt Co., LLC	1.0000	LS	100,000.000	0.00

Item	Description	Unit of Measure	Quantity
MOBILIZATION (C-105-6.1 V1)-	MOBILIZATION (C-105-6.1 V1): This item of work shall consist of, but is not limited to, work and operations necessary for the movement of personnel, equipment, material, and supplies, and incidentals to and from the project site for work on the project except as provided in the contract as separate pay items.	LS	1.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	1.0000	LS	355,816.000	0.00
Ranger Construction Industries, Inc.	1.0000	LS	419,000.000	0.00
General Asphalt Co., LLC	1.0000	LS	400,000.000	0.00

Item	Description	Unit of Measure	Quantity
AIRPORT SAFETY AND MAINTENANCE O-	AIRPORT SAFETY AND MAINTENANCE OF TRAFFIC (S-102-5.1 V1): The work specified in this section consists of airport safety and maintaining traffic within the limits of the project for the duration of the construction period. It shall include the construction the project and the furnishing, installing and maintaining of traffic control and maintenance of any necessary detour facilities along safety devices required for safe and expeditious movement of traffic as may becalled for on the plans.	LS	1.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	1.0000	LS	649,000.000	0.00

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Ranger Construction Industries, Inc.	1.0000	LS	654,770.000	0.00
General Asphalt Co., LLC	1.0000	LS	800,000.000	0.00

Item	Description	Unit of Measure	Quantity
TEMPORARY FENCE FOR OWL/TURTOISE-	TEMPORARY FENCE FOR OWL/TURTOISE NESTS (S-102-5.2 V1): This Item consist of installation of temporary fence around nests during the entire length of construction per plans and specification.	EA	25.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	25.0000	EA	400.000	0.00
Ranger Construction Industries, Inc.	25.0000	EA	1,460.000	0.00
General Asphalt Co., LLC	25.0000	EA	1,200.000	0.00

Item	Description	Unit of Measure	Quantity
PROJECT SURVEY AND STAKEOUT (S-1-	PROJECT SURVEY AND STAKEOUT (S-103-5.1 V1): The Contractor shall perform all necessary surveying and project stakeout required to construct all elements of the Project as shown on the Contract Drawings and specified in the Specifications.	LS	1.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	1.0000	LS	66,010.000	0.00
Ranger Construction Industries, Inc.	1.0000	LS	105,800.950	0.00
General Asphalt Co., LLC	1.0000	LS	100,000.000	0.00

Item	Description	Unit of Measure	Quantity
FULL DEPTH ASPHALT PAVEMENT REMO-	FULL DEPTH ASPHALT PAVEMENT REMOVAL (P-101-5.1 V1): This item shall consist of preparation of existing pavement surfaces for overlay, surface treatments, removal of existing pavement, hauling and disposal and stockpiling of demolished material and other miscellaneous items. The work shall be accomplished in accordance with these specifications and the applicable plans.	SY	11,730.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	11,730.0000	SY	16.850	0.00
Ranger Construction Industries, Inc.	11,730.0000	SY	6.200	0.00
General Asphalt Co., LLC	11,730.0000	SY	9.600	0.00

Item	Description	Unit of Measure	Quantity
BITUMINOUS PAVEMENT MILLING (UP-	BITUMINOUS PAVEMENT MILLING (UP TO 2 INCH DEEP) (P-101-5.2 V): Milling shall be performed with a power-operated milling machine or grinder, capable of producing a uniform finished surface.	SY	5,250.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	5,250.0000	SY	3.750	0.00
Ranger Construction Industries, Inc.	5,250.0000	SY	6.650	0.00
General Asphalt Co., LLC	5,250.0000	SY	3.550	0.00

Item	Description	Unit of Measure	Quantity
UNCLASSIFIED EXCAVATION (P-152-4-	UNCLASSIFIED EXCAVATION (P-152-4.1 V1): Unclassified excavation shall consist of the excavation and disposal of all material, regardless of its nature which is not otherwise classified. This item covers excavation, disposal, and compaction of all materials within the limits of the work required to construct safety areas, runways, taxiways, aprons, and intermediate areas as well as other areas for drainage, building construction, parking, or other purposes in accordance with these specifications and in conformity to the dimensions and typical sections shown on the plans.	CY	7,080.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	7,080.0000	CY	29.000	0.00
Ranger Construction Industries, Inc.	7,080.0000	CY	31.150	0.00
General Asphalt Co., LLC	7,080.0000	CY	12.000	0.00

Item	Description	Unit of Measure	Quantity
EMBANKMENT (P-152-4.2 V1)-	EMBANKMENT (P-152-4.2 V1): This item covers excavation, disposal, and compaction of all materials within the limits of the work required to construct safety areas, runways, taxiways, aprons, and intermediate areas as well as other areas for drainage, building construction, parking, or other purposes in accordance with these specifications and in conformity to the dimensions and typical sections shown on the plans.	CY	120.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	120.0000	CY	28.000	0.00
Ranger Construction Industries, Inc.	120.0000	CY	16.350	0.00
General Asphalt Co., LLC	120.0000	CY	24.000	0.00

Item	Description	Unit of Measure	Quantity
UTILITY SOFT DIG (P-152-4.3 V1)-	UTILITY SOFT DIG (P-152-4.3 V1): This item consists of the contractor using non-destructive excavation method in area where the underground utilities exist per plans and specifications.	EA	50.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	50.0000	EA	550.000	0.00
Ranger Construction Industries, Inc.	50.0000	EA	373.400	0.00
General Asphalt Co., LLC	50.0000	EA	360.000	0.00

Item	Description	Unit of Measure	Quantity
SUBBASE COURSE, 12 INCH THICK (P-	SUBBASE COURSE, 12 INCH THICK (P-154-5.1 V1): This item shall consist of a subbase course composed of granular materials constructed on a prepared subgrade or underlying course in accordance with these specifications, and in conformity with the dimensions and typical cross-section shown on the plans.	SY	9,140.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	9,140.0000	SY	18.780	0.00
Ranger Construction Industries, Inc.	9,140.0000	SY	11.350	0.00
General Asphalt Co., LLC	9,140.0000	SY	36.000	0.00

Item	Description	Unit of Measure	Quantity
SUBBASE COURSE, 6 INCH THICK (P--	SUBBASE COURSE, 6 INCH THICK (P-152-5.2 V1): This item shall consist of a subbase course composed of granular materials constructed on a prepared subgrade or underlying course in accordance with these specifications, and in conformity with the dimensions and typical cross-section shown on the plans.	SY	5,110.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	5,110.0000	SY	18.480	0.00
Ranger Construction Industries, Inc.	5,110.0000	SY	8.500	0.00
General Asphalt Co., LLC	5,110.0000	SY	24.000	0.00

Item	Description	Unit of Measure	Quantity
LIME ROCK BASE COURSE, 9 INCH TH-	LIME ROCK BASE COURSE, 9 INCH THICK (P-211-5.1 V1): This item shall consist of a base course composed of lime rock constructed on the prepared underlying course per these specifications and shall conform to the dimensions and typical cross-section shown on the plans.	SY	8,840.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	8,840.0000	SY	45.640	0.00
Ranger Construction Industries, Inc.	8,840.0000	SY	33.000	0.00
General Asphalt Co., LLC	8,840.0000	SY	36.000	0.00

Item	Description	Unit of Measure	Quantity
LIMEROCK TRANSITION WEDGE (P-211-	LIMEROCK TRANSITION WEDGE (P-211-5.2 V1): This item shall consist of a base course composed of lime rock constructed on the prepared underlying course per these specifications and shall conform to the dimensions and typical cross-section shown on the plans.	LS	1.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	1.0000	LS	10,692.000	0.00
Ranger Construction Industries, Inc.	1.0000	LS	30,700.000	0.00
General Asphalt Co., LLC	1.0000	LS	12,000.000	0.00

Item	Description	Unit of Measure	Quantity
HOT MIXED ASPHALT (SURFACE) (P-4-	HOT MIXED ASPHALT (SURFACE) (P-401-8.1 V1): This item shall consist of pavement courses composed of mineral aggregate and asphalt binder mixed in a central mixing plant and placed on a prepared base or stabilized course in accordance with these specifications and shall conform to the lines, grades, thicknesses, and typical cross-sections shown on the plans. Each course shall be constructed to the depth, typical section, and elevation required by the plans and shall be rolled, finished, and approved before the placement of the next course.	TN	2,780.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	2,780.0000	TN	220.000	0.00
Ranger Construction Industries, Inc.	2,780.0000	TN	232.600	0.00
General Asphalt Co., LLC	2,780.0000	TN	204.870	0.00

Item	Description	Unit of Measure	Quantity
HOT MIXED ASPHALT PAVEMENT (LEVE-	HOT MIXED ASPHALT PAVEMENT (LEVELING) (P-401-8.3 V1): This item shall consist of pavement courses composed of mineral aggregate and asphalt binder mixed in a central mixing plant and placed on a prepared course in accordance with these specifications and shall conform to the lines, grades, thicknesses, and typical cross sections shown on the plans. Each course shall be constructed to the depth, typical section, and elevation required by the plans and shall be rolled, finished, and approved before the placement of the next course	TN	80.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	80.0000	TN	350.000	0.00
Ranger Construction Industries, Inc.	80.0000	TN	292.300	0.00

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
General Asphalt Co., LLC	80.0000	TN	275.430	0.00

Item	Description	Unit of Measure	Quantity
EMULSIFIED ASPHALT PRIME COAT (P-	EMULSIFIED ASPHALT PRIME COAT (P-602-5.1 V1): This item shall consist of an application of emulsified asphalt material on the prepared base course in accordance with these specifications and in reasonably close conformity to the lines shown on the plans.	GA	280.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	280.0000	GA	10.000	0.00
Ranger Construction Industries, Inc.	280.0000	GA	11.450	0.00
General Asphalt Co., LLC	280.0000	GA	9.600	0.00

Item	Description	Unit of Measure	Quantity
EMULSIFIED ASPHALT TACK COAT (P--	EMULSIFIED ASPHALT TACK COAT (P-603-5.1 V1): This item shall consist of preparing and treating an asphalt or concrete surface with asphalt material in accordance with these specifications and in reasonably close conformity to the lines shown on the plans.	GA	210.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	210.0000	GA	10.000	0.00
Ranger Construction Industries, Inc.	210.0000	GA	6.050	0.00
General Asphalt Co., LLC	210.0000	GA	9.600	0.00

Item	Description	Unit of Measure	Quantity
PERMANENT AIRFIELD PAINTING WITH-	PERMANENT AIRFIELD PAINTING WITH TYPE III GLASS BEADS (YELLOW AND WHITE): This item shall consist of the preparation and painting of numbers, markings, and stripes on the surface of runways, taxiways, and aprons, in accordance with these specifications and at the locations shown on the plans, or as directed by the Resident Project Representative (RPR).	SF	7,220.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	7,220.0000	SF	2.700	0.00
Ranger Construction Industries, Inc.	7,220.0000	SF	2.850	0.00
General Asphalt Co., LLC	7,220.0000	SF	2.400	0.00

Item	Description	Unit of Measure	Quantity
PERMANENT AIRFIELD PAINTING WITH-	PERMANENT AIRFIELD PAINTING WITH TYPE I GLASS BEADS (RED SURFACE PAINTED SIGNS): This item shall consist of the preparation and painting of numbers, markings, and stripes on the surface of runways, taxiways, and aprons, in accordance with these specifications and at the locations shown on the plans, or as directed by the Resident Project Representative (RPR).	SF	1,140.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	1,140.0000	SF	7.250	0.00
Ranger Construction Industries, Inc.	1,140.0000	SF	7.850	0.00
General Asphalt Co., LLC	1,140.0000	SF	2.400	0.00

Item	Description	Unit of Measure	Quantity
PERMANENT AIRFIELD PAINTING WITH-	PERMANENT AIRFIELD PAINTING WITH NO GLASS BEADS (BLACK) (P-6): This item shall consist of the preparation and painting of numbers, markings, and stripes on the surface of runways, taxiways, and aprons, in accordance with these specifications and at the locations shown on the plans, or as directed by the Resident Project Representative (RPR).	SF	21,250.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	21,250.0000	SF	1.450	0.00
Ranger Construction Industries, Inc.	21,250.0000	SF	1.550	0.00
General Asphalt Co., LLC	21,250.0000	SF	1.200	0.00

Item	Description	Unit of Measure	Quantity
TEMPORARY AIRFIELD PAINTING WITH-	TEMPORARY AIRFIELD PAINTING WITH TYPE I GLASS BEADS (YELLOW AND WHITE): This item shall consist of the preparation and painting of numbers, markings, and stripes on the surface of runways, taxiways, and aprons, in accordance with these specifications and at the locations shown on the plans, or as directed by the Resident Project Representative (RPR).	SF	7,220.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	7,220.0000	SF	2.000	0.00
Ranger Construction Industries, Inc.	7,220.0000	SF	2.150	0.00
General Asphalt Co., LLC	7,220.0000	SF	2.160	0.00

continued...

Item	Description	Unit of Measure	Quantity
TEMPORARY AIRFIELD PAINTING WITH-	TEMPORARY AIRFIELD PAINTING WITH NO GLASS BEADS (RED SURFACE PAINTED SIGNS): This item shall consist of the preparation and painting of numbers, markings, and stripes on the surface of runways, taxiways, and aprons, in accordance with these specifications and at the locations shown on the plans, or as directed by the Resident Project Representative (RPR).	SF	1,140.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	1,140.0000	SF	6.950	0.00
Ranger Construction Industries, Inc.	1,140.0000	SF	7.550	0.00
General Asphalt Co., LLC	1,140.0000	SF	2.160	0.00

Item	Description	Unit of Measure	Quantity
AIRFIELD PAINT REMOVAL (P-620-5.-	AIRFIELD PAINT REMOVAL (P-620-5.6 V1): This item shall consist of the preparation and painting of numbers, markings, and stripes on the surface of runways, taxiways, and aprons, in accordance with these specifications and at the locations shown on the plans, or as directed by the Resident Project Representative (RPR).	SF	4,210.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	4,210.0000	SF	3.350	0.00
Ranger Construction Industries, Inc.	4,210.0000	SF	3.600	0.00
General Asphalt Co., LLC	4,210.0000	SF	3.600	0.00

Item	Description	Unit of Measure	Quantity
SODDING (T-904-5.1 V1)-	SODDING (T-904-5.1 V1): This item shall consist of furnishing, hauling, and placing approved live sod on prepared areas in accordance with this specification at the locations shown on the plans or as directed by the RPR.	SY	6,400.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	6,400.0000	SY	8.640	0.00
Ranger Construction Industries, Inc.	6,400.0000	SY	5.200	0.00
General Asphalt Co., LLC	6,400.0000	SY	8.050	0.00

Item	Description	Unit of Measure	Quantity
HYDROSEEDING (S-906-5.1 V1)-	HYDROSEEDING (S-906-5.1 V1): This item shall consist of soil preparation, and hydroseeding (or hydraulic mulch seeding, or hydro-mulching) within the Limits of Work, beyond sodded taxiway shoulders, or as directed by the Resident Project Representative (RPR) in accordance with these specifications.	SY	59,680.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	59,680.0000	SY	2.500	0.00
Ranger Construction Industries, Inc.	59,680.0000	SY	3.000	0.00
General Asphalt Co., LLC	59,680.0000	SY	2.280	0.00

Item	Description	Unit of Measure	Quantity
HAND EXCAVATE MINIMUM 8 INCH WID-	HAND EXCAVATE MINIMUM 8 INCH WIDE X 28 INCH DEEP IN EARTH (L-108-5.1 V1): This item shall consist of furnishing and installing power cables that are direct buried and furnishing and/or installing power cables within conduit or duct banks per these specifications at the locations shown on the plans.	LF	20.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	20.0000	LF	223.000	0.00
Ranger Construction Industries, Inc.	20.0000	LF	20.500	0.00
General Asphalt Co., LLC	20.0000	LF	20.400	0.00

Item	Description	Unit of Measure	Quantity
3 QUARTER INCH X 20 FOOT GROUND-	3 QUARTER INCH X 20 FOOT GROUND RODS CONNECTED TO COUNTERPOISE. (L-108-5.2 V1): This item shall consist of furnishing and installing power cables that are direct buried and furnishing and/or installing power cables within conduit or duct banks per these specifications at the locations shown on the plans.	EA	16.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	16.0000	EA	223.000	0.00
Ranger Construction Industries, Inc.	16.0000	EA	313.250	0.00
General Asphalt Co., LLC	16.0000	EA	312.000	0.00

Item	Description	Unit of Measure	Quantity
ADDITIONAL 10 FOOT GROUND ROD SE-	ADDITIONAL 10 FOOT GROUND ROD SECTIONS. (L-108-5.3 V1): This item shall consist of furnishing and installing power cables that are direct buried and furnishing and/or installing power cables within conduit or duct banks per these specifications at the locations shown on the plans.	EA	16.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	16.0000	EA	223.000	0.00
Ranger Construction Industries, Inc.	16.0000	EA	126.500	0.00
General Asphalt Co., LLC	16.0000	EA	126.000	0.00

Item	Description	Unit of Measure	Quantity
NO. 6 BARE SOLID AWG COUNTERPOIS-	NO. 6 BARE SOLID AWG COUNTERPOISE CONDUCTOR INSTALLED OVER CONDUIT SYSTEM. (L-108-5.4 V1): This item shall consist of furnishing and installing power cables that are direct buried and furnishing and/or installing power cables within conduit or duct banks per these specifications at the locations shown on the plans.	LF	5,610.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	5,610.0000	LF	8.350	0.00
Ranger Construction Industries, Inc.	5,610.0000	LF	1.950	0.00
General Asphalt Co., LLC	5,610.0000	LF	1.920	0.00

Item	Description	Unit of Measure	Quantity
NO. 8, 5KV, L-824 CONDUCTOR INST-	NO. 8, 5KV, L-824 CONDUCTOR INSTALLED IN NEW AND EXISTING CONDUIT/DUCTBANK SYSTEM. (L-108-5.5 V1): This item includes the installation of the cable in duct banks or conduit per the specifications L-108.	LF	10,170.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	10,170.0000	LF	7.700	0.00
Ranger Construction Industries, Inc.	10,170.0000	LF	1.950	0.00
General Asphalt Co., LLC	10,170.0000	LF	1.920	0.00

continued...

Item	Description	Unit of Measure	Quantity
ONE 2 INCH SCHEDULE 40 PVC CONDU-	ONE 2 INCH SCHEDULE 40 PVC CONDUIT NON-ENCASED DIRECT BURIED IN EARTH, 24-INCH MINIMUM COVER, COMPLETE IN PLACE. (L-110-5.1 V1): This item shall consist of underground electrical conduits and duct banks (single or multiple conduits encased in concrete or buried in sand) installed per this specification at the locations and per the dimensions, designs, and details shown on the plans. This item shall include furnishing and installing of all underground electrical duct banks and individual and multiple underground conduits. It shall also include all turfing trenching, backfilling, removal, and restoration of any paved or turfed areas; concrete encasement, mandrelling, pulling lines, duct markers, plugging of conduits, and the testing of the installation as a completed system ready for installation of cables per the plans and specifications. This item shall also include furnishing and installing conduits and all incidentals for providing positive drainage of the system. Verification of existing ducts is incidental to the pay items provided in this specification.	LF	4,920.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	4,920.0000	LF	9.440	0.00
Ranger Construction Industries, Inc.	4,920.0000	LF	9.050	0.00
General Asphalt Co., LLC	4,920.0000	LF	9.000	0.00

continued...

Item	Description	Unit of Measure	Quantity
ONE 2 INCH SCHEDULE 40 PVC CONDU-	ONE 2 INCH SCHEDULE 40 PVC CONDUIT CONCRETE ENCASED AND INSTALLED IN NEW FULL-STRENGTH PAVEMENT, 24-INCH MINIMUM COVER, COMPLETE IN PLACE. (L-110-5.2 V1): This item shall consist of underground electrical conduits and duct banks (single or multiple conduits encased in concrete or buried in sand) installed per this specification at the locations and per the dimensions, designs, and details shown on the plans. This item shall include furnishing and installing of all underground electrical duct banks and individual and multiple underground conduits. It shall also include all turfing trenching, backfilling, removal, and restoration of any paved or turfed areas; concrete encasement, mandrelling, pulling lines, duct markers, plugging of conduits, and the testing of the installation as a completed system ready for installation of cables per the plans and specifications. This item shall also include furnishing and installing conduits and all incidentals for providing positive drainage of the system.Verification of existing ducts is incidental to the pay items provided in this specification.	LF	955.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	955.0000	LF	42.250	0.00
Ranger Construction Industries, Inc.	955.0000	LF	18.050	0.00
General Asphalt Co., LLC	955.0000	LF	18.000	0.00

continued...

Item	Description	Unit of Measure	Quantity
ONE 2 INCH SCHEDULE 40 PVC CONDU-	ONE 2 INCH SCHEDULE 40 PVC CONDUIT CONCRETE ENCASED AND INSTALLED IN EXISTING FULL-STRENGTH PAVEMENT, 24-INCH MINIMUM COVER, COMPLETE IN PLACE. (L-110-5.3 V1): This item shall consist of underground electrical conduits and duct banks (single or multiple conduits encased in concrete or buried in sand) installed per this specification at the locations and per the dimensions, designs, and details shown on the plans. This item shall include furnishing and installing of all underground electrical duct banks and individual and multiple underground conduits. It shall also include all turfing trenching, backfilling, removal, and restoration of any paved or turfed areas; concrete encasement, mandrelling, pulling lines, duct markers, plugging of conduits, and the testing of the installation as a completed system ready for installation of cables per the plans and specifications. This item shall also include furnishing and installing conduits and all incidentals for providing positive drainage of the system.Verification of existing ducts is incidental to the pay items provided in this specification.	LF	370.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	370.0000	LF	42.250	0.00
Ranger Construction Industries, Inc.	370.0000	LF	109.050	0.00
General Asphalt Co., LLC	370.0000	LF	108.600	0.00

Item	Description	Unit of Measure	Quantity
INTERCEPT EXISTING CONDUIT SYSTE-	INTERCEPT EXISTING CONDUIT SYSTEM AND CONNECT TO NEW CONDUIT SYSTEM (L-110-5.4 V1): This item shall consist of underground electrical conduits and duct banks (single or multiple conduits encased in concrete or buried in sand) installed per this specification at the locations and per the dimensions, designs, and details shown on the plans. This item shall include furnishing and installing of all underground electrical duct banks and individual and multiple underground conduits. It shall also include all turfing trenching, backfilling, removal, and restoration of any paved or turfed areas; concrete encasement, mandrelling, pulling lines, duct markers, plugging of conduits, and the testing of the installation as a completed system ready for installation of cables per the plans and specifications. This item shall also include furnishing and installing conduits and all incidentals for providing positive drainage of the system. Verification of existing ducts is incidental to the pay items provided in this specification.	EA	19.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	19.0000	EA	278.000	0.00
Ranger Construction Industries, Inc.	19.0000	EA	1,450.000	0.00
General Asphalt Co., LLC	19.0000	EA	1,440.000	0.00

continued...

Item	Description	Unit of Measure	Quantity
HAND EXCAVATE AND CONCRETE ENCAS-	HAND EXCAVATE AND CONCRETE ENCASE EXISTING FPL HALF-INCH CONDUIT, COMPLETE. (L-110-5.5 V1): This item shall consist of underground electrical conduits and duct banks (single or multiple conduits encased in concrete or buried in sand) installed per this specification at the locations and per the dimensions, designs, and details shown on the plans. This item shall include furnishing and installing of all underground electrical duct banks and individual and multiple underground conduits. It shall also include all turfing trenching, backfilling, removal, and restoration of any paved or turfed areas; concrete encasement, mandrelling, pulling lines, duct markers, plugging of conduits, and the testing of the installation as a completed system ready for installation of cables per the plans and specifications. This item shall also include furnishing and installing conduits and all incidentals for providing positive drainage of the system. Verification of existing ducts is incidental to the pay items provided in this specification.	LF	175.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	175.0000	LF	155.560	0.00
Ranger Construction Industries, Inc.	175.0000	LF	34.950	0.00
General Asphalt Co., LLC	175.0000	LF	34.800	0.00

Item	Description	Unit of Measure	Quantity
L-867 16 INCH DIAMETER JUNCTION-	L-867 16 INCH DIAMETER JUNCTION CAN WITH COVER INSTALLED IN EARTH. (L-115-5.1 V1): This item shall consist of electrical manholes and junction structures (hand holes, pullboxes, junction cans, etc.) installed per this specification, at the indicated locations and conforming to the lines, grades and dimensions shown on the plans or as required by the RPR. This item shall include the installation of each electrical manhole and/or junction structures with all associated excavation, backfilling, sheeting and bracing, concrete, reinforcing steel, ladders, appurtenances, testing, dewatering and restoration of surfaces to the satisfaction of the RPR including removal of existing manholes and junction structures as shown on the plans.	EA	1.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	1.0000	EA	3,340.000	0.00
Ranger Construction Industries, Inc.	1.0000	EA	2,110.000	0.00
General Asphalt Co., LLC	1.0000	EA	2,100.000	0.00

Item	Description	Unit of Measure	Quantity
L-867 16 INCH DIAMETER BOTTOMLES-	L-867 16 INCH DIAMETER BOTTOMLESS 3 CAN JUNCTION CAN PLAZA INSTALLED IN EARTH. (L-115-5.2 V1): This item shall consist of electrical manholes and junction structures (hand holes, pullboxes, junction cans, etc.) installed per this specification, at the indicated locations and conforming to the lines, grades and dimensions shown on the plans or as required by the RPR. This item shall include the installation of each electrical manhole and/or junction structures with all associated excavation, backfilling, sheeting and bracing, concrete, reinforcing steel, ladders, appurtenances, testing, dewatering and restoration of surfaces to the satisfaction of the RPR including removal of existing manholes and junction structures as shown on the plans.	EA	4.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	4.0000	EA	6,670.000	0.00
Ranger Construction Industries, Inc.	4.0000	EA	12,700.000	0.00
General Asphalt Co., LLC	4.0000	EA	12,600.000	0.00

Item	Description	Unit of Measure	Quantity
INTERCEPT EXISTING LIGHT BASE CA-	INTERCEPT EXISTING LIGHT BASE CAN IN EARTH/EXISTING PAVEMENT AND CONNECT TO CONDUIT SYSTEM. (L-115-5.3 V1): This item shall consist of electrical manholes and junction structures (hand holes, pullboxes, junction cans, etc.) installed per this specification, at the indicated locations and conforming to the lines, grades and dimensions shown on the plans or as required by the RPR. This item shall include the installation of each electrical manhole and/or junction structures with all associated excavation, backfilling, sheeting and bracing, concrete, reinforcing steel, ladders, appurtenances, testing, dewatering and restoration of surfaces to the satisfaction of the RPR including removal of existing manholes and junction structures as shown on the plans.	EA	1.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	1.0000	EA	1,340.000	0.00
Ranger Construction Industries, Inc.	1.0000	EA	1,710.000	0.00
General Asphalt Co., LLC	1.0000	EA	1,704.000	0.00

Item	Description	Unit of Measure	Quantity
REMOVAL OF EXISTING JUNCTION CAN-	REMOVAL OF EXISTING JUNCTION CAN/LIGHT BASE CAN IN EARTH, COMPLETE. (L-115-5.4 V1): This item shall consist of electrical manholes and junction structures (hand holes, pullboxes, junction cans, etc.) installed per this specification, at the indicated locations and conforming to the lines, grades and dimensions shown on the plans or as required by the RPR. This item shall include the installation of each electrical manhole and/or junction structures with all associated excavation, backfilling, sheeting and bracing, concrete, reinforcing steel, ladders, appurtenances, testing, dewatering and restoration of surfaces to the satisfaction of the RPR including removal of existing manholes and junction structures as shown on the plans.	EA	100.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	100.0000	EA	139.000	0.00
Ranger Construction Industries, Inc.	100.0000	EA	725.300	0.00
General Asphalt Co., LLC	100.0000	EA	722.400	0.00

Item	Description	Unit of Measure	Quantity
ABANDON EXISTING JUNCTION CAN/LI-	ABANDON EXISTING JUNCTION CAN/LIGHT BASE CAN IN PLACE, COMPLETE. (L-115-5.5 V1): This item shall consist of electrical manholes and junction structures (hand holes, pullboxes, junction cans, etc.) installed per this specification, at the indicated locations and conforming to the lines, grades and dimensions shown on the plans or as required by the RPR. This item shall include the installation of each electrical manhole and/or junction structures with all associated excavation, backfilling, sheeting and bracing, concrete, reinforcing steel, ladders, appurtenances, testing, dewatering and restoration of surfaces to the satisfaction of the RPR including removal of existing manholes and junction structures as shown on the plans.	EA	10.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	10.0000	EA	106.000	0.00
Ranger Construction Industries, Inc.	10.0000	EA	530.000	0.00
General Asphalt Co., LLC	10.0000	EA	528.000	0.00

Item	Description	Unit of Measure	Quantity
NEW L-861T(L), LED TAXIWAY ELEVA-	NEW L-861T(L), LED TAXIWAY ELEVATED EDGE LIGHT AND NEW BASE CAN INSTALLED IN EARTH. (L-125-5.1 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	EA	59.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	59.0000	EA	2,167.000	0.00
Ranger Construction Industries, Inc.	59.0000	EA	1,770.000	0.00
General Asphalt Co., LLC	59.0000	EA	1,766.400	0.00

Item	Description	Unit of Measure	Quantity
NEW L-861T(L), LED TAXIWAY ELEVA-	NEW L-861T(L), LED TAXIWAY ELEVATED EDGE LIGHT AND NEW BASE CAN INSTALLED IN EXISTING PAVEMENT (L-125-5.2 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	EA	8.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	8.0000	EA	2,167.000	0.00
Ranger Construction Industries, Inc.	8.0000	EA	3,430.000	0.00
General Asphalt Co., LLC	8.0000	EA	3,420.000	0.00

Item	Description	Unit of Measure	Quantity
REINSTALL L-862(L), LED RUNWAY E-	REINSTALL L-862(L), LED RUNWAY ELEVATED EDGE LIGHT ON NEW BASE CAN INSTALLED IN EXISTING PAVEMENT (L-125-5.3 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	EA	4.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	4.0000	EA	2,195.000	0.00

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Ranger Construction Industries, Inc.	4.0000	EA	3,310.000	0.00
General Asphalt Co., LLC	4.0000	EA	3,300.000	0.00

Item	Description	Unit of Measure	Quantity
NEW L-862(L), LED RUNWAY ELEVATE-	NEW L-862(L), LED RUNWAY ELEVATED EDGE LIGHT AND NEW TOP SECTION INSTALLED ON EXISTING BASE CAN (L-125-5.4 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	EA	2.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	2.0000	EA	2,000.000	0.00
Ranger Construction Industries, Inc.	2.0000	EA	2,770.000	0.00
General Asphalt Co., LLC	2.0000	EA	2,760.000	0.00

Item	Description	Unit of Measure	Quantity
NEW L-858(L), SIZE 1, 3-4 CHARAC-	NEW L-858(L), SIZE 1, 3-4 CHARACTERS LED GUIDANCE SIGN AND CONCRETE BASE INSTALLED IN EARTH. (L-125-5.5 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	EA	5.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	5.0000	EA	7,670.000	0.00
Ranger Construction Industries, Inc.	5.0000	EA	12,000.000	0.00
General Asphalt Co., LLC	5.0000	EA	12,000.000	0.00

Item	Description	Unit of Measure	Quantity
NEW L-858(L), SIZE 1, 5-6 CHARAC-	NEW L-858(L), SIZE 1, 5-6 CHARACTERS LED GUIDANCE SIGN AND CONCRETE BASE INSTALLED IN EARTH. (L-125-5.6 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	EA	2.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	2.0000	EA	11,670.000	0.00

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Ranger Construction Industries, Inc.	2.0000	EA	15,100.000	0.00
General Asphalt Co., LLC	2.0000	EA	15,000.000	0.00

Item	Description	Unit of Measure	Quantity
NEW L-858(L), SIZE 1, 1-2 CHARAC-	NEW L-858(L), SIZE 1, 1-2 CHARACTERS LED GUIDANCE SIGN AND CONCRETE BASE INSTALLED IN EXISTING PAVEMENT. (L-125-5.7 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	EA	4.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	4.0000	EA	12,000.000	0.00
Ranger Construction Industries, Inc.	4.0000	EA	10,200.000	0.00
General Asphalt Co., LLC	4.0000	EA	10,200.000	0.00

Item	Description	Unit of Measure	Quantity
REPANEL L-858(L), SIZE 1, 2 MODU-	REPANEL L-858(L), SIZE 1, 2 MODULE LED GUIDANCE SIGN WITH ALLOWANCE ACCOUNT SIGN LEGEND PANELS. (L-125-5.8 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	EA	3.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	3.0000	EA	1,340.000	0.00
Ranger Construction Industries, Inc.	3.0000	EA	421.700	0.00
General Asphalt Co., LLC	3.0000	EA	420.000	0.00

Item	Description	Unit of Measure	Quantity
REPANEL L-858(L), SIZE 1, 3 MODU-	REPANEL L-858(L), SIZE 1, 3 MODULE LED GUIDANCE SIGN WITH ALLOWANCE ACCOUNT SIGN LEGEND PANELS. (L-125-5.9 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	EA	3.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	3.0000	EA	2,112.000	0.00

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Ranger Construction Industries, Inc.	3.0000	EA	662.650	0.00
General Asphalt Co., LLC	3.0000	EA	660.000	0.00

Item	Description	Unit of Measure	Quantity
REMOVAL OF EXISTING GUIDANCE SIG-	REMOVAL OF EXISTING GUIDANCE SIGN AND CONCRETE BASE IN EARTH/EXISTING PAVEMENT, COMPLETE. (L-125-5.10 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	EA	10.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	10.0000	EA	556.000	0.00
Ranger Construction Industries, Inc.	10.0000	EA	4,220.000	0.00
General Asphalt Co., LLC	10.0000	EA	4,200.000	0.00

Item	Description	Unit of Measure	Quantity
REMOVAL OF EXISTING GUIDANCE SIG-	REMOVAL OF EXISTING GUIDANCE SIGN AND ABANDON EXISTING CONCRETE BASE, COMPLETE. (L-125-5.11 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	EA	1.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	1.0000	EA	556.000	0.00
Ranger Construction Industries, Inc.	1.0000	EA	481.950	0.00
General Asphalt Co., LLC	1.0000	EA	480.000	0.00

Item	Description	Unit of Measure	Quantity
INTERCEPT EXISTING CIRCUIT CONDU-	INTERCEPT EXISTING CIRCUIT CONDUCTORS IN EXISTING BASE CAN/MANHOLE/JUNCTION CAN AND EXTEND CIRCUITS ACCORDINGLY. (L-125-5.12 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	EA	13.0000

continued...

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	13.0000	EA	335.000	0.00
Ranger Construction Industries, Inc.	13.0000	EA	91.550	0.00
General Asphalt Co., LLC	13.0000	EA	91.200	0.00

Item	Description	Unit of Measure	Quantity
INSTALLATION OF ALLOWANCE ACCOUN-	INSTALLATION OF ALLOWANCE ACCOUNT ALCMS GRAPHIC UPDATES, COMPLETE. (L-125-5.13 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	LS	1.0000

Responses

Supplier	Bid Quantity	Unit of Measure	Unit Price	Award Amount
Weekley Asphalt Paving, Inc.	1.0000	LS	18,000.000	0.00
Ranger Construction Industries, Inc.	1.0000	LS	6,390.000	0.00
General Asphalt Co., LLC	1.0000	LS	6,360.000	0.00

Header Questions And Responses

QUESTION
Required Forms: Did you complete and signed all the Required Forms package? Please upload completed forms here.

Question Responses		
Supplier	Name	Answer
227	Weekley Asphalt Paving, Inc.	Yes
2767	Ranger Construction Industries, Inc.	Yes
3193	General Asphalt Co., LLC	Yes

QUESTION

Reference Form: Did you complete the Reference Form listing at least three (3) references for previous projects? Please upload completed form here.

Question Responses		
Supplier	Name	Answer
227	Weekley Asphalt Paving, Inc.	Yes
2767	Ranger Construction Industries, Inc.	Yes
3193	General Asphalt Co., LLC	Yes

QUESTION

Licensing Requirements: Do you meet the Licensing Requirements of this solicitation? Please upload supporting documentation here.

Question Responses		
Supplier	Name	Answer
227	Weekley Asphalt Paving, Inc.	Yes
2767	Ranger Construction Industries, Inc.	Yes
3193	General Asphalt Co., LLC	Yes

QUESTION

Bid Security: Are you aware that this solicitation has a Bid Security requirement? Please upload supporting documentation here.

Question Responses		
Supplier	Name	Answer
227	Weekley Asphalt Paving, Inc.	Yes
2767	Ranger Construction Industries, Inc.	Yes
3193	General Asphalt Co., LLC	Yes

QUESTION

Insurance Requirements: Do you meet the Insurance Requirements of this solicitation? Please upload supporting documentation here.

Question Responses

Supplier	Name	Answer
227	Weekley Asphalt Paving, Inc.	Yes
2767	Ranger Construction Industries, Inc.	Yes
3193	General Asphalt Co., LLC	Yes

QUESTION

Anti-Human Trafficking Affidavit: Not required at the time of bid response. It is required during contract execution with the awarded Bidder. Refer to the attached sample for reference. Are you willing to comply with this requirement?

Question Responses

Supplier	Name	Answer
227	Weekley Asphalt Paving, Inc.	Yes
2767	Ranger Construction Industries, Inc.	Yes
3193	General Asphalt Co., LLC	Yes

Contacts

Name	Email
SANTRECIA HARDEN	saharden@fortlauderdale.gov

Q And A

Supplier	Question	Answer
Caribbean Technical Services, Inc.	What is the engineer's estimate for this project?	The engineer's estimate for this project is $4,030,308.30.

continued...

Supplier	Question	Answer
General Asphalt Co., LLC	May the bid items be made available in Excel format.	Refer to the attachment, Event 595 - Bid Line Items (Excel)
Ranger Construction Industries, Inc.	On sheet C16, the P-154 subbase is noted as “New 12” subbase – LBR 40”. However, Specification section P-154 (154-2.1) states the subbase material shall have a minimum CBR of 20. Please confirm whether the governing requirement for this project i	The Subbase is required to be LBR 40 (CBR 32) as noted in the plans.
Ranger Construction Industries, Inc.	What is the anticipated date for issuance of the Notice to Proceed (NTP)?	The NTP will be issued upon completion of the award process and execution of the agreement. No specific date can be confirmed at this time.
Ranger Construction Industries, Inc.	Please clarify the following for bidding and construction purposes. oThe required depth (thickness) of existing topsoil to be stripped and stockpiled. oThe required thickness of topsoil to be respread prior to sod installation.	There is no topsoil availabe at the airport. The Contractor will be responsible for importing topsoil. The sod mat is expected to include two inches of topsoil. No additional topsoil will be required to be placed under the sod mat on the 6 inch P-154 shoulders. Two inches of topsoil will be required for all areas receiving hydroseed.
Ranger Construction Industries, Inc.	Typical section no.1 on plan sheet C16 depicts new 6" stabilized subgrade on shoulders with new 2" Sod. Will the stabilized shoulders receive topsoil prior to sod placement, or will new 2" sod be placed directly on the 6" P-154 subbase?	The sod mat is expected to include two inches of topsoil. No additional topsoil will be required to be placed under the sod mat on the 6 inch P-154 shoulders. Two inches of topsoil will be required for all areas receiving hydroseed.

City of Fort Lauderdale • Procurement Services Department
101 NE 3rd Avenue, Suite 1650 • Fort Lauderdale, Florida 33301
954-828-5933 Fax 954-828-5576
purchase@fortlauderdale.gov

ADDENDUM NO. 1

ITB No. 595
TITLE: FXE Taxiway Bravo & Quebec Realignment Project

ISSUED: May 7, 2026

This Addendum is issued to make the following change(s) to the solicitation.

1. Line 15: LIMEROCK TRANSITION WEDGE (P-211-5.2 V1) Revision

Changed From:

~~Quantity: 6,000.0000 Unit of Measure: LF~~

Changed To:

Quantity: 1.0000 Unit of Measure: LS

2. Event 595 - Plan Set Revision

i. C02 SUMMARY OF QUANTITIES, is hereby deleted in its entirety and replaced with the attached.

ii. C06 PHASING PLAN 1, is hereby deleted in its entirety and replaced with the attached.

iii. C07 PHASING PLAN 2, is hereby deleted in its entirety and replaced with the attached.

iv. C08 PHASING PLAN 3, is hereby deleted in its entirety and replaced with the attached.

v. C09 PHASING PLAN 4, is hereby deleted in its entirety and replaced with the attached.

vi. C16 TYPICAL SECTIONS, is hereby deleted in its entirety and replaced with the attached.

3. Event 595 - Technical Specifications Revision

i. Section ITEM P-154 SUBBASE COURSE (Pages P-154-1 through P-154-6), is hereby deleted in its entirety and replaced with the attached.

ii. Section ITEM P-211 LIME ROCK BASE COURSE (Pages P-211-1 through P-211-6), is hereby deleted in its entirety and replaced with the attached.

City of Fort Lauderdale • Procurement Services Department
101 NE 3rd Avenue, Suite 1650 • Fort Lauderdale, Florida 33301
954-828-5933 Fax 954-828-5576
purchase@fortlauderdale.gov

iii. Section ITEM T-905 TOPSOIL (Pages T-905-1 through T-905-4), is hereby deleted in its entirety and replaced with the attached.

All other terms, conditions, and specifications remain unchanged.

Santrecia Harden
Senior Procurement Specialist

Company Name: _____
(please print)

Authorized Name: _____ Title: _____

Authorized Signature: _____

Date: _____

BASE BID					
ITEM NO.	SPEC NO.	ITEM DESCRIPTION	UNIT	QUANTITY	
				CONTRACT	AS-BUILT
1	C-100-14.1	CONTRACTOR QUALITY CONTROL PROGRAM (CQCP)	LS	1	
2	C-102-5.1	TEMPORARY AIR AND WATER POLLUTION, SOIL EROSION, AND SILTATION CONTROL	LS	1	
3	C-105-6.1	MOBILIZATION	LS	1	
4	S-102-5.1	AIPORT SAFETY AND MAINTENANCE OF TRAFFIC	LS	1	
5	S-102-5.2	TEMPORARY FENCE FOR OWL/TURTOISE NESTS	EA	25	
6	S-103-5.1	PROJECT SURVEY AND STAKEOUT	LS	1	
7	P-101-5.1	FULL DEPTH ASPHALT PAVEMENT REMOVAL	SY	11,730	
8	P-101-5.2	BITUMINOUS PAVEMENT MILLING (UP TO 2" DEEP)	SY	5,250	
9	P-152-4.1	UNCLASSIFIED EXCAVATION	CY	7,080	
10	P-152-4.2	EMBANKMENT	CY	120	
11	P-152-4.3	UTILITY SOFT DIG	EA	50	
12	P-154-5.1	SUBBASE COURSE, 12" THICK	SY	9,140	
13	P-154-5.2	SUBBASE COURSE, 6" THICK	SY	5,110	
14	P-211-5.1	LIME ROCK BASE COURSE, 9" THICK	SY	8,840	
15	P-211-5.2	LIMEROCK TRANSITION WEDGE	LS	1	
16	P-401-8.1	HOT MIXED ASPHALT PAVEMENT (SURFACE)	TON	2,780	
17	P-403-8.1	HOT MIXED ASPHALT PAVEMENT (LEVELING)	TON	80	
18	P-602-5.1	EMULSIFIED ASPHALT PRIME COAT	GAL	280	
19	P-603-5.1	EMULSIFIED ASPHALT TACK COAT	GAL	210	
20	P-620-5.1	PERMANENT AIRFIELD PAINTING WITH TYPE III GLASS BEADS (YELLOW AND WHITE)	SF	7,220	
21	P-620-5.2	PERMANENT AIRFIELD PAINTING WITH TYPE I GLASS BEADS (RED SURFACE PAINTED SIGNS)	SF	1,140	
22	P-620-5.3	PERMANENT AIRFIELD PAINTING WITH NO GLASS BEADS (BLACK)	SF	21,250	
23	P-620-5.4	TEMPORARY AIRFIELD PAINTING WITH TYPE I GLASS BEADS (YELLOW AND WHITE)	SF	7,220	
24	P-620-5.5	TEMPORARY AIRFIELD PAINTING WITH NO GLASS BEADS (RED SURFACE PAINTED SIGNS)	SF	1,140	
25	P-620-5.6	AIRFIELD PAINT REMOVAL	SF	4,210	
26	T-904-5.1	SODDING	SY	6,400	
27	S-906-5.1	HYDROSEEDING	SY	59,680	
28	L-108-5.1	HAND EXCAVATE MINIMUM 8" WIDE X 28" DEEP IN EARTH	LF	20	
29	L-108-5.2	3/4" X 20' GROUND RODS CONNECTED TO COUNTERPOISE.	EA	16	
30	L-108-5.3	ADDITIONAL 10' GROUND ROD SECTIONS.	EA	16	
31	L-108-5.4	#6 BARE SOLID AWG COUNTERPOISE CONDUCTOR INSTALLED OVER CONDUIT SYSTEM.	LF	5,610	
32	L-108-5.5	#8, 5KV, L-824 CONDUCTOR INSTALLED IN NEW AND EXISTING CONDUIT/DUCTBANK SYSTEM.	LF	10,170	
33	L-110-5.1	ONE 2" SCHEDULE 40 PVC CONDUIT NON-ENCASED DIRECT BURIED IN EARTH, 24-INCH MINIMUM COVER, COMPLETE IN PLACE.	LF	4,920	
34	L-110-5.2	ONE 2" SCHEDULE 40 PVC CONDUIT CONCRETE ENCASED AND INSTALLED IN NEW FULL-STRENGTH PAVEMENT, 24-INCH MINIMUM COVER, COMPLETE IN PLACE.	LF	955	
35	L-110-5.3	ONE 2" SCHEDULE 40 PVC CONDUIT CONCRETE ENCASED AND INSTALLED IN EXISTING FULL-STRENGTH PAVEMENT, 24-INCH MINIMUM COVER, COMPLETE IN PLACE.	LF	370	
36	L-110-5.4	INTERCEPT EXISTING CONDUIT SYSTEM AND CONNECT TO NEW CONDUIT SYSTEM.	EA	19	
37	L-110-5.5	HAND EXCAVATE AND CONCRETE ENCASE EXISTING FPL 1/2" CONDUIT, COMPLETE.	LF	175	
38	L-115-5.1	L-867 16" DIAMETER JUNCTION CAN WITH COVER INSTALLED IN EARTH.	EA	1	
39	L-115-5.2	L-867 16" DIAMETER BOTTOMLESS 3 CAN JUNCTION CAN PLAZA INSTALLED IN EARTH.	EA	4	
40	L-115-5.3	INTERCEPT EXISTING LIGHT BASE CAN IN EARTH/EXISTING PAVEMENT AND CONNECT TO CONDUIT SYSTEM.	EA	1	
41	L-115-5.4	REMOVAL OF EXISTING JUNCTION CAN/LIGHT BASE CAN IN EARTH, COMPLETE.	EA	100	
42	L-115-5.5	ABANDON EXISTING JUNCTION CAN/LIGHT BASE CAN IN PLACE, COMPLETE.	EA	10	
43	L-125-5.1	NEW L-861T(L), LED TAXIWAY ELEVATED EDGE LIGHT AND NEW BASE CAN INSTALLED IN EARTH.	EA	59	
44	L-125-5.2	NEW L-861T(L), LED TAXIWAY ELEVATED EDGE LIGHT AND NEW BASE CAN INSTALLED IN EXISTING PAVEMENT	EA	8	
45	L-125-5.3	REINSTALL L-862(L), LED RUNWAY ELEVATED EDGE LIGHT ON NEW BASE CAN INSTALLED IN EXISTING PAVEMENT	EA	4	
46	L-125-5.4	NEW L-862(L), LED RUNWAY ELEVATED EDGE LIGHT AND NEW TOP SECTION INSTALLED ON EXISTING BASE CAN	EA	2	
47	L-125-5.5	NEW L-858(L), SIZE 1, 3-4 CHARACTERS LED GUIDANCE SIGN AND CONCRETE BASE INSTALLED IN EARTH.	EA	5	
48	L-125-5.6	NEW L-858(L), SIZE 1, 5-6 CHARACTERS LED GUIDANCE SIGN AND CONCRETE BASE INSTALLED IN EARTH.	EA	2	
49	L-125-5.7	NEW L-858(L), SIZE 1, 1-2 CHARACTERS LED GUIDANCE SIGN AND CONCRETE BASE INSTALLED IN EXISTING PAVEMENT.	EA	4	
50	L-125-5.8	REPANEL L-858(L), SIZE 1, 2 MODULE LED GUIDANCE SIGN WITH ALLOWANCE ACCOUNT SIGN LEGEND PANELS.	EA	3	
51	L-125-5.9	REPANEL L-858(L), SIZE 1, 3 MODULE LED GUIDANCE SIGN WITH ALLOWANCE ACCOUNT SIGN LEGEND PANELS.	EA	3	
52	L-125-5.10	REMOVAL OF EXISTING GUIDANCE SIGN AND CONCRETE BASE IN EARTH/EXISTING PAVEMENT, COMPLETE.	EA	10	
53	L-125-5.11	REMOVAL OF EXISTING GUIDANCE SIGN AND ABANDON EXISTING CONCRETE BASE, COMPLETE.	EA	1	
54	L-125-5.12	INTERCEPT EXISTING CIRCUIT CONDUCTORS IN EXISTING BASE CAN/MANHOLE /JUNCTION CAN AND EXTEND CIRCUITS ACCORDINGLY.	EA	13	
55	L-125-5.13	INSTALLATION OF ALLOWANCE ACCOUNT ALCMS GRAPHIC UPDATES, COMPLETE.	LS	1	
56	L-125-5.14	ALLOWANCE ACCOUNT: MODIFY EXISTING AIRFIELD LIGHTING CONTROL AND MONITORING SYSTEM (ALCMS), COMPLETE	ALL	1	
57	L-125-5.15	ALLOWANCE ACCOUNT: NEW L-858(L) SIGN PANELS FOR EXISTING ADB SIGNS PER SIGN SCHEDULE.	ALL	1	
T/W B & Q REALIGNMENT					

△1

State of Florida
Professional Engineer
License No. 044693108
THOMAS F. ODONNELL

DRAWN BY: RB
DATE: 08/28/2025
DESIGNED BY: ADC
SCALE: AS NOTED
CHECKED BY: TFO
FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION
1	05/06/2026	AC	TFO	REVISED CBR VALUES AND METHOD OF MEASUREMENT.

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
SUMMARY OF QUANTITIES

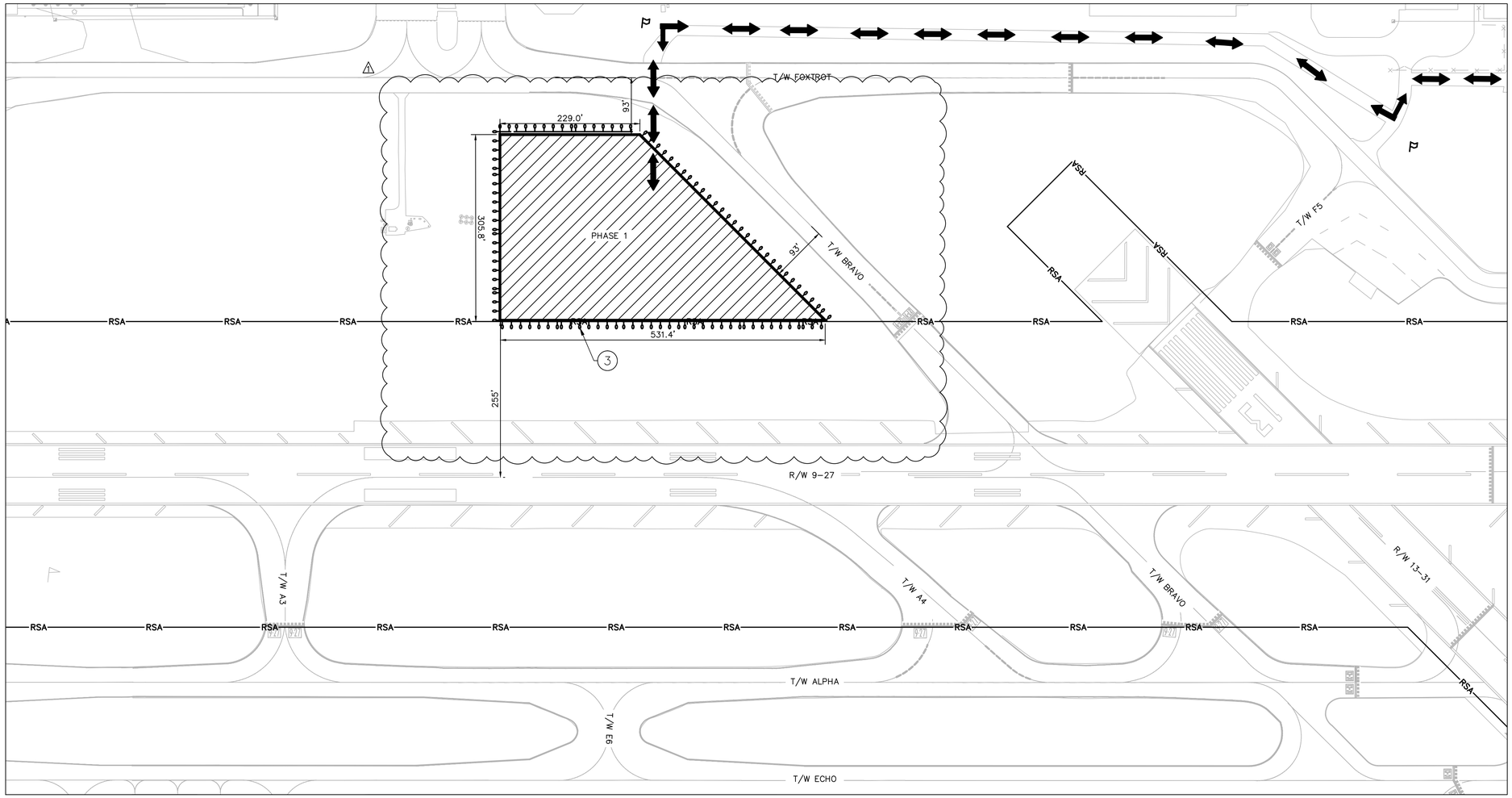
CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.
CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

BID SET

SHEET NO. C02 | OF
TOTAL: 41
CAD FILE: 12706-C02-QUAN
DRAWING FILE NO.

K:_FTL_AVIATION\044693108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-C02-QUAN.DWG



LEGEND

- PHASE 1 WORK LIMITS
- LOW LEVEL AIRFIELD BARRICADES SEE DETAIL 8 SHEET C06.
- TEMP. TAXIWAY CLOSURE MARKER SEE DETAIL 1 SHEET C06.
- TEMP. LIGHTED RUNWAY CLOSURE MARKER SEE DETAIL 4 SHEET C06.
- RSA — RUNWAY SAFETY AREA
- FLAG MAN
- HAUL ROUTE
- (1) LOCATION OF LIGHTED RUNWAY CLOSURE "X"
- (2) LOCATION OF TAXIWAY CLOSURE "X"
- (3) LOW LEVEL AIRFIELD BARRICADE AS REQUIRED TO CLOSE TAXIWAY. IN PLACE FOR DURATION OF SPECIFIED PHASE.
- (X) PHASE NUMBER

PRIMARY ITEMS OF WORK*

1. SUBMIT AND COMPLETE THE REVIEW PROCESS FOR ALL SHOP DRAWINGS AND SUBMITTALS.
2. INSTALL ANY SIGNAGE AS REQUIRED.
3. PREPARE EXISTING STAGING AREA.
4. INSTALL FABRIC TO EXISTING STAGING AREA FENCING AND IMPLEMENT OTHER SECURITY MEASURES.
5. INSTALL STORMWATER POLLUTION PREVENTION (SWPP) MEASURES.
6. PERFORM CONTRACTOR'S QUALITY CONTROL WORKSHOP.
7. PROCURE AND RECEIVE ALL ELECTRICAL ITEMS AND COMPONENTS. INVENTORIED, STAGED, AND STORED ON SITE.
8. PERFORM PRE-CONSTRUCTION MEETING.
9. COVER EXISTING LIGHTS THAT ARE TO REMAIN.

⚠

PRIMARY ITEMS OF WORK*

1. INSTALL BARRICADES AS REQUIRED
2. DISABLE OR COVER EXISTING LIGHTS AND SIGNS WITHIN CLOSED WORK AREAS AND/OR THAT DIRECT TRAFFIC TO A WORK AREA.
3. PERFORM FULL DEPTH INFIELD EXCAVATION.
4. COMPACT IN SITU SUBGRADE, INSTALL P-154 SUBBASE AND P-211 LIMEROCK.
5. PERFORM ELECTRICAL INSTALLATION.
6. INSTALL P-154 STABILIZED SHOULDERS.

*THIS LIST IS NOT EXHAUSTIVE NOR SEQUENTIAL; IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE PROJECT AND CONTRACT DOCUMENTS TO PERFORM ALL REQUIRED WORK IN ITS APPROPRIATE SEQUENCE.

PHASE M (MOBILIZATION)

OPERATIONS

ALL WORK, WITH THE EXCEPTION OF INSTALLATION OF SWPP MEASURES, WILL BE PERFORMED OUTSIDE OF THE AIRPORT SAFETY AREAS AND PROTECTED SURFACES. ALL AIRPORT INFRASTRUCTURE TO REMAIN OPEN. WORK WILL BE PERFORMED 8.5 HOURS PER DAY, MONDAY THROUGH FRIDAY, 7:00 AM TO 4:30 PM.

FOR THE INSTALLATION OF SWPP MEASURES, THE CONTRACTOR IS TO COORDINATE WITH AIRPORT STAFF REGARDING ACCESS AND CLOSURE OF AIRPORT INFRASTRUCTURE. ALL CLOSURES WILL BE "ROLLING" AND CONTROLLED BY AIRPORT OPERATIONS STAFF. CONTRACTOR TO COORDINATE CLOSELY WITH AIRPORT OPERATIONS STAFF DURING CLOSURES. WORK TIMES ARE REFERENCED FROM START OF SHIFT.

LIMITS OF WORK

WITH THE EXCEPTION OF THE INSTALLATION OF SWPP MEASURES, THE LIMITS OF THIS WORK AREA WILL CONSIST OF THE EXISTING ACCESS POINT AND THE CONTRACTOR'S STAGING AREA.

WORK SEQUENCING

WORK IN THIS AREA WILL BE PERFORMED SEQUENTIALLY AFTER NTP.

PHASE 1

OPERATIONS

CONSTRUCTION IN THE WORK AREA SHOWN WILL NOT REQUIRE THE CLOSURE TO ANY EXISTING RUNWAYS OR TAXIWAYS. CROSSINGS OF ACTIVE TAXIWAYS WILL BE COORDINATING WITH AIRPORT OPERATIONS. WORK WILL BE PERFORMED FROM 7:00 AM TO 4:30 PM MONDAY THROUGH FRIDAY. WORK TIMES ARE REFERENCED FROM START OF SHIFT.

CONTRACTOR TO COORDINATE BARRICADE PLACEMENT WITH AIRPORT STAFF AND RESIDENT PROJECT REPRESENTATIVE. BARRICADE LOCATIONS ARE SCHEMATIC AND MAY BE ADJUSTED OR ADDED IN THE FIELD AS NECESSARY FOR THE COMPLETION OF THE WORK.

LIMITS OF WORK

THE LIMITS OF THIS PHASE ARE 93' WEST OF THE EXISTING TAXIWAY BRAVO CENTERLINE NORTH OF THE RUNWAY 9-27 RSA.

WORK SEQUENCING

WORK IN THIS AREA WILL BE PERFORMED SEQUENTIALLY AFTER THE COMPLETION OF THE MOBILIZATION PHASE AFTER CONSTRUCTION NTP IS PROVIDED.

0 60' 120'

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2026 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
2151 VISTA PARKWAY SUITE I-9
WEST PALM BEACH, FL 33411
561-210-9224
LICENSE NO. CA30805

BID SET

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION
⚠	05/06/2026	AC	TFO	REVISED CBR VALUE, METHOD OF MEASUREMENT, PHASING.

State of Florida
Professional Engineer
License No. 044693108
THOMAS F. ODONNELL

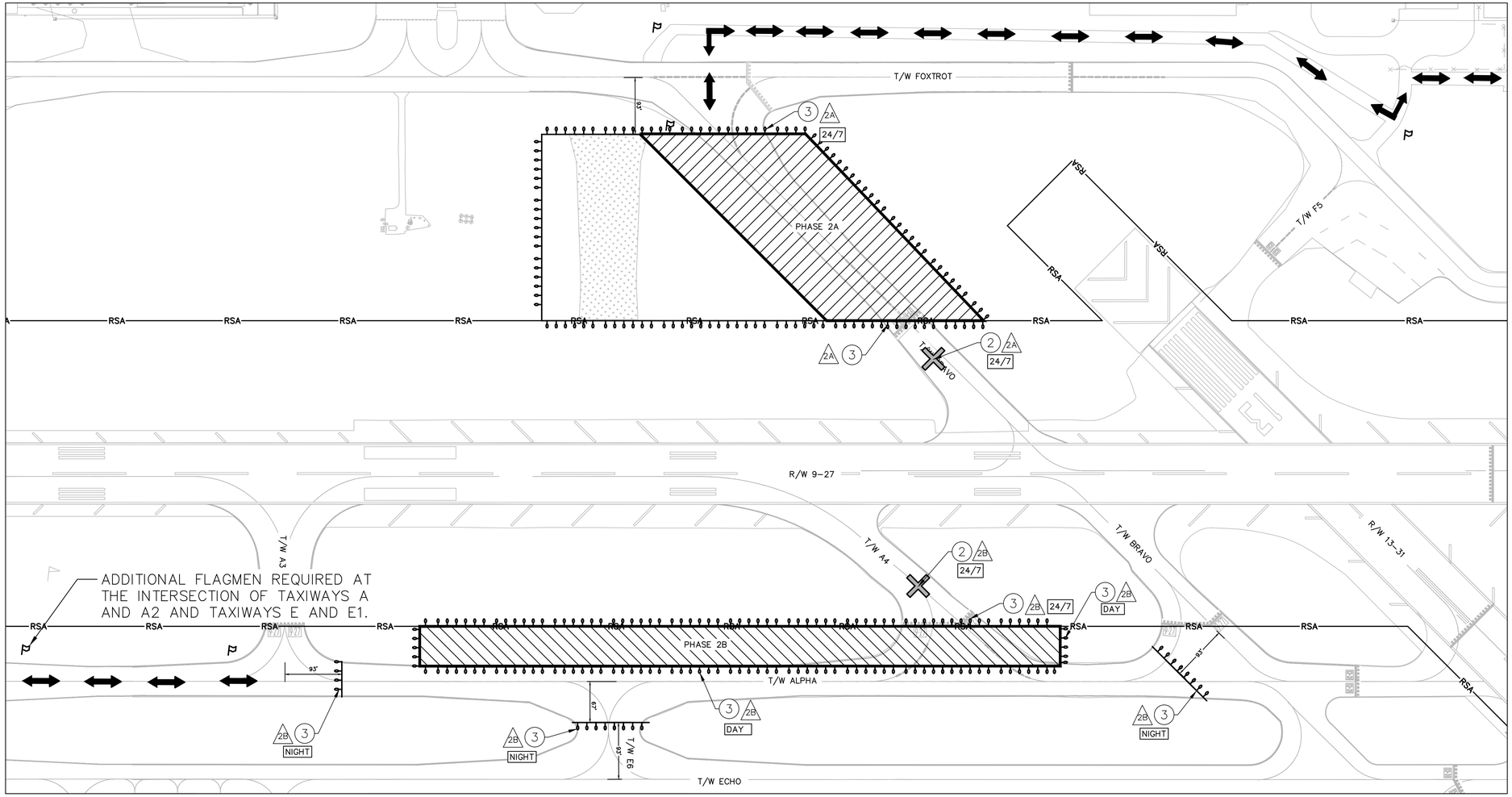
DRAWN BY: RB | DATE: 08/28/2025
DESIGNED BY: ADC | SCALE: AS NOTED
CHECKED BY: TFO | FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
PHASING PLAN 1

SHEET NO. C06 | OF
TOTAL: 41
CAD FILE: 12706-C06-PHAS1
DRAWING FILE NO.

K:\FTL_AVIATION\044693108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-C06-PHAS1.DWG



LEGEND

- PHASE 2A WORK LIMITS
- PHASE 2B WORK LIMITS
- COMPLETED WORK
- LOW LEVEL AIRFIELD BARRICADES SEE DETAIL 8 SHEET C06.
- TEMP. TAXIWAY CLOSURE MARKER SEE DETAIL 1 SHEET C06.
- TEMP. LIGHTED RUNWAY CLOSURE MARKER SEE DETAIL 4 SHEET C06.
- RSA — RUNWAY SAFETY AREA
- FLAG MAN
- HAUL ROUTE
- (1) LOCATION OF LIGHTED RUNWAY CLOSURE "X"
- (2) LOCATION OF TAXIWAY CLOSURE "X"
- (3) LOW LEVEL AIRFIELD BARRICADE AS REQUIRED TO CLOSE TAXIWAY. IN PLACE FOR DURATION OF SPECIFIED PHASE.
- X — PHASE NUMBER
- XXXX — THIS LEGEND DESCRIBES THE TIMES AND DAYS WHEN THIS TRAFFIC CONTROL MEASURE WILL BE DEPLOYED. NIGHT = 10 PM TO 7 AM, NIGHTLY, SUNDAY THROUGH THURSDAY. DAY = 7 AM TO 10 PM, DAILY, MONDAY THROUGH FRIDAY AND 24 HOURS PER DAY ON THE WEEKEND. 24/7 = 24 HOURS PER DAY FOR THE DURATION OF THE PHASE.

⚠

PHASE 2A

PRIMARY ITEMS OF WORK*

1. INSTALL BARRICADES AND TAXIWAY CLOSURE MAKERS AS DIRECTED BY FXE OPERATIONS.
2. PERFORM P-101 FULL DEPTH PAVEMENT DEMOLITION AND P-152 INFIELD EXCAVATION.
3. PERFORM ELECTRICAL DEMOLITION.
4. COMPACT IN SITU SUBGRADE.
5. INSTALL P-152 EMBANKMENT, T-904 SOD, AND S-906 HYDROSEED.

*THIS LIST IS NOT EXHAUSTIVE NOR SEQUENTIAL; IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE PROJECT AND CONTRACT DOCUMENTS TO PERFORM ALL REQUIRED WORK IN ITS APPROPRIATE SEQUENCE.

OPERATIONS

CONSTRUCTION IN THE PHASE SHOWN WILL REQUIRE THE CLOSURE OF EXISTING TAXIWAY BRAVO NORTH OF THE RUNWAY 9-27 RSA FOR THE DURATION OF THIS PHASE. TAXIWAY FOXTROT AND RUNWAY 9-27 WILL REMAIN OPEN DURING THIS PHASE. WORK WILL BE PERFORMED 8.5 HOURS PER DAY, MONDAY THROUGH FRIDAY, 7:00 AM TO 4:30 PM.

CONTRACTOR TO COORDINATE BARRICADE AND TAXIWAY CLOSURE MARKER PLACEMENT WITH AIRPORT STAFF AND RESIDENT PROJECT REPRESENTATIVE. BARRICADE LOCATIONS ARE SCHEMATIC AND MAY BE ADJUSTED OR ADDED IN THE FIELD AS NECESSARY FOR THE COMPLETION OF THE WORK.

LIMITS OF WORK

THE LIMITS OF THIS PHASE IS THE AREA NORTH OF THE RUNWAY 9-27 RSA AND SOUTH OF 93' SOUTH OF THE TAXIWAY FOXTROT CENTERLINE. THE HORIZONTAL LIMITS OF THIS PHASE MATCH THE PROJECT LIMITS IN THIS AREA.

WORK SEQUENCING

WORK IN THIS PHASE WILL BE PERFORMED SEQUENTIALLY AFTER THE COMPLETION OF PHASE 1.

PHASE 2B

PRIMARY ITEMS OF WORK*

1. INSTALL BARRICADES AND TAXIWAY CLOSURE MARKERS NIGHTLY AS DIRECTED BY FXE OPERATIONS.
2. DISABLE OR COVER EXISTING LIGHTS AND SIGNS WITHIN CLOSED WORK AREAS AND/OR THAT DIRECT TRAFFIC TO A WORK AREA.
3. PERFORM P-101 FULL DEPTH PAVEMENT DEMOLITION AND P-152 INFIELD EXCAVATION.
4. PERFORM ELECTRICAL DEMOLITION.
5. COMPACT IN SITU SUBGRADE, INSTALL P-154 SUBBASE AND P-211 LIMEROCK.
6. PERFORM ELECTRICAL INSTALLATION.
7. INSTALL P-211 LIME ROCK TRANSITION WEDGES.
8. INSTALL P-154 STABILIZED SHOULDERS.
9. INSTALL T-905 TOPSOIL, T-904 SOD, AND S-906 HYDROSEED.
10. INSTALL TRANSITION WEDGES IN WORK AREA AS NEEDED AT THE END OF EACH SHIFT.

*THIS LIST IS NOT EXHAUSTIVE NOR SEQUENTIAL; IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE PROJECT AND CONTRACT DOCUMENTS TO PERFORM ALL REQUIRED WORK IN ITS APPROPRIATE SEQUENCE.

OPERATIONS

CONSTRUCTION IN THE PHASE SHOWN WILL REQUIRE THE CLOSURE OF TAXIWAY A4 FOR THE DURATION OF THIS PHASE AND THE NIGHTLY CLOSURE OF TAXIWAY ALPHA AND E6 IN THE LIMITS SHOWN ABOVE. CONTRACTOR TO ADDRESS ALL DROPOFFS WITH LIMEROCK WEDGES AS DIRECTED BY OWNER OR RPR. WORK WILL ALLOW TAXIWAY ALPHA AND E6 TO BE REOPENED EACH MORNING AT 7:00 AM. WORK WILL BE PERFORMED NIGHTLY, FROM 10:00 PM TO 7:00 AM.

CONTRACTOR TO COORDINATE BARRICADE AND TAXIWAY CLOSURE MARKER PLACEMENT WITH AIRPORT STAFF AND RESIDENT PROJECT REPRESENTATIVE. BARRICADE LOCATIONS ARE SCHEMATIC AND MAY BE ADJUSTED OR ADDED IN THE FIELD AS NECESSARY FOR THE COMPLETION OF THE WORK.

LIMITS OF WORK

THE LIMITS OF THIS PHASE ARE SOUTH OF THE RUNWAY 9-27 RSA AND NORTH OF THE NORTH EDGE OF TAXIWAY ALPHA, THE HORIZONTAL LIMITS OF THIS PHASE MATCH THE PROJECT LIMITS IN THIS AREA.

WORK SEQUENCING

WORK IN THIS AREA WILL BE PERFORMED SEQUENTIALLY AFTER THE COMPLETION OF PHASE 2A.

0 60' 120'

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.
CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
2795 VISTA PARKWAY SUITE I-9
WEST PALM BEACH, FL 33411
561-210-9224
LICENSE NO. CA30005

BID SET

State of Florida
Professional Engineer
License No. 044693108
THOMAS F. ODONNELL

DRAWN BY:	DATE:
RB	08/28/2025
DESIGNED BY:	SCALE:
ADC	AS NOTED
CHECKED BY:	
TFO	
FIELD BOOK:	

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

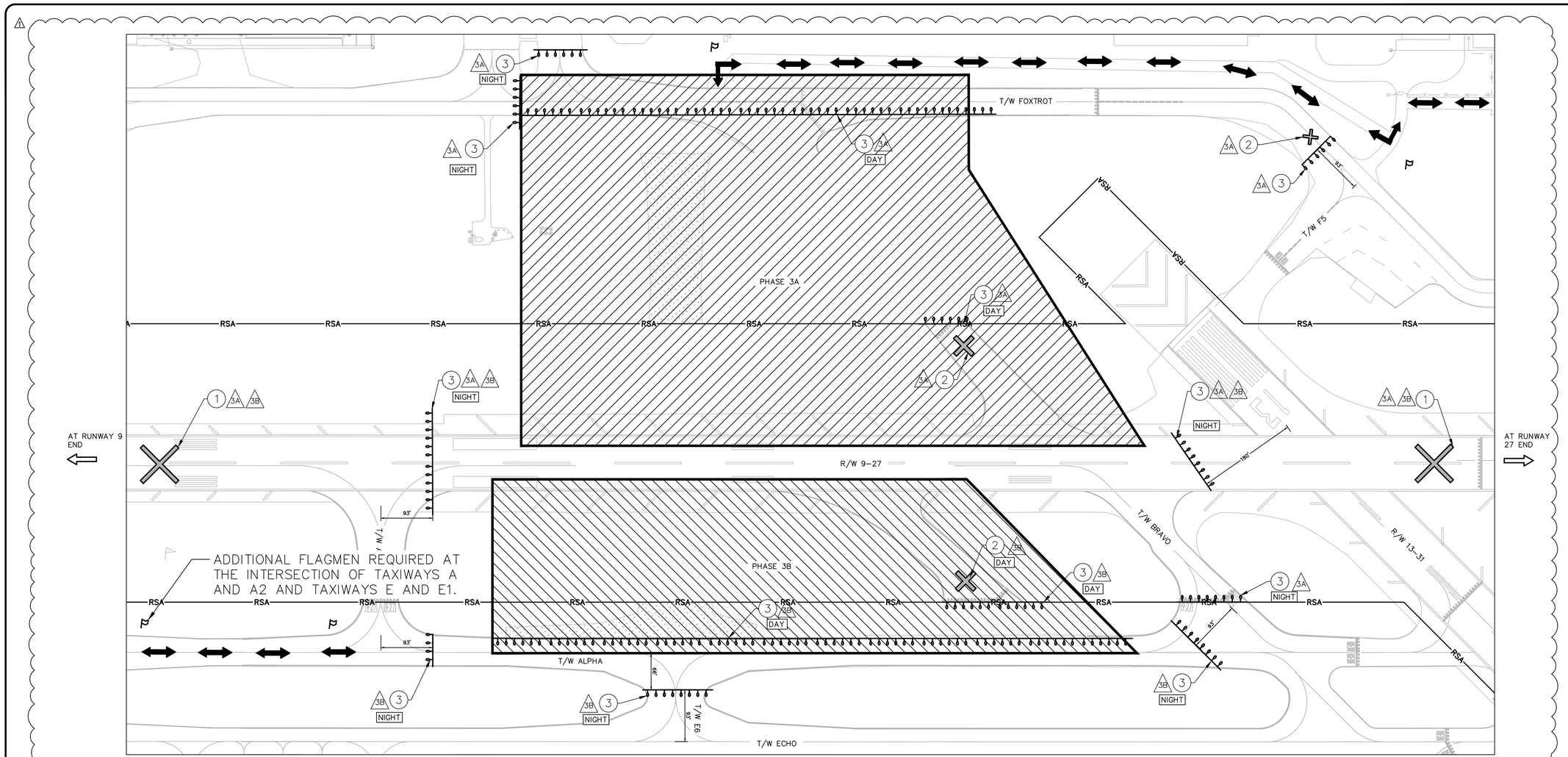
REVISIONS

NO.	DATE	BY (HKD)	DESCRIPTION
1	05/06/2026	AC	TFO REVISED CBR VALUE, METHOD OF MEASUREMENT, PHASING.

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
PHASING PLAN 2

SHEET NO.	OF
C07	
TOTAL:	41
CAD FILE: 12706-C07-PHAS2	
DRAWING FILE NO.	

K:_FTL_AVIATION\044693108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-C07-PHAS2.DWG



LEGEND

- PHASE 3A WORK LIMITS
- PHASE 3B WORK LIMITS
- COMPLETED WORK
- LOW LEVEL AIRFIELD BARRICADES SEE DETAIL 8 SHEET C06.
- TEMP. TAXIWAY CLOSURE MARKER SEE DETAIL 1 SHEET C06.
- TEMP. LIGHTED RUNWAY CLOSURE MARKER SEE DETAIL 4 SHEET C06.
- RSA — RUNWAY SAFETY AREA
- FLAG MAN
- HAUL ROUTE
- (1) LOCATION OF LIGHTED RUNWAY CLOSURE "X"
- (2) LOCATION OF TAXIWAY CLOSURE "X"
- (3) LOW LEVEL AIRFIELD BARRICADE AS REQUIRED TO CLOSE TAXIWAY. IN PLACE FOR DURATION OF SPECIFIED PHASE.
- X — PHASE NUMBER
- XXXX — THIS LEGEND DESCRIBES THE TIMES AND DAYS WHEN THIS TRAFFIC CONTROL MEASURE WILL BE DEPLOYED. NIGHT = 10 PM TO 7 AM, NIGHTLY, SUNDAY THROUGH THURSDAY. DAY = 7 AM TO 10 PM, DAILY, MONDAY THROUGH FRIDAY AND 24 HOURS PER DAY ON THE WEEKEND. 24/7 = 24 HOURS PER DAY FOR THE DURATION OF THE PHASE.

PRIMARY ITEMS OF WORK*

1. INSTALL BARRICADES, TAXIWAY CLOSURE MARKER AND LIGHTED XS AS NOTED OR AS DIRECTED BY FXE OPERATIONS.
2. DISABLE OR COVER EXISTING LIGHTS AND SIGNS WITHIN CLOSED WORK AREAS AND/OR THAT DIRECT TRAFFIC TO A WORK AREA.
3. PERFORM P-101 FULL DEPTH PAVEMENT DEMOLITION AND P-152 INFIELD EXCAVATION.
4. PERFORM ELECTRICAL DEMOLITION.
5. COMPACT IN SITU SUBGRADE, INSTALL P-154 SUBBASE, AND P-211 LIME ROCK BASE COURSES.
6. PERFORM ELECTRICAL INSTALLATION.
7. INSTALL P-154 STABILIZED SHOULDERS.
8. PERFORM P-401 PAVING.
9. INSTALL P-620 TEMPORARY PAVEMENT MARKINGS.
10. INSTALL T-905 TOPSOIL, T-904 SOD AND S-906 HYDROSEED.
11. INSTALL TRANSITION WEDGES IN WORK AREA AS NEEDED AT THE END OF EACH SHIFT.

*THIS LIST IS NOT EXHAUSTIVE NOR SEQUENTIAL; IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE PROJECT AND CONTRACT DOCUMENTS TO PERFORM ALL REQUIRED WORK IN ITS APPROPRIATE SEQUENCE.

PHASE 3A

OPERATIONS

CONSTRUCTION IN THE PHASE SHOWN WILL REQUIRE THE NIGHTLY CLOSURE OF RUNWAY 9-27 AND TAXIWAY FOXTROT BETWEEN TW F5 AND THE EASTERN BARRICADE SHOWN ABOVE. CONTRACTOR TO ADDRESS ALL DROPOFFS WITH LIMEROCK WEDGES AS DIRECTED BY OWNER OR RPR. WORK AND WILL ALLOW RUNWAY 9-27 AND TAXIWAY FOXTROT TO BE REOPENED EACH MORNING AT 6:00 AM. WORK WILL BE PERFORMED NIGHTLY, FROM 10:00 PM TO 6:00 AM.

CONTRACTOR TO COORDINATE BARRICADE PLACEMENT WITH AIRPORT STAFF AND RESIDENT PROJECT REPRESENTATIVE. BARRICADE LOCATIONS ARE SCHEMATIC AND MAY BE ADJUSTED OR ADDED IN THE FIELD AS NECESSARY FOR THE COMPLETION OF THE WORK.

LIMITS OF WORK

THE LIMITS OF THIS PHASE IS THE AREA NORTH OF THE RUNWAY 9-27 NORTH EDGE AND SOUTH OF THE TAXIWAY FOXTROT CENTERLINE. THE HORIZONTAL LIMITS OF THIS PHASE MATCH THE PROJECT LIMITS IN THIS AREA.

WORK SEQUENCING

WORK IN THIS PHASE WILL BE PERFORMED SEQUENTIALLY AFTER THE COMPLETION OF PHASE 2B.

PHASE 3B

OPERATIONS

CONSTRUCTION IN THE PHASE SHOWN WILL REQUIRE THE NIGHTLY CLOSURE OF RUNWAY 9-27 AND TAXIWAY ALPHA BETWEEN TW A3 AND THE EASTERN BARRICADE SHOWN ABOVE. CONTRACTOR TO ADDRESS ALL DROPOFFS WITH LIMEROCK WEDGES AS DIRECTED BY OWNER OR RPR. WORK WILL ALLOW RUNWAY 9-27 AND TAXIWAY ALPHA TO BE REOPENED EACH MORNING AT 6:00 AM. WORK WILL BE PERFORMED NIGHTLY, FROM 10:00 PM TO 6:00 AM.

CONTRACTOR TO COORDINATE BARRICADE PLACEMENT WITH AIRPORT STAFF AND RESIDENT PROJECT REPRESENTATIVE. BARRICADE LOCATIONS ARE SCHEMATIC AND MAY BE ADJUSTED OR ADDED IN THE FIELD AS NECESSARY FOR THE COMPLETION OF THE WORK.

LIMITS OF WORK

THE LIMITS OF THIS PHASE ARE SOUTH OF THE RUNWAY 9-27 SOUTH EDGE AND NORTH OF THE TAXIWAY ALPHA CENTERLINE, THE HORIZONTAL LIMITS OF THIS PHASE MATCH THE PROJECT LIMITS IN THIS AREA.

WORK SEQUENCING

WORK IN THIS AREA WILL BE PERFORMED SEQUENTIALLY AFTER THE COMPLETION OF PHASE 3A.

0 60' 120'

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.
CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6200 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
2751 VISTA PARKWAY SUITE I-9
WEST PALM BEACH, FL 33411
561-210-9224
LICENSE NO. CA30805

BID SET

State of Florida
Professional Engineer
License No. 044693108
THOMAS F. ODONNELL

DRAWN BY: RB | DATE: 08/28/2025
DESIGNED BY: ADC | SCALE: AS NOTED
CHECKED BY: TFO | FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

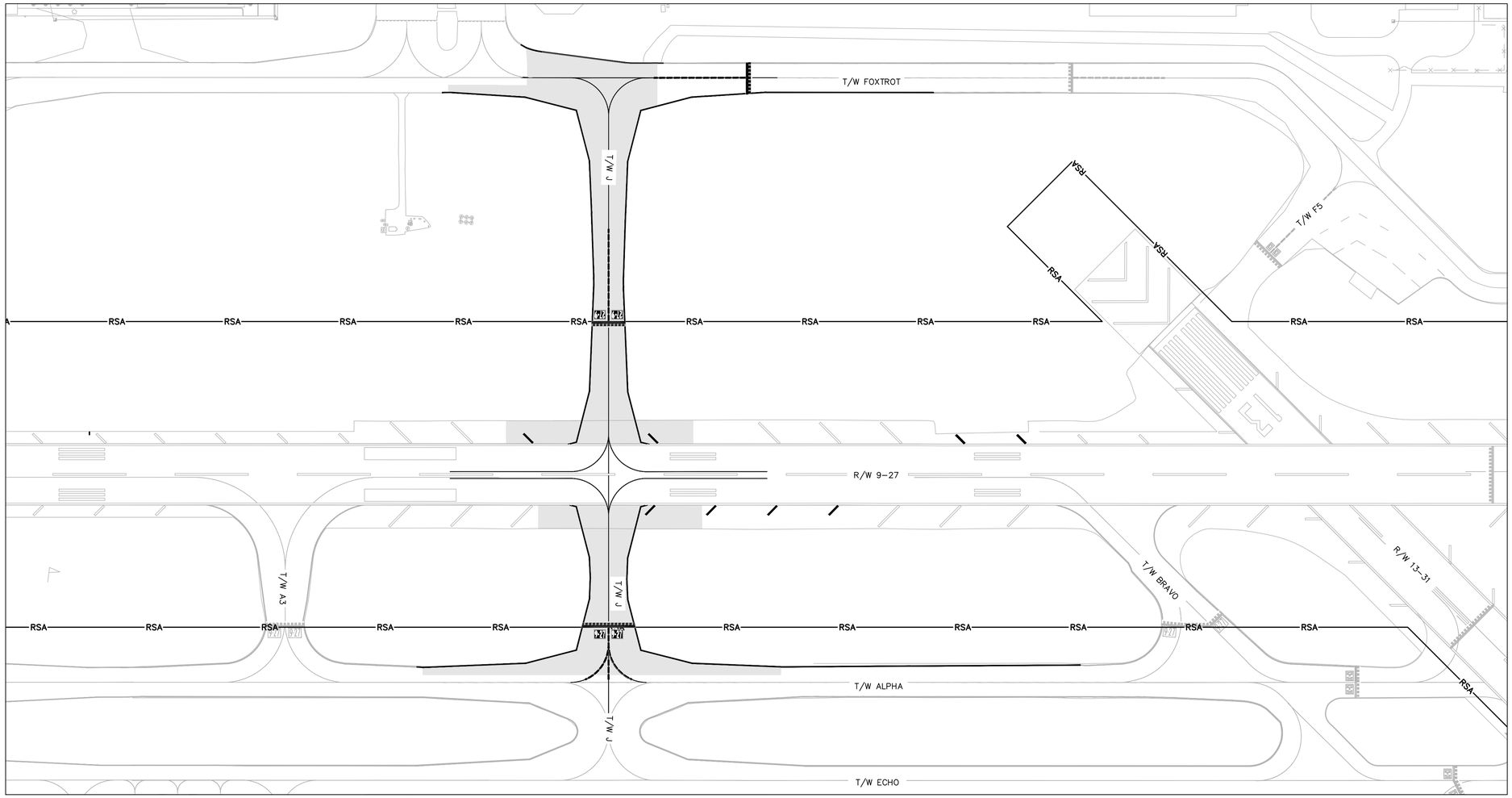
REVISIONS

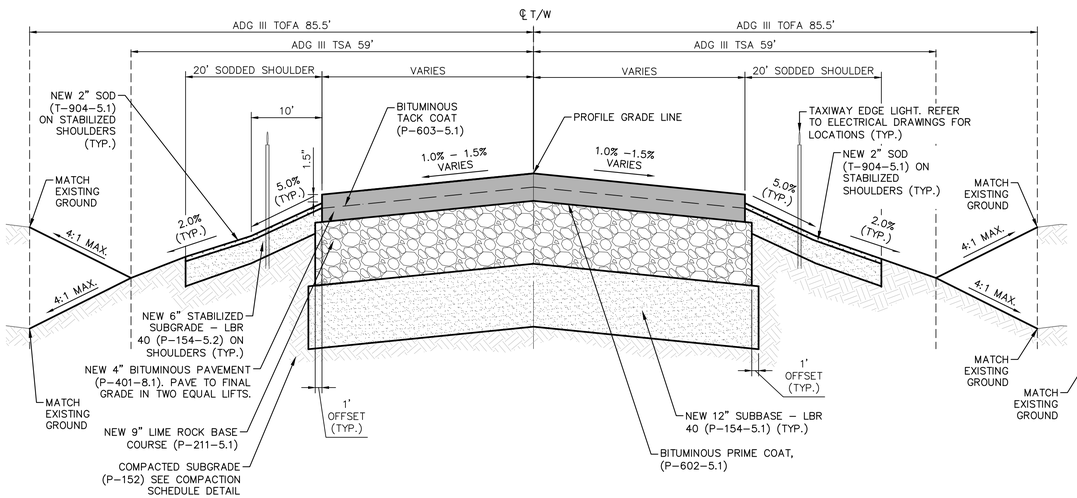
NO.	DATE	BY	CHK'D	DESCRIPTION
1	05/06/2026	AC	TFO	REVISED CBR VALUE, METHOD OF MEASUREMENT, PHASING.

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
PHASING PLAN 3

SHEET NO. C08 | OF
TOTAL: 41
CAD FILE: 12706-C08-PHAS3
DRAWING FILE NO.

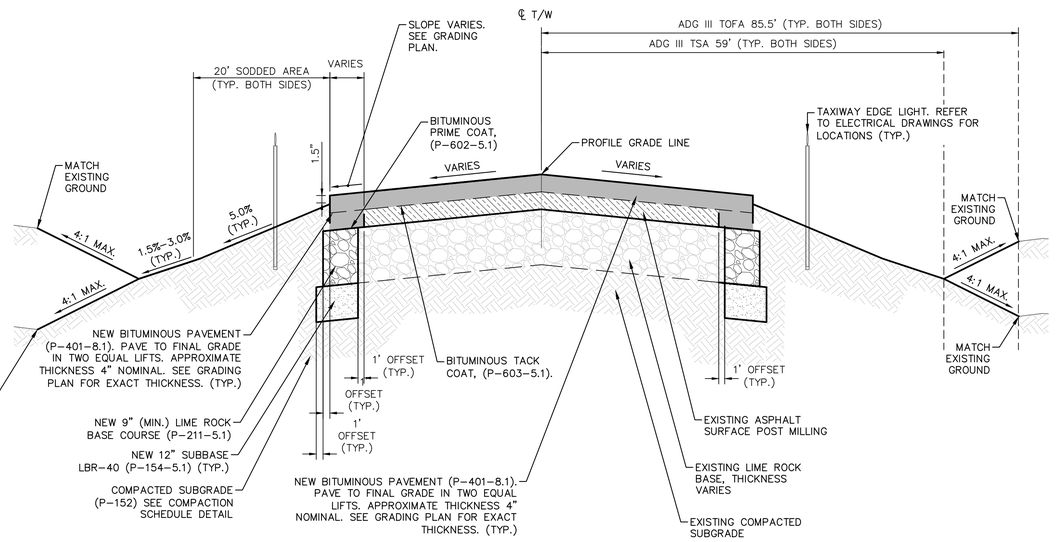
K:\FTL_AVIATION\044693108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-C08-PHAS3.DWG


T/W FOXTROT
T/W J
T/W F5
RSA
R/W 9-27
T/W A3
T/W J
T/W BRAVO
R/W 13-31
T/W ALPHA
T/W J
T/W ECHO
RSA
RSA
RSA



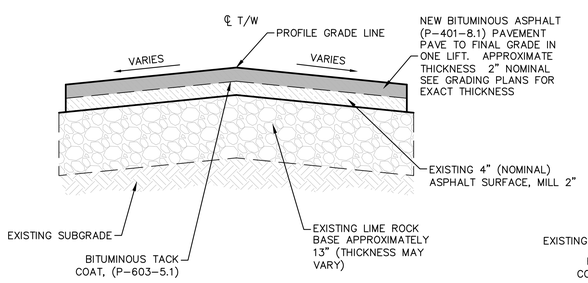
TYPICAL SECTION NO. 1 – FULL DEPTH TAXIWAY CONSTRUCTION

N.T.S.



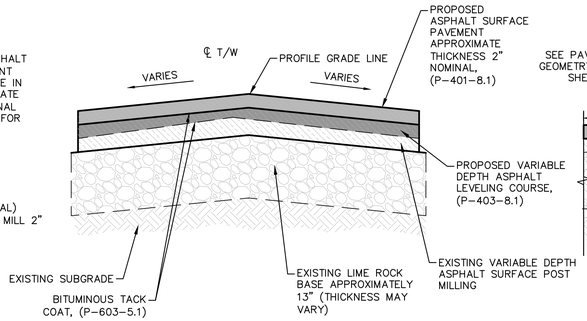
TYPICAL SECTION NO. 2 – NEW PAVEMENT ADJACENT TO MILL AND OVERLAY

N.T.S.



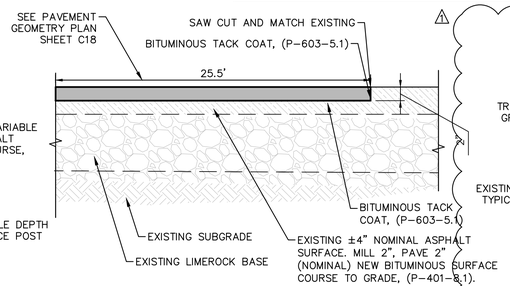
TYPICAL SECTION NO. 3 – 2" MILL AND 2" OVERLAY

N.T.S.



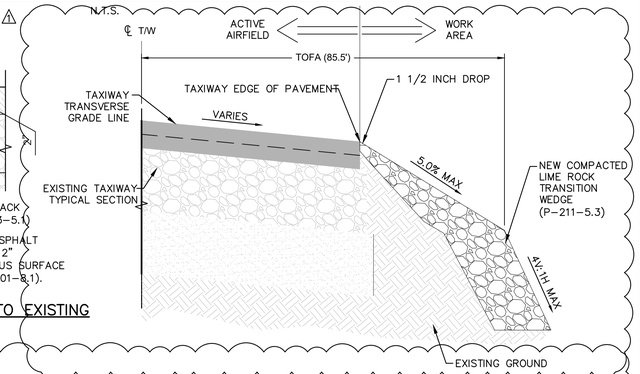
TYPICAL SECTION NO. 4 – 2" MILL AND 2" OVERLAY WITH VARIABLE DEPTH LEVELLING COURSE

N.T.S.

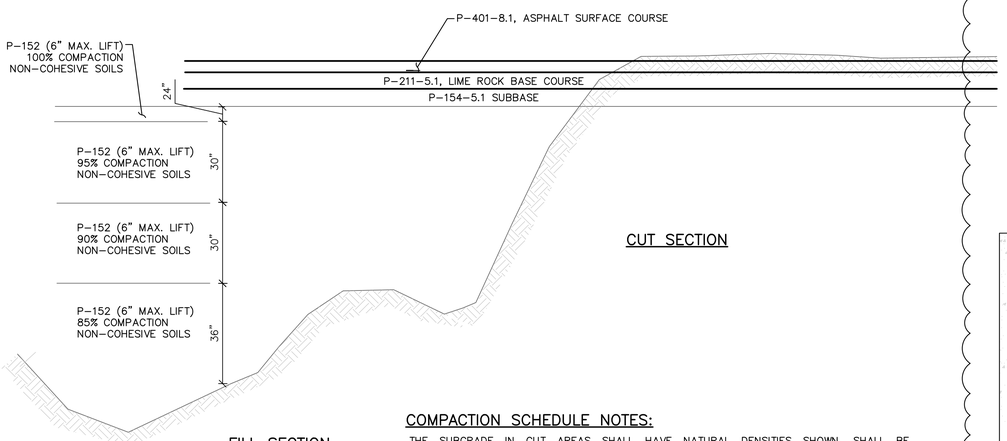


DETAIL 1 – BUTT JOINT OVERLAY TRANSITION TO EXISTING (MILL 2", PAVE 2")

N.T.S.



DETAIL 2 – LIME ROCK TRANSITION WEDGE AT TAXIWAY EDGE



CUT SECTION

FILL SECTION

COMPACTION SCHEDULE

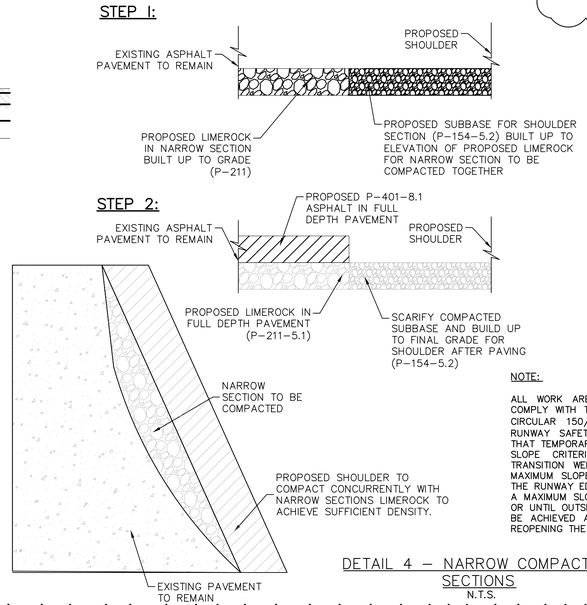
N.T.S.

COMPACTION SCHEDULE NOTES:

THE SUBGRADE IN CUT AREAS SHALL HAVE NATURAL DENSITIES SHOWN, SHALL BE COMPACTED FROM THE SURFACE TO ACHIEVE THE REQUIRED DENSITIES, OR SHALL BE REMOVED AND REPLACED IN WHICH CASE THE MINIMUM DENSITIES FOR FILLS APPLY. SEE SPECIFICATION P–152 FOR OVER EXCAVATION REQUIREMENTS.

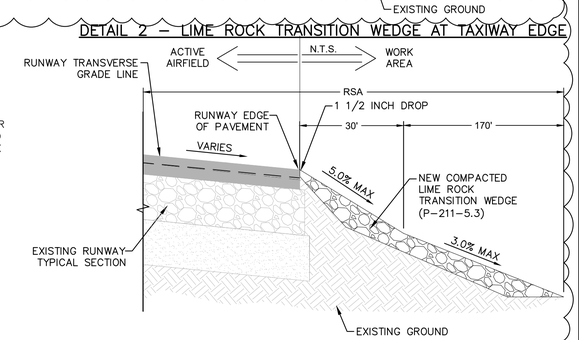
NON–COHESIVE SOILS, FOR THE PURPOSE OF DETERMINING COMPACTION, ARE THOSE WITH A P.I. < 3.

UNDER AREAS THAT WILL NOT BE PAVED, ROLLING OPERATIONS SHALL BE CONTINUED UNTIL THE EMBANKMENT IS COMPACTED TO NOT LESS THAT 95% OF MAXIMUM DENSITY FOR NON COHESIVE SOILS AND 90% OF MAXIMUM DENSITY FOR COHESIVE SOILS PER ITEM P–152.



DETAIL 4 – NARROW COMPACTION SECTIONS

N.T.S.



DETAIL 3 – LIME ROCK TRANSITION WEDGE AT RUNWAY EDGE

NOTE:

ALL WORK AREAS ADJACENT TO ACTIVE INFRASTRUCTURE SHALL COMPLY WITH THE SLOPE TOLERANCES OUTLINED IN FAA ADVISORY CIRCULAR 150/5300–13B. WHEN PERFORMING WORK WITHIN THE RUNWAY SAFETY AREA (RSA), THE CONTRACTOR SHALL ENSURE THAT TEMPORARY AND FINAL GRADING CONDITIONS MEET ALLOWABLE SLOPE CRITERIA AT ALL TIMES. THE P–211–5.3 LIME ROCK TRANSITION WEDGES WITHIN THE RSA SHALL BE RESTORED TO A MAXIMUM SLOPE OF 5 PERCENT WITHIN THE FIRST 30 FEET FROM THE RUNWAY EDGE UNTIL THE END OF THE RUNWAY SHOULDER, AND A MAXIMUM SLOPE OF 3 PERCENT FOR THE SUBSEQUENT 170 FEET OR UNTIL OUTSIDE OF THE RSA. THESE SLOPE REQUIREMENTS SHALL BE ACHIEVED AT THE END OF EACH WORK SHIFT, AND PRIOR TO REOPENING THE RUNWAY TO AIRCRAFT OPERATIONS

N.T.S.

CALL 48 HOURS BEFORE YOU DIG

IT'S THE LAW! DIAL 811

811 Know what's below. Call before you dig.

SUNSHINE STATE ONE CALL OF FLORIDA, INC.

CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
2755 VISTA PARKWAY SUITE 1-9
WEST PALM BEACH, FL 33411
561-210-9224
LICENSE NO. CA30015

BID SET

State of Florida
Professional Engineer
License No. 044693108
THOMAS F. ODONNELL

DRAWN BY: RB | DATE: 08/28/2025
DESIGNED BY: ADC | SCALE: AS NOTED
CHECKED BY: TFO | FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION
1	05/06/2026	AC	TFO	REVISED CBR VALUE, METHOD OF MEASUREMENT, PHASING.

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
TYPICAL SECTIONS

SHEET NO. C16 | OF
TOTAL: 41
CAD FILE: 12706–MULTI–TSEC
DRAWING FILE NO.

K:_FTL_AVIATION\044693108 – FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706–MULTI–TSEC.DWG

ITEM P-154 SUBBASE COURSE

DESCRIPTION

154-1.1 This item shall consist of a subbase course composed of granular materials constructed on a prepared subgrade or underlying course in accordance with these specifications, and in conformity with the dimensions and typical cross-section shown on the plans.

MATERIALS

154-2.1 Materials. The subbase material shall consist of hard durable particles or fragments of granular aggregates The material may be obtained from ***blending in situ materials with P-211 Lime Rock,*** gravel pits, stockpiles, or may be produced from a crushing and screening plant with proper blending. The materials from these sources shall meet the requirements for gradation, quality, and consistency. The material shall be free from vegetative matter, excessive amounts of clay, and other objectionable substances; uniformly blended; and be capable of being compacted into a dense, stable subbase.

The subbase material shall exhibit a California Bearing Ratio (CBR) value of at least ~~20~~ ***32 Lime Rock Bearing Ratio (LBR) value of 40)*** when tested in accordance with ASTM D1883 ***(FM 5-515)***. The subbase material shall meet the gradation specified in the table below.

1

THIS AREA HAS BEEN LEFT INTENTIONALLY BLANK

Subbase Gradation Requirements

Sieve designation	Percentage by weight passing sieves		Contractor's Final Gradation	Job Control Grading Band Tolerances[1] (Percent)
	Subbase Aggregate	~~Recycled pavement (RAP or RCO)~~		
3 inch (75 mm)	100			0
1 1/2 inch (37.5 mm)		~~100~~		0
3/4 inch (19.0 mm)	70-100	~~70-100~~		±10
No. 10 (2.00 mm)	20-100	~~20-100~~		±10
No. 40 (425 µm)	5-60	~~5-60~~		±5
No. 200 (75 µm)	0-15	~~[0-15]~~		±5

[1]The "Job Control Grading Band Tolerances" shall be applied to "Contractor's Final Gradation" to establish the job control grading band.

The portion of the material passing the No. 40 (425 µm) sieve shall have a liquid limit of not more than 25 and a plasticity index of not more than six (6) when tested in accordance with ASTM D4318.

154-2.2 Sampling and testing.

a. Aggregate base materials. Samples shall be taken by the Contractor per ASTM D75 for initial aggregate subbase requirements and gradation. Material shall meet the requirements in paragraphs 154-2.1. The Contractor shall submit to the Resident Project Representative (RPR) certified test results showing that the aggregate meets the Material requirements of this section. Tests shall be representative of the material to be used for the project.

b. Gradation requirements. The Contractor shall take at least one aggregate subbase sample per day in the presence of the RPR to check the final gradation. Samples shall be taken from the in-place, un-compacted material at sampling locations determined by the RPR on a random basis per ASTM D3665. Sampling shall be per ASTM D75 and tested per ASTM C136 and ASTM C117. Results shall be furnished to the RPR by the Contractor each day during construction. Material shall meet the requirements in paragraph 154-2.1.

154-2.3 Separation Geotextile. Not used

154-2.4 Geogrid. Not used.

CONSTRUCTION METHODS

154-3.1 General. The subbase course shall be placed where designated on the plans or as directed by the RPR. The material shall be shaped and thoroughly compacted within the tolerances specified.

Granular subbases which, due to grain sizes or shapes, are not sufficiently stable to support the construction equipment without movement, shall be mechanically modified to the depth necessary to provide stability as directed by the RPR. The mechanical modification shall include the addition of a fine-grained medium to bind the particles of the subbase material sufficiently to furnish a bearing strength, so the course will not deform under construction equipment traffic.

154-3.2 Preparing underlying course. Prior to constructing the subbase course, clean the underlying course or subgrade of all foreign substances. The surface of the underlying course or subgrade shall meet specified compaction and surface tolerances in accordance with Item P-152. Correct ruts, soft yielding spots in the underlying courses, and subgrade areas having inadequate compaction and/or deviations of the surface from the specified requirements, by loosening and removing soft or unsatisfactory material, adding approved material, reshaping to line and grade, and recompacting to specified density requirements. For cohesionless underlying courses or subgrades containing sands or gravels, as defined in ASTM D2487, the surface shall be stabilized prior to placement of the overlying course by mixing the overlying course material into the underlying course, and compacting by approved methods. The stabilized material shall be considered as part of the underlying course and shall meet all requirements for the underlying course. The finished underlying course shall not be disturbed by traffic or other operations and shall be maintained in a satisfactory condition until the overlying course is placed. The underlying course shall be checked and accepted by the RPR before placing and spreading operations are started.

To protect the subgrade and to ensure proper drainage, spreading of the subbase shall begin along the centerline of the pavement on a crowned section or on the high side of pavements with a one-way slope.

154-3.3 Control Strip. The first half-day of subbase construction shall be considered as a control strip for the Contractor to demonstrate, in the presence of the RPR, that the materials, equipment, and construction processes meet the requirements of this specification. The sequence and manner of rolling necessary to obtain specified density requirements shall be determined. The maximum compacted thickness may be increased to a maximum of 12 inches (300 mm) upon the Contractor's demonstration that approved equipment and operations will uniformly compact the lift to the specified density. The RPR must witness this demonstration and approve the lift thickness prior to full production.

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. 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.

154-3.4 Placement. The material shall be placed and spread on the prepared underlying layer by spreader boxes or other devices as approved by the RPR, to a uniform thickness and width. The equipment shall have positive thickness controls to minimize the need for additional manipulation of the material. Dumping from vehicles that require re-handling shall not be

permitted. Hauling over the uncompacted base course shall not be permitted. The material shall not be placed when the underlying course is soft or yielding.

The material shall meet gradation and moisture requirements prior to compaction. Material may be free-draining and the minimum moisture content shall be established for placement and compaction of the material.

The material shall be constructed in lifts as established in the control strip, but not less than 4 inches (100 mm) nor more than 12 inches (300 mm) of compacted thickness.

When more than one lift is required to establish the layer thickness shown on the plans, the construction procedure described here shall apply to each lift. No lift shall be covered by subsequent lifts until tests verify that compaction requirements have been met. The Contractor shall rework, re-compact and retest any material placed which does not meet the specifications.

154-3.5 Compaction. The subbase material shall be compacted, adjusting moisture as necessary, to be within ±2% of optimum moisture. The field density of the compacted material shall be at least 100% of the maximum density as specified in paragraph 154-3.9a. If the specified density is not attained, the area of the lift represented by the test shall be reworked and/or re-compacted and 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.

The compaction of the P-154 material alongside the P-211 material in the sections referenced in the narrow compaction detail is to be considered incidental to the P-154 for Stabilized Shoulders. The subsequent scarifying and addition of remaining P-154 required to complete the section of P-154 Stabilized Shoulders is also to be included in the cost of P-154 for Stabilized Shoulders.

154-3.6 Weather limitation. Material shall not be placed unless the ambient air temperature is at least 40°F (4°C) and rising. Work on subbase course shall not be conducted when the subgrade is wet or frozen or the subbase material contains frozen material.

154-3.7 Maintenance. No base or surface course shall be placed on the subbase until the subbase has been accepted by the RPR. The Contractor shall maintain the completed course in satisfactory condition throughout placement of subsequent layers. When material has been exposed to excessive rain, snow, or freeze-thaw conditions, the Contractor shall verify that materials still meet all specification requirements before placement of additional material. Equipment may be routed over completed sections of subbase course, provided the equipment does not damage the subbase course and the equipment is routed over the full width of the completed subbase course. Any damage to the subbase course from routing equipment over the subbase course shall be repaired by the Contractor at their expense.

154-3.8 Surface tolerance. In those areas on which a subbase or base course is to be placed, the surface shall be tested for smoothness and accuracy of grade and crown. Any portion lacking the required smoothness or failing in accuracy of grade or crown shall be scarified to a depth of at least 3 inches (75 mm), reshaped and re-compacted to grade until the required smoothness and accuracy are obtained and approved by the RPR. The Contractor shall perform all final smoothness and grade checks in the presence of the RPR. Any deviation in surface tolerances shall be corrected by the Contractor at the Contractor's expense.

a. Smoothness. The finished surface shall not vary more than +/- ½ inch (12 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 and crown shall be measured on a 50-foot (15-m) grid and shall be within +/-0.05 feet (15 mm) of the specified grade.

154-3.9 Acceptance sampling and testing. The aggregate base course shall be accepted for density and thickness on an area basis. Two tests shall be made for density and thickness for each 1,200 square yards ~~(1000 square meters)~~. Sampling locations will be determined on a random basis per ASTM D3665.

a. Density. ~~The RPR shall perform all density tests~~ ***The RPR shall perform density tests as needed for QA. The Contractor shall perform density tests every 1,000 SY for QC.***

Each area shall be accepted for density when the field density is at least 100% of the maximum density of laboratory specimens compacted and tested per ASTM **D698 or D1557**. The in-place field density shall be determined per ASTM **D6938**. If the specified density is not attained, the area represented by the failed test shall 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.

When the material has greater than 30 percent retained on the ¾ inch (19.0 mm) sieve, use methods in ASTM D1557 and the procedures in AASHTO T180 Annex for correction of maximum dry density and optimum moisture for oversized particles.

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 of proper gradation, and the material shall be blended and recompacted to grade. The Contractor shall replace, at his expense, base material where depth tests have been taken.

METHOD OF MEASUREMENT

154-4.1 Subbase course shall be measured by the number of square yards of subbase course material placed and compacted to specified density and plan thickness requirements in the completed course. The quantity of subbase course material shall be measured in final position based upon survey of the completed work computed from elevations to the nearest 0.01 foot. On individual depth measurements, thicknesses more than 1/2 inch (12 mm) in excess of that shown on the plans shall be considered as the specified thickness plus 1/2 inch (12 mm) in computing the yardage for payment. Subbase materials shall not be included in any other excavation quantities.

154-4.2 Contractor will perform a detailed survey, after the subbase has been installed, with a professionally licensed surveyor and supply it to the RPR and Engineer. Survey will be submitted in digital terrain model (DTM) format. The survey is a requirement to receive payment for subbase

1

BASIS OF PAYMENT

154-5.1 Payment shall be made at the contract unit price per square yard for subbase course. This price shall be full compensation for furnishing all materials; for all preparation, hauling, and placing of these materials; and for all labor, equipment, tools, ***surveying,*** and incidentals necessary to complete the item.

Payment will be made under:

Item P-154-5.1 V1	Subbase Course, 12” Thick - per square yard
Item P-154-5.2 V1	Subbase Course, 6” Thick - per square yard

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 C117	Standard Test Method for Materials Finer than 75-µm (No. 200) Sieve in Mineral Aggregates by Washing
ASTM C136	Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates
ASTM D75	Standard Practice for Sampling Aggregates
ASTM D698	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft^3 (600 kN-m/m^3))
ASTM D1556	Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method
ASTM D1557	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft^3 (2,700 kN-m/m^3))
ASTM D2487	Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)
ASTM D4253	Standard Test Methods for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table
ASTM D4759	Practice for Determining the Specification Conformance of Geosynthetics
ASTM D4318	Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
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)

M 288	Geotextile Specification for Highway Applications

Florida Department of Transportation (FDOT) Florida Sampling and Testing Methods (FSTM)

FM 5-515	***Florida Method of Test for Lime Rock Bearing Ratio***

END OF ITEM P-154

NO.	DATE	BY	CHK'D	DESCRIPTION
1	05/06/2026	AC	TFO	REVISED CBR AND METHOD OF MEASUREMENT.

ITEM P-211 LIME ROCK BASE COURSE

DESCRIPTION

211-1.1 This item shall consist of a base course composed of lime rock constructed on the prepared underlying course per these specifications and shall conform to the dimensions and typical cross-section shown on the plans.

MATERIALS

211-2.1 Materials. The lime rock base course material shall consist of fossiliferous limestone of uniform quality. The material shall not contain hard or flinty pieces that will cause a rough surface containing pits and pockets. The rock shall show no tendency to "air slake" or undergo chemical change when exposed to the weather. ***Lime rock material shall not contain chert or other extremely hard pieces, or lumps, balls or pockets of sand or clay material in sufficient quantity as to be detrimental to the proper bonding, finishing or strength of the lime rock base course.*** The material when watered and rolled shall be capable of compacting to a dense and well-bonded base.

Lime Rock Base Course Material Properties[2]

	Lime Rock	Oolitic	Non-Oolitic
Carbonates of calcium and magnesium[1]	95% minimum	70% minimum	75% minimum
Oxides of iron and aluminum[1]	Less than or equal to 2%	Less than or equal to 2%	Less than or equal to 2%
Liquid limit	Not greater than 35	NA	Not greater than 35
Plasticity Index	Not greater than 6	NA	Not greater than 6
Organic or foreign matter	Not more than 0.5%	Not more than 0.5%	Not more than 0.5%
Lime Bearing Ratio (LBR)[3] at 0 to +1.5% optimum	125	125	125

[1] The combined amount of carbonates, oxides, and silica shall be at least 97%. The material shall be non-plastic.

[2] The chemical analysis of lime rock shall consist of determining the insoluble silica, iron oxide, and alumina by solution of the sample in hydrochloric (HCl) acid, evaporating, dehydrating, re-dissolving the residue, and neutralizing with ammonium hydroxide, filtering, washing, and igniting the residue lime rock. The difference between the percentage of insoluble matter and 100% is reported as carbonates of calcium and magnesium.

[3] FM 5-515, Florida Method of Test for Lime Rock Bearing Ratio

Lime Rock Base Course Gradation

Sieve Designation (square openings)	Percentage by Weight Passing Sieves
3-1/2 inch (87.5 mm)	100
3/4 inch (19.0 mm)	50-100

All fine material shall consist entirely of dust of fracture (fine portion passing the No. 10 (2.00 mm) sieve). ***The maximum individual dimension shall not exceed 6 inches. All crushing or break-up, which is necessary in order to meet these gradation requirements, shall be done before the lime rock is placed in the base course.***

211-2.2 Sampling and Testing.

a. Aggregate base materials. The Contractor shall take samples of the aggregate base in accordance with ASTM D75 to verify initial aggregate base requirements and gradation. Material shall meet the requirements in paragraph 211-2.1. This sampling and testing will be the basis for approval of the aggregate base quality requirements.

b. Gradation requirements. The Contractor shall take at least two aggregate base samples per day in the presence of the Resident Project Representative (RPR) to check the final gradation ***providing a consistent material source is used for that day***. Sampling shall be per ASTM D75. Material shall meet the requirements in paragraph 209-2.1. The lot will be consistent with the lot size used for density. The samples shall be taken from the in-place, un-compacted material at sampling points and intervals designated by the RPR.

c. Sampling shall be taken by the Contractor Quality Control (QC) technician in the presence of the RPR's Quality Assurance (QA) representative. Each sample shall be mixed and quartered by the QC Technician such that the QC technician and the QA representative will each possess adequate size sample for testing.

211-2.3 Separation Geotextile. Not used.

CONSTRUCTION METHODS

211-3.1 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 removed and replaced at the Contractor's expense. Full operations shall not continue 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.

211-3.2 Preparing underlying course. ***Before any rock base course material is placed, the underlying course shall be prepared and conditioned as specified.*** The RPR shall check and accept the underlying course before placing and spreading operations are started. Any ruts or soft yielding places caused by improper drainage conditions, hauling, or any other cause shall be corrected at the Contractor's expense before the base course is placed. Material shall not be placed on frozen subgrade.

To protect the underlying course and to insure proper drainage the spreading of the limerock shall begin along the centerline of the pavement on a crowned section or on the high side of pavement with a one-way slope.

211-3.3 Placement. The material shall be placed and spread on the prepared underlying layer by spreader boxes or other devices as approved by the RPR, to a uniform thickness and width. The equipment shall have positive thickness controls to minimize the need for additional manipulation of the material. Dumping from vehicles that require re-handling shall not be permitted. Hauling over the uncompacted base course shall not be permitted.

The material shall meet gradation and moisture requirements prior to compaction. The layer shall be constructed in lifts as established in the control strip, but not less than 4 inches (~~100 mm~~) nor more than 12 inches (~~300 mm~~) of compacted thickness.

When more than one lift is required to establish the layer thickness shown on the plans, the construction procedure described here shall apply to each lift. No lift shall be covered by subsequent lifts until tests verify that compaction requirements have been met. The Contractor shall rework, re-compact and retest any material placed which does not meet the specifications.

211-3.4 Compaction. Immediately upon completion of the spreading operations, compact each layer of the base course, as specified, with approved compaction equipment. The number, type, and weight of rollers shall be sufficient to compact the material to the required density within the same day that the aggregate is placed on the subgrade. The field density of each compacted lift of material shall be at least 100% of the maximum density of laboratory specimens prepared from samples of the subbase material delivered to the jobsite. The moisture content of the material during placing operations shall be within ±2 percentage points of the optimum moisture content as determined by ASTM **1557**. Maximum density refers to maximum dry density at optimum moisture content unless otherwise specified.

Sufficient rollers of the designated types shall be furnished to adequately handle the compaction of the material that has been placed and spread. Blading and rolling shall be done alternately as required or directed to obtain a smooth, even surface and until the entire depth of base is compacted into a dense, unyielding mass. Re-rolling of previous day's spread shall be done as directed. When the shoulder backfill material has been placed, the shoulder shall be thoroughly rolled and compacted

Along curbs, headers, and all areas inaccessible to the roller, the base course material shall be tamped thoroughly with mechanical or hand tampers.

In the areas of narrow full depth construction called out in the plans, refer to the typical detail for compaction methods.

211-3.5 Finishing. After the watering and rolling of the base course, the entire surface shall be scarified to a depth of at least 3 inches (~~75 mm~~) and shaped to the exact crown and cross-section with a blade grader. The scarified material shall be rewetted and thoroughly rolled. Rolling shall continue until the base is bonded and compacted to a dense, unyielding mass, true to grade and cross-section. Scarifying and rolling of the surface of the base shall follow the initial rolling of the lime rock by not more than four (4) days. When the lime rock base is constructed in two layers, the scarifying of the surface shall be to a depth of 2 inches (~~50 mm~~).

If cracks or checks appear in the base before the surface course is laid, the Contractor shall rescarify, reshape, water, add lime rock where necessary, and recompact. If the underlying

material becomes mixed with the base course material, the Contractor shall, without additional compensation, remove, reshape, and recompact the mixture.

211-3.6 Weather limitations. Material shall not be placed unless the ambient air temperature is at least 40°F (4°C) and rising. Work on base course shall not be conducted when the subgrade or subbase is wet or frozen or the base material contains frozen material.

211-3.7 Maintenance. The base course shall be maintained in a condition that will meet all specification requirements until the work is accepted by the RPR. When material has been exposed to excessive rain, snow, or freeze-thaw conditions, prior to placement of additional material, the Contractor shall verify that materials still meet all specification requirements. Equipment may be routed over completed sections of base course, provided that no damage results and the equipment is routed over the full width of the completed base course. Any damage resulting to the base course from routing equipment over the base course shall be repaired by the Contractor at the Contractor's expense.

211-3.8 Surface tolerance. After the course has been compacted, the surface shall be tested for smoothness and accuracy of grade and crown. Any portion lacking the required smoothness or failing in accuracy of grade or crown shall be scarified to a depth of at least 3 inches (~~75 mm~~), reshaped and recompacted to grade until the required smoothness and accuracy are obtained and approved by the RPR. Any deviation in surface tolerances shall be corrected by the Contractor at the Contractor's expense. The smoothness and accuracy requirements specified here apply only to the top layer when base course is constructed in more than one layer.

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 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. **Straightedge shall be provided by the Contractor.**

b. Grade. The grade and crown 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.

211-3.9 Acceptance sampling and testing. Lime rock base course shall be accepted for density on an area basis. Two tests shall be made for density and thickness for each 2400 square yds (~~1000 m^2~~). Sampling locations will be determined on a random basis per 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**.** ***The Contractor shall perform density tests every 1,000 SY for QC. The RPR shall perform density tests as needed for QA.***

Each area shall be accepted for density when the field density is at least 100% of the maximum density of laboratory specimens compacted and tested per ASTM D1557. The in-place field density shall be determined per 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 entire area shall 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. Depth tests shall be made by ***survey*** ~~test holes or cores at least 3 inches (75 mm) in diameter that extend through the base~~ ***at intervals so each test shall represent 300 square yards in the presence of the RPR***. 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 of proper gradation, and the material shall be blended and recompacted to grade. The Contractor shall replace, at his expense, base material where depth tests have been taken.

1

211-3.10 Lime Rock Transition Wedges at Runway or Taxiway Edge. All work shall comply with the slope tolerances outlined in FAA Advisory Circular 150/5300-13B. When performing work within the runway safety area (RSA) or taxiway object free area (TOFA), the contractor shall ensure that temporary and final grading conditions meet allowable slope criteria at all times.

The Lime Rock Transition Wedges at Runway Edge shall be restored to a maximum slope of 5 percent within the first 30 feet from the runway edge until the end of the runway shoulder, and a maximum slope of 3 percent for the subsequent 170 feet or until outside of the RSA.

The Lime Rock Transition Wedges at Taxiway Edge shall be restored to a maximum slope of 5 percent, outside the pavement edge, within 85.5 feet from the centerline of the taxiway until the end of the taxiway object free area, and a maximum slope of 4 vertical : 1 horizontal outside of the TOFA.

These slope requirements shall be achieved at the end of each work shift, and prior to reopening the runway and or taxiway to aircraft operations. These slopes will be removed at the start of each work shift as required.

Compaction will be performed in accordance with 211-3.4.

~~METHOD OF MEASUREMENT~~

METHOD OF MEASUREMENT

211-4.1 The quantity of lime rock base course shall be the number of square yards ~~(square meters)~~ of base material placed, bonded, and accepted in the completed base course ***at the specified thickness***. The quantity of base course material shall be measured in final position based upon depth tests ***taken by the Contractor's Surveyor*** as directed by the RPR. On individual depth measurements, thicknesses more than 1/2 inch (~~12 mm~~) in excess of that shown on the plans shall be considered as the specified thickness plus 1/2 inch (~~12 mm~~) in computing the yardage for payment.

1

211-4.2 Measurement for the lime rock transition wedges will be made at the lump sum for this item's installation and removal each shift.

BASIS OF PAYMENT

211-5.1 Payment shall be made at the contract unit price per square yards ~~(square meters)~~ for lime rock base course. This price shall be full compensation for furnishing all materials and for all preparation, hauling, and placing of these materials, and for all labor, equipment, tools, ***survey,*** and incidentals necessary to complete the item.

The cost of removing cracks and checks including the labor, and the additional lime rock necessary for crack elimination, will not be paid for separately but shall be included in the contract price per square yard (~~square meter~~) for lime rock base course.

An As-Built survey taken by a Professionally Licensed Surveyor of the finished lime rock surface must be provided after the installation of lime rock is completed to receive payment for the lime rock.

1 ***211-5.2 Lime Rock Transition Wedge payment shall be made at the contract price per lump sum. This price shall be full compensation for loading and hauling, compaction, furnishing all materials, labor, equipment, tools, surveying, and incidentals necessary to complete the item, each shift, to the grades and requirements shown on the plans.***

Payment will be made under:

Item P-211-5.1 V1 Lime Rock Base Course, 9" Thick – per Square Yard

1 ~~***Item P-211-5.2 V1 Lime Rock Transition Wedge – Lump Sum***~~

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 C136	Standard Test Method for Sieve or Screen Analysis of Fine and Coarse Aggregates
ASTM D75	Standard Practice for Sampling Aggregates
ASTM D698	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft^3 (600 kN-m/m^3))
ASTM D1556	Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method
ASTM D1557	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft^3 (2700 kN-m/m^3))
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

American Association of State Highway and Transportation Officials (AASHTO)

M288 Standard Specification for Geosynthetic Specification for Highway Applications

END OF ITEM P-211

NO.	DATE	BY	CHK'D	DESCRIPTION
1	05/06/2026	AC	TFO	REVISED CBR AND METHOD OF MEASUREMENT.

ITEM T-905 TOPSOIL

DESCRIPTION

905-1.1 This item shall consist of preparing the ground surface for topsoil application, removing topsoil from designated stockpiles or areas to be stripped on the site or from approved sources off the site, and placing and spreading the topsoil on prepared areas in accordance with this specification at the locations shown on the plans or as directed by the RPR.

MATERIALS

905-2.1 Topsoil. Topsoil shall be the surface layer of soil with no admixture of refuse or any material toxic to plant growth, and it shall be reasonably free from subsoil and stumps, roots, brush, stones (2 inches (50 mm) or more in diameter), and clay lumps or similar objects. Brush and other vegetation that will not be incorporated with the soil during handling operations shall be cut and removed. Ordinary sod and herbaceous growth such as grass and weeds are not to be removed, but shall be thoroughly broken up and intermixed with the soil during handling operations. Heavy sod or other cover, which cannot be incorporated into the topsoil by discing or other means, shall be removed. The topsoil or soil mixture, unless otherwise specified or approved, shall have a pH range of approximately 5.5 pH to 7.6 pH, when tested in accordance with the methods of testing of the Association of Official Agricultural Chemists in effect on the date of invitation of bids. The organic content shall be not less than 3% nor more than 20% as determined by the wet-combustion method (chromic acid reduction). There shall be not less than 20% nor more than 80% of the material passing the 200 mesh (75 µm) sieve as determined by the wash test in accordance with ASTM C117.

Natural topsoil may be amended by the Contractor with approved materials and methods to meet the above specifications.

905-2.2 Inspection and tests. Within 10 days following acceptance of the bid, the RPR shall be notified of the source of topsoil to be furnished by the Contractor. The topsoil shall be inspected to determine if the selected soil meets the requirements specified and to determine the depth to which stripping will be permitted. At this time, the Contractor may be required to take representative soil samples from several locations within the area under consideration and to the proposed stripping depths, for testing purposes as specified in paragraph 905-2.1.

CONSTRUCTION METHODS

905-3.1 General. Areas to be topsoiled shall be shown on the plans. If topsoil is available on the site, the location of the stockpiles or areas to be stripped of topsoil and the stripping depths shall be shown on the plans.

Suitable equipment necessary for proper preparation and treatment of the ground surface, stripping of topsoil, and for the handling and placing of all required materials shall be on hand, in good condition, and approved by the RPR before the various operations are started.

905-3.2 Preparing the ground surface. Immediately prior to dumping and spreading the topsoil on any area, the surface shall be loosened by discs or spike-tooth harrows, or by other

means approved by the RPR, to a minimum depth of 2 inches (50 mm) to facilitate bonding of the topsoil to the covered subgrade soil. The surface of the area to be topsoiled shall be cleared of all stones larger than 2 inches (50 mm) in any diameter and all litter or other material which may be detrimental to proper bonding, the rise of capillary moisture, or the proper growth of the desired planting. Limited areas, as shown on the plans, which are too compact to respond to these operations shall receive special scarification.

Grades on the area to be topsoiled, which have been established by others as shown on the plans, shall be maintained in a true and even condition. Where grades have not been established, the areas shall be smooth-graded and the surface left at the prescribed grades in an even and compacted condition to prevent the formation of low places or pockets where water will stand.

905-3.3 Obtaining topsoil. Prior to the stripping of topsoil from designated areas, any vegetation, briars, stumps and large roots, rubbish or stones found on such areas, which may interfere with subsequent operations, shall be removed using methods approved by the RPR. Heavy sod or other cover, which cannot be incorporated into the topsoil by discing or other means shall be removed.

When suitable topsoil is available on the site, the Contractor shall remove this material from the designated areas and to the depth as directed by the RPR. The topsoil shall be spread on areas already tilled and smooth-graded, or stockpiled in areas approved by the RPR. Any topsoil stockpiled by the Contractor shall be rehandled and placed without additional compensation. Any topsoil that has been stockpiled on the site by others, and is required for topsoil purposes, shall be removed and placed by the Contractor. The sites of all stockpiles and areas adjacent thereto which have been disturbed by the Contractor shall be graded if required and put into a condition acceptable for seeding.

When suitable topsoil is secured off the airport site, the Contractor shall locate and obtain the supply, subject to the approval of the RPR. The Contractor shall notify the RPR sufficiently in advance of operations in order that necessary measurements and tests can be made. The Contractor shall remove the topsoil from approved areas and to the depth as directed. The topsoil shall be hauled to the site of the work and placed for spreading, or spread as required. Any topsoil hauled to the site of the work and stockpiled shall be rehandled and placed without additional compensation.

905-3.4 Placing topsoil. The topsoil shall be evenly spread on the prepared areas to a uniform depth of 2 inches (50 mm) after compaction, unless otherwise shown on the plans or stated in the special provisions. Spreading shall not be done when the ground or topsoil is frozen, excessively wet, or otherwise in a condition detrimental to the work. Spreading shall be carried on so that turfing operations can proceed with a minimum of soil preparation or tilling.

After spreading, any large, stiff clods and hard lumps shall be broken with a pulverizer or by other effective means, and all stones or rocks (2 inches (50 mm) or more in diameter), roots, litter, or any foreign matter shall be raked up and disposed of by the Contractor. after spreading is completed, the topsoil shall be satisfactorily compacted by rolling with a cultipacker or by other means approved by the RPR. The compacted topsoil surface shall conform to the required lines, grades, and cross-sections. Any topsoil or other dirt falling upon pavements as a result of hauling or handling of topsoil shall be promptly removed.

METHOD OF MEASUREMENT

~~**905-4.1** Topsoil obtained on the site shall be measured by the number of cubic yards (cubic meters) of topsoil measured in its original position and stripped or excavated. Topsoil stockpiled by others and removed for topsoil by the Contractor shall be measured by the number of cubic yards (cubic meters) of topsoil measured in the stockpile. Topsoil shall be measured by volume in cubic yards (cubic meters) computed by the method of end areas.~~

~~**905-4.2** Topsoil obtained off the site shall be measured by the number of cubic yards (cubic meters) of topsoil measured in its original position and stripped or excavated. Topsoil shall be measured by volume in cubic yards (meters) computed by the method of end areas.~~

BASIS OF PAYMENT

~~**905-5.1** Payment will be made at the contract unit price per cubic yard for topsoil (obtained on the site). This price shall be full compensation for furnishing all materials and for all preparation, placing, and spreading of the materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.~~

~~**905-5.2** Payment will be made at the contract unit price per cubic yard for topsoil (obtained off the site). This price shall be full compensation for furnishing all materials and for all preparation, placing, and spreading of the materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.~~

~~Payment will be made under:~~

~~Item T-905-5.1 Topsoil, 2"- per cubic yard~~

Topsoil will be incidental to the installation of sod and hydroseed. No additional payment for the procurement or installation of topsoil will be provided.

REFERENCES

1

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 C117 Materials Finer than 75 μm (No. 200) Sieve in Mineral Aggregates by Washing

Advisory Circulars (AC)

AC 150/5200-33 Hazardous Wildlife Attractants on or Near Airports

FAA/United States Department of Agriculture

Wildlife Hazard Management at Airports, A Manual for Airport Personnel

END OF ITEM T-905

THIS PAGE INTENTIONALLY LEFT BLANK

NO.	DATE	BY	CHK'D	DESCRIPTION
1	05/05/2026	AC	TFO	Made topsoil incidental to sod and hydroseed.

BASE BID					
ITEM NO.	SPEC NO.	ITEM DESCRIPTION	UNIT	QUANTITY	
				CONTRACT	AS-BUILT
1	C-100-14.1	CONTRACTOR QUALITY CONTROL PROGRAM (CQCP)	LS	1	
2	C-102-5.1	TEMPORARY AIR AND WATER POLLUTION, SOIL EROSION, AND SILTATION CONTROL	LS	1	
3	C-105-6.1	MOBILIZATION	LS	1	
4	S-102-5.1	AIPORT SAFETY AND MAINTENANCE OF TRAFFIC	LS	1	
5	S-102-5.2	TEMPORARY FENCE FOR OWL/TURTOISE NESTS	EA	25	
6	S-103-5.1	PROJECT SURVEY AND STAKEOUT	LS	1	
7	P-101-5.1	FULL DEPTH ASPHALT PAVEMENT REMOVAL	SY	11,730	
8	P-101-5.2	BITUMINOUS PAVEMENT MILLING (UP TO 2" DEEP)	SY	5,250	
9	P-152-4.1	UNCLASSIFIED EXCAVATION	CY	7,080	
10	P-152-4.2	EMBANKMENT	CY	120	
11	P-152-4.3	UTILITY SOFT DIG	EA	50	
12	P-154-5.1	SUBBASE COURSE, 12" THICK	SY	9,140	
13	P-154-5.2	SUBBASE COURSE, 6" THICK	SY	5,110	
14	~~P-211-5.1~~	~~LIME ROCK BASE COURSE, 9" THICK~~	SY	8,840	
15	P-211-5.2	LIMEROCK TRANSITION WEDGE	LS	1	
16	P-401-8.1	HOT MIXED ASPHALT PAVEMENT (SURFACE)	TON	2,780	
17	P-403-8.1	HOT MIXED ASPHALT PAVEMENT (LEVELING)	TON	80	
18	P-602-5.1	EMULSIFIED ASPHALT PRIME COAT	GAL	280	
19	P-603-5.1	EMULSIFIED ASPHALT TACK COAT	GAL	210	
20	P-620-5.1	PERMANENT AIRFIELD PAINTING WITH TYPE III GLASS BEADS (YELLOW AND WHITE)	SF	7,220	
21	P-620-5.2	PERMANENT AIRFIELD PAINTING WITH TYPE I GLASS BEADS (RED SURFACE PAINTED SIGNS)	SF	1,140	
22	P-620-5.3	PERMANENT AIRFIELD PAINTING WITH NO GLASS BEADS (BLACK)	SF	21,250	
23	P-620-5.4	TEMPORARY AIRFIELD PAINTING WITH TYPE I GLASS BEADS (YELLOW AND WHITE)	SF	7,220	
24	P-620-5.5	TEMPORARY AIRFIELD PAINTING WITH NO GLASS BEADS (RED SURFACE PAINTED SIGNS)	SF	1,140	
25	P-620-5.6	AIRFIELD PAINT REMOVAL	SF	4,210	
26	T-904-5.1	SODDING	SY	6,400	
27	S-906-5.1	HYDROSEEDING	SY	59,680	
28	L-108-5.1	HAND EXCAVATE MINIMUM 8" WIDE X 28" DEEP IN EARTH	LF	20	
29	L-108-5.2	3/4" X 20' GROUND RODS CONNECTED TO COUNTERPOISE.	EA	16	
30	L-108-5.3	ADDITIONAL 10' GROUND ROD SECTIONS.	EA	16	
31	L-108-5.4	#6 BARE SOLID AWG COUNTERPOISE CONDUCTOR INSTALLED OVER CONDUIT SYSTEM.	LF	5,610	
32	L-108-5.5	#8, 5KV, L-824 CONDUCTOR INSTALLED IN NEW AND EXISTING CONDUIT/DUCTBANK SYSTEM.	LF	10,170	
33	L-110-5.1	ONE 2" SCHEDULE 40 PVC CONDUIT NON-ENCASED DIRECT BURIED IN EARTH, 24-INCH MINIMUM COVER, COMPLETE IN PLACE.	LF	4,920	
34	L-110-5.2	ONE 2" SCHEDULE 40 PVC CONDUIT CONCRETE ENCASED AND INSTALLED IN NEW FULL-STRENGTH PAVEMENT, 24-INCH MINIMUM COVER, COMPLETE IN PLACE.	LF	955	
35	L-110-5.3	ONE 2" SCHEDULE 40 PVC CONDUIT CONCRETE ENCASED AND INSTALLED IN EXISTING FULL-STRENGTH PAVEMENT, 24-INCH MINIMUM COVER, COMPLETE IN PLACE.	LF	370	
36	L-110-5.4	INTERCEPT EXISTING CONDUIT SYSTEM AND CONNECT TO NEW CONDUIT SYSTEM.	EA	19	
37	L-110-5.5	HAND EXCAVATE AND CONCRETE ENCASE EXISTING FPL 1/2" CONDUIT, COMPLETE.	LF	175	
38	L-115-5.1	L-867 16" DIAMETER JUNCTION CAN WITH COVER INSTALLED IN EARTH.	EA	1	
39	L-115-5.2	L-867 16" DIAMETER BOTTOMLESS 3 CAN JUNCTION CAN PLAZA INSTALLED IN EARTH.	EA	4	
40	L-115-5.3	INTERCEPT EXISTING LIGHT BASE CAN IN EARTH/EXISTING PAVEMENT AND CONNECT TO CONDUIT SYSTEM.	EA	1	
41	L-115-5.4	REMOVAL OF EXISTING JUNCTION CAN/LIGHT BASE CAN IN EARTH, COMPLETE.	EA	100	
42	L-115-5.5	ABANDON EXISTING JUNCTION CAN/LIGHT BASE CAN IN PLACE, COMPLETE.	EA	10	
43	L-125-5.1	NEW L-861T(L), LED TAXIWAY ELEVATED EDGE LIGHT AND NEW BASE CAN INSTALLED IN EARTH.	EA	59	
44	L-125-5.2	NEW L-861T(L), LED TAXIWAY ELEVATED EDGE LIGHT AND NEW BASE CAN INSTALLED IN EXISTING PAVEMENT	EA	8	
45	L-125-5.3	REINSTALL L-862(L), LED RUNWAY ELEVATED EDGE LIGHT ON NEW BASE CAN INSTALLED IN EXISTING PAVEMENT	EA	4	
46	L-125-5.4	NEW L-862(L), LED RUNWAY ELEVATED EDGE LIGHT AND NEW TOP SECTION INSTALLED ON EXISTING BASE CAN	EA	2	
47	L-125-5.5	NEW L-858(L), SIZE 1, 3-4 CHARACTERS LED GUIDANCE SIGN AND CONCRETE BASE INSTALLED IN EARTH.	EA	5	
48	L-125-5.6	NEW L-858(L), SIZE 1, 5-6 CHARACTERS LED GUIDANCE SIGN AND CONCRETE BASE INSTALLED IN EARTH.	EA	2	
49	L-125-5.7	NEW L-858(L), SIZE 1, 1-2 CHARACTERS LED GUIDANCE SIGN AND CONCRETE BASE INSTALLED IN EXISTING PAVEMENT.	EA	4	
50	L-125-5.8	REPANEL L-858(L), SIZE 1, 2 MODULE LED GUIDANCE SIGN WITH ALLOWANCE ACCOUNT SIGN LEGEND PANELS.	EA	3	
51	L-125-5.9	REPANEL L-858(L), SIZE 1, 3 MODULE LED GUIDANCE SIGN WITH ALLOWANCE ACCOUNT SIGN LEGEND PANELS.	EA	3	
52	L-125-5.10	REMOVAL OF EXISTING GUIDANCE SIGN AND CONCRETE BASE IN EARTH/EXISTING PAVEMENT, COMPLETE.	EA	10	
53	L-125-5.11	REMOVAL OF EXISTING GUIDANCE SIGN AND ABANDON EXISTING CONCRETE BASE, COMPLETE.	EA	1	
54	L-125-5.12	INTERCEPT EXISTING CIRCUIT CONDUCTORS IN EXISTING BASE CAN/MANHOLE /JUNCTION CAN AND EXTEND CIRCUITS ACCORDINGLY.	EA	13	
55	L-125-5.13	INSTALLATION OF ALLOWANCE ACCOUNT ALCMS GRAPHIC UPDATES, COMPLETE.	LS	1	
56	L-125-5.14	ALLOWANCE ACCOUNT: MODIFY EXISTING AIRFIELD LIGHTING CONTROL AND MONITORING SYSTEM (ALCMS), COMPLETE	ALL	1	
57	L-125-5.15	ALLOWANCE ACCOUNT: NEW L-858(L) SIGN PANELS FOR EXISTING ADB SIGNS PER SIGN SCHEDULE.	ALL	1	
T/W B & Q REALIGNMENT					

△1

K:\FTL_AVIATION\044693108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-C02-QUAN.DWG

CALL 48 HOURS BEFORE YOU DIG

IT'S THE LAW! DIAL 811

811 Know what's below. Call before you dig.

SUNSHINE STATE ONE CALL OF FLORIDA, INC.

CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

BID SET

State of Florida
Professional Engineer
License No. 044693108
THOMAS F. ODONNELL

DRAWN BY: RB
DESIGNED BY: ADC
CHECKED BY: TFO
DATE: 08/28/2025
SCALE: AS NOTED
FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION
1	06/2026	AC	TFO	REVISED CBR VALUES AND METHOD OF MEASUREMENT.

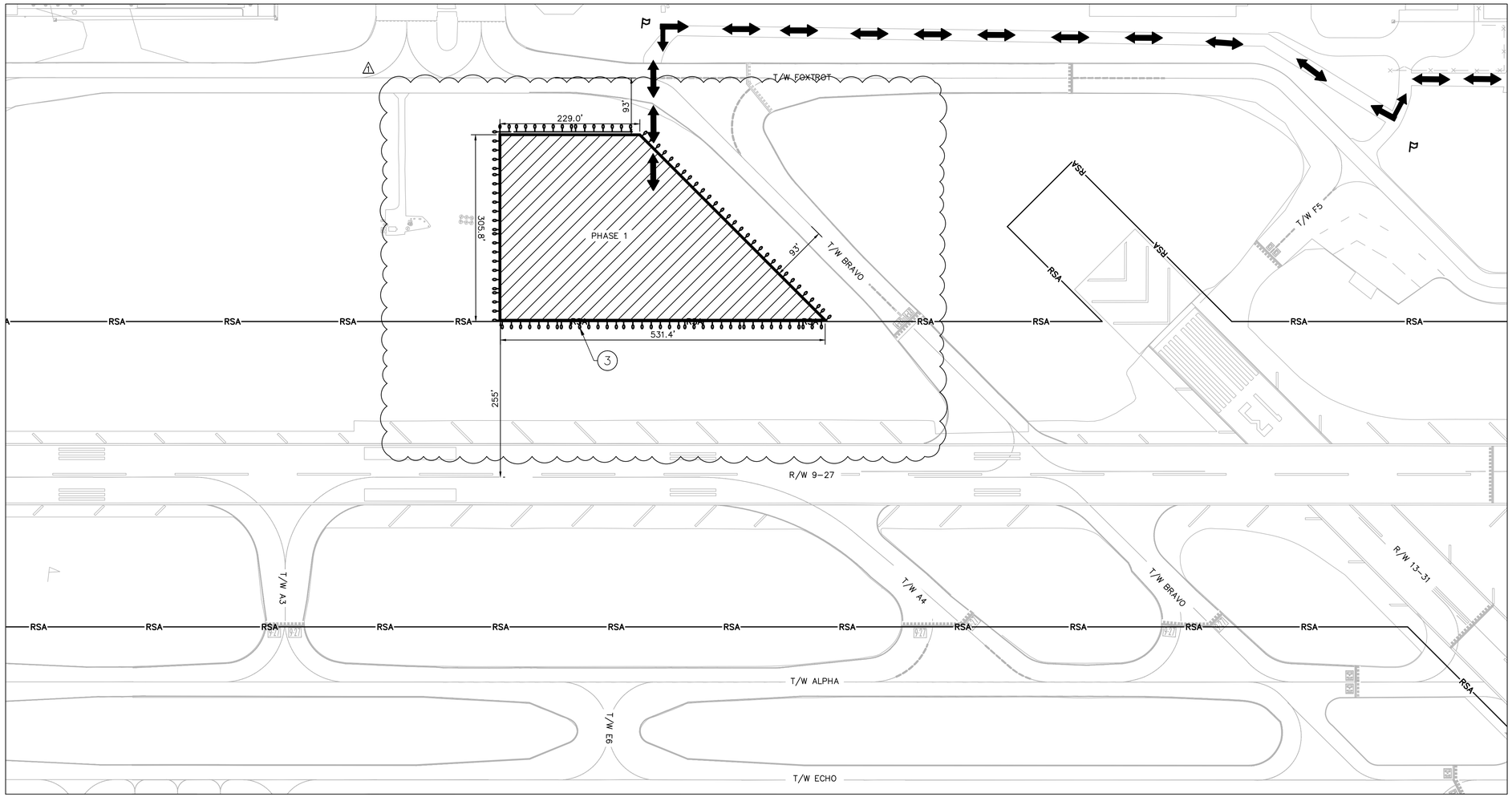
PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
SUMMARY OF QUANTITIES

SHEET NO. C02 OF

TOTAL: 41

CAD FILE: 12706-C02-QUAN

DRAWING FILE NO.



LEGEND

- PHASE 1 WORK LIMITS
- LOW LEVEL AIRFIELD BARRICADES SEE DETAIL 8 SHEET C06.
- TEMP. TAXIWAY CLOSURE MARKER SEE DETAIL 1 SHEET C06.
- TEMP. LIGHTED RUNWAY CLOSURE MARKER SEE DETAIL 4 SHEET C06.
- RSA — RUNWAY SAFETY AREA
- FLAG MAN
- HAUL ROUTE
- (1) LOCATION OF LIGHTED RUNWAY CLOSURE "X"
- (2) LOCATION OF TAXIWAY CLOSURE "X"
- (3) LOW LEVEL AIRFIELD BARRICADE AS REQUIRED TO CLOSE TAXIWAY. IN PLACE FOR DURATION OF SPECIFIED PHASE.
- (X) PHASE NUMBER

PRIMARY ITEMS OF WORK*

1. SUBMIT AND COMPLETE THE REVIEW PROCESS FOR ALL SHOP DRAWINGS AND SUBMITTALS.
2. INSTALL ANY SIGNAGE AS REQUIRED.
3. PREPARE EXISTING STAGING AREA.
4. INSTALL FABRIC TO EXISTING STAGING AREA FENCING AND IMPLEMENT OTHER SECURITY MEASURES.
5. INSTALL STORMWATER POLLUTION PREVENTION (SWPP) MEASURES.
6. PERFORM CONTRACTOR'S QUALITY CONTROL WORKSHOP.
7. PROCURE AND RECEIVE ALL ELECTRICAL ITEMS AND COMPONENTS. INVENTORIED, STAGED, AND STORED ON SITE.
8. PERFORM PRE-CONSTRUCTION MEETING.
9. COVER EXISTING LIGHTS THAT ARE TO REMAIN.

⚠

PRIMARY ITEMS OF WORK*

1. INSTALL BARRICADES AS REQUIRED
2. DISABLE OR COVER EXISTING LIGHTS AND SIGNS WITHIN CLOSED WORK AREAS AND/OR THAT DIRECT TRAFFIC TO A WORK AREA.
3. PERFORM FULL DEPTH INFIELD EXCAVATION.
4. COMPACT IN SITU SUBGRADE, INSTALL P-154 SUBBASE AND P-211 LIMEROCK.
5. PERFORM ELECTRICAL INSTALLATION.
6. INSTALL P-154 STABILIZED SHOULDERS.

*THIS LIST IS NOT EXHAUSTIVE NOR SEQUENTIAL; IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE PROJECT AND CONTRACT DOCUMENTS TO PERFORM ALL REQUIRED WORK IN ITS APPROPRIATE SEQUENCE.

PHASE M (MOBILIZATION)

OPERATIONS

ALL WORK, WITH THE EXCEPTION OF INSTALLATION OF SWPP MEASURES, WILL BE PERFORMED OUTSIDE OF THE AIRPORT SAFETY AREAS AND PROTECTED SURFACES. ALL AIRPORT INFRASTRUCTURE TO REMAIN OPEN. WORK WILL BE PERFORMED 8.5 HOURS PER DAY, MONDAY THROUGH FRIDAY, 7:00 AM TO 4:30 PM.

FOR THE INSTALLATION OF SWPP MEASURES, THE CONTRACTOR IS TO COORDINATE WITH AIRPORT STAFF REGARDING ACCESS AND CLOSURE OF AIRPORT INFRASTRUCTURE. ALL CLOSURES WILL BE "ROLLING" AND CONTROLLED BY AIRPORT OPERATIONS STAFF. CONTRACTOR TO COORDINATE CLOSELY WITH AIRPORT OPERATIONS STAFF DURING CLOSURES. WORK TIMES ARE REFERENCED FROM START OF SHIFT.

LIMITS OF WORK

WITH THE EXCEPTION OF THE INSTALLATION OF SWPP MEASURES, THE LIMITS OF THIS WORK AREA WILL CONSIST OF THE EXISTING ACCESS POINT AND THE CONTRACTOR'S STAGING AREA.

WORK SEQUENCING

WORK IN THIS AREA WILL BE PERFORMED SEQUENTIALLY AFTER NTP.

PHASE 1

OPERATIONS

CONSTRUCTION IN THE WORK AREA SHOWN WILL NOT REQUIRE THE CLOSURE TO ANY EXISTING RUNWAYS OR TAXIWAYS. CROSSINGS OF ACTIVE TAXIWAYS WILL BE COORDINATING WITH AIRPORT OPERATIONS. WORK WILL BE PERFORMED FROM 7:00 AM TO 4:30 PM MONDAY THROUGH FRIDAY. WORK TIMES ARE REFERENCED FROM START OF SHIFT.

CONTRACTOR TO COORDINATE BARRICADE PLACEMENT WITH AIRPORT STAFF AND RESIDENT PROJECT REPRESENTATIVE. BARRICADE LOCATIONS ARE SCHEMATIC AND MAY BE ADJUSTED OR ADDED IN THE FIELD AS NECESSARY FOR THE COMPLETION OF THE WORK.

LIMITS OF WORK

THE LIMITS OF THIS PHASE ARE 93' WEST OF THE EXISTING TAXIWAY BRAVO CENTERLINE NORTH OF THE RUNWAY 9-27 RSA.

WORK SEQUENCING

WORK IN THIS AREA WILL BE PERFORMED SEQUENTIALLY AFTER THE COMPLETION OF THE MOBILIZATION PHASE AFTER CONSTRUCTION NTP IS PROVIDED.

0 60' 120'

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.
CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
2755 VISTA PARKWAY SUITE I-9
WEST PALM BEACH, FL 33411
561-210-9224
LICENSE NO. CA30805

BID SET

K:\FTL_AVIATION\044693108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-C06-PHAS1.DWG

State of Florida
Professional Engineer
License No. 044693108
THOMAS F. ODONNELL

DRAWN BY: RB | DATE: 08/28/2025
DESIGNED BY: ADC | SCALE: AS NOTED
CHECKED BY: TFO
FIELD BOOK:

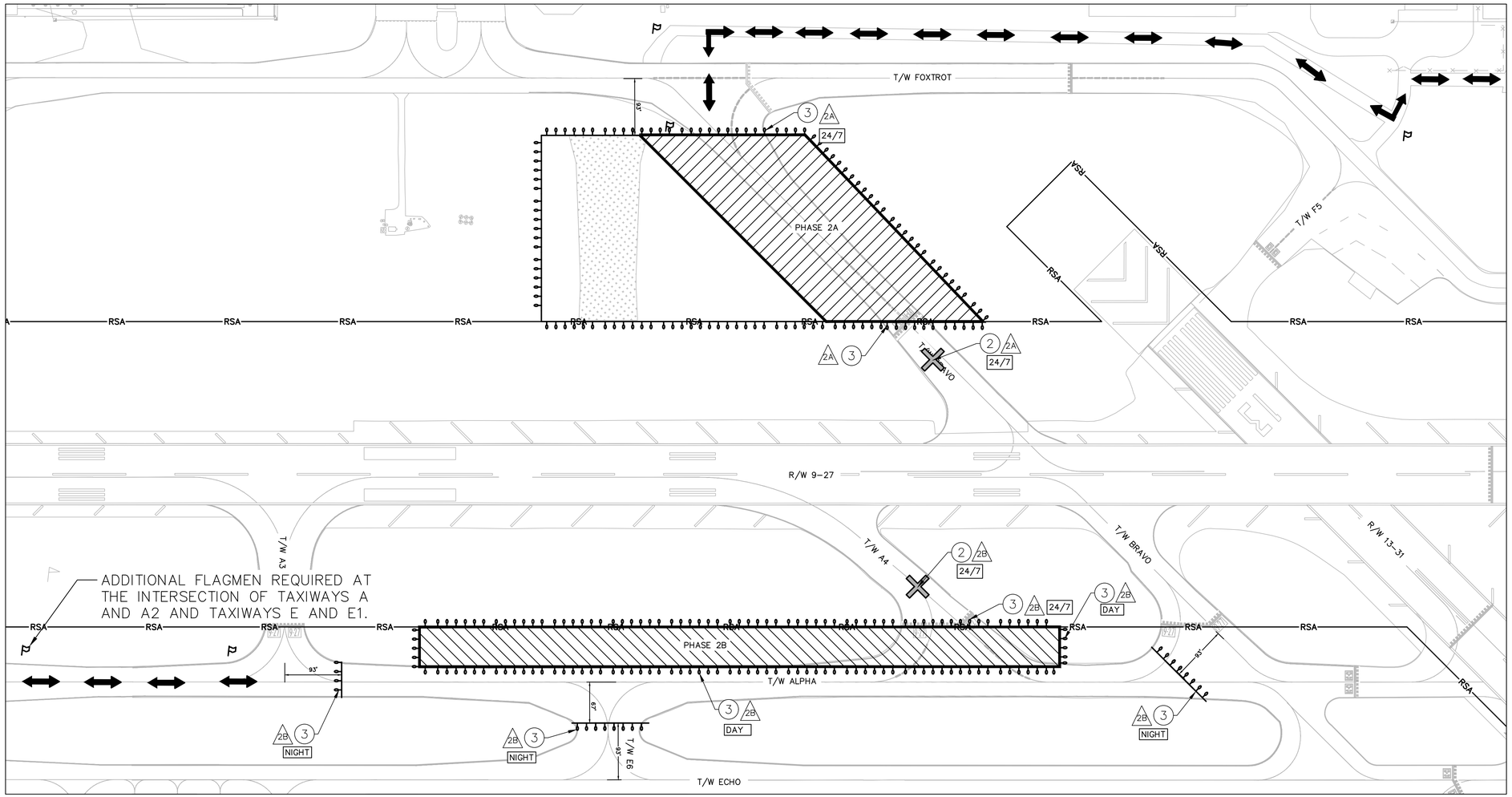
CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION
1	05/06/2026	AC	TFO	REVISED, DIR. VALUE, METHOD OF MEASUREMENT, PHASING.

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
PHASING PLAN 1

SHEET NO. C06 | OF
TOTAL: 41
CAD FILE: 12706-C06-PHAS1
DRAWING FILE NO.



LEGEND

- PHASE 2A WORK LIMITS
- PHASE 2B WORK LIMITS
- COMPLETED WORK
- LOW LEVEL AIRFIELD BARRICADES SEE DETAIL 8 SHEET C06.
- TEMP. TAXIWAY CLOSURE MARKER SEE DETAIL 1 SHEET C06.
- TEMP. LIGHTED RUNWAY CLOSURE MARKER SEE DETAIL 4 SHEET C06.
- RSA — RUNWAY SAFETY AREA
- FLAG MAN
- HAUL ROUTE
- 1 — LOCATION OF LIGHTED RUNWAY CLOSURE "X"
- 2 — LOCATION OF TAXIWAY CLOSURE "X"
- 3 — LOW LEVEL AIRFIELD BARRICADE AS REQUIRED TO CLOSE TAXIWAY. IN PLACE FOR DURATION OF SPECIFIED PHASE.
- X — PHASE NUMBER
- XXXX — THIS LEGEND DESCRIBES THE TIMES AND DAYS WHEN THIS TRAFFIC CONTROL MEASURE WILL BE DEPLOYED. NIGHT = 10 PM TO 7 AM, NIGHTLY, SUNDAY THROUGH THURSDAY. DAY = 7 AM TO 10 PM, DAILY, MONDAY THROUGH FRIDAY AND 24 HOURS PER DAY ON THE WEEKEND. 24/7 = 24 HOURS PER DAY FOR THE DURATION OF THE PHASE.

PHASE 2A

PRIMARY ITEMS OF WORK*

1. INSTALL BARRICADES AND TAXIWAY CLOSURE MAKERS AS DIRECTED BY FXE OPERATIONS.
2. PERFORM P-101 FULL DEPTH PAVEMENT DEMOLITION AND P-152 INFIELD EXCAVATION.
3. PERFORM ELECTRICAL DEMOLITION.
4. COMPACT IN SITU SUBGRADE.
5. INSTALL P-152 EMBANKMENT, T-904 SOD, AND S-906 HYDROSEED.

*THIS LIST IS NOT EXHAUSTIVE NOR SEQUENTIAL; IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE PROJECT AND CONTRACT DOCUMENTS TO PERFORM ALL REQUIRED WORK IN ITS APPROPRIATE SEQUENCE.

OPERATIONS

CONSTRUCTION IN THE PHASE SHOWN WILL REQUIRE THE CLOSURE OF EXISTING TAXIWAY BRAVO NORTH OF THE RUNWAY 9-27 RSA FOR THE DURATION OF THIS PHASE. TAXIWAY FOXTROT AND RUNWAY 9-27 WILL REMAIN OPEN DURING THIS PHASE. WORK WILL BE PERFORMED 8.5 HOURS PER DAY, MONDAY THROUGH FRIDAY, 7:00 AM TO 4:30 PM.

CONTRACTOR TO COORDINATE BARRICADE AND TAXIWAY CLOSURE MARKER PLACEMENT WITH AIRPORT STAFF AND RESIDENT PROJECT REPRESENTATIVE. BARRICADE LOCATIONS ARE SCHEMATIC AND MAY BE ADJUSTED OR ADDED IN THE FIELD AS NECESSARY FOR THE COMPLETION OF THE WORK.

LIMITS OF WORK

THE LIMITS OF THIS PHASE IS THE AREA NORTH OF THE RUNWAY 9-27 RSA AND SOUTH OF 93' SOUTH OF THE TAXIWAY FOXTROT CENTERLINE. THE HORIZONTAL LIMITS OF THIS PHASE MATCH THE PROJECT LIMITS IN THIS AREA.

WORK SEQUENCING

WORK IN THIS PHASE WILL BE PERFORMED SEQUENTIALLY AFTER THE COMPLETION OF PHASE 1.

PHASE 2B

PRIMARY ITEMS OF WORK*

1. INSTALL BARRICADES AND TAXIWAY CLOSURE MARKERS NIGHTLY AS DIRECTED BY FXE OPERATIONS.
2. DISABLE OR COVER EXISTING LIGHTS AND SIGNS WITHIN CLOSED WORK AREAS AND/OR THAT DIRECT TRAFFIC TO A WORK AREA.
3. PERFORM P-101 FULL DEPTH PAVEMENT DEMOLITION AND P-152 INFIELD EXCAVATION.
4. PERFORM ELECTRICAL DEMOLITION.
5. COMPACT IN SITU SUBGRADE, INSTALL P-154 SUBBASE AND P-211 LIMEROCK.
6. PERFORM ELECTRICAL INSTALLATION.
7. INSTALL P-211 LIME ROCK TRANSITION WEDGES.
8. INSTALL P-154 STABILIZED SHOULDERS.
9. INSTALL T-905 TOPSOIL, T-904 SOD, AND S-906 HYDROSEED.
10. INSTALL TRANSITION WEDGES IN WORK AREA AS NEEDED AT THE END OF EACH SHIFT.

*THIS LIST IS NOT EXHAUSTIVE NOR SEQUENTIAL; IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE PROJECT AND CONTRACT DOCUMENTS TO PERFORM ALL REQUIRED WORK IN ITS APPROPRIATE SEQUENCE.

OPERATIONS

CONSTRUCTION IN THE PHASE SHOWN WILL REQUIRE THE CLOSURE OF TAXIWAY A4 FOR THE DURATION OF THIS PHASE AND THE NIGHTLY CLOSURE OF TAXIWAY ALPHA AND E6 IN THE LIMITS AS SHOWN ABOVE. CONTRACTOR TO ADDRESS ALL DROPOFFS WITH LIMEROCK WEDGES AS DIRECTED BY OWNER OR RPR. WORK WILL ALLOW TAXIWAY ALPHA AND E6 TO BE REOPENED EACH MORNING AT 7:00 AM. WORK WILL BE PERFORMED NIGHTLY, FROM 10:00 PM TO 7:00 AM.

CONTRACTOR TO COORDINATE BARRICADE AND TAXIWAY CLOSURE MARKER PLACEMENT WITH AIRPORT STAFF AND RESIDENT PROJECT REPRESENTATIVE. BARRICADE LOCATIONS ARE SCHEMATIC AND MAY BE ADJUSTED OR ADDED IN THE FIELD AS NECESSARY FOR THE COMPLETION OF THE WORK.

LIMITS OF WORK

THE LIMITS OF THIS PHASE ARE SOUTH OF THE RUNWAY 9-27 RSA AND NORTH OF THE NORTH EDGE OF TAXIWAY ALPHA, THE HORIZONTAL LIMITS OF THIS PHASE MATCH THE PROJECT LIMITS IN THIS AREA.

WORK SEQUENCING

WORK IN THIS AREA WILL BE PERFORMED SEQUENTIALLY AFTER THE COMPLETION OF PHASE 2A.

0 60' 120'

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.
CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2026 KIMLEY-HORN AND ASSOCIATES, INC.
8201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
2755 VISTA PARKWAY SUITE 1-9
WEST PALM BEACH, FL 33411
561-210-9224
LICENSE NO. CA30005

BID SET

K:\FTL_AVIATION\044693108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-C07-PHAS2.DWG

State of Florida
Professional Engineer
License No. 044693108
THOMAS F. ODONNELL

DRAWN BY:	DATE:
RB	08/28/2025
DESIGNED BY:	SCALE:
ADC	AS NOTED
CHECKED BY:	
TFO	
FIELD BOOK:	

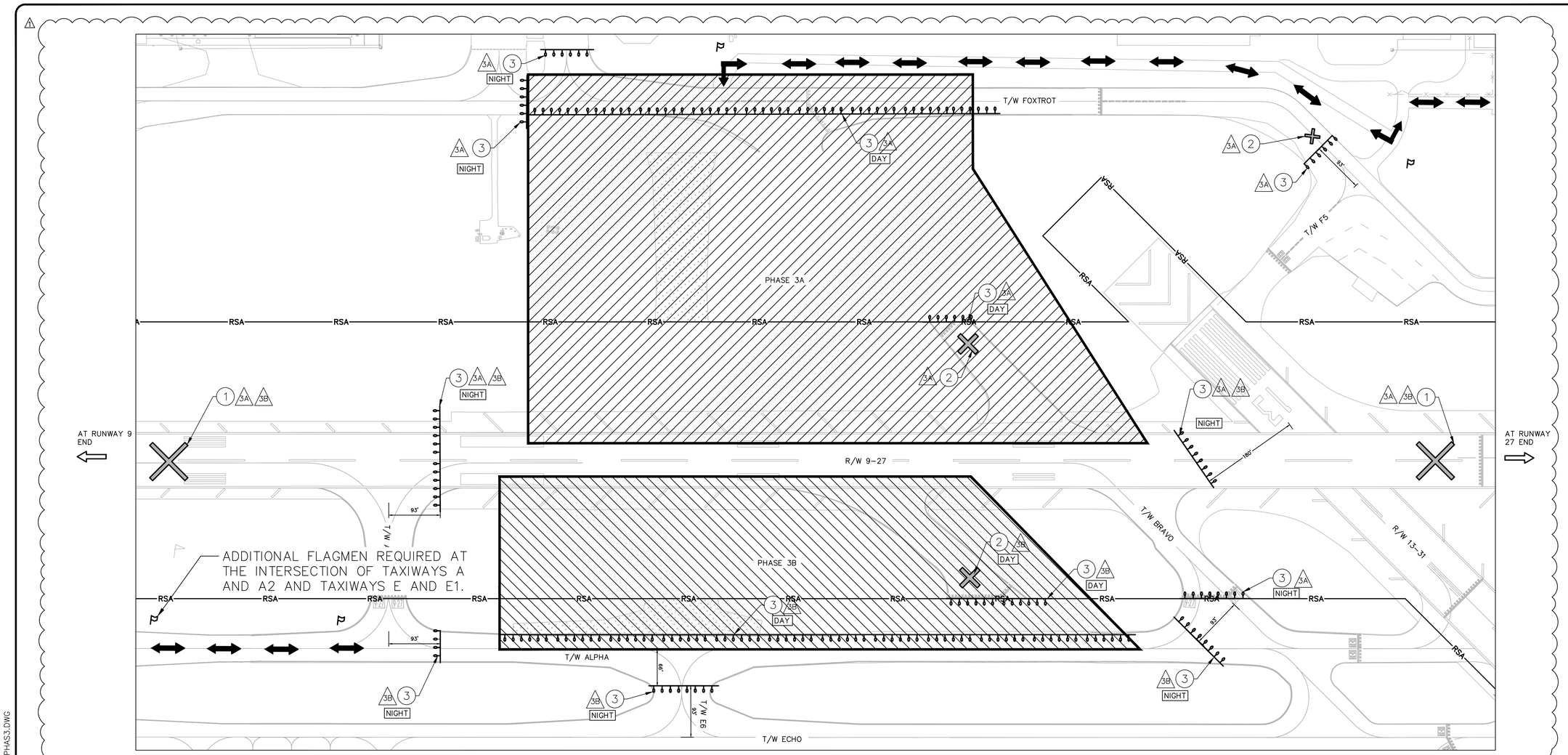
CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	05/06/2026	AC	CHK'D TFO REVISED QTY, VALUE, METHOD OF MEASUREMENT, PHASING.

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
PHASING PLAN 2

SHEET NO.	OF
C07	
TOTAL:	41
CAD FILE: 12706-C07-PHAS2	
DRAWING FILE NO.	



LEGEND

- PHASE 3A WORK LIMITS
- PHASE 3B WORK LIMITS
- COMPLETED WORK
- LOW LEVEL AIRFIELD BARRICADES SEE DETAIL 8 SHEET C06.
- TEMP. TAXIWAY CLOSURE MARKER SEE DETAIL 1 SHEET C06.
- TEMP. LIGHTED RUNWAY CLOSURE MARKER SEE DETAIL 4 SHEET C06.
- RSA — RUNWAY SAFETY AREA
- FLAG MAN
- HAUL ROUTE
- (1) LOCATION OF LIGHTED RUNWAY CLOSURE "X"
- (2) LOCATION OF TAXIWAY CLOSURE "X"
- (3) LOW LEVEL AIRFIELD BARRICADE AS REQUIRED TO CLOSE TAXIWAY. IN PLACE FOR DURATION OF SPECIFIED PHASE.
- X — PHASE NUMBER
- XXXX — THIS LEGEND DESCRIBES THE TIMES AND DAYS WHEN THIS TRAFFIC CONTROL MEASURE WILL BE DEPLOYED. NIGHT = 10 PM TO 7 AM, NIGHTLY, SUNDAY THROUGH THURSDAY. DAY = 7 AM TO 10 PM, DAILY, MONDAY THROUGH FRIDAY AND 24 HOURS PER DAY ON THE WEEKEND. 24/7 = 24 HOURS PER DAY FOR THE DURATION OF THE PHASE.

PRIMARY ITEMS OF WORK*

1. INSTALL BARRICADES, TAXIWAY CLOSURE MARKER AND LIGHTED XS AS NOTED OR AS DIRECTED BY FXE OPERATIONS.
2. DISABLE OR COVER EXISTING LIGHTS AND SIGNS WITHIN CLOSED WORK AREAS AND/OR THAT DIRECT TRAFFIC TO A WORK AREA.
3. PERFORM P-101 FULL DEPTH PAVEMENT DEMOLITION AND P-152 INFIELD EXCAVATION.
4. PERFORM ELECTRICAL DEMOLITION.
5. COMPACT IN SITU SUBGRADE, INSTALL P-154 SUBBASE, AND P-211 LIME ROCK BASE COURSES.
6. PERFORM ELECTRICAL INSTALLATION.
7. INSTALL P-154 STABILIZED SHOULDERS.
8. PERFORM P-401 PAVING.
9. INSTALL P-620 TEMPORARY PAVEMENT MARKINGS.
10. INSTALL T-905 TOPSOIL, T-904 SOD AND S-906 HYDROSEED.
11. INSTALL TRANSITION WEDGES IN WORK AREA AS NEEDED AT THE END OF EACH SHIFT.

*THIS LIST IS NOT EXHAUSTIVE NOR SEQUENTIAL; IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE PROJECT AND CONTRACT DOCUMENTS TO PERFORM ALL REQUIRED WORK IN ITS APPROPRIATE SEQUENCE.

PRIMARY ITEMS OF WORK*

1. INSTALL BARRICADES, TAXIWAY CLOSURE MARKER AND LIGHTED XS AS NOTED OR AS DIRECTED BY FXE OPERATIONS.
2. DISABLE OR COVER EXISTING LIGHTS AND SIGNS WITHIN CLOSED WORK AREAS AND/OR THAT DIRECT TRAFFIC TO A WORK AREA.
3. PERFORM P-101 FULL DEPTH PAVEMENT DEMOLITION AND P-152 INFIELD EXCAVATION.
4. PERFORM ELECTRICAL DEMOLITION.
5. COMPACT IN SITU SUBGRADE, INSTALL P-154 SUBBASE, AND P-211 LIME ROCK BASE COURSES.
6. PERFORM ELECTRICAL INSTALLATION.
7. INSTALL P-154 STABILIZED SHOULDERS.
8. PERFORM P-401 PAVING.
9. INSTALL P-620 TEMPORARY PAVEMENT MARKINGS.
10. INSTALL T-905 TOPSOIL, T-904 SOD AND S-906 HYDROSEED.
11. INSTALL TRANSITION WEDGES IN WORK AREA AS NEEDED AT THE END OF EACH SHIFT.

*THIS LIST IS NOT EXHAUSTIVE NOR SEQUENTIAL; IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE PROJECT AND CONTRACT DOCUMENTS TO PERFORM ALL REQUIRED WORK IN ITS APPROPRIATE SEQUENCE.

PHASE 3A

OPERATIONS

CONSTRUCTION IN THE PHASE SHOWN WILL REQUIRE THE NIGHTLY CLOSURE OF RUNWAY 9-27 AND TAXIWAY FOXTROT BETWEEN TW F5 AND THE WESTERN BARRICADE SHOWN ABOVE. CONTRACTOR TO ADDRESS ALL DROPOFFS WITH LIMEROCK WEDGES AS DIRECTED BY OWNER OR RPR. WORK AND WILL ALLOW RUNWAY 9-27 AND TAXIWAY FOXTROT TO BE REOPENED EACH MORNING AT 6:00 AM. WORK WILL BE PERFORMED NIGHTLY, FROM 10:00 PM TO 6:00 AM.

CONTRACTOR TO COORDINATE BARRICADE PLACEMENT WITH AIRPORT STAFF AND RESIDENT PROJECT REPRESENTATIVE. BARRICADE LOCATIONS ARE SCHEMATIC AND MAY BE ADJUSTED OR ADDED IN THE FIELD AS NECESSARY FOR THE COMPLETION OF THE WORK.

LIMITS OF WORK

THE LIMITS OF THIS PHASE IS THE AREA NORTH OF THE RUNWAY 9-27 NORTH EDGE AND SOUTH OF THE TAXIWAY FOXTROT CENTERLINE. THE HORIZONTAL LIMITS OF THIS PHASE MATCH THE PROJECT LIMITS IN THIS AREA.

WORK SEQUENCING

WORK IN THIS PHASE WILL BE PERFORMED SEQUENTIALLY AFTER THE COMPLETION OF PHASE 2B.

PHASE 3B

OPERATIONS

CONSTRUCTION IN THE PHASE SHOWN WILL REQUIRE THE NIGHTLY CLOSURE OF RUNWAY 9-27 AND TAXIWAY ALPHA BETWEEN TW A3 AND THE EASTERN BARRICADE SHOWN ABOVE. CONTRACTOR TO ADDRESS ALL DROPOFFS WITH LIMEROCK WEDGES AS DIRECTED BY OWNER OR RPR. WORK WILL ALLOW RUNWAY 9-27 AND TAXIWAY ALPHA TO BE REOPENED EACH MORNING AT 6:00 AM. WORK WILL BE PERFORMED NIGHTLY, FROM 10:00 PM TO 6:00 AM.

CONTRACTOR TO COORDINATE BARRICADE PLACEMENT WITH AIRPORT STAFF AND RESIDENT PROJECT REPRESENTATIVE. BARRICADE LOCATIONS ARE SCHEMATIC AND MAY BE ADJUSTED OR ADDED IN THE FIELD AS NECESSARY FOR THE COMPLETION OF THE WORK.

LIMITS OF WORK

THE LIMITS OF THIS PHASE ARE SOUTH OF THE RUNWAY 9-27 SOUTH EDGE AND NORTH OF THE TAXIWAY ALPHA CENTERLINE, THE HORIZONTAL LIMITS OF THIS PHASE MATCH THE PROJECT LIMITS IN THIS AREA.

WORK SEQUENCING

WORK IN THIS AREA WILL BE PERFORMED SEQUENTIALLY AFTER THE COMPLETION OF PHASE 3A.

0 60' 120'

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.
CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
2755 VISTA PARKWAY SUITE I-9
WEST PALM BEACH, FL 33411
561-210-9224
LICENSE NO. CA36005

BID SET

K:\FTL_AVIATION\044693108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-C08-PHAS3.DWG

State of Florida
Professional Engineer
License No. 044693108
THOMAS F. ODONNELL

DRAWN BY: RB | DATE: 08/28/2025
DESIGNED BY: ADC | SCALE: AS NOTED
CHECKED BY: TFO | FIELD BOOK:

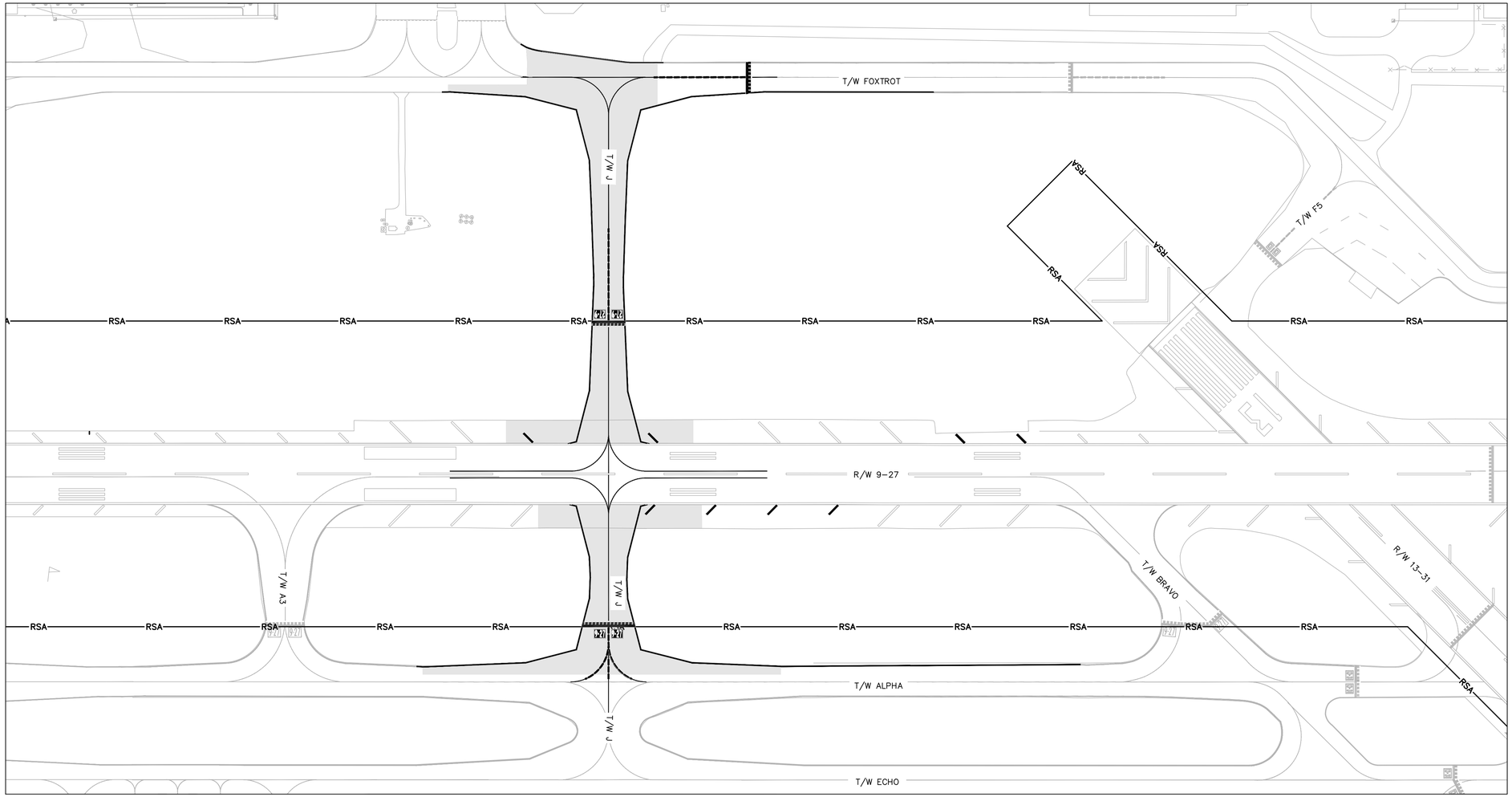
CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION
1	05/06/2026	AC	TFO	REVISED QRF VALUE, METHOD OF MEASUREMENT, PHASING.

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
PHASING PLAN 3

SHEET NO. C08 | OF
TOTAL: 41
CAD FILE: 12706-C08-PHAS3
DRAWING FILE NO.



LEGEND

- LIMITS OF NEW PAVEMENT
- LOW LEVEL AIRFIELD BARRICADES SEE DETAIL 8 SHEET C06.
- TEMP. TAXIWAY CLOSURE MARKER SEE DETAIL 1 SHEET C06.
- TEMP. LIGHTED RUNWAY CLOSURE MARKER SEE DETAIL 4 SHEET C06.
- RSA — RUNWAY SAFETY AREA
- FLAG MAN
- HAUL ROUTE
- 1 — LOCATION OF LIGHTED RUNWAY CLOSURE "X"
- 2 — LOCATION OF TAXIWAY CLOSURE "X"
- 3 — LOW LEVEL AIRFIELD BARRICADE AS REQUIRED TO CLOSE TAXIWAY. IN PLACE FOR DURATION OF SPECIFIED PHASE.
- X — PHASE NUMBER

PHASE 4

PRIMARY ITEMS OF WORK*

1. INSTALL BARRICADES, TAXIWAY CLOSURE MARKINGS, AND LIGHTED "Xs" AS DIRECTED BY AIRPORT OPERATIONS STAFF.
2. ALLOW ASPHALT TO CURE FOR 30 DAY.
3. INSTALL REMAINING SOD AND HYDROSEED.
4. PERFORM PUNCHLIST WORK.
5. INSTALL P-620 PERMANENT PAVEMENT MARKINGS.

*THIS LIST IS NOT EXHAUSTIVE NOR SEQUENTIAL; IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE PROJECT AND CONTRACT DOCUMENTS TO PERFORM ALL REQUIRED WORK IN ITS APPROPRIATE SEQUENCE.

OPERATIONS

CONSTRUCTION IN THE WORK AREA SHOWN WILL REQUIRE THE PERIODIC CLOSURES OF RUNWAY 9-27, TAXIWAYS ALPHA, FOXTROT, AND JULIET. THE EXACT LIMITS OF WORK AREAS WILL BE DETERMINED IN THE FIELD BY AIRPORT OPERATIONS STAFF AND/OR THE RPR. RUNWAYS 13-31 AND TAXIWAYS E ARE TO REMAIN OPEN AT ALL TIMES. WORK WILL BE PERFORMED 8.5 HOURS PER DAY, MONDAY THROUGH FRIDAY, 7:30 AM TO 4:00 PM. BARRICADES, TAXIWAY CLOSURE MARKERS, AND LIGHTED "Xs" HAVE BEEN INTENTIONALLY OMITTED FROM VTHIS DRAWING FOR CLARITY. THE CONTRACTOR IS TO USE THE SAME LEVEL OF EFFORT AND VOLUME AS PRIOR PHASES TO CLOSE INFRASTRUCTURE. CONTRACTOR TO COORDINATE BARRICADE AND CLOSURE MARKING PLACEMENT WITH AIRPORT STAFF AND RESIDENT PROJECT REPRESENTATIVE.

LIMITS OF WORK

THE LIMITS OF THIS PHASE ARE THE FULL LIMITS OF THE PROJECT ON A PULL BACK BASIS OR WITH CLOSURE MEASURES AS DIRECTED BY AIRPORT OPERATIONS STAFF AND/OR THE RPR.

WORK SEQUENCING

WORK IN THIS AREA WILL BE PERFORMED SEQUENTIALLY AFTER THE COMPLETION OF PHASE 3A AND 3B. PERMANENT PAINT MARKING INSTALLATION WILL BE PERFORMED SEQUENTIALLY AFTER THE 30 DAY ASPHALT CURING PERIOD.

0 60' 120'

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.

CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2025 KIMLEY-HORN AND ASSOCIATES, INC.
6201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM Electrical Engineering, Inc.
2755 VISTA PARKWAY SUITE I-9
WEST PALM BEACH, FL 33411
561-210-9224
LICENSE NO. CA30805

BID SET

State of Florida
Professional Engineer
License No. 044693108
THOMAS F. ODONNELL

DRAWN BY: RB | DATE: 08/28/2025
DESIGNED BY: ADC | SCALE: AS NOTED
CHECKED BY: TFO | FIELD BOOK:

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

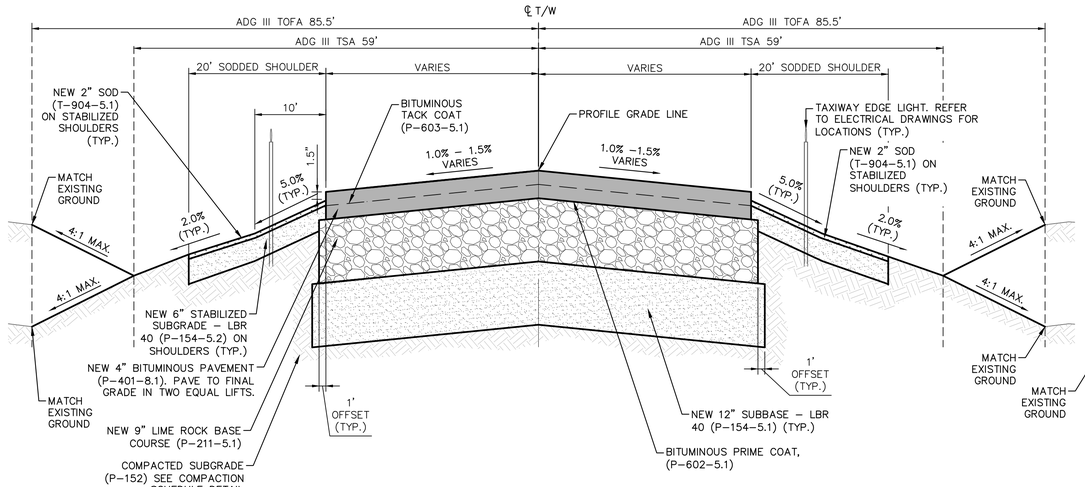
REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION
1	05/06/2026	AC	TFO	REVISED QTR. VALUE, METHOD OF MEASUREMENT, PHASING.

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
PHASING PLAN 4

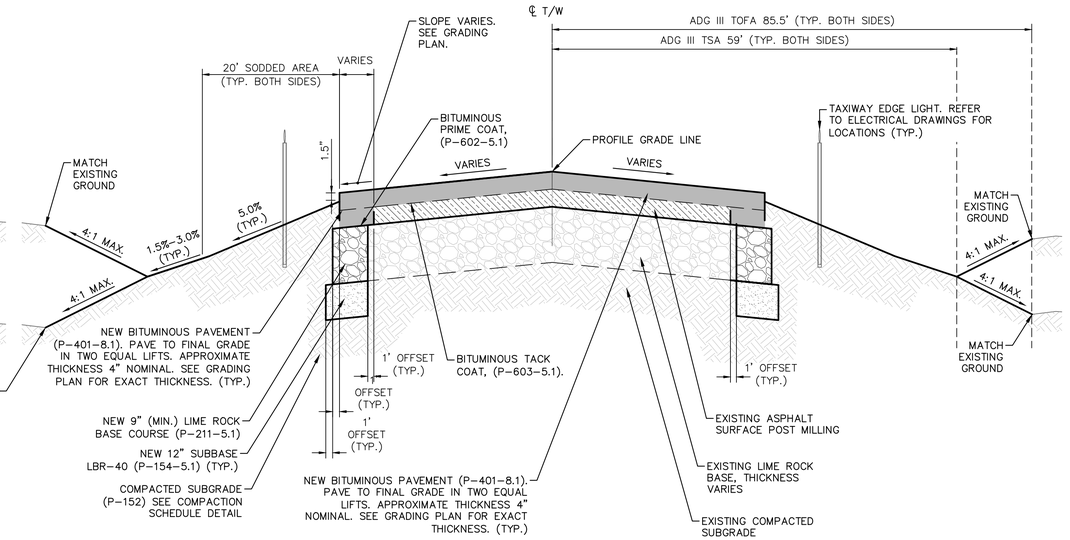
SHEET NO. C09 | OF
TOTAL: 41
CAD FILE: 12706-C09-PHAS4
DRAWING FILE NO.

K:\FTL_AVIATION\044693108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-C09-PHAS4.DWG



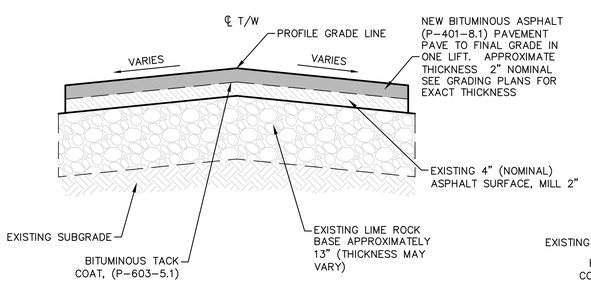
TYPICAL SECTION NO. 1 – FULL DEPTH TAXIWAY CONSTRUCTION

N.T.S.



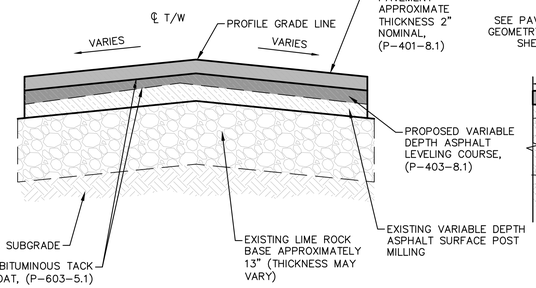
TYPICAL SECTION NO. 2 – NEW PAVEMENT ADJACENT TO MILL AND OVERLAY

N.T.S.



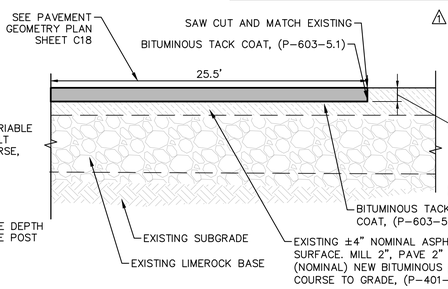
TYPICAL SECTION NO. 3 – 2" MILL AND 2" OVERLAY

N.T.S.



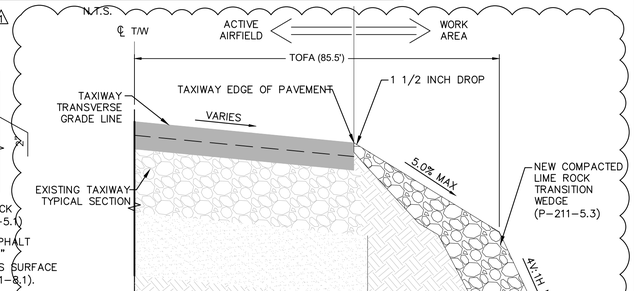
TYPICAL SECTION NO. 4 – 2" MILL AND 2" OVERLAY WITH VARIABLE DEPTH LEVELLING COURSE

N.T.S.



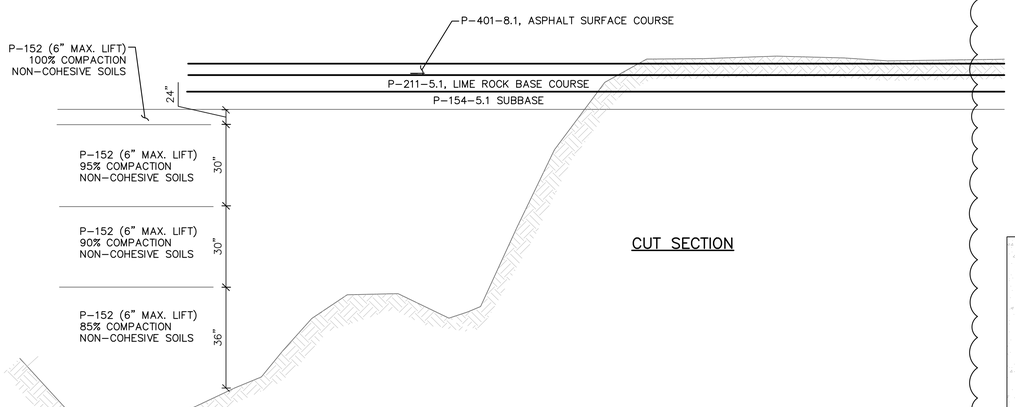
DETAIL 1 – BUTT JOINT OVERLAY TRANSITION TO EXISTING (MILL 2", PAVE 2")

N.T.S.



DETAIL 2 – LIME ROCK TRANSITION WEDGE AT TAXIWAY EDGE

N.T.S.



CUT SECTION

FILL SECTION

COMPACTION SCHEDULE

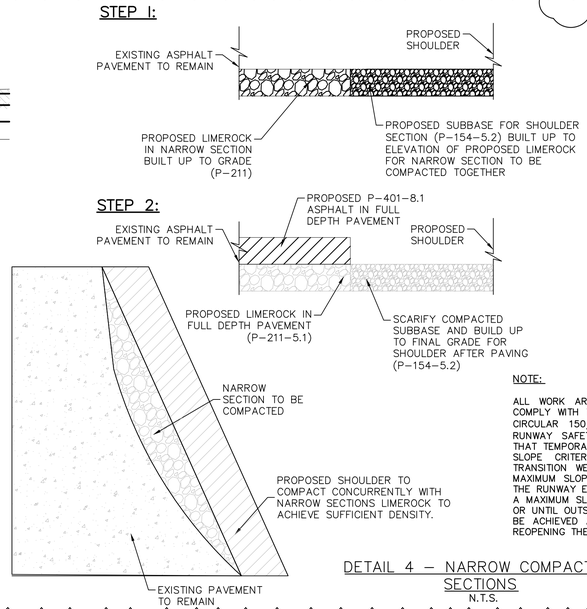
N.T.S.

COMPACTION SCHEDULE NOTES:

THE SUBGRADE IN CUT AREAS SHALL HAVE NATURAL DENSITIES SHOWN, SHALL BE COMPACTED FROM THE SURFACE TO ACHIEVE THE REQUIRED DENSITIES, OR SHALL BE REMOVED AND REPLACED IN WHICH CASE THE MINIMUM DENSITIES FOR FILLS APPLY. SEE SPECIFICATION P-152 FOR OVER EXCAVATION REQUIREMENTS.

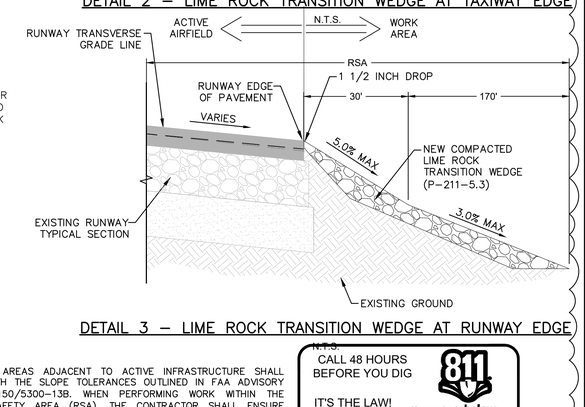
NON-COHESIVE SOILS, FOR THE PURPOSE OF DETERMINING COMPACTION, ARE THOSE WITH A P.I. < 3.

UNDER AREAS THAT WILL NOT BE PAVED, ROLLING OPERATIONS SHALL BE CONTINUED UNTIL THE EMBANKMENT IS COMPACTED TO NOT LESS THAT 95% OF MAXIMUM DENSITY FOR NON COHESIVE SOILS AND 90% OF MAXIMUM DENSITY FOR COHESIVE SOILS PER ITEM P-152.



DETAIL 4 – NARROW COMPACTION SECTIONS

N.T.S.



DETAIL 3 – LIME ROCK TRANSITION WEDGE AT RUNWAY EDGE

N.T.S.

NOTE:

ALL WORK AREAS ADJACENT TO ACTIVE INFRASTRUCTURE SHALL COMPLY WITH THE SLOPE TOLERANCES OUTLINED IN FAA ADVISORY CIRCULAR 150/5300-13B. WHEN PERFORMING WORK WITHIN THE RUNWAY SAFETY AREA (RSA), THE CONTRACTOR SHALL ENSURE THAT TEMPORARY AND FINAL GRADING CONDITIONS MEET ALLOWABLE SLOPE CRITERIA AT ALL TIMES. THE P-211-5.3 LIME ROCK TRANSITION WEDGES WITHIN THE RSA SHALL BE RESTORED TO A MAXIMUM SLOPE OF 5 PERCENT WITHIN THE FIRST 30 FEET FROM THE RUNWAY EDGE UNTIL THE END OF THE RUNWAY SHOULDER, AND A MAXIMUM SLOPE OF 3 PERCENT FOR THE SUBSEQUENT 170 FEET OR UNTIL OUTSIDE OF THE RSA. THESE SLOPE REQUIREMENTS SHALL BE ACHIEVED AT THE END OF EACH WORK SHIFT, AND PRIOR TO REOPENING THE RUNWAY TO AIRCRAFT OPERATIONS

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
Know what's below. Call before you dig.
SUNSHINE STATE ONE CALL OF FLORIDA, INC.
CALL 48 HOURS BEFORE DIGGING FAA FACILITIES 954-356-7212

Kimley»Horn
Kimley-Horn and Associates, Inc.
© 2026 KIMLEY-HORN AND ASSOCIATES, INC.
8201 PETERS RD., SUITE 2200, PLANTATION, FL 33324
REGISTRY No. 35106

QUANTUM
Electrical Engineering, Inc.
2755 VISTA PARKWAY SUITE I-9
WEST PALM BEACH, FL 33411
561-210-9224
LICENSE NO. CA30005

BID SET

State of Florida
Professional Engineer
License No. 044693108
THOMAS F. ODONNELL

DRAWN BY:	DATE:	SCALE:
RB	08/28/2025	AS NOTED
DESIGNED BY:	CHECKED BY:	
ADC	TFO	
FIELD BOOK:		

CITY OF FORT LAUDERDALE
PUBLIC WORKS DEPARTMENT
ENGINEERING & ARCHITECTURE
100 North Andrews Avenue, Fort Lauderdale, Florida 33301

REVISIONS

NO.	DATE	BY	CHK'D	DESCRIPTION
1	05/06/2026	AC	TFO	REVISED DIR. VALUE, METHOD OF MEASUREMENT, PHASING.

PROJECT # 12706
TAXIWAY B AND Q
REALIGNMENT
TYPICAL SECTIONS

SHEET NO.	OF
C16	
TOTAL:	41
CAD FILE: 12706-MULTI-TSEC	
DRAWING FILE NO.	

K:\FTL_AVIATION\044693108 - FXE TW B & Q REALIGNMENT\CAD\PLANSHEETS\12706-MULTI-TSEC.DWG

ITEM P-154 SUBBASE COURSE

DESCRIPTION

154-1.1 This item shall consist of a subbase course composed of granular materials constructed on a prepared subgrade or underlying course in accordance with these specifications, and in conformity with the dimensions and typical cross-section shown on the plans.

MATERIALS

154-2.1 Materials. The subbase material shall consist of hard durable particles or fragments of granular aggregates The material may be obtained from ***blending in situ materials with P-211 Lime Rock,*** gravel pits, stockpiles, or may be produced from a crushing and screening plant with proper blending. The materials from these sources shall meet the requirements for gradation, quality, and consistency. The material shall be free from vegetative matter, excessive amounts of clay, and other objectionable substances; uniformly blended; and be capable of being compacted into a dense, stable subbase.

The subbase material shall exhibit a California Bearing Ratio (CBR) value of at least ~~20~~ ***32 Lime Rock Bearing Ratio (LBR) value of 40)*** when tested in accordance with ASTM D1883 ***(FM 5-515)***. The subbase material shall meet the gradation specified in the table below.

1

THIS AREA HAS BEEN LEFT INTENTIONALLY BLANK

Subbase Gradation Requirements

Sieve designation	Percentage by weight passing sieves		Contractor's Final Gradation	Job Control Grading Band Tolerances[1] (Percent)
	Subbase Aggregate	~~Recycled pavement (RAP or RCO)~~		
3 inch (75 mm)	100			0
1 1/2 inch (37.5 mm)		~~100~~		0
3/4 inch (19.0 mm)	70-100	~~70-100~~		±10
No. 10 (2.00 mm)	20-100	~~20-100~~		±10
No. 40 (425 µm)	5-60	~~5-60~~		±5
No. 200 (75 µm)	0-15	~~[0-15]~~		±5

[1]The "Job Control Grading Band Tolerances" shall be applied to "Contractor's Final Gradation" to establish the job control grading band.

The portion of the material passing the No. 40 (425 µm) sieve shall have a liquid limit of not more than 25 and a plasticity index of not more than six (6) when tested in accordance with ASTM D4318.

154-2.2 Sampling and testing.

a. Aggregate base materials. Samples shall be taken by the Contractor per ASTM D75 for initial aggregate subbase requirements and gradation. Material shall meet the requirements in paragraphs 154-2.1. The Contractor shall submit to the Resident Project Representative (RPR) certified test results showing that the aggregate meets the Material requirements of this section. Tests shall be representative of the material to be used for the project.

b. Gradation requirements. The Contractor shall take at least one aggregate subbase sample per day in the presence of the RPR to check the final gradation. Samples shall be taken from the in-place, un-compacted material at sampling locations determined by the RPR on a random basis per ASTM D3665. Sampling shall be per ASTM D75 and tested per ASTM C136 and ASTM C117. Results shall be furnished to the RPR by the Contractor each day during construction. Material shall meet the requirements in paragraph 154-2.1.

154-2.3 Separation Geotextile. Not used

154-2.4 Geogrid. Not used.

CONSTRUCTION METHODS

154-3.1 General. The subbase course shall be placed where designated on the plans or as directed by the RPR. The material shall be shaped and thoroughly compacted within the tolerances specified.

Granular subbases which, due to grain sizes or shapes, are not sufficiently stable to support the construction equipment without movement, shall be mechanically modified to the depth necessary to provide stability as directed by the RPR. The mechanical modification shall include the addition of a fine-grained medium to bind the particles of the subbase material sufficiently to furnish a bearing strength, so the course will not deform under construction equipment traffic.

154-3.2 Preparing underlying course. Prior to constructing the subbase course, clean the underlying course or subgrade of all foreign substances. The surface of the underlying course or subgrade shall meet specified compaction and surface tolerances in accordance with Item P-152. Correct ruts, soft yielding spots in the underlying courses, and subgrade areas having inadequate compaction and/or deviations of the surface from the specified requirements, by loosening and removing soft or unsatisfactory material, adding approved material, reshaping to line and grade, and recompacting to specified density requirements. For cohesionless underlying courses or subgrades containing sands or gravels, as defined in ASTM D2487, the surface shall be stabilized prior to placement of the overlying course by mixing the overlying course material into the underlying course, and compacting by approved methods. The stabilized material shall be considered as part of the underlying course and shall meet all requirements for the underlying course. The finished underlying course shall not be disturbed by traffic or other operations and shall be maintained in a satisfactory condition until the overlying course is placed. The underlying course shall be checked and accepted by the RPR before placing and spreading operations are started.

To protect the subgrade and to ensure proper drainage, spreading of the subbase shall begin along the centerline of the pavement on a crowned section or on the high side of pavements with a one-way slope.

154-3.3 Control Strip. The first half-day of subbase construction shall be considered as a control strip for the Contractor to demonstrate, in the presence of the RPR, that the materials, equipment, and construction processes meet the requirements of this specification. The sequence and manner of rolling necessary to obtain specified density requirements shall be determined. The maximum compacted thickness may be increased to a maximum of 12 inches (300 mm) upon the Contractor's demonstration that approved equipment and operations will uniformly compact the lift to the specified density. The RPR must witness this demonstration and approve the lift thickness prior to full production.

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. 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.

154-3.4 Placement. The material shall be placed and spread on the prepared underlying layer by spreader boxes or other devices as approved by the RPR, to a uniform thickness and width. The equipment shall have positive thickness controls to minimize the need for additional manipulation of the material. Dumping from vehicles that require re-handling shall not be

permitted. Hauling over the uncompacted base course shall not be permitted. The material shall not be placed when the underlying course is soft or yielding.

The material shall meet gradation and moisture requirements prior to compaction. Material may be free-draining and the minimum moisture content shall be established for placement and compaction of the material.

The material shall be constructed in lifts as established in the control strip, but not less than 4 inches (100 mm) nor more than 12 inches (300 mm) of compacted thickness.

When more than one lift is required to establish the layer thickness shown on the plans, the construction procedure described here shall apply to each lift. No lift shall be covered by subsequent lifts until tests verify that compaction requirements have been met. The Contractor shall rework, re-compact and retest any material placed which does not meet the specifications.

154-3.5 Compaction. The subbase material shall be compacted, adjusting moisture as necessary, to be within ±2% of optimum moisture. The field density of the compacted material shall be at least 100% of the maximum density as specified in paragraph 154-3.9a. If the specified density is not attained, the area of the lift represented by the test shall be reworked and/or re-compacted and 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.

The compaction of the P-154 material alongside the P-211 material in the sections referenced in the narrow compaction detail is to be considered incidental to the P-154 for Stabilized Shoulders. The subsequent scarifying and addition of remaining P-154 required to complete the section of P-154 Stabilized Shoulders is also to be included in the cost of P-154 for Stabilized Shoulders.

154-3.6 Weather limitation. Material shall not be placed unless the ambient air temperature is at least 40°F (4°C) and rising. Work on subbase course shall not be conducted when the subgrade is wet or frozen or the subbase material contains frozen material.

154-3.7 Maintenance. No base or surface course shall be placed on the subbase until the subbase has been accepted by the RPR. The Contractor shall maintain the completed course in satisfactory condition throughout placement of subsequent layers. When material has been exposed to excessive rain, snow, or freeze-thaw conditions, the Contractor shall verify that materials still meet all specification requirements before placement of additional material. Equipment may be routed over completed sections of subbase course, provided the equipment does not damage the subbase course and the equipment is routed over the full width of the completed subbase course. Any damage to the subbase course from routing equipment over the subbase course shall be repaired by the Contractor at their expense.

154-3.8 Surface tolerance. In those areas on which a subbase or base course is to be placed, the surface shall be tested for smoothness and accuracy of grade and crown. Any portion lacking the required smoothness or failing in accuracy of grade or crown shall be scarified to a depth of at least 3 inches (75 mm), reshaped and re-compacted to grade until the required smoothness and accuracy are obtained and approved by the RPR. The Contractor shall perform all final smoothness and grade checks in the presence of the RPR. Any deviation in surface tolerances shall be corrected by the Contractor at the Contractor's expense.

a. Smoothness. The finished surface shall not vary more than +/- ½ inch (12 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 and crown shall be measured on a 50-foot (15-m) grid and shall be within +/-0.05 feet (15 mm) of the specified grade.

154-3.9 Acceptance sampling and testing. The aggregate base course shall be accepted for density and thickness on an area basis. Two tests shall be made for density and thickness for each 1,200 square yards ~~(1000 square meters)~~. Sampling locations will be determined on a random basis per ASTM D3665.

a. Density. ~~The RPR shall perform all density tests~~ ***The RPR shall perform density tests as needed for QA. The Contractor shall perform density tests every 1,000 SY for QC.***

Each area shall be accepted for density when the field density is at least 100% of the maximum density of laboratory specimens compacted and tested per ASTM **D698 or D1557**. The in-place field density shall be determined per ASTM **D6938**. If the specified density is not attained, the area represented by the failed test shall 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.

When the material has greater than 30 percent retained on the ¾ inch (19.0 mm) sieve, use methods in ASTM D1557 and the procedures in AASHTO T180 Annex for correction of maximum dry density and optimum moisture for oversized particles.

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 of proper gradation, and the material shall be blended and recompacted to grade. The Contractor shall replace, at his expense, base material where depth tests have been taken.

METHOD OF MEASUREMENT

154-4.1 Subbase course shall be measured by the number of square yards of subbase course material placed and compacted to specified density and plan thickness requirements in the completed course. The quantity of subbase course material shall be measured in final position based upon survey of the completed work computed from elevations to the nearest 0.01 foot. On individual depth measurements, thicknesses more than 1/2 inch (12 mm) in excess of that shown on the plans shall be considered as the specified thickness plus 1/2 inch (12 mm) in computing the yardage for payment. Subbase materials shall not be included in any other excavation quantities.

~~154-4.2 Contractor will perform a detailed survey, after the subbase has been installed, with a professionally licensed surveyor and supply it to the RPR and Engineer. Survey will be submitted in digital terrain model (DTM) format. The survey is a requirement to receive payment for subbase~~

1

BASIS OF PAYMENT

154-5.1 Payment shall be made at the contract unit price per square yard for subbase course. This price shall be full compensation for furnishing all materials; for all preparation, hauling, and placing of these materials; and for all labor, equipment, tools, ***surveying,*** and incidentals necessary to complete the item.

Payment will be made under:

Item P-154-5.1 V1	Subbase Course, 12” Thick - per square yard
Item P-154-5.2 V1	Subbase Course, 6” Thick - per square yard

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 C117	Standard Test Method for Materials Finer than 75-µm (No. 200) Sieve in Mineral Aggregates by Washing
ASTM C136	Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates
ASTM D75	Standard Practice for Sampling Aggregates
ASTM D698	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft^3 (600 kN-m/m^3))
ASTM D1556	Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method
ASTM D1557	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft^3 (2,700 kN-m/m^3))
ASTM D2487	Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)
ASTM D4253	Standard Test Methods for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table
ASTM D4759	Practice for Determining the Specification Conformance of Geosynthetics
ASTM D4318	Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
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)

M 288	Geotextile Specification for Highway Applications

Florida Department of Transportation (FDOT) Florida Sampling and Testing Methods (FSTM)

FM 5-515	***Florida Method of Test for Lime Rock Bearing Ratio***

1

END OF ITEM P-154

NO.	DATE	BY	CHK'D	DECRIPTION
1	05/06/2026	AC	TFO	REVISED CBR AND METHOD OF MEASUREMENT.

ITEM P-211 LIME ROCK BASE COURSE

DESCRIPTION

211-1.1 This item shall consist of a base course composed of lime rock constructed on the prepared underlying course per these specifications and shall conform to the dimensions and typical cross-section shown on the plans.

MATERIALS

211-2.1 Materials. The lime rock base course material shall consist of fossiliferous limestone of uniform quality. The material shall not contain hard or flinty pieces that will cause a rough surface containing pits and pockets. The rock shall show no tendency to "air slake" or undergo chemical change when exposed to the weather. ***Lime rock material shall not contain chert or other extremely hard pieces, or lumps, balls or pockets of sand or clay material in sufficient quantity as to be detrimental to the proper bonding, finishing or strength of the lime rock base course.*** The material when watered and rolled shall be capable of compacting to a dense and well-bonded base.

Lime Rock Base Course Material Properties[2]

	Lime Rock	Oolitic	Non-Oolitic
Carbonates of calcium and magnesium[1]	95% minimum	70% minimum	75% minimum
Oxides of iron and aluminum[1]	Less than or equal to 2%	Less than or equal to 2%	Less than or equal to 2%
Liquid limit	Not greater than 35	NA	Not greater than 35
Plasticity Index	Not greater than 6	NA	Not greater than 6
Organic or foreign matter	Not more than 0.5%	Not more than 0.5%	Not more than 0.5%
Lime Bearing Ratio (LBR)[3] at 0 to +1.5% optimum	125	125	125

[1] The combined amount of carbonates, oxides, and silica shall be at least 97%. The material shall be non-plastic.

[2] The chemical analysis of lime rock shall consist of determining the insoluble silica, iron oxide, and alumina by solution of the sample in hydrochloric (HCl) acid, evaporating, dehydrating, re-dissolving the residue, and neutralizing with ammonium hydroxide, filtering, washing, and igniting the residue lime rock. The difference between the percentage of insoluble matter and 100% is reported as carbonates of calcium and magnesium.

[3] FM 5-515, Florida Method of Test for Lime Rock Bearing Ratio

Lime Rock Base Course Gradation

Sieve Designation (square openings)	Percentage by Weight Passing Sieves
3-1/2 inch (87.5 mm)	100
3/4 inch (19.0 mm)	50-100

All fine material shall consist entirely of dust of fracture (fine portion passing the No. 10 (2.00 mm) sieve). ***The maximum individual dimension shall not exceed 6 inches. All crushing or break-up, which is necessary in order to meet these gradation requirements, shall be done before the lime rock is placed in the base course.***

211-2.2 Sampling and Testing.

a. Aggregate base materials. The Contractor shall take samples of the aggregate base in accordance with ASTM D75 to verify initial aggregate base requirements and gradation. Material shall meet the requirements in paragraph 211-2.1. This sampling and testing will be the basis for approval of the aggregate base quality requirements.

b. Gradation requirements. The Contractor shall take at least two aggregate base samples per day in the presence of the Resident Project Representative (RPR) to check the final gradation ***providing a consistent material source is used for that day***. Sampling shall be per ASTM D75. Material shall meet the requirements in paragraph 209-2.1. The lot will be consistent with the lot size used for density. The samples shall be taken from the in-place, un-compacted material at sampling points and intervals designated by the RPR.

c. Sampling shall be taken by the Contractor Quality Control (QC) technician in the presence of the RPR's Quality Assurance (QA) representative. Each sample shall be mixed and quartered by the QC Technician such that the QC technician and the QA representative will each possess adequate size sample for testing.

211-2.3 Separation Geotextile. Not used.

CONSTRUCTION METHODS

211-3.1 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 removed and replaced at the Contractor's expense. Full operations shall not continue 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.

211-3.2 Preparing underlying course. ***Before any rock base course material is placed, the underlying course shall be prepared and conditioned as specified.*** The RPR shall check and accept the underlying course before placing and spreading operations are started. Any ruts or soft yielding places caused by improper drainage conditions, hauling, or any other cause shall be corrected at the Contractor's expense before the base course is placed. Material shall not be placed on frozen subgrade.

To protect the underlying course and to insure proper drainage the spreading of the limerock shall begin along the centerline of the pavement on a crowned section or on the high side of pavement with a one-way slope.

211-3.3 Placement. The material shall be placed and spread on the prepared underlying layer by spreader boxes or other devices as approved by the RPR, to a uniform thickness and width. The equipment shall have positive thickness controls to minimize the need for additional manipulation of the material. Dumping from vehicles that require re-handling shall not be permitted. Hauling over the uncompacted base course shall not be permitted.

The material shall meet gradation and moisture requirements prior to compaction. The layer shall be constructed in lifts as established in the control strip, but not less than 4 inches (~~100 mm~~) nor more than 12 inches (~~300 mm~~) of compacted thickness.

When more than one lift is required to establish the layer thickness shown on the plans, the construction procedure described here shall apply to each lift. No lift shall be covered by subsequent lifts until tests verify that compaction requirements have been met. The Contractor shall rework, re-compact and retest any material placed which does not meet the specifications.

211-3.4 Compaction. Immediately upon completion of the spreading operations, compact each layer of the base course, as specified, with approved compaction equipment. The number, type, and weight of rollers shall be sufficient to compact the material to the required density within the same day that the aggregate is placed on the subgrade. The field density of each compacted lift of material shall be at least 100% of the maximum density of laboratory specimens prepared from samples of the subbase material delivered to the jobsite. The moisture content of the material during placing operations shall be within ±2 percentage points of the optimum moisture content as determined by ASTM **1557**. Maximum density refers to maximum dry density at optimum moisture content unless otherwise specified.

Sufficient rollers of the designated types shall be furnished to adequately handle the compaction of the material that has been placed and spread. Blading and rolling shall be done alternately as required or directed to obtain a smooth, even surface and until the entire depth of base is compacted into a dense, unyielding mass. Re-rolling of previous day's spread shall be done as directed. When the shoulder backfill material has been placed, the shoulder shall be thoroughly rolled and compacted

Along curbs, headers, and all areas inaccessible to the roller, the base course material shall be tamped thoroughly with mechanical or hand tampers.

In the areas of narrow full depth construction called out in the plans, refer to the typical detail for compaction methods.

211-3.5 Finishing. After the watering and rolling of the base course, the entire surface shall be scarified to a depth of at least 3 inches (~~75 mm~~) and shaped to the exact crown and cross-section with a blade grader. The scarified material shall be rewetted and thoroughly rolled. Rolling shall continue until the base is bonded and compacted to a dense, unyielding mass, true to grade and cross-section. Scarifying and rolling of the surface of the base shall follow the initial rolling of the lime rock by not more than four (4) days. When the lime rock base is constructed in two layers, the scarifying of the surface shall be to a depth of 2 inches (~~50 mm~~).

If cracks or checks appear in the base before the surface course is laid, the Contractor shall rescarify, reshape, water, add lime rock where necessary, and recompact. If the underlying

material becomes mixed with the base course material, the Contractor shall, without additional compensation, remove, reshape, and recompact the mixture.

211-3.6 Weather limitations. Material shall not be placed unless the ambient air temperature is at least 40°F (4°C) and rising. Work on base course shall not be conducted when the subgrade or subbase is wet or frozen or the base material contains frozen material.

211-3.7 Maintenance. The base course shall be maintained in a condition that will meet all specification requirements until the work is accepted by the RPR. When material has been exposed to excessive rain, snow, or freeze-thaw conditions, prior to placement of additional material, the Contractor shall verify that materials still meet all specification requirements. Equipment may be routed over completed sections of base course, provided that no damage results and the equipment is routed over the full width of the completed base course. Any damage resulting to the base course from routing equipment over the base course shall be repaired by the Contractor at the Contractor's expense.

211-3.8 Surface tolerance. After the course has been compacted, the surface shall be tested for smoothness and accuracy of grade and crown. Any portion lacking the required smoothness or failing in accuracy of grade or crown shall be scarified to a depth of at least 3 inches (~~75 mm~~), reshaped and recompacted to grade until the required smoothness and accuracy are obtained and approved by the RPR. Any deviation in surface tolerances shall be corrected by the Contractor at the Contractor's expense. The smoothness and accuracy requirements specified here apply only to the top layer when base course is constructed in more than one layer.

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 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. **Straightedge shall be provided by the Contractor.**

b. Grade. The grade and crown 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.

211-3.9 Acceptance sampling and testing. Lime rock base course shall be accepted for density on an area basis. Two tests shall be made for density and thickness for each 2400 square yds (~~1000 m^2~~). Sampling locations will be determined on a random basis per 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. ***The Contractor shall perform density tests every 1,000 SY for QC. The RPR shall perform density tests as needed for QA.***

Each area shall be accepted for density when the field density is at least 100% of the maximum density of laboratory specimens compacted and tested per ASTM D1557. The in-place field density shall be determined per 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 entire area shall 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. Depth tests shall be made by ***survey*** ~~test holes or cores at least 3 inches (75 mm) in diameter that extend through the base~~ ***at intervals so each test shall represent 300 square yards in the presence of the RPR***. 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 of proper gradation, and the material shall be blended and recompacted to grade. The Contractor shall replace, at his expense, base material where depth tests have been taken.

1

211-3.10 Lime Rock Transition Wedges at Runway or Taxiway Edge. All work shall comply with the slope tolerances outlined in FAA Advisory Circular 150/5300-13B. When performing work within the runway safety area (RSA) or taxiway object free area (TOFA), the contractor shall ensure that temporary and final grading conditions meet allowable slope criteria at all times.

The Lime Rock Transition Wedges at Runway Edge shall be restored to a maximum slope of 5 percent within the first 30 feet from the runway edge until the end of the runway shoulder, and a maximum slope of 3 percent for the subsequent 170 feet or until outside of the RSA.

The Lime Rock Transition Wedges at Taxiway Edge shall be restored to a maximum slope of 5 percent, outside the pavement edge, within 85.5 feet from the centerline of the taxiway until the end of the taxiway object free area, and a maximum slope of 4 vertical : 1 horizontal outside of the TOFA.

These slope requirements shall be achieved at the end of each work shift, and prior to reopening the runway and or taxiway to aircraft operations. These slopes will be removed at the start of each work shift as required.

Compaction will be performed in accordance with 211-3.4.

METHOD OF MEASUREMENT

METHOD OF MEASUREMENT

211-4.1 The quantity of lime rock base course shall be the number of square yards ~~(square meters)~~ of base material placed, bonded, and accepted in the completed base course ***at the specified thickness***. The quantity of base course material shall be measured in final position based upon depth tests ***taken by the Contractor's Surveyor*** as directed by the RPR. On individual depth measurements, thicknesses more than 1/2 inch (~~12 mm~~) in excess of that shown on the plans shall be considered as the specified thickness plus 1/2 inch (~~12 mm~~) in computing the yardage for payment.

1

211-4.2 Measurement for the lime rock transition wedges will be made at the lump sum for this item's installation and removal each shift.

BASIS OF PAYMENT

211-5.1 Payment shall be made at the contract unit price per square yards ~~(square meters)~~ for lime rock base course. This price shall be full compensation for furnishing all materials and for all preparation, hauling, and placing of these materials, and for all labor, equipment, tools, ***survey,*** and incidentals necessary to complete the item.

The cost of removing cracks and checks including the labor, and the additional lime rock necessary for crack elimination, will not be paid for separately but shall be included in the contract price per square yard (~~square meter~~) for lime rock base course.

An As-Built survey taken by a Professionally Licensed Surveyor of the finished lime rock surface must be provided after the installation of lime rock is completed to receive payment for the lime rock.

△1 ***211-5.2 Lime Rock Transition Wedge payment shall be made at the contract price per lump sum. This price shall be full compensation for loading and hauling, compaction, furnishing all materials, labor, equipment, tools, surveying, and incidentals necessary to complete the item, each shift, to the grades and requirements shown on the plans.***

Payment will be made under:

Item P-211-5.1 V1 Lime Rock Base Course, 9" Thick – per Square Yard

△1 ***Item P-211-5.2 V1 Lime Rock Transition Wedge – Lump Sum***

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 C136	Standard Test Method for Sieve or Screen Analysis of Fine and Coarse Aggregates
ASTM D75	Standard Practice for Sampling Aggregates
ASTM D698	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft^3 (600 kN-m/m^3))
ASTM D1556	Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method
ASTM D1557	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft^3 (2700 kN-m/m^3))
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

American Association of State Highway and Transportation Officials (AASHTO)

M288 Standard Specification for Geosynthetic Specification for Highway Applications

END OF ITEM P-211

NO.	DATE	BY	CHK'D	DESCRIPTION
1	05/06/2026	AC	TFO	REVISED CBR AND METHOD OF MEASUREMENT.

ITEM T-905 TOPSOIL

DESCRIPTION

905-1.1 This item shall consist of preparing the ground surface for topsoil application, removing topsoil from designated stockpiles or areas to be stripped on the site or from approved sources off the site, and placing and spreading the topsoil on prepared areas in accordance with this specification at the locations shown on the plans or as directed by the RPR.

MATERIALS

905-2.1 Topsoil. Topsoil shall be the surface layer of soil with no admixture of refuse or any material toxic to plant growth, and it shall be reasonably free from subsoil and stumps, roots, brush, stones (2 inches (50 mm) or more in diameter), and clay lumps or similar objects. Brush and other vegetation that will not be incorporated with the soil during handling operations shall be cut and removed. Ordinary sod and herbaceous growth such as grass and weeds are not to be removed, but shall be thoroughly broken up and intermixed with the soil during handling operations. Heavy sod or other cover, which cannot be incorporated into the topsoil by discing or other means, shall be removed. The topsoil or soil mixture, unless otherwise specified or approved, shall have a pH range of approximately 5.5 pH to 7.6 pH, when tested in accordance with the methods of testing of the Association of Official Agricultural Chemists in effect on the date of invitation of bids. The organic content shall be not less than 3% nor more than 20% as determined by the wet-combustion method (chromic acid reduction). There shall be not less than 20% nor more than 80% of the material passing the 200 mesh (75 µm) sieve as determined by the wash test in accordance with ASTM C117.

Natural topsoil may be amended by the Contractor with approved materials and methods to meet the above specifications.

905-2.2 Inspection and tests. Within 10 days following acceptance of the bid, the RPR shall be notified of the source of topsoil to be furnished by the Contractor. The topsoil shall be inspected to determine if the selected soil meets the requirements specified and to determine the depth to which stripping will be permitted. At this time, the Contractor may be required to take representative soil samples from several locations within the area under consideration and to the proposed stripping depths, for testing purposes as specified in paragraph 905-2.1.

CONSTRUCTION METHODS

905-3.1 General. Areas to be topsoiled shall be shown on the plans. If topsoil is available on the site, the location of the stockpiles or areas to be stripped of topsoil and the stripping depths shall be shown on the plans.

Suitable equipment necessary for proper preparation and treatment of the ground surface, stripping of topsoil, and for the handling and placing of all required materials shall be on hand, in good condition, and approved by the RPR before the various operations are started.

905-3.2 Preparing the ground surface. Immediately prior to dumping and spreading the topsoil on any area, the surface shall be loosened by discs or spike-tooth harrows, or by other

means approved by the RPR, to a minimum depth of 2 inches (50 mm) to facilitate bonding of the topsoil to the covered subgrade soil. The surface of the area to be topsoiled shall be cleared of all stones larger than 2 inches (50 mm) in any diameter and all litter or other material which may be detrimental to proper bonding, the rise of capillary moisture, or the proper growth of the desired planting. Limited areas, as shown on the plans, which are too compact to respond to these operations shall receive special scarification.

Grades on the area to be topsoiled, which have been established by others as shown on the plans, shall be maintained in a true and even condition. Where grades have not been established, the areas shall be smooth-graded and the surface left at the prescribed grades in an even and compacted condition to prevent the formation of low places or pockets where water will stand.

905-3.3 Obtaining topsoil. Prior to the stripping of topsoil from designated areas, any vegetation, briars, stumps and large roots, rubbish or stones found on such areas, which may interfere with subsequent operations, shall be removed using methods approved by the RPR. Heavy sod or other cover, which cannot be incorporated into the topsoil by discing or other means shall be removed.

When suitable topsoil is available on the site, the Contractor shall remove this material from the designated areas and to the depth as directed by the RPR. The topsoil shall be spread on areas already tilled and smooth-graded, or stockpiled in areas approved by the RPR. Any topsoil stockpiled by the Contractor shall be rehandled and placed without additional compensation. Any topsoil that has been stockpiled on the site by others, and is required for topsoil purposes, shall be removed and placed by the Contractor. The sites of all stockpiles and areas adjacent thereto which have been disturbed by the Contractor shall be graded if required and put into a condition acceptable for seeding.

When suitable topsoil is secured off the airport site, the Contractor shall locate and obtain the supply, subject to the approval of the RPR. The Contractor shall notify the RPR sufficiently in advance of operations in order that necessary measurements and tests can be made. The Contractor shall remove the topsoil from approved areas and to the depth as directed. The topsoil shall be hauled to the site of the work and placed for spreading, or spread as required. Any topsoil hauled to the site of the work and stockpiled shall be rehandled and placed without additional compensation.

905-3.4 Placing topsoil. The topsoil shall be evenly spread on the prepared areas to a uniform depth of 2 inches (50 mm) after compaction, unless otherwise shown on the plans or stated in the special provisions. Spreading shall not be done when the ground or topsoil is frozen, excessively wet, or otherwise in a condition detrimental to the work. Spreading shall be carried on so that turfing operations can proceed with a minimum of soil preparation or tilling.

After spreading, any large, stiff clods and hard lumps shall be broken with a pulverizer or by other effective means, and all stones or rocks (2 inches (50 mm) or more in diameter), roots, litter, or any foreign matter shall be raked up and disposed of by the Contractor. after spreading is completed, the topsoil shall be satisfactorily compacted by rolling with a cultipacker or by other means approved by the RPR. The compacted topsoil surface shall conform to the required lines, grades, and cross-sections. Any topsoil or other dirt falling upon pavements as a result of hauling or handling of topsoil shall be promptly removed.

METHOD OF MEASUREMENT

~~**905-4.1** Topsoil obtained on the site shall be measured by the number of cubic yards (cubic meters) of topsoil measured in its original position and stripped or excavated. Topsoil stockpiled by others and removed for topsoil by the Contractor shall be measured by the number of cubic yards (cubic meters) of topsoil measured in the stockpile. Topsoil shall be measured by volume in cubic yards (cubic meters) computed by the method of end areas.~~

~~**905-4.2** Topsoil obtained off the site shall be measured by the number of cubic yards (cubic meters) of topsoil measured in its original position and stripped or excavated. Topsoil shall be measured by volume in cubic yards (meters) computed by the method of end areas.~~

BASIS OF PAYMENT

~~**905-5.1** Payment will be made at the contract unit price per cubic yard for topsoil (obtained on the site). This price shall be full compensation for furnishing all materials and for all preparation, placing, and spreading of the materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.~~

~~**905-5.2** Payment will be made at the contract unit price per cubic yard for topsoil (obtained off the site). This price shall be full compensation for furnishing all materials and for all preparation, placing, and spreading of the materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.~~

~~Payment will be made under:~~

~~Item T-905-5.1 Topsoil, 2" per cubic yard~~

Topsoil will be incidental to the installation of sod and hydroseed. No additional payment for the procurement or installation of topsoil will be provided.

REFERENCES

1

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 C117 Materials Finer than 75 μm (No. 200) Sieve in Mineral Aggregates by Washing

Advisory Circulars (AC)

AC 150/5200-33 Hazardous Wildlife Attractants on or Near Airports

FAA/United States Department of Agriculture

Wildlife Hazard Management at Airports, A Manual for Airport Personnel

END OF ITEM T-905

THIS PAGE INTENTIONALLY LEFT BLANK

NO.	DATE	BY	CHK'D	DECRIPTION
1	05/05/2026	AC	TFO	Made topsoil incidental to sod and hydroseed.

Event 595 - Bid Line Items (Excel)

Event	Line	ItemNumber	ItemDescription	Description	Qty	UOM
595	1	CONTRACTOR QUALITY CONTROL PROGR	CONTRACTOR QUALITY CONTROL PROGRAM (CQCP) (C-100-14.1 V1)	CONTRACTOR QUALITY CONTROL PROGRAM (CQCP) (C-100-14.1 V1): The Contractor shall establish, provide, and maintain an effective Contractor Quality Control Program (CQCP) that details the methods and procedures that will be taken to assure that all materials and completed construction required by this contract conform to contract plans, technical specifications, and other requirements, whether manufactured by the Contractor, or procured from subcontractors or vendors. Although guidelines are established and certain minimum requirements are specified here and elsewhere in the contract technical specifications, the Contractor shall assume full responsibility for accomplishing the stated purpose.	1.00	LS
595	2	TEMPORARY AIR AND WATER POLLUTIO	TEMPORARY AIR AND WATER POLLUTION, SOIL EROSION, AND SILTATI	TEMPORARY AIR AND WATER POLLUTION, SOIL EROSION, AND SILTATION CONTROL (C-102-5.1 V1): This item shall consist of temporary control measures as shown on the plans or as ordered by the Resident Project Representative (RPR) during the life of a contract to control pollution of air and water, soil erosion, and siltation through the use of silt fences, berms, dikes, dams, sediment basins, fiber mats, gravel, mulches, grasses, slope drains, and other erosion control devices or methods.	1.00	LS
595	3	MOBILIZATION (C-105-6.1 V1)	MOBILIZATION (C-105-6.1 V1)	MOBILIZATION (C-105-6.1 V1): This item of work shall consist of, but is not limited to, work and operations necessary for the movement of personnel, equipment, material, and supplies, and incidentals to and from the project site for work on the project except as provided in the contract as separate pay items.	1.00	LS
595	4	AIRPORT SAFETY AND MAINTENANCE O	AIRPORT SAFETY AND MAINTENANCE OF TRAFFIC (S-102-5.1 V1)	AIRPORT SAFETY AND MAINTENANCE OF TRAFFIC (S-102-5.1 V1): The work specified in this section consists of airport safety and maintaining traffic within the limits of the project for the duration of the construction period. It shall include the construction the project and the furnishing, installing and maintaining of traffic control and maintenance of any necessary detour facilities along safety devices required for safe and expeditious movement of traffic as may becalled for on the plans.	1.00	LS
595	5	TEMPORARY FENCE FOR OWL/TURTOISE	TEMPORARY FENCE FOR OWL/TURTOISE NESTS (S-102-5.2 V1)	TEMPORARY FENCE FOR OWL/TURTOISE NESTS (S-102-5.2 V1): This Item consist of installation of temporary fence around nests during the entire length of construction per plans and specification.	25.00	EA
595	6	PROJECT SURVEY AND STAKEOUT (S-1	PROJECT SURVEY AND STAKEOUT (S-103-5.1 V1)	PROJECT SURVEY AND STAKEOUT (S-103-5.1 V1): The Contractor shall perform all necessary surveying and project stakeout required to construct all elements of the Project as shown on the Contract Drawings and specified in the Specifications.	1.00	LS
595	7	FULL DEPTH ASPHALT PAVEMENT REMO	FULL DEPTH ASPHALT PAVEMENT REMOVAL (P-101-5.1 V1)	FULL DEPTH ASPHALT PAVEMENT REMOVAL (P-101-5.1 V1): This item shall consist of preparation of existing pavement surfaces for overlay, surface treatments, removal of existing pavement, hauling and disposal and stockpiling of demolished material and other miscellaneous items. The work shall be accomplished in accordance with these specifications and the applicable plans.	11730.00	SY
595	8	BITUMINOUS PAVEMENT MILLING (UP	BITUMINOUS PAVEMENT MILLING (UP TO 2 INCH DEEP) (P-101-5.2 V	BITUMINOUS PAVEMENT MILLING (UP TO 2 INCH DEEP) (P-101-5.2 V): Milling shall be performed with a power-operated milling machine or grinder, capable of producing a uniform finished surface.	5250.00	SY
595	9	UNCLASSIFIED EXCAVATION (P-152-4	UNCLASSIFIED EXCAVATION (P-152-4.1 V1)	UNCLASSIFIED EXCAVATION (P-152-4.1 V1): Unclassified excavation shall consist of the excavation and disposal of all material, regardless of its nature which is not otherwise classified. This item covers excavation, disposal, and compaction of all materials within the limits of the work required to construct safety areas, runways, taxiways, aprons, and intermediate areas as well as other areas for drainage, building construction, parking, or other purposes in accordance with these specifications and in conformity to the dimensions and typical sections shown on the plans.	7080.00	CY
595	10	EMBANKMENT (P-152-4.2 V1)	EMBANKMENT (P-152-4.2 V1)	EMBANKMENT (P-152-4.2 V1): This item covers excavation, disposal, and compaction of all materials within the limits of the work required to construct safety areas, runways, taxiways, aprons, and intermediate areas as well as other areas for drainage, building construction, parking, or other purposes in accordance with these specifications and in conformity to the dimensions and typical sections shown on the plans.	120.00	CY
595	11	UTILITY SOFT DIG (P-152-4.3 V1)	UTILITY SOFT DIG (P-152-4.3 V1)	UTILITY SOFT DIG (P-152-4.3 V1): This item consists of the contractor using non-destructive excavation method in area where the underground utilities exist per plans and specifications.	50.00	EA
595	12	SUBBASE COURSE, 12 INCH THICK (P	SUBBASE COURSE, 12 INCH THICK (P-154-5.1 V1)	SUBBASE COURSE, 12 INCH THICK (P-154-5.1 V1): This item shall consist of a subbase course composed of granular materials constructed on a prepared subgrade or underlying course in accordance with these specifications, and in conformity with the dimensions and typical cross-section shown on the plans.	9140.00	SY
595	13	SUBBASE COURSE, 6 INCH THICK (P-	SUBBASE COURSE, 6 INCH THICK (P-152-5.2 V1)	SUBBASE COURSE, 6 INCH THICK (P-152-5.2 V1): This item shall consist of a subbase course composed of granular materials constructed on a prepared subgrade or underlying course in accordance with these specifications, and in conformity with the dimensions and typical cross-section shown on the plans.	5110.00	SY
595	14	LIME ROCK BASE COURSE, 9 INCH TH	LIME ROCK BASE COURSE, 9 INCH THICK (P-211-5.1 V1)	LIME ROCK BASE COURSE, 9 INCH THICK (P-211-5.1 V1): This item shall consist of a base course composed of lime rock constructed on the prepared underlying course per these specifications and shall conform to the dimensions and typical cross-section shown on the plans.	8840.00	SY
595	15	LIMEROCK TRANSITION WEDGE (P-211	LIMEROCK TRANSITION WEDGE (P-211-5.2 V1)	LIMEROCK TRANSITION WEDGE (P-211-5.2 V1): This item shall consist of a base course composed of lime rock constructed on the prepared underlying course per these specifications and shall conform to the dimensions and typical cross-section shown on the plans.	1.00	LS
595	16	HOT MIXED ASPHALT (SURFACE) (P-4	HOT MIXED ASPHALT (SURFACE) (P-401-8.1 V1)	HOT MIXED ASPHALT (SURFACE) (P-401-8.1 V1): This item shall consist of pavement courses composed of mineral aggregate and asphalt binder mixed in a central mixing plant and placed on a prepared base or stabilized course in accordance with these specifications and shall conform to the lines, grades, thicknesses, and typical cross-sections shown on the plans. Each course shall be constructed to the depth, typical section, and elevation required by the plans and shall be rolled, finished, and approved before the placement of the next course.	2780.00	TN
595	17	HOT MIXED ASPHALT PAVEMENT (LEVE	HOT MIXED ASPHALT PAVEMENT (LEVELING) (P-401-8.3 V1)	HOT MIXED ASPHALT PAVEMENT (LEVELING) (P-401-8.3 V1): This item shall consist of pavement courses composed of mineral aggregate and asphalt binder mixed in a central mixing plant and placed on a prepared course in accordance with these specifications and shall conform to the lines, grades, thicknesses, and typical cross sections shown on the plans. Each course shall be constructed to the depth, typical section, and elevation required by the plans and shall be rolled, finished, and approved before the placement of the next course	80.00	TN
595	18	EMULSIFIED ASPHALT PRIME COAT (P	EMULSIFIED ASPHALT PRIME COAT (P-602-5.1 V1)	EMULSIFIED ASPHALT PRIME COAT (P-602-5.1 V1): This item shall consist of an application of emulsified asphalt material on the prepared base course in accordance with these specifications and in reasonably close conformity to the lines shown on the plans.	280.00	GA
595	19	EMULSIFIED ASPHALT TACK COAT (P-	EMULSIFIED ASPHALT TACK COAT (P-603-5.1 V1)	EMULSIFIED ASPHALT TACK COAT (P-603-5.1 V1): This item shall consist of preparing and treating an asphalt or concrete surface with asphalt material in accordance with these specifications and in reasonably close conformity to the lines shown on the plans.	210.00	GA
595	20	PERMANENT AIRFIELD PAINTING WITH	PERMANENT AIRFIELD PAINTING WITH TYPE III GLASS BEADS (YELLO	PERMANENT AIRFIELD PAINTING WITH TYPE III GLASS BEADS (YELLOW AND WHITE): This item shall consist of the preparation and painting of numbers, markings, and stripes on the surface of runways, taxiways, and aprons, in accordance with these specifications and at the locations shown on the plans, or as directed by the Resident Project Representative (RPR).	7220.00	SF
595	21	PERMANENT AIRFIELD PAINTING WITH	PERMANENT AIRFIELD PAINTING WITH TYPE I GLASS BEADS (RED SUR	PERMANENT AIRFIELD PAINTING WITH TYPE I GLASS BEADS (RED SURFACE PAINTED SIGNS): This item shall consist of the preparation and painting of numbers, markings, and stripes on the surface of runways, taxiways, and aprons, in accordance with these specifications and at the locations shown on the plans, or as directed by the Resident Project Representative (RPR).	1140.00	SF

595	22	PERMANENT AIRFIELD PAINTING WITH	PERMANENT AIRFIELD PAINTING WITH NO GLASS BEADS (BLACK) (P-6	PERMANENT AIRFIELD PAINTING WITH NO GLASS BEADS (BLACK) (P-6): This item shall consist of the preparation and painting of numbers, markings, and stripes on the surface of runways, taxiways, and aprons, in accordance with these specifications and at the locations shown on the plans, or as directed by the Resident Project Representative (RPR).	21250.00	SF
595	23	TEMPORARY AIRFIELD PAINTING WITH	TEMPORARY AIRFIELD PAINTING WITH TYPE I GLASS BEADS (YELLOW	TEMPORARY AIRFIELD PAINTING WITH TYPE I GLASS BEADS (YELLOW AND WHITE): This item shall consist of the preparation and painting of numbers, markings, and stripes on the surface of runways, taxiways, and aprons, in accordance with these specifications and at the locations shown on the plans, or as directed by the Resident Project Representative (RPR).	7220.00	SF
595	24	TEMPORARY AIRFIELD PAINTING WITH	TEMPORARY AIRFIELD PAINTING WITH NO GLASS BEADS (RED SURFACE	TEMPORARY AIRFIELD PAINTING WITH NO GLASS BEADS (RED SURFACE PAINTED SIGNS): This item shall consist of the preparation and painting of numbers, markings, and stripes on the surface of runways, taxiways, and aprons, in accordance with these specifications and at the locations shown on the plans, or as directed by the Resident Project Representative (RPR).	1140.00	SF
595	25	AIRFIELD PAINT REMOVAL (P-620-5.	AIRFIELD PAINT REMOVAL (P-620-5.6 V1)	AIRFIELD PAINT REMOVAL (P-620-5.6 V1): This item shall consist of the preparation and painting of numbers, markings, and stripes on the surface of runways, taxiways, and aprons, in accordance with these specifications and at the locations shown on the plans, or as directed by the Resident Project Representative (RPR).	4210.00	SF
595	26	SODDING (T-904-5.1 V1)	SODDING (T-904-5.1 V1)	SODDING (T-904-5.1 V1): This item shall consist of furnishing, hauling, and placing approved live sod on prepared areas in accordance with this specification at the locations shown on the plans or as directed by the RPR.	6400.00	SY
595	27	HYDROSEEDING (S-906-5.1 V1)	HYDROSEEDING (S-906-5.1 V1)	HYDROSEEDING (S-906-5.1 V1): This item shall consist of soil preparation, and hydroseeding (or hydraulic mulch seeding, or hydro-mulching) within the Limits of Work, beyond sodded taxiway shoulders, or as directed by the Resident Project Representative (RPR) in accordance with these specifications.	59680.00	SY
595	28	HAND EXCAVATE MINIMUM 8 INCH WID	HAND EXCAVATE MINIMUM 8 INCH WIDE X 28 INCH DEEP IN EARTH (L	HAND EXCAVATE MINIMUM 8 INCH WIDE X 28 INCH DEEP IN EARTH (L-108-5.1 V1): This item shall consist of furnishing and installing power cables that are direct buried and furnishing and/or installing power cables within conduit or duct banks per these specifications at the locations shown on the plans.	20.00	LF
595	29	3 QUARTER INCH X 20 FOOT GROUND	3 QUARTER INCH X 20 FOOT GROUND RODS CONNECTED TO COUNTERPOI	3 QUARTER INCH X 20 FOOT GROUND RODS CONNECTED TO COUNTERPOISE. (L-108-5.2 V1): This item shall consist of furnishing and installing power cables that are direct buried and furnishing and/or installing power cables within conduit or duct banks per these specifications at the locations shown on the plans.	16.00	EA
595	30	ADDITIONAL 10 FOOT GROUND ROD SE	ADDITIONAL 10 FOOT GROUND ROD SECTIONS. (L-108-5.3 V1)	ADDITIONAL 10 FOOT GROUND ROD SECTIONS. (L-108-5.3 V1): This item shall consist of furnishing and installing power cables that are direct buried and furnishing and/or installing power cables within conduit or duct banks per these specifications at the locations shown on the plans.	16.00	EA
595	31	NO. 6 BARE SOLID AWG COUNTERPOIS	NO. 6 BARE SOLID AWG COUNTERPOISE CONDUCTOR INSTALLED OVER C	NO. 6 BARE SOLID AWG COUNTERPOISE CONDUCTOR INSTALLED OVER CONDUIT SYSTEM. (L-108-5.4 V1): This item shall consist of furnishing and installing power cables that are direct buried and furnishing and/or installing power cables within conduit or duct banks per these specifications at the locations shown on the plans.	5610.00	LF
595	32	NO. 8, 5KV, L-824 CONDUCTOR INST	NO. 8, 5KV, L-824 CONDUCTOR INSTALLED IN NEW AND EXISTING CO	NO. 8, 5KV, L-824 CONDUCTOR INSTALLED IN NEW AND EXISTING CONDUIT/DUCTBANK SYSTEM. (L-108-5.5 V1): This item includes the installation of the cable in duct banks or conduit per the specifications L-108.	10170.00	LF
595	33	ONE 2 INCH SCHEDULE 40 PVC CONDU	ONE 2 INCH SCHEDULE 40 PVC CONDUIT NON-ENCASED DIRECT BURIED	ONE 2 INCH SCHEDULE 40 PVC CONDUIT NON-ENCASED DIRECT BURIED IN EARTH, 24-INCH MINIMUM COVER, COMPLETE IN PLACE. (L-110-5.1 V1): This item shall consist of underground electrical conduits and duct banks (single or multiple conduits encased in concrete or buried in sand) installed per this specification at the locations and per the dimensions, designs, and details shown on the plans. This item shall include furnishing and installing of all underground electrical duct banks and individual and multiple underground conduits. It shall also include all turfing trenching, backfilling, removal, and restoration of any paved or turfed areas; concrete encasement, mandrelling, pulling lines, duct markers, plugging of conduits, and the testing of the installation as a completed system ready for installation of cables per the plans and specifications. This item shall also include furnishing and installing conduits and all incidentals for providing positive drainage of the system. Verification of existing ducts is incidental to the pay items provided in this specification.	4920.00	LF
595	34	ONE 2 INCH SCHEDULE 40 PVC CONDU	ONE 2 INCH SCHEDULE 40 PVC CONDUIT CONCRETE ENCASED AND INST	ONE 2 INCH SCHEDULE 40 PVC CONDUIT CONCRETE ENCASED AND INSTALLED IN NEW FULL-STRENGTH PAVEMENT, 24-INCH MINIMUM COVER, COMPLETE IN PLACE. (L-110-5.2 V1): This item shall consist of underground electrical conduits and duct banks (single or multiple conduits encased in concrete or buried in sand) installed per this specification at the locations and per the dimensions, designs, and details shown on the plans. This item shall include furnishing and installing of all underground electrical duct banks and individual and multiple underground conduits. It shall also include all turfing trenching, backfilling, removal, and restoration of any paved or turfed areas; concrete encasement, mandrelling, pulling lines, duct markers, plugging of conduits, and the testing of the installation as a completed system ready for installation of cables per the plans and specifications. This item shall also include furnishing and installing conduits and all incidentals for providing positive drainage of the system.Verification of existing ducts is incidental to the pay items provided in this specification.	955.00	LF
595	35	ONE 2 INCH SCHEDULE 40 PVC CONDU	ONE 2 INCH SCHEDULE 40 PVC CONDUIT CONCRETE ENCASED AND INST	ONE 2 INCH SCHEDULE 40 PVC CONDUIT CONCRETE ENCASED AND INSTALLED IN EXISTING FULL-STRENGTH PAVEMENT, 24-INCH MINIMUM COVER, COMPLETE IN PLACE. (L-110-5.3 V1): This item shall consist of underground electrical conduits and duct banks (single or multiple conduits encased in concrete or buried in sand) installed per this specification at the locations and per the dimensions, designs, and details shown on the plans. This item shall include furnishing and installing of all underground electrical duct banks and individual and multiple underground conduits. It shall also include all turfing trenching, backfilling, removal, and restoration of any paved or turfed areas; concrete encasement, mandrelling, pulling lines, duct markers, plugging of conduits, and the testing of the installation as a completed system ready for installation of cables per the plans and specifications. This item shall also include furnishing and installing conduits and all incidentals for providing positive drainage of the system.Verification of existing ducts is incidental to the pay items provided in this specification.	370.00	LF
595	36	INTERCEPT EXISTING CONDUIT SYSTE	INTERCEPT EXISTING CONDUIT SYSTEM AND CONNECT TO NEW CONDUIT	INTERCEPT EXISTING CONDUIT SYSTEM AND CONNECT TO NEW CONDUIT SYSTEM (L-110-5.4 V1): This item shall consist of underground electrical conduits and duct banks (single or multiple conduits encased in concrete or buried in sand) installed per this specification at the locations and per the dimensions, designs, and details shown on the plans. This item shall include furnishing and installing of all underground electrical duct banks and individual and multiple underground conduits. It shall also include all turfing trenching, backfilling, removal, and restoration of any paved or turfed areas; concrete encasement, mandrelling, pulling lines, duct markers, plugging of conduits, and the testing of the installation as a completed system ready for installation of cables per the plans and specifications. This item shall also include furnishing and installing conduits and all incidentals for providing positive drainage of the system. Verification of existing ducts is incidental to the pay items provided in this specification.	19.00	EA

595	37	HAND EXCAVATE AND CONCRETE ENCAS	HAND EXCAVATE AND CONCRETE ENCASE EXISTING FPL HALF-INCH CON	HAND EXCAVATE AND CONCRETE ENCASE EXISTING FPL HALF-INCH CONDUIT, COMPLETE. (L-110-5.5 V1): This item shall consist of underground electrical conduits and duct banks (single or multiple conduits encased in concrete or buried in sand) installed per this specification at the locations and per the dimensions, designs, and details shown on the plans. This item shall include furnishing and installing of all underground electrical duct banks and individual and multiple underground conduits. It shall also include all turfing trenching, backfilling, removal, and restoration of any paved or turfed areas; concrete encasement, mandrelling, pulling lines, duct markers, plugging of conduits, and the testing of the installation as a completed system ready for installation of cables per the plans and specifications. This item shall also include furnishing and installing conduits and all incidentals for providing positive drainage of the system. Verification of existing ducts is incidental to the pay items provided in this specification.	175.00	LF
595	38	L-867 16 INCH DIAMETER JUNCTION	L-867 16 INCH DIAMETER JUNCTION CAN WITH COVER INSTALLED IN	L-867 16 INCH DIAMETER JUNCTION CAN WITH COVER INSTALLED IN EARTH. (L-115-5.1 V1): This item shall consist of electrical manholes and junction structures (hand holes, pullboxes, junction cans, etc.) installed per this specification, at the indicated locations and conforming to the lines, grades and dimensions shown on the plans or as required by the RPR. This item shall include the installation of each electrical manhole and/or junction structures with all associated excavation, backfilling, sheeting and bracing, concrete, reinforcing steel, ladders, appurtenances, testing, dewatering and restoration of surfaces to the satisfaction of the RPR including removal of existing manholes and junction structures as shown on the plans.	1.00	EA
595	39	L-867 16 INCH DIAMETER BOTTOMLES	L-867 16 INCH DIAMETER BOTTOMLESS 3 CAN JUNCTION CAN PLAZA I	L-867 16 INCH DIAMETER BOTTOMLESS 3 CAN JUNCTION CAN PLAZA INSTALLED IN EARTH. (L-115-5.2 V1): This item shall consist of electrical manholes and junction structures (hand holes, pullboxes, junction cans, etc.) installed per this specification, at the indicated locations and conforming to the lines, grades and dimensions shown on the plans or as required by the RPR. This item shall include the installation of each electrical manhole and/or junction structures with all associated excavation, backfilling, sheeting and bracing, concrete, reinforcing steel, ladders, appurtenances, testing, dewatering and restoration of surfaces to the satisfaction of the RPR including removal of existing manholes and junction structures as shown on the plans.	4.00	EA
595	40	INTERCEPT EXISTING LIGHT BASE CA	INTERCEPT EXISTING LIGHT BASE CAN IN EARTH/EXISTING PAVEMENT	INTERCEPT EXISTING LIGHT BASE CAN IN EARTH/EXISTING PAVEMENT AND CONNECT TO CONDUIT SYSTEM. (L-115-5.3 V1): This item shall consist of electrical manholes and junction structures (hand holes, pullboxes, junction cans, etc.) installed per this specification, at the indicated locations and conforming to the lines, grades and dimensions shown on the plans or as required by the RPR. This item shall include the installation of each electrical manhole and/or junction structures with all associated excavation, backfilling, sheeting and bracing, concrete, reinforcing steel, ladders, appurtenances, testing, dewatering and restoration of surfaces to the satisfaction of the RPR including removal of existing manholes and junction structures as shown on the plans.	1.00	EA
595	41	REMOVAL OF EXISTING JUNCTION CAN	REMOVAL OF EXISTING JUNCTION CAN/LIGHT BASE CAN IN EARTH, CO	REMOVAL OF EXISTING JUNCTION CAN/LIGHT BASE CAN IN EARTH, COMPLETE. (L-115-5.4 V1): This item shall consist of electrical manholes and junction structures (hand holes, pullboxes, junction cans, etc.) installed per this specification, at the indicated locations and conforming to the lines, grades and dimensions shown on the plans or as required by the RPR. This item shall include the installation of each electrical manhole and/or junction structures with all associated excavation, backfilling, sheeting and bracing, concrete, reinforcing steel, ladders, appurtenances, testing, dewatering and restoration of surfaces to the satisfaction of the RPR including removal of existing manholes and junction structures as shown on the plans.	100.00	EA
595	42	ABANDON EXISTING JUNCTION CAN/LI	ABANDON EXISTING JUNCTION CAN/LIGHT BASE CAN IN PLACE, COMPL	ABANDON EXISTING JUNCTION CAN/LIGHT BASE CAN IN PLACE, COMPLETE. (L-115-5.5 V1): This item shall consist of electrical manholes and junction structures (hand holes, pullboxes, junction cans, etc.) installed per this specification, at the indicated locations and conforming to the lines, grades and dimensions shown on the plans or as required by the RPR. This item shall include the installation of each electrical manhole and/or junction structures with all associated excavation, backfilling, sheeting and bracing, concrete, reinforcing steel, ladders, appurtenances, testing, dewatering and restoration of surfaces to the satisfaction of the RPR including removal of existing manholes and junction structures as shown on the plans.	10.00	EA
595	43	NEW L-861T(L), LED TAXIWAY ELEVA	NEW L-861T(L), LED TAXIWAY ELEVATED EDGE LIGHT AND NEW BASE	NEW L-861T(L), LED TAXIWAY ELEVATED EDGE LIGHT AND NEW BASE CAN INSTALLED IN EARTH. (L-125-5.1 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	59.00	EA
595	44	NEW L-861T(L), LED TAXIWAY ELEVA	NEW L-861T(L), LED TAXIWAY ELEVATED EDGE LIGHT AND NEW BASE	NEW L-861T(L), LED TAXIWAY ELEVATED EDGE LIGHT AND NEW BASE CAN INSTALLED IN EXISTING PAVEMENT (L-125-5.2 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	8.00	EA
595	45	REINSTALL L-862(L), LED RUNWAY E	REINSTALL L-862(L), LED RUNWAY ELEVATED EDGE LIGHT ON NEW BA	REINSTALL L-862(L), LED RUNWAY ELEVATED EDGE LIGHT ON NEW BASE CAN INSTALLED IN EXISTING PAVEMENT (L-125-5.3 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	4.00	EA
595	46	NEW L-862(L), LED RUNWAY ELEVATE	NEW L-862(L), LED RUNWAY ELEVATED EDGE LIGHT AND NEW TOP SEC	NEW L-862(L), LED RUNWAY ELEVATED EDGE LIGHT AND NEW TOP SECTION INSTALLED ON EXISTING BASE CAN (L-125-5.4 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	2.00	EA
595	47	NEW L-858(L), SIZE 1, 3-4 CHARAC	NEW L-858(L), SIZE 1, 3-4 CHARACTERS LED GUIDANCE SIGN AND C	NEW L-858(L), SIZE 1, 3-4 CHARACTERS LED GUIDANCE SIGN AND CONCRETE BASE INSTALLED IN EARTH. (L-125-5.5 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	5.00	EA

595	48	NEW L-858(L), SIZE 1, 5-6 CHARAC	NEW L-858(L), SIZE 1, 5-6 CHARACTERS LED GUIDANCE SIGN AND C	NEW L-858(L), SIZE 1, 5-6 CHARACTERS LED GUIDANCE SIGN AND CONCRETE BASE INSTALLED IN EARTH. (L-125-5.6 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	2.00	EA
595	49	NEW L-858(L), SIZE 1, 1-2 CHARAC	NEW L-858(L), SIZE 1, 1-2 CHARACTERS LED GUIDANCE SIGN AND C	NEW L-858(L), SIZE 1, 1-2 CHARACTERS LED GUIDANCE SIGN AND CONCRETE BASE INSTALLED IN EXISTING PAVEMENT. (L-125-5.7 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	4.00	EA
595	50	REPANEL L-858(L), SIZE 1, 2 MODU	REPANEL L-858(L), SIZE 1, 2 MODULE LED GUIDANCE SIGN WITH AL	REPANEL L-858(L), SIZE 1, 2 MODULE LED GUIDANCE SIGN WITH ALLOWANCE ACCOUNT SIGN LEGEND PANELS. (L-125-5.8 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	3.00	EA
595	51	REPANEL L-858(L), SIZE 1, 3 MODU	REPANEL L-858(L), SIZE 1, 3 MODULE LED GUIDANCE SIGN WITH AL	REPANEL L-858(L), SIZE 1, 3 MODULE LED GUIDANCE SIGN WITH ALLOWANCE ACCOUNT SIGN LEGEND PANELS. (L-125-5.9 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	3.00	EA
595	52	REMOVAL OF EXISTING GUIDANCE SIG	REMOVAL OF EXISTING GUIDANCE SIGN AND CONCRETE BASE IN EARTH	REMOVAL OF EXISTING GUIDANCE SIGN AND CONCRETE BASE IN EARTH/EXISTING PAVEMENT, COMPLETE. (L-125-5.10 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	10.00	EA
595	53	REMOVAL OF EXISTING GUIDANCE SIG	REMOVAL OF EXISTING GUIDANCE SIGN AND ABANDON EXISTING CONCR	REMOVAL OF EXISTING GUIDANCE SIGN AND ABANDON EXISTING CONCRETE BASE, COMPLETE. (L-125-5.11 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	1.00	EA
595	54	INTERCEPT EXISTING CIRCUIT CONDU	INTERCEPT EXISTING CIRCUIT CONDUCTORS IN EXISTING BASE CAN/M	INTERCEPT EXISTING CIRCUIT CONDUCTORS IN EXISTING BASE CAN/MANHOLE/JUNCTION CAN AND EXTEND CIRCUITS ACCORDINGLY. (L-125-5.12 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	13.00	EA
595	55	INSTALLATION OF ALLOWANCE ACCOUN	INSTALLATION OF ALLOWANCE ACCOUNT ALCMS GRAPHIC UPDATES, COM	INSTALLATION OF ALLOWANCE ACCOUNT ALCMS GRAPHIC UPDATES, COMPLETE. (L-125-5.13 V1): This item shall consist of airport lighting systems furnished, and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.	1.00	LS