

LETTING ITEM NUMBER
6A

LETTING DATE
JULY 29, 2016

LETTING CONTRACT NUMBER
WI057

TOTAL SHEETS: 21

CONSTRUCTION PLANS

RUNWAY 11-29 REHABILITATION, ASSOCIATED EDGE LIGHTS AND GUIDANCE SIGN REPLACEMENT AT WILLIAMSON COUNTY REGIONAL AIRPORT MARION - HERRIN, WILLIAMSON COUNTY, ILLINOIS

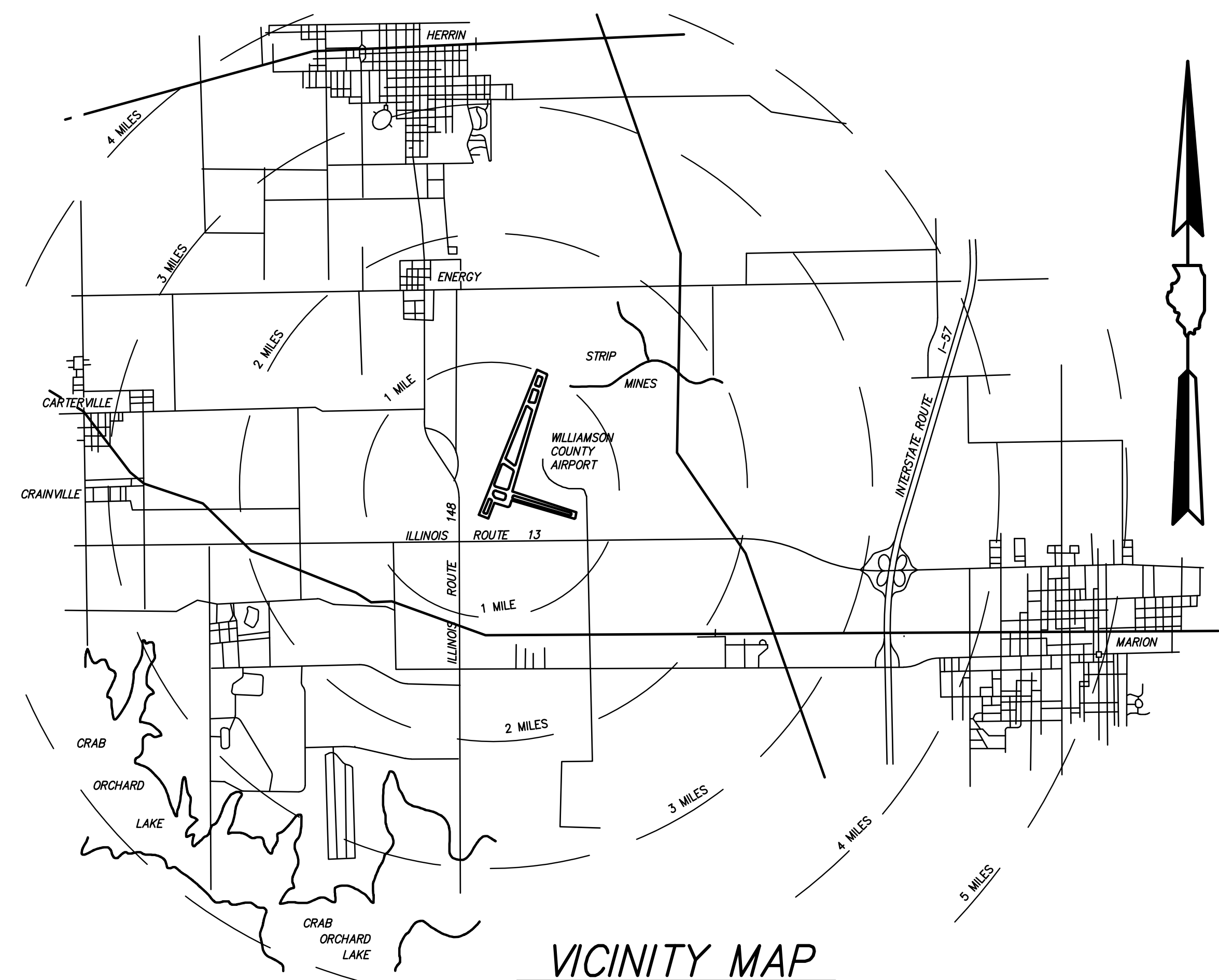
ITEM NO.	DESCRIPTION	UNIT	EST. QTY.	AS BUILT QTY.
AR108108	1/C #8 5 KV UG CABLE	L.F.	1,360	
AR108158	1/C #8 5 KV UG CABLE IN UD	L.F.	12,170	
AR108258	2/C #8 5KV UG CABLE IN UD	L.F.	410	
AR108960	REMOVE CABLE	L.F.	9,720	
AR109902	REMOVE ELECTRICAL EQUIPMENT	L.S.	1	
AR110504	4-WAY CONCRETE ENCASED DUCT	L.F.	305	
AR110710	ELECTRICAL MANHOLE	EACH	1	
AR125442	TAXI GUIDANCE SIGN, 2 CHARACTER	EACH	4	
AR125443	TAXI GUIDANCE SIGN, 3 CHARACTER	EACH	5	
AR125444	TAXI GUIDANCE SIGN, 4 CHARACTER	EACH	2	
AR125446	TAXI GUIDANCE SIGN, 6 CHARACTER	EACH	1	
AR125447	TAXI GUIDANCE SIGN, 7 CHARACTER	EACH	2	
AR125511	MIRL, BASE MOUNTED-LED	EACH	47	
AR125546	MI THRESHOLD LIGHT BASE MTD-LED	EACH	12	
AR125561	RUNWAY DISTANCE REMAINING SIGN-LED	EACH	4	
AR125565	SPLICE CAN	EACH	1	
AR125901	REMOVE STAKE MOUNTED LIGHT	EACH	45	
AR125902	REMOVE BASE MOUNTED LIGHT	EACH	15	
AR125904	REMOVE TAXI GUIDANCE SIGN	EACH	14	
AR125905	REMOVE RWY DISTANCE REMAIN SIGN	EACH	4	
AR125942	ADJUST BASE MOUNTED LIGHT	EACH	15	
AR150510	ENGINEER'S FIELD OFFICE	L.S.	1	
AR150520	MOBILIZATION	L.S.	1	
AR150530	TRAFFIC MAINTENANCE	L.S.	1	
AR401610	BITUMINOUS SURFACE COURSE	TON	5,450	
AR401630	BITUMINOUS TEST SECTION	EACH	1	
AR401640	BITUMINOUS PAVEMENT GROOVING	S.Y.	32,500	
AR401650	BITUMINOUS PAVEMENT MILLING	S.Y.	43,300	
AR603510	BITUMINOUS TACK COAT	GAL.	6,500	
AR605540	CLEAN & SEAL JOINTS	L.F.	14,983	
AR620520	PAVEMENT MARKING-WATERBORNE	S.F.	25,150	
AR620525	PAVEMENT MARKING-BLACK BORDER	S.F.	1,800	
AR620900	PAVEMENT MARKING REMOVAL	S.F.	10,000	
AR801358	SPALL REPAIR	S.F.	25	
AR904510	SODDING	S.Y.	11,200	

DATE : 6/17/2016

ILLINOIS PROJECT No. MWA-4480
A.I.P. PROJECT No. 3-17-0065-3316

INDEX OF SHEETS

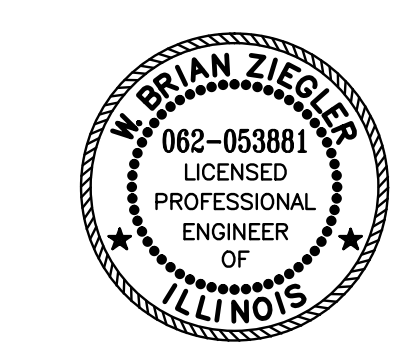
1. COVER
2. SCOPE OF WORK
- 3-5. SAFETY AND PHASING PLAN
6. TYPICAL SECTIONS
- 7-9. DEMOLITION PLAN
- 10-11. OVERLAY PLAN
- 12-15. ELECTRICAL PLANS
- 16-18. ELECTRICAL NOTES AND DETAILS
- 19-20. PAVEMENT MARKING PLANS
21. PAVEMENT MARKING DETAILS



DUE TO THE ANTICIPATED TIMING OF CONTRACT AWARD AND POTENTIAL FOR INCLEMENT WEATHER, IT IS NOT EXPECTED THAT CONSTRUCTION WILL BEGIN BEFORE APRIL 2017.

BOARD MEMBERS

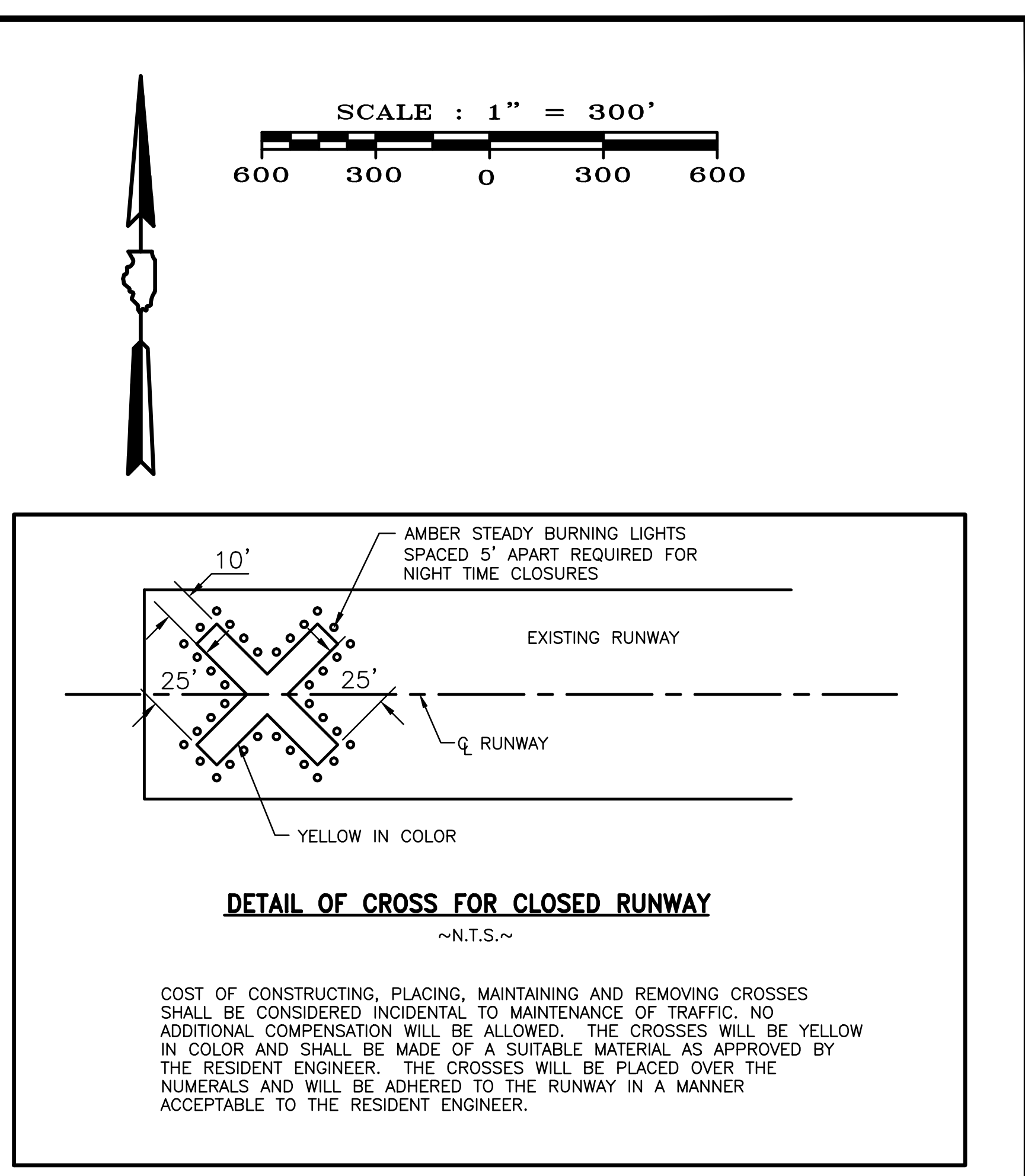
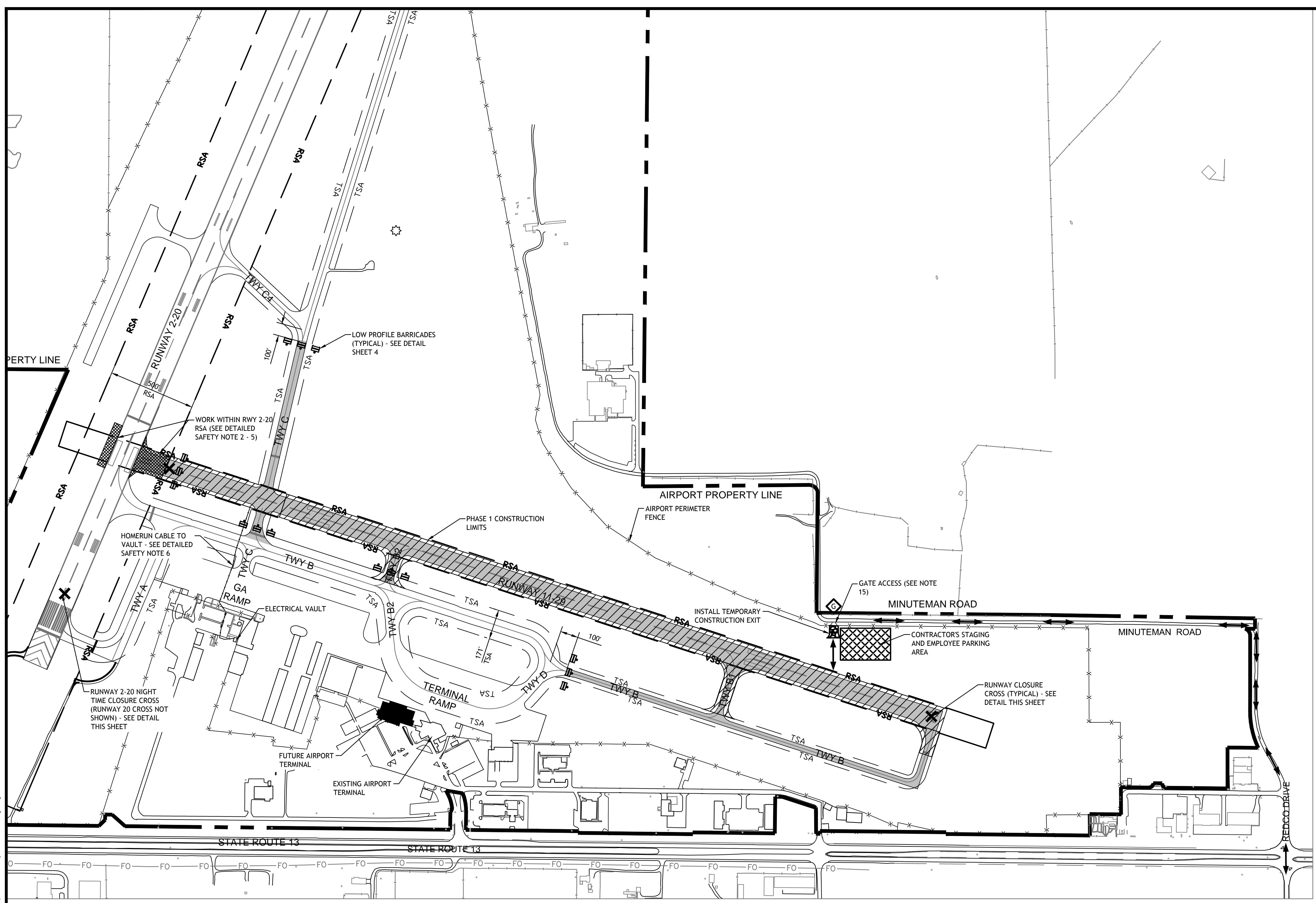
- CHAIRMAN : BERNARD A. PAUL
- MEMBERS : JAVIER MUNIZ
RICHARD PISONI
ROBERT MEES
MICHAEL TROOP
- SECRETARY : CRAIG PILLATSCH
- AIRPORT MANAGER : DOUGLAS KIMMEL



EXPIRES : NOVEMBER 30, 2017

PLANS PREPARED BY :

<p>CLARIDA & ZIEGLER ENGINEERING COMPANY P.O. Box 937, 410 North Court Street Marion, Illinois 62959</p>	<p>WILLIAMSON COUNTY AIRPORT AUTHORITY</p>
<p>REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS NO. 053881</p> <p>W. Brian Ziegler ENGINEER</p>	<p>APPROVED <i>Bernard A. Paul</i> CHAIRMAN</p> <p>DATE : 6/17/2016</p> <p>APPROVED <i>Craig Pillatsch</i> SECRETARY</p> <p>DATE : 6/17/2016</p>
<p>SUBMITTED _____</p> <p>DATE : 6/17/2016</p>	<p>DATE : 6/17/2016</p>



LEGEND

PHASE 1 LIMITS	
AIRFIELD PAVEMENT CLOSURE	
CONSTRUCTION STAGING AREA	
HAUL ROUTE	
RUNWAY SAFETY AREA	
TAXIWAY SAFETY AREA	
LOW PROFILE BARRICADE	
RUNWAY CLOSURE CROSS	
GATE GUARD	

AIRFIELD OPERATIONAL LIMITATIONS

FACILITY	PHASE 1 LIMITATIONS
RUNWAY 2-20	RUNWAY 2-20 CLOSURE 11:00 PM - 5:00 AM (3 DAYS OF PHASE 1)
RUNWAY 11-29	CLOSED
TAXIWAY A	NONE
TAXIWAY B	CLOSED EAST OF TAXIWAY D
TAXIWAY B1	CLOSED
TAXIWAY B2	CLOSED NORTH OF TAXIWAY B
TAXIWAY C	CLOSED BETWEEN TAXIWAY C4 AND TAXIWAY B
TAXIWAY D	NONE

- GENERAL SAFETY NOTES**
- ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO THE CURRENT VERSION OF FAA ADVISORY CIRCULAR 150/5370-2F, "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION", AND THE AIRPORT SAFETY REQUIREMENTS CONTAINED IN THIS SAFETY AND PHASING PLAN.
 - AIRCRAFT AND EMERGENCY VEHICLES SHALL HAVE THE RIGHT OF WAY AT ALL TIMES.
 - APPROPRIATE NOTAMS (NOTICE TO AIRMEN) WILL BE ISSUED BY THE AIRPORT MANAGER. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 72 HOURS NOTICE PRIOR TO NAVIAD OR PAVEMENT CLOSURES.
 - THE CONTRACTOR SHALL NOT ALLOW HIS/HER EMPLOYEES, INCLUDING SUBCONTRACTORS AND SUPPLIERS, TO CROSS OR PROCEED ON AN ACTIVE RUNWAY, TAXIWAY, OR CRITICAL/SAFETY AREA WITHOUT PRIOR AUTHORIZATION BY AIRPORT PERSONNEL.
 - THE CONTRACTOR SHALL WORK ONLY WITHIN THE LIMITS SHOWN ON THE PLANS. ALL EQUIPMENT AND PERSONNEL SHALL BE LIMITED TO THE STAGING AREA, DESIGNATED HAUL ROUTES, OR WITHIN THE CONSTRUCTION LIMITS. ALL PERSONAL VEHICLES SHALL BE PARKED WITHIN THE CONTRACTOR'S STAGING AREA.
 - THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN THE PROPOSED HAUL ROUTE AND PARKING AREA THROUGHOUT THE COURSE OF THE PROJECT. ANY AREAS DAMAGED OUTSIDE THESE AREAS WILL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE. AT THE CONCLUSION OF THE PROJECT THE CONTRACTOR WILL PERFORM ANY AND ALL WORK NECESSARY TO RESTORE THE HAUL ROUTE AND EQUIPMENT PARKING AND STORAGE AREA TO ITS ORIGINAL STATE. RESTORATION OF THE HAUL ROUTE AND PARKING AREA WILL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO ADDITIONAL

- COMPENSATION WILL BE ALLOWED.
- THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL CONSTRUCTION AREAS WHEN THE PROJECT IS COMPLETED.
 - EXISTING TURF AREAS DISTURBED BY THE CONTRACTORS OPERATIONS SHALL BE RESTORED AT HIS/HER EXPENSE TO THE SATISFACTION OF THE AIRPORT.
 - HEIGHT OF CONSTRUCTION EQUIPMENT MAXIMUM IS ANTICIPATED TO BE 25', WHICH IS A RAISED TRUCK BED.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITY COMPANIES LINES IN THE WORK AREA. CALL J.U.L.I.E. (1-800-892-0123) FOR UTILITY LOCATING.
 - IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE AND MAINTAIN BARRICADES AND CROSSES AS DIRECTED BY THE ENGINEER. THE BARRICADES WILL BE EQUIPPED WITH RED FLASHING LIGHTS. THE BARRICADES, THEIR MAINTENANCE, PLACEMENT AND REMOVAL WILL BE CONSIDERED AS AN INCIDENTAL TO MAINTENANCE OF TRAFFIC AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
 - IDENTIFICATION - WHEN THE CONTRACTOR'S VEHICLES AND EQUIPMENT ARE ON THE AIRPORT THEY SHALL BE PROPERLY MARKED WITH THREE FOOT (3') SQUARE CHECKERED AVIATION FLAGS (INTERNATIONAL ORANGE AND WHITE) OR FLASHING DOME TYPE AMBER COLORED BEACONS VISIBLE FROM THE CONTROL TOWER.
 - THE CONTRACTOR SHALL FURNISH AIRPORT RADIOS FOR HIS/HER USE. RADIOS SHALL BE CAPABLE OF MONITORING AND TRANSMITTING OVER THE AIRPORT'S GROUND CONTROL

- FREQUENCY (121.7 MHZ). THE CONTRACTOR SHALL MONITOR THE GROUND CONTROL FREQUENCY CONTINUOUSLY WHEN THE ATCT IS OPERATIONAL, 7:00 AM TO 7:00 PM. WHEN THE ATCT IS CLOSED THE CONTRACTOR SHALL MONITOR FREQUENCY (127.47).
- CONTRACTOR PERSONNEL OPERATING VEHICLES ON THE AIRFIELD SHALL ATTEND AIRPORT DRIVERS TRAINING CLASS OR BE ESCORTED BY PERSONNEL WHO HAVE COMPLETED TRAINING PRIOR TO BEGINNING OF CONSTRUCTION.
 - THE CONTRACTOR SHALL MAINTAIN SECURITY (GATE GUARD) ON THE ACCESS GATE WHEN IT IS UNLOCKED. THE GATE SHALL BE CLOSED AND LOCKED AT THE END OF EACH WORK DAY. CONTRACTOR SHALL PROVIDE LOCK FOR GATE WITH KEYS FOR ESSENTIAL PERSONNEL ONLY. ALL COST FOR GATE GUARDS AND LOCK SHALL BE INCIDENTAL TO THE PROJECT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
 - RUNWAY AND TAXIWAY LIGHTS WITHIN CLOSED PORTIONS OF PROJECT SHALL BE DISCONNECTED OR COVERED.
 - THE CONTRACTOR SHALL PREPARE AND SUBMIT TO THE ENGINEER A SAFETY PLAN COMPLIANCE DOCUMENT (SPCP) PRIOR TO BEGINNING WORK. THE INTENT OF THE SPCD IS TO DOCUMENT HOW THE CONTRACTOR WILL COMPLY WITH CONSTRUCTION SAFETY AND PHASING PLAN (CSPP). SEE FAA ADVISORY CIRCULAR (AC) 150/5370-2F FOR ADDITIONAL INFORMATION.
 - COST FOR STAGING AREA, CONSTRUCTION AND RESTORATION OF HAUL ROUTES, AND TEMPORARY CONSTRUCTION EXIT SHALL BE INCIDENTAL TO MAINTENANCE OF TRAFFIC.

- DETAILED SAFETY NOTES**
- PHASE 1 SHALL CONSIST OF BITUMINOUS MILLING ON RUNWAY 11-29, BITUMINOUS TEST STRIP AND PAVING, RUNWAY ELECTRICAL, HOME RUN CABLE INSTALLATION AND CONCRETE JOINT SEALING.
 - WORK WITHIN THE RUNWAY 2-20 SAFETY AREA (RSA) SHALL BE COMPLETED WITH RUNWAY 2-20 CLOSED BETWEEN THE HOURS OF 11:00 PM AND 5:00 AM. ALL TRENCHES SHALL BE BACKFILLED AND ALL EQUIPMENT, MATERIALS, AND PERSONNEL SHALL BE CLEAR THE RSA NO LATER THAN 5:00 AM. THE CONTRACTOR SHALL NOT LEAVE THE SITE UNTIL AIRPORT PERSONNEL HAVE CONDUCTED A SAFETY INSPECTION AND DEEMED RUNWAY 2-20 SAFE TO REOPEN.
 - THE CONTRACTOR SHALL TO THE BEST OF HIS/HER ABILITY NOT PARK EQUIPMENT OR STORE MATERIALS ON THE PAVEMENT OF RUNWAY 2-20 DURING NIGHT TIME CLOSURE.
 - RUNWAY 2-20 CLOSURE CROSSES SHALL BE REMOVED AT THE END OF EACH NIGHTS WORK.
 - THE CONTRACTOR SHALL MONITOR COMMON TRAFFIC ADVISORY FREQUENCY (CTAF) 127.47 MHZ DURING RUNWAY 2-20 CLOSURE.
 - WORK ASSOCIATED WITH INSTALLING HOME RUN OUTSIDE CONSTRUCTION PHASE LIMITS SHALL BE COORDINATED WITH THE RESIDENT ENGINEER AND AIR TRAFFIC CONTROL TOWER.
 - CONTRACT TIME FOR PHASE 1 SHALL BE 15 CALENDAR DAYS. RUNWAY 2-20 CLOSURE SHALL BE NO MORE THAN 3 CALENDAR DAYS.

LETTING CONTRACT NUMBER
W1057

STATE OF ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-004515

ALL RIGHTS RESERVED

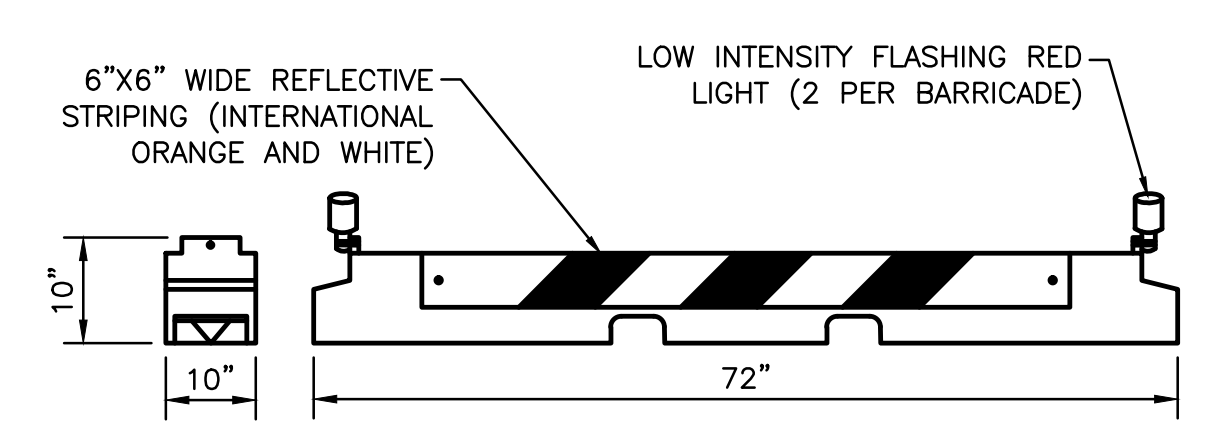
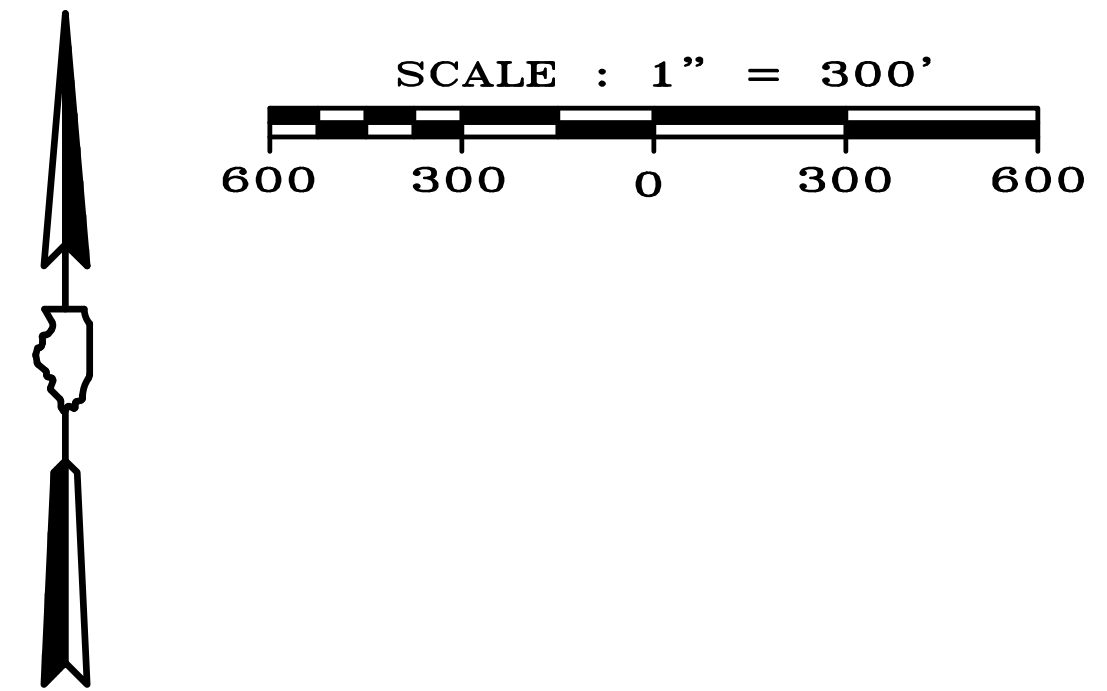
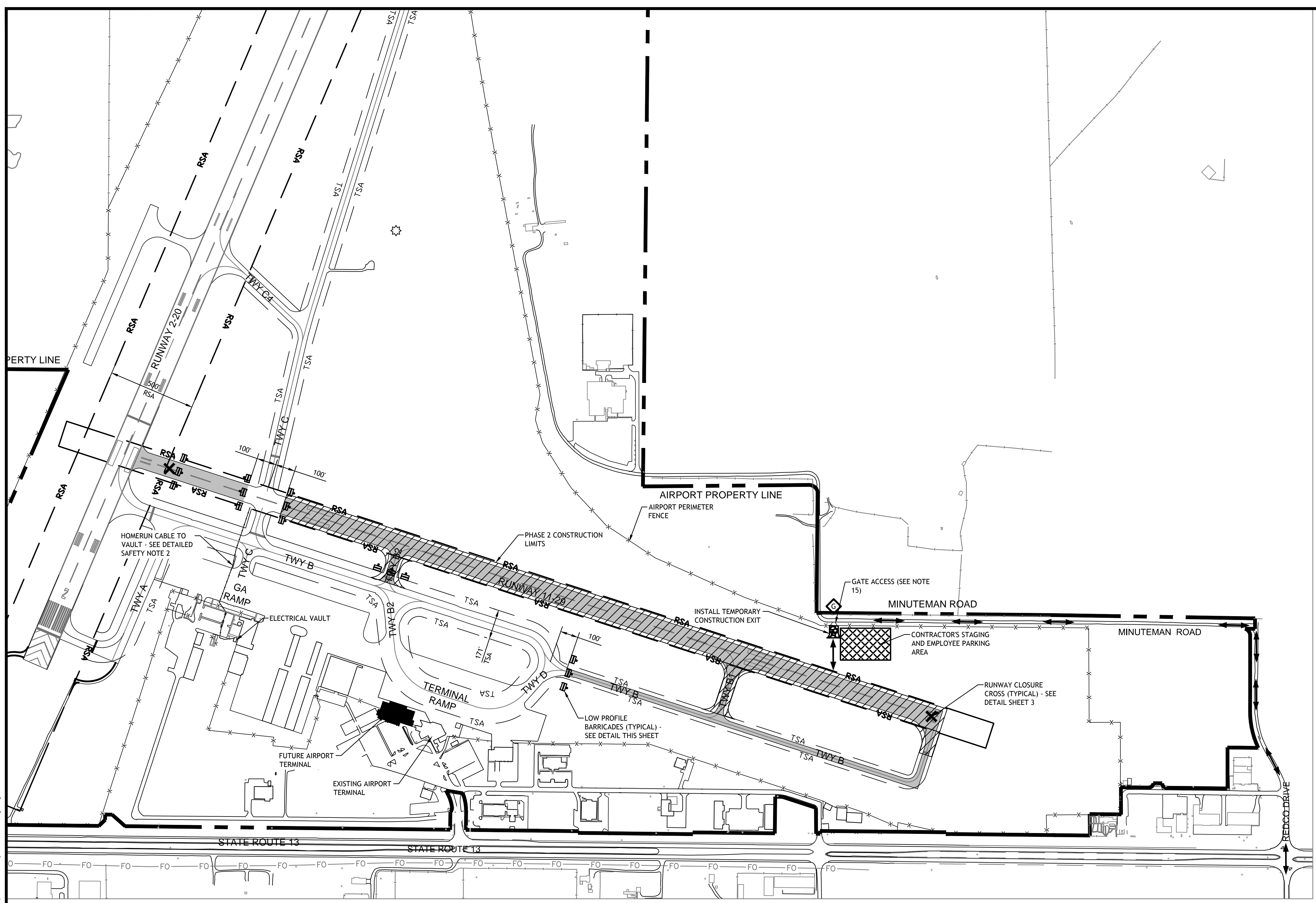
CLARIDA & ZIEGLER ENGINEERING CO.

410 North Court St, P.O. Box 937
Marion, Illinois 62959
Phone - (618)993-6411, Fax - (618)993-6750

RUNWAY 11-29 REHABILITATION, ASSOCIATED EDGE LIGHTS & GUIDANCE SIGN REPLACEMENT SAFETY AND PHASING - PH1

Date 6/17/16 DR. By MKW CK'D By WBZ
Scale 1" = 300' Job No. 15096 Sheet No. 3 of 21

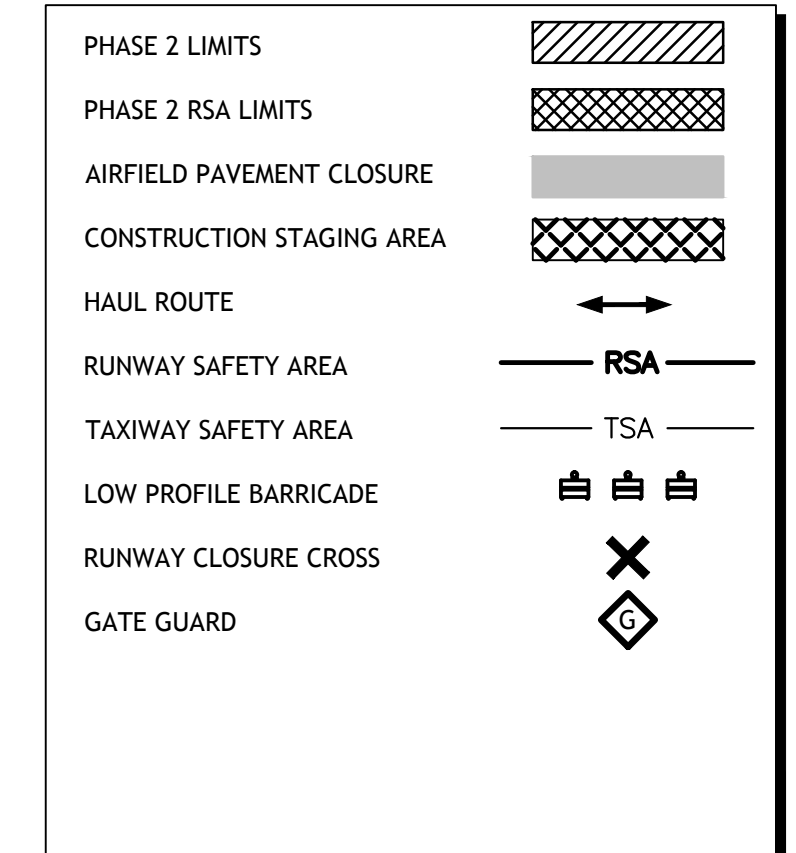
P:\Airport\15096 Runway 11-29 Runway Resurfacing and Lighting Drawings - Plans\03-05 Safety and Phasing.dwg 6-17-16 02:27:32 PM Matt



LOW PROFILE BARRICADE DETAIL
~N.T.S.~

- BARRICADE NOTES**
1. LOW PROFILE BARRICADES SHALL MEET REQUIREMENTS OF FAA ADVISORY CIRCULAR 150/5370-2 (CURRENT VERSION).
 2. BARRICADES MAXIMUM SPACING SHALL BE 15 FEET CENTER TO CENTER.
 3. BARRICADES SHALL BE WEIGHTED TO PREVENT MOVEMENT.
 4. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PROPER POSITIONING OF ALL BARRICADES.
 5. ALL COST TO FURNISH AND MAINTAIN BARRICADES SHALL BE INCLUDED IN THE COST OF MAINTENANCE OF TRAFFIC.

LEGEND



AIRFIELD OPERATIONAL LIMITATIONS

FACILITY	PHASE 2 LIMITATIONS
RUNWAY 2-20	NONE
RUNWAY 11-29	CLOSED
TAXIWAY A	CLOSED
TAXIWAY B	CLOSED EAST OF TAXIWAY D
TAXIWAY B1	CLOSED
TAXIWAY B2	CLOSED
TAXIWAY C	NONE
TAXIWAY D	NONE

GENERAL SAFETY NOTES

1. ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO THE CURRENT VERSION OF FAA ADVISORY CIRCULAR 150/5370-2F, "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION", AND THE AIRPORT SAFETY REQUIREMENTS CONTAINED IN THIS SAFETY AND PHASING PLAN.
2. AIRCRAFT AND EMERGENCY VEHICLES SHALL HAVE THE RIGHT OF WAY AT ALL TIMES.
3. APPROPRIATE NOTAMS (NOTICE TO AIRMEN) WILL BE ISSUED BY THE AIRPORT MANAGER. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 72 HOURS NOTICE PRIOR TO NAVIAD OR PAVEMENT CLOSURES.
4. THE CONTRACTOR SHALL NOT ALLOW HIS/HER EMPLOYEES, INCLUDING SUBCONTRACTORS AND SUPPLIERS, TO CROSS OR PROCEED ON AN ACTIVE RUNWAY, TAXIWAY, OR CRITICAL/SAFETY AREA WITHOUT PRIOR AUTHORIZATION BY AIRPORT PERSONNEL.
5. THE CONTRACTOR SHALL WORK ONLY WITHIN THE LIMITS SHOWN ON THE PLANS. ALL EQUIPMENT AND PERSONNEL SHALL BE LIMITED TO THE STAGING AREA, DESIGNATED HAUL ROUTES, OR WITHIN THE CONSTRUCTION LIMITS. ALL PERSONAL VEHICLES SHALL BE PARKED WITHIN THE CONTRACTOR'S STAGING AREA.
6. THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN THE PROPOSED HAUL ROUTE AND PARKING AREA THROUGHOUT THE COURSE OF THE PROJECT. ANY AREAS DAMAGED OUTSIDE THESE AREAS WILL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE. AT THE CONCLUSION OF THE PROJECT THE CONTRACTOR WILL PERFORM ANY AND ALL WORK NECESSARY TO RESTORE THE HAUL ROUTE AND EQUIPMENT PARKING AND STORAGE AREA TO ITS ORIGINAL STATE. RESTORATION OF THE HAUL ROUTE AND PARKING AREA WILL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO ADDITIONAL

COMPENSATION WILL BE ALLOWED.

7. THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL CONSTRUCTION AREAS WHEN THE PROJECT IS COMPLETED.
8. EXISTING TURF AREAS DISTURBED BY THE CONTRACTORS OPERATIONS SHALL BE RESTORED AT HIS/HER EXPENSE TO THE SATISFACTION OF THE AIRPORT.
9. HEIGHT OF CONSTRUCTION EQUIPMENT MAXIMUM IS ANTICIPATED TO BE 25', WHICH IS A RAISED TRUCK BED.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITY COMPANIES LINES IN THE WORK AREA. CALL J.U.L.I.E. (1-800-892-0123) FOR UTILITY LOCATING.
11. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE AND MAINTAIN BARRICADES AND CROSSES AS DIRECTED BY THE ENGINEER. THE BARRICADES WILL BE EQUIPPED WITH RED FLASHING LIGHTS. THE BARRICADES, THEIR MAINTENANCE, PLACEMENT AND REMOVAL WILL BE CONSIDERED AS AN INCIDENTAL TO MAINTENANCE OF TRAFFIC AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
12. IDENTIFICATION - WHEN THE CONTRACTOR'S VEHICLES AND EQUIPMENT ARE ON THE AIRPORT THEY SHALL BE PROPERLY MARKED WITH THREE FOOT (3') SQUARE CHECKERED AVIATION FLAGS (INTERNATIONAL ORANGE AND WHITE) OR FLASHING DOME TYPE AMBER COLORED BEACONS VISIBLE FROM THE CONTROL TOWER.
13. THE CONTRACTOR SHALL FURNISH AIRPORT RADIOS FOR HIS/HER USE. RADIOS SHALL BE CAPABLE OF MONITORING AND TRANSMITTING OVER THE AIRPORT'S GROUND CONTROL

FREQUENCY (121.7 MHZ). THE CONTRACTOR SHALL MONITOR THE GROUND CONTROL

14. CONTRACTOR PERSONNEL OPERATING VEHICLES ON THE AIRFIELD SHALL ATTEND AIRPORT DRIVERS TRAINING CLASS OR BE ESCORTED BY PERSONNEL WHO HAVE COMPLETED TRAINING PRIOR TO BEGINNING OF CONSTRUCTION.
15. THE CONTRACTOR SHALL MAINTAIN SECURITY (GATE GUARD) ON THE ACCESS GATE WHEN IT IS UNLOCKED. THE GATE SHALL BE CLOSED AND LOCKED AT THE END OF EACH WORK DAY. CONTRACTOR SHALL PROVIDE LOCK FOR GATE WITH KEYS FOR ESSENTIAL PERSONNEL ONLY. ALL COST FOR GATE GUARDS AND LOCK SHALL BE INCIDENTAL TO THE PROJECT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
16. RUNWAY AND TAXIWAY LIGHTS WITHIN CLOSED PORTIONS OF PROJECT SHALL BE DISCONNECTED OR COVERED.
17. THE CONTRACTOR SHALL PREPARE AND SUBMIT TO THE ENGINEER A SAFETY PLAN COMPLIANCE DOCUMENT (SPCP) PRIOR TO BEGINNING WORK. THE INTENT OF THE SPCD IS TO DOCUMENT HOW THE CONTRACTOR WILL COMPLY WITH CONSTRUCTION SAFETY AND PHASING PLAN (CSPP). SEE FAA ADVISORY CIRCULAR (AC) 150/5370-2F FOR ADDITIONAL INFORMATION.
18. COST FOR STAGING AREA, CONSTRUCTION AND RESTORATION OF HAUL ROUTES, AND TEMPORARY CONSTRUCTION EXIT SHALL BE INCIDENTAL TO MAINTENANCE OF TRAFFIC.

DETAILED SAFETY NOTES

1. PHASE 2 SHALL CONSIST OF, RUNWAY ELECTRICAL, HOME RUN CABLE INSTALLATION AND CONCRETE JOINT SEALING.
2. WORK ASSOCIATED WITH INSTALLING HOME RUN OUTSIDE CONSTRUCTION PHASE LIMITS SHALL BE COORDINATED WITH THE RESIDENT ENGINEER AND AIR TRAFFIC CONTROL TOWER.
3. CONTRACT TIME FOR PHASE 2 SHALL BE 30 CALENDAR DAYS.

LETTING CONTRACT NUMBER

W1057

STATE OF ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-004515

ALL RIGHTS RESERVED

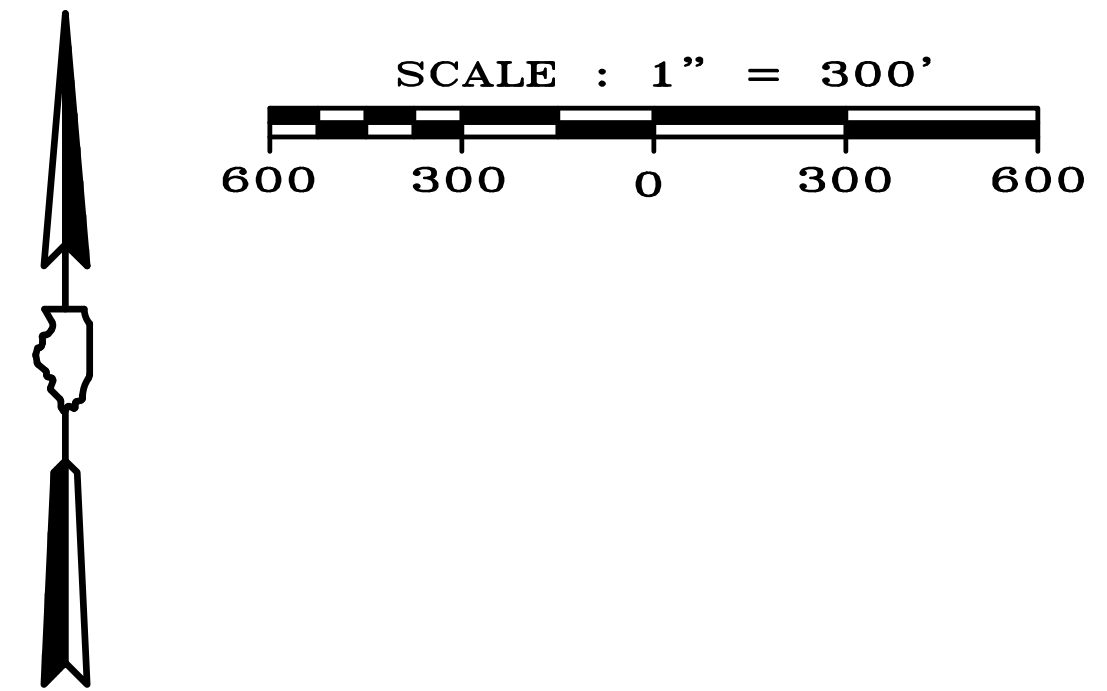
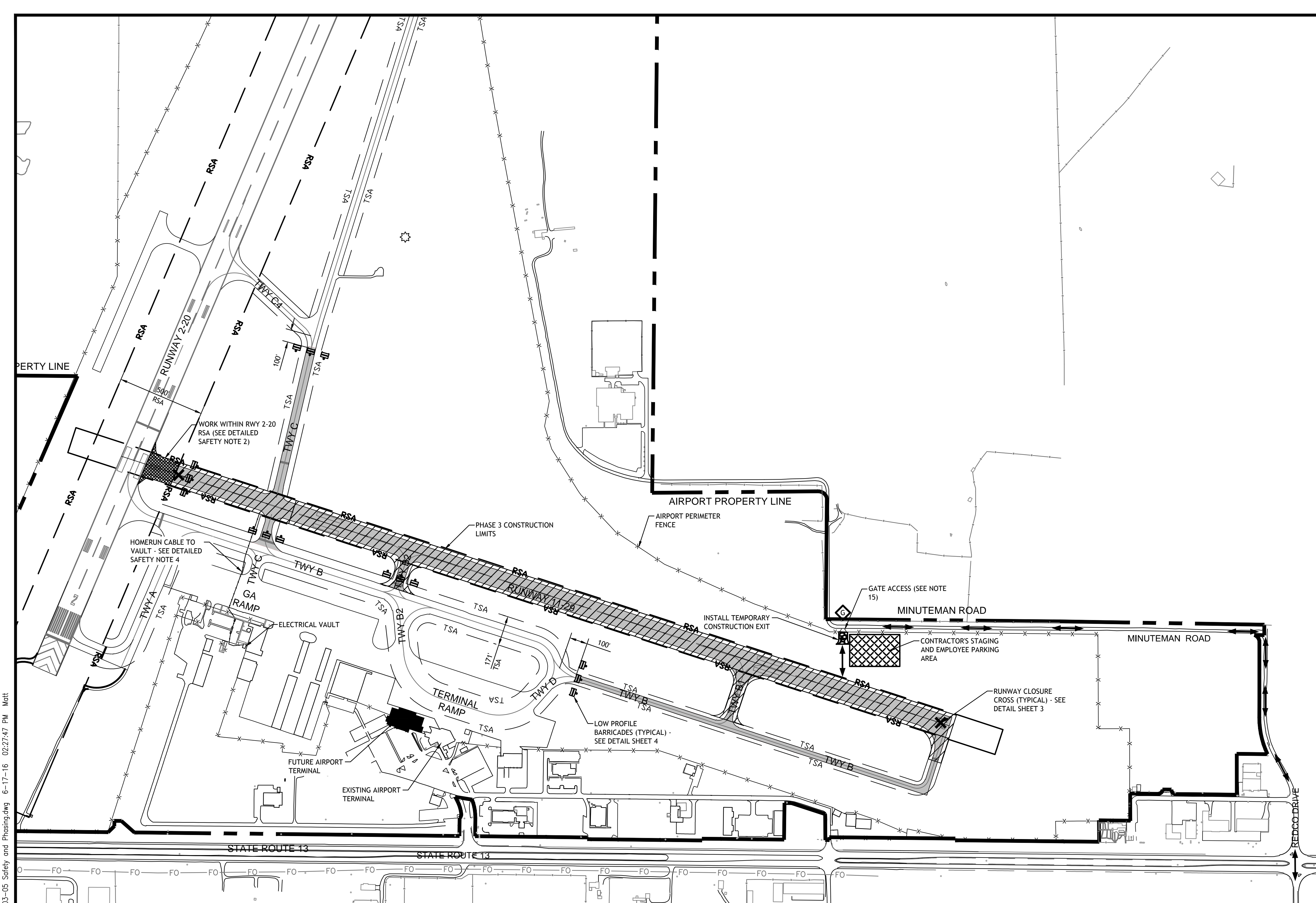
CLARIDA & ZIEGLER ENGINEERING CO.

410 North Court St, P.O. Box 937
Marion, Illinois 62959
Phone - (618)993-6411, Fax - (618)993-6750

RUNWAY 11-29 REHABILITATION, ASSOCIATED EDGE LIGHTS & GUIDANCE SIGN REPLACEMENT SAFETY AND PHASING - PH2

Date 6/17/16 DR. By MKW CK'D By WBZ
Scale 1" = 300' Job No. 15096 Sheet No. 4 of 21

P:\Airport\15096 Runway 11-29 Runway Resurfacing and Lighting Drawings - Plans\03-05 Safety and Phasing.dwg 6-17-16 02:27:42 PM Matt



LEGEND

PHASE 3 LIMITS	
PHASE 3 RSA LIMITS	
AIRFIELD PAVEMENT CLOSURE	
CONSTRUCTION STAGING AREA	
HAUL ROUTE	
RUNWAY SAFETY AREA	
TAXIWAY SAFETY AREA	
LOW PROFILE BARRICADE	
RUNWAY CLOSURE CROSS	
GATE GUARD	

AIRFIELD OPERATIONAL LIMITATIONS

FACILITY	PHASE 3 LIMITATIONS
RUNWAY 2-20	NONE
RUNWAY 11-29	CLOSED
TAXIWAY A	NONE
TAXIWAY B	CLOSED EAST OF TAXIWAY D
TAXIWAY B1	CLOSED
TAXIWAY B2	CLOSED NORTH OF TAXIWAY B
TAXIWAY C	CLOSED BETWEEN TAXIWAY C4 AND TAXIWAY B
TAXIWAY D	NONE

- GENERAL SAFETY NOTES**
- ALL CONSTRUCTION ACTIVITIES SHALL CONFORM TO THE CURRENT VERSION OF FAA ADVISORY CIRCULAR 150/5370-2F, "OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION", AND THE AIRPORT SAFETY REQUIREMENTS CONTAINED IN THIS SAFETY AND PHASING PLAN.
 - AIRCRAFT AND EMERGENCY VEHICLES SHALL HAVE THE RIGHT OF WAY AT ALL TIMES.
 - APPROPRIATE NOTAMS (NOTICE TO AIRMEN) WILL BE ISSUED BY THE AIRPORT MANAGER. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 72 HOURS NOTICE PRIOR TO NAVIAD OR PAVEMENT CLOSURES.
 - THE CONTRACTOR SHALL NOT ALLOW HIS/HER EMPLOYEES, INCLUDING SUBCONTRACTORS AND SUPPLIERS, TO CROSS OR PROCEED ON AN ACTIVE RUNWAY, TAXIWAY, OR CRITICAL/SAFETY AREA WITHOUT PRIOR AUTHORIZATION BY AIRPORT PERSONNEL.
 - THE CONTRACTOR SHALL WORK ONLY WITHIN THE LIMITS SHOWN ON THE PLANS. ALL EQUIPMENT AND PERSONNEL SHALL BE LIMITED TO THE STAGING AREA, DESIGNATED HAUL ROUTES, OR WITHIN THE CONSTRUCTION LIMITS. ALL PERSONAL VEHICLES SHALL BE PARKED WITHIN THE CONTRACTOR'S STAGING AREA.
 - THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN THE PROPOSED HAUL ROUTE AND PARKING AREA THROUGHOUT THE COURSE OF THE PROJECT. ANY AREAS DAMAGED OUTSIDE THESE AREAS WILL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE. AT THE CONCLUSION OF THE PROJECT THE CONTRACTOR WILL PERFORM ANY AND ALL WORK NECESSARY TO RESTORE THE HAUL ROUTE AND EQUIPMENT PARKING AND STORAGE AREA TO ITS ORIGINAL STATE. RESTORATION OF THE HAUL ROUTE AND PARKING AREA WILL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO ADDITIONAL

- COMPENSATION WILL BE ALLOWED.
- THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL CONSTRUCTION AREAS WHEN THE PROJECT IS COMPLETED.
 - EXISTING TURF AREAS DISTURBED BY THE CONTRACTORS OPERATIONS SHALL BE RESTORED AT HIS/HER EXPENSE TO THE SATISFACTION OF THE AIRPORT.
 - HEIGHT OF CONSTRUCTION EQUIPMENT MAXIMUM IS ANTICIPATED TO BE 25', WHICH IS A RAISED TRUCK BED.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITY COMPANIES LINES IN THE WORK AREA. CALL J.U.L.I.E. (1-800-892-0123) FOR UTILITY LOCATING.
 - IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE AND MAINTAIN BARRICADES AND CROSSES AS DIRECTED BY THE ENGINEER. THE BARRICADES WILL BE EQUIPPED WITH RED FLASHING LIGHTS. THE BARRICADES, THEIR MAINTENANCE, PLACEMENT AND REMOVAL WILL BE CONSIDERED AS AN INCIDENTAL TO MAINTENANCE OF TRAFFIC AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
 - IDENTIFICATION - WHEN THE CONTRACTOR'S VEHICLES AND EQUIPMENT ARE ON THE AIRPORT THEY SHALL BE PROPERLY MARKED WITH THREE FOOT (3') SQUARE CHECKERED AVIATION FLAGS (INTERNATIONAL ORANGE AND WHITE) OR FLASHING DOME TYPE AMBER COLORED BEACONS VISIBLE FROM THE CONTROL TOWER.
 - THE CONTRACTOR SHALL FURNISH AIRPORT RADIOS FOR HIS/HER USE. RADIOS SHALL BE CAPABLE OF MONITORING AND TRANSMITTING OVER THE AIRPORT'S GROUND CONTROL

- FREQUENCY (121.7 MHZ). THE CONTRACTOR SHALL MONITOR THE GROUND CONTROL FREQUENCY CONTINUOUSLY WHEN THE ATCT IS OPERATIONAL, 7:00 AM TO 7:00 PM. WHEN THE ATCT IS CLOSED THE CONTRACTOR SHALL MONITOR FREQUENCY (127.47).
- CONTRACTOR PERSONNEL OPERATING VEHICLES ON THE AIRFIELD SHALL ATTEND AIRPORT DRIVERS TRAINING CLASS OR BE ESCORTED BY PERSONNEL WHO HAVE COMPLETED TRAINING PRIOR TO BEGINNING OF CONSTRUCTION.
 - THE CONTRACTOR SHALL MAINTAIN SECURITY (GATE GUARD) ON THE ACCESS GATE WHEN IT IS UNLOCKED. THE GATE SHALL BE CLOSED AND LOCKED AT THE END OF EACH WORK DAY. CONTRACTOR SHALL PROVIDE LOCK FOR GATE WITH KEYS FOR ESSENTIAL PERSONNEL ONLY. ALL COST FOR GATE GUARDS AND LOCK SHALL BE INCIDENTAL TO THE PROJECT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
 - RUNWAY AND TAXIWAY LIGHTS WITHIN CLOSED PORTIONS OF PROJECT SHALL BE DISCONNECTED OR COVERED.
 - THE CONTRACTOR SHALL PREPARE AND SUBMIT TO THE ENGINEER A SAFETY PLAN COMPLIANCE DOCUMENT (SPCP) PRIOR TO BEGINNING WORK. THE INTENT OF THE SPDC IS TO DOCUMENT HOW THE CONTRACTOR WILL COMPLY WITH CONSTRUCTION SAFETY AND PHASING PLAN (CSPP). SEE FAA ADVISORY CIRCULAR (AC) 150/5370-2F FOR ADDITIONAL INFORMATION.
 - COST FOR STAGING AREA, CONSTRUCTION AND RESTORATION OF HAUL ROUTES, AND TEMPORARY CONSTRUCTION EXIT SHALL BE INCIDENTAL TO MAINTENANCE OF TRAFFIC.

- DETAILED SAFETY NOTES**
- PHASE 3 SHALL CONSIST OF RUNWAY ELECTRICAL HOME RUN CABLE INSTALLATION, RUNWAY GROOVING, PAVEMENT MARKINGS AND CONCRETE JOINT SEALING.
 - RUNWAY GROOVING AND PAVEMENT MARKINGS WITHIN THE RUNWAY 2-20 SAFETY AREA (RSA) SHALL BE COORDINATED WITH THE AIR TRAFFIC CONTROL TOWER. THE CONTRACTOR SHALL BE PREPARED TO EXIT THE SAFETY AREA AT ANY TIME FOR ARRIVING OR DEPARTING AIR TRAFFIC. THE CONTRACTOR SHALL DEDICATE PERSONNEL TO SOLELY MONITOR GROUND CONTROL FREQUENCY WHILE WORKING WITHIN THE RUNWAY SAFETY AREA.
 - RUNWAY GROOVING AND PAVEMENT MARKING OUTSIDE PHASE 3 LIMITS SHALL BE COORDINATED WITH AIR TRAFFIC CONTROL TOWER AND THE ENGINEER.
 - WORK ASSOCIATED WITH INSTALLING HOME RUN OUTSIDE CONSTRUCTION PHASE LIMITS SHALL BE COORDINATED WITH THE RESIDENT ENGINEER AND AIR TRAFFIC CONTROL TOWER.
 - CONTRACT TIME FOR PHASE 3 SHALL BE 25 CALENDAR DAYS.

LETTING CONTRACT NUMBER
W1057

STATE OF ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-004515
© ALL RIGHTS RESERVED

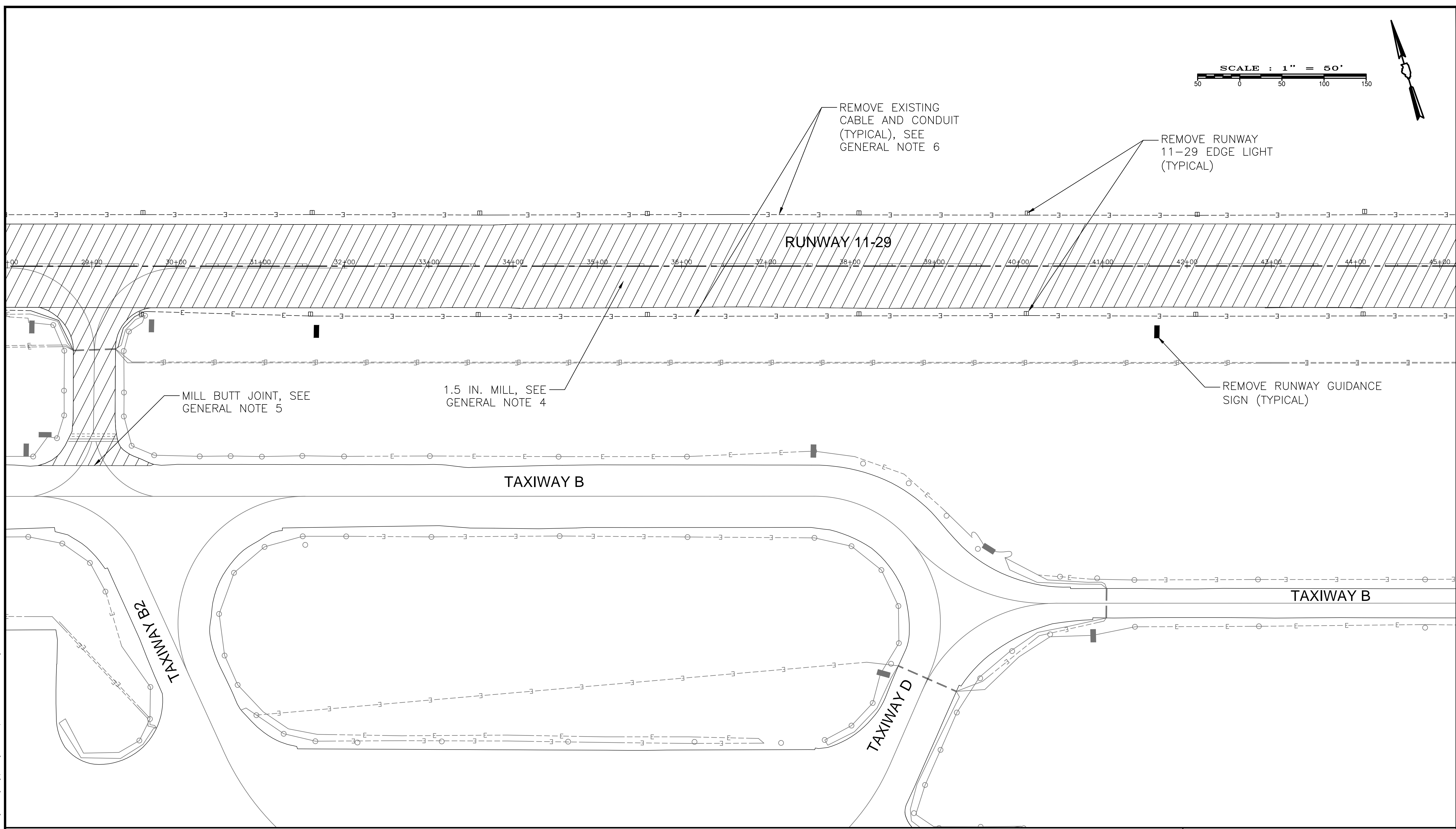
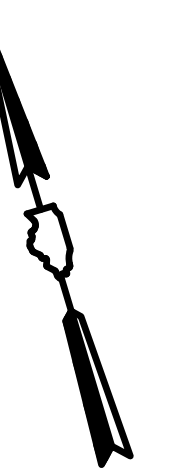
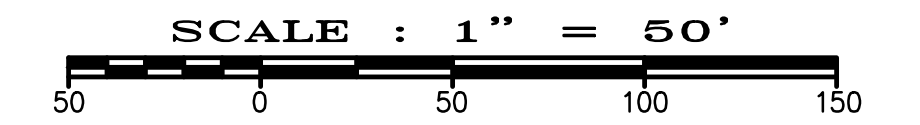
CLARIDA & ZIEGLER ENGINEERING CO.
410 North Court St, P.O. Box 937
Marion, Illinois 62959
Phone - (618)993-6411, Fax - (618)993-6750

RUNWAY 11-29 REHABILITATION, ASSOCIATED EDGE LIGHTS & GUIDANCE SIGN REPLACEMENT SAFETY AND PHASING - PH3

REVISIONS	
DATE	NO.

Date 6/17/16 DR. By MKW Ck'D By WBZ
Scale 1" = 300' Job No. 15096 Sheet No. 5 of 21

P:\Airport\15096 Runway 11-29 Runway Resurfacing and Lighting Drawings - Plans\03-05 Safety and Phasing.dwg 6-17-16 02:27:47 PM Matt



- GENERAL NOTES**
- LOCATE EXISTING UNDERGROUND CABLES AND DUCT BANKS. CROSSINGS AT CABLES TO BE RETAINED SHALL BE CAREFULLY EXCAVATED TO AVOID DAMAGE.
 - CABLES TO BE DISCONNECTED, REMOVED OR OTHERWISE ABANDONED, WHEN FOUND TO INTERFERE WITH PROPOSED WIRING, SHALL BE REMOVED TO AT LEAST 2 FT FROM THE PROPOSED INSTALLATION.
 - EXISTING RUNWAY 11-29 CABLES TO BE REMOVED FROM DUCK BANKS.
 - CONTRACTOR SHALL STOCKPILE MILLINGS AT LOCATION SPECIFIED ON SCOPE OF WORK SHEET.
 - BUTT JOINT SHALL BE CONSTRUCTED PER DETAIL ON TYPICAL SECTIONS. FIELD LOCATION OF JOINT SHALL BE DETERMINED BY THE ENGINEER. BUTT JOINT CONSTRUCTION SHALL BE INCIDENTAL TO BITUMINOUS PAVEMENT MILLING.

6. REMOVE EXISTING CABLE AND CONDUIT BETWEEN RUNWAY 11-29 EDGE LIGHTS AND AS NOTED ELSEWHERE IN CONSTRUCTION PLANS.

LETTING CONTRACT NUMBER
WI057

STATE OF ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-004515

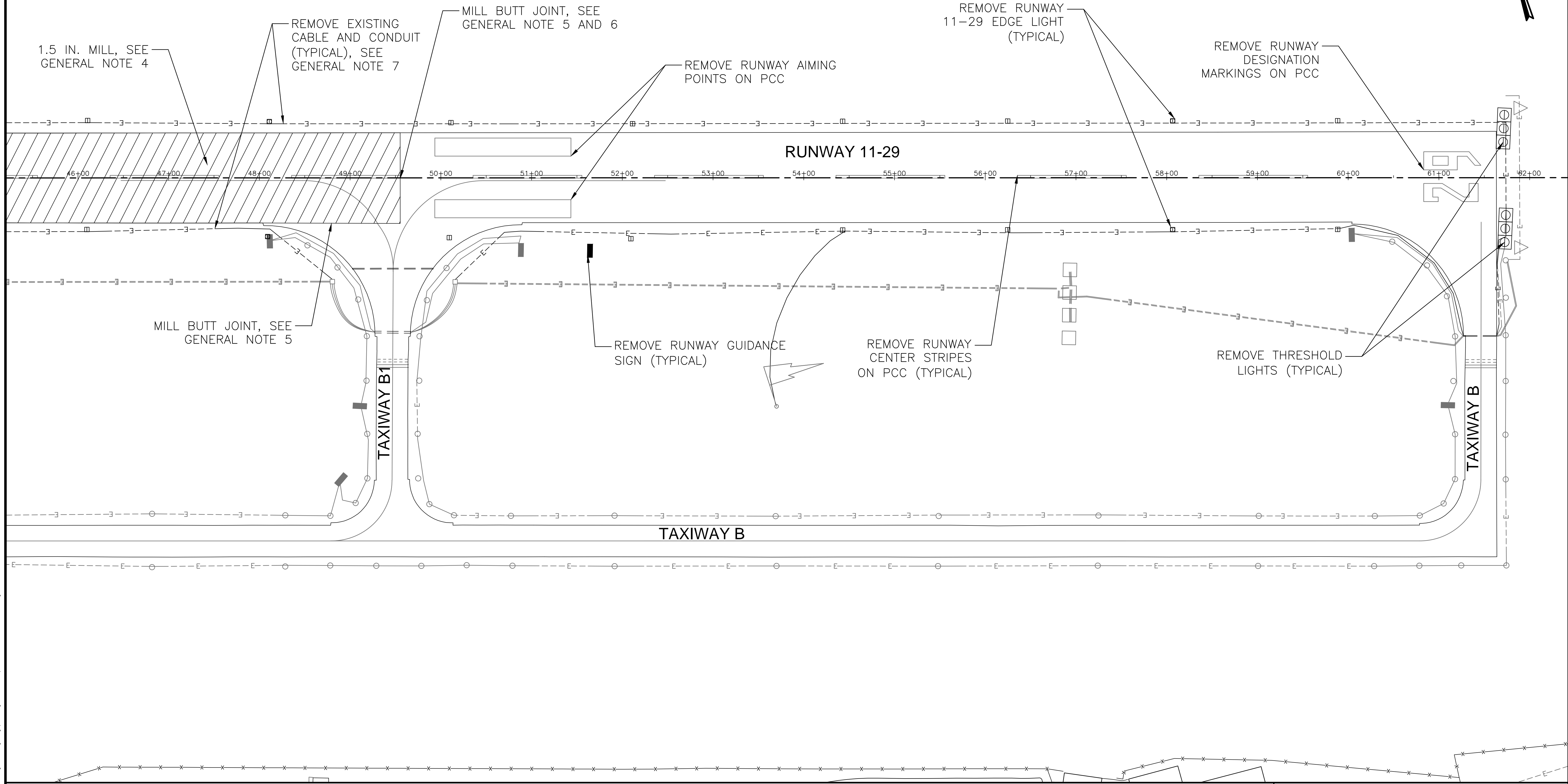
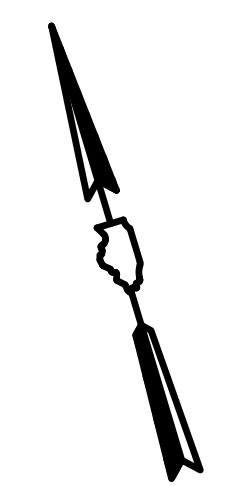
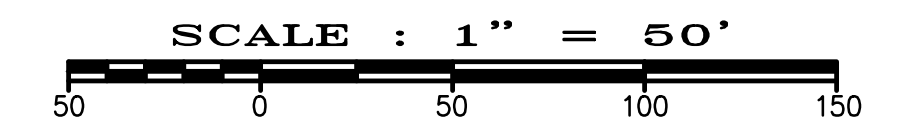
REVISIONS	
DATE	NO.

© ALL RIGHTS RESERVED
CLARIDA & ZIEGLER ENGINEERING CO.
 410 North Court St, P.O. Box 937
 Marion, Illinois 62959
 Phone - (618)993-6411, Fax - (618)993-6750

RUNWAY 11-29 REHABILITATION, ASSOCIATED EDGE LIGHTS & GUIDANCE SIGN REPLACEMENT DEMOLITION PLAN

Date 6/17/16 DR. By MKW CK'D By WBZ
 Scale 1" = 50' Job No. 15096 Sheet No. 8 of 21

P:\Airport\15096 Runway 11-29 Runway Resurfacing and Lighting Drawings - Plans\07-09 Demolition Plan.dwg 6-17-16 02:28:11 PM Matt



GENERAL NOTES

1. LOCATE EXISTING UNDERGROUND CABLES AND DUCT BANKS. CROSSINGS AT CABLES TO BE RETAINED SHALL BE CAREFULLY EXCAVATED TO AVOID DAMAGE.
2. CABLES TO BE DISCONNECTED, REMOVED OR OTHERWISE ABANDONED, WHEN FOUND TO INTERFERE WITH PROPOSED WIRING, SHALL BE REMOVED TO AT LEAST 2 FT FROM THE PROPOSED INSTALLATION.
3. EXISTING RUNWAY 11-29 CABLES TO BE REMOVED FROM DUCK BANKS.
4. CONTRACTOR SHALL STOCKPILE MILLINGS AT LOCATION SPECIFIED ON SCOPE OF WORK SHEET.
5. BUTT JOINT SHALL BE CONSTRUCTED PER DETAIL ON TYPICAL SECTIONS. FIELD LOCATION OF JOINT SHALL BE DETERMINED BY THE ENGINEER. BUTT JOINT CONSTRUCTION SHALL BE INCIDENTAL TO BITUMINOUS PAVEMENT MILLING.
6. CONTRACTOR SHALL MILL PERPENDICULAR BUTT JOINT. CONCRETE MILLING SHALL NOT BE PAID FOR SEPARATELY.
7. REMOVE EXISTING CABLE AND CONDUIT BETWEEN RUNWAY 11-29 EDGE LIGHTS AND AS NOTED ELSEWHERE IN CONSTRUCTION PLANS.

STATE OF ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-004515

REVISIONS	
DATE	NO.

© ALL RIGHTS RESERVED

CLARIDA & ZIEGLER ENGINEERING CO.

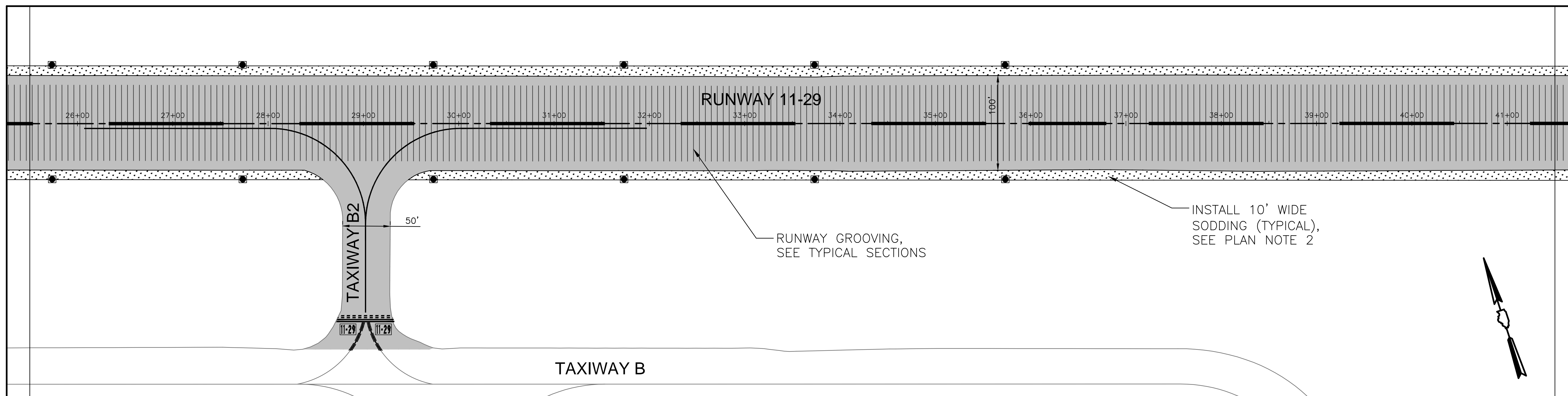
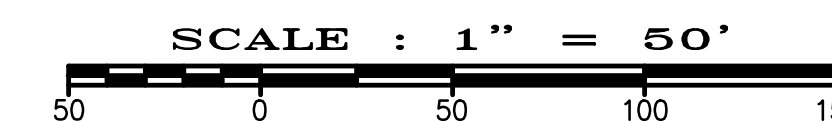
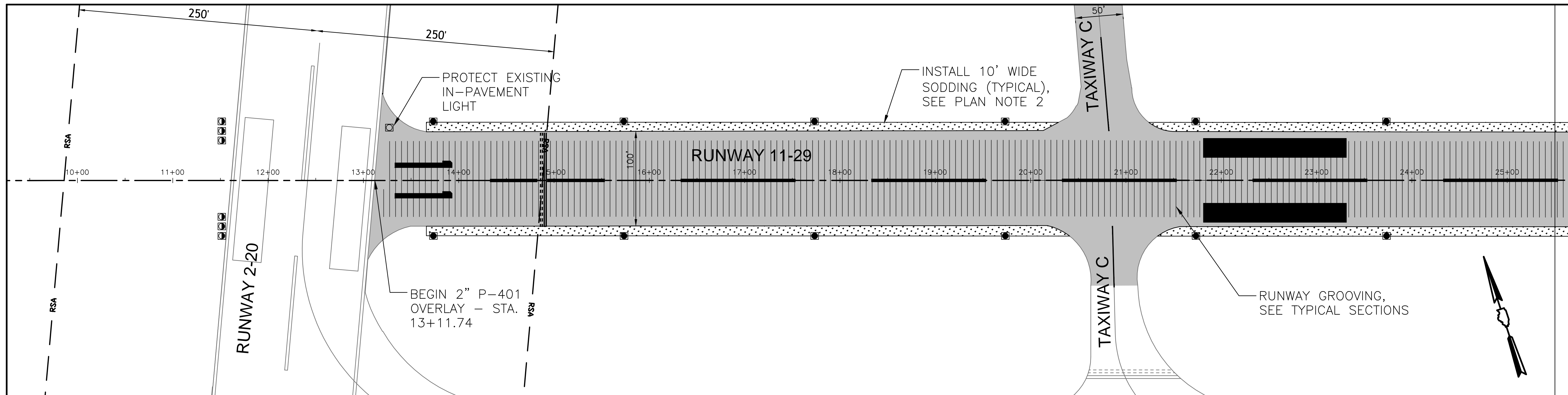
410 North Court St, P.O. Box 937
Marion, Illinois 62959
Phone - (618)993-6411, Fax - (618)993-6750

RUNWAY 11-29 REHABILITATION, ASSOCIATED EDGE LIGHTS & GUIDANCE SIGN REPLACEMENT DEMOLITION PLAN

Date 6/17/16 DR. By MKW CK'D By WBZ
Scale 1" = 50' Job No. 15096 Sheet No. 9 of 21

LETTING CONTRACT NUMBER
WI057

F:\Airport\15096 Runway 11-29 Runway Resurfacing and Lighting Drawings - Plans\07-09 Demolition Plan.dwg 6-17-16 02:28:16 PM Matt



GENERAL NOTES

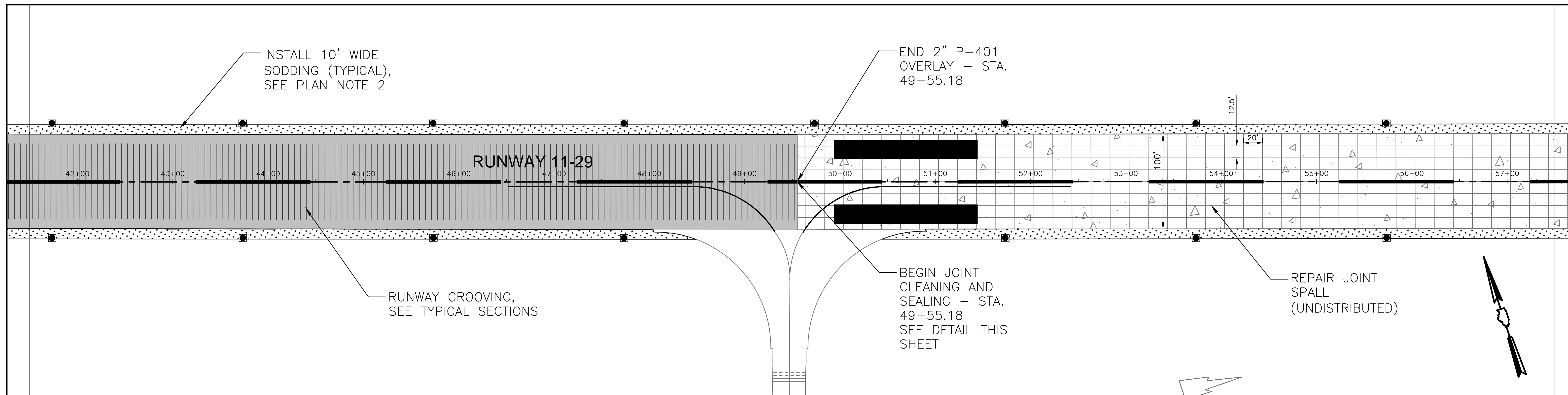
1. SEE SAFETY AND PHASING PLANS FOR WORK WITHIN RUNWAY 2-20 SAFETY AREA.
2. SODDING SHALL BE 1.5 INCHES BELOW RUNWAY PAVEMENT. CONTRACTOR SHALL CUT EARTH SHOULDER AS NEEDED TO MAINTAIN THIS DEPTH. COST OF CUT SHALL BE INCIDENTAL TO SODDING.
3. PAVEMENT SURFACE SHALL BE FLUSH WITH EXISTING IN-PAVEMENT LIGHT.

LEGEND	
BITUMINOUS PAVEMENT	
RUNWAY GROOVING	
SODDING	

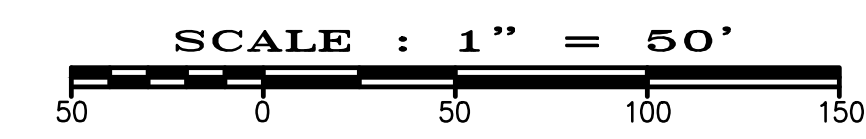
LETTING CONTRACT NUMBER
W1057

STATE OF ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-004515	
REVISIONS	
DATE	NO.
CLARIDA & ZIEGLER ENGINEERING CO. 410 North Court St, P.O. Box 937 Marion, Illinois 62959 Phone - (618)993-6411, Fax - (618)993-6750	
RUNWAY 11-29 REHABILITATION, ASSOCIATED EDGE LIGHTS & GUIDANCE SIGN REPLACEMENT OVERLAY PLAN	
Date	6/17/16
DR. By	MKW
Ck'D By	WBZ
Scale	1" = 50'
Job No.	15096
Sheet No.	10 of 21

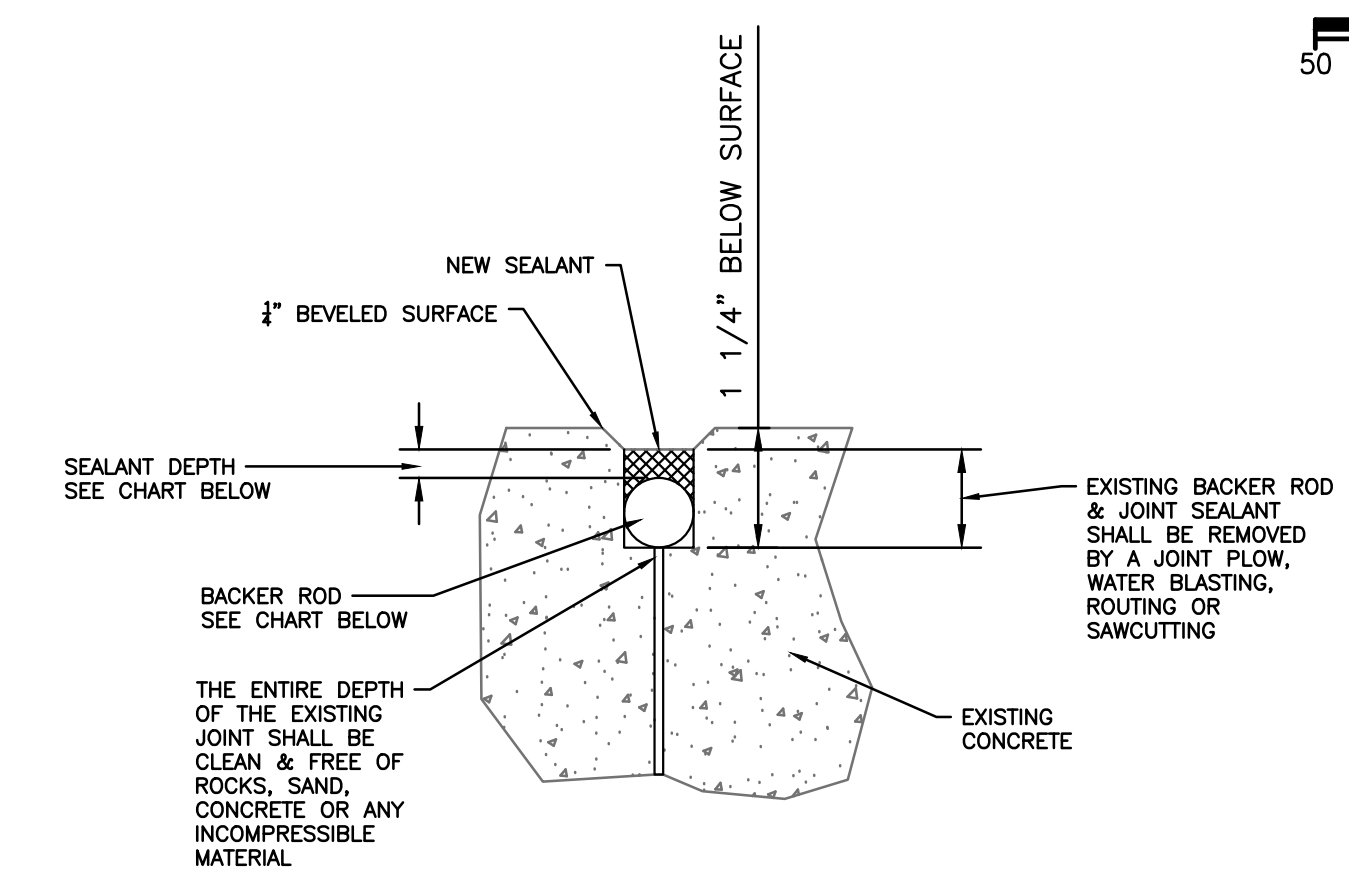
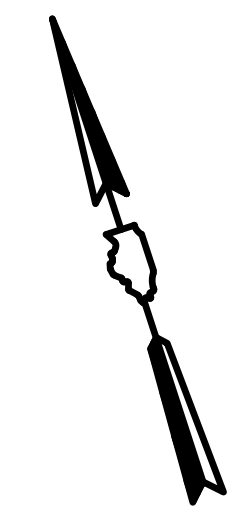
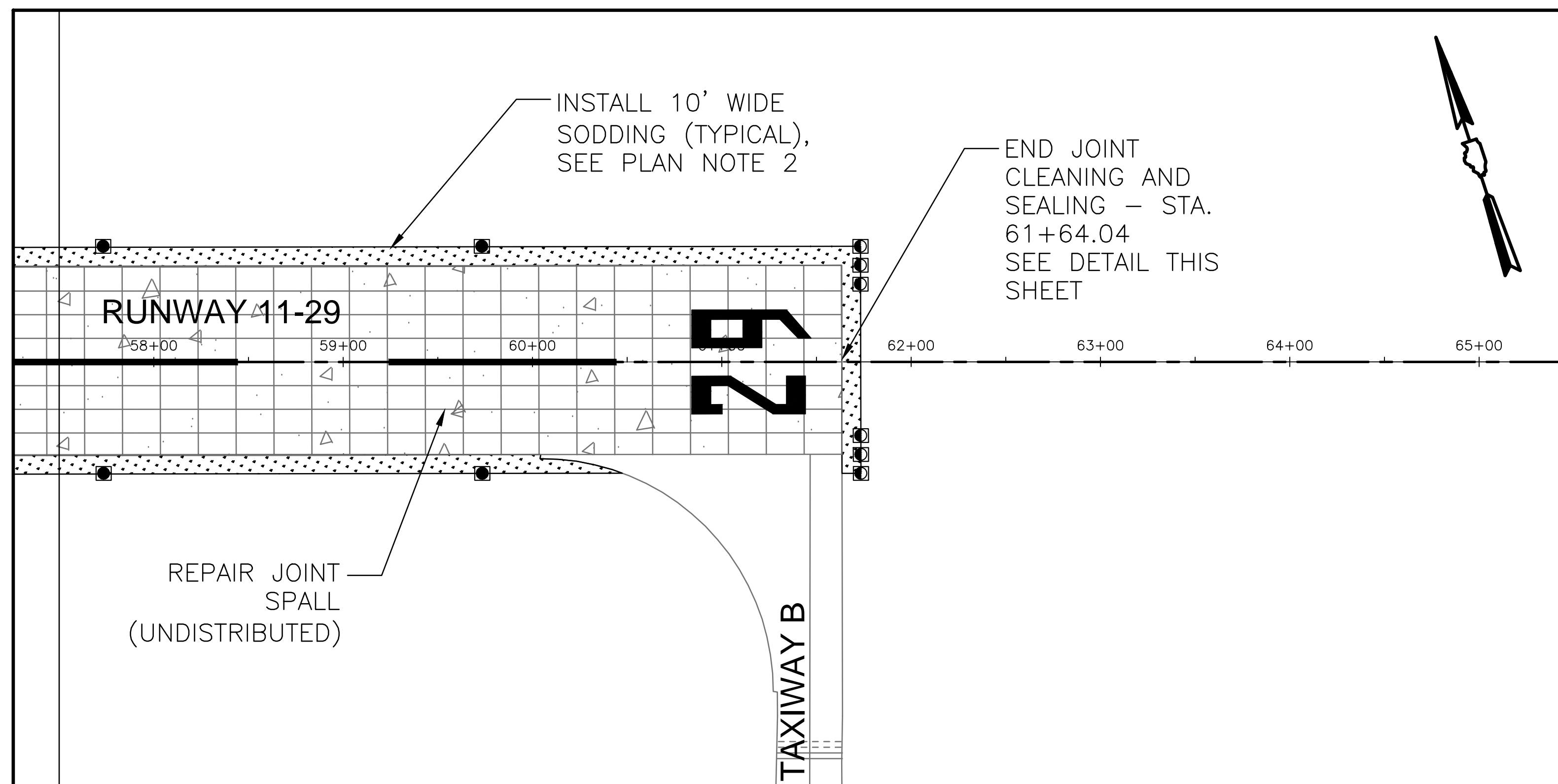
MATCH LINE
STA. 41+50



MATCH LINE
STA. 57+50



MATCH LINE
STA. 57+50



JOINT WIDTH	3/8"	1/2"	3/4"	1"
SEALANT DEPTH	1/4"	1/4"	3/8"	1/2"
BACKER ROD DIAMETER	1/2"	5/8"	7/8"	1 1/4"

EXISTING CONCRETE JOINT CLEANING AND SEALING
N.T.S.

- SEALANT NOTES:**
- JOINT SEALANT SHALL BE DOW 9505L SILICONE OR APPROVED EQUAL AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
 - BACKER ROD MATERIAL SHALL BE COMPATIBLE WITH THE JOINT SEALER USED AND SHALL BE CLOSED-CELL RESILIENT FOAM OR SPONGE RUBBER.

- GENERAL NOTES**
- SEE SAFETY AND PHASING PLANS FOR WORK WITHIN RUNWAY 2-20 SAFETY AREA.
 - SODDING SHALL BE 1.5 INCHES BELOW RUNWAY PAVEMENT. CONTRACTOR SHALL CUT EARTH SHOULDER AS NEEDED TO MAINTAIN THIS DEPTH. COST OF CUT SHALL BE INCIDENTAL TO SODDING.
 - PAVEMENT SURFACE SHALL BE FLUSH WITH EXISTING IN-PAVEMENT LIGHT.
 - JOINT SPALL REPAIR LOCATIONS SHALL BE AS DIRECTED BY THE ENGINEER.

LEGEND	
BITUMINOUS PAVEMENT	
EXISTING CONCRETE	
RUNWAY GROOVING	
SODDING	

LETTING CONTRACT NUMBER
WI057

STATE OF ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-004515

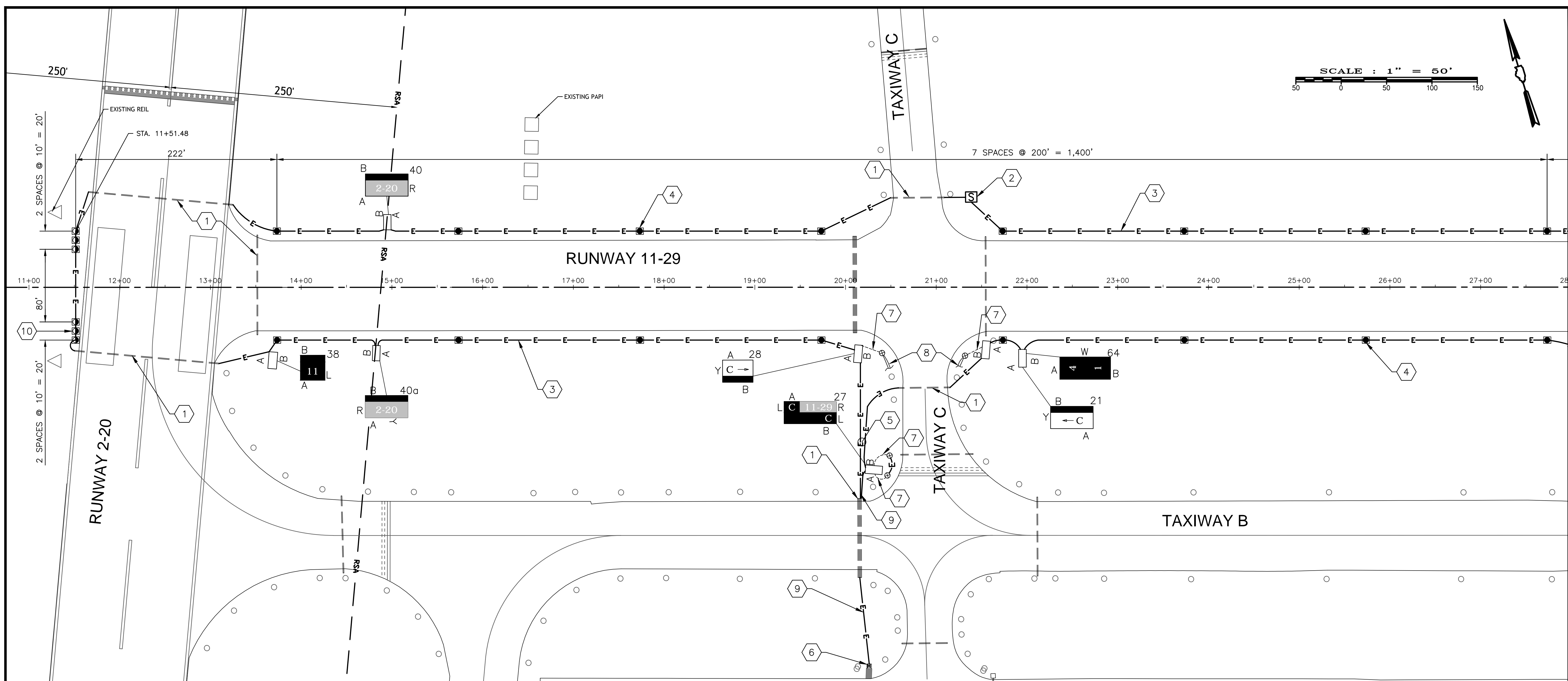
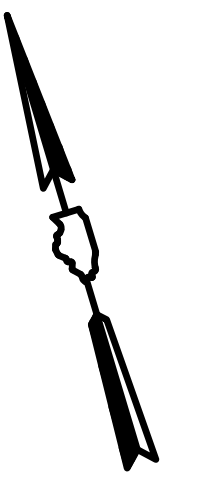
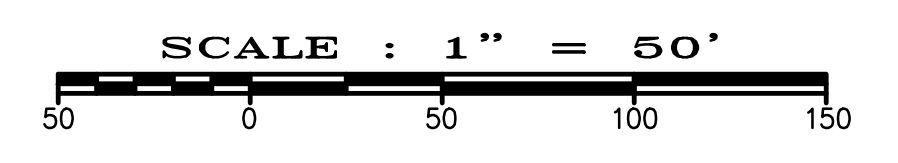
REVISIONS	
DATE	NO.

CLARIDA & ZIEGLER ENGINEERING CO.
410 North Court St., P.O. Box 937
Marion, Illinois 62959
Phone - (618)993-6411, Fax - (618)993-6750

RUNWAY 11-29 REHABILITATION, ASSOCIATED EDGE LIGHTS & GUIDANCE SIGN REPLACEMENT OVERLAY PLAN

Date 6/17/16 DR. By MKW Ck'D By WBZ
Scale 1" = 50' Job No. 15096 Sheet No. 11 of 21

P:\Airport\15096 Runway 11-29 Runway Resurfacing and Lighting\Drawings - Plans\10-11 OVERLAY PLANKING 6-17-16 02:28:37 PM Mitt



- PLAN NOTES**
- LOCATE AND EXPOSE ENDS OF EXISTING DUCT FOR ADDITION OF PROPOSED CABLES. HAND-EXCAVATE AS NECESSARY TO AVOID DAMAGE TO EXISTING CABLES. DISCONNECT AND REMOVE EXISTING CABLES FOR CIRCUITS TO BE REPLACED.
 - SPLICE RUNWAY CABLE IN THIS SPLICE BOX FOR FUTURE CIRCUIT EXTENSIONS.
 - 1/C, #8, 5 KV, TYPE C CABLE IN UNIT DUCT - TYPICAL FOR ALL RUNWAY LIGHTING CABLE UNLESS NOTED OTHERWISE. OFFSET CABLE ROUTING AS REQUIRED TO AVOID EXISTING UNDERGROUND CABLE REROUTING.
 - INSTALL BASE MOUNTED LED MEDIUM INTENSITY RUNWAY EDGE LIGHT (MIRL) WHITE - TYPICAL FOR ALL RUNWAY LIGHTS. SEE SHEET 17 FOR LIGHT DETAIL.
 - RUNWAY 11-29 PROPOSED CIRCUIT.
 - SEE SHEET 15 FOR DETAILS OF THIS AREA.
 - REMOVE EXISTING CABLE BETWEEN EXISTING GUIDANCE SIGN AND BASE MOUNTED TAXIWAY LIGHTS SHOWN.
 - REROUTE EXISTING CABLE INTO EXISTING BASE MOUNTED TAXIWAY LIGHT SHOWN.
 - 2/C, #8, 5 KV, TYPE C CABLE IN UNIT DUCT.
 - L-861 E LED RUNWAY THRESHOLD LIGHTS, BIDIRECTIONAL: RED-GREEN

- GENERAL NOTES**
- ALL RUNWAY LIGHTS SHALL BE LOCATED 10 FT FROM EDGE OF PAVEMENT TO CENTER.
 - TAXIWAY GUIDANCE AND HOLDING SIGNS SHALL BE LOCATED ON EXISTING CONCRETE BASES UNLESS NOTED OTHERWISE. WHERE EXISTING BASES ARE TO BE REMOVED AND REPLACED, THE PROPOSED BASE SHALL BE PLACED IN THE SAME LOCATION. ADJUST MOUNTING FOR PROPOSED SIGNS TO REUSE EXISTING SECONDARY CONDUIT STUBUP FROM THE ADJACENT TRANSFORMER BASE.

SIGN SCHEDULE				
SIGN NO.	SIDE	R/Y/L/W	LEGEND	REMARKS
21	A	Y	[C]	CONNECT TO RUNWAY 11-29 CIRCUIT
27	A	L/R	[C 11-29]	CONNECT TO RUNWAY 11-29 CIRCUIT
	B	L	[C]	
28	A	Y	[C →]	CONNECT TO RUNWAY 11-29 CIRCUIT
38	A	L	[11]	CONNECT TO RUNWAY 11-29 CIRCUIT
40	A	R	[2-20]	STYLE 2, SIZE 5; CONNECT TO RUNWAY 11-29 CIRCUIT
40A	A	R	[2-20]	STYLE 2, SIZE 5; CONNECT TO RUNWAY 11-29 CIRCUIT
64	A	W	[4]	STYLE 2, SIZE 5; CONNECT TO RUNWAY 11-29 CIRCUIT
	A	W	[1]	

- SCHEDULE NOTES**
- ALL SIGNS ARE STYLE 2, SIZE 1 UNLESS NOTED OTHERWISE IN REMARKS COLUMN.
 - ALL ARROW DEGREES ARE MEASURED FROM VERTICAL.
 - SIGN SCHEDULE LEGEND:
 R = WHITE LTR./RED BACKGROUND - HOLDING SIGN
 Y = BLACK LTR./YELLOW BACKGROUND - DIRECTION OR DESTINATION SIGN.
 L = YELLOW LTR./BLACK BACKGROUND - TAXIWAY LOCATION SIGN
 W = WHITE LTR./BLACK BACKGROUND - RUNWAY DISTANCE REMAINING SIGN
 A = SIGN FACE A
 B = SIGN FACE B - IF NOT SHOWN, THIS FACE SHALL REMAIN BLANK

LEGEND

- PROPOSED RUNWAY EDGE LIGHT
- EXISTING TAXIWAY EDGE LIGHT TO BE ADJUSTED
- EXISTING TAXIWAY EDGE LIGHT
- PROPOSED RUNWAY THRESHOLD LIGHT
- PROPOSED CABLE IN DUCT
- EXISTING TAXIWAY CABLE TO BE REMOVED/RELOCATED
- PROPOSED GUIDANCE SIGN
- PROPOSED SPLICE BOX

STATE OF ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-004515

REVISIONS

DATE	NO.

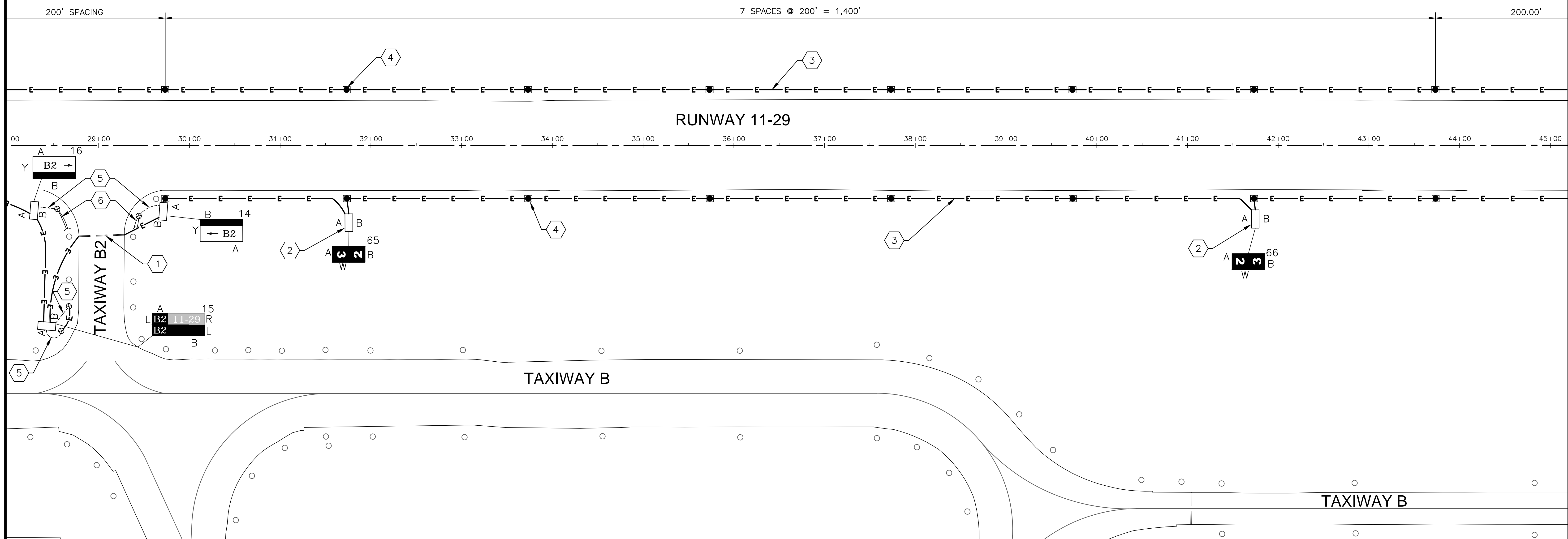
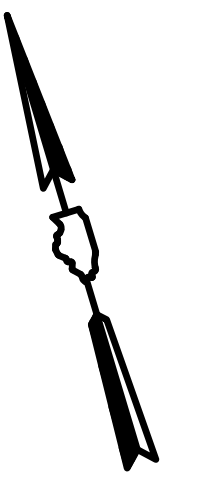
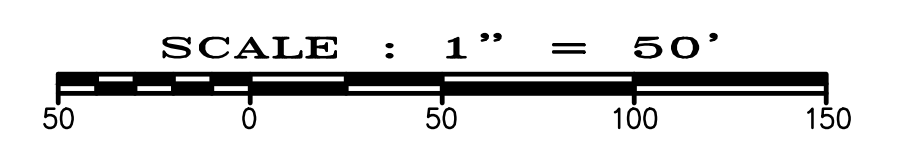
© ALL RIGHTS RESERVED

CLARIDA & ZIEGLER ENGINEERING CO.
 410 North Court St, P.O. Box 937
 Marion, Illinois 62959
 Phone - (618)993-6411, Fax - (618)993-6750

RUNWAY 11-29 REHABILITATION, ASSOCIATED EDGE LIGHTS & GUIDANCE SIGN REPLACEMENT ELECTRICAL PLAN

Date 6/17/16 DR. By MKW CK'D By WBZ
 Scale 1" = 50' Job No. 15096 Sheet No. 12 of 21

LETTING CONTRACT NUMBER
 WI057



- PLAN NOTES**
- LOCATE AND EXPOSE ENDS OF EXISTING DUCT FOR ADDITION OF PROPOSED CABLES. HAND-EXCAVATE AS NECESSARY TO AVOID DAMAGE TO EXISTING CABLES. DISCONNECT AND REMOVE EXISTING CABLES FOR CIRCUITS TO BE REPLACED.
 - REMOVE AND REPLACE EXISTING CONCRETE FOUNDATION FOR THIS TAXI GUIDANCE SIGN ENTIRELY.
 - 1/C, #8, 5 KV, TYPE C CABLE IN UNIT DUCT - TYPICAL FOR ALL RUNWAY LIGHTING CABLE UNLESS NOTED OTHERWISE. OFFSET CABLE ROUTING AS REQUIRED TO AVOID EXISTING UNDERGROUND CABLE ROUTINGS.
 - INSTALL BASE MOUNTED LED MEDIUM INTENSITY RUNWAY EDGE LIGHT (MIRL) WHITE - TYPICAL FOR ALL RUNWAY LIGHTS. SEE SHEET 17 FOR LIGHT DETAIL.
 - REMOVE EXISTING CABLE BETWEEN EXISTING GUIDANCE SIGN AND BASE MOUNTED TAXIWAY.
 - REROUTE EXISTING CABLE INTO EXISTING BASE MOUNTED TAXIWAY LIGHT SHOWN.

- GENERAL NOTES**
- ALL RUNWAY LIGHTS SHALL BE LOCATED 10 FT FROM EDGE OF PAVEMENT TO CENTER.
 - TAXIWAY GUIDANCE AND HOLDING SIGNS SHALL BE LOCATED ON EXISTING CONCRETE BASES UNLESS NOTED OTHERWISE. WHERE EXISTING BASES ARE TO BE REMOVED AND REPLACED, THE PROPOSED BASE SHALL BE PLACED IN THE SAME LOCATION. ADJUST MOUNTING FOR PROPOSED SIGNS TO REUSE EXISTING SECONDARY CONDUIT STUBUP FROM THE ADJACENT TRANSFORMER BASE.

SIGN SCHEDULE				
SIGN NO.	SIDE	R/Y/L/W	LEGEND	REMARKS
14	A	Y	[B2]	CONNECT TO RUNWAY 11-29 CIRCUIT
15	A	L/R	[B2 11-29]	CONNECT TO RUNWAY 11-29 CIRCUIT
	B	L	[B2]	
16	A	Y	[B2]	CONNECT TO RUNWAY 11-29 CIRCUIT
65	A	W	[3]	STYLE 2, SIZE 5; CONNECT TO RUNWAY 11-29 CIRCUIT
	B	W	[2]	
66	A	W	[2]	STYLE 2, SIZE 5; CONNECT TO RUNWAY 11-29 CIRCUIT
	B	W	[3]	

- SCHEDULE NOTES**
- ALL SIGNS ARE STYLE 2, SIZE 1 UNLESS NOTED OTHERWISE IN REMARKS COLUMN.
 - ALL ARROW DEGREES ARE MEASURED FROM VERTICAL.
 - SIGN SCHEDULE LEGEND:
 R = WHITE LTR./RED BACKGROUND - HOLDING SIGN
 Y = BLACK LTR./YELLOW BACKGROUND - DIRECTION OR DESTINATION SIGN.
 L = YELLOW LTR./BLACK BACKGROUND - TAXIWAY LOCATION SIGN
 W = WHITE LTR./BLACK BACKGROUND - RUNWAY DISTANCE REMAINING SIGN
 A = SIGN FACE A
 B = SIGN FACE B - IF NOT SHOWN, THIS FACE SHALL REMAIN BLANK

LEGEND

PROPOSED RUNWAY EDGE LIGHT	
EXISTING TAXIWAY EDGE LIGHT TO BE ADJUSTED	
EXISTING TAXIWAY EDGE LIGHT	
PROPOSED RUNWAY THRESHOLD LIGHT	
PROPOSED CABLE IN DUCT	
EXISTING TAXIWAY CABLE TO BE REMOVED/RELOCATED	
PROPOSED GUIDANCE SIGN	
PROPOSED SPLICE BOX	

STATE OF ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-004515

REVISIONS

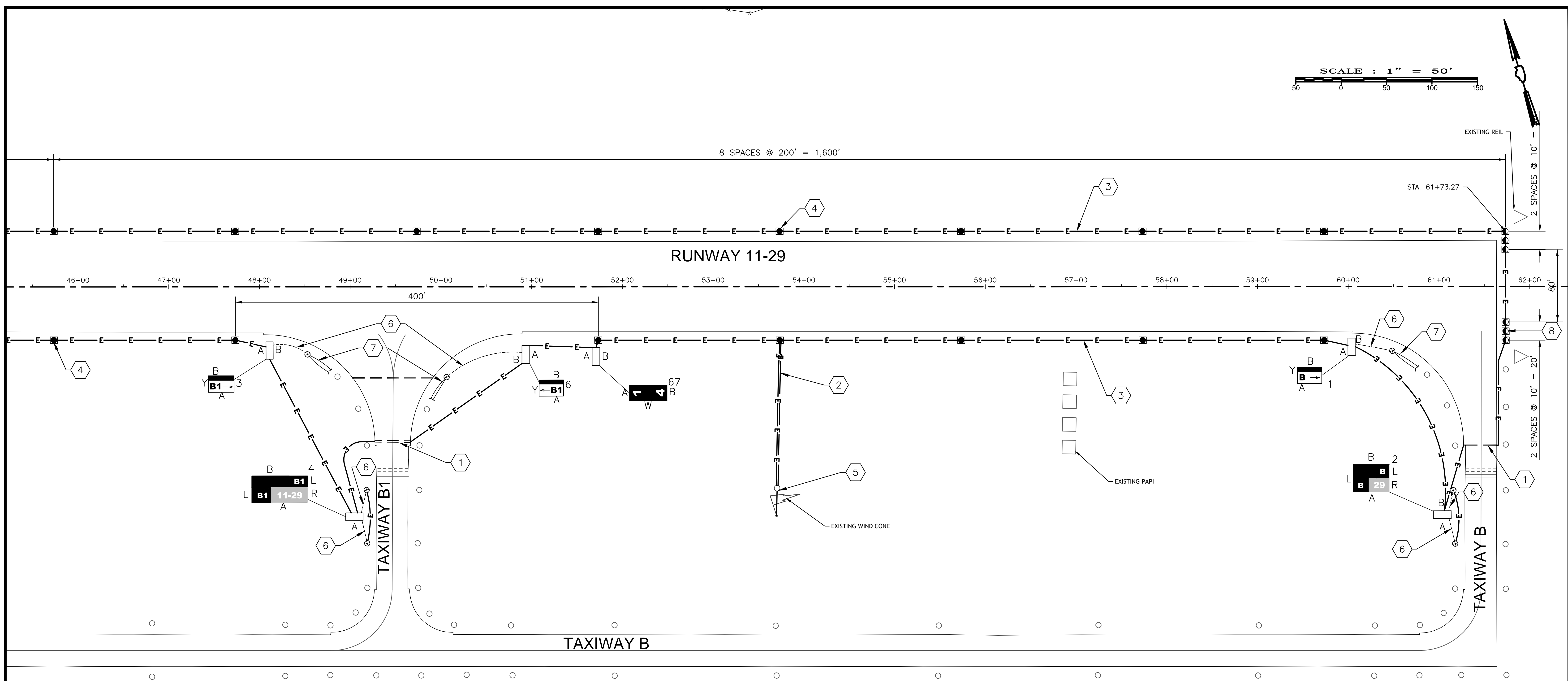
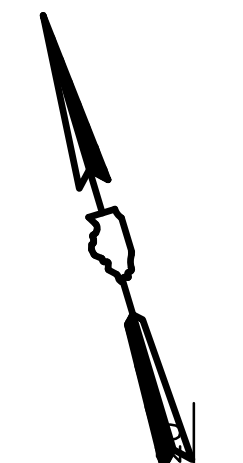
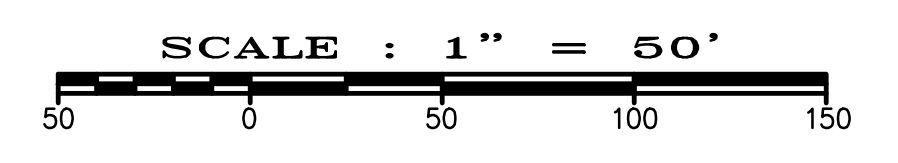
DATE	NO.

CLARIDA & ZIEGLER ENGINEERING CO.
 410 North Court St, P.O. Box 937
 Marion, Illinois 62959
 Phone - (618)993-6411, Fax - (618)993-6750

RUNWAY 11-29 REHABILITATION, ASSOCIATED EDGE LIGHTS & GUIDANCE SIGN REPLACEMENT ELECTRICAL PLAN

Date: 6/17/16 DR. By: MKW CK'D By: WBZ
 Scale: 1" = 50' Job No. 15096 Sheet No. 13 of 21

LETTING CONTRACT NUMBER
 WI057



- PLAN NOTES**
- LOCATE AND EXPOSE ENDS OF EXISTING DUCT FOR ADDITION OF PROPOSED CABLES. HAND-EXCAVATE AS NECESSARY TO AVOID DAMAGE TO EXISTING CABLES. DISCONNECT AND REMOVE EXISTING CABLES FOR CIRCUITS TO BE REPLACED.
 - 2/C #8 5 KV TYPE C CABLE IN UNIT DUCT.
 - 1/C, #8, 5 KV, TYPE C CABLE IN UNIT DUCT - TYPICAL FOR ALL RUNWAY LIGHTING CABLE UNLESS NOTED OTHERWISE. OFFSET CABLE ROUTING AS REQUIRED TO AVOID EXISTING UNDERGROUND CABLE ROUTINGS.
 - INSTALL BASE MOUNTED LED MEDIUM INTENSITY RUNWAY EDGE LIGHT (MREL) WHITE - TYPICAL FOR ALL RUNWAY LIGHTS. SEE SHEET 17 FOR LIGHT DETAIL.
 - TIE NEW CABLE IN UNIT DUCT INTO EXISTING L-806 WIND CONE ADAPTER UNIT.
 - REMOVE EXISTING CABLE BETWEEN EXISTING GUIDANCE SIGN AND BASE MOUNTED TAXIWAY LIGHT SHOWN.
 - REROUTE EXISTING CABLE INTO EXISTING BASE MOUNTED TAXIWAY LIGHT SHOWN.
 - L-861 E LED RUNWAY THRESHOLD LIGHTS, BIDIRECTIONAL: RED-GREEN

- GENERAL NOTES**
- ALL RUNWAY LIGHTS SHALL BE LOCATED 10 FT FROM EDGE OF PAVEMENT TO CENTER.
 - TAXIWAY GUIDANCE AND HOLDING SIGNS SHALL BE LOCATED ON EXISTING CONCRETE BASES UNLESS NOTED OTHERWISE. WHERE EXISTING BASES ARE TO BE REMOVED AND REPLACED, THE PROPOSED BASE SHALL BE PLACED IN THE SAME LOCATION. ADJUST MOUNTING FOR PROPOSED SIGNS TO REUSE EXISTING SECONDARY CONDUIT STUBUP FROM THE ADJACENT TRANSFORMER BASE.

SIGN SCHEDULE				
SIGN NO.	SIDE	R/Y/L/W	LEGEND	REMARKS
1	A	Y	[B→]	CONNECT TO RUNWAY 11-29 CIRCUIT
2	A	L/R	[B129]	CONNECT TO RUNWAY 11-29 CIRCUIT
3	A	Y	[B1→]	CONNECT TO RUNWAY 11-29 CIRCUIT
4	A	L/R	[B111-29]	CONNECT TO RUNWAY 11-29 CIRCUIT
6	A	Y	[→B1]	CONNECT TO RUNWAY 11-29 CIRCUIT
67	A	W	[1]	CONNECT TO RUNWAY 11-29 CIRCUIT
	B	W	[4]	CONNECT TO RUNWAY 11-29 CIRCUIT

- SCHEDULE NOTES**
- ALL SIGNS ARE STYLE 2, SIZE 1 UNLESS NOTED OTHERWISE IN REMARKS COLUMN.
 - ALL ARROW DEGREES ARE MEASURED FROM VERTICAL.
 - SIGN SCHEDULE LEGEND:
 R = WHITE LTR./RED BACKGROUND - HOLDING SIGN
 Y = BLACK LTR./YELLOW BACKGROUND - DIRECTION OR DESTINATION SIGN
 L = YELLOW LTR./BLACK BACKGROUND - TAXIWAY LOCATION SIGN
 W = WHITE LTR./BLACK BACKGROUND - RUNWAY DISTANCE REMAINING SIGN
 A = SIGN FACE A
 B = SIGN FACE B - IF NOT SHOWN, THIS FACE SHALL REMAIN BLANK

LEGEND

- PROPOSED RUNWAY EDGE LIGHT
- EXISTING TAXIWAY EDGE LIGHT TO BE ADJUSTED
- EXISTING TAXIWAY EDGE LIGHT
- PROPOSED RUNWAY THRESHOLD LIGHT
- PROPOSED CABLE IN DUCT
- EXISTING TAXIWAY CABLE TO BE REMOVED/RELOCATED
- PROPOSED GUIDANCE SIGN
- PROPOSED SPLICE BOX

LETTING CONTRACT NUMBER
 WI057

STATE OF ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-004515

ALL RIGHTS RESERVED

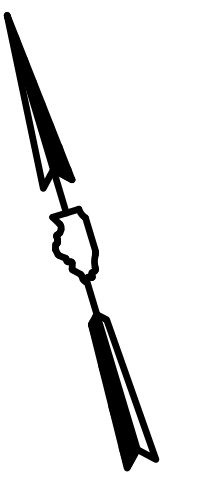
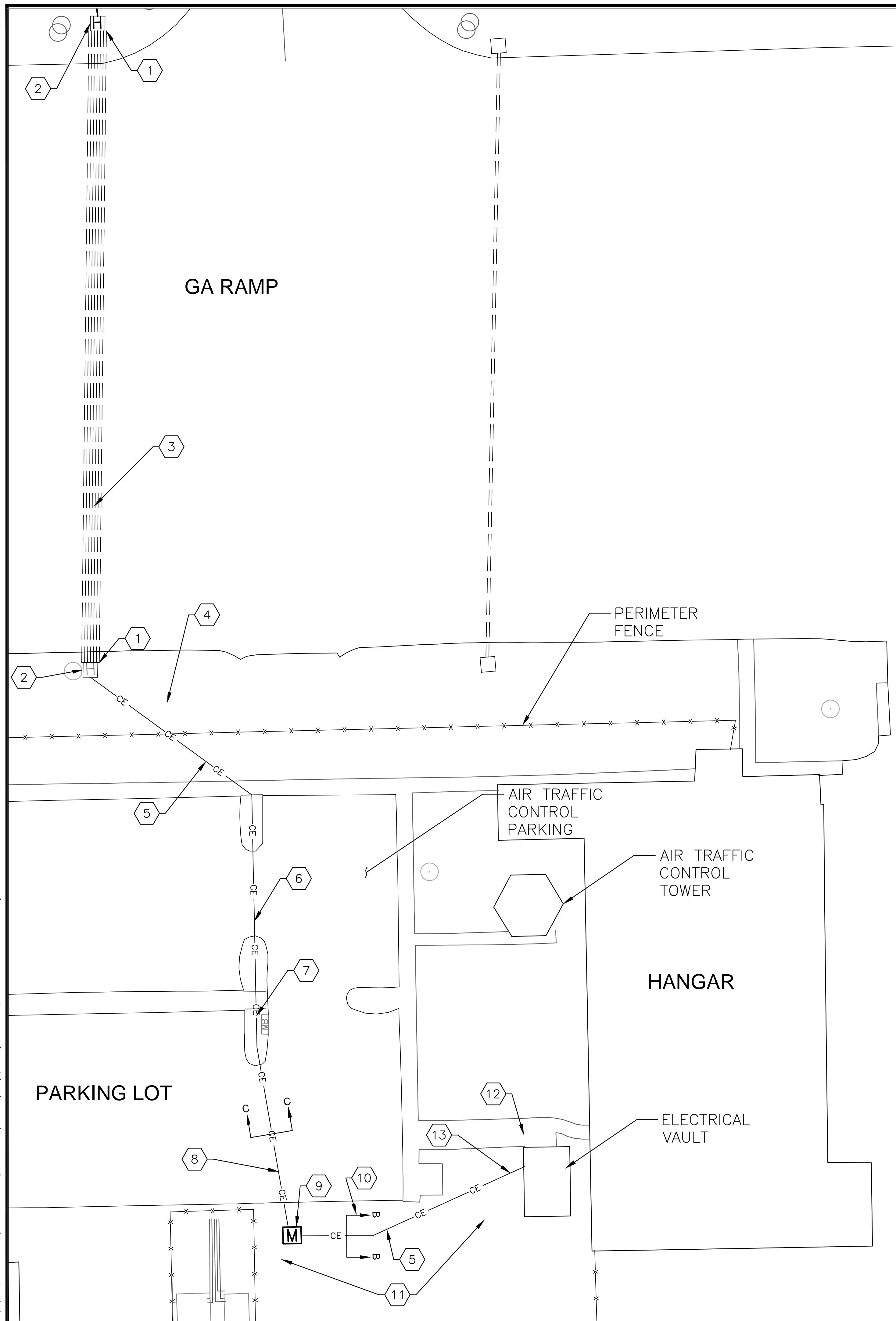
CLARIDA & ZIEGLER ENGINEERING CO.
 410 North Court St, P.O. Box 937
 Marion, Illinois 62959
 Phone - (618)993-6411, Fax - (618)993-6750

RUNWAY 11-29 REHABILITATION, ASSOCIATED EDGE LIGHTS & GUIDANCE SIGN REPLACEMENT ELECTRICAL PLAN

DATE: 6/17/16 DR. BY: MKW CK'D BY: WBZ
 Scale: 1" = 50' Job No. 15096 Sheet No. 14 of 21

F:\Airport\15096 Runway 11-29 Runway Resurfacing and Lighting Drawings - Plans\12-15 ELECTRICAL PLAN.dwg 6-17-16 02:29:06 PM Matt

P:\Airport\15096 Runway 11-29 Runway Resurfacing and Lighting Drawings - Plans\12-15 ELECTRICAL PLAN.dwg 6-17-16 02:29:11 PM Matt



PLAN NOTES

- ① LOCATE AND EXPOSE ENDS OF EXISTING DUCT BANK FOR ADDITION OF PROPOSED CABLES. HAND-EXCAVATE BETWEEN DUCT BANK AND EXISTING HANDHOLE TO AVOID DAMAGE TO EXISTING CABLES. DISCONNECT AND REMOVE EXISTING CABLES FOR CIRCUITS TO BE REPLACED.
- ② TRACE AND IDENTIFY EXISTING HOME RUN CABLES TO BE RETAINED AND TO BE REMOVED IN EXISTING HANDHOLES. PROVIDE IDENTIFICATION TAGS ON ALL PROPOSED AND EXISTING CABLE PAIRS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE PROPOSED CABLE INSTALLATION. CORE-DRILL EXISTING EAST WALL OF HANDHOLE FOR PROPOSED CONDUIT ENTRY. SEAL PENETRATION WATERTIGHT WITH NON-SHRINK GROUT. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE DUCT BANK PAY ITEM.
- ③ 2- 1C, #8, 5 KV, TYPE C CABLES IN EXISTING DUCT BANK SPARE CONDUIT. REMOVE EXISTING RUNWAY 11-29 CABLES.
- ④ HAND EXCAVATE EXISTING UNDERGROUND CABLES BEFORE CROSSING WITH PROPOSED DUCT BANK. DEEPEN DUCT BANK AS REQUIRED TO AVOID DAMAGE.
- ⑤ PROPOSED CONCRETE-ENCASED DUCT BANK CONSISTING OF 4 - 4" PVC SCHED 40 CONDUITS. SEE DETAILS, SHEET 18. PROVIDE 2- 1/C, #8, 5 KV, TYPE C CABLES IN PROPOSED DUCT BANK TO VAULT. SEE VAULT DETAIL SHEET 18.
- ⑥ 30 LINEAL FEET OF PAVEMENT SHALL BE REMOVED AND REPLACED FOR DUCT BANK INSTALLATION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE DUCT BANK PAY ITEM.
- ⑦ LOCATE AND EXPOSE EXISTING WATER LINE TO AVOID DAMAGE. DEEPEN DUCT BANK AS REQUIRED TO AVOID DAMAGE.
- ⑧ 48 LINEAL FEET OF PAVEMENT SHALL BE REMOVED AND REPLACED FOR DUCT BANK INSTALLATION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE DUCT BANK PAY ITEM.
- ⑨ SEE SHEET 18 FOR MANHOLE DETAILS.
- ⑩ EXISTING FUEL FARM PUMP STARTER TO REMAIN.
- ⑪ LOCATE AND EXPOSE EXISTING FUEL PUMP UNDERGROUND FEEDS. DEEPEN DUCT BANK AS REQUIRED TO AVOID DAMAGE.
- ⑫ LOCATE EXISTING UNDERGROUND UTILITIES AND AVOID DAMAGING. NOTE AMEREN ILLINOIS HIGH VOLTAGE CABLE IN THIS AREA.
- ⑬ LOCATE EXISTING UNDERGROUND CONDUITS LEAVING BUILDING. LOWER DUCT BANK AS NEEDED TO PASS BENEATH. SEE DETAIL, SHEET 18 FOR PROPOSED CONDUIT ENTRY INTO BUILDING.

GENERAL NOTES

1. THE CONTRACTOR SHALL MAINTAIN ACCESS TO THE AIR TRAFFIC CONTROL TOWER PARKING AT ALL TIMES.
2. THE CONTRACTOR SHALL TEMPORARILY RELOCATE MAILBOXES IF IN CONFLICT WITH DUCT INSTALLATION.
3. THE CONTRACTOR SHALL MAINTAIN THE INTEGRITY OF THE PERIMETER FENCE AT ALL TIMES. SHOULD THE FENCE REQUIRE TEMPORARY REMOVAL A GUARD SHALL BE PROVIDED AT ALL TIMES.
4. ALL COST ASSOCIATED WITH INSTALLATION OF CONCRETE ENCASED DUCT INCLUDING BUT NOT LIMITED TO REMOVAL AND REPLACEMENT OF PAVEMENT, CURB, SIDEWALK, AND SEEDING SHALL BE INCIDENTAL TO ITEM L-110, 4-WAY CONCRETE ENCASED DUCT. REPLACEMENT MATERIALS AND DIMENSIONS SHALL MATCH EXISTING.

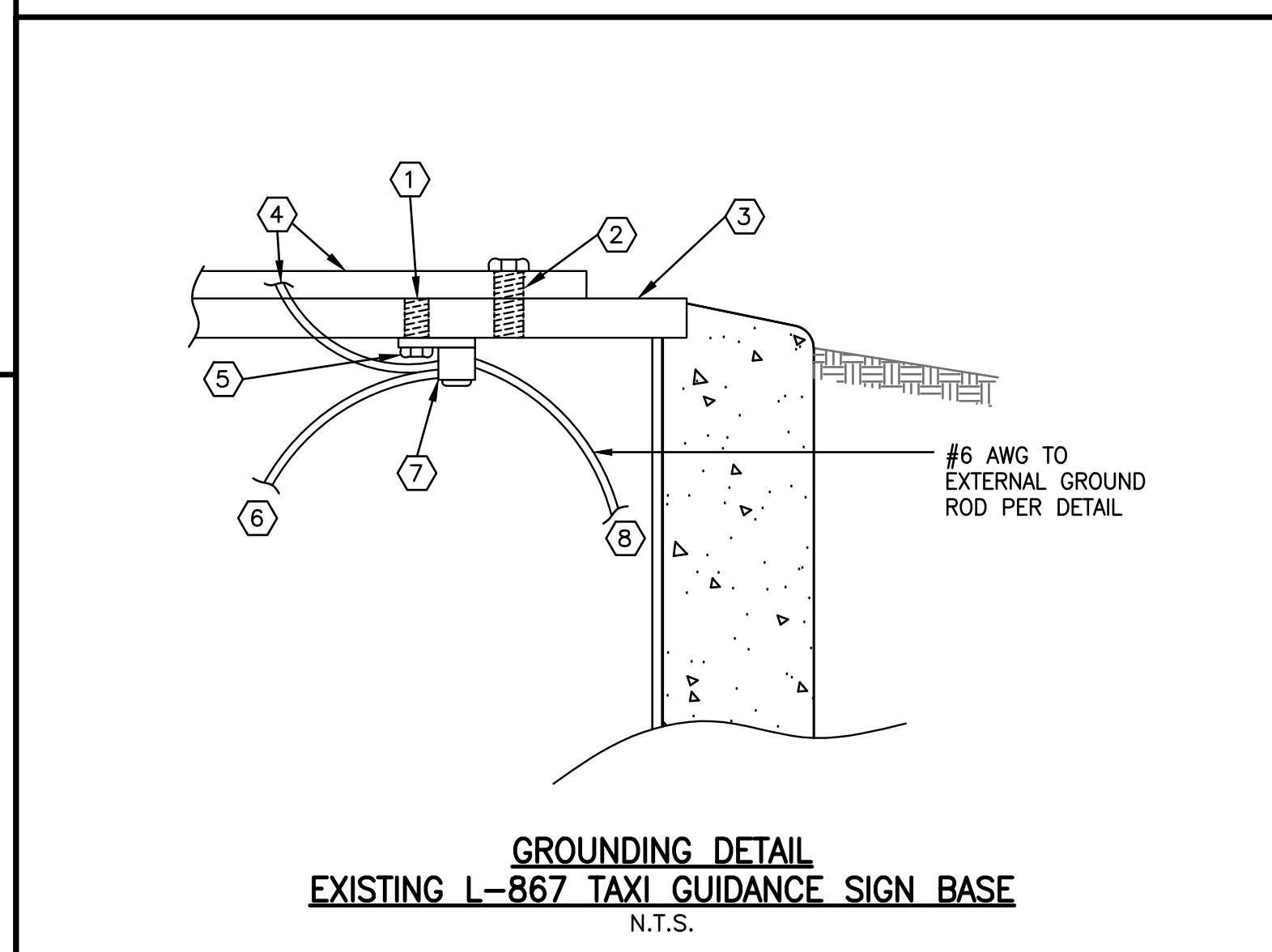
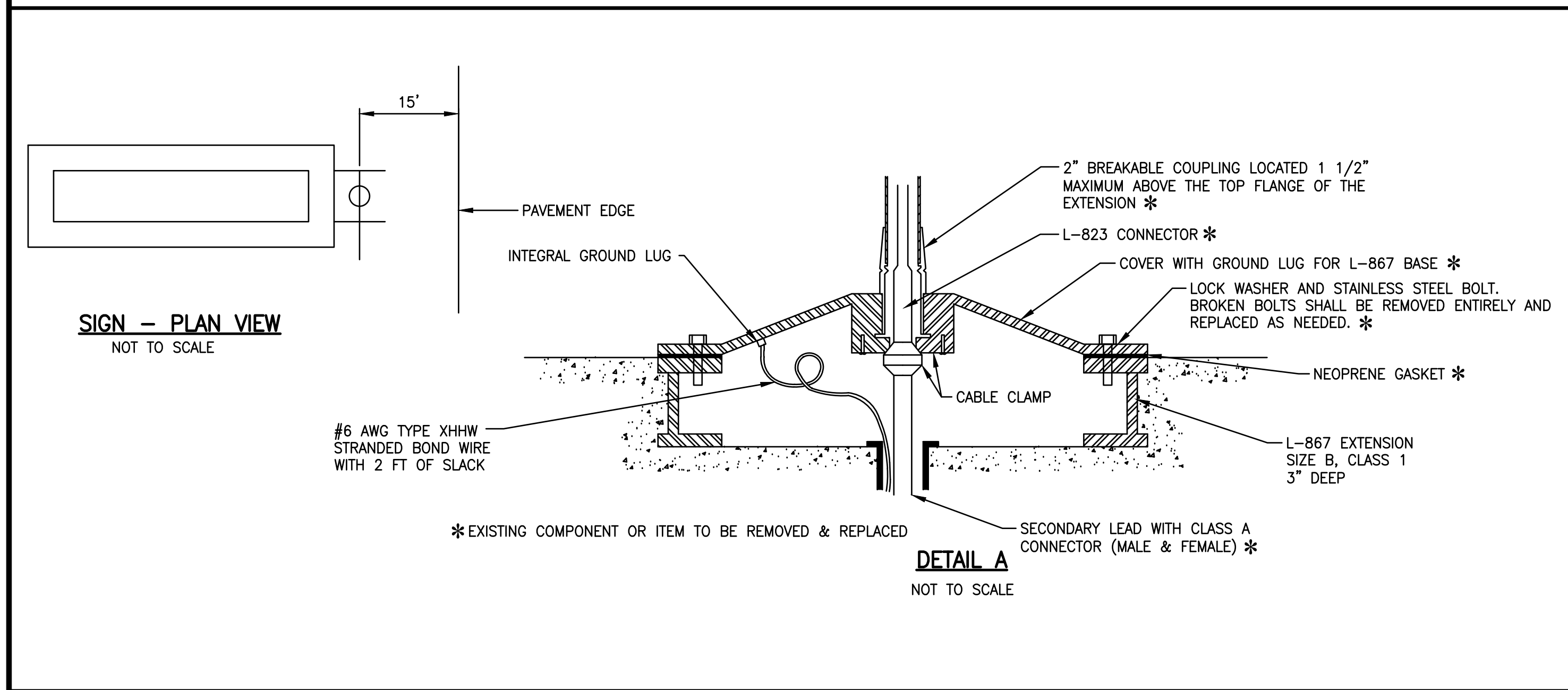
LETTING CONTRACT NUMBER
W1057

STATE OF ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-004515	
© ALL RIGHTS RESERVED	
CLARIDA & ZIEGLER ENGINEERING CO.	
410 North Court St, P.O. Box 937 Marion, Illinois 62959 Phone - (618)993-6411, Fax - (618)993-6750	
RUNWAY 11-29 REHABILITATION, ASSOCIATED EDGE LIGHTS & GUIDANCE SIGN REPLACEMENT ELECTRICAL PLAN	
Date 6/17/16	DR. By MKW
Scale 1" = 20'	Job No. 15096
Sheet No. 15	of 21

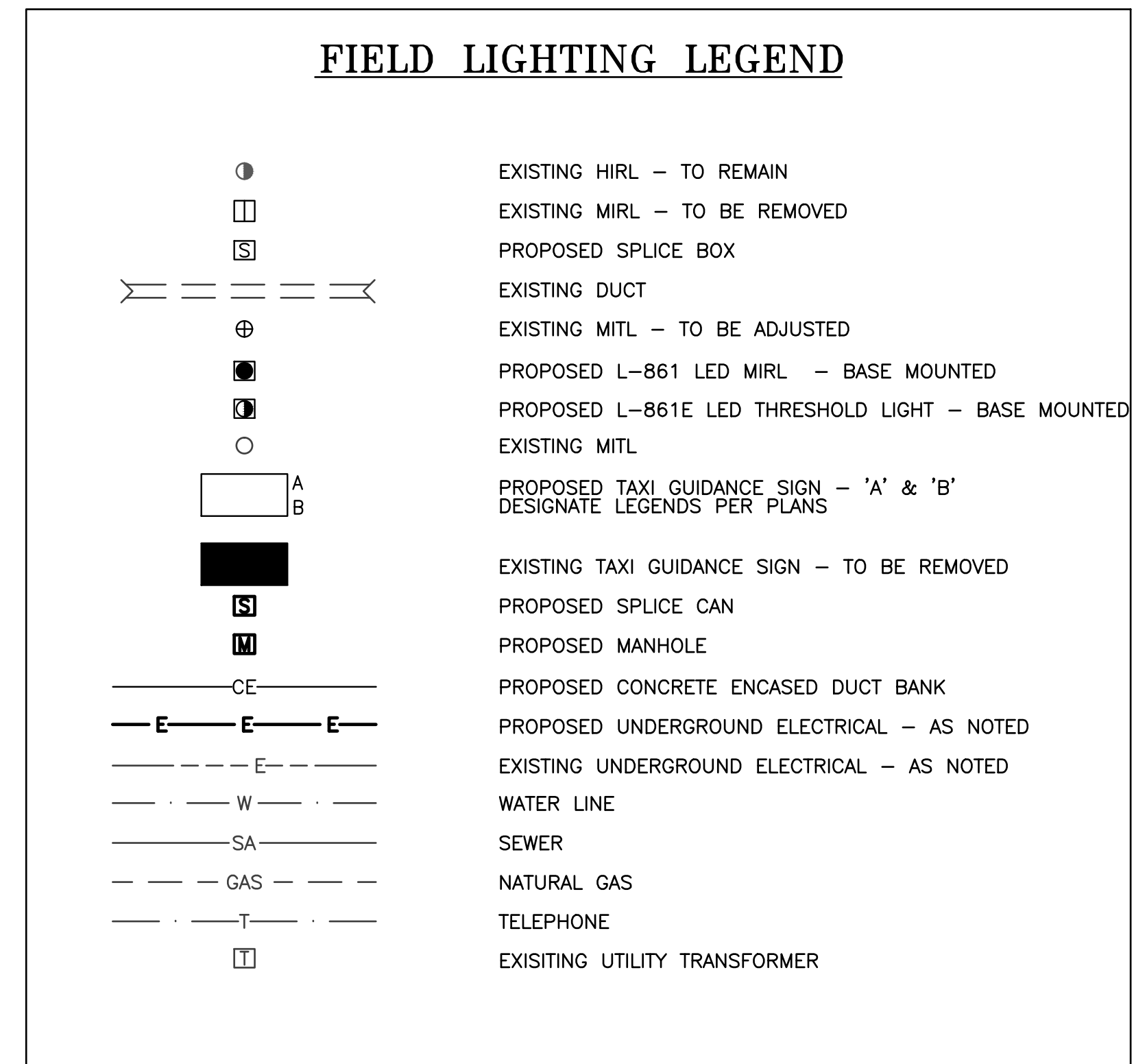
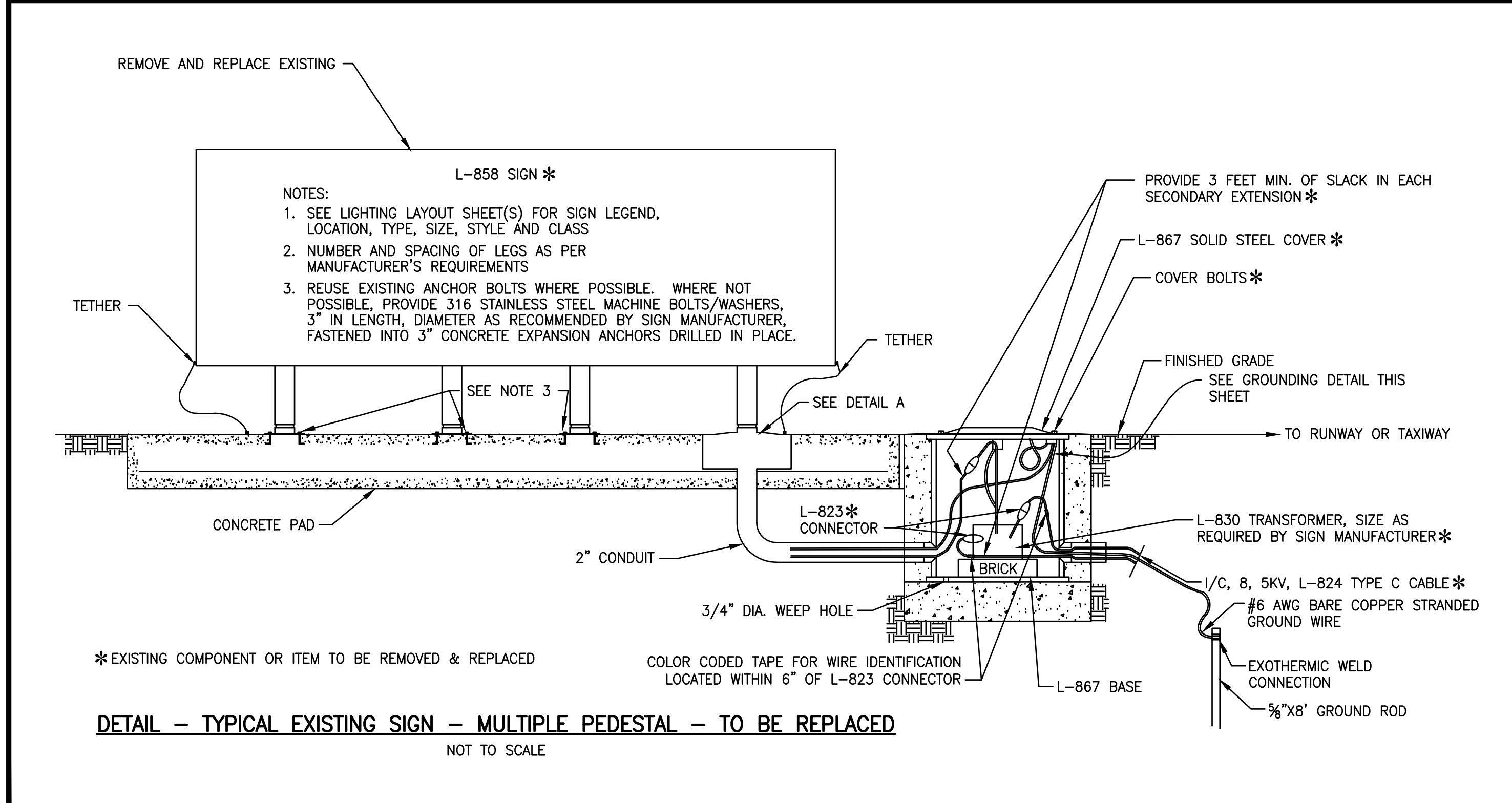
GENERAL ELECTRICAL NOTES

- THE ELECTRICAL INSTALLATION, AS A MINIMUM, SHALL MEET THE NATIONAL ELECTRICAL CODE AND LOCAL REGULATIONS.
- 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 AND RED SHALL BE USED FOR SINGLE PHASE, THREE WIRE SYSTEMS, AND BLACK, RED AND BLUE SHALL BE USED FOR THREE PHASE 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 SIZE LARGER THAN NO. 6 SHALL BE IDENTIFIED EITHER BY A CONTINUOUS WHITE OR NATURAL GRAY OUTER FINISH ALONG ITS ENTIRE LENGTH OR BY THE USE OF WHITE TAPE AT ITS TERMINATIONS AND INSIDE ACCESSIBLE ENCLOSURES.
- ALL BRANCH CIRCUIT CONDUCTORS CONNECTED TO A PARTICULAR PHASE SHALL BE IDENTIFIED WITH THE SAME COLOR. THE COLOR CODING SHALL BE EXTENDED TO THE POINT OF UTILIZATION.
- NEATLY LACE WIRING IN DISTRIBUTION PANELS, SWITCHES AND JUNCTION/PULL BOXES.
- GROUND ALL NONCURRENT-CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT BY USING INSULATED COPPER WIRE TO BE RUN INSIDE CABINETS AND IN CONDUITS TOGETHER WITH OTHER WIRES.
- ALL GROUND CONNECTIONS TO BUSES, PANELS, ETC., SHALL BE MADE WITH PRESSURE TYPE SOLDERLESS LUG CLAMPS. SOLDERED OR BOLT & WASHER TYPE CONNECTIONS ARE NOT ACCEPTABLE. CLEAN ALL METAL SURFACES BEFORE MAKING GROUND CONNECTIONS. CONNECTIONS TO GROUND RODS SHALL BE MADE WITH EXOTHERMIC WELDING PROCESS.
- SCHEDULE 40 RIGID STEEL CONDUIT SHALL BE USED THROUGHOUT THE INSTALLATION UNLESS OTHERWISE SPECIFIED.
- ALL STEEL CONDUITS, FITTINGS, NUTS, BOLTS, ETC., SHALL BE GALVANIZED.
- USE INSULATED CONDUIT BUSHINGS AT EACH CONDUIT TERMINATION.
- USE DOUBLE LOCK NUTS AT EACH CONDUIT TERMINATION.
- UNLESS OTHERWISE SHOWN, ALL EXPOSED CONDUITS SHALL BE RUN PARALLEL TO OR AT RIGHT ANGLES WITH THE LINES OF THE STRUCTURE.
- UNLESS OTHERWISE NOTED, ALL SINGLE CONTROL CONDUCTORS SHALL BE NO. 12 AWG, THHN, STRANDED COPPER. EXTENSIONS TO EXISTING CONTROL CONDUCTORS SHALL BE THE SAME COLOR AS EXISTING.
- BOTH ENDS OF EACH CONTROL CONDUCTOR SHALL BE TERMINATED AT A TERMINAL BLOCK. THE TERMINAL BLOCKS SHALL BE OF PROPER RATING AND SIZE AND THEY SHALL BE LOCATED IN EQUIPMENT ENCLOSURES OR SPECIAL TERMINAL CABINETS.
- BOTH ENDS OF ALL CONTROL CONDUCTORS SHALL BE IDENTIFIED AS TO THE CIRCUIT, TERMINAL BLOCK, AND TERMINAL NUMBER. ONLY SHRINKABLE PERMANENT LABELS SHALL BE USED.
- SPLICES AND JUNCTION POINTS SHALL BE PERMITTED ONLY IN JUNCTION BOXES, LIGHT BASES, WIREWAYS EQUIPPED WITH REMOVABLE COVERS AND AT EASILY ACCESSIBLE LOCATIONS.
- UNLESS OTHERWISE NOTED, ALL UNDERGROUND FIELD POWER MULTIPLE AND SERIES CIRCUIT CONDUCTORS SHALL BE FAA APPROVED L-824, TYPE, INSULATION, VOLTAGE AND SIZE SHALL BE AS SPECIFIED.
- THE JOINT OF THE PRIMARY L-823 PRIMARY CONNECTORS SHALL BE WRAPPED WITH AT LEAST ONE LAYER OF RUBBER OR SYNTHETIC RUBBER TAPE AND ONE LAYER OF PLASTIC TAPE, ONE-HALF LAPPED, EXTENDING AT LEAST 1-1/2 INCHES ON EACH SIDE OF THE JOINT. HEAT-SHRINK TUBING SHALL BE APPLIED WHERE CABLE ENTERS BACK OF CONNECTOR, SEE DETAIL DWG., SHEET 17.
- ALL THE ID OF THE PRIMARY L-823 FIELD ATTACHED CONNECTORS SHALL MATCH THE CABLE OD TO PROVIDE A WATERTIGHT CABLE ENTRANCE.
- THE RESISTANCE TO GROUND OF THE GROUNDING SYSTEM WITH COMMERCIAL POWER LINE NEUTRAL DISCONNECTED SHALL NOT EXCEED 25 OHMS.
- ALL POWER AND CONTROL CIRCUIT CONDUCTORS SHALL BE COPPER, ALUMINUM SHALL NOT BE ACCEPTED. THIS INCLUDES WIRE, CABLE, BUSES, TERMINALS, SWITCH/PANEL COMPONENTS, ETC.
- CABLE/SPLICE/DUCT MARKERS SHALL BE PRECAST CONCRETE OF SIZE SHOWN. LETTERS/NUMBERS FOR THE LEGEND TO BE IMPRESSED INTO TOPS OF THE MARKERS SHALL BE PREASSEMBLED AND SECURED IN MOLD BEFORE CONCRETE IS POURED. LEGEND INSCRIBED BY HAND IN WET CONCRETE SHALL NOT BE ACCEPTABLE.
- THE CONTRACTOR SHALL ASCERTAIN THAT ALL LIGHTING SYSTEM COMPONENTS FURNISHED BY HIM (INCLUDING FAA APPROVED EQUIPMENT) ARE COMPATIBLE IN ALL RESPECTS WITH EACH OTHER AND REMAINDER OF THE NEW/EXISTING SYSTEM. ANY NONCOMPATIBLE COMPONENTS FURNISHED BY THIS CONTRACTOR SHALL BE REPLACED BY HIM AT NO ADDITIONAL COST TO THE AIRPORT SPONSOR WITH A SIMILAR UNIT, APPROVED BY THE ENGINEER (DIFFERENT MODEL OF DIFFERENT MANUFACTURER) THAT

- IS COMPATIBLE WITH THE REMAINDER OF THE AIRPORT LIGHTING SYSTEM.
- IN CASE THE CONTRACTOR SELECTS TO FURNISH AND INSTALL AIRPORT LIGHTING EQUIPMENT REQUIRING ADDITIONAL WIRING, TRANSFORMERS, ADAPTERS, MOUNTINGS, ETC., DIFFERENT FROM THOSE SHOWN ON THE DRAWINGS AND/OR LISTED IN THE SPECIFICATIONS, ANY COST FOR THESE ITEMS SHALL BE INCIDENTAL TO THE EQUIPMENT COST.
- THE CONTRACTOR INSTALLED EQUIPMENT (INCLUDING FAA APPROVED) SHALL NOT GENERATE ANY ELECTRO-MAGNETIC INTERFERENCE IN THE EXISTING AND/OR NEW COMMUNICATIONS, WEATHER, AND AIR TRAFFIC CONTROL EQUIPMENT. ANY EQUIPMENT GENERATING SUCH INTERFERENCE SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST BY EQUIPMENT MEETING THE APPLICABLE SPECIFICATIONS AND NOT GENERATING ANY INTERFERENCE.
- UNLESS NOTED OTHERWISE FOR IN PAVEMENT LIGHTS, WHERE EXISTING FIELD LIGHTS ARE TO BE REMOVED, THE AREA SHALL BE BACKFILLED WITH EARTH TO THE ORIGINAL GRADE, COMPACTED AND SEEDED. SUCH LIGHTS AND CONCRETE BASES SHALL BECOME CONTRACTOR SALVAGE AND SHALL BE REMOVED FROM THE PREMISES ENTIRELY.
- WHERE PROPOSED LIGHTS OR SIGNS ARE SHOWN IN THE SAME LOCATION AS EXISTING LIGHTS OR SIGNS, CONTRACTOR SHALL REMOVE THE EXISTING WIRING TO AT LEAST TWO FEET AWAY FROM PROPOSED WIRING.
- CONTRACTOR SHALL LOCATE EXISTING UNDERGROUND CIRCUITS WITH A PORTABLE CABLE LOCATOR WHERE POSSIBLE TO AVOID DAMAGE TO EXISTING CIRCUITS TO BE RETAINED. EXCAVATION REQUIRED IN CONGESTED AREAS CONTAINING OTHER CIRCUITS SHALL BE DONE BY HAND. ANY SUCH WIRING DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED IMMEDIATELY AFTER DISCOVERY AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED. ALL UNDERGROUND SPLICES SHALL BE INSPECTED BY THE ENGINEER PRIOR TO BACKFILLING TRENCHES.
- SHOP DRAWINGS SHALL BE REQUIRED FOR THE FOLLOWING ITEMS: CONDUIT, WIRE & CABLE, CABLE IN UNIT DUCT, FIELD LIGHTS, LAMPS, SPLICE CANS, FIELD LIGHT MODIFICATIONS, CABLE CONNECTORS, PULL BOXES, PRECAST CONCRETE MANHOLES, TAXI GUIDANCE SIGNS.
- A MINIMUM OF FOUR HOURS SHALL BE PROVIDED FOR TRAINING AIRPORT MAINTENANCE PERSONNEL ON THE PROPOSED AIRFIELD LIGHTING SYSTEMS.



- DETAIL NOTES**
- DRILL AND TAP A 1/2" X 20 THREADED HOLE IN THE BASE LIP FOR GROUND SCREW.
 - EXISTING THREADED HOLE FOR COVER BOLT.
 - EXISTING L-867 BASE EMBEDDED IN CONCRETE FOUNDATION TO BE RETAINED.
 - #6 GROUND WIRE WITH 2 FT OF SLACK TO PROPOSED BASE BLANK COVER PLATE GROUND LUG.
 - STAINLESS STEEL 1/2" X 20 HEX-HEAD BOLT AND WASHER. CUT OFF ANY EXCESS BOLT ABOVE THE LIP, FLUSH WITH TOP OF BASE.
 - #6 GROUND WIRE BONDED TO PROPOSED SIGN EXTENSION COVER PER DETAIL A.
 - 125 AMP RATED COPPER SOLDERLESS LUG BOLTED TO UNDERSIDE OF BASE LIP.
 - #6 GROUND WIRE BONDED TO PROPOSED EXTERNAL GROUND ROD PER DETAIL.



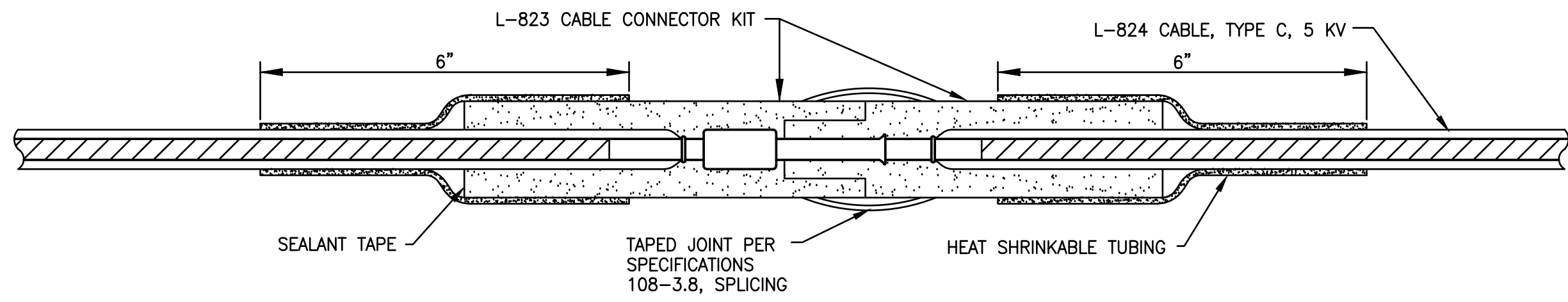
LETTING CONTRACT NUMBER
W1057

STATE OF ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-004515	
ALL RIGHTS RESERVED	
CLARIDA & ZIEGLER ENGINEERING CO.	
410 North Court St, P.O. Box 937 Marion, Illinois 62959 Phone - (618)993-6411, Fax - (618)993-6750	
RUNWAY 11-29 REHABILITATION, ASSOCIATED EDGE LIGHTS & GUIDANCE SIGN REPLACEMENT ELECTRICAL NOTES AND DETAILS	
Date	6/17/16
DR. By	MKW
Ck'D By	WBZ
Scale	N.T.S.
Job No.	15096
Sheet No.	16 of 21

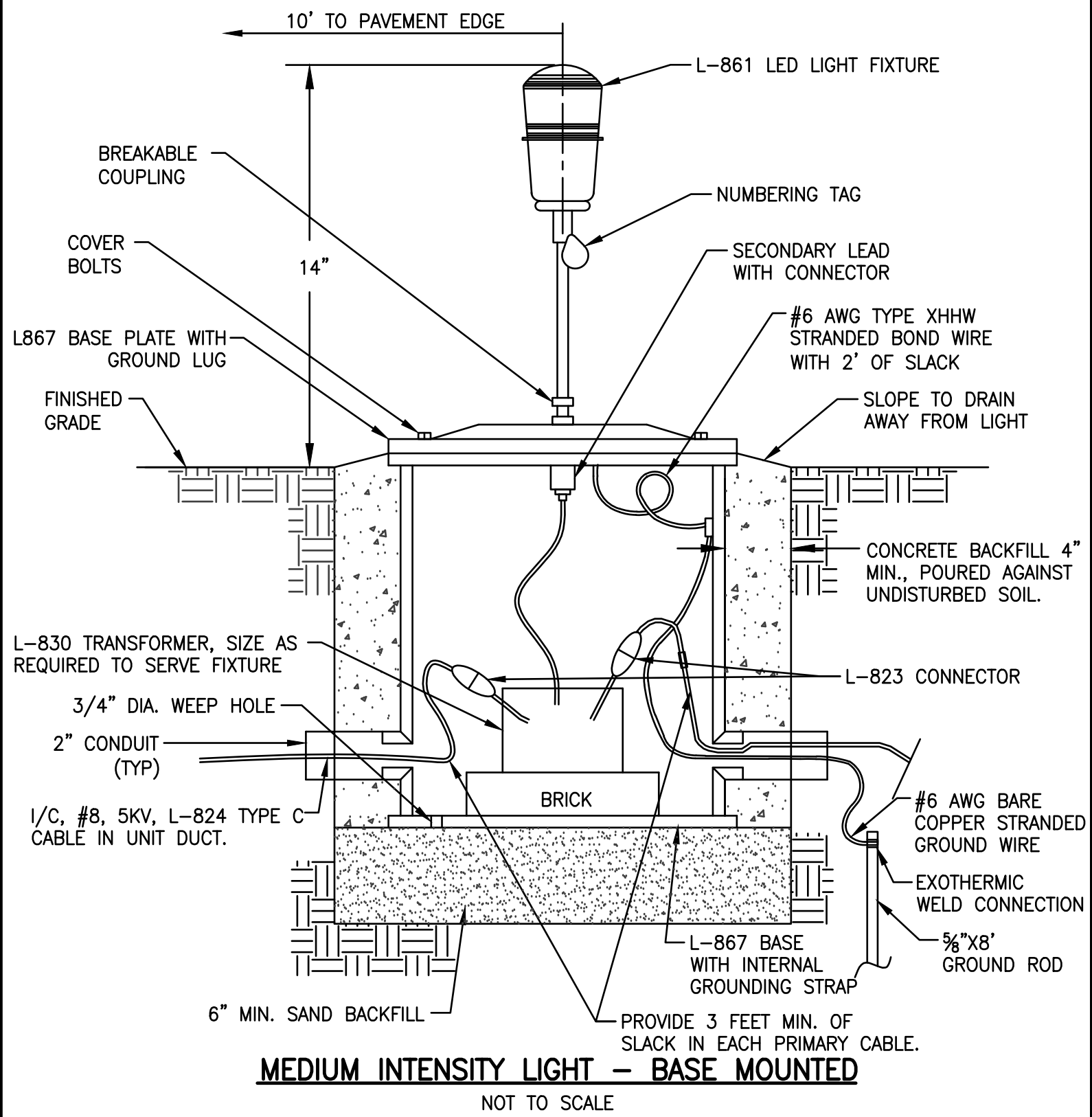
P:\Airport\15096 Runway 11-29 Runway Resurfacing and Lighting Drawings - Plans\16-18 ELECTRICAL NOTES & DETAILS.dwg 6-17-16 02:37:03 PM Matt

CABLE SPLICING NOTES:

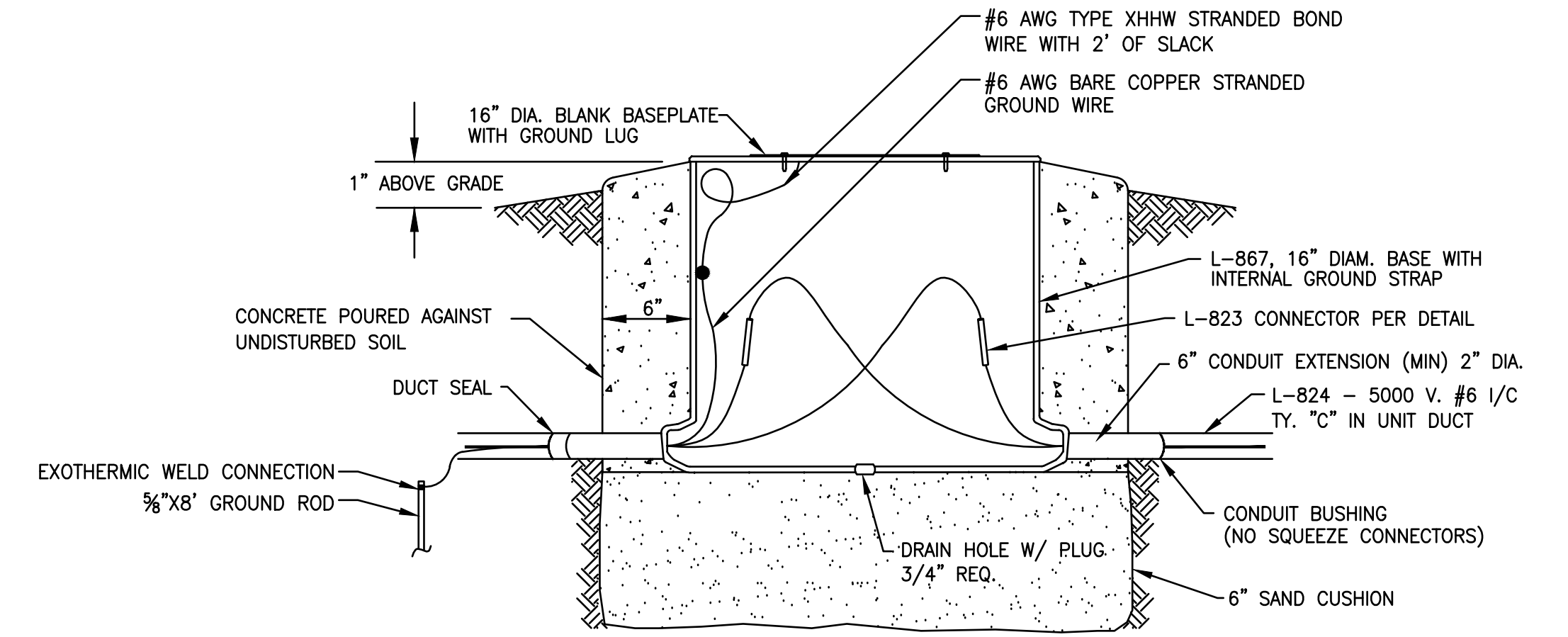
- HEAT-SHRINKABLE TUBING WILL NOT BE REQUIRED FOR ISOLATION TRANSFORMER PRIMARY CONNECTORS WHICH ARE MOLDED ON TO THE CABLE LEADS AT THE FACTORY.
- THE SEALANT TAPE AROUND THE CONNECTOR SHALL BE WATER INSOLUBLE, MAINTAINING ELASTICITY OVER WIDE RANGE OF TEMPERATURE, AND SHALL BE RAYCHEM NO. 5-1011 OR APPROVED EQUAL.
- HEAT-SHRINKABLE TUBING SHALL HAVE MINIMUM EXPANDED I.D. OF 1.200", MAXIMUM RECOVERED I.D. OF .300", MINIMUM EXPANDED WALL THICKNESS OF .04", NOMINAL RECOVERED WALL THICKNESS OF 0.17", A MASTIC WATER SEALANT COATING APPLIED ON THE INSIDE, AND SHALL BE RAYCHEM NO. WCS-300-6-S OR APPROVED EQUAL.
- MINIMUM LENGTH OF THE HEAT-SHRINKABLE TUBING SHALL BE 6".
- CLEAN THE CABLE INSULATION BEFORE APPLYING THE TUBING WITH A SOLVENT SPECIFIED BY THE TUBING MANUFACTURER.
- TO HEAT THE TUBING, USE PROPANE TORCH, OR ELECTRIC HEATER RECOMMENDED BY THE TUBING MANUFACTURER.
- BEGIN HEATING THE TUBING AT THE CENTER, GO COMPLETELY AROUND, THEN MOVE TOWARD THE ENDS.
- CONTINUE HEATING THE TUBING UNTIL IT SHRINKS COMPLETELY AND THE SEALANT IS BEING SQUEEZED OUT AT BOTH ENDS.
- IF THERE IS ANY NOTICEABLE HEAT DAMAGE TO THE CABLE OR THE TUBING, THE CONNECTION, INCLUDING THE DAMAGED PORTION, WILL BE REMOVED AND ANOTHER CONNECTION MADE.
- ALLOW THE CONNECTION TO COOL BEFORE HANDLING.
- INSTALL THE CONNECTIONS WITHOUT BENDING THEM.



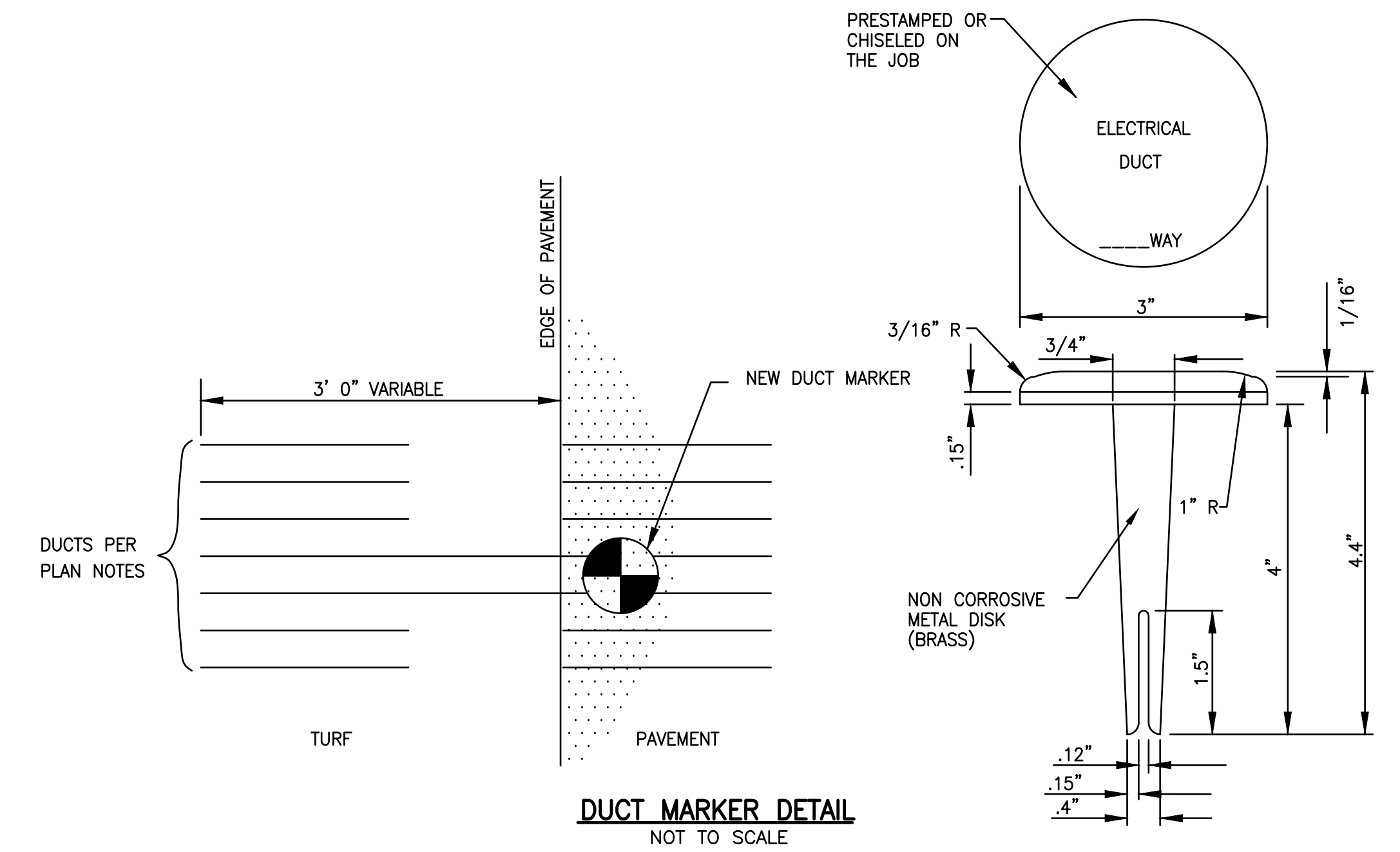
DETAIL - CABLE SPLICING
NOT TO SCALE



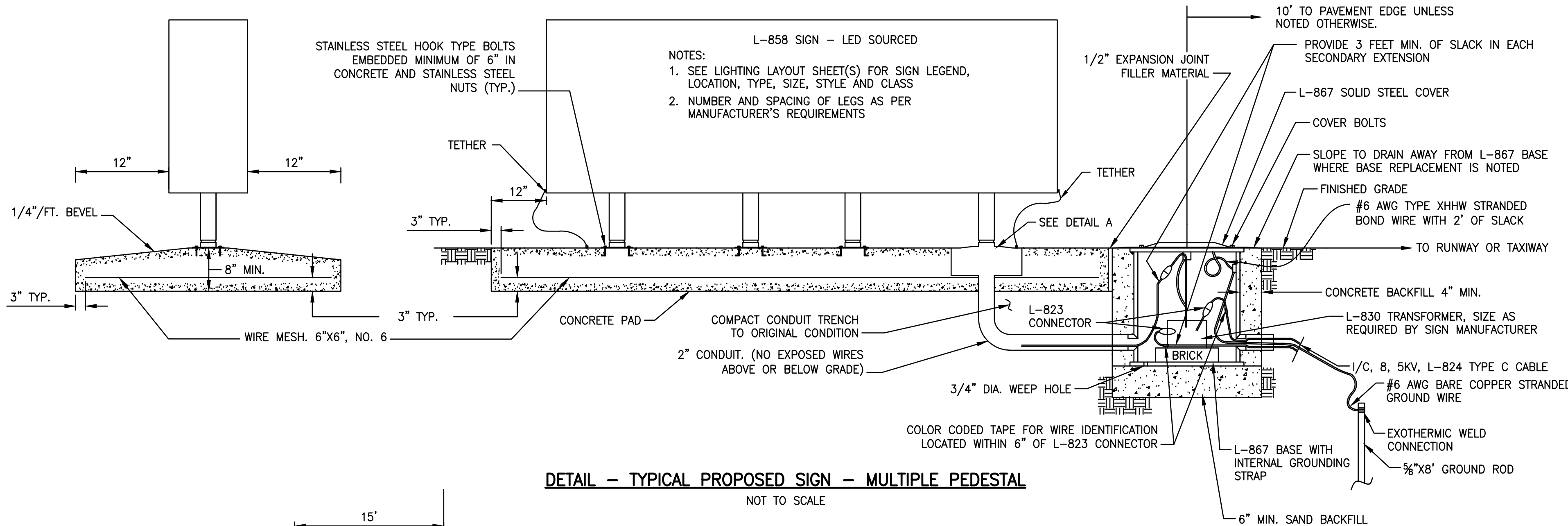
MEDIUM INTENSITY LIGHT - BASE MOUNTED
NOT TO SCALE



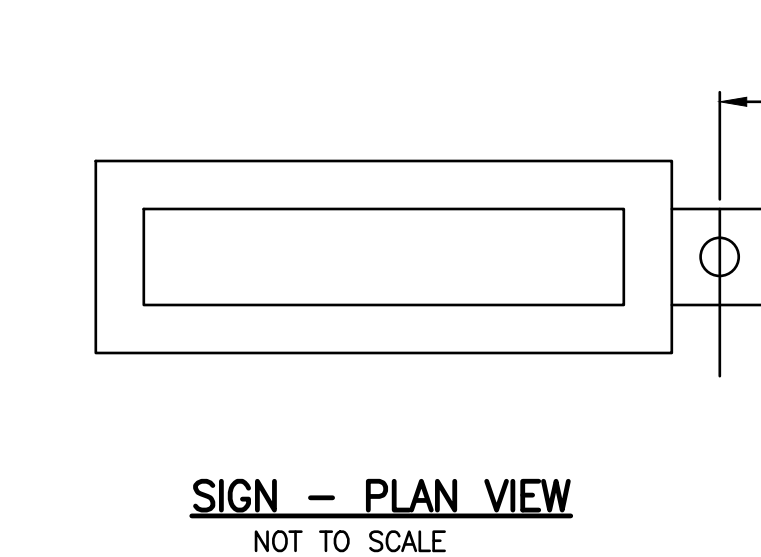
ELECTRICAL SPICE CAN DETAIL
NOT TO SCALE



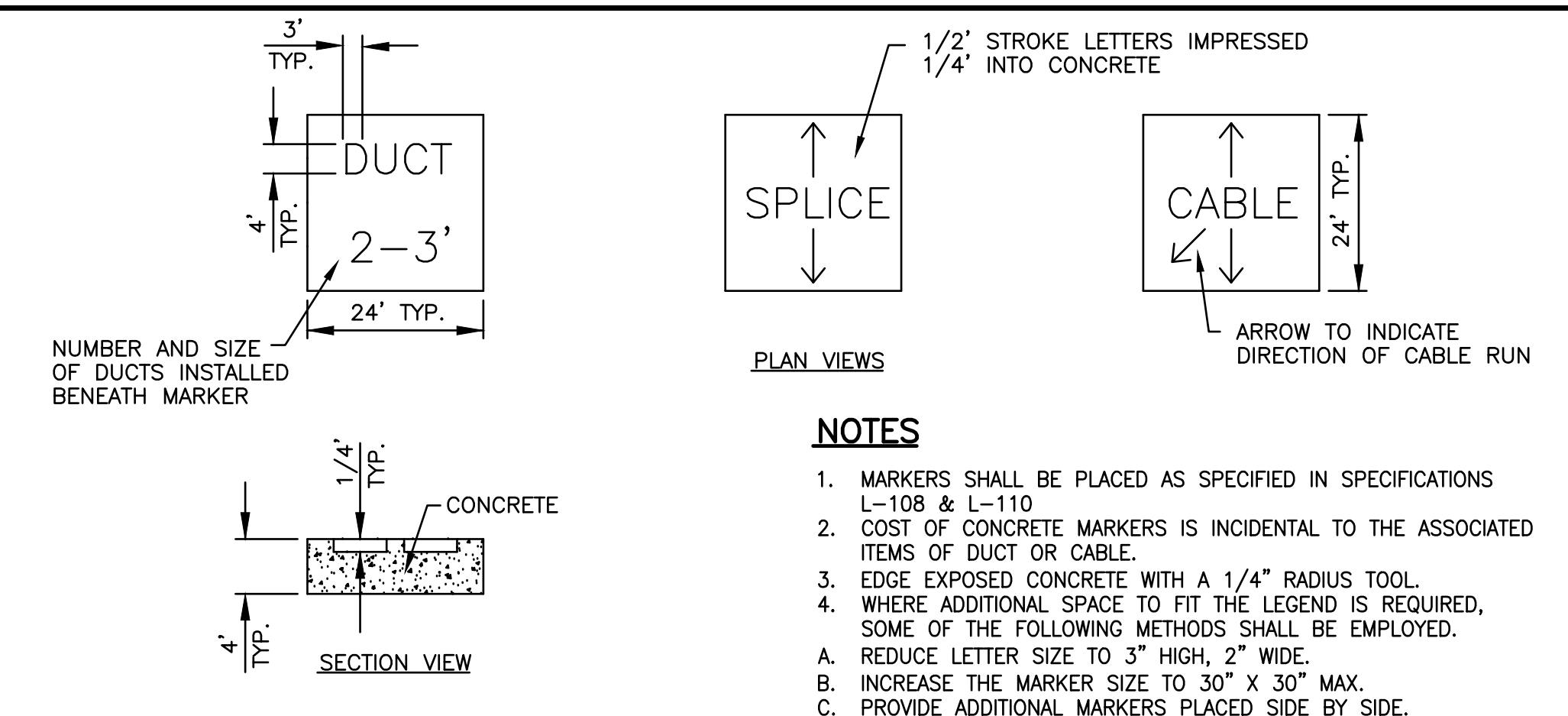
DUCT MARKER DETAIL
NOT TO SCALE



DETAIL - TYPICAL PROPOSED SIGN - MULTIPLE PEDESTAL
NOT TO SCALE



SIGN - PLAN VIEW
NOT TO SCALE



CABLE AND DUCT MARKERS
NOT TO SCALE

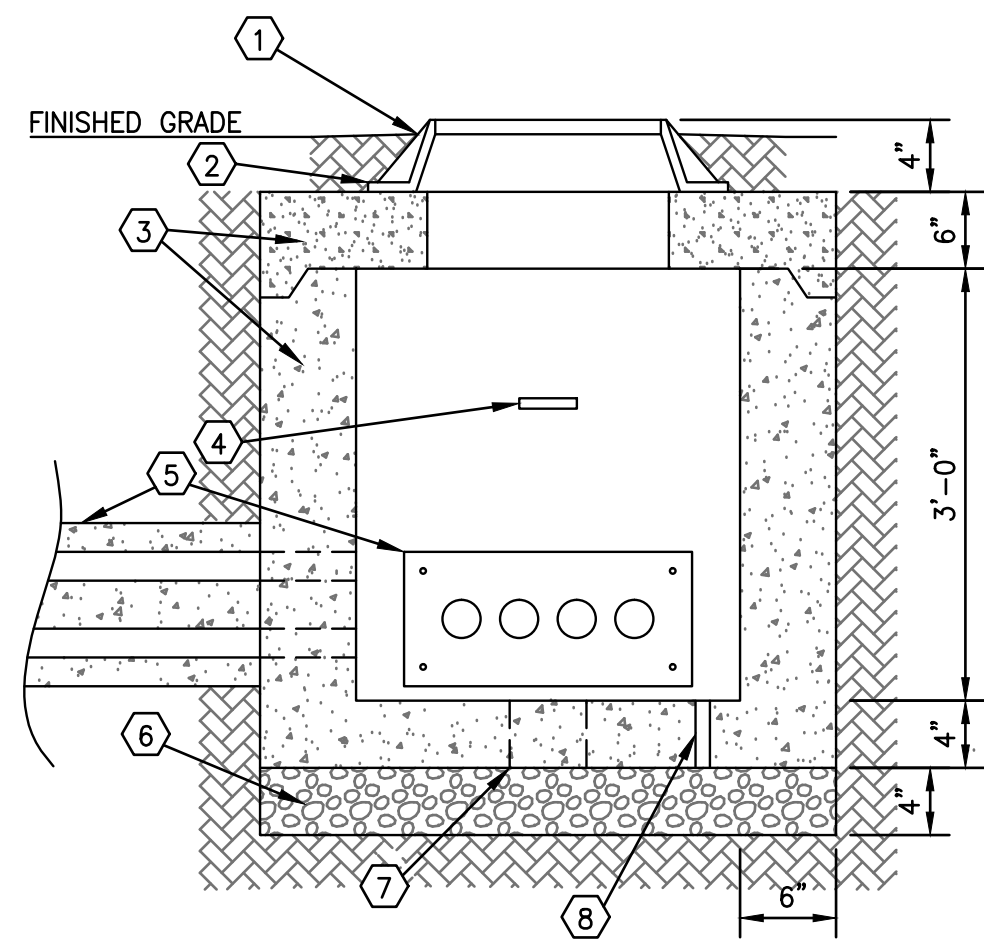
REVISIONS		DATE		NO.	

STATE OF ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-004515
© ALL RIGHTS RESERVED
CLARIDA & ZIEGLER ENGINEERING CO.
410 North Court St., P.O. Box 937
Marion, Illinois 62959
Phone - (618)993-6411, Fax - (618)993-6750

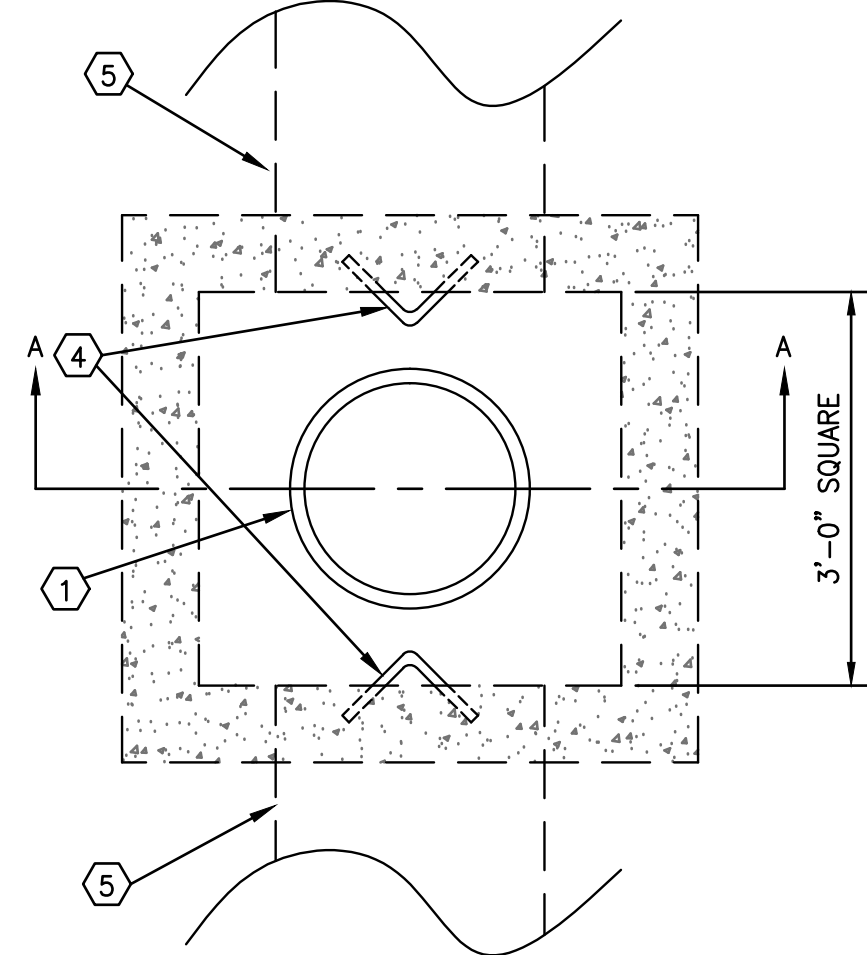
RUNWAY 11-29 REHABILITATION, ASSOCIATED EDGE LIGHTS & GUIDANCE SIGN REPLACEMENT ELECTRICAL NOTES AND DETAILS

LETTING CONTRACT NUMBER: **WI057**

Date: 6/17/16 DR. By: MKW CK'D By: WBZ
Scale: N.T.S. Job No.: 15096 Sheet No.: 17 of 21



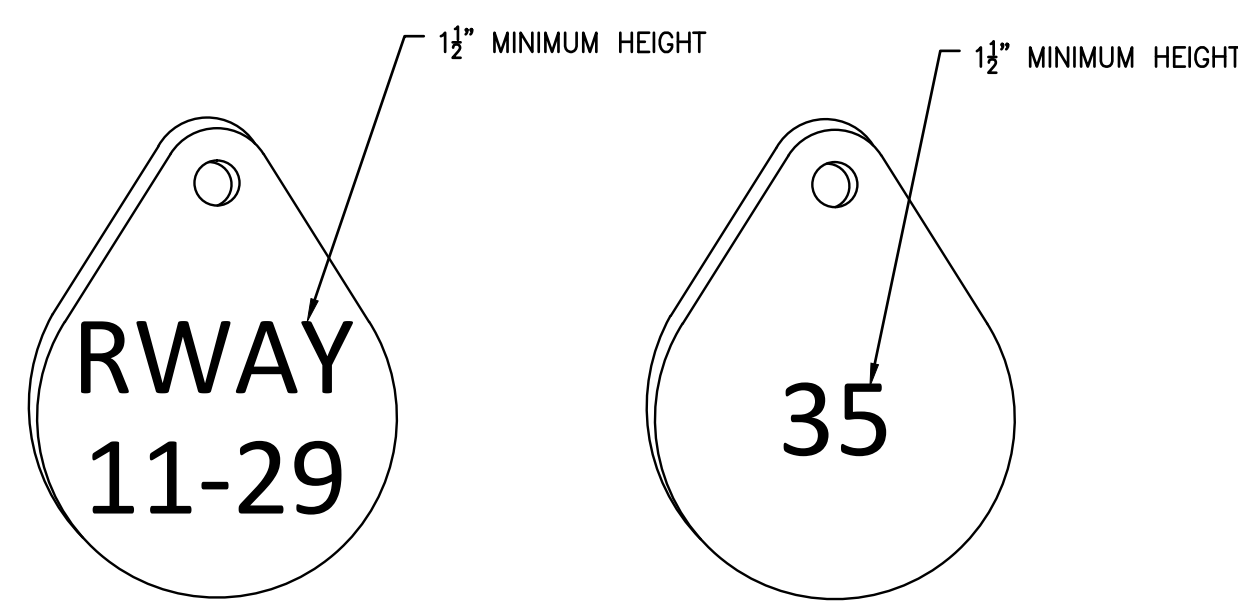
SECTION A-A
N.T.S.



PLAN VIEW
N.T.S.
TYPICAL MANHOLE

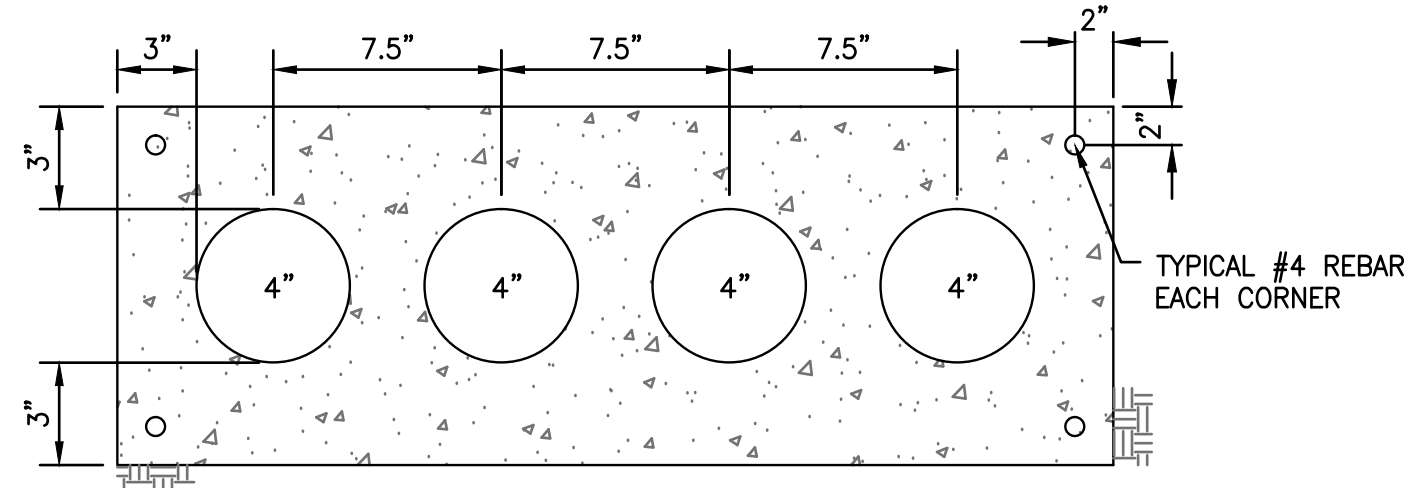
DETAIL NOTES

- 1 24" DIAMETER MINIMUM MANHOLE ACCESS COVER. NEENAH R-6141 (OR APPROVED EQUAL) CASTING.
- 2 SEAL JOINT WATERTIGHT WITH NON-SHRINK GROUT.
- 3 PRE-CAST CONCRETE MANHOLE AND TOP.
- 4 TYPICAL GALVANIZED PULLING IRON LOCATED 1 FT FROM TOP AND INSTALLED OPPOSITE ANY DUCT BANK ENTRANCE INTO MANHOLE.
- 5 TYPICAL SINGLE-LAYER DUCT BANK OR CONDUIT ENTRANCES PER PLANS. SEAL ENTRANCES INTO MANHOLE WATERTIGHT.
- 6 POROUS GRANULAR BASE INSTALLED ON UNDISTURBED SOIL.
- 7 6" DIAMETER DRAIN HOLE IN MANHOLE BASE.
- 8 3/4" DIAMETER GROUND ROD HOLE

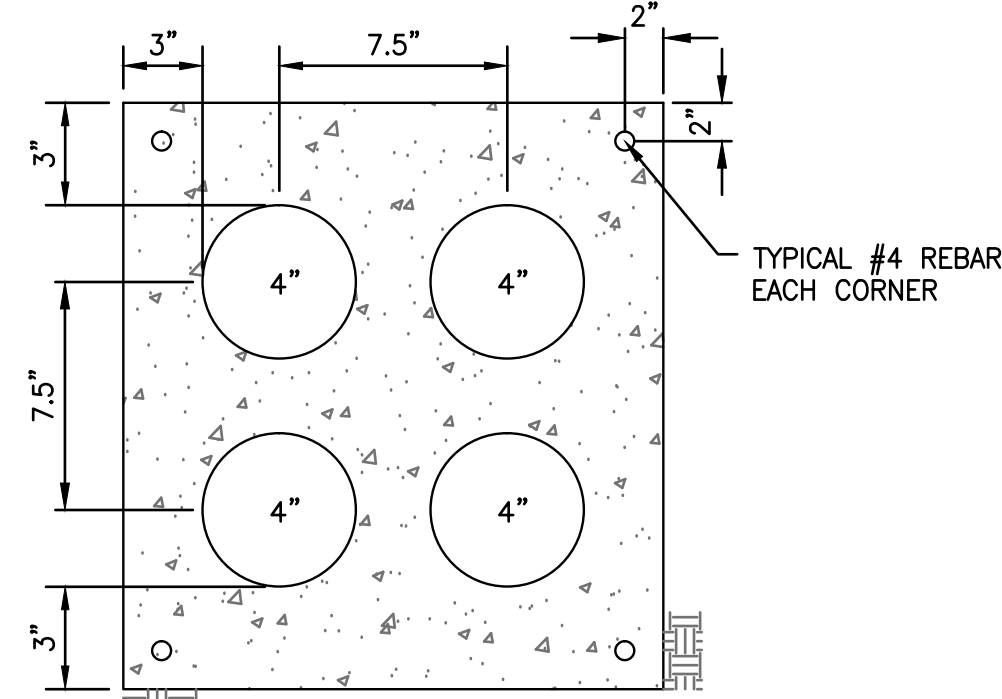


HOME RUN CABLES TAG DETAIL
N.T.S.

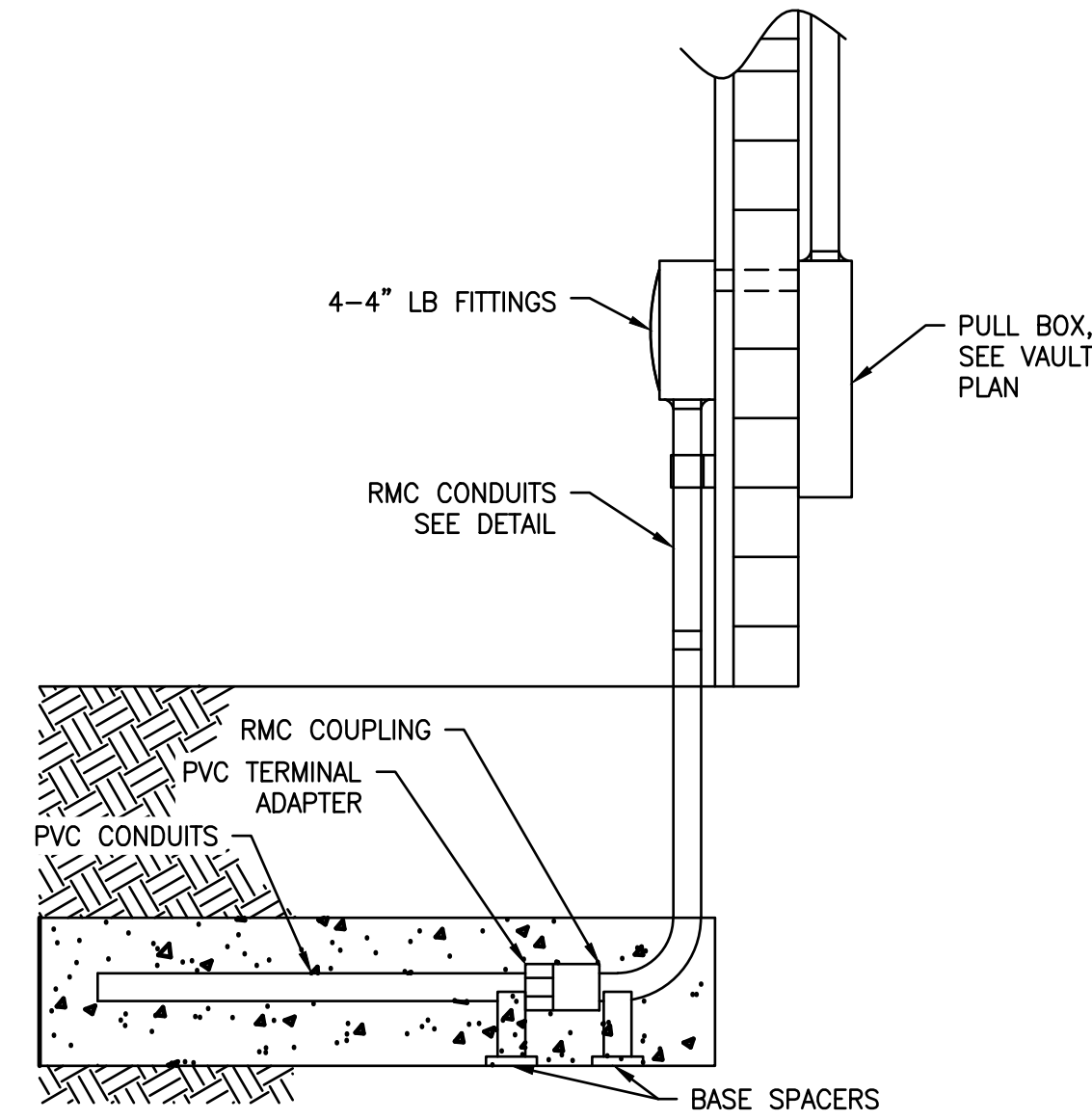
LIGHT FIXTURE TAG DETAIL
N.T.S.



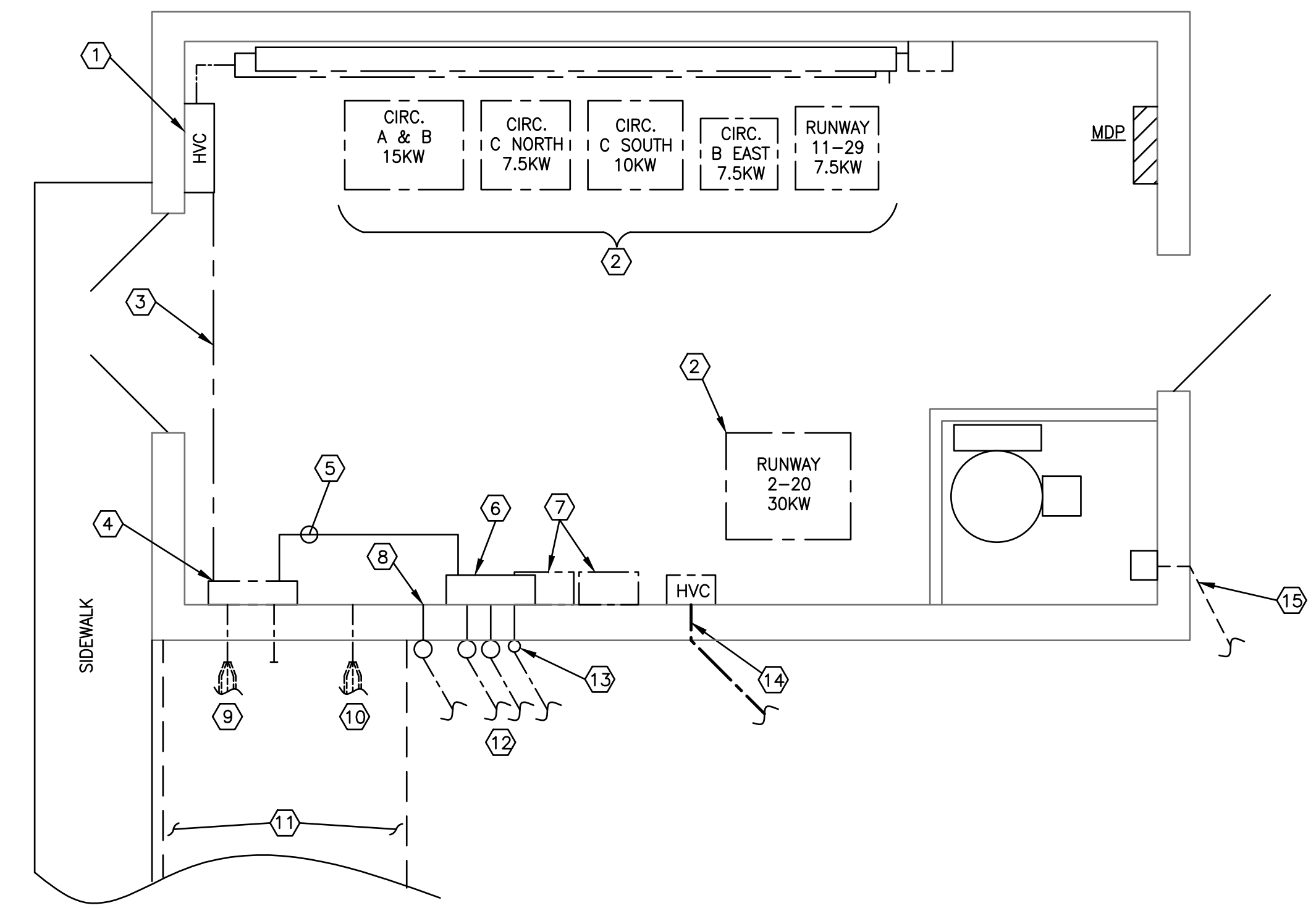
TYPICAL SECTION B-B
CONCRETE ENCASED DUCT BANK
N.T.S.



TYPICAL SECTION C-C
CONCRETE ENCASED DUCT BANK
N.T.S.



DETAIL - PVC TO RMC CONDUIT TRANSITION WITHIN DUCT BANK
N.T.S.

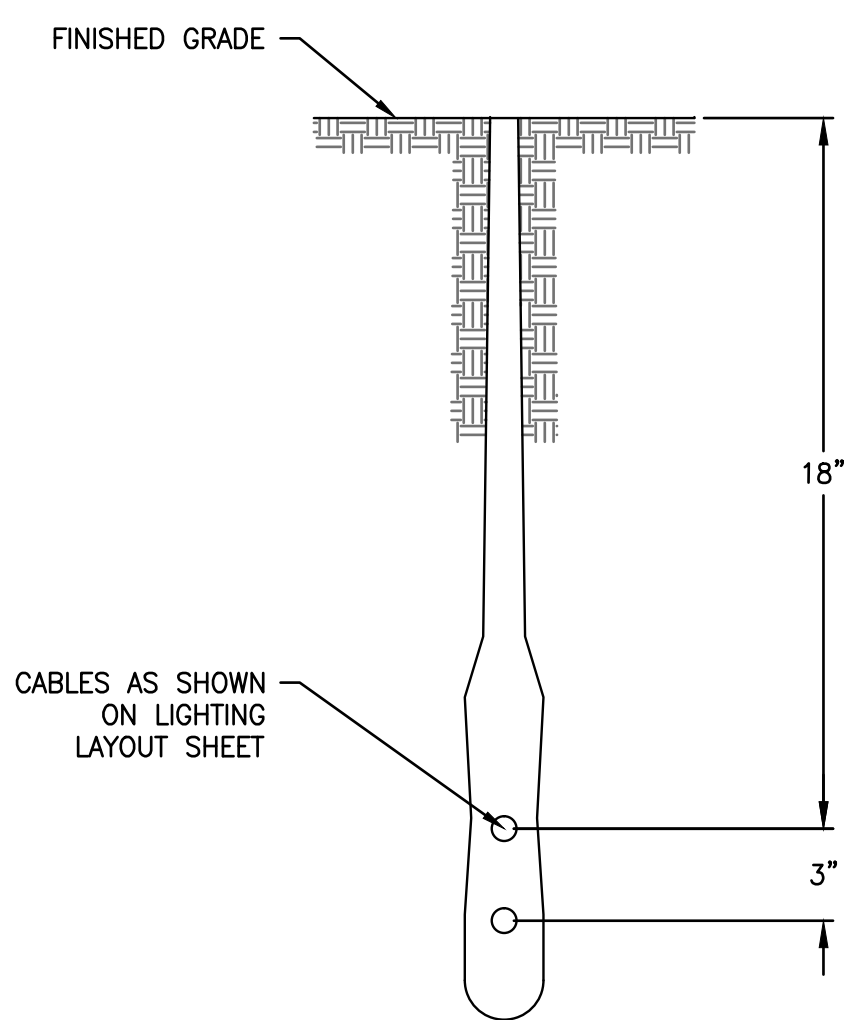


PROPOSED VAULT PLAN MODIFICATIONS
3/8" = 1"

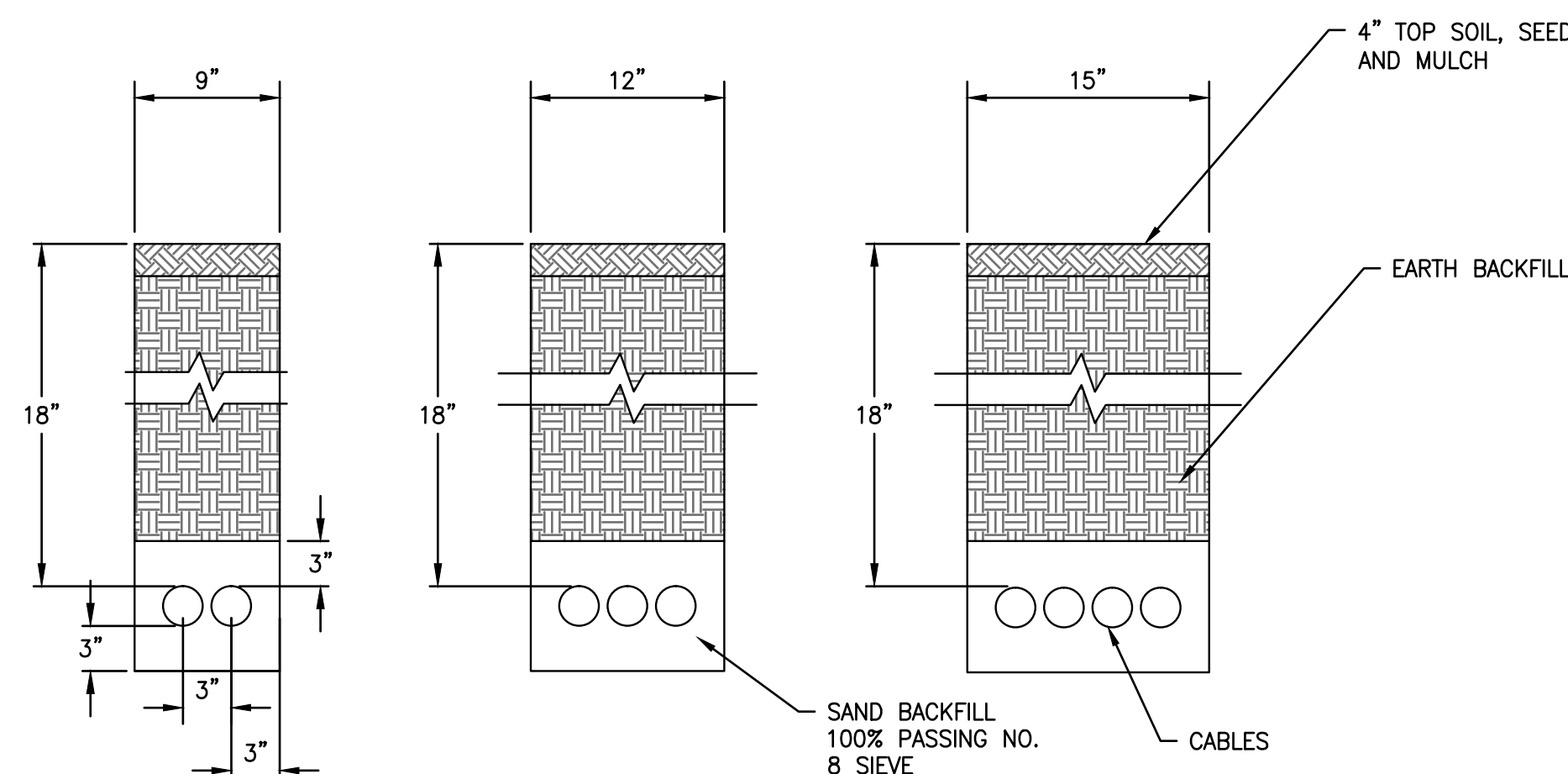
DETAIL NOTES

GENERAL - CONDUIT INSTALLATION SHALL BE INCIDENTAL TO DUCT BANK PAY ITEM. CABLE INSTALLATION SHALL BE INCIDENTAL TO CABLE PAY ITEM.

- 1 EXISTING HIGH VOLTAGE CUTOFF PANEL. CONNECT PROPOSED FIELD LIGHTING CABLES TO THE EXISTING CUTOFF CIRCUIT NOTED IN 3 BELOW.
- 2 EXISTING FIELD LIGHTING REGULATORS - NO WORK.
- 3 EXISTING UNDERFLOOR 4" CONDUIT - DISCONNECT AND REMOVE 2 EXISTING FIELD LIGHTING CONDUCTORS PRESENTLY FEEDING RUNWAY 11-29. REPLACE WITH 2 - #8, 5 KV, TYPE C PROPOSED CABLES FOR RUNWAY 11-29.
- 4 EXISTING FIELD LIGHTING CABLE PULL BOX TO REMAIN. DISCONNECT RUNWAY 11-29 UNDERGROUND CONDUCTORS, CAP OFF AND LABEL AS 'ABANDONED'. NO SPLICES ALLOWED IN PROPOSED CABLES.
- 5 2 - #8, 5 KV, TYPE C CABLES IN 3" EMT. CONNECT TO FEED RUNWAY 11-29 FIELD LIGHTING CIRCUIT.
- 6 24" X 24" X 8" DEEP, NEMA 1 SCREW COVER PULL BOX. MOUNT 3 FT TO THE TOP AFF. NO SPLICES ALLOWED IN PROPOSED CABLES. RUN CONTINUOUS TO EXISTING HIGH VOLTAGE CUTOFF.
- 7 DISCONNECT AND REMOVE THE EXISTING ADD-A-PHASE UNIT, CONTACTOR, AND ALL ASSOCIATED WIRE AND CONDUIT BACK TO MDP. DELIVER WALL UNITS TO MAINTENANCE DEPT FOR STORAGE.
- 8 STUB ONE 4" CONDUIT THRU WALL AND CAP OFF FOR FUTURE 120/240 VOLT CIRCUITS.
- 9 EXISTING DIRECT-BURIED FIELD LIGHTING HIGH VOLTAGE CABLES IN TRENCH.
- 10 EXISTING DIRECT-BURIED FIELD LIGHTING 120/240 VOLT CABLES IN TRENCH.
- 11 THIS AREA CONTAINS MULTIPLE CABLES IN TRENCH. LOCATE AND AVOID DAMAGE TO SAME DURING CONSTRUCTION.
- 12 SEE SITE PLAN FOR CONTINUATION OF CONCRETE-ENCASED DUCT BANK.
- 13 SEE DETAIL, THIS SHEET FOR EXTERIOR CONDUIT RISERS.
- 14 LOCATE AND AVOID EXISTING UNDERGROUND FEED TO RUNWAY 2-20 FIELD LIGHTS. SEE SITE PLAN.
- 15 LOCATE AND AVOID EXISTING UNDERGROUND FEED TO FUEL FARM. SEE SITE PLAN.



PLOWED CABLE
N.T.S.

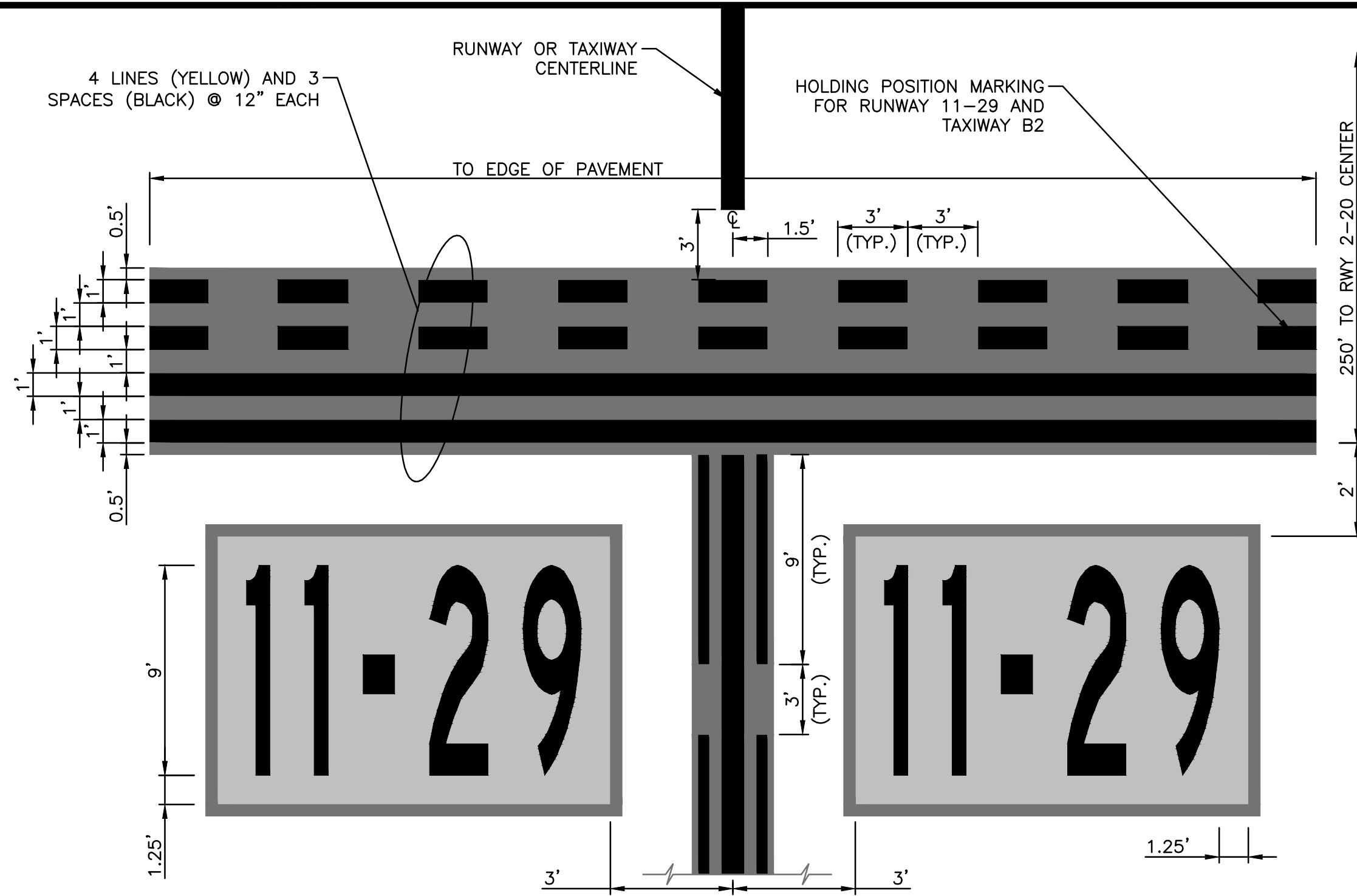


1. DETAIL NUMBERS INDICATE NO. OF CABLES
2. INCREASE TRENCHES WITH MORE THAN 7 CABLES 3" IN WIDTH FOR EACH ADDITIONAL CABLE. IF SPECIFIED ON PLANS. TWO PARALLEL TRENCHES MAY BE CONSTRUCTED.
3. RESTORE ALL DISTURBED SURFACES TO THEIR ORIGINAL CONDITION. COST IS INCIDENTAL TO TRENCH RETURNING MATERIALS AND RATES MAY BE SHOWN ON PLAN.

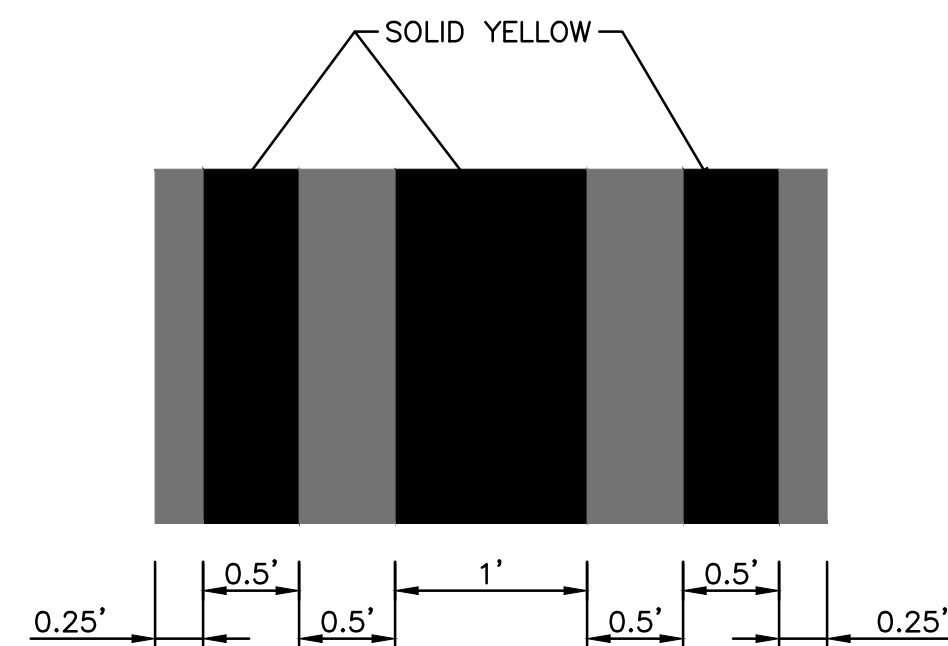
UNIT DUCT OR CABLE INSTALLED IN TRENCH
N.T.S.

LETTING CONTRACT NUMBER
WI057

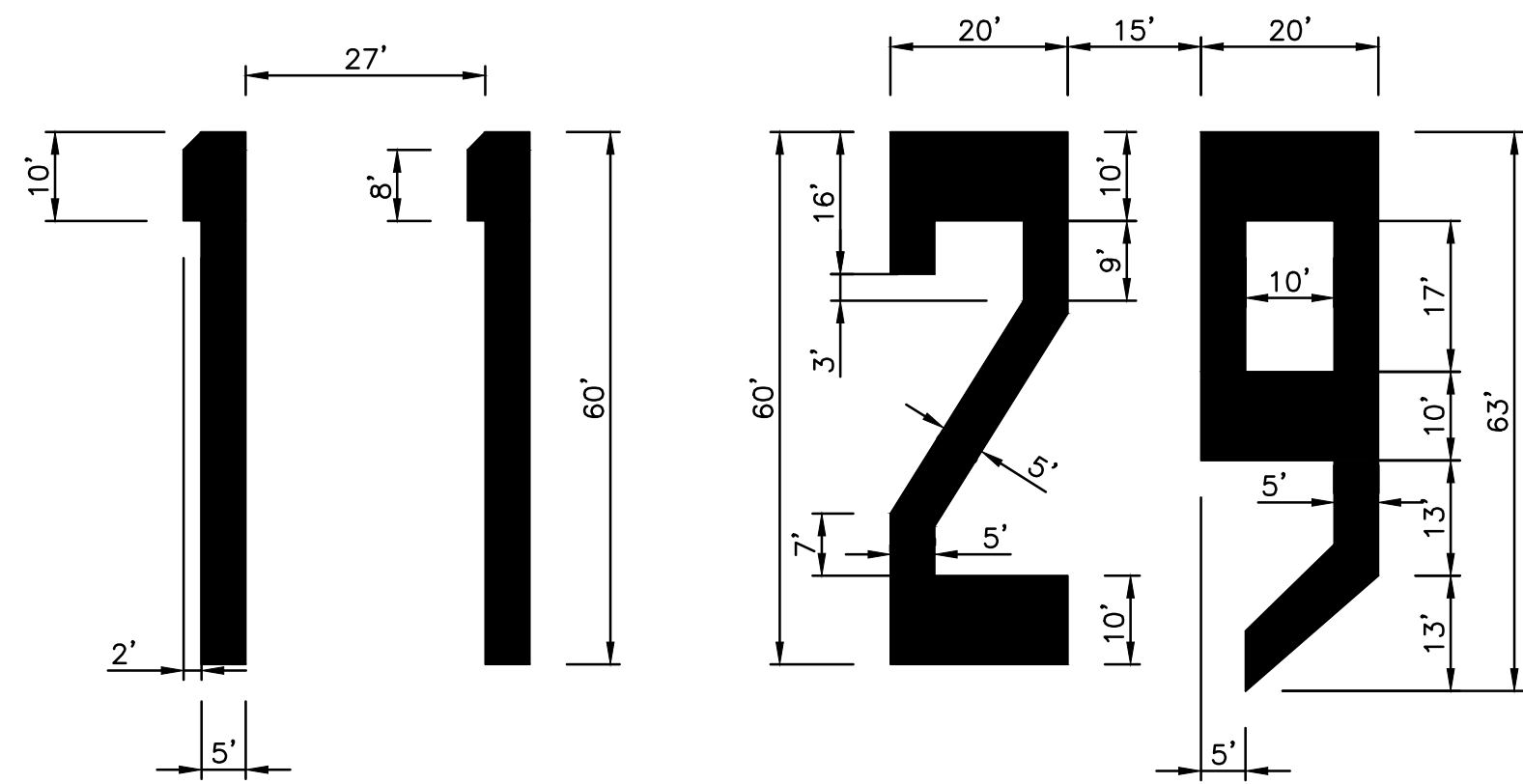
STATE OF ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-004515	
ALL RIGHTS RESERVED	
REVISIONS	CLARIDA & ZIEGLER ENGINEERING CO.
DATE	410 North Court St, P.O. Box 937 Marion, Illinois 62959
NO.	Phone - (618)993-6411, Fax - (618)993-6750
	RUNWAY 11-29 REHABILITATION, ASSOCIATED EDGE LIGHTS & GUIDANCE SIGN REPLACEMENT ELECTRICAL NOTES AND DETAILS
Date 6/17/16	DR. By MKW
Scale N.T.S.	Job No. 15096
	Sheet No. 18 of 21



SURFACE PAINTED HOLDING POSITION



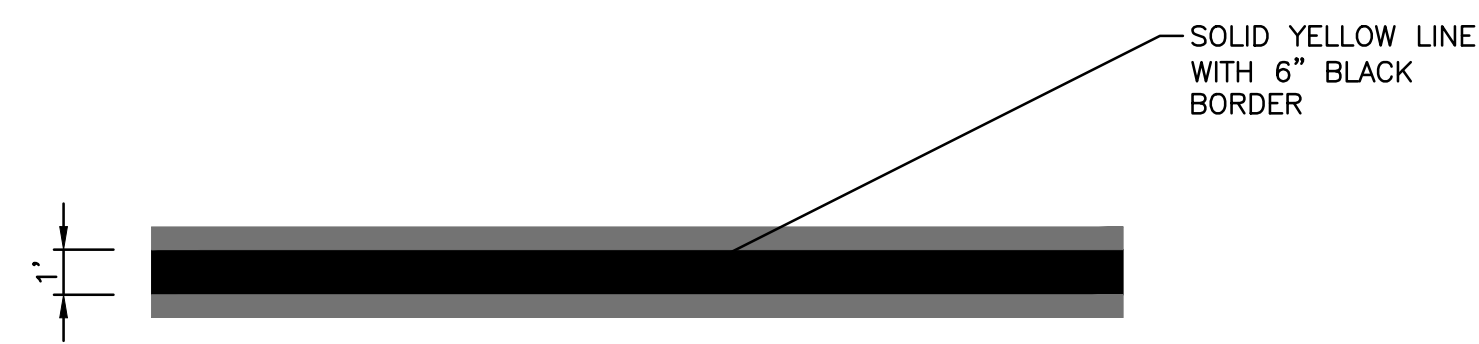
ENLARGEMENT OF ENHANCED MARKING



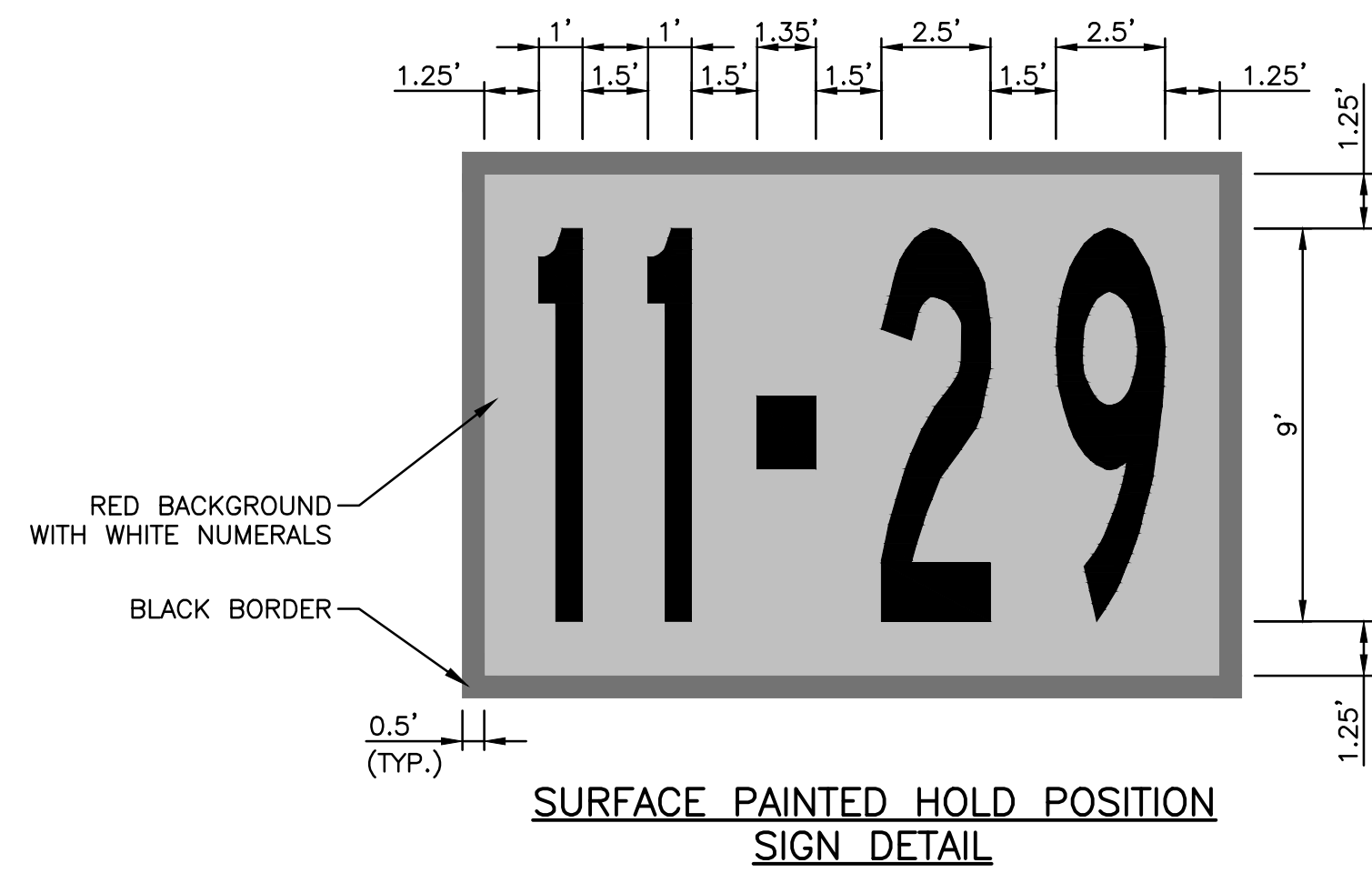
RUNWAY DESIGNATION NUMERALS

DESIGNATION NOTES:

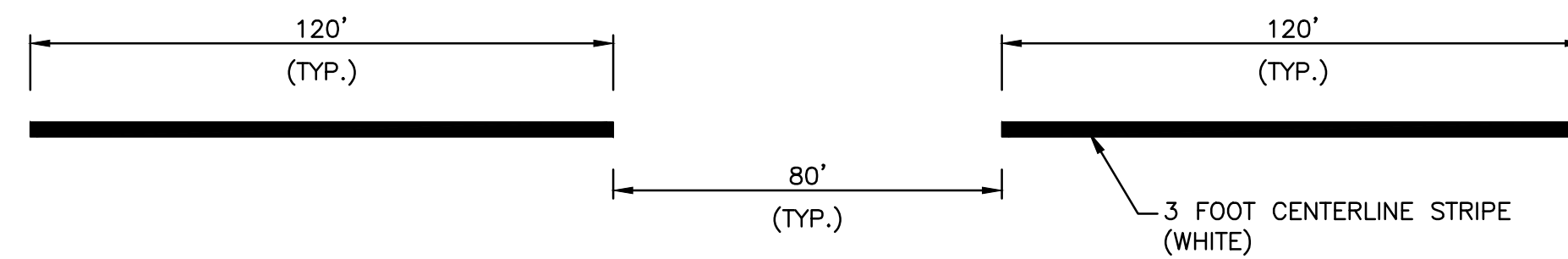
1. RUNWAY DESIGNATION MARKINGS SHALL BE WHITE IN COLOR.
2. RUNWAY DESIGNATION MARKINGS SHALL BE CENTERED BETWEEN THE TWO NUMBERS ON THE RUNWAY CENTERLINE.



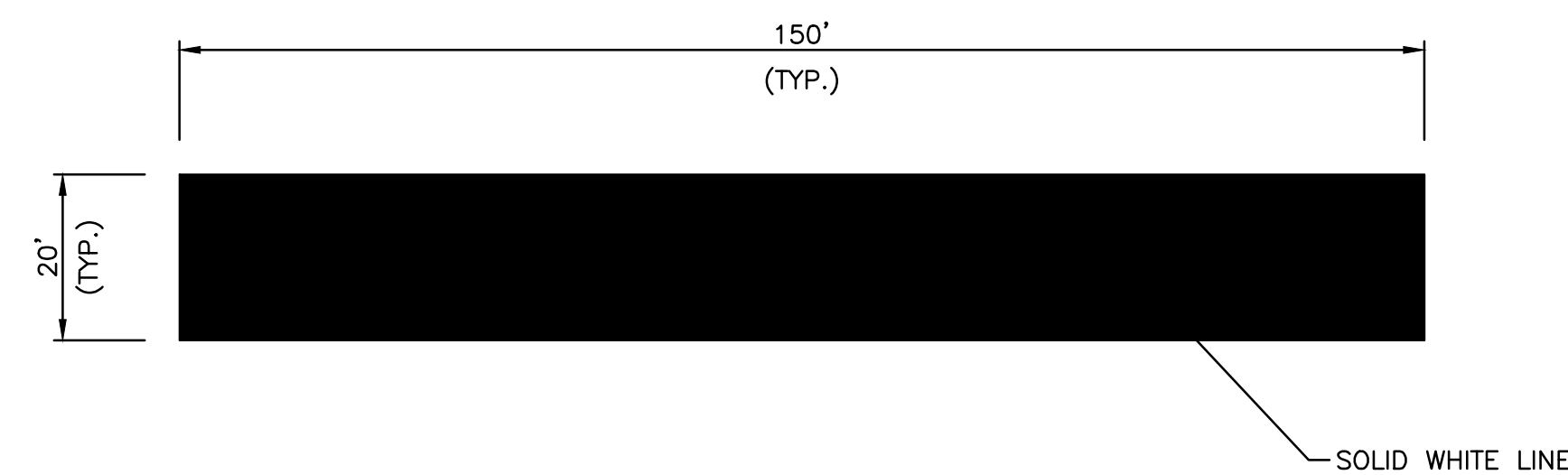
TAXIWAY CENTERLINE MARKING



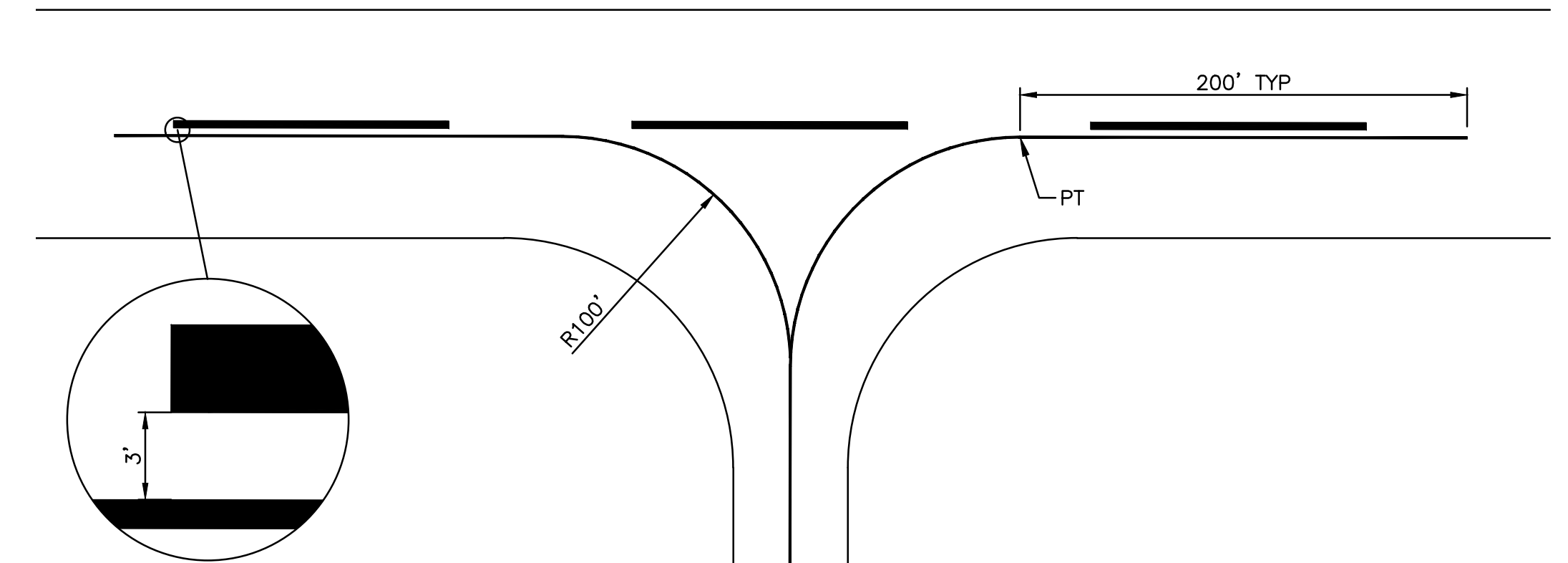
SURFACE PAINTED HOLD POSITION SIGN DETAIL



RUNWAY 11-29 CENTERLINE MARKING



RUNWAY 11-29 AIMING POINT MARKING



TYPICAL TAXIWAY CENTERLINE EXTENSION ON RUNWAY

PAVEMENT MARKING NOTES:

1. IMMEDIATELY PRIOR TO THE APPLICATION OF PAINT, ALL SURFACES SHALL BE DRY AND FREE FROM DIRT, GREASE, OIL, LAITANCE, OR OTHER FOREIGN MATERIAL WHICH WOULD REDUCE THE BOND BETWEEN THE PAINT AND THE PAVEMENT. THIS SHALL INCLUDE PAINTED AREAS ON THE EXISTING PAVEMENT.
2. SURFACE PAINTED HOLDING POSITION SIGNS SHALL BE RED BACKGROUND WITH WHITE NUMERALS.
3. RUNWAY MARKINGS PAINTED ON CONCRETE SHALL HAVE A 6 INCH BLACK BORDER.
4. ALL TAXIWAY MARKINGS SHALL HAVE A 6 INCH BLACK BORDER.

LETTING CONTRACT NUMBER
W1057

STATE OF ILLINOIS PROFESSIONAL DESIGN FIRM LICENSE NO. 184-004515	
ALL RIGHTS RESERVED	
©	
CLARIDA & ZIEGLER ENGINEERING CO.	
410 North Court St, P.O. Box 937 Marion, Illinois 62959 Phone - (618)993-6411, Fax - (618)993-6750	
RUNWAY 11-29 REHABILITATION, ASSOCIATED EDGE LIGHTS & GUIDANCE SIGN REPLACEMENT PAVEMENT MARKING DETAILS	
Date	6/17/16
DR. By	MKW
Ck'D By	WBZ
Scale	N.T.S.
Job No.	15096
Sheet No.	21 of 21