

FOR INDEX OF SHEETS, SEE SHEET NO. 3

TRAFFIC DATA

	2009 ADT	2030 ADT
MANNHEIM ROAD	41,500	86,900
MONTROSE AVE	4,100	4,600
LAWRENCE AVE	17,300	23,950

	DESIGN SPEED	POSTED SPEED
MANNHEIM ROAD	50 MPH	50 MPH
MONTROSE AVE	30 MPH	30 MPH
LAWRENCE AVE	35 MPH	35 MPH

DESIGN DESIGNATION

MANNHEIM ROAD	7950(30) PRINCIPAL ARTERIAL 33.35(PCC-30)
MONTROSE AVE	420(30) COLLECTOR 33.35(PCC-30)
LAWRENCE AVE	2160(30) MINOR ARTERIAL 33.35(PCC-30)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
**PROPOSED
HIGHWAY PLANS**

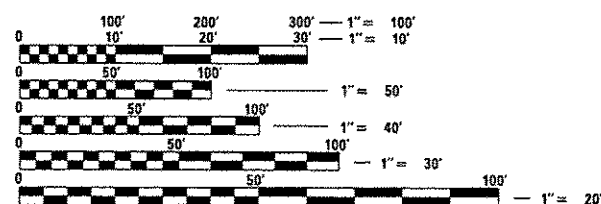
F.A.P. 330 (US 12/45)

**MANNHEIM ROAD SOUTH (IRVING PARK ROAD (IL 19) TO I-190)
RECONSTRUCTION**

SECTION: 0105 WRS&HB
PROJECT: ACNHF-0330(070)

COOK COUNTY
C-91-399-09

VOLUME 1 OF 2



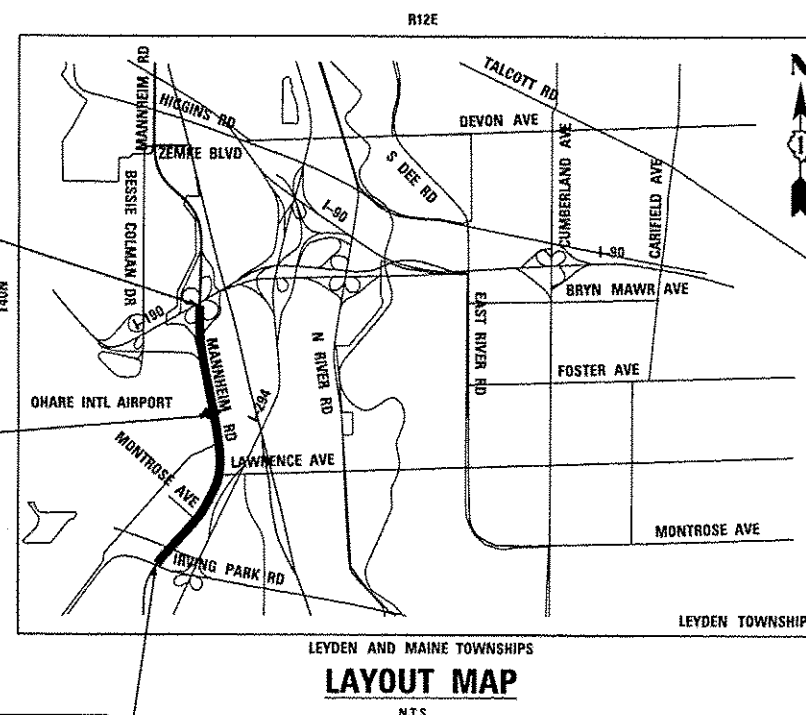
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD
ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT
CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS
ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

FOR UTILITY INFORMATION CALL J.U.I.E. (JOINT UTILITY
LOCATION INFORMATION FOR EXCAVATION) AT (800) 892-0123
48 HOURS BEFORE DIGGING

PROJECT ENDS
STA. 114 + 78.89

STR No. 016-7943
NB MANNHEIM
STR No. 016-7942
SB MANNHEIM

PROJECT BEGINS
STA. 28 + 00.00



GROSS LENGTH = 8,678.89 FT. = 1.644 MILE
NET LENGTH = 8,678.89 FT. = 1.644 MILE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	1
ILLINOIS CONTRACT NO. 60G37				

* 605 + 1 = 606
* 606 + 66 = 672



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
SUBMITTED Dec 7 2012
John Fortmann
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
Dec 7 2012
John D. Baranzelli, P.E.
ENGINEER OF DESIGN AND ENVIRONMENT
Dec 7 2012
William R. Freyler
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

HNTB TENG

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

Rev. 1-3-13

INDEX OF SHEETS – VOLUME 1

1	COVER SHEET - VOLUME 1
2	SIGNATURE SHEET
3	INDEX OF SHEETS - VOLUME 1
4	DISTRICT 1 DETAILS AND HIGHWAY STANDARDS
5	GENERAL NOTES, COMMITMENTS AND MIXTURE REQUIREMENTS
6 - 34	SUMMARY OF QUANTITIES
35 - 46	TYPICAL SECTIONS
47 - 52	SCHEDULE OF QUANTITIES
53 - 57	ALIGNMENT, TIES, AND BENCHMARKS
58 - 63	REMOVAL PLANS
64 - 75	ROADWAY PLANS AND PROFILES
76 - 81	ROADWAY DETAILS
82 - 88	ROADWAY JOINTING PLANS
89	MAINTENANCE OF TRAFFIC GENERAL NOTES AND STAGING
90 - 96	MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
97 - 105	MAINTENANCE OF TRAFFIC - PRE-STAGE
106 - 132	MAINTENANCE OF TRAFFIC - STAGE 1
133 - 148	MAINTENANCE OF TRAFFIC - STAGE 2
149 - 157	MAINTENANCE OF TRAFFIC - STAGE 3
158 - 162	DETOUR PLANS
163 - 170	TEMPORARY INFORMATION SIGNS
171 - 177	EROSION AND SEDIMENT CONTROL PLANS
178 - 186	DRAINAGE PLAN AND PROFILES
187 - 192	DRAINAGE SCHEDULE
193 - 194	DRAINAGE DETAILS
195	UTILITY RELOCATION PLANS
196 - 200	PROPOSED PUMP STATION
201 - 206	PLAT OF HIGHWAYS
207 - 212	PAVEMENT MARKING AND SIGNING PLANS
213 - 215	SIGNING SCHEDULE OF QUANTITIES
216 - 220	SIGN PANEL DETAILS
221 - 223	SIGN DETAILS
224 - 253	SIGN STRUCTURES
254 - 259	LANDSCAPING PLANS
260 - 286	TRAFFIC SIGNAL PLANS AND DETAILS
287 - 323	LIGHTING PLANS
324 - 333	BALMORAL LIGHTING
334	RUNWAY CLEAR ZONES

INDEX OF SHEETS – VOLUME 2

335	COVER SHEET - VOLUME 2
336	INDEX OF SHEETS - VOLUME 2
337 - 362	STRUCTURE PLANS - 016-7943 NB MANNHEIM RD BRIDGE
363 - 389	STRUCTURE PLANS - 016-7942 SB MANNHEIM RD BRIDGE
390 - 402	STRUCTURE PLANS - 016-1400 WEST RETAINING WALL
403 - 416	STRUCTURE PLANS - 016-1401 EAST RETAINING WALL
417 - 419	STRUCTURE PLANS - BARRIER WALL
420 - 436	SOIL BORING LOGS
437 - 462	ITS PLANS
463 - 497	DISTRICT ONE DETAILS
498 - 572	CROSS SECTIONS - MANNHEIM ROAD
573	NOT USED
574 - 575	CROSS SECTIONS - MONTROSE AVENUE
576 - 579	CROSS SECTIONS - LAWRENCE AVENUE
580 - 581	CROSS SECTIONS - RAMP A
582 - 583	CROSS SECTIONS - RAMP B
584 - 586	CROSS SECTIONS - RAMP M2CD1
587 - 588	CROSS SECTIONS - RAMP EBNB
589	CROSS SECTIONS - RAMP SBEB
590 - 605	CROSS SECTIONS - BALMORAL UNDERPASS
605A - 605BN	FAA - FOTS LOOP 3 AND NAVAIDS RELOCATION

DISTRICT 1 DETAILS

BD-01	DRIVEWAY DETAILS - DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER >= 15' (4.5 M)
BD-02	DRIVEWAY DETAILS DISTANCE BETWEEN ROW AND FACE OF CURB < 15' (4.5 M)
BD-03	OUTLET FOR CONCRETE CURB AND GUTTER
BD-07	STORM SEWER CONNECTION TO EXISTING SEWER
BD-12	MANHOLE WITH RESTRICTOR PLATE
BD-22	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
BD-32	BUTT JOINTS AND HMA TAPER
BD-48	PCC PAVEMENT ROUNDOUTS AT CURB AND GUTTER
BD-49	DETAIL OF C.L. SAWCUT 16' & VAR. JOINTED PCC PAV'T FOR RAMPS
BD-52	DETAIL OF PAVEMENT SEPERATION, JOINT FOR JOINTED PAVEMENTS AT INTERSECTIONS
BE-205	LIGHTING CONTROLLER, RADIO CONTROL, DUPLEX TYPE W/SCADA
BE-301	LIGHT POLE FOUNDATION, 40' TO 47 1/2' M.H. 15" BOLT CIRCLE
BE-322	LIGHT POLE, FOUNDATION INTEGRAL WITH DOUBLE FACE BARRIER WALL
BE-410	LIGHT POLE, ALUMINUM, DAVIT TYPE, 47.5 FT. M.H.
BE-702	MISCELLANEOUS DETAILS, SHEET A - CABLE SPLICE, POLE WIRING, TRENCH DETAIL
BE-703	MISCELLANEOUS DETAILS, SHEET B, J BOX EMBEDDED IN BARRIER WALL - INSTALLATION OF CONDUIT IN BRIDGE PARAPET, EXPANSION JOINT, - ELECTRIC CONNECTION TO UNDERPASS LIGHTING
BE-705	COMMUNICATIONS VAULT, COMPOSITE CONCRETE
BE-800	TEMPORARY LIGHTING
BE-801	TEMPORARY AERIAL CABLE INSTALLATION
BE-1000	CCTV CAMERA STRUCTURE 50' (15.24 m) MOUNTING HEIGHT
TC-08	FREEWAY ENTRANCE AND EXIT RAMP CLOSURE DETAILS
TC-10	TRAFFIC CONTROL AND PROTECTION FOR ROADS, INTERSECTIONS, AND DRIVEWAYS
TC-11	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT)
TC-12	MULTI-LANE FREEWAY PAVEMENT MARKING
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-14	TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
TC-16	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
TC-17	TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES
TC-21	DETOUR SIGNING FOR CLOSING STATE HIGHWAYS
TC-22	ARTERIAL ROAD INFORMATION SIGN
TC-26	DRIVEWAY ENTRANCE SIGNING
TS-02	MAST ARM MOUNTED STREET NAME SIGNS
TS-05	STANDARD TRAFFIC SIGNAL DESIGN DETAILS

IDOT HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006-00	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420001-07	PAVEMENT JOINTS
420106-04	36' JOINTED PCC PAVEMENT
420111-03	PCC PAVEMENT ROUNDOUTS
420201-07	ENTRANCE RAMP TERMINAL
420301-04	EXIT RAMP TERMINAL
420401-09	BRIDGE APPROACH PAVMENT CONNECTOR
442201-03	CLASS C AND D PATCHES
482001-02	HMA SHOULDER ADJACENT TO FLEXIBLE PAVEMENT
482006-03	HMA SHOULDER ADJACENT TO RIGID PAVEMENT
483001-04	PCC SHOULDER
515001-03	NAME PLATE FOR BRIDGES
542301-03	PRECAST REINFORCED CONCRETE FLARED END SECTION
542306-02	PRECAST REINFORCED CONCRETE ELLIPTICAL FLARED END SECTION
542311-04	TRAVERSABLE PIPE GRATE
601001-04	SUB-SURFACE DRAINS
601101-01	CONCRETE HEADWALL FOR PIPE DRAIN
602001-02	CATCH BASIN, TYPE A
602101-02	DRAINAGE STRUCTURES TYPES 1, 2, & 3
602401-03	MANHOLE, TYPE A
602406-05	MANHOLE, TYPE A, 6' DIAMETER
602416-03	MANHOLE, TYPE A, 8' DIAMETER
602601-02	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
602701-02	MANHOLE STEPS
604001-03	FRAME AND LIDS, TYPE 1
604036-02	GRATE, TYPE 8
604071-04	FRAME AND GRATE, TYPE 20
604081-04	FRAMES AND GRATES, TYPE 22
604091-02	FRAME AND GRATE, TYPE 24
606001-05	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-04	PC CONCRETE ISLANDS AND MEDIANS
630001-10	STEEL PLATE BEAM GUARDRAIL
630201-06	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
637001-05	CONCRETE BARRIER, DOUBLE FACE, 32 IN. HEIGHT
664001-02	CHAIN LINK FENCE

IDOT HIGHWAY STANDARDS (CONTINUED)

701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-04	OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701011-03	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701101-03	OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701411-08	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS >= 45 MPH
701421-05	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS >= 45 MPH TO 55 MPH
701422-05	LANE CLOSURE, MULTILANE, FOR SPEEDS >= 45 MPH TO 55 MPH
701426-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION ,FOR SPEEDS >= 45 MPH
701427-01	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS <= 40 MPH
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701601-08	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701701-08	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-05	SIDEWALK, CORNER OR CROSS-WALK CLOSURE
701901-02	TRAFFIC CONTROL DEVICES
704001-07	TEMPORARY CONCRETE BARRIER
720001-01	SIGN PANEL MOUNTING DETAILS
720006-03	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
720016-03	MAST ARM MOUNTED STREET NAME SIGNS
728001-01	TELESCOPING STEEL SIGN SUPPORT
729001-01	APPLICATIONS OF TYPES A AND B METAL POSTS (FOR SIGNS & MARKERS)
780001-03	TYPICAL PAVEMENT MARKINGS
805001-01	ELECTRICAL SERVICE INSTALLATION DETAILS
814001-02	HANDHOLES
814006-02	DOUBLE HANDHOLES
836001-02	LIGHT POLE FOUNDATION
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
877001-05	STEEL MAST ARM ASSEMBLY AND POLE - 16' THROUGH 55'
877002-02	STEEL MAST ARM ASSEMBLY AND POLE - 56' THROUGH 75'
878001-09	CONCRETE FOUNDATION DETAILS
880001-01	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS

G-03

HNTB

USER NAME	DESIGNED	REVISED
DRAWN	MMK	REVISED
CHECKED	LLS	REVISED
DATE	12/28/12	ADDENDUM 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 DETAILS AND HIGHWAY STANDARDS

SCALE: N.T.S. SHEET NO. 1 OF 1 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	4
CONTRACT NO. 60637				
ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% FED. / 20% STATE				80% FED. 10% STATE 10% VILLAGE	80% FED. 15% STATE 5% VILLAGE	100% CHICAGO
				CONSTRUCTION CODE						
				ROADWAY 0003 URBAN	BALMORAL 0003 URBAN	BRIDGE 0008 URBAN	LIGHTING 0021 URBAN	TS-MONTROSE 0021 URBAN	TS-LAWRENCE 0021 URBAN	
44000100	PAVEMENT REMOVAL	SQ YD	103,253	103,253						
44000165	HOT-MIX ASPHALT SURFACE REMOVAL, 4"	SQ YD	5,567	5,567						
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	3,673	3,673						
44004000	PAVED DITCH REMOVAL	FOOT	582	582						
44004250	PAVED SHOULDER REMOVAL	SQ YD	31,567	31,567						
44201771	CLASS D PATCHES, TYPE IV, 10 INCH	SQ YD	390	250	140					
44300200	STRIP RELFECTIVE CRACK CONTROL TREATMENT	FOOT	500	500						
48101620	AGGREGATE SHOULDERS, TYPE B, 10"	SQ YD	1,722	1,222	500					
48203040	HOT-MIX ASPHALT SHOULDERS, 10 3/4"	SQ YD	1,093	1,093						
48300500	PORTLAND CEMENT CONCRETE SHOULDERS 10"	SQ YD	2,730		2,730					
48300515	PORTLAND CEMENT CONCRETE SHOULDERS 10 3/4"	SQ YD	25,872	25,872						
50200100	STRUCTURE EXCAVATION	CU YD	9,505			9,505				
50200450	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL FOR STRUCTURES	CU YD	885			885				
50300225	CONCRETE STRUCTURES	CU YD	2,260.1			2,242.1				

* SPECIALITY ITEM

HNTB	USER NAME * lsupancheck	DESIGNED	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT
	PLOT SCALE * 1/1	DRAWN	REVISED -									
	PLOT DATE * 22-OCT-2012	CHECKED	REVISED -									
	DATE 10/19/12	REVISED -										
Rev. 1-3-13												
SECTION 0105 WRS&HB												
COUNTY COOK												
TOTAL SHEETS 605												
SHEET NO. 9												
CONTRACT NO. 60637												

SUMMARY OF QUANTITIES

80% FED. / 20% STATE

80% FED. 10% STATE 10% VILLAGE
80% FED. 15% STATE 5% VILLAGE
100% CHICAGO

CONSTRUCTION CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY 0003 URBAN	BALMORAL 0003 URBAN	BRIDGE 0008 URBAN	LIGHTING 0021 URBAN	TS-MONTROSE 0021 URBAN	TS-LAWRENCE 0021 URBAN
50300255	CONCRETE SUPERSTRUCTURE	CU YD	1,240.7			1,240.7			
50300260	BRIDGE DECK GROOVING	SQ YD	2,688			2,688			
50300285	FORM LINER TEXTURED SURFACE	SQ FT	7,774			7,774			
50300300	PROTECTIVE COAT	SQ YD	10,224		7,135	3,089			
50500305	ERECTING STRUCTURAL STEEL	L SUM	1			1			
50500505	STUD SHEAR CONNECTORS	EACH	10,465			10,465			
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	500,880			497,680			
50800515	BAR SPLICERS	EACH	719			719			
50901760	PIPE HANDRAIL	FOOT	45						
51100100	SLOPE WALL 4 INCH	SQ YD	1,670			1,670			
51500100	NAME PLATES	EACH	2			2			
52000030	PREFORMED JOINT SEAL 2 1/2"	FOOT	126			126			
52000110	PREFORMED JOINT STRIP SEAL	FOOT	368			368			
52100210	ERECTING ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	20			20			
52100520	ANCHOR BOLTS, 1"	EACH	40			40			

* SPECIALITY ITEM

Rev. 1-3-13

S00-5

HNTB

USER NAME: isupencheck

DESIGNED

REVISED

PLOT SCALE: 1/4"

DRAWN

REVISED

PLOT DATE: 22-OCT-2012

CHECKED

REVISED

DATE 10/19/12

REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE:

SHEET NO.

OF

SHEETS

STA.

TO STA.

F.A.P.

RTE.

SECTION

COUNTY

TOTAL SHEETS

SHEET NO.

330

0105 WRS&HB

COOK

605

10

CONTRACT NO. 60637

ILLINOIS FED. AID PROJECT

SUMMARY OF QUANTITIES

80% FED / 20% STATE

80% FED. 10% STATE 10% VILLAGE
80% FED. 15% STATE 5% VILLAGE

CONSTRUCTION CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	BALMORAL	BRIDGE	LIGHTING	TS-MONTROSE	TS-LAWRENCE
				0003 URBAN	0003 URBAN	0008 URBAN	0021 URBAN	0021 URBAN	0021 URBAN
52100530	ANCHOR BOLTS, 1 1/4"	EACH	40			40			
542A0217	PIPE CULVERTS, CLASS A, TYPE 1, 12"	FOOT	61		61				
542A0220	PIPE CULVERTS, CLASS A, TYPE 1 15"	FOOT	61		61				
54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	3	1	2				
54261430	CONCRETE END SECTION, STANDARD 542001, 30", 1:4	EACH	1		1				
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	2		2				
54261615	CONCRETE END SECTION, STANDARD 542001, 15", 1:6	EACH	3	1	2				
54213675	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 30"	EACH	2		2				
54261624	CONCRETE END SECTION, STANDARD 542001, 24", 1:6	EACH	2		2				
54213687	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 42"	EACH	1	1					
54261630	CONCRETE END SECTION, STANDARD 542001, 30", 1:6	EACH	1		1				
54247130	GRATING FOR CONCRETE FLARED END SECTION 24"	EACH	2		2				
54247150	GRATING FOR CONCRETE FLARED END SECTION 30"	EACH	2		2				
550A0050	STORM SEWERS, CLASS A, TYPE 1, 12"	FOOT	407	234	173				
550A0090	STORM SEWERS, CLASS A, TYPE 1, 18"	FOOT	187		187				
550A0140	STORM SEWERS, CLASS A, TYPE 1, 30"	FOOT	64		64				
550A0340	STORM SEWERS, CLASS A, TYPE 2, 12"	FOOT	4,587	4,169	418				
550A0360	STORM SEWERS, CLASS A, TYPE 2, 15"	FOOT	26		26				
550A0380	STORM SEWERS, CLASS A, TYPE 2, 18"	FOOT	1,721	1,721					

* SPECIALITY ITEM

Rev. 1-3-13

S00-6

HNTB

USER NAME: lsupancheck

DESIGNED

REVISED

PLOT SCALE: 1:1

DRAWN

REVISED

PLOT DATE: 22-OCT-2012

CHECKED

REVISED

DATE: 10/19/12

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	11
CONTRACT NO. 60637				
ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	80% FED./20% STATE				80% FED. 10% STATE 10% VILLAGE	80% FED. 15% STATE 5% VILLAGE
				CONSTRUCTION CODE					
				ROADWAY 0003 URBAN	BALMORAL 0003 URBAN	BRIDGE 0008 URBAN	LIGHTING 0021 URBAN	TS-MONTROSE 0021 URBAN	TS-LAWRENCE 0021 URBAN
550A0410	STORM SEWERS, CLASS A, TYPE 2, 24"	FOOT	806	580	226				
550A0430	STORM SEWERS, CLASS A, TYPE 2, 30"	FOOT	246	170	76				
550A0450	STORM SEWERS, CLASS A, TYPE 2, 36"	FOOT	1,726	1,726					
550A0470	STORM SEWERS, CLASS A, TYPE 2, 42"	FOOT	758	758					
550A0640	STORM SEWERS, CLASS A, TYPE 3, 12"	FOOT	171	171					
550A0660	STORM SEWERS, CLASS A, TYPE 3, 15"	FOOT	72		72				
550A0710	STORM SEWERS, CLASS A, TYPE 3, 24"	FOOT	497	497					
550A0770	STORM SEWERS, CLASS A, TYPE 3, 42"	FOOT	416	416					
550A0780	STORM SEWERS, CLASS A, TYPE 3, 48"	FOOT	1,356	1,356					
550A1080	STORM SEWERS, CLASS A, TYPE 4, 48"	FOOT	2684	1300	1,384				
550A1950	STORM SEWERS, CLASS A, TYPE 7, 48"	FOOT	353	353					
55100200	STORM SEWER REMOVAL 6"	FOOT	25	25					
55100300	STORM SEWER REMOVAL 8"	FOOT	219	219					
55100400	STORM SEWER REMOVAL 10"	FOOT	1,956	1,956					
55100500	STORM SEWER REMOVAL 12"	FOOT	2,541	2,541					

* SPECIALITY ITEM

Rev. 1-3-13

S00-7

HNTB

USER NAME : lsupencheck

DESIGNED

REVISED -

PLOT SCALE : 1/4"

DRAWN

REVISED -

PLOT DATE : 22-OCT-2012

CHECKED

REVISED -

DATE 10/19/12

REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	606	12
CONTRACT NO. 60G37				

ILLINOIS FED. AID PROJECT

SUMMARY OF QUANTITIES

80% FED. / 20% VILLAGE

80% FED. 10% STATE 10% VILLAGE
80% FED. 15% STATE 5% VILLAGE
100% CHICAGO

CONSTRUCTION CODE

XXXXX

ALSF-2
0043

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY 0003 URBAN	BALMORAL 0003 URBAN	BRIDGE 0008 URBAN	LIGHTING 0021 URBAN	TS-MONTROSE 0021 URBAN	TS-LAWRENCE 0021 URBAN
* 63100169	TRAFFIC BARRIER TERMINAL, TYPE 1, (SPECIAL) FLARED	EACH	3	3					
63200310	GUARDRAIL REMOVAL	FOOT	9,229	9,229					
63301210	REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	442	442					
63700155	CONCRETE BARRIER, SINGLE FACE, 32 INCH HEIGHT	FOOT	700	700					
63700255	CONCRETE BARRIER, DOUBLE FACE, 32 INCH HEIGHT	FOOT	3,760	3,760					
63700900	CONCRETE BARRIER BASE	FOOT	4,600	4,600					
64300260	IMPACT ATTENUATOR (FULLY REDIRECTIVE, NARROW) TEST LEVEL 3	EACH	3	3					
64407400	CHAIN LINK GATES, 6' X 8' DOUBLE	EACH	1						
64300530	IMPACT ATTENUATORS (PARTIALLY REDIRECTIVE), TEST LEVEL 3	EACH	1		1				
* 66900200	NON-SPECIAL WASTE DISPOSAL	CY YD	132,000	132,000					
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	20	20					
* 66900400	SPECIAL WASTE GROUNDWATER DISPOSAL	GALLON	3,424,000	3,424,000					
67000600	ENGINEER'S FIELD LABORATORY	CAL MO	20	20					
* 66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	1					
67100100	MOBILIZATION	L SUM	1	1					
* 66901000	BACKFILL PLUGS	CUYD	210	210					
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	464	464					
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	10	10					
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	151	151					
70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SQ FT	169	169					

* SPECIALITY ITEM

Rev. 1-3-13

SQ-11

HNTB

USER NAME * lsupencheck	DESIGNED	REVISED -
	DRAWN	REVISED -
PLOT SCALE * 1:1	CHECKED	REVISED -
PLOT DATE * 22-OCT-2012	DATE 10/19/12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	16
CONTRACT NO. 60637				
ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES

80% FED. / 20% STATE

80% FED. 80% FED.
10% STATE 15% STATE
10% VILLAGE 5% VILLAGE

CONSTRUCTION CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE						TS-MONTROSE 0021 URBAN	TS-LAWRENCE 0021 URBAN
				ROADWAY 0003 URBAN	BALMORAL 0003 URBAN	BRIDGE 0008 URBAN	LIGHTING 0021 URBAN				
* 78200430	GUARDRAIL MARKERS, TYPE C	EACH	10		10						
* 78200530	BARRIER WALL MARKERS, TYPE C	EACH	1,095	1,075	20						
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4		4						
78300100	PAVEMENT MARKING REMOVAL	SQ FT	47,907	47,907							
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	917	917							
• 80400100	ELECTRIC SERVICE INSTALLATION	EACH	4	1	1		2				
• 80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1	0.5			0.5				
• 81023300	CONDUIT ENCASED, CONCRETE, 2" DIA., PVC 2 WIDE X 1 HIGH	FOOT	1,200		1,200						
• 81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1,568	149				680	739		
• 81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	263		130			81	52		
• 81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	1,960	30			1,618	71	241		
• 81028230	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3 1/2" DIA.	FOOT	298	298							
• 81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	8,069	6,818				643	608		
• 81028340	UNDERGROUND CONDUIT, PVC, 1 1/2" DIA.	FOOT	125		125						

19 • SPECIALITY ITEM

HNTB

USER NAME • leupenbach

DESIGNED

REVISED -

PLOT SCALE • 1/1

DRAWN

REVISED -

PLOT DATE • 22-OCT-2012

CHECKED

REVISED -

DATE 10/19/12

REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET NO. OF SHEETS STA. TO STA.

Rev. 1-3-13

S00-15

F.A.P. RTE.

SECTION

COUNTY

TOTAL SHEETS

SHEET NO.

330

0105 WRS&HB

COOK

605

20

CONTRACT NO. 60637

ILLINOIS FED. AID PROJECT

SUMMARY OF QUANTITIES

80% FED. / 20% STATE

80% FED. 80% FED.
10% STATE 15% STATE
10% VILLAGE 5% VILLAGE

CONSTRUCTION CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE					
				ROADWAY 0003 URBAN	BALMORAL 0003 URBAN	BRIDGE 0008 URBAN	LIGHTING 0021 URBAN	TS-MONTROSE 0021 URBAN	TS-LAWRENCE 0021 URBAN
X0327436	2-WAY 2' - 6" PVC DUCT BANK 1 HIGH BY 2 WIDE	FOOT	480		480				
X0327442	12-WAY 12' - 6" PVC DUCT BANK 4 HIGH BY 3 WIDE	FOOT	1,120		1,120				
X0335700	PUMP STATION GENERAL WORK	L SUM	1		1				
X0426200	DEWATERING	L SUM	1	1					
X2011000	TEMPORARY FENCE (SPECIAL)	FOOT	600		600				
X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	1	1					
X4403700	MEDIAN REMOVAL (SPECIAL)	SQ FT	14,273	14,273					
X4023000	TEMPORARY ACCESS (ROAD)	EACH	1	1					
X5030230	SPECIAL STRUCTURE	EACH	2		2				
X6020084	MANHOLE, SPECIAL	EACH	3		3				
X6020090	MANHOLES, WITH RESTRICTOR PLATE	EACH	2	1	1				
X6060097	CLASS SI CONCRETE (OUTLET), SPECIAL	CU YD	8	8					
X6061005	CONCRETE CURB, TYPE B (SPECIAL)	FOOT	174	174					
X6061902	CONCRETE MEDIAN, TYPE SM (SPECIAL)	SQ FT	5,783	5,783					
X6640535	CHAIN LINK FENCE, 6' ATTACHED TO STRUCTURE	FOOT	595		595				
X6640560	CHAIN LINK FENCE, 6' (SPECIAL)	FOOT	85		85				

* SPECIALITY ITEM

Rev. 1-3-13

S00-24

HNTB

USER NAME - laupencheck	DESIGNED	REVISED -
PLOT SCALE - 1/4"	DRAWN	REVISED -
PLOT DATE - 22-OCT-2012	CHECKED	REVISED -
	DATE 10/19/12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE. 330	SECTION 0105 WRS&HB	COUNTY COOK	TOTAL SHEETS 605	SHEET NO. 29
CONTRACT NO. 60637				
ILLINOIS FED. AID PROJECT				

80% FED. / 20% STATE

80% FED. 10% STATE 10% VILLAGE

80% FED. 15% STATE 5% VILLAGE

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE				TS-MONTROSE 0021 URBAN	TS-LAWRENCE 0021 URBAN
				ROADWAY 0003 URBAN	BALMORAL 0003 URBAN	BRIDGE 0008 URBAN	LIGHTING 0021 URBAN		
Z0004002	BOLLARDS	EACH	11		11				
* Z0007118	UNTREATED TIMBER LAGGING	SQ FT	6,965			6,965			
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1					
Z0016702	DETOUR SIGNING	L SUM	1	1					
Z0022800	FENCE REMOVAL	FOOT	1,150		1,150				
Z0023500	FILLING EXISTING CULVERTS	CU YD	2		2				
Z0026402	FURNISHING SOLDIER PILES (HP SECTION)	FOOT	1,746			1,746			
Z0026404	FURNISHING SOLDIER PILES (W SECTION)	FOOT	743			743			
70600256	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	3	3					
70600251	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	7	7					
70600280	IMPACT ATTENUATORS, TEMPORARY (SEVERE USE, NARROW), TEST LEVEL 3	EACH	4	4					
70600290	IMPACT ATTENUATORS, TEMPORARY (SEVERE USE, WIDE), TEST LEVEL 3	EACH	3	3					
70600320	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE) TEST LEVEL 2	EACH	6	6					
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	6	6					
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	2,249	2,249					
* Z0033020	LUMINAIRE SAFETY CABLE ASSEMBLY	EACH	126				126		
Z0033028	MAINTENANCE OF LIGHTING SYSTEM	L SUM	1	1					

14

* SPECIALITY ITEM

Rev. 1-3-13

S00-27

HNTB

USER NAME : isupencheck

DESIGNED

DRAWN MMK

CHECKED LLS

DATE 10/19/12

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE:

SHEET NO. 27 OF 28 SHEETS

STA.

TO STA.

F.A.P. RTE. 330

SECTION 0105 WRS&HB

COUNTY COOK

TOTAL SHEETS 605

SHEET NO. 32

CONTRACT NO. 60637

ILLINOIS FED. AID PROJECT

FILE NAME : IP_PWDms47814\0168037-shr-S00-27.dgn

SUMMARY OF QUANTITIES

80% FED. / 20% STATE

80% FED. 80% FED.
10% STATE 15% STATE
10% VILLAGE 5% VILLAGE

100% CHICAGO

CONSTRUCTION CODE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY 0003 URBAN	BALMORAL 0003 URBAN	BRIDGE 0008 URBAN	LIGHTING 0021 URBAN	TS-MONTROSE 0021 URBAN	TS-LAWRENCE 0021 URBAN	ALSF-2 0043
② Z0076600	TRAINEES	HOURL	2000	2000						
* X0327519	INNERDUCT, 1" SOLID WALL, SDR-11	FOOT	37,600	37,600						
② Z0076604	TRAINING PROGRAM GRADUATE L TRAINEES	HOURL	2000	2000						
* XX608162	MAINTAIN LIGHTING SYSTEM	L SUM	1		1					
* X0327516	2-WAY 2-5" PVC DUCT BANK - 1 HIGH BY 2 WIDE	FOOT	480		480					
* X0327520	FAA ELECTRICAL HANDHOLE	EACH	14	9						5
* X0327517	15-WAY 15-5" PVC DUCT BANK - 5 HIGH BY 3 WIDE	FOOT	1120		1120					
* X0327521	NEW COVER ON EXISTING FAA MANHOLE/HANDHOLE	EACH	10	10						
* X0327522	AGGREGATE SURFACE COURSE, CA -4, 6 INCH	SQ YD	130							130
* X0327523	INSTALL NEW MALSR MG-30 LIGHT TOWER - COMPLETE	EACH	1							1
* X0327524	12 STRAND, TYPE B, MULTI-MODE FIBER OPTIC CABLE, OUTDOOR	FOOT	8500	8500						
* X0327525	MULTI-MODE FIBER OPTIC PATCH PANEL, 72 PORT	EACH	2	2						
* X0327526	INSTALL TEMPORARY ALSF-2 MG-20 LIGHT TOWER - COMPLETE	EACH	1							1
* X0327527	RELOCATE ALSF-2 MG-20 LIGHT TOWER - COMPLETE	EACH	1							1
* X0327528	ADJUST WINCH BRACKET ON ALSF-2 TOWER - COMPLETE	EACH	1							1
* X0327529	ALSF-2 FLASHER CONTROL CABLE, 12 PAIR #19, SHIELDED	FOOT	350							350
* X0327530	POWER CABLE - L - B24, TYPE C 5 KV, 1/C #6 AWG	FOOT	8200							8200
* X0327531	GROUND WIRE - 1/C, #6 AWG, 600V, THWN GREEN	FOOT	1000							1000
* X0327532	GUARD WIRE - 1/C, 1/0 AWG, 600V, BARE COPPER	FOOT	2440	2200						240
* X0327533	TRACER WIRE - 1/C, #14 AWG, SOLID, INSTALLED, ORANGE	FOOT	8500	8500						
* X0327534	CONDUCTOR - ALSF-2 FLASHER POWER CABLE	FOOT	350							350
* X0327535	DUCT BANK, 2-WAY, 2" PVC CONDUIT, CONCRETE ENCASED	FOOT	8							8
* X0327536	DUCT BANK, 2-WAY, 3" PVC CONDUIT, CONCRETE ENCASED	FOOT	15							15
* X0327537	DUCT BANK, 2-WAY, 4" PVC CONDUIT, CONCRETE ENCASED	FOOT	2150	2150						
* X0327538	DUCT BANK, 5-WAY (3-WAY 2", 2-WAY 3") PVC CONDUIT WITH 6" SEPERATION, CONDUIT ENCASED	FOOT	100							100
* X0327539	DUCT BANK, 6-WAY 2" PVC CONDUIT WITH 6" SEPERATION, CONCRETE ENCASED	FOOT	120							120
* X0327540	DUCT BANK, 7-WAY, 2" PVC COATED GALVANIZED RIGID STEEL (GRS) CONDUIT, DIRECTIONALLY BORED	FOOT	190							190
* X0327541	DUCT BANK, 2-WAY, 4" PVC COATED GALVANIZED RIGID STEEL (GRS) CONDUIT, DIRECTIONALLY BORED	FOOT	726	726						

HNTB

DESIGNED
DRAWN MMK
CHECKED LLS
DATE 10/19/12REVISOR
REVISOR
REVISOR
REVISORSTATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

Rev. 1-3-13

F.A.P.
RTE.
330SECTION
0105 WRS&HBCOUNTY
COOKTOTAL
SHEETS
605SHEET
NO.
34

CONTRACT NO. 60637

SCALE:

SHEET NO. 28 OF 28 SHEETS

STA.

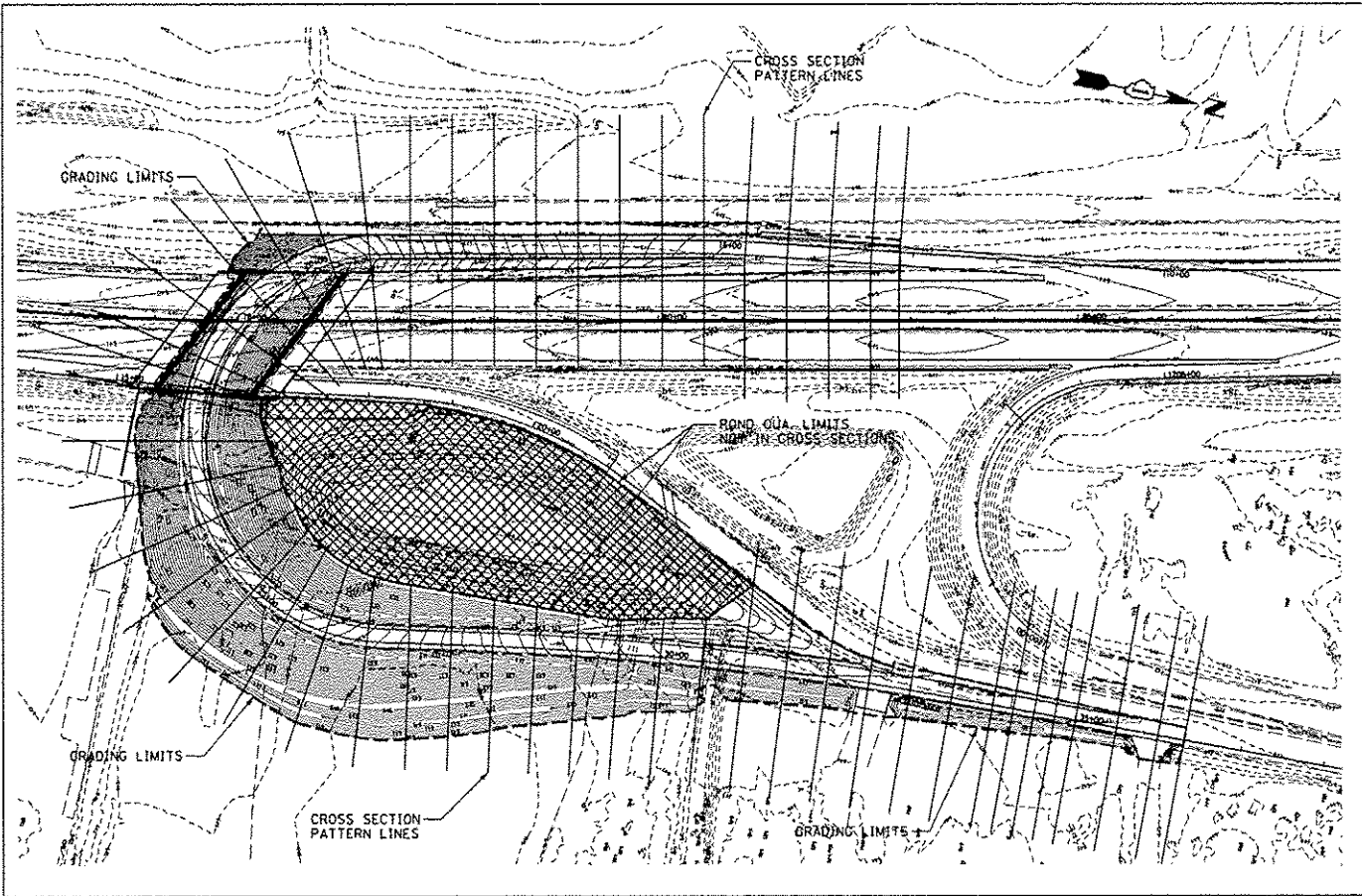
TO STA.

ILLINOIS FED. AID PROJECT

EARTHWORK SCHEDULE

EARTH EXCAVATION & FURNISHED EXCAVATION AND UNSUITABLE MATERIAL REMOVAL STA. 13+15.98 TO STA.36+31.80											
STATION	CUT AREA SQ. FT.	CUT VOLUME CU. YD.	FILL AREA SQ. FT.	FILL VOLUME CU. YD.	MULT. FACTOR	EXPANDED FILL VOLUME CU. YD.	TOPSOIL PLACE AREA SQ. FT.	TOPSOIL PLACE VOL. CU. YD.	UNSUITABLE REM AREA SQ. FT.	UNSUITABLE REM VOL. CU. YD.	
13+15.98	37.1	0.0	0.2	0.0	1.2	0.0	2.0	0.0	17.1	0.0	
13+50.00	44.2	51.3	0.0	0.1	1.2	0.2	3.0	3.1	10.7	23.2	
14+00.00	61.6	97.9	0.0	0.0	1.2	0.0	3.0	5.6	21.4	38.0	
14+50.00	78.3	129.5	0.3	0.2	1.2	0.3	5.3	7.7	22.0	40.1	
15+00.00	72.0	139.2	0.1	0.3	1.2	0.4	0.0	4.9	21.9	40.6	
15+50.00	86.2	128.0	0.4	0.5	1.2	0.5	0.0	0.0	22.1	40.7	
16+00.00	98.5	152.5	25.0	23.6	1.2	27.1	0.0	0.0	18.4	37.5	
16+50.00	145.1	225.5	18.7	40.4	1.2	46.5	0.0	0.0	18.6	34.2	
17+00.00	208.3	325.3	37.6	52.0	1.2	58.8	0.0	0.0	17.7	33.6	
17+50.00	280.8	451.0	29.9	62.5	1.2	71.8	0.0	0.0	17.9	32.9	
18+00.00	346.8	581.1	88.5	91.1	1.2	104.8	0.0	0.0	17.3	32.6	
18+50.00	448.8	736.6	146.0	198.6	1.2	226.4	0.0	0.0	17.3	32.1	
19+00.00	570.4	951.1	158.8	282.2	1.2	324.5	0.0	0.0	17.8	32.5	
19+50.00	699.2	1182.9	138.8	275.5	1.2	316.8	0.0	0.0	18.1	33.3	
20+00.00	1000.7	1574.0	134.9	253.4	1.2	291.5	4.1	3.8	24.4	39.3	
20+50.00	1632.4	2438.0	145.1	259.3	1.2	296.2	16.8	19.4	26.9	47.5	
21+00.00	1571.9	2966.9	346.2	455.0	1.2	523.2	0.0	15.6	20.6	44.0	
21+50.00	1558.7	2898.6	317.6	614.7	1.2	706.9	0.0	0.0	13.9	31.9	
22+00.00	1651.2	2972.1	331.1	603.7	1.2	690.8	0.0	0.0	0.1	13.0	
22+50.00	1910.9	1670.2	149.3	225.3	1.2	259.1	8.0	3.7	12.9	6.1	
22+50.00	2073.7	1821.1	0.1	68.3	1.2	78.6	49.9	26.4	66.8	36.4	
23+00.00	2746.7	4463.3	0.0	0.1	1.2	0.1	64.0	105.4	79.5	135.4	
23+50.00	2778.1	5115.6	0.0	0.0	1.2	0.0	67.8	122.0	83.3	150.7	
24+00.00	2888.3	5246.6	0.0	0.0	1.2	0.0	74.4	131.6	89.9	160.4	
24+50.00	3013.4	5464.5	0.2	0.2	1.2	0.2	89.0	151.2	104.6	180.1	
25+00.00	2714.9	5304.0	0.0	0.2	1.2	0.2	86.3	162.3	102.0	191.3	
25+50.00	2449.7	4762.1	0.0	0.0	1.2	0.0	81.8	155.7	97.3	184.5	
26+00.00	2278.9	4378.4	0.2	0.2	1.2	0.2	82.8	152.4	98.4	181.2	
26+50.00	2024.9	3985.0	0.0	0.2	1.2	0.2	80.5	151.2	96.1	180.1	
27+00.00	1735.9	3482.1	0.0	0.0	1.2	0.0	76.7	145.6	92.2	174.4	
27+50.00	1438.6	2639.3	0.0	0.0	1.2	0.0	70.6	136.4	86.1	165.1	
28+00.00	1092.0	2343.1	0.0	0.0	1.2	0.0	62.4	123.1	77.9	151.8	
28+50.00	795.4	1747.5	0.0	0.0	1.2	0.0	55.2	106.8	70.5	137.4	
29+00.00	551.7	1247.3	0.0	0.0	1.2	0.0	48.2	95.7	63.6	124.2	
29+50.00	471.7	947.6	0.9	0.9	1.2	1.0	42.6	84.0	58.0	112.6	
30+00.00	175.0	598.8	1.9	2.6	1.2	3.0	40.4	76.8	55.8	105.4	
30+50.00	46.6	205.3	66.1	63.0	1.2	72.4	37.2	71.8	52.6	100.4	
31+00.00	174.6	204.9	43.8	101.7	1.2	117.0	54.3	84.7	69.6	113.3	
31+50.00	87.3	242.5	31.7	69.9	1.2	80.3	38.4	85.8	53.8	114.4	
32+00.00	62.3	138.6	16.9	44.9	1.2	51.7	24.7	58.4	40.2	87.0	
32+50.00	68.5	121.1	0.0	15.6	1.2	16.0	0.0	22.9	17.5	53.4	
33+00.00	96.0	152.3	0.0	0.0	1.2	0.0	12.8	11.8	25.9	40.2	
33+50.00	82.3	165.1	0.0	0.0	1.2	0.0	11.7	22.7	23.5	45.8	
34+00.00	78.0	148.4	0.0	0.0	1.2	0.0	10.4	20.5	21.6	41.8	
34+25.00	52.2	60.3	0.0	0.0	1.2	0.0	10.3	9.6	11.5	15.3	
34+50.00	49.9	47.2	0.0	0.0	1.2	0.0	9.0	8.9	10.4	10.2	
34+75.00	45.6	44.2	0.0	0.0	1.2	0.0	8.2	7.9	9.5	8.2	
35+00.00	38.9	39.1	0.0	0.0	1.2	0.0	7.5	7.3	8.7	8.4	
35+50.00	33.4	66.9	0.0	0.0	1.2	0.0	6.8	13.3	8.1	15.6	
36+00.00	34.8	63.1	0.0	0.0	1.2	0.0	0.0	6.3	0.0	7.5	
36+31.80	20.4	32.5	0.2	0.1	1.2	0.1	10.5	6.2	11.7	6.9	
SUBTOTAL	75269.7		SUBTOTAL	3803.3	SUBTOTAL	4372.8	SUBTOTAL	2430.5	SUBTOTAL	3673.4	
*QUANTITIES NOT IN CROSS SECTIONS (POND AREA)		25658.2		882.5	1.2	1059.0		1764.7		1764.7	
TOTAL	100925.9		TOTAL	4685.8	TOTAL	5432.8	TOTAL	4195.2	TOTAL	5438.1	

* QUANTITIES GENERATED USING GEOPAK TIN SURFACE TO SURFACE CALCULATIONS.



CROSS SECTION LOCATION
N.T.S.

- NOTE:
- "REMOVAL OF UNSUITABLE MATERIAL" INCLUDES:
 - TOPSOIL (6"DEPTH) 5438.1 C.Y.
 - 200 CY FOR REMOVAL OF POOR SOILS AT THE DIRECTION OF THE ENGINEER.
 - TOTAL REMOVAL OF UNSUITABLE MATERIAL IS 5638 C.Y.
 - A QUANTITY OF 200 C.Y. OF AGGREGATE SUBGRADE IMPROVEMENT HAS BEEN INCLUDED IN THE QUANTITIES FOR THE REPLACEMENT OF POOR SOILS.

STORM SEWER REMOVAL - 8"
STA. 72+02.85 TO STA. 71+99.44 - 65.2 FT

STORM SEWER REMOVAL - 10"
STA. 72+96.42 TO STA. 75+46.99 - 254.5 FT
STA. 75+46.99 TO STA. 75+45.99 - 24.9 FT
STA. 77+98.46 TO STA. 77+86.82 - 82.8 FT

STORM SEWER REMOVAL - 15"
STA. 70+00.00 TO STA. 70+10.45 - 68.2 FT
STA. 70+10.45 TO STA. 70+12.15 - 12.8 FT

STORM SEWER REMOVAL - 18"
STA. 75+43.12 TO STA. 75+45.99 - 69.6 FT
STA. 81+20.17 TO STA. 81+45.19 - 158.6 FT

STORM SEWER REMOVAL - 24"
STA. 68+00.00 TO STA. 70+12.15 - 217.2 FT
STA. 70+12.15 TO STA. 72+11.50 - 204.3 FT
STA. 72+11.50 TO STA. 75+45.77 - 342.4 FT
STA. 75+45.77 TO STA. 77+94.38 - 248.6 FT
STA. 77+94.38 TO STA. 78+53.91 - 59.5 FT
STA. 78+53.91 TO STA. 81+43.08 - 289.2 FT
STA. 81+43.08 TO STA. 82+00.00 - 56.9 FT

REMOVAL LEGEND

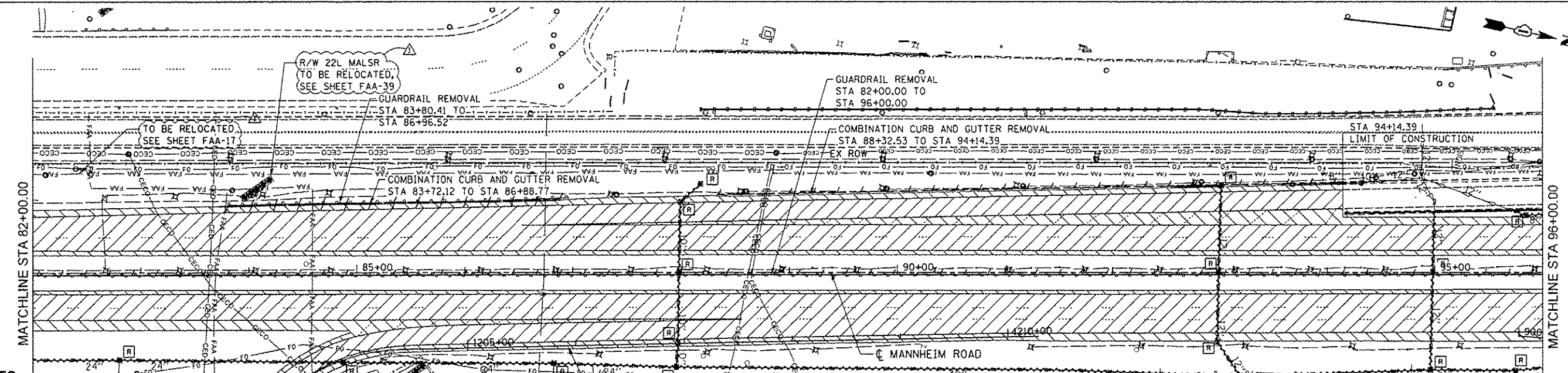
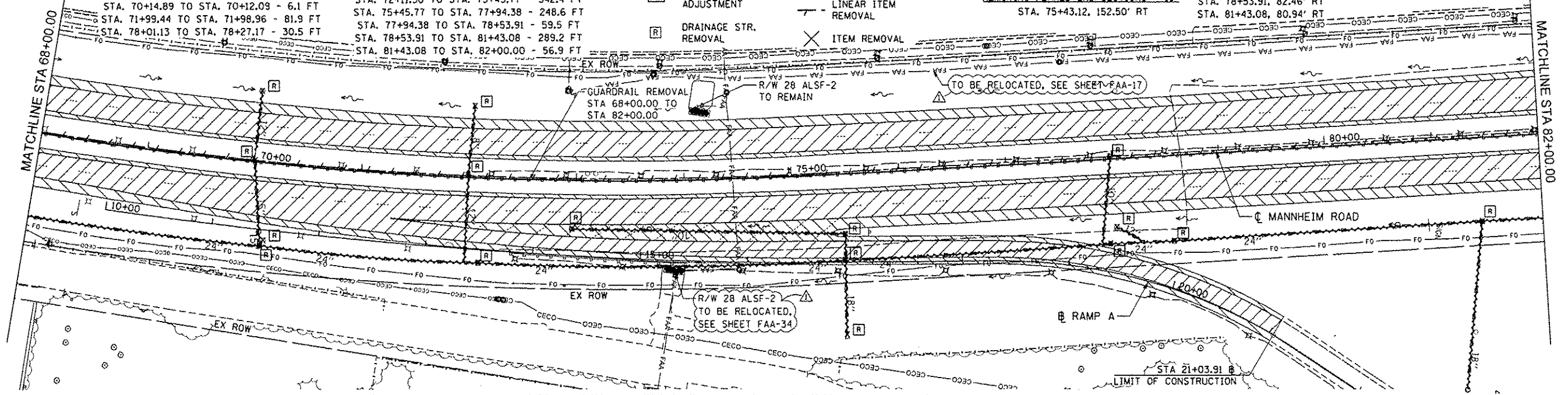
- PAVEMENT REMOVAL
- SHOULDER REMOVAL
- HMA SURFACE REMOVAL, 4"
- DRAINAGE STR. ADJUSTMENT
- DRAINAGE STR. REMOVAL
- CONCRETE MEDIAN REMOVAL
- PAVED DITCH REMOVAL
- STORM SEWER REMOVAL
- LINEAR ITEM REMOVAL
- ITEM REMOVAL

REMOVING INLETS
STA. 72+02.85, 65.47' LT

REMOVING CATCH BASINS
STA. 70+00.12, 65.25' LT
STA. 70+14.84, 73.81' RT
STA. 77+98.46, 0.00' LT
STA. 78+01.13, 66.23' RT

REMOVING MANHOLES
STA. 70+00.00, 0.20' LT
STA. 70+12.15, 79.42' RT
STA. 71+99.44, 0.37' LT
STA. 72+11.50, 81.50' RT
STA. 72+96.42, 47.57' RT
STA. 75+46.99, 58.02' RT
STA. 75+45.77, 82.91' RT
STA. 77+94.38, 81.76' RT
STA. 78+53.91, 82.46' RT
STA. 81+43.08, 80.94' RT

REMOVING FLARED END SECTIONS - 18"
STA. 75+43.12, 152.50' RT



NOTES

- SEE PAVEMENT MARKING AND SIGNING PLANS, LIGHTING PLANS, LANDSCAPING PLANS, AND TRAFFIC SIGNAL PLANS FOR ADDITIONAL REMOVALS NOT SHOWN ON THIS SHEET.
- REMOVAL AND DISPOSAL OF EXISTING SHOULDER STABILIZATION UNDER EXISTING GUARDRAIL SHALL NOT BE MEASURED FOR PAYMENT BUT SHALL BE INCLUDED IN THE COST OF SHOULDER REMOVAL.
- REMOVAL AND DISPOSAL OF EXISTING BURIED MOUNTABLE CURB SHALL NOT BE MEASURED FOR PAYMENT BUT SHALL BE INCLUDED IN THE COST OF SHOULDER REMOVAL.

STORM SEWER REMOVAL - 10"
STA. 88+17.60 TO STA. 87+98.87 - 25.2 FT
STA. 87+98.87 TO STA. 87+97.61 - 65.1 FT
STA. 87+97.61 TO STA. 87+96.69 - 66.4 FT
STA. 87+96.69 TO STA. 87+95.22 - 22.6 FT

STORM SEWER REMOVAL - 12"
STA. 93+01.00 TO STA. 92+98.59 - 80.5 FT
STA. 92+98.59 TO STA. 92+97.39 - 64.9 FT
STA. 92+97.39 TO STA. 93+18.78 - 38.3 FT
STA. 95+84.53 TO STA. 95+73.9 - 12 FT
STA. 94+99.49 TO STA. 94+97.91 - 54 FT
STA. 94+97.91 TO STA. 94+95.67 - 90.9 FT

STORM SEWER REMOVAL - 24"
STA. 82+00.00 TO STA. 82+80.00 - 80.0 FT
STA. 82+80.00 TO STA. 84+87.42 - 207.4 FT
STA. 84+87.42 TO STA. 86+82.36 - 195.0 FT
STA. 86+82.36 TO STA. 87+95.22 - 112.9 FT

STORM SEWER REMOVAL - 30"
STA. 87+95.22 TO STA. 94+95.67 - 700.6 FT
STA. 94+95.67 TO STA. 95+74.63 - 79.0 FT

REMOVING MANHOLES
STA. 82+80.00, 81.08' RT
STA. 84+87.42, 83.42' RT
STA. 86+82.36, 84.61' RT
STA. 88+17.60, 82.00' LT
STA. 87+98.87, 65.13' LT
STA. 87+97.61, 0.00' LT
STA. 87+96.69, 66.33' RT
STA. 87+95.22, 88.07' RT

REMOVING MANHOLES
STA. 93+01.00, 80.70' LT
STA. 92+98.59, 0.25' LT
STA. 92+97.39, 64.59' RT
STA. 95+84.53, 52.77' LT
STA. 94+97.91, 0.30' LT
STA. 94+95.67, 90.57' RT
STA. 95+74.63, 91.28' RT



USER NAME = mhk	DESIGNED LLS/MMK	REVISED -
PLOT SCALE = 50:1	DRAWN MMK	REVISED -
PLOT DATE = 27-DEC-2012	CHECKED LLS	REVISED -
	DATE	REVISED 12/28/12 ADDENDUM 1

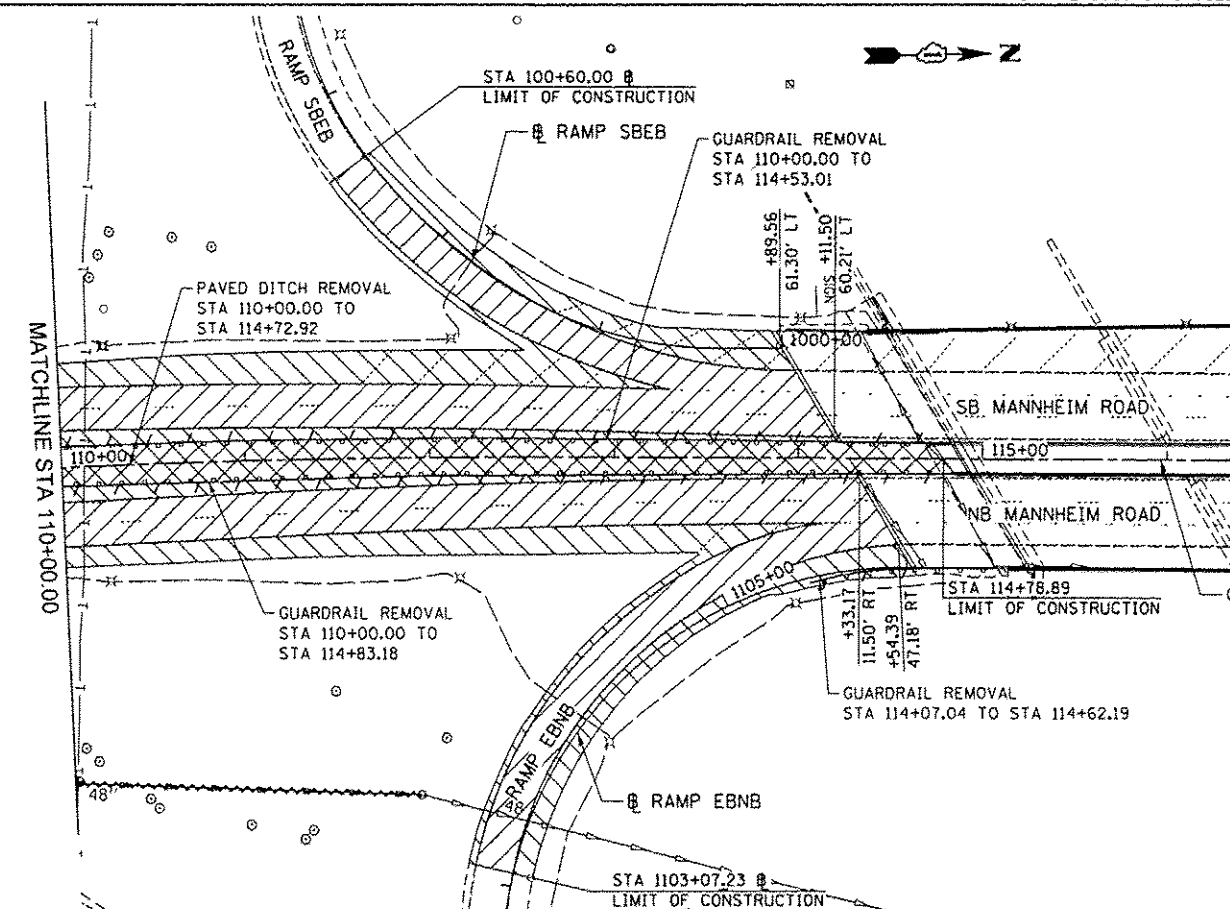
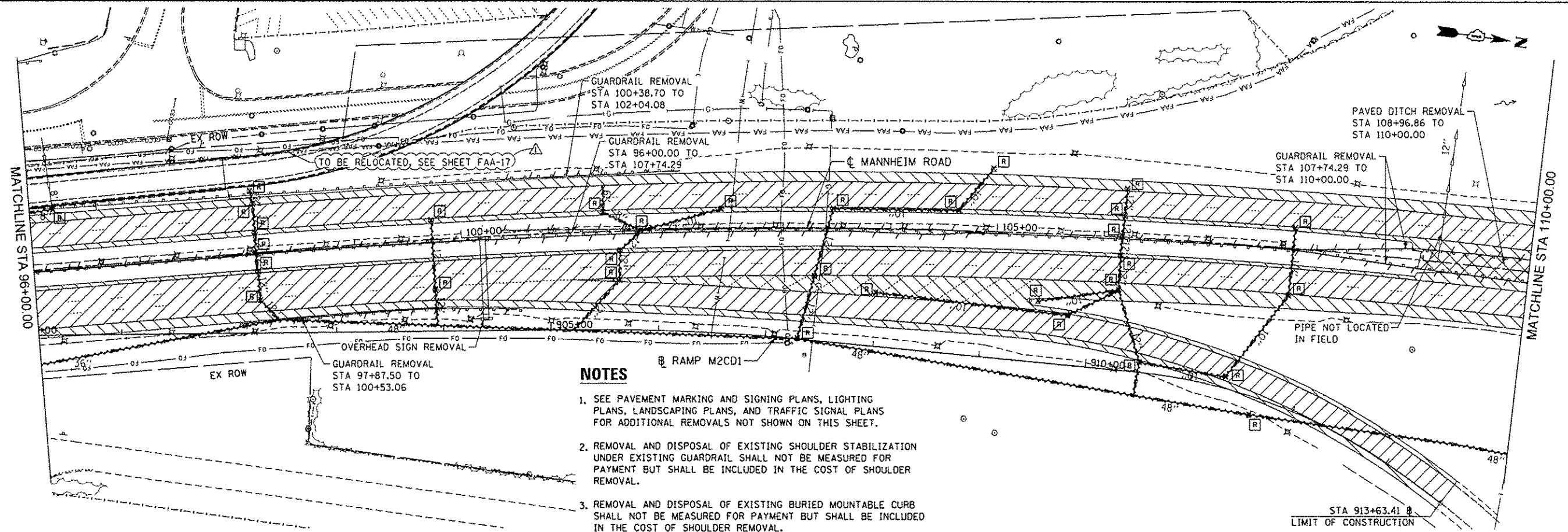
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL PLAN MANNHEIM ROAD

SCALE: 1" = 50' SHEET NO. 3 OF 6 SHEETS STA. 68+00.00 TO STA. 96+00.00

F.A.P. RTE. 330	SECTION 0105 WRS&H	COUNTY COOK	TOTAL SHEETS 605	SHEET NO. 60
CONTRACT NO. 60637				
ILLINOIS FED. AID PROJECT				

REM-03



STORM SEWER REMOVAL - 6"
 STA. 101+33.03 TO STA. 101+32.26 - 24.9 FT

STORM SEWER REMOVAL - 8"
 STA. 96+21.70 TO STA. 95+84.53 - 37.3 FT
 STA. 101+32.26 TO STA. 101+67.02 - 39.3 FT

STORM SEWER REMOVAL - 10"
 STA. 102+42.59 TO STA. 101+67.02 - 78.0 FT
 STA. 104+95.00 TO STA. 104+63.16 - 51.0 FT
 STA. 104+63.16 TO STA. 103+46.16 - 117.4 FT
 STA. 103+46.16 TO STA. 105+69.20 - 181.1 FT
 STA. 105+69.20 TO STA. 106+16.37 - 53.3 FT
 STA. 105+40.45 TO STA. 106+16.37 - 76.3 FT
 STA. 107+78.54 TO STA. 107+77.06 - 63.6 FT
 STA. 107+77.06 TO STA. 107+22.73 - 96.7 FT
 STA. 107+22.73 TO STA. 106+39.49 - 81.8 FT

STORM SEWER REMOVAL - 12"
 STA. 98+06.50 TO STA. 98+08.13 - 12.6 FT
 STA. 98+08.13 TO STA. 98+08.19 - 26.9 FT
 STA. 98+08.19 TO STA. 98+07.24 - 18.8 FT
 STA. 98+07.24 TO STA. 98+08.44 - 17.9 FT
 STA. 98+08.44 TO STA. 98+08.89 - 27.4 FT
 STA. 98+08.89 TO STA. 98+24.21 - 24.7 FT
 STA. 99+72.72 TO STA. 99+72.96 - 64.9 FT
 STA. 99+72.96 TO STA. 99+73.01 - 33.8 FT
 STA. 101+67.02 TO STA. 101+47.31 - 26.7 FT
 STA. 101+47.31 TO STA. 101+45.81 - 27.7 FT
 STA. 101+45.81 TO STA. 101+01.21 - 63.8 FT
 STA. 103+46.16 TO STA. 103+28.80 - 65.8 FT
 STA. 103+28.80 TO STA. 103+12.52 - 60.9 FT
 STA. 106+19.85 TO STA. 106+18.75 - 26.5 FT
 STA. 106+18.75 TO STA. 106+17.10 - 18.3 FT
 STA. 106+17.10 TO STA. 106+16.47 - 18.4 FT
 STA. 106+16.47 TO STA. 106+16.37 - 32.4 FT
 STA. 106+16.37 TO STA. 106+39.49 - 70.1 FT
 STA. 106+39.49 TO STA. 106+35.76 - 31.6 FT

STORM SEWER REMOVAL - 36"
 STA. 95+74.63 TO STA. 98+24.21 - 251.0 FT

STORM SEWER REMOVAL - 48"
 STA. 98+24.21 TO STA. 103+12.52 - 483.0 FT
 STA. 103+12.52 TO STA. 107+47.85 - 428.9 FT
 STA. 107+47.85 TO STA. 111+93.90 - 433.5 FT

REMOVING CATCH BASINS
 STA. 98+06.50, 58.14' LT
 STA. 104+95.00, 58.80' LT

REMOVING MANHOLES
 STA. 96+21.70, 55.65' LT
 STA. 98+07.24, 0.00' LT
 STA. 98+08.89, 44.98' RT
 STA. 99+72.96, 46.81' RT
 STA. 101+32.26, 18.39' LT
 STA. 101+67.02, 0.00' LT
 STA. 101+47.31, 18.11' RT
 STA. 101+45.81, 45.49' RT
 STA. 102+42.59, 19.24' LT
 STA. 103+12.52, 103.39' RT
 STA. 103+28.80, 44.60' RT
 STA. 103+86.41, 59.60' RT
 STA. 106+16.47, 17.59' RT
 STA. 106+16.37, 50.00' RT
 STA. 106+17.10, 0.80' LT
 STA. 105+69.20, 75.70' RT
 STA. 106+39.49, 116.38' RT
 STA. 107+22.73, 124.60' RT
 STA. 107+47.85, 158.81' RT
 STA. 107+77.06, 44.24' RT

REMOVAL LEGEND

- PAVEMENT REMOVAL
- SHOULDER REMOVAL
- HMA SURFACE REMOVAL, 4"
- DRAINAGE STR. ADJUSTMENT
- DRAINAGE STR. REMOVAL
- CONCRETE MEDIAN REMOVAL
- PAVED DITCH REMOVAL
- STORM SEWER REMOVAL
- LINEAR ITEM REMOVAL
- ITEM REMOVAL

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

REMOVAL PLAN
 MANNHEIM ROAD

SCALE: 1" = 50' SHEET NO. 3 OF 6 SHEETS STA. 96+00.00 TO STA. EOP

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	61
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

HNTB

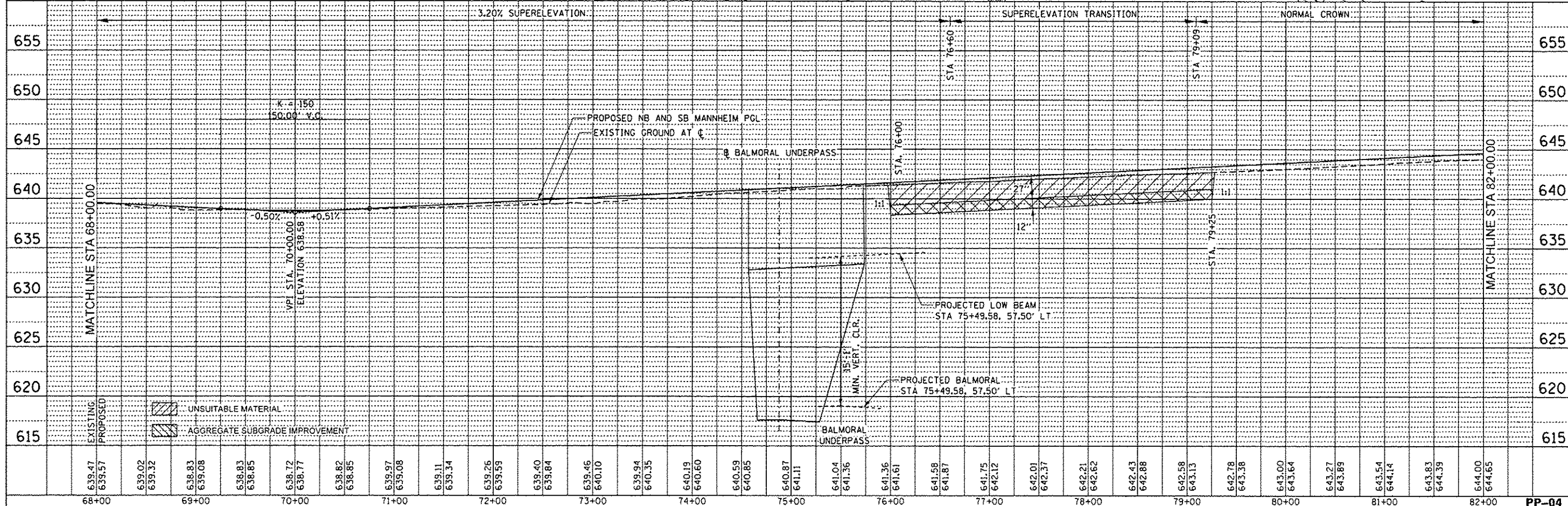
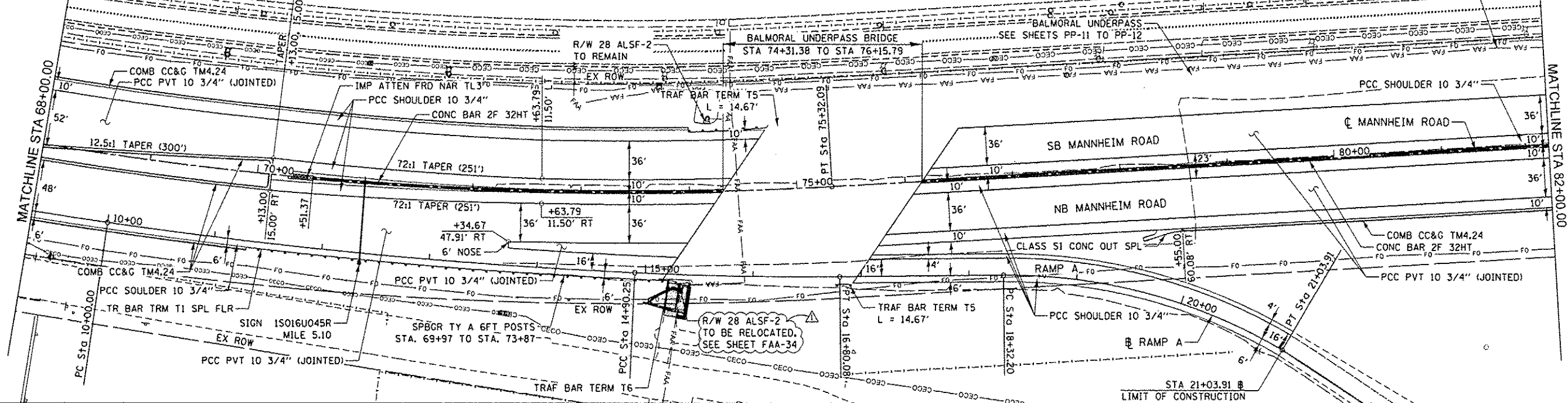
USER NAME: mkgjir	DESIGNED: LLS/MMK	REVISED: -
DRAWN: MMK	CHECKED: LLS	REVISED: -
PLOT SCALE: 1"=50'	DATE: 12/28/12	ADDENDUM 1

FILE NAME: 3P_PWDms47844NDIG037-htrem4.dgn

REM-04

NOTES:

1. ALL STATIONS AND OFFSETS CORRESPOND TO MANNHEIM CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL RADII FOR CURB AND GUTTER ARE TO THE EDGE OF PAVEMENT.
3. SEE PROPOSED LANDSCAPING PLANS, DRAINAGE PLANS, TRAFFIC SIGNAL PLANS AND OVERHEAD SIGNING PLANS FOR LANDSCAPING, DRAINAGE STRUCTURE, PIPE, TRAFFIC SIGNAL AND OVERHEAD SIGN INFORMATION.
4. FOR ADDITIONAL DETAILS NOT SHOWN, SEE ROADWAY DETAIL SHEETS AND STANDARD DETAILS.
5. RAMP ALIGNMENTS AND CURVE INFORMATION ARE SHOWN ON THE ALIGNMENT AND TIE SHEETS.
6. RAMP PROFILES ARE SHOWN ON THE ROADWAY PROFILE SHEETS PP-09 TO PP-10.



HNTB

USER NAME = mksr	DESIGNED LLS/MMK	REVISED -
DRAWN MMK	REVISOR -	
CHECKED LLS	REVISOR -	
DATE 10/19/12	REVISOR 12/27/12 ADDENDUM 1	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
MANNHEIM ROAD

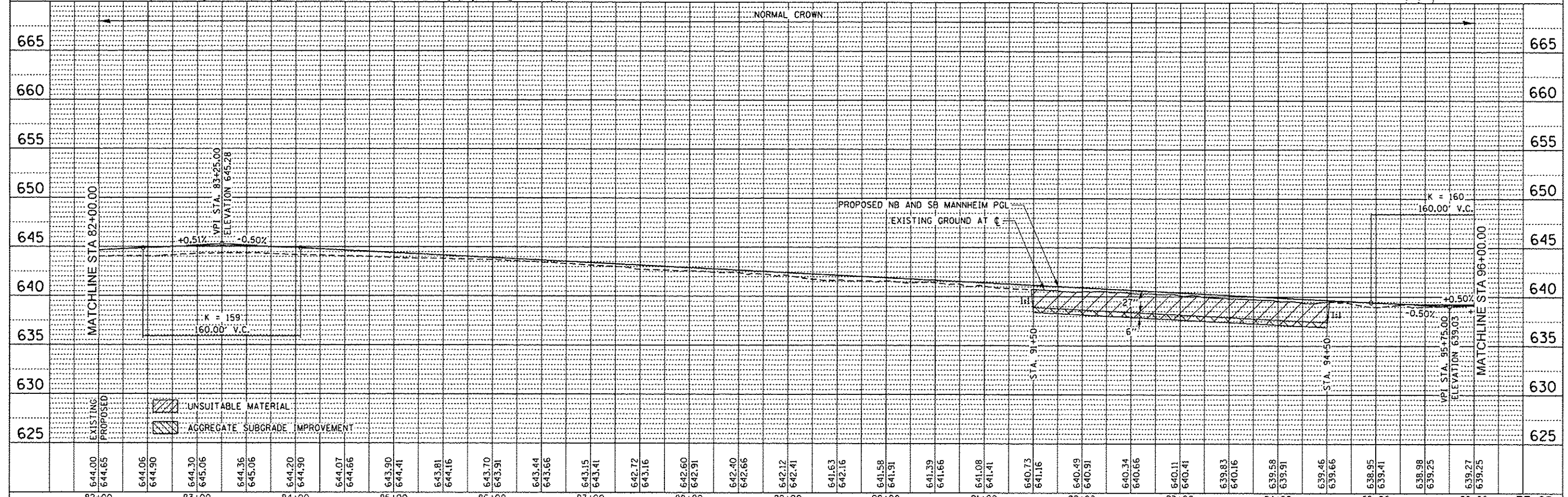
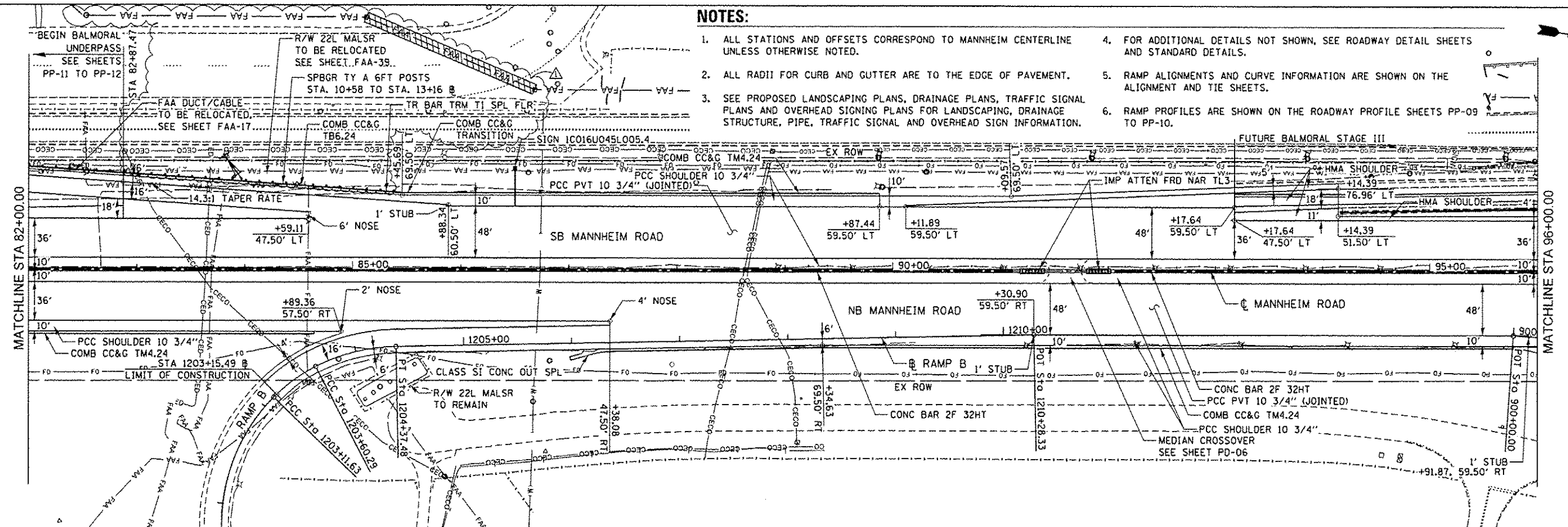
SCALE: 1" = 50' SHEET NO. 4 OF 12 SHEETS STA. 68+00.00 TO STA. 82+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	67
CONTRACT NO. 60637				

FILE NAME IP_PWPdms47844\0160637-shr-plnprf_04.dgn

NOTES:

1. ALL STATIONS AND OFFSETS CORRESPOND TO MANNHEIM CENTERLINE UNLESS OTHERWISE NOTED.
2. ALL RADII FOR CURB AND GUTTER ARE TO THE EDGE OF PAVEMENT.
3. SEE PROPOSED LANDSCAPING PLANS, DRAINAGE PLANS, TRAFFIC SIGNAL PLANS AND OVERHEAD SIGNING PLANS FOR LANDSCAPING, DRAINAGE STRUCTURE, PIPE, TRAFFIC SIGNAL AND OVERHEAD SIGN INFORMATION.
4. FOR ADDITIONAL DETAILS NOT SHOWN, SEE ROADWAY DETAIL SHEETS AND STANDARD DETAILS.
5. RAMP ALIGNMENTS AND CURVE INFORMATION ARE SHOWN ON THE ALIGNMENT AND TIE SHEETS.
6. RAMP PROFILES ARE SHOWN ON THE ROADWAY PROFILE SHEETS PP-09 TO PP-10.



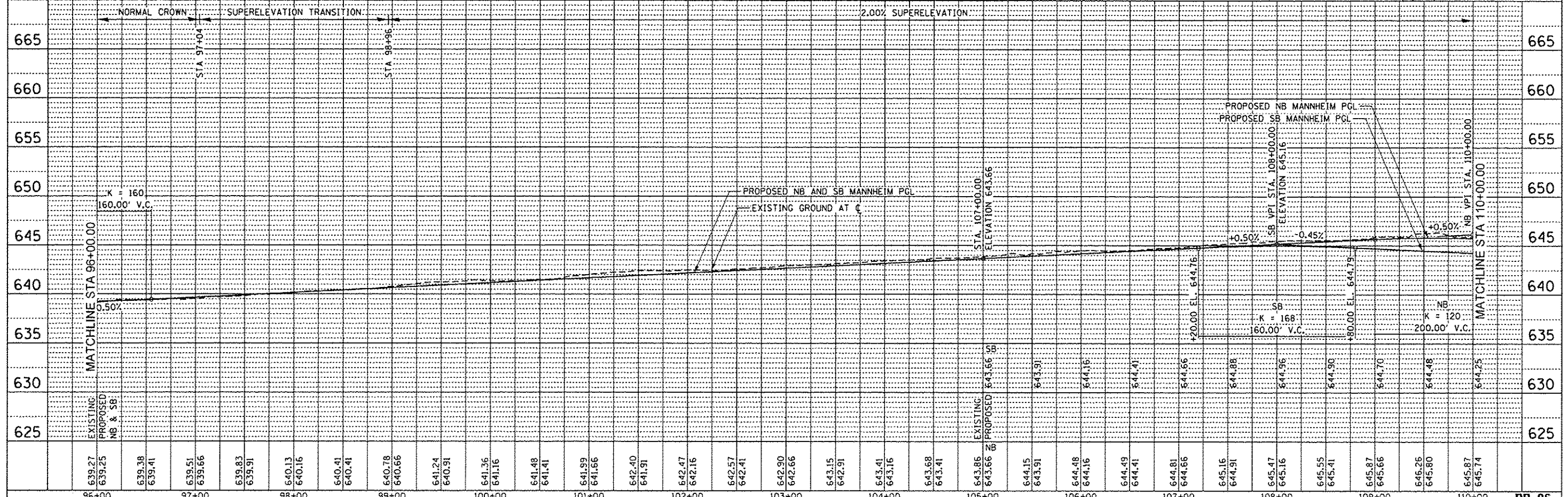
DESIGNED	LLS/MMK	REVISED	
DRAWN	MMK	REVISED	
CHECKED	LLS	REVISED	
DATE	10/19/12	REVISED	12/27/12 ADDENDUM 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE	SECTION	COUNTY	TOTAL SHEETS
MANNHEIM ROAD	0105 WRS&HB	COOK	605
SCALE: 1" = 50'	SHEET NO. 5 OF 12 SHEETS	STA. 82+00.00 TO STA. 96+00.00	CONTRACT NO. 60637

PP-05	SECTION	COUNTY	TOTAL SHEETS
330	0105 WRS&HB	COOK	605
CONTRACT NO. 60637			

PROFILE	SURVEYED	ST	DATE
NOTE BOOK	PLOTTED		
NO.	CHAINS CHECKED		
	B.M. NOTED		
	STRUCTURE NOTATIONS CHECKED		



	USER NAME = mkoosir	DESIGNED LLS/MMK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN AND PROFILE MANNHEIM ROAD			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50'H	DRAWN MMK	REVISED -					330	0105 WRS&HB	COOK	605	69
	PLOT DATE = 27-DEC-2012	CHECKED LLS	REVISED -					CONTRACT NO. 60G37				
	DATE 10/19/12	REVISD	12/27/12 ADDENDUM 1					SCALE: 1" = 50'	SHEET NO. 6 OF 12 SHEETS	STA. 96+00.00 TO STA. 110+00.00	ILLINOIS FED. AID PROJECT	

MAINTENANCE OF TRAFFIC GENERAL NOTES

1. THE WORK REQUIRED TO COMPLY WITH THE MAINTENANCE OF TRAFFIC GENERAL NOTES SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL), EXCEPT FOR PAY ITEMS WHICH HAVE BEEN ESTABLISHED IN THE CONTRACT AND ARE SHOWN ON THE PLANS.
2. ALL TRAFFIC CONTROL SIGNS AND DEVICES, WORK ZONE PAVEMENT MARKING, TEMPORARY CONCRETE BARRIERS AND ATTENUATORS NECESSARY FOR THE MAINTENANCE OF TRAFFIC, AS SHOWN ON THE PLANS, SHALL BE IN PLACE BEFORE THE START OF ANY CONSTRUCTION STAGE.
3. EXISTING PAVEMENT MARKINGS AND RAISED REFLECTIVE PAVEMENT MARKERS THAT CONFLICT WITH REVISED TRAFFIC PATTERNS SHALL BE REMOVED.
4. ACCESS SHALL BE PROVIDED AND MAINTAINED TO ALL DRIVEWAYS, BUILDINGS, FIELD ENTRANCES OR OTHER PROPERTY ABUTTING THE HIGHWAY OR STREET BEING IMPROVED FOR THE ENTIRE DURATION OF THE CONTRACT.
5. TEMPORARY TRAFFIC SIGNALS SHALL BE IN PLACE AT THE INTERSECTIONS NOTED ON THE PLANS BEFORE THE START OF STAGE 1 CONSTRUCTION.
6. TEMPORARY TRAFFIC SIGNALS SHALL BE ADJUSTED TO ACCOMMODATE THE VARIOUS STAGES OF CONSTRUCTION SHOWN ON THE PLANS.
7. WET REFLECTIVE TEMPORARY TAPE, TYPE III SHALL BE USED ON THE FINAL WEARING SURFACE OR ON THE EXISTING PAVEMENT TO REMAIN.
8. TEMPORARY INFORMATION SIGNS ON TEMPORARY SUPPORTS SHALL BE PROVIDED FOR ALL COMMERCIAL DRIVEWAYS. THESE SIGNS SHALL BE WHITE ON GREEN IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THIS WORK WILL BE PAID FOR PER DISTRICT ONE DETAIL TC-26. THESE SIGNS SHALL BE RELOCATED AS REQUIRED FOR EACH CONSTRUCTION STAGE AND SHALL BE PLACED AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER SQUARE FOOT FOR TEMPORARY INFORMATION SIGNING.
9. MAINTENANCE OF TRAFFIC STAGING AND I-190/MANNHEIM RD RAMP DETOUR STAGING SHALL BE COORDINATED WITH THE CONTRACTOR ON THE ADJACENT CONTRACT NO. 60P35.
10. ALL CONSTRUCTION WARNING SIGNS SHALL BE BLACK LEGEND ON ORANGE BACKGROUND.
11. ALL CONSTRUCTION WARNING SIGNS SHALL BE 48" x 48" UNLESS OTHERWISE SHOWN ON THE PLANS.
12. ALL "ROAD CONSTRUCTION AHEAD" WARNING SIGNS SHALL BE EQUIPPED WITH A TYPE B MONO-DIRECTIONAL FLASHING LIGHT.
13. TRAFFIC CONTROL AND PROTECTION FOR CONSTRUCTION STAGING, AT INTERSECTIONS, STREET RETURNS, DRIVEWAYS OR OTHER ISOLATED LOCATIONS, THAT IS NOT SPECIFICALLY SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS BUT WHICH IS NECESSARY FOR CONSTRUCTION SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL).
14. ADDITIONAL TEMPORARY TRAFFIC BARRIER OPENINGS SHALL BE RESTRICTED TO LOCATIONS ADJACENT TO SINGLE LANE TRAFFIC. THE APPROVAL OF THE ENGINEER WILL BE REQUIRED FOR ALL TEMPORARY TRAFFIC BARRIER WALL OPENINGS NOT SHOWN ON THE PLANS. THE APPROACH END OF TEMPORARY TRAFFIC BARRIER SHALL BE PROTECTED WITH AN NCHRP 350 APPROVED END TREATMENT. THE WORK REQUIRED TO PROVIDE ADDITIONAL TEMPORARY TRAFFIC BARRIER OPENINGS FOR CONTRACTOR'S ACCESS TO WORK AREAS WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE FOR TRAFFIC CONTROL PROTECTION (SPECIAL).
15. THE CONTRACTOR SHALL CONTACT THE TRAFFIC SUPERVISOR AT 847-705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
16. THE CONTRACTOR SHALL PLACE CHANGEABLE MESSAGE SIGNS TO INFORM MOTORISTS OF UPCOMING CONSTRUCTION ACTIVITIES. THE LOCATION SHALL BE AS DIRECTED BY THE ENGINEER. THE MESSAGE SIGN SHALL BE IN PLACE TWO WEEKS PRIOR TO START OF CONSTRUCTION ACTIVITIES. THIS WORK IS TO BE PAID FOR AT THE CONTRACT UNIT PRICE PER CALENDAR MONTH FOR "CHANGEABLE MESSAGE SIGN."
17. SIDE ROAD, INTERSECTION, AND DRIVEWAY TRAFFIC CONTROL SHALL BE AS SHOWN ON THE PLANS, AND IN ACCORDANCE WITH DISTRICT DETAIL TC-10 AND TYPICAL ENTRANCE SIGNING DETAIL.
18. THE "DROP OFF BETWEEN TRAVELED LANES" TABLE SPECIFIES THE PHYSICAL TREATMENT REQUIRED BY THE CONTRACTOR FOR DROP-OFF LOCATIONS BETWEEN TRAVELED LANES.
19. THE "DROP OFF BETWEEN TRAVEL LANE AND SHOULDER/EDGE OF PAVEMENT" TABLE SPECIFIES THE PHYSICAL TREATMENT REQUIRED BY THE CONTRACTOR FOR DROP-OFF LOCATIONS ADJACENT TO THE TRAVEL LANE, WHERE THE WORK AREA IS NOT SEPARATED FROM THE TRAVEL LANE BY TEMPORARY CONCRETE BARRIER, SUCH AS AT INTERSECTIONS, RAMP EXITS AND ENTRANCES, AND LOCATIONS WHERE ACCESS TO PROPERTY ABUTTING THE HIGHWAY IS REQUIRED, THE CONTRACTOR SHALL SCHEDULE THE WORK THAT CREATES A DROP-OFF TO BE COMPLETED WITHIN THE TIME PERIOD SPECIFIED ON THE TABLE SUCH THAT TEMPORARY CONCRETE BARRIER MAY BE ELIMINATED.
20. BARRIER WALL MARKERS SHALL BE INSTALLED ON BOTH THE FACE OF THE TEMPORARY CONCRETE BARRIER WALL NEXT TO TRAFFIC, AND THE TOP OF SECTIONS OF THE TEMPORARY CONCRETE BARRIER WALL AS SHOWN IN STANDARD T04001. THE COLOR OF THESE REFLECTORS SHALL MATCH THE COLOR OF THE EDGELINES (YELLOW ON THE LEFT AND CRYSTAL OR WHITE ON THE RIGHT). IF THE BASE OF THE TEMPORARY CONCRETE BARRIER WALL IS 12 INCHES OR LESS FROM THE TRAVEL LANE, THEN THE LOWER SLOPE OF THE WALL SHALL ALSO HAVE A 6 INCH WIDE TEMPORARY PAVEMENT MARKING EDGELINE (YELLOW ON THE LEFT AND WHITE ON THE RIGHT). TEMPORARY PAVEMENT MARKING ON THE LOWER SLOPE OF THE TEMPORARY CONCRETE BARRIER WALL WILL BE MEASURED AND PAID FOR AS TEMPORARY PAVEMENT MARKING 6".
21. TRAFFIC CONTROL AND PROTECTION SHALL BE AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE APPLICABLE HIGHWAY STANDARD OR DISTRICT DETAIL FOR THE PROPOSED WORK. WORKERS SIGN SHALL BE USED ONLY WHEN WORKERS ARE PRESENT. FLAGGER SIGN SHALL BE USED ONLY WHEN FLAGGERS ARE PRESENT.
22. TWO LANES (11' MINIMUM) IN EACH DIRECTION SHALL BE KEPT OPEN TO TRAFFIC ALONG MANNHEIM ROAD DURING NON-WORKING HOURS AND PEAK TRAFFIC VOLUME HOURS AS SPECIFIED IN THE SPECIAL PROVISIONS.
23. A MINIMUM OF ONE LANE (10' MINIMUM) IN EACH DIRECTION SHALL BE KEPT OPEN TO TRAFFIC ALONG MONTROSE AVENUE AND LAWRENCE AVENUE DURING NON-WORKING HOURS AND PEAK TRAFFIC VOLUME HOURS AS SPECIFIED IN THE SPECIAL PROVISIONS.
24. TEMPORARY PAVEMENT (VARIABLE DEPTH) HAS BEEN PROVIDED FOR USE AT TEMPORARY TRAFFIC STAGE CONSTRUCTION LOCATIONS TO TEMPORARILY REPLACE MINOR SECTIONS OF EXISTING PAVEMENT WHICH IS REMOVED TO PROVIDE CONSTRUCTION CLEARANCE FOR PERMANENT PAVEMENT CONSTRUCTION. TEMPORARY PAVEMENT (VARIABLE DEPTH) HAS ALSO BEEN PROVIDED FOR USE AT TEMPORARY TRAFFIC STAGE CONSTRUCTION LOCATIONS WHERE IT IS NECESSARY TO TRANSITION CHANGES IN GRADE BETWEEN PERMANENT PAVEMENT CONSTRUCTION AND EXISTING PAVEMENT. THIS WORK WILL BE PAID FOR SEPARATELY ACCORDING TO THE SPECIAL PROVISION TEMPORARY PAVEMENT (VARIABLE DEPTH).
25. THE SEPARATION OF TRAFFIC CONTROL AND PROTECTION WORK BETWEEN ADJACENT CONTRACTS IS STA. 118+24 AS SHOWN ON THE PLANS.
26. ALL VERTICAL PANELS SHOWN ON THE STAGING PLANS SHALL BE EQUIPPED WITH MONODIRECTIONAL STEADY BURN LIGHT.

27. ALL PAY ITEMS LISTED IN THE STAGING PLANS AS "IMP ATTN TEMP NR0 TL3 (ABSORB 350)" WILL BE PAID AS "IMP ATTN TEMP NRN TL3".

DROP OFF BETWEEN TRAVELED LANES
(EXCLUDES PAVEMENT PATCHING)

DROP-OFF LOCATION	NORMAL POSTED SPEED	DROP-OFF HEIGHT (X) AND TYPE	PHYSICAL TREATMENT (1)(2)	ADDITIONAL REQUIREMENTS
BETWEEN LANES	≥ 45 MPH	≤ 1 IN LIFT DIFFERENCE OR ≤ 1 IN VERTICAL MILLED FACE	NONE	NONE
		1 IN < X ≤ 2 IN LIFT DIFFERENCE OR 1 IN < X ≤ 1.5 IN VERTICAL MILLED FACE	NONE	UNEVEN LANE SIGNS (1 MILE SPACING)
		2 IN < X ≤ 4 IN LIFT DIFFERENCE	NOTCHED LONGITUDINAL WEDGE (4)	
		1.5 IN < X ≤ 4 IN VERTICAL MILLED FACE	TEMPORARY WEDGE OR MILLED SLOPED EDGE MIN 1:3 (4)	
		4 IN < X ≤ 12 IN (3)	LANE CLOSURE USING CHANNELIZING DEVICES	AS PER LANE CLOSURE STANDARD
		> 12 IN	LANE CLOSURE USING TEMPORARY TRAFFIC BARRIER	
BETWEEN LANES	< 45 MPH	≤ 1 IN LIFT DIFFERENCE OR ≤ 1.5 IN VERTICAL MILLED FACE	NONE	NONE
		1 IN < X ≤ 2.5 IN LIFT DIFFERENCE	NONE	UNEVEN LANE SIGNS
		2.5 IN < X ≤ 4 IN LIFT DIFFERENCE	NOTCHED LONGITUDINAL WEDGE (4)	
		1.5 IN < X ≤ 4 IN VERTICAL MILLED FACE	TEMPORARY WEDGE OR MILLED SLOPED EDGE MIN 1:3 (4)	
		4 IN < X ≤ 12 IN (3)	LANE CLOSURE USING CHANNELIZING DEVICES	AS PER LANE CLOSURE STANDARD
		> 12 IN	LANE CLOSURE USING TEMPORARY TRAFFIC BARRIER	

NOTES:

(1) PLACE CHANNELIZING DEVICES AND TEMPORARY BARRIER AT SAME LEVEL AS TRAVEL LANE.

(2) CHANNELIZING DEVICES MAY BE PLACED AT THE DROP-OFF ELEVATION TO PRESERVE LANE WIDTH. RAISE THE REFLECTIVE AREA AND WARNING LIGHT TO THE ELEVATION ABOVE THE TRAVELING LANE; SEE HIGHWAY STANDARD 701901.

(3) DROP-OFF 4 IN < X ≤ 12 IN IS PERMITTED FOR LESS THAN 0.5 MILE LENGTH OF DROP-OFF EXPOSURE OR LESS THAN 48-HOUR CLOSURE TIME. LENGTH AND DURATION OF DROP-OFF IN EXCESS OF THESE LIMITS REQUIRE TEMPORARY TRAFFIC BARRIER. ADJACENT WORK AREAS THAT ARE ESSENTIALLY CONTINUOUS IN DROP-OFF EXPOSURE, AS DETERMINED BY THE ENGINEER, SHALL BE CONSIDERED AS ONE WORK ZONE.

(4) OR THE SAME PHYSICAL TREATMENT AND SIGN REQUIREMENTS AS 4 IN < X ≤ 12 IN.

DROP OFF BETWEEN TRAVEL LANE AND SHOULDER/EDGE OF PAVEMENT

DROP-OFF LOCATION	NORMAL POSTED SPEED	DROP-OFF HEIGHT (X) AND TYPE	TREATMENT REQUIRED
≤ 3 FT FROM EDGE OF TRAVEL LANE (1)(2)	ALL	≤ 1 IN	NONE
		1 IN < X ≤ 3 IN	LOW SHOULDER SIGNS (2 MILE SPACING)
	< 45 MPH	3 IN < X ≤ 18 IN	PLACE CHANNELIZING DEVICES AT 50-FT SPACING
	≥ 45 MPH	3 IN < X ≤ 12 IN	PLACE CHANNELIZING DEVICES AT 100-FT SPACING
	< 45 MPH	18 IN < X ≤ 24 IN FOR < 0.5 MILE OR < 48 HOURS (4)	PLACE CHANNELIZING DEVICES AT 50-FT SPACING
	≥ 45 MPH	12 IN < X ≤ 18 IN FOR < 0.5 MILE OR < 48 HOURS	PLACE CHANNELIZING DEVICES AT 100-FT SPACING
	≥ 45 MPH	12 IN < X ≤ 24 IN FOR > 0.5 MILE OR > 48 HOURS	TEMPORARY TRAFFIC BARRIER BETWEEN TRAVEL LANE AND DROP OFF
	< 45 MPH	18 IN < X ≤ 24 IN (5)	TEMPORARY TRAFFIC BARRIER BETWEEN TRAVEL LANE AND DROP OFF
	≥ 45 MPH	18 IN < X ≤ 24 IN FOR < 0.5 MILE OR < 48 HOURS (5)	TEMPORARY TRAFFIC BARRIER BETWEEN TRAVEL LANE AND DROP OFF
	ALL	> 24 IN (5)	TEMPORARY TRAFFIC BARRIER BETWEEN TRAVEL LANE AND DROP OFF
> 3 FT AND ≤ 8 FT FROM EDGE OF TRAVEL LANE (3)	ALL	≤ 1 IN	NONE
		1 IN < X ≤ 3 IN	LOW SHOULDER SIGNS (2-MILE SPACING)
	< 45 MPH	3 IN < X ≤ 24 IN	PLACE CHANNELIZING DEVICES AT 50-FT SPACING
	≥ 45 MPH	3 IN < X ≤ 24 IN	PLACE CHANNELIZING DEVICES AT 100-FT SPACING
> 8 FT FROM EDGE OF TRAVEL LANE TO WORK ZONE CLEAR ZONE (3)	ALL	> 24 IN (5)	TEMPORARY TRAFFIC BARRIER BETWEEN TRAVEL LANE AND DROP OFF
	< 45 MPH	12 IN < X ≤ 24 IN	PLACE CHANNELIZING DEVICES AT 50-FT SPACING
	≥ 45 MPH	12 IN < X ≤ 24 IN	PLACE CHANNELIZING DEVICES AT 100-FT SPACING
	ALL	> 24 IN (5)	TEMPORARY TRAFFIC BARRIER BETWEEN TRAVEL LANE AND DROP OFF

NOTES:

(1) PLACE CHANNELIZING DEVICES AND/OR TEMPORARY BARRIER AT THE SAME LEVEL AS THE TRAVEL LANE OR SHOULDER PROFILE.

(2) CHANNELIZING DEVICES MAY BE PLACED AT THE DROP-OFF ELEVATION TO PRESERVE LANE WIDTH. RAISE THE REFLECTIVE AREA AND WARNING LIGHT TO THE ELEVATION ABOVE TRAVEL LANE OR SHOULDER PROFILE; SEE HIGHWAY STANDARD 701901.

(3) PLACE CHANNELIZING DEVICES AND TEMPORARY BARRIER AT SAME LEVEL AS SIDE SLOPE PROFILE TO BE FULLY VISIBLE.

(4) LENGTH AND DURATION MAY BE EXCEEDED FOR URBAN AREAS WHEN SIGHT DISTANCE WILL BE ADVERSELY AFFECTED BY TEMPORARY BARRIER, AS DETERMINED BY THE ENGINEER.

(5) TEMPORARY TRAFFIC BARRIER MAY BE ELIMINATED FOR STATIONARY OPERATIONS OF LESS THAN 24 HOURS FOR MULTILANE, AND MAY BE ELIMINATED FOR STATIONARY OPERATIONS OF LESS THAN 96 HOURS PER STAGE FOR TWO LANES, AS DETERMINED BY THE ENGINEER.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
GENERAL NOTES AND DROP OFF SCHEDULES

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

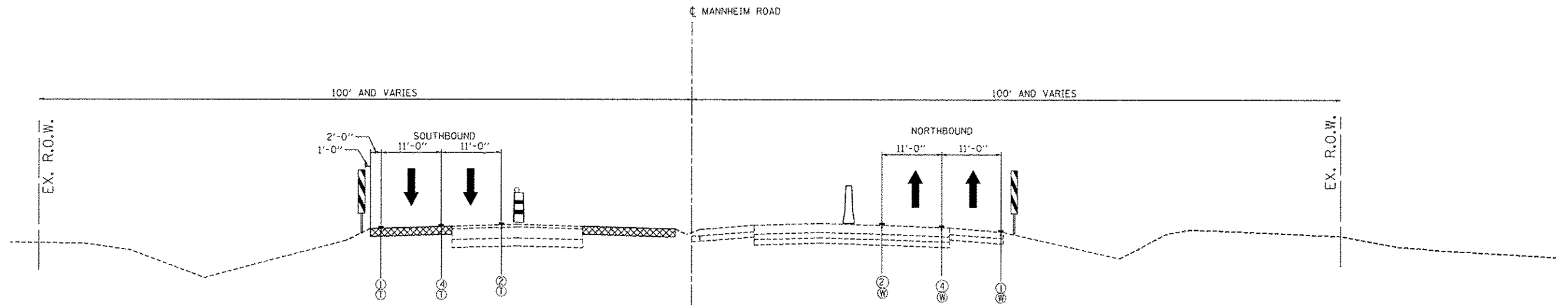
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS NO.
	0105 WRS&HB	COOK	605 89
CONTRACT NO. 60G37			
ILLINOIS FED. AID PROJECT			

MOT-01

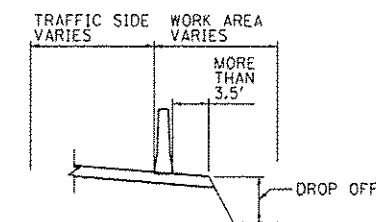
FILE NAME	USER NAME	DESIGNED	REVISED
0168037-B060ERT.DGN	#USER8	BRH	12/27/2012 MM
01FILE#		DRAWN	JZP
		CHECKED	KDA
		DATE	10/19/12
		REVISED	

TENG
TENG & ASSOCIATES, INC.
ENGINEERS/ARCHITECTS/PLANNERS
CHICAGO, ILLINOIS

12-26-2012, 14:58:59
F:\000-EXP\041-200-2084-402-COMMON\SET\TEMP\SET\PLT\0168037-SHT-STAGING.N2.DGN
M0440000A



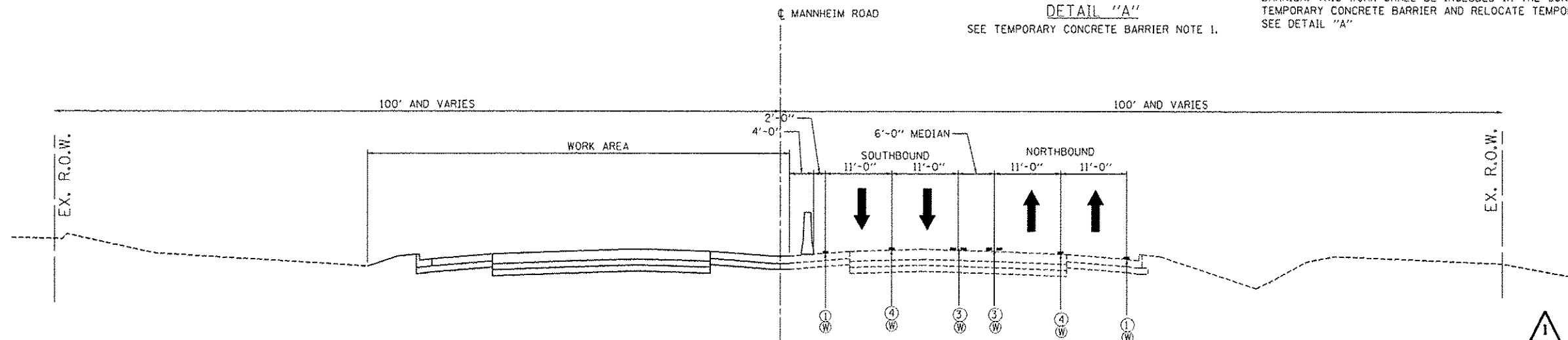
STAGE 1 - SUB-STAGE C
MANNHEIM RD.
(STA. 104+00)



DETAIL "A"
SEE TEMPORARY CONCRETE BARRIER NOTE 1.

NOTES:

- 1) AT LOCATIONS WHERE A DROP OFF FROM THE GROUND SURFACE ADJACENT TO THE TEMPORARY CONCRETE BARRIER IS 3.5' OR LESS FROM THE TEMPORARY CONCRETE BARRIER, THE TEMPORARY CONCRETE BARRIER SHALL BE SECURED TO THE TEMPORARY PAVEMENT OR PAVED SHOULDER, USING THREE ANCHORING PINS INSTALLED ON THE TRAFFIC SIDE OF THE TEMPORARY CONCRETE BARRIER. THIS WORK SHALL BE INCLUDED IN THE CONTRACT UNIT PRICES FOR TEMPORARY CONCRETE BARRIER AND RELOCATE TEMPORARY CONCRETE BARRIER. SEE DETAIL "A"



STAGE 2 - SUB-STAGE A
MANNHEIM RD.

NOTES:

- 1) EPOXY OR POLYUREA PAVEMENT MARKING SHALL BE USED FOR TEMPORARY PAVEMENT MARKING WHEN CONSTRUCTION STAGING EXTENDS OVER THE WINTER PERIOD. EPOXY OR POLYUREA PAVEMENT MARKING WILL BE PAID AT THE CONTRACT UNIT PRICE OF TEMPORARY PAVEMENT MARKING OR WET REFLECTIVE TEMPORARY TAPE TYPE III AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR CHANGES IN QUANTITIES TO COMPLY WITH THIS REQUIREMENT.
- 2) REMOVAL OF EPOXY OR POLYUREA PAVEMENT MARKING THAT WAS PLACED FOR CONSTRUCTION STAGE DURING WINTER PERIOD, WILL BE PAID FOR AS PAVEMENT MARKING REMOVAL.

MAINTENANCE OF TRAFFIC LEGEND

- TEMPORARY PAVEMENT
- DOUBLE VERTICAL PANEL
- TEMPORARY CONCRETE BARRIER
- TRAFFIC DIRECTION
- TYPE II BARRICADE OR DRUM W/ TYPE C STEADY BURN MONO-DIRECTIONAL LIGHT
- ① PVT MK - LINE 4" WHITE
- ② PVT MK - LINE 4" YELLOW
- ③ PVT MK - DBL 4" YELLOW
- ④ PVT MK - LINE 4" WHITE (10' DASH- 30' SKIP)
- ⑤ PVT MK - LINE 6" WHITE
- ⑥ PVT MK - LINE 8" WHITE
- ⑦ EXISTING PAVEMENT MARKING

- Ⓣ TEMP PVT MK (SEE GENERAL NOTES SHT G-03)
- Ⓜ WET REF TEM TAPE T3 (SEE GENERAL NOTES SHT G-03)
- Ⓟ PERM PVT MK (SEE PVT MK PLANS)

FILE NAME : #FILE#	USER NAME : #USER#	DESIGNED - JZP	REVISED - 12/27/2012 MM
		DRAWN - JZP	REVISED -
		CHECKED - KDA	REVISED -
		DATE - 10/19/12	REVISED -
PLOT SCALE : #SCALE#			
PLOT DATE : 12-26-2012			

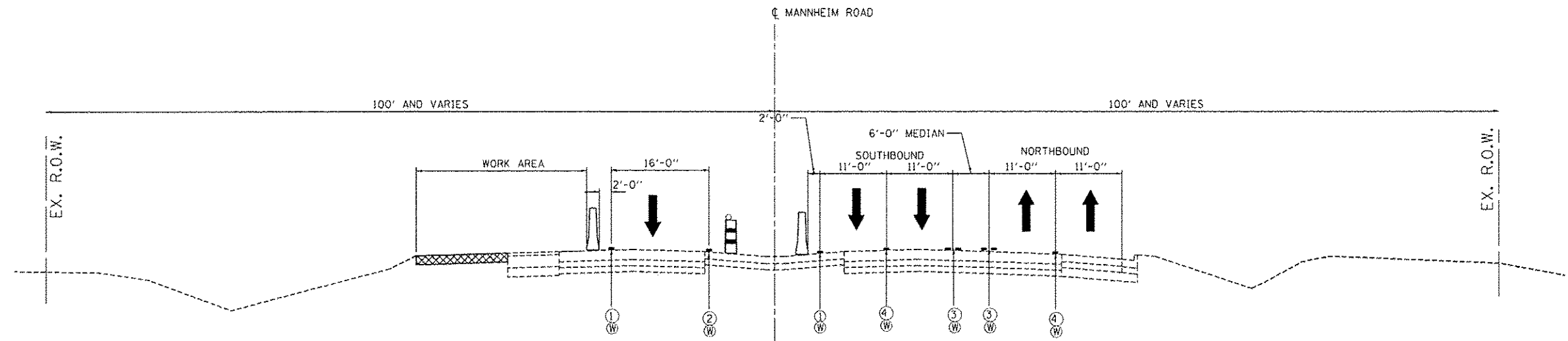
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC TYPICAL SECTIONS			
STAGE 1 - SUB-STAGE B AND C, STAGE 2 - SUB-STAGE A			
SCALE: 1"=10'	SHEET NO. OF SHEETS	STA.	TO STA.

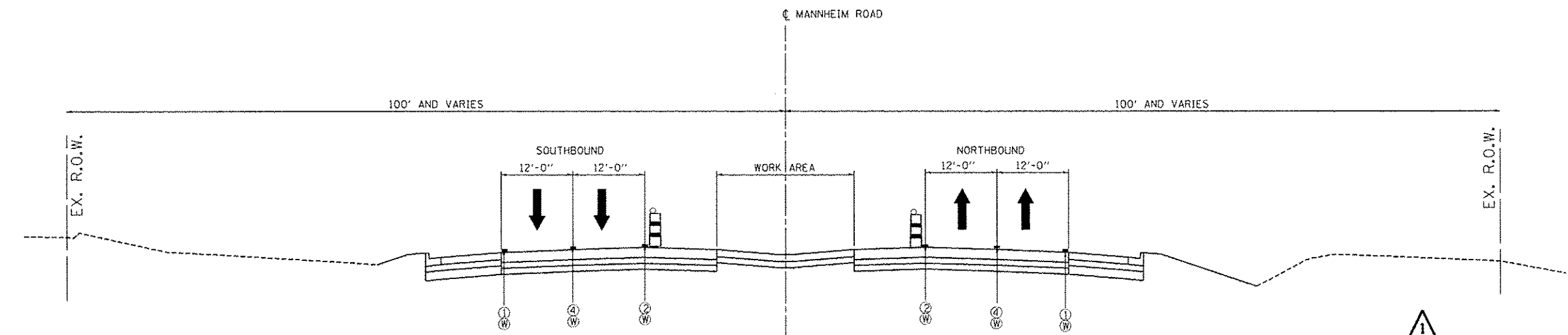
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	0105 WRS&HB	COOK	405	92
CONTRACT NO. 60637				
ILLINOIS FED. AID PROJECT				

MOT-04

\\N068037-STAGING\STAGING\DRAWING\1068037-SHT-1-STAGE1\1068037-SHT-1-STAGE1.DWG
12-26-2012 14:55:28
PLOT SCALE : #SCALE#
PLOT DATE : 12-26-2012
TENG & ASSOCIATES, INC.
ENGINEERS/ARCHITECTS/PLANNERS
CHICAGO, ILLINOIS



STAGE 2 - SUB-STAGE B
MANNHEIM RD.



STAGE 3
MANNHEIM RD.

MAINTENANCE OF TRAFFIC LEGEND



TEMPORARY PAVEMENT



TEMPORARY CONCRETE BARRIER



TYPE II BARRICADE OR DRUM
W/ TYPE C STEADY BURN
MONO-DIRECTIONAL LIGHT



DOUBLE VERTICAL PANEL



TRAFFIC DIRECTION

- ① PVT MK - LINE 4" WHITE
- ② PVT MK - LINE 4" YELLOW
- ③ PVT MK - DBL 4" YELLOW
- ④ PVT MK - LINE 4" WHITE (10' DASH- 30' SKIP)
- ⑤ PVT MK - LINE 6" WHITE
- ⑥ PVT MK - LINE 8" WHITE
- ⑦ EXISTING PAVEMENT MARKING

- Ⓣ TEMP PVT MK
(SEE GENERAL NOTES SHT G-03)
- Ⓜ WET REF TEM TAPE T3
(SEE GENERAL NOTES SHT G-03)
- Ⓟ PERM PVT MK
(SEE PVT MK PLANS)

NOTES:

- 1) EPOXY OR POLYUREA PAVEMENT MARKING SHALL BE USED FOR TEMPORARY PAVEMENT MARKING WHEN CONSTRUCTION STAGING EXTENDS OVER THE WINTER PERIOD. EPOXY OR POLYUREA PAVEMENT MARKING WILL BE PAID AT THE CONTRACT UNIT PRICE OF TEMPORARY PAVEMENT MARKING OR WET REFLECTIVE TEMPORARY TAPE TYPE III AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR CHANGES IN QUANTITIES TO COMPLY WITH THIS REQUIREMENT.
- 2) REMOVAL OF EPOXY OR POLYUREA PAVEMENT MARKING THAT WAS PLACED FOR CONSTRUCTION STAGE DURING WINTER PERIOD, WILL BE PAID FOR AS PAVEMENT MARKING REMOVAL.

FILE NAME : \\V06037-STAGING\BORDER\DON...\\V06037-STAGING\DON...\\V06037-SHT-STAGINT_4.DGN	USER NAME : *USER*	DESIGNED - JZP	REVISED - 12/27/2012 MM
#FILE#		DRAWN - JZP	REVISED -
	PLOT SCALE : *SCALE*	CHECKED - KDA	REVISED -
	PLOT DATE : 12-26-2012	DATE - 10/19/12	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
TYPICAL SECTIONS
STAGE 2 - SUB-STAGE B AND STAGE 3

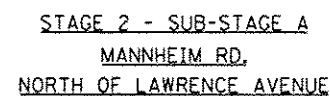
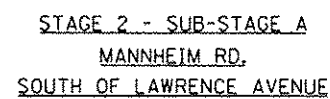
SCALE: 1"=10' SHEET NO. OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	0105 WRS&HB	COOK	665	93
CONTRACT NO. 60G37			ILLINOIS FED. AID PROJECT	

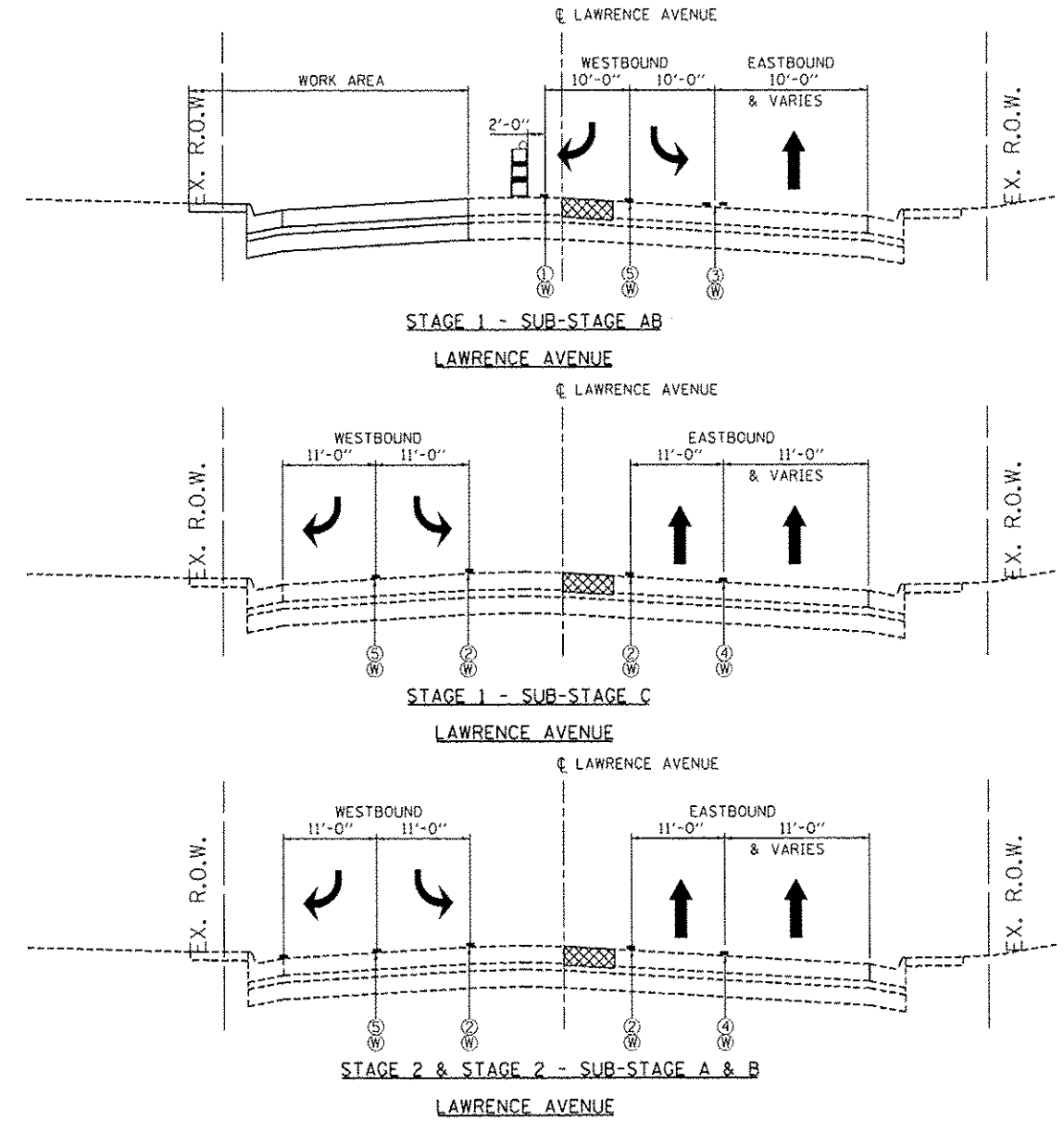
MOT-05

\\V06037-STAGING\BORDER\DON...\\V06037-STAGING\DON...\\V06037-SHT-STAGINT_4.DGN
12-28-2012 14:51:41
MANNHWA F:\DOC-EXP-CH-088\2581-8\COMMON\SET\TEMP\SET\TRAOT\06037-SHT-STAGINT_3.DGN

TENG TENG & ASSOCIATES, INC.
ENGINEERS/ARCHITECTS/PLANNERS
CHICAGO, ILLINOIS



FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - JZP	REVISED - 12/27/2012 MM	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC TYPICAL SECTIONS STAGE 2 - SUB-STAGE A				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - JZP	REVISED -										
	PLOT SCALE = #SCALE#	CHECKED - KDA	REVISED -										
	PLOT DATE = 12-26-2012	DATE = 10/19/12	REVISED -										
TENG TENG & ASSOCIATES, INC. ENGINEERS/ARCHITECTS/PLANNERS CHICAGO, ILLINOIS					SCALE: 1"=10'	SHEET NO. OF	SHEETS	STA.	TO STA.		CONTRACT NO. 60637 ILLINOIS FED. AID PROJECT		

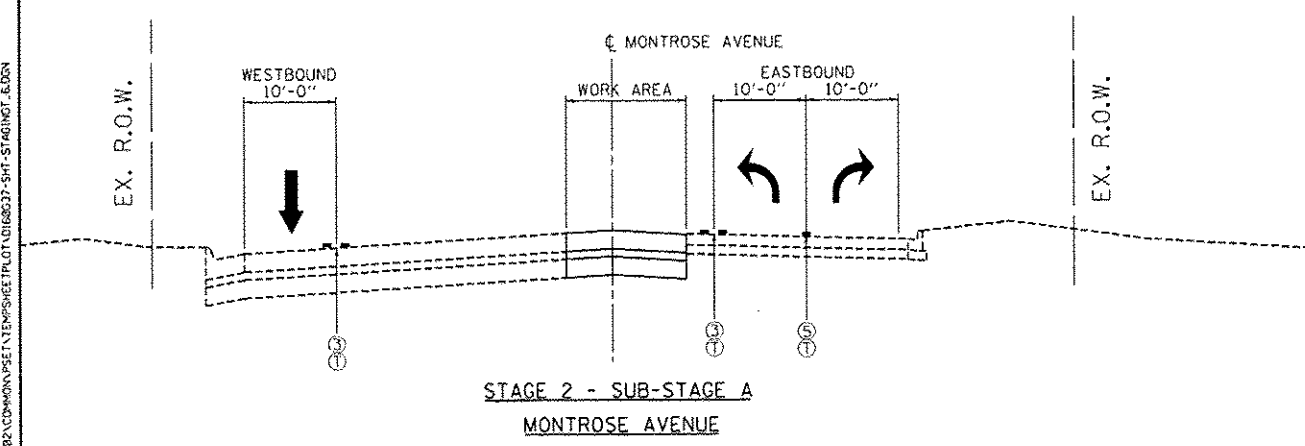
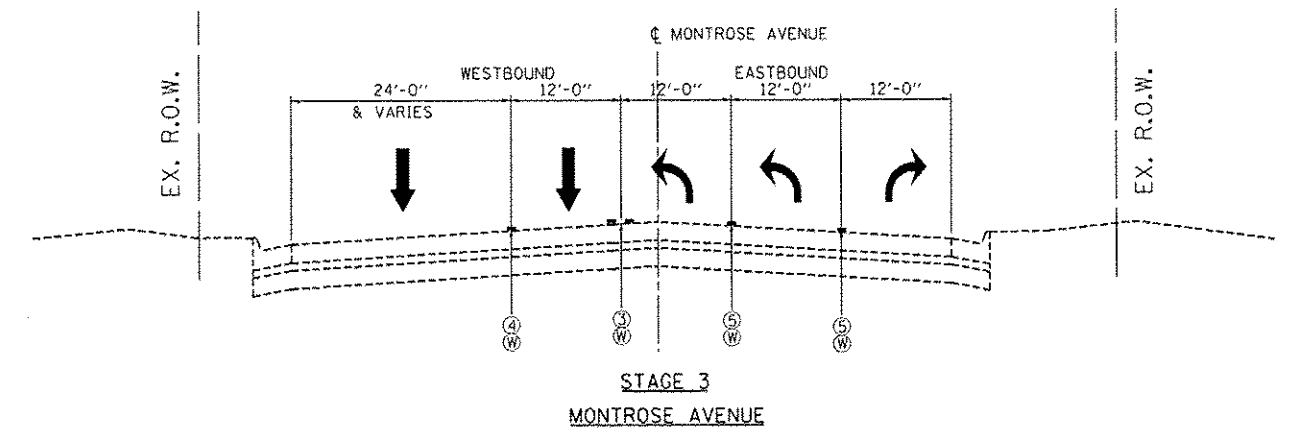
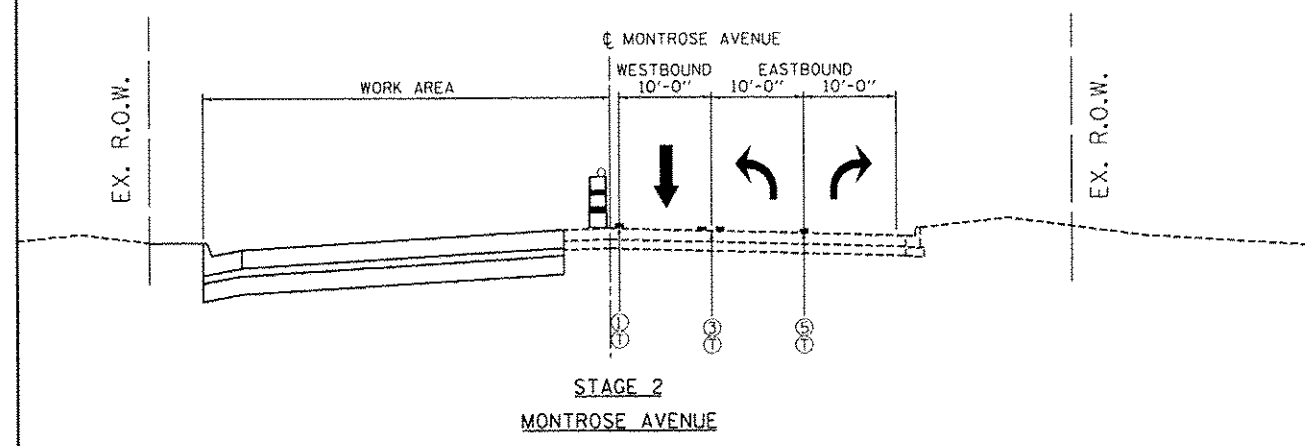
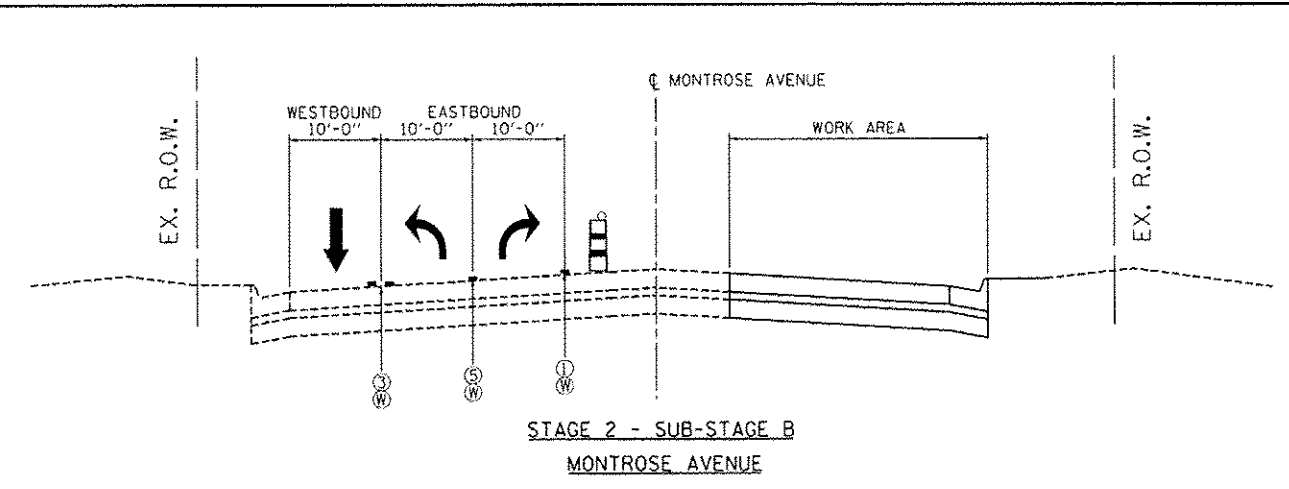
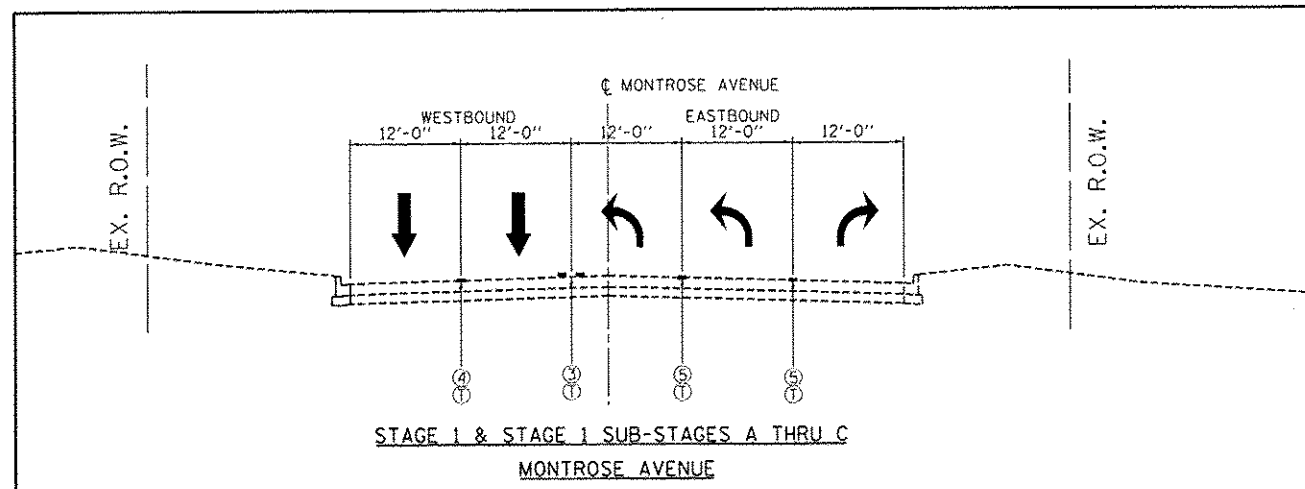


2) REMOVAL OF EPOXY OR POLYUREA PAVEMENT MARKING THAT WAS PLACED FOR CONSTRUCTION STAGE DURING WINTER PERIOD. WILL BE PAID FOR AS PAVEMENT MARKING REMOVAL.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	0105 WAS&HB	COOK	605	95
CONTRACT NO. 60637				
ILLINOIS FED. AID PROJECT				

MOT-07

\D168037-STAGING1.DCN,,\D168037-STAGING1.DCN,,\D168037-STAGING1.DCN
 2-26-2012 14:59:53
 F:\QC_EXP\041-20212534-02\COMSON\SET1\EXP5\SET1P1\D168037-SMT-STAGING1.5.DGN
 M04000000



NOTES:

- 1) EPOXY OR POLYUREA PAVEMENT MARKING SHALL BE USED FOR TEMPORARY PAVEMENT MARKING WHEN CONSTRUCTION STAGING EXTENDS OVER THE WINTER PERIOD. EPOXY OR POLYUREA PAVEMENT MARKING WILL BE PAID AT THE CONTRACT UNIT PRICE OF TEMPORARY PAVEMENT MARKING OR WET REFLECTIVE TEMPORARY TAPE TYPE III AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR CHANGES IN QUANTITIES TO COMPLY WITH THIS REQUIREMENT.
- 2) REMOVAL OF EPOXY OR POLYUREA PAVEMENT MARKING THAT WAS PLACED FOR CONSTRUCTION STAGE DURING WINTER PERIOD, WILL BE PAID FOR AS PAVEMENT MARKING REMOVAL.

MAINTENANCE OF TRAFFIC LEGEND

- TEMPORARY PAVEMENT
- TEMPORARY CONCRETE BARRIER
- TYPE II BARRICADE OR DRUM W/ TYPE C STEADY BURN MONO-DIRECTIONAL LIGHT
- DOUBLE VERTICAL PANEL
- TRAFFIC DIRECTION
- ① PVT MK - LINE 4" WHITE
- ② PVT MK - LINE 4" YELLOW
- ③ PVT MK - DBL 4" YELLOW
- ④ PVT MK - LINE 4" WHITE (10' DASH- 30' SKIP)
- ⑤ PVT MK - LINE 6" WHITE
- ⑥ PVT MK - LINE 8" WHITE
- ⑦ EXISTING PAVEMENT MARKING
- Ⓣ TEMP PVT MK (SEE GENERAL NOTES SHT G-03)
- Ⓜ WET REF TEM TAPE T3 (SEE GENERAL NOTES SHT G-03)
- Ⓟ PERM PVT MK (SEE PVT MK PLANS)

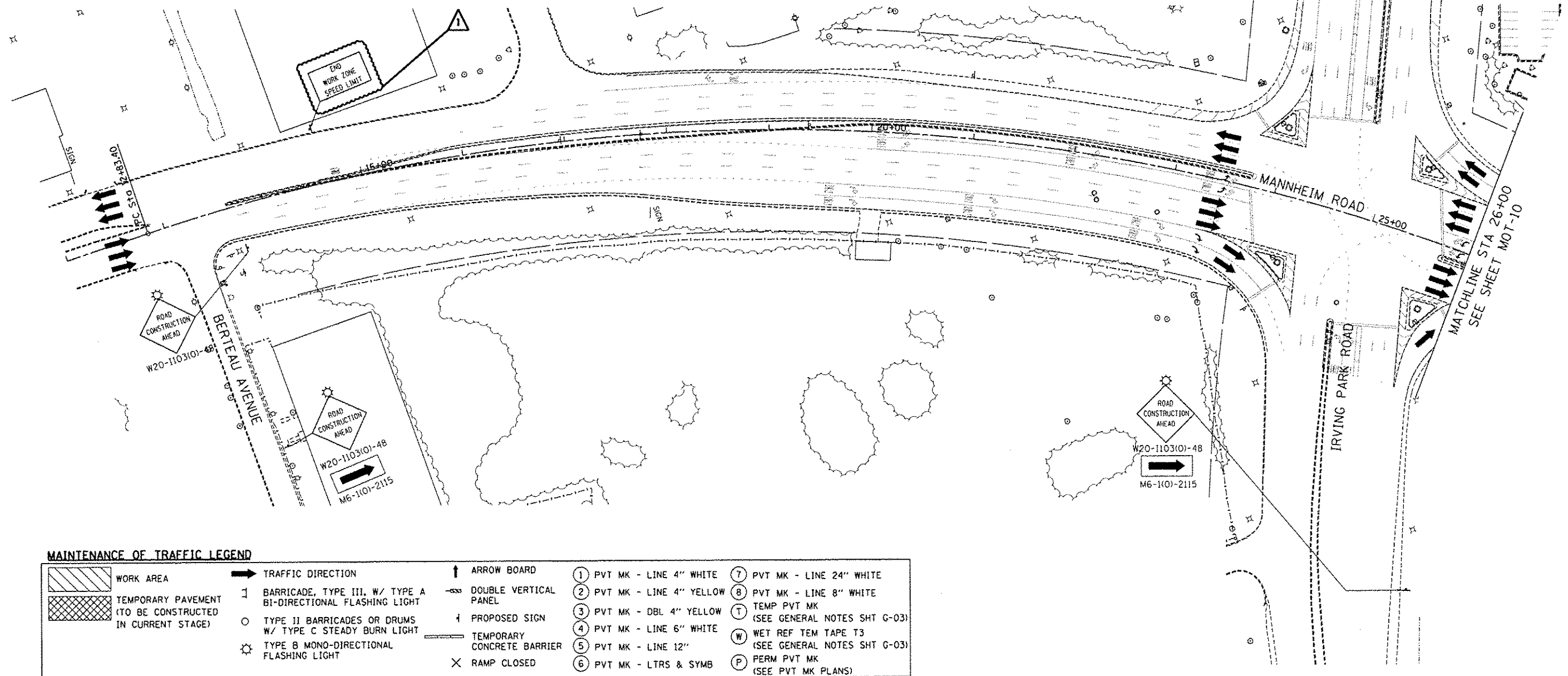
FILE NAME = 12-26-2012_14150037-STAGING.DGN		USER NAME = #USER#	DESIGNED - JZP	REVISED - 12/27/2012 MM	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC TYPICAL SECTIONS MONTROSE AVENUE			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
#FILE#			DRAWN - JZP	REVISED -				0105 WRS&HB	COOK	605	96		
PLOT SCALE = #SCALE#			CHECKED - KDA	REVISED -							CONTRACT NO. 60C37		
PLOT DATE = 12-26-2012		DATE - 10/19/12	REVISED -			SCALE: 1"=10'	SHEET NO.	OF SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		
TENG TENG & ASSOCIATES, INC. ENGINEERS/ARCHITECTS/PLANNERS CHICAGO, ILLINOIS													

10160037-STAGING.DGN, 10160037-STAGING.DGN, 10160037-SHT-STAGING1, 5.DGN
 12-26-2012, 14:53:12, 10160037-STAGING.DGN, 10160037-SHT-STAGING1, 5.DGN



NOTES

1. MAINTAIN TRAFFIC ON EXISTING PAVEMENT DURING PRE-STAGE WORK.
2. IMPLEMENT DAILY LANE AND/OR SHOULDER CLOSURES AS REQUIRED IN ACCORDANCE WITH APPLICABLE HIGHWAY STANDARDS DURING PRE-STAGE WORK.
3. WORK REQUIRING A TEMPORARY LANE AND/OR SHOULDER CLOSURE SHALL BE RESTRICTED TO ONE SIDE OF THE EXISTING PAVEMENT AT A TIME FOR EACH DIRECTION OF TRAFFIC.
4. SIDE ROAD, INTERSECTION, AND DRIVEWAY TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH DISTRICT DETAIL TC-10.



MAINTENANCE OF TRAFFIC LEGEND

	WORK AREA		TRAFFIC DIRECTION		ARROW BOARD		PVT MK - LINE 4" WHITE		PVT MK - LINE 24" WHITE
	TEMPORARY PAVEMENT (TO BE CONSTRUCTED IN CURRENT STAGE)		BARRICADE, TYPE III, W/ TYPE A BI-DIRECTIONAL FLASHING LIGHT		DOUBLE VERTICAL PANEL		PVT MK - LINE 4" YELLOW		PVT MK - LINE 8" WHITE
			TYPE 11 BARRICADES OR DRUMS W/ TYPE C STEADY BURN LIGHT		PROPOSED SIGN		PVT MK - DBL 4" YELLOW		TEMP PVT MK (SEE GENERAL NOTES SHT G-03)
			TYPE B MONO-DIRECTIONAL FLASHING LIGHT		TEMPORARY CONCRETE BARRIER		PVT MK - LINE 6" WHITE		WET REF TEM TAPE T3 (SEE GENERAL NOTES SHT G-03)
					RAMP CLOSED		PVT MK - LINE 12"		PERM PVT MK (SEE PVT MK PLANS)
							PVT MK - LTRS & SYMB		

FILE NAME *

OF FILE *

12-26-2012, 14:59:26

TENG

TENG & ASSOCIATES, INC.
ENGINEERS/ARCHITECTS/PLANNERS
CHICAGO, ILLINOIS

USER NAME * RUSERS

PLOT SCALE * 1/8"=1'-0"

PLOT DATE * 12-26-2012

DESIGNED - BRH

DRAWN - JZP

CHECKED - KDA

DATE - 10/19/12

REVISED - 12/27/2012

REVISED -

REVISED -

REVISED -

MM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PRE-STAGE

SCALE: 1"=50'

SHEET NO. OF SHEETS STA. 12+00 TO STA. 26+00

F.A. RTE.

SECTION

D105 WRS&HB

COUNTY

COOK

TOTAL SHEETS

605

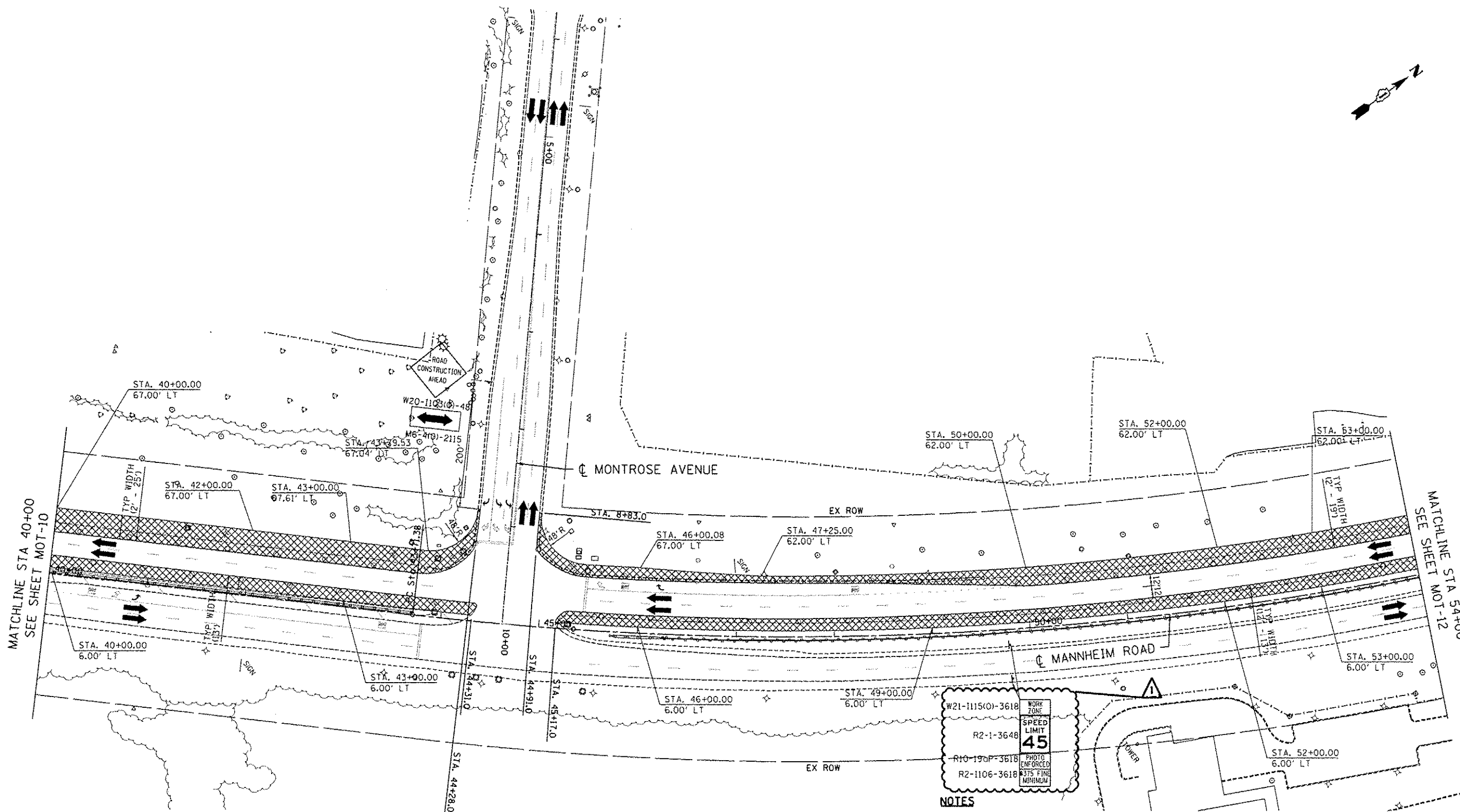
SHEET NO.

97

CONTRACT NO. 60G37

ILLINOIS FED. AID PROJECT

MOT-09

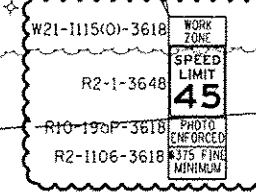


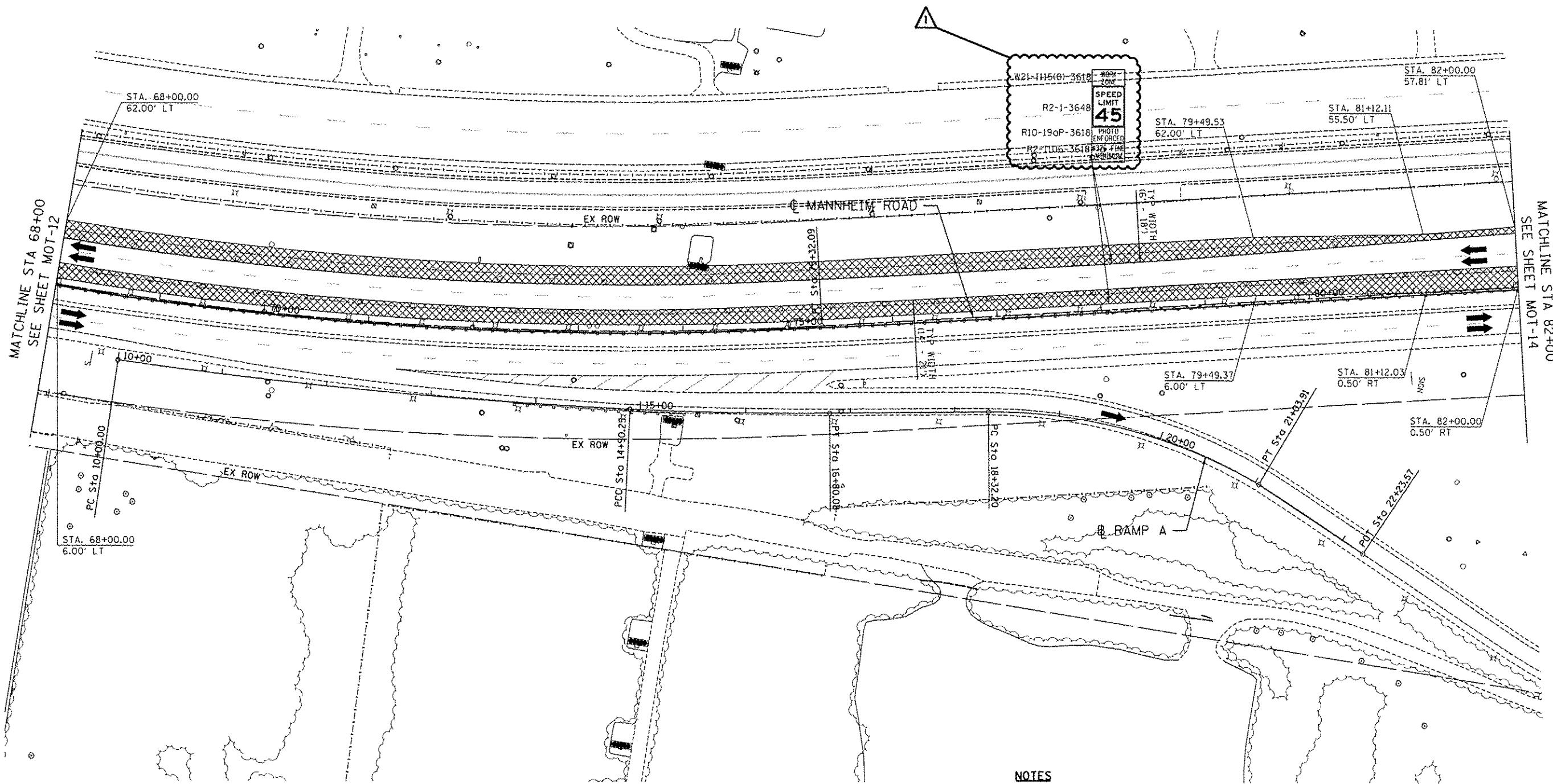
MAINTENANCE OF TRAFFIC LEGEND

	WORK AREA		TRAFFIC DIRECTION		ARROW BOARD		1 PVT MK - LINE 4" WHITE		7 PVT MK - LINE 24" WHITE
	TEMPORARY PAVEMENT (TO BE CONSTRUCTED IN CURRENT STAGE)		BARRICADE, TYPE III, W/ TYPE A BI-DIRECTIONAL FLASHING LIGHT		DOUBLE VERTICAL PANEL		2 PVT MK - LINE 4" YELLOW		8 PVT MK - LINE 8" WHITE
	TYPE II BARRICADES OR DRUMS W/ TYPE C STEADY BURN LIGHT		PROPOSED SIGN		TEMPORARY CONCRETE BARRIER		3 PVT MK - DBL 4" YELLOW		T TEMP PVT MK (SEE GENERAL NOTES SHT G-03)
	TYPE B MONO-DIRECTIONAL FLASHING LIGHT		RAMP CLOSED		WET REF TEM TAPE T3 (SEE GENERAL NOTES SHT G-03)		4 PVT MK - LINE 6" WHITE		P PERM PVT MK (SEE PVT MK PLANS)
							5 PVT MK - LINE 12"		
							6 PVT MK - LTRS & SYMB		

NOTES

1. MAINTAIN TRAFFIC ON EXISTING PAVEMENT DURING PRE-STAGE WORK.
2. IMPLEMENT DAILY LANE AND/OR SHOULDER CLOSURES AS REQUIRED IN ACCORDANCE WITH APPLICABLE HIGHWAY STANDARDS DURING PRE-STAGE WORK.
3. WORK REQUIRING A TEMPORARY LANE AND/OR SHOULDER CLOSURE SHALL BE RESTRICTED TO ONE SIDE OF THE EXISTING PAVEMENT AT A TIME FOR EACH DIRECTION OF TRAFFIC.
4. SIDE ROAD, INTERSECTION, AND DRIVEWAY TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH DISTRICT DETAIL TC-10.





MAINTENANCE OF TRAFFIC LEGEND

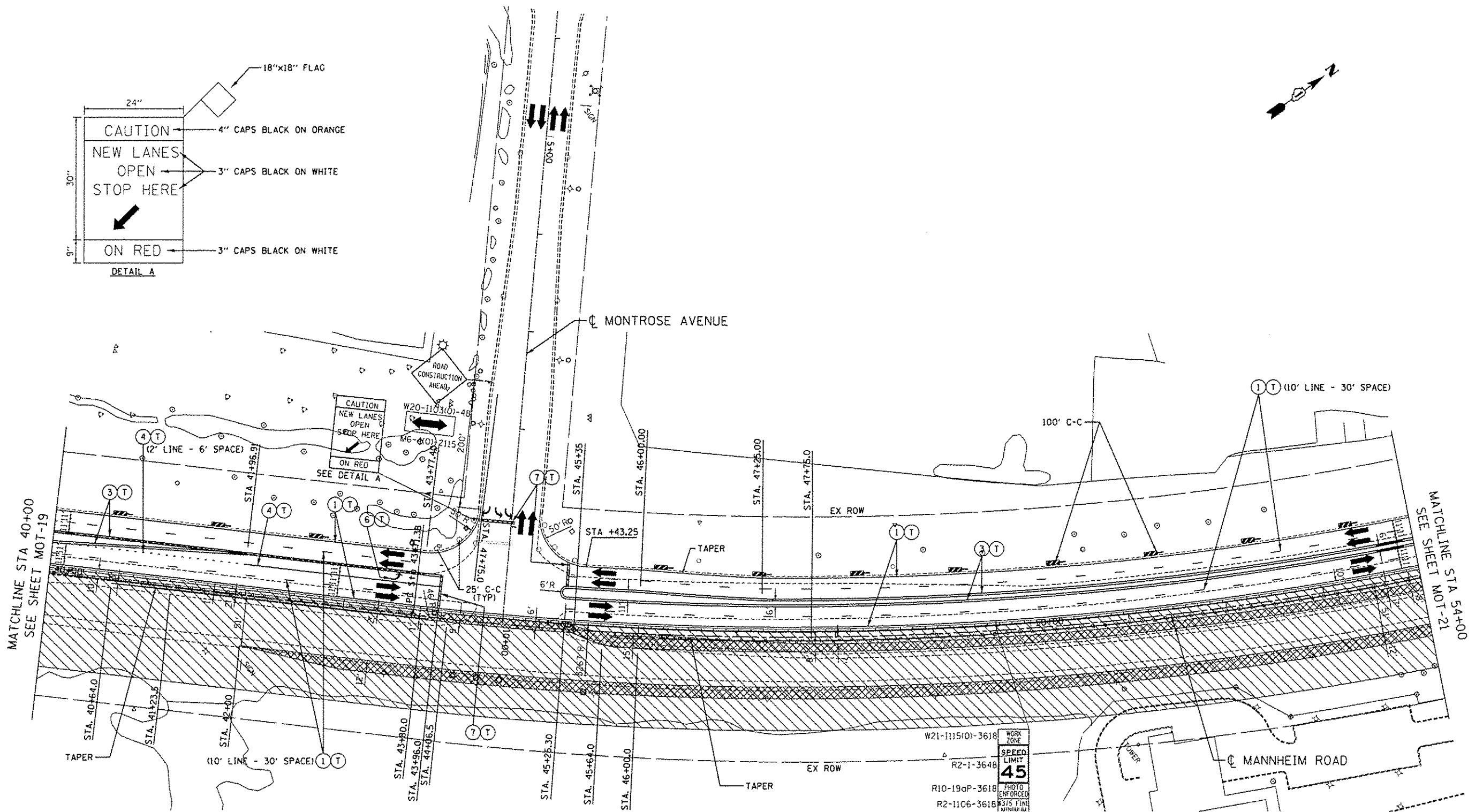
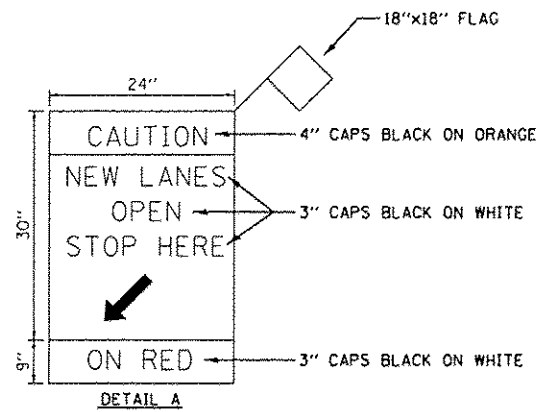
	WORK AREA		TRAFFIC DIRECTION		ARROW BOARD		1 PVT MK - LINE 4" WHITE		7 PVT MK - LINE 24" WHITE
	TEMPORARY PAVEMENT (TO BE CONSTRUCTED IN CURRENT STAGE)		1 BARRICADE, TYPE III, W/ TYPE A BI-DIRECTIONAL FLASHING LIGHT		DOUBLE VERTICAL PANEL		2 PVT MK - LINE 4" YELLOW		8 PVT MK - LINE 8" WHITE
			○ TYPE II BARRICADES OR DRUMS W/ TYPE C STEADY BURN LIGHT		PROPOSED SIGN		3 PVT MK - DBL 4" YELLOW		T TEMP PVT MK
			⚡ TYPE B MONO-DIRECTIONAL FLASHING LIGHT		TEMPORARY CONCRETE BARRIER		4 PVT MK - LINE 6" WHITE		W WET REF TEM TAPE T3
					RAMP CLOSED		5 PVT MK - LINE 12"		P PERM PVT MK
							6 PVT MK - LTRS & SYMB		P PERM PVT MK
									(SEE PVT MK PLANS)

NOTES

1. MAINTAIN TRAFFIC ON EXISTING PAVEMENT DURING PRE-STAGE WORK.
2. IMPLEMENT DAILY LANE AND/OR SHOULDER CLOSURES AS REQUIRED IN ACCORDANCE WITH APPLICABLE HIGHWAY STANDARDS DURING PRE-STAGE WORK.
3. WORK REQUIRING A TEMPORARY LANE AND/OR SHOULDER CLOSURE SHALL BE RESTRICTED TO ONE SIDE OF THE EXISTING PAVEMENT AT A TIME FOR EACH DIRECTION OF TRAFFIC.
4. SIDE ROAD, INTERSECTION, AND DRIVEWAY TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH DISTRICT DETAIL TC-10.

MOT-13

FILE NAME: \\0168037-LAYOUT.DGN, \\0168037-TOP.DGN, \\0168037-STAGING.DGN, \\0168037-BORDER.DGN, \\0168037-PLAN.DGN, \\0168037-SECTION.DGN, \\0168037-DETAIL.DGN, \\0168037-AS-BUILT.DGN	USER NAME: #USER#	DESIGNED: BRH	REVISED: 12/27/2012 MM	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC PRE-STAGE	F.A. RTE.	SECTION 0105 WRS&HB	COUNTY COOK	TOTAL SHEETS 605	SHEET NO. 101
TENG & ASSOCIATES, INC. ENGINEERS/ARCHITECTS/PLANNERS CHICAGO, ILLINOIS	PLOT SCALE: #SCALE#	DRAWN: JZP	REVISOR: KDA	SCALE: 1"=50'	SHEET NO. OF SHEETS	STA. 68+00	TO STA. 82+00	CONTRACT NO. 60G37	ILLINOIS FED. AID PROJECT	
	PLOT DATE: 12-26-2012	DATE: 10/19/12	REVISOR: KDA							



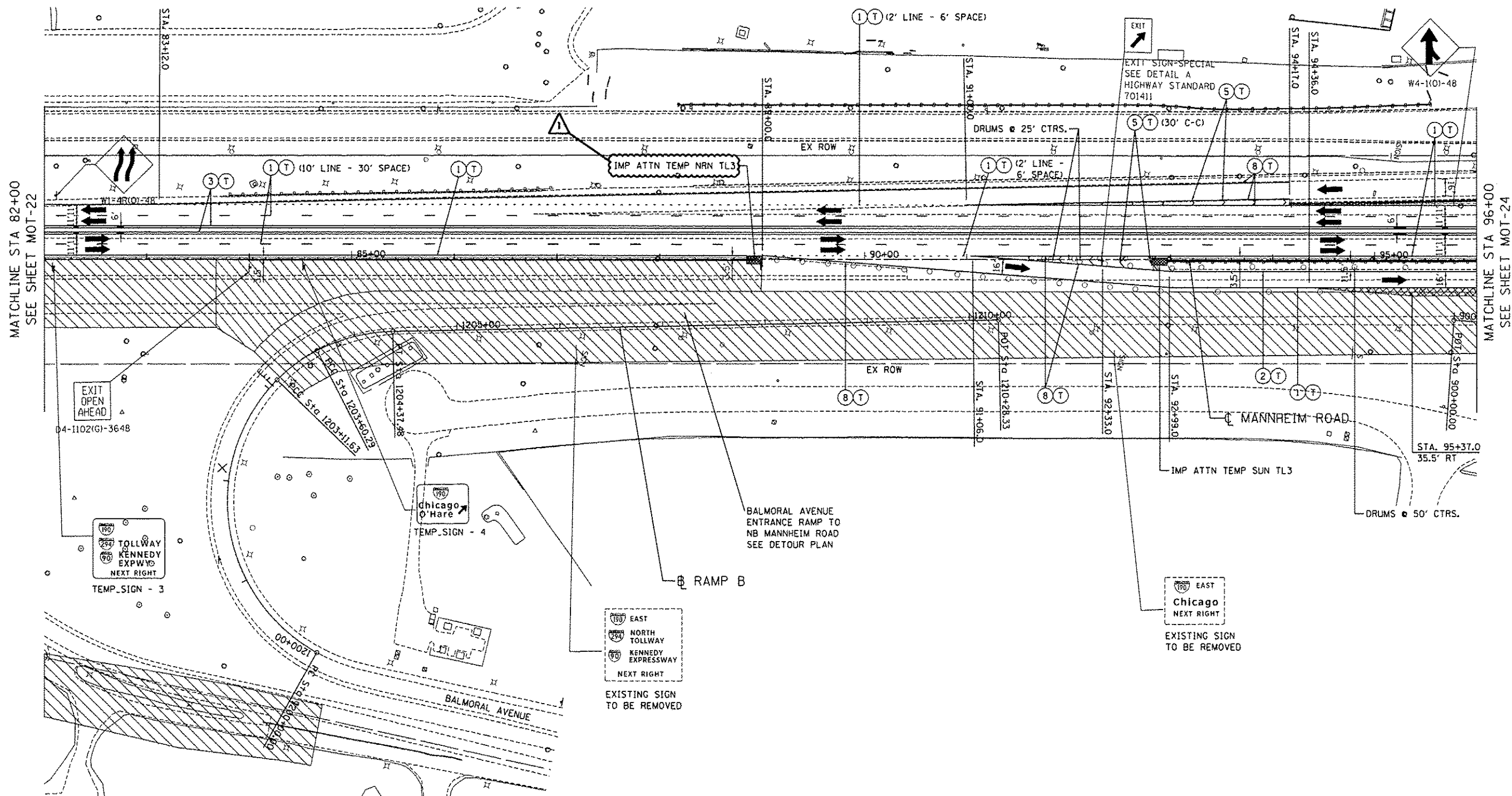
MAINTENANCE OF TRAFFIC LEGEND

	WORK AREA		TRAFFIC DIRECTION		ARROW BOARD
	TEMPORARY PAVEMENT (TO BE CONSTRUCTED IN CURRENT STAGE)		BARRICADE, TYPE III, W/ TYPE A BI-DIRECTIONAL FLASHING LIGHT		DOUBLE VERTICAL PANEL
			TYPE II BARRICADES OR DRUMS W/ TYPE C STEADY BURN LIGHT		PROPOSED SIGN
			TYPE B MONO-DIRECTIONAL FLASHING LIGHT		TEMPORARY CONCRETE BARRIER
			RAMP CLOSED		
			PVT MK - LINE 4" WHITE		PVT MK - LINE 24" WHITE
			PVT MK - LINE 4" YELLOW		PVT MK - LINE 8" WHITE
			PVT MK - DBL 4" YELLOW		TEMP PVT MK (SEE GENERAL NOTES SHT G-03)
			PVT MK - LINE 6" WHITE		WET REF TEM TAPE T3 (SEE GENERAL NOTES SHT G-03)
			PVT MK - LINE 12"		PERM PVT MK (SEE PVT MK PLANS)
			PVT MK - LTRS & SYMB		

NOTES:

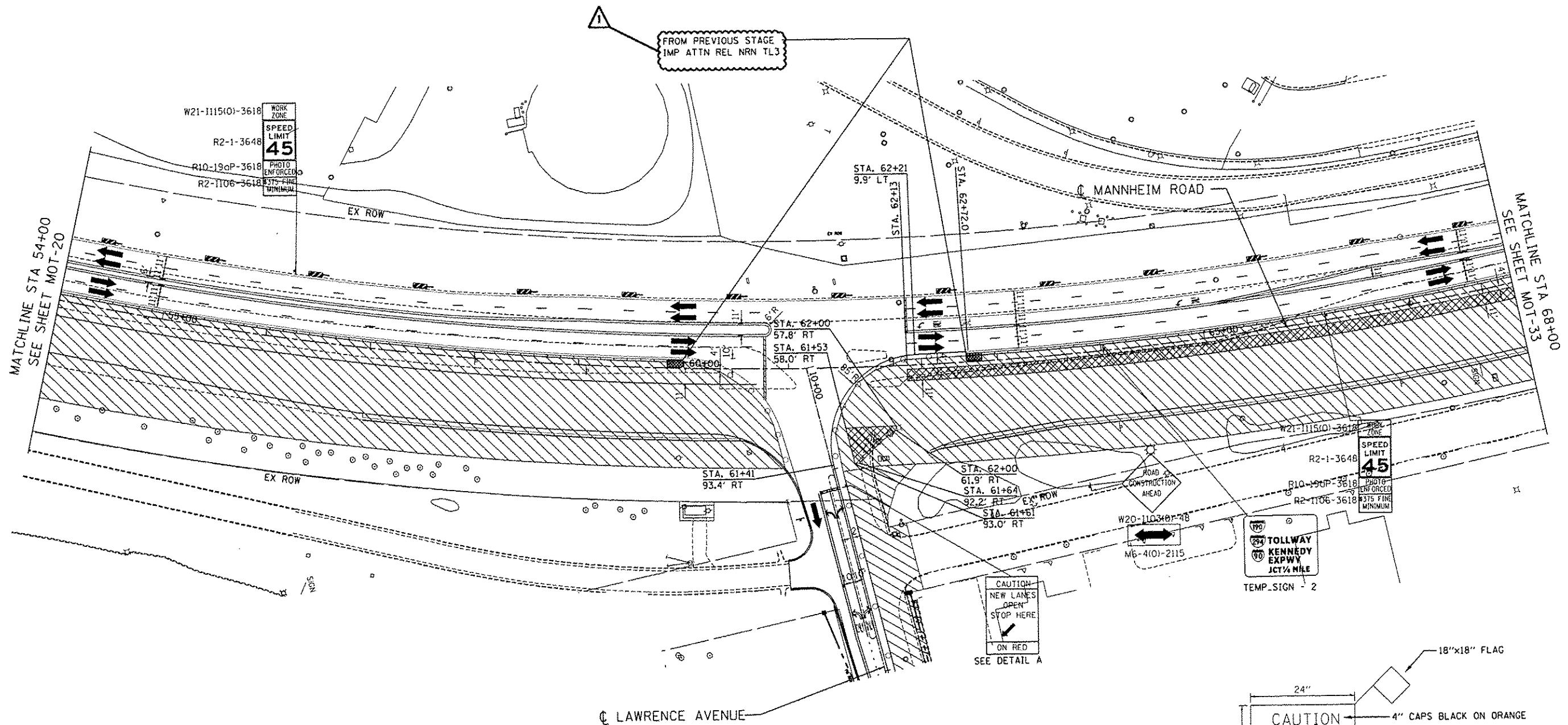
1. SIDEROAD, INTERSECTION, AND DRIVEWAY TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH DISTRICT DETAIL TC-10.
2. DRIVEWAY ENTRANCES SHALL HAVE DRIVEWAY ENTRANCE SIGNING PER DISTRICT DETAIL TC-26.

	WORK AREA		TRAFFIC DIRECTION		ARROW BOARD	①	PVT MK - LINE 4" WHITE	⑦	PVT MK - LINE 24" WHITE
	TEMPORARY PAVEMENT (TO BE CONSTRUCTED IN CURRENT STAGE)	1	BARRICADE, TYPE III, W/ TYPE A BI-DIRECTIONAL FLASHING LIGHT		DOUBLE VERTICAL PANEL	②	PVT MK - LINE 4" YELLOW	⑧	PVT MK - LINE 8" WHITE
		○	TYPE II BARRICADES OR DRUMS W/ TYPE C STEADY BURN LIGHT	1	PROPOSED SIGN	③	PVT MK - DBL 4" YELLOW	⑩	TEMP PVT MK (SEE GENERAL NOTES SHT G-03)
		☼	TYPE B MONO-DIRECTIONAL FLASHING LIGHT		TEMPORARY CONCRETE BARRIER	④	PVT MK - LINE 6" WHITE	⑪	WET REF TEM TAPE T3 (SEE GENERAL NOTES SHT G-03)
				×	RAMP CLOSED	⑤	PVT MK - LINE 12"	⑫	PERM PVT MK (SEE PVT MK PLANS)
						⑥	PVT MK - LTRS & SYMB		



NO168637-ALIGNMENT.DGN,,NO168637-LAYOUT.DGN,,NO168637-TOPORIG.DGN,,NO168637-ROW.DGN,,NO168637-STAGING1.DGN,,NO168637-BORDER1.DGN,,NO168637-STAGING.DGN
NO168637-2-26-2012,14:55:21MOMANANA F:\DOC\EXP\CH1-2001258\4-02\COMMON\SET\ITEMPSHEET\PL01\NO168637-SH1-STAGING1-6.DGN

FILE NAME = #FILE#	USER NAME = #USER#	DESIGNED - BRH	REVISED - 12/27/2012 MM	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION										MAINTENANCE OF TRAFFIC STAGE 1					F.A. RTE.	SECTION	COUNTY	TOTAL SHEET NO.	SHEET NO.					
		DRAWN - JZP	REVISED -													0105 WRS&HB	COOK	605	111									
														CONTRACT NO. 60G37														
TENG TENG & ASSOCIATES, INC. ENGINEERS/ARCHITECTS/PLANNERS CHICAGO, ILLINOIS	PLOT SCALE = #SCALE#	CHECKED - KDA	REVISED -											SCALE: 1"=50'					SHEET NO.	OF	SHEETS	STA. 82+00	TO STA. 96+00	ILLINOIS FED. AID PROJECT				
	PLOT DATE = 12-26-2012	DATE = 10/19/12	REVISED -																									

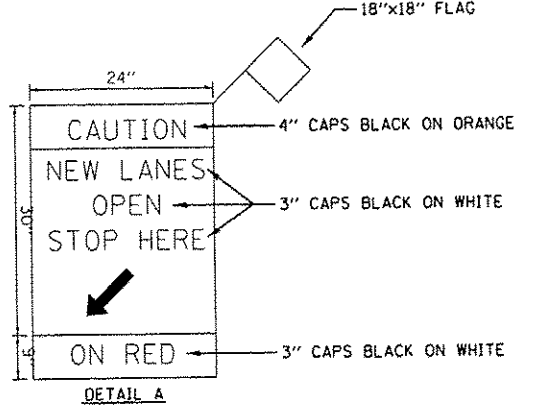


MAINTENANCE OF TRAFFIC LEGEND

	WORK AREA		TRAFFIC DIRECTION		ARROW BOARD		PVT MK - LINE 4" WHITE		PVT MK - LINE 24" WHITE
	TEMPORARY PAVEMENT (TO BE CONSTRUCTED IN CURRENT STAGE)		BARRICADE, TYPE III, W/ TYPE A BI-DIRECTIONAL FLASHING LIGHT		DOUBLE VERTICAL PANEL		PVT MK - LINE 4" YELLOW		PVT MK - LINE 8" WHITE
	TYPE II BARRICADES OR DRUMS W/ TYPE C STEADY BURN LIGHT		PROPOSED SIGN		TEMPORARY CONCRETE BARRIER		PVT MK - DBL 4" YELLOW		TEMP PVT MK (SEE GENERAL NOTES SHT G-03)
	TYPE B MONO-DIRECTIONAL FLASHING LIGHT		RAMP CLOSED		WET REF TEM TAPE T3 (SEE GENERAL NOTES SHT G-03)		PVT MK - LINE 6" WHITE		WET REF TEM TAPE T3 (SEE GENERAL NOTES SHT G-03)
					PERM PVT MK (SEE PVT MK PLANS)		PVT MK - LINE 12"		PERM PVT MK (SEE PVT MK PLANS)
							PVT MK - LTRS & SYMB		

NOTE:

- SIDEROAD, INTERSECTION, AND DRIVEWAY TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH DISTRICT DETAIL TC-10.
- SEE SHEET MOT-37 FOR LAWRENCE AVENUE MAINTENANCE OF TRAFFIC



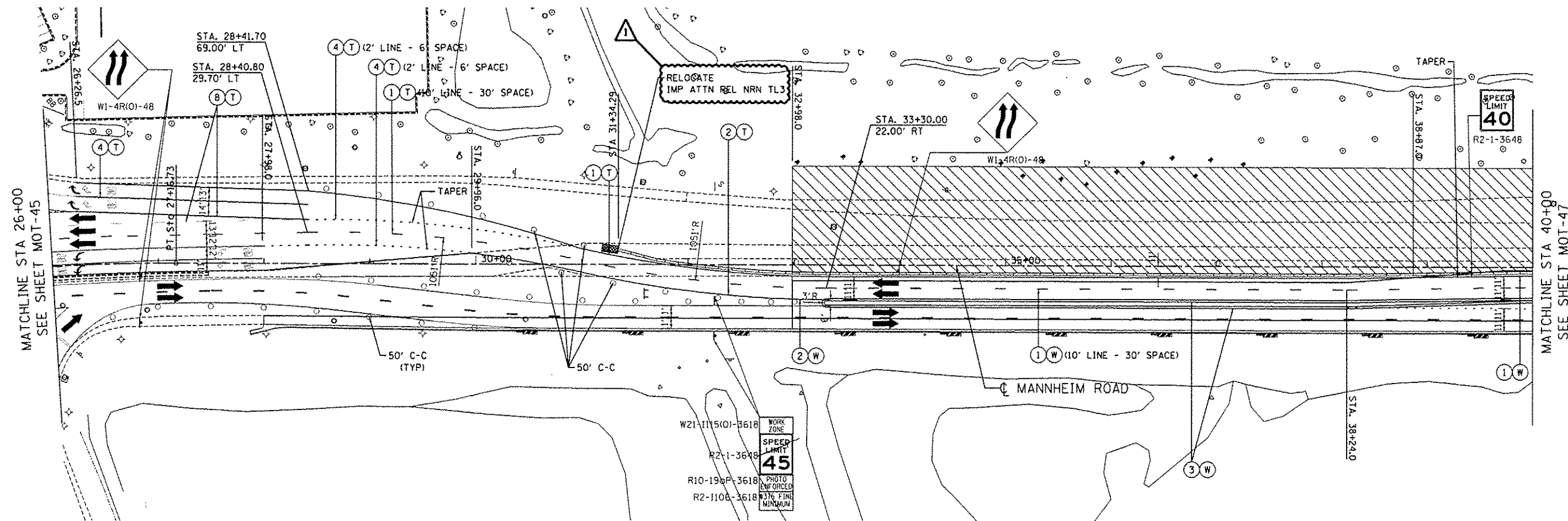
DETAIL A

FILE NAME: #FILE#		USER NAME: #USER#	DESIGNED: BRH	REVISED: 12/27/2012	MM	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION				MAINTENANCE OF TRAFFIC STAGE 1 - SUB-STAGE B				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			DRAWN: JZP	REVISED:											0105 WRS&HB	COOK	605	129
PLOT SCALE: #SCALE#			CHECKED: KDA	REVISED:										CONTRACT NO. 60637				
PLOT DATE: 12-26-2012			DATE: 10/19/12	REVISED:										ILLINOIS FED. AID PROJECT				

SCALE: 1"=50' SHEET NO. OF SHEETS STA. 54+00 TO STA. 68+00

TENG TENG & ASSOCIATES, INC. ENGINEERS/ARCHITECTS/PLANNERS CHICAGO, ILLINOIS

MOT-32



MAINTENANCE OF TRAFFIC LEGEND

	WORK AREA		TRAFFIC DIRECTION		ARROW BOARD		1 PVT MK - LINE 4" WHITE		7 PVT MK - LINE 24" WHITE
	TEMPORARY PAVEMENT (TO BE CONSTRUCTED IN CURRENT STAGE)		BARRICADE, TYPE III, W/ TYPE A BI-DIRECTIONAL FLASHING LIGHT		DOUBLE VERTICAL PANEL		2 PVT MK - LINE 4" YELLOW		8 PVT MK - LINE 8" WHITE
			TYPE II BARRICADES OR DRUMS W/ TYPE C STEADY BURN LIGHT		PROPOSED SIGN		3 PVT MK - DBL 4" YELLOW		T TEMP PVT MK (SEE GENERAL NOTES SHT G-03)
			TYPE B MONO-DIRECTIONAL FLASHING LIGHT		TEMPORARY CONCRETE BARRIER		4 PVT MK - LINE 6" WHITE		W WET REF TEM TAPE T3 (SEE GENERAL NOTES SHT G-03)
					RAMP CLOSED		5 PVT MK - LINE 12"		P PERM PVT MK (SEE PVT MK PLANS)
							6 PVT MK - LTRS & SYMB		

NOTE:

- SIDEROAD, INTERSECTION, AND DRIVEWAY TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH DISTRICT DETAIL TC-10.

FILE NAME =		USER NAME = #USER#		DESIGNED - BRH	REVISED - 12/27/2012 MM	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		MAINTENANCE OF TRAFFIC STAGE 2		F.A. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
#FILE#				DRAWN - JZP	REVISED -						0105 WRS&HB	COOK	602 134
PLOT SCALE = #SCALE#				CHECKED - KDA	REVISED -					CONTRACT NO. 60G37			
PLOT DATE = 12-26-2012				DATE - 10/19/12	REVISED -			SCALE: 1"=50'	SHEET NO. OF SHEETS	STA. 26+00 TO STA. 40+00	ILLINOIS FED. AID PROJECT		

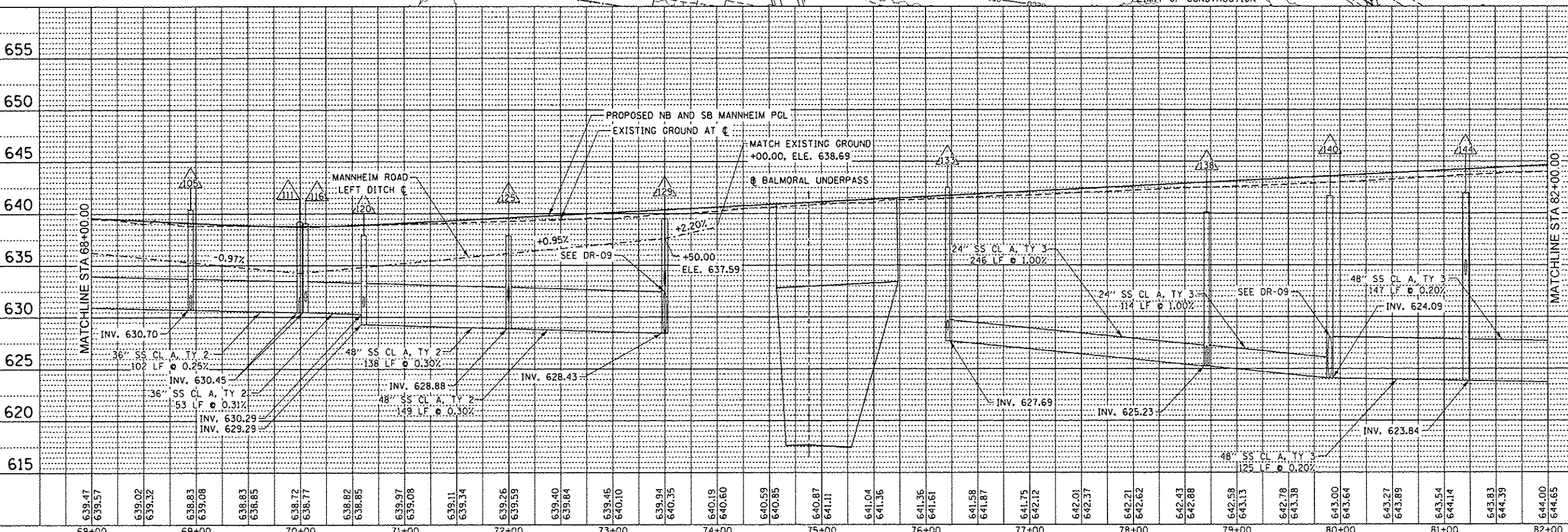
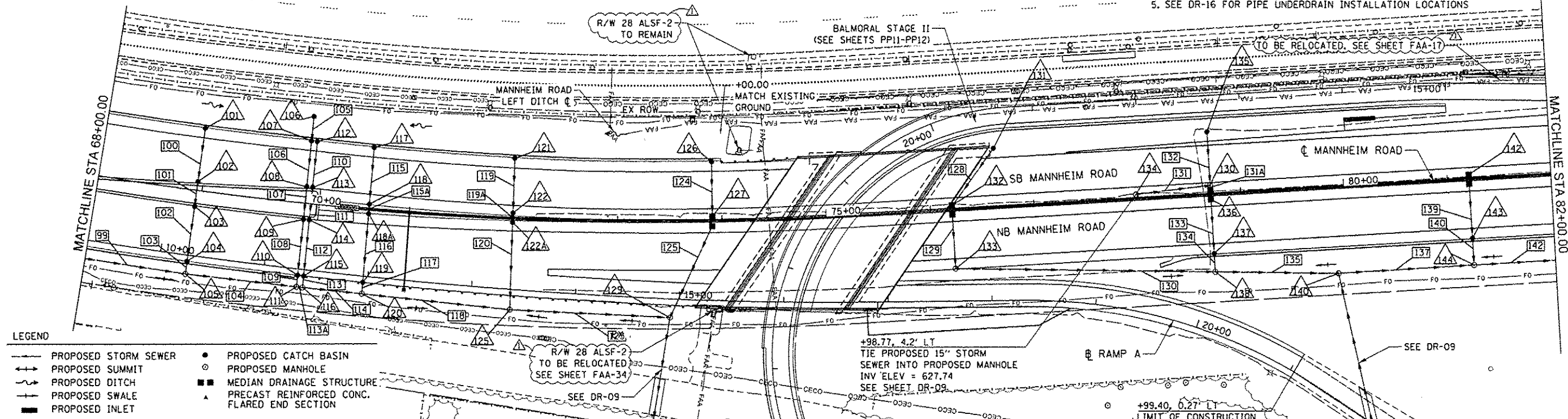
TENG TENG & ASSOCIATES, INC.
ENGINEERS/ARCHITECTS/PLANNERS
CHICAGO, ILLINOIS

MOT-46

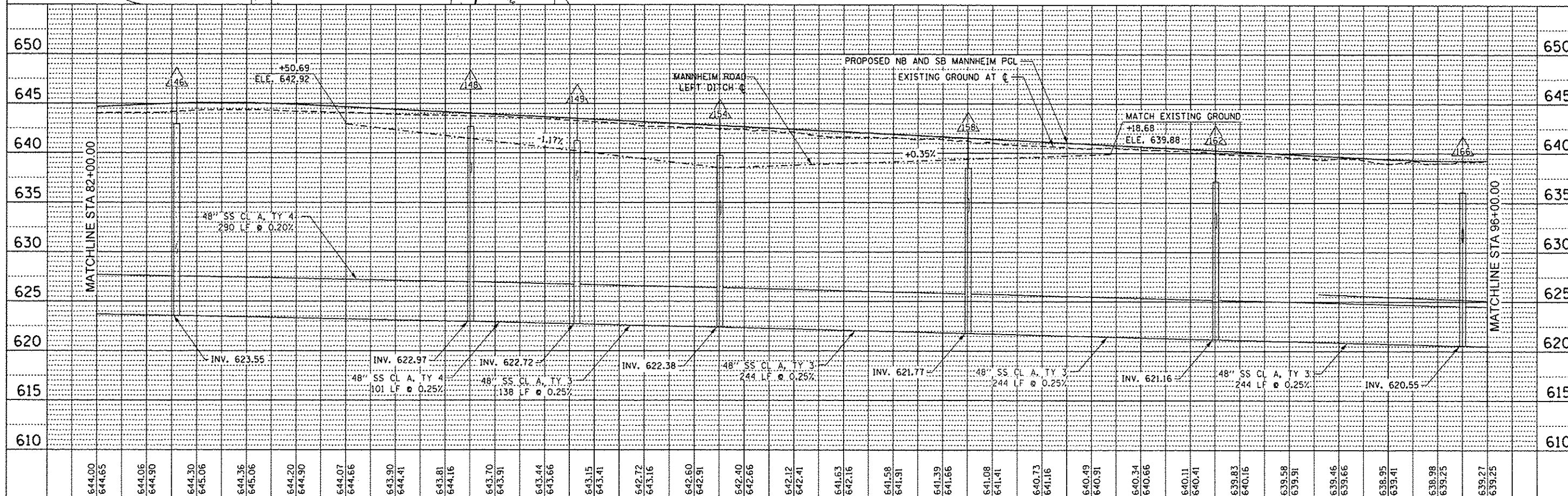
PLAN	DATE
BY	
CHECKED	
DATE	
NO.	

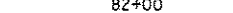
PROFILE	DATE
BY	
CHECKED	
DATE	
NO.	

- NOTES:
1. ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED
 2. ALL STATIONING AND OFFSET MEASUREMENTS ARE OFF ϕ MANNHEIM RD
 3. ALL PIPE DIAMETERS ARE IN INCHES (IN) UNLESS OTHERWISE NOTED
 4. REFER TO ROADWAY PROFILE PLANS FOR ALL ROADWAY PROFILE SLOPE AND CURVE GEOMETRY
 5. SEE DR-16 FOR PIPE UNDERDRAIN INSTALLATION LOCATIONS



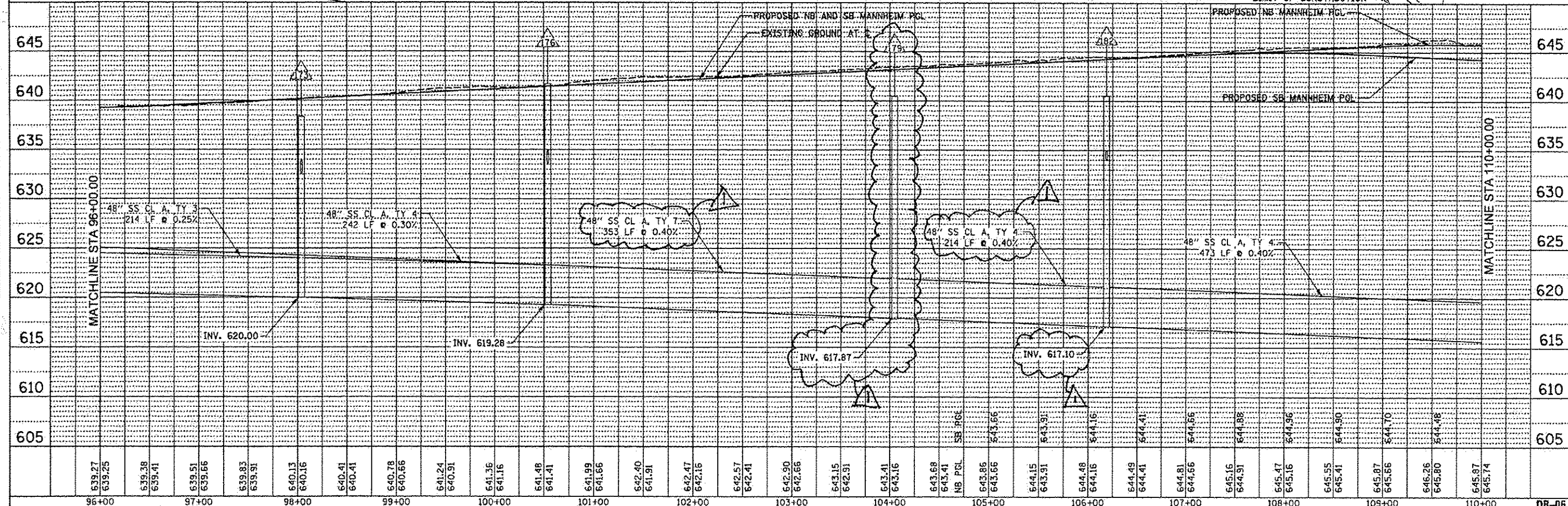
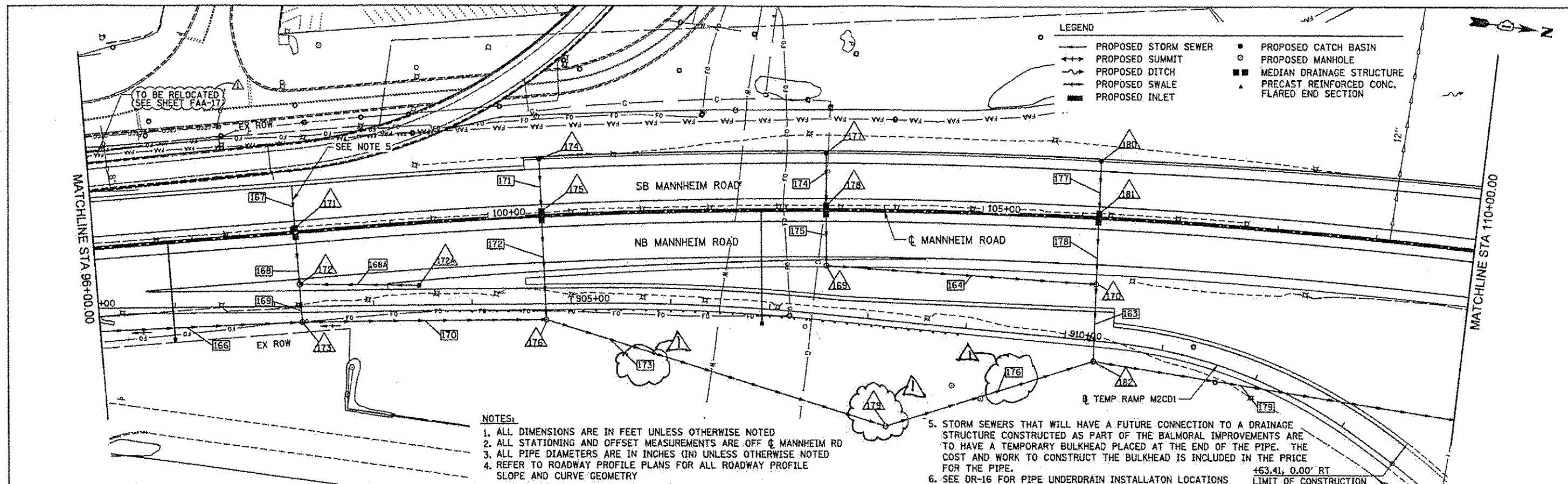
68+00	69+00	70+00	71+00	72+00	73+00	74+00	75+00	76+00	77+00	78+00	79+00	80+00	81+00	82+00																																											
639.47	639.57	639.02	639.32	638.83	639.08	638.83	638.85	638.72	638.77	638.82	638.85	639.37	639.08	639.11	639.34	639.26	639.59	639.40	639.84	639.46	640.10	639.94	640.35	640.19	640.60	640.59	640.85	640.87	641.11	641.04	641.36	641.36	641.61	641.58	641.87	641.75	642.12	642.01	642.37	642.21	642.62	642.43	642.88	642.58	643.13	642.78	643.38	643.00	643.64	643.27	643.89	643.54	644.14	643.83	644.39	644.00	644.65



82+00		83+00		84+00		85+00		86+00		87+00		88+00		89+00		90+00		91+00		92+00		93+00		94+00		95+00		96+00		DR-05			
		USER NAME = mkoar		DESIGNED MAM/PMS		REVISED -		STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION										DRAINAGE PLAN AND PROFILE – MANNHEIM ROAD										F.A.P. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN PMS		REVISED -		330	0105 WRS&HB																					COOK	605	182			
		PLOT SCALE = 50:1		CHECKED MAM		REVISED -																											
		PLOT DATE = 27-DEC-2012		DATE 10/19/12		REVISED  12/27/12 ADDENDUM 1																											
																		SCALE: 1" = 50'		SHEET NO. 5 OF 8 SHEETS		STA. 82+00.00 TO STA. 96+00.00		ILLINOIS FED. AID PROJECT									

PLAN	DATE
DESIGNED	
CHECKED	
DATE	
NO.	
FILE NAME	

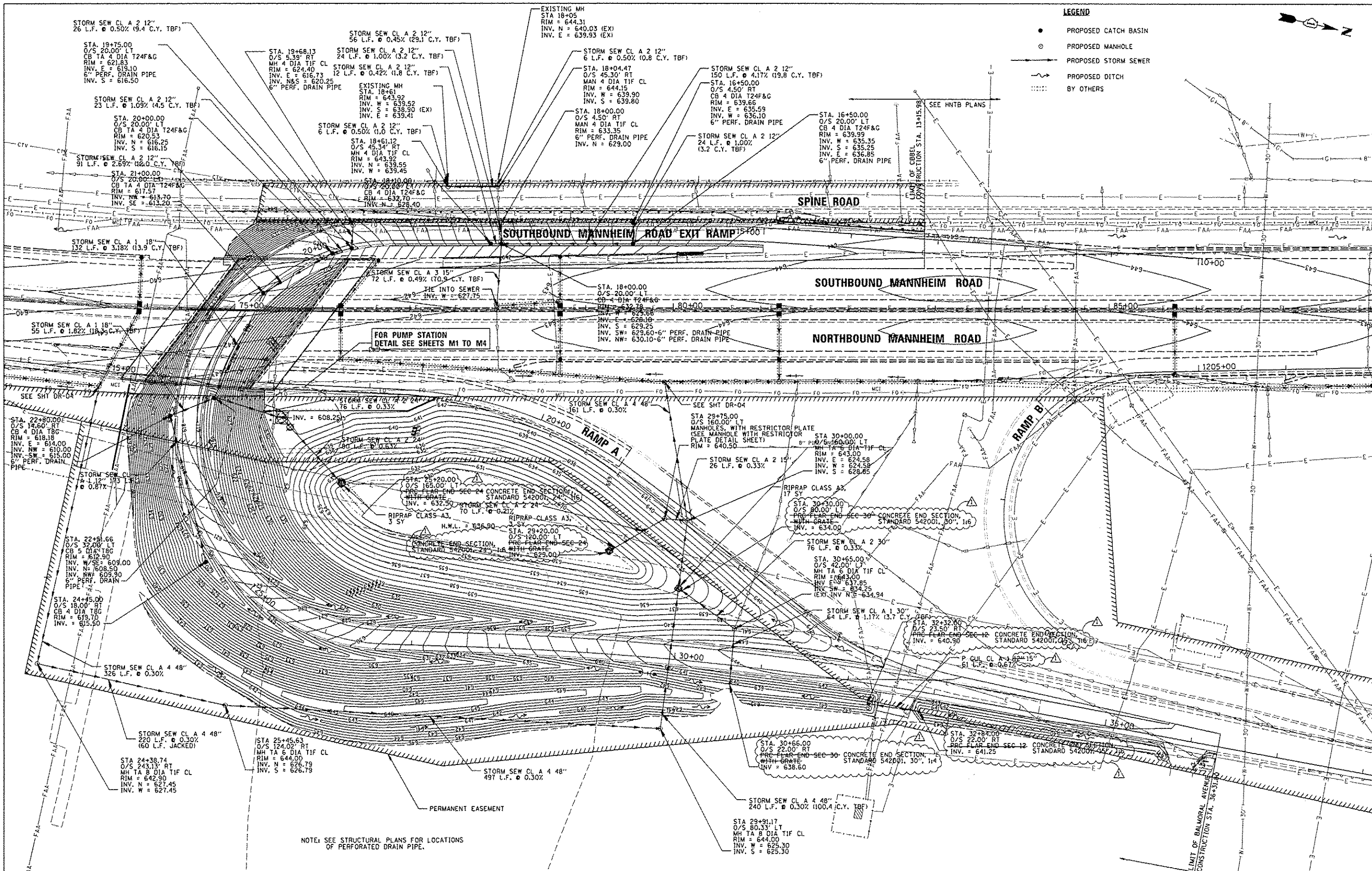
PROFILE	DATE
DESIGNED	
CHECKED	
DATE	
NO.	
FILE NAME	



USER NAME	DESIGNED	REVISION	STATE OF ILLINOIS	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
MAM/PHS	PHS		DEPARTMENT OF TRANSPORTATION	0105 WRS&HB	COOK	605	183
DATE	CHECKED	REVISION	SCALE: 1" = 50'	SHEET NO. 6 OF 8 SHEETS	STA. 96+00.00 TO STA. 110+00.00	CONTRACT NO. 60G37	ILLINOIS FED. AID PROJECT
10/19/12	MAM	12/27/12 ADDENDUM 1					

HNTB

FILE NAME: IP_PwPids47844\0105037-ahs-drainp\prf_06.dgn



CHRYSTOPHER B. BURKE ENGINEERS LTD. 1015 W. Higgins Road, Suite 100 Rosemont, Illinois 60018 (708) 947-0001	USER NAME: cgoldenberg PLOT SCALE: 1"=50' PLOT DATE: 12/21/2012	DESIGNED: NJM DRAWN: PWN CHECKED: SNS DATE: 12/21/2012	REVISED: - REVISED: - REVISED: - REVISED: 12/21/12 ADDENDUM 1	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		PROPOSED DRAINAGE PLAN BALMORAL UNDERPASS		F.A. RTE. 330 SECTION 0105 WRS&HB COUNTY COOK TOTAL SHEETS 605 SHEET NO. 186 CONTRACT NO. 60G37 ILLINOIS FED. AID PROJECT
---	---	---	--	---	--	--	--	---

FILE NAME: N:\AROSEMONT\11209\CA00_Sheets\11209\CA00-37-drain-drain-01.cvd

DRAINAGE STRUCTURE DATA

STRUCTURE NO.	DESCRIPTION	STATION	OFFSET	DIR.	PROPOSED RIM ELEV.	NORTH	SOUTH	EAST	WEST	PIPE ID-PIPE SIZE NORTH	PIPE ID-PIPE SIZE SOUTH	PIPE ID-PIPE SIZE EAST	PIPE ID-PIPE SIZE WEST	DOT SHEET NO.	NOTES:
145	NOT USED														
146	6' DIA MH TY A TIF, CL	82+79.93	82.7	R	641.83	623.55	623.55			143 - DIA 48"	142 - DIA 48"			DR-05	
147	DRAINAGE STRUCTURE TYPE 1 T20	85+75.50	0.0		643.75			638.88				144 - DIA 12"		DR-05	
148	6' DIA MH TY A TIF, CL	85+75.50	74.0	R	643.03	622.97	622.97		638.00	145 - DIA 48"	143 - DIA 48"		144 - DIA 12"	DR-05	REPLACE CONE RISER WITH REINFORCED FLAT SLAB TOP
149	6' DIA MH TY A TIF, CL	86+82.45	89.6	R	641.18	622.72	622.72			146 - DIA 48"	145 - DIA 48"			DR-05	
150	4' DIA CB TY A T8	88+25.60	85.0	L	638.70			635.72				147 - DIA 12"		DR-05	
151	4' DIA CB TY A T24	88+25.60	69.5	L	641.84			635.61	635.61			148 - DIA 12"	147 - DIA 12"	DR-05	
152	DRAINAGE STRUCTURE TYPE 1 T20	88+25.60	0.0		642.49			634.46	634.96					DR-05	
153	4' DIA CB TY A T24	88+25.60	71.7	R	641.84			633.80	633.80			149 - DIA 18"	148 - DIA 12"	DR-05	
154	6' DIA MH TY A TIF, CL	88+25.60	86.3	R	640.17	622.38	622.38		633.70	151 - DIA 48"	146 - DIA 48"		150 - DIA 18"	DR-05	
155	4' DIA CB TY A T24	90+75.13	69.5	L	640.59			635.07				152 - DIA 18"		DR-05	
156	DRAINAGE STRUCTURE TYPE 1 T20	90+75.13	0.0		641.25			634.73	634.73			153 - DIA 18"	152 - DIA 18"	DR-05	
157	4' DIA CB TY A T24	90+75.13	69.5	R	640.60			634.09	634.09			154 - DIA 18"	153 - DIA 18"	DR-05	
158	6' DIA MH TY A TIF, CL	90+75.13	84.1	R	638.46	621.77	621.77		634.00	155 - DIA 48"	151 - DIA 48"		154 - DIA 18"	DR-05	
159	NOT USED														
160	DRAINAGE STRUCTURE TYPE 1 T20	93+25.50	0.0		640.00			633.23	633.23			157 - DIA 18"	156 - DIA 18"	DR-05	
161	4' DIA CB TY A T24	93+25.50	69.5	R	639.34			632.59	632.59			158 - DIA 18"	157 - DIA 18"	DR-05	
162	6' DIA MH TY A TIF, CL	93+25.50	84.1	R	637.15	621.16	621.16		632.50	159 - DIA 48"	155 - DIA 48"		158 - DIA 18"	DR-05	
163	NOT USED														
164	NOT USED														
165	DRAINAGE STRUCTURE TYPE 2 T22	95+75.00	0.0		638.97	631.78		631.78	631.78	165 - DIA 12"		162 - DIA 18"	161 - DIA 18"	DR-05	
166	6' DIA MH TY A TIF, OL	95+75.00	84.1	R	635.81	620.54	620.55		631.00	166 - DIA 48"	159 - DIA 48"		162 - DIA 18"	DR-05	REPLACE CONE RISER WITH REINFORCED FLAT SLAB TOP
167	NOT USED														
168	DRAINAGE STRUCTURE TYPE 1 T20	95+85.00	0.0		638.97		631.85					165 - DIA 12"		DR-05	
169	4' DIA MH TY A TIF, CL	103+41	56.5	R	641.83	634.54			634.64	164 - DIA 18"			175 - DIA 18"	DR-06	
170	4' DIA MH TY A TIF, CL	106+17.65	67.4	R	641.99		631.84	631.64	634.72		164 - DIA 18"	163 - DIA 18"	178 - DIA 12"	DR-06	
171	DRAINAGE STRUCTURE TYPE 1 T20	98+04.00	0.0		639.89			633.81	633.81			168 - DIA 12"	167 - DIA 12"	DR-06	
172A	4' DIA CB TY A TIF, OL	99+25.00	63.5	R	639.62		634.51				168A - DIA 12"	168A - DIA 12"		DR-06	
172	4' DIA MH TY A TIF, CL	98+04.00	52.6	R	639.62	633.34		632.84	633.34	168A - DIA 12"		169 - DIA 18"	168 - DIA 12"	DR-06	
173	6' DIA MH TY A TIF, CL	98+04.00	91.4	R	638.59	620.00	620.00		632.50	170 - DIA 48"	166 - DIA 48"		169 - DIA 18"	DR-06	
174	4' DIA CB TY A T24	100+54.00	57.5	L	641.74			635.01				171 - DIA 18"		DR-06	
175	DRAINAGE STRUCTURE TYPE 1 T20	100+54.00	0.0		641.14			634.49	634.49			172 - DIA 18"	171 - DIA 18"	DR-06	
176	6' DIA MH TY A TIF, CL	100+54.00	105.5	R	641.66	619.28	619.28		633.50	173 - DIA 48"	170 - DIA 48"		172 - DIA 18"	DR-06	
177	4' DIA CB TY A T24	103+41.00	57.5	L	643.18			636.35				174 - DIA 12"		DR-06	
178	DRAINAGE STRUCTURE TYPE 1 T20	103+41.00	0.0		642.58			635.27	635.77			175 - DIA 18"	174 - DIA 12"	DR-06	
179	6' DIA MH TY A TIF, CL	104+04.70	219.2	R	640.44	617.87	617.87			176 - DIA 48"	173 - DIA 48"			DR-06	REPLACE CONE RISER WITH REINFORCED FLAT SLAB TOP
180	4' DIA CB TY A T24	106+16.25	57.3	L	644.56			636.04				177 - DIA 12"		DR-06	
181	DRAINAGE STRUCTURE TYPE 1 T20	106+16.25	0.0		643.96			635.46	635.46			178 - DIA 12"	177 - DIA 12"	DR-06	
182	6' DIA MH TY A TIF, CL	106+18.75	145.9	R	639.55	617.10	617.10		630.92	179 - DIA 48"	176 - DIA 48"		163 - DIA 18"	DR-06	
183	4' DIA CB TY A T24	111+10.00	65.4	L	644.23			633.80				180 - DIA 12"		DR-07	
184	4' DIA CB TY A T20	111+10.00	5.0	L	643.49	633.23		632.73	633.23	181 - DIA 12"		184 - DIA 18"	180 - DIA 12"	DR-07	
185	4' DIA CB TY A T20	112+85.00	8.4	L	642.86	634.94	634.94			182 - DIA 12"	181 - DIA 12"			DR-07	
186	4' DIA CB TY A T20	113+40.90	9.5	L	642.76	635.46	635.46			183 - DIA 12"	182 - DIA 12"			DR-07	
187	4' DIA CB TY A T20	113+50.89	9.5	L	642.76	635.52	635.52			183 - DIA 12"	183 - DIA 12"			DR-07	
188	4' DIA CB TY A T20	111+10.00	4.7	R	644.78	633.17		632.67	632.67	185 - DIA 12"		188 - DIA 18"	184 - DIA 18"	DR-07	
189	4' DIA CB TY A T20	112+85.00	8.1	R	642.86	634.88	634.88			186 - DIA 12"	185 - DIA 12"			DR-07	
190	4' DIA CB TY A T20	113+79.10	10.0	R	642.27	635.78	635.78			187 - DIA 12"	186 - DIA 12"			DR-07	
191	4' DIA CB TY A T20	113+89.11	10.0	R	642.24	635.84	635.84			187 - DIA 12"	187 - DIA 12"			DR-07	
192	6' DIA MH TY A TIF, CL	111+10.00	177.0	R	634.97	615.22	615.22		631.00	189 - DIA 48"	179 - DIA 48"		188 - DIA 18"	DR-07	REPLACE CONE RISER WITH REINFORCED FLAT SLAB TOP
193	4' DIA CB TY A T24	12+39.00	33.0	L	642.28	635.02	635.02			190 - DIA 12"	190 - DIA 12"			DR-08	CL LAWRENCE, REPLACE CONE RISER WITH REINFORCED FLAT SLAB TOP
193A	5' DIA MH TY A TIF, CL	12+39.00	5.5	L	642.82	634.80	634.80	633.80	633.80	190 - DIA 12"	190A - DIA 12"	191 - DIA 24"	76 - DIA 24"	DR-08	CL LAWRENCE, REPLACE CONE RISER WITH REINFORCED FLAT SLAB TOP
194	4' DIA CB TY A T24	12+34.00	29.5	R	642.03	635.10	635.10			190A - DIA 12"				DR-08	CL LAWRENCE, REPLACE CONE RISER WITH REINFORCED FLAT SLAB TOP
195	4' DIA CB TY A T24	14+00.00	31.8	L	640.90		635.32			192 - DIA 12"	192 - DIA 12"			DR-08	CL LAWRENCE, REPLACE CONE RISER WITH REINFORCED FLAT SLAB TOP
195A	5' DIA MH TY A TIF, CL	14+00.00	5.5	L	641.43	635.10	635.10	634.11	634.11	192 - DIA 12"	192A - DIA 12"	193 - DIA 24"	191 - DIA 24"	DR-08	CL LAWRENCE, REPLACE CONE RISER WITH REINFORCED FLAT SLAB TOP
196	4' DIA CB TY A T24	14+00.00	22.0	R	641.10	635.33	635.33			192A - DIA 12"				DR-08	CL LAWRENCE, REPLACE CONE RISER WITH REINFORCED FLAT SLAB TOP
197	5' DIA MH TY A TIF, CL	15+28.00	9.0	L	640.93			634.52				193 - DIA 24"		DR-08	CL LAWRENCE, REPLACE CONE RISER WITH REINFORCED FLAT SLAB TOP
198	4' DIA CB TY A T24	7+96.20	32.2	L	647.67		644.20			194 - DIA 12"				DR-02	CL MONTROSE, REPLACE CONE RISER WITH REINFORCED FLAT SLAB TOP
199	4' DIA CB TY A T24	7+91.65	31.3	R	647.67	643.90	643.90			194 - DIA 12"		195 - DIA 12"		DR-02	CL MONTROSE, REPLACE CONE RISER WITH REINFORCED FLAT SLAB TOP
200	4' DIA CB TY A T24	8+88.94	41.4	L	648.00		644.25			196 - DIA 12"	196 - DIA 12"			DR-02	CL MONTROSE, REPLACE CONE RISER WITH REINFORCED FLAT SLAB TOP
201	4' DIA CB TY A T24	8+96.09	32.4	R	648.22	643.50	643.40		643.40	196 - DIA 12"	197 - DIA 12"		195 - DIA 12"	DR-02	CL MONTROSE
202	12" FES	8+79.37	102.1	R	643.00	643.00				197 - DIA 12"				DR-02	CL MONTROSE



USER NAME: mhoss	DESIGNED: MAM/PMS	REVISED: -
PLOT SCALE: 1"=50'	DRAWN: PMS	REVISED: -
PLOT DATE: 27-DEC-2012	CHECKED: MAM	REVISED: -
	DATE: 12/28/12	ADDENDUM 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE STRUCTURE SCHEDULE

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE. 330	SECTION 0105 WRS&HB	COUNTY COOK	TOTAL SHEETS 805	SHEET NO. 189
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

DR-12

FILE NAME: J:\P\WP\47644\0168037\sh-drainstr1.sch.03.dgn

DRAINAGE PIPE DATA

PIPE NO.	DESCRIPTION	SIZE (IN)	LENGTH	SLOPE	TRENCH BACKFILL	100' SHEET NO.	FROM NODE	TO NODE	NOTES
145	STORM SEWERS, CLASS A, TYPE 4	48	101	0.25%	1.0	DR-05	148	149	WATERMAIN QUALITY PIPE @ 10' ON EITHER SIDE OF PROPOSED WATERMAIN CROSSING
146	STORM SEWERS, CLASS A, TYPE 3	48	138	0.25%	1.0	DR-05	149	154	
147	STORM SEWERS, CLASS A, TYPE 2	12	12	0.98%	1.0	DR-05	150	151	
148	STORM SEWERS, CLASS A, TYPE 2	12	65	1.01%	35.3	DR-05	151	152	
149	STORM SEWERS, CLASS A, TYPE 2	18	66	1.00%	43.4	DR-05	152	153	
150	STORM SEWERS, CLASS A, TYPE 2	18	10	1.05%	1.0	DR-05	153	154	
151	STORM SEWERS, CLASS A, TYPE 3	48	244	0.25%	1.0	DR-05	154	158	
152	STORM SEWERS, CLASS A, TYPE 2	18	35	0.99%	21.4	DR-05	155	156	
153	STORM SEWERS, CLASS A, TYPE 2	18	65	1.00%	26.2	DR-05	156	157	
154	STORM SEWERS, CLASS A, TYPE 2	18	10	0.95%	1.0	DR-05	157	158	
155	STORM SEWERS, CLASS A, TYPE 3	48	244	0.25%	1.0	DR-05	158	162	
156	STORM SEWERS, CLASS A, TYPE 2	18	65	1.00%	16.3	DR-05	BULKHEAD	160	
157	STORM SEWERS, CLASS A, TYPE 2	18	64	1.00%	28.3	DR-05	160	161	
158	STORM SEWERS, CLASS A, TYPE 2	18	10	0.95%	1.0	DR-05	161	162	
159	STORM SEWERS, CLASS A, TYPE 3	48	244	0.25%	1.0	DR-05	162	166	
160	NOT USED								
161	STORM SEWERS, CLASS A, TYPE 2	18	42	0.99%	18.0	DR-05	BULKHEAD	165	
162	STORM SEWERS, CLASS A, TYPE 2	18	78	1.01%	22.1	DR-05	165	166	
163	STORM SEWERS, CLASS A, TYPE 2	18	73	1.00%	37.0	DR-06	170	182	
164	STORM SEWERS, CLASS A, TYPE 2	18	270	1.00%	1.0	DR-06	169	170	
165	STORM SEWERS, CLASS A, TYPE 2	12	7	1.00%	4.1	DR-05	168	165	
166	STORM SEWERS, CLASS A, TYPE 3	48	214	0.25%	1.0	DR-05 - DR-06	166	173	
167	STORM SEWERS, CLASS A, TYPE 2	12	71	1.00%	17.2	DR-06	BULKHEAD	171	
168A	STORM SEWERS, CLASS A, TYPE 2	12	117	1.00%	41.2	DR-06	172A	172	
168	STORM SEWERS, CLASS A, TYPE 2	12	47	1.00%	20.2	DR-06	171	172	
169	STORM SEWERS, CLASS A, TYPE 2	18	34	1.01%	11.3	DR-06	172	173	
170	STORM SEWERS, CLASS A, TYPE 4	48	242	0.30%	1.0	DR-06	173	176	
171	STORM SEWERS, CLASS A, TYPE 2	18	53	1.00%	22.9	DR-06	174	175	
172	STORM SEWERS, CLASS A, TYPE 2	18	98	1.00%	49.7	DR-06	175	176	
173	STORM SEWERS, CLASS A, TYPE 2	48	353	0.40%	1.0	DR-06	176	179	WATERMAIN QUALITY PIPE @ 10' ON EITHER SIDE OF PROPOSED WATERMAIN CROSSING
174	STORM SEWERS, CLASS A, TYPE 2	12	98	1.00%	30.9	DR-06	177	178	
175	STORM SEWERS, CLASS A, TYPE 2	18	63	1.00%	32.9	DR-06	178	169	
176	STORM SEWERS, CLASS A, TYPE 4	48	214	0.40%	1.0	DR-06	179	182	
177	STORM SEWERS, CLASS A, TYPE 2	12	58	1.01%	46.6	DR-06	180	181	
178	STORM SEWERS, CLASS A, TYPE 2	12	74	1.00%	74.7	DR-06	181	170	
179	STORM SEWERS, CLASS A, TYPE 4	48	473	0.40%	280.3	DR-06 - DR-07	182	192	
180	STORM SEWERS, CLASS A, TYPE 2	12	57	1.01%	62.6	DR-07	183	184	
181	STORM SEWERS, CLASS A, TYPE 2	12	172	1.00%	154.3	DR-07	185	184	
182	STORM SEWERS, CLASS A, TYPE 2	12	52	1.00%	34.3	DR-07	186	185	
183	STORM SEWERS, CLASS A, TYPE 2	12	6	1.00%	3.6	DR-07	187	186	
184	STORM SEWERS, CLASS A, TYPE 2	18	6	1.07%	7.2	DR-07	184	188	
185	STORM SEWERS, CLASS A, TYPE 2	12	171	1.00%	172.9	DR-07	189	188	
186	STORM SEWERS, CLASS A, TYPE 2	12	90	1.00%	54.0	DR-07	190	189	
187	STORM SEWERS, CLASS A, TYPE 2	12	6	1.00%	2.8	DR-07	191	190	
188	STORM SEWERS, CLASS A, TYPE 2	18	168	1.00%	34.4	DR-07	188	192	
189	STORM SEWERS, CLASS A, TYPE 4	48	76	0.40%	1.0	DR-07	192	EX MH	
190	WATERMAIN QUALITY PIPE	12	22	1.00%	15.3	DR-08	193	193A	
190A	WATERMAIN QUALITY PIPE	12	30	1.00%	97.4	DR-08	194	193A	
191	STORM SEWERS, CLASS A, TYPE 2	24	156	0.20%	97.4	DR-08	195A	193A	WESTERN 20' OF PIPE SHALL BE WATERMAIN QUALITY
192	WATERMAIN QUALITY PIPE	12	22	1.01%	8.7	DR-08	195	195A	
192A	STORM SEWERS, CLASS A, TYPE 2	12	23	1.00%	49.7	DR-08	196	195A	
193	STORM SEWERS, CLASS A, TYPE 2	24	124	0.33%	49.7	DR-08	197	195A	
194	STORM SEWERS, CLASS A, TYPE 1	12	61	0.50%	1.2	DR-02	198	199	
195	STORM SEWERS, CLASS A, TYPE 2	12	101	0.50%	12.9	DR-02	199	201	
196	STORM SEWERS, CLASS A, TYPE 2	12	71	1.06%	8.4	DR-02	200	201	
197	STORM SEWERS, CLASS A, TYPE 1	12	70	0.58%	1.0	DR-02	201	202	

△

353
38
63

214
58
74

DR-15



USER NAME: a.mhajar

DESIGNED	MAM/PMS
----------	---------

REVISÉ

PLOT SCALE = 50:1

DRAWN PMS

REVISÉ

PLOT DATE = 27-DEC-2012

DATE

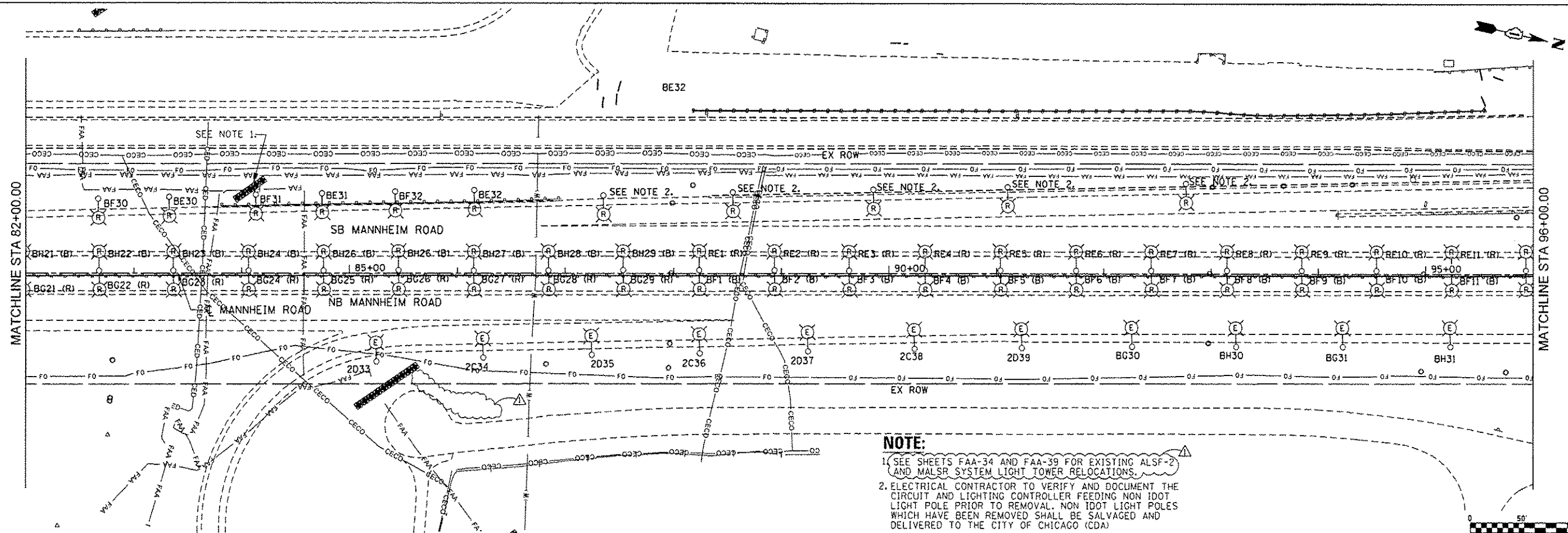
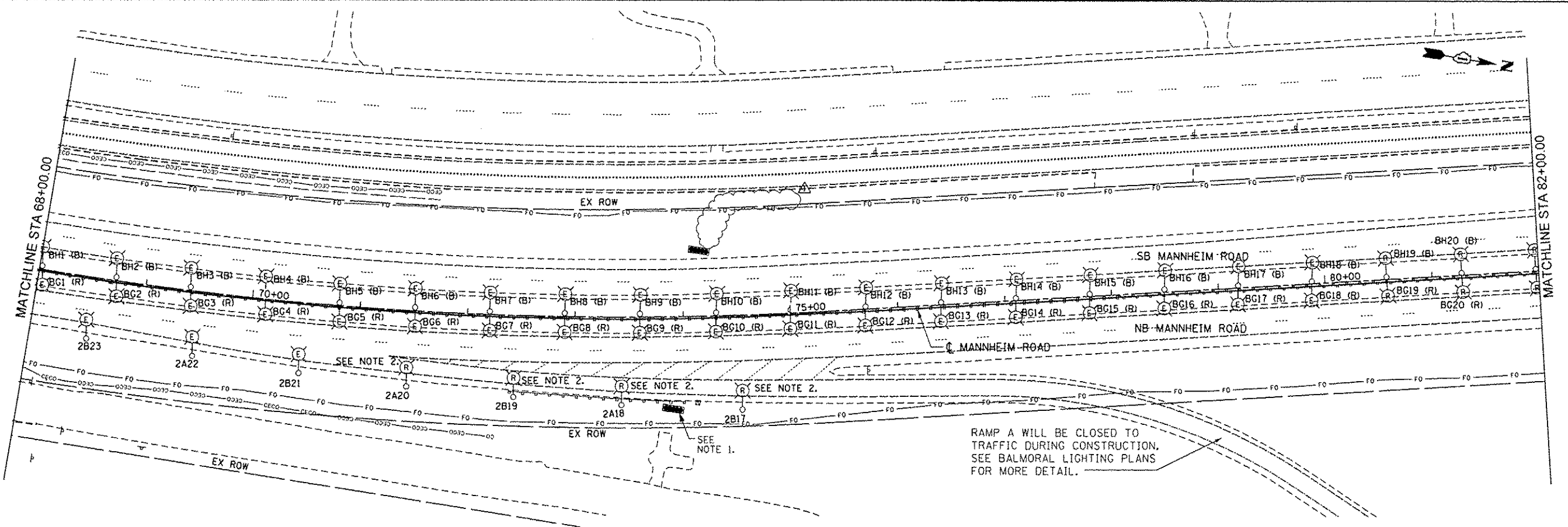
REVISION 1 12/28/12 ADDENDUM 1

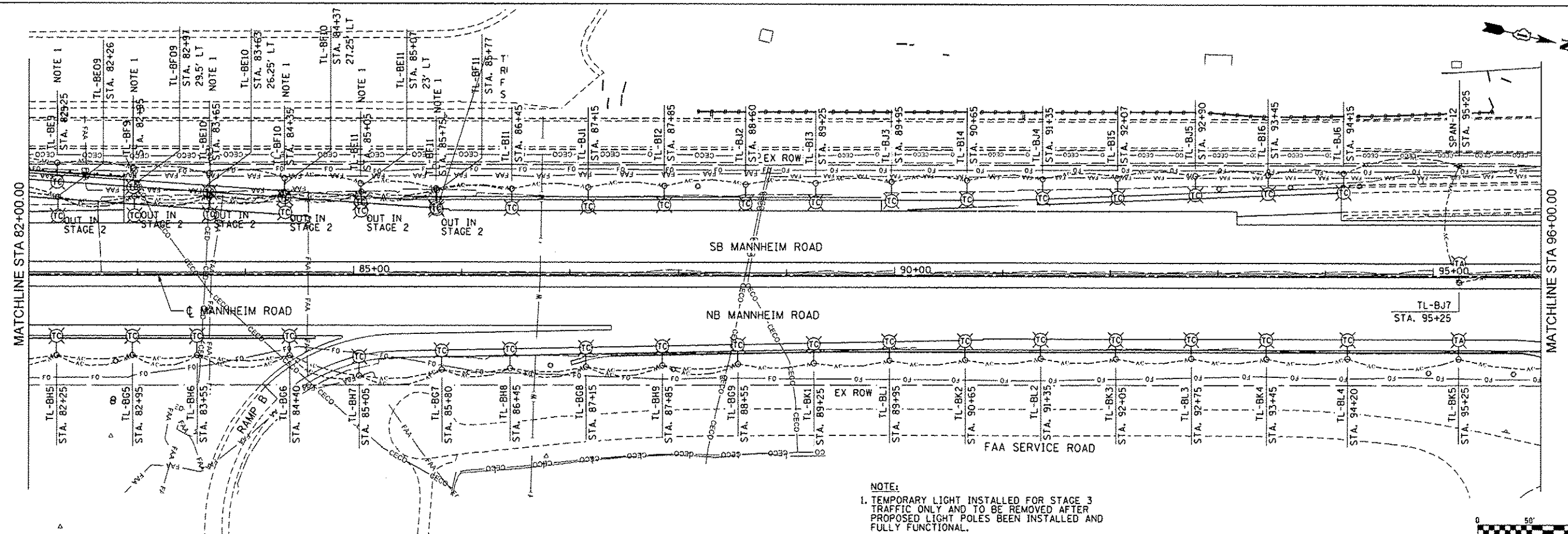
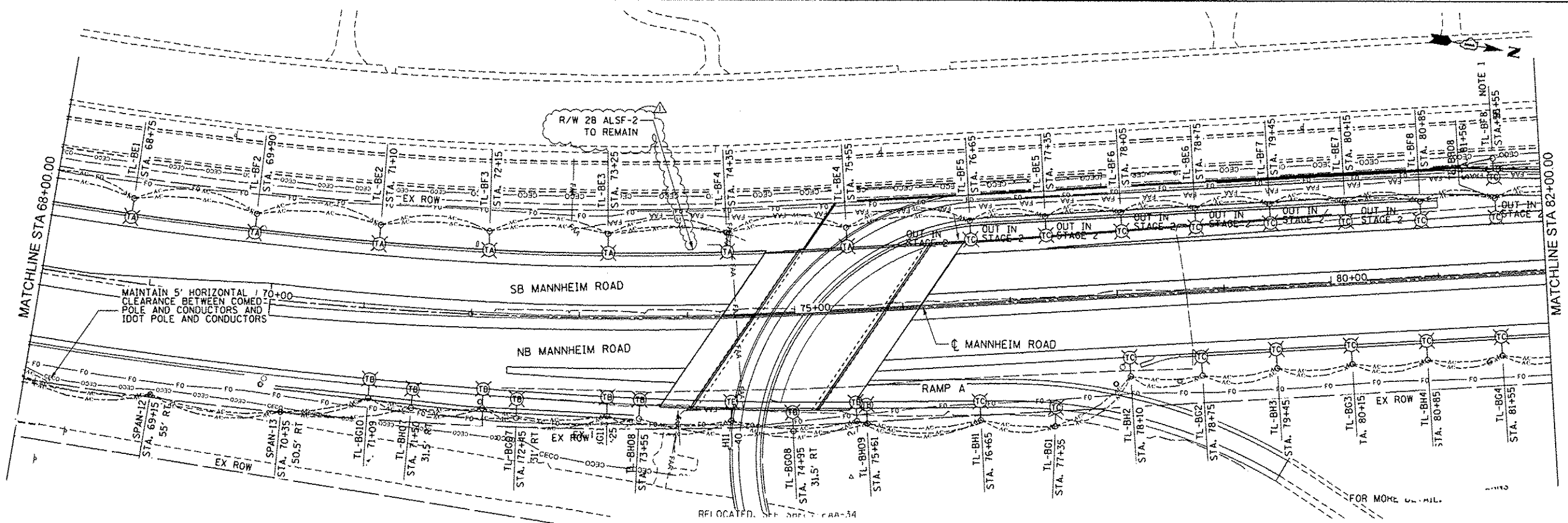
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE PIPE SCHEDULE

SCALE:	SHEET NO. 3 OF 5 SHEETS	STA.	TO STA.
--------	-------------------------	------	---------

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
33D	0105 WRS&HD	CODK	605	192
CONTRACT NO. 60637				
ILLINOIS FED. AID PROJECT				

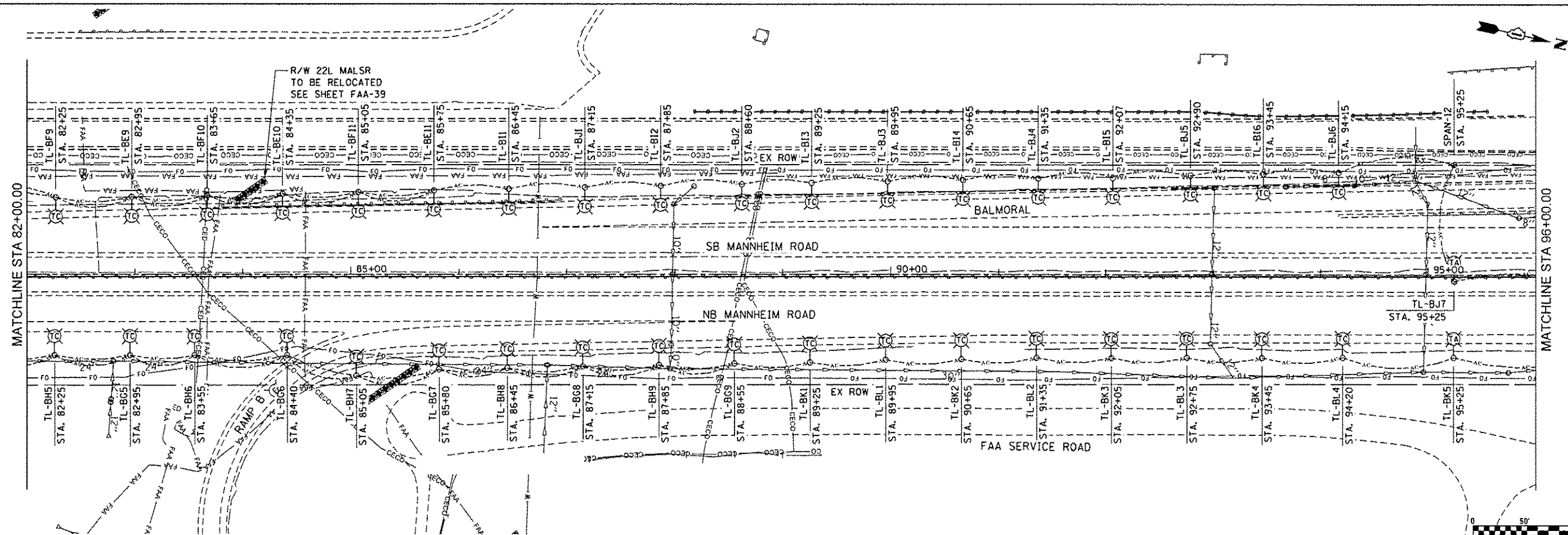
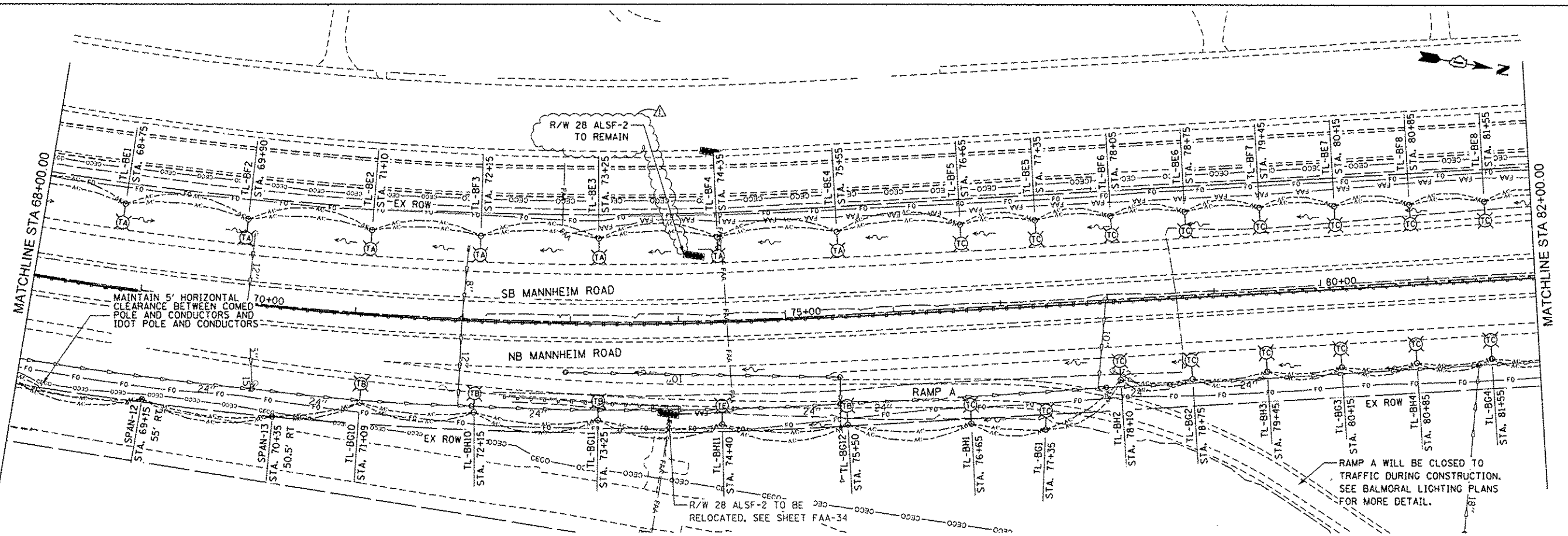




NOTE:
1. TEMPORARY LIGHT INSTALLED FOR STAGE 3
TRAFFIC ONLY AND TO BE REMOVED AFTER
PROPOSED LIGHT POLES BEEN INSTALLED AND
FULLY FUNCTIONAL.

0 50' 100' E-14

 Globetrotters* Engineering Corporation ENGINEERS ARCHITECTS 300 South Wacker Drive Chicago, Illinois 60606	USER NAME = mksdsv	DESIGNED LLS/CD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LIGHTING REMOVAL PLAN STAGE 3 MANHEIM ROAD				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN MMK/RL	REVISED -		330	0105 WRS&HB	COOK	605	300				
	PLOT SCALE = 5/8"=1"	CHECKED CD	REVISED -		CONTRACT NO. 60G37								
	PLOT DATE = 27-DEC-2012	DATE	REVISED 12/28/12 ADDENDUM 1		SCALE: 1" = 50' SHEET NO. 3 OF 5 SHEETS STA. 68+00.00 TO STA. 96+00.00				ILLINOIS FED. AID PROJECT				
	FILE NAME = J:\P\W\Frdms47844\0106037-shl-ETemp-RmvL Staging\3.dgn												



HNTB

USER NAME: mhoss	DESIGNED: KA	REVISED: -
PLOT SCALE: 50:1	DRAWN: MMK	REVISED: -
PLOT DATE: 27-DEC-2012	CHECKED: MCD	REVISED: -
	DATE:	REVISED: 12/28/12 ADDENDUM 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY LIGHTING PLAN
PRESTAGE
MANNHEIM ROAD

SCALE: 1" = 50' SHEET NO. 3 OF 5 SHEETS STA. 68+00.00 TO STA. 96+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	304
CONTRACT NO. 60637				
ILLINOIS FED. AID PROJECT				

FILE NAME: IP:\P\dm47844\0160637-htc\temp\light-prestage-B3.dgn

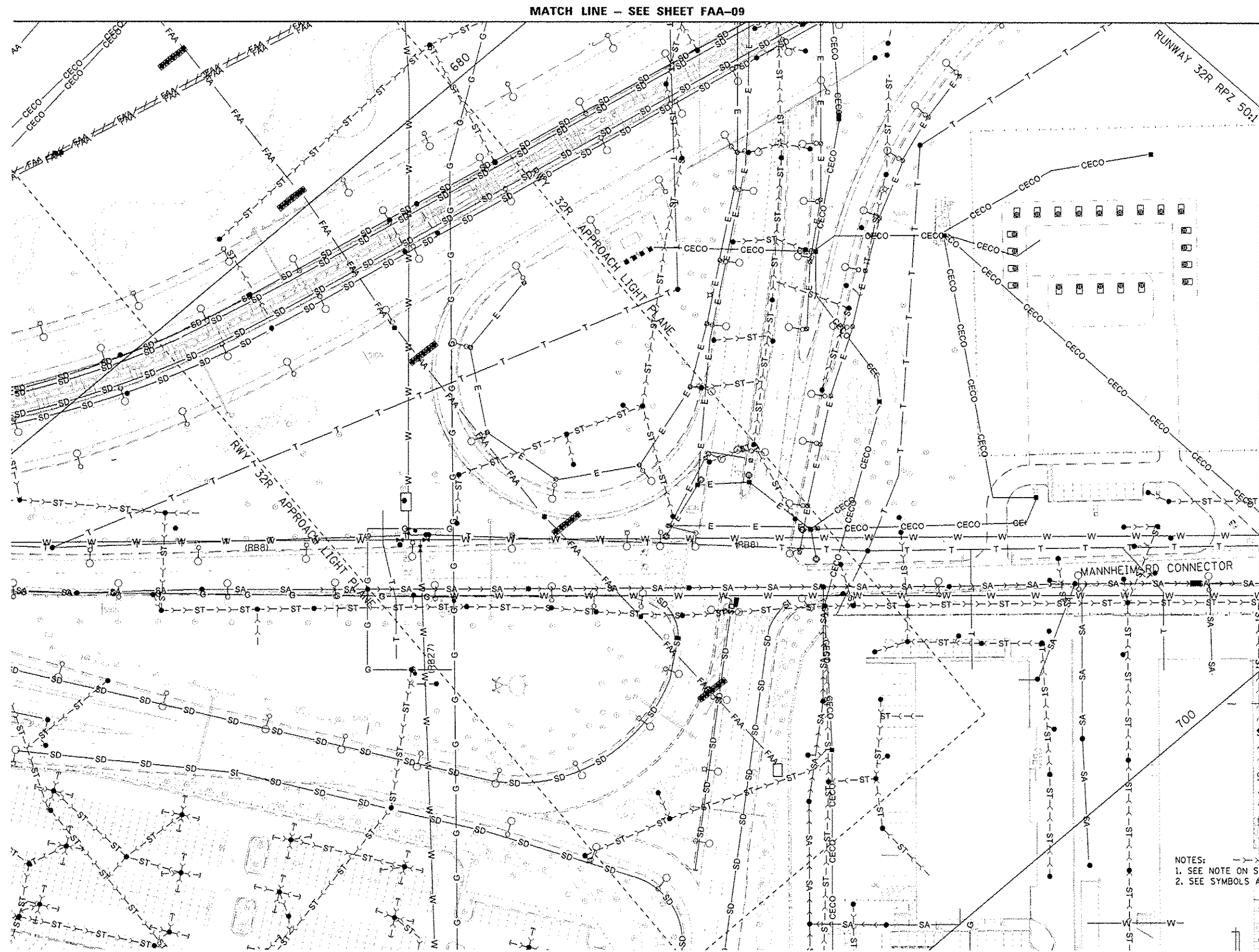
E-18

INDEX OF SHEETS – VOLUME 1

1	COVER SHEET - VOLUME 1
2	SIGNATURE SHEET
3	INDEX OF SHEETS - VOLUME 1
4	DISTRICT 1 DETAILS AND HIGHWAY STANDARDS
5	GENERAL NOTES, COMMITMENTS AND MIXTURE REQUIREMENTS
6 - 34	SUMMARY OF QUANTITIES
35 - 46	TYPICAL SECTIONS
47 - 52	SCHEDULE OF QUANTITIES
53 - 57	ALIGNMENT, TIES, AND BENCHMARKS
58 - 63	REMOVAL PLANS
64 - 75	ROADWAY PLANS AND PROFILES
76 - 81	ROADWAY DETAILS
82 - 88	ROADWAY JOINTING PLANS
89	MAINTENANCE OF TRAFFIC GENERAL NOTES AND STAGING
90 - 96	MAINTENANCE OF TRAFFIC TYPICAL SECTIONS
97 - 105	MAINTENANCE OF TRAFFIC - PRE-STAGE
106 - 132	MAINTENANCE OF TRAFFIC - STAGE 1
133 - 148	MAINTENANCE OF TRAFFIC - STAGE 2
149 - 157	MAINTENANCE OF TRAFFIC - STAGE 3
158 - 162	DETOUR PLANS
163 - 170	TEMPORARY INFORMATION SIGNS
171 - 177	EROSION AND SEDIMENT CONTROL PLANS
178 - 186	DRAINAGE PLAN AND PROFILES
187 - 192	DRAINAGE SCHEDULE
193 - 194	DRAINAGE DETAILS
195	UTILITY RELOCATION PLANS
196 - 200	PROPOSED PUMP STATION
201 - 206	PLAT OF HIGHWAYS
207 - 212	PAVEMENT MARKING AND SIGNING PLANS
213 - 215	SIGNING SCHEDULE OF QUANTITIES
216 - 220	SIGN PANEL DETAILS
221 - 223	SIGN DETAILS
224 - 253	SIGN STRUCTURES
254 - 259	LANDSCAPING PLANS
260 - 286	TRAFFIC SIGNAL PLANS AND DETAILS
287 - 323	LIGHTING PLANS
324 - 333	BALMORAL LIGHTING
334	RUNWAY CLEAR ZONES

INDEX OF SHEETS – VOLUME 2

335	COVER SHEET - VOLUME 2
336	INDEX OF SHEETS - VOLUME 2
337 - 362	STRUCTURE PLANS - 016-7943 NB MANNHEIM RD BRIDGE
363 - 389	STRUCTURE PLANS - 016-7942 SB MANNHEIM RD BRIDGE
390 - 402	STRUCTURE PLANS - 016-1400 WEST RETAINING WALL
403 - 416	STRUCTURE PLANS - 016-1401 EAST RETAINING WALL
417 - 419	STRUCTURE PLANS - BARRIER WALL
420 - 436	SOIL BORING LOGS
437 - 462	ITS PLANS
463 - 497	DISTRICT ONE DETAILS
498 - 572	CROSS SECTIONS - MANNHEIM ROAD
573	NOT USED
574 - 575	CROSS SECTIONS - MONTROSE AVENUE
576 - 579	CROSS SECTIONS - LAWRENCE AVENUE
580 - 581	CROSS SECTIONS - RAMP A
582 - 583	CROSS SECTIONS - RAMP B
584 - 586	CROSS SECTIONS - RAMP M2CD1
587 - 588	CROSS SECTIONS - RAMP EBNB
589	CROSS SECTIONS - RAMP SBEB
590 - 605	CROSS SECTIONS - BALMORAL UNDERPASS
605A - 605BN	FAA - FOTS LOOP 3 AND NAVAIDS RELOCATION



MATCH LINE - SEE SHEET FAA-11

- NOTES:
1. SEE NOTE ON SHEET FAA-09.
 2. SEE SYMBOLS AND LEGEND ON SHEET FAA-05.

ADDED SHEET
FAA-10

HNTB

USER NAME: mkostr	DESIGNED: CFB	REVISED: -
DRAWN: CFB	REVISION: -	
PLOT SCALE: 1/8"=1'	CHECKED: SPG	REVISED: -
PLOT DATE: 26-DEC-2012	DATE: -	REVISED: 12/28/12 ADDENDUM 1

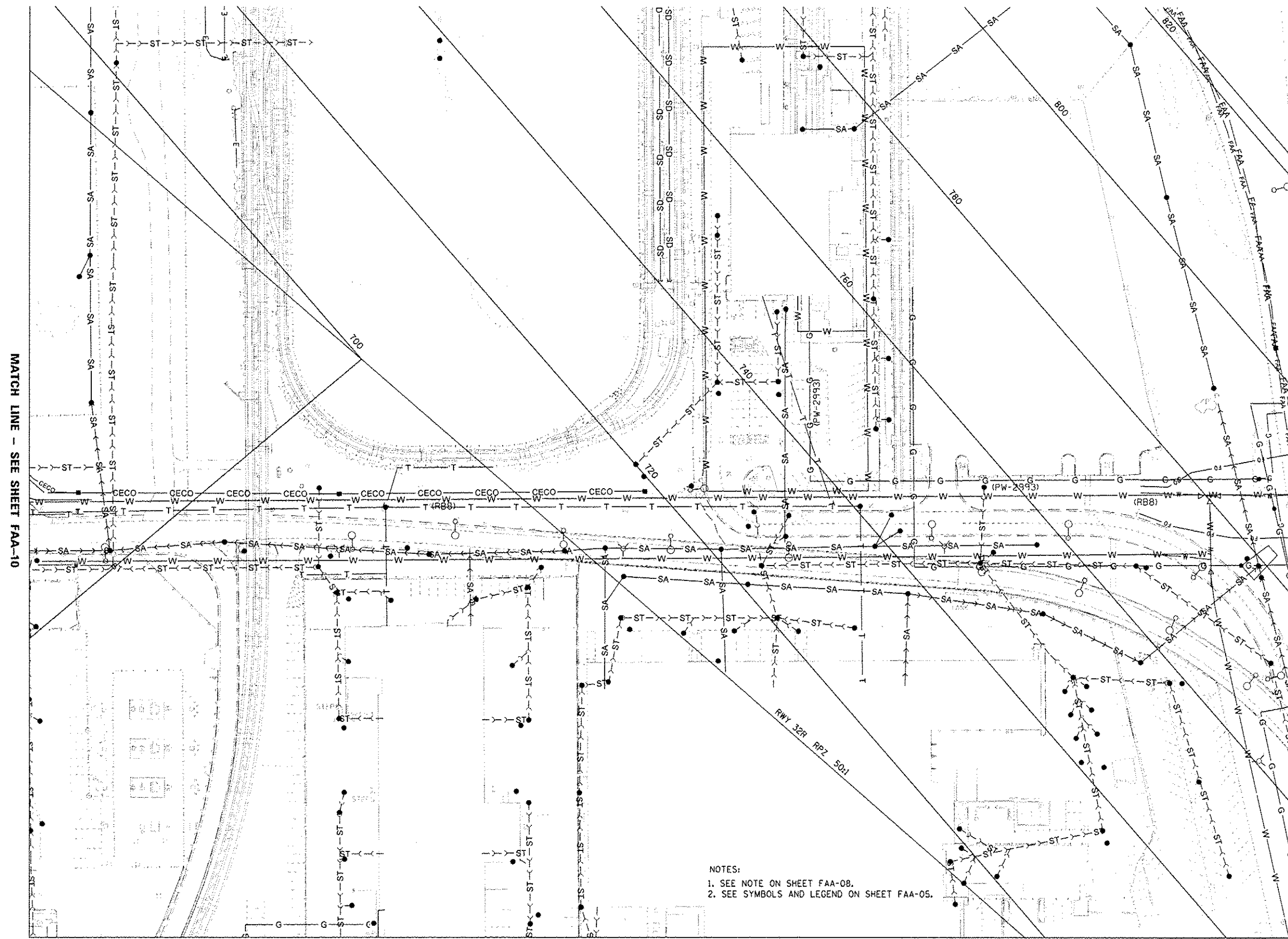
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOTS LOOP 3
EXISTING CONDITIONS AND COMPOSITE UTILITIES

SCALE: SHEET NO. 3 OF 7 SHEETS STA. TO STA.

F.A.P. RITE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	805J
				CONTRACT NO. 60637
ILLINOIS FED. AID PROJECT				

FILE NAME: 1P_PWDms47844\0160637-shr-FAA-0518.dgn



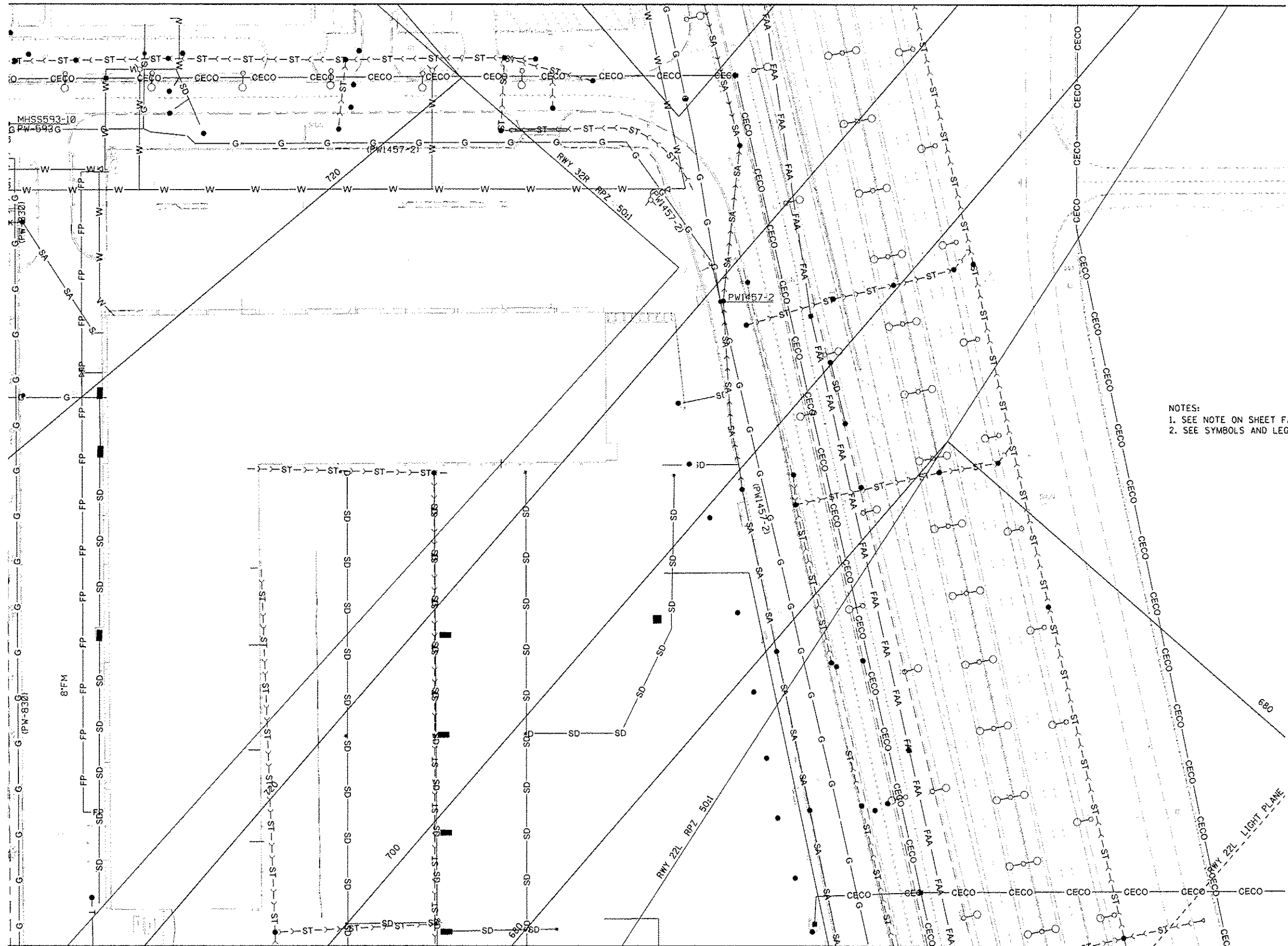
MATCH LINE - SEE SHEET FAA-12

① **ADDED SHEET**
FAA-11

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	605K
		CONTRACT NO. 60G37		
ILLINOIS		FED. AID PROJECT		

FILE NAME = IP_PWPIdmx47844\0162637-wht-FAAF0TSII.dgn

MATCH LINE - SEE SHEET FAA-11



NOTES:
1. SEE NOTE ON SHEET FAA-09.
2. SEE SYMBOLS AND LEGEND ON SHEET FAA-05.

MATCH LINE - SEE SHEET FAA-13

HNTB

USER NAME = mhw	DESIGNED CFB	REVISED -
PLAT SCALE = 1/8"=1'	DRAWN CFB	REVISED -
PLAT DATE = 26-DEC-2012	CHECKED SPG	REVISED -
	DATE	REVISED 12/28/12 ADDENDUM 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

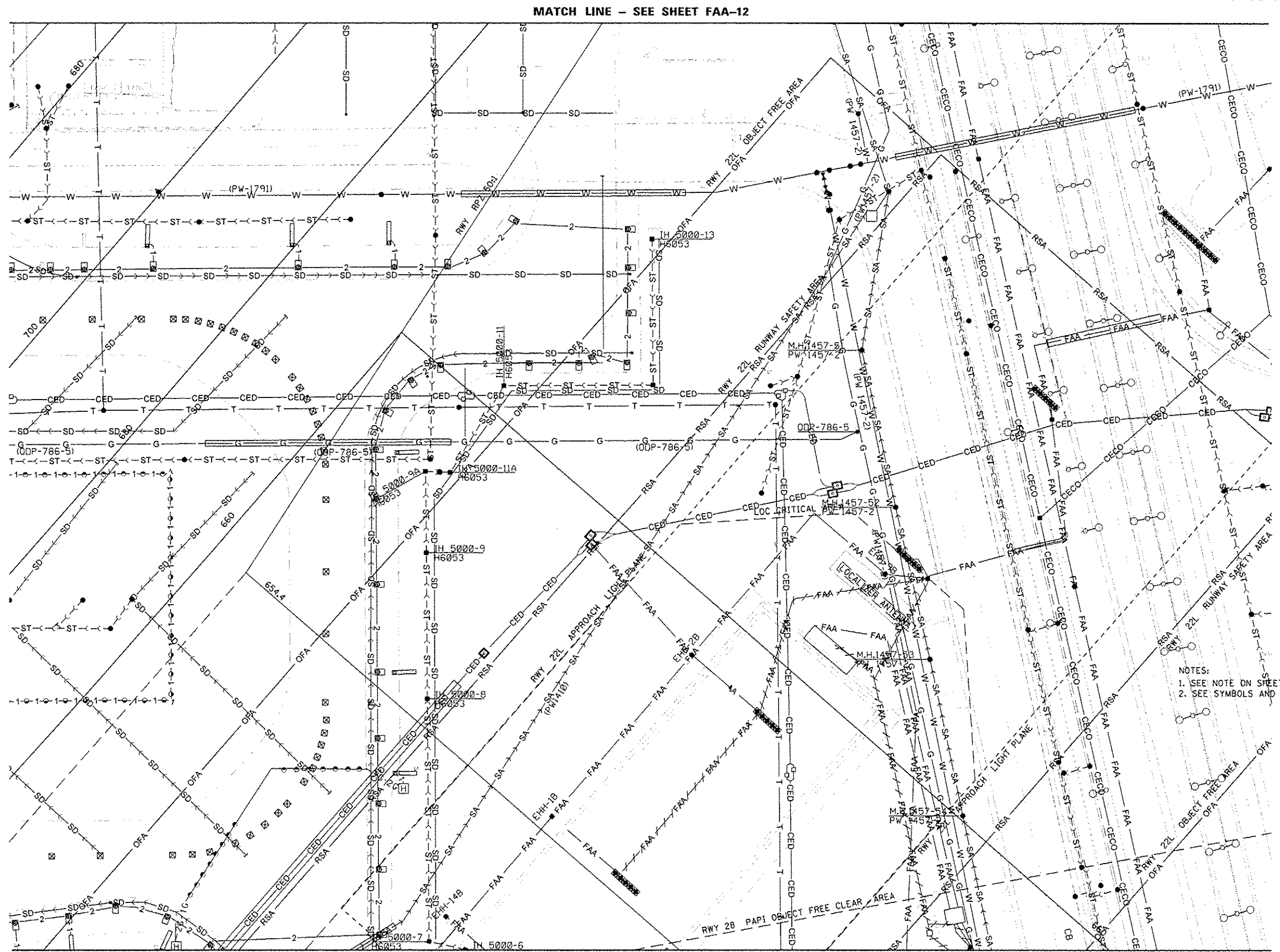
FOTS LOOP 3
EXISTING CONDITIONS AND COMPOSITE UTILITIES

SCALE: SHEET NO. 5 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	805	605L
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

FILE NAME = IP_PWPdms47844\0106037-shl-FAAFOTS12.dgn

ADDED SHEET
FAA-12



NOTES:
1. SEE NOTE ON SHEET C-001.
2. SEE SYMBOLS AND LEGEND ON SHEET G-014.

ADDED SHEET
FAA-13

HNTB

USER NAME: mhoev	DESIGNED: CFB	REVISED: -
DRAWN: CFB	REVISED: -	
CHECKED: MSPG	REVISED: -	
DATE: 26-DEC-2012	REVISED: 12/28/12 ADDENDUM 1	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

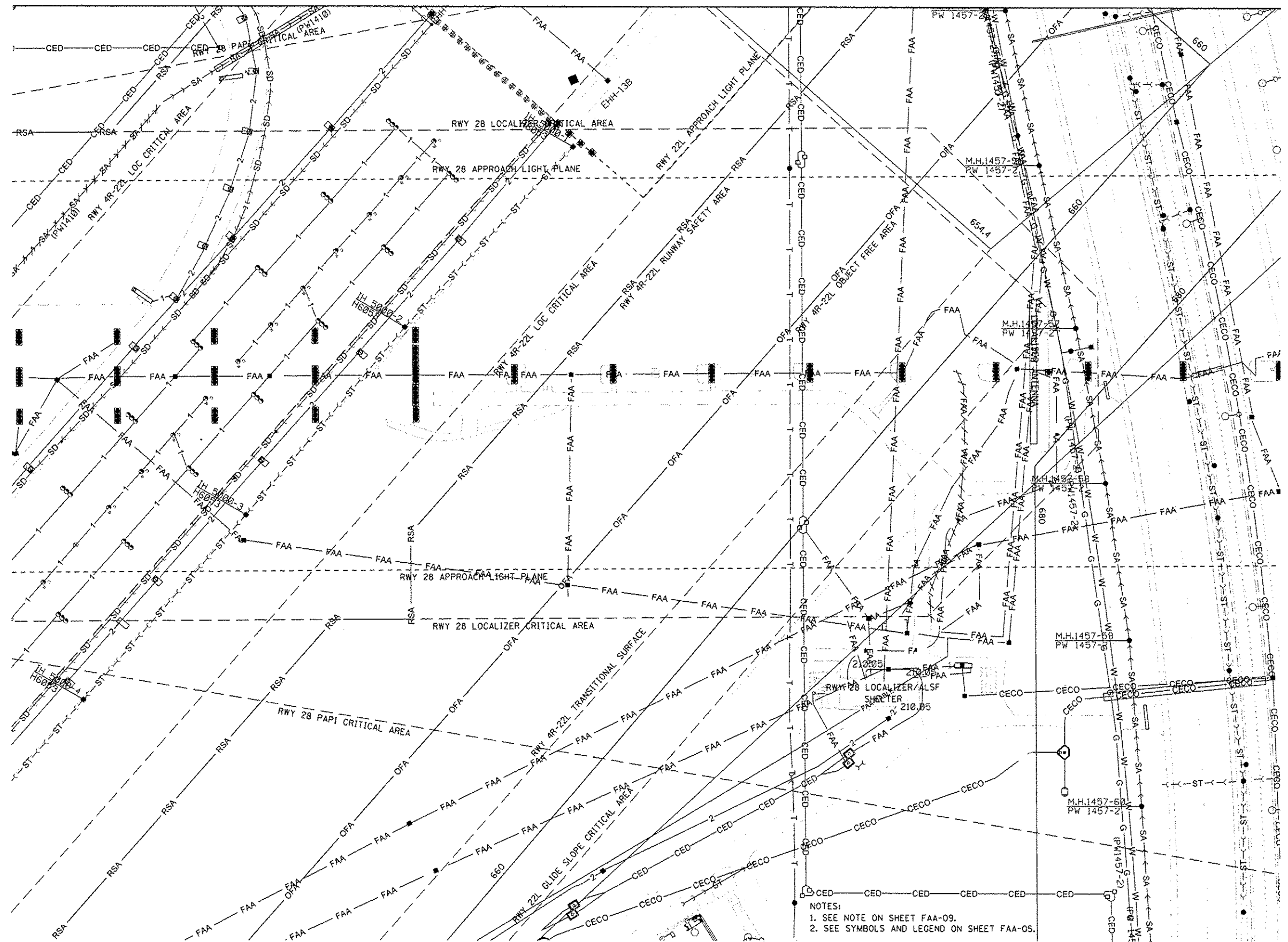
FOTS LOOP 3
EXISTING CONDITIONS AND COMPOSITE UTILITIES

F.A.P. RTE. 330	SECTION 0105 WRS&H	COUNTY COOK	TOTAL SHEETS 605	SHEET NO. 605M
CONTRACT NO. 60G37			ILLINOIS FED. AID PROJECT	

FILE NAME: IP_PWP\dmx7044\016037-shr-FAA\01513.dgn

SCALE: SHEET NO. 6 OF 7 SHEETS STA. TO STA.

MATCH LINE - SEE SHEET FAA-13



- NOTES:
 1. SEE NOTE ON SHEET FAA-09.
 2. SEE SYMBOLS AND LEGEND ON SHEET FAA-05.

ADDED SHEET
FAA-14

HNTB

USER NAME: mksr	DESIGNED: CFB	REVISED: -
DRAWN: CFB	CHECKED: SPG	REVISED: -
PLOT SCALE: 1/8"=1'	DATE: 12/28/12	ADDENDUM: 1

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

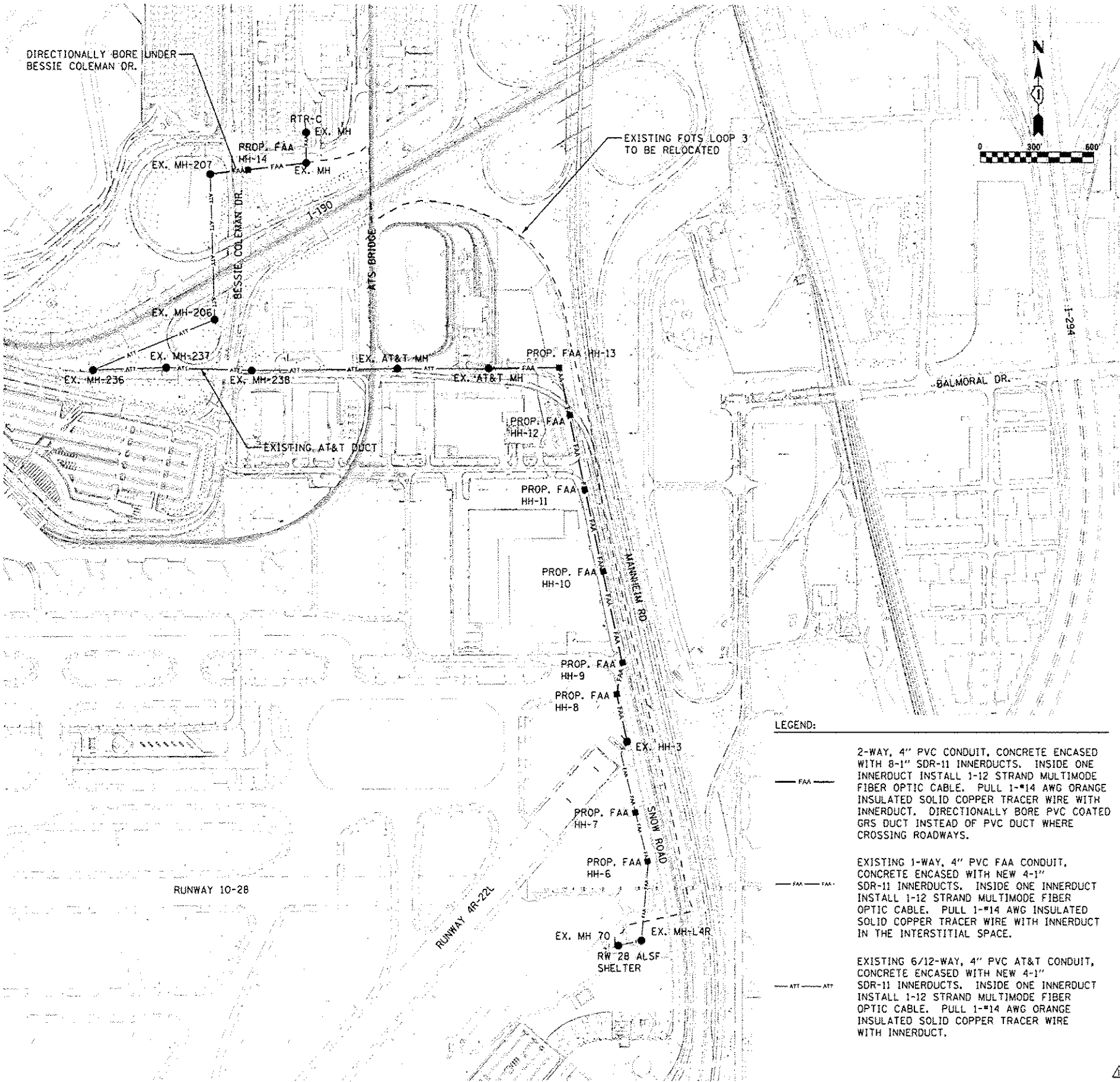
FOTS LOOP 3
EXISTING CONDITIONS AND COMPOSITE UTILITIES

SCALE:	SHEET NO. 7 OF 7 SHEETS	STA. TO STA.	F.A.P. RTE. 330	SECTION 0105 WRS&HB	COUNTY COOK	TOTAL SHEETS 605	SHEET NO. 605N
						CONTRACT NO. 60G37	
ILLINOIS FED. AID PROJECT							

FILE NAME: J:\P\W\pdm47844\0168337-shl-FAAFOTS14.dgn

PROPOSED FAA FOTS WORK NOTES:

1. DURING CONSTRUCTION, THE CONTRACTOR WILL BE REQUIRED TO PERFORM WORK ASSOCIATED WITH FAA CABLES WITHIN THE AIRPORT AOA. THE WORK WILL REQUIRE COORDINATION BETWEEN THE CONTRACTOR AND FAA PERSONNEL. ADDITIONAL COORDINATION MAY BE REQUIRED WITH AT&T AND OTHER ADJACENT UTILITIES. THE CONTRACTOR SHALL FIELD VERIFY ALL PROPOSED LAYOUTS AND EXISTING CONDITIONS OF THE FAA CABLING AND DUCTBANK PRIOR TO BEGINNING ANY WORK. SEE GENERAL NOTES SHEETS FOR REQUIREMENTS.
2. REFER TO CIVIL UTILITY PLAN AND PROFILE SHEETS FOR DUCTBANK AND CABLE ROUTING.
3. CONTRACTOR TO PROVIDE SHOP DRAWING SUBMITTALS OF HANDHOLES, DUCTBANK, CABLES AND ASSOCIATED EQUIPMENT FOR REVIEW AND APPROVAL BY THE FAA AND THE ENGINEER. SEE SPECIFICATIONS FOR SUBMITTAL REQUIREMENTS.
4. EXISTING FAA DUCT TO BE USED FOR PROPOSED FOTS LOOP MUST BE LOCATED AND MARKED BY THE FAA TO ENSURE THAT NO ACTIVE CABLES ARE DISTURBED. EXISTING ABANDONED CABLE IN THE DUCT MAY BE USED TO TRACE THE PATH OF THE DUCT BETWEEN THE RUNWAY 28 ALSF SHELTER AND THE HANDHOLE WHERE NEW DUCT IS TO BEGIN. ANY PORTIONS OF DUCT THAT ARE BLOCKED OR REMOVED MUST BE RE-ESTABLISHED TO COMPLETE THE LOOP. CONTRACTOR MUST MANOEUVRE EXISTING DUCT TO DETERMINE ITS VIABILITY. EXCAVATIONS WITHIN 5' OF ACTIVE FAA CABLE MUST BE DONE BY MEANS OF HAND DIGGING OR VACUUM EXCAVATION.
5. ALL FAA CABLING SHALL REMAIN OPERATIONAL THROUGHOUT THE DURATION OF THE CONTRACT.
6. CONTRACTOR SHALL INSTALL PROPOSED DUCTBANK AND HANDHOLES AT LOCATIONS SHOWN. WHERE PROPOSED DUCTBANK IS SHOWN TO CONNECT TO EXISTING HANDHOLES OR MANHOLES, CONTRACTOR SHALL EXCAVATE SURROUNDING EARTH AND CORE-DRILL OPENING FOR PROPOSED DUCT(S). CONTRACTOR SHALL EXTEND PROPOSED DUCT(S) INTO EXISTING STRUCTURE AND SEAL OPENING TO PREVENT WATER INFILTRATION AT THE POINT OF PENETRATION.
7. CONTRACTOR SHALL EXTEND PROPOSED CABLING AND INNERDUCT THROUGH THE NEW AND EXISTING DUCTS AND INTO THE STRUCTURE. PROPOSED INNERDUCT SHALL BE CUT AND FIBER OPTIC CABLE SHALL BE COILED TO PROVIDE THE APPROPRIATE LENGTH OF SLACK IN THE STRUCTURE. NO FIBER OPTIC CABLES SHALL BE CUT AT ANY POINTS ALONG THE ENTIRETY OF THE PROPOSED CABLE LENGTH. CONTRACTOR SHALL PROVIDE ENOUGH LENGTH OF INNERDUCT TO ALLOW FOR INNER DUCT TO CONTRACT PRIOR TO CUTTING(APPROXIMATELY 5 INCHES).
8. AT BOTH THE FAA RTR-C AND RUNWAY 28 ALSF SHELTER SITES, THE CONTRACTOR SHALL EXTEND THE PROPOSED INNERDUCT AND CABLING INTO EACH SITE AND TERMINATE ON NEW FIBER PATCH PANELS. ALL CABLE SHALL BE PROTECTED AT ALL TIMES. CONTRACTOR SHALL PROVIDE A SAFETY BARRIER AS NECESSARY TO PREVENT ACCIDENTAL DAMAGE. CABLE SHALL ADHERE TO BENDING RADIUS LIMITS AS DESCRIBED IN THE SPECIFICATIONS.
9. CONTRACTOR TO TEST PROPOSED CABLING IN ACCORDANCE WITH FAA PROCEDURES AND CRITERIA. ALL TESTING TO BE PERFORMED IN THE PRESENCE OF FAA PERSONNEL. ANY CABLING DAMAGED DURING INSTALLATION SHALL BE REPLACED IN ITS ENTIRETY BETWEEN ITS TERMINATION POINTS WITHOUT SPLICES.
10. UPON COMPLETION OF THE INSTALLATION AND TESTING OF PROPOSED FIBER CABLE BY THE CONTRACTOR, THE FAA WILL COMPLETE ALL CABLING AND TERMINATIONS OF PROPOSED CABLING FROM THE FIBER PATCH PANEL TO THE EXISTING EQUIPMENT. CONTRACTOR SHALL REMAIN AVAILABLE TO THE FAA UNTIL ALL SYSTEMS HAVE BEEN BROUGHT BACK ONLINE AND ALL CABLING IS VERIFIED TO BE INSTALLED AS SPECIFIED. RED-LINES OF ALL WORK MUST BE PROVIDED TO THE FAA WITHIN 14 DAYS OF COMPLETION OF WORK. ALL EXISTING AND PROPOSED MANHOLE AND HANDHOLE INTERIOR WALL PENETRATIONS MUST BE PHOTOGRAPHED PER SPECIFICATION L-118.
11. ANY EXISTING FAA CABLING MADE OBSOLETE BY THE PROPOSED WORK SHALL BE IDENTIFIED AND REMOVED BY THE CONTRACTOR ONLY AT THE REQUEST OF THE FAA.
12. ALL CONSTRUCTION MUST BE COMPLETED WHILE THE EXISTING LOOP REMAINS INTACT. THE FAA WILL DETERMINE WHEN THE NEW FOTS LOOP 3 WILL BE ACTIVATED. THE NEW LOOP MUST BE TESTED AND HAVE BEEN OPERATIONAL FOR AT LEAST ONE WEEK PRIOR TO THE FAA DECOMMISSIONING THE EXISTING FOTS LOOP AND THE ASSOCIATED DUCT BANK. MANNHEIM ROAD SOUTH RECONSTRUCTION STAGE 2, BALMORAL DRIVE STAGE 3, AND THE ATS BRIDGE EXTENSION PROJECTS REQUIRE THAT THE NEW LOOP BE OPERATIONAL AS THE EXISTING LOOP TRAVERSES THROUGH ALL THREE PROJECTS.



- LEGEND:
- 2-WAY, 4" PVC CONDUIT, CONCRETE ENCASED WITH 8-1" SDR-11 INNERDUCTS. INSIDE ONE INNERDUCT INSTALL 1-12 STRAND MULTIMODE FIBER OPTIC CABLE. PULL 1-#14 AWG ORANGE INSULATED SOLID COPPER TRACER WIRE WITH INNERDUCT. DIRECTIONALLY BORE PVC COATED GRS DUCT INSTEAD OF PVC DUCT WHERE CROSSING ROADWAYS.
 - EXISTING 1-WAY, 4" PVC FAA CONDUIT, CONCRETE ENCASED WITH NEW 4-1" SDR-11 INNERDUCTS. INSIDE ONE INNERDUCT INSTALL 1-12 STRAND MULTIMODE FIBER OPTIC CABLE. PULL 1-#14 AWG INSULATED SOLID COPPER TRACER WIRE WITH INNERDUCT IN THE INTERSTITIAL SPACE.
 - EXISTING 6/12-WAY, 4" PVC AT&T CONDUIT, CONCRETE ENCASED WITH NEW 4-1" SDR-11 INNERDUCTS. INSIDE ONE INNERDUCT INSTALL 1-12 STRAND MULTIMODE FIBER OPTIC CABLE. PULL 1-#14 AWG ORANGE INSULATED SOLID COPPER TRACER WIRE WITH INNERDUCT.

ADDED SHEET
FAA-15

HNTB

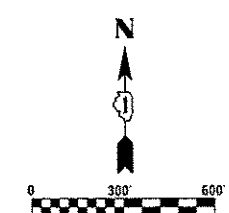
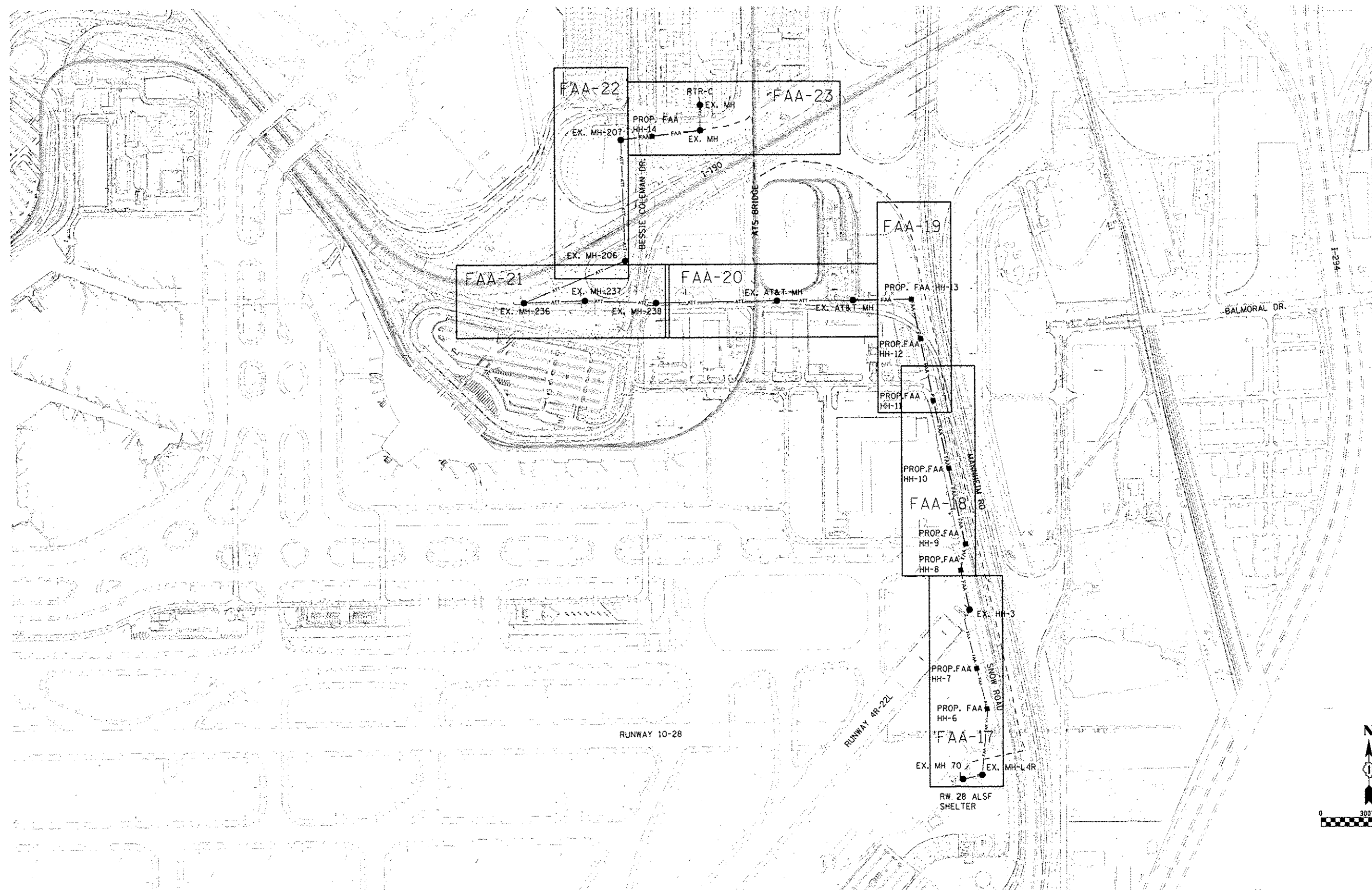
USER NAME: mkear	DESIGNED: CFB	REVISED: -
DRAWN: CFB	CHECKED: SPG	REVISED: -
PLOT SCALE: 600:1	DATE: 12/28/12	REVISED: 12/28/12 ADDENDUM 1
PLOT DATE: 26-DEC-2012		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOTS LOOP 3
OVERVIEW AND NOTES

SCALE: SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE. 330	SECTION 0105 WRS&HB	COUNTY COOK	TOTAL SHEETS 606	SHEET NO. 6050
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

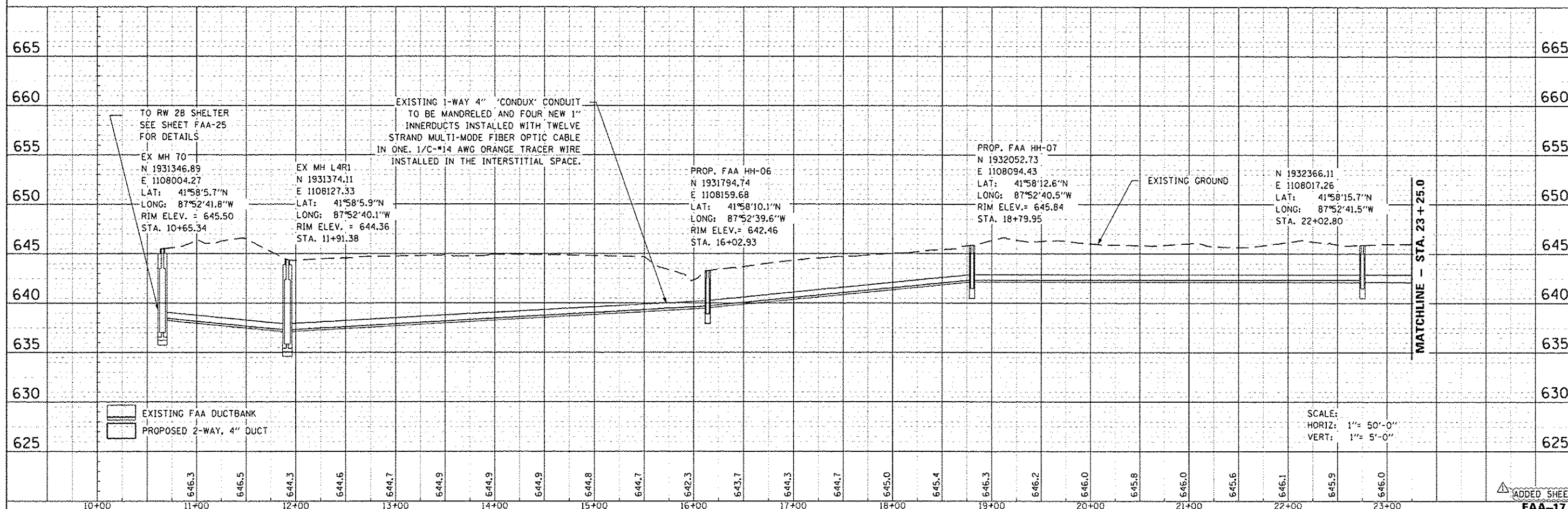
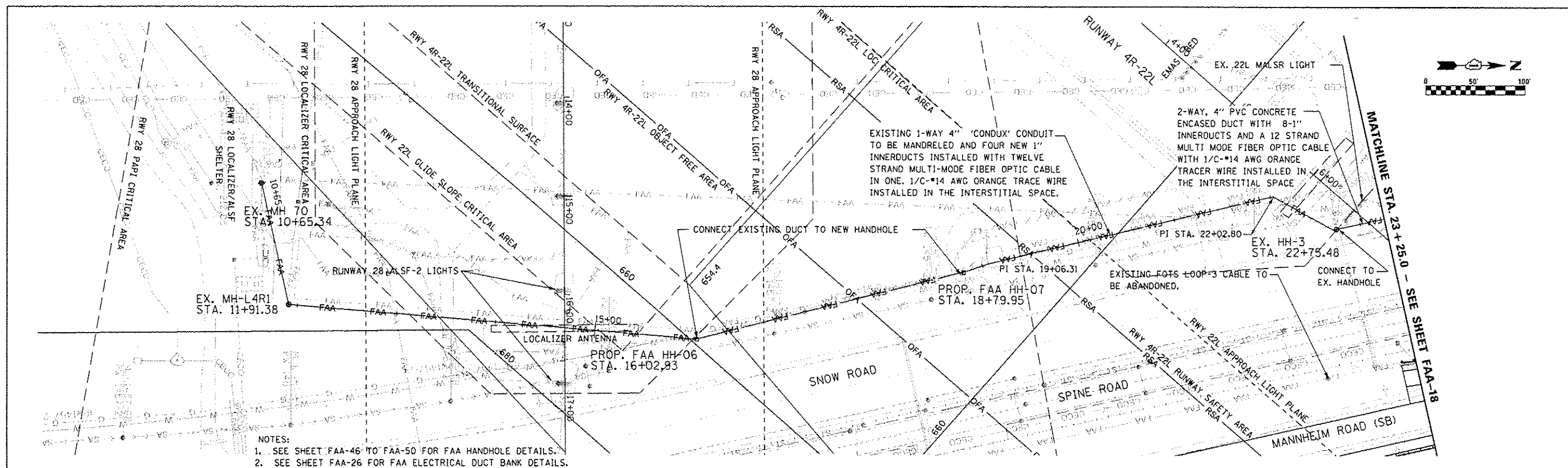
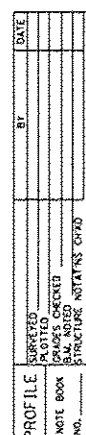



ADDED SHEET
FAA-16

	USER NAME = khosr	DESIGNED CFB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FOTS LOOP 3 PLAN AND PROFILE INDEX				F.A.P. RTE,	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN CFB	REVISED -						330	0105 WRS&HB	COOK	605	605P
	PLOT SCALE = 600:1	CHECKED SPG	REVISED -		CONTRACT NO. 60G37				ILLINOIS FED. AID PROJECT				
	PLOT DATE = 26-DEC-2012	DATE	REVISED  12/28/12 ADDENDUM 1										
					SCALE:	SHEET NO. 1 OF 8 SHEETS	STA.	TO STA.					

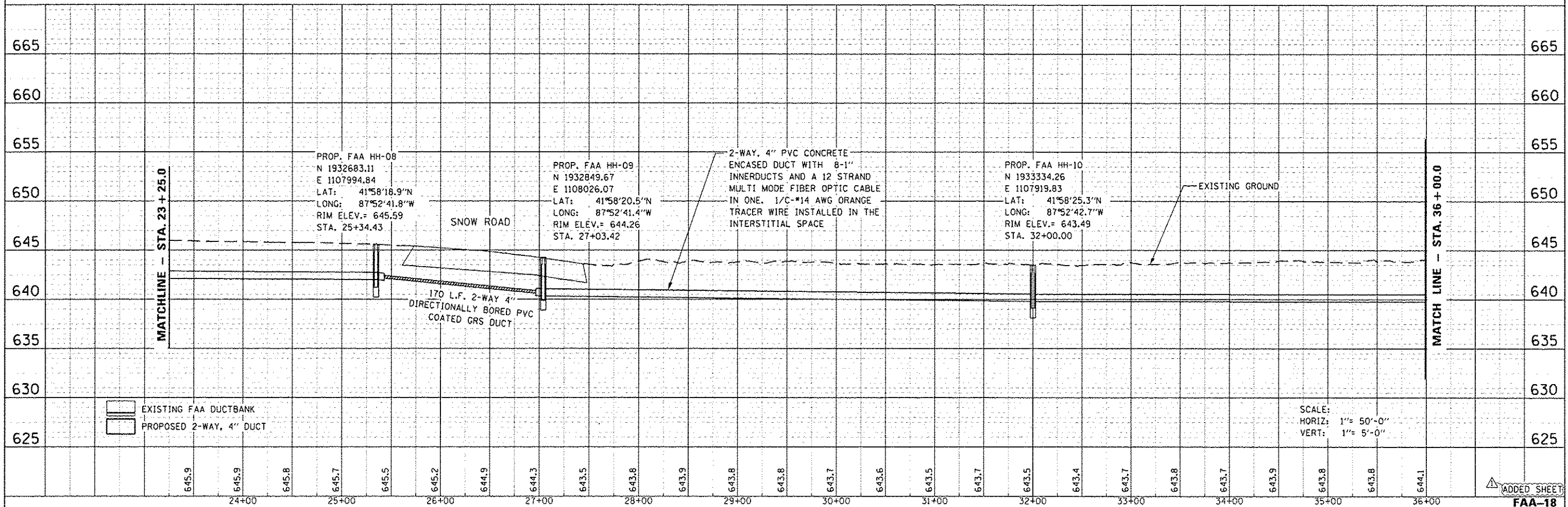
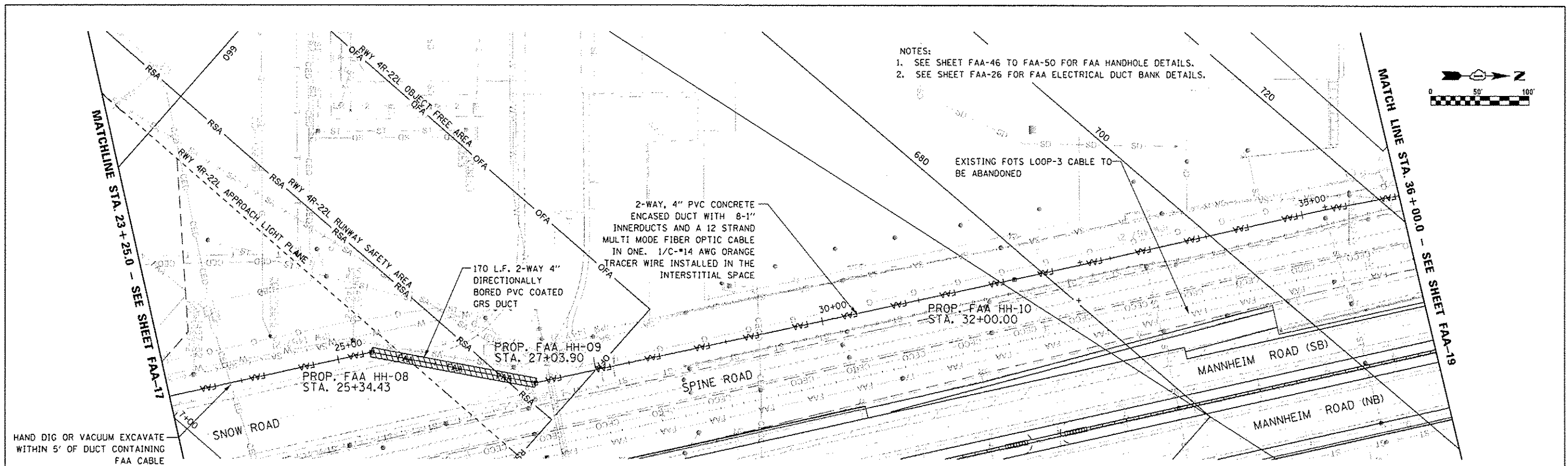
FILE NAME = I:\0_Bu\Draws\47844\060G37-shs-FOTS\OTSIS.dgn

FILE NAME = JP_PwPdm47044\0160G37-ah1-FAAFOTS16.dgn



PLAN	DATE
DESIGNED	
DRAWN	
CHECKED	
NOTED	
FILE NO.	

PROFILE	DATE
DESIGNED	
DRAWN	
CHECKED	
NOTED	
FILE NO.	



HNTB	USER NAME: <i>hntb</i>	DESIGNED: <i>CFB</i>	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FOTS LOOP 3 PLAN AND PROFILE	SCALE: SHEET NO. 3 OF 8 SHEETS STA. TO STA.	SECTION: 0105 WRS&HB	COUNTY: COOK	TOTAL SHEETS: 605	SHEET NO.: 605R	CONTRACT NO. 60G37
	DRAWN: <i>CFB</i>	CHECKED: <i>SPG</i>	REVISED: -								
	PLAT SCALE: 1/8"=1'	DATE: 10/19/12	REVISED: 12/21/12 ADDENDUM 1								
	PLAT DATE: 26-DEC-2012										

FILE NAME: IP_PWPdms47844\0160G37-whr-FAAFOTS18.dgn

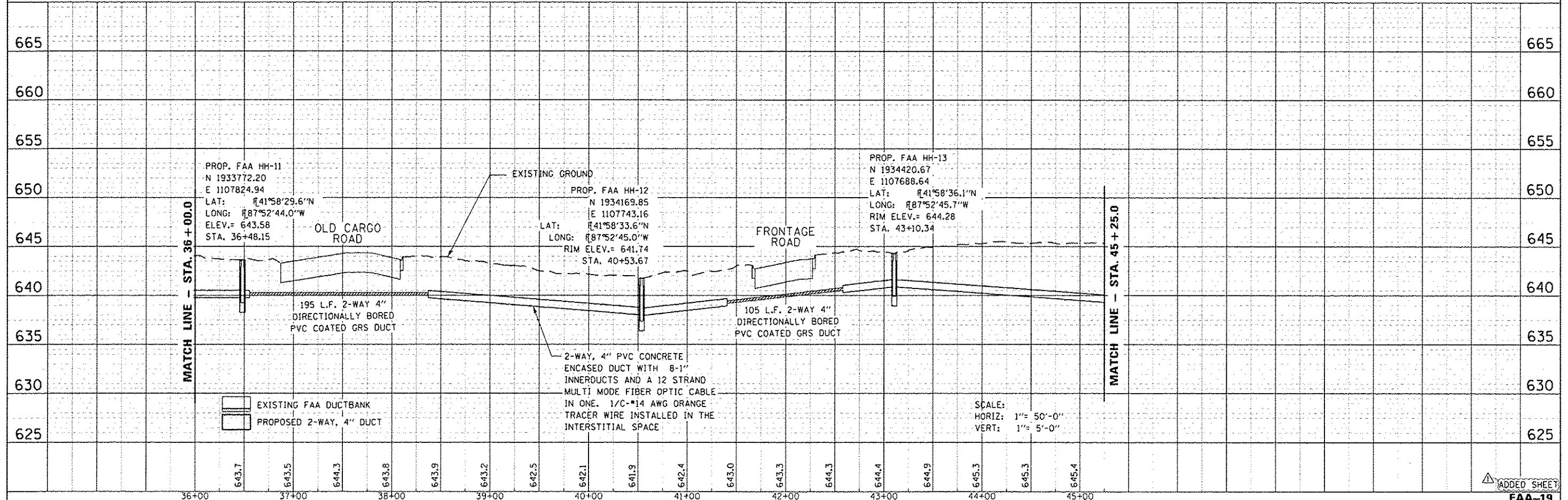
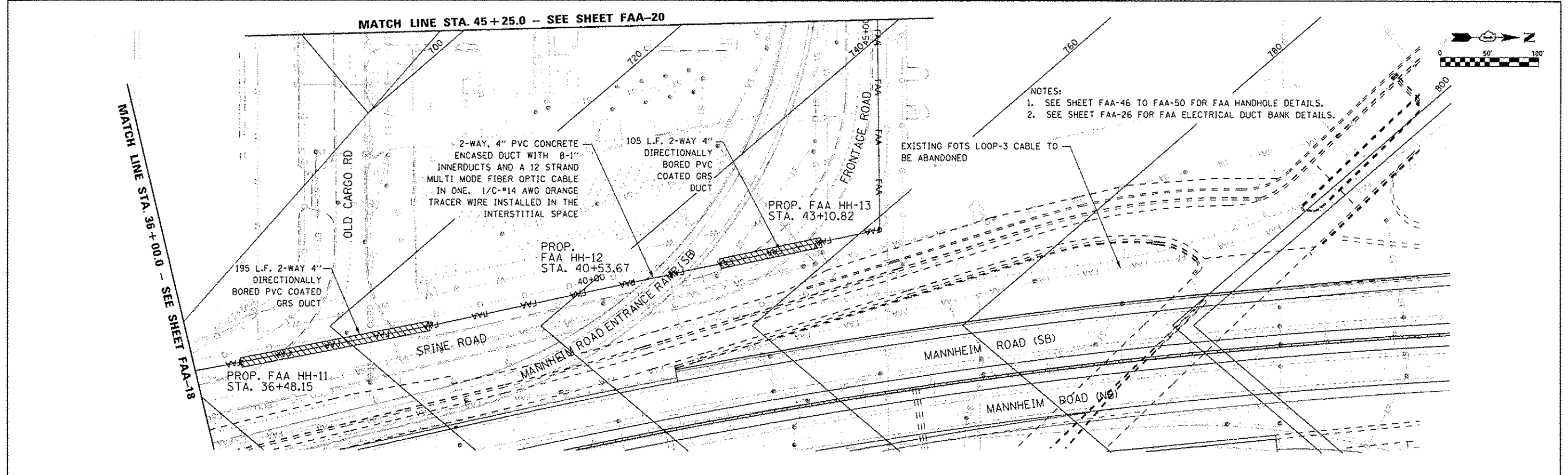
ADDED SHEET

FAA-18

ILLINOIS FED. AID PROJECT

PLAN	DATE
BY	
REVIEWED	
NOTED	
NO.	

PROFILE	DATE
BY	
REVIEWED	
NOTED	
NO.	



HNTB	USER NAME: mh001p	DESIGNED: CFB	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FOTS LOOP 3 PLAN AND PROFILE	SCALE: SHEET NO. 4 OF 8 SHEETS STA. TO STA.	F.A.P. RTE. 330	SECTION 0105 WRS&HB	COUNTY COOK	TOTAL SHEET NO. 605	CONTRACT NO. 60G37
	PLOT SCALE: 1/8"=1'	DRAWN: CFB	REVISED: -								
	PLOT DATE: 26-DEC-2012	CHECKED: SPG	REVISED: -								
	DATE: 10/19/12	REVISED: 12/27/12 ADDENDUM 1									

GENERAL REQUIREMENTS:

1. APPLICABLE ABBREVIATIONS AND DEFINITIONS:

- AC - ADVISORY CIRCULAR
ACM - AIRPORT CERTIFICATION MANUAL
AOA - AIRCRAFT OPERATIONS AREA
COA - CHICAGO DEPARTMENT OF AVIATION
CSD - CONSTRUCTION SETBACK DISTANCE
CST - CENTRAL STANDARD TIME
FAA - FEDERAL AVIATION ADMINISTRATION
FAR - FEDERAL AVIATION REGULATION
FOD - FOREIGN OBJECT DEBRIS/FOREIGN OBJECT DAMAGE
ILS - INSTRUMENT LANDING SYSTEM
OMP - O'HARE MODERNIZATION PROGRAM
ORD - O'HARE INTERNATIONAL AIRPORT
ROFA - RUNWAY OBJECT FREE AREA - (400 FEET FROM RUNWAY CENTERLINE; 1,000 FEET BEHIND RUNWAY END)
RSA - RUNWAY SAFETY AREA (250 FEET FROM RUNWAY CENTERLINE; 1,000 FEET BEHIND RUNWAY END)
S.T.O.P. - SHORT TERM OPERATIONAL PHASING
TOFA - TAXIWAY OBJECT FREE AREA (160 FEET FROM TAXIWAY CENTERLINE FOR ADG V; 193 FEET FROM TAXIWAY CENTERLINE FOR ADG VI)
TSA - TAXIWAY SAFETY AREA (107 FEET FROM TAXIWAY CENTERLINE FOR ADG V; 131 FEET FROM TAXIWAY CENTERLINE FOR ADG VI)

2. THE PROJECT MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND SPECIFICATIONS AND ANY RULES, REGULATIONS, STANDARDS OR SPECIFICATIONS REFERENCED THEREIN. THE PROJECT IS SUBJECT TO INSPECTION BY REPRESENTATIVES OF THE CITY OF CHICAGO, CHICAGO DEPARTMENT OF AVIATION (COA), THE FEDERAL AVIATION ADMINISTRATION (FAA), AND OTHER GOVERNING AGENCIES.

3. THE CONTRACTOR MUST COMPLY WITH ALL FEDERAL, STATE AND LOCAL SAFETY REGULATIONS AS WELL AS THOSE SPECIFIED IN THE CONTRACT DRAWINGS AND SPECIFICATIONS.

4. THE CONTRACTOR MUST ADHERE TO ALL AIRPORT SECURITY REQUIREMENTS AS SPECIFIED IN ARTICLE XV OF THE PART 2 - GENERAL CONDITIONS SPECIFICATIONS.

5. THE CONTRACTOR IS ADVISED THAT CERTAIN RULES AND RESTRICTIONS, AS CONTAINED IN THE FAA ADVISORY CIRCULAR 150/5370-2E (OR CURRENT EDITION) OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION, FAA AC 150/5300-13 (CURRENT EDITION) AIRPORT DESIGN, AIRPORT CERTIFICATION MANUAL, AND FAR PART 139 AND AUGMENTED BY THESE DRAWINGS AND SPECIFICATIONS, WILL APPLY TO THE WORK. THE CONTRACTOR MUST MAINTAIN ALL AREAS OF WORK IN COMPLIANCE WITH THESE REQUIREMENTS AT ALL TIMES. THIS EFFORT IS INCIDENTAL TO THE CONTRACT. PAYMENT WILL BE WITHHELD FOR NON-COMPLIANCE.

6. ORD WILL BE IN OPERATION WHILE CONSTRUCTION UNDER THIS CONTRACT IS TAKING PLACE. TIMING AND COORDINATION OF THE WORK IS AN ESSENTIAL FEATURE OF THIS CONTRACT AND THE COA AND FAA WILL REQUIRE THE COMPLETION OF ALL WORK HEREIN SPECIFIED SO AS TO OFFER THE LEAST OBSTRUCTION AND/OR IMPEDIMENT TO THE AIRPORT TRAFFIC AND THE GENERAL OPERATION OF THE AIRPORT. ALL EXISTING UTILITIES SERVING THE AIRPORT MUST REMAIN IN CONTINUOUS OPERATION DURING THE EXECUTION OF THE WORK, UNLESS REMOVED UNDER THIS OR A SEPARATE CONTRACT. THE COA AND FAA OR HIS/HER REPRESENTATIVES RESERVE THE RIGHT TO PLACE SECTIONS OF THE WORK REQUIRED UNDER THIS CONTRACT IN USE AS SOON AS POSSIBLE AND/OR UPON COMPLETION.

7. IN ESTABLISHING THE SCHEDULE FOR THIS CONTRACT, THE CONTRACTOR MUST CONSIDER THE FOLLOWING: NO ADDITIONAL COMPENSATION OR EXTENSION OF TIME FOR COMPLETION OF THE PROJECT, OR ANY PHASE OF THE PROJECT WILL BE ALLOWED DUE TO THE PHASING OF THE WORK, OR DUE TO WEATHER CONDITIONS WHICH MAY IMPEDE THE PROGRESS OF THE WORK, EXCEPT AS ALLOWED IN ARTICLE VIII-B.4. OF PART 2 (GENERAL CONDITIONS) OF THE SPECIFICATIONS. THE CONTRACTOR MAY WORK SEVEN (7) DAYS PER WEEK AS REQUIRED IN ORDER TO COMPLETE THE ENTIRE PROJECT AS SPECIFIED HEREIN.

8. CONTRACTOR MUST BE AWARE OF THE FAA HOLIDAY MORATORIUM DATES DURING THANKSGIVING AND CHRISTMAS THAT MAY AFFECT WORK ACTIVITIES IN DESIGNATED AREAS. FAA WAIVERS ARE REQUIRED FOR ANY/ALL PROJECT ACTIVITIES DURING THE MORATORIUM PERIOD THAT: (1) INTERFACE WITH POWER AND/OR LIVE FAA FIBER, (2) TAKE PLACE INSIDE COMMISSIONED FAA FACILITIES, OR (3) ARE EXECUTED WITHIN 50 FEET OF AN ACTIVE FAA FACILITY OR LIVE FAA SERVICES INCLUDING POTS MANHOLES AND DUCTBANKS THAT CARRY LIVE FIBER. ON HARD MORATORIUM DATES, ABSOLUTELY NO WORK IN OR NEAR FAA FACILITIES WILL BE ALLOWED AND FAA WAIVERS ARE NOT VALID.

THANKSGIVING MORATORIUM - TYPICALLY ABOUT 11 DAYS (LATER WEEKS OF NOVEMBER) OF WORK STAND DOWN, WORK ONLY PERMITTED WITH APPROVED FAA WAIVER. FIVE DAYS WITHIN THIS PERIOD WILL BE HARD STAND MORATORIUM - ABSOLUTELY NO WORK IN OR NEAR FAA FACILITIES. FOR EXAMPLE, IN 2009, WORK STAND DOWN WAS FROM NOVEMBER 16 6PM CST THRU NOVEMBER 26 2AM CST. HARD STAND MORATORIUM STARTED NOVEMBER 20 6PM CST THRU NOVEMBER 30 2AM CST.

CHRISTMAS MORATORIUM - TYPICALLY ABOUT 20 DAYS FROM MID DECEMBER TO FIRST WEEK OF JANUARY. FOR EXAMPLE, IN 2009, WORK STAND DOWN WAS FROM DECEMBER 18 6PM CST THRU JANUARY 4 2AM CST.

THE COA ADOPTS THE SAME SHUTDOWN PERIODS AND HARD STAND MORATORIUMS AT BOTH THANKSGIVING AND CHRISTMAS PERIODS THAT IMPACT ALL PROJECTS.

THE ACTUAL DURATION AND START/END DATES OF THE MORATORIUM WILL VARY DEPENDING ON THE YEAR. THE COA AND FAA WILL PROVIDE NOTICE TO THE CONTRACTOR ON THESE DATES.

9. UNDERGROUND NOTIFICATION CHECKLIST (DIG BOOK) PRIOR TO COMMENCING ANY EXCAVATION AND/OR UTILITY WORK, THE CONTRACTOR AND OWNER'S REPRESENTATIVE SHALL ESTABLISH SPECIFIC WORK AREAS AND TYPE OF WORK SO THAT THE UNDERGROUND NOTIFICATION CHECKLIST (DIG BOOK) CAN BE CREATED AND FINALIZED. THE DIG BOOK IS A DOCUMENT THAT ENSURES ALL UPFRONT UTILITY INVESTIGATION IS PERFORMED: UTILITY MEETS ARE HELD; PRE-ACTIVITY MEETINGS ARE HELD; UTILITY LOCATES ARE PERFORMED, ALL EXISTING UTILITIES ARE LOCATED AND PROPERLY MARKED, ETC. THE CHECKLIST MUST BE COMPLETELY EXECUTED PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION AND/OR UTILITY WORK WITHIN A SPECIFIC WORK AREA. THE CONTRACTOR SHOULD ANTICIPATE THAT THIS PROCESS WILL TAKE APPROXIMATELY 21 CALENDAR DAYS. UPON COMPLETION OF ALL REQUIRED ITEMS IN THE DIG BOOK, THE OWNER'S REPRESENTATIVE WILL SUBMIT THE DIG BOOK TO THE WEEKLY SHORT-TERM OPERATIONS PHASING (S.T.O.P) FOR FINAL APPROVAL AND AUTHORIZATION TO PROCEED WITH EXCAVATION ACTIVITIES. WORKING CLOSELY WITH THE OWNER'S REPRESENTATIVE, THE CONTRACTOR WILL PROVIDE THE PRIORITY AND REQUIRED DATES FOR WHEN THE DIG BOOK NEEDS TO BE APPROVED TO BEGIN SCHEDULED WORK ACTIVITIES. THE DATES MUST ALLOW FOR 7 DAYS OF REVIEW AFTER THE CHECKLISTS ARE SUBMITTED TO THE S.T.O.P MEETING. THE OWNER'S REPRESENTATIVE, WITH ASSISTANCE OF THE CONTRACTOR, WILL BE RESPONSIBLE FOR PREPARING THE DIG BOOK AND COMPILING ALL NECESSARY INFORMATION AS DESIGNATED IN THE CHECKLISTS. THE DIG BOOKS MUST BE APPROVED BY THE FAA (FOR AIRSPACE REQUIREMENTS WITHIN AOA), COA OPERATIONS AND OTHER AGENCIES CONCERNED. UNDERGROUND WORK CAN BEGIN AFTER THE APPROVED DIG BOOKS ARE DISTRIBUTED AND RECEIVED BY THE CONTRACTOR. THE CONTRACTOR MUST KEEP A COPY OF THE DIG BOOK AT THE SITE AT ALL TIMES SO THAT THE EMPLOYEES INVOLVED IN THE WORK ARE INFORMED OF THE PRELIMINARY INVESTIGATION EFFORTS AND THE LOCATION OF EXISTING UTILITIES.

10. THE CONTRACTOR MUST COORDINATE WITH ALL OTHER CONTRACTORS DOING WORK ON OR ABOUT THE PROJECT SITE, TO THE MUTUAL BENEFIT OF ALL, IN COMPLETING THEIR RESPECTIVE WORK.

11. CONSTRUCTION WORK ADJACENT TO OPERATIONAL RUNWAYS AND TAXIWAYS WILL BE SUBJECT TO THE FOLLOWING RESTRICTIONS:

- a. THE CONTRACTOR MUST UTILIZE HIS MACHINERY AND EQUIPMENT SO THAT AIRCRAFT AND VEHICLES USING THE FIELD WILL NOT BE SUBJECT TO HAZARDS DUE TO THE CONSTRUCTION OPERATION. IN NO CASE WILL THE CONTRACTOR BE PERMITTED



Thomas G. Greiter
EXPIRES 11-30-13

TO OPERATE AND PARK VEHICLES/EQUIPMENT OR STORE MATERIALS ON ANY AIRFIELD PAVEMENT. THIS REQUIREMENT WILL APPLY WHETHER THE PAVEMENT IS OPENED OR CLOSED TO AIRCRAFT TRAFFIC. ALL CONFLICTS WILL BE MEDIATED BY THE COA AND FAA.

b. AT NO TIME WILL ANY CONSTRUCTION VEHICLE OR EQUIPMENT BE PARKED OR STAGED WITHIN AN OBJECT FREE AREA (OFA); I.E., 400 FEET OF AN OPEN RUNWAY CENTERLINE OR 160 FEET OF AN OPEN ADG V TAXIWAY CENTERLINE. NOTE THAT CURRENTLY THERE ARE NO ADG VI AIRCRAFT OPERATING AT ORD.

c. WORK IS PERMITTED WITHIN THE ROFA UP TO THE RSA OF AN OPERATIONAL RUNWAY, UNLESS HEIGHT RESTRICTIONS OTHERWISE DISALLOW THE CONSTRUCTION ACTIVITY. AT NO TIME WILL EQUIPMENT, MACHINERY, AND MATERIALS BE ALLOWED WITHIN 250 FEET OF THE CENTERLINE AND 1000 FEET OF THE END OF AN OPERATIONAL RUNWAY DURING WORK AND NON-WORK HOURS. AT THE END OF THE WORK DAY, ALL EQUIPMENT, STOCKPILES, AND MATERIALS MUST BE REMOVED FROM THE AREAS CONSISTENT WITH 11.b ABOVE.

d. WORK IS PERMITTED WITHIN THE TOFA UP TO THE CSD WHEN AIRCRAFT ARE OPERATING ON THE TAXIWAY PAVEMENT. THE CSD RESTRICTION OFFSET IS APPLICABLE REGARDLESS OF CONSTRUCTION EQUIPMENT HEIGHT. REFER TO TABLE 1 BELOW FOR DIMENSIONS OF THE CSD WHICH ARE DEPENDENT UPON THE WIDTH OF THE EXISTING TAXIWAY PAVEMENT. AT THE END OF THE WORK DAY, ALL EQUIPMENT, STOCKPILES, AND MATERIALS MUST BE REMOVED FROM THE AREAS CONSISTENT WITH 11.d ABOVE.

TABLE 1 - CONSTRUCTION SET BACK SCHEDULE (CSD)

CONTROLLING AIRCRAFT	CSD FROM EDGE OF FULL STRENGTH PAVEMENT, FT.	TAXIWAY PAVEMENT WIDTH, FT.	TSA WIDTH FROM CENTERLINE, FT.
B-747-400 VARIANTS	86	75	107
B-747-400 VARIANTS	86	82	131
B-747-400 VARIANTS	86	100	131

e. THE CONTRACTOR MUST INSTALL AND MAINTAIN TEMPORARY SAFETY AREA MARKINGS (SNOW FENCES) TO DELINEATE THE RSA, CSD, AND OTHER CRITICAL AREA LIMITS AS DEPICTED IN THE CONTRACT DOCUMENTS. THE SAFETY AREA MARKINGS OR FENCES MUST NOT BECOME FOD.

12. THE CONTRACTOR IS ADVISED THAT THERE MAY BE ADVERSE IMPACTS TO THE INTEGRITY OF THE NAVAID SIGNALS REQUIRED FOR APPROACHES TO OPERATING RUNWAYS 14L-32R CAUSED BY CONSTRUCTION OPERATIONS WHICH MAY NOT BE IDENTIFIABLE PRIOR TO THE START OF CONSTRUCTION. ANY SUCH ADVERSE IMPACTS MUST BE MITIGATED AS NECESSARY TO THE SATISFACTION OF THE ENGINEER, COA AND FAA AND THE MUTUAL BENEFIT OF THE CONTRACTOR AND THE AIRPORT. CONTRACTOR PERSONNEL AND EQUIPMENT MUST VACATE ALL APPROPRIATE NAVAID CRITICAL AREAS AND OPERATIONAL SURFACES WHEN SO DIRECTED BY THE ENGINEER, COA AND FAA.

13. IF THE COA AND FAA SUSPENDS WORK, THE CONTRACTOR MUST REMOVE FROM THE PROJECT SITE, ALL EQUIPMENT, MACHINERY AND MATERIALS. ANY EQUIPMENT, MACHINERY AND MATERIALS ALLOWED TO REMAIN MUST BE BARRICADED AND LIGHTED AS MANDATED BY THE ENGINEER, COA AND FAA. ALL BARRICADE LIGHTS WITHIN THE AOA MUST BE RED WITH 360 DEGREES VISIBILITY.

14. SOME OF THE WORK UNDER THIS CONTRACT IS IN RESTRICTED AREAS. THE CONTRACTOR CANNOT CROSS ANY ACTIVE RUNWAY OR TAXIWAY UNDER ANY CIRCUMSTANCES UNLESS UNDER ESCORT BY THE CITY OF CHICAGO COA. THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT ACCESS TO CERTAIN CONTRACT AREAS MAY BE LIMITED AND/OR REFUSED FOR LIMITED PERIODS OF TIME. THE CONTRACTOR MUST COOPERATE WITH AIRPORT OPERATIONS TO KEEP THE AIRPORT IN OPERATION. THE CONTRACTOR MUST COORDINATE WITH THE COA, THROUGH THE ENGINEER, TO ESCORT THEIR VEHICLES IN RESTRICTED AREAS PER ARTICLE XV.B OF THE PART 2 - GENERAL CONDITIONS.

15. THE CONTRACTOR MUST MAKE SURE ALL TAXIWAYS, RUNWAYS, ROAD AND APRONS THAT ARE USED OR CROSSED BY CONSTRUCTION VEHICLES ARE KEPT CLEAR OF FOD AT ALL TIMES WHEN WORK IS IN PROGRESS AND CLOSURES ARE ALLOWED AS PART OF THE PROJECT DURING THE DURATION OF THIS CONTRACT.

16. CONTRACTOR GENERATED DEBRIS, WASTE AND LOOSE MATERIAL CAPABLE OF CAUSING DAMAGE TO AIRCRAFT LANDING GEAR, PROPELLERS, AND ROTORS OR OF BEING INGESTED BY JET ENGINES MUST NOT BE LEFT ON ACTIVE MOVEMENT AREAS. THE CONTRACTOR MUST REMOVE SUCH MATERIAL WITHIN THESE AREAS IMMEDIATELY AND CONTINUOUSLY DURING WORKING HOURS NOT COINCIDING WITH AIRCRAFT OPERATIONS IN THE IMMEDIATE VICINITY OF THE WORK DURING THE DURATION OF THE CONTRACT.

17. THE CONTRACTOR MUST HAVE A SUFFICIENT NUMBER OF OPERATING VACUUM POWER SWEEPERS AND OPERATORS ON THE JOB SITE AT ALL TIMES. AIRPORT OPERATIONS AND THE OWNER'S REPRESENTATIVE WILL DETERMINE THE ADEQUACY AND NUMBER OF SWEEPERS REQUIRED. A MINIMUM OF ONE (1) SWEEPER FOR LANDSIDE WORK AND TWO (2) SWEEPERS FOR AIRSIDE WORK ARE REQUIRED AT ALL TIMES WHILE THIS PROJECT IS IN PROGRESS, FOR THE DURATION OF THIS CONTRACT. ADDITIONAL SWEEPERS MAY BE REQUIRED AS DIRECTED BY THE ENGINEER, COA AND FAA BASED ON THE SCOPE OF THE PROJECT WORK. COSTS FOR THE SWEEPERS AND OPERATORS WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED INCLUDED IN THE OVERALL CONTRACT PRICE.

18. THE CONTRACTOR MUST COMPLETE CLEAN UP AND RESTORATION OF THE ENTIRE PROJECT AREA, INCLUDING STAGING AND STORAGE AREAS, AS APPROVED BY THE ENGINEER, COA AND FAA WITHIN THIRTY (30) DAYS OF THE CONTRACT COMPLETION DATE. ANY AREA DAMAGED WITHIN THE AOA DURING CONSTRUCTION MUST MEET FAR PART 139 AND BE IMMEDIATELY RESTORED TO ITS ORIGINAL CONDITION BY THE CONTRACTOR AT HIS OWN EXPENSE.

19. THE CONTRACTOR'S SUPERINTENDENT MUST BE ON THE CONSTRUCTION SITE AT ALL TIMES DURING THE WORKING HOURS WHILE THIS PROJECT IS IN PROGRESS. THE CONTRACTOR'S SUPERINTENDENT MUST BE THE DESIGNATED RESPONSIBLE CONTRACTOR REPRESENTATIVE AND MUST BE AVAILABLE IN CASE OF EMERGENCIES ON A TWENTY-FOUR (24) HOUR BASIS.

20. THE CONTRACTOR'S PROJECT MANAGER AND FIELD SUPERINTENDENT MUST ATTEND A WEEKLY PROJECT PROGRESS MEETING WITH THE RESIDENT ENGINEER AND CONSTRUCTION MANAGER. THE CONTRACTOR'S PROJECT MANAGER MUST SUBMIT A TWO WEEK LOOK-AHEAD SCHEDULE, FROM THE CURRENT APPROVED CRITICAL PATH METHOD (CPM) SCHEDULE, AT THE MEETING.

21. THE CONTRACTOR MUST INVESTIGATE THE AVAILABILITY OF AN ADEQUATE SUPPLY OF SUITABLE WATER, MAKE ALL ARRANGEMENTS (PERMITS) FOR THE PURCHASE OF THE WATER, AND PROVIDE NECESSARY FACILITIES TO FURNISH WATER FOR USE DURING CONSTRUCTION, SOLELY AT THE CONTRACTOR'S EXPENSE. SUBJECT TO AVAILABILITY, THE CONTRACTOR MAY USE WATER OBTAINED LANDSIDE FROM WILLOW CREEK, BENSENVILLE DITCH, ETC., FOR USE IN THEIR CONSTRUCTION OPERATIONS, WITH THE APPROVAL OF THE ENGINEER AND COA.

22. THE CONTRACTOR MUST BE AWARE OF HEIGHT RESTRICTIONS ON THE PROJECT. THE CONSTRUCTION RESTRICTION DRAWINGS SHOW PART 77 HEIGHT LIMITS. CONSTRUCTION EQUIPMENT MUST NOT PENETRATE THE FAR PART 77 IMAGINARY SURFACES OF THE AIRPORT WHEN THE RUNWAY IS IN OPERATION, UNLESS SPECIFICALLY ALLOWED BY THE ENGINEER, COA AND FAA. IF THE CONTRACTOR IS PERMITTED TO PENETRATE THESE SURFACES, THE PENETRATIONS WILL BE LIMITED IN HEIGHT AND TIME DURATION AS DIRECTED BY THE COA AND FAA AND TIME WILL BE COORDINATED.

23. ON BEHALF OF THE CONTRACTOR, OWNER'S REPRESENTATIVE WILL SUBMIT FAA FORM 7460-1 INCLUDING ALL HEIGHTS AND LOCATIONS OF ANTICIPATED EQUIPMENT TO BE USED FOR CONSTRUCTION. ANY CONTRACTOR MODIFICATIONS TO THE 7460-1 MUST OBTAIN FAA APPROVAL PRIOR TO BEGINNING CONSTRUCTION. DURATION FOR FAA APPROVAL OF MODIFICATIONS TO THE 7460-1 IS APPROXIMATELY 45 CALENDAR DAYS.

ADDED SHEET
FAA-01

HNTB

USER NAME: mhaz	DESIGNED: SJM	REVISED: -
PLOT SCALE: 1/2"	DRAWN: SJM	REVISED: -
PLOT DATE: 26-DEC-2012	CHECKED: SPG	REVISED: -
	DATE	REVISED: 12/28/12 ADDENDUM 1

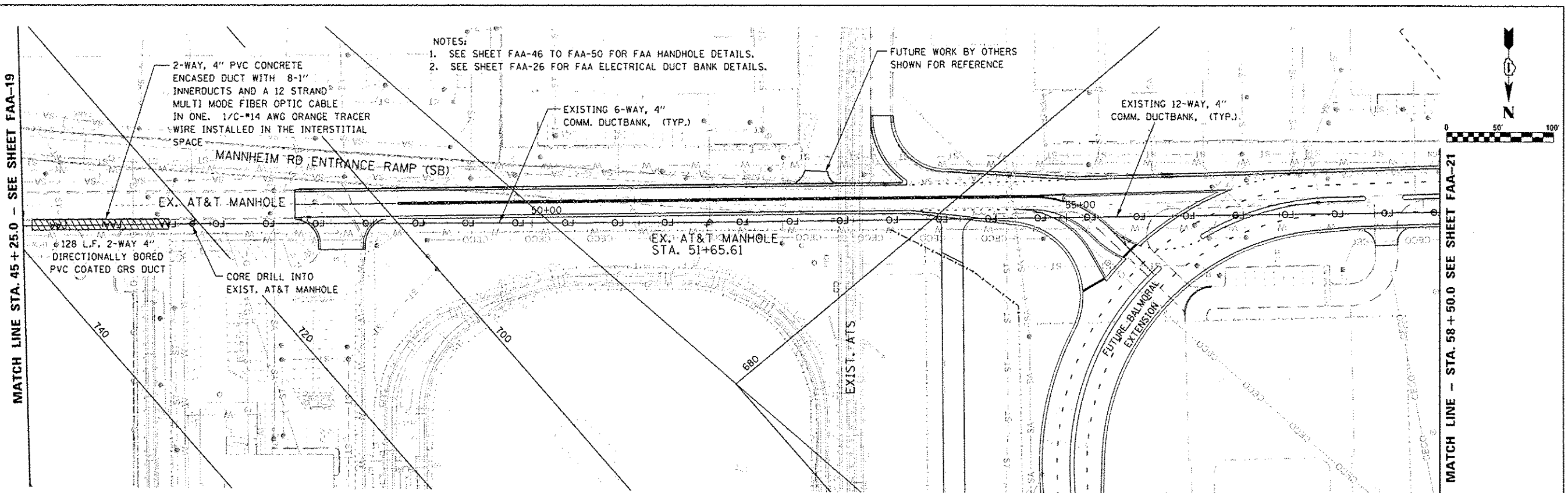
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAA-GENERAL NOTES

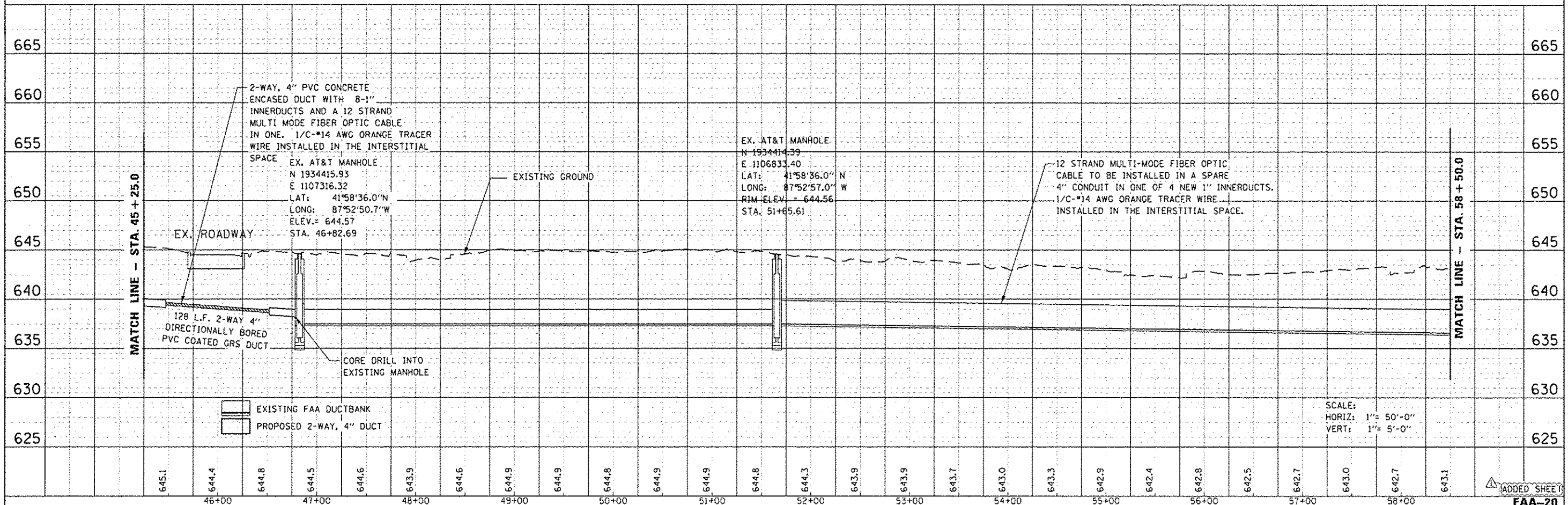
SCALE: N.T.S. SHEET NO. 1 OF 4 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HD	COOK	805	805A
				CONTRACT NO. 60637
ILLINOIS FED. AID PROJECT				

PLAN	DATE
REVISION	BY
NOTED	DATE
NO.	FILE NAME



PROFILE	DATE
REVISION	BY
NOTED	DATE
NO.	FILE NAME



HNTB

USER NAME: eh001	DESIGNED: CFB	REVISED: -
DRAWN: CFB	REVISION: -	
CHECKED: SPG	REVISION: -	
DATE: 10/19/12	REVISION: 12/27/12 ADDENDUM 1	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

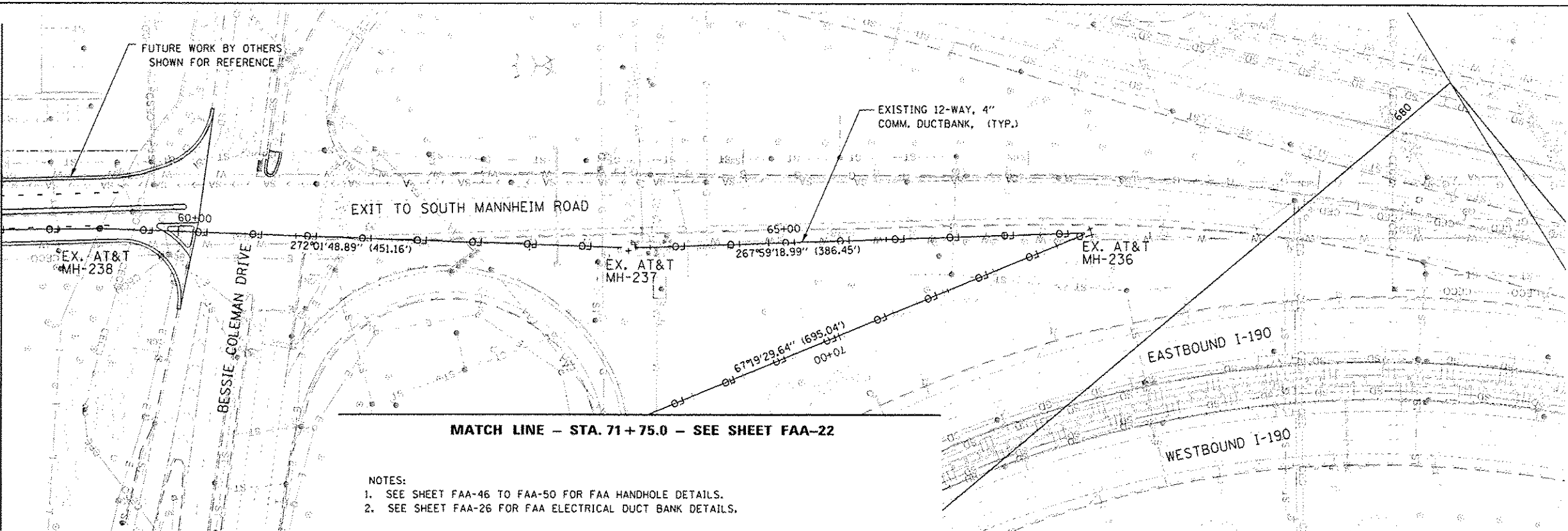
FOTS LOOP 3 PLAN AND PROFILE	
SCALE:	SHEET NO. 5 OF 8 SHEETS
STA.	TO STA.

F.A.P. RTE. 330	SECTION 0105 WRS&HB	COUNTY COOK	TOTAL SHEET NO. 805
CONTRACT NO. 60G37			ILLINOIS FED. AID PROJECT

FILE NAME IP_PWPdms47844\0160537-WH-FAA-07528.dgn

PLAN	DATE
REVISED	BY
NOTED	DATE
NOTE BOOK	NO.
ADD FILE NAME	

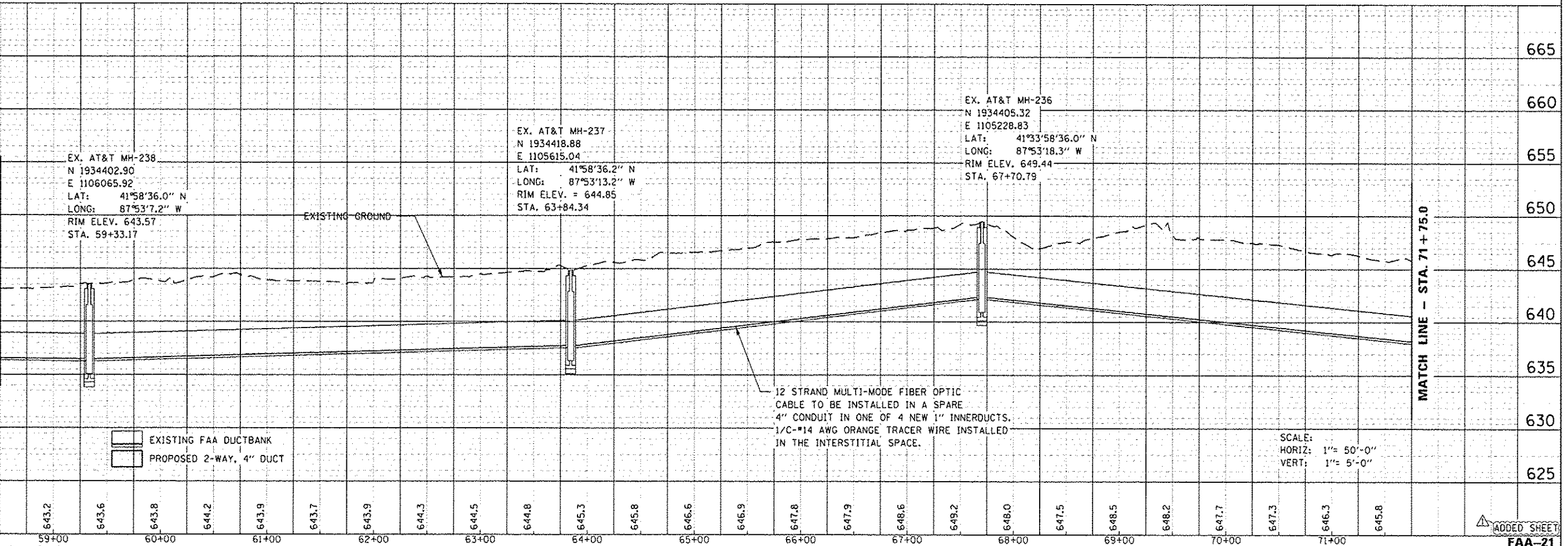
MATCH LINE - STA. 58 + 50.0 SEE SHEET FAA-20



- NOTES:
1. SEE SHEET FAA-46 TO FAA-50 FOR FAA HANDHOLE DETAILS.
 2. SEE SHEET FAA-26 FOR FAA ELECTRICAL DUCT BANK DETAILS.

PROFILE	DATE
REVISED	BY
NOTED	DATE
NOTE BOOK	NO.
ADD FILE NAME	

MATCH LINE - STA. 58 + 50.0



HNTB

USER NAME = mksir	DESIGNED CFB	REVISED -
PLOT SCALE = 100.00071	DRAWN CFB	REVISED -
PLOT DATE = 26-DEC-2012	CHECKED SPG	REVISED -
DATE 10/19/12	REVISOR	12/27/12 ADDENDUM 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOTS LOOP 3
PLAN AND PROFILE

SCALE: SHEET NO. 6 OF 8 SHEETS STA. TO STA.

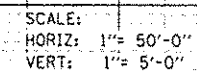
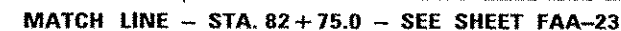
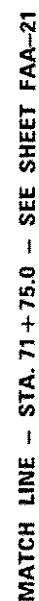
F.A.P. RTE. 330	SECTION 0105 WRS&HB	COUNTY COOK	TOTAL SHEET NO. 605
CONTRACT NO. 60637			605U

FILE NAME JP_PWPdms47844\0168037-shr-FAA01521.dgn

ADDED SHEET

FAA-21

PROFILE	BY	DATE
SORTED		
PLOTTED		
GRADES CHECKED		
NOTE BOOK		
NO.		
STRUCTURE NOTATIONS OFF		



MATCH LINE - STA. 82+75.0

1 ADDED SHEET
FAA-22

HNTB

USER NAME = mkosar	DESIGNED CFB	REVISED -
	DRAWN CFB	REVISED -
PLOT SCALE = 1/8001	CHECKED SPG	REVISED -
PLOT DATE = 26-DEC-2012	DATE 10/19/12	REVISED 12/27/12 ADDENDUM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOTS LOOP 3 PLAN AND PROFILE

SCALE:	SHEET NO. 7 OF 8 SHEETS	STA.	TO STA.
--------	-------------------------	------	---------

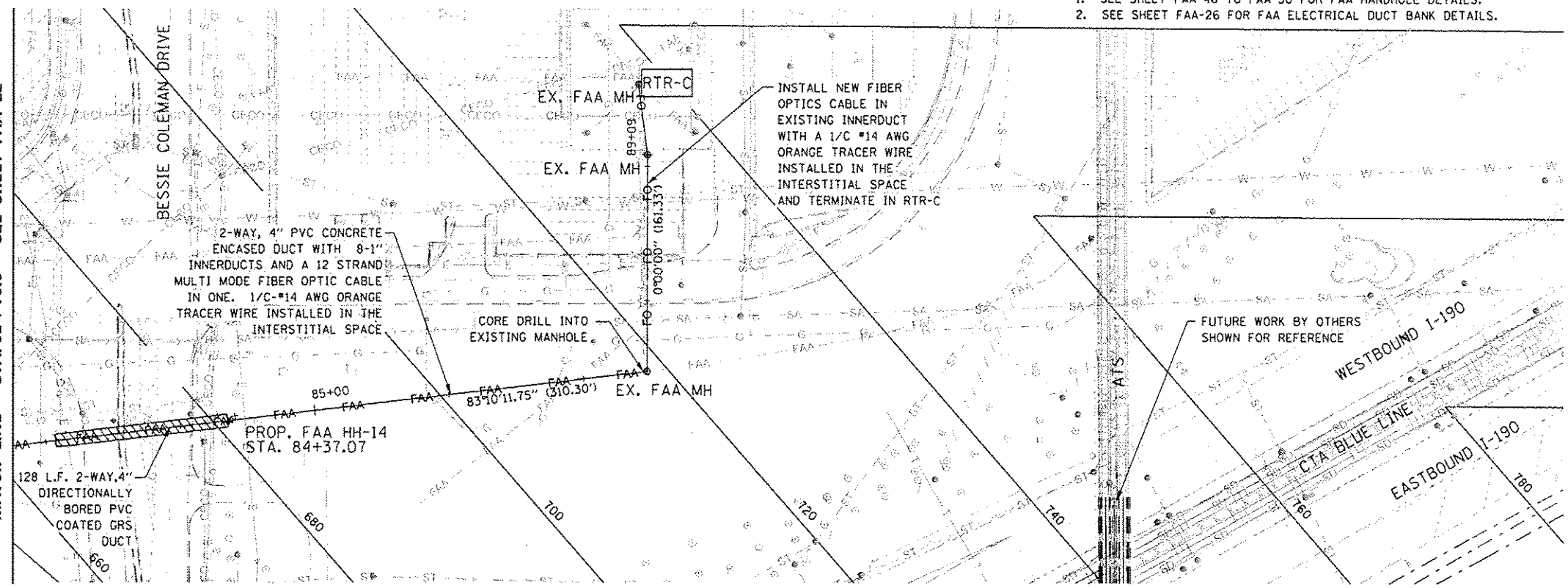
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	605V
CONTRACT NO. 60637				

FILE NAME IP_PWP:idea47844\DI68C37-ah-FANF0TS22.doc

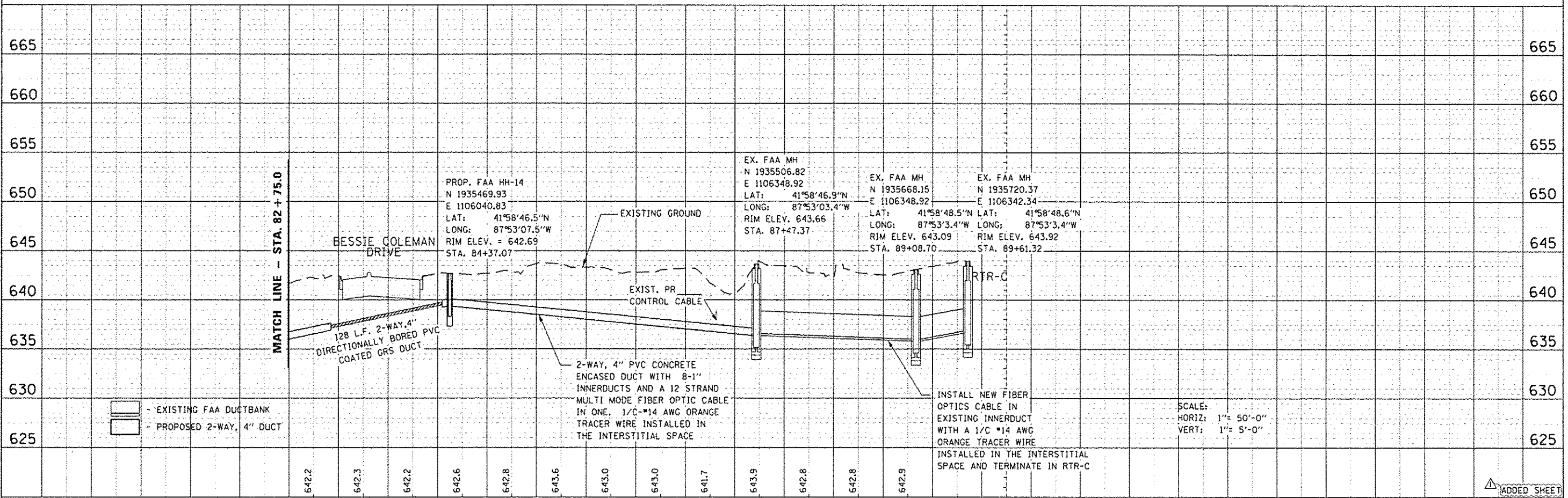
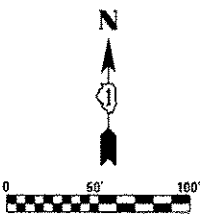
PLAN	DATE	BY
DESIGNED		
DRAWN		
CHECKED		
DATE		
FILE NAME		

PROFILE	DATE	BY
DESIGNED		
DRAWN		
CHECKED		
DATE		
FILE NAME		

MATCH LINE - STA. 82 + 75.0 - SEE SHEET FAA-22



- NOTES:
1. SEE SHEET FAA-46 TO FAA-50 FOR FAA HANDHOLE DETAILS.
 2. SEE SHEET FAA-26 FOR FAA ELECTRICAL DUCT BANK DETAILS.



SCALE:
HORIZ: 1"= 50'-0"
VERT: 1"= 5'-0"



USER NAME: mkostr	DESIGNED: CFB	REVISED: -
DRAWN: CFB	CHECKED: SPG	REVISED: -
PLDT SCALE: 1/8"=1'	DATE: 10/19/12	REVISED: 12/27/12 ADDENDUM 1
PLDT DATE: 26-DEC-2012		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOTS LOOP 3 PLAN AND PROFILE	
SCALE:	SHEET NO. 8 OF 8 SHEETS
STA.	TO STA.

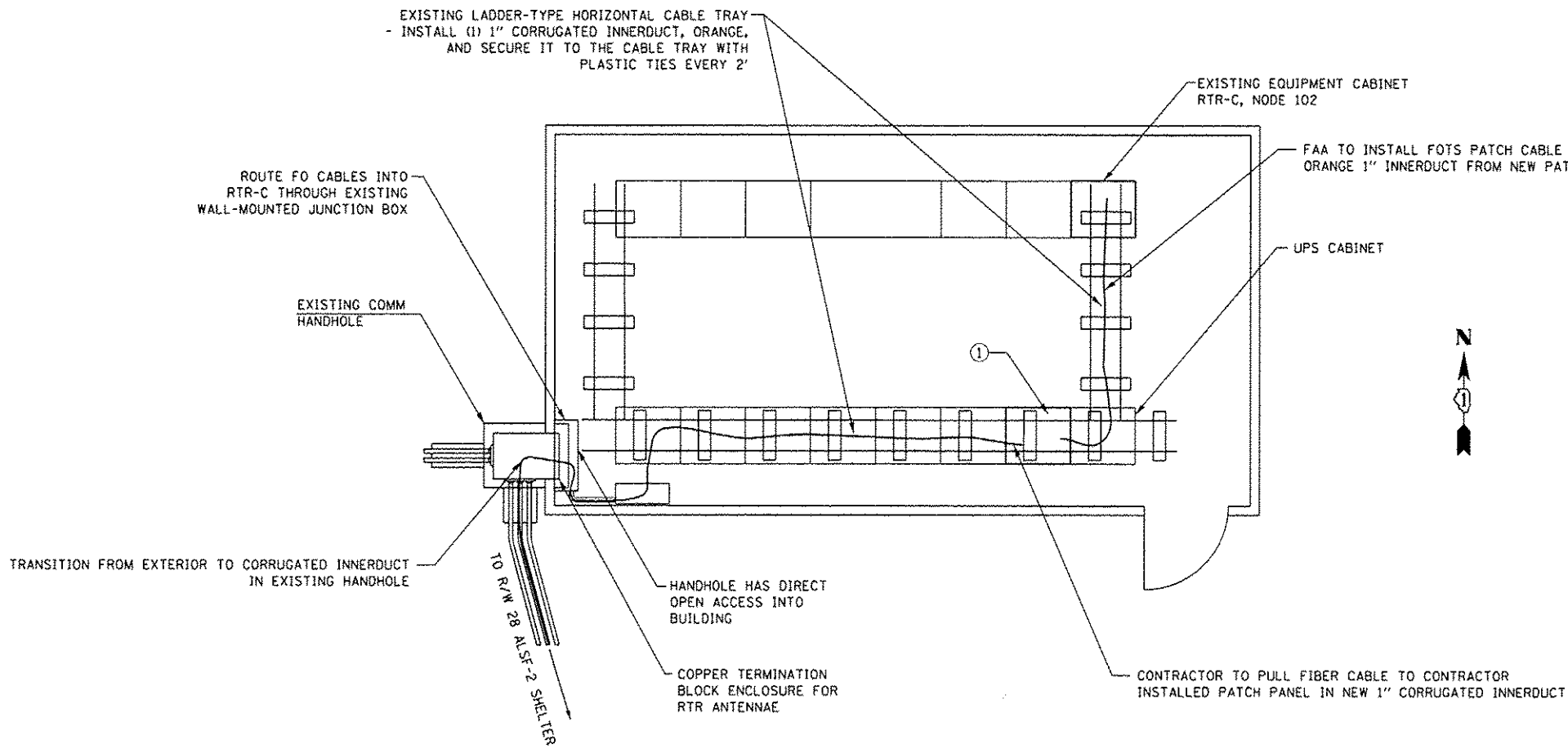
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	805	805W
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

FILE NAME: IP_PWDms47844\DI68037-ah-FAAF01523.dgn

ADDED SHEET
FAA-23

NUMBERED LEGEND:

- ① INSTALL NEW FIBER PATCH PANEL IN EXISTING RACK (BAY 1, RACK 2)
A. ROUTE CABLING CONTINUOUS TO THIS POINT AND MAKE CONNECTIONS TO FIBER PATCH PANEL.
B. FURNISH PATCH CABLE FOR FAA PERSONNEL TO INSTALL;
COORDINATE LENGTH OF PATCH CABLES WITH FAA PERSONNEL.



RTR-C - PLAN VIEW

NOTES

1. THE PROPOSED FIBER OPTIC CABLE SHALL BE INSTALLED WITHOUT SPLICE BETWEEN THE NEW CONTRACTOR PROVIDED FOTS PATCH PANELS IN RTR C AND THE EXISTING FOTS PATCH PANEL IN THE RUNWAY 28 ALSF SHELTER.
2. ALL 12 FIBERS ARE TO TERMINATED BE ON THE FOTS PATCH PANELS AND TESTED IN ACCORDANCE WITH SPECIFICATION 16125.
3. ALL EXISTING FIBER OPTIC CABLES AND TERMINATIONS TO BE MAINTAINED UNTIL THE FAA COMMISSIONS THE NEW INSTALLATION.
4. CONTRACTOR MUST SUBMIT ASSISTANCE REQUEST FORM 5 BUSINESS DAYS IN ADVANCE OF GAINING ACCESS TO THE SHELTER TO PERFORM WORK.
5. NO FIBER CABLES ARE TO BE DISCONNECTED BY THE CONTRACTOR. ANY FIBER TO BE REMOVED WILL BE IDENTIFIED BY FAA PERSONNEL ONLY.
6. INSTALL A PULLWIRE/TAPE IN NEW CORRUGATED INNERDUCT BETWEEN PATCH PANEL AND TERMINATION IN EQUIPMENT CABINET.
7. SEAL ALL EXISTING AND NEW UNUSED CONDUITS AND INNERDUCT AT HANDHOLE FOR OPENINGS THAT LEAD OUT OF THE SHELTER.



HNTB

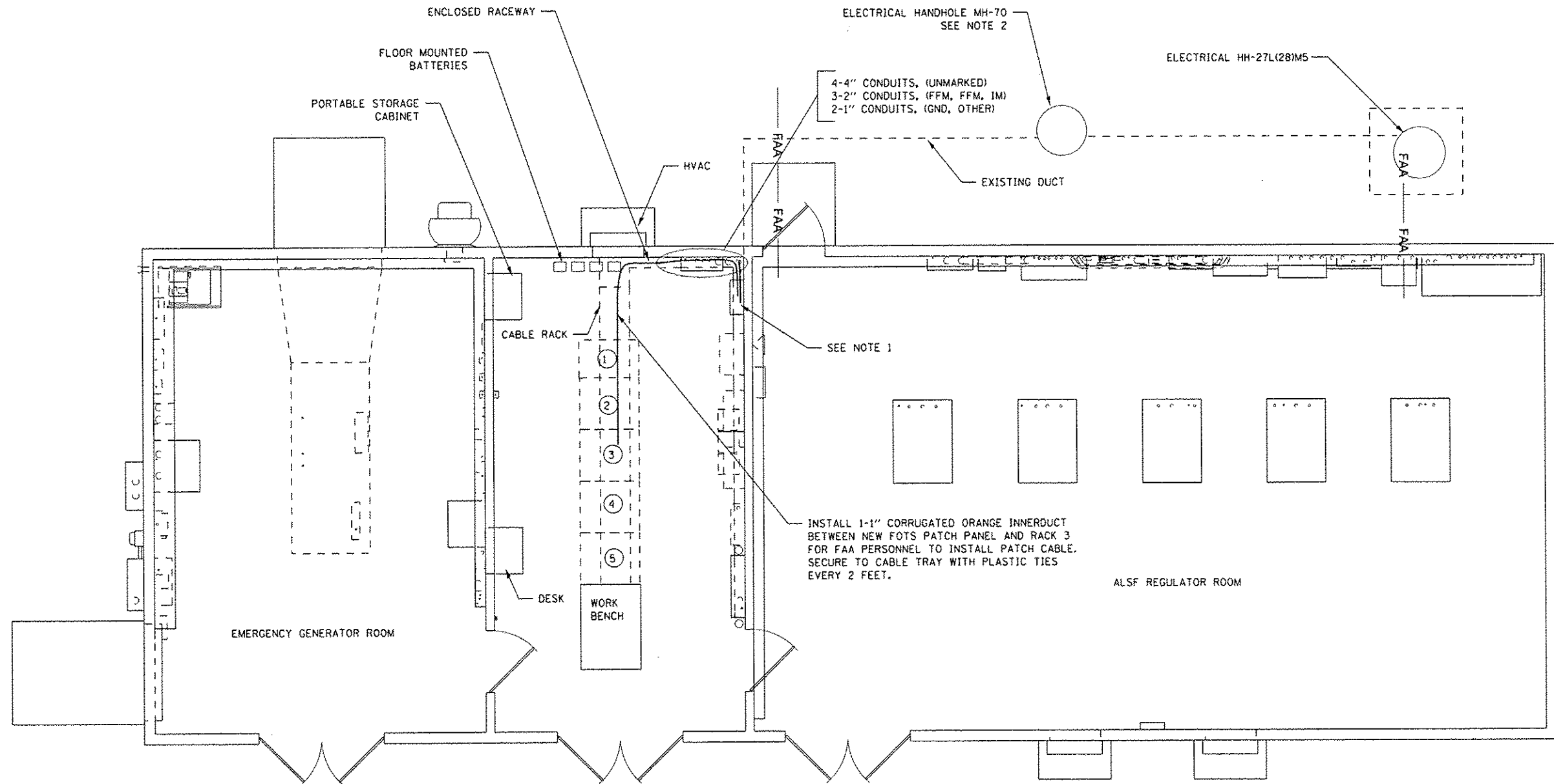
USER NAME = mksir	DESIGNED SJM	REVISED -
	DRAWN SJM	REVISED -
PLOT SCALE = 2/1	CHECKED SPG	REVISED -
PLOT DATE = 27-DEC-2012	DATE	REVISED 12/28/12 ADDENDUM 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOTS LOOP 3
FOTS TAIL TERMINATION DETAILS AT RTR-C

SCALE: N.T.S. SHEET NO. 1 OF 3 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0109 WRS&HB	COOK	605	605X
CONTRACT NO. 60637				
ILLINOIS FED. AID PROJECT				



NOTES:

- EXISTING, SPARE JUNCTION BOX ENCLOSURE (24" x 24" x 10"). INSTALL PROPOSED PATCH PANEL IN ENCLOSURE. EXTEND PROPOSED CABLING INTO SHELTER AND CONNECT TO PROPOSED FIBER OPTIC PATCH PANEL.
- CONTRACTOR MUST REQUEST FAA ASSISTANCE TO LOCATE/TRACE EXISTING ROUTE OF DUCT FROM THE ABANDONED JUNCTION BOX IN THE 28 SHELTER TO THE RUNWAY 4R LOCALIZER.
- INSTALL A PULLWIRE/TAPE IN NEW CORRUGATED INNERDUCT BETWEEN PATCH PANEL AND TERMINATION IN EQUIPMENT CABINET.
- SEAL ALL EXISTING AND NEW UNUSED CONDUITS AND INNERDUCT AT HANDHOLE FOR OPENINGS THAT LEAD OUT OF THE SHELTER.
- CONTRACTOR MUST CLEAN OUT UNUSED ELECTRICAL TERMINATION POINTS FROM THE INTERIOR OF THE SPARE JUNCTION BOX.

- FIBER RACK ENCLOSURE, FOL 612-4R-LOC WITH TERMINATIONS:
A) FOL 612-4R-LOC OC3-1 RX TO 22L MALSR FIBER 2;
B) FOL 612-4R-LOC OC3-1 RX TO 22L MALSR FIBER 1;
C) FOL 612-4R-10C OC3-2 RX TO 22L GS FIBER 2;
D) FOL 612-4R-10C OC3-2 RX TO 22L GS FIBER 1;
- POWER SUPPLIES CABINET
- ALCATEL 3600+ CABINET
- MED LOC CABINET
- FJU LOC CABINET

ADDED SHEET
FAA-25

HNTB

USER NAME = mhobier	DESIGNED <i>SJM</i>	REVISED -
	DRAWN <i>SJM</i>	REVISED -
PLOT SCALE = 2H	CHECKED <i>SPG</i>	REVISED -
PLOT DATE = 27-DEC-2012	DATE	REVISED 12/28/12 ADDENDUM 1

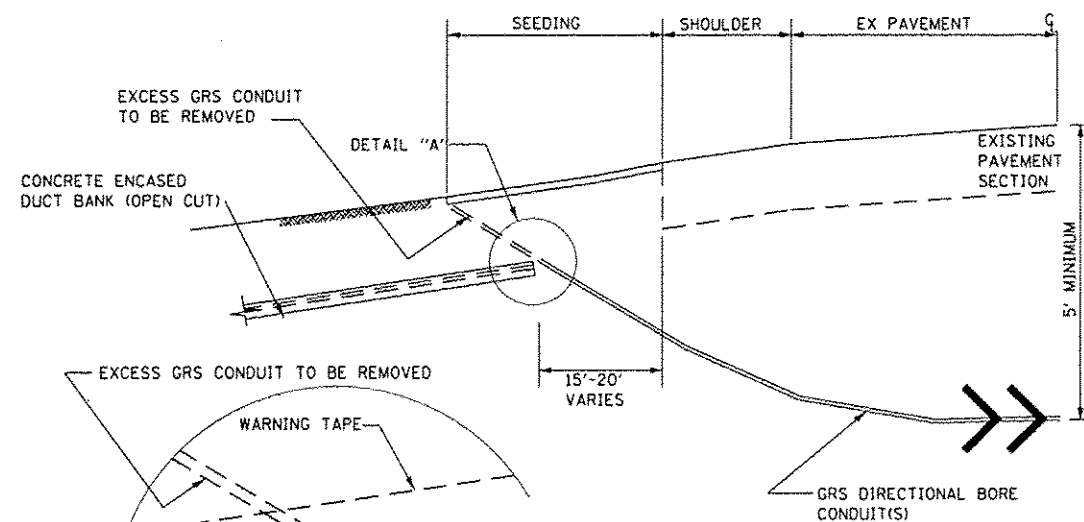
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOTS LOOP 3
FOTS TAIL TERMINATION DETAILS AT RTR-C

SCALE: N.T.S. SHEET NO. 2 OF 3 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	605Y
CONTRACT NO. 60G37				

ILLINOIS FED. AID PROJECT

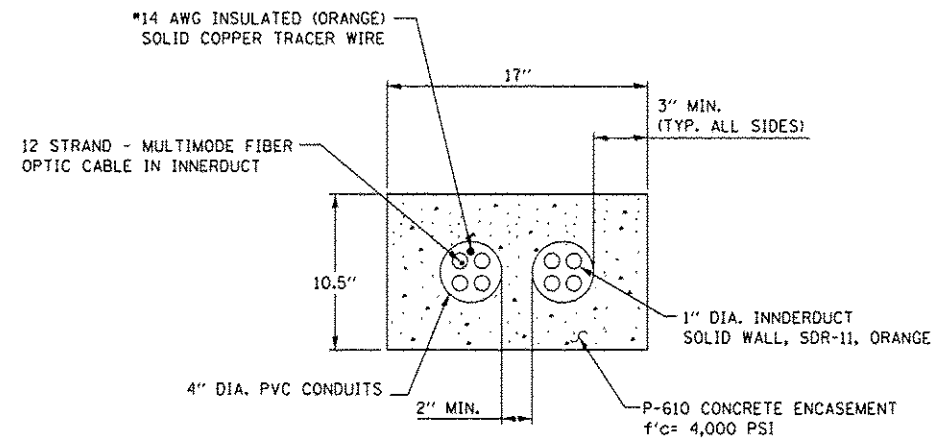


DETAIL A

DIRECTIONALLY BORED CONDUIT UNDER PAVEMENT

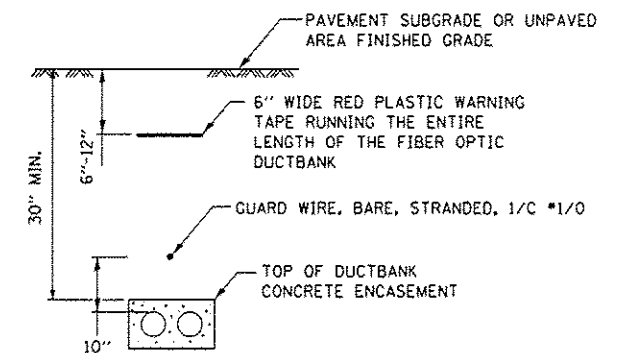
NOTES:

- ALL CONCRETE ENCASED DUCT BANKS MUST HAVE:
 - A 2" MINIMUM SEPARATION BETWEEN OUTSIDE SURFACE OF CONDUITS.
 - A 3" MINIMUM CONCRETE COVER BETWEEN OUTSIDE SURFACE OF THE CONDUITS AND OUTSIDE SURFACE OF THE DUCTBANK.
- INSTALL CONDUITS AT A MINIMUM SLOPE OF 3"/100' TOWARD MANHOLES OR HANDHOLES FOR DRAINAGE.
- WHERE COLD SPLICES ARE REQUIRED BETWEEN CONCRETE POURS, THE CONCRETE FACE AT THE END OF A POUR MUST BE LEFT AS A 45 SLOPED SPLICE FACE.
- SEE TYPICAL DUCTBANK DETAILS ON SHEET FAA-43 FOR FURTHER INFORMATION.
- FOR DIRECTIONALLY BORED DUCTS, CONNECT GROUND WIRE TO GRS CONDUIT AND A GROUND ROD ON BOTH ENDS OF THE DIRECTIONALLY BORE, VIA EXOTHERMIC WELDS; SEE SPECIFICATIONS FOR MORE INFORMATION.

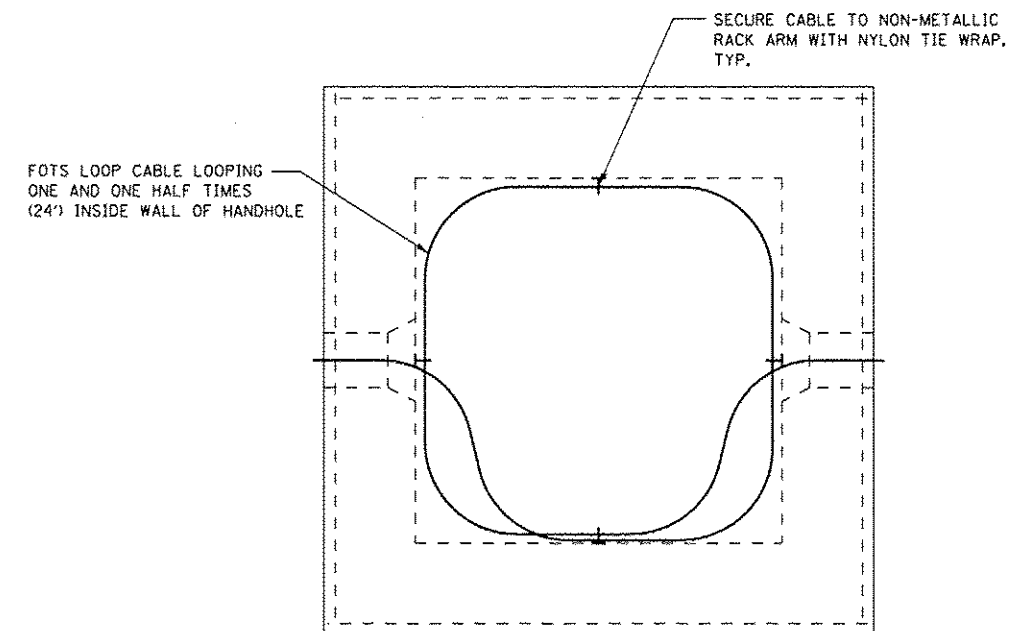


- ALL DUCTBANKS MUST HAVE:
- A 2" MINIMUM SEPARATION BETWEEN OUTSIDE SURFACE OF CONDUITS.
 - A 3" MINIMUM CONCRETE COVER BETWEEN OUTSIDE SURFACE OF THE CONDUITS AND OUTSIDE SURFACE OF THE DUCTBANK.

CONCRETE ENCASED DUCTBANK 2-WAY, 4" PVC, NON-REINFORCED



LOCATION OF FAA GUARD WIRE AND DUCTBANK WARNING TAPE



NOTES:

- CABLE BEND RADIUS FOR STATIC STORAGE MUST NOT BE LESS THAN 20 TIMES THE OUTSIDE DIAMETER OF THE CABLE AT ANY LOCATION OR AS RECOMMENDED BY THE MANUFACTURER.
- CABLE RACKS MUST BE HEAVY DUTY, STANDARD YELLOW FIBERGLASS REINFORCED NYLON WITH ADJUSTABLE ARMS.
- CABLES MUST BE LOOPED HORIZONTALLY ONE FOOT FROM TOP PORTION OF HANDHOLE INSIDE WALL.
- LENGTH OF RACK ARM MUST BE 6 INCHES.

TYPICAL FOTS LOOP CABLE SLACK DETAIL INSIDE FAA HANDHOLE

HNTB

USER NAME = mhovir	DESIGNED <i>SJM</i>	REVISED -
	DRAWN <i>SJM</i>	REVISED -
PLOT SCALE = 20	CHECKED <i>SPG</i>	REVISED -
PLOT DATE = 26-DEC-2012	DATE	REVISED 12/28/12 ADDENDUM 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOTS LOOP 3
FAA ELECTRICAL DUCT BANK AND CABLE SLACK DETAILS

SCALE: N.T.S. SHEET NO. 3 OF 3 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	805Z
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

ADDED SHEET
FAA-26

NOTES FOR RW 28 ALSF-2 & RW 22L MALSR RELOCATION WORK

1. CONTRACTOR SHALL FIELD-VERIFY ALL EXISTING AND PROPOSED ROUTING FOR DUCTBANKS AND CIRCUITS AFFECTED BY THE ALSF-2 AND MALSR WORK.
2. PRIOR TO BEGINNING WORK AT LIGHT STATIONS, IT IS RECOMMENDED THAT THE CONTRACTOR COMPLETE ALL INFRASTRUCTURE INSTALLATION TO MINIMIZE DOWNTIME OF THE NAVIGATIONAL AIDS.
3. HANDHOLES SHALL BE FURNISHED WITH PRE-CAST CONDUIT STUBS TO ALLOW FOR VARIOUS CONNECTIONS DURING EACH PHASE OF WORK. COORDINATE NUMBER AND ORIENTATION OF STUBS WITH PHASING PLANS.
4. CONTRACTOR SHALL TEST ALL SYSTEMS IN THE PRESENCE OF THE FAA AND REMAIN AVAILABLE UNTIL ALL SYSTEMS ARE DEEMED OPERATIONAL BY FAA PERSONNEL.
5. CONTRACTOR SHALL COORDINATE TIMING OF ALL WORK WITH THE ENGINEER, CDA, AND FAA. ALL COORDINATION SHALL BE FINALIZED PRIOR TO THE START OF WORK.
6. CONTRACTOR SHALL IDENTIFY AND VERIFY ALL EXISTING PARTS OF THE ALSF-2 LIR TOWER, MOUNTING BRACKET, AND LIGHT BAR TO BE STORED AND RE-USED FOR THE PERMANENT INSTALLATION IN PHASE 2. REFER TO INSTALLATION DETAILS FOR REFERENCED PARTS.
7. CONTRACTOR SHALL DISASSEMBLE AND PROTECT ALL REQUIRED LIGHT STATION PARTS AS NECESSARY FOR PROPOSED WORK TO BE COMPLETED.
8. ANY EXISTING PARTS OR EQUIPMENT DAMAGED DURING CONSTRUCTION SHALL BE REPLACED WITH FAA-APPROVED, STANDARD PARTS AT NO ADDITIONAL COST TO THE CONTRACT. CONTRACTOR SHALL NOTIFY THE ENGINEER AND FAA OF ANY EXISTING DAMAGED PARTS PRIOR TO ANY WORK BEING PERFORMED AT THE LIGHT STATION.
9. CONTRACTOR SHALL FURNISH AND INSTALL A NEW PERMANENT MAINTENANCE STAND AND TEMPORARY WORKING PLATFORM AT EACH PERMANENTLY RELOCATED LIGHT STATION. COORDINATE HEIGHT, LOCATION, AND ORIENTATION WITH FAA PERSONNEL PRIOR TO INSTALLATION TO ENSURE ALL LIGHTS ARE ABLE TO BE MAINTAINED IN THE NEW MAINTENANCE POSITION.



USER NAME = mhobier	DESIGNED <i>SJM</i>	REVISED -
	DRAWN <i>SJM</i>	REVISED -
PLOT SCALE = 2H	CHECKED <i>SPG</i>	REVISED -
PLOT DATE = 26-DEC-2012	DATE <i>10/19/12</i>	REVISED  12/28/12 ADDENDUM 1

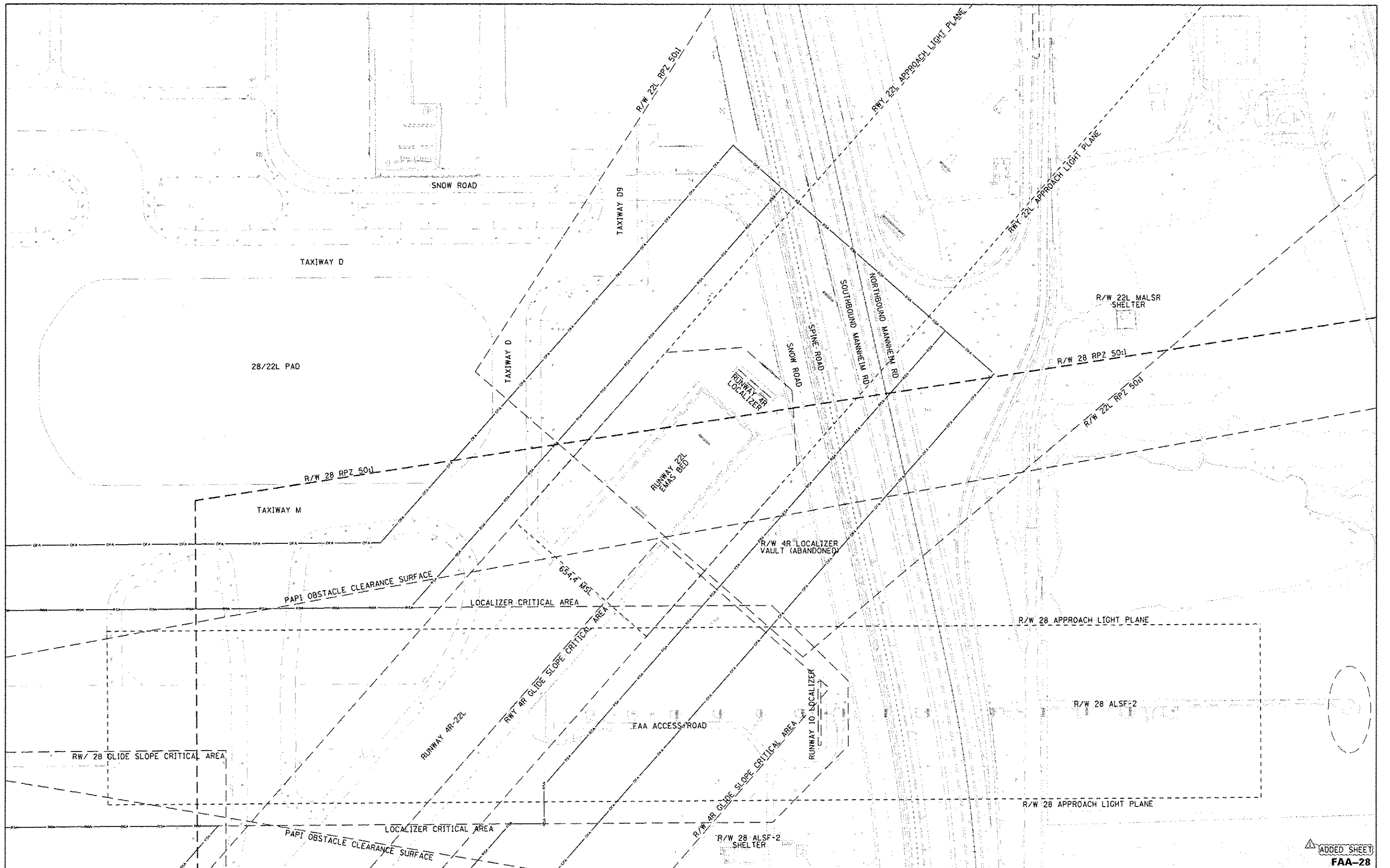
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

**NAVAIDS
ALSF-2 AND MALSR RELOCATION NOTES**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&MB	COOK	605	605AA
		CONTRACT NO. 60G37		
ILLINOIS FED. AID PROJECT				

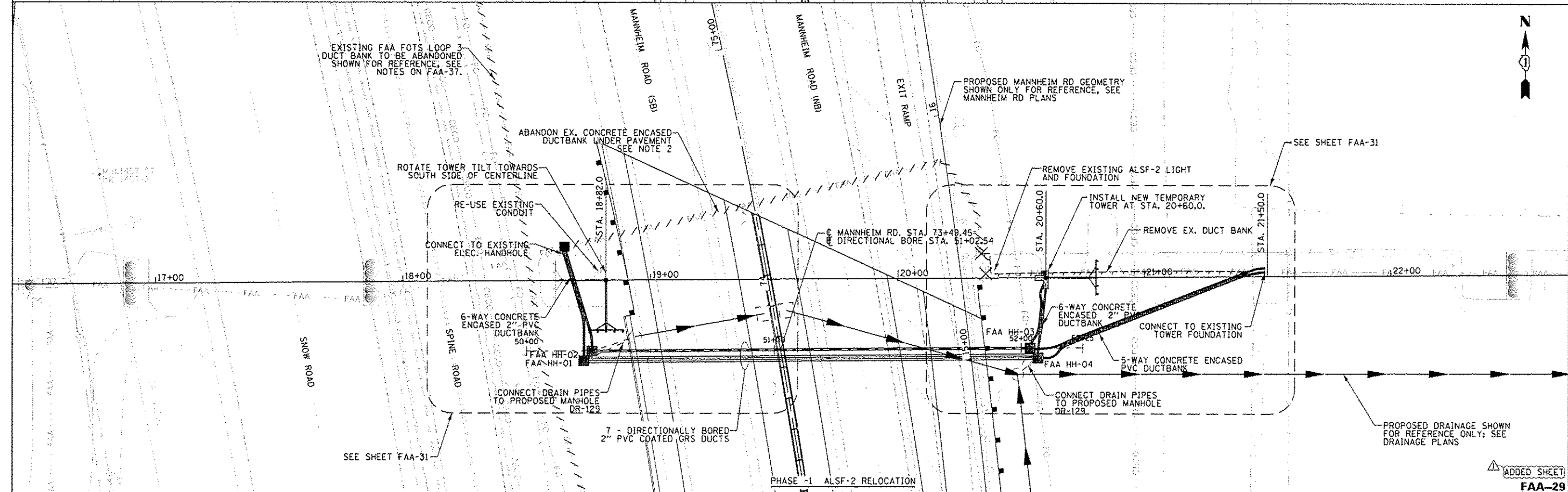
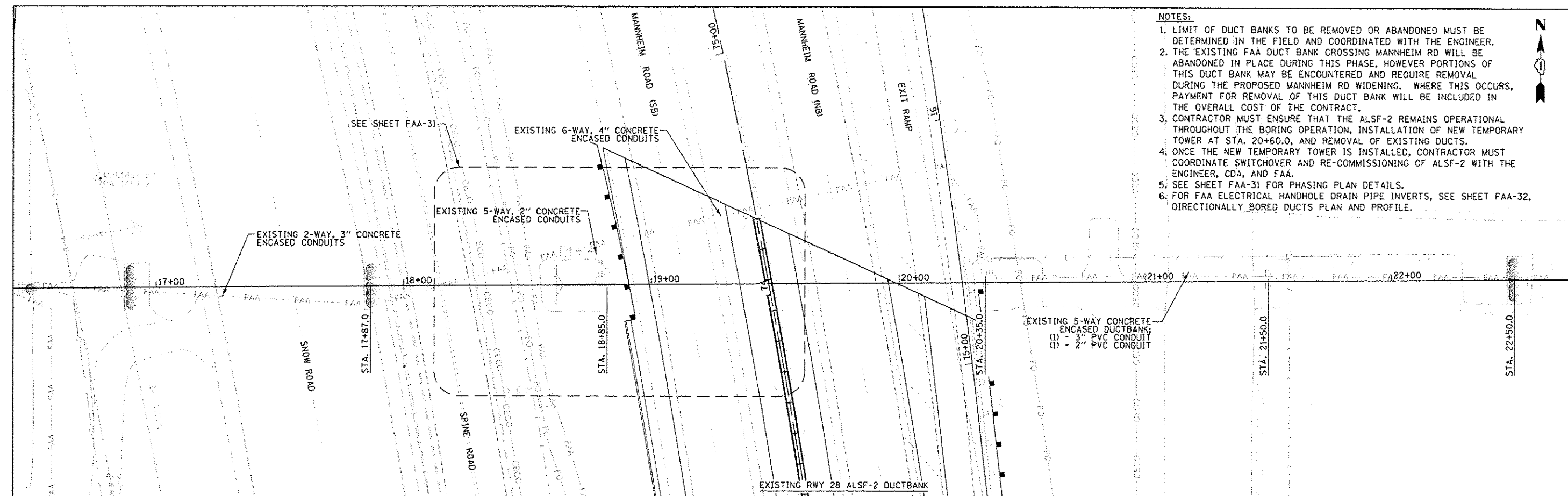
FILE NAME = JP_PWP\dms47BA4\DI68G37-shr-FANNAV27.do

ADDED SHEET
FAA-27



HNTB	USER NAME : mhoeir	DESIGNED SJM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	NAVAIDS - EXISTING CONDITIONS AND COMPOSITE UTILITIES	F.A.P. RTE. 330	SECTION 0105 WRS&HB	COUNTY COOK	TOTAL SHEETS 605	SHEET NO. 605AB	CONTRACT NO. 60G37
	PLOT SCALE : 200:1	DRAWN SJM	REVISED -								
	PLOT DATE : 26-DEC-2012	CHECKED SPG	REVISED -								
	DATE	REVISED	12/20/12 ADDENDUM 1								
FILE NAME : IP_PWPdms47044\016037-shv-FAANAV028.dgn				SCALE: 1" = 100'		SHEET NO. 1 OF 1 SHEETS		STA. TO STA.		ILLINOIS FED. AID PROJECT	

ADDED SHEET
FAA-28



HNTB				STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION				NAVAIDS R/W 28 ALSF-2 RELOCATION EXISTING AND PHASE 1				FAA-29			
USER NAME: mksar				DESIGNED: CFB				F.A.P. RTE. 330				SECTION 0105 WRS&HB			
PLOT SCALE: 40:1				DRAWN: CFB				COUNTY COOK				TOTAL SHEET NO. 605			
PLOT DATE: 26-DEC-2012				CHECKED: SPG				CONTRACT NO. 60637				ILLINOIS FED. AID PROJECT			
DATE				REVISED: 12/28/12 ADDENDUM 1				SCALE: 1" = 20'				SHEET NO. 1 OF 1 SHEETS			
STA.				TO STA.				TO STA.				TO STA.			

FILE NAME: J:\P\mksar\47844\0160637-shc-FAA\NAV29.dgn

24. NO REQUIREMENTS OF THIS CONTRACT WITH RESPECT TO PRECAUTIONS REQUIRED OR OMITTED WILL BE DEEMED TO LIMIT OR IMPAIR ANY OBLIGATIONS ASSUMED BY THE CONTRACTOR UNDER OR IN CONNECTION WITH THIS CONTRACT, AND THE CONTRACTOR MUST AT ALL TIMES MAINTAIN ADEQUATE PROTECTION TO SAFEGUARD AIRCRAFT, THE PUBLIC, AND ALL PERSONS ENGAGED IN THE WORK AND MUST TAKE SUCH PRECAUTIONS AS WILL ACCOMPLISH SUCH END, WITHOUT INTERFERENCE TO AIRCRAFT, THE PUBLIC, OR MAINTENANCE AND OPERATION OF THE AIRPORT.
25. COMMUNICATION BETWEEN ALL PARTIES INVOLVED IN THE WORK IS OF THE UTMOST IMPORTANCE. THE CONTRACTOR, THROUGH THE ENGINEER, CDA AND FAA, AND CDA AIRPORT OPERATIONS PERSONNEL MUST BE IN CONSTANT COMMUNICATION TO ENSURE SAFE OPERATIONS ON THE AOA. THE CONTRACTOR MUST NOTIFY THE CDA AND FAA FORTY-EIGHT (48) HOURS PRIOR TO REQUESTING THE CLOSING OF ANY AREA SO THAT THE AIRPORT OPERATIONS PERSONNEL CAN PROPERLY COORDINATE THE ACTIVITIES OF THE AIRPORT AND CONTRACTOR. UNDER NO CIRCUMSTANCES IS THE CONTRACTOR ALLOWED TO COMMUNICATE WITH FAA AIR TRAFFIC CONTROL PERSONNEL. EXISTING NAVAID SIGNAL OPERATIONS MAY REQUIRE THE CONTRACTOR TO RESTRICT THE USE OF COMMUNICATION DEVICES. THERE WILL BE NO ADDITIONAL COMPENSATION TO THE CONTRACTOR DUE TO ANY RESTRICTIONS ON HIS/HER COMMUNICATION DEVICES.
26. WHERE REQUIRED IN THE EXECUTION OF THE PROJECT, THE CONTRACTOR MUST FURNISH 20 CLASS "A" BARRICADES COMPLETE WITH LIGHTS. THE CONTRACTOR MUST PROVIDE, PLACE, AND MAINTAIN ALL BARRICADES AND MUST MAINTAIN ALL SIGNS REQUIRED TO CONTROL CONSTRUCTION AND AIRCRAFT TRAFFIC. TYPICAL BARRICADE SPACING IS 10 FEET ACROSS A RUNWAY AND 25 FEET ACROSS A TAXIWAY. THE EXACT LOCATION, NUMBER AND SPACING OF ALL BARRICADES AND LIGHTS WILL BE DETERMINED BY THE CDA AIRPORT OPERATIONS. ALL BARRICADES AND LIGHTS MUST BE TURNED OVER TO THE ENGINEER AND CDA IN GOOD WORKING CONDITION AND WITH NEW BATTERIES AND DELIVERED TO A LOCATION ON O'HARE AIRPORT PROPERTY AT THE DIRECTION OF THE ENGINEER AND CDA, UPON COMPLETION OF THE PROJECT. BARRICADES, LIGHTS, LAMPS, BATTERIES, TRANSPORTATION, AND HANDLING AND MAINTENANCE WILL NOT BE PAID FOR SEPARATELY BUT CONSIDERED INCLUDED IN THE OVERALL CONTRACT PRICE.
27. EXISTING GRADES REPORTED ON THE DRAWINGS ARE BASED ON BEST AVAILABLE INFORMATION; HOWEVER, THE CITY ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THESE GRADES. IF THE CONTRACTOR DOES NOT CONCUR WITH THE ELEVATION PROVIDED ON THE DRAWINGS, THE CONTRACTOR MUST NOTIFY THE ENGINEER AND CDA IN WRITING PRIOR TO CONSTRUCTION. NO CONSTRUCTION WILL BE ALLOWED TO BEGIN UNTIL THESE CONFLICTS ARE RESOLVED.
28. EXISTING CONDITIONS WERE TAKEN FROM THE BEST AVAILABLE INFORMATION OR MAPPING. INFORMATION SHOWN CONCERNING FEATURES AND UTILITIES IS NOT GUARANTEED ALL INCLUSIVE OR CORRECT. THE CONTRACTOR IS TO VERIFY THE FEATURES PRIOR TO CONSTRUCTION. EXISTING UTILITIES ARE TO BE MAINTAINED IN SERVICE AT ALL TIMES. THE LOCATION OF MATERIALS AND DIMENSIONS OF EXISTING FACILITIES AND OBSTRUCTIONS ARE BASED UPON LOCATION RECORDS AND ARE SHOWN ON THE DRAWINGS STRICTLY AS AID TO THE CONTRACTOR, BUT MUST NOT BE CONSTRUED AS BEING ACCURATE, CORRECT, OR COMPLETE. ALL STRUCTURES ABOVE OR BELOW GROUND THAT ARE ENCOUNTERED DURING CONSTRUCTION ARE TO BE PROPERLY SUPPORTED AND MAINTAINED. THE CONTRACTOR IS TO MAKE ALL ARRANGEMENTS WITH THE ENGINEER AND CDA FOR THE PROTECTION OR RELOCATION OF SUCH STRUCTURES. IF DAMAGED DURING CONSTRUCTION, THE CONTRACTOR MUST MAKE REPAIRS OR PAY FOR THE REPAIRS OF ANY STRUCTURE TO THE SATISFACTION OF THE ENGINEER AND CDA. NO ADDITIONAL COMPENSATION WILL BE MADE FOR ANY SUCH INTERFERENCE OR OBSTRUCTION.
29. ALL ITEMS PROPOSED FOR DEMOLITION MUST BE MARKED BY THE CONTRACTOR FOR REVIEW BY THE ENGINEER AND CDA. NO ITEM WILL BE DEMOLISHED UNTIL APPROVED BY THE ENGINEER AND CDA.
30. THE CONTRACTOR MUST LAY OUT THE LOCATION OF ALL NEW ITEMS FOR REVIEW BY THE ENGINEER AND CDA. NO ITEM WILL BE CONSTRUCTED UNTIL THE LOCATION IS APPROVED BY THE ENGINEER AND CDA.
31. THE ENGINEER AND CDA WILL REVIEW THE SHOP DRAWINGS AND PROCEDURES IN ACCORDANCE WITH THE PROVISIONS AS SPECIFIED IN ARTICLE XI OF PART 2 (GENERAL CONDITIONS) OF THE SPECIFICATIONS.
32. THE CONTRACTOR MUST ESTABLISH TEMPORARY BENCHMARKS (TBM) AT INTERVALS NOT GREATER THAN FIVE-HUNDRED (500) FEET ALONG THE PROJECT PRIOR TO BEGINNING ANY CONSTRUCTION REQUIRING LOCATIONS OR GRADES. TBMS MUST BE PLACED WHERE THEY WILL NOT BE DISTURBED BY CONSTRUCTION. TBM DATA MUST BE PROVIDED TO THE ENGINEER AND CDA.
33. THE CONTRACTOR MUST PROVIDE ELECTRONIC FILES TO THE ENGINEER AND CDA IN LAND .XML AND .DXF FORMATS FOR ALL SURVEY DATA (ORIGINAL GROUND; TOPSOIL STRIPPING; FINAL LOCATION, GRADES AND ELEVATIONS OF STRUCTURES; UTILITY AS-BUILT DATA; ETC.) FOR THE ENGINEER AND CDS REVIEW AND CONCURRENCE. ALL CONTROL POINTS MUST BE SUBMITTED IN .CSV OR .TXT FORMAT FOR THE ENGINEER AND CDS REVIEW AND CONCURRENCE.
34. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE PRESERVATION OF ALL CITY OF CHICAGO PROPERTY AND MUST CAREFULLY LOCATE AND PROTECT FROM DAMAGE OR DISTURBANCE ALL BENCHMARKS, LAND MONUMENTS AND PROPERTY MARKERS. IF DAMAGE TO PROPERTY DOES OCCUR DURING THE WORK, THE CONTRACTOR MUST RESTORE, AT NO EXPENSE TO THE OWNER, SUCH PROPERTY TO A CONDITION EQUAL TO THAT EXISTING BEFORE SUCH DAMAGE WAS DONE BY REBUILDING OR RESTORING AS DIRECTED BY THE ENGINEER AND CDA.
35. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR CONSTRUCTION.
36. ALL DEWATERING OF THE SITE AS NEEDED FOR THE CONTRACTOR'S OPERATIONS WILL NOT BE PAID FOR SEPARATELY, BUT BE CONSIDERED AS INCLUDED IN THE OVERALL CONTRACT PRICE.

TRAFFIC CONTROL, SAFETY REQUIREMENTS AND ID BADGING PROCESS

1. FOR ALL CONSTRUCTION WITHIN THE AOA, THE CONTRACTOR WILL BE REQUIRED TO OBTAIN ALL VEHICLE PASSES, PERSONNEL SECURITY BADGES, AND SATISFY ALL SECURITY AND AIRFIELD TRAINING REQUIREMENTS PRIOR TO BEGINNING WORK WITHIN THE RESTRICTED AREA. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO ASSURE ALL CONSTRUCTION PERSONNEL AND EMPLOYEES WITH ACCESS TO THE AIRFIELD COMPLETE ALL REQUIRED FAR PART 139.303 AIRFIELD TRAINING. REQUIREMENTS FOR OBTAINING PASSES AND BADGES ARE INCLUDED IN PART 2 - GENERAL CONDITIONS - ARTICLE XV OF THE SPECIFICATIONS. FOR ADDITIONAL INFORMATION AND UPDATES ON BADGING AND DRIVING REQUIREMENTS, CHECK THE FOLLOWING WEBSITES: (1) HTTP://WWW.FLYCHICAGO.COM/BADGING/ AND (2) HTTP://WWW.FLYCHICAGO.COM/DRIVING/. ALL COSTS WILL NOT BE PAID SEPARATELY BUT WILL BE CONSIDERED INCLUDED IN THE TOTAL CONTRACT PRICE.
2. THE CONTRACTOR MUST COORDINATE OFF-SITE HAUL AND ACCESS ROUTES WITH THE PARTY HAVING JURISDICTION OVER THE AFFECTED ROUTE. ON-SITE HAUL AND ACCESS ROUTES MUST BE MAINTAINED BY THE CONTRACTOR AND MUST BE RESTORED TO THEIR ORIGINAL CONDITION UPON COMPLETION OF BEING USED AS A HAUL ROUTE. FENCING, DRAINAGE, GRADING, RESURFACING, OR OTHER WORK NECESSARY TO CONSTRUCT AND MAINTAIN HAUL ROUTES ON THE AIRPORT IS THE CONTRACTOR'S RESPONSIBILITY AT NO COST TO THE OWNER AND MUST BE APPROVED BY THE ENGINEER AND CDA PRIOR TO THE WORK.
3. THE CONTRACTOR MUST OBTAIN ALL VEHICLE PERMITS, PERSONNEL SECURITY BADGES, 303 TRAINING FOR ALL BADGED PERSONNEL, AND MUST SATISFY ALL SECURITY REQUIREMENTS PRIOR TO BEGINNING WORK WITHIN RESTRICTED AREAS. THE CONTRACTOR MUST FAMILIARIZE ALL CONSTRUCTION PERSONNEL WITH ANY CHANGE IN THE REQUIREMENTS FOR ENTERING AND OPERATING WITHIN THE AOA.
4. THE CONTRACTOR MUST REMAIN WITHIN THE DESIGNATED CONSTRUCTION LIMITS, STAGING AREA OR DESIGNATED HAUL ROUTES UNLESS PRIOR WRITTEN APPROVAL IS OBTAINED FROM THE ENGINEER, CDA, AND FAA.
5. MUCH OF THE CONSTRUCTION WORK IN THIS PROJECT WILL OCCUR WITHIN OR IN THE VICINITY AOA AND IS SUBJECT TO OPERATIONAL SAFETY AND SECURITY REQUIREMENTS OF THE CITY OF CHICAGO AND FAA. THE CONTRACTOR MUST COMPLY WITH ANY ADDITIONAL REQUIREMENTS AS MAY BE DEEMED NECESSARY BY THE AFOREMENTIONED ORGANIZATIONS AT NO COST TO THE OWNER.
6. THE CONTRACTOR MUST BE RESPONSIBLE FOR TRANSPORTING EMPLOYEES AND/OR VISITORS BETWEEN ACCESS GATES AND THE PROJECT SITE/WORK AREA(S), IF NECESSARY.
7. THE CONTRACTOR IS TO PLAN HIS CONSTRUCTION OPERATION SO THAT MATERIAL, EQUIPMENT, SUPPLIES AND WORKING PERSONNEL NECESSARY TO DO

- THE WORK WILL ENTER AND LEAVE THE CONTRACT SITE VIA THE GATES AND ROUTES DESIGNATED ON THE DRAWINGS. NO PERSONAL VEHICLES WILL BE PERMITTED WITHIN THE AOA. THE CONTRACTOR IS RESPONSIBLE FOR THE CONSTRUCTION, REPAIR, AND/OR MAINTENANCE OF ALL HAUL AND ACCESS ROADS TO AND FROM DESIGNATED ENTRANCES TO THE VARIOUS WORK SITES. THE CONTRACTOR MUST COORDINATE WITH THE OWNER'S REPRESENTATIVE PRIOR TO, DURING AND UPON COMPLETION OF EACH DAY'S ACTIVITY AND MUST STRICTLY FOLLOW THEIR RULES AND REGULATIONS IN ORDER TO MAINTAIN THE OPERATIONS UNINTERRUPTED.
8. SECURITY CHECKPOINTS TO THE AOA WILL BE MANNED BY BONDED GUARDS SUPPLIED BY THE CITY. SECURITY GUARDS ASSIGNED OUTSIDE THE AOA TO CONTROL ACCESS AND CONSTRUCTION TRAFFIC TO THE CONTRACTOR'S WORK SITE WILL BE PROVIDED BY THE CONTRACTOR, AS DETAILED IN SPECIFICATION SECTION M-103. THE OWNER'S REPRESENTATIVE WILL COORDINATE CONTRACTOR RESPONSIBILITIES FOR PROVIDING THE REQUIRED SECURITY GUARDS.
9. THE FOLLOWING PROVISIONS, IN ADDITION TO THE CONTRACTOR'S SAFETY PLAN ARE TO BE EXECUTED BY THE CONTRACTOR AND/OR CDA AND FAA TO ASSURE SAFE OPERATION OF THE AIRPORT DURING CONSTRUCTION ACTIVITY.
- a. VEHICLES THAT OPERATE ON THE AOA MUST WITHOUT EXCEPTION HAVE EITHER A ROTATING OR YELLOW STROBE LIGHT MOUNTED ON THE TOP OF THE VEHICLE. STROBES MOUNTED IN HEADLIGHTS AND TAILLIGHTS DO NOT COMPLY TO THE FAA CIRCULARS (AC 150/5210-5D OR CURRENT EDITION) AND ORD GROUND MOTOR VEHICLE REGULATIONS PAGE 23.1.
- b. IT IS MANDATORY THAT DURING HOURS OF LOW VISIBILITY AND DARKNESS, VEHICLES MUST HAVE THE HEADLIGHTS ON. FOR ADDED SAFETY, HAZARD LIGHTS SHOULD BE ON (AC 150/5210-5D, FAA CERT ALERT 09-11 ISSUED 7-1-09 OR CURRENT EDITION).
- c. VEHICLE TRAILERS MUST BE CONNECTED TO THEIR RESPECTIVE TOW VEHICLE WITH OPERATIONAL PARKING LIGHTS. UNATTENDED TRAILERS MUST HAVE LIGHTS ON, ESPECIALLY DURING LOW VISIBILITY AND HOURS OF DARKNESS. IF A TRAILER MUST BE DETACHED FROM THE TOW VEHICLE, BARRICADES MUST BE PLACED AT THE FOUR CORNERS OF THE TRAILER.
- d. ALL "HEAVY" EQUIPMENT IS REQUIRED TO HAVE THE 3 FEET BY 3 FEET ORANGE AND WHITE (AIRPORT CONSTRUCTION SAFETY) FLAG MOUNTED ON THE VEHICLE WHILE OPERATING ON THE AIRFIELD (AC 150/5210-5D OR CURRENT EDITION).
- e. VEHICLES NOT CONSIDERED "HEAVY" EQUIPMENT ARE PICK-UP TRUCKS, DUMP TRUCKS, BOX AND PANEL VANS, STAKE BODIES, PASSENGER VEHICLES, MECHANIC/SERVICE TRUCKS, SKID STEERS, COMBINATION BACKHOES AND BUSES. THESE VEHICLES MUST HAVE AN OPERATIONAL YELLOW ROTATING/STROBE LIGHT. EQUIPMENT THAT DO NOT REQUIRE FLAGS OR ROTATING/STROBE LIGHTS ARE HAND OPERATED EQUIPMENT (CONCRETE SAWS, DOWEL MACHINES, ETC.) AND TOW BEHIND EQUIPMENT/VEHICLES (LIGHT WAGONS, COMPRESSORS, TRAILERS, ETC.)
- f. ALL CONTRACTOR FLAGGING PERSONNEL ARE REQUIRED TO ATTEND A SPECIFIC AIRFIELD FLAGGER TRAINING CLASS AND BE CERTIFIED PRIOR TO THEM BEGINNING FLAGGING OPERATIONS ON THE AIRFIELD. ALL COSTS ASSOCIATED WITH THIS ACTIVITY WILL NOT BE PAID SEPARATELY BUT CONSIDERED INCLUDED IN THE OVERALL CONTRACT PRICE.
10. THE CONTRACTOR MUST DEVELOP A SITE SPECIFIC CONSTRUCTION SAFETY PROGRAM FOR THE PROJECT AND SUBMIT FOR REVIEW AND APPROVAL TO THE CDA AND FAA AT LEAST THIRTY (30) DAYS PRIOR TO THE START OF WORK. THE CONTRACTOR'S SAFETY PROGRAM MUST BE IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH IN PART 2 (GENERAL CONDITIONS) ARTICLE XIV OF THE SPECIFICATIONS. PLEASE REFER TO THE "CDA/OMP CONSTRUCTION SAFETY MANUAL" FOR ADDITIONAL REQUIREMENTS ON THIS PROJECT. IF COPIES ARE NEEDED, ASK THE CDA AND FAA
11. THE CONTRACTOR MUST DESIGNATE A QUALIFIED SAFETY REPRESENTATIVE FOR THE PROJECT. THESE PERSONS MUST BE AT THE PROJECT WHENEVER WORK IS BEING PERFORMED AT THE SITE OR ANY STAGING AREA ON THE AIRPORT PROPERTY. THE SAFETY REPRESENTATIVE MUST HAVE PROJECT SAFETY AS HIS OR HER EXCLUSIVE RESPONSIBILITY AND NOT HAVE ANY OTHER RESPONSIBILITIES REGARDING THE PROJECT. THE CONTRACTOR MUST PROVIDE THE SAFETY REPRESENTATIVE WITH THE AUTHORITY NECESSARY TO ENSURE THE SAFETY OF THE AIRPORT, CONTRACTOR'S, AND SUBCONTRACTOR'S EMPLOYEES AND PROPERTY. AMONG OTHER RESPONSIBILITIES CONCERNING THE PROJECT SAFETY, THE SAFETY REPRESENTATIVE MUST PROVIDE: SAFETY TRAINING, SAFETY ORIENTATION, SAFETY INSPECTIONS AND CONDUCT TOOLBOX SAFETY MEETINGS.
12. THE CONTRACTOR MUST COMPLY WITH THE SECURITY BADGING AND ACCESS REQUIREMENTS OF THE ORD. ALL CONTRACTORS WITH EMPLOYEES WORKING ON-SITE (AIRSIDE) FOR MORE THAN FIVE DAYS (5) WILL REQUIRE EACH EMPLOYEE TO RECEIVE AN O'HARE INTERNATIONAL AIRPORT (ORD) BADGE. THE CONTRACTOR IS RESPONSIBLE TO COMPLETE ALL NECESSARY ORD ID BADGING APPLICATION FORMS AND COMPLY WITH ALL TRANSPORTATION SECURITY ADMINISTRATION (TSA) AND CDA BADGING REQUIREMENTS AND EMPLOYEE BACKGROUND CHECKS.
13. "303 TRAINING" IS MANDATORY FOR ALL PERSONNEL THAT WILL BE BADGED AND ALLOWED TO PERFORM WORK OR DUTIES WITHIN THE AOA. "303 TRAINING" MUST BE COMPLETED EVERY YEAR AND EXPIRES ONE YEAR FROM THE DATE OF TRAINING. ANY CONTRACTOR EMPLOYEE APPLYING FOR AN ORD BADGE MUST ATTEND THE 303 AIRFIELD SAFETY TRAINING AND MUST ALLOW THREE HOURS FOR THE TRAINING CLASS PER EMPLOYEE. EMPLOYEES WHOSE TRAINING EXPIRES WILL HAVE THEIR BADGES SUSPENDED AND WILL NOT HAVE ACCESS ONTO THE AIRFIELD UNTIL TRAINING REQUIREMENTS ARE MET. CONTRACTORS HAVE TO MAINTAIN TRAINING RECORDS OF THEIR WORKERS TO KEEP BADGING AND TRAINING UP TO DATE AND MUST NOTIFY CDA/OMP OF CHANGES IN THE EMPLOYMENT AND/OR BADGE STATUS OF THEIR WORKERS.
14. BADGED EMPLOYEES THAT ESCORT NON-BADGED EMPLOYEES ONTO THE AOA MUST REMAIN WITH THEM AT ALL TIMES WHILE ON THE JOBSITE. TRANSFERRING NON-BADGED EMPLOYEES TO OTHER BADGED EMPLOYEES FOR ESCORTING IS NOT ALLOWED. CDA REGULATIONS PROHIBIT LEAVING A NON-BADGED EMPLOYEE UN-ESCORTED AT ANY TIME.
15. ALL CONTRACTOR VEHICLES ACCESSING THE JOBSITE ARE REQUIRED TO OBTAIN "VEHICLE DRIVING PERMITS" FROM THE ORD ID BADGING OFFICE.

STAGING AND STORAGE AREAS

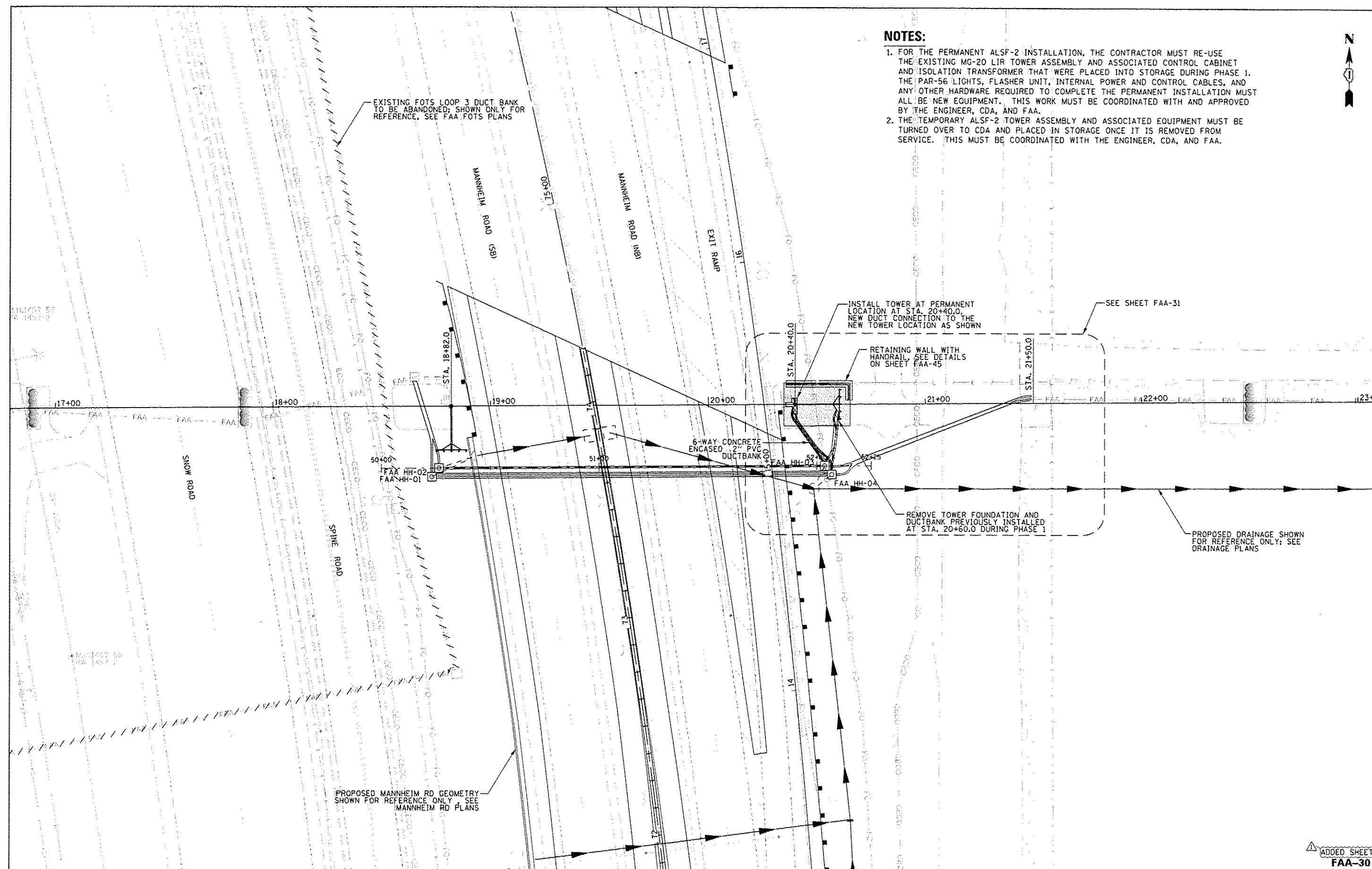
1. A STAGING AREA SHALL BE MADE AVAILABLE FOR CONTRACTOR'S MOBILIZATION, STORAGE, AND EMPLOYEE PARKING AS SHOWN ON THE CONTRACT DRAWINGS. THIS AREA MUST BE PREPARED, MAINTAINED DAILY, AND RESTORED TO THE ORIGINAL CONDITION, TO THE APPROVAL OF THE CDA AND FAA, WITHIN THIRTY (30) DAYS OF THE COMPLETION OF THE PROJECT, AT THE CONTRACTOR'S EXPENSE.
2. THE CONTRACTOR MUST STORE ALL EQUIPMENT, VEHICLES AND MATERIALS ONLY IN THOSE STAGING AREAS SHOWN ON THE DRAWINGS OR AS DESIGNATED BY THE ENGINEER AND CDA.
3. THE EXACT LIMITS, LIGHTING, ENVIRONMENTAL, AND SECURITY REQUIREMENTS OF THE CONTRACTOR'S STAGING AND STORAGE AREAS MUST BE ESTABLISHED BY THE CONTRACTOR SUBJECT TO APPROVAL OF THE ENGINEER, CDA AND FAA. ANY AND ALL REQUIRED UTILITIES FOR THE CONTRACTOR'S OPERATIONS MUST BE ARRANGED FOR AND PAID FOR BY THE CONTRACTOR AND PAID DIRECTLY TO THE APPROPRIATE UTILITY. UTILITY ARRANGEMENTS WILL BE SUBJECT TO THE APPROVAL OF THE ENGINEER, CDA AND FAA. ALL COST ASSOCIATED WITH PREPARING THE STORAGE AND STAGING AREAS WILL BE BORNE BY THE CONTRACTOR. THIS INCLUDES, BUT IS NOT LIMITED TO, CLEARING AND GRADING OF THE SITE, CONSTRUCTION OF ALL TEMPORARY UTILITIES, ACCESS ROADS, ALL SECURITY FENCING, EROSION AND SEDIMENT CONTROL, CLEANUP, AND RESTORATION OF THE SITE TO ITS ORIGINAL CONDITION.
4. EXCESS SOILS, EXCESS MILLED ASPHALT CONCRETE, BITUMINOUS CONCRETE RUBBLE, PORTLAND CEMENT CONCRETE RUBBLE, AND UNSUITABLE EXCAVATION MUST BE DISPOSED OF AT APPROVED LOCATIONS ON SITE. RECYCLABLE MILLED BITUMINOUS CONCRETE, BITUMINOUS CONCRETE RUBBLE, PORTLAND CEMENT CONCRETE RUBBLE ARE TO BE PLACED IN THE LOCATION(S) OF THE RECYCLABLE MATERIALS STOCKPILES AS SHOWN ON THE DRAWINGS. MATERIAL WILL BE WASTED OR STOCKPILED ON THE AIRPORT IN LOCATIONS AS APPROVED BY THE ENGINEER AND CDA. EXCEPT AS DETAILED IN SPECIFICATION SECTION P-152, DISPOSAL COSTS ASSOCIATED WITH THESE MATERIALS WILL NOT BE PAID FOR SEPARATELY, BUT ARE INCLUDED IN THE OVERALL CONTRACT PRICE. ANY SALVAGED ITEMS ARE TO REMAIN THE PROPERTY OF THE CITY OF CHICAGO AND DELIVERED TO A LOCATION AT O'HARE AS DIRECTED BY THE ENGINEER AND CDA, UNLESS OTHERWISE INDICATED.

	USER NAME = mhawir	DESIGNED SJM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAA-GENERAL NOTES	F.A.P. RTE. 330	SECTION 0105 WRS&HB	COUNTY COOK	TOTAL SHEETS 605	SHEET NO. 605B
	PLOT SCALE = 2:1	DRAWN SJM	REVISED -							
	CHECKED SPG	CHECKED SPG	REVISED -							
	PLOT DATE = 26-DEC-2012	DATE	REVISED 12/28/12 ADDENDUM 1							
SCALE: SHEET NO. 2 OF 4 SHEETS STA. N/A TO STA. N/A						ILLINOIS FED. AID PROJECT				



NOTES:

1. FOR THE PERMANENT ALSF-2 INSTALLATION, THE CONTRACTOR MUST RE-USE THE EXISTING MG-20 LIR TOWER ASSEMBLY AND ASSOCIATED CONTROL CABINET AND ISOLATION TRANSFORMER THAT WERE PLACED INTO STORAGE DURING PHASE 1. THE PAR-56 LIGHTS, FLASHER UNIT, INTERNAL POWER AND CONTROL CABLES, AND ANY OTHER HARDWARE REQUIRED TO COMPLETE THE PERMANENT INSTALLATION MUST ALL BE NEW EQUIPMENT. THIS WORK MUST BE COORDINATED WITH AND APPROVED BY THE ENGINEER, CDA, AND FAA.
2. THE TEMPORARY ALSF-2 TOWER ASSEMBLY AND ASSOCIATED EQUIPMENT MUST BE TURNED OVER TO CDA AND PLACED IN STORAGE ONCE IT IS REMOVED FROM SERVICE. THIS MUST BE COORDINATED WITH THE ENGINEER, CDA, AND FAA.



HNTB

USER NAME: mkostr	DESIGNED: CFB	REVISED: -
PLDT SCALE: 40:1	DRAWN: CFB	REVISED: -
PLDT DATE: 26-DEC-2012	CHECKED: SPG	REVISED: -
	DATE	REVISED: 12/28/12 ADDENDUM 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

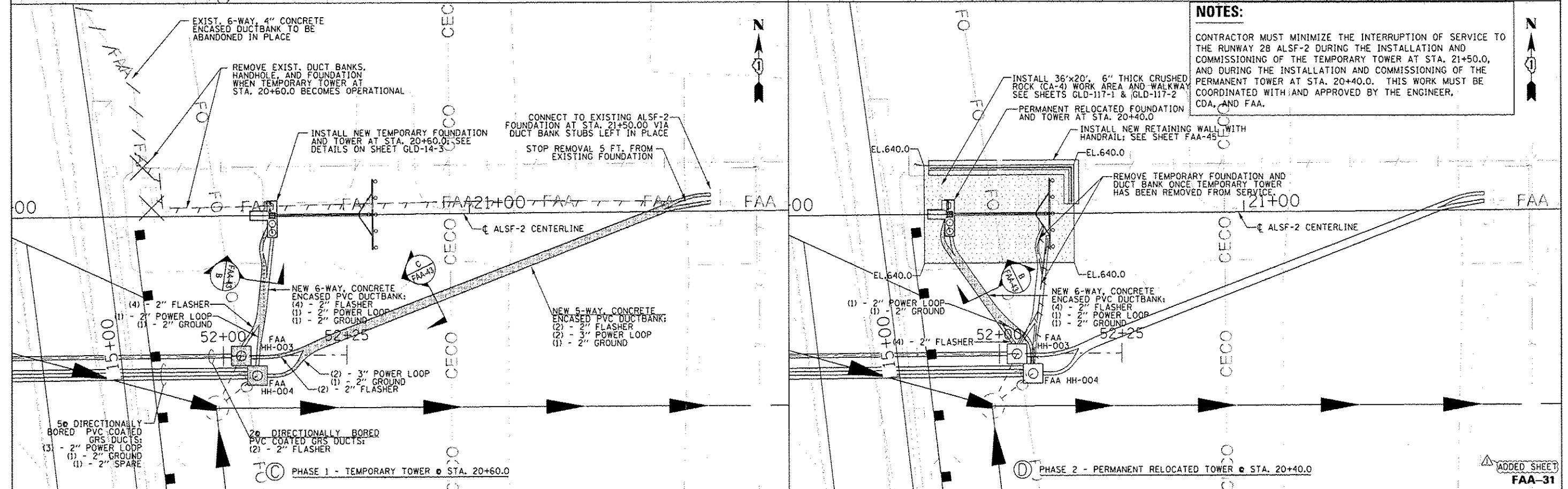
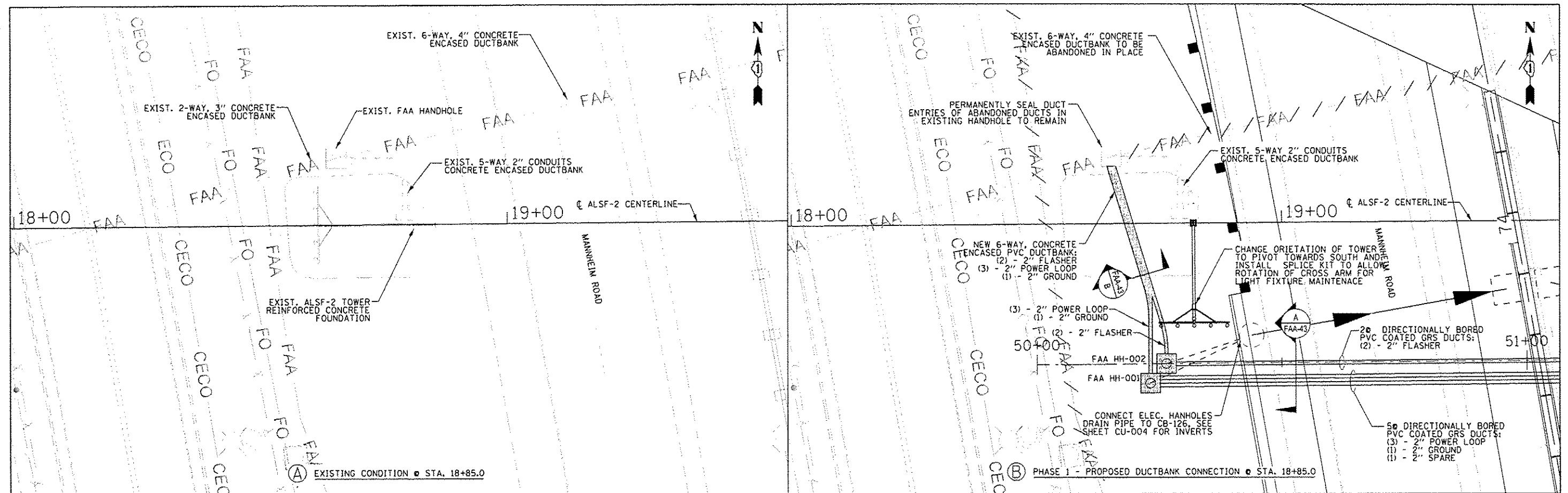
NAVAIDS
RW 28 ALSF-2 RELOCATION
PHASE 2

SCALE: 1" = 20' SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	605AD
				CONTRACT NO. 60637
ILLINOIS FED. AID PROJECT				

ADDED SHEET
FAA-30

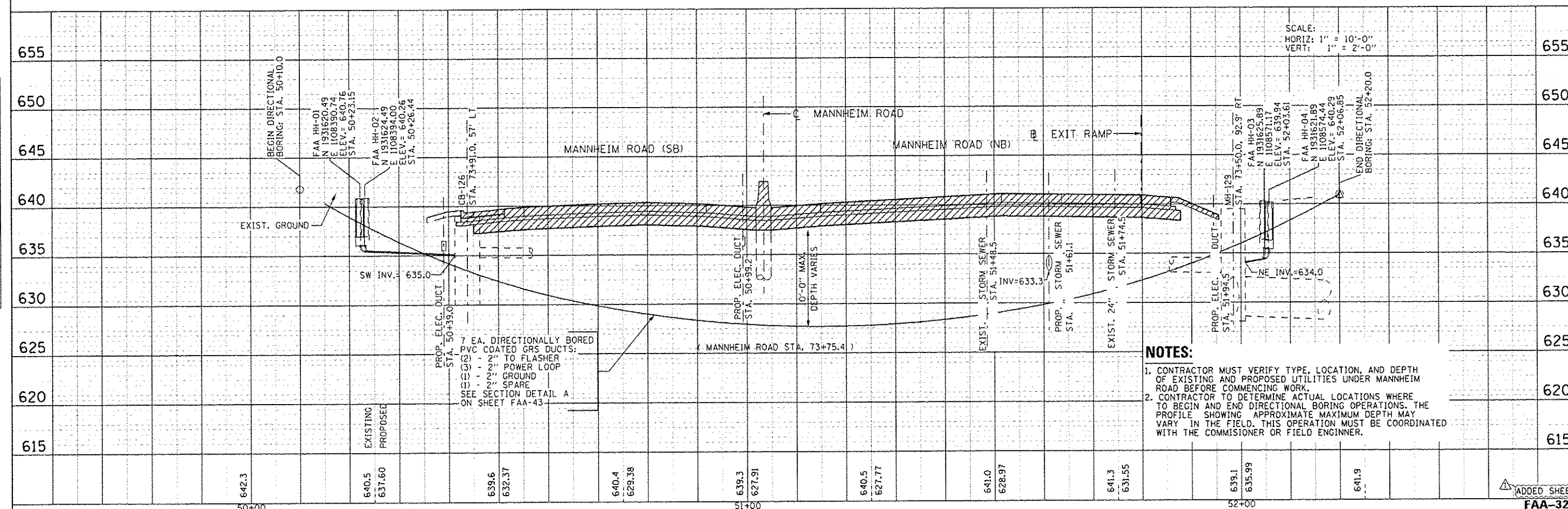
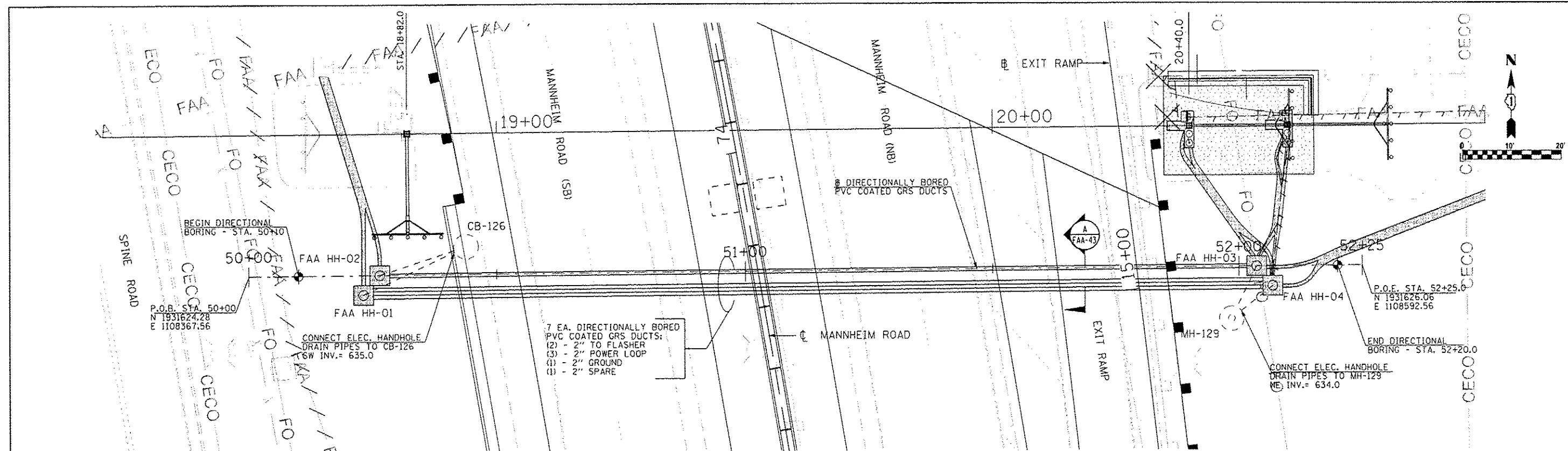
FILE NAME: IP_PWDms47B44\0160037-shr-FAANAVD38.dgn



NOTES:

CONTRACTOR MUST MINIMIZE THE INTERRUPTION OF SERVICE TO THE RUNWAY 28 ALSF-2 DURING THE INSTALLATION AND COMMISSIONING OF THE TEMPORARY TOWER AT STA. 21+50.0, AND DURING THE INSTALLATION AND COMMISSIONING OF THE PERMANENT TOWER AT STA. 20+40.0. THIS WORK MUST BE COORDINATED WITH AND APPROVED BY THE ENGINEER, CDA, AND FAA.

PROFILE	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	GRADES CHECKED		
	B.M. NOTED		
	EXPLANATIONS		



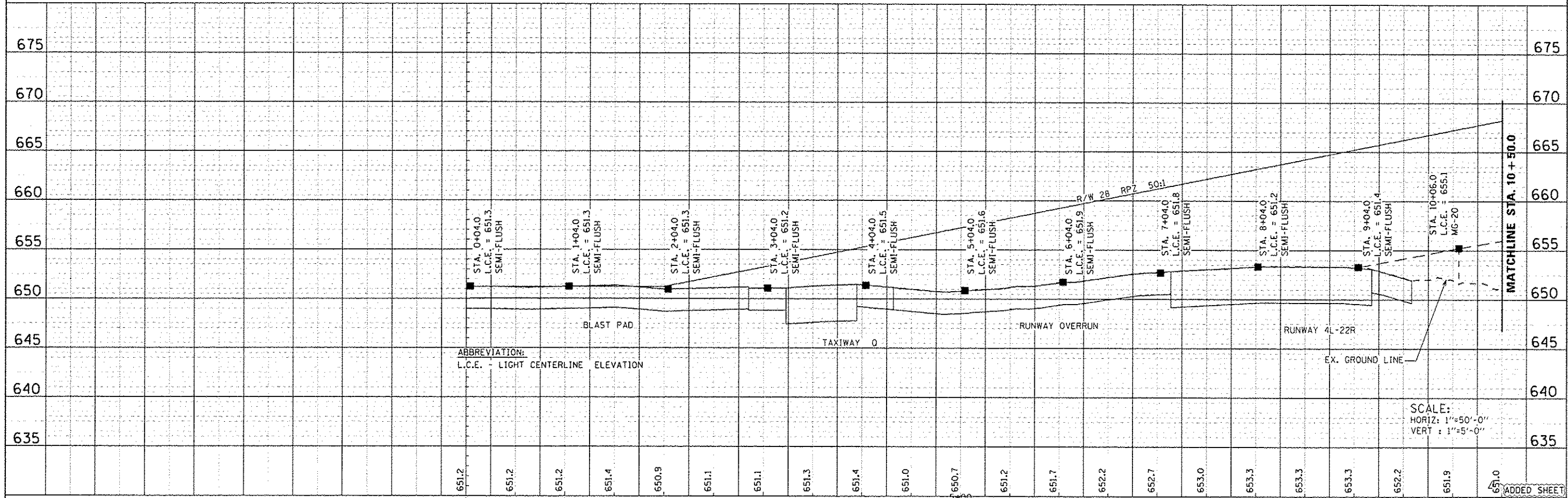
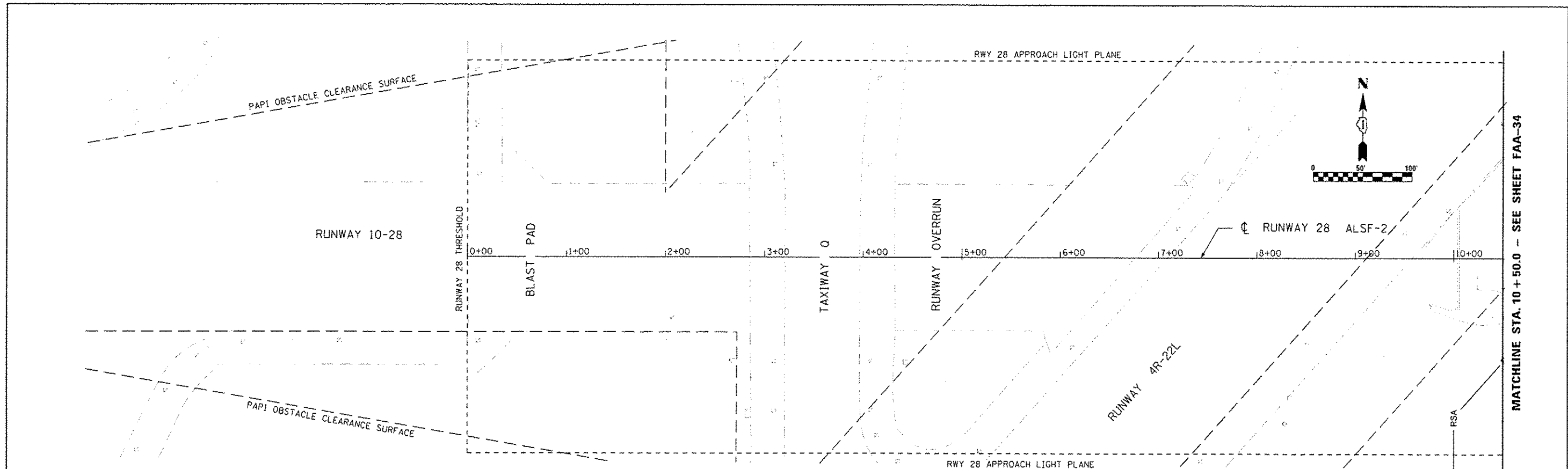
NOTES:

1. CONTRACTOR MUST VERIFY TYPE, LOCATION, AND DEPTH OF EXISTING AND PROPOSED UTILITIES UNDER MANNHEIM ROAD BEFORE COMMENCING WORK.
2. CONTRACTOR TO DETERMINE ACTUAL LOCATIONS WHERE TO BEGIN AND END DIRECTIONAL BORING OPERATIONS. THE PROFILE SHOWING APPROXIMATE MAXIMUM DEPTH MAY VARY IN THE FIELD. THIS OPERATION MUST BE COORDINATED WITH THE COMMISSIONER OR FIELD ENGINEER.

	USER NAME = mksair	DESIGNED CFB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	NAVAIDS RW 28 ALSF-2 RELOCATION DIRECTIONALLY BORED DUCTS PLAN AND PROFILE				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN CFB	REVISED -		330	0105 WRS&HB	COOK	605	605/				
	PLOT SCALE = 20'	CHECKED SPG	REVISED -		CONTRACT NO. 60G3								
	PLOT DATE = 26-DEC-2012	DATE 10/19/12	REVISED 12/27/12 ADDENDUM 1		SCALE: SHEET NO. 1 OF 1 SHEETS STA. TO STA.								

PLAN	SURVEYED	BY	DATE
NO. 000	NO. 000		
NO. 000	NO. 000		
NO. 000	NO. 000		

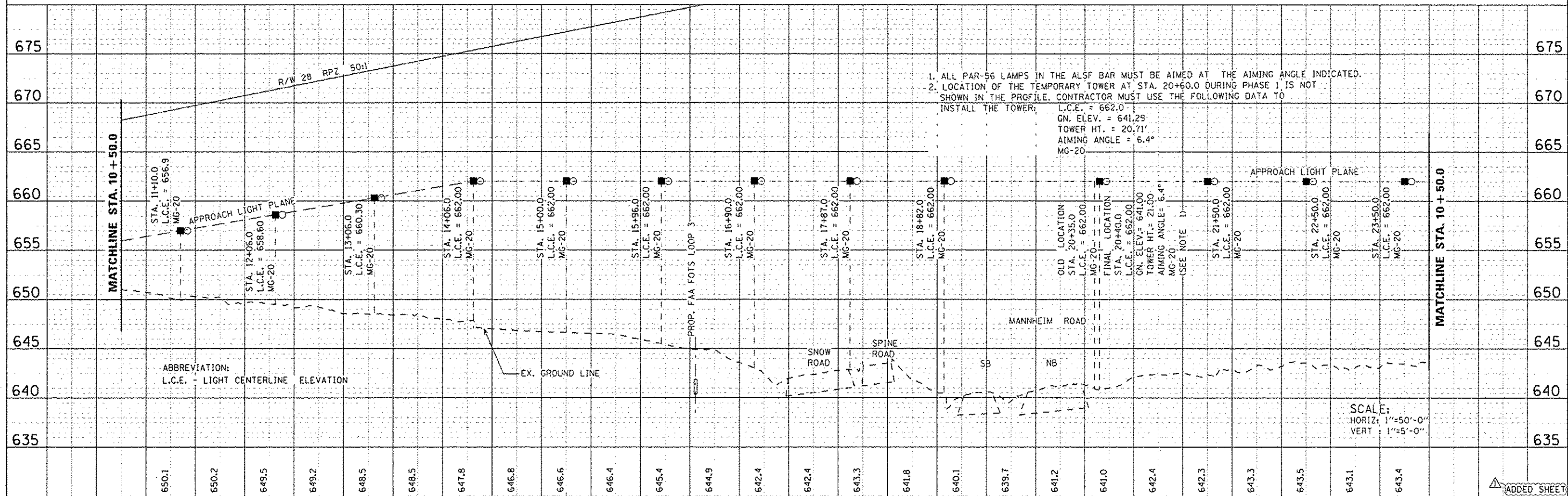
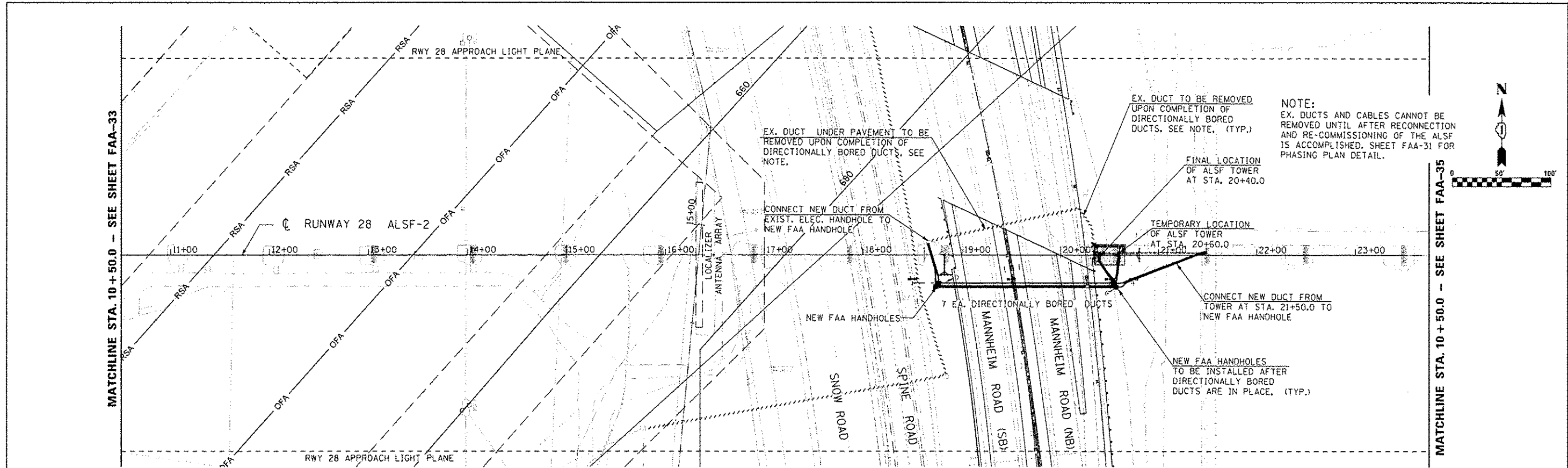
PROFILE	SURVEYED	BY	DATE
NO. 000	NO. 000		
NO. 000	NO. 000		
NO. 000	NO. 000		



HNTB				STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION				NAVAIDS RW 28 ALSF-2 RELOCATION PLAN AND PROFILE				FAA-33 ADDED SHEET			
USER NAME: mkoar DESIGNED: CFB DRAWN: CFB CHECKED: SPG PLOT DATE: 26-DEC-2012				REVISED: - REVISED: - REVISED: - REVISED: 12/27/12 ADDENDUM 1				F.A.P. RTE: 330 SECTION: 0105 WRS&HB COUNTY: COOK CONTRACT NO. 60637				TOTAL SHEET NO. 605 TOTAL SHEET NO. 605AG			
FILE NAME: IP_PWPIdms47844\0168537-shs-FAANAVD33.dgn				SCALE:				SHEET NO. 1 OF 3 SHEETS				STA. TO STA.			

PLAN	DATE
DESIGNED	BY
DRAWN	BY
CHECKED	BY
NOTED	BY
FILE NAME	

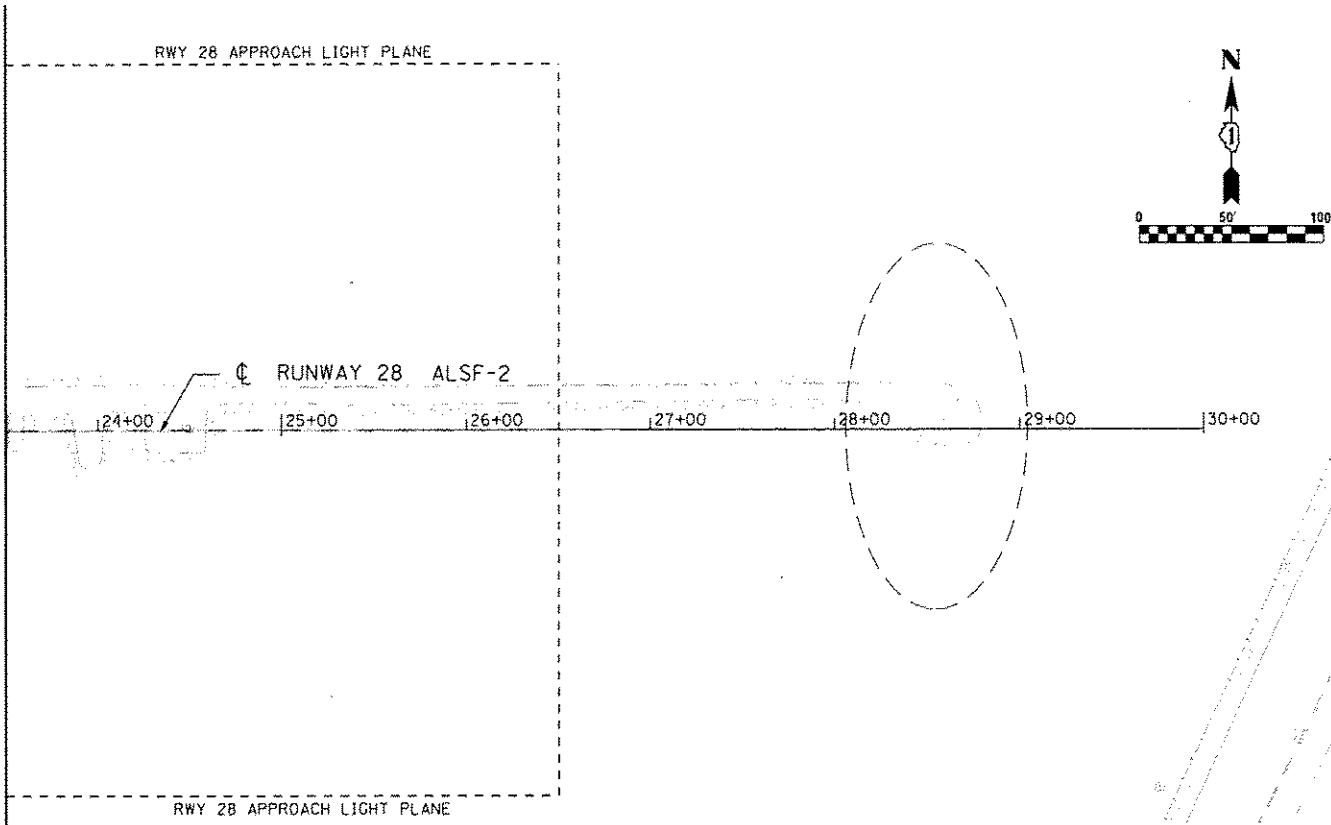
PROFILE	DATE
DESIGNED	BY
DRAWN	BY
CHECKED	BY
NOTED	BY
FILE NAME	



HNTB		USER NAME: mkear		DESIGNED: CFB	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		NAVAIDS RW 28 ALSF-2 RELOCATION PLAN AND PROFILE		F.A.P. RTE. 330		SECTION 0105 WRS&HB	COUNTY COOK	TOTAL SHEETS 605	SHEET NO. 605AH	CONTRACT NO. 60637	ILLINOIS FED. AID PROJECT
PLOT SCALE: 1/8"=1'-0"		PLOT DATE: 26-DEC-2012		CHECKED: SPG	REVISED: -	DATE: 10/19/12		REVIS: 12/21/12 ADDENDUM 1		SCALE: SHEET NO. 2 OF 3 SHEETS		STA. TO STA.					

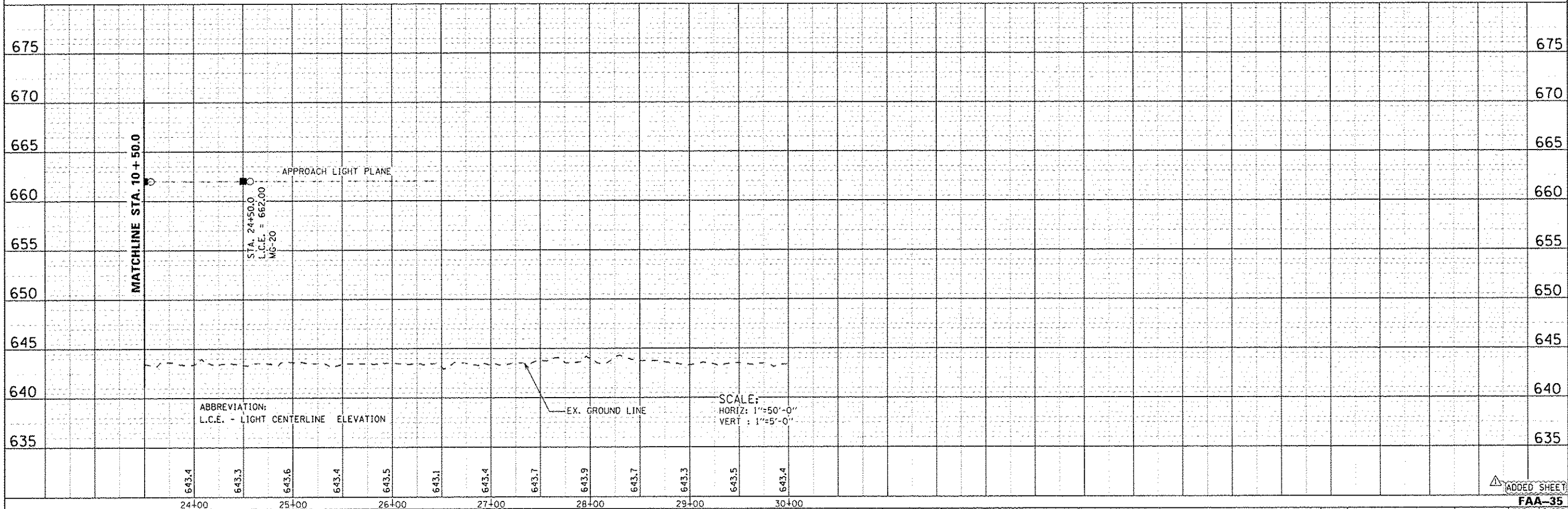
PLAN	DESIGNED	BY	DATE
NOTED	PLOTTED		
NOTED	CHECKED		
NO.	FILE NAME		

MATCHLINE STA. 10 + 50.0 - SEE SHEET FAA-34



PROFILE	DESIGNED	BY	DATE
NOTED	PLOTTED		
NOTED	CHECKED		
NO.	FILE NAME		

MATCHLINE STA. 10 + 50.0



HNTB

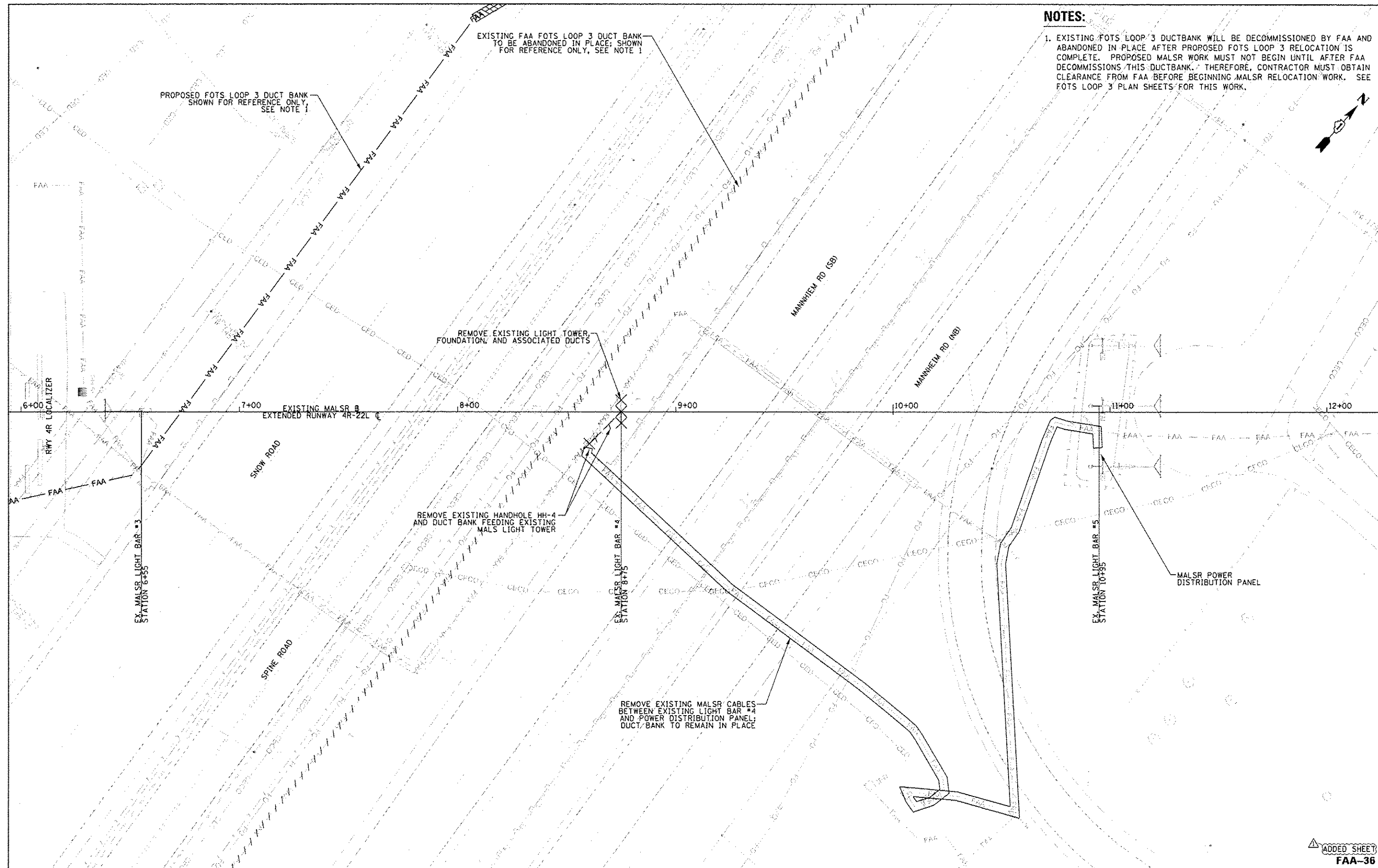
USER NAME	DESIGNED	REVISED
PLLOT SCALE = 1/8"=1'	DRAWN	REVISED
PLLOT DATE = 26-DEC-2012	CHECKED	REVISED
	DATE	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:	SHEET NO. 3 OF 3 SHEETS	STA.	TO STA.
--------	-------------------------	------	---------

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRSABH	COOK	605	605A1
CONTRACT NO. 60G37				

FILE NAME IP_PWPdms47844\0160037-ehs-FAANAYD35.dgn



- NOTES:**
1. EXISTING FOTS LOOP 3 DUCTBANK WILL BE DECOMMISSIONED BY FAA AND ABANDONED IN PLACE AFTER PROPOSED FOTS LOOP 3 RELOCATION IS COMPLETE. PROPOSED MALS WORK MUST NOT BEGIN UNTIL AFTER FAA DECOMMISSIONS THIS DUCTBANK. THEREFORE, CONTRACTOR MUST OBTAIN CLEARANCE FROM FAA BEFORE BEGINNING MALS RELOCATION WORK. SEE FOTS LOOP 3 PLAN SHEETS FOR THIS WORK.



USER NAME = mkoar	DESIGNED <i>SJM</i>	REVISED -
	DRAWN <i>SJM</i>	REVISED -
PLOT SCALE = 40:1	CHECKED <i>SPG</i>	REVISED -
PLOT DATE = 26-DEC-2012	DATE	REVISED 12/28/12 ADDENDUM 1

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

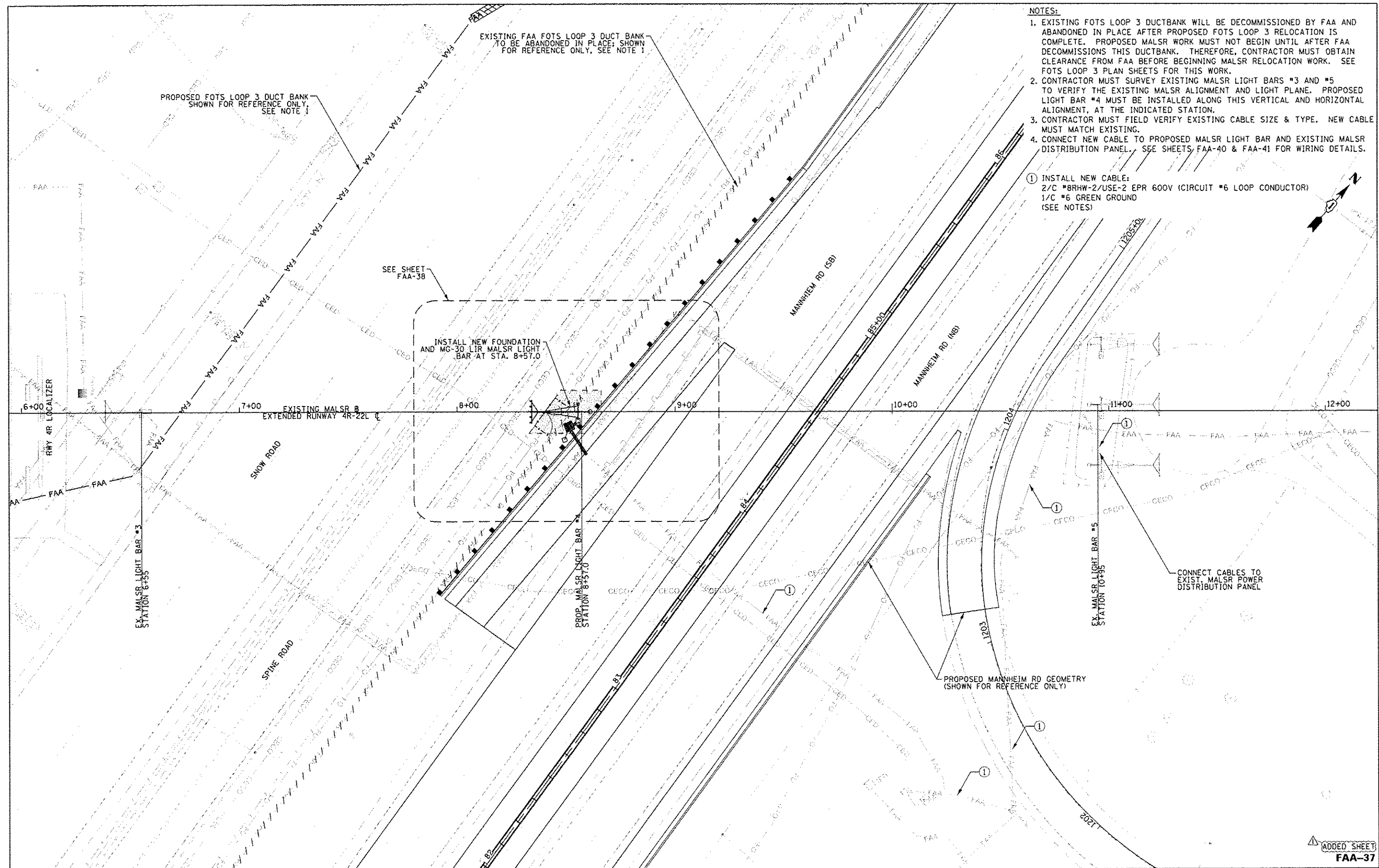
**NAVAIDS
RW 22L MALS RELOCATION
EXISTING SITE PLAN**

SCALE: 1" = 20' SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE. 330	SECTION 0105 WRS&HB	COUNTY COOK	TOTAL SHEETS 605	SHEET NO. 605AJ
CONTRACT NO. 60637			ILLINOIS FED. AID PROJECT	

FILE NAME = JP_PWPides47844\0168037-shc-FAANAVD36.dgn

ADDED SHEET
FAA-36



- NOTES:
1. EXISTING FOTS LOOP 3 DUCTBANK WILL BE DECOMMISSIONED BY FAA AND ABANDONED IN PLACE AFTER PROPOSED FOTS LOOP 3 RELOCATION IS COMPLETE. PROPOSED MALS WORK MUST NOT BEGIN UNTIL AFTER FAA DECOMMISSIONS THIS DUCTBANK. THEREFORE, CONTRACTOR MUST OBTAIN CLEARANCE FROM FAA BEFORE BEGINNING MALS RELOCATION WORK. SEE FOTS LOOP 3 PLAN SHEETS FOR THIS WORK.
 2. CONTRACTOR MUST SURVEY EXISTING MALS LIGHT BARS #3 AND #5 TO VERIFY THE EXISTING MALS ALIGNMENT AND LIGHT PLANE. PROPOSED LIGHT BAR #4 MUST BE INSTALLED ALONG THIS VERTICAL AND HORIZONTAL ALIGNMENT, AT THE INDICATED STATION.
 3. CONTRACTOR MUST FIELD VERIFY EXISTING CABLE SIZE & TYPE. NEW CABLE MUST MATCH EXISTING.
 4. CONNECT NEW CABLE TO PROPOSED MALS LIGHT BAR AND EXISTING MALS DISTRIBUTION PANEL. SEE SHEETS FAA-40 & FAA-41 FOR WIRING DETAILS.
- ① INSTALL NEW CABLE:
2/C *8RHW-2/USE-2 EPR 600V (CIRCUIT #6 LOOP CONDUCTOR)
1/C #6 GREEN GROUND
(SEE NOTES)
- ① CONNECT CABLES TO EXIST. MALS POWER DISTRIBUTION PANEL

HNTB

USER NAME	DESIGNED	REVISION
mkw	SJM	-
PLOT SCALE = 40:1	DRAWN	REVISION
PLOT DATE = 26-DEC-2012	SJM	-
	CHECKED	REVISION
	SPG	-
	DATE	REVISION
		12/28/12 ADDENDUM 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

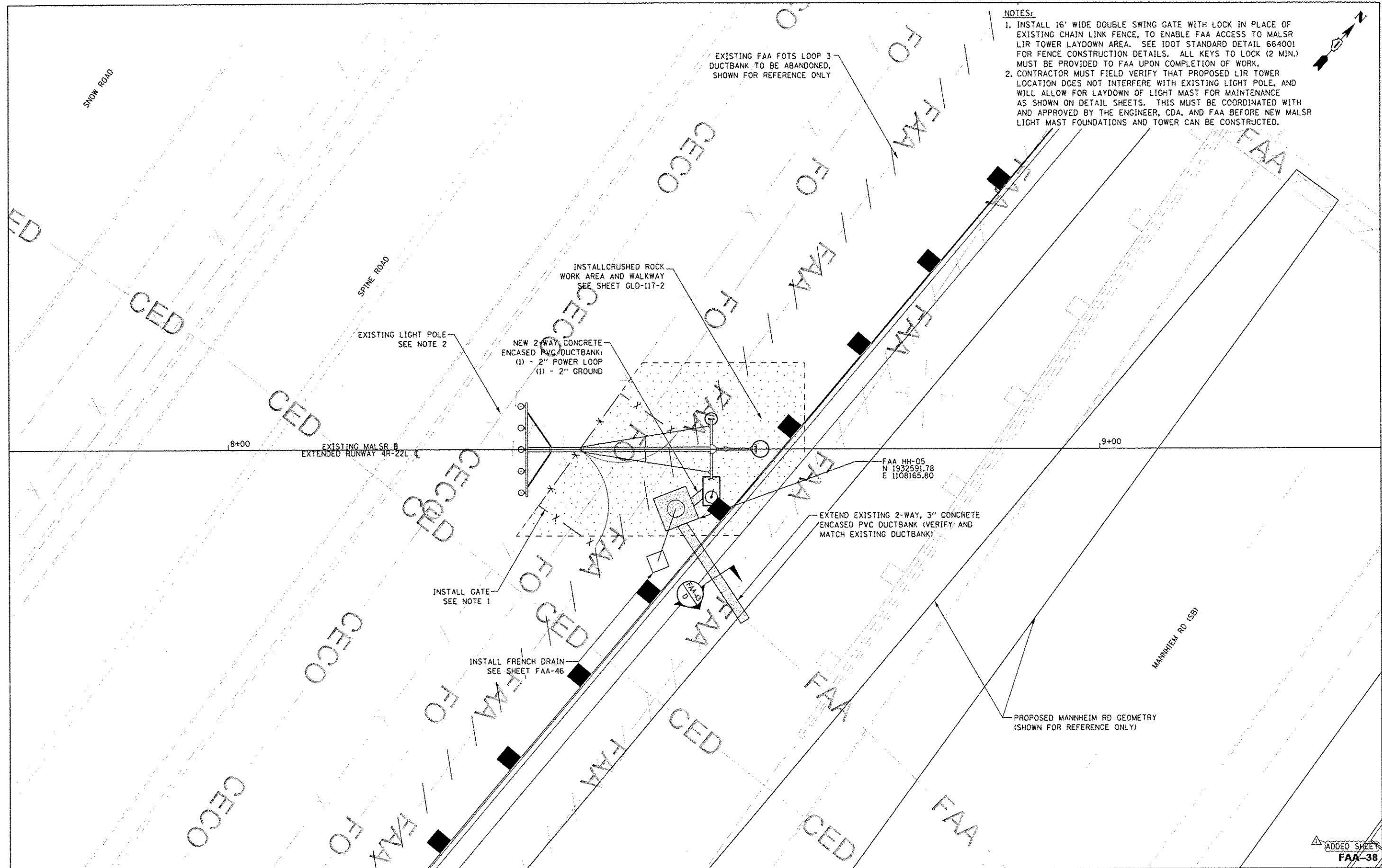
NAVAIDS - RW 22L MALS RELOCATION
PROPOSED SITE PLAN

SCALE: 1" = 20' SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	605AK
CONTRACT NO. 60G37				ILLINOIS FED. AID PROJECT

ADDED SHEET
FAA-37

FILE NAME = IP_PwPids4784\DI68G37-shs-FAANAV037.dgn

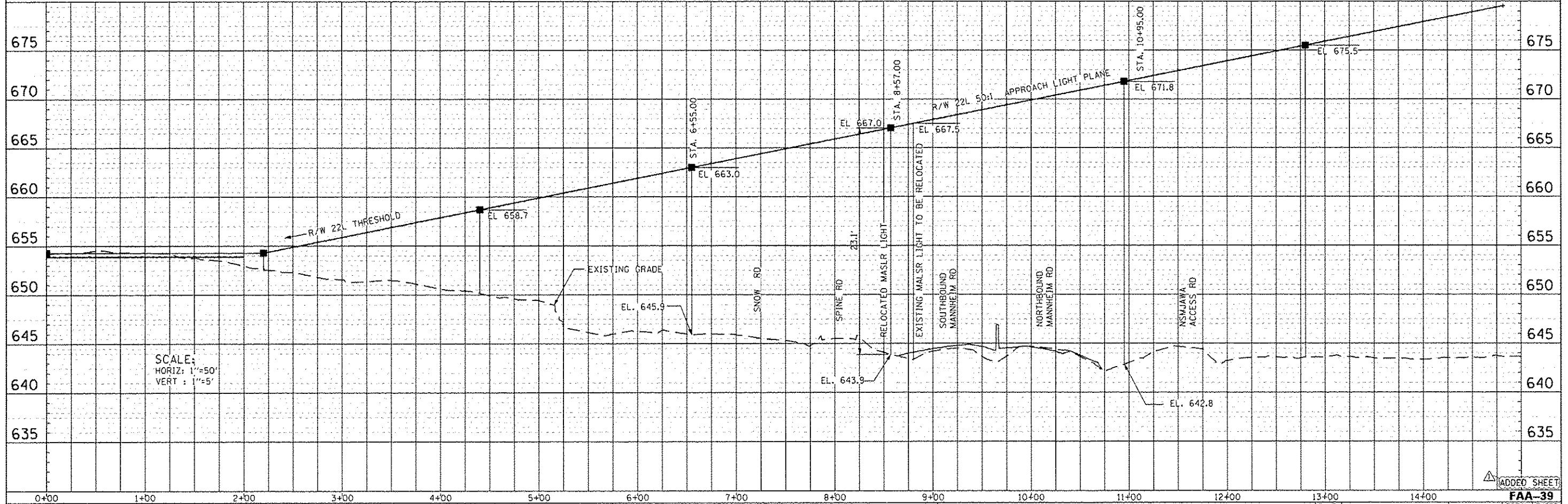


- NOTES:**
1. INSTALL 16' WIDE DOUBLE SWING GATE WITH LOCK IN PLACE OF EXISTING CHAIN LINK FENCE, TO ENABLE FAA ACCESS TO MALS R LIR TOWER LAYDOWN AREA. SEE IDOT STANDARD DETAIL 664001 FOR FENCE CONSTRUCTION DETAILS. ALL KEYS TO LOCK (2 MIN.) MUST BE PROVIDED TO FAA UPON COMPLETION OF WORK.
 2. CONTRACTOR MUST FIELD VERIFY THAT PROPOSED LIR TOWER LOCATION DOES NOT INTERFERE WITH EXISTING LIGHT POLE, AND WILL ALLOW FOR LAYDOWN OF LIGHT MAST FOR MAINTENANCE AS SHOWN ON DETAIL SHEETS. THIS MUST BE COORDINATED WITH AND APPROVED BY THE ENGINEER, CDA, AND FAA BEFORE NEW MALS R LIGHT MAST FOUNDATIONS AND TOWER CAN BE CONSTRUCTED.

HNTB	USER NAME = mkmw	DESIGNED SJM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	NAVAIDS RW 22L MALS RELOCATION PROPOSED DETAIL PLAN				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN SJM	REVISED -										
	PLOT SCALE = 1/8"	CHECKED SPG	REVISED -										
	PLOT DATE = 26-DEC-2012	DATE	REVISED 12/28/12 ADDENDUM 1										
					SCALE: 1" = 5'	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT				
												CONTRACT NO. 60G37	

FILE NAME = IP_PWP\ids47044\0168037-shv-FAANAVD38.dgn

PROFILE	SAMPLED _____	BY _____	DATE _____
	PLOTTED _____		
	GRADES CHECKED _____		
	S.M. NOTED _____		
	STRUCTURE NOTATIONS CHECKED _____		
	NO. _____		



	USER NAME = mksgr	DESIGNED SJM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	NAVAIDS - R/W 22L MALSR RELOCATION PLAN AND PROFILE	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN SJM	REVISED -			330	0105 WRS&HB	COOK	605	605AM
	PLOT SCALE = 100:1	CHECKED SPG	REVISED -			CONTRACT NO. 60G37				
	PLOT DATE = 26-DEC-2012	DATE 10/19/12	REVISED  12/27/12 ADDENDUM 1			SCALE:	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT

5. ALL STOCKPILED MATERIAL MUST BE CONSTRAINED IN A MANNER TO PREVENT MOVEMENT AND FOREIGN OBJECT DAMAGE (FOD) AS A RESULT OF AIRCRAFT OPERATIONS OR WIND AND PLACED IN A LOCATION APPROVED BY THE ENGINEER AND CDA, PRIOR TO PLACEMENT.
6. THE CONTRACTOR MUST PROVIDE LABOR AND EQUIPMENT AS REQUIRED TO SHAPE, STABILIZE, AND MAINTAIN ALL STOCKPILES. THE COST OF SHAPING AND MAINTAINING STOCKPILES IS INCIDENTAL TO THE OVERALL CONTRACT AND NO ADDITIONAL PAYMENT WILL BE MADE FOR THE WORK.

FAR PART 139 REQUIREMENTS

1. RECOMMENDED FAA PUBLICATIONS FOR CONTRACTORS INCLUDE BUT NOT LIMITED TO:
- FAR 139 - CERTIFICATION AND OPERATIONS: LAND AIRPORTS SERVING CERTAIN AIR CARRIERS.
FAR 77 - OBJECT AFFECTING NAVIGABLE AIRSPACE.
AC 150/5370-2 (CURRENT EDITION) - OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION.
AC 150-5370-10 (CURRENT EDITION) - STANDARDS FOR SPECIFYING CONSTRUCTION OF AIRPORTS.
2. FOR THE DURATION OF THIS PROJECT, RUNWAYS AND TAXIWAYS WILL BE OPEN AND AVAILABLE FOR USE BY AIR TRAFFIC OPERATIONS. IT IS IMPERATIVE FOR EACH CONTRACTOR TO BE AWARE OF SPECIFIC RULES AND REGULATIONS THAT MIGHT AFFECT THEIR PROJECT. ALL RUNWAY SAFETY AREAS ARE TO REMAIN CLEAR OF ALL MEN AND EQUIPMENT WHILE THE RUNWAY IS OPEN AND AVAILABLE FOR AIR TRAFFIC USE. NO WORK MUST TAKE PLACE IN THE RSA UNLESS THE RUNWAY IS CLOSED TO AIR TRAFFIC OPERATIONS.
3. WORK IS PERMITTED WITHIN THE ROFA BUT OUTSIDE THE RSA (OR WITHIN THE TOFA BUT OUTSIDE THE TSA); HOWEVER, AT THE COMPLETION OF EACH WORK DAY, NO STOCKPILES, MATERIAL, OR EQUIPMENT ARE PERMITTED WITHIN THE ROFA (TOFA). EXCAVATIONS WITHIN THE OBJECT FREE AREA ARE ALLOWED PROVIDED THEY ARE BARRICADED AND PROTECTED TO A LEVEL APPROVED BY THE ENGINEER, CDA AND FAA AND OPERATIONS.
4. WORK MAY BE PERMITTED WITHIN THE TSA PROVIDED ALL WORK IS SCHEDULED AND APPROVED THROUGH THE ENGINEER, FAA, AND CDA OPERATIONS. SEE CONTRACT DRAWINGS FOR SPECIFIC AREAS THAT HAVE BEEN APPROVED AND IN ACCORDANCE TO AC 150/5370-2E (OR CURRENT EDITION).
5. ALL STOCKPILED MATERIAL MUST BE PLACED AND MAINTAINED IN AN AREA THAT IS CLEAR OF ALL RSA AND TOFA AND HEIGHTS OF ANY STOCKPILED MATERIAL MUST NOT PENETRATE ANY FAR PART 77 SURFACES. STOCKPILES MUST HAVE AN FAA 7460 AIRSPACE STUDY CONDUCTED AND APPROVED PRIOR TO ANY MATERIAL BEING LEFT ON SITE.
6. ALL VEHICLES AND EQUIPMENT MUST BE PARKED OR STORED IN AN AREA THAT IS CLEAR OF ALL RSA, TSA, ROFA, TOFA AND HEIGHTS OF ANY VEHICLE OR EQUIPMENT DO NOT PENETRATE ANY FAR PART 77 SURFACES. ANY EQUIPMENT THAT CANNOT BE REASONABLY MOVED TO THE CONTRACTOR STAGING AREA AND MUST REMAIN ON OR NEAR THE JOB SITE, MUST BE PARKED OR STAGED IN A MANNER THAT THE EQUIPMENT/VEHICLES ARE NOT IN THE RSA, TSA, ROFA, OR TOFA AND DO NOT PENETRATE FAR PART 77 SURFACES. VEHICLES, EQUIPMENT, MATERIAL AND STOCKPILES ALLOWED TO REMAIN OUTSIDE THE ROFA MUST NOT PENETRATE FAR PART 77 IMAGINARY SURFACES.
7. NO HAUL ROUTES MAY PENETRATE THE RSA, TSA, OR CSD WHEN THEY ARE OPEN TO AIR TRAFFIC OPERATIONS. IF THE CONTRACTOR WISHES TO USE A HAUL ROUTE OTHER THAN THOSE IDENTIFIED IN THE APPROVED CONSTRUCTION DRAWINGS, THE CONTRACTOR MUST SUBMIT THEIR REQUEST IN WRITING TO THE ENGINEER, CDA, AND FAA AND SUBMIT AN FAA 7460 AIRSPACE STUDY FOR THE PROPOSED HAUL ROUTE. WHERE APPROVED HAUL ROUTES CROSS AN ACTIVE TAXIWAY, A VACUUM TYPE SWEEPER SHALL BE ASSIGNED TO THE AREA WHILE THAT PARTICULAR ROUTE IS IN OPERATION.
8. THE CONTRACTOR MUST MAINTAIN ACCESS TO ALL ARFF FIRE STATIONS AND ARFF FIRE ACCESS ROADS AT ALL TIMES DURING THE CONSTRUCTION OF THE WORK. UNOBSTRUCTED PATHS MUST BE MAINTAINED TO AND FROM ALL FIRE STATIONS AND FIRE ACCESS ROADS. ALL FIRE ACCESS ROADS ARE TO REMAIN CLEAR OF VEHICLE, EQUIPMENT, MATERIALS, AND STOCKPILES AT ALL TIMES. IF ACCESS ROADS NEED TO BE CLOSED OR RELOCATED, ALL WORK MUST BE COORDINATED WITH THE ENGINEER, FAA AND CDA OPERATIONS.
9. PART 139 REQUIREMENTS RELATED TO NAVIGATIONAL EQUIPMENT (NAVAIDS):
- a. THE CONTRACTOR SHALL NOT PARK, STAGE, STORE, OR STOCKPILE ANY MATERIAL OR EQUIPMENT WITHIN ANY NAVAID CRITICAL AREAS.
10. PART 139 REQUIREMENTS RELATED TO CRANE OPERATIONS:
- a. ALL CRANE LOCATIONS ON THE JOBSITE REQUIRE SUBMITTAL OF AN FAA 7460 AIRSPACE STUDY TO FAA.
- b. USE OF A CRANE AT A SPECIFIC LOCATION REQUIRES A MINIMUM 5 DAY NOTICE TO CDA OPERATIONS TO ALLOW FOR FDC NOTAM REQUIREMENTS AND NOTIFICATIONS (THIS IS A ONE TIME NOTIFICATION FOR EACH WORKING LOCATION).
- c. ALL CRANE OPERATIONS ARE TO BE COORDINATED WITH THE ENGINEER, FAA AND CDA OPERATIONS ON A DAILY BASIS.
11. GENERAL CONSTRUCTION SAFETY FAR PART 139 REQUIREMENTS:
- a. ONLY ORD APPROVED BARRICADES ARE TO BE USED FOR RUNWAY AND TAXIWAY CLOSURES. THESE BARRICADES ARE NOT TO BE USED TO DELINEATE EXCAVATIONS.
- b. ALL MANDATORY HOLD BARS AND SURFACE PAINTED MARKINGS OBSCURED, REMOVED, OR DAMAGED DUE TO CONSTRUCTION TRAFFIC SHALL BE REPAINTED AS NEEDED WHEN DIRECTED BY THE ENGINEER, FAA OR CDA OPERATIONS. ALL COSTS ASSOCIATED WITH REPAINTING ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- c. ANY PART 139 DEFICIENCIES MUST BE REMEDIED IMMEDIATELY, BY STOPPING WORK IF NECESSARY, AND AT NO ADDITIONAL COST TO THE CITY. UPON NOTIFICATION OF ANY FAR PART 139 VIOLATIONS, AT ANY POINT DURING THE DURATION OF THE CONTRACT, THE CONTRACTOR MUST IMMEDIATELY MOBILIZE CREWS AS NECESSARY TO REMEDIATE ALL ISSUES TO THE SATISFACTION OF THE ENGINEER, CDA, AND FAA .

UTILITY REQUIREMENTS

1. EXISTING UTILITY INFORMATION SHOWN ON THE DRAWINGS WAS COMPILED BASED ON THE BEST AVAILABLE UTILITY RECORDS. THE CONTRACTOR MUST PROVIDE A UTILITY LOCATOR AND VERIFY THE ACTUAL LOCATION PRIOR TO CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES IN PLACE UNLESS OTHERWISE NOTED OR SPECIFIED. THE OWNER AND ENGINEER AND CDA BEAR NO RESPONSIBILITY FOR UTILITIES NOT SHOWN ON THE DRAWINGS. ANY AND ALL DAMAGE TO EXISTING UTILITIES MUST BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXCAVATION IMMEDIATELY NEAR UTILITIES MUST BE DONE BY HAND. UTILITIES INTERFERING WITH CONSTRUCTION MUST BE RESET OR RELOCATED BY THE UTILITY COMPANY CONCERNED UNLESS NOTED OTHERWISE OR OTHER ARRANGEMENTS HAVE BEEN MADE WITH THE UTILITY COMPANY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE APPROPRIATE UTILITY COMPANY TO DETERMINE WHO WILL PERFORM THE WORK. THE CONTRACTOR MUST CONTACT THE FOLLOWING UTILITY COMPANIES AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO BEGINNING CONSTRUCTION. FOR RELOCATION OF COMED AND OTHER UTILITY FACILITIES, CONTRACTORS MUST KNOW THAT ACTUAL COMPLETION OF ANY RELOCATION WILL TAKE SEVERAL WEEKS AT A MINIMUM. DEPENDENT ON SCOPE. CONTRACTOR MUST COORDINATE WITH THE ENGINEER AND CDA FOR ANY WORK NECESSARY TO RELOCATE, REMOVE, DISCONNECT, OR CONNECT TO COMED FACILITIES.

TABLE 2

Utility	Contact Name	Contact Number
BP Amoco Oil Co.	Jlm Swapman	(847) 824-5176
Village of Bensenville	Mark Rysovy	(630) 350-3396
City of Chicago - Chicago Department of Aviation (CDA)		
Security	Ken Warrick	(773) 894-5358 or (773) 617-3652
Water / Sewer / Utilities	John Antonacci	(773) 457-1424
Electrical Services	Mike Eberwein	(773) 686-2224 or (773) 447-4789
Electrical (Airfield)	Steve McNamara	(773) 818-7079
Electrical (Road /Traffic)	Steve McNamara	(773) 818-7079
Communications	Plus Fernandez	(773) 686-2310
Supervising Engineer	Harl Vegesna	(773) 686-4988 or (773) 447-0412
City of Chicago 1/2 Water/Sewer Digger		(312) 747-8117 (312) 744-7000
Electric 1/2 Commonwealth Edison (ComEd)	Mark Bartolameoli James Donovan Bob Pomeroy	(847) 846-3375 (630) 650-5573 (773) 617-5463
Elk Grove Village		(847) 734-8800
Federal Aviation Administration (FAA)	Anthony Harts- NPPM (GNAS) TSOC (for cable breaks) OMP Resident Engr. OMP Project Mgmt. Office	(773) 601-7635 (847) 608-5878 (847) 294-8186 (847) 294-8226
Fuel Lines/Farms - Airport Group International	Mike Loveridge or Douglas Wahl	773) 686-7500
Gas - Peoples Gas	Nina Leonard Annie-Beryl Akuamoaah	(312) 240-3946 (312) 240-4776
Illinois Department of Transportation Bureau of Traffic	Sudad Mahmoud	(847) 705-4131
Joint Utility Locating Information for Excavators (J.U.L.I.E.)		(800) 892-0123
Level 3 Communications	John Dykstra Keith Osborne	(312) 622-8062 or (708)410-1683 (720) 888-2774
MCI	Kris Krzysztof	(630) 901-4948
Natural Gas Pipeline Co.		(312) 691-3855
Nicor, Inc. - Northern Illinois Gas Co.	Connie Lane Ed Vonscoff	(630) 388-3830 (Office) (815) 221-4339 (Mobile)
NSMJAWA Shell Oil Co.	Steve Pittman Rich Almaquer	(773) 686-0077 (847) 439-4603
Telephone - AT&T	Thomas Folin	(630) 573-6477
West Shore	Rich Ellison	(708) 649-5214
Union Pacific Railroad Co.	Mike Graham	(918) 495-5894
	John Venice	(708) 649-5210

2. ACCESS TO ALL FAA FACILITIES AND EQUIPMENT MUST BE MAINTAINED AT ALL TIMES. TO ACCESS FAA FACILITIES, NOTIFICATION IS 5 DAYS IN ADVANCE OF FAA ASSISTANCE. REQUEST FOR FAA CABLE LOCATES IS 72 HOURS IN ADVANCE. NOTIFICATION EXCLUDES SATURDAY, SUNDAY, AND HOLIDAYS.

3. WORK IN OR AT THE VICINITY OF FAA FACILITIES AND EQUIPMENT MUST FOLLOW THE FOLLOWING REQUIREMENTS:

- a. THE CONTRACTOR MUST REQUEST THAT THE FAA LOCATE AND MARK FAA CABLES WITHIN THE PERIMETER OF THE CONSTRUCTION AREA USING THE FAA FIELD CABLE LOCATES REQUEST FORM. ALL CABLE LOCATES WILL REQUIRE 72 HOUR ADVANCE NOTIFICATION AND THE SUBMISSION OF ALL REQUIRED DOCUMENTS. THE 72 HOUR ADVANCE NOTIFICATION DOES NOT INCLUDE WEEKENDS AND HOLIDAYS AND THE SUBMISSIONS MUST BE MADE BY 2:30 P.M., OR TRACKING STARTS ON THE NEXT CONSECUTIVE BUSINESS DAY.
- b. IF ANY FAA FACILITIES ARE NOTAMED OUT OF SERVICE, THE TEMPORARY SAFETY AREA MARKINGS (SNOW FENCE) MUST BE INSTALLED A MINIMUM OF 10 FEET AROUND THE FACILITY. WITHIN THE PROJECT LIMITS, SNOW FENCE MUST BE INSTALLED 50 FEET AROUND FACILITIES THAT ARE OPERATIONAL.
- c. THE CONTRACTOR WHEN ENTERING INTO A MANHOLE/HANDHOLE THAT CONTAINS LIVE FAA CABLES (POWER OR CONTROL) MUST FOLLOW FAA ESTABLISHED PROCEDURES. REQUEST FOR FAA ASSISTANCE FORM MUST BE FILLED OUT AND SUBMITTED TO FAA AND AN FAA RE MUST BE ON-SITE DURING ANY CONSTRUCTION ACTIVITIES WITHIN THE STRUCTURE. THIS WORK WILL ONLY BE ALLOWED TO TAKE PLACE AT NIGHT AFTER CLOSE COORDINATION WITH THE FAA.
- d. ANY DAMAGE TO FAA CABLES, ACCESS ROADS, OR TO FAA FACILITIES DURING CONSTRUCTION WILL REQUIRE THE CONTRACTOR TO REPLACE THE DAMAGED CABLES, ACCESS ROAD, OR FAA FACILITIES TO THE TECHNICAL OPERATIONS DISTRICT OFFICE'S REQUIREMENTS AND AT THE CONTRACTOR'S EXPENSE. IF ANY FAA CABLES ARE DAMAGED, THE CONTRACTOR MUST REPLACE THE CABLES IN THEIR ENTIRETY. THE SPLICING OF CABLES IS NOT AN ACCEPTABLE FORM OF REPAIR.
- e. PROPOSED GRADING CHANGES IN THE GLIDE SLOPE (GS) SIGNAL FORMING AREA MAY ADVERSELY AFFECT THE GS SIGNAL. ENSURE THAT SITE PREPARATION IS IN ACCORDANCE WITH CHAPTER 3 OF FAA ORDER 6750-16D, SITING CRITERIA FOR INSTRUMENT LANDING SYSTEMS. PROVIDE TYPICAL SECTIONS OF THE TAXIWAY PAVING AND SURROUNDING EXISTING AND PROPOSED GRADING TAKEN THROUGH THE GLIDE SLOPE CRITICAL AREA (GSCA) TO THE FAA FOR THEIR REVIEW OF POSSIBLE SIGNAL INTERFERENCE. COORDINATE WITH THE FAA TO ENSURE THAT NO NEGATIVE IMPACTS SHALL BE IMPOSED UPON THE FACILITY'S SIGNAL GENERATION TO CREATE POSSIBLE HAZARD TO NAVIGATION.

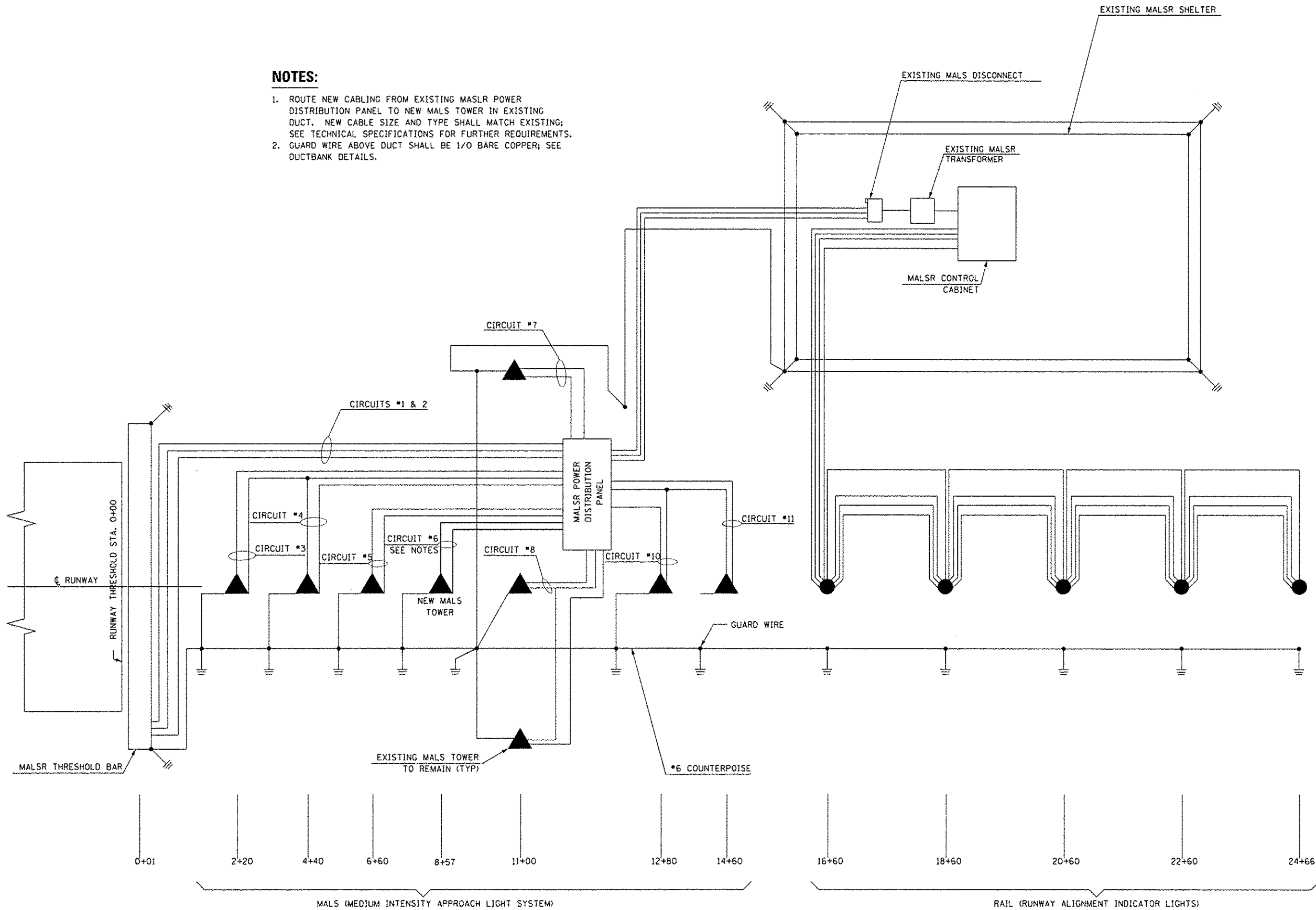
ADDED SHEET
FAA-03

	USER NAME = mhokir	DESIGNED <i>SJM</i>	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAA-GENERAL NOTES			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEET SHEETS	SHEET NO.
		DRAWN <i>SJM</i>	REVISED -					330	0105 WRS&HB	COOK	605	605C
	PLOT SCALE = 2:1	CHECKED <i>SPG</i>	REVISED -					CONTRACT NO. 60637				
	PLOT DATE = 26-DEC-2012	DATE	REVISED  12/28/12 ADDENDUM 1					ILLINOIS FED. AID PROJECT				
								SCALE:	SHEET NO. 3 OF 4 SHEETS	STA. N/A	TO STA. N/A	

FILE NAME = IP_PWP\rdms47844\0168037-shs-FAR03.dgn

NOTES:

1. ROUTE NEW CABLING FROM EXISTING MASLR POWER DISTRIBUTION PANEL TO NEW MALS TOWER IN EXISTING DUCT. NEW CABLE SIZE AND TYPE SHALL MATCH EXISTING; SEE TECHNICAL SPECIFICATIONS FOR FURTHER REQUIREMENTS.
2. GUARD WIRE ABOVE DUCT SHALL BE 1/0 BARE COPPER; SEE DUCTBANK DETAILS.



HNTB

USER NAME: mkgaur	DESIGNED: SJM	REVISED: -
	DRAWN: SJM	REVISED: -
PLOT SCALE: 1/2"=1'	CHECKED: SPG	REVISED: -
PLOT DATE: 26-DEC-2012	DATE: 12/28/12	ADDENDUM 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

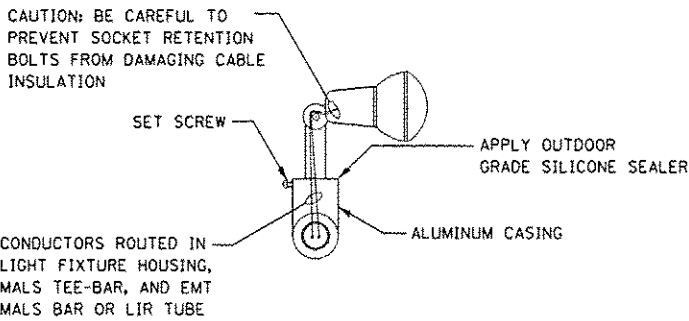
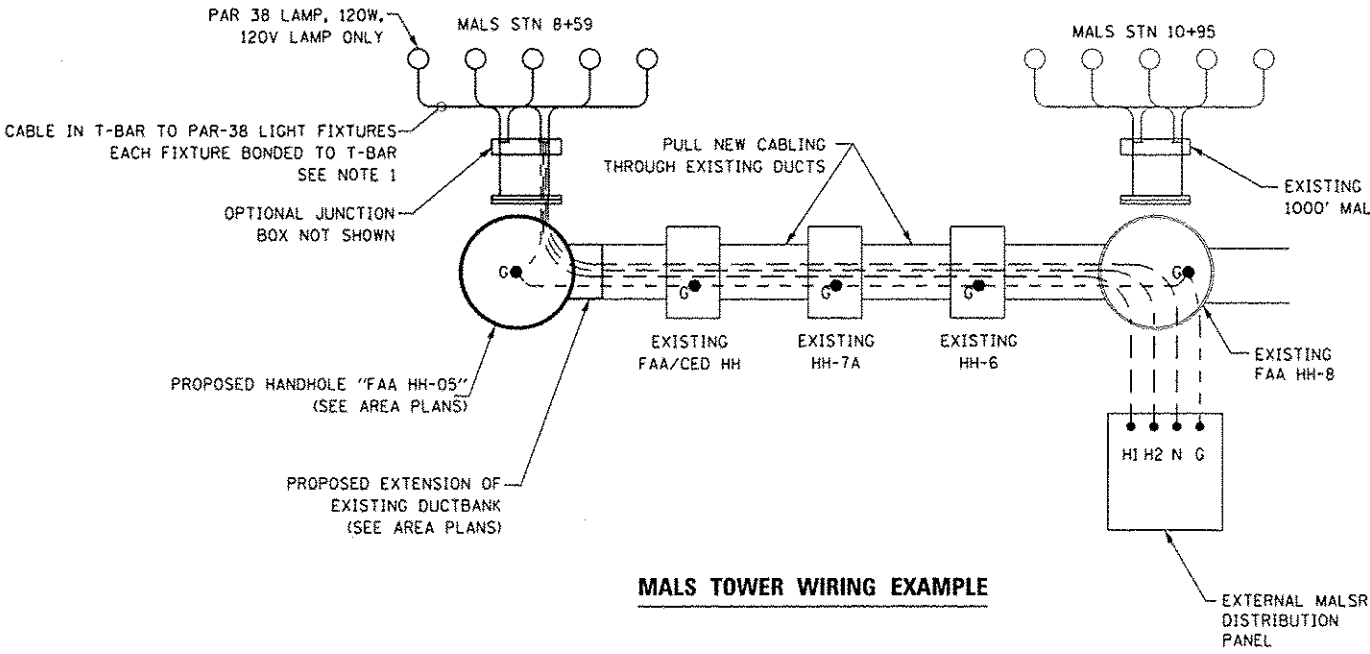
NAVAIDS
RW 22L MALS RELOCATION
SYSTEM WIRING DIAGRAM OVERVIEW
SCALE: N.T.S. SHEET NO. 1 OF 6 SHEETS STA. N/A TO STA. N/A

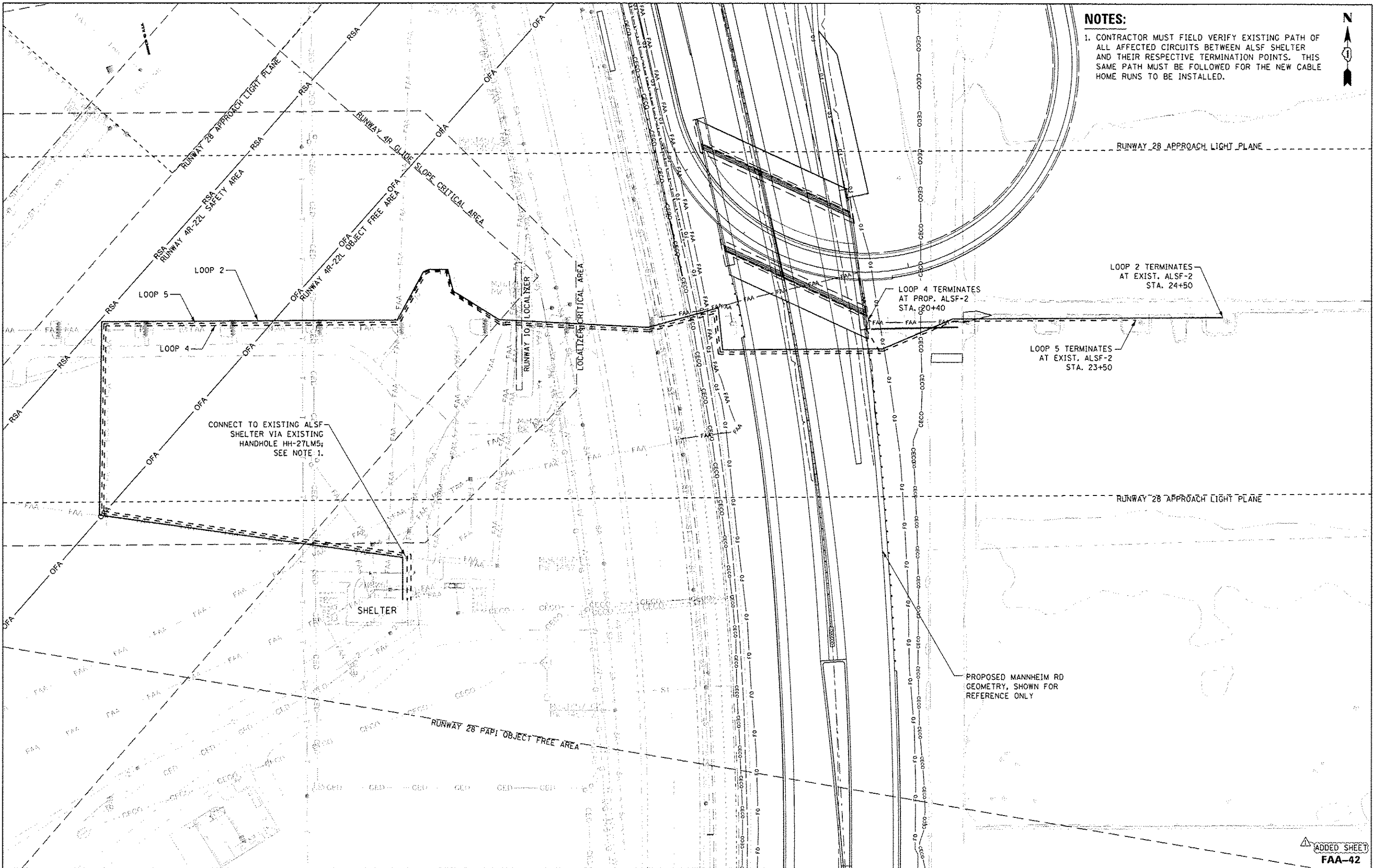
F.A.P. RTE. 330	SECTION 0105 WRS&HB	COUNTY COOK	TOTAL SHEETS 605	SHEET NO. 605AN
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

ADDED SHEET
FAA-40

FILE NAME: IP:\P\ids\47844\DI68037-ahs-FAANAVD48.dgn

NOTES:
1. CABLE SIZE & TYPE TO MATCH EXISTING.
SEE TECHNICAL SPECIFICATIONS FOR
FURTHER REQUIREMENTS.





NOTES:
1. CONTRACTOR MUST FIELD VERIFY EXISTING PATH OF ALL AFFECTED CIRCUITS BETWEEN ALSF SHELTER AND THEIR RESPECTIVE TERMINATION POINTS. THIS SAME PATH MUST BE FOLLOWED FOR THE NEW CABLE HOME RUNS TO BE INSTALLED.

LOOP 2 TERMINATES AT EXIST. ALSF-2 STA. 24+50
LOOP 4 TERMINATES AT PROP. ALSF-2 STA. 20+40
LOOP 5 TERMINATES AT EXIST. ALSF-2 STA. 23+50

CONNECT TO EXISTING ALSF SHELTER VIA EXISTING HANDHOLE HH-27LMS; SEE NOTE 1.

PROPOSED MANNHEIM RD GEOMETRY, SHOWN FOR REFERENCE ONLY

HNTB

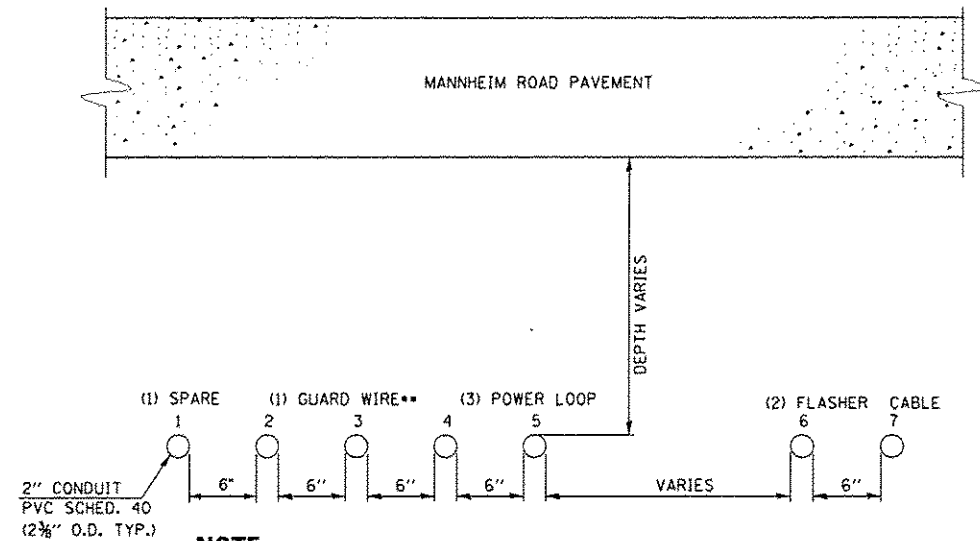
USER NAME = mkoair	DESIGNED SJM	REVISED -
PLOT SCALE = 1/8"=1'	DRAWN SJM	REVISED -
PLOT DATE = 26-DEC-2012	CHECKED SPG	REVISED -
	DATE	REVISED 12/28/12 ADDENDUM 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NAVAIDS
RW 28 ALSF-2 RELOCATION
HOMERUN OVERVIEW FOR POWER LOOPS
SCALE: 1" = 50' SHEET NO. 1 OF 1 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE. 330	SECTION 0105 WRS&HB	COUNTY COOK	TOTAL SHEETS 605	SHEET NO. 605AP
				CONTRACT NO. 60G37
ILLINOIS FED. AID PROJECT				

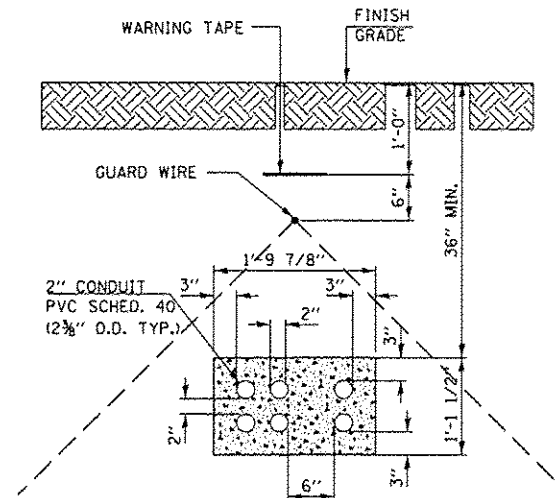
ADDED SHEET
FAA-42



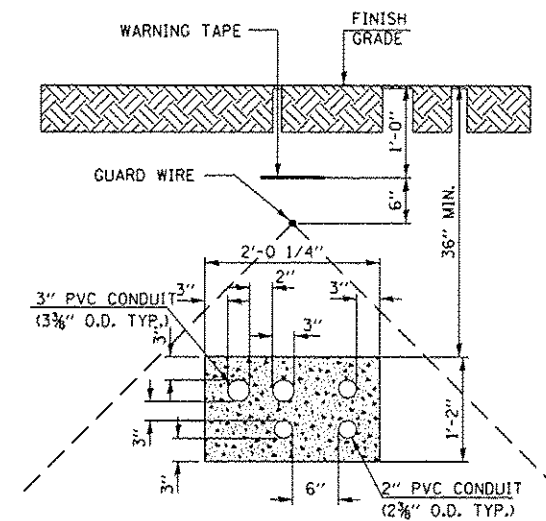
NOTE:

1. CONNECT GROUND WIRE TO THE PVC COATED GRS DUCT AND A GROUND ROD AT EACH END OF THE DIRECTIONAL BORE, VIA EXOTHERMIC WELDS; SEE SPECIFICATIONS FOR MORE INFO.

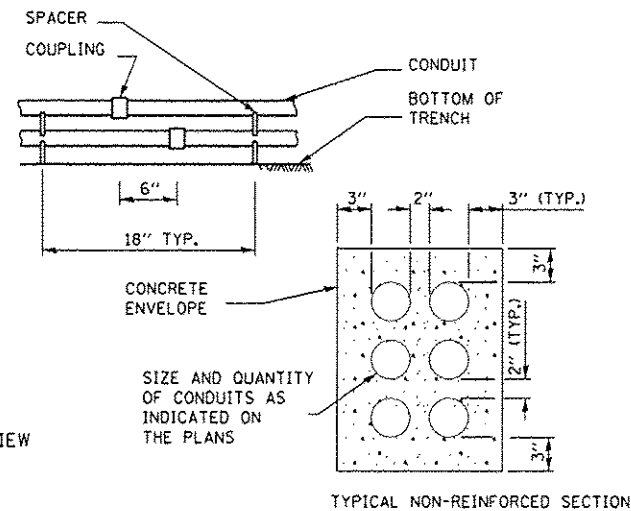
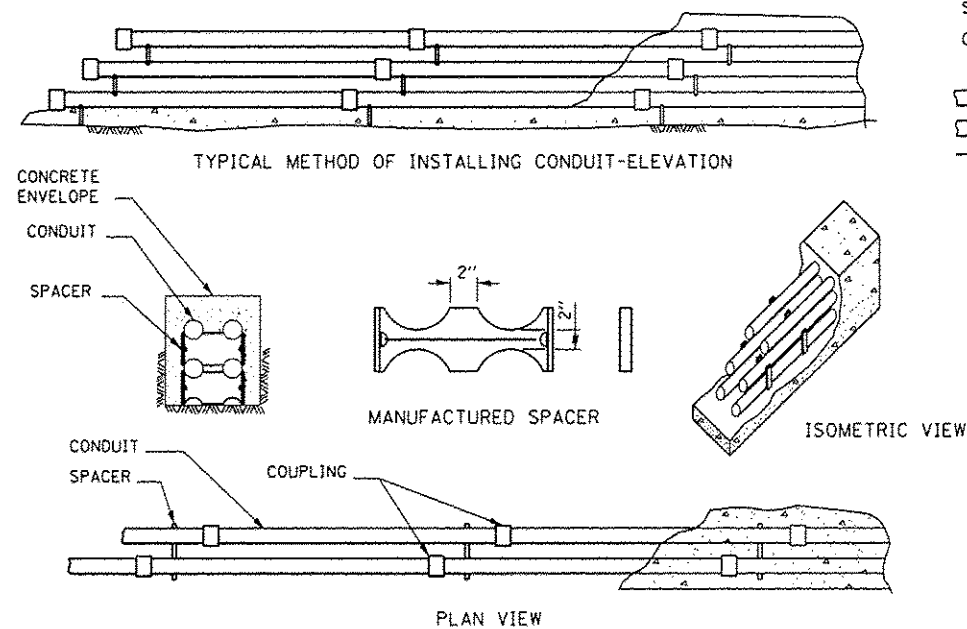
DETAIL A DIRECTIONALLY BORED DUCTS 7-WAY, 2" PVC COATED GRS



DETAIL B CONCRETE ENCASED DUCT BANK 6-WAY, 2" PVC, NON-REINFORCED



DETAIL C CONCRETE ENCASED DUCT BANK 5-WAY, 2" PVC, NON-REINFORCED



1. PROVIDE CONDUITS OF SIZES AS CALLED FOR ON THE PLANS.
2. INSTALL CONDUITS AT A MINIMUM SLOPE OF 3"/100' TOWARD MANHOLES OR HANDHOLES FOR DRAINAGE.

TYPICAL NON-REINFORCED DUCTBANK INSTALLATION

NOTES:

1. ALL CONCRETE ENCASED DUCT BANKS MUST HAVE:
 - A) A 2" MINIMUM SEPARATION BETWEEN OUTSIDE SURFACE OF CONDUITS.
 - B) A 3" MINIMUM CONCRETE COVER BETWEEN OUTSIDE SURFACE OF THE CONDUITS AND OUTSIDE SURFACE OF THE DUCTBANK.
2. INSTALL CONDUITS AT A MINIMUM SLOPE OF 3"/100' TOWARD MANHOLES OR HANDHOLES FOR DRAINAGE.
3. WHERE COLD SPLICES ARE REQUIRED BETWEEN CONCRETE POURS, THE CONCRETE
4. FACE AT THE END OF A POUR MUST BE LEFT AS A 45 SLOPED SPLICE FACE. SEE TYPICAL DUCTBANK DETAILS ON SHEET FAA-26 FOR FURTHER INFORMATION.

HNTB

USER NAME = mkgm	DESIGNED <i>SJM</i>	REVISED -
PLOT SCALE = 2:1	DRAWN <i>SJM</i>	REVISED -
PLOT DATE = 26-DEC-2012	CHECKED <i>SPG</i>	REVISED -
	DATE	REVISED 12/28/12 ADDENDUM 1

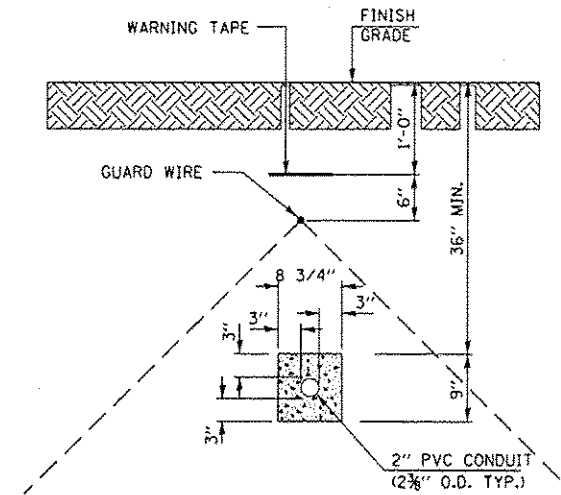
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NAVAIDS
FAA ELECTRICAL DUCT BANK DETAILS

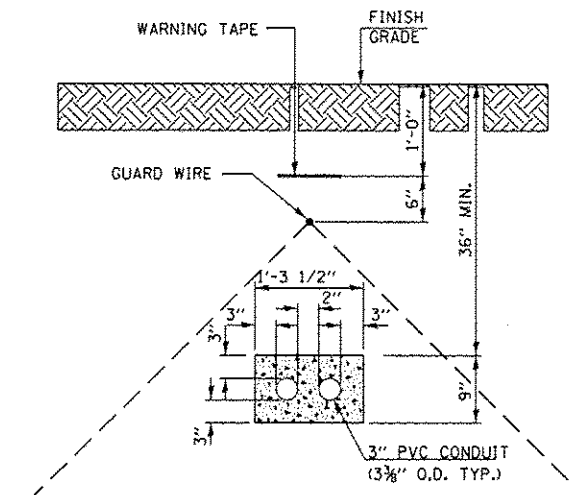
SCALE: N.T.S. SHEET NO. 4 OF 6 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE. 330	SECTION 0105 WRS&HB	COUNTY COOK	TOTAL SHEETS 605	SHEET NO. 605AQ
CONTRACT NO. 60G37				ILLINOIS FED. AID PROJECT

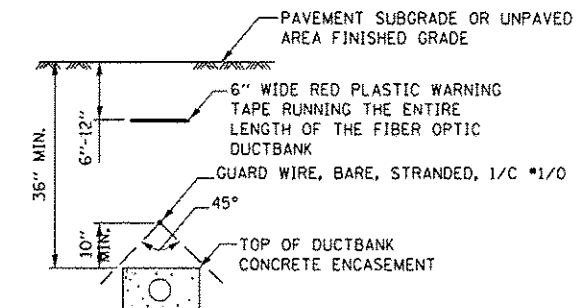
ADDED SHEET
FAA-43



DETAIL E
CONCRETE ENCASED DUCT BANK
1-WAY, 2" PVC, NON-REINFORCED



DETAIL F
CONCRETE ENCASED DUCT BANK
2-WAY, 3" PVC, NON-REINFORCED



NOTES:

GUARD WIRE MUST BE BONDED TO THE EARTH ELECTRODE SYSTEM (EES) AT EACH CONDUIT END, AND TO GROUND RODS AT APPROXIMATELY 90-FOOT INTERVALS USING EXOTHERMIC WELDS. SPACING BETWEEN GROUND RODS MUST VARY BY 10% TO 20% TO PREVENT RESONANCE. INSTALL THE GROUND RODS AT APPROXIMATELY 6 FEET ON EITHER SIDE OF TRENCH.

DETAIL G
LOCATION OF FAA DUCT BANK
GUARD WIRE AND WARNING TAPE

HNTB

USER NAME = mkoar	DESIGNED <i>SJM</i>	REVISED -
	DRAWN <i>SJM</i>	REVISED -
PLOT SCALE = 2:1	CHECKED <i>SPG</i>	REVISED -
PLOT DATE = 26-DEC-2012	DATE	REVISED 12/28/12 ADDENDUM 1

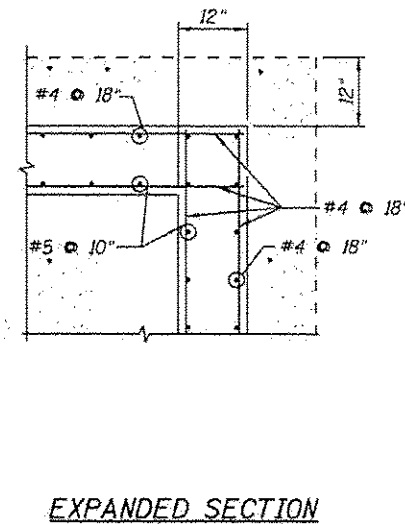
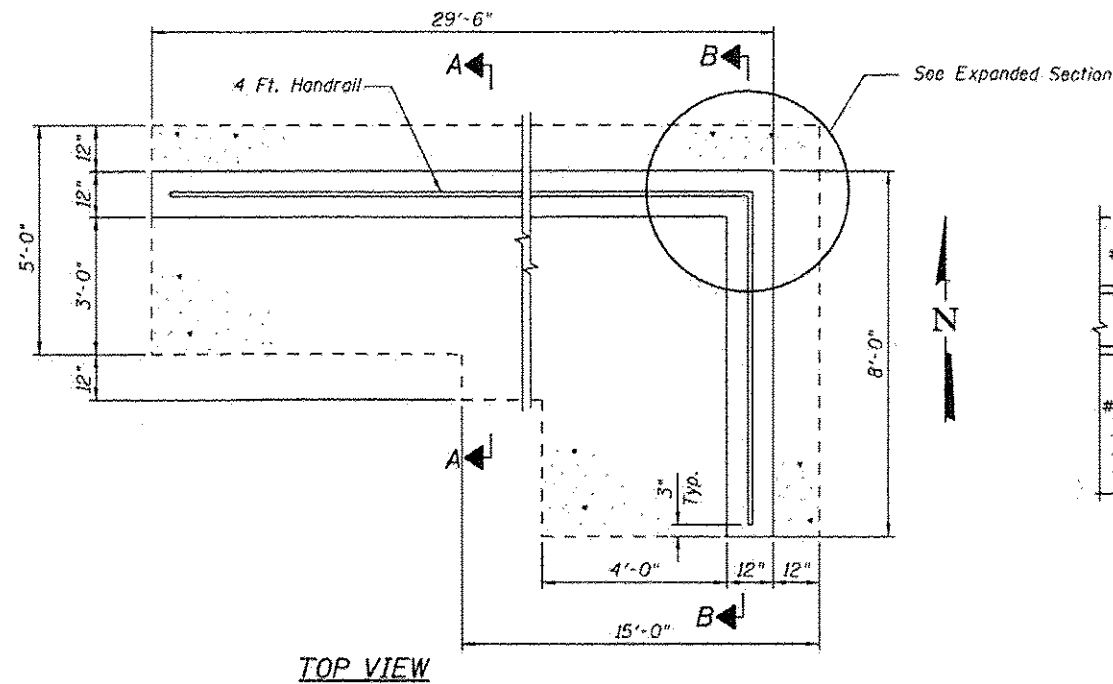
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NAVAIDS
FAA ELECTRICAL DUCT BANK DETAILS

SCALE: N.T.S. SHEET NO. 5 OF 6 SHEETS STA. N/A TO STA. N/A

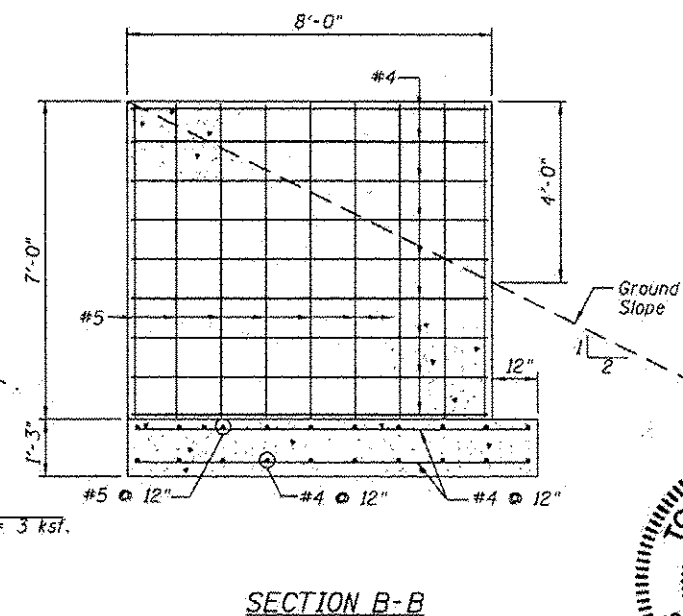
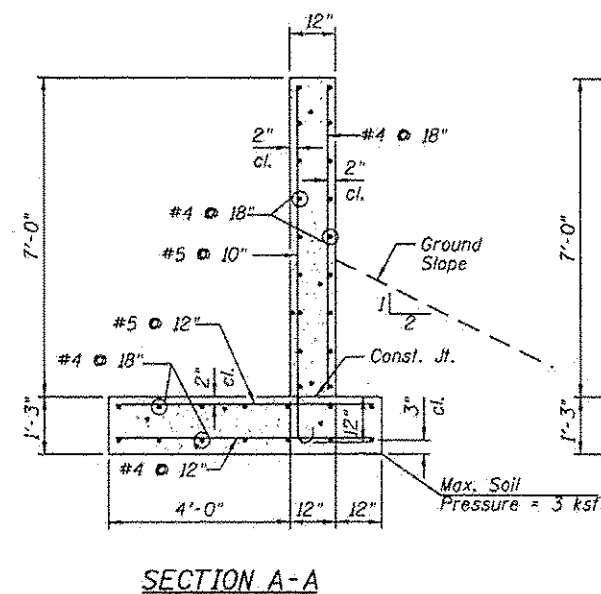
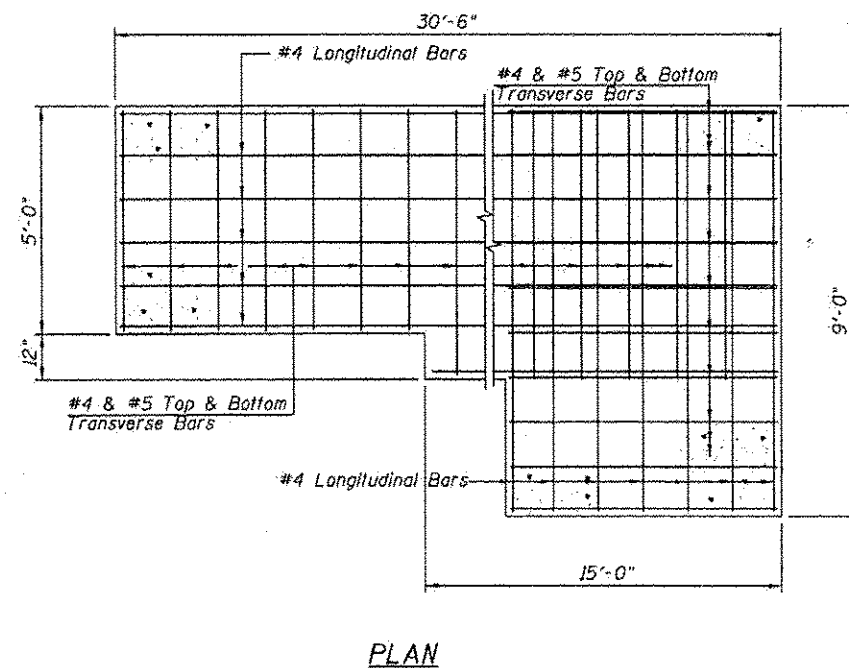
F.A.P. RTE. 330	SECTION 0105 WRS&HB	COUNTY COOK	TOTAL SHEETS 605	SHEET NO. 605AR
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

ADDED SHEET
FAA-44

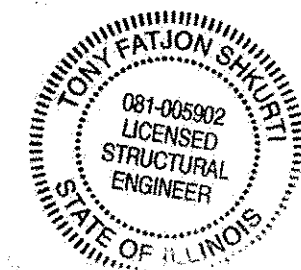


NOTES:

1. Concrete strength, $f'_c = 4$ ksi.
2. Steel reinforcement epoxy-coated, $f_y = 60$ ksi.
3. Maximum allowable soil pressure, 3 ksf.



RETAINING WALL DETAILS
Not To Scale



Tony Shkurti
11/30/2014



USER NAME: mks11	DESIGNED: JS	REVISED:
PLOT SCALE: 8/16667/1	CHECKED: ML	REVISED:
PLOT DATE: 26-DEC-2012	DRAWN: CFB	REVISED:
	DATE:	REVISED: 12/27/12 ADDENDUM 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RETAINING WALL DETAILS

SHEET NO. FAA-49 OF 1 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	605AS
				CONTRACT NO. 60G37
ILLINOIS FED. AID PROJECT				

GENERAL NOTES AND DESIGN ASSUMPTIONS FOR CAST-IN-PLACE FAA HANDHOLES

1. THE TYPICAL INSIDE CLEAR DIMENSIONS FOR HH SHALL BE AS FOLLOWS:
HH: 4'W x 4'L X 4'H
2. STRUCTURES DESIGNED TO SUPPORT HS20 LOADING ARE TO BE INSTALLED WITHIN LANDSIDE AND AREAS OUTSIDE THE RUNWAY SAFETY AREA (RSA) AND TAXIWAY SAFETY AREA (TSA).
3. STRUCTURES DESIGNED TO SUPPORT AIRCRAFT LOADS ARE TO BE INSTALLED WITHIN THE RUNWAY SAFETY AREA (RSA) AND TAXIWAY SAFETY (TSA).
3. IF THE CONTRACTOR OPTS TO USE PRECAST HANDHOLES, THE CONTRACTOR MUST SUBMIT STRUCTURAL DESIGN CALCULATIONS, SIGNED AND SEALED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF ILLINOIS, TO VERIFY THAT THE STRUCTURES CAN SUPPORT THE APPROPRIATE LOADING USING THE FOLLOWING DESIGN CRITERIA:

STRUCTURES DESIGNED TO SUPPORT HS20 LOADING:

A. EXCEPT AS NOTED, MINIMUM COMPRESSIVE STRENGTH FOR FAA ELECTRICAL HANDHOLE
f'c = 4,000 psi @ 28 DAYS

B. REINFORCEMENT: $f_y = 60,000$ psi (ASTM A615)

C. IF SOIL BORING DATA NOT AVAILABLE, ASSUME ALLOWABLE SOIL BEARING CAPACITY = 2 ksf
REFERENCE: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 2002 THROUGH
CURRENT INTERIMS
LOADING: LIVE LOAD HS20

STRUCTURES DESIGNED TO SUPPORT AIRCRAFT LOADING:

A. EXCEPT AS NOTED, MINIMUM COMPRESSIVE STRENGTH FOR FAA ELECTRICAL HANDHOLE
f'c = 4,000 psi @ 28 DAYS

B. REINFORCEMENT: $f_y = 60,000$ psi (ASTM A615)

C. IF SOIL BORING DATA NOT AVAILABLE, ASSUME ALLOWABLE SOIL BEARING CAPACITY = 2 ksf
REFERENCE: FAA AC 150/5320-6 (LATEST VERSION) APPENDIX 3 - DESIGN OF STRUCTURES
FOR HEAVY AIRCRAFT

LOADING: BOEING 747-400ER

MAIN GEAR MAXIMUM LOAD/STRUR = 213,600 lbs

MANHOLE COVER = 100,000 lbs/WHEEL LOAD

THE CONTRACTOR MUST SUBMIT SHOP DRAWINGS DETAILING ALL CONNECTIONS AND INSERTS TO BE CAST IN THE STRUCTURE TO INCLUDE AMONG OTHERS, DRAIN PIPE, MH/HH FRAME AND COVER, GROUND ROD SLEEVE, PULL IRON, KNOCK-OUTS FOR DUCT BANKS, ETC.

4. FAA HANDHOLE FRAME AND COVER TO BE SQUARE SPRING ASSIST, DUCTILE IRON, HINGED WITH A CLEAR OPENING OF 30" X 30". PROVIDE LID WITH ONE LIFT HANDLE AND TWO STAINLESS STEEL LOCKING BOLTS. THE FRAME MUST BE CAST INTO THE TOP SLAB WITHIN THE AIRCRAFT OPERATION AREA (AOA). USE 100,000 LB. RATED FRAME AND COVER LID WITH 2" HIGH LETTERS. CAST LETTERING FOR EACH HANDHOLE LID MUST BE CONFIRMED WITH CDA AND FAA, PER NOTE 4 IN THE "NOTES REQUIRING SPECIAL ATTENTION" SHOWN ON THIS SHEET. REFER TO SPECIFICATION L-115 FOR MORE INFORMATION.

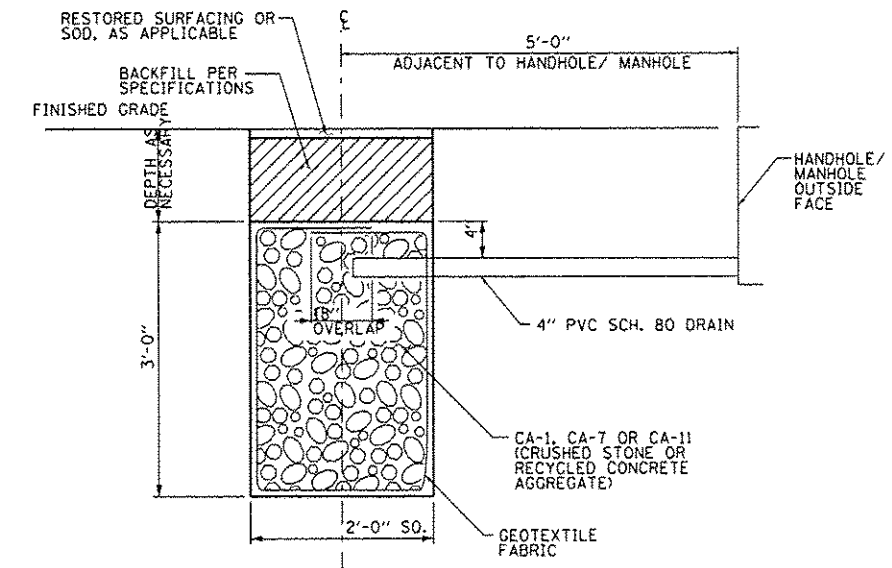
ABBREVIATIONS:

AASHTO = AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
A/E = ARCHITECT/ ENGINEER MH = MANHOLE
B = BOTTOM N.T.S. = NOT TO SCALE
CED = COMMON ELECTRICAL DUCTBANK RSA = RUNWAY SAFETY AREA
CL = CLEARANCE SCH. = SCHEDULE
E.F. = EACH FACE SO = SQUARE
E.W. = EACH WAY T = TOP
FAA = FEDERAL AVIATION ADMINISTRATION TSA = TAXIWAY SAFETY AREA
HH = HANDHOLE TYP. = TYPICAL

W = WIDTH, L = LENGTH, H = HEIGHT

NOTES REQUIRING SPECIAL ATTENTION FOR FAA HANDHOLES

1. THE FOLLOWING NOTES ARE INCLUDED HERE FOR EMPHASIS ONLY. FURTHER INFORMATION ON THESE AND OTHER REQUIREMENTS ARE DETAILED IN THE TECHNICAL SPECIFICATIONS. CONTRACTOR MUST COMPLY WITH ALL CDA TECHNICAL SPECIFICATIONS.
2. CONTRACTOR MUST REPLACE HANDHOLE/MANHOLE COVERS FOR EXISTING AT&T STRUCTURES THAT WILL BE UTILIZED FOR RELOCATED FOTS LOOP 3. NEW COVERS MUST BE SAME AS EXISTING, HOWEVER NOMENCLATURE FOR THESE NEW COVERS MUST BE COORDINATED IN ADVANCE WITH CDA. PAYMENT FOR THIS PORTION OF THE WORK WILL BE INCLUDED IN THE CONTRACT COST.
3. CONTRACTOR MUST REPLACE HANDHOLE/MANHOLE COVERS FOR EXISTING FAA STRUCTURES THAT WILL BE UTILIZED FOR RELOCATED FOTS LOOP 3. NEW COVERS MUST BE SAME AS EXISTING, HOWEVER NOMENCLATURE FOR THESE NEW COVERS MUST BE COORDINATED IN ADVANCE WITH CDA. PAYMENT FOR THIS PORTION OF THE WORK WILL BE INCLUDED IN THE CONTRACT COST.
4. CONTRACTOR MUST PROVIDE A REMOVABLE STAINLESS STEEL OR CAST IRON GRATE COVER FOR DRAIN, IN ACCORDANCE WITH SPECIFICATION SECTION L-115.
5. CONTRACTOR MUST SUBMIT HANDHOLE GROUNDING DETAILS, SHOWING HOW ALL FRAMES AND COVERS WILL BE GROUNDED AND VERIFYING COMPLIANCE WITH THE REQUIREMENTS OF SPECIFICATION SECTION L-115.
6. CONTRACTOR MUST SUBMIT SHOP DRAWINGS SHOWING THE NOMENCLATURE FOR HANDHOLE/MANHOLE COVERS THAT CONTAIN FAA CABLES.
7. CONTRACTOR MUST SUBMIT SHOP DRAWINGS FOR EPOXY CONCRETE ADHESIVES TO VERIFY THEY MEET SECTION 1025.01 OF IDOT'S STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION, IN ACCORDANCE WITH SPECIFICATION SECTION L-115.
8. CONTRACTOR MUST SUBMIT SHOP DRAWINGS FOR CABLE RACKING APPURTENANCES.
9. CONTRACTOR MUST PROVIDE HH/MH CHECKLISTS, IN ACCORDANCE WITH SPECIFICATION SECTION L-118, INCLUDING PICTURES OF EACH WALL WITHIN THE HANDHOLE/MANHOLE.
10. CONTRACTOR CAN NOT AND MUST NOT INSTALL HANDHOLE/MANHOLE STRUCTURES DESIGNED FOR HS20 LOADING WITHIN THE RSA OR TSA.



TYPICAL FRENCH DRAIN DETAIL



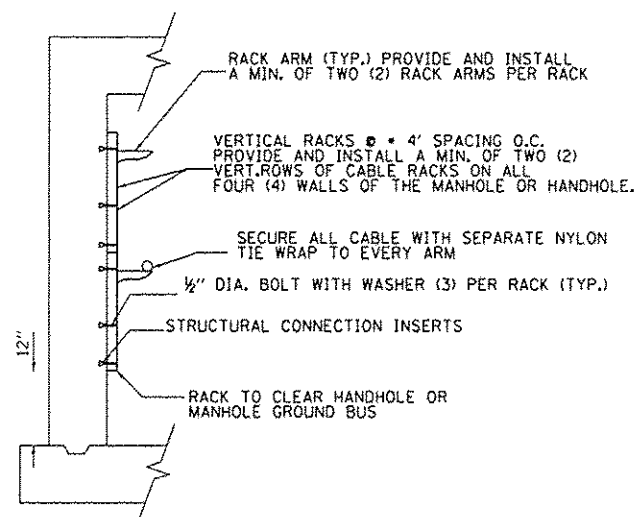
USER NAME = mkosar	DESIGNED <i>SJM</i>	REVISED -
	DRAWN <i>SJM</i>	REVISED -
PLOT SCALE = 2:1	CHECKED <i>SPG</i>	REVISED -
PLOT DATE = 26-DEC-2012	DATE	REVISED  12/28/12 ADDENDUM

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAA
HANDHOLE GENERAL NOTES AND
FRENCH DRAIN DETAIL

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	605AT
		CONTRACT NO. 60G37		
ILLINOIS FED. AID PROJECT				

FILE NAME : IP_PWPIdm47844\DI60037-wht-FAN46.dgn

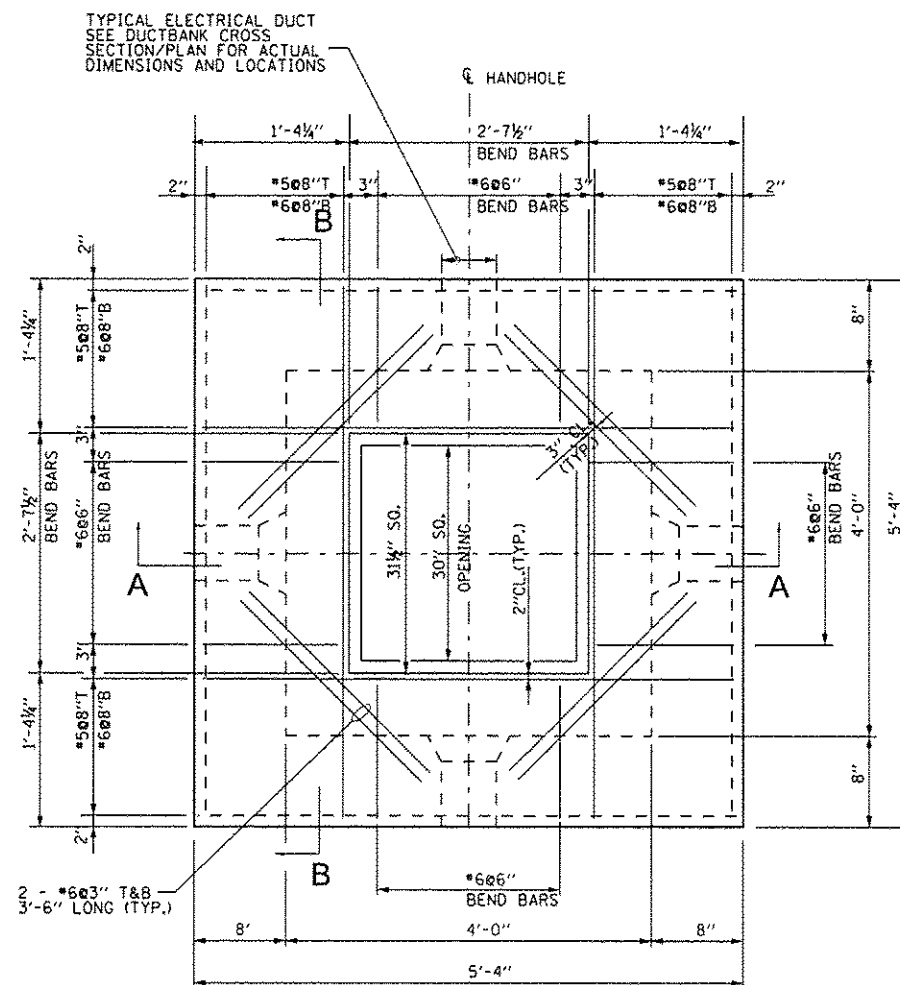


NOTES:

1. CABLE RACKS MUST BE HEAVY DUTY, STANDARD YELLOW FIBERGLASS REINFORCED NYLON WITH ADJUSTABLE ARMS.
2. LENGTH OF RACK ARM MUST BE 14 INCHES FOR FAA MANHOLES AND 6 INCHES FOR FAA HANDHOLES.

TYPICAL NON-METALLIC CABLE SUPPORT RACKS

(NOT TO SCALE)



NOTES:

1. IF CONTRACTOR OPTS TO USE PRECAST HANDHOLE IN LIEU OF CAST-IN-PLACE, REFER TO GENERAL NOTES AND DESIGN ASSUMPTIONS ON SHEET CU-009.
2. FOR SECTION A-A AND SECTION B-B, SEE SHEET CU-011.

TOP SLAB PLAN TYPICAL CAST-IN-PLACE FAA HANDHOLE REINFORCEMENT HS20 LOADING

HNTB

USER NAME = mkoar	DESIGNED <i>SJM</i>	REVISED -
	DRAWN <i>SJM</i>	REVISED -
PLOT SCALE = 2:1	CHECKED <i>SPG</i>	REVISED -
PLOT DATE = 26-DEC-2012	DATE	REVISED 12/28/12 ADDENDUM 1

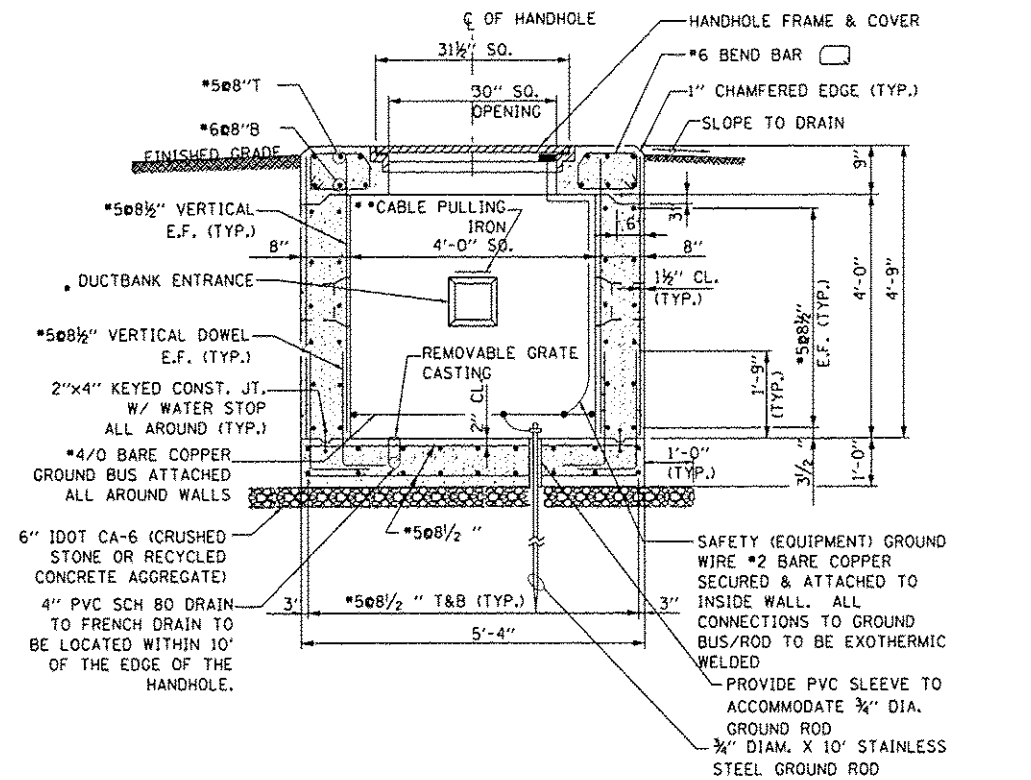
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAA HANDHOLE DETAILS HS20 LOADING, SHEET 1 OF 2			
SCALE: N.T.S.	SHEET NO. 2 OF 5 SHEETS	STA. N/A	TO STA. N/A

F.A.P. RTE. 330	SECTION 0105 WRS&HB	COUNTY COOK	TOTAL SHEETS 605	SHEET NO. 605AU
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

ADDED SHEET
FAA-47

FILE NAME = IP_PWP\jdas47644\0168037-shc-FAA47.dgn

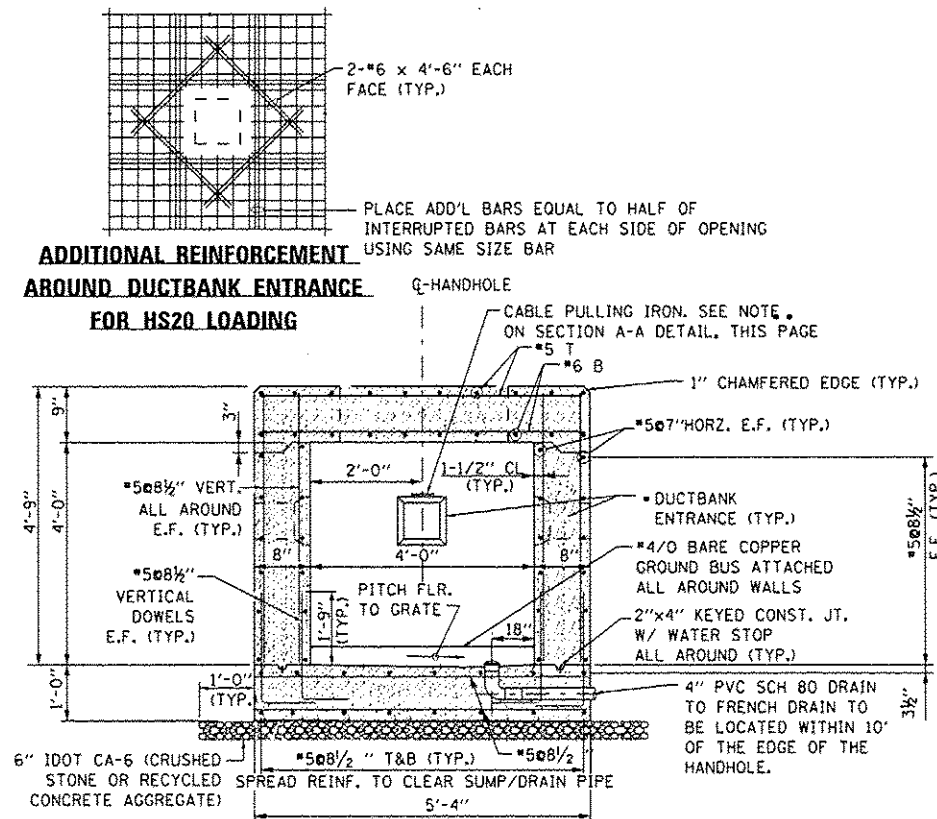


NOTES:

- IF CONTRACTOR OPTS TO USE PRECAST HANDHOLE IN LIEU OF CAST-IN-PLACE, REFER TO SHEET CU-009 FOR GENERAL NOTES AND DESIGN ASSUMPTIONS.
- FOR CABLE SUPPORT RACK DETAIL & NOTES, SEE DETAIL ON SHEET CU-010.
- TOP SLAB DIAGONAL BARS NOT SHOWN FOR CLARITY. FOR PLACEMENT, SEE TOP SLAB PLAN DETAIL ON SHEET CU-010.
- SUBGRADE BENEATH HANDHOLE FOOTING MUST BE PREPARED TO MEET A MINIMUM BEARING CAPACITY OF 2 KSF. CONTRACTOR TO VERIFY BEARING TO 3 FEET MINIMUM OR TO DEPTH AS DIRECTED BY THE COMMISSIONER. COST OF VERIFYING AND PROVIDING THE REQUIRED MINIMUM BEARING IS INCLUDED IN THE PRICE OF THE HANDHOLE.

- ACTUAL SIZE, LOCATION & NUMBER OF DUCTBANK ENTRANCE DEPENDS ON DESIGN REQUIREMENT. REFER TO DUCTBANK LAYOUT & SECTIONS. MAXIMUM OPENING 2'-5 1/2" x 2'-5 1/2" (9 WAY-4" SCH.40 PVC CONDUIT).
- LOCATION OF PULLING IRON DEPENDS ON DUCTBANK LOCATIONS. IT MUST BE APPROXIMATELY LOCATED ALONG THE AXIS OF THE OPPOSITE DUCTBANK TO BE PULLED.

SECTION A-A TYPICAL CAST-IN-PLACE FAA HANDHOLE REINFORCEMENT HS20 LOADING



NOTES:

- IF CONTRACTOR OPTS TO USE PRECAST HANDHOLE IN LIEU OF CAST-IN-PLACE, REFER TO SHEET CU-009 FOR GENERAL NOTES AND DESIGN ASSUMPTIONS.
- FOR CABLE SUPPORT RACK DETAIL & NOTES, SEE DETAIL ON SHEET CU-010.
- TOP SLAB DIAGONAL BARS NOT SHOWN FOR CLARITY. FOR PLACEMENT, SEE TOP SLAB PLAN DETAIL ON SHEET CU-010.
- FOR SPACING OF THE TOP SLAB REINFORCEMENT, SEE TOP SLAB PLAN DETAIL ON SHEET CU-010.
- SUBGRADE BENEATH HANDHOLE FOOTING MUST BE PREPARED TO MEET A MINIMUM BEARING CAPACITY OF 2 KSF. CONTRACTOR TO VERIFY BEARING TO 3 FEET MINIMUM OR TO DEPTH AS DIRECTED BY THE COMMISSIONER. COST OF VERIFYING AND PROVIDING THE REQUIRED MINIMUM BEARING IS INCLUDED IN THE PRICE OF THE HANDHOLE.

- ACTUAL SIZE, LOCATION & NUMBER OF DUCTBANK ENTRANCE DEPENDS ON DESIGN REQUIREMENT. REFER TO DUCTBANK LAYOUT & SECTIONS. MAXIMUM OPENING 2'-5 1/2" x 2'-5 1/2" (9 WAY-4" SCH.40 PVC CONDUIT).

SECTION B-B TYPICAL CAST-IN-PLACE FAA HANDHOLE REINFORCEMENT HS20 LOADING

HNTB

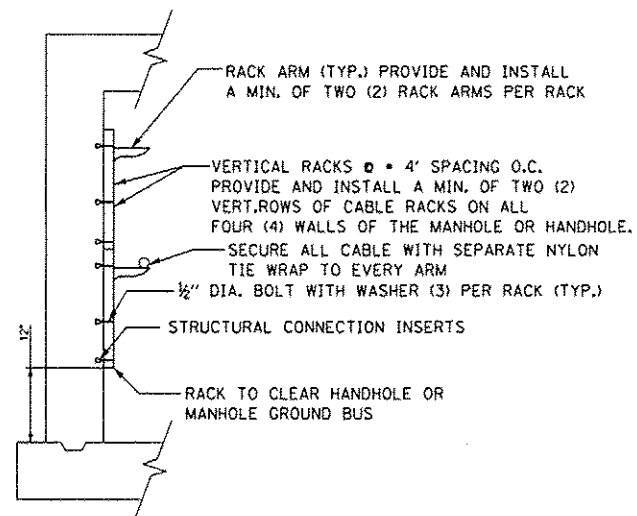
USER NAME: mkoar	DESIGNED: SJM	REVISED: -
DRAWN: SJM	CHECKED: SPG	REVISED: -
PLOT SCALE: 2:1	DATE: 12/28/12	ADDENDUM 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAA HANDHOLE DETAILS HS20 LOADING, SHEET 2 OF 2	SCALE: N.T.S.	SHEET NO. 3 OF 5 SHEETS	STA. N/A TO STA. N/A
---	---------------	-------------------------	----------------------

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	605AV
CONTRACT NO. 60G37				

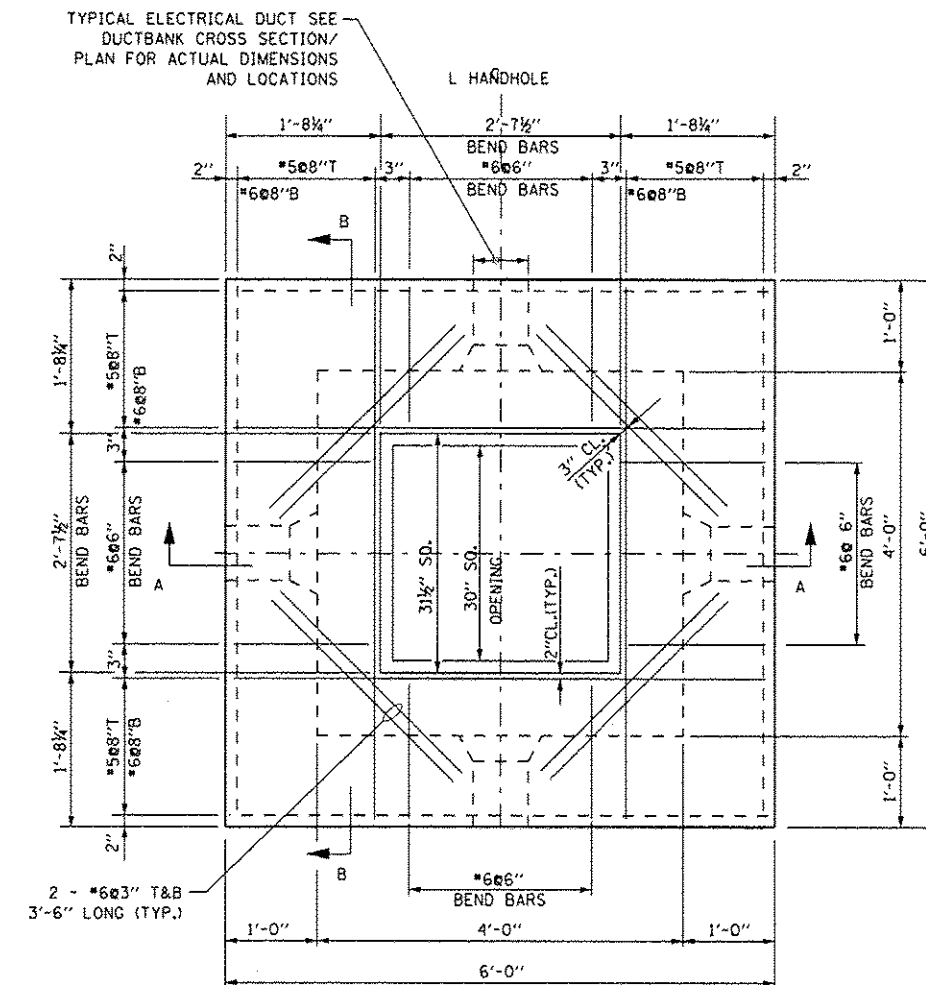
ADDED SHEET
FAA-48



NOTES:

1. CABLE RACKS MUST BE HEAVY DUTY, STANDARD YELLOW FIBERGLASS REINFORCED NYLON WITH ADJUSTABLE ARMS.
2. LENGTH OF RACK ARM MUST BE 14 INCHES FOR FAA MANHOLES AND 6 INCHES FOR FAA HANDHOLES.
3. FIBER OPTIC CABLE TO BE LOOPED IN HANDHOLE PER SPEC. 16125.

TYPICAL NON-METALLIC CABLE SUPPORT RACKS



NOTES:

1. IF CONTRACTOR OPTS TO USE PRECAST HANDHOLE IN LIEU OF CAST-IN-PLACE, REFER TO SHEET CU-009 FOR GENERAL NOTES AND DESIGN ASSUMPTIONS.
2. FOR SECTION A-A AND SECTION B-B, SEE SHEET CU-013.

TOP SLAB PLAN TYPICAL CAST-IN PLACE CED HANDHOLE REINFORCEMENT AIRCRAFT LOADING

HNTB	USER NAME = mhasir	DESIGNED SJM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAA HANDHOLE DETAILS AIRCRAFT LOADING, SHEET 1 OF 2	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 2H	DRAWN SJM	REVISED -			330	0105 WRS&HB	COOK	606	605AW
	PLOT DATE = 26-DEC-2012	CHECKED SPG	REVISED -			CONTRACT NO. 60637				
	PLOT DATE = 26-DEC-2012	DATE	REVISED 12/28/12 ADDENDUM 1			SCALE: N.T.S.	SHEET NO. 4 OF 5 SHEETS	STA. N/A TO STA. N/A	ILLINOIS FED. AID PROJECT	
FILE NAME = IP_PWPtdms47844\0168637-shc-FAA49.dgn										

ADDED SHEET
FAA-49

CONTRACT NO. 60637
 ILLINOIS FED. AID PROJECT

4. ALL EXISTING UTILITIES SERVING THE AIRPORT MUST REMAIN IN CONTINUOUS OPERATION DURING THE EXECUTION OF THE WORK, UNLESS REMOVED UNDER THIS OR SEPARATE CONTRACTS. THESE UTILITIES INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING: CITY, FAA, AT&T, PEOPLES GAS, COMED, CONTROL AND COMMUNICATION CABLES, WATER LINE, FUEL LINES, SEWER AND DRAINAGE LINES. THE CONTRACTOR MUST CONTACT "J.U.L.I.E." OR "DIGGER", AND THE OWNERS OF ALL UTILITIES PRIOR TO THE START OF THE WORK SO THAT THE OWNERS MAY LOCATE AND STAKE THEIR UTILITIES. THE CONTRACTOR MUST NOTIFY THE ENGINEER, CDA, AND FAA , IN WRITING, FORTY-EIGHT (48) HOURS PRIOR TO THE UTILITY OWNER LOCATING THE UTILITY.
5. THE CONTRACTOR MUST PROVIDE SEVENTY-TWO (72) HOURS NOTICE PRIOR TO ANY OUTAGES OR SHUTDOWNS TO THE ENGINEER, CDA, AND FAA AND THE AGENCY OWNING THE AFFECTED UTILITY. THE CONTRACTOR MUST PROVIDE ANY TEMPORARY CONNECTIONS OR OTHER MEASURES AS MAY BE REQUIRED TO MAINTAIN SERVICE AT NO ADDITIONAL COST TO THE OWNER. ALL TEMPORARY CONNECTIONS WILL BE AT THE EXPENSE OF THE CONTRACTOR AND TO THE SPECIFICATIONS OF THE ENGINEER, CDA, AND FAA OR AFFECTED UTILITY.
6. THE CONTRACTOR MUST DETERMINE THE LOCATIONS OF ALL FAA UTILITIES AND ALL OTHER UNDERGROUND UTILITIES IN THE VICINITY OF THE SITE OF WORK AND MUST PROTECT AND PREVENT DAMAGE TO SUCH FACILITIES FROM ITS OPERATION UNDER THIS CONTRACT. PROTECTION OF UNDERGROUND FAA AND OTHER FACILITIES MUST BE IN ACCORDANCE WITH THE CDA SPECIFICATIONS M-103 PARAGRAPHS 2.05, 3.20, AND 3.21.
7. NO EXCAVATION ACTIVITIES OR DISRUPTION OF ANY SURFACE IS TO BE UNDERTAKEN UNTIL THE ENGINEER AND CDA HAS REVIEWED THE SITE FOR UTILITY DELINEATION AND HAS AUTHORIZED THE CONTRACTOR TO PROCEED.
8. CONTRACTOR OPERATIONS SUCH AS TRENCHING, JACKING OF PIPE OR CASINGS, EXCAVATION FOR PAVEMENTS OR STRUCTURES, SITE GRADING, AND VEHICULAR TRAFFIC OVER EARTH AREAS WILL OCCUR IN THE VICINITY OF FACILITIES, INCLUDING, BUT NOT LIMITED TO, EQUIPMENT HOUSES, DUCT BANKS AND DIRECT BURIED CABLES. THESE FACILITIES ARE CRITICAL TO THE OPERATION OF THE AIR TRAFFIC CONTROL SYSTEM AND MUST NOT BE DISTURBED. THE FAA REGARDS THE PROSPECT OF FAILURE OF AIR TRAFFIC CONTROL SYSTEMS CAUSED BY CONTRACTOR NEGLIGENCE WITH UTMOST CONCERN, AND MAINTAINS A ZERO TOLERANCE POLICY.
9. THE CONTRACTOR IS RESPONSIBLE TO LOCATE ALL EXISTING UTILITIES WITHIN TEN (10) FEET OF ANY PROPOSED UTILITIES LOCATION, UTILIZING NONDESTRUCTIVE METHODS OF LOCATING THE UTILITIES AS APPROVED BY THE ENGINEER AND CDA OR BY HAND DIGGING.
10. ALL EXCAVATING WITHIN FIVE (5) FEET EITHER SIDE OF EXISTING CABLES OR OTHER EXISTING UTILITY LINES MUST BE PERFORMED BY HAND OR BY VACUUM EXCAVATION METHODS, SUBJECT TO THE ENGINEER AND CDA'S APPROVAL. COSTS FOR SUCH EXCAVATION WILL NOT BE PAID FOR SEPARATELY, BUT CONSIDERED INCLUDED IN THE CONTRACT PRICE. ANY CABLE OR OTHER EXISTING UTILITY LINE THAT IS DAMAGED DURING THE PERFORMANCE OF THIS CONTRACT IS TO BE REPAIRED IMMEDIATELY BY THE CONTRACTOR, TO THE SATISFACTION OF THE ENGINEER AND CDA AND AT THE CONTRACTOR'S EXPENSE. DURING THE TIME THAT THE ABOVE TYPES OF CABLES OR UTILITIES ARE OUT OF SERVICE DUE TO THE CONTRACTOR'S OPERATIONS, ALL CONTRACT WORK WILL BE SUSPENDED UNLESS OTHERWISE DIRECTED BY THE ENGINEER AND CDA IN WRITING. THE CONTRACTOR MUST HALT ALL OPERATIONS UNTIL SERVICE IS RESTORED. THE CONTRACTOR WILL NOT BE ALLOWED TO MAKE CLAIMS FOR EXTRA COSTS OR TIME EXTENSIONS DUE TO SUCH STOPPAGE OF WORK.
11. THE CONTRACTOR MUST PREPARE AND SUBMIT CONSTRUCTION DRAWINGS TO THE ENGINEER AND CDA FOR APPROVAL, WHICH CLEARLY AND ACCURATELY DEPICT THE METHODS AND MEANS BY WHICH THE CONTRACTOR INTENDS TO PROTECT, SHORE, SUPPORT, BRACE, ETC., EXISTING UTILITIES WHEN THE WORK AFFECTS A DUCTBANK, CABLE, SEWER, OR OTHER UTILITIES WITHIN THE PROJECT SITE.
12. IN ACCORDANCE WITH THE GENERAL CONDITIONS, THE CONTRACTOR MUST NOT START ANY WORK WHICH MAY AFFECT EXISTING CITY, FAA, TELEPHONE UTILITY (E.G., AT&T), COMED, PEOPLES GAS, OR OTHER PRIVATE UTILITY CABLES, PIPELINES OR SEWERS UNTIL THE ENGINEER AND CDA HAS APPROVED SHOP DRAWINGS AND PROCEDURES FOR PROTECTION OF THE UTILITY.
13. POWER CABLING, CONTROL CABLING AND FIXTURES FOR AIRFIELD LIGHTING AND NAVIGATIONAL AIDS ARE LOCATED IN THE CONSTRUCTION AREAS. THE CONTRACTOR'S PERSONNEL MUST BECOME FAMILIAR WITH THESE CABLE AND FIXTURE LOCATIONS AND KEEP VEHICLES AND EQUIPMENT CLEAR OF THEM AT ALL TIMES. ADHERENCE TO AVIATION LOCKOUT/TAG-OUT PROCEDURES MUST BE STRICTLY FOLLOWED.
14. INTERRUPTION TO EXISTING AIRFIELD LIGHTING SYSTEMS NOT INCLUDED IN THIS PROJECT WILL NOT BE PERMITTED. THE CONTRACTOR WILL TEMPORARILY MAINTAIN ALL AIRFIELD LIGHTING CIRCUITS AFFECTED BY THIS PROJECT DURING OPERATIONAL PERIODS. ALL TEMPORARY EQUIPMENT, CONSTRUCTION METHODS, AND SCHEDULING FOR TEMPORARY AIRFIELD LIGHTING MUST BE SPECIFICALLY APPROVED BY THE ENGINEER, CDA, AND FAA.
15. ALL ACTIVE AIRFIELD LIGHTING DAMAGED BY THE CONSTRUCTION OPERATIONS WILL BE REPAIRED OR REPLACED IMMEDIATELY BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
16. COMED AND OTHER UTILITY OWNERS REQUIRE FULL ACCESS TO ALL COMED FACILITIES AT ALL TIMES DURING ALL PHASES OF CONSTRUCTION.
17. ALL OVERHEAD LINES IN THE PROJECT AREA OR ON DESIGNATED HAUL AND ACCESS ROADS MUST BE IDENTIFIED WITH WARNING SIGNS.



USER NAME = mhobir	DESIGNED <i>SJM</i>	REVISED -
	DRAWN <i>SJM</i>	REVISED -
PLOT SCALE = 2:1	CHECKED <i>SPG</i>	REVISED -
PLOT DATE = 26-DEC-2012	DATE	REVISED 12/28/12 ADDENDUM 1

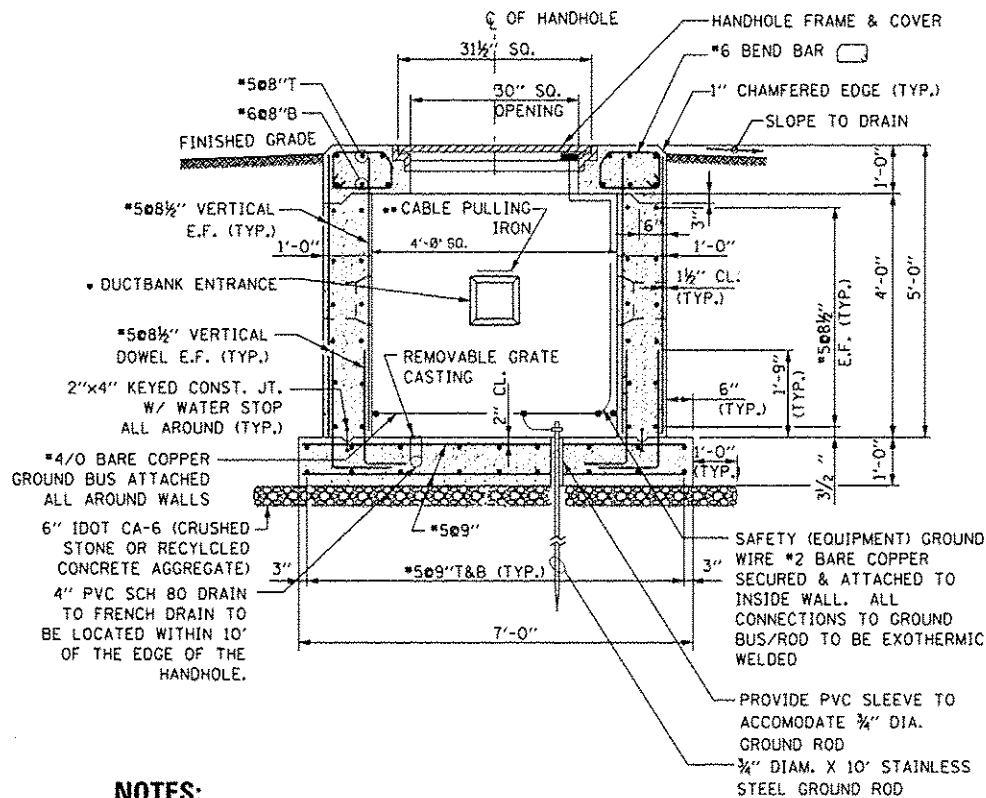
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAA-GENERAL NOTES

SCALE: SHEET NO. 4 OF 4 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	605D
CONTRACT NO. 60637				
ILLINOIS FED. AID PROJECT				

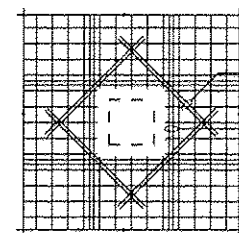
ADDED SHEET
FAA-04



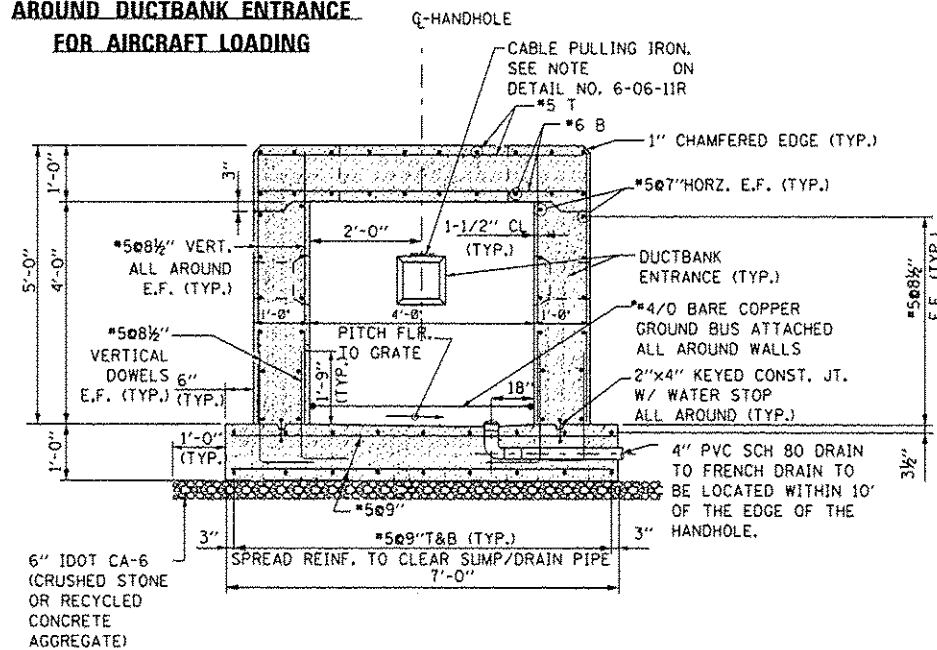
NOTES:

- IF CONTRACTOR OPTS TO USE PRECAST HANDHOLE IN LIEU OF CAST-IN-PLACE, REFER TO SHEET CU-009 FOR GENERAL NOTES AND DESIGN ASSUMPTIONS.
 - FOR CABLE SUPPORT RACK DETAIL & NOTES, SEE SHEET CU-012.
 - TOP SLAB DIAGONAL BARS NOT SHOWN FOR CLARITY. FOR PLACEMENT, SEE TOP SLAB PLAN DETAIL ON SHEET CU-012.
 - SUBGRADE BENEATH HANDHOLE FOOTING MUST BE PREPARED TO MEET A MINIMUM BEARING CAPACITY OF 2 KSF. CONTRACTOR TO VERIFY BEARING TO 3 FEET MINIMUM OR TO DEPTH AS DIRECTED BY THE COMMISSIONER. COST OF VERIFYING AND PROVIDING THE REQUIRED MINIMUM BEARING IS INCIDENTAL TO AND INCLUDED IN THE PRICE OF THE HANDHOLE.
- ACTUAL SIZE, LOCATION & NUMBER OF DUCTBANK ENTRANCE DEPENDS ON DESIGN REQUIREMENT. REFER TO DUCTBANK LAYOUT & SECTIONS. MAXIMUM OPENING 2'-5 1/2" x 2'-5 1/2" (9 WAY-4" SCH.40 PVC CONDUIT).
 - LOCATION OF PULLING IRON DEPENDS ON DUCTBANK LOCATIONS. IT MUST BE APPROXIMATELY LOCATED ALONG THE AXIS OF THE OPPOSITE DUCTBANK TO BE PULLED.

SECTION A-A TYPICAL CAST-IN PLACE CED HANDHOLE REINFORCEMENT AIRCRAFT LOADING



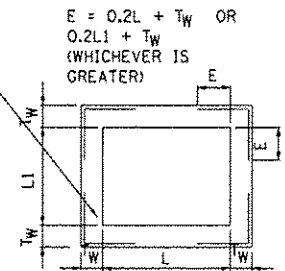
ADDITIONAL REINFORCEMENT AROUND DUCTBANK ENTRANCE FOR AIRCRAFT LOADING



NOTES:

- IF CONTRACTOR OPTS TO USE PRECAST HANDHOLE IN LIEU OF CAST-IN-PLACE, REFER TO SHEET CU-009 FOR GENERAL NOTES AND DESIGN ASSUMPTIONS.
 - FOR CABLE SUPPORT RACK DETAIL & NOTES, SEE SHEET CU-012.
 - TOP SLAB DIAGONAL BARS NOT SHOWN FOR CLARITY. FOR PLACEMENT, SEE TOP SLAB PLAN DETAIL ON SHEET CU-012.
 - FOR THE SPACING OF THE TOP SLAB REINFORCEMENT, SEE TOP SLAB PLAN DETAIL ON SHEET CU-012.
 - SUBGRADE BENEATH HANDHOLE FOOTING MUST BE PREPARED TO MEET A MINIMUM BEARING CAPACITY OF 2 KSF. CONTRACTOR TO VERIFY BEARING TO 3 FEET MINIMUM OR TO DEPTH AS DIRECTED BY THE COMMISSIONER. COST OF VERIFYING AND PROVIDING THE REQUIRED MINIMUM BEARING IS INCIDENTAL TO AND INCLUDED IN THE PRICE OF THE HANDHOLE.
- ACTUAL SIZE, LOCATION & NUMBER OF DUCTBANK ENTRANCE DEPENDS ON DESIGN REQUIREMENT. REFER TO DUCTBANK LAYOUT & SECTIONS. MAXIMUM OPENING 2'-5 1/2" x 2'-5 1/2" (9 WAY-4" SCH.40 PVC CONDUIT).

SECTION B-B TYPICAL CAST-IN PLACE CED HANDHOLE REINFORCEMENT AIRCRAFT LOADING



PLAN CORNER REINFORCEMENT FOR AIRCRAFT LOADING

HNTB

USER NAME = mikovir	DESIGNED = SJM	REVISED =
DRAWN = SJM	REVISED =	
PLOT SCALE = 2:1	CHECKED = SPG	REVISED =
PLOT DATE = 26-DEC-2012	DATE =	REVISED = 12/28/12 ADDENDUM 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAA
HANDHOLE DETAILS
AIRCRAFT LOADING, SHEET 2 OF 2

SCALE: N.T.S. SHEET NO. 5 OF 5 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE. 330	SECTION 0105 WRS&HB	COUNTY COOK	TOTAL SHEETS 606	SHEET NO. 605AX
CONTRACT NO. 60637			ILLINOIS FED. AID PROJECT	

ADDED SHEET
FAA-50

RWY 28 ALSF-2 LIGHT BAR AND LAMP SCHEDULE

ALSf-2 STATION	LIGHT BAR LOCATION (SEE LEGEND)	STEADY BURNING LAMPS (SEE NOTE 1)						SUPPORT TYPE (SEE NOTE 4)	SETTING ANGLE (DEGREES) ELEVATED ABOVE HORIZONTAL •	
		NORTHING	EASTING	PROP. FINAL GRADE ELEV. (SEE NOTE 4)	PROP. LAMP Ô ELEV.	NUMBER				COLOR
						500W	300W			
20+40	C					1		CLEAR	MG-20	6.4
							1	CLEAR		
		1931654.37	1108557.51	641.29	662.0		1	CLEAR		
							1	CLEAR		
							1	CLEAR		
20+60	C						1	CLEAR	MG-20	6.4
							1	CLEAR		
		1931654.52	1108577.51	641.29	662.0		1	CLEAR		
							1	CLEAR		
							1	CLEAR		

ALSF-2 STATION	LAMP LOCATION (SEE LEGEND)	FLASHER LAMPS						
		NORTHING	EASTING	PROP. FINAL GRADE ELEV. (NOTE 4)	PROP. LAMP ELEV. (NOTE 3)	NUMBER	COLOR	SUPPORT TYPE
20+40	C	1931654.37	1108557.51	641.29	660.5	1	CLEAR	NOTE 3
20+60	C	1938577.69	1108577.51	641.29	660.5	1	CLEAR	NOTE 3

• AIMING ANGLE SHALL ALWAYS BE BETWEEN 6 AND 9 DEGREES;
SEE TECHNICAL SPECIFICATIONS FOR FURTHER DIRECTION ON SETTING THE AIMING ANGLE
NOTE: ALL SEQUENCED FLASHING LIGHTS SHALL BE AIMED AT 6.0 DEGREES ABOVE HORIZONTAL

RWY 22L MALSR LIGHT BAR AND LAMP SCHEDULE

ALS F-2 STATION	LIGHT BAR LOCATION (SEE LEGEND)	STEADY BURNING LAMPS (SEE NOTE 1)						SUPPORT TYPE (SEE NOTE 4)	SETTING ANGLE (DEGREES) ELEVATED ABOVE HORIZONTAL *	
		NORTHING	EASTING	PROP. FINAL GRADE ELEV. (SEE NOTE 4)	PROP. LAMP C ELEV.	NUMBER				COLOR
						300W	120W			
8+57	C						1	CLEAR	MG-30	6.6
							1	CLEAR		
		1932591.78	1108165.80	643.9	667.0		1	CLEAR		
							1	CLEAR		
							1	CLEAR		

• SEE TECHNICAL SPECIFICATIONS FOR FURTHER DIRECTION ON SETTING THE AIMING ANGLE

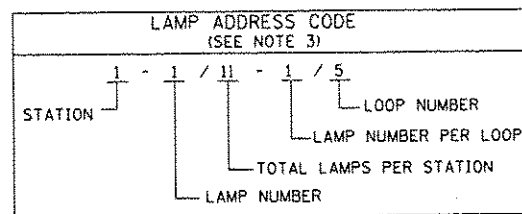
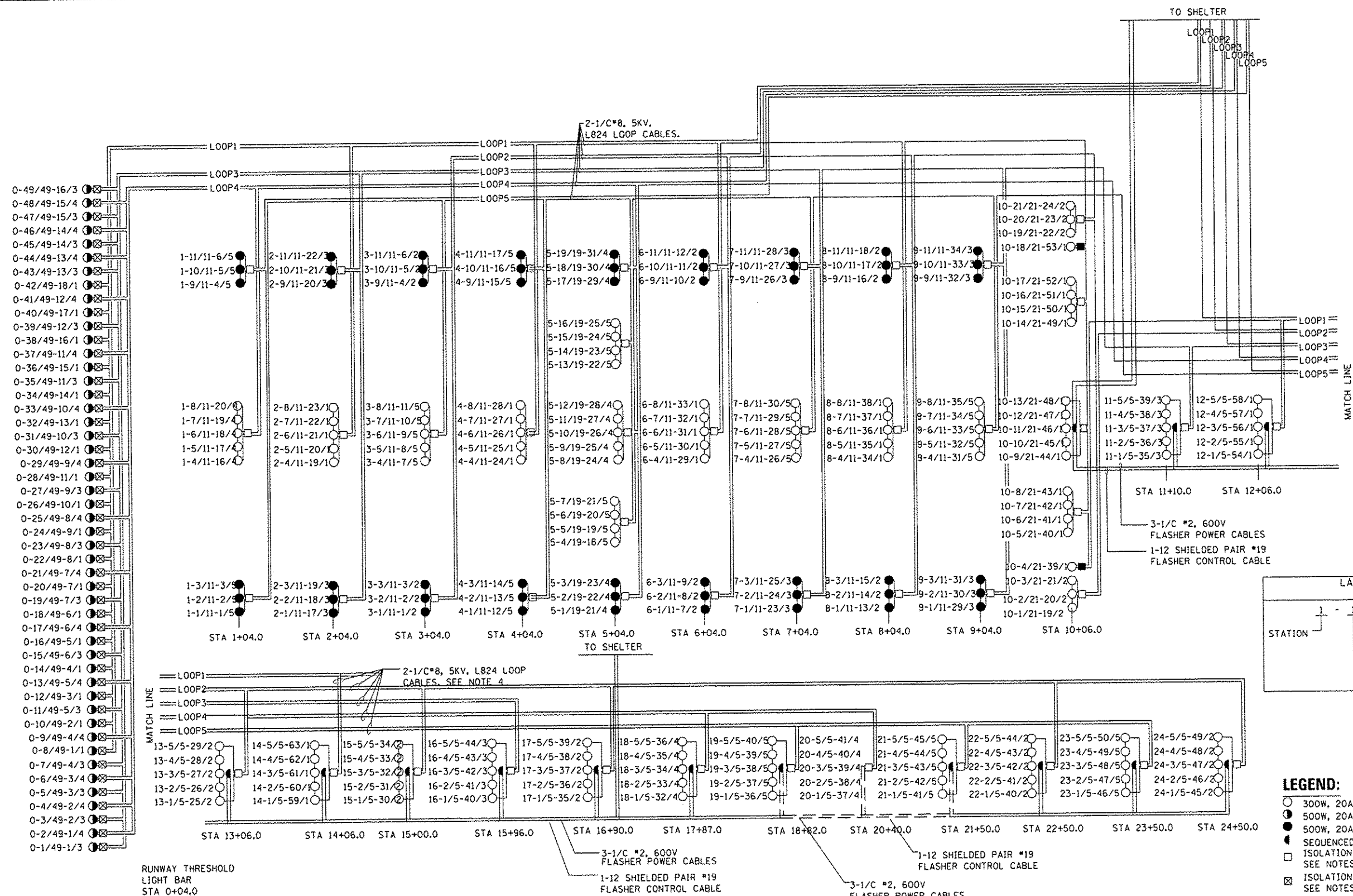
NOTES:

1. SEE SHEET GLD-05-1 FOR ALSF-2 LAMP ADDRESS CODE, LEGEND & ADDITIONAL NOTES. SEE SHEET FAA-040 FOR MALSR WIRING DIAGRAM & ADDITIONAL NOTES.
2. SEE SHEETS GLD-14-3 THRU GLD-15-1 FOR TYPICAL LIGHT BAR DETAILS AND DIMENSIONS.
3. ALSF-2 FLASHER FIXTURE IS MOUNTED ON CENTER STEADY BURNING FIXTURE LIR STRUCTURE AND IS SET 1.50 FT TYPICAL BELOW THE LAMP ELEVATION OF THE STEADY BURNING FIXTURE.
4. THE TABULATED FINAL GRADE ELEVATION IS THE GRADE ELEVATION AT THE CENTER OF THE LIGHT BAR OR BARRETTE. ALL FINAL GRADE ELEVATIONS SHALL BE FIELD-VERIFIED. THE TOP OF EACH MG-20 TOWER CONCRETE FOUNDATION SHALL BE 1" ABOVE THE GRADE ELEVATION INDICATED AT THE CENTER OF THE TOWER. THE TOP ELEVATION OF THE THREE PIERS FOR EACH MG-30 STRUCTURE SHALL BE THE HIGHEST FINISHED GRADE AT ANY OF THE THREE PIERS.
5. ALL LIR TOWERS SHALL TILT TOWARDS THE RUNWAY UNLESS OTHERWISE SPECIFIED.

LEGEND (RELATIVE TO AN OBSERVER FACING THE RUNWAY THRESHOLD)

- C CENTERLINE GROUP
- L GROUP LEFT OF CENTER
- R GROUP RIGHT OF CENTER
- LL SECOND GROUP LEFT OF CENTER
- RR SECOND GROUP RIGHT OF CENTER

ADDED SHEET
GLD-01-1



LEGEND:

- 300W, 20A LAMP WITH NO COLORED GLASS FILTER
- 500W, 20A LAMP WITH GREEN GLASS FILTER
- 500W, 20A LAMP WITH RED GLASS FILTER
- ⬮ SEQUENCED FLASHER
- ISOLATION TRANSFORMER (1500W, 20A/20A). SEE NOTES 1 AND 2
- ⊠ ISOLATION TRANSFORMER (500W, 20A/20A). SEE NOTES 1 AND 2
- ISOLATION TRANSFORMER (300W, 20A/20A). SEE NOTES 1 AND 2
- 0-14/59-4/1 LAMP ADDRESS CODE. SEE NOTE 3
- == LOOP1 == SYSTEM LOOPS
- POWER LINES FOR FLASHER
- SYSTEM LOOP CABLING TO BE INSTALLED NEW

ADDED SHEET
GLD-05-1

HNTB

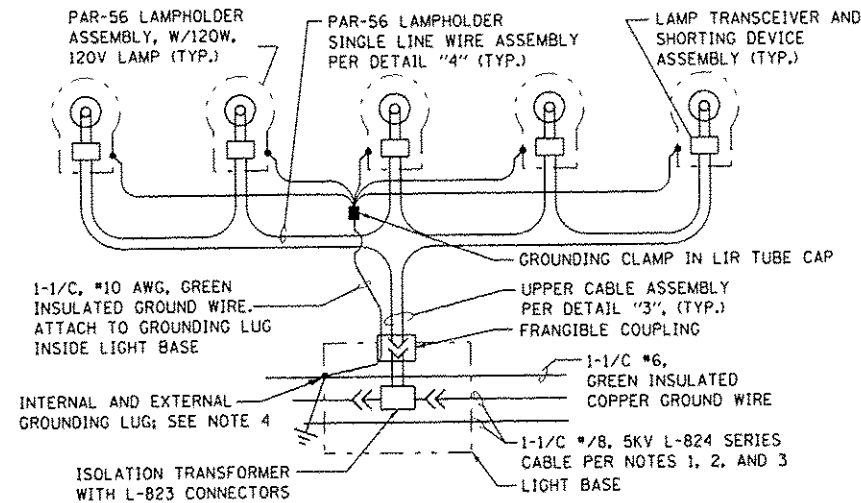
USER NAME: mhk	DESIGNED: SJM	REVISED: -
DRAWN: SJM	REVIEWED: -	
CHECKED: SPG	REVIEWED: -	
DATE: 12/26/12	ADDENDUM 1	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

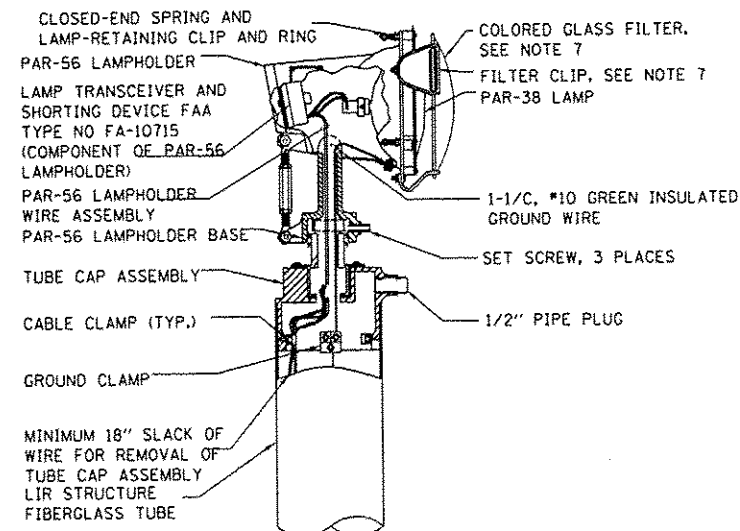
NAVAIDS
RW 28 ALSF-2 SYSTEM WIRING DIAGRAM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	605AZ
CONTRACT NO. 60637				

SCALE: N.T.S. SHEET NO. 2 OF 16 SHEETS STA. N/A TO STA. N/A



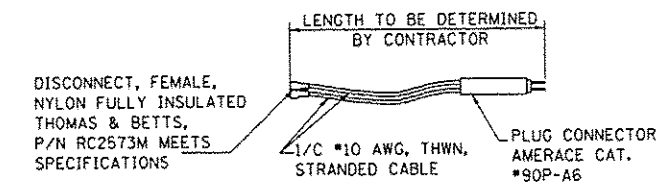
DETAIL 1
5 LIGHT BAR MOUNTED ON LIR STRUCTURE



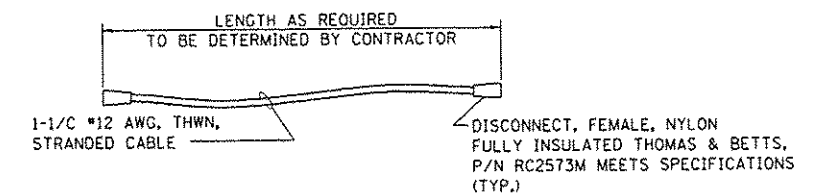
DETAIL 2
TYPICAL PAR-56 LAMPHOLDER LIGHT
INSTALLATION AND WIRE ROUTING

NOTES:

1. ALL CABLE CONNECTIONS WITHIN A LIGHT BASE (EXCEPT PLUG AND RECEPTACLE INSIDE FRANGIBLE COUPLING), SHALL BE SEALED PER SPECIFICATIONS WITH HEAT SHRINK TUBING FROM CABLE TO CABLE, FROM CABLE TO TRANSFORMER LEAD, OR FROM TRANSFORMER LEAD TO TRANSFORMER LEAD.
2. EACH CURRENT-CARRYING CABLE MAKING A CONNECTION IN THE LIGHT BASE SHALL HAVE A MINIMUM 4' SLACK LOOP COILED NEATLY INSIDE THE LIGHT BASE. (SLACK LOOP NOT REQUIRED FOR CABLES PASSING THROUGH LIGHT BASE WITHOUT CONNECTION).
3. EACH TRANSFORMER-TO-TRANSFORMER SERIES CABLE SHALL HAVE A PLUG CONNECTOR ON ONE END, AND A RECEPTACLE CONNECTOR ON THE OTHER END, AMERACE CAT. NO. 54-D4-D4.
4. #4/0 AWG BARE COPPER GUARD WIRE IS NOT TO BE CONNECTED TO EXTERNAL GROUND LUG ON EACH BASE BUT MUST BE CONNECTED TO THE GROUND ROD INSTALLED AT EACH BASE. (NOT SHOWN FOR CLARITY).
5. ALL THREADS ON BOLTS AND FRANGIBLE COUPLINGS SHALL BE COATED WITH ANTI-SEIZE COMPOUND, WITH THE EXCEPTION OF CERAMIC METALLIC, FLUOROPOLYMER COATED SAE GRADE 2 BOLTS.
6. NOT USED
7. EACH COLORED GLASS FILTER IS SECURED WITH THREE STAINLESS STEEL FILTER CLIPS. THE CONTRACTOR SHALL BEND THE FILTER CLIPS SUCH THAT THEY HOLD THE FILTER SNUGLY IN PLACE WHEN THEY ARE BOLTED. COLORED FILTERS ARE NOT REQUIRED FOR CENTERLINE BAR.
8. THE CONTRACTOR SHALL FURNISH AND INSTALL AN NBP PAR-56 LAMPHOLDER RING ON EACH PAR-56 LAMPHOLDER. THIS RING FITS OVER THE LAMP-RETAINING CLIPS, AND HOLDS THE LAMP POSITIVELY IN PLACE. THE RING COMES WITH AN ATTACHED CHAIN HAVING A SS BOLT AT THE FREE END. REPLACE THE LAMPHOLDER'S EXISTING STAINLESS STEEL GROUNDING BOLT WITH THE CHAIN'S BOLT, TO MAKE THE RING CAPTIVE.



DETAIL 3
UPPER CABLE ASSEMBLY



DETAIL 4
TYPICAL PAR-56 LAMPHOLDER
SINGLE-LINE WIRE ASSEMBLY

HNTB

USER NAME = mhoss	DESIGNED = SJM	REVISED =
	DRAWN = SJM	REVISED =
PLOT SCALE = 20:1	CHECKED = SPG	REVISED =
PLOT DATE = 26-DEC-2012	DATE	REVISED = 12/28/12 ADDENDUM 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

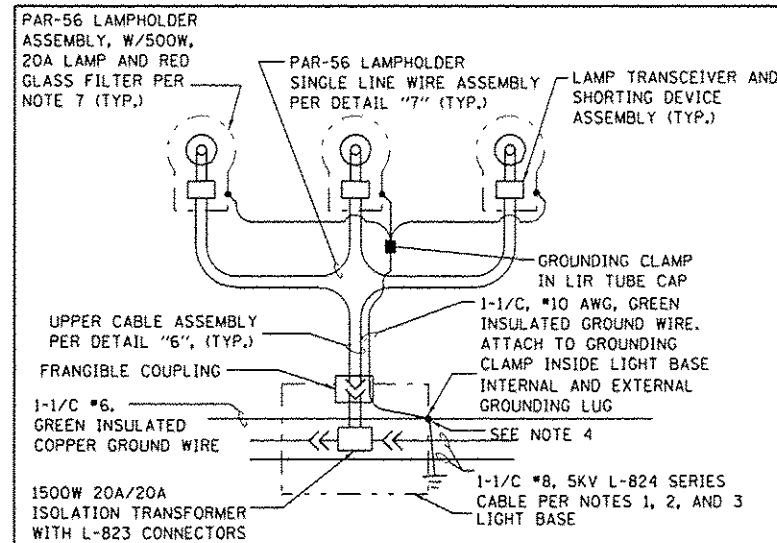
NAVAIDS
ALS-2 TYPICAL WIRING DIAGRAMS
FOR LIGHT BARS ON LIR TOWERS

SCALE: N.T.S. SHEET NO. 4 OF 16 SHEETS STA. N/A TO STA. N/A

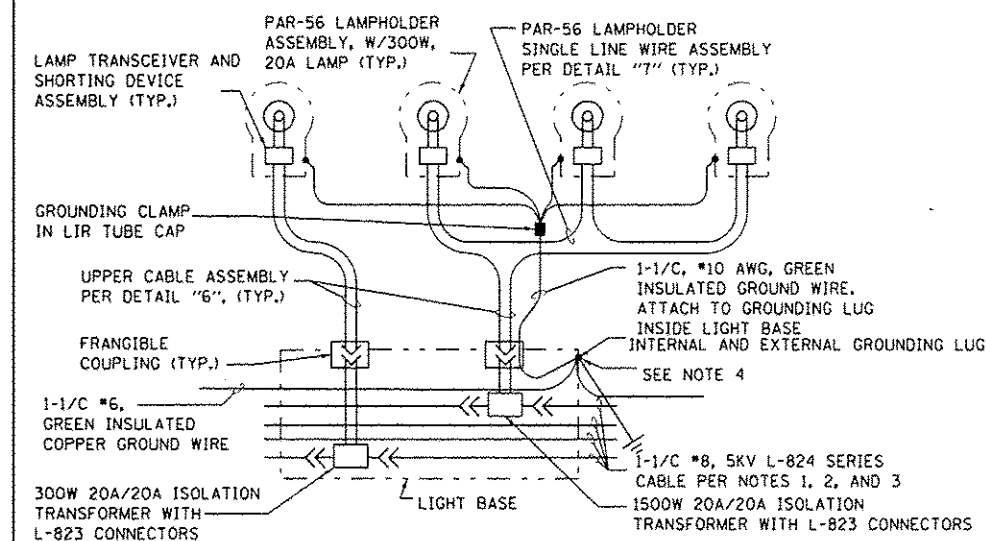
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	605BA
CONTRACT NO. 60637				

ILLINOIS FED. AID PROJECT

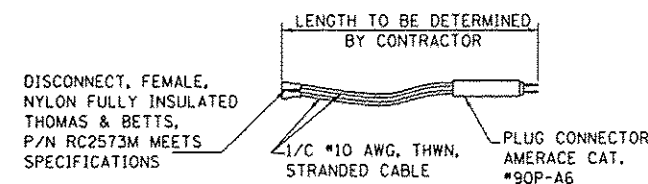
ADDED SHEET
GLD-06-1



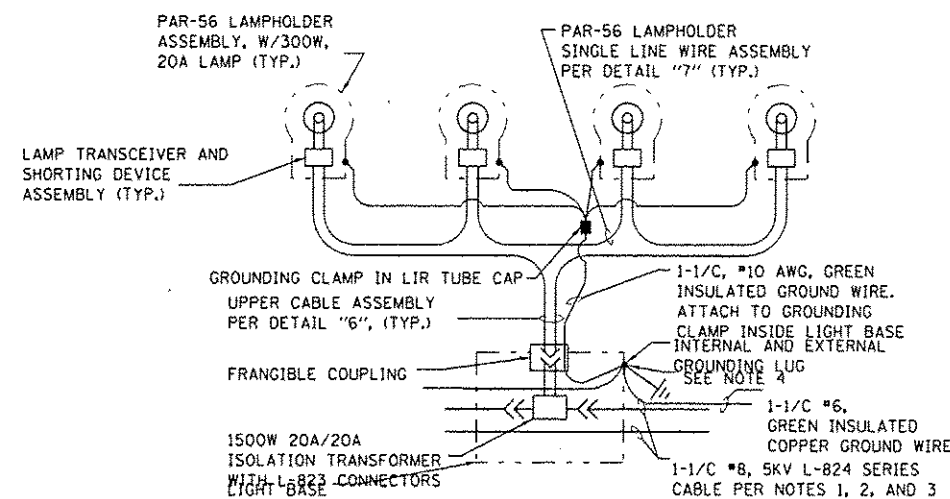
DETAIL 1
3-LIGHT BAR MOUNTED ON LIR STRUCTURE RAMPED NOSE



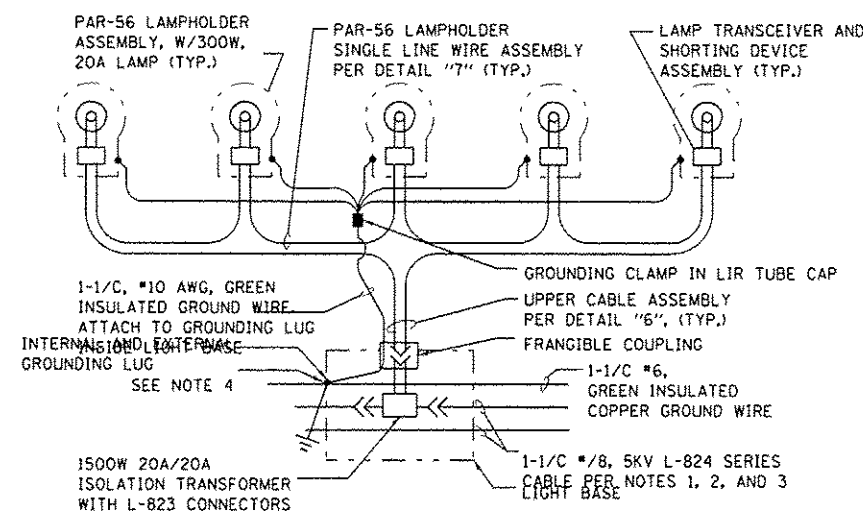
DETAIL 3
OUTBOARD 4-LIGHT BAR MOUNTED ON LIR STRUCTURE AT STATION 10+30



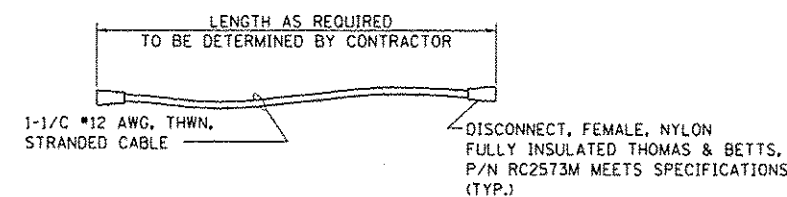
DETAIL 6
UPPER CABLE ASSEMBLY



DETAIL 2
4-LIGHT BAR MOUNTED ON LIR STRUCTURE



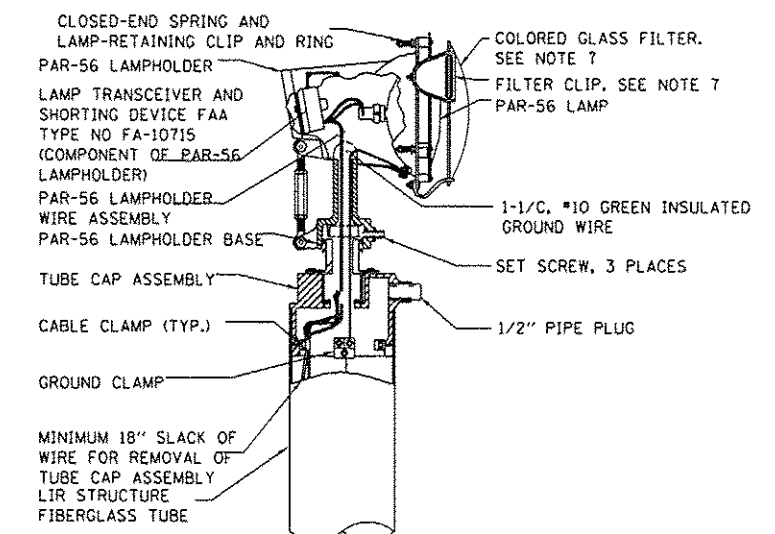
DETAIL 4
5 LIGHT BAR MOUNTED ON LIR STRUCTURE



DETAIL 7
TYPICAL PAR-56 LAMPHOLDER SINGLE-LINE WIRE ASSEMBLY

NOTES:

1. ALL CABLE CONNECTIONS WITHIN A LIGHT BASE (EXCEPT PLUG AND RECEPTACLE INSIDE FRANGIBLE COUPLING), SHALL BE SEALED PER SPECIFICATIONS WITH HEAT SHRINK TUBING FROM CABLE TO CABLE, FROM CABLE TO TRANSFORMER LEAD, OR FROM TRANSFORMER LEAD TO TRANSFORMER LEAD.
2. EACH CURRENT-CARRYING CABLE MAKING A CONNECTION IN THE LIGHT BASE SHALL HAVE A MINIMUM 4' SLACK LOOP COILED NEATLY INSIDE THE LIGHT BASE. (SLACK LOOP NOT REQUIRED FOR CABLES PASSING THROUGH LIGHT BASE WITHOUT CONNECTION).
3. EACH TRANSFORMER-TO TRANSFORMER SERIES CABLE SHALL HAVE A PLUG CONNECTOR ON ONE END, AND A RECEPTACLE CONNECTOR ON THE OTHER END, AMERACE CAT. NO. 54-D4-D4.
4. #4/0 AWG BARE COPPER GUARD WIRE IS NOT TO BE CONNECTED TO EXTERNAL GROUND LUG ON EACH BASE BUT MUST BE CONNECTED TO THE GROUND ROD INSTALLED AT EACH BASE. (NOT SHOWN FOR CLARITY).
5. ALL THREADS ON BOLTS AND FRANGIBLE COUPLINGS SHALL BE COATED WITH ANTI-SEIZE COMPOUND, WITH THE EXCEPTION OF CERAMIC METALLIC, FLUOROPOLYMER COATED SAE GRADE 2 BOLTS.
6. NOT USED
7. EACH COLORED GLASS FILTER IS SECURED WITH THREE STAINLESS STEEL FILTER CLIPS. THE CONTRACTOR SHALL BEND THE FILTER CLIPS SUCH THAT THEY HOLD THE FILTER SNUGLY IN PLACE WHEN THEY ARE BOLTED. COLORED FILTERS ARE NOT REQUIRED FOR CENTERLINE BAR.
8. THE CONTRACTOR SHALL FURNISH AND INSTALL AN NBP PAR-56 LAMPHOLDER RING ON EACH PAR-56 LAMPHOLDER. THIS RING FITS OVER THE LAMP-RETAINING CLIPS, AND HOLDS THE LAMP POSITIVELY IN PLACE. THE RING COMES WITH AN ATTACHED CHAIN HAVING A SS BOLT AT THE FREE END. REPLACE THE LAMPHOLDER'S EXISTING STAINLESS STEEL GROUNDING BOLT WITH THE CHAIN'S BOLT, TO MAKE THE RING CAPTIVE.



DETAIL 5
TYPICAL PAR-56 LAMPHOLDER LIGHT INSTALLATION AND WIRE ROUTING

HNTB

USER NAME: mhovir	DESIGNED: SJM	REVISED: -
PLOT SCALE: x 200	DRAWN: SJM	REVISED: -
PLOT DATE: 26-DEC-2012	CHECKED: SPG	REVISED: -
	DATE: 12/28/12 ADDENDUM 1	

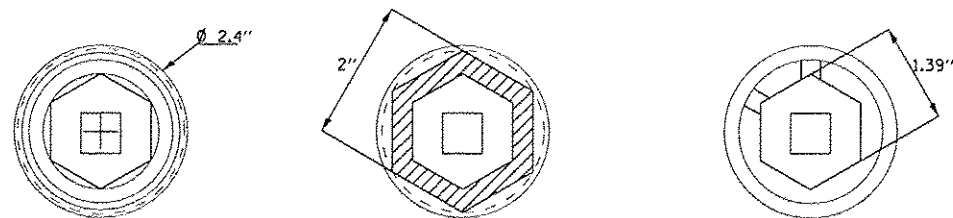
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NAVAIDS
ALSF-2 TYPICAL WIRING DIAGRAMS
FOR LIGHT BARS ON LIR TOWERS

SCALE: N.T.S. SHEET NO. 4 OF 16 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE. 330	SECTION 0105 WRS&HB	COUNTY COOK	TOTAL SHEETS 605	SHEET NO. 605BB
CONTRACT NO. 60637				ILLINOIS FED. AID PROJECT

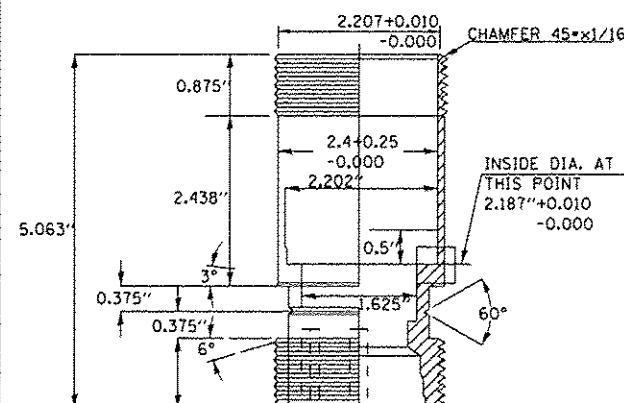
ADDED SHEET
GLD-07-1



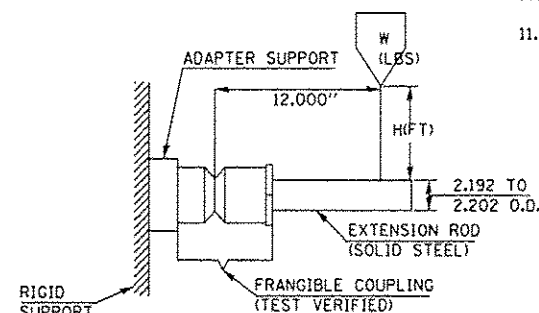
PLAN

SECTION B-B

SECTION C-C



HALF ELEV. - HALF SEC.



IMPACT TEST SETUP

NOTES:

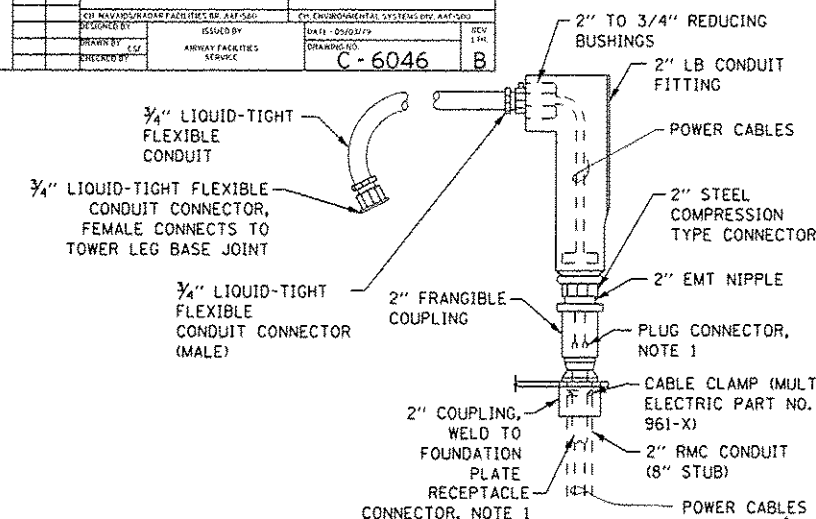
- FRANGIBLE COUPLING CONSIST OF COUPLING, NUT, AND COMPRESSION RING.
- ANY METHOD OF CASTING MAY BE USED, PROVIDED THE TOLERANCES ARE HELD.
- MACHINING IS PERMITTED ON CASTING FOR CUTTING THREADS OR FRANGIBLE GROOVE ONLY. GRIND OR WIRE BRUSH ALL INTERNAL AND EXTERNAL BURRS AND CASTING RIDGES.
- TWO SLOTS SHALL BE PROVIDED ON COUPLINGS MADE OF ALLOY 380.0 SLOTS SHALL BE .187 TO .250 INCHES WIDE, 1.125 INCHES LONG AND EXTEND NO CLOSER THAN .0625 INCHES OF EXTERIOR SURFACES.
- ANODIZING, WHEN REQUIRED BY THE TABLE, SHALL BE PERFORMED ON ALL COMPONENTS IN ACCORDANCE WITH MIL-A-8625, TYPE II, CLASS 1, TO A MINIMUM THICKNESS OF 0.001 INCHES. TOLERANCES INDICATED ON THIS DRAWING SHALL INCLUDE ANODIZING COAT THICKNESS.
- 2.207 +.010/-0.000 IS TO PROVIDE SLIP FIT FOR STD 2 (NOMINAL) ELECTRICAL METALLIC TUBING (EMT) WITH 2.192" MINIMUM AND 2.202" MAXIMUM OUTSIDE DIAMETER.
- NUT SHALL HEXAGONAL, THREADED AS REQUIRED TO BE FREE RUNNING ON COUPLING THREADS. NUT AND COMPRESSION RING DETAILS SHALL BE SIMILAR TO THOSE USED ON STD 2" EMT WATER-TIGHT FITTING.
- QUALITY CONTROL
 - ALUMINUM VENDOR CERTIFIED PER QQ-A-591 AND/OR QQ-A-250 AS APPLICABLE.
 - ANODIZING VENDOR CERTIFIED PER MIL-A-8825.
 - IMPACT TEST CONDUCTED BY CONTRACTOR AND WITNESSED BY FAA USING TEST SET-UP BELOW TO VERIFY THAT COUPLING WILL WITHSTAND 20FT LB IMPACT LOAD. SAMPLES CONTRACTOR FURNISHED, SELECTED AT RANDOM BY FAA AT RATE OF 5 PER 100 FOR THE FIRST 200 UNITS PRODUCED, 2 PER 500 FOR QUANTITIES PRODUCED THERE-AFTER.
- DEPTH OF FRANGIBLE GROOVE ESTABLISHED AS REQUIRED FOR COUPLING TO MEET REQUIREMENTS OF NOTE 8C.
- MATERIALS - COUPLING AND NUT - ALUMINUM 423.0 OR 380.0 PER QQ-A-591 OR ALUMINUM .3003-H14 PER FED. SPEC. QQ-A-250/2 (REFER TO LATEST ISSUE OF EACH FED. SPEC)
- TENSION TEST - CONDUCTED AND CERTIFIED BY THE CONTRACTOR A MINIMUM OF 20 LB FORCE SHALL BE REQUIRED TO PULL A 2INCH (NOM) EMT FROM THE FRANGIBLE COUPLING AFTER THE NUT (WITH COMPRESSION RING) HAS BEEN TIGHTENED.

TYPE	MAT'L NOTE 11	SLOTS NOTE-5	ANODIZING	NOTE-6
1	MG-20		7'-1"	SUM L(FOR
2	MG-20		6'-5"	MG-20 & MG-30)
3	MG-20		6'-9"	=51'-10"<60°

B	07/25/10	UPDATE DRAWING		
A	01/07/09	DELETED NOTE 4, CLARIFIED NOTES 5 & 6, ADDED NOTES 8 & 12	JA	7
REV. LTH	DATE	DESCRIPTION	CHECKED	APPROVED
DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION WASHINGTON, D.C. 20591				
FRANGIBLE COUPLING				
TYPE 1 AND TYPE 1A, DETAILS				
RECEIVED BY	SUBMITTED BY	APPROVED BY		
	CH NAVAIDS/RAIDAR FACILITIES DIV. AAT-560	CH ENVIRONMENTAL SYSTEMS DIV. AAT-570		
DESIGNED BY	ISSUED BY	DATE - 01/07/09	REV	1
DRAWN BY	ANNAID FACILITIES SERVICE	DRAWING NO.	C-6046	B
CHECKED BY				

NOTES:

- WHENEVER NEW COUPLINGS ARE REQUIRED CONTRACTOR MUST PERFORM FIELD TESTING AS DESCRIBED ABOVE IN PRESENCE OF FAA AND DIRECTOR.
- SEE PLAN AND PROFILE DRAWINGS FOR LAMP CENTERLINE ELEVATIONS
- ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED



FRANGIBLE COUPLING

ADDED SHEET
GLD-09-1

HNTB

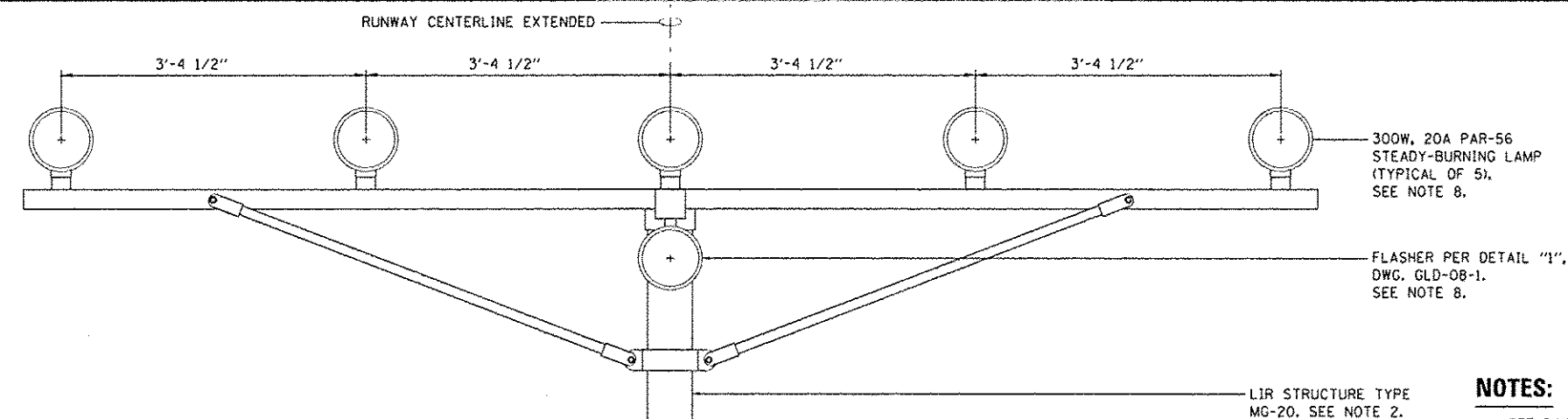
USER NAME = mkoerr	DESIGNED SJM	REVISED -
PLOT SCALE = 2:1	DRAWN SJM	REVISED -
PLOT DATE = 26-DEC-2012	CHECKED SPG	REVISED -
	DATE	REVISED 12/28/12 ADDENDUM 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NAVAIDS
FRANGIBLE COUPLING DETAILS

SCALE: N.T.S. SHEET NO. 6 OF 16 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
330	0105 WRS&NB	COOK	605 605BD
CONTRACT NO. 60637			



NOTES:

- SEE DWG. GLD-01-1 FOR LAMP CENTERLINE AND FOUNDATION TOP ELEVATIONS.
- LIR STRUCTURE SHALL PIVOT AWAY FROM THE RUNWAY THRESHOLD. SEE DRAWING GLD-120-1 FOR LIR TUBE CUTTING LENGTH CALCULATION AND STRUCTURE ASSEMBLY DETAILS. LIR TUBE SHALL BE CUT TO ACCOMMODATE INSTALLATION OF JAQUITH L5023 BREAKAWAY COUPLING KIT.
- SEE SPECIFICATION P-157 FOR EXCAVATION AND BACKFILL REQUIREMENTS. EXCAVATION SHALL BE SHORED OR SHAPED PER OSHA REQUIREMENTS.
- SEE SPECIFICATION P-610 FOR CONCRETE FORMWORK, REINFORCEMENT, MATERIAL, PLACEMENT, AND CURING SPECIFICATIONS.
- ALL CONNECTIONS TO GROUNDING RODS SHALL BE MADE USING EXOTHERMIC WELDS PER SPECIFICATIONS.
- FOUNDATION SHALL BE CONSTRUCTED SUCH THAT CENTER LIR MAST IS CENTERED AT THE RUNWAY STATION SHOWN ON LIGHT BAR AND LAMP SCHEDULE.
- GROUND THE FLASHER JUNCTION BOX AND ICC PER DRAWING GLD-08-1.
- SEE DETAIL "4", DWG. GLD-07-1 FOR 5-LIGHT BAR WIRING AND DRAWING GLD-08-1 FOR FLASHER WIRING AND LAMPHOLDER INSTALLATION DETAILS.
- ATTACH UNISTRUT TO EMT USING 3/8" X 2 1/2" SS BOLTS, FLAT WASHERS, AND NUTS. ICC'S ATTACHING TABS OFFSET BACK OF CABINET FROM EMT WHICH WILL ALLOW INSTALLATION OF BOLT AND WASHER THROUGH EMT AND THROUGH BACK OF UNISTRUT. REMOVE PANEL INSIDE JUNCTION BOX (SECURED USING FOUR NUTS), DRILL THROUGH BACK OF JUNCTION BOX AND INSTALL 1/4" BOLTS AND UNISTRUT SPRING NUTS. REINSTALL PANEL IN JUNCTION BOX. PANEL IS OFFSET FROM BACK OF BOX, BUT INSTALLATION OF ADDITIONAL WASHERS TO OFFSET FURTHER MAY BE NECESSARY TO CLEAR BOLT HEADS.
- THE LOOP CABLE LIGHT BASE SHALL BE A SPECIFICATION FAA-E-1315A LIGHT BASE 16 1/4" I.D., 28" DEEP, CLASS 1B WITH INTERNAL GROUND CLAMP, 17 3/8" COVER PLATE, L-867 WITH GASKET, AND WITH THE FOLLOWING FLEXIBLE GROMMET CONNECTIONS (FLEX CONNEX) IN STANDARD VERTICAL ARRAY: TWO 3" CONNECTIONS AT 0 DEGREES, ONE 2" CONNECTION AT 90 DEGREES, TWO 3" CONNECTIONS AT 180 DEGREES, AND ONE 2" CONNECTION AT 270 DEGREES. THE PLYWOOD SHIPPING COVER SHALL BE 18"-DIA, 1 1/4" DEEP, AND SHALL BE USED AS CONCRETE FORM TO GIVE 3/8"-WIDE ANNULAR SPACE AROUND BASE PLATE. TOP OF COVER SHALL BE FLUSH WITH CONCRETE SURFACE.
- THE FLASHER CABLE LIGHT BASE SHALL BE A SPECIFICATION FAA-E-1315A LIGHT BASE 16 1/4" I.D., 28" DEEP, CLASS 1B WITH INTERNAL GROUND CLAMP, 17 3/8" COVER PLATE, L-867 WITH GASKET, AND WITH THE FOLLOWING 2"-DIA FLEXIBLE GROMMET CONNECTIONS (FLEX CONNEX) IN STANDARD VERTICAL ARRAY: 3 EACH AT 90 DEGREES, TWO EACH AT 225 DEGREES, ONE EACH AT 270 DEGREES, AND TWO EACH AT 315 DEGREES. THE PLYWOOD SHIPPING COVER SHALL BE 18"-DIA, 1 1/4" DEEP, AND SHALL BE USED AS CONCRETE FORM TO GIVE 3/8"-WIDE ANNULAR SPACE AROUND BASE PLATE. TOP OF COVER SHALL BE FLUSH WITH TOP OF CONCRETE.
- SECTIONS AND DETAILS SHOWN ARE TYPICAL. SEE PLAN DRAWINGS TO DETERMINE SPECIFIC STATION REQUIREMENTS AS TO NUMBER OF CONDUITS AND LOCATION OF CONDUIT ENTRANCES INTO BASES.
- FOR MG-20 LIR TOWERS LESS THAN 12'-0", NO WINCH IS REQUIRED TO SAFELY LOWER TOWER FOR MAINTENANCE. OMIT 3'-6" SECTION OF FOUNDATION INCLUDING WINCH CONNECTION ANCHOR BOLTS AND ANCHOR PLATE FOR QUICK RELEASE PIN.
- SEE SHEET GLD-14-5 FOR PLAN VIEW.
- CONCRETE FOUNDATION ANCHOR RODS MUST BE STAINLESS STEEL.
- ANTI-SEIZE COMPOUND MUST BE USED ON ALL THREADED CONNECTIONS.
- RIGID STEEL COUPLINGS SHALL BE INSTALLED PLUMB. THE TOP OF THE COUPLING MUST PROTRUDE 1/4" ABOVE THE TOP OF THE CONCRETE FOUNDATION.
- ALL ALSF LIGHT BAR / TOWER FOUNDATIONS MUST BE CAST-IN-PLACE.
- CONTRACTOR SHALL PROVIDE A STAINLESS STEEL STRAINER TO THE BOTTOM OF THE UNUSED HOLES OF THE MG20 MOUNTING STAND.
- ALL ANCHOR BOLTS AND HARDWARE SHALL BE STAINLESS STEEL. BOLTS USED FOR LIGHT BASE CANS SHALL BE CERAMIC COATED BOLTS PER FAA ENGINEERING BRIEF 83 AND SPECIFICATION SECTION L-100.
- THE REQUIRED MINIMUM BEARING CAPACITY ON SUBGRADE BENEATH THE FOUNDATION SHALL BE 3.0 KSF. THE CONTRACTOR QC MUST VERIFY BEARING BENEATH THE FOUNDATION TO A DEPTH OF 3' MIN. OR DEPTH AS REQUIRED BY THE DIRECTOR.
- SEE SHEET GLD-14-5 FOR CABLE ROUTING UNDER THE LIR TOWER MOUNTING STAND.

SECTION A - ELEVATION FLASHER ICC AND LIGHT BASE DETAILS OUTSIDE RSA TEMPORARY TOWER STA. 20+60.00

HNTB

USER NAME: mhawley	DESIGNED: SJM	REVISED: -
DRAWN: SJM	REVISED: -	
PLOT SCALE: 28:1	CHECKED: SPG	REVISED: -
PLOT DATE: 26-DEC-2012	DATE: 12/28/12	ADDENDUM 1

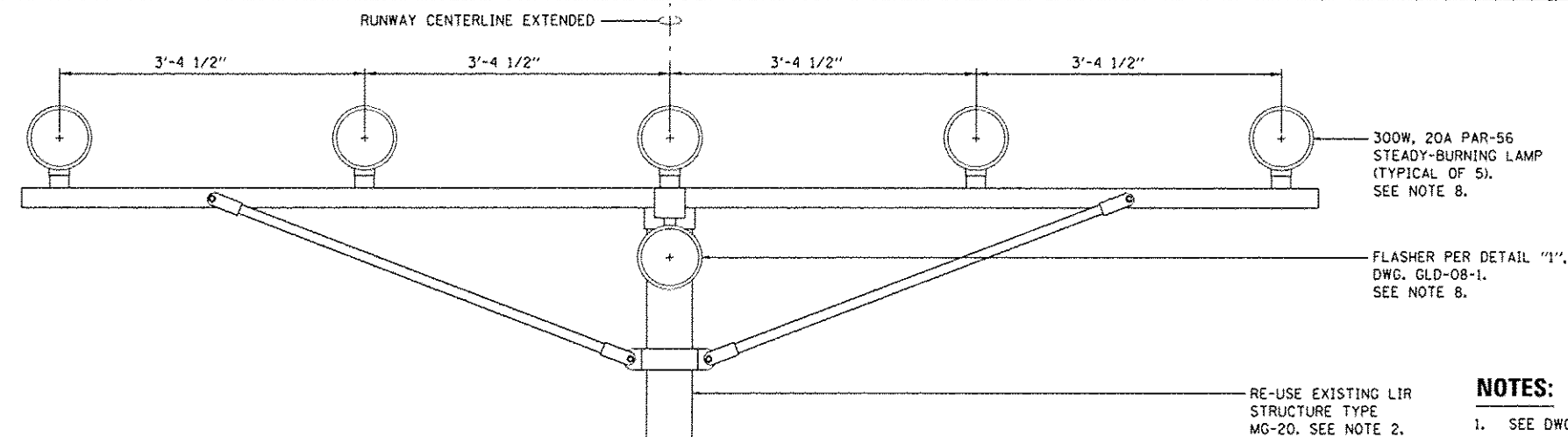
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NAVAIDS
ALSF-2 - DETAILS FOR MG-20 TOWER LIGHT BAR W/FLASHER
PIVOT AWAY FROM THRESHOLD (TEMPORARY)

SCALE: N.T.S. SHEET NO. 7 OF 16 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	605BE
				CONTRACT NO. 60G37
ILLINOIS FED. AID PROJECT				

ADDED SHEET
GLD-14-3



NOTES:

- SEE DWG. GLD-01-1 FOR LAMP CENTERLINE AND FOUNDATION TOP ELEVATIONS.
- LIR STRUCTURE SHALL PIVOT AWAY FROM THE RUNWAY THRESHOLD. SEE DRAWING GLD-120-1 FOR LIR TUBE CUTTING LENGTH CALCULATION AND STRUCTURE ASSEMBLY DETAILS. LIR TUBE SHALL BE CUT TO ACCOMMODATE INSTALLATION OF JACUITH L5023 BREAKAWAY COUPLING KIT.
- SEE SPECIFICATION P-157 FOR EXCAVATION AND BACKFILL REQUIREMENTS. EXCAVATION SHALL BE SHORED OR SHAPED PER OSHA REQUIREMENTS.
- SEE SPECIFICATION P-610 FOR CONCRETE FORMWORK, REINFORCEMENT, MATERIAL, PLACEMENT, AND CURING SPECIFICATIONS.
- ALL CONNECTIONS TO GROUNDING RODS SHALL BE MADE USING EXOTHERMIC WELDS PER SPECIFICATIONS.
- FOUNDATION SHALL BE CONSTRUCTED SUCH THAT CENTER LIR MAST IS CENTERED AT THE RUNWAY STATION SHOWN ON LIGHT BAR AND LAMP SCHEDULE.
- GROUND THE FLASHER JUNCTION BOX AND ICC PER DRAWING GLD-08-1.
- SEE DETAIL "4", DWG. GLD-07-1 FOR 5-LIGHT BAR WIRING AND DRAWING GLD-08-1 FOR FLASHER WIRING AND LAMPHOLDER INSTALLATION DETAILS.
- ATTACH UNISTRUT TO EMT USING 3/8" X 2 1/2" SS BOLTS, FLAT WASHERS, AND NUTS. ICC'S ATTACHING TABS OFFSET BACK OF CABINET FROM EMT WHICH WILL ALLOW INSTALLATION OF BOLT AND WASHER THROUGH EMT AND THROUGH BACK OF UNISTRUT. REMOVE PANEL INSIDE JUNCTION BOX (SECURED USING FOUR NUTS), DRILL THROUGH BACK OF JUNCTION BOX AND INSTALL 1/4" BOLTS AND UNISTRUT SPRING NUTS. REINSTALL PANEL IN JUNCTION BOX. PANEL IS OFFSET FROM BACK OF BOX, BUT INSTALLATION OF ADDITIONAL WASHERS TO OFFSET FURTHER MAY BE NECESSARY TO CLEAR BOLT HEADS.
- THE LOOP CABLE LIGHT BASE SHALL BE A SPECIFICATION FAA-E-1315A LIGHT BASE 16 1/4" I.D., 28" DEEP, CLASS 1B WITH INTERNAL GROUND CLAMP, 17 3/8" COVER PLATE, L-867 WITH GASKET, AND WITH THE FOLLOWING FLEXIBLE GROMMET CONNECTIONS (FLEX CONNEX) IN STANDARD VERTICAL ARRAY: TWO 3" CONNECTIONS AT 0 DEGREES, ONE 2" CONNECTION AT 90 DEGREES, TWO 3" CONNECTIONS AT 180 DEGREES, AND ONE 2" CONNECTION AT 270 DEGREES. THE PLYWOOD SHIPPING COVER SHALL BE 18"-DIA, 1 1/4" DEEP, AND SHALL BE USED AS CONCRETE FORM TO GIVE 3/8"-WIDE ANNULAR SPACE AROUND BASE PLATE. TOP OF COVER SHALL BE FLUSH WITH CONCRETE SURFACE.
- THE FLASHER CABLE LIGHT BASE SHALL BE A SPECIFICATION FAA-E-1315A LIGHT BASE 16 1/4" I.D., 28" DEEP, CLASS 1B WITH INTERNAL GROUND CLAMP, 17 3/8" COVER PLATE, L-867 WITH GASKET, AND WITH THE FOLLOWING 2"-DIA FLEXIBLE GROMMET CONNECTIONS (FLEX CONNEX) IN STANDARD VERTICAL ARRAY: 3 EACH AT 90 DEGREES, TWO EACH AT 225 DEGREES, ONE EACH AT 270 DEGREES, AND TWO EACH AT 315 DEGREES. THE PLYWOOD SHIPPING COVER SHALL BE 18"-DIA, 1 1/4" DEEP, AND SHALL BE USED AS CONCRETE FORM TO GIVE 3/8"-WIDE ANNULAR SPACE AROUND BASE PLATE. TOP OF COVER SHALL BE FLUSH WITH TOP OF CONCRETE.
- SECTIONS AND DETAILS SHOWN ARE TYPICAL. SEE PLAN DRAWINGS TO DETERMINE SPECIFIC STATION REQUIREMENTS AS TO NUMBER OF CONDUITS AND LOCATION OF CONDUIT ENTRANCES INTO BASES.
- FOR MG-20 LIR TOWERS LESS THAN 12'-0", NO WINCH IS REQUIRED TO SAFELY LOWER TOWER FOR MAINTENANCE. OMIT 3'-6" SECTION OF FOUNDATION INCLUDING WINCH CONNECTION ANCHOR BOLTS AND ANCHOR PLATE FOR QUICK RELEASE PIN.
- SEE SHEET GLD-14-5 FOR PLAN VIEW.
- CONCRETE FOUNDATION ANCHOR RODS MUST BE STAINLESS STEEL.
- ANTI-SEIZE COMPOUND MUST BE USED ON ALL THREADED CONNECTIONS.
- RIGID STEEL COUPLINGS SHALL BE INSTALLED PLUMB. THE TOP OF THE COUPLING MUST PROTRUDE 1/4" ABOVE THE TOP OF THE CONCRETE FOUNDATION.
- ALL ALSF LIGHT BAR / TOWER FOUNDATIONS MUST BE CAST-IN-PLACE.
- CONTRACTOR SHALL PROVIDE A STAINLESS STEEL STRAINER TO THE BOTTOM OF THE UNUSED HOLES OF THE MG20 MOUNTING STAND.
- ALL ANCHOR BOLTS AND HARDWARE SHALL BE STAINLESS STEEL. BOLTS USED FOR LIGHT BASE CANS SHALL BE CERAMIC COATED BOLTS PER FAA ENGINEERING BRIEF 83 AND SPECIFICATION SECTION L-100.
- THE REQUIRED MINIMUM BEARING CAPACITY ON SUBGRADE BENEATH THE FOUNDATION SHALL BE 3.0 KSF. THE CONTRACTOR QC MUST VERIFY BEARING BENEATH THE FOUNDATION TO A DEPTH OF 3' MIN. OR DEPTH AS REQUIRED BY THE DIRECTOR.
- SEE SHEET GLD-14-5 FOR CABLE ROUTING UNDER THE LIR TOWER MOUNTING STAND.

ADDED SHEET
GLD-14-4

SECTION A - ELEVATION FLASHER ICC AND LIGHT BASE DETAILS OUTSIDE RSA PERMANENT RELOCATED TOWER STA. 20+40.00

HNTB

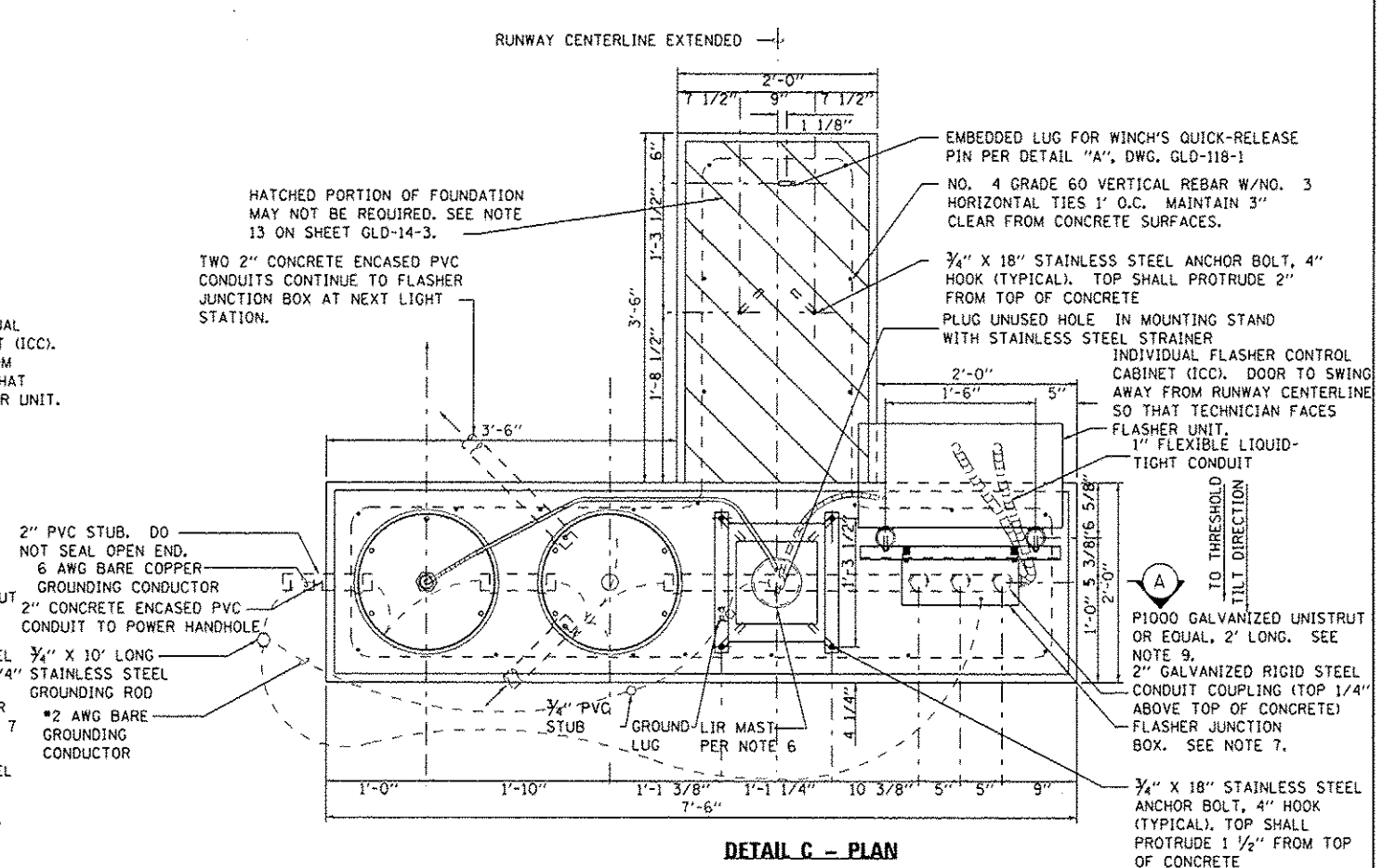
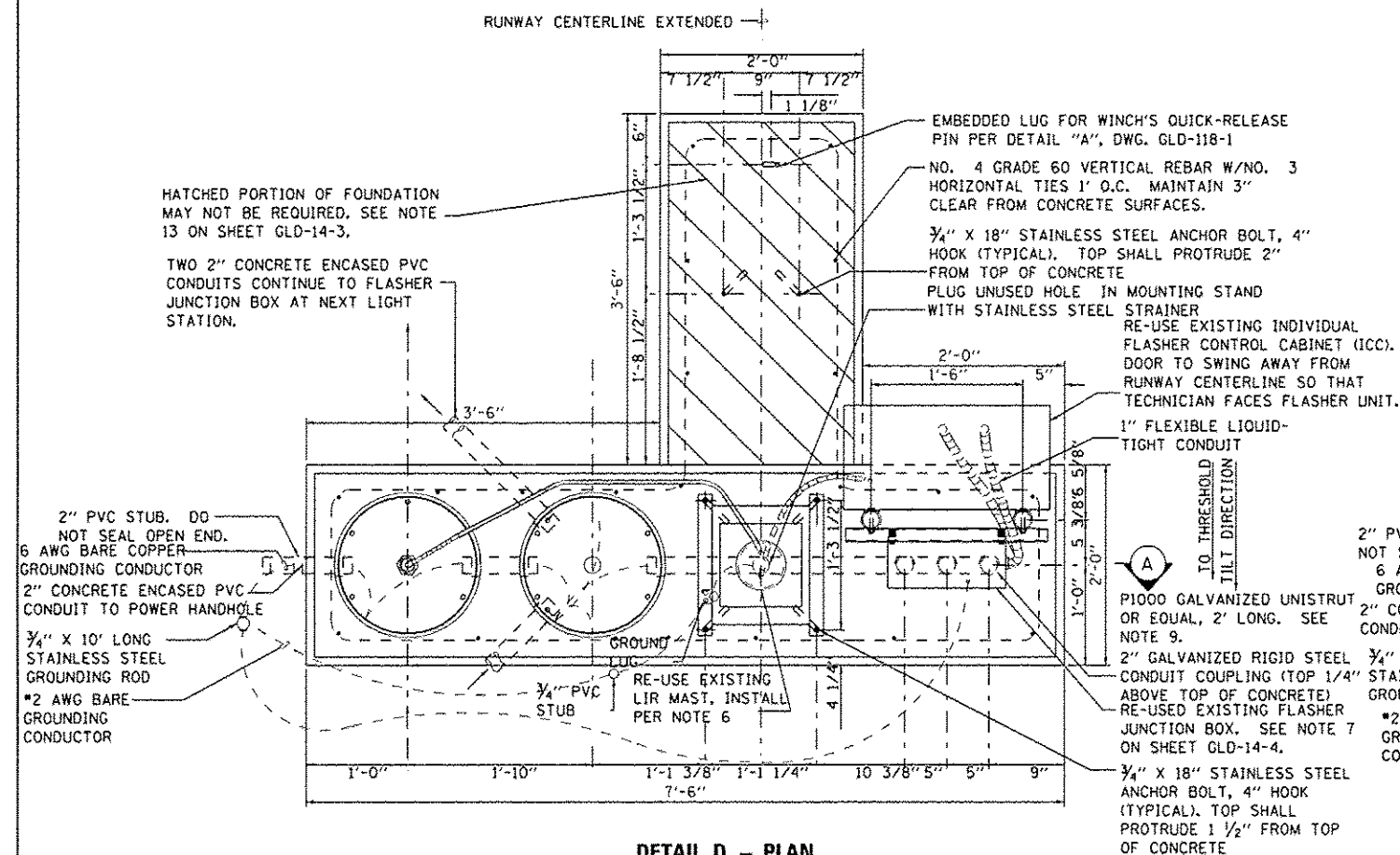
USER NAME = mh001r	DESIGNED = SJM	REVISED =
	DRAWN = SJM	REVISED =
PLOT SCALE = 20:1	CHECKED = SPG	REVISED =
PLOT DATE = 26-DEC-2012	DATE	REVISED = 12/28/12 ADDENDUM 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NAVAIDS
ALSF-2 - DETAILS FOR MG-20 TOWER LIGHT BAR W/FLASHER
PIVOT AWAY FROM THRESHOLD (PERMANENT)

SCALE: N.T.S. SHEET NO. 8 OF 16 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	605BF
CONTRACT NO. 60637				ILLINOIS FED. AID PROJECT



NOTES:

- SHEET GLD-14-3 FOR ELEVATION AND NOTES.

HNTB

USER NAME: mhkoyr	DESIGNED: SJM	REVISED: -
PLDT SCALE: 20/1	DRAWN: SJM	REVISED: -
PLDT DATE: 26-DEC-2012	CHECKED: SPG	REVISED: -
	DATE: 12/28/12	ADDENDUM 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NAVAIDS
ALSF-2 - DETAILS FOR MG-20 TOWER LIGHT BAR W/FLASHER
PIVOT AWAY FROM THRESHOLD TYPICAL FOUNDATIONS

SCALE: N.T.S. SHEET NO. 9 OF 16 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	605BG
				CONTRACT NO. 60G37
ILLINOIS FED. AID PROJECT				

ADDED SHEET
GLD-14-5

SYMBOLS

EXISTING

①	APRON INLET
•	BOLLARD
└	CAP
● OR ○	CATCH BASIN
○	COMED STRAIGHT MANHOLE
○	COMED TEE MANHOLE
⊙	ELECTRICAL GROUNDING PIN
□	ELECTRICAL HANDHOLE
---	EXIST. CONTOUR
~>	FLOW LINE
—□—	POWER POLE
○ OR ⊙	MISC. MANHOLE
⊙	SANITARY SEWER MANHOLE
⊙	WATERMAIN MANHOLE
○ OR ⊙	STORM SEWER MANHOLE
○	TELEPHONE MANHOLE
■ PP	POWER PIT
■	WATER CABINET
△ WV	WATER VALVE
△	FUEL VALVE
○ OR ○	FIRE HYDRANT
✕ OR ✕	LIGHT POLE
■	INSPECTION HANDHOLE
⊙	FUEL MANHOLE
⊙	FUEL MANHOLE GROUP
○ OR ○	TREE OR FOILAGE
---	FENCE
OR	R/W TOUCHDOWN ZONE LIGHTS
OR	R/W CENTERLINE LIGHT
OR	IN-PAVEMENT REFLECTOR
OR	T/W EDGE LIGHT
OR	TAXIWAY C/L LIGHT
⊙	THRESHOLD LIGHT
○	IN-PAVEMENT UNIDIRECTIONAL LIGHT
⊙	MALSR NAVAID LIGHT ASSEMBLY
⊙	AIRFIELD GUIDANCE SIGN
○	R.R. ELEC. POLE
└	ROADWAY SIGNAGE
□	COMMON ELECTRIC DUCTBANK
●	(CED) HANDHOLE CLUSTER
□	COMMON ELECTRIC DUCTBANK
○	(CED) MANHOLES

LEGEND

EXISTING

AIRFIELD ELECTRIC	— AF — AF — AF —
CABLE TV	— CTV — CTV — CTV — CTV —
CITY ELECTRIC	— E — E — E —
CLOSED CIRCUIT TV	— CCTV — CCTV — CCTV —
COMED	— CECO — CECO — CECO —
COMMON ELECTRIC DUCT BANK	— CED — CED — CED —
FAA CABLES	— FAA — FAA — FAA —
FIBER OPTIC	— FO — FO — FO — FO —
FIRE PROTECTION WATER LINE	— FP — FP — FP —
FUELING FACILITIES	— F — F — F —
NATURAL GAS	— G — G — G —
OIL PIPE	— O — O — O —
OVERHEAD CITY ELECTRIC	— E — E — E —
PIPE UNDERDRAIN (DIRECTION KNOWN)	— SD — SD — SD —
PIPE UNDERDRAIN (DIRECTION UNKNOWN)	— SD — SD — SD —
RAILROAD SIGNAL/ COMMUNICATIONS	— RR — RR — RR —
TELEPHONE	— T — T — T —
SANITARY SEWER (DIRECTION KNOWN)	— SA — SA — SA —
SANITARY SEWER (DIRECTION UNKNOWN)	— SA — SA — SA —
STORM SEWER (DIRECTION KNOWN)	— ST — ST — ST —
STORM SEWER (DIRECTION UNKNOWN)	— ST — ST — ST —
SUPERVISORY MONITORING SYSTEM	— SMS — SMS — SMS —
UTILITY TUNNEL	— — — — —
WATER DISTRIBUTION	— W — W — W —
WEATHER SENSOR & GAUGES	— WSG — WSG — WSG —
ABANDON IN PLACE	— — — — —
AIRFIELD LIGHTING 2-WAY 3"	— 2 — — — —
AIRFIELD LIGHTING 1-WAY 2"	— 1 — — — —

EXISTING ABANDONED

— AF — AF — AF —
— CTV — CTV — CTV — CTV —
— E — E — E —
— CCTV — CCTV — CCTV —
— CECO — CECO — CECO —
— CED — CED — CED —
— FAA — FAA — FAA —
— FO — FO — FO — FO —
— FP — FP — FP —
— F — F — F —
— G — G — G —
— O — O — O —
— E — E — E —
— SD — SD — SD —
— SD — SD — SD —
— RR — RR — RR —
— T — T — T —
— SA — SA — SA —
— SA — SA — SA —
— ST — ST — ST —
— ST — ST — ST —
— SMS — SMS — SMS —
— — — — —
— W — W — W —
— WSG — WSG — WSG —
— — — — —
— 2 — — — —
— 1 — — — —

ADDED SHEET
FAA-05

HNTB

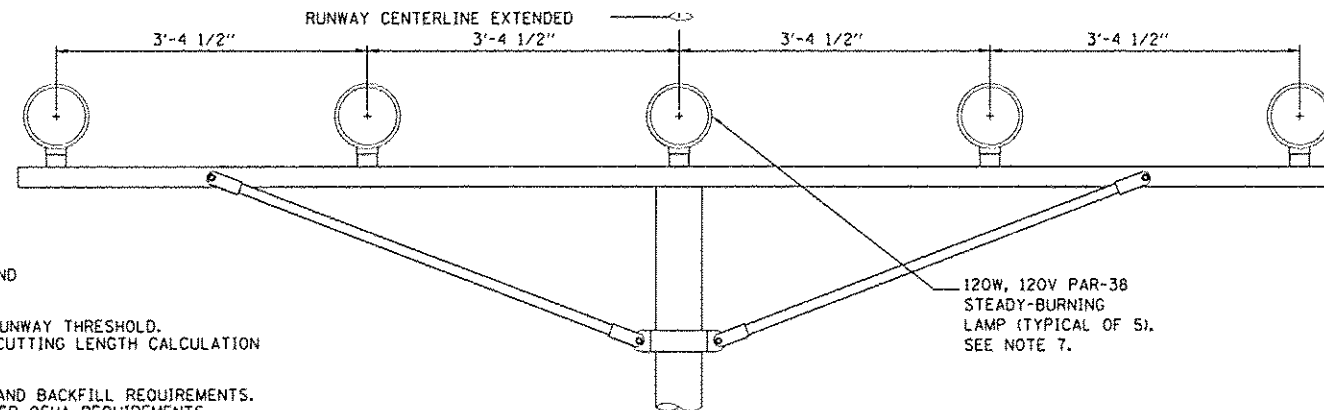
USER NAME	mkasr	DESIGNED		REVISED	-
		DRAWN	CFB	REVISED	-
PLT SCALE	2:1	CHECKED	SPG	REVISED	-
PLT DATE	26-DEC-2012	DATE		REVISED	12/28/12 ADDENDUM 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FAA
UTILITIES SYMBOLS AND LEGEND

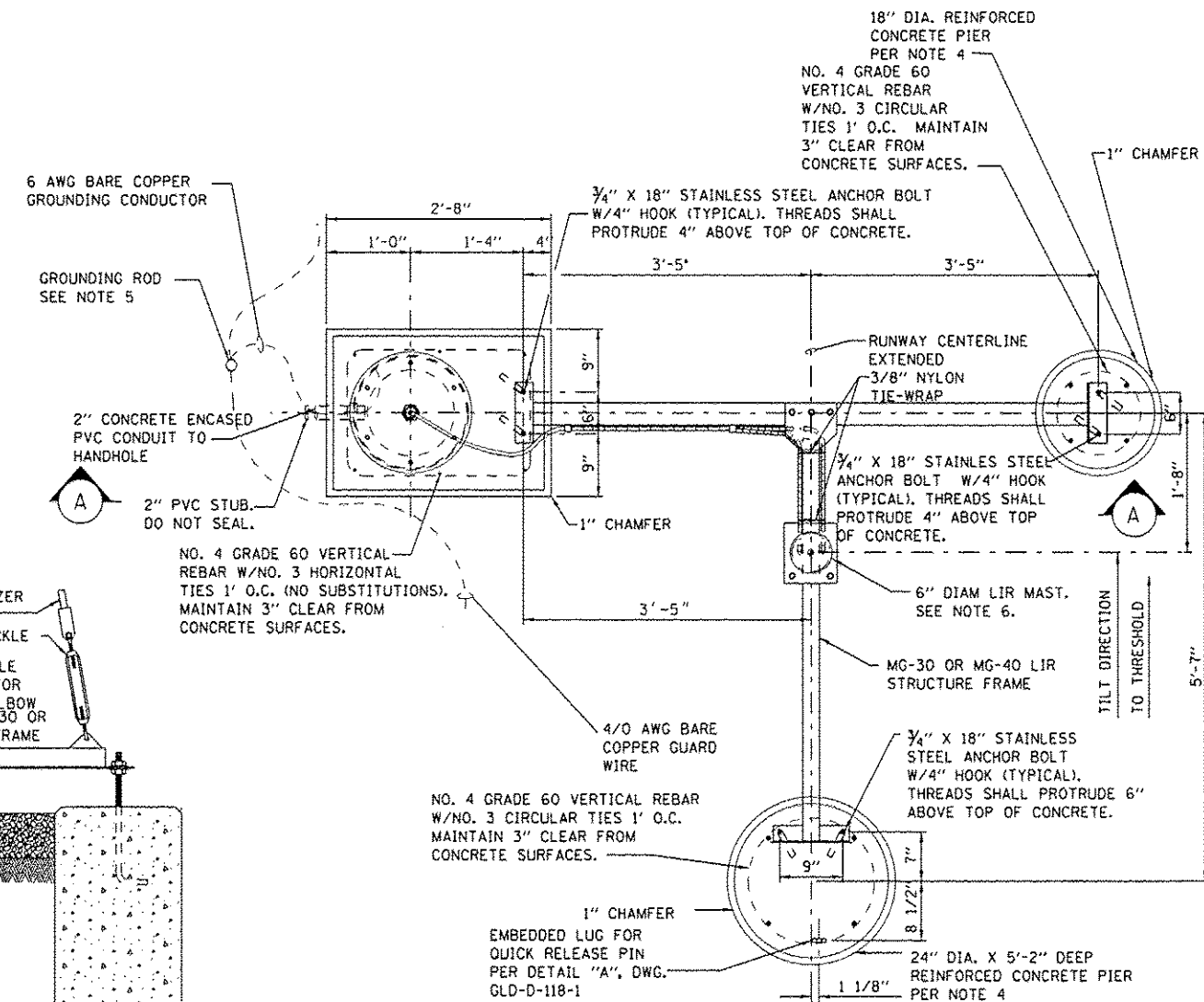
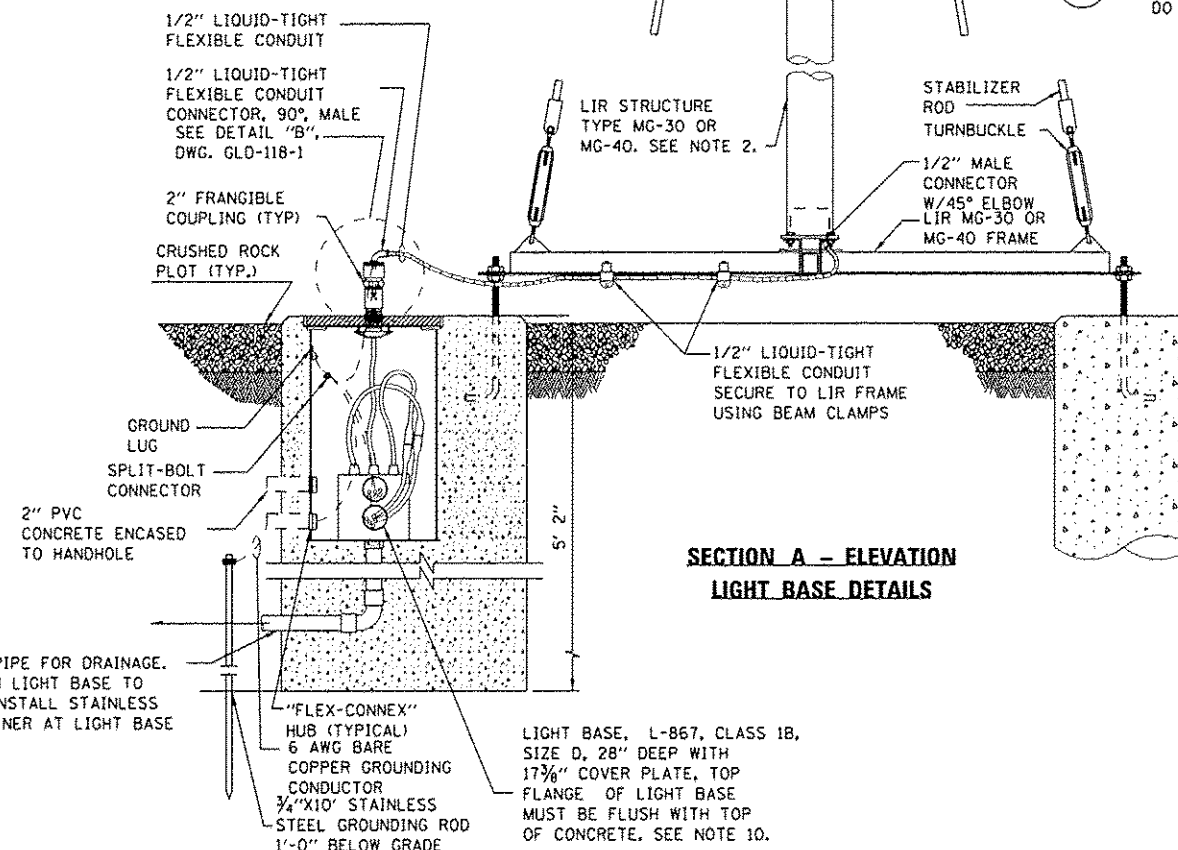
SCALE: N.T.S. SHEET NO. OF SHEETS STA. N/A TO STA. N/A

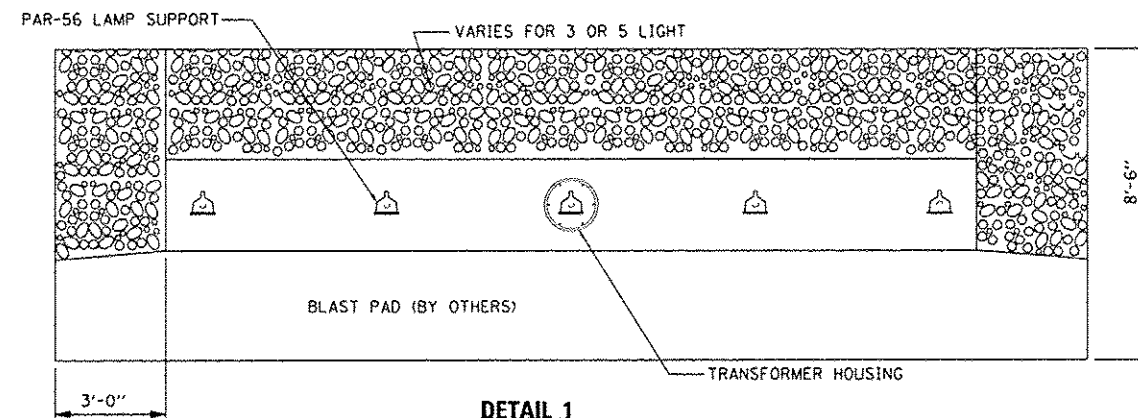
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	605E
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				



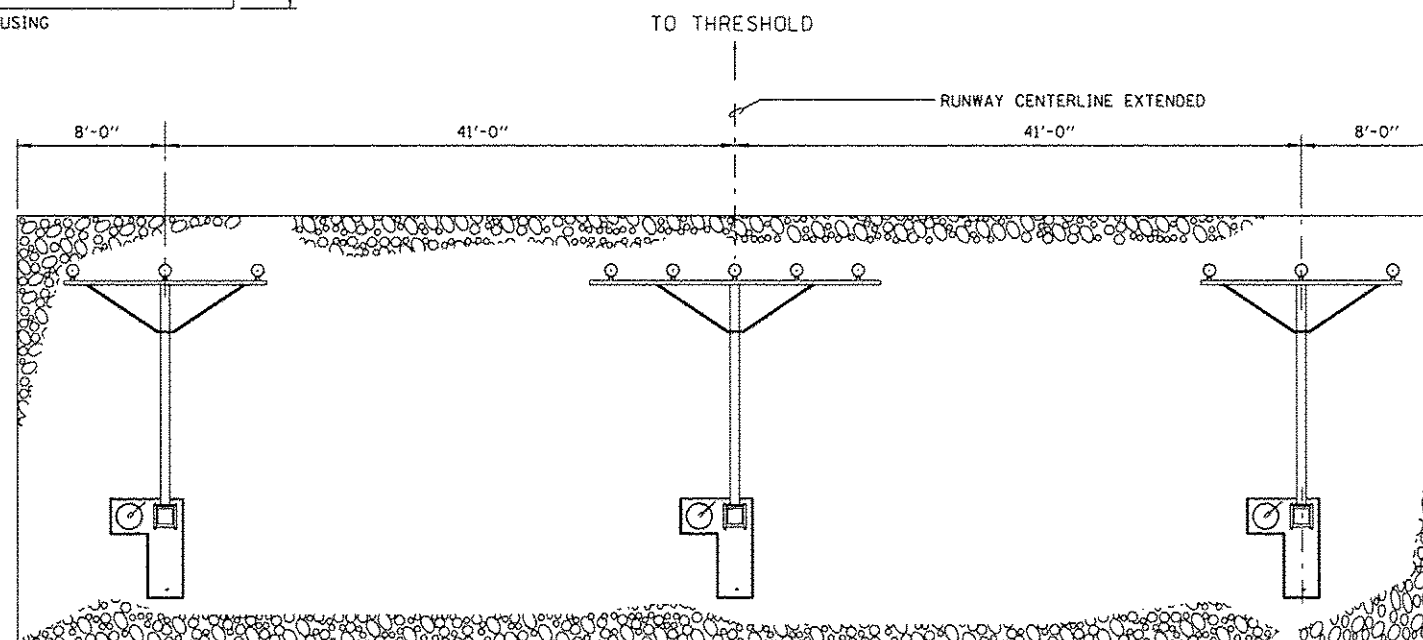
NOTES:

1. SEE DWG. GLD-01-1 FOR LAMP CENTERLINE AND FOUNDATION TOP ELEVATIONS.
2. LIR STRUCTURE SHALL PIVOT TOWARD THE RUNWAY THRESHOLD.
SEE NOTE 1, DWG. GLD-119-1 FOR LIR TUBE CUTTING LENGTH CALCULATION AND STRUCTURE ASSEMBLY DETAILS.
3. SEE SPECIFICATION P-157 FOR EXCAVATION AND BACKFILL REQUIREMENTS.
EXCAVATION SHALL BE SHORED OR SHAPED PER OSHA REQUIREMENTS.
4. SEE SPECIFICATION P-610 FOR CONCRETE FORM WORK, REINFORCEMENT, MATERIAL, PLACEMENT, AND CURING SPECIFICATIONS. TOP TWO FEET OF CONCRETE PIER SHALL BE FORMED IN A FIBER FORM. FIBER FORM SHALL BE REMOVED TO 6" BELOW GRADE AFTER CURING FOR TWO DAYS.
5. ALL CONNECTIONS TO GROUNDING RODS SHALL BE MADE USING EXOTHERMIC WELDS PER SPECIFICATIONS.
6. FOUNDATION SHALL BE CONSTRUCTED SUCH THAT LIR MAST IS CENTERED AT THE RUNWAY STATION AS SHOWN ON LIGHT BAR AND LAMP SCHEDULE.
7. SEE DETAIL "1", DWG. EA-011 FOR MALS 5-LIGHT BAR WIRING.
8. SECTIONS AND DETAILS SHOWN ARE TYPICAL. SEE PLAN DRAWINGS TO DETERMINE SPECIFIC STATION REQUIREMENTS AS TO NUMBER OF CONDUITS AND LOCATION OF CONDUIT ENTRANCES INTO BASE.
9. RIGID STEEL COUPLINGS SHALL BE INSTALLED PLUMB, THE TOP OF THE COUPLING SHALL PROTRUDE 1/4" ABOVE THE TOP OF THE CONCRETE FOUNDATION. THE FRANGIBLE COUPLING SHALL BE LOCKED AGAINST TURNING USING A LOCKING RING.
12. CONCRETE FOUNDATION ANCHOR RODS AND HARDWARE MUST BE STAINLESS STEEL.
13. ANTI-SEIZE COMPOUND MUST BE USED ON ALL THREADED CONNECTIONS, WITH THE EXCEPTION OF CERAMIC METALLIC, FLUOROPOLYMER COATED SAE GRADE 2 BOLTS.
14. ALL ALSF LIGHT BAR/TOWER FOUNDATIONS SHALL BE CAST-IN PLACE.
15. THE REQUIRED MINIMUM BEARING CAPACITY ON SUBGRADE BENEATH THE FOUNDATION SHALL BE 3.0 KSF. THE CONTRACTOR OC MUST VERIFY BEARING BENEATH FOUNDATION TO A DEPTH OF 3' MIN. OR DEPTH AS REQUIRED BY IDOT AND THE CDA COMMISSIONER.

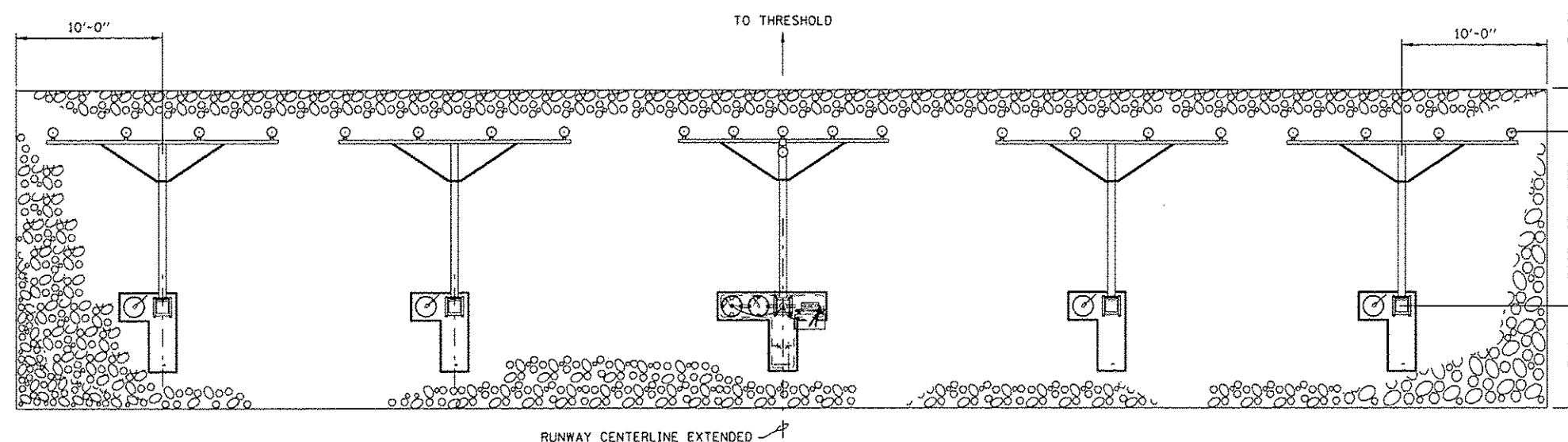




DETAIL 1
TYPICAL CRUSHED ROCK WORK AREA
FOR FRANGIBLY MOUNTED STEADY BURNING LIGHT BAR



DETAIL 2
TYPICAL CRUSHED ROCK PLOT FOR STEADY-BURNING LIGHT
BARS MOUNTED ON TYPE MG-20 LIR STRUCTURES



TYPICAL CRUSHED ROCK PLOT FOR STEADY-BURNING LIGHT
BARS MOUNTED ON TYPE MG-20 LIR STRUCTURES

NOTES:

1. CRUSHED ROCK PLOT EXTENDS TO NAVAIDS ACCESS ROAD.

HNTB

USER NAME: mkoar	DESIGNED: SJM	REVISED: -
	DRAWN: SJM	REVISED: -
PLOT SCALE: 2:1	CHECKED: SPG	REVISED: -
PLOT DATE: 26-DEC-2012	DATE:	REVISED: 12/28/12 ADDENDUM 1

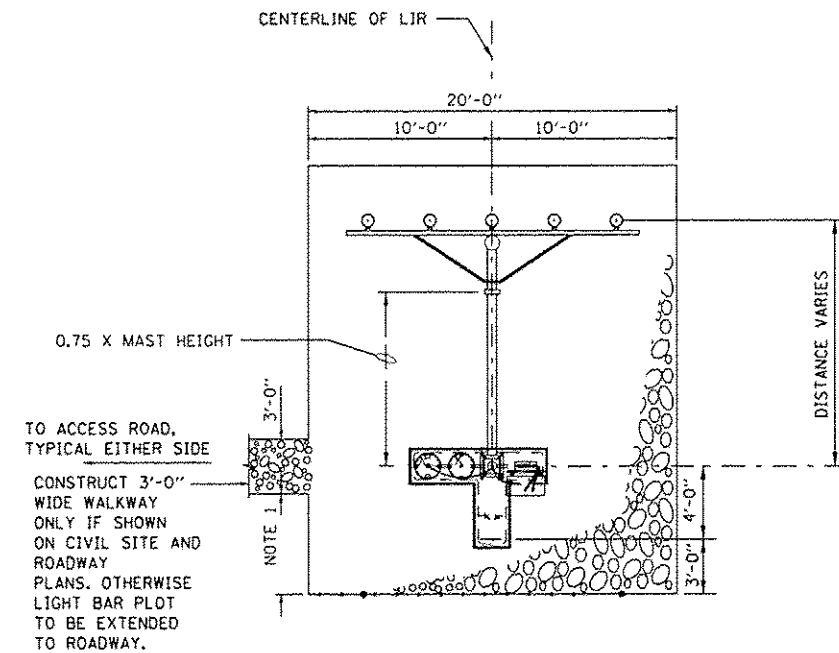
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NAVAIDS
CRUSHED ROCK PLOT DETAILS

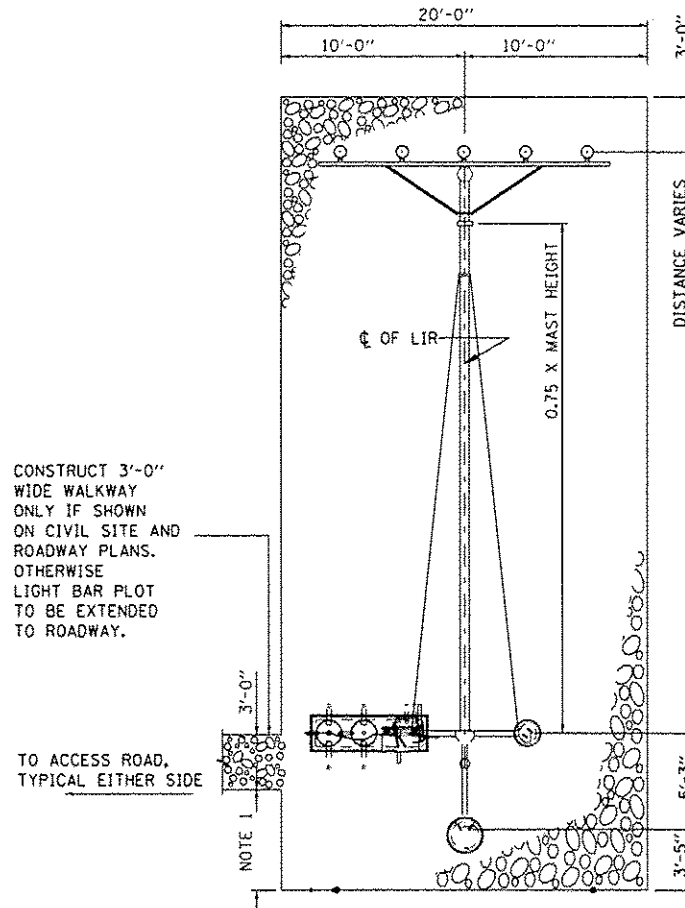
SCALE: N.T.S. SHEET NO. 11 OF 16 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE. 330	SECTION 0105 WRS&HB	COUNTY COOK	TOTAL SHEETS 605	SHEET NO. 605B1
CONTRACT NO. 60637				
ILLINOIS FED. AID PROJECT				

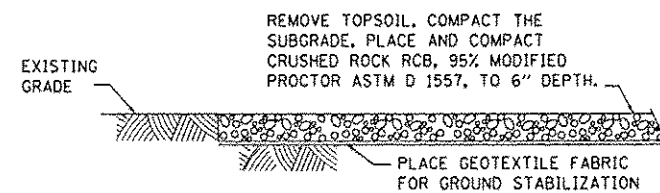
ADDED SHEET
GLD-117-1



DETAIL 4
TYPICAL CRUSHED ROCK WORK AREA FOR
TYPE MG-20 LIR STRUCTURE WITH FLASHER



DETAIL 5
TYPICAL CRUSHED ROCK WORK AREA FOR TYPE MG-30
OR TYPE MG-40 LIR STRUCTURE



DETAIL 6
CRUSHED ROCK PLOT WORK AREAS AND WALKWAYS

NOTES:

1. TYPICAL DIMENSION IS 5'-6" UNLESS SHOWN OTHERWISE ON PLANS.
2. WALKWAYS WILL BE SHOWN WHERE REQUIRED ON CIVIL SITE AND CIVIL ROAD AND PROFILE PLANS. DO NOT LAYOUT 3'-0" WIDE WALKWAYS UNLESS SHOWN.

HNTB

USER NAME = mkoew	DESIGNED <i>SJM</i>	REVISED -
	DRAWN <i>SJM</i>	REVISED -
PLOT SCALE = 2:1	CHECKED <i>SPG</i>	REVISED -
PLOT DATE = 26-DEC-2012	DATE	REVISED 12/28/12 ADDENDUM 1

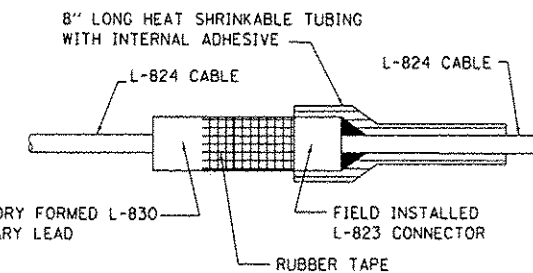
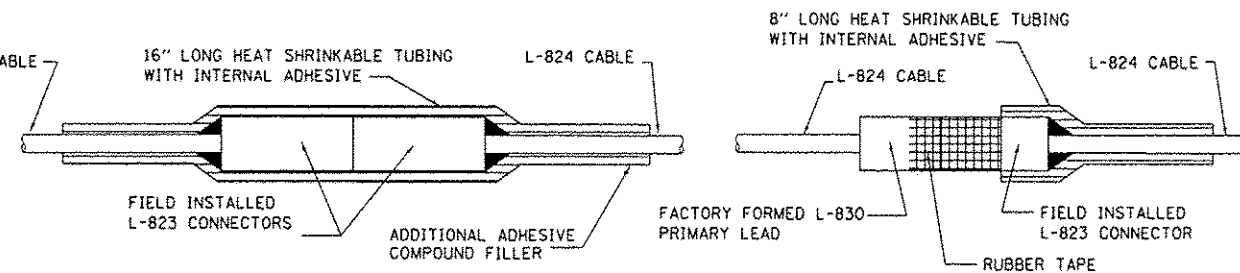
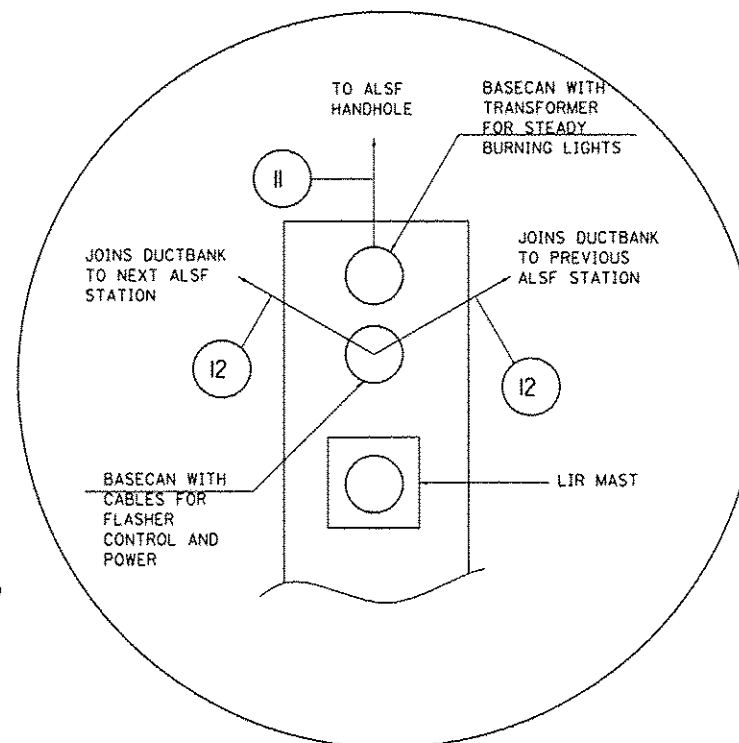
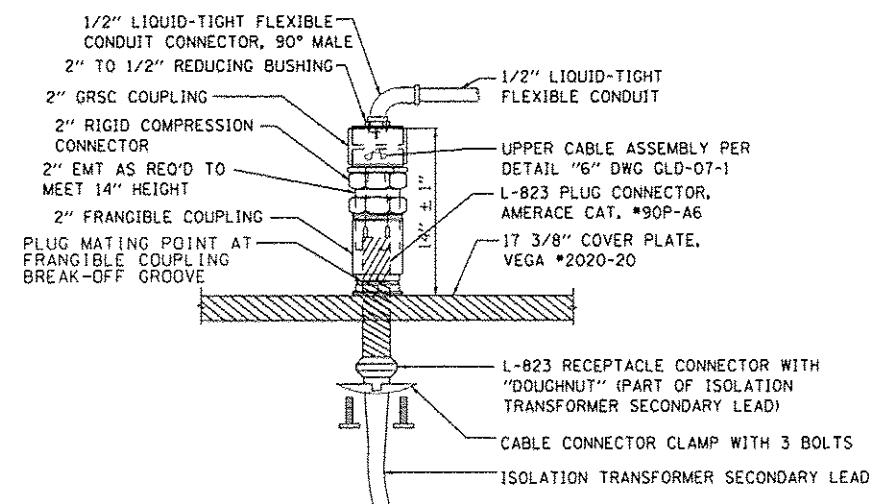
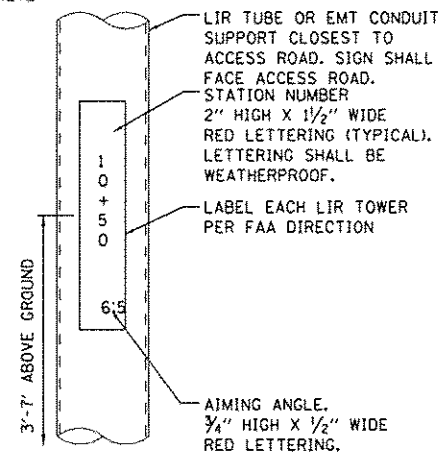
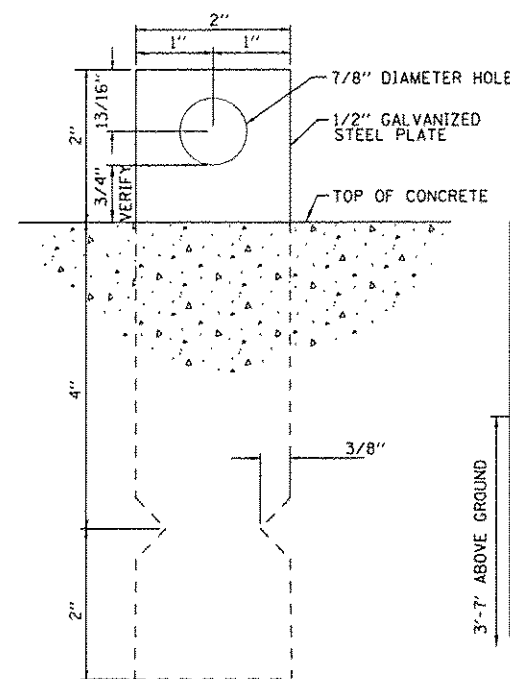
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NAVAIDS
CRUSHED ROCK PLOT DETAILS

SCALE: N.T.S. SHEET NO. 12 OF 16 SHEETS STA. N/A TO STA. N/A

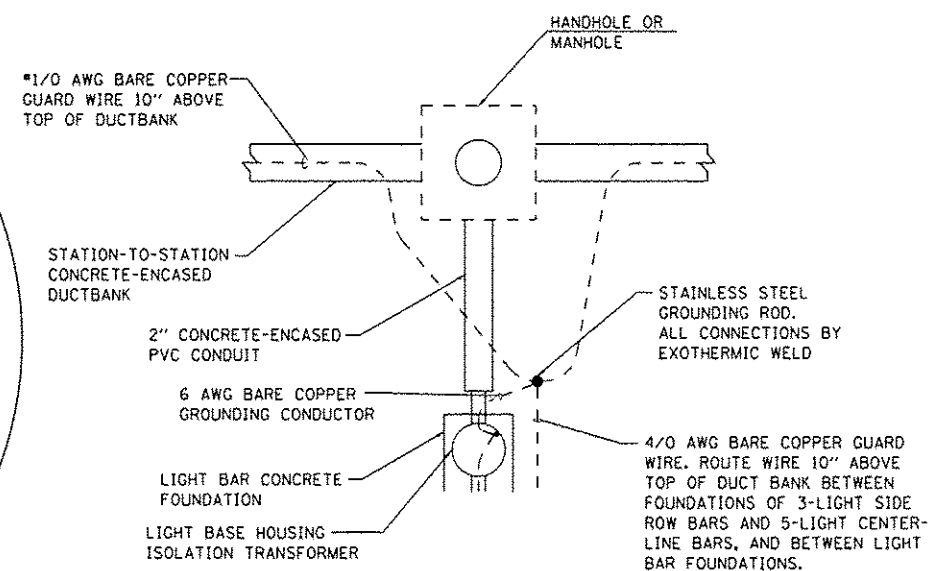
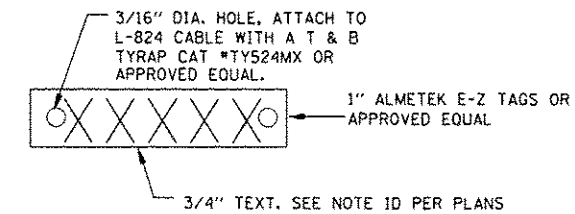
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	606BJ
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

ADDED SHEET
GLD-117-2



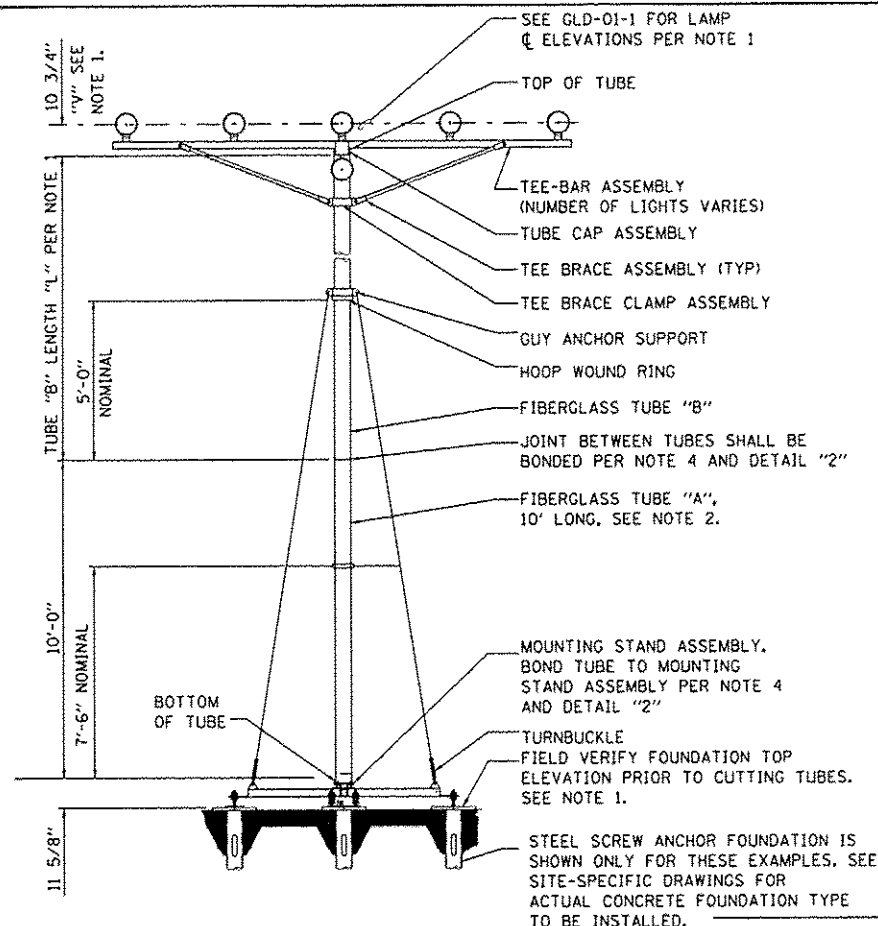
- SPLICING NOTES:**

1. INSIDE DIAMETER OF CONNECTOR SHALL PROPERLY MATCH THE OUTSIDE DIAMETER OF CABLE.
2. HEAT SHRINK TUBING SHALL BE USED ON ALL FIELD INSTALLED L-823 CONNECTORS EXCEPT FOR SECONDARY CONNECTIONS ON ISOLATION TRANSFORMERS.
3. USE PENCILING TOOL WHEN REMOVING CABLE INSULATION TO PREVENT NICKING.
4. USE CRIMPING TOOL (THOMAS & BETTS TBM 25S OR EQUAL) WHEN INSTALLING SERIES CIRCUIT PINS. EACH PIN SHALL BE CRIMPED TWICE (CRIMPS SHALL BE 90° APART)

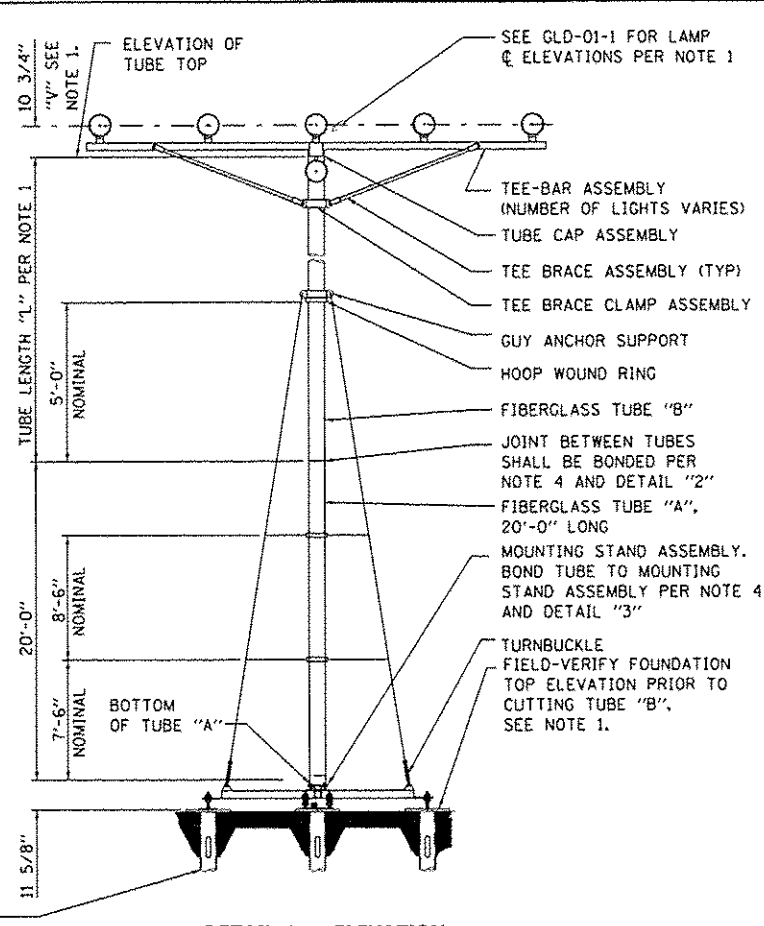


USER NAME = mhoksr	DESIGNED <i>SJM</i>	REVISED -
	DRAWN <i>SJM</i>	REVISED -
PLOT SCALE = 2:1	CHECKED <i>SPG</i>	REVISED -
PLOT DATE = 26-DEC-2012	DATE	REVISED  12/28/12 APPENDUM 1

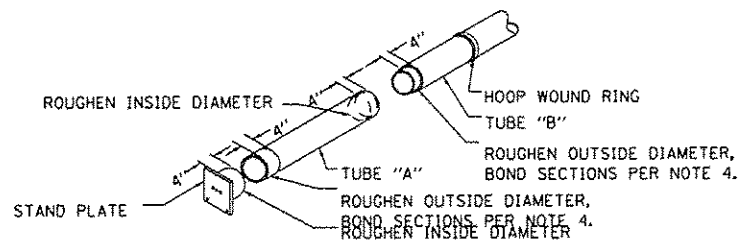
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	605BK
		CONTRACT NO. 60637		
[ILLINOIS] FED. AID PROJECT				



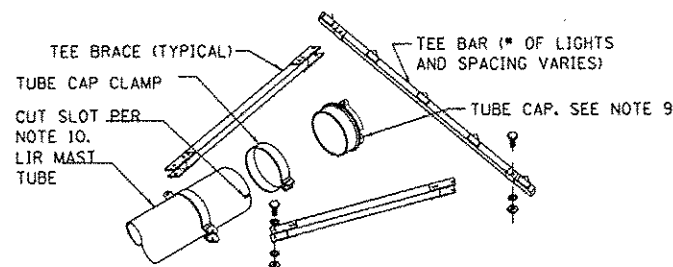
**DETAIL 1 - ELEVATION
MG-30 LIR STRUCTURE**



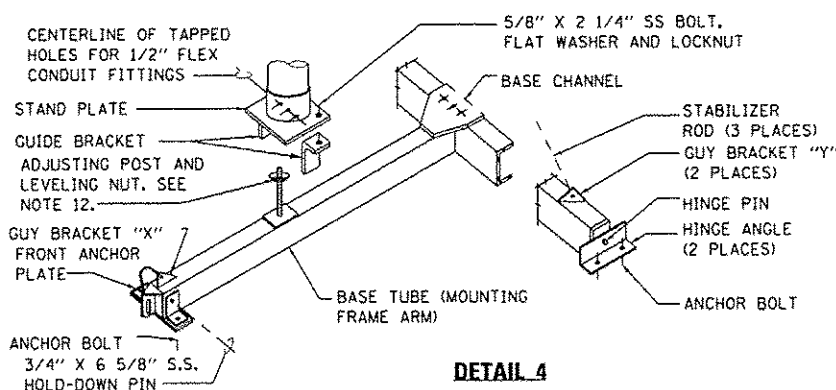
**DETAIL 2 - ELEVATION
MG-40 LIR STRUCTURE**



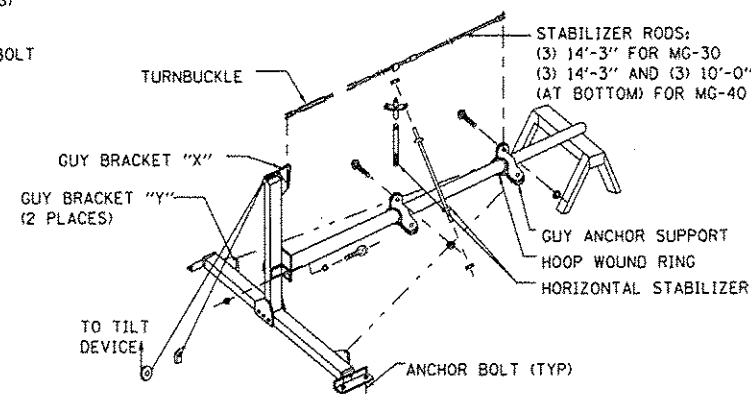
**DETAIL 3
LIR TUBE ASSEMBLY DETAILS**



**DETAIL 5
TEE BRACE ASSEMBLY DETAILS**



**DETAIL 4
MOUNTING FRAME ASSEMBLY**



**DETAIL 6
LOWERED CONDITION**

NOTES:

1. THE CONTRACTOR SHALL ESTABLISH TOP OF FOUNDATION ELEVATION PER LIGHT BAR AND LAMP SCHEDULE. FOR EACH LIR TOWER PER LIGHT STATION, THE CONTRACTOR SHALL FIELD-VERIFY THE ACTUAL FOUNDATION TOP ELEVATION PRIOR TO CUTTING LIR TUBE 'B'. THE CONTRACTOR SHALL DETERMINE THE REQUIRED TUBE 'B' LENGTH 'L' AS FOLLOWS:
$$L = \text{LAMP } \phi \text{ ELEVATION} - \text{FOUNDATION TOP ELEVATION} - \text{TUBE 'A' LENGTH} - IV + 11\frac{5}{8}"$$

THE FOUNDATION TOP OF ELEVATION MUST BE FIELD VERIFIED. THE DIMENSION 'V' MAY NOT BE 103/4" AND IS DEPENDENT ON THE HARDWARE AND THEREFORE MUST BE FIELD VERIFIED.
2. CUT TUBE LENGTH FROM THE 20 FOOT TUBE 'A' STOCK AS REQUIRED, USING A TABLE SAW WITH A DIAMOND OR CARBIDE ABRASIVE BLADE. ALL SAW CUTS SHALL PERPENDICULAR TO THE TUBE AXIS. DEBURR CUT EDGES.
3. USE EMERY CLOTH TO ROUGHEN THE SURFACES TO BE BONDED TO THE STAND PLATE PER DETAIL "3". CLEAN THE ROUGHENED SURFACES WITH A SOLVENT (TRICHLOROETHYLENE, ACETONE, OR METHYL ETHYL KETONE).
4. CONTRACTOR SHALL BOND EACH JOINT BY SPREADING A LIGHT COAT OF MIXED ADHESIVE ON BOTH SURFACES TO BE BONDED, SLOWLY SLIDE THE TUBE ONTO THE STAND PLATE, WHILE ROTATING IT TO EXCLUDE AIR. THE BONDING ADHESIVE MATERIALS, 2-PART EPOXY, FUSOR 304-1 RESIN AND 304-2 HARDENER, FUSOR 304-1 AND 304-2 ARE AVAILABLE FROM LORD CORP CHEMICAL PRODUCTS GROUP, ERIE PA. THE ADHESIVE MUST BE MIXED AND CURED IN AIR TEMPERATURES WHICH DO NOT DROP BELOW 67°F. CURING IS COMPLETE AFTER 48 HOURS. FOLLOW MANUFACTURER'S INSTRUCTIONS.
5. ASSEMBLE LIR STRUCTURES IN HORIZONTAL POSITION PER DETAIL "6". INSERT HINGE PINS WHICH ARE ATTACHED TO BASE CHANNEL, INTO LEFT AND RIGHT ANCHOR PLATES. PLACE THE FRONT, THE LEFT, AND THE RIGHT ANCHOR PLATES OVER THE 3/4" ANCHOR BOLTS. CONNECT BASE TUBE TO BASE CHANNEL, MAKING SURE MOUNTING FRAME ASSEMBLY SWINGS FREELY ON HINGE PINS. SECURE ANCHOR PLATES TO FOUNDATION AND RAISE MOUNTING FRAME ARM TO VERTICAL (VERIFY). ATTACH THE GUY ANCHOR SUPPORT ABOVE THE HOOP WOUND RING. ATTACH STABILIZER RODS TO THREE GUY ANCHOR ENDS. BOLT TWO GUIDE BRACKETS TO BOTTOM OF MAST STAND PLATE WITH THE 5/8" X 2 1/4" STAINLESS STEEL BOLTS AND NUTS. DO NOT TIGHTEN. POSITION STAND PLATE WITH TAPPED HOLES ALIGNED PER DETAIL "4". SET STAND PLATE OVER ADJUSTING POST. POST IS INSERTED INTO HOLE IN CENTER OF STAND PLATE. ADJUST NUT FOR PROPER HEIGHT. SUPPORT UPPER END OF MAST SO IT IS APPROXIMATELY PARALLEL WITH GROUND. CLAMP GUIDE BRACKETS TO BASE TUBE, AND SECURE. FASTEN TURNBUCKLES (ATTACHED TO STABILIZER RODS) TO GUY BRACKETS "X" AND "Y". TIGHTEN TURNBUCKLE AT GUY BRACKET "X" UNTIL MAST IS EXACTLY PERPENDICULAR TO MOUNTING FRAME. TIGHTEN THE OTHER TWO TURNBUCKLES AT GUY BRACKETS "Y". ATTACH HORIZONTAL STABILIZER ASSEMBLY. USE THE APPROPRIATE NUMBER AND SIZE OF STABILIZER RODS DEPENDING ON THE TOWER TYPE (MG-30 OR MG-40). SEE DETAIL "6".
6. SEE INSTRUCTION BOOK TI 6850.77 FOR ADDITIONAL ASSEMBLY INSTRUCTIONS.
7. TWO SPARE "A" TUBES SHALL REMAIN IN STORAGE. RETURN TO STORAGE ANY TUBE REMNANT GREATER THAN 10' LONG.
8. TEE BAR SHALL BE ALIGNED PERPENDICULAR TO RUNWAY CENTERLINE +/- 1".
9. A SMALL HOLE MUST BE CUT IN THE RUBBER LINER OF TUBE CAP TO ALLOW ACCESS FOR TEE BAR WIRING INSTALLATION. DO NOT REMOVE RUBBER LINER.
10. SAWCUT FOUR 2" LONG SLOTS, EQUALLY SPACED AROUND PERIMETER, IN TOP OF LIR TUBE TO ALLOW EASY INSERTION OF TUBE CAP.
11. AFTER LEVELING AND PLUMBING THE MAST, LIFT THE MAST BY ONE COMPLETE TURN OF THE LEVELING NUT. THIS IS INTENDED TO CREATE UNIFORM TENSION IN (200-500 LBS) IN ALL STABILIZER RODS.
12. PROVIDE A STAINLESS STEEL SCREEN ON ANY UNUSED HOLES AT THE BOTTOM OF THE LIR POLE.

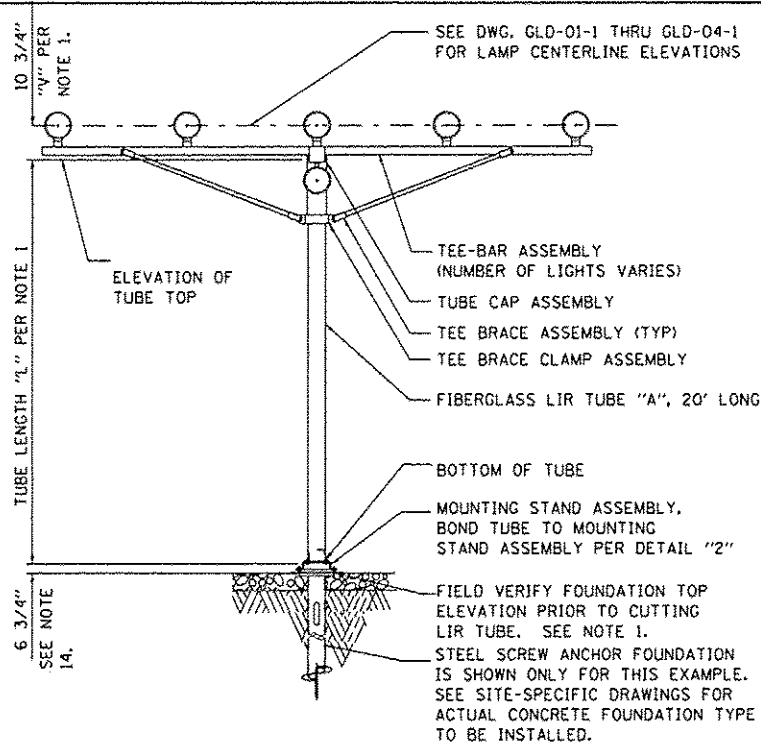
HNTB

USER NAME: mkrw	DESIGNED: SJM	REVISED: -
DRAWN: SJM	REVISED: -	
CHECKED: SPG	REVISED: -	
DATE: 12/28/12	ADDENDUM 1	

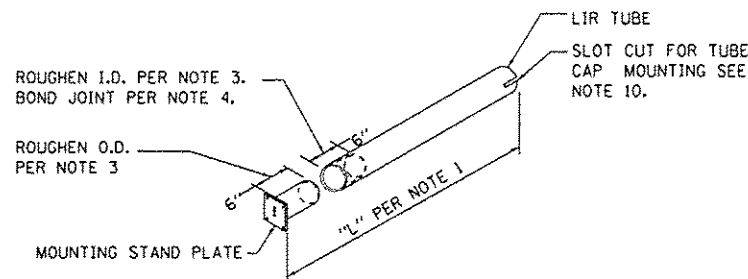
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NAVAIDS
LIR STRUCTURE ASSEMBLY DETAILS FOR
LIR TOWER TYPES MG-30 AND MG-40

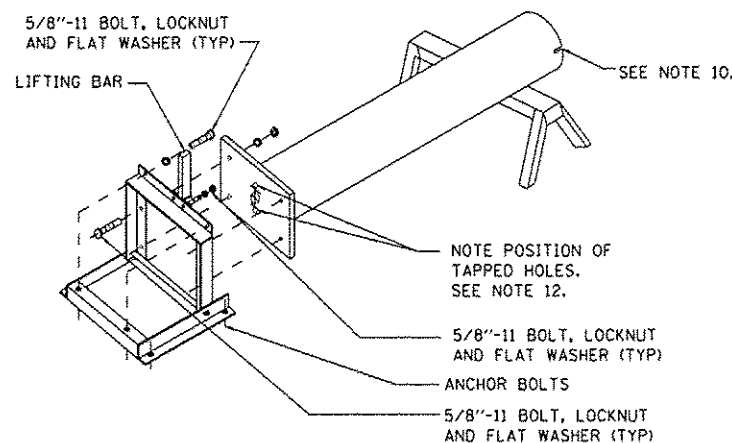
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	606	606BL
CONTRACT NO. 60G37				



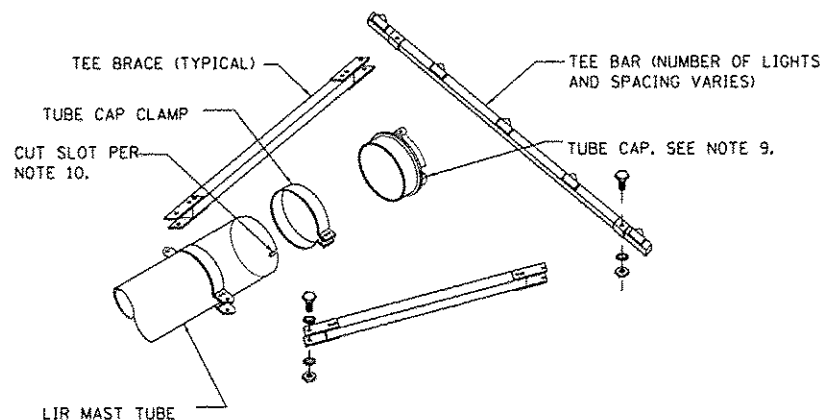
**DETAIL 1 - ELEVATION
MG-20 LIR STRUCTURE**



**DETAIL 2
LIR MAST BONDING DETAILS**



TILTED CONDITION



**DETAIL 3
TEE BRACE ASSEMBLY DETAILS**

NOTES:

1. THE CONTRACTOR SHALL ESTABLISH TOP OF FOUNDATION ELEVATION PER LIGHT BAR AND LAMP SCHEDULE. FOR EACH LIR TOWER AT A LIGHT STATION, THE CONTRACTOR SHALL FIELD-VERIFY THE ACTUAL FOUNDATION TOP ELEVATION PRIOR TO CUTTING LIR TUBE. THE CONTRACTOR SHALL DETERMINE THE REQUIRED TUBE LENGTH "L" AS FOLLOWS:
$$L = \text{LAMP C ELEVATION} - \text{FOUNDATION TOP ELEVATION} - (V + 6\frac{3}{4}')$$
2. THE FOUNDATION TOP OF ELEVATION MUST BE FIELD VERIFIED. THE DIMENSION "V" MAY NOT BE 10 3/4" AND IS DEPENDENT ON THE HARDWARE AND THEREFORE MUST BE FIELD VERIFIED.
3. CUT TUBE LENGTH FROM THE 20 FOOT TUBE "A" STOCK AS REQUIRED. USING A TABLE SAW WITH A DIAMOND OR CARBIDE ABRASIVE BLADE. ALL SAW CUTS SHALL BE PERPENDICULAR TO THE TUBE'S LONGITUDINAL AXIS. DEBURR CUT EDGES.
4. USE SAND PAPER TO ROUGHEN THE SURFACES TO BE BONDED TO THE STAND PLATE PER DETAIL "3". CLEAN THE ROUGHENED SURFACES WITH A SOLVENT (TRICHLOROETHYLENE, ACETONE, OR METHYL ETHYL KETONE).
5. CONTRACTOR SHALL BOND EACH JOINT BY SPREADING A LIGHT COAT OF MIXED ADHESIVE ON BOTH SURFACES TO BE BONDED. SLOWLY SLIDE THE TUBE ONTO THE STAND PLATE, WHILE ROTATING IT TO EXCLUDE AIR. THE BONDING ADHESIVE MATERIALS, 2-PART EPOXY, FUSOR 304-1 RESIN AND 304-2 HARDENER, FUSOR 304-1 AND 304-2 ARE AVAILABLE FROM LORD CORP CHEMICAL PRODUCTS GROUP, ERIE PA. THE ADHESIVE MUST BE MIXED AND CURED IN AIR TEMPERATURES WHICH DO NOT DROP BELOW 67°F. CURING IS COMPLETE AFTER 48 HOURS. FOLLOW MANUFACTURER'S INSTRUCTIONS.
6. ASSEMBLE LIR STRUCTURES IN HORIZONTAL POSITION PER DETAIL "2". TO TILT TOWER, SECURE MOUNTING STAND ON ANCHOR BOLTS. REMOVE TWO 5/8" BOLTS AT REAR OF MOUNTING STAND ASSEMBLY, AND PIVOT INNER SECTION UP TO VERTICAL POSITION. PLACE STAND PLATE (BOTTOM OF MAST) OVER FOUR 5/8" STUDS IN MOUNTING STAND, AND FASTEN WITH HEX NUTS. NOTE POSITION OF TAPPED HOLES IN STAND PLATE. HOLES MUST BE POSITIONED TO ACCOMMODATE INSTALLATION OF TUBE CAP AND TEE BAR ASSEMBLY PER DETAIL "5".
7. SEE INSTRUCTION BOOK TI 6850.77 FOR ADDITIONAL ASSEMBLY INSTRUCTIONS.
8. TWO SPARE "A" TUBES SHALL REMAIN IN STORAGE. RETURN TO STORAGE ANY TUBE REMNANT GREATER THAN 10' LONG.
9. TEE BAR SHALL BE ALIGNED PERPENDICULAR TO RUNWAY CENTERLINE +/- 1°.
10. A SMALL HOLE MUST BE CUT IN THE RUBBER LINER OF TUBE CAP TO ALLOW ACCESS FOR TEE BAR WIRING INSTALLATION. DO NOT REMOVE RUBBER LINER.
11. SAWCUT FOUR 2" LONG SLOTS, EQUALLY SPACED AROUND PERIMETER, IN TOP OF LIR TUBE TO ALLOW EASY INSERTION OF TUBE CAP.
12. THE SPLICE SHOWN IN DETAIL 5 IS REQUIRED ONLY FOR STATIONS WHICH PIVOT AT AN ANGLE TO RUNWAY CENTERLINE. SPLICE IS REQUIRED ONLY FOR STATIONS WHICH PIVOT PERPENDICULAR TO RUNWAY CENTERLINE. SPLICE SECTION ALLOWS CROSSBAR ASSEMBLY (WHEN CLAMPS ARE LOOSENED) TO BE ROTATED 90° TO ALLOW COMPLETE LOWERING OF TOWER.
13. THE CONTRACTOR SHALL COVER THE 2" CENTER HOLE OF THE MG-20 STAND PLATE ASSEMBLY WITH A 2"-DIA PLASTIC OR ALUMINUM MINI-LOUVER. McMASTER-CARR CAT. NO. 2016K23, 2016K13, AND 2016K3 MINI-LOUVERS MEET THIS REQUIREMENT. SEAL UNUSED HOLE IN THE STAND PLATE WITH A STAINLESS STEEL SCREEN.
14. FOR RVR SITES ONLY INSTALL A RUBBER GROMMET TO THE BOTTOM OF THE LIR POLE WHERE THE RVR CABLES ENTER. CUT THE GROMMET TO ALLOW CABLE ENTRY.
15. FOR MG-20 STRUCTURES REQUIRING THE BREAK-AWAY COUPLING KIT AS PER GLD-14-4, AN ADDITIONAL 6 3/4" MUST BE ADDED TO THE 6 3/4" DIMENSION IN ORDER TO CORRECTLY DETERMINE THE LENGTH OF TUBE REQUIRED "L". SEE NOTE 1 AND DETAIL 1 OF THIS SHEET.

HNTB

USER NAME = mh091r	DESIGNED <i>SJM</i>	REVISED -
	DRAWN <i>SJM</i>	REVISED -
PLOT SCALE = 2:1	CHECKED <i>SPG</i>	REVISED -
PLOT DATE = 26-DEC-2012	DATE	REVISED Δ 12/28/12 ADDENDUM 1

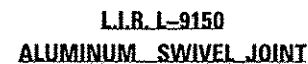
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**NAVAIDS
LIR STRUCTURE ASSEMBLY DETAILS
FOR TOWER TYPE MG-20**

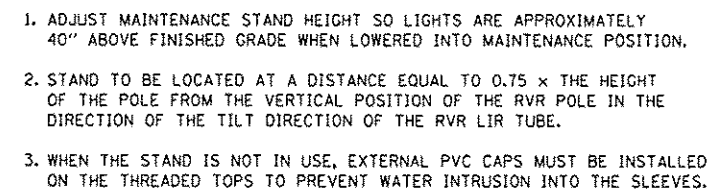
SCALE: N.T.S. SHEET NO. 15 OF 16 SHEETS STA. N/A TO STA. N/A

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	605BM
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				

**ADDED SHEET
GLD-120-1**



USED WHEN THE LIR MAST IS LOWERED AND THE CROSSBAR MUST BE
ROTATED FOR SERVICE. THIS DESIGN ALLOWS THE ROTATION
SURFACES TO BE METAL TO METAL VERSUS FIBERGLASS TO
FIBERGLASS. BUILT-IN LOCATING PIN FOR POSITIVE RE-ALIGNMENT
AFTER SERVICING. FIELD BONDING AND SLOTTING REQUIRED,



HNTB

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:	N.T.S.	SHEET NO. 16 OF 16 SHEETS	STA. N/A	TO STA. N/A
--------	--------	---------------------------	----------	-------------

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	605BN
		CONTRACT NO. 60G37		
UNCLASSIFIED AND PROJECT				

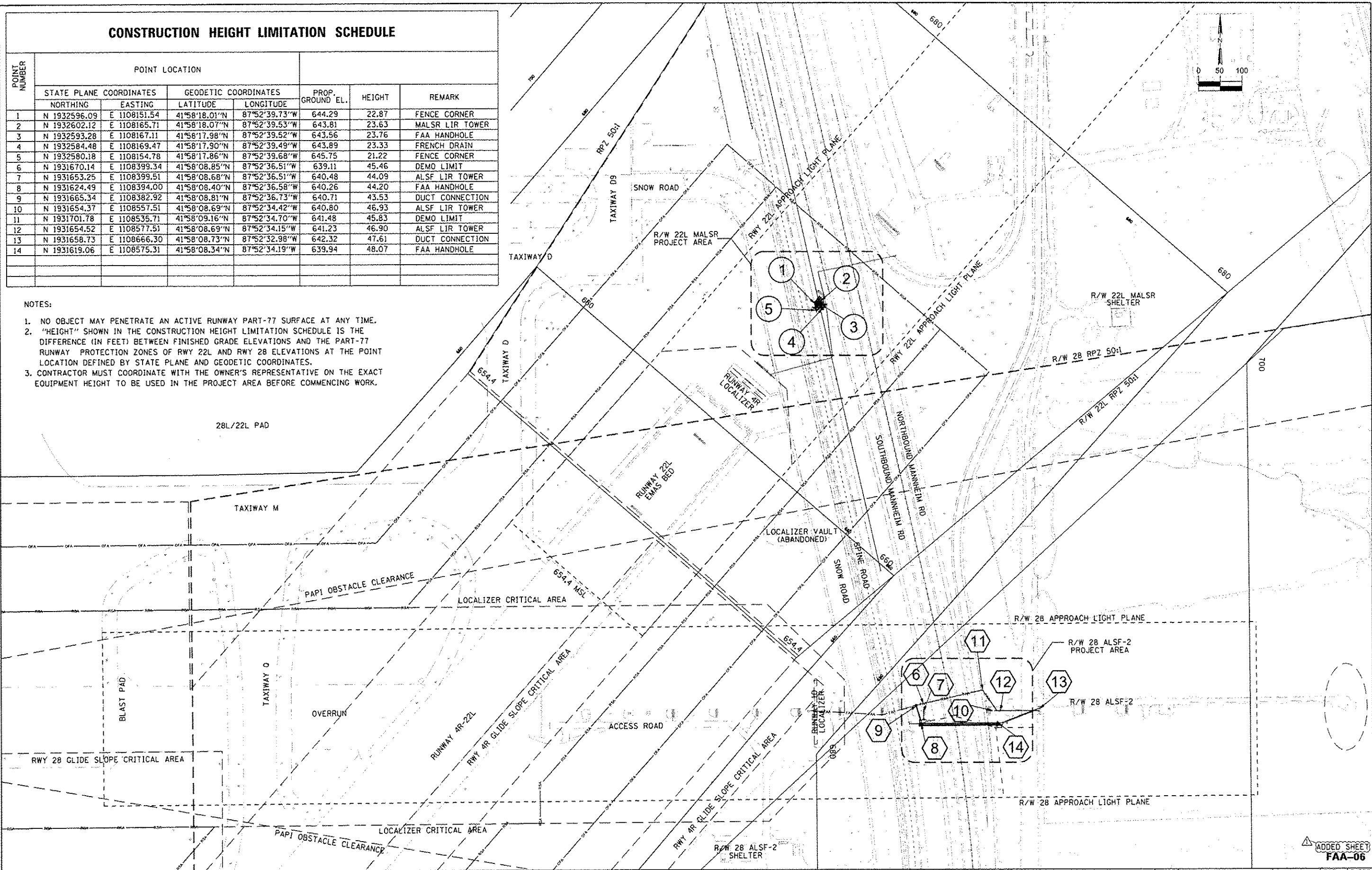
FILE NAME = IP_PWPids47844\DI68C37-shr-FAANAVOG6.dgn

CONSTRUCTION HEIGHT LIMITATION SCHEDULE

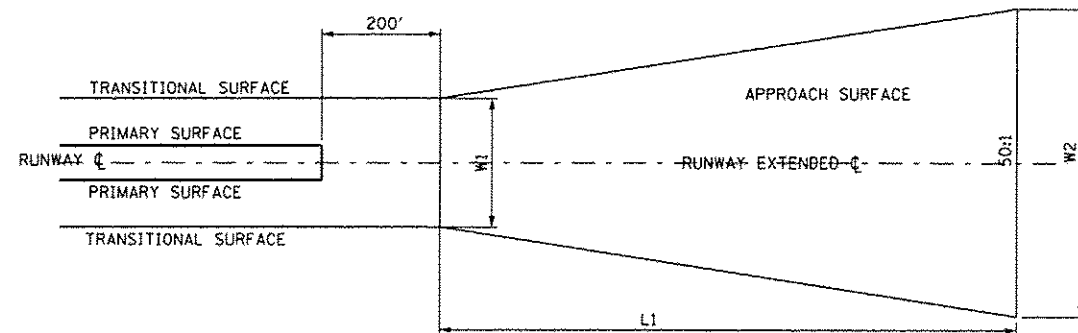
POINT NUMBER	POINT LOCATION				PROP. GROUND EL.	HEIGHT	REMARK
	STATE PLANE COORDINATES		GEODETTIC COORDINATES				
	NORTHING	EASTING	LATITUDE	LONGITUDE			
1	N 1932596.09	E 1108151.54	41°58'18.01"N	87°52'39.73"W	644.29	22.87	FENCE CORNER
2	N 1932602.12	E 1108165.71	41°58'18.07"N	87°52'39.53"W	643.81	23.63	MALSR LIR TOWER
3	N 1932593.28	E 1108167.11	41°58'17.98"N	87°52'39.52"W	643.56	23.76	FAA HANDHOLE
4	N 1932584.48	E 1108169.47	41°58'17.90"N	87°52'39.49"W	643.89	23.33	FRENCH DRAIN
5	N 1932580.18	E 1108154.78	41°58'17.86"N	87°52'39.68"W	645.75	21.22	FENCE CORNER
6	N 1931670.14	E 1108399.34	41°58'08.85"N	87°52'36.51"W	639.11	45.46	DEMO LIMIT
7	N 1931653.25	E 1108399.51	41°58'08.68"N	87°52'36.51"W	640.48	44.09	ALSF LIR TOWER
8	N 1931624.49	E 1108394.00	41°58'08.40"N	87°52'36.58"W	640.26	44.20	FAA HANDHOLE
9	N 1931665.34	E 1108382.92	41°58'08.81"N	87°52'36.73"W	640.71	43.53	DUCT CONNECTION
10	N 1931654.37	E 1108557.51	41°58'08.69"N	87°52'34.42"W	640.80	46.93	ALSF LIR TOWER
11	N 1931701.78	E 1108535.71	41°58'09.16"N	87°52'34.70"W	641.48	45.83	DEMO LIMIT
12	N 1931654.52	E 1108577.51	41°58'08.69"N	87°52'34.15"W	641.23	46.90	ALSF LIR TOWER
13	N 1931658.73	E 1108666.30	41°58'08.73"N	87°52'32.98"W	642.32	47.61	DUCT CONNECTION
14	N 1931619.06	E 1108575.31	41°58'08.34"N	87°52'34.19"W	639.94	48.07	FAA HANDHOLE

NOTES:

1. NO OBJECT MAY PENETRATE AN ACTIVE RUNWAY PART-77 SURFACE AT ANY TIME.
2. "HEIGHT" SHOWN IN THE CONSTRUCTION HEIGHT LIMITATION SCHEDULE IS THE DIFFERENCE (IN FEET) BETWEEN FINISHED GRADE ELEVATIONS AND THE PART-77 RUNWAY PROTECTION ZONES OF RWY 22L AND RWY 28 ELEVATIONS AT THE POINT LOCATION DEFINED BY STATE PLANE AND GEODEIC COORDINATES.
3. CONTRACTOR MUST COORDINATE WITH THE OWNER'S REPRESENTATIVE ON THE EXACT EQUIPMENT HEIGHT TO BE USED IN THE PROJECT AREA BEFORE COMMENCING WORK.

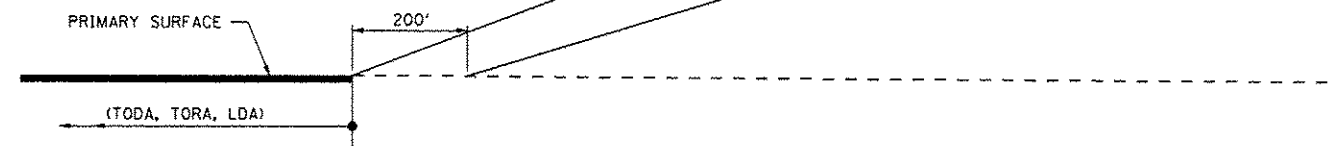


HNTB	USER NAME = mksay	DESIGNED SJM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAA RUNWAY SAFETY PLAN AND RUNWAY CRITICAL AREA	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	CONTRACT NO. 60G37
	PLOT SCALE = 200:1	DRAWN SJM	REVISED -			330	0105 WRS&HB	COOK	605	605F	
	PLOT DATE = 26-DEC-2012	CHECKED SPG	REVISED -			ILLINOIS FED. AID PROJECT					
	DATE	REVISED	12/28/12 ADDENDUM 1			SCALE: 1" = 100'	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.		

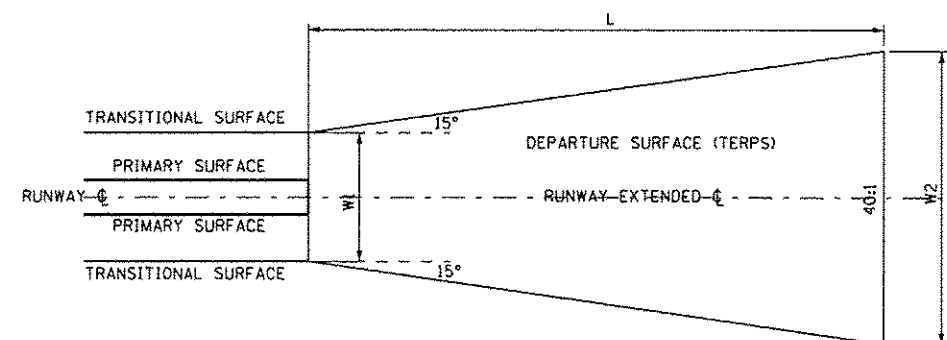


RUNWAY APPROACH	W1	W2	L1	S	THRESHOLD ELEVATION
R/W 22L	1,000	4,000	10,000	50:1	654.0
R/W 28	1,000	4,000	10,000	50:1	651.0

PLAN - APPROACH SURFACE (PRECISION)

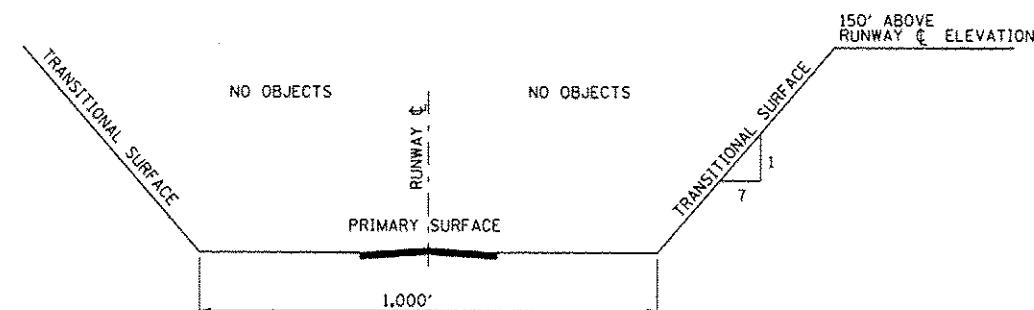


RUNWAY PROFILE (PART-77 SURFACE)



RUNWAY DEPARTURE	W1	W2	L	S	THRESHOLD ELEVATION
R/W 22L	1,000	6,466	10,200	40:1	654.0
R/W 28	1,000	6,466	10,200	40:1	651.0

PLAN - DEPARTURE SURFACE (TERPS)



RUNWAY SECTION - PRIMARY AND TRANSITIONAL SURFACE

NOTES:

1. THE CONTRACTOR MUST RESTRICT EQUIPMENT HEIGHT AROUND ACTIVE RUNWAYS IN ACCORDANCE WITH THE FAR PART 77 SURFACE DETAILS AS SHOWN ON THIS SHEET.
2. NO OBJECT MAY PENETRATE AN ACTIVE RUNWAY PART 77 SURFACE AT ANYTIME.
3. CONTRACTOR MUST COORDINATE WITH THE OWNER'S REPRESENTATIVE ON THE EXACT EQUIPMENT HEIGHT LIMITATION LOCATIONS IN THE PROJECT AREA.
4. THERE WILL BE NO EQUIPMENT STORAGE ALLOWED OVERNIGHT IN THE PROJECT AREA OR AT ANY LOCATION NOT DESIGNATED IN THE CONTRACT.

PART - 77 SURFACE

HNTB

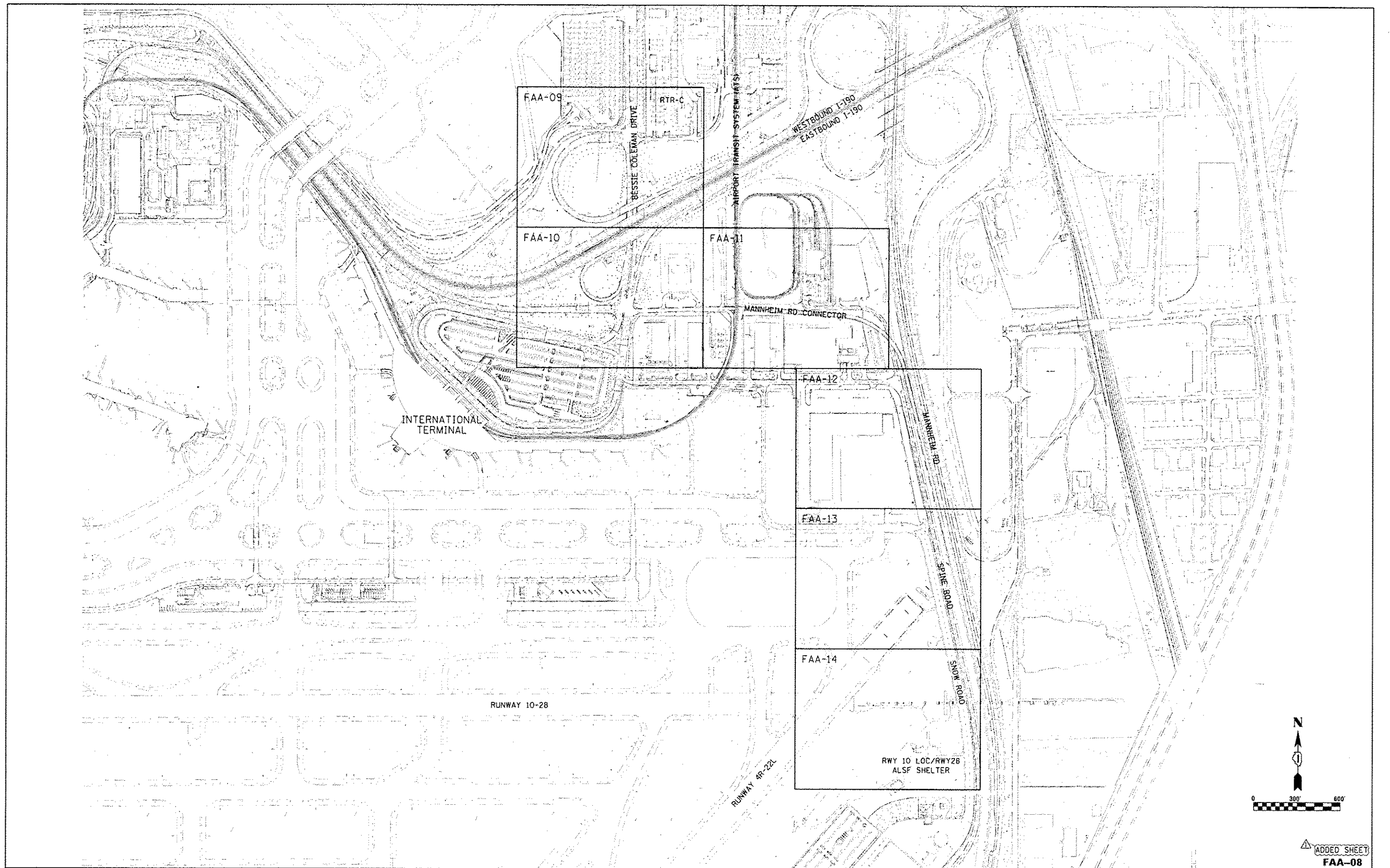
USER NAME: *phosir	DESIGNED	REVISED -
DRAWN: CFB	CHECKED: SPG	REVISED -
PLOT SCALE: 2:1	DATE	REVISED: 12/28/12 ADDENDUM 1
PLOT DATE: 26-DEC-2012		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FAA
RUNWAY AIRSPACE DETAILS AND NOTES**

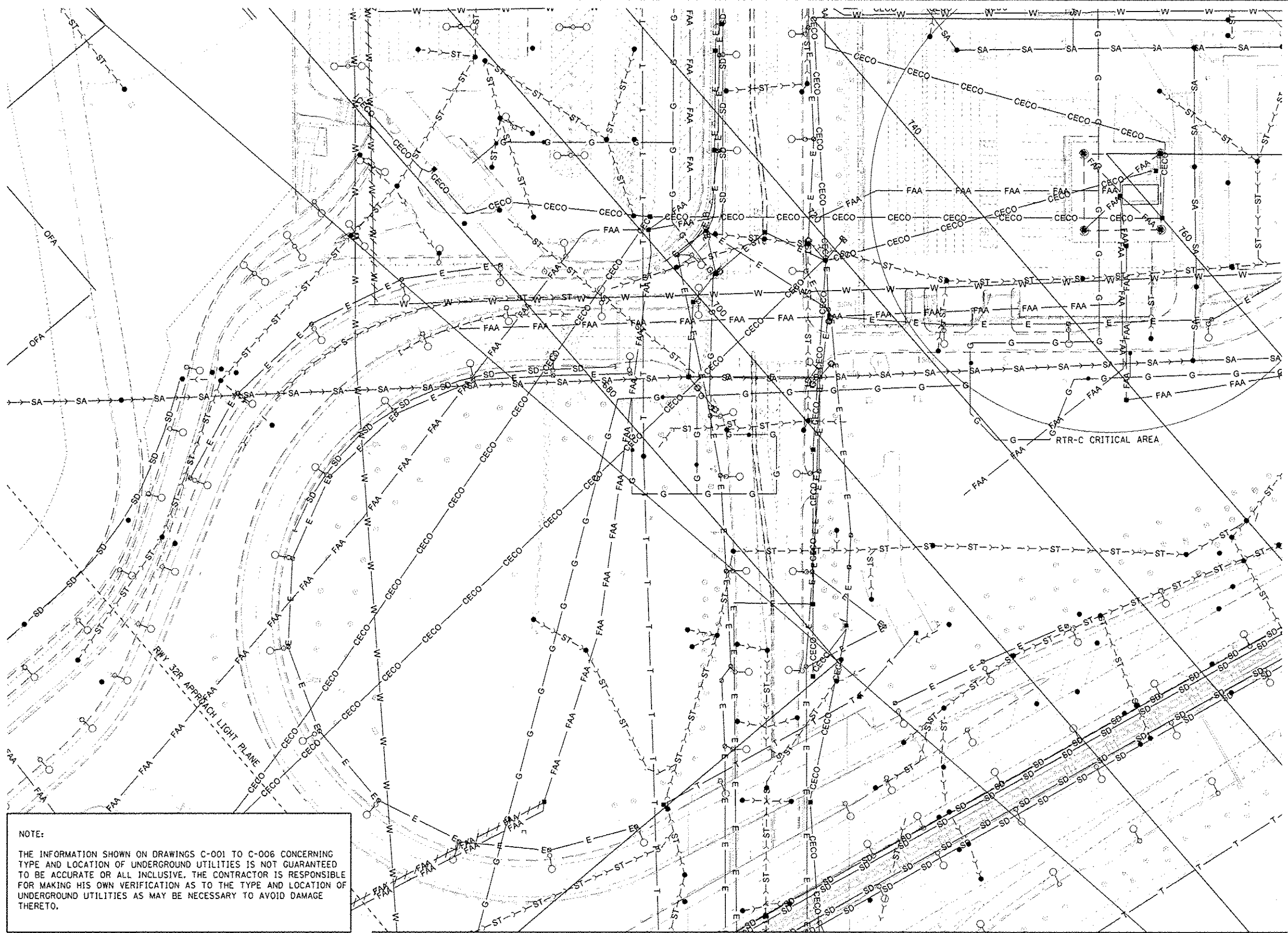
SCALE: N.T.S.	SHEET NO. OF SHEETS	STA. N/A TO STA. N/A
---------------	---------------------	----------------------

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
330	0105 WRS&HB	COOK	605	605G
CONTRACT NO. 60G37				
ILLINOIS FED. AID PROJECT				



ADDED SHEET
FAA-08

HNTB	USER NAME = mhoss	DESIGNED CFB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FOTS LOOP 3 EXISTING CONDITIONS AND COMPOSITE UTILITIES KEY PLAN	F.A.P. RTE. 330	SECTION 0105 WRS&HB	COUNTY COOK	TOTAL SHEETS 605	SHEET NO. 605H	CONTRACT NO. 60G37		
	PLOT SCALE = 600:1	CHECKED SPG	REVISED -										
	PLOT DATE = 26-DEC-2012	DATE	REVISED 12/28/12 ADDENDUM 1										
FILE NAME = I:\P\W\Wm42844\0160G37\shs-546021586.doc					SCALE:	SHEET NO. 1 OF 7 SHEETS		STA.		TO STA.		ILLINOIS FED. AID PROJECT	



NOTE:

THE INFORMATION SHOWN ON DRAWINGS C-001 TO C-006 CONCERNING TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN VERIFICATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

MATCH LINE - SEE SHEET FAA-10

ADDED SHEET
FAA-09

HNTB

USER NAME = mhw	DESIGNED CFB	REVISED -
PLOT SCALE = 1/8"=1'	DRAWN CFB	REVISED -
PLOT DATE = 26-DEC-2012	CHECKED SPG	REVISED -
	DATE	REVISED 12/28/12 ADDENDUM 1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOTS LOOP 3
EXISTING CONDITIONS AND COMPOSITE UTILITIES

SCALE: SHEET NO. 2 OF 7 SHEETS STA. TO STA.

F.A.P. RTE. 330	SECTION 0105 WRS&HB	COUNTY COOK	TOTAL SHEET NO. 605
		CONTRACT NO. 60637	
		ILLINOIS FED. AID PROJECT	