

INDEX OF SHEETS

PAGE NO.	DESCRIPTION
1	COVER SHEET
2	SUMMARY OF QUANTITIES
3	CONSTRUCTION SAFETY PLAN
4	DIMENSIONAL LAYOUT PLAN
5	EROSION CONTROL PLAN
6	FENCING PLAN
7	UNDERDRAIN PLAN
8	TEMPORARY PAVEMENT MARKING PLAN AND DISPLACED THRESHOLD PLAN AND DETAILS
9	PERMANENT PAVEMENT MARKING PLAN AND DETAILS
10	ELECTRICAL PLAN
11	ELECTRICAL DETAILS
12	ELECTRICAL NOTES
13	FILLET AREA ELEVATIONS
14	RUNWAY PLAN AND PROFILE
15	TAXIWAY PLAN AND PROFILE
16	CONNECTING TAXIWAY PLAN AND PROFILE
17	NORTH RUNWAY SAFETY AREA GRADING PLAN
18-25	CROSS SECTIONS

THE CITY OF MORRIS, ILLINOIS

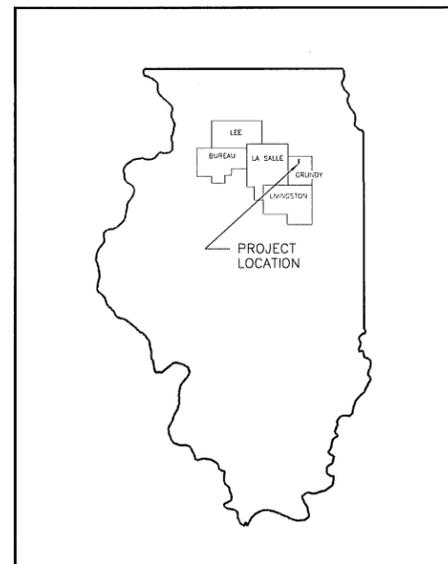
MORRIS MUNICIPAL AIRPORT

JAMES R. WASHBURN FIELD

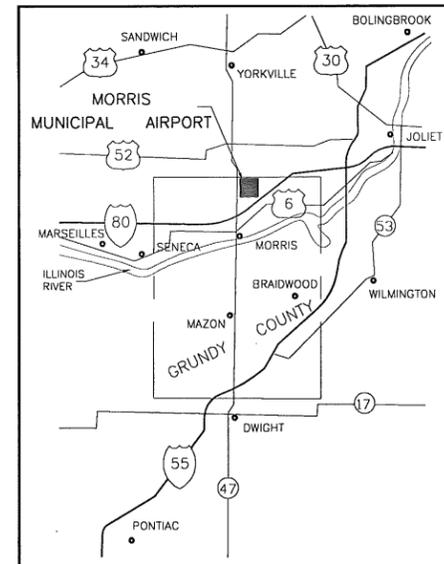
CONSTRUCTION PLANS
FOR
EXTEND RUNWAY 18/36 NORTH TO 5,500 FEET
WITH PARALLEL TAXIWAY
ILLINOIS PROJECT NO. C09-4089
SBG PROJECT NO. 3-17-0071-B16

LATITUDE 41°-25'-31.8" LONGITUDE 88°-25'-7.2"
ELEVATION 585.01

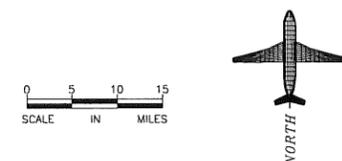
DATE: MARCH 21, 2014
RUNWAY CATEGORY B, GROUP II



LOCATION MAP
NOT TO SCALE



VICINITY MAP



3/21/14
date
LISCENSED PROFESSIONAL ENGINEER
NO. 062-059217
STATE OF ILLINOIS
expires 11-30-2015
signature
PROFESSIONAL DESIGN FIRM
LICENSE NO. 184-001717

Illinois Department of Transportation
Division of Aeronautics

APPROVED _____ CHIEF ENGINEER
DATE _____ 20 ____

CHAMLIN ASSOCIATES
PERU ILLINOIS MORRIS

SUBMITTED BY: *Paul J. Adams* ENGINEER
DATE: *MARCH 21*, 20 *14*

JOB NO. 1002.76
PROFESSIONAL DESIGN FIRM LICENSE NO.: 184-001717

CITY OF MORRIS

APPROVED: *Paul J. Adams* MAYOR
DATE: *March 24*, 20 *14*
APPROVED: *Carol A. Adair* CITY CLERK
DATE: *3-24-2014*, 20 ____

BENCHMARK DATA

DESCRIPTION	ELEVATION METRIC	ELEVATION ENGLISH
S.E. CORNER OF CONCRETE BASE FOR OLD WIND SOCK AT OFFICE BLDG.	179.558	(589.10)
BRASS PLUG IN WEST WALL @ GRACE LUTH. CHURCH	179.783	(589.84)

DESCRIPTION

MORRIS MUNICIPAL AIRPORT
SECTIONS 10 & 15, TOWNSHIP 34N., RANGE 7E. OF 3RD P.M. GRUNDY COUNTY, SARATOGA TOWNSHIP

UNDERGROUND UTILITY INFORMATION

UTILITY SERVICE	PERSON TO CONTACT	TELEPHONE NO.
ELECTRIC -- COMMONWEALTH EDISON	JULIE (JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS)	1-800-892-0123
TELEPHONE -- AT&T	JULIE (JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS)	1-800-892-0123
NATURAL GAS -- NICOR	JULIE (JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS)	1-800-892-0123

CHAMLIN & ASSOCIATES, INC. © 2009
Drawing Name: H:\A\081\11002-76\CADD\01-COVER.dwg Last Modified: Mar 21, 2014 - 11:41am by romp

SUMMARY OF QUANTITIES				
ITEM	DESCRIPTION	UNIT	ESTIMATED QUANTITY	RECORD QUANTITY
AR 108158	1/C #8 5 KV UG CABLE IN UD	L.F.	4,834	0
AR 110504	4-WAY CONCRETE ENCASED DUCT	L.F.	41	0
AR 125410	MITL - STAKE MOUNTED	EACH	27	0
AR 125415	MITL - BASE MOUNTED	EACH	4	0
AR 125441	TAXI GUIDANCE SIGN, 1 CHARACTER	EACH	2	0
AR 125442	TAXI GUIDANCE SIGN, 2 CHARACTER	EACH	1	0
AR 125443	TAXI GUIDANCE SIGN, 3 CHARACTER	EACH	1	0
AR 125505	MIRL, STAKE MOUNTED	EACH	5	0
AR 125510	MIRL, BASE MOUNTED	EACH	2	0
AR 125901	REMOVE STAKE MOUNTED LIGHT	EACH	5	0
AR 125904	REMOVE TAXI GUIDANCE SIGN	EACH	1	0
AR 125961	RELOCATE STAKE MOUNTED LIGHT	EACH	6	0
AR 125967	RELOCATE REILS	PAIR	1	0
AR 150510	ENGINEER'S FIELD OFFICE	L.S.	1	0
AR 150560	TEMPORARY THRESHOLD	L.S.	1	0
AR 152410	UNCLASSIFIED EXCAVATION	C.Y.	44,867	0
AR 155530	HYDRATED LIME	TON	250	0
AR 155712	LIME-MODIFIED SUBGRADE - 12"	S.Y.	9,820	0
AR 156510	SILT FENCE	L.F.	500	0
AR 156511	DITCH CHECK	EACH	12	0
AR 156544	RIPRAP - GRADATION NO. 4	S.Y.	23	0
AR 162508	CLASS E FENCE, 8'	L.F.	5,450	0
AR 162624	CLASS E GATE, 24'	EACH	3	0
AR 201610	BITUMINOUS BASE COURSE	TON	3,769	0
AR 201630	BITUMINOUS BASE TEST SECTION	EACH	1	0
AR 209606	CRUSHED AGG. BASE COURSE - 6"	S.Y.	8,573	0
AR 401610	BITUMINOUS SURFACE COURSE	TON	804	0
AR 401650	BITUMINOUS PAVEMENT MILLING	S.Y.	1,078	0
AR 602510	BITUMINOUS PRIME COAT	GAL.	2,945	0
AR 603510	BITUMINOUS TACK COAT	GAL.	932	0
AR 620520	PAVEMENT MARKING - WATERBORNE	S.F.	16,970	0
AR 620900	PAVEMENT MARKING REMOVAL	S.F.	10,716	0
AR 625510	TAR EMULSION SEAL COAT	S.Y.	1,111	0
AR 701524	24" RCP, CLASS IV	L.F.	97	0
AR 705526	6" PERFORATED UNDERDRAIN W/SOCK	L.F.	2,880	0
AR 705630	UNDERDRAIN INSPECTION HOLE	EACH	15	0
AR 751550	MANHOLE 5'	EACH	1	0
AR 752424	PRECAST REINFORCED CONC. FES 24"	EACH	2	0
AR 801302	NEENAH R4341-A GRATE	EACH	1	0
AR 801308	EROSION CONTROL BLANKET	S.Y.	7,259	0
AR 801338	8" ORIFICE RESTRICTOR PLATE	EACH	1	0
AR 901510	SEEDING	ACRE	24	0
AR 908510	MULCHING	ACRE	24	0

CHAMLIN & ASSOCIATES, INC. © 2009
 Drawing Name: H:\A\08\1\1002-76\C3D\002-500.dwg Last Modified: Mar 21, 2014 - 9:08am Plotted on: Mar 21, 2014 - 10:08am by romp

DRAWN BY: RGP	REVISIONS			
CHECKED BY: RTS	LEVEL	BY	DATE	DESCRIPTION
CREATED: 3/18/14	1	RGP	3/21/14	100% SET FOR IDA APPROVAL


CHAMLIN & ASSOCIATES
 PERU MORRIS ILLINOIS

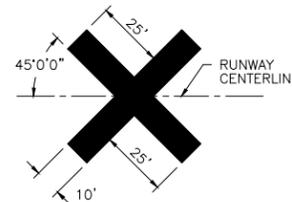
MORRIS MUNICIPAL AIRPORT
 MORRIS, ILLINOIS

SUMMARY OF QUANTITIES

APPROVED FOR CONSTRUCTION	CURRENT AS OF: 3/21/14	
	SCALE: 1 = 300	SHEET 2
	FILE NO.: 13128	OF 25

NOTE:

- 1.) CLOSED RUNWAY MARKERS SHALL BE YELLOW.
- 2.) MARKERS SHALL BE DOUBLE LAYERED PAINTED SNOW FENCE, COLORED PLASTIC, PAINTED PLYWOOD OR OTHER MATERIAL APPROVED BY THE ENGINEER.
- 3.) CONTRACTOR SHALL MAINTAIN MARKERS AS DIRECTED BY THE ENGINEER.
- 4.) MARKERS SHALL BE PLACED OVER EXISTING RUNWAY NUMERALS AND AS DIRECTED BY THE ENGINEER.
- 5.) COST OF FURNISHING, INSTALLING, MAINTAINING AND REMOVING MARKERS AND BARRICADES SHALL BE CONSIDERED INCIDENTAL TO CONTRACT.



TEMPORARY CLOSED RUNWAY MARKER DETAIL

NOT TO SCALE



EARTHWORK SUMMARY			
LOCATION	UNCLASSIFIED EXCAVATION		
	CUT (COMPUTED EXISTING IN PLACE) (CY) (A)	FILL (COMPUTED COMPACTED IN PLACE) (CY) (B)	SHORTAGE(-) OR EXCESS(+) (CY) (C) (A)(0.80)-B
GENERAL SITE AREA	44,867	26,784	+9,110
PAY ITEMS:	UNCLASSIFIED EXCAVATION		44,867 C.Y.
AR 152410			

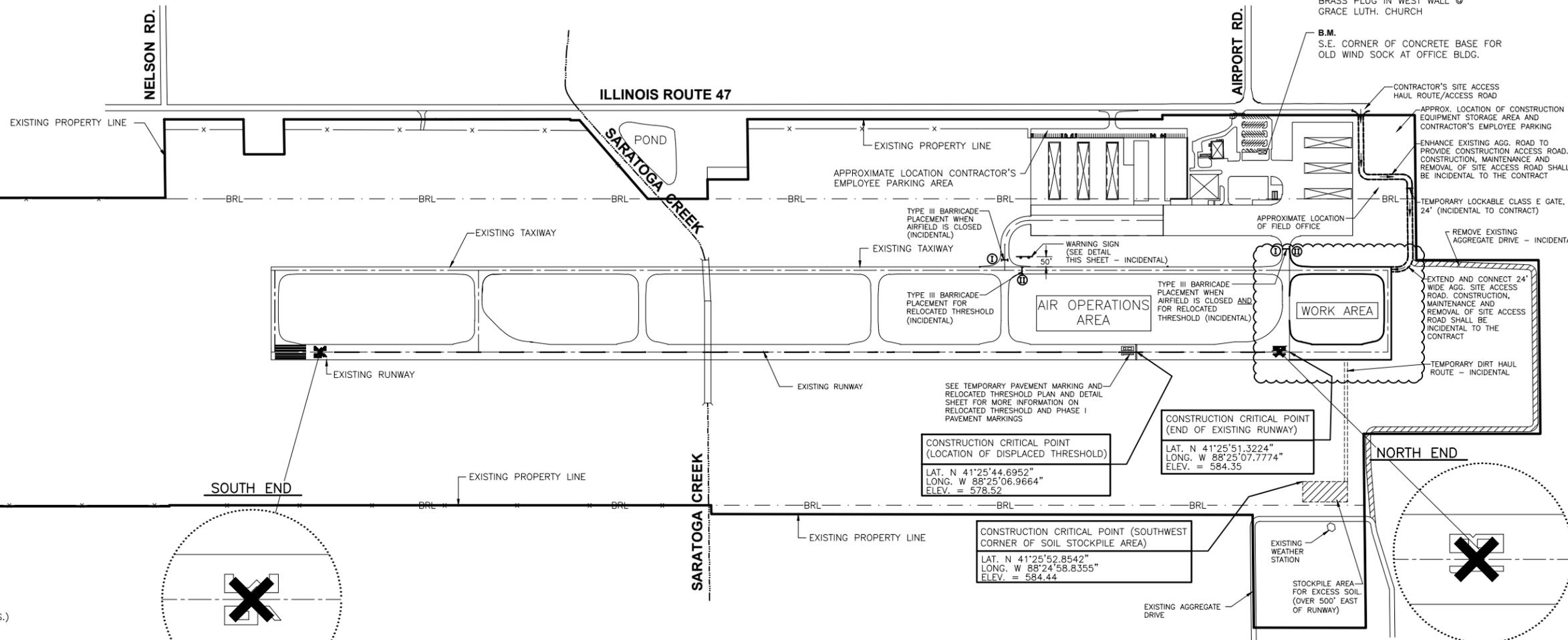


WARNING SIGN DETAIL

NOT TO SCALE

NOTE:

- 1.) SIGN COST INCIDENTAL TO CONTRACT
- 2.) WARNING SIGN SHALL REMAIN THE PROPERTY OF THE AIRPORT UPON COMPLETION OF THE PROJECT
- 3.) BACKGROUND - ORANGE LETTERS - BLACK



SEQUENCE OF CONSTRUCTION

1. PHASE I: (UTILIZE EXISTING RUNWAYS AND TAXIWAYS FOR ACCESS.)
 - a. ISSUE NOTAM AND TEMPORARILY CLOSE RUNWAY 18/36.
 - b. PUT UP CONSTRUCTION SIGNAGE AND BARRICADES.
 - c. CONSTRUCT RELOCATED THRESHOLD, TEMPORARY PAVEMENT MARKINGS AND TEMPORARY LIGHTING.
 - d. REMOVE CONFLICTING EXISTING PAVEMENT MARKINGS.
 - e. STAKE LIMITS OF AERONAUTICAL OPERATIONS AREA (AOA) AND LIMITS OF CONSTRUCTION.
 - f. RE-OPEN RUNWAY 18/36 WITH RELOCATED THRESHOLD.
2. PHASE II:
 - a. CONSTRUCT TEMPORARY SITE ACCESS ROAD OFF ROUTE 47 BY EXTENDING PRIVATE DRIVE NORTH OF AIRPORT ROAD AS SHOWN.
 - b. REMOVE EXISTING AGGREGATE DRIVE WHERE INDICATED.
 - c. CONSTRUCT STORMWATER CONTROLS IN ACCORDANCE WITH THE EROSION CONTROL PLANS.
 - d. STRIP TOPSOIL.
 - e. CONSTRUCT EMBANKMENT AND SHOULDER EARTHWORK.
 - f. CONSTRUCT STORM DRAINAGE.
 - g. CONSTRUCT SUB-GRADE AND AGGREGATE BASE COURSE.
 - h. CONSTRUCT UNDERDRAINS.
 - i. CONSTRUCT BITUMINOUS CONCRETE PAVEMENT.
 - j. INSTALL/ CONSTRUCT MITL AND MRL EXTENSIONS AND NEW GUIDANCE SIGNS.
 - k. APPLY FERTILIZER, SEEDING, AND MULCHING.
 - l. CLEAN PAVEMENT AND APPLY PAVEMENT MARKING.
 - m. INSTALL PERIMETER SECURITY FENCING.
 - n. REMOVE TEMPORARY SITE ACCESS ROAD, AND EXISTING AGGREGATE DRIVE.

GENERAL NOTES AND SCOPE OF WORK

- 1.) SCOPE OF WORK: THIS PROJECT CONSISTS OF CONSTRUCTION OF A 500' EXTENSION TO THE EXISTING RUNWAY 18/36 AND PARALLEL TAXIWAY INCLUDING ALL NECESSARY EARTHWORK, GRADING, DRAINAGE, EROSION CONTROL, PAVEMENT MARKING AND FENCING.
- 2.) THE MAXIMUM ANTICIPATED CONSTRUCTION EQUIPMENT HEIGHT IS 30'-0".
- 3.) THE CONTRACTOR SHALL USE THE DESIGNATED ACCESS ROAD AS SHOWN ON THIS SHEET. THE CONTRACTOR SHALL MAINTAIN THE PROPOSED ACCESS ROAD THROUGHOUT THE COURSE OF THE PROJECT. AT THE CONCLUSION OF THE PROJECT, ANY AREAS DAMAGED OUTSIDE THE AREAS SHOWN FOR CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE. RESTORATION OF THE ACCESS ROAD WILL BE CONSIDERED INCIDENTAL TO THE PROJECT.
- 4.) THE CONTRACTOR SHALL INVESTIGATE EXISTING DRAINAGE PIPES AND FIELD TILES TO DETERMINE THEIR EXTENT. ALL FIELD TILES AND DRAIN PIPES SHALL BE EXTENDED, REROUTED, OR MAINTAINED TO PROVIDE CONTINUOUS UNOBSTRUCTED DRAINAGE.
- 5.) PUMPING GROUND WATER AND/OR STORM WATER FROM THE WORK AREA IS CONSIDERED INCIDENTAL TO THE PROJECT.
- 6.) DUE TO THE CLOSE PROXIMITY TO AIRCRAFT OPERATIONS, THE CONTRACTOR IS REQUIRED TO STRICTLY ADHERE TO THE GUIDELINES REGARDING CONSTRUCTION SAFETY AS SET FORTH IN FAA ADVISORY CIRCULAR 150/5370-2F

LEGEND

- BRL — BUILDING RESTRICTION LINE (BRL)
- Ⓢ I PHASE I BARRICADE PLACEMENT
- Ⓢ II PHASE II BARRICADE PLACEMENT

SAFETY PLAN NOTES

- 1.) THE SEQUENCE OF CONSTRUCTION SHOWN ON THIS SHEET IS INTENDED TO ALLOW ORDERLY AND SAFE CONSTRUCTION, AND TO AVOID LENGTHY TAXIWAY CLOSINGS.
- 2.) BARRICADES SHALL BE PLACED AND MAINTAINED AS SHOWN HEREIN, AS INDICATED IN THE SPECIAL PROVISIONS AND AS DIRECTED BY THE ENGINEER. PLACEMENT AND MAINTENANCE OF BARRICADES ARE INCIDENTAL TO CONTRACT.
- 3.) THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING CLOSED TAXIWAY MARKERS AS SHOWN ON THIS SHEET AND AS DIRECTED BY THE AIRPORT MANAGER AND THE ENGINEER. MARKERS SHALL BE PLACED AND REMOVED WHEN SO DIRECTED BY THE OWNER THROUGH THE ENGINEER. THE OWNER SHALL BE RESPONSIBLE FOR NOTIFYING THE FLIGHT SERVICE STATION REGARDING RUNWAY CLOSURE.
- 4.) ALL BARRICADES, MARKINGS, LATHE, FLAGGING, AND TRAFFIC CONTROL ITEMS ARE INCIDENTAL TO THE CONTRACT.
- 5.) ALL IDOT TYPE III BARRICADES SHALL HAVE FOUR STANDARD SIZE SAND BAGS PER LEG.

POINT OF CONTACT

AIRPORT MANAGER:
JEFF VOGEN
MORRIS MUNICIPAL AIRPORT
9980 N. RTE. 47
MORRIS, IL 60450
(815) 942-1600

CHAMLIN & ASSOCIATES, INC. © 2009
Drawing Name: H:\A\08\11\1002-78\C3D\003-SAFETY.dwg Last Modified: Mar 19, 2014 - 2:11pm Plotted on: Mar 21, 2014 - 10:11am by romp

DRAWN BY: MAB	REVISIONS			
	LEVEL	BY	DATE	DESCRIPTION
CHECKED BY: RTS	1	RGP	1/30/14	80% SET FOR IDA REVIEW
CREATED: 10/28/10	2	RGP	3/21/14	100% SET FOR IDA APPROVAL

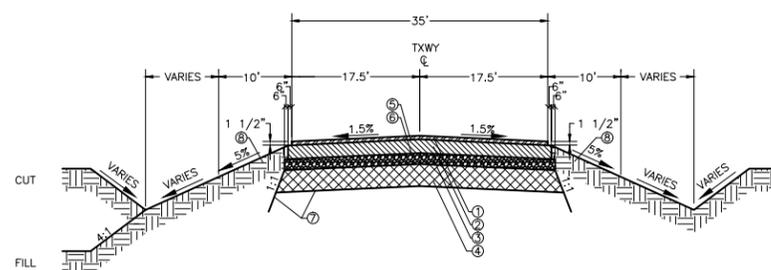
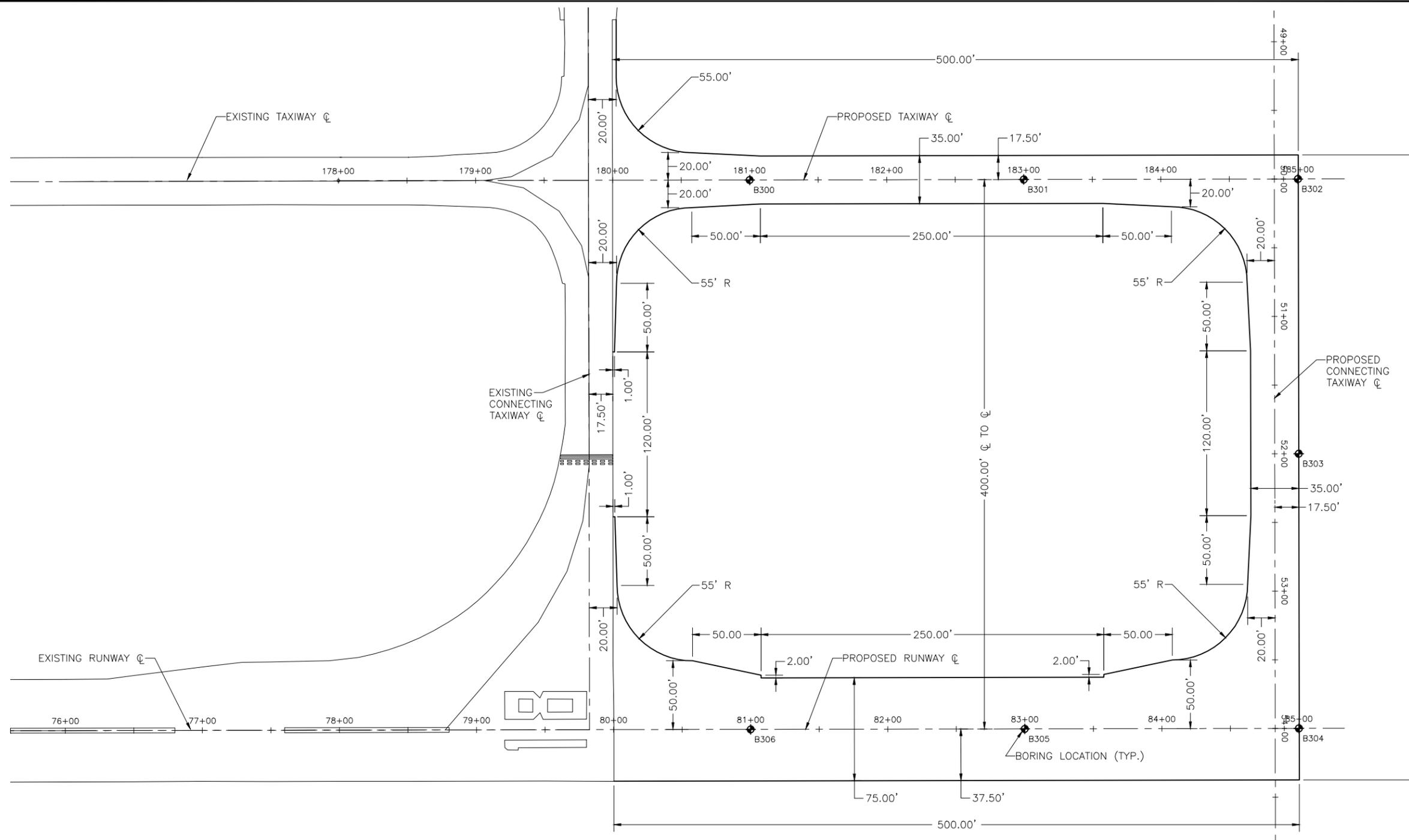
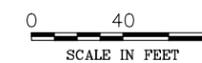
CHAMLIN & ASSOCIATES
PERU MORRIS
ILLINOIS

MORRIS MUNICIPAL AIRPORT
MORRIS, ILLINOIS

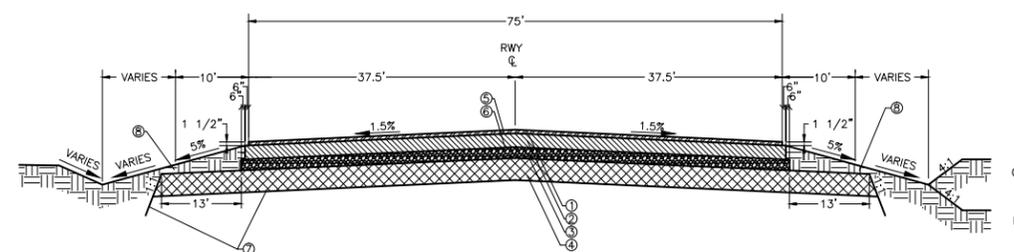
CONSTRUCTION SAFETY PLAN

APPROVED FOR CONSTRUCTION

CURRENT AS OF: 3/21/14
SCALE: 1 = 300 SHEET 3
FILE NO.: 13128 OF 25



**TYPICAL CROSS SECTION
NEW TAXIWAY**
NOT TO SCALE



**TYPICAL CROSS SECTION
NEW RUNWAY**
NOT TO SCALE

- ① PROPOSED BITUMINOUS SURFACE COURSE (401), 1 1/2" DEPTH.
- ② PROPOSED BITUMINOUS BASE COURSE (201), 8" DEPTH.
- ③ PROPOSED AGGREGATE BASE COURSE (209), 6" DEPTH.
- ④ PROPOSED LIME-MODIFIED SUBGRADE, 12" DEPTH
- ⑤ PROPOSED BITUMINOUS TACK COAT (603) 0.10 GAL. PER SQ. YD.
- ⑥ PROPOSED BITUMINOUS PRIME COAT (602) 0.35 GAL. PER SQ. YD.
- ⑦ SUBGRADE BELOW PROPOSED AIRFIELD PAVEMENTS
- ⑧ EMBANKMENTS OUTSIDE PAVEMENT LIMITS, ASTM D 698 STANDARD

CHAMLIN & ASSOCIATES, INC. © 2009
Drawing Name: H:\A\08\11\002-76\C3D\C3D\04-DIMLAY.dwg Last Modified: Mar 19, 2014 - 1:56pm Plotted on: Mar 21, 2014 - 10:24am by rmp

DRAWN BY: MAB	REVISIONS			
CHECKED BY: RTS	LEVEL	BY	DATE	DESCRIPTION
CREATED: 10/28/10	1	RGP	1/30/14	80% SET FOR IDA REVIEW

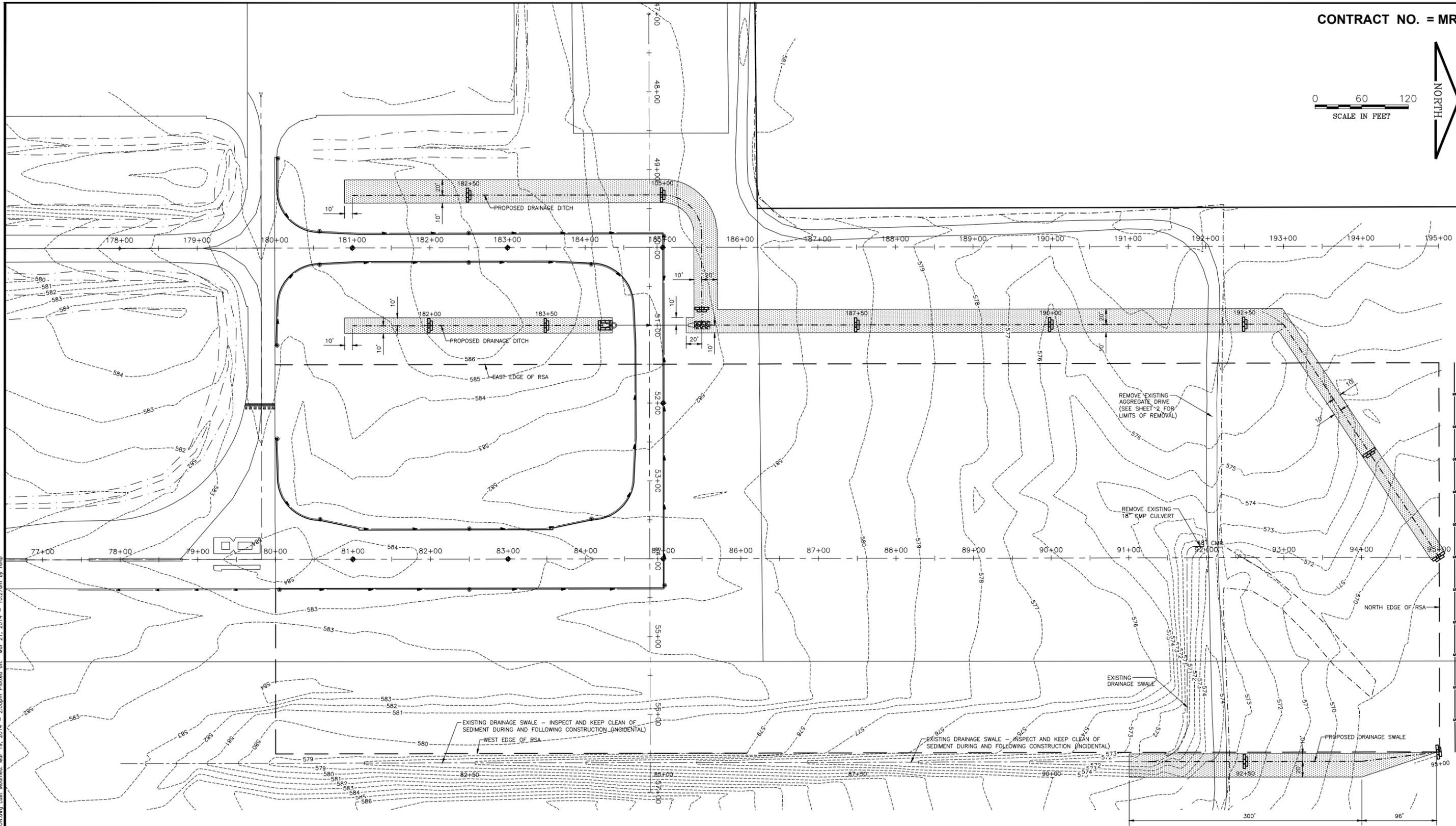
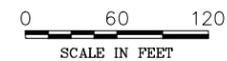
CHAMLIN & ASSOCIATES
PERU MORRIS
ILLINOIS

MORRIS MUNICIPAL AIRPORT
MORRIS, ILLINOIS

DIMENSIONAL LAYOUT PLAN

APPROVED
FOR CONSTRUCTION

CURRENT AS OF: 3/21/14	SHEET 4
SCALE: 1 = 40	OF 25
FILE NO.: 13128	



LEGEND

- SILT FENCE
- DITCH CHECK (BALES)
- INLET PROTECTION (BALES)
- RIPRAP APRON
- EROSION CONTROL BLANKET

CHAMLIN & ASSOCIATES, INC. © 2009
Drawing Name: H:\A\08\11002-76\C3D\095-EROSION.dwg Last Modified: Mar 19, 2014 - 2:03pm Plotted on: Mar 21, 2014 - 10:27am by rmp

DRAWN BY: MAB	REVISIONS			
CHECKED BY: RTS	LEVEL	BY	DATE	DESCRIPTION
CREATED: 10/28/10	1	RGP	1/30/14	80% SET FOR IDA REVIEW

CHAMLIN & ASSOCIATES
PERU MORRIS ILLINOIS

MORRIS MUNICIPAL AIRPORT
MORRIS, ILLINOIS

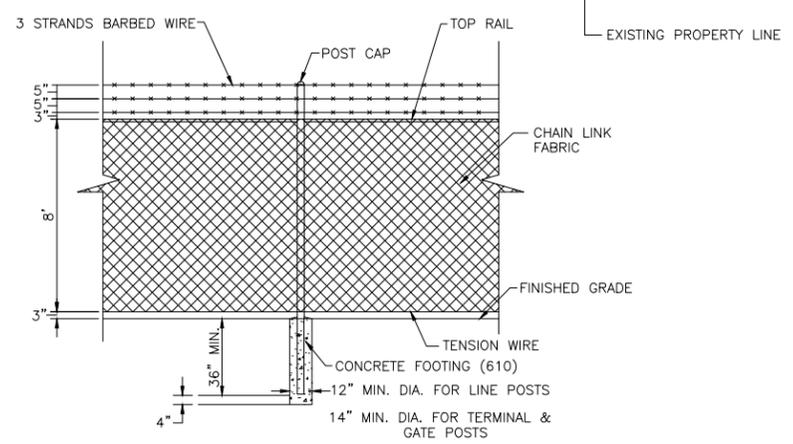
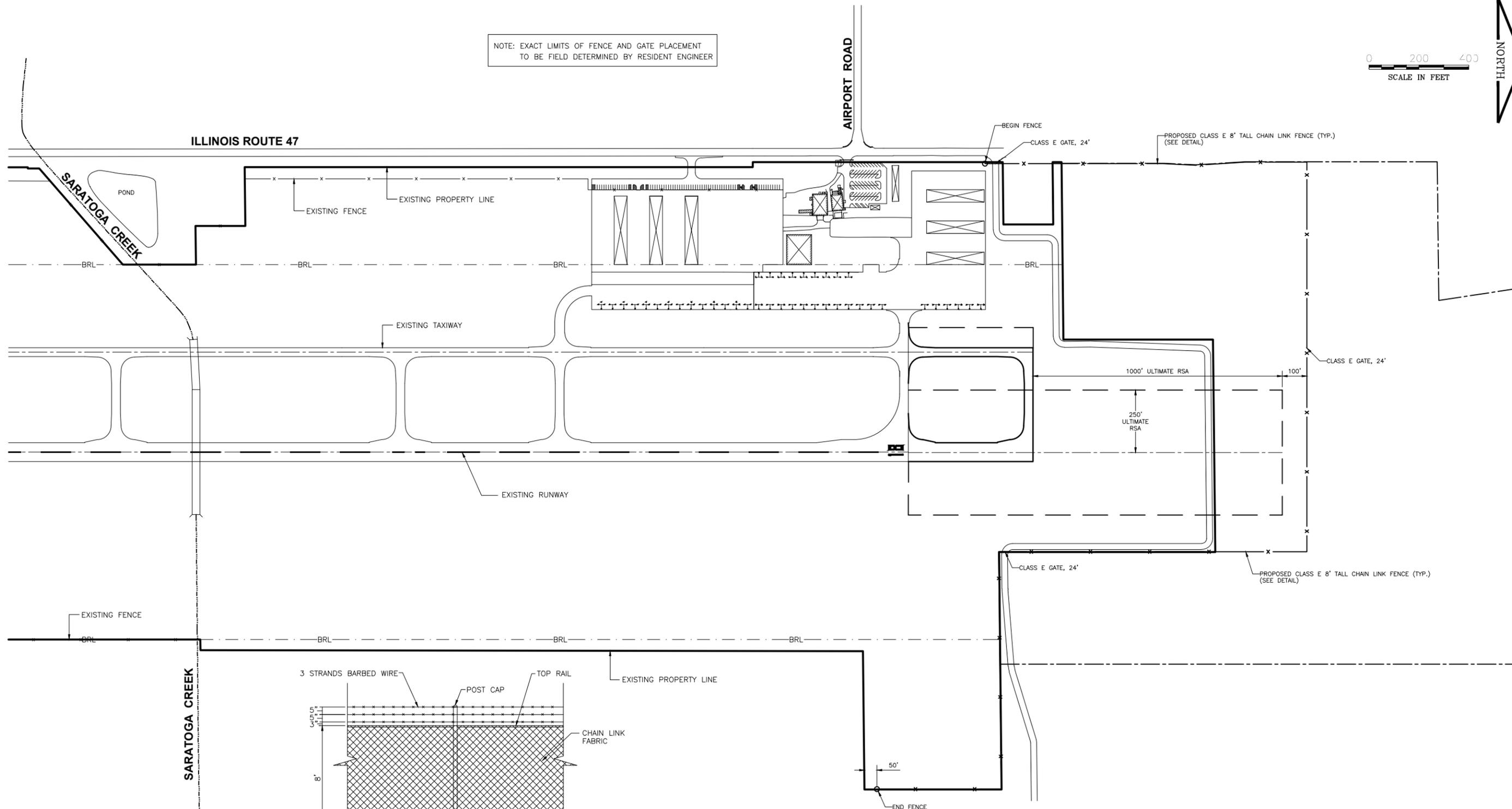
EROSION CONTROL PLAN

APPROVED
FOR CONSTRUCTION

CURRENT AS OF: 3/21/14	SHEET 5
SCALE: 1 = 60	OF 25
FILE NO.: 13128	



NOTE: EXACT LIMITS OF FENCE AND GATE PLACEMENT TO BE FIELD DETERMINED BY RESIDENT ENGINEER



CLASS E FENCE, 8'
N.T.S.

CHAMLIN & ASSOCIATES, INC. © 2009
Drawing Name: H:\A\08\11\002-76\C3D\006-FENCING.dwg Last Modified: Mar 19, 2014 - 2:18pm Plotted on: Mar 21, 2014 - 10:31am by: rmp

REVISIONS				
LEVEL	BY	DATE	DESCRIPTION	
1	RGP	1/30/14	80% SET FOR IDA REVIEW	
DRAWN BY: MAB				
CHECKED BY: RTS				
CREATED: 10/28/10				

CHAMLIN & ASSOCIATES
PERU MORRIS
ILLINOIS

MORRIS MUNICIPAL AIRPORT
MORRIS, ILLINOIS

FENCING PLAN

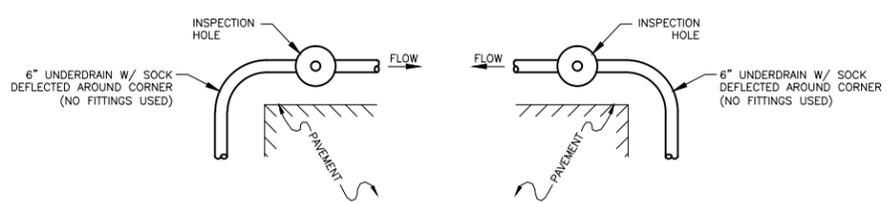
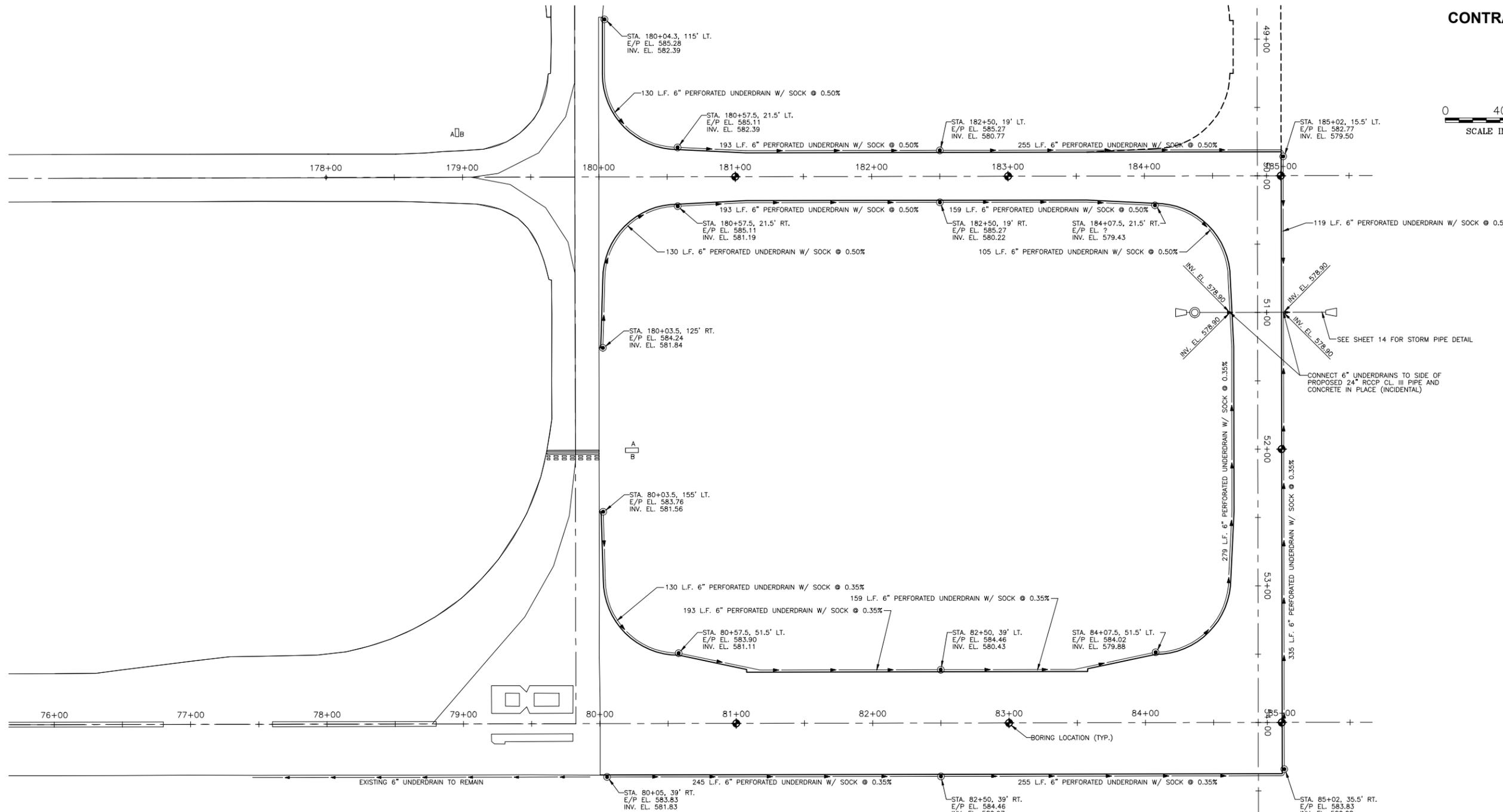
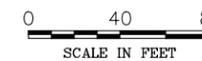
APPROVED FOR CONSTRUCTION

CURRENT AS OF: 3/21/14

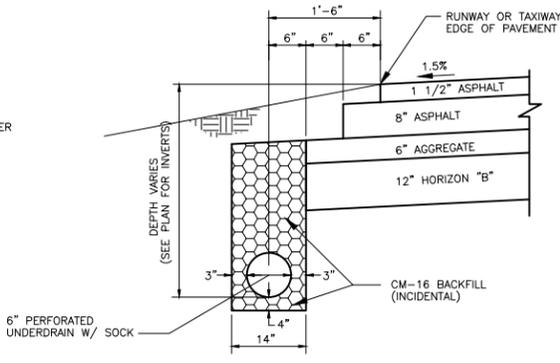
SCALE: 1 = 200

FILE NO.: 13128

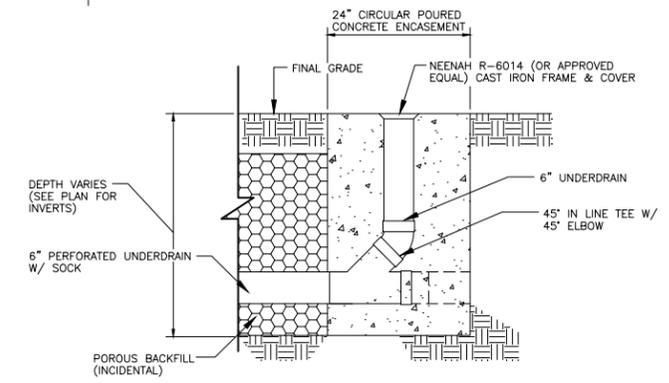
SHEET 6 OF 25



UNDERDRAIN INSPECTION HOLE PLAN DETAIL
TYPICAL AT NORTHEAST & NORTHWEST CORNER OF IMPROVEMENT
N.T.S.



UNDERDRAIN DETAIL
N.T.S.



UNDERDRAIN INSPECTION HOLE DETAIL
N.T.S.

CHAMLIN & ASSOCIATES, INC. © 2009
Drawing Name: H:\A\08\1\1002-76\330\007-UPRA\dwg Last Modified: Mar 19, 2014 - 2:07pm Plotted on: Mar 21, 2014 - 10:33am by romp

DRAWN BY: MAB	REVISIONS			
CHECKED BY: RTS	LEVEL	BY	DATE	DESCRIPTION
CREATED: 10/28/10	1	RGP	1/30/14	80% SET FOR IDA REVIEW

CHAMLIN & ASSOCIATES
PERU MORRIS
ILLINOIS

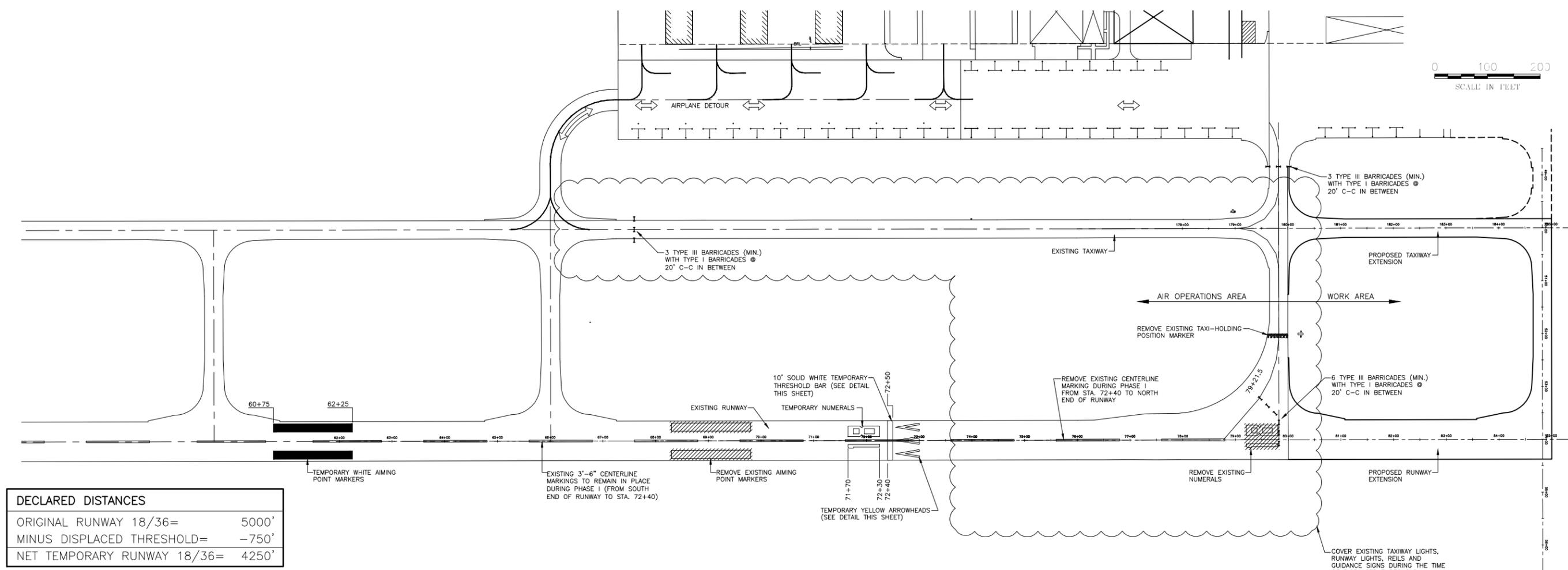
MORRIS MUNICIPAL AIRPORT
MORRIS, ILLINOIS

UNDERDRAIN PLAN

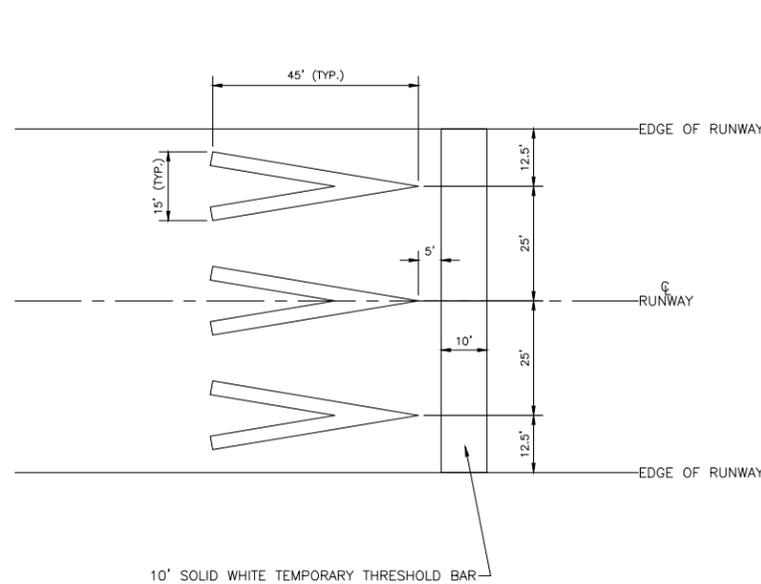
APPROVED FOR CONSTRUCTION

CURRENT AS OF: 3/21/14
SCALE: 1" = 40'
FILE NO.: 13128

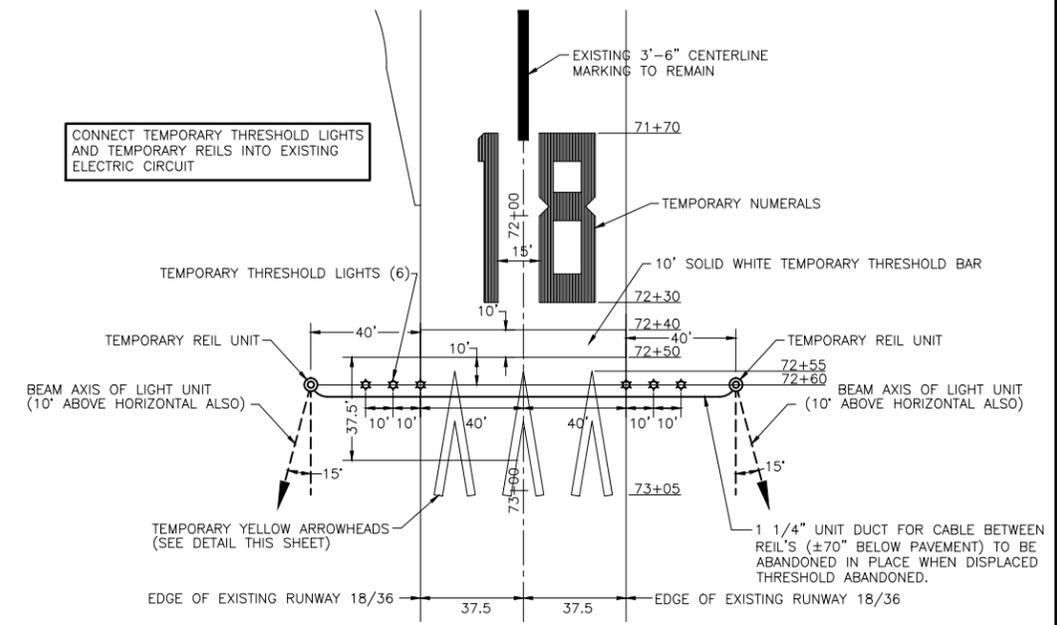
SHEET 7 OF 25



DECLARED DISTANCES	
ORIGINAL RUNWAY 18/36=	5000'
MINUS DISPLACED THRESHOLD=	-750'
NET TEMPORARY RUNWAY 18/36=	4250'



TEMPORARY CHEVRON DETAIL
NOT TO SCALE



RELOCATED THRESHOLD DETAIL
NOT TO SCALE

CHAMLIN & ASSOCIATES, INC. © 2009
Drawing Name: H:\A\08\11\002-76\C3D\08-TMP_PMARK.dwg Last Modified: Mar 21, 2014 - 2:11pm Plotted on: Mar 21, 2014 - 10:39am by rmp

DRAWN BY: MAB	REVISIONS			
	LEVEL	BY	DATE	DESCRIPTION
CHECKED BY: RTS	1	RGP	1/30/14	80% SET FOR IDA REVIEW
CREATED: 10/28/10	2	RGP	3/21/14	100% SET FOR IDA APPROVAL

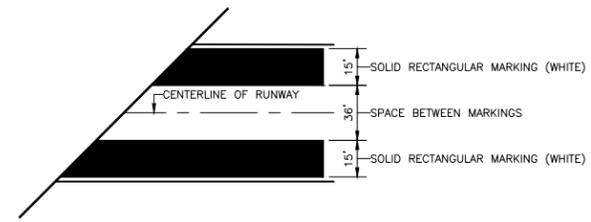
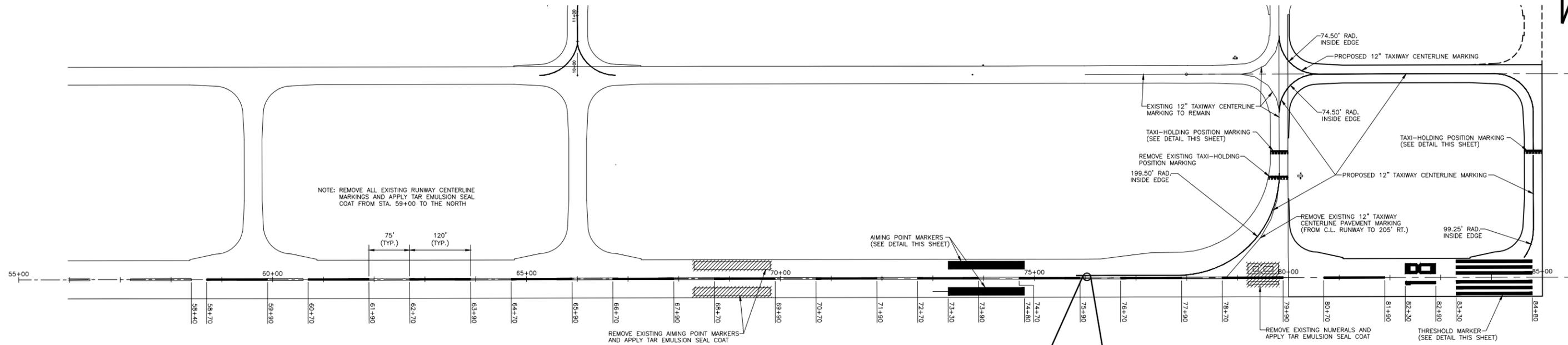
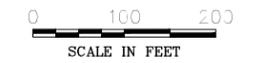
CHAMLIN & ASSOCIATES
PERU MORRIS
ILLINOIS

MORRIS MUNICIPAL AIRPORT
MORRIS, ILLINOIS

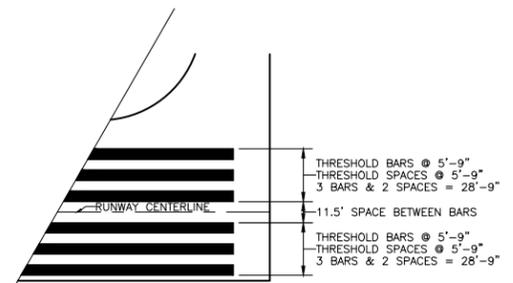
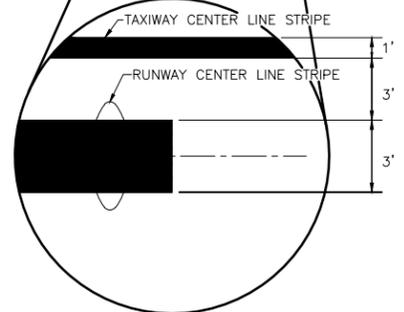
TEMPORARY PAVEMENT MARKING PLAN AND RELOCATED THRESHOLD PLAN AND DETAILS

APPROVED FOR CONSTRUCTION
CURRENT AS OF: 3/21/14
SCALE: 1 = 100
FILE NO.: 13128
SHEET 8 OF 25

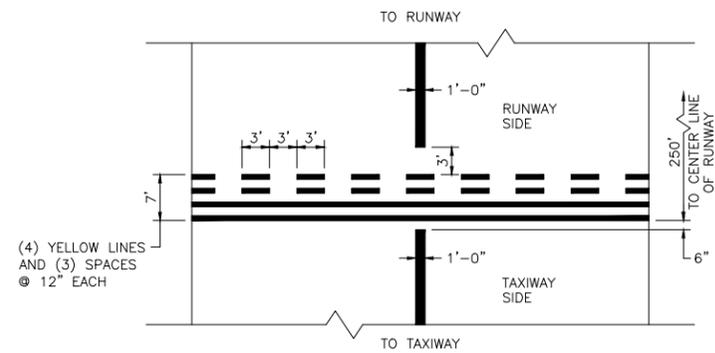
PAVEMENT MARKING TABLE (PER APPLICATION)			
ITEM NO. - DESCRIPTION	WHITE	YELLOW	TOTAL
AR 620520 - PAVEMENT MARKING - WATERBORNE	14,875 S.F.	2,095 S.F.	16,970 S.F.



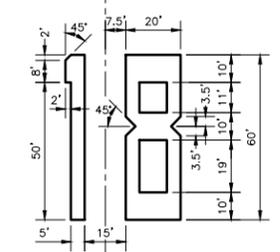
AIMING POINT MARKER
NOT TO SCALE



THRESHOLD MARKING (TYPICAL)
NOT TO SCALE



TAXI-HOLDING POSITION MARKING
NOT TO SCALE



NUMERAL DETAILS
NOT TO SCALE

NOTE:
ALL NUMERALS ARE SOLID (WHITE)

- NOTES:**
- 1.) ALL RUNWAY MARKING WHITE
 - 2.) ALL TAXIWAY MARKING - AVIATION YELLOW
 - 3.) THRESHOLD MARKERS, AIMING POINT MARKERS, RUNWAY CENTER LINES AND NUMERALS TO BE SOLID.

CHAMLIN & ASSOCIATES, INC. © 2009
Drawing Name: H:\A\ADB\1\1002-76\C3D\009-FERM_PMARK.dwg Last Modified: Mar 19, 2014 - 2:15pm Plotted on: Mar 21, 2014 - 10:42am by romp

DRAWN BY: MAB	REVISIONS			
	LEVEL	BY	DATE	DESCRIPTION
CHECKED BY: RTS	1	RGP	1/30/14	80% SET FOR IDA REVIEW
CREATED: 10/28/10	2	RGP	3/21/14	100% SET FOR IDA APPROVAL

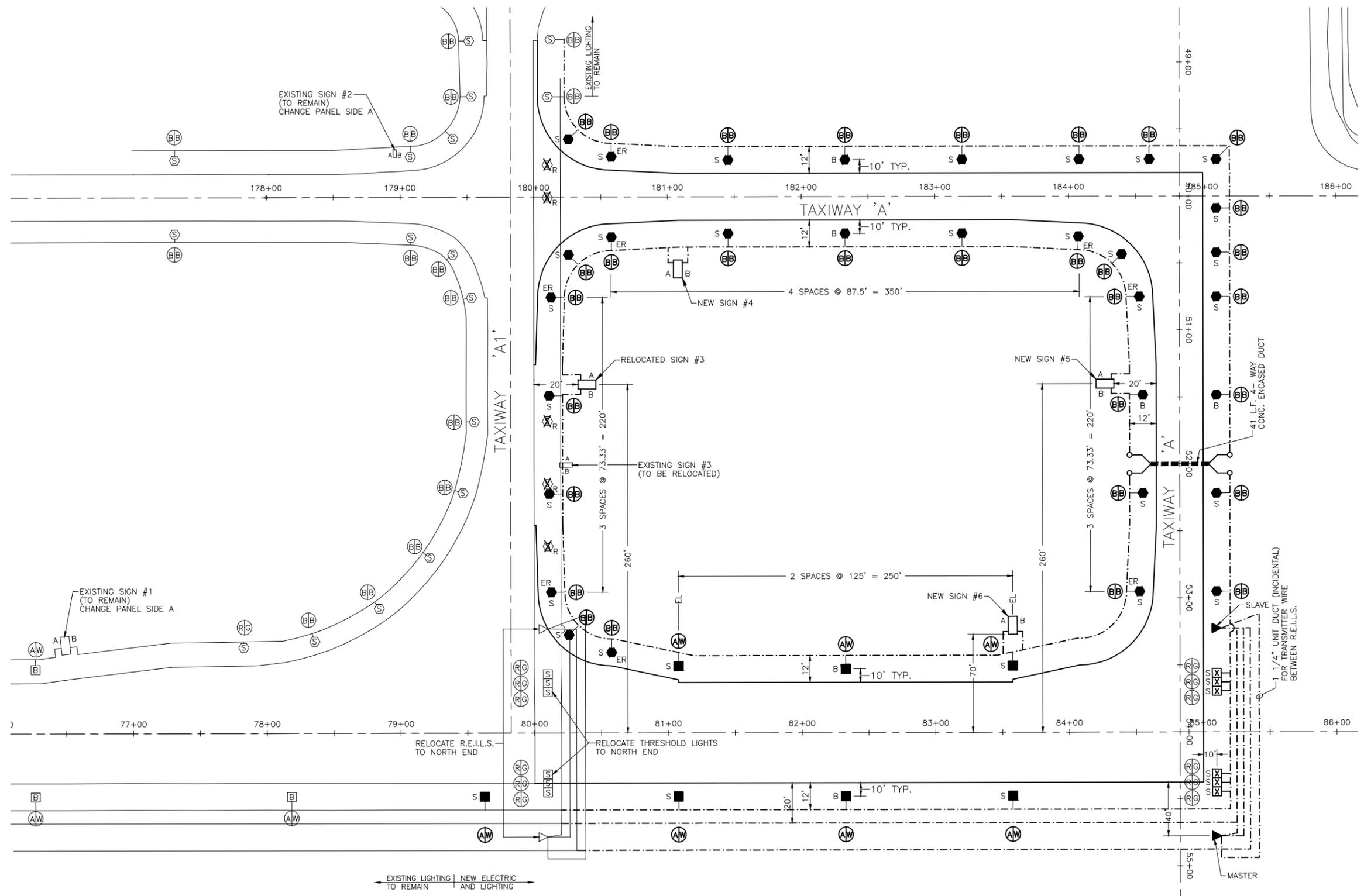
CHAMLIN & ASSOCIATES
PERU MORRIS
ILLINOIS

MORRIS MUNICIPAL AIRPORT
MORRIS, ILLINOIS

PERMANENT PAVEMENT MARKING PLAN AND DETAILS

APPROVED FOR CONSTRUCTION

CURRENT AS OF: 3/21/14	SHEET 9
SCALE: 1 = 100	OF 25
FILE NO.: 13128	



LEGEND

- EXISTING HIGH VOLTAGE CABLE
- - - PROPOSED HIGH VOLTAGE CABLE
- EXISTING 4-WAY CONCRETE ENCASED DUCT
- PROPOSED 4-WAY CONCRETE ENCASED DUCT
- ⊙ EXISTING MEDIUM INTENSITY TAXIWAY LIGHT (STAKE MOUNTED)
- ⊕ EXISTING MEDIUM INTENSITY TAXIWAY LIGHT (BASE MOUNTED)
- ⊙ B PROPOSED MEDIUM INTENSITY TAXIWAY LIGHT (BASE MOUNTED) BLUE LENS
- ⊙ B PROPOSED MEDIUM INTENSITY RUNWAY LIGHT (BASE MOUNTED)
- ⊙ S PROPOSED MEDIUM INTENSITY TAXIWAY LIGHT (STAKE MOUNTED) BLUE LENS
- ⊙ S PROPOSED MEDIUM INTENSITY RUNWAY LIGHT (STAKE MOUNTED)
- ⊙ S EXISTING MEDIUM INTENSITY RUNWAY LIGHT (STAKE MOUNTED)
- ⊕ EXISTING MEDIUM INTENSITY RUNWAY LIGHT (BASE MOUNTED)
- EXISTING TAXIWAY GUIDANCE SIGN
- PROPOSED TAXIWAY GUIDANCE SIGN
- ER END OF RADIUS
- EL END OF LEAD-IN FILLET
- CL EXTENDED CENTERLINE
- △ EXISTING R.E.I.L.S. TO BE RELOCATED
- ▲ RELOCATED R.E.I.L.S.
- ⊗ REMOVE EXISTING STAKE MOUNTED LIGHT
- ⊙ (A, B, G, R) DENOTES LENS COLOR
- W = WHITE
- A = AMBER
- B = BLUE
- G = GREEN
- R = RED
- ⊙ (A, B, G, R) EXISTING THRESHOLD LIGHTS TO BE RELOCATED
- ⊙ (A, B, G, R) RELOCATED THRESHOLD LIGHTS

GENERAL NOTES

1. BREAKING GROOVE OR BREAKABLE COUPLINGS SHALL NOT EXCEED 1-1/2" ABOVE FINISHED GRADE OR BASE COVER.
2. COPPER CLAD GR. RODS 5/8" DIA. X 8'-0" LG. SHALL BE DRIVEN 1'-0" BELOW FINISHED GRADE & COUNTERPOISE CABLE SECURELY ATTACHED TO SAME GROUND RODS SHALL BE SPACED MAX. OF 1000' APART AND LOCATED NEAR FIXTURE.
3. HIGH AND LOW VOLTAGE CABLE SHALL BE RUN IN SEPARATE UNDERGROUND DUCTS.
4. WHEN HIGH AND LOW VOLTAGE CABLES ARE IN A HANDHOLE OR MANHOLE, PROTECTION SHALL BE MADE AROUND THE HIGH VOLTAGE CABLE. THE METHOD OF PROTECTION SHALL BE BY SPLIT DUCT ANCHOR CLIPPED TO THE WALL.
5. L-861 SPECIFICATION DENOTES RUNWAY LIGHT FIXTURE. L-861T DENOTES TAXIWAY LIGHT FIXTURE.

CHAMLIN & ASSOCIATES, INC. © 2009
 Drawing Name: H:\A\ADB\11\1002-78\C3D\1010-ELECTRIC.dwg Last Modified: Mar. 19, 2014 - 2:18pm Plotted on: Mar. 21, 2014 - 10:46am by rmp

DRAWN BY: MAB	REVISIONS			
CHECKED BY: RTS	LEVEL	BY	DATE	DESCRIPTION
CREATED: 10/28/10	1	RGP	1/30/14	80% SET FOR IDA REVIEW

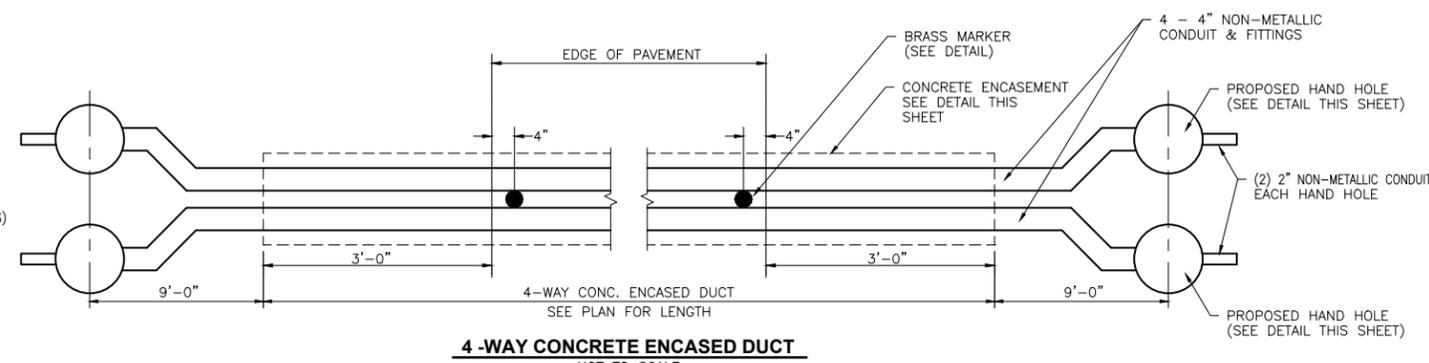
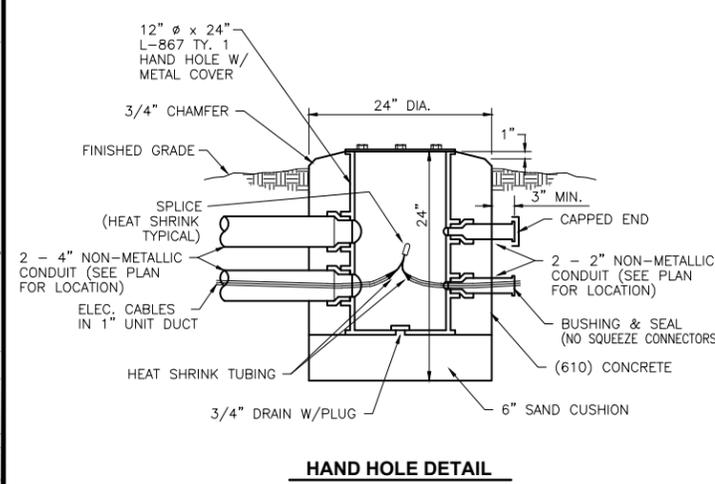
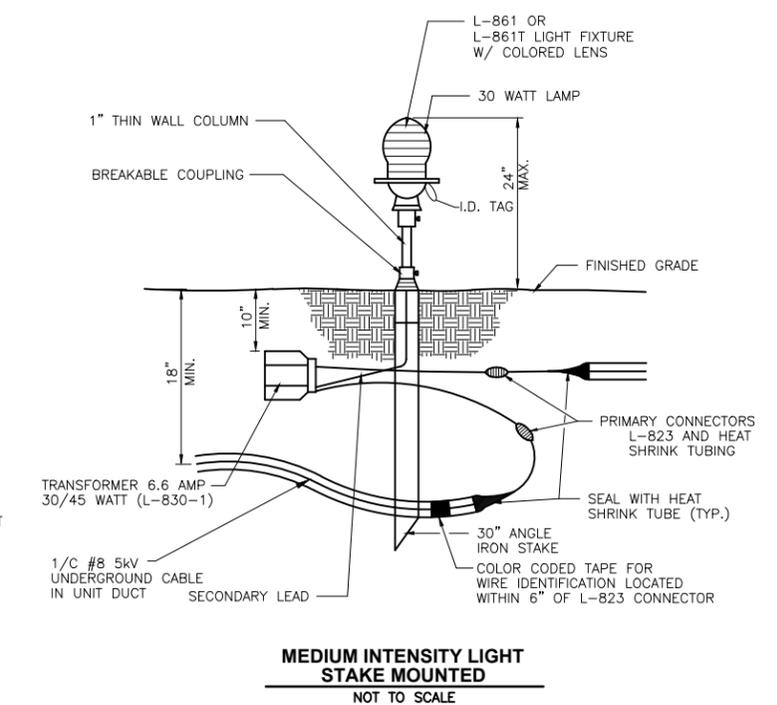
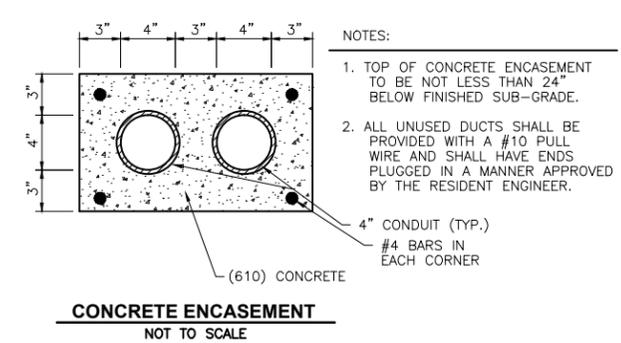
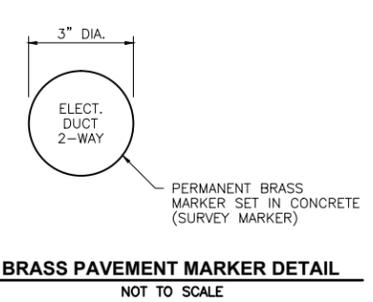
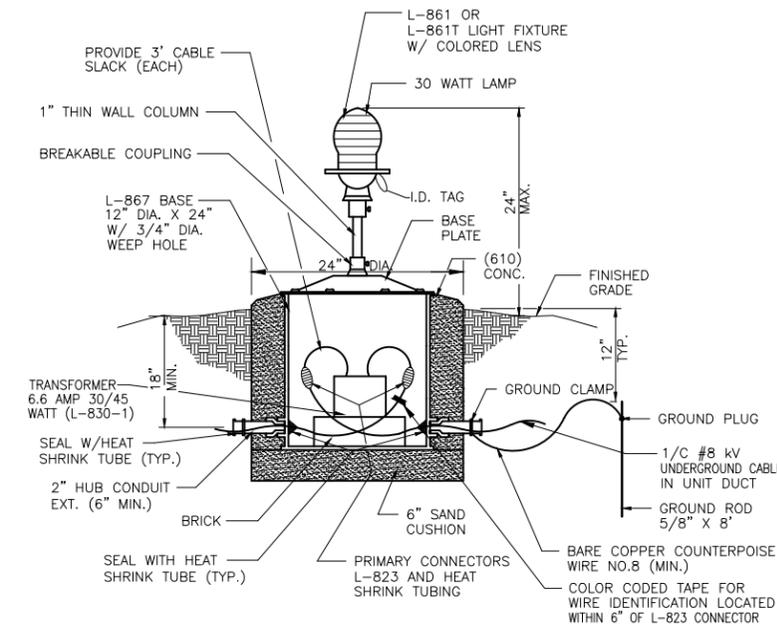
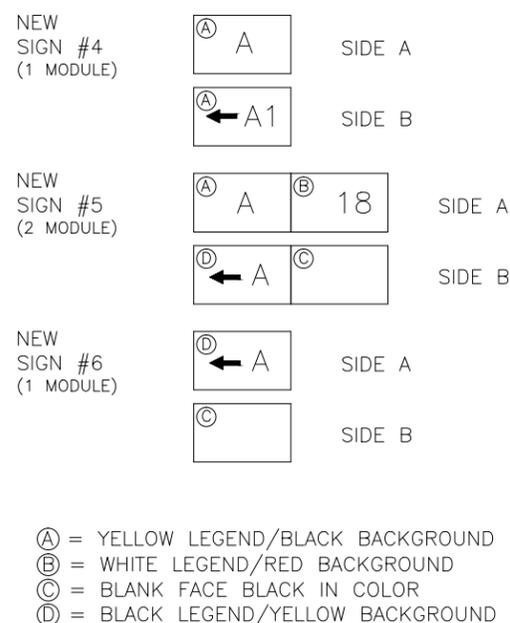
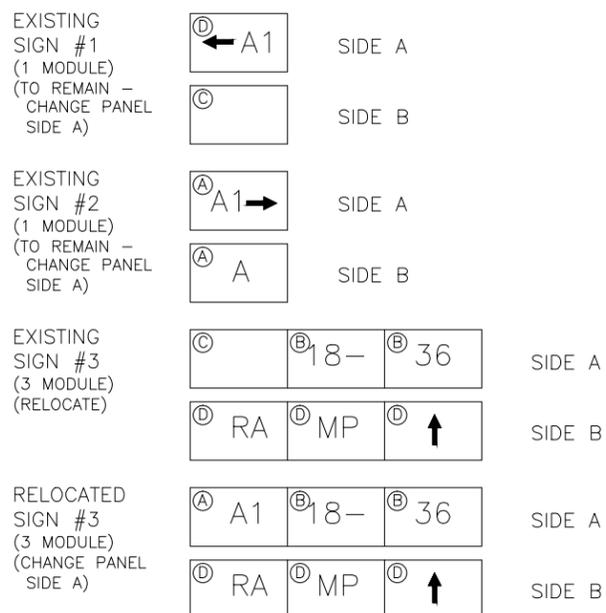
CHAMLIN & ASSOCIATES
 PERU MORRIS
 ILLINOIS

MORRIS MUNICIPAL AIRPORT
 MORRIS, ILLINOIS

ELECTRICAL PLAN

APPROVED FOR CONSTRUCTION	CURRENT AS OF: 3/21/14 SCALE: 1 = 40 FILE NO.: 13128	SHEET 10 OF 25
-------------------------------------	--	-------------------

LEGEND PANELS FOR TAXIWAY GUIDANCE/RUNWAY EXIT SIGNS



CHAMLIN & ASSOCIATES, INC. © 2009
 Drawing Name: H:\A\08\11\002-76\C3D\011-ELECTRICAL.dwg Last Modified: Mar 19, 2014 - 2:31pm Plotted on: Mar 21, 2014 - 10:49am by rmp

DRAWN BY: MAB	REVISIONS			
CHECKED BY: RTS	LEVEL	BY	DATE	DESCRIPTION
CREATED: 10/28/10	1	RGP	1/30/14	80% SET FOR IDA REVIEW

CHAMLIN & ASSOCIATES
 PERU MORRIS
 ILLINOIS

MORRIS MUNICIPAL AIRPORT
 MORRIS, ILLINOIS

ELECTRICAL DETAILS

APPROVED FOR CONSTRUCTION

CURRENT AS OF: 3/21/14

SCALE: 1 = 40

FILE NO.: 13128

SHEET 11 OF 25

PROJECT ELECTRICAL NOTES

- RELOCATE EXISTING RUNWAY/TAXIWAY LIGHTS AS SHOWN. PROVIDE NEW STAKE AT RELOCATED STAKE-MOUNTED LIGHTS. REUSE EXISTING LENSES OR PROVIDE NEW LENSES WHERE SHOWN.
- ALL EQUIPMENT SHALL BE GROUNDED TO THE EXISTING COUNTERPOISE LOOP.
- COPPER CLAD GROUND RODS 5/8" DIAMETER X 8'-0" LONG SHALL BE DRIVEN 1'-0" BELOW FINISHED GRADE AND COUNTERPOISE CABLE SECURELY ATTACHED TO SAME. GROUND RODS SHALL BE SPACED AT A MAXIMUM OF 1000' APART AND BE LOCATED NEAR FIXTURES. THE COUNTERPOISE CABLE SHALL BE ATTACHED TO THE GROUND ROD BY AN EXOTHERMIC WELDED CONNECTION. SOLDERED OR BOLT AND WASHER TYPE CONNECTIONS ARE NOT ACCEPTABLE. CLEAN ALL METAL SURFACES BEFORE MAKING GROUND CONNECTIONS. RESISTANCE TO GROUND OF THE COUNTERPOISE SYSTEM MUST NOT EXCEED 25 OHMS.

ELECTRICAL NOTES (AC 150/5340-30; APPENDIX 5)

GENERAL

- THE ELECTRICAL INSTALLATION, AS A MINIMUM, MUST MEET THE NEC AND LOCAL REGULATIONS.
- THE CONTRACTOR MUST ASCERTAIN THAT ALL LIGHTING SYSTEM COMPONENTS FURNISHED BY HIM (INCLUDING FAA APPROVED EQUIPMENT) ARE COMPATIBLE IN ALL RESPECTS WITH EACH OTHER AND THE REMAINDER OF THE NEW/EXISTING SYSTEM. ANY NON-COMPATIBLE COMPONENTS FURNISHED BY THIS CONTRACTOR MUST BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE AIRPORT SPONSOR WITH A SIMILAR UNIT, APPROVED BY THE ENGINEER (DIFFERENT MODEL OR DIFFERENT MANUFACTURER), THAT IS COMPATIBLE WITH THE REMAINDER OF THE AIRPORT LIGHTING SYSTEM.
- IN CASE THE CONTRACTOR SELECTS TO FURNISH AND INSTALL AIRPORT LIGHTING EQUIPMENT REQUIRING ADDITIONAL WIRING, TRANSFORMERS, ADAPTERS, MOUNTINGS, ETC., TO THOSE SHOWN ON THE DRAWINGS AND/OR LISTED IN THE SPECIFICATIONS, ANY COST FOR THESE ITEMS MUST BE INCIDENTAL TO THE EQUIPMENT COST.
- THE CONTRACTOR-INSTALLED EQUIPMENT (INCLUDING FAA APPROVED) MUST NOT GENERATE ANY ELECTROMAGNETIC INTERFERENCE IN THE EXISTING AND/OR NEW COMMUNICATIONS, WEATHER, AIR NAVIGATION, AND AIR TRAFFIC CONTROL EQUIPMENT. ANY EQUIPMENT GENERATING SUCH INTERFERENCE MUST BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST WITH EQUIPMENT MEETING THE APPLICABLE SPECIFICATIONS AND NOT GENERATING ANY INTERFERENCE.
- WHEN A SPECIFIC TYPE, STYLE, CLASS, ETC., OF FAA APPROVED EQUIPMENT IS SPECIFIED ONLY THAT TYPE, STYLE, CLASS, ETC., WILL BE ACCEPTABLE, EVEN THOUGH EQUIPMENT OF OTHER TYPES, STYLE, CLASS, ETC., MAY BE FAA APPROVED.
- ANY AND ALL INSTRUCTIONS FROM THE ENGINEER TO THE CONTRACTOR REGARDING CHANGES IN, OR DEVIATIONS FROM, THE PLANS AND SPECIFICATIONS MUST BE IN WRITING WITH COPIES SENT TO THE AIRPORT SPONSOR AND THE FAA FIELD OFFICE (ADO/AFO). THE CONTRACTOR MUST NOT ACCEPT ANY VERBAL INSTRUCTIONS FROM THE ENGINEER REGARDING ANY CHANGES FROM THE PLANS AND SPECIFICATIONS.
- A MINIMUM OF THREE COPIES OF INSTRUCTION BOOKS MUST BE SUPPLIED WITH EACH DIFFERENT TYPE OF EQUIPMENT. THE BOOKS DESCRIBING A MORE SOPHISTICATED TYPE OF EQUIPMENT, SUCH AS REGULATORS, PAPI, REIL, ETC., AT A MINIMUM MUST CONTAIN THE FOLLOWING:
 - A DETAILED DESCRIPTION OF THE OVERALL EQUIPMENT AND ITS INDIVIDUAL COMPONENTS.
 - THEORY OF OPERATION INCLUDING THE FUNCTION OF EACH COMPONENT.
 - INSTALLATION INSTRUCTIONS.
 - START-UP INSTRUCTIONS.
 - PREVENTATIVE MAINTENANCE REQUIREMENTS.
 - CHART FOR TROUBLESHOOTING.
- COMPLETE POWER AND CONTROL DETAILED WIRING DIAGRAM(S), SHOWING EACH CONDUCTOR/CONNECTION/COMPONENT. "BLACK" BOXES ARE NOT ACCEPTABLE. THE DIAGRAM OR THE NARRATIVE MUST SHOW VOLTAGES/CURRENTS/WAVE SHAPES AT STRATEGIC LOCATIONS TO BE USED WHEN CHECKING AND/OR TROUBLESHOOTING THE EQUIPMENT. WHEN THE EQUIPMENT HAS SEVERAL BRIGHTNESS STEPS, THESE PARAMETERS MUST BE INDICATED FOR ALL THE DIFFERENT MODES.
- PARTS LIST WILL INCLUDE ALL MAJOR AND MINOR COMPONENTS, SUCH AS RESISTORS, DIODES, ETC. IT MUST INCLUDE A COMPLETE NOMENCLATURE OF EACH COMPONENT AND, IF APPLICABLE, THE NAME OF ITS MANUFACTURER AND THE CATALOG NUMBER.
- SAFETY INSTRUCTIONS.

POWER AND CONTROL

- STENCIL ALL ELECTRICAL EQUIPMENT TO IDENTIFY FUNCTION, CIRCUIT VOLTAGE AND PHASE. WHERE THE EQUIPMENT CONTAINS FUSES, ALSO STENCIL THE FUSE OR FUSE LINK AMPERE RATING. WHERE THE EQUIPMENT DOES NOT HAVE SUFFICIENT STENCILING AREA, THE STENCILING MUST BE DONE ON THE WALL NEXT TO THE UNIT. THE LETTERS MUST BE ONE INCH HIGH AND PAINTED IN WHITE OR BLACK PAINT TO PROVIDE THE HIGHEST CONTRAST WITH THE BACKGROUND.
- COLOR CODE ALL PHASE WIRING BY THE USE OF COLORED WIRE INSULATION AND/OR COLORED TAPE. WHERE TAPE IS USED, THE WIRE INSULATION MUST BE BLACK, BLACK AND RED MUST BE USED FOR SINGLE-PHASE, THREE WIRE SYSTEMS AND BLACK, RED AND BLUE MUST BE USED FOR THREE-PHASE SYSTEMS. NEUTRAL CONDUCTORS, SIZE NO. 6 AWG OR SMALLER, MUST BE IDENTIFIED BY A CONTINUOUS WHITE OR NATURAL CONDUCTORS LARGER THAN NO. 6 AWG MUST BE IDENTIFIED EITHER BY A CONTINUOUS WHITE OR NATURAL GRAY OUTER FINISH ALONG ITS ENTIRE LENGTH OR BY THE USE OF WHITE TAPE AT ITS TERMINATIONS AND INSIDE ACCESSIBLE WIREWAYS.
- ALL BRANCH CIRCUIT CONDUCTORS CONNECTED TO A PARTICULAR PHASE MUST BE IDENTIFIED WITH THE SAME COLOR. THE COLOR CODING MUST EXTEND TO THE POINT OF UTILIZATION.
- IN CONTROL WIRING THE SAME COLOR MUST BE USED THROUGHOUT THE SYSTEM FOR THE SAME FUNCTION, SUCH AS 10%, 30%, 100% BRIGHTNESS CONTROL, ETC.
- ALL POWER AND CONTROL CIRCUIT CONDUCTORS MUST BE COPPER; ALUMINUM WILL NOT BE ACCEPTED. THIS INCLUDES WIRE, CABLE, BUSSES, TERMINALS, SWITCH/PANEL COMPONENTS, ETC.

- LOW VOLTAGE (600 V.) AND HIGH VOLTAGE (5000 V.) CONDUCTORS MUST BE INSTALLED IN SEPARATE WIREWAYS.
- NEATLY LACE WIRING IN DISTRIBUTION PANELS, WIREWAYS, SWITCHES AND PULL/JUNCTION BOXES.
- THE MINIMUM SIZE OF PULL/JUNCTION BOXES, REGARDLESS OF THE QUANTITY AND THE SIZE OF THE CONDUCTORS SHOWN, MUST BE AS FOLLOWS:
 - IN STRAIGHT PULLS THE LENGTH OF THE BOX MUST NOT BE LESS THAN EIGHT TIMES THE TRADE DIAMETER OF THE LARGER CONDUIT. THE TOTAL AREA (INCLUDING THE CONDUIT CROSS-SECTIONAL AREA) OF A BOX END MUST BE AT LEAST 3 TIMES GREATER THAN THE TOTAL TRADE CROSS-SECTIONAL AREA OF THE CONDUITS TERMINATING AT THE END.
 - IN ANGLE OR U-PULLS THE DISTANCE BETWEEN EACH CONDUIT ENTRY INSIDE THE BOX AND THE OPPOSITE WALL OF THE BOX MUST NOT BE LESS THAN SIX TIMES THE TRADE DIAMETER OF THE LARGEST CONDUIT. THIS DISTANCE MUST BE INCREASED FOR ADDITIONAL ENTRIES BY THE AMOUNT OF THE SUM OF THE DIAMETERS OF ALL OTHER CONDUIT ENTRIES ON THE SAME WALL OF THE BOX. THE DISTANCE BETWEEN CONDUIT ENTRIES ENCLOSING THE SAME CONDUCTOR MUST NOT BE LESS THAN SIX TIMES THE TRADE DIAMETER OF THE LARGEST CONDUIT.
- A RUN OF CONDUIT BETWEEN TERMINATIONS AT EQUIPMENT ENCLOSURES, SQUARE DUCTS AND PULL/JUNCTION BOXES, MUST NOT CONTAIN MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS (360 DEGREES TOTAL), INCLUDING THOSE BENDS LOCATED IMMEDIATELY AT THE TERMINATIONS. CAST, CONDUIT TYPE OUTLETS MUST NOT BE TREATED AS PULL/JUNCTION BOXES.
- EQUIPMENT CABINETS MUST NOT BE USED AS PULL/JUNCTION BOXES. ONLY WIRING TERMINATING AT THE EQUIPMENT MUST BE BROUGHT INTO THESE ENCLOSURES.
- SPLICES AND JUNCTION POINTS WILL BE PERMITTED ONLY IN JUNCTION BOXES, DUCTS EQUIPPED WITH REMOVABLE COVERS, AND AT EASILY ACCESSIBLE LOCATIONS.
- CIRCUIT BREAKERS IN POWER DISTRIBUTION PANEL(S) MUST BE THERMAL-MAGNETIC, MOLDED CASE, PERMANENT TRIP WITH 100-AMPERE, MINIMUM, FRAME.
- DUAL LUGS MUST BE USED WHERE TWO WIRES, SIZE NO. 6 OR LARGER, ARE TO BE CONNECTED TO THE SAME TERMINAL.
- ALL WALL MOUNTED EQUIPMENT ENCLOSURES MUST BE MOUNTED ON WOODEN MOUNTING BOARDS.
- WOODEN EQUIPMENT MOUNTING BOARDS MUST BE PLYWOOD, EXTERIOR TYPE, 3/4 INCH MINIMUM THICKNESS, BOTH SIDES PAINTED WITH ONE COAT OF PRIMER AND TWO COATS OF GRAY, OIL-BASED PAINT.
- RIGID STEEL CONDUIT MUST BE USED THROUGHOUT THE INSTALLATION UNLESS OTHERWISE SPECIFIED. THE MINIMUM TRADE SIZE SHALL BE 3/4 INCH.
- ALL RIGID CONDUIT MUST BE TERMINATED AT CONSTANT CURRENT REGULATORS WITH A SECTION (10" MINIMUM) OF FLEXIBLE CONDUIT.
- UNLESS OTHERWISE SHOWN, ALL EXPOSED CONDUITS SHALL BE RUN PARALLEL TO, OR AT RIGHT ANGLES WITH, THE LINES OF THE STRUCTURE.
- ALL STEEL CONDUITS, FITTINGS, NUTS, BOLTS, ETC., SHALL BE GALVANIZED.
- USE CONDUIT BUSHINGS AT EACH CONDUIT TERMINATION. WHERE NO. 4 AWG OR LARGER UNGROUNDED WIRE IS INSTALLED, USE INSULATED BUSHINGS.
- USE DOUBLE LOCK NUTS AT EACH CONDUIT TERMINATION.
- WRAP ALL PRIMARY AND SECONDARY POWER TRANSFORMER CONNECTIONS WITH SUFFICIENT LAYERS OF INSULATING TAPE AND COVER WITH INSULATING VARNISH FOR FULL VALUE OF CABLE INSULATION VOLTAGE.
- UNLESS OTHERWISE NOTED, ALL INDOOR SINGLE CONDUCTOR CONTROL WIRING MUST BE NO. 12 AWG.
- BOTH ENDS OF EACH CONTROL CONDUCTOR SHALL BE TERMINATED AT A TERMINAL BLOCK. THE TERMINAL BLOCK MUST BE OF PROPER RATING AND SIZE FOR THE FUNCTION INTENDED AND BE LOCATED IN EQUIPMENT ENCLOSURES OR SPECIAL TERMINAL CABINETS.
- ALL CONTROL CONDUCTOR TERMINATORS MUST BE OF THE OPEN-EYE CONNECTOR/SCREW TYPE. SOLDERED, CLOSED-EYED TERMINATORS, OR TERMINATORS WITHOUT CONNECTORS ARE NOT ACCEPTABLE.
- IN TERMINAL BLOCK CABINETS THE MINIMUM SPACING BETWEEN PARALLEL TERMINAL BLOCKS SHALL BE 6 INCHES. THE MINIMUM SPACING BETWEEN TERMINAL BLOCK SIDES/ENDS AND CABINET SIDES/BOTTOM/TOP SHALL BE 5 INCHES. THE MINIMUM SPACING WILL BE INCREASED AS REQUIRED BY THE NUMBER OF CONDUCTORS. ADDITIONAL SPACING MUST BE PROVIDED AT CONDUCTOR ENTRANCES.
- BOTH ENDS OF ALL CONTROL CONDUCTORS MUST BE IDENTIFIED AS TO THE CIRCUIT, TERMINAL, BLOCK, AND TERMINAL NUMBER. ONLY STICK-ON LABELS SHALL BE USED.
- A SEPARATE AND CONTINUOUS NEUTRAL CONDUCTOR SHALL BE INSTALLED AND CONNECTED FOR EACH BREAKER CIRCUIT IN THE POWER PANEL(S) FROM THE NEUTRAL BAR TO EACH POWER/CONTROL CIRCUIT.
- THE FOLLOWING WILL APPLY TO RELAY/CONTACTOR PANEL/ENCLOSURES:
 - ALL COMPONENTS SHALL BE MOUNTED IN DUST PROOF ENCLOSURES WITH VERTICALLY HINGED COVERS.
 - THE ENCLOSURES MUST HAVE AMPLE SPACE FOR THE CIRCUIT COMPONENTS, TERMINAL BLOCKS, AND INCOMING INTERNAL WIRING.
 - ALL INCOMING/OUTGOING WIRING SHALL BE TERMINATED AT TERMINAL BLOCKS.
 - EACH TERMINAL ON TERMINAL BLOCKS AND ON CIRCUIT COMPONENTS MUST BE CLEARLY IDENTIFIED.
 - ALL CONTROL CONDUCTOR TERMINATIONS MUST BE OF THE OPEN-EYE CONNECTOR/SCREW TYPE. SOLDERED, CLOSED-EYE CONNECTORS, OR TERMINATIONS WITHOUT CONNECTORS ARE NOT ACCEPTABLE.

- WHEN THE ENCLOSURE COVER IS OPENED, ALL CIRCUIT COMPONENTS, WIRING, AND TERMINALS MUST BE EXPOSED AND ACCESSIBLE WITHOUT ANY REMOVAL OF ANY PANELS, COVERS, ETC., EXCEPT THOSE COVERING HIGH VOLTAGE COMPONENTS.
- ACCESS TO, OR REMOVAL OF, A CIRCUIT COMPONENT OR TERMINAL BLOCK SHALL NOT REQUIRE THE REMOVAL OF ANY OTHER CIRCUIT COMPONENT OR TERMINAL BLOCK.
- EACH CIRCUIT COMPONENT MUST BE CLEARLY IDENTIFIED INDICATING ITS CORRESPONDING NUMBER SHOWN ON THE DRAWING AND ITS FUNCTION.
- A COMPLETE WIRING DIAGRAM (NOT A SCHEMATIC DIAGRAM) MUST BE MOUNTED ON THE INSIDE OF THE COVER. THE DIAGRAM MUST REPRESENT EACH CONDUCTOR BY A SEPARATE LINE.
- THE DIAGRAM MUST IDENTIFY EACH CIRCUIT COMPONENT AND NUMBERING AND COLOR OF EACH INTERNAL CONDUCTOR AND TERMINAL.
- ALL WIRING MUST BE NEATLY TRAINED AND LACED.
- MINIMUM WIRE SIZE SHALL BE NO. 12 AWG.

FIELD LIGHTING

- UNLESS OTHERWISE NOTIFIED, ALL UNDERGROUND FIELD POWER MULTIPLE AND SERIES CIRCUIT CONDUCTORS WHETHER DIRECT EARTH BURIAL (DEB) OR IN DUCT/CONDUIT MUST BE FAA APPROVED L-824 TYPE. INSULATION VOLTAGE AND SIZE AS SPECIFIED.
- NO COMPONENTS OF PRIMARY CIRCUIT SUCH AS CABLE, CONNECTORS AND TRANSFORMERS WILL BE BROUGHT ABOVE GROUND AT EDGE LIGHTS, SIGNS, REILS, ETC.
- THERE MUST BE NO EXPOSED POWER/CONTROL CABLES BETWEEN THE POINT WHERE THEY LEAVE THE UNDERGROUND (DEB OR L-867 BASES) AND WHERE THEY ENTER THE EQUIPMENT (SUCH AS TAXIWAY SIGNS, PAPI, REILS, ETC.) ENCLOSURES. THESE CABLES SHALL BE ENCLOSED IN RIGID CONDUIT OR IN FLEXIBLE WATERTIGHT CONDUIT WITH FRANGIBLE COUPLING(S) AT GRADE OR THE HOUSING COVER, AS SHOWN IN APPLICABLE DETAILS.
- THE JOINTS OF THE L-823 PRIMARY CONNECTORS SHALL BE WRAPPED WITH ONE LAYER OF RUBBER OR SYNTHETIC RUBBER TAPE AND ONE LAYER OF PLASTIC TAPE, ONE HALF LAPPED, EXTENDING AT LEAST 1-1/2 INCHES ON EACH SIDE OF THE JOINT, AS SHOWN IN FIGURE 122 OF AC 150/5340-30.
- THE CABLE ENTRANCE INTO THE FIELD ATTACHED L-823 CONNECTORS MUST BE ENCLOSED BY A HEAT-SHRINKABLE TUBING WITH CONTINUOUS INTERNAL ADHESIVE AS SHOWN IN FIGURE 122 OF AC 150/5340-30.
- THE ID OF THE PRIMARY L-823 FIELD ATTACHED CONNECTORS MUST MATCH THE CABLE ID TO PROVIDE A WATERTIGHT CABLE ENTRANCE. THIS ENTRANCE SHALL BE ENCAPSULATED IN A HEAT SHRINKABLE TUBING WITH CONTINUOUS FACTORY APPLIED INTERNAL ADHESIVE, AS SHOWN IN FIGURE 122 OF AC 150/5340-30.
- L-823 TYPE 11, TWO-CONDUCTOR SECONDARY CONNECTOR SHALL BE CLASS "A" (FACTORY MOLDED).
- THERE SHALL BE NO SPLICES IN THE SECONDARY CABLE(S) WITHIN THE STEMS OF A RUNWAY/TAXIWAY EDGE/THRESHOLD LIGHTING FIXTURES AND THE WIREWAYS LEADING TO TAXIWAY SIGNS AND PAPI/REIL EQUIPMENT.
- ELECTRICAL INSULATING GREASE SHALL BE APPLIED WITHIN THE L-823, SECONDARY, TWO CONDUCTOR CONNECTORS TO PREVENT WATER ENTRANCE. THESE CONNECTORS SHALL NOT BE TAPED.
- DEB ISOLATION TRANSFORMERS SHALL BE BURIED AT A DEPTH OF 10 INCHES ON A LINE CROSSING THE LIGHT AND PERPENDICULAR TO THE RUNWAY/TAXIWAY CENTERLINE AT A LOCATION 12 INCHES FROM THE LIGHT OPPOSITE FROM THE RUNWAY/TAXIWAY.
- DEB PRIMARY CONNECTORS SHALL BE BURIED AT A DEPTH OF 10 INCHES NEAR THE ISOLATION TRANSFORMER. THEY MUST BE ORIENTATED PARALLEL WITH THE RUNWAY/TAXIWAY CENTERLINE. THERE SHALL BE NO BENDS IN THE PRIMARY CABLE 6 INCHES, MINIMUM, FROM THE ENTRANCE INTO THE FIELD-ATTACHED PRIMARY CONNECTION.
- A SLACK OF 3 FEET, MINIMUM, SHALL BE PROVIDED IN THE PRIMARY CABLE AT EACH TRANSFORMER/CONNECTOR TERMINATION. AT STAKE-MOUNTED LIGHTS THE SLACK SHALL BE LOOSELY COILED IMMEDIATELY BELOW THE ISOLATION TRANSFORMER.
- DIRECTION OF PRIMARY CABLES SHALL BE IDENTIFIED BY COLOR CODING AS FOLLOWS: WHEN FACING LIGHT WITH BACK FACING PAVEMENT, CABLE TO THE LEFT IS CODED RED AND CABLE TO THE RIGHT IS CODED BLUE, THIS APPLIES TO THE STAKE-MOUNTED LIGHTS AND BASE-MOUNTED LIGHTS WHERE THE BASE HAS ONLY ONE ENTRANCE.
- L-867 BASES SHALL BE SIZE B, 24" DEEP CLASS 1 UNLESS OTHERWISE NOTED.
- BASE-MOUNTED FRANGIBLE COUPLINGS SHALL NOT HAVE WEEP HOLES TO THE OUTSIDE. PLUGGED UP HOLES WILL NOT BE ACCEPTABLE. IT MUST HAVE A 1/4" DIAMETER MINIMUM OR EQUIVALENT OPENING FOR DRAINAGE FROM THE SPACE AROUND THE SECONDARY CONNECTOR INTO THE L-867 BASE.
- THE ELEVATION OF THE FRANGIBLE COUPLING GROOVE SHALL NOT EXCEED 1-1/2" ABOVE THE EDGE OF THE COVER IN CASE OF BASE-MOUNTED COUPLINGS, OR THE TOP OF THE STAKE IN CASE OF STAKE-MOUNTED COUPLINGS.
- WHERE THE FRANGIBLE COUPLING IS NOT AN INTEGRAL PART OF THE LIGHT FIXTURE STEM OR MOUNTING LEG, A BEAD OF SILICON SEAL MUST BE APPLIED COMPLETELY AROUND THE LIGHT STEM OR WIREWAY AT FRANGIBLE COUPLING TO PROVIDE A WATERTIGHT SEAL.
- TOPS OF THE STAKES SUPPORTING LIGHT FIXTURES SHALL BE FLUSH WITH THE SURROUNDING GRADE.
- PLASTIC LIGHTING FIXTURE COMPONENTS, SUCH AS LAMP HEADS, STEMS, FRANGIBLE COUPLINGS, BASE COVERS, BRACKETS, STAKES, WILL NOT BE ACCEPTABLE. L-867 PLASTIC TRANSFORMER HOUSINGS ARE ACCEPTABLE. THE METAL THREADED FITTING SHALL BE SET IN THE FLANGE DURING THE CASTING PROCESS. BASE COVER BOLTS SHALL BE FABRICATED FROM 18-8 STAINLESS STEEL.
- THE TOLERANCE FOR THE HEIGHT OF RUNWAY/TAXIWAY EDGE LIGHTS IS ± ONE (1) INCH. IN CASE OF STAKE-MOUNTED LIGHTS, THE SPECIFIED LIGHTING FIXTURE HEIGHT SHALL BE MEASURED BETWEEN THE TOP OF THE STAKE AND THE TOP OF THE LENS. IN CASE OF BASE-MOUNTED LIGHTS, THE SPECIFIED LIGHTING FIXTURE HEIGHT SHALL BE MEASURED BETWEEN THE TOP OF THE BASE FLANGE AND THE TOP OF THE LENS, THUS INCLUDING THE BASE COVER, THE FRANGIBLE COUPLING, THE STEM, THE LAMP HOUSING AND THE LENS.

CONTRACT NO. = MR021

- THE TOLERANCE FOR THE LATERAL SPACING (LIGHT LANE TO RUNWAY/TAXIWAY CENTERLINE) OF RUNWAY/TAXIWAY EDGE LIGHTS IS ± ONE (1) INCH. THIS ALSO APPLIES AT INTERSECTIONS TO LATERAL SPACING BETWEEN LIGHTS OF A RUNWAY/TAXIWAY AND THE INTERSECTING RUNWAY/TAXIWAY.
- SOIL PERMITTING, THE L-867 BASES SHALL NOT BE PRE-CAST IN CONCRETE. CONCRETE AROUND THE BASES MUST BE USED AS A BACKFILL.
- ENTRANCES INTO L-867 BASES SHALL BE PLUGGED FROM THE INSIDE WITH DUCT SEAL.
- GALVANIZED/PAINTED EQUIPMENT/COMPONENT SURFACES SHALL NOT BE DAMAGED BY DRILLING, FILING, ETC. DRAIN HOLES IN METAL TRANSFORMER HOUSINGS SHALL BE MADE BEFORE GALVANIZED.
- EDGE LIGHT NUMBERING TAGS SHALL BE FACING THE PAVEMENT.
- CABLE/SPLICE/DUCT MARKERS MUST BE PRE-CAST CONCRETE OF THE SIZE SHOWN. LETTERS/NUMBERS/ARROWS FOR THE LEGEND TO BE IMPRESSED INTO THE TOPS OF THE MARKERS MUST BE PRE-ASSEMBLED AND SECURED IN THE MOLD BEFORE THE CONCRETE IS POURED. LEGEND INSCRIBED BY HAND IN WET CONCRETE WILL NOT BE ACCEPTABLE.
- ALL UNDERGROUND CABLE RUNS SHALL BE IDENTIFIED BY CABLE MARKERS AT 200 FEET MAXIMUM SPACING, WITH AN ADDITIONAL MARKER AT EACH CHANGE OF DIRECTION OF THE CABLE RUN. CABLE MARKERS SHALL BE INSTALLED IMMEDIATELY ABOVE THE CABLE.
- LOCATIONS OF ALL DEB UNDERGROUND CABLE SPLICE/CONNECTIONS, EXCEPT THOSE AT ISOLATION TRANSFORMERS, SHALL BE IDENTIFIED BY SPLICE MARKERS. SPLICE MARKERS SHALL BE PLACED IMMEDIATELY ABOVE THE SPLICE/CONNECTIONS.
- THE CABLE AND SPLICE MARKERS MUST IDENTIFY THE CIRCUITS WHICH THE CABLES BELONG TO, SUCH AS RWY 4-22, PAPI-4, PAPI-22, ETC.
- LOCATIONS OF ENDS OF ALL UNDERGROUND DUCTS MUST BE IDENTIFIED BY DUCT MARKERS.
- THE PREFERRED MOUNTING METHOD OF RUNWAY AND TAXIWAY SIGNS IS BY THE USE OF A SINGLE ROW OF LEGS. HOWEVER, TWO ROWS WILL BE ACCEPTABLE.
- THE PREFERRED METHOD TO BRING THE POWER CABLE INTO AN L-858 SIGN IS METHOD A, AS SHOWN IN FIGURE 126 OF AC 150/5340-30, HOWEVER, METHOD B WILL ALSO BE ACCEPTABLE.
- STENCIL HORIZONTAL AND VERTICAL AIMING ANGLES ON EACH REIL FLASH HEAD OR EQUIPMENT ENCLOSURE. THE NUMERALS MUST BE BLACK AND ONE INCH MINIMUM HEIGHT.
- ALL POWER AND CONTROL CABLES IN MAN/HAND HOLES MUST BE TAGGED. USE EMBOSSED COPPER STRIPS ATTACHED AT BOTH ENDS TO THE CABLE BY THE USE OF PLASTIC STRAPS. MINIMUM OF TWO TAGS MUST BE PROVIDED ON EACH CABLE IN A MAN/HAND HOLE - ONE AT THE CABLE ENTRANCE AND ONE AT THE CABLE EXIT.
- APPLY AN OXIDE INHIBITING, ANTI-SEIZING COMPOUND TO ALL SCREWS, NUTS AND FRANGIBLE COUPLING THREADS.
- THERE SHALL BE NO SPLICES BETWEEN THE ISOLATION TRANSFORMERS. L-823 CONNECTORS ARE ALLOWED AT TRANSFORMER CONNECTIONS ONLY, UNLESS OTHERWISE SHOWN.
- DEB SPLICES IN HOME RUNS SHALL BE OF THE CAST TYPE A, UNLESS OTHERWISE SHOWN. SEE FIG. 120 OF AC 150/5340-30 FOR DETAILS.
- CONCRETE USED FOR SLABS, FOOTING, OR BACKFILL AROUND TRANSFORMER HOUSINGS, MARKERS, ETC., SHALL BE 3000 PSI, MIN., AIR-ENTRAINED.

GROUNDING

- GROUND ALL NON-CURRENT-CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT BY USING NO. 6 AWG BARE COPPER WIRE TO BE RUN INSIDE CABINETS AND IN CONDUITS TOGETHER WITH OTHER WIRES. WHERE THIS IS NOT FEASIBLE, RUN THE EXPOSED GROUNDING WIRE PARALLEL OR AT RIGHT ANGLES TO THE BUILDING LINE AND SECURE IT AT LEAST EVERY 24 INCHES AND WITHIN 6 INCHES FROM BEND OR JUNCTION. THE EXPOSED WIRE MAY BE NO. 6 AWG IF IT IS NOT SUBJECTED TO PHYSICAL ABUSE, OTHERWISE NO. 4 AWG SHALL BE USED.
- ALL GROUND CONNECTIONS TO GROUND RODS, BUSSES, PANELS, ETC., MUST BE MADE WITH PRESSURE TYPE SOLDERLESS LUGS AND GROUND CLAMPS. SOLDERED OR BOLT AND WASHER TYPE CONNECTIONS ARE NOT ACCEPTABLE. CLEAN ALL METAL SURFACES BEFORE MAKING GROUND CONNECTIONS.
- TOPS OF GROUND RODS SHALL BE A MIN. 12" INCHES BELOW GRADE.
- THE RESISTANCE TO GROUND OF THE VAULT GROUNDING SYSTEM WITH THE COMMERCIAL POWER LINE NEUTRAL DISCONNECTED MUST NOT EXCEED 10 OHMS.
- THE RESISTANCE TO GROUND OF THE COUNTERPOISE SYSTEM, OR AT ISOLATION LOCATIONS, SUCH AS AIRPORT BEACON MUST NOT EXCEED 25 OHMS.

CHAMLIN & ASSOCIATES, INC. © 2009 Drawing Name: H:\A\DOB\11\1002-76\C30\012-ELECTRICAL.dwg Last Modified: Mar 19, 2014 - 2:22pm Plotted on: Mar 21, 2014 - 10:53am by rmp

DRAWN BY: MAB	REVISIONS			
	LEVEL	BY	DATE	DESCRIPTION
CHECKED BY: RTS	1	RGP	1/30/14	80% SET FOR IDA REVIEW
CREATED: 10/28/10				

CHAMLIN & ASSOCIATES
PERU MORRIS ILLINOIS

MORRIS MUNICIPAL AIRPORT
MORRIS, ILLINOIS

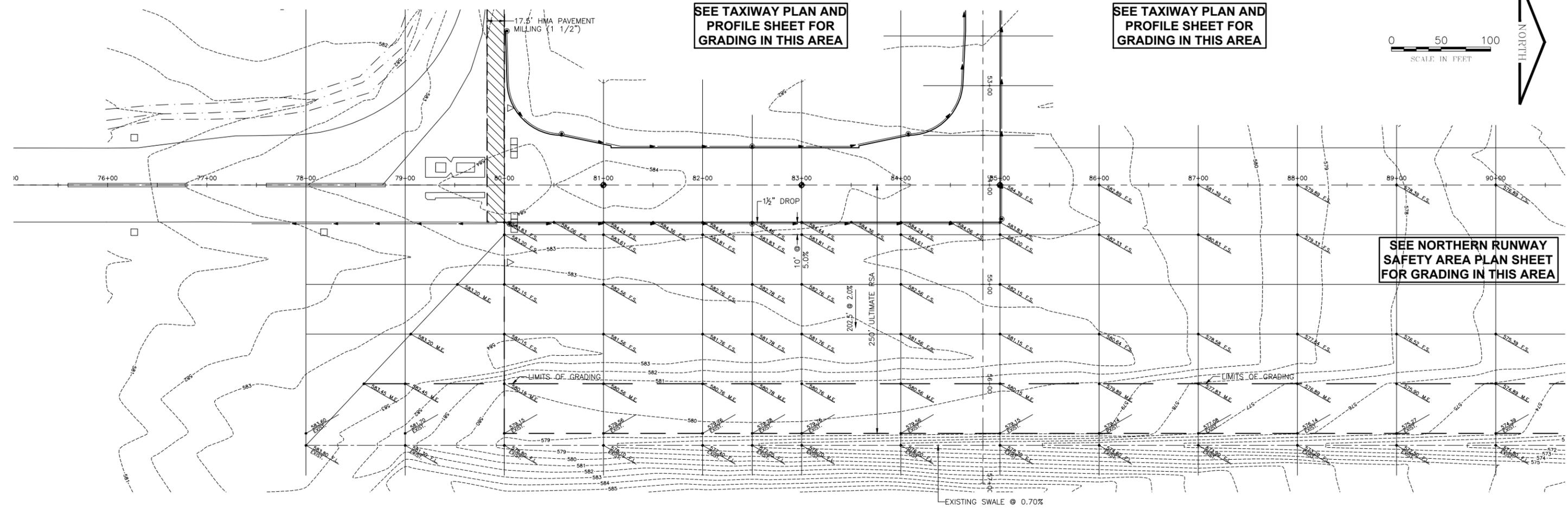
ELECTRICAL NOTES

APPROVED FOR CONSTRUCTION

CURRENT AS OF: 3/21/14

SCALE: 1 = 40 SHEET 12

FILE NO.: 13128 OF 25

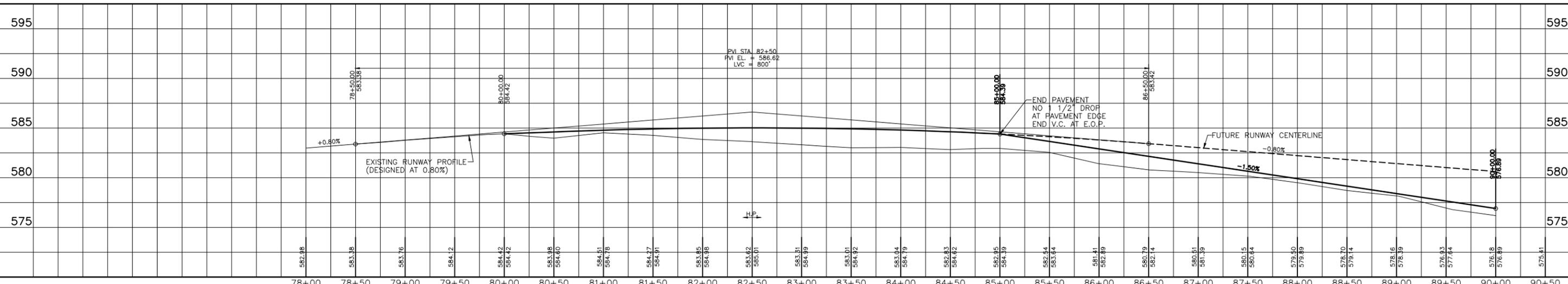


SEE TAXIWAY PLAN AND PROFILE SHEET FOR GRADING IN THIS AREA

SEE TAXIWAY PLAN AND PROFILE SHEET FOR GRADING IN THIS AREA



SEE NORTHERN RUNWAY SAFETY AREA PLAN SHEET FOR GRADING IN THIS AREA



CHAMLIN & ASSOCIATES, INC. © 2009
 Drawing Name: H:\A\DOB\11002-76\C3D\014-RUNWAY-PP.dwg Last Modified: Mar 19, 2014 - 2:28pm Plotted on: Mar 21, 2014 - 11:06am by romp

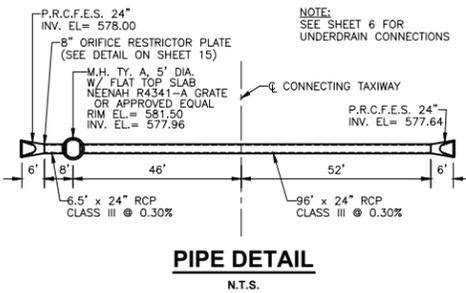
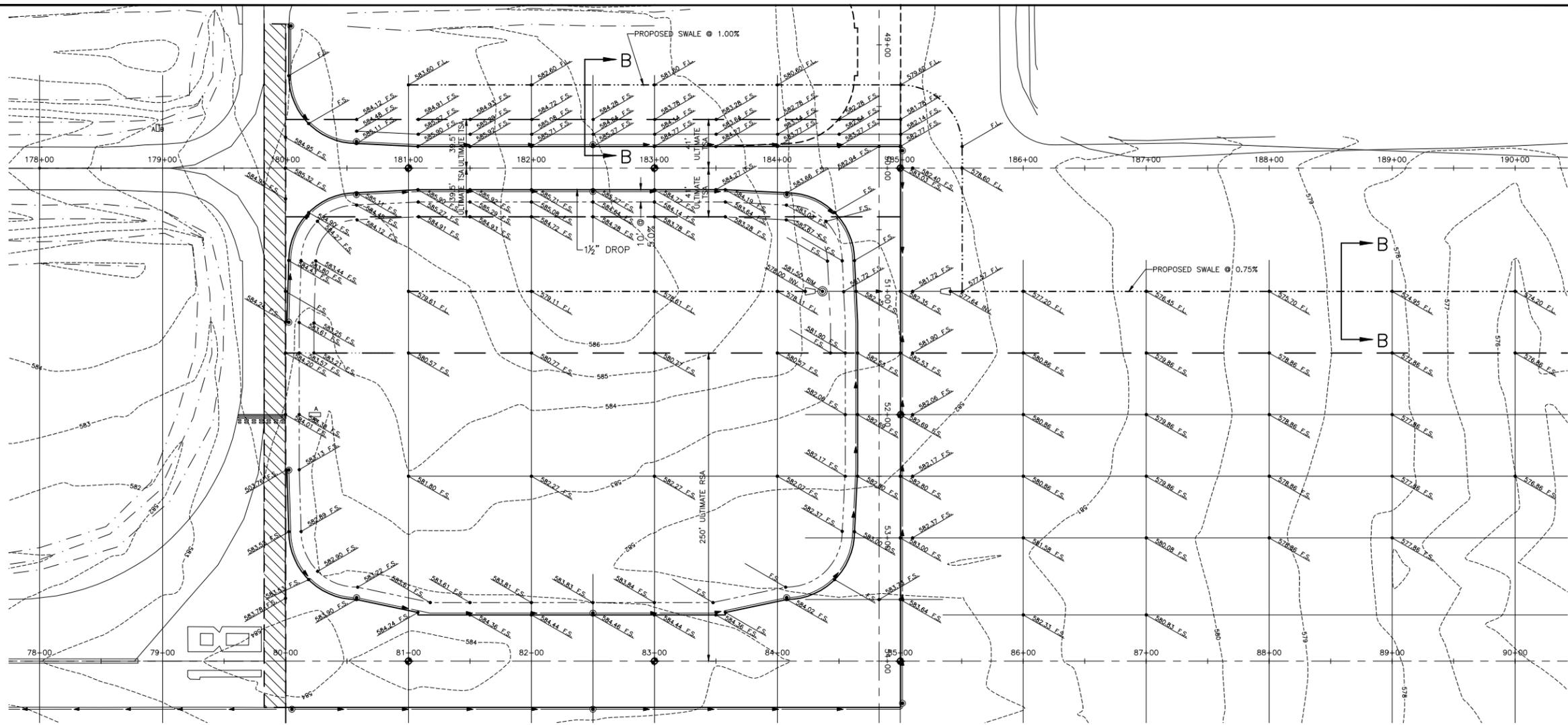
DRAWN BY: MAB	REVISIONS			
CHECKED BY: RTS	LEVEL	BY	DATE	DESCRIPTION
CREATED: 10/28/10	1	RGP	1/30/14	80% SET FOR IDA REVIEW

CHAMLIN & ASSOCIATES
 PERU MORRIS ILLINOIS

MORRIS MUNICIPAL AIRPORT
 MORRIS, ILLINOIS

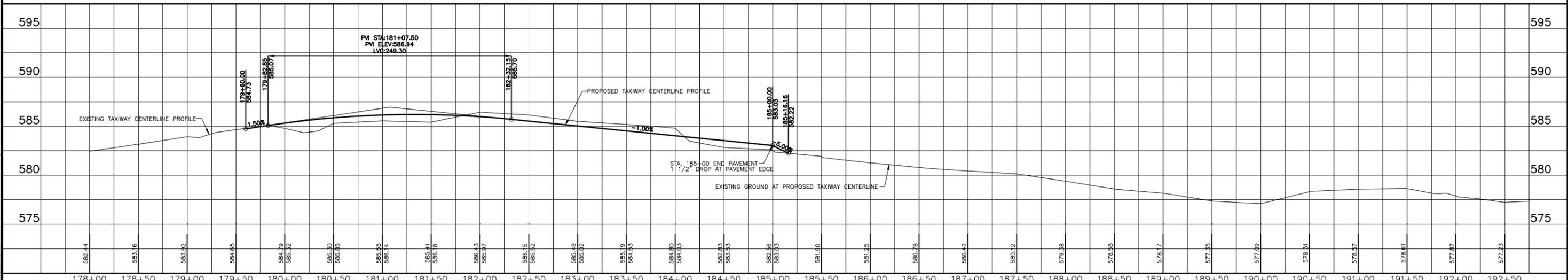
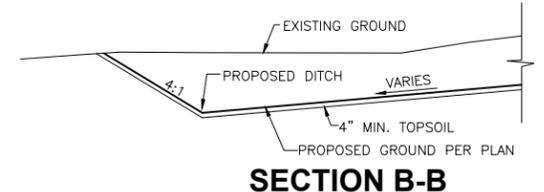
RUNWAY PLAN AND PROFILE

APPROVED FOR CONSTRUCTION
 CURRENT AS OF: 3/21/14
 SCALE: 1 = 50
 SHEET 14 OF 25
 FILE NO.: 13128



SEE NORTHERN RUNWAY SAFETY AREA PLAN SHEET FOR GRADING IN THIS AREA

SEE RUNWAY PLAN AND PROFILE SHEET FOR GRADING IN THIS AREA



CHAMLIN & ASSOCIATES, INC. © 2009
Drawing Name: H:\A\08\11002-78\C3D\015-TAXI-PP.dwg Last Modified: Mar 19, 2014 - 2:30pm Plotted on: Mar 21, 2014 - 11:08am by rmp

DRAWN BY: MAB	REVISIONS			
CHECKED BY: RTS	LEVEL	BY	DATE	DESCRIPTION
CREATED: 10/28/10	1	RGP	1/30/14	80% SET FOR IDA REVIEW

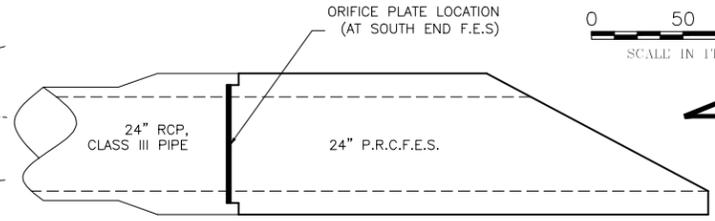
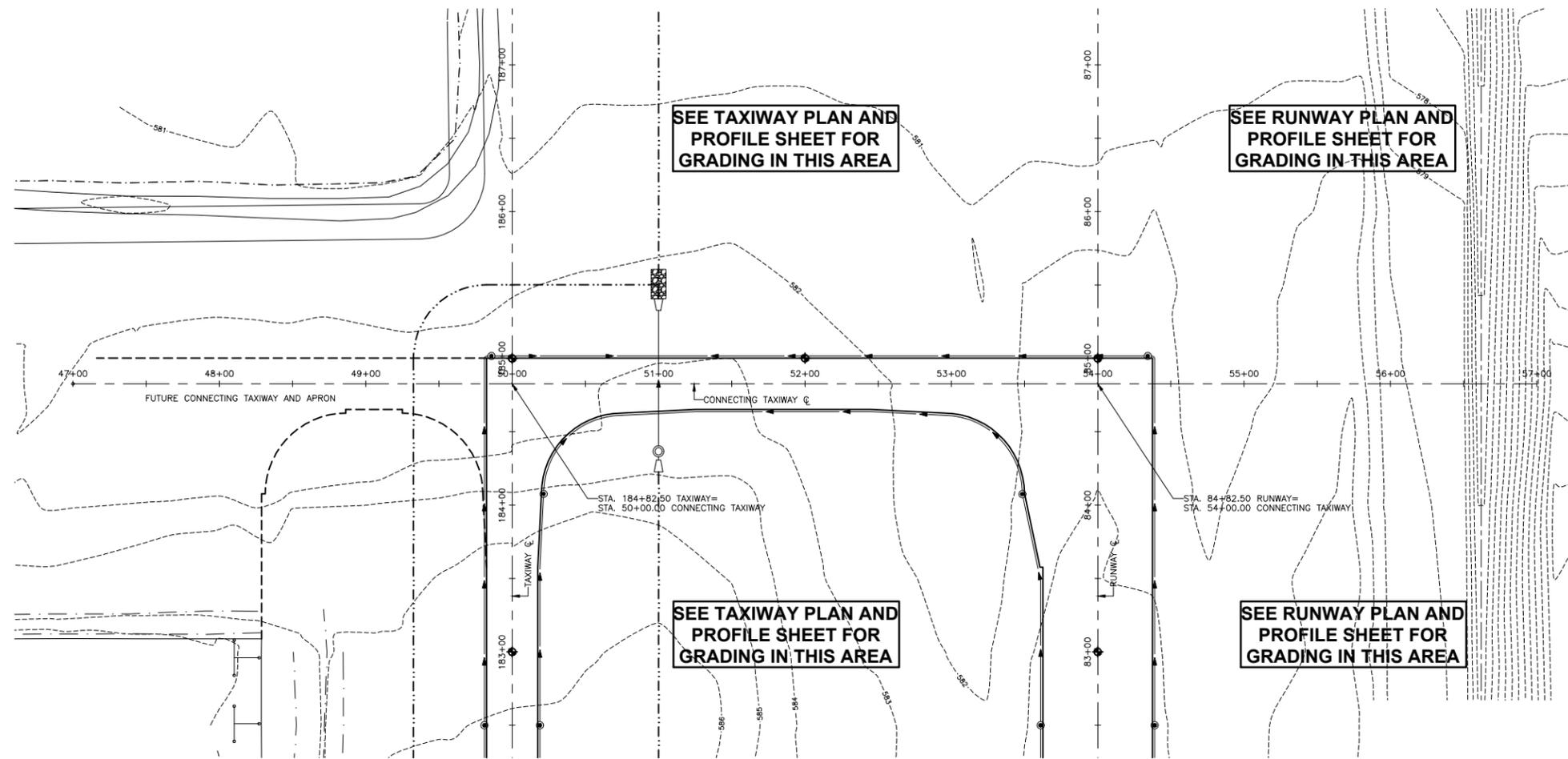
CHAMLIN & ASSOCIATES
PERU MORRIS
ILLINOIS

MORRIS MUNICIPAL AIRPORT
MORRIS, ILLINOIS

TAXIWAY PLAN AND PROFILE

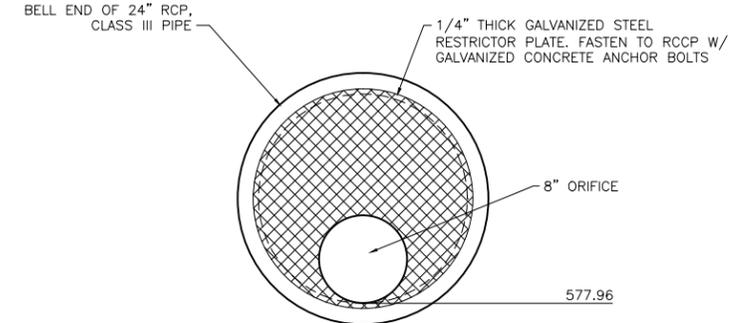
APPROVED FOR CONSTRUCTION

CURRENT AS OF: 3/21/14	SHEET 15
SCALE: 1 = 50	OF 25
FILE NO.: 13128	



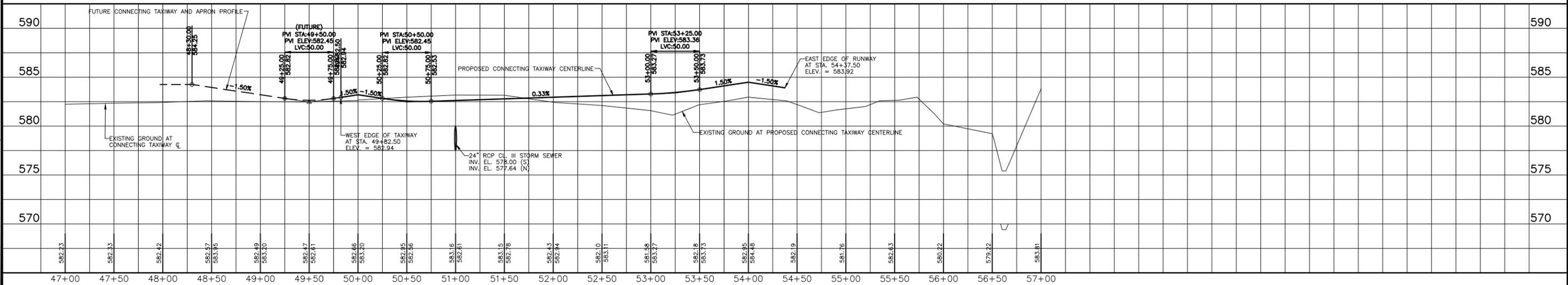
ORIFICE PLATE LOCATION

N.T.S.



DETAIL 8" ORIFICE PLATE

N.T.S.



CHAMLIN & ASSOCIATES, INC. © 2009
Drawing Name: H:\A\DOB\11002-76\C3D\016-CON TAXI-PP.dwg Last Modified: Mar 19, 2014 - 2:33pm Plotted on: Mar 21, 2014 - 11:14am by: romp

DRAWN BY: MAB	REVISIONS			
CHECKED BY: RTS	LEVEL	BY	DATE	DESCRIPTION
CREATED: 10/28/10	1	RGP	1/30/14	80% SET FOR IDA REVIEW

CHAMLIN & ASSOCIATES
PERU MORRIS
ILLINOIS

MORRIS MUNICIPAL AIRPORT
MORRIS, ILLINOIS

CONNECTING TAXIWAY PLAN AND PROFILE

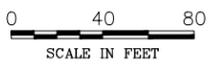
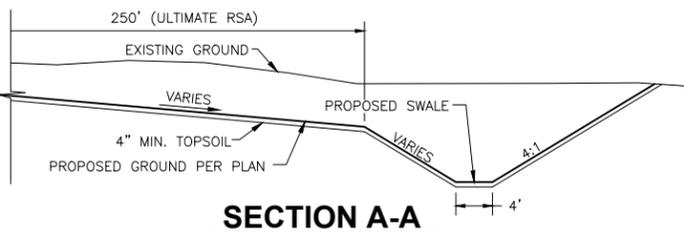
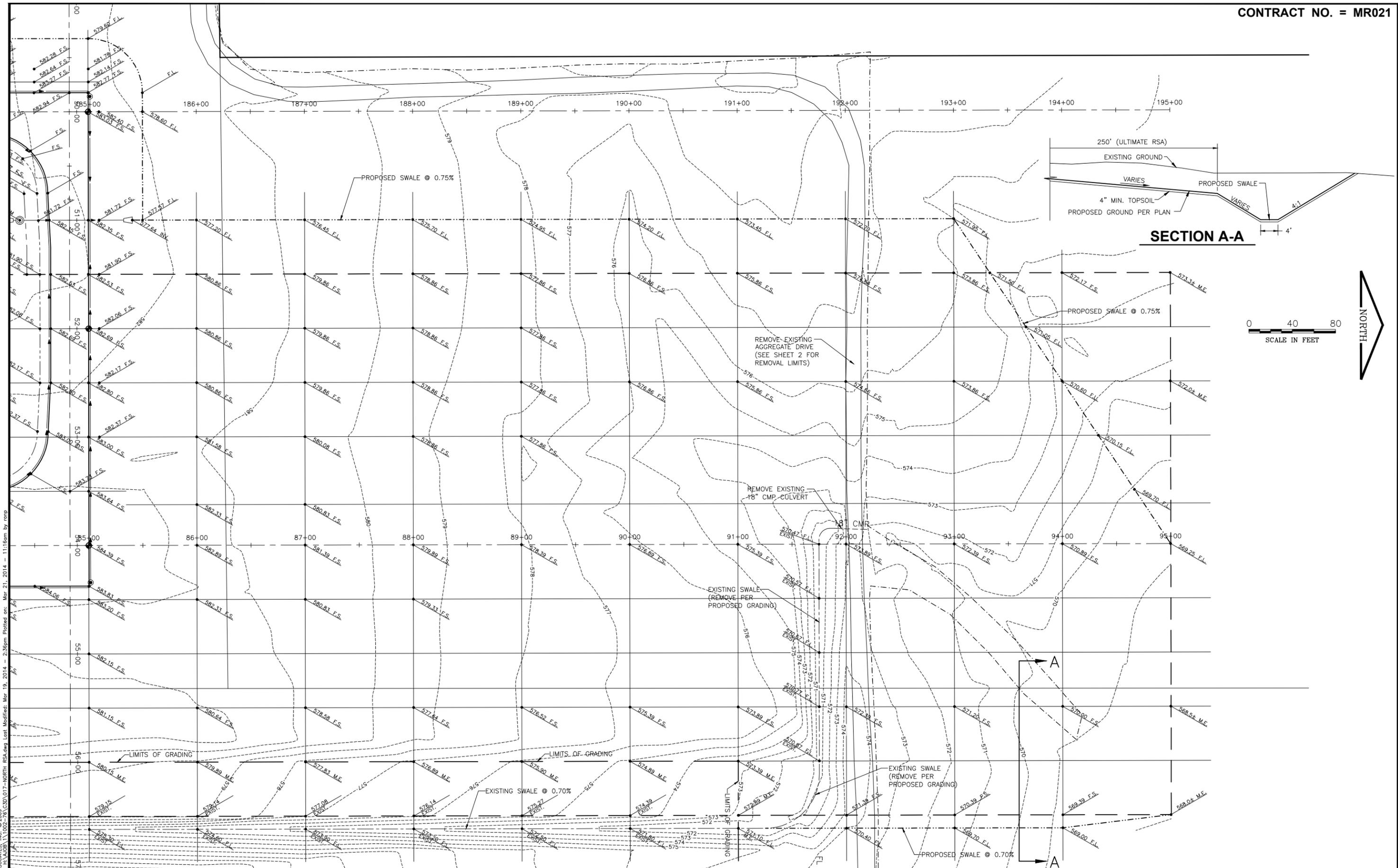
APPROVED FOR CONSTRUCTION

CURRENT AS OF: 3/21/14

SCALE: 1 = 50

FILE NO.: 13128

SHEET 16 OF 25



CHAMLIN & ASSOCIATES, INC. © 2009
 DRAWING NAME: H:\A08\11002-76\C3D\017-NORTH RSA.dwg Last Modified: Mar 19, 2014 - 2:36pm Plotted on: Mar 21, 2014 - 2:36pm by rmp

DRAWN BY: MAB		REVISIONS			
LEVEL	BY	DATE	DESCRIPTION		
1	RGP	1/30/14	80% SET FOR IDA REVIEW		
CHECKED BY: RTS					
CREATED: 10/28/10					

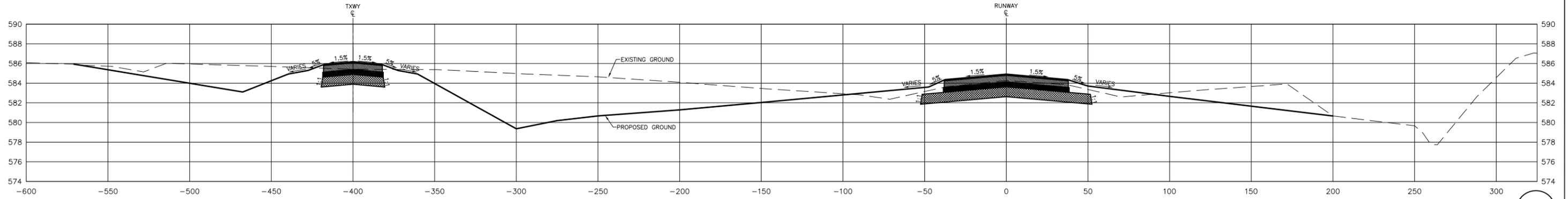
PERU MORRIS
 ILLINOIS

MORRIS MUNICIPAL AIRPORT
MORRIS, ILLINOIS

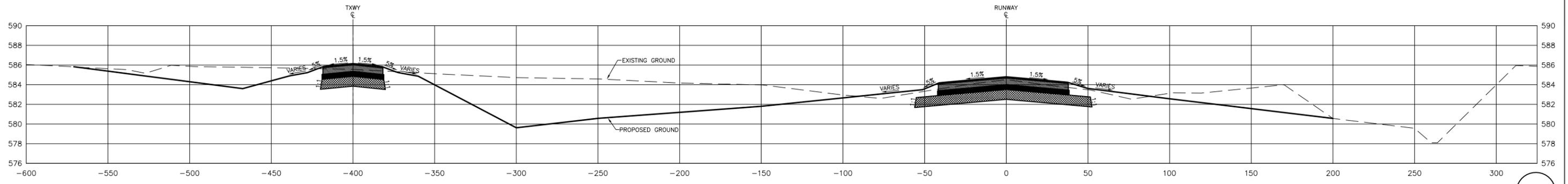
NORTHERN RUNWAY AREA GRADING PLAN

APPROVED
 FOR CONSTRUCTION

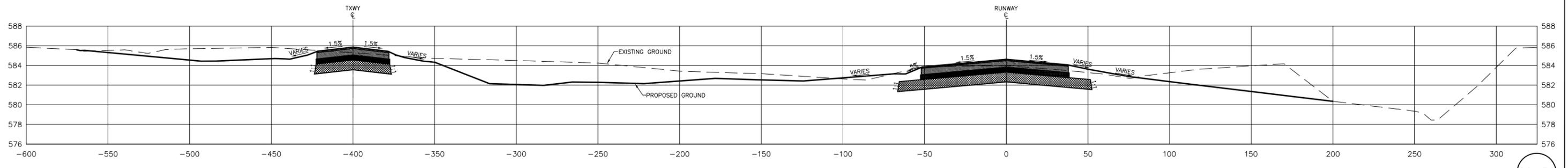
CURRENT AS OF: 3/21/14	SHEET 17
SCALE: 1 = 40	OF 25
FILE NO.: 13128	



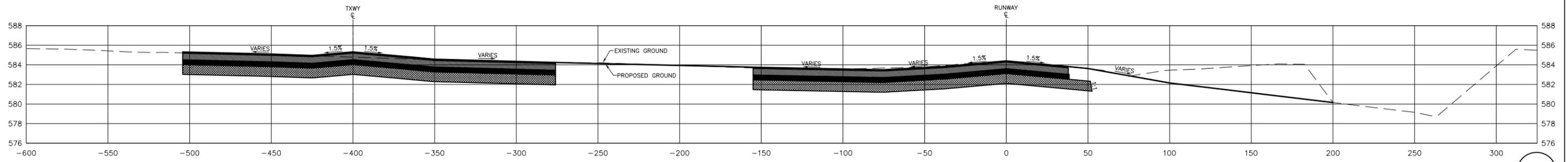
81+50



81+00



80+50



80+00

NOTE: - SEE TYPICAL CROSS SECTIONS FOR NEW RUNWAY AND NEW TAXIWAY ON SHEET 3 FOR DETAILED PAVEMENT SECTIONS AND EARTHWORK INFORMATION.

CHAMLIN & ASSOCIATES, INC. © 2009
Drawing Name: H:\ADDB\1\1002-76\C30\BASE.dwg Last Modified: Mar 21, 2014 - 12:53pm Plotted on: Mar 24, 2014 - 9:30am by roberts

DRAWN BY: RGP	REVISIONS			
CHECKED BY: RTS	LEVEL	BY	DATE	DESCRIPTION
CREATED: 1/24/14	1	RGP	1/30/14	80% SET FOR IDA REVIEW

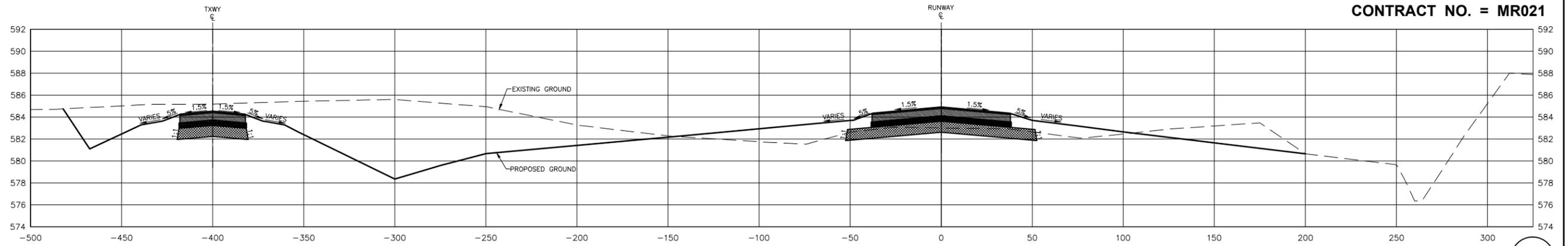
CHAMLIN & ASSOCIATES, INC.
PERU MORRIS ILLINOIS

MORRIS MUNICIPAL AIRPORT
MORRIS, ILLINOIS

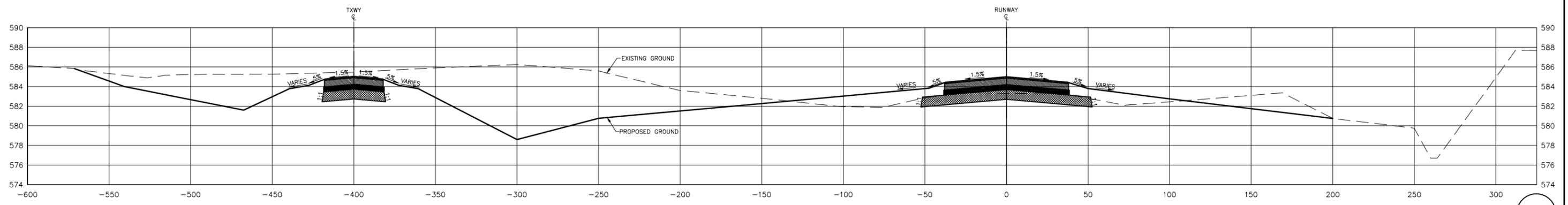
CROSS SECTIONS

APPROVED FOR CONSTRUCTION

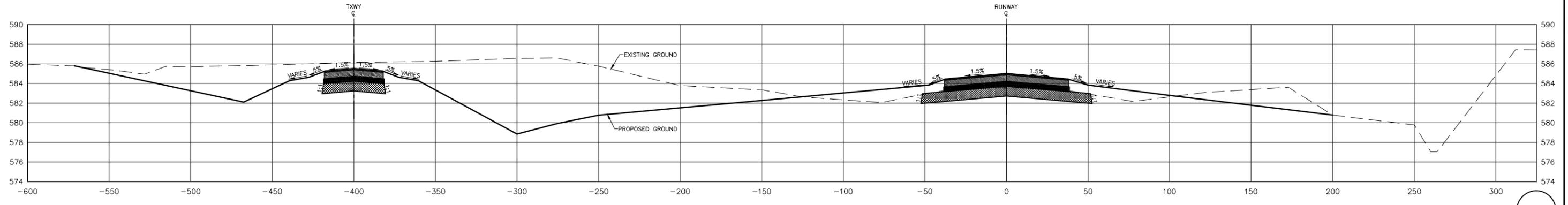
CURRENT AS OF: 03/21/14	SHEET 18
SCALE: AS NOTED	OF 25
FILE NO.: 13128	



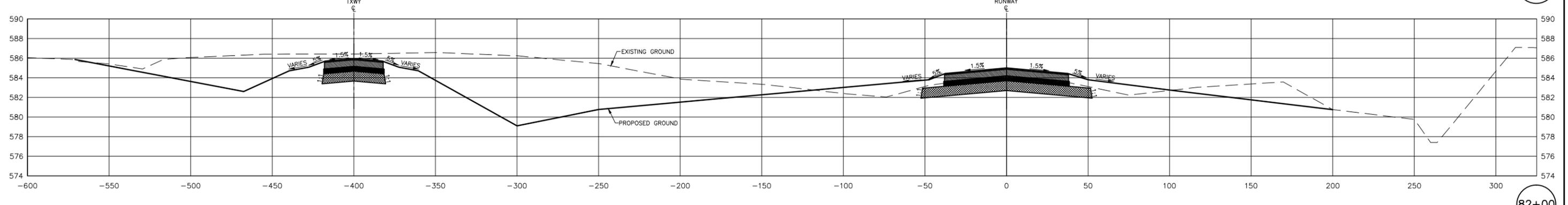
83+50



83+00



82+50



82+00

NOTE: - SEE TYPICAL CROSS SECTIONS FOR NEW RUNWAY AND NEW TAXIWAY ON SHEET 3 FOR DETAILED PAVEMENT SECTIONS AND EARTHWORK INFORMATION.

CHAMLIN & ASSOCIATES, INC. © 2009
Drawing Name: H:\A\08\11002-78\C30\BASE.dwg Last Modified: Mar 21, 2014 - 11:15am Plotted on: Mar 21, 2014 - 11:30am by rmp

REVISIONS				
LEVEL	BY	DATE	DESCRIPTION	
1	RGP	1/30/14	80% SET FOR IDA REVIEW	
DRAWN BY: RGP				
CHECKED BY: RTS				
CREATED: 1/24/14				

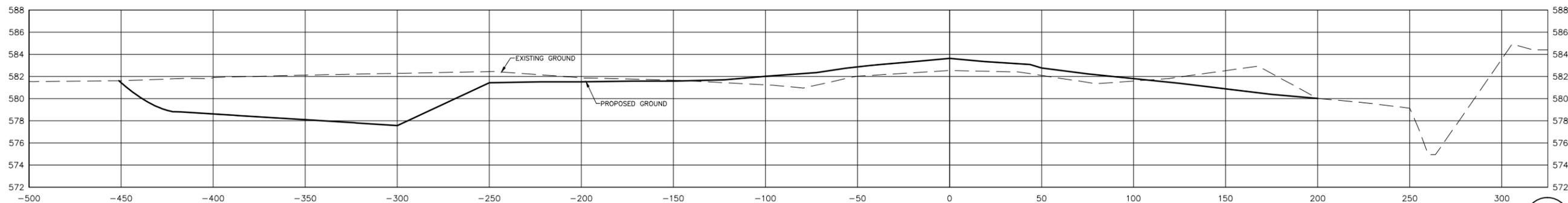
CHAMLIN & ASSOCIATES, INC.
PERU MORRIS ILLINOIS

MORRIS MUNICIPAL AIRPORT
MORRIS, ILLINOIS

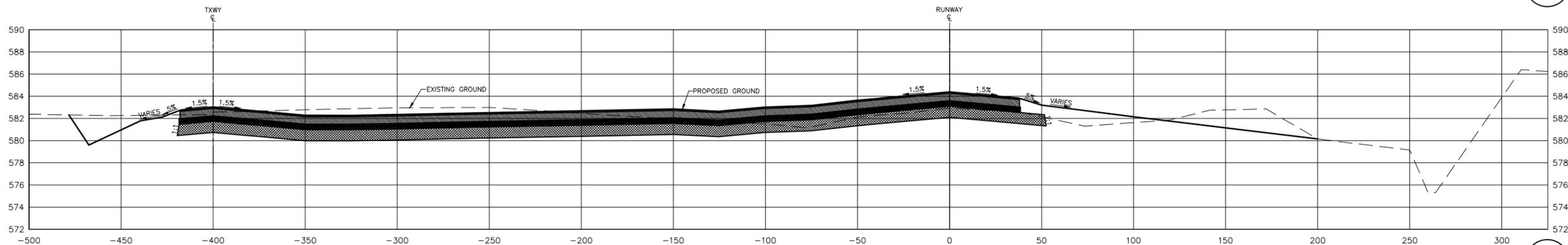
CROSS SECTIONS

APPROVED
FOR CONSTRUCTION

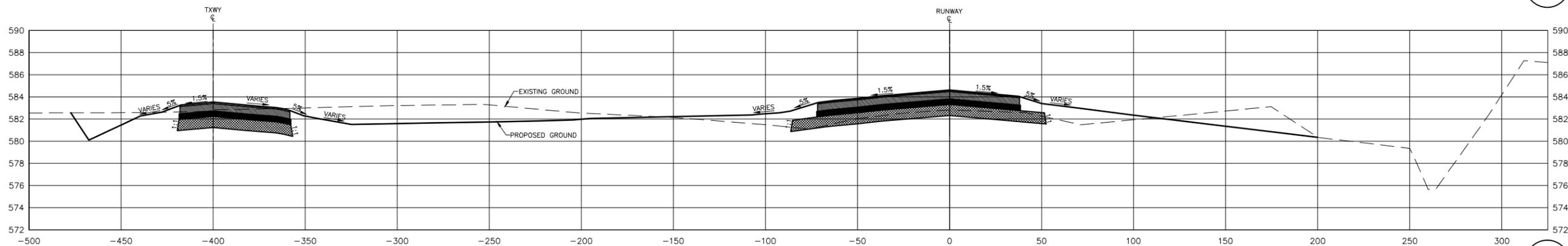
CURRENT AS OF: 03/21/14	SHEET 19
SCALE: AS NOTED	OF 25
FILE NO.: 13128	



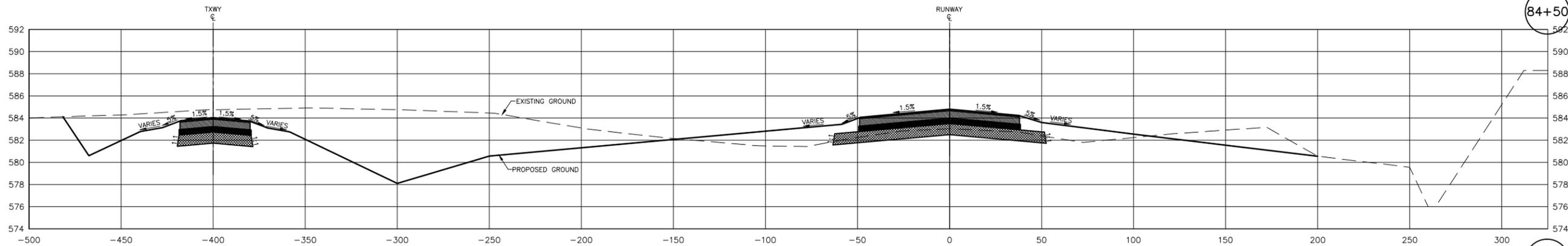
85+50



85+00



84+50



84+00

NOTE: - SEE TYPICAL CROSS SECTIONS FOR NEW RUNWAY AND NEW TAXIWAY ON SHEET 3 FOR DETAILED PAVEMENT SECTIONS AND EARTHWORK INFORMATION.

CHAMLIN & ASSOCIATES, INC. © 2009
Drawing Name: H:\A\021\1002-78\030\BASE.dwg Last Modified: Mar 21, 2014 - 11:30am by romp

DRAWN BY: RGP	REVISIONS			
CHECKED BY: RTS	LEVEL	BY	DATE	DESCRIPTION
CREATED: 1/24/14	1	RGP	1/30/14	80% SET FOR IDA REVIEW

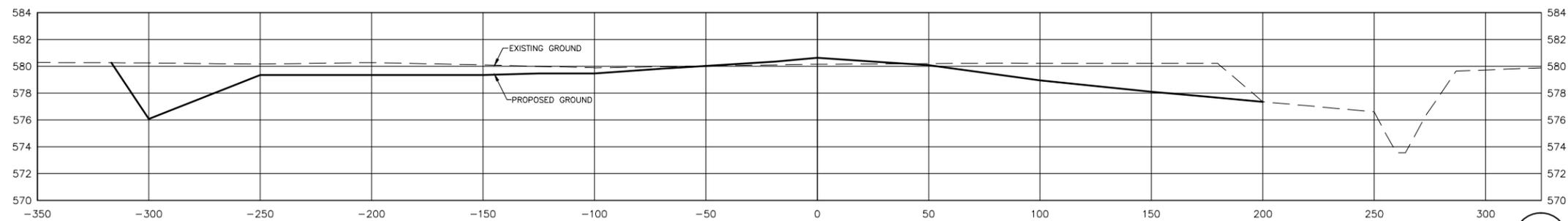
CHAMLIN & ASSOCIATES, INC.
PERU MORRIS ILLINOIS

MORRIS MUNICIPAL AIRPORT
MORRIS, ILLINOIS

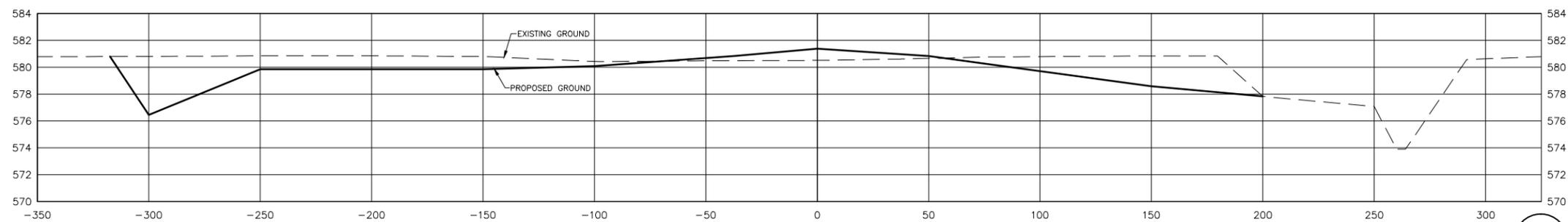
CROSS SECTIONS

APPROVED
FOR CONSTRUCTION

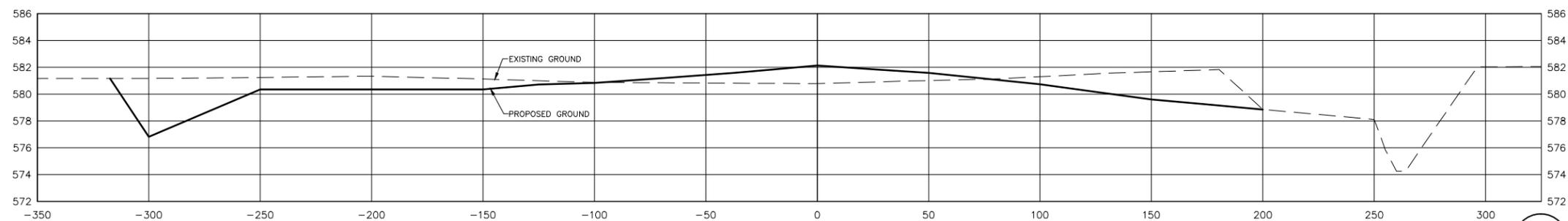
CURRENT AS OF: 03/21/14	SHEET 20
SCALE: AS NOTED	OF 25
FILE NO.: 13128	



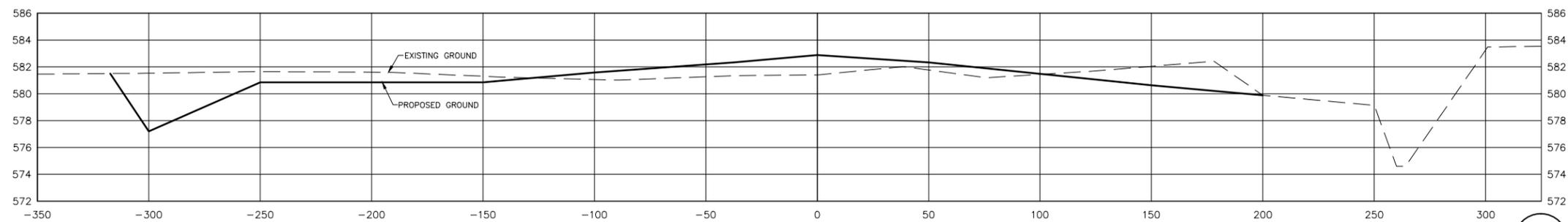
87+50



87+00



86+50



86+00

NOTE: - SEE TYPICAL CROSS SECTIONS FOR NEW RUNWAY AND NEW TAXIWAY ON SHEET 3 FOR DETAILED PAVEMENT SECTIONS AND EARTHWORK INFORMATION.

CHAMLIN & ASSOCIATES, INC. © 2009
Drawing Name: H:\A\08\11\1002-78\C30\BASE.dwg Last Modified: Mar 21, 2014 - 11:15am Plotted on: Mar 21, 2014 - 11:30am by romp

DRAWN BY: RGP		REVISIONS	
LEVEL	BY	DATE	DESCRIPTION
1	RGP	1/30/14	80% SET FOR IDA REVIEW
CHECKED BY: RTS			
CREATED: 1/24/14			

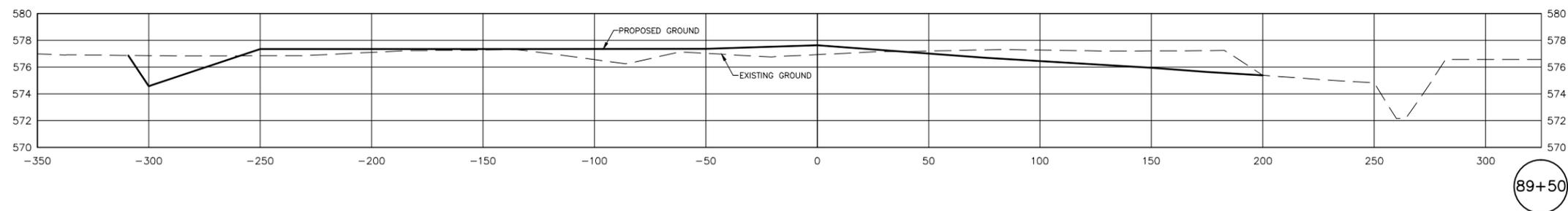
CHAMLIN & ASSOCIATES, INC.
PERU MORRIS ILLINOIS

MORRIS MUNICIPAL AIRPORT
MORRIS, ILLINOIS

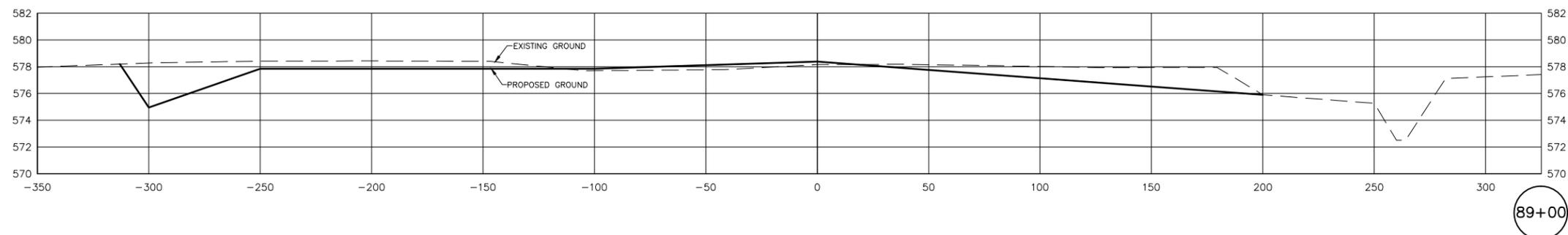
CROSS SECTIONS

APPROVED FOR CONSTRUCTION

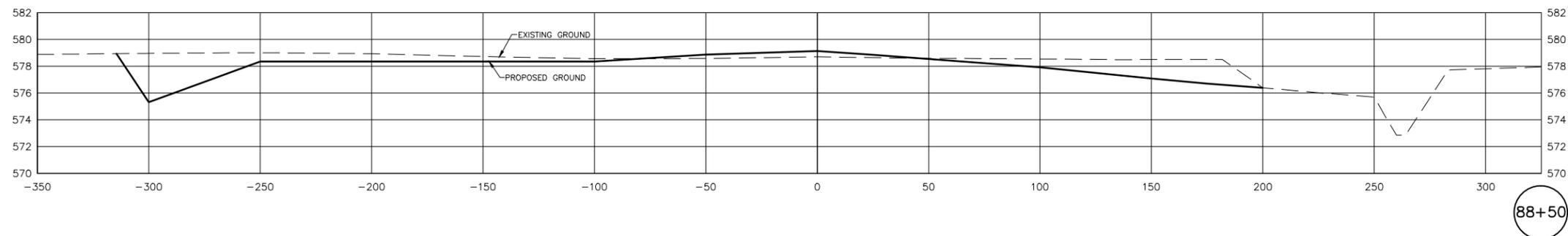
CURRENT AS OF: 03/21/14	SHEET 21
SCALE: AS NOTED	OF 25
FILE NO.: 13128	



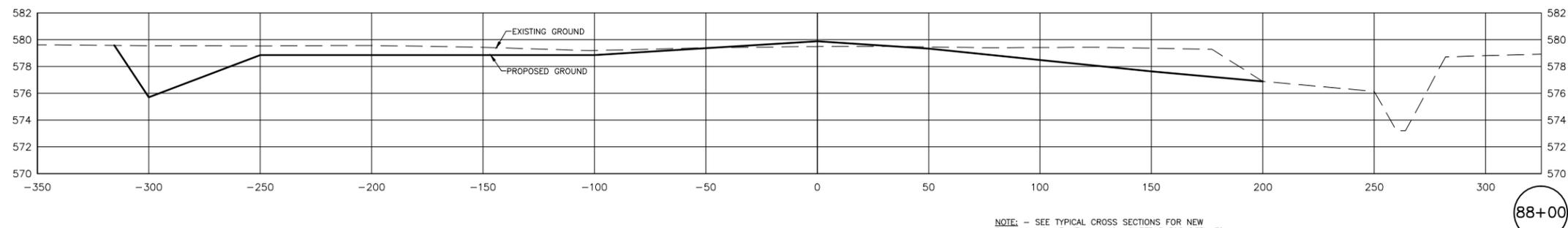
89+50



89+00



88+50



88+00

NOTE: - SEE TYPICAL CROSS SECTIONS FOR NEW RUNWAY AND NEW TAXIWAY ON SHEET 3 FOR DETAILED PAVEMENT SECTIONS AND EARTHWORK INFORMATION.

CHAMLIN & ASSOCIATES, INC. © 2009
Drawing Name: H:\A\08\11\1002-78\CS0\BASE.dwg Last Modified: Mar 21, 2014 - 11:15am Plotted on: Mar 21, 2014 - 11:31am by romp

REVISIONS				
LEVEL	BY	DATE	DESCRIPTION	
1	RGP	1/30/14	80% SET FOR IDA REVIEW	

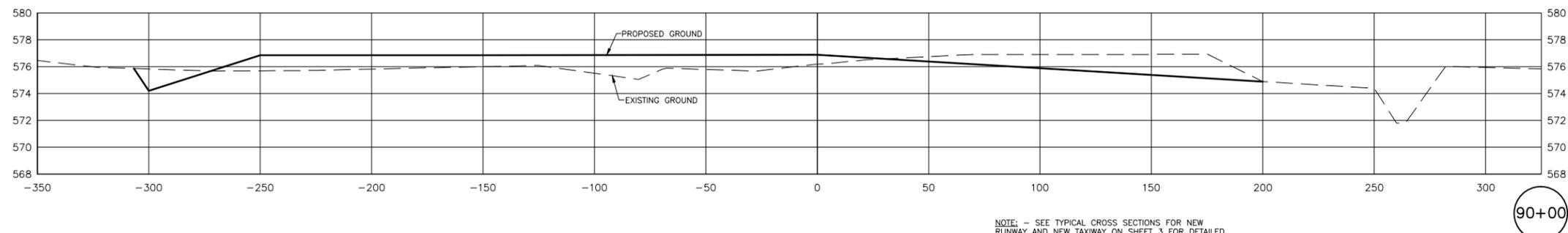
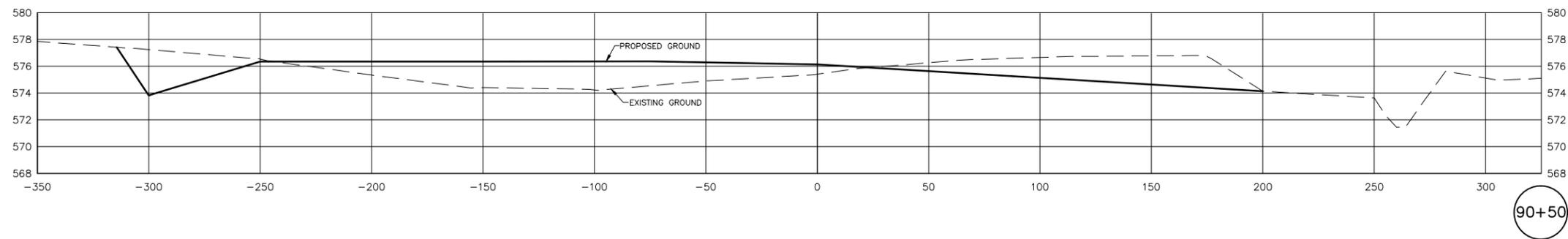
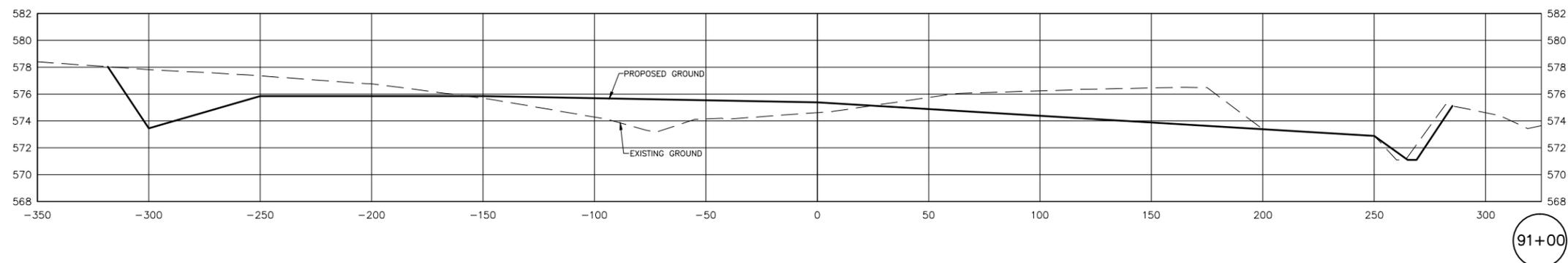
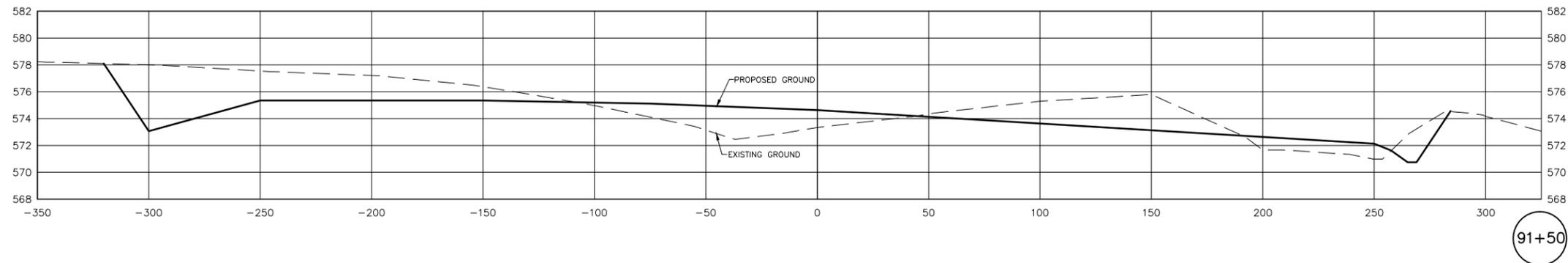
CHAMLIN & ASSOCIATES, INC.
PERU MORRIS ILLINOIS

MORRIS MUNICIPAL AIRPORT
MORRIS, ILLINOIS

CROSS SECTIONS

APPROVED FOR CONSTRUCTION

CURRENT AS OF: 03/21/14	SHEET 22
SCALE: AS NOTED	OF 25
FILE NO.: 13128	



NOTE: - SEE TYPICAL CROSS SECTIONS FOR NEW RUNWAY AND NEW TAXIWAY ON SHEET 3 FOR DETAILED PAVEMENT SECTIONS AND EARTHWORK INFORMATION.

CHAMLIN & ASSOCIATES, INC. © 2009
Drawing Name: H:\A\08\11\1002-78\030\BASE.dwg Last Modified: Mar 21, 2014 - 11:15am Plotted on: Mar 21, 2014 - 11:31am by romp

REVISIONS				
LEVEL	BY	DATE	DESCRIPTION	
1	RGP	1/30/14	80% SET FOR IDA REVIEW	
DRAWN BY: RGP				
CHECKED BY: RTS				
CREATED: 1/24/14				

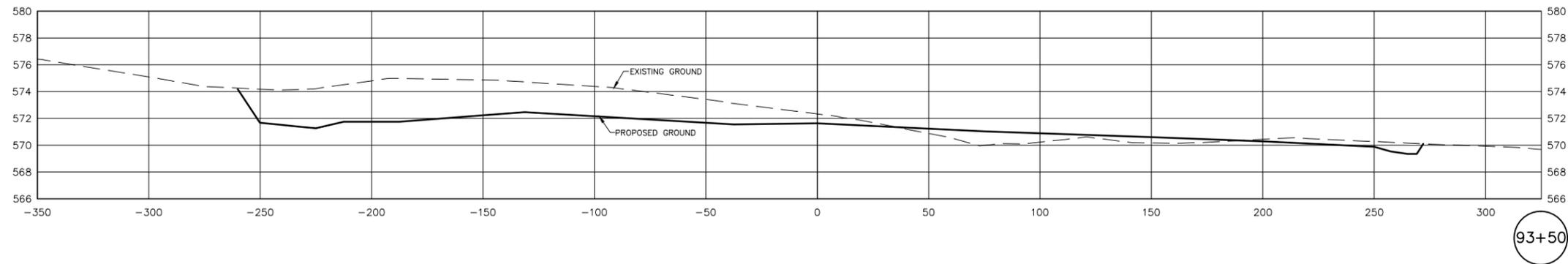
CHAMLIN & ASSOCIATES, INC.
PERU MORRIS ILLINOIS

MORRIS MUNICIPAL AIRPORT
MORRIS, ILLINOIS

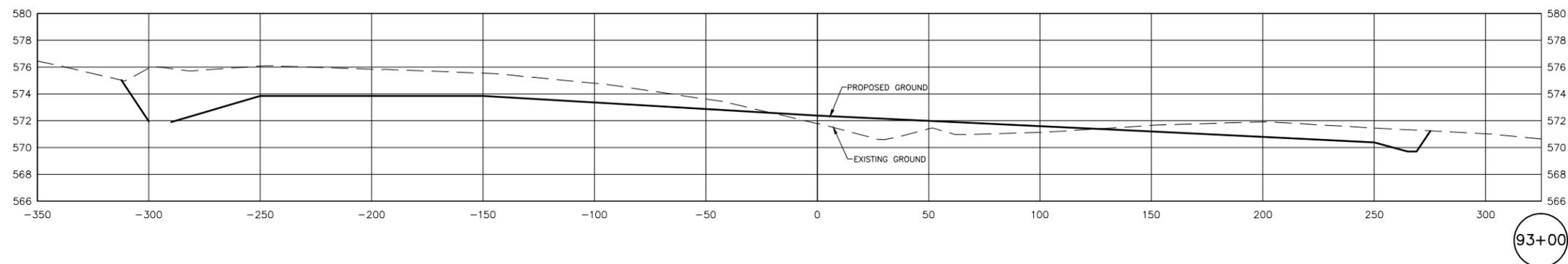
CROSS SECTIONS

APPROVED
FOR CONSTRUCTION

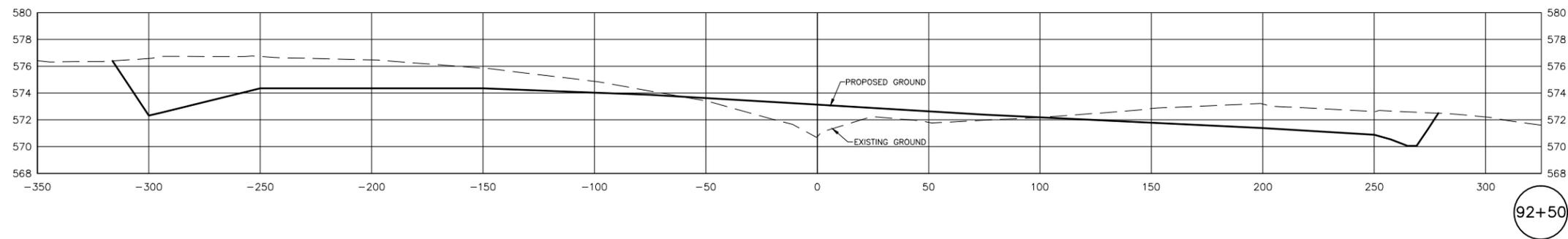
CURRENT AS OF: 03/21/14	SHEET 23
SCALE: AS NOTED	OF 25
FILE NO.: 13128	



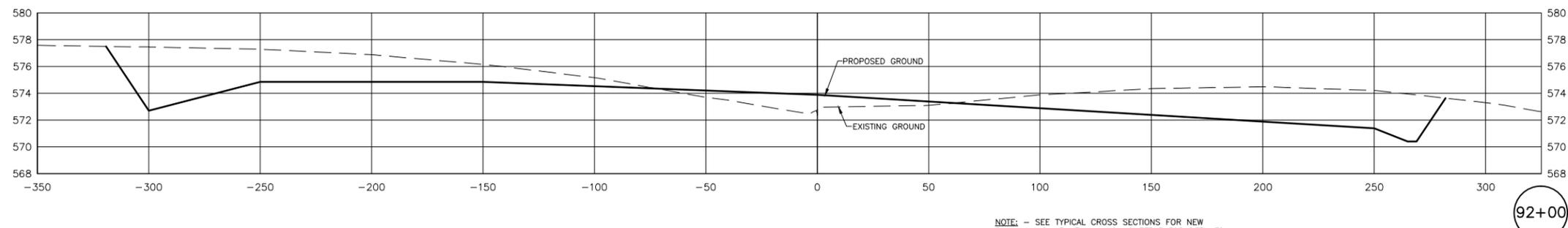
93+50



93+00



92+50



92+00

NOTE: - SEE TYPICAL CROSS SECTIONS FOR NEW RUNWAY AND NEW TAXIWAY ON SHEET 3 FOR DETAILED PAVEMENT SECTIONS AND EARTHWORK INFORMATION.

CHAMLIN & ASSOCIATES, INC. © 2009
Drawing Name: H:\A\08\1\1002-76\C30\BASE.dwg Last Modified: Mar 21, 2014 - 11:15am Plotted on: Mar 21, 2014 - 11:31am by romp

REVISIONS			
LEVEL	BY	DATE	DESCRIPTION
1	RGP	1/30/14	80% SET FOR IDA REVIEW

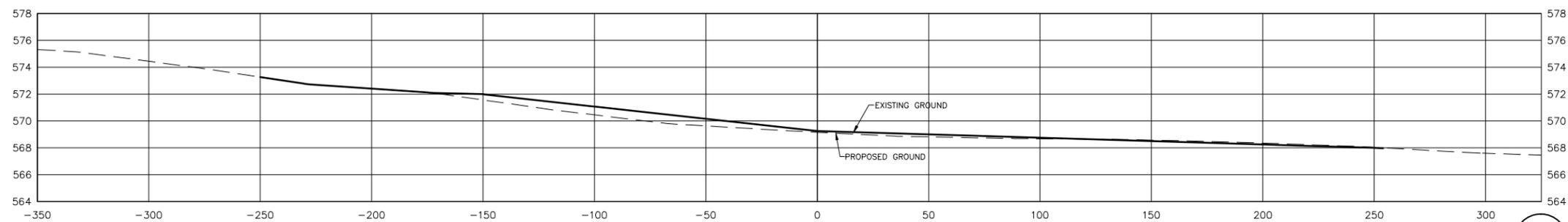
CHAMLIN & ASSOCIATES, INC.
PERU MORRIS ILLINOIS

MORRIS MUNICIPAL AIRPORT
MORRIS, ILLINOIS

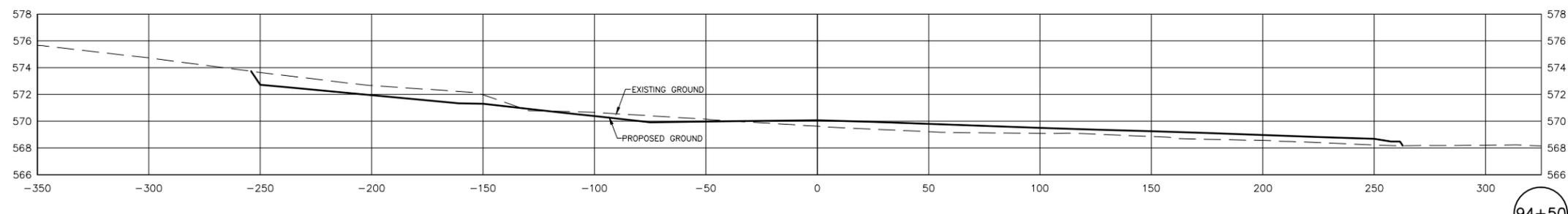
CROSS SECTIONS

APPROVED FOR CONSTRUCTION

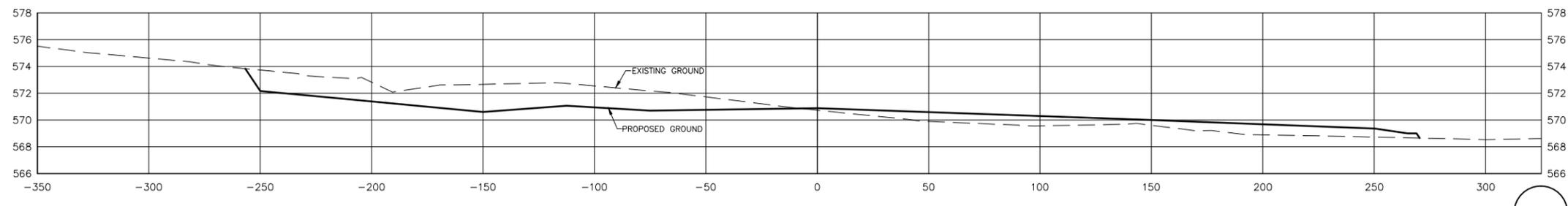
CURRENT AS OF: 03/21/14	SHEET 24
SCALE: AS NOTED	OF 25
FILE NO.: 13128	



95+00



94+50



94+00

NOTE: - SEE TYPICAL CROSS SECTIONS FOR NEW RUNWAY AND NEW TAXIWAY ON SHEET 3 FOR DETAILED PAVEMENT SECTIONS AND EARTHWORK INFORMATION.

CHAMLIN & ASSOCIATES, INC. © 2009
Drawing Name: H:\A\08\1\1002-78\030\BASE.dwg Last Modified: Mar 21, 2014 - 11:15am Plotted on: Mar 21, 2014 - 11:32am by romp

REVISIONS			
LEVEL	BY	DATE	DESCRIPTION
1	RGP	1/30/14	80% SET FOR IDA REVIEW

CHAMLIN & ASSOCIATES, INC.
PERU MORRIS ILLINOIS

MORRIS MUNICIPAL AIRPORT
MORRIS, ILLINOIS

CROSS SECTIONS

APPROVED
FOR CONSTRUCTION

CURRENT AS OF: 03/21/14	SHEET 25
SCALE: AS NOTED	OF 25
FILE NO.: 13128	