LETTING ITEM NO. 4A
IDOT LETTING JANUARY 15, 2016

LK012
TOTAL SHEETS = 36

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS

FINAL CONSTRUCTION PLANS
FOR
LAKE IN THE HILLS AIRPORT

IMPROVE RUNWAY 8/26 SAFETY AREA

ILLINOIS PROJECT: 3CK-4404
S.B.G. PROJECT: 3-17-SBGP-XX

DECEMBER 3, 2015

INDEX TO SHEETS	
Number	Sheet Title
1	Cover Sheet
2	Summary of Quantities and Miscellaneous Details
3	Site Plan and Horizontal/Vertical Control
4	Sequence of Construction - General Notes & Details
5	Sequence of Construction - Phase 1
6	Sequence of Construction - Phase 2
7	Sequence of Construction - Phase 3
8	Landscaping and Erosion Control Plan
9	Landscaping and Erosion Control Plan - Notes and Details 1
10	Landscaping and Erosion Control Plan - Notes and Details 2
11	Existing Conditions / Proposed Removals 1
12	Existing Conditions / Proposed Removals 2
13	Building Demolition and Relocation Plan and Photos
14	Building Demolition and Relocation Notes and Details
15	Typical Sections
16	Plan and Profile - Taxiway A
17	Plan and Profile - Runway and Connector Taxiway
18	Grading Plan
19	Intersection Grade Details
20	Lighting, Electrical, and Pavement Marking Plan - 1
21	Lighting, Electrical, and Pavement Marking Plan - 2
22	Electrical Details 1
23	Electrical Details 2
24	Electrical Details 3
25	Pavement Marking and Sign Details
26	Drainage Plan and Storm Sewer Profiles 1
27	Drainage Schedules and Details
28	Miscellaneous Details
29	Index to Cross Sections and Earthwork Summary and Notes
30	Cross Sections 1
31	Cross Sections 2
32	Cross Sections 3
33	Cross Sections 4
34	Engineering Information Sheet
35	Fencing Details
36	Cantilever Gate Details

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

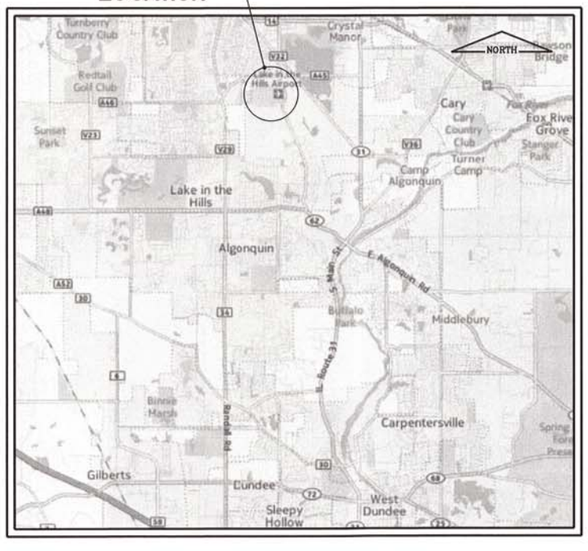
J.U.L.I.E.
JOINT UTILITY LOCATING
INFORMATION FOR EXCAVATORS
www.illinois1call.com

THE LOCATION, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ON THE PLANS IS NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ACTUAL LOCATIONS OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY UTILITY COMPANIES OF HIS OPERATIONAL PLANS, OBTAIN FROM RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION AND THE ONE-CALL NOTICE SYSTEM. THE ENGINEER SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY SUCH UTILITY OR SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.

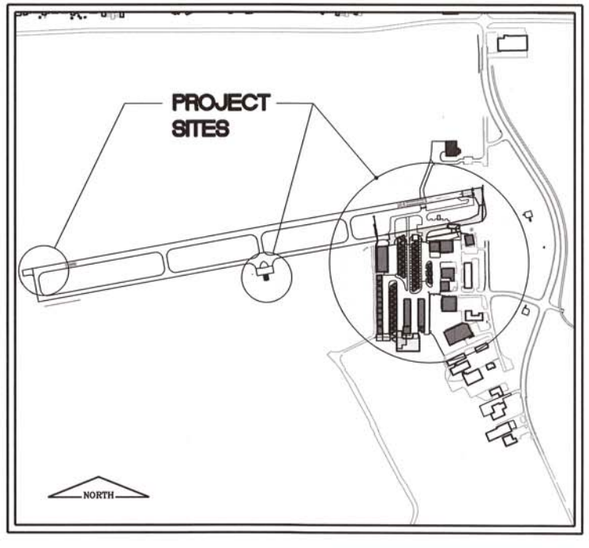
CALL J.U.L.I.E. FOR UTILITY INFORMATION AT 811.

LAKE IN THE HILLS AIRPORT
VILLAGE OF LAKE IN THE HILLS, ILLINOIS
8407 PYOTT ROAD
LAKE IN THE HILLS, ILLINOIS 60156
TELEPHONE: 847-960-7500

PROJECT LOCATION



LOCATION MAP



SITE PLAN

CALL J.U.L.I.E. BEFORE
EXCAVATING AT 811 LAKE IN THE
HILLS AIRPORT

TOWNSHIP: T 43 N
RANGE: R 8 E
SECTION: 17
COUNTY: MCHENRY TOWNSHIP:
ALGONQUIN

DESIGN INFORMATION

DESIGN AIRCRAFT APPROACH CATEGORY B
DESIGN AIRCRAFT GROUP II (CITATION EXCEL)

14255-01

CMT
CRAWFORD, MURPHY & TILLY, INC.
CONSULTING ENGINEERS
License No. 184-000613

DANIEL L. PAPE
062-057261
REGISTERED
PROFESSIONAL
ENGINEER
OF
ILLINOIS
EXPIRES 11/30/17

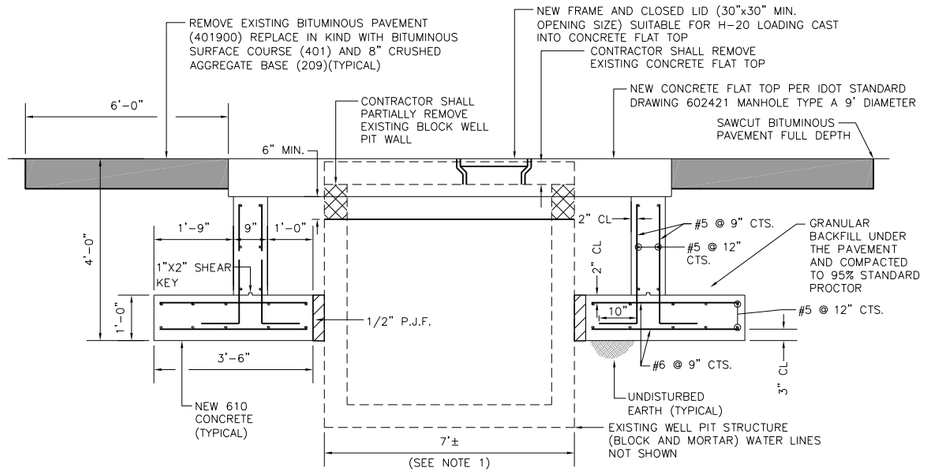
SUBMITTED BY _____
DANIEL L. PAPE, P.E.

DATE DECEMBER 3 2015

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	RECORD QUANTITY
BASE BID - CONSTRUCT TAXIWAY A AND A PORTION OF THE SOUTH TRANSIENT APRON				
AR108088	1/C #8 XLP-USE	L.F.	3,650	
AR110312	2" STEEL DUCT, JACKED	L.F.	135	
AR110504	4-WAY CONCRETE ENCASED DUCT	L.F.	56	
AR110550	SPLIT DUCT	L.F.	1,212	
AR125100	ELEVATED RETROREFLECTIVE MARKER	EACH	72	
AR125461	TAXI GUIDANCE SIGN, SPECIAL	EACH	8	
AR125565	SPLICE CAN	EACH	4	
AR125961	RELOCATE STAKE MOUNTED LIGHT	EACH	14	
AR150510	ENGINEER'S FIELD OFFICE	L.S.	1	
AR150520	MOBILIZATION	L.S.	1	
AR152410	UNCLASSIFIED EXCAVATION	C.Y.	18,380	
AR152531	EXPLORATION TRENCH	L.F.	400	
AR152540	SOIL STABILIZATION FABRIC	S.Y.	9,400	
AR152620	FOUNDATION REMOVAL	S.Y.	650	
AR156510	SILT FENCE	L.F.	3,120	
AR156511	DITCH CHECK	EACH	15	
AR156520	INLET PROTECTION	EACH	18	
AR156530	TEMPORARY SEEDING	ACRE	10.5	
AR156531	EROSION CONTROL BLANKET	S.Y.	5,000	
AR162304	CLASS E GATE 6'-VINYL	EACH	1	
AR162320	CLASS E GATE 20'-VINYL	EACH	1	
AR162404	CLASS E FENCE, VINYL-4'	L.F.	435	
AR162900	REMOVE CLASS E FENCE	L.F.	105	
AR162905	REMOVE GATE	EACH	2	
AR162920	REMOVE MANUAL SLIDE GATE	EACH	1	
AR163000	TEMPORARY CONSTRUCTION FENCE	L.F.	1,600	
AR208515	POROUS GRANULAR EMBANKMENT	C.Y.	450	
AR209608	CRUSHED AGG. BASE COURSE - 8"	S.Y.	9,400	
AR401610	BITUMINOUS SURFACE COURSE	TON	1,000	
AR401650	BITUMINOUS PAVEMENT MILLING	S.Y.	1,200	
AR401900	REMOVE BITUMINOUS PAVEMENT	S.Y.	13,000	
AR403610	BITUMINOUS BASE COURSE	TON	2,300	
AR510510	TIE DOWN	EACH	15	
AR602510	BITUMINOUS PRIME COAT	GAL.	4,570	
AR603510	BITUMINOUS TACK COAT	GAL.	1,690	
AR610510	STRUCTURAL PC CONCRETE	C.Y.	18	
AR620520	PAVEMENT MARKING - WATERBORNE	S.F.	3,800	
AR620525	PAVEMENT MARKING - BLACK BORDER	S.F.	9,300	
AR620900	PAVEMENT MARKING REMOVAL	S.F.	200	
AR701512	12" RCP, CLASS IV	L.F.	530	
AR701515	15" RCP, CLASS IV	L.F.	270	
AR701524	24" RCP, CLASS IV	L.F.	160	
AR701900	REMOVE PIPE	L.F.	70	
AR705506	6" PERFORATED UNDERDRAIN	L.F.	2,550	
AR705610	CONCRETE HEADWALL FOR UNDERDRAIN	EACH	1	
AR705635	UNDERDRAIN COLLECTION STRUCTURE	EACH	6	
AR705640	UNDERDRAIN CLEANOUT	EACH	5	
AR705900	REMOVE UNDERDRAIN	L.F.	70	
AR705905	REMOVE COLLECTION STRUCTURE	EACH	1	
AR705924	REPLACE UNDERDRAIN CLEANOUT	EACH	2	
AR751540	MANHOLE 4'	EACH	7	
AR751560	MANHOLE 5'	EACH	1	
AR751570	MANHOLE - SPECIAL	EACH	1	
AR751983	RECONSTRUCT MANHOLE	EACH	2	
AR752412	PRECAST REINFORCED CONC. FES 12"	EACH	1	
AR754904	REMOVE COMB CURB & GUTTER	L.F.	750	
* AR770908	REMOVE SEPTIC SYSTEM	L.S.	1	
* AR800024	BUILDING DEMOLITION	L.S.	1	
* AR800037	HANGAR RELOCATION - TYPE A	EACH	1	
AR800053	ELECTRICAL SERVICE - RUNWAY LIGHTING	L.S.	1	
AR800064	ELECTRICAL SERVICE - T-HANGARS	L.S.	1	
* AR800118	HANGAR RELOCATION - TYPE B	EACH	3	
* AR800120	HANGAR FOUNDATION AND FLOOR - TYPE A	EACH	1	
* AR800128	HANGAR FOUNDATION AND FLOOR - TYPE B	EACH	3	
AR800142	RELOCATE FLAG POLE	EACH	1	
AR800164	REMOVE RETROREFLECTIVE MARKER	EACH	5	
AR901510	SEEDING	ACRE	8.5	
AR908515	HEAVY DUTY HYDRAULIC MULCH	ACRE	7.5	
AR910205	TRAFFIC SIGN	S.F.	4.0	
AR910915	REMOVE ROADWAY SIGN	EACH	8	
AR910975	RELOCATE ROADWAY SIGN	EACH	1	
ADDITIVE ALTERNATE #1 - CONSTRUCTION ADDITIONAL SOUTH TRANSIENT APRON				
AS125100	ELEVATED RETROREFLECTIVE MARKER	EACH	2	
AS125461	TAXI GUIDANCE SIGN, SPECIAL	EACH	1	
AS152410	UNCLASSIFIED EXCAVATION	C.Y.	300	
AS152540	SOIL STABILIZATION FABRIC	S.Y.	1,800	
AS156531	EROSION CONTROL BLANKET	S.Y.	310	
AS208515	POROUS GRANULAR EMBANKMENT	C.Y.	100	
AS209608	CRUSHED AGG. BASE COURSE - 8"	S.Y.	1,800	
AS401610	BITUMINOUS SURFACE COURSE	TON	160	
AS401900	REMOVE BITUMINOUS PAVEMENT	S.Y.	8	
AS403610	BITUMINOUS BASE COURSE	TON	484	
AS510510	TIE DOWN	EACH	3	
AS602510	BITUMINOUS PRIME COAT	GAL.	955	
AS603510	BITUMINOUS TACK COAT	GAL.	280	
AS620520	PAVEMENT MARKING - WATERBORNE	S.F.	340	
AS620525	PAVEMENT MARKING - BLACK BORDER	S.F.	310	
AS705924	REPLACE UNDERDRAIN CLEANOUT	EACH	1	

* **DENOTES SPECIALTY ITEM**



MANHOLE - SPECIAL DETAIL

NOT TO SCALE

NOTES

1. CONTRACTOR SHALL VERIFY AND MEASURE EXISTING WELL PIT DIMENSIONS BEFORE SUBMITTING SHOP DRAWINGS. DIMENSIONS SHOWN ARE ESTIMATED AND NO ADDITIONAL COMPENSATION WILL BE MADE TO THE CONTRACTOR FOR VARIATIONS ACTUALLY ENCOUNTERED.

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS		
NUMBER	BY	DATE

0 1 2

THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

SUMMARY OF QUANTITIES AND MISCELLANEOUS DETAILS

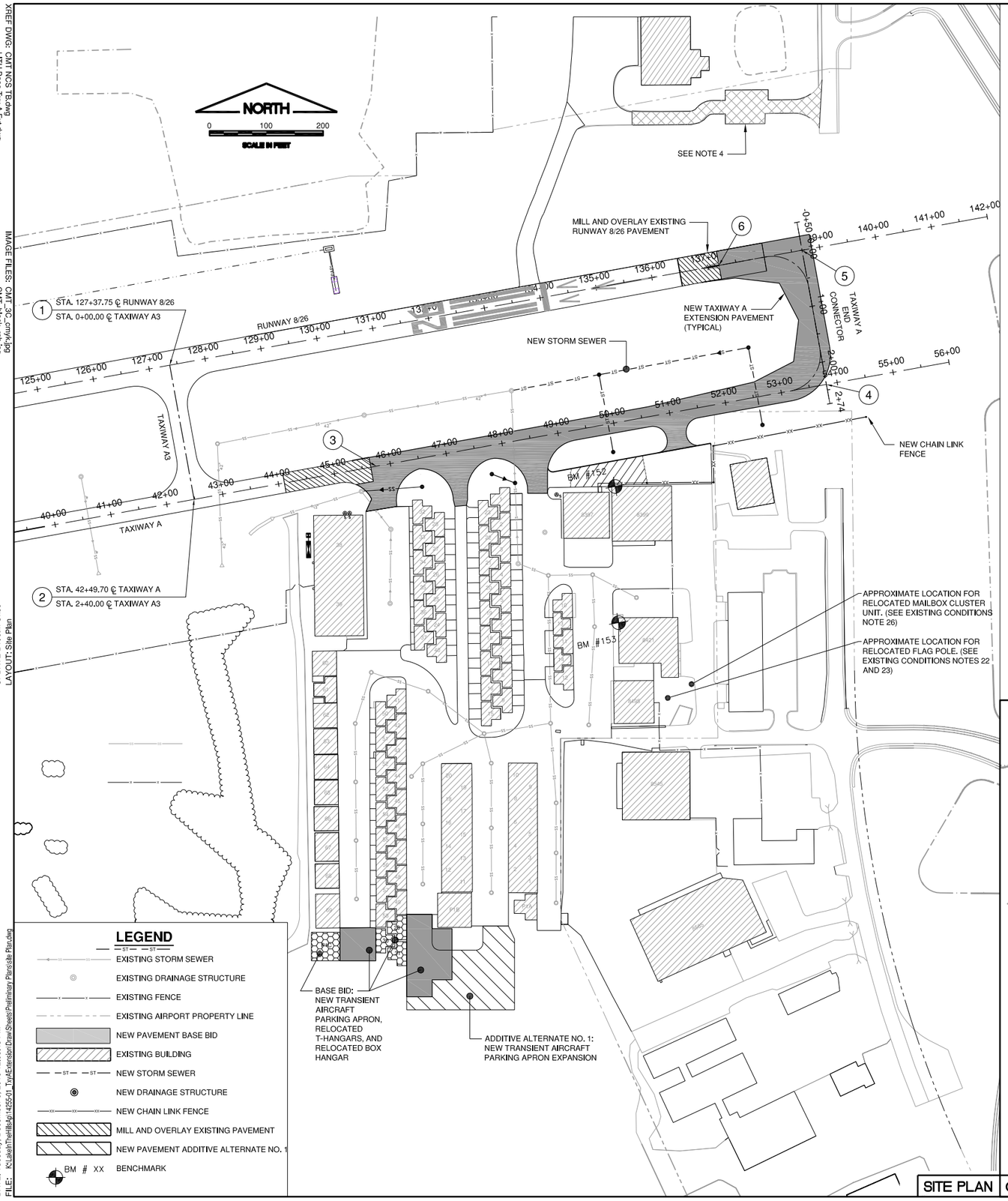
CMT

VILLAGE OF LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

SHEET 2 OF 36 SHEETS



NOTES

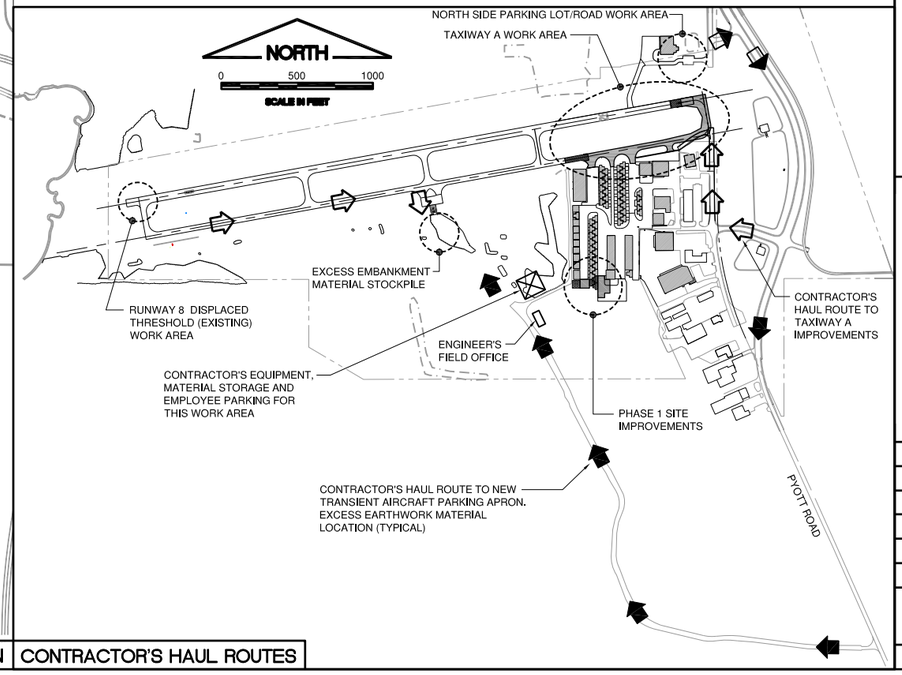
1. THE NEW PAVEMENT STRUCTURE AND ALL EXISTING PAVEMENTS WERE DESIGNED FOR EXCLUSIVE USE BY SMALL AIRCRAFT. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PROTECT THE PAVEMENT STRUCTURE AND SUBGRADE FROM DAMAGE, WHICH MAY INCLUDE BUT NOT BE LIMITED TO USE OF TRACKED EQUIPMENT, SHORT HAUL TRUCKS OR TRACKED PAVERS.
2. AT ALL TIMES THE CONTRACTOR SHALL PERFORM ALL MAINTENANCE WORK NECESSARY TO KEEP EACH NEWLY CONSTRUCTED PAVEMENT SECTION LAYER IN A SATISFACTORY CONDITION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE DONE BY HIS HAULING AND CONSTRUCTION EQUIPMENT ON EXISTING AND NEW PAVEMENTS. ANY WORK NECESSARY TO CORRECT DAMAGED WORK SHALL BE PERFORMED BY THE CONTRACTOR AND AT THE EXPENSE OF THE CONTRACTOR.
4. EXISTING PARKING LOT/ENTRANCE ROAD PAVEMENT AND CURB TO BE REMOVED AND REPLACED WITH TOPSOIL.

VERTICAL CONTROL TABLE (NAVD 88)

BENCHMARK #	DESCRIPTION	ELEVATION
152	NGS PID NUMBER NH0152 NAVD 88 (ADJUSTED 6/1991) SET VERTICALLY IN THE NORTH FACE OF THE NORTHWEST CORNER OF THE CONCRETE FOUNDATION OF THE NORTH ONE OF TWO LARGE CONCRETE BLOCK HANGARS, 1-1/2 FEET EAST OF THE NORTHWEST CORNER, 1 FOOT ABOVE THE LEVEL OF THE GROUND, AND ABOUT LEVEL WITH THE ENTRANCE DRIVE.	886.80
153	NGS PID NUMBER NH0153 NAVD 88 (ADJUSTED 6/1991) SET VERTICALLY IN THE WEST FACE OF THE NORTHWEST CORNER OF THE CONCRETE FOUNDATION OF THE SOUTH ONE OF TWO LARGE CONCRETE BLOCK HANGARS, 1 FOOT SOUTH OF THE NORTHWEST CORNER, AND 1/2 FOOT ABOVE THE LEVEL OF CONCRETE RAMP.	886.58

HORIZONTAL CONTROL (NAD 83)

POINT	DESCRIPTION	NORTHING	EASTING	STATION/OFFSET
1	RUNWAY 8/26 AND TAXIWAY A3	2018103.2830	987873.0180	STA 45+75.18 TAXIWAY A
2	TAXIWAY A AND TAXIWAY A3	2017867.1490	987915.9170	STA 53+80.67 TAXIWAY A
3	BEGINNING OF PROPOSED TAXIWAY A	2017925.4900	988237.0510	STA 45+75.18 TAXIWAY A
4	TWY A AND TWY A END CONNECTOR	2018069.4700	989029.5690	STA 53+80.67 TAXIWAY A
5	RWY 8/26 AND TWY A END CONNECTOR	2018305.6050	988986.6690	STA 138+68.72 RUNWAY 8/26
6	END OF PROPOSED PAVEMENT	2018279.0210	988840.3390	STA 137+20.00 RUNWAY 8/26
6712	NGS PID DN6712 (NOT SHOWN)	2017968.1600	989135.8500	-
6713	NGS PID DN6713 (NOT SHOWN)	2016897.8900	988201.9300	-
6714	NGS PID DN6714 (NOT SHOWN)	2016381.6500	989443.5300	-



SITE PLAN | CONTRACTOR'S HAUL ROUTES

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

SITE PLAN AND HORIZANTAL/VERTICAL CONTROL

CMT

VILLAGE OF LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

SHEET 3 OF 36 SHEETS

GENERAL NOTES

1. THE SUGGESTED SEQUENCE OF CONSTRUCTION SHOWN IS INTENDED TO ALLOW FOR THE ORDERLY CONSTRUCTION OF THE PROPOSED IMPROVEMENTS WHILE MAINTAINING AIRCRAFT ACCESS AT ALL TIMES. THE PHASING SHOWN IS A SUGGESTED SEQUENCE OF CONSTRUCTION ONLY. THIS SEQUENCE MAY BE MODIFIED HOWEVER, ALTERNATE STAGING PLANS MUST MAINTAIN AIRPORT OPERATIONS TO THE SATISFACTION OF THE AIRPORT MANAGER AND RESIDENT ENGINEER AND BE APPROVED BY THE DIVISION OF AERONAUTICS AND FEDERAL AVIATION ADMINISTRATION.

2. ALL OPERATIONS SHALL BE IN CONFORMANCE WITH AC 150/5370-2F (LATEST EDITION) OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION.

3. CONTRACTOR'S EQUIPMENT SHALL BE STORED IN THE EQUIPMENT AND MATERIAL STORAGE/STAGING AREA WHEN CONSTRUCTION IS NOT IN PROGRESS.

4. THE AIRPORT MANAGER IN CONSULTATION WITH THE RESIDENT ENGINEER SHALL HAVE FINAL SAY IN THE APPROVAL OF THE CONSTRUCTION OPERATING SEQUENCE AS IT RELATES TO PEDESTRIAN, VEHICULAR AND AIRCRAFT SAFETY.

5. ALL EXISTING PAVEMENTS, DRIVES OR ANY OTHER AREAS USED AS A HAUL ROAD OR STORAGE AREA BY THE CONTRACTOR SHALL BE RESTORED IN KIND TO THEIR PRE-CONSTRUCTION CONDITION OR TO THE SATISFACTION OF THE RESIDENT ENGINEER AND AIRPORT MANAGER. THE COST OF MAINTAINING, REPAIRING OR CONSTRUCTING THESE PAVEMENTS AND AREAS SHALL BE INCIDENTAL TO THE CONTRACT. EXISTING AREAS OUTSIDE THE PROJECT LIMITS WHICH ARE DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY HIM AT HIS EXPENSE TO THE SATISFACTION OF THE RESIDENT ENGINEER AND THE AIRPORT MANAGER.

6. THE CONTRACTOR SHALL KEEP ALL TRUCKS, EQUIPMENT AND MATERIALS OFF OF THE EXISTING TAXIWAYS, APRONS AND RUNWAYS OUTSIDE OF THE PROJECT LIMITS EXCEPT AS SHOWN OR WITH THE PRIOR PERMISSION OF THE RESIDENT ENGINEER AND AIRPORT MANAGER.

7. WORK PERFORMED BY THE CONTRACTOR OUTSIDE OF DAYLIGHT HOURS SHALL BE DONE UNDER SUFFICIENT ARTIFICIAL LIGHTING TO ALLOW FOR PROPER CONSTRUCTION METHODS AND INSPECTIONS. LIGHT SHALL CONSIST OF MOVABLE POLE MOUNTED FLOODLIGHTS AND/OR SPOTLIGHTS OF SUFFICIENT NUMBER TO ILLUMINATE THE WORK AREA. VEHICLE HEADLIGHTS WILL BE ALLOWED ONLY IN ADDITION TO OTHER LIGHTS MENTIONED ABOVE. LIGHTING SHALL BE AS APPROVED BY THE RESIDENT ENGINEER AND SHALL NOT BE USED IF THEY AFFECT FLIGHT SAFETY. CONTRACTOR'S WORK HOURS SHALL BE IN ACCORDANCE WITH LOCAL ORDINANCES.

8. THE CONTRACTOR SHALL PROVIDE PORTABLE FLOOD LIGHTING FOR NIGHTTIME CONSTRUCTION. SUFFICIENT UNITS SHALL BE PROVIDED SO THAT WORK AREAS ARE ILLUMINATED TO A LEVEL OF FIVE HORIZONTAL FOOT CANDLES. THE LIGHTING LEVELS SHALL BE CALCULATED AND MEASURED IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE ILLUMINATION ENGINEERING SOCIETY. LIGHTS SHALL BE POSITIONED SO AS NOT TO INTERFERE WITH AIRPORT OPERATIONS.

9. THE CONTRACTOR WILL BE REQUIRED TO HAVE A SWEEPER AVAILABLE FOR USE AT ALL TIMES. WHEN ACTIVE AIRFIELD PAVEMENTS ARE UTILIZED AS HAUL ROADS BY THE CONTRACTOR, MATERIAL TRACKED ON TO THE PAVEMENT SHALL BE CONTINUALLY REMOVED WITH SAID SWEEPER. THIS SWEEPING SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

10. MATERIALS REMOVED FROM THE PROJECT WILL BE DISPOSED OF OFF AIRPORT PROPERTY, UNLESS NOTED OTHERWISE.

11. PAYMENT FOR TRAFFIC CONTROL INCLUDING, BUT NOT LIMITED TO BARRICADES, SIGNING, RUNWAY CLOSED MARKERS, AIR OPERATIONS AREA (A.O.A.) LATHE AND WARNING TAPE, ETC. SHALL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. BARRICADES WITH TWO ORANGE FLAGS (20" x 20") ON EACH BARRICADE SHALL BE PLACED AT THE LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. BARRICADES SHALL BE WEIGHTED TO PREVENT BLOWING OVER. BARRICADES SHALL HAVE A STEADY BURN OR FLASHING RED LIGHT. BARRICADE INSTALLATION WILL BE REQUIRED PRIOR TO ACCESS TO THE A.O.A. BY CONTRACTOR'S WORKERS, EQUIPMENT OR MATERIAL. SIGNS SHALL BE PLACED AT EACH TAXIWAY/RUNWAY CLOSURE LOCATION AND SHALL BE ATTACHED TO THE BARRICADES. EACH BARRICADE LOCATION SHALL CONSIST OF ONE "DO NOT ENTER" SIGN AND ONE "AIRCRAFT MOVEMENT AREA" SIGN. SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. THE CONTRACTOR SHALL SUPPLY AND USE AS DIRECTED BY THE AIRPORT, REFLECTIVE LOW PROFILE TYPE BARRICADES. ALL BARRICADES SHALL BE PLACED OUTSIDE OF ACTIVE RUNWAY SAFETY AREAS AND ACTIVE TAXIWAY/TAXILANE OBJECT FREE AREAS.

12. THE CONTRACTOR SHALL CONTACT THE AIRPORT MANAGER THROUGH THE RESIDENT ENGINEER FOURTEEN (14) WORKING DAYS IN ADVANCE OF THE START OF CONSTRUCTION SO THAT THE APPROPRIATE NOTAMS MAY BE ISSUED.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ALL CONSTRUCTION ACCESS GATES CLOSED DURING NON WORKING HOURS. THE CONTRACTOR SHALL PROVIDE A SIGN AT THE ACCESS GATE SAYING "AUTHORIZED PERSONNEL ONLY". THE CONTRACTOR SHALL CLOSE AND LOCK THE ACCESS GATE UPON LEAVING THE SITE. THROUGHOUT THE DURATION OF THE CONTRACT, ANY DAMAGES TO THE ACCESS ROAD, ACCESS GATE OR FENCING ADJACENT TO THE PROJECT SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE RESIDENT ENGINEER. ALL COST RELATING TO CONTRACTOR'S ACCESS AND SECURITY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

14. CONTRACTOR WILL BE REQUIRED TO PUT AIRPORT FLAGS AND HAVE BEACON LIGHTS ON ALL EQUIPMENT AT ALL TIMES DURING CONSTRUCTION. SEE FLAG DETAIL.

15. IN THE CASE OF AN EMERGENCY, CONTRACTOR SHALL NOTIFY AIRPORT MANAGER AND THE RESIDENT ENGINEER IMMEDIATELY.

16. DURING ADVERSE WEATHER, THE CONTRACTOR SHALL MAKE PROVISIONS FOR ACCESS TO THE WORK AT NO ADDITIONAL COST TO THE CONTRACT. NO EXTENSION OF CONTRACT TIME WILL BE CONSIDERED FOR DELAYS DUE TO LACK OF ADEQUATE ACCESS TO THE WORK.

17. THE TALLEST PIECE OF CONSTRUCTION EQUIPMENT IS ANTICIPATED TO BE AN ASPHALT/STONE TRUCK WHICH HAS A MAXIMUM HEIGHT OF 25 FEET IN A DUMP POSITION AND 30' HEIGHT FOR BUILDING RELOCATION.

18. IF RUNWAY NUMERALS ARE PRESENT DURING CONSTRUCTION THEN CONTRACTOR SHALL PLACE CLOSED RUNWAY MARKER OVER NUMERALS AS DETAILED, OTHERWISE PLACE RUNWAY CLOSED MARKER IN TURF AT ENDS OF RUNWAY AS DETAILED.

19. THE AIRPORT WILL BE IN OPERATION DURING THE CONSTRUCTION OF THIS PROJECT. COORDINATION OF WORK WITH THE AIRPORT IS MANDATORY SO AS TO MINIMIZE IMPACTS ON AIRPORT OPERATIONS.

20. APPROXIMATE LOCATION OF HAUL ROUTES ON THE AIRPORT SITE ARE SHOWN ON THE GENERAL PROJECT LAYOUT AND THE PHASING PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE OFF-SITE HAUL ROUTES (STATE HIGHWAYS, COUNTY ROADS OR CITY STREETS) WITH THE APROPRIATE OWNER WHO HAS JURISDICTION OVER THE AFFECTED ROUTE. ON-SITE ROADS USED AS HAUL ROUTES SHALL BE MAINTAINED BY THE CONTRACTOR AND SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE TO THEIR ORIGINAL CONDITION UPON COMPLETION OF BEING USED AS A HAUL ROUTE. THE BEFORE AND AFTER CONDITION OF ON-SITE HAUL ROUTES SHALL BE JOINTLY INSPECTED AND DETERMINED BY THE CONTRACTOR AND THE ENGINEER. FENCING, DRAINAGE, GRADING AND OTHER MISCELLANEOUS CONSTRUCTION REQUIRED TO CONSTRUCT TEMPORARY HAUL ROUTES OR ACCESS POINTS ON THE AIRPORT WILL BE THE CONTRACTOR'S TOTAL RESPONSIBILITY AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO THE WORK. ALL ON-SITE ACCESS ROADS TO AIRPORT FACILITIES SHALL REMAIN OPEN AND MAINTAINED AT ALL TIMES.

21. MOBILIZATION/EQUIPMENT STORAGE AREA WILL BE MADE AVAILABLE FOR CONTRACTOR'S MOBILIZATION AND STORAGE AS SHOWN ON THE PLANS. THIS AREA SHALL BE RESTORED TO THE ORIGINAL CONDITION UPON COMPLETION OF THE PROJECT AT THE CONTRACTOR'S EXPENSE.

22. LOCATION OF KNOWN EXISTING AIRPORT UNDERGROUND CABLES ARE SHOWN ON THE PLANS AND MUST BE VERIFIED BY THE CONTRACTOR. REPAIR OF DAMAGED CABLE MUST BE STARTED IMMEDIATELY AND CONTINUED UNTIL COMPLETED. ALL SUCH REPAIRS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS, OR AS DIRECTED BY THE OWNER OF THE CABLE OR FACILITY, AND SHALL BE AT THE CONTRACTOR'S EXPENSE. IF FAA CABLES ARE DAMAGED, REPAIRS SHALL BE DONE FROM PREVIOUS EXISTING TERMINATION POINT TO NEXT EXISTING TERMINATION POINT IN ACCORDANCE WITH FAA REQUIREMENTS AND IN THE PRESENCE OF A FAA REPRESENTATIVE. THE OWNER MAY ELECT TO HAVE THE REPAIR PERFORMED BY OTHERS IN WHICH CASE THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING THE INCURRED COSTS OF REPAIRS.

23. COORDINATION MEETINGS - THE CONTRACTOR SHALL CONDUCT WEEKLY COORDINATION MEETINGS TO DISCUSS WORK AREAS AND SCHEDULING, ETC. WITH THE RESIDENT ENGINEER, AIRPORT OPERATIONS, FAA, AND OTHER APPROPRIATE OFFICIALS. MINUTES FROM THE WEEKLY MEETINGS SHALL BE PREPARED BY THE CONTRACTOR, FURNISHED TO ALL ATTENDEES PRIOR TO THE SUBSEQUENT MEETING, AND KEPT ON FILE AT THE FIELD OFFICE. THE COORDINATION MEETING COSTS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

24. THE CONTRACTOR SHALL PROVIDE THE PHONE NUMBERS OF THREE PERSONNEL, INCLUDING THE PROJECT SUPERINTENDENT, WHO MAY BE CONTACTED IN AN EMERGENCY. PERSONNEL SHALL BE ON CALL 24 HOURS PER DAY FOR MAINTAINING AIRPORT HAZARD LIGHTING AND BARRICADES.

25. DRAINAGE MODIFICATIONS SHALL BE SEQUENCED TO PROVIDE POSITIVE DRAINAGE AT ALL TIMES AT NO ADDITIONAL COST TO THE CONTRACT.

26. CONTRACTOR PERSONNEL, VEHICLES, EQUIPMENT AND BARRICADES SHALL NOT BE ALLOWED WITHIN THE TAXIWAY / TAXILANE OBJECT FREE AREA (TOFA) OF ACTIVE TAXIWAYS / TAXILANES AND THE RUNWAY SAFETY AREA (RSA) OF ACTIVE RUNWAYS AND THRESHOLD SITE SURFACE OF ACTIVE RUNWAYS.

27. CONTRACTOR SHALL STORE EQUIPMENT AND MATERIALS IN SUCH A MANNER AS NOT TO VIOLATE FEDERAL AVIATION ADMINISTRATION PART 77 IMAGINARY SURFACES, RUNWAY, TAXIWAY SAFETY AREAS, AND TAXIWAY/TAXILANE OBJECT FREE AREAS.

28. ALL EXISTING TAXIWAY AND RUNWAY AIRFIELD LIGHTING CIRCUITS, FAA CABLES AND OTHER ELECTRICAL CABLES SHALL REMAIN IN SERVICE AT ALL TIMES. ALL EXISTING LIGHTING AND VAULT EQUIPMENT SHALL REMAIN IN SERVICE UNTIL PROPOSED IMPROVEMENTS ARE INSTALLED AND OPERATIONAL, UNLESS OTHERWISE APPROVED BY THE RESIDENT ENGINEER. ANY CABLES DAMAGED BY THE CONTRACTOR SHALL BE IMMEDIATELY REPAIRED AT HIS EXPENSE. ANY NECESSARY TEMPORARY JUMPER CABLES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

29. COORDINATION BY THE CONTRACTOR WITH THE EXISTING UTILITIES SHALL BE COMPLETED BEFORE CONSTRUCTION IS STARTED. CONTRACTOR IS REFERRED TO SECTION 50-17 OF THE STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS FOR SPECIFIC REQUIREMENTS. THE LOCATION OF UNDERGROUND UTILITIES AS INDICATED ON THE PLANS HAVE BEEN OBTAINED FROM EXISTING RECORDS. NEITHER THE OWNER OR THE DESIGN ENGINEER ASSUME ANY RESPONSIBILITY WHATSOEVER IN RESPECT TO THE ACCURACY, COMPLETENESS OR SUFFICIENCY OF THE INFORMATION. THERE IS NO GUARANTEE, EITHER EXPRESSED OR IMPLIED THAT THE LOCATIONS, SIZE AND TYPE MATERIAL OF EXISTING UNDERGROUND UTILITIES AS INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED DURING CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANY OF HIS OPERATIONAL PLANS. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR DETAILED INFORMATION AND ASSISTANCE IN LOCATING UTILITIES. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY, THE RESIDENT ENGINEER AND THE AIRPORT MANAGER. ANY SUCH MAINS AND/OR SERVICES DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED IMMEDIATELY AT HIS EXPENSE TO THE SATISFACTION OF THE RESIDENT ENGINEER AND AIRPORT MANAGER.

30. ALL AIRFIELD LIGHTING AND LIGHTING GUIDANCE SYSTEMS (NAVAIDS) LOCATED WITHIN AND IMMEDIATELY ADJACENT TO THE CONTRACTORS WORK ZONE SHALL BE CHECKED FOR OPERATIONAL CONDITION PRIOR TO THE DEPARTURE FROM THE AIRPORT WITH THE AIRPORT MANAGER. ANY DEFECIENCIES IN THESE SYSTEMS DUE TO THE ACTS OF CONTRACTOR OR HIS SUBCONTRACTORS, SUPPLIERS OR CONSULTANTS SHALL BE REPAIRED IMMEDIATELY.

CONTRACTOR CROSSING RUNWAY/TAXIWAY/TAXILANE/APRON AIR OPERATIONS AREA (A.O.A.)

31. ANYTIME THE CONTRACTOR IS REQUIRED TO UTILIZE OR CROSS ACTIVE AIRFIELD PAVEMENTS FOR ACCESS TO AND FROM THE WORK ZONE, A FULL TIME CROSSING GUARD IN RADIO CONTACT WITH AIR TRAFFIC SHALL BE FURNISHED BY THE CONTRACTOR FOR MOVEMENTS OF VEHICLES OR EQUIPMENT TO AND FROM THE WORK ZONE. THE RADIO OPERATOR SHALL BE FAMILIAR WITH AIRPORT GROUND CONTROL PROCEDURES AND DEMONSTRATE KNOWLEDGE OF SAME TO THE AIRPORT. THE AIRPORT RESERVES THE RIGHT TO APPROVE THE CROSSING GUARDS. THE CONTRACTOR SHALL PROVIDE THEIR OWN RADIOS. THIS COST SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYMENT OF MUNICIPAL FINES ($500 PER OCCURENCE) DUE TO AIRFIELD INCURSIONS BY HIS EMPLOYEES, SUBCONTRACTORS, SUPPLIERS, CONSULTANTS AND/OR AGENTS.

32. ANY PAVEMENT DAMAGED BY CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY BY HIM TO THE SATISFACTION OF THE RESIDENT ENGINEER AND AIRPORT MANAGER AT NO ADDITIONAL COST TO THE OWNER. PAVEMENT SHALL BE CONTINUALLY SWEPT TO PROVIDE DEBRIS FREE SURFACE DURING ALL HAUL ROAD OPERATIONS. THIS COST SHALL NOT BE PAID SEPERATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

33. WORK WITHIN THE A.O.A. SHALL BE EXPEDITED. ANY DROP OFF SHALL BE ADEQUATELY LIGHTED, SIGNED AND BARRICADED. NO MATERIAL SHALL BE STOCKPILED WITHIN THE A.O.A. SHOULD IT BE NECESSARY FOR THE CONTRACTOR TO TEMPORARILY RELOCATE MEN AND EQUIPMENT TO ALLOW AIRCRAFT TO PASS, THEY SHALL DO SO AT NO EXTRA COST TO THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND AIRPORT MANAGER TEN (10) WORKING DAYS IN ADVANCE OF ANY PLANNED CONSTRUCTION WITHIN THESE LIMITS.

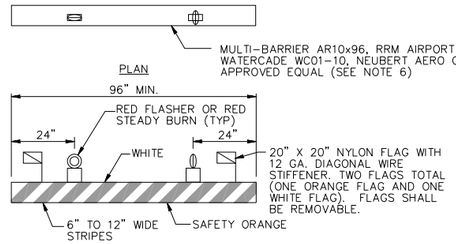
LIMITATIONS ON CONSTRUCTION WITHIN RUNWAY SAFETY AREA (RSA) AND TAXIWAY/TAXILANE OBJECT FREE AREA (TOFA)

RUNWAYS:

THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND AIRPORT MANAGER TEN (10) WORKING DAYS IN ADVANCE OF ANY PLANNED CONSTRUCTION WITHIN THESE LIMITS. WORK SHALL BE EXPEDITED IN THESE AREAS AND AT THE END OF EACH WORKING DAY THESE AREAS SHALL BE SMOOTHLY GRADED TO ALLOW THE RUNWAY TO BE REOPENED OR AT THE END OF THE PHASE AS SHOWN ON THE PLAN. IF NECESSARY STEEL PLATES SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR TO COVER ANY OPEN TRENCHES OR EXCAVATION WITHIN THE RSA IF DURING RUNWAY CLOSURE AN EMERGENCY IS DECLARED, THE CONTRACTOR SHALL IMMEDIATELY CLEAR THE RUNWAY OF ALL VEHICLES, MEN AND EQUIPMENT. REFERENCE TABLE ON PREVIOUS SHEET FOR SAFETY AREA WIDTHS.

TAXIWAYS / TAXILANES:

ANY WORK WITHIN TAXIWAY / TAXILANE OBJECT FREE AREA (TOFA) WILL REQUIRE A TAXIWAY / TAXILANE CLOSURE. WORK WITHIN THE TOFA SHALL BE EXPEDITED. ANY DROP OFF SHALL BE ADEQUATELY LIGHTED, SIGNED AND BARRICADED. NO MATERIAL SHALL BE STOCKPILED WITHIN THE TOFA. SHOULD IT BE NECESSARY FOR THE CONTRACTOR TO TEMPORARILY RELOCATE EQUIPMENT TO ALLOW AIRCRAFT TO PASS, THEY SHALL DO SO AT NO EXTRA COST TO THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND AIRPORT MANAGER FIVE (5) WORKING DAYS IN ADVANCE OF ANY PLANNED CONSTRUCTION WITHIN THESE LIMITS. REFERENCE TABLE ON PREVIOUS SHEET FOR OBJECT FREE AREA WIDTHS. NO DROP-OFFS OR OPEN EXCAVATIONS WILL BE ALLOWED WITHIN THE TAXIWAY / TAXILANE SAFETY AREAS OF OPEN TAXIWAYS / TAXILANES.

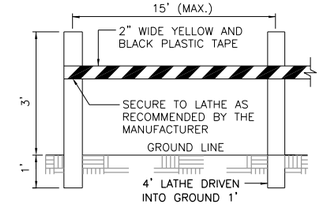


LOW PROFILE LIGHTED BARRICADE

NOT TO SCALE

BARRICADE NOTES:

1. FLASHER OR STEADY BURN LIGHTS SHALL BE BATTERY OR SOLAR POWER OPERATED. LENS SHALL BE RED AND BE ABLE TO ROTATE 90°.
2. FACING OF BARRICADE SHALL BE COVERED WITH REFLECTIVE TAPE OR PAINT.
3. BARRICADES TO BE PLACED WITH A MAXIMUM OF 10' SPACING CENTER TO CENTER BETWEEN RED LIGHTS ALONG OPERATIONAL PAVEMENT ADJACENT TO CONSTRUCTION AS DIRECTED BY THE RESIDENT ENGINEER. ALTERNATE FLASHER OR STEADY BURN LENSES SO THAT EVERY OTHER LENS IS ROTATED 90°.
4. FLASHER OR STEADY BURN LIGHTS SHALL BE SECURED TO THE BARRICADES, AS APPROVED BY THE RESIDENT ENGINEER.
5. BARRICADES SHALL BE OF LOW MASS, EASILY COLLAPSIBLE UPON CONTACT WITH AN AIRCRAFT OR ANY OF ITS COMPONENTS, AND WEIGHTED TO AVOID BEING BLOWN OVER.
6. BARRICADES SHALL BE OF A COMMERCIAL DESIGN.



LATHING AND WARNING TAPE DETAIL

NOT TO SCALE

MATERIALS ARE TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION. COST OF MATERIALS, INSTALLATION, RELOCATION AND MAINTENANCE OF LATHING AND WARNING TAPE SHALL BE INCIDENTAL TO THE CONTRACT.

DESIGN AIRCRAFT APPROACH CATAGORY: B
DESIGN AIRPORT GROUP: II
RUNWAY 8/26 SAFETY AREA TOTAL WIDTH = 150'
TAXIWAY CENTERLINE TO OBJECT SEPARATION = 65.5'
TAXILANE CENTERLINE TO OBJECT SEPARATION = 57.5'

MAXIMUM ANTICIPATED HEIGHT OF EQUIPMENT - 25' FOR GENERAL CONSTRUCTION

MAXIMUM ANTICIPATED HEIGHT OF EQUIPMENT - 30' FOR BUILDING RELOCATION

CONSTRUCTION POINT TABLE

POINT	NEAREST ACTIVE RUNWAY	LATITUDE	LONGITUDE	ELEVATION
A	CENTERLINE RUNWAY 8/26	42°12'24.12"	-88°19'10.56"	886.7
B	CENTERLINE RUNWAY 8/26	42°12'25.92"	-88°19'08.76"	886.0
C	CENTERLINE RUNWAY 8/26	42°12'25.20"	-88°19'05.16"	886.4
D	CENTERLINE RUNWAY 8/26	42°12'26.28"	-88°19'04.08"	885.8
E	CENTERLINE RUNWAY 8/26	42°12'25.20"	-88°19'03.72"	886.7
F	CENTERLINE RUNWAY 8/26	42°12'25.92"	-88°18'59.04"	885.6
G	CENTERLINE RUNWAY 8/26	42°12'25.20"	-88°19'10.92"	885.7
H	CENTERLINE RUNWAY 8/26	42°12'26.28"	-88°19'04.08"	885.8
I	CENTERLINE RUNWAY 8/26	42°12'26.28"	-88°19'03.36"	885.8
J	CENTERLINE RUNWAY 8/26	42°12'26.64"	-88°19'00.12"	884.7
K	CENTERLINE RUNWAY 8/26	42°12'27.00"	-88°18'57.96"	885.4
L	CENTERLINE RUNWAY 8/26	42°12'26.28"	-88°19'03.00"	885.6
M	CENTERLINE RUNWAY 8/26	42°12'26.64"	-88°19'00.12"	884.7
N	CENTERLINE RUNWAY 8/26	42°12'27.36"	-88°18'55.44"	880.7
O	CENTERLINE RUNWAY 8/26	42°12'30.24"	-88°18'56.52"	886.4
P	CENTERLINE RUNWAY 8/26	42°12'20.16"	-88°19'19.56"	864.0

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS		
NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

SEQUENCE OF CONSTRUCTION
GENERAL NOTES AND DETAILS

CMT

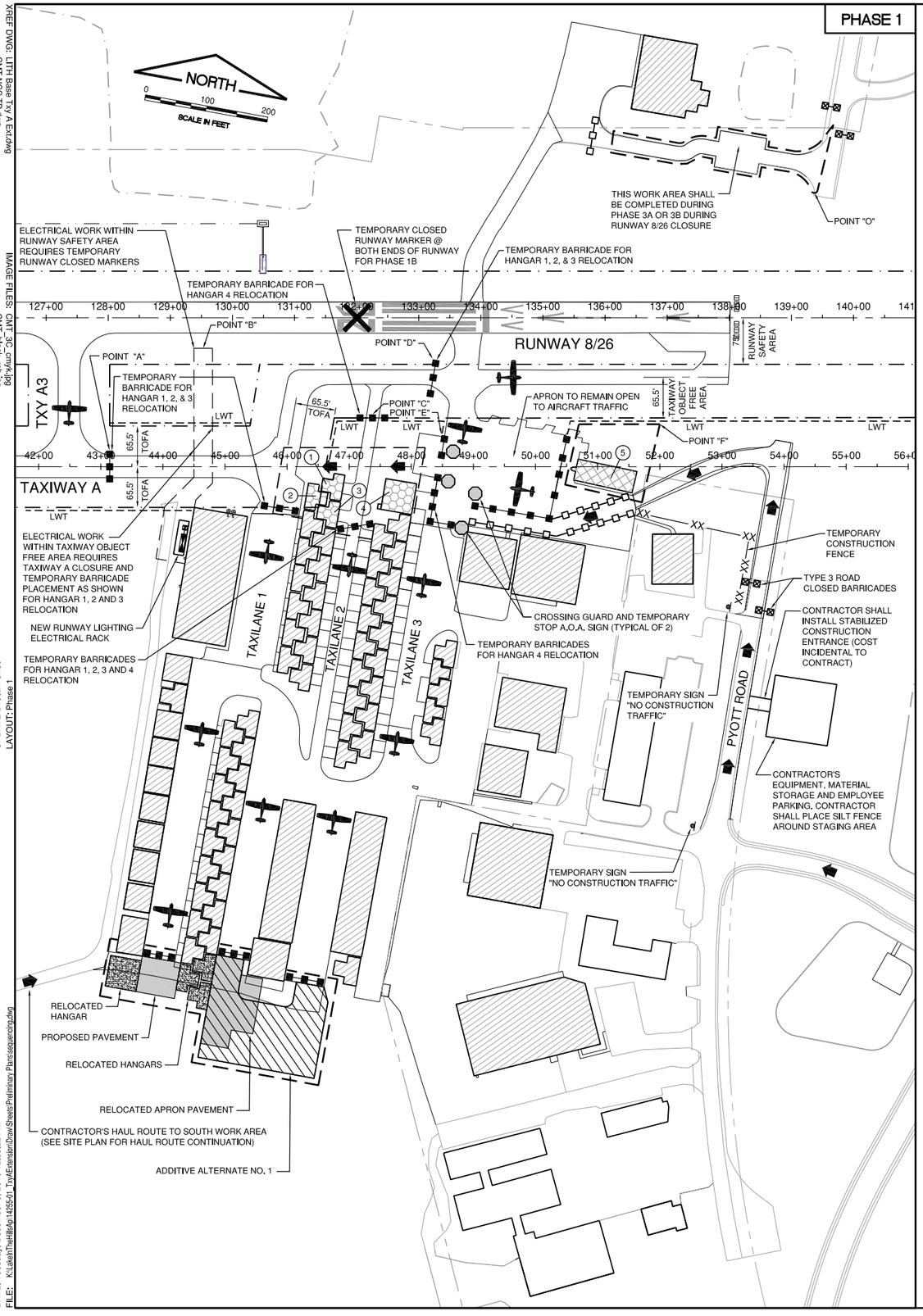
VILLAGE OF LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

SHEET 4 OF 36 SHEETS

PHASE 1

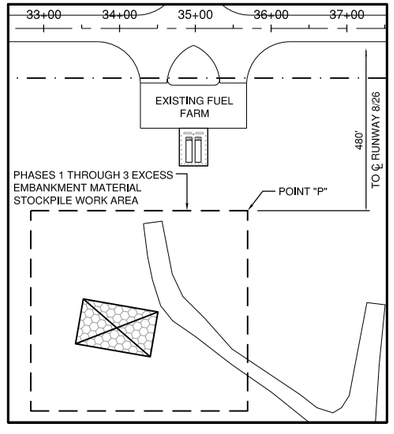


WORK AREA	ALLOWABLE WORK PERIOD	OPERATION STATUS/RESTRICTIONS
PHASE 1 A NEW APRON AREA AND HANGAR SITEWORK	NO RESTRICTIONS	RUNWAY 8/26 - OPEN ALL TAXIWAY A AND TAXILANES - OPEN PARTIAL CLOSURE OF APRON
PHASE 1 A RELOCATE RUNWAY LIGHTING CIRCUIT OUTSIDE RSA	NO RESTRICTIONS	RUNWAY 8/26 - OPEN; PARTIAL CLOSURE OF TAXIWAY A FOR WORK WITHIN TAXIWAY A TOFA
PHASE 1 B RELOCATE RUNWAY LIGHTING CIRCUIT WITHIN RSA	1 WORK DAY FROM 8:00 AM TO 4:00 PM	RUNWAY 8/26 - CLOSED
PHASE 1 C DEMOLITION OF ADMINISTRATION BUILDING	BEING WORK AFTER RUNWAY 8/26 LIGHTING CIRCUIT IS OPERATIONAL	RUNWAY 8/26 - OPEN; PARTIAL CLOSURE OF APRON
PHASE 1 D RELOCATE HANGARS VIA TAXILANE 1,2 & 3	BEGIN WORK AFTER ALL RELOCATED HANGAR SITEWORK, FLOORS, FOUNDATIONS, AND UTILITY SERVICES ARE COMPLETED. NOTIFY AIRPORT MANAGER AND ENGINEER 30 DAYS ADVANCE NOTICE FOR COORDINATION WITH BUILDING TENANTS	RUNWAY 8/26 OPEN PARTIAL CLOSURE OF TAXIWAY A FOR HANGAR 1, 2, & 3 RELOCATION A MINIMUM OF ONE TAXILANE SHALL REMAIN OPEN AT ALL TIMES

PRIOR TO REOPENING A CLOSED RUNWAY, THE ENTIRE (RSA) RUNWAY SAFETY AREA (75 FEET FROM CENTERLINE AND INCLUDING BEYOND THE END OF THE RUNWAY WITHIN AIRPORT PROPERTY) AND (TOFA) TAXIWAY OBJECT FREE AREA MUST MEET FAA CRITERIA. FAA CRITERIA REQUIRES THAT THERE BE NO OPEN EXCAVATIONS OR TRENCHES IN THE SAFETY AREA(S), THE MAXIMUM PAVEMENT DROP OFF BE 3 INCHES, AND ALL GRADES IN ANY DIRECTION BE LESS THAN 5 PERCENT. STEEL PLATES, TEMPORARY WEDGING OF BASE COURSE AND BITUMINOUS CONCRETE MAY BE REQUIRED TO MEET CRITERIA. ALL NECESSARY TEMPORARY MEASURES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

LEGEND

- CONTRACTOR'S WORK AREA
- EXISTING AIRPORT PROPERTY LINE
- EXISTING FENCE
- AOA — AIR OPERATIONS AREA (A.O.A.) LIMITS
  ACTIVE RUNWAYS: USE RUNWAY SAFETY AREA
  ACTIVE TAXIWAYS: USE TAXIWAY OBJECT FREE AREA
  ACTIVE TAXILANES: USE TAXILANE OBJECT FREE AREA
- AIRCRAFT OPERATIONS AREAS
- TYPE II BARRICADES WITH RED LIGHTS
- TYPE III ROAD CLOSED BARRICADES WITH SIGNAGE
- LOW PROFILE BARRICADES WITH RED LIGHTS AND SIGNS "DO NOT ENTER" AND "AIRCRAFT MOVEMENT AREA"
- CONTRACTOR'S ACCESS/HAUL ROAD
- TEMPORARY CLOSED RUNWAY MARKER
- CROSSING GUARD AND TEMPORARY STOP-AOA SIGN (SEE NOTE 1)
- LWT — LATHING AND WARNING TAPE
- BUILDING TO BE RELOCATED
- BUILDING TO BE DEMOLISHED
- XX — TEMPORARY CONSTRUCTION FENCE
- (2) — BUILDING NUMBER FOR REFERENCE



ALL PHASES:

CONTRACTOR SHALL PLAN AND PERFORM HIS WORK SO AS NOT TO INTERFERE OR HINDER THE PROGRESS, WORK OR HAUL ROAD ACCESS OF OTHER CONTRACTORS (SEE STANDARD SPECIFICATIONS SECTION 50-05). THE PRIME CONTRACTOR WILL BE RESPONSIBLE TO COORDINATE CONSTRUCTION ACTIVITIES AND ACCESS BETWEEN ALL ON-SITE CONTRACTORS SUBCONTRACTORS.

ALL EXISTING TAXIWAY AND RUNWAY AIRFIELD LIGHTING CIRCUITS, FAA CABLES AND OTHER AIRPORT ELECTRICAL CABLES SHALL REMAIN IN SERVICE UNTIL REPLACED AS ACCEPTABLE TO THE RESIDENT ENGINEER AND AIRPORT MANAGER. ALL TEMPORARY CABLING AND SPLICING NECESSARY TO KEEP THE CIRCUITS IN OPERATION SHALL BE CONSIDERED INCIDENTAL TO CONTRACT.

EXISTING CRITICAL AIRCRAFT AND REQUIRED SAFETY AREAS

RUNWAY	8/26
APPROACH CATEGORY	B
DESIGN GROUP	II
DESIGN AIRCRAFT	CITATION EXCEL
WINGSPAN	55.7'
TAIL HEIGHT	17.2'
AOA @ RUNWAY SAFETY AREA WIDTH (RSA)	150'
RUNWAY OBJECT FREE AREA WIDTH (ROFA)	500'
TAXIWAY SAFETY AREA WIDTH (TSA)	79'
AOA @ TAXIWAY OBJECT FREE AREA WIDTH (TOFA)	131'
AOA @ TAXILANE OBJECT FREE AREA WIDTH (TOFA)	115'

NOTE: AOA - AIR OPERATIONS AREA

SUGGESTED SEQUENCE OF CONSTRUCTION

- PROVIDE ENGINEER'S FIELD OFFICE AND CONTRACTOR'S EQUIPMENT STORAGE AND PARKING AREA.
- COORDINATE CLOSURES WITH RESIDENT ENGINEER AND AIRPORT MANAGER.
- PLACE BARRICADES AND INSTALL LATHING AND WARNING TAPE AS SHOWN OR AS DIRECTED BY THE ENGINEER.
- MEGGAR EXISTING AIRFIELD CABLES.
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AND CONSTRUCTION SIGNS ON PYOTT ROAD.
- PLACE TEMPORARY EROSION CONTROL ITEMS OF WORK.
- CONSTRUCT RELOCATED TRANSIENT APRON AND HANGAR APRON PAVEMENT.
- INSTALL NEW RUNWAY LIGHTING SYSTEM CABLING, TIE-IN AND ELECTRICAL RACK TO MAINTAIN RUNWAY LIGHTING (SEE NOTE 2)
- DEMOLISH AIRPORT ADMINISTRATION BUILDING.
- RELOCATE HANGAR TYPE A AND HANGARS TYPE B.
- TOPSOIL AND SEED/MULCH.
- INSTALL TEMPORARY SIGNAGE ON TAXILANES ROUTING AIRCRAFT TO SOUTH TRANSIENT APRON.
- CLEAN PAVEMENTS/REMOVE BARRICADES/OPEN SOUTH TRANSIENT APRON PAVEMENT/COMMISSION HANGARS FOR TENANT USE.

CONTRACTOR'S CONSTRUCTION ENTRANCE NOTES

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT AND DEBRIS ONTO PUBLIC RIGHT-OF-WAYS. ALL SEDIMENT AND DEBRIS SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS MUST BE REMOVED IMMEDIATELY.
2. CONTRACTOR SHALL FURNISH CONSTRUCTION SIGNS ON PYOTT ROAD AS SHOWN OR AS REQUIRED BY MCHENRY COUNTY D.O.T. COST OF SIGNS SHALL BE INCIDENTAL TO THE CONTRACT.
3. COST OF INSTALLING, MAINTAINING, REMOVING AND RESTORING ENTRANCE SHALL BE INCIDENTAL TO THE CONTRACT.
4. STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL CONSTRUCTION ENTRANCES (COST INCIDENTAL)

GENERAL NOTES

1. WHEN HAUL ROUTE IS IN USE, THE CONTRACTOR WILL BE REQUIRED TO HAVE A CROSSING GUARD FOR CONSTRUCTION PERSONNEL, CONSTRUCTION TRAFFIC, CONTRACTORS VEHICLES AND EQUIPMENT CROSSING BY, TO OR FROM WORK ZONE. STOP SIGNS SHALL BE IN PLACE AT ALL TIMES IN THIS AREA. THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT.
2. ADMINISTRATION BUILDING IS NOT ALLOWED TO BE DEMOLISHED UNTIL NEW RUNWAY LIGHTING REROUTING IS INSTALLED AND OPERATIONAL.
3. CONTRACTOR SHALL MOVE BARRICADES AS NEEDED FOR PILOT ACCESS TO ADJACENT HANGARS AT NO ADDITIONAL COST TO THE CONTRACT.
4. DURING THE MOVEMENT OF THE HANGARS TO BE RELOCATED CONTRACTOR SHALL PLACE TEMPORARY ORANGE CONES ALONG TAXILANE ROUTE AS DIRECTED BY THE AIRPORT MANAGER.
5. TAXILANES SHALL NOT BE USED AS A HAUL ROUTE FOR CONSTRUCTION EQUIPMENT EXCEPT FOR THE RELOCATION OF BUILDINGS FROM EXISTING LOCATION TO NEW LOCATION.

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

SEQUENCE OF CONSTRUCTION PHASE 1

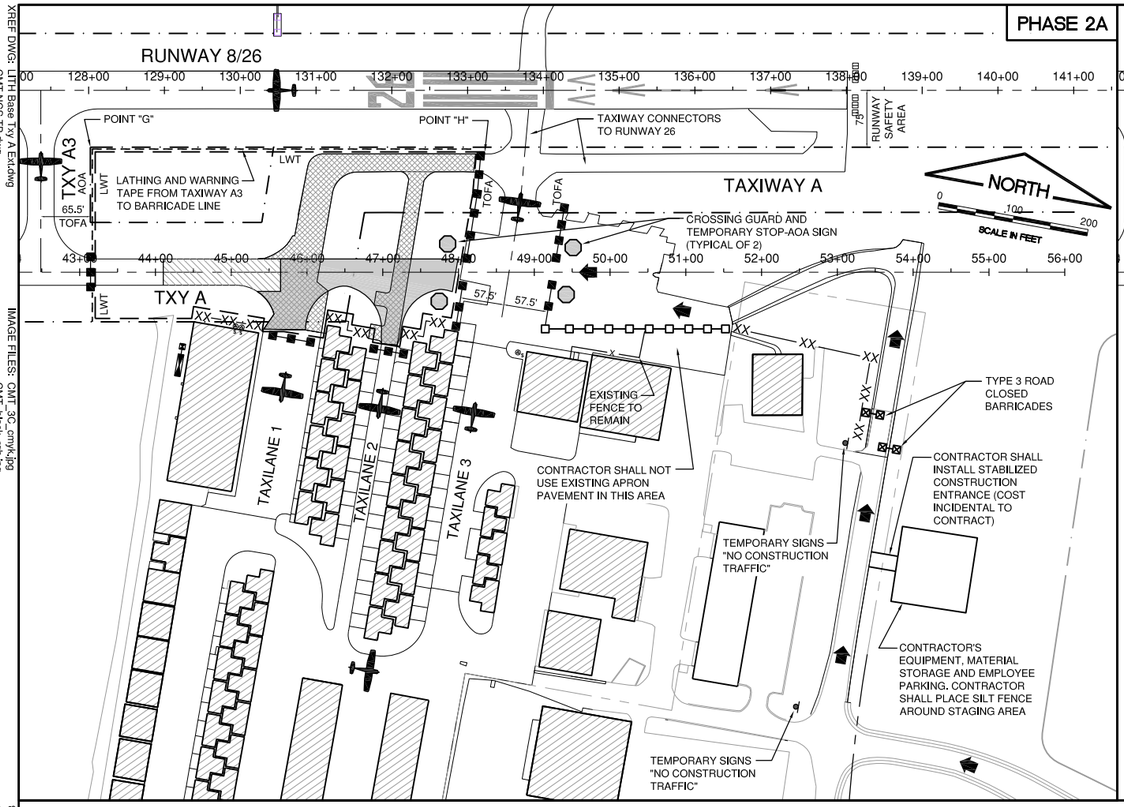
CMT

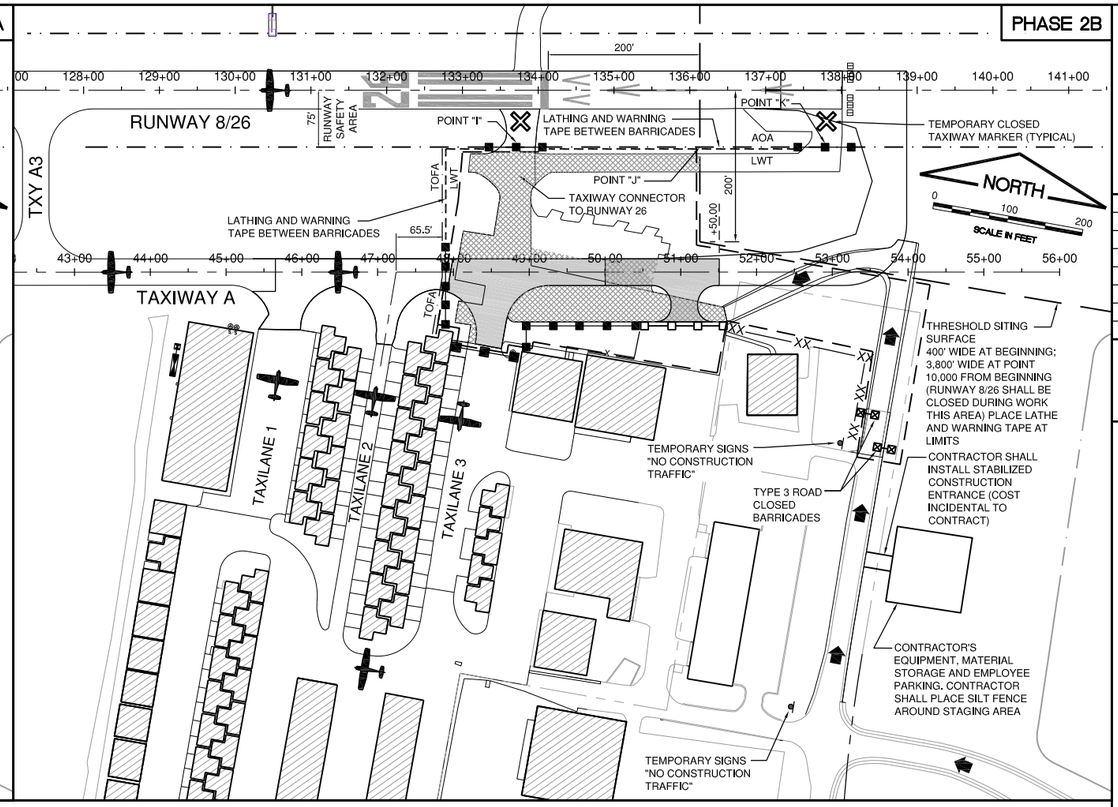
VILLAGE OF LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

SHEET 5 OF 36 SHEETS





PHASE 2A
SUGGESTED SEQUENCE OF CONSTRUCTION

- COORDINATE CLOSURES WITH RESIDENT ENGINEER AND AIRPORT MANAGER.
- PLACE BARRICADES AND INSTALL LATHING AND WARNING TAPE AS SHOWN OR AS DIRECTED BY THE ENGINEER.
- INSTALL TEMPORARY EROSION CONTROL ITEMS OF WORK.
- MEGGAR EXISTING AIRFIELD CABLES.
- REMOVE EXISTING PAVEMENTS AND MISCELLANEOUS REMOVAL ITEMS.
- STRIP TOPSOIL, CONSTRUCT EARTHWORK AND FINAL GRADING.
- INSTALL STORM SEWER.
- CONSTRUCT PAVEMENT STRUCTURE.
- TOPSOIL AND SHOULDER CONSTRUCTION.
- INSTALL TAXIWAY RETROREFLECTIVE MARKERS AND PAVEMENT MARKINGS.
- SEED AND MULCH.
- STA. 43+00 TO STA. 48+00 TAXIWAY A - CONSTRUCT ALL PROPOSED IMPROVEMENTS IN ORDER TO OPEN TO AIRCRAFT TRAFFIC - COORDINATE PARTIAL FINAL INSPECTIONS WITH ENGINEER.
- CLEAN PAVEMENTS/REMOVE BARRICADES/OPEN TAXIWAY A PAVEMENT FROM STA. 43+00 TO STA. 48+00.

PRIOR TO REOPENING A CLOSED RUNWAY, THE ENTIRE (RSA) RUNWAY SAFETY AREA (75 FEET FROM CENTERLINE AND INCLUDING BEYOND THE END OF THE RUNWAY WITHIN AIRPORT PROPERTY) AND (TOFA) TAXIWAY OBJECT FREE AREA MUST MEET FAA CRITERIA. FAA CRITERIA REQUIRES THAT THERE BE NO OPEN EXCAVATIONS OR TRENCHES IN THE SAFETY AREA(S), THE MAXIMUM PAVEMENT DROP OFF BE 3 INCHES, AND ALL GRADES IN ANY DIRECTION BE LESS THAN 5 PERCENT. STEEL PLATES, TEMPORARY WEDGING OF BASE COURSE AND BITUMINOUS CONCRETE MAY BE REQUIRED TO MEET CRITERIA. ALL NECESSARY TEMPORARY MEASURES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

LEGEND

- CONTRACTOR'S WORK AREA
- EXISTING AIRPORT PROPERTY LINE
- EXISTING FENCE
- AIR OPERATIONS AREA (A.O.A.)
- ACTIVE RUNWAYS: USE RUNWAY SAFETY AREA
- ACTIVE TAXIWAYS: USE TAXIWAY OBJECT FREE AREA
- ACTIVE TAXILANES: USE TAXILANE OBJECT FREE AREA
- AIRCRAFT OPERATIONS AREAS
- TYPE 3 ROAD CLOSED BARRICADES WITH ROAD CLOSED SIGNAGE
- TYPE II BARRICADES WITH RED LIGHTS
- LOW PROFILE BARRICADES WITH RED LIGHTS AND SIGNS "DO NOT ENTER" AND "AIRCRAFT MOVEMENT AREA"
- CONTRACTOR'S ACCESS/HAUL ROAD
- TEMPORARY CLOSED RUNWAY MARKER
- TEMPORARY CLOSED TAXIWAY MARKER
- CROSSING GUARD AND TEMPORARY STOP-AOA SIGN (SEE NOTE 1 ON SHEET 5)
- LATHING AND WARNING TAPE
- TEMPORARY CONSTRUCTION FENCE

ALL PHASES:

CONTRACTOR SHALL PLAN AND PERFORM HIS WORK SO AS NOT TO INTERFERE OR HINDER THE PROGRESS, WORK OR HAUL ROAD ACCESS OF OTHER CONTRACTORS (SEE STANDARD SPECIFICATIONS SECTION 50-05). THE PRIME CONTRACTOR WILL BE RESPONSIBLE TO COORDINATE CONSTRUCTION ACTIVITIES AND ACCESS BETWEEN ALL ON-SITE CONTRACTORS SUBCONTRACTORS.

ALL EXISTING TAXIWAY AND RUNWAY AIRFIELD LIGHTING CIRCUITS, FAA CABLES AND OTHER AIRPORT ELECTRICAL CABLES SHALL REMAIN IN SERVICE UNTIL REPLACED AS ACCEPTABLE TO THE RESIDENT ENGINEER AND AIRPORT MANAGER. ALL TEMPORARY CABLING AND SPLICING NECESSARY TO KEEP THE CIRCUITS IN OPERATION SHALL BE CONSIDERED INCIDENTAL TO CONTRACT.

EXISTING CRITICAL AIRCRAFT AND REQUIRED SAFETY AREAS

RUNWAY	8/26
APPROACH CATEGORY	B
DESIGN GROUP	II
DESIGN AIRCRAFT	CITATION EXCEL
WINGSPAN	17.2'
TAIL HEIGHT	55.7'
AOA @ RUNWAY SAFETY AREA WIDTH (RSA)	150'
RUNWAY OBJECT FREE AREA WIDTH (ROFA)	500'
TAXIWAY SAFETY AREA WIDTH (TSA)	79'
AOA @ TAXIWAY OBJECT FREE AREA WIDTH (TOFA)	131'
AOA @ TAXILANE OBJECT FREE AREA WIDTH (TOFA)	115'

PHASE 2B
SUGGESTED SEQUENCE OF CONSTRUCTION

- COORDINATE CLOSURES WITH RESIDENT ENGINEER AND AIRPORT MANAGER.
- PLACE BARRICADES AND INSTALL LATHING AND WARNING TAPE AS SHOWN OR AS DIRECTED BY THE ENGINEER.
- INSTALL TEMPORARY EROSION CONTROL ITEMS OF WORK.
- REMOVE EXISTING PAVEMENTS AND MISCELLANEOUS REMOVAL ITEMS.
- STRIP TOPSOIL AND CONSTRUCT EARTHWORK AND FINAL GRADING.
- CONSTRUCT PAVEMENT STRUCTURE.
- TOPSOIL AND SHOULDER CONSTRUCTION.
- INSTALL TAXIWAY RETROREFLECTIVE MARKERS AND PAVEMENT MARKINGS.
- SEED AND MULCH.
- STA. 48+00 TO STA. 51+50 TAXIWAY A - CONSTRUCT ALL PROPOSED IMPROVEMENTS IN ORDER TO OPEN TO AIRCRAFT TRAFFIC - COORDINATE PARTIAL FINAL INSPECTIONS WITH ENGINEER.
- CLEAN PAVEMENTS/REMOVE BARRICADES/OPEN TAXIWAY A AND TAXILANE 3 PAVEMENT.

WORK AREA	ALLOWABLE WORK PERIOD	OPERATION STATUS/RESTRICTIONS
PHASE 2A	NO RESTRICTIONS	RUNWAY 8/26 - OPEN TAXILANE 1 AND TAXILANE 2 TO TAXIWAY A - CLOSED TAXIWAY A FROM TAXIWAY A3 TO TAXIWAY CONNECTOR RUNWAY 26 - CLOSED TAXILANE 3 AND TAXIWAY CONNECTORS TO RUNWAY 26 - OPEN
PHASE 2B	NO RESTRICTIONS	RUNWAY 8/26 - OPEN TAXIWAY A FROM RUNWAY 8 END TO TAXILANE CONNECTOR 1 & 2 - OPEN TAXIWAY CONNECTORS TO RUNWAY 26 - CLOSED TAXILANE 3 CONNECTOR TO TAXIWAY A - CLOSED

NOTE: AIRCRAFT TO USE RUNWAY 8/26 FOR TAXIING TO RUNWAY 26 FOR TAKOFFS AND ACCESS TO HANGARS VIA TAXIWAY A3.

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

SEQUENCE OF CONSTRUCTION PHASE 2

CMT

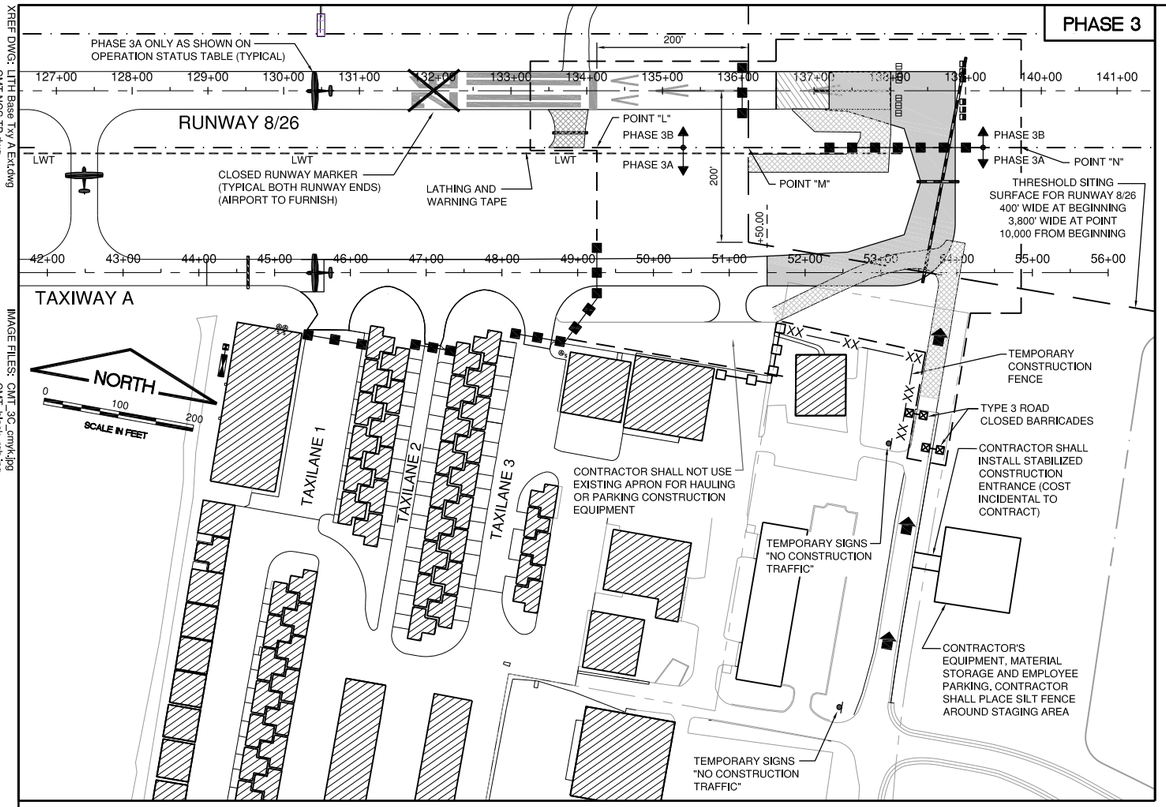
VILLAGE OF LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

SHEET 6 OF 36 SHEETS

XREF DWG: LITH Base Txy A Exist.dwg
CMT NCS TB.dwg
IMAGE FILES: CMT_3C_cmyk.jpg
CMT_black_rgb.jpg
UPDATE BY: Jim Ohse
LAYOUT: Phase 2A-2B
DATE: Tuesday, December 8, 2015 12:36:02 PM
FILE: K:\Lake\The Hills\Apt\14255-01 TxyAExtension\Draw\Sheets\Preliminary Plans\sequencing2.dwg



XREF DWG: LITH Base Txy A Ext.dwg
CMT NCS TB.dwg
IMAGE FILES: CMT_3C_cmyk.jpg
CMT_black_rgb.jpg
LithLogo.jpg
UPDATE BY: Jim Ohse
LAYOUT: Phase 3
DATE: Tuesday, December 8, 2015 12:38:01 PM
FILE: K:\Lake\In The Hills\Apt\14255-01_Txy\Extension\Draw\Sheets\Preliminary Plans\sequencing3.dwg

LEGEND

- CONTRACTOR'S WORK AREA
- EXISTING AIRPORT PROPERTY LINE
- x — EXISTING 6' CLASS E FENCE
- AOA — AIR OPERATIONS AREA (A,O,A,) ACTIVE RUNWAYS: USE RUNWAY SAFETY AREA ACTIVE TAXIWAYS: USE TAXIWAY OBJECT FREE AREA ACTIVE TAXILANES: USE TAXILANE OBJECT FREE AREA
- AIRCRAFT OPERATIONS AREAS
- TYPE II BARRICADES WITH FLASHING RED LIGHTS
- TYPE III ROAD CLOSED BARRICADES WITH SIGNAGE
- LOW PROFILE BARRICADES WITH RED LIGHTS AND SIGNS "DO NOT ENTER" AND "AIRCRAFT MOVEMENT AREA"
- CONTRACTOR'S ACCESS/HAUL ROAD
- TEMPORARY CLOSED RUNWAY MARKER
- CROSSING GUARD AND TEMPORARY STOP-AOA SIGN (SEE NOTE 1)
- LWT — LATHING AND WARNING TAPE
- XX — TEMPORARY CONSTRUCTION FENCE

SUGGESTED SEQUENCE OF CONSTRUCTION

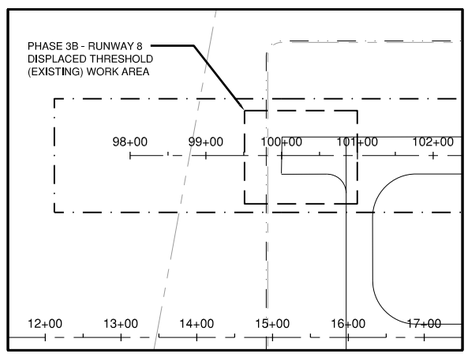
- COORDINATE CLOSURES WITH RESIDENT ENGINEER AND AIRPORT MANAGER.
- PLACE BARRICADES, CLOSED RUNWAY MARKERS AND INSTALL LATHING AND WARNING TAPE AS SHOWN OR AS DIRECTED BY THE ENGINEER.
- INSTALL TEMPORARY EROSION CONTROL ITEMS OF WORK.
- REMOVE EXISTING PAVEMENTS AND MISCELLANEOUS REMOVAL ITEMS.
- STRIP TOPSOIL AND CONSTRUCT EARTHWORK AND FINAL GRADING.
- CONSTRUCT PAVEMENT STRUCTURE.
- TOPSOIL AND SHOULDER CONSTRUCTION.
- INSTALL TAXIWAY RETROREFLECTIVE MARKERS AND PAVEMENT MARKING.
- SEED AND MULCH.
- COORDINATE FINAL INSPECTIONS WITH ENGINEER.
- CLEAN PAVEMENTS/REMOVE BARRICADES/OPEN PAVEMENTS.

ALL PHASES:

CONTRACTOR SHALL PLAN AND PERFORM HIS WORK SO AS NOT TO INTERFERE OR HINDER THE PROGRESS, WORK OR HAUL ROAD ACCESS OF OTHER CONTRACTORS (SEE STANDARD SPECIFICATIONS SECTION 50-05). THE PRIME CONTRACTOR WILL BE RESPONSIBLE TO COORDINATE CONSTRUCTION ACTIVITIES AND ACCESS BETWEEN ALL ON-SITE CONTRACTORS SUBCONTRACTORS.

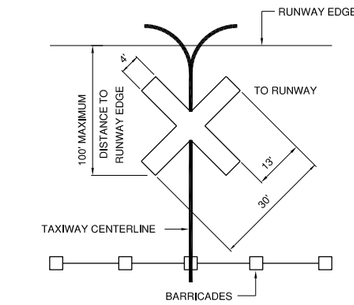
ALL EXISTING TAXIWAY AND RUNWAY AIRFIELD LIGHTING CIRCUITS, FAA CABLES AND OTHER AIRPORT ELECTRICAL CABLES SHALL REMAIN IN SERVICE UNTIL REPLACED AS ACCEPTABLE TO THE RESIDENT ENGINEER AND AIRPORT MANAGER. ALL TEMPORARY CABLING AND SPLICING NECESSARY TO KEEP THE CIRCUITS IN OPERATION SHALL BE CONSIDERED INCIDENTAL TO CONTRACT.

WORK AREA	ALLOWABLE WORK PERIOD	OPERATION STATUS/RESTRICTIONS
PHASE 3A WORK OUTSIDE RUNWAY 8/26 SAFETY AREA AND WITHIN THRESHOLD SITING SURFACE	14 CALENDAR DAYS (CONSECUTIVE); DAY TIME ONLY	RUNWAY 8/26 - CLOSED DAYTIME ONLY. TAXIWAY A, TAXILANES 1, 2 AND 3 CLOSED DAYTIME ONLY
PHASE 3B WORK WITHIN RUNWAY 8/26 SAFETY AREA AND WITHIN THRESHOLD SITING SURFACE	7 CALDENDAR DAYS (CONSECUTIVE); WORK IS REQUIRED TO BE COMPLETED WITHIN THE LAST 7 CALENDAR DAYS OF PHASE 3A	RUNWAY 8/26 - CLOSED DAY AND NIGHT. TAXIWAY A, TAXILANES 1, 2 AND 3 CLOSED



EXISTING CRITICAL AIRCRAFT AND REQUIRED SAFETY AREAS

RUNWAY	8/26
APPROACH CATEGORY	B
DESIGN GROUP	II
DESIGN AIRCRAFT	CITATION EXCEL
WINGSPAN	17.2'
TAIL HEIGHT	55.7'
AOA @ RUNWAY SAFETY AREA WIDTH (RSA)	150'
RUNWAY OBJECT FREE AREA WIDTH (ROFA)	500'
TAXIWAY SAFETY AREA WIDTH (TSA)	79'
AOA @ TAXIWAY OBJECT FREE AREA WIDTH (TOFA)	131'
AOA @ TAXILANE OBJECT FREE AREA WIDTH (TOFA)	115'

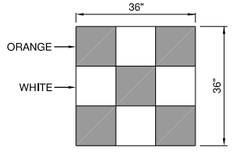


CLOSED TAXIWAY MARKER DETAIL

NOT TO SCALE

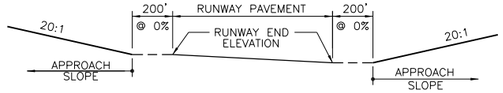
CLOSED TAXIWAY MARKER DETAIL NOTES

1. CLOSED TAXIWAY MARKERS SHALL BE PAINTED WITH TEMPORARY MARKING CAPABLE OF BEING REMOVED WITH LOW PRESSURE WATER BLASTING OR OTHER MATERIAL THAT DOES NOT VIOLATE THE OBJECT FREE AREA CRITERIA AND RUNWAY SAFETY AREA CRITERIA PER ADVISORY CIRCULAR 150/5300-13A (LATEST EDITION) AND ARE APPROVED BY THE AIRPORT.
2. CONTRACTOR SHALL MAINTAIN AND RELOCATE MARKERS AS SHOWN ON THE PLANS OR AS NEEDED TO FACILITATE CONSTRUCTION
3. COST OF FURNISHING, INSTALLING, MAINTAINING AND REMOVING MARKERS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
4. PLACE MARKERS OVER TAXIWAY CENTERLINE.
5. MARKERS SHALL BE ADEQUATELY SECURED TO PREVENT MOVEMENT BY PROPELLER WASH, JET BLAST OR OTHER WIND CURRENTS.
6. MARKERS ARE ONLY REQUIRED FOR TAXIWAYS CLOSED THREE (3) CONSECUTIVE DAYS OR MORE.



CONSTRUCTION EQUIPMENT AND TRUCK SIGNAL FLAG

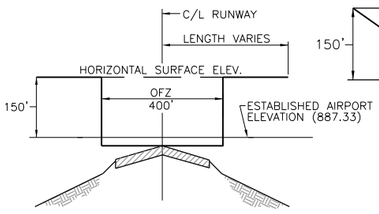
NOT TO SCALE



TYPICAL PROFILE F.A.R. PART 77 IMAGINARY SURFACES

NO SCALE

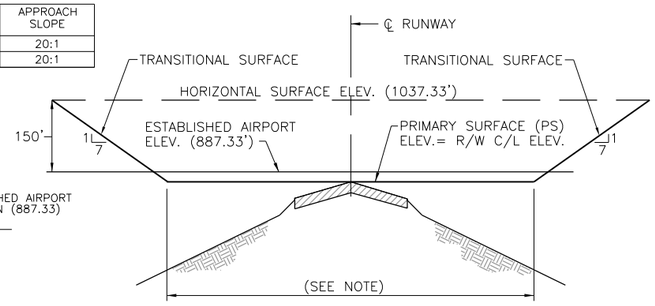
RUNWAY END	ELEVATION	APPROACH SLOPE
8	884.68	20:1
26	885.25	20:1



TYPICAL SECTION OBSTACLE FREE ZONE (OFZ)

NO SCALE

RUNWAY	TYPE OF RUNWAY	H (FEET)
8-26	VISUAL	150



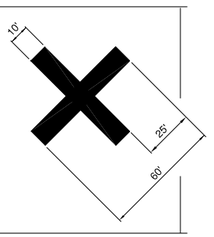
TYPICAL SECTION F.A.R. PART 77 IMAGINARY SURFACES

NO SCALE

NOTE:

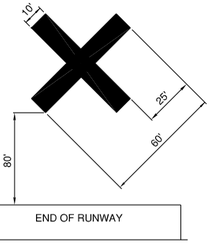
IMAGINARY SURFACE REQUIREMENTS FOR EXISTING ACTIVE RUNWAYS (R/W);

R/W 8-26 500' PRIMARY SURFACE (PS) (250' LT. & RT. OF CENTERLINE)



ON PAVEMENT TEMPORARY CLOSED RUNWAY MARKER DETAIL

NOT TO SCALE



OFF PAVEMENT TEMPORARY CLOSED RUNWAY MARKER DETAIL

NOT TO SCALE

CLOSED RUNWAY MARKER DETAIL NOTES

1. CLOSED RUNWAY MARKERS SHALL BE YELLOW.
2. MARKERS SHALL BE MATERIAL APPROVED BY THE ENGINEER.
3. CONTRACTOR SHALL MAINTAIN AND RELOCATE MARKERS AS SHOWN ON THE PLANS OR AS NEEDED TO FACILITATE CONSTRUCTION
4. MARKERS ON PAVEMENT SHALL BE PLACED OVER EXISTING RUNWAY NUMERALS AS SHOWN.
5. MARKERS SHALL BE FURNISHED BY THE CONTRACTOR. THE CONTRACTOR SHALL FURNISH ALL LABOR AND MATERIALS FOR INSTALLING, RELOCATING, MAINTAINING AND REMOVING THE MARKERS, WHOSE COST SHALL BE INCIDENTAL TO THE CONTRACT.
6. DURING VARIOUS PHASES OF WORK, IT WILL BE NECESSARY TO CLOSE RUNWAYS TO AIR TRAFFIC ON A TEMPORARY BASIS AS COORDINATED WITH THE AIRPORT. THE CONTRACTOR SHALL MARK THE RUNWAYS TO BE CLOSED BY PLACING A YELLOW CROSS AT THE LOCATION AND DIMENSIONS DETAILED ON THIS SHEET. THE CROSSES ARE SHOWN ON THE RESPECTIVE RUNWAYS ACCORDING TO THE VARIOUS PHASES OF WORK AS DELINEATED IN THE SUGGESTED SEQUENCE OF CONSTRUCTION.

PRIOR TO REOPENING A CLOSED RUNWAY, THE ENTIRE (RSA) RUNWAY SAFETY AREA (150 FEET FROM CENTERLINE AND INCLUDING BEYOND THE END OF THE RUNWAY WITHIN AIRPORT PROPERTY) AND (TOFA) TAXIWAY OBJECT FREE AREA MUST MEET FAA CRITERIA. FAA CRITERIA REQUIRES THAT THERE BE NO OPEN EXCAVATIONS OR TRENCHES IN THE SAFETY AREA(S), THE MAXIMUM PAVEMENT DROP OFF BE 3 INCHES, AND ALL GRADES IN ANY DIRECTION BE LESS THAN 5 PERCENT, STEEL PLATES, TEMPORARY WEDGING OF BASE COURSE AND BITUMINOUS CONCRETE MAY BE REQUIRED TO MEET CRITERIA. ALL NECESSARY TEMPORARY MEASURES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS		
NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

SEQUENCE OF CONSTRUCTION PHASE 3

CMT

VILLAGE OF LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

SHEET 7 OF 36 SHEETS

XREF DWG: LITH Base 1'xy A Ext.dwg
CMT NCS TB.dwg
Keymap.dwg

IMAGE FILES: IUM-530.tif
CMT_3C_cmyk.jpg
CMT_black_sgn.jpg

UPDATE BY: Jim Ohse
LAYOUT: Eros Plan

DATE: Tuesday, December 8, 2015 12:29:16 PM
FILE: K:\Lake\TheHills\p14255-01_TrvAExtension\Draw\Sheets Preliminary Plans\SWPPP.dwg

KEY MAP

WORK AREAS THIS SHEET

PHASE 1

PHASE 2A PHASE 2B

PHASE 2

PHASE 3

PHASES 1-3

PHASES 2-3

RUNWAY 8/26

TAXIWAY A

PYOTT ROAD

NORTH
0 100 200
SCALE IN FEET

TEMPORARY TREE PROTECTION

VEGETATED TURF BUFFER STRIP

CONTRACTOR'S STORAGE, PARKING AND STOCKPILING AREA

EXISTING FUEL FARM

SECONDARY STOCKPILE LOCATION EXACT LOCATION TO BE COORDINATED WITH RESIDENT ENGINEER AND AIRPORT

DOUBLE ROW OF SILT FENCE. EXACT LOCATION TO BE COORDINATED IN FIELD WITH STOCKPILE LOCATION

AGGREGATE ACCESS ROAD

CONTRACTOR TO PLACE TOPSOIL AT THE PAVEMENT REMOVAL LIMITS

TEMPORARY TREE PROTECTION

LEGEND

- NEW PAVEMENT
- NEW SEEDING (901) AND HEAVY DUTY MULCH (908)
- TEMPORARY SEEDING (156) AND TEMPORARY MULCHING (156)
- VEGETATED TURF BUFFER
- NEW EROSION CONTROL BLANKET (156)
- TEMPORARY INLET PROTECTION
- TEMPORARY SILT FENCE
- GRADING LIMITS
- RUNWAY SAFETY AREA
- NEW CONTOUR
- EXISTING CONTOUR
- ACCESS/HAUL ROUTE (SEE SEQUENCE PLANS)
- (13') TEMPORARY DITCH CHECK (MANUFACTURED) (APPROXIMATE LENGTH)
- XX TEMPORARY CONSTRUCTION FENCE

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

LANDSCAPING AND EROSION CONTROL PLAN

CMT

VILLAGE OF LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

SHEET 8 OF 36 SHEETS

XREF DWG: LITH Base Txy A Ext.dwg
CMT NCS TB.dwg
keymap.dwg

IMAGE FILES: IUM-530.tiff
CMT_3C_cmyk.jpg
CMT_black_rgb.jpg
LithLogo.jpg

UPDATE BY: Jim Ohse
LAYOUT: Eros Dtls

DATE: Tuesday, December 8, 2015 12:11:22 PM
FILE: K:\LakeInTheHillsAp\14255-01_TxyAExtension\Draw\Sheets\Preliminary Plans\SWPPP.dwg

TEMPORARY EROSION CONTROL GENERAL NOTES

1. EROSION CONTROL SHALL BE PROVIDED IN ACCORDANCE WITH THE VILLAGE OF LAKE IN THE HILLS AND MCHENRY COUNTY STORM WATER REQUIREMENTS.
2. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS IN THE ILLINOIS URBAN MANUAL REVISED SEPTEMBER 2012.
3. A COPY OF THE APPROVED EROSION CONTROL AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIME.
4. THE CONTRACTOR WILL BE REQUIRED TO IMPLEMENT AND MAINTAIN EROSION CONTROL MEASURES IMMEDIATELY AFTER STRIPPING OF EXISTING VEGETATION.
5. NO RUNOFF FROM STRIPPED AREAS WILL LEAVE THE SITE OTHER THAN THROUGH EROSION CONTROL PROTECTIVE MEASURES. THE CONTRACTOR WILL ADJUST HIS OPERATIONS AND IMPLEMENT EROSION CONTROL MEASURES ACCORDINGLY.
6. MAINTENANCE AND REPAIR OF ALL EROSION CONTROL MEASURES SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE RESPECTIVE EROSION CONTROL PAY AREA.
7. THE CONTRACTOR SHALL INSTALL SILT FILTER FENCE AT ALL EARTH STOCKPILES WHICH SHALL BE PAID FOR AS SILT FENCE.
8. ALL ADJACENT STREETS MUST BE KEPT CLEAR OF DEBRIS, INSPECTED DAILY, AND CLEANED WHEN NECESSARY.
9. EROSION CONTROL MEASURES SHALL BE INSPECTED 24 HOURS AFTER ANY STORM OF PRECIPITATION OF 0.5" OR GREATER.
10. ALL CONCRETE TRUCK WASHOUT LOCATIONS SHALL BE LOCATED WITHIN THE CONTRACTOR'S STAGING AREA. THE DESIGNATED AREA SHALL BE APPROVED BY THE ENGINEER.

    A.) A CONCRETE WASHOUT SIGN SHALL BE INSTALL WITHIN 20 FEET OF THE TEMPORARY CONCRETE TRUCK WASHOUT FACILITY. AT A MINIMUM, THE SIGN SHALL READ "CONCRETE WASHOUT" IN 6" TALL LETTERS.

    B.) INSPECTION SHALL OCCUR ONCE A WEEK AND DAILY DURING CONCRETE OPERATIONS. REPAIR/REPLACEMENT OF THE FACILITY SHALL BE MADE SUCH THAT CONCRETE WASTE IS CONTAINED.

    C.) THE CONCRETE WASHOUT FACILITY MUST BE CLEANED AND ALL OF THE CONTAINED MATERIALS SHALL BE REMOVED AND DISPOSED OF AT A LEGAL OFF-SITE LOCATION WHEN THE FACILITY HAS REACHED TWO-THIRDS CAPACITY. UPON COMPLETION OF CONCRETE OPERATIONS, THE CONCRETE TRUCK WASHOUT AND ALL MATERIALS CONTAINED WITHIN SHALL BE DISPOSED OF AT A LEGAL OFF-SITE LOCATION.

    D.) WASHOUT TO BE LOCATED ON LEVEL GROUND AND A MINIMUM OF 50' FROM INLETS, DRAINAGE FACILITIES OR WATER BODIES. IF REQUIRED CONTRACTOR SHALL BUILD A LEVEL PAD FOR THE WASHOUT (COST INCIDENTAL TO CONTRACT).

    E.) ALL LABOR, EQUIPMENT, TOOLS, MATERIAL, EXCAVATION, MAINTENANCE AND DISPOSAL SHALL NOT BE MEASURED FOR PAYMENT BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

    F.) CONTRACTOR SHALL REMOVE ACCUMULATED LIQUIDS PRIOR TO IMPENDING STORMS TO PREVENT OVERFLOW OF FACILITY, OTHERWISE COVER FACILITY.

    G.) CONTRACTOR MAY PROPOSE ALTERNATE WASHOUT FACILITIES IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL FOR REVIEW AND APPROVAL BY THE ENGINEER.
11. THE CONTRACTOR IS RESPONSIBLE FOR PROPER INSTALLATION, INSPECTION, AND MAINTENANCE OF ALL EROSION CONTROL DEVICES. ALL EROSION CONTROL DEVICES SHALL BE MAINTAINED, REPAIRED, AND REPLACED THROUGHOUT THE ENTIRE CONSTRUCTION OF PROJECT. AFTER ACHIEVING PERMANENT VEGETATION, ALL EROSION CONTROL DEVICES SHALL BE REMOVED, ALL DRAINAGE STRUCTURES CLEANED, AND ALL AREAS DISTURBED BY INSTALLATION OF EROSION CONTROL DEVICES RESTORED.
12. SILT BASKETS SHALL BE INSTALLED AT ALL IN PAVEMENT AND TURF DRAINAGE STRUCTURES. SILT BASKETS SHALL BE CLEANED AS RECOMMENDED BY THE MANUFACTURER OR AT THE DIRECTION OF THE ENGINEER. COSTS FOR INSTALLATION AND CLEANING OF SILT BASKETS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR INLET PROTECTION.
13. TEMPORARY EROSION CONTROL SEEDING SHALL BE APPLIED BY HAND BROADCASTING TO ACHIEVE REASONABLY UNIFORM COVERAGE AT A RATE OF 100LB/ACRE.
14. DITCH CHECKS SHALL BE FROM IDOT'S APPROVED LIST OR ROLLED EXCELSIOR. ROLLED EXCELSIOR SHALL BE IN CONFORMANCE WITH SECTIONS 280.04 AND 1081.15 (f) OF THE STD. SPECIFICATION, FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION. METAL STAKES WILL NOT BE PERMITTED.
15. DITCH CHECK SPACING BASED ON 10-INCH HIGH DITCH CHECK. SPACING AND QUANTITY TO BE ADJUSTED BASED ON TYPE OF DITCH CHECK INSTALLED.
16. CONTRACTOR SHALL DETERMINE AND IMPLEMENT THE NECESSARY PRECAUTIONS TO MINIMIZE FUGITIVE DUST DURING BUILDING AND FOUNDATION DEMOLITION, AT A MINIMUM SURFACES SHOULD BE WETTED.
17. EROSION CONTROL BLANKET WILL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS. WOOD STAKES OR BIODEGRADABLE PLASTIC STAKES ARE TO BE USED ONLY. METAL STAKES ARE NOT ALLOWED.

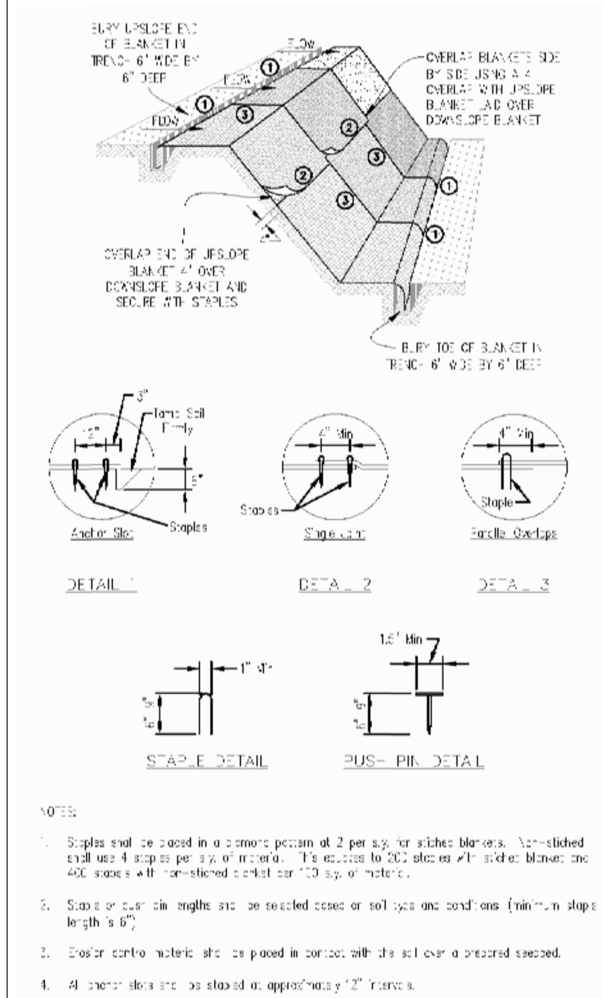
MCHENRY COUNTY STANDARD SOIL EROSION AND SEDIMENT CONTROL NOTES

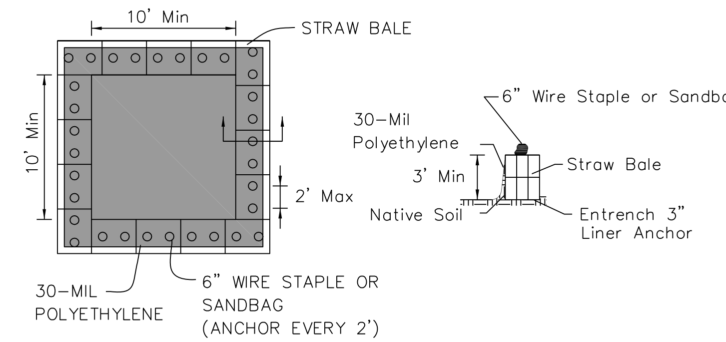
1. CONTROL MEASURES SHALL MEET THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE *ILLINOIS URBAN MANUAL* (WWW.AISWCD.ORG/IUM) UNLESS STATED OTHERWISE.
2. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. AREAS OF THE DEVELOPMENT SITE THAT ARE NOT TO BE DISTURBED SHALL BE PROTECTED FROM CONSTRUCTION TRAFFIC OR OTHER DISTURBANCE UNTIL FINAL STABILIZATION IS ACHIEVED.
3. SOIL STABILIZATION MEASURES SHALL CONSIDER THE TIME OF YEAR, DEVELOPMENT SITE CONDITIONS AND THE USE OF TEMPORARY OR PERMANENT MEASURES.
4. STABILIZATION BY SEEDING SHALL INCLUDE TOPSOIL PLACEMENT AND FERTILIZATION, AS NECESSARY.
5. NATIVE SEED MIXTURES SHALL INCLUDE RAPID-GROWING ANNUAL GRASSES OR SMALL GRAINS TO PROVIDE INITIAL, TEMPORARY SOIL STABILIZATION.
6. OFFSITE PROPERTY SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. VELOCITY DISSIPATION DEVICES SHALL BE PLACED AT CONCENTRATED DISCHARGE LOCATIONS AND ALONG THE LENGTH OF ANY OUTFALL CHANNEL, AS NECESSARY TO PREVENT EROSION.
7. SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE DISTURBANCE OF TRIBUTARY AREAS.
8. STABILIZATION OF DISTURBED AREAS SHALL BE INITIATED IMMEDIATELY WHENEVER ANY CLEARING, GRADING, EXCAVATING OR OTHER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED ON ANY PORTION OF THE DEVELOPMENT SITE, OR TEMPORARILY CEASED ON ANY PORTION OF THE DEVELOPMENT SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. STABILIZATION OF DISTURBED AREAS SHALL BE INITIATED WITHIN 1 WORKING DAY OF PERMANENT OR TEMPORARY CESSATION OF EARTH DISTURBING ACTIVITIES AND SHALL BE COMPLETED AS SOON AS POSSIBLE, BUT NOT LATER THAN 14 CALENDAR DAYS FROM THE INITIATION OF STABILIZATION WORK IN AN AREA. EXCEPTIONS TO THESE TIME FRAMES ARE SPECIFIED BELOW:
   A. WHERE THE INITIATION OF STABILIZATION MEASURES IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE; AND
   B. IN AREAS WHERE CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED AND WILL RESUME AFTER 14 DAYS, A TEMPORARY STABILIZATION METHOD MAY BE USED.
9. DISTURBANCE OF STEEP SLOPES SHALL BE MINIMIZED. AREAS OR EMBANKMENTS HAVING SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED WITH STAKED IN PLACE SOD, EROSION CONTROL BLANKET IN COMBINATION WITH SEEDING, OR AN EQUIVALENT CONTROL MEASURE.
10. PERIMETER CONTROL MEASURES SHALL BE PROVIDED DOWNSLOPE AND PERPENDICULAR TO THE FLOW OF RUNOFF FROM DISTURBED AREAS, WHERE THE TRIBUTARY AREA IS GREATER THAN 5,000 SQUARE FEET, AND WHERE RUNOFF WILL FLOW IN A SHEET FLOW MANNER. PERIMETER EROSION CONTROL SHALL ALSO BE PROVIDED AT THE BASE OF SOIL STOCKPILES.
11. THE STORMWATER MANAGEMENT SYSTEM SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION DOWNSLOPE FROM DISTURBED AREAS. INLET PROTECTION THAT REDUCES SEDIMENT LOADING, WHILE ALLOWING RUNOFF TO ENTER THE INLET SHALL BE REQUIRED FOR ALL STORM SEWERS. CHECK DAMS, OR AN EQUIVALENT CONTROL MEASURE, SHALL BE REQUIRED FOR ALL CHANNELS. FILTER FABRIC INLET PROTECTION AND STRAW BALE DITCH CHECKS ARE NOT ACCEPTABLE CONTROL MEASURES.
12. IF DEWATERING SERVICES ARE USED, DISCHARGES SHALL BE ROUTED THROUGH AN EFFECTIVE SEDIMENT CONTROL MEASURE (E.G., SEDIMENT TRAP OR AN EQUIVALENT CONTROL MEASURE). THE ENFORCEMENT OFFICER SHALL BE NOTIFIED PRIOR TO THE COMMENCEMENT OF DEWATERING ACTIVITIES.
13. ALL TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL STABILIZATION OF THE DEVELOPMENT SITE IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NECESSARY. TRAPPED SEDIMENT SHALL BE REMOVED AND DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED.
14. STOCKPILED SOIL AND MATERIALS SHALL BE REMOVED FROM FLOOD HAZARD AREAS AT THE END OF EACH WORK DAY. SOIL AND MATERIALS STOCKPILED IN IWMC OR BUFFER AREAS SHALL BE PLACED ON TIMBER MATS, OR AN EQUIVALENT CONTROL MEASURE.
15. EFFECTIVE CONTROL MEASURES SHALL BE UTILIZED TO MINIMIZE THE DISCHARGE OF POLLUTANTS FROM THE DEVELOPMENT SITE. AT A MINIMUM, CONTROL MEASURES SHALL BE IMPLEMENTED IN ORDER TO:
   A. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATER; AND
   B. MINIMIZE THE EXPOSURE OF BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTES, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, VEHICLE FLUIDS, SANITARY WASTE, AND OTHER MATERIALS PRESENT ON THE DEVELOPMENT SITE TO PRECIPITATION AND TO STORMWATER.
16. ADEQUATE RECEPTACLES SHALL BE PROVIDED FOR THE DEPOSITING OF ALL CONSTRUCTION MATERIAL DEBRIS GENERATED DURING THE DEVELOPMENT PROCESS. THE APPLICANT SHALL NOT CAUSE OR PERMIT THE DUMPING, DEPOSITING, DROPPING, THROWING, DISCARDING OR LEAVING OF CONSTRUCTION MATERIAL DEBRIS UPON OR INTO ANY DEVELOPMENT SITE, CHANNEL, OR IWMC. THE DEVELOPMENT SITE SHALL BE MAINTAINED FREE OF CONSTRUCTION MATERIAL DEBRIS.
17. THE ENFORCEMENT OFFICER MAY REQUIRE ADDITIONAL OR ALTERNATE SOIL EROSION AND SEDIMENT CONTROL MEASURES, BASED ON DEVELOPMENT SITE SPECIFIC CONSIDERATIONS AND THE EFFECTIVENESS OF THE INSTALLED CONTROL MEASURES.

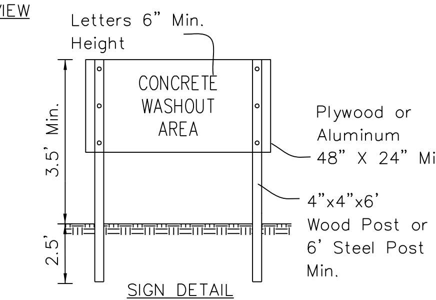
VEGETATIVE BUFFER NOTES

1. CONTRACTOR SHALL MARK THE VEGETATIVE BUFFER WITH LATHE AND RIBBON. THE AREA SHALL NOT BE DISTURBED BY CONSTRUCTION EQUIPMENT OR VEHICLES.
2. VEGETATIVE BUFFER SHALL BE INSPECTED FOR PROPER DISTRIBUTION OF FLOWS, SEDIMENT ACCUMULATION AND SIGNS OF RILL FORMATION. THEY SHALL AT A MINIMUM BE INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PROVIDED 0.5 INCHES OF RAIN OR MORE DURING A 24 HOUR PERIOD.
3. IF THE BUFFER BECOMES SILT COVERED, CONTAINS RILLS OR IS OTHERWISE RENDERED INEFFECTIVE, OTHER PERIMETER SEDIMENT CONTROL MEASURES SHALL BE INSTALLED. ERODED AREAS SHALL BE REPAIRED AND STABILIZED, REPAIR SHALL BE COMPLETED AS SOON AS POSSIBLE WITH CONSIDERATION TO SITE CONDITIONS.
4. THE BUFFER VEGITATION SHALL BE MAINTAINED BETWEEN A HEIGHT OF 4-12 INCHES.
5. MAINTENANCE OF THE BUFFER AREA WILL NOT BE MEASURED SEPARATELY FOR PAYMENT BUT SHALL BE INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

STABILIZATION TYPE	JAN.	FEB.	MAR.	APR.	MAY.	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
PERMANENT SEEDING				A →	→	→		A →	→	→	→	
DORMANT SEEDING	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
TEMPORARY SEEDING			B →	→	→	→	→	→	→	→	→	
MULCHING				→	→	→	→	→	→	→	→	
TEMPORARY MULCHING			→	→	→	→	→	→	→	→	→	→
EROSION CONTROL BLANKET	→	→	→	→	→	→	→	→	→	→	→	→
A. SEEDING AERONAUTICS MIX (SEE IDOT STD. SPEC. AIRPORTS SECTION 901-2.17 FOR SEEDING MIXTURE)												
B. TEMPORARY SEEDING (SEE IDOT STD. SPEC. ART. 280.04 f.)												





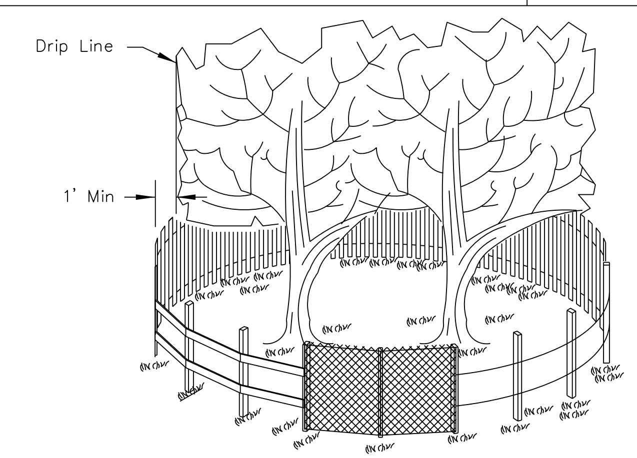


TEMPORARY CONCRETE WASHOUT FACILITY – STRAW BALE

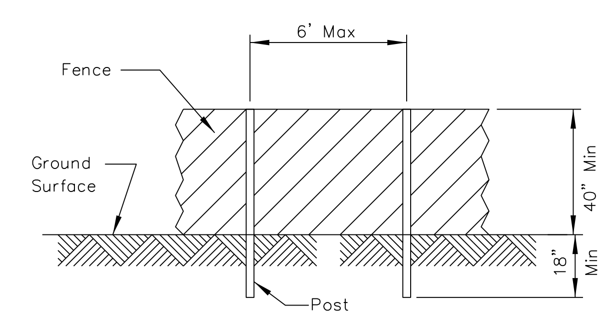
IL URBAN MANUAL STD. IUM-654 5B

NOTES: STRAW BALE ANCHOR SECTIONS

1. MAINTAINING TEMPORARY CONCRETE WASHOUT FACILITIES SHALL INCLUDE REMOVING AND DISPOSING OF HARDEND CONCRETE AND/OR SLURRY AND RETURNING THE FACILIITIES TO A FUNCTIONAL CONDITION.
2. FACILITY SHALL BE CLEANED OR RECONSTRUCTED IN A NEW AREA ONCE WASHOUT BECOMES TWO-THIRDS FULL.
3. EACH STRAW BALE IS TO BE STAKED IN PLACE USING (2) 2"X2"X4' WOODEN STAKES.
4. SEE NOTE 10 FROM TEMPORARY EROSION CONTROL GENERAL NOTES.



SIDE VIEW



POST AND FENCE DETAIL

TREE TRUNK PROTECTION DETAIL

IL URBAN MANUAL STD. IL-690

NOTES:

1. THE FENCE SHALL BE LOCATED A MINIMUM OF 1 FOOT OUTSIDE THE DRIP LINE OF THE TREE TO BE SAVED AND IN NO CASE CLOSER THAN 5 FEET TO THE TRUNK OF ANY TREE.
2. FENCE POSTS SHALL BE EITHER STANDARD STEEL POSTS OR WOOD POSTS WITH A MINIMUM CROSS SECTIONAL AREA OF 3.0 SQ. IN.
3. THE FENCE MAY BE EITHER 40" HIGH SNOW FENCE, 40" PLASTIC WEB FENCING OR ANY OTHER MATERIAL AS APPROVED BY THE ENGINEER/INSPECTOR.
4. TREE TRUNK PROTECTION SHALL BE MEASURED AND PAID FOR AS ITEM AR163000 TEMPORARY CONSTRUCTION FENCE.

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS		
NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

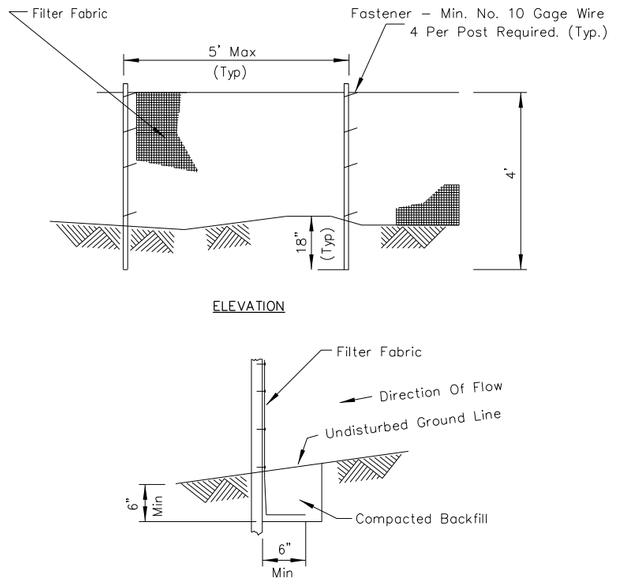
LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

LANDSCAPING AND EROSION CONTROL PLAN
NOTES AND DETAILS 1

VILLAGE OF
LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

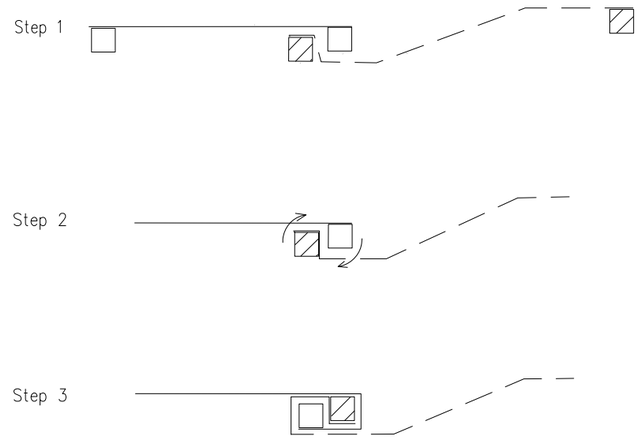
FINAL



NOTES:

1. TEMPORARY SILT FENCE SHALL BE INSTALLED PRIOR TO ANY GRADING WORK IN THE AREA TO BE PROTECTED. THEY SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD AND REMOVED IN CONJUNCTION WITH THE FINAL GRADING AND SITE STABILIZATION.
2. FILTER FABRIC SHALL BE A WOVEN FABRIC MEETING THE REQUIREMENTS OF AASHTO M288 FOR UNSUPPORTED SILT FENCE WITH LESS THAN 50 PERCENT GEOTEXTILE ELONGATION.
3. FENCE POSTS SHALL BE WOOD POST WITH A MINIMUM CROSS-SECTIONAL AREA OF 3.0 SQ. IN.

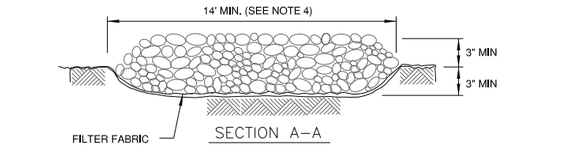
SILT FENCE DETAIL

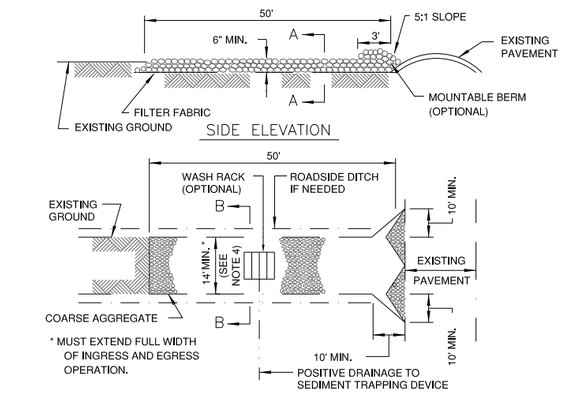


NOTES:

1. PLACE THE END POST OF THE SECOND FENCE INSIDE THE END POST OF THE FIRST FENCE.
2. ROTATE BOTH POSTS AT LEAST 180 DEGREES IN A CLOCKWISE DIRECTION TO CREATE A TIGHT SEAL WITH THE FABRIC MATERIAL.
3. DRIVE BOTH POSTS A MINIMUM OF 18 INCHES INTO THE GROUND AND BURY THE FLAP.
4. SILT FILTER J-HOOK PLACEMENT SHALL BE IN ACCORDANCE WITH IDOT STD. 280001-07.

ATTACHING TWO SILT FENCES DETAIL

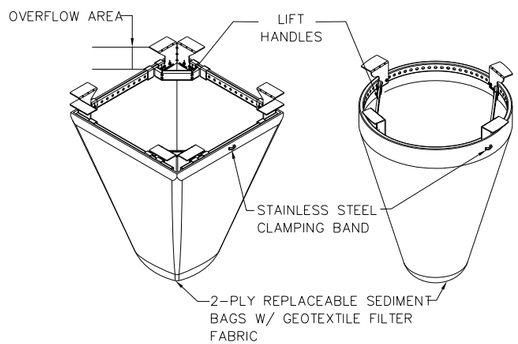




STABILIZED CONSTRUCTION ENTRANCE

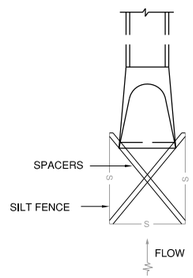
FROM NRCS STANDARD DRAWING NO. IL-630

1. FILTER FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFIED UNDER SECTION 1080.03, OF THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2012.
2. ROCK OR RECLAIMED CONCRETE SHALL MEET ONE OF THE FOLLOWING IDOT COARSE AGGREGATE GRADATION, CA-1, CA-2, CA-3 OR CA-4. COMPACTION SHALL BE TO THE SATISFACTION OF THE ENGINEER.
3. ANY DRAINAGE FACILITIES REQUIRED BECAUSE OF WASHING SHALL BE CONSTRUCTED ACCORDING TO MANUFACTURERS SPECIFICATIONS AND SHALL BE INCIDENTAL TO THE CONTRACT.
4. MINIMUM WIDTH IS 14' FOR ONE-WAY TRAFFIC AND 20' FOR TWO WAY TRAFFIC. TWO-WAY TRAFFIC WIDTHS SHALL BE INCREASED A MINIMUM OF 4' FOR TRAILER TRAFFIC. DEPENDING ON THE TYPE OF VEHICLE OR EQUIPMENT, SPEED, LOADS, CLIMATIC AND OTHER CONDITIONS UNDER WHICH VEHICLES AND EQUIPMENT OPERATE AN INCREASE IN THE MINIMUM WIDTHS MAY BE REQUIRED.
5. ROADWAY SHALL FOLLOW THE CONTOUR OF THE NATURAL TERRAIN TO THE EXTENT POSSIBLE.
6. IF WASH RACK ARE USED THEY SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.
7. THE STABILIZED CONSTRUCTION ENTRANCE SHALL NOT BE PAID FOR BUT WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT.



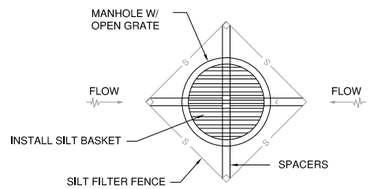
INLET PROTECTION – SILT BASKET (PAVEMENT AND TURF)

FOR ALL RECTANGULAR AND CIRCULAR INLETS



INLET PROTECTION (END SECTION)

NOT TO SCALE
IDOT STANDARD 280001-07



INLET PROTECTION (INLET/MANHOLES - IN TURF)

NOT TO SCALE
IDOT STANDARD 280001-07

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

LANDSCAPING AND EROSION CONTROL PLAN NOTES AND DETAILS 2

CMT

VILLAGE OF LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

SHEET 10 OF 36 SHEETS

EXISTING 2-BOX PAPI

REMOVE PARKING LOT/ENTRANCE PAVEMENT AND CURB AND GUTTER (NOT SHOWN - SEE SITE PLAN)

EXISTING RUNWAY MARKING TO REMAIN (TYPICAL)

VARIABLE DEPTH MILL AND OVERLAY (386 S.Y.)

RUNWAY 8/26

REMOVE EXISTING DUCT (COST INCIDENTAL TO UNCLASSIFIED EXCAVATION)(SEE NOTE 27)

EXISTING DRAINAGE STRUCTURE TO BE RECONSTRUCTED

REMOVE TAXIWAY A AND APRON BITUMINOUS PAVEMENTS (9468 S.Y.)(SEE NOTE 25)

REMOVE UNDERDRAIN COLLECTION STRUCTURES (705)

REMOVE 70 LF 6" DIA. UNDERDRAIN (705)

REMOVE RETROREFLECTIVE TAXIWAY EDGE MARKER

MILL AND OVERLAY EXISTING BITUMINOUS PAVEMENT (738 S.Y.) (SEE NOTE 25)

REMOVE SIGN

EXISTING T-HANGAR (3 UNITS) TO BE RELOCATED (TYPE B) (800) AND FOUNDATION AND FLOOR TO BE REMOVED (152)

EXISTING TERMINAL ADMINISTRATIVE BUILDING AND FOUNDATION TO BE REMOVED

REMOVE COMMUNICATION PEDESTAL (COST INCIDENTAL TO BUILDING DEMOLITION)

REMOVE 12" CMP CULVERT

REMOVE AGGREGATE SHOULDER

REMOVE EXISTING SEPTIC FIELD AND TANKS (770)

REMOVE UTILITIES (COST INCIDENTAL TO BUILDING DEMOLITION)

TAXIWAY A END CONNECTOR CENTERLINE

RELOCATE SIGN

REMOVE BITUMINOUS ROADWAY (1564 S.Y.) (SEE NOTE 25)

RELOCATE MAILBOX CLUSTER UNIT(SEE NOTE 26)

REMOVE WALKWAY GATE (162)

REMOVE SIGN

NEW TAXIWAY A CENTERLINE EXTENSION

TXY A

REMOVE VEHICLE SLIDE GATE (162)

REMOVE SIGNS

REMOVE EXISTING 4' - VINYL CLAD FENCE (SEE NOTE 17 AND 24)

REMOVE WALKWAY GATE (162)

RELOCATE EXISTING FLAG POLE AND PERIMETER DECORATIVE LANDSCAPING AND LIGHTING IN KIND (SEE NOTES 22 AND 23)

REMOVE AGGREGATE SHOULDER TO BE PAID FOR AS UNCLASSIFIED EXCAVATION (152) (TYP.)

EXISTING GATE

EXISTING DRAINAGE STRUCTURE TO BE RECONSTRUCTED

SEE NOTE 27

EXISTING HEATING FUEL TANK TO BE REMOVED. COST INCIDENTAL TO BUILDING RELOCATION. EXISTING FOUNDATION FOR HEATING TANK TO BE REMOVED AND PAID FOR AS FOUNDATION REMOVAL (152)

REMOVE 6 LF OF STORM SEWER, COST INCLUDED IN NEW DRAINAGE STRUCTURE

EXISTING WELL TO REMAIN UNDISTURBED

EXISTING 4-ELECTRICAL METERS, GAS REGULATOR AND TELEPHONE BOX TO REMAIN UNDISTURBED

ABANDON EXISTING WATER SERVICE (SEE NOTE 28)

EXISTING COMM. LINE TO BE ABANDONED

EXISTING BOX HANGAR (TYPE A) TO BE RELOCATED (800) AND FOUNDATION AND FLOOR TO BE REMOVED (152)

REMOVE EXISTING PARKING STALL PAVEMENT MARKINGS ON EXISTING PAVEMENT TO REMAIN

EXISTING STRUCTURE TO BE MODIFIED (SEE TAXIWAY A PLAN AND PROFILE PLAN) REMOVE EXISTING PAVEMENT PER MANHOLE SPECIAL DETAIL

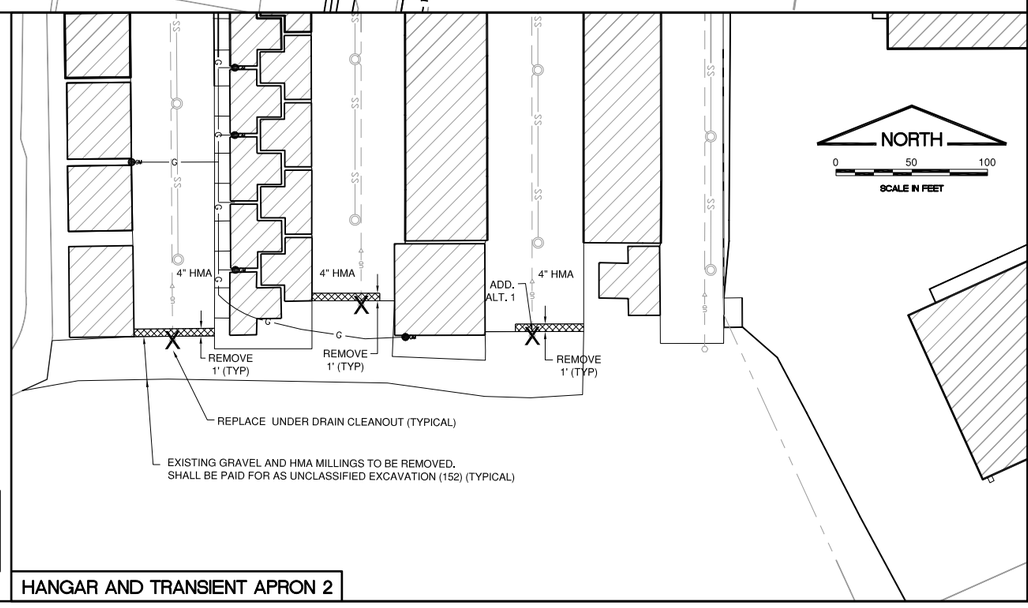
THE INFORMATION SHOWN ON THESE PLANS HAS BEEN OBTAINED FROM AVAILABLE RECORDS. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY WHATSOEVER IN RESPECT TO THE ACCURACY OR SUFFICIENCY OF THE INFORMATION AND THERE IS NO GUARANTEE EITHER EXPRESSED OR IMPLIED THAT THE CONDITIONS INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED IN THE FIELD. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND ACQUAINT HIMSELF WITH THE EXISTING CONDITIONS.

NORTH
0 50 100
SCALE IN FEET

LEGEND

- NEW PAVEMENT
- EXISTING BUILDING TO BE DEMOLISHED OR RELOCATED
- EXISTING BITUMINOUS PAVEMENT TO BE REMOVED
- EXISTING BITUMINOUS PAVEMENT MILL AND OVERLAY
- SS — EXISTING STORM SEWER
- EXISTING INLET/MANHOLE/HEADWALL
- UD — EXISTING UNDERDRAIN
- EXISTING UNDERDRAIN CLEANOUT/INSPECTION HOLE
- SAN — EXISTING SANITARY SEWER
- SAN — EXISTING SANITARY MANHOLE
- E — EXISTING ELECTRICAL MANHOLE
- G — EXISTING GAS LINE
- T — EXISTING COMMUNICATIONS CABLE
- S — EXISTING WELL
- EXISTING SIGN
- OHE — EXISTING OVERHEAD ELECTRIC
- UGE — EXISTING UNDERGROUND ELECTRIC
- EXISTING UTILITY POLE
- EXISTING UTILITY POLE WITH TRANSFORMER
- W — EXISTING WATER LINE
- EXISTING ELECTRICAL DUCT/CONDUIT
- EXISTING STAKE MOUNTED TAXIWAY LIGHT
- EXISTING STAKE MOUNTED LOW INTENSITY RUNWAY LIGHT
- EXISTING STAKE MOUNTED THRESHOLD LIGHT
- EXISTING ELEVATED TAXIWAY RETROREFLECTIVE MARKER
- EXISTING AIRFIELD GUIDANCE SIGN
- E — EXISTING RUNWAY 8/26 CIRCUIT
- E — EXISTING VASI CIRCUIT
- R — EXISTING STRUCTURE/LIGHT TO BE REMOVED
- TOFA — TAXIWAY OBJECT FREE AREA
- B-1 — SOIL BORING
- C-1 — PROPOSED PAVEMENT CORE
- EXISTING STAKE MOUNTED LOW INTENSITY RUNWAY LIGHT
- CKT#1 — EXISTING RUNWAY 8/26 CIRCUIT
- PAPI — EXISTING RUNWAY 26 PAPI CIRCUIT
- X — EXISTING FENCE
- T — EXISTING COMMUNICATION SPLICE BOX
- HH — EXISTING ELECTRICAL HANDHOLE
- EXISTING GAS RELOCATION
- E — EXISTING ELECTRICAL METER
- EXISTING MAILBOX
- EXISTING FLAGPOLE
- X — ITEM TO BE REMOVED
- REL — ITEM TO BE RELOCATED

SEE EXISTING CONDITIONS/PROPOSED REMOVALS 2 FOR NOTES



HANGAR AND TRANSIENT APRON 2

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

EXISTING CONDITIONS/PROPOSED REMOVALS 1

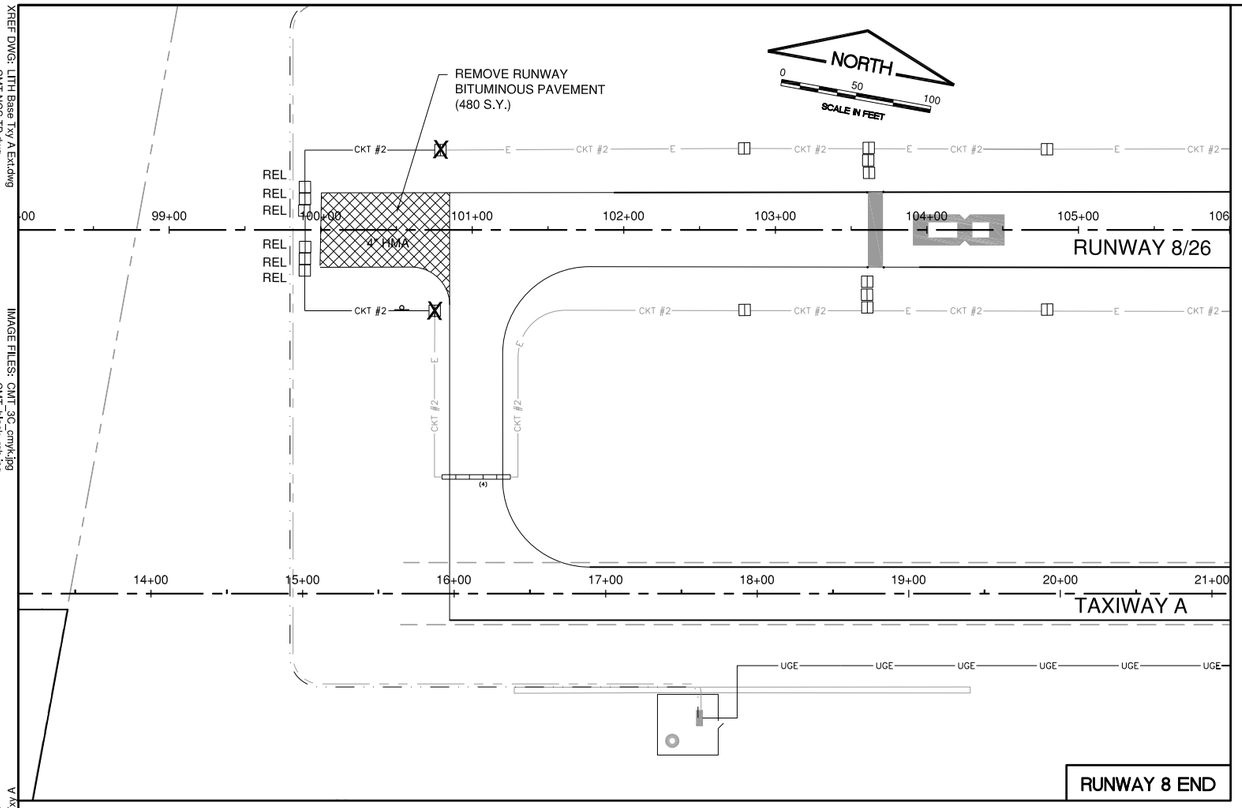
CMT

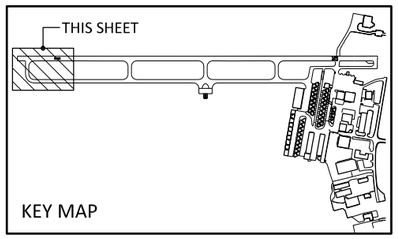
VILLAGE OF LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

SHEET 11 OF 36 SHEETS





FOR LEGEND
SEE EXISTING CONDITIONS/PROPOSED REMOVALS 1

NOTES

1. TIE EXISTING UNDERDRAIN TOGETHER W/ "T" OR "X" SECTIONS TO NEW COLLECTION STRUCTURE (SEE PLAN AND PROFILE SHEETS) (COST INCIDENTAL TO COLLECTION STRUCTURE REMOVAL)
2. THE EXISTING PAVEMENT TO BE REMOVED AND /OR REPLACED SHALL BE SAWED FULL DEPTH AROUND THE PERIMETER OF THE REMOVAL LIMITS. THE COST OF SAWCUTTING AND DISPOSAL OF PAVEMENT SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM. ANY DAMAGE TO THE PAVEMENT BEYOND THE LIMITS AS SHOWN ON THE PLANS AND LAID OUT BY RESIDENT ENGINEER SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
3. SEE ENGINEERING INFORMATION SHEETS FOR PAVEMENT CORE DATA AND BORING LOGS.
4. ALL EXISTING AIRFIELD CABLES SHOWN SPACED APART FROM EACH OTHER FOR CLARITY, EXACT LOCATIONS TO BE DETERMINED BY THE CONTRACTOR AND ASSOCIATED UTILITY OWNERS IN THE FIELD. (COST INCIDENTAL).
5. CONTRACTOR SHALL CAP ANY EXISTING OR NEW UNDERDRAIN ENDS THAT ARE NOT TO BE TIED INTO NEW OR EXISTING STRUCTURES OR STORM SEWERS (COST INCIDENTAL).
6. THE LIGHTS, SIGNS, TRANSFORMERS AND REFLECTORS TO BE REMOVED SHALL BE TURNED OVER TO THE AIRPORT. ANY REMOVAL ITEMS THE AIRPORT DOES NOT WANT SHALL BE DISPOSED OF BY THE CONTRACTOR.
7. ANY TEMPORARY CABLING AND CONDUITS REQUIRED FOR THIS PROJECT SHALL BE CONSIDERED INCIDENTAL, INCLUDING CONDUIT PUSHES (BORE AND JACK) AND UNCOVERING OF EXISTING CONDUITS TO KEEP CIRCUITS WORKING. NO TEMPORARY CABLING SHALL BE ALLOWED ABOVE GROUND IN ANY TAXIWAY OBJECT FREE AREA AND RUNWAY SAFETY AREA (SEE SEQUENCE PLANS).
8. IN AREAS WHERE REMOVED CONDUIT, DUCT BANK, UNDERDRAIN, DRAIN TILE OR STORM SEWER OR ANY REMOVAL ITEM IS BELOW LIMITS OF PROPOSED PAVEMENTS, TRENCH SHALL BE BACKFILLED AND COMPACTED PER SECTION 701 OF THE PROJECT SPECIFICATIONS. COST OF BACKFILLING SHALL BE INCIDENTAL TO THE RESPECTIVE REMOVAL ITEM.
9. ITEMS REMOVED DUE TO PROPOSED PAVEMENT EXCAVATION WILL NOT BE PAID FOR SEPARATELY BUT WILL BE CONSIDERED INCIDENTAL TO UNCLASSIFIED EXCAVATION UNLESS OTHERWISE NOTED ON THE PLANS.
10. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PROTECT THE EXISTING AND PROPOSED PAVEMENT STRUCTURE AND SUBGRADE FROM DAMAGE, WHICH MAY INCLUDE BUT NOT BE LIMITED TO USE OF TRACKED EQUIPMENT, SHORT HAUL TRUCKS OR TRACKED PAVERS, AT NO ADDITIONAL COST TO CONTRACT.
11. AT ALL TIMES THE CONTRACTOR SHALL PERFORM ALL MAINTENANCE WORK NECESSARY TO KEEP EACH PAVEMENT SECTION LAYER IN A SATISFACTORY CONDITION.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE DONE BY HIS HAULING, CONSTRUCTION EQUIPMENT AND CONSTRUCTION OPERATIONS. ANY WORK NECESSARY TO CORRECT DAMAGED WORK, EXISTING AND NEW PAVEMENT SHALL BE PERFORMED BY THE CONTRACTOR AND AT THE EXPENSE OF THE CONTRACTOR.
13. CONTRACTOR SHALL STABILIZE AND KEEP EXISTING UNDERDRAIN IN PLACE DURING CONSTRUCTION OF ADJACENT PAVEMENT (INCIDENTAL).
14. NO EXTRA COMPENSATION WILL BE ALLOWED FOR ANY VARIANCE IN EXISTING PAVEMENT SECTIONS ENCOUNTERED.
15. THE PAVEMENTS AT THE AIRPORT ARE RATED FOR LIGHT DUTY AIRCRAFT. NO EQUIPMENT OR HAULING OPERATIONS SHALL BE ALLOWED OUTSIDE THE DESIGNATED PROJECT LIMITS.
16. AGGREGATE SHOULDER REMOVAL SHALL BE PAID FOR AS UNCLASSIFIED EXCAVATION (152).
17. CONTRACTOR SHALL BACKFILL POST HOLES IN PAVEMENT WITH IDOT CA-7 TO EXISTING SUBGRADE. THE REMAINING HOLES SHALL BE BACKFILLED AND COMPACTED WITH HMA IN CONFORMANCE WITH SECTIONS 401 AND 403 OF THE STANDARD SPECIFICATIONS. COST OF BACKFILLING SHALL BE INCIDENTAL TO REMOVAL PAY ITEM.
18. CONTRACTOR SHALL TAKE MEASURES TO PROTECT EXISTING BITUMINOUS AND PCC PAVEMENT. ANY PAVEMENT DAMAGED BY CONTRACTORS EQUIPMENT SHALL BE SAW CUT PER RESIDENT ENGINEER LAYOUT AND REPLACED IN KIND AT NO ADDITIONAL COST TO CONTRACT.
19. CONTRACTOR SHALL TAKE MEASURES TO PROTECT EXISTING AND NEW STORM SEWER PIPE AND UNDERDRAIN FROM DAMAGE DUE TO CONSTRUCTION EQUIPMENT.
20. CONTRACTOR TO TAKE MEASURES TO PROTECT ALL UNDERGROUND UTILITIES INCLUDING, BUT NOT LIMITED TO, POWER, GAS, COMMUNICATION, SANITARY, STORM SEWER PIPE AND UNDERDRAIN FROM DAMAGE DUE TO CONSTRUCTION EQUIPMENT.
21. EXISTING CONCRETE PAD OUTSIDE EXISTING HANGAR FACE SHALL BE PROTECTED BY CONTRACTOR. CONTRACTOR SHALL COMPLETE PROPOSED PAVEMENT REHABILITATION UP TO THESE CONCRETE PADS. SHOULD THE EXISTING PAD PAVEMENT BE DAMAGED, THE CONTRACTOR SHALL REPLACE IN-KIND AT HIS OWN EXPENSE.
22. EXISTING FLAG POLE SHALL BE RELOCATED. CONTRACTOR SHALL COORDINATE EXACT LOCATION WITH THE RESIDENT ENGINEER AND THE AIRPORT MANAGER. EXISTING PLANTS/SHRUBS, FLOOD LIGHTS, SIGNS AND BENCHES SHALL BE RELOCATED WITH FLAG POLE. THE EXISTING FLAG POLE FOUNDATION WILL BE REMOVED AND DISPOSED OF OFF SITE. THE COST TO COORDINATE THE NEW FLAGPOLE LOCATION AND OTHER ITEMS NOTED TO BE RELOCATED OR DISPOSED OF WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICE FOR THE FLAG POLE RELOCATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
23. CONTRACTOR SHALL COORDINATE WITH RESIDENT ENGINEER AND AIRPORT MANAGER TO MAKE THE NECESSARY POWER CONNECTIONS/TERMINATIONS FOR THE FLAG POLE LIGHTING. THE COSTS ASSOCIATED WITH THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICE FOR THE FLAG POLE RELOCATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
24. EXISTING WALKWAY GATE AND SLIDE GATE TO BE REMOVED SHALL BE TURNED OVER TO THE AIRPORT. ANY REMOVAL ITEM THAT THE AIRPORT DOES NOT WANT SHALL BE DISPOSED OF BY THE CONTRACTOR.
25. CLEAN AGGREGATE AND HMA MILLINGS REMOVED AS PART OF THIS PROJECT SHALL BE STOCKPILED ADJACENT TO TRANSIENT APRON 2 OR BY THE FUEL FARM. EXACT LOCATION TO BE COORDINATED IN THE FIELD WITH RESIDENT ENGINEER AND AIRPORT MANAGER.
26. THE CONTRACTOR SHALL REMOVE ALL MAILBOX CLUSTER UNITS WITHIN THE LIMITS OF CONSTRUCTION, WHICH INTERFERE WITH CONSTRUCTION OPERATIONS AND SHALL ERECT THEM AT A TEMPORARY LOCATION AS DETERMINED BY THE AIRPORT. AS SOON AS CONSTRUCTION OPERATIONS PERMIT, THE CONTRACTOR SHALL SET THE MAILBOXES AT THEIR PERMANENT LOCATION, AS DETERMINED BY THE AIRPORT, SEE PLANS FOR MOUNTING PAD DETAIL. THE COST OF ALL MATERIALS, EQUIPMENT AND ALL LABOR NECESSARY TO COMPLETE THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
27. PRIOR TO REMOVING DUCT/CONDUIT OR DISTURBING AREA OVER/ADJACENT TO DUCT, CONTRACTOR SHALL HAND DIG DUCT/CONDUIT ENDS AND VERIFY IF CABLES ARE PRESENT AND ACTIVE. IF CABLES ARE ACTIVE CONTRACTOR SHALL NOTIFY RESIDENT ENGINEER, COST SHALL BE INCIDENTAL TO THE CONTRACT.
28. CONTRACTOR SHALL DISCONNECT AND CAP BOTH ENDS OF WATER SERVICE LINE. COST SHALL BE INCIDENTAL TO THE BUILDING DEMOLITION.

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

EXISTING CONDITIONS/PROPOSED REMOVALS 2

CMT

VILLAGE OF
LAKE IN THE HILLS

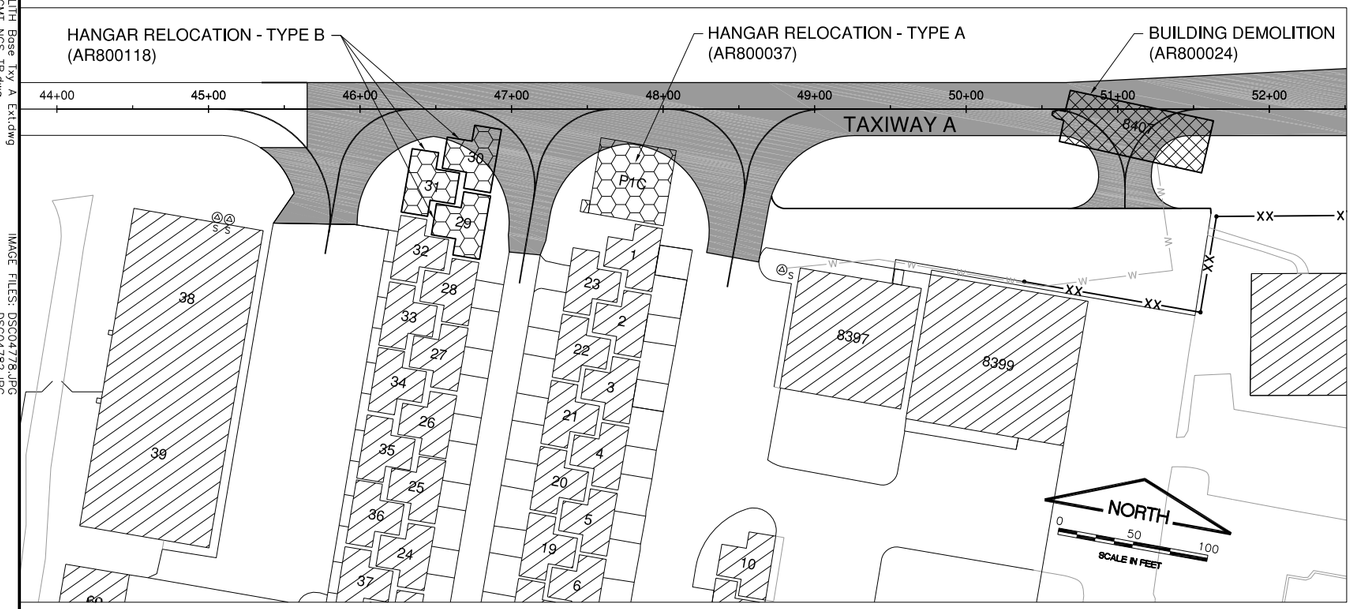
DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

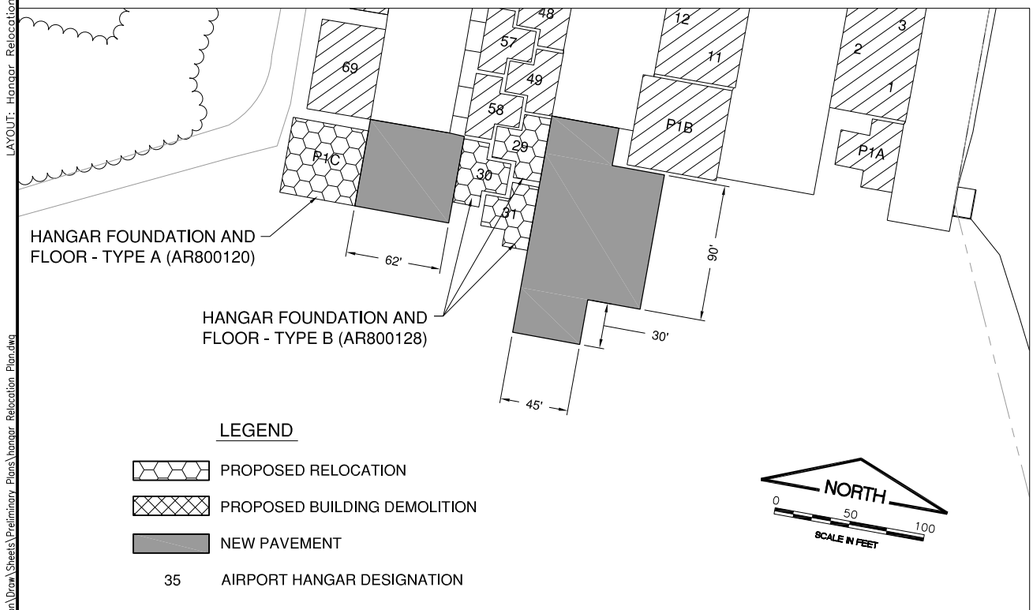
SHEET 12 OF 36 SHEETS

XREF DWG: LITH Base Txy A Ext.dwg
CMT NCS TB.dwg
IMAGE FILES: CMT_3C_cmyk.jpg
CMT_black_rgb.jpg
Lith Logo.jpg
UPDATE BY: Jim Ohse
LAYOUT: Exist Cond Txy A
DATE: Tuesday, December 8, 2015 12:12:30 PM
FILE: K:\Lake In The Hills\Apt\14255-01_TxyAExtension\Draw\Sheets\Preliminary Plans\TxyA Extension Existing Conditions 2.dwg

EXISTING BUILDING LOCATIONS



RELOCATED BUILDING LOCATIONS



NOTES

1. THESE IMAGES REPRESENT EXISTING GENERAL CONDITIONS AT THE SITE AT THE TIME THE IMAGES WERE TAKEN. THE CONTRACTOR IS ENCOURAGED TO VISIT THE SITE AND INSPECT THE BUILDING STRUCTURES AND ANY OTHER FEATURE THE CONTRACTOR DEEMS NECESSARY IN ORDER TO SUBMIT A RESPONSIBLE BID FOR THEIR REMOVAL AND RELOCATION OF THE BOX HANGAR, T-HANGARS AND ADMINISTRATION BUILDING.
2. HANGAR TO HANGAR SEPARATION SHALL MEET VILLAGE OF LAKE IN THE HILLS REQUIREMENTS.
3. SEE NOTE 16 OF THE TEMPORARY EROSION CONTROL GENERAL NOTES.

ADMINISTRATION BUILDING PHOTOS

BOX HANGAR (TYPE A) PHOTOS

T-HANGAR (TYPE B) PHOTOS

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

BUILDING DEMOLITION AND RELOCATION PLAN AND PHOTOS

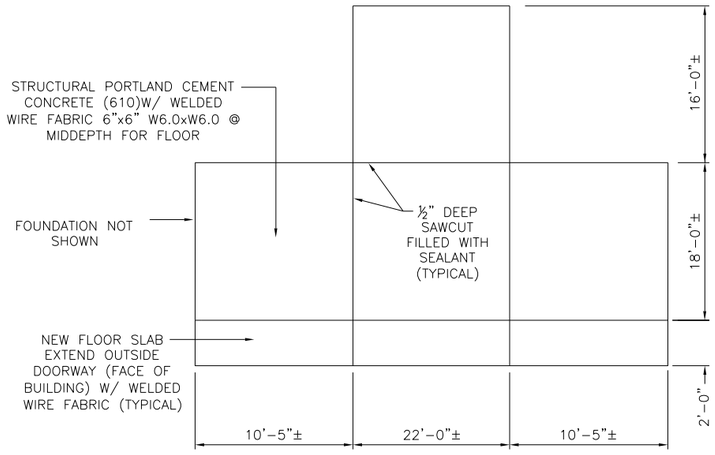
CMT

VILLAGE OF LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

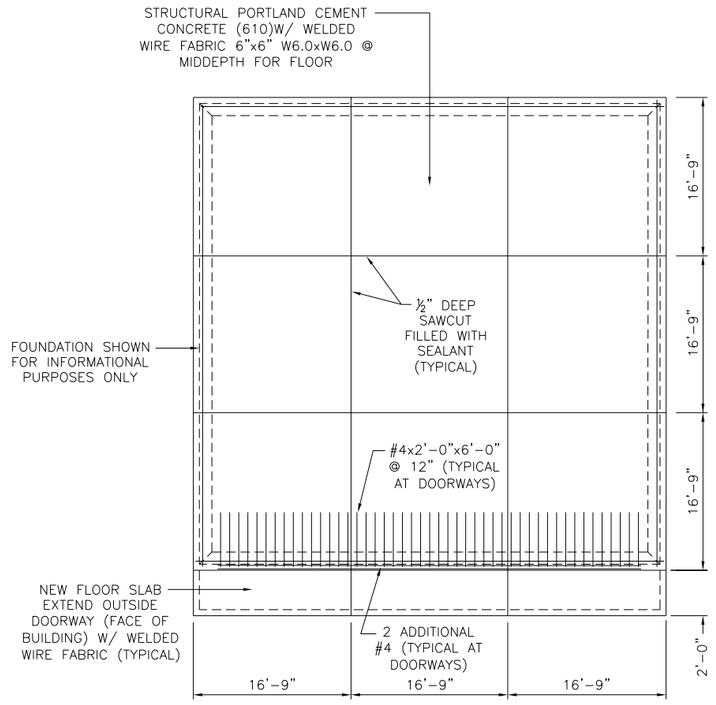
FINAL

SHEET 13 OF 36 SHEETS



HANGAR FOUNDATION AND FLOOR TYPE B FLOOR JOINTING PLAN

NOT TO SCALE



HANGAR FOUNDATION AND FLOOR TYPE A FLOOR JOINTING PLAN

NOT TO SCALE

NOTES

1. CONTRACTOR SHALL VERIFY AND MEASURE ALL EXISTING BUILDING AND FLOOR DIMENSIONS BEFORE SUBMITTING SHOP DRAWINGS. DIMENSIONS SHOWN ARE ESTIMATED AND NO ADDITIONAL COMPENSATION WILL BE MADE TO THE CONTRACTOR FOR VARIATIONS ACTUALLY ENCOUNTERED.

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS		
NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

BUILDING DEMOLITION AND RELOCATION NOTES AND DETAILS

CMT

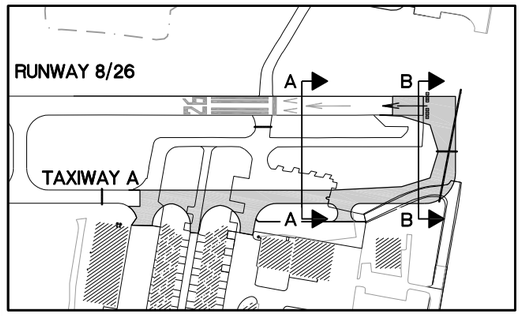
VILLAGE OF LAKE IN THE HILLS

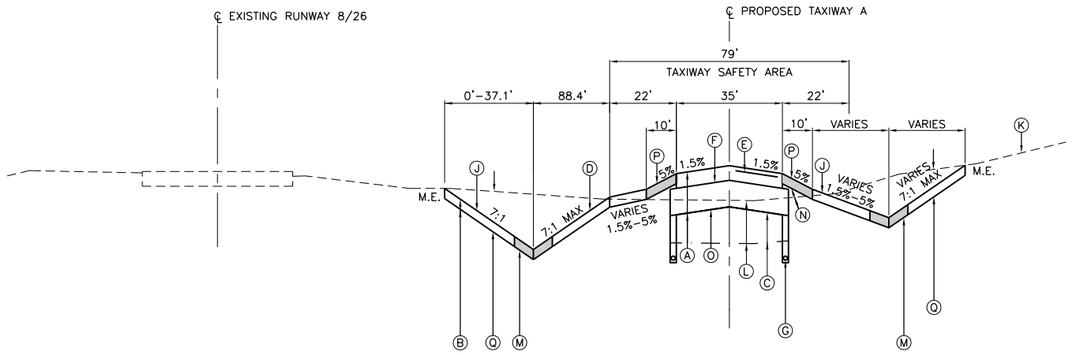
DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

SHEET 14 OF 36 SHEETS

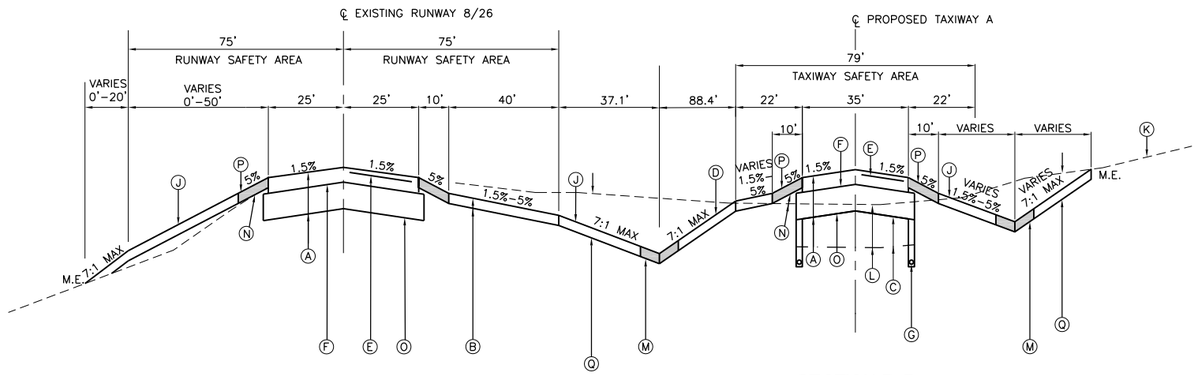
LITH Base Txy A Ext.dwg
CMT NCS TB.dwg
IMAGE FILES: DSC04778.JPG
DSC04782.JPG
DSC04787.JPG
DSC04793.JPG
DSC04831.JPG
DSC04833.JPG
P1030646.JPG
WP_20141209_08_13_46_Pro.jpg
UPDATE BY: Jim Ohse
LAYOUT: HANGAR DETAILS
DATE: Tuesday, December 8, 2015 12:13:07 PM
FILE: K:\LakeInTheHills\14255-01 TxwExtension\Draw\Sheets\Preliminary Plans\hangar Relocation Plan.dwg





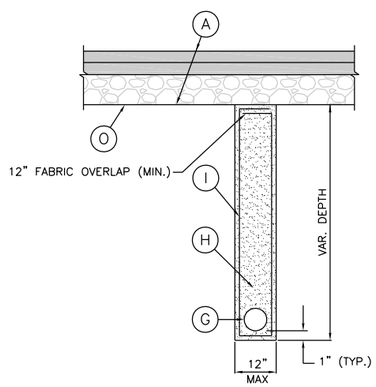
SECTION A-A
NO SCALE

STA. 45+64.72 TO STA. 51+60.05
TAXIWAY INTERSECTION OMISSION RIGHT FROM STA. 45+64.72 TO STA. 49+25.85
AND STA. 50+61.82 TO STA. 51+46.82

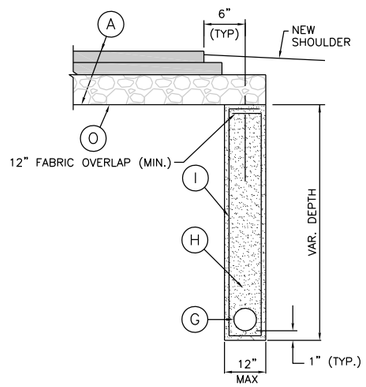


SECTION B-B
NO SCALE

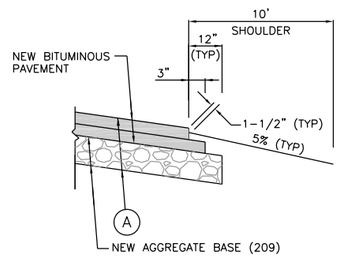
STA. 51+60.05 TO STA. 53+99.08
RUNWAY MILL AND VARIABLE DEPTH OVERLAY OMISSION LEFT FROM STA. 51+60.05 TO STA. 52+32.8
TAXIWAY INTERSECTION OMISSION LEFT FROM STA. 52+56.86 TO STA. 53+99.08



UNDERDRAIN DETAIL - PAVED AREAS
NO SCALE



UNDERDRAIN DETAIL - EDGE OF PAVEMENT AREAS
NO SCALE



AIRFIELD PAVEMENT EDGE DETAIL
NO SCALE

LEGEND

- (A) NEW TAXIWAY PAVEMENT STRUCTURE
  1.5" BITUMINOUS SURFACE COURSE (401)
  4.5" BITUMINOUS BASE COURSE (403)
  8" CRUSHED AGGREGATE BASE COURSE (209)
- (B) NEW TOPSOIL PLACEMENT (4" MIN.)(905)
- (C) NEW EMBANKMENT FILL (152)
- (D) NEW SEEDING AND MULCHING (901 AND 908)
- (E) NEW TACK COAT (603)
- (F) NEW PRIME COAT (602)
- (G) NEW 6" UNDERDRAIN (705)
- (H) NEW POROUS BACKFILL (705) COST INCIDENTAL TO NEW UNDERDRAIN
- (I) NEW UNDERDRAIN TRENCH FABRIC ENVELOPE (705) COST INCIDENTAL TO UNDERDRAIN
- (J) NEW GROUNDLINE
- (K) EXISTING GROUNDLINE
- (L) EXISTING 10"–17" AVERAGE TOPSOIL TO BE STRIPPED (152) NOT SHOWN FOR CLARITY
- (M) NEW SEEDING (901) AND 16' WIDE EROSION CONTROL BLANKET (156)
- (N) NEW SHOULDER FILL (152)
- (O) NEW SOIL STABILIZATION FABRIC (152)
- (P) NEW SEEDING (901) AND 8' WIDE EROSION CONTROL BLANKET (156)
- (Q) UNCLASSIFIED EXCAVATION (152)
- (R) EXISTING HMA PAVEMENT TO BE REMOVED (THICKNESS VARIES BETWEEN 2"–11.5") NOT SHOWN FOR CLARITY (401)

M.E. MATCH EXISTING

NOTES:

1. TRANSIENT APRON 2 AND NEW HANGAR APRON PAVEMENT SECTIONS ARE THE SAME AS TAXIWAY A

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS		
NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

TYPICAL SECTIONS

CMT

VILLAGE OF LAKE IN THE HILLS

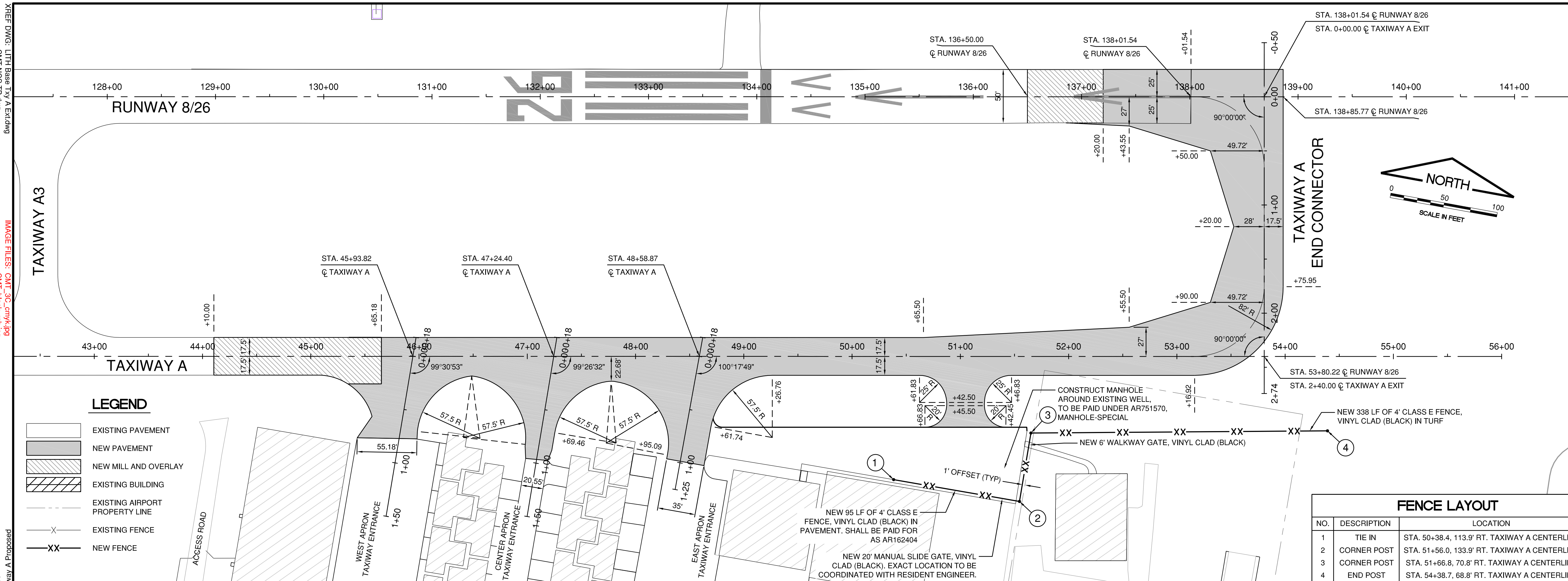
DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

SHEET 15 OF 36 SHEETS

XREF DWG: LITH Base Txy A Ext.dwg
CMT NCS TB.dwg

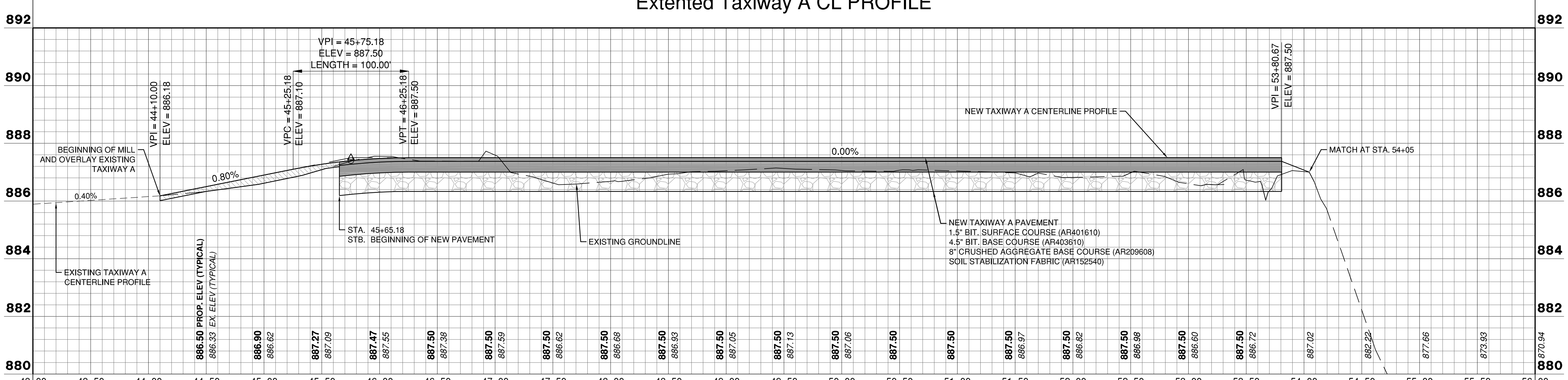
IMAGE FILES: CMT_3C_cmyk.jpg
CMT_black_rgb.jpg
LithLogo.jpg



FENCE LAYOUT

NO.	DESCRIPTION	LOCATION
1	TIE IN	STA. 50+38.4, 113.9' RT. TAXIWAY A CENTERLINE
2	CORNER POST	STA. 51+56.0, 133.9' RT. TAXIWAY A CENTERLINE
3	CORNER POST	STA. 51+66.8, 70.8' RT. TAXIWAY A CENTERLINE
4	END POST	STA. 54+38.7, 68.8' RT. TAXIWAY A CENTERLINE

Extented Taxiway A CL PROFILE



UPDATE BY: Jim Ohse
LAYOUT: P&P - Taxiway A Proposed

DATE: Tuesday, December 8, 2015 12:13:47 PM
FILE: K:\LakeInTheHillsAp\14255-01_TxyAExtension\Draw\Sheets\Preliminary Plans\TxyA Extension P&p.dwg

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS		
NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

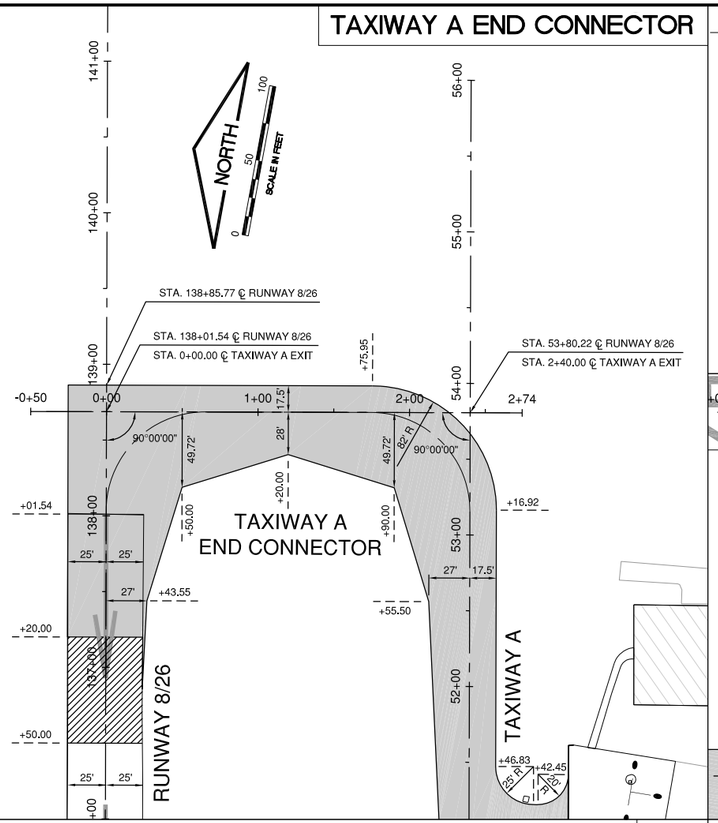
PLAN AND PROFILE
TAXIWAY A

VILLAGE OF
LAKE IN THE HILLS

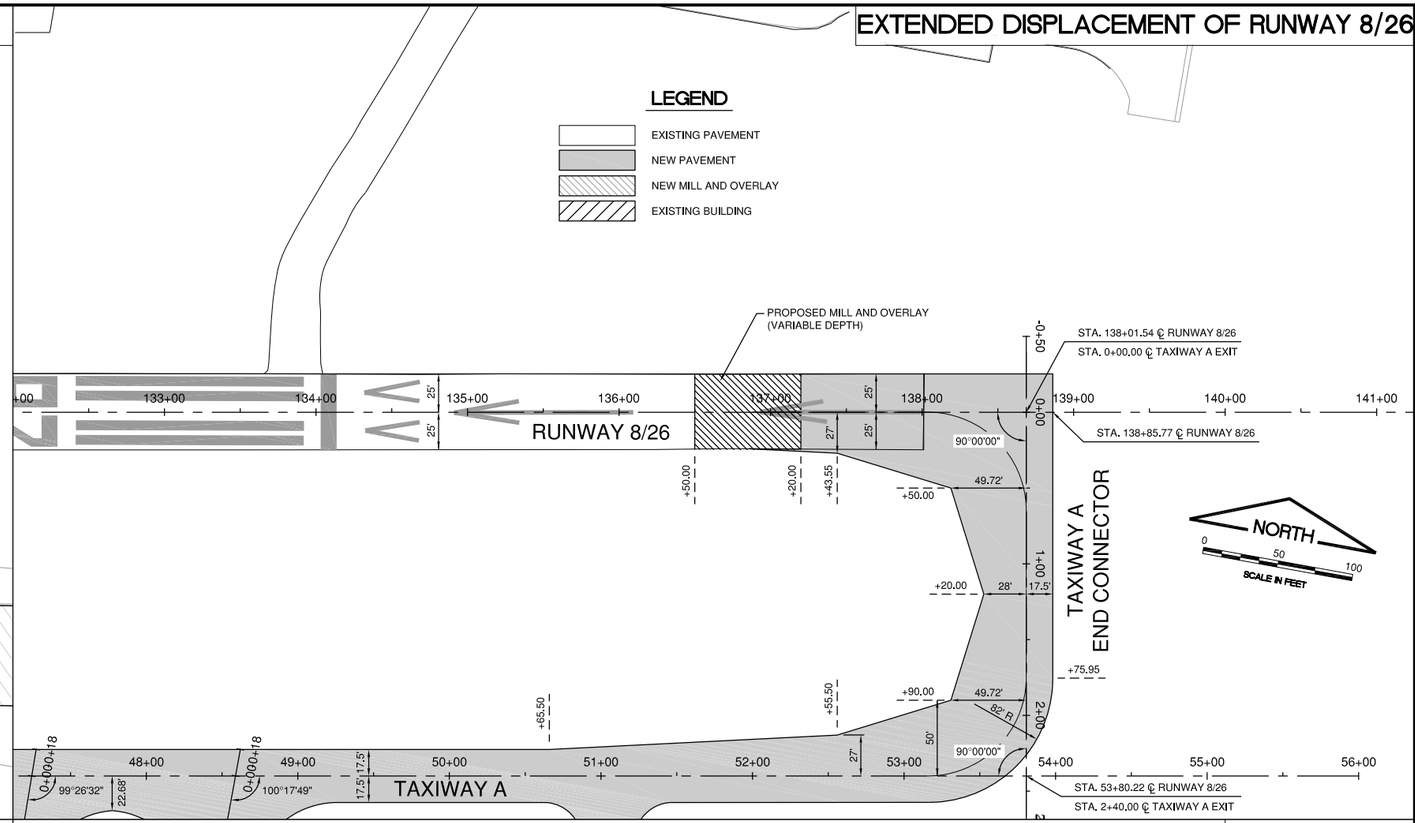
DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

TAXIWAY A END CONNECTOR



EXTENDED DISPLACEMENT OF RUNWAY 8/26



IL. CONTRACT:	LK012
IL. LETTING ITEM:	4A
IL. PROJECT:	3CK-4404
S.B.G. PROJECT:	3-17-SBGP-XX

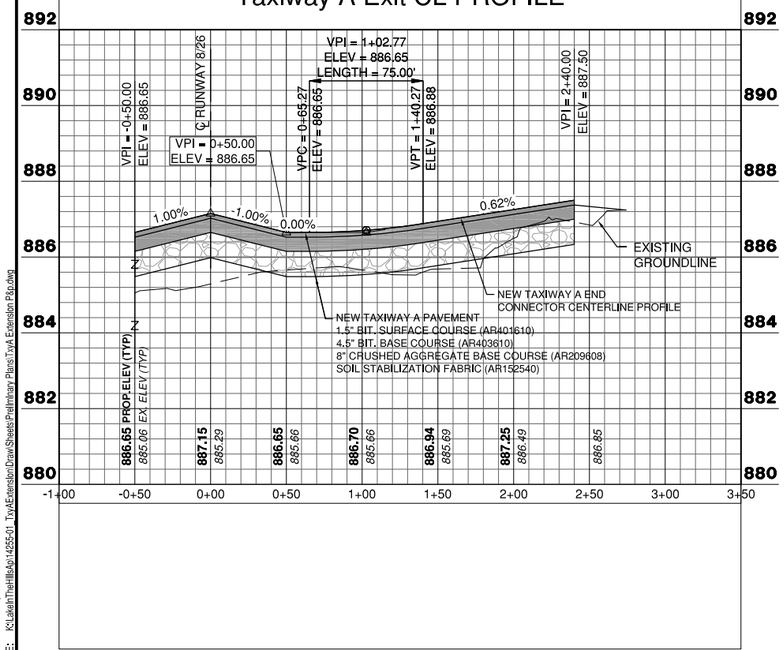
SURVEY BOOK # BOOK # 1263

REVISIONS

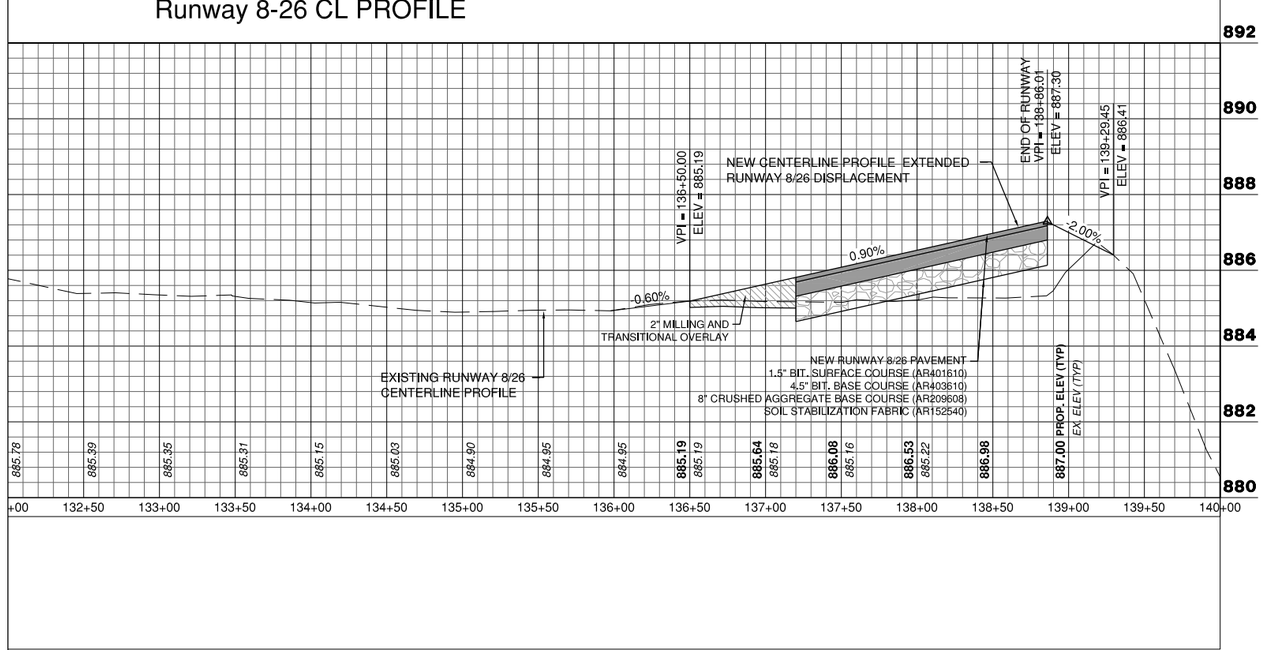
NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

Taxiway A Exit CL PROFILE



Runway 8-26 CL PROFILE



LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

PLAN AND PROFILE
RUNWAY AND CONNECTOR TAXIWAY

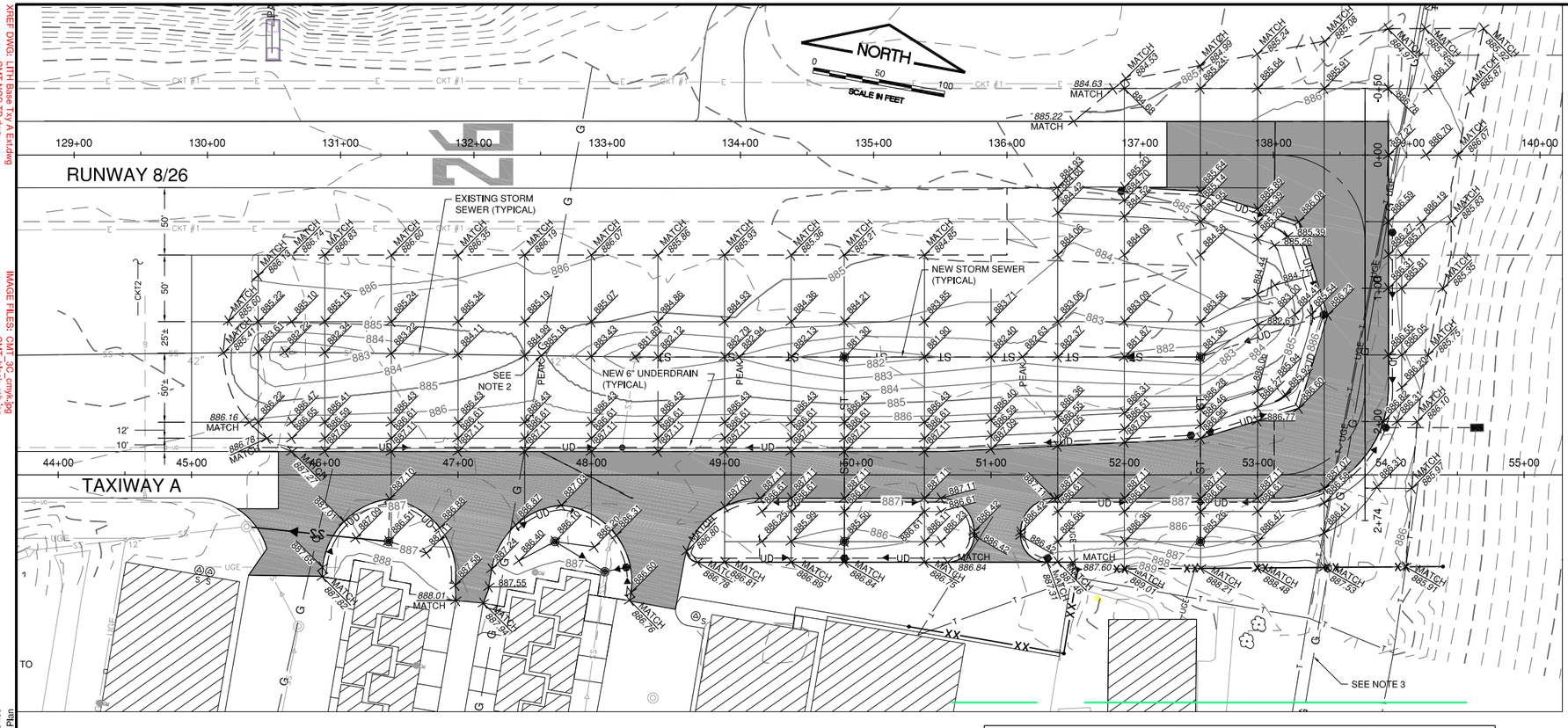
CMT

VILLAGE OF
LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

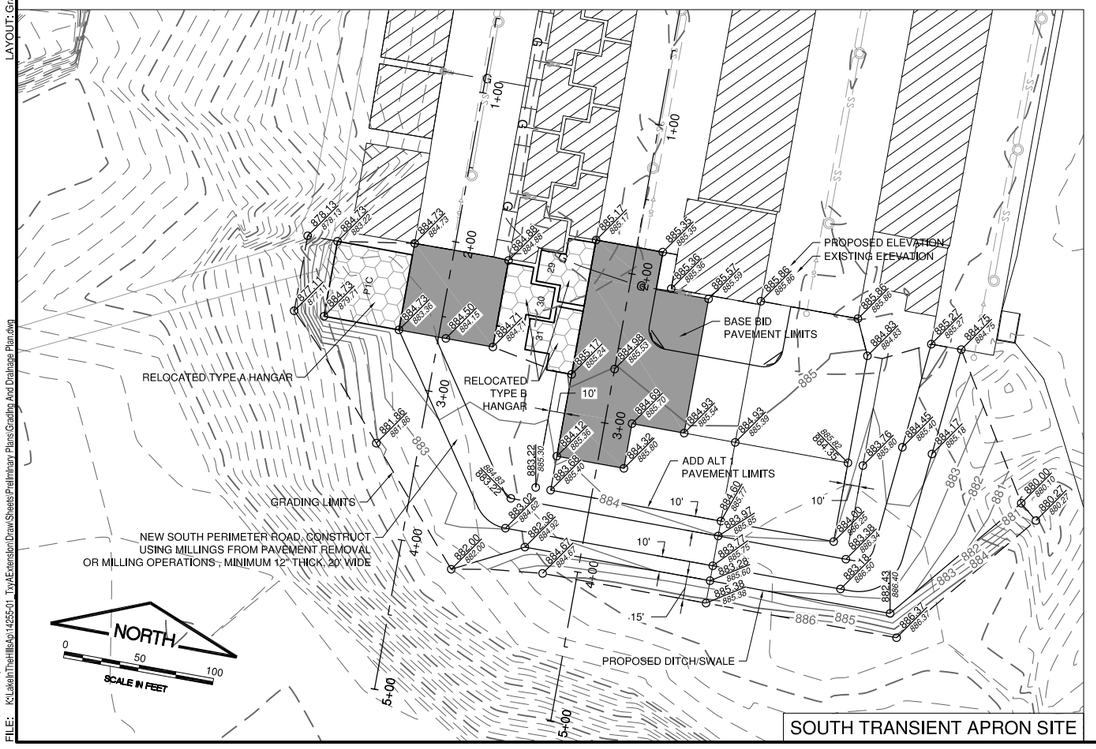
FINAL

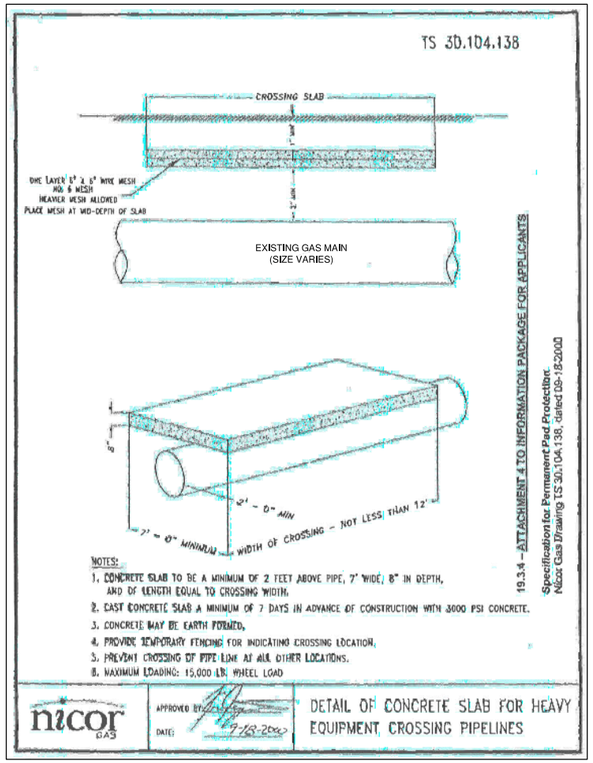
SHEET 17 OF 36 SHEETS



LEGEND

- EXISTING STORM SEWER
- EXISTING DRAINAGE STRUCTURE
- EXISTING FENCE
- EXISTING AIRPORT PROPERTY LINE
- NEW PAVEMENT
- NEW STORM SEWER
- NEW SILT FENCE/GRADING LIMITS
- NEW DRAINAGE STRUCTURE
- EXISTING BUILDING
- RELOCATED BUILDING
- MATCH EXISTING GROUND @ ELEVATION SEE NOTE 1
- PROPOSED ELEVATION - SEE NOTE 1
- PROPOSED CONTOUR
- PROPOSED GRADING LIMITS
- PROPOSED FENCE





NOTES:

1. ALL ELEVATIONS SHOWN FOR TAXIWAY A, END CONNECTOR TAXIWAY A AND RUNWAY 8/26 ARE TURF GRADES. SEE INTERSECTION GRADING DETAILS SHEET FOR PAVEMENT GRADES.
2. WHERE LESS THAN 30" COVER CAN BE PROVIDED OVER EXISTING NICOR GAS MAIN OF ANY SIZE, THE CONTRACTOR SHALL CONSTRUCT A PROTECTIVE PAD IN ACCORDANCE WITH THE DETAIL SHOWN ON THIS SHEET EXCEPT THAT FROM THE TOP OF THE PROTECTIVE PAD TO THE FINAL GROUNDLINE SHALL BE A MINIMUM OF 6" AND THE DEPTH FROM THE BOTTOM OF THE PAD TO THE TOP OF THE EXISTING GAS MAIN SHALL BE A MINIMUM OF 10"-12". ALL WORK REQUIRED FOR THE PROTECTIVE PAD, INCLUDING EXCAVATION, WELDED WIRE FABRIC, ITEM 610 CONCRETE, ETC., SHALL BE PAID UNDER ITEM AR610510, STRUCTURAL PC CONCRETE.
3. WHERE THE CONTRACTOR ELECTS TO CONTINUOUSLY CROSS EXISTING GAS MAIN (CROSSING ROUTE), HE SHALL CONSTRUCT A PROTECTIVE PAD IN ACCORDANCE WITH THE DETAIL SHOWN ON THIS SHEET OR PROTECT THE MAIN(S) BY OTHER MEANS. THE CONTRACTOR SHALL CONTACT NICOR IN ADVANCE OF ESTABLISHING HIS HAUL ROUTES THAT CROSS ACTIVE GAS MAINS TO DETERMINE SUITABLE PROTECTIVE MEASURES. PROTECTION OF EXISTING UTILITIES DURING HAUL OPERATIONS SHALL NOT BE PAID, AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
4. CONTRACTOR SHALL GRADE THE SOUTH TRANSIENT APRON SITE TO THE ULTIMATE BUILD OUT LIMITS UNDER THE BASE BID. SHOULD ADDITIVE ALTERNATE #1 BE AWARDED, THE GRADING SHOWN WILL NOT BE CHANGED. ADDITIONAL GRADES CAN BE FURNISHED AT CONTRACTOR REQUEST DURING CONSTRUCTION.
5. COSTS TO PLACE, SHAPE AND COMPACT THE MILLINGS FOR THE SOUTH PERIMETER ROAD SHOWN AT THE SOUTH TRANSIENT APRON SITE SHALL BE INCLUDED UNDER ITEM AR152410, UNCLASSIFIED EXCAVATION AND NO ADDITIONAL PAYMENT WILL BE MADE.

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

IMPROVE RUNWAY 8/26 SAFETY AREA
LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS

GRADING PLAN

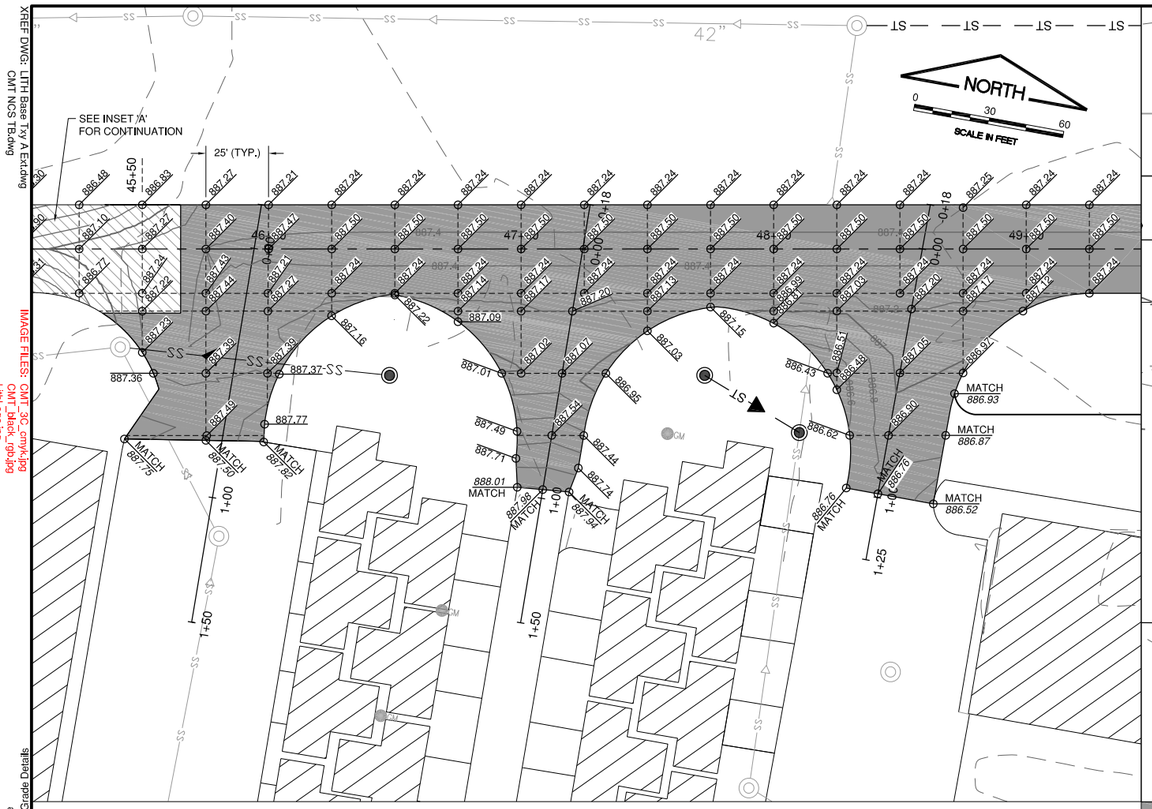
CMT

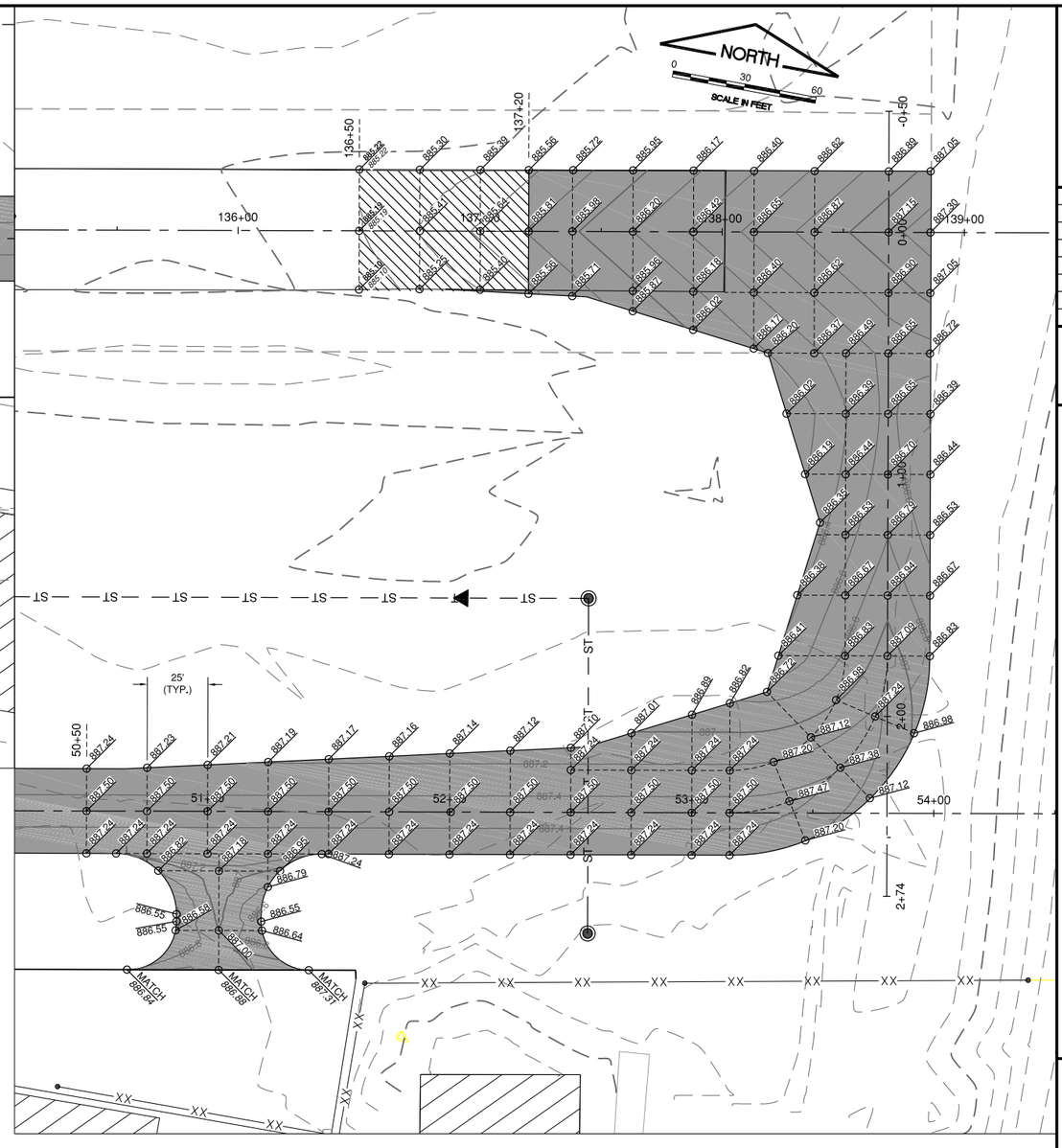
VILLAGE OF LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

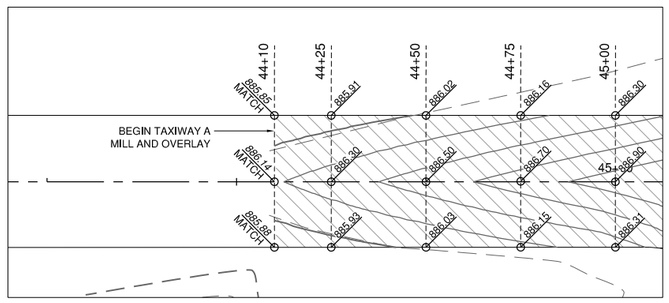
SHEET 18 OF 36 SHEETS





LEGEND

- EXISTING STORM SEWER
- EXISTING DRAINAGE STRUCTURE
- EXISTING FENCE
- EXISTING AIRPORT PROPERTY LINE
- NEW PAVEMENT
- NEW MILL AND OVERLAY
- NEW STORM SEWER
- NEW SILT FENCE/GRADING LIMITS
- NEW DRAINAGE STRUCTURE
- EXISTING BUILDING
- RELOCATED BUILDING
- MATCH EXISTING GROUND @ ELEVATION
- PROPOSED ELEVATION
- PROPOSED CONTOUR
- PROPOSED GRADING LIMITS
- PROPOSED FENCE



INSET 'A'

SCALE: 1"=20'

NOTE:

ALL ELEVATIONS SHOWN ARE PAVEMENT GRADES. SEE GRADING PLAN SHEET FOR TURF GRADES.

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

INTERSECTION GRADE DETAILS

CMT

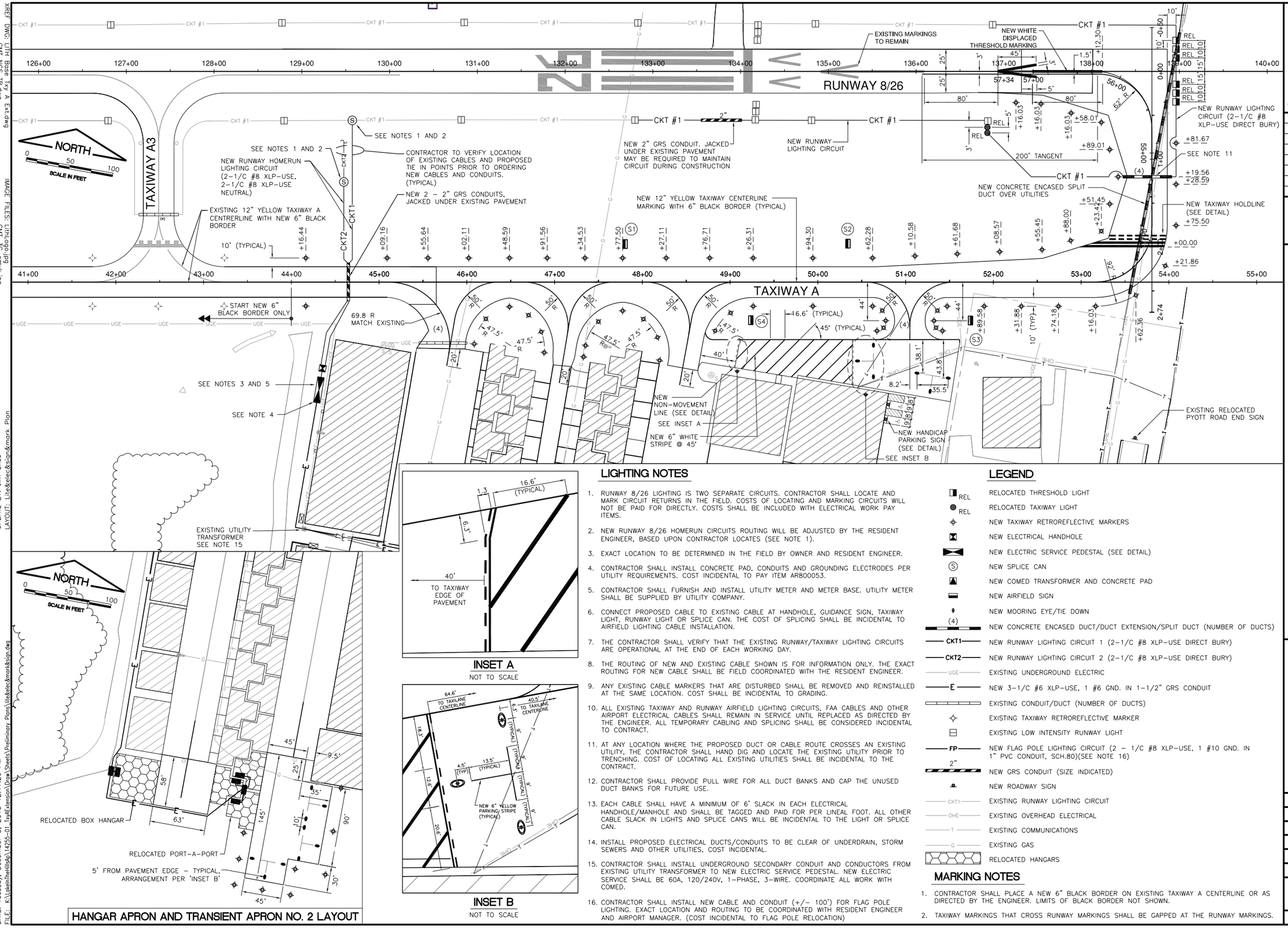
VILLAGE OF LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

SHEET 19 OF 36 SHEETS

XREF DWG: LITH Base Txy A Ext.dwg
CMT NCS TB.dwg
IMAGE FILES: CMT_3C_cmyk.jpg
CMT_black_rgb.jpg
Lith.Logo.jpg
UPDATE BY: Jim Ohse
LAYOUT: Intersection Grade Details
DATE: Tuesday, December 8, 2015 12:16:59 PM
FILE: K:\Lake\TheHills\Apt\14255-01_TxyAExtension\Draw\Sheets\Prelminary Plans\Intersection Grade Details.dwg



INSET A
NOT TO SCALE

INSET B
NOT TO SCALE

LIGHTING NOTES

1. RUNWAY 8/26 LIGHTING IS TWO SEPARATE CIRCUITS. CONTRACTOR SHALL LOCATE AND MARK CIRCUIT RETURNS IN THE FIELD. COSTS OF LOCATING AND MARKING CIRCUITS WILL NOT BE PAID FOR DIRECTLY. COSTS SHALL BE INCLUDED WITH ELECTRICAL WORK PAY ITEMS.
2. NEW RUNWAY 8/26 HOMERUN CIRCUITS ROUTING WILL BE ADJUSTED BY THE RESIDENT ENGINEER, BASED UPON CONTRACTOR LOCATES (SEE NOTE 1).
3. EXACT LOCATION TO BE DETERMINED IN THE FIELD BY OWNER AND RESIDENT ENGINEER.
4. CONTRACTOR SHALL INSTALL CONCRETE PAD, CONDUITS AND GROUNDING ELECTRODES PER UTILITY REQUIREMENTS. COST INCIDENTAL TO PAY ITEM AR800053.
5. CONTRACTOR SHALL FURNISH AND INSTALL UTILITY METER AND METER BASE. UTILITY METER SHALL BE SUPPLIED BY UTILITY COMPANY.
6. CONNECT PROPOSED CABLE TO EXISTING CABLE AT HANDHOLE, GUIDANCE SIGN, TAXIWAY LIGHT, RUNWAY LIGHT OR SPLICE CAN. THE COST OF SPLICING SHALL BE INCIDENTAL TO AIRFIELD LIGHTING CABLE INSTALLATION.
7. THE CONTRACTOR SHALL VERIFY THAT THE EXISTING RUNWAY/TAXIWAY LIGHTING CIRCUITS ARE OPERATIONAL AT THE END OF EACH WORKING DAY.
8. THE ROUTING OF NEW AND EXISTING CABLE SHOWN IS FOR INFORMATION ONLY. THE EXACT ROUTING FOR NEW CABLE SHALL BE FIELD COORDINATED WITH THE RESIDENT ENGINEER.
9. ANY EXISTING CABLE MARKERS THAT ARE DISTURBED SHALL BE REMOVED AND REINSTALLED AT THE SAME LOCATION. COST SHALL BE INCIDENTAL TO GRADING.
10. ALL EXISTING TAXIWAY AND RUNWAY AIRFIELD LIGHTING CIRCUITS, FAA CABLES AND OTHER AIRPORT ELECTRICAL CABLES SHALL REMAIN IN SERVICE UNTIL REPLACED AS DIRECTED BY THE ENGINEER. ALL TEMPORARY CABLING AND SPLICING SHALL BE CONSIDERED INCIDENTAL TO CONTRACT.
11. AT ANY LOCATION WHERE THE PROPOSED DUCT OR CABLE ROUTE CROSSES AN EXISTING UTILITY, THE CONTRACTOR SHALL HAND DIG AND LOCATE THE EXISTING UTILITY PRIOR TO TRENCHING. COST OF LOCATING ALL EXISTING UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT.
12. CONTRACTOR SHALL PROVIDE PULL WIRE FOR ALL DUCT BANKS AND CAP THE UNUSED DUCT BANKS FOR FUTURE USE.
13. EACH CABLE SHALL HAVE A MINIMUM OF 6' SLACK IN EACH ELECTRICAL HANDHOLE/MANHOLE AND SHALL BE TAGGED AND PAID FOR PER LINEAL FOOT. ALL OTHER CABLE SLACK IN LIGHTS AND SPLICE CANS WILL BE INCIDENTAL TO THE LIGHT OR SPLICE CAN.
14. INSTALL PROPOSED ELECTRICAL DUCTS/CONDUITS TO BE CLEAR OF UNDERDRAIN, STORM SEWERS AND OTHER UTILITIES, COST INCIDENTAL.
15. CONTRACTOR SHALL INSTALL UNDERGROUND SECONDARY CONDUIT AND CONDUCTORS FROM EXISTING UTILITY TRANSFORMER TO NEW ELECTRIC SERVICE PEDESTAL. NEW ELECTRIC SERVICE SHALL BE 60A, 120/240V, 1-PHASE, 3-WIRE. COORDINATE ALL WORK WITH COMED.
16. CONTRACTOR SHALL INSTALL NEW CABLE AND CONDUIT (+/- 100') FOR FLAG POLE LIGHTING. EXACT LOCATION AND ROUTING TO BE COORDINATED WITH RESIDENT ENGINEER AND AIRPORT MANAGER. (COST INCIDENTAL TO FLAG POLE RELOCATION)

LEGEND

- REL — RELOCATED THRESHOLD LIGHT
- REL — RELOCATED TAXIWAY LIGHT
- NEW TAXIWAY RETROREFLECTIVE MARKERS
- NEW ELECTRICAL HANDHOLE
- NEW ELECTRIC SERVICE PEDESTAL (SEE DETAIL)
- S — NEW SPLICE CAN
- NEW COMED TRANSFORMER AND CONCRETE PAD
- NEW AIRFIELD SIGN
- 8 — NEW MOORING EYE/TIE DOWN
- (4) — NEW CONCRETE ENCASED DUCT/DUCT EXTENSION/SPLIT DUCT (NUMBER OF DUCTS)
- CKT1 — NEW RUNWAY LIGHTING CIRCUIT 1 (2-1/C #8 XLP-USE DIRECT BURY)
- CKT2 — NEW RUNWAY LIGHTING CIRCUIT 2 (2-1/C #8 XLP-USE DIRECT BURY)
- UGE — EXISTING UNDERGROUND ELECTRIC
- E — NEW 3-1/C #6 XLP-USE, 1 #6 GND. IN 1-1/2" GRS CONDUIT
- EXISTING CONDUIT/DUCT (NUMBER OF DUCTS)
- EXISTING TAXIWAY RETROREFLECTIVE MARKER
- EXISTING LOW INTENSITY RUNWAY LIGHT
- FP — NEW FLAG POLE LIGHTING CIRCUIT (2 - 1/C #8 XLP-USE, 1 #10 GND. IN 1" PVC CONDUIT, SCH.80)(SEE NOTE 16)
- 2" — NEW GRS CONDUIT (SIZE INDICATED)
- NEW ROADWAY SIGN
- CKT1 — EXISTING RUNWAY LIGHTING CIRCUIT
- OHE — EXISTING OVERHEAD ELECTRICAL
- T — EXISTING COMMUNICATIONS
- G — EXISTING GAS
- RELOCATED HANGARS

MARKING NOTES

1. CONTRACTOR SHALL PLACE A NEW 6" BLACK BORDER ON EXISTING TAXIWAY A CENTERLINE OR AS DIRECTED BY THE ENGINEER. LIMITS OF BLACK BORDER NOT SHOWN.
2. TAXIWAY MARKINGS THAT CROSS RUNWAY MARKINGS SHALL BE GAPPED AT THE RUNWAY MARKINGS.

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

LIGHTING, ELECTRICAL AND PAVEMENT MARKING PLAN - 1

CMT

VILLAGE OF LAKE IN THE HILLS

DESIGN BY:	ARM/AB
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

SHEET 20 OF 36 SHEETS

XREF DWG: LITH Base Txy A Ext.dwg
CMT NCS TB.dwg

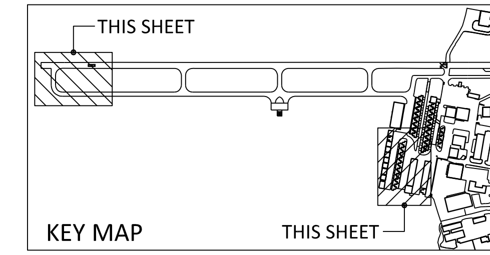
IMAGE FILES: CMT_3C_cmyk.jpg
CMT_black_rgb.jpg
LithLogo.jpg

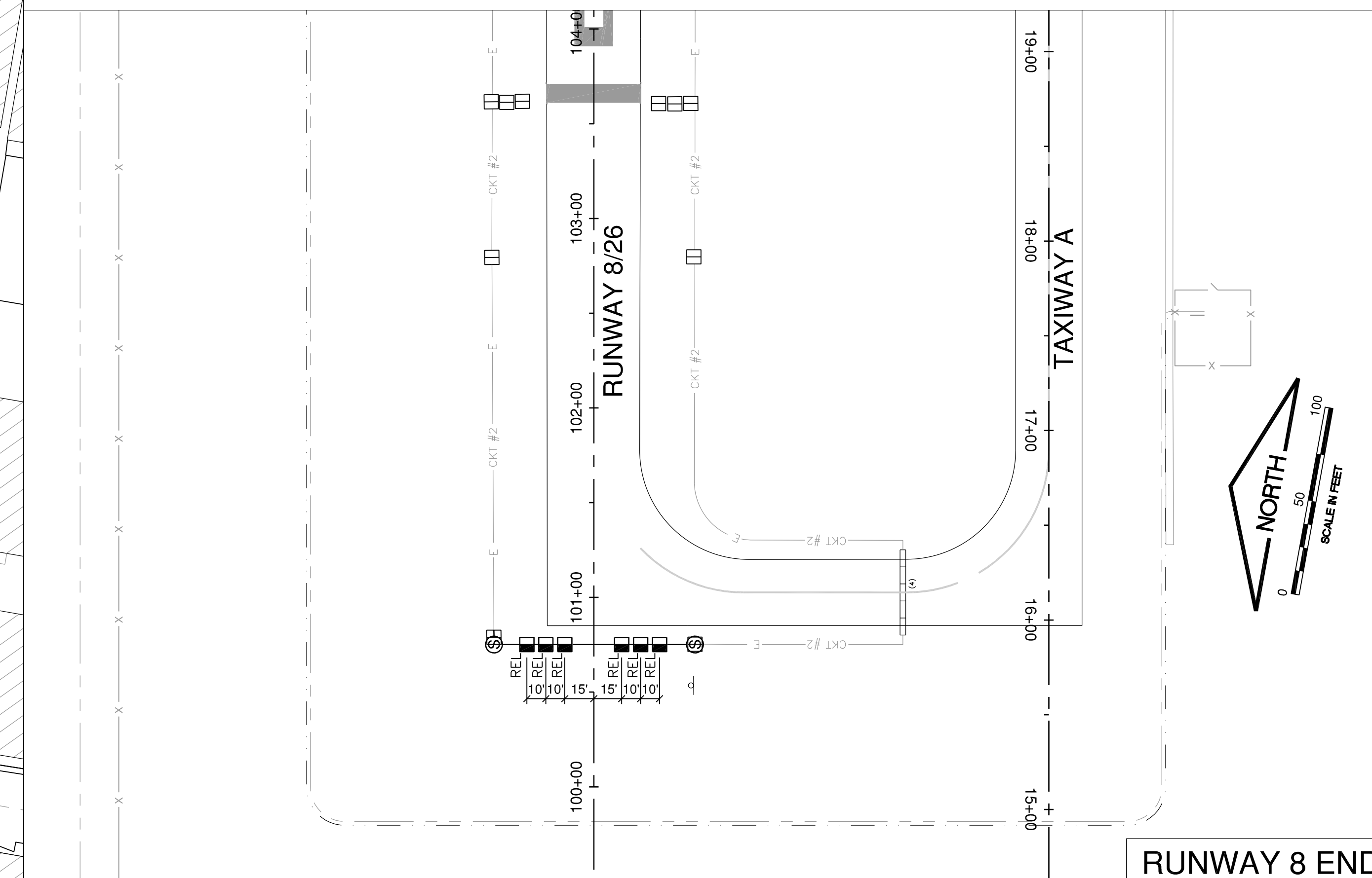
UPDATE BY: Jim Ohse
LAYOUT: South Apron Alternatives

DATE: Tuesday, December 8, 2015 12:17:55 PM
FILE: K:\LakeInTheHillsAp\14255-01_TxyAExtension\Draw\Sheets\Preliminary Plans\lite&elec&mark&sign-2.dwg

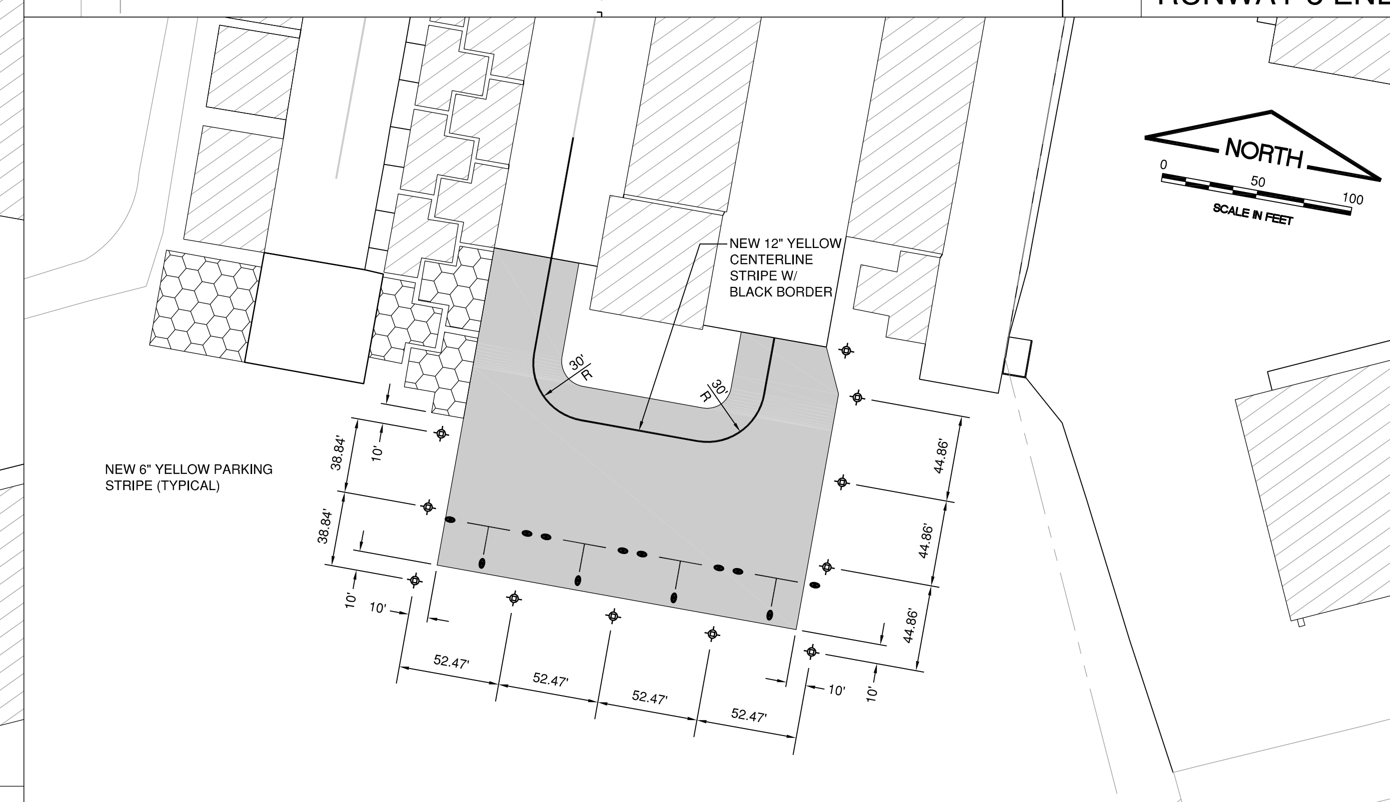
HANGAR APRON AND TRANSIENT APRON NO. 2 - BASE BID

SEE LIGHTING SHEET 1 FOR LEGEND AND NOTES





RUNWAY 8 END



TRANSIENT APRON NO. 2 - ADDITIVE ALTERNATE NO. 1

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS		
NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

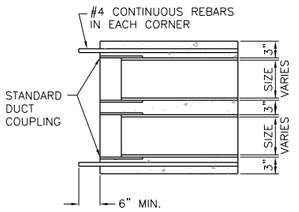
LIGHTING, ELECTRICAL AND PAVEMENT MARKING PLAN - 2

CMT

VILLAGE OF LAKE IN THE HILLS

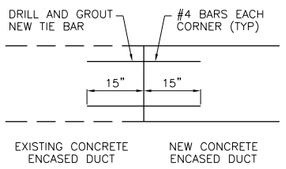
DESIGN BY:	ARM
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL



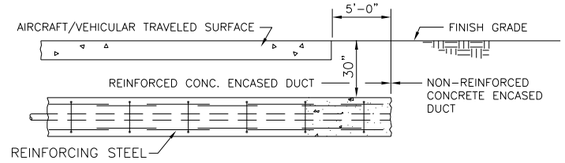
CONCRETE ENCASED DUCT END DETAIL

NO SCALE

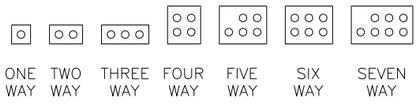


EXTENSION OF EXISTING DUCT

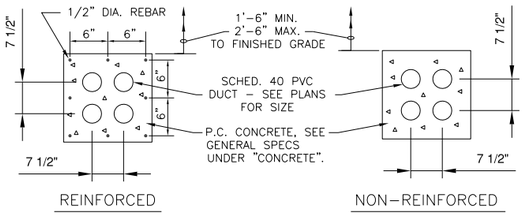
NO SCALE



REINFORCED DUCT INSTALLATION



TYPICAL DUCT BANK CONFIGURATIONS

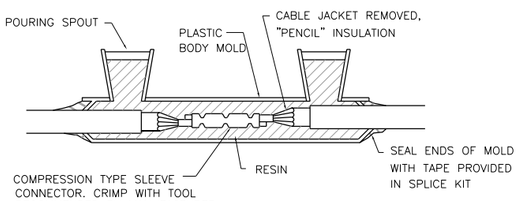


DUCT BANK DETAILS

NOT TO SCALE

NOTES:

1. DIMENSIONS ARE MINIMUM.
2. ALL CONDUIT SHALL BE SCHEDULE 40 PVC.
3. 4" SPLIT DUCT SHALL BE CONCRETE ENCASED WITH 3" MINIMUM CONCRETE SURROUNDING 4" CONDUIT. COST INCIDENTAL TO SPLIT DUCT.
4. PROVIDE PULL STRINGS AND CAPS FOR UNUSED DUCTS.
5. MAINTAIN MINIMUM 3" CONCRETE COVER AND SPACING FOR NUMBER AND SIZE CONDUIT CONFIGURATION. SEE EXTERIOR CONDUIT SCHEDULE.
6. REINFORCED STEEL TO BE MIN. #4 REBAR, MIN. 18" LAP.

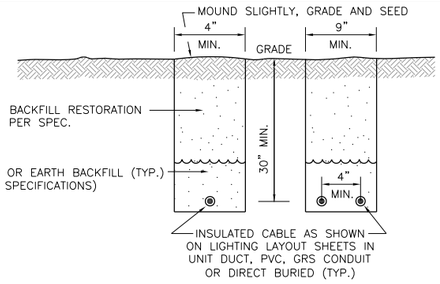


DIRECT BURIED CABLE SPLICE

NOT TO SCALE

CABLE SPLICE NOTES

1. INSIDE DIAMETER OF CONNECTOR SHALL PROPERLY MATCH THE OUTSIDE DIAMETER OF CABLE.
2. WRAP WITH AT LEAST ONE LAYER OF RUBBER OR SYNTHETIC RUBBER TAPE AND ONE LAYER OF PLASTIC TAPE, ONE-HALF LAPPED, EXTENDING AT LEAST 1-1/2 INCHES ON EACH SIDE OF JOINT.
3. THE COST OF FURNISHING AND INSTALLING ALL SPLICE MATERIALS SHALL BE INCIDENTAL TO THE ASSOCIATED CABLE ITEMS.
4. THE CONTRACTOR SHALL HAVE A MINIMUM OF FIVE (5) TYPE A SPLICE KITS ON THE JOB SITE AT ALL TIMES FOR EMERGENCY REPAIRS.

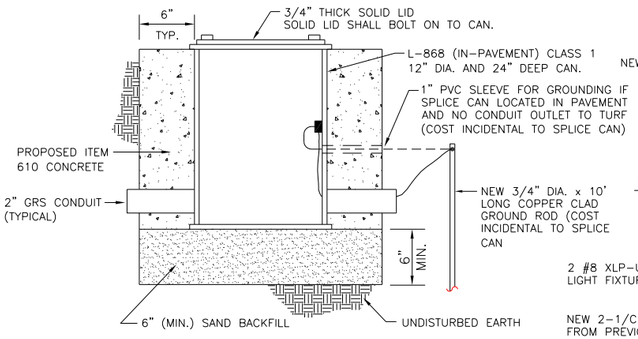


TRENCH DETAIL

NOT TO SCALE

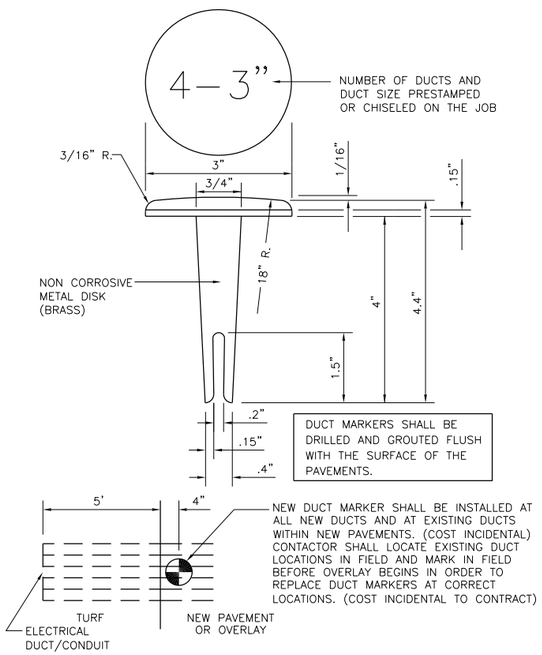
NOTES

1. TRENCHES WITH MORE THAN 2 CABLES SHALL BE INCREASED 3" IN WIDTH FOR EACH ADDITIONAL CABLE. IF SPECIFIED ON PLANS, TWO PARALLEL TRENCHES MAY BE CONSTRUCTED.
2. DEPTH OF TRENCHES SHALL BE AS SHOWN UNLESS OTHERWISE SPECIFIED ON THE PLANS.
3. SAND BACKFILL SHALL BE USED IF THE EXISTING SOIL DOES NOT MEET THE BACKFILL REQUIREMENTS.
4. ALL DISTURBED SURFACES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION.



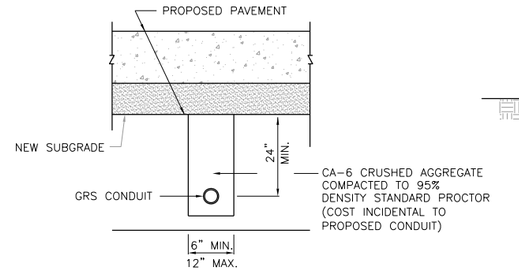
EXISTING/NEW SPLICE CAN DETAIL

NOT TO SCALE



DUCT/CONDUIT MARKER DETAIL

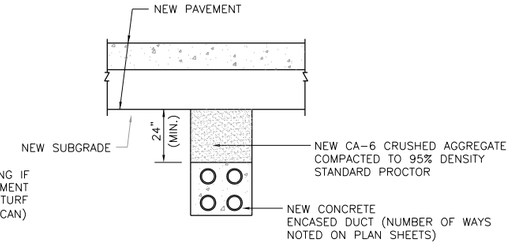
NOT TO SCALE



GRS CONDUIT UNDER PAVEMENT DETAIL

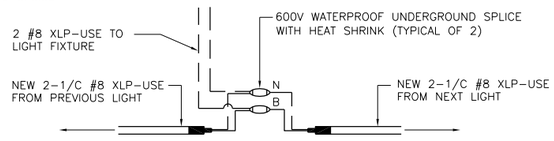
NOT TO SCALE

NEW DUCT BANK/CONDUIT SHALL BE INSTALLED AT AN ELEVATION THAT WILL NOT CONFLICT WITH EXISTING OR NEW UTILITIES INCLUDING STORM SEWER, UNDERDRAIN, CONDUIT, DUCT, GAS, WATERMAIN, PHONE, ELECTRICAL AT NO ADDITIONAL COST TO THE CONTRACT.



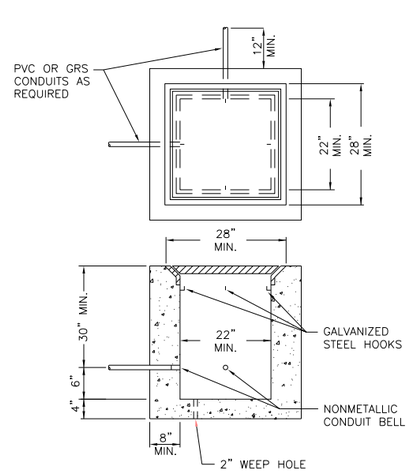
CONCRETE ENCASED DUCT BACKFILL

NOT TO SCALE



120V LIGHTING CIRCUIT CONNECTION DETAIL

NOT TO SCALE

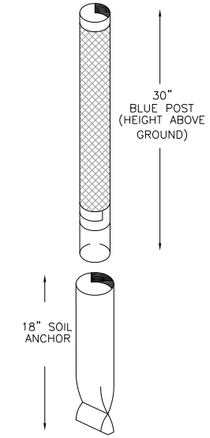


ELECTRICAL HANDHOLE DETAIL

NOT TO SCALE

NOTES:

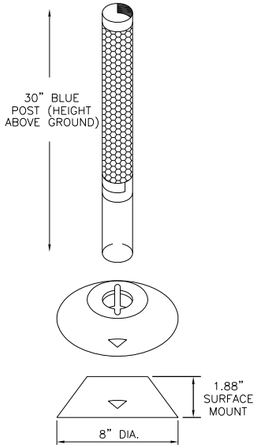
1. CONDUIT ENTRANCES AND NUMBER OF CONDUITS SHALL BE AS SHOWN ON SITE PLAN VIEW.
2. FRAME AND LID SHALL BE SUITABLE FOR H-20 LOADING.
3. COVER SHALL BE STAMPED "ELECTRICAL".



ELEVATED RETROFLECTIVE MARKER (SOIL ANCHOR MOUNT)

NOT TO SCALE

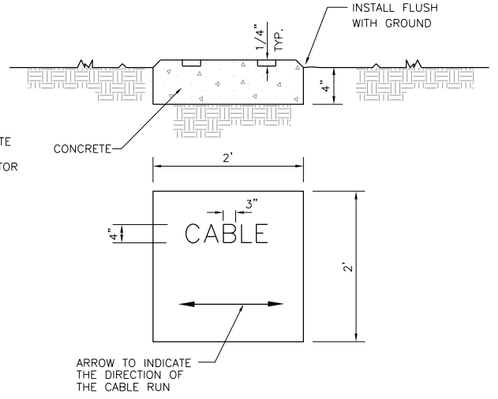
NOTE: RETROFLECTIVE MARKER SHALL BE L-853 CERTIFIED.



ELEVATED RETROFLECTIVE MARKER (SURFACE MOUNT)

NOT TO SCALE

NOTE: RETROFLECTIVE MARKER SHALL BE L-853 CERTIFIED.



TURF CABLE MARKER DETAIL

NOT TO SCALE

NOTES

1.) CABLE MARKERS SHALL BE INSTALLED AT ALL BENDS AND EVERY 200' ALONG THE CABLE RUN.

2.) ITEM 610 CONCRETE SHALL BE USED.

3.) ALL EXPOSED EDGES SHALL BE EDGED WITH A 1/4" RADIUS TOOL.

4.) THE COST OF FURNISHING AND INSTALLING NEW MARKERS SHALL BE INCIDENTAL TO THE ASSOCIATED CABLE ITEMS.

5.) 0.049 CU. YD. CONCRETE PER MARKER.

6.) CONTACTOR SHALL LOCATE EXISTING CABLE MARKERS IN THE FIELD BEFORE SHOULDER ADJUSTMENT BEGINS IN ORDER TO REPLACE CABLE MARKERS AT CORRECT LOCATIONS (COST INCIDENTAL TO CONTRACT).

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS		
NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

ELECTRICAL DETAILS 1

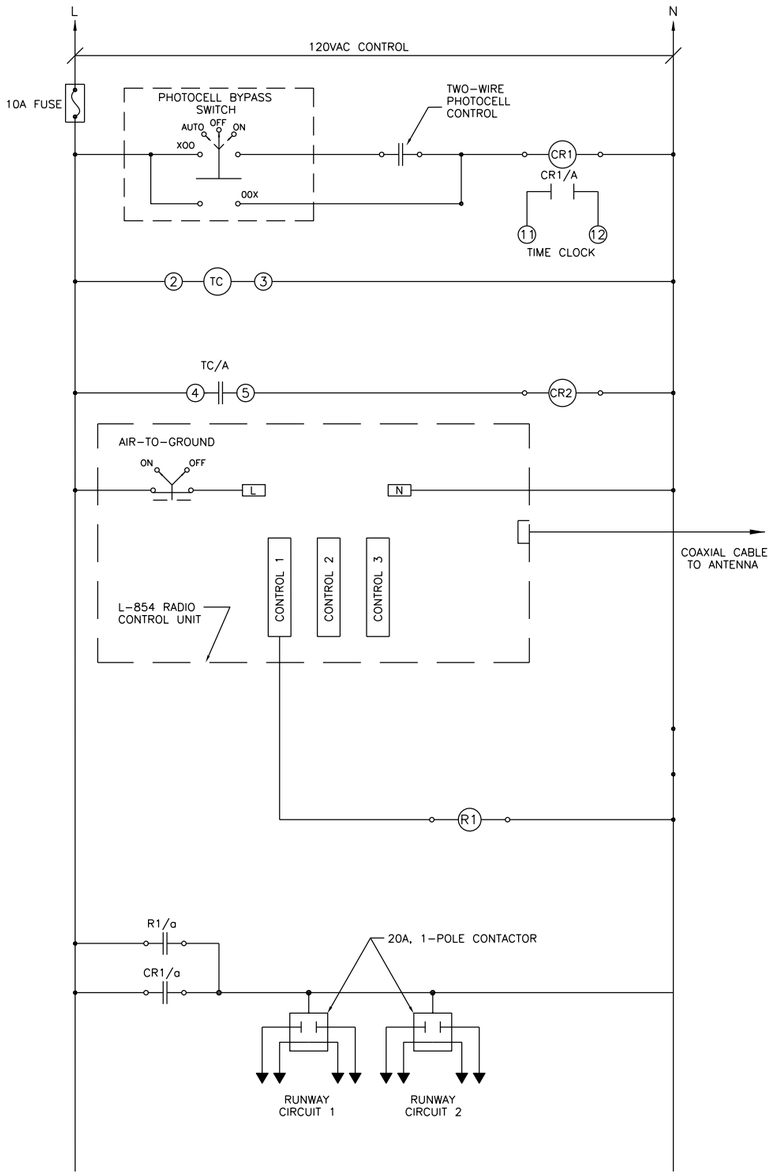
CMT

VILLAGE OF LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

SHEET 22 OF 36 SHEETS



RUNWAY CIRCUIT CONTROL WIRING SCHEMATIC

N.T.S.

NOTES

1. PHOTOCELL (PC) AT TRANSCLOSURE SUPPLIED WITH TIME CLOCK.
2. TIME CLOCK TO BE GRASSLIN, MODEL PC2-DIGI 30, TWO CHANNEL PHOTO ELECTRIC/TIME SWITCH, OR EQUIVALANT. TIME CLOCK TO OPERATE AT 120VAC.
3. CONTROL RELAYS (CR1 & CR2) TO BE HEAVY DUTY, 10A, 4PDT, P&B #KUP-17A19-120, OR EQUAL WITH SOCKET.
4. PHOTOCELL BYPASS SWITCH TO BE SQUARE D #SKS43BH2, OR EQUIVALENT, WITH PADLOCK ATTACHMENT IN NEMA 4X ENCLOSURE.
5. ALL CONTROL WIRING TO BE #12 THWN UNLESS OTHERWISE NOTED.

POWER PANEL SCHEDULE

PANEL DESIGNATION: **PP-1** | BOND NEUTRAL AND GROUND BAR: **YES** | POLE: **20**
LOCATION: POWER PEDESTAL | NEUTRAL BUS RATING: **100%** | SHORT CIRCUIT RATING: **18KA**
MFR & TYPE: **SQUARED D OR EQUAL** | SERVICE ENTRANCE RATED: **YES** | SERIES OR FULLY RATED: **SERIES**
TVSS & DISCONNECT REQUIRED: **NO**

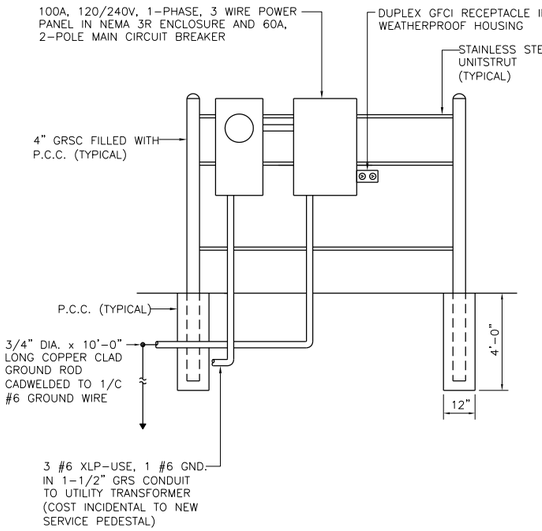
VOLTS: **120/240** | MOUNTING: **SURFACE** | BUS RATING (AMPS): **100**
PHASE: **1** | ENCL RATING: **NEMA 3R** | BUS: **COPPER OR ALUMINUM**
WIRE: **3** | XFMR CAPACITY: | MAIN CIRCUIT BREAKER: **60A, 2-POLE**

CKT NO.	LOAD	BREAKER SIZE	LOAD AMPS	USAGE FACTOR	PHASE AMPS A	PHASE AMPS B	POLE NO.		PHASE AMPS A	PHASE AMPS B	USAGE FACTOR	LOAD AMPS	BREAKER SIZE	LOAD	CKT NO.
1	L-854 RADIO CONTROLLER	20/1	3	0.5	1.5		1	2	0.8		0.4	2	20/1	CONVENIENCE OUTLET	2
3	RUNWAY LIGHTING CONTROLLER	20/1	1	1		1	3	4		9	0.5	18	20/1	RUNWAY CIRCUIT 1	4
5	SPARE 20 A CB	20/1	1	1	1		5	6	9		0.5	18	20/1	RUNWAY CIRCUIT 2	6
7	SPARE 20 A CB	20/1	1	1		1	7	8		0.4	0.4	1	20/1	SPARE 20 A CB	8
9	SPARE 20 A CB	20/1	0	1	0		9	10	0		1	0	20/1	SPARE 20 A CB	10
11	SPARE 20 A CB	20/1	0	1		0	11	12		0	1	0	20/1	SPARE 20 A CB	12
13	-	-	-	-	0		13	14	0						14
15	-	-	-	-		0	15	16		0					16
17	-	-	-	-	0		17	18	0						18
19	-	-	-	-		0	19	20		0					20
SECTION TOTAL:					2.5	2			9.8	9.4					

	A	B
MINIMUM MAIN CIRCUIT BREAKER AMPS: 12 — PHASE TOTAL AMPS:	12.3	11.4
PHASE TOTAL VA:	1476	1368

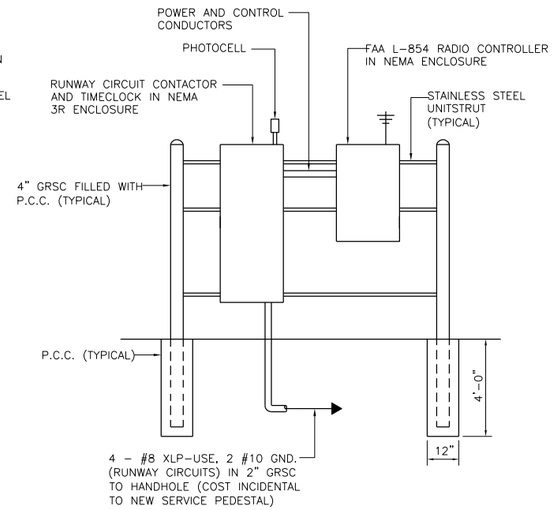
TOTAL USAGE LOAD: 2844 VA
MIN. XFMR VA: 3555 VA

NOTES:



NEW ELECTRIC SERVICE PEDESTAL DETAIL (FRONT)

NOT TO SCALE



NEW ELECTRIC SERVICE PEDESTAL DETAIL (BACK)

NOT TO SCALE

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

ELECTRICAL DETAILS 2

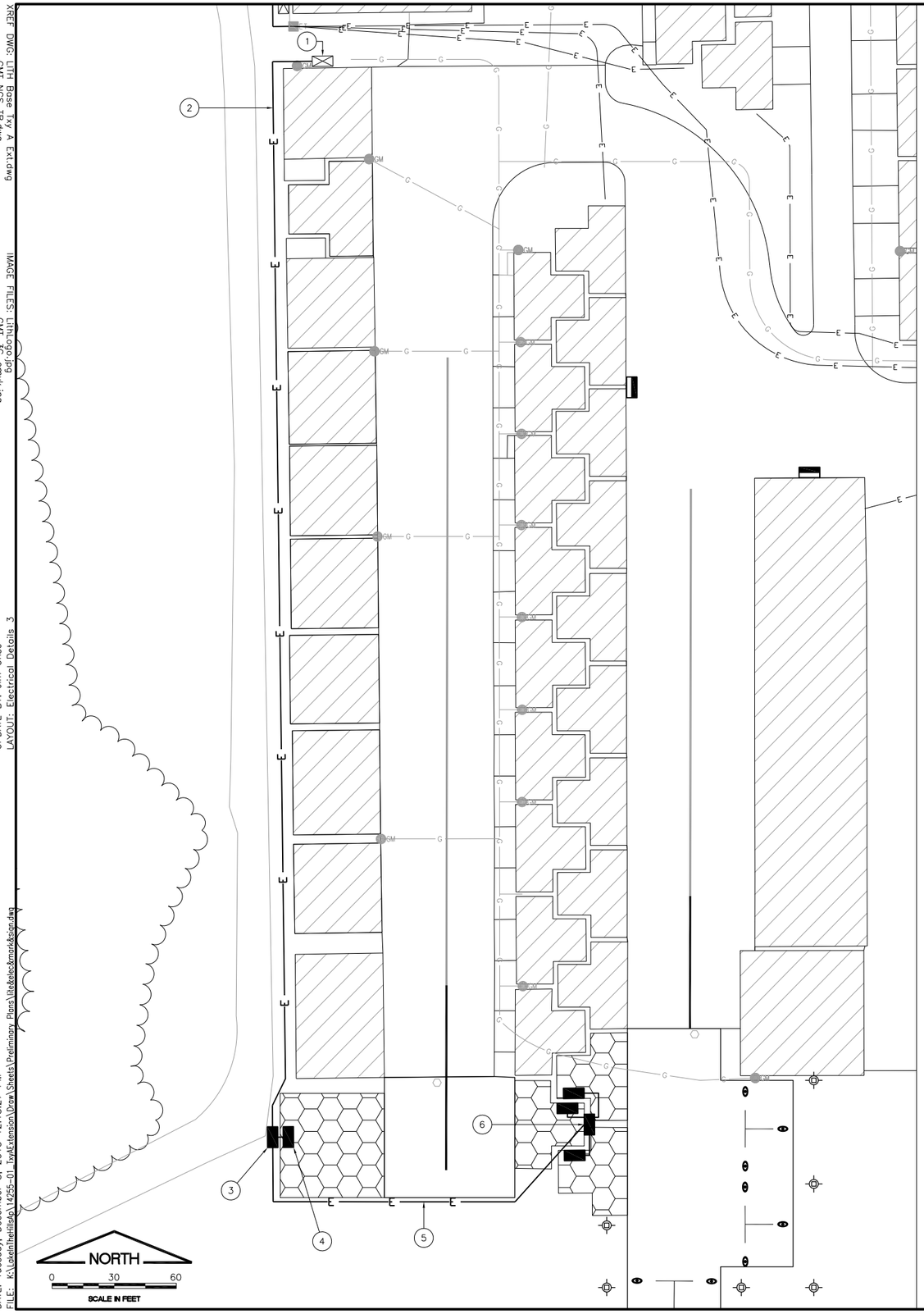
CMT

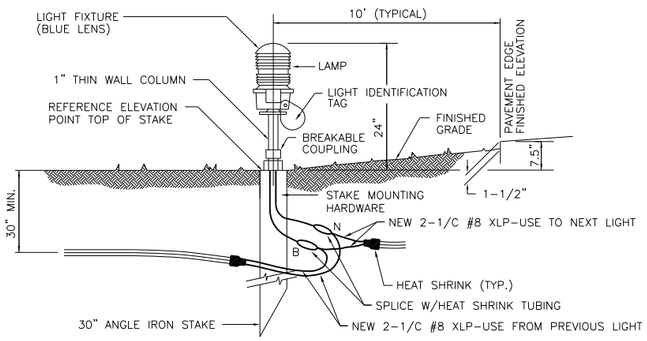
VILLAGE OF LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

SHEET 23 OF 36 SHEETS





RELOCATED STAKE MOUNTED TAXIWAY LIGHT

NOT TO SCALE

NOTES:

1. THE COST OF ALL DISCONNECTS, CABLE, CONDUIT AND JUNCTION BOXES SHOWN ON THIS SHEET SHALL BE INCIDENTAL TO PAY ITEM "AR800064 ELECTRIC SERVICE – T–HANGARS".
2. ALL ABOVE GROUND CONDUITS SHALL BE GRS CONDUITS. INSTALL PVC–GRS COUPLINGS FOR TRANSITION FROM PVC TO GRSC.

KEYED NOTES:

(1) EXISTING ELECTRIC SERVICE WITH DISCONNECT. INSTALL NEW (2) 60A, 2–POLE, NEMA 3K DISCONNECTS AND WIREWAY. SEE "NEW T–HANGAR ELECTRIC SERVICE DETAIL" THIS SHEET.

(2) NEW (2) 2" PVC SCHEDULE 80, DIRECT BURIED WITH 3 #6 XLP–USE, 1 #8 GND. IN EACH CONDUIT.

(3) NEW 18" x 18" x 6" NEMA 3R JUNCTION BOX, ATTACHED HANGAR FOR PULL BOX.

(4) RELOCATED POWER PANEL. INSTALL CONDUIT/CONDUCTORS TO FEED PANEL.

(5) NEW 2" PVC SCHEDULE 80 CONDUIT, DIRECT BURIED WITH 3 #6 XLP–USE, 1 #8 GND.

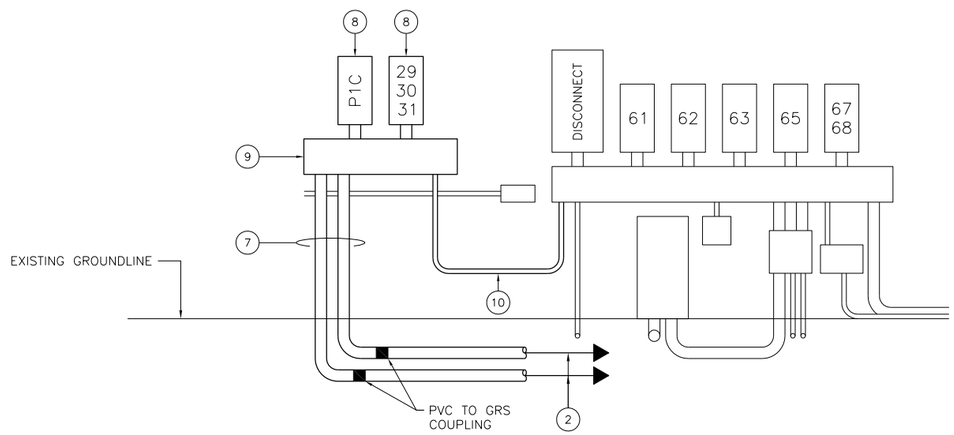
(6) NEW 12" x 12" x 6" NEMA 3R JUNCTION BOX ABOVE GRADE. INSTALL CONDUIT AND CONDUCTORS TO FEED RELOCATED HANGARS.

(7) NEW (2) 2" GRS CONDUITS

(8) NEW 60A, 2–POLE, 240V NEMA 3R DISCONNECT FOR NEW ELECTRIC SERVICES TO HANGARS.

(9) NEW 6" x 6" WIREWAY.

(10) NEW 2" GRS CONDUIT WITH 6 #6 XLP–USE, 2 #8 GND.



NEW T-HANGAR ELECTRIC SERVICE DETAIL

NOT TO SCALE

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

ELECTRICAL DETAILS 3

CMT

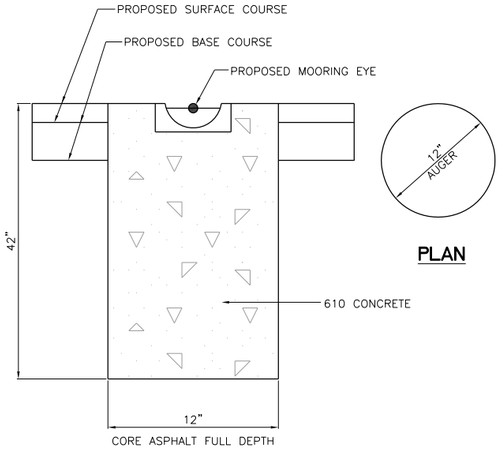
VILLAGE OF LAKE IN THE HILLS

DESIGN BY:	AB
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

SHEET 24 OF 36 SHEETS

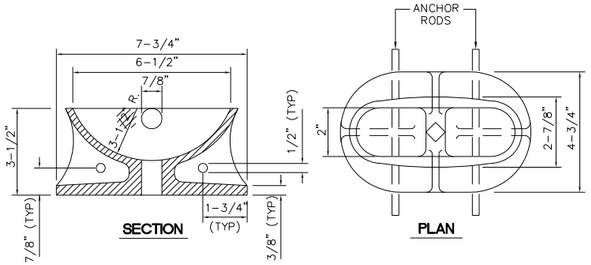
XREF DWG: LtH Base Txy A Ext.dwg
CMT NCS TB.dwg
MUTCD_Sign_Library_D9-6(BW).dwg
IMAGE FILES: LthLogo.jpg
CMT_3C_cmyk.jpg
CMT_black_rgb.jpg
LthLogo.jpg
UPDATE BY: Jim Onse
LAYOUT: Electrical Details 3
DATE: Tuesday, December 8, 2015 12:18:27 PM
FILE: K:\Lake\In The Hills\p\14255-01_TwyExtension\Draw\Sheets\Preliminary Plans\lite&elec&mark&sign.dwg



SECTION

MOORING EYE INSTALLATION DETAIL

NOT TO SCALE



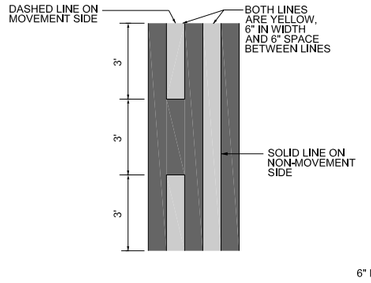
MOORING EYE DETAIL

NOT TO SCALE

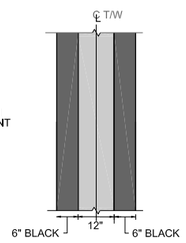
NOTES

1.) MOORING CASTINGS SHALL BE NEENAH SEMI-STEEL AIRPORT MOORING EYE CATALOG NO. R3490 OR APPROVED EQUIVALENT.

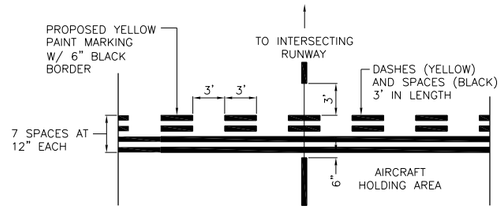
2.) ANCHOR RODS TO BE NO. 3 DEFORMED REINFORCING STEEL 15" LONG AND SHALL BE BENT DOWNWARD AT 45°.



NON-MOVEMENT AREA MARKINGS
NOT TO SCALE



TAXIWAY CENTERLINE MARKING (YELLOW)
NOT TO SCALE



RUNWAY HOLDING POSITION MARKER

NOT TO SCALE

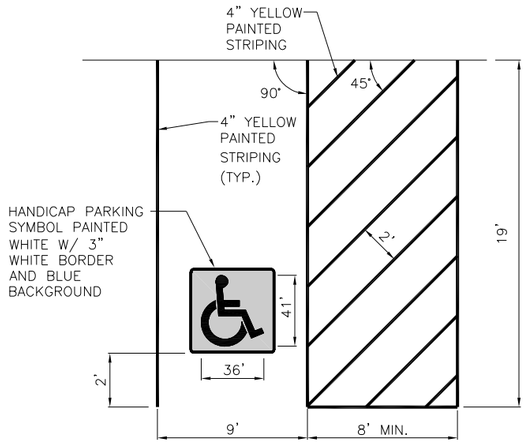
R7-8
12" x 18"

R1-1101
12" x 6"

HANDICAP PARKING SIGN

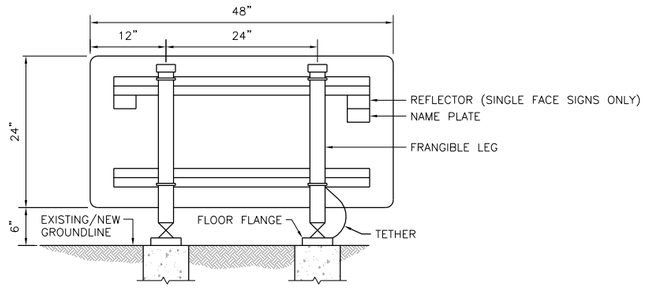
NOT TO SCALE

1. ALL SIGNS ARE STANDARD MATERIALS, COLORS AND LETTER STYLE AND SIZE AS SHOWN IN THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.
2. SIGN R1-1101 ($250 FINE) TO BE INSTALLED UNDER ALL SIGNS R7-8.

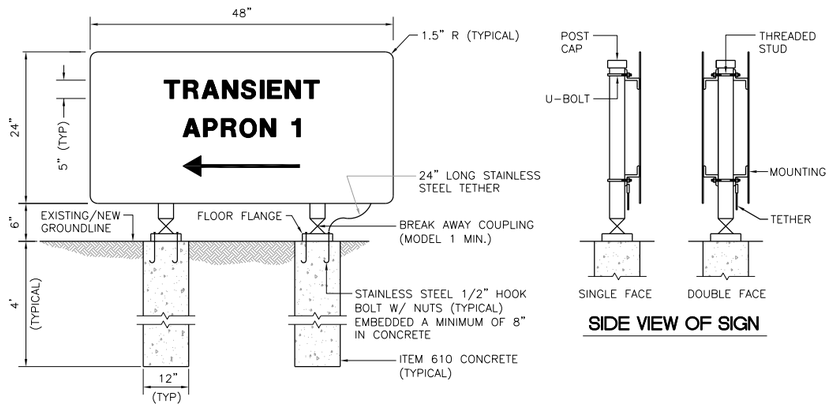


HANDICAP PARKING STALL STRIPING DETAIL

NOT TO SCALE



BACK VIEW OF SIGN



FRONT VIEW OF SIGN

SIDE VIEW OF SIGN

UNLIGHTED AIRFIELD GUIDANCE SIGN DETAIL

NOT TO SCALE

NOTES

1. SIGN SHALL BE IN CONFORMANCE WITH FAA ADVISORY CIRCULAR 150/5345-44K.
2. RETROREFLECTIVE MATERIAL USED MUST MEET THE REQUIREMENTS OF ASTM D4956 (CURRENT VERSION AS OF ISSUE DATE OF AC 150/5345-44K) SPECIFICATION FOR RETROREFLECTIVE SHEETING FOR TRAFFIC CONTROL, FOR TYPE III OR IV SHEETING.
3. SIGN PANEL MUST BE MADE OF ALUMINUM IN ACCORDANCE WITH SECTION 1090 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION.
4. ALL SIGN SCREWS, BOLTS, NUTS AND WASHERS, MUST BE ALLOY SAE 304, 316 OR 18-8 STAINLESS STEEL.
5. ALL SIGN MOUNTING HARDWARE MUST BE SUITABLE FOR ITS INTENDED PURPOSE AND PROTECTED FROM CORROSION.
6. AN INSULATING MATERIAL MUST BE USED BETWEEN ANY ALUMINUM AND STEEL MATERIAL IN DIRECT CONTACT TO PREVENT GALVANIC CORROSION.

AIRFIELD SIGNAGE SCHEDULE

SIGN NUMBER	PROPOSED SIGN FACE	PROPOSED SIGN LEGEND	PROPOSED SIGN TYPE	COMMENTS
S1 (BASE BID)	W	TRANSIENT APRON 2 →	3	STA. 47+78, 37.5' LT. GROUND MOUNTED W/ FRANGIBLE COUPLINGS
S2 (BASE BID)	W	TRANSIENT APRON 1 →	3	STA. 50+34, 37.5' LT. GROUND MOUNTED W/ FRANGIBLE COUPLINGS
S3 (BASE BID)	E	TRANSIENT APRON 1 ←	3	STA. 51+73.5, 37.5' RT. GROUND MOUNTED W/ FRANGIBLE COUPLINGS
S4 (BASE BID)	E	TRANSIENT APRON 2 ←	3	STA. 49+23, 37.5' RT. GROUND MOUNTED W/ FRANGIBLE COUPLINGS
S5 (BASE BID)	N	TRANSIENT APRON 2 ↑	3	GROUND MOUNTED W/ FRANGIBLE COUPLINGS EXACT LOCATION TO BE FIELD DETERMINED W/ RESIDENT ENGINEER
S6 (BASE BID)	N	TRANSIENT APRON 2 →	3	GROUND MOUNTED W/ FRANGIBLE COUPLINGS AIRPORT MAY ELECT TO MOUNT ON BUILDING FACE EXACT LOCATION TO BE FIELD DETERMINED W/ RESIDENT ENGINEER
S7 (BASE BID)	N	TRANSIENT APRON 2 →	3	GROUND MOUNTED W/ FRANGIBLE COUPLINGS AIRPORT MAY ELECT TO MOUNT ON BUILDING FACE EXACT LOCATION TO BE FIELD DETERMINED W/ RESIDENT ENGINEER
S7 (ADD ALT #1)	N	TRANSIENT APRON 2 ↔	3	GROUND MOUNTED W/ FRANGIBLE COUPLINGS AIRPORT MAY ELECT TO MOUNT ON BUILDING FACE SIGN S7 TO BE MODIFIED W/ DOUBLE APROW EXACT LOCATION TO BE FIELD DETERMINED W/ RESIDENT ENGINEER
S8	E	APRON 2 ←	3	GROUND MOUNTED W/ FRANGIBLE COUPLINGS EXACT LOCATION TO BE FIELD DETERMINED W/ RESIDENT ENGINEER (MANUFACTURER TO MODIFY SIGN DIMENSIONS)
S9 (ADD ALT #1)	E W	TRANSIENT APRON 2 ← TRANSIENT APRON 2 →	3 3	GROUND MOUNTED W/ FRANGIBLE COUPLINGS EXACT LOCATION TO BE FIELD DETERMINED W/ RESIDENT ENGINEER

PROPOSED SIGN TYPE LEGEND

0 — BLANK PANEL - BLACK
1 — RUNWAY/TAXIWAY HOLDLINE - WHITE LEGEND ON RED BACKGROUND
2 — LOCATION SIGN - YELLOW LEGEND ON BLACK BACKGROUND
3 — DIRECTION SIGN - BLACK LEGEND ON YELLOW BACKGROUND
4 — REMAINING DISTANCE - WHITE LEGEND ON BLACK BACKGROUND

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

PAVEMENT MARKING AND SIGN DETAILS

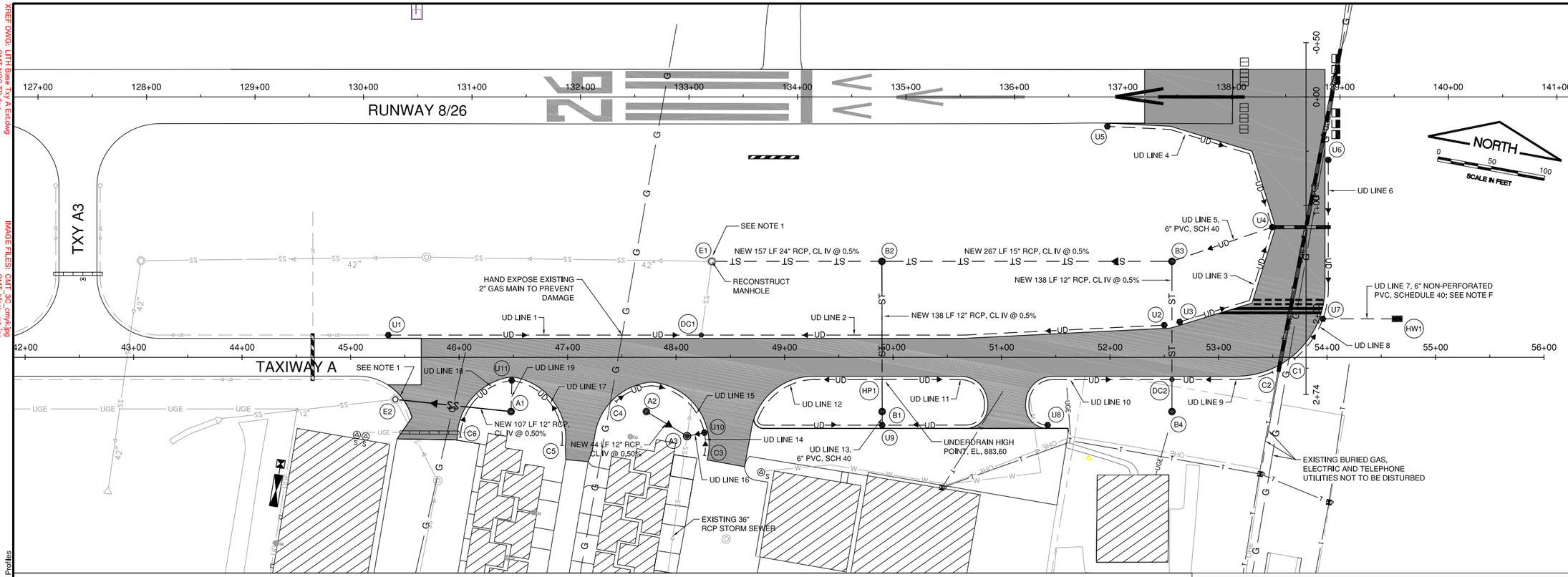
CMT

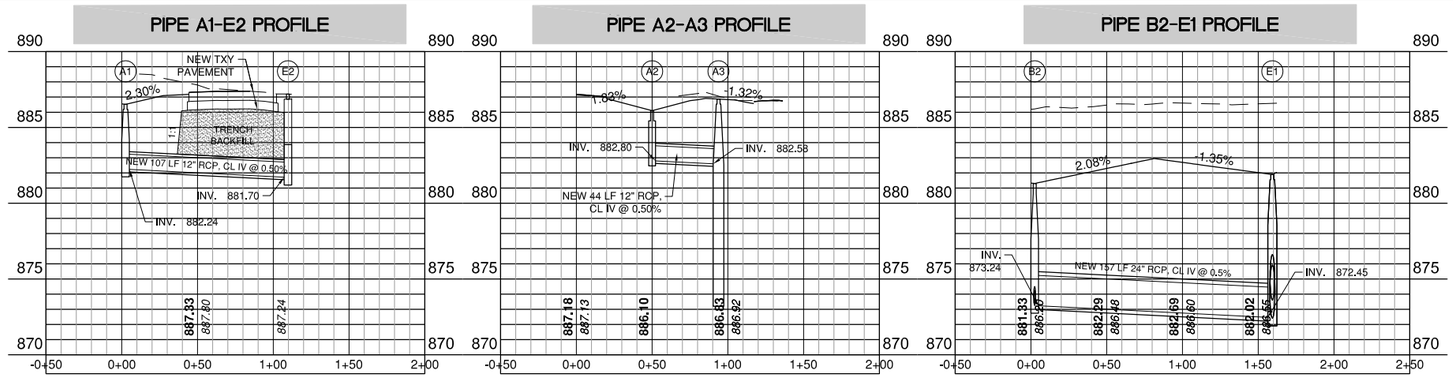
VILLAGE OF LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

SHEET 25 OF 36 SHEETS





LEGEND

- EXISTING STORM SEWER
- EXISTING DRAINAGE STRUCTURE
- EXISTING FENCE
- NEW PAVEMENT
- EXISTING BUILDING
- NEW STORM SEWER
- NEW DRAINAGE STRUCTURE
- NEW UNDERDRAIN COLLECTION STRUCTURE OR CLEANOUT - SEE SCHEDULE
- UNDERDRAIN DIRECT CONNECTION TO STORM SEWER PIPE
- NEW 6" PERFORATED UNDERDRAIN

STORM SEWER NOTES:

1. CONTRACTOR SHALL CORE INTO EXISTING MANHOLE. COST OF CORING INTO MANHOLE SHALL BE INCLUDED IN THE COST OF NEW STORM SEWER. EXISTING BENCH IN BOTTOM OF STRUCTURE TO BE REMOVED AND REPLACED, COST INCLUDED IN NEW STORM SEWER PIPE.
2. NEW STRUCTURE A3 SHALL BE INSTALLED ON EXISTING 36" RCP STORM SEWER. COST OF PIPE REMOVAL, CONCRETE COLLARS AND OTHER INCIDENTALS REQUIRED TO CONNECT THE EXISTING AND NEW PIPE TO THE NEW STRUCTURE SHALL BE INCLUDED IN THE COST OF THE MANHOLE.
3. SEE STORM SEWER SCHEDULE ON DRAINAGE SCHEDULES AND DETAILS SHEET.

UNDERDRAIN NOTES:

A. CONTRACTOR SHALL FIELD VERIFY UNDERDRAIN INSPECTION HOLES INVERTS BEFORE INSTALLING UNDERDRAIN.

B. ALL UNDERDRAIN CONNECTIONS, TEES, BENDS, ETC. SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE UNDERDRAIN.

C. UNDERDRAIN CONFLICTS WITH THE EXISTING CONDITIONS SHALL BE RESOLVED AND SHALL BE INCIDENTAL TO THE COST OF THE UNDERDRAIN.

D. UNDERDRAIN SLOPES FOLLOW EDGE OF PAVEMENT SLOPES UNLESS NOTED OTHERWISE.

E. INSTALL PROPOSED ELECTRICAL DUCTS/CONDUITS TO BE CLEAR OF UNDERDRAIN, COST INCIDENTAL.

F. 6" PERFORATED AND 6" NON-PERFORATED PVC SCHEDULE 40 OUTLET PIPE SHALL BE PAID UNDER ITEM AR705506, 6" PERFORATED UNDERDRAIN.

G. SEE UNDERDRAIN STRUCTURE SCHEDULE AND UNDERDRAIN PIPE SCHEDULE ON DRAINAGE SCHEDULES AND DETAILS SHEET.

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

DRAINAGE PLAN AND STORM SEWER PROFILES 1

CMT

VILLAGE OF LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

SHEET 26 OF 36 SHEETS

XREF DWG: CMT NCS TB.dwg
142550100-C-STRM.dwg
IMAGE FILES: CMT_3C_cmyk.jpg
CMT_black_rgb.jpg
LithLogo.jpg
UPDATE BY: Jim Ohse
LAYOUT: Storm Sewer Details
DATE: Tuesday, December 8, 2015 12:20:24 PM
FILE: K:\LakeInTheHillsAp\14255-01_TxyAExtension\Draw\Sheets\Preliminary Plans\storm Sewer Details.dwg

STORM SEWER STRUCTURE SCHEDULE

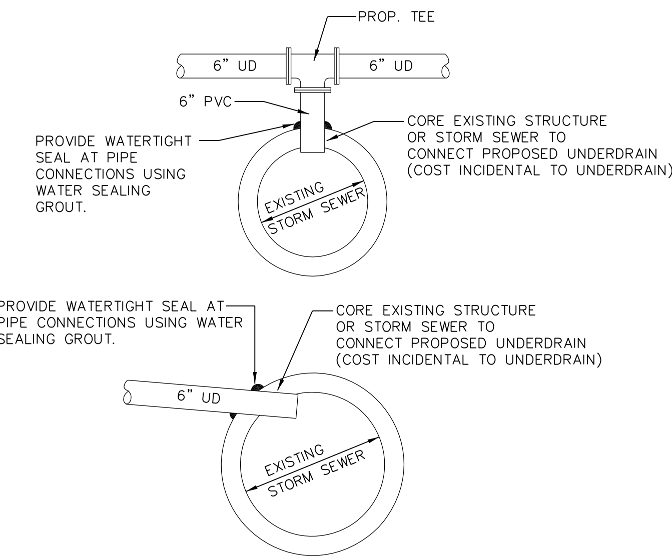
STRUCTURE NUMBER	LOCATION	RIM	INVERT	NOTES
A1	STA. 46+48, 50' RT	886.51	6" PVC INV. N (IN) 883.00 12" RCP INV. W (OUT) 882.24	NEW 4' MANHOLE, TYPE 1 FRAME AND OPEN LID
A2	STA. 47+73, 50' RT	886.00	12" RCP INV. E (OUT) 882.80	NEW 4' MANHOLE, TYPE 1 FRAME AND OPEN LID
A3	STA. 48+10, 73' RT	886.37	6" PVC INV. E (IN) 882.50 12" RCP INV. W (IN) 882.58 EX. 36" RCP INV. S (IN) 873.70± EX. 36" RCP INV. N (OUT) 873.70±	NEW 6' MANHOLE, TYPE 1 FRAME AND CLOSED LID SET NEW STRUCTURE ON EXISTING 36" RCP
B1	STA. 49+90, 50' RT	885.50	6" PVC INV. S (IN) 881.50 12" RCP INV. N (OUT) 873.95	NEW 4' MANHOLE, TYPE 1 FRAME AND OPEN LID
B2	STA. 49+90, 88' LT	881.30	12" RCP INV. S (IN) 873.26 15" RCP INV. E (IN) 873.26 24" RCP INV. W (OUT) 873.24	NEW 4' MANHOLE, TYPE 1 FRAME AND OPEN LID
B3	STA. 52+57, 88' LT	881.30	6" PVC INV. E (IN) 877.74 12" RCP INV. S (IN) 874.61 15" RCP INV. W (OUT) 874.59	NEW 4' MANHOLE, TYPE 1 FRAME AND OPEN LID
B4	STA. 52+57, 50' RT	885.25	12" INV. N (OUT) 875.30	NEW 4' MANHOLE, TYPE 1 FRAME AND OPEN LID
E1	STA. 48+33, 88' LT	886.21	24" INV. E (IN) 872.45 EX. 36" INV. S (IN) 873.61 EX. 42" INV. W (OUT) 872.41	RECONSTRUCT EXISTING 8' MANHOLE NEW RIM = 881.89 WITH NEW TYPE 1 FRAME AND OPEN LID
E2	STA. 45+41, 39' RT	885.75	12" INV. E (IN) 881.70 EX. 18" INV. S (IN) 882.75 EX. 12" INV. W (OUT) 881.45	RECONSTRUCT EXISTING 4' MANHOLE NEW RIM = 886.90 WITH NEW TYPE 1 FRAME AND OPEN LID

UNDERDRAIN STRUCTURE SCHEDULE

STRUCTURE NUMBER	STATION/OFFSET	RIM ELEV.	INV. ELEV.	NOTES
U1	STA. 45+35, 19.5' LT	886.50	884.70 (W) 883.00 (E)	COLLECTION STRUCTURE
U2	STA. 52+35, 28.7' LT	886.95	883.50	TYPE 1 CLEANOUT
U3	STA. 52+64, 32' LT	886.95	883.50	TYPE 1 CLEANOUT
U4	STA. 53+51, 120' LT	886.20	880.68 (N) 882.81 (S) 880.50 (W)	COLLECTION STRUCTURE
U5	STA. 51+98, 214.5' LT	885.20	881.70	TYPE 1 CLEANOUT
U6	STA. 54+01, 182' LT	886.55	883.05	TYPE 1 CLEANOUT
U7	STA. 53+95, 36' LT	886.70	882.73 (N) 882.68 (S) 882.68 (E)	COLLECTION STRUCTURE
U8	STA. 51+42, 64' RT	887.15	883.65	TYPE 1 CLEANOUT
U9	STA. 49+90, 64' RT	886.70	882.00 (W) 882.00 (E) 881.90 (N)	COLLECTION STRUCTURE
U10	STA. 48+26, 69' RT	886.60	883.10 (N) 883.10 (S) 883.00 (W)	COLLECTION STRUCTURE
U11	STA. 46+49, 19.5' RT	887.10	883.70 (W) 883.70 (E) 883.60 (S)	COLLECTION STRUCTURE
HP1	STA. 49+90, 19.5' RT		883.60	HIGH POINT
C1	STA. 53+70, 1' RT		883.00	END CAP
C2	STA. 53+50, 12' RT		883.00	END CAP
C3	STA. 48+29, 92' RT		883.20	END CAP
C4	STA. 47+43, 40' RT		883.63	END CAP
C5	STA. 46+96, 81' RT		884.10	END CAP
C6	STA. 46+00, 73' RT		884.10	END CAP
HW1	STA. 54+70, 36' LT		882.00	UNDERDRAIN HEADWALL
DC1	STA. 48+23, 19.5' LT		881.55	DIRECT CONNECTION TO STORM SEWER PIPE
DC2	STA. 52+57, 19.5' RT		881.55	DIRECT CONNECTION TO STORM SEWER PIPE

UNDERDRAIN PIPE SCHEDULE

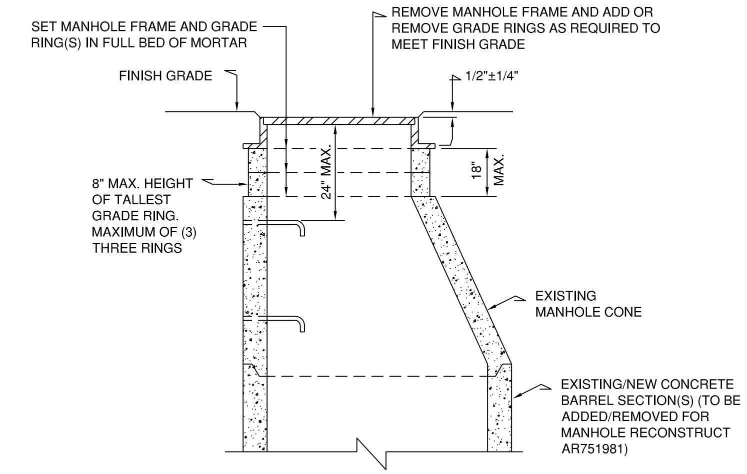
UD LINE	UPSTREAM STRUCTURE	DOWNSTREAM STRUCTURE	UPSTREAM INVERT	DOWNSTREAM INVERT	PIPE LENGTH	PIPE SLOPE
1	U1	DC1	883.00	881.55	289	0.50%
2	U2	DC1	883.50	881.55	427	0.46%
3	U3	U4	883.50	882.81	138	0.50%
4	U5	U4	881.70	880.68	205	0.50%
5	U4	B3	880.50	877.74	92	3.00%
6	U6	U7	883.05	882.73	147	0.22%
7	U7	HW1	882.68	882.00	74	0.92%
8	C1	U7	883.00	882.68	46	0.70%
9	C2	DC2	883.00	882.53	94	0.50%
10	U8	DC2	883.65	882.53	173	0.65%
11	HP1	U9	883.60	882.00	214	0.75%
12	HP1	U9	883.60	882.00	250	0.64%
13	U9	B1	881.90	881.50	12	3.33%
14	C3	U10	883.20	883.10	21	0.48%
15	C4	U10	883.63	883.10	107	0.50%
16	U10	A3	883.00	882.50	16	3.13%
17	C5	U11	884.10	883.70	84	0.48%
18	C6	U11	884.10	883.70	77	0.52%
19	U11	A1	883.60	883.00	28	2.14%



UNDERDRAIN CONNECTIONS AND FITTINGS, TEES AND ELBOWS USED FOR CONNECTIONS TO PROPOSED STRUCTURES AND STORM SEWERS / EXISTING STRUCTURES AND STORM SEWERS, SHALL BE CONSIDERED INCIDENTAL TO THE PROPOSED UNDERDRAIN.

UNDERDRAIN CONNECTION DETAILS

NOT TO SCALE

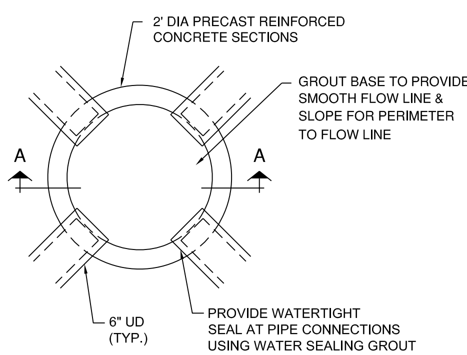


RECONSTRUCT MANHOLE (AR751981)

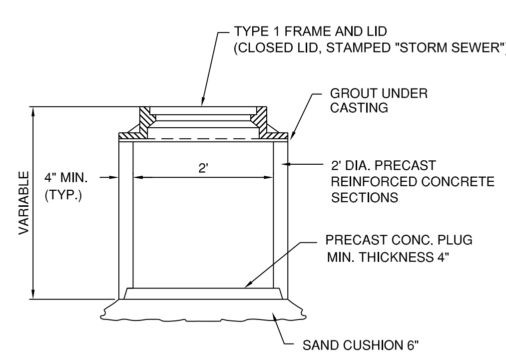
NOT TO SCALE

NOTES

1. REFER TO ASTM DESIGNATION C-478 FOR DESIGN AND STRENGTH REQUIREMENTS.
2. WHEN AN ADJUSTMENT OF GREATER THAN 18" IN GRADE RINGS IS REQUIRED, THE MANHOLE SHALL BE RECONSTRUCTED WITH APPROVED PRE-CAST CONC. BARREL SECTIONS THE SAME SIZE AS MANHOLE DIA. AND PAID FOR AS MANHOLE RECONSTRUCT (AR751981).
3. ADJUSTING RINGS SHALL BE PRE-CAST REINFORCED CONCRETE. ALL ADJUSTING RINGS AND METAL FRAME SHALL BE MORTARED INTO PLACE WITHOUT THE USE OF SHIMS OF ANY TYPE.
4. MORTAR SHALL HARDEN FOR 72 HOURS PRIOR TO PLACING GRAVEL OR ASPHALT DIRECTLY AROUND ADJUSTED STRUCTURE.
5. THE MAXIMUM HEIGHT OF ANY SINGLE ADJUSTING RING(S) SHALL BE 8 INCHES INCLUDING EXISTING RINGS.
6. THE MAXIMUM NUMBER OF RINGS IN ANY STRUCTURE IS THREE. THIS MAY REQUIRE THE CONTRACTOR TO REMOVE EXISTING RINGS AND REPLACE WITH DIFFERENT SIZE RINGS.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD CHECKING EXISTING MANHOLE CONFIGURATIONS AND SIZES FOR THE NECESSARY ADJUSTMENT AND RECONSTRUCT.



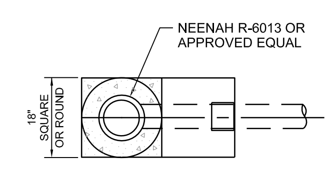
PLAN VIEW



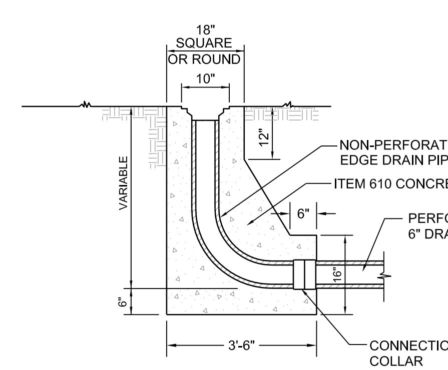
SECTION A-A

UNDERDRAIN COLLECTION STRUCTURE DETAIL

NOT TO SCALE



TOP VIEW



SIDE VIEW

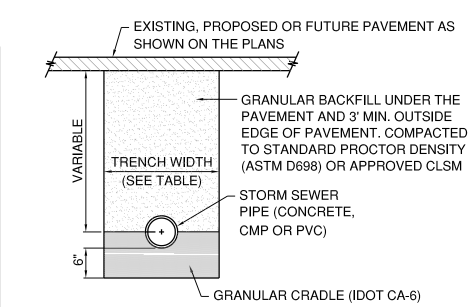
UNDERDRAIN TYPE 1 CLEANOUT DETAIL

NOT TO SCALE

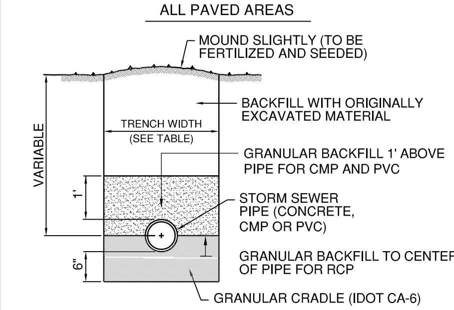
NOTE:

CLEANOUTS TO BE REPLACED SHALL BE COMPLETELY REMOVED AND A NEW TYPE 1 CLEANOUT INSTALLED AT THAT LOCATION. REMOVAL AND REPLACEMENT TO BE PAID UNDER AR705924, REPLACE UNDERDRAIN CLEANOUT.

INSIDE DIAMETER OF STORM SEWER (INCHES)	MAXIMUM TRENCH WIDTH	MAXIMUM PAVEMENT REMOVAL WIDTH
6	3'-7"	5'-7"
8	3'-9"	5'-9"
12	4'-2"	6'-2"
15	4'-6"	6'-6"
18	4'-9"	6'-9"
21	5'-0"	7'-0"
24	5'-4"	7'-4"
27	5'-7"	7'-7"
30	5'-11"	7'-11"
36	6'-6"	8'-6"
42	7'-1"	9'-1"
48	7'-8"	9'-8"
54	8'-3"	10'-3"
60	8'-10"	10'-10"
66	9'-5"	11'-5"
72	10'-0"	12'-0"
78	10'-7"	12'-7"
84	11'-2"	13'-2"
90	11'-9"	13'-9"
96	12'-4"	14'-4"
102	12'-11"	14'-11"
108	13'-6"	15'-6"



ALL PAVED AREAS



NON-PAVED AREAS

TRENCH DETAILS

NOT TO SCALE
(INCIDENTAL)

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS		
NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

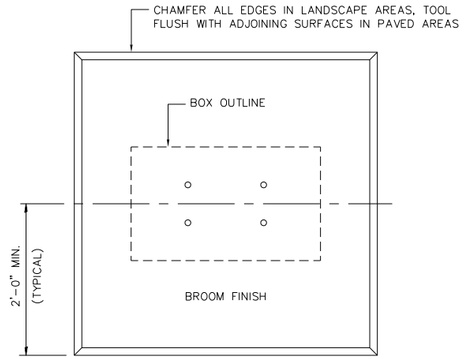
DRAINAGE SCHEDULES AND DETAILS

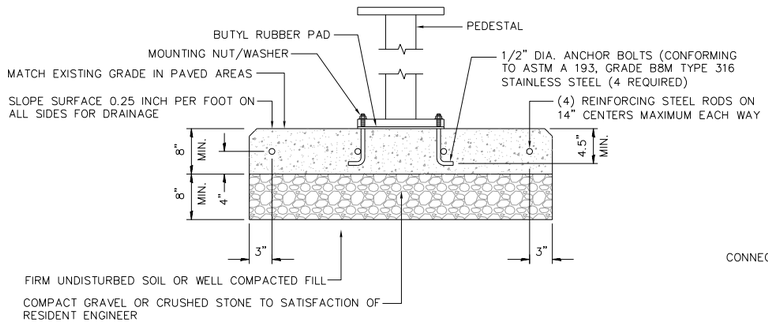
CMT

VILLAGE OF LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL



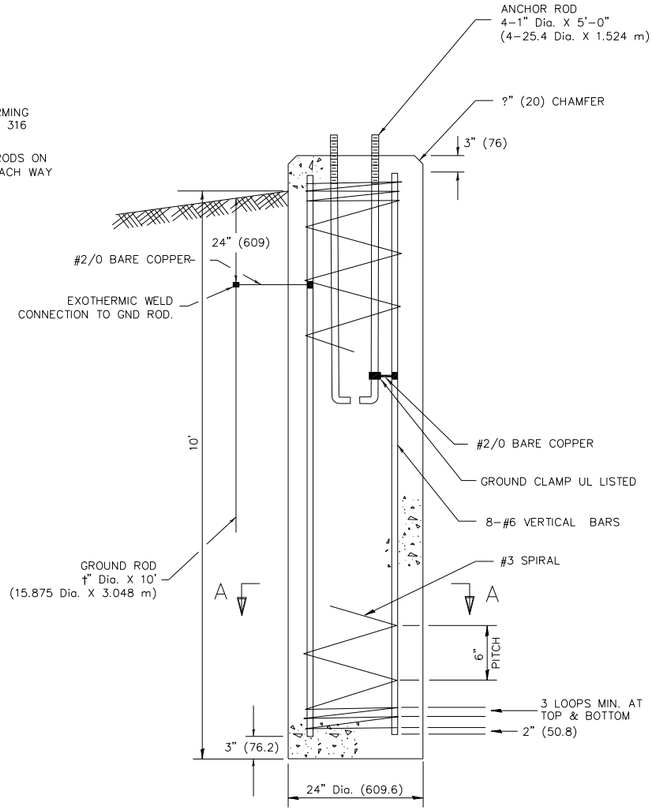


MAILBOX PEDESTAL FOUNDATION DETAIL

NOT TO SCALE

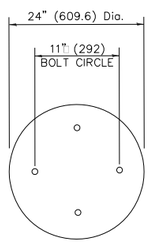
NOTES

1. ALL CONCRETE AND STEEL REINFORCEMENT SHALL BE IN CONFORMANCE WITH SECTION 610.
2. AGGREGATE BASE SHALL BE IN CONFORMANCE WITH SECTION 209.
3. THE COST OF FURNISHING ALL MATERIALS, EQUIPMENT, LABOR, PAVEMENT REMOVAL, EXCAVATION AND INCIDENTALS NECESSARY TO COMPLETE THIS WORK SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.



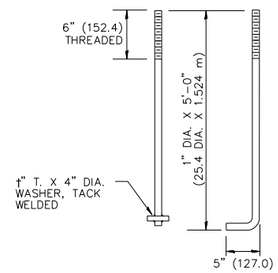
FLAG POLE FOUNDATION DETAIL

NOT TO SCALE



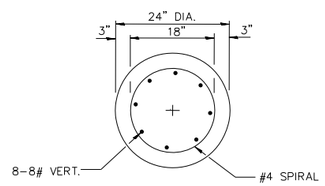
TOP VIEW

NOT TO SCALE



ANCHOR BOLT DETAIL

NOT TO SCALE



SECTION A-A

NOT TO SCALE

NOTES

1. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SHOWN.
2. THE ANCHOR RODS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IN PLACED.
3. THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 4 IN. (100 mm) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
4. THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
5. THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED *f*-IN. (20 mm).
6. THE CONCRETE SHALL BE AN IDOT CLASS SI MIX. CONCRETE SHALL CURE ACCORDING TO SECTION 610 BEFORE POLE IS INSTALLED.
7. THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
8. THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
9. ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
10. THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
11. ANCHOR RODS SHALL PROJECT 2*f*" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
12. THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER. ALL MATERIALS WILL BE IN ACCORDANCE WITH SECTION 610.
13. THE NUMBER AND DIAMETER OF ANCHOR ROD TO BE ADJUSTED TO ACCOMMODATE FLAG POLE BOLT PATTERN.
14. THE COST OF FURNISHING ALL MATERIALS, EQUIPMENT, LABOR, EXCAVATION, DISPOSAL AND ALL INCIDENTALS NECESSARY TO COMPLETE THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICE FOR THE FLAG POLE RELOCATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS		
NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

MISCELLANEOUS DETAILS

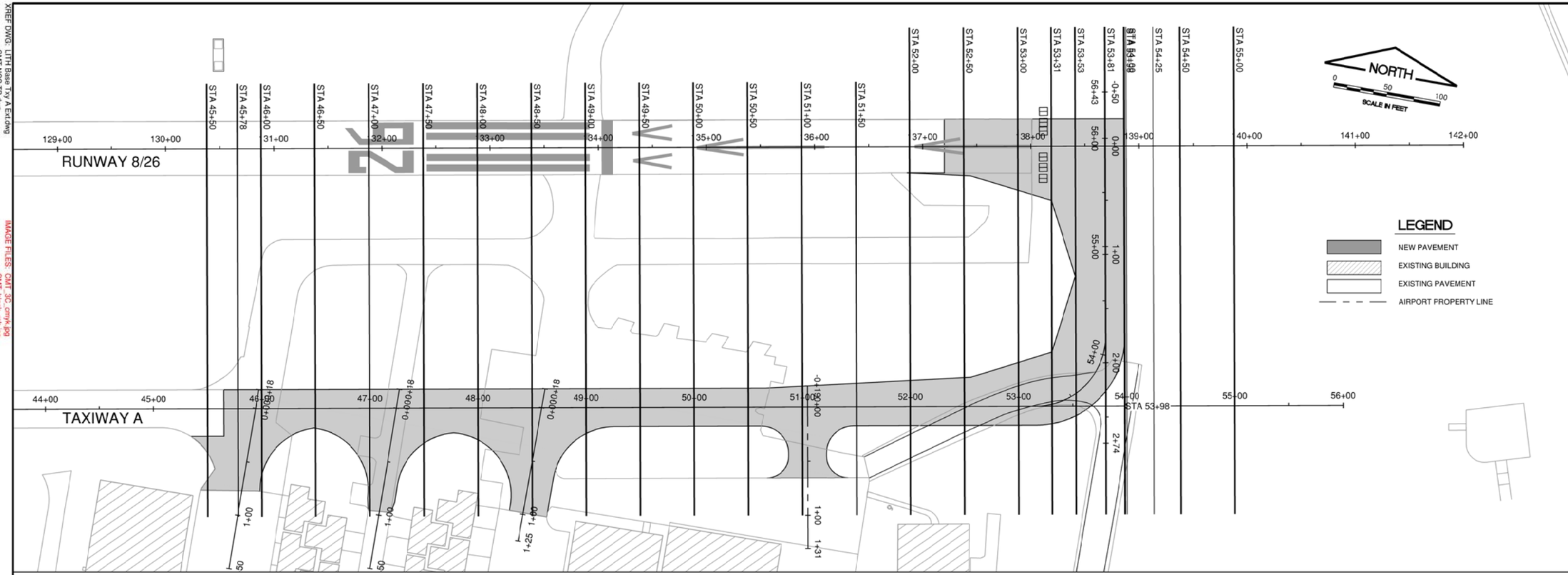
CMT

VILLAGE OF LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

SHEET 28 OF 36 SHEETS



EARTHWORK NOTES

1. TAXIWAY A AND RUNWAY 8/26 EARTHWORK IS SHOWN ON CROSS SECTIONS PLAN SHEETS 1 THROUGH 4.
2. TRANSIENT APRON AND BUILDING PAD EARTHWORK IS SHOWN ON GRADING PLAN SHEET. EMBANKMENT FILL UNDER THE BUILDING PADS SHALL BE COMPACTED TO 98% STANDARD PROCTOR. CONTRACTOR SHALL CONSTRUCT ALL EARTHWORK FOR THE TRANSIENT APRON, INCLUDING THE ADDITIVE ALTERNATE NO. 1 UNDER BASE BID. THIS WORK SHALL ALSO INCLUDE TOPSOIL PLACEMENT ON THE ADDITIVE ALTERNATE NO. 1 PAVEMENT AREAS AND CUT ALONG THE SHOULDERS AROUND THE PAVEMENT PERIMETER TO PROVIDE ADEQUATE DRAINAGE UNDER BASE BID.
3. RUNWAY 8 DISPLACED THRESHOLD PAVEMENT TO BE REMOVED SHALL BE REPLACED WITH EMBANKMENT FILL AND 4" TOPSOIL PLACEMENT. NEW GRADES SHALL MATCH PRIOR EXISTING GRADES OR AS DIRECTED BY THE RESIDENT ENGINEER TO PROVIDE ADEQUATE DRAINAGE. THE EXISTING AGGREGATE BASE COURSE SHALL BE REMOVED AND PAID FOR AS UNCLASSIFIED EXCAVATION AND FILLED BACK IN WITH EMBANKMENT FILL COMPACTED TO 90% STANDARD PROCTOR.
4. THE AUTO PARKING LOT AND ROADWAY NORTH OF RUNWAY 8/26 PAVEMENT SHALL BE REPLACED WITH SHOULDER FILL AND 4" TOPSOIL PLACEMENT. NEW GRADES SHALL MATCH PRIOR EXISTING GRADES OR AS DIRECTED BY THE RESIDENT ENGINEER TO PROVIDE ADEQUATE DRAINAGE. THE EXISTING AGGREGATE BASE COURSE SHALL BE REMOVED AND PAID FOR AS UNCLASSIFIED EXCAVATION.
5. THIS WORK INCLUDES REMOVING UNSUITABLE MATERIAL (UNCLASSIFIED EXCAVATION) AS THE FIELD CONDITIONS WARRANT AT THE TIME OF CONSTRUCTION. IF REQUIRED THE LOCATIONS WILL BE DETERMINED IN THE FIELD. THE QUANTITY OF UNSUITABLE MATERIAL SHALL NOT BE USED AS EMBANKMENT FILL MATERIAL UNLESS AUTHORIZED BY THE RESIDENT ENGINEER.
6. EXCESS MATERIAL SUITABLE FOR EMBANKMENT UNDER FUTURE PAVEMENT SHALL BE PLACED AT AN AREA NEAR THE FUEL FARM OR AS DIRECTED BY THE RESIDENT ENGINEER. BEFORE PLACING ANY EMBANKMENT FILL, THE EXISTING TOPSOIL SHALL BE STRIPPED AND PAID FOR UNDER UNCLASSIFIED EXCAVATION. EMBANKMENT MATERIAL SHALL BE PLACED AND COMPACTED IN LIFTS, PER SPECIFICATION ITEM 152, TO 95% STANDARD PROCTOR. UPON COMPLETION OF EMBANKMENT FILL PLACEMENT, THE CONTRACTOR SHALL PLACE THE EXCAVATED TOPSOIL AS TOPSOIL PLACEMENT AND GRADE THE SITE TO DRAIN.
   THE MAXIMUM HEIGHT OF THE STOCKPILE SHALL BE 1' LESS THAN ADJACENT FUEL FARM PAVEMENT GRADES. THE RESIDENT ENGINEER SHALL PROVIDE A GRADING PLAN FOR THE CONTRACTOR'S USE.
7. EXCESS TOPSOIL SHALL BE STOCKPILED NEAR THE NEW TRANSIENT APRON OR AS DIRECTED BY THE OWNER IN COORDINATION WITH THE RESIDENT ENGINEER. THE STOCKPILE SHALL BE GRADED TO DRAIN WITH MAXIMUM SIDE SLOPES OF 7:1 AND THE MAXIMUM HEIGHT SHALL BE 4'.
8. THE BASE BID 4" TOPSOIL PLACEMENT OVER THE PAVEMENT AREA AND THE SHOULDER EXCAVATION SHALL NOT BE REQUIRED IF THE ADDITIVE ALTERNATE NO. 1 IS CONSTRUCTED.
9. EARTH MATERIAL SHRINKAGE FROM INITIAL POSITION TO FINAL POSITION IS NOT SHOWN. ACTUAL SHRINKAGE WILL VARY AND NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR ANY SHRINKAGE.
10. ALL EARTHWORK QUANTITIES ARE CALCULATED BASED ON THE MATERIAL IN ITS INITIAL OR FINAL POSITION AS SHOWN IN THE PLANS AND QUANTIFIED BY THE METHOD OF AVERAGE END AREAS.
11. UNCLASSIFIED EXCAVATION IS THE SUM OF TOPSOIL STRIPPING AND UNCLASSIFIED EXCAVATION AND IS TO BE PAID FOR UNDER ITEM NO. AR152410 IN ITS INITIAL POSITION.
12. ALL HAUL ROADS TO BE CONSTRUCTED FOR THE PROJECT WILL NOT BE MEASURED FOR PAYMENT BUT SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
13. CONTRACTOR'S HAUL ROADS TO THE SITE AND STAGING AREAS SHALL BE RESTORED WITH 4" MINIMUM OF TOPSOIL PLACED. ALL HAUL ROAD AND STAGING AREA RESTORATION SHALL BE INCIDENTAL TO THE CONTRACT AND NO SEPARATE PAYMENT SHALL BE MADE.
14. EMBANKMENT FILL, TOPSOIL PLACEMENT AND SHOULDER FILL ARE INCIDENTAL TO UNCLASSIFIED EXCAVATION (ITEM 152410). NO SEPARATE PAYMENT WILL BE MADE FOR EMBANKMENT FILL, TOPSOIL PLACEMENT AND SHOULDER FILL.
15. PLACEMENT AND COMPACTION OF THE MILLINGS FOR THE PERIMETER ROAD AT THE SOUTH APRON SITE SHALL NOT BE PAID FOR BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. AT THE AIRPORT'S DISCRETION, ANY REMAINING MILLINGS MAY BE STOCKPILED AT THE AIRPORT AT A LOCATION AS DETERMINED BY THE AIRPORT MANAGER. SHOULD THE AIRPORT NOT ELECT TO RETAIN ANY PORTION OF THE EXCESS MILLINGS, THE CONTRACTOR SHALL DISPOSE OF THE MILLINGS OFFSITE AT NO ADDITIONAL COST TO THE CONTRACT.

EARTHWORK SUMMARY TABLE

	SEE NOTES	LOCATION	TOPSOIL STRIPPING INITIAL POSITION (CUBIC YARD)	TOPSOIL PLACEMENT FINAL POSITION (CUBIC YARD)	SHOULDER FILL FINAL POSITION (CUBIC YARD)	UNCLASSIFIED EXCAVATION INITIAL POSITION (CUBIC YARD)	EMBANKMENT FILL FINAL POSITION (CUBIC YARD)
BASE BID	1	TAXIWAY A AND RUNWAY 8/26 –SEE CROSS SECTIONS	4,860	1,620	440	5,010	1,090
	2	TRANSIENT APRON/BUILDING PADS –SEE GRADING PLAN	2,160	840	–	2,170	–
	3	RUNWAY 8 DISPLACED THRESHOLD –SEE LANDSCAPING AND EROSION CONTROL PLAN	–	60	–	160	140
	4	AUTO PARKING LOT AND ROADWAY –NORTH OF RUNWAY 8/26 –SEE SITE PLAN	–	140	270	270	–
	5	ESTIMATED UNSUITABLE MATERIAL (AS FIELD CONDITIONS WARRANT)	–	–	–	450	–
	6	EMBANKMENT MATERIAL STOCKPILE –NEAR FUEL FARM –SEE LANDSCAPING AND EROSION CONTROL PLAN	3,340	3,340	–	–	–
		TOTALS – BASE BID	10,360	6,000	710	8,060	1,230
ADDITIVE ALTERNATE NO. 1	8	TRANSIENT APRON/BUILDING PADS (BASE BID WORK NOT REQUIRED IF ADD. ALT. NO.1 IS AWARDED)	–	–	–	200	–
	5	ESTIMATED UNSUITABLE MATERIAL (AS FIELD CONDITIONS WARRANT)	–	–	–	100	–
		TOTALS – ADDITIVE ALTERNATE NO. 1	–	–	–	300	–
		TOTALS – BASE BID AND ADDITIVE ALTERNATE NO. 1	10,360	6,000	710	8,360	1,230

EXCESS MATERIALS TO STOCKPILES							
BASE BID + ADDITIVE ALTERNATE NO. 1	6	EXCESS EMBANKMENT MATERIAL STOCKPILE –NEAR FUEL FARM –SEE LANDSCAPING AND EROSION CONTROL PLAN	–	–	–	–	6,420
	7	EXCESS TOPSOIL MATERIAL STOCKPILE –NEAR TRANSIENT APRON –SEE LANDSCAPING AND EROSION CONTROL PLAN	–	4,360	–	–	–

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

INDEX TO CROSS SECTIONS AND EARTHWORK SUMMARY AND NOTES

CMT

VILLAGE OF LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

SHEET 29 OF 36 SHEETS

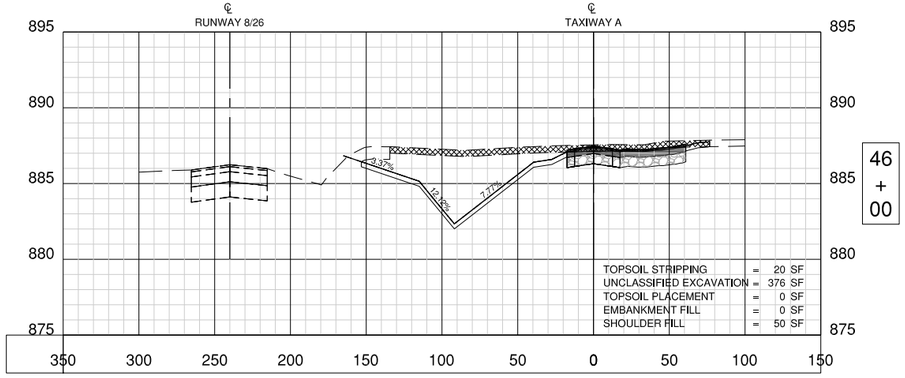
XREF DWG: LITH Base Txy A Ext.dwg
CMT NCS TB.dwg

IMAGE FILES: CMT_3C_cmyk.jpg
CMT_black_rgb.jpg
Lith.Logo.jpg

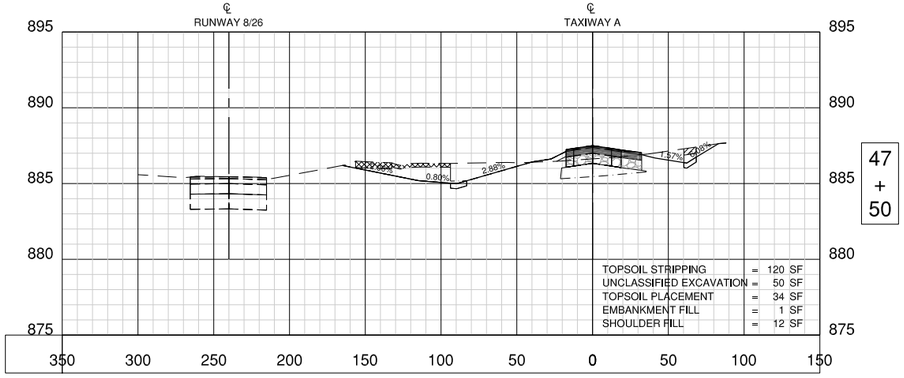
UPDATE BY: Jim Ohse
LAYOUT: TXY A XSEC 1

DATE: Tuesday, December 8, 2015 12:22:13 PM
FILE: K:\Lake\In The Hills\Apj\14255-01_TxyAExtension\Draw\C3D\14255100-C-CORR_GRAD.dwg

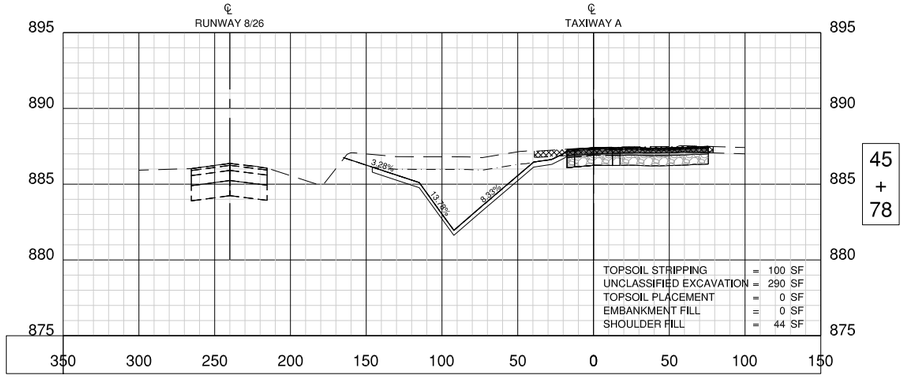
TAXIWAY A



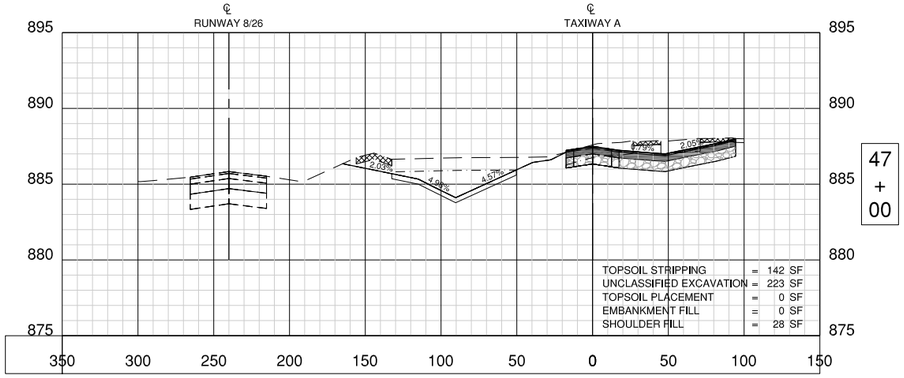
46 + 00



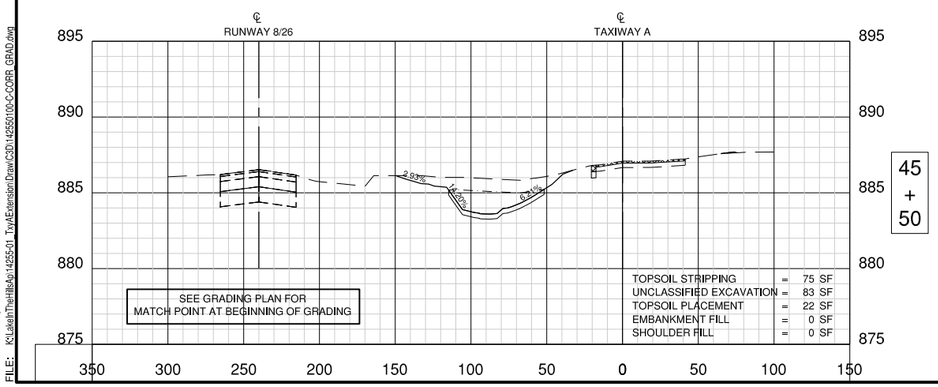
47 + 50



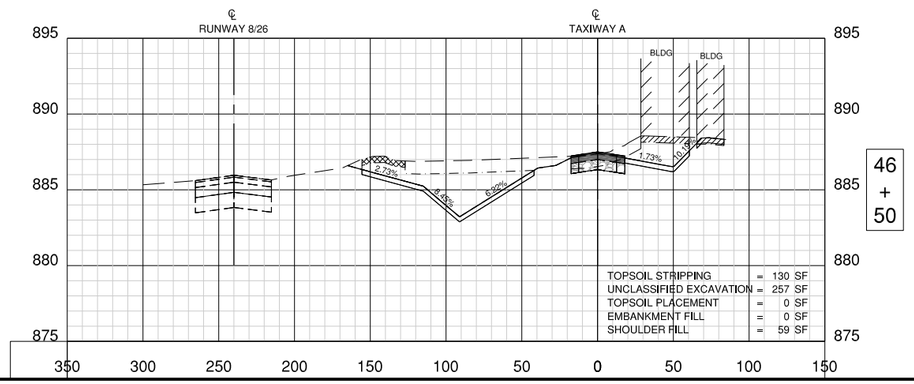
45 + 78



47 + 00



45 + 50



46 + 50

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

CROSS SECTIONS 1

CMT

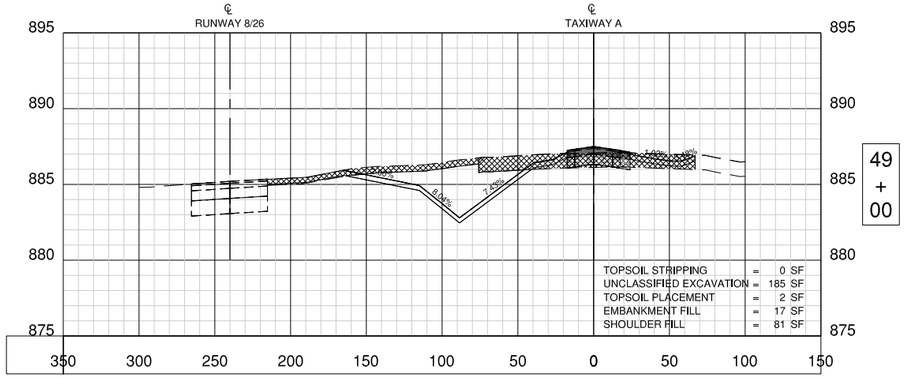
VILLAGE OF LAKE IN THE HILLS

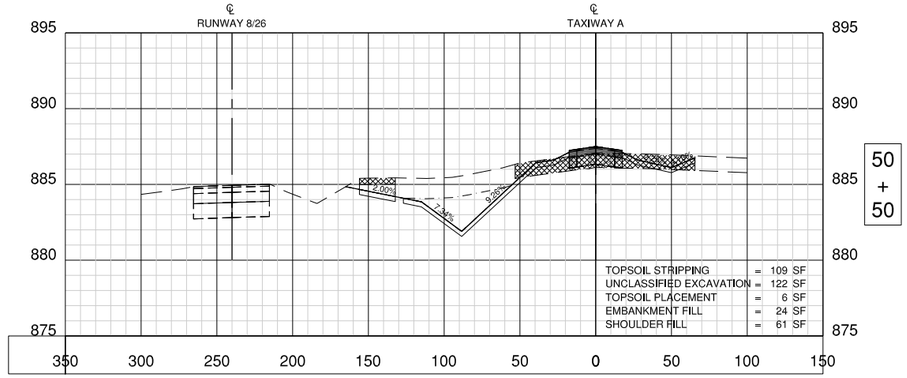
DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

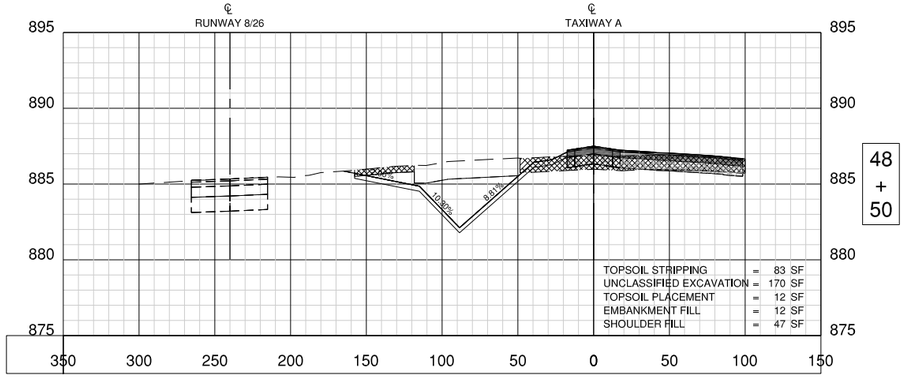
FINAL

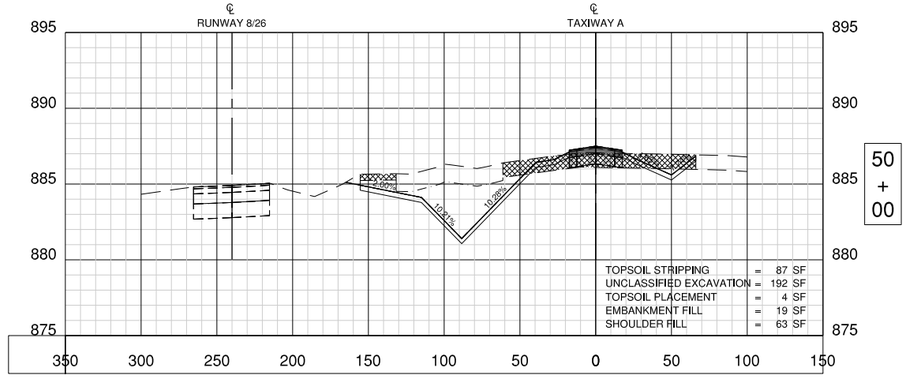
SHEET 30 OF 36 SHEETS

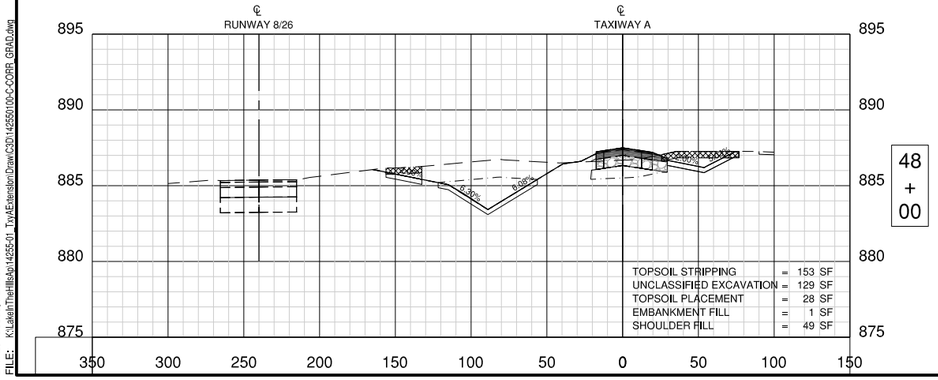
SEE CROSS SECTIONS 1 PLAN SHEET FOR LEGEND AND CALL OUTS

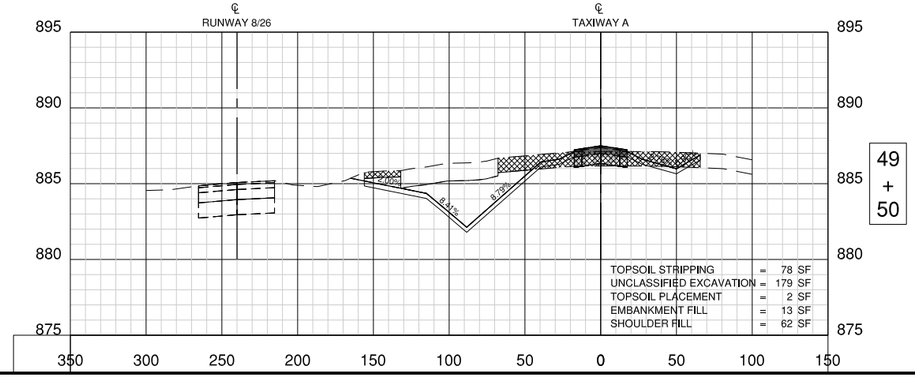












IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

CROSS SECTIONS 2

CMT

VILLAGE OF LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

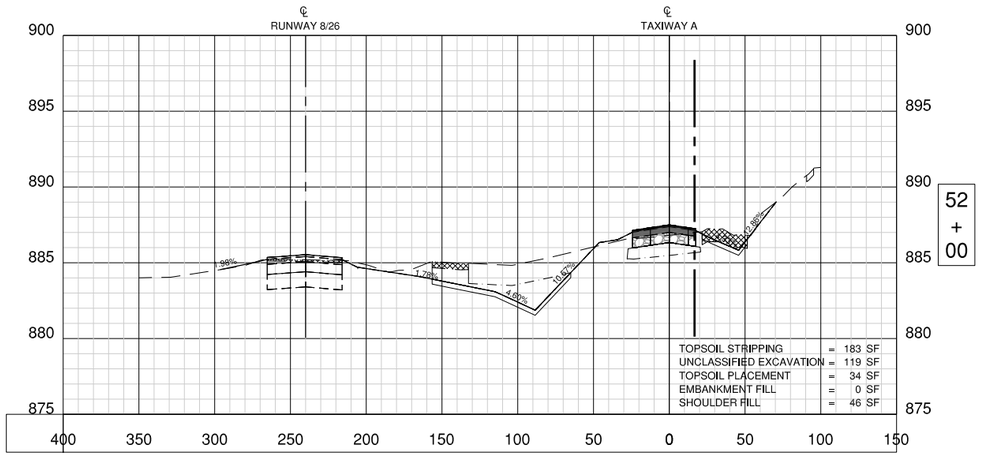
FINAL

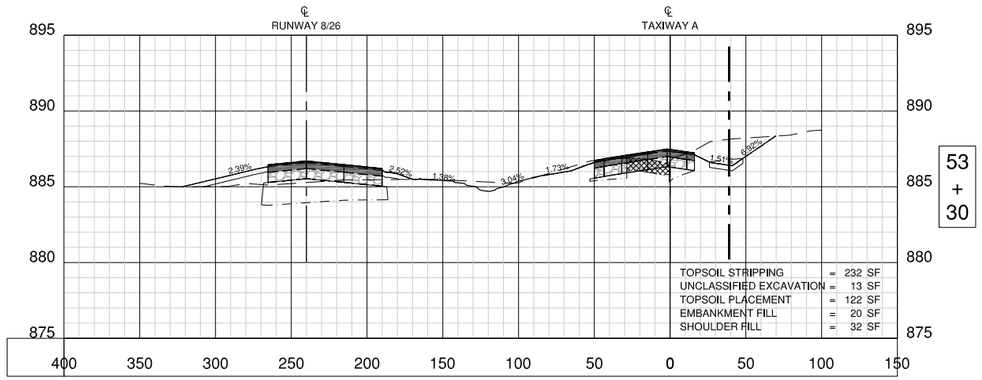
SHEET 31 OF 36 SHEETS

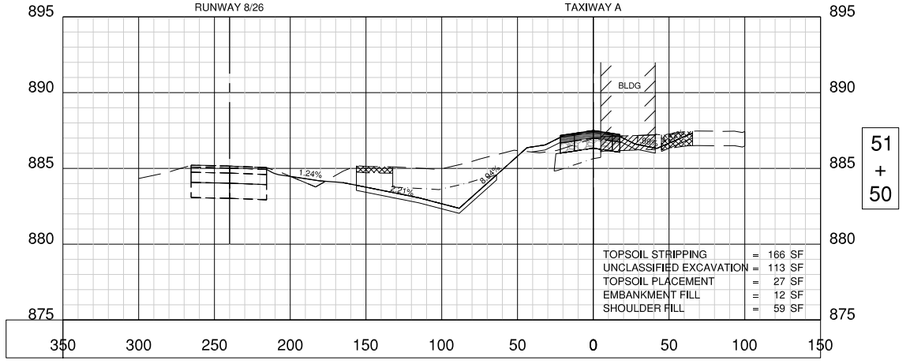
XREF DWG: LITH Base Txy A Ext.dwg
CMT NCS TB.dwg
IMAGE FILES: CMT_3C_cmyk.jpg
CMT_black_rgb.jpg
Lith.Logo.jpg
UPDATE BY: Jim Ohse
LAYOUT: TXY A XSEC 2
DATE: Tuesday, December 8, 2015 12:22:22 PM
FILE: K:\Lake\TheHills\dgn\14255-01_TxyAExtension\Draw\C3D\14255010C-CORR_GRAD.dwg

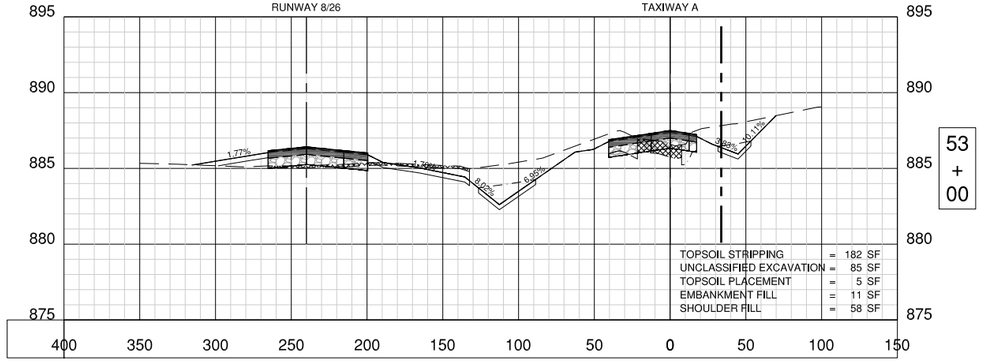
TAXIWAY A

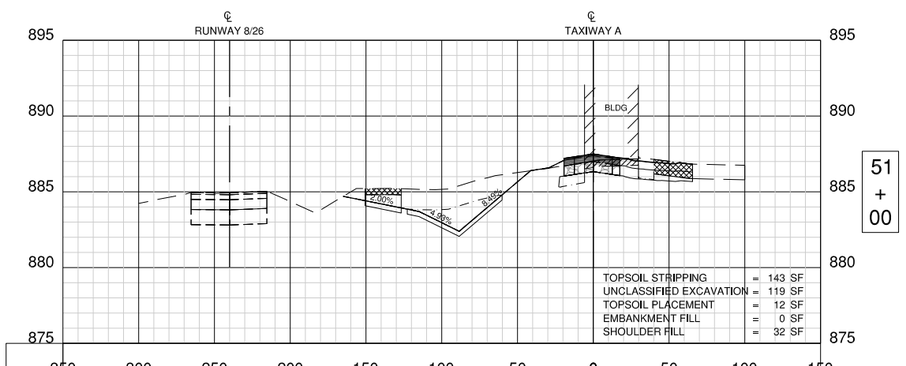
SEE CROSS SECTIONS 1 PLAN SHEET FOR LEGEND AND CALL OUTS

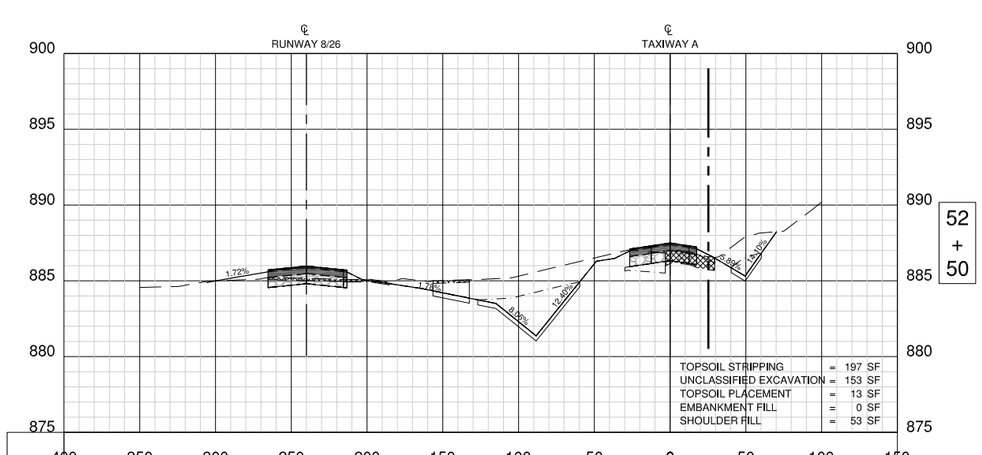












IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

CROSS SECTIONS 3

CMT

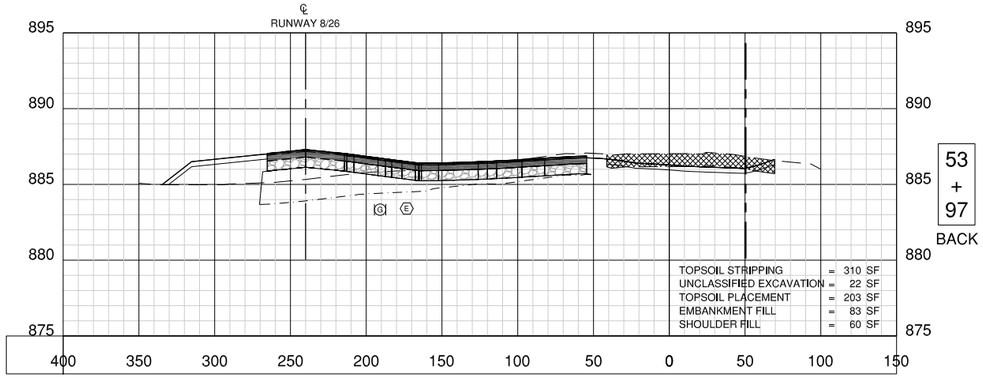
VILLAGE OF LAKE IN THE HILLS

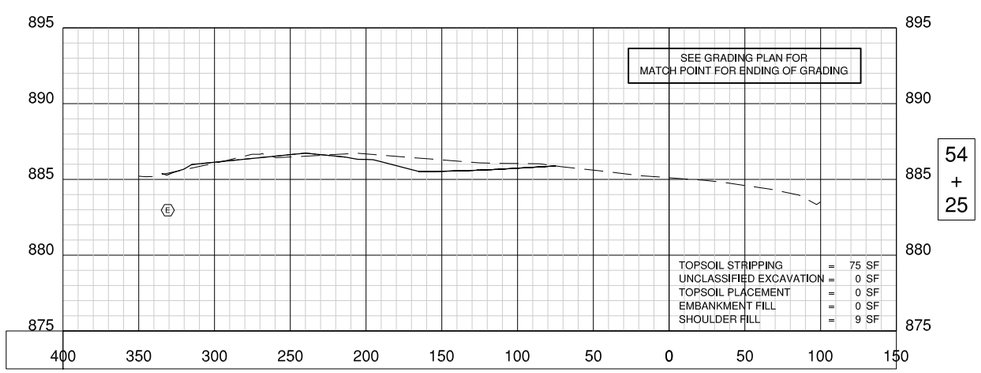
DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

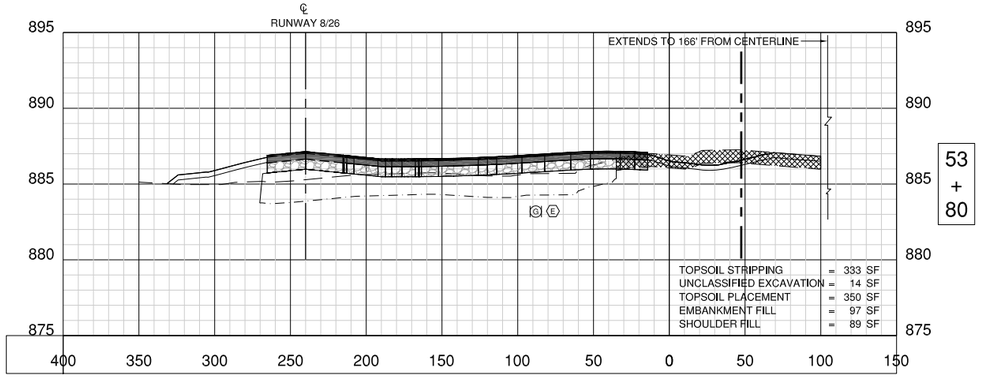
FINAL

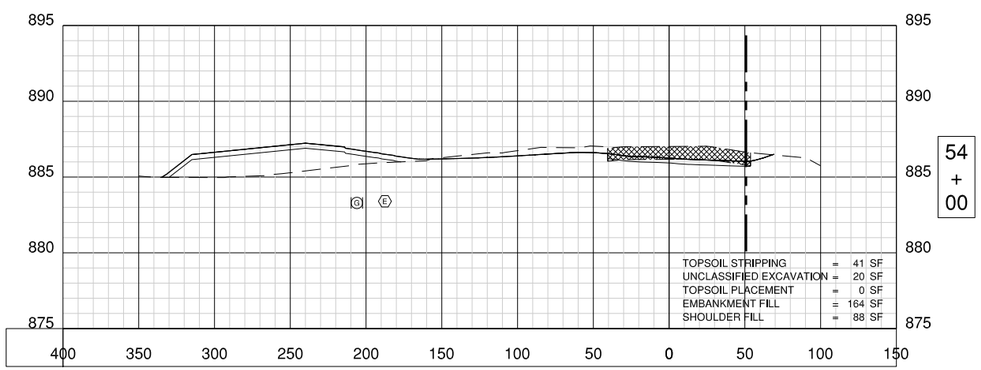
SHEET 32 OF 36 SHEETS

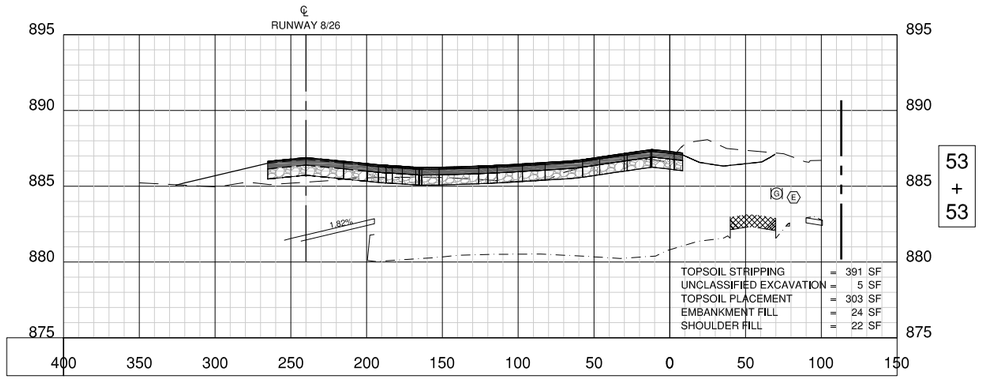
SEE CROSS SECTIONS 1 PLAN SHEET
FOR LEGEND AND CALL OUTS

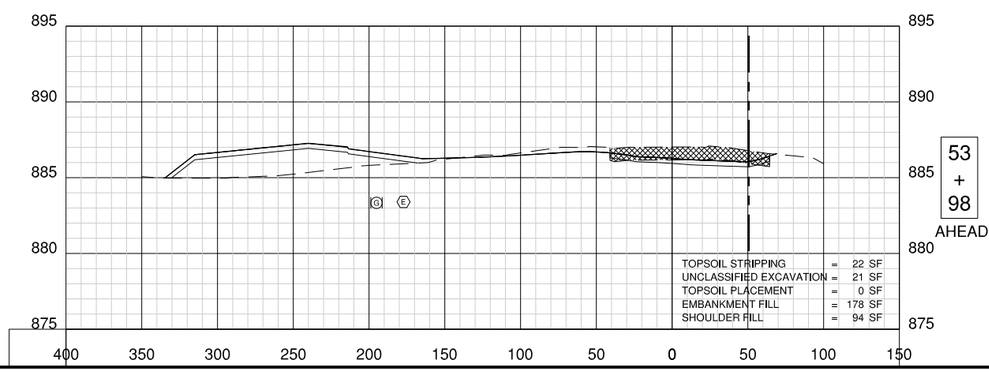












IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2"
AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

CROSS SECTIONS 4

CMT

VILLAGE OF
LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

SHEET 33 OF 36 SHEETS

XREF DWG: LITH Base Txy A Ext.dwg
CMT NCS TB.dwg
IMAGE FILES: CMT_3C_cmyk.jpg
CMT_black_rgb.jpg
Lith.Logo.jpg
UPDATE BY: Jim Ohse
LAYOUT: TXY A XSEC 4
DATE: Tuesday, December 8, 2015 12:22:43 PM
FILE: K:\Lake In The Hills\dgn\14255-01_TxyAExtension\Draw\C3D\14255100-C-CORR_GRAD.dwg

LOG OF BORING NO. B-1

CLIENT: CMT
PROJECT LOCATION: Lake In The Hills Airport, Lake In The Hills, Illinois
BORING LOCATION: Station: 46+32.93 Offset: 6.9' Left
PROJECT DESCRIPTION: Geotechnical Investigation, Improve Runway 8/26 Safety Area, Lake In The Hills Airport, Lake In The Hills, Illinois

DEPTH (ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.³
					GROUND SURFACE ELEVATION 887.74	
	1	AS			10.0" TOPSOIL–black	
	2	SS			LEAN CLAY with Sand–brown–hard (CL)	116
5.0	3	SS			Poorly Graded SAND–brown–medium dense (SP)	
	4	SS			Poorly Graded SAND & GRAVEL–brown–medium dense to dense (GP)	
10.0	5	SS				

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.²
CALIBRATED PENETROMETER TONS/FT.²: 1 2 3 4 5 6+
WATER ● CONTENT %
STANDARD "N" PENETRATION (BLOWS/FT.): 10 20 30 40 50 60+
7.4S

END OF BORING

WATER LEVEL OBSERVATIONS
Water Level While Drilling Dry
Water Level After Boring Dry

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60563
(630) 305-1838

BORING STARTED	September 24, 2014
BORING COMPLETED	September 24, 2014
RIG	B-57 FOREMAN RJ
DRAWN	RWC APPROVED AJP
GSI JOB No. 14149	SHEET 1 OF 1

© Geo Services, Inc.

LOG OF BORING NO. B-2

CLIENT: CMT
PROJECT LOCATION: Lake In The Hills Airport, Lake In The Hills, Illinois
BORING LOCATION: Station: 47+73.43 Offset: 12.1' Left
PROJECT DESCRIPTION: Geotechnical Investigation, Improve Runway 8/26 Safety Area, Lake In The Hills Airport, Lake In The Hills, Illinois

DEPTH (ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.³
					GROUND SURFACE ELEVATION 886.58	
	1	AS			14.0" TOPSOIL–black	
	2	SS			SANDY LEAN CLAY–brown–stiff (CL)	
5.0	3	SS			Poorly Graded SAND–brown–medium dense (SP)	
	4	SS			Poorly Graded SAND & GRAVEL–brown–medium dense to dense (GP)	
10.0	5	SS				

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.²
CALIBRATED PENETROMETER TONS/FT.²: 1 2 3 4 5 6+
WATER ● CONTENT %
STANDARD "N" PENETRATION (BLOWS/FT.): 10 20 30 40 50 60+

END OF BORING

WATER LEVEL OBSERVATIONS
Water Level While Drilling Dry
Water Level After Boring Dry

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60563
(630) 305-1838

BORING STARTED	September 24, 2014
BORING COMPLETED	September 24, 2014
RIG	B-57 FOREMAN RJ
DRAWN	RWC APPROVED AJP
GSI JOB No. 14149	SHEET 1 OF 1

© Geo Services, Inc.

LOG OF BORING NO. B-3

CLIENT: CMT
PROJECT LOCATION: Lake In The Hills Airport, Lake In The Hills, Illinois
BORING LOCATION: Station: 49+50.00 Offset: Baseline
PROJECT DESCRIPTION: Geotechnical Investigation, Improve Runway 8/26 Safety Area, Lake In The Hills Airport, Lake In The Hills, Illinois

DEPTH (ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION OF MATERIAL	DRY WT. LBS./FT.³
					GROUND SURFACE ELEVATION 887.13	
	1	AS			11.5" ASPHALT, 6.5" SAND & GRAVEL	
	2	SS				
5.0	3	SS			SANDY CLAY with Gravel–dark brown–loose to medium dense (SC)	
	4	SS				
10.0	5	SS			Poorley Graded SAND & GRAVEL–brown–medium dense to dense (GP)	

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.²
CALIBRATED PENETROMETER TONS/FT.²: 1 2 3 4 5 6+
WATER ● CONTENT %
STANDARD "N" PENETRATION (BLOWS/FT.): 10 20 30 40 50 60+

END OF BORING

WATER LEVEL OBSERVATIONS
Water Level While Drilling Dry
Water Level After Boring Dry

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60563
(630) 305-1838

BORING STARTED	September 24, 2014
BORING COMPLETED	September 24, 2014
RIG	B-57 FOREMAN RJ
DRAWN	RWC APPROVED AJP
GSI JOB No. 14149	SHEET 1 OF 1

© Geo Services, Inc.

LOG OF BORING NO. B-4

CLIENT: CMT
PROJECT LOCATION: Lake In The Hills Airport, Lake In The Hills, Illinois
BORING LOCATION: Station: 52+00.02 Offset: 8.05' Right
PROJECT DESCRIPTION: Geotechnical Investigation, Improve Runway 8/26 Safety Area, Lake In The Hills Airport, Lake In The Hills, Illinois

DEPTH (ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION OF MATERIAL	DRY WT. LBS./FT.³
					GROUND SURFACE ELEVATION 886.90	
	1	AS			16.0" TOPSOIL–black	
	2	SS			LEAN CLAY with Sand–dark brown–stiff (CL)	
5.0	3	SS			Poorly Graded SAND & GRAVEL–brown–medium dense to dense (GP)	
	4	SS				
10.0	5	SS				

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.²
CALIBRATED PENETROMETER TONS/FT.²: 1 2 3 4 5 6+
WATER ● CONTENT %
STANDARD "N" PENETRATION (BLOWS/FT.): 10 20 30 40 50 60+

END OF BORING

WATER LEVEL OBSERVATIONS
Water Level While Drilling Dry
Water Level After Boring Dry

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60563
(630) 305-1838

BORING STARTED	September 24, 2014
BORING COMPLETED	September 24, 2014
RIG	B-57 FOREMAN RJ
DRAWN	RWC APPROVED AJP
GSI JOB No. 14149	SHEET 1 OF 1

© Geo Services, Inc.

SOIL BORING LOGS

LOG OF BORING NO. B-5

CLIENT: CMT
PROJECT LOCATION: Lake In The Hills Airport, Lake In The Hills, Illinois
BORING LOCATION: Station: 53+73.97 Offset: 119.87' Left
PROJECT DESCRIPTION: Geotechnical Investigation, Improve Runway 8/26 Safety Area, Lake In The Hills Airport, Lake In The Hills, Illinois

DEPTH (ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.³
					GROUND SURFACE ELEVATION 885.68	
	1	AS			17.0" TOPSOIL–black	
	2	SS			LEAN CLAY with Sand–brown–stiff (CL)	
5.0	3	SS				
	4	SS			Poorly Graded SAND & GRAVEL–brown–dense (GP)	
10.0	5	SS				

UNCONFINED COMPRESSIVE STRENGTH TONS/FT.²
CALIBRATED PENETROMETER TONS/FT.²: 1 2 3 4 5 6+
WATER ● CONTENT %
STANDARD "N" PENETRATION (BLOWS/FT.): 10 20 30 40 50 60+

END OF BORING

WATER LEVEL OBSERVATIONS
Water Level While Drilling Dry
Water Level After Boring Dry

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60563
(630) 305-1838

BORING STARTED	September 24, 2014
BORING COMPLETED	September 24, 2014
RIG	B-57 FOREMAN RJ
DRAWN	RWC APPROVED AJP
GSI JOB No. 14149	SHEET 1 OF 1

© Geo Services, Inc.

PAVEMENT CORE LOGS

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60563
(630) 305-1838

Page: 1 of 1

PAVEMENT CORE SUMMARY

Project: Geotechnical Investigation, Improve Runway 8/26 Safety Area — GSI Job No.: 14149
Location: Lake In The Hills Airport, Lake In The Hills, Illinois — Date: 9/29/2014
County: Lake — Cored By: RJ
Client: CMT — Checked By: AJP

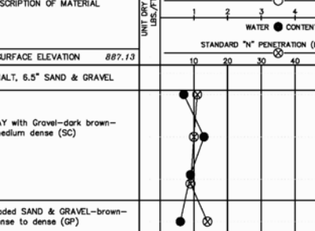
CORE NO.	THICKNESS (in.)	MATERIAL DESCRIPTION
C–1		Station: 46+84.54 Offset: 144.59 Left
	2.0	ASPHALT–well consolidated, fine to medium coarse aggregate.
	1.5	ASPHALT–well consolidated, fine to medium coarse aggregate.
	1.5	ASPHALT–poorly consolidated @ surface, fine to medium coarse aggregate.
	19.0+	SILTY CLAY–black
C–2		Station: 52+90.05 Offset: 180.07 Left
	2.0	ASPHALT–well consolidated, fine to medium coarse aggregate.
	–	SAND & GRAVEL
C–3		Station: 53+86.69 Offset: 24.61 Right
	2.5	ASPHALT–well consolidated, fine to medium coarse aggregate.
	3.25	ASPHALT–well consolidated, fine to medium coarse aggregate.
	1.25	ASPHALT–well consolidated, fine to medium coarse aggregate.
	1.5	ASPHALT–well consolidated, medium coarse aggregate.
	1.75	ASPHALT–well consolidated, fine to medium coarse aggregate.
	10.75	SAND & GRAVEL
	8.0+	SILTY CLAY–dark gray & black
B–3		Station: 49+50.00 Offset: Baseline
	3.0	ASPHALT–well consolidated, fine to medium coarse aggregate.
	8.5	ASPHALT–well consolidated, medium coarse aggregate.
	12.5+	CLAYEY SAND & GRAVEL–dark gray to black

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60563
(630) 305-1838

Page: 1 of 2

PAVEMENT CORE PHOTO LOG

Project: Geotechnical Investigation, Improve Runway 8/26 Safety Area — GSI Job No.: 14149
Location: Lake In The Hills Airport, Lake In The Hills, Illinois — Date: 9/29/2014
County: Lake — Cored By: RJ
Client: CMT — Checked By: AJP



Core No.: C–1 Core Location: Station: 46+84.54 Offset: 144.59 Left

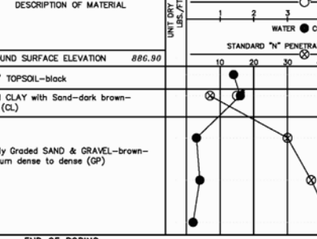
Core No.: C–2 Core Location: Station: 52+90.05 Offset: 180.07 Left

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60563
(630) 305-1838

Page: 2 of 2

PAVEMENT CORE PHOTO LOG

Project: Geotechnical Investigation, Improve Runway 8/26 Safety Area — GSI Job No.: 14149
Location: Lake In The Hills Airport, Lake In The Hills, Illinois — Date: 9/29/2014
County: Lake — Cored By: RJ
Client: CMT — Checked By: AJP



Core No.: C–3 Core Location: Station: 53+86.69 Offset: 24.61 Right

Core No.: B–3 Core Location: Station: 49+50.00 Offset: Baseline

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

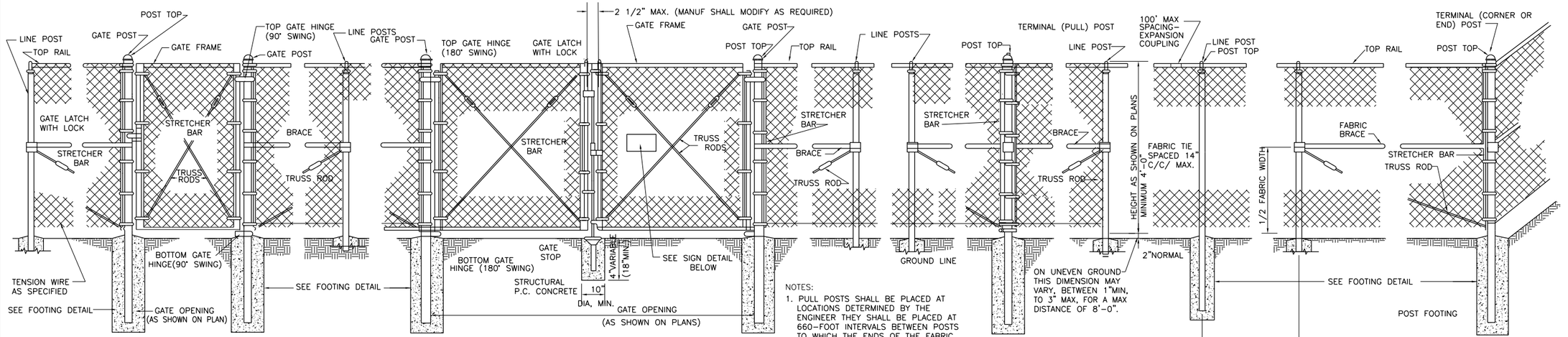
ENGINEERING INFORMATION SHEET

CMT

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255–01

FINAL

SHEET 34 OF 36 SHEETS



PEDESTRIAN GATE ARRANGEMENT

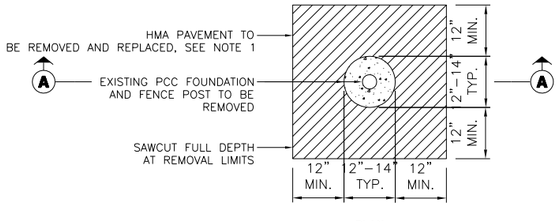
VEHICLE GATE ARRANGEMENT

NOTES:
1. PULL POSTS SHALL BE PLACED AT LOCATIONS DETERMINED BY THE ENGINEER THEY SHALL BE PLACED AT 660-FOOT INTERVALS BETWEEN POSTS TO WHICH THE ENDS OF THE FABRIC ARE CLAMPED OR MIDWAY BETWEEN SUCH POSTS WHEN THE DISTANCE IS LESS THAN 1320' AND GREATER THAN 660'
2. WHERE FENCE HAS A CHANGE IN DIRECTION OF 15° OR MORE, A TERMINAL POST SHALL BE PLACED AS SHOWN ABOVE.

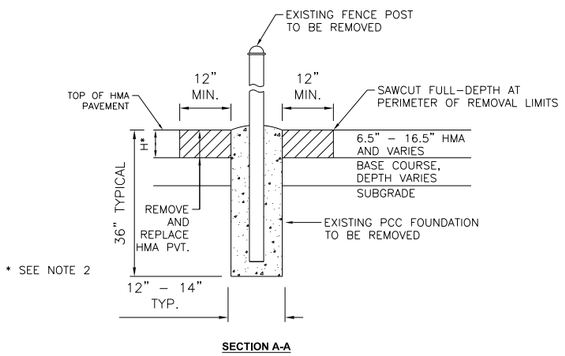
PULL POST ARRANGEMENT

LINE POST ARRANGEMENT

CORNER OF END POST ARRANGEMENT



PLAN

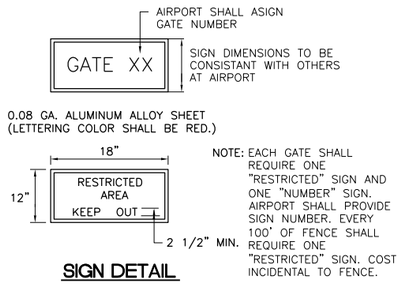


SECTION A-A

FENCE POST REMOVAL IN HMA PAVEMENT

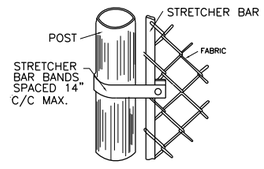
NOTES:

1. HMA PAVEMENT TO BE REMOVED FULL DEPTH
2. BASE COURSE AND/OR SUBGRADE TO BE REMOVED SUCH THAT THE DEPTH "H" IS A MINIMUM OF 11.5 INCHES.
3. COSTS OF PAVEMENT AND FOUNDATION REMOVAL, NEW PAVEMENT, SAW CUTTING, CLEANUP AND DISPOSAL, SHALL BE CONSIDERED INCIDENTAL TO AR162900, REMOVE CLASS E FENCE.
4. AT THE CONTRACTOR'S OPTION AND AT NO ADDITIONAL COST TO THE CONTRACT, THE CONTRACTOR MAY REMOVE A "STRIP" OF ASPHALT PAVEMENT ALONG THE FENCELINE, TO BE REPLACED IN KIND AFTER FENCELINE REMOVAL AND REPLACEMENT.
5. SAME DETAIL IS TO BE USED IF NEW POST HOLES ARE REQUIRED IN EXISTING HMA PAVEMENT, NOT INCLUDING THE REMOVAL PORTION (COST INCIDENTAL TO CONTRACT)

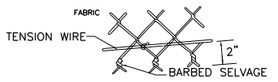


NOTE: EACH GATE SHALL REQUIRE ONE "RESTRICTED" SIGN AND ONE "NUMBER" SIGN. AIRPORT SHALL PROVIDE SIGN NUMBER. EVERY 100' OF FENCE SHALL REQUIRE ONE "RESTRICTED" SIGN. COST INCIDENTAL TO FENCE.

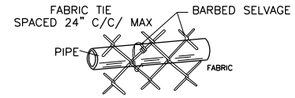
SIGN DETAIL



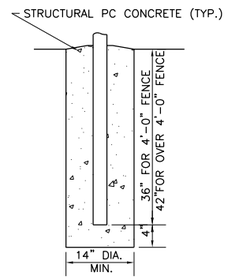
METHOD OF FASTENING STRETCHER BAR TO POST



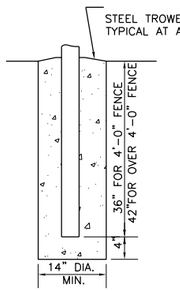
METHOD OF TYING FABRIC TO TENSION WIRE



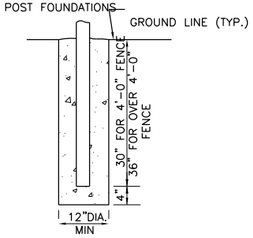
METHOD OF TYING FABRIC TO PIPE



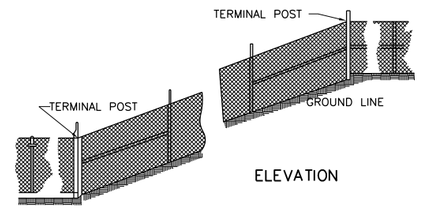
FOOTING FOR TERMINAL POST



FOOTING FOR GATE POST

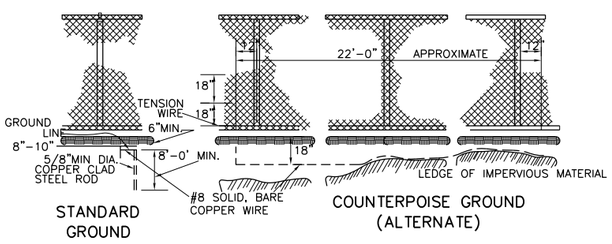


FOOTING FOR LINE POST



ELEVATION

FENCE INSTALLATION ON SLOPES



STANDARD GROUND

COUNTERPOISE GROUND (ALTERNATE)

PROTECTIVE ELECTRICAL GROUND

NOTES:
1. CONTINUOUS FENCE SHALL BE GROUNDED AT INTERVALS NOT EXCEEDING 1000' EXCEPT THERE SHALL BE A GROUND NOT EXCEEDING 100 FT. FROM A GATE IN EACH SECTION OF THE FENCE ADJACENT TO THE GATE.
2. FENCE UNDER POWER LINE SHALL BE GROUNDED BY THREE GROUNDS, ONE DIRECTLY UNDER THE CROSSING AND ONE ON EACH SIDE 25 TO 50 FT. AWAY. A SINGLE GROUND SHALL BE LOCATED DIRECTLY UNDER EACH TELEPHONE WIRE OR CABLE CROSSING.
3. THE COUNTERPOISE SHALL BE USED ONLY WHERE IT IS IMPOSSIBLE TO DRIVE A GROUND ROD BECAUSE OF AN IMPERVIOUS EARTH STRUCTURES.
4. THE GROUND WIRE SHALL BE CONNECTED TO FABRIC, TENSION WIRE, AND THE GROUND ROD BY A MECHANICAL CLAMP OF CAST BRONZE BODY AND BRONZE OR STAINLESS STEEL BOLTS AND WASHERS.

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS		
NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

FENCING DETAILS

CMT

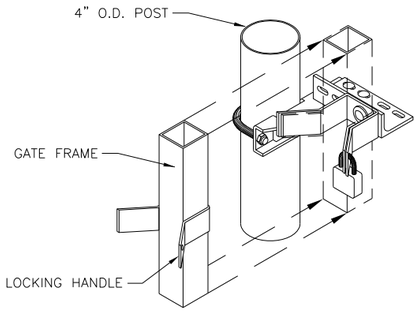
VILLAGE OF LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

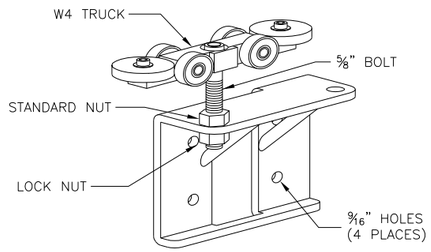
FINAL

SHEET 35 OF 36 SHEETS

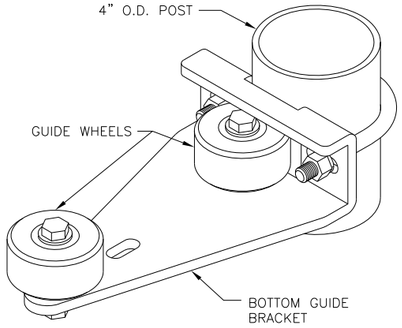
XREF DWG: CMT NCS TB.dwg
UPDATE BY: Jim Onse
LAYOUT: Layout1
DATE: Tuesday, December 8, 2015 12:23:15 PM
FILE: K:\Lake\InTheHills\p\14255-01_IwyExtension\Draw\Sheets\Preliminary Plans\details - Fencing.dwg



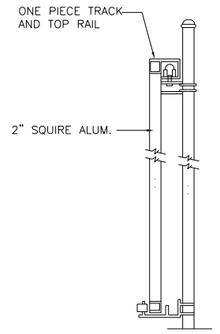
CATCH ASSEMBLY DETAIL



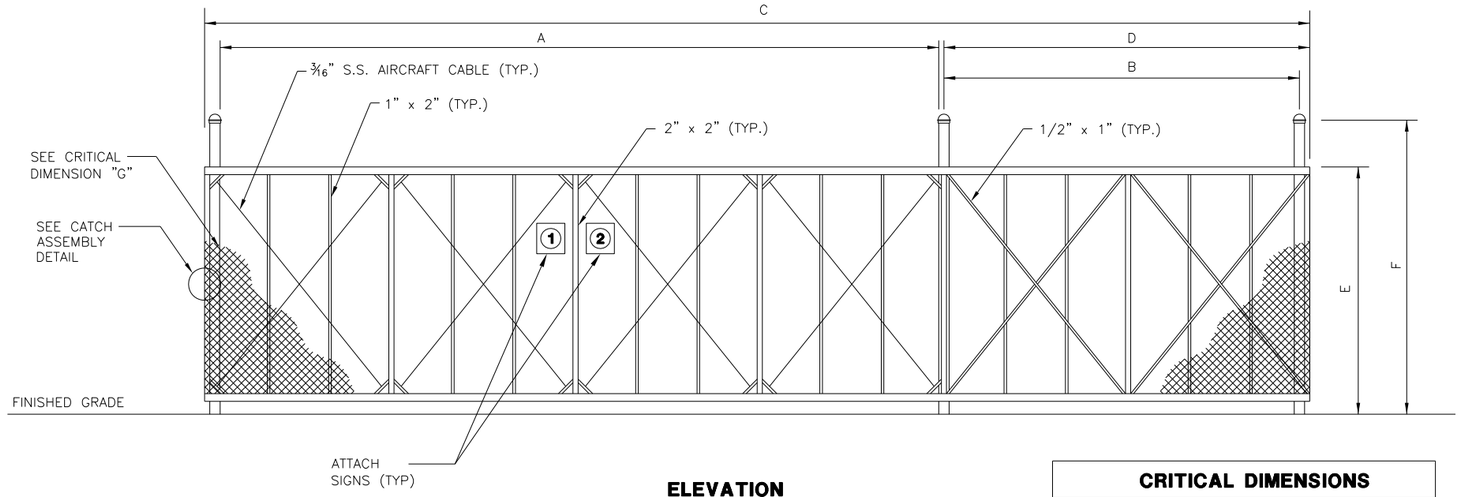
GATE HANGER ASSEMBLY



STANDARD BOTTOM GUIDE ASSEMBLY



GATE FRAME SECTION



ELEVATION

CANTILEVER SLIDE GATE

WARNING SIGN DETAIL

CRITICAL DIMENSIONS		
A	CLEAR OPENING	20'–0"
B	COUNTER BALANCE POST SPACING, CENTER TO CENTER	9'–1"
C	OVERALL GATE LENGTH	30'–0"
D	COUNTERBALANCE LENGTH	10'–0"
E	NOMINAL GATE HEIGHT	4'–0"
F	POST HEIGHT	4'–0"
G	FABRIC HEIGHT	3'–0"

UL 235 COMPLIANCE NOTES

GATE INSTALLATION SHALL COMPLY WITH ALL REQUIREMENTS OF UL 235, INCLUDING, BUT NOT LIMITED TO:

1. ALL OPENINGS OF THE SLIDE GATE ARE GUARDED OR SCREENED FROM THE BOTTOM OF THE GATE TO A MINIMUM OF 4 FEET ABOVE GROUND TO PREVENT A 2-1/4" DIAMETER SPHERE FROM PASSING THROUGH THE OPENINGS ANYWHERE IN THE GATE, AND IN THAT PORTION OF THE ADJACENT FENCE THAT THE GATE COVERS IN THE OPEN POSITION.
2. ALL EXPOSED PINCH POINTS ARE ELIMINATED OR GUARDED AND GUARDING IS SUPPLIED FOR ALL EXPOSED ROLLERS.
3. A WARNING SIGN (SEE DETAIL, THIS SHEET) MUST BE AFFIXED TO BOTH SIDES OF THE SLIDE GATE, BOTH MANUAL AND ELECTRIC.
4. FOR ADDITIONAL UL 235 REQUIREMENTS FOR THIS GATE INSTALLATION, SEE ELECTRIC GATE DETAILS SHEET.

LOCATIONS, DETAILS AND CHARACTER OF EQUIPMENT SHOWN ON THIS SHEET ARE GENERIC. EQUIPMENT LOCATIONS SHALL BE AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER.

IL. CONTRACT: **LK012**
IL. LETTING ITEM: **4A**
IL. PROJECT: **3CK-4404**
S.B.G. PROJECT: **3-17-SBGP-XX**

SURVEY BOOK # BOOK # 1263

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

LAKE IN THE HILLS AIRPORT
LAKE IN THE HILLS, ILLINOIS
IMPROVE RUNWAY 8/26 SAFETY AREA

CANTILEVER GATE DETAILS

CMT

VILLAGE OF
LAKE IN THE HILLS

DESIGN BY:	TMS
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DLP
DATE:	12/03/2015
JOB No:	14255-01

FINAL

SHEET 36 OF 36 SHEETS

XREF DWG: CMT NCS TB.dwg
IMAGE FILES: CMT_3C_cmyk.jpg
CMT_black_rgb.jpg
LithLogo.jpg
UPDATE BY: Jim Onse
LAYOUT: Layout1
DATE: Tuesday, December 8, 2015 12:23:20 PM
FILE: K:\LakeInTheHills\p\14255-01_IxpExtension\Draw\Sheets\Preliminary Plans\details - Gate.dwg