

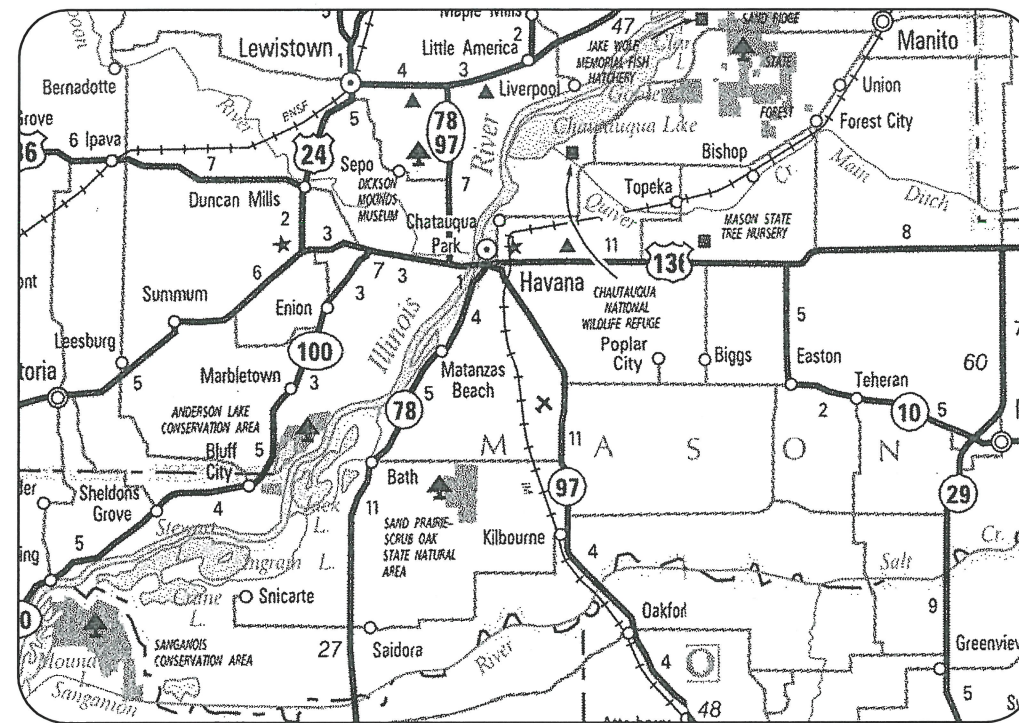
# CONSTRUCTION PLANS FOR HAVANA REGIONAL AIRPORT HAVANA, MASON COUNTY, ILLINOIS CONSTRUCT T-HANGAR PAVEMENTS & ACCESS ROAD

SCOPE OF WORK

THIS PROJECT CONSISTS OF CONSTRUCTING BITUMINOUS T-HANGAR PAVEMENTS AND AN AGGREGATE ACCESS ROAD AND CROSSING INCLUDING ALL NECESSARY UNCLASSIFIED EXCAVATION, DRAINAGE, AGGREGATE FILL, BITUMINOUS PAVING, MARKING, TOPSOILING, SEEDING AND MULCHING.

ADDITIVE ALTERNATE NO. 1

THIS ALTERNATE CONSISTS OF CONSTRUCTING A SOIL CEMENTED ACCESS ROAD AND HAUL ROUTE ALONG THE EAST PROPERTY LINE AND INCLUDES ALL MATERIALS AND PROCESSING REQUIRED FOR SOIL CEMENTING.



## LOCATION

ILL. PROJ.: 910-4104  
A.I.P. PROJ.: 3-17-0133-B12  
LATITUDE: 40° 13' 16"  
LONGITUDE: 90° 01' 22"  
ELEVATION: 495.0' M.S.L.  
DATE: JUNE 10, 2011



Submitted by: *Lindsay Hausman* ENG'R  
Date Submitted: 6/10/11  
Lic. Exp. Date: 11/30/11

### HAVANA REGIONAL PORT DISTRICT

Approved: *Gene Pace* AIRPORT MANAGER  
Date: 6/10/2011

DATE	REVISION	BY

HAVANA REGIONAL AIRPORT  
HAVANA, ILLINOIS

A.I.P. PROJ.: 3-17-0133-B12  
ILL. PROJ.: 910-4104

Hanson Project No. 808-08A0206D	Filename: R-001CVR.DWG	Scale: N/A	Date: 6/10/11
LAYOUT	LDH	LDH	CAH
DRAWN	LDH	LDH	CAH
REVIEWED	LDH	LDH	CAH



T-HANGAR PAVEMENTS AND ACCESS ROAD

COVER SHEET

JUN 06, 2011 1:40 PM HAUSM00682 I:\AIRPORTS\HAVANA\_08A0206D\CADD\AIRPORT\SHEET\R-001CVR.DWG - COVER

DATE	REVISION	BY

SUMMARY OF QUANTITIES – BASE BID

ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITIES	AS BUILT QUANTITIES
AR150510	ENGINEER'S FIELD OFFICE	LS	1.0	
AR152410	UNCLASSIFIED EXCAVATION	CY	4,435.0	
AR152540	SOIL STABILIZATION FABRIC	SY	6,592.0	
AR156510	SILT FENCE	LF	845.0	
AR156513	SEPARATION FABRIC	SY	1,457.0	
AR156520	INLET PROTECTION	EA	1.0	
AR156545	RIPRAP – GRADATION NO. 5	SY	178.0	
AR209606	CRUSHED AGG. BASE COURSE – 6"	SY	1,457.0	
AR209608	CRUSHED AGG. BASE COURSE – 8"	SY	6,592.0	
AR401613	BIT. SURF. CSE. – METHOD I, SUPERPAVE	TON	780.0	
AR401660	SAW & SEAL BIT. JOINTS	LF	960.0	
AR403613	BIT. BASE CSE. – METHOD I, SUPERPAVE	TON	780.0	
AR602510	BITUMINOUS PRIME COAT	GAL	1,942.0	
AR603510	BITUMINOUS TACK COAT	GAL	971.0	
AR620520	PAVEMENT MARKING – WATERBORNE	SF	1,211.0	
AR701012	12" PVC STORM SEWER	LF	104.0	
AR701212	12" CMP	LF	33.0	
AR701536	36" RCP, CLASS IV	LF	240.0	
AR705506	6" PERFORATED UNDERDRAIN	LF	608.0	
AR705630	UNDERDRAIN INSPECTION HOLE	EA	2.0	
AR705640	UNDERDRAIN CLEANOUT	EA	2.0	
AR751051	SLOTTED DRAIN	LF	246.0	
AR751411	INLET – TYPE A	EA	1.0	
AR752212	METAL END SECTION 12"	EA	1.0	
AR752436	PRECAST REINFORCED CONC. FES 36"	EA	8.0	
AR901510	SEEDING	AC	2.0	
AR905510	TOPSOILING (FROM ON SITE)	CY	1,120.0	
AR908510	MULCHING	AC	2.0	

SUMMARY OF QUANTITIES – ADDITIVE ALTERNATE NO. 1

ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITIES	AS BUILT QUANTITIES
AR800546	SOIL CEMENTING	SY	2,843.0	

INDEX TO SHEETS

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	SUMMARY OF QUANTITIES AND INDEX TO SHEETS
3	PROPOSED SAFETY PLAN
4	ALIGNMENT AND CURVE DATA
5	TYPICAL SECTIONS
6	ACCESS ROAD AND ACCESS CROSSING PLAN AND SECTIONS
7	STORM WATER POLLUTION PREVENTION PLAN
8	STORM WATER POLLUTION PREVENTION DETAILS
9	PLAN AND PROFILE – ALIGNMENT 200
10	PLAN AND PROFILE – ALIGNMENT 300
11	PLAN AND PROFILE – ALIGNMENT 400
12	PLAN AND PROFILE – ALIGNMENT 400
13	STAKING PLAN
14	STAKING PLAN
15	STAKING PLAN – ACCESS ROAD SWALES
16	CROSS SECTIONS – ALIGNMENT 200
17	CROSS SECTIONS – ALIGNMENT 300
18	CROSS SECTIONS – ALIGNMENT 400
19	CROSS SECTIONS – ALIGNMENT 400
20	DRAINAGE SCHEDULES
21	DRAINAGE DETAILS
22	DRAINAGE DETAILS
23	MARKING PLAN
24	LANDSCAPING PLAN

**HAVANA REGIONAL AIRPORT  
HAVANA, ILLINOIS**  
 A.I.P. PROJ.: 3-17-0133-B12  
 IL PROJ.: 910-4104

Hanson Project No. 808-08A0206D	4/27/11
Filename R-002FLP.DWG	LDH
Scale N/A	LDH
Date 6/10/11	CAH
LAYOUT	REVIEWED
DRAWN	
5/23/11	



**T-HANGAR PAVEMENTS  
AND ACCESS ROAD**  
 SUMMARY OF QUANTITIES  
AND INDEX TO SHEETS

**SCOPE OF WORK**

THIS PROJECT CONSISTS OF CONSTRUCTING BITUMINOUS T-HANGAR PAVEMENTS AND AN AGGREGATE ACCESS ROAD AND CORSSING INCLUDING ALL NECESSARY UNCLASSIFIED EXCAVATION, DRAINAGE, AGGREGATE FILL, BITUMINOUS PAVING, MARKING, TOPSOILING, SEEDING AND MULCHING.

**ADDITIVE ALTERNATE NO. 1**

THIS ALTERNATE CONSISTS OF CONSTRUCTING A SOIL CEMENTED ACCESS ROAD AND HAUL ROUTE ALONG THE EAST PROPERTY LINE AND INCLUDES ALL MATERIALS AND PROCESSING REQUIRED FOR SOIL CEMENTING.

**UTILITY NOTE**

THE LOCATION, SIZE, AND TYPE OF MATERIAL OF EXISTING UNDERGROUND AND/OR ABOVEGROUND UTILITIES INDICATED ON THE PLANS ARE NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY WHATEVER 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 OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED IN THE 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 COMPANIES OF HIS OPERATIONAL PLANS AND SHALL OBTAIN FROM THE 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. THE OWNER'S REPRESENTATIVE AND/OR THE RESIDENT ENGINEER SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY DAMAGE TO SUCH MAINS AND SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT. ALL UTILITY CABLES AND LINES SHALL BE LOCATED BY THE RESPECTIVE UTILITY. **CONTACT JULIE (JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS) FOR UTILITY INFORMATION, PHONE: 1-800-892-0123.** CONTACT THE FAA (FEDERAL AVIATION ADMINISTRATION) FOR ASSISTANCE IN LOCATING FAA CABLES AND UTILITIES. LOCATION OF FAA POWER, CONTROL, AND COMMUNICATION CABLES SHALL BE COORDINATED WITH AND/OR LOCATED BY THE FAA. ALSO CONTACT AIRPORT DIRECTOR/MANAGER AND AIRPORT PERSONNEL FOR ASSISTANCE IN LOCATING UNDERGROUND AIRPORT CABLES AND/OR UTILITIES. ALSO COORDINATE WORK WITH ALL ABOVEGROUND UTILITIES.

**J.U.L.I.E. INFORMATION**

COUNTY \_\_\_\_\_ MASON  
 CITY \_\_\_\_\_ HAVANA  
 TOWNSHIP \_\_\_\_\_ HAVANA  
 SECTION NO. \_\_\_\_\_ 32  
 ADDRESS \_\_\_\_\_ HAVANA, AIRPORT

**HEIGHT OF CONSTRUCTION EQUIPMENT**

THE MAXIMUM ANTICIPATED HEIGHT OF THE CONSTRUCTION EQUIPMENT WILL BE 25 FEET.

**HAUL ROUTE AND VEHICLE PARKING**

THE CONTRACTOR WILL USE THE DESIGNATED HAUL ROUTE AND PARKING AREA AS SHOWN ON THIS SHEET. THE PROPOSED PARKING AREA WILL BE 50' X 200'. THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN THE PROPOSED HAUL ROUTE AND PARKING AREA THROUGHOUT THE COURSE OF THE PROJECT. ANY AREAS DAMAGED OUTSIDE OF THESE AREAS WILL BE REPAIRED BY THE CONTRACTOR AND AT THE CONTRACTOR'S OWN EXPENSE. AT THE CONCLUSION OF THE PROJECT THE CONTRACTOR WILL GRADE, FERTILIZE, SEED AND MULCH THE HAUL ROUTE AND PARKING AREA AS NEEDED TO RESTORE IT TO ITS ORIGINAL STATE. THE RESIDENT ENGINEER AND CONTRACTOR SHALL WALK THE SECTION OF THE ENTRANCE ROAD TO BE USED AS A HAUL ROUTE AND RECORD ALL PAVEMENT DEFICIENCIES. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR ANY OTHER DEFICIENCIES THAT APPEAR AT THE END OF THE PROJECT. SAID REPAIRS WILL BE COMPLETED TO THE SATISFACTION OF THE RESIDENT ENGINEER AND AT THE CONTRACTOR'S OWN EXPENSE. RESTORATION OF THE HAUL ROUTE AND PARKING AREA WILL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

**CONTRACTOR RESPONSIBILITIES**

THE CONTRACTOR'S EQUIPMENT PARKING AND STORAGE AREA WILL BE AS SHOWN ON THIS SHEET. THE CONTRACTOR'S EMPLOYEES WILL PARK THEIR VEHICLES IN THIS AREA.

THE CONTRACTOR AND HIS EMPLOYEES WILL BE RESTRICTED TO THE WORK AREA AND ALL OTHER AREAS OF THE AIRPORT ARE "OFF LIMITS" TO THEM.

NO TRENCHES OR HOLES WILL REMAIN OPEN OVERNIGHT.

**CONSTRUCTION SCHEDULE**

CONTRACTOR SHALL PROVIDE 2 WEEK NOTICE PRIOR TO STARTING SO THAT THE AIRPORT MAY NOTIFY AIRCRAFT OWNERS.

THIS PROJECT SHALL NOT BE STAGED, RATHER COMPLETED IN ONE PHASE. CONSTRUCTION SHALL BE COMPLETED IN ONE SEASON, NO SUSPENSIONS WILL BE ALLOWED AS PART OF THIS PROJECT.

**BARRICADES AND TRAFFIC CONES**

IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE AND MAINTAIN BARRICADES AND TRAFFIC CONES AS DIRECTED BY THE AIRPORT MANAGER. THE BARRICADES WILL BE EQUIPPED WITH RED FLASHING OR RED STEADY-BURN LIGHTS AND 20" SQUARE ORANGE FLAGS. THE BARRICADES, THEIR MAINTENANCE, PLACEMENT AND REMOVAL WILL BE CONSIDERED AS AN INCIDENTAL ITEM TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

**PROPOSED SAFETY PLAN**

IDENTIFICATION - WHEN THE CONTRACTORS VEHICLES AND EQUIPMENT ARE ON THE AIRPORT THEY SHALL BE PROPERLY MARKED WITH THREE (3) FOOT SQUARE CHECKERED FLAGS (INTERNATIONAL ORANGE AND WHITE). THE CONTRACTOR WILL ALSO PROVIDE WORKERS WITH SOME TYPE OF TAG OR GARMENT TO IDENTIFY THE PERSON AS BEING PART OF THE CONSTRUCTION CREW.

RADIO CONTROL - THE CONTRACTOR WILL BE REQUIRED TO BE IN TWO-WAY RADIO CONTACT (122.90 MHz.) WITH THE AIRPORT UNICOM. THIS WILL KEEP THE CONTRACTOR IN CONSTANT CONTACT WITH THE HAVANA REGIONAL AIRPORT AND ENABLE THE AIRPORT TO IMMEDIATELY CONTACT THE CONTRACTOR IN CASE OF AN AERONAUTIC EMERGENCY THAT WOULD REQUIRE ACTION BY THE CONTRACTOR AND/OR HIS PERSONNEL.

**DESIGN AND SPECIFICATIONS**

ALL DESIGN WAS DONE FOR 60,000 LBS. OR LESS AIRCRAFT.

**150-ENGINEER'S FIELD OFFICE NOTES**

THE PROPOSED ENGINEER'S FIELD OFFICE WILL BE FURNISHED, MAINTAINED, AND REMOVED IN ACCORDANCE WITH ITEM AR150510 "ENGINEER'S FIELD OFFICE" AS STATED ON PAGE 49 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION OF AIRPORTS NOV. 2, 2009.

THE LOCATION OF THE PROPOSED ENGINEER'S FIELD OFFICE WILL BE DETERMINED AT THE PRE-CONSTRUCTION MEETING.

THE ENGINEERING FIRM WILL MAKE PAYMENT FOR ALL LONG DISTANCE TELEPHONE CALLS IN EXCESS OF ONE HUNDRED DOLLARS (\$100.00) PER MONTH.

THE CONTRACTOR WILL FURNISH A WIRELESS PHONE TO THE RESIDENT ENGINEER FOR HIS EXCLUSIVE USE FOR THE DURATION OF THIS PROJECT. THE RESIDENT ENGINEER WILL USE THIS PHONE FOR PROJECT BUSINESS ONLY. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL CHARGES ASSOCIATED WITH THIS CELL PHONE.

THE PROPOSED ENGINEER'S FIELD OFFICE WILL BE PAID FOR UNDER ITEMS: AR150510 ENGINEER'S FIELD OFFICE \_\_\_\_ 1 L.S.







**CERTIFIED PAYROLLS**

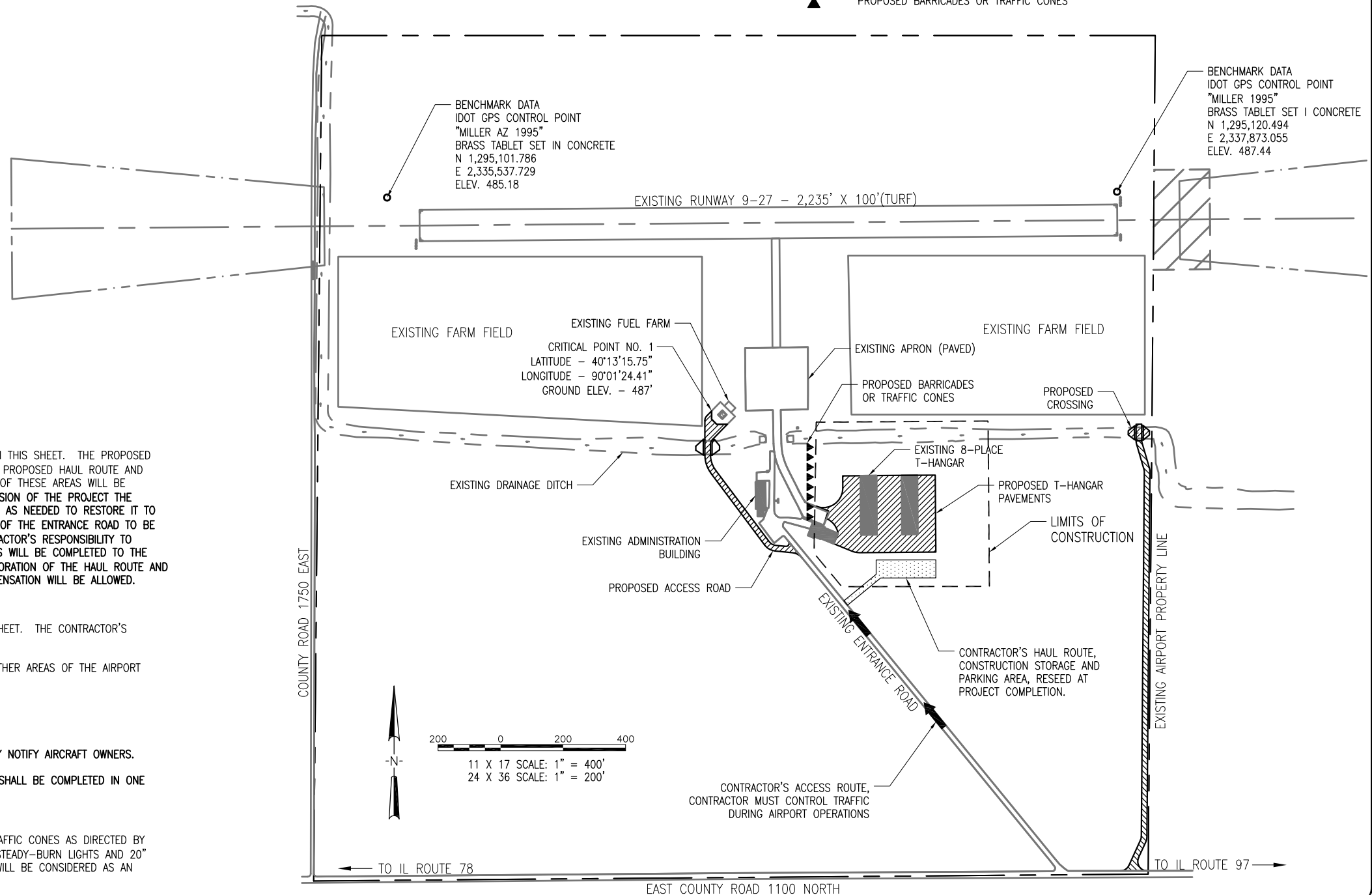
THE RESIDENT ENGINEER CANNOT FORWARD CONSTRUCTION REPORTS TO THE ILLINOIS DIVISION OF AERONAUTICS FOR PROCESSING UNTIL ALL CERTIFIED PAYROLLS FOR THE PERIOD HAVE BEEN RECEIVED.

**MATERIAL CERTIFICATION**

COMPLETED WORK CANNOT BE PLACED ON A CONSTRUCTION REPORT UNTIL ALL MATERIAL CERTIFICATIONS FOR THAT PAY ITEM HAVE BEEN RECEIVED, REVIEWED AND ACCEPTED BY THE RESIDENT ENGINEER.

**LEGEND**

-  EXISTING IMPROVEMENTS
-  PROPOSED BASE BID IMPROVEMENTS
-  PROPOSED ADDITIVE ALTERNATE IMPROVEMENTS
-  EXISTING BUILDINGS
-  PROPOSED HAUL ROUTE AND EQUIPMENT PARKING AREA
-  PROPOSED BARRICADES OR TRAFFIC CONES



HVOO5

DATE	REVISION	BY

**HAVANA REGIONAL AIRPORT  
 HAVANA, ILLINOIS**

A.I.P. PROJ.: 3-17-0133-B12  
 IL PROJ.: 910-4104

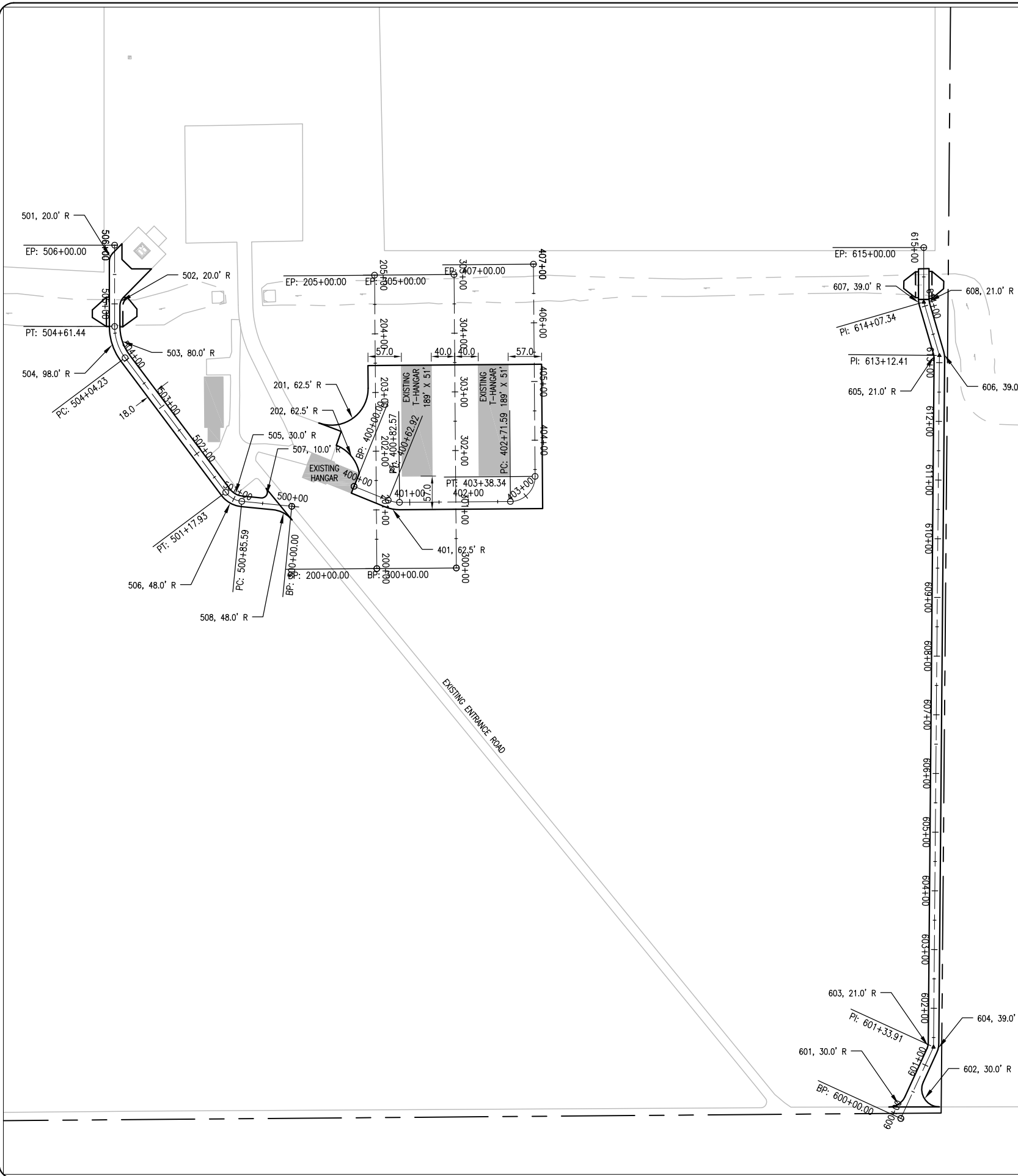
Hanson Project No. 808-08A0206D	4/27/11
File Name R-003SFY.DWG	LDH
Scale 1:200	LDH
Date 6/10/11	CAH
LAYOUT	REVIEWED
DRAWN	



**T-HANGAR PAVEMENTS  
 AND ACCESS ROAD**

**PROPOSED SAFETY PLAN**

JUN 06, 2011 12:10 PM HAU5M00682 I:\AIRPORTS\HAVANA\08A0206D\CADD\AIRPORT\_SHEET\R-003SFY.DWG - Layout1



ALIGNMENT DATA TABLE

ALIGNMENT 200	STATION	NORTHING	EASTING	ALIGNMENT 500	STATION	NORTHING	EASTING
BEGINNING OF ALIGNMENT	200+00	1293865.897	2337010.742	BEGINNING OF ALIGNMENT	500+00	1293972.071	2336865.658
END OF ALIGNMENT	205+00	1294365.882	2337006.831	PC	500+85.59	1293980.498	2336780.485
				CENTER OF RADIUS (39.0' RAD)	500+85.59	1294019.309	2336784.325
				PT	501+17.93	1293995.931	2336753.109
				PC	504+04.23	1294225.089	2336581.489
				CENTER OF RADIUS (89.0' RAD)	504+04.23	1294287.440	2336652.726
				PT	504+61.44	1294278.440	2336563.726
				END OF ALIGNMENT	506+00	1294416.997	2336563.726

ALIGNMENT 300	STATION	NORTHING	EASTING	ALIGNMENT 600	STATION	NORTHING	EASTING
BEGINNING OF ALIGNMENT	300+00	1293866.957	2337146.238	BEGINNING OF ALIGNMENT	600+00	1292928.915	2337903.931
END OF ALIGNMENT	305+00	1294366.942	2337142.327	PI	601+33.91	1293050.639	2337959.735
				PI	613+12.41	1294229.100	2337969.687
				PI	614+07.34	1294320.232	2337943.109
				END OF ALIGNMENT	615+00	1294412.894	2337943.109

ALIGNMENT 400	STATION	NORTHING	EASTING	ALIGNMENT 600	STATION	NORTHING	EASTING
BEGINNING OF ALIGNMENT	400+00	1294006.006	2336971.859	BEGINNING OF ALIGNMENT	600+00	1292928.915	2337903.931
PC	400+62.92	1293982.365	2337030.165	PI	601+33.91	1293050.639	2337959.735
CENTER OF RADIUS (50.0' RAD)	400+82.57	1294028.701	2337048.953	PI	613+12.41	1294229.100	2337969.687
PT	400+82.57	1293978.703	2337049.344	PI	614+07.34	1294320.232	2337943.109
PC	402+71.59	1293980.181	2337238.355	END OF ALIGNMENT	615+00	1294412.894	2337943.109
CENTER OF RADIUS (42.5' RAD)	402+71.59	1294022.680	2337238.023				
PT	403+38.34	1294023.012	2337280.522				
END OF ALIGNMENT	407+00	1294384.657	2337277.693				

CURVE DATA TABLE

CURVE	STATION	OFFSET	NORTHING	EASTING
201	PT	202+48.92	1294114.049	2336911.770
	CENTER	203+07.41	1294172.709	2336933.340
	PC	203+07.41	1294173.198	2336995.838
202	PT	202+10.57	1294075.931	2336941.673
	CENTER	201+52.50	1294017.680	2336919.020
	PC	201+62.10	1294027.763	2336980.701
401	PT	400+62.92	1293970.781	2337025.468
	CENTER	400+82.57	1294028.701	2337048.953
	PC	400+82.57	1293966.203	2337049.441
501	PT	505+86.31	1294403.304	2336560.451
	CENTER	505+72.30	1294389.296	2336574.726
	PC	505+72.30	1294389.296	2336554.726
502	PT	505+10.66	1294327.654	2336578.451
	CENTER	504+96.65	1294313.646	2336592.726
	PC	504+96.65	1294313.646	2336572.726
503	PT	504+61.44	1294278.440	2336572.726
	CENTER	504+61.44	1294278.440	2336652.726
	PC	504+04.23	1294230.484	2336588.692
504	PT	504+61.44	1294278.440	2336554.726
	CENTER	504+61.44	1294278.440	2336652.726
	PC	504+04.23	1294219.694	2336574.285
505	PT	501+17.93	1294001.326	2336760.313
	CENTER	501+17.93	1294019.309	2336784.325
	PC	500+85.59	1293989.455	2336781.371
506	PT	501+17.93	1293990.536	2336745.905
	CENTER	501+17.93	1294019.309	2336784.325
	PC	500+85.59	1293971.542	2336779.599
507	PT	500+53.61	1293986.306	2336813.197
	CENTER	500+53.61	1293996.257	2336814.181
	PC	500+46.55	1294002.609	2336821.905
508	PT	500+31.21	1293966.188	2336833.715
	CENTER	500+31.21	1293918.421	2336828.989
	PC	499+97.32	1293948.908	2336866.064
601	PT	600+09.41	1292948.494	2337883.806
	CENTER	600+36.66	1292978.494	2337883.757
	PC	600+36.66	1292965.992	2337911.028
602	PT	600+45.32	1292948.633	2337969.675
	CENTER	600+72.57	1292978.633	2337969.627
	PC	600+72.57	1292991.135	2337942.356
603	PT	601+27.49	1293048.557	2337948.879
	CENTER	601+27.49	1293057.308	2337929.790
	PC	601+40.33	1293057.131	2337950.789
604	PT	601+27.49	1293041.055	2337965.242
	CENTER	601+27.49	1293057.308	2337929.790
	PC	601+40.33	1293056.979	2337968.788
605	PT	613+07.99	1294224.762	2337960.650
	CENTER	613+07.99	1294224.939	2337939.651
	PC	613+16.82	1294230.819	2337959.811
606	PT	613+07.99	1294224.610	2337978.649
	CENTER	613+07.99	1294224.939	2337939.651
	PC	613+16.82	1294235.858	2337977.091
607	PT	614+03.05	1294313.598	2337935.669
	CENTER	614+03.05	1294324.517	2337973.109
	PC	614+11.63	1294324.517	2337934.109
608	PT	614+03.05	1294318.637	2337952.949
	CENTER	614+03.05	1294324.517	2337973.109
	PC	614+11.63	1294324.517	2337952.109

BY	
REVISION	
DATE	

**HAVANA REGIONAL AIRPORT  
HAVANA, ILLINOIS**

A.I.P. PROJ.: 3-17-0133-B12  
IL PROJ.: 910-4104

Hanson Project No. 808-08A0206D	4/27/11
Filename R-005ALIGN.DWG	LDH
Scale 1:100	LDH
Date 6/10/11	CAH
LAYOUT	REVIEWED
DRAWN	

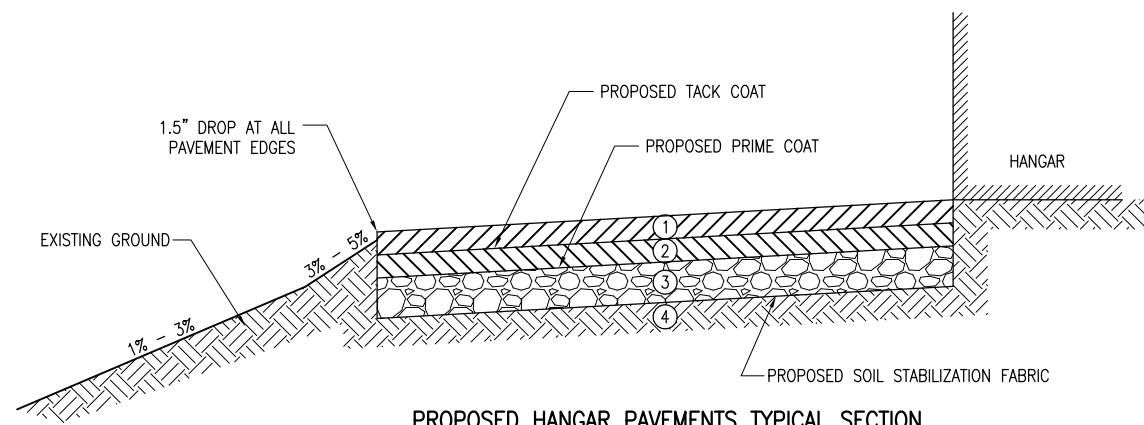
**HANSON**  
Hanson Professional Services Inc.  
1626 S. Main Street  
Springfield, IL 62703-2886  
Offices Nationwide

**T-HANGAR PAVEMENT  
AND ACCESS ROAD**

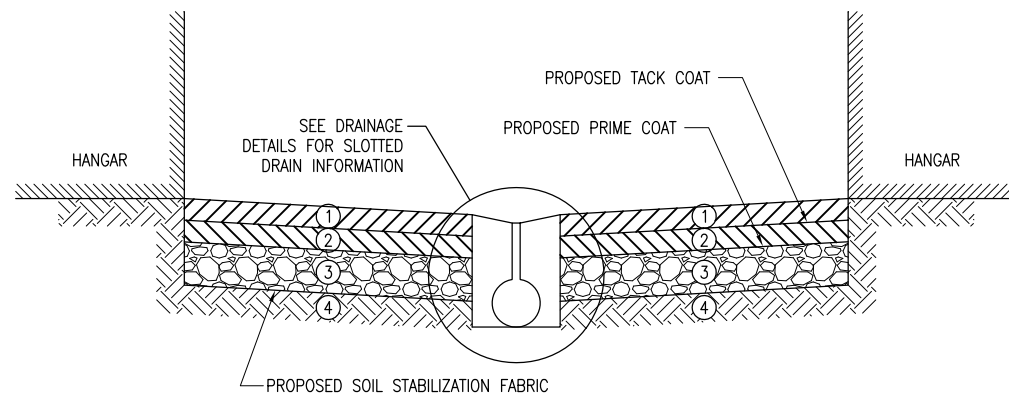
ALIGNMENT AND  
CURVE DATA

**4**

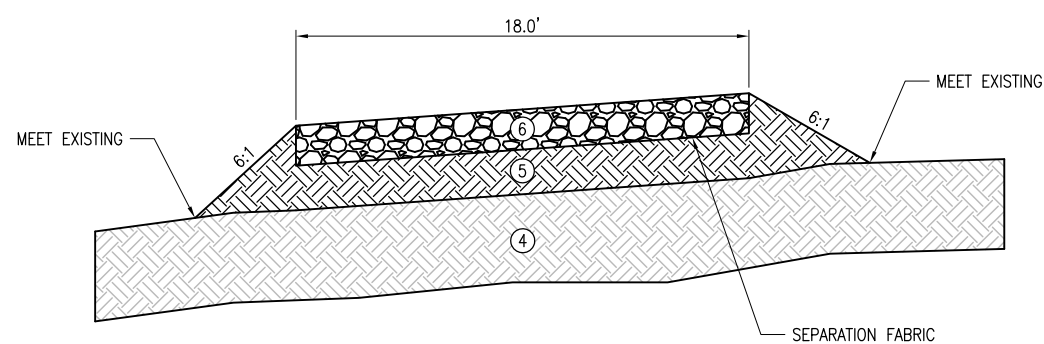
4 of 24 sheets



**PROPOSED HANGAR PAVEMENTS TYPICAL SECTION**  
NOT TO SCALE



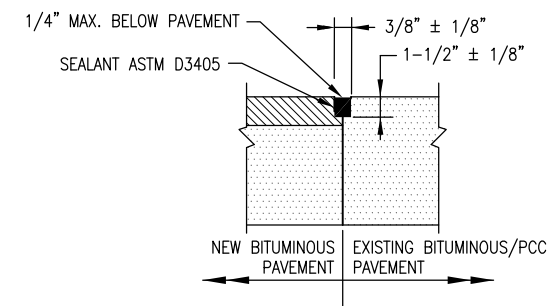
**PROPOSED HANGAR PAVEMENTS TYPICAL SECTION**  
NOT TO SCALE



**PROPOSED WEST ACCESS ROAD TYPICAL SECTION**  
NOT TO SCALE

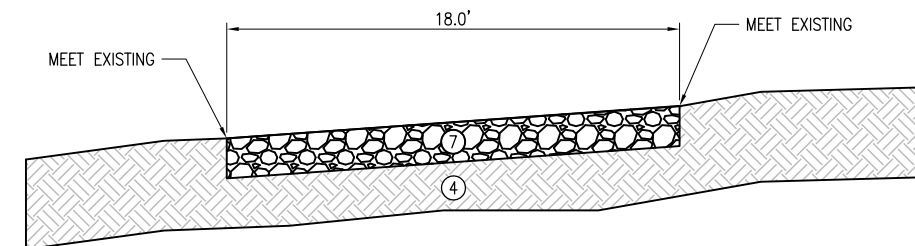
**LEGEND**

- ① PROPOSED AR401613: BITUMINOUS SURFACE COURSE 2" \_\_\_\_\_ PER TON
- ② PROPOSED AR403613: BITUMINOUS BASE COURSE 2" \_\_\_\_\_ PER TON
- ③ PROPOSED AR209608: AGGREGATE BASE COURSE 8" \_\_\_\_\_ PER SQUARE YARD
- ④ EXISTING SUBGRADE
- ⑤ PROPOSED PREPARED SUBGRADE 12"  
EXCESS SPOIL MATERIAL FROM EXCAVATION, ITEM AR152410, SHALL BE USED AS SUBGRADE AND COMPACTED TO THE SATISFACTION OF THE RESIDENT ENGINEER. SPREAD AND COMPACTION SHALL BE INCIDENTAL TO ITEM AR152410.
- ⑥ PROPOSED AR209606: AGGREGATE BASE COURSE 6" \_\_\_\_\_ PER SQUARE YARD



**NOTE:**  
ALL BITUMINOUS/BITUMINOUS AND BITUMINOUS/PCC JOINT SEALING TO BE PAID UNDER SAW AND SEAL BITUMINOUS JOINTS, ITEM AR401660.

**BITUMINOUS/BITUMINOUS OR BITUMINOUS/PCC SEAL**



**ADDITIVE ALTERNATE - PROPOSED EAST ACCESS ROAD AND HAUL ROUTE TYPICAL SECTION**  
NOT TO SCALE

**LEGEND**

- ④ EXISTING SUBGRADE
- ⑦ PROPOSED AR800546: SOIL CEMENTING 16" \_\_\_\_\_ PER SQUARE YARD CEMENTITIOUS MATERIAL TO BE INCORPORATED AT A RATE OF 5% BY WEIGHT TO A DEPTH OF 16"

SEPARATION FABRIC SHALL BE PAID FOR UNDER  
AR156513 SEPARATION FABRIC \_\_\_\_\_ PER SQUARE YARD

SAW AND SEAL BITUMINOUS JOINTS SHALL BE PAID FOR UNDER  
AR401660 SAW & SEAL BIT. JOINT \_\_\_\_\_ PER LINEAR FOOT

BITUMINOUS PRIME COAT SHALL BE PAID FOR UNDER  
AR602510 BITUMINOUS PRIME COAT \_\_\_\_\_ PER GALLON

BITUMINOUS TACK COAT SHALL BE PAID FOR UNDER  
AR603510 BITUMINOUS TACK COAT \_\_\_\_\_ PER GALLON

REVISION	DATE	BY

**HAVANA REGIONAL AIRPORT  
HAVANA, ILLINOIS**

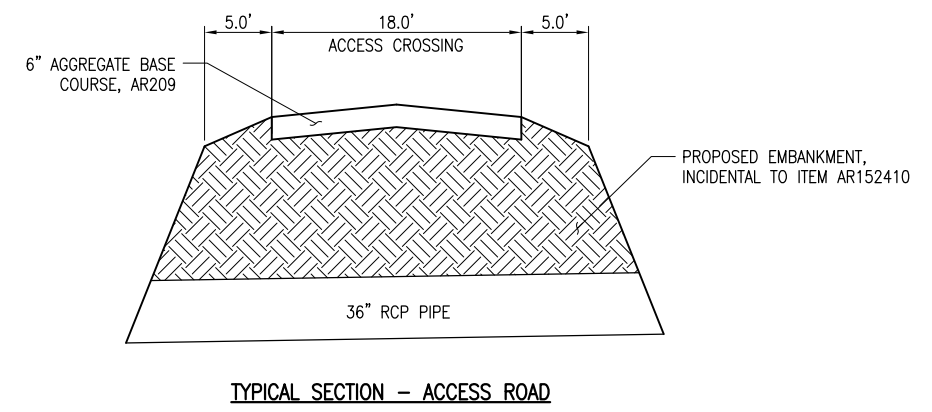
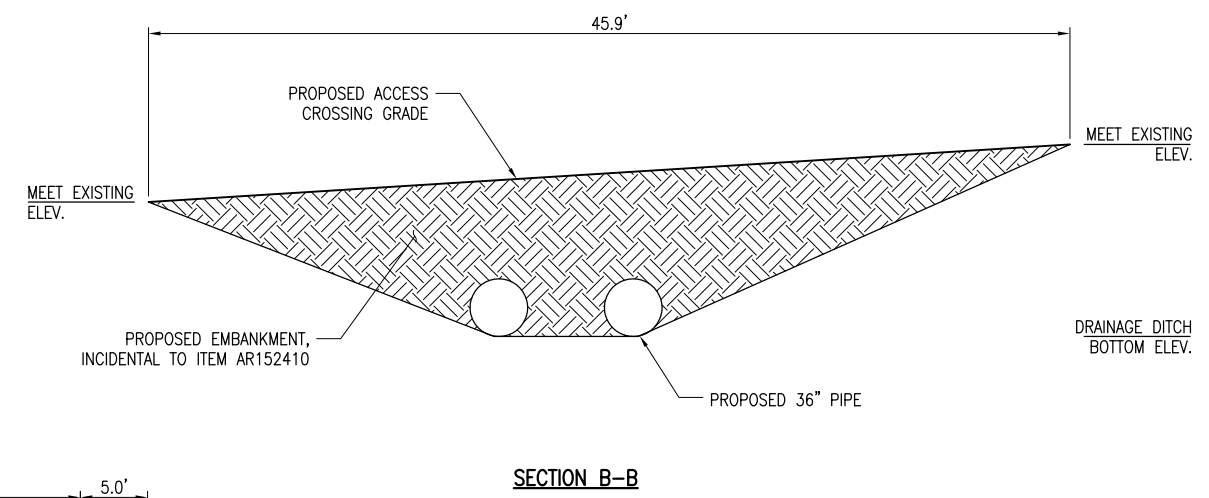
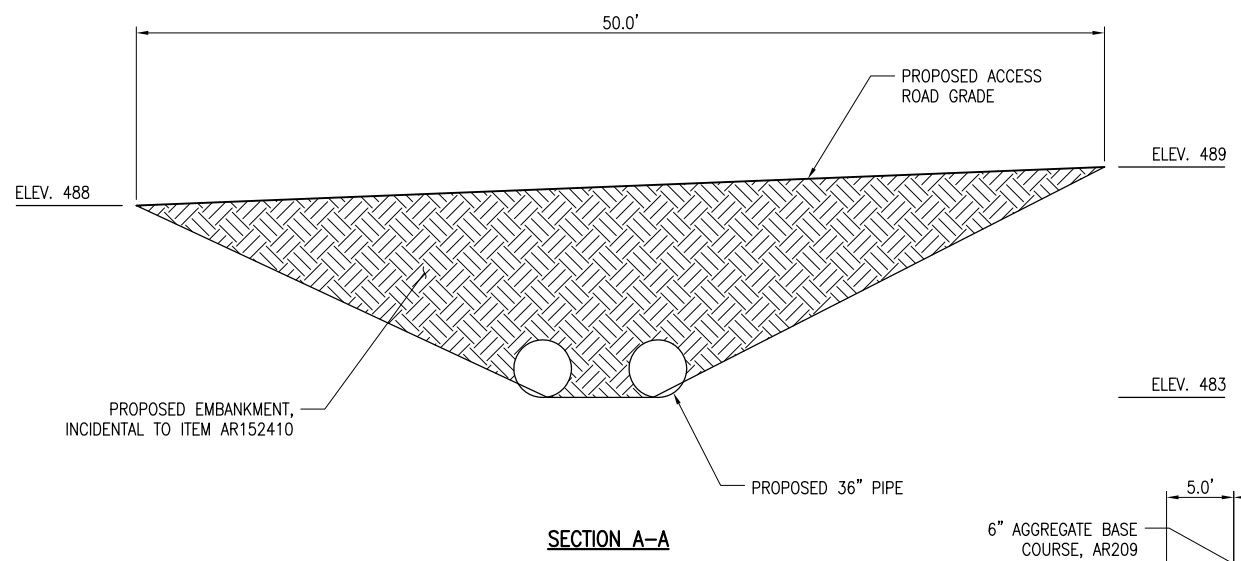
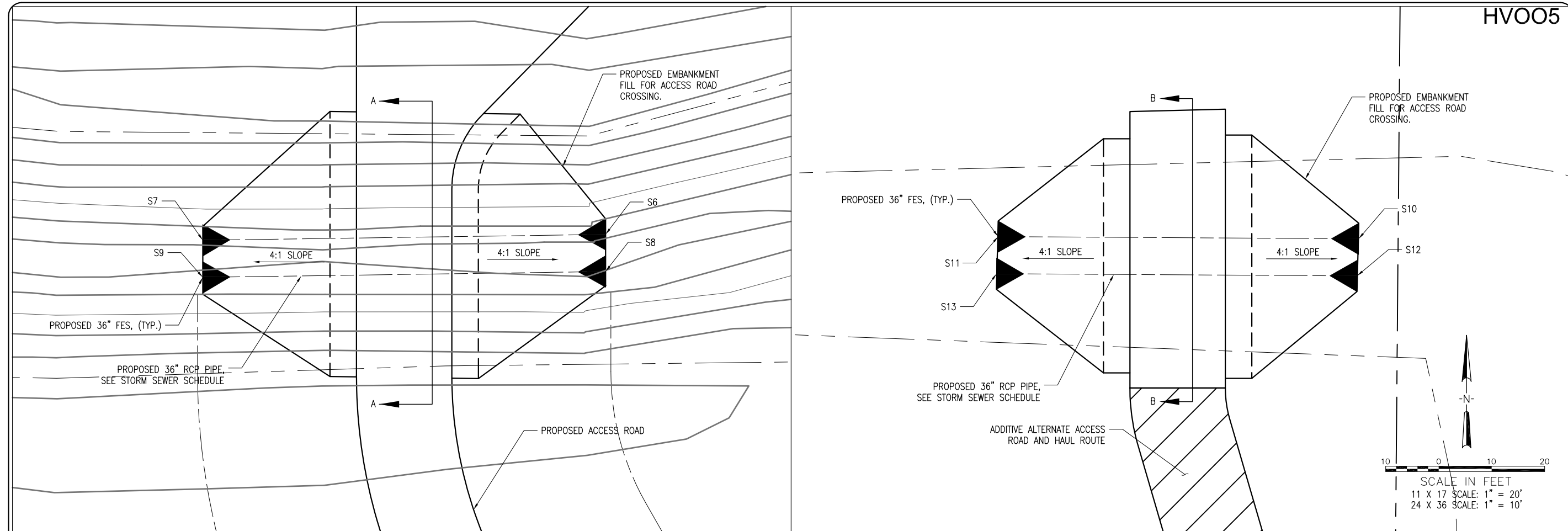
A.I.P. PROJ.: 3-17-0133-B12  
IL PROJ.: 90-4104

Hanson Project No. 808-08A0206D	4/28/11
Filename R-006TYP.DWG	4/28/11
Scale N/A	5/23/11
Date 6/10/11	
LAYOUT LDH	
DRAWN LDH	
REVIEWED CAH	

**HANSON**  
Hanson Professional Services Inc.  
1626 South State Street  
Springfield, IL 62703-2886  
Offices Nationwide

**T-HANGAR PAVEMENTS  
AND ACCESS ROAD**

TYPICAL SECTIONS



DATE	REVISION	BY

**HAVANA REGIONAL AIRPORT  
HAVANA, ILLINOIS**

A.I.P. PROJ.: 3-17-0133-B12  
IL. PROJ.: 90-4104

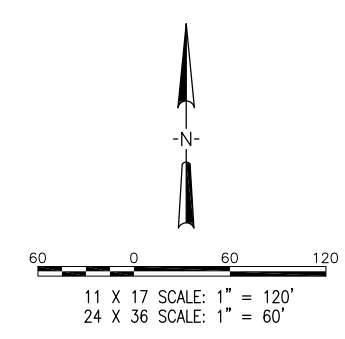
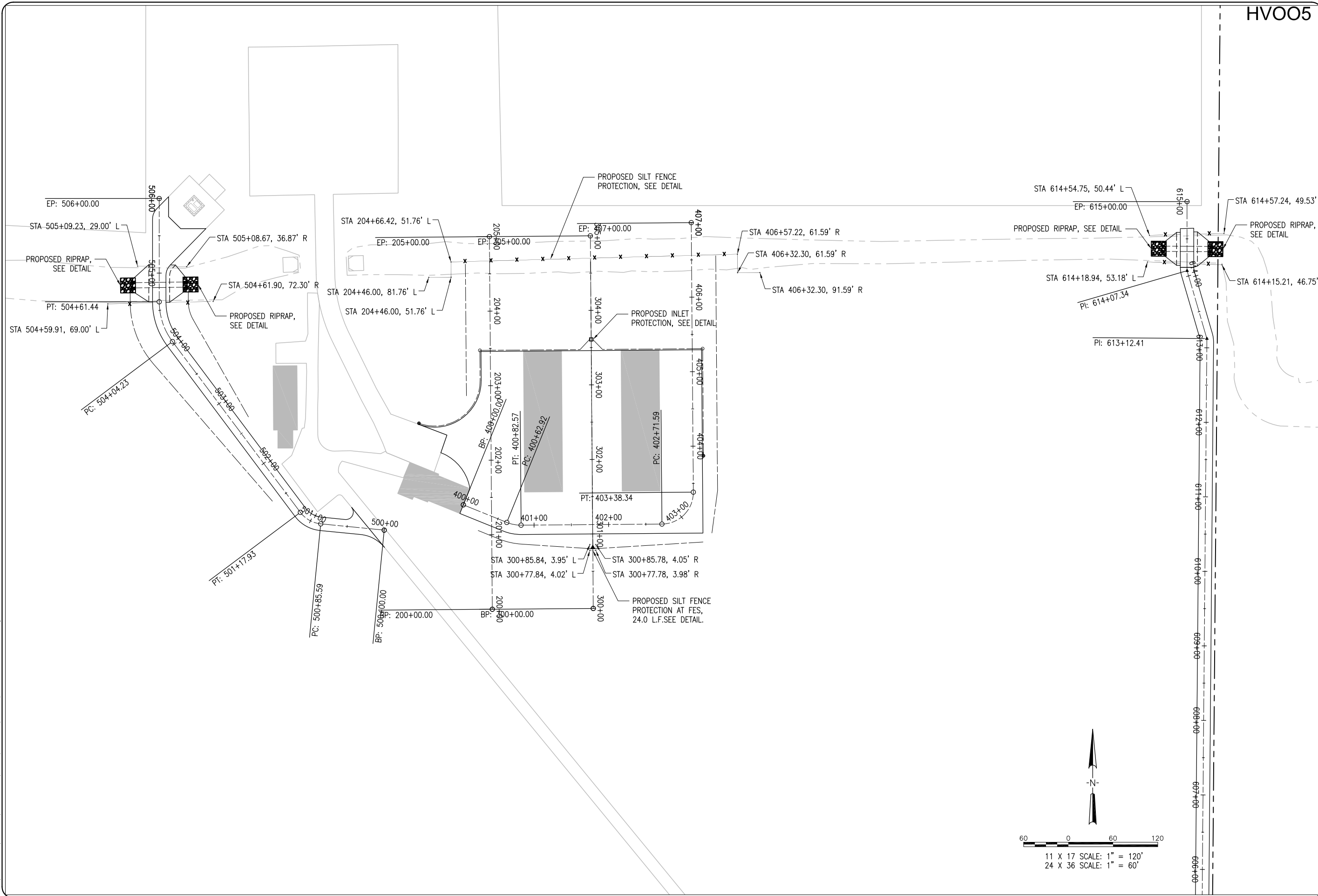
Hanson Project No. 808-08A0206D	5/3/11
Filename R-121CON.DWG	5/3/11
Scale 1:10	5/23/11
Date 6/10/11	5/23/11
LAYOUT LDH	CAH
DRAWN LDH	
REVIEWED CAH	



**T-HANGAR PAVEMENTS  
AND ACCESS ROAD**

ACCESS ROAD AND  
ACCESS CROSSING  
PLAN AND SECTIONS

HV005



DATE	REVISION	BY

**HAVANA REGIONAL AIRPORT  
 HAVANA, ILLINOIS**

IL PROJ.: 910-4104 A.I.P. PROJ.: 3-17-0133-B12

Hanson Project No. 808-08A0206D	5/4/11
File Name: R-181SWP.DWG	LDH
Scale: 1:60	LDH
Date: 6/10/11	CAH
LAYOUT	5/23/11
DRAWN	
REVIEWED	



Hanson Professional Services Inc.  
 1625 South State Street  
 Springfield, IL 62703-2686  
 Offices Nationwide

**T-HANGAR PAVEMENTS  
 AND ACCESS ROAD**

**STORM WATER POLLUTION  
 PREVENTION PLAN**

**7**

**EROSION CONTROL NOTES**

ALL PROPOSED EROSION CONTROL MEASURES SHALL BE COMPLETED AS DETAILED ON THE STORM WATER POLLUTION PREVENTION PLAN AND IN ACCORDANCE WITH THE SPECIFICATIONS.

EROSION CONTROL MEASURES ARE GOVERNED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY'S STANDARDS AND SPECIFICATIONS FOR SOIL EROSIONS AND SPECIFICATION FOR SOIL EROSIONS AND SEDIMENT CONTROL.

FILTER FENCE FOR STRUCTURE PROTECTION AS SHOWN ON THE STORM WATER POLLUTION PREVENTION PLAN.

THE PROPOSED INLET PROTECTION WILL BE PLACED AT THE LOCATIONS SHOWN ON THE STORM WATER POLLUTION PREVENTION PLAN.

INSPECTION OF THE INLET PROTECTION SHALL BE FREQUENT AND REPAIR/REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.

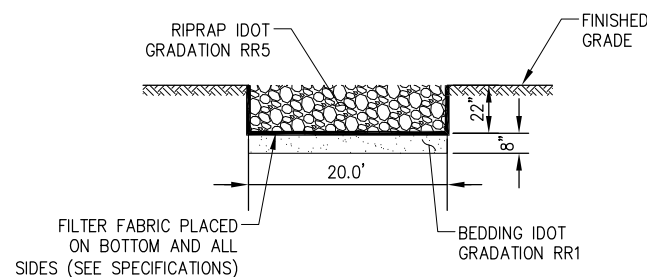
EROSION CONTROL FENCE SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM WATER DRAINAGE.

COST OF REMOVAL AND REPLACEMENT SHALL BE INCLUDED IN THE UNIT PRICE FOR ITEM AR156510 SILT FENCE.

SILT FENCE PAID UNDER: AR156510 SILT FENCE \_\_\_\_\_ PER LINEAR FOOT  
 RIPRAP PAID UNDER: AR156545 RIPRAP \_\_\_\_\_ PER SQUARE YARD  
 INLET PROTECTION PAID UNDER: AR156520 INLET PROTECTION \_\_\_\_\_ PER EACH

**NOTES**

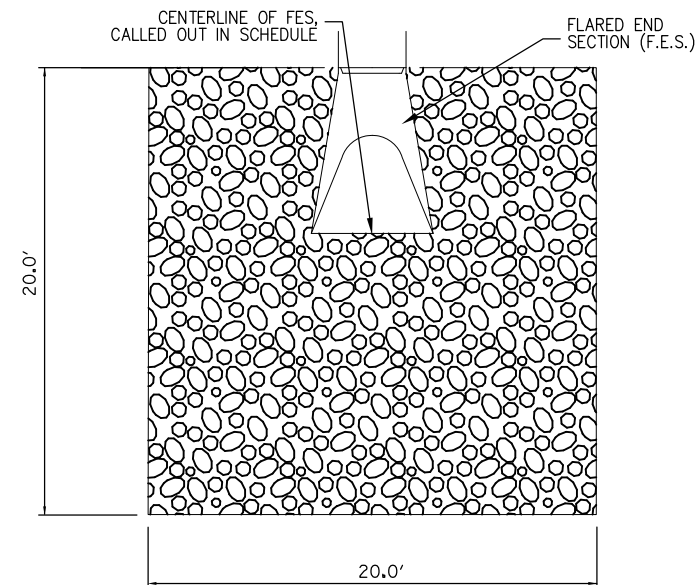
1. COST OF FILTER FABRIC IS INCIDENTAL TO RIPRAP.
2. CENTERLINE OF FLARED END SECTIONS WILL BE CALLED OUT IN SCHEDULE. THE WIDTH OF THE RIPRAP WILL BE CENTERED ABOUT FLARED END SECTIONS. THE PLACEMENT OF THE RIPRAP CAN BE DETERMINED FROM THIS LOCATION.



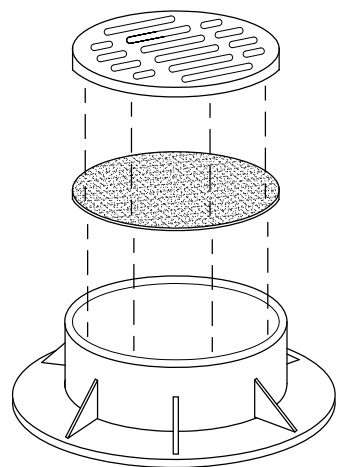
**NOTES**

1. COST OF FILTER FABRIC IS INCIDENTAL TO RIPRAP.

**RIPRAP SECTION**



**RIPRAP DETAIL**



**INLET PROTECTION DETAIL**

"NOT TO SCALE"

**NOTE**

FILTER WRAP TO BE PLACED IN ALL PROPOSED AND EXISTING INLETS LOCATED WITHIN THE PROJECT LIMITS.

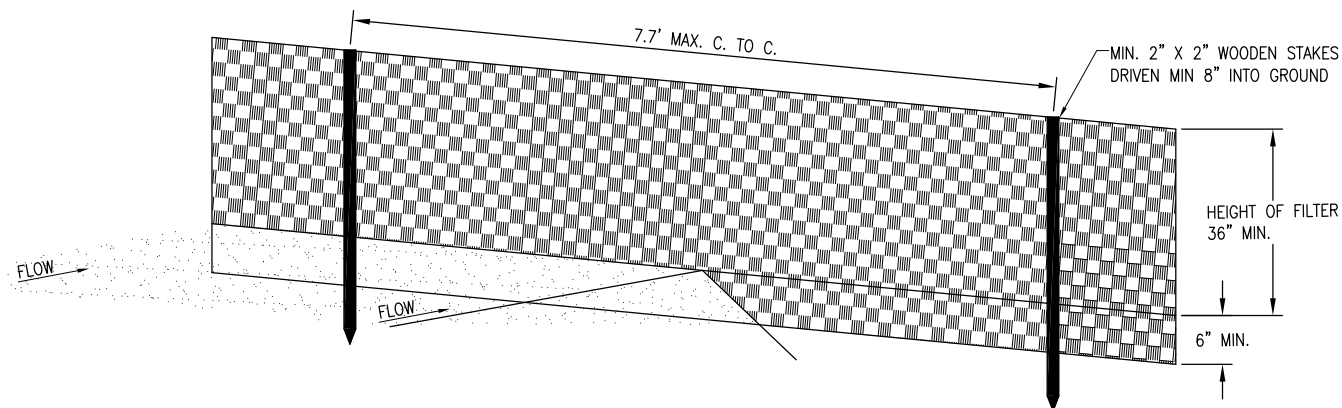
FABRIC SHALL BE IN CONFORMANCE WITH MATERIALS SPECIFIED FOR EROSION CONTROL FENCING.

FABRIC SHALL OVERLAY FRAME BY 2" MIN.

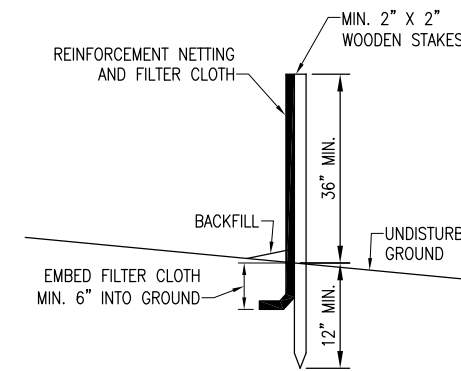
THE CONTRACTOR SHALL CLEAR DEBRIS AND SILT AS REQUIRED FROM FABRIC TO MAINTAIN DRAINAGE THROUGH THE STRUCTURE.

FABRIC SHALL REMAIN IN PLACE UNTIL TURFED AREAS HAVE DEVELOPED A MIN. OF 80% COVERAGE.

COST OF FILTER WRAP SHALL BE PAID FOR UNDER ITEM NO. AR156520.



**PERSPECTIVE VIEW**



**SECTION**

**FILTER FENCE DETAIL**

"NOT TO SCALE"

DATE	REVISION	BY

**HAVANA REGIONAL AIRPORT  
 HAVANA, ILLINOIS**

A.I.P. PROJ.: 3-17-0133-B12

IL PROJ.: 910-4104

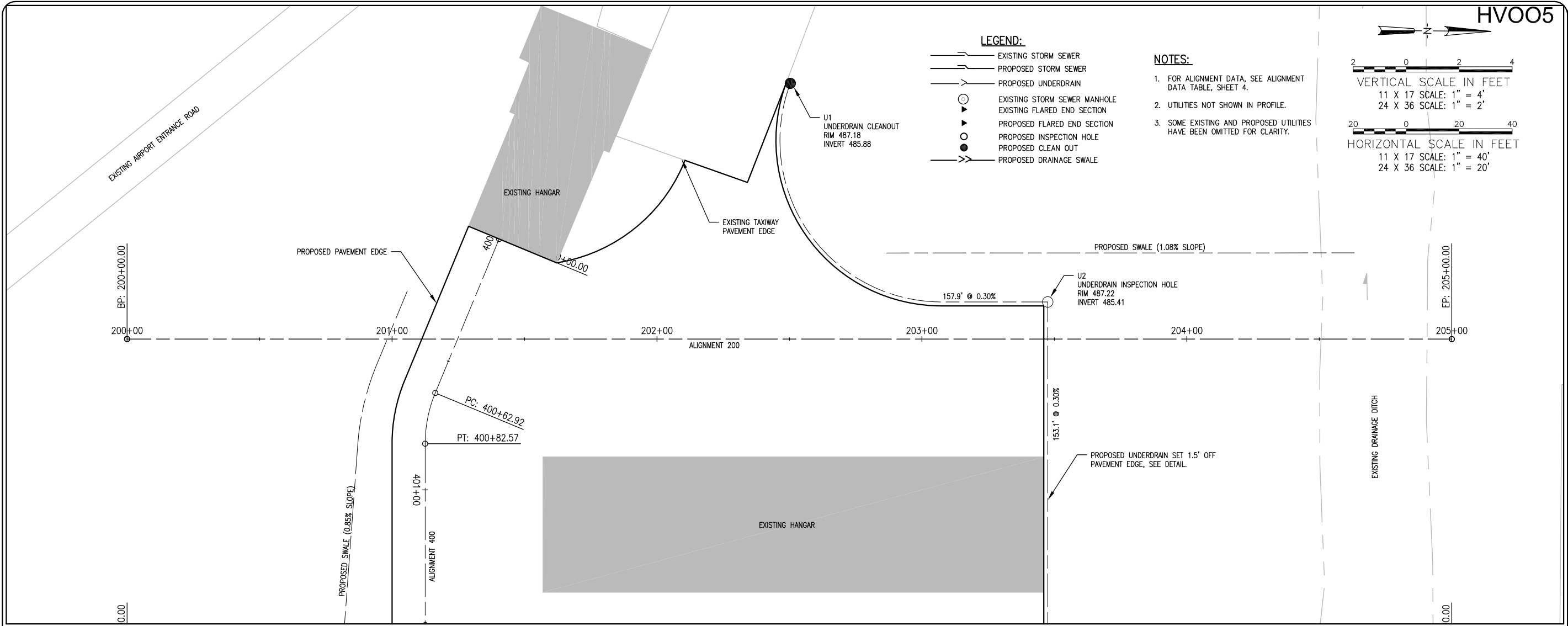
Hanson Project No. 808-08A0206D	LDH	5/6/11
File Name: R-182SWP.DWG	LDH	5/6/11
Scale: N/A	CAH	5/23/11
Date: 6/10/11		

**HANSON**  
 Hanson Professional Services Inc.  
 1625 South Main Street  
 Springfield, IL 62703-2886  
 Offices Nationwide

**T-HANGAR PAVEMENTS  
 AND ACCESS ROAD**

**STORM WATER POLLUTION  
 PREVENTION DETAILS**





DATE	REVISION	BY

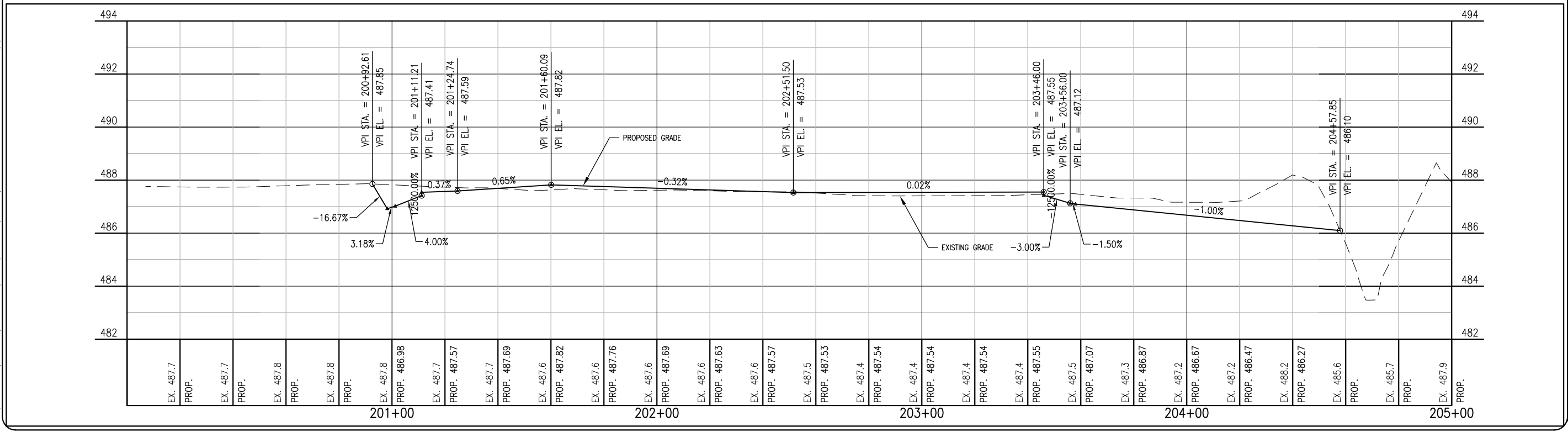
**HAVANA REGIONAL AIRPORT**  
**HAVANA, ILLINOIS**

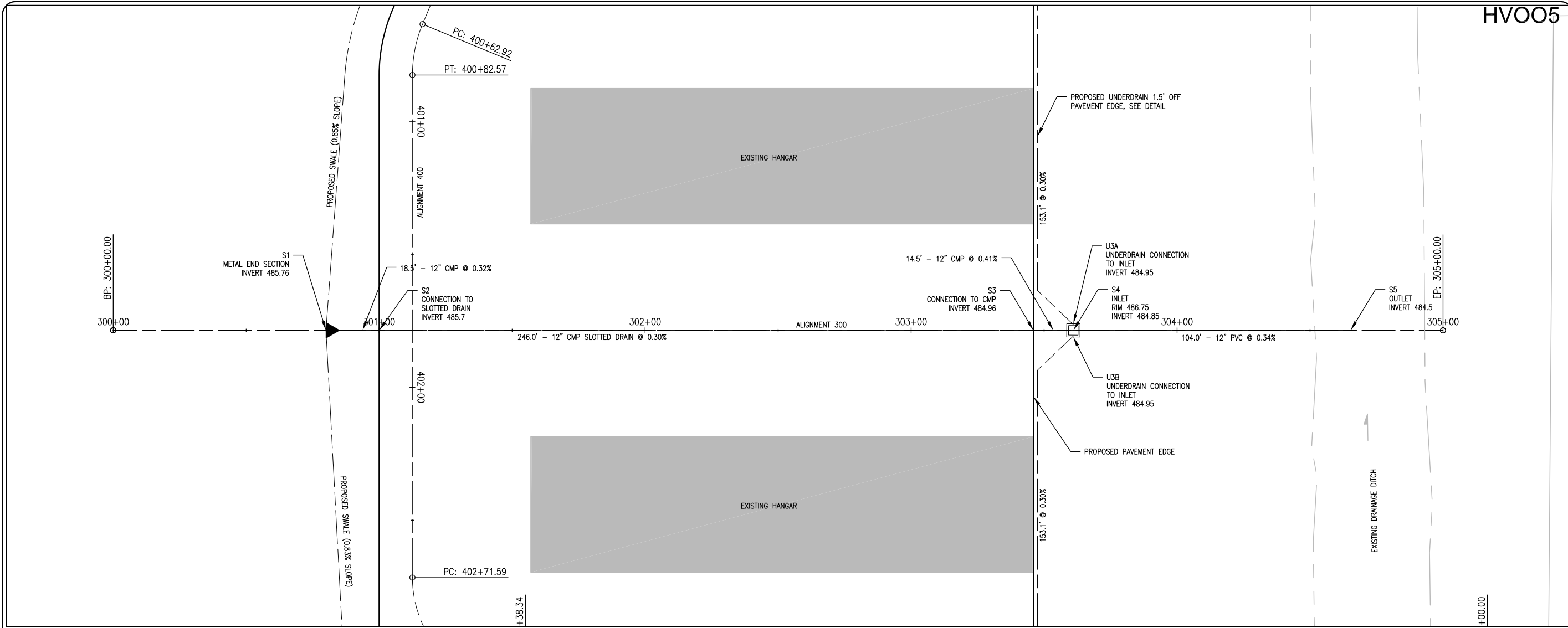
A.I.P. PROJ.: 3-17-0133-B12  
 IL PROJ.: 910-4104

Hanson Project No. 808-08A0206D	File Name R-701PNP-200.DWG	Scale 1:20	Date 6/10/11
LAYOUT	LDH	4/27/11	
DRAWN	LDH	4/27/11	
REVIEWED	CAH	5/23/11	



**T-HANGAR PAVEMENT AND ACCESS ROAD**  
 PLAN AND PROFILE  
 ALIGNMENT 200





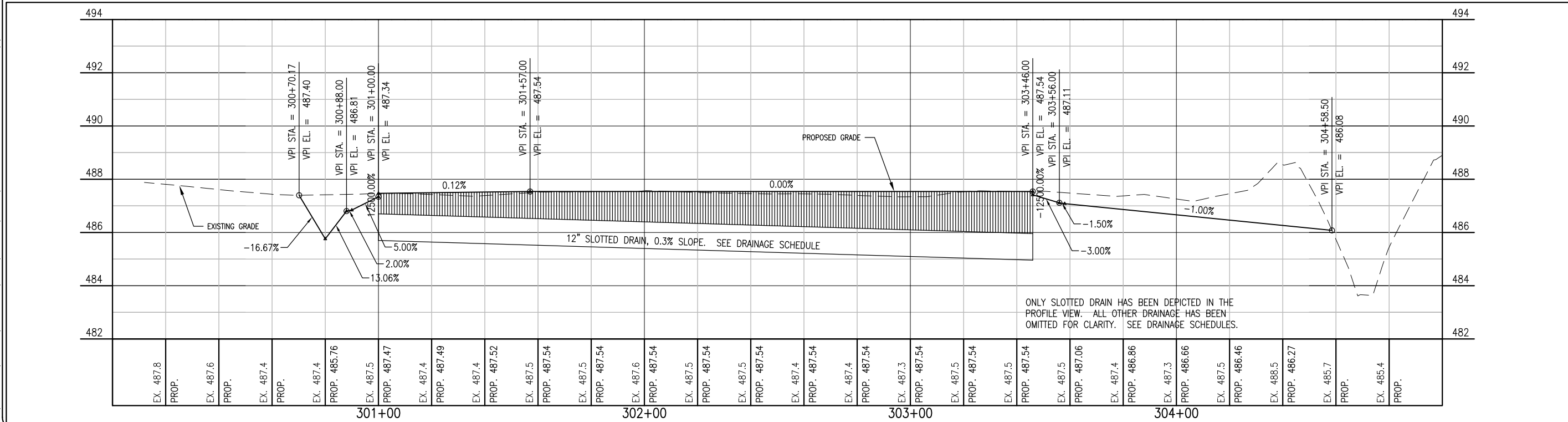
HV005

DATE	REVISION	BY

**HAVANA REGIONAL AIRPORT  
 HAVANA, ILLINOIS**

IL PROJ.: 910-4104 A.I.P. PROJ.: 3-17-0133-B12

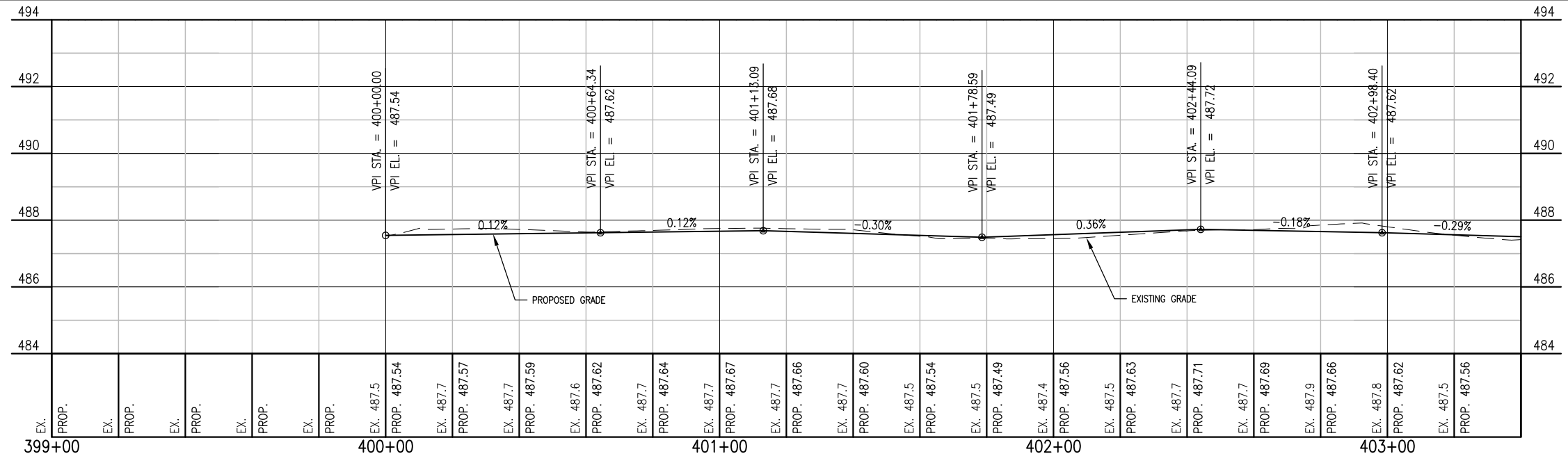
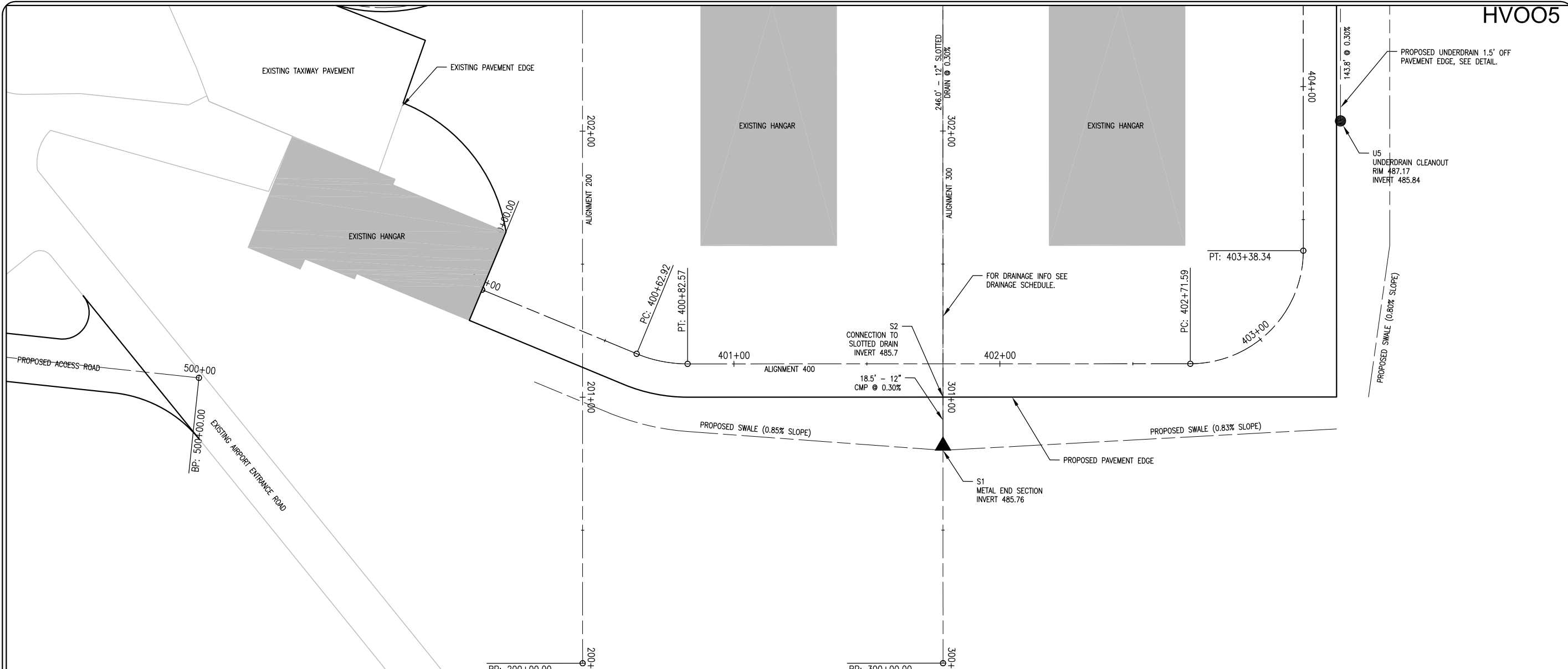
Hanson Project No. 808-08A0206D	File Name R-701PNP-300.DWG	Scale 1:20	Date 6/10/11
LAYOUT	LDH	4/27/11	
DRAWN	LDH	4/27/11	
REVIEWED	CAH	5/23/11	



ONLY SLOTTED DRAIN HAS BEEN DEPICTED IN THE PROFILE VIEW. ALL OTHER DRAINAGE HAS BEEN OMITTED FOR CLARITY. SEE DRAINAGE SCHEDULES.



**T-HANGER PAVEMENTS  
 AND ACCESS ROAD**  
 PLAN AND PROFILE  
 ALIGNMENT 300



HV005

DATE	REVISION	BY

**HAVANA REGIONAL AIRPORT  
 HAVANA, ILLINOIS**

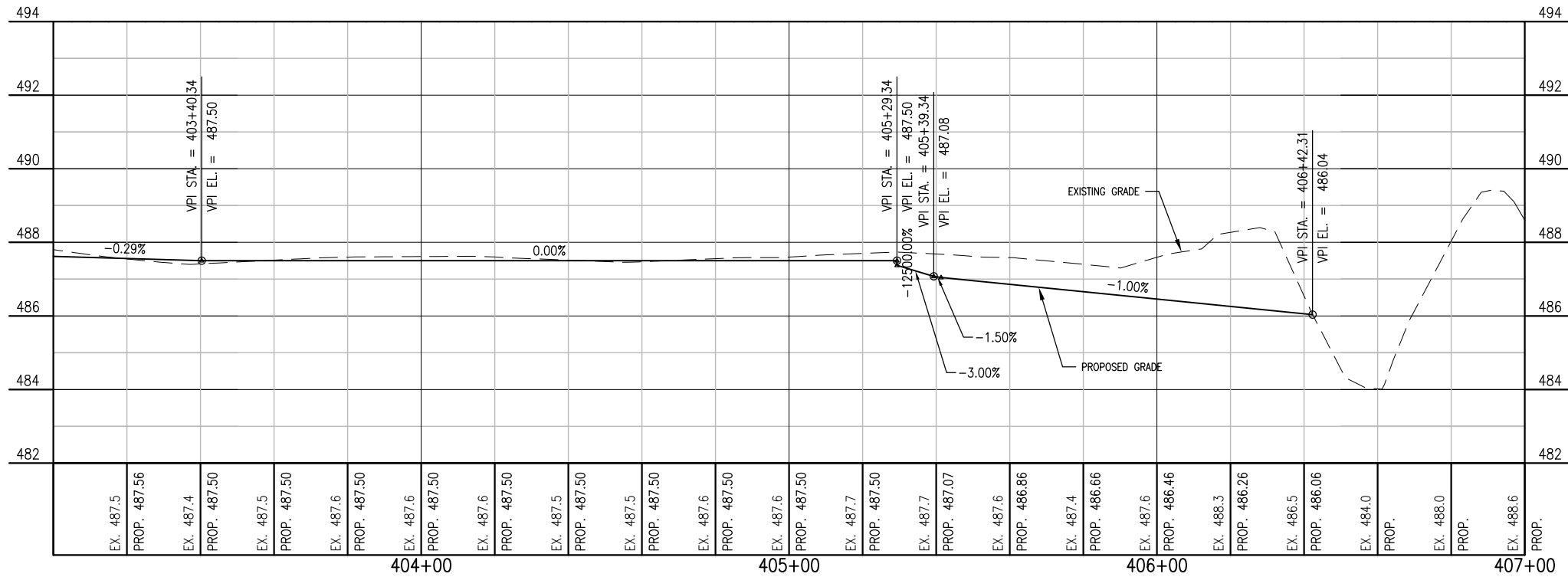
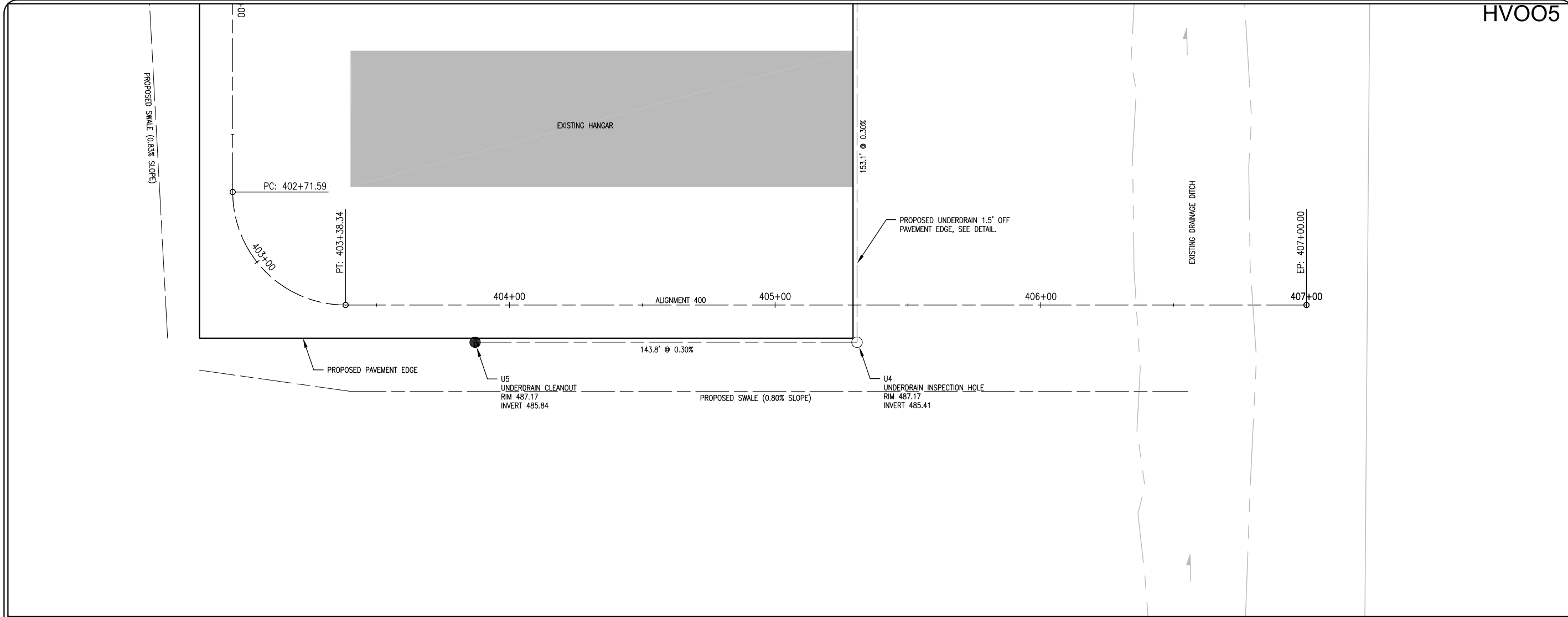
IL PROJ.: 910-4104 A.I.P. PROJ.: 3-17-0133-B12

Hanson Project No. 808-08A0206D	4/27/11
File Name: R-701PNP-400.DWG	LDH
Scale: 1:20	LDH
Date: 6/10/11	CAH
LAYOUT	
DRAWN	
REVIEWED	



Hanson Professional Services Inc.  
 1625 South State Street  
 Springfield, IL 62703-2886  
 Offices Nationwide

**T-HANGAR PAVEMENTS  
 AND ACCESS ROAD**  
 PLAN AND PROFILE  
 ALIGNMENT 400



HVOO5

DATE	REVISION	BY

**HAVANA REGIONAL AIRPORT  
HAVANA, ILLINOIS**

IL PROJ.: 90-4104     A.I.P. PROJ.: 3-17-0133-B12

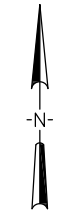
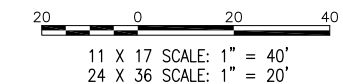
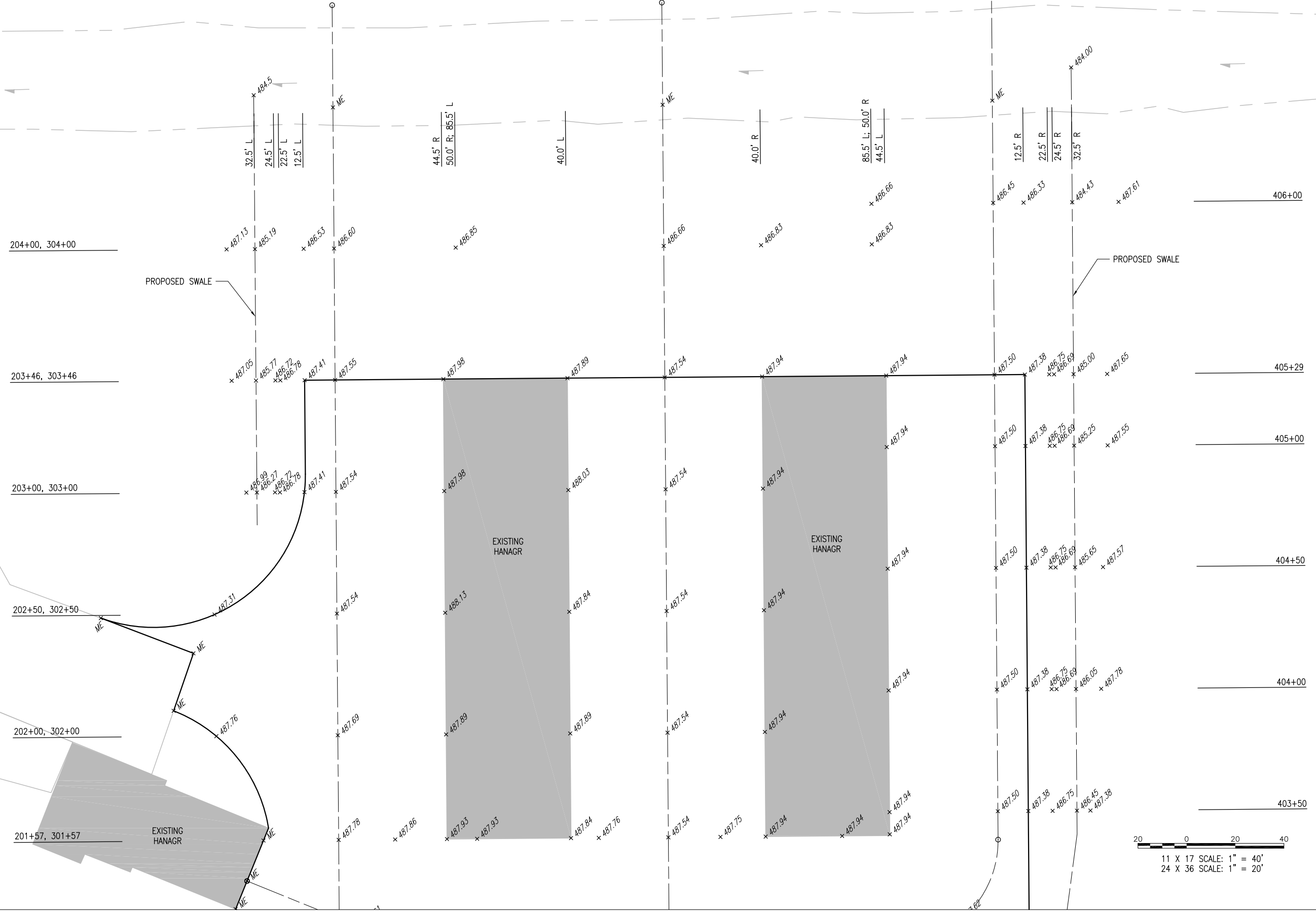
Hanson Project No. 808-08A0206D	LDH	4/27/11
Filename R-702PNP-400.DWG	LDH	4/27/11
Scale 1:20	CAH	5/23/11
Date 6/10/11		



**T-HANGAR PAVEMENTS  
AND ACCESS ROAD**

PLAN AND PROFILE  
ALIGNMENT 400

JUN 06, 2011 12:14 PM HAU5M00682  
I:\AIRPORTS\HAVANA\08A0206D\CADD\AIRPORT\_SHEET\R-191STK.DWG - Layout1



DATE	REVISION	BY

**HAVANA REGIONAL AIRPORT**  
**HAVANA, ILLINOIS**

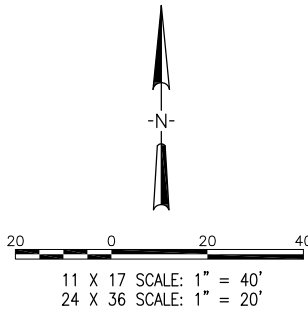
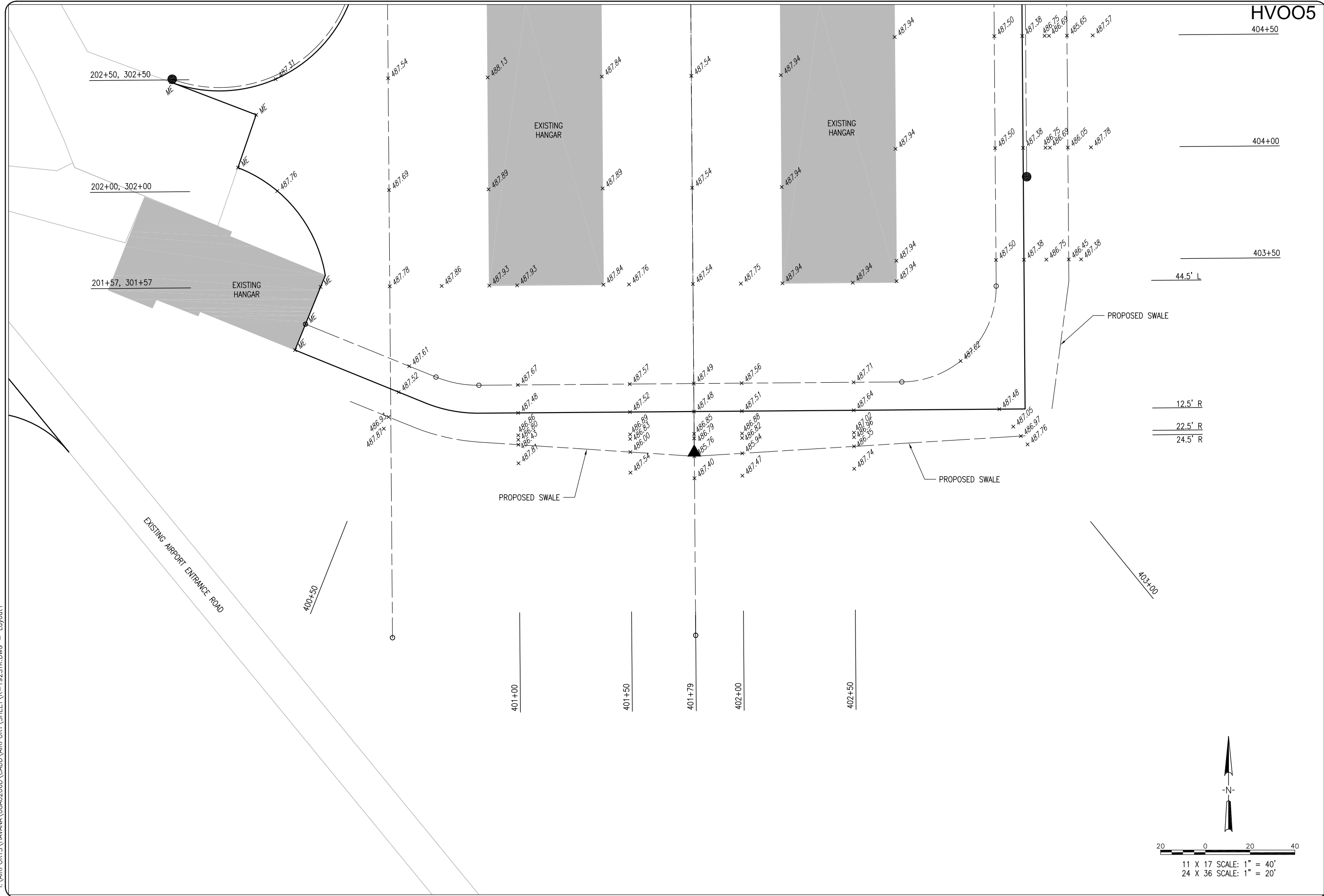
IL PROJ.: 910-4104     A.I.P. PROJ.: 3-17-0133-B12

Hanson Project No. 808-08A0206D	LAYOUT	LDH	5/5/11
Filename: R-191STK.DWG	DRAWN	LDH	5/5/11
Scale: 1:20	REVIEWED	CAH	5/23/11
Date: 6/10/11			



**T-HANGAR PAVEMENTS AND ACCESS ROAD**

**STAKING PLAN**



HV005

404+50

404+00

403+50

44.5' L

12.5' R

22.5' R

24.5' R

DATE	REVISION	BY

**HAVANA REGIONAL AIRPORT  
 HAVANA, ILLINOIS**

IL PROJ.: 910-4104 A.I.P. PROJ.: 3-17-0133-B12

Hanson Project No. 808-08A0206D  
 Filename R-192STK.DWG  
 Scale 1:20  
 Date 6/10/11

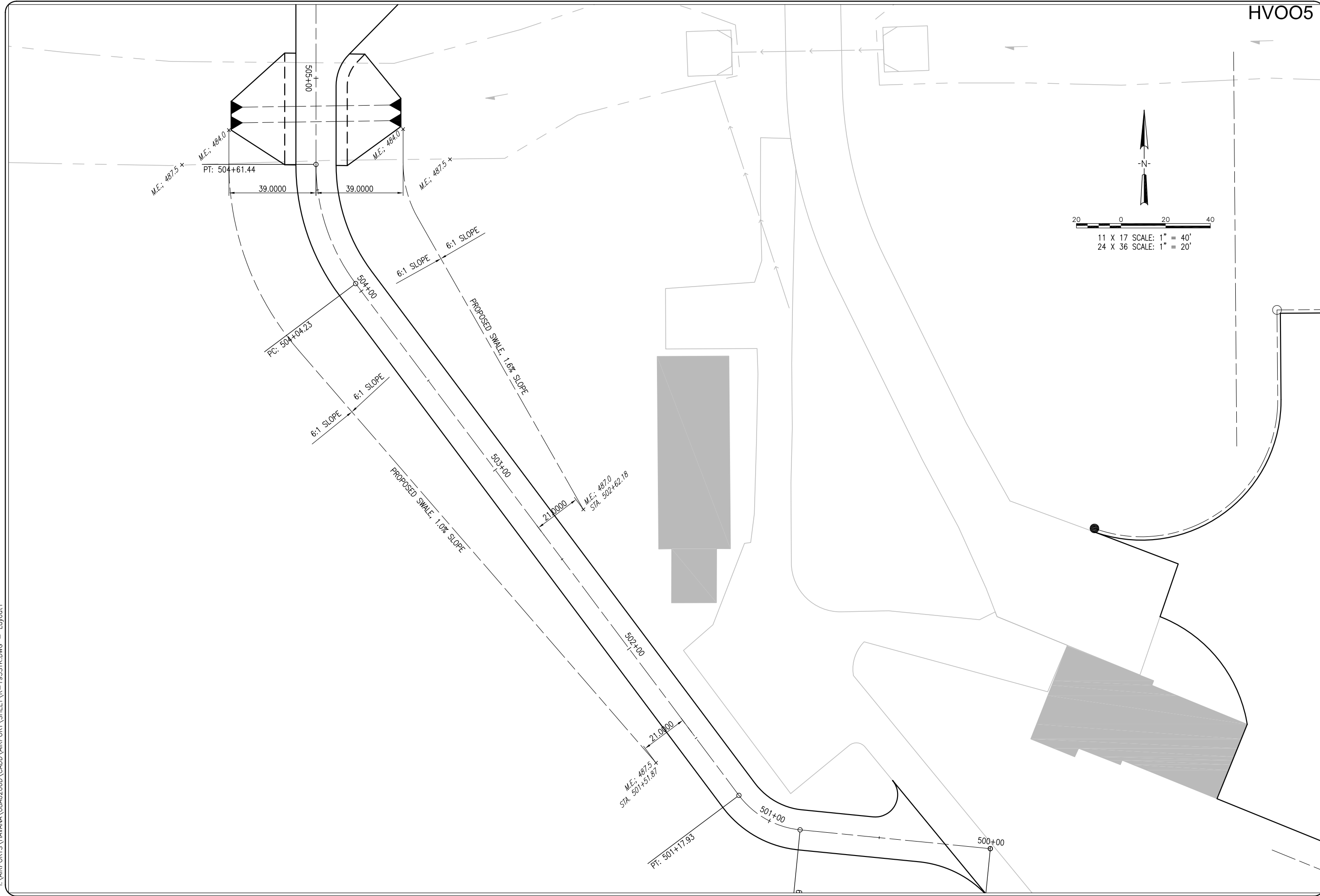
LAYOUT	LDH	5/5/11
DRAWN	LDH	5/5/11
REVIEWED	CAH	5/23/11



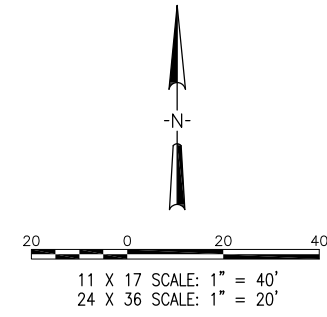
Hanson Professional Services Inc.  
 1625 South  
 Springfield  
 Offices Nationwide

**T-HANGAR PAVEMENTS  
 AND ACCESS ROAD**

STAKING PLAN



HV005



DATE	REVISION	BY

**HAVANA REGIONAL AIRPORT  
 HAVANA, ILLINOIS**

IL. PROJ.: 90-4104 A.I.P. PROJ.: 3-17-0133-B12

Hanson Project No. 808-08A0206D	LDH	5/5/11
Filename: R-193STK.DWG	LDH	5/5/11
Scale: 1:20	CAH	5/23/11
Date: 6/10/11		



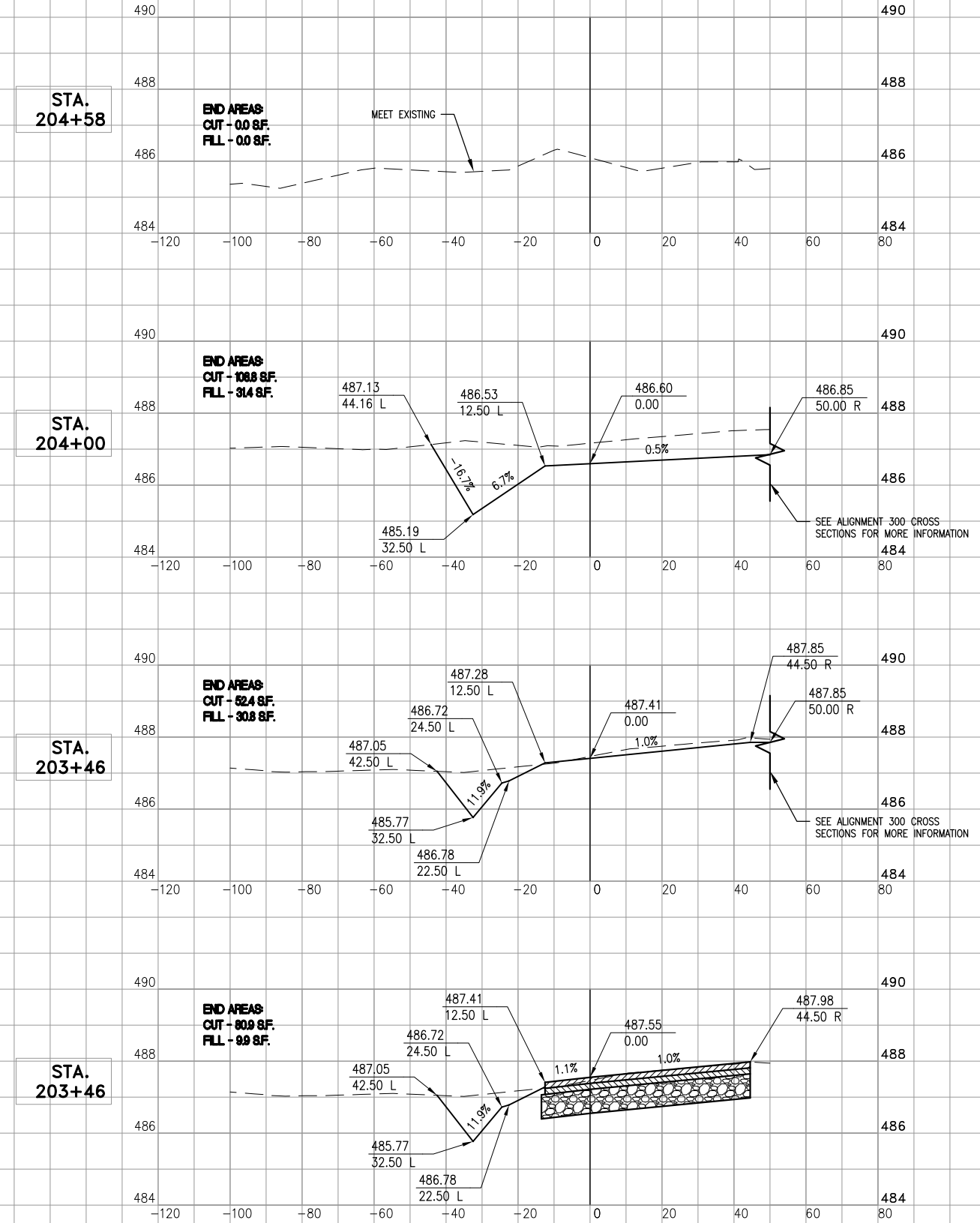
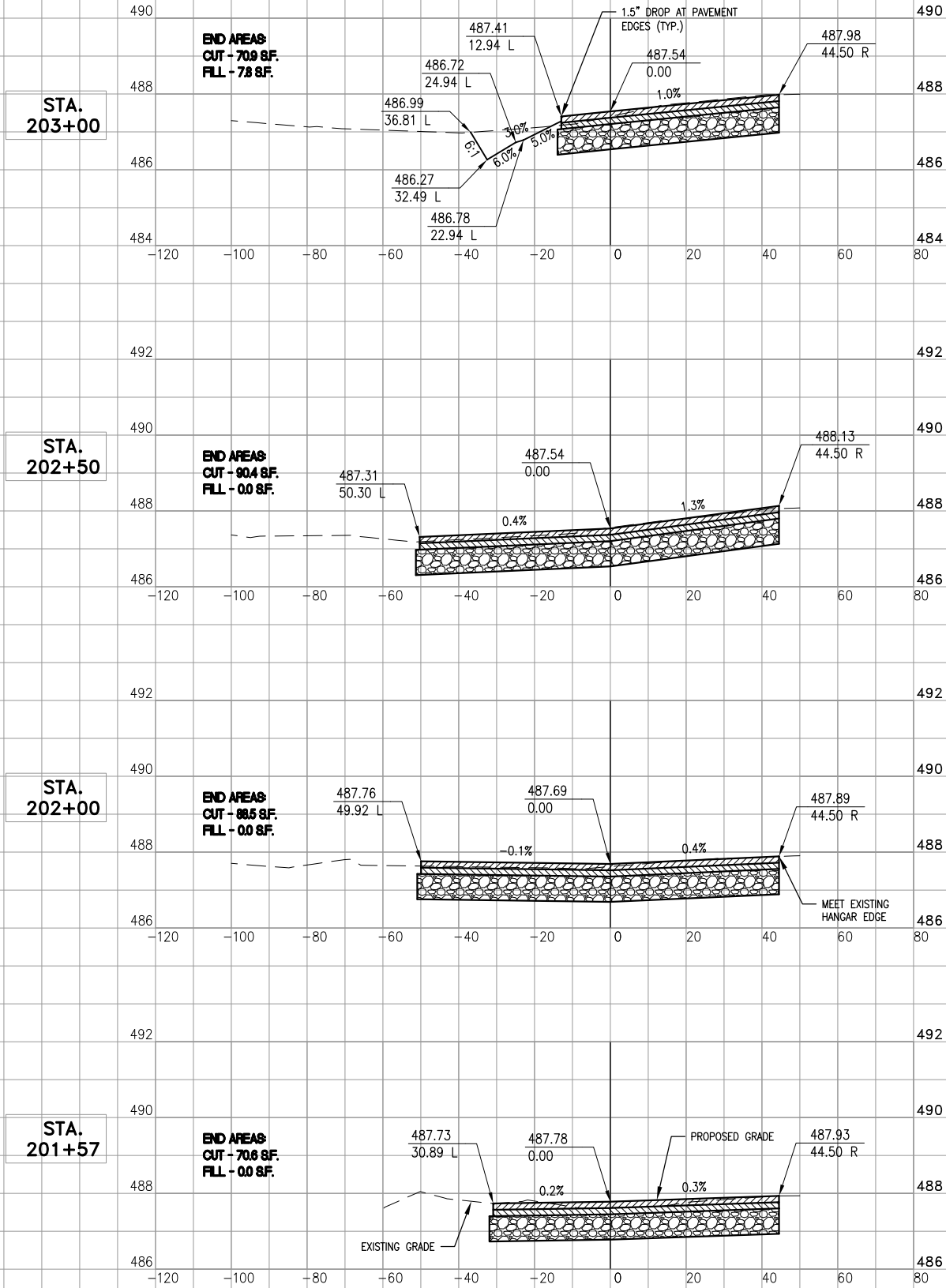
Hanson Professional Services Inc.  
 1625 South Main Street  
 Springfield, IL 62703-2886  
 Offices Nationwide

**T-HANGAR PAVEMENTS  
 AND ACCESS ROAD**

**STAKING PLAN  
 ACCESS ROAD SWALES**

JUN 06, 2011 12:16 PM HAU5M00682  
 I:\AIRPORTS\HAVANA\08A0206D\CADD\AIRPORT\SHEET\R-301XS-200.DWG - Layout1

HV005



DATE	REVISION	BY

**HAVANA REGIONAL AIRPORT  
 HAVANA, ILLINOIS**

A.I.P. PROJ.: 3-17-0133-B12  
 IL PROJ.: 90-4104

Hanson Project No. 808-08A0206D	5/2/11
Filename R-301XS-200.DWG	LDH
Scale 1:20	LDH
Date 6/10/11	CAH
LAYOUT	REVIEWED
DRAWN	



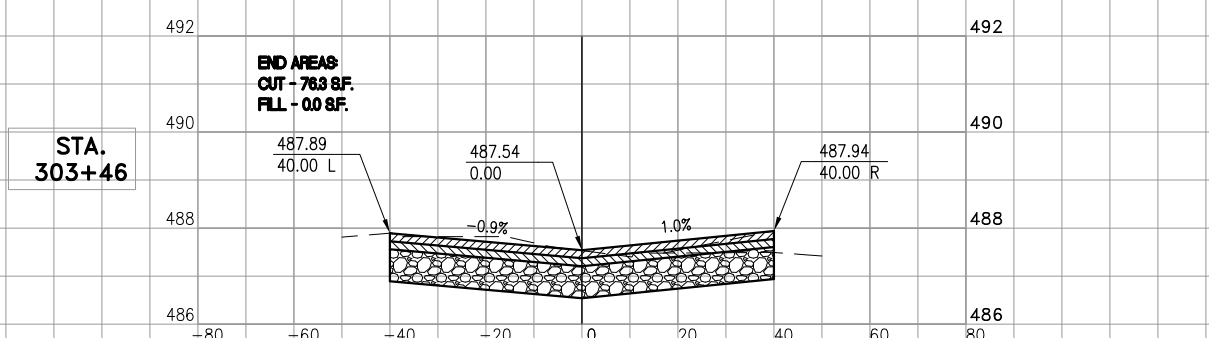
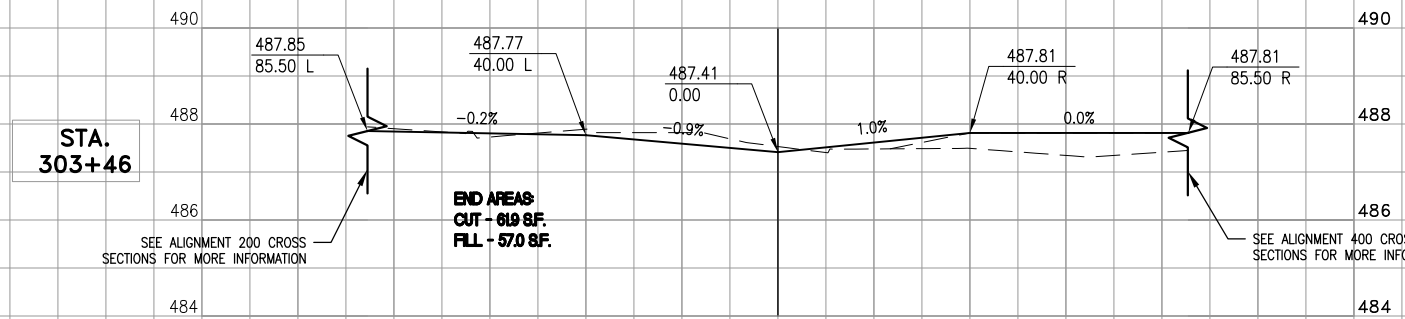
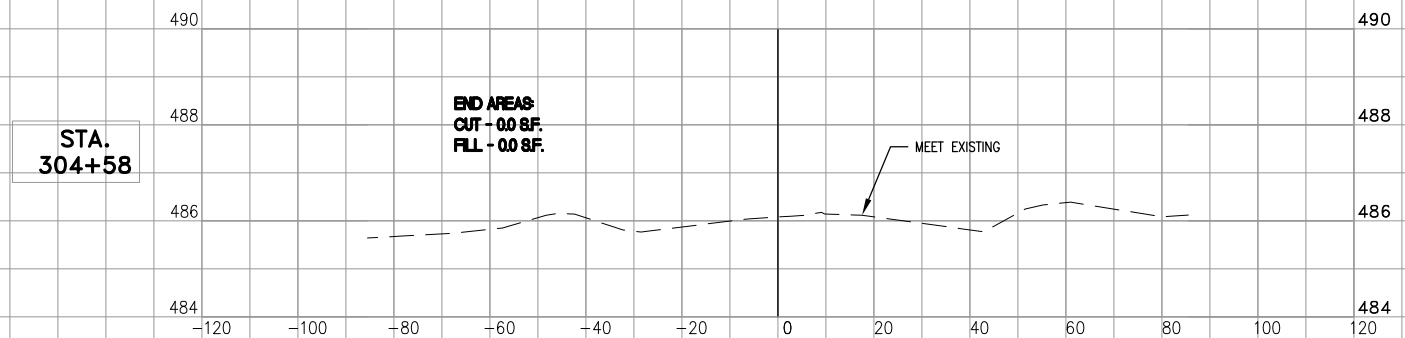
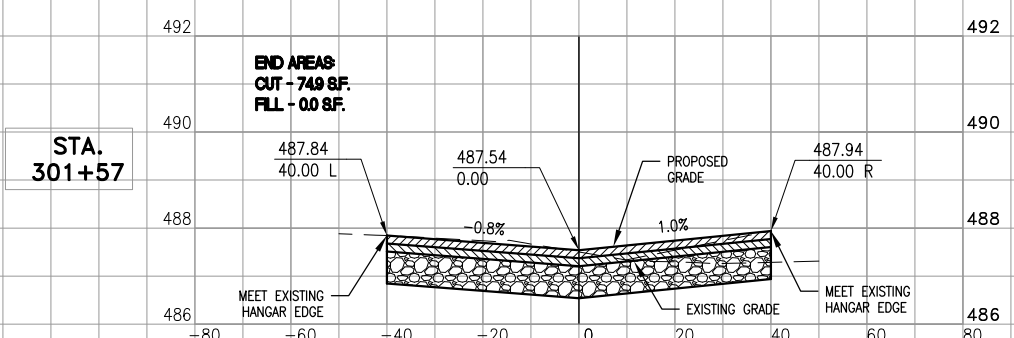
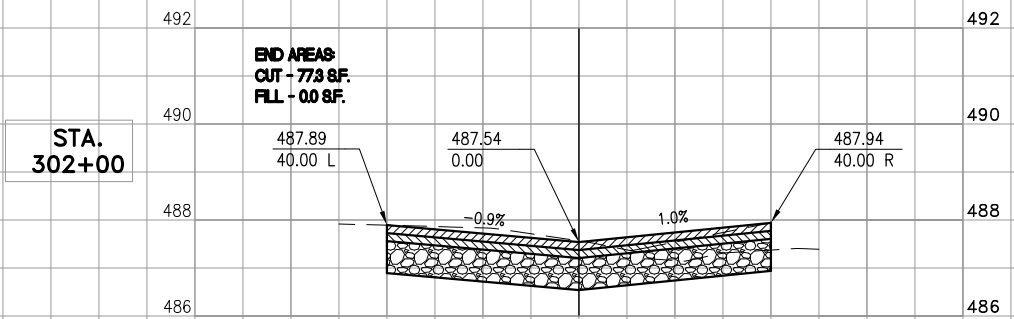
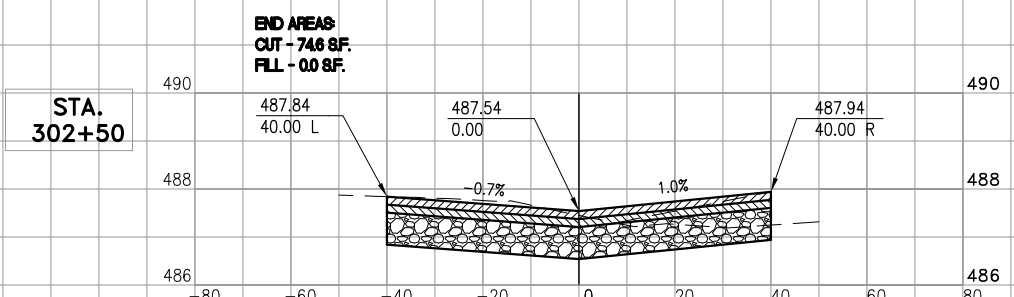
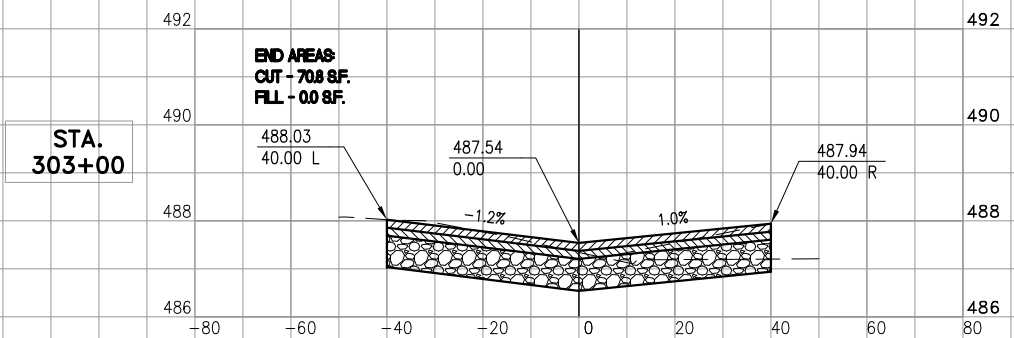
Hanson Professional Services Inc.  
 1625 South State Street  
 Springfield, IL 62761  
 Offices Nationwide

**T-HANGAR PAVEMENTS  
 AND ACCESS ROAD**

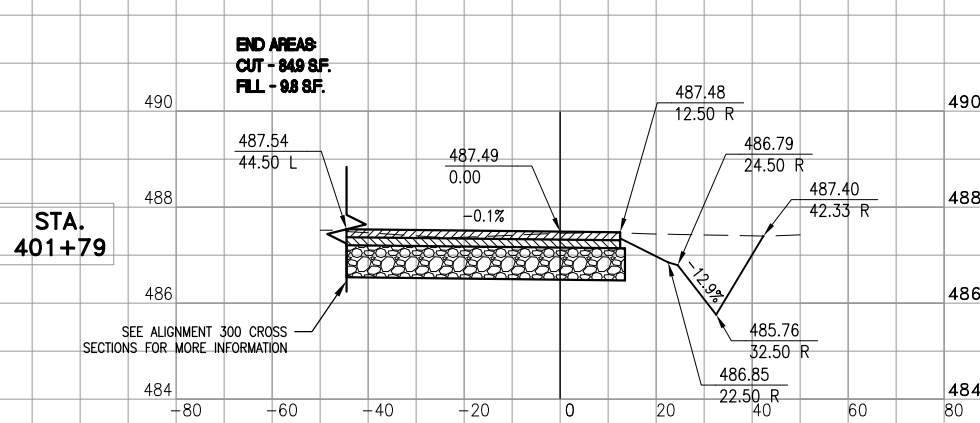
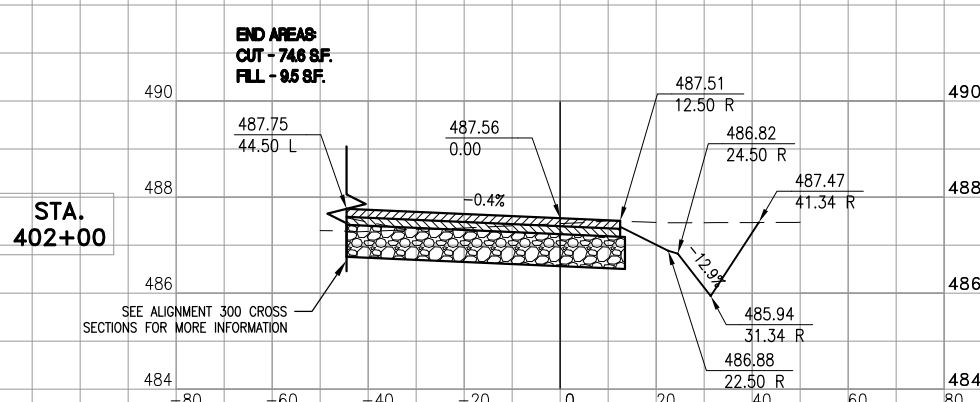
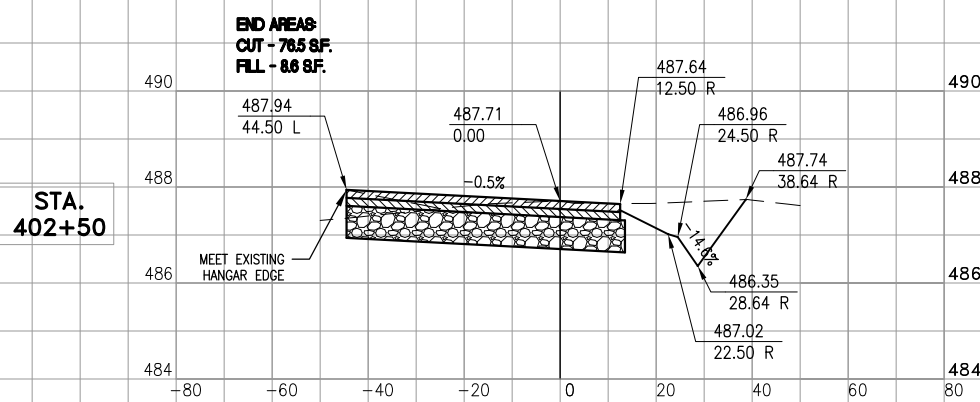
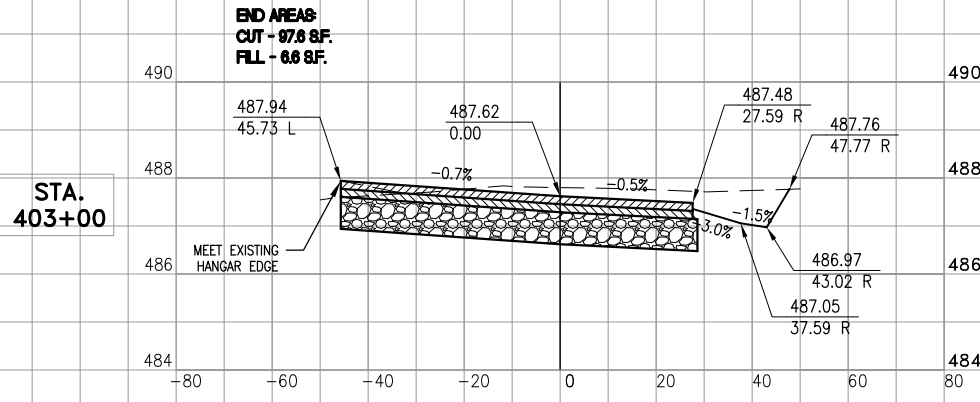
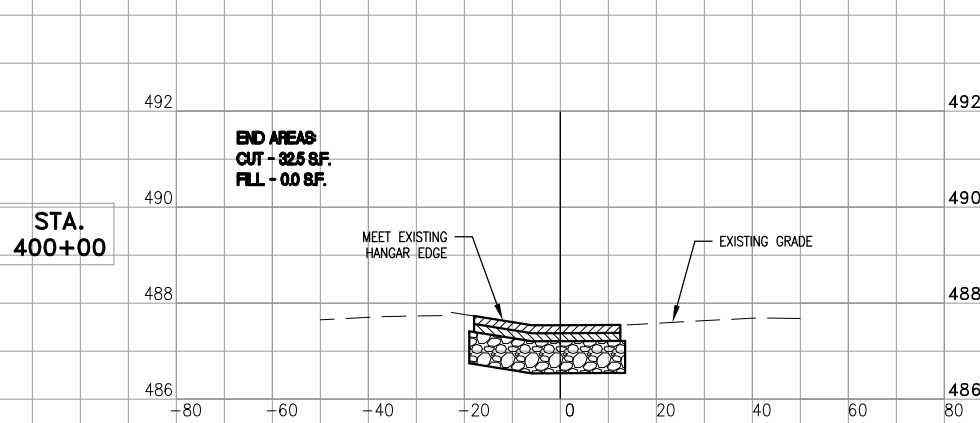
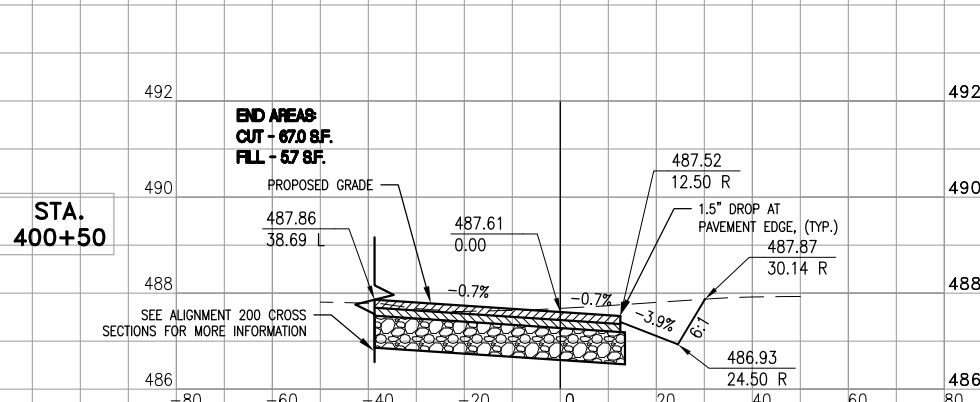
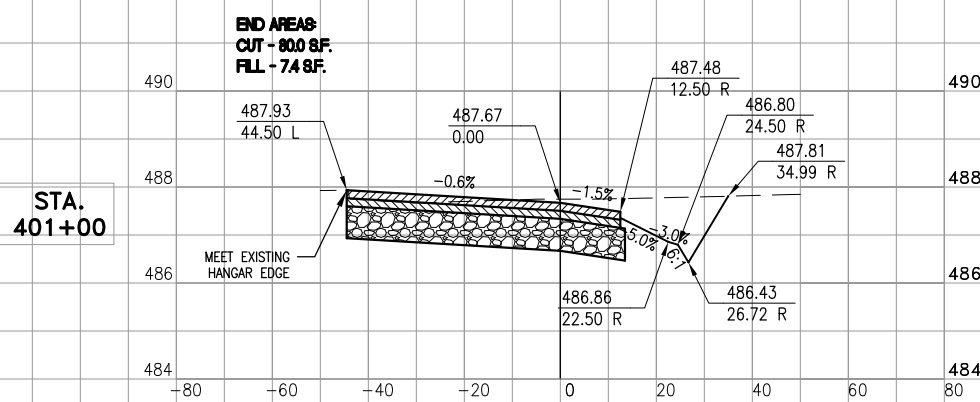
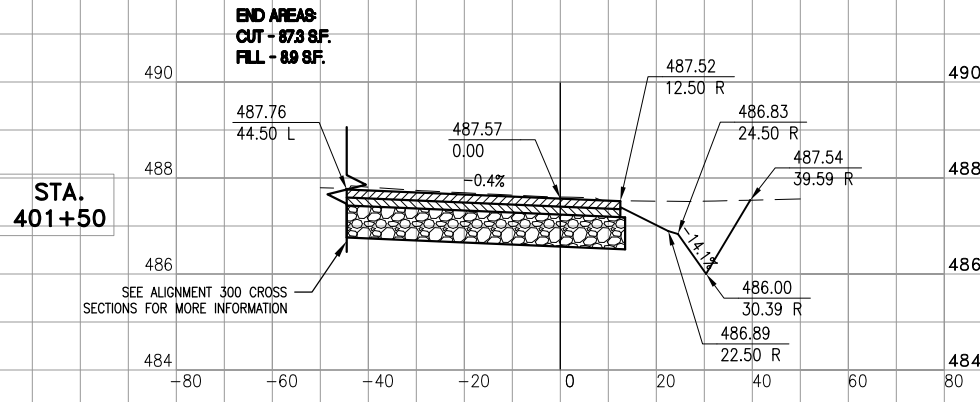
CROSS SECTIONS  
 ALIGNMENT 200




JUN 06, 2011 12:16 PM HAU5M00682  
 I:\AIRPORTS\HAVANA\08A0206D\CADD\AIRPORT\SHEET\R-301XS-300.DWG - Layout1



BY	
REVISION	
DATE	
<b>HAVANA REGIONAL AIRPORT HAVANA, ILLINOIS</b>	
A.I.P. PROJ.: 3-17-0133-B12 IL. PROJ.: 90-4104	
Hanson Project No. 808-08A0206D	Date: 6/10/11
Filename: R-301XS-300.DWG	Scale: 1:20
LAYOUT	LDH
DRAWN	LDH
REVIEWED	CAH
5/2/11	5/2/11
5/2/11	5/23/11
<b>HANSON</b> Hanson Professional Services Inc. 1626 South Main Street Springfield, IL 62703-2886 Offices Nationwide	
<b>T-HANGAR PAVEMENTS AND ACCESS ROAD</b>	
CROSS SECTIONS ALIGNMENT 300	
<b>17</b>	
17 of 24 sheets	



BY	
REVISION	
DATE	
<b>HAVANA REGIONAL AIRPORT HAVANA, ILLINOIS</b>	
A.I.P. PROJ.: 3-17-0133-B12 IL PROJ.: 90-4104	
Hanson Project No. 808-08A0206D	5/3/11
Filename R-301XS-400.DWG	LDH
Scale 1:20	LDH
Date 6/10/11	CAH
LAYOUT	REVIEWED
DRAWN	



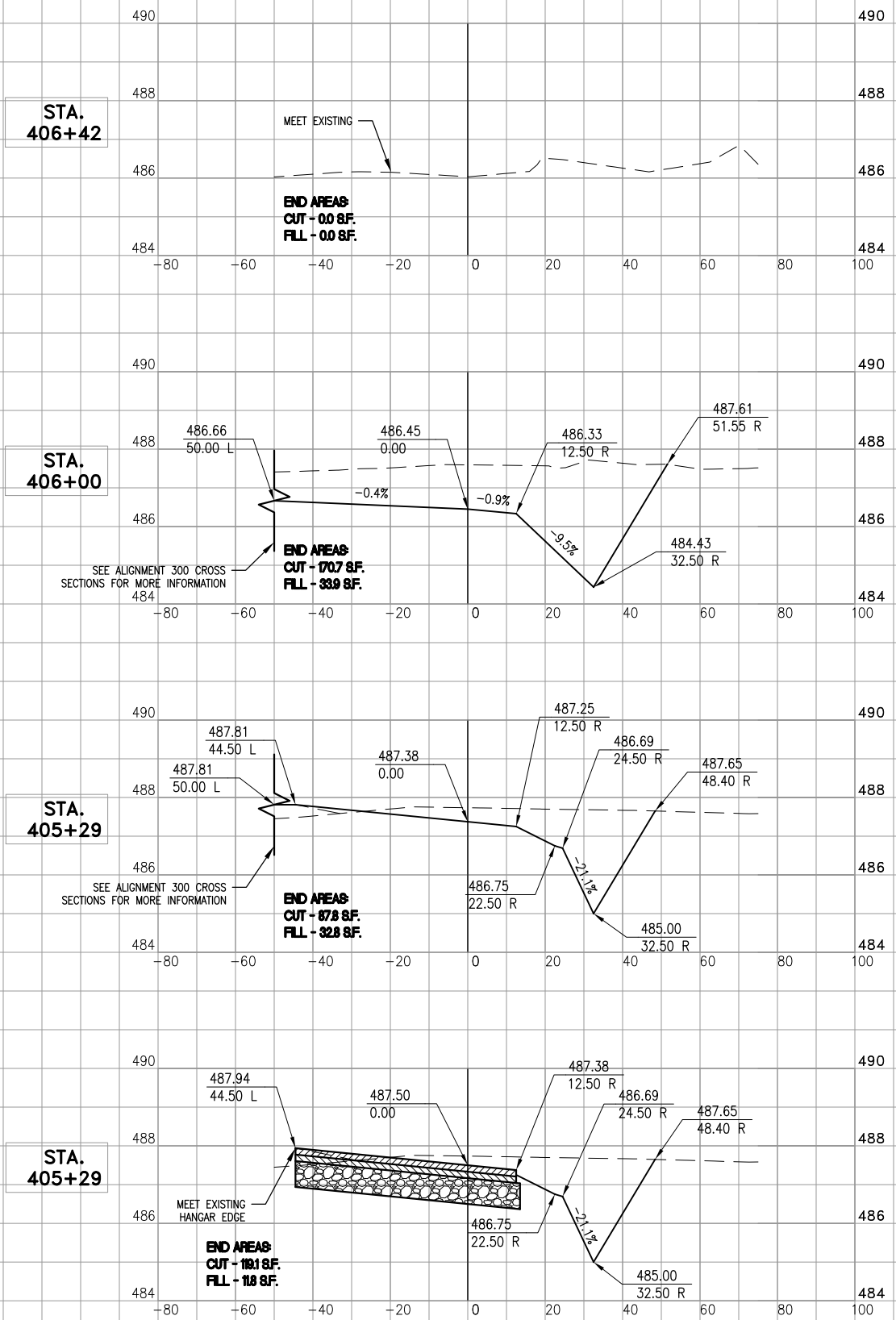
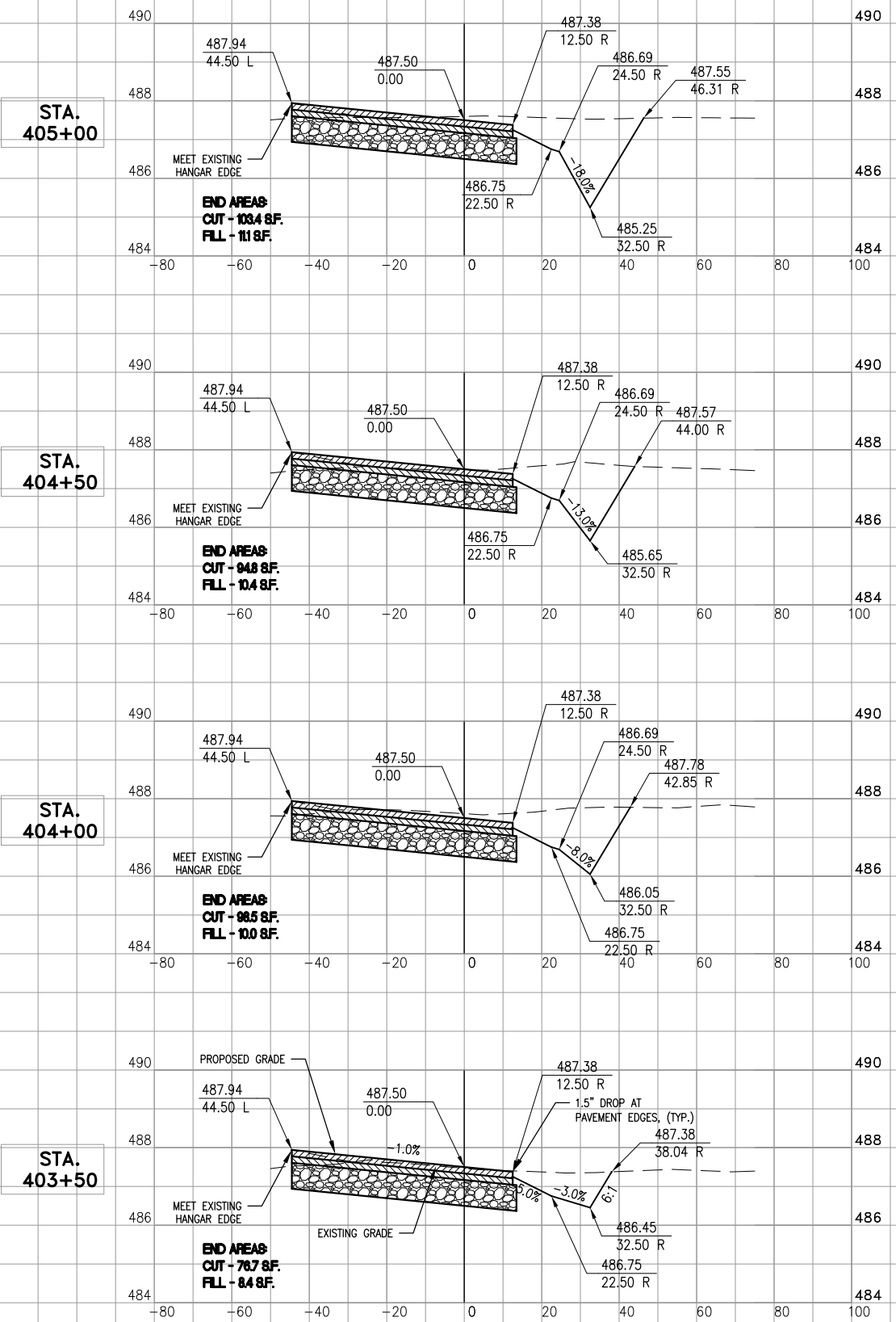
Hanson Professional Services Inc.  
 1626 South State Street  
 Springfield, IL 62703-2886  
 Offices Nationwide

<b>T-HANGAR PAVEMENTS AND ACCESS ROAD</b>	<b>CROSS SECTIONS ALIGNMENT 400</b>
---	---

**18**

18 of 24 sheets

JUN 06, 2011 12:21 PM HAU5M00682  
 I:\AIRPORTS\HAVANA\08A0206D\CADD\AIRPORT\SHEET\R-302XS-400.DWG - Layout1



DATE	REVISION	BY

**HAVANA REGIONAL AIRPORT  
 HAVANA, ILLINOIS**  
 A.I.P. PROJ.: 3-17-0133-B12  
 I.L. PROJ.: 90-4104

Hanson Project No. 808-08A0206D	5/3/11
Filename R-302XS-400.DWG	LDH
Scale 1:20	LDH
Date 6/10/11	CAH
LAYOUT	REVIEWED
DRAWN	



**T-HANGAR PAVEMENTS  
 AND ACCESS ROAD**  
 CROSS SECTIONS  
 ALIGNMENT 400

STORM SEWER SCHEDULE

Structure	Station	Offset	Type	Rim El.	Invert El.	Pay Length	Size	Type	Slope %
S1	300+80.00	0.0'	FES	---	485.76				
S2	301+00.00	0.0'	Connection to Slotted Drain	---	485.70	18.5	12.0	CMP	0.32
S3	303+46.00	0.0'	Connection to CMP	---	484.96	246.0	12.0	12" Slotted Drain	0.30
S4	303+61.00	0.0'	Inlet	486.75	484.90 S 484.85 N	14.5	12.0	CMP	0.41
S5	304+65.27	0.0'	Outlet	---	484.50	104.0	12.0	PVC	0.34
S6	504+88.10	38.0' R	FES	---	483.40	64.0	36.0	RCP	0.31
S7	504+87.01	38.0' L	FES	---	483.20	64.0	36.0	RCP	0.31
S8	504+81.10	38.0' R	FES	---	483.20	64.0	36.0	RCP	0.31
S9	504+80.01	38.0' L	FES	---	483.00	64.0	36.0	RCP	0.31
S10	614+39.77	34.17' R	FES	---	M.E	56.0	36.0	RCP	---
S11	614+40.20	33.87' L	FES	---	M.E	56.0	36.0	RCP	---
S12	614+32.78	33.87' R	FES	---	M.E	56.0	36.0	RCP	---
S13	614+33.20	34.17' L	FES	---	M.E	56.0	36.0	RCP	---

UNDERDRAIN SCHEDULE

Structure	Station	Offset	Type	Rim El.	Invert El.	Pay Length	Slope %
U1	202+50.32	96.50 LT	Clean Out	487.18	485.88	157.9	0.30
U2	230+47.50	14.00 LT	Inspection Hole	487.22	485.41	153.1	0.30
U3a	303+61.00	0.00	Connection to Inlet	---	484.95		
U5	403+87.09	14.00 RT	Clean Out	487.17	485.84	143.8	0.30
U4	405+30.84	14.00 RT	Inspection Hole	487.17	485.41	153.1	0.30
U3b	303+61.00	0.00	Connection to Inlet	---	484.95		

- 12" PVC STORM SEWER SHALL BE PAID FOR UNDER AR701012 12" PVC STORM SEWER \_\_\_\_\_ PER LINEAR FOOT
- 12" CMP PIPE SHALL BE PAID FOR UNDER AR701212 12" CMP \_\_\_\_\_ PER LINEAR FOOT
- 36" RCP, CLASS IV PIPE SHALL BE PAID FOR UNDER AR701536 36" RCP, CLASS IV \_\_\_\_\_ PER LINEAR FOOT
- 6" PERFORATED UNDERDRAIN SHALL BE PAID FOR UNDER AR705506 6" PERFORATED UNDERDRAIN \_\_\_\_\_ PER LINEAR FOOT
- UNDERDRAIN INSPECTION HOLE SHALL BE PAID FOR UNDER AR705630 UNDERDRAIN INSPECTION HOLE \_\_\_\_\_ PER EACH
- UNDERDRAIN CLEANOUT SHALL BE PAID FOR UNDER AR705640 UNDERDRAIN CLEANOUT \_\_\_\_\_ PER EACH
- INLET TYPE A SHALL BE PAID FOR UNDER AR751411 INLET - TYPE A \_\_\_\_\_ PER EACH
- 12" METAL END SECTION SHALL BE PAID FOR UNDER AR752212 METAL END SECTION 12" \_\_\_\_\_ PER EACH
- 36" PRECAST REINFORCED CONCRETE FES SHALL BE PAID FOR UNDER AR752436 PRECAST REINFORCED CONC. FES 36" \_\_\_\_\_ PER EACH

REVISION	DATE	BY

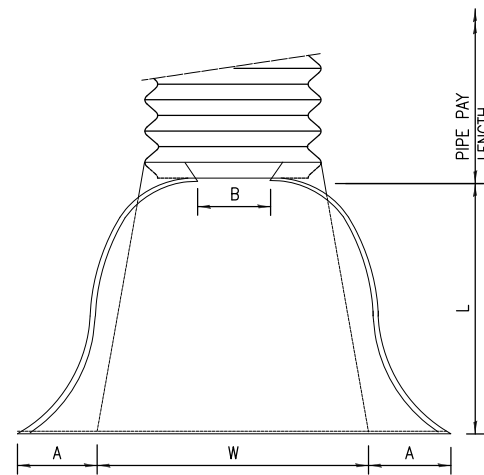
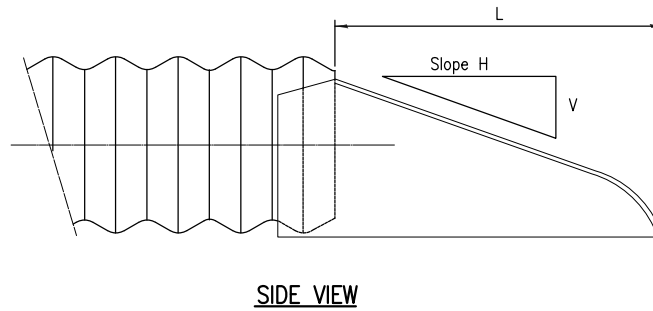
HAVANA REGIONAL AIRPORT  
HAVANA, ILLINOIS  
A.I.P. PROJ.: 3-17-0133-B12  
IL PROJ.: 910-4104

Hanson Project No. 808-08A0206D	4/28/11
Filename R-531DRN.DWG	4/28/11
Scale N/A	5/23/11
Date 6/10/11	
LAYOUT LDH	
DRAWN LDH	
REVIEWED CAH	

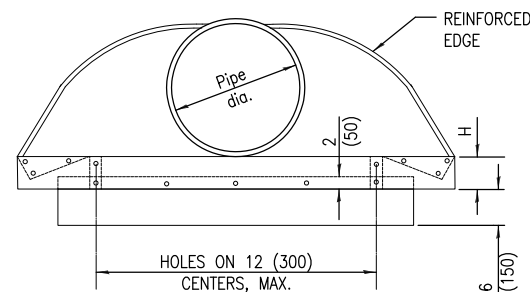


T-HANGAR PAVEMENTS AND ACCESS ROAD  
DRAINAGE SCHEDULES

PIPE DIA.	THICKNESS	DIMENSIONS					SLOPE (Approx.) (V:H)	BODY
		A	B	H	L	W		
12 (300)	0.064 (1.63)	1 +/- (25)	6 (max.) (150)	1 +/- (25) (150)	1.5 +/- (38) (535)	2 +/- (50) (610)	1:2 1/2	1 Pc.

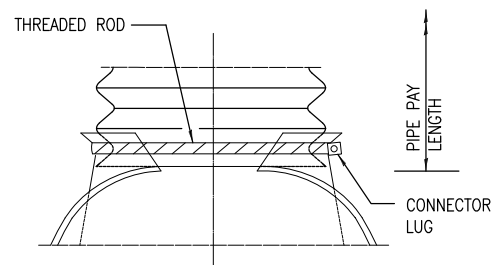


PLAN



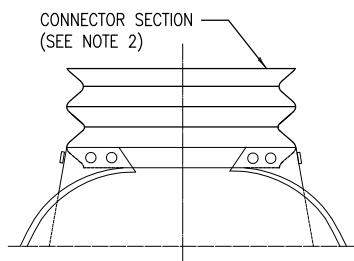
END VIEW

END SECTION



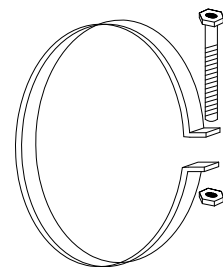
TYPE 1

FOR 12" THRU 24" ONLY (SEE NOTE 1)



TYPE 3

(SEE NOTE 2)

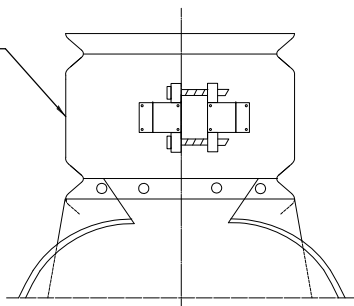


1 (25) WIDE, 0.109 (2.77) THICK STRAP WITH STANDARD 1/2 X 6 (M12X150) BAND BOLT AND NUT.

ALTERNATE STRAP CONNECTOR

(FOR TYPE 1 ONLY)

BAND SHOP BOLTED TO END SECTION WITH 3/8 (M10) BOLTS.



TYPE 4

(SEE NOTE 3)

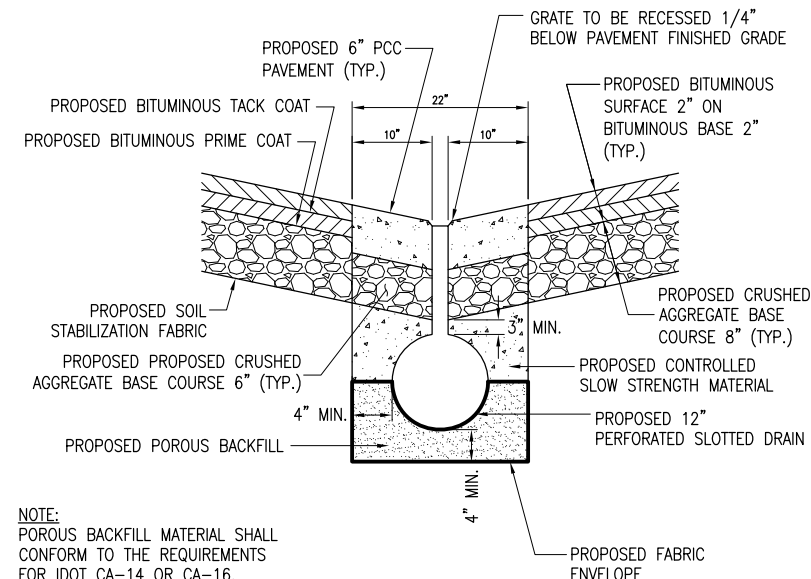
NOTES

TYPES 1 AND 2 FOR PIPES WITH ANNULAR ENDS ONLY.

TYPE 3 CONNECTION MAY BE USED FOR ALL PIPE SIZES AND INCLUDES 12 (300) OF THE PIPE LENGTH. THE CONNECTOR SECTION SHALL BE ATTACHED TO THE END SECTION BY RIVETS OR BOLTS AND SHALL BE THE SAME METAL THICKNESS AS THE END SECTION. STUB SHALL BE EITHER 2 2/3 (68) PITCH X 1/2 (13) DEPTH OR 3 (75) PITCH X 1 (25) DEPTH ANNULAR CORRUGATED PIPE.

TYPE 4 CONNECTION CAN BE USED FOR ALL PIPE SIZES. COUPLER SHALL BE 2 2/3 X 1/2 (68X13) DIMPLE, HUGGER, OR ANNULAR BAND OF 3X1 (75X25). THE DIMPLE, HUGGER, OR ANNULAR BAND MAY BE USED WITH CORRUGATED METAL PIPES HAVING ANNULAR ENDS. FOR CORRUGATED METAL PIPES HAVING HELICAL ENDS, ONLY THE DIMPLE BAND WILL BE ALLOWED.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.



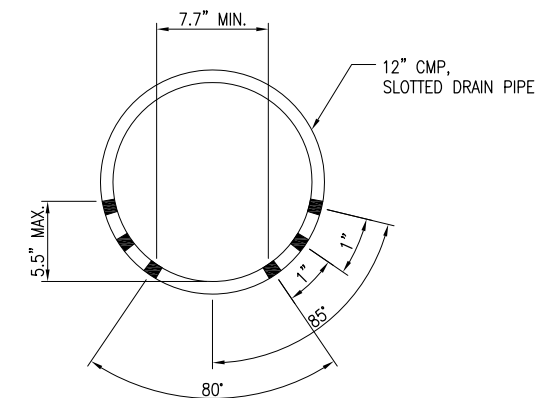
SLOTTED DRAIN DETAIL

NOT TO SCALE

SLOTTED DRAIN NOTE

ALL MATERIAL ASSOCIATED WITH THE PROPER INSTALLATION OF THE PROPOSED SLOTTED DRAIN IS TO BE INCLUDED IN THE BID UNIT PRICE. THIS INCLUDES CONCRETE, AGGREGATE, CONTROLLED LOW STRENGTH MATERIAL, POROUS BACKFILL, FABRIC ENVELOPE, AND PERFORATED SLOTTED DRAIN PIPE.

THE PROPOSED 6" PCC PAVEMENT SHALL BE IN CONFORMANCE WITH ITEM 610 OF THE SPECIFICATIONS.



SLOTTED DRAIN PIPE PERFORATION DETAIL

NOT TO SCALE

NOTE

THERE SHALL BE A MINIMUM OF 6 ROWS OF PERFORATIONS. THE NUMBER OF PERFORATIONS PER FOOT IN EACH ROW AND INLET AREA IS DEPENDENT UPON CORRUGATION PITCH.

REVISION	DATE	BY

HAVANA REGIONAL AIRPORT  
HAVANA, ILLINOIS

A.I.P. PROJ.: 3-17-0133-B12

IL PROJ.: 910-4104

Hanson Project No. 808-08A0206D	4/28/11
File Name R-532DRN.DWG	4/28/11
Scale N/A	5/23/11
Date 6/10/11	
LAYOUT LDH	
DRAWN LDH	
REVIEWED CAH	

Hanson Professional Services Inc.  
1626 South State Street  
Springfield, IL 62703-2886  
Offices Nationwide

T-HANGER PAVEMENTS  
AND ACCESS ROAD

DRAINAGE DETAILS

DATE	REVISION	BY

HAVANA REGIONAL AIRPORT  
HAVANA, ILLINOIS

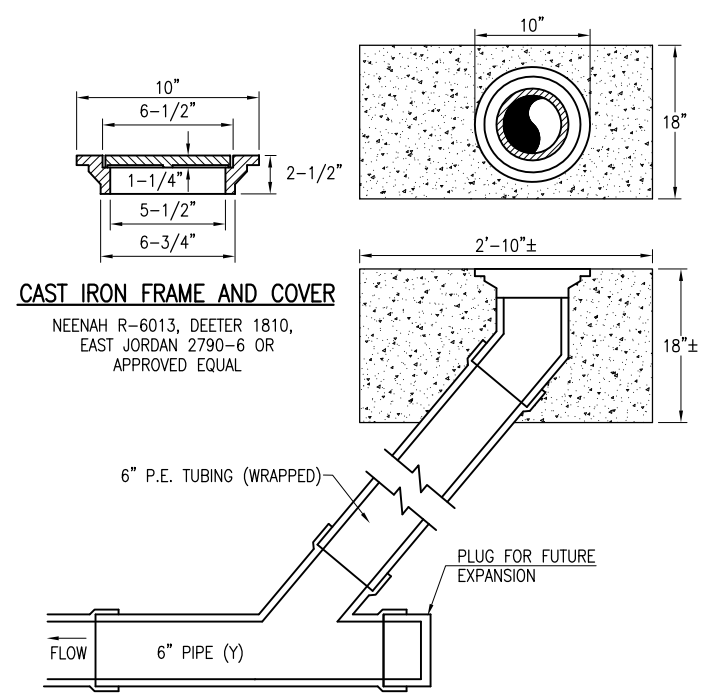
A.I.P. PROJ.: 3-17-0133-B12  
IL PROJ.: 910-4104

Hanson Project No. 808-08A0206D	LAYOUT	LDH	4/28/11
File Name R-533DRN.DWG	DRAWN	LDH	4/28/11
Scale N/A	REVIEWED	CAH	5/23/11
Date 6/10/11			



T-HANGAR PAVEMENTS AND ACCESS ROAD

DRAINAGE DETAILS



**CAST IRON FRAME AND COVER**  
NEENAH R-6013, DEETER 1810,  
EAST JORDAN 2790-6 OR  
APPROVED EQUAL

**CLEANOUT HOLE-TYPE B**

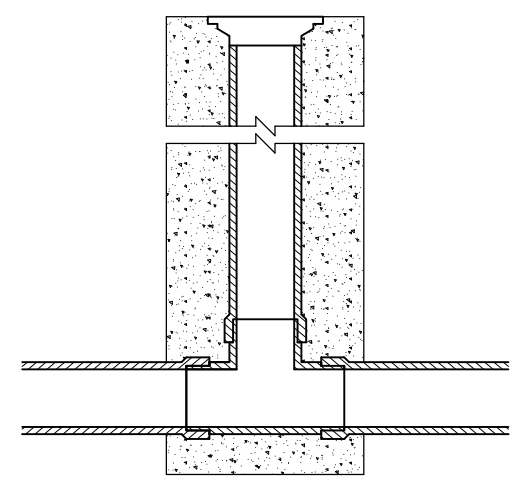
**INSPECTION HOLE NOTES**

DIAMETER OF PIPE AS SPECIFIED.

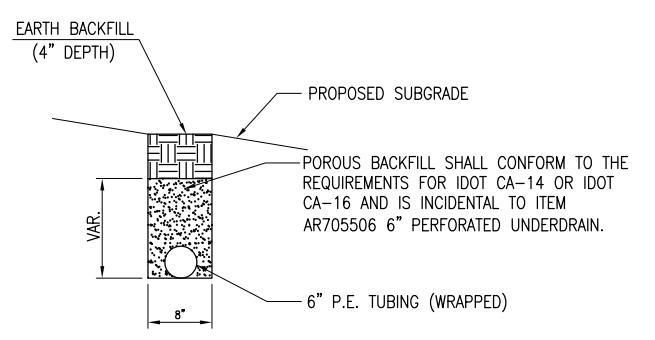
TOP OF INSPECTION HOLES SHALL BE 2" ABOVE FINISH GROUND LINE AT LOCATION SHOWN ON PLANS.

1/2" CHAMFER TO BE USED ON ALL EXPOSED EDGES OF INSPECTION HOLES.

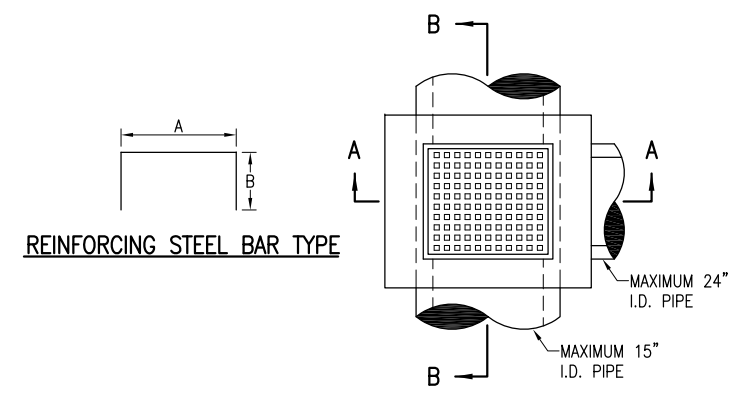
THE CONCRETE SHALL BE STRUCTURAL PORTLAND CEMENT CONCRETE (NON-REINFORCED)



**INSPECTION HOLE-TYPE A**



**UNDERDRAIN DETAIL**  
NOT TO SCALE



**REINFORCING BARS SCHEDULE**

TYPE	QUANTITY PER INLET	DIMENSIONS		SIZE	APPROX. WT. OF BARS IN INLET
		A	B		
A	2	3'-4"	2'-4"	#5	16.7

**INLET NOTES**

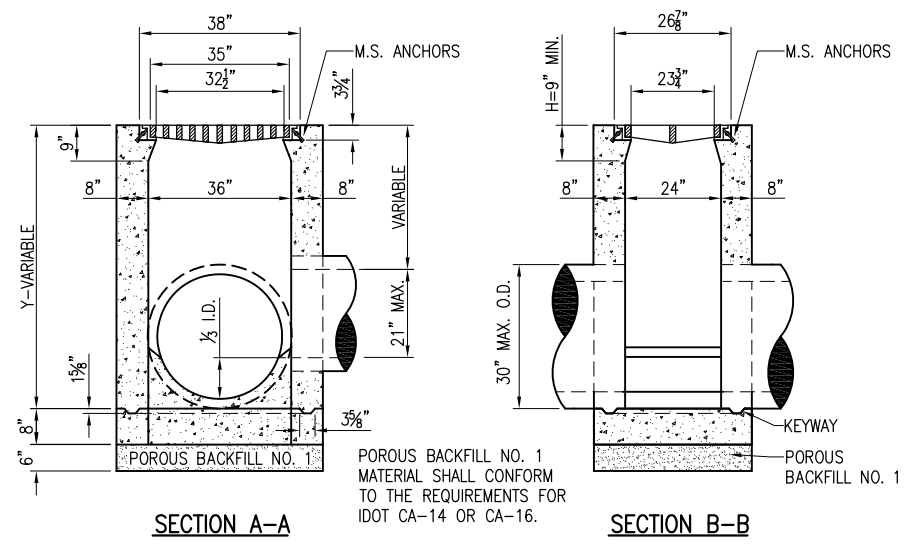
INLET TO BE CONSTRUCTED OF STRUCTURAL P.C. CONCRETE. THE CONTRACT UNIT PRICE PER INLET SHALL INCLUDE THE FRAME, GRATE AND STEPS IN PLACE AND COMPLETE PER UNIT.

1/2" CHAMFER TO BE USED ON ALL EXPOSED CORNERS OF INLETS. BARS TO BE INSTALLED 2" FROM FACE OF WALLS.

THE FRAME AND GRATE SHALL BE NEENAH R-3475-A, DEETER 2425-E.

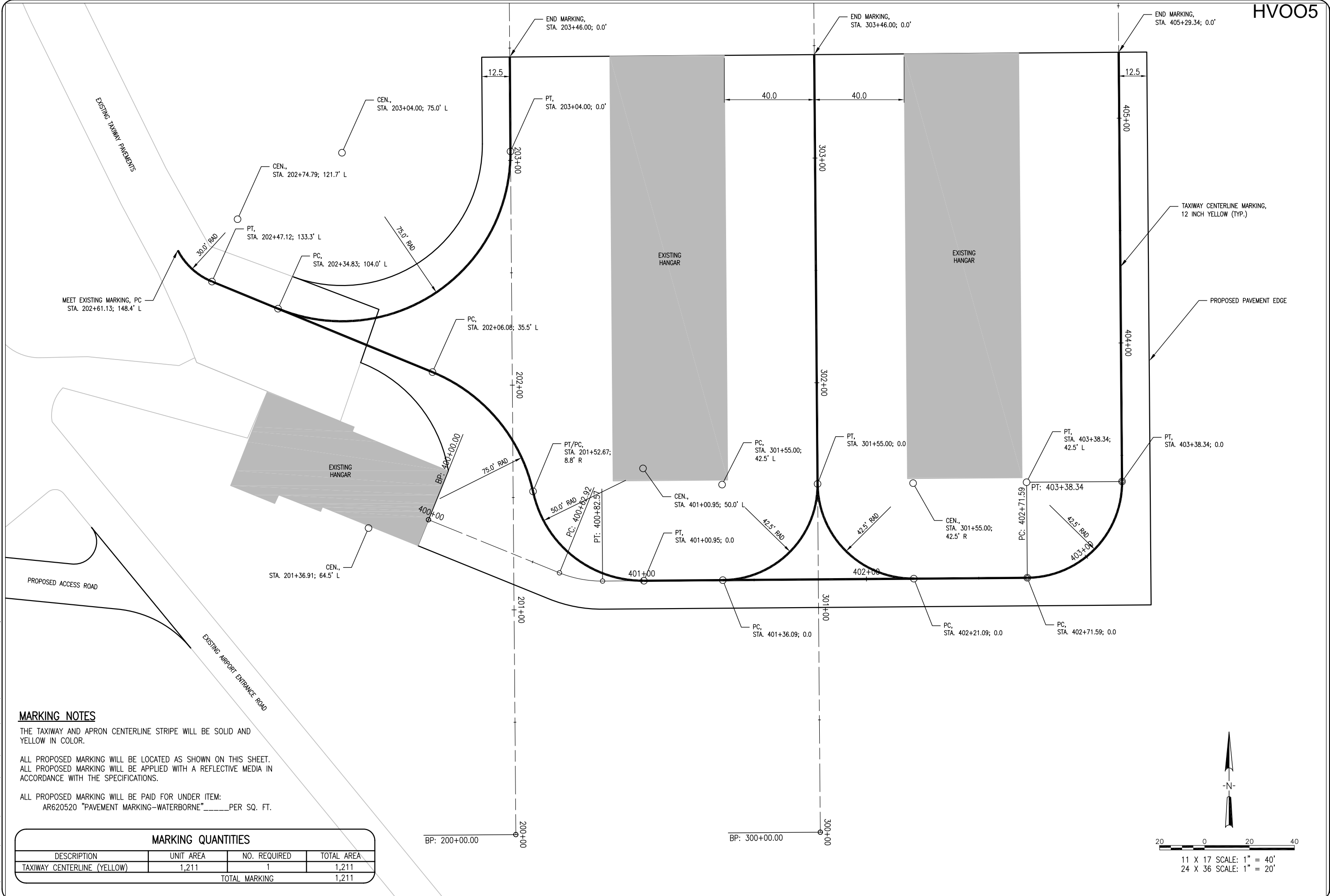
"H" SHALL BE EQUAL TO THE PROPOSED PAVEMENT THICKNESS AND NOT LESS THAN THE ATTACHED MINIMUMS. TYPE A \_\_\_\_\_ 9" MINIMUM.

INLET STEPS SHALL BE NEENAH R-1980-1, 12" TO 15" C.C. STEPS TO BE INSTALLED WHEN Y IS GREATER THAN 5' COST. THE COST OF THE STEPS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR EACH INLET.



**SECTION A-A**

**SECTION B-B**



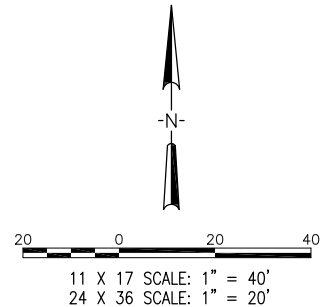
**MARKING NOTES**

THE TAXIWAY AND APRON CENTERLINE STRIPE WILL BE SOLID AND YELLOW IN COLOR.

ALL PROPOSED MARKING WILL BE LOCATED AS SHOWN ON THIS SHEET. ALL PROPOSED MARKING WILL BE APPLIED WITH A REFLECTIVE MEDIA IN ACCORDANCE WITH THE SPECIFICATIONS.

ALL PROPOSED MARKING WILL BE PAID FOR UNDER ITEM:  
AR620520 "PAVEMENT MARKING-WATERBORNE" \_\_\_\_\_PER SQ. FT.

MARKING QUANTITIES			
DESCRIPTION	UNIT AREA	NO. REQUIRED	TOTAL AREA
TAXIWAY CENTERLINE (YELLOW)	1,211	1	1,211
TOTAL MARKING			1,211



DATE	REVISION	BY

**HAVANA REGIONAL AIRPORT  
HAVANA, ILLINOIS**

IL PROJ.: 910-4104 A.I.P. PROJ.: 3-17-0133-B12

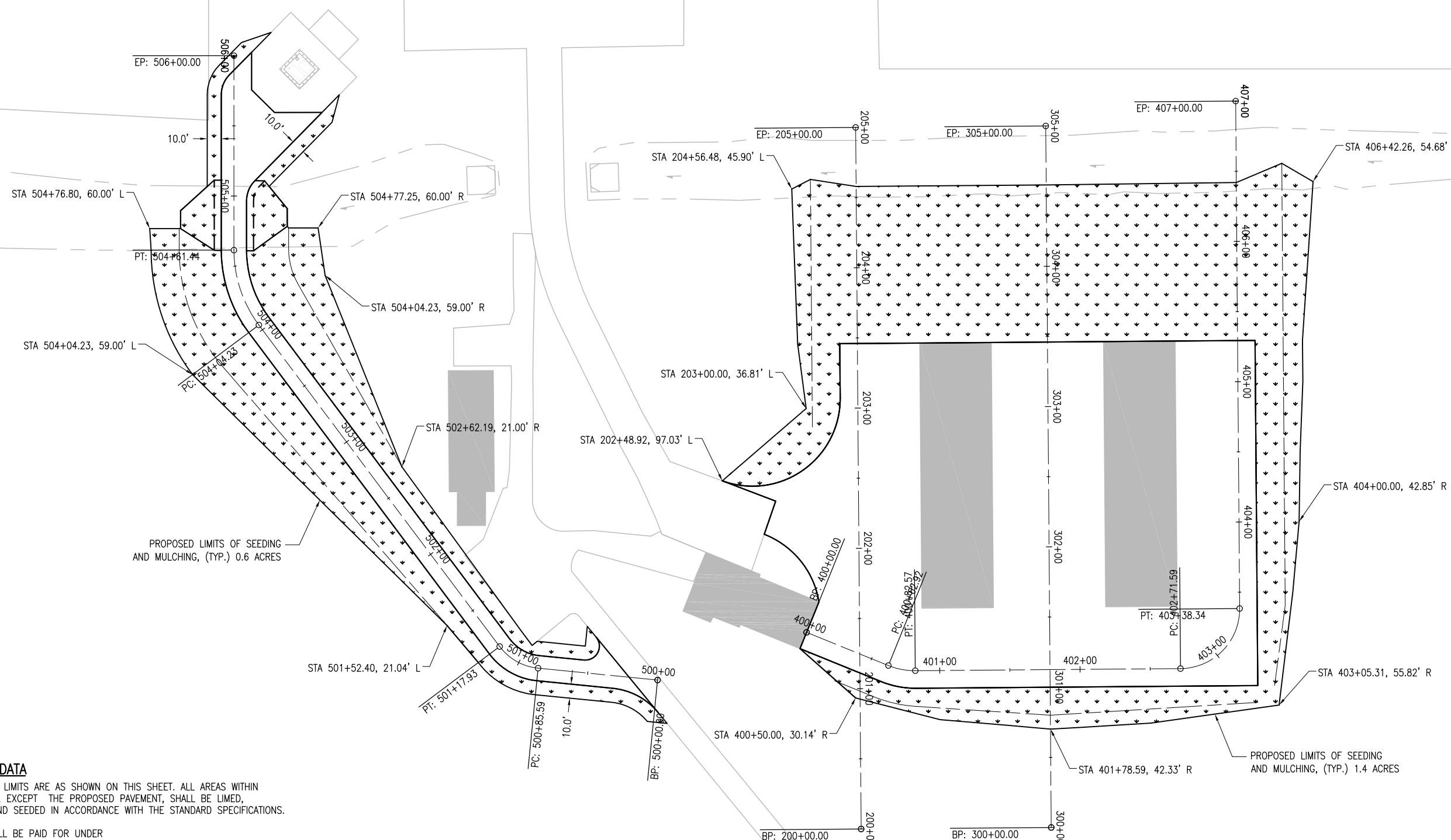
Hanson Project No. 808-08A0206D	LDH	4/29/11
Filename R-151MRK.DWG	LDH	4/29/11
Scale 1:20	CAH	5/23/11
Date 6/10/11		



**T-HANGAR PAVEMENTS AND ACCESS ROAD**

MARKING PLAN

JUN 06, 2011 12:14 PM HAU5M00682 I:\AIRPORTS\HAVANA\08A0206D\CADD\AIRPORT\_SHEET\R-151MRK.DWG - Layout1



**SEEDING DATA**

THE GRADING LIMITS ARE AS SHOWN ON THIS SHEET. ALL AREAS WITHIN THESE LIMITS, EXCEPT THE PROPOSED PAVEMENT, SHALL BE LIMED, FERTILIZED AND SEEDED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

SEEDING SHALL BE PAID FOR UNDER  
AR901510 SEEDING \_\_\_\_\_ PER ACRE

**MULCHING DATA**

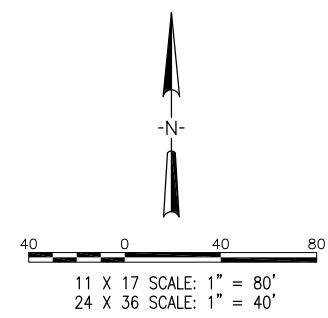
ALL EARTHEN AREAS WITHIN THE GRADING LIMITS WILL BE MULCHED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

MULCHING SHALL BE PAID FOR UNDER  
AR908510 MULCHING \_\_\_\_\_ PER ACRE

**TOPSOILING DATA**

4" TOPSOIL SHALL BE PLACED IN ALL EARTHEN AREAS WITHIN THE GRADING LIMITS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

TOPSOILING SHALL BE PAID FOR UNDER  
AR905510 TOPSOILING (FROM ON-SITE) \_\_\_\_\_ PER CUBIC YARD



REVISION	DATE	BY

**HAVANA REGIONAL AIRPORT  
HAVANA, ILLINOIS**

IL PROJ.: 910-4104 A.I.P. PROJ.: 3-17-0133-B12

Hanson Project No. 808-08A0206D	5/4/11
Filename R-181EC.DWG	LDH
Scale 1:40	LDH
Date 6/10/11	CAH
LAYOUT	5/23/11
DRAWN	5/23/11
REVIEWED	5/23/11



Hanson Professional Services Inc.  
1625 South Main Street  
Springfield, IL 62703-2886  
Offices Nationwide

**T-HANGAR PAVEMENTS  
AND ACCESS ROAD**

**LANDSCAPING PLAN**

JUN 06, 2011 12:13 PM HAU5M00682 I:\AIRPORTS\HAVANA\08A0206D\CADD\AIRPORT\SHEET\R-181EC.DWG - Layout1