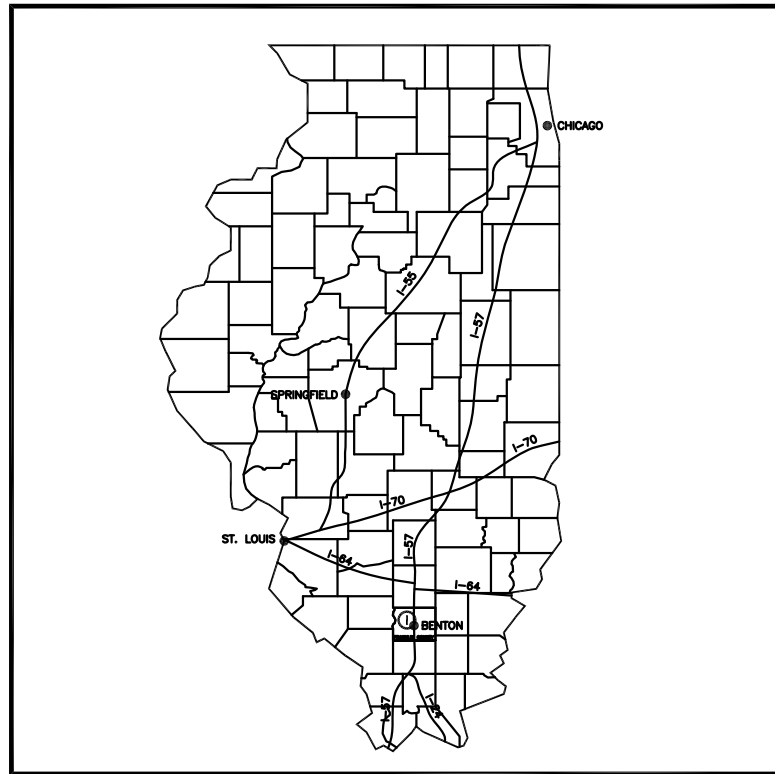


CONSTRUCTION PLANS

FOR

BENTON MUNICIPAL AIRPORT

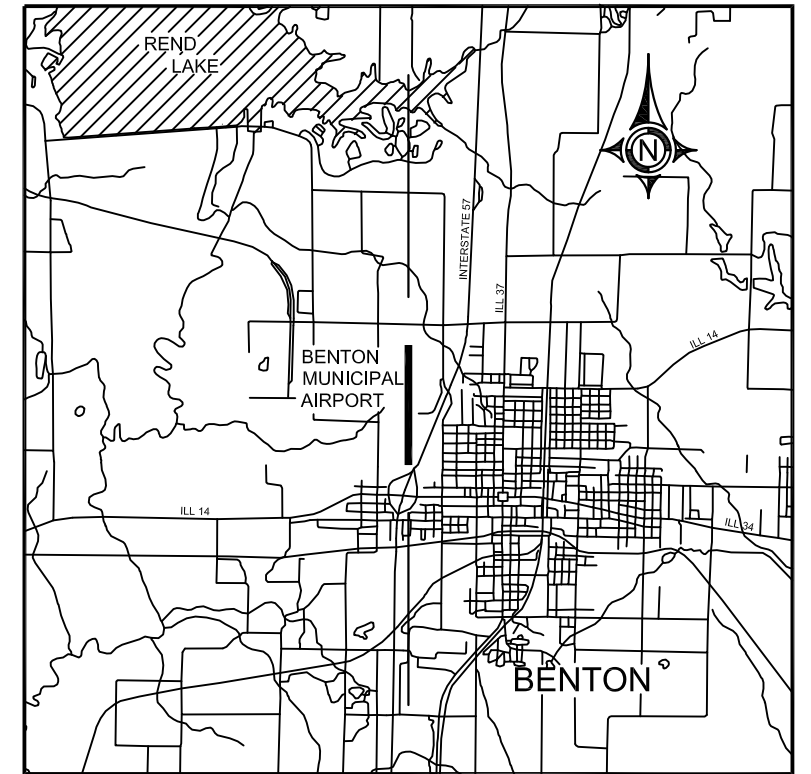
T-HANGAR APRON EXPANSION



LOCATION MAP

ILLINOIS PROJECT NUMBER: H96-4113
 AIP PROJECT NUMBER: 3-17-0005-B15

BENTON, ILLINOIS
 DATE: APRIL 27, 2012



VICINITY MAP

BROWN AND ROBERTS, INC.
 CONSULTING ENGINEERS
 PRESIDENT

SUBMITTED BY: *[Signature]*
 JIM W. BROWN, AS PRESIDENT

DATE SUBMITTED: 4/27/2012

LISC. NUMBER: 184-002518

LISC. EXP. DATE: APRIL 30, 2013

PLANS PREPARED BY:



BROWN AND ROBERTS, INC.
 1 WEST RIDGE ROAD
 HARRISBURG, IL. 62946
 (618) 252-8111

BENTON MUNICIPAL AIRPORT
 CHAIRMAN

APPROVED BY: *[Signature]*
 MICHAEL J. WYANT, CHAIRMAN

DATE: 4/27/2012

SUMMARY OF QUANTITIES

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>UNIT</u>	<u>QUANTITY</u>
AR152410	UNCLASSIFIED EXCAVATION	C.Y.	1,100
AR156510	SILT FENCE	L.F.	800
AR156514	DITCH CHECK	L.F.	80
AR156520	INLET PROTECTION	EACH	1
AR209510	CRUSHED AGGREGATE BASE COURSE	TON	1,100
AR401613	BITUMINOUS SURFACE COURSE - METHOD I, SUPERPAVE	TON	550
AR403613	BITUMINOUS BASE COURSE - METHOD I, SUPERPAVE	TON	550
AR602510	BITUMINOUS PRIME COAT	GAL	2,300
AR603510	BITUMINOUS TACK COAT	GAL	100
AR801257	DEMOLITION OF EXISTING HANGARS (4)	L.S.	1
AR901510	SEEDING	ACRE	2.2
AR908510	MULCHING	ACRE	2.2

INDEX TO SHEETS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
1	COVER SHEET
2	SUMMARY OF QUANTITIES
3	RUNWAY SAFETY PLAN
4	TYPICAL SECTIONS
5-6	STORMWATER POLLUTION PREVENTION PLAN
7	GENERAL SITE PLAN STORMWATER POLLUTION PREVENTION PLAN
8	DETAILED SITE PLAN
9-10	CROSS SECTIONS

SCOPE OF WORK

THE PROJECT SCOPE CONSISTS OF THE CONSTRUCTION OF A NEW HOT-MIX ASPHALT APRON AND OTHER NECESSARY AND RELATED WORK.

PROPOSED SAFETY PLAN

GENERAL- THE BENTON MUNICIPAL AIRPORT CURRENTLY HAS A PAVED NORTH-SOUTH RUNWAY (4000-FT BY 75-FT).

IT IS ANTICIPATED THAT RUNWAY 18-36 WILL REMAIN OPEN FOR THE DURATION OF THIS PROJECT, AS NO CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT WILL BE WITHIN 200' OF THE RUNWAY 18-36 CENTERLINE. ANY WORK WITHIN 200' OF THE CENTERLINE WILL REQUIRE CLOSURE OF THAT RUNWAY.

CONTRACTOR'S RESPONSIBILITIES

IDENTIFICATION- THE CONTRACTOR'S VEHICLES AND EQUIPMENT SHALL BE PROPERLY MARKED WITH 3-FOOT SQUARE INTERNATIONAL ORANGE AND WHITE CHECKERED FLAGS ANYTIME THEY ARE ON AIRPORT PROPERTY.

THE CONTRACTOR AND HIS EMPLOYEES SHALL BE RESTRICTED TO THE WORK AREA.

EQUIPMENT PARKING AND STORAGE- THE CONTRACTOR'S EQUIPMENT PARKING, STORAGE, AND EMPLOYEE PARKING WILL BE AT THE LOCATION SHOWN ON THIS SHEET. ONLY CONTRACTOR VEHICLES AND EQUIPMENT REQUIRED FOR CONSTRUCTION WILL BE ALLOWED OUTSIDE THIS AREA.

BARRICADES AND TRAFFIC CONES- IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE AND MAINTAIN BARRICADES AND TRAFFIC CONES AS REQUIRED AND AS DIRECTED BY THE RESIDENT ENGINEER. BARRICADES, THEIR MAINTENANCE, PLACEMENT, AND REMOVAL WILL BE CONSIDERED AS AN INCIDENTAL ITEM TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

THE CONTRACTOR WILL NOT BE ALLOWED ON ANY AIRPORT PAVEMENT. THE CONTRACTOR WILL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING PAVEMENTS CAUSED BY HIS PERSONNEL OR EQUIPMENT.

HAUL ROUTE AND EQUIPMENT PARKING

THE CONTRACTOR WILL USE THE DESIGNATED HAUL ROUTE AND EQUIPMENT PARKING AREA SHOWN ON THIS SAFETY PLAN. THE PROPOSED EQUIPMENT PARKING AREA WILL BE APPROXIMATELY 100-FT BY 200-FT. THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN THE PROPOSED HAUL ROUTE AND PARKING AREA THROUGHOUT THE COURSE OF THE PROJECT. AT THE CONCLUSION OF THE PROJECT, ALL AREAS DISTURBED WILL BE RESTORED AS NEEDED TO ITS ORIGINAL STATE. RESTORATION OF THE HAUL ROUTE AND EQUIPMENT PARKING AREA WILL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

UTILITY NOTE

THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES AND ORGANIZATIONS THAT HAVE LINES OR CONDUITS IN THE PROPOSED WORK AREA. ALL LINES AND CONDUITS SHALL BE LOCATED AND IDENTIFIED FOR DEPTH BEFORE ANY EXCAVATION BEGINS. THE CONTRACTOR SHALL CALL JULIE (1-800-892-0123) TO ACCOMPLISH THESE REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING ALL NON-JULIE UTILITIES AND AIRPORT UTILITIES LOCATED WITHIN THE PROPOSED CONSTRUCTION LIMITS. THESE UTILITIES ARE TO BE LOCATED PRIOR TO THE START OF CONSTRUCTION.

JULIE INFORMATION

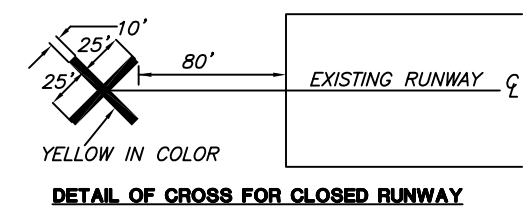
COUNTY.....FRANKLIN
 CITY.....BENTON
 TOWNSHIP.....BROWNING
 SECTION NO.....12 & 13
 NEAREST MAJOR ROAD INTERSECTION...RT 37 PETROFF RD.
 AIRPORT ADDRESS....BENTON MUNICIPAL AIRPORT
 P.O. BOX 158
 BENTON, IL. 62812

AIRPORT SECURITY

AIRPORT SECURITY WILL BE MAINTAINED AT ALL TIMES. THE PROPOSED HAUL ROUTE SHOWN ON THIS SAFETY PLAN IS THE ONLY ACCESS CONTRACTOR EQUIPMENT AND PERSONNEL WILL BE ALLOWED TO USE. THE CONTRACTOR SHALL PROVIDE BARRICADES AT THIS ACCESS AND ENSURE THE BARRICADES ARE IN PLACE AT THE END OF EACH WORKING DAY.

AIRCRAFT OPERATIONAL AREA

THE CONTRACTOR, HIS EMPLOYEES, OR ANY EQUIPMENT WILL NOT PROCEED WITH ANY WORK WITHIN THE AIRCRAFT OPERATIONAL AREA WITHOUT FIRST CLOSING THE RUNWAY.



NOTE:

THE COST OF CONSTRUCTING, PLACING, MAINTAINING, AND REMOVING CROSSES WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED. THE CROSSES WILL BE YELLOW IN COLOR AND SHALL BE MADE OF A SUITABLE MATERIAL AS APPROVED BY THE RESIDENT ENGINEER. THE CROSSES WILL BE PLACED AT THE ENDS OF THE RUNWAY AND SECURED IN A MANNER APPROVED BY THE RESIDENT ENGINEER. THE PROPOSED CROSSES WILL BE PLACED WHEN THE RUNWAY IS CLOSED AND REMOVED WHEN THE RUNWAY IS RE-OPENED. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE PLACEMENT AND REMOVAL OF THE CROSSES AT NO ADDITIONAL COST TO THE CONTRACT.

RUNWAY CLOSURE PROCEDURES:

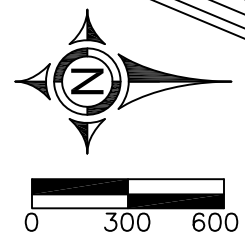
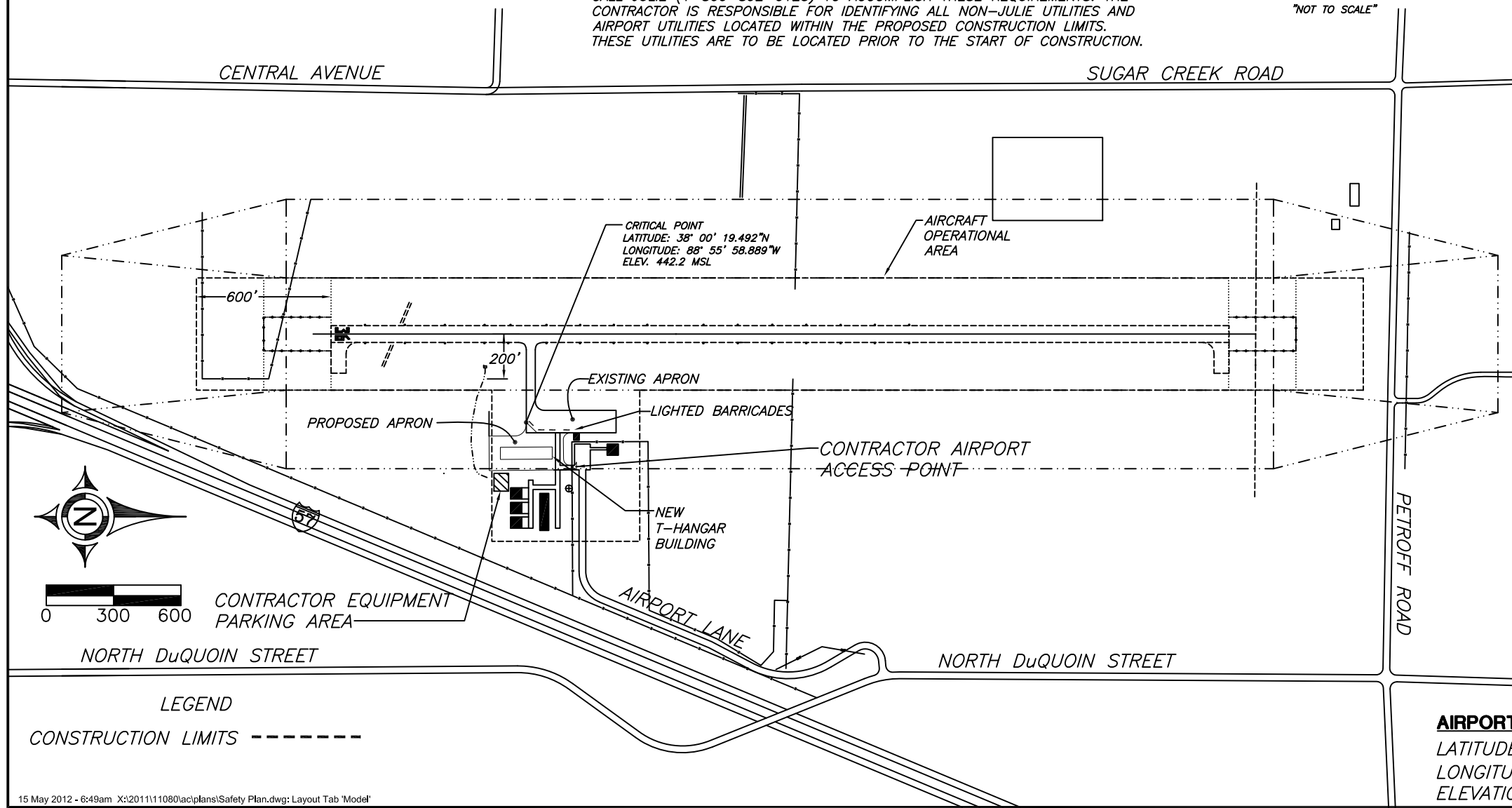
- * CONTACT THE AIRPORT MANAGER OR HIS ASSIGNED REPRESENTATIVE.
- * ISSUANCE OF NOTAM BY THE AIRPORT MANAGER OR HIS ASSIGNED REPRESENTATIVE.
- * PLACEMENT OF CROSSES (SEE DETAIL THIS SHEET).
- * PLACEMENT OF LIGHTED BARRICADES. ONLY AT THE TIME THAT ALL OF THE ABOVE ARE COMPLETED MAY ANY CONSTRUCTION OPERATIONS WITHIN 200-FT OF THE AFFECTED RUNWAY CENTERLINE AND WITHIN 600 FT OF THE RUNWAY END BEGIN.
- * RUNWAY LIGHTS SHALL BE DISABLED

RUNWAY RE-OPENING PROCEDURES:

- * REMOVE CROSSES.
- * REMOVE LIGHTED BARRICADES.
- * NOTIFY THE AIRPORT MANAGER OR HIS REPRESENTATIVE TO CANCEL THE NOTAM.
- * CANCELLATION OF THE NOTAM. A CLOSED RUNWAY WILL NOT BE RE-OPENED UNTIL ALL EQUIPMENT AND WORK ARE FURTHER THAN 200 FT. FROM THE AFFECTED RUNWAY CENTERLINE
- * RUNWAY LIGHTS SHALL BE REACTIVATED.

HEIGHT OF CONSTRUCTION EQUIPMENT

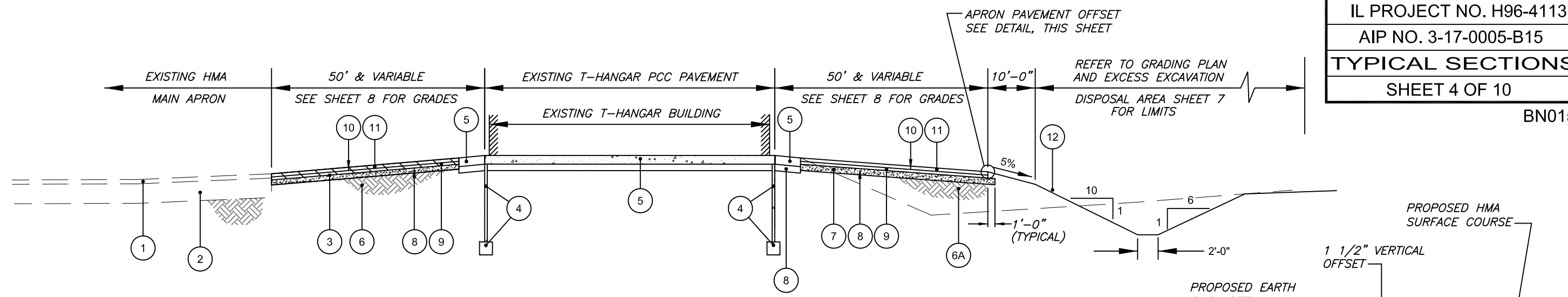
THE MAXIMUM ANTICIPATED HEIGHT OF THE CONSTRUCTION EQUIPMENT IS 20 FEET. THE TALLEST EQUIPMENT IS EXPECTED TO BE SEMI TRAILER IN THE UP POSITION.



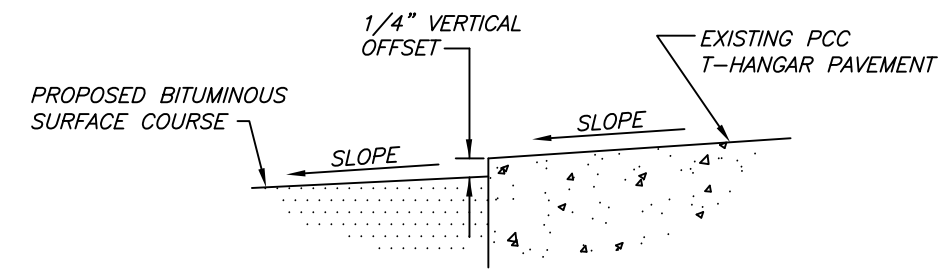
LEGEND
 CONSTRUCTION LIMITS - - - - -

AIRPORT REFERENCE POINT:
 LATITUDE: 38° 00' 24.334"N
 LONGITUDE: 88° 56' 03.910"LN
 ELEVATION: 444 MSL

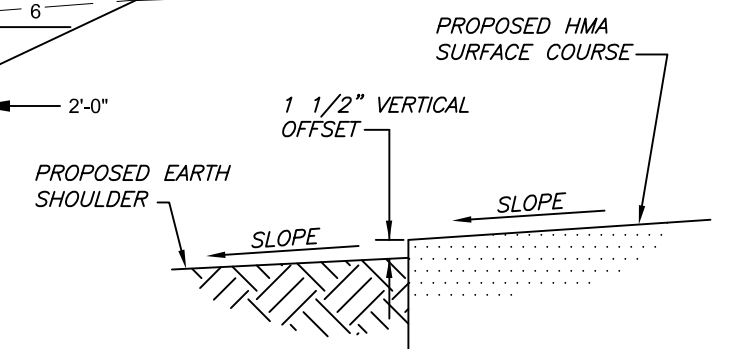
BN015



TYPICAL SECTION (EAST - WEST)
 NO SCALE



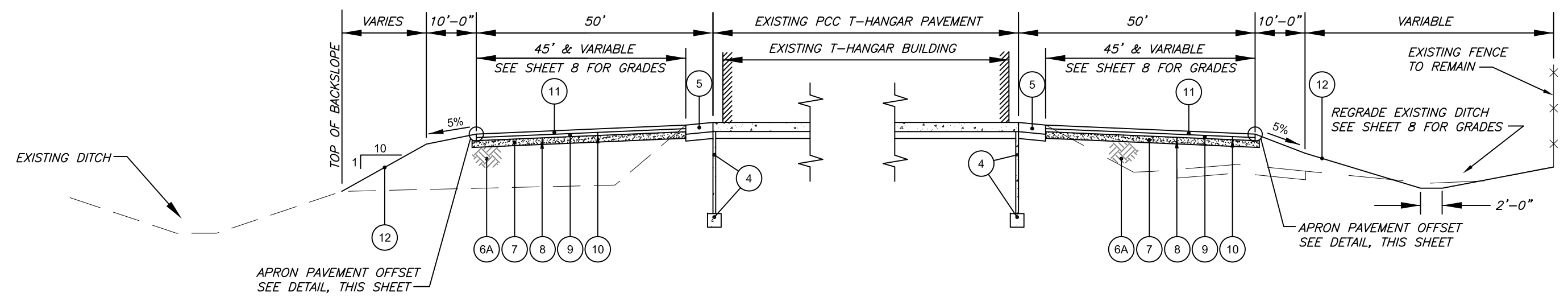
T-HANGAR PAVEMENT OFFSET DETAIL
 NO SCALE



APRON PAVEMENT OFFSET DETAIL
 NO SCALE

LEGEND

- | | | | |
|---|---|----|---|
| 1 | EXISTING BITUMINOUS SURFACE | 6A | AR152410 - PREPARED AND COMPACTED SUBGRADE |
| 2 | EXISTING AGGREGATE BASE | 7 | AR209510 - CRUSHED AGGREGATE BASE COURSE (4") |
| 3 | EXISTING CRUSHED AGGREGATE BASE COURSE (TO BE REMOVED AS UNCLASSIFIED EXCAVATION) | 8 | AR602510 - BITUMINOUS PRIME COAT |
| 4 | EXISTING STRUCTURAL PC CONCRETE | 9 | AR403613 - BITUMINOUS BASE COURSE - METHOD I, SUPERPAVE (2") |
| 5 | EXISTING PCC PAVEMENT | 10 | AR603510 - BITUMINOUS TACK COAT |
| 6 | EXISTING SUBGRADE TO REMAIN | 11 | AR401613 - BITUMINOUS SURFACE COURSE - METHOD I, SUPERPAVE (2") |
| | | 12 | GROUND RESTORATION (GRADING, SEEDING & MULCHING) |



TYPICAL SECTION (NORTH - SOUTH)
 NO SCALE

STORM WATER POLLUTION PREVENTION PLAN

The following Plan is established and incorporated in the project to direct the Contractor in the placement of temporary erosion control systems and to provide a storm water pollution prevention plan for compliance under NPDES.

The purpose of this plan is to minimize erosion within the construction site and to limit sediments leaving the construction site by utilizing proper temporary erosion control systems and providing ground cover within a reasonable amount of time.

Certain erosion control facilities shall be installed by the Contractor at the beginning of construction. Other items shall be installed as directed by the Engineer on a case by case situation depending on the Contractor's sequence of activities, time of year and expected weather conditions.

The Contractor shall construct permanent erosion control systems and seeding within a time frame specified herein and as directed by the Engineer, therefore minimizing the amount of area susceptible to erosion and reducing the amount of temporary seeding. The engineer will determine if any temporary erosion control systems shown in the plans can be deleted and if any additional temporary erosion control systems, which are not included in the plans, shall be added. The contractor shall perform all work as directed by the Engineer and as shown in STANDARD 280001-06.

Section 280, Temporary Erosion Control, of the Standard Specifications for Road and Bridge Construction additionally supplements this plan.

INTENDED SEQUENCE OF MAJOR CONSTRUCTION ACTIVITIES

1. Demolition of Existing Hangars.
2. Excavation and grading.
3. Placement of Aggregate Base Course.
4. Placement of HMA Pavement
5. Seeding and permanent erosion control systems.

AREA OF CONSTRUCTION SITE

1. The total area of the construction site is estimated to be 2.2 Acres of which approximately 2.2 Acres will be disturbed.

OTHER REPORTS, STUDIES AND PLANS WHICH AID IN THE DEVELOPMENT OF THE SWPPP AS REFERENCED DOCUMENTS.

1. Information of the terrain was obtained from topographic maps.
2. Project plan documents, specifications and special provisions and plan drawings indicating the drainage patterns and location of existing drainage features were utilized in the preparation of the proposed placement of temporary erosion control systems.

DRAINAGE TRIBUTARIES AND SENSITIVE AREAS RECEIVING RUNOFF


1. Proposed storm sewers are tributary to existing storm sewers. No new discharge points will be constructed.

CONTROLS - EROSION CONTROLS AND SEDIMENT CONTROLS

1. Existing vegetation will be preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices will include temporary seeding, permanent seeding, mulching, protection of trees, preservation of mature vegetation and other appropriate measures as directed by the Engineer. Stabilization measures shall be initiated as soon as practical in those areas of the site where construction activities have ceased, but in no case more than 7 days after the construction activity for an area has temporarily or permanently ceased.
2. Areas outside the construction limits shall be protected from construction activities.
3. Dead, diseased or unsuitable vegetation within the site shall be removed as directed by the Engineer.
4. As soon as is reasonable, the temporary erosion control system shall be installed as indicated in the plans or as directed by the engineer.

This plan has been prepared with the intent to comply with the provisions of the NPDES Permit Number ILR10, issued by the Illinois Environmental Protection Agency for storm water discharges from construction site activities.

I certify under penalty of law that this plan was prepared at my direction in accordance with a system that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.


Michael J. Wyant, Chairman
4/27/2012
Date

BENTON MUNICIPAL AIRPORT
IL PROJECT NO. H96-4113
AIP NO. 3-17-0005-B15
STORM WATER POLLUTION PREVENTION PLAN
SHEET 5 OF 10

BN015

DESCRIPTION OF STABILIZATION PRACTICES
DURING CONSTRUCTION

1. During construction, areas outside the construction limits shall be protected.
2. Within the construction limits, areas which may be susceptible to erosion as determined by the Engineer shall remain undisturbed until full scale construction is underway.
3. Earth stockpiles shall be temporary seeded if they are to remain unused for more than 14 days.
4. As soon as construction proceeds, the contractor shall institute the following as directed by the Engineer:
 - A) Place temporary erosion control facilities at locations shown in the plans.
 - B) Temporarily seed erodable bare earth on a weekly basis to minimize the amount of erodable surface area within the contract limits.
 - C) Provide temporary erosion control systems.
 - D) Temporarily divert water around proposed culvert locations.
5. Excavated areas shall be permanently seeded immediately after final grading. If not, they shall be temporarily seeded if no construction in the area is planned for 7 days.
6. All necessary measures shall be taken by the contractor to contain any fuel or pollutant in accordance with EPA water quality regulations. Leaking equipment or supplies shall be immediately repaired or removed from the site.
7. The Resident Engineer shall inspect the project daily during construction activities. Inspection shall also be done weekly and after rains of 0.5 inches or greater or equivalent snowfall and during any winter shutdown period.
8. Sediment collected during the construction by the various temporary erosion control systems shall be disposed of on site on a regular basis as directed by the Resident Engineer. The cost of this maintenance shall be considered incidental to the erosion control system.
9. The temporary erosion control systems shall be removed as directed by the Engineer after use is no longer needed or no longer functioning.

DESCRIPTION OF STRUCTURAL PRACTICES
AFTER FINAL GRADING

1. Temporary seeding shall be left in place with proper maintenance until permanent erosion control and all proposed turf areas seeded and established.
2. Once permanent erosion control systems as proposed in the plans are functional and established, temporary items shall be removed, cleaned up and disturbed turf areas reseeded.

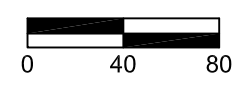
MAINTENANCE AFTER CONSTRUCTION

1. Construction is complete after FINAL acceptance by the Engineer's final inspection. Maintenance up to this date will be by the contractor.

MISCELLANEOUS

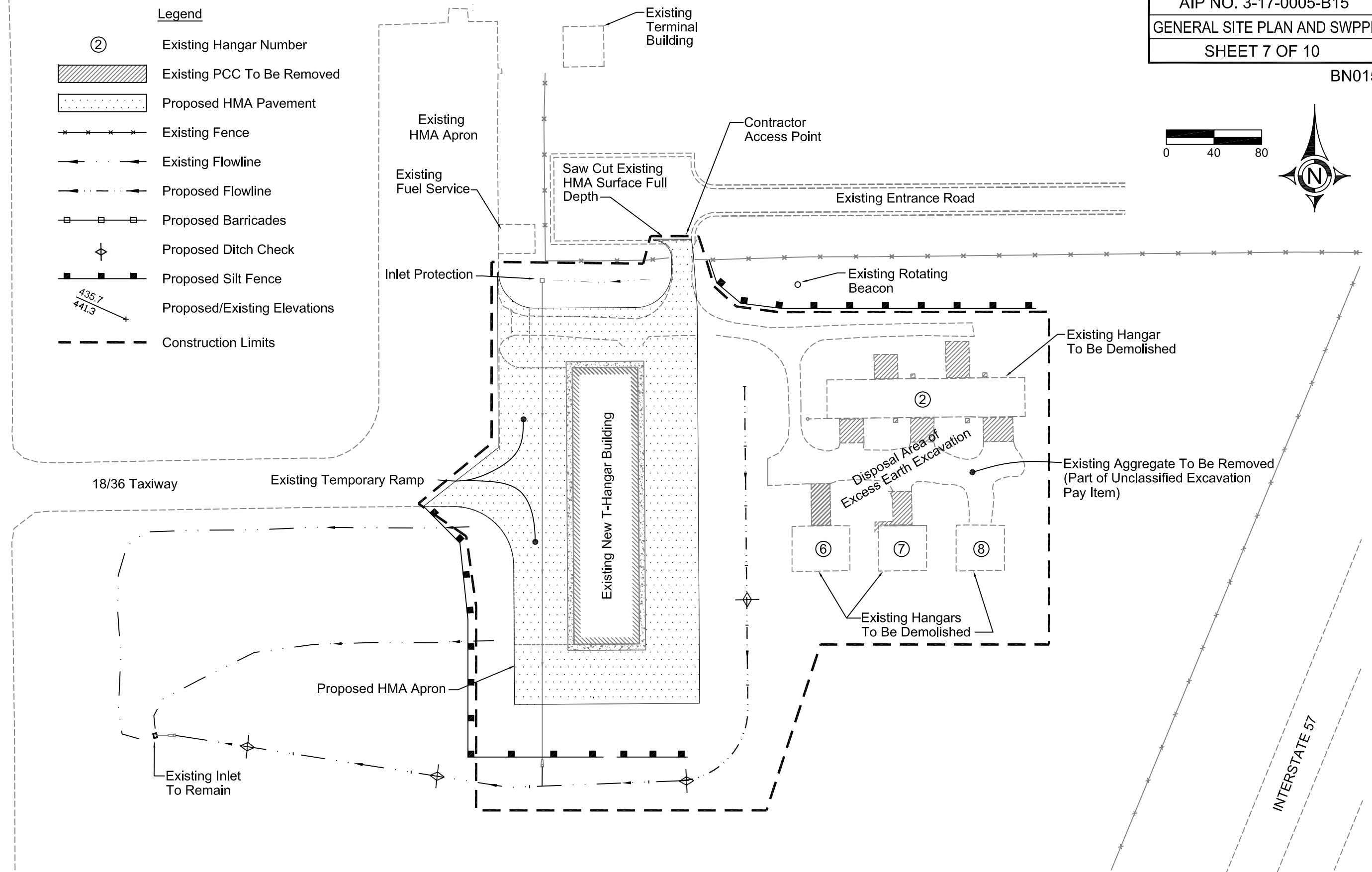
1. Temporary erosion control seeding shall be applied at the rate of 100 lbs/acre.
2. All erosion control products furnished shall be specifically recommended by the manufacturer for the use specified in the erosion control plan. Prior to the approval and use of the product, the contractor shall submit to the Engineer a notarized certification by the producer stating the intended use of the product and the physical properties required for this application are met or exceeded. The contractor shall provide manufacturer installation procedures to facilitate the Engineer in construction inspection.
3. All items shall be constructed as shown on IDOT STANDARD 280001-06 and as directed by the Engineer. Maintenance and cleaning of erosion control items shall be considered part of the respective erosion control pay item.

BN015



- Legend**
- ② Existing Hangar Number
 - Existing PCC To Be Removed
 - Proposed HMA Pavement
 - Existing Fence
 - Existing Flowline
 - Proposed Flowline
 - Proposed Barricades
 - Proposed Ditch Check
 - Proposed Silt Fence
 - Proposed/Existing Elevations
 - Construction Limits

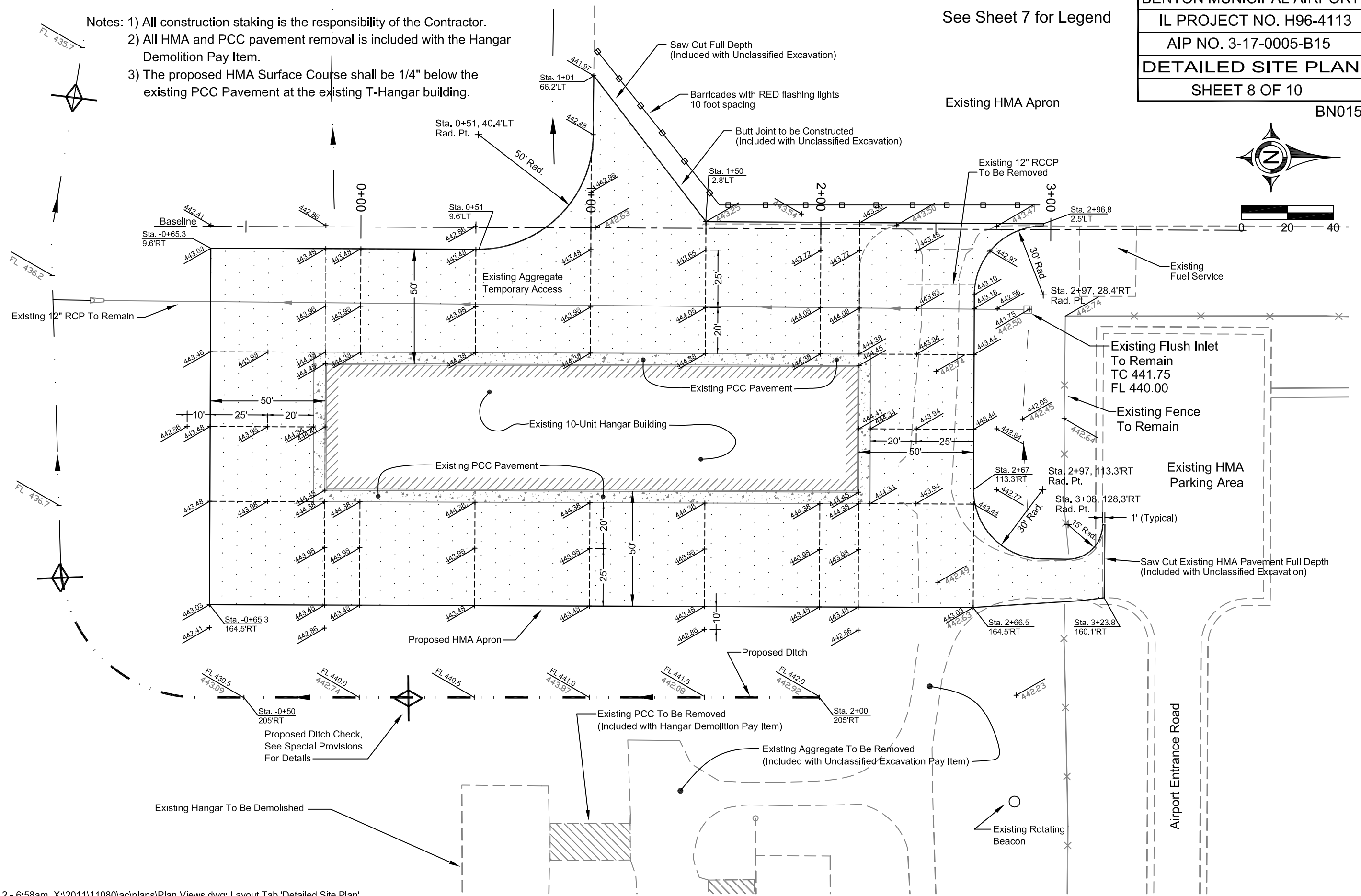
Centerline of Runway 18/36



BN015

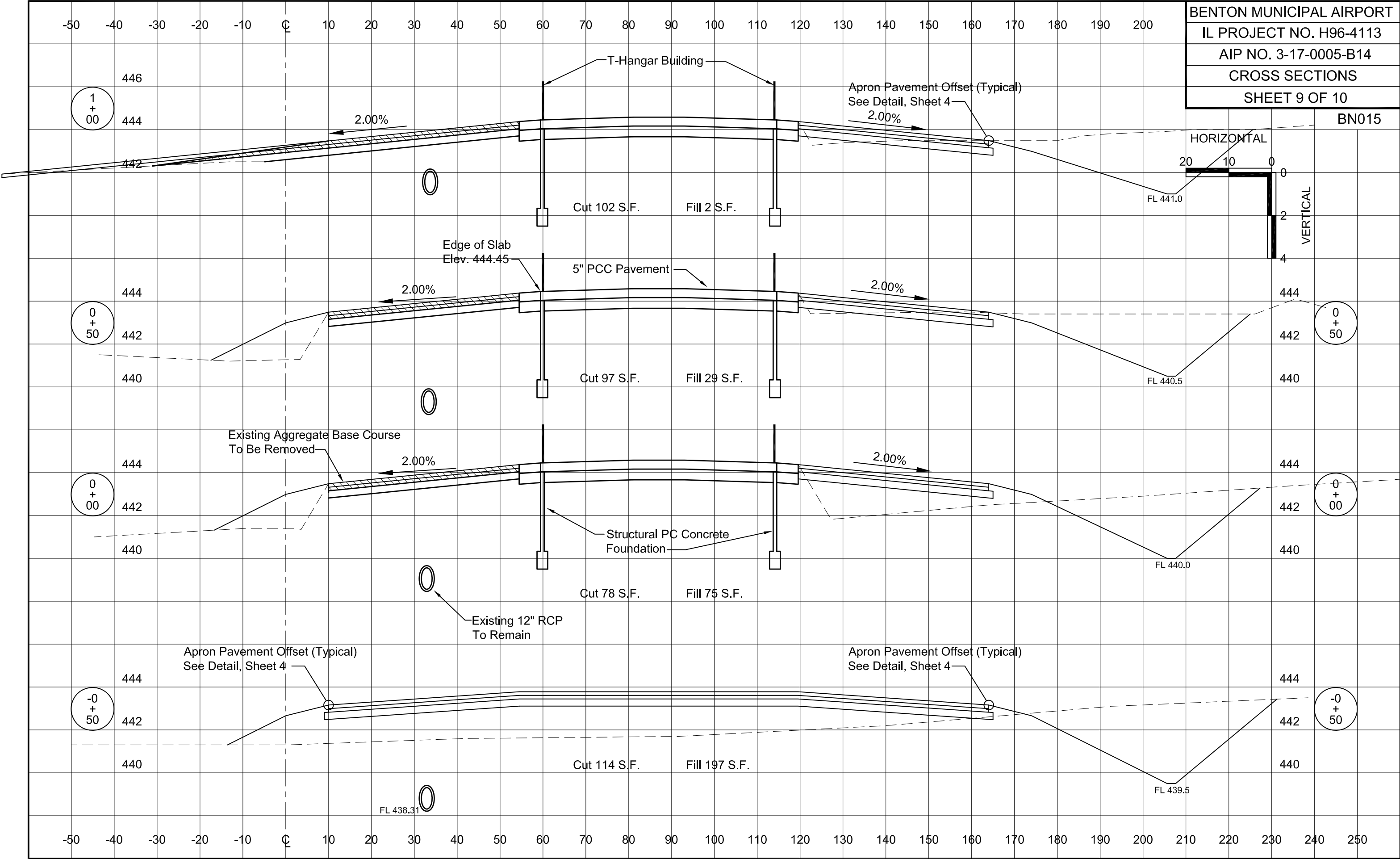
See Sheet 7 for Legend

- Notes: 1) All construction staking is the responsibility of the Contractor.
 2) All HMA and PCC pavement removal is included with the Hangar Demolition Pay Item.
 3) The proposed HMA Surface Course shall be 1/4" below the existing PCC Pavement at the existing T-Hangar building.



BENTON MUNICIPAL AIRPORT
IL PROJECT NO. H96-4113
AIP NO. 3-17-0005-B14
CROSS SECTIONS
SHEET 9 OF 10

BN015



BENTON MUNICIPAL AIRPORT
IL PROJECT NO. H96-4113
AIP NO. 3-17-0005-B14
CROSS SECTIONS
SHEET 10 OF 10

BN015

