



Illinois Department of Transportation

Office of Intermodal Project Implementation / Division of Aeronautics
1 Langhorne Bond Drive / Springfield, Illinois 62707-8415

May 20, 2026

SUBJECT: Central Illinois Regional Airport
Bloomington, Illinois
McLean County
Illinois Project Number: BMI-5258
AIP Project Number: 3-17-0006-TBD
Contract No. BL074
Item No. 06A, June 12, 2026 Letting
Addendum A

NOTICE TO PROSPECTIVE BIDDERS

Attached is an addendum to the plans or proposal. This addendum involves revised and/or added material.

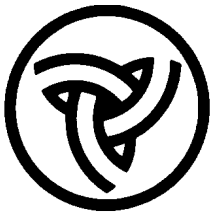
Reason for Addendum:

Add Project Documentation and Testing Requirements (PDTR) to the bid proposal.

Proposal Changes:

Add the attached PDTR to the bid proposal.

Prime contractors must utilize the enclosed material when preparing their bid and must include any changes to the Schedule of Prices in their bid.



Illinois Department of Transportation

Division of Aeronautics

Project Documentation and Testing Requirements

Airport: Central Illinois Regional

Ill. Proj. No. : BMI-5258-01

A.I.P. Proj. No.: 3-17-006-TBD

REHABILITATE RUNWAY 11/29: PHASE 2 CONSTRUCTION

The following is a list of each pay item and its required materials documentation and testing for the above referenced project. Except for ongoing testing on items such as mixtures and embankment, the Resident Engineer shall obtain the required documentation and review it for specification compliance--BEFORE-- allowing the material to be incorporated into the project. ADHERANCE TO THE BUY AMERICAN ACT FOR ALL MANUFACTURED PRODUCTS AND EVIDENCE OF SUCH IS REQUIRED ON ALL A.I.P.-FUNDED PROJECTS. Documentation that indicates materials that do not comply with the requirements of the contract shall be rejected for use in the project. (DONT WAIT UNTIL THE END OF THE PROJECT TO SUBMIT THIS INFORMATION!) Note: Pay Items shall not be reported for payment until the check box, R.E. initials, and date(s) are filled in for the applicable pay item code number that is reported for payment. When the final quantity for a given pay item is reported for payment, a copy of the page of this report that has the applicable code number on it shall be sent to the Illinois Division of Aeronautics, Construction Materials Section with the required documentation attached to it. CONTRACTOR'S NOTE: M-5 report is a field assignment report to be completed solely by the R.E.

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
☐ AW108065 RGL CABLE	4650 L.F.	_____
1.) See L-108 PDTR Handout		

Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
☐ AW108706 1/C #6 COUNTERPOISE	4200 L.F.	_____
1.) See L-108 PDTR Handout		

Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
☒ AW110102 DUCT MARKER - IN PAVEMENT	17 EA	_____
1.) Approved shop drawings for the duct marker with evidence of 100% domestic materials		

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
☒ AW125565 SPLICE CAN	9 EA	_____
1.) See Item L-125 PDTR Handout		

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
☒ AW125740 RUNWAY GUARD LIGHT	8 EA	_____
1.) See Item L-125 PDTR Handout		

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
☒ AW125906 REMOVE SPLICE CAN	4 EA	_____

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
☒ AW125946 ADJUST SPLICE CAN	5 EA	_____

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
☐ AW150510 ENGINEER'S FIELD OFFICE	1 L.S.	_____
1.) Statement that requirements per Special Provisions and/or FAA Specifications per Item C-105-4 have been met.		

Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
☐ AW150520 MOBILIZATION	1 L.S.	_____

Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
☐ AW150550 CONSTRUCTION ACCESS	1 L.S.	_____
1) Approved shop drawings for any pipe used w/ evidence of 100% domestic steel for CMP		

Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
☐ AW150552 RESTORE CONSTRUCTION ACCESS	1 L.S.	_____
1) Approved shop drawings for any pipe used w/ evidence of 100% domestic steel for CMP		

Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____

AwardedFinal**AW152451 SHOULDER EMBANKMENT****2150 C.Y.**

- 1.) Survey notes of elevation and measurements of ground surface submitted by the contractor per Item P-152-2.2
- 2.) Subgrade and/or embankment control strip for 1st half day of construction in presence of the R.E. per Item P-152-2.7
- 3.) Proctor report in accordance with ASTM D698, ASTM D1557. New Proctor for each new soil type if required. (per Item P-152-2.8)
- 4.) R.E. performs density test every 3,000 SY : Fill depths, compaction efforts, ASTM designations per the the contract Special Provisions under Item P-152-2.2
- 5.) Proof rolling before subgrade work as determined by the Special Provisions under Item P-152-2.9
- 6.) R.E performs in place field density as determined by the Special Provisions under Item P-152-2.10.
- 7.) R.E performs smoothness check with 12' straight edge in 50' grids: 0.5" tolerance
- 8.) R.E performs grade check in 50' grids: 0.5" tolerance and 0.10" tolerance in safety areas.

A.) Proof Rolling and Compaction Reports: Per Item P-152

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

AwardedFinal**AW152515 SUBGRADE UNDERCUT****1200 C.Y.**

- 1.) Compaction in accordance with Section 152-2.2b

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

AwardedFinal**AW156510 SILT FENCE****1450 FOOT**

- 1.) Approved shop drawings conforming to ASTM D6461
- 2.) Evidence of 100% domestic material and manufacturer.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
■ AW156520 INLET PROTECTION	12 EA	_____
1.) Approved Shop Drawings for aggregate, silt fence, or straw bales per the Special Provisions w/ verification of domestic material and manufacture of manufactured product (if applicable)		

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
■ AW209618 CRUSHED AGG. BASE COURSE - 18"	10500 SY	_____
1.) See P-209 PDTR Handout.		

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
■ AW401010 CONTRACTOR QUALITY CONTROL	1 L.S.	_____
1.) See Item C-100 in FAA specifications for requirements		

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
■ AW401610 BITUMINOUS SURFACE COURSE	10330 TON	_____
1.) See P-401 PDTR Handout		

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

		<u>Quantity</u>	
		<u>Awarded</u>	<u>Final</u>
☐ AW401620 BITUMINOUS SURFACE COURSE LE		1800 TON	_____
1.) See P-401 PDTR Handout			

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

Project Number: BMI-5258-01

		<u>Quantity</u>	
		<u>Awarded</u>	<u>Final</u>
☐ AW401630 BITUMINOUS SURFACE TEST SECTI		1 EACH	_____
1.) See P-401 handout for items needed			

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

Project Number: BMI-5258-01

		<u>Quantity</u>	
		<u>Awarded</u>	<u>Final</u>
☐ AW401640 BITUMINOUS PAVEMENT GROOVIN		33000 S.Y.	_____
1.) Groove measurements with stationing and offset per Section 621-3.1 Acceptance testing (frequency is no less than 3 times per day per production).			

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

Project Number: BMI-5258-01

		<u>Quantity</u>	
		<u>Awarded</u>	<u>Final</u>
☐ AW401655 BUTT JOINT CONSTRUCTION		3375 SY	_____

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

Project Number: BMI-5258-01

		<u>Quantity</u>	
		<u>Awarded</u>	<u>Final</u>
☐ AW401900 REMOVE BITUMINOUS PAVEMENT		10250 SY	_____

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

Project Number: BMI-5258-01

		<u>Quantity</u>	
		<u>Awarded</u>	<u>Final</u>
☒ AW403610	BITUMINOUS BASE COURSE	6350 TON	_____
1.) See P-403 PDTR Handout			

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

		<u>Quantity</u>	
		<u>Awarded</u>	<u>Final</u>
☒ AW403630	BITUMINOUS BASE TEST SECTION	1 EACH	_____
1.) See P-403 handout for items needed			

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

		<u>Quantity</u>	
		<u>Awarded</u>	<u>Final</u>
☒ AW602510	BITUMINOUS PRIME COAT	3550 GAL	_____
1.) See P-602 PDTR Handout			

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

		<u>Quantity</u>	
		<u>Awarded</u>	<u>Final</u>
☒ AW603510	BITUMINOUS TACK COAT	12560 GAL	_____
1.) See P-603 PDTR Handout			

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

	<u>Awarded</u>	<u>Final</u>
AW620520 PAVEMENT MARKING-WATERBORN	50300 S.F.	
1.) Paint type and material certification per item P-620-2.2, Table 1 as specified in the Special Provisions conforming to Federal Spec. TT-P-1952F, Federal Standard No. 595 Waterborne. 2.) Reflective media type and material certification per item P-620-2.2b. As specified in the Special Provisions and conforming to Federal Spec. TT-B-1325D. 3.) Evidence of production in the United States with 100 percent U.S. materials for beads and paint 4.) Test results from contractor installed control strip demonstrating surface preparation and striping equipment methods per item P-620-3.7. 5.) Retro-reflectance test results using retro-reflectometer conforming to ASTM E1710 per item D-620-3.8.		

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

	<u>Awarded</u>	<u>Final</u>
AW620525 PAVEMENT MARKING-BLACK BORD	12600 S.F.	
1.) Paint type and material certification per item P-620-2.2, Table 1 as specified in the Special Provisions conforming to Federal Spec. TT-P-1952F, Federal Standard No. 595 Waterborne. 2.) Evidence of production in the United States with 100 percent U.S. materials for the paint 3.) Test results from contractor installed control strip demonstrating surface preparation and striping equipment methods per item P-620-3.7.		

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
AW620545 PAVEMENT MARKING-WATERBORN	575 S.F.	_____
1.) Paint type and material certification per item P-620-2.2, Table 1 as specified in the Special Provisions conforming to Federal Spec. TT-P-1952F, Federal Standard No. 595 Waterborne.		
2.) Reflective media type and material certification per item P-620-2.2b. As specified in the Special Provisions and conforming to Federal Spec. TT-B-1325D.		
3.) Evidence of production in the United States with 100 percent U.S. materials for beads and paint		
4.) Test results from contractor installed control strip demonstrating surface preparation and striping equipment methods per item P-620-3.7.		
5.) Retro-reflectance test results using retro-reflectometer conforming to ASTM E1710 per item D-620-3.8.		

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
AW620900 PAVEMENT MARKING REMOVAL	650 SF	_____

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
■ AW705526 6" PERFORATED UNDERDRAIN W/SO	1250 L.F.	
1.) Approved shop drawings/manufacturer's certification for pipe with evidence of 100% domestic materials and assembly 2.) Approved shop drawings for joint mortar cement (ASTM C150) and sand (ASTM C144). 3.) Approved shop drawings/manufacturer's certification for elastomeric seals (ASTM F477) with evidence of 100% domestic materials and assembly 4.) Porous backfill gradation (ASTM C136) report per section 705-2.5, Table 1 of the Special Provisions. 5.) Material certification of granular material backfill conform to ASTM D2321 for Class IA, IB or II materials. 6.) Approved shop drawings/manufacturer's certification for filter fabric (AASHTO M288) with evidence of 100% domestic materials and assembly 7.) Approved shop drawings/manufacturer's certification for filter fabric sock (ASTM D6706) with evidence of 100% domestic materials and assembly 8.) Overfill soil compaction report per Item P-152.		

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
■ AW705546 6" NON-PERFORATED UNDERDRAIN	170 L.F.	
1.) Approved shop drawings/manufacturer's certification for pipe with evidence of 100% domestic materials and assembly 2.) Approved shop drawings for joint mortar cement (ASTM C150) and sand (ASTM C144). 3.) Approved shop drawings/manufacturer's certification for elastomeric seals (ASTM F477) with evidence of 100% domestic materials and assembly 4.) Porous backfill gradation (ASTM C136) report per section 705-2.5, Table 1 of the Special Provisions. 5.) Material certification of granular material backfill conform to ASTM D2321 for Class IA, IB or II materials. 6.) Approved shop drawings/manufacturer's certification for filter fabric (AASHTO M288) with evidence of 100% domestic materials and assembly 7.) Approved shop drawings/manufacturer's certification for filter fabric sock (ASTM D6706) with evidence of 100% domestic materials and assembly 8.) Overfill soil compaction report per Item P-152.		

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
AW705635 UNDERDRAIN COLLECTION STRUCT	2 EA	
1.) Approved shop drawings per the Special Provisions and/or FAA specification per item D-751 conforming to ASTM C32 for brick, ASTM C150 Type 1 for mortar, ASTM for sand, item P-610 for concrete, ASTM C478 for precast manhole rings and ASTM C443 for gaskets, AASHTO M36 for corrugated metal, ASTM A48 for Class 35B gray iron castings, ASTM A47 for malleable iron castings, ASTM A27 for steel castings, ASTM A283 for Grade D steel grates and frames, ASTM A536 Grade 65-45-12 for ductile iron castings, ASTM A897 for austempered ductile iron castings, steps shall be gray or malleable cast iron or galvanized steel, ASTM C913 for precast inlet structures. 2.) Approved backfill and compaction tests per the Special provisions item D-751-3.9.		

Received, reviewed, and accepted by: Resident Engineer (initials) _____
 Date Received: _____

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
AW705645 UNDERDRAIN CONNECTION	2 L.F.	
1.) Approved shop drawings/manufacturer's certification for pipe with evidence of 100% domestic materials and assembly 2.) Approved shop drawings for joint mortar cement (ASTM C150) and sand (ASTM C144). 3.) Approved shop drawings/manufacturer's certification for elastomeric seals (ASTM F477) with evidence of 100% domestic materials and assembly 4.) Porous backfill gradation (ASTM C136) report per section 705-2.5, Table 1 of the Special Provisions. 5.) Material certification of granular material backfill conform to ASTM D2321 for Class IA, IB or II materials. 6.) Approved shop drawings/manufacturer's certification for filter fabric (AASHTO M288) with evidence of 100% domestic materials and assembly 7.) Approved shop drawings/manufacturer's certification for filter fabric sock (ASTM D6706) with evidence of 100% domestic materials and assembly 8.) Overfill soil compaction report per Item P-152.		

Received, reviewed, and accepted by: Resident Engineer (initials) _____
 Date Received: _____

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
AW705900 REMOVE UNDERDRAIN	1100 L.F.	

Received, reviewed, and accepted by: Resident Engineer (initials) _____
 Date Received: _____

Project Number: BMI-5258-01

		<u>Quantity</u>	
		<u>Awarded</u>	<u>Final</u>
☐	AW705904 REMOVE UNDERDRAIN CLEANOUT	3 EA	_____

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

		<u>Quantity</u>	
		<u>Awarded</u>	<u>Final</u>
☐	AW705944 ADJUST UNDERDRAIN CLEANOUT	7 EA	_____

1.) Approved shop drawings for adjusting rings or any new material.

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

		<u>Quantity</u>	
		<u>Awarded</u>	<u>Final</u>
☐	AW801523 ADJUST BASE MOUNTED LIGHT IN T	30 EA	_____

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

		<u>Quantity</u>	
		<u>Awarded</u>	<u>Final</u>
☐	AW801524 ADJUST BASE MOUNTED LIGHT IN P	33 EA	_____

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

		<u>Quantity</u>	
		<u>Awarded</u>	<u>Final</u>
☐	AW801529 BITUMINOUS PAVEMENT MILLING -	28750 S.Y.	_____

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
☐ AW801533 REMOVE SURFACE SENSOR	2 EA	_____

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
☐ AW801536 DUST CONTROL	1 L.S.	_____

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
☐ AW801537 REMOVE AND REPLACE AIRFIELD S	4 EA	_____

1.) See L-125 handout for items needed

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
☐ AW801538 BITUMINOUS PAVEMENT MILLING -	2800 SY	_____

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
☐ AW801539 REMOVE BITUMINOUS ROAD	1450 SY	_____

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
■ AW801540 SPARE PARTS	8 EA	_____

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
■ AW801541 CRUSHED AGG. BASE COURSE - 10"	1500 SY	_____

1.) See P-209 PDTR Handout.

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
■ AW901510 SEEDING	9.4 ACRE	_____

- 1.) Manufacturer's certification for seed conforming to Federal Spec. JJJ-S-181 per item T-901-2.1 indicating seed name, lot number, net weight, percentages of purity, germination and hard seed and percentage of weed seed.
- 2.) Verification statement that seed was tested by a recognized laboratory within six months of delivery including laboratory address, date of test, lot number for each seed per item P-901-2.1.
- 3.) Lime material certification conforming to ASTM C602 indicating that the ground limestone contains less than 85% of total carbonates, 90% passing No. 20 sieve and 50% passing No. 100 sieve or as required by the Special Provision item T-901-2.2.
- 4.) Fertilizer material certification of a standard commercial type showing percentages of nitrogen, phosphoric acid, potash per item T-901-2.3.

Received, reviewed, and accepted by: Resident Engineer (initials)_____

Date Received:_____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
■ AW904510 SODDING	2200 SY	_____
1.) Manufacturer's certification as specified in the Special Provisions per item T-904-2.1.		
2.) Lime material certification conforming to ASTM C602 indicating that the ground limestone contains less than 85% of total carbonates, 90% passing No. 20 sieve and 50% passing No. 100 sieve or as required by the Special Provison item T-901-2.2.		
3.) Fertilizer material certification of a standard commerical type showing percentages of nitrogen, phosphoric acid, potash per item T-901-2.3.		

Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____

Project Number: BMI-5258-01

	<u>Quantity</u>	
	<u>Awarded</u>	<u>Final</u>
■ AW908515 HEAVY-DUTY HYDRAULIC MULCH	9.4 ACRE	_____
1.) Manufacturer's certification per Item T-908		

Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____

PDTR – L-108 Underground Power Cable for Airports

Pay items:

- Various pay items that require Item L-108 FAA specifications/Contract Special provisions. (FAA Specification version 10H).
- 1.) **All Material/Equipment Components** (Specification item 108-2.1a)
- a. Airport lighting equipment and materials. (Specification item 108-2.1a)
 - i. Approved shop drawings/manufacturer's certification verifying adherence to the Airport Lighting Equipment Certification Program per AC 150/5345-53, current version.
 - ii. Evidence of 100% domestic material and manufacture.
 - b. Warranty period (Specification item 108-2.1f)
 - i. Contractor statement indicating 12 month warranty
 - c. Insulation resistance tests (Specification item 108-2.1f)
 - i. Contractor statement indicating test will be performed throughout warranty period.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

2.) **Cable (Type L-824)** (Specification item 108-2.2)

- a. Approved shop drawings/manufacturer's certification meeting requirements of AC 150/5345-7
- b. Evidence of 100% domestic material and manufacture.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

3.) **Bare Copper Wire** (Specification item 108-2.3)

- a. Counterpoise
 - i. Approved shop drawings/manufacturer's certification meeting ASTM B3 & ASTM B8 or ASTM B33 if using tinned copper wire.
 - ii. Evidence of 100% domestic material and manufacture.
- b. Bare Copper Wire Ground

- i. Approved shop drawings/manufacturer's certification meeting ASTM B3 & ASTM B8 or ASTM B33 if using tinned copper wire.
 - ii. Evidence of 100% domestic material and manufacture.
- c. Ground Rod
 - i. Approved shop drawings/manufacturer's certification
 - ii. Evidence of 100% domestic material and manufacture.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

4.) Cable Connections (Specification item 108-2.4)

- a. Cast Splice
 - i. Approved shop drawings/manufacturer's certification.
 - ii. Evidence of 100% domestic material and manufacture.
- b. Field-Attached Plug in Splice
 - i. Approved shop drawings/manufacturer's certification.
 - ii. Evidence of 100% domestic material and manufacture.
- c. Factory-Molded Plug in Splice
 - i. Approved shop drawings/manufacturer's certification.
 - ii. Evidence of 100% domestic material and manufacture.
- d. Taped or Heat-Shrink Splice
 - i. Approved shop drawings/manufacturer's certification.
 - ii. Evidence of 100% domestic material and manufacture.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

5.) Cable Splicer Qualifications (Specification item 108-2.5)

- a. Submit proof cable splicer is qualified in making airport cable splices and terminations on cables rated at or above 5,000 volts AC

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

6.) Concrete (Specification item 108-2.6)

- a. Shall meet the requirements of Item P-610
 - i. See Item P-610 PDTR Handout
 - ii. If 610 PCC not used elsewhere on the project refer to Item 108-2.6 option.
Submit approved PCC mix design per Item 108-2.6.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

7.) Flowable Backfill (Specification item 108-2.7)

- a. Submittal of mix design verifying that it meets the requirements of Item P-153, Controlled Low Strength Material (CLSM).

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

8.) Cable Identification Tags (Specification item 108-2.8)

- a. Approved shop drawings.
- b. Evidence of 100% domestic material and manufacture.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

9.) Tape (Specification item 108-2.9)

- a. Approved shop drawings.
- b. Evidence of 100% domestic material and manufacture.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

10.) Electrical Coating (Specification item 108-2.10)

- a. Approved shop drawings.
- b. Evidence of 100% domestic material and manufacture.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

11.) Existing Circuits (Specification item 108-2.11)

- a. Submit test results of insulation resistance on work affected existing circuits before work is complete.
- b. Submit tests results of insulation resistance on work affected circuits after work is completed.
- c. Submit tests results of insulation resistance on work affected circuits after work is complete throughout the warranty period per AC 150/5340-26C.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

12.) Detectable Warning Tape (Specification item 108-2.12)

- a. Approved shop drawings/manufacturer certification
- b. Evidence of 100% domestic material and manufacture.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

13.) Installation in Duct Banks or Conduits (Unit Duct) (Specification item 108-3.2)

- a. Approved shop drawings/manufacturer certification per Item L-110 or Special Provisions.
- b. Evidence of 100% domestic material and manufacture.
- c. Backfill compaction test reports. (If required)

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

14.) Pulling Tension (Specification item 108-3.2)

- a. Submit contractor recommended cable pulling tensions.
- b. Submit in place dynamometer cable pulling tension values.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

15.) Cable Marker (Specification item 108-3.4)

- a. Approved shop drawings.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

16.) Testing (Completed System) (Specification item 108-3.10a-i)

- a. Earth resistance testing in the presence of the Resident Engineer (R.E.).
- b. Conductor continuity testing with low resistance ohmmeter in the presence of the R.E. (Required if damage is suspected)
- c. Testing for all affected lighting and control circuits (existing and new) are continuous and free of short circuits in the presence of the R.E.
- d. Testing for all affected circuits (existing and new) are free from unspecified grounds in the presence of the R.E.
- e. Testing for insulation resistance for all circuits of not less than the megohms value as stated in the Special Provisions in the presence of the R.E.
- f. Testing for insulation resistance for all non-grounded conductors of not less than 100 megohms in the presence of the R.E.
- g. R.E. verification that all affected circuits (existing and new) are connected per contract plan wiring diagram and specifications.
- h. That all affected circuits (existing and new) are operable. Tests shall be conducted that include operating each control not less than 10 times and the continuous operation of each lighting and power circuit for not less than 1/2 hour in the presence of the R.E.

- i. That the impedance to ground of each ground rod does not exceed the ohms value per the Special Provisions prior to establishing connections to other ground electrodes and as described per (ANSI/IEEE) Standard 81 in the presence of the R.E.
- j. Two copies of tabulated results of all cable tests performed shall be supplied by the Contractor to the R.E.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

PDTR – L-125 Installation of Airport Lighting Systems

Pay items:

- Various pay items that require Item L-125 FAA specifications/Contract Special provisions. (FAA Specification version 10H).
- 1.) **All Material/Equipment Components** (Specification item 125-2.1a)
 - a. Airport lighting equipment and materials. (Specification item 125-2.1a)
 - i. Approved shop drawings/manufacturer's certification verifying adherence to the Airport Lighting Equipment Certification Program per AC 150/5345-53, current version.
 - ii. Evidence of 100% domestic material and manufacture.
 - b. Warranty period (Specification item 125-2.1e)
 - i. Contractor statement indicating 12 month warranty
Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____
 - 2.) **Runway and Taxiway Lights** (Specification item 125-2.7)
 - a. Approved shop drawings/manufacturer's certification per Special Provisions meeting the requirements of AC 150/5345-46.
 - b. Evidence of 100% domestic material and manufacture.
Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____
 - 3.) **Runway and Taxiway Signs** (Specification item 125-2.8)
 - a. Approved shop drawings/manufacturer's certification per Special Provisions meeting the requirements of AC 150/5345-44.
 - b. Evidence of 100% domestic material manufacture
Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____
 - 4.) **Runway End Identifier Light (REIL).** (Specification item 125-2.9)
 - a. Approved shop drawings/manufacturer's certification per Special Provisions meeting the requirements of AC 150/5345-51.
 - b. Evidence of 100% domestic material and manufacture.
Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____

5.) **Precision Approach Path Indicator (PAPI)** (Specification item 125-2.10)

- a. Approved shop drawings/manufacturer's certification per Special Provisions meeting the requirements of AC 150/5345-28.

- b. Evidence of 100% domestic material and manufacture.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

6.) **Circuit Selector Cabinet** (Specification item 125-2.11)

- a. Approved shop drawings/manufacturer's certification per Special Provisions meeting the requirements of AC 150/5345-5.

- b. Evidence of 100% domestic material and manufacture.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

7.) **Light Base and Transformer Housings** (Specification item 125-2.12)

- a. Approved shop drawings/manufacturer's certification per Special Provisions meeting the requirements of AC 150/5345-42.

- b. Evidence of 100% domestic material and manufacture.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

8.) **Isolation Transformers** (Specification item 125-2.13)

- a. Approved shop drawings/manufacturer's certification per Special Provisions meeting the requirements of AC 150/5345-47.

- b. Evidence of 100% domestic material and manufacture.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

9.) **Project specific installation information from AC 150/5340-30 as required per the Special Provisions** (Specification item 125-3.1)

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

10.) **Testing** (Specification item 125-3.2)

- a. All lights shall be fully tested by continuous operation for not less than 24 hours as a completed system prior to acceptance. The test shall include operating the constant current regulator in each step not less than 10 times at the beginning and end of the 24-hour test. The fixtures shall illuminate properly during each portion of the test.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

PDTR – P-209 Crushed Aggregate Base Course

1.) Material Components for

a. Aggregates (approval) (Section 209-2.1)

- i. Coarse aggregate L.A. Abrasion test results (max wear 45%) (ASTM C131).
Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____
- ii. Coarse aggregate soundness loss test results (ASTM C88). Max 12% using sodium sulfate. Max 18% using magnesium sulfate. (Five cycles)
Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____
- iii. Coarse aggregate deleterious material test results: Clay lumps and friable materials (ASTM C142) $\leq 3.0\%$
Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____
- iv. Verification of: $\geq 90\%$ by weight of individual pieces having two or more fractured faces and 98% by weight having at least 1 fractured face. The area of the face shall be equal to at least 75% of the smallest mid-sectional area of the piece. When two fractured faces are contiguous the angle between the planes of fractures shall be at least 30° to count as two fractured faces.
Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____
- v. Coarse aggregate flat, elongated, and flat and elongated test results (ASTM D4791). Max 10% by weight.
Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____
- vi. Aggregate gradation approval: Contractor submits initial sample (ASTM D75) gradation report when tested per ASTM C117 and ASTM C136 conforming to Gradation Table per section 209-2.2 of the Special Provisions.
Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____
- vii. Contractor takes 2 samples (ASTM D75) per day from in-place, uncompacted material in the presence to the R.E. to check final gradation (ASTM C117, ASTM C136) meeting the Gradation Table per section 209-2.2 of the Special Provisions.
Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____

- viii. Separation Geotextile (if required) shall be Class 2, 0.02 sec⁻¹ permittivity per ASTM D4491, Apparent opening size per ASTM 4751 with 0.60mm maximum average roll value.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

2.) Control Strip (Section 209-3.1)

- a. First half-day of constructing aggregate base course shall be considered the control strip to demonstrate the in the presence of the R.E. that materials, equipment, and construction processes meet the contract specifications.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- b. Verification that a maximum lift of 12" meets specified density requirements.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

3.) Production Testing

- a. Compaction (Section 209-3.5)

1. Maximum density results or each lift per ASTM testing method (ASTM D698 or ASTM D1557) as specified in the Special Provisions per Section 209-3.5.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

2. Verification of moisture content of aggregate during placement meeting +/- 2% of the optimum moisture content as determined by the ASTM method specified in the Special Provisions, section 209-3.5.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

3. Smoothness: Compacted surface testing results for smoothness and accuracy of grade and crown and not vary more than 3/8" when tested with a 12' straightedge by the R.E. in 50' grids.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

4. Grade: Compacted surface measured results for grade and crown by the R.E. in 50' grids and shall be within +0 and -1/2 inch.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

4.) Acceptance Testing (Section 209-3.9)

- a. Density: Test results every 1200 SY meeting a field density value [] and the ASTM testing method (ASTM D698 or ASTM D1557) as specified in the Special Provisions per Section 209-3.9.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- b. Thickness: Depth test results every 1200 SY meeting the contract specified depth within a tolerance of +0 and -1/2 inch.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

PDTR – P-401 Hot Mix Asphalt Paving (HMA)

1.) Quality Control Program

- a. Shall comply with the requirements set forth in Section 100 and be submitted to IDA (Engineer) for approval seven (7) calendar days before the Preconstruction Meeting.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- b. Must be approved in writing by IDA (Engineer) prior to the Notice to Proceed (NTP).

IDA Approval Date: _____

- c. Contractor's Quality Control testing laboratory (ASTM D3666) must be approved in writing by IDA (Engineer) prior to the NTP. (Section 401-3.2)

IDA Approval Date: _____

2.) Material Components for HMA

- a. Aggregates (approval) (Section 401-2.1)

- i. Verification that coarse aggregate is: Has no history of pavement staining due to ferrous sulfides, such as pyrite.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- ii. Coarse aggregate L.A. Abrasion test results (max wear 40%) (ASTM C131).

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- iii. Coarse aggregate soundness loss test results (ASTM C88). Max 12% using sodium sulfate. Max 18% using magnesium sulfate. (Five cycles)

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- iv. Coarse aggregate deleterious material test results: Clay lumps and friable materials (ASTM C142) $\leq 1.0\%$

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- v. Percentage of fractured particles: (For aircraft gross weights of $\geq 60,000$ lbs.)
Verification of: $\geq 75\%$ by weight of individual pieces having two or more fractured faces and 85% by weight having at least 1 fractured face. The area of the face shall be equal to at least 75% of the smallest midsectional area of the piece. When two fractured faces are contiguous the angle between the planes of fractures shall be at least 30° to count as two fractured faces.

(For aircraft gross weights of < 60,000 lbs.) Verification of: $\geq 50\%$ by weight of individual pieces having two or more fractured faces and 65% by weight having at least 1 fractured face. The area of the face shall be equal to at least 75% of the smallest mid-sectional area of the piece. When two fractured faces are contiguous the angle between the planes of fractures shall be at least 30° to count as two fractured faces.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- vi. Coarse aggregate flat, elongated, and flat and elongated test results (ASTM D4791). Max 8% by weight with a value of 5:1 or 20% by weight with a value of 3:1.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- vii. Fine aggregate test results for all fine aggregate (manufactured and natural): plasticity index ($\leq$ four (4)) and a liquid limit (≤ 25) test results (ASTM D4318)

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- viii. Fine aggregate soundness loss test results (ASTM C88) max loss 10% using sodium sulfate or max 15% loss using magnesium sulfate after five cycles.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- ix. Fine aggregate deleterious material test results (% by weight): Clay lumps and friable materials test results (ASTM C142) $\leq 1.0\%$.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- x. Fine aggregate (natural sand): verification that it meets the requirements of ASTM D1073.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- xi. Fine aggregate (natural and manufactured sand): test result for sand equivalent value (≥ 45) (ASTM D2419).

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- xii. Mineral filler (if used): verification that it meets ASTM D242. (Section 401-2.2)

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

b. Asphalt Cement Binder (Section 401-2.3)

- i. A certificate of compliance from the manufacturer verifying it meets ASTM D6373 for the performance grade specified.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- ii. Test results for Elastic Recovery ($\geq 75\%$) ASTM 6084, procedure B and on RTFO.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- iii. Supplier's certified test reports for each load to the mix plant shall include:

1. Grade certification for asphalt binder provided.
2. Temperature/viscosity charts for mixing and compaction temperatures.
3. The certifications shall show the appropriate ASTM tests for each material, the test results, and a statement that the material meets the specification requirement.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

c. Anti-stripping agent (if used)

- i. Manufacturer's certification meeting 401-2.4 of the Special Provisions.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

3.) HMA Mix Design development and approval

a. Laboratory Approval (Section 401-3.2)

- i. Verification of lab accreditation in accordance with ASTM D3666:

1. Verify lab accreditation is current and listed on accrediting authority's website.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

2. Verify all test methods required to develop the JMF are listed on the lab accreditation.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

3. Obtain a copy of the laboratory's current accreditation (ASTM D3666) and accredited test methods. Submit to Engineer (IDA) prior to the start of construction.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

b. Mix Design/Job Mix Formula (JMF) (Section 401-3.3)

- i. Submitted 30 days prior to paving and shall be stamped or sealed by the responsible professional Engineer of the laboratory and shall include as a minimum:

1. Percent passing each sieve size for total combined gradation, individual gradation of all aggregate stockpiles and percent by weight of each stockpile used in the job mix formula (JMF).
2. Percent of asphalt cement.
3. Asphalt performance grade and type of modifier (if used).
4. Number of gyrations.
5. Laboratory mixing temperature.
6. Laboratory compaction temperature.
7. Temperature-viscosity relationship of the PG asphalt cement binder showing acceptable range of mixing and compaction temperatures; and for modified binders include supplier recommended mixing and compaction temperatures.
8. Plot of combined gradation on a .45 power gradation curve.
9. Graphical plots of air voids, voids in the mineral aggregate, and unit weight vs. asphalt content.
10. Specific gravity and absorption of each aggregate.
11. Percent natural sand.
12. Percent fractured faces.
13. Percent by weight of flat particles, elongated particles, and flat and elongated particles (and criteria).
14. Tensile Strength Ratio (TSR).
15. Anti-strip agent (if required).
16. Date the JMF was developed.
17. Percentage and properties of RAP per section 401-3.4.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- ii. JMF verification testing.

1. 3 asphalt samples prepared at optimum asphalt content.
 - a. Verification that average of the 3 sample test results conform to requirements of tables 1 and 3 of the Special Provisions.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

4.) Control Strip (when specified) (Section 401-3.5)

- a. Verify QC plan has been approved.
- b. Test Section Evaluation/Acceptance (3 Samples using lot pay factor per Section 100)

i. HMA

1. Mat Density (per subplot) (percent compaction)
 - a. Bulk Gravity (per subplot) ASTM D2726 /Average Bulk Gravity of the Lot (Laboratory Prepared)
 - b. PWL Calculations (Per Lot) $\geq 90\%$
2. Air Voids (per subplot) ASTM D3203
 - a. Bulk Gravity (per subplot) ASTM D2726
 - b. Theoretical Maximum Specific Gravity (per subplot) ASTM D2041
 - c. PWL Calculations (Per Lot) $\geq 90\%$
3. Joint Density
 - a. Bulk Gravity (per subplot) ASTM D2726/Average Bulk Gravity of the Lot (Laboratory Prepared)
 - b. PWL Calculations (Per Lot) $\geq 90\%$
4. Mix gradation test results (within action limits specified)
5. Asphalt Content test results (within action limits specified)
6. Voids in the mineral aggregate (VMA) (within the limits specified in table 2.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

5.) Asphalt Plant (Section 401-4.2)

- a. Verification asphalt plant conforms to AASHTO M156.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

6.) Laydown Plan (Section

- a. Prior to paving the Contractor will submit laydown plan with the sequence of paving lanes and widths to minimize cold joints with location of temporary ramps and laydown temperatures.
- b. Contractor will submit survey data of each lift meeting the tolerances of Section 401-6.2d.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

7.) Contractor QC Testing (Section 401-5.2)

- a. Asphalt content: 2 tests per day (ASTM D6307 or ASTM D2172)
- b. Gradation: 2 per day (ASTM D5444, ASTM C136 and ASTM C117)

- c. Moisture Content of Aggregate: 1 per day (AASHTO T329 or ASTM D1461)
- d. Temperatures: 4 per day at necessary locations at the plant and job site.
- e. In-place density monitoring: Nuclear gauge QC testing results (as needed) to ensure specified density is being achieved.
- f. Smoothness: 1 per day transverse and longitudinal checks using a 12' straightedge. 50' grids with tolerances $\leq \frac{1}{4}$ " (ASTM E2133)
- g. Grade: 1 per day. Before and after paving. Grade line tolerances 0.5" vertically and 0.1' laterally. Results given to R.E. at the end of paving day.
- h. Control Charts: Maintain linear control charts for both individual measurements and range (difference between highest and lowest measurements) for aggregate gradation, asphalt content and VMA for each day of paving. Results posted or sent to R.E. daily.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

8.) Acceptance Sampling and Testing (Section 401-6.1)

a. Laboratory Approval

i. Verification of lab accreditation in accordance with ASTM D3666:

- 1. Verify lab accreditation is current and listed on accrediting authority's website.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- 2. Verify all test methods required for acceptance sampling and testing are listed on the lab accreditation.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- 3. Obtain a copy of the laboratory's current accreditation (ASTM D3666) and accredited test methods. Submit to Engineer (IDA) prior to the start of construction.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- 4. All equipment in Contractor furnished laboratories shall be calibrated by an independent testing organization prior to the start of construction.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

b. Hot Mix Asphalt (HMA) Testing (Laboratory prepared) (Lot/sublot PWL payment for $\geq$ 3000 tons) (For small projects $\leq$ 3000 tons material paid by the tons placed per day)

i. Air Voids (per subplot) ASTM D3203

- 1. Bulk Gravity (per subplot) ASTM D2726

2. Theoretical Maximum Specific Gravity (per subplot) ASTM D2041
3. PWL Calculations (Per Lot)
4. Lot Pay Factor Calculations

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

c. In-Place HMA Testing

i. Mat Density (per subplot) (Percent Compaction)

1. Bulk Gravity (per subplot) ASTM D2726 /Average Bulk Gravity of the Lot (Laboratory Prepared)
2. PWL Calculations (Per Lot)
3. Lot Pay Factor Calculations

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

ii. Joint Density

1. Bulk Gravity (per subplot) ASTM D2726/Average Bulk Gravity of the Lot (Laboratory Prepared)
2. PWL Calculations (Per Lot) Note: if < 71% Lot Pay Factor shall be reduced by 5%.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

iii. Thickness

1. Measurements per specification requirements.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

iv. Smoothness

1. Straight Edge Test results per specification requirements.
2. Profilograph Testing results (reduced tapes at the end of each day's testing) per specification requirements.
3. Profilograph Average Profile Index Smoothness Pay Factor.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

v. Grade

1. Survey documentation per lot (2500 square yards)
 - a. Stamped and signed by a licensed surveyor.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

PDTR – P-403 Hot Mix Asphalt Paving (HMA)

1.) Quality Control Program

- a. Shall comply with the requirements set forth in Section 100 and be submitted to IDA (Engineer) for approval seven (7) calendar days before the Preconstruction Meeting.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- b. Must be approved in writing by IDA (Engineer) prior to the Notice to Proceed (NTP).

IDA Approval Date: _____

- c. Contractor's Quality Control testing laboratory (ASTM D3666) must be approved in writing by IDA (Engineer) prior to the NTP. (Section 403-3.2)

IDA Approval Date: _____

2.) Material Components for HMA

- a. Aggregates (approval) (Section 403-2.1)

- i. Verification that coarse aggregate is: Has no history of pavement staining due to ferrous sulfides, such as pyrite.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- ii. Coarse aggregate L.A. Abrasion test results (max wear 40%) (ASTM C131).

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- iii. Coarse aggregate soundness loss test results (ASTM C88). Max 12% using sodium sulfate. Max 18% using magnesium sulfate. (Five cycles)

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- iv. Coarse aggregate deleterious material test results: Clay lumps and friable materials (ASTM C142) $\leq 1.0\%$

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- v. Percentage of fractured particles: (For aircraft gross weights of $\geq 60,000$ lbs.)
Verification of: $\geq 75\%$ by weight of individual pieces having two or more fractured faces and 85% by weight having at least 1 fractured face. The area of the face shall be equal to at least 75% of the smallest midsectional area of the piece. When two fractured faces are contiguous the angle between the planes of fractures shall be at least 30° to count as two fractured faces.

(For aircraft gross weights of < 60,000 lbs.) Verification of: $\geq 50\%$ by weight of individual pieces having two or more fractured faces and 65% by weight having at least 1 fractured face. The area of the face shall be equal to at least 75% of the smallest mid-sectional area of the piece. When two fractured faces are contiguous the angle between the planes of fractures shall be at least 30° to count as two fractured faces.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- vi. Coarse aggregate flat, elongated, and flat and elongated test results (ASTM D4791). Max 8% by weight with a value of 5:1 or 20% by weight with a value of 3:1.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- vii. Fine aggregate test results for all fine aggregate (manufactured and natural): plasticity index ($\leq$ four (4)) and a liquid limit (≤ 25) test results (ASTM D4318)

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- viii. Fine aggregate soundness loss test results (ASTM C88) max loss 10% using sodium sulfate or max 15% loss using magnesium sulfate after five cycles.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- ix. Fine aggregate deleterious material test results (% by weight): Clay lumps and friable materials test results (ASTM C142) $\leq 1.0\%$.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- x. Fine aggregate (natural sand): verification that it meets the requirements of ASTM D1073.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- xi. Fine aggregate (natural and manufactured sand): test result for sand equivalent value (≥ 45) (ASTM D2419).

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- xii. Mineral filler (if used): verification that it meets ASTM D242. (Section 403-2.2)

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

b. Asphalt Cement Binder (Section 403-2.3)

- i. A certificate of compliance from the manufacturer verifying it meets ASTM D6373 for the performance grade specified.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- ii. Test results for Elastic Recovery ($\geq 75\%$) ASTM 6084, procedure B and on RTFO.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- iii. Supplier's certified test reports for each load to the mix plant shall include:

1. Grade certification for asphalt binder provided.
2. Temperature/viscosity charts for mixing and compaction temperatures.
3. The certifications shall show the appropriate ASTM tests for each material, the test results, and a statement that the material meets the specification requirement.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

c. Anti-stripping agent (if used)

- i. Manufacturer's certification meeting 403-2.4 of the Special Provisions.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

3.) HMA Mix Design development and approval

a. Laboratory Approval (Section 403-3.2)

- i. Verification of lab accreditation in accordance with ASTM D3666:

1. Verify lab accreditation is current and listed on accrediting authority's website.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

2. Verify all test methods required to develop the JMF are listed on the lab accreditation.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

3. Obtain a copy of the laboratory's current accreditation (ASTM D3666) and accredited test methods. Submit to Engineer (IDA) prior to the start of construction.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

b. Mix Design/Job Mix Formula (JMF) (Section 403-3.3)

- i. Submitted 30 days prior to paving and shall be stamped or sealed by the responsible professional Engineer of the laboratory and shall include as a minimum:

1. Percent passing each sieve size for total combined gradation, individual gradation of all aggregate stockpiles and percent by weight of each stockpile used in the job mix formula (JMF).
2. Percent of asphalt cement.
3. Asphalt performance grade and type of modifier (if used).
4. Number of gyrations.
5. Laboratory mixing temperature.
6. Laboratory compaction temperature.
7. Temperature-viscosity relationship of the PG asphalt cement binder showing acceptable range of mixing and compaction temperatures; and for modified binders include supplier recommended mixing and compaction temperatures.
8. Plot of combined gradation on a .45 power gradation curve.
9. Graphical plots of air voids, voids in the mineral aggregate, and unit weight vs. asphalt content.
10. Specific gravity and absorption of each aggregate.
11. Percent natural sand.
12. Percent fractured faces.
13. Percent by weight of flat particles, elongated particles, and flat and elongated particles (and criteria).
14. Tensile Strength Ratio (TSR).
15. Anti-strip agent (if required).
16. Date the JMF was developed.
17. Percentage and properties of RAP per section 403-3.4.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

ii. JMF verification testing.

1. 3 asphalt samples prepared at optimum asphalt content.
 - a. Verification that average of the 3 sample test results conform to requirements of tables 1 and 3 of the Special Provisions.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

4.) Control Strip (when specified) (Section 403-3.5)

- a. Verify QC plan has been approved.
- b. Test Section Evaluation/Acceptance (3 Samples using lot pay factor per Section 100)

i. HMA

1. Mat Density (per subplot) (percent compaction)
 - a. Bulk Gravity (per subplot) ASTM D2726 /Average Bulk Gravity of the Lot (Laboratory Prepared)
2. Air Voids (per subplot) ASTM D3203
 - a. Bulk Gravity (per subplot) ASTM D2726
 - b. Theoretical Maximum Specific Gravity (per subplot) ASTM D2041
3. Joint Density
 - a. Bulk Gravity (per subplot) ASTM D2726/Average Bulk Gravity of the Lot (Laboratory Prepared)
4. Mix gradation test results (within action limits specified)
5. Asphalt Content test results (within action limits specified)
6. Voids in the mineral aggregate (VMA) (within the limits specified in table 2.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

5.) Asphalt Plant (Section 403-4.2)

- a. Verification asphalt plant conforms to AASHTO M156.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

6.) Laydown Plan (Section

- a. Prior to paving the Contractor will submit laydown plan with the sequence of paving lanes and widths to minimize cold joints with location of temporary ramps and laydown temperatures.
- b. Contractor will submit survey data of each lift meeting the tolerances of Section 403-6.2d.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

7.) Contractor QC Testing (Section 403-5.2)

- a. Asphalt content: 2 tests per day (ASTM D6307 or ASTM D2172)
- b. Gradation: 2 per day (ASTM D5444, ASTM C136 and ASTM C117)
- c. Moisture Content of Aggregate: 1 per day (AASHTO T329 or ASTM D1461)
- d. Temperatures: 4 per day at necessary locations at the plant and job site.

- e. In-place density monitoring: Nuclear gauge QC testing results (as needed) to ensure specified density is being achieved.
- f. Smoothness: 1 per day transverse and longitudinal checks using a 12' straightedge. 50' grids with tolerances $\leq \frac{1}{4}"$ (ASTM E2133)
- g. Grade: 1 per day. Before and after paving. Grade line tolerances 0.5" vertically and 0.1' laterally. Results given to R.E. at the end of paving day.
- h. Control Charts: Maintain linear control charts for both individual measurements and range (difference between highest and lowest measurements) for aggregate gradation, asphalt content and VMA for each day of paving. Results posted or sent to R.E. daily.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

8.) Acceptance Sampling and Testing (Section 403-6.1)

a. Laboratory Approval

i. Verification of lab accreditation in accordance with ASTM D3666:

1. Verify lab accreditation is current and listed on accrediting authority's website.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

2. Verify all test methods required for acceptance sampling and testing are listed on the lab accreditation.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

3. Obtain a copy of the laboratory's current accreditation (ASTM D3666) and accredited test methods. Submit to Engineer (IDA) prior to the start of construction.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

4. All equipment in Contractor furnished laboratories shall be calibrated by an independent testing organization prior to the start of construction.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

b. Hot Mix Asphalt (HMA) Testing (Laboratory prepared) (Lot/sublot PWL payment for ≥ 3000 tons) (For small projects ≤ 3000 tons material paid by the tons placed per day)

i. Air Voids (per sublot) ASTM D3203

1. Bulk Gravity (per sublot) ASTM D2726
2. Theoretical Maximum Specific Gravity (per sublot) ASTM D2041
3. PWL Calculations (Per Lot)

4. Lot Pay Factor Calculations

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

c. In-Place HMA Testing

i. Mat Density (per subplot) (Percent Compaction)

1. Bulk Gravity (per subplot) ASTM D2726 /Average Bulk Gravity of the Lot (Laboratory Prepared)

2. PWL Calculations (Per Lot)

3. Lot Pay Factor Calculations

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

ii. Joint Density

1. Bulk Gravity (per subplot) ASTM D2726/Average Bulk Gravity of the Lot (Laboratory Prepared)

2. PWL Calculations (Per Lot) Note: if < 71% Lot Pay Factor shall be reduced by 5%.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

iii. Thickness

1. Measurements per specification requirements.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

iv. Smoothness

1. Straight Edge Test results per specification requirements.

2. Profilograph Testing results (reduced tapes at the end of each day's testing) per specification requirements.

3. Profilograph Average Profile Index Smoothness Pay Factor.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

v. Grade

1. Survey documentation per lot (2500 square yards)

a. Stamped and signed by a licensed surveyor.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

PDTR P-602 Bituminous Prime Coat

Pay items:

- AW602510 Bituminous Prime Coat
 - Quantity: Final: _____

1. Bituminous Material

- a. Manufacturer's certification and test reports showing material meets the requirements of ASTM D3628.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- b. Statement of source and character of the proposed bituminous material submitted and approved by the Engineer before any shipment of bituminous materials to the project.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- c. Vendor certified test reports for each carload or equivalent of bituminous material shipped to the project. (Provided to and approved by the Engineer before the material is applied).

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- d. Waybill and delivery tickets.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

PDTR – P-603 Bituminous Tack Coat

1. Bituminous Material

- a. Manufacturer's certification and test reports showing material meets the requirements of ASTM D3628.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- b. Statement of source and character of the proposed bituminous material submitted and approved by the Engineer before any shipment of bituminous materials to the project.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- c. Vendor certified test reports for each carload or equivalent of bituminous material shipped to the project. (Provided to and approved by the Engineer before the material is applied).

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- d. Waybill and delivery tickets.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

PDTR – P-610 Structural Portland Cement Concrete

Pay items:

- Various that require Item P-610

1.) Material Components for PCC

a. Aggregates (approval)

- i. Coarse and fine aggregate alkali-aggregate reactivity test results (tested separately) (ASTM C1260) max expansion $\leq 0.10\%$ at 28 days (30 days from casting).

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- ii. Combined coarse and fine aggregate reactivity test results in accordance with ASTM C1567 or COE CRD C662, modified for combined aggregates. Max expansion $\leq 0.10\%$ at 28 days.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- iii. Fine aggregate meeting ASTM C33, need actual fine aggregate gradation test results (ASTM C136) meeting the requirements of the table: Gradation for Fine Aggregate in the Contract Specifications.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- iv. Coarse aggregate meeting ASTM C33, need actual coarse aggregate gradation test results (ASTM C136) meeting the requirements of the table: Gradation for Coarse Aggregate in the Contract Specifications.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- v. Documentation of no history of D-cracking.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

b. Cement

- i. Cement certification and tickets meeting ASTM C150 or ASTM C595 checked daily and maintained daily in the project file.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- ii. Vendors certified test reports for each carload or equivalent of cement shipped to the project. Report delivered to the Engineer before use of the cement is granted.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

c. Additional Cementitious Material

i. Flyash (if used)

- 1. Verification that it meets the requirements of ASTM C618, with the exception of loss of ignition, where the maximum shall be less than 6%. Fly ash for use in mitigating alkali-silica reactivity shall have a Calcium Oxide (CaO) content of less than 13%.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

2.) Premolded joint material

- a. Manufacturer's certification and test reports showing material meets the requirement of ASTM D1751/D1752.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- b. Evidence of 100% domestic material and manufacture.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

3.) Steel Reinforcement

- a. Manufacturer's certification and test reports showing material meets Grade 60 conforming to the requirements of ASTM A615 or ASTM A1064.
- b. Verification of 100% domestic steel and manufacture.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

4.) Material for Curing Concrete

a. Liquid Membrane

- i. Manufacturer's certification and test reports showing material meets ASTM C309, Type 2, Class B.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- ii. Evidence of 100% domestic material and manufacture.
Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____

b. Clear or white Polyethylene Sheeting

- i. Manufacturer's certification and test reports showing material meets ASTM C171.
Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____

- ii. Evidence of 100% domestic material and manufacture.
Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____

c. Waterproof paper

- i. Manufacturer's certification and test reports showing material meets ASTM C171.
Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____

- ii. Evidence of 100% domestic material and manufacture.
Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____

5.) Admixtures

a. Air-entrainment Mixture

- i. Manufacturer's certification and test reports showing material meets the requirements of ASTM C260.
Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____
- ii. Complete test data from an approved laboratory (if requested by the Engineer).
Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____

b. Water Reducing Mixture

- i. Manufacturer's certification and test reports showing material meets the requirements of ASTM C494, Type A, B, or D.
Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____

- ii. Complete test data from an approved laboratory (if requested by the Engineer).
Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____

c. Other Admixtures

- i. Set Retarding: Manufacturer's certification and test reports showing material meets the requirements of ASTM C494, Type A, B, or D.
Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____

- ii. Set Accelerating: Manufacturer's certification and test reports showing material meets the requirements of ASTM C494, Type C.
Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____

6.) Joint Filler

- a. Shall meet the requirements of Item P-605
Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____

7.) PCC Mix Design

- a. Submittal of mix design verifying that it meets the requirements of 610-3.2 of the Contract Specifications.

8.) Acceptance Sampling and Testing

- a. Acceptance sampling/testing Laboratory accreditation must be submitted and verified (ASTM C1077 or ASTM E329).

Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____

- b. Compressive Strength

- i. Compressive strength test results (Tested in accordance with ASTM C39 must achieve 4000 psi @ 28 days).

- 1. Include slump (ASTM C143) (max 4"), air content (ASTM C231) (5% ± 1%).

Received, reviewed, and accepted by: Resident Engineer (initials) _____
Date Received: _____

PDTR – P-620 Runway and Taxiway Marking

1. Paint Acceptance

- a. The Contractor shall furnish manufacturer's certified test reports for materials shipped to the project.
 - i. Paint shall be furnished in white – 37925, red-31136, yellow-33538 or 33655, and black-37038 in accordance with Federal Standard No. 595.
 - ii. Paint shall be waterborne in accordance with Federal Specification TT-P-1952E, Type I or Type II. The non-volatile portion of the vehicle for all paint types shall be composed of a 100% acrylic polymer as determined by infrared spectral analysis.
 - iii. Reflective Media – Glass beads shall meet the requirements for TT-B-1325D, Type III.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

- b. Evidence of 100% domestic material and manufacture.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____

2. Test Strip

- a. Verify Paint Acceptance prior to constructing the Test Strip
- b. Prior to the full application of airfield markings, the Contractor shall produce a Test Strip in the presence of the Engineer in accordance with 620-3.6 Test Strip.

Received, reviewed, and accepted by: Resident Engineer (initials) _____

Date Received: _____