TOWN OF PLYMOUTH
PLYMOUTH MUNICIPAL AIRPORT

RECONSTRUCT RUNWYA 6-24, RECONSTRUCT TAXIWAY H, J, K AND L

AIP No. 3-25-0042-###-2026

ADDENDUM No. 2

Date: April 21, 2026

The following is provided to clarify, add or delete information in the Contract Documents, Specifications and Plans for the above project. This information is required for bidding and construction, and the Bidder's acknowledgement of receipt of this Addendum is required on page B-1 of the BID PROPOSAL.

As a point of clarification, it should be understood that the Contract Documents govern all aspects of the project. Informal discussions held during the Pre-Bid Conference or over the telephone are informational only. All official changes to the Contract Documents are made only by addenda. The following changes and additional information are hereby made a part of the Contract Documents.

SPECIFICATIONS

1. Bid Forms:

Remove and replace the existing bid forms with the attached bid forms. The bid form has been modified to include a pay item for L-125-5.8 Install Vinyl Runway Closure Markers.

2. L-125 Installation of Airport Lighting Systems:

Remove and replace the L-125 technical specification with the attached specification. The attached spec has been modified to include a pay item for L-125-5.8 Install Vinyl Runway Closure Markers.

3. C-100 Contractor Quality Control Program:

Remove and replace the existing C-100 specification with the attached specification. The method of measurement has been modified.

DRAWINGS.

The following sheets were modified from the original bid set:

G1.5 Quantities:	Sheet has been revised. See revised sheet.
S3.1 Safety Area Details:	Sheet has been revised. See revised sheet.

SCHEDULE OF PRICES
Runway 6-24 Reconstruction
Plymouth Municipal Airport
Plymouth, MA
AIP Project No. 3-25-0042-XXX-2026

Item No.	Brief Description - Unit or Lump Sum Price (in both words and numerals)	Estimated Quantity	Total Bid Price (in numerals)
C-102-5.1	**Temporary Seeding & Mulching,** per Acre		
	_____ Dollars and	2 AC	
	_____ Cents ($_____)		$_____
C-102-5.2	**Installation and Removal of Silt Fence,** per LF		
	_____ Dollars and	10,500 LF	
	_____ Cents ($_____)		$_____
C-102-5.3	**Catch Basin Inlet Protection,** per EA		
	_____ Dollars and	19 EA	
	_____ Cents ($_____)		$_____
C-102-5.4	**Erosion Control Matting,** per SY		
	_____ Dollars and	500 SY	
	_____ Cents ($_____)		$_____
C-102-5.5	**Stabilized construction Entrance,** per EA		
	_____ Dollars and	2 EA	
	_____ Cents ($_____)		$_____
C-102-5.6	**Compost Filter Tube,** per LF		
	_____ Dollars and	2,650 LF	
	_____ Cents ($_____)		$_____
P-150-5.1	**Pavement Removal,** per SY		
	_____ Dollars and	2,900 SY	
	_____ Cents ($_____)		$_____
P-150-5.2	**Runway Light Removal,** per EA		
	_____ Dollars and	84 EA	
	_____ Cents ($_____)		$_____

Item No.	Brief Description - Unit or Lump Sum Price (in both words and numerals)	Estimated Quantity	Total Bid Price (in numerals)
P-150-5.3	**Taxiway Light Removal,** per EA		
	_____ Dollars and	104 EA	
	_____ Cents ($_____)		$_____
P-150-5.4	**Guidance Sign Foundation Removal,** per EA		
	_____ Dollars and	11 EA	
	_____ Cents ($_____)		$_____
P-150-5.5	**Pavement Marking Removal,** per SY		
	_____ Dollars and	1,300 SY	
	_____ Cents ($_____)		$_____
P-152-4.1	**Unclassified Excavation,** per CY		
	_____ Dollars and	10,400 CY	
	_____ Cents ($_____)		$_____
P-207-5.1	**In Place For Recycled Asphalt Aggregate Base Course,** per SY		
	_____ Dollars and	46,800 SY	
	_____ Cents ($_____)		$_____
P-207-5.2	**Corrective Aggregate Material (1 1/2" crushed stone,** per CY		
	_____ Dollars and	4,200 CY	
	_____ Cents ($_____)		$_____
P-207-5.3	**Reuse FDR Aggregate base course,** per CY		
	_____ Dollars and	2,000 CY	
	_____ Cents ($_____)		$_____
P-401-8.1	**Bituminous Pavement – Binder Course (2"),** per TON		
	_____ Dollars and	6,550 TON	
	_____ Cents ($_____)		$_____

Item No.	Brief Description - Unit or Lump Sum Price (in both words and numerals)	Estimated Quantity	Total Bid Price (in numerals)
P-401-8.2	**Bituminous Pavement – Wearing Course,** per TON		
	_____ Dollars and	6,550 TON	
	_____ Cents ($_____)		$_____
P-603-5.1	**Emulsified Asphalt Tack Coat,** per GAL		
	_____ Dollars and	2,500 GAL	
	_____ Cents ($_____)		$_____
P-605-5.1	**Joint Sealant for Pavements,** per LF		
	_____ Dollars and	1,500 LF	
	_____ Cents ($_____)		$_____
P-620-5.1	**White Paint,** per SF		
	_____ Dollars and	48,100 SF	
	_____ Cents ($_____)		$_____
P-620-5.2	**Black Paint,** per SF		
	_____ Dollars and	27,500 SF	
	_____ Cents ($_____)		$_____
P-620-5.3	**Yellow Paint,** per SF		
	_____ Dollars and	4,400 SF	
	_____ Cents ($_____)		$_____
P-621-5.1	**Grooving,** per SY		
	_____ Dollars and	27,400 SY	
	_____ Cents ($_____)		$_____
T-901-5.1	**Seeding,** per Acre		
	_____ Dollars and	18 AC	
	_____ Cents ($_____)		$_____
T-905-5.1	**Topsoiling (4"),** per CY		
	_____ Dollars and	9,550 CY	
	_____ Cents ($_____)		$_____

Item No.	Brief Description - Unit or Lump Sum Price (in both words and numerals)	Estimated Quantity	Total Bid Price (in numerals)
T-908-5.1	**Mulching,** per Acre		
	_____ Dollars and	18 AC	
	_____ Cents ($_____)		$_____
L-108-5.1	**No. 8 AWG, L-824 Cable,** per LF		
	_____ Dollars and	20,700 LF	
	_____ Cents ($_____)		$_____
L-108-5.2	**No. 6 Bare Counterpoise Wire,** per LF		
	_____ Dollars and	19,700 LF	
	_____ Cents ($_____)		$_____
L-110-5.1	**4" 4-Way Concrete Encased Electrical Duct Bank,** per LF		
	_____ Dollars and	480 LF	
	_____ Cents ($_____)		$_____
L-110-5.2	**2" Electrical Conduit,** per LF		
	_____ Dollars and	20,300 LF	
	_____ Cents ($_____)		$_____
L-110-5.3	**Concrete Duct or Splice Marker,** per EA		
	_____ Dollars and	12 EA	
	_____ Cents ($_____)		$_____
L-110-5.4	2**" 1-Way Concrete Encased Electrical Duct Bank,** per LF		
	_____ Dollars and	260 LF	
	_____ Cents ($_____)		$_____
L-115-5.1	**Electric Handhole,** per EA		
	_____ Dollars and	12 EA	
	_____ Cents ($_____)		$_____
L-125-5.1	**Install Runway Edge Light L-862,** per EA		
	_____ Dollars and	64 EA	
	_____ Cents ($_____)		$_____

Item No.	Brief Description - Unit or Lump Sum Price (in both words and numerals)	Estimated Quantity	Total Bid Price (in numerals)
L-125-5.2	**Relocate Guidance Sign on New Foundation),** per EA		
	_____ Dollars and	11 EA	
	_____ Cents ($_____)		$_____
L-125-5.3	**Install New Guidance Sign,** per EA		
	_____ Dollars and	12 EA	
	_____ Cents ($_____)		$_____
L-125-5.4	**L-893 Runway Closure Markers,** per EA		
	_____ Dollars and	2 EA	
	_____ Cents ($_____)		$_____
L-125-5.5	**Install New Taxiway Edge Light L-861T LED,** per EA		
	_____ Dollars and	74 EA	
	_____ Cents ($_____)		$_____
L-125-5.6	**Install New Taxiway Edge Light L-861T Quartz,** per EA		
	_____ Dollars and	16 EA	
	_____ Cents ($_____)		$_____
L-125-5.7	**Install New In-Pavement LED Runway Edge Light L-850,** per EA		
	_____ Dollars and	2 EA	
	_____ Cents ($_____)		$_____
L-125-5.8	**Install Vinyl Runway Closure Markers**		
	_____ Dollars and	2 EA	
	_____ Cents ($_____)		$_____

GRAND TOTAL $_____

NOTE: In the event of a bidder's mathematical error in tabulating any bid prices, the written unit price shall govern. Selection of the lowest bidder will be based on the calculated total of all items as written in words.

Item L-125 Installation of Airport Lighting Systems

DESCRIPTION

125-1.1 This item shall consist of airport lighting systems furnished and installed in accordance with this specification, the referenced specifications, and the applicable advisory circulars (ACs). The systems shall be installed at the locations and in accordance with the dimensions, design, and details shown in the plans. This item shall include the furnishing of all equipment, materials, services, and incidentals necessary to place the systems in operation as completed units to the satisfaction of the RPR.

EQUIPMENT AND MATERIALS

125-2.1 General.

a. Airport lighting equipment and materials covered by Federal Aviation Administration (FAA) specifications shall be certified under the Airport Lighting Equipment Certification Program in accordance with AC 150/5345-53, current version. FAA certified airfield lighting shall be compatible with each other to perform in compliance with FAA criteria and the intended operation. If the Contractor provides equipment that does not performs as intended because of incompatibility with the system, the Contractor assumes all costs to correct the system for to operate properly.

b. Manufacturer's certifications shall not relieve the Contractor of their responsibility to provide materials in accordance with these specifications and acceptable to the RPR. Materials supplied and/or installed that do not comply with these specifications shall be removed, when directed by the RPR and replaced with materials, which do comply with these specifications, at the sole cost of the Contractor.

c. All materials and equipment used shall be submitted to the RPR for approval prior to ordering the equipment. Submittals consisting of marked catalog sheets or shop drawings shall be provided. Clearly mark each copy to identify pertinent products or models applicable to this project. Indicate all optional equipment and delete non-pertinent data. Submittals for components of electrical equipment and systems shall identify the equipment for which they apply on each submittal sheet. Markings shall be clearly made with arrows or circles (highlighting is not acceptable). The Contractor shall be responsible for delays in the project accruing directly or indirectly from late submissions or resubmissions of submittals.

d. The data submitted shall be sufficient, in the opinion of the RPR, to determine compliance with the plans and specifications. The Contractor's submittals shall be submitted in electronic PDF format, tabbed by specification section. The RPR reserves the right to reject any or all equipment, materials or procedures, which, in the RPR’s opinion, does not meet the system design and the standards and codes, specified herein.

e. All equipment and materials furnished and installed under this section shall be guaranteed against defects in materials and workmanship for a period of at least twelve (12) months from final acceptance by the Owner. Where specified, all new LED light fixtures, with the exception of obstruction lighting, must be warranted by the manufacturer for a minimum of 4 years after date of installation inclusive of all electronics.” Obstruction lighting warranty is set by the individual manufacturer. The defective materials and/or equipment shall be repaired or replaced, at the Owner's discretion, with no additional cost to the Owner.

EQUIPMENT AND MATERIALS

125-2.2 Conduit/Duct. Conduit shall conform to Specification Item L-110 Airport Underground Electrical Duct Banks and Conduits.

125-2.3 Cable and Counterpoise. Cable and Counterpoise shall conform to Item L-108 Underground Power Cable for Airports.

125-2.4 Tape. Rubber and plastic electrical tapes shall be Scotch Electrical Tape Numbers 23 and 88 respectively, as manufactured by 3M Company or an approved equal.

125-2.5 Cable Connections. Cable Connections shall conform to Item L-108 Installation of Underground Cable for Airports.

125-2.6 Retroreflective Markers. Not required.

125-2.7 Runway and Taxiway Lights. Medium Intensity runway and taxiway lights shall conform to the requirements of AC 150/5345-46. Proposed lights specified on the plans are LED type with Arctic Kit. All other lamps shall be quartz lights. Refer to the plans for the proposed locations of each type.

125-2.8 Runway and Taxiway Signs. Runway and Taxiway Guidance Signs should conform to the requirements of AC 150/5345-44.

125-2.9 Runway End Identifier Light (REIL). Not required.

125-2.10 Precision Approach Path Indicator (PAPI). Not required.

125-2.11 Circuit Selector Cabinet. Not required.

125-2.12 Light Base and Transformer Housings. Light Base and Transformer Housings should conform to the requirements of AC 150/5345-42. Light bases shall be Type L-867, Class 1A, Size B shall be provided as indicated or as required to accommodate the fixture or device installed thereon. Base plates, cover plates, and adapter plates shall be provided to accommodate various sizes of fixtures.

125-2.13 Isolation Transformers. Isolation Transformers shall be Type L-830, size as required for each installation. Transformer shall conform to AC 150/5345-47.

INSTALLATION

125-3.1 Installation. The Contractor shall furnish, install, connect and test all equipment, accessories, conduit, cables, wires, buses, grounds and support items necessary to ensure a complete and operable airport lighting system as specified here and shown in the plans.

The equipment installation and mounting shall comply with the requirements of the National Electrical Code and state and local code agencies having jurisdiction.

The Contractor shall install the specified equipment in accordance with the applicable advisory circulars and the details shown on the plans.

Items not installed in accordance with the FAA Advisory Circulars, these specifications, and drawings shall be replaced by and at the expense of the contractor.

a. Assemble units and connect to the system in accordance with the manufacturer's recommendations and instructions.

b. Provide three (3) feet of slack in each cable in each base can.

c. Painted and galvanized surfaces that are damaged shall be repaired according to the manufacturer's recommendations, to the satisfaction of the Owner and Engineer.

d. All airfield lighting bolting hardware and threaded connections, i.e. frangible couplings shall be coated with "Never-Seize" or "Ideal Noalox" compound before being screwed together

125-3.2 Testing. 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.

Up to two (2) walk-throughs may be initiated by the Owner or the Engineer during which the airfield lighting units would be required to be in operation. Additional walk-throughs may be necessary depending upon the number of discrepancies found on the previous walk-throughs.

The contractor is responsible for lamp replacements and necessary maintenance of airfield items during the testing, construction and walk-through periods.

Cables shall be tested per specification L-108.

The contractor shall perform the necessary inspection and tests for some items concurrently with the installation because of subsequent inaccessibility of some components. The Engineer shall be notified by the Contractor forty-eight (48) hours in advance of any testing.

125-3.3 Shipping and Storage. Equipment shall be shipped in suitable packing material to prevent damage during shipping. Store and maintain equipment and materials in areas protected from weather and physical damage. Any equipment and materials, in the opinion of the RPR, damaged during construction or storage shall be replaced by the Contractor at no additional cost to the owner. Painted or galvanized surfaces that are damaged shall be repaired in accordance with the manufacturer's recommendations.

125-3.4 Elevated and In-pavement Lights. Water, debris, and other foreign substances shall be removed prior to installing fixture base and light.

A jig or holding device shall be used when installing each light fixture to ensure positioning to the proper elevation, alignment, level control, and azimuth control. Light fixtures shall be oriented with the light beams parallel to the runway or taxiway centerline and facing in the required direction. The outermost edge of fixture shall be level with the surrounding pavement. Surplus sealant or flexible embedding material shall be removed. The holding device shall remain in place until sealant has reached its initial set.

METHOD OF MEASUREMENT

125-4.1 Runway and taxiway lights will be measured by the number of each type installed as completed units in place, ready for operation, and accepted by the RPR. Guidance signs will be measured by the number of each type and size installed as completed units, in place, ready for operation, and accepted by the RPR.

125-4.2 New L-893 Lighted Runway Closure Markers. The quantity of runway closure units to be paid for under this item shall be the number of each type installed, complete and in place, ready for operation, and accepted by the Engineer. Units to become the property of the Airport at the completion of the project.

125-4.3 Vinyl Runway Closure Markers. The quantity of vinyl runway closure markings to be paid for under this item shall be the number of each pair ready for use and accepted by the Engineer. Markers to become the property of the Airport at the completion of the project.

BASIS OF PAYMENT

125-5.1 Payment will be made at the Contract unit price for each complete runway or taxiway light, guidance sign installed by the Contractor and accepted by the RPR. This payment will be full compensation for furnishing all materials and for all preparation, assembly, and installation of these materials, and for all labor, equipment, tools and incidentals necessary to complete this item.

Payment will be made under:

Item L-125-5.1	Install New Runway Edge Light L-862 – LED Lamp w/arctic kit, Base Mounted - per each
Item L-125-5.2	Relocate Existing Guidance Sign on New Foundation – per each
Item L-125-5.3	Install New Guidance Sign – per each
Item L-125-5.4	L-893 Runway Closure Markers – per each
Item L-125-5.5	Install New Taxiway Edge Light L-861T –LED lamp w/arctic kit
Item L-125-5.6	Install New Taxiway Edge Light L-861T –Quartz lamp
Item L-125-5.7	Install New In-Pavement LED Runway Edge Light L-850 - per each
Item L-125-5.8	Vinyl Runway Closure Markers – per each

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

Advisory Circulars (AC)

AC 150/5340-18	Standards for Airport Sign Systems
AC 150/5340-26	Maintenance of Airport Visual Aid Facilities
AC 150/5340-30	Design and Installation Details for Airport Visual Aids
AC 150/5345-5	Circuit Selector Switch
AC 150/5345-7	Specification for L-824 Underground Electrical Cable for Airport Lighting Circuits
AC 150/5345-26	Specification for L-823 Plug and Receptacle, Cable Connectors
AC 150/5345-28	Precision Approach Path Indicator (PAPI) Systems
AC 150/5345-39	Specification for L-853, Runway and Taxiway Retroreflective Markers
AC 150/5345-42	Specification for Airport Light Bases, Transformer Housings, Junction Boxes, and Accessories
AC 150/5345-44	Specification for Runway and Taxiway Signs
AC 150/5345-46	Specification for Runway and Taxiway Light Fixtures
AC 150/5345-47	Specification for Series to Series Isolation Transformers for Airport Lighting Systems
AC 150/5345-51	Specification for Discharge-Type Flashing Light Equipment

AC 150/5345-53	Airport Lighting Equipment Certification Program

Engineering Brief (EB)

EB No. 67	Light Sources Other than Incandescent and Xenon for Airport and Obstruction Lighting Fixtures

END OF ITEM L-125

Part 2 – General Construction Items

Item C-100 Contractor Quality Control Program (CQCP)

100-1 General. Quality is more than test results. Quality is the combination of proper materials, testing, workmanship, equipment, inspection, and documentation of the project. Establishing and maintaining a culture of quality is key to achieving a quality project. The Contractor shall establish, provide, and maintain an effective Contractor Quality Control Program (CQCP) that details the methods and procedures that will be taken to assure that all materials and completed construction required by this contract conform to contract plans, technical specifications and other requirements, whether manufactured by the Contractor, or procured from subcontractors or vendors. Although guidelines are established and certain minimum requirements are specified here and elsewhere in the contract technical specifications, the Contractor shall assume full responsibility for accomplishing the stated purpose.

The Contractor shall establish a CQCP that will:

a. Provide qualified personnel to develop and implement the CQCP.

b. Provide for the production of acceptable quality materials.

c. Provide sufficient information to assure that the specification requirements can be met.

d. Document the CQCP process.

The Contractor shall not begin any construction or production of materials to be incorporated into the completed work until the CQCP has been reviewed and approved by the Resident Project Representative (RPR). No partial payment will be made for materials subject to specific quality control (QC) requirements until the CQCP has been reviewed and approved.

The QC requirements contained in this section and elsewhere in the contract technical specifications are in addition to and separate from the quality assurance (QA) testing requirements. QA testing requirements are the responsibility of the RPR or Contractor as specified in the specifications.

A Quality Control (QC)/Quality Assurance (QA) workshop with the Engineer, Resident Project Representative (RPR), Contractor, subcontractors, testing laboratories, and Owner's representative must be held prior to start of construction. The QC/QA workshop will be facilitated by the Contractor. The Contractor shall coordinate with the Airport and the RPR on time and location of the QC/QA workshop. Items to be addressed, at a minimum, will include:

a. Review of the CQCP including submittals, QC Testing, Action & Suspension Limits for Production, Corrective Action Plans, Distribution of QC reports, and Control Charts.

b. Discussion of the QA program.

c. Discussion of the QC and QA Organization and authority including coordination and information exchange between QC and QA.

d. Establish regular meetings to discuss control of materials, methods and testing.

e. Establishment of the overall QC culture.

100-2 Description of program.

a. General description. The Contractor shall establish a CQCP to perform QC inspection and testing of all items of work required by the technical specifications, including those performed by subcontractors.

The CQCP shall ensure conformance to applicable specifications and plans with respect to materials, off-site fabrication, workmanship, construction, finish, and functional performance. The CQCP shall be effective for control of all construction work performed under this Contract and shall specifically include surveillance and tests required by the technical specifications, in addition to other requirements of this section and any other activities deemed necessary by the Contractor to establish an effective level of QC.

b. Contractor Quality Control Program (CQCP). The Contractor shall describe the CQCP in a written document that shall be reviewed and approved by the RPR prior to the start of any production, construction, or off-site fabrication. The written CQCP shall be submitted to the RPR for review and approval at least 14 calendar days before the CQCP Workshop. The Contractor's CQCP and QC testing laboratory must be approved in writing by the RPR prior to the Notice to Proceed (NTP).

The CQCP shall be organized to address, as a minimum, the following:

1. QC organization and resumes of key staff
2. Project progress schedule
3. Submittals schedule
4. Inspection requirements
5. QC testing plan
6. Documentation of QC activities and distribution of QC reports
7. Requirements for corrective action when QC and/or QA acceptance criteria are not met
8. Material quality and construction means and methods. Address all elements applicable to the project that affect the quality of the pavement structure including subgrade, subbase, base, and surface course. Some elements that must be addressed include, but is not limited to mix design, aggregate grading, stockpile management, mixing and transporting, placing and finishing, quality control testing and inspection, smoothness, laydown plan, equipment, and temperature management plan.

The Contractor must add any additional elements to the CQCP that is necessary to adequately control all production and/or construction processes required by this contract.

100-3 CQCP organization. The CQCP shall be implemented by the establishment of a QC organization. An organizational chart shall be developed to show all QC personnel, their authority, and how these personnel integrate with other management/production and construction functions and personnel.

The organizational chart shall identify all QC staff by name and function, and shall indicate the total staff required to implement all elements of the CQCP, including inspection and testing for each item of work. If necessary, different technicians can be used for specific inspection and testing functions for different items of work. If an outside organization or independent testing laboratory is used for implementation of all or part of the CQCP, the personnel assigned shall be subject to the qualification requirements of paragraphs 100-03a and 100-03b. The organizational chart shall indicate which personnel are Contractor employees and which are provided by an outside organization.

The QC organization shall, as a minimum, consist of the following personnel:

a. Program Administrator. The Contractor Quality Control Program Administrator (CQCPA) must be a full-time on-site employee of the Contractor, or a consultant engaged by the Contractor. The CQCPA must have a minimum of five (5) years of experience in QC pavement construction with prior QC experience on a project of comparable size and scope as the contract.

Included in the five (5) years of paving/QC experience, the CQCPA must meet at least one of the following requirements:

(1) Professional Engineer with one (1) year of airport paving experience.

(2) Engineer-in-training with two (2) years of airport paving experience.

(3) National Institute for Certification in Engineering Technologies (NICET) Civil Engineering Technology Level IV with three (3) years of airport paving experience.

(4) An individual with four (4) years of airport paving experience, with a Bachelor of Science Degree in Civil Engineering, Civil Engineering Technology or Construction.

The CQCPA must have full authority to institute any and all actions necessary for the successful implementation of the CQCP to ensure compliance with the contract plans and technical specifications. The CQCPA authority must include the ability to immediately stop production until materials and/or processes are in compliance with contract specifications. The CQCPA must report directly to a principal officer of the construction firm. The CQCPA may supervise the Quality Control Program on more than one project provided that person can be at the job site within two (2) hours after being notified of a problem.

b. QC technicians. A sufficient number of QC technicians necessary to adequately implement the CQCP must be provided. These personnel must be either Engineers, engineering technicians, or experienced craftsman with qualifications in the appropriate field equivalent to NICET Level II in Civil Engineering Technology or higher, and shall have a minimum of two (2) years of experience in their area of expertise.

The QC technicians must report directly to the CQCPA and shall perform the following functions:

(1) Inspection of all materials, construction, plant, and equipment for conformance to the technical specifications, and as required by paragraph 100-6.

(2) Performance of all QC tests as required by the technical specifications and paragraph 100-8.

(3) Performance of tests for the RPR when required by the technical specifications.

Certification at an equivalent level of qualification and experience by a state or nationally recognized organization will be acceptable in lieu of NICET certification.

c. Staffing levels. The Contractor shall provide sufficient qualified QC personnel to monitor each work activity at all times. Where material is being produced in a plant for incorporation into the work, separate plant and field technicians shall be provided at each plant and field placement location. The scheduling and coordinating of all inspection and testing must match the type and pace of work activity. The CQCP shall state where different technicians will be required for different work elements.

100-4 Project progress schedule. Critical QC activities must be shown on the project schedule as required by Section 80, paragraph 80-03, *Execution and Progress*.

100-5 Submittals schedule. The Contractor shall submit a detailed listing of all submittals (for example, mix designs, material certifications) and shop drawings required by the technical specifications. The listing can be developed in a spreadsheet format and shall include as a minimum:

a. Specification item number

b. Item description

c. Description of submittal

d. Specification paragraph requiring submittal

e. Scheduled date of submittal

100-6 Inspection requirements. QC inspection functions shall be organized to provide inspections for all definable features of work, as detailed below. All inspections shall be documented by the Contractor as specified by paragraph 100-9.

Inspections shall be performed as needed to ensure continuing compliance with contract requirements until completion of the particular feature of work. Inspections shall include the following minimum requirements:

a. During plant operation for material production, QC test results and periodic inspections shall be used to ensure the quality of aggregates and other mix components, and to adjust and control mix proportioning to meet the approved mix design and other requirements of the technical specifications. All equipment used in proportioning and mixing shall be inspected to ensure its proper operating condition. The CQCP shall detail how these and other QC functions will be accomplished and used.

b. During field operations, QC test results and periodic inspections shall be used to ensure the quality of all materials and workmanship. All equipment used in placing, finishing, and compacting shall be inspected to ensure its proper operating condition and to ensure that all such operations are in conformance to the technical specifications and are within the plan dimensions, lines, grades, and tolerances specified. The CQCP shall document how these and other QC functions will be accomplished and used.

100-7 Contractor QC testing facility.

a. For projects that include Item P-401, Item P-403, and Item P-404, the Contractor shall ensure facilities, including all necessary equipment, materials, and current reference standards, are provided that meet requirements in the following paragraphs of ASTM D3666, *Standard Specification for Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials*:

- 8.1.3 Equipment Calibration and Checks;
- 8.1.9 Equipment Calibration, Standardization, and Check Records;
- 8.1.12 Test Methods and Procedures

b. Not Used.

100-8 QC testing plan. As a part of the overall CQCP, the Contractor shall implement a QC testing plan, as required by the technical specifications. The testing plan shall include the minimum tests and test frequencies required by each technical specification Item, as well as any additional QC tests that the Contractor deems necessary to adequately control production and/or construction processes.

The QC testing plan can be developed in a spreadsheet fashion and shall, as a minimum, include the following:

a. Specification item number (e.g., P-401)

b. Item description (e.g., Hot Mix Asphalt Pavements)

c. Test type (e.g., gradation, grade, asphalt content)

d. Test standard (e.g., ASTM or American Association of State Highway and Transportation Officials (AASHTO) test number, as applicable)

e. Test frequency (e.g., as required by technical specifications or minimum frequency when requirements are not stated)

f. Responsibility (e.g., plant technician)

g. Control requirements (e.g., target, permissible deviations)

The QC testing plan shall contain a statistically-based procedure of random sampling for acquiring test samples in accordance with ASTM D3665. The RPR shall be provided the opportunity to witness QC sampling and testing.

All QC test results shall be documented by the Contractor as required by paragraph 100-9.

100-9 Documentation. The Contractor shall maintain current QC records of all inspections and tests performed. These records shall include factual evidence that the required QC inspections or tests have been performed, including type and number of inspections or tests involved; results of inspections or tests; nature of defects, deviations, causes for rejection, etc.; proposed remedial action; and corrective actions taken.

These records must cover both conforming and defective or deficient features, and must include a statement that all supplies and materials incorporated in the work are in full compliance with the terms of the contract. Legible copies of these records shall be furnished to the RPR daily. The records shall cover all work placed subsequent to the previously furnished records and shall be verified and signed by the CQCPA.

Contractor QC records required for the contract shall include, but are not necessarily limited to, the following records:

a. Daily inspection reports. Each Contractor QC technician shall maintain a daily log of all inspections performed for both Contractor and subcontractor operations. These technician's daily reports shall provide factual evidence that continuous QC inspections have been performed and shall, as a minimum, include the following:

(1) Technical specification item number and description
(2) Compliance with approved submittals
(3) Proper storage of materials and equipment
(4) Proper operation of all equipment
(5) Adherence to plans and technical specifications
(6) Summary of any necessary corrective actions
(7) Safety inspection.
(8) Photographs and/or video

The daily inspection reports shall identify all QC inspections and QC tests conducted, results of inspections, location and nature of defects found, causes for rejection, and remedial or corrective actions taken or proposed.

The daily inspection reports shall be signed by the responsible QC technician and the CQCPA. The RPR shall be provided at least one copy of each daily inspection report on the work day following the day of record. When QC inspection and test results are recorded and transmitted electronically, the results must be archived.

b. Daily test reports. The Contractor shall be responsible for establishing a system that will record all QC test results. Daily test reports shall document the following information:

(1) Technical specification item number and description
(2) Test designation
(3) Location
(4) Date of test
(5) Control requirements
(6) Test results

(7) Causes for rejection

(8) Recommended remedial actions

(9) Retests

Test results from each day's work period shall be submitted to the RPR prior to the start of the next day's work period. When required by the technical specifications, the Contractor shall maintain statistical QC charts. When QC daily test results are recorded and transmitted electronically, the results must be archived.

100-10 Corrective action requirements. The CQCP shall indicate the appropriate action to be taken when a process is deemed, or believed, to be out of control (out of tolerance) and detail what action will be taken to bring the process into control. The requirements for corrective action shall include both general requirements for operation of the CQCP as a whole, and for individual items of work contained in the technical specifications.

The CQCP shall detail how the results of QC inspections and tests will be used for determining the need for corrective action and shall contain clear rules to gauge when a process is out of control and the type of correction to be taken to regain process control.

When applicable or required by the technical specifications, the Contractor shall establish and use statistical QC charts for individual QC tests. The requirements for corrective action shall be linked to the control charts.

100-11 Inspection and/or observations by the RPR. All items of material and equipment are subject to inspection and/or observation by the RPR at the point of production, manufacture or shipment to determine if the Contractor, producer, manufacturer or shipper maintains an adequate QC system in conformance with the requirements detailed here and the applicable technical specifications and plans. In addition, all items of materials, equipment and work in place shall be subject to inspection and/or observation by the RPR at the site for the same purpose.

Inspection and/or observations by the RPR does not relieve the Contractor of performing QC inspections of either on-site or off-site Contractor's or subcontractor's work.

100-12 Noncompliance.

a. The Resident Project Representative (RPR) will provide written notice to the Contractor of any noncompliance with their CQCP. After receipt of such notice, the Contractor must take corrective action.

b. When QC activities do not comply with either the CQCP or the contract provisions or when the Contractor fails to properly operate and maintain an effective CQCP, and no effective corrective actions have been taken after notification of non-compliance, the RPR will recommend the Owner take the following actions:

(1) Order the Contractor to replace ineffective or unqualified QC personnel or subcontractors and/or

(2) Order the Contractor to stop operations until appropriate corrective actions are taken.

METHOD OF MEASUREMENT

100-13 Basis of measurement and payment. Incidental to other pay items

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

National Institute for Certification in Engineering Technologies (NICET)

ASTM International (ASTM)

ASTM C1077	Standard Practice for Agencies Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Testing Agency Evaluation
ASTM D3665	Standard Practice for Random Sampling of Construction Materials
ASTM D3666	Standard Specification for Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials

END OF ITEM C-100

ITEM NO.	SPEC. SECTION	DESCRIPTION	UNIT	TOTAL QUANTITY
		FAA Pay Items		
1	C-102-5.1	TEMPORARY SEEDING AND MULCHING	AC	2
2	C-102-5.2	INSTALLATION AND REMOVAL OF SILT FENCE	LF	10,500
3	C-102-5.3	CATCH BASIN INLET PROTECTION	EA	19
4	C-102-5.4	EROSION CONTROL MATTING	SY	500
5	C-102-5.5	STABILIZED CONSTRUCTION ENTRANCE	EA	2
6	C-102-5.6	COMPOST FILTER TUBE	LF	2,650
7	P-150-5.1	PAVEMENT REMOVAL	SY	2,900
8	P-150-5.2	RUNWAY LIGHT REMOVAL	EA	79
9	P-150-5.3	TAXIWAY LIGHT REMOVAL	EA	100
10	P-150-5.4	GUIDANCE SIGN FOUNDATION REMOVAL	EA	11
11	P-150-5.5	PAVEMENT MARKING REMOVAL	SY	1,300
12	P-152-4.1	UNCLASSIFIED EXCAVATION	CY	10,400
13	P-207-5.1	IN-PLACE FDR RECYCLED ASPHALT AGGREGATE BASE COURSE	SY	46,800
14	P-207-5.2	CORRECTIVE AGGREGATE MATERIAL (1-1/2" CRUSHED STONE)	CY	4,200
15	P-207-5.3	REUSED FDR AGGREGATE BASE COURSE	CY	2,000
16	P-401-8.1	BITUMINOUS PAVEMENT - BINDER COURSE	TON	6,550
17	P-401-8.2	BITUMINOUS PAVEMENT - WEARING COURSE	TON	6,550
18	P-603-5.1	EMULSIFIED ASPHALT TACK COAT	GAL	2,500
19	P-605-5.1	JOINT SEALANT FOR PAVEMENTS	LF	1,500
20	P-620-5.1	WHITE PAINT	SF	48,100
21	P-620-5.2	BLACK PAINT	SF	27,500
22	P-620-5.3	YELLOW PAINT	SF	4,400
23	P-621-5.1	GROOVING	SY	27,400
24	T-901-5.1	SEEDING	AC	18
25	T-905-5.1	TOPSOILING (4")	CY	9,550
26	T-908-5.1	MULCHING	AC	18
27	L-108-5.1	NO. 8 AWG, L-824 CABLE	LF	20,700
28	L-108-5.2	NO. 6 BARE COUNTERPOISE WIRE	LF	19,700
29	L-110-5.1	4" 4-WAY CONCRETE ENCASED ELECTRICAL DUCT BANK	LF	480
30	L-110-5.2	2" ELECTRICAL CONDUIT	LF	20,300
31	L-110-5.3	CONCRETE DUCT OR SPLICE MARKER	EA	12
32	L-110-5.4	2" 1-WAY CONCRETE ENCASED ELECTRICAL DUCT BANK	LF	260
33	L-115-5.1	ELECTRIC HANDHOLE	EA	12
34	L-125-5.1	INSTALL RUNWAY EDGE LIGHT L-862	EA	64
35	L-125-5.2	RELOCATE GUIDANCE SIGN ON NEW FOUNDATION	EA	11
36	L-125-5.3	INSTALL NEW GUIDANCE SIGN	EA	12
37	L-125-5.4	L-893 RUNWAY CLOSURE MARKERS	EA	2
38	L-125-5.5	INSTALL NEW TAXIWAY EDGE LIGHT L-861T - LED	EA	74
39	L-125-5.6	INSTALL NEW TAXIWAY EDGE LIGHT L-861T - QUARTZ	EA	16
40	L-125-5.7	INSTALL NEW IN-PAVEMENT LED RUNWAY EDGE LIGHT L-850	EA	2
41	L-125-5.8	INSTALL VINYL RUNWAY CLOSURE	EA	2

DuBois & King inc.
ENGINEERING • PLANNING • MANAGEMENT • DEVELOPMENT
www.dubois-king.com
© Copyright 2026 DuBois & King inc.

BID PLANS

NOT FOR CONSTRUCTION

REVISIONS

NUMBER	DATE	REVISION DESCRIPTION	BY
1	4/21/26	MODIFIED PAY ITEMS	MCG

CLIENT NAME:

PLYMOUTH AIRPORT COMMISSION

246 SOUTH MEADOW ROAD
PLYMOUTH, MASS. 02360

PROJECT NAME:

RECONSTRUCT, MARK RUNWAY 6-24 (APPROX 4,350 LF X 75 LF)

AIP NO.
3-25-0042-XXX-2025

SHEET TITLE

QUANTITIES

D&K PROJECT #	PROJ. ENG.
331139	MCG
DRAWN BY	CHECKED BY
DSP	JAA

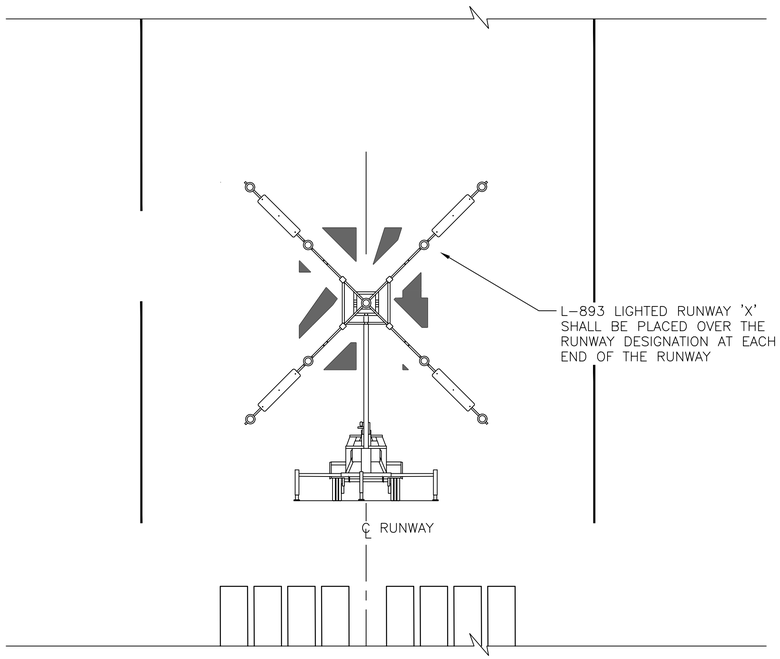
DATE
MARCH 2026

SHEET NUMBER

G1.5

SHEET: 5 of 79

I:\3\331139 Plymouth Runway 6 24\Drawings\pym 6-24 recon_qty.dwg 4/21/2026 1:19 PM

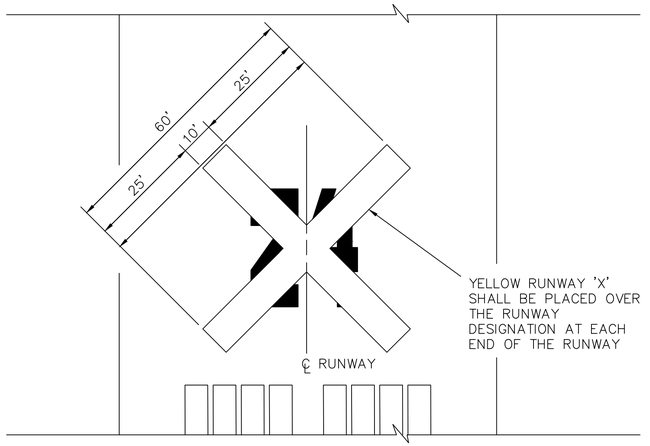


LIGHTED TEMPORARY RUNWAY CLOSURE DETAIL

NOT TO SCALE

NOTES:

1. NO WORK WITHIN THE RUNWAY SAFETY AREA OR OBJECT FREE ZONE (OFZ) SHALL BE ALLOWED UNTIL THE TEMPORARY RUNWAY CLOSURE MARKINGS HAVE BEEN INSTALLED, ALL RUNWAY LIGHTING AND NAVIGATIONAL POWER IS TURNED OFF AND ALL SAFETY MEASURES ARE ACCEPTED BY THE ENGINEER.
2. RUNWAY CLOSURE MARKING SHALL BE OPERATIONAL 24HRS DURING RUNWAY CLOSURES.
3. RUNWAY X'S ARE LIGHTED L–893 UNITS, AND WILL BE PURCHASED AS A PAY ITEM FOR THIS PROJECT.
4. L–893 UNITS ARE POWERED BY A DIESEL GENERATOR. CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING FUEL.
5. SEE SPECIFICATIONS.

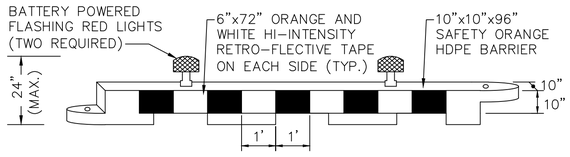


NOTES:

1. NO WORK WITHIN THE RUNWAY SAFETY AREA (RSA) OR OBJECT FREE ZONE (OFZ) SHALL BE ALLOWED UNTIL THE TEMPORARY RUNWAY CLOSURE MARKINGS HAVE BEEN INSTALLED, ALL RUNWAY LIGHTING AND NAVIGATIONAL POWER IS TURNED OFF AND ALL MEASURES ARE ACCEPTED BY THE ENGINEER.
2. RUNWAY X'S SHALL BE CONSTRUCTED OF YELLOW VINYL–COATED MESH OR OTHER APPROVED MATERIAL.
3. RUNWAY X'S SHALL BE SECURED IN PLACE WITH SAND BAGS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE TEMPORARY RUNWAY CLOSURE MARKINGS FOR THE DURATION OF HIS WORK. ALL COSTS ASSOCIATED WITH FURNISHING, INSTALLING, MAINTAINING AND REMOVING THE TEMPORARY RUNWAY CLOSED MARKINGS SHALL BE INCIDENTAL TO THE PROJECT.
5. SEE SPECIFICATIONS.

VINYL TEMPORARY RUNWAY CLOSURE DETAIL

N.T.S.



NOTES:

1. BARRICADES SHALL BE PLACED END TO END. BARRICADES SHALL BE FILLED WITH WATER.
2. MAXIMUM SPACING BETWEEN BARRICADES IS 4'.
3. THERE IS NO PAY ITEM ASSOCIATED WITH LOW PROFILE LIGHTED BARRICADES. THE WORK INVOLVED IN PROVIDING, INSTALLING, OPERATING, AND RELOCATING SHALL BE SUBSIDIARY TO THE PROJECT.

LOW PROFILE LIGHTED BARRICADE DETAIL

N.T.S.

DuBois & King inc.
ENGINEERING • PLANNING • MANAGEMENT • DEVELOPMENT
www.dubois-king.com
© Copyright 2026 DuBois & King inc.

BID PLANS

NOT FOR CONSTRUCTION

REVISIONS

NUMBER	DATE	REVISION DESCRIPTION	BY
1	4/21/26	MODIFIED DETAIL NOTES	MCG

CLIENT NAME:

PLYMOUTH AIRPORT COMMISSION

246 SOUTH MEADOW ROAD
PLYMOUTH, MASS. 02360

PROJECT NAME:

RECONSTRUCT, MARK RUNWAY 6-24 (APPROX 4,350 LF X 75 LF)

AIP NO. 3-25-0042-XXX-2025

SHEET TITLE

SAFETY AREA DETAILS

D&K PROJECT #	PROJ. ENG.
331139	MCG
DRAWN BY	CHECKED BY
DSP	JAA

DATE: MARCH 2026

SHEET NUMBER

S3.1

SHEET: 11 of 79

I:\3\331139 Plymouth Runway 6 24\Drawings\PYM 6-24 Recon_SafetyDET.dwg 4/21/2026 11:18 AM