

U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL AVIATION ADMINISTRATION
 NORTHWEST MOUNTAIN REGION
 AIRPORT IMPROVEMENT PROGRAM

MODIFICATION OF AIRPORT DESIGN STANDARDS

BACKGROUND		
1. AIRPORT:	2. LOCATION(CITY,STATE):	3. LOC ID:
4. EFFECTED RUNWAY/TAXIWAY:	5. APPROACH (EACH RUNWAY): <input type="checkbox"/> PIR <input type="checkbox"/> NPI <input type="checkbox"/> VISUAL	6. AIRPORT REF. CODE (ARC):
7. DESIGN AIRCRAFT (EACH RUNWAY/TAXIWAY):		
MODIFICATION OF STANDARDS		
8. TITLE OF STANDARD BEING MODIFIED (CITE REFERENCE DOCUMENT): Federal Aviation Administration, Advisory Circular (AC) 150/5370-10G, Standards for Specifying Construction of Airports. Item P-620 Runway and Taxiway Marking.		
9. STANDARD/REQUIREMENT: P-620 Description, P-620 Materials, P-620 Construction Methods, P-620 Method of Measurement, P-620 Basis of Payment.		
10. PROPOSED: Add the following sentence to the end of Section 620-1.1: “This item shall also consist of the placement and removal of phasing and permanent markings as shown on the drawings, or as directed by the Port.” Add the following section to P-620 Materials: “620-2.4 Phasing Markings. Phasing markings shall be accomplished with paint meeting the requirements of paragraph 620-2.2. Reflective media shall be applied to phasing markings. Phasing markings shall include temporary paint out of existing markings as shown on the drawings or as directed by the Port. All paint out of markings shall be accomplished with black paint.” Add the following section to P-620 Materials: “620-2.5 Fog Seal. Fog seal shall be an emulsified bituminous material meeting the requirements of Item P-608 Emulsified Asphalt Seal Coat.” Add the following sentence to the end of Section 620-3.5: “Where phasing markings are applied to a bituminous surface, a fog seal shall be applied to the surface prior to applying the markings. Phasing markings may be applied as soon as the fog seal has cured to a non-sticky condition.” Add the following section to P-620 Construction Methods: “620-3.9 Removal. Remove paint down to the pavement surface by waterblasting or other approved means. Care shall be taken during the removal process to minimize surface damage caused by the equipment. If chemical solvents are used, provide Safety Data Sheets (SDS) and manufacturer’s material information to the Port at least 3 days prior to application. Chemicals and application methods shall not be harmful to the environment. Chemical solvent shall be collected and properly disposed of with no		

discharge of the chemical to the land or to the storm drainage system.

Areas of paint removal from bituminous surfaces, except those to be repainted or in areas of subsequent pavement removal, shall be sealed with an approved bituminous fog seal product within 48 hours of paint removal. Sand shall be applied immediately after application of fog seal and shall be black boiler sanding slag or a similar angular, black abrasive. All excess or loose sand shall be cleaned up with a regenerative-air sweeper and disposed of off Port property.”

Add the following section to P-620 Method of Measurement:

“620-4.2 Phasing Pavement Marking. The quantity of phasing pavement marking to be paid for will be the number of square feet of pavement surface painted in accordance with the drawings and specifications and as accepted by the Port.”

Add the following section to P-620 Method of Measurement:

“620-4.3 Fog Seal. Fog seal, as may be needed for surface grinding or phasing markings, will be incidental to other related bid items and not be measured.”

Add the following section to P-620 Basis of Payment:

“620-5.2 Phasing Pavement Marking. Payment will be made at the contract unit price per square foot of phasing marking applied. This item will include any fog seal material placed prior to applying marking.”

Add the following section to P-620 Basis of Payment:

“620-5.3 Fog Seal. Payment for fog seal is considered incidental to other related bid items and will not be paid for separately.”

11. EXPLAIN WHY STANDARD CANNOT BE MET (FAA ORDER 5300.1E):

Currently no specification exists in AC 150/5370-10G for complete removal of existing markings or application of phasing markings to redirect traffic, only partial removal for repainting as indicated in Section 620-3.3.

12. DISCUSS VIABLE ALTERNATIVES (FAA ORDER 5300.1E):

If no phasing markings were used, an alternative would be to shut down entire taxiways, runways, and ramps until the work is fully completed.

Appendix 2

13. STATE WHY MODIFICATION WOULD PROVIDE ACCEPTABLE LEVEL OF SAFETY, ECONOMY, DURABILITY, AND WORKMANSHIP (FAA ORDER 5300.1E):

For most projects on Port of Portland airports, work on the airfields can cause a large impact to air traffic operations. By applying phasing markings to reroute aircraft to portions of taxiways and ramps that are not affected by construction but that have adequate clear distances, impacts to air traffic operations can be significantly reduced, as opposed to shutting down entire taxiways and ramps.

The proposed phasing markings meet the requirements of permanent markings and are applied to an emulsified asphalt seal coat meeting the requirements of Item P-608. This allows the markings to be removed once construction is complete, without damaging the pavement.

The Port breaks out phasing markings as a separate pay item. It is understood that placement of Phasing Markings is an eligible item and will be paid for under the AIP Grant for the first application. Any additional applications will not be eligible, and will be paid for by the Port. This ensures FAA requirements for markings are met, at no additional cost to the FAA.

ATTACH ADDITIONAL SHEETS AS NECESSARY – INCLUDE SKETCH/PLAN

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MODIFICATION:		LOCATION:		PAGE 2 OF 2	
14. SIGNATURE OF ORIGINATOR:		15. ORIGINATOR'S ORGANIZATION:		16. TELEPHONE:	
17. DATE OF LATEST FAA SIGNED ALP:					
18. ADO RECOMMENDATION:		19. SIGNATURE:		20. DATE:	
21. FAA DIVISIONAL REVIEW (AT, AF, FS):					
ROUTING SYMBOL	SIGNATURE	DATE	CONCUR	NON-CONCUR	
COMMENTS:					
22. AIRPORTS' DIVISION FINAL ACTION:					
<input type="checkbox"/> UNCONDITIONAL APPROVAL		<input type="checkbox"/> CONDITIONAL APPROVAL		<input type="checkbox"/> DISAPPROVAL	
DATE:	SIGNATURE:		TITLE:		
CONDITIONS OF APPROVAL:					

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ITEMS 1-17 ARE TO BE COMPLETED BY THE AIRPORT SPONSOR(ORIGINATOR). ALL OTHER ITEMS WILL BE COMPLETED BY THE FAA.

THE COMPLETED FORM WILL BE TRANSMITTED BY THE ORIGINATOR TO THE APPLICABLE ADO/AFO. THE ADO/AFO WILL TRANSMIT THE FINAL FAA DETERMINATION TO THE ORIGINATOR.

MODIFICATION TO AIRPORT DESIGN STANDARDS REQUESTS SHOULD INCLUDE SKETCHES OR DRAWINGS WHICH CLEARLY ILLUSTRATE THE NONSTANDARD CONDITION.

ITEMS

1. LEGAL NAME OF AIRPORT.
2. ASSOCIATED CITY.
3. AIRPORT LOCATION IDENTIFIER (SEE APPROACH PLATES/AIRPORT FACILITY DIRECTORY).
4. IDENTIFY THE RUNWAY(S), TAXIWAY(S) OR OTHER FACILITIES EFFECTED BY THE PROPOSED MODIFICATION TO STANDARDS REQUEST.
5. IDENTIFY THE MOST CRITICAL APPROACH FOR EACH RUNWAY IDENTIFIED IN #4.
6. AIRPORT REFERENCE CODE - SEE PARAGRAPH 2, PAGE 1 AC 150/5300-13(CHANGE 4) - I.E. C-II, B-II, A-I (SMALL).
7. NOTE THE DESIGN AIRCRAFT (ARC OR SPECIFIC AIRCRAFT) FOR EACH FACILITY IDENTIFIED IN #4. A DESIGN AIRCRAFT MUST MAKE REGULAR USE OF THE FACILITY. NORMALLY, FAA CONSIDERS REGULAR USE TO BE 500 OR MORE ANNUAL INTINERANT OPERATIONS.

IF THE AIRPORT SERVES A WHOLE FAMILY OF AIRCRAFT IN A PARTICULAR GROUP, THE ARC (I.E. B-II) SHOULD BE SPECIFIED. IF, HOWEVER, THE AIRPORT IS USED BY ONLY 1 OR 2 OF A FAMILY OF AIRCRAFT (IX- BEECH KING AIR C90), THE MOST DEMANDING (APPROACH SPEED, WINGSPAN) AIRCRAFT SHOULD BE SPECIFIED.
8. IDENTIFY THE SPECIFIC NAME OF THE STANDARD THAT IS PROPOSED TO BE MODIFIED FOR THE SUBJECT LOCAL CONDITION.
9. DESCRIBE (WORDS AND NUMBERS) THE DIMENSIONS AND REQUIREMENTS OF THE STANDARD AS PROVIDED IN AC 150/5300-13.
10. STATE THE PROPOSED MODIFICATION TO THE STANDARD.
11. DISCUSS THE LOCAL CONDITIONS THAT MAKE IT IMPRACTICAL OR IMPOSSIBLE TO MEET THE STANDARD.
12. IDENTIFY ALTERNATIVES TO THE SUBJECT PROPOSED MODIFICATION, AND SHOW WHY THESE ALTERNATIVES ARE NOT VIABLE.
13. DISCUSS HOW THE PROPOSED MODIFICATION WOULD IMPACT AIRPORT SAFETY AND EXPLAIN WHY AN ACCEPTABLE LEVEL OF SAFETY, ECONOMY, DURABILITY, AND WORKMANSHIP WOULD STILL EXIST.
14. TYPED NAME AND SIGINATURE OF AIRPORT AUTHORITY REPRESLNTATIVE.
15. SELF-EXPLANATORY.
16. SELF-EXPLANATORY.
17. SELF-EXPLANATORY.
18. TO BE COMPLETED BY FAA

Appendix 2