STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

ADDENDUM NO. 1
FOR
TAXIWAY C RECONSTRUCTION
AT DANIEL K INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII
STATE PROJECT NO. AO1021-30

March 16, 2026

This Addendum shall make the following amendment(s) to the Solicitation:

A. NOTICE TO BIDDERS

1. Prospective bidders are **hereby notified** that receiving of bids, scheduled for March 23, 2026 at 2:00 P.M., Hawaii Standard Time (HST), is **HEREBY POSTPONED** until **APRIL 8, 2026 at 2:00 P.M., HST**.

   The deadline for Request for Information (RFI) is **HEREBY EXTENDED** to **March 19, 2026 at 2:00 P.M.., HST.**

   Delete **NOTICE TO BIDDERS**, HIePRO release date January 29, 2026, in its entirety and replace it with attached **NOTICE TO BIDDERS**, dated R03/16/2026.

B. TABLE OF CONTENTS

1. Delete **TABLE OF CONTENTS**, dated January 2026, in its entirety and replace it with attached **TABLE OF CONTENTS,** dated R03/16/2026.

C. PROPOSAL SCHEDULE

1. Delete **PROPOSAL SCHEDULE** page P-8 to P-11, dated January 2026, and replace it with attached **PROPOSAL SCHEDULE**, page P-8 to P-11A dated R03/16/2026.

D. SPECIFICATIONS

1. Delete **PART 0.D SPECIAL PROVISIONS,** page 4 with January 2026 and replace it with attached **PART 0.D SPECIAL PROVISIONS,** page 4, dated R03/16/2026.

2. Delete **PART 0.E NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY** dated January 2026, in its entirety.

3. Delete **PART 0.E EQUAL OPPORTUNITY CLAUSE** dated January 2026, in its entirety.

4. Delete **PART 0.E STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS** dated January 2026, in its entirety.

5. Delete **PART 0.E TYPE I, II, III EQUIPMENT/BUILDING, AND IV BUY AMERICAN WAIVERS ISSUED (AS OF 12/22/2025)** dated December 22, 2025, in its entirety and replace it with attached **PART 0.E TYPE I, II, III EQUIPMENT/BUILDING, AND IV BUY AMERICAN WAIVERS ISSUED (AS OF 3/3/2026),** dated R03/16/2026.

6. Delete **PART 0.E GENERAL CIVIL RIGHTS PROVISIONS** dated January 2026, in its entirety and replace it with attached **PART 0.E GENERAL CIVIL RIGHTS PROVISIONS,** dated R03/16/2026.

7. Delete **PART 0.E CIVIL RIGHTS – TITLE VI ASSURANCES** dated January 2026, in its entirety and replace it with attached **PART 0.E CIVIL RIGHTS – TITLE VI ASSURANCES,** dated R03/16/2026.

8. Delete **PART 0.E DAVIS-BACON REQUIREMENTS** dated January 2026, in its entirety and replace it with attached **PART 0.E DAVIS-BACON REQUIREMENTS,** dated R03/16/2026.

9. Add and make a part of the specifications the attached **PART 0.E FEDERAL FAIR LABOR STANDARDS ACT,** dated R03/16/2026.

10. Add and make a part of the specifications the attached **PART 0.E OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970,** dated R03/16/2026.

11. Delete **PART 0.E DISTRACTED DRIVING** dated January 2026, in its entirety and replace it with attached **PART 0.E DISTRACTED DRIVING,** dated R03/16/2026.

12. Add and make a part of the specifications the attached **PART 0.E PROHIBITION OF COVERED UNMANNED AIRCRAFT SYSTEMS (UAS),** dated R03/16/2026.

13. Delete **PART 0.H BIDDER'S STATEMENT ON PREVIOUS CONTRACTS SUBJECT TO EEO CLAUSES** dated January 2026, in its entirety.

14. Delete **PART 0.H PROHIBITION OF SEGREGATED FACILITIES** dated January 2026, in its entirety.

15. Delete **Section 01005 DESCRIPTION OF WORK,** Page 01005-4, dated January 2026, and replace it with attached **Section 01005 DESCRIPTION OF WORK,** Page 01005-4**,** dated R03/16/2026.

16. Delete **Section 01005 DESCRIPTION OF WORK,** Attachment A – Draft Safety Risk Assessment Panel Meeting Safety Risk Management Document, dated January 20, 2026, and replace it with attached **Section 01005 DESCRIPTION OF WORK,** Attachment A – Safety Risk Assessment Panel Meeting Safety Risk Management Document**,** dated February 17, 2026.

17. Delete **Section 01562 MANAGEMENT OF CONTAMINATED MEDIA, SOIL DISPOSAL, AND SOIL REUSE,** Attachment B – DRAFT Construction Environmental Hazard Management Plan, dated January 2026, in its entirety and replace it with attached **Section 01562 MANAGEMENT OF CONTAMINATED MEDIA, SOIL DISPOSAL, AND SOIL REUSE,** Attachment B – DRAFT Construction Environmental Hazard Management Plan, dated February 2026.

18. Delete **Section 01580 TEMPORARY FACILITIES AND UTILITIES,** Page 01580-2 January 2026, and replace it with attached **Section 01580 TEMPORARY FACILITIES AND UTILITIES,** Page 01580-2, dated R03/16/2026.

19. Add and make a part of the specifications the attached **Section 01580 TEMPORARY FACILITIES AND UTILITIES,** Attachment A – Oahu District Temporary Water Application, dated R03/16/2026.

20. Delete **Section 02152 EXCAVATION, SUBGRADE, AND EMBANKMENT,** Pages 02152-1, 02152-4, 02152-12, 02152-13, and 02152-14, dated January 2026, and replace it with attached **Section 02152 EXCAVATION, SUBGRADE, AND EMBANKMENT,** Pages 02152-1, 02152-4, 02152-12, 02152-13, and 02152-14, dated R03/16/2026.

21. Add and make a part of the specifications the attached **Section 02152 EXCAVATION, SUBGRADE, AND EMBANKMENT**, Attachment A – TWY C Potholing Investigation – Associated Documents, dated February 26, 2026.

22. Delete **Section 02315 TRENCHING AND BACKFILL**, in its entirety, dated January 2026, and replace it with attached **Section 02315 TRENCHING AND BACKFILL,** dated R03/16/2026.

23. Delete **Section 02610 CONCRETE FOR MISCELLANEOUS STRUCTURES,** Page 02610-5, dated January 2026, and replace it with attached **Section 02610 CONCRETE FOR MISCELLANEOUS STRUCTURES,** Page 02610-5, dated R03/16/2026.

24. Delete **Section 02620 RUNWAY AND TAXIWAY MARKINGS,** Page 02620-7, dated January 2026, and replace it with attached **Section 02620 RUNWAY AND TAXIWAY MARKINGS,** Page 02620-7, dated R03/16/2026.

25. Delete **Section 02701 PIPE FOR STORM DRAINS AND CULVERTS,** Pages 02701-3, 02701-8, 02701-9, and 02701-10, dated January 2026, and replace it with attached **Section 02701 PIPE FOR STORM DRAINS AND CULVERTS,** Pages 02701-3, 02701-8, 02701- 9, and 02701-10, dated R03/16/2026.

26. Delete **Section 02753 ELECTRICAL AND UTILITY STRUCTURE INVESTIGATION,** Page 02753-3, dated January 2026, and replace it with attached **Section 02753 ELECTRICAL AND UTILITY STRUCTURE INVESTIGATION,** Page 02753-3, dated R03/16/2026.

27. Add and make a part of the specifications the attached **Section 16101 AIRFIELD ELECTRICAL DEMOLITION AND REMOVAL,** dated R03/16/2026.

28. Add and make a part of the specifications the attached **Section 16128 TEMPORARY AND PERMANENT MISCELLANEOUS AIRFIELD ELECTRICAL WORK,** dated R03/16/2026.

29. Delete **Section 16301 UNDERGROUND ELECTRICAL WORK**, Page16301-6, dated January 2026, and replace it with attached **Section 16301 UNDERGROUND ELECTRICAL WORK,** Pages 16301-6 and 16301-7**,** dated R03/16/2026.

30. Delete **Section 16560 AIRFIELD LIGHTING SYSTEM**, dated January 2026, in its entirety and replace it with attached **Section 16560 AIRFIELD LIGHTING SYSTEM,** dated R03/16/2026.

E. PLANS

1. Delete **PLANS SHEET NO. G-002 INDEX OF DRAWINGS** and replace it with attached **PLANS SHEET NO. ADD. 1 G-002 INDEX OF DRAWINGS.**

2. Delete **PLANS SHEET NO. G-003 NOTES AND ABBREVIATIONS** and replace it with attached **PLANS SHEET NO. ADD. 1 G-003 NOTES AND ABBREVIATIONS.**

3. Delete **PLANS SHEET NO. G-018 CONSTRUCTION SEQUENCING/TIMELINE AND PHASING OVERVIEW** and replace it with attached **PLANS SHEET NO. ADD. 1 G-018 CONSTRUCTION SEQUENCING/TIMELINE AND PHASING OVERVIEW.**

4. Delete **PLANS SHEET NO. G-019 SOIL STOCKPILING AND LAYDOWN AREA PLAN** and replace it with attached **PLANS SHEET NO. ADD. 1 G-019 SOIL STOCKPILING AND LAYDOWN AREA PLAN.**

5. Delete **PLANS SHEET NO. G-020 SOIL STOCKPILING AND LAYDOWN IMPROVEMENT PLAN** and replace it with attached **PLANS SHEET NO. ADD. 1 G-020 SOIL STOCKPILING AND LAYDOWN IMPROVEMENT PLAN.**

6. Delete **PLANS SHEET NO. G-021 CONSTRUCTION PHASING PLAN PHASE 1A** and replace it with attached **PLANS SHEET NO. ADD. 1 G-021 CONSTRUCTION PHASING PLAN PHASE 1A.**

7. Delete **PLANS SHEET NO. G-022 CONSTRUCTION PHASING PLAN PHASE 1A** and replace it with attached **PLANS SHEET NO. ADD. 1 G-022 CONSTRUCTION PHASING PLAN PHASE 1B.**

8. Delete **PLANS SHEET NO. G-025 CONSTRUCTION PHASING PLAN PHASE 3** and replace it with attached **PLANS SHEET NO. ADD. 1 G-025 CONSTRUCTION PHASING PLAN PHASE 3.**

9. Delete **PLANS SHEET NO. G-026 CONSTRUCTION PHASING PLAN PHASE 4.1** and replace it with attached **PLANS SHEET NO. ADD. 1 G-026 CONSTRUCTION PHASING PLAN PHASE 4.1.**

10. Delete **PLANS SHEET NO. G-027 CONSTRUCTION PHASING PLAN PHASE 4.2** and replace it with attached **PLANS SHEET NO. ADD. 1 G-027 CONSTRUCTION PHASING PLAN PHASE 4.2.**

11. Delete **PLANS SHEET NO. G-028 CONSTRUCTION PHASING PLAN PHASE 4.3** and replace it with attached **PLANS SHEET NO. ADD. 1 G-028 CONSTRUCTION PHASING PLAN PHASE 4.3.**

12. Delete **PLANS SHEET NO. G-029 CONSTRUCTION PHASING PLAN PHASE 5** and replace it with attached **PLANS SHEET NO. ADD. 1 G-029 CONSTRUCTION PHASING PLAN PHASE 5.**

13. Delete **PLANS SHEET NO. G-031 CONSTRUCTION PHASING PLAN PHASE 6** and replace it with attached **PLANS SHEET NO. ADD. 1 G-031 CONSTRUCTION PHASING PLAN PHASE 6.**

14. Delete **PLANS SHEET NO. G-032 CONSTRUCTION PHASING PLAN PHASE 7** and replace it with attached **PLANS SHEET NO. ADD. 1 G-032 CONSTRUCTION PHASING PLAN PHASE 7.**

15. Delete **PLANS SHEET NO. G-034 CONSTRUCTION PHASING PLAN PHASE 8** and replace it with attached **PLANS SHEET NO. ADD. 1 G-034 CONSTRUCTION PHASING PLAN PHASE 8.**

16. Delete **PLANS SHEET NO. G-035 CONSTRUCTION PHASING PLAN PHASE 9** and replace it with attached **PLANS SHEET NO. ADD. 1 G-035 CONSTRUCTION PHASING PLAN PHASE 9.**

17. Delete **PLANS SHEET NO. G-036 CONSTRUCTION PHASING PLAN PHASE 10** and replace it with attached **PLANS SHEET NO. ADD. 1 G-036 CONSTRUCTION PHASING PLAN PHASE 10.**

18. Delete **PLANS SHEET NO. G-037 CONSTRUCTION PHASING PLAN PHASE 11** and replace it with attached **PLANS SHEET NO. ADD. 1 G-037 CONSTRUCTION PHASING PLAN PHASE 11.**

19. Delete **PLANS SHEET NO. G-038 CONSTRUCTION PHASING PLAN PHASE 12** and replace it with attached **PLANS SHEET NO. ADD. 1 G-038 CONSTRUCTION PHASING PLAN PHASE 12.**

20. Delete **PLANS SHEET NO. G-039 CONSTRUCTION PHASING PLAN PHASE 13** and replace it with attached **PLANS SHEET NO. ADD. 1 G-039 CONSTRUCTION PHASING PLAN PHASE 13.**

21. Delete **PLANS SHEET NO. G-040 CONSTRUCTION PHASING PLAN PHASE 14** and replace it with attached **PLANS SHEET NO. ADD. 1 G-040 CONSTRUCTION PHASING PLAN PHASE 14.**

22. Delete **PLANS SHEET NO. G-042 PHASING DETAILS 2** and replace it with attached **PLANS SHEET NO. G-042 PHASING DETAILS 2.**

23. Delete **PLANS SHEET NO. G-060 TEMP MARKING PLAN PHASE 2** and replace them with attached **PLANS SHEET NO. ADD. 1 G-060 TEMP MARKING PLAN PHASE 2.**

24. Delete **PLANS SHEET NO. G-061 TEMP MARKING PLAN PHASE 3** and replace them with attached **PLANS SHEET NO. ADD. 1 G-061 TEMP MARKING PLAN PHASE 3.**

25. Delete **PLANS SHEET NO. G-062 TEMP MARKING PLAN PHASE 6** and replace them with attached **PLANS SHEET NO. ADD. 1 G-062 TEMP MARKING PLAN PHASE 6.**

26. Delete **PLANS SHEET NO. G-063 TEMP MARKING PLAN PHASE 9** and replace them with attached **PLANS SHEET NO. ADD. 1 G-063 TEMP MARKING PLAN PHASE 9.**

27. Delete **PLANS SHEET NO. G-064 TEMP MARKING PLAN PHASE 10** and replace them with attached **PLANS SHEET NO. ADD. 1 G-064 TEMP MARKING PLAN PHASE 10.**

28. Delete **PLANS SHEET NO. G-065 TEMP MARKING PLAN PHASE 11** and replace them with attached **PLANS SHEET NO. ADD. 1 G-065 TEMP MARKING PLAN PHASE 11.**

29. Delete **PLANS SHEET NO. G-066 TEMP MARKING PLAN PHASE 12** and replace them with attached **PLANS SHEET NO. ADD. 1 G-066 TEMP MARKING PLAN PHASE 12.**

30. Delete **PLANS SHEET NO. G-101 EXISTING CONDITIONS PLAN 2** and replace them with attached **PLANS SHEET NO. ADD. 1 G-101 EXISTING CONDITIONS PLAN 2.**

31. Delete **PLANS SHEET NO. G-102 EXISTING CONDITIONS PLAN 3** and replace them with attached **PLANS SHEET NO. ADD. 1 G-102 EXISTING CONDITIONS PLAN 3.**

32. Delete **PLANS SHEET NO. G-103 EXISTING CONDITIONS PLAN 4** and replace them with attached **PLANS SHEET NO. ADD. 1 G-103 EXISTING CONDITIONS PLAN 4.**

33. Delete **PLANS SHEET NO. G-104 EXISTING CONDITIONS PLAN 5** and replace them with attached **PLANS SHEET NO. ADD. 1 G-104 EXISTING CONDITIONS PLAN 5.**

34. Delete **PLANS SHEET NO. G-105 EXISTING CONDITIONS PLAN 6** and replace them with attached **PLANS SHEET NO. ADD. 1 G-105 EXISTING CONDITIONS PLAN 6.**

35. Delete **PLANS SHEET NO. G-106 EXISTING CONDITIONS PLAN 7** and replace them with attached **PLANS SHEET NO. ADD. 1 G-106 EXISTING CONDITIONS PLAN 7.**

36. Delete **PLANS SHEET NO. G-107 EROSION CONTROL PLAN 1** and replace them with attached **PLANS SHEET NO. ADD. 1 G-107 EROSION CONTROL PLAN 1.**

37. Delete **PLANS SHEET NO. G-108 EROSION CONTROL PLAN 2** and replace them with attached **PLANS SHEET NO. ADD. 1 G-108 EROSION CONTROL PLAN 2.**

38. Delete **PLANS SHEET NO. G-109 EROSION CONTROL PLAN 3** and replace them with attached **PLANS SHEET NO. ADD. 1 G-109 EROSION CONTROL PLAN 3.**

39. Delete **PLANS SHEET NO. G-110 EROSION CONTROL PLAN 4** and replace them with attached **PLANS SHEET NO. ADD. 1 G-110 EROSION CONTROL PLAN 4.**

40. Delete **PLANS SHEET NO. C-201 CIVIL DEMOLITION PLAN 1** and replace them with attached **PLANS SHEET NO. ADD. 1 C-201 CIVIL DEMOLITION PLAN 1.**

41. Delete **PLANS SHEET NO. C-202 CIVIL DEMOLITION PLAN 2** and replace them with attached **PLANS SHEET NO. ADD. 1 C-202 CIVIL DEMOLITION PLAN 2.**

42. Delete **PLANS SHEET NO. C-203 CIVIL DEMOLITION PLAN 3** and replace them with attached **PLANS SHEET NO. ADD. 1 C-203 CIVIL DEMOLITION PLAN 3.**

43. Delete **PLANS SHEET NO. C-204 CIVIL DEMOLITION PLAN 4** and replace them with attached **PLANS SHEET NO. ADD. 1 C-204 CIVIL DEMOLITION PLAN 4.**

44. Delete **PLANS SHEET NO. C-205 CIVIL DEMOLITION PLAN 5** and replace them with attached **PLANS SHEET NO. ADD. 1 C-205 CIVIL DEMOLITION PLAN 5.**

45. Delete **PLANS SHEET NO. C-206 CIVIL DEMOLITION PLAN 6** and replace them with attached **PLANS SHEET NO. ADD. 1 C-206 CIVIL DEMOLITION PLAN 6.**

46. Delete **PLANS SHEET NO. C-207 CIVIL DEMOLITION PLAN 7** and replace them with attached **PLANS SHEET NO. ADD. 1 C-207 CIVIL DEMOLITION PLAN 7.**

47. Delete **PLANS SHEET NO. C-301 PAVING LAYOUT PLAN 1** and replace them with attached **PLANS SHEET NO. ADD. 1 C-301 PAVING LAYOUT PLAN 1.**

48. Delete **PLANS SHEET NO. C-302 PAVING LAYOUT PLAN 2** and replace them with attached **PLANS SHEET NO. ADD. 1 C-302 PAVING LAYOUT PLAN 2.**

49. Delete **PLANS SHEET NO. C-303 PAVING LAYOUT PLAN 3** and replace them with attached **PLANS SHEET NO. ADD. 1 C-303 PAVING LAYOUT PLAN 3.**

50. Delete **PLANS SHEET NO. C-304 PAVING LAYOUT PLAN 4** and replace them with attached **PLANS SHEET NO. ADD. 1 C-304 PAVING LAYOUT PLAN 4.**

51. Delete **PLANS SHEET NO. C-305 PAVING LAYOUT PLAN 5** and replace them with attached **PLANS SHEET NO. ADD. 1 C-305 PAVING LAYOUT PLAN 5.**

52. Delete **PLANS SHEET NO. C-306 PAVING LAYOUT PLAN 6** and replace them with attached **PLANS SHEET NO. ADD. 1 C-306 PAVING LAYOUT PLAN 6.**

53. Delete **PLANS SHEET NO. C-307 PAVING LAYOUT PLAN 7** and replace them with attached **PLANS SHEET NO. ADD. 1 C-307 PAVING LAYOUT PLAN 7.**

54. Delete **PLANS SHEET NO. C-308 PCC PAVING LAYOUT PLAN** and replace them with attached **PLANS SHEET NO. ADD. 1 C-308 PCC PAVING LAYOUT PLAN.**

55. Delete **PLANS SHEET NO. C-350 PAVING DETAILS 1** and replace it with attached **PLANS SHEET NO. ADD. 1 C-350 PAVING DETAILS 1**.

56. Delete **PLANS SHEET NO. C-352 PAVING DETAILS 3** and replace it with attached **PLANS SHEET NO. ADD. 1 C-352 PAVING DETAILS 3**.

57. Delete **PLANS SHEET NO. C-501 GRADING PLAN 1** and replace them with attached **PLANS SHEET NO. ADD. 1 C-501 GRADING PLAN 1.**

58. Delete **PLANS SHEET NO. C-502 GRADING PLAN 2** and replace them with attached **PLANS SHEET NO. ADD. 1 C-502 GRADING PLAN 2.**

59. Delete **PLANS SHEET NO. C-503 GRADING PLAN 3** and replace them with attached **PLANS SHEET NO. ADD. 1 C-503 GRADING PLAN 3.**

60. Delete **PLANS SHEET NO. C-504 GRADING PLAN 4** and replace them with attached **PLANS SHEET NO. ADD. 1 C-504 GRADING PLAN 4.**

61. Delete **PLANS SHEET NO. C-505 GRADING PLAN 5** and replace them with attached **PLANS SHEET NO. ADD. 1 C-505 GRADING PLAN 5.**

62. Delete **PLANS SHEET NO. C-506 GRADING PLAN 6** and replace them with attached **PLANS SHEET NO. ADD. 1 C-506 GRADING PLAN 6.**

63. Delete **PLANS SHEET NO. C-507 GRADING PLAN 7** and replace them with attached **PLANS SHEET NO. ADD. 1 C-507 GRADING PLAN 7.**

64. Delete **PLANS SHEET NO. C-601 ENLARGED DRAINAGE PLAN 1** and replace it with attached **PLANS SHEET NO. ADD. 1 C-601 ENLARGED DRAINAGE PLAN 1**.

65. Delete **PLANS SHEET NO. C-602 ENLARGED DRAINAGE PLAN 2** and replace it with attached **PLANS SHEET NO. ADD. 1 C-602 ENLARGED DRAINAGE PLAN 2**.

66. Delete **PLANS SHEET NO. C-603 ENLARGED DRAINAGE PLAN 3** and replace it with attached **PLANS SHEET NO. ADD. 1 C-603 ENLARGED DRAINAGE PLAN 3**.

67. Delete **PLANS SHEET NO. C-604 WATER LINE PLAN AND PROFILE** and replace it with attached **PLANS SHEET NO. ADD. 1 C-604 WATER LINE PLAN AND PROFILE**.

68. Delete **PLANS SHEET NO. C-605 DRAIN LINE PROFILES** and replace it with attached **PLANS SHEET NO. ADD. 1 C-605 DRAIN LINE PROFILES**.

69. Delete **PLANS SHEET NO. C-606 MISCELLANEOUS DETAILS** and replace it with attached **PLANS SHEET NO. ADD. 1 C-606 MISCELLANEOUS DETAILS**.

70. Delete **PLANS SHEET NO. C-704 PAVEMENT MARKING LAYOUT PLAN 4** and replace it with attached **PLANS SHEET NO. ADD. 1 C-704 PAVEMENT MARKING LAYOUT PLAN 4**.

71. Delete **PLANS SHEET NO. E-001 ELECTRICAL SYMBOL LIST AND GENERAL NOTES** and replace it with attached **PLANS SHEET NO. ADD. 1 E-001 ELECTRICAL SYMBOL LIST AND GENERAL NOTES**.

72. Delete **PLANS SHEET NO. E-101 ELECTRICAL DEMOLITION SITE PLAN - 1** and replace it with attached **PLANS SHEET NO. ADD. 1 E-101 ELECTRICAL DEMOLITION SITE PLAN - 1**.

73. Delete **PLANS SHEET NO. E-102 ELECTRICAL DEMOLITION SITE PLAN - 2** and replace it with attached **PLANS SHEET NO. ADD. 1 E-102 ELECTRICAL DEMOLITION SITE PLAN - 2**.

74. Delete **PLANS SHEET NO. E-103 ELECTRICAL DEMOLITION SITE PLAN - 3** and replace it with attached **PLANS SHEET NO. ADD. 3 E-101 ELECTRICAL DEMOLITION SITE PLAN - 3**.

75. Delete **PLANS SHEET NO. E-104 ELECTRICAL DEMOLITION SITE PLAN - 4** and replace it with attached **PLANS SHEET NO. ADD. 1 E-104 ELECTRICAL DEMOLITION SITE PLAN - 4**.

76. Delete **PLANS SHEET NO. E-105 ELECTRICAL DEMOLITION SITE PLAN - 5** and replace it with attached **PLANS SHEET NO. ADD. 1 E-105 ELECTRICAL DEMOLITION SITE PLAN - 5**.

77. Delete **PLANS SHEET NO. E-106 ELECTRICAL DEMOLITION SITE PLAN - 6** and replace it with attached **PLANS SHEET NO. ADD. 1 E-106 ELECTRICAL DEMOLITION SITE PLAN - 6**.

78. Delete **PLANS SHEET NO. E-107 ELECTRICAL DEMOLITION SITE PLAN - 7** and replace it with attached **PLANS SHEET NO. ADD. 1 E-107 ELECTRICAL DEMOLITION SITE PLAN - 7**.

79. Delete **PLANS SHEET NO. E-201 NEW ELECTRICAL SITE PLAN - 1** and replace it with attached **PLANS SHEET NO. ADD. 1 E-201 NEW ELECTRICAL SITE PLAN - 1**.

80. Delete **PLANS SHEET NO. E-202 NEW ELECTRICAL SITE PLAN - 2** and replace it with attached **PLANS SHEET NO. ADD. 1 E-202 NEW ELECTRICAL SITE PLAN - 2**.

81. Delete **PLANS SHEET NO. E-203 NEW ELECTRICAL SITE PLAN - 3** and replace it with attached **PLANS SHEET NO. ADD. 1 E-203 NEW ELECTRICAL SITE PLAN - 3**.

82. Delete **PLANS SHEET NO. E-204 NEW ELECTRICAL SITE PLAN - 4** and replace it with attached **PLANS SHEET NO. ADD. 1 E-204 NEW ELECTRICAL SITE PLAN - 4**.

83. Delete **PLANS SHEET NO. E-205 NEW ELECTRICAL SITE PLAN - 5** and replace it with attached **PLANS SHEET NO. ADD. 1 E-205 NEW ELECTRICAL SITE PLAN - 5**.

84. Delete **PLANS SHEET NO. E-206 NEW ELECTRICAL SITE PLAN - 6** and replace it with attached **PLANS SHEET NO. ADD. 1 E-206 NEW ELECTRICAL SITE PLAN - 6**.

85. Delete **PLANS SHEET NO. E-207 NEW ELECTRICAL SITE PLAN - 7** and replace it with attached **PLANS SHEET NO. ADD. 1 E-207 NEW ELECTRICAL SITE PLAN - 7**.

86. Delete **PLANS SHEET NO. E-300 OVERALL TAXIWAY CIRCUITING SITE PLAN** and replace it with attached **PLANS SHEET NO. ADD. 1 E-300 OVERALL TAXIWAY CIRCUITING SITE PLAN.**

87. Delete **PLANS SHEET NO. E-301 TAXIWAY CIRCUITING SITE PLAN - 1** and replace it with attached **PLANS SHEET NO. ADD. 1 E-301 TAXIWAY CIRCUITING SITE PLAN - 1**.

88. Delete **PLANS SHEET NO. E-302 TAXIWAY CIRCUITING SITE PLAN - 2** and replace it with attached **PLANS SHEET NO. ADD. 1 E-302 TAXIWAY CIRCUITING SITE PLAN - 2**.

89. Delete **PLANS SHEET NO. E-303 TAXIWAY CIRCUITING SITE PLAN - 3** and replace it with attached **PLANS SHEET NO. ADD. 1 E-303 TAXIWAY CIRCUITING SITE PLAN - 3**.

90. Delete **PLANS SHEET NO. E-304 TAXIWAY CIRCUITING SITE PLAN - 4** and replace it with attached **PLANS SHEET NO. ADD. 1 E-304 TAXIWAY CIRCUITING SITE PLAN - 4**.

91. Delete **PLANS SHEET NO. E-305 TAXIWAY CIRCUITING SITE PLAN - 5** and replace it with attached **PLANS SHEET NO. ADD. 1 E-305 TAXIWAY CIRCUITING SITE PLAN - 5**.

92. Delete **PLANS SHEET NO. E-306 TAXIWAY CIRCUITING SITE PLAN - 6** and replace it with attached **PLANS SHEET NO. ADD. 1 E-306 NOT USED**.

93. Delete **PLANS SHEET NO. E-307 TAXIWAY CIRCUITING SITE PLAN - 7** and replace it with attached **PLANS SHEET NO. ADD. 1 E-307 NOT USED**.

94. Delete **PLANS SHEET NO. E-501 DUCT SECTION & DUCT ENTRANCE DETAILS AND PANEL SCHEDULE** and replace it with attached **PLANS SHEET NO. ADD. 1 E-501 DUCT SECTION DETAILS & SCHEDULE, HANDHOLE PENETRATION DETAIL.**

95. Delete **PLANS SHEET NO. E-502 TAXIWAY EDGE LIGHT DETAILS** and replace it with attached **PLANS SHEET NO. ADD. 1 E-502 TAXIWAY EDGE LIGHT DETAILS.**

96. Delete **PLANS SHEET NO. E-504 HANDHOLE DETAILS** and replace it with attached **PLANS SHEET NO. ADD. 1 E-504 NOT USED.**

97. Delete **PLANS SHEET NO. E-601 TAXIWAY CIRCUITING DIAGRAMS** and replace it with attached **PLANS SHEET NO. ADD. 1 E-601 NOT USED.**

98. Delete **PLANS SHEET NO. E-602 TAXIWAY CIRCUITING DIAGRAMS** and replace it with attached **PLANS SHEET NO. ADD. 1 E-602 NOT USED.**

The following is provided for information.

F. PRE-BID MEETING MINUTES

1. The attached **PRE-BID MEETING MINUTES and ATTENDANCE SHEETS (for Pre-Bid Meeting and Site Visit)** are provided for information.

G. RESPONSES TO REQUESTS FOR INFORMATION (RFI'S/QUESTIONS)

1. The attached **RESPONSES TO REQUESTS FOR INFORMATION** are provided for information.

H. ATTACHMENTS

1. Geotechnical Data Report, Taxiway C Pavement Reconstruction Project, Daniel K. Inouye International Airport, prepared by Geolabs, Inc., dated February 27, 2026

2. Geotechnical Data Report, Taxiway C Reconstruction, Daniel K. Inouye International Airport, prepared by Yogi Kwong Engineers, dated May 2025

3. AO1021-30 TWY C Addendum #1, RFI #2.dwg

Please acknowledge receipt of this **ADDENDUM NO. 1** by recording the date of its receipt in the space provided on the **PAGE P-4** of the Proposal.

CURT T. OTAGURO
Deputy Director of Transportation for Airports

NOTICE TO BIDDERS

Hawaii Revised Statutes (HRS),
Chapter 103D

The receiving of bids for **TAXIWAY C RECONSTRUCTION AT DANIEL K. INOUYE INTERNATIONAL AIRPORT, HONOLULU, OAHU, HAWAII, STATE PROJECT NO. AO1021-30, AIP NO. 3-15-0005-###)**, will begin as of the HIePRO Release Date. Bidders shall register and submit complete bids through HIePRO only. Refer to the following HIePRO link for important information on Vendor Registration: https://hiepro.ehawaii.gov/welcome.html.

The solicitation plans, specifications, proposal, and additional documents designated or incorporated by reference shall be available in HIePRO.

HIePRO OFFER DUE DATE AND TIME is April 8, 2026, at 2:00 p.m., Hawaii Standard Time (HST). **Bidders shall submit and upload the complete proposal to HIePRO prior to the offer due date and time. Proposals received after said due date and time shall not be considered. Any additional support documents explicitly designated as confidential and/or proprietary shall be uploaded as a separate file to HIePRO. Bidders shall not include confidential and/or proprietary documents as part of their proposal. The record of each bidder and their respective proposal shall be open to public inspection. FAILURE TO UPLOAD THE PROPOSAL TO HIePRO SHALL BE GROUNDS FOR REJECTION.**

The scope of work consists of the asphalt concrete pavement reconstruction of Taxiway C and PCC pavement reconstruction adjacent to Hardstands A-E on the South Ramp, including asphalt overlay, storm drain replacements and repairs, 12-inch waterline replacement, and airfield electrical and lighting revisions. The estimated cost of construction is between $105,000,000 and $115,000,000.

To be eligible for award, bidders shall possess a valid State of Hawaii General Engineering "A" Contractor's license **prior to the award of contract.**

The Hawaii Department of Transportation, Air and Water Transportation Facilities Division, 2016 GENERAL PROVISIONS FOR CONSTRUCTION PROJECTS, applicable to this project are available on the internet at: http://hidot.hawaii.gov/administration/con/.

A virtual pre-bid conference is scheduled for February 12, 2026, at 10:00 a.m., HST. Interested bidders shall contact John West, Project Manager, directly at john.k.west@hawaii.gov, no later than five working days prior to the scheduled pre-bid conference to receive the meeting invitation. All prospective bidders and/or their respective representatives are encouraged to attend, however, attendance is not mandatory. All information presented at the pre-bid conference shall be provided for clarification and information only. Any amendments to the solicitation shall be made by formal addendum and posted in HIePRO.

A pre-bid site visit is scheduled for February 9, 2026 at the Daniel K. Inouye International Airport. Please contact the Project Manager at john.k.west@hawaii.gov to confirm your attendance by close of business February 4, 2026.

All Request for Information (RFI) questions and Substitution Requests shall be submitted in HIePRO **no later than March 19, 2026.** RFI questions received after the stated deadline shall not be addressed. Substitution Requests received after the stated deadline shall not be considered. Verbal RFI(s) shall not receive a response. All responses to RFI questions shall be provided for clarification and information only and issued by formal addendum. Any amendments to the solicitation shall be made by formal addendum and posted in HIePRO.

If there is a conflict between the solicitation and information stated in the pre-bid conference, the meeting minutes, the pre-bid site visit, and/or the responses to RFI questions, the solicitation shall govern and control, unless as amended by formal addendum.

Campaign contributions by State and County Contractors. Contractors are hereby notified of the applicability of HRS § 11-355 which states that campaign contributions are prohibited from specified State or County government contractors during the term of the contract if the contractors are paid with funds appropriated by a legislative body. For more information, contact the Campaign Spending Commission at (808) 586-0285.

Protests. Any protest of this solicitation shall be submitted in writing to the Director of Transportation, in accordance with HRS § 103D-701 and Hawaii Administrative Rules § 3-126. The Equal Employment Opportunity Regulations of the Secretary of Labor implementing Executive Order 11246, as amended, shall be complied with on this project.

The U.S. Department of Transportation Regulation entitled "Nondiscrimination in Federally Assisted Programs of the U.S. Department of Transportation," Title 49, Code of Federal Regulations (CFR), Part 21, is applicable to this project. Bidders are hereby notified that the Department of Transportation shall affirmatively ensure that the contract entered into pursuant to this advertisement shall be awarded to the lowest responsible bidder without discrimination on the grounds of race, color, national origin, or sex (as directed by 23 CFR Part 200).

Disadvantaged Business Enterprise (DBE). The U.S. Department of Transportation Regulations entitled "Participation by Disadvantaged Business Enterprise in Department of Transportation Financial Assistance Programs," Title 49, CFR, Part 26, is applicable to this project. Bidders are hereby notified that the Department of Transportation shall strictly

enforce full compliance with all the requirements of the Disadvantaged Business Enterprise program with respect to this project.

Bidders shall read the following included in the solicitation:

1. "CIVIL RIGHTS COMPLIANCE AND DISADVANTAGED BUSINESS ENTERPRISE SPECIAL PROVISIONS"

For additional information, contact John West, Project Manager, by phone at (808) 838-8867 or by email at john.k.west@hawaii.gov.

The State reserves the right to reject any or all proposals and to waive any defects in said proposals in the best interest of the public.

CURT T. OTAGURO
Deputy Director of Transportation for Airports

HIePRO RELEASE DATE: March 16, 2026

TABLE OF CONTENTS

PART 0 – GENERAL REQUIREMENTS

PART 0.A – BIDDING REQUIREMENTS

Notice To Bidders ..... 1 to 4
Instructions for Contractor's Licensing ..... 1 to 1

PART 0.B – BIDDING DOCUMENTS TO BE SUBMITTED WITH BID

Proposal to the State of Hawaii Department of Transportation ..... P-1 to P-7
Proposal Schedule ..... P-8 to P-11A
Surety Bid Bond P-12
Certification Of Compliance With Faa Buy American Preference – .....
Construction Projects ..... P-13 to P-15

PART 0.C – WAGE RATES

Requirements of Chapter 104, HRS Wages and Hours of Employee on Public Works Law ..... 1 to 2
State of Hawaii Wage Rate Schedule (Not Physically Included in bid Documents) ..... 1 to 1
Federal Wage Rates ..... 1 to 19

PART 0.D – SPECIAL PROVISIONS

Special Provisions ..... 1 to 13

PART 0.E – REQUIRED FEDERAL AIRPORT IMPROVEMENT PROGRAM (AIP) CONTRACT PROVISIONS

Buy American Preference Statement ..... 1 to 1
Appendix X. Buy American Guidance ..... 1 to 4
U.S.C. Title 49, Subtitle VII, Part E, Chapter 501 Buy American Preferences ..... 1 to 3
Type I, II, III Equipment/Building, and IV Buy American Waivers Issued (As of 3/3/2026) .... 1 to 42
General Civil Rights Provisions ..... 1 to 1
Civil Rights – Title VI Assurances ..... 1 to 3
Contract Work Hours and Safety Standards Act Requirements ..... 1 to 1
Davis-Bacon Requirements ..... 1 to 6
Copeland "Anti-Kickback" Act ..... 1 to 1
Federal Fair Labor Standards Act ..... 1 to 1
Occupational Safety and Health Act of 1970 ..... 1 to 1
Energy Conservation Requirements ..... 1 to 1
Procurement of Recovered Materials ..... 1 to 1
Rights to Inventions ..... 1 to 1
Veteran's Preference ..... 1 to 1
Distracted Driving ..... 1 to 1

Clean Air And Water Pollution Control ..... 1 to 1
Prohibition On Certain Telecommunicationns And Video Surveillance Services Or Equipment 1 to 1
Prohibition Of Covered Unmanned Aircraft Systems (UAS) ..... 1 to 1

PART 0.F –DISADVANTAGED BUSINESS ENTERPRISE

Civil Rights Compliance and Disadvantaged Business Enterprise Special Provisions ..... 1 to 4

PART 0.G – SAMPLE FORMS

Contract ..... K-1 to K-4
Performance Bond (Surety) ..... 1 to 2
Performance Bond ..... 1 to 2
Labor and Material Payment Bond (Surety) ..... 1 to 2
Labor and Material Payment Bond ..... 1 to 2
Chapter 104, HRS Compliance Certificate ..... 1 to 1

PART 0.H – FEDERAL FORMS TO BE SUBMITTED PRIOR TO AWARD

Certification Regarding Lobbying ..... P-1 to P-1
Trade Restriction Certification ..... P-1 to P-2
Certification of Offeror/Bidder Regarding Tax Delinquency and Felony Convictions ..... P-1 to P-1
Certification of Offeror/Bidder Regarding Debarment ..... 1 to 1
Certificate Regarding Domestic Preferences for Procurements ..... 1 to 1

PART I – GENERAL PROVISIONS FOR CONSTRUCTION PROJECTS (NOT PHYSICALLY INCLUDED)

PART II – TECHNICAL PROVISIONS

SECTION **PAGE**

DIVISION 1 – GENERAL REQUIREMENTS

Section 01005 – Description of Work 01005-1 to 01005-4
Attachment A - Safety Risk Assessment Panel Meeting Safety Risk Management Document A-1 to A-174
Section 01040 – Scope of Work 01040-1 to 01040-6
Section 01050 – Control of Work 01050-1 to 01050-9
Section 01060 – Control of Materials 01060-1 to 01060-5
Section 01070 – Legal Regulations and Responsibility to Public 01070-1 to 01070-8
Section 01090 – Measurement and Payment 01090-1 to 01090-10
Section 01100 – Contractor Quality Control Program 01100-1 to 01100-10
Section 01105 – Mobilization 01105-1 to 01105-4
Section 01110 – Method of Estimating Percentage of Material within Specification Limits (PWL) 01110-1 to 01110-8

Section 01210 – Allowances	01210-1 to 01210-2
Section 01300 – Submittals	01300-1 to 01300-8
Section 01533 – Temporary Barricades and Facilities	01533-1 to 01533-4
Section 01560 – General Environmental, Health, & Safety Controls	01560-1 to 01560-4
Section 01561 – Construction Site Pollution Controls	01561-1 to 01561-13
Section 01562 – Management of Contaminated Media, Soil Disposal, and Soil Reuse	01562-1 to 01562-14
Attachment A – DRAFT Taxiway C Preliminary Soil and Groundwater Characterization Summary Report	A-1 to A-143
Attachment B – DRAFT Construction Environmental Hazard Management Plan	B-1 to B-98
Section 01565 – Aviation Security Services	01565-1 to 01565-2
Section 01580 – Temporary Facilities & Utilities	01580-1 to 01580-2
Attachment A – Oahu District Temporary Water Application	A-1 to A-4
Section 01900 – Project Survey and Stakeout	01900-1 to 01900-4
DIVISION 2 – SITE WORK	
Section 02101 – Preparation/Removal of Existing Pavements	02101-1 to 02101-10
Section 02151 – Clearing and Grubbing	02151-1 to 02151-4
Section 02152 – Excavation, Subgrade, and Embankment	02152-1 to 02152-15
Attachment A – TWY C Potholing Investigation – Associated Documents	A-1 to A-52
Section 02153 – Controlled Low-Strength Material (CLSM)	02153-1 to 02153-5
Section 02209 – Crushed Aggregate Base Course	02209-1 to 02209-10
Section 02306 – Lean Concrete Base Course	02306-1 to 02306-13
Section 02315 – Trenching and Backfill	02315-1 to 02315-3
Section 02401 – Asphalt Mix Pavement	02401-1 to 02401-26
Section 02403 – Asphalt Mix Pavement Base and Shoulder Course	02403-1 to 02403-25
Section 02501 – Cement Concrete Pavement	02501-1 to 02501-38
Section 02510 – Water Distribution	02510-1 to 02510-2
Section 02603 – Emulsified Asphalt Tack Coat	02603-1 to 02603-5
Section 02604 – Compression Joint Seals for Concrete Pavements	02604-1 to 02604-8
Section 02605 – Joint Sealants for Pavements	02605-1 to 02605-6
Section 02608 – Emulsified Asphalt Rapid Cure Seal Coat	02608-1 to 02608-11
Section 02610 – Concrete for Miscellaneous Structures	02610-1 to 02610-11
Section 02620 – Runway and Taxiway Markings	02620-1 to 02620-12
Section 02701 – Pipe for Storm Drains and Culverts	02701-1 to 02701-11
Section 02753 – Electrical and Utility Structure Investigation	02753-1 to 02753-3
Section 02755 – Cured-In-Place Pipe (CIPP)	02755-1 to 02755-8
Section 02903 – Sprigging	02903-1 to 02903-6

Section 02905 – Topsoiling 02905-1 to 02905-5
Section 13110 – Cathodic Protection System 13110-1 to 13110-22

DIVISION 16 – ELECTRICALWORK
Section 16011– General Electrical Requirements 16011-1 to 16011-4
Section 16101 – Airfield Electrical Demolition and Removal 16101-1 to 16101-5
Section 16128 – Temporary and Permanent Miscellaneous Airfield Electrical Work 16128-1 to 16128-4
Section 16301 – Underground Electrical Work 16301-1 to 16301-7
Section 16560 – Airfield Lighting System 16560-1 to 16560-8

TAXIWAY C RECONSTRUCTION
DANIEL K INOUYE INTERNATIONAL AIRPORT
HONOLULU, HAWAII
STATE PROJECT NO. AO1021-30
PROPOSAL SCHEDULE

Item No.	Description	Approx. Quantity (a)	Unit	Unit Price (b)	Total (a x b)
01100.1	Contractor Quality Control Program	LS	LS	LS	$ _____
01100.2	QC/QA Workshop Subject Matter Expert	Allowance			$ 25,000.00
01105.1	Mobilization (10 % Maximum)	LS	LS	LS	$ _____
01210.1	Unforeseen Conditions	Allowance			$ 2,000,000.00
01533.1	Temporary Barricades and Facilities Phase 1	LS	LS	LS	$ _____
01533.2	Temporary Barricades and Facilities Phase 2	LS	LS	LS	$ _____
01533.3	Temporary Barricades and Facilities Phase 3	LS	LS	LS	$ _____
01533.4	Temporary Barricades and Facilities Phase 4	LS	LS	LS	$ _____
01533.5	Temporary Barricades and Facilities Phase 5	LS	LS	LS	$ _____
01533.6	Temporary Barricades and Facilities Phase 6	LS	LS	LS	$ _____
01533.7	Temporary Barricades and Facilities Phase 7	LS	LS	LS	$ _____
01533.8	Temporary Barricades and Facilities Phase 8	LS	LS	LS	$ _____
01533.9	Temporary Barricades and Facilities Phase 9	LS	LS	LS	$ _____
01533.10	Temporary Barricades and Facilities Phase 10	LS	LS	LS	$ _____
01533.11	Temporary Barricades and Facilities Phase 11	LS	LS	LS	$ _____
01533.12	Temporary Barricades and Facilities Phase 12	LS	LS	LS	$ _____
01533.13	Temporary Barricades and Facilities Phase 13	LS	LS	LS	$ _____
01533.14	Temporary Barricades and Facilities Phase 14	LS	LS	LS	$ _____
01561.1	Construction Site Pollution Controls	LS	LS	LS	$ _____
01562.1	Management of Contaminated Media, Soil Disposal, and Soil Reuse	Allowance			$ 1,200,000.00
01565.1	Aviation Security Services	Allowance			$ 100,000.00
01900.1	Project Survey and Layout	LS	LS	LS	$ _____

Item No.	Description	Approx. Quantity (a)	Unit	Unit Price (b)	Total (a x b)
02101.1	AC Pavement Demolition (Less than 6-inches Depth)	20,000	SY	$ _____	$ _____
02101.2	AC Pavement Demolition (Greater than 6-inches Depth)	85,000	SY	$ _____	$ _____
02101.3	Cold Milling (3-inch Depth)	40,400	SY	$ _____	$ _____
02101.4	Removal of Existing Structures	1	EA	$ _____	$ _____
02101.5	Abandonment of Existing Structures	3	EA	$ _____	$ _____
02101.6	Pavement Marking Blackout	5,000	SF	$ _____	$ _____
02101.7	Pavement Marking Obliteration	12,000	SF	$ _____	$ _____
02101.8	Pavement Marking Mill or Grind	8,000	SF	$ _____	$ _____
02151.1	Clearing and Grubbing	300	SY	$ _____	$ _____
02152.1	Unclassified Excavation, Material Handling, and Stockpiling	38,600	CY	$ _____	$ _____
02152.2	Unclassified Embankment from Off-Site Material	2,000	CY	$ _____	$ _____
02152.3	Performing Exported Fill Determination Process on Stockpiled Excavation Material	107	Stock-piles	$ _____	$ _____
02152.4	Hazardous Waste Determination Process for Stockpiled Excavation Material where Fill Material Characterization Indicates Contaminant Level is Above the Tier 1 EAL	8	Stock-piles	$ _____	$ _____
02152.5	Disposal of Type I Stockpiled Excavation Material	34,300	CY	$ _____	$ _____
02152.6	Disposal of Type II Stockpiled Excavation Material	1,100	CY	$ _____	$ _____
02152.7	Disposal of Type III Stockpiled Excavation Material	3,100	CY	$ _____	$ _____
02209.1	Crushed Aggregate Base Course (6-inch Depth)	107,000	SY	$ _____	$ _____
02306.1	Lean Concrete Base Course (5-inch Depth)	5,700	SY	$ _____	$ _____
02401.1	Asphalt Mix Pavement Surface Course	45,600	TON	$ _____	$ _____
02403.1	Asphalt Mix Pavement Base and Shoulder Course	62,100	TON	$ _____	$ _____
02501.1	Portland Cement Concrete Pavement (18-inch Depth)	5,300	SY	$ _____	$ _____

Item No.	Description	Approx. Quantity (a)	Unit	Unit Price (b)	Total (a x b)
02510.1	12” Cl. 53 Ductile Iron water pipe, in place complete	LS	LS	LS	$ _____
02603.1	Emulsified Asphalt Tack Coat	37,700	GAL	$ _____	$ _____
02604.1	Compression Joint Seals for PCC Pavement	7,800	LF	$ _____	$ _____
02605.1	Joint Sealants for Pavement	1,220	LF	$ _____	$ _____
02608.1	Emulsified Asphalt Seal Coat	94,000	SF	$ _____	$ _____
02610.1	FAA Ductbank Protection Slab	540	LF	$ _____	$ _____
02620.1	Runway and Taxiway Markings	110,000	SF	$ _____	$ _____
02620.2	Temporary Runway and Taxiway Markings	11,000	SF	$ _____	$ _____
02620.3	Preformed Markings	4,200	SF	$ _____	$ _____
02620.4	Retroreflective Marker	17	EA	$ _____	$ _____
02701.1	36” Reinforced Concrete Pipe, Class IV, Wall B, in place complete	297	LF	$ _____	$ _____
02701.2	Adjust Drain Manhole Top	LS	LS	LS	$ _____
02701.3	Concrete Pipe Spall Repair	LS	LS	LS	$ _____
02753.1	Electrical and Utility Structure Investigation	LS	LS	LS	$ _____
02755.1	Cured-In-Place Pipe	LS	LS	LS	$ _____
13110.1	Corrosion Protection, in place complete	LS	LS	LS	$ _____
16101.1	Demolition & Removal of Airport Electrical Items	LS	LS	LS	$ _____
16128.1	Temporary Electrical Work for Construction Phasing	LS	LS	LS	$ _____
16128.2	Permanent Miscellaneous Airport Electrical Work	LS	LS	LS	$ _____
16301.1	Concrete Encased One 2” PVC Schedule 40 Duct	1,850	LF	$ _____	$ _____
16301.2	Concrete Encased Four 2” PVC Schedule 40 Ducts	380	LF	$ _____	$ _____
16560.1	Salvage Taxiway Light and Associated Isolation Transformer and Provide Blank Cover Plate	13	EA	$ _____	$ _____
16560.2	Salvage Taxiway Light and Transformer	22	EA	$ _____	$ _____
16560.3	Remove No. 8 AWG, 5 kV, Taxiway Lighting Cables	5,690	LF	$ _____	$ _____

Item No.	Description	Approx. Quantity (a)	Unit	Unit Price (b)	Total (a x b)
16560.4	Elevated Taxiway Edge Light Including Light Base and Isolation Transformer	26	EA	$ _____	$ _____
16560.5	No. 8 AWG, 5 kV, Taxiway Lighting Cables	5,000	LF	$ _____	$ _____
16560.6	Electrical Field Investigation Plan	LS	LS	LS	$ _____
16560.7	Electrical Work Plan	LS	LS	LS	$ _____
TOTAL AMOUNT FOR COMPARISON OF BIDS					$ _____

The prices bid herein shall include all labor, materials, equipment, and incidentals necessary to construct all items in place, including installation and testing of equipment, complete and ready for operation, all in accordance with the plans and specifications.

Notes:

1. Bid shall include all Federal, State, County and other applicable taxes and fees.
2. The TOTAL AMOUNT FOR COMPARISON OF BIDS shall be used to determine the lowest, responsive, responsible bidder.
3. Bidders shall complete all unit prices and amounts. Failure to do so shall be grounds for rejection of Bid.
4. If a discrepancy occurs between the unit price and the total, the unit price shall govern.
5. The State reserves the right to reject any or all Bids and to waive any defects in said Bids in the best interest of the State.
6. Submission of a Bid is a warranty that the bidder has made an examination of the project site and is fully aware of all conditions to be encountered in performing the work and the requirements of the plans and specifications.
7. The bidder's attention is directed to Section 2.11 – BID SECURITY of the "General Provisions", as amended by the Special Provisions.
8. Bidders shall be paid for actual work performed as directed by the Engineer for allowance items. Bidder will not be paid overhead and profit for unused allowance funds.
9. If the TOTAL AMOUNT FOR COMPARISON OF BIDS exceeds the funds available for the project, then the State reserves the right to negotiate with the lowest, responsive, responsible bidder as permitted under Section 103D-302, Hawaii Revised Statutes (HRS), to further reduce the scope of work and award a contract thereafter.
10. **Bidders shall submit and <u>upload the complete proposal to HIePRO</u> prior to the bid opening date and time. Proposals received after said due date and time shall not be considered. Any additional supporting documents explicitly designated as <u>confidential and/or proprietary</u> shall be uploaded as a <u>separate file</u> to HIePRO. Do not include confidential and/or proprietary documents with the proposal. The record of each bidder and respective bid**

shall be open to public inspection. Original (wet ink, hard copy) proposal documents are not required to be submitted. **Contract award shall be based on evaluation of proposals submitted and uploaded to HIePRO.**

FAILURE TO UPLOAD THE COMPLETE PROPOSAL TO HIePRO SHALL BE GROUNDS FOR REJECTION OF THE BID.

If there is a conflict between the specification document and the HIePRO solicitation, the specifications shall govern and control unless otherwise specified.

total amount of the awarded contract by more than 25%: (2) in scope work would increase or decrease the total of any major contract item by more than 25%; (3) work that is not within the scope of the originally awarded contract; or (4) adding or deleting of a major contract item.

Taxilane - A taxiway designed for low speed movement of aircraft between aircraft parking areas and terminal areas.

Taxiway - The portion of the air operations area of an airport that has been designated by competent airport authority for movement of aircraft to and from the airport's runways, aircraft parking areas, and terminal areas.

Taxiway/Taxilane Safety Area (TSA) - A defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an aircraft. See the construction safety and phasing plan (CSPP) for limits of the TSA.

2.7 REQUEST FOR SUBSTITUTION OF SPECIFIED MATERIALS AND EQUIPMENT BEFORE BIG OPENING is amended as follows:

1. The last sentence in the first paragraph (line 147 to 152) shall be replaced with the following:

"Where a bidder intends to use a material or equipment of an unspecified brand, make, or model, the bidder must submit a request to the Department for review and approval at the earliest date possible. As specified in the Notice to Bidders, all requests shall be posted as a question in HIePRO under the "Question and Answer" tab. Supporting documents for specific request shall be emailed to the Project Manager specified in the Notice to Bidders. Request must be posted in HIePRO and supporting documents received by the Project Manager no later than twenty (20) calendar days before the bid opening date."

2. The first sentence in the second paragraph (line 154 to 156) shall be replaced with the following:

"It shall be the responsibility of the bidder to submit sufficient evidence based upon which a determination can be made by the Department that the alternate brand is a qualified equivalent."

2.8 PREPARATION AND DELIVERY OF BID is amended as follows: Last Paragraph (line 189 to 192) shall be replaced with the following:

"**Bidders shall submit and upload the complete proposal to HIePRO prior to the bid opening date and time. Proposals received after said due date and time shall not be considered. Any additional support documents explicitly designated as confidential and/or proprietary shall be uploaded as a separate file to HIePRO. Bidders shall not include confidential and/or proprietary documents with the proposal. The record of each bidder and respective bid shall be open to public inspection.** Original (wet ink, hard copy) proposal documents are not required to be submitted. **Contract award shall be based on evaluation of proposals submitted and uploaded to HIePRO.**

FAILURE TO UPLOAD THE COMPLETE PROPOSAL TO HIePRO SHALL BE GROUNDS FOR REJECTION OF THE BID.

If there is a conflict between the specification document and the HIePRO solicitation, the specifications shall govern and control, unless otherwise specified."

2.11 BID SECURITY is amended by deleting (a) and replacing it with:

"(a) Unless directed otherwise in the invitation for bids, each bid shall be accompanied by bid security which is intended to protect the Department against the failure or refusal of a bidder to execute the contract for the work bid or to supply the required performance and payment bonds. Bid security shall be

FAA
Office of Airports

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

NOTICE: L-823 Connectors do not have independent utility needed to consider it as a component that warrants a Buy American waiver. For purposes of Buy American Preferences, the FAA considers these products as sub-components of the larger airfield lighting equipment being installed.

Waiver Type	Applicant	Project	Effective Date	Status
Type I	Core Tech International	Terminal Building Roof Replacment	2/21/2026	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-850C Runway Edge Light, Inpavement Model 44A6009/XXXX	1/31/2026	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-862 Runway Edge Light, High Intensity (HIRL) Model 44A2071/XXXX	1/31/2026	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-862E Runway Threshold/End Light, High Intensity (HITHL) Model 44A2071/41XX	1/31/2026	Approved
Type III Equipment/Building	Jaquith Industries Inc.	L-868 Flange Ring Class 1A AF5402XX	1/31/2026	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-854 Radio Controls Model RCE/XX1X	12/6/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-850E Runway Threshold Light, Inpavement Model 44A6248/XXX0	12/6/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-852E(L) Taxiway Intersection Light, Medium Intensity Inpavement Model RSLE21XP3NXNXXX2	11/29/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-852E(L) Taxiway Intersection Light, Medium Intensity Inpavement Model RSNL21XP3NXNXXX2	11/29/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	ADB Safegate Americas, LLC	L-862(L) Runway Edge Light, High Intensity (HIRL) Model EREX2XX3XSXXXX2	11/29/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-862E(L) Runway Threshold/End Light, High Intensity (HITHL) Model EREX2XXXXSXXXX2	11/29/2025	Approved
Type III Equipment/Building	Jaquith Industries Inc.	L-868 Cover Plates AKXXXXXX	11/29/2025	Approved
Type III Equipment/Building	Jaquith Industries Inc.	L-894 Base Plate Class 1A APXXXXXX	11/29/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-850A Infrared Runway Centerline Light, Inpavement Model 44A6659/XXXX	10/19/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-852T(L) Taxiway Edge Light, Omnidirectional, Inpavement Model ITEL/CX1X	10/19/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-827 Monitors, Regulator Model ACE3-XXXXDXX10001	9/27/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-847 Switch, Circuit Selector Model 44D4520/XXXXX	9/27/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	EHP-L LED Elevated Heliport Perimeter Light	9/20/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	ADB Safegate Americas, LLC	ILCMS Individual Lamp Control & Monitoring System, Controller Model LINCCXXXXXXXXXX	9/20/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	ILCMS Individual Lamp Control & Monitoring System, Remote Model AGCXXXX	9/20/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	ILCMS Individual Lamp Control & Monitoring System, Remote Model LINCPXXXXXXXXXX	9/20/2025	Approved
Type III Equipment/Building	BETA Technologies	Charge Cube System	9/20/2025	Approved
Type III Equipment/Building	BETA Technologies	Mini Cube	9/20/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-829 Regulators, Monitored Constant Current Model FSPP66XX-XXXX	9/20/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-880 Precision Approach Path Indicator (PAPI) Model PAPA/4XXX	9/20/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-880 Precision Approach Path Indicator (PAPI) Model PAPB/4XXX	9/20/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-881 Abbreviated Precision Approach Path Indicator (PAPI) Model PAPA/2XXX	9/20/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	ADB Safegate Americas, LLC	L-881 Abbreviated Precision Approach Path Indicator (PAPI) Model PAPB/2XXX	9/20/2025	Approved
Type III Equipment/Building	Airport Lighting Company	L-858 (L) D-Lux Size 1 Lighted Guidance Sign	9/20/2025	Approved
Type III Equipment/Building	Airport Lighting Company	L-858 (L) D-Lux Size 2 Lighted Guidance Sign	9/20/2025	Approved
Type III Equipment/Building	Airport Lighting Company	L-858 (L) D-Lux Size 3 Lighted Guidance Sign	9/20/2025	Approved
Type III Equipment/Building	Airport Lighting Company	L-858 (L) D-Lux Size 5 Lighted Guidance Sign	9/20/2025	Approved
Type III Equipment/Building	DBT Transportation Services LLC	F1 Standalone AWOS System (AWOS IV-Z)	9/6/2025	Approved
Type III Equipment/Building	Trex Aviation Systems Corp	Trex FOD Finder XFV2 (Fixed)	9/6/2025	Approved
Type III Equipment/Building	Trex Aviation Systems Corp	Trex FOD Finder XMV2 (Mobile)	9/6/2025	Approved
Type III Equipment/Building	Airport Lighting Company	L-828 Constant Current Regulator, No Monitoring	8/30/2025	Approved
Type III Equipment/Building	Standard Signs	L-858, Size 4, 1 module, LED lighting (D1L)	8/30/2025	Approved
Type III Equipment/Building	Standard Signs	L-858, Size 5, 1 module, LED lighting (DL1L)	8/30/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	Standard Signs	L-858, Size 3, 1 module, LED lighting (L1L)	8/30/2025	Approved
Type III Equipment/Building	Standard Signs	L-858, Size 3, 2 module, LED lighting (L2L)	8/30/2025	Approved
Type III Equipment/Building	Standard Signs	L-858, Size 3, 3 module, LED lighting (L3L)	8/30/2025	Approved
Type III Equipment/Building	Standard Signs	L-858, Size 3, 4 module, LED lighting (L4L)	8/30/2025	Approved
Type III Equipment/Building	Standard Signs	L-858, Size 2, 1 module, LED lighting (M1L)	8/30/2025	Approved
Type III Equipment/Building	Standard Signs	L-858, Size 2, 2 module, LED lighting (M2L)	8/30/2025	Approved
Type III Equipment/Building	Standard Signs	L-858, Size 2, 3 module, LED lighting (M3L)	8/30/2025	Approved
Type III Equipment/Building	Standard Signs	L-858, Size 2, 4 module, LED lighting (M4L)	8/30/2025	Approved
Type III Equipment/Building	Standard Signs	L-858, Size 1, 1 module, LED lighting (S1L)	8/30/2025	Approved
Type III Equipment/Building	Standard Signs	L-858, Size 1, 2 module, LED lighting (S2L)	8/30/2025	Approved
Type III Equipment/Building	Standard Signs	L-858, Size 1, 3 module, LED lighting (S3L)	8/30/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	Standard Signs	L-858, Size 1, 4 module, LED lighting (S4L)	8/30/2025	Approved
Type III Equipment/Building	Airport Lighting Company	L-847 Circuit Selector Switch 6.6A	8/23/2025	Approved
Type III Equipment/Building	Airport Lighting Company	L-847 Circuit Selector Switch 20A	8/23/2025	Approved
Type III Equipment/Building	Airport Lighting Company	L-858 (L) I-Lux Size 2 Lighted Guidance Sign	8/23/2025	Approved
Type III Equipment/Building	Airport Lighting Company	L-858 (L) I-Lux Size 3 Lighted Guidance Sign	8/23/2025	Approved
Type III Equipment/Building	Airport Lighting Company	L-858 (L) I-Lux Size 4 Lighted Guidance Sign	8/23/2025	Approved
Type III Equipment/Building	Airport Lighting Company	L-858 (L) I-Lux Size 5 Lighted Guidance Sign	8/23/2025	Approved
Type III Equipment/Building	Airport Lighting Company	L-859 ODALS 6.6A	8/23/2025	Approved
Type III Equipment/Building	Airport Lighting Company	L-859 ODALS Voltage	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L806-S1-EX-12 Wind Cone	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L806-S1-EX-66A Wind Cone	8/23/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	Hali-Brite Inc.	L806-S1-EX-120 Wind Cone	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L806-S1-EX-230 Wind Cone	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L806-S1-IN-12 Wind Cone	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L806-S1-IN-66A Wind Cone	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L806-S1-IN-120 Wind Cone	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L806-S1-IN-230 Wind Cone	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L806-S1-UN-NON Wind Cone	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L807-S1-EX-12 Wind Cone	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L807-S1-EX-66A Wind Cone	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L807-S1-EX-120 Wind Cone	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L807-S1-EX-230 Wind Cone	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L807-S1-IN-12 Wind Cone	8/23/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	Hali-Brite Inc.	L807-S1-IN-66A Wind Cone	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L807-S1-IN-120 Wind Cone	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L807-S1-IN-230 Wind Cone	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L807-S1-UN-NON Wind Cone	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L893 Runway Closure Marker, LED Diesel	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L807-S2-EX-12 Wind Cone	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L807-S2-EX-66A Wind Cone	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L807-S2-EX-120 Wind Cone	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L807-S2-EX-230 Wind Cone	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L807-S2-IN-12 Wind Cone	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L807-S2-IN-66A Wind Cone	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L807-S2-IN-120 Wind Cone	8/23/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	Hali-Brite Inc.	L807-S2-IN-230 Wind Cone	8/23/2025	Approved
Type III Equipment/Building	Hali-Brite Inc.	L807-S2-UN-NON Wind Cone	8/23/2025	Approved
Type III Equipment/Building	SPX Aids to Navigation LLC	Portable Barricade Light, 8Ah, Charge Port/Switch Model AV-60-863-R-B1-03	8/2/2025	Approved
Type III Equipment/Building	SPX Aids to Navigation LLC	Portable Barricade Light, 17Ah, Charge Port/Switch Model AV-60-863-R-B2-03	8/2/2025	Approved
Type III Equipment/Building	SPX Aids to Navigation LLC	Portable Barricade Light, 8Ah, Charge Port/Switch Model AV-70-863-R-B1-03	8/2/2025	Approved
Type III Equipment/Building	SPX Aids to Navigation LLC	Portable Barricade Light, 17Ah, Charge Port/Switch Model AV-70-863-R-B2-03	8/2/2025	Approved
Type III Equipment/Building	SPX Aids to Navigation LLC	Portable Barricade Light, 17Ah, Charge Port/Switch, Wireless Model AV-70-863-R-B2-07	8/2/2025	Approved
Type III Equipment/Building	SPX Aids to Navigation LLC	Portable Taxiway Light, 8Ah, Charge Port/Switch Model AV-70-863-B-B1-03	8/2/2025	Approved
Type III Equipment/Building	SPX Aids to Navigation LLC	Portable Taxiway Light, 17Ah, Charge Port/Switch Model AV-70-863-B-B2-03	8/2/2025	Approved
Type III Equipment/Building	SPX Aids to Navigation LLC	Portable Taxiway Light, 17Ah, Charge Port/Switch, Wireless Model AV-70-863-B-B2-07	8/2/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	Davies Imperial Coatings, Inc.	TT-P-1952F Type III Blue Runway Marking Paint	8/2/2025	Approved
Type III Equipment/Building	Davies Imperial Coatings, Inc.	TT-P-1952F Type III Brick Red Runway Marking Paint	8/2/2025	Approved
Type III Equipment/Building	Davies Imperial Coatings, Inc.	TT-P-1952F Type III Bright Green Runway Marking Paint	8/2/2025	Approved
Type III Equipment/Building	Davies Imperial Coatings, Inc.	TT-P-1952F Type III Red Runway Marking Paint	8/2/2025	Approved
Type III Equipment/Building	Davies Imperial Coatings, Inc.	TT-P-1952F Type III Yellow Runway Marking Paint	8/2/2025	Approved
Type III Equipment/Building	Davies Imperial Coatings, Inc.	TT-P-1952F Type II Blue Runway Marking Paint	8/2/2025	Approved
Type III Equipment/Building	Davies Imperial Coatings, Inc.	TT-P-1952F Type II Bright Green Runway Marking Paint	8/2/2025	Approved
Type III Equipment/Building	Davies Imperial Coatings, Inc.	TT-P-1952F Type II Red Runway Marking Paint	8/2/2025	Approved
Type III Equipment/Building	Davies Imperial Coatings, Inc.	TT-P-1952F Type II Yellow Runway Marking Paint	8/2/2025	Approved
Type III Equipment/Building	Davies Imperial Coatings, Inc.	TT-P-1952F Type III Drab Green Runway Marking Paint	8/2/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-890 Airport Lighting Control & Monitoring System	8/2/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	Airport Lighting Company	L-849 Runway End Identifier Light 6.6A	8/2/2025	Approved
Type III Equipment/Building	Airport Lighting Company	L-849(L) Runway End Identifier Light 6.6A LED Current	8/2/2025	Approved
Type III Equipment/Building	Airport Lighting Company	L-849(L) Runway End Identifier Light 6.6A LED Voltage	8/2/2025	Approved
Type III Equipment/Building	Airport Lighting Company	L-861T(L) Medium Intensity Taxiway Light LED	8/2/2025	Approved
Type III Equipment/Building	Airport Lighting Company	L-858 (L) I-Lux Size 1 Lighted Guidance Sign	8/2/2025	Approved
Type III Equipment/Building	Advanced Drainage Systems, Inc.	4 inch. N-12 HWY.STIB.PERF.SOCK.20 foot	7/26/2025	Approved
Type I	Surangel and Sons Construction	Asphalt Surface or Leveling Course, Emusified Prime and Tack Coat, Subbase Course, Crushed Aggregate Base Course	7/26/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-862(L) Runway Edge Light, High Intensity Model ARE11XXXX1X1XXX001	7/13/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-862E(L) Runway Threshold/End Light, High Intensity Model ARN21XXXX0X1XXX001	7/13/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	ADB Safegate Americas, LLC	L-862E(L) Runway Threshold/End Light, High Intensity Model ART21XXXX0X1XXX001	7/13/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-862S(L) Stopbar, Elevated Model ASB21XNRN0X1XCX001	7/13/2025	Approved
Type III Equipment/Building	Minit Charger LLC	eGSE Charger Altus II with Euro Cables and J1772 Charging Option	6/28/2025	Approved
Type III Equipment/Building	Musco Lighting	Light-Structure System™ Apron Flood Lighting	6/28/2025	Approved
Type III Equipment/Building	Rosenbauer Minnesota, LLC	ARFF Vehicle Model A146	6/15/2025	Approved
Type III Equipment/Building	Davies Imperial Coatings, Inc.	4636 Yellow IL Spec Runway Marking Paint	6/15/2025	Approved
Type III Equipment/Building	Millerbernd Manufacturing Company	L-867 Light Base Can Non-Load Bearing	6/15/2025	Approved
Type III Equipment/Building	Millerbernd Manufacturing Company	L-868 Light Base Can Non-Load Bearing	6/15/2025	Approved
Type III Equipment/Building	Hali-Brite, Inc.	L801A(L) LED Beacons, Medium Intensity Item# L801AL116	6/7/2025	Approved
Type III Equipment/Building	Hali-Brite, Inc.	L801A(L) LED Beacons, Medium Intensity Item# L801AL216	6/7/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	Hali-Brite, Inc.	L801H(L) LED Heliport Beacons, Medium Intensity Item# L801HL116	6/7/2025	Approved
Type III Equipment/Building	Hali-Brite, Inc.	L801H(L) LED Heliport Beacons, Medium Intensity Item# L801HL216	6/7/2025	Approved
Type III Equipment/Building	Hali-Brite, Inc.	L802A(L) LED Beacons, High Intensity Item# L802AL116	6/7/2025	Approved
Type III Equipment/Building	Hali-Brite, Inc.	L802A(L) LED Beacons, High Intensity Item# L802AL216	6/7/2025	Approved
Type III Equipment/Building	Hali-Brite, Inc.	L802(M) Military Beacons, High Intensity Item# L802M116	6/7/2025	Approved
Type III Equipment/Building	Hali-Brite, Inc.	L802(M) Military Beacons, High Intensity Item# L802M216	6/7/2025	Approved
Type III Equipment/Building	Monroe Integro	11680 Transformer 30/45W 6.6/6.6A 60Hz	5/5/2025	Approved
Type III Equipment/Building	Monroe Integro	11681 Transformer 30/45W 20/6.6A 60Hz	5/5/2025	Approved
Type III Equipment/Building	Monroe Integro	11682 Transformer 65W 6.6/6.6A 60Hz	5/5/2025	Approved
Type III Equipment/Building	Monroe Integro	11683 Transformer 100W 6.6/6.6A 60Hz	5/5/2025	Approved
Type III Equipment/Building	Monroe Integro	11684 Transformer 100W 20/6.6A 60Hz	5/5/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	Monroe Integro	11685 Transformer 200W 6.6/6.6A 60Hz	5/5/2025	Approved
Type III Equipment/Building	Monroe Integro	11686 Transformer 200W 20/6.6A 60Hz	5/5/2025	Approved
Type III Equipment/Building	Monroe Integro	11717 Transformer 10/15W 6.6/6.6A 60Hz	5/5/2025	Approved
Type III Equipment/Building	Monroe Integro	11729 Transformer 20/25W 6.6/6.6A 60Hz	5/5/2025	Approved
Type III Equipment/Building	Monroe Integro	11730 Transformer 150W 6.6/6.6A 60Hz	5/5/2025	Approved
Type III Equipment/Building	Monroe Integro	11736 Transformer 300W 6.6/6.6A 60Hz	5/5/2025	Approved
Type III Equipment/Building	Monroe Integro	11760 Transformer 300W 20/6.6A 60Hz	5/5/2025	Approved
Type III Equipment/Building	Monroe Integro	11174-01 Style 3&10 Connector Kit #8 AWG, Primary Connector Kit with L-823	5/5/2025	Approved
Type III Equipment/Building	Monroe Integro	11174-02 Style 3&10 Connector Kit #6 AWG, Primary Connector Kit with L-823	5/5/2025	Approved
Type III Equipment/Building	Monroe Integro	11174-04 Style 3&10 Connector Kit #6 AWG Sm, Primary Connector Kit with L-823	5/5/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	Monroe Integro	11174-05 Style 3&10 Connector Kit #8 AWG Lg, Primary Connector Kit with L-823	5/5/2025	Approved
Type III Equipment/Building	Monroe Integro	11805-01 Complete Kit, 8AWG, Medium, Black	5/5/2025	Approved
Type III Equipment/Building	Monroe Integro	11805-02 Complete Kit, 6AWG, Large, Black	5/5/2025	Approved
Type III Equipment/Building	Monroe Integro	11805-04 Complete Kit, 6AWG, Medium, Black	5/5/2025	Approved
Type III Equipment/Building	Monroe Integro	11805-05 Complete Kit, 8AWG, Large, Black	5/5/2025	Approved
Type III Equipment/Building	Advanced Drainage Systems, Inc.	6 inch. N-12 HWY.STIB.PERF.SOCK.20 foot	4/21/2025	Approved
Type III Equipment/Building	Rural Electric Inc.	L-821 Airport Lighting Control Panel	4/21/2025	Approved
Type III Equipment/Building	Rural Electric Inc.	L-854 Radio Controls	4/21/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	CFB Regulators, Monitored Constant Current Model CFB/02X0	4/21/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-829 Regulators, Monitored Constant Current Model FSPP20XX-XXXX.	4/21/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	ADB Safegate Americas, LLC	PAR-56 Steady Burning Approach Light, Elevated Model 44D1661/XXXX	4/21/2025	Approved
Type III Equipment/Building	Flight Light Inc.	L810 Incandescent Obstruction Light Dual Head	4/21/2025	Approved
Type III Equipment/Building	Flight Light Inc.	L810 Incandescent Obstruction Light Single Head	4/21/2025	Approved
Type III Equipment/Building	Flight Light Inc.	L861 Elevated Runway Edge Clear Light Quartz 30W	4/21/2025	Approved
Type III Equipment/Building	Flight Light Inc.	L861 Elevated Runway Edge Clear Light Quartz 45W	4/21/2025	Approved
Type III Equipment/Building	Flight Light Inc.	L861 Elevated Runway Clear Light T10 Incandescent 30W	4/21/2025	Approved
Type III Equipment/Building	Flight Light Inc.	L861 Elevated Runway Clear Light T10 Incandescent 45W	4/21/2025	Approved
Type III Equipment/Building	Flight Light Inc.	L861 Elevated Runway Edge ClearYellow Light Quartz 30W	4/21/2025	Approved
Type III Equipment/Building	Flight Light Inc.	L861 Elevated Runway Edge ClearYellow Light Quartz 45W	4/21/2025	Approved
Type III Equipment/Building	Flight Light Inc.	L861 Elevated Runway ClearYellow Light T10 Incandescent 30W	4/21/2025	Approved
Type III Equipment/Building	Flight Light Inc.	L861 Elevated Runway ClearYellow Light T10 Incandescent 45W	4/21/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	Flight Light Inc.	L861E Elevated Runway Threshold/End Light Quartz 30W	4/21/2025	Approved
Type III Equipment/Building	Flight Light Inc.	L861E Elevated Runway Threshold/End Light Quartz 45W	4/21/2025	Approved
Type III Equipment/Building	Flight Light Inc.	L861E Elevated Runway Threshold/End Light T10 Incandescent 30W	4/21/2025	Approved
Type III Equipment/Building	Flight Light Inc.	L861E Elevated Runway Threshold/End Light T10 Incandescent 45W	4/21/2025	Approved
Type III Equipment/Building	Flight Light Inc.	L861T Elevated Taxiway Blue Light Quartz 30W	4/21/2025	Approved
Type III Equipment/Building	Flight Light Inc.	L861T Elevated Taxiway Blue Light Quartz 45W	4/21/2025	Approved
Type III Equipment/Building	Flight Light Inc.	L861T Elevated Taxiway Blue Light T10 -Incandescent 30W	4/21/2025	Approved
Type III Equipment/Building	Flight Light Inc.	L861T Elevated Taxiway Blue Light T10 -Incandescent 45W	4/21/2025	Approved
Type III Equipment/Building	Franklin Paint Company	Black Waterborne Traffic Paint	4/5/2025	Approved
Type III Equipment/Building	Franklin Paint Company	Green Waterborne Traffic Paint	4/5/2025	Approved
Type III Equipment/Building	Franklin Paint Company	Red Waterborne Traffic Paint	4/5/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	Franklin Paint Company	White Waterborne Traffic Paint	4/5/2025	Approved
Type III Equipment/Building	Franklin Paint Company	Yellow Waterborne Traffic Paint	4/5/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-828 Regulators, Constant Current Model CHF20XX/X300	4/5/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-829 Regulators, Monitored Constant Current Model CHF20XX/X3XX	4/5/2025	Approved
Type III Equipment/Building	Jaquith Industries Inc.	L-867 Class 1B Extension AES2XXX	4/5/2025	Approved
Type III Equipment/Building	Jaquith Industries Inc.	L-867 Base Can Class 1B ACS21XX	4/5/2025	Approved
Type III Equipment/Building	Jaquith Industries Inc.	L-867 Spacer Class 1A AT2XXX	4/5/2025	Approved
Type III Equipment/Building	Jaquith Industries Inc.	L-867 Spacer Rings Class 1B ATS2XXX	4/5/2025	Approved
Type III Equipment/Building	Jaquith Industries Inc.	L-867B Extension Class 1A AE20XX	4/5/2025	Approved
Type III Equipment/Building	Jaquith Industries Inc.	L-868 Class 1B Extension AXS2XXX	4/5/2025	Approved
Type III Equipment/Building	Jaquith Industries Inc.	L-868 Adaptor Plate Class 1A AA122820	4/5/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	Jaquith Industries Inc.	L-868 Base Class 1B ACS24XX	4/5/2025	Approved
Type III Equipment/Building	Jaquith Industries Inc.	L-868 Base Can Class 1A AC24XX	4/5/2025	Approved
Type III Equipment/Building	Jaquith Industries Inc.	L-868 Conversion Ring Class 1A AA54XX	4/5/2025	Approved
Type III Equipment/Building	Jaquith Industries Inc.	L-868 Extension Class 1A AX203XX	4/5/2025	Approved
Type III Equipment/Building	Jaquith Industries Inc.	L-868 Flange Ring Class 1B AFS54XX	4/5/2025	Approved
Type III Equipment/Building	Jaquith Industries Inc.	L-868 Spacer Rings Class 1B ARS54XX	4/5/2025	Approved
Type III Equipment/Building	Jaquith Industries Inc.	L-868 Spacer Rings Class 1A AR5421XX	4/5/2025	Approved
Type III Equipment/Building	Jaquith Industries Inc.	L-868A Base Class 1A AC08XXXXX	4/5/2025	Approved
Type III Equipment/Building	Flight Light Inc.	L810 LED Obstruction Light Dual Head, Night Vision Compatible	4/5/2025	Approved
Type III Equipment/Building	Flight Light Inc.	L810 LED Obstruction Light Single Head, Night Vision Compatible	4/5/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-828 Regulators, Constant Current Model CRFXXXXXX0XXX0	3/30/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	ADB Safegate Americas, LLC	L-828 Regulators, Constant Current Model CRTXXXXXXX0XXX0	3/30/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-829 Regulators, Monitored Constant Current Model CRFXXXXXXXXXXX0	3/30/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-829 Regulators, Monitored Constant Current Model CRTXXXXXXXXXXX0	3/30/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-858(L) Signs, Runway and Taxiway Model SR1X-7XX3XX0	3/30/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-858(L) Signs, Runway and Taxiway Model SR1X-7XX3XX1	3/30/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-858(L) Signs, Runway and Taxiway Model SR2X-7XX3XX0	3/30/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-858(L) Signs, Runway and Taxiway Model SR2X-7XX3XX1	3/30/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-858(L) Signs, Runway and Taxiway Model SR3X-7XX3XX0	3/30/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-858(L) Signs, Runway and Taxiway Model SR3X-7XX3XX1	3/30/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-858(L) Signs, Runway and Taxiway Model SR41-7XX3XX0	3/30/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-858(L) Signs, Runway and Taxiway Model SR41-7XX3XX1	3/30/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	ADB Safegate Americas, LLC	L-858(L) Signs, Runway and Taxiway Model SR51-7XX3XX1	3/30/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-858(L) Signs, Runway and Taxiway Model SS1X-7XX3XX0	3/30/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-858(L) Signs, Runway and Taxiway Model SS1X-7XX3XX1	3/30/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-858(L) Signs, Runway and Taxiway Model SS2X-7XX3XX0	3/30/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-858(L) Signs, Runway and Taxiway Model SS2X-7XX3XX1	3/30/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-858(L) Signs, Runway and Taxiway Model SS3X-7XX3XX0	3/30/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-858(L) Signs, Runway and Taxiway Model SS3X-7XX3XX1	3/30/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-858(L) Signs, Runway and Taxiway Model SS41-7XX3XX0	3/30/2025	Approved
Type III Equipment/Building	Ennis-Flint, Inc	A-A-2886B Solvent Based Paint – Black	3/30/2025	Approved
Type III Equipment/Building	Ennis-Flint, Inc.	A-A-2886B Solvent Based Paint – Blue	3/30/2025	Approved
Type III Equipment/Building	Ennis-Flint, Inc.	A-A-2886B Solvent Based Paint – Green	3/30/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	Ennis-Flint, Inc.	A-A-2886B Solvent Based Paint – Red	3/30/2025	Approved
Type III Equipment/Building	Ennis-Flint, Inc.	A-A-2886B Solvent Based Paint – White	3/30/2025	Approved
Type III Equipment/Building	Ennis-Flint, Inc.	A-A-2886B Solvent Based Paint – Yellow	3/30/2025	Approved
Type III Equipment/Building	Ennis-Flint, Inc.	AirMark Preformed Thermoplastic Pavement Markings - Black	3/30/2025	Approved
Type III Equipment/Building	Ennis-Flint, Inc.	AirMark Preformed Thermoplastic Pavement Markings - Red	3/30/2025	Approved
Type III Equipment/Building	Ennis-Flint, Inc.	AirMark Preformed Thermoplastic Pavement Markings - White	3/30/2025	Approved
Type III Equipment/Building	Ennis-Flint, Inc.	AirMark Preformed Thermoplastic Pavement Markings - Yellow	3/30/2025	Approved
Type III Equipment/Building	Ennis-Flint, Inc.	TT-P-1952F Type I / II Waterborne Paint – Blue	3/30/2025	Approved
Type III Equipment/Building	Ennis-Flint, Inc.	TT-P-1952F Type I / II Waterborne Paint – Green	3/30/2025	Approved
Type III Equipment/Building	Ennis-Flint, Inc.	TT-P-1952F Type III Waterborne Paint – Green	3/30/2025	Approved
Type III Equipment/Building	Ennis-Flint, Inc.	TT-P-1952F Type I / II Waterborne Paint – Red	3/30/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	Ennis-Flint, Inc.	TT-P-1952F Type I / II Waterborne Paint – White	3/30/2025	Approved
Type III Equipment/Building	Ennis-Flint, Inc.	TT-P-1952F Type III Waterborne Paint – White	3/30/2025	Approved
Type III Equipment/Building	Ennis-Flint, Inc.	TT-P-1952F Type I / II Waterborne Paint – Yellow	3/30/2025	Approved
Type III Equipment/Building	Ennis-Flint, Inc.	TT-P-1952F Type III Waterborne Paint – Yellow	3/30/2025	Approved
Type III Equipment/Building	Airport Lighting Company	L804 (L) Runway Guardlight	3/30/2025	Approved
Type III Equipment/Building	Airport Lighting Company	L829 Constant Current Regulator, Monitoring - Model FR829	3/30/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-858(L) Signs, Runway and Taxiway Model SS41-7XX3XX1	3/25/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-858(L) Signs, Runway and Taxiway Model SS51-7XX3XX0	3/25/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-858(L) Signs, Runway and Taxiway Model SS51-7XX3XX1	3/25/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-880(L) LED Precision Approach Path Indicator (PAPI) Model RPA4XXXXXX0XXX01	3/25/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	ADB Safegate Americas, LLC	L-880(L) LED Precision Approach Path Indicator (PAPI) Model RPB4XXXXXX0XXX01	3/25/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-880(L) LED Precision Approach Path Indicator (PAPI) Model RPR4XXXXXX0XXX01	3/25/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-849(L) Runway End Identifier Light Model REIL/A1XXX012	3/25/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-849(L) Runway End Identifier Light Model REIL/A2XXX012	3/25/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-849(L) Runway End Identifier Light Model REIL/C1XXX012	3/25/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-849(L) Runway End Identifier Light Model REIL/C2XXX012	3/25/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-849(L) Runway End Identifier Light Model REIL/E1XXX012	3/25/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-849(L) Runway End Identifier Light Model REIL/E2XXX012	3/25/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-858(L) Signs, Runway and Taxiway Model SR51-7XX3XX0	3/25/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	ADB Safegate Americas, LLC	L-881(L) LED Abbreviated Precision Approach Path Indicator (PAPI) Model RPR2XXXXXX0XXX01	3/25/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-881(L) LED Abbreviated Precision Approach Path Indicator (PAPI) Model RPA2XXXXXX0XXX01	3/25/2025	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-881(L) LED Precision Approach Path Indicator (PAPI) Model RPB2XXXXXX0XXX01	3/25/2025	Approved
Type III Equipment/Building	Airport Lighting Company	L-828 4KW 6.6A Constant Current Regulator	3/25/2025	Approved
Type III Equipment/Building	Airport Lighting Company	L-861 (L) Medium Intensity Light LED	3/25/2025	Approved
Type III Equipment/Building	Airport Lighting Company	L-861E (L) Medium Intensity Threshold Light LED	3/25/2025	Approved
Type III Equipment/Building	ADB Safegate Americas LLC	L-804(L) Runway Guard Light, Elevated Model ERGL/6112X	3/25/2025	Approved
Type III Equipment/Building	ADB Safegate Americas LLC	L-804(L) Runway Guard Light, Elevated Model ERGL/5112X	3/25/2025	Approved
Type III Equipment/Building	ADB Safegate Americas LLC	L-804(L) Runway Guard Light, Elevated Model ERGL/1111X	3/25/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	ADB Safegate Americas LLC	L-804(L) Runway Guard Light, Elevated Model ERGL/3111X	3/25/2025	Approved
Type III Equipment/Building	ADB Safegate Americas LLC	L-829 Regulators, Monitored Constant Current Model FLPP20XX-XXXX	3/25/2025	Approved
Type III Equipment/Building	ADB Safegate Americas LLC	L-829 Regulators, Monitored Constant Current Model FLPP66XX-XXXX	3/25/2025	Approved
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952 Type III, Hotline Waterborne - Black Paint TM2140	3/25/2025	Approved
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952 Type III, Hotline Waterborne - White Paint TM2152	3/25/2025	Approved
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952 Type I/II Hotline Waterborne - Yellow Paint TM2153	3/25/2025	Approved
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952 Type I/II Hotline Waterborne - Black Paint TM2221	3/25/2025	Approved
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952 Type I/II Hotline Waterborne - Red Paint TM2222	3/25/2025	Approved
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952 Type I/II Hotline Waterborne - Blue Paint TM2224	3/25/2025	Approved
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952 Type I/II Hotline Waterborne - Green Paint TM2226	3/25/2025	Approved
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952 Type I/II Hotline Waterborne - White Paint TM2248	3/25/2025	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952 Type I/II Hotline Waterborne - Yellow Paint TM2259	3/25/2025	Approved
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952 Type III, Hotline Waterborne - White Paint TM2452	3/25/2025	Approved
Type III Equipment/Building	The Sherwin-Williams Company	P-620, TT-P-1952 Type III, Hotline Waterborne - Yellow Paint TM2453	3/25/2025	Approved
Type III Equipment/Building	Minit Charger, LLC	Industrial Battery Charger Momentus 1 Port	1/12/2025	Approved
Type III Equipment/Building	Minit Charger, LLC	e GSE Charger Altus II with BIW Cables	8/3/2024	Approved
Type III Equipment/Building	TWR Lighting	Double-L-810 Red Obstruction Light with IR OL2VLED 2-IR	7/6/2024	Approved
Type III Equipment/Building	NA	Obstruction Lighting Projects	7/6/2024	Approved
Type III Equipment/Building	NA	Obstruction Lighting Projects	7/6/2024	Approved
Type III Equipment/Building	Mesotech International, Inc.	Automated Weather Observing System (AWOS) I	7/1/2024	Approved
Type III Equipment/Building	Mesotech International Inc	Automated Weather Observing System (AWOS) II	7/1/2024	Approved
Type III Equipment/Building	Mesotech International Inc	Automated Weather Observing System (AWOS) IIIP	7/1/2024	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	Mesotech International Inc	Automated Weather Observing System (AWOS) IVZ	7/1/2024	Approved
Type III Equipment/Building	Mesotech International Inc	Automated Weather Observing System (AWOS) IIIPT	7/1/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-804E-AP1-066 Elevated Runway Guard Light	6/22/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-858 SIGN LED	6/22/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-858 SIGN FIBERGLASS LED	6/22/2024	Approved
Type III Equipment/Building	Prysmian Cables and Systems (US) , Inc.	L-824 Underground Electrical Cable 1/8 XLPE 5KV FAA Type C 389171	5/18/2024	Approved
Type III Equipment/Building	Prysmian Cables and Systems (US), Inc.	L-824 Underground Electrical Cable 1/6 XLPE 5KV FAA Type C Yellow	5/18/2024	Approved
Type III Equipment/Building	Prysmian Cables and Systems (US) , Inc.	L-824 Underground Electrical Cable ¼ XLP 5KV FAA Type C 389181	5/18/2024	Approved
Type III Equipment/Building	Prysmian Cables and Systems (US), Inc.	L-824 Underground Electrical Cable 1/8 EPR/PVC 5KV FAA Type B 38827	5/18/2024	Approved
Type III Equipment/Building	Prysmian Cables and Systems (US), Inc.	L-824 Underground Electrical Cable 1/6(7X) EPR/CPE 5KV FAA Type B	5/18/2024	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	ADB Safegate Americas, LCC	L-861T(L) Taxiway Edge Light, Medium Intensity (MIRL) Elevated model ETES/XXXX	5/18/2024	Approved
Type III Equipment/Building	ADB Safegate Americas, LCC	L-861E(L) Runway Threshold Light Medium Intensity (MITHL) Elevated model EMIS2XX0XS00X00	5/18/2024	Approved
Type III Equipment/Building	ADB Safegate Americas, LCC	L-861(L) Runway Edge Light Medium Intensity (MIRL) Elevated model EMIS2XX0XS00X00	5/18/2024	Approved
Type III Equipment/Building	ADB Safegate Americas, LCC	L-861SE(L) Runway Threshold Light, Medium Intensity (MITHL) Elevated model EMIS2XX0XSF0X00	5/18/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-828S Constant Current Regulator	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-828M Constant Current Regulator	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-829S Monitored Constant Current Regulator	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-829M Monitored Constant Current Regulator	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-829L Monitored Constant Current Regulator	5/11/2024	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-847 Circuit Selector Switch	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-850A LED Inpavement Runway Lights	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-850A3 Quartz Inpavement Runway Lights	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-850B LED Inpavement Runway Lights	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-850B3 Quartz Inpavement Runway Lights	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-850C LED Inpavement Runway	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-850C Quartz Inpavement Runway Lights	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-850D LED Inpavemetn Runway Lights	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-852E3 Quartz Inpavement Taxiway Lights	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-852D 12-inch LED Inpavement Taxiway Lights	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Projects	L-852C 12-inch LED Inpavement Taxiway Lights	5/11/2024	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-852C 8-inch LED Inpavement Taxiway Lights	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-852B 12-inch LED Inpavement Taxiway Lights	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-852B 8-inch LED Inpavement Taxiway Lights	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-852A 12 -inch LED Inpavement Taxiway Lights	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-852A 8-inch LED Inpavement Taxiway Lights	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-852J LED 8-Inch Taxiway Centerline Lights	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-852G LED Inset Runway Guard Lights	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse-Hinds Airport Lighting Products	L-852G IRGL/STOP BAR LED	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-852J LED 12-Inch Taxiway Centerline Lights	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-852K LED 8-Inch Taxiway Centerline Lights	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-852K 12 Inch LED Taxiway Centerline Lights	5/11/2024	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-852S STOP BAR LED	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-852T TOL QUARTZ	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-890 Airport Lighting Control and Monitoring System	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-861 MIRL Omnidirectional LED	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-861 MIRL Bidirectional LED	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-861E MIRL THR LED	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hiinds Airport Lighting Products	L-861SE MIRL THR/RW END LED	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-861T AP1 MITL LED	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-861T MITL LED	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-852T TOL LED	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-862 HIRL EDGE LED	5/11/2024	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-862 HIRL EDGE QUARTZ	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-862E HIRL THR LED	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-862E HIRL THR QUARTZ	5/11/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-862S PRO APF Elevated Stop Bar LED	5/11/2024	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-881B(L) Abbreviated LED Precision Approach Path Indicator (PAPI)	5/11/2024	Approved
Type III Equipment/Building	ADB Safegate Americas, LCC	Heliport Perimeter Light, Inset IUL/3X2X	5/11/2024	Approved
Type III Equipment/Building	Crown USA Incorporated	F-HB-491 TT-P-1952F Type III Bicycle Green	4/20/2024	Approved
Type III Equipment/Building	Crown USA Incorporated	F-HB-281 TT-P-1952F Type III Yellow Marking Paint	4/20/2024	Approved
Type III Equipment/Building	Crown USA Incorporated	F-HB-287 TT-P-1952F Type III Red Marking Paint	4/20/2024	Approved
Type III Equipment/Building	Crown USA Incorporated	F-HB-493 TT-P-1952F Type III Green	4/20/2024	Approved
Type III Equipment/Building	Crown USA Incorporated	F-HB-283 TT-P-1952F Type III Black Marking Paint	4/20/2024	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	Crown USA Incorporated	F-HB-287-D TT-P-1952F Type III Dark Red Marking Paint	4/20/2024	Approved
Type III Equipment/Building	Crown USA Incorporated	F-HB-280 TT-P-1952F Type III White Marking Paint	4/20/2024	Approved
Type III Equipment/Building	Crown USA Incorporated	F-HB-285 TT-P-1952F Type III Blue Marking Paint	4/20/2024	Approved
Type III Equipment/Building	DBT Transportation Services LLC	AWOS 3PT plus Thunderstorm Sensor	3/16/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-850A-AP1-XX-F1 PRO APF RCL LED	2/25/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-850A3 PRO III RCL QUARTZ	2/25/2024	Approved
Type III Equipment/Building	Eaton Crouse Hinds Airport Lighting Products	L-850B TDZ LED	2/25/2024	Approved
Type III Equipment/Building	Ampure Charging Systems, Incorportated	ASSY Top 50Hz GSE 600-380	1/15/2024	Approved
Type III Equipment/Building	Ampure Charging Systems, Incorporated	DVS400 480V-600V ADK-CEC	1/15/2024	Approved
Type III Equipment/Building	ABB E-Mobility Incorportated.	Terra DC Fast Charger T184 HC CC	1/15/2024	Approved
Type III Equipment/Building	ABB E-Mobility Incorporated	Terra DC Fast Charger T184 BAA CTEP/NTEP	1/15/2024	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	ABB E-Mobility Incorporated	Terra DC Fast Charger T124 Dual CCS1 BABA	1/15/2024	Approved
Type III Equipment/Building	ABB E-Mobility Incorporated	Terra DC Fast Charger T184 Single ADA	1/15/2024	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-895 Elevated Light Stake Mounting	1/15/2024	Approved
Type III Equipment/Building	ABB E-Mobility Incorporated	Terra Direct Current Fast Charger T184 BAA ADA	1/15/2024	Approved
Type III Equipment/Building	Potters Industries	Reflective Media TTB 1325D Type IVA (Flex-O-Lite) Glass Beads	9/26/2023	Approved
Type III Equipment/Building	ADB Safegate Americas LLC	L-862(L) Runway Edge Light High Intensity (HIRL) EREX2XXXXXXXX02	8/26/2023	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-862E(L) Runway Threshold Light, High Intensity (HITHL) EREX2XXXXXFXX02	8/26/2023	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-852G(L) Inpavement Runway Guard Light, model RSRG11XX1NYXX2X1	7/22/2023	Approved
Type III Equipment/Building	DBT Transportation Services LLC	AWOS 3PT	7/22/2023	Approved
Type III Equipment/Building	DBT Transportation Services LLC	AWOS 3P	7/22/2023	Approved
Type III Equipment/Building	DBT Transportation Services LLC	AWOS 3	7/22/2023	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	DBT Transporation Services LLC	AWOS 2	7/22/2023	Approved
Type III Equipment/Building	DBT Transportation Services LLC	AWOS 1	7/22/2023	Approved
Type III Equipment/Building	DBT Transportation Services LLC	AWOS AV	7/22/2023	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-830, Isolation Transformers, 60Hz Model 1STXXX66601001	7/8/2023	Approved
Type III Equipment/Building	Hillcrest Industries, Inc.	Reflective Media TTB 1325D Type 1A – Glass Beads	7/8/2023	Approved
Type III Equipment/Building	Crown USA Incorporated	F-AB-297 TT-P-1952F Type II Black Marking Paint	7/8/2023	Approved
Type III Equipment/Building	Crown USA Incorporated	F-AL-397 TT-P-1952F Type II Blue Marking Paint	7/8/2023	Approved
Type III Equipment/Building	Crown USA Incorportated	F-AR-399 TT-P-1952F Type II Red Marking Paint	7/8/2023	Approved
Type III Equipment/Building	Crown USA Incorportated	F-AR-D-399 TT-P-1952F Type II Dark Red Marking Paint	7/8/2023	Approved
Type III Equipment/Building	Crown USA Incorportated	F-AW-292 TT-P-1952F Type II White Marking Paint	7/8/2023	Approved
Type III Equipment/Building	Crown USA Incorporated	F-LFY-295 TT-P-1952F Type II L.F. Yellow Marking Paint	7/8/2023	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	Crown USA Incorporated	F-AG-355 TT-P-1952F Type II Bicycle Green Marking Paint	7/8/2023	Approved
Type III Equipment/Building	NoFoam Systems	NoFoam Tester Model P w kits	7/1/2023	Approved
Type III Equipment/Building	NoFoam Systems	NoFoam Tester (Model C) w kits	7/1/2023	Approved
Type III Equipment/Building	E-One, Inc.	Ecologic Test Cart	7/1/2023	Approved
Type III Equipment/Building	SPX Aids for Aviation	L-863 Portable Runway and Taxiway Lighting AV-70-863-B-SW-CP	3/25/2023	Approved
Type III Equipment/Building	SPX Aids to Aviation	L-863 Portable Runway and Taxiway Lighting AC-70-863-B-RF-SW-CP	3/25/2023	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-852T LED (L) Omni-directional In-pavement Taxiway Edge Light RSTEX1XP3NXNXXX2	3/25/2023	Approved
Type III Equipment/Building	DBT Transportation LLC	AWOS 3000 - Automated Weather Observation System AWOS II	3/6/2023	Approved
Type III Equipment/Building	Cherokee Nation 3S	Automated Weather Observation System AWOS-C	3/6/2023	Approved
Type III Equipment/Building	DBT Transportation LLC	AWOS 3000 - Automated Weather Observation System III P/T	2/25/2023	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	DBT Transportation LLC	AWOS 3000 - Automated Weather Observation System III	2/25/2023	Approved
Type III Equipment/Building	DBT Transportation LLC	AWOS 3000 - Automated Weather Observation System III-P	2/25/2023	Approved
Type III Equipment/Building	DBT Transportation LLC	AWOS 3000 - Automated Weather Observation System AWOS I	2/25/2023	Approved
Type III Equipment/Building	DBT Transportation LLC	AWOS 3000 - Automated Weather Observation System Altimeter/Visibility (AV)	2/25/2023	Approved
Type III Equipment/Building	Potters Industries (Flex-O-Lite)	Reflective Media TTB 13215D Type IA (Flex-O-Lite) Glass Beads	8/27/2022	Approved
Type III Equipment/Building	GBA Components, LLC	Inpavement Light EB-83A Coated Bolts	8/7/2022	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-850D(L) RSRT212XXXFXXXX1 Inpavement Runway Threshold Light	7/30/2022	Approved
Type III Equipment/Building	Potters Industries (Flex-O-Lite)	Reflective Media TT-B 1325D Type III (Flex-O-Lite) Glass Beads, 1.9 Index of Refraction	7/17/2022	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-852K(LED) Inpavement Taxiway Centerline Light Model RSTK21XXXCXXX2X1	7/17/2022	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	ADB Safegate Americas, LLC	L-852A (LED) Model RSTA21XXXNXXX2X1 Inpavement Taxiway Centerline Light	7/17/2022	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-852C (LED) Model RSTC21XXXNXXX2X1 Inpavement Taxiway Centerline Light	7/17/2022	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-852J (LED) Model RSTJ21XXXCXXX2X1 Inpavement Taxiway Centerline Light	7/17/2022	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-852S (LED) Model RSSB21XXXNRNX2X1 Inpavement Stop Bar Light	7/17/2022	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-852B (LED) Model RSTB21XXXNXXX2X1 Inpavement Centerline Light	7/17/2022	Approved
Type III Equipment/Building	ADB Safegate Americas, LLC	L-852D (LED) Model RSTD21XXXNXXX2X1 Inpavement Centerline Light	7/17/2022	Approved
Type III Equipment/Building	FLash Technology	L-880 (LED) Precision Approach Path Indicator	7/17/2022	Approved
Type III Equipment/Building	Flash Technology	Flash Technology L-881 (LED) Precision Approach Path Indicator	7/17/2022	Approved
Type III Equipment/Building	ADB Safegate	L-850A(L) RSRC11XXXNXXXXX1 Inpavement Runway Centerline Light	6/18/2022	Approved
Type III Equipment/Building	ADB Safegate	L-850C (L) RSRE11XXXCXXXXX1 Inpavement Runway Edge Light	6/18/2022	Approved
Type III Equipment/Building	ADB Safegate	L-850B(L) RSRZ11XX1XWNXXX1 Inpavement Touchdown Zone Light	6/18/2022	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	ADB Safegate	L-850D(L) RSRN212XXXRXXXX1 Inpavement Runway End Light	6/18/2022	Approved
Type III Equipment/Building	ADB Safegate	L-850T(L) RSRS21XX1NRNRXX1 Runway Status Light	6/18/2022	Approved
Type III Equipment/Building	Airport Lighting Company	L-881 LED Abbreviated Precision Approach Path Indicator	2/26/2022	Approved
Type III Equipment/Building	Airport Lighting Company	L-880 LED Precision Approach Path Indicator	2/26/2022	Approved
Type III Equipment/Building	Airport Lighting Company	L-821 Airport Lighting Control Panel	2/26/2022	Approved
Type III Equipment/Building	Webasto Charging Systems Incorportated	Posicharge DVS 300 Electric Vehicle Charger	11/27/2021	Approved
Type III Equipment/Building	ADB Safegate	High Intensity Runway Edge L-862(L) ERES2YW33S00002	11/27/2021	Approved
Type III Equipment/Building	ADB Safegate	High Intensity Runway Edge Light L-862(L) ERES2WY33S00002	11/27/2021	Approved
Type III Equipment/Building	ADB Safegate	High Intensity Runway Edge Light L-862(L) ERES2GR13SF0002	11/27/2021	Approved
Type III Equipment/Building	Multi-Electric Manufacturing	LED E Runway Elevated Threshold End Light	9/18/2021	Approved
Type III Equipment/Building	Multi-Electric Manufacturing	LED Runway Elevated Edge - L-862 (L)	9/18/2021	Approved

Type I, II, III Equipment / Building, and IV Buy American Waivers Issued (As of 3/3/2026)

The following manufacturer's equipment was issued a Buy American Waiver under 49 U.S.C. 50101(b) and can be used on AIP Funded Projects.

Waiver Type	Applicant	Project	Effective Date	Status
Type III Equipment/Building	Airport Lighting Company	L-890 Lighting Control & Monitoring System	7/17/2021	Approved

The following components or subcomponents are steel or manufactured goods that have an FAA specification number and have been determined to be 1) 100% United States product and 2) produced in the United States.

Waiver Type	Manufacturer	Product	Effective Date
100% US and US Final Assembly	Integro	L-823 Plug and Receptacle, Cable Connectors	6/10/2009
100% US and US Final Assembly	MCB Industries	EB-83 bolts	1/31/2011
100% US and US Final Assembly	MCB Industries	2-part washers (used with 3/8" x 16 by various length bolts)	10/14/2015
100% US and US Final Assembly	MCB Industries	18-8 fasteners (various length bolts)	12/27/2016

GENERAL CIVIL RIGHTS PROVISIONS

In all its activities within the scope of its airport program, the Contractor agrees to comply with pertinent statutes, Executive Orders, and such rules as identified in Title VI List of Pertinent Nondiscrimination Acts and Authorities to ensure that no person shall, on the grounds of race, color, national origin, creed, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

This provision binds the Contractor and subcontractors from the bid solicitation period through the completion of the contract.

CIVIL RIGHTS – TITLE VI ASSURANCES

Title VI Solicitation Notice:

As a condition of a grant award, the Sponsor shall demonstrate that it complies with the provisions of Title VI of the Civil Rights Act of 1964 (42 U.S.C. §§ 2000d et seq) and implementing regulations (49 CFR part 21) including amendments thereto, the Airport and Airway Improvement Act of 1982 (49 U.S.C. § 47123), the Age Discrimination Act of 1975 (42 U.S.C. 6101 et seq.), Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. § 794 et seq.), the Americans with Disabilities Act of 1990 (42 U.S.C. § 12101, et seq.), U.S. Department of Transportation and Federal Aviation Administration (FAA) Assurances, and other relevant civil rights statutes, regulations, or authorities, including any amendments or updates thereto.

This may include, as applicable, providing a current Title VI Program Plan to the FAA for approval, in the format and according to the timeline required by the FAA, and other information about the communities that will be benefited and impacted by the project. A completed FAA Title VI Pre-Grant Award Checklist is required for every grant application, unless excused by the FAA. The Sponsor shall affirmatively ensure that when carrying out any project supported by this grant that it complies with all federal nondiscrimination and civil rights laws based on race, color, national origin, sex, creed, age, disability, genetic information, in consideration for federal financial assistance. The Department's and FAA's Office of Civil Rights may provide resources and technical assistance to recipients to ensure full and sustainable compliance with Federal civil rights requirements. Failure to comply with civil rights requirements will be considered a violation of the agreement or contract and be subject to any enforcement action as authorized by law.

Title VI List of Pertinent Nondiscrimination Acts and Authorities

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 USC § 2000d et seq., 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin);
- 49 CFR Part 21 (Non-discrimination in Federally-Assisted programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964) including amendments thereto;
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 USC § 4601) (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Section 504 of the Rehabilitation Act of 1973 (29 USC § 794 et seq.), as amended (prohibits discrimination on the basis of disability); and 49 CFR Part 27 (Nondiscrimination on the Basis of Disability in Programs or Activities Receiving Federal Financial Assistance);
- The Age Discrimination Act of 1975, as amended (42 USC § 6101 et seq.) (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982 (49 USC § 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);

- The Civil Rights Restoration Act of 1987 (PL 100-259) (broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);

- Titles II and III of the Americans with Disabilities Act of 1990 (42 USC § 12101, et seq) (prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities) as implemented by U.S. Department of Transportation regulations at 49 CFR Parts 37 and 38;

- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 USC § 1681, et seq).

Title VI Clauses for Compliance with Nondiscrimination Requirements

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor"), agrees as follows:

1. **Compliance with Regulations:** The Contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts and Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. **Nondiscrimination:** The Contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, national origin, creed, sex, age, or disability in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21 including amendments thereto.

3. **Solicitations for Subcontracts, including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Contractor of the contractor's obligations under this contract and the Nondiscrimination Acts and Authorities on the grounds of race, color, or national origin.

4. **Information and Reports:** The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts and Authorities and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the Sponsor or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

5. **Sanctions for Noncompliance**: In the event of a Contractor's noncompliance with the non-discrimination provisions of this contract, the Sponsor will impose such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:

a. Withholding payments to the Contractor under the contract until the Contractor complies; and/or

b. Cancelling, terminating, or suspending a contract, in whole or in part.

6. **Incorporation of Provisions:** The Contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations, and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the Sponsor or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Contractor may request the Sponsor to enter into any litigation to protect the interests of the Sponsor. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

DAVIS-BACON REQUIREMENTS

1. Minimum Wages.

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by the Secretary of Labor under regulations implementing the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalent thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR § 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under (1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can easily be seen by the workers.

(ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination;

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the Contractor, the laborers, or mechanics to be employed in the classification, or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii) (B) or (C) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program: Provided that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding.

The Federal Aviation Administration or the Sponsor shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the Federal Aviation Administration may, after written notice to the Contractor, Sponsor, Applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and Basic Records.

(i) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 1(b)(2)(B) of the Davis-Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records that show that the commitment to provide

such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual costs incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the Contractor will submit the payrolls to the applicant, Sponsor, or Owner, as the case may be, for transmission to the Federal Aviation Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR § 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g. the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division Web site at https://www.dol.gov/agencies/whd/government-contracts/construction/payroll-certification or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker and shall provide them upon request to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the Contractor will submit them to the applicant, Sponsor, or Owner, as the case may be, for transmission to the Federal Aviation Administration, the Contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, Sponsor, or Owner).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR § 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR § 5.5 (a)(3)(i), and that such information is correct and complete;

(2) That each laborer and mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The Contractor or subcontractor shall make the records required under paragraph (3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the Sponsor, the Federal Aviation Administration, or the Department of Labor and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the Contractor, Sponsor, applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR § 5.12.

4. Apprentices and Trainees.

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR § 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to

journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination that provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate that is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

5. Compliance with Copeland Act Requirements.

   The Contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

6. Subcontracts.

   The Contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR §§ 5.5(a)(1) through (10) and such other clauses as the Federal Aviation Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR § 5.5.

7. Contract Termination: Debarment.

   A breach of the contract clauses in paragraph 1 through 10 of this section may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR § 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements.

   All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes Concerning Labor Standards.

   Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of Eligibility.

(i) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR § 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR § 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 USC § 1001.

FEDERAL FAIR LABOR STANDARDS ACT

All contracts and subcontracts that result from this solicitation incorporate by reference the provisions of 29 CFR Part 201, et seq, the Federal Fair Labor Standards Act (FLSA), with the same force and effect as if given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part-time workers.

The Contractor has full responsibility to monitor compliance to the referenced statute or regulation. The Contractor must address any claims or disputes that arise from this requirement directly with the U.S. Department of Labor – Wage and Hour Division.

OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

All contracts and subcontracts that result from this solicitation incorporate by reference the requirements of 29 CFR Part 1910 with the same force and effect as if given in full text. The employer must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The employer retains full responsibility to monitor its compliance and their subcontractor's compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (29 CFR Part 1910). The employer must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health Administration.

DISTRACTED DRIVING

In accordance with Executive Order 13513, "Federal Leadership on Reducing Text Messaging While Driving", (10/1/2009) and DOT Order 3902.10, "Text Messaging While Driving", (12/30/2009), the Federal Aviation Administration encourages recipients of Federal grant funds to adopt and enforce safety policies that decrease crashes by distracted drivers, including policies to ban text messaging while driving when performing work related to a grant or subgrant.

In support of this initiative, the Owner encourages the Contractor to promote policies and initiatives for its employees and other work personnel that decrease crashes by distracted drivers, including policies that ban text messaging while driving motor vehicles while performing work activities associated with the project. The Contractor must include the substance of this clause in all sub-tier contracts exceeding $15,000 that involve driving a motor vehicle in performance of work activities associated with the project.

PROHIBITION OF COVERED UNMANNED AIRCRAFT SYSTEMS (UAS)

The Bidder or Offeror certifies that they are aware of and comply with relevant Federal statutes and regulations, including those from the Federal Aviation Administration (FAA), for operating unmanned aircraft systems (UAS) in accordance, and in compliance with all related requirements in the FAA Reauthorization Act of 2024 (Public Law 118-63), section 936 (49 U.S.C. § 44801 note).

The Contractor warrants that all UAS operations will be conducted in full compliance with all applicable Federal Aviation Administration (FAA) regulations, including but not limited to 14 CFR Part 107, and any other applicable local, state, or Federal laws and regulations.

Sponsors and subgrant recipients cannot use AIP grant funds to enter into, extend, or renew a contract related to covered unmanned aircraft systems (UAS). This includes both procurement and operational contracts, as well as contracts with entities that operate such systems.

C. Outages of taxiway and runway lights will be coordinated and scheduled with the Airport Manager. The Contractor shall submit written requests to the RPR for such outages no later than fourteen (14) calendar days in advance. The request shall include a description of work and the duration of the outage. The Contractor shall not proceed with such outages until written approval is received from the State.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

PART 4 - MEASUREMENT AND PAYMENT

4.1 BASIS OF MEASUREMENT AND PAYMENT

A. All work under this Section shall not be measured nor paid for separately but shall be considered incidental to and included in the bid prices for the various items of work in this project.

PART 5 - ATTACHMENTS

5.1 Attachment A – Safety Risk Assessment Panel Meeting Safety Risk Management Document (SRMD), excluding all Appendices except Appendix K - Construction Safety and Phasing Plan (CSPP).

All other appendices are available upon request.

--------END OF SECTION 01005--------

Daniel K. Inouye International Airport (HNL)

Taxiway C Reconstruction

Safety Risk Assessment Panel Meeting

Safety Risk Management Document

State of Hawaii
Department of Transportation
Airports

SRMD Version 1.1
February 17, 2026

Table of Contents

Change Control and Version Tracking 2
Signature Page 3
Executive Summary 9
Introduction and Background 14
Section 1 – Current System / Baseline 17
Section 2 – Proposed Change 19
Section 3 – Safety Risk Management Planning and Impacted Organizations 82
Section 4 – Assumptions 86
Section 5 – Phase 1: System Description 88
Section 6 – Phase 2: Identified Hazards 89
Section 7 – Phases 3 & 4: Hazard Analysis and Risks Assessed 100
Section 8 – Phase 5: Treatment of Risk / Mitigation of Hazards 108
Section 9 – Tracking and Monitoring Hazards 110

List of Figures

Figure 1: Risk Matrix (Executive Summary)..... 13
Figure 2: Airport Diagram 18
Figure 3: Construction Sequencing/Timeline and Phasing Overview 20
Figure 4: Soil Stockpiling and Laydown Area Plan 22
Figure 5: Soil Stockpiling and Laydown Improvement Plan..... 24
Figure 6: Construction Phasing Plan, Phase 1A 27
Figure 7: Construction Phasing Plan, Phase 1B..... 30
Figure 8: Construction Phasing Plan, Phase 2 33
Figure 9: Construction Phasing Plan, Phase 2.1 35
Figure 10: Construction Phasing Plan, Phase 3 38
Figure 11: Construction Phasing Plan, Phase 4.1 41
Figure 12: Construction Phasing Plan, Phase 4.2 44
Figure 13: Construction Phasing Plan, Phase 4.3 47
Figure 14: Construction Phasing Plan, Phase 5 50
Figure 15: Construction Phasing Plan, Phase 5.1 52
Figure 16: Construction Phasing Plan, Phase 6 55
Figure 17: Construction Phasing Plan, Phase 7 58
Figure 18: Construction Phasing Plan, Phase 7.1 60
Figure 19: Construction Phasing Plan, Phase 8 63
Figure 20: Construction Phasing Plan, Phase 9 66
Figure 21: Construction Phasing Plan, Phase 10 69
Figure 22: Construction Phasing Plan, Phase 11 72
Figure 23: Construction Phasing Plan, Phase 12 75
Figure 24: Construction Phasing Plan, Phase 13 78
Figure 25: Construction Phasing Plan, Phase 14 81
Figure 26: Risk Matrix (Section 7) 102

List of Tables

Table 1: Hazard Risk Assessment Results 11
Table 2: Runway Data Summary 17
Table 3: SRM Panel Members, Subject Matter Experts, Meeting Attendees (12/10/25) 82
Table 4: SRM Panel Members, Subject Matter Experts, Meeting Attendees (12/17/25) 84
Table 5: List of Hazards and the Associated System State and Effects 90
Table 6: Severity Definitions 106
Table 7: Likelihood Definitions 107
Table 8: Initial Risk Dissenting Opinion Summary 109

Appendices

Appendix A – Preliminary Hazard List (PHL)
Appendix B – Preliminary Hazard Analysis (PHA)
Appendix C – Panel Packet
Appendix D – Dissenting Opinions
Appendix E – Sign-In Sheets
Appendix F – SAS-1 Form
Appendix G – Ground Rules
Appendix H – Definitions
Appendix I – Roles and Responsibilities
Appendix J – Reference Documents
Appendix K – Construction Safety and Phasing Plan

Definitions and Acronyms

The following table provides definitions and acronyms used throughout this Safety Risk Management Document (SRMD). Acronyms are spelled out at first use in the narrative text and included here for reference.

| AC | Advisory Circular |

| ADM | Airport District Manager |

| ADO | Airports District Office |

| ALPA | Air Line Pilots Association |

| AOPA | Aircraft Owners and Pilots Association |

| AMR | American Medical Response |

| ARFF | Aircraft Rescue and Fire Fighting |

| ATO | Air Traffic Organization |

| ATCT | Air Traffic Control Tower |

| CIP | Capital Improvement Program |

| CMO | Certificate Management Office |

| CSPP | Construction Safety Phasing Plan |

| CTAF | Common Traffic Advisory Frequency |

| DOT-A | Department of Transportation – Airports |

| FAA | Federal Aviation Administration |

| FOD | Foreign Object Debris |

| FSDO | Flight Standards District Office |

| GACH | General Aviation Council of Hawaii |

| HCF | Honolulu Control Facility |

| HIANG | Hawaii Air National Guard |

| HNL | Daniel K. Inouye International Airport |

| ILS | Instrument Landing System |

| LOSA | Loss of Situational Awareness |

| NAS | National Airspace System |

| NBAA | National Business Aviation Association |

| NOTAM | Notice to Air Missions |

Definitions and Acronyms - Continued

| OE | Operational Error |

| PCC | Portland Concrete Cement |

| PD | Pilot Deviation |

| PHA | Preliminary Hazard Analysis |

| PHL | Preliminary Hazard List |

| RMP | Radio Monitoring Person |

| RPR | Resident Project Representative |

| RSO | Runway Safety Office |

| RWY | Runway |

| SMS | Safety Management System |

| SRA | Safety Risk Assessment |

| SRMD | Safety Risk Management Document |

| SRMP | Safety Risk Management Panel |

| TCAS | Traffic Collision Avoidance System |

| TWY | Taxiway |

| TXL | Taxilane |

| UNICOM | Universal Communications |

| USAF | United States Air Force |

| WSC | Western Service Center |

| WIP | Work-In-Progress |

Executive Summary

The State of Hawaii, Department of Transportation, Airports (DOT-A) proposes to provide pavement reconstruction of the Daniel K. Inouye International Airport's (HNL), Taxiway Charlie and bring into compliance with current Federal Aviation Administration (FAA) design standards.

The DOT-A implemented the Safety Risk Assessment (SRA) process into the Construction Safety Phasing Plan (CSPP) review due to the proposed changes to the airfield and presumed significant impacts to the airfield operational status and the National Airspace System (NAS). All DOT-A led SRA preliminary and panel meetings were conducted and facilitated in accordance with the (FAA) Airport (ARP) Safety Management System Order 5200.11A, FAA ARP Safety Management Systems (SMS) Desk Reference, Version 1.0, FAA AC 150/5200-37A Safety Management Systems for Airport Operators, and FAA Order 8040.4B Safety Risk Management Policy.

This Safety Risk Management Document (SRMD) documents the Safety Risk Management Panel's (SRMP) evaluation of potential hazards and effects associated with the proposed CSPP for the reconstruction of Taxiway Charlie.

DOT-A conducted a Preliminary SRA (PreSRA) meeting with airport stakeholder groups to ensure that the SRMP is sufficiently knowledgeable of the Federal Aviation Administration (FAA) Airports SMS process and understand the proposed change to airfield system.

This meeting was conducted on November 25, 2025. Invitations from the DOT-A to the stakeholders included the designer, Orion Engineers & Associates (Orion), Daniel K. Inouye (HNL) Operations Staff, DOT-A staff, DOT-A HNL Aircraft Rescue and Fire Fighting (ARFF), DOT-A General Aviation (GA) Officer, FAA HNL Airports District Office (ADO), FAA Honolulu Control Facility (HCF), FAA Flight Standards District Office (FSDO), FAA Certificate Management Office (CMO), FAA Flight Procedures, FAA Tech Ops, FAA Runway Safety Office (RSO), FAA Air Traffic Organization (ATO), FAA System Support Center (SSC), FAA Planning, Western Service Center (WSC), United States Air Force (USAF), Hawaii Air National Guard (HIANG), AvAirPros, AECOM, Parsons, Air Canada, American Airlines, Alaska Airlines, Delta Airlines, Hawaiian Airlines, Southwest Airlines, JAL, Lanai Air, Mokulele, United Airlines, West Air, West Jet, Aircraft Owners and Pilots Association (AOPA), General Aviation Council of Hawaii (GACH), Aloha Air Cargo, Amazon Ops/Pacific Air Cargo, Amazon Air, Asia Pacific Airlines, Atlas Air, FedEx, Kalitta, Kamaka Air, Trans Air Hawaii, UPS, Atlantic Aviation, Signature Aviation, Castle & Cooke Aviation, Corporate Air, Blue Hawaiian Helicopters, Georges Aviation, GMR, Mauna Loa Helicopters, Pacific Flight Academy, Rainbow Helicopters, A4A, Air Line Pilots Association (ALPA), AOPA, the National Business Aviation Association (NBAA), and GA tenants. The meeting was conducted virtually via Microsoft Teams Video conference call and In-Person. Final comments from this PreSRA meeting were noted, agreed upon and incorporated into the CSPP prior to scheduling and conducting the SRA Panel meeting.

Critical discussions topics from the PreSRA meeting are listed below:

1. Any NAVAIDS that have been out for 72 hours need re-certification. A Flight check is required prior to restoring ILS.
    a. Phase 2.2 is not to start until the Runway (RWY) 4R Instrument Landing System (ILS) is back in service before we affect the RWY 8L ILS.

2. The project is to coordinate with ARFF to ensure they are aware of the closures, barricade placements and having an acceptable emergency response route.
3. Project to be rephased to avoid RWY 26R closures during Kona Wind seasons.
    a. RWY 26R is the primary commercial jet departure runway during Kona wind conditions. The airlines need RWY 26R full length for departures.
4. Adding subphases to allow other work to occur while the hardstand concrete extensions are curing.
5. Contractors radio communications with Air Traffic Control Tower (ATCT) when entering the work area.
6. Pushback procedures for hardstand restrictions were discussed to maintain wing tip clearance and to avoid jet blast effects to the construction area.
7. HNL will provide some Runway Incursion Warning System (RIWS) LITE for the contractor vehicles.

Following the PreSRA meeting, the SRA Panel meeting was conducted on December 10, 2025, with a second continuation Panel meeting held on December 17, 2025, with all stakeholders. The SRMP completed its evaluation of the Taxiway Charlie Reconstruction CSPP. The evaluations are summarized below under their respective section headings.

SRMP Findings

The Hazards were identified, analyzed, and assessed in an organized group discussion, based on the thorough review of the Project Proposal Summary (PPS) and the CSPP. The Preliminary Hazard List (PHL) was developed through a structured brainstorming session, which resulted in seven (7) preliminary potential hazards. The Safety Risk Management Panel (SRMP) subsequently reviewed and evaluated these hazards for further analysis in the Preliminary Hazard Analysis (PHA) worksheet.

During the PHA process, the SRMP reviewed the preliminary hazard list containing seven (7) potential hazards and evaluated them for different effects. The SRMP determined the Worst Credible Effect for each Hazard and rated their Risk based on Severity and Likelihood. There were three potential hazards (HZ-5, HZ-6, and HZ-7) that were determined as a Cause or an Effect for other hazards and were accepted for removal. See Table 1 below for summary, taken from the PHA in Appendix B.

Table 1: Hazard Risk Assessment Results

(1) Hazard ID	(2) Hazard Description	(7) Effects	(12) Initial Risk	(15) Predicted Residual Risk
XYZ-1	Condition, real or potential; can cause injury, illness, etc. Pre-requisite for accident or incident	Potential Outcome or harm of the hazard if it occurs in the defined system state; worst credible	Conditions, characterized by qualities, in which a system can exist; worst credible	Risk status predicted to occur when recommended controls or requirements are verified
HNL-TWY-C-RECON: HZ-1	Controller Loss of Situational Awareness (LOSA)	-Runway Incursion -Aircraft Nose to Nose -Go Arounds -Wrong Surface Landings -Aircraft Departure from Surface -Longer Taxi Routes -Surface Incident -Radical Maneuvers Causing Impacts to Passengers in Cabin -Missed Approaches -Jet Blast	3C MEDIUM	N/A No Further Mitigations
HNL-TWY-C-RECON: HZ-2	Pilot LOSA	-Runway Incursion -Aircraft Nose to Nose -Go Arounds -Wrong Surface Landings -Aircraft Departure from Surface -Longer Taxi Routes -Surface Incident -Radical Maneuvers Causing Impacts to Passengers in Cabin -Missed Approaches -Jet Blast	3C MEDIUM	N/A No Further Mitigations

HNL-TWY-C-RECON: HZ-3	Vehicle LOSA	-Runway Incursion -Longer Driving Routes -Surface Incident	3C MEDIUM	N/A No Further Mitigations
HNL-TWY-C-RECON: HZ-4	FOD	-Closure of Runways and Taxiways -Pick Up Wildlife -Aircraft Damage -Runway Incursion -Surface Incident	3C MEDIUM	N/A No Further Mitigations
HNL-TWY-C-RECON: HZ-5 (REMOVED)	Jet Blast	N/A	N/A	N/A
HNL-TWY-C-RECON: HZ-6 (REMOVED)	Keeping OFZ Clear of Construction Barricades	N/A	N/A	N/A
HNL-TWY-C-RECON: HZ-7 (REMOVED)	Construction Flood Lighting Mixed with Normal Ramp Lighting	N/A	N/A	N/A

Severity / Likelihood	Minimal 5	Minor 4	Major 3	Hazardous 2	Catastrophic 1
Frequent A					
Probable B					
Remote C			HNL-TWY-C-RECON-HZ-1 HNL-TWY-C-RECON-HZ-2 HNL-TWY-C-RECON-HZ-3 HNL-TWY-C-RECON-HZ-4		
Extremely Remote D					
Extremely Improbable E					

Figure 1: Risk matrix

High Risk – Unacceptable
Medium Risk – Acceptable with Mitigation
Low Risk – Acceptable

The four (4) of the seven (7) Hazards (HZ-1, -2, -3, -4) resulted in Initial Risk ratings of Medium Risk (3C). The SRMP felt there were enough existing controls and emphasis put on stakeholder notifications that no further evaluation for additional mitigation was needed for these hazards.

The SRMP applied the SRM process to determine that the HNL Taxiway C Reconstruction Project can be introduced into the National Airspace System (NAS) with an acceptable level of risk. Appendix F provides the SAS-1 Form 5200-8 Signature Page, signifying SRMP member's concurrence of this Safety Risk Assessment for the HNL Taxiway C Reconstruction Project. Please note, the Hazards in the Matrix are abbreviated and are the same hazards as identified in Table 1, Hazard Risk Assessment Results.

Introduction and Background

Daniel K. Inouye International Airport is a 4,220-acre public joint-use facility located on the island of Oahu. The airport is owned and operated by the State of Hawaii, Department of Transportation, Airports (DOT-A) servicing domestic and international commercial air carrier, air cargo, commuter/air taxi, corporate, military, general aviation (GA), and helicopter operations. It is a Part 139 certificated public use commercial airport with four (4) hard surface runways, two (2) sea lanes, and multiple parallel and interconnecting taxiways. The airport has a shared agreement with Joint Base Pearl Harbor Hickam (JBPHH) and also facilitates the Hawaii Air National Guard (HIANG). The airport is controlled by the Honolulu Control Facility (HCF); this is a combined control facility which provides enroute, approach/departure, and airport control services, including the HCF Air Traffic Control Tower (ATCT). These facilities operate 24 hours a day, 7 days a week, within the Airport's Class B airspace and surrounding airspace.

The DOT-A is currently out to bid on a project to reconstruct Taxiway C and portions of the South Ramp hardstands. The Project will include pavement demolition, asphalt paving, Portland Cement Concrete (PCC) paving, taxiway edge lighting, storm drain and waterline improvements and marking application. The taxiway reconstruction will provide a smooth and durable surface that is free of foreign object debris (FOD) and designed to FAA AC 5320-6 standards (current edition).

The project is composed of reconstructing airfield pavements, including Taxiway C, intersecting portions of Taxiway D, E, F, P and RT, and a small portion of the hardstand apron fronting cargo parking positions, all located within the AOA.

The DOT-A utilized their SRA facilitator services consultant to conduct all SRA preliminary and panel meetings in accordance with the FAA Airport (ARP) Safety Management System Order 5200.11A, FAA ARP Safety Management Systems (SMS) Desk Reference, Version 1.0, FAA AC 150/5200-37A Safety Management Systems for Airport Operators, and FAA Order 8040.4B Safety Risk Management Policy.

A preliminary SRA meeting was conducted using a systematic approach to prepare for the final SRA panel meeting. The meeting was scheduled with stakeholder groups as they reviewed the Construction Safety Phasing Plan (CSPP) presented by the designer, Orion Engineers. The following outlines the meeting date and stakeholder groups that were invited. However, it is not an indicator of the actual attendance, please refer to Appendix E Sign-In Sheets.

Preliminary SRA Meeting Date	Stakeholder Group	Purpose
November 25, 2025	Daniel K. Inouye (HNL) Operations Staff, DOT-A staff, DOT-A HNL Aircraft Rescue and Fire Fighting (ARFF), DOT-A General Aviation (GA) Officer, FAA HNL Airports District Office (ADO), FAA Honolulu Control Facility (HCF), FAA Flight Standards District Office (FSDO), FAA Certificate Management Office (CMO), FAA Flight Procedures, FAA Tech Ops, FAA Runway Safety Office (RSO), FAA Air	To review the CSPP for the field investigations with all stakeholders and develop to an acceptable level by all parties

	Traffic Organization (ATO), FAA System Support Center (SSC), FAA Planning, Western Service Center (WSC), United States Air Force (USAF), Hawaii Air National Guard (HIANG), AvAirPros, AECOM, Parsons, Air Canada, American Airlines, Alaska Airlines, Delta Airlines, Hawaiian Airlines, Southwest Airlines, JAL, Lanai Air, Mokulele, United Airlines, West Air, West Jet, Aircraft Owners and Pilots Association (AOPA), General Aviation Council of Hawaii (GACH), Aloha Air Cargo, Amazon Ops/Pacific Air Cargo, Amazon Air, Asia Pacific Airlines, Atlas Air, FedEx, Kalitta, Kamaka Air, Trans Air Hawaii, UPS, Atlantic Aviation, Signature Aviation, Castle & Cooke Aviation, Corporate Air, Blue Hawaiian Helicopters, Georges Aviation, GMR, Mauna Loa Helicopters, Pacific Flight Academy, Rainbow Helicopters, A4A, Air Line Pilots Association (ALPA), AOPA, the National Business Aviation Association (NBAA), and GA tenants	

As the preliminary meetings were conducted, an SRA briefing on the FAA ARP SMS process, roles and responsibilities, and ground rules were presented. The ground rules provided participants with the opportunity to ask questions and have their concerns addressed prior to conducting the final SRA Panel Meeting. Throughout these meetings, the participants were reminded of the ground rules. Specifically, "the absence of an answer is understood as agreement." This fostered open discussion with participants' concerns, being either addressed during the meeting or placed on the issues board for future discussion.

The following provides a brief overview of the preliminary SRA meeting discussion and concerns by the stakeholder group in narrative format.

Preliminary SRA No. 1 with the Airport, FAA, and Stakeholders on November 25, 2025

The first Preliminary SRA meeting was conducted on November 25, 2025. Invitations from DOT to the stakeholders included the designer (Orion Engineers), DOT-A, HNL, HNL ARFF, DOT-A GA Officer, FAA HNL ADO, , FAA HCF, FAA FASDO, FAA CSAO, FAA CMO, FAA Flight Procedures, FAA Tech Ops, FAA RSO, FAA ATO WSC NPI, USAF, HIANG, commercial, cargo and general aviation stakeholders to ensure the CSPP drawings were at the point to have a panel meeting discussion. It was decided that this project would be conducted in fifteen (15) phases with some phases containing subphases. The following is a recap of the discussion that took place.

a. The stakeholders reviewed the proposed construction phasing, limits of construction, workdays and daily start and end times. Minor revisions identified during the review included clarifying hardstand pushback procedures to allow tail-north and/or tail-south operations; splitting Phase 2.2 to reduce impacts to the Runway 8L localizer critical area; and adding subphases to Phases 6 through 8 to allow other work to proceed while concrete cures. Additional updates addressed NOTAM language consistency with HCF preferences, barricade placement to provide direct access to the work area from the non-movement area, and runway lighting to display amber lights on the final 2, 000 feet of the shortened Runway 8L. Construction coordination schedules will continue to be updated and distributed to stakeholders as needed and prior to each phase change. Further action include confirming the required number and locations of flaggers and realigning the Taxiway C centerline during Phases 9 through 12 to maintain general aviation access.
b. Orion Engineers will assess potential phasing adjustments to avoid Runway 26R closures during the Kona Wind season, as Runway 26R is the primary departure runway during these operations.

At the conclusion of the Preliminary SRA meeting with all the FAA offices, airlines, military, general aviation, and other stakeholders, Orion Engineers was able to refine the CSPP diagrams and the CSPP narrative for the SRA Panel review. The SRA Panel meeting was conducted on December 10, 2025, with an SRA Panel continuation meeting conducted on December 17, 2025.

Section 1 – Current System / Baseline

Section 1 provides an overview of the current operational state of Daniel K. Inouye International Airport (HNL), establishing the baseline conditions against the Proposed Change and to assess its potential impacts. This baseline includes the existing airfield configuration, operating hours, available navigational and visual aids, runway characteristics, and the types of aviation activities currently conducted at HNL. By documenting these existing conditions, Section 1 enables a clear comparison between the current system and the operational environment anticipated during and after implementation of the proposed Taxiway C reconstruction project. This comparison is essential to identifying system-state changes, understanding how construction activities may interact with ongoing airfield operations, and evaluating any resulting safety risks within the Safety Risk Management (SRM) process.

HNL is also a large hub primary airport with airfield facilities that include four asphalt runways and two sea lanes. Runway 8L/26R at 12,360'x200', Runway 8R/26L at 12,000'x200', Runway 4R/22L at 9,002'x150', Runway 4L/22R at 6,955'x150', Runway 4W/22W at 3,000'x150' and Runway 8W/26W at 5,000'x300' (See Figure 1). HNL has a complex taxiway system, aprons, navigational aids, VORTAC, DME, PAPI, and ASDE-X systems.

Table 2: Runway Data Summary

HNL	Runway 8L/26R		Runway 8R/26L		Runway 4L/22R		Runway 4R/22L	
	8L	26R	8R	26L	4L	22R	4R	22L
Width	200'		200'		150'		150'	
Length	12,360'		12,000'		6,955'		9,002'	
Marking Type	Precision	Precision	Precision	Precision	Non-Precision	Non-Precision	Precision	Precision
Part 77 Approach	Precision	Visual	Non-Precison	Non-Precison	Non-Precison	Visual	Precision	Visual
Navigational Aids	ILS,DME	None	RNAV GPS	LDA/DME	RNAV GPS	None	ILS/ DME	None
Visual Aids	4-Light PAPI	4-Light PAPI	4-Light PAPI	4-Light PAPI	4-Light PAPI	None	4-Light PAPI	4-Light PAPI
Approach Lights	MALSR	REIL	REIL	MALSF	REIL		MALSR	REIL
Runway Edge Lighting	HIRL		HIRL		MIRL		HIRL	

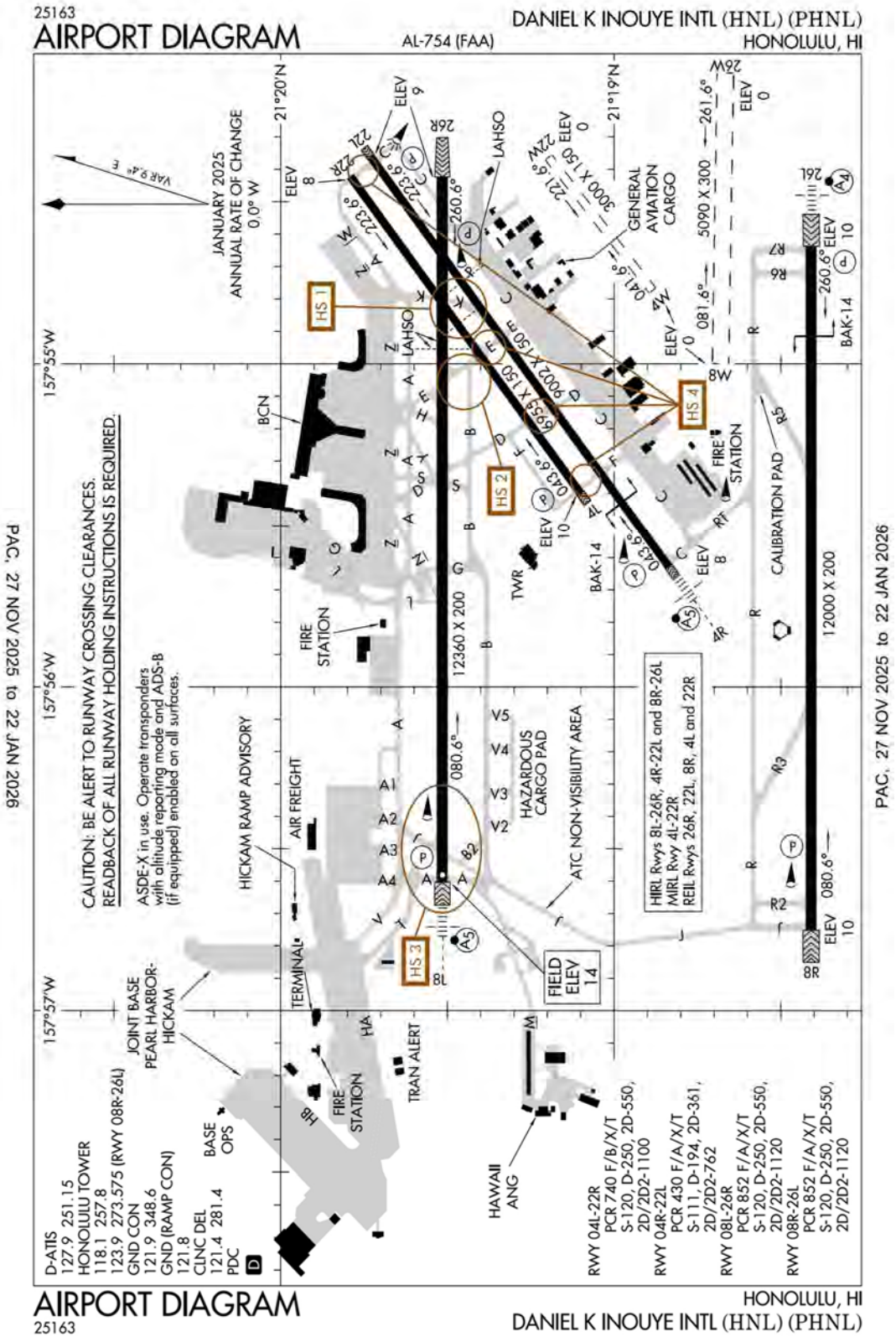

Figure 2: Airport Diagram

Section 2 – Proposed Change

The scope of work consists of full depth reconstruction of Taxiway C, extending the Portland Concrete Cement (PCC) for Hardstands A-E, and restriping activities associated with paving.

This project will be constructed in fourteen (14) phases (Phase 1A through Phase 14), with some phases having subphases. The following stages are as proposed:

Construction Sequencing/Timeline and Phasing Overview

GENERAL PHASING NOTES

1. TWY C CLOSED WITHIN EACH PHASE LIMIT SHOWN FOR THE DURATION OF THE PHASE EXCEPT FOR PHASES 2, 5, AND 7 WHICH INCLUDE PCC PAVING ADJACENT TO THE HARDSTANDS. REFER TO INDIVIDUAL PHASING SHEETS FOR PCC CURE TIME PROVISIONS IN THE PHASE DURATION.
2. REFER TO INDIVIDUAL PHASING SHEETS FOR FULL LIST OF NOTAM'S.
3. REFER TO SHEETS G-041 - G-043 FOR PHASING DETAILS.
4. REFER TO THE CSPP FOR CONTRACTOR TRAINING REQUIREMENTS FOR FLAGGERS.
5. REFER TO SHEET G-019 FOR DESIGNATED ROUTES TO SOIL HANDLING SITES.
6. ANY NAVAIDS OUT OF SERVICE FOR MORE THAN 72 HOURS CONTINUOUSLY SHALL REQUIRE RECERTIFICATION BY THE FAA. CONTRACTOR SHALL PROVIDE A MINIMUM 7 DAYS NOTICE TO THE FAA FOR RECERTIFICATION.
7. REFER TO INDIVIDUAL PHASING SHEETS FOR FULL LIST OF NOTAM'S.
8. APPLICATION OF FINAL MARKINGS TO BE COORDINATED WITH RPR.
9. CONTRACTOR MAY PROPOSE RESEQUENCING OF WORK AT THE APPROVAL OF HNL DISTRICT AND HCF.
10. RPR MAY ELECT TO RESEQUENCE WORK SUCH THAT PHASE 4 AS SHOWN IS CONSTRUCTED OUTSIDE OF THE KONA WIND SEASON (OCTOBER THROUGH MAY) AT NO ADDITIONAL COST.

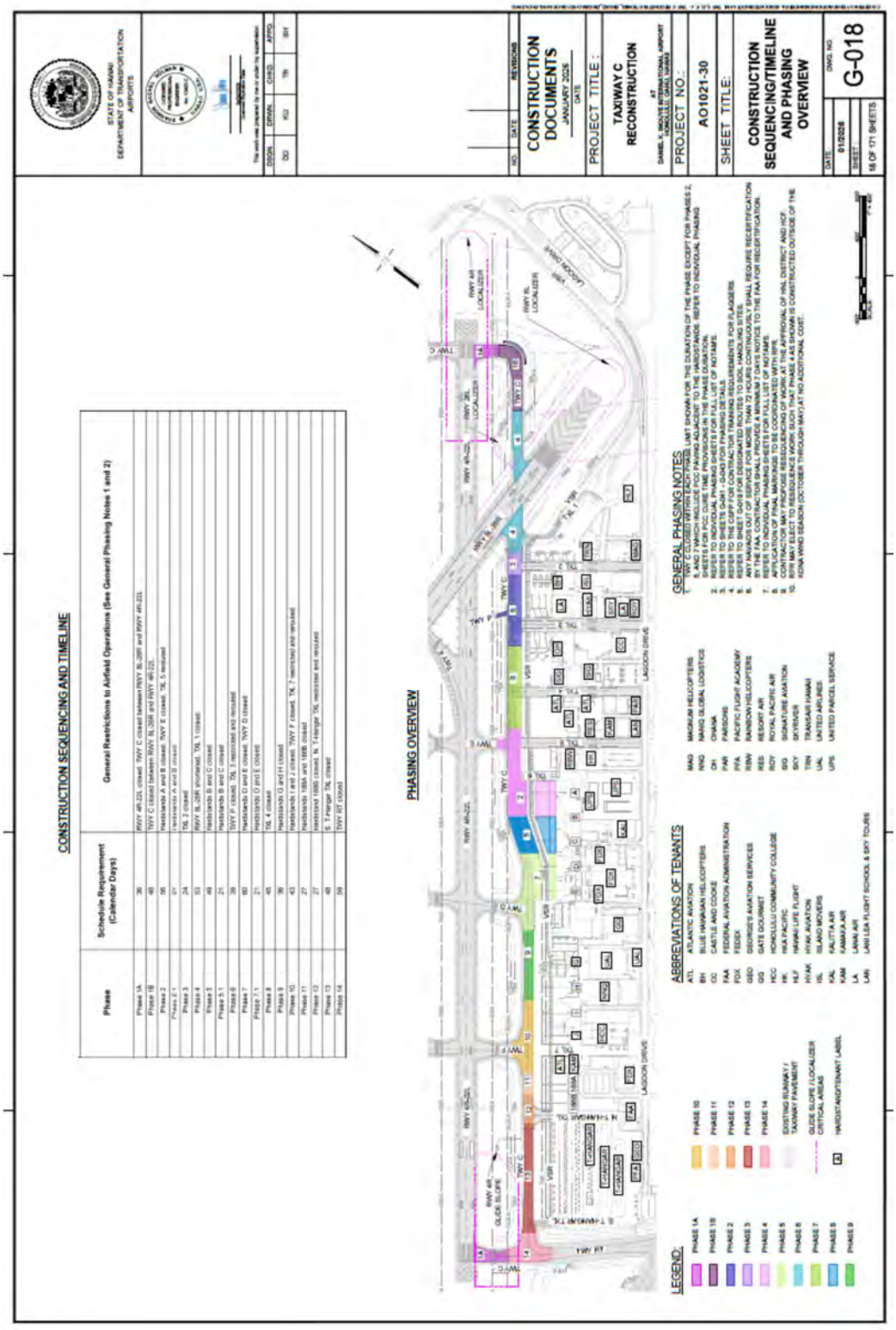

Figure 3: Construction Sequencing/Timeline and Phasing Overview

Soil Stockpiling and Laydown Area Plan

NOTES:

1. THE LIMITS OF THE STAGING/STOCKPILING AREAS SHOWN ARE APPROXIMATE. THE EXACT LIMITS SHALL BE COORDINATED WITH AND APPROVED BY THE RPR.
2. STOCKPILING AREAS ARE ESTIMATED TO BE ABLE TO CONTAIN A TOTAL OF 190 STOCKPILES THAT ARE 60 FEET IN LENGTH AND WIDTH AND EACH CONTAINING A MAXIMUM OF 400 CUBIC YARDS OF MATERIAL AT A MAXIMUM HEIGHT OF 3 FEET. ACTUAL NUMBER OF STOCKPILES CONTAINED WITHIN AREA MAY DIFFER.
3. STOCKPILE AREAS 1 AND 2 SHALL BE USED AS THE MAIN AREAS TO FACILITATE THE MANAGEMENT OF EXCAVATED SOILS. STOCKPILED SOIL SHALL BE TESTED AND DISPOSED OF OFFSITE IN ACCORDANCE WITH SPECIFICATION SECTION 01562 AS SOON AS POSSIBLE TO MAKE ROOM FOR ONGOING EXCAVATION ACTIVITIES. STOCKPILE AREA 3 MAY ONLY BE USED IF IT CAN BE DEMONSTRATED TO BE NECESSARY AND ITS USE MUST BE APPROVED BY THE RPR.
4. THE CONTRACTOR SHALL SUBMIT A LAYOUT PLAN FOR THE STAGING AREA FOR REVIEW AND APPROVAL BY THE RPR PRIOR TO MOBILIZATION.
5. STAGING AREAS ARE WITHIN THE AOA AND SHALL BE SECURED AT ALL TIMES AS OUTLINES IN SPECIFICATION 01565.
6. SEE SPECIFICATIONS SECTION 01562 FOR STOCKPILING SITE REQUIREMENTS NEEDED PRIOR TO START OF STOCKPILING ACTIVITIES AND ADDITIONAL REQUIREMENTS AT END OF STOCKPILING REMOVAL ACTIVITIES.
7. SEE SHEET G-020 FOR STOCKPILE SITE IMPROVEMENT REQUIREMENTS.

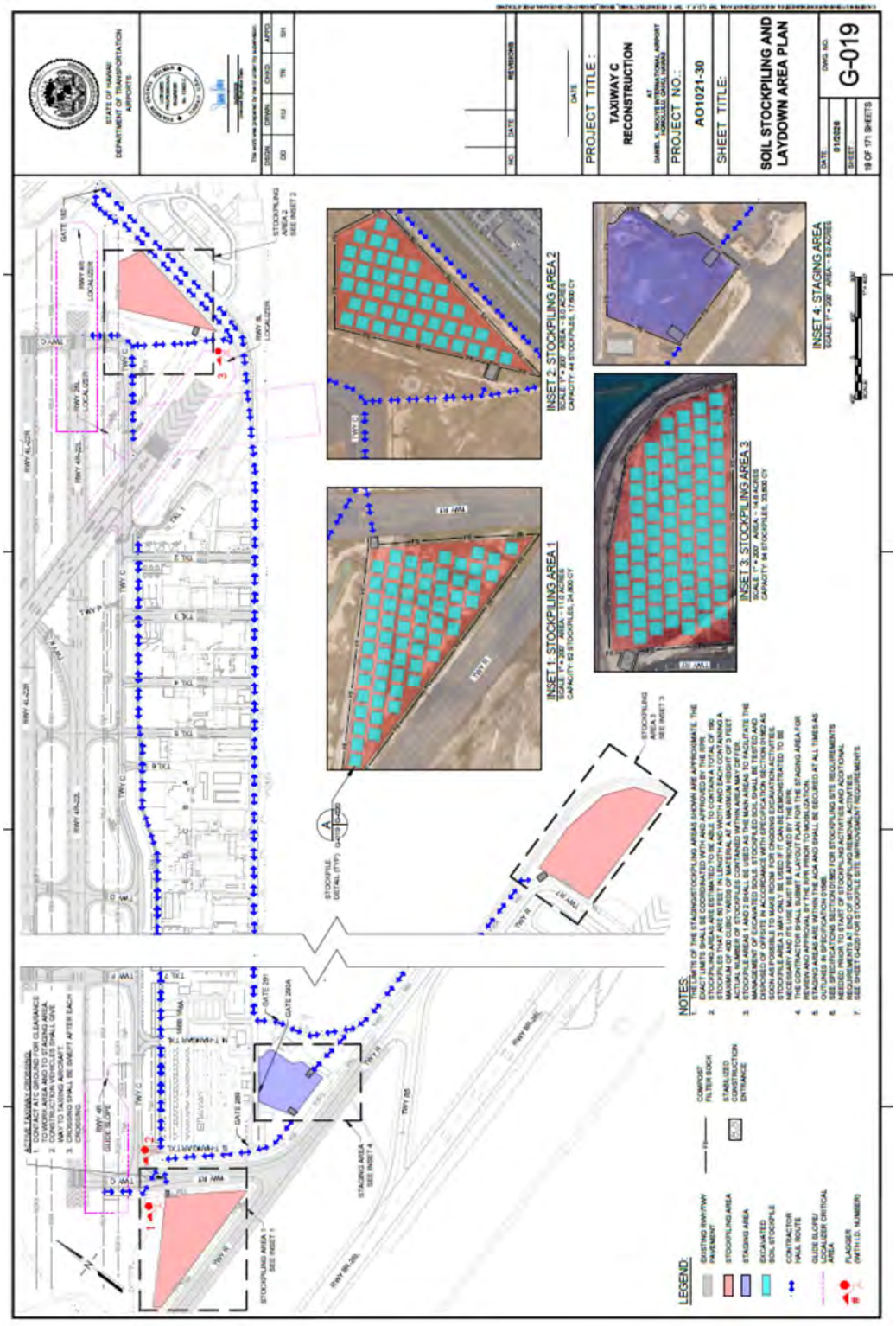

Figure 4: Soil Stockpiling and Laydown Area Plan

Soil Stockpiling and Laydown Improvement Plan

NOTES:

1. CONTRACTOR SHALL PREPARE A STOCKPILE MANAGEMENT PLAN THAT INCLUDES A NUMBERING SCHEME FOR EACH STOCKPILE AND WHERE THE SOIL WAS EXCAVATED FROM (I.E. PHASE, STATION AND OFFSET FROM THE CENTERLINE). SEE SPECIFICATIONS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONSTRUCTION ACCESS AROUND THE STOCKPILES INCLUDING STABILIZING AREAS AS REQUIRED. SEE SPECIFICATIONS.
3. TARPS COVERING STOCKPILES SHALL BE CLEARLY MARKED IN ACCORDANCE WITH THE NUMBERING SCHEME.
4. CONTRACTOR SHALL COLLECT ANY STANDING WATER THAT MAY ACCUMULATE AROUND LINED STOCKPILES AND DISPOSE OF BY MEANS OF AN INFILTRATION TRENCH. SEE DETAIL 1 ON SHEET G-111.
5. PHOTOGRAPHS OF EXISTING CONDITIONS OF PROPOSED STOCKPILING SITES WERE TAKEN ON AUGUST 12, 2025.
6. CONTRACTOR SHALL RESTORE STOCKPILE SITES TO THEIR ORIGINAL CONDITION FOLLOWING FINAL DISPOSAL OF ALL EXCAVATION MATERIALS. ONLY AREAS WITH STOCKPILE SITES USED FOR STOCKPILING AND CONSTRUCTION ACCESS SHALL BE PLANTED WITH SPRIGGS AS FURTHER DESCRIBED IN SPECIFICATIONS SECTION 02903 – SPRIGGING. CONTRACTOR SHALL BE RESPONDSIBLE FOR IRRIGATING AND MAINTAINING NEWLY PLANTED SPRIGS FOR A PERIOD OF 6 MONTHS. IRRIGATION SHALL BE BY HAND, OR BY MEANS OF A TEMPORARY IRRIGATION SYSTEM AS APPROVED BY THE RPR.

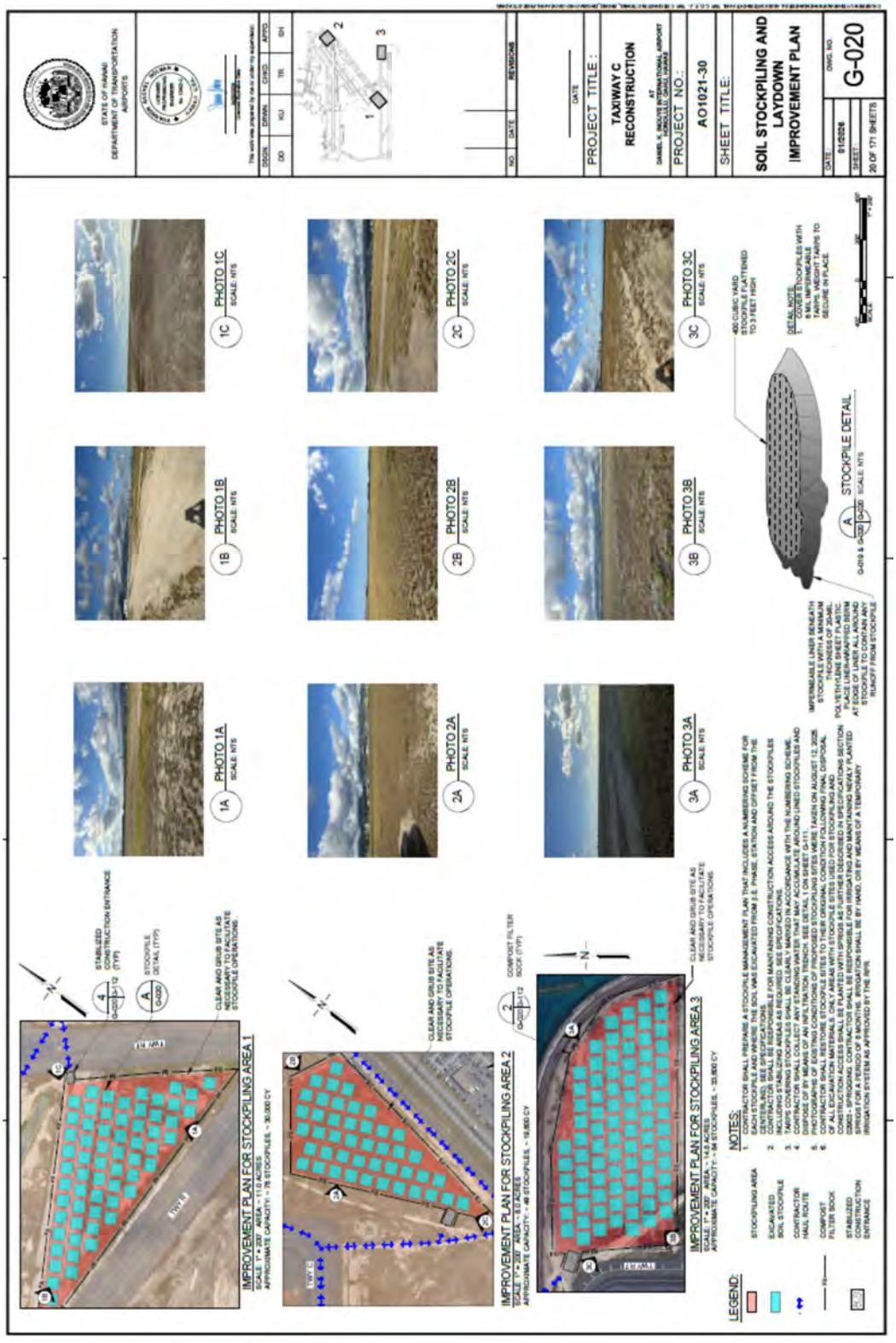

Figure 5: Soil Stockpiling and Laydown Improvement Plan

Phase 1A (Figure 6: Construction Phasing Plan, Phase 1A)

NOTE – PHASE 1A SHALL START CONCURRENTLY WITH PHASE 1B.

DESCRIPTION OF WORK:

DEMOLTION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARTION, NEW AC PAVEMENT, TEMPORARY RUNWAY AND TAXIWAY MARKINGS.

WORK HOURS:
1600-0600

DURATION:
36 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):

1. RWY 4R-22L CLOSED.
2. TWY C CLOSED BETWEEN RWY 4R-22L AND RWY8L-26R.
3. TWY C CLOSED BETWEEN RWY 4R-22L AND TWY RT.
4. TWY K CLOSED BETWEEN RWY 8L-26R AND RWY 4R-22L.
5. TWY P CLSOED BETWEEN TWY C AND RWY 4R-22L.

NAVAID STATUS AND IMPACTS (24/7):

1. RWY 4R: ILS OUT OF SERVICE UNTIL FLIGHT CHECK.
2. RWY 4R: PAPI, REIL, MALSR OUT OF SERVICE.
3. RWY 22L: PAPI, REIL, OUT OF SERVICE.

PHASING NOTES:

1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. ANY NAVAIDS OUT OF SERVICE FOR MORE THAN 72 HOURS CONTINUOUSLY SHALL REQUIRE RECERTIFICATION BY THE FAA. CONTRACTOR SHALL PROVIDE A MINIMUM OF 7 DAYS NOTICE TO THE FAA FOR RECERTIFICATION.
4. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE RUNWAY AND TAXIWAY TO AIRCRAFT OPERATIONS.

HAUL ROUTE NOTES:

1. CONTRACTORS FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUINCATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ATCT AT ALL TIMES.
2. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESGINATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESGINATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.
3. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.

FLAGGER NOTES:
ENTERING CLOSED SECTION OF RWY 8L-26R:
(LOCATION 26R END)

1. ACCESS TO THE WORK AREA IS THROUGH A CLOSED AREA. CONTRACTOR IS NOT REQUIRED TO CONTACT ATCT WHEN USING THIS HAUL ROUTE TO ACCESS THIS WORK AREA. CONTRACTOR SHALL BE REQUIRED TO CONTACT ATCT AND RECEIVE APPROVAL, PRIOR TO TRAVELING OUTSIDE OF THE DESIGNATED WORK AREA OR HAUL ROUTE.

Phase 1A – Discussion Points

1. Phase 1A shall be concurrent with Phase 1B.
2. NAVAID status and impacts to be noted as a 24/7 closure.
3. Barricades will go out to the Taxiway full strength pavement.
   a. Ensure that all barricades are not extending into RSA's.

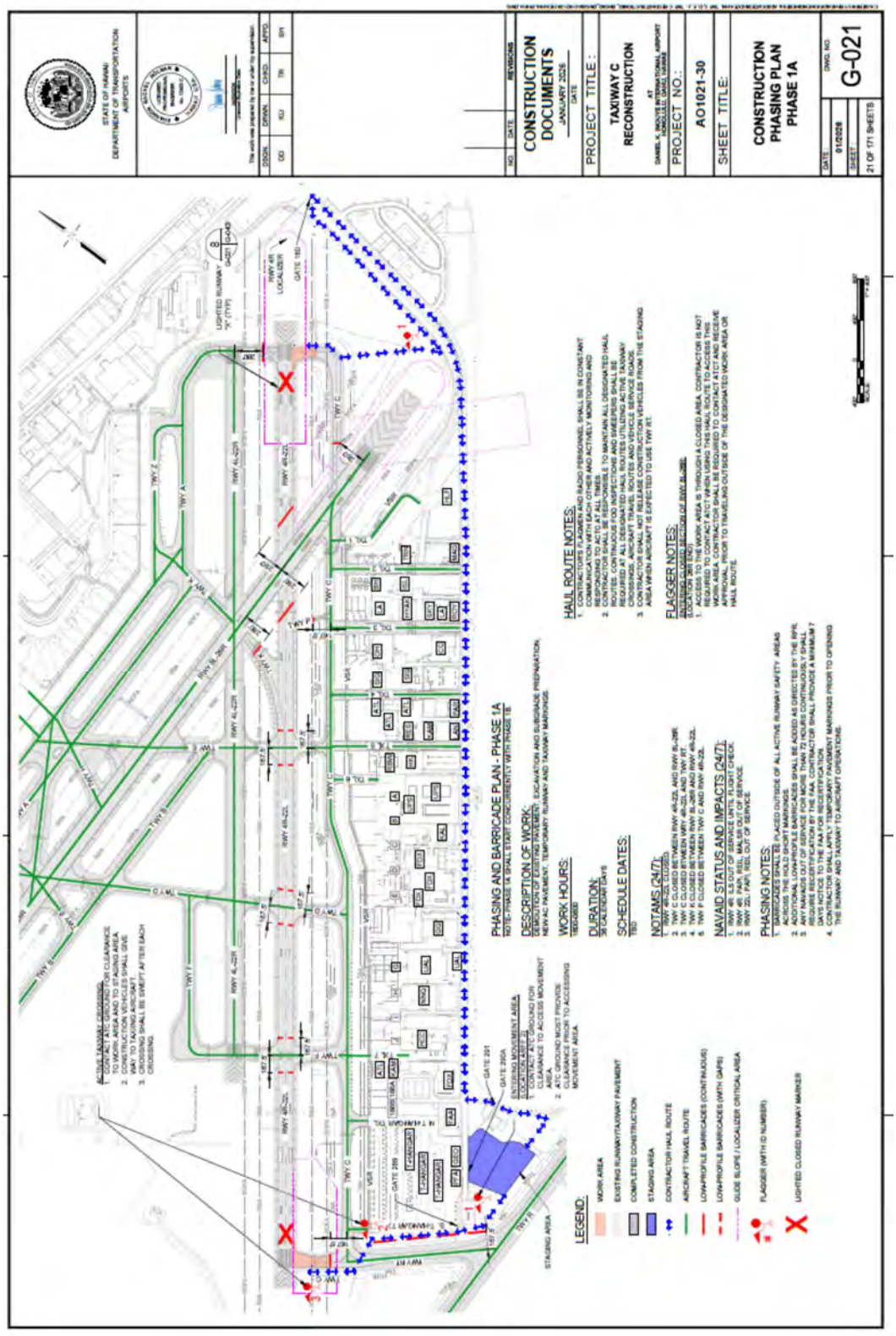

Figure 6: Construction Phasing Plan, Phase 1A

Phase 1B (Figure 7: Construction Phasing Plan, Phase 1B)

NOTE- PHASE 1B SHALL START CONCURRENTLY WITH PHASE 1A

DESCRIPTION OF WORK:
DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARATION, NEW AC PAVEMENT, TEMPORARY TAXIWAY MARKINGS.

WORK HOURS:
1600-0600

DURATION:
48 CALENDAR DAYS

SCHEDULE DAYS:
TBD

NOTAMs (24/7):

1. TAIXWAY C CLOSED BETWEEN RUNWAY 8L-26R AND RUNWAY 4R-22L

NAVAID STATUS AND IMPACTS (24/7):
NO IMPACTS TO NAVAIDS

PHASING NOTES:

1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE RUNWAY AND TAXIWAY TO AIRCRAFT OPERATIONS.
4. SEE SHEET E-001 FOR ELECTRICAL PHASING NOTES

HAUL ROUTE NOTES:

1. CONTRACTORS FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUINCATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ATCT AT ALL TIMES.
2. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESGINATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESGINATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.
3. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.

FLAGGER NOTES:
ENTERING CLOSED SECTION OF TWY C:
(LOCATION 26R END)

1. ACCESS TO THE WORK AREA IS THROUGH A CLOSED AREA. CONTRACTOR IS NOT REQUIRED TO CONTACT ATCT WHEN USING THIS HAUL ROUTE TO ACCESS THIS WORK AREA. CONTRACTOR SHALL BE REQUIRED TO CONTACT ATCT AND RECEIVE APPROVAL, PRIOR TO TRAVELING OUTSIDE OF THE DESIGNATED WORK AREA OR HAUL ROUTE.

Phase 1B – Discussion Points

1. Phase 1B shall be concurrent with Phase 1A.
2. Runway 4R ILS will be out of service until flight check.
3. To avoid project delays, a separate flight check will be scheduled if necessary.

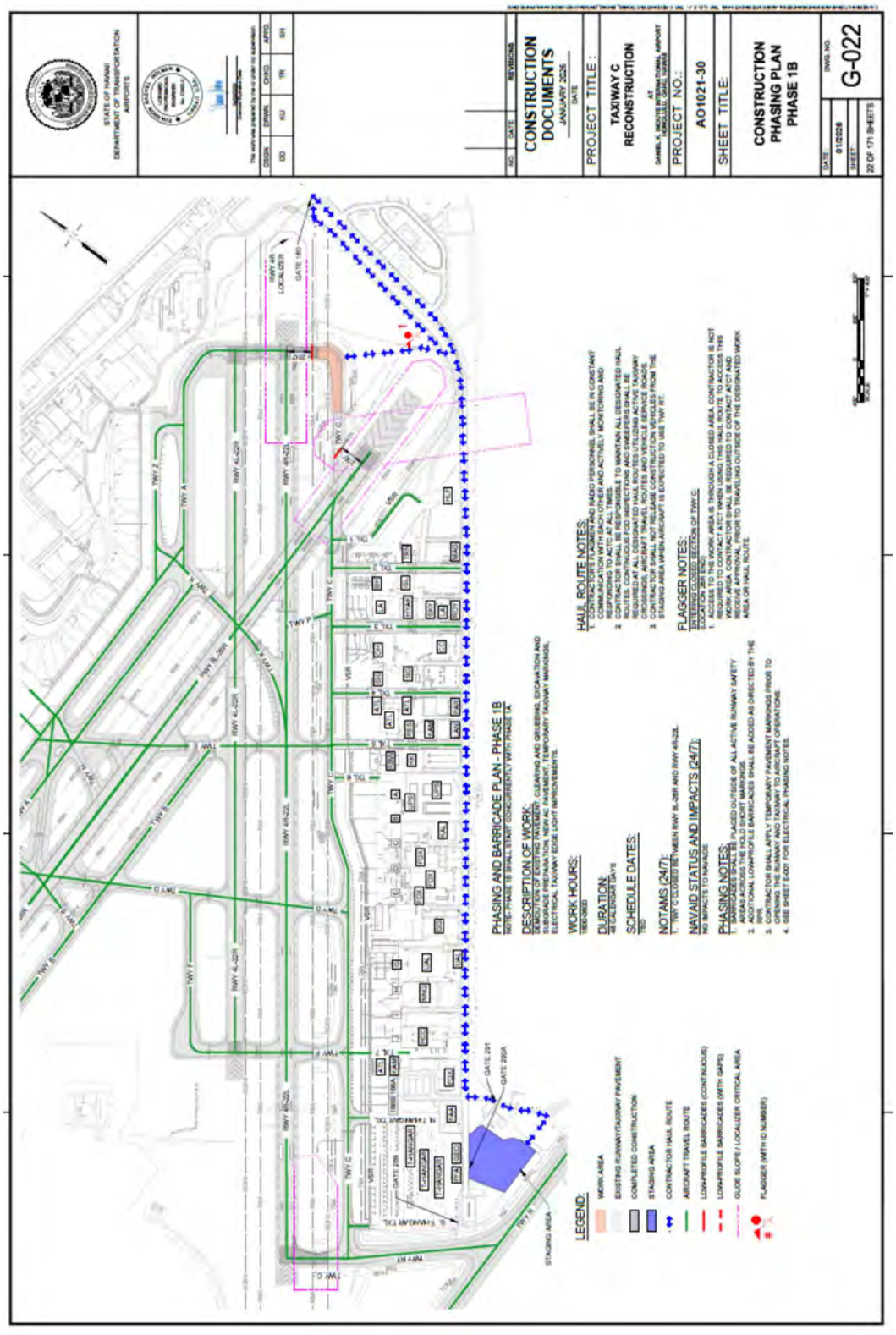

Figure 7: Construction Phasing Plan, Phase 1B

Phase 2 (Figure 8: Construction Phasing Plan, Phase 2)

DESCRIPTION OF WORK:
DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARATION, NEW AC AND PCC PAVEMENT, PAVEMENT MARKINGS, STORM DRAIN IMPROVEMENTS.

WORK HOURS:
1600-0600

DURATION
69 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):

1. TWY E CLOSED BETWEEN RWY 4R-22L AND TWY C.
2. TWY C CLOSED BETWEEN HARDSTAND B AND TXL 4.
3. HARDSTANDS A AND B CLOSED.
4. HARDSTAND C AND D OPEN WITH RESTRICTIONS. SEE TABLE 1.
5. TXL 6 CLOSED
6. TXL 5 MAY ONLY BE USED FOR ADG I-II (49-79 FT. WINGSPAN) WITH RESTRICTIONS.

NAVAID STATUS AND IMPACTS:

NO IMPACTS TO NAVAIDS

PHASING NOTES:

1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHAL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAYS, TAXILANE AND HARDSTANDS TO AIRCRAFT OPERATIONS.
4. CONTRATOR SHALL MAINTAIN EXISTING, TWO-WAY VSR THROUGH THE WORK ZONE AT ALL TIMES. SEE SHEET G-042 FOR VSR DETAILS IN THE WORK AREA.
5. TEMPORARY STRIPING FOR TXL 5 SHALL BE INSTALLED AT THE END OF PHASE 1B AND REMOVED AT THE END OF PHASE 2. SEE SHEET G-060. COORDINATE WITH RPR TO MINIMIZE IMPACT TO AIRFIELD OPERATIONS.

HAUL ROUTE NOTES:

1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ATCT AT ALL TIMES.
2. AFTER RECEIVING AUTHORIZATION FROM ATCT, CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL CONTROL THE MOVMENT OF ALL CONSTRUCTION VEHICLES WITHIN THE DESIGNATED HAUL ROUTE(S) UNLESS OTHERWISE APPROVED BY RPR.
3. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESGINATED HAUL ROUTES. CONTINUOUS FOD INSPECTIOS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILZIING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.
4. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.
5. PROVIDE FLAGMAN FOR ENTERING VSR FROM WORK AREAS. CONTRACTOR SHALL YIELD TO ANY ONCOMING VSR TRAFFIC.

TABLE 1 – HARDSTAND RESTRICTIONS				
LOCATION	MAX ADG POWER IN/ TOW OUT	MAX WINGSPAN	MAX ADG TOW IN/ TOW OUT	MAX WINGSPAN
HARDSTAND C	V	214 FT	N/A	N/A
HARDSTAND D	V	214 FT	N/A	N/A

HARDSTAND RESTRICTION NOTES:

1. HARDSTANDS C: TOW OUT TAIL SOUTH, SOUTH OF TWY D.
2. HARDSTAND D:
   2.1. TOW OUT TAIL NORTH, PULL FORWARD SHORT OF TWY D.
   2.2. TOW OUT TAIL SOUTH, SOUTH OF TWY D.
3. FOR AIRCRAFT MOVEMENT SEE SHEET G-044.
4. NO ENGINE STARTUP DURING PUSH BACK.

Phase 2 – Discussion Points

1. Hardstand D Pushback tail north option was revised to also pull forward to Hardstand E for jet blast mitigation.
2. VSR Road guard requirement added to assumptions to mitigate aircraft pushbacks.
3. Contractor does not need to call tower when entering the work area via the non-movement area.

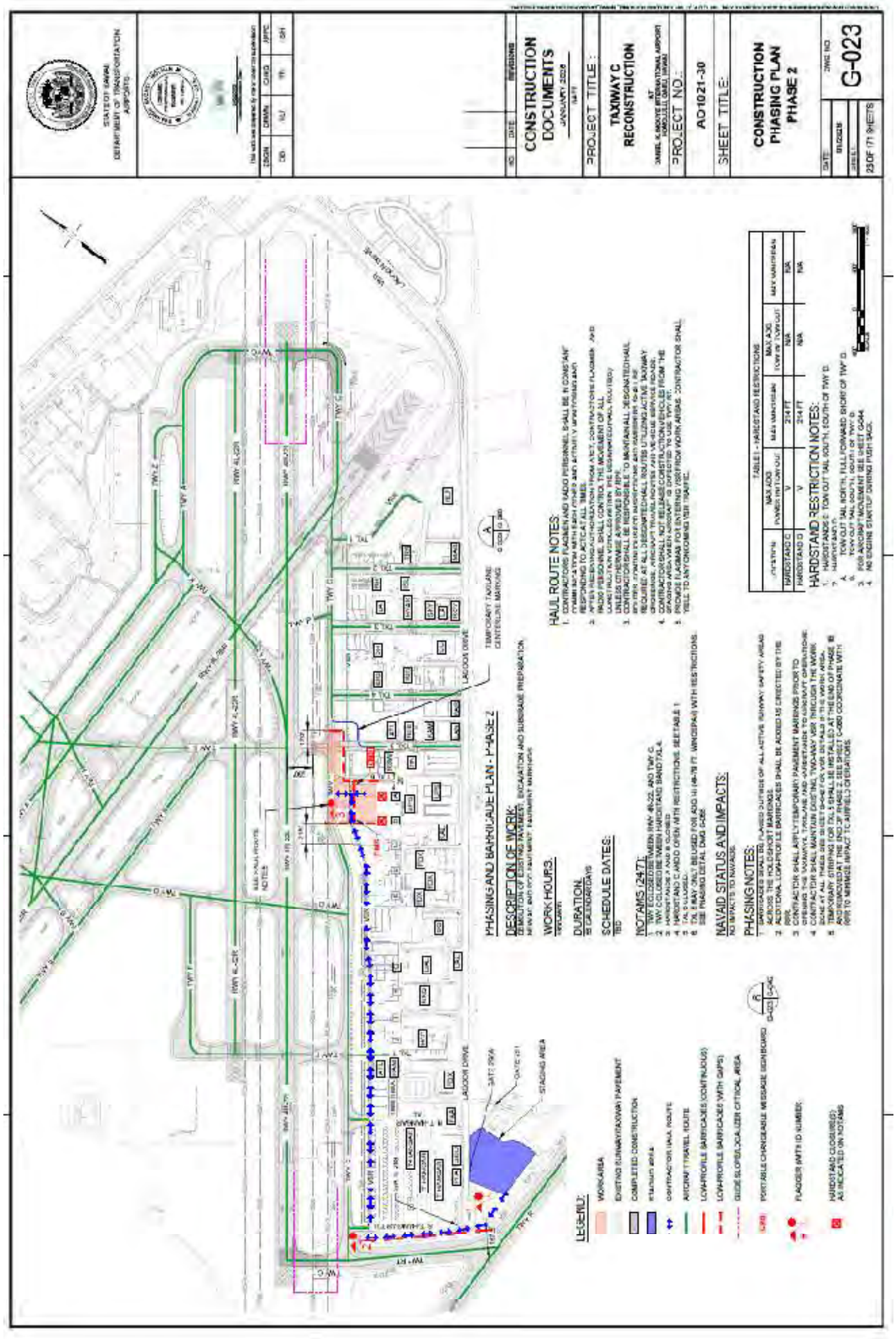

Figure 8: Construction Phasing Plan, Phase 2

Phase 2.1 (Figure 9: Construction Phasing Plan, Phase 2.1)

Description of Work:
CONCRETE CURING.

WORK HOURS:
NO WORK ACTIVITY (CONCRTE CURING)

Duration:
21 CALENDAR DAYS (SEE NOTE 4)

SCHEDULE DATES:
TBD

NOTAMs (24/7):
1. HARSTANDS A AND B CLOSED

NAVAID STATUS:
NO IMPACTS ON NAVAIDS

Phasing Notes:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAYS, TAXILANE AND HARDSTANDS TO AIRCRAFT OPERATIONS.
4. TOTAL CURE TIME IS ASSUMED TO BE 28 CALENDAR DAYS. THE DURATION LISTED ABOVE IS THE ADDITIONAL DAYS BEYOND THE DAY ALREADY ACCOUNTED FOR IN PHASE 2.

Phase 2.1 – Discussion Points

1. No Comments.

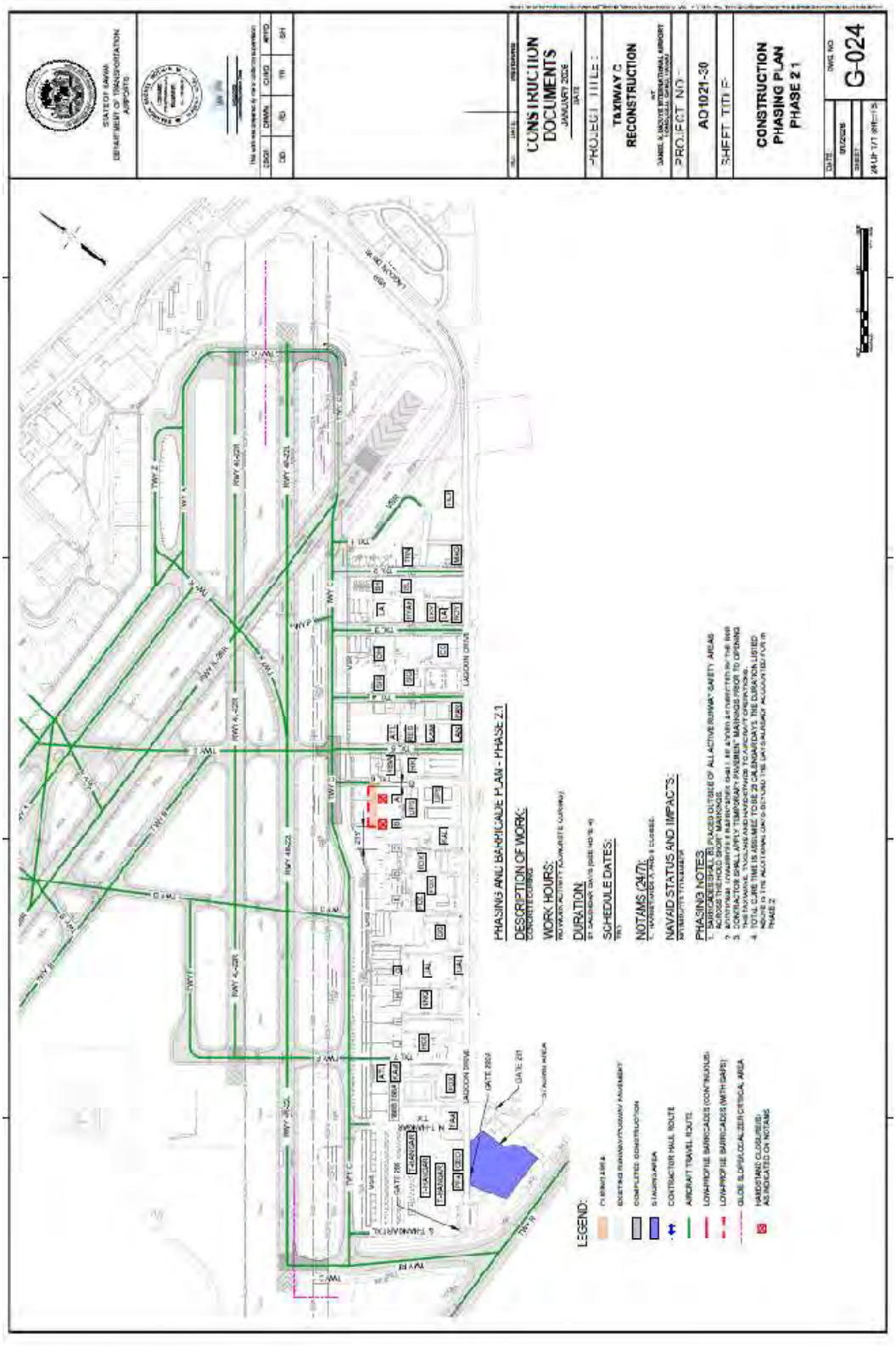

Figure 9: Construction Phasing Plan, Phase 2.1

Phase 3 (Figure 10: Construction Phasing Plan, Phase 3)

DESCRPITION OF WORK:
DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARATION, NEW AC PAVEMENT, TEMPORARY RUNWAY AND TAXIWAY MARKINGS.

WORK HOURS:
1600-0600

DURATION:
24 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMs (24/7):

1. TWY C CLOSED BETWEEN TXL 1 AND 445-FT EAST OF TXL 3.
2. TXL 2 MAY ONLY BE USED FOR ADG I-II (49-79 FT. WINGSPAN) WITH RESTRICTIONS. SEE PHASING DETAIL DWG G-045.
3. TXL 1 MAY ONLY BE USED FOR ADG I-III (79-118FT. WINGSPAN).

NAVAID STATUS AND IMPACTS:
NO IMPACTS OT NAVAIDS

PHASING NOTES:

1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAY AND TAXILANES TO AIRCRAFT OPERATIONS.
4. TEMPORARY STRIPING FOR TXL 1 AND TXL 2 SHALL BE INSTALLED AT THE END OF PHASE 2 AND REMOVED AT THE END OF PHASE 3. SEE SHEET G-061. COORDINATE WITH RPR TO MINIMIZE IMPACT TO AIRFIELD OPERATIONS.

HAUL ROUTE NOTES:

1. CONTRACTORS FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ATCT AT ALL TIMES.
2. AFTER RECEIVING AUTHORIZATION FROM ATCT, CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL CONTROL THE MOVEMENT OF ALL CONSTRUCTION VEHICLES WITHIN THE DESIGNATED HAUL ROUTE(S) UNLESS OTHERWISE APPROVED BY RPR.
3. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.
4. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.

Phase 3 – Discussion Points

1. Hawaii Life Flight will have to adjust to their parking due to inadequate wing tip clearance.
    a. Project to install a temporary lead in line from Trans Air Parking towards Taxilane one.
2. One Trans Air and One Blue Hawaiian parking spots to be temporarily relocated.

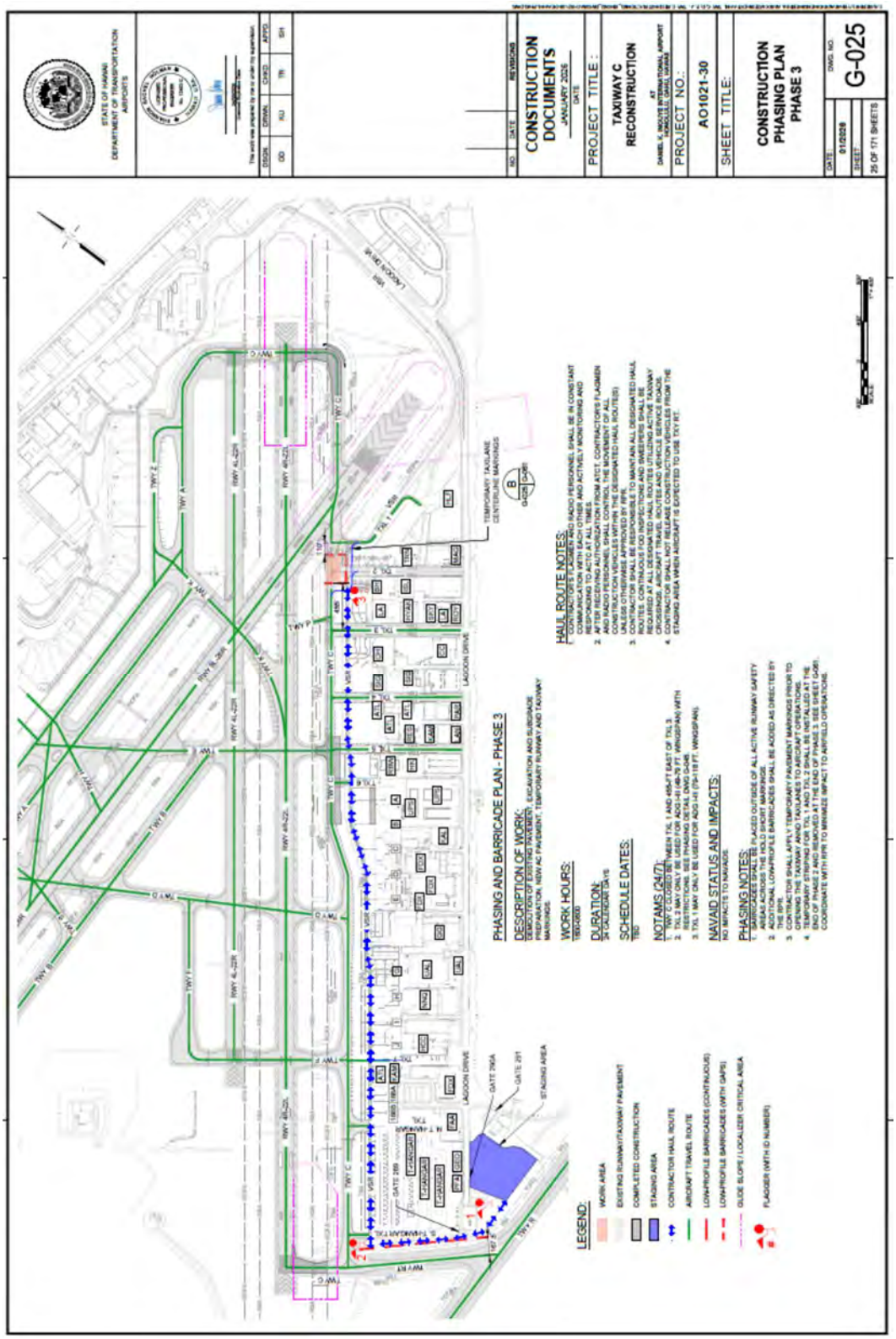

Figure 10: Construction Phasing Plan, Phase 3

Phase 4.1 (Figure 11: Construction Phasing Plan, Phase 4.1)

DESCRIPTION OF WORK:
INSTALLATION OF TEMPORARY THRESHOLD MARKINGS, DESIGNATION NUMBERS, CHEVRONS, AND REMOVE RUNWAY CENTERLINES. MODIFY RUNWAY EDGE LIGHTS AND RUNWAY DISTANCE REMAINING SIGNS. COORDINATE NAVAID CHANGES.

WORK HOURS:
24 HOURS – ACTUAL TIMES ARE TBD BY THE RPR

DURATION:
1 CALENDAR DAY

SCHEDULE DATES:
TBD

NOTAMs (24/7):

1. RWY 8L-26R CLOSED.
2. TWY E CLOSED BETWEEN TWY B AND TWY A.
3. TWY H CLOSED BETWEEN RWY 8L-26R AND TWY A.
4. RWY 8L-26R RDR'S OUT OF SERVICE.

NAVAID STATUS AND IMPACTS (24/7):

1. RWY 8L: ILS OUT-OF-SERVICE UNTIL FLIGHT CHECK.
2. RWY 8L: PAPI, REIL, MALSR, OUT OF SERVICE.
3. RWY 26R: PAPI, REIL, OUT OF SERVICE.
4. RWY 26L: LOC OUT OF SERVICE UNTIL FLIGHT CHECK.

PHASING NOTES:

1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTY BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE RUNWAY AND TAXIWAY TO ARICRAFT OPERATIONS.
4. ANY NAVAIDS OUT OF SERVICE FOR MORE THAN 72 HOURS CONTINUOUSLY SHALL REQUIRE RECERTIFICATION BY THE FAA. CONTRACTORS SHALL PROVIDE A MINIMUM OF 7 DAYS NOTICE TO THE FAA FOR RECERTIFICATION.

HAUL ROUTE NOTES:

1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ATIVELY MONITORING AND RESPONDING TO ATCT AT ALL TIMES.
2. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.

SEQUENCE OF WORK:

1. CONFIRM RWY AND TWY CLOSURES WITH HNL OPERATIONS.
2. INSTALL LIGHTED X'S AT BOTH ENDS OF RWY 8L-26R.
3. INSTALL REQUIRED LOW-PROFILE BARRICADES.
4. MARKING REMOVAL
    A. OBLITERATE RWY CENTERLINE MARKINGS IN WORK AREA AS SHOWN.
5. APPLY TEMPORARY MARKINGS AS SHOWN.
6. ELECTRICAL
    A. SECURELY COVER TEMPORARY THRESHOLD LIGHTS AND DEACTIVATE RWY EDGE LIGHTS IN CLOSED PORTION OF RWY.
    B. DEACTIVATE RWY 8L ILS, RWY 26R PAPI & REIL, AND RWY 26L LOC DURING WORK HOURS AS SHOWN ON NAVAID STATUS AND IMPACTS.
    C. REMOVE EXISTING RUNWAY EDGE LIGHTS AND STORE FOR REINSTALLATION. INSTALL NEW WHITE/AMBER RUNWAY EDGE LIGHTS ON EXISTING BASE CAN FOR TEMPORARY RUNWAY LIGHTING (14 ABOVE-GRADE EDGE LIGHTS AND 6 SEMI-FLUSH EDGE LIGHTS IN TOTAL).
7. SIGNAGE
    A. COVER RWY DISTANCE REMAINING SIGNS.
    B. COVER APPROPRIATE TWY DIRECTIONAL SIGNS FOR TWY'S SCHEDULE TO BE CLOSED.
8. OPENING OF RUNWAY
    A. CONDUCT FOD CHECK AND OBTAIN FINAL ACCEPTANCE FROM HNL OPERATIONS.
    B. REMOVE LOW PROFILE BARRICADES.
    C. REMOVE LIGHTED X'S AT BOTH END OF RWY 8L-26R.
    D. OPEN RWY 8L-26R AT 8600' LENGTH.

Phase 4.1 – Discussion Points

1. 24 Hour closure (1600-1600) dependent on the contractor. Rwy may be returned earlier.

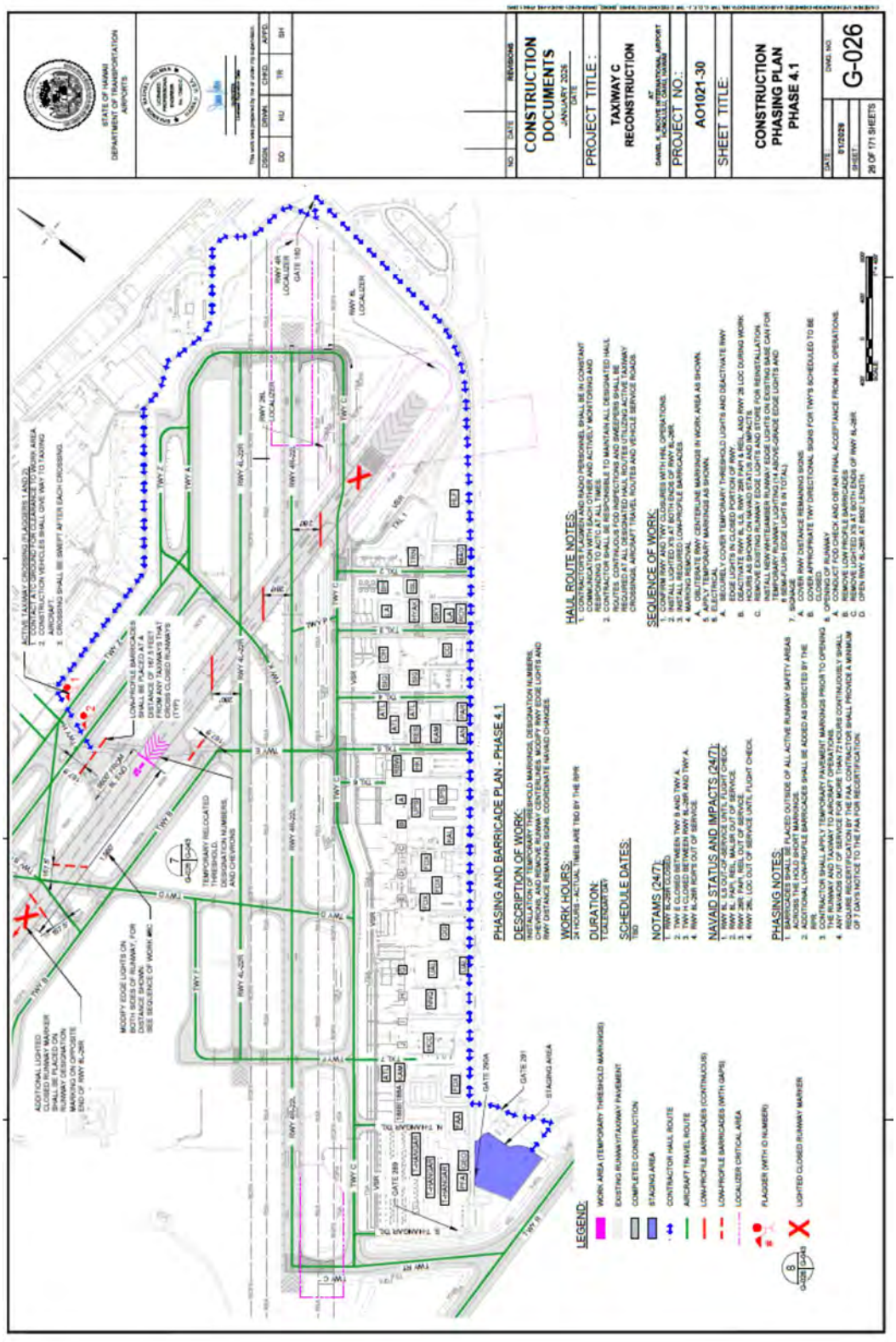

Figure 11: Construction Phasing Plan, Phase 4.1

Phase 4.2 (Figure 12: Construction Phasing Plan, Phase 4.2)

DESCRIPTION OF WORK:
DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARTION, NEW AC PAVEMENT, TEMPORARY RUNWAY AND TAXIWAY MARKINGS, STORM DRAIN IMPROVEMENTS, CLEARING AND GRUBBING.

WORK HOURS:
1600-0600 DAILY

DURATION:
50 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. RWY 8L-26R SHORTENED TO 8600 FT.
   A. 8L – TODA, TORA, ASDA, LDA = 8600 FT.
      - LAST TAXIWAY AVAILABLE TO EXIT: TWY E
   B. 26R TODA, TORA, ASDA, = 8600 FT, LDA = 0 FT.
2. TWY C CLOSED BETWEEN RWY 4R-22L AND 85.5’ EAST OF TXL 2.
3 RWY 8L-26R RDR’S OUT OF SERVICE.
4. TXL 1 CLOSED.

NAVIAD STATUS AND IMPACTS (24/7):
1. RWY 8L: ILS OUT OF SERVICE UNTIL FLIGHT CHECK.
2. RWY 8L: PAPI, REIL, MALSR IN SERVICE.
3. RWY 26R: PAPI, REIL OUT OF SERVICE.
4. RWY 26L: LOC OUT OF SERVICE UNTIL FLIGHT CHECK.

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE RUNWAY, TAXIWAY AND TAXILANE TO AIRCRAFT OPERATIONS.
4. SEE SHEET E-001 FOR ELECTRICAL PHASING NOTES.
5. ANY NAVAIDS OUT OF SERVICE FOR MORE THAN 72 HOURS CONTINUOUSLY SHALL REQUIRE RECERTIFICATION BY THE FAA. CONTRTACTOR SHALL PROVIDE A MINIMUM OF 7 DAYS NOTICE TO THE FAA FOR RECERTIFICATION.

HAUL ROUTE NOTES:

1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ATCT AT ALL TIMES.
2. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESIGNATED HAUL ROTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.

FLAGGER NOTES:

ENTERING CLOSED SECTION OF RWY 8L-26R:
(LOCATION 26R END)

1. ACCESS TO THE WORK AREA IS THROUGH A CLOSED AREA. CONTRACTOR IS NOT REQUIRED TO CONTACT ATCT WHEN USING THIS HAUL ROUTE TO ACCESS THIS WORK AREA. CONTRACTOR SHALL BE REQUIRED TO CONTACT ATCT AND RECEIVE APPROVAL, PRIOR TO TRAVELING OUTSIDE OF THE DESIGNATED WORK AREA OR HAUL ROUTE.

Phase 4.2 – Discussion Points

1. Phase shifted outside Kona Wind Season.

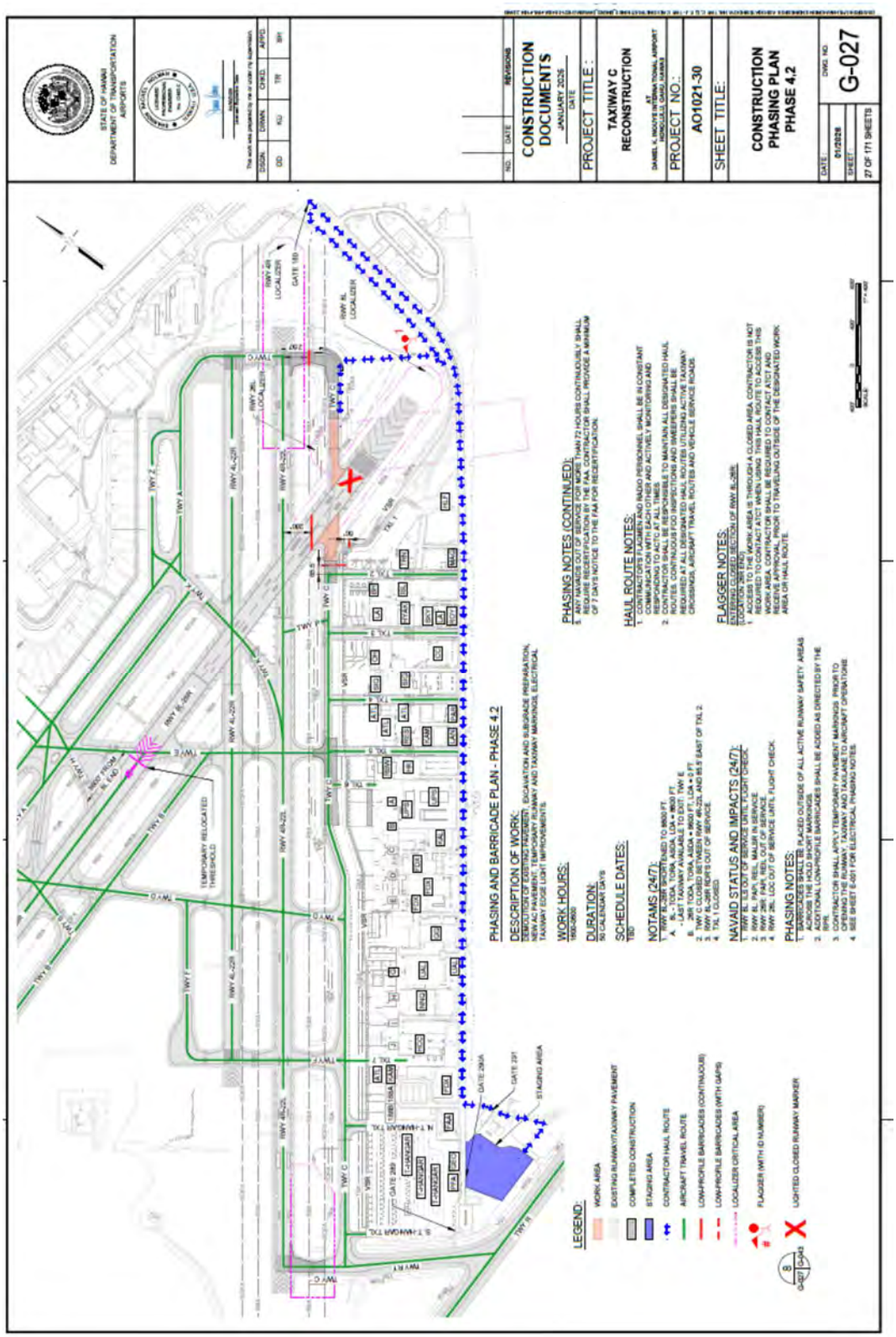

Figure 12: Construction Phasing Plan, Phase 4.2

Phase 4.3 (Figure 13: Construction Phasing Plan, Phase 4.3)

DESCRIPTION OF WORK:
REMOVAL OF TEMPORARY THRESHOLD MARKINGS, DESIGNATION NUMBERS, CHEVRONS. SEAL COAT. IMPLEMENTATION OF RUNWAY CENTERLINES. MODIFY RUNWAY EDGE LIGHTS AND RUNWAY DISTANCE REMAINING SIGNS. COORDINATE NAVAID CHANGES.

WORK HOURS:
24 HOURS – ACTUAL TIMES ARE TBD BY THE RPR

DURATION:
2 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMs (24/7):

1. RWY 8L-26R CLOSED.
2. TWY E CLOSED BETWEEN TWY B AND TWY A.
3. TWY H CLOSED BETWEEN RWY 8L-26R AND TWY A.
4. RWY 8L-26R RDR'S OUT OF SERVICE.

NAVAID STATUS AND IMPACTS (24/7):

1. RWY 8L: ILS OUT OF SERVICE UNTIL FLIGHT CHECK.
2. RWY 8L: PAI, REIL, MALSR OUT OF SERVICE.
3. RWY 26R: PAPI, REIL OUT OF SERVICE.
4. RWY 26L: LOC OUT OF SERVICE UNTIL FLIGHT CHECK.

PHASING NOTES:

1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. ANY NAVAIDS OUT OF SERVICE FOR MORE THAN 72 HOURS CONTINUOUSLY SHALL REQUIRE RECERTIFICATION BY THE FAA. CONTRACTOR SHALL PROVIDED A MINIMUM OF 7 DAYS NOTICE TO THE FAA FOR RECERTIFICATION.
4. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE RUNWAY, TAXIWAY AND TAXILANE TO AIRCRAFT OPERATIONS.

HAUL ROUTE NOTES:

1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ATCT AT ALL TIMES.
2. CONTRACTOR SHALL BE RESPONSBILE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.

SEQUENCE OF WORK:

1. CONFIRM RWY AND TWY CLOSURES WITH HNL OPERATIONS.
2. INSTALL LIGHTED X'S AT BOTH ENDS OF RWY 8L-26R.
3. INSTALL REQUIRED LOW-PROFILE BARRICADES.
4. MARKING REMOVAL
    A. OBLITERATE TEMPORARY RWY DESIGNATION THRESHOLD MARKINGS. SEAL COAT PER SPECIFICATIONS SECTION 02622.
5. RESTORE RWY CENTERLINE MARKINGS PREVIOUSLY OBLITERATED IN PHASE 4.1.
6. ELECTRICAL
    A. DEACTIVATE TEMPORARY THRESHOLD LIGHTS AND REACTIVE RWY EDGE LIGHTS IN PHASE 4.2 WORK AREA AND 1000' RSA.
    B. REACTIVATE RWY 8L ILS, RWY 26R PAPI & REIL, AND RWY 26L LOC PROVIDED FLIGHT CHECK HAS BEEN PERFORMED.
    C. REMOVE WHITE/AMBER RWY EDGE LIGHTS AND REINSTALL ORIGINAL RUNWAY EDGE LIGHTS (14 ABOVE-GRADE EDGE LIGHTS AND 6 SEMI-FLUSH EDGE LIGHTS).
7. SIGNAGE
    A. UNCOVER RWY DISTANCE REMAINING SIGNS.
    B. UNCOVER TWY DIRECTIONAL SIGNS.
8. OPENING OF RUNWAY
    A. CONDUCT FOD CHECK AND OBTAIN FINAL ACCEPTANCE FROM HNL OPERATIONS.
    B. REMOVE LOW PROFILE BARRICADES.
    C. REMOVE LIGHTED X'S AT BOTH ENDS OF RWY 8L-26R.
    D. OPEN RWY 8L-26R AT FULL LENGTH.

Phase 4.3 – Discussion Points

1. Reopening Rwy 8L shortened during the day to be discussed when contractor is onboard.

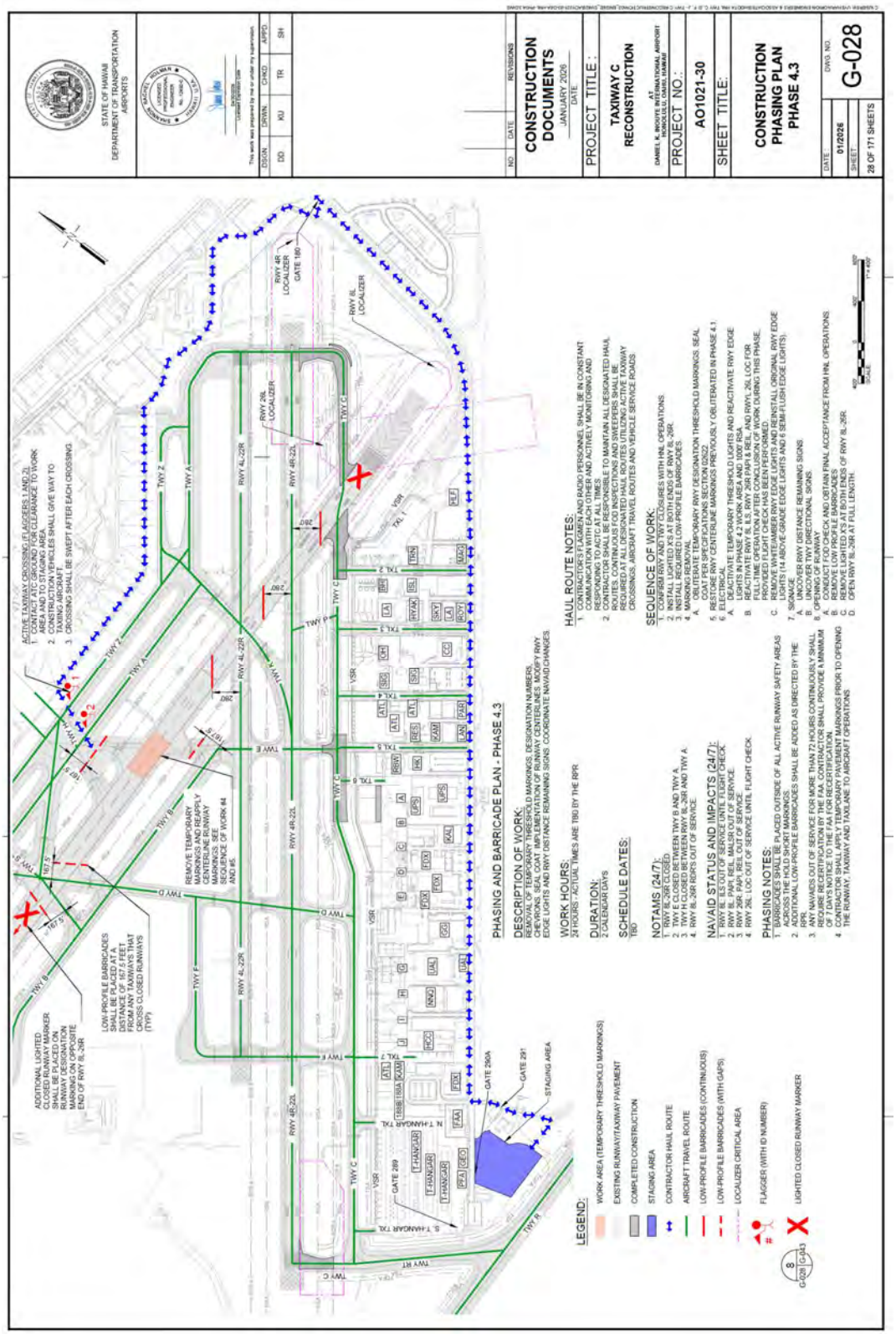

Figure 13: Construction Phasing Plan, Phase 4.3

Phase 5 (Figure 14: Construction Phasing Plan, Phase 5)

Description of Work:
DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARATION, NEW AC AND PCC PAVEMENT, STORM DRAIN IMPROVEMETNS, TEMPORARY TAXIWAY MARKNGS, ELECTRICAL TAZIWAY EDGE LIGHT IMPROVEMENTS.

WORK HOURS:
1600-0600

DURATION:
49 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7)
1. TWY C CLOSED BETWEEN HARDSTANDS A AND D.
2. HARDSTANDS B AND C CLOSED.
3. HARDSTANDS A, D AND E OPEN WITH RESTRICTIONS. SEE TABLE 1.

NAVAID STATUS AND IMPACTS (24/7):
1. RUNWAY 8L-26R: ILS OUT OF SERVICE UNTIL FLIGHT CHECK

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAY AND HARDSTANDS TO AIRCRAFT OPERATIONS.
4. SEE SHEET E-001FOR ELECTRICAL PHASING NOTES.

HAUL ROUTE NOTES:
1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ACTC AT ALL TIMES.
2. AFTER RECEIVING AUTHORIZATION FROM ATCT, CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL CONTROL THE MOVEMENT OF ALL CONSTRUCTION VEHICLES WITHING THE DESIGNATED HAUL ROUTE(S) UNLESS OTHERWISE APPROVED BY RPR.
3. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESIGNATED HAUL ROTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESGINATED HAUL ROUTES

UTILIZING ACTIVE TAXIWAY CROSSING, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.

4. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.
5. PROVIDE FLAGMAN FOR ENTERING VSR FROM WORK AREAS. CONTRACTOR SHALL YIELD TO ANY ONCOMIG VSR TRAFFIC.

TABLE 1 – HARDSTAND RESTRICTIONS				
LOCATION	MAX ADG POWER IN/ TOW OUT	MAX WINGSPAN	MAX ADG TOW IN/ TOW OUT	MAX WINGSPAN
HARDSTAND A	V	214 FT	N/A	N/A
HARDSTAND D	III	118 FT	IV	171 FT
HARDSTAND E	V	214 FT	N/A	N/A

HARDSTAND RESTRICTION NOTES:

1. HARDSTAND A: TOW OUT TAIL NORTH, NORTH OF TWY E.
2. HARDSTAND D: TOW OUT TAIL SOUTH, SOUTH OF TWY D.
3. HARDSTAND E:
    A. TOW OUT TAIL NORTH, PULL FORWARD SOUTH OF TWY D.
    B. TOW OUT TAIL SOUTH, SOUTH OF TWY D.
4. FOR AIRCRAFT MOVEMENTS SEE SHEET G-046.
5. NO ENGINE STARTUP DURING PUSH BACK.

Phase 5 – Discussion Points

1. Updated Hardstand pushback options (Tail North and South if possible) to give HCF more options.

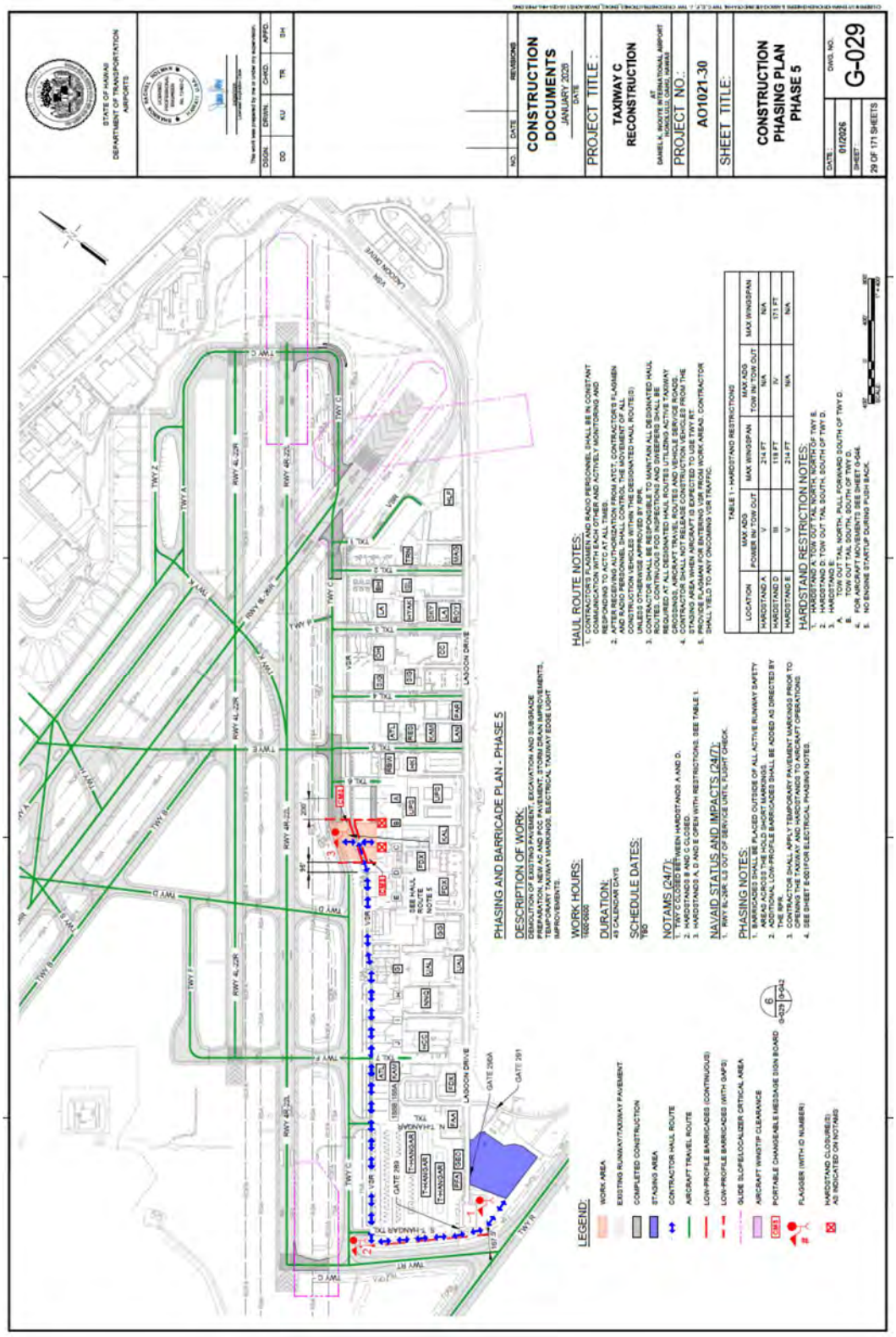

Figure 14: Construction Phasing Plan, Phase 5

Phase 5.1 (Figure 15: Construction Phasing Plan, Phase 5.1)

DESCRIPTION OF WORK:
CONCRETE CURING

WORK HOURS:
NO WORK ACTIVITY (CONCRETE CURING)

DURATION:
26 CALENDAR DAYS (SEE NOTE 4)

SCHEDULE DATES:
- TBD

NOTAMs (24/7):
1. HARDSTANDS B AND C CLOSED
2. HARDSTAND D OPEN WITH RESTRICTIONS. SEE TABLE 1

NAVAID STATUS AND IMPACTS:
NO IMPACTS TO NAVAIDS

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRCTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAYS, TAXILANE AND HARDSTANDS TO AIRCRAFT OPERATIONS.
4. TOTAL CURE TIME IS ASSUMED TO BE 28 CALENDAR DAYS. THE DURATION LISTED ABOVE IS THE ADDITIONAL DAYS BEYOND THE DAYS ALREADY ACCOUNTED FOR IN PHASE 5.

Phase 5.1 – Discussion Points

1. No comments.

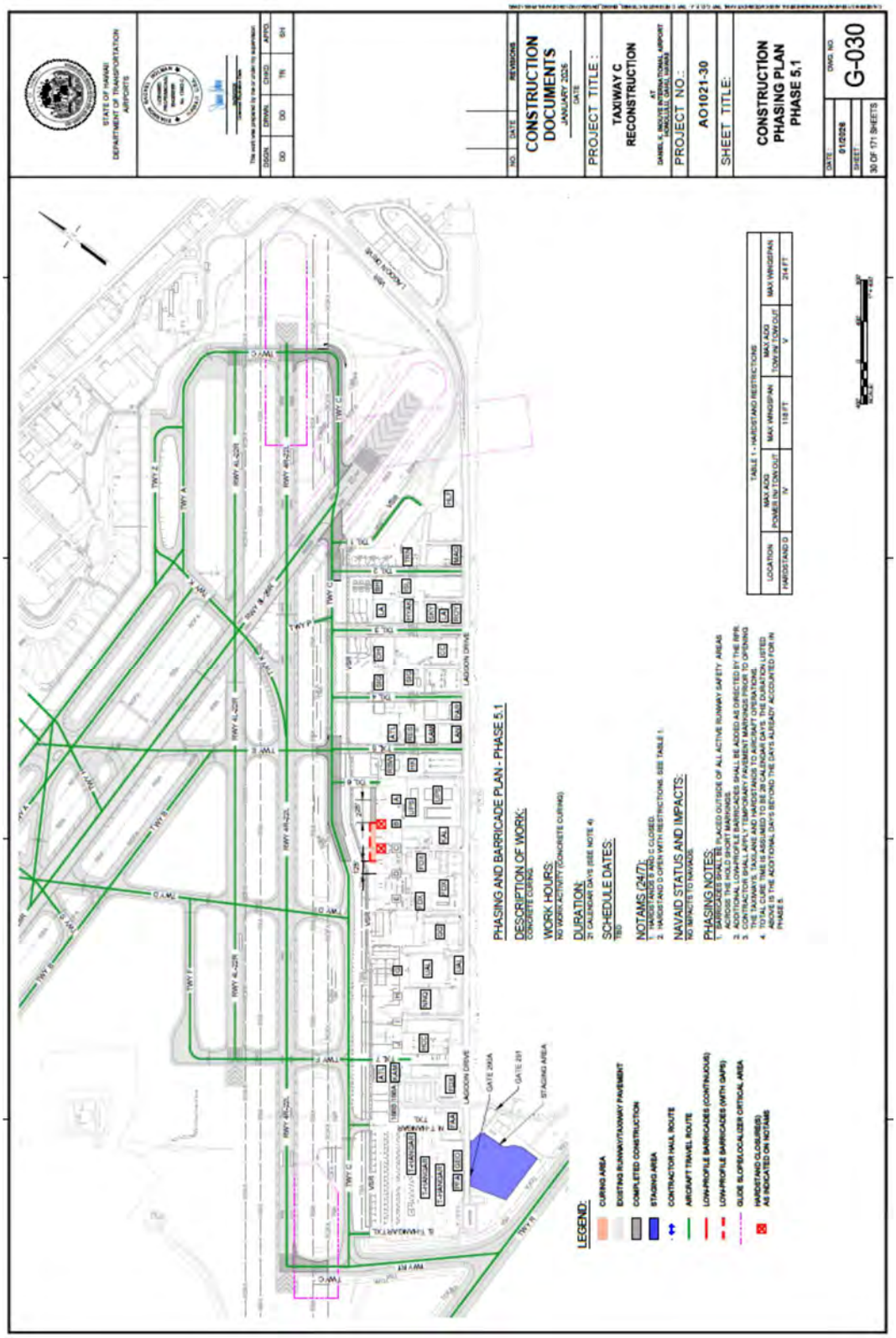

Figure 15: Construction Phasing Plan, Phase 5.1

Phase 6 (Figure 16: Construction Phasing Plan, Phase 16)

DESCRIPTION OF WORK:
DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARATION, NEW AC PAVEMENT, TEMPORARY RUNWAY AND TAXIWAY MARKINGS.

WORK HOURS:
1600-0600

DURATION
39 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. TWY C CLOSED BETWEEN TXL 2 AND 430-FT EAST OF TXL 4.
2. TWY P CLOSED BETWEEN TWY C AND RWY 4R-22L.
3. TXL 3 RESTRICTED TO ADG III (MAX WINGSPAN: 112.6 FT). SEE SHEETS G-047AND G-048.

NAVAID STATUS AND IMPACTS:
NO IMPACTS TO NAVAIDS

PHASING NOTES

1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY ARES ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMNT MARKINGS PRIOR TO OPENING THE TAXIWAY AND TAXILANE TO AIRCRAFT OPERATIONS.
4. TEMPORARY STRIPING FOR TAXILANE 5 SHALL BE INSTALLED AT THE END OF PHASE 5 AND REMOVED AT THE END OF PHASE 6. SEE SHEET G-062. COORDINATE WITH RPR TO MINIMIZE IMPACT TO AIRFIELD OPERATIONS.

HAUL ROUTE NOTES:

1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ATCT AT ALL TIMES.
2. AFTER RECEIVING AUTHORIZATION FROM ATCT, CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL CONTROL THE MOVEMENT OF ALL CONSTRUCTION VEHICLES WITHIN THE DESIGNATED HAUL ROUTE(S) UNLESS OTHERWISE APPROVED BY RPR.

3. COUNTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZNG ACTIVE TAXIWAY CORSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.
4. CONTRACTOR SHALL NOT RLEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.

Phase 6 – Discussion Points

1. Check if aircraft can have access to taxilane 3 south bound via Ohana ramp.

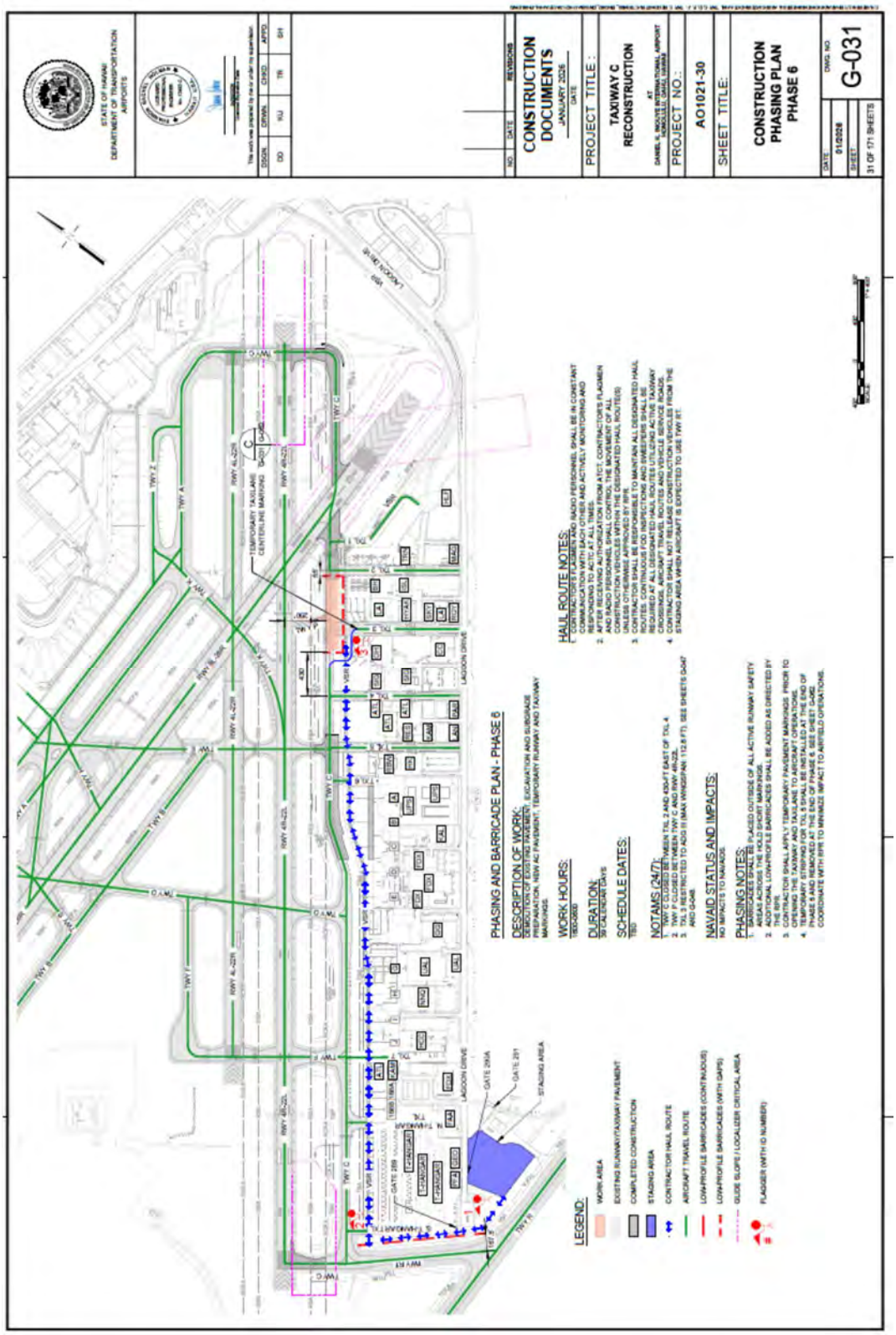

Figure 16: Construction Phasing Plan, Phase 6

Phase 7 (Figure 17: Construction Phasing Plan, Phase 7)

DESCRIPTION OF WORK:
DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARTION, NEW AC AND PCC PAVEMENT, TEMPORARY RUNWAY AND TAXIWAY MARKINGS, STORM DRAIN IMPROVEMENTS.

WORK HOURS:
1600-0600

DURATION:
60 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. TWY D CLOSED BETWEEN RWY 4R-22L AND TWY C.
2. TWY C CLOSED BETWEEN HARDSTAND C AND HARDSTAND G.
3. HARDSTANDS D AND E CLOSED.
4. HARDSTANDS B, C, G, AND H OPEN WITH RESTRICTIONS. SEE TABLE 1.

NAVAID STATUS AND IMPACTS:
NO IMPACTS TO NAVAIDS.

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAY AND HARDSTANDS TO AIRCRAFT OPERATIONS.
4. SEE SHEET G-042 FOR VSR DETAILS IN THE WORK AREA.
5. SEE SHEET E-001 FOR ELECTRICAL PHASING NOTES.

HAUL ROUTE NOTES:
1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ATCT AT ALL TIMES.
2. AFTER RECEIVING AUTHORIZATION FROM ATCT, CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL CONTROL THE MOVEMENT OF ALL CONSTRUCTION VEHICLES WITHIN THE DESGINATED HAUL ROUTE(S) UNLESS OTHERWISE APPROVED BY RPR.
3. CONTRACTOR SHALL BE RESPONSBILE TO MAINTAIN ALL DESGINATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND

SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.

4. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.
5. PROVIDE FLAGMEN FOR ENTERING VSR FROM WORK AREAS. CONTRACTOR SHALL YIELD TO ANY ONCOMING VSR TRAFFIC.

TABLE 1 – HARDSTAND RESTRICTIONS				
LOCATION	MAX ADG POWER IN/ TOW OUT	MAX WINGSPAN	MAX ADG TOW IN/ TOW OUT	MAX WINGSPAN
HARDSTAND B	V	214 FT	N/A	N/A
HARDSTAND C	III	118 FT	IV	157 FT
HARDSTAND G	VI	262 FT	N/A	N/A
HARDSTAND H	VI	262 FT	N/A	N/A

HARDSTAND RESTRICTION NOTES:

1. HARDSTAND B AND C: TOW OUT TAIL NORTH, NORTH OF TWY E.
2. HARDSTAND G: TOW OUT TAIL SOUTH, SOUTH OF TWY F.
3. HARDSTAND H:
   A. TOW OUT TAIL NORTH, PULL FORWARD AND HOLD SHORT OF TWY F.
   B. TOW OUT TAIL SOUTH, SOUTH OF TWY F.
4. FOR AIRCRAFT MOVEMENT SEE SHEET G-049.
5. NO ENGINE STARTUP DURING PUSHBACK.

Phase 7 – Discussion Points

1. No engine startup during pushback.
2. Orion to look into FedEx turning movements on their ramp.

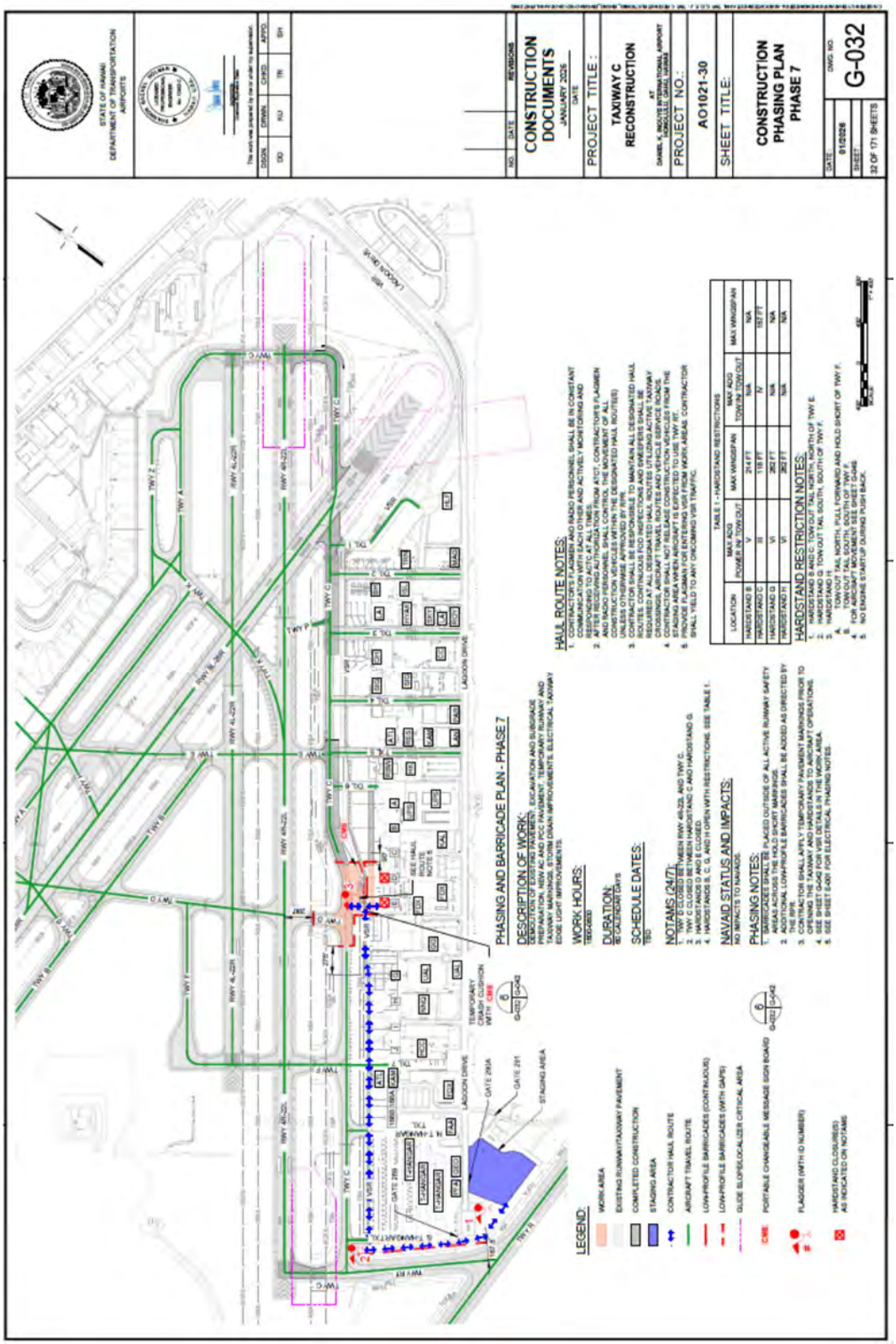

Figure 17: Construction Phasing Plan, Phase 7

Phase 7.1 (Figure 18: Construction Phasing Plan, Phase 7.1)

DESCRIPTION OF WORK:
CONCRETE CURING.

WORK HOURS:
NO WORK ACTIVITY (CONCRETE CURING)

DURATION:
21 CALENDAR DAYS (SEE NOTE 4)

SCHEDULE DATES:
TBD

NOTAMS (24/7):

1. HARDSTANDS E AND D CLOSED.
2. HARSTAND C OPEN WITH RESTRICTIONS. SEE TABLE 1.

NAVAID STATUS AND IMPACTS:
NO IMPACTS TO NAVAIDS

PHASING NOTES:

1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAYS, TAXILANE AND HARDSTANDS TO AIRCRAFT OPERATIONS.
4. TOTAL CURE TIME IS ASSUMED TO BE 28 CALENDAR DAYS. THE DURATION LISTED ABOVE IS THE ADDITIONAL DAYS BEYOND TH DAYS ALREADY ACCOUNTED FOR IN PHASE 7.

TABLE 1 – HARDSTAND RESTRICTIONS				
LOCATION	MAX ADG POWER IN/ TOW OUT	MAX WINGSPAN	MAX ADG TOW IN/ TOW OUT	MAX WINGSPAN
HARDSTAND C	IV	157 FT	V	198 FT

Phase 7.1 Discussion points

1. No comments.

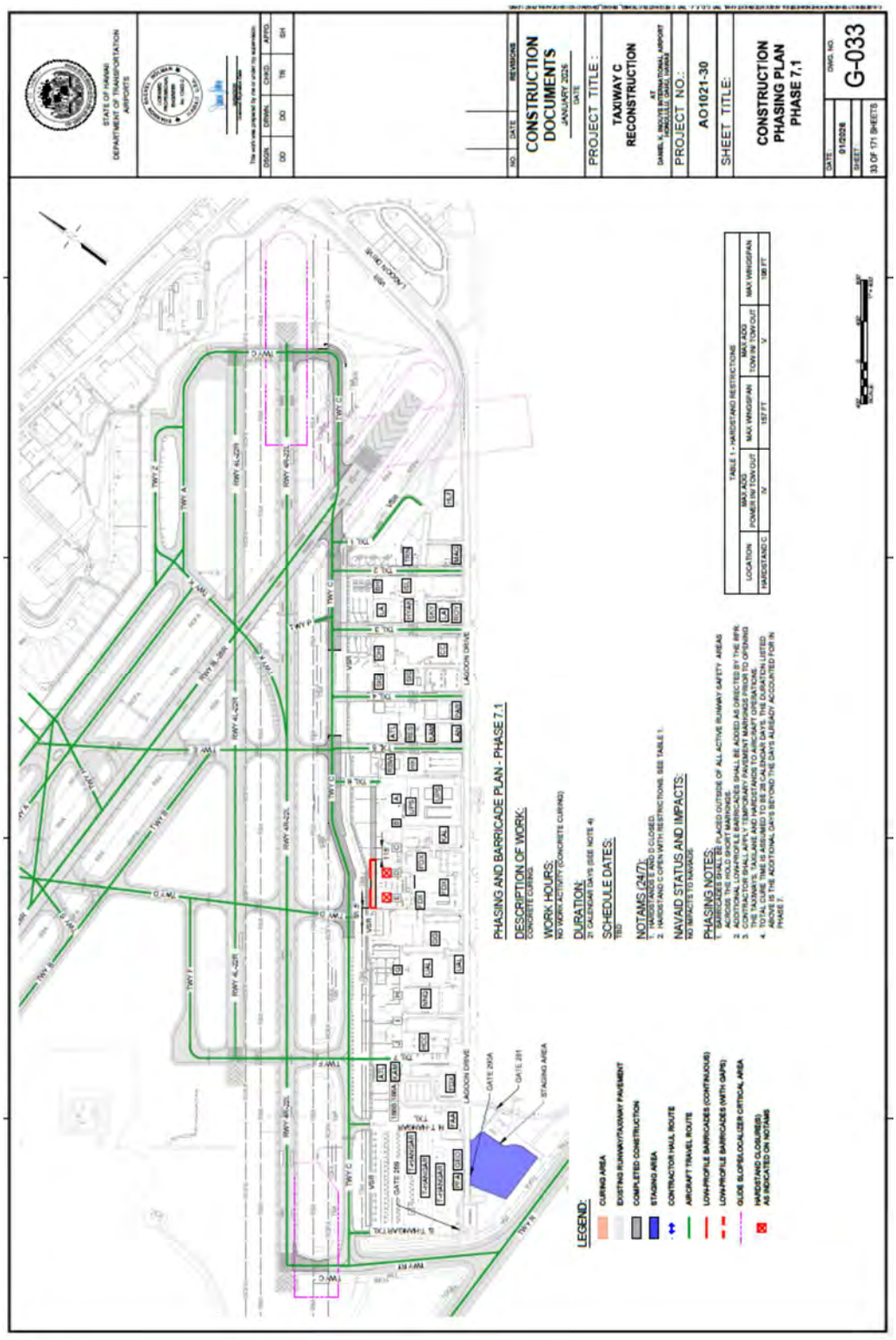

Figure 18: Construction Phasing Plan, Phase 7.1

Phase 8 (Figure 19: Construction Phasing Plan, Phase 8)

DESCRIPTION OF WORK:
DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARATION, NEW AC PAVEMENT, TEMPORARY RUNWAY AND TAXIWAY MARKINGS, STORM DRAING IMPROVEMENTS.

HOURS:
1600-0600

DURATION:
45 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. TWY C CLOSED BETWEEN TXL 5 AND TXL 3.
2. TXL 4 CLOSED.

NAVIAD STATUS AND IMPACTS:
NO IMPACTS TO NAVAIDS

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY HALF APPLICATION PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAY AND TAXILANE TO AIRCRAFT OPERATIONS.

HAUL ROUTE NTOES:
1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ATCT AT ALL TIMES.
2. AFTER RECEIVING AUTHORIZATION FROM ATCT, CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL CONTROL THE MOVEMENT OF ALL CONSTRUCTION VEHICLES WITHIN THE DESIGNATED HAUL ROUTE(S) UNLESS OTHERWISE APPROVED BY RPR.
3. CONTRACTOR SHALL BE RESPONSBILE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.
4. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.

Phase 8 – Discussion Points

1. Added assumption Mauna Loa helicopters will depart over the fence towards lagoon drive. Will notify HCF of their intent upon their departure call.

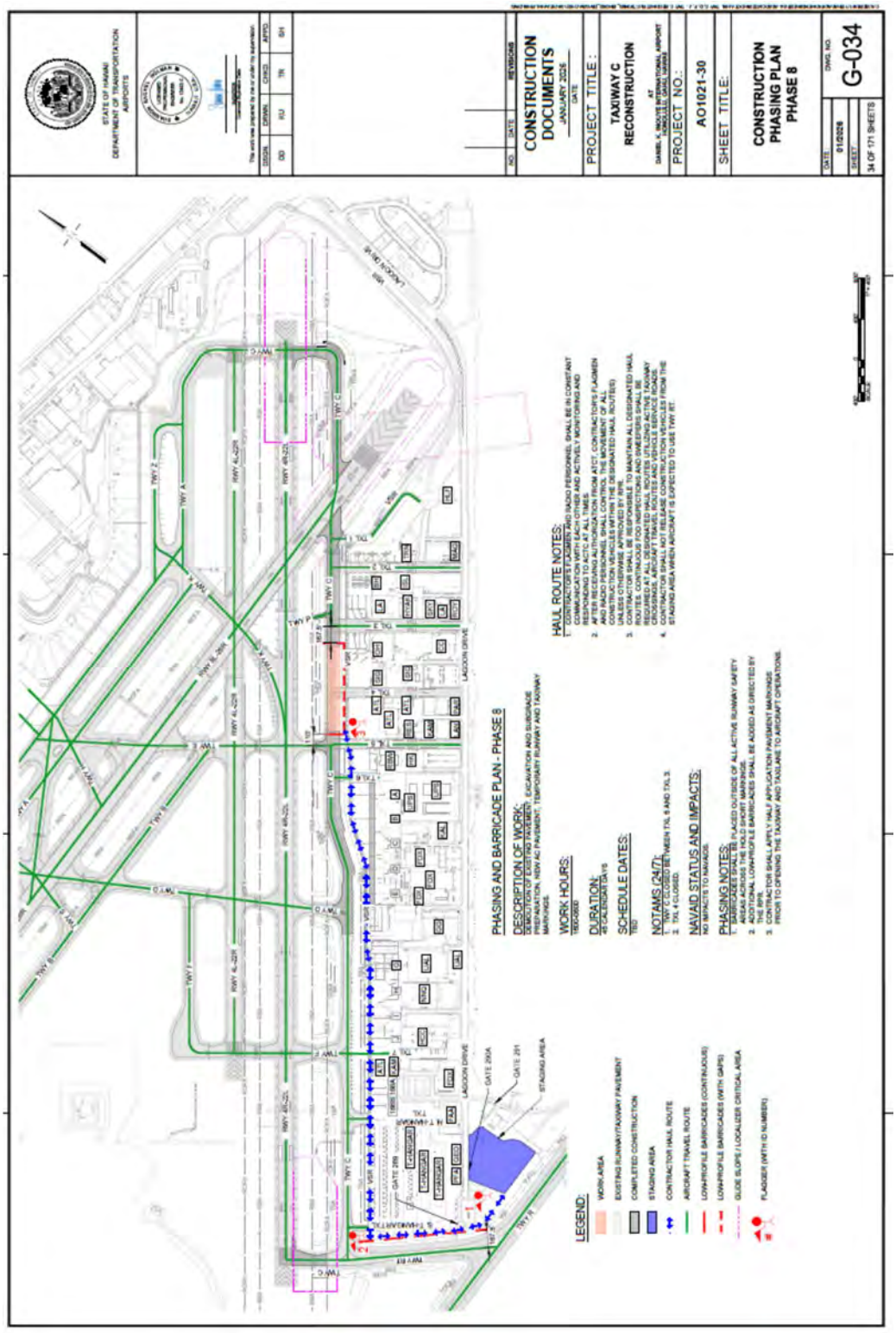

Figure 19: Construction Phasing Plan, Phase 8

Phase 9 (Figure 20: Construction Phasing Plan, Phase 9)

DESCRIPTION OF WORK:
DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARATION, NEW AC PAVEMENT, TEMPORARY RUNWAY AND TAXIWAY MARKINGS, ELECTRICAL TAXIWAY EDGE LGHT IMPROVEMENTS.

WORK HOURS:
1600-0600

DURATION:
36 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. TWY C RESTRICTED TO ADG II (MAX SPEED 10 MPH AND MAX WINGSPAN: 73 FT) BETWEEN HARDSTAND I AND TWY D.
2. HARDSTANDS G AND H CLOSED.
3. HARDSTANDS E, I, AND J OPEN WITH RESTRICTIONS. SEE TABLE 1.

NAVAID STATUS AND IMPACTS:
NO IMPACTS TO NAVAIDS

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAY AND HARDSTANDS TO AIRCRAFT OPERATIONS.
4. TEMPORARY STRIPING FOR TWY C SHALL BE INSTALLED AT THE END OF PHASE 8 AND REMOVED AT THE END OF PHASE 9. SEE SHEET G-063. COORDINATE WITH RPR TO MINIMIZE IMPACT TO AIRFIELD OPERATIONS.
5. SEE SHEET E-001 FOR ELECTRICAL PHASING NOTES.

HAUL ROUTE NOTES:
1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ATCT AT ALL TIMES.
2. AFTER RECEIVING AUTHORIZATION FROM ATCT, CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL CONTROL THE MOVEMENT OF ALL CONSTRUCTION VEHICLES WITHIN THE DESIGNATED HAUL ROUTE(S) UNLESS OTHERWISE APPROVED BY RPR.

3. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.
4. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.

TABLE 1 – HARDSTAND RESTRICTIONS				
LOCATION	MAX ADG POWER IN/ TOW OUT	MAX WINGSPAN	MAX ADG TOW IN/ TOW OUT	MAX WINGSPAN
HARDSTAND I	III	118 FT	IV	171 FT

HARDSTAND RESTRICTION NOTES:

1. HARDSTAND E:
    A. TOW OUT TAIL NORTH, NORTH OF TWY D.
    B. TOW OUT TAIL SOUTH, PULL FORWARD NORTH OF TWY D.
2. HARDSTANDS I AND J: TOW OUT TAIL SOUTH, SOUTH OF TWY F.
3. FOR AIRCRAFT MOVEMENT SEE SHEETS G-050 AND G-056.
4. NO ENGINE STARTUP DURING PUSH BACK.

Phase 9 – Discussion Points

1. When closer to phase 9, a meeting will be called with FSDO Scott Allen and the GA community. Pilot controller format requested.
2. Updated Hardstand pushback options (Tail North and South if possible) to give HCF more options.

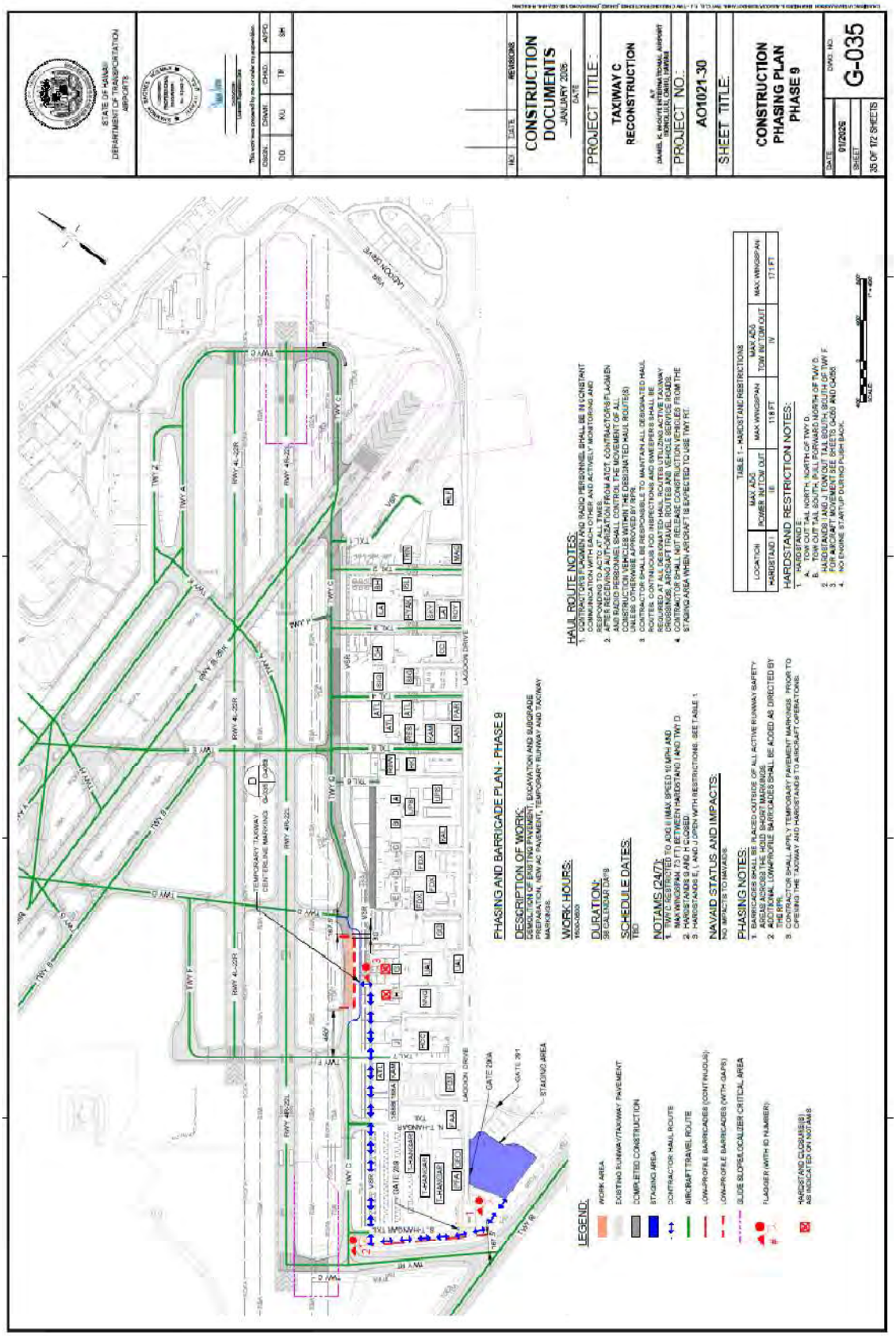

Figure 20: Construction Phasing Plan, Phase 9

Phase 10 (Figure 21: Construction Phasing Plan, Phase 10)

DESCRIPTION OF WORK:
DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARTION, NEW AC PAVEMENT, TEMPORARY RUNWAY AND TAXIWAY PAVEMENT MARKINGS, ELECTRICAL TAXIWAY EDGE LIGHT IMPROVEMENTS.

WORK HOURS:
1600-0600

DURATION:
43 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. TWY F CLOSED BETWEEN RWY 4R-22L AND TWY C.
2. TWY C RESTRICTED TO ADG II (MAX WINGSPAN: 73 FT) BETWEEN HARDSTAND 188A AND HARDSTAND H.
3. TXL 7 MAY ONLY BE USED FOR ADG I-II (49-79 FT WINGSPAN) WITH RESTRICTIONS. SEE SHEETS G-057 AND G-064.
4. HARDSTANDS I AND J CLOSED.
5. HARDSTANDS 188A, 188B, G, AND H OPEN WITH RESTRICTIONS. SEE TABLE 1.

NAVAID STATUS AND IMPACTS:
NO IMPACTS TO NAVAIDS

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAY AND HARDSTANDS TO AIRCRAFT OPERATIONS.
4. TEMPORARY STRIPING FOR TWY C AND TWY 7 SHALL BE INSTALLED AT THE END OF PHASE 9 AND REMOVED AT THE END OF PHASE 10. SEE SHEET G-064. COORDINATE WITH RPR TO MINIMIZE IMPACT TO AIRFIELD OPERATIONS.
5. SEE SHEET E-0D1 FOR ELECTRICAL PHASING NOTES.

HAUL ROUTE NOTES:

1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ATCT AT ALL TIMES.
2. AFTER RECEIVING AUTHORIZATION FROM ATCT, CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL CONTROL THE MOVEMENT OF ALL CONSTRUCTION VEHICLES WITHIN THE DESIGNATED HAUL ROUTE(S) UNLESS OTHERWISE APPROVED BY RPR.
3. CONTRACTOR SHALL BE RESPONSBILE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.
4. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.

TABLE 1 – HARDSTAND RESTRICTIONS				
LOCATON	MAX ADG POWER IN/ TOW OUT	MAX WINGSPAN	MAX ADG TOW IN/ TOW OUT	MAX WINGSPAN
HARDSTAND 188A	IV	125 FT	N/A	N/A
HARDSTAND 188B	IV	125 FT	N/A	N/A
HARDSTAND H	IV	117FT	IV	171 FT

HARDSTAND RESTRICTION NOTES:

1. HARDSTAND G:
   A. TOW OUT TAIL SOUTH, PULL FORWARD SHORT OF TWY D.
   B. TOW OUT TAIL NORTH OF TWY D.
2. HARDSTAND H: TOW OUT TAIL NORTH, NORTH OF TWY D.
3. HARDSTAND 188A: TOW OUT, PUSH THEN PULL TAIL NORTH, SOUTH OF N. T-HANGAR TXL.
4. HARDSTAND 188B: TOW OUT TAIL NORTH, PULL FORWARD SOUTH OF N. T-HANGAR TXL.
5. FOR AIRCRAFT MOVEMENT SEE SHEETS G-051 AND G-057.
6. NO ENGINE STARTUP DURING PUSH BACK.

Phase 10 – Discussion Points

1. Updated Hardstand pushback options (Tail North and South if possible) to give HCF more options.
2. HCF has concerns about sending GA users around Rwy 22L and 22R on Twy C due to visibility issues.

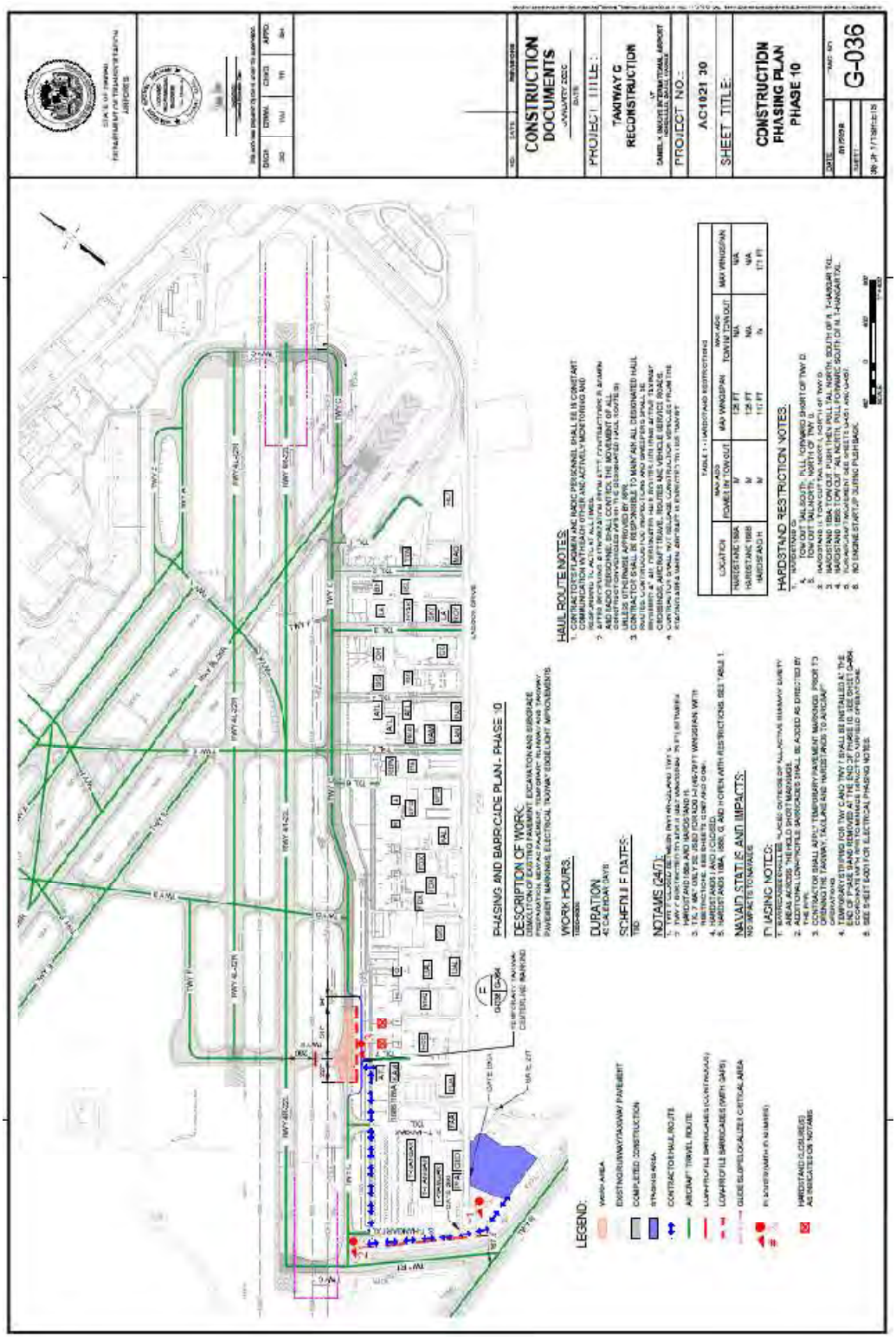

Figure 21: Construction Phasing Plan, Phase 10

Phase 11 (Figure 22: Construction Phasing Plan, Phase 11)

DESCRIPTION OF WORK:
DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARTION, NEW AC PAVEMENT, TEMPORARY RUNWAY AND TAXIWAY MARKINGS, TAXIWAY EDGE LIGHT IMPROVEMENTS.

WORK HOURS:
1600-0600

DURATION:
27 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. TWY C RESTRICTED TO ADG II (MAX WINGSPAN: 73 FT). BETWEEN N. T-HANGAR TXL AND TWY F.
2. HARDSTANDS 188A AND 188B CLOSED.
3. HARDSTANDS I AND J OPEN WITH RESTRICTIONS.

NAVAID STATUS AND IMPACTS:
NO IMPACTS TO NAVAIDS

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAY AND HARDSTANDS TO AIRCRAFT OPERATIONS.
4. TEMPORARY STRIPING FOR TWY C SHALL BE INSTALLED AT THE END OF PHASE 10 AND REMOVED AT THE END OF PHASE 11. SEE SHEET G-065.

HAUL ROUTE NOTES:
1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ATCT AT ALL TIMES.
2. AFTE RECEIVING AUTHORIZATION FROM ATCT, CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL CONTROL THE MOVEMENT OF ALL CONSTRUCTION VEHICLES WITHING THE DESIGNATED HAUL ROUTE(S) UNLESS OTHERWISE APPROVED BY RPR.
3. CONTRACTOR SHALL BE RESPONSBILE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND

SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.

4. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.

HARDSTAND RESTRICTION NOTES:

1. HARSTANDS I:
    A. TOW OUT TAIL SOUTH, PULL FORWARD NORTH OF TWY F.
    B. TOW OUT TAIL NORTH, PULL FORWARD SHORT OF TWY F.
2. HARDSTAND J:
    A. TOW OUT TAIL SOUTH, PULL FORWARD NORTH OF HARDSTAND I.
    B. TOW OUT TAIL NORTH, NORTH OF TWY F.
3. FOR AIRCRAFT MOVEMENT SEE SHEETS G-052 AND G-058
4. NO ENGINE STARTUP DURING PUSHBACK.

Phase 11 – Discussion Points

1. Updated Hardstand pushback options (Tail North and South if possible) to give HCF more options.
2. Road guards are needed to protect the VSR during pushback procedures.

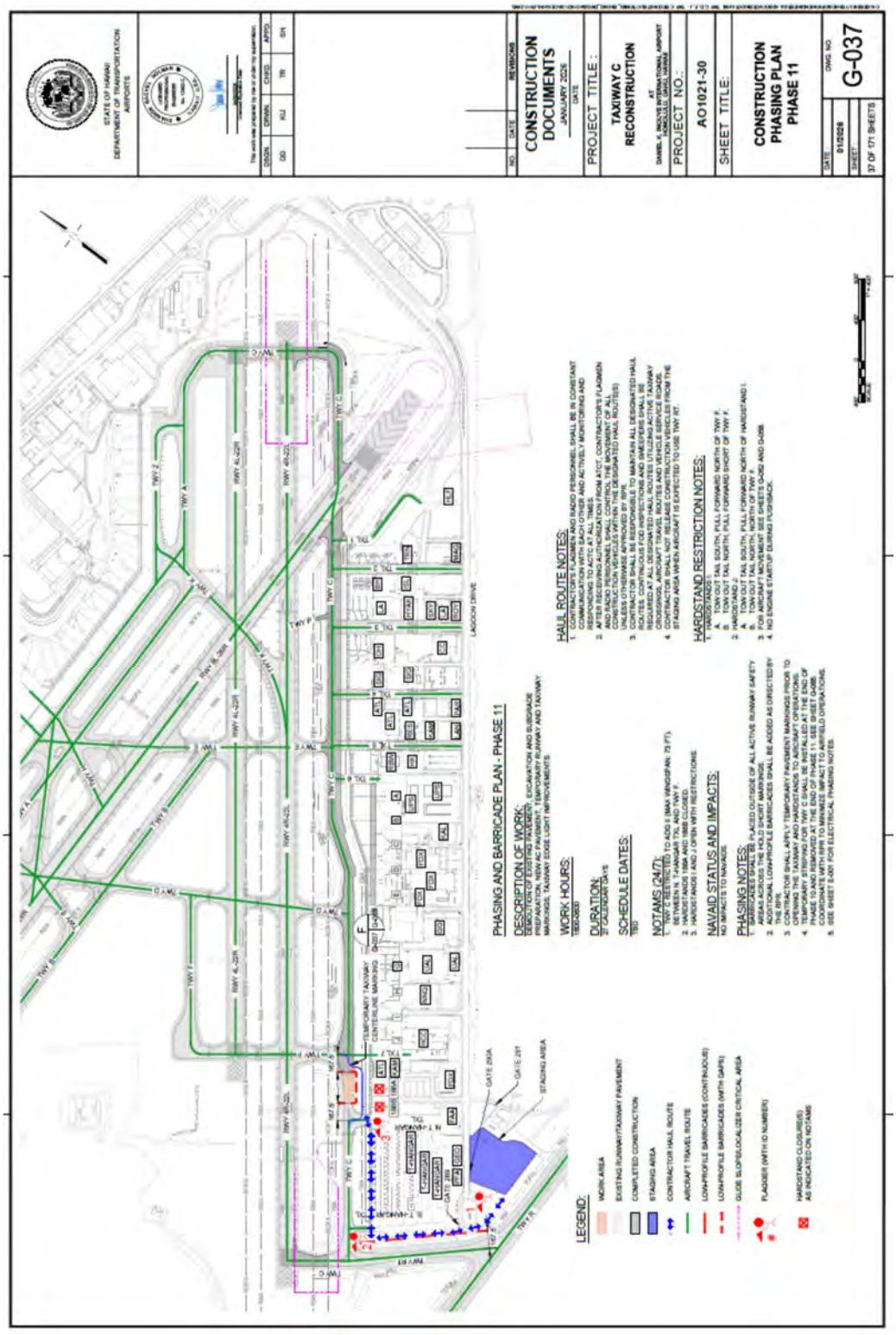

Figure 22: Construction Phasing Plan, Phase 11

Phase 12 (Figure 23: Construction Phasing Plan, Phase 12)

DESCRIPTION OF WORK:
DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARTION, NEW AC PAVEMENT, TEMPORARY RUNWAY AND TAXIWAY MARKINGS. ELECTRICAL TAXIWAY EDGE LIGHT IMPROVEMENTS, ELECTRICAL TAZIWAY LIGHT IMPROVEMENTS.

WORK HOURS:
1600-0600 DAILY

DURATION:
27 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. TWY C CLOSED BETWEEN S. T-HANGAR TXL AND N. T-HANGAR TXL. TWY C RESTRICTED TO ADG II (MAX WINGSPAN: 73 FT) BETWEEN N. T HANGAR TXL AND HARDSTAND 188A.
3. N. T-HANGAR TXL RESTRICTED TO ADG II (MAX WINGSPAN: 73 FT).
4. HARDSTAND 188B CLOSED.
5. HARDSTAND J AND 188A OPEN WITH RESTRICTIONS. SEE TABLE 1.

NAVAID STATUS AND IMPACTS:
NO IMPACTS TO NAVAIDS

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAY AND TAXILANE TO AIRCRAFT OPERATIONS.
4. TEMPORARY STRIPPING FOR N. T-HANGAR TXL SHALL BE INSTALLED AT THE END OF PHASE 11 AND REMOVED AT THE END OF PHASE 12. SEE SHEET G-066.COORDINATE WITH RPR TO MINIMIZE IMPACT TO AIRFIELD OPERATIONS.
5. SEE SHEET E001 FOR ELECRICAL PHASING NOTES.

HAUL ROUTE NOTES:

1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ATCT AT ALL TIMES.
2. AFTER RECEIVING AUTHORIZATION FROM ATCT, CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL CONTROL THE MOVEMENT OF ALL CONSTRUCTION VEHICLES WITHING THE DESIGNATED HAUL ROUTE(S) UNLESS OTHERWISE APPROVED BY RPR.
3. CONTRACTOR SHALL BE RESPONSBILE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.
4. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.

TABLE 1 – HARDSTAND RESTRICTIONS				
LOCATION	MAX ADG POWER IN/ TOW OUT	MAX WINGSPAN	MAX ADG TOW IN/ TOW OUT	MAX WINGSPAN
HARDSTAND 188A	III	118 FT	IV	171 FT

HARDSTAND RESTRICTION NOTES:

1. HARDSTAND 188A: TOW OUT TAIL NORTH, NORTH OF TWY F.
2. HARDSTAND J:
    A. TOW OUT TAIL SOUTH, PULL FORWARD NORTH OF TWY F.
    B. TOW OUT TAIL NORTH, HOLD SHORT TWY F.
3. FOR AIRCRAFT MOVEMENT SEE SHEETS G-053 AND G-059.
4. NO ENGINE STARTUP DURING PUSH BACK.

Phase 12 – Discussion Points

1. Extending the barricades to the Non-movement line to allow direct access to work area from the Non-movement area to reduce calls to ATCT. Typical for all phases that have this situation.
2. Updated Hardstand pushback options (Tail North and South if possible) to give HCF more options.

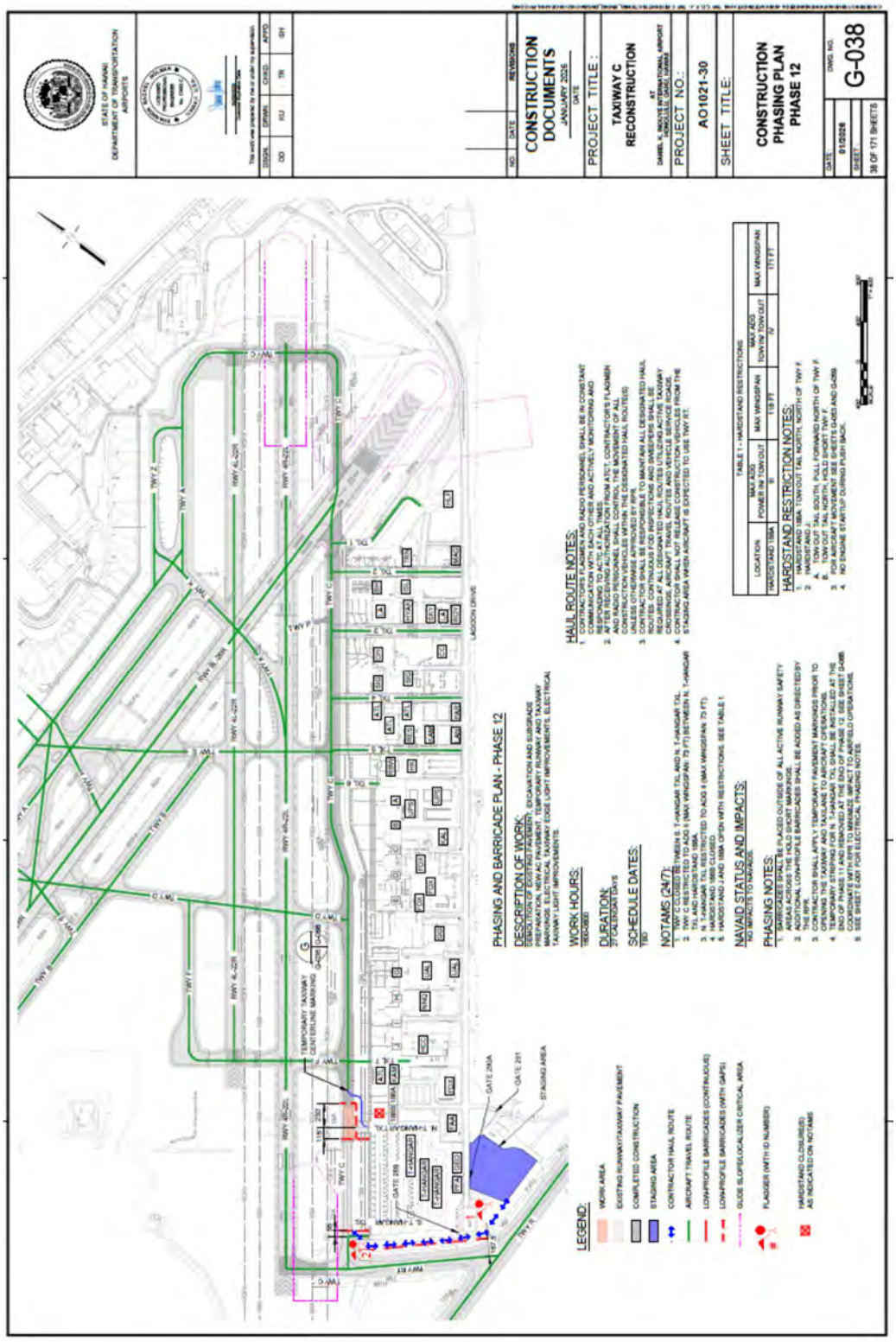

Figure 23: Construction Phasing Plan, Phase 12

Phase 13 (Figure 24: Construction Phasing Plan, Phase 13)

DESCRIPTION OF WORK
DEMOLITION OF EXISTING PAVEMENT AND EDGE LIGHT SYSTEM, EXCAVATION AND SUBGRADE PREPARATION, NEW AC PAVEMENT AND EDGE LIGHT SYSTEM, WATER LINE IMPROVEMENTS, TEMPORARY RUNWAY AND TAXIWAY MARKINGS. ELECTRICAL TAXIWAY EDGE LIGHT IMPROVEMENTS, ELECTRICAL TAXIWAY EDGE LIGHT IMPROVEMENTS.

WORK HOURS:
1600-0600

DURATION:
48 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. TWY C CLOSED BETWEEN TWY RT AND N. T-HANGAR TXL.
2. SOUTH T-HANGAR TXL CLOSED BETWEEN TWY C AND 200 FT SOUTH OF TWY C.
3. HARDSTANDS 188A AND 188B OPEN WITH RESTRICTIONS.

NAVAID STATUS AND IMPACTS:
NO IMPACTS TO NAVAIDS

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMNET MARKINGS PRIOR TO OPENING THE TAXIWAY AND TAXILANE TO AIRCRAFT OPERATIONS.
4. SEE SHEET -001 FOR ELECTRICAL PHASING NOTES.

HAUL ROUTE NOTES:
1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ATCT AT ALL TIMES.
2. AFTER RECEIVING AUTHORIZATION FROM ATCT, CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL CONTROL THE MOVEMENT OF ALL CONSTRUCTION VEHICLES WITHIN THE DESIGNATED HAUL ROUTE(S) UNLESS OTHERWISE APPROVED BY RPR.
3. CONTRACTOR SHALL BE RESPONSIBILE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND

SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.

4. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.

HARDSTAND RESTRICION NOTES:

1. HARDSTAND 188A:
    A. TOW OUT TAIL SOUTH, PULL FORWARD NORTH OF TWY F.
    B. TOW OUT TAIL NORTH, NORTH OF TWY F.
1. HARDSTAND 188B: TOW OUT TAIL NORTH, NORTH OF TWY F.
2. FOR AIRCRAFT MOVEMENT SEE SHEET G-054.
3. NO ENGINE STARTUP DURING PUSH BACK.

Phase 13 – Discussion Points

1. Updated Hardstand pushback options (Tail North and South if possible) to give HCF more options.

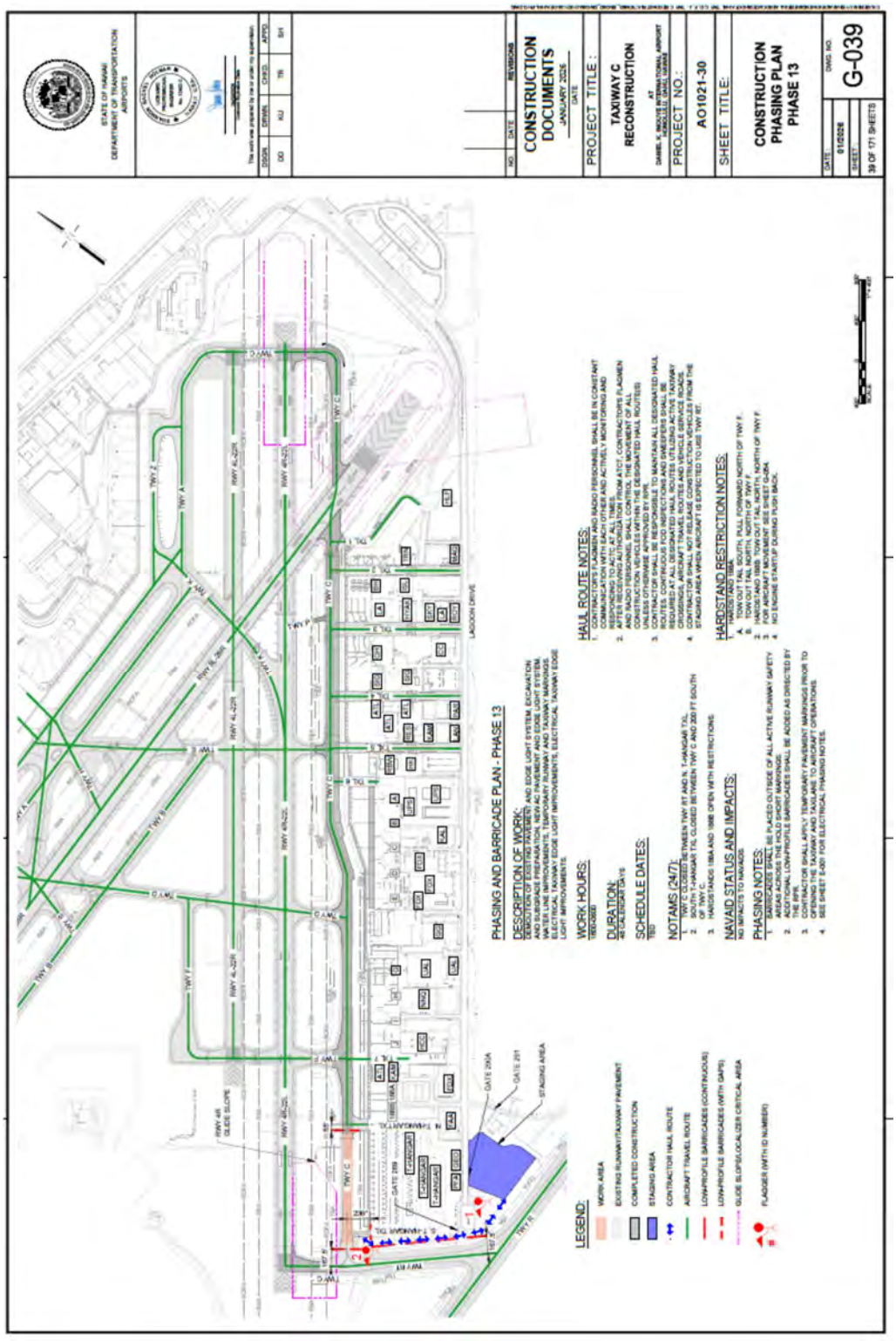

Figure 24: Construction Phasing Plan, Phase 13

Phase 14 (Figure 25: Construction Phasing Plan, Phase 14)

DESCRIPTION OF WORK:
DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARTION, NEW AC PAVEMENT, TEMPORARY RUNWAY AND TAXIWAY MARKINGS, STORM DRAIN IMPROVEMENTS, ELECTRICAL TAXIWAY EDGE LIGHT IMPROVEMENTS.

WORK HOURS:
1600-0600

DURATION:
59 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. TWY RT CLOSED
2. TWY C CLOSED BETWEEN TWY RT AND S. T-HANGER TXL.

NAVAID STATUS AND IMPACTS (24/7):
1. RUNWAY 4R: GS, OUT-OF-SERVICE UNTIL FLIGHT CHECK

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. ANY NAVAIDS OUT OF SERVICE FOR MORE THAN 72 HOURS CONTINUOUSLY SHALL REQUIRE RECERTIFICAION BY THE FAA. CONTRACTOR SHALL PROVIDED A MINIMUM OF 7 DAYS NOTICE TO THE FAA FOR RECERTIFICATION.
4. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAY TO AIRCRAFT OPERATIONS
5. SEE SHEET E-001 FOR ELECTRICAL PHASING NOTES.

HAUL ROUTE NOTES:
1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ATCT AT ALL TIMES.
2. AFTER RECEIVING AUTHORIZATION FROM ATCT, CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL CONTROL THE MOVEMENT OF ALL CONSTRUCTION VEHICLES WITHIN THE DESIGNATED HAUL ROUTE(S) UNLESS OTHERWISE APPROVED BY RPR.
3. CONTRACTOR SHALL BE RESPONSBILE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND

SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.

4. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.

Phase 14 – Discussion Points

1. Option to discuss work hours to shorten the phase duration.
2. Added an assumption that airport reversal of the airfield flow is not expected to occur within the time of this project.

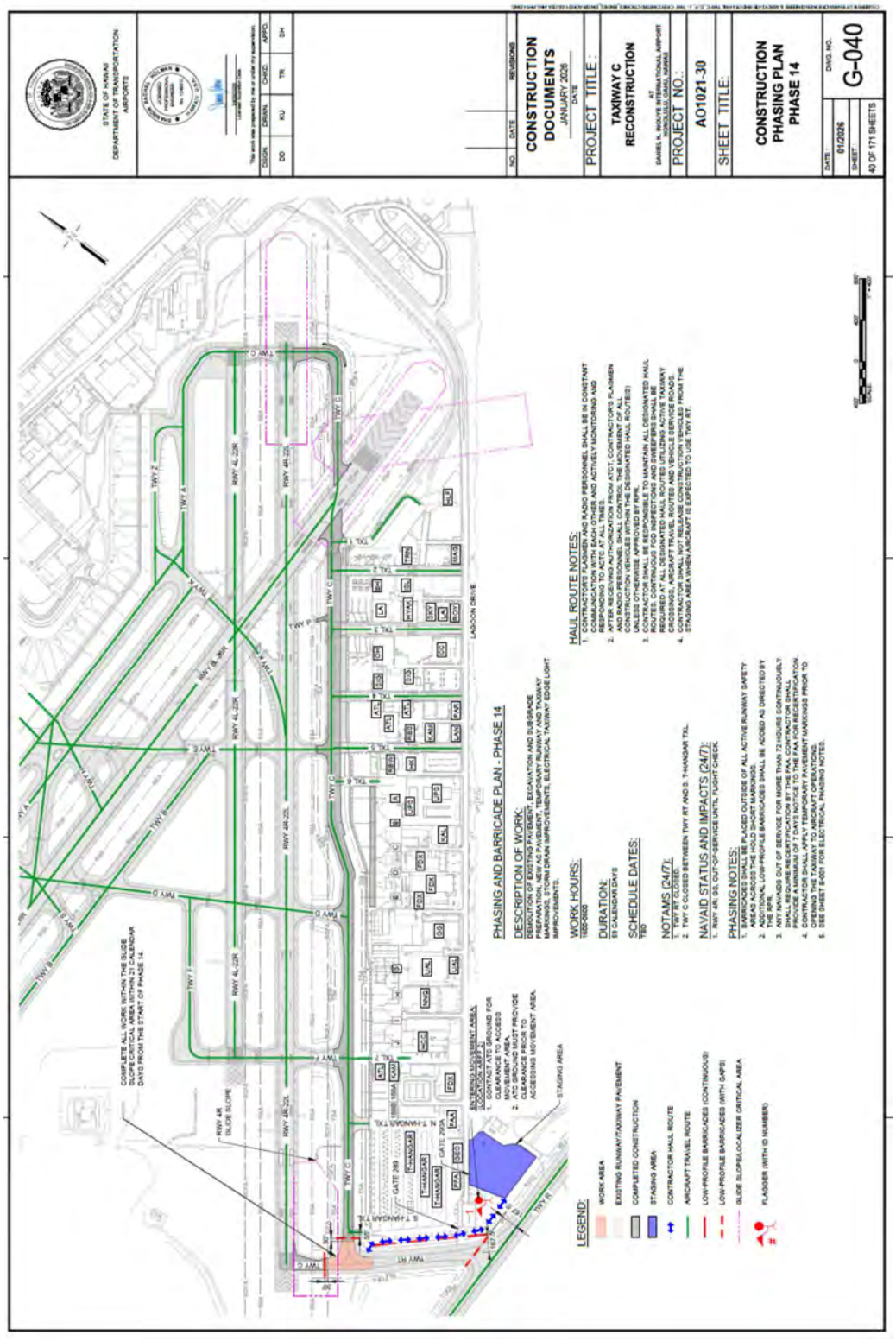

Figure 25: Construction Phasing Plan, Phase 14

Section 3 – Safety Risk Management Planning and Impacted Organizations

The Safety Risk Management Panel (SRMP) initially met on December 10, 2025. Due to the need for additional coordination and updates to the drawings, the SRMP was continued on December 17, 2025, to further assess the proposed change to the National Airspace System (NAS) and associated hazards. The facilitator worked with the HNL ADO Program Manager to identify SRMP members, Subject Matter Experts (SMEs), and obtained concurrence prior to sending out calendar invitations. All FAA Lines of Business and Daniel K. Inouye International Airport (HNL) stakeholders were included in the invitation. Table 3 & 4 presents the list of panel meeting participants for the panel meetings held on December 10, 2025, and December 17, 2025, respectively. The sign-in sheets can be found in Appendix E.

Table 3: SRM Panel Members, Subject Matter Experts, Meeting Attendees (12/10/25)

Panel Member	Organization, Position/Title	E-mail
Deborah Saito	DOT-A HNL	deborah.t.saito@hawaii.gov
Mark AhYo	DOT-A HNL	mark.a.ahyo@hawaii.gov
Kandyce Watanabe	FAA HNL ADO	kandyce.watanabe@faa.gov
Scott Allen	FAA FSDO	scott.e.allen@faa.gov
Sylvan Drakes	FAA Flight Procedures	Sylvan.drakes@faa.gov
Joe Gertonson	AFAA HCF NATCA	hcffacrep@gmail.com
Kristyn Nakasone	FAA HCF	kristyn.m.nakasone@faa.gov
Ruelito Reyel	FAA SSC – Environmental	ruelito.reyel@faa.gov
Paul Amen	American Airlines	paul.amen@aa.com
George Hodgson	Southwest Airlines	george.hodgson@wnco.com
Scott Robinson	Aloha Air Cargo	srobinson@alohaaircargo.com
Marcus Ditsch	FedEx	marcus.ditsch@fedex.com
Tara Fore	Mauna Loa Helicopters	tara@maunaloahelicopters.edu

SME	Organization, Position/Title	E-mail
Thomas Waldman	DOT-A GA Officer	thomas.j.waldman@hawaii.gov
Mark Nejad	DOT HNL Asst. Superintendent	mehran.m.nejad@hawaii.gov
James Fu	DOT-A AIR-EA	james.fu2@hawaii.gov
John West	DOT-A AIR-EA	john.k.west@hawaii.gov
Bento Ho	DOT-A AIR-EM	benton.ho@hawaii.gov
Irene Nohara	DOT-A AIR-EP	irene.n.nohara@hawaii.gov
Lemuel Aweau	HNL SMS Specialist	lemuel.ak.aweau@hawaii.gov
Mary Brana	AECOM	mary.branamunoz@aecom.com
Sean Dunckel	AECOM	sean.dunckel@aecom.com
Roger Hyun	Parsons	roger.hyun@parsons.com
Sean Quarie	Parsons	sean.quarie@parsons.com
Daniel Dabu	Orion Engineers	daniel.dabu@orionea.com
Shannon Holman	Orion Engineers	shannon.holman@orionea.com
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Facilitation Team	Organization, Position/Title	E-mail
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Section 4 – Assumptions

Assumptions are established in this section to define the baseline conditions, existing controls, and operating expectations which the SRMP conducted its evaluation. Because the SRM process requires a clear and consistent understanding of the environment in which hazards may occur, assumptions help ensure that all stakeholders apply the same baseline conditions when identifying hazards, analyzing risks, and determining the effectiveness of existing or proposed controls. These assumptions also provide a better understanding regarding the constraints, operational norms, and procedural expectations that the panel relied on in its analysis. By documenting these assumptions, the SRMP ensures that the risk assessment remains traceable, repeatable, and aligned with the airfield's current practices and regulatory requirements.

1. All existing controls are in place.
2. Continuous incursion monitoring and outreach efforts will continue by the Airport and local FAA offices.
3. No anticipated increase in commercial service, cargo, general aviation and military operations during construction period.
4. Planned equipment upgrades in NAVAIDs or communication systems by the FAA. Monitor ERAM Enroute Automation project.
5. Radio personnel will be onsite during construction.
6. Work will not be allowed on the airfield unless an approved CSPP is on file.
7. Ongoing construction meetings will address operations during upcoming phases to ensure attendee awareness of impending construction work and associated operational impacts, including runway and taxiway section closures.
8. Barricade phasing and schedules will be provided to affected parties including the airlines, ATCT, contractor, CM, District Ops, and ARFF via periodic construction meetings, informational meetings, and email.
9. Construction vehicle routes, flaggers and barricades will be reviewed as indicated in the CSPP prior to the start of each construction phase.
10. Construction areas will be clearly marked with lighted low-profile barricades that will be weighted down properly.
11. Controllers, pilots, and vehicle operators will be briefed on runway and taxiway changes, closures, and procedures.
12. FOD checks will be completed by construction and airport personnel when movement areas are used.
13. NOTAMs will be issued for each phase as indicated on the phasing sheets.
14. Minimize changes to CSPP/schedule.
15. Coordination with ongoing projects.
16. Airport Sponsor Strategic Event Submission Form (FAA Form 6000-26) will be submitted 45 days prior to the event

Website:
https://oeaaa.faa.gov/downloads/AIRPORT_SPONSOR_STRATEGIC_EVENT_SUBMISSION_FORM.pdf.

17. All applicable 7460-1 airspace determinations will be completed prior to commencement of airfield work. Post construction, 7460-2 filing will be completed for permanent structures by the contractor.
18. Tower to submit construction activity no later than 30-days prior to start of project to email: 9-AJA-ConstructionCouncil@faa.gov. ACAC
19. Shutdown/Restore of NAVAIDs has a Reimbursable Agreement with FAA Western Service Center.

11/25/2025 – PreSRA Added Assumptions

20. One month prior to each change of phase CM and contractor to reach out and coordinate with ARFF for emergency response path.
21. Before each phase change ARFF will go out and inspect barricades and response path.
22. Before 8L ILS is affected, Runway 4R ILS needs to pass flight check and be back in service.
23. Project phasing needing flight check will schedule closer to Flight Check dates.
24. HNL will provide RIWS LITE to contractors for their vehicles.
25. The Contractor will attend the airport Non-Movement and Movement Area training prior to entering the AOA and airfield. This will include but not limited to, proper radio communications, escorting, signage, markings and airfield familiarization.

12/10/2025 – SRA Panel Added Assumptions

26. For aircraft holding on Taxiway D (off Taxiway C) to cross 4R, need road guard controls to stop traffic on the VSR to protect vehicles from jet blast.
27. Ph 8, Mauna Loa helicopters will depart over the fence towards lagoon drive. Will notify HCF of their intent upon their departure call.
28. Ph 9, project to call a meeting with FSDO (Scott Allen) and GA users implementing a 10-mph taxi restriction.
29. The proposal for opposite airfield flow is not anticipated to happen until after this project is completed.

Section 5 – Phase 1: System Description

Section 5 provides the current and near-future projects and operational activities anticipated at Daniel K. Inouye International Airport (HNL) that were evaluated for their potential cumulative impacts on overall airfield operations. These ongoing and upcoming efforts, --- including maintenance activities, Capital Improvement Program (CIP) projects, and other airfield-related work—were reviewed to determine whether they could overlap with construction activities associated with the HNL Taxiway C Reconstruction Project. By identifying these concurrent initiatives, the Safety Risk Management Panel (SRMP) ensured that any combined operational effects were considered when assessing the system-state changes, potential interactions with construction activities, and any resulting safety risks.

This project is anticipated to begin construction in January 2027, with an expected completion date of August 2028. Shown below are the current and near future projects and events anticipated to occur at HNL that were considered for potential cumulative impacts to airfield operations.

- HNL Runway and Taxiway Shoulders Rehabilitation (Anticipated end date June 2026)
  - Additional work added. No additional closures were added.
- HNL Maintenance (Grass Cutting/Pavement Maintenance)
- Barrier Maintenance
- HNL 8L Phase 1: Remove temporary striping and install permanent markings
  - (Jan/Feb 2026)

Upcoming Capital Improvement Program (CIP) Projects at HNL

- HNL Runway 8R Lighting LED and replacement of lighting control system 2026-2027. (If this project goes beyond January 2027, will need to include in coordination with HNL Taxiway C and Taxiway A projects).
- HNL Taxiway A Rehabilitation (Anticipated construction start date August 2027).
  - *Both Projects (Taxiway C and Taxiway A) will coordinate to deconflict any potential impacts.*
- Waterline replacement from north of Taxiway C to ATC. June-October 2026.

Other Projects:

- HNL 8L MALSR building replacement project (Anticipated Construction Q1 2026)
- Soil samples to be taken, December 15-19, 2025.
  - Removal of Prefab building near 4L. Anticipated 1 week in 2026.
- RIMPAC – July-August 2028 (No Potential Impacts) – (Taxiway RT closure will cause ground impact)

The SRMP determined that these projects are not expected to have any significant impacts with the HNL Taxiway C Reconstruction project.

Section 6 – Phase 2: Identified Hazards

Identification of hazards in this step considers all reasonably possible sources of hazards. According to Order 5200.11, a hazard is any existing or potential condition that can lead to injury, illness, or death to people; damage or loss of a system, equipment, or property; or damage to the environment. A hazard is a condition that is a prerequisite of an accident or incident.

During this hazard identification stage, the facilitator began by providing the panel members with some ground rules listed in Appendix G and reminded the group that, "the absence of an answer is understood as agreement." The SRM Panel Meeting is the venue to vet out all safety concerns related to this project.

The design consultant (Orion Engineers) completed their presentation of the CSPP exhibits and the facilitator provided the Panel Members with a briefing on the brainstorming process. The development of the Preliminary Hazard List (PHL) allowed all panel members to list their presumed safety concerns based upon their background and subject matter expertise.

During the December 17, 2025, continuation of the SRA Panel Meeting which originally started on December 10, 2025, the facilitation team reviewed the Preliminary Hazard List (PHL) dated December 17, 2025, with the SRMP and obtained concurrence on the PHL. The Panel Members confirmed that no additional potential hazards were identified beyond those documented in the Preliminary Hazard List, found in Appendix A.

The SRMP identified seven (7) preliminary potential hazards as a result of the brainstorming process. Further review of the PHL, the SRMP categorized each potential hazard as a Cause, Hazard or Effect.

The SRMP Populated the PHA with the seven (7) preliminary potential hazards for risk analysis. As the SRMP evaluated the preliminary potential hazards, they determined that four (4) hazards were credible and warranted further evaluation in the Preliminary Hazard Analysis (PHA) worksheet, found in Appendix B. Three (3) potential hazards (HZ-5, HZ-6 and HZ-7) were categorized as a Casuse or Effect for other hazards and were accepted by the SRMP for removal. Table 5 shown below illustrates the SRMP evaluation.

Table 5: List of Hazards and the Associated System State and Effects

(1) Hazard ID	(2) Hazard Description	(4) System State	(7) Effects
XYZ-1	Condition, real or potential; can cause injury, illness, etc. Pre-requisite for accident or incident	Conditions, characterized by quantities or qualities, in which a system can exist; worst credible	Potential outcome or harm of the hazard if it occurs in the defined system state
HNL-TWY-C-RECON: HZ-1	Controller LOSA	All Phases of Construction	-Runway Incursion -Aircraft nose to nose -Go arounds -Wrong surface landings -Aircraft departure from surface -longer taxi routes -Surface incident -Radical maneuvers causing impacts to passengers in cabin -Missed approaches -Jet Blast
HNL-TWY-C-RECON: HZ-2	Pilot LOSA	All Phases of Construction	-Runway Incursion -Aircraft nose to nose -Go arounds -Wrong surface landings -Aircraft departure from surface -longer taxi routes -Surface incident -Radical maneuvers causing impacts to passengers in cabin -Missed approaches -Jet Blast
HNL-TWY-C-RECON: HZ-3	Vehicle LOSA	All Phases of Construction	-Runway Incursion -longer driving routes -Surface incident

HNL-TWY-C-RECON: HZ-4	Foreign Object Debris "FOD"	All Phases of Construction	-Closure of runways and taxiways -pick up wildlife -Aircraft damage -Runway Incursion -Surface Incident
HNL-TWY-C-RECON: HZ-5 (REMOVED)	Jet Blast	N/A	N/A
HNL-TWY-C-RECON: HZ-6 (REMOVED)	Keeping OFZ Clear of Construction Barricades	N/A	N/A
HNL-TWY-C-RECON: HZ-7 (REMOVED)	Construction Flood Lighting Mixed with Normal Ramp Lighting	N/A	N/A

During the SRMP PHA discussion, the following hazards were determined to be uncontrollable events occurring independently or in combination, resulting in a hazard or failure. The SRMP agreed to remove these hazards as they were either recategorized and analyzed as an "Cause" or "Effect" in the PHA. There were no objections in the SRMP, and these were captured under the hazards that were evaluated.

- Hazard ID: HNL-TWY-C-RECON: HZ-5, Jet Blast. The SRMP initially identified this condition as a potential hazard. Following further discussion and evaluation during the PHA process, the SRMP concluded that it is more appropriately categorized as an Effect of Pilot Loss of Situational Awareness (LOSA) and Controller Loss of Situational Awareness (LOSA). Therefore, it was removed from the hazard list.

- Hazard ID: HNL-TWY-C-RECON: HZ-6, Keeping OFZ clear of construction barricades. The SRMP initially identified this condition as a potential hazard. Following further discussion and evaluation during the PHA process, the SRMP concluded that is it more appropriately categorized as a cause for Foreign Object Debris (FOD). Therefore, it was removed from the hazard list.

- Hazard ID: HNL-TWY-C-RECON: HZ-7, Construction Flood Lighting Mixed with Normal Ramp Lighting. The SRMP initially identified this condition as a potential hazard. Following further discussion and evaluation during the PHA process, the SRMP concluded that is it more appropriately categorized as a cause for Vehicle Loss of Situational Awareness (LOSA) and Controller Loss of Situational Awareness (LOSA). Therefore, it was removed from the hazard list.

This panel used the PHA tool/technique provided in the ARP Desk Reference for the HNL Taxiway C Reconstruction CSPP. The PHA provided the panel members with an initial overview of the hazards present in the overall flow of the operation in this proposed change.

Description of Hazards

This step focuses on hazard identification, including further analysis to assist panel members in analyzing the safety risks. The facilitator cultivated discussions to ensure the panel considered all credible sources of system failure, including equipment, human factors, operational procedures, maintenance procedures, and external services.

The facilitator initiated the functional brainstorming technique as a tool to systematically identify hazards as the panel developed the PHL. During the brainstorming session, the group compiled a list of potential hazards associated with the project and provided the basis for the Preliminary Hazard Analysis (PHA).

During the hazard identification stage, the panel identified potential safety Hazards, their possible Causes, and corresponding Effects. The technical writer documented these discussions in the PHA. After each section, the facilitator obtained concurrence from the panel members to ensure all documentation was accurate.

The following sections summarize each identified hazard, along with its associated Causes and Effects, as captured in the Preliminary Hazard Analysis (PHA) worksheet, found in Appendix B for the proposed project.

HNL-TWY-C-RECON: HZ-1 CONTROLLER LOSA

All Phases of Construction

The SRMP determined that Controller Loss of Situational Awareness (LOSA) is a hazard. This hazard exists during all phases of construction. Events that result in this hazard or failure as documented in Column 3 (Causes) of the PHA worksheet include:

- Pushback Restrictions/Instructions
- Unusual Taxi Routes
- Relocated Parking Spots
- Runway Closures
- Taxiway Closures
- Unusual Arrival/Departure Points
- Frequency Congestion
- Continuation Bias
- Expectation Bias
- Changes in Phases
- Phasing and Schedule Flexibility

The existing controls identified in Column 5 of the PHA worksheet represent control measures currently in place to manage this hazard and mitigate its effects. They are as follows:

- AC 150/5200-28, NOTAMs for Airport Operators
- AC 150/5210-20, Ground Vehicle Operations on Airports
- AC 150/5210-24, Airport Foreign Object Debris Management
- AC 150/5210-5, Painting, Marking Lighting of Vehicles Used on Airport
- AC 150/5340-1, Standards for Airport Markings
- AC 150/5340-18, Standards for Airport Sign Systems

- AC 150/5345-55, Specification for L-893 Lighted Visual Aid to Indicate Temporary Runway Closure
- AC 150/5370-2, Operational Safety on Airports During Construction
- FAR Part 139 Regulations/Airport
- Airport Construction Advisory Council
- JO 7110.65, Air Traffic Control
- JO 7210.3, Facility Operations and Administration
- JO 6000.15, NAS Maintenance
- SOP Standard Operating Procedure
- LOA Letter of Agreement
- MEARTS/STARS Micro En-Route Automated Radar Tracking System
- ARSR, ASR-9, ASSR-11 Surveillance Radar
- ASDE, ASDE-X Airport Surface Detection Equipment
- ATIS Automated Terminal Information System
- TCAS Traffic Alert & Collision Avoidance System
- CA/MSAW Conflict Alert/Minimum Safe Altitude Warning
- ASOS Automated Surface Observing System
- Pilot Training
- Controller Training, Airfield Driver Training
- Pilot Intervention
- Controller Intervention
- ATC Scanning
- Airfield Operations Monitoring
- Operational Supervision
- Radio Frequency Monitoring
- NOTAM: Notice to Airmen
- AFD: Airport/Facility Directory
- AIM: Aeronautical Information Manual
- CRM: Crew Resource Management
- Daily Briefing/Notes; TMI: Traffic Management Initiative
- CSPP: Construction Safety and Phasing Plan
- Weekly PCMs: Weekly Project Coordination Meetings
- Airport Notices: HNL Provides by Email
- Weekly Contractor Meetings: Contractor Conducts Weekly Project Meetings
- Pilot Controller Forum (For GA Community): Quarterly
- Forum for Air Carrier/Cargo: Quarterly.

The SRMP identified ten (10) possible effects and determined that a runway incursion represents the worst credible potential outcome or harm of the hazard if it occurs in the defined system state. This hazard was analyzed by the SRMP and the results are documented in Section 7.

HNL-TWY-C-RECON: HZ-2 PILOT LOSA

All Phases of Construction

The SRMP determined that Pilot Loss of Situational Awareness (LOSA) is a hazard. This hazard exists in all phases of construction. As documented in Column 3 (Causes) of the PHA worksheet, events that result in this hazard or failure include:

- Pushback Restrictions/Instructions
- Unusual Taxi Routes
- Relocated Parking Spots
- Runway Closures
- Taxiway Closures
- Unusual Arrival/Departure Points
- Frequency Congestion
- Continuation Bias
- Expectation Bias
- Changes in Phases
- Phasing and Schedule Flexibility
- Unfamiliarity with Airfield Layout
- On Time Arrivals/Departures
- Limited NOTAM Information (Text/Graphical)
- Construction Flood Lighting Mixed with Normal Ramp Lighting

The existing controls identified in Column 5 of the PHA worksheet represent control measures currently in place to manage this hazard and mitigate its effects. They are as follows:

- AC 150/5200-28, NOTAMs for Airport Operators
- AC 150/5210-5, Painting; Marking, Lighting of Vehicle Used on Airport
- AC 150/5300-13, Airport Design
- AC 150/340-1, Standards for Airport Markings
- AC 150/5340-18, Standards for Airport Sign Systems
- AC 150/5340-30, Design and Installation Details for Airport Visual Aids
- AC 150/5345-44, Specifications for Runway and Taxiway Signs
- AC 150/5345-46, Specifications for Runway and Taxiway Lighting Fixtures
- AC 150/5370-2, Operational Safety on Airports During Construction
- FAR Part 139
- Regulations/Airport
- SOP: Standard Operating Procedure
- LOA: Letter of Agreement
- ATIS: Automated Terminal Information System
- Automated Surface Observing System (ASOS)
- Pilot Training
- Pilot Intervention
- Controller Intervention
- ATC Scanning
- Airfield Operations Monitoring

- Operational Supervision
- Radio Frequency Monitoring
- NOTAM: Notice to Airmen
- Charts: Aeronautical Jeppesen Charts
- AFD: Airport/Facility Directory
- AIM: Aeronautical Informational Manual
- CRM: Crew Resource Management
- Daily Briefing Notes
- TMI: Traffic Management Initiative
- CSPP: Construction Safety and Phasing Plan
- Automated CNDs: Airport Construction Notices
- EGPWS (121/135 Carriers): Enhanced Ground Proximity Warning System
- ARINC 424 NDB: Navigation Database
- RAAS (121/135 Carriers): Runway Alerting Advisory System.

The SRMP identified ten (10) possible effects and determined that a runway incursion represents the worst credible potential outcome or harm of the hazard if it occurs within the defined system state. This hazard was analyzed by the SRMP and the results are documented in Section 7.

HNL-TWY-C-RECON: HZ-3 VEHICLE LOSA

All Phases of Construction

The SRMP determined that Pilot Loss of Situational Awareness (LOSA) is a hazard. This hazard exists during all phases of construction. Events that result in this hazard or failure as documented in Column 3 (Causes) of the PHA worksheet include:

- Unusual Routes
- Runway Closures
- Taxiway Closures
- Frequency Congestion
- Continuation Bias
- Expectation Bias
- Changes in Phases
- Phasing and Schedule Flexibility
- Construction Unfamiliarity with Airfield Layout
- Limited NOTAM Information (Text/Graphical)
- Additional Construction Traffic
- Construction Flood Lighting Mixed with Normal Ramp Lighting

The existing controls identify in Column 5 of the PHA worksheet represent control measures currently in place to manage this hazard and mitigate its effects. They are as follows:

- AC 150/5200-18, Airport Safety Self Inspection
- AC 150/5200-28, NOTAMs for Airport Operators
- AC 150/5200-31, Airport Emergency Plan
- AC 150/5210-20, Ground Vehicle Operations on Airports
- AC 150/5210-24, Airport Foreign Object Debris Management
- AC 150/5210-5, Painting, Marking, and Lighting, of Vehicles Used on Airport
- AC 150/5300-13, Airport Design
- AC 150/5340-1, Standards for Airport Markings
- AC 150/5340-18, Standards for Airport Sign Systems
- AC 150/5340-30, Design and Installation Details for Airport Visual Aids
- AC 150/5345-44, Specifications for Runway and Taxiway Signs
- AC 150/5345-46, Specifications for Runway and Taxiway Lighting Fixtures
- AC 150/5345-53, Airport Lighting Equipment Certification Program
- AC 150/5345-55, Specification for L-893
- Lighted Visual Aid to Indicate Temporary Runway Closure
- AC 150/5345-56, Specification for L-890
- Airport Lighting Control and Monitoring System (ALCMS)
- AC 150/5370-2, Operational Safety on Airports During Construction
- FAR Part 139: Regulations/Airport
- JO 7110.65, Air Traffic Control
- JO 7210.3, Facility Operations and Administration
- JO 6000.15, NAS Maintenance
- SOP: Standard Operating Procedure

- LOA: Letter of Agreement
- ASDE; ASDE-X: Airport Surface Detection Equipment
- ATIS: Automated Terminal Information System
- ASOS: Automated Surface Observing System
- Airfield Driver Training
- Access Control Training
- Pilot Intervention
- Controller Intervention
- ATC Scanning
- Airfield Operations Monitoring
- Operational/Supervision; Radio Frequency Monitoring
- NOTAM: Notice to Airmen
- AFD: Airport/Facility Directory
- AIM: Aeronautical Information Manual
- Daily Briefings/Notes
- CSPP: Construction Safety and Phasing Plan
- Automated CNDs: Airport Construction Notices
- Weekly PCMs: Weekly Project Coordination Meetings
- Airport Notices: HNL Provides by Email
- Weekly Contractor Meetings: Contractor Conducts Weekly Project Meetings
- Pilot Controller Forum (For GA Community): Quarterly
- Forum for Air Carrier/Cargo: Quarterly
- Airport Project Schedule Statewide Website: Monthly Updates are Provided.

The SRMP identified three (3) possible effects and determined that a runway incursion represents the worst credible potential outcome or harm of this hazard if it occurs in the defined system state. This hazard was analyzed by the SRMP and the results are documented in Section 7.

HNL-TWY-C-RECON: HZ-4 FOREIGN OBJECT DEBRIS "FOD"

All Phases of Construction

The SRMP determined that Foreign Object Debris (FOD) is a hazard. This hazard exists during all phases of construction. Events that result in this hazard or failure as documented in Column 3 (Causes) of the PHA worksheet include:

- Vehicles Driving on Haul Routes
- Extra Birds
- Construction Crews Not Tying Down Equipment
- Equipment Left in the Field
- Construction Work
- Keeping RSA/TSA Clear of Construction Barricades

The existing controls identified in Column 5 of the PHA worksheet represent control measures currently in place to manage this hazard and mitigate its effects. They are as follows:

- AC 150/5200-18, Airport Safety Self Inspection
- AC 150/5210-20, Ground Vehicle Operations on Airports
- AC 150/5210-24, Airport Foreign Object Debris Management
- AC 150/5210-5, Painting, Marking, and Lighting of Vehicles Used on Airport
- AC 150/5300-13, Airport Design
- AC 1501/5340-41, Standards for Airport Markings
- AC 150/5340-18, Standards for Airport Sign Systems
- AC 150/5340-30, Design and Installation Details for Airport Visual Aids
- AC 150/5345-44, Specification for Runway and Taxiway Signs
- AC 150/5345-46, Specifications for Runway and Taxiway Lighting Fixtures
- AC 150/5345-53, Airport Lighting Equipment Certification Program
- AC 150/5370-2, Operational Safety on Airports During Construction
- FAR Part 139 Regulations/Airport
- JO 7110.65, Air Traffic Control
- JO 7210.3, Facility Operations and Administration
- SOP: Standard Operating Procedure
- LOA: Letter of Agreement
- Airfield Driver Training
- Access Control Training
- Pilot Intervention
- Controller Intervention
- ATC Scanning
- Airfield Operations Monitoring
- Operational Supervision
- Radio Frequency Monitoring
- CSPP: Construction Safety and Phasing Plan
- Weekly PCMs: Weekly Project Coordination Meetings
- Airport Notices: HNL Provides by Email
- Weekly Contractor Meeting: Contractor Conducts Weekly Project Meetings

The SRMP identified five (5) possible effects and determined that aircraft damage represents the worst credible potential outcome or harm of this hazard if it occurs in the defined system state. This hazard was analyzed by the SRMP and the results are documented in Section 7.

HNL-TWY-C-RECON: HZ-5 JET BLAST

(Removed)

The SRMP initially determined jet bast as a hazard, however, through discussion, they agreed to remove this as a hazard as this condition is more appropriately documented as an Effect for Pilot Loss of Situational Awareness (LOSA) and Controller Loss of Situational Awareness (LOSA). Therefore, this was removed as a hazard in the PHA.

HNL-TWY-C-RECON: HZ-5

KEEPING OFZ CLEAR OF CONSTRUCTION BARRICADES

(Removed)

The SRMP initially determined that keeping the OFZ clear of construction barricades, as a hazard, however, through discussion, they agreed to remove this as a hazard as this condition is more appropriately documented as a Cause for Foreign Object Debris (FOD). Therefore, this was removed as a hazard in the PHA.

HNL-TWY-C-RECON: HZ-6

CONSTRUCTION FLOOD LIGHTING MIXED WITH NORMAL RAMP LIGHTING

(Removed)

The SRMP initially determined that construction flood lighting mixed with normal ramp lighting, as a hazard, however, through discussion, they agreed to remove this as a hazard as this condition is more appropriately documented as a Cause for Pilot Loss of Situational Awareness (LOSA) and Vehicle Loss of Situational Awareness (LOSA). Therefore, this was removed as a hazard in the PHA.

Section 7 – Phases 3 & 4: Hazard Analysis and Risks Assessed

To ensure a thorough examination of hazards, the SRMP's methodology for risk analysis was based on the Five-Step SRM process detailed in FAA Order 5200.11.

1. Describe the System
2. Identify Hazards
3. Analyze Risk
4. Assess Level of Risk
5. Mitigation Actions

Risk Analysis

The objective of this step is to determine the initial safety risk associated with the effects of each identified hazard. Safety risk is defined as the combination of the predicted severity and the likelihood of a hazards potential effects in the worst credible system state. This assessment also considers existing controls that are in place to help mitigate risk to an acceptable level.

The Effect is defined as the potential outcome or harm of the hazard if it occurs within the defined system state.

The Preliminary Hazard Assessment (PHA) worksheet was developed to systemically record the Hazards, Causes, System States, Existing Controls, Possible Effects, Severity and Likelihood Rationale, Initial Risk, Proposed Mitigation Measures for the hazard, who has the Responsibility to Implement the Mitigation(s), and the Predicted Residual risk with the additional mitigation measures being implemented. The completed PHA is found in Appendix B.

Risk Assessment

The objective of this step is to determine the acceptability of the safety risk level. This Risk Assessment is the process of combining the impacts of risk elements identified during risk analysis and comparing them against defined acceptability criteria. It may include consolidating risks into risk sets that can be jointly mitigated, combined, and used to support decision making. FAA Order 5200.11 defines risk as the composite of predicted severity and likelihood of the potential effect of a hazard in the worst credible system state.

Each hazard was evaluated using two factors. First, severity was determined in accordance with Table 6, followed by an assessment of likelihood using Table 7. The Safety Risk Management Panel (SRMP) identified the severity and likelihood of each hazard based on its worst credible effect, as described above. These materials were provided to panel members as part of the complete SRMP Panel Packet, included in Appendix C. Individual severity and likelihood ratings submitted by each panel member are documented in Appendix D.

Severity represents the potential consequence or impact of a hazard in terms of the degree of loss or harm. It reflects a prediction of how severe the outcome may be if the hazard occurs. While a single hazard may result in multiple potential outcomes, severity is evaluated based on the worst credible outcome. If the SRMP elects to evaluate multiple credible outcomes (Effect), those evaluations are documented accordingly.

Likelihood is the estimated probability or frequency, expressed quantitatively or qualitatively, of the outcome(s) associated with a hazard. It represents how often the outcome of a hazard is predicted to occur in the future.

The SRMP plotted the severity and likelihood for each hazard's worst credible outcome on the FAA Risk Matrix (Figure 26), shown below. The SRMP then reviewed where the hazards lie within the three risk categories - low, medium, or high - indicating the 'initial' risk level for each hazard.

Low Risk (green): Acceptable without restriction and requires FAA Local Airport Division signature. Low-risk hazards do not need active management but must be recorded in the SRM documentation.

Medium Risk (yellow): Acceptable within the ARP SMS and requires FAA Regional signatures. Medium-risk hazards may proceed, provided the risk is tracked and actively managed.

Since this SRMP was airport-led and not initiated by the FAA ADO, DOT-A's SRMP concurred that the project's medium-risk level is acceptable. The SRMP determined no additional safety mitigation measures were needed to supplement the current risk tracking and active management through weekly construction coordination meetings.

High Risk (red): Unacceptable within the ARP SMS without mitigation. If an initial hazard falls in the high-risk region, FAA Order 5200.11A requires mitigation. The proposal cannot proceed until the hazard is reduced to medium or low risk, and the ARP Safety Review Board recommends that ARP-1 approve the mitigations. Initial high-risk hazards with mitigations also requires FAA Headquarters signature. In all cases, the ARP SMS mandates tracking and management of high-risk hazards and their controls.

The Risk Matrix provides a visual depiction of safety risk and enables prioritization in hazard control. The Risk Matrix shown in Figure 26 (below) is referenced from FAA Order 8040.4B, Safety Risk Management Policy.

Severity / Likelihood	Minimal 5	Minor 4	Major 3	Hazardous 2	Catastrophic 1
Frequent A					
Probable B					
Remote C		HNL-TWY-C-RECON-HZ-1 HNL-TWY-C-RECON-HZ-2 HNL-TWY-C-RECON-HZ-3 HNL-TWY-C-RECON-HZ-4			
Extremely Remote D					
Extremely Improbable E					

Figure 26: Risk Matrix (Identical to Figure 1, Shown here for reference)

High Risk – Unacceptable
Medium Risk – Acceptable with Mitigation
Low Risk – Acceptable

The hazard analysis and risk assessments summarized below were developed using methodology outlined in FAA Order 5200.11B, Appendix C. Table 6 presents the severity definitions, and Table 7 presents the likelihood, which follow the hazard summaries.

HNL-TWY-C-RECON: HZ-1 Controller LOSA

Effect: Runway incursion

The SRMP analyzed and assessed this hazard by discussing the identified causes that could contribute to potential outcomes if this hazard occurs in the defined system state. The assessment was based on the worst credible effect, which was determined to be a runway incursion.

Using the severity and likelihood definitions established in FAA Order 5200.11, Appendix C, the Safety Risk Management Panel (SRMP) assigned a severity rating of 3 – Major, based on the airport-related effects listed below:

- Major damage to aircraft and/or minor injury to passenger(s)/workers(s); or
- Major unplanned disruption to airport operations; or
- Serious incident; or
- Deduction on the airport's ability to deal with adverse conditions

In accordance with FAA Order 5200.11 likelihood definitions, the SRMP assigned a likelihood rating of C – Remote, defined as an event expected to occur about once every year or 2.5 million departures, whichever occurs sooner.

Based on these determinations, the hazard received an initial risk rating of 3C – Medium (Yellow).

The SRMP determined that existing controls and stakeholder notifications are sufficient, and no additional mitigation or further evaluation is required.

HNL-TWY-C-RECON-HZ-2 Pilot LOSA

Effect: Runway incursion

The SRMP analyzed and assessed this hazard by discussing the identified causes that could contribute to potential outcomes if this hazard occurs in the defined system state. The assessment considered the worst credible effect, which was determined to be a runway incursion.

Using the severity and likelihood definitions established in FAA Order 5200.11, Appendix C, the Safety Risk Management Panel (SRMP) assigned a severity rating of 3 – Major, based on the airport-related effects listed below:

- Major damage to aircraft and/or minor injury to passenger(s)/workers(s); or
- Major unplanned disruption to airport operations; or
- Serious incident; or
- Deduction on the airport's ability to deal with adverse conditions

In accordance with FAA Order 5200.11 likelihood definitions, the SRMP assigned a likelihood rating of C – Remote, defined as an event expected to occur about once every year or 2.5 million departures, whichever occurs sooner.

Based on these determinations, the hazard received an initial risk rating of 3C – Medium (Yellow).

The SRMP determined that existing controls and stakeholder notifications are sufficient, and no additional mitigation or further evaluation is required.

HNL-TWY-C-RECON-HZ-3 Vehicle LOSA

Effect: Runway incursion

The SRMP analyzed and assessed this hazard by discussing the identified causes that could contribute to potential outcomes if this hazard occurs in the defined system state. The assessment considered the worst credible effect, which was determined to be a runway incursion.

Using the severity and likelihood definitions established in FAA Order 5200.11, Appendix C, the Safety Risk Management Panel (SRMP) assigned a severity rating of 3 – Major, based on the airport-related effects listed below:

- Major damage to aircraft and/or minor injury to passenger(s)/workers(s); or
- Major unplanned disruption to airport operations; or
- Serious incident; or
- Deduction on the airport's ability to deal with adverse conditions

In accordance with FAA Order 5200.11 likelihood definitions, the SRMP assigned a likelihood rating of C – Remote, defined as an event expected to occur about once every year or 2.5 million departures, whichever occurs sooner.

Based on these determinations, the hazard received an initial risk rating of 3C – Medium (Yellow).

The SRMP determined that existing controls and stakeholder notifications are sufficient, and no additional mitigation or further evaluation is required.

HNL-TWY-C-RECON-HZ-4 Foreign Object Debris "FOD"

Effect: Aircraft Damage

The SRMP analyzed and assessed this hazard by discussing the identified causes that could contribute to potential outcomes if this hazard occurs in the defined system state. The assessment considered the worst credible effect, which was determined to be aircraft damage.

Using the severity and likelihood definitions established in FAA Order 5200.11, Appendix C, the Safety Risk Management Panel (SRMP) assigned a severity rating of 3 – Major, based on the airport-related effects listed below:

- Major damage to aircraft and/or minor injury to passenger(s)/workers(s); or
- Major unplanned disruption to airport operations; or
- Serious incident; or
- Deduction on the airport's ability to deal with adverse conditions

In accordance with FAA Order 5200.11 likelihood definitions, the SRMP assigned a likelihood rating of C – Remote, defined as an event expected to occur about once every year or 2.5 million departures, whichever occurs sooner.

Based on these determinations, the hazard received an initial risk rating of 3C – Medium (Yellow).

The SRMP determined that existing controls and stakeholder notifications are sufficient, and no additional mitigation or further evaluation is required.

Table 6: Severity Definitions

Hazard Severity Classification

Effect On:	Minimal 5	Minor 4	Major 3	Hazardous 2	Catastrophic 1
Airports	No damage to aircraft but minimal injury or discomfort of little consequence to passenger(s) or worker(s)	-Minimal damage to aircraft, or -Minor injury to passengers, or -Minimal unplanned airport operations limitations (i.e. taxiway closure), or -Minor incident involving the use of airport emergency procedures	-Major damage to aircraft and/or minor injury to passenger(s)/worker(s), or -Major unplanned disruption to airport operations, or -Serious incident, or -Deduction on the airport's ability to deal with adverse conditions	-Severe damage to aircraft and/or serious injury to passenger(s)/worker(s), or -Complete unplanned airport closure, or -Major unplanned operations limitations (i.e., runway closure), or -Major airport damage to equipment and facilities	-Complete loss of aircraft and/or facilities or fatal injury in passenger(s)/worker(s), or -Complete unplanned airport closure and destruction of critical facilities; or -Airport facilities and equipment destroyed
ATC Services	A minimal reduction in ATC services CAT D runway incursion[1] Proximity Event, Operational Deviation, or measure of compliance greater than or equal to 66 percent[2]	Low Risk Analysis Event severity,[3] two or fewer indicators fail CAT C runway incursion	Medium Risk Analysis Event severity, three indicators fail CAT B runway incursion	High Risk Analysis Event severity, four indicators fail CAT A runway incursion	Ground collision[5] Mid-air collision Controlled flight into terrain or obstacles
Flying Public	Minimal injury or discomfort to persons on board	Physical discomfort to passenger(s) (e.g., extreme braking action, clear air turbulence causing unexpected movement of aircraft resulting in injuries to one or two passengers out of their seats) Minor injury to less than or equal to 10 percent of person on board[6]	Physical distress to passengers (e.g., abrupt evasive action, severe turbulence causing unexpected aircraft movements) Minor injury to greater than 10 percent of persons on board	Serious injury to persons onboard[7]	Fatal injuries to persons onboard[8]
Flight Crew	Pilot is aware of traffic (identified by Traffic Collision Avoidance System traffic alert, issued by ATC, or observed by flight crew) in close enough proximity to require focused attention, but no action is required Pilot deviation[9] where loss of airborne separation falls within the same parameters of a Proximity Event or measure of compliance greater than or equal to 66 percent Circumstances requiring a flight crew to initiate a go-around	Pilot deviation where loss of airborne separation falls within the same parameters of a low Risk Analysis Event severity Reduction of functional capability of aircraft, but overall safety not affected (e.g., normal procedures as per Airplane Flight Manuals) Circumstances requiring a flight crew to abort takeoff (rejected takeoff); however, the act of aborting takeoff does not degrade the aircraft performance capability Near mid-air collision encounters with separation greater than 500 feet[10]	Pilot deviation where loss of airborne separation falls within the same parameters of a medium Risk Analysis Event severity Reduction in safety margin or functional capability of the aircraft, requiring crew to follow abnormal procedures as per Airplane Flight Manuals Circumstances requiring a flight crew to reject landing (i.e., balked landing) at or near the runway threshold Circumstances requiring a flight crew to abort takeoff (i.e., rejected takeoff), the act of aborting takeoff degrades the aircraft performance capability Near mid-air collision encounters with separation less than 500 feet[10]	Pilot deviation where loss of airborne separation falls within the same parameters of a high Risk Analysis Event severity Reduction in safety margin and functional capability of the aircraft requiring crew to follow emergency procedures as per Airplane Flight Manuals Near mid-air collision encounters with separation less than 100 feet[10]	Ground collision Mid-air collision Controlled flight into terrain or obstacles Hull loss to manned aircraft Failure conditions that would prevent continued safe flight and landing

Effect On:	Minimal 5	Minor 4	Major 3	Hazardous 2	Catastrophic 1
Unmanned Aircraft Systems	Discomfort to those on the ground Loss of separation leading to a measure of compliance greater than or equal to 66 percent	Low Risk Analysis Event severity, two or fewer indicators fail Non-serious injury to three or fewer people on the ground	Medium Risk Analysis Event severity, three indicators fail Non-serious injury to more than three people on the ground A reduced ability of the crew to cope with adverse operating conditions to the extent that there would be a significant reduction in safety margins Manned aircraft making an evasive maneuver, but proximity from unmanned aircraft remains greater than 500 feet	High Risk Analysis Event severity, four indicators fail Incapacitation to unmanned aircraft system crew Proximity of less than 500 feet to a manned aircraft Serious injury to persons other than the unmanned aircraft System crew	A collision with a manned aircraft Fatality or fatal injury to persons other than the unmanned aircraft system crew

Table 7: Likelihood Definitions

	Airport Specific	Quantitative (ATC/Flight Procedures/Systems Engineering)	Domain-wide: NAS-wide, Terminal, or En route
A Frequent	Expected to occur more than once per week or every 2500 departures, whichever occurs sooner	(Probability) ≥ 1 per 1000	Equal to or more than once per week
B Probable	Expected to occur about once every month or 250,000 departures, whichever occurs sooner	1 per 1000 > (Probability) ≥ 1 per 100,000	Less than once per week and equal to more than once per three months
C Remote	Expected to occur about once every year or 2.5 million departures, whichever occurs sooner	1 per 100,000 > (Probability) ≥ 1 per 10,000,000	Less than once per three months and equal to more than once per three years
D Extremely Remote	Expected to occur once every 10-100 years or 25 million departures, whichever occurs sooner	1 per 10,000,000 > (Probability) ≥ 1 per 1,000,000,000	Less than once per three years and equal to or more than once per 30 years.
E Extremely Improbable	Expected to occur less than every 100 years	1 per 1,000,000,000 > (Probability) ≥ 1 per 10^{14}	Less than once per 30 years

Note: A cutoff point of 10^{-14} was established to define the boundaries of credible events for the purpose of calculating likelihood.

Section 8 – Phase 5: Treatment of Risk / Mitigation of Hazards

The SRMP agreed that the following Hazards and associated Effects, which were rated with Medium Initial Risk ratings (3C), have existing controls in place to effectively manage the risks and no additional mitigation measures were required.

- **HNL-TWY-C-RECON: HZ-1, Controller LOSA**
- **HNL-TWY-C-RECON: HZ-2, Pilot LOSA**
- **HNL-TWY-C-RECON: HZ-3, Vehicle LOSA**
- **HNL-TWY-C-RECON: HZ-4, Foreign Object Debris "FOD"**

During the SRMP PHA process, there were instances in which individual panel members assigned severity and/or likelihood ratings that differed from the majority consensus. These differences are documented in Table 8 and Appendix D, Dissenting Opinions. Panel members with the indicated yellow highlights under each Hazard ID, were offered the opportunity to submit written dissenting opinions in accordance with the FAA Office of Airports Safety Management System (SMS) Implementation Guidance and Desk Reference, Section 5.3.e.2, SRMD documentation. However, no written dissenting opinions were submitted.

Table 8: Initial Risk Dissenting Opinion Summary

	HNL-TWY-C-RECON: HZ-1 Controller LOSA		HNL-TWY-C-RECON: HZ-2 Pilot LOSA		HNL-TWY-C-RECON: HZ-3 Vehicle LOSA	
Panel Member	Severity	Likelihood	Severity	Likelihood	Severity	Likelihood
Deborah Saito	3	C	3	C	3	B
Mark AhYo	3	C	3	C	3	C
Kandyce Watanabe	4	D	4	C	4	C
Sylvan Drakes	3	C	3	C	3	C
Kristyn Nakasone	3	B	3	B	3	B
Perfecto Delmendo	3	C	3	C	4	C
Paul Amen	3	D	2	D	-	-
George Hodgson	3	D	3	D	3	C
Majority Rating	**3**	**C**	**3**	**C**	**3**	**C**
	3C - MEDIUM		**3C - MEDIUM**		**3C - MEDIUM**	

	HNL-TWY-C-RECON: HZ-4 Foreign Object Debris "FOD"	
Panel Member	Severity	Likelihood
Deborah Saito	3	C
Mark AhYo	3	B
Kandyce Watanabe	4	C
Sylvan Drakes	3	C
Kristyn Nakasone	3	C
Perfecto Delmendo	2	D
Paul Amen	-	-
George Hodgson	3	C
Majority Rating	**3**	**C**
	3C - MEDIUM	

Section 9 – Tracking and Monitoring Hazards

In accordance with the ARP SMS Desk Reference, hazards rated as low-risk hazards (green) are acceptable without active management but must be recorded in the SRMD. Hazards rated as medium risk are acceptable within the ARP SMS, provided the proposals proceeds with appropriate tracking and active management of the associated risks.

These hazards documented within this SRMD, will be monitored by DOT-A as they progress through the design and construction SRA phases and addressed as necessary.

To support ongoing risk monitoring, the SRMP established safety performance targets to identify conditions that may trigger reconvening the panel. These targets include, but are not limited to, the definitions provided below. The SRMP will consider reconvening if a single incident occurs that falls within the 3-Major severity category at any point during the HNL TWY C Reconstruction project. The definitions below are from FAA Order 5200.11, Appendix C, Hazard Severity Classification table, Major-3 column and are as follows:

- ATC Services
  - Category B runway incursion.

- Flight Crew
  - Pilot deviation where loss of airborne separations falls within the same parameters of a medium Risk Analysis Event severity
  - Reduction in safety margin or functional capability of the aircraft, requiring crew to follow abnormal procedures as per Airplane Flight Manuals
  - Circumstances required a flight crew to reject landing (i.e. balked landing) at or near the runway threshold
  - Circumstances requiring a flight crew to abort takeoff (i.e. rejected takeoff); the act of aborting takeoff degrades the aircraft performance capability
  - Near mid-air collision encounters with separation less than 500 feet

- Flying Public
  - Physical distress to passenger(s) (e.g., abrupt evasive action, severe turbulence causing unexpected aircraft movements).
  - Minor injury to greater than 10 percent of persons on board.

- Airport
  - Major damage to aircraft
  - Minor injury to passenger(s)/worker(s)
  - Major unplanned disruption to airport operations.
  - Serious incident.
  - Deduction on the airport's ability to deal with adverse conditions.

DANIEL K. INOUYE INTERNATIONAL AIRPORT (HNL)

TAXIWAY C RECONSTRUCTION

HAWAIʻI DEPARTMENT OF TRANSPORTATION AIRPORTS (HDOT-A)

CONSTRUCTION SAFETY AND PHASING PLAN (CSPP)

February 12, 2026
Revision: No. 0

Prepared by:

Orion Engineers & Associates

Table of Contents

SECTION 1 INTRODUCTION 1

1.1 Safety Plan Compliance Document 1
1.2 Airport Contact Numbers 2

SECTION 2 COORDINATION 5

2.1 Planning Meetings 5
2.2 Coordination and Progress Meetings 5
2.3 Safety Meetings and Training 6
2.4 Scope or Schedule Changes 6
2.5 Additional Coordination 7

SECTION 3 PHASING 8

3.1 General Description – Scope of Work 8
3.2 Phase Elements 8
3.3 Construction Safety Drawings (CSD's) 9

SECTION 4 AREAS AND OPERATIONS AFFECTED BY CONSTRUCTION ACTIVITIES 10

4.1 General Description 10
4.2 Identification of Affected Areas 11
4.3 Mitigations of Effects 12
4.3.1 Off-Peak Work Hours 12
4.3.2 Temporary Runway Markings 12
4.3.3 Temporary Taxiway and Taxilane Markings 12
4.3.4 Temporary Lighting 12
4.3.5 Airfield Signs 12

SECTION 5 PROTECTION OF NAVAIDS 13

5.1 Summary 13
5.2 NAVAID facilities placed out of service: 13
5.3 Shutdown Coordination 13
5.4 Protection of FAA NAVAIDs 13

SECTION 6 AIRFIELD ACCESS 14

6.1 Site Security 14
6.2 Contractor Staging Area and Soil Stockpiling and Laydown Areas 14
6.3 Haul Routes 15
6.4 Requirements and Regulations Relating to the Operation of Motor Vehicles 15
6.4.1 Operation of Motor Vehicles within the AOA 16
6.4.2 Parking 17
6.4.3 Vehicle Identification Including Lighting and Markings 17
6.4.4 Load Limits 18
6.4.5 Delivery and Parking of Construction Equipment and Vehicles 18
6.4.6 Requirements and Regulations Relating to Vehicle Drivers 18
6.4.7 Vehicle Driver Training 18
6.4.8 Two-Way Radio Communications 19
6.4.9 Airport Security 20

SECTION 7 WILDLIFE MANAGEMENT 21

7.1 Summary 21
7.2 Trash 21
7.3 Disruption of Existing Wildlife Habitat 21

SECTION 8 FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT 22

8.1 Summary 22

SECTION 9 HAZARDOUS MATERIAL (HAZMAT) MANAGEMENT 23

9.1 Summary 23

SECTION 10 NOTIFICATION OF CONSTRUCTION ACTIVITIES 24

10.1 NOTAM Issuance 24
10.2 ARFF Coordination 24
10.3 HDOT-A Coordination 24
10.4 FAA Coordination 24
10.4.1 Marking of Equipment and Restrictions on Cranes 24

SECTION 11 INSPECTION REQUIREMENTS 26

11.1 Summary 26
11.2 Daily (or More Frequent) Inspections 26
11.3 Final Inspections 26

SECTION 12 UNDERGROUND UTILITIES 27

12.1 Summary 27
12.2 Procedures for Locating and Protecting Existing Underground Utilities/Facilities in Excavation Area 27
12.3 Underground Service Alert 28

SECTION 13 PENALTIES 29

13.1 Summary 29

SECTION 14 SPECIAL CONDITIONS 30

14.1 Summary 30

SECTION 15 RUNWAY AND TAXIWAY VISUAL AIDS – MARKING, LIGHTING, AND SIGNS 31

15.1 Marking Removal 31
15.2 AOA Closures (Runways, Taxiways, Ramps) 31
15.3 Temporary Lighting 31
15.4 Permanent Signage 31

SECTION 16 MARKING AND SIGNS FOR ACCESS ROUTES 32

16.1 Summary 32

SECTION 17 HAZARD MARKING AND LIGHTING 33

17.1 Summary 33
17.2 Equipment 33

SECTION 18 PROTECTION OF RUNWAY AND TAXIWAY SAFETY AREAS AND SURFACES ... 35

18.1 Summary 35
18.2 Runway Safety Area (RSA) 35
18.3 Runway Object Free Area (ROFA) 35
18.4 Taxiway Safety Area (TSA) 35
18.5 Taxiway Object Free Area (TOFA) 35
18.6 Obstacle Free Zone (OFZ) 35
18.7 Runway Approach/Departure Surfaces 35
18.8 Procedures and Equipment to Delineate Closed Construction Areas from Airport Operational Areas 36

SECTION 19 OTHER LIMITATIONS ON CONSTRUCTION 37

19.1 Additional Restrictions 37
19.2 Police Coordination 38
19.3 HNL Airport Operations 38

FIGURES

Figure 1: Emergency Communication Flow Chart 3
Figure 2: Non-Emergency Communication Flow Chart 4

TABLE

Table 1: HNL Airfield Operational Impact 10

APPENDIX A - Construction Phasing Plans

Construction Safety and Phasing Plan at Daniel K. Inouye International Airport
Taxiway C Reconstruction
State Project No. AO1021-30

SECTION 1 INTRODUCTION

Daniel K. Inouye International Airport (HNL) is a large hub airport located on the Island of Oahu. HNL is owned and operated by the State of Hawaii, Department of Transportation-Airports (HDOT-A). HNL has a joint user agreement with Hickam Air Force Base. The Honolulu Air Traffic Control Tower (ATCT) operates 24 hours a day, 7 days a week in a Class B airspace.

The HDOT-A is currently out to bid on a project to reconstruct Taxiway C and portions of the South Ramp hardstands. The areas are shown in Appendix A. The Project will include pavement demolition, asphalt paving, Portland Cement Concrete (PCC) paving, taxiway edge lighting, storm drain and waterline improvements, and marking application. The taxiway reconstruction will provide a smooth and durable surface that is free of foreign object debris (FOD) and designed to FAA AC 5320-6 standards (current edition).

HNL is a complex operating facility that is governed by a very strict set of operating rules to ensure the safety of the traveling public, the operators of the various airlines, and those individuals who function as support personnel to the facility.

The following are general safety objectives that shall be achieved to maximize safety and to minimize time and economic loss to the aviation community, and others directly or indirectly affected by the project. The Contractor shall be responsible for controlling his/her operations with the requirements of this section as listed below:

- Maximize safety of aircraft operations
- Keep the airport operational for all users at all times
- Prevent any delays or conflicts to aircraft operations
- Prevent any delays or conflicts to other on-going construction operations
- Safely complete the site investigation

1.1 Safety Plan Compliance Document

The Contractor shall submit a Safety Plan Compliance Document (SPCD) for approval prior to beginning construction activities. The SPCD shall conform to requirements found in FAA AC 150/5370-2 (current edition) and the project specifications.

1.2 Airport Contact Numbers

Contractor:
TBD

Construction Manager:
TBD

Daniel K. Inouye International Airport (HNL) Contacts:

HNL Airport Emergency (in Lieu of 9-1-1)		(808) 836-6670
HNL Airport Manager		(808) 836-6533
HNL Airport Duty Manager (Code 22)		(808) 836-6434
HNL Airport Ramp Control		(808) 836-6603
		(808) 836-6515
HNL Airport Rescue and Fire Fighting	(ARFF #1)	(808) 836-6607
	(ARFF #2)	(808) 836-6608
HNL Airport Pass and ID Office		(808) 836-6427
HNL Airport Security Manager		(808) 834-6063
HNL Airport Sheriff Detail		(808) 836-6606
HNL Airport Maintenance		(808) 836-6486
		(808) 833-6510
HNL Airport Communications Switchboard		(808) 836-6411
		(808) 836-6600
HNL Airport Airside Operations Manager		(808) 836-6428
Securitas USA (HNL Security)		(808) 670-3550

HDOT/FAA-HCF Contacts:

John West	HDOTA – Project Manager	(808) 838-8867
FAA Honolulu Control Facility - ATCT (24hr)		(808) 840-6201
Frequency 121.8 (Ramp)		
Frequency 121.9 (Ground) | Frequency 118.1 (Tower)		(808) 840-6221
FAA Honolulu Control Facility - SOC (24hr)		(808) 840-6511

Other

Hawaii One Call Center	(866) 423-7287
Hawaii Poison Center	(800) 222-1222

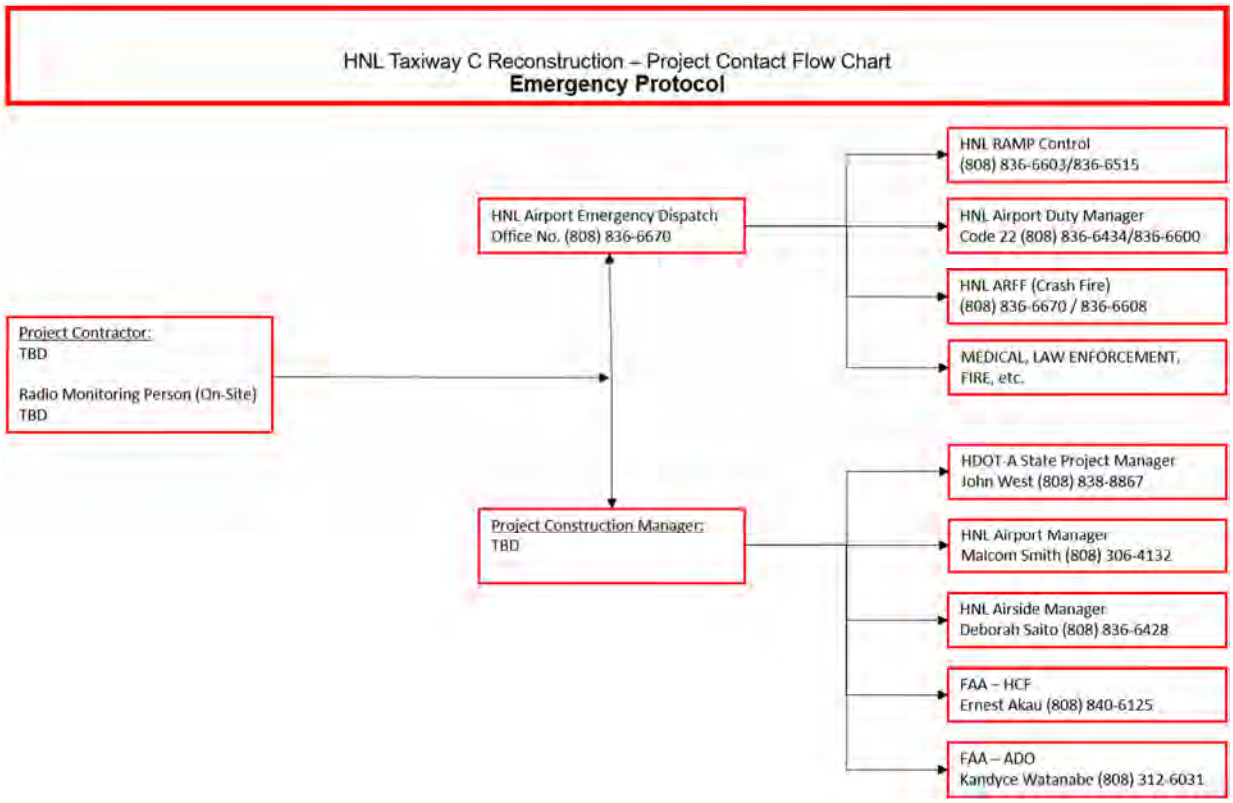


Figure 1: Emergency Communication Flow Chart

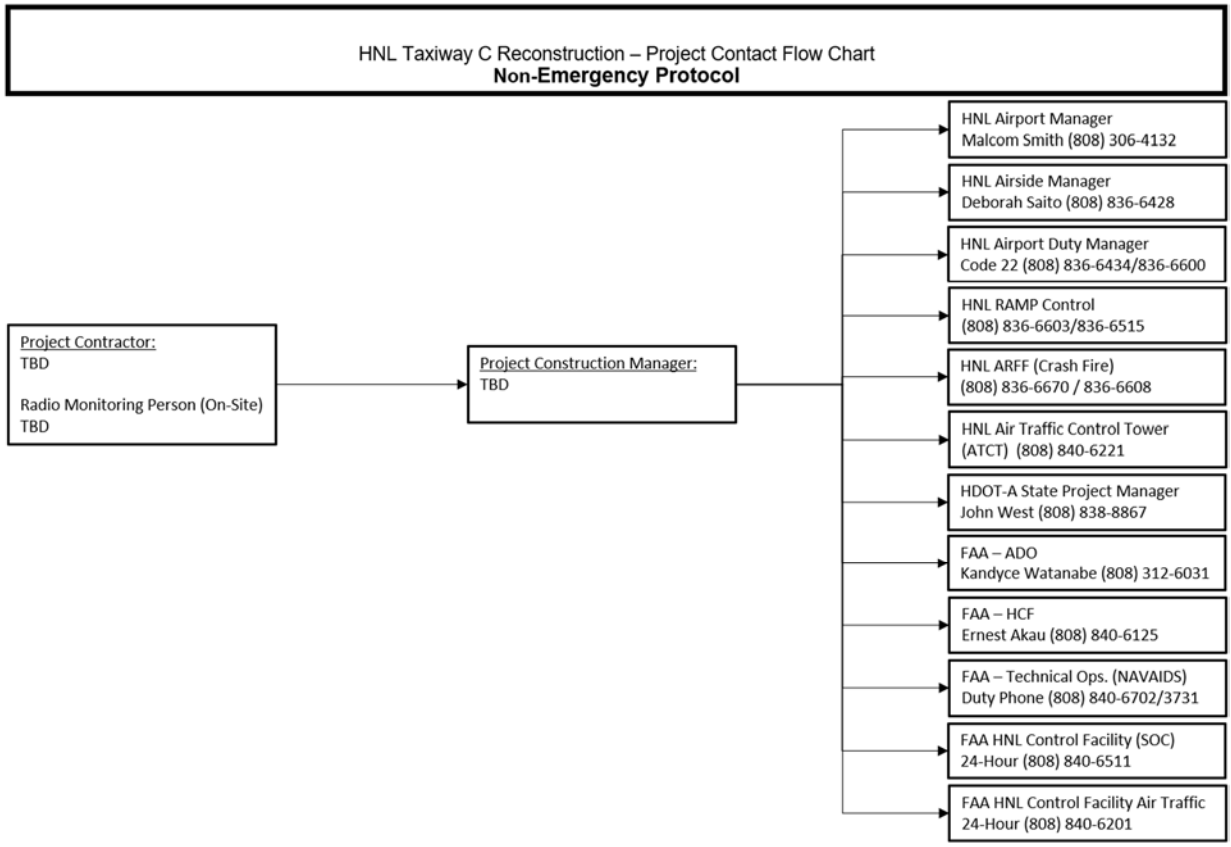


Figure 2: Non-Emergency Communication Flow Chart

End of Section 1

SECTION 2 COORDINATION

2.1 Planning Meetings

Prior to the start of the project and/or each major phase of the work, the Contractor shall schedule meetings with the Construction Manager (CM); the HDOT-A; the Honolulu Airport Management (HNL); the Honolulu Airport Operations Control (RAMP); the Federal Aviation Administration (FAA); the Honolulu Airport Rescue and Fire Fighting (ARFF); and the Honolulu Air Traffic Control Tower (ATCT) regarding the scheduled construction activities, and other airport stakeholders to discuss project planning. Meetings should be scheduled in advance and coordinated to give adequate time and participation of all parties. The topics of discussion shall include preferred access point; vehicle routes; other on-going construction projects within the vicinity; additional notifications/communications requirements prior to entering each area; setting up work area barricades, lighting, backup equipment, and materials; emergency notification procedures and emergency contacts; temporary stockpile locations; procedures that must be followed should the Contractor be unable to open a phase at the end of scheduled night time work hours; and other topics as appropriate.

2.2 Coordination and Progress Meetings

Progress meetings will be coordinated with HDOT-A Project Manager to discuss the progress of the project as a whole. The Contractor must be prepared to discuss in detail their work, schedule, requested closures, and effect on operations for the upcoming three weeks. It may be necessary for the Contractor to modify their work and schedule to accommodate other projects or special operational needs at the airport. During runway or taxiway closures, Airport Management may require simultaneous work operations by multiple Contractors or Agencies to minimize the effect on airport operations.

Coordination of airfield activities is an important component of a safe operating environment. Progress meetings will be coordinated with the HDOT-A Project Manager to discuss the progress of the project as a whole. During the project the following coordination meetings will be held to discuss airfield activities:

- Pre-construction meeting
- Weekly Contractor progress meetings
- Pre-activity meeting and contingency planning meetings
- Daily coordination will take place between all involved parties
- The Contractor and Subcontractors may be required to attend a daily airfield safety coordination meeting as determined by the RPR.

During construction activities, the Contractor's representative shall attend all weekly Project Coordination Meetings organized by HDOT-A Oahu District. During these meetings, the proposed construction work and closures shall be coordinated to minimize the construction impact to HNL operations. At each weekly meeting, the Contractor shall present an updated three-week work schedule with the proposed phasing/barricade plan. The three-week schedule shall include the construction activity for each day and the phasing/barricade plan (working hours, required runway closures, required taxiway closures, aircraft operating area (AOA) hauling route, proposed alternate aircraft route, etc.). All parties involved with the weekly meeting (Contractor, HDOT-A, FAA, HNL-Ops, RAMP, ARFF, ATCT, HCF, Airline Representative, etc.) will be able to provide input and/or voice any concerns to the construction activity and/or proposed closures. The three-week schedule and phasing/barricade plan will be reviewed and approved on a weekly basis for activities planned for the following week. If any changes to the three-week schedule and/or phasing/barricade plan are required, the Contractor will update and resubmit the plan for approval.

If a closure is required in the movement and/or non-movement areas, the Contractor will provide a proposed alternate route for aircraft taxiing operations. Proposed language for Notices to Airmen (NOTAMs) and low-profile barricade plans shall identify the date, time and proposed closure area for construction work. The proposed closure plan and alternate aircraft travel route(s) shall be submitted for approval and/or comments one week prior to the scheduled closure. HDOT-A, HNL, FAA ADO, and FAA HCF must approve alternate routing for aircraft prior to scheduling any NOTAM(s) for this project. The Airport Duty Manager (Code 22) will be responsible for the issuance of any NOTAM(s) for the project.

Prior to starting any work shift (day or night work), a daily meeting will be held by the field work crew. The meeting shall be led by the Superintendent, Foreman, and/or On-Site Supervisor, and shall include discussion of the work to be performed during that shift, any potential safety issues, the approved barricade plan, closed AOA sections, AOA hauling routes, and construction goals. A weekly safety meeting will be held at the start of each week. As required by occupational safety and health administration (OSHA), the safety meetings shall be documented and recorded. As part of the weekly safety meeting, the construction crew will take time to share any experiences, safety issues experienced the previous week (lessons learned), related to the safety topic of the week.

2.3 Safety Meetings and Training

A safety meeting prior to the start of construction activities is mandatory. The Contractor shall schedule the meeting so that personnel from HDOT-A, Airport Management, and FAA are able to attend. The Contractor shall schedule the pre-construction safety meeting prior to the start of construction activities within 7 days of the first work shift. The Contractor, HNL Airport Management, and all sub-Contractors active on the site must be represented at the meeting. This meeting is vital to identify any activity which may impact airport operations and to ensure the required Notice to Airmen (NOTAM) has been issued. The Contractor, sub-contractors, and all other personnel involved on site during construction activities, shall review this CSPP prior to the meeting. The Contractor shall conduct the meeting and provide for keeping the meeting minutes. A copy of the meeting minutes will be provided to HNL. The purpose of the meeting is to review any safety issues that have been identified, arrange for any changes that require coordination with airport operations, discuss changes in procedures and personnel, and resolve other problems that may develop.

The Contractor shall schedule additional construction safety meetings prior to the start of each new phase of work and periodically throughout the project. Although attendance is not mandatory, the Contractor is encouraged to invite HDOT-A, Airport Management, and FAA to these additional meetings.

All Contractor personnel working within the AOA, Ramp and/or Movement Area shall receive proper training and obtain a valid AOA badge, Ramp license and/or Movement license from HNL operations, as described in Section 6, prior to the commencement of work. The training and licensing will cover (but is not limited to) the following:

- Aircraft jet blast
- Aircraft versus vehicles (aircraft right-of-way)
- Airfield layout including signs, marking, and lighting
- Airfield driving rules within movement and non-movement areas
- Communicating with ATCT
- Maintaining airport security within the AOA
- Closed or prohibited areas
- FOD
- Wildlife management procedures

Any personnel without the required training, proper badging and/or licensing will be required to be accompanied by the Contractors' personnel with the required training and security escorting privileges.

Additionally, all contractor's flag personnel, as shown on the construction phasing plans, shall be required to receive training specific to managing construction vehicle traffic on the airfield within the designated haul routes.

2.4 Scope or Schedule Changes

Changes to the schedule will be coordinated with HDOT-A, HNL, FAA ADO, and FAA HCF at least one week in advance. It is possible that Contractors' field activity may be canceled for the following reasons:

- Inclement weather; work shall be canceled for the night if heavy consistent rain or wind conditions are predicted to occur at the 6:00 PM (HST) weather forecast prior to the night of field activity.

- Irregular airport operations or emergencies.

A Go/No-Go decision shall be made at a minimum of 2 hours before scheduled work closure. In the event of cancellation, work shall be rescheduled for the next available scheduled runway and/or taxiway closure date. The Contractor will inform all involved parties of work cancellation; otherwise it is generally assumed the weather will be satisfactory. Delays due to inclement weather or irregular airport operations will extend the schedule accordingly.

2.5 Additional Coordination

The Contractor shall conduct all operations in such a manner as to maintain a smooth, safe, and uninterrupted flow of aircraft operations and vehicular traffic around the airport. In addition, the Contractor will coordinate with RAMP to access the airfield; this also includes airfield driver training, airfield escorts, airfield ride-along(s), etc.

FAA Form 7460-1, Notice of Proposed Construction or Alteration, shall be filed with the FAA for this project and is required for any construction or alteration associated with any project at or near the airport. Additional FAA Form 7460-1, Notice of Proposed Construction or Alteration, shall be filed for any crane activity associated with construction.

Prior to excavation in the vicinity of existing underground facilities, the Contractor shall notify the State Project Manager and the respective authorities representing the owners and agencies responsible for the associated facilities, not less than three (3) working days and not more than five (5) working days, prior to excavation so that a representative of the owner(s) or agencies can be present if they so desire.
It is required to provide a list of utility companies and representatives whose facilities may be impacted by the project.

End of Section 2

SECTION 3 PHASING

3.1 General Description – Scope of Work

The project is composed of reconstructing airfield pavements, including Taxiway C, intersecting portions of Taxiway D, E, F, P and RT, and a small portion of the hardstand apron fronting cargo parking positions, all located within the AOA. A drawing showing the work areas is included in Appendix A – Construction Phasing Plans. The purpose of the work is to provide a smooth and durable surface that is free of FOD and designed to FAA AC 5320-6 standards (current edition).

3.2 Phase Elements

The Contractor shall perform each phase of the work within the periods of time and/or duration specified. The Contractor shall provide all labor, material, and equipment, including standby equipment necessary to complete work within the constraints and timeframe(s) specified for the individual phases and the overall project, and within the requirements of the contract documentation. The terms “work area”, “zone”, and “phase” may be used hereafter to describe either the period of time and/or the area in which certain work is to be done.

The Contract Time for completion of the work under this Contract shall be seven hundred and eighty-two (766) calendar days and will consist of the phases listed in Table 1.

All work will be performed during nighttime hours. Night work shall be restricted to the hours of 1600 to 0600. Work area lighting shall be provided to minimize shadows within the work area and at such a level that meets safety requirements while working at night and that plans can be read within the work area when not directly beneath a light.

Table 1 - Construction Phase Duration

Phase Name	Location	Work Hours	Phase Duration (Calendar Days)	Contract Days (Total)
Phase 0			90	90
Phase 1A	*Taxiway C and Runway 4R-22L*	*1600 to 0600*	*36*	*126*
Phase 1B	*Taxiway C*	*1600 to 0600*	*48*	*138*
Phase 2	*Taxiway C and Hardstands A-B*	*1600 to 0600*	*57*	*195*
Phase 2.1	*Hardstands A-B*	*N/A*	*21*	*216*
Phase 3	*Taxiway C and Taxilane 2*	*1600 to 0600*	*24*	*218*
Phase 4	*Taxiway C and Runway 8L-26R*	*1600 to 0600*	*53*	*272*
Phase 5	*Taxiway C and Hardstands B-C*	*1600 to 0600*	*49*	*321*
Phase 5.1	*Hardstands B-C*	*N/A*	*21*	*342*
Phase 6	*Taxiway C, Taxiway P, and Taxilane 3*	*1600 to 0600*	*39*	*360*
Phase 7	*Taxiway C and Hardstands D-E*	*1600 to 0600*	*61*	*421*
Phase 7.1	*Hardstands D-E*	*N/A*	*21*	*442*
Phase 8	*Taxiway C and Taxilane 4*	*1600 to 0600*	*45*	*466*
Phase 9	*Taxiway C and Hardstands G-H*	*1600 to 0600*	*36*	*502*

Table 1 - Construction Phase Duration				
Phase Name	Location	Work Hours	Phase Duration (Calendar Days)	Contract Days (Total)
Phase 10	*Taxiway C, Taxiway F, Taxilane 7, and Hardstands I-J*	*1600 to 0600*	*43*	*545*
Phase 11	*Taxiway C and Hardstands 188A-188B*	*1600 to 0600*	*27*	*572*
Phase 12	*Taxiway C, N. T-Hangar Taxilane, and Hardstand 188B-Hangar Taxilane,*	*1600 to 0600*	*27*	*599*
Phase 13	*Taxiway C and S. T-Hangar Taxilane*	*1600 to 0600*	*48*	*646*
Phase 14	*Taxiway C and Taxiway RT*	*1600 to 0600*	*60*	*706*
			60	*766*

3.3 Construction Safety Drawings (CSD's)

The limits of work for each work area for construction are clearly shown on Appendix A – Construction Phasing and Barricade Plans, indicating offset distances from adjacent active runways, taxilanes and/or taxiways. For each work area, these lines show the limit of the work area in which the Contractor may have workers, equipment, and materials, and in which he may conduct work for that area.

No construction activity is permissible within the designated runway safety area (RSA) or taxiway/taxilane object free area (TOFA) while the adjacent runway, taxiway, or taxilane is open to aircraft operations. Work within the RSA/TOFA shall only be accomplished during night shift operations as previously coordinated with the RPR and airport operations. Prior to reopening a runway/taxiway/taxilane closed for construction for any period, all equipment and materials shall be moved outside of the RSA/TOFA, all barricades and lighting shall be established per plan requirements, no stockpiles shall remain within RSA/TOFA, grade shall be covered in a manner to prevent dust, rock movement due to jet blast, or other objectionable movement of material onto the open runway or taxiway/taxilane, and the adjacent runway or taxiway pavement shall be cleaned of all construction debris and sweep. The RPR shall retain the right to shut down contractor operations in any work area if these conditions are not being met. Prior to re-opening of taxiways, the RPR and Contractor shall both inspect to determine if the above criteria is met at least 30 minutes prior to re-opening of the taxiway.

End of Section 3

SECTION 4 AREAS AND OPERATIONS AFFECTED BY CONSTRUCTION ACTIVITIES

4.1 General Description

A general description of the impacted locations and airfield areas affected by each phase of work is shown in Table 2 – HNL Airfield Operations Impact below.

Table 2: HNL Airfield Operational Impact

Phase Name	Location of Airfield Impacts	Airfield Restrictions / Closures
Phase 1A	*Taxiway C and Runway 4R-22L*	*Runway 4R-22L closed* *Taxiway C closed between Runway 4R-22L and Runway 8L-26R* *Taxiway C closed between Runway 4R-22L and Taxiway RT* *Taxiway K closed between Runway 8L-26R and Runway 4R-22L* *Taxiway P closed between Taxiway C and Runway 4R-22L*
Phase 1B	*Taxiway C, Taxilane 5, Taxilane 6, and Hardstands A-D*	*Taxiway C closed between Runway 8L-26R and Runway 4R-22L*
Phase 2	*Taxiway C, Taxiway E, Taxilane 5, Taxilane 6, and Hardstands A-D*	*Taxiway E closed between Runway 4R-22L and Taxiway C* *Taxiway C closed between Hardstand B and Taxilane 4* *Hardstands A and B closed* *See Hardstand Restrictions on Phase 2 Plan Sheet for restrictions on Hardstands C and D* *Taxilane 6 closed* *Taxilane 5 restricted to wingspan of 79 feet or less*
Phase 2.1	*Hardstands A and B*	*Hardstands A and B closed*
Phase 3	*Taxiway C, Taxilane 1, and Taxilane 2*	*Taxiway C closed between Taxilane 1 and 455 feet east of Taxilane 3* *Taxilane 1 restricted to wingspan of 118 feet or less* *Taxilane 2 restricted to wingspan of 79 feet or less*
Phase 4.1	*Runway 8L-26R*	*Runway 8L-26R closed* *Taxiway E closed between Taxiway B and Taxiway A* *Taxiway H closed between Runway 8L-26R and Taxiway A* *Runway 8L-26R RDR's out of service*
Phase 4.2	*Taxiway C and Runway 8L-26R*	*Runway 8L shortened to 8600 feet* *Taxiway C closed between Runway 4R-22L and 85.5 feet east of Taxilane 2* *Runway 8L-26R RDR's out of service* *Taxilane 1 closed*
Phase 4.3	*Runway 8L-26R*	*Runway 8L-26R closed* *Taxiway E closed between Taxiway B and Taxiway A* *Taxiway H closed between Runway 8L-26R and Taxiway A* *Runway 8L-26R RDR's out of service*
Phase 5	*Taxiway C and Hardstands A-E*	*Taxiway C closed between Hardstands A and D* *Hardstands B and C closed* *See Hardstand Restrictions on Phase 5 Plan Sheet for restrictions on Hardstands A, D, and E*
Phase 5.1	*Hardstands B-D*	*Hardstands B and C closed* *See Hardstand Restrictions on Phase 5.1 Plan Sheet for restrictions on Hardstand D*
Phase 6	*Taxiway C and*	*Taxiway C closed between Taxilane 2 and 430 feet rast of*

	Taxilane 3	*Taxilane 4* *Taxiway P closed between Taxiway C and Runway 4R-22L* *Taxilane 3 restricted to wingspan of 112 feet or less*
Phase 7	*Taxiway C, Taxiway D, and Hardstands B-H*	*Taxiway C closed between Hardstand C and Hardstand G* *Taxiway D closed between Runway 4R-22L and Taxiway C* *Hardstands D and E closed* *See Hardstand Restrictions on Phase 7 Plan Sheet for restrictions on Hardstands B, C, G, and H*
Phase 7.1	*Hardstands C-E*	*Hardstands D and E closed* *See Hardstand Restrictions on Phase 7 Plan Sheet for restrictions on Hardstand C*
Phase 8	*Taxiway C and Taxilane 4*	*Taxiway C closed between Taxilane 5 and Taxilane 3* *Taxilane 4 closed*
Phase 9	*Taxiway C and Hardstands G-J*	*Taxiway C restricted to maximum speed of 10 mph and wingspan of 73 feet or less between Hardstand I and Taxiway D* *Hardstands G and H closed* *See Hardstand Restrictions on Phase 9 Plan Sheet for restrictions on Hardstands E, I, and J*
Phase 10	*Taxiway C, Taxiway F, Taxilane 7 and Hardstands G, H, I, J, 188A, and 188B*	*Taxiway F closed between Runway 4R-22L and Taxiway C* *Taxiway C restricted to wingspan of 73 feet or less between Hardstand 188A and Hardstand H* *Taxilane 7 restricted to wingspan of 79 feet or less* *Hardstands I and J closed* *See Hardstand Restrictions on Phase 10 Plan Sheet for restrictions on Hardstands G, H, 188A, and 188B*
Phase 11	*Taxiway C and Hardstands I, J, 188A, and 188B*	*Taxiway C restricted to wingspan of 73 feet or less between N. T-Hangar Taxilane and Taxiway F* *Hardstands 188A and 188B closed* *See Hardstand Restrictions on Phase 11 Plan Sheet for restrictions on Hardstands I and J*
Phase 12	*Taxiway C, N. T-Hangar Taxilane and Hardstands J, 188A, and 188B*	*Taxiway C closed between S. T-Hangar Taxilane and N. T-Hangar Taxilane* *Taxiway C restricted to wingspan of 73 feet or less between N. T-Hangar TXL and Hardstand 188A* *See Hardstand Restrictions on Phase 12 Plan Sheet for restrictions on Hardstands 188A and J*
Phase 13	*Taxiway C, S. T-Hangar Taxilane and Hardstands 188A and 188B*	*Taxiway C closed between Taxiway RT and N. T-Hangar Taxilane* *South T-Hangar Taxilane closed between Taxiway C and 200 feet south of Taxiway C* *See Hardstand Restrictions on Phase 13 Plan Sheet for restrictions on Hardstands 188A and 188B*
Phase 14	*Taxiway C and Taxiway RT*	*Taxiway RT closed* *Taxiway C closed between Taxiway RT and S. T-Hangar Taxilane*

4.2 Identification of Affected Areas

The areas affected by the Project will be the full length of Taxiway C, connecting taxiways up to the TOFA, Hardstands A-E, and tie-in pavement for necessary grading. Specific areas for each phase and subphase are shown in the Construction Phasing and Barricade Plans.

4.3 Mitigations of Effects

To mitigate impacts to airport operations and air traffic control, the project will implement mitigation measures designed to deconflict construction vehicles and air traffic, and to increase aircraft safety. These mitigation measures were developed in coordination with FAA, ATC, HNL, and HDOT-A.

4.3.1 Off-Peak Work Hours

To mitigate potential conflicts between aircraft and construction operations, all work will be done during off-peak hours when air traffic is minimal. Off-peak hours as determined by HNL are from 1600 – 0600 daily.

4.3.2 Temporary Runway Markings

When Runway 8L-26R is operating in a shortened condition, the runway markings will be revised. The temporary threshold location will be identified with all FAA required threshold markings including a threshold bar, stripes, and runway designation numbers. Conflicting markings on the portion of the runway to be closed will be obliterated or otherwise removed to prevent ghosting. Blackout marking will only be allowed on the runway edge stripes.

4.3.3 Temporary Taxiway and Taxilane Markings

When Taxiway C or taxilanes are operating in a restricted condition, the taxiway markings will be revised. The taxiway centerline location will be identified with FAA required taxiway centerline markings. Conflicting markings on the portion of the taxiway/taxilane to be restricted will be blacked out.

4.3.4 Temporary Lighting

Runway edge lights will be modified when the Runway 8L-26R is shortened to 8,600-ft. Existing edge lights on closed portions of the runway will be deactivated. Existing edge lights in the last 2,000-ft of the closed runway will be removed and stored for reinstallation, and new amber/white runway edge lights will be installed.

4.3.5 Airfield Signs

Existing runway distance remaining signs on Runway 8L-26R will be covered. Existing taxiway direction signs will be covered or deactivated on closed taxiway connectors.

End of Section 4

SECTION 5 PROTECTION OF NAVAIDS

5.1 Summary

The following NAVAIDs will be impacted by this project:

1. Runway 4R Glide Slope,
2. Runway 4R Localizer,
3. Runway 8L Localizer, and
4. Runway 26L Localizer.

These NAVAIDs will not be impacted by the Project construction but will be out of service for portions of the work as indicated below. This will require reclassifying of the localizers and glide slope and associated flight check before being brought back into service. The Project will not have modifications to the grading within the localizer and glide slope critical areas.

5.2 NAVAID facilities placed out of service:

Table 3 lists the NAVAIDs that will be placed out of service.

Table 3. NAVAIDs Out of Service

Phase	NAVAIDs Out of Service
Phase 1A	4R ILS, 4R PAPI, 4R REIL, 4R MALSR, 22L PAPI, 22L REIL
Phase 4.1	8L ILS, 8L PAPI, 8L REIL, 8L MALSR, 26R PAPI, 26R REIL, 26L Localizer
Phase 4.3	8L ILS, 8L PAPI, 8L REIL, 8L MALSR, 26R PAPI, 26R REIL, 26L Localizer
Phase 14	4R Glide Slope

5.3 Shutdown Coordination

Electronic NAVAIDs (ILS, LOC/DME, VORTAC, Glide Slope, etc.) and their critical areas shall be protected at all times during the construction work. HDOT-A or the RPR will coordinate the NAVAIDs shutdown for all runway closures on this project. NAVAID shutdowns will also be coordinated with the Honolulu ATCT. FAA Technical Operations will be responsible for turning off/on all electronic NAVAID(s) for the runway closures.

The HNL Duty Manager will be responsible for publishing NOTAMS. Refer to Section 10 for NOTAMs issuance procedure.

5.4 Protection of FAA NAVAIDs

The Contractor will ensure that all runway lighting, taxiway lighting, and NAVAIDs are undamaged by the construction operations. Parking of equipment or vehicles near electronic NAVAIDs will not be permitted. When possible, the Contractor shall remain clear from the electronic NAVAIDs clear areas, thus minimizing interference with signals essential to air navigation. The contractor will provide barricades around the NAVAID systems to delineate the perimeter of the NAVAIDs to prevent NAVAID impacts.

End of Section 5

SECTION 6 AIRFIELD ACCESS

6.1 Site Security

The airport is operated in strict compliance with FAA and Honolulu Transportation Security Administration (Honolulu TSA) regulations, which prohibit unauthorized persons or vehicles in the AOA. Equipment and personnel will be restricted to the work area as defined in Appendix A – Construction Phasing and Barricade Plans. Any violation by the Contractor or sub-contractors will be subjected to penalties imposed by FAA and/or Honolulu TSA.

The Contractor shall conform to the FAA air carriers' Standard Security Program (SSP) (Title 49 CFR Part 1542, Airport Security) employee background check requirement as administered and enforced by the airport director. Public law 106-528 requires that all new employees comply with the "criminal history record checks" by being fingerprinted.

The Contractor shall obtain HNL-AOA security badges for employees expected to work within the AOA. Workers shall abide by requirements dictated by the badging agreement. These include, but are not limited to, regulations for entering/exiting, operating vehicles on the AOA, escorting procedures, and visibility requirements.

Access to the airport AOA will be through HNL's security access points at Gate #289, Gate #290A, Gate #291 and Gate #180 (Lagoon Drive)). Refer to Appendix A – Construction Phasing Plans, which clearly delineate the locations of the AOA access points, including preferred haul and travel routes.

6.2 Contractor Staging Area and Soil Stockpiling and Laydown Areas

Contractor Staging Area and Soil Stockpiling and Laydown Areas are as depicted on the contract drawings and shall be used to store all idle equipment, supplies, construction materials and excavated material. Storage shall not interfere with operations areas. When not in use during working hours, and at all other times, all material and equipment shall be stored at these areas as indicated on the drawings unless prior approval is provided by the RPR the HDOT-A.

- Storage of equipment and materials shall be in the Contractor's staging area as shown in Appendix A – Construction Phasing and Barricade Plans. The Contractor shall be solely responsible for the security of the staging area and shall be liable for any damage caused to such premises. The Contractor shall restore the staging and storage areas and adjacent areas to their original condition prior to final acceptance of the work.
- When required, Best Management Practices (BMP's) will be installed around the staging/stockpile areas as approved by HDOT-A.
- The stockpile and staging area(s) shall not be permitted within the RSA, obstacle free zone (OFZ), or within the runway or taxiway object free areas (OFA). Stockpiling materials and/or parking equipment near electronic NAVAIDs or within five (5) feet of the AOA fence line shall not be permitted.
- The Contractor staging area shall be used to store all idle equipment, supplies, and construction materials. Storage shall not interfere with operational areas.
- The Contractor shall not store materials or equipment in areas in which the equipment or material will affect the operation of FAA electronics equipment.
- Any approved storage of equipment shall not present a line of sight problem with FAA ATCT, flagman operations, vehicle traffic, or aircraft.
- Stockpiling of material will only be allowed at designated stockpiling areas. The Contractor shall be responsible for any blown debris or dust from stockpiles. The stockpile height is restricted to 20 feet and shall remain below the Title 14 FAR Part 77 imaginary surface contours. However, barricades with red flashing lights shall be installed where potential conflicts with aircraft or ground vehicular traffic exists.

6.3 Haul Routes

- Haul route for vehicles delivering materials to, or hauling material from, the work sites shall use the gates and haul routes as shown on the plans. Appendix A – Construction Phasing Plans, clearly delineates how the Contractor will access the airfield including preferred haul and travel routes.
- Roads designated as Contractor haul routes may be used by other airport vehicles, Contractors, and the general public (along public roads). The Contractor shall not interfere with other vehicle traffic and shall yield to emergency vehicles and aircraft along any of the airport or public roads. The Contractor shall provide all flagging, signing, lighting, etc. required by the city, airport, county, and state to provide all reasonable safety measures to protect all persons utilizing the AOA service road, the haul road, and all public roads used by the Contractor. The Contractor shall obey all vehicular weight and speed limits established as posted on airport property and public streets.
- All vehicles and equipment shall be kept within the work areas established for that work shift unless traveling to or from the site. Under no circumstances shall vehicles be parked or equipment stored outside of the work areas.
- Any equipment temporarily parked at a work site for use during the current work shift shall be properly marked, parked outside all safety areas, and within the barricaded work site. Equipment shall not exceed 15 feet in height and shall be left in the lowest possible profile position.
- All airfield markings along haul routes and areas adjacent to the work area shall be maintained by the Contractor to the satisfaction of HDOT-A for the duration of the project.
- Trucks delivering asphalt pavement or concrete shall wash out chutes, beds, mixers, etc. only at locations previously approved by HDOT-A.
- Locations of access roads are approximate. Exact locations shall be coordinated with HDOT-A to avoid surface utilities, navigational equipment, TOFAs, RSA, etc. Access roads must be constructed and operational before any other work can begin. All vehicles and equipment must access the work area along designated access roads.
- Contractor's vehicles shall not deviate from approved haul routes specified on the plans or as directed by HDOT-A. Crossover between construction sites is prohibited. To move from one construction site to another, a vehicle must exit the AOA via the approved haul route and access point and re-enter through the approved area. If vehicles are required to travel over any portion of that area, they shall be accompanied by an approved radio-equipped escort vehicle.
- Contractor shall monitor and control FOD on the haul route at all times.
- When driving from dirt areas to paved areas, the Contractor shall implement FOD check- points for vehicle operators to check and remove FOD on the tires to prevent tracking of FOD to aircraft operational areas.

6.4 Requirements and Regulations Relating to the Operation of Motor Vehicles

During the duration of the work, the Contractor shall recognize and abide by all rules, regulations, and controls, as modified by federal regulations.

In addition to the federal regulations, HDOT-A is empowered to issue such other instructions as may be deemed necessary for the safety and well-being of airport users or otherwise in the best interest of the public.

Vehicles entering the AOA must comply with FAA AC 150/5210-5, Painting, Marking, and Lighting of Vehicles Used on an Airport, (current edition). Contractor vehicles and equipment, except those under escort, shall be marked with the company name or logo on both sides in no less than 4-inch high letters of a contrasting color. Markings may be painted on the vehicle, or magnetic signs may be used. Construction vehicles under escort are the responsibility of the properly equipped lead vehicle and are required to have a flag or beacon.

All Contractor vehicles and equipment operating in the AOA must display orange and white checkered flags or flashing yellow beacons during daytime use and flashing yellow beacons during nighttime use. The flag shall be on a staff attached to the vehicle and shall be at least a 3-foot square having a checkered pattern of International Orange and White squares at least one (1) foot on each side. Flags and beacons must be mounted on the vehicle where they are visible from any direction.

Each Contractor, including each Contractor/Subcontractor employee, who operates a ground vehicle on any portion of the AOA at HNLmust be familiar with and comply with:

- HNL Airport's AOA vehicle rules and regulations
- HNL Airport's procedures for the operation of ground vehicles
- The consequences of noncompliance with HNL Airport's rules and regulation and/or procedures for the operation of ground vehicles as shown on plans

6.4.1 Operation of Motor Vehicles within the AOA

Motor vehicle operations within the vicinity and on the airport premises shall be governed by the provisions of the Hawai'i state motor vehicle codes and traffic direction procedures and signs and signals for turns. Lights and safe-driving precaution shall be in conformity therewith. In addition, motor vehicles shall conform to all special regulations prescribed by the airport.

Traffic on perimeter roads, enplaning and deplaning areas (ramp areas), public thoroughfares, and parking areas of the airport is limited to those vehicles properly licensed to operate on public streets and highways or as approved by HNL management and RAMP.

Every person operating motorized equipment of any character on any area shall operate the same in a careful and prudent manner and at a speed posted or fixed by this section or the general provisions and at no time greater than is reasonable and proper under the conditions existing at the point of operating, taking into account weather, traffic and road conditions, view and obstructions, and shall be consistent with all conditions so as not to endanger the life, limb or property, or the rights of others entitled to the use thereof.

The Contractor shall be aware that operations of aircraft in an adjacent area will result in jet blast occurring in the work area. Contractor vehicles, equipment, and supplies must remain inside the work area established for the work shift unless in transit to or from the site. All vehicles and equipment must access the work area along designated access roads/haul routes.

All motor vehicles that enter the AOA shall possess exhaust systems that are protected with screens, mufflers, or other devices adequate to prevent the escape of sparks or the propagation of flame.

All vehicles within the AOA shall be equipped with reflectors or lights on both front and rear ends and on the sides.

All vehicles and equipment used on the AOA must display an orange and white checkered flag or a flashing yellow beacon during daytime work, and a yellow flashing beacon during nighttime work.

No person shall operate any motor vehicle or motorized equipment in the AOA of the airport unless such motor vehicle or motorized equipment is in a safe and mechanically reliable condition for such operation.

Any person operating equipment within the AOA shall, in addition to this section, abide by all existing FAA and other governmental rules and regulations and shall at all times comply with any lawful signals or direction of airport employees. All traffic signs, lights, and signals shall be obeyed.

No person shall operate any motor vehicle or motorized equipment on the aircraft movement area or non-movement area(s) of the airport at a speed in excess of the posted (established) speed limit of 15 mph unless otherwise noted or when conditions require a reduction in speed. Designated motor vehicle drive lanes shall be utilized where provided unless specific direction is given by the HNL Management, or RAMP.

No person operating a motor vehicle or motorized equipment within the AOA shall in any way hinder, stop, slow, or otherwise interfere with the operation of any aircraft. Aircraft shall have the right-of-way at all times.

All aircraft and emergency vehicles have priority over Contractor vehicles. Contractor vehicles shall yield right-of-way to aircraft and emergency vehicles. Contractor shall ensure that under no circumstances will any Contractor or other vehicle associated with the project pass beneath any part of an aircraft or loading bridge, or block the access to any parking gate or delay any aircraft movement.

Vehicles shall remain within established drive lanes. It is prohibited to use active runways or taxiways or adjacent field areas unless specifically allowed by ATCT. Vehicles shall remain within established drive lanes. It is emphasized that the Contractor's authority to operate does not extend to active aircraft movement areas. The Contractor shall operate along established access roads/haul routes with prior approval of the HNL Management and RAMP.

All construction personnel (Contractor and Subcontractors) requiring access to the AOA shall obtain an AOA badge. Should individuals require a temporary pass to enter the AOA, Contractor will request Escort Required Temporary Badges (ERTB) from HDOT-A. The individual possessing an ERTB must be escorted at all time while within the AOA by a badge holder who possesses an Escort privilege on his/her AOA badge. While in the closed construction area (barricaded area), the Escort must maintain full control of the ERTB personnel.

6.4.2 Parking

- No parking is permitted on the airport roadway as the primary purpose of the airport roadways is for motor vehicle traffic.
- No person shall park any motor vehicle, other equipment, or materials within the AOA, except in a neat and orderly manner and at such locations prescribed or as directed by the CM and HDOT-A.
- No person shall park any motor vehicle or other equipment or place materials within the AOA or within 15 feet of any fire hydrant or standpipe.
- Parking of construction workers' private vehicles shall also be in a public parking or private parking facility outside the AOA.
- Under no circumstances shall vehicles or equipment be parked within five (5) feet of the airport perimeter security fence line.

6.4.3 Vehicle Identification Including Lighting and Markings

Each vehicle or unit of equipment that travels or operates on any part of the AOA shall have an approved decal or painted company name applied to both sides of the vehicles in a location opposite the driver's seat. The identification should be applied to the front door panels. Magnetic or temporary signs are acceptable.

All vehicles and equipment, except those under escort, must be marked with the company name and/or logo on both sides. Per the *(Contractor's Training Guide July 2007, the lettering for the company name shall be in bold characters of a minimum 4" in height, and 1-1/2" in width, and the height of the logo shall be a minimum of 6")*. Escort vehicles must be marked with the company logo as stated above and must be properly equipped with a two-way radio. Escort vehicles may be used to escort a maximum of six (6) vehicles onto the AOA. The vehicle(s) providing the escort must lead the convoy and is responsible for all trailing vehicle(s). This vehicle may escort unmarked vehicles onto the AOA. Vehicles being escorted shall be in radio or cell phone contact with the lead escort vehicle. Under no circumstances may an employee provide an escort from inside an unmarked vehicle. Drivers of escorted vehicles must display a delivery escort badge or a construction escort badge.

Use of logos or symbols in lieu of letters is subject to approval by the HNL Airport Operations manager.

Vehicles that appear at access gates without signs on both sides of the vehicle will be denied access. Vehicles found to be missing signs within the AOA will be escorted off the jobsite and not be permitted to re-enter until signs have been installed.

Any person operating equipment in the AOA shall, in addition to this section, abide by all existing FAA and other governmental rules and regulations.

It is emphasized that the Contractor's authority to operate does not extend to active aircraft movement area. The Contractor shall operate along established access roads/haul routes with prior approval of the HDOT-A and HNL Management.

6.4.4 Load Limits

When using airport roadways, the Contractor shall restrict the gross weight as required by local codes. For heavier vehicle loads, permits shall be obtained through the agency having jurisdiction. All vehicle weights are subject to verification by the CM.

6.4.5 Delivery and Parking of Construction Equipment and Vehicles

No equipment or construction vehicles shall be parked or left unattended outside the airfield access gates or on public roadways. When equipment or vehicles are to be delivered to the work site, the Contractor must be present to accept the equipment or vehicles and shall escort them inside the airfield fence and have them parked in the Contractors staging area or other approved location on the airfield. Any construction equipment or vehicles left unattended outside the airfield gates or on public roadways shall be impounded by the City.

6.4.6 Requirements and Regulations Relating to Vehicle Drivers

All drivers operating vehicles on airport property must carry a valid United States driver's license on his/her person, appropriately endorsed for the type of equipment being operated.

Drivers designated to operate vehicles within the AOA shall receive special drivers training as required in Section 6.4.7 and be approved by the airport before being allowed to operate within the AOA or must be escorted by an approved escort.

Drivers operating outside the AOA may operate vehicles without attending the special drivers training.

Permission to apply for vehicle permits shall be made in writing to the Oahu Airport District Manager through HDOT-A, and must list all vehicles requesting a permit. Construction equipment (cold planer, AC paver, AC rollers, backhoes, etc.) that remain at the jobsite do not require a vehicle permit (vehicle permit required for licensed vehicles only), and may be stored in the staging area or closed construction areas as approved by HDOT-A, HNL, and FAA. An orange and white checkered flag shall be displayed on all equipment while within the AOA during non- working hours.

Use of tall equipment (cranes, concrete pumps, etc.) will not be allowed unless the FAA Form 7460-1 determination letter is issued and approved for such equipment.

6.4.7 Vehicle Driver Training

Every driver who operates a vehicle on the AOA of the airport must be familiar with the pertinent provisions of the State of Hawai‘i vehicle code and the traffic and licensing subsections of these rules and regulations. The driver must have been trained in the vehicle to be operated.

All Contractor employees and Subcontractors who will be driving a company identified vehicle within the AOA will be required to obtain an Airport Motor Vehicle Operator's Permit (Ramp License). A ramp license, in conjunction with a valid, state issued driver license, current AOA badge, and permission from RAMP will qualify drivers to operate vehicles within the non-movement areas of the airport only. To qualify for the ramp license, each operator must attend the ramp license class provided by HNL and pass the written examination.

One approved vehicle with an operator who possesses an Escort privilege on his/her AOA badge can escort up to six (6) vehicles onto the AOA.

The applicant must pass a written 25 question multiple-choice test administered by the airport Pass & ID office covering AOA safety rules and regulations. A score of 80% (20 correct responses out of 25) is required to pass. If the applicant fails the test, it can be re-administered the following day. Ramp licenses are valid for a period of 8 years or until the expiration of the applicant's state issued driver license, whichever is shorter.

For employees working or driving inside the movement areas, a "Movement Area" stamp shall be placed on the AOA badge. In order to qualify for the movement area license, each operator must attend the movement area training class provided by HNL and pass the written examination which includes proper procedures for radio communications with Ground Control and the ATCT.

The applicant must attend a movement area training class and pass a computer-based training (CBT) administered by the Pass & ID Office. The test covers AOA safety rules and regulations, proper procedures and phraseology for communicating with Ground Control and ATCT, knowledge of airport layout including all taxiway designations, and familiarity with airport signing and pavement markings. Contractor can schedule training through the HNL Pass & ID Office website. A score of 90% is required to pass. If the applicant fails the test, it can be re-administered at the next scheduled offering. Movement area qualification is good for a period of 1 year or until the expiration of the applicant's driver's license or ramp license.

The preferred procedure for Contractors unfamiliar with the airport who require movement area access is to be escorted by RAMP until such time as they have proven competency in navigation and communication on the airfield as determined by the Ramp Control Supervisor. The Contractor shall coordinate the need for escort with HNL and RAMP at least one week prior.

6.4.8 Two-Way Radio Communications

Radio communications with the ATCT will be in accordance with the construction phasing plans and with the procedures specified by the most current memorandum of understanding between FAA control tower (or contract tower) and HNL.

The Contractor will provide at least two (2) Radio Monitoring Personnel (RMP) to control personnel, vehicles and equipment within the designated work area and manage all flag personnel. Additionally, all flag personnel, as shown on the construction phasing and barricade plans, shall attend RMP training and be equipped with radios and traffic control devices to control construction vehicle and equipment traffic within the specified haul routes. Prior to the start and throughout the course of the project, the RMP's and flag personnel will acquire additional training as directed by HNL management. The RMP's and flag personnel shall acquire the movement area certification at HNL, and be familiar with proper radio communication procedures and phraseology. Contractor employees with valid airport movement area certification and properly equipped and marked vehicles may escort up to two other vehicles onto the AOA. The vehicle providing the escort must lead and is responsible for the trailing vehicles. Communication with escorted vehicles is also required with use of a handheld radio or mobile phone. RMP(s) will be expected to communicate with one or more of the following:

- Honolulu Ramp Control (RAMP) – Open 24 hours
- Honolulu ATCT – Open 24 hours

The RMP(s) will communicate with RAMP (frequency 121.8) prior to the start of work for permission to enter the AOA. Prior to crossing the movement area line (one dashed and one solid line) and entering the movement area, the RMP(s) shall contact “Honolulu Ground” (frequency 121.9) for permission to enter the movement area. RMP(s) shall contact “Honolulu Tower” (frequency 118.1) to obtain permission to enter the RSA (two dashes and two solid lines). The “Honolulu Ground” and/or “Honolulu Tower” frequencies shall be monitored at all times while within the airport movement areas. RMP(s) shall use cellular phones as temporary backup to the radios in the unlikely event of radio communications failure.

- 121.8 “HNL Ramp” – used to communicate with RAMP
- 121.9 “HNL Ground” – monitored when entering or within the movement areas
- 118.1 “HNL Tower” – monitored when traveling, crossing and/or working within the RSA

For the area(s) and/or runway section(s) closed for construction activities, FAA-HCF gives HDOT-A jurisdiction for control of vehicles, equipment, and personnel in the closed area as long as the Contractor complies with the movement of vehicles, equipment and personnel within the designated areas for movement on and off the runway and taxiways. In addition to the RMP(s), the Contractor may use escorts, flagmen, signal lights, or other means as approved by HNL, HDOT-A, and FAA. The RMP shall not instruct aircraft at any time.

A minimum of two (2) airport radios shall be kept on the jobsite at all times. Should all airport radios become non-operational, the Contractor will contact RAMP and/or HNL-ATCT via cell phone, and notify them of the situation. Contractor shall await their direction. If Contractor is unable to reach them via cell phone, Contractor will face the tower, and flash their vehicle headlights. Contractor will await the Tower’s direction via the red, white and green light gun.

6.4.9 Airport Security

The Contractor shall be responsible to provide and maintain HNL security-badged personnel in all areas of the work, obtain necessary training required to drive vehicles within the AOA and AMA areas as directed by HNL management, and obtain necessary vehicle ramp permits for all vehicles entering the AOA.

Access to the airport AOA will be through HNL’s security access points at Gate #289, Gate #290A, Gate #291, and Gate #180 (Lagoon Drive). For access points that are not manned by HDOT-A’s security, the Contractor shall be responsible for posting a security guard. The assigned security guard shall be from the same as HDOT-A’s current contracted security company.

End of Section 6

SECTION 7 WILDLIFE MANAGEMENT

7.1 Summary

This project will use the following protocols to mitigate any wildlife hazards created:

All project personnel working on the AOA will receive an airfield safety briefing that will include information on the dangers of wildlife and aircraft operations. Inspection of the construction area will be conducted on a daily basis by HNL Airport Operations personnel.

Personnel shall take immediate action to eliminate wildlife hazards whenever they are detected. Hazards include, but are not limited to:

- Trash (food scraps and miscellaneous waste), standing water, or tall grass and seeds which may attract unwanted wildlife to the airport. All personnel shall take immediate action to eliminate wildlife hazards and shall be promptly removed to prevent attracting birds and animals.
- Poorly maintained or damaged security and wildlife fencing and gates, which may allow animals to enter the AOA.
- Any unusual wildlife activity will be noted on the airfield inspection checklist.
- Notifications will be made to the USDA Staff Wildlife biologist and Airport Operation wildlife superintendent and the ATC tower.
- The Contractor in consultation with HNL Airport Operations and the USDA wildlife biologist will develop and implement corrective measures to eliminate any wildlife threat.

7.2 Trash

All trash will be collected and contained in covered bins during construction activity, and disposed of properly off-site. All Contractor vehicles shall have trash receptacles or use by personnel while on the project site. Trash receptacles stored in open portions of vehicles must have tight fitting or latching covers to prevent trash from blowing out of the receptacle due to wind, jet blast, or normal vehicle operation. Receptacles may be plastic trash bags if stored in the vehicle cab or other closed space.

7.3 Disruption of Existing Wildlife Habitat

Projects on runways, taxiways, aprons and other paved areas of the airport are not expected to disrupt wildlife habitat. Work in non-paved areas of the airport may encounter wildlife habitat. The Contractor shall report all wildlife sightings to RAMP on radio frequency 121.8 or by phone at 808- 836-6603.

End of Section 7

SECTION 8 FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT

8.1 Summary

Upon completion of each day's work, the Contractor shall clean and remove from the project area all FOD materials generated by the Contractor's activities. The Contractor shall perform FOD checks on all paved areas used for Contractor access and haul routes within the AOA. Prior to reopening any closed portions of the airfield to aircraft, the Contractor shall request a FOD inspection from RAMP. Once the FOD inspection has been completed and the pavement areas cleared for opening, Code 22 will contact HCF to coordinate reopening the closed portions of the airfield. All aircraft movement areas will be under constant surveillance by all parties to ensure they are acceptable for aircraft operations.

All utilities within and passing through the work area shall be kept operational at all times, unless otherwise specified.

No loose material or waste (FOD), capable of causing damage to aircraft or capable of being ingested into jet engines, may be left in the working area on or next to runways, taxiways, ramps, or aprons. The Contractor shall direct special attention to all areas that are operational to aircraft during construction. These shall be kept clean and clear of all materials or debris at all time.

Common sources of FOD during construction include trucking or hauling operations of construction materials to and from the construction site, demolition and removal of items (i.e. cold-milling or PCC demolition), and during placement and construction of improvements (i.e. placement of aggregate subbase). All loose material or waste (FOD) located on aircraft movement areas shall be reported to the inspectors immediately; the inspectors shall coordinate with RAMP to close the area to aircraft traffic if required until cleanup is accomplished.

Trucks and equipment shall have all accumulated dirt, mud, rocks, and debris removed before accessing the AOA, and when leaving the work area. Loads shall be struck flush and secured to prohibit loss of material. If spillage occurs, such roadways shall be swept clean immediately after such spillage to allow for safe operation of vehicles as determined by RAMP. If the Contractor is negligent in cleanup and airport resources are required to perform the work, the expense of said cleanup shall be paid by the Contractor.

The Contractor shall take precautions to prevent FOD on all access routes used to the work areas and existing adjacent paved areas and AOA pavements. These areas shall be kept free of debris at all times, at no additional cost to the owner.

The Contractor shall keep available methods to clean and remove FOD at all times during working and nonworking hours and shall keep the site free from dust and objectionable debris. During the period of time that there is no construction activity (between work shifts), the Contractor's personnel shall be available by phone to respond immediately to a dust or debris problem as identified by RAMP staff. At no time shall there be more than a 10-minute response time to calls concerning dust/debris problems during work hours and a 60-minute response time at all other times on a 24-hour-per-day basis. The Contractor shall provide whatever means necessary to sufficiently prevent FOD in aircraft movement areas and provide construction area generated dust control on a 24-hour basis.

If the Contractor's method does not remove debris adequately to meet safety requirements, the Contractor may be shut down and will be required to utilize other methods at no additional cost to HDOT-A.

End of Section 8

SECTION 9 HAZARDOUS MATERIAL (HAZMAT) MANAGEMENT

9.1 Summary

The Contractor shall have an emergency spill cleanup kit on the project site at all times. The spill kit will include absorbent pads and one 5-gallon bucket with cover. In the unlikely event of fuel or hydraulic oil spills; the Contractor shall contain the spill and place the absorbent pads on the spill immediately, used pads shall be placed in the bucket and disposed of properly off-site at a later time.

All construction activity involved with the handling of hazardous materials must provide the HDOT-A with a hazardous materials removal plan. The plan will include the name of the company used for removal of hazardous materials and the names and 24-hour telephone numbers of staff authorized to handle such removals.

No fuel, oil, grease, flammable liquids, or contaminants of any kind, including detergents, shall be allowed to flow into or be placed in any sewer system or open water areas without a separator or unless connected to an industrial waste system.

Transport and handling of hazardous materials requires special procedures as outlined in following HDOT-A website:
https://hidot.hawaii.gov/airports/doing-business/engineering/environmental/construction-site-runoff-control-program/

End of Section 9

SECTION 10 NOTIFICATION OF CONSTRUCTION ACTIVITIES

HNL Airport Operations will make notifications to airport users using continuously updated web- based distribution methodologies.

During weekly Project Coordination meetings, construction activities for the next three (3) weeks shall be discussed. Specific items should include, but are not limited to, phase beginning or ending, construction activities requiring closure of taxiways, modification to the vehicle service roads, and construction activities requiring FAA Form 7460-1 submittal.

10.1 NOTAM Issuance

No ramp, apron, taxiway, or runway area shall be closed to aircraft without approval of HNL Airport Operations and HCF. This will enable NOTAMs, or other advisory communications, to be issued. A minimum of 72-hours' notice of requested closing shall be directed to HNL at the weekly Project Coordination meetings. All NOTAMs must be published 48-hours prior to closures.

The Contractor shall contact Code 22 to confirm the issuance and correctness of NOTAMs prior to beginning work each day. Code 22 will publish the NOTAMs and notify HCF. Should the NOTAM need to be cancelled, the Contractor shall notify Code 22.

10.2 ARFF Coordination

ARFF personnel, although involved in the planning and design phases, will receive a briefing prior to the start of construction along with periodic briefings on the status of the project. The Contractor shall provide uninterrupted ARFF access to all areas of the airport. Additionally, ARFF personnel will be invited to weekly construction meetings when work is expected to directly affect ARFF operations. The Contractor shall advise ARFF personnel of the following occurrences:

- AOA fence relocations
- Waterline and fire hydrant deactivation and activation
- Re-routing, blocking and restoration of emergency access routes
- The use of hazardous materials on the airfield

10.3 HDOT-A Coordination

Contractor is to work with HDOT-A to maintain a list of the responsible representatives/points of contact for all parties and procedures for contacting them 24 hours a day, seven days a week. This list includes local FAA HCF, FAA Technical Operations personnel, and the Contractor including all subcontractors.

In the event of an aircraft emergency that may affect construction activities determined by HDOT-A and/or HCF; the Contractor's personnel and/or equipment may be required to immediately vacate the area. HDOT-A and/or HCF will coordinate directly with the Contractor.

10.4 FAA Coordination

10.4.1 Marking of Equipment and Restrictions on Cranes

If cranes or other equipment exceeding 15 feet in height are to be used, Contractor will be required to submit for approval the FAA's application Form 7460-1. The submittal will be made to the FAA for approval by the Contractor on behalf of the HDOT-A.

HDOT-A has no control over the FAA's review and approval time. Contractor is encouraged to submit any required applications well in advance (at least three (3) months) of the need for the use of the equipment or crane.

Contractor to Submit:

- Latitude
- Longitude
- Existing ground elevation including vertical datum
- Height of crane, structure, stockpile, etc.
- Exhibit indicating operating area of the equipment or crane

FAA Form 7460-1 will be filed for this project along with all crane activity associated with construction.

End of Section 10

SECTION 11 INSPECTION REQUIREMENTS

11.1 Summary

HDOT-A and the Contractor's personnel will conduct continual inspections of the construction site to ensure that areas surrounding the sites are safe for aircraft operations.

HDOT-A personnel will note any discrepancies on the daily inspection checklist.

Any aircraft movement surface or adjoining runway, taxiway, or taxilane safety area that does not pass inspection must remain closed until such time cleanup is performed and approved.

RAMP and Code 22 shall conduct final inspections prior to opening the area for aircraft operations. Code 22 will notify HCF when areas may be opened for aircraft operations.

Frequent inspections will be made by RAMP and HDOT-A or his authorized representative during the critical phases of the work to ensure that the Contractor is following the recommended safety procedures. The inspector shall report any violations or potential safety hazards to the Contractor for immediate correction by the Contractor.

11.2 Daily (or More Frequent) Inspections

At the end of each work shift or work phase, the area will be cleaned to remove all FOD created by the construction activity from all runways, taxiways, and apron areas. Prior to opening of a closed area, the Contractor shall perform a FOD check of the work area and the haul route used for the shift or phase, and will not remove any low profile barricades and/or lighted X's until the area has been cleared by RAMP. The Contractor will inspect and clean the haul route outside of the barricaded area and ensure there is no FOD on the active airport areas.

11.3 Final Inspections

The Contractor will request a FOD inspection from RAMP when the FOD check and cleaning is completed. Once the FOD inspection has been completed and cleared for opening, Code 22 will contact the HCF and cancel the issued NOTAMs. The Contractor's request for inspection shall be at least 30 minutes prior to reopening the area to allow adequate time for inspection and final approval.

End of Section 11

SECTION 12 UNDERGROUND UTILITIES

12.1 Summary

All utilities within the project site shall be protected in place unless identified in the plans for removal or relocation. Significant utilities of concern include the following, but are not limited to:

- Airfield lighting, signage, and associated cabling
- Stormwater drainage pipes and inlets
- Water line and Force mains
- FAA Power and Communication conduits

12.2 Procedures for Locating and Protecting Existing Underground Utilities/Facilities in Excavation Area

In accordance with State law, the Contractor shall contact the Hawaii One Call Center (866-423-7287) to locate any public utilities and the FAA HCF or FAA Technical Operations to locate any airport utilities prior to excavation. All existing utilities within the construction areas or the staging area that are designated to remain in place shall be maintained, accessible, and protected at all times (i.e., waterlines, fire hydrants, valves, drainage structures, electrical and FAA cables/equipment, etc.). Refer to the specifications, phasing plans, and demolition plans for additional requirements that are associated with this project.

The existence, location, and characteristics of underground utility information shown on these plans were obtained from available record data. No representation is made as to the accuracy or completeness of utility lines shown or any unknown utilities. Contractor shall make reasonable inferences as to existing underground utilities from observation of visible conditions and take appropriate measures to protect all utilities, including underground communication installation, which are owned and operated by HNL, FAA, HECO, AT&T, or other third parties.

Contractor shall perform site investigation to verify location of utilities within the project area. Investigate by means of toning and/or ground penetrating radar or other methods approved by HNL and HDOT-A. Contractor shall accurately record and stake the location of all project verified utilities.

The Contractor shall be responsible for and repair, at Contractor’s own expense, any damages resulting from his/her failure to locate utilities as specified.

Exercise extreme care when using any equipment to prevent contact with any nearby power lines and power sources. Safe working clearances shall conform to the national electrical code.

All structures shall be designed to support aircraft loads specified unless otherwise noted. The Contractor may make certain temporary connections to the existing airfield lighting system only if it is associated with keeping the required lighting systems operational and approved by HDOT-A. The Contractor shall provide a separate power source for other construction related power needs.

When power and control cables for airfield lighting and navigational aids are located in the construction areas, the Contractor's personnel shall be familiar with these cable locations and keep vehicles and equipment clear of any cables at all times. Mark/delineate the surface for each utility in a manner acceptable to HDOT-A. As indicated on the plans and the specifications, the Contractor shall locate all utilities (operational and abandoned) prior to starting any excavation, demolition, or earthwork. The Contractor shall contact FAA technical support unit to facilitate locating FAA facilities and cables.

The Contractor's attention is directed to the existence of certain underground facilities that may require special precautions by the Contractor to protect the health, safety, and welfare of workers and of the public. Facilities requiring special precautions include: compressed air lines; conductors of petroleum products, oxygen, chlorine, and toxic or flammable gases; natural gas in pipelines greater than six (6) inches in diameter, or pipelines operating at pressures greater than 60 psi (gauge); underground electric supply system conductors or cables, with the potential to ground more than 300 V, either directly buried

or in duct or conduit that do not have concentric grounding; or other effectively grounded metal shields or sheaths.

All utilities encountered along the line of the work shall be maintained in service during all operations under the contract, unless other arrangements satisfactory to the utility owner, the affected agency, and HDOT-A are made in advance. Utilities shall include, all above or below ground conduit, pipes, wet wells, ducts, cables, and appurtenances associated with oil, gas, water, steam, irrigation, storm drain, wastewater, air, electrical, power, instrumentation, communication, telephone, TV, and lighting systems, whether or not owned by HNL. All valves, switches, vaults, and meters shall be maintained readily accessible for emergency shutoff.

Any utility that is damaged by the Contractor shall be immediately reported to HDOT-A and immediately repaired to a condition equal to, or better than, the condition they were in prior to such damage. Repair work shall be continuous until the utility or improvement is placed back in service.

12.3 Underground Service Alert

The Contractor shall mark all FAA utility lines prior to any work in a given area. Marking shall consist of a 36-inch-high lathe, placed ten (10) feet on center. Lathe shall be marked with the words DANGER – FAA or equivalent and shall be affixed with red or orange surveyor tape to enhance visibility. Additionally, the Contractor shall expose and verify (by field survey) the depth and alignment of all underground utilities in the construction site. The Contractor shall pot-hole and field survey all utilities within a five (5)-foot distance of any footing work, utilities, etc. prior to excavation.

End of Section 12

SECTION 13 PENALTIES

13.1 Summary

Safety and security precautions are necessary at the Airport. Failure of the Contractor to adhere to prescribed requirements may have consequences that jeopardize the health, safety or lives of customers and employees at the Airport. Security violations of HDOT-A, FAA or TSA rules or regulations; or safety violations of this CSPP or FAA requirements, may result in fines up to $10,000 per occurrence or individual, revocation of the AOA badge, or loss of AOA driving privileges, depending on the severity of the offense.

The Airport employs a contractual law enforcement firm to support the overall Security Program:

- **Contract Law Enforcement:** Security personnel under contract to the State Airports Division and who are deputized under State law to engage in law enforcement activities prescribed under Federal Regulations Part 107.17. The current contract is performed by Securitas USA, which provides personnel to man security screening station law enforcement positions, access gates, traffic control, perimeter and ramp patrols and the Pass and ID office.

- **Transportation Security Administration (TSA):** Federal Security personnel who perform pre-departure passenger screening.

Misuse of Airport security access privileges by any badge holder or any violation of Airport, State and/or Federal rules and regulations will subject violators to arrest or fine as prescribed by law and revocation of all further clearance and access into security areas.

The Operations Division has the option to issue warnings on the first offense based upon the circumstances of the incident. Individuals involved in noncompliance violations may be required to surrender their Airport ID badges pending investigation of the matter.

Penalties for violations related to (HDOT-A, FAA, & TSA) procedures include the following:

- Warning citation, Airport ID badge confiscation, retraining, and a letter from the employer stating what action if any has been taken to prevent this from happening again.
- Project shutdown and/or removal of personnel involved from the AOA.
- Class B Misdemeanor citation - (Daniel K. Inouye International Airport Rules & Regulations.) Ordinance Title 19 Administrative Rules.

Project shutdown or misdemeanor citation may be issued on a first offense.

End of Section 13

SECTION 14 SPECIAL CONDITIONS

14.1 Summary

It is possible that unexpected emergencies may arise during the progress of the construction work. Construction emergencies may be caused by equipment breakdowns, accidents, or even damages to nearby existing structures, property, or light fixtures. Airport emergencies may arise during the progress of the work, such as in-flight emergencies that may develop. In the event of a construction or airport emergency, Code 22 will be notified immediately, informing them of the situation. Code 22 will decide on the appropriate remedial actions that are needed to stabilize the situation.
Other special conditions that may affect the construction work are listed below:

Weather Conditions
In the event of adverse weather conditions, the Contractor may be required to reschedule the work and/or runway and taxiway closures and cancel active NOTAMs. Adverse weather conditions would include winds that dictate the use of certain runways or taxiways under construction (e.g. Kona Wind conditions, arrivals from the east).

Instrument Flight Rules (IFR) weather conditions when the ceiling is less than 2,500 feet and visibility is less than three (3) statute miles, and/or continuing heavy rain showers. The Contractor will obtain the current and forecasted weather conditions, and confirm with HDOT-A, HNL, FAA ADO and FAA HCE whether to proceed with the scheduled work. Once the “Go” / “No Go” call is made, work will continue until the runway has been restored to the original conditions (i.e. all paving work has been completed). The “Go” / “No Go” call for work will be made two (2) hours prior to the scheduled closure time.

- **Contractor shall assume that work will be canceled by HNL or FAA with 1-hour notice due to weather or other airport operational limitations, up to 5 full work shifts over the duration of the project, at no additional cost to the owner.**

End of Section 14

SECTION 15 RUNWAY AND TAXIWAY VISUAL AIDS – MARKING, LIGHTING, AND SIGNS

15.1 Marking Removal

All existing pavement markings requiring removal shall be obliterated or blacked out in a manner that will not leave marking shadows at the direction of the HNL Operations and the RPR. All permanent pavement markings shall be restored at project completion.

15.2 AOA Closures (Runways, Taxiways, Ramps)

All lights and equipment designated to remain within the work areas, safety areas, and on the AOA shall be protected at all times. The Contractor shall protect these lights and equipment from damage while working at the work site. The Contractor shall place barricades around any elevated lights and equipment that may be in the work area to delineate and protect them. Damage due to the Contractor's operations shall be repaired immediately at the Contractors' expense.

15.3 Temporary Lighting

Temporary light plants used in conjunction with nighttime work will not be located in such a manner as to be an obstruction or hazard. In addition, these light plants will not be located where the glare of the light will cause visual or physical interference to operating aircraft and the FAA ATCT.

15.4 Permanent Signage

Contractor shall protect all existing airfield signs. No impacts to existing signs are anticipated for this project.

End of Section 15

SECTION 16 MARKING AND SIGNS FOR ACCESS ROUTES

16.1 Summary

All haul routes shall conform to marking and signage in the HNL Approved Airport Certification Manual.

Marking and signs for access routes will not be used on this project. As construction vehicles and/or equipment arrive to the airport, they will enter the AOA through the designated AOA access gates. Construction vehicles and equipment will wait in the designated staging area. The designated haul routes shall be managed by the designated flag personnel as depicted in the construction phasing plans. All construction vehicles and equipment necessary to complete the work will remain on the closed area for the duration of the work shift. At the end of the work shift, all construction vehicles and equipment shall be escorted back to the staging area or to the access gate if exiting the AOA. Please refer Appendix A – Construction Phasing and Barricade Plans regarding the proposed hauling routes.

End of Section 16

SECTION 17 HAZARD MARKING AND LIGHTING

17.1 Summary

When areas on the airport are closed or present hazards due to Contractor activities, they shall be marked and lighted according to AC 150/5340-1 (current edition) “Standards of Airport Markings” and AC 150/5370-2 (current edition) “Safety During Construction”. Marking and lighting must be approved by the Airport Project Manager.

Every excavation or hazard on or adjacent to the airfield or other areas shall be marked.

The Contractor shall barricade the work area as shown in Appendix A – Construction Phasing and Barricades Plans. Low profile barricades with lights or other hazard lighting devices stipulated on the phasing plans shall be operative at all times while in place. It shall be the Contractor’s responsibility to immediately repair or replace any light that is not operating.

Barricades shall be in place prior to commencing construction operations and shall be maintained for the life of the construction phase/contract.

Beacons and flags required on all Contractor vehicles/equipment must be maintained in good working condition, and flags shall be replaced if they become faded, discolored, or ragged.

Limits of the various phases of work shall be clearly delineated with barricades, warning signs with attached steady or flashing red lights; "standing red" barricade lights and other markings as shown on the plans specified herein, in order to deter aircraft and vehicles from entering the construction areas.

Contractor shall continually inspect and maintain all construction barriers, fencing, and gates in good condition.

Portable lighting provided for any night work shall not interfere with air navigation. Lights shall be transported to the work areas pointed down and turned off to avoid affecting FAA ATCT Operations.

17.2 Equipment

Runway Lighted “X”:
Whenever work is required in the RSA, lighted “X”’s shall be place at each end of the runway directly on or as near as practicable to the runway designation numbers. Lighted “X”’s shall face the approach surface for the respective runway end. The lighted “X”’s shall be removed at the end of each work shift and/or work phase.

Low-Profile Barricades:
Low profile barricades shall be used to identify the closed areas due to construction activities. These low-profile barricades shall be orange or white, and shall have at least one (1) red 360 degree light mounted to each barricade. Low profile barricades shall be placed approximately 15’-0” O.C. (maximum 20’-0” O.C.) while construction is ongoing and during non-working hours. The orange and white barricades shall be placed in alternating colors (orange base and white base), and shall be located and secured to prevent displacement from jet blast or other surface wind conditions. Low profile barricades shall be either Neubert Aero Corporation Model NAC-PC 2410, Multi-Barrier Safety Barricade Model No. AR-10x96 or FAA approved equivalent. Please refer to Appendix A – Construction Phasing Plans, regarding the proposed locations of the low-profile barricades. The barricades will be filled with water to weigh them down, and prevent FOD or movement from jet blast and/or high wind conditions.

Reflective Cones and Type II Barricades:
If required, reflective cones and or Type II barricades shall be used to demarcate AOA travel route(s), and locations where vehicles shall yield to aircraft and shall be adequately anchored from jet blast.

Concrete Barrier Rails, Temporary Crash Cushions, and Changeable Message Signs

Concrete barrier rails shall be used to demarcate the AOA travel route adjacent to construction activities. Refer to Appendix A – Construction Phasing Plans, regarding the proposed locations of concrete barrier rails, temporary crash cushions, and changeable message signs.

Construction Lighting

For night working hours, temporary light plants shall be used to provide enough lighting to perform the scheduled work. The light plants shall be located away from any obstruction or hazard, and positioned and point away in such a manner that it does not cause visual or physical interference to operating aircraft and the FAA ATCT. The light plants shall be taken down at the end of the work shift, and stored at the equipment staging area. All Contractor personnel and subcontractors working on the AOA during hours of darkness shall wear high visibility vests with reflective markings and orange/visible hard hats.

End of Section 17

SECTION 18 PROTECTION OF RUNWAY AND TAXIWAY SAFETY AREAS AND SURFACES

18.1 Summary

Runway Safety Area (RSA), Taxiway Safety Area (TSA), Object Free Zones (OFZ), and Object Free Areas (OFA) will be impacted by the work, including the closure of runways and taxiways adjacent to the work area.

Contractor will be required to coordinate the construction work to accommodate clearance requirements for arrival and departure of scheduled aircraft, and maintain compliance with AC 150/5370-2, Operational Safety on Airports During Construction, (current edition). The AC sets forth guidelines for maintaining desired levels of operational safety during construction.

Contractor will require that project staff attend mandatory training sessions to reinforce the importance of airport protocol. The intent of the presentations will be to highlight common threats such as safety area encroachments, improper ground vehicle operations, and unmarked or uncovered holes and trenches in the vicinity of aircraft operating surfaces. Airport staff will be invited to make presentations on topics of their choosing.

18.2 Runway Safety Area (RSA)

The RSA is the defined surface surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of an undershoot, overshoot, or excursion from the runway. No construction may occur within the RSA while the runway is open for aircraft operations.

18.3 Runway Object Free Area (ROFA)

Construction, including excavations, may be permitted in the ROFA. Equipment must be removed from the ROFA when not in use, and material shall not be stockpiled in the ROFA if not necessary.

18.4 Taxiway Safety Area (TSA)

The TSA is a defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an airplane unintentionally departing the taxiway. No construction may occur within the TSA while the taxiway is open for aircraft operations. All work within the TSA shall be coordinated with HDOT-A, FAA, and HNL.

18.5 Taxiway Object Free Area (TOFA)

The TOFA is regularly penetrated by aircraft wings during normal operations, thus the restrictions are more stringent. No construction may occur within the TOFA while the taxiway is open for aircraft operations.

18.6 Obstacle Free Zone (OFZ)

In general, personnel, material, and/or equipment may not penetrate the OFZ while the runway is open for aircraft operations. If penetrations to the OFZ are necessary, it may be possible to continue aircraft operations through operational restrictions. All work within the OFZ shall be coordinate with HDOT-A, FAA, and HNL.

18.7 Runway Approach/Departure Surfaces

All personnel, materials, and/or equipment must remain clear of the applicable threshold siting surfaces, FAR Part 77 Approach Surfaces, Terminal Instrument Procedures (TERPs) surfaces, or One Engine Inoperative (OEI) surfaces. Objects that do not penetrate these surfaces may still be obstructions to air navigation and may affect standard instrument approach procedures. Should construction work occur within the runway approach and/or departure surfaces, a runway closure may be required. All work within or adjacent to the runway approach and/or departure surfaces shall be coordinated with HDOT-A, FAA-ADO and HCF.

18.8 Procedures and Equipment to Delineate Closed Construction Areas from Airport Operational Areas

No ramp, apron, taxiway, or runway area shall be closed to aircraft without approval of HDOT-A and HCF.

The Contractor shall place low profile barricades with solar powered flashing red lights placed at all locations in which aircraft could inadvertently enter the construction area for limited duration closures as approved by HDOT-A.

All pertinent airfield signage will be removed, covered, and de-energized where appropriate.

End of Section 18

SECTION 19 OTHER LIMITATIONS ON CONSTRUCTION

19.1 Additional Restrictions

1. Runway and Taxiway closure areas will be limited to the areas shown for each phase in Appendix A – Construction Phasing and Barricade Plans, to allow proper aircraft movement.

2. Per the construction schedule, the project working hours are listed below. If necessary, the working hours may be adjusted by HDOT-A, and/or HCF:

    - **1600 to 0600**

3. Jet blast considerations – Jet blast considerations were included as part of the planning process. The review included aircraft distance from construction and aircraft movement around the construction area. Equipment, small tools, construction material, stockpile material, and excavation trenches shall be constrained in a manner to prevent movement resulting from aircraft jet blast or high wind conditions. Equipment and materials will not be stored near areas susceptible to jet blast.

4. Contractor shall maintain a safe operating area, free of FOD, at all times. Methods to clean and remove FOD, as outlined in these specifications and on the plans, shall be continuously utilized to maintain the work site and haul routes. Non-badged vehicle operators shall be escorted at all times while within the AOA between access gate and work site. Access gate guards shall be provided to register all Contractor personnel accessing the AOA subject to the requirements of airport security, TSA and HNL Security Provider which may include vehicle searches for weapons, explosive devices or other prohibited items not allowed within the AOA. Only Contractor and HDOT-A authorized personnel shall be allowed through Contractor gates.

5. The existing condition of the project may be altered due to construction currently being performed at the Airport. It is the Contractor's responsibility to work with the ultimate existing condition of the project at the time of construction.

6. Other contracts adjacent to the project may be ongoing at the time of construction. The Contractor shall coordinate his/her efforts with adjacent contracts to the satisfaction of HDOT-A and at no additional cost to the owner.

7. The Contractor shall be solely responsible for the safely and security of the site, including during nonworking hours.

8. All site preparation as indicated shall be made under the continuous inspection of HDOT-A. Secure the required permit for the construction of trenches or excavations that are five (5) feet or deeper or work that may jeopardize the workers.

9. The Contractor shall at all times maintain positive drainage away from existing buildings. The Contractor shall be responsible for installation, maintenance, and removal of temporary haul routes to support his/her operations within the work area. The Contractor shall maintain work area free of FOD at all times and dust control measures shall be implemented to the satisfaction of HDOT-A.

10. No lantern, flare pots, or open-flame welding or other devices shall be used. Blasting is not allowed.

11. Open flame welding or torch cutting operations are prohibited within the AOA unless adequate precautions have been taken and the written procedure approved by HDOT-A, FAA, and/or ARFF. In addition, the Contractor will obtain an airport “Burn Permit” from ARFF.

12. No smoking by employees while within the AOA.

13. Use of tall equipment (cranes, concrete pumps, etc.) will not be allowed unless the FAA Form 7460-1 determination letter is issued and approved for such equipment.

19.2 Police Coordination

In case of an emergency caused by an accident, fire, personal injury, or illness, airport police are to be immediately notified under Code 22. Police will coordinate with other emergency agencies as necessary. Contractor shall also notify RAMP so that any coordination or closures that may be required can be addressed immediately.

19.3 HNL Airport Operations

Construction may be stopped by HDOT-A, any time he/she considers that the intent of the regulations regarding safety or security requirements is being violated or that a hazardous condition exists. This decision to suspend the operation will be final and will only be rescinded by HNL when satisfied that the Contractor has taken action to correct the condition and prevent recurrence.

Construction may also be stopped or suspended by HDOT-A during periods of inclement weather, such as low visibility, or when it is necessary to provide an extra margin of safety to aircraft operations, or reduce other activities to keep the airport operational.

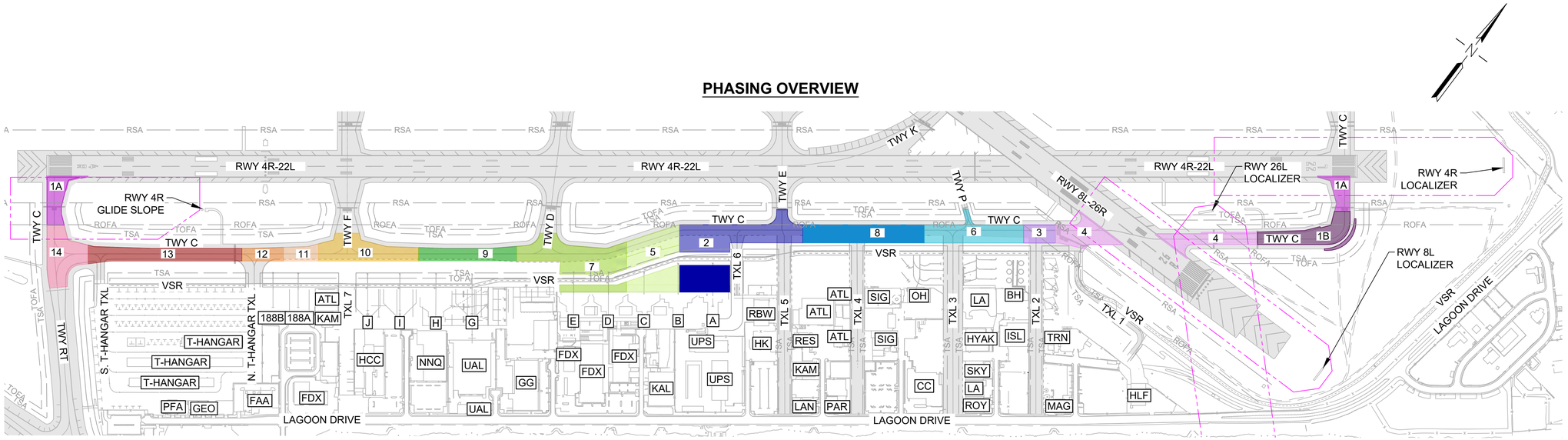
End of Section 19

Appendix A: Construction Phasing and Barricade Plans

CONSTRUCTION SEQUENCING AND TIMELINE

Phase	Schedule Requirement (Calendar Days)	General Restrictions to Airfield Operations (See General Phasing Notes 1 and 2)
Phase 1A	36	RWY 4R-22L closed, TWY C closed between RWY 8L-26R and RWY 4R-22L
Phase 1B	50	TWY C closed between RWY 8L-26R and RWY 4R-22L
Phase 2	45	Hardstands A and B closed, TWY E closed, TXL 5 rerouted
Phase 2.1	21	Hardstands A and B closed
Phase 3	24	TXL 2 closed
Phase 4	53	RWY 8L-26R shortened, TXL 1 closed
Phase 5	40	Hardstands B and C closed
Phase 5.1	21	Hardstands B and C closed
Phase 6	39	TWY P closed, TXL 3 restricted and rerouted
Phase 7	50	Hardstands D and E closed, TWY D closed
Phase 7.1	21	Hardstands D and E closed
Phase 8	45	TXL 4 closed
Phase 9	36	Hardstands G and H closed
Phase 10	43	Hardstands I and J closed, TWY F closed, TXL 7 restricted and rerouted
Phase 11	27	Hardstands 188A and 188B closed
Phase 12	25	Hardstand 188B closed, N. T-Hangar TXL restricted and rerouted
Phase 13	56	S. T-Hangar TXL closed
Phase 14	57	TWY RT closed

PHASING OVERVIEW



LEGEND:

- PHASE 1A
- PHASE 1B
- PHASE 2
- PHASE 3
- PHASE 4
- PHASE 5
- PHASE 6
- PHASE 7
- PHASE 8
- PHASE 9
- PHASE 10
- PHASE 11
- PHASE 12
- PHASE 13
- PHASE 14
- EXISTING RUNWAY / TAXIWAY PAVEMENT
- GLIDE SLOPE / LOCALIZER CRITICAL AREAS
- [A] HARDSTAND/TENANT LABEL

ABBREVIATIONS OF TENANTS

ATL	ATLANTIC AVIATION
BH	BLUE HAWAIIAN HELICOPTERS
CC	CASTLE AND COOKE
FAA	FEDERAL AVIATION ADMINISTRATION
FDX	FEDEX
GEO	GEORGE'S AVIATION SERVICES
GG	GATE GOURMET
HCC	HONOLULU COMMUNITY COLLEGE
HK	HKA PACIFIC
HLF	HAWAII LIFE FLIGHT
HYAK	HYAK AVIATION
ISL	ISLAND MOVERS
KAL	KALITTA AIR
KAM	KAMAKA AIR
LA	LANAI AIR
LAN	LANI LEA FLIGHT SCHOOL & SKY TOURS
MAG	MAGNUM HELICOPTERS
NNQ	NANIQ GLOBAL LOGISTICS
OH	OHANA
PAR	PARSONS
PFA	PACIFIC FLIGHT ACADEMY
RBW	RAINBOW HELICOPTERS
RES	RESORT AIR
ROY	ROYAL PACIFIC AIR
SIG	SIGNATURE AVIATION
SKY	SKYRIVER
TRN	TRANSAIR HAWAII
UAL	UNITED AIRLINES
UPS	UNITED PARCEL SERVICE

GENERAL PHASING NOTES

1. TWY C CLOSED WITHIN EACH PHASE LIMIT SHOWN FOR THE DURATION OF THE PHASE EXCEPT FOR PHASES 2, 5, AND 7 WHICH INCLUDE PCC PAVING ADJACENT TO THE HARDSTANDS. REFER TO INDIVIDUAL PHASING SHEETS FOR PCC CURE TIME PROVISIONS IN THE PHASE DURATION.
2. REFER TO INDIVIDUAL PHASING SHEETS FOR FULL LIST OF NOTAM'S.
3. REFER TO SHEETS G-041 - G-043 FOR PHASING DETAILS.
4. REFER TO THE CSPP FOR CONTRACTOR TRAINING REQUIREMENTS FOR FLAGGERS.
5. REFER TO SHEET G-019 FOR DESIGNATED ROUTES TO SOIL HANDLING SITES.
6. ANY NAVAIDS OUT OF SERVICE FOR MORE THAN 72 HOURS CONTINUOUSLY SHALL REQUIRE RECERTIFICATION BY THE FAA. CONTRACTOR SHALL PROVIDE A MINIMUM 7 DAYS NOTICE TO THE FAA FOR RECERTIFICATION.
7. REFER TO INDIVIDUAL PHASING SHEETS FOR FULL LIST OF NOTAM'S.
8. APPLICATION OF FINAL MARKINGS TO BE COORDINATED WITH RPR.
9. CONTRACTOR MAY PROPOSE RESEQUENCING OF WORK AT THE APPROVAL OF HNL DISTRICT AND HCF.
10. OWNER MAY ELECT TO RESEQUENCE WORK TO OUTSIDE OF KONA WIND OPERATIONS.

400' 0 400' 800'
SCALE: 1" = 400'

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

SHANNON RACHEL HOLMAN
LICENSED PROFESSIONAL ENGINEER
No. 12492-C
HAWAII U.S.A.

04/30/2026
Licensed Expiration Date

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.
DD	KU	TR	SH

NO.	DATE	REVISIONS

CONSTRUCTION DOCUMENTS
JANUARY 2026
DATE

PROJECT TITLE :

TAXIWAY C RECONSTRUCTION

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

AO1021-30

SHEET TITLE:

CONSTRUCTION SEQUENCING/TIMELINE AND PHASING OVERVIEW

DATE : 01/2026
SHEET : 18 OF 172 SHEETS
DWG. NO. G-018

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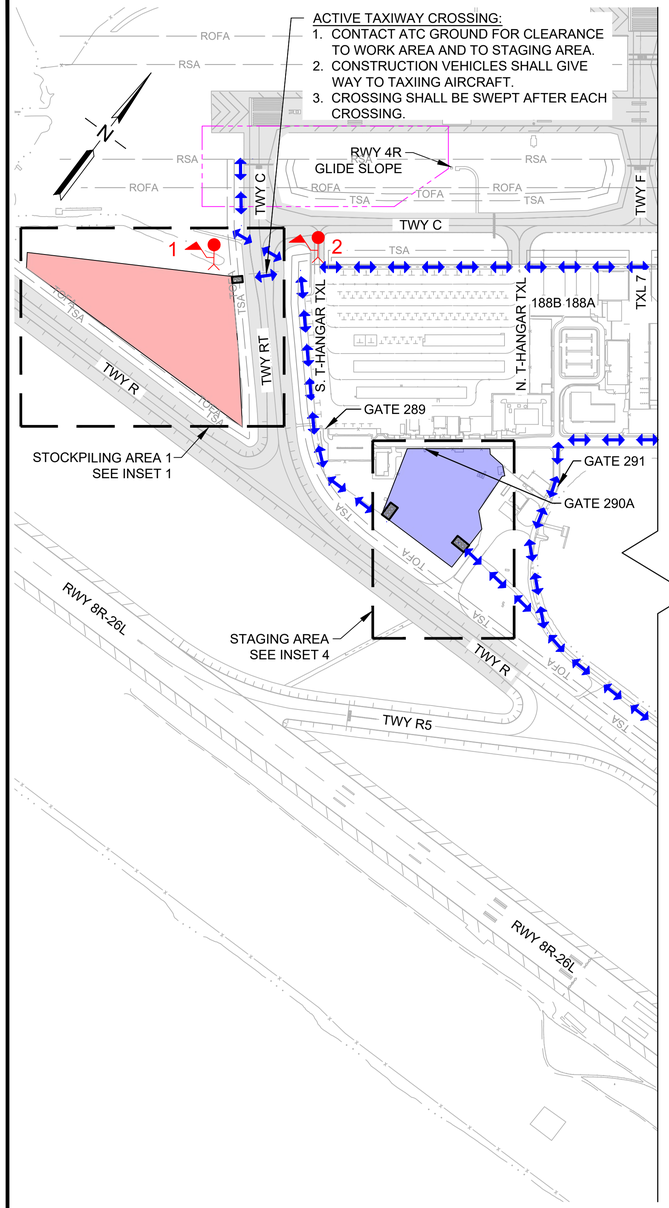
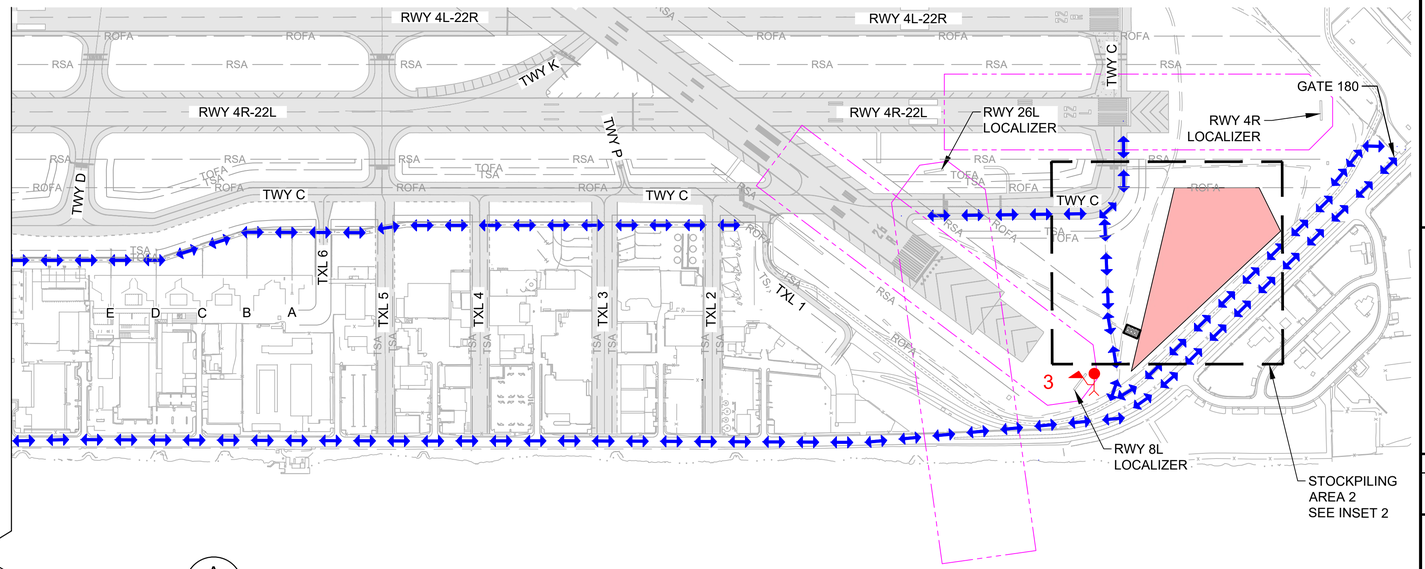
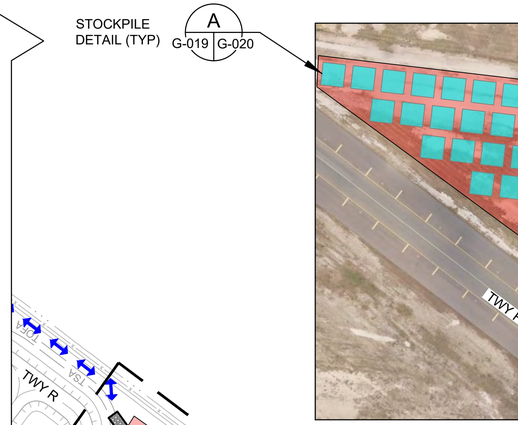
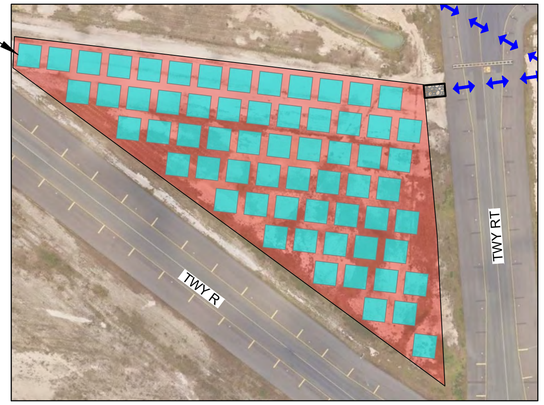


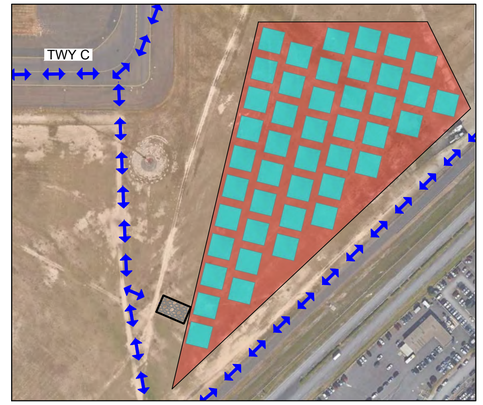




STOCKPILE DETAIL (TYP) A G-019 | G-020

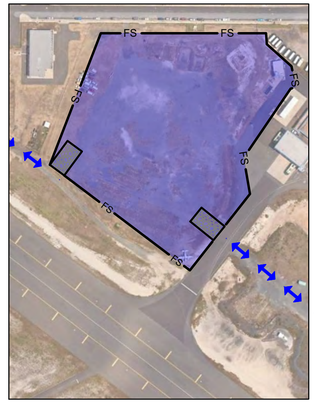


INSET 1: STOCKPILING AREA 1
SCALE: 1" = 200' AREA: ~ 11.0 ACRES
CAPACITY: 62 STOCKPILES, 24,800 CY



INSET 2: STOCKPILING AREA 2
SCALE: 1" = 200' AREA: ~ 8.0 ACRES
CAPACITY: 44 STOCKPILES, 17,600 CY

INSET 3: STOCKPILING AREA 3
SCALE: 1" = 200' AREA: ~ 14.8 ACRES
CAPACITY: 84 STOCKPILES, 33,600 CY



INSET 4: STAGING AREA
SCALE: 1" = 200' AREA: ~ 6.0 ACRES

SCALE: 400' 0 400' 800' — 1" = 400'

LEGEND:

- EXISTING RWY/TWY PAVEMENT
- STOCKPILING AREA
- STAGING AREA
- EXCAVATED SOIL STOCKPILE
- CONTRACTOR HAUL ROUTE
- GLIDE SLOPE/ LOCALIZER CRITICAL AREA
- FLAGGER (WITH I.D. NUMBER)
- FS — COMPOST FILTER SOCK
- STABILIZED CONSTRUCTION ENTRANCE

NOTES:

1. THE LIMITS OF THE STAGING/STOCKPILING AREAS SHOWN ARE APPROXIMATE. THE EXACT LIMITS SHALL BE COORDINATED WITH AND APPROVED BY THE RPR.
2. STOCKPILING AREAS ARE ESTIMATED TO BE ABLE TO CONTAIN A TOTAL OF 190 STOCKPILES THAT ARE 60 FEET IN LENGTH AND WIDTH AND EACH CONTAINING A MAXIMUM OF 400 CUBIC YARDS OF MATERIAL AT A MAXIMUM HEIGHT OF 3 FEET. ACTUAL NUMBER OF STOCKPILES CONTAINED WITHIN AREA MAY DIFFER.
3. STOCKPILE AREAS 1 AND 2 SHALL BE USED AS THE MAIN AREAS TO FACILITATE THE MANAGEMENT OF EXCAVATED SOILS. STOCKPILED SOIL SHALL BE TESTED AND DISPOSED OF OFFSITE IN ACCORDANCE WITH SPECIFICATION SECTION 01562 AS SOON AS POSSIBLE TO MAKE ROOM FOR ONGOING EXCAVATION ACTIVITIES. STOCKPILE AREA 3 MAY ONLY BE USED IF IT CAN BE DEMONSTRATED TO BE NECESSARY AND ITS USE MUST BE APPROVED BY THE RPR.
4. THE CONTRACTOR SHALL SUBMIT A LAYOUT PLAN FOR THE STAGING AREA FOR REVIEW AND APPROVAL BY THE RPR PRIOR TO MOBILIZATION.
5. STAGING AREAS ARE WITHIN THE AOA AND SHALL BE SECURED AT ALL TIMES AS OUTLINES IN SPECIFICATION 01565.
6. SEE SPECIFICATIONS SECTION 01562 FOR STOCKPILING SITE REQUIREMENTS NEEDED PRIOR TO START OF STOCKPILING ACTIVITIES AND ADDITIONAL REQUIREMENTS AT END OF STOCKPILING REMOVAL ACTIVITIES.
7. SEE SHEET G-020 FOR STOCKPILE SITE IMPROVEMENT REQUIREMENTS.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

SHANNON RACHEL HOLMAN
LICENSED PROFESSIONAL ENGINEER
No. 12492-C
HAWAII U.S.A.

04/30/2026
Licensed Expiration Date

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.
DD	KU	TR	SH

NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

TAXIWAY C RECONSTRUCTION

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

AO1021-30

SHEET TITLE:

SOIL STOCKPILING AND LAYDOWN AREA PLAN

DATE :	DWG. NO.
01/2026	G-019
SHEET :	
19 OF 172 SHEETS	

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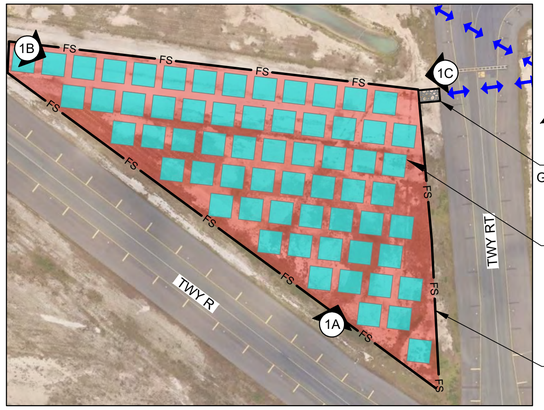


4 G-020 G-112 STABILIZED CONSTRUCTION ENTRANCE (TYP)

A G-020 STOCKPILE DETAIL (TYP)

CLEAR AND GRUB SITE AS NECESSARY TO FACILITATE STOCKPILE OPERATIONS .

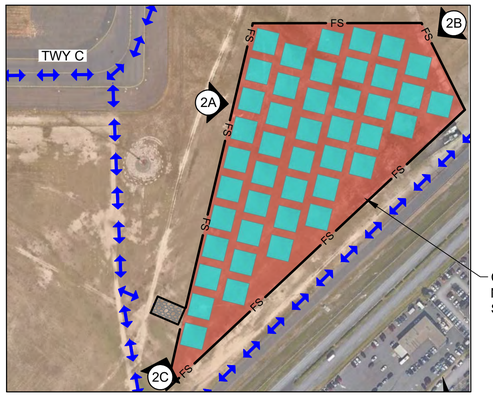
IMPROVEMENT PLAN FOR STOCKPILING AREA 1

SCALE: 1" = 200' AREA: ~ 11.0 ACRES
APPROXIMATE CAPACITY: ~ 75 STOCKPILES, ~ 30,000 CY

1A PHOTO 1A
SCALE: NTS

1B PHOTO 1B
SCALE: NTS

1C PHOTO 1C
SCALE: NTS



CLEAR AND GRUB SITE AS NECESSARY TO FACILITATE STOCKPILE OPERATIONS.

IMPROVEMENT PLAN FOR STOCKPILING AREA 2

SCALE: 1" = 200' AREA: ~ 8.0 ACRES
APPROXIMATE CAPACITY: ~ 49 STOCKPILES, ~ 19,600 CY

2 G-020 G-112 COMPOST FILTER SOCK (TYP)

CLEAR AND GRUB SITE AS NECESSARY TO FACILITATE STOCKPILE OPERATIONS.

IMPROVEMENT PLAN FOR STOCKPILING AREA 3

SCALE: 1" = 200' AREA: ~ 14.8 ACRES
APPROXIMATE CAPACITY: ~ 84 STOCKPILES, ~ 33,600 CY

2A PHOTO 2A
SCALE: NTS

2B PHOTO 2B
SCALE: NTS

2C PHOTO 2C
SCALE: NTS

3A PHOTO 3A
SCALE: NTS

3B PHOTO 3B
SCALE: NTS

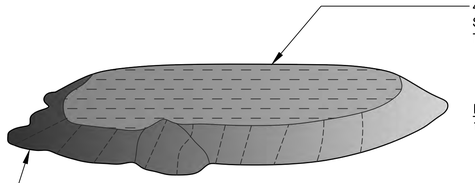
3C PHOTO 3C
SCALE: NTS

LEGEND:

- STOCKPILING AREA
- EXCAVATED SOIL STOCKPILE
- CONTRACTOR HAUL ROUTE
- FS — COMPOST FILTER SOCK
- STABILIZED CONSTRUCTION ENTRANCE

NOTES:

1. CONTRACTOR SHALL PREPARE A STOCKPILE MANAGEMENT PLAN THAT INCLUDES A NUMBERING SCHEME FOR EACH STOCKPILE AND WHERE THE SOIL WAS EXCAVATED FROM (I.E. PHASE, STATION AND OFFSET FROM THE CENTERLINE). SEE SPECIFICATIONS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONSTRUCTION ACCESS AROUND THE STOCKPILES INCLUDING STABILIZING AREAS AS REQUIRED. SEE SPECIFICATIONS.
3. TARPS COVERING STOCKPILES SHALL BE CLEARLY MARKED IN ACCORDANCE WITH THE NUMBERING SCHEME.
4. CONTRACTOR SHALL COLLECT ANY STANDING WATER THAT MAY ACCUMULATE AROUND LINED STOCKPILES AND DISPOSE OF BY MEANS OF AN INFILTRATION TRENCH. SEE DETAIL 1 ON SHEET G-111.
5. PHOTOGRAPHS OF EXISTING CONDITIONS OF PROPOSED STOCKPILING SITES WERE TAKEN ON AUGUST 12, 2025.
6. CONTRACTOR SHALL RESTORE STOCKPILE SITES TO THEIR ORIGINAL CONDITION FOLLOWING FINAL DISPOSAL OF ALL EXCAVATION MATERIALS. ONLY AREAS WITH STOCKPILE SITES USED FOR STOCKPILING AND CONSTRUCTION ACCESS SHALL BE PLANTED WITH SPRIGS AS FURTHER DESCRIBED IN SPECIFICATIONS SECTION 02903 - SPRIGGING. CONTRACTOR SHALL BE RESPONSIBLE FOR IRRIGATING AND MAINTAINING NEWLY PLANTED SPRIGS FOR A PERIOD OF 6 MONTHS. IRRIGATION SHALL BE BY HAND, OR BY MEANS OF A TEMPORARY IRRIGATION SYSTEM AS APPROVED BY THE RPR.



A G-019 & G-020 G-020 STOCKPILE DETAIL SCALE: NTS

DETAIL NOTE:
1. COVER STOCKPILES WITH 6 MIL IMPERMEABLE TARPS. WEIGHT TARPS TO SECURE IN PLACE.

SCALE: 400' 0 200' 400' (1" = 200')

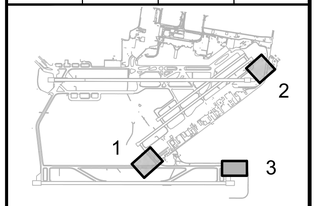
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

SHANNON RACHEL HOLMAN
LICENSED PROFESSIONAL ENGINEER
No. 12492-C
HAWAII U.S.A.

04/30/2026
Licensed Expiration Date

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.
DD	KU	TR	SH



NO.	DATE	REVISIONS

DATE

PROJECT TITLE :

TAXIWAY C RECONSTRUCTION

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

AO1021-30

SHEET TITLE:

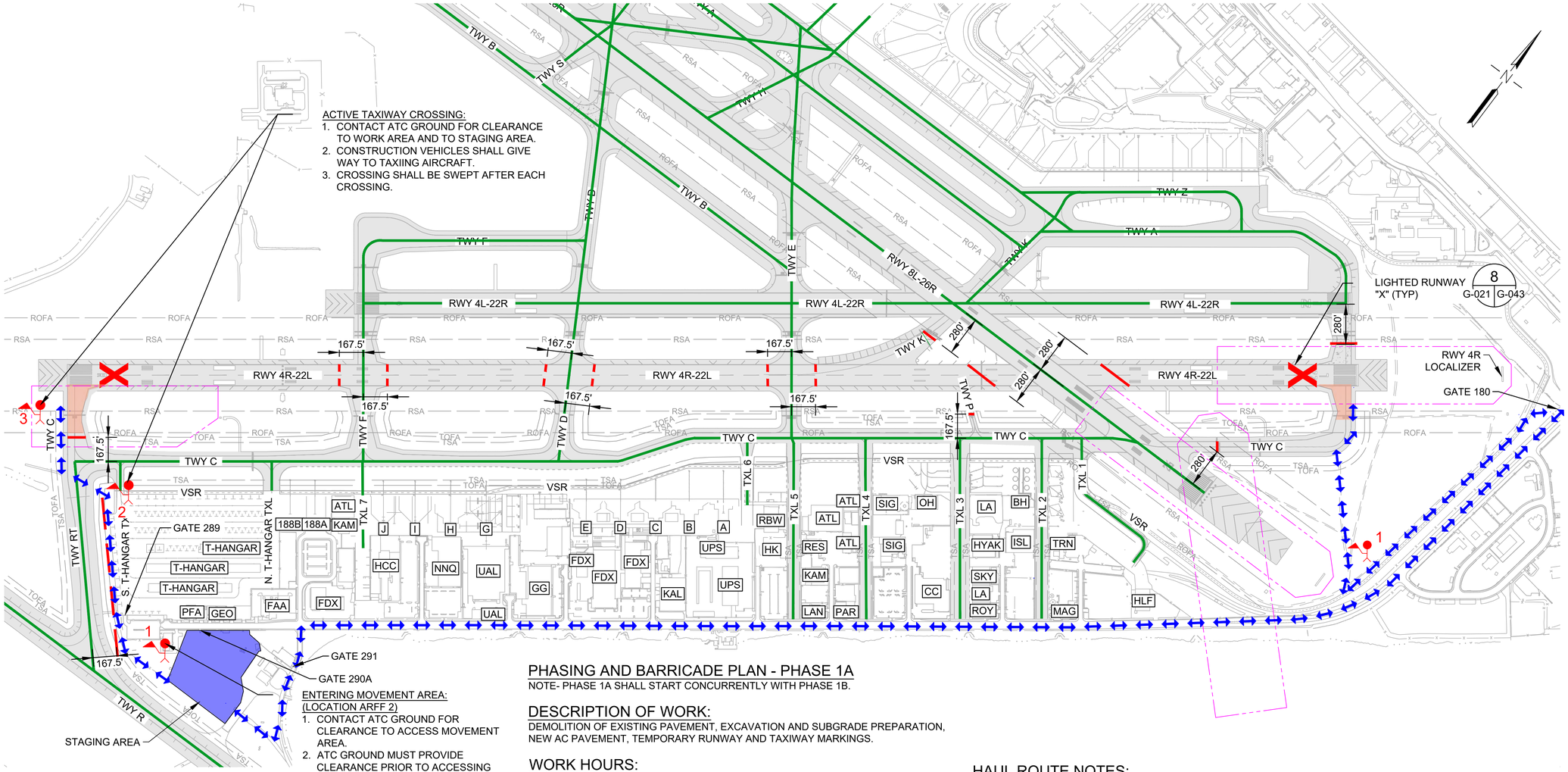
SOIL STOCKPILING AND LAYDOWN IMPROVEMENT PLAN

DATE : 01/2026

SHEET : 20 OF 172 SHEETS

DWG. NO. G-020

C:\USERS\K.UYEHARA\ORION ENGINEERS & ASSOCIATES\HDOT\A HNL TWY C, D, F, J - TWY C RECONSTRUCTION\03_ENG\02_DWGS\AO1021-30-CEA-HNL-PHSE-STCK.DWG



LEGEND:

- WORK AREA
- EXISTING RUNWAY/TAXIWAY PAVEMENT
- COMPLETED CONSTRUCTION
- STAGING AREA
- CONTRACTOR HAUL ROUTE
- AIRCRAFT TRAVEL ROUTE
- LOW-PROFILE BARRICADES (CONTINUOUS)
- LOW-PROFILE BARRICADES (WITH GAPS)
- GLIDE SLOPE / LOCALIZER CRITICAL AREA
- FLAGGER (WITH ID NUMBER)
- LIGHTED CLOSED RUNWAY MARKER

PHASING AND BARRICADE PLAN - PHASE 1A

NOTE- PHASE 1A SHALL START CONCURRENTLY WITH PHASE 1B.

DESCRIPTION OF WORK:

DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARATION, NEW AC PAVEMENT, TEMPORARY RUNWAY AND TAXIWAY MARKINGS.

WORK HOURS:

1600-0600

DURATION:

36 CALENDAR DAYS

SCHEDULE DATES:

TBD

NOTAMS (24/7):

1. RWY 4R-22L CLOSED.
2. TWY C CLOSED BETWEEN RWY 4R-22L AND RWY 8L-26R.
3. TWY C CLOSED BTWEEN WRY 4R-22L AND TWY RT.
4. TWY K CLOSED BETWEEN RWY 8L-26R AND RWY 4R-22L.
5. TWY P CLOSED BETWEEN TWY C AND RWY 4R-22L.

NAVAID STATUS AND IMPACTS (24/7):

1. RWY 4R: ILS OUT OF SERVICE UNTIL FLIGHT CHECK.
2. RWY 4R: PAPI, REIL, MALSR OUT OF SERVICE.
3. RWY 22L: PAPI, REIL OUT OF SERVICE.

PHASING NOTES:

1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. ANY NAVAIDS OUT OF SERVICE FOR MORE THAN 72 HOURS CONTINUOUSLY SHALL REQUIRE RECERTIFICATION BY THE FAA. CONTRACTOR SHALL PROVIDE A MINIMUM 7 DAYS NOTICE TO THE FAA FOR RECERTIFICATION.
4. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE RUNWAY AND TAXIWAY TO AIRCRAFT OPERATIONS.

HAUL ROUTE NOTES:

1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ACTC AT ALL TIMES.
2. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.
3. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.

FLAGGER NOTES:

ENTERING CLOSED SECTION OF RWY 8L-26R:
(LOCATION 26R END)

1. ACCESS TO THE WORK AREA IS THROUGH A CLOSED AREA. CONTRACTOR IS NOT REQUIRED TO CONTACT ATCT WHEN USING THIS HAUL ROUTE TO ACCESS THIS WORK AREA. CONTRACTOR SHALL BE REQUIRED TO CONTACT ATCT AND RECEIVE APPROVAL, PRIOR TO TRAVELING OUTSIDE OF THE DESIGNATED WORK AREA OR HAUL ROUTE.

400' 0 400' 800'
SCALE: 1" = 400'

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

SHANNON RACHEL HOLMAN
LICENSED PROFESSIONAL ENGINEER
No. 12492-C
HAWAII U.S.A.

04/30/2026
Licensed Expiration Date

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.
DD	KU	TR	SH

NO.	DATE	REVISIONS

CONSTRUCTION DOCUMENTS
JANUARY 2026
DATE

PROJECT TITLE :

TAXIWAY C RECONSTRUCTION

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

AO1021-30

SHEET TITLE:

CONSTRUCTION PHASING PLAN PHASE 1A

DATE :
01/2026
SHEET :
21 OF 172 SHEETS

DWG. NO.
G-021

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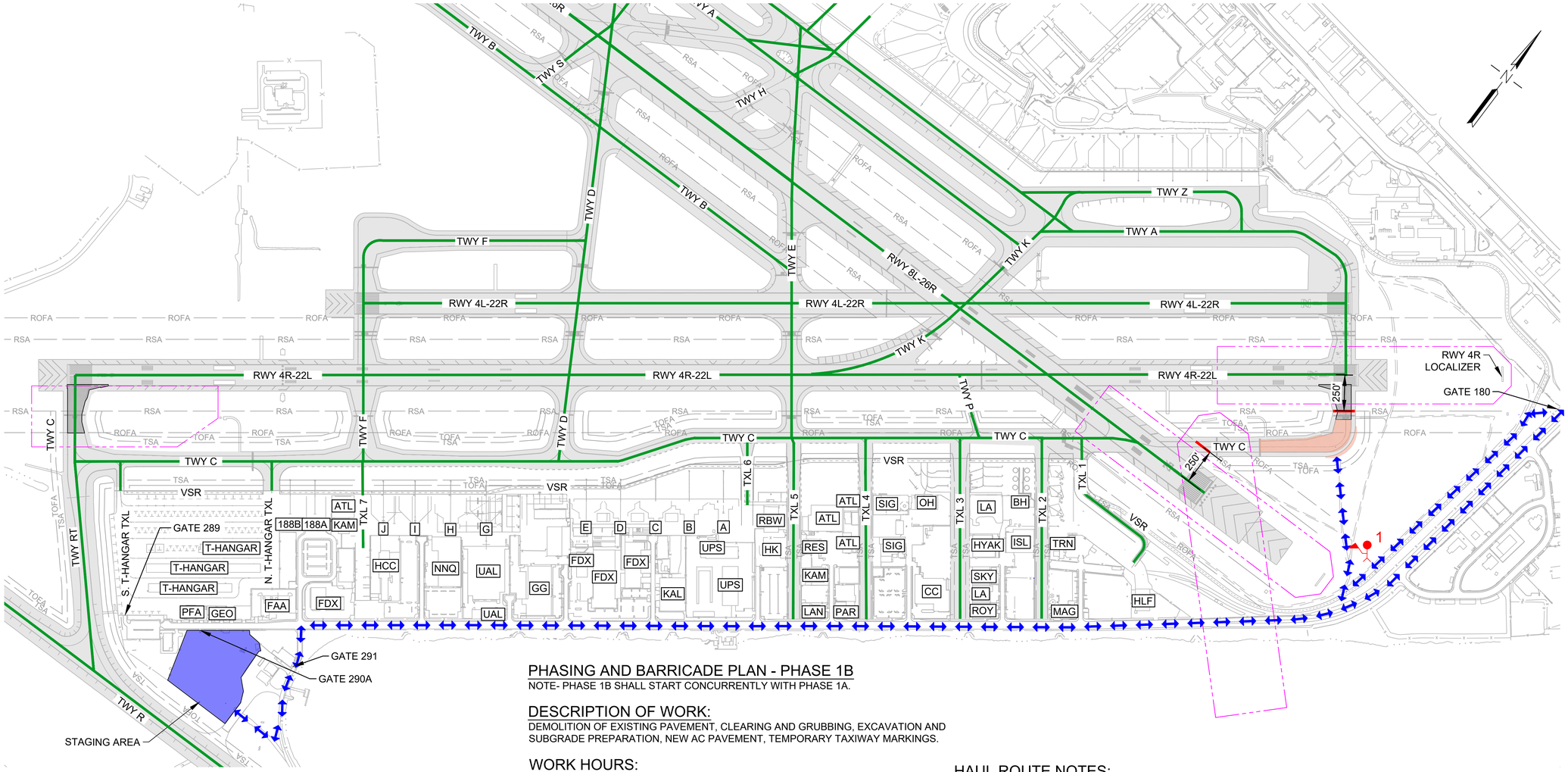

PHASING AND BARRICADE PLAN - PHASE 1B

NOTE- PHASE 1B SHALL START CONCURRENTLY WITH PHASE 1A.

DESCRIPTION OF WORK:

DEMOLITION OF EXISTING PAVEMENT, CLEARING AND GRUBBING, EXCAVATION AND SUBGRADE PREPARATION, NEW AC PAVEMENT, TEMPORARY TAXIWAY MARKINGS.

WORK HOURS:

1600-0600

DURATION:

50 CALENDAR DAYS

SCHEDULE DATES:

TBD

NOTAMS (24/7):

1. TWY C CLOSED BETWEEN RWY 8L-26R AND RWY 4R-22L.

NAVAID STATUS AND IMPACTS (24/7):

NO IMPACTS TO NAVAIDS

PHASING NOTES:

1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE RUNWAY AND TAXIWAY TO AIRCRAFT OPERATIONS.

HAUL ROUTE NOTES:

1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ACTC AT ALL TIMES.
2. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.
3. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.

FLAGGER NOTES:

ENTERING CLOSED SECTION OF TWY C:
(LOCATION 26R END)

1. ACCESS TO THE WORK AREA IS THROUGH A CLOSED AREA. CONTRACTOR IS NOT REQUIRED TO CONTACT ATCT WHEN USING THIS HAUL ROUTE TO ACCESS THIS WORK AREA. CONTRACTOR SHALL BE REQUIRED TO CONTACT ATCT AND RECEIVE APPROVAL, PRIOR TO TRAVELING OUTSIDE OF THE DESIGNATED WORK AREA OR HAUL ROUTE.

LEGEND:

- WORK AREA
- EXISTING RUNWAY/TAXIWAY PAVEMENT
- COMPLETED CONSTRUCTION
- STAGING AREA
- CONTRACTOR HAUL ROUTE
- AIRCRAFT TRAVEL ROUTE
- LOW-PROFILE BARRICADES (CONTINUOUS)
- LOW-PROFILE BARRICADES (WITH GAPS)
- GLIDE SLOPE / LOCALIZER CRITICAL AREA
- FLAGGER (WITH ID NUMBER)

SCALE: 1" = 400' (400' 0 400' 800')

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

SHANNON RACHEL HOLMAN
LICENSED PROFESSIONAL ENGINEER
No. 12492-C
HAWAII U.S.A.

04/30/2026
Licensed Expiration Date

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DSGN.	DRWN.	CHKD.	APPD.
DD	KU	TR	SH

NO.	DATE	REVISIONS

CONSTRUCTION DOCUMENTS
JANUARY 2026
DATE

PROJECT TITLE :

TAXIWAY C RECONSTRUCTION

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

AO1021-30

SHEET TITLE:

CONSTRUCTION PHASING PLAN PHASE 1B

DATE : **01/2026**

SHEET : 22 OF 172 SHEETS

DWG. NO. **G-022**

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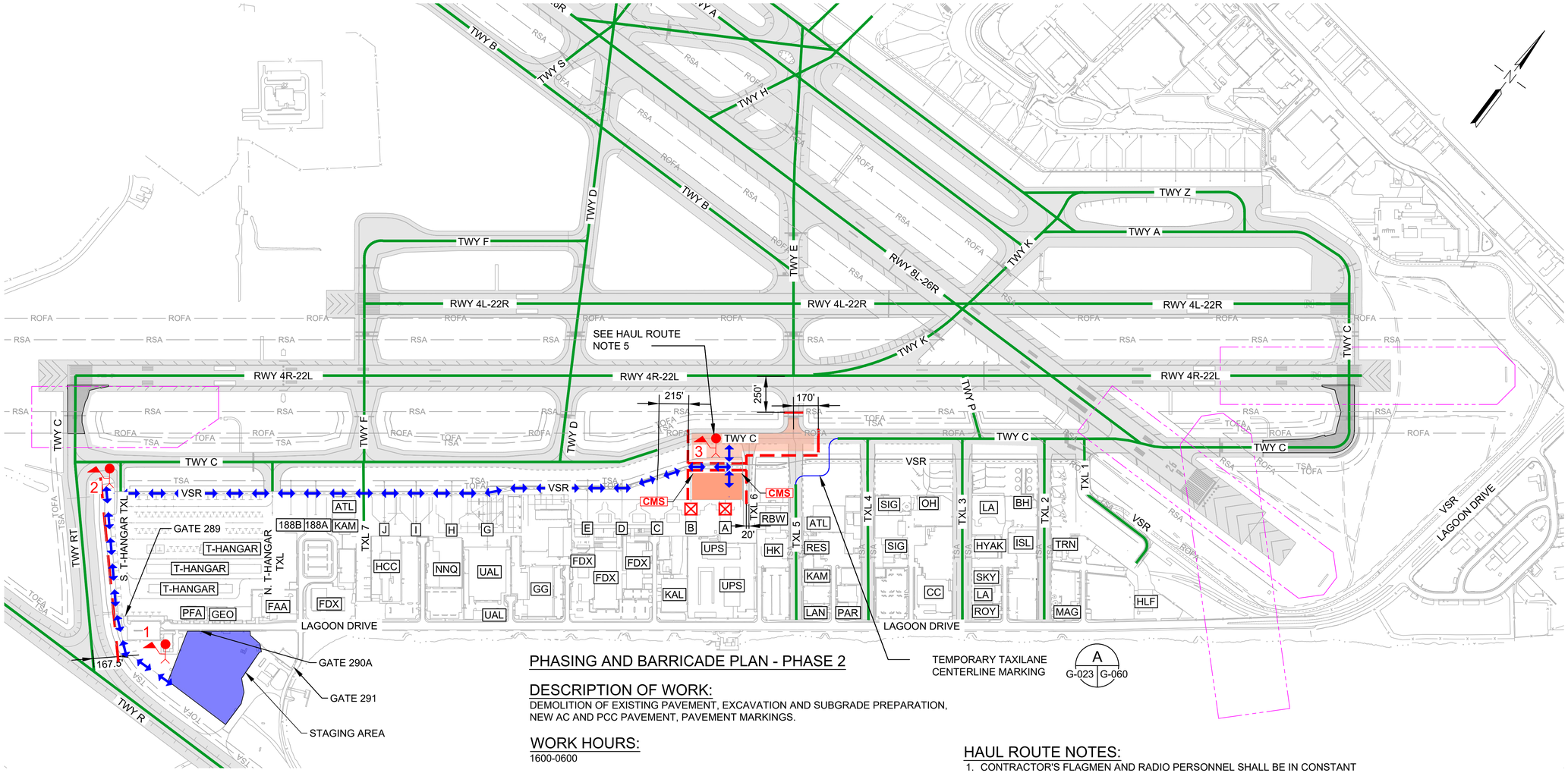

PHASING AND BARRICADE PLAN - PHASE 2

DESCRIPTION OF WORK:

DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARATION, NEW AC AND PCC PAVEMENT, PAVEMENT MARKINGS.

WORK HOURS:

1600-0600

DURATION:

45 CALENDAR DAYS

SCHEDULE DATES:

TBD

NOTAMS (24/7):

1. TWY E CLOSED BETWEEN RWY 4R-22L AND TWY C.
2. TWY C CLOSED BETWEEN HARDSTAND B AND TXL 4.
3. HARDSTANDS A AND B CLOSED.
4. HARDSTAND C AND D OPEN WITH RESTRICTIONS. SEE TABLE 1.
5. TXL 6 CLOSED.
6. TXL 5 MAY ONLY BE USED FOR ADG I-II (49-79 FT. WINGSPAN) WITH RESTRICTIONS. SEE PHASING DETAIL DWG G-055.

NAVAID STATUS AND IMPACTS:

NO IMPACTS TO NAVAIDS.

PHASING NOTES:

1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAYS, TAXILANE AND HARDSTANDS TO AIRCRAFT OPERATIONS.
4. CONTRACTOR SHALL MAINTAIN EXISTING, TWO-WAY VSR THROUGH THE WORK ZONE AT ALL TIMES. SEE SHEET G-042 FOR VSR DETAILS IN THE WORK AREA.
5. TEMPORARY STRIPING FOR TXL 5 SHALL BE INSTALLED AT THE END OF PHASE 1B AND REMOVED AT THE END OF PHASE 2. SEE SHEET #####. COORDINATE WITH RPR TO MINIMIZE IMPACT TO AIRFIELD OPERATIONS.

HAUL ROUTE NOTES:

1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ACTC AT ALL TIMES.
2. AFTER RECEIVING AUTHORIZATION FROM ATCT, CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL CONTROL THE MOVEMENT OF ALL CONSTRUCTION VEHICLES WITHIN THE DESIGNATED HAUL ROUTE(S) UNLESS OTHERWISE APPROVED BY RPR.
3. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.
4. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.
5. PROVIDE FLAGMAN FOR ENTERING VSR FROM WORK AREAS. CONTRACTOR SHALL YIELD TO ANY ONCOMING VSR TRAFFIC.

LEGEND:

- WORK AREA
- EXISTING RUNWAY/TAXIWAY PAVEMENT
- COMPLETED CONSTRUCTION
- STAGING AREA
- CONTRACTOR HAUL ROUTE
- AIRCRAFT TRAVEL ROUTE
- LOW-PROFILE BARRICADES (CONTINUOUS)
- LOW-PROFILE BARRICADES (WITH GAPS)
- GLIDE SLOPE/LOCALIZER CRTIICAL AREA
- CMS — PORTABLE CHANGEABLE MESSAGE SIGN BOARD — 6 / G-023 | G-042
- # — FLAGGER (WITH ID NUMBER)
- HARDSTAND CLOSURE(S) AS INDICATED ON NOTAMS

TABLE 1 - HARDSTAND RESTRICTIONS

LOCATION	MAX ADG POWER IN/ TOW OUT	MAX WINGSPAN	MAX ADG TOW IN/ TOW OUT	MAX WINGSPAN
HARDSTAND C	V	214 FT	N/A	N/A
HARDSTAND D	V	214 FT	N/A	N/A

HARDSTAND RESTRICTION NOTES:

1. HARDSTANDS C: TOW OUT TAIL SOUTH, SOUTH OF TWY D.
2. HARDSTAND D:
   - 2.1. TOW OUT TAIL NORTH, PULL FORWARD SHORT OF TWY D.
   - 2.2. TOW OUT TAIL SOUTH, SOUTH OF TWY D.
3. FOR AIRCRAFT MOVEMENT SEE SHEET G-044.
4. NO ENGINE STARTUP DURING PUSH BACK.

SCALE: 400' 0 400' 800' — 1" = 400'

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

SHANNON RACHEL HOLMAN
LICENSED PROFESSIONAL ENGINEER
No. 12492-C
HAWAII U.S.A.

04/30/2026
Licensed Expiration Date

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DSGN.	DRWN.	CHKD.	APPD.
DD	KU	TR	SH

NO.	DATE	REVISIONS

CONSTRUCTION DOCUMENTS
JANUARY 2026
DATE

PROJECT TITLE :

TAXIWAY C RECONSTRUCTION

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

AO1021-30

SHEET TITLE:

CONSTRUCTION PHASING PLAN PHASE 2

DATE : 01/2026

SHEET : 23 OF 172 SHEETS

DWG. NO. G-023

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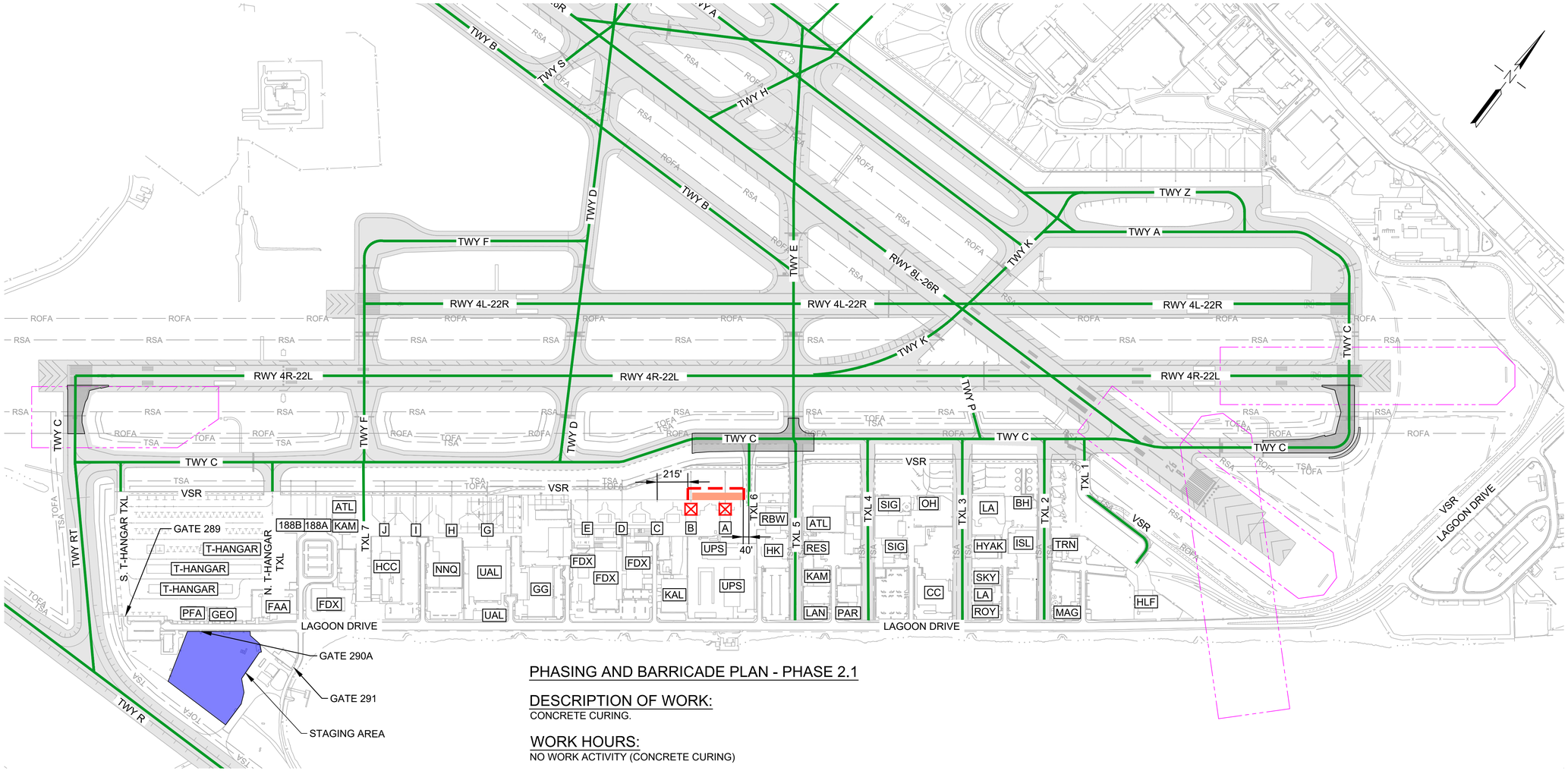

PHASING AND BARRICADE PLAN - PHASE 2.1

DESCRIPTION OF WORK:
CONCRETE CURING.

WORK HOURS:
NO WORK ACTIVITY (CONCRETE CURING)

DURATION:
21 CALENDAR DAYS (SEE NOTE 5)

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. HARDSTANDS A AND B CLOSED.

NAVAID STATUS AND IMPACTS:
NO IMPACTS TO NAVIADS.

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAYS, TAXILANE AND HARDSTANDS TO AIRCRAFT OPERATIONS.
4. TOTAL CURE TIME IS ASSUMED TO BE 28 CALENDAR DAYS. THE DURATION LISTED ABOVE IS THE ADDITIONAL DAYS BEYOND THE DAYS ALREADY ACCOUNTED FOR IN PHASE 2.

LEGEND:
- CURING AREA
- EXISTING RUNWAY/TAXIWAY PAVEMENT
- COMPLETED CONSTRUCTION
- STAGING AREA
- CONTRACTOR HAUL ROUTE
- AIRCRAFT TRAVEL ROUTE
- LOW-PROFILE BARRICADES (CONTINUOUS)
- LOW-PROFILE BARRICADES (WITH GAPS)
- GLIDE SLOPE/LOCALIZER CRTIICAL AREA
- HARDSTAND CLOSURE(S) AS INDICATED ON NOTAMS

SCALE: 400' 0 400' 800' — 1" = 400'

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

SHANNON RACHEL HOLMAN
LICENSED PROFESSIONAL ENGINEER
No. 12492-C
HAWAII U.S.A.

04/30/2026
Licensed Expiration Date

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DD	DD	TR	SH

NO.	DATE	REVISIONS

CONSTRUCTION DOCUMENTS
JANUARY 2026
DATE

PROJECT TITLE :

TAXIWAY C RECONSTRUCTION

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

AO1021-30

SHEET TITLE:

CONSTRUCTION PHASING PLAN PHASE 2.1

DATE :
01/2026
SHEET :
24 OF 172 SHEETS

DWG. NO.
G-024

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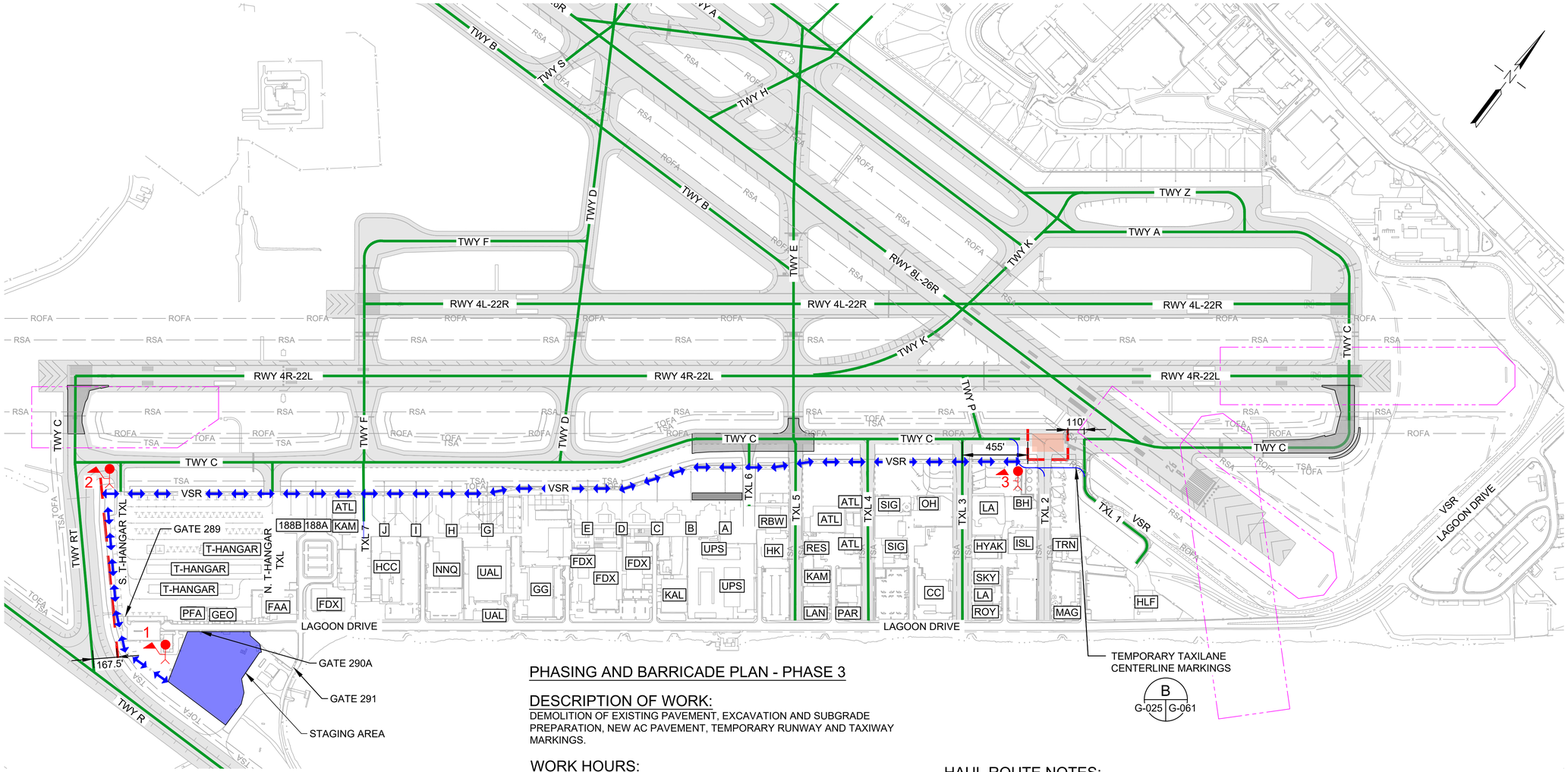

LEGEND:

- WORK AREA
- EXISTING RUNWAY/TAXIWAY PAVEMENT
- COMPLETED CONSTRUCTION
- STAGING AREA
- CONTRACTOR HAUL ROUTE
- AIRCRAFT TRAVEL ROUTE
- LOW-PROFILE BARRICADES (CONTINUOUS)
- LOW-PROFILE BARRICADES (WITH GAPS)
- GLIDE SLOPE / LOCALIZER CRITICAL AREA
- # FLAGGER (WITH ID NUMBER)

PHASING AND BARRICADE PLAN - PHASE 3

DESCRIPTION OF WORK:
DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARATION, NEW AC PAVEMENT, TEMPORARY RUNWAY AND TAXIWAY MARKINGS.

WORK HOURS:
1600-0600

DURATION:
24 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. TWY C CLOSED BETWEEN TXL 1 AND 455-FT EAST OF TXL 3.
6. TXL 2 MAY ONLY BE USED FOR ADG I-III (49-79 FT. WINGSPAN) WITH RESTRICTIONS. SEE PHASING DETAIL DWG G-045.
7. TXL 1 MAY ONLY BE USED FOR ADG I-III (79-118 FT. WINGSPAN).

NAVAID STATUS AND IMPACTS:
NO IMPACTS TO NAVAIDS.

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAY ANND TAXILANES TO AIRCRAFT OPERATIONS.

HAUL ROUTE NOTES:
1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ACTC AT ALL TIMES.
2. AFTER RECEIVING AUTHORIZATION FROM ATCT, CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL CONTROL THE MOVEMENT OF ALL CONSTRUCTION VEHICLES WITHIN THE DESIGNATED HAUL ROUTE(S) UNLESS OTHERWISE APPROVED BY RPR.
3. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.
4. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TXY RT.

400' 0 400' 800'
SCALE: 1" = 400'

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

SHANNON RACHEL HOLMAN
LICENSED PROFESSIONAL ENGINEER
No. 12492-C
HAWAII U.S.A.

04/30/2026
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DD	KU	TR	SH

NO.	DATE	REVISIONS

CONSTRUCTION DOCUMENTS
JANUARY 2026
DATE

PROJECT TITLE :

TAXIWAY C RECONSTRUCTION

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

AO1021-30

SHEET TITLE:

CONSTRUCTION PHASING PLAN PHASE 3

DATE :
01/2026
SHEET :
25 OF 172 SHEETS

DWG. NO.
G-025

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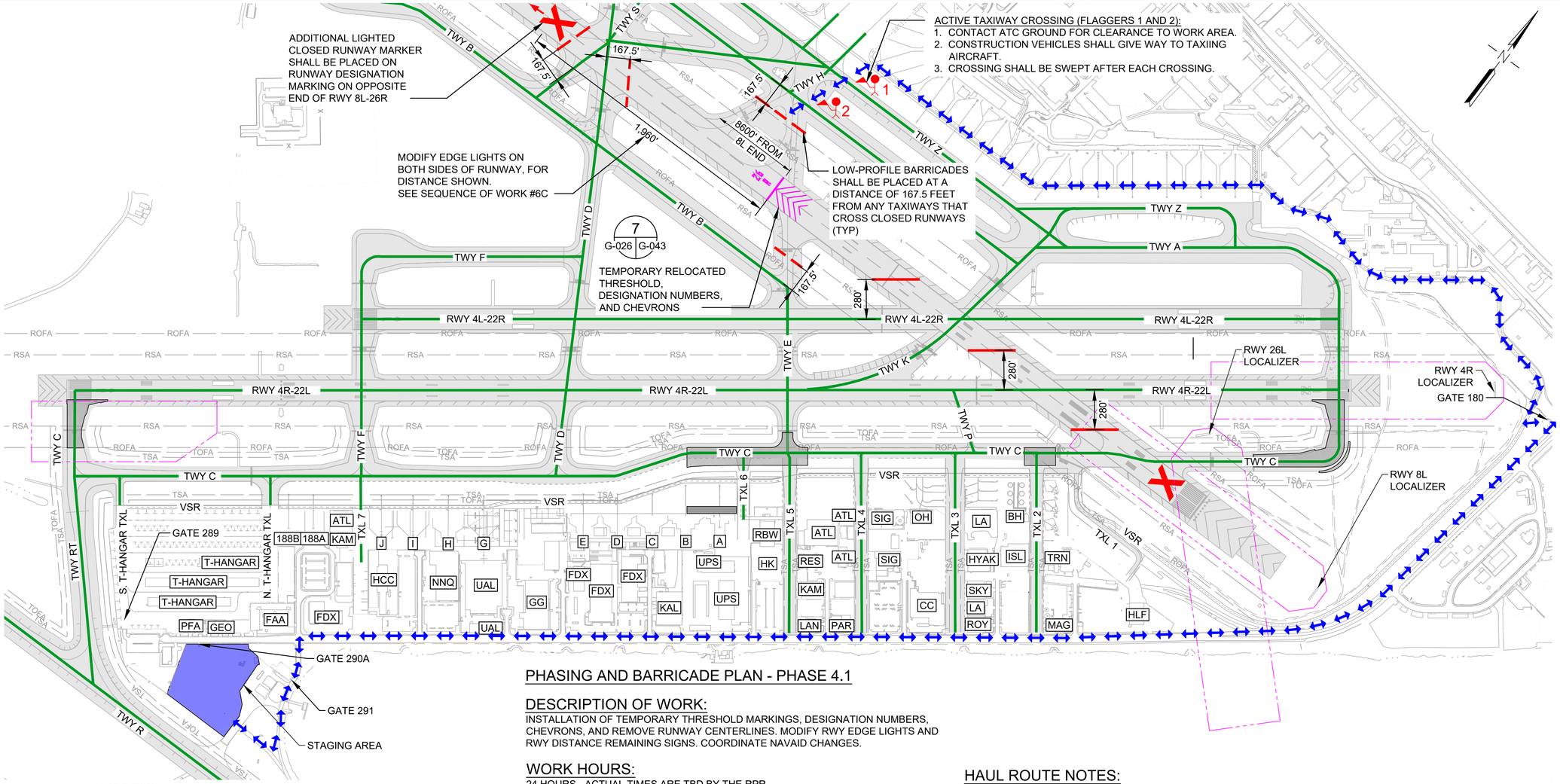


LEGEND:

- WORK AREA (TEMPORARY THRESHOLD MARKINGS)
- EXISTING RUNWAY/TAXIWAY PAVEMENT
- COMPLETED CONSTRUCTION
- STAGING AREA
- CONTRACTOR HAUL ROUTE
- AIRCRAFT TRAVEL ROUTE
- LOW-PROFILE BARRICADES (CONTINUOUS)
- LOW-PROFILE BARRICADES (WITH GAPS)
- LOCALIZER CRITICAL AREA
- FLAGGER (WITH ID NUMBER)
- 8 / G-026 G-043 — LIGHTED CLOSED RUNWAY MARKER

PHASING AND BARRICADE PLAN - PHASE 4.1

DESCRIPTION OF WORK:
INSTALLATION OF TEMPORARY THRESHOLD MARKINGS, DESIGNATION NUMBERS, CHEVRONS, AND REMOVE RUNWAY CENTERLINES. MODIFY RWY EDGE LIGHTS AND RWY DISTANCE REMAINING SIGNS. COORDINATE NAVAID CHANGES.

WORK HOURS:
24 HOURS - ACTUAL TIMES ARE TBD BY THE RPR

DURATION:
1 CALENDAR DAY

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. RWY 8L-26R CLOSED.
2. TWY E CLOSED BETWEEN TWY B AND TWY A.
3. TWY H CLOSED BETWEEN RWY 8L-26R AND TWY A.
4. RWY 8L-26R RDR'S OUT OF SERVICE.

NAVAID STATUS AND IMPACTS (24/7):
1. RWY 8L: ILS OUT-OF-SERVICE UNTIL FLIGHT CHECK.
2. RWY 8L: PAPI, REIL, MALSR OUT OF SERVICE.
3. RWY 26R: PAPI, REIL OUT OF SERVICE.
4. RWY 26L: LOC OUT OF SERVICE UNTIL FLIGHT CHECK.

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE RUNWAY AND TAXIWAY TO AIRCRAFT OPERATIONS.
4. ANY NAVAIDS OUT OF SERVICE FOR MORE THAN 72 HOURS CONTINUOUSLY SHALL REQUIRE RECERTIFICATION BY THE FAA. CONTRACTOR SHALL PROVIDE A MINIMUM OF 7 DAYS NOTICE TO THE FAA FOR RECERTIFICATION.

HAUL ROUTE NOTES:
1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ACTC AT ALL TIMES.
2. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.

SEQUENCE OF WORK:
1. CONFIRM RWY AND TWY CLOSURES WITH HNL OPERATIONS.
2. INSTALL LIGHTED X'S AT BOTH ENDS OF RWY 8L-26R.
3. INSTALL REQUIRED LOW-PROFILE BARRICADES.
4. MARKING REMOVAL
   A. OBLITERATE RWY CENTERLINE MARKINGS IN WORK AREA AS SHOWN.
5. APPLY TEMPORARY MARKINGS AS SHOWN.
6. ELECTRICAL
   A. SECURELY COVER TEMPORARY THRESHOLD LIGHTS AND DEACTIVATE RWY EDGE LIGHTS IN CLOSED PORTION OF RWY.
   B. DEACTIVATE RWY 8L ILS, RWY 26R PAPI & REIL, AND RWY 26 LOC DURING WORK HOURS AS SHOWN ON NAVAID STATUS AND IMPACTS.
   C. REMOVE EXISTING RUNWAY EDGE LIGHTS AND STORE FOR REINSTALLATION. INSTALL NEW WHITE/AMBER RUNWAY EDGE LIGHTS ON EXISTING BASE CAN FOR TEMPORARY RUNWAY LIGHTING (14 ABOVE-GRADE EDGE LIGHTS AND 6 SEMI-FLUSH EDGE LIGHTS IN TOTAL).
7. SIGNAGE
   A. COVER RWY DISTANCE REMAINING SIGNS.
   B. COVER APPROPRIATE TWY DIRECTIONAL SIGNS FOR TWY'S SCHEDULED TO BE CLOSED.
8. OPENING OF RUNWAY
   A. CONDUCT FOD CHECK AND OBTAIN FINAL ACCEPTANCE FROM HNL OPERATIONS.
   B. REMOVE LOW PROFILE BARRICADES
   C. REMOVE LIGHTED X'S AT BOTH ENDS OF RWY 8L-26R.
   D. OPEN RWY 8L-26R AT 8600' LENGTH.

400' 0 400' 800'
SCALE: 1" = 400'

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

SHANNON RACHEL HOLMAN
LICENSED PROFESSIONAL ENGINEER
No. 12492-C
HAWAII U.S.A.

04/30/2026
Licensed Expiration Date

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.
DD	KU	TR	SH

NO.	DATE	REVISIONS

CONSTRUCTION DOCUMENTS
JANUARY 2026
DATE

PROJECT TITLE :

TAXIWAY C RECONSTRUCTION

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

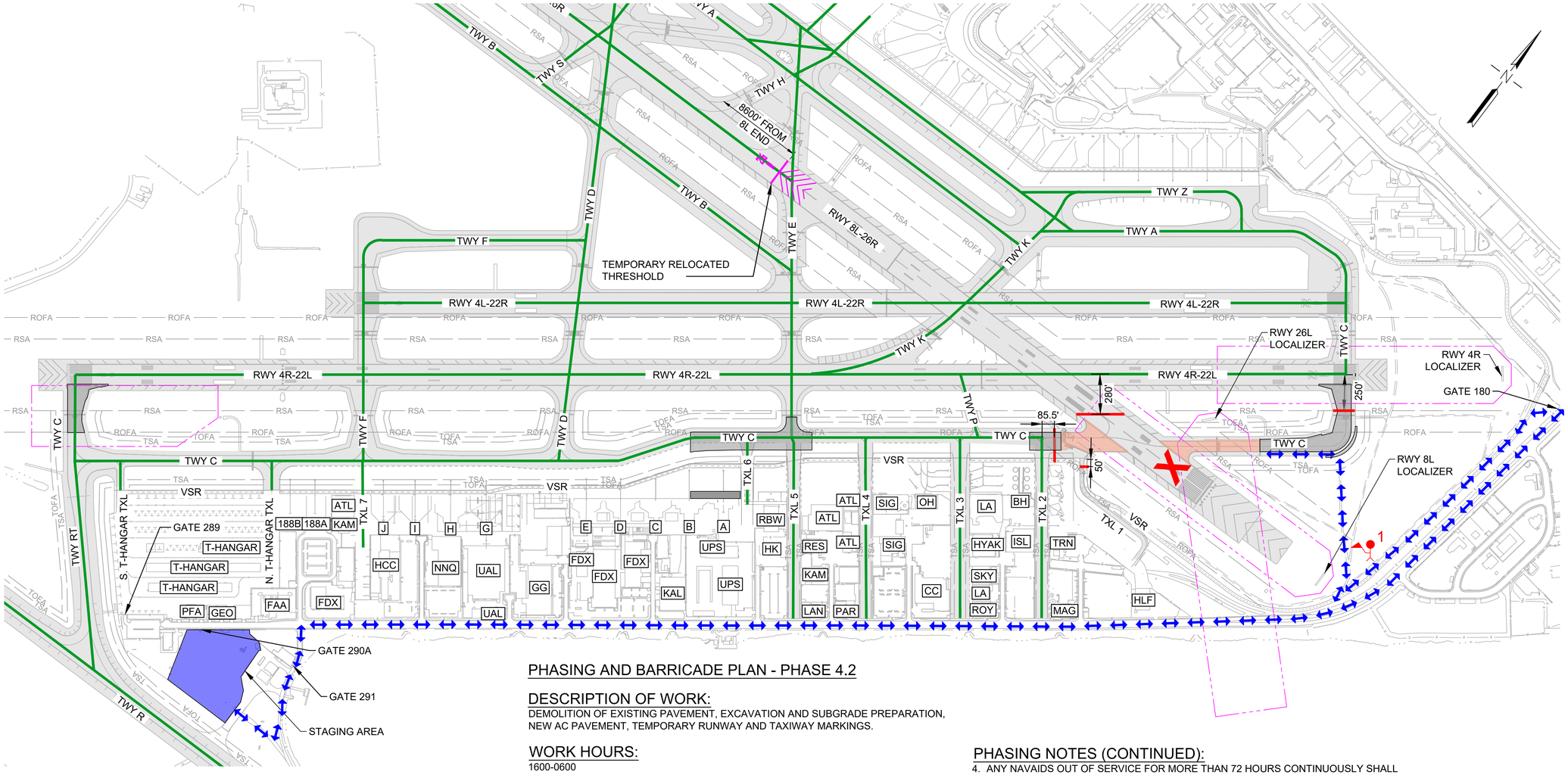
AO1021-30

SHEET TITLE:

CONSTRUCTION PHASING PLAN PHASE 4.1

DATE : **01/2026**
SHEET : 26 OF 172 SHEETS
DWG. NO. **G-026**

C:\USERS\K.UYEHARA\ORION ENGINEERS & ASSOCIATES\HDOT\A HNL TWY C, D, F, J - TWY C RECONSTRUCTION\03_ENG\02_DWGS\AO1021-30-OEA-HNL-PH04.1.DWG



LEGEND:

- WORK AREA
- EXISTING RUNWAY/TAXIWAY PAVEMENT
- COMPLETED CONSTRUCTION
- STAGING AREA
- CONTRACTOR HAUL ROUTE
- AIRCRAFT TRAVEL ROUTE
- LOW-PROFILE BARRICADES (CONTINUOUS)
- LOW-PROFILE BARRICADES (WITH GAPS)
- LOCALIZER CRITICAL AREA
- FLAGGER (WITH ID NUMBER)
- 8 / G-027 | G-043 — LIGHTED CLOSED RUNWAY MARKER

PHASING AND BARRICADE PLAN - PHASE 4.2

DESCRIPTION OF WORK:
DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARATION, NEW AC PAVEMENT, TEMPORARY RUNWAY AND TAXIWAY MARKINGS.

WORK HOURS:
1600-0600

DURATION:
50 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. RWY 8L-26R SHORTENED TO 8600 FT.
   A. 8L - TODA, TORA, ASDA, LDA = 8600 FT.
      - LAST TAXIWAY AVAILABLE TO EXIT: TWY E
   B. 26R TODA, TORA, ASDA = 8600 FT, LDA = 0 FT
2. TWY C CLOSED BETWEEN RWY 4R-22L AND 85.5' EAST OF TXL 2.
3. RWY 8L-26R RDR'S OUT OF SERVICE.
4. TXL 1 CLOSED.

NAVAID STATUS AND IMPACTS (24/7):
1. RWY 8L: ILS OUT OF SERVICE UNTIL FLIGHT CHECK.
2. RWY 8L: PAPI, REIL, MALSR IN SERVICE.
3. RWY 26R: PAPI, REIL OUT OF SERVICE.
4. RWY 26L: LOC OUT OF SERVICE UNTIL FLIGHT CHECK.

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE RUNWAY, TAXIWAY AND TAXILANE TO AIRCRAFT OPERATIONS.

PHASING NOTES (CONTINUED):
4. ANY NAVAIDS OUT OF SERVICE FOR MORE THAN 72 HOURS CONTINUOUSLY SHALL REQUIRE RECERTIFICATION BY THE FAA. CONTRACTOR SHALL PROVIDE A MINIMUM OF 7 DAYS NOTICE TO THE FAA FOR RECERTIFICATION.

HAUL ROUTE NOTES:
1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ACTC AT ALL TIMES.
2. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.

FLAGGER NOTES:
ENTERING CLOSED SECTION OF RWY 8L-26R:
(LOCATION 26R END)
1. ACCESS TO THE WORK AREA IS THROUGH A CLOSED AREA. CONTRACTOR IS NOT REQUIRED TO CONTACT ATCT WHEN USING THIS HAUL ROUTE TO ACCESS THIS WORK AREA. CONTRACTOR SHALL BE REQUIRED TO CONTACT ATCT AND RECEIVE APPROVAL, PRIOR TO TRAVELING OUTSIDE OF THE DESIGNATED WORK AREA OR HAUL ROUTE.

400' 0 400' 800'
SCALE: 1" = 400'

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

SHANNON RACHEL HOLMAN
LICENSED PROFESSIONAL ENGINEER
No. 12492-C
HAWAII U.S.A.

04/30/2026
Licensed Expiration Date

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DSGN.	DRWN.	CHKD.	APPD.
DD	KU	TR	SH

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CONSTRUCTION DOCUMENTS
JANUARY 2026
DATE

PROJECT TITLE :

TAXIWAY C RECONSTRUCTION

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

AO1021-30

SHEET TITLE:

CONSTRUCTION PHASING PLAN PHASE 4.2

DATE :
01/2026
SHEET :
27 OF 172 SHEETS

DWG. NO.
G-027

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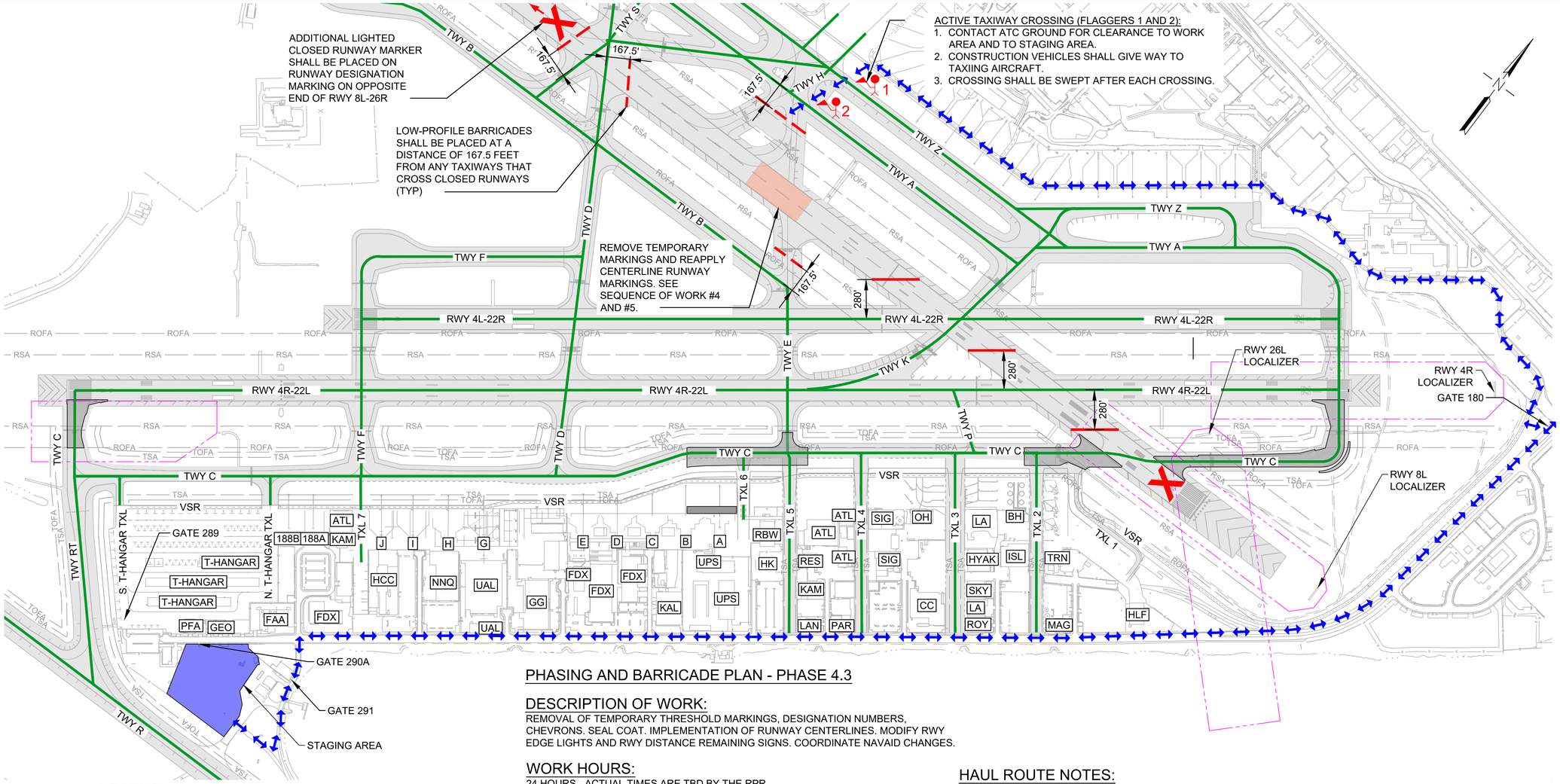

LEGEND:

- WORK AREA (TEMPORARY THRESHOLD MARKINGS)
- EXISTING RUNWAY/TAXIWAY PAVEMENT
- COMPLETED CONSTRUCTION
- STAGING AREA
- CONTRACTOR HAUL ROUTE
- AIRCRAFT TRAVEL ROUTE
- LOW-PROFILE BARRICADES (CONTINUOUS)
- LOW-PROFILE BARRICADES (WITH GAPS)
- LOCALIZER CRITICAL AREA
- FLAGGER (WITH ID NUMBER)
- 8 / G-028 | G-043 — LIGHTED CLOSED RUNWAY MARKER

PHASING AND BARRICADE PLAN - PHASE 4.3

DESCRIPTION OF WORK:
REMOVAL OF TEMPORARY THRESHOLD MARKINGS, DESIGNATION NUMBERS, CHEVRONS. SEAL COAT. IMPLEMENTATION OF RUNWAY CENTERLINES. MODIFY RWY EDGE LIGHTS AND RWY DISTANCE REMAINING SIGNS. COORDINATE NAVAID CHANGES.

WORK HOURS:
24 HOURS - ACTUAL TIMES ARE TBD BY THE RPR

DURATION:
2 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. RWY 8L-26R CLOSED.
2. TWY E CLOSED BETWEEN TWY B AND TWY A.
3. TWY H CLOSED BETWEEN RWY 8L-26R AND TWY A.
4. RWY 8L-26R RDR'S OUT OF SERVICE.

NAVAID STATUS AND IMPACTS (24/7):
1. RWY 8L: ILS OUT OF SERVICE UNTIL FLIGHT CHECK.
2. RWY 8L: PAPI, REIL, MALSR OUT OF SERVICE.
3. RWY 26R: PAPI, REIL OUT OF SERVICE.
4. RWY 26L: LOC OUT OF SERVICE UNTIL FLIGHT CHECK.

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. ANY NAVAIDS OUT OF SERVICE FOR MORE THAN 72 HOURS CONTINUOUSLY SHALL REQUIRE RECERTIFICATION BY THE FAA. CONTRACTOR SHALL PROVIDE A MINIMUM OF 7 DAYS NOTICE TO THE FAA FOR RECERTIFICATION.
4. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE RUNWAY, TAXIWAY AND TAXILANE TO AIRCRAFT OPERATIONS.

HAUL ROUTE NOTES:
1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ACTC AT ALL TIMES.
2. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.

SEQUENCE OF WORK:
1. CONFIRM RWY AND TWY CLOSURES WITH HNL OPERATIONS.
2. INSTALL LIGHTED X'S AT BOTH ENDS OF RWY 8L-26R.
3. INSTALL REQUIRED LOW-PROFILE BARRICADES.
4. MARKING REMOVAL
   A. OBLITERATE TEMPORARY RWY DESIGNATION THRESHOLD MARKINGS. SEAL COAT PER SPECIFICATIONS SECTION 02622.
5. RESTORE RWY CENTERLINE MARKINGS PREVIOUSLY OBLITERATED IN PHASE 4.1.
6. ELECTRICAL
   A. DEACTIVATE TEMPORARY THRESHOLD LIGHTS AND REACTIVATE RWY EDGE LIGHTS IN PHASE 4.2 WORK AREA AND 1000' RSA.
   B. REACTIVATE RWY 8L ILS, RWY 26R PAPI & REIL, AND RWYL 26L LOC FOR FULL-TIME OPERATION AFTER CONCLUSION OF WORK DURING THIS PHASE, PROVIDED FLIGHT CHECK HAS BEEN PERFORMED.
   C. REMOVE WHITE/AMBER RWY EDGE LIGHTS AND REINSTALL ORIGINAL RWY EDGE LIGHTS (14 ABOVE-GRADE EDGE LIGHTS AND 6 SEMI-FLUSH EDGE LIGHTS).
7. SIGNAGE
   A. UNCOVER RWY DISTANCE REMAINING SIGNS.
   B. UNCOVER TWY DIRECTIONAL SIGNS.
8. OPENING OF RUNWAY
   A. CONDUCT FOD CHECK AND OBTAIN FINAL ACCEPTANCE FROM HNL OPERATIONS.
   B. REMOVE LOW PROFILE BARRICADES
   C. REMOVE LIGHTED X'S AT BOTH ENDS OF RWY 8L-26R.
   D. OPEN RWY 8L-26R AT FULL LENGTH.

400' 0 400' 800'
SCALE: 1" = 400'

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

SHANNON RACHEL HOLMAN
LICENSED PROFESSIONAL ENGINEER
No. 12492-C
HAWAII U.S.A.

04/30/2026
Licensed Expiration Date

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.
DD	KU	TR	SH

NO.	DATE	REVISIONS

CONSTRUCTION DOCUMENTS
JANUARY 2026
DATE

PROJECT TITLE :

TAXIWAY C RECONSTRUCTION

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

AO1021-30

SHEET TITLE:

CONSTRUCTION PHASING PLAN PHASE 4.3

DATE :	DWG. NO.
01/2026	G-028
SHEET :	
28 OF 172 SHEETS	

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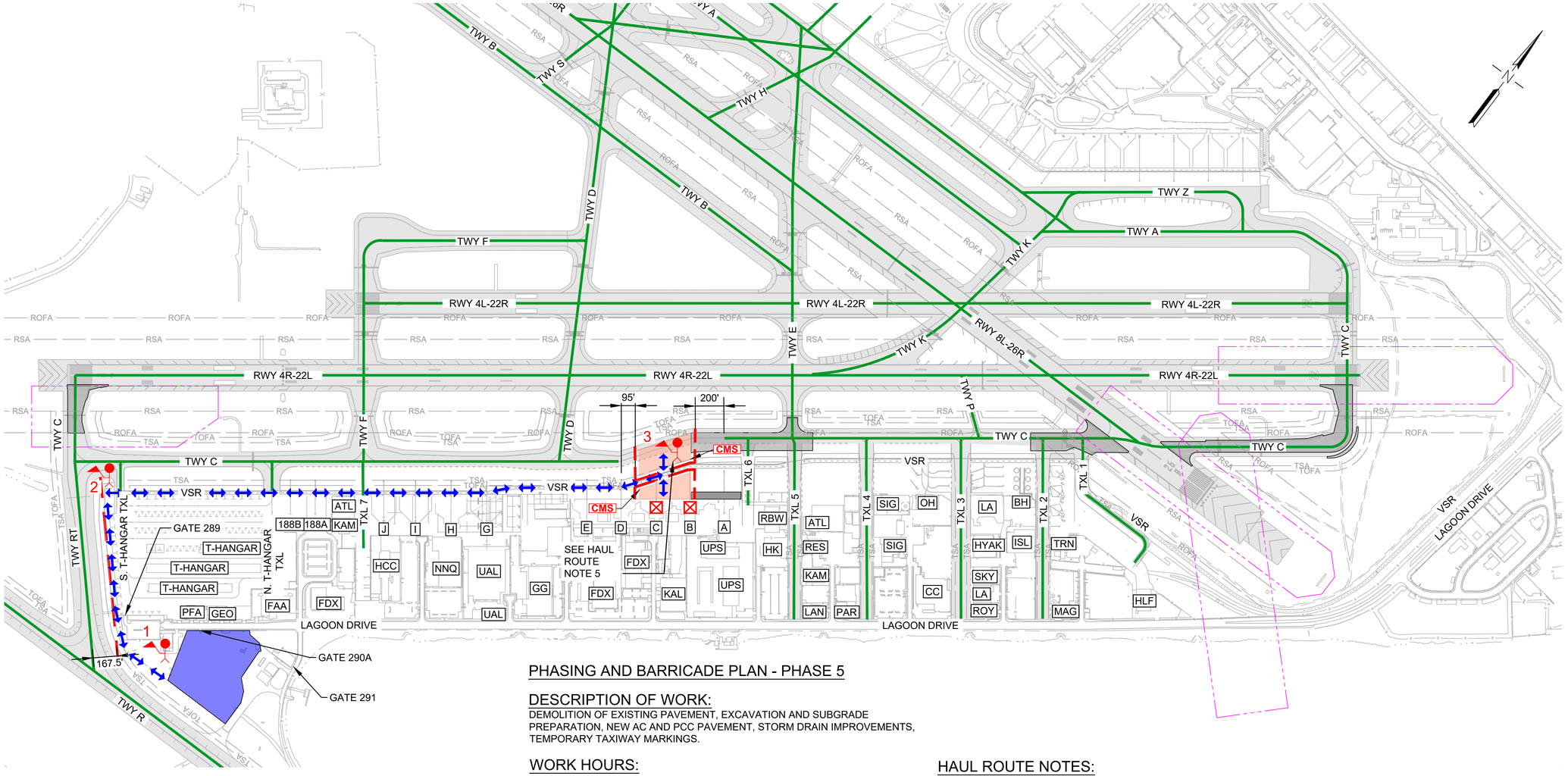

PHASING AND BARRICADE PLAN - PHASE 5

DESCRIPTION OF WORK:
DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARATION, NEW AC AND PCC PAVEMENT, STORM DRAIN IMPROVEMENTS, TEMPORARY TAXIWAY MARKINGS.

WORK HOURS:
1600-0600

DURATION:
40 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. TWY C CLOSED BETWEEN HARDSTANDS A AND D.
2. HARDSTANDS B AND C CLOSED.
3. HARDSTANDS A, D AND E OPEN WITH RESTRICTIONS. SEE TABLE 1.

NAVAID STATUS AND IMPACTS (24/7):
1. RWY 8L-26R: ILS OUT OF SERVICE UNTIL FLIGHT CHECK.

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAY AND HARDSTANDS TO AIRCRAFT OPERATIONS.

HAUL ROUTE NOTES:
1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ACTC AT ALL TIMES.
2. AFTER RECEIVING AUTHORIZATION FROM ATCT, CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL CONTROL THE MOVEMENT OF ALL CONSTRUCTION VEHICLES WITHIN THE DESIGNATED HAUL ROUTE(S) UNLESS OTHERWISE APPROVED BY RPR.
3. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.
4. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.
5. PROVIDE FLAGMAN FOR ENTERING VSR FROM WORK AREAS. CONTRACTOR SHALL YIELD TO ANY ONCOMING VSR TRAFFIC.

TABLE 1 - HARDSTAND RESTRICTIONS

LOCATION	MAX ADG POWER IN/ TOW OUT	MAX WINGSPAN	MAX ADG TOW IN/ TOW OUT	MAX WINGSPAN
HARDSTAND A	V	214 FT	N/A	N/A
HARDSTAND D	III	118 FT	IV	171 FT
HARDSTAND E	V	214 FT	N/A	N/A

HARDSTAND RESTRICTION NOTES:
1. HARDSTAND A: TOW OUT TAIL NORTH, NORTH OF TWY E.
2. HARDSTAND D: TOW OUT TAIL SOUTH, SOUTH OF TWY D.
3. HARDSTAND E:
   - 3.1. TOW OUT TAIL NORTH, PULL FORWARD SOUTH OF TWY D.
   - 3.2. TOW OUT TAIL SOUTH, SOUTH OF TWY D.
4. FOR AIRCRAFT MOVEMENTS SEE SHEET G-046.
5. NO ENGINE STARTUP DURING PUSH BACK.

SCALE: 400' 0 400' 800' — 1" = 400'

LEGEND:
- WORK AREA
- EXISTING RUNWAY/TAXIWAY PAVEMENT
- COMPLETED CONSTRUCTION
- STAGING AREA
- CONTRACTOR HAUL ROUTE
- AIRCRAFT TRAVEL ROUTE
- LOW-PROFILE BARRICADES (CONTINUOUS)
- LOW-PROFILE BARRICADES (WITH GAPS)
- GLIDE SLOPE/LOCALIZER CRTIICAL AREA
- AIRCRAFT WINGTIP CLEARANCE
- CMS — PORTABLE CHANGEABLE MESSAGE SIGN BOARD
- # — FLAGGER (WITH ID NUMBER)
- HARDSTAND CLOSURE(S) AS INDICATED ON NOTAMS

6 (G-029 | G-042)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

SHANNON RACHEL HOLMAN
LICENSED PROFESSIONAL ENGINEER
No. 12492-C
HAWAII U.S.A.

04/30/2026
Licensed Expiration Date

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.
DD	KU	TR	SH

NO.	DATE	REVISIONS

CONSTRUCTION DOCUMENTS
JANUARY 2026
DATE

PROJECT TITLE :

TAXIWAY C RECONSTRUCTION

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

AO1021-30

SHEET TITLE:

CONSTRUCTION PHASING PLAN PHASE 5

DATE : 01/2026

SHEET : 29 OF 172 SHEETS

DWG. NO. G-029

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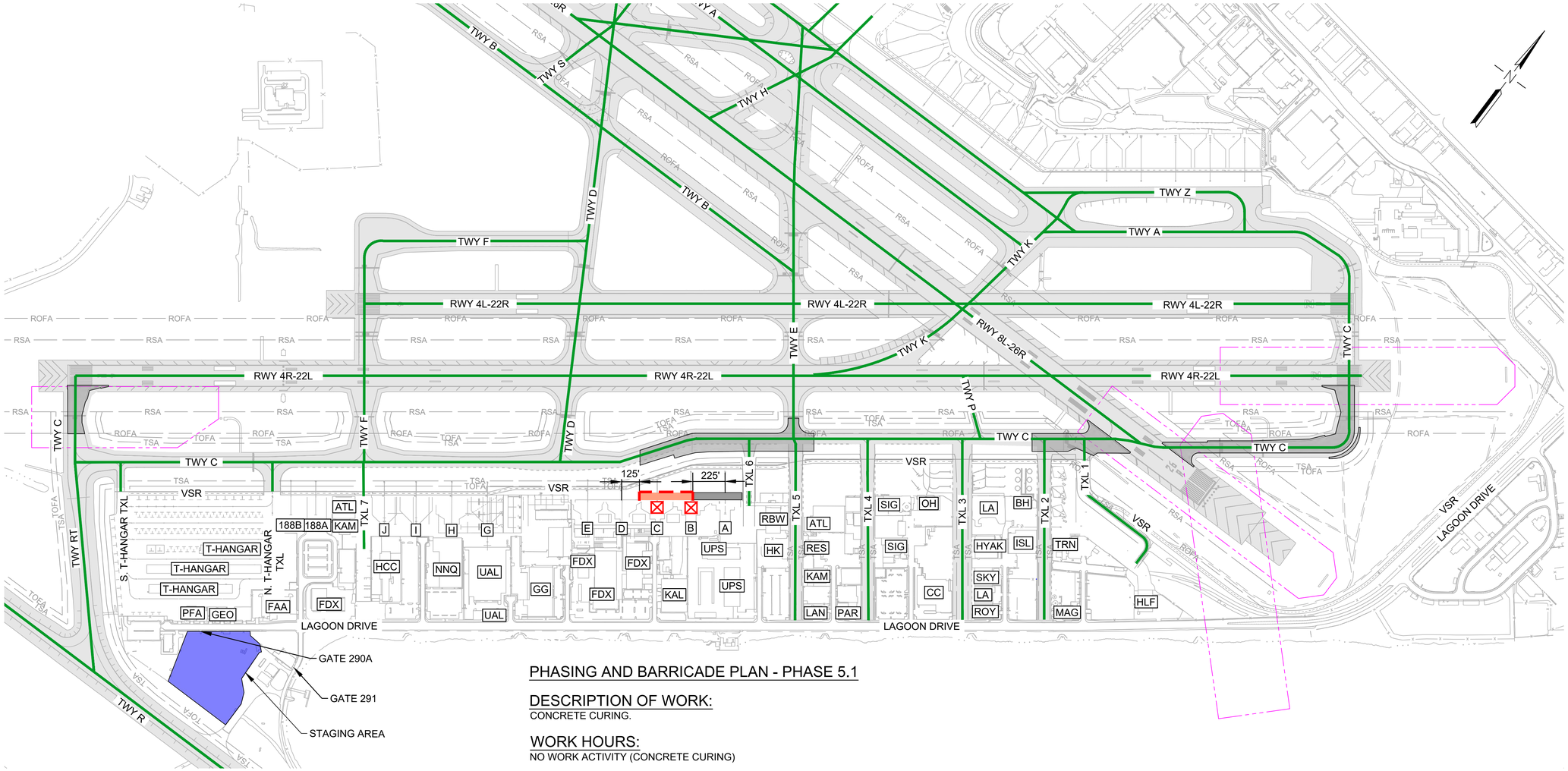

PHASING AND BARRICADE PLAN - PHASE 5.1

DESCRIPTION OF WORK:
CONCRETE CURING.

WORK HOURS:
NO WORK ACTIVITY (CONCRETE CURING)

DURATION:
21 CALENDAR DAYS (SEE NOTE 5)

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. HARDSTANDS B AND C CLOSED.
2. HARDSTAND D OPEN WITH RESTRICTIONS. SEE TABLE 1.

NAVAID STATUS AND IMPACTS:
NO IMPACTS TO NAVIADS.

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAYS, TAXILANE AND HARDSTANDS TO AIRCRAFT OPERATIONS.
4. TOTAL CURE TIME IS ASSUMED TO BE 28 CALENDAR DAYS. THE DURATION LISTED ABOVE IS THE ADDITIONAL DAYS BEYOND THE DAYS ALREADY ACCOUNTED FOR IN PHASE 5.

LEGEND:
- CURING AREA
- EXISTING RUNWAY/TAXIWAY PAVEMENT
- COMPLETED CONSTRUCTION
- STAGING AREA
- CONTRACTOR HAUL ROUTE
- AIRCRAFT TRAVEL ROUTE
- LOW-PROFILE BARRICADES (CONTINUOUS)
- LOW-PROFILE BARRICADES (WITH GAPS)
- GLIDE SLOPE/LOCALIZER CRTIICAL AREA
- HARDSTAND CLOSURE(S) AS INDICATED ON NOTAMS

TABLE 1 - HARDSTAND RESTRICTIONS

LOCATION	MAX ADG POWER IN/ TOW OUT	MAX WINGSPAN	MAX ADG TOW IN/ TOW OUT	MAX WINGSPAN
HARDSTAND D	IV	118 FT	V	214 FT

400' 0 400' 800'
SCALE: 1" = 400'

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

SHANNON RACHEL HOLMAN
LICENSED PROFESSIONAL ENGINEER
No. 12492-C
HAWAII U.S.A.

04/30/2026
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DSGN.	DRWN.	CHKD.	APPD.
DD	DD	TR	SH

NO.	DATE	REVISIONS

CONSTRUCTION DOCUMENTS
JANUARY 2026
DATE

PROJECT TITLE :

TAXIWAY C RECONSTRUCTION

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

AO1021-30

SHEET TITLE:

CONSTRUCTION PHASING PLAN PHASE 5.1

DATE :
01/2026
SHEET :
30 OF 172 SHEETS

DWG. NO.
G-030

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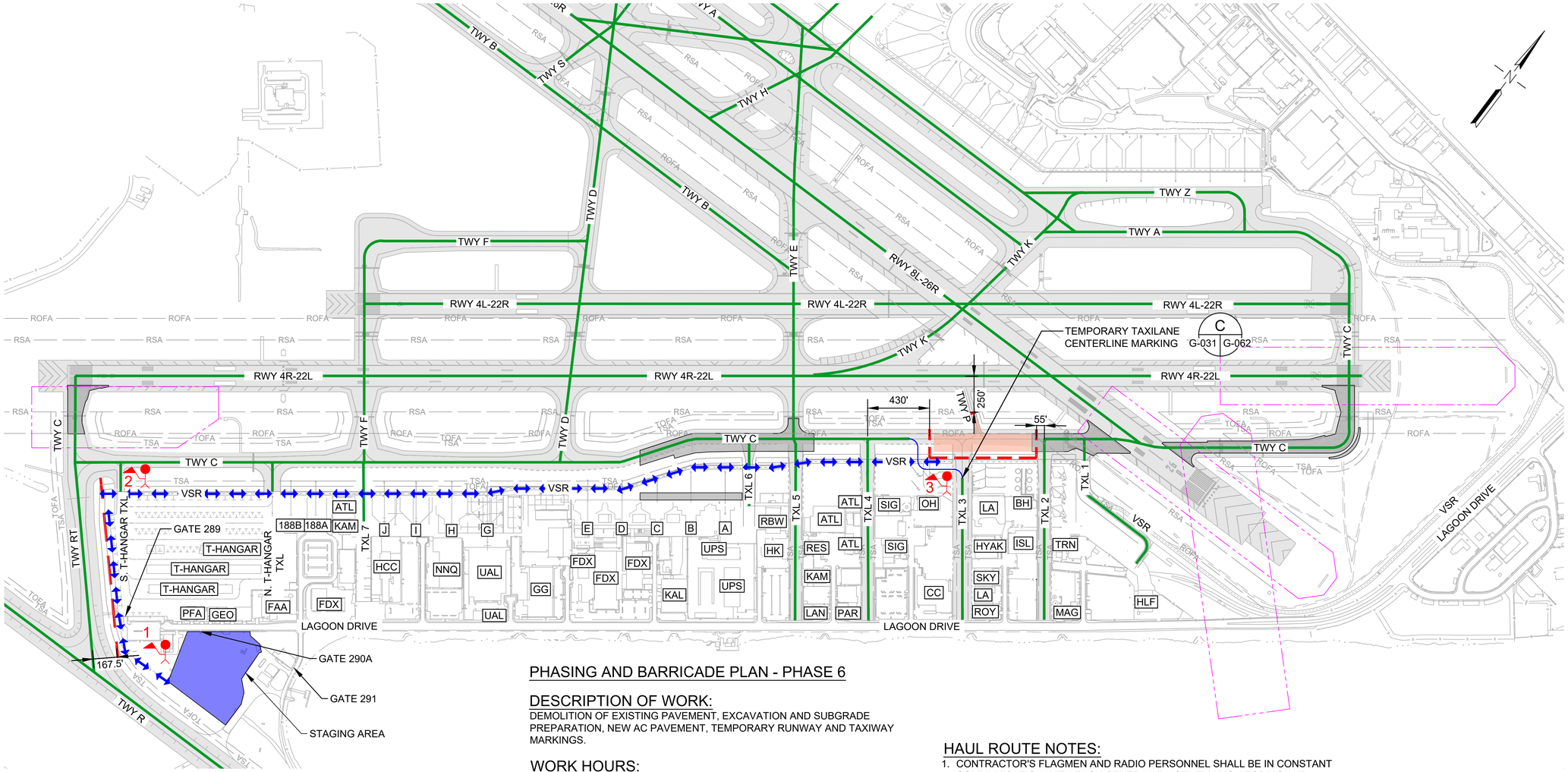

LEGEND:

- WORK AREA
- EXISTING RUNWAY/TAXIWAY PAVEMENT
- COMPLETED CONSTRUCTION
- STAGING AREA
- CONTRACTOR HAUL ROUTE
- AIRCRAFT TRAVEL ROUTE
- LOW-PROFILE BARRICADES (CONTINUOUS)
- LOW-PROFILE BARRICADES (WITH GAPS)
- GLIDE SLOPE / LOCALIZER CRITICAL AREA
- FLAGGER (WITH ID NUMBER)

PHASING AND BARRICADE PLAN - PHASE 6

DESCRIPTION OF WORK:
DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARATION, NEW AC PAVEMENT, TEMPORARY RUNWAY AND TAXIWAY MARKINGS.

WORK HOURS:
1600-0600

DURATION:
39 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. TWY C CLOSED BETWEEN TXL 2 AND 430-FT EAST OF TXL 4.
2. TWY P CLOSED BETWEEN TWY C AND RWY 4R-22L.
3. TXL 3 RESTRICTED TO ADG III (MAX WINGSPAN: 112.6 FT). SEE SHEETS G-047 AND G-048.

NAVAID STATUS AND IMPACTS:
NO IMPACTS TO NAVAIDS.

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAY AND TAXILANE TO AIRCRAFT OPERATIONS.
5. TEMPORARY STRIPING FOR TXL 5 SHALL BE INSTALLED AT THE END OF PHASE 5 AND REMOVED AT THE END OF PHASE 6. SEE SHEET G-062. COORDINATE WITH RPR TO MINIMIZE IMPACT TO AIRFIELD OPERATIONS.

HAUL ROUTE NOTES:
1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ACTC AT ALL TIMES.
2. AFTER RECEIVING AUTHORIZATION FROM ATCT, CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL CONTROL THE MOVEMENT OF ALL CONSTRUCTION VEHICLES WITHIN THE DESIGNATED HAUL ROUTE(S) UNLESS OTHERWISE APPROVED BY RPR.
3. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.
4. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.

400' 0 400' 800'
SCALE: 1" = 400'

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

SHANNON RACHEL HOLMAN
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AT
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HONOLULU, OAHU, HAWAII

PROJECT NO.:

AO1021-30

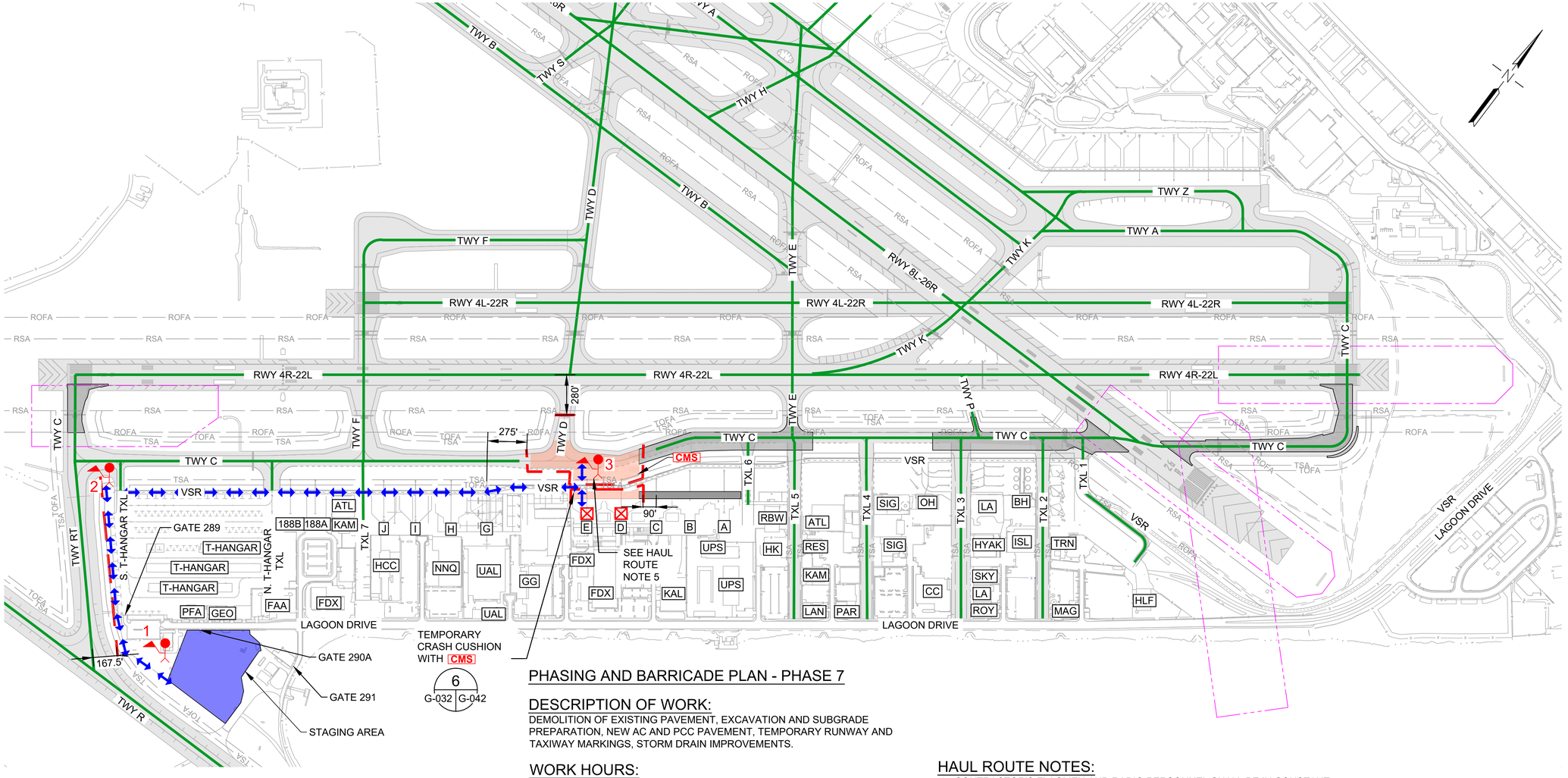
SHEET TITLE:

CONSTRUCTION PHASING PLAN PHASE 6

DATE :
01/2026
SHEET :
31 OF 172 SHEETS

DWG. NO.
G-031

C:\USERS\K UYEHARA\ORION ENGINEERS & ASSOCIATES\HDOT\A HNL TWY C, D, F, J - TWY C RECONSTRUCTION\03_ENG\02_DWGS\AO1021-30-OEA-HNL-PH06.DWG



LEGEND:

- WORK AREA
- EXISTING RUNWAY/TAXIWAY PAVEMENT
- COMPLETED CONSTRUCTION
- STAGING AREA
- CONTRACTOR HAUL ROUTE
- AIRCRAFT TRAVEL ROUTE
- LOW-PROFILE BARRICADES (CONTINUOUS)
- LOW-PROFILE BARRICADES (WITH GAPS)
- GLIDE SLOPE/LOCALIZER CRTIICAL AREA
- CMS — PORTABLE CHANGEABLE MESSAGE SIGN BOARD (6 / G-032 | G-042)
- # — FLAGGER (WITH ID NUMBER)
- ⊠ — HARDSTAND CLOSURE(S) AS INDICATED ON NOTAMS

PHASING AND BARRICADE PLAN - PHASE 7

DESCRIPTION OF WORK:
DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARATION, NEW AC AND PCC PAVEMENT, TEMPORARY RUNWAY AND TAXIWAY MARKINGS, STORM DRAIN IMPROVEMENTS.

WORK HOURS:
1600-0600

DURATION:
50 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. TWY D CLOSED BETWEEN RWY 4R-22L AND TWY C.
2. TWY C CLOSED BETWEEN HARDSTAND C AND HARDSTAND G.
3. HARDSTANDS D AND E CLOSED.
4. HARDSTANDS B, C, G, AND H OPEN WITH RESTRICTIONS. SEE TABLE 1.

NAVAID STATUS AND IMPACTS:
NO IMPACTS TO NAVAIDS.

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAY AND HARDSTANDS TO AIRCRAFT OPERATIONS.
4. SEE SHEET G-042 FOR VSR DETAILS IN THE WORK AREA.

HAUL ROUTE NOTES:
1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ACTC AT ALL TIMES.
2. AFTER RECEIVING AUTHORIZATION FROM ATCT, CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL CONTROL THE MOVEMENT OF ALL CONSTRUCTION VEHICLES WITHIN THE DESIGNATED HAUL ROUTE(S) UNLESS OTHERWISE APPROVED BY RPR.
3. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.
4. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.
5. PROVIDE FLAGMAN FOR ENTERING VSR FROM WORK AREAS. CONTRACTOR SHALL YIELD TO ANY ONCOMING VSR TRAFFIC.

TABLE 1 - HARDSTAND RESTRICTIONS

LOCATION	MAX ADG POWER IN/ TOW OUT	MAX WINGSPAN	MAX ADG TOW IN/ TOW OUT	MAX WINGSPAN
HARDSTAND B	V	214 FT	N/A	N/A
HARDSTAND C	III	118 FT	IV	157 FT
HARDSTAND G	VI	262 FT	N/A	N/A
HARDSTAND H	VI	262 FT	N/A	N/A

HARDSTAND RESTRICTION NOTES:
1. HARDSTAND B AND C: TOW OUT TAIL NORTH, NORTH OF TWY E.
2. HARDSTAND G: TOW OUT TAIL SOUTH, SOUTH OF TWY F.
3. HARDSTAND H:
   - 3.1. TOW OUT TAIL NORTH, PULL FORWARD AND HOLD SHORT OF TWY F.
   - 3.2. TOW OUT TAIL SOUTH, SOUTH OF TWY F.
4. FOR AIRCRAFT MOVEMENT SEE SHEET G-049.
5. NO ENGINE STARTUP DURING PUSH BACK.

SCALE: 400' 0 400' 800' — 1" = 400'

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

SHANNON RACHEL HOLMAN
LICENSED PROFESSIONAL ENGINEER
No. 12492-C
HAWAII U.S.A.

04/30/2026
Licensed Expiration Date

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.
DD	KU	TR	SH

NO.	DATE	REVISIONS

CONSTRUCTION DOCUMENTS
JANUARY 2026
DATE

PROJECT TITLE :

TAXIWAY C RECONSTRUCTION

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

AO1021-30

SHEET TITLE:

CONSTRUCTION PHASING PLAN PHASE 7

DATE : 01/2026
SHEET : 32 OF 172 SHEETS
DWG. NO. G-032

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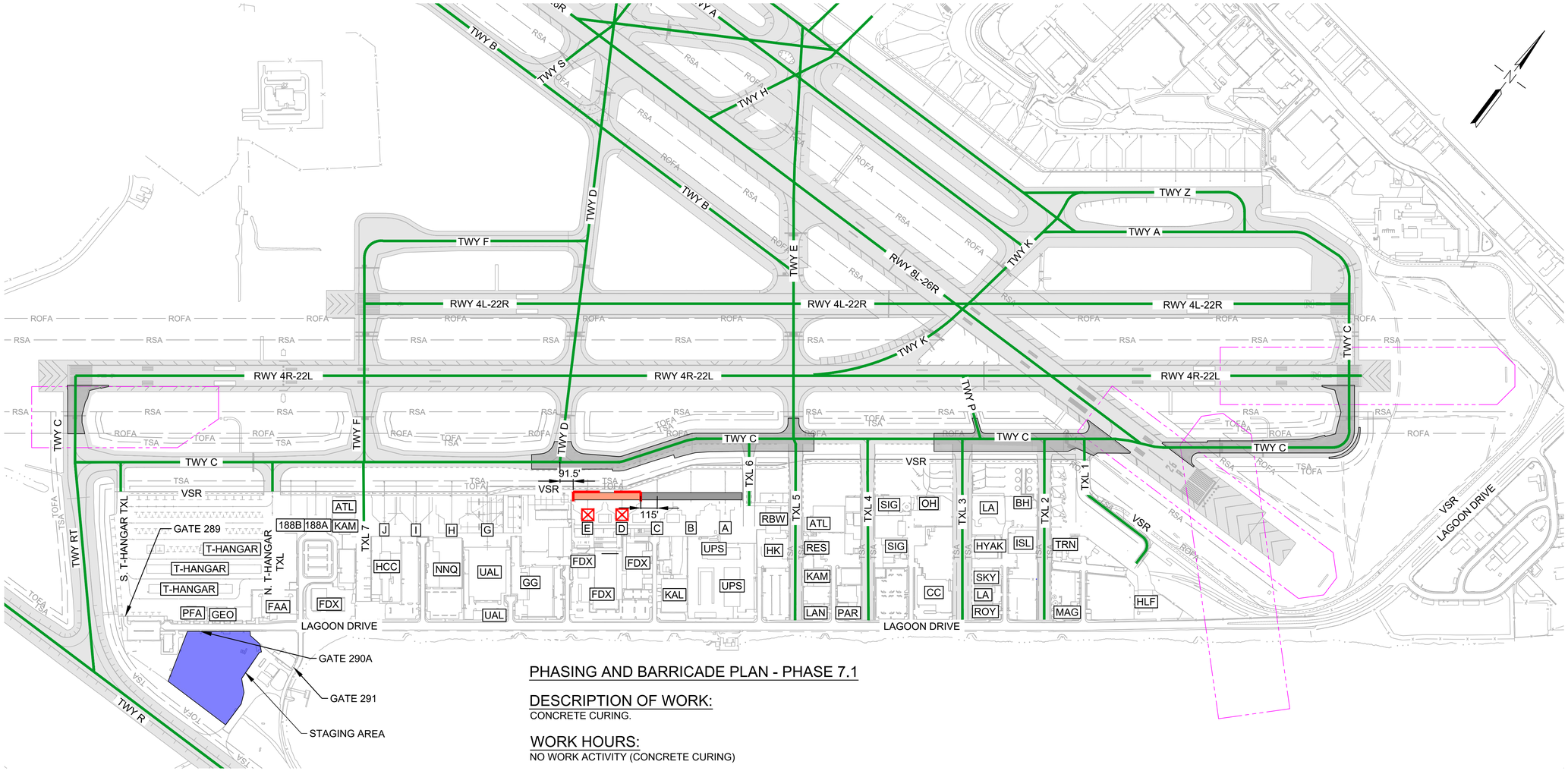

PHASING AND BARRICADE PLAN - PHASE 7.1

DESCRIPTION OF WORK:
CONCRETE CURING.

WORK HOURS:
NO WORK ACTIVITY (CONCRETE CURING)

DURATION:
21 CALENDAR DAYS (SEE NOTE 5)

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. HARDSTANDS E AND D CLOSED.
2. HARDSTAND C OPEN WITH RESTRICTIONS. SEE TABLE 1.

NAVAID STATUS AND IMPACTS:
NO IMPACTS TO NAVIADS.

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAYS, TAXILANE AND HARDSTANDS TO AIRCRAFT OPERATIONS.
4. TOTAL CURE TIME IS ASSUMED TO BE 28 CALENDAR DAYS. THE DURATION LISTED ABOVE IS THE ADDITIONAL DAYS BEYOND THE DAYS ALREADY ACCOUNTED FOR IN PHASE 7.

LEGEND:
- CURING AREA
- EXISTING RUNWAY/TAXIWAY PAVEMENT
- COMPLETED CONSTRUCTION
- STAGING AREA
- CONTRACTOR HAUL ROUTE
- AIRCRAFT TRAVEL ROUTE
- LOW-PROFILE BARRICADES (CONTINUOUS)
- LOW-PROFILE BARRICADES (WITH GAPS)
- GLIDE SLOPE/LOCALIZER CRTIICAL AREA
- HARDSTAND CLOSURE(S) AS INDICATED ON NOTAMS

TABLE 1 - HARDSTAND RESTRICTIONS

LOCATION	MAX ADG POWER IN/ TOW OUT	MAX WINGSPAN	MAX ADG TOW IN/ TOW OUT	MAX WINGSPAN
HARDSTAND C	IV	157 FT	V	198 FT

400' 0 400' 800'
SCALE: 1" = 400'

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

SHANNON RACHEL HOLMAN
LICENSED PROFESSIONAL ENGINEER
No. 12492-C
HAWAII U.S.A.

04/30/2026
Licensed Expiration Date

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.
DD	DD	TR	SH

NO.	DATE	REVISIONS

CONSTRUCTION DOCUMENTS
JANUARY 2026
DATE

PROJECT TITLE :

TAXIWAY C RECONSTRUCTION

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

AO1021-30

SHEET TITLE:

CONSTRUCTION PHASING PLAN PHASE 7.1

DATE :
01/2026
SHEET :
33 OF 172 SHEETS

DWG. NO.
G-033

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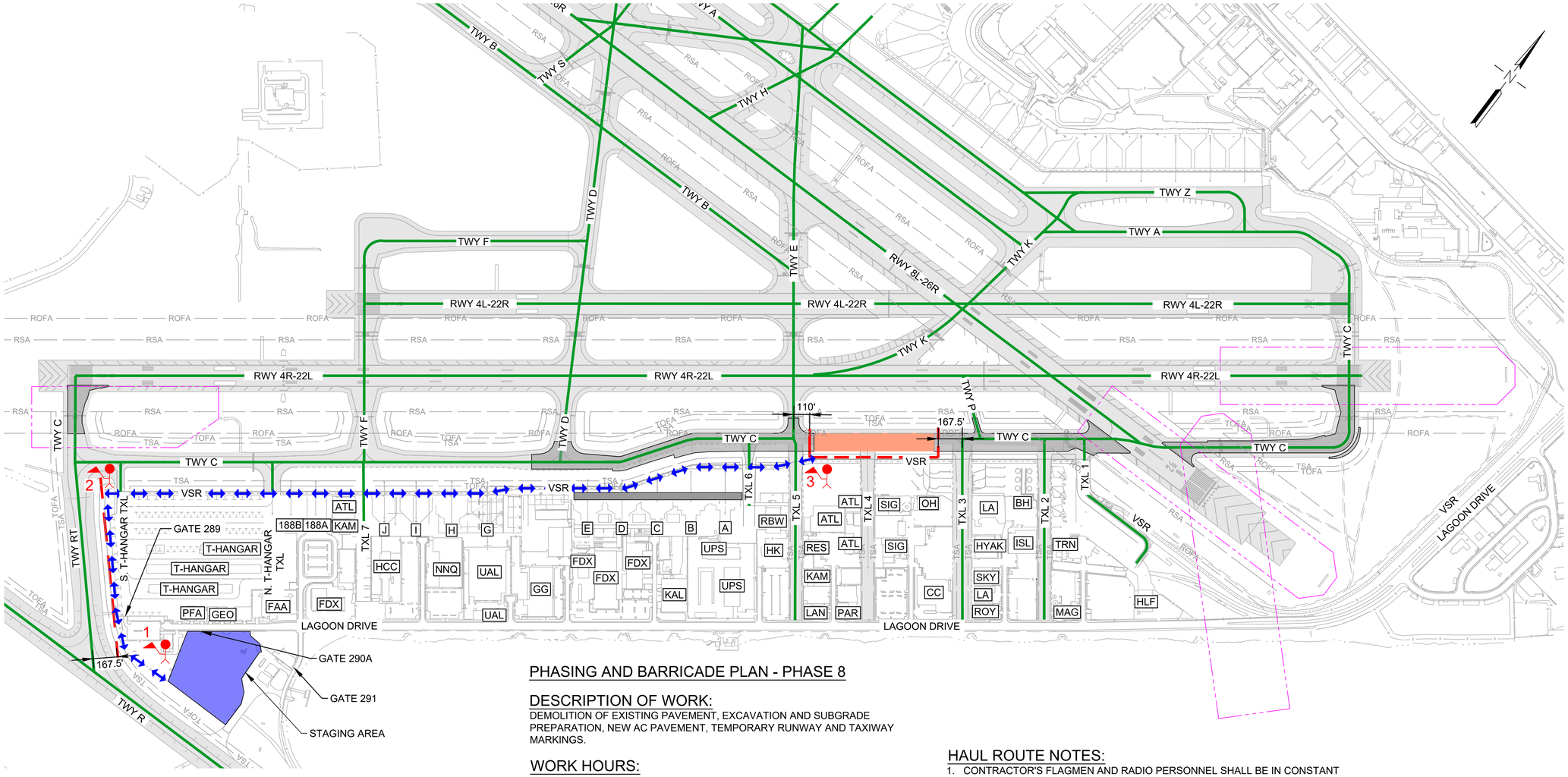

PHASING AND BARRICADE PLAN - PHASE 8

DESCRIPTION OF WORK:
DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARATION, NEW AC PAVEMENT, TEMPORARY RUNWAY AND TAXIWAY MARKINGS.

WORK HOURS:
1600-0600

DURATION:
45 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. TWY C CLOSED BETWEEN TXL 5 AND TXL 3.
2. TXL 4 CLOSED.

NAVAID STATUS AND IMPACTS:
NO IMPACTS TO NAVAIDS.

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY HALF APPLICATION PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAY AND TAXILANE TO AIRCRAFT OPERATIONS.

HAUL ROUTE NOTES:
1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ACTC AT ALL TIMES.
2. AFTER RECEIVING AUTHORIZATION FROM ATCT, CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL CONTROL THE MOVEMENT OF ALL CONSTRUCTION VEHICLES WITHIN THE DESIGNATED HAUL ROUTE(S) UNLESS OTHERWISE APPROVED BY RPR.
3. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.
4. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.

LEGEND:
- WORK AREA
- EXISTING RUNWAY/TAXIWAY PAVEMENT
- COMPLETED CONSTRUCTION
- STAGING AREA
- CONTRACTOR HAUL ROUTE
- AIRCRAFT TRAVEL ROUTE
- LOW-PROFILE BARRICADES (CONTINUOUS)
- LOW-PROFILE BARRICADES (WITH GAPS)
- GLIDE SLOPE / LOCALIZER CRITICAL AREA
- FLAGGER (WITH ID NUMBER)

SCALE: 1" = 400' (400' 0 400' 800')

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

SHANNON RACHEL HOLMAN
LICENSED PROFESSIONAL ENGINEER
No. 12492-C
HAWAII U.S.A.

04/30/2026
Licensed Expiration Date

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DSGN.	DRWN.	CHKD.	APPD.
DD	KU	TR	SH

NO.	DATE	REVISIONS

CONSTRUCTION DOCUMENTS
JANUARY 2026
DATE

PROJECT TITLE :

TAXIWAY C RECONSTRUCTION

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

AO1021-30

SHEET TITLE:

CONSTRUCTION PHASING PLAN PHASE 8

DATE : 01/2026
SHEET : 34 OF 172 SHEETS
DWG. NO. G-034

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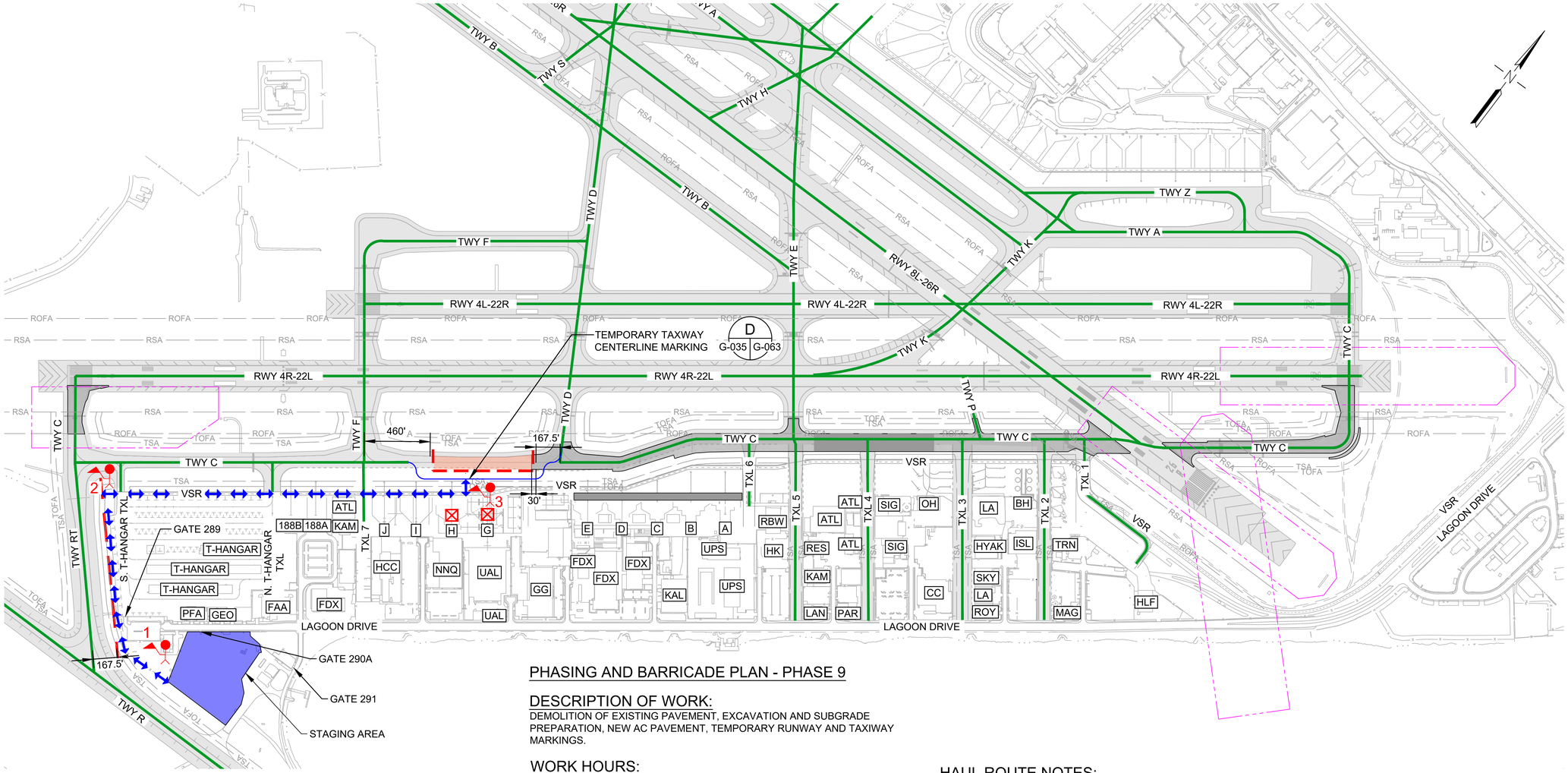

LEGEND:

- WORK AREA
- EXISTING RUNWAY/TAXIWAY PAVEMENT
- COMPLETED CONSTRUCTION
- STAGING AREA
- CONTRACTOR HAUL ROUTE
- AIRCRAFT TRAVEL ROUTE
- LOW-PROFILE BARRICADES (CONTINUOUS)
- LOW-PROFILE BARRICADES (WITH GAPS)
- GLIDE SLOPE/LOCALIZER CRITICAL AREA
- FLAGGER (WITH ID NUMBER)
- HARDSTAND CLOSURE(S) AS INDICATED ON NOTAMS

PHASING AND BARRICADE PLAN - PHASE 9

DESCRIPTION OF WORK:
DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARATION, NEW AC PAVEMENT, TEMPORARY RUNWAY AND TAXIWAY MARKINGS.

WORK HOURS:
1600-0600

DURATION:
36 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. TWY C RESTRICTED TO ADG II (MAX SPEED 10 MPH AND MAX WINGSPAN: 73 FT) BETWEEN HARDSTAND I AND TWY D.
2. HARDSTANDS G AND H CLOSED.
3. HARDSTANDS E, I, AND J OPEN WITH RESTRICTIONS. SEE TABLE 1.

NAVAID STATUS AND IMPACTS:
NO IMPACTS TO NAVAIDS.

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAY AND HARDSTANDS TO AIRCRAFT OPERATIONS.

HAUL ROUTE NOTES:
1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ACTC AT ALL TIMES.
2. AFTER RECEIVING AUTHORIZATION FROM ATCT, CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL CONTROL THE MOVEMENT OF ALL CONSTRUCTION VEHICLES WITHIN THE DESIGNATED HAUL ROUTE(S) UNLESS OTHERWISE APPROVED BY RPR.
3. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.
4. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.

TABLE 1 - HARDSTAND RESTRICTIONS

LOCATION	MAX ADG POWER IN/ TOW OUT	MAX WINGSPAN	MAX ADG TOW IN/ TOW OUT	MAX WINGSPAN
HARDSTAND I	III	118 FT	IV	171 FT

HARDSTAND RESTRICTION NOTES:
1. HARDSTAND E:
   A. TOW OUT TAIL NORTH, NORTH OF TWY D.
   B. TOW OUT TAIL SOUTH, PULL FORWARD NORTH OF TWY D.
2. HARDSTANDS I AND J: TOW OUT TAIL SOUTH, SOUTH OF TWY F.
3. FOR AIRCRAFT MOVEMENT SEE SHEETS G-050 AND G-056.
4. NO ENGINE STARTUP DURING PUSH BACK.

SCALE: 400' 0 400' 800' — 1" = 400'

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

SHANNON RACHEL HOLMAN
LICENSED PROFESSIONAL ENGINEER
No. 12492-C
HAWAII U.S.A.

04/30/2026
Licensed Expiration Date

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.
DD	KU	TR	SH

NO.	DATE	REVISIONS

CONSTRUCTION DOCUMENTS
JANUARY 2026
DATE

PROJECT TITLE :

TAXIWAY C RECONSTRUCTION

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

AO1021-30

SHEET TITLE:

CONSTRUCTION PHASING PLAN PHASE 9

DATE :
01/2026
SHEET :
35 OF 172 SHEETS

DWG. NO.
G-035

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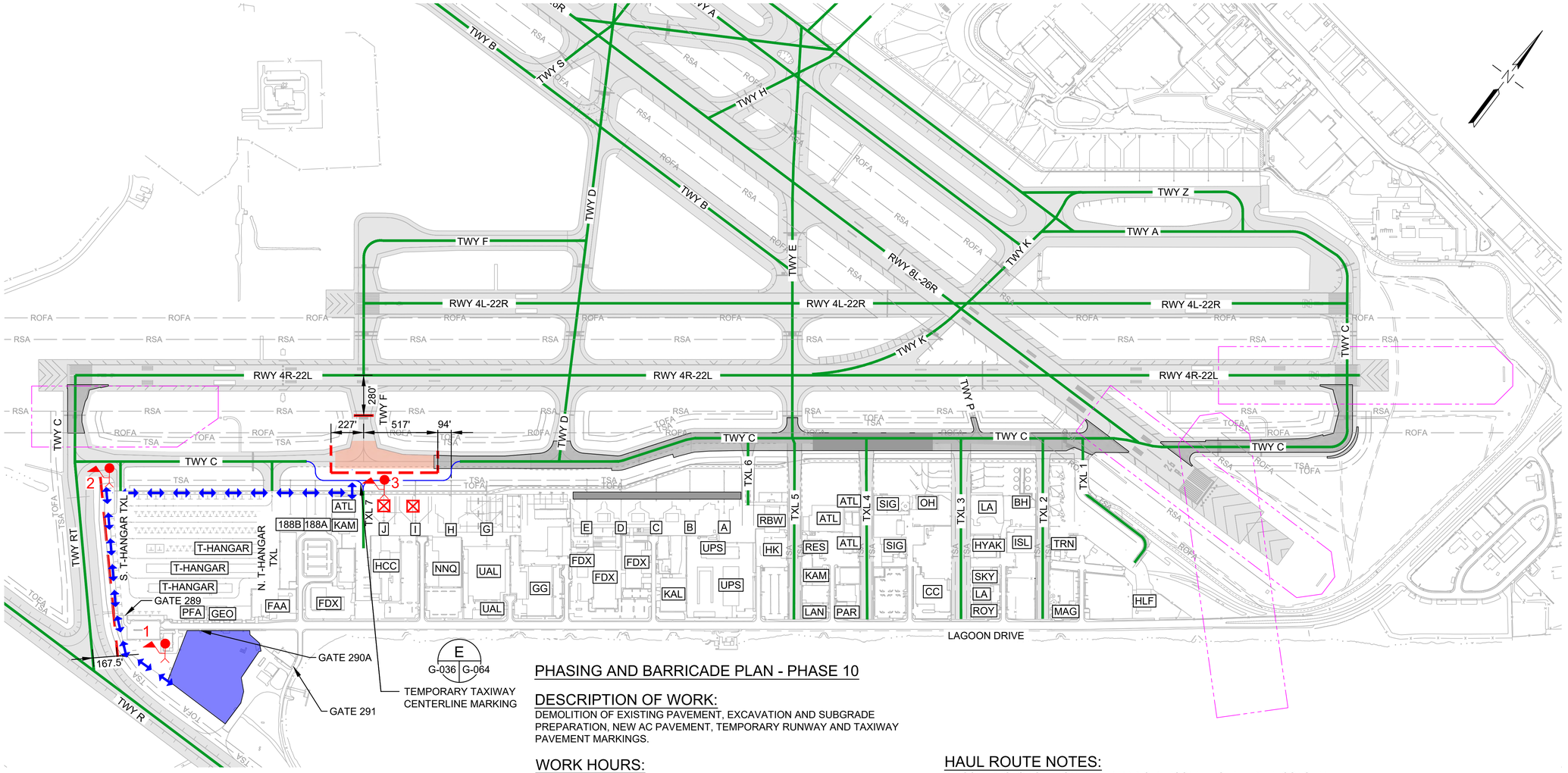

PHASING AND BARRICADE PLAN - PHASE 10

DESCRIPTION OF WORK:
DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARATION, NEW AC PAVEMENT, TEMPORARY RUNWAY AND TAXIWAY PAVEMENT MARKINGS.

WORK HOURS:
1600-0600

DURATION:
49 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. TWY F CLOSED BETWEEN RWY 4R-22L AND TWY C.
2. TWY C RESTRICTED TO ADG II (MAX WINGSPAN: 73 FT) BETWEEN HARDSTAND 188A AND HARDSTAND H.
3. TXL 7 MAY ONLY BE USED FOR ADG I-II (49-79 FT WINGSPAN) WITH RESTRICTIONS. SEE SHEETS G-057 AND G-064.
4. HARDSTANDS I AND J CLOSED.
5. HARDSTANDS 188A, 188B, G, AND H OPEN WITH RESTRICTIONS. SEE TABLE 1.

NAVAID STATUS AND IMPACTS:
NO IMPACTS TO NAVAIDS.

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAY, TAXILANE AND HARDSTANDS TO AIRCRAFT OPERATIONS.

HAUL ROUTE NOTES:
1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ACTC AT ALL TIMES.
2. AFTER RECEIVING AUTHORIZATION FROM ATCT, CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL CONTROL THE MOVEMENT OF ALL CONSTRUCTION VEHICLES WITHIN THE DESIGNATED HAUL ROUTE(S) UNLESS OTHERWISE APPROVED BY RPR.
3. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.
4. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.

TABLE 1 - HARDSTAND RESTRICTIONS

LOCATION	MAX ADG POWER IN/ TOW OUT	MAX WINGSPAN	MAX ADG TOW IN/ TOW OUT	MAX WINGSPAN
HARDSTAND 188A	IV	125 FT	N/A	N/A
HARDSTAND 188B	IV	125 FT	N/A	N/A
HARDSTAND H	IV	117 FT	IV	171 FT

HARDSTAND RESTRICTION NOTES:
1. HARDSTAND G:
   1.1. TOW OUT TAIL SOUTH, PULL FORWARD SHORT OF TWY D.
   1.2. TOW OUT TAIL NORTH, NORTH OF TWY D.
2. HARDSTAND H: TOW OUT TAIL NORTH, NORTH OF TWY D.
3. HARDSTAND 188A: TOW OUT, PUSH THEN PULL TAIL NORTH, SOUTH OF N. T-HANGAR TXL.
4. HARDSTAND 188B: TOW OUT TAIL NORTH, PULL FORWARD SOUTH OF N. T-HANGAR TXL.
5. FOR AIRCRAFT MOVEMENT SEE SHEETS G-051 AND G-057.
6. NO ENGINE STARTUP DURING PUSH BACK.

LEGEND:
- WORK AREA
- EXISTING RUNWAY/TAXIWAY PAVEMENT
- COMPLETED CONSTRUCTION
- STAGING AREA
- CONTRACTOR HAUL ROUTE
- AIRCRAFT TRAVEL ROUTE
- LOW-PROFILE BARRICADES (CONTINUOUS)
- LOW-PROFILE BARRICADES (WITH GAPS)
- GLIDE SLOPE/LOCALIZER CRITICAL AREA
- FLAGGER (WITH ID NUMBER)
- HARDSTAND CLOSURE(S) AS INDICATED ON NOTAMS

SCALE: 1" = 400'

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

SHANNON RACHEL HOLMAN
LICENSED PROFESSIONAL ENGINEER
No. 12492-C
HAWAII U.S.A.

04/30/2026
Licensed Expiration Date

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.
DD	KU	TR	SH

NO.	DATE	REVISIONS

CONSTRUCTION DOCUMENTS
JANUARY 2026
DATE

PROJECT TITLE :

TAXIWAY C RECONSTRUCTION

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

AO1021-30

SHEET TITLE:

CONSTRUCTION PHASING PLAN PHASE 10

DATE : 01/2026
SHEET : 36 OF 172 SHEETS
DWG. NO. G-036

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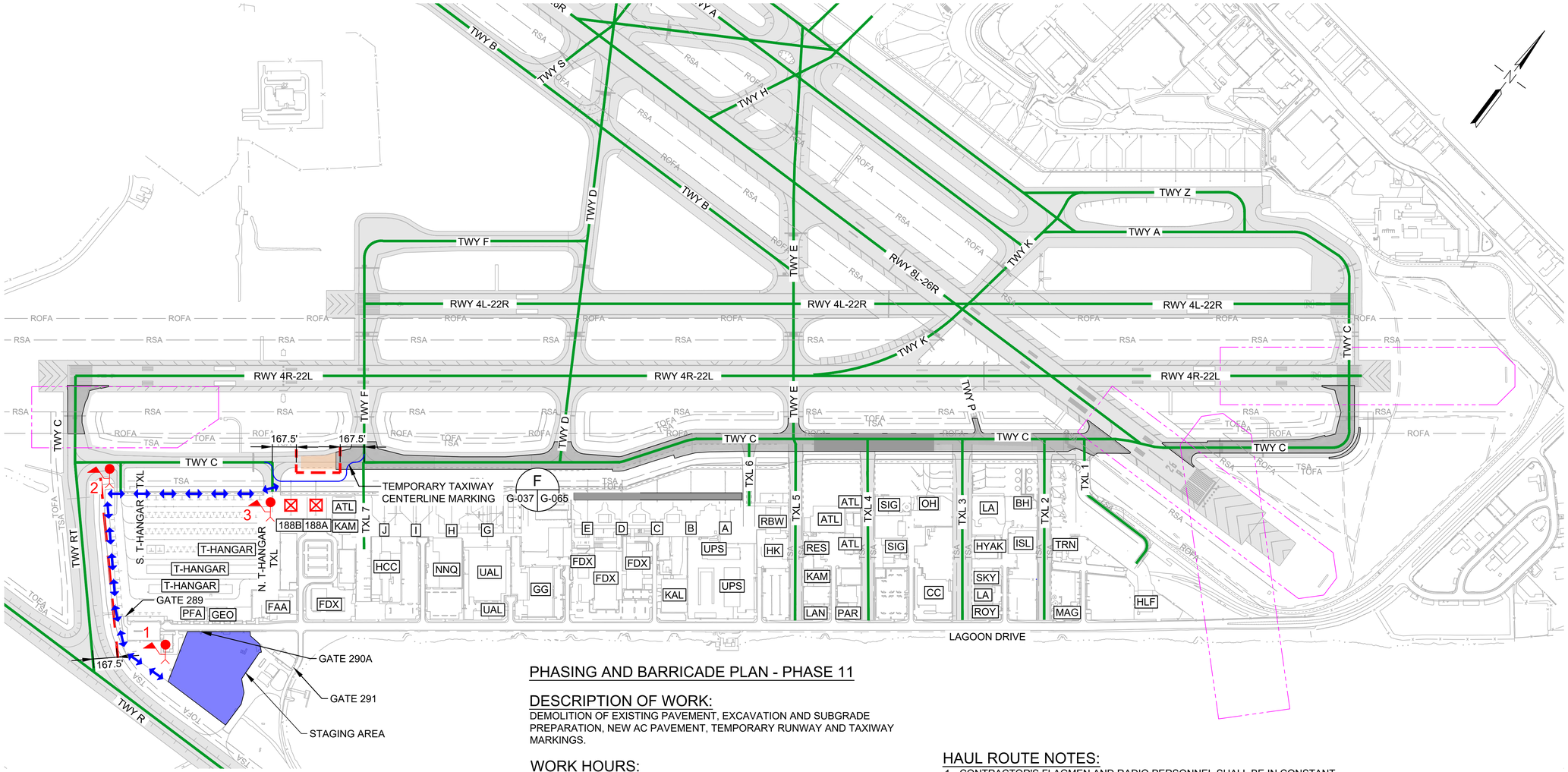


LEGEND:

- WORK AREA
- EXISTING RUNWAY/TAXIWAY PAVEMENT
- COMPLETED CONSTRUCTION
- STAGING AREA
- CONTRACTOR HAUL ROUTE
- AIRCRAFT TRAVEL ROUTE
- LOW-PROFILE BARRICADES (CONTINUOUS)
- LOW-PROFILE BARRICADES (WITH GAPS)
- GLIDE SLOPE/LOCALIZER CRITICAL AREA
- FLAGGER (WITH ID NUMBER)
- HARDSTAND CLOSURE(S) AS INDICATED ON NOTAMS

PHASING AND BARRICADE PLAN - PHASE 11

DESCRIPTION OF WORK:
DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARATION, NEW AC PAVEMENT, TEMPORARY RUNWAY AND TAXIWAY MARKINGS.

WORK HOURS:
1600-0600

DURATION:
27 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. TWY C RESTRICTED TO ADG II (MAX WINGSPAN: 73 FT). BETWEEN N. T-HANGAR TXL AND TWY F.
2. HARDSTANDS 188A AND 188B CLOSED.
3. HARDSTANDS I AND J OPEN WITH RESTRICTIONS.

NAVAID STATUS AND IMPACTS:
NO IMPACTS TO NAVAIDS.

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAY AND HARDSTANDS TO AIRCRAFT OPERATIONS.

HAUL ROUTE NOTES:
1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ACTC AT ALL TIMES.
2. AFTER RECEIVING AUTHORIZATION FROM ATCT, CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL CONTROL THE MOVEMENT OF ALL CONSTRUCTION VEHICLES WITHIN THE DESIGNATED HAUL ROUTE(S) UNLESS OTHERWISE APPROVED BY RPR.
3. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.
4. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.

HARDSTAND RESTRICTION NOTES:
1. HARDSTANDS I:
   A. TOW OUT TAIL SOUTH, PULL FORWARD NORTH OF TWY F.
   B. TOW OUT TAIL NORTH, PULL FORWARD SHORT OF TWY F.
2. HARDSTAND J:
   A. TOW OUT TAIL SOUTH, PULL FORWARD NORTH OF HARDSTAND I.
   B. TOW OUT TAIL NORTH, NORTH OF TWY F.
3. FOR AIRCRAFT MOVEMENT SEE SHEETS G-052 AND G-058.
4. NO ENGINE STARTUP DURING PUSHBACK.

400' 0 400' 800'
SCALE: 1" = 400'

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

SHANNON RACHEL HOLMAN
LICENSED PROFESSIONAL ENGINEER
No. 12492-C
HAWAII U.S.A.

04/30/2026
Licensed Expiration Date

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.
DD	KU	TR	SH

NO.	DATE	REVISIONS

CONSTRUCTION DOCUMENTS
JANUARY 2026
DATE

PROJECT TITLE :

TAXIWAY C RECONSTRUCTION

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

AO1021-30

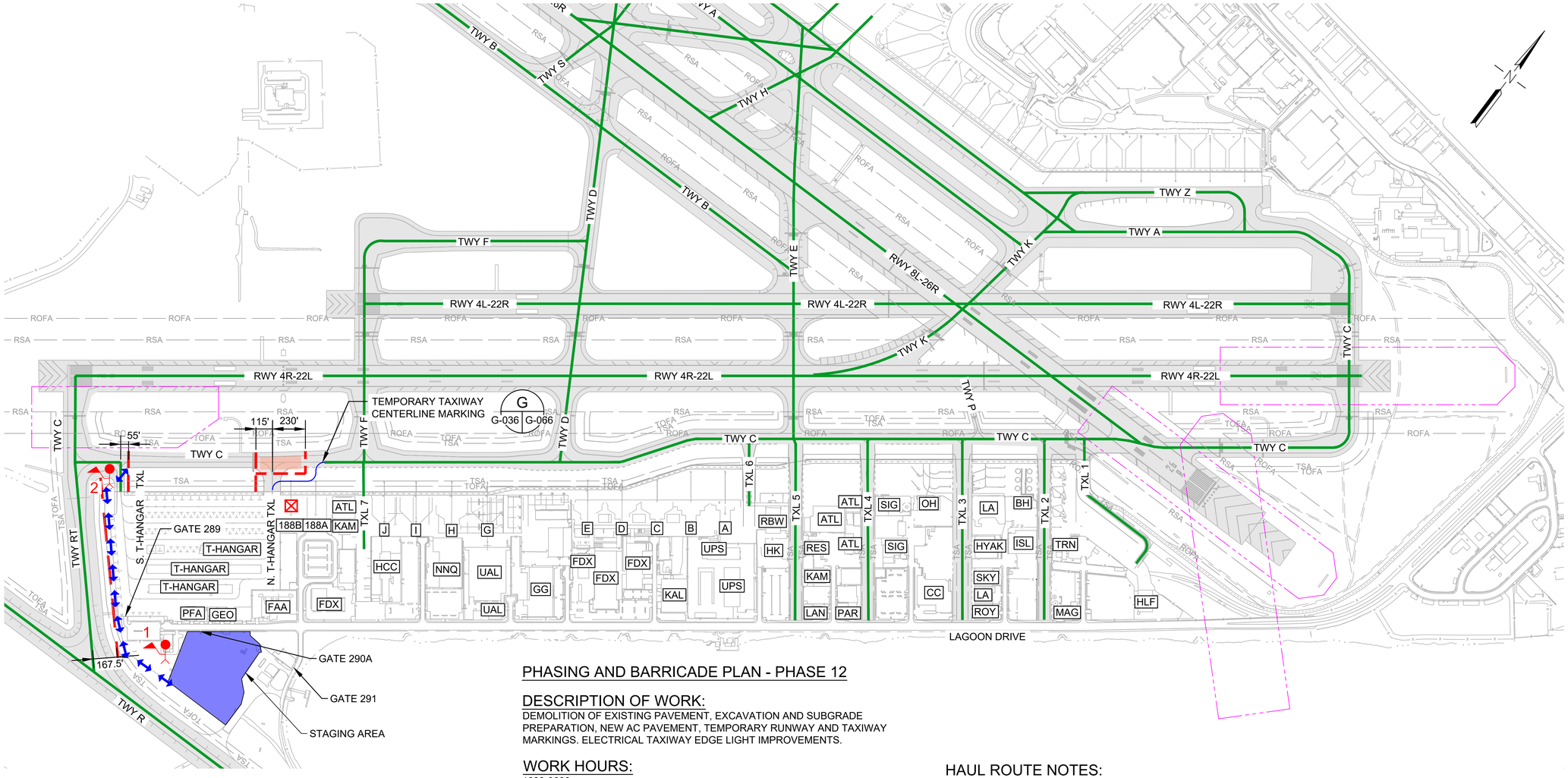
SHEET TITLE:

CONSTRUCTION PHASING PLAN PHASE 11

DATE :
01/2026
SHEET :
37 OF 172 SHEETS

DWG. NO.
G-037

C:\USERS\K UYEHARA\ORION ENGINEERS & ASSOCIATES\HDOTA HNL TWY C, D, F, J - TWY C RECONSTRUCTION\03_ENG\02_DWGS\AO1021-30-OEA-HNL-PH11.DWG



LEGEND:

- WORK AREA
- EXISTING RUNWAY/TAXIWAY PAVEMENT
- COMPLETED CONSTRUCTION
- STAGING AREA
- CONTRACTOR HAUL ROUTE
- AIRCRAFT TRAVEL ROUTE
- LOW-PROFILE BARRICADES (CONTINUOUS)
- LOW-PROFILE BARRICADES (WITH GAPS)
- GLIDE SLOPE/LOCALIZER CRITICAL AREA
- FLAGGER (WITH ID NUMBER)
- HARDSTAND CLOSURE(S) AS INDICATED ON NOTAMS

PHASING AND BARRICADE PLAN - PHASE 12

DESCRIPTION OF WORK:
DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARATION, NEW AC PAVEMENT, TEMPORARY RUNWAY AND TAXIWAY MARKINGS. ELECTRICAL TAXIWAY EDGE LIGHT IMPROVEMENTS.

WORK HOURS:
1600-0600

DURATION:
27 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. TWY C CLOSED BETWEEN S. T-HANGAR TXL AND N. T-HANGAR TXL.
2. TWY C RESTRICTED TO ADG II (MAX WINGSPAN: 73 FT) BETWEEN N. T-HANGAR TXL AND HARDSTAND 188A.
3. N. T-HANGAR TXL RESTRICTED TO ADG II (MAX WINGSPAN: 73 FT).
4. HARDSTAND 188B CLOSED.
5. HARDSTAND J AND 188A OPEN WITH RESTRICTIONS. SEE TABLE 1.

NAVAID STATUS AND IMPACTS:
NO IMPACTS TO NAVAIDS.

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAY AND TAXILANE TO AIRCRAFT OPERATIONS.

HAUL ROUTE NOTES:
1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ACTC AT ALL TIMES.
2. AFTER RECEIVING AUTHORIZATION FROM ATCT, CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL CONTROL THE MOVEMENT OF ALL CONSTRUCTION VEHICLES WITHIN THE DESIGNATED HAUL ROUTE(S) UNLESS OTHERWISE APPROVED BY RPR.
3. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.
4. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.

TABLE 1 - HARDSTAND RESTRICTIONS

LOCATION	MAX ADG POWER IN/ TOW OUT	MAX WINGSPAN	MAX ADG TOW IN/ TOW OUT	MAX WINGSPAN
HARDSTAND 188A	III	118 FT	IV	171 FT

HARDSTAND RESTRICTION NOTES:
1. HARDSTAND 188A: TOW OUT TAIL NORTH, NORTH OF TWY F.
2. HARDSTAND J:
   A. TOW OUT TAIL SOUTH, PULL FORWARD NORTH OF TWY F.
   B. TOW OUT TAIL NORTH, HOLD SHORT TWY F.
3. FOR AIRCRAFT MOVEMENT SEE SHEETS G-053 AND G-059.
4. NO ENGINE STARTUP DURING PUSH BACK.

SCALE: 400' 0 400' 800' — 1" = 400'

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

SHANNON RACHEL HOLMAN
LICENSED PROFESSIONAL ENGINEER
No. 12492-C
HAWAII U.S.A.

04/30/2026
Licensed Expiration Date

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.
DD	KU	TR	SH

NO.	DATE	REVISIONS

CONSTRUCTION DOCUMENTS
JANUARY 2026
DATE

PROJECT TITLE :

TAXIWAY C RECONSTRUCTION

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

AO1021-30

SHEET TITLE:

CONSTRUCTION PHASING PLAN PHASE 12

DATE : **01/2026**

SHEET : 38 OF 172 SHEETS

DWG. NO. **G-038**

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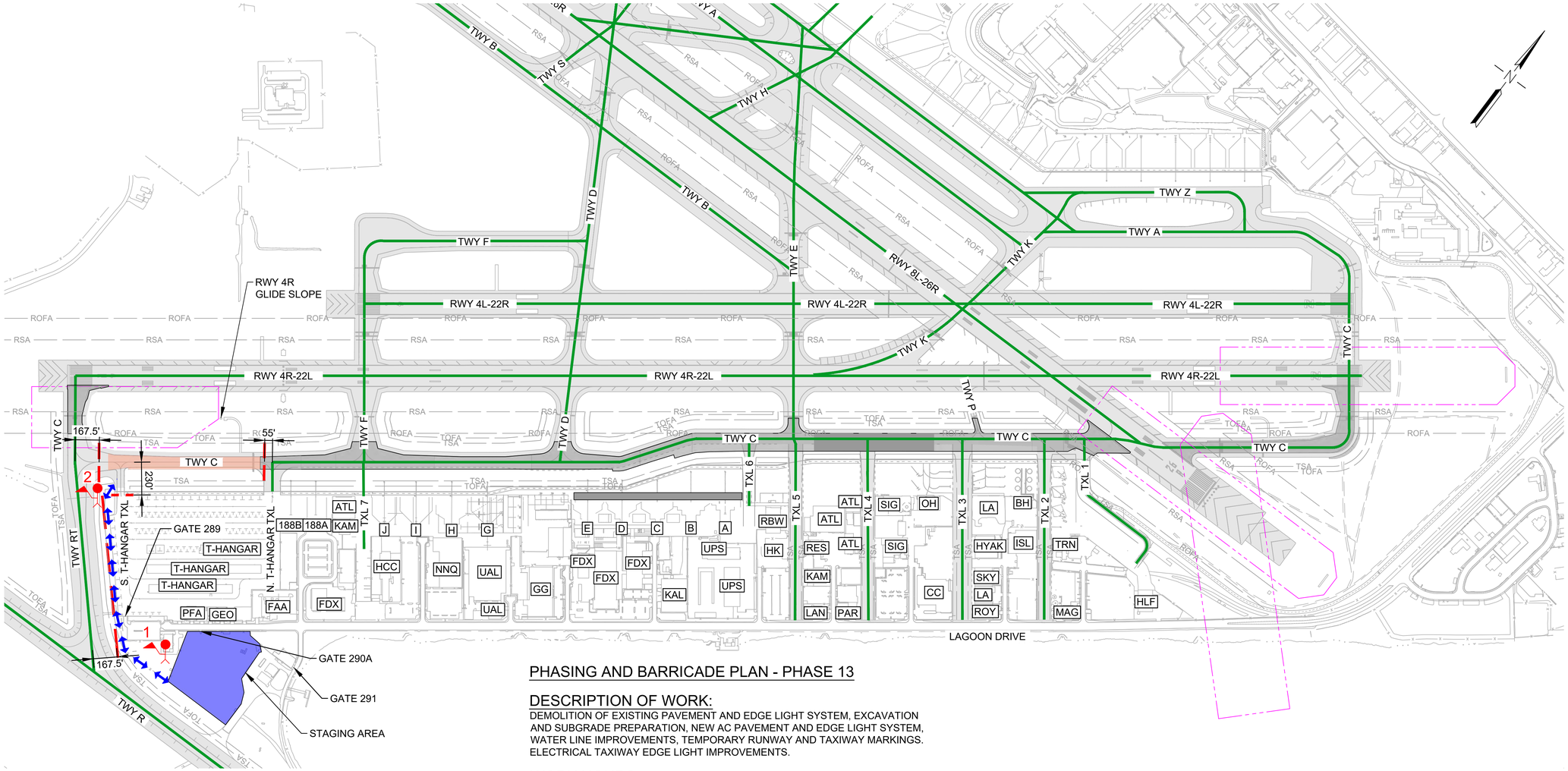

PHASING AND BARRICADE PLAN - PHASE 13

DESCRIPTION OF WORK:
DEMOLITION OF EXISTING PAVEMENT AND EDGE LIGHT SYSTEM, EXCAVATION AND SUBGRADE PREPARATION, NEW AC PAVEMENT AND EDGE LIGHT SYSTEM, WATER LINE IMPROVEMENTS, TEMPORARY RUNWAY AND TAXIWAY MARKINGS. ELECTRICAL TAXIWAY EDGE LIGHT IMPROVEMENTS.

WORK HOURS:
1600-0600

DURATION:
56 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. TWY C CLOSED BETWEEN TWY RT AND N. T-HANGAR TXL.
2. SOUTH T-HANGAR TXL CLOSED BETWEEN TWY C AND 200 FT SOUTH OF TWY C.
3. HARDSTANDS 188A AND 188B OPEN WITH RESTRICTIONS.

NAVAID STATUS AND IMPACTS:
NO IMPACTS TO NAVAIDS.

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAY AND TAXILANE TO AIRCRAFT OPERATIONS.

HAUL ROUTE NOTES:
1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ACTC AT ALL TIMES.
2. AFTER RECEIVING AUTHORIZATION FROM ATCT, CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL CONTROL THE MOVEMENT OF ALL CONSTRUCTION VEHICLES WITHIN THE DESIGNATED HAUL ROUTE(S) UNLESS OTHERWISE APPROVED BY RPR.
3. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.
4. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.

HARDSTAND RESTRICTION NOTES:
1. HARDSTAND 188A:
   1.1. TOW OUT TAIL SOUTH, PULL FORWARD NORTH OF TWY F.
   1.2. TOW OUT TAIL NORTH, NORTH OF TWY F.
2. HARDSTAND 188B: TOW OUT TAIL NORTH, NORTH OF TWY F.
3. FOR AIRCRAFT MOVEMENT SEE SHEET G-054.
4. NO ENGINE STARTUP DURING PUSH BACK.

LEGEND:
- WORK AREA
- EXISTING RUNWAY/TAXIWAY PAVEMENT
- COMPLETED CONSTRUCTION
- STAGING AREA
- CONTRACTOR HAUL ROUTE
- AIRCRAFT TRAVEL ROUTE
- LOW-PROFILE BARRICADES (CONTINUOUS)
- LOW-PROFILE BARRICADES (WITH GAPS)
- GLIDE SLOPE/LOCALIZER CRITICAL AREA
- FLAGGER (WITH ID NUMBER)

SCALE: 1" = 400' (400' 0 400' 800')

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

SHANNON RACHEL HOLMAN
LICENSED PROFESSIONAL ENGINEER
No. 12492-C
HAWAII U.S.A.

04/30/2026
Licensed Expiration Date

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DSGN.	DRWN.	CHKD.	APPD.
DD	KU	TR	SH

NO.	DATE	REVISIONS

CONSTRUCTION DOCUMENTS
JANUARY 2026
DATE

PROJECT TITLE :

TAXIWAY C RECONSTRUCTION

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

AO1021-30

SHEET TITLE:

CONSTRUCTION PHASING PLAN PHASE 13

DATE : 01/2026
SHEET : 39 OF 172 SHEETS
DWG. NO. G-039

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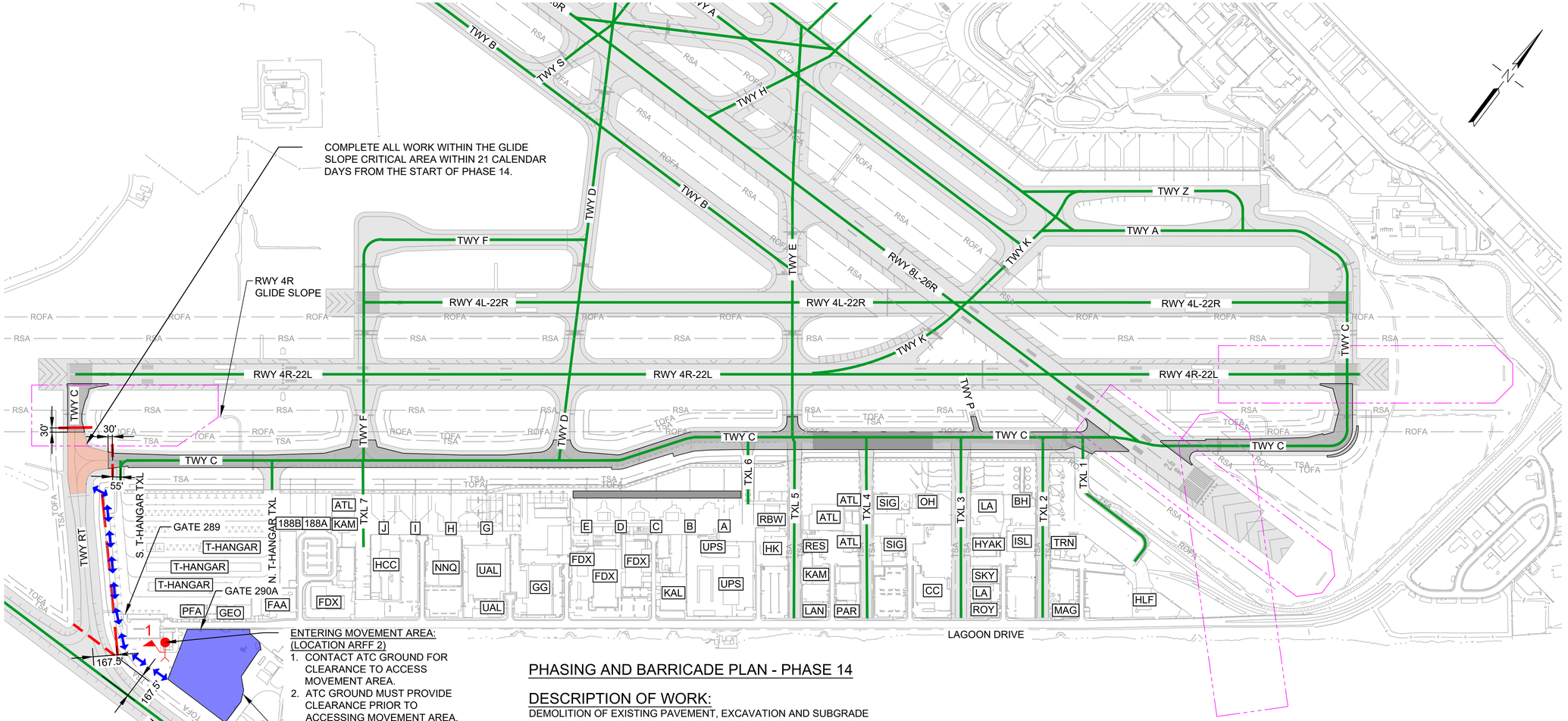

LEGEND:

- WORK AREA
- EXISTING RUNWAY/TAXIWAY PAVEMENT
- COMPLETED CONSTRUCTION
- STAGING AREA
- CONTRACTOR HAUL ROUTE
- AIRCRAFT TRAVEL ROUTE
- LOW-PROFILE BARRICADES (CONTINUOUS)
- LOW-PROFILE BARRICADES (WITH GAPS)
- GLIDE SLOPE/LOCALIZER CRITICAL AREA
- FLAGGER (WITH ID NUMBER)

PHASING AND BARRICADE PLAN - PHASE 14

DESCRIPTION OF WORK:
DEMOLITION OF EXISTING PAVEMENT, EXCAVATION AND SUBGRADE PREPARATION, NEW AC PAVEMENT, TEMPORARY RUNWAY AND TAXIWAY MARKINGS, STORM DRAIN IMPROVEMENTS.

WORK HOURS:
1600-0600

DURATION:
57 CALENDAR DAYS

SCHEDULE DATES:
TBD

NOTAMS (24/7):
1. TWY RT CLOSED.
2. TWY C CLOSED BETWEEN TWY RT AND S. T-HANGAR TXL.

NAVAID STATUS AND IMPACTS (24/7):
1. RWY 4R: GS, OUT-OF-SERVICE UNTIL FLIGHT CHECK.

PHASING NOTES:
1. BARRICADES SHALL BE PLACED OUTSIDE OF ALL ACTIVE RUNWAY SAFETY AREAS ACROSS THE HOLD SHORT MARKINGS.
2. ADDITIONAL LOW-PROFILE BARRICADES SHALL BE ADDED AS DIRECTED BY THE RPR.
3. ANY NAVAIDS OUT OF SERVICE FOR MORE THAN 72 HOURS CONTINUOUSLY SHALL REQUIRE RECERTIFICATION BY THE FAA. CONTRACTOR SHALL PROVIDE A MINIMUM OF 7 DAYS NOTICE TO THE FAA FOR RECERTIFICATION.
4. CONTRACTOR SHALL APPLY TEMPORARY PAVEMENT MARKINGS PRIOR TO OPENING THE TAXIWAY TO AIRCRAFT OPERATIONS.

HAUL ROUTE NOTES:
1. CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL BE IN CONSTANT COMMUNICATION WITH EACH OTHER AND ACTIVELY MONITORING AND RESPONDING TO ACTC AT ALL TIMES.
2. AFTER RECEIVING AUTHORIZATION FROM ATCT, CONTRACTOR'S FLAGMEN AND RADIO PERSONNEL SHALL CONTROL THE MOVEMENT OF ALL CONSTRUCTION VEHICLES WITHIN THE DESIGNATED HAUL ROUTE(S) UNLESS OTHERWISE APPROVED BY RPR.
3. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL DESIGNATED HAUL ROUTES. CONTINUOUS FOD INSPECTIONS AND SWEEPERS SHALL BE REQUIRED AT ALL DESIGNATED HAUL ROUTES UTILIZING ACTIVE TAXIWAY CROSSINGS, AIRCRAFT TRAVEL ROUTES AND VEHICLE SERVICE ROADS.
4. CONTRACTOR SHALL NOT RELEASE CONSTRUCTION VEHICLES FROM THE STAGING AREA WHEN AIRCRAFT IS EXPECTED TO USE TWY RT.

400' 0 400' 800'
SCALE: 1" = 400'

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
AIRPORTS

SHANNON RACHEL HOLMAN
LICENSED PROFESSIONAL ENGINEER
No. 12492-C
HAWAII U.S.A.

04/30/2026
Licensed Expiration Date

This work was prepared by me or under my supervision.

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NO.	DATE	REVISIONS

CONSTRUCTION DOCUMENTS
JANUARY 2026
DATE

PROJECT TITLE :

TAXIWAY C RECONSTRUCTION

AT
DANIEL K. INOUYE INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO.:

AO1021-30

SHEET TITLE:

CONSTRUCTION PHASING PLAN PHASE 14

DATE :
01/2026
SHEET :
40 OF 172 SHEETS

DWG. NO.
G-040

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Construction
Environmental Hazard Management Plan
Taxiway C Reconstruction
Daniel K. Inouye International Airport
Honolulu, Oahu, Hawaii

Prepared for

Orion Engineers & Associates
1003 Bishop Street, Suite 2020
Honolulu, Hawaii 96813

Prepared by

EA Engineering, Science, Technology, Inc., PBC
615 Piikoi Street, Suite 515
Honolulu, Hawaii 96814

February 2026
Version: DRAFT
EA Project No. 1569009

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Construction
Environmental Hazard Management Plan
Taxiway C Reconstruction
Daniel K. Inouye International Airport
Honolulu, Oahu, Hawaii

SIGNATURES

The contractor will determine the appropriate signors for the statements below and ensure acceptance of this plan via the signatures below prior to submittal of the final plan. This document is not finalized until it is signed. A signed copy will be present on-site at all times.

I certify that as a representative of the Daniel K. Inouye International Airport, I am responsible for ensuring all parties who work or reside at my site are aware of the contamination at my property, and the associated hazards, and that the information in this document is true and accurate to the best of my knowledge. I am responsible for ensuring compliance with all land use controls as well as advance notifications to the Hawaii Department of Health (HDOH) of anticipated land use changes or groundbreaking activity at my property.

_____

Date

Hawaii Department of Transportation – Airports Division

I certify that I am a qualified environmental professional, capable of ensuring compliance with the requirements of this Construction Environmental Hazard Management Plan (C-EHMP). It is my duty on this project to understand the requirements of this document and be on site during ground-disturbing activities. I will communicate hazards, management protocols, and other C-EHMP requirements to construction professionals at the site. I will document such activities, and communicate with HDOH, as needed.

_____

Date

Qualified Environmental Professional

As Construction Manager, I am responsible for understanding the requirements of this C-EHMP, effectively communicating the requirements and hazards to my crews and subcontractors and providing the required training and personal protective equipment to site workers. I will work with the Qualified Environmental Professional to ensure compliance with this C-EHMP during work at this property.

_____

Date

Construction Project Manager

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TABLE OF CONTENTS

Page

LIST OF TABLES iii
LIST OF FIGURES iii
LIST OF APPENDIXES iv
LIST OF ACRONYMS AND ABBREVIATIONS v

1. INTRODUCTION 1-1

1.1 PURPOSE OF THE PLAN 1-1
1.2 HOW TO USE THIS DOCUMENT 1-3

2. BACKGROUND 2-1

2.1 EXISTING ENVIRONMENTAL CONDITIONS 2-1
2.2 CHEMICALS OF POTENTIAL CONCERN 2-2
2.3 CHEMICALS OF POTENTIAL CONCERN AND CONSTRUCTION MATERIALS 2-3

3. SUMMARY OF POTENTIAL ENVIRONMENTAL HAZARDS 3-1

3.1 ENVIRONMENTAL HAZARD TABLE 3-1
3.2 CHRONIC AND ACUTE DIRECT EXPOSURE HAZARDS 3-1

4. NOTIFICATION REQUIREMENTS 4-1
5. REQUIREMENTS FOR ON-SITE ENVIRONMENTAL OVERSIGHT 5-1

5.1 QEP RESPONSIBILITIES 5-1

6. CONSTRUCTION ACTIVITIES 6-1
7. SOIL MANAGEMENT PLAN 7-1

7.1 SOIL EXCAVATION AND HANDLING 7-1

7.1.1 Field Identification of Contaminated Soil 7-2
7.1.2 Dust and Erosion Control 7-3

7.2 SOIL STOCKPILING AND STORAGE 7-4
7.3 SOIL CHARACTERIZATION AND DISPOSAL 7-5
7.4 RECORDKEEPING AND REPORTING 7-7

8. GROUNDWATER MANAGEMENT PLAN 8-1

8.1 GROUNDWATER MANAGEMENT 8-2
8.2 DEWATERING 8-2

8.3 RECORDKEEPING AND REPORTING 8-3

9. FREE PRODUCT MANAGEMENT PLAN 9-1
10. STORMWATER MANAGEMENT PLAN 10-1
11. VAPOR MANAGEMENT PLAN 11-1
12. SPILL OR RELEASE RESPONSE PLAN 12-1

12.1 RELEASE RESPONSE 12-1
12.2 RELEASE REPORTING 12-1

13. WORKER PROTECTION 13-1

13.1 AWARENESS AND TRAINING FOR CONTAMINATION MANAGED ON-SITE 13-1
13.2 USE RESTRICTIONS TO PROTECT SITE WORKERS AND GUESTS 13-2
13.3 EMERGENCY RESPONSE FOR CHEMICAL EXPOSURE 13-2

13.3.1 Eye and Skin Exposure to Chemicals 13-2
13.3.2 Inhalation Exposure to Chemicals 13-2

14. DECONTAMINATION 14-1

14.1 DECONTAMINATION OF TOOLS AND PERSONNEL 14-1
14.2 DECONTAMINATION OF VEHICLES AND EQUIPMENT 14-2

15. RECORDKEEPING AND REPORTING REQUIREMENTS 15-1
16. REFERENCES 16-1

LIST OF TABLES

Table 1. Pre-Construction Evaluation of Environmental Issues

Table 2. Site Location

Table 3. Site Conditions

Table 4. Chemicals of Potential Concern

Table 5. Construction Materials Compatibility Summary

Table 6. Environmental Hazards Identified at the Site

Table 7. Chronic and Acute Direct Exposure Hazards

Table 8. Project Activities When QEP Must Be Present

Table 9 Characterization Sampling Parameters and Frequency

Table 10. Groundwater Characteristics and Construction Activities

LIST OF FIGURES

Figure 1. Site Location Map

Figure 2a. Soil Exceedances Map

Figure 2b. Groundwater Exceedances Map

Figure 3. Short-Term Engineering Controls Map

LIST OF APPENDIXES

Appendix A. Taxiway C Reconstruction Project Plan and Specifications

Appendix B. Taxiway C Reconstruction Health and Safety Plan

Appendix C. Key Project Personnel

Appendix D. Taxiway C Reconstruction Sampling and Analysis Plan

Appendix E. Taxiway C Reconstruction Erosion and Sediment Control Plan

Appendix F. PVT Land Company, Ltd. Soil Acceptance Agreement Form

Appendix G. Soil Tracking Log

Appendix H. Release Response and Notification Guidelines

LIST OF ACRONYMS AND ABBREVIATIONS

bgs	below ground surface
BMP	best management practice
C-EHMP	Construction Environmental Hazard Management Plan
COPC	contaminants of potential concern
DRO	diesel range organics
DU	decision unit
EAL	Environmental Action Level
EHMP	Environmental Hazard Management Plan
EZ	exclusion zone
HAR	Hawaii Administrative Rules
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
HDOH	Hawaii Department of Health
HDOT-A	Hawaii Department of Transportation – Airports Division
HEER	Hazard Evaluation and Emergency Response
HIOSH	Hawaii Occupational Safety and Health
HNL	Daniel K. Inouye International Airport
HRS	Hawaii Revised Statutes
HSERC	Hawaii State Emergency Response Commission
MI	multi-increment
PFAS	Per- and polyfluoroalkyl Substances
PFOS	Perfluorooctanesulfonic acid
PID	photoionization detector
PPE	personal protective equipment
QEP	qualified environmental professional
RRO	residual range organics
TGM	Technical Guidance Manual
TMK	Tax Map Key
TPH	total petroleum hydrocarbons

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1. INTRODUCTION

EA Engineering, Science, and Technology, Inc., PBC has prepared this Construction Environmental Hazard Management Plan (C-EHMP) for the planned reconstruction of Taxiway C at the Daniel K. Inouye International Airport (HNL) (the "subject property"), located on the eastern end of HNL in Honolulu, Oahu, Hawaii. The subject property covers approximately 36.5 acres and includes the area around Taxiway C. The subject property location is provided in Figure 1.

This C-EHMP was prepared for construction activities related to proposed reconstruction of Taxiway C, connecting taxiways (D, E, and F), connecting taxi lanes, the south ramp pavement areas at the subject property (hereafter referred to as the "site"). The proposed improvements will be located at the main thoroughfare for south ramp tenants. Over 100 tenants utilize the area including large cargo carriers, flight schools, medical evacuation support, scenic flight tours, fixed-based operators and many more. The proposed improvements include excavation of utility trenches for select storm drain replacements. The site location is provided in Figure 1b.

Prior to the submittal of the final version of this C-EHMP, the contractor shall complete and include the following portions of this plan:

- Signature Page
- Figure 3. Short Term Engineering Controls Map
- Appendix A. Taxiway C Reconstruction Project Plan and Specifications
- Appendix B. Taxiway C Reconstruction Health and Safety Plan
- Appendix C. Key Project Personnel
- Appendix D. Taxiway C Reconstruction Sampling and Analysis Plan
- Appendix E. Taxiway C Reconstruction Erosion and Sediment Control Plan

1.1 PURPOSE OF THE PLAN

This C-EHMP for the site was prepared following the *State of Hawaii's State Contingency Plan* (Hawaii Administrative Rules [HAR] 11-451), *Technical Guidance Manual for Characterization and Remediation of Contaminated Properties* (State of Hawaii Department of Health [HDOH], 2025), and *Guidance for Stockpile Characterization and Evaluation of Imported and Exported Fill Material* (HDOH 2017). These documents provide regulatory requirements for the management of residual impacted soil and/or groundwater.

The State Contingency Plan approach develops an Environmental Hazard Management Plan (EHMP) for the following:

- To identify and evaluate potential environmental hazards to human health and ecological receptors from residual impacted soil and groundwater at the site; and

- To prepare general guidelines for management of future soil-disturbing activities at the site.

This C-EHMP has been developed to prevent potential exposure of future construction workers at the site from contaminants of potential concern (COPCs) during planned subsurface construction activities. The identification of soil or groundwater contamination above HDOH Tier 1 Environmental Action Levels (EALs) at the site requires the site owner and/or operator to manage the identified residual impacted subsurface soils and accumulated groundwater to prevent unmitigated exposures to future construction workers, site operators, and/or users.

Table 1 is a HDOH checklist of environmental issues that should be identified before beginning construction activities. The methods for managing the identified environmental issues are detailed in this C-EHMP.

Table 1 – Pre-Construction Evaluation of Environmental Issues

Yes	No	
X		Are concentrations of COPCs above the lowest unrestricted Tier 1 EAL[1]?[2]
X		Has the release been reported to the HDOH HEER Office?[2]
	X	Are concentrations of COPCs above the construction worker EAL?
	X	Has the extent of contamination been fully delineated (both vertically and laterally)?
N/A		Have sufficient soil vapor samples been collected in areas where a future building will be present?
	X	Is there an ongoing release at the site that must be mitigated prior to construction?
	X	Does contaminated media need to be removed or remediated prior to construction?
	X	Are COPC concentrations and contaminated media unknown but presumed or suspected to be present at the site at potentially hazardous levels based on historic site activities or other evidence?[1]
	X	Will demolition of structures be conducted at the site prior to redevelopment?
	N/A	If demolition will occur, has asbestos and lead-paint abatement been completed prior to demolition in accordance with all State and Federal regulations?

NOTES:
COPC = Chemical of Potential Concern
EAL = Environmental Action Level
HDOH = State of Hawaii Department of Health
N/A = Not Applicable
[1]If no contaminants are present or suspected to be present at the site at concentrations greater than the lowest unrestricted Tier 1 EAL then a C-EHMP is not required. The lowest Tier 1 EAL is defined as the EAL for unrestricted land use where groundwater is a potential drinking water resource, and the nearest surface water body is less than 150 meters away.
[2]All releases must be reported to the Hazard Evaluation and Emergency Response (HEER) Office Emergency Preparedness and Response Section by calling 808-586-4249 and following up with a written Release Notification

1.2 HOW TO USE THIS DOCUMENT

The procedures, information, and hazard management plans referred to within this C-EHMP are not intended to be a comprehensive description of all of the rules, regulations, laws, and other requirements applicable to a future construction project at the site that may potentially disturb subsurface impacted soil or groundwater. The information contained herein is intended to provide general information and should not be used in place of appropriately qualified personnel. Each potential user and/or construction contractor for the site is responsible for complying with all applicable rules, regulations, laws, and other requirements and for preparing site- and project-specific Health and Safety Plans (HASPs) for their own work.

This document is intended to be used at the site when potentially impacted soil or groundwater is encountered during planned subsurface construction activities. A qualified environmental professional (QEP) who is capable of ensuring the C-EHMP is followed when dealing with potentially impacted soil or groundwater should be on-site during soil and groundwater disturbing activities. In order to ensure proper handling of impacted soil and groundwater, contractors should familiarize themselves with this C-EHMP, the hazards associated with impacted soil and groundwater, and the handling and disposal guidelines outlined herein.

Following construction, the QEP will notify the HDOH Hazard Evaluation and Emergency Response (HEER) Office to confirm that all contamination was managed in accordance with the approved C-EHMP. At a minimum, a construction completion report will be submitted that includes all appropriate manifests, tracking logs, and photos.

2. BACKGROUND

The project site is located on the eastern end of HNL in Honolulu, Oahu, Hawaii, and includes the area around Taxiway C (Figure 1). The total area of the site is approximately 36.5 acres located in Tax Map Key (1) 1-1-003: Parcel 001.

The proposed project activities are located in the HNL Taxiway C. According to the City and County of Honolulu Department of Planning and Permitting, the area is currently zoned F-1 (Federal and Military Preservation), I-2 (Intensive Industrial), and IMX-1 (Industrial Mixed Use). Current and future use is anticipated to remain unchanged.

Table 2 – Site Location

Address	Taxiway C at the Daniel K. Inouye International Airport
TMK #	(1) 1-1-003:001
Latitude/Longitude	21.320276, -157.914430

Table 3 – Site Conditions

Distance to Nearest Surface Water Body	Approximately 200 feet (61 meters) to Keehi Lagoon (southeast)
Approximate Depth to Groundwater	4 to 9 feet below ground surface
Is the Property Above or Below UIC Line?	Below UIC Line
Is the first-encountered groundwater classified as a potential source of drinking water in the Mink & Lau Aquifer Identification and Classification Report?	No
Current Property Use Type (Residential, Commercial, Zoning, etc.)	Industrial
Proposed/Future Property Use Type (Residential, Commercial, Mixed Use Zoning, etc.)	Industrial
Typical Soil Profile from Surface to Groundwater (Include Depth Range, Lithology)	Fill material
Utilities Serving Site (e.g., Storm Drains, Electrical, Gas, Water, Sewer [specify- C&C, Cesspool, Septic, Other])	Yes. Electric; Fuel; Water; Sewer (C&C); Storm Drains, FAA Utility

NOTES:
C&C = City and County of Honolulu
FAA = Federal Aviation Administration
UIC = underground injection control

2.1 EXISTING ENVIRONMENTAL CONDITIONS

On December 4, 2020, a Contaminated Soil and Groundwater Review Form was submitted to the environmental consultant of HDOT-A. The response on the review form indicates that neither soil nor groundwater contamination have been detected within the proposed project area;

however, three areas were identified within approximately 300-400 feet of the proposed project that have total petroleum hydrocarbons (TPH) or chromium impacts in the soil and/or groundwater

A preliminary screening was completed in November 2025 to characterize the in-situ environmental conditions of soil and groundwater that may be encountered during proposed work at the site. The results of the soil sampling confirm that TPH and Perfluorooctanesulfonic acid (PFOS) contamination has been confirmed at the site in exceedance of Tier 1 EALs, but at concentrations below Commercial/Industrial EALs for TPH (there is no C/I EAL for PFOS). The results of groundwater sampling indicate that per- and polyfluoroalkyl substances (PFAS) in exceedance of Tier 1 EALs are present in groundwater upgradient of the site, an organochlorine pesticide is present in groundwater to the northeast of the site, and TPH in exceedance of Tier 1 EALs is present in groundwater to the south west of the site. During the installation of a monitoring well in the southwest corner of the site, black staining with a faint petroleum odor was observed at a depth of 4 to 5 feet below ground surface. The draft report concludes that further sampling and characterization of soils and groundwater at the site will be necessary for delineation or disposal (EA 2026). The location of soil sample results in exceedance of Tier 1 EALs are shown in Figure 2a. The location of groundwater sample results in exceedance of Tier 1 EALs are shown in Figure 2b.

Because potential contamination at the project site has not been delineated, and screening samples indicated the presence of soil and groundwater contamination exceeding Tier 1 EALs, the potential to encounter impacted soil or groundwater must be considered throughout the project site. Therefore, all excavated soils and groundwater encountered will be considered potentially contaminated, until determined otherwise.

2.2 CHEMICALS OF POTENTIAL CONCERN

The following COPCs were identified within the limits of the proposed construction activities covered under this C-EHMP, and may be encountered during future subsurface activities at the site:

Table 4 – Chemicals of Potential Concern

COPC	Matrix	Concentration Range	Tier 1 EAL *
TPH Compounds			
TPH-DRO	Soil	< 2.0 to 210 mg/kg	180 mg/kg
TPH-RRO	Soil	5.3 to 2,000 mg/kg	500 mg/kg
TPH-DRO	Groundwater	50 to 840 µg/L	640 µg/L
TPH-RRO	Groundwater	140 to 1,300 µg/L	640 µg/L
PFAS Compounds			
Perfluorooctanesulfonic acid	Soil	0.026 to 46 µg/kg	25 µg/kg
Perfluoroheptanoic acid	Groundwater	0.0062 to 0.14 µg/L	0.077 µg/L
Perfluoropentanesulfonic acid	Groundwater	0.011 to 0.67 µg/L	0.58 µg/L

COPC	Matrix	Concentration Range	Tier 1 EAL *
Perfluoroheptanesulfonic acid	Groundwater	0.0013 to 0.041 µg/L	0.038 µg/L
Organochlorine Pesticides			
Heptachlor	Groundwater	< 0.00075 to 1.5 µg/L	0.0036 µg/L

NOTES:
* Tier 1 Environmental Action Level (EAL) for Unrestricted Use; < 150 meters from surface water; not above drinking water
COPC = chemical of potential concern
mg/kg = milligrams per kilogram
PFAS = per- and polyfluoroalkyl substances
TPH = total petroleum hydrocarbons
µg/L = micrograms per liter

Direct exposure to impacted subsurface soil has the potential to occur as a result of excavation, stockpiling, and disposal of excavated soils. Direct exposure to impacted groundwater may occur during excavation dewatering, storage, and disposal of groundwater encountered at the site. Proposed project activities will disturb potentially impacted soils and groundwater throughout the project area (Figure 1).

2.3 CHEMICALS OF POTENTIAL CONCERN AND CONSTRUCTION MATERIALS

Table 5 below is a checklist to determine construction material compatibility.

Table 5 – Construction Materials Compatibility Summary

Question	Yes	No
Are storm drains (including interceptors) or will storm drains be present at the site?	X	
Will any portion of a storm drain (including interceptors) be present at an elevation that is potentially in contaminated groundwater?		X
Will any portion of a utility corridor be present at an elevation that is potentially in contaminated groundwater?	X	
Will a portion of any other utility or subsurface structure (other than foundations) extend potentially into contaminated groundwater?		X
Are any potentially flammable or explosive COPCs present at the site (e.g., methane, total petroleum hydrocarbons as gasoline, etc.)?		X
Will any electrical lines/utility corridors be subsurface?	X	
Are any COPCs in vapors present at or above 10 % of the LEL?		X
Will any elevator shafts or escalator pits, potentially extend into contaminated groundwater?		X

Notes:
COPC = Chemical of Potential Concern
LEL = Lower Explosive Limit

Construction materials potentially in contact with contaminated groundwater include storm drain piping, which is reinforced concrete pipe. The primary contaminants at the site, TPH, pesticides, PFAS compounds, will not affect the construction materials. The Taxiway C reconstruction plans and specifications are included as Appendix A.

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3. SUMMARY OF POTENTIAL ENVIRONMENTAL HAZARDS

Based on the results of the 2025 preliminary investigation of the project area (EA 2026), six discrete soil samples and three groundwater wells are impacted with concentrations of COPCs exceeding the HDOH Tier 1 EALs for unrestricted use, as depicted in Figures 2a and 2b.

3.1 ENVIRONMENTAL HAZARD TABLE

Table 6 summarizes the environmental hazards posed by the COPCs at the site.

Table 6 – Environmental Hazards Identified at the Site

COPC	Media			Hazard					Potential Receptors				
	Soil	Water	Vapor	Direct Exposure	Leaching	Gross Contamination	Ecotoxicity	Vapor Intrusion	Construction Workers	Site Visitors	Site Occupants	General Public	Future Site Users
TPH	X	X		X	X	X			X				
PFAS	X	X		X	X		X		X				
Heptachlor		X					X		X				

Notes:
COPC = Chemical of Potential Concern
PFAS – Per- and Polyfluoroalkyl Substances
TPH = Total Petroleum Hydrocarbons

3.2 CHRONIC AND ACUTE DIRECT EXPOSURE HAZARDS

A detailed description of the effects of exposure to known COPCs at the site is included in the site-specific HASP for the project, included as Appendix B. Details include how to recognize potential exposure to COPCs, how to avoid exposure to COPCs, and required training and Personal Protective Equipment (PPE) to use when working around the COPCs.

Table 7 summarizes the chronic and acute direct exposure hazards posed by the COPCs at the site.

Table 7 – Chronic and Acute Direct Exposure Hazards

COPC	Direct Exposure Hazard				Acute Exposure	Chronic Exposure
	Ingestion	Inhalation	Absorption	Injection		
TPH-DRO	X	X			• Irritation • Pain • Itching • Discoloration • Swelling • May be fatal if swallowed • Headache • Dizziness • Vomiting	• Increased risk of cancers of liver, blood, and thymus
TPH-RRO	X	X			• Coughing • Difficulty breathing	• None documented
PFAS	X	X	X		• None documented	• Reproductive effects • Developmental delays • Increased risk of some cancers • Decreased immune response • Endocrine system disruption
Heptachlor	X	X	X		• Headache • Dizziness • Nausea • Vomiting • Highly toxic	• Neurological effects including irritability, salivation, dizziness, muscle tremors, and convulsions • Reproductive and developmental effects

NOTES:
COPC = Chemical of Potential Concern
PFAS = Per- and Polyfluoroalkyl Substances
TPH-DRO = Total Petroleum Hydrocarbons – Diesel Range Organics
TPH-RRO = Total Petroleum Hydrocarbons – Residual Range Organics

A summary of the existing environmental conditions is provided in Section 2.1. Locations of soil and groundwater samples impacted with concentrations of COPCs exceeding the HDOH Tier I EALs for unrestricted use are depicted in Figures 2a and 2b. All contaminated media must be properly handled and disposed of in accordance with the guidance in this C-EHMP. Mishandling of contaminated media could result in spreading the contamination within the site or to off-site locations, which could result in fines and other penalties.

4. NOTIFICATION REQUIREMENTS

The effective environmental management of this construction project will require a coordinated effort from all personnel involved in construction activities. The Contractor will maintain a current list of project contacts throughout the construction phase of the project. An updated key project personnel list will be maintained and submitted to HDOH in writing whenever a change in key project personnel occurs. The identification and responsibilities of key personnel involved in the construction activities are included in Appendix C.

If site conditions or the scope of planned reconstruction activities change following submittal and acceptance of this C-EHMP by the HDOH HEER Office, then the HDOH HEER Office must be notified at least 90 days prior to conducting ground disturbing activities or as soon as the change has been identified. Please note that if HDOH is notified of a change in site conditions or the scope of planned reconstruction activities less than 90 days prior to ground disturbing activities, there could be delays in construction if additional assessment work needs to be conducted. The initial notification of construction activities (at least 90 days prior to the planned start of construction) and any changes can be submitted through the HDOH e-permitting portal using the website link (https://eha-cloud.doh.hawaii.gov/epermit/app/#/formversion/ed9ca916-7863-459b-b5dd-e66f881381d5).

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5. REQUIREMENTS FOR ON-SITE ENVIRONMENTAL OVERSIGHT

On-site monitoring is a key component of ensuring that the procedures documented in this C-EHMP are implemented properly and function as intended (e.g., cleanliness of equipment, and workspaces, screening of potential contaminated material, and stockpile segregation, etc.). A QEP will be retained as the environmental monitor to provide guidance on implementing the recommended measures and to develop additional mitigation measures if the need arises. The on-site QEP will have at least 5 years of experience providing environmental oversight for construction projects and must have completed Hazardous Waste Operations and Emergency Response (HAZWOPER) 40-hour training with a current 8-hour refresher.

Monitoring events will be conducted at an appropriate frequency based on specific work tasks/procedures and the potential for adverse impacts to occur. An appropriate schedule (frequency and duration of site visits) will be established between the QEP and all parties involved regarding when the QEP is on site. In general, the QEP will be familiar with the day-to-day conduct of project activities and be on-site during activities with the potential to impact human health or the environment, when contaminated media will be disturbed, when mitigation measures are implemented, or as determined in discussion with the regulatory agencies. The QEP will be on site whenever potentially contaminated soil or groundwater may be disturbed, and for soil stockpile characterization activities. Key monitoring stages may include, but are not necessarily limited to, the following:

- During soil or groundwater exposure and soil movement activities
- During dewatering activities
- Prior to and after heavy rain/storm events
- During engineering control installation and testing
- During soil stockpile characterization activities
- During installation of erosion and sediment control measures

5.1 QEP RESPONSIBILITIES

The primary responsibility of the QEP is to ensure that the environmental and human health protection measures are implemented and are adhered to and that any movement, transport, and disposal of contaminated material (on-site and to an off-site location) is properly documented.

Typical responsibilities of the QEP include, but are not limited to, the following:

- Direct the segregation of contaminated soil.

- Communicate the requirements of the C-EHMP to project members during pre-job and tailgate meetings.

- Remain on-site as per the schedule established between parties prior to the project start. The QEP will remain on-call during non-critical work periods to respond to emerging environmental issues.

- Review the contractor's work procedures to ensure functionality and compliance with the C-EHMP and applicable regulations, standards and best management practices (BMPs).

- Provide advice in preparing for work activities in a manner that mitigates adverse environmental or health effects.

- Exercise the authority to modify and/or halt any construction activity at any time if deemed necessary for the protection of human health and the environment.

- Advise project members if project activities have caused or are likely to cause an environmental incident and make recommendations for corrective action.

- Monitor compliance with the C-EHMP and relevant permit conditions.

- Liaise directly with project members and provide technical advice for the purpose of resolving situations that may impact human health and the environment as they arise.

- Maintain complete records of activities related to the implementation of the C-EHMP. This should include any measurements taken (e.g., photoionization detector [PID] screening, air monitoring, equipment calibration, manifests, truck receipts, truck counting spreadsheets etc.), photographs and incident reports.

- Complete and submit environmental monitoring reports to the HDOH HEER and report any unanticipated adverse effects to the environment. Such reports must include the nature of the effect, its cause, mitigation and/or remediation implemented, and whether a work stoppage was ordered, as well photographs, analyses, and measurements, if applicable.

- Report unanticipated encounters with contamination at the site in accordance with Hawaii Revised Statutes (HRS) 128D. Reportable releases include contamination not already identified at the site, as well as tanks, drums, and/or abandoned pipelines that are not identified in advance and are encountered during excavation.

Table 8 is a list of the project activities when a QEP is required to be present at the site.

Table 8 – Project Activities When QEP Must Be Present

Activity	Planned at Site?		QEP Will Be Present?		Monitoring Equipment to be Used by QEP
	Yes	No	Yes	No	
Environmental Sampling	X		X		PID
Geotechnical Sampling	X			X	
Silt Fence Installation	X		X		
Demolition (asphalt pavement removal)	X			X	
Grading	X		X		PID
Excavation	X		X		PID
Pile Installation		X		X	
Underground storage tank Removal		X		X	
Dewatering	X		X		
Utility Trenching	X		X		PID
Soil Stockpiling	X		X		PID
Soil Export/Import	X		X		N/A
Vapor Barrier Installation		X		X	
Vapor Extraction		X		X	
Confined Space Work		X		X	
Work Below High-Water Mark		X		X	
Engineering Control Installation and Testing		X		X	
Pipeline Tapping		X		X	
Installation of Erosion/ Sediment Controls	X		X		N/A
Prior to/During Rainstorm Events	X		X		N/A

Notes:
N/A = not applicable
PID = photoionization detector
QEP = qualified environmental professional

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6. CONSTRUCTION ACTIVITIES

The proposed HNL construction project covered under this C-EHMP includes the reconstruction of Taxiway C and portions of the South Ramp (Figure 1). Select stormwater piping within the project area that were previously found to be in poor condition will be replaced. Soil excavation up to a depth of 4 feet below ground surface (bgs) is expected throughout the project site. Excavations will extend to depths up to 12 feet bgs where stormwater piping will be replaced. Excavation is expected to generate approximately 110,000 cubic yards of soil. Excavated soil will be placed in stockpiles of up to 400 cubic yards, at a pre-determined staging area shown in Figure 3, for disposal characterization sampling. Additional details are provided in the Soil Management Plan (Section 7) and the Sampling and Analysis Plan (Appendix D). A preliminary screening of subsurface soil and groundwater was performed to identify potentially contaminated media that may be encountered during the future reconstruction work. The screening concluded that soil and groundwater contamination that exceeds HDOH Tier I EALs is present within the project footprint (EA 2026). Prior to off-site disposal of excess soil generated during the project, waste characterization sampling will be performed in accordance with the *Technical Guidance Manual for the Implementation of the Hawaii State Contingency Plan* (TGM) (HDOH 2025), and the Hawaii Department of Transportation Airports (HDOT-A) Environmental Hazard Evaluation/Environmental Hazard Management Plan (HDOT-A 2024), as further described in Section 7.

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7. SOIL MANAGEMENT PLAN

The purpose of the Soil Management Plan is to ensure proper handling of impacted subsurface soil at the site. As detailed above and depicted in Figure 2a, discrete soil samples from areas of the site were found to be impacted by TPH and PFAS in exceedance of Tier 1 EALs. Because soil contamination at the project area has not been delineated, the soil management practices outlined throughout this section shall be implemented throughout the site. Proper management of soil excavations at the site is necessary to ensure continued protection of human health and the environment from potentially impacted subsurface soils.

7.1 SOIL EXCAVATION AND HANDLING

Soil disturbed at the site will be continuously monitored and documented by a QEP with at least 5 years' experience in environmental oversight associated with construction projects. Where known or suspect contaminated soil is encountered during excavation, the appropriate response actions must be taken that conform with HDOH and United States Environmental Protection Agency guidance, laws, and regulations. This includes proactive planning to ensure that workers have the appropriate level of personal protective equipment (PPE), and that contaminated soil is managed properly when excavated. Tasks associated with properly managing contaminated soil include the following:

- Where contaminated soil is encountered, a QEP shall provide field oversight to ensure:
  - that known or suspect contaminated soil is segregated from suspected clean soil,
  - that known or suspected contaminated soil is properly stored on and covered with plastic sheeting,
  - that known or suspect contaminated soil is properly characterized,
  - that the contaminated soil is managed properly during and following excavation,
  - and that health and safety guidance related to potential exposure of workers to COPCs is provided.
- Workers who may come into contact with contaminated soil must wear the appropriate level of PPE, as documented in the site-specific HASP.
- Workers who may come into contact with contaminated soil must have required training (at a minimum, 40-hour HAZWOPER certification and current 8-hour annual refresher training).
- Soil trucked off-site should be drained of fluids and the load must be covered with a dust screen during transport.

- If newly encountered soil contamination is discovered at a previously unknown source or location, the HDOH HEER Office must be immediately notified of its discovery by reporting it as a new release.

Before beginning the excavation, the Contractor shall establish an exclusion zone (EZ) around the proposed work area. Measures, such as temporary fencing, shall be placed to minimize access to the EZ by unauthorized persons; entrance/exit locations to the EZ should be limited, and the boundaries of the EZ must be located wholly within the boundaries of the site. The location of the EZ is shown in Figure 3.

Equipment may move freely within the EZ, and washing of equipment while located within the EZ is not required. Special care is required to ensure that impacted soil is not mixed with non-impacted soil. Brooming of loose soil and removal of significant quantities of adhered soil with hand tools shall be performed as necessary to decontaminate equipment prior to leaving the EZ.

Impacted soil will be transferred to the temporary stockpile location depicted on Figure 3. Equipment used for transferring soil to stockpiles must be broom cleaned before leaving the loading area such that they do not track impacted soils across the site. Decontamination procedures for personnel exiting the EZ shall be described in the site-specific HASP prepared by the Contractor.

Excavated soils will be temporarily stockpiled as described in Section 7.2.

7.1.1 Field Identification of Contaminated Soil

Some COPCs, including, but not limited to metals, dioxins, pesticides, and polychlorinated biphenyls, cannot be identified in the field through visual and olfactory observations. In some cases, previous sampling or historical research into previous industrial operations may have identified areas where these COPCs are likely present at concentrations above the most restrictive HDOH EALs that are targeted for excavation. As described in Section 2.2, the only COPCs anticipated for soil excavated under this C-EHMP are TPH and PFAS compounds, which may not be definitively identifiable via qualitative field observations. Therefore, the excavated soil must be managed in a manner protective of site workers, the public, and the environment. The locations of soil samples exceeding Tier 1 ESLs are shown in Figure 2a. Soil excavated from these and adjacent areas should be segregated and stockpiled separately from other excavated soil.

Previously unidentified areas and types of contaminated soil may be identified in the field through visual and olfactory observations. Petroleum contaminated soil typically exhibits petroleum staining and/or a petroleum hydrocarbon odor. Free product may or may not be observed. Petroleum contaminated soil may be also detected indirectly via a rotten egg odor stemming from anaerobic degradation of the product that produces hydrogen sulfide in oxygen starved zones. Solvent-contaminated soil typically exhibits a solvent or sweet odor, and in some instances free phase product may be present. Suspect contaminated soil should be segregated from clean material. Soil with a strong petroleum or solvent odor and/or free phase product should be segregated separately from the moderately or non-impacted soil, as soil that is

considered grossly contaminated must be removed, may not be replaced in the excavation and must be properly disposed of. Upon discovery of suspected unanticipated and unknown impacted soil, immediately suspend all activities in the vicinity and notify the QEP.

During excavation activities of soil at the site, the QEP will perform the following activities:

- Monitor excavation activities to ensure that potentially impacted soil from locations depicted on Figure 2a is properly managed as contaminated, even when there is no field evidence of contamination.
- Visually screen soils for staining, debris, soil waste, discoloration, or other evidence of contamination as the soils are removed from the excavation.
- Check for petroleum or other unusual chemical odors emanating from the soil.
- If suspected impacted soils are encountered, collect soil screening samples in sealable bags and test the headspace within each bag for volatile organic compounds (VOCs) using a PID and following the procedure described in detail in Section 8.4.2 of the HDOH Technical Guidance Manual (TGM) (HDOH 2025). Prior to testing, PID meters must be calibrated in accordance with device manufacturer instructions.
- Use field observations, VOC measurements, and any other field screening tests, such as the glove and paper towel tests, to segregate the soil properly.

Excavated soil will have the approximate originated location and associated stockpile location identified for reporting purposes. Suspected contaminated soil will be segregated from non-impacted soils. Additional field screening and sampling procedures are discussed in the project specific Sampling and Analysis Plan, included as Appendix D.

7.1.2 Dust and Erosion Control

Dust and erosion controls at the site will be continuously monitored and documented by a QEP with at least 5 years' experience in environmental oversight associated with construction projects. Prior to excavation activities, the Contractor and the QEP must evaluate and establish erosion control and dust control measures. The erosion control and dust control measures must prevent impacted soils from migrating away from the excavation area and soil stockpile location. Typically, BMPs are employed to control erosion and prevent the spread of contamination via runoff or wind. For the activities covered under this C-EHMP, BMPs will include prevention of tracking potentially impacted soils off-site or commingling with un-impacted soils.

Dust control measures should ensure compliance with ambient air quality standards established in HAR 11-59 and should comply with air pollution control requirements specified in HAR 11-60.1. During excavation and handling of impacted soil, the following dust control measures must be implemented to minimize dust generation:

- Equipment decontamination: BMPs to control the transport of contaminated soil from the site and within the site shall be used to limit the tracking of soil away from the excavation area. Decontamination areas should be set up in the EZ adjacent to excavation areas where contaminated media will be disturbed, adjacent to stockpile areas, and where materials and equipment leaves the site. Decontamination protocols are described in Section 14.

- Wetting/misting: BMPs associated with dust control measures shall include the use of water to be sprayed on the soil during excavation activities. During excavation, water shall be sprayed on the surface of the soil to prevent dust from being generated. However, the amount of water used for dust control shall be minimized so as to not create run-off away from the excavation.

Additional erosion control measures are detailed in the Erosion and Sediment Control Plan, Appendix E.

7.2 SOIL STOCKPILING AND STORAGE

Because potential contamination at the project site has not been delineated, and screening samples indicated the presence of soil and groundwater contamination exceeding Tier 1 EALs, the potential to encounter impacted soil must be considered throughout the project site. Therefore, all excavated soils will be considered potentially contaminated, until determined otherwise. Soil excavated from areas adjacent to soil exceedances shown in Figure 2a will be stockpiled separately from other soil and/or construction/demolition materials. Soil will be characterized and disposed as discussed in Section 7.3.

The following activities are required with respect to managing excavated soil:

- Contaminated soil will be segregated from uncontaminated soil.

- Water contained within excavated soils will be allowed to drain back into the excavation prior to stockpiling the soil.

- Stockpiles shall be placed on 6-mil plastic-lined, bermed area. The stockpiles must be covered with plastic sheeting at the end of each day and during any major wind or rain events. The plastic sheeting must be secured with enough ballast so that it will not be dislodged by strong winds.

- Underlay the edges of the plastic sheeting with clean soil or other material to create a berm around the stockpile.

- Ensure that the height of the berm will be sufficient to prevent storm water runoff or run-on from breaching it.

- Soil stockpiles shall be located away from storm drain inlets, surface waters, and storm water drainage pathways/channels.

- Stockpile soil that has a strong petroleum or solvent odor and/or free phase product separately from both clean and moderately impacted soil. This soil may not be reused and must be properly disposed of.

- Soil stockpiles must remain on-site and cannot be transported or stored off-site without prior authorization or characterization. Off-site storage of soil will require a Temporary Storage and Disposal Facility Permit and potentially may require additional permits.

- Confirmation sampling of the underlying soil may be required following stockpile removal to ensure that COPCs did not leach into the ground. Confirmation sampling post-stockpiling is included in the Sampling and Analysis Plan (Appendix D).

The proposed locations of soil stockpiles are shown in Figure 3. If the location of the stockpiles changes or if the stockpiles are moved, then updated figures will be prepared and provided to the HDOH as soon as possible.

All locations that have the potential to expose site workers and/or operators to impacted media, such as excavations and soil stockpiles, will be inspected at a frequency appropriate for the activities being conducted at the site. The site should also be inspected prior to and following adverse weather conditions that could disrupt control measures. Damaged or inadequate measures should be replaced immediately after discovery. PPE should be inspected prior to each use and replaced immediately if found to be inadequate.

7.3 SOIL CHARACTERIZATION AND DISPOSAL

Potentially impacted soil excavated from the site will be characterized in accordance with the HEER Office TGM (HDOH 2025) and the HEER Office Guidance for the Evaluation of Imported and Exported Fill Material (HDOH 2017). Stockpiled soil will be sampled using the multi-increment (MI) sampling methodology. MI sample collection involves the collection and composition of multiple increments of soil from a single decision unit (DU) into one sample that is representative of the entire, three-dimensional mass of the stockpile. A total of 50 increments will be collected from each stockpile DU and physically combined in the field into a single MI soil sample for laboratory analysis. For this project, MI samples are anticipated to be collected from all stockpiles prior to disposal or reuse determination. Characterization samples will be submitted for laboratory analysis for the analytes, and at the frequency, listed in Table 9 below. Additional details on stockpile confirmation sampling can be found in the Sampling and Analysis Plan, Appendix D.

Table 9 – Characterization Sampling Parameters and Frequency[1]

Chemical to Analyze	Analytical Method	Sampling Frequency (CY per MI Sample)
TPH DRO and TPH RRO	SW 8015B	400
TPH GRO	SW 8260	
RCRA 8 Metals	SW 6020/7471A	
PAHs	SW 8270C - SIM	
TCLP RCRA 8 Metals	SW 1311/6010B/7470A	
Pesticides	SW 8081A	
PFAS	1633	
Ignitability[2]	SW 1010 or equivalent	

Notes:
[1] Analytical suite to be confirmed with disposal facility (PVT Land Company, Ltd. Landfill)
[2] Required if petroleum contamination observed during excavation or stockpiling
CY = cubic yard(s)
DRO = diesel range organics
DU = decision unit
GRO = gasoline range organics
MI = Multi Increment
PAH = polycyclic aromatic hydrocarbon
PFAS = per- and polyfluoroalkyl substances
RCRA = Resource Conservation and Recovery Act
RRO = residual range organics
SIM = selected ion monitoring
TCLP = Toxicity Characteristic Leaching Procedure
TPH = total petroleum hydrocarbons

If sampling results are below Tier 1 EALs, soil may be reused onsite (within the construction project boundary from which excavated soil was generated), off-site within the airport boundary (with the approval of HDOT-A), or potentially at off-site commercial or industrial locations. If off-site commercial/industrial locations are anticipated for reuse, a formal agreement between the HDOT-A and the receiving site must be signed prior to transportation of soil. The HEER Office needs to be contacted and soil reuse discussed, and if the HEER Office agrees on the reuse, a soil agreement signed by the generating and receiving party must be submitted to the HEER Office prior to any reuse. Stockpiles samples with concentrations exceeding Tier 1 EALs will be further characterized in accordance with the *Guidance for Stockpile Characterization and Evaluation of Imported and Exported Fill Material* (HDOH 2017) and/or the requirements of the disposal facility.

Stockpiled soil containing COPCs above Tier 1 EALs will be transported for off-site disposal at a permitted disposal facility. PVT Land Company, Ltd. Landfill (87-2020 Farrington Hwy, Waianae, HI) is the anticipated disposal site for impacted soil under this C-EHMP. PVT Land Company, Ltd. Soil Acceptance Agreement forms (blank) are included as Appendix F. The Contractor shall properly manifest the waste with the landfill. All soil transport must use a bill of lading or manifest for each off-site shipment of soil. The Contractor is responsible for properly preparing bills of lading, or other related documents required by the disposal facility. These documents should include the date and time of shipment, the name of the transportation company, the name of the truck driver, the disposal site, and a brief description of the material. These documents and the associated weight slip showing the weight/volume of the soil should be provided to the QEP within five business days of disposal.

The QEP will ensure that the waste hauler only dispose of soil at locations approved in this plan. The QEP will monitor and review hauling manifests and disposal records to ensure adherence to the plan. Disposal of soil at a location not previously approved could result in fines.

7.4 RECORDKEEPING AND REPORTING

Detailed records of workplace monitoring, potentially impacted soil excavation, soil stockpiling, soil testing, soil reuse and disposal, inspection and maintenance activities shall be maintained. Significant findings from site inspections will be communicated to site workers promptly and adjustments made to the site- and Contractor's HASP, as needed. Minor deviations from the C-EHMP are acceptable based on field discretion. Major deviations should be approved by HDOH in advance of implementation. Documentation of major deviations should be provided to the HDOH and maintained for the contractor's records.

A log of all soil that leaves the Site and its final disposition will be maintained by the QEP. An example Soil Tracking Log is included as Appendix G. All waste manifests, truckload counts at source and receiving site, weigh tickets, and soil profiles will be included in a final report documenting the environmental oversight conducted during construction. The report will be submitted to the HEER Office at the conclusion of the project. In addition, whenever soil is exported from the site, summary reports of the disposal records, including copies of documents, will be submitted to the HEER Office on a weekly or monthly basis, unless waived in writing by the HEER Office project manager. For all soil disposed of at a disposal facility a manifest with all required signatures will be submitted.

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8. GROUNDWATER MANAGEMENT PLAN

Preliminary groundwater screening determined contamination exceeding Tier 1 EALs was present in groundwater samples from three monitoring wells at the project site, depicted in Figure 2b. COPCs include TPH-DRO, TPH-RRO, PFAS, and heptachlor (EA 2026). Because potential contamination the project site has not been delineated, the potential to encounter impacted groundwater must be considered throughout the project site. Therefore, all groundwater encountered will be considered potentially contaminated, until determined otherwise.

Groundwater was encountered between 4 and 9 feet bgs during the preliminary screening of the project site (EA 2026). Current construction plans include excavation at the project site to depths of up to 4 feet bgs throughout a majority of the site, and deeper excavations in select areas for storm drain pipe replacement to a maximum depth of 12 feet bgs. Based on the established depth to groundwater, excavation of areas of deeper excavation are likely to encounter groundwater, and dewatering may be necessary. Dewatered groundwater will be allowed to re-infiltrate in trenches adjacent to the excavations, as described in Section 8.2, below. The project site is shown on Figure 1.

The site is located seaward of the Underground Injection Control area of Oahu, indicating that groundwater at the site is not used as a drinking water resource. Local groundwater is anticipated to flow in a general southeast direction toward the Keehi Lagoon, which is about 200 feet (61 meters) from the site.

Table 10 lists the groundwater characteristics and construction activities.

Table 10 – Groundwater Characteristics and Construction Activities

Estimated Depth to Groundwater at Site:	4 to 9 feet below ground surface		
Proposed Maximum Excavation Depth:	12 feet		
Estimated Direction of Groundwater Flow:	Southeast		
Will Contaminated Groundwater be Encountered During this Project?	Yes	No	Unknown
	X		
Will Groundwater from this Site be Dewatered into the Sanitary Sewer System?		X	
Will Groundwater from this Site be Dewatered into the Storm Sewer System?		X	
Does the Contractor have a Dewatering Permit Issued by the County and/or HDOH Clean Water Branch?		X	
Is Free Product Known or Suspected to be Present at the Site?		X	

This groundwater management plan is intended to ensure that groundwater encountered during construction is properly managed. Some groundwater impacts may be detected through visual and olfactory observations (e.g., petroleum, chlorinated solvents); however, many COPCs are not identifiable through field observations (e.g., non-volatiles, metals etc.). Planning dewatering and groundwater management proactively ahead of construction is essential.

8.1 GROUNDWATER MANAGEMENT

When suspected impacted groundwater is encountered during planned excavation activities, appropriate response actions shall be taken in conformance with HDOH and United States Environmental Protection Agency regulations. Response actions would include ensuring that workers are equipped with the appropriate level of PPE and ensuring proper management of any free product or impacted groundwater, should dewatering be performed. The following summarizes tasks associated with managing potentially impacted groundwater at the site:

- Where groundwater is encountered, a QEP shall provide field oversight to direct appropriate dewatering if conducted, manage disposal of groundwater if necessary, and provide health and safety guidance related to potential exposure of workers to COPCs.
- Workers who may come into contact with contaminated groundwater must wear the appropriate level of PPE.
- Workers who may come into contact with contaminated groundwater must have required training (at a minimum, 40-hour HAZWOPER certification and current 8-hour annual refresher training).
- If free product is encountered it must be recovered to the extent practicable, which is further discussed in Section 9.
- If contaminated groundwater is discovered at a previously unknown source or location, the HDOH HEER Office must be immediately notified of its discovery.

8.2 DEWATERING

Contaminated groundwater may be dewatered from one excavation into another (or into re-infiltration trenches/pits on site) as long as the following conditions are met:

- The excavations are within at least 200 feet of each other.
- The receiving excavation is wider than it is deep, is less than 10 feet in depth, and does not meet the definition of an underground injection control well (at least one surface dimension of the excavation is greater than the depth).
- The groundwater within both excavations is contaminated. Contaminated groundwater cannot be discharged into a clean excavation.
- Any free product present in the excavation has been removed (see Section 9 below). Under no circumstances can fee product be transferred from one excavation to another.
- The receiving excavation is greater than 150 meters from a surface water body, storm drain inlet, or sensitive environment (e.g. bird sanctuary, endangered species, beach, park), unless the HDOH otherwise approves the discharge location.

Contaminated groundwater may also be dewatered into tanks or other temporary storage containers. If it is desired that the water contained within the tanks or storage containers be re-infiltrated into a nearby excavation, the HDOH Solid and Hazardous Waste Branch must be consulted to determine whether there are sampling or treatment requirements in accordance with their rules and regulations. If groundwater is containerized in tanks or storage containers that will be disposed off-site, characterization sampling will be required to meet requirements of the permitted receiving facility.

Generated groundwater must be treated and disposed of if re-infiltration within 200 feet of the area of generation is impracticable or if COPC concentrations are above appropriate site-specific EALs. Should disposal become necessary, the groundwater should be stored onsite in the appropriate containers, characterized (e.g., using generator knowledge, field screening, and/or laboratory analysis) to determine the disposal options, and disposed of property at an HDOH permitted disposal facility.

The QEP will be responsible for overseeing the containerization of the water and for collecting water samples. At a minimum, water samples will be analyzed for the following COPCs prior to disposal (or as otherwise required by the disposal facility):

- TPH DRO and TPH RRO by EPA Method 8015
- PFAS by EPA Method 1633
- Organochlorine Pesticides by EPA Method 8081

8.3 RECORDKEEPING AND REPORTING

Detailed records of workplace monitoring, dewatering, groundwater disposal, and response activities will be maintained. Significant issues will be communicated to site workers immediately. Minor deviations from the EHMP are acceptable based on field discretion. Major deviations shall be approved by HDOH in advance of implementation. Documentation of major deviations shall be provided to the HDOH and maintained for the contractor's records.

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9. FREE PRODUCT MANAGEMENT PLAN

The purpose of the free product management plan is to ensure proper handling and management of free product that may be encountered. Free product is generally encountered floating on the groundwater or at the capillary fringe, and typically presents as either free-flowing, black or brown, viscous product; a thin layer of black or brown product; a discontinuous layer of product (e.g., spots or globules); or a petroleum hydrocarbon sheen. In areas where groundwater level is tidally influenced there may be an increase in the amount of free product at either high or low tide.

Proposed construction plans at the site will encounter groundwater in areas of deeper excavation associated with storm drain pipe replacement. The preliminary screening at the site indicated an area of staining was observed, however free product was not encountered during groundwater sampling (EA 2026). Current construction plans do not anticipate encountering free product at this site. If new information indicates that free product may be present at the site, or if free product is encountered during construction activities, this C-EHMP will be revised and re-submitted to the HEER Office for review and approval as soon as the change has been identified.

Where free product is encountered during construction activities, the appropriate response actions must be taken that conform with HDOH and EPA guidance, laws, and regulations. The anticipated response actions are summarized below.

- The QEP with at least five years' experience in environmental oversight associated with construction projects must provide environmental oversight whenever free product is encountered.

- The QEP should also provide health and safety guidance related to the potential exposure of the free product to the onsite workers. Additional health and safety guidance is included in the site-specific HASP (Appendix B) prepared for this project.

- The QEP must assess flammability, explosivity and asphyxiation hazards by using a 4-gas monitor. Measure LEL, carbon monoxide, carbon dioxide, and hydrogen sulfide in the work zone. If workers will be required to enter the trench or excavation pit, then oxygen measurements are also required, and confined space entry requirements must be complied with. Confined space entry requirements for this project are detailed in the site-specific HASP (Appendix B).

- The free product must be recovered to extent practicable. This may involve the use of absorbent pads/booms, oil-water separators, and/or vacuum trucks to skim free product off the water table. The following methods will be used to recover free product at the project site:

- For sheens and small quantities of free product (less than ½", absorbent pads will be placed on the surface of the water. Pads will be removed and replaced daily or as needed. Used pads will be disposed of in 55-gallon solid waste drums. The location of waste drum storage is depicted on Figure 3.

- Thicker layers of free product will be removed using a vacuum truck and transferred into 55-gallon drums for off-site disposal. The location of waste drum storage is depicted on Figure 3.

- Workers who may come into contact with free product must wear the appropriate level of PPE.

- Workers who may come into contact with free product must have required training (at a minimum, 40-hour HAZWOPER certification and current 8-hour annual refresher training).

- All oil-absorbent pads/booms, PPE, and other disposable equipment containing free product must be appropriately disposed of.

  Where dewatering is necessary and free product is floating on the water in the onsite infiltration trenches, the product will be recovered to the extent practicable, and any absorbent material such as absorbent pads must be disposed of properly. Please note, that free product may not be moved from one excavation to another and engineering measures must be taken to prevent the transfer of free product during dewatering (e.g., placing the intake of the pump at a level below the free product layer – deeper than the planned deepest part of excavation/sump, etc.).

10. STORMWATER MANAGEMENT PLAN

The actions listed below will minimize the potential for contaminating storm water.

- Place contaminated soil on plastic sheeting in a lined, bermed area to prevent storm water from contacting contaminated soil. See Section 7.2 for additional stockpile requirements.
- Open excavations should be backfilled as soon as practicable to prevent storm water and direct precipitation from entering the excavation. When possible, open excavations should be bermed to prevent storm water run-off from entering the excavation.
- In the event of heavy rain, ensure that all stockpiles of contaminated soil are covered with plastic sheeting and substantially secured.

The weather will be monitored throughout the day for signs of approaching storms and/or heavy rains. Additional stormwater BMPs are described in the Erosion and Sediment Control Plan, Appendix E.

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11. VAPOR MANAGEMENT PLAN

None of the COPCs identified or suspected to be present at the site are at concentrations that would generate significant volatile constituents that are anticipated to create a soil vapor hazard at the site during construction. Therefore, a vapor management plan is not needed for this C-EHMP. If new information indicates that hazardous soil vapors may be present, then this C-EHMP will be revised and re-submitted to the HEER Office for review and approval prior to conducting soil/groundwater disturbing activities or as soon as the change has been identified.

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12. SPILL OR RELEASE RESPONSE PLAN

Releases, should they occur, must be reported in accordance with HRS 128D and HAR 11-451. In addition to contractor releases, a release may include pre-existing contamination encountered during construction activities. If new contamination is discovered that is different from any known previously reported releases, the release must be reported as described in the abovementioned regulations. Release response and reporting will be conducted in accordance with the following guidance:

- HDOT-A. Spill Reporting Fact Sheet, Daniel K. Inouye International Airport, V7.
- HDOH. Hazardous Substances Release Notification Guideline.

Both documents are included as Appendix H.

12.1 RELEASE RESPONSE

If a release occurs, the following actions must be taken:

- Identify the type of material spilled, the source of the spill, the volume of the spill, the severity of the spill, and if immediate emergency response actions are necessary.
- Eliminate the source of the spill to the extent practicable (e.g., shutting off a valve, righting an overturned container), if it is safe to do so. Do not attempt to stop a release from an active fuel pipeline.
- Stop work if contaminant releases are extremely large and cannot be contained. If an imminent threat to human health or the environment exists, or if human or environmental receptors are impacted (e.g., human receptors falling ill or suffering sudden illness), notify the City and County of Honolulu Fire Department by calling 9-1-1.
- If the spill is of a volatile, flammable, or combustible liquid or vapor, possible ignition sources should be eliminated, and workers will be directed to remain upwind. In addition, monitor for explosive vapors using a Lower Explosive Limit meter.
- Stop work if an unusually large release or contaminated area is encountered unexpectedly or if there is any release of chemicals or hazards not covered by the plan.
- Stop work and take immediate emergency response actions if a worker or member of the general public is injured.

12.2 RELEASE REPORTING

In the event of a release of a hazardous substance that causes imminent threat to human health or the environment, the first call should be to 9-1-1. Example of releases requiring a call to 9-1-1

include, but are not limited to, fuel or gas leaking from an active pipeline, an ammonia tank leak, or workers and/or the public becoming ill.

Encountering unanticipated petroleum-impacted soil and/or groundwater during future subsurface activities is considered a release and must be reported to the HEER Office.

Notifications shall be made immediately to the following:

- The Hawaii State Emergency Response Commission (HSERC) at 808-586-4249 or 808-247-2191 for after-hours reporting
- The Local Emergency Planning Committee at 808-723-8960

Verbal notification must be made immediately to the HSERC/HEER Office and the Local Emergency Planning Committee either by telephone or in person; HSERC/HEER Office will not accept initial notification via fax or email. It is expected that notification will occur within 20 minutes of discovery of the release. The following information will be requested for the verbal notification:

- Name and telephone number of the caller.
- The name and telephone number of a contact person, if different from the caller, that can provide timely information as the incident is occurring.
- Name (trade and chemical), of the substance which is suspected to have been released.
- Approximate quantity of the substance released.
- Location of the incident.
- Date and time of the spill, release, or threatened release.
- Description of what happened (source and cause of the release).
- Immediate danger or threat posed by the release.
- Name, address, and telephone number of the responsible party or potentially responsible party.
- Measures taken or proposed to be taken in response to the release as of the time of the notification.
- Any known injuries or advice regarding medical attention necessary for exposed individuals.

- The names and phone numbers of other federal, state, or local government agencies that have been notified of the release.

- Any other information that may help emergency personnel respond to the incident.

Once the information has been provided, the caller will be provided with a HEER Incident Case Number, which shall be referenced in any future correspondence including a written submittal.

Written notification must also be made in writing to the HSERC/HEER Office no later than 30 days after initial discovery of a release. The written notification shall include all information provided in the verbal notification and any other pertinent information not previously provided. This written notification can be sent by certified mail, faxed, hand-delivered, or another means which provides proof of delivery. Photos should be included to document the incident. The Written Follow-up Notification form should be completed and sent to the HEER Office to fulfill notification requirements. A copy of this form should be maintained by the entity making the notification.

Notification forms are provided in this C-EHMP in the guidance documents included as Appendix H. The HDOT-A fact sheet can also be found at: https://hidot.hawaii.gov/airports/files/2021/08/HNLSpill-Reporting-Fact-Sheet.pdf.

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13. WORKER PROTECTION

A site-specific HASP will be prepared by the Contractor for the site in accordance with the appropriate occupational health and safety regulations. These regulations and requirements include but are not limited to the use of the appropriate level of PPE and appropriate personal hygiene steps associated with the identified COPCs as the site. The site-specific HASP will be prepared and attached to the C-EHMP prior to the start of construction activities. When prepared a copy of the HASP will be submitted to the HDOH HEER Office for their records.

Administrative Controls for Protecting Workers from COPC Hazards (further detailed in the HASP) include:

- 40-hour HAZWOPER training and the current 8-hour refresher required for all workers who may come into contact with contaminated media.
- A discussion of COPC hazards that may be encountered will be discussed during daily tailgate safety meetings.
- A QEP with at least 5 years' experience in environmental oversight associated with construction projects will be present when contaminated media is moved or disturbed.

Engineering controls for protecting workers from COPC hazards (further detailed in the HASP) include:

- The appropriate level of PPE shall be selected based on the potential hazards and COPCs associated with the individual construction tasks. The level of PPE may be upgraded or downgraded depending upon the tasks being conducted and the level of contact with the soil or groundwater. At a minimum, Level D PPE and nitrile gloves are to be required for workers directly exposed to contaminated soils or groundwater within the trenches and excavations.
- Stanchions (delineators) and hazard tape shall be used to delineate exclusion areas where COPCs may be present, and access is restricted.

13.1 AWARENESS AND TRAINING FOR CONTAMINATION MANAGED ON-SITE

This C-EHMP shall be retained on-site and made available to all construction personnel, subcontractors, and guests. Construction activities are proposed in in areas of the site where subsurface soils and groundwater impacts have been identified (Figure 2a and 2b). All construction workers shall review the site-specific HASP that documents health and safety precautions and requirements for the proposed work. In addition, adequate signage and warning demarcations shall be placed on-site to prevent trespassers or unintentional access into the EZ or other construction areas.

13.2 USE RESTRICTIONS TO PROTECT SITE WORKERS AND GUESTS

Use restrictions identified by Hawaii Occupational Safety and Health (HIOSH) shall be followed, which may include, but are not necessarily limited to, the following:

- No work or activities that will disturb the engineering controls (e.g. disturbance in the vicinity of the known impacted soil or groundwater) are permitted without prior approval from the HDOH HEER Office staff; and

- Only HAZWOPER trained personnel may access the EZ if impacted subsurface soil or groundwater is encountered.

13.3 EMERGENCY RESPONSE FOR CHEMICAL EXPOSURE

Construction personnel and their supervisors should take the necessary precautions to ensure that exposure to potentially impacted soil and groundwater is prevented through the use of PPE and/or engineering/administrative controls.

13.3.1 Eye and Skin Exposure to Chemicals

Emergency response for chemicals shall follow HIOSH recommendations. Soil and groundwater should not be handled by site workers without dermal protection such as gloves, safety glasses, and conservative clothing, or any other recommended PPE. If impacted soil or groundwater comes into contact with the eyes or skin, immediately and thoroughly rinse the eyes or skin with water. An eye wash station and soap and water should be made available on-site during any activity disturbing potentially impacted subsurface soil or groundwater.

13.3.2 Inhalation Exposure to Chemicals

Requirements identified by HIOSH shall be followed at all times. In addition to worker protection measures, adequate ventilation and/or other engineering controls should be identified to protect general site workers and visitors from exposure to airborne dust/fugitive emissions during construction work where potential impacted soil or groundwater may be encountered.

14. DECONTAMINATION

Prior to excavation activities, the Contractor and the QEP will designate areas for decontamination activities following exposure to potentially impacted soils or groundwater. The decontamination area is anticipated to be within the EZ established prior to project activities. The QEP must also evaluate and establish decontamination procedures for personnel, tools, equipment and vehicles, prior to construction. Decontamination procedures for personnel and BMPs to limit direct exposure to COPCs is also discussed in the Contractor's site-specific HASP.

14.1 DECONTAMINATION OF TOOLS AND PERSONNEL

Appropriate personal hygiene practices shall be adhered to at all times when handling potentially impacted soil and groundwater. Washing facilities shall be made available on the jobsite to allow workers to wash their hands and avoid cross-contamination before eating, drinking, smoking, and/or leaving the job site.

After contact with the impacted soil or groundwater, proper decontamination procedures shall be conducted including the removal, segregation, and disposal of PPE. Any used PPE shall be placed in plastic garbage bags, double bagged, and deposited in the site dumpster.

Hand-held and manual tools in direct contact with impacted soil must be decontaminated to remove any contaminated soil or water prior to handling un-impacted material that are assumed to be uncontaminated and before they are removed from the work area. The decontamination of tools must include the following:

- At the excavation location, physically remove soil adhering to the surface of the equipment using appropriate hand tools. Soil removed during this step should be placed back into the impacted area, excavation, or the appropriate stockpile following removal.

- Rinse off contaminated groundwater at the excavation location, allowing rinse water to drain back into the excavation or be collected in a container for proper disposal.

- While the tools are located at the excavation, water should be used to wash the surfaces of the tools that were exposed to impacted material. The water used to wash the exposed surfaces should be directed back to the excavation and allowed to infiltrate.

During equipment decontamination, proper PPE shall be employed to minimize exposure to COPCs. Proper PPE should include Modified Level D PPE with nitrile gloves, boots, waterproof apron, and an appropriate face shield to protect against splash back during decontamination. The QEP shall designate decontamination areas for the donning and doffing of disposable PPE and for the cleaning of materials. Decontamination areas are anticipated to be within the EZ.

14.2 DECONTAMINATION OF VEHICLES AND EQUIPMENT

Vehicle and equipment decontamination should occur following the use of vehicles and equipment (to include haul trucks and heavy machinery) in direct contact with impacted soil or groundwater. The equipment decontamination procedures are intended to describe methods for reducing and controlling the spread of site COPCs to unimpacted portions of the site or un-impacted materials, and to off-site locations.

Equipment and vehicles in direct contact with impacted soil must be decontaminated to remove any contaminated soil before leaving the work area. The decontamination of vehicles equipment must include the following:

- At the excavation location, physically remove soil adhering to the surface of the equipment using appropriate hand tools. Soil removed during this step should be placed back into the impacted area, excavation, or the appropriate stockpile following removal.

- While the vehicle/equipment is located at the excavation, water should be used to wash the surfaces of the vehicle/equipment that was exposed to impacted material. The water used to wash the exposed surfaces should be directed back to the excavation and allowed to infiltrate.

During equipment decontamination, proper PPE shall be employed to minimize exposure to COPCs. Proper PPE should include Modified Level D PPE with nitrile gloves, rubber boots, waterproof apron, and an appropriate face shield to protect against splash back during decontamination.

15. RECORDKEEPING AND REPORTING REQUIREMENTS

Detailed records of all environmental activities conducted during construction will be maintained. These records may include air monitoring results, stockpile sampling, soil or water segregation, sampling methodologies and results, dewatering activities, free product recovery, vapor suppression, soil disposal or re-use, and any other environmental activities conducted in association with construction activities.

In addition to maintaining these records, the Contractor will prepare a C-EHMP Closeout Report within 30 days of the completion of ground disturbing activities summarizing the environmental activities conducted during construction. The report will be submitted to HDOH for review and comment. Guidance for preparation of the C-EHMP Closeout Report can be found in Section 18 of the HEER Office TGM (HDOH 2025) as well as the HDOT-A guidance and construction specifications.

The C-EHMP Closeout Report will contain the following contents:

- A signed letter certifying that the removal and disposal of all contaminated materials were completed in accordance with this Programmatic EHE-EHMP, as well as all applicable Federal, State, and local rules and regulations
- All testing and laboratory results, including chain of custody, for soil/sediment, groundwater, soil vapor, or other media sampling and analysis
- Any results from air monitoring
- Record of field observations, including location map with GPS coordinates, limits, and depths of any contaminated media (soil, groundwater, soil vapor) encountered at previously unknown sources or sites on the project. Include a copy of the completed Hawaii Hazardous Substance Written Follow-up Notification form submitted to DOH and all other associated documents.
- If contaminated soil was disposed of offsite (off airport property), include the following:
    - A copy of the signed agreement from the receiving facility acknowledging the sample test results and indicating acceptance of the soil
    - Documentation of the quantity of soil received by the facility
    - Copies of the test results of the soil sampling
    - All certifications, disposal forms, waste manifests, and summary logs
- If any soil was approved for reuse onsite (within the construction site boundaries) or offsite within Airport Property, at a minimum, include the following:
    - Copies of the test results of the soil sampling

  - The quantity of soil that was reused onsite
  - Location map of the reused soil including GPS coordinates of its emplaced limits
  - A brief description of the purpose of the reused soil (e.g., general fill, utility trench backfill material, etc.), including the depth and thickness of its placement
  - Photos of the site after placement of the reuse soil has been completed
- Record of field observations of any unanticipated UST or pipeline discovered during construction activities, including a copy of the completed DOH Notice of Intent to Close Underground Storage Tanks form, UST Closure Report, and all other associated documents.

The C-EHMP Closeout Report should also include copies of all disposal receipts, truck logs, as well as a map illustrating the approximate Global Positioning System location(s) where any contaminated soil or groundwater was encountered and/or reused on-site.

Following completion of construction activities under this C-EHMP, the site will be managed under the HDOT-A programmatic EHE and EHMP.

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16. REFERENCES

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Figures

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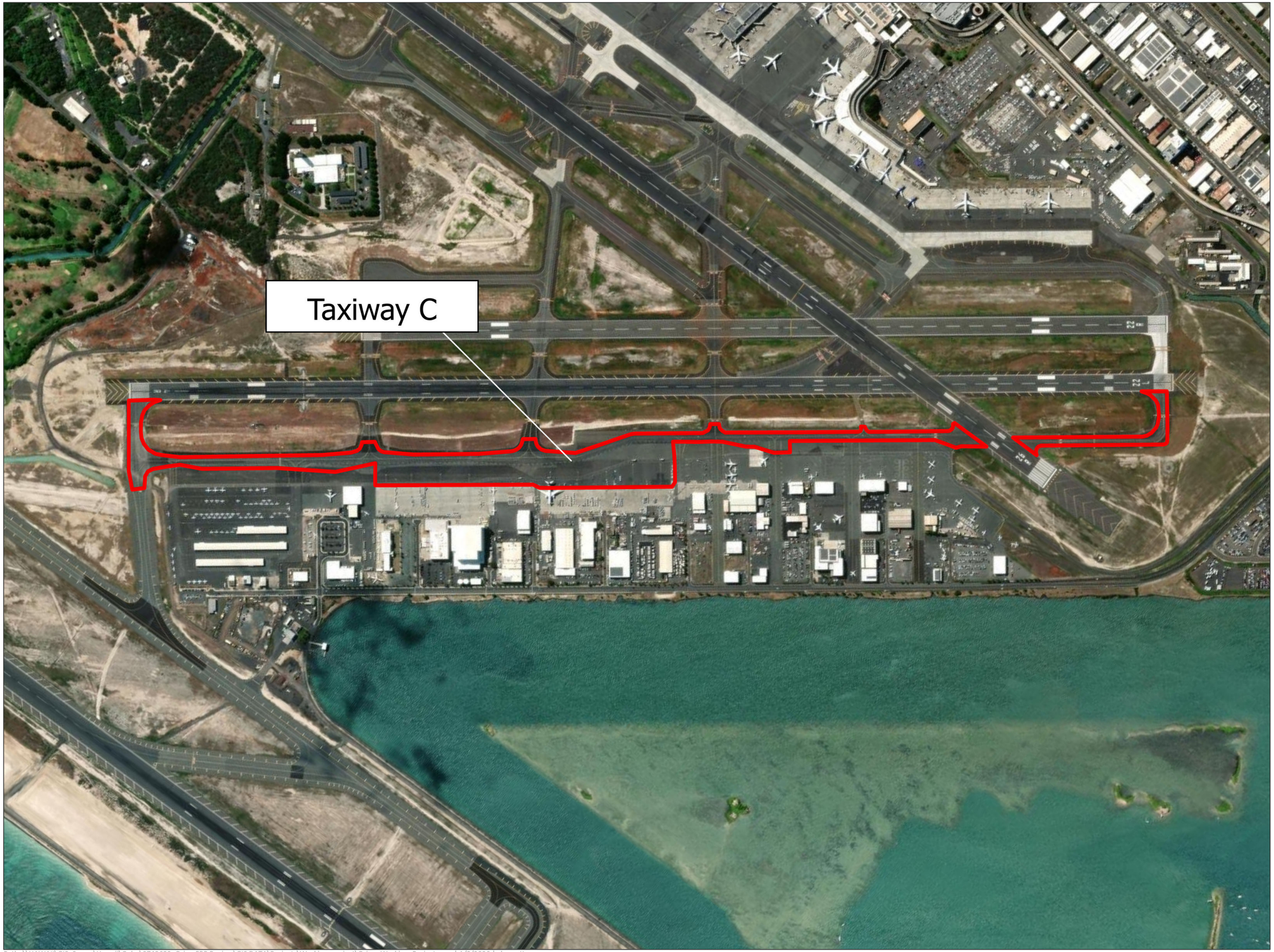

Legend

Project area

0 500 1,000

Feet

Data Sources: Earthstar Geographics, Resource Mapping Hawaii, Vantor

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Construction Environmental Hazard Management Plan Taxiway C Reconstruction

Daniel K. Inouye International Airport (HNL)
Honolulu, Hawaii
Tax Map Key No.
(1)-1-003: Parcel 073

Site Location

Figure 1

EA Engineering, Science, and Technology, Inc., PBC

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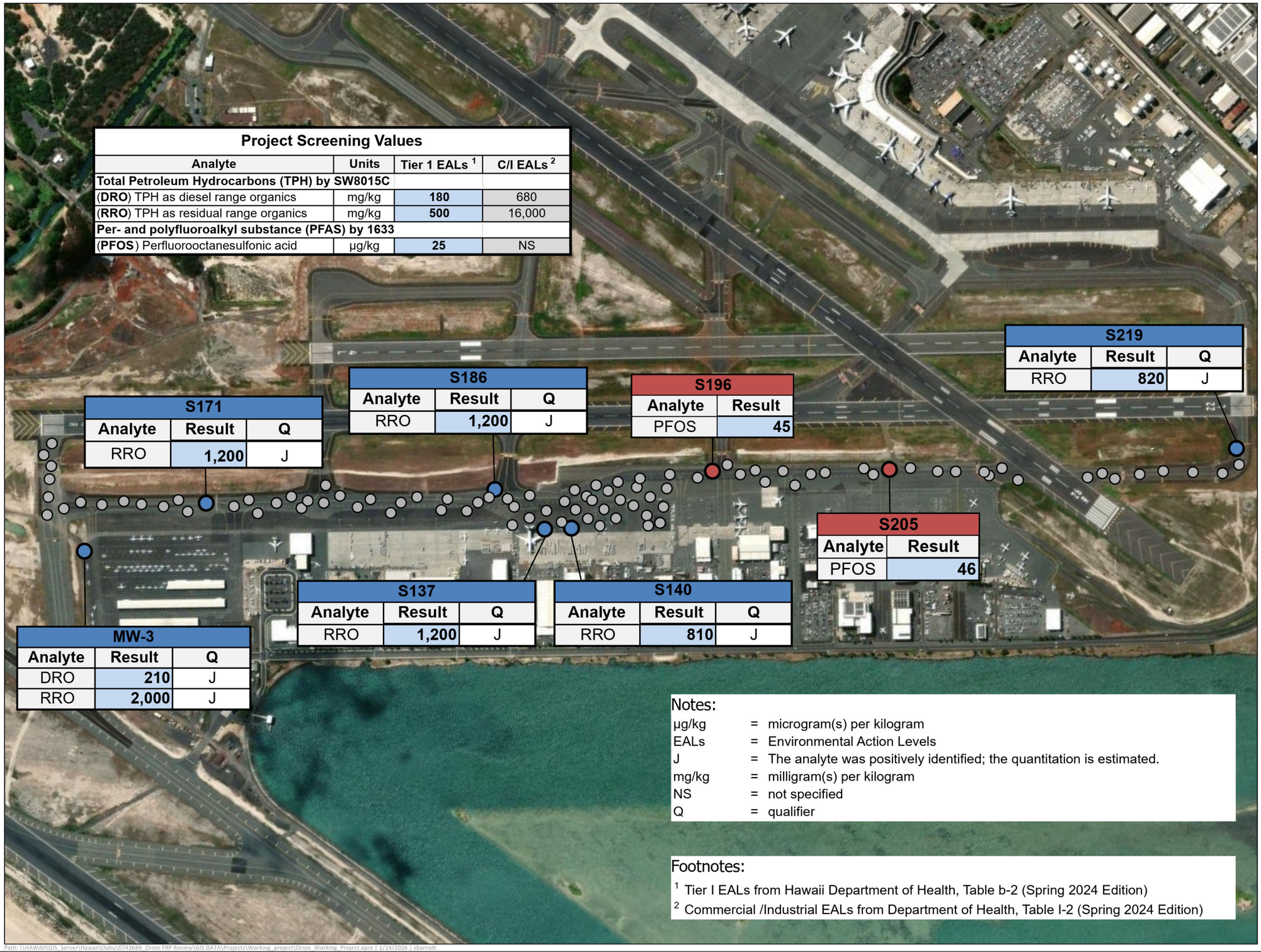

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- Sample locations with PFOS exceedances
- Sample locations with petroleum exceedances
- Sample Locations with no exceedances

0 500 1,000
Feet

Data Sources: Earthstar Geographics, Resource Mapping Hawaii, Vantor

Notes:

µg/kg	=	microgram(s) per kilogram
EALs	=	Environmental Action Levels
J	=	The analyte was positively identified; the quantitation is estimated.
mg/kg	=	milligram(s) per kilogram
NS	=	not specified
Q	=	qualifier

Footnotes:

[1] Tier I EALs from Hawaii Department of Health, Table b-2 (Spring 2024 Edition)
[2] Commercial /Industrial EALs from Department of Health, Table I-2 (Spring 2024 Edition)

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Construction Environmental Hazard Management Plan Taxiway C Reconstruction

Daniel K. Inouye International Airport (HNL)
Honolulu, Hawaii
Tax Map Key No.
(1)-1-003: Parcel 073

Soil Exceedances

Figure 2a

EA Engineering, Science, and Technology, Inc., PBC

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Project Screening Values

Analyte	Units	Tier 1 EALs [1]
Total Petroleum Hydrocarbons (TPH) by SW8015C		
(DRO) Total Petroleum Hydrocarbons - Diesel Range Organics	µg/L	640
(RRO) Total Petroleum Hydrocarbons - Residual Range Organics	µg/L	640
Per- and polyfluoroalkyl substance (PFAS) by 1633		
Perfluoroheptanesulfonic acid	µg/L	0.038
Perfluoroheptanoic acid	µg/L	0.077
Perfluoropentanesulfonic acid	µg/L	0.58
Organochlorine Pesticides (SW8081B)		
Heptachlor	µg/L	0.0036

MW-2

Analyte	Result
Perfluoroheptanesulfonic acid	**0.041**
Perfluoroheptanoic acid	**0.14**
Perfluoropentanesulfonic acid	**0.67**

MW-3

Sample Type	Primary		Duplicate	
Analyte	**Result**	**Q**	**Result**	**Q**
DRO	**820**	J	**840**	J
RRO	**1,300**	J	**1,300**	J

MW-1

Analyte	Result	Q
Heptachlor	**0.015**	J

MW-2
MW-3
MW-4
MW-5
MW-1

Notes:
µg/L = microgram(s) per liter
EALs = Environmental Action Levels
J = The analyte was positively identified; the quantitation is estimated.
Q = qualifier

Footnotes:
[1] Tier I EALs from Hawaii Department of Health, Table b-2 (Spring 2024 Edition)

Legend

- Groundwater well with TPH exceedances
- Groundwater well with PFAS exceedances
- Groundwater well with Pesticide exceedance
- Groundwater wells with no exceedances

0 500 1,000
Feet

Data Sources: Earthstar Geographics, Resource Mapping Hawaii, Vantor

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Construction Environmental Hazard Management Plan Taxiway C Reconstruction

Daniel K. Inouye International Airport (HNL)
Honolulu, Hawaii
Tax Map Key No.
(1)-1-003: Parcel 073

Groundwater Exceedances

Figure 2b

EA Engineering, Science, and Technology, Inc., PBC

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Appendix A

Taxiway C Reconstruction
Project Plan and Specifications

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Appendix B

Taxiway C Reconstruction
Health and Safety Plan
(to be prepared by the Contractor and submitted with final version)

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Appendix C

Key Project Personnel
(to be prepared by the Contractor and submitted with final version)

Appendix C. Key Project Personnel

The project owner (developer) will maintain a current list of project contacts throughout the construction phase of the project. An updated key project personnel list will be maintained and submitted to HDOH in writing whenever a change in key project personnel occurs.

Key Project Personnel Table

Role	Company	Name	Phone Number	E-mail
Construction Project Manager				
Construction Foreman				
On-site Qualified Environmental Professional				
Qualified Environmental Professional (Project Manager)				
Property Owner				
Operator				
Developer				
NPDES Permit contact				
DPP Building Permit contact				
HDOH HEER Office Project Manager				
Landfill Disposal Contact				
Waste Transporter Contact				
Contact Export Site (if exporting soil)				
Contact Import Site (if importing soil)				

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Appendix D

Taxiway C Reconstruction
Sampling and Analysis Plan
(to be prepared by the Contractor and submitted with final version)

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Appendix E

Taxiway C Reconstruction
Erosion and Sediment Control Plan
(to be prepared by the Contractor and submitted with final version)

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Appendix F

PVT Land Company, Ltd. Soil Acceptance Agreement Form

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REQUEST FOR CLEARANCE NUMBER

All Clearance Numbers expire 6 months from date of approval. Customers should renew their clearance number or request an extension prior to the expiration date. Clearance Numbers are issued during business hours, Monday through Friday only.

PART I. CUSTOMER INFORMATION (Please print legibly)

JOBSITE ADDRESS		CITY	ZIP CODE
NAME OF PROPERTY OWNER			
NAME OF DEMOLITION CONTRACTOR			
ADDRESS		CITY	ZIP CODE
PHONE	FAX # or EMAIL	P.O.#	JOB #
*NAME OF TRANSPORTER	PHONE #	FAX # or EMAIL	

BILL CHARGES TO: _____

_____ _____ _____
Authorized Signature *Title* *Date*

**For additional transporters, please complete the Transporter Authorization Form.*

LEED TRACKING:
- ☐ Yes
- ☐ No

USE OF SITE:
- ☐ Residential
- ☐ Commercial
- ☐ Industrial
- ☐ Vacant Land
- ☐ Other: _____
- ☐ City
- ☐ State
- ☐ Federal

JOB/PROJECT:
- ☐ Demolition
- ☐ Renovation
- ☐ Roofing Only
- ☐ Asbestos
- ☐ Contaminated Soil
- ☐ Liquid Waste
- ☐ Other: _____

WASTE MATERIAL:
- ☐ Canec
- ☐ Concrete
- ☐ Grub
- ☐ Mixed Waste
- ☐ Rock/Dirt Soil
- ☐ Liquid Waste/Sludge
- ☐ Other: _____
- ☐ Transite
- ☐ Asbestos
- ☐ Lead Based Paint
- ☐ Paint Chips
- ☐ Contaminated Soil

Profile Sheets Attached: ☐ Contaminated Soil ☐ Solidification ☐ Asbestos Notification of Demolition and Renovation

PART II. WASTE CERTIFICATION

1. This waste is not a "Hazardous Waste" as defined by EPA or the State of Hawaii.
2. This waste does not contain regulated radioactive materials or regulated concentrations of PCBs (Polychlorinated Biphenyls).
3. The statements and attachments contain true and accurate descriptions of the waste. All relevant information regarding known or suspected hazards in the possession of the undersigned has been disclosed.
4. The analytical data presented herein or attached hereto were derived from testing representative samples taken in accordance with the DOH HEER Technical Guidance Manual.
5. If any changes occur in the character of the waste, the undersigned shall notify a Landfill representative immediately.
6. The waste is not generated from a CERCLA site.

I have read and understand the WASTE CERTIFICATION guidelines and certify the information entered onto this form is accurate and true:

_____ _____ _____
Property Owner or Authorized Agent Signature *Title* *Date:*

_____ _____ _____
Demolition Contractor or Authorized Agent Signature *Title* *Date*

_____ _____ _____
Transporter or Authorized Agent Signature *Title* *Date*

FOR OFFICE USE ONLY

Clearance No.:	☐ Approved ☐ Declined Initials_____ Date:_____ ☐ Landfill *and* ☐Phase I *or* ☐Phase II
Issued by_____ Date:_____ Compuweigh entry by _____ Date: _____ Filed by _____	Comments:

PVT LAND COMPANY LIMITED
87- 2020 Farrington Highway • Waianae, Hawaii 96792
Tel: 808/668-4561 • FAX: 808/668-1368 www.pvtland.com

SOIL PROFILE

PART I. SOIL GENERATOR INFORMATION

a. Generator Name: _____

b. Generator Address: _____ c. Zip Code _____

d. Address of Soil Generation: _____

e. Address of Soil Storage (if different from generator address): _____

f. Type of Facility Soil has been generated from: _____

g. State DOH Facility ID#: _____

h. Contact: _____ i. Phone _____

PART II. SOIL INFORMATION

a. Describe the circumstances by which the soil has been generated.

b. Describe the method used to determine the presence or absence of contaminants in the soil.

c. Name of consultant performing sampling

d. Name of analytical laboratory

e. Was the sampling and analysis performed in accordance with the DOH Office of Hazard Evaluation and Emergency Response Technical Guidance Manual? ☑ Yes ☐ No *(If No, explain)*

f. Site map and map of sample locations attached? ☑ Yes ☐ No

g. Sampling source (e.g. drum, pit, stockpile, in site, etc.):

h. Analytical results attached? ☐ Yes ☐ No *(If No, explain)*

i. Amount of Soil (tons and/or cubic yards):

j. Type of Soil:

k. Soil Moisture ☐ Wet ☐ Damp ☐ Dry

l. Soil Color (Munsell Color Chart Code if available): various - tan to light brown

m. Strong incidental odor? ☐ Yes ☑ No *(If yes, describe)*

n. pH

o. Is the soil ignitable? ☐ Yes ☑ No

p. Is this a federal or state hazardous waste? ☐ Yes ☑ No

q. Does this waste contain heavy metals? ☐ Yes ☑ No

r. Does the waste contain PCBs? ☐ Yes ☑ No

s. Is the waste TSCA waste? ☐ Yes ☑ No

t. Is the waste CERCLA or HRS Chapter 128D waste? ☐ Yes ☑ No

u. Is the waste the result of a UST removal or response action? ☐ Yes ☑ No

v. Does the waste represented by this profile contain dioxins? ☐ Yes ☑ No

w. Does the waste represented by this profile contain asbestos? ☐ Yes ☑ No

x. Does the waste contain debris? Yes ✓ No *(If yes, list debris type)*

SOIL PROFILE

y. Personal Protective Equipment Requirements:

z. Does the soil contain radioactive material or disposal regulated by the NRC? ☐ Yes ☑ No

aa. Does the waste profile and all attachments contain true and accurate descriptions of the waste material, and has all relevant information within the possession of the Generator regarding known or suspected hazards pertaining to the waste been disclosed to the contractor? ☑ Yes ☐ No

PART III. TRANSPORTATION INFORMATION

a. Method of Shipment ☐ Bulk Solid ☐ Drum/Box ☐ Other: _____

b. Name of Hauler: _____ Phone No. _____

c. Is this a U.S. Department of Transportation (USDOT) Hazardous Material? ☐ Yes ☑ No

PART IV. ENVIRONMENTAL REPRESENTATIVE'S CERTIFICATION

a. Name: _____ b. Title: _____

c. Employer: _____

The environmental representative's signature certifies that sampling and analysis attached hereto was performed in accordance with the DOH HEER Technical Guidance Manual.

_____
Environmental Representative's Signature

PART V. GENERATOR'S CERTIFICATION

a. This soil is not a "Hazardous Waste" as defined by EPA or the State of Hawaii.
b. This waste does not contain regulated concentrations of PCB's (Polychlorinated Biphenyls).
c. The statements and attachments contain true and accurate descriptions of the soil. All relevant information regarding known or suspected hazards in the possession of the Generator has been disclosed.
d. The sampling and analysis attached hereto was performed in accordance with the DOH HEER Technical Guidance Manual.
e. If any changes occur in the character of the soil, the Generator shall notify a Landfill representative immediately.

I have read, understand, and certify the soil being disposed meet the guidelines above and will notify a PVT Landfill representative immediately if any changes occur:

_____ _____
Signature Date

_____ _____
Print Name & Title Company

WASTE DISPOSAL DECISION (For PVT Office use only)

Waste Disposal ☐ Accepted ☐ Rejected

Disposal Method ☐ Asbestos Pit ☐ Landfill and ☐Phase I or ☐Phase II Date: _____

Precautions, Special Handling Procedures, or Limitations on Approval: _____

_____

Clearance No. _____ Reviewed by: _____ Date: _____

Approved by: _____ Date: _____

Additional Information for Contaminated Soil Reviews

1. Is this a hazardous waste (RCRA C)? ☐ Yes ☐ No
2. Does this waste contain heavy metals? ☐ Yes ☐ No
   If yes, explain & identify _____
3. Does the waste contain PCBs? ☐ Yes ☐ No
   If yes, explain _____
4. Is the waste a TSCA waste? ☐ Yes ☐ No
   If yes, explain & identify _____
5. Is the waste a CERCLA waste? ☐ Yes ☐ No
   If yes, explain & identify _____
6. Regulatory agency & Contact _____
   _____
7. Generator _____
   _____
8. Type of Contamination _____
9. Consultant Name & Number _____
10. Review report attached ☐
    _____

If this certification is made by a broker, the undersigned signs as authorized agent of the generator and has confirmed the information contained in this Sheet and additionally attached sheets from information provided by the generator and additional information as it has determined to be reasonably necessary.

Certification Signature: _____ Title: _____
Name (Type or Print): _____ Company: _____ Date:_____

Submittal Instructions

The following are the items that should be in any review report, in the order noted.

1. List of regulatory agencies and regulations applicable to the project. Include Names and contact information (phone numbers) for all agencies involved for follow up.
2. Contact information: generator, type of contamination, and site history in narrative form.
3. Consultant information (i.e. Names, phone numbers) include the consultant that did the original investigation and subsequent investigations.
4. Report format for technical information.
   A. Background information for site and processes.
   B. Summary of investigative action. Including sampling and testing information pertinent to disposal.
   C. Summary of remedial actions and how material being disposed was generated.
   D. Rational for the determination that material is solid waste this should be based on applicable regulations.
   E. Site location maps and site drawings.
   F. Summary table of test data.
   G. Laboratory data.

Actions Taken

Date _____
Accepted _____ Rejected_____
Reason for rejection_____

Appendix G

Soil Tracking Log

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SOIL TRACKING LOG

Construction Environmental Hazard Management Plan
Taxoway C Reconstruction
Danial K. Inouye International Airport, Honolulu, Hawaii

	TRUCK MANIFEST NUMBER	LANDFILL CLEARANCE NUMBER	LANDFILL DISPOSAL TICKET NUMBER	DATE	QUANTITY (TONS)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

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Appendix H

Release Response and Notification Guidelines

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SPILL REPORTING
Daniel K. Inouye International Airport

FACT SHEET

Each row below is a scenario and multiple scenarios may apply to a single spill/leak event. Please review all scenarios! Contact information is listed on the next page.

ALL SPILLS/LEAKS MUST BE REPORTED TO DOT AIR-EE

Spilled material is less than a reportable* quantity, regardless of type	Verbally notify Ramp Control **(808) 836-6670**		
Spill is 25-gallons or less of petroleum, but not contained within 72 hours	Verbally notify Ramp Control **(808) 836-6670**	Submit written notifications to DOH HEER no later than **30 days** following discovery of release, also explain why the spill was not cleaned within **72 hours**	
Spilled material is of a reportable* quantity	Verbally notify Ramp Control, then: • DOH HSERC/HEER • LEPC • NRC Obtain Case Number & provide to AIR-EE	Submit written notifications to DOH HSERC/HEER and NRC no later than **30 days** following discovery of release	
Spilled material enters storm drain or water body	Verbally notify Ramp Control, then: • DOH CWB • DOH HSERC/HEER • LEPC • NRC Obtain Case Number & provide to AIR-EE	Submit written notifications to DOH CWB, HEER, LEPC, and NRC no later than **30 days** following discovery of release	
Spilled material is wastewater that enters state waters **OR** is ≥ 1,000 gallons	Verbally notify Ramp Control, then DOH WWB. **Consult with AIR EE on**: • Press release • Water Disinfecting • Monitor the receiving water for bacteria	Submit written follow-up report to DOH WWB	

Complete the Spill Reporting Form using the QR code or web address below:

https://hidot.hawaii.gov/airports/doing-business/engineering/environmental/spill-reporting-form/

*See Reporting Procedures on page 2 for definition of "reportable".

SPILL REPORTING
Daniel K. Inouye International Airport

FACT SHEET

REPORTING PROCEDURES

Airport activities and material storage have the potential to contaminate stormwater runoff and surface water bodies via spills and/or leaking equipment/vehicles/aircraft. The procedures outlined in this fact sheet are intended to detail general procedures to be followed in the event of a spill/leak. Please see all current state and federal guidelines for complete details.

Spills/Leaks must be immediately reported per DOH and/or Federal requirements (DOT Airports has additional requirements) if one or more of the following conditions apply:

1. If the release is more than 25-gallons of petroleum product.
2. If the release is 25-gallons or less of petroleum product but is not contained or remedied within 72 hours.
3. If the release **is *equal to or exceeds the reportable quantity criteria*** for one or more chemicals listed within the DOH HEER Office Technical Guidance Manual (TGM): https://health.hawaii.gov/heer/reporting/how-to-report-a-release-spill/
4. If the release enters a storm drain or water body.

CONTACT INFORMATION

In the event a spill/leak occurs, the contact information for pertinent personnel and agencies listed below are intended to be used for reference during the necessary reporting procedures detailed on Page 1.

Personnel or Agency	*Contact Information*	
HNL Ramp Control*	Phone: Pax Line 711 or (808) 836-6670	
Airport Duty Manager/Code 22	Phone: (808) 836-6434	
HNL Airport Rescue and Fire Fighting (ARFF)	Phone: (808) 836-6670	
Hawaii State Emergency Response Commission (HSERC) / DOH Hazard Evaluation and Emergency Response (HEER)	Phone: (808) 586-4249 Phone: (808) 236-8200 after hours	
DOT Airports Environmental Section (AIR-EE)* dot.air.environmental@hawaii.gov	Kylie Emily Phone: (808) 838-8064 Email: kylie.e.emily@hawaii.gov	Mike Carberry Phone: (808) 838-8098 Email: michael.j.carberry@hawaii.gov
Local Emergency Planning Committee (LEPC)	Phone: (808) 723-8960 or 911 after hours	
National Response Center (NRC)	Phone: (800) 424-8802	
DOH Clean Water Branch (CWB)	Phone: (808) 586-4309	
DOH Wastewater Branch (WWB)	Phone: (808) 586-4294	

*Should be notified for **ALL** spills regardless of quantity or type.

APPENDIX 2-B

HAZARDOUS SUBSTANCE RELEASE NOTIFICATION GUIDELINE

Interim Final

Appendix 2-B

Hazardous Substance Release Notification Guideline
Hawai`i Department of Health (HDOH)
Office of Hazard Evaluation and Emergency Response (HEER Office)

This guideline is general in nature and is provided to assist in complying with HEPCRA and the SCP in Hawaii and does not have the force and effect of law. To ensure full compliance under the law, persons affected should review the appropriate Federal and State statutes and regulations. Failure to report a release under these laws and regulations may prompt EPA or State enforcement action including penalties not to exceed fines of $25,000 per day per violation or imprisonment. Copies of the laws and regulations may be obtained by contacting the HSERC/HEER at (808) 586-4249 or on the HEER website.

Overview of Requirements

In Hawaii, owners or operators of facilities or vessels reporting releases of hazardous substances are subject to state notification requirements under Chapter 128D, Hawaii Revised Statutes, the Environmental Response Law, Chapter 128E, Hawaii Revised Statutes, the Hawaii Emergency Planning and Community Right-to-Know Act (HEPCRA) and Title 11, Chapter 451, Hawaii Administrative Rules, the State Contingency Plan (SCP).

In general, the owner or operator of a facility or vessel **must immediately notify** the Hawaii State Emergency Response Commission (HSERC/HEER) ((808) 586-4249 or (808) 247-2191 after work hours) and the Local Emergency Planning Committee (LEPC) (telephone numbers are listed on a separate sheet) of the appropriate jurisdiction after the release of:

1. A listed hazardous substance designated under section 11-451-5(b), in quantities equal to or exceeding the reportable quantity criteria in section 11-451-6(b) in any 24-hour period; or

2. An unlisted hazardous substance designated under section 11-451-5(c), in quantities equal to or exceeding the reportable quantity criteria in section 11-451-6(c) in any 24-hour period.

Note: The HSERC/HEER are listed together because the Hawaii State Department of Health Hazard Evaluation and Emergency Response Office is the administrative contact for the Hawaii State Emergency Response Commission.

An exception from immediate notification is provided for releases of oil of less than 25 gallons in any 24-hour period which is not contained and remedied within 72 hours. Such releases must be reported in written form only within 30 days of the discovery of the release.

The owner or operator of the facility or vessel must also provide a written follow-up notice within 30 days of the discovery of the release. If a release of a hazardous substance poses an imminent or immediate threat to public health or the environment, dial 911 to request fire, police, or emergency medical service personnel response.

Immediate Notification Contents

A reportable quantity of a hazardous substance is a trigger to notify the appropriate government agencies. This is necessary so that government personnel such as the State On-Scene Coordinators can evaluate the need for a response action and ensure that any necessary response actions are undertaken in a timely manner.

Interim Final

Immediate verbal notification shall be provided to the HSERC/HEER and LEPC either via telephone or in person. HEER/HSERC will not accept **initial notification** via fax or e-mail. In addition, unless it is specifically stated that a verbal notification is being given to a State On-Scene Coordinator (SOSC) on scene during an incident, the presence of a SOSC does not constitute a notification.

Provide the following information to the extent known at the time of the notice so long as no delay in responding to the emergency results. It is expected that notification occur within 20 minutes of discovery of the release. (Do not delay due to incomplete notification information related to the release):

1. Name and telephone number of the caller.
2. Name and telephone number of a contact person, (if different from the caller) that can provide timely information as the incident is occurring.
3. Name (trade and chemical), of the hazardous substance which has been released.
4. Approximate quantity of the hazardous substance which has been released.
5. Location of the incident.
6. Date and time of spill, release, or threatened release.
7. Description of what happened (source and cause of the release).
8. Immediate danger or threat posed by the release.
9. Name, address, and telephone number of the responsible party or potentially responsible party.
10. Measures taken or proposed to be taken in response to the release as of the time of the notification.
11. Any known injuries or advice regarding medical attention necessary for exposed individuals.
12. The names and phone numbers of other federal, state, or local government agencies that have been notified of the release.
13. Any other information that may help emergency personnel respond to the incident.

Once the information has been provided, the caller will be provided with a HEER Incident Case Number, which shall be referenced in any future correspondence including the written notification submittal.

Federal Requirements under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Oil Pollution Act (OPA)

Releases of Reportable Quantities (RQ) of CERCLA hazardous substances and releases of oil which causes a sheen on water must also be reported to the National Response Center at 1(800) 424-8802.

Written Follow-Up Notification Contents

Notice, including all information provided in the verbal notification described above and any other pertinent information not previously provided, shall also be made in writing to the HSERC/HEER. This written notification shall be sent to HSERC/HEER no later than thirty (30) days after initial discovery of a release. The written notification can be sent by certified mail, faxed, hand-delivered, or another means which provides proof of delivery. Photos should be included to document the incident. A suggested Written Follow-up Notification Form is provided.

Interim Final

Hawaii Hazardous Substance Written Follow-Up Notification Form

PLEASE PROVIDE THE FOLLOWING INFORMATION

Incident Case No.: _____

Contact Information

Caller's Information

Name: _____

Address: _____

City: _____ State _____ Zip _____

Telephone number: _____

Owner's Information

Name: _____

Title: _____

Company: _____

Address: _____

City: _____ State _____ Zip _____

Telephone number: _____

Operator's Information

Name: _____

Title: _____

Company: _____

Address: _____

City: _____ State _____ Zip _____

Telephone number: _____

Name of a contact person at the facility or vessel where the release has occurred: _____

_____

Telephone number: _____

Interim Final

Hazardous Substance Released:

Name (trade and chemical) of the hazardous substance which has been released: _____

_____

Chemical Abstract Service (CAS) Number (if applicable):_____

Approximate quantity of the hazardous substance released: _____

Incident Information

Location of the release:_____

_____

A brief description of the release: _____

_____

Media into which the release occurred or is likely to occur (Indicate all those that apply):

☐ Air ☐ Soil ☐ Groundwater ☐ Concrete ☐ Asphalt ☐ Stream ☐ Ocean ☐ Other

Cause of the release: _____

_____

Date of the release: _____

Time of the release: _____

Duration of the release: _____

Date: _____

Time that the person in charge of the facility or vessel where the release occurred obtained knowledge of the release: _____

Source of the release: _____

_____

Response Information

Response measures taken thus far: _____

_____

Interim Final

Any appropriate information relating to the ability of the owner or operator of the facility or vessel where the release has occurred to pay for or perform any proposed or required response actions: _____

_____

_____

The names of other federal, state, or local government agencies that have been notified of the release: _____

_____

Health Information

Known or anticipated acute health risks: _____

_____

Known or anticipated chronic health risks: _____

_____

Advice regarding medical attention necessary for exposed individuals: _____

_____

Potential impacts to public health or welfare: _____

_____

Potential impacts to the environment: _____

_____

"I certify under penalty of law that I have personally examined and am familiar with the information submitted and believe the submitted info is true, accurate, and complete."

Signature: _____ Date: _____

Printed Name: _____

Title: _____

Company: _____

and shall be separate from any Contractor offices. The Contractor shall provide safe, illuminated access at all times work is in progress. Utilities shall include electricity, potable water, sanitary facilities, heating, air conditioning, and internet service.

B. Facility Requirements: Provide a minimum 40-foot modular office trailer (or approved equivalent) in good condition, weatherproof, climate-controlled, and suitable for professional use. The office shall include two enclosed private offices, one open work area for inspectors and meetings, lockable doors, window coverings, adequate lighting, and HVAC capable of maintaining 68°F–76°F.

C. Furnishings: Provide desks, ergonomic chairs, guest seating, a conference table with seating for four to six persons, shelving or bookcases for plans, at least one drafting table, waste receptacles, and a wall-mounted pinboard or whiteboard.

D. Office Equipment: Provide a networked multifunction color laser printer capable of 11x17 printing, all required toner and paper, surge protection, a fire extinguisher, and a first-aid kit.

E. Maintenance and Upkeep: Maintain the office and equipment in clean, safe, and fully functional condition. Provide weekly cleaning and trash removal. Repair or replace failed equipment within 48 hours of notification

F. Removal: Upon completion of the work, remove the office and restore the site as directed

PART 4 - MEASUREMENT AND PAYMENT

4.1 BASIS OF MEASUREMENT AND PAYMENT

A. All work under this Section will not be measured nor paid for separately, but shall be considered incidental to and included in the bid prices for the various items of work in this Project.

PART 5 - ATTACHMENTS

5.1 Attachment A – Oahu District Temporary Water Service Application.

--------END OF SECTION 01580--------

SR #: _____ Premise ID#: _____

TEMPORARY WATER METER
(Approval Checklist)

1. Project Title/Owner: _____

2. Person requesting for temporary service: _____

   Business Ph# _____ Fax Ph# _____

3. Use: Specify: _____
   If for Dust Control/Irrigation
   Acres being graded/irrigation _____

4. How long will the temporary service be needed? _____

5. What is the water flow requirement? _____GPM

6. Are there any other temporary services for this project or in this general area?

   If yes, indicate location: _____

   _____

7. What other type of resources have been utilized for this project?
   (existing water meters, ponds, ditch water, etc.)

   _____

   _____

8. How are the resources and temporary meters being utilized?
   (filing frequency, usage)

   _____

   _____

_____

DEPARTMENT OF TRANSPORTATION
AIRPORTS DIVISION
NOTICE FOR SERVICE HOLDERS OF

TEMPORARY WATER METERS

In consideration of DOT - Airports Division granting this special type service connection, the applicant hereby agrees to accept responsibility for the water quality and appurtenances.

NOTE: WATER CONTAMINATION WILL BE CHARGED TO APPLICANT

This is to advise you that the temporary meter will be removed as follows:

_____ days for fire hydrant meters from _____

_____ days for underground meters from _____

Also, the Airports Division must authorize the removal or relocation of the temporary fire hydrant or underground meters. Should the temporary fire hydrant or underground meter be relocated by the service holder from the authorized location, the water services shall be automatically terminated and the meter confiscated. An unauthorized removal will result in a fine and refusal of service in the future.

Once the meter is removed, a new application must be made. If approval is granted to reinstate the temporary water, the applicant will be levied the prevailing water usage charge. Application must be approved by the Airport Manager at 300 Rodgers Boulevard, #12 Honolulu, HI 96819 and will be accepted from Monday thru Friday.

If you have any questions regarding this notice, please call 834-6091.

I, as the authorized representative/agent of the company named below, understand and agree to comply with all the conditions of this notice.

_____ _____
Phone Number Company Name

_____ _____
Fax Number Print Name
(Authorized Representative/Agent)

_____
Title

_____
Signature
(Authorized Representative/Agent)

APPLICATION FOR TEMPORARY WATER SERVICE

(Revised 2/2017)

TEMPORARY WATER SERVICE, may be provided for the following:

a. construction interim, i.e., dust control, job site office, etc.
b. under special conditions

IF ALLOWED, the type of Temporary Service may be provided in the following order:

1. The use of **an existing service**, if adequate for the requested flow demand.

2. The use of a **cleanout** at the end of a main, if available. The contractor to coordinate with AIR-OME Section for the installation of a lateral.

3. The use of a **fire hydrant**, if available.

Note:

- *The use of a fire hydrant for filling of domestic potable water trucks shall not be approved.*
- *The Department will allow ONLY ONE temporary water service for a single project, unless the project can justify the need for more.*
- *If the hydrant is new and part of an on-going infrastructure installation, then written clearance to use the hydrant from the Project Manager assigned to that project and the Airport Manager is required.*

4. In the event that an existing unused service lateral or fire hydrant is unavailable, **a temporary "in-ground" service**, may be allowed.

When applying for temporary service, please fill out the attached application forms. The following requested information is required to complete the forms.

a. name of Project/Owner
b. name of Party responsible for the water bill
c. billing address
d. a person authorized to sign up for the water service/RWS form
e. phone number and fax number
f. location where the temporary service is to be established
g. if applying for service from an O/F service, we will need a sketch plotting the location of the empty meter box(es)
h. if applying for a new "in-ground" service, provide a sketch with landmarks and dimensions for meter location
I. flow requirements
j. if applying for a hydrant connection:
    1. *Provide the hydrant number which is located on the side of the hydrant facing the roadway, (example: M-1234, L-2345, C-6578, and W-4523)*
    2. *If the hydrant is new, a number may not be indicated. Provide a map that will clearly show the location of the requested new hydrant, especially if the area is undeveloped. Prior to the use of the new hydrant, an approval from the Project Manager assigned to the project will be required.*
    3. *Please be able to provide alternate choices in the event we are not able to approve your first choice.*
    4. *Only Gate Valve type operators are permitted (no ball valves).*
    5. *The Meter, and BFP shall be installed at the Requestor's expense.*
    6. *The requestor shall pay their water/sewer bill in a timely manner. The District reserves the right to terminate or refuse service for breach in part or whole of this agreement.*

You will be required to coordinate the requirements for a backflow device with the Oahu District Engineer (300 Rodgers Boulevard, #12 Admin Tower).

CROSS-CONNECTION CONTROL AND BACKFLOW PREVENTION AGREEMENT FOR WATER METERS AND TEMPORARY FIRE HYDRANT CONNECTIONS

PROJECT TITLE/OWNER _____

HYDRANT/METER ADDRESS _____

CONTRACTOR _____ PHONE _____

1. TYPE: _____ Temporary Meter _____ Fire Hydrant

2. USE: Specify: _____

3. Will you be adding chemicals, fertilizers, "hydromulch", or any other agents to the water you use:

   _____Yes _____No Other, specify_____

4. Backflow Prevention Device (B.P.D.) required: _____Yes _____No

   _____ Reduced Pressure Principle B.P.D.
   _____ Double Check Valve B.P.D.
   _____ 6-Inch Air Gap

5. CONDITIONS:

   a. The owner/contractor shall install, at his expense, a DOT-Airports Division approved Backflow Prevention Device, of the type specified above, after the water meter, according to DOT-Airports Division Rules and Regulations.

   b. Failure to install the required backflow prevention device of the use or activity that may pose a potential backflow problem may result in immediate removal of the water meter without prior notification. The owner shall be required to pay for water meter reinstallation.

AGREED:

_____
Applicant's Signature Date

_____
Print Name

_____
Title

APPROVED:

_____
Oahu District Airport Manager Date

CONCUR:

_____
Oahu District Engineer Date

(DOT-AIR use only)

SIZE: _____ HEIGHT: _____

SKETCH

MAKE:_____ MODEL: _____

SERIAL NUMBER: _____

METER NUMBER: _____

METER READING: _____

SECTION 02152 - EXCAVATION, SUBGRADE, AND EMBANKMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. The General Provision of the contract, including the General Provisions for Construction Projects (2016), Special Provisions, and General Requirements of the Specifications, apply to the work specified in this section. This Section shall be in accordance with FAA Specification Item P-152: Excavation, Subgrade, and Embankment, as included as an attachment to this Section.

1.2 DESCRIPTION OF WORK

A. This Section covers excavation, placement, and compaction of all materials within the limits of the work required to construct safety areas, runways, taxiways, aprons, and intermediate areas as well as other areas for drainage, building construction, parking, or other purposes in accordance with these specifications and in conformity to the dimensions and typical sections shown on the plans and the material handling, stockpiling, testing (sampling and analysis) and off-site disposal of all excess excavated materials.

1.3 RELATED WORK SPECIFIED ELSEWHERE

A. Section 01300 – Submittals
B. Section 01561 – Construction Site Runoff Control Program
C. Section 01562 – Management of Contaminated Medias
D. Section 02315 – Trenching and Backfill
E. Section 02903 – Sprigging; FAA Specification Item T-903
F. Section 02905 – Topsoiling; FAA Specification Item T-905

1.4 REFERENCES

A. Federal Aviation Administration (FAA)
   1. FAA Specification Item P-152: Excavation, Subgrade, and Embankment.
   2. FAA Specification Item T-905: Topsoiling
B. State of Hawai'i
   1. State of Hawai‘i Contingency Plan (Hawaii Administrative Rules [HAR] 11-451).
   2. Guidance for Soil Stockpile Characterization and Evaluation of Imported and Exported Fill Material, State of Hawai‘i Department of Health (HDOH), Hazard Evaluation and Emergency Response (HEER) Office Honolulu, Hawai‘i, October 2017.
   3. Technical Guidance Manual for Characterization and Remediation of Contaminated Properties, HDOH, May 2025.
   4. Interim Soil and Water Environmental Action Levels (EALs) for Perfluoroalkyl and Polyfluoroalkyl Substances (PFASs), HDOH, February, 2025.
C. Programmatic Environmental Hazard Evaluation/Environmental Hazard Management Plan, Hawaii Department of Transportation Airports Division, September 2024.

PART 4 - MEASUREMENT AND PAYMENT

4.1 METHOD OF MEASUREMENT

A. Method of measurement and payment shall be in accordance with FAA Specification Item P-152, paragraph 152-3.1 to 3.7.

4.2 BASIS OF PAYMENT

A. Basis for payment shall be in accordance with FAA Specification Item P-152, paragraph 152-4.1 to 4.7.

PART 5 - ATTACHMENTS

5.1 FAA Specification Item P-152 Excavation, Subgrade, and Embankment.

5.2 Potholing of existing utilities was performed to verify depths to the utilities that cross below the taxiway reconstruction. Approximately 10 CY was removed and tested for disposal in accordance with HDOH requirements. See Attachment A for TWY C Potholing Investigation – Associated Documents.

the RPR, it is practical to place the salvaged topsoil at the time of excavation or stripping, the material shall be placed in its final position without stockpiling or further re-handling.
Upon completion of grading operations, stockpiled topsoil shall be handled and placed as shown on the plans and as required in Item T-905. Topsoil shall be paid for as provided in Item T-905. No direct payment will be made for topsoil under Item P-152.

METHOD OF MEASUREMENT

152-3.0 Measurement for payment specified by the cubic yard shall be computed by the comparison of digital terrain model (DTM) surfaces for computation of neat line design quantities and by stockpiled quantities as described below.

152-3.1 Unclassified Excavation, Material Handling and Stockpiling. The quantity of Unclassified Excavation, Material Handling, and Stockpiling to be paid for shall be the number of cubic yards measured in its original position. Measurement shall not include the quantity of materials excavated without authorization beyond normal slope lines, or the quantity of material used for purposes other than those directed

152-3.2 Unclassified Embankment from Off-Site Material. The quantity of Unclassified Excavation Embankment from Off-Site Material to be paid for shall be the cubic yard measured by the truckload as agreed to by the RPR.

152-3.3 Performing Exported Fill Determination Process on Stockpiled Excavation Material payment shall be made at the contract unit price per stockpile measured by the number of stockpiles constructed as shown on the Plans and following the completed exported fill determination process in accordance with the *Guidance for Soil Stockpile Characterization and Evaluation of Imported and Exported Fill Material* (HDOH HEER Office, 2017), and as agreed to by the RPR.

152-3.4 Hazardous Waste Determination Process for Stockpiled Excavation Material where Fill Material Characterization indicate contaminant level is above the Tier 1 EAL payment shall be made at the contract unit price per stockpile measured by the number of stockpiles constructed as shown on the Plans and following the completed Hazardous Waste Determination Process in accordance with the *Guidance for Soil Stockpile Characterization and Evaluation of Imported and Exported Fill Material* (HDOH HEER Office, 2017), and as agreed to by the RPR.

152-3.5 Disposal of Type I Stockpiled Excavation Material payment shall be made at the contract unit price per cubic yard and shall be measured by the truckload as agreed to by the RPR.

152-3.6 Disposal of Type II Stockpiled Excavation Material payment shall be made at the contract unit price per cubic yard and shall be measured by the truckload as agreed to by the RPR.

152-3.7 Disposal of Type III Stockpiled Excavation Material payment shall be made at the contract unit price per cubic yard and shall be measured by the truckload as agreed to by the RPR.

BASIS OF PAYMENT

152-4.1 Unclassified Excavation, Material Handling and Stockpiling payment shall be made at the contract unit price per cubic yard. This price shall be full compensation for preparing pavement subgrade and embankments within the project area to a depth of 12in below the pavement section to a density of not less than 100% of the maximum dry density within the project area. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item, including excavation, subgrade preparation, material handling and hauling, temporary stockpiling, and stockpile management of excavated material in accordance with the approved Stockpile Management Plan under Specification 02152, Section 3.3. Excavation material for utility trenching shall be measured in items 02510 and 02701.

152-4.2 Unclassified Embankment from Off-Site Material. Unclassified Excavation Embankment from Off-Site Material shall be paid at the contract unit price per cubic yard. This price will be full compensation for furnishing all materials, for preparing, placing and compacting materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

152-4.3 Performing Exported Fill Determination Process on Stockpiled Excavation Material payment shall be made at the contract unit price per stockpile. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, Qualified Environmental Professional costs, soil testing (sampling) and laboratory analytical costs, preparation of fill material characterization reports, disposal manifests and incidentals necessary to complete the item as necessary to determine if stockpiled excavation material meets the HEER Office definition of acceptable fill material. This includes screening for PFASs, in accordance with HDOH guidance, and any additional analyses required by the identified disposal facilities.

152-4.4 Hazardous Waste Determination Process for Stockpiled Excavation Material where Fill Material Characterization indicate contaminant level is above the Tier 1 EAL payment shall be made at the contract unit price per stockpile. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, Qualified Environmental Professional costs, soil testing (sampling) and laboratory analytical costs, preparation of reports and incidentals to perform the hazardous waste determination process for exported excavated material in accordance the *Guidance for Soil Stockpile Characterization and Evaluation of Imported and Exported Fill Material* (HDOH HEER Office, 2017).

152-4.5 Disposal of Type I Stockpiled Excavation Material payment shall be made at the contract unit price per cubic yard. This price shall include all work necessary for material handling, hauling and legally disposing of Type I stockpiled excavation materials off Airport property in accordance with Section 01562. Type I stockpiled excavation material is defined as having been Characterized as having concentrations below Tier 1 EALs (including PFASs).

152-4.6 Disposal of Type II Stockpiled Excavation Material payment shall be made at the contract unit price per cubic yard This price shall include all work necessary for material handling, hauling and legally disposing of Type II stockpiled excavation materials off Airport property in accordance with Section 01562. Type II stockpiled excavation material is defined as having been

Characterized as having concentrations below Tier 1 EALs other than PFASs; and concentrations of PFASs above the EALs.

152-4.7 Disposal of Type III Stockpiled Excavation Material payment shall be made at the contract unit price per cubic yard. This price shall include all work necessary for material handling, hauling and legally disposing of Type III stockpiled excavation materials off Airport property in accordance with Section 01562. Type III stockpiled excavation material is defined as having been Characterized as having concentrations above Tier 1 EALs.

The costs for the handling and legal disposal of any Hazardous Waste discovered during the Hazardous Waste Determination Process shall be made under the Allowance for Contaminated Media.

Payment will be made under:

Item No.	Description	Unit
02152.1	Unclassified Excavation, Material Handling, and Stockpiling	Cubic Yard
02152.2	Unclassified Embankment from Off-Site Material	Cubic Yard
02152.3	Performing Exported Fill Determination Process on Stockpiled Excavation Material	Stockpiles
02152.4	Hazardous Waste Determination Process for Stockpiled Excavation Material where Fill Material Characterization indicate contaminant level is above the Tier 1 EAL	Stockpiles
02152.5	Disposal of Type I Stockpiled Excavation Material	Cubic Yard
02152.6	Disposal of Type II Stockpiled Excavation Material	Cubic Yard
02152.7	Disposal of Type III Stockpiled Excavation Material	Cubic Yard

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.

American Association of State Highway and Transportation Officials (AASHTO)

AASHTO T-180 Standard Method of Test for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop.

ASTM International (ASTM)

ASTM D698 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft^3 (600 kN-m/m^3)

ASTM D1556 Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method

Kiewit
Infrastructure Group

February 26th, 2026

Orion Engineers & Associates
Attn: Shannon Holman
1003 Bishop Street, Ste 2020
Honolulu, HI 96813

Subject: TWY C Potholing Investigation – Associated Documents

Attached are the documents associated with the TWY C potholing investigation performed by Kiewit Infrastructure West Co. (KIWC). Included are the potholing workplan, the detailed data file containing coordinates and elevation information, and the laboratory results for the soils generated from the potholing operations.

Should you have any questions, please feel free to contact me at (808) 518-8537 or via email at Brandon.Silva@kiewit.com.

Sincerely,

Brandon Silva
Project Manager
Kiewit Infrastructure West Co.

Attachment A – Kiewit Potholing Workplan
Attachment B – Potholing Data and Location Plan (.pdf and .csv file provided)
Attachment C – Environmental Science International (ESI) Laboratory Results for Pothole Spoils

Kiewit Infrastructure Group

Attachment A

Existing Utility Potholing Workplan for TWY C

Potholing Method

KIWC performed potholing to identify and expose existing underground utilities within the project area. Deliverables for this work include the pothole location plan, the coordinates and elevation data collected for each completed pothole, and the laboratory testing results for the potholing spoils.

Pothole Spoils

Associated activities included spoils handling, soil sampling, and final material handling.

Spoils Handling and Drying Procedures

Wet spoils generated during vacuum excavation were collected and placed into a containment bin. The total volume of spoils generated during potholing activities is approximately 10 cubic yards.

Spoils were allowed to dry naturally within the containment bin. Once dried, KIWC transferred the spoils to designated area in the staging yard and material was placed on plastic sheeting to prevent ground contact.

To maintain compliance with environmental requirements, biosocks were installed around the stockpile perimeter to control sediment migration and plastic covering was placed over the stockpile to prevent windblown dust, protect material from precipitation, and minimize runoff potential.

Soil Sampling

Environmental Science International (ESI), performed soil sampling of the stockpile. Samples were collected in accordance with laboratory and regulatory protocols and submitted for laboratory analysis to determine proper classification and disposal requirements.

Final Material Handling

Upon receipt of laboratory results, KIWC will determine proper disposal or reuse classification and coordinate final handling and transport in compliance with project and regulatory requirements.

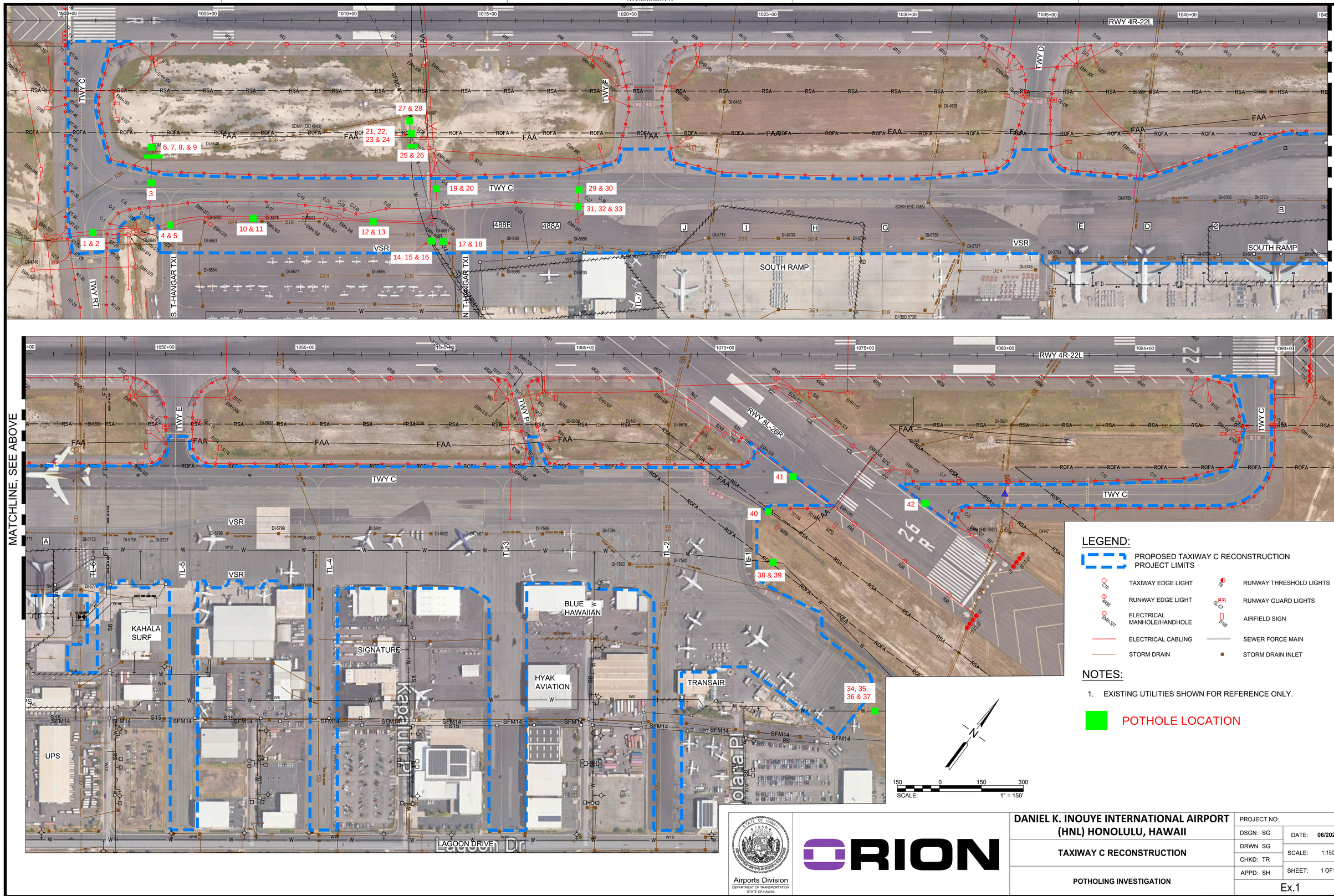
Kiewit Infrastructure West Co.
707 Richards Street, Suite 750
Honolulu, HI 96813
(880) 457-4500

Kiewit Infrastructure Group

Attachment B

Potholing Data and Location Plan
(.pdf and .csv file provided)

Kiewit Infrastructure West Co.
707 Richards Street, Suite 750
Honolulu, HI 96813
(880) 457-4500



LEGEND:

- PROPOSED TAXIWAY C RECONSTRUCTION PROJECT LIMITS
- TAXIWAY EDGE LIGHT
- RUNWAY EDGE LIGHT
- ELECTRICAL MANHOLE/HANDHOLE
- ELECTRICAL CABLING
- STORM DRAIN
- RUNWAY THRESHOLD LIGHTS
- RUNWAY GUARD LIGHTS
- AIRFIELD SIGN
- SEWER FORCE MAIN
- STORM DRAIN INLET

NOTES:

1. EXISTING UTILITIES SHOWN FOR REFERENCE ONLY.

POTHOLE LOCATION

150 0 150 300
SCALE: 1" = 150'

Airports Division
DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

ORION

DANIEL K. INOUYE INTERNATIONAL AIRPORT (HNL) HONOLULU, HAWAII	PROJECT NO:
	DSGN: SG / DRWN SG / CHKD: TR / APPD: SH
	DATE: 06/2025
	SCALE: 1:150
	SHEET: 1 OF1
TAXIWAY C RECONSTRUCTION	
POTHOLING INVESTIGATION	Ex.1

C:\USERS\SAM GOUVEIA\ORION ENGINEERS & ASSOCIATES\HDOTA HNL TWY C, D, F, J - TWY C RECONSTRUCTION\03_ENG\02_DWGS\08_EXHIBITS\02_ELECTRICAL EXHIBITS\OEA-HNL-ELEC-EXHBV3.DWG, 6/9/2025 1:56 PM

TWY C Utility Investigation

Pothole Information (.csv file)

MAP ID	ID	EASTING	NORTHING	ELEVATION
1	TOP AC 21	1665763.801	52941.088	7.022
2	TOP DB 21	1665763.548	52941.543	4.34
3	NO UTILITY 1	1665791.976	53194.953	4.647
4	TOP AC 22	1665951.361	53143.53	6.249
5	TOP DB 22	1665951.569	53143.112	3.357
6	NO UTILITY 2	1665741.48	53271.193	0.991
7	EXISTING GRADE 2	1665740.786	53270.784	5.146
8	NO UTILITY 3	1665758.015	53282.1	0.475
9	EXISTING GRADE 3	1665759.185	53282.269	5.123
10	TOP AC 23	1666143.329	53304.922	5.788
11	TOP DB 23	1666142.898	53303.808	3.721
12	TOP AC 24	1666516.244	53587.262	6.568
13	TOP DB 24	1666515.667	53586.494	3.79
14	TOP CLAY 4	1666740.519	53654.487	1.564
15	NO UTILITY 4	1666740.726	53654.269	-0.817
16	EXISTING GRADE 4	1666741.555	53653.392	6.023
17	TOP AC 25	1666757.988	53657.085	6.118
18	TOP WATERLINE 25	1666757.387	53657.942	2.594
19	TOP AC 26	1666628.61	53809.517	7.916
20	TOP DB 26	1666627.689	53808.959	3.375
21	TOP TOPSOIL 27	1666521.323	53905.349	6.824
22	TOP DB 27	1666521.684	53903.682	6.3
23	TOP TOPSOIL 27.1	1666513.129	53903.654	6.49
24	TOP DB 27.1	1666513.964	53903.33	5.742
25	TOP TOPSOIL 28	1666516.914	53901.237	6.59
26	TOP WATERLINE 28	1666517.456	53900.389	3.207
27	TOP TOPSOIL 29	1666466.614	53956.062	5.28
28	TOP 2ND WATERLINE 29	1666465.835	53956.785	2.754
29	TOP AC 30	1667034.28	54103.48	9.159
30	TOP DB 30	1667033.493	54104.584	5.96
31	TOP AC 31	1667066.884	54061.336	8.387
32	TOP DEMOD AC LAYER 31	1667066.127	54062.704	3.56
33	TOP DB SHOULDER LIGHTING 31	1667066.456	54061.566	7.194
34	TOP TOPSOIL 36	1672028.171	57011.288	7.506
35	TOP DB 36	1672026.011	57011.321	5.672
36	TOP TOPSOIL 37	1672013.797	57010.261	7.825
37	TOP WATERLINE 37	1672015.305	57008.329	3.575
38	EXISTING GRADE 18	1671381.447	57211.622	10.162
39	TOP WATERLINE 18	1671382.448	57212.116	6.106
40	TOP DB 39 - 1.958' BELOW EG	1671303.915	57410.631	
41	TOP DB 38 - 2.791' BELOW EG	1671315.708	57512.115	
42	TOP DB 38 - 0.458' BELOW EG	1671605.63	57729.836	

Kiewit Infrastructure Group

Attachment C

Environmental Science International (ESI)
Laboratory Results for Pothole Spoils

Environmental Science International
354 Uluniu Street, Suite 304, Kailua, Hawaii 96734
(808) 261-0740 phone

February 25, 2026

Kiewit Infrastructure West Co.
707 Richard Street
Honolulu, Hawaii 96813

Attention: Milissa Ceria

Subject: Soil Stockpile Sample Results for Taxiway C Rehabilitation and Design Project at Daniel K. Inouye International Airport, Project No. AO1021-28.

Attached are the laboratory results for the Taxiway C potholing spoils. Please contact me at (808) 479-5217, if you have any questions or need additional assistance.

Mahalo,

Robert Chong

Robert Chong
Vice President
Environmental Science International, Inc.

Attachment A – Soil Stockpile Sample Results

Attachment A
Soil Stockpile Sample Results

Data Summary Table
Taxiway C
Stockpile Soil Sampling

COPC		DOH Tier 1 EAL	TCLP Limit	Units	Sample ID	
					SP-01	
					Sample Date	
					1/8/2026	
Metals (Total)	Arsenic	24		mg/Kg	ND (2.0)	
	Barium	1000		mg/Kg	**2,800**	
	Cadmium	17		mg/Kg	ND (1.0)	
	Chromium	1145		mg/Kg	**44**	
	Lead	200		mg/Kg	**23**	
	Selenium	78		mg/Kg	ND (2.0)	
	Silver	78		mg/Kg	ND (1.0)	
	Mercury	4.7		mg/Kg	ND (0.5)	
Metals (TCLP)	Arsenic		5	mg/L	ND (0.05)	
	Barium		100	mg/L	ND (1.0)	
	Cadmium		1	mg/L	ND (0.05)	
	Chromium		5	mg/L	ND (0.5)	
	Lead		5	mg/L	ND (0.1)	
	Selenium		1	mg/L	ND (0.05)	
	Silver		5	mg/L	ND (0.05)	
	Mercury		0.2	mg/L	ND (0.05)	
TPH	TPH-d	183		mg/Kg	ND (150)	DF3
	TPH-g	100		mg/Kg	ND (0.1)	
	TPH-o	500		mg/Kg	**920**	
VOCs	Chloromethane	4.01		mg/Kg	ND (0.1)	
	Vinyl Chloride	0.04		mg/Kg	ND (0.02)	
	Bromomethane	0.22		mg/Kg	ND (0.05)	
	Chloroethane	11.5		mg/Kg	ND (0.05)	
	1,1-Dichloroethylene	4.17		mg/Kg	ND (0.05)	
	Methylene Chloride	21.7		mg/Kg	ND (0.1)	
	Methyl Tert Butyl Ether (MTBE)	2.31		mg/Kg	ND (0.02)	
	Trans-1,2-Dichloroethylene	1.78		mg/Kg	ND (0.02)	
	1,1-Dichloroethane	0.38		mg/Kg	ND (0.02)	
	Cis-1,2-dichloroethylene	1.78		mg/Kg	ND (0.02)	
	Methyl ethyl ketone (MEK)	15.4		mg/Kg	ND (0.5)	
	Chloroform	0.03		mg/Kg	ND (0.05)	
	1,1,1-Trichloroethane	1.24		mg/Kg	ND (0.02)	
	Carbon tetrachloride	0.10		mg/Kg	ND (0.02)	
	Benzene	0.77		mg/Kg	ND (0.02)	
	1,2-dichloroethane	0.02		mg/Kg	ND (0.02)	
	Trichloroethylene (TCE)	0.09		mg/Kg	ND (0.02)	
	1,2-Dichloropropane	0.16		mg/Kg	ND (0.02)	
	Bromodichloromethane	0.02		mg/Kg	ND (0.02)	
	Toluene	0.78		mg/Kg	ND (0.05)	
	1,1,2-Trichloroethane	0.01		mg/Kg	ND (0.02)	
	Tetrachloroethylene	0.10		mg/Kg	ND (0.02)	
	Dibromochloromethane	0.34		mg/Kg	ND (0.02)	
	1,2-Dibromoethane	0.00		mg/Kg	ND (0.02)	
	Chlorobenzene	1.45		mg/Kg	ND (0.02)	
	1,1,1,2-Tetrachloroethane	0.32		mg/Kg	ND (0.02)	
	Ethylbenzene	0.90		mg/Kg	ND (0.05)	
	Xylenes	1.36		mg/Kg	ND (0.1)	
	Styrene	2.93		mg/Kg	ND (0.02)	
	Bromoform	1.99		mg/Kg	ND (0.1)	
	1,2,3-Trichloropropane	0.01		mg/Kg	ND (0.02)	
	1,1,2,2-Tetrachloroethane	0.01		mg/Kg	ND (0.04)	
	1,3-Dichlorobenzene	2.51		mg/Kg	ND (0.02)	
	1,4-Dichlorobenzene	0.05		mg/Kg	ND (0.02)	
	1,2-Dichlorobenzene	1.05		mg/Kg	ND (0.02)	
	1,2-Dibromo-3-chloropropane (DBCP)	0.00		mg/Kg	ND (0.1)	
	1,2,4-Trichlorobenzene	0.18		mg/Kg	ND (0.05)	
	Hexachlorobutadiene	0.06		mg/Kg	ND (0.1)	
	Naphthalene	3.11		mg/Kg	ND (0.1)	
PAHs	1-Methylnaphthalene	0.89		mg/Kg	ND (0.05)	
	2-Methylnaphthalene	1.9		mg/Kg	ND (0.05)	
	Acenaphthene	118		mg/Kg	ND (0.05)	
	Acenaphthylene	5.5		mg/Kg	ND (0.05)	
	Anthracene	4.23		mg/Kg	ND (0.05)	
	Benzo[a]anthracene	10		mg/Kg	ND (0.05)	
	Benzo[a]pyrene	4		mg/Kg	ND (0.1)	
	Benzo[b]fluoranthene	5.8		mg/Kg	ND (0.1)	
	Benzo[g,h,i]perylene	35		mg/Kg	ND (0.1)	
	Benzo[k]fluoranthene	35		mg/Kg	ND (0.1)	
	Chrysene	7.3		mg/Kg	ND (0.05)	
	Dibenz(a,h)anthracene	1.13		mg/Kg	ND (0.1)	
	Fluoranthene	87		mg/Kg	ND (0.05)	
	Fluorene	93		mg/Kg	ND (0.05)	
	Indeno[1,2,3-cd]pyrene	5.7		mg/Kg	ND (0.095)	
	Naphthalene	3.1		mg/Kg	ND (0.05)	
	Phenanthrene	69		mg/Kg	**0.16**	
	Pyrene	44		mg/Kg	ND (0.05)	

Data Summary Table
Taxiway C
Stockpile Soil Sampling

COPC		DOH Tier 1 EAL	TCLP Limit	Units	Sample ID: SP-01, Sample Date: 1/8/2026	
PCBs	Polychlorinated Biphenyls (Total)	1.17		mg/Kg	ND (0.1)	
OCPs	Aldrin	3.9		mg/Kg	ND (0.001)	
	alpha-BHC	NS		mg/Kg	ND (0.001)	
	beta-BHC	NS		mg/Kg	ND (0.001)	
	delta-BHC	NS		mg/Kg	ND (0.001)	
	gamma-BHC (Lindane)	0.029		mg/Kg	ND (0.001)	
	alpha-Chlordane	17		mg/Kg	ND (0.005)	
	gamma-Chlordane			mg/Kg	ND (0.005)	
	Chlordane (Technical)			mg/Kg	ND (0.1)	
	Chloromethane	4.01		mg/Kg	ND (0.1)	
	Dieldrin	2.5		mg/Kg	ND (0.001)	
	Endosulfan I	13		mg/Kg	ND (0.001)	
	Endosulfan II			mg/Kg	ND (0.005)	
	Endosulfan sulfate			mg/Kg	ND (0.01)	
	Endrin	3.8		mg/Kg	ND (0.001)	
	Endrin aldehyde	NS		mg/Kg	ND (0.005)	
	Endrin ketone	NS		mg/Kg	ND (0.005)	
	Heptachlor	1.3		mg/Kg	ND (0.001)	
	Heptachlor epoxide	0.2		mg/Kg	ND (0.001)	
	Methoxychlor	16		mg/Kg	ND (0.005)	
	Toxaphene	0.48		mg/Kg	ND (0.2)	
	4,4'-DDD	2.2		mg/Kg	ND (0.005)	
	4,4'-DDE	1.9		mg/Kg	ND (0.005)	
	4,4'-DDT	1.8		mg/Kg	ND (0.005)	
PFAS	Perfluoro butanoate (PFBA)	0.22		mg/Kg	**0.0002**	**J**
	Perfluoro butane sulfonate (PFBS)	0.16		mg/Kg	**0.00011**	**J**
	Perfluoro pentanoate (PFPeA)	0.02		mg/Kg	**0.00028**	
	Perfluoropentane sulfonate (PFPeS)	0.10		mg/Kg	**0.000088**	**J**
	Perfluoro hexanoate (PFHxA)	0.34		mg/Kg	**0.00034**	
	Perfluorohexane sulfonate (PFHxS)	0.0038		mg/Kg	**0.00082**	
	Perfluoro heptanoate (PFHpA)	0.027		mg/Kg	**0.00011**	**J**
	Perfluoroheptane sulfonate (PFHpS)	0.0079		mg/Kg	**0.000062**	**J**
	Perfluoro octanoate (PFOA)	0.0011		mg/Kg	**0.00015**	**J**
	Perfluorooctane sulfonate (PFOS)	0.000236		mg/Kg	**0.0071**	
	Perfluroroctane sulfonamide (PFOSA)	0.0051		mg/Kg	ND (0.000061)	
	Perfluoro nonanoate (PFNA)	0.0047		mg/Kg	**0.000051**	**J I**
	Perfluoro decanoate (PFDA)	0.00051		mg/Kg	**0.000063**	**J**
	Perfluorodecane sulfonate (PFDS)	0.13		mg/Kg	ND (0.000048)	
	Perfluoro undecanoate (PFUnDA)	0.063		mg/Kg	ND (0.000048)	
	Perfluoro dodecanoate (PFDoDA)	0.085		mg/Kg	**0.00005**	**J**
	Perfluoro tridecanoate (PFTrDA)	0.085		mg/Kg	ND (0.000048)	
	Perfluoro tetradecanoate (PFTeDA)	0.85		mg/Kg	ND (0.000056)	
	2,3,3,3-tetrafluoro-2-(heptafluoropropoxy) propanoate (HFPO-DA)	0.00068		mg/Kg	ND (0.000048)	
	6:2 Fluorotelomer sulfonate (6:2 FTS)	0.24		mg/Kg	**0.00074**	
	Ammonium 4,8-Dioxa-3H-perfluoro nonanoate (ADONA)	0.19		mg/Kg	ND (0.000048)	

Notes:

Bold shaded values exceed DOH Tier 1 EALs.

DOH Tier 1 EAL	DOH HEER Office Tier 1 Environmental Action levels for sites <150m from a surface water body and groundwater is a current or potential drinking water resource.
COPC	Contaminant of Potential Concern
DF3	Dilution factor of three.
I	value is estimated max possible concentration.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value
mg/kg	miligram per kilogram
mg/L	miligram per liter
ND (MDL)	Not Detected (Method Detection Limit)

ADVANCED ANALYTICAL LABORATORY INC

January 16, 2026

Environmental Science International
354 Ulunia Street, Suite 304
Kailua, HI
96734

Dear Robert Chong:

Please find enclosed the analytical report for:

Project Name:	HNL TWY C
AAL Project #:	BB18
Date Received:	01/08/2026
MIS Prep:	Yes

The results, applicable reporting limits, QA/QC data, invoice, and copy of COC are included. If Multi-incremental preparation was needed for this project, it was completed by Advanced Analytical Laboratory, Honolulu, HI.

Advanced Analytical Laboratory appreciates the opportunity to provide analytical services for this project. If you have any questions regarding this project, please don't hesitate to contact AAL.

Thank you for your business and continuing support.

Sincerely,

Uwe Baumgartner, Ph.D
Owner

Elisa M. Young
Owner

544 Ohohia Street #10 HONOLULU HAWAII 96819
tel (808) 836-2252 AAL@hawaii.rr.com

ADVANCED ANALYTICAL LABORATORY INC

AAL Project #BB18

Environmental Science International

Client Project #: 126001 Method 8015M
Client Project Name: HNL TWY C Matrix: Soil

CLIENT SAMPLE ID	TPH-GASOLINE [mg/kg]	SURROGATE RECOVERY	FLAGS	DATE ANALYZED
Blank	nd	103%		1/9/2026
SP-1	nd	113%		1/9/2026
PQL	10.0	Acceptable Range		
MDL	0.10	70%-130%		

QA/QC DATA

QC BATCH # 010926	TPH-GASOLINE [mg/kg]	Acceptable Range
Lab Control Spike (LCS)	10.0	7.0-13.0
Matrix Spike (MS)	10.0	7.0-13.0
Matrix Spike Dup (MSD)	9.9	7.0-13.0
Recovery LCS	100%	70%-130%
Recovery MS	100%	70%-130%
Recovery MSD	99%	70%-130%
RPD of MS/MSD	1.0%	20%

Analyst: E. Young
Data review: U. Baumgartner, Ph.D.

ADVANCED ANALYTICAL LABORATORY INC

AAL Project #BB18

Environmental Science International

Client Project #: 126001 Method 8015M

Client Project Name: HNL TWY C Matrix: Soil

CLIENT SAMPLE ID	TPH-DIESEL [mg/kg]	TPH-OIL [mg/kg]	SURROGATE RECOVERY	FLAGS	DATE ANALYZED
Blank	nd	nd	95%		1/8/2026
SP-1	nd<150	920	101%	DF3	1/8/2026
PQL	50	100	Acceptable Range		
MDL	20	35	70%-130%		

QA/QC DATA

QC BATCH # 010826-2	TPH-DIESEL [mg/kg]	TPH-OIL [mg/kg]	Acceptable Range
Lab Control Spike (LCS)	507	484	350-650
Matrix Spike (MS)	499	471	350-650
Matrix Spike Dup (MSD)	514	490	350-650
Recovery LCS	101%	97%	70%-130%
Recovery MS	100%	94%	70%-130%
Recovery MSD	103%	98%	70%-130%
RPD of MS/MSD	3.0%	4.0%	20%

Analyst: U. Baumgartner, Ph.D.

Data review: E. Young

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Analytical Report

Client	**Advanced Analytical Laboratory**	**Acculab WO#**	**26-AL0112-2**
	544 Ohohia Street #10		
	Honolulu, HI, 96819	Date Sampled	1/8/2026
Project Manager	Uwe Baumgartner/ Elisa Young	Date Received	1/12/2026
Project Name	**HNL TWY C**	Date Reported	1/16/2026
Client Project#	**126001**		
Project#	**BB18**		

Volatiles in Soil by EPA 8260D/5030B

Accu Lab Batch# AL011226-1

Client sample ID					**SP-1**	**MS**	**MSD**	**RPD**
Lab ID	**MRL**	**Unit**	**MTH BLK**	**LCS**	26-AL0112-2-1	26-AL0112-1-1	26-AL0112-1-1	26-AL0112-1-1
Matrix			Solid	Solid	Soil	Soil	Soil	Soil
Date Extracted			1/12/2026	1/12/2026	1/8/2026	1/8/2026	1/8/2026	1/8/2026
Date Analyzed			1/12/2026	1/12/2026	1/12/2026	1/12/2026	1/12/2026	1/12/2026
Moisture (%)					6%	20%	20%	20%
Chloromethane	100	ug/kg	nd		nd			
Vinyl chloride	20	ug/kg	nd	113%	nd	116%	112%	4%
Bromomethane	50	ug/kg	nd		nd			
Chloroethane	50	ug/kg	nd		nd			
Trichlorofluoromethane	50	ug/kg	nd		nd			
1,1-Dichloroethene	50	ug/kg	nd		nd			
Methylene Chloride	100	ug/kg	nd		nd			
Methyl T-Butyl Ether (MTBE)	20	ug/kg	nd	98%	nd	97%	104%	7%
trans-1,2-Dichloroethene	20	ug/kg	nd		nd			
1,1-Dichloroethane	20	ug/kg	nd	96%	nd	102%	105%	3%
2,2-Dichloropropane	20	ug/kg	nd		nd			
cis-1,2-Dichloroethene	20	ug/kg	nd		nd			
Methyl Ethyl Ketone (MEK)	500	ug/kg	nd		nd			
Chloroform	50	ug/kg	nd		nd			
1,1,1-Trichloroethane	20	ug/kg	nd		nd			
Carbon tetrachloride	20	ug/kg	nd		nd			
1,1-Dichloropropene	20	ug/kg	nd		nd			
Benzene	20	ug/kg	nd	87%	nd	112%	96%	15%
1,2-Dichloroethane (EDC)	20	ug/kg	nd		nd			
Trichloroethene	20	ug/kg	nd	99%	nd	108%	96%	12%
1,2-Dichloropropane	20	ug/kg	nd		nd			
Dibromomethane	20	ug/kg	nd		nd			
Bromodichloromethane	20	ug/kg	nd		nd			
Toluene	50	ug/kg	nd	88%	nd	108%	96%	12%
1,1,2-Trichloroethane	20	ug/kg	nd		nd			
Tetrachloroethene	20	ug/kg	nd	102%	nd	106%	92%	14%
1,3-Dichloropropane	20	ug/kg	nd		nd			
Dibromochloromethane	20	ug/kg	nd		nd			

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Analytical Report

Client	**Advanced Analytical Laboratory**	**Acculab WO#**	**26-AL0112-2**
	544 Ohohia Street #10		
	Honolulu, HI, 96819	Date Sampled	1/8/2026
Project Manager	Uwe Baumgartner/ Elisa Young	Date Received	1/12/2026
Project Name	**HNL TWY C**	Date Reported	1/16/2026
Client Project#	**126001**		
Project#	**BB18**		

Volatiles in Soil by EPA 8260D/5030B

Accu Lab Batch# AL011226-1

Client sample ID					**SP-1**	**MS**	**MSD**	**RPD**
Lab ID	**MRL**	**Unit**	**MTH BLK**	**LCS**	26-AL0112-2-1	26-AL0112-1-1	26-AL0112-1-1	26-AL0112-1-1
Matrix			Solid	Solid	Soil	Soil	Soil	Soil
Date Extracted			1/12/2026	1/12/2026	1/8/2026	1/8/2026	1/8/2026	1/8/2026
Date Analyzed			1/12/2026	1/12/2026	1/12/2026	1/12/2026	1/12/2026	1/12/2026
Moisture (%)					6%	20%	20%	20%
1,2-Dibromoethane (EDB)	20	ug/kg	nd		nd			
Chlorobenzene	20	ug/kg	nd	102%	nd	102%	96%	6%
1,1,1,2-Tetrachloroethane	20	ug/kg	nd		nd			
Ethyl benzene	50	ug/kg	nd	102%	nd	106%	96%	10%
m,p-Xylenes	100	ug/kg	nd	100%	nd	104%	94%	10%
o-Xylene	50	ug/kg	nd	101%	nd	104%	92%	12%
Styrene	20	ug/kg	nd		nd			
Bromoform	100	ug/kg	nd		nd			
Isopropyl benzene	20	ug/kg	nd		nd			
1,2,3-Trichloropropane	20	ug/kg	nd		nd			
Bromobenzene	20	ug/kg	nd		nd			
1,1,2,2-Tetrachloroethane	40	ug/kg	nd		nd			
n-Propylbenzene	50	ug/kg	nd		nd			
2-Chlorotoluene	20	ug/kg	nd		nd			
4-Chlorotoluene	20	ug/kg	nd		nd			
1,3,5-TrimEthylbenzene	50	ug/kg	nd		nd			
tert-Butylbenzene	50	ug/kg	nd		nd			
1,2,4-TrimEthylbenzene	100	ug/kg	nd		nd			
sec-Butylbenzene	20	ug/kg	nd		nd			
1,3-Dichlorobenzene	20	ug/kg	nd		nd			
p-Isopropyltoluene	20	ug/kg	nd		nd			
1,4-Dichlorobenzene	20	ug/kg	nd		nd			
1,2-Dichlorobenzene	20	ug/kg	nd		nd			
n-Butylbenzene	100	ug/kg	nd		nd			
1,2-Dibromo-3-Chloropropane	100	ug/kg	nd		nd			
1,2,4-Trichlorobenzene	50	ug/kg	nd		nd			
Hexachlorobutadiene	100	ug/kg	nd		nd			
Naphthalene	100	ug/kg	nd	104%	nd	84%	91%	8%
1,2,3-Trichlorobenzene	100	ug/kg	nd		nd			

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Analytical Report

Client	**Advanced Analytical Laboratory**	**Acculab WO#**	**26-AL0112-2**
	544 Ohohia Street #10		
	Honolulu, HI, 96819	Date Sampled	1/8/2026
Project Manager	Uwe Baumgartner/ Elisa Young	Date Received	1/12/2026
Project Name	**HNL TWY C**	Date Reported	1/16/2026
Client Project#	**126001**		
Project#	**BB18**		

Volatiles in Soil by EPA 8260D/5030B

Accu Lab Batch# AL011226-1

Client sample ID					**SP-1**	**MS**	**MSD**	**RPD**
Lab ID	**MRL**	**Unit**	**MTH BLK**	**LCS**	26-AL0112-2-1	26-AL0112-1-1	26-AL0112-1-1	26-AL0112-1-1
Matrix			Solid	Solid	Soil	Soil	Soil	Soil
Date Extracted			1/12/2026	1/12/2026	1/8/2026	1/8/2026	1/8/2026	1/8/2026
Date Analyzed			1/12/2026	1/12/2026	1/12/2026	1/12/2026	1/12/2026	1/12/2026
Moisture (%)					6%	20%	20%	20%
Surrogate Recoveries								
Dibromofluoromethane			116%	105%	110%	105%	105%	
1,2-Dichloroethane-d4			120%	122%	96%	121%	121%	
Toluene-d8			101%	100%	100%	97%	101%	
4-Bromofluorobenzene			97%	116%	129%	103%	99%	

Acceptable Recovery Limits:

Surrogates/LCS	*70-130%*
MS/MSD	*65-135%*
Acceptable RPD limit:	*30%*

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Analytical Report

Client	**Advanced Analytical Laboratory**	**Acculab WO#**	**26-AL0112-2**
	544 Ohohia Street #10		
	Honolulu, HI, 96819	Date Sampled	1/8/2026
Project Manager	Uwe Baumgartner/ Elisa Young	Date Received	1/12/2026
Project Name	**HNL TWY C**	Date Reported	1/16/2026
Client Project#	**126001**		
Project#	**BB18**		

PAHs in Soil by EPA 8270E SIM/3550C

Accu Lab Batch# AL011426-4

Client sample ID					**SP-1**	**MS**	**MSD**	**RPD**
Lab ID	**MRL**	**Unit**	**MTH BLK**	**LCS**	26-AL0112-2-1	26-AL0114-2-4	26-AL0114-2-4	26-AL0114-2-4
Matrix			Solid	Solid	Soil	Soil	Soil	Soil
Date Extracted			1/14/2026	1/14/2026	1/14/2026	1/14/2026	1/14/2026	1/14/2026
Date Analyzed			1/15/2026	1/15/2026	1/15/2026	1/15/2026	1/15/2026	1/15/2026
Moisture (%)					6%	17%	17%	17%
Naphthalene	0.05	mg/kg	nd	114%	nd	97%	92%	5%
2-Methylnaphthalene	0.05	mg/kg	nd		nd			
1-Methylnaphthalene	0.05	mg/kg	nd		nd			
Acenaphthylene	0.05	mg/kg	nd		nd			
Acenaphthene	0.05	mg/kg	nd	104%	nd	83%	80%	4%
Fluorene	0.05	mg/kg	nd		nd			
Phenanthrene	0.05	mg/kg	nd		0.16			
Anthracene	0.05	mg/kg	nd		nd			
Fluoranthene	0.05	mg/kg	nd	108%	nd	96%	113%	16%
Pyrene	0.05	mg/kg	nd	122%	nd	100%	88%	13%
Benzo(a)anthracene	0.05	mg/kg	nd		nd			
Chrysene	0.05	mg/kg	nd		nd			
Benzo(b)fluoranthene	0.10	mg/kg	nd		nd			
Benzo(k)fluoranthene	0.10	mg/kg	nd		nd			
Benzo(a)pyrene	0.10	mg/kg	nd	68%	nd	93%	86%	8%
Indeno(1,2,3-cd)pyrene	0.095	mg/Kg	nd		nd			
Dibenzo(a,h)anthracene	0.10	mg/Kg	nd		nd			
Benzo(ghi)perylene	0.10	mg/Kg	nd		nd			
Surrogate Recoveries								
2-Fluorobiphenyl			75%	99%	81%	107%	104%	
Terphenyl-d14			83%	121%	66%	111%	110%	

Acceptable Recovery Limits:

Surrogates/LCS	*50-150%*
MS/MSD	*45-150%*
Acceptable RPD Limit:	*30%*

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Analytical Report

Client	**Advanced Analytical Laboratory**	**Acculab WO#**	**26-AL0112-2**
	544 Ohohia Street #10		
	Honolulu, HI, 96819	Date Sampled	1/8/2026
Project Manager	Uwe Baumgartner/ Elisa Young	Date Received	1/12/2026
Project Name	**HNL TWY C**	Date Reported	1/16/2026
Client Project#	**126001**		
Project#	**BB18**		

Polychlorinated Biphenyls in Soil by EPA 8082A/3550C

Accu Lab Batch# AL011226-3

Client sample ID					**SP-1**	**MS**	**MSD**	**RPD**
Lab ID	**MRL**	**Unit**	**MTH BLK**	**LCS**	26-AL0112-2-1	26-AL0112-4-9	26-AL0112-4-9	26-AL0112-4-9
Matrix			Solid	Solid	Soil	Soil	Soil	Soil
Date Extracted			1/12/2026	1/12/2026	1/12/2026	1/12/2026	1/12/2026	1/12/2026
Date Analyzed			1/12/2026	1/12/2026	1/12/2026	1/12/2026	1/12/2026	1/12/2026
A1016	0.10	mg/kg	nd		nd			
A1221	0.10	mg/kg	nd		nd			
A1232	0.10	mg/kg	nd		nd			
A1242	0.10	mg/kg	nd		nd			
A1248	0.10	mg/kg	nd		nd			
A1254	0.10	mg/kg	nd		nd			
A1260	0.10	mg/kg	nd	125%	nd	106%	126%	18%
Surrogate Recoveries								
Tetrachloro-m-xylene			103%	112%	91%	112%	113%	
Decachlorobiphenyl			129%	137%	91%	115%	115%	

Acceptable Recovery Limits:

Surrogates/LCS	*60-150%*
MS/MSD	*50-150%*
Acceptable RPD limit:	*30%*

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Analytical Report

Client	**Advanced Analytical Laboratory**	**Acculab WO#**	**26-AL0112-2**
	544 Ohohia Street #10		
	Honolulu, HI, 96819	Date Sampled	1/8/2026
Project Manager	Uwe Baumgartner/ Elisa Young	Date Received	1/12/2026
Project Name	**HNL TWY C**	Date Reported	1/16/2026
Client Project#	**126001**		
Project#	**BB18**		

Organochlorine Pesticides in Soil by EPA 8081B/3550C

Accu Lab Batch# AL011226-3

Client sample ID					**SP-1**	**MS**	**MSD**	**RPD**
Lab ID	**MRL**	**Unit**	**MTH BLK**	**LCS**	26-AL0112-2-1	26-AL0112-4-10	26-AL0112-4-10	26-AL0112-4-10
Matrix			Solid	Solid	Soil	Soil	Soil	Soil
Date Extracted			1/12/2026	1/12/2026	1/12/2026	1/12/2026	1/12/2026	1/12/2026
Date Analyzed			1/12/2026	1/12/2026	1/12/2026	1/12/2026	1/12/2026	1/12/2026
α-BHC	1.0	ug/kg	nd		nd			
γ-BHC (Lindane)	1.0	ug/kg	nd	82%	nd	110%	92%	18%
β-BHC	1.0	ug/kg	nd		nd			
Heptachlor	1.0	ug/kg	nd	112%	nd	83%	71%	16%
δ-BHC	1.0	ug/kg	nd		nd			
Aldrin	1.0	ug/kg	nd	88%	nd	113%	93%	19%
Heptachlor Epoxide	1.0	ug/kg	nd		nd			
γ-Chlordane	5.0	ug/kg	nd		nd			
α-Chlordane	5.0	ug/kg	nd		nd			
Endosulfan I	1.0	ug/kg	nd		nd			
4,4'-DDE	5.0	ug/kg	nd		nd			
Dieldrin	1.0	ug/kg	nd	85%	nd	99%	84%	16%
Endrin	1.0	ug/kg	nd	77%	nd	103%	89%	15%
4,4'-DDD	5.0	ug/kg	nd		nd			
Endosulfan II	5.0	ug/kg	nd		nd			
4,4'-DDT	5.0	ug/kg	nd	74%	nd	86%	74%	15%
Endrin Aldehyde	5.0	ug/kg	nd		nd			
Methoxychlor	5.0	ug/kg	nd		nd			
Endrin Ketone	5.0	ug/kg	nd		nd			
Endosulfan Sulfate	10	ug/kg	nd		nd			
Technical Chlordane	0.10	**mg/kg**	nd		nd			
Toxaphene	0.20	**mg/kg**	nd		nd			
Surrogate Recoveries								
Tetrachloro-m-xylene			95%	90%	84%	101%	105%	
Decachlorobiphenyl			113%	110%	79%	95%	123%	

Acceptable Recovery Limits:

Surrogates	*50-150%*
LCS/MS/MSD	*50-150%*
Acceptable RPD limit:	*30%*

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ACCU LABORATORY

12524 130th Lane NE
Kirkland WA 98034

Tel: (425) 214-5858
(425) 214-5868
Email: lisa@accu-lab.com
website: www.accu-lab.com

Analytical Report

Client	**Advanced Analytical Laboratory**	**Acculab WO#**	**26-AL0112-2**
	544 Ohohia Street #10		
	Honolulu, HI, 96819	Date Sampled	1/8/2026
Project Manager	Uwe Baumgartner/ Elisa Young	Date Received	1/12/2026
Project Name	**HNL TWY C**	Date Reported	1/16/2026
Client Project#	**126001**		
Project#	**BB18**		

Metals in Soil by EPA 6020B/EPA3050B

Accu Lab Batch# AL011326-11

Client sample ID					**SP-1**	**MS**	**MSD**	**RPD**
Lab ID	**MRL**	**Unit**	**MTH BLK**	**LCS**	26-AL0112-2-1	26-AL0109-5-1	26-AL0109-5-1	26-AL0109-5-1
Matrix			Solid	Solid	Soil	Soil	Soil	Soil
Date Digested			1/13/2026	1/13/2026	1/13/2026	1/13/2026	1/13/2026	1/13/2026
Date Analyzed			1/13/2026	1/13/2026	1/13/2026	1/13/2026	1/13/2026	1/13/2026
Arsenic (As)	2.0	mg/kg	nd	112%	nd	92%	95%	3%
Barium (Ba)	5.0	mg/kg	nd	108%	2,800	M	M	
Cadmium (Cd)	1.0	mg/kg	nd	114%	nd	101%	93%	8%
Chromium (Cr)	2.0	mg/kg	nd	115%	44	85%	98%	15%
Lead (Pb)	1.0	mg/kg	nd	110%	23	98%	84%	16%
Selenium (Se)	2.0	mg/kg	nd	120%	nd	98%	102%	4%
Silver (Ag)	1.0	mg/kg	nd	83%	nd	123%	119%	3%
Mercury (Hg)	0.50	mg/kg	nd	88%	nd	96%	87%	10%

Acceptable Recovery Limits:

LCS	*80-120%*
MS/MSD	*75-125%*
Acceptable RPD limit:	*20%*

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Analytical Report

Client	**Advanced Analytical Laboratory**	**Acculab WO#**	**26-AL0112-2**
	544 Ohohia Street #10		
	Honolulu, HI, 96819	Date Sampled	1/8/2026
Project Manager	Uwe Baumgartner/ Elisa Young	Date Received	1/12/2026
Project Name	**HNL TWY C**	Date Reported	1/16/2026
Client Project#	**126001**		
Project#	**BB18**		

Metals in Soil TCLP by EPA 6020B/3010A/1311

Accu Lab Batch# AL011226-10

Client sample ID					**TCLP SP-1**	**TCLP MS**	**TCLP MSD**	**TCLP RPD**
Lab ID	**MRL**	**Unit**	**MTH BLK**	**LCS**	26-AL0112-2-1	26-AL0112-1-1	26-AL0112-1-1	26-AL0112-1-1
Matrix			TCLP Extract	TCLP Extract	TCLP Extract	TCLP Extract	TCLP Extract	TCLP Extract
Date Extracted			1/12/2026	1/12/2026	1/12/2026	1/12/2026	1/12/2026	1/12/2026
Date Analyzed			1/13/2026	1/13/2026	1/13/2026	1/13/2026	1/13/2026	1/13/2026
Arsenic (As)	0.05	mg/l	nd	100%	nd	97%	99%	2%
Barium (Ba)	1.0	mg/l	nd	106%	nd	109%	114%	4%
Cadmium (Cd)	0.05	mg/l	nd	101%	nd	94%	98%	4%
Chromium (Cr)	0.50	mg/l	nd	96%	nd	114%	121%	6%
Lead (Pb)	0.10	mg/l	nd	99%	nd	93%	97%	5%
Selenium (Se)	0.05	mg/l	nd	106%	nd	94%	96%	2%
Silver (Ag)	0.05	mg/l	nd	94%	nd	112%	111%	1%
Mercury (Hg)	0.05	mg/l	nd	110%	nd	80%	77%	4%

Acceptable Recovery Limits:

LCS	*80-120%*
MS/MSD	*75-125%*
Acceptable RPD limit:	*20%*

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Analytical Report

Client	Advanced Analytical Laboratory	**Acculab WO#**	**26-AL0112-2**
	544 Ohohia Street #10		
	Honolulu, HI, 96819	Date Sampled	1/8/2026
Project Manager	Uwe Baumgartner/ Elisa Young	Date Received	1/12/2026
Project Name	**HNL TWY C**	Date Reported	1/16/2026
Client Project#	**126001**		
Project#	**BB18**		

Data Qualifiers and Comments:

Results reported on dry-weight basis for soil samples.

MRL- Method Reporting Limit
nd- Indicates the analyte is not detected at the listing reporting limit.
C- Coelution with other compounds.
M- % Recovery of surrogate, MS/MSD is out of the acceptable limit due to matrix effect.
B- Indicates the analyte is detected in the method blank associated with the sample.
J- The analyte is detected at below the reporting limit.
E- The result reported exceeds the calibration range, and is an estimate.
D- Sample required dilution due to matrix. Method Reporting Limits were elevated due to dilutions.
H- Sample was received or analyzed past holding time
Q- Sample was received with head space, improper preserved or above recommended temperature.
I- Due to insufficient sample, LCS/LCS DUP were analyzed in place of MS/MSD.
R- The recovery of this analyte in QC sample failed high, but the analyte was not detected in all related samples. No action was taken.
R-1- The RPD value for the MS/MSD was outside of QC acceptance limits however both recoveries were acceptable. All related samples were "nd". No action was taken.
R-2- The recovery of the surrogate in sample failed high, but all related analytes were not detected in the sample. No action was taken.

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ADVANCED ANALYTICAL LABORATORY-CHAIN OF CUSTODY RECORD

Phone: (808) 836 2252 Fax:(808) 836 2250 Address: 544 Ohohia Street, Honolulu, HI 96819

TURNAROUND TIME: Standard

AAL PROJECT#: BB18

LAB SENT TO: AAL

CLIENT: Environmental Science International
ADDRESS: 354 Uluniu Street, Suite 304, Kailua, HI 96734
PHONE: 808-261-0740 FAX: 808-261-0749
CLIENT PROJECT#: 126001 Email: klockwood@esciencei.com, rchong@esciencei.com

LOCATION: HNL TWY C
COLLECTOR: Kaila Lockwood
DATE OF COLLECTION: ~~8/21/24~~ 1/8/26
PROJECT MANAGER: Robert Chong

ANALYSES

Sample ID	Depth	Time	Sample type	Container Type	TPH Fuel Scan (8015)	VOCs (8260)	PAHs (8270)	PCBs (8082)	Pesticides (8081)	Total RCRA 8 Metals (6010/6020)	TCLP RCRA 8 Metals	MI Volatile	MI Non-Volatile	Field Notes	Total Number of Containers	Total Number Received
SP-1	NA	0835	Soil	Ziploc/amber	X	X	X	X	X		X	X	X	X		2	2

RELINQUISHED BY (Signature) DATE/TIME RECEIVED BY (Signature) DATE/TIME

1/8/25 1030 1/8/26 10:30

RELINQUISHED BY (Signature) DATE/TIME RECEIVED BY (Signature) DATE/TIME

SAMPLE RECEIPT	
TOTAL NUMBER OF CONTAINERS	2
CHAIN OF CUSTODY SEALS INTACT	
RECEIVED IN GOOD CONDITION	Y
TEMPERATURE	2.4°C
PAGE 1 OF 1	

LABORATORY NOTES:

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Robert Chong
Environmental Science International, Inc
354 Uluniu Street, Suite 304
Kailua, Hawaii 96734

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JOB DESCRIPTION

126001; HNL TXY C

JOB NUMBER

320-128768-1

Eurofins Sacramento
880 Riverside Parkway
West Sacramento CA 95605

See page two for job notes and contact information.

my EOL

Eurofins Sacramento

Job Notes

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Authorization

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Authorized for release by
Micah Smith, Project Manager II
Micah.Smith@et.eurofinsus.com
(916)374-4302

Client: Environmental Science International, Inc
Project/Site: 126001; HNL TXY C

Laboratory Job ID: 320-128768-1

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Detection Summary 6
Client Sample Results 7
Isotope Dilution Summary 9
QC Sample Results 10
QC Association Summary 18
Lab Chronicle 19
Certification Summary 20
Method Summary 22
Sample Summary 23
Chain of Custody 24
Receipt Checklists 28

Definitions/Glossary

Client: Environmental Science International, Inc
Project/Site: 126001; HNL TXY C

Job ID: 320-128768-1

Qualifiers

LCMS

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Environmental Science International, Inc
Project: 126001; HNL TXY C

Job ID: 320-128768-1

Job ID: 320-128768-1 — Eurofins Sacramento

Job Narrative
320-128768-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The sample was received on 1/9/2026 9:40 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.4°C.

PFAS
Method 1633A: The low level continuing calibration verification (CCVL) associated with batch 320-898197 recovered above the upper control limit for Nonafluoro-3,6-dioxaheptanoic acid (NFDHA). The samples and method blank (MB) associated with this CCVL were non-detects, the low level laboratory control sample, laboratory control sample, and laboratory control sample duplicate (LLCS/LCS/LCSD) were within control limits for the affected analyte; therefore, the data have been reported: SP-1 (320-128768-1), (CCVL 320-898197/4), (LCS 320-898085/3-A), (LCSD 320-898085/4-A) and (MB 320-898085/1-A).

Method 1633A: The "I" qualifier means the transition mass ratio for the indicated analyte was outside the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty. The associated analytes have been flagged: SP-1 (320-128768-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Environmental Science International, Inc
Project/Site: 126001; HNL TXY C

Job ID: 320-128768-1

Client Sample ID: SP-1

Lab Sample ID: 320-128768-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid (PFBA)	0.20	J	0.39	0.097	ug/Kg	1		1633A	Total/NA
Perfluoropentanoic acid (PFPeA)	0.28		0.19	0.048	ug/Kg	1		1633A	Total/NA
Perfluorohexanoic acid (PFHxA)	0.34		0.19	0.048	ug/Kg	1		1633A	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.11	J	0.19	0.048	ug/Kg	1		1633A	Total/NA
Perfluorooctanoic acid (PFOA)	0.15	J	0.19	0.060	ug/Kg	1		1633A	Total/NA
Perfluorononanoic acid (PFNA)	0.051	J I	0.19	0.048	ug/Kg	1		1633A	Total/NA
Perfluorodecanoic acid (PFDA)	0.063	J	0.19	0.048	ug/Kg	1		1633A	Total/NA
Perfluorododecanoic acid (PFDoA)	0.050	J	0.19	0.048	ug/Kg	1		1633A	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.11	J	0.19	0.065	ug/Kg	1		1633A	Total/NA
Perfluoropentanesulfonic acid (PFPeS)	0.088	J	0.19	0.048	ug/Kg	1		1633A	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.82		0.19	0.048	ug/Kg	1		1633A	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	0.062	J	0.19	0.048	ug/Kg	1		1633A	Total/NA
Perfluorooctanesulfonic acid (PFOS)	7.1		0.19	0.048	ug/Kg	1		1633A	Total/NA
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	0.74		0.39	0.097	ug/Kg	1		1633A	Total/NA
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	0.34	J	0.39	0.097	ug/Kg	1		1633A	Total/NA
Incremented sample generated	1.0				NONE	1		Increment, prep	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Sacramento

Client Sample Results

Client: Environmental Science International, Inc
Project/Site: 126001; HNL TXY C

Job ID: 320-128768-1

Client Sample ID: SP-1

Date Collected: 01/08/26 08:35
Date Received: 01/09/26 09:40

Lab Sample ID: 320-128768-1

Matrix: Solid

Method: EPA 1633A - Per- and Polyfluoroalkyl Substances by LC/MS/MS, 1633A

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**0.20**	**J**	0.39	0.097	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
Perfluoropentanoic acid (PFPeA)	**0.28**		0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
Perfluorohexanoic acid (PFHxA)	**0.34**		0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
Perfluoroheptanoic acid (PFHpA)	**0.11**	**J**	0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
Perfluorooctanoic acid (PFOA)	**0.15**	**J**	0.19	0.060	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
Perfluorononanoic acid (PFNA)	**0.051**	**J I**	0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
Perfluorodecanoic acid (PFDA)	**0.063**	**J**	0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
Perfluoroundecanoic acid (PFUnA)	ND		0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
Perfluorododecanoic acid (PFDoA)	**0.050**	**J**	0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
Perfluorotridecanoic acid (PFTrDA)	ND		0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
Perfluorotetradecanoic acid (PFTeDA)	ND		0.19	0.056	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
Perfluorobutanesulfonic acid (PFBS)	**0.11**	**J**	0.19	0.065	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
Perfluoropentanesulfonic acid (PFPeS)	**0.088**	**J**	0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
Perfluorohexanesulfonic acid (PFHxS)	**0.82**		0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
Perfluoroheptanesulfonic acid (PFHpS)	**0.062**	**J**	0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
Perfluorooctanesulfonic acid (PFOS)	**7.1**		0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
Perfluorononanesulfonic acid (PFNS)	ND		0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
Perfluorododecanesulfonic acid (PFDoS)	ND		0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		0.39	0.097	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	**0.74**		0.39	0.097	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	**0.34**	**J**	0.39	0.097	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.19	0.061	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		0.97	0.24	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		0.97	0.24	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	^+	0.19	0.060	ug/Kg		01/22/26 05:20	01/23/26 04:28	1

Client Sample Results

Client: Environmental Science International, Inc
Project/Site: 126001; HNL TXY C

Job ID: 320-128768-1

Client Sample ID: SP-1

Date Collected: 01/08/26 08:35
Date Received: 01/09/26 09:40

Lab Sample ID: 320-128768-1

Matrix: Solid

Method: EPA 1633A - Per- and Polyfluoroalkyl Substances by LC/MS/MS, 1633A (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.19	0.073	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		0.19	0.048	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		0.39	0.097	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		0.97	0.24	ug/Kg		01/22/26 05:20	01/23/26 04:28	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		0.97	0.24	ug/Kg		01/22/26 05:20	01/23/26 04:28	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*98.6*		*8 - 130*	*01/22/26 05:20*	*01/23/26 04:28*	*1*
13C5 PFPeA	*115*		*35 - 130*	*01/22/26 05:20*	*01/23/26 04:28*	*1*
13C5 PFHxA	*110*		*40 - 130*	*01/22/26 05:20*	*01/23/26 04:28*	*1*
13C4 PFHpA	*108*		*40 - 130*	*01/22/26 05:20*	*01/23/26 04:28*	*1*
13C8 PFOA	*111*		*40 - 130*	*01/22/26 05:20*	*01/23/26 04:28*	*1*
13C9 PFNA	*109*		*40 - 130*	*01/22/26 05:20*	*01/23/26 04:28*	*1*
13C6 PFDA	*113*		*40 - 130*	*01/22/26 05:20*	*01/23/26 04:28*	*1*
13C7 PFUnA	*103*		*40 - 130*	*01/22/26 05:20*	*01/23/26 04:28*	*1*
13C2 PFDoA	*103*		*40 - 130*	*01/22/26 05:20*	*01/23/26 04:28*	*1*
13C2 PFTeDA	*98.2*		*20 - 130*	*01/22/26 05:20*	*01/23/26 04:28*	*1*
13C3 PFBS	*102*		*40 - 135*	*01/22/26 05:20*	*01/23/26 04:28*	*1*
13C3 PFHxS	*117*		*40 - 130*	*01/22/26 05:20*	*01/23/26 04:28*	*1*
13C8 PFOS	*121*		*40 - 130*	*01/22/26 05:20*	*01/23/26 04:28*	*1*
13C8 FOSA	*111*		*40 - 130*	*01/22/26 05:20*	*01/23/26 04:28*	*1*
d3-NMeFOSAA	*83.3*		*40 - 135*	*01/22/26 05:20*	*01/23/26 04:28*	*1*
d5-NEtFOSAA	*86.2*		*40 - 150*	*01/22/26 05:20*	*01/23/26 04:28*	*1*
13C2 4:2 FTS	*152*		*40 - 165*	*01/22/26 05:20*	*01/23/26 04:28*	*1*
13C2 6:2 FTS	*139*		*40 - 215*	*01/22/26 05:20*	*01/23/26 04:28*	*1*
13C2 8:2 FTS	*160*		*40 - 275*	*01/22/26 05:20*	*01/23/26 04:28*	*1*
13C3 HFPO-DA	*108*		*40 - 130*	*01/22/26 05:20*	*01/23/26 04:28*	*1*
d7-N-MeFOSE-M	*105*		*20 - 130*	*01/22/26 05:20*	*01/23/26 04:28*	*1*
d9-N-EtFOSE-M	*91.1*		*15 - 130*	*01/22/26 05:20*	*01/23/26 04:28*	*1*
d5-NEtPFOSA	*89.0*		*10 - 130*	*01/22/26 05:20*	*01/23/26 04:28*	*1*
d3-NMePFOSA	*85.9*		*10 - 130*	*01/22/26 05:20*	*01/23/26 04:28*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Incremented sample generated (EPA Increment, prep)	**1.0**				NONE			01/14/26 13:41	1

Isotope Dilution Summary

Client: Environmental Science International, Inc
Project/Site: 126001; HNL TXY C

Job ID: 320-128768-1

Method: 1633A - Per- and Polyfluoroalkyl Substances by LC/MS/MS, 1633A

Matrix: Solid **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFBA	PFPeA	13C5PHA	C4PFHA	C8PFOA	C9PFNA	C6PFDA	13C7PUA
Lab Sample ID	Client Sample ID	(8-130)	(35-130)	(40-130)	(40-130)	(40-130)	(40-130)	(40-130)	(40-130)
320-128768-1	SP-1	98.6	115	110	108	111	109	113	103
LCS 320-898085/3-A	Lab Control Sample	105	127	119	112	114	118	100	88.9
LCSD 320-898085/4-A	Lab Control Sample Dup	106	123	117	117	118	118	103	93.2
LLCS 320-898085/2-A	Lab Control Sample	106	108	107	106	108	110	105	91.4
MB 320-898085/1-A	Method Blank	101	122	116	112	113	108	94.1	82.4

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFDoA	PFTDA	C3PFBS	C3PFHS	C8PFOS	PFOSA	d3NMFOS	d5NEFOS
Lab Sample ID	Client Sample ID	(40-130)	(20-130)	(40-135)	(40-130)	(40-130)	(40-130)	(40-135)	(40-150)
320-128768-1	SP-1	103	98.2	102	117	121	111	83.3	86.2
LCS 320-898085/3-A	Lab Control Sample	82.1	78.7	108	111	105	115	88.4	84.8
LCSD 320-898085/4-A	Lab Control Sample Dup	71.8	73.9	112	109	109	99.1	74.3	65.3
LLCS 320-898085/2-A	Lab Control Sample	100	88.6	105	106	107	104	103	91.0
MB 320-898085/1-A	Method Blank	76.8	80.6	114	112	104	99.1	78.4	70.1

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		M242FTS	M262FTS	M282FTS	HFPODA	NMFM	NEFM	d5NPFSA	d3NMFSA
Lab Sample ID	Client Sample ID	(40-165)	(40-215)	(40-275)	(40-130)	(20-130)	(15-130)	(10-130)	(10-130)
320-128768-1	SP-1	152	139	160	108	105	91.1	89.0	85.9
LCS 320-898085/3-A	Lab Control Sample	98.5	91.4	97.3	123	109	96.6	84.9	75.9
LCSD 320-898085/4-A	Lab Control Sample Dup	107	91.0	82.3	123	77.6	71.5	79.8	66.3
LLCS 320-898085/2-A	Lab Control Sample	110	115	105	111	94.9	96.9	94.7	91.1
MB 320-898085/1-A	Method Blank	110	106	110	114	89.9	85.9	85.8	79.4

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
13C5PHA = 13C5 PFHxA
C4PFHA = 13C4 PFHpA
C8PFOA = 13C8 PFOA
C9PFNA = 13C9 PFNA
C6PFDA = 13C6 PFDA
13C7PUA = 13C7 PFUnA
PFDoA = 13C2 PFDoA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
C3PFHS = 13C3 PFHxS
C8PFOS = 13C8 PFOS
PFOSA = 13C8 FOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M242FTS = 13C2 4:2 FTS
M262FTS = 13C2 6:2 FTS
M282FTS = 13C2 8:2 FTS
HFPODA = 13C3 HFPO-DA
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M
d5NPFSA = d5-NEtPFOSA
d3NMFSA = d3-NMePFOSA

QC Sample Results

Client: Environmental Science International, Inc
Project/Site: 126001; HNL TXY C

Job ID: 320-128768-1

Method: 1633A - Per- and Polyfluoroalkyl Substances by LC/MS/MS, 1633A

Lab Sample ID: MB 320-898085/1-A
Matrix: Solid
Analysis Batch: 898253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 898085

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.40	0.10	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
Perfluoropentanoic acid (PFPeA)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
Perfluorohexanoic acid (PFHxA)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
Perfluoroheptanoic acid (PFHpA)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
Perfluorooctanoic acid (PFOA)	ND		0.20	0.062	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
Perfluorononanoic acid (PFNA)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
Perfluorodecanoic acid (PFDA)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
Perfluoroundecanoic acid (PFUnA)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
Perfluorododecanoic acid (PFDoA)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
Perfluorotridecanoic acid (PFTrDA)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
Perfluorotetradecanoic acid (PFTeDA)	ND		0.20	0.058	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.20	0.067	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
Perfluoropentanesulfonic acid (PFPeS)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
Perfluorononanesulfonic acid (PFNS)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
Perfluorododecanesulfonic acid (PFDoS)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	ND		0.40	0.10	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	ND		0.40	0.10	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	ND		0.40	0.10	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.20	0.063	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
N-methylperfluorooctane sulfonamide (NMeFOSA)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
N-ethylperfluorooctane sulfonamide (NEtFOSA)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	ND		1.0	0.25	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	ND		1.0	0.25	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND		0.20	0.062	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1

QC Sample Results

Client: Environmental Science International, Inc
Project/Site: 126001; HNL TXY C

Job ID: 320-128768-1

Method: 1633A - Per- and Polyfluoroalkyl Substances by LC/MS/MS, 1633A (Continued)

Lab Sample ID: MB 320-898085/1-A
Matrix: Solid
Analysis Batch: 898253

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 898085

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	ND		0.20	0.075	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	ND		0.20	0.050	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
3-Perfluoropropylpropanoic acid (3:3 FTCA)	ND		0.40	0.10	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
3-Perfluoropentylpropanoic acid (5:3 FTCA)	ND		1.0	0.25	ug/Kg		01/22/26 05:20	01/23/26 03:22	1
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	ND		1.0	0.25	ug/Kg		01/22/26 05:20	01/23/26 03:22	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*101*		*8 - 130*	*01/22/26 05:20*	*01/23/26 03:22*	*1*
13C5 PFPeA	*122*		*35 - 130*	*01/22/26 05:20*	*01/23/26 03:22*	*1*
13C5 PFHxA	*116*		*40 - 130*	*01/22/26 05:20*	*01/23/26 03:22*	*1*
13C4 PFHpA	*112*		*40 - 130*	*01/22/26 05:20*	*01/23/26 03:22*	*1*
13C8 PFOA	*113*		*40 - 130*	*01/22/26 05:20*	*01/23/26 03:22*	*1*
13C9 PFNA	*108*		*40 - 130*	*01/22/26 05:20*	*01/23/26 03:22*	*1*
13C6 PFDA	*94.1*		*40 - 130*	*01/22/26 05:20*	*01/23/26 03:22*	*1*
13C7 PFUnA	*82.4*		*40 - 130*	*01/22/26 05:20*	*01/23/26 03:22*	*1*
13C2 PFDoA	*76.8*		*40 - 130*	*01/22/26 05:20*	*01/23/26 03:22*	*1*
13C2 PFTeDA	*80.6*		*20 - 130*	*01/22/26 05:20*	*01/23/26 03:22*	*1*
13C3 PFBS	*114*		*40 - 135*	*01/22/26 05:20*	*01/23/26 03:22*	*1*
13C3 PFHxS	*112*		*40 - 130*	*01/22/26 05:20*	*01/23/26 03:22*	*1*
13C8 PFOS	*104*		*40 - 130*	*01/22/26 05:20*	*01/23/26 03:22*	*1*
13C8 FOSA	*99.1*		*40 - 130*	*01/22/26 05:20*	*01/23/26 03:22*	*1*
d3-NMeFOSAA	*78.4*		*40 - 135*	*01/22/26 05:20*	*01/23/26 03:22*	*1*
d5-NEtFOSAA	*70.1*		*40 - 150*	*01/22/26 05:20*	*01/23/26 03:22*	*1*
13C2 4:2 FTS	*110*		*40 - 165*	*01/22/26 05:20*	*01/23/26 03:22*	*1*
13C2 6:2 FTS	*106*		*40 - 215*	*01/22/26 05:20*	*01/23/26 03:22*	*1*
13C2 8:2 FTS	*110*		*40 - 275*	*01/22/26 05:20*	*01/23/26 03:22*	*1*
13C3 HFPO-DA	*114*		*40 - 130*	*01/22/26 05:20*	*01/23/26 03:22*	*1*
d7-N-MeFOSE-M	*89.9*		*20 - 130*	*01/22/26 05:20*	*01/23/26 03:22*	*1*
d9-N-EtFOSE-M	*85.9*		*15 - 130*	*01/22/26 05:20*	*01/23/26 03:22*	*1*
d5-NEtPFOSA	*85.8*		*10 - 130*	*01/22/26 05:20*	*01/23/26 03:22*	*1*
d3-NMePFOSA	*79.4*		*10 - 130*	*01/22/26 05:20*	*01/23/26 03:22*	*1*

Lab Sample ID: LCS 320-898085/3-A
Matrix: Solid
Analysis Batch: 898253

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 898085

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	1.00	0.956		ug/Kg		96	70 - 140
Perfluoropentanoic acid (PFPeA)	0.500	0.392		ug/Kg		78	60 - 150
Perfluorohexanoic acid (PFHxA)	0.500	0.511		ug/Kg		102	65 - 140
Perfluoroheptanoic acid (PFHpA)	0.500	0.532		ug/Kg		106	65 - 145
Perfluorooctanoic acid (PFOA)	0.500	0.503		ug/Kg		101	70 - 150
Perfluorononanoic acid (PFNA)	0.500	0.464		ug/Kg		93	70 - 155
Perfluorodecanoic acid (PFDA)	0.500	0.521		ug/Kg		104	70 - 155

QC Sample Results

Client: Environmental Science International, Inc
Project/Site: 126001; HNL TXY C

Job ID: 320-128768-1

Method: 1633A - Per- and Polyfluoroalkyl Substances by LC/MS/MS, 1633A (Continued)

Lab Sample ID: LCS 320-898085/3-A
Matrix: Solid
Analysis Batch: 898253

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 898085

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroundecanoic acid (PFUnA)	0.500	0.491		ug/Kg		98	70 - 155
Perfluorododecanoic acid (PFDoA)	0.500	0.526		ug/Kg		105	70 - 150
Perfluorotridecanoic acid (PFTrDA)	0.500	0.502		ug/Kg		100	65 - 150
Perfluorotetradecanoic acid (PFTeDA)	0.500	0.588		ug/Kg		118	65 - 150
Perfluorobutanesulfonic acid (PFBS)	0.444	0.436		ug/Kg		98	65 - 145
Perfluoropentanesulfonic acid (PFPeS)	0.470	0.445		ug/Kg		95	55 - 160
Perfluorohexanesulfonic acid (PFHxS)	0.456	0.416		ug/Kg		91	60 - 150
Perfluoroheptanesulfonic acid (PFHpS)	0.477	0.474		ug/Kg		99	65 - 155
Perfluorooctanesulfonic acid (PFOS)	0.465	0.458		ug/Kg		99	65 - 160
Perfluorononanesulfonic acid (PFNS)	0.481	0.487		ug/Kg		101	55 - 140
Perfluorodecanesulfonic acid (PFDS)	0.482	0.477		ug/Kg		99	30 - 140
Perfluorododecanesulfonic acid (PFDoS)	0.485	0.403		ug/Kg		83	25 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	0.938	1.02		ug/Kg		109	60 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	0.952	1.10		ug/Kg		115	55 - 200
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	0.960	0.987		ug/Kg		103	70 - 150
Perfluorooctanesulfonamide (PFOSA)	0.500	0.471		ug/Kg		94	70 - 140
N-methylperfluorooctane sulfonamide (NMeFOSA)	0.500	0.549		ug/Kg		110	70 - 155
N-ethylperfluorooctane sulfonamide (NEtFOSA)	0.500	0.427		ug/Kg		85	70 - 140
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.500	0.466		ug/Kg		93	65 - 155
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.500	0.525		ug/Kg		105	65 - 165
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	2.50	2.29		ug/Kg		91	70 - 140
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	2.50	2.46		ug/Kg		98	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	0.375	0.350		ug/Kg		93	70 - 145
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.473	0.433		ug/Kg		92	70 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.500	0.432		ug/Kg		86	30 - 140
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.500	0.492		ug/Kg		98	60 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.500	0.522		ug/Kg		104	60 - 155

QC Sample Results

Client: Environmental Science International, Inc
Project/Site: 126001; HNL TXY C

Job ID: 320-128768-1

Method: 1633A - Per- and Polyfluoroalkyl Substances by LC/MS/MS, 1633A (Continued)

Lab Sample ID: LCS 320-898085/3-A
Matrix: Solid
Analysis Batch: 898253

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 898085

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)			0.467	0.489		ug/Kg		105	70 - 150		
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)			0.472	0.452		ug/Kg		96	45 - 160		
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)			0.446	0.382		ug/Kg		86	70 - 140		
3-Perfluoropropylpropanoic acid (3:3 FTCA)			1.00	1.06		ug/Kg		106	45 - 130		
3-Perfluoropentylpropanoic acid (5:3 FTCA)			2.50	2.67		ug/Kg		107	60 - 130		
3-Perfluoroheptylpropanoic acid (7:3 FTCA)			2.50	2.67		ug/Kg		107	60 - 150		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*105*		*8 - 130*
13C5 PFPeA	*127*		*35 - 130*
13C5 PFHxA	*119*		*40 - 130*
13C4 PFHpA	*112*		*40 - 130*
13C8 PFOA	*114*		*40 - 130*
13C9 PFNA	*118*		*40 - 130*
13C6 PFDA	*100*		*40 - 130*
13C7 PFUnA	*88.9*		*40 - 130*
13C2 PFDoA	*82.1*		*40 - 130*
13C2 PFTeDA	*78.7*		*20 - 130*
13C3 PFBS	*108*		*40 - 135*
13C3 PFHxS	*111*		*40 - 130*
13C8 PFOS	*105*		*40 - 130*
13C8 FOSA	*115*		*40 - 130*
d3-NMeFOSAA	*88.4*		*40 - 135*
d5-NEtFOSAA	*84.8*		*40 - 150*
13C2 4:2 FTS	*98.5*		*40 - 165*
13C2 6:2 FTS	*91.4*		*40 - 215*
13C2 8:2 FTS	*97.3*		*40 - 275*
13C3 HFPO-DA	*123*		*40 - 130*
d7-N-MeFOSE-M	*109*		*20 - 130*
d9-N-EtFOSE-M	*96.6*		*15 - 130*
d5-NEtPFOSA	*84.9*		*10 - 130*
d3-NMePFOSA	*75.9*		*10 - 130*

Lab Sample ID: LCSD 320-898085/4-A
Matrix: Solid
Analysis Batch: 898253

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 898085

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)			1.00	0.928		ug/Kg		93	70 - 140	3	30
Perfluoropentanoic acid (PFPeA)			0.500	0.440		ug/Kg		88	60 - 150	12	30
Perfluorohexanoic acid (PFHxA)			0.500	0.530		ug/Kg		106	65 - 140	4	30
Perfluoroheptanoic acid (PFHpA)			0.500	0.471		ug/Kg		94	65 - 145	12	30
Perfluorooctanoic acid (PFOA)			0.500	0.469		ug/Kg		94	70 - 150	7	30

QC Sample Results

Client: Environmental Science International, Inc
Project/Site: 126001; HNL TXY C

Job ID: 320-128768-1

Method: 1633A - Per- and Polyfluoroalkyl Substances by LC/MS/MS, 1633A (Continued)

Lab Sample ID: LCSD 320-898085/4-A
Matrix: Solid
Analysis Batch: 898253

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 898085

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorononanoic acid (PFNA)	0.500	0.450		ug/Kg		90	70 - 155	3	30
Perfluorodecanoic acid (PFDA)	0.500	0.488		ug/Kg		98	70 - 155	6	30
Perfluoroundecanoic acid (PFUnA)	0.500	0.504		ug/Kg		101	70 - 155	3	30
Perfluorododecanoic acid (PFDoA)	0.500	0.539		ug/Kg		108	70 - 150	3	30
Perfluorotridecanoic acid (PFTrDA)	0.500	0.443		ug/Kg		89	65 - 150	12	30
Perfluorotetradecanoic acid (PFTeDA)	0.500	0.534		ug/Kg		107	65 - 150	10	30
Perfluorobutanesulfonic acid (PFBS)	0.444	0.430		ug/Kg		97	65 - 145	1	30
Perfluoropentanesulfonic acid (PFPeS)	0.470	0.452		ug/Kg		96	55 - 160	1	30
Perfluorohexanesulfonic acid (PFHxS)	0.456	0.460		ug/Kg		101	60 - 150	10	30
Perfluoroheptanesulfonic acid (PFHpS)	0.477	0.443		ug/Kg		93	65 - 155	7	30
Perfluorooctanesulfonic acid (PFOS)	0.465	0.435		ug/Kg		93	65 - 160	5	30
Perfluorononanesulfonic acid (PFNS)	0.481	0.443		ug/Kg		92	55 - 140	9	30
Perfluorodecanesulfonic acid (PFDS)	0.482	0.391		ug/Kg		81	30 - 140	20	30
Perfluorododecanesulfonic acid (PFDoS)	0.485	0.310		ug/Kg		64	25 - 160	26	30
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	0.938	0.835		ug/Kg		89	60 - 150	20	30
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	0.952	0.984		ug/Kg		103	55 - 200	11	30
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	0.960	1.08		ug/Kg		113	70 - 150	9	30
Perfluorooctanesulfonamide (PFOSA)	0.500	0.479		ug/Kg		96	70 - 140	2	30
N-methylperfluorooctane sulfonamide (NMeFOSA)	0.500	0.597		ug/Kg		119	70 - 155	8	30
N-ethylperfluorooctane sulfonamide (NEtFOSA)	0.500	0.428		ug/Kg		86	70 - 140	0	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.500	0.512		ug/Kg		102	65 - 155	9	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.500	0.553		ug/Kg		111	65 - 165	5	30
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	2.50	2.46		ug/Kg		98	70 - 140	7	30
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	2.50	2.52		ug/Kg		101	70 - 135	2	30
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	0.375	0.330		ug/Kg		88	70 - 145	6	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.473	0.400		ug/Kg		85	70 - 160	8	30
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.500	0.485		ug/Kg		97	30 - 140	11	30
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.500	0.497		ug/Kg		99	60 - 150	1	30

QC Sample Results

Client: Environmental Science International, Inc
Project/Site: 126001; HNL TXY C

Job ID: 320-128768-1

Method: 1633A - Per- and Polyfluoroalkyl Substances by LC/MS/MS, 1633A (Continued)

Lab Sample ID: LCSD 320-898085/4-A
Matrix: Solid
Analysis Batch: 898253

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 898085

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)			0.500	0.515		ug/Kg		103	60 - 155	2	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)			0.467	0.417		ug/Kg		89	70 - 150	16	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)			0.472	0.354		ug/Kg		75	45 - 160	24	30
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)			0.446	0.401		ug/Kg		90	70 - 140	5	30
3-Perfluoropropylpropanoic acid (3:3 FTCA)			1.00	1.10		ug/Kg		110	45 - 130	4	30
3-Perfluoropentylpropanoic acid (5:3 FTCA)			2.50	2.63		ug/Kg		105	60 - 130	1	30
3-Perfluoroheptylpropanoic acid (7:3 FTCA)			2.50	2.80		ug/Kg		112	60 - 150	5	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
13C4 PFBA	*106*		*8 - 130*
13C5 PFPeA	*123*		*35 - 130*
13C5 PFHxA	*117*		*40 - 130*
13C4 PFHpA	*117*		*40 - 130*
13C8 PFOA	*118*		*40 - 130*
13C9 PFNA	*118*		*40 - 130*
13C6 PFDA	*103*		*40 - 130*
13C7 PFUnA	*93.2*		*40 - 130*
13C2 PFDoA	*71.8*		*40 - 130*
13C2 PFTeDA	*73.9*		*20 - 130*
13C3 PFBS	*112*		*40 - 135*
13C3 PFHxS	*109*		*40 - 130*
13C8 PFOS	*109*		*40 - 130*
13C8 FOSA	*99.1*		*40 - 130*
d3-NMeFOSAA	*74.3*		*40 - 135*
d5-NEtFOSAA	*65.3*		*40 - 150*
13C2 4:2 FTS	*107*		*40 - 165*
13C2 6:2 FTS	*91.0*		*40 - 215*
13C2 8:2 FTS	*82.3*		*40 - 275*
13C3 HFPO-DA	*123*		*40 - 130*
d7-N-MeFOSE-M	*77.6*		*20 - 130*
d9-N-EtFOSE-M	*71.5*		*15 - 130*
d5-NEtPFOSA	*79.8*		*10 - 130*
d3-NMePFOSA	*66.3*		*10 - 130*

Lab Sample ID: LLCS 320-898085/2-A
Matrix: Solid
Analysis Batch: 898446

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 898085

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)			0.160	0.138	J	ug/Kg		86	70 - 140
Perfluoropentanoic acid (PFPeA)			0.0800	0.0876	J	ug/Kg		110	60 - 150
Perfluorohexanoic acid (PFHxA)			0.0800	0.0849	J	ug/Kg		106	65 - 140

QC Sample Results

Client: Environmental Science International, Inc
Project/Site: 126001; HNL TXY C

Job ID: 320-128768-1

Method: 1633A - Per- and Polyfluoroalkyl Substances by LC/MS/MS, 1633A (Continued)

Lab Sample ID: LLCS 320-898085/2-A
Matrix: Solid
Analysis Batch: 898446

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 898085

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroheptanoic acid (PFHpA)	0.0800	0.0907	J	ug/Kg		113	65 - 145
Perfluorooctanoic acid (PFOA)	0.0800	0.0759	J	ug/Kg		95	70 - 150
Perfluorononanoic acid (PFNA)	0.0800	0.0952	J	ug/Kg		119	70 - 155
Perfluorodecanoic acid (PFDA)	0.0800	0.0833	J	ug/Kg		104	70 - 155
Perfluoroundecanoic acid (PFUnA)	0.0800	0.0966	J	ug/Kg		121	70 - 155
Perfluorododecanoic acid (PFDoA)	0.0800	0.0926	J	ug/Kg		116	70 - 150
Perfluorotridecanoic acid (PFTrDA)	0.0800	0.0870	J	ug/Kg		109	65 - 150
Perfluorotetradecanoic acid (PFTeDA)	0.0800	0.0994	J	ug/Kg		124	65 - 150
Perfluorobutanesulfonic acid (PFBS)	0.0710	0.0713	J	ug/Kg		100	65 - 145
Perfluoropentanesulfonic acid (PFPeS)	0.0752	0.0780	J	ug/Kg		104	55 - 160
Perfluorohexanesulfonic acid (PFHxS)	0.0730	0.0873	J	ug/Kg		120	60 - 150
Perfluoroheptanesulfonic acid (PFHpS)	0.0763	0.0855	J	ug/Kg		112	65 - 155
Perfluorooctanesulfonic acid (PFOS)	0.0744	0.0961	J	ug/Kg		129	65 - 160
Perfluorononanesulfonic acid (PFNS)	0.0770	0.0924	J	ug/Kg		120	55 - 140
Perfluorodecanesulfonic acid (PFDS)	0.0771	0.0713	J	ug/Kg		92	30 - 140
Perfluorododecanesulfonic acid (PFDoS)	0.0776	0.0780	J	ug/Kg		100	25 - 160
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2 FTS)	0.150	0.167	J	ug/Kg		111	60 - 150
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2 FTS)	0.152	0.148	J	ug/Kg		97	55 - 200
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2 FTS)	0.154	0.155	J	ug/Kg		101	70 - 150
Perfluorooctanesulfonamide (PFOSA)	0.0800	0.0829	J	ug/Kg		104	70 - 140
N-methylperfluorooctane sulfonamide (NMeFOSA)	0.0800	0.0824	J	ug/Kg		103	70 - 155
N-ethylperfluorooctane sulfonamide (NEtFOSA)	0.0800	0.0717	J	ug/Kg		90	70 - 140
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	0.0800	0.0815	J	ug/Kg		102	65 - 155
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.0800	0.115	J	ug/Kg		144	65 - 165
N-methylperfluorooctane sulfonamidoethanol (NMeFOSE)	0.400	0.405	J	ug/Kg		101	70 - 140
N-ethylperfluorooctane sulfonamidoethanol (NEtFOSE)	0.400	0.364	J	ug/Kg		91	70 - 135
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	0.0600	ND		ug/Kg		77	70 - 145
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.0757	0.0858	J	ug/Kg		113	70 - 160
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.0800	0.0829	J	ug/Kg		104	30 - 140

QC Sample Results

Client: Environmental Science International, Inc
Project/Site: 126001; HNL TXY C

Job ID: 320-128768-1

Method: 1633A - Per- and Polyfluoroalkyl Substances by LC/MS/MS, 1633A (Continued)

Lab Sample ID: LLCS 320-898085/2-A
Matrix: Solid
Analysis Batch: 898446

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 898085

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.0800	0.0923	J	ug/Kg		115	60 - 150
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.0800	0.0897	J	ug/Kg		112	60 - 155
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	0.0747	0.0773	J	ug/Kg		103	70 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	0.0755	ND		ug/Kg		93	45 - 160
Perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	0.0714	0.0790	J	ug/Kg		111	70 - 140
3-Perfluoropropylpropanoic acid (3:3 FTCA)	0.160	0.159	J	ug/Kg		100	45 - 130
3-Perfluoropentylpropanoic acid (5:3 FTCA)	0.400	0.426	J	ug/Kg		106	60 - 130
3-Perfluoroheptylpropanoic acid (7:3 FTCA)	0.400	0.447	J	ug/Kg		112	60 - 150

Isotope Dilution	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
13C4 PFBA	*106*		*8 - 130*
13C5 PFPeA	*108*		*35 - 130*
13C5 PFHxA	*107*		*40 - 130*
13C4 PFHpA	*106*		*40 - 130*
13C8 PFOA	*108*		*40 - 130*
13C9 PFNA	*110*		*40 - 130*
13C6 PFDA	*105*		*40 - 130*
13C7 PFUnA	*91.4*		*40 - 130*
13C2 PFDoA	*100*		*40 - 130*
13C2 PFTeDA	*88.6*		*20 - 130*
13C3 PFBS	*105*		*40 - 135*
13C3 PFHxS	*106*		*40 - 130*
13C8 PFOS	*107*		*40 - 130*
13C8 FOSA	*104*		*40 - 130*
d3-NMeFOSAA	*103*		*40 - 135*
d5-NEtFOSAA	*91.0*		*40 - 150*
13C2 4:2 FTS	*110*		*40 - 165*
13C2 6:2 FTS	*115*		*40 - 215*
13C2 8:2 FTS	*105*		*40 - 275*
13C3 HFPO-DA	*111*		*40 - 130*
d7-N-MeFOSE-M	*94.9*		*20 - 130*
d9-N-EtFOSE-M	*96.9*		*15 - 130*
d5-NEtPFOSA	*94.7*		*10 - 130*
d3-NMePFOSA	*91.1*		*10 - 130*

QC Association Summary

Client: Environmental Science International, Inc
Project/Site: 126001; HNL TXY C

Job ID: 320-128768-1

LCMS

Prep Batch: 898085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-128768-1	SP-1	Total/NA	Solid	1633A Shake	
MB 320-898085/1-A	Method Blank	Total/NA	Solid	1633A Shake	
LCS 320-898085/3-A	Lab Control Sample	Total/NA	Solid	1633A Shake	
LCSD 320-898085/4-A	Lab Control Sample Dup	Total/NA	Solid	1633A Shake	
LLCS 320-898085/2-A	Lab Control Sample	Total/NA	Solid	1633A Shake	

Analysis Batch: 898253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-128768-1	SP-1	Total/NA	Solid	1633A	898085
MB 320-898085/1-A	Method Blank	Total/NA	Solid	1633A	898085
LCS 320-898085/3-A	Lab Control Sample	Total/NA	Solid	1633A	898085
LCSD 320-898085/4-A	Lab Control Sample Dup	Total/NA	Solid	1633A	898085

Analysis Batch: 898446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LLCS 320-898085/2-A	Lab Control Sample	Total/NA	Solid	1633A	898085

General Chemistry

Analysis Batch: 512020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-128768-1	SP-1	Total/NA	Solid	Increment, prep	

Lab Chronicle

Client: Environmental Science International, Inc
Project/Site: 126001; HNL TXY C

Job ID: 320-128768-1

Client Sample ID: SP-1

Date Collected: 01/08/26 08:35
Date Received: 01/09/26 09:40

Lab Sample ID: 320-128768-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	1633A Shake			2.064 g	5.0 mL	898085	01/22/26 05:20	R1T	EET SAC
Total/NA	Analysis	1633A		1			898253	01/23/26 04:28	N1K	EET SAC
Total/NA	Analysis	Increment, prep		1			512020	01/14/26 13:41	TOA	EET SEA

Laboratory References:

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Accreditation/Certification Summary

Client: Environmental Science International, Inc
Job ID: 320-128768-1
Project/Site: 126001; HNL TXY C

Laboratory: Eurofins Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska	State	CA00044	06-30-26
Alaska (UST)	State	17-020	02-20-27
ANAB	Dept. of Defense ELAP	L2468	01-20-27
ANAB	Dept. of Energy	L2468.01	01-20-27
ANAB	ISO/IEC 17025	L2468.03	01-20-27
Arizona	State	AZ0708	08-11-26
Arkansas DEQ	State	88-0691	05-18-26
California	State	2897	01-31-26
Colorado	State	CA00044	08-31-26
Florida	NELAP	E87570	06-30-26
Georgia	State	4040	01-29-26
Illinois	NELAP	200060	03-31-26
Kansas	NELAP	E-10375	10-31-26
Louisiana	NELAP	01944	06-30-26
Louisiana (All)	NELAP	01944	06-30-26
Maine	State	CA00004	04-14-26
Massachusetts	State	M-CA044	06-30-26
Michigan	State	9947	01-29-26
Minnesota	NELAP	2749448	12-31-26
Nevada	State	CA00044	07-31-26
New Jersey	NELAP	CA005	06-30-26
New York	NELAP	11666	04-01-26
Ohio	State	41252	01-29-26
Oregon	NELAP	4040	01-29-26
Texas	NELAP	T104704399-23-17	05-31-26
US Fish & Wildlife	US Federal Programs	A22139	04-30-26
USDA	US Federal Programs	P330-18-00239	02-28-26
Utah	NELAP	CA000442023-16	02-28-26
Virginia	NELAP	460278	03-14-26
Washington	State	C581	05-05-26
West Virginia (DW)	State	9930C	02-01-26
West Virginia DEP	State	422	03-28-26
Wisconsin	State	998204680	08-31-26
Wyoming	State Program	8TMS-L	01-28-19 *

Laboratory: Eurofins Seattle

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	20-004	02-19-27
ANAB	Dept. of Defense ELAP	L2236	01-19-27
California	State	2954	07-07-26
Florida	NELAP	E87575	06-30-26
Louisiana (All)	NELAP	03073	06-30-26
Maine	State	WA01273	05-02-26
Montana (UST)	State	NA	04-14-27
New Jersey	NELAP	WA014	06-30-26
New York	NELAP	11662	04-01-26
Oregon	NELAP	4167	01-19-26
US Fish & Wildlife	US Federal Programs	A20571	06-30-26

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Eurofins Sacramento

Accreditation/Certification Summary

Client: Environmental Science International, Inc
Job ID: 320-128768-1
Project/Site: 126001; HNL TXY C

Laboratory: Eurofins Seattle (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
USDA	US Federal Programs	525-23-4-22573	01-24-28
Washington	State	C788	07-13-26

Method Summary

Client: Environmental Science International, Inc
Project/Site: 126001; HNL TXY C

Job ID: 320-128768-1

Method	Method Description	Protocol	Laboratory
1633A	Per- and Polyfluoroalkyl Substances by LC/MS/MS, 1633A	EPA	EET SAC
Increment, prep	ISM - Dry, Disaggregate, Sieve, 2 D Slabcake Subsample	EPA	EET SEA
1633A Shake	Shake Extraction with SPE	EPA	EET SAC

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EET SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

EET SEA = Eurofins Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Sample Summary

Client: Environmental Science International, Inc
Project/Site: 126001; HNL TXY C

Job ID: 320-128768-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
320-128768-1	SP-1	Solid	01/08/26 08:35	01/09/26 09:40	Hawaii

Eurofins Sacramento
880 Riverside Parkway
West Sacramento, CA 95605-1500
phone 916 373 5600 fax 303 467 7248

Chain of Custody Record

eurofins Environment Testing America

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

Eurofins Environment Testing Northern California, LLC

Client Contact	**Project Manager:** Robert Chong		COC No
Environmental Science International	**Email.** rchong@esciencei com klockwood@esciencei com	**Site Contact:** Kaila Lockwood	**Date:** 1/8/26 — 1 of 1 COCs
354 Uluniu Street; Suite 304	**Tel/Fax:**	**Lab Contact:** Darla Smith	**Carrier:** — TALS Project #:
Kailua, HI 96734	**Analysis Turnaround Time** ☑ CALENDAR DAYS ☐ WORKING DAYS		Sampler: K_
808-261-0740 Phone	TAT if different from Below ☑ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		**For Lab Use Only:** Walk-in Client: / Lab Sampling
FAX			
Project Name HNL TWY C			Job / SDG No
Site HNL			
P O # 126001			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	ISM/40 PFAS 1633	Sample Specific Notes
SP-1	1/8/26	0935	C	Soil	1	N	N	x	

320-128768 Chain of Custody

Therm. ID ____ Cor ____ Unc. ____
Cooler Dsc SunBlue
Packing None
Cust. Seal Yes ___ No ___
Blue Ice, Wet, Dry, None
SERVICE CENTE
Therm ID H1180
Cor 5.9 Unc 5.6

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:
Please run LCS/LCSD
Tau standard EDD

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No 263497 6 + Seals		Cooler Temp (°C) Obs'd 0.4	Corr'd 0.4	Therm ID No LOG		
Relinquished by: Kaila Lockwood	Company: ESI	Date/Time 1/8/26	Received by:	Company:	Date/Time 1/8/26 1051		
Relinquished by:	Company:	Date/Time 1/8/26 1645	Received by:	Company: EEI SAC	Date/Time 01/09/26 0940		
Relinquished by:	Company	Date/Time	Received in Laboratory by:	Company:	Date/Time		

SECTION 02152 ATTACHMENT A
ADDENDUM #1 R03/16/2026

eurofins Environment Testing	Document Title: Sample Receiving Notes		
	Eurofins Document Reference : S-SR-FRM72109	Revision: 3	Historical Reference: QA-812
	Effective date : 18 Jul 2025		Issued by: XE8X

Loc 320
Job 128768

Tracking # 4223 6048 6852
SO / PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier
GSL / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations
File in the job folder with the COC

Therm. ID LOU Corr. Factor (+/-) NA °C

Ice ✓ Wet ✓ Gel _____ Other _____

Cooler Custody Seal 2634476 + Seals

Cooler ID _____

Temp Observed 0.4 °C Corrected 0.4 °C

From Temp Blank ☒ Sandwich ☐ Sidewall ☐

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☒	☐
Cooler Temperature is acceptable?	☒	☐	☐
Frozen samples show signs of thaw?	☐	☐	☒

Initials DM Date 01/09/26

Unpacking/Labeling The Samples	Yes	No	NA
Containers are not broken or leaking?	☒	☐	☐
Samples compromised/tampered with?	☐	☒	☐
COC is complete w/o discrepancies	☒	☐	☐
Sample custody seal?	☐	☐	☒
Sample containers have legible labels?	☒	☐	☐
Sample date/times are provided?	☒	☐	☐
Appropriate containers are used?	☒	☐	☐
Sample bottles are completely filled?	☒	☐	☐
Sample preservatives verified?	☐	☐	☒
Is the Field Sampler's name on COC?	☒	☐	☐
Samples w/o discrepancies?	☒	☐	☐
Zero headspace?*	☐	☐	☒
Alkalinity has no headspace?	☐	☐	☒
Perchlorate has headspace? (Methods 314, 331, 6850)	☐	☐	☒
Multiphasic samples are not present?	☒	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4')

Initials DM Date 01/09/26

Notes _____

Trizma Lot #(s) _____

Ammonium
Acetate Lot #(s) _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☒	☐	☐
NCM Filed?	☐	☐	☒
Samples received within hold time?	☒	☐	☐
Log Release checked in TALS?	☒	☐	☐

Initials DM Date 01/09/26

Sub Seattle

Eurofins Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Phone: 916-373-5600 Fax: 916-372-1059

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Smith, Micah	Carrier Tracking No(s): N/A	COC No: 320-391006.1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Micah.Smith@et.eurofinsus.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: Eurofins Environment Testing Northwest L		Accreditations Required (See note): N/A		Job #: 320-128768-1
Address: 5755 8th Street East, ,	Due Date Requested: 1/29/2026			
City: Tacoma	TAT Requested (days): N/A			
State, Zip: WA, 98424				
Phone: 253-922-2310(Tel)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: 126001; HNL TXY C	Project #: 32028749			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes:
-

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	ISM_A_DD_SI_SS	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
SP-1 (320-128768-1)	1/8/26	08:35 Hawaiian	G	Solid			X	1	10g - 2x 1633use plastic with no teflon lid

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northern California, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northern California, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northern California, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northern California, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	DSM	01/09/26 1630	EETSac		1/10/26 0950	eeam
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 1.4/1.3 IR11

Ver: 10/10/2024

ADDENDUM #1 1/26/2026
R03/16/2026
SECTION 02152
ATTACHMENT A

Eurofins Seattle
5755 8th Street East
Tacoma WA 98424
Phone. 253-922-2310

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler: N/A	Lab PM: Smith Micah	Carrier Tracking No(s): N/A	COC No: 580-153411 1
Client Contact: Shipping/Receiving	Phone: N/A	E-Mail: Micah Smith@et.eurofinsus.com	State of Origin: Hawaii	Page: Page 1 of 1
Company: Eurofins Environment Testing Northern Ca		Accreditations Required (See note): N/A		Job #: 320-128768-1
Address: 880 Riverside Parkway	Due Date Requested: 1/29/2026			
City: West Sacramento	TAT Requested (days): N/A			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #: N/A			
Email: N/A	WO #: N/A			
Project Name: 126001 HNL TXY C	Project #: 32028749			
Site: N/A	SSOW#: N/A			

Analysis Requested

Preservation Codes

Other: N/A

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1633A/1633A_ShakeStandard List (40 analytes)	Total Number of containers	Special Instructions/Note
			Preservation Code:						
SP-1 (320-128768-1)	1/8/26	08 35 Hawaiian	G	Solid			X	2	use 10g ISM aliquot from Seattle, See HI Work instructions

Note: Since laboratory accreditations are subject to change Eurofins Environment Testing Northwest, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northwest, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northwest, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northwest, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank. 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment:

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	1-14-26 1600			1-16-26 940	
Relinquished by	Date/Time:	Company	Received by	Date/Time	Company
Relinquished by	Date/Time:	Company	Received by	Date/Time	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.	Cooler Temperature(s) °C and Other Remarks.

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: Environmental Science International, Inc

Job Number: 320-128768-1

Login Number: 128768
List Number: 3
Creator: Simmons, Jason C

List Source: Eurofins Sacramento

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	2572926
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.6c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Environmental Science International, Inc

Job Number: 320-128768-1

Login Number: 128768
List Number: 2
Creator: Swartz, Simon

List Source: Eurofins Seattle
List Creation: 01/10/26 10:03 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	IR11 1.4/1.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

SECTION 02315 – TRENCHING AND BACKFILL

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. The General Provision of the contract, including the General Provisions for Construction Projects (2016), Special Provisions, and General Requirements of the Specifications, apply to the work specified in this section.

1.2 DESCRIPTION OF WORK

A. This section describes the following:

1. Trenching for drain pipe and drainage structures, water systems and sewer systems.

2. Stockpiling and testing of excavated materials.

3. Backfilling to subgrade elevations.

4. Backfilling trenches for drain pipe and drainage structures, water systems and sewer systems.

1.3 RELATED WORK SPECIFIED ELSEWHERE

A. Section 02152 – Excavation Subgrade and Embankment.

B. Section 02510 – Water Distribution.

C. Section 02701 – Pipe for Storm Drains and Culverts.

1.4 REFERENCES

A. State of Hawaii "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" dated 2005.

1.5 QUALITY ASSURANCE

A. Perform work in accordance with Section 105 of the State of Hawaii "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" dated 2005.

1.6 SUBMITTALS

A. Submit in accordance with Section 01300 – Submittals.

B. Shop Drawings: Submit complete shop drawings and manufacturer's certifications for the State Engineer's review before any materials are ordered. Required submittals are

as specified in the State of Hawaii "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" dated 2005.

PART 2 - PRODUCTS

2.1 MATERIALS

A. All materials shall be in accordance to the State of Hawaii "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" dated 2005 except as amended in the plans and/or specifications herein paragraphs of Measurements and Payments in the Sections are not applicable to this project.

Structure Backfill Material 703.20

Trench Backfill Material..... 703.21

Cullet and Cullet-Made Materials..... 717

B. Structure and trench backfill material shall include mixture of aggregate and cullet. When cullet is not produced on the project island, or material unit price of cullet is greater than material unit price of structure backfill or greater than material unit price of trench backfill, cullet may be excluded for that backfill application. Before excluding cullet, submit availability and pricing documentation.

C. Trench gravel backfill material shall conform to AASHTO M 43, size number 67. When tested in accordance with AASHTO T 96, the LA abrasion shall not exceed 40 percent at 500 revolutions.

D. Controlled Low Strength Material (CLSM) in accordance with Section 314 of the State of Hawaii "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" dated 2005 may be used in place of trench and structure backfill material, subject to the State Engineer's acceptance. Where CLSM is allowed, provide drainage system to accommodate underground water seepage.

E. Provide plastic marking tape that is acid and alkali-resistant polyethylene film, 6 inches wide with minimum thickness of 0.004 inch. Provide tape with minimum strength of 1750 psi lengthwise and 1500 psi crosswise. Manufacture tape with integral wires, foil backing, or other means to enable detection by a metal detector when tape is buried up to 3-feet deep. Manufacture tape specifically for marking and locating underground utilities. Provide metallic core of tape encased in a protective jacket or provided with other means to protect it from corrosion. Tape shall conform to the following colors and shall bear a continuous printed inscription describing the specific utility: Blue: Water System; Green: Sewer Systems.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Perform trenching and backfill work for installation of drain pipe and drainage structures in accordance with Section 206 of the State of Hawaii "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" dated 2005.

B. Perform trenching and backfill work for installation of water systems in accordance with Section 204 of the State of Hawaii "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" dated 2005.

C. Excavation materials resulting from trenching shall be transported and stockpiled in accordance with Section 02152.

PART 4 - MEASUREMENT AND PAYMENT

4.1 BASIS OF MEASUREMENT AND PAYMENT

All work specified in this Section shall not be measured nor paid for separately but shall be considered incidental to items 02510.1 and 02701.1.

--------END OF SECTION 02315--------

Maximum Aggregate Size	ASTM C33, Table 3 Grading Requirements (Size No.)
1 1/2 inch (37.5 mm)	467 or 4 and 67
1 inch (25 mm)	57
¾ inch (19 mm)	67
½ inch (12.5 mm)	7

610-2.2.1 Coarse Aggregate susceptibility to durability (D) cracking. Not used.

610-2.3 Fine aggregate. The fine aggregate for concrete shall meet all fine aggregate requirements of ASTM C33.

610-2.4 Cement. Cement shall conform to the requirements of ASTM C150 Type I or II.

610-2.5 Cementitious materials.

a. Fly ash. Fly ash shall meet the requirements of ASTM C618, with the exception of loss of ignition, where the maximum shall be less than 6%. Fly ash shall have a Calcium Oxide (CaO) content of less than 15% and a total available alkali content less than 3% per ASTM C311. Fly ash produced in furnace operations using liming materials or soda ash (sodium carbonate) as an additive shall not be acceptable. The Contractor shall furnish the previous three most recent, consecutive ASTM C618 reports for each source of fly ash proposed in the concrete mix, and shall furnish each additional report as they become available during the project. The reports can be used for acceptance or the material may be tested independently by the RPR.

b. Slag cement (ground granulated blast furnace (GGBF)). Slag cement shall conform to ASTM C989, Grade 100 or Grade 120. Slag cement shall be used only at a rate between 25% and 55% of the total cementitious material by mass.

610-2.6 Water. Water used in mixing or curing shall be from potable water sources. Other sources shall be tested in accordance with ASTM C1602 prior to use.

610-2.7 Admixtures. The Contractor shall submit certificates indicating that the material to be furnished meets all of the requirements indicated below. In addition, the RPR may require the Contractor to submit complete test data from an approved laboratory showing that the material to

Glass beads shall be treated with all compatible coupling agents recommended by the manufacturers of the paint and reflective media to ensure adhesion and embedment.

Glass beads shall not be used in black and green paint.

Type III glass beads shall not be used in red and pink paint.

CONSTRUCTION METHODS

620-3.1 Weather limitations. Painting shall only be performed when the surface is dry, and the ambient temperature and the pavement surface temperature meet the manufacturer's recommendations in accordance with paragraph 620-2.1. Painting operations shall be discontinued when the ambient or surface temperatures does not meet the manufacturer's recommendations. Markings shall not be applied when the wind speed exceeds 10 mph unless windscreens are used to shroud the material guns. Markings shall not be applied when weather conditions are forecasts to not be within the manufacturers' recommendations for application and dry time.

620-3.2 Equipment. Equipment shall include the apparatus necessary to properly clean the existing surface, a mechanical marking machine, a bead dispensing machine, and such auxiliary hand-painting equipment as may be necessary to satisfactorily complete the job.

The mechanical marker shall be an atomizing spray-type or airless type marking machine with automatic glass bead dispensers suitable for application of traffic paint. It shall produce an even and uniform film thickness and appearance of both paint and glass beads at the required coverage and shall apply markings of uniform cross-sections and clear-cut edges without running or spattering and without over spray. The marking equipment for both paint and beads shall be calibrated daily.

620-3.3 Preparation of surfaces. Immediately before application of the paint, the surface shall be dry and free from dirt, grease, oil, laitance, or other contaminates that would reduce the bond between the paint and the pavement. Use of any chemicals or impact abrasives during surface preparation shall be approved in advance by the RPR. After the cleaning operations, sweeping, blowing, or rinsing with pressurized water shall be performed to ensure the surface is clean and free of grit or other debris left from the cleaning process.

a. Preparation of new pavement surfaces. The area to be painted shall be cleaned by broom, blower, water blasting, or by other methods approved by the RPR to remove all contaminants, including PCC curing compounds, minimizing damage to the pavement surface.

b. Preparation of pavement to remove existing markings. Existing or temporary pavement markings shall be removed by rotary grinding, water blasting, or by other methods approved by the RPR minimizing damage to the pavement surface. The removal area may need to be larger than the area of the markings to eliminate ghost markings. After removal of markings on asphalt pavements, apply a seal coat per Section 02608 to 'block out' the removal area to eliminate 'ghost' markings.

c. Preparation of pavement markings prior to remarking. Prior to remarking existing markings, loose existing markings must be removed minimizing damage to the pavement surface,

Item D-701 Pipe for Storm Drains and Culverts

DESCRIPTION

701-1.1 This item shall consist of the construction of pipe culverts and storm drains in accordance with these specifications and in reasonably close conformity with the lines and grades shown on the plans.

MATERIALS

701-2.1 Materials shall meet the requirements shown on the plans and specified below. Underground piping and components used in drainage systems for terminal and aircraft fueling ramp drainage shall be noncombustible and inert to fuel in accordance with National Fire Protection Association (NFPA) 415.

701-2.2 Pipe. The pipe shall be of the type called for on the plans or in the proposal and shall be in accordance with the following appropriate requirements:

ASTM C76	Standard Specification for Reinforced Concrete Culvert, Storm Drain, Class IV, Wall B.

701-2.3 Concrete. Concrete for pipe cradles shall have a minimum compressive strength of 4000 psi (13.8 MPa) at 28 days and conform to the requirements of ASTM C94.

701-2.4 Rubber gaskets. Rubber gaskets for rigid pipe shall conform to the requirements of ASTM C443.

701-2.5 Joint mortar. Pipe joint mortar shall consist of one part Portland cement and two parts sand. The Portland cement shall conform to the requirements of ASTM C150, Type I. The sand shall conform to the requirements of ASTM C144.

701-2.6 Joint fillers. Poured filler for joints shall conform to the requirements of ASTM D6690.

701-2.7 Plastic gaskets. Plastic gaskets shall conform to the requirements of ASTM C990.

701-2.8. Controlled low-strength material (CLSM). Controlled low-strength material shall conform to the requirements of Item P-153. When CLSM is used, all joints shall have gaskets.

701-2.9 Precast box culverts. Manufactured in accordance with and conforming to ASTM C1433.

701-2.10 Precast concrete pipe. Precast concrete structures shall be furnished by a plant meeting National Precast Concrete Association Plant Certification Program or American Concrete Pipe Association QCast Plant Certification program.

CONSTRUCTION METHODS

701-3.1 Excavation. The width of the pipe trench shall be sufficient to permit satisfactory jointing of the pipe and thorough tamping of the bedding material under and around the pipe, but it shall not be less than the external diameter of the pipe plus 12 inches (300 mm) on each side. The trench walls shall be approximately vertical.

METHOD OF MEASUREMENT

701-4.1 The length of pipe shall be measured in linear feet of pipe in place, completed, and accepted. It shall be measured along the centerline of the pipe from end or inside face of structure to the end or inside face of structure, whichever is applicable. The 36" Class IV, Wall B, RCP shall be measured separately. All fittings shall be included in the footage as typical pipe sections in the pipe being measured.

701-4.2. Work under this Section will not be measured for payment but will be paid for at the Contract Lump Sum Price

701-4.3. Work under this Section will not be measured for payment but will be paid for at the Contract Lump Sum Price

BASIS OF PAYMENT

701-5.0 These prices shall fully compensate the Contractor for furnishing all materials and for all preparation, excavation, and installation of these materials; and for all labor, equipment, tools, and incidentals necessary to complete the item.

701-5.1 Payment will be made at the contract unit price per linear foot for 36" Reinforced Concrete Pipe, Class IV, Wall B, in place complete

701-5.2 Payment shall be made at the contract unit price per lump sum. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item.

701-5.3 Payment shall be made at the contract unit price per lump sum. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Item No.	Item	Unit
02701.1	36" Reinforced concrete pipe, Class IV, Wall B, in place complete	Linear Foot
02701.2	Adjust Drain Manhole Top	Lump Sum
02701.3	Concrete Pipe Spall Repair	Lump Sum

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.

American Association of State Highway and Transportation Officials (AASHTO)

AASHTO M167 Standard Specification for Corrugated Steel Structural Plate, Zinc-Coated, for Field-Bolted Pipe, Pipe-Arches, and Arches

AASHTO M190	Standard Specification for Bituminous-Coated Corrugated Metal Culvert Pipe and Pipe Arches
AASHTO M196	Standard Specification for Corrugated Aluminum Pipe for Sewers and Drains
AASHTO M219	Standard Specification for Corrugated Aluminum Alloy Structural Plate for Field-Bolted Pipe, Pipe-Arches, and Arches
AASHTO M243	Standard Specification for Field Applied Coating of Corrugated Metal Structural Plate for Pipe, Pipe-Arches, and Arches
AASHTO M252	Standard Specification for Corrugated Polyethylene Drainage Pipe
AASHTO M294	Standard Specification for Corrugated Polyethylene Pipe, 300- to 1500-mm (12- to 60-in.) Diameter
AASHTO M304	Standard Specification for Poly (Vinyl Chloride) (PVC) Profile Wall Drain Pipe and Fittings Based on Controlled Inside Diameter
AASHTO MP20	Standard Specification for Steel Reinforced Polyethylene (PE) Ribbed Pipe, 300- to 900-mm (12- to 36-in.) Diameter

ASTM International (ASTM)

ASTM A760	Standard Specification for Corrugated Steel Pipe, Metallic Coated for Sewers and Drains
ASTM A761	Standard Specification for Corrugated Steel Structural Plate, Zinc Coated, for Field-Bolted Pipe, Pipe-Arches, and Arches
ASTM A762	Standard Specification for Corrugated Steel Pipe, Polymer Precoated for Sewers and Drains
ASTM A849	Standard Specification for Post-Applied Coatings, Pavings, and Linings for Corrugated Steel Sewer and Drainage Pipe
ASTM B745	Standard Specification for Corrugated Aluminum Pipe for Sewers and Drains
ASTM C14	Standard Specification for Nonreinforced Concrete Sewer, Storm Drain, and Culvert Pipe
ASTM C76	Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
ASTM C94	Standard Specification for Ready Mixed Concrete
ASTM C144	Standard Specification for Aggregate for Masonry Mortar
ASTM C150	Standard Specification for Portland Cement
ASTM C443	Standard Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets
ASTM C506	Standard Specification for Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe

ASTM C507	Standard Specification for Reinforced Concrete Elliptical Culvert, Storm Drain and Sewer Pipe
ASTM C655	Standard Specification for Reinforced Concrete D-Load Culvert, Storm Drain and Sewer Pipe
ASTM C990	Standard Specification for Joints for Concrete Pipe, Manholes, and Precast Box Sections Using Preformed Flexible Joint Sealants
ASTM C1433	Standard Specification for Precast Reinforced Concrete Monolithic Box Sections for Culverts, Storm Drains, and Sewers
ASTM D1056	Standard Specification for Flexible Cellular Materials Sponge or Expanded Rubber
ASTM D3034	Standard Specification for Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings
ASTM D3212	Standard Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals
ASTM D3262	Standard Specification for "Fiberglass" (Glass-Fiber Reinforced Thermosetting Resin) Sewer Pipe
ASTM D3282	Standard Practice for Classification of Soils and Soil-Aggregate Mixtures for Highway Construction Purposes
ASTM D4161	Standard Specification for "iberglass" (Glass-Fiber Reinforced Thermosetting Resin) Pipe Joints Using Flexible Elastomeric Seals
ASTM D6690	Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements
ASTM F477	Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe
ASTM F667	Standard Specification for 3 through 24 in. Corrugated Polyethylene Pipe and Fittings
ASTM F714	Standard Specification for Polyethylene (PE) Plastic Pipe (DR PR) Based on Outside Diameter
ASTM F794	Standard Specification for Poly (Vinyl Chloride) (PVC) Profile Gravity Sewer Pipe & Fittings Based on Controlled Inside Diameter
ASTM F894	Standard Specification for Polyethylene (PE) Large Diameter Profile Wall Sewer and Drain Pipe
ASTM F949	Standard Specification for Poly (Vinyl Chloride) (PVC) Corrugated Sewer Pipe with a Smooth Interior and Fittings
ASTM F2435	Standard Specification for Steel Reinforced Polyethylene (PE) Corrugated Pipe
ASTM F2562	Specification for Steel Reinforced Thermoplastic Ribbed Pipe and Fittings for Non-Pressure Drainage and Sewerage

runway safety area (RSA) will require a runway closure and Contractor required to coordinate appropriate airport staff.

G. Contractor shall perform electrical and utility structure adjustments in accordance with the Contract Plans.

PART 4 - MEASUREMENT AND PAMENT

4.1 METHOD OF MEASUREMENT

A. Electrical and Utility Structure Investigation shall be measured on a lump sum basis as accepted by the RPR. The lump sum measurement shall include all field investigations, report preparation, and revisions from comments provided by the RPR.

4.2 BASIS OF PAYMENT

A. Electrical and Utility Structure Investigation will be paid for at the contract unit price per lump sum. This pay item includes the investigation of all structures within the project limits and adjacent to the project as noted on the Contract Plans, and shall include electrical handholes, vaults/manholes, junction structures, pull boxes, drainage manholes, ditch inlets and utility boxes (e.g. jet fuel, water boxes, etc.). This price shall be full compensation for field investigation, stand-by time, coordination with airport staff and development of CSPP, temporary barricades and nighttime lighting (if required), circuitry tracing, storm drain elevations, electronic documentation and the preparation of report summarizing each structure including revisions from comments provided by the RPR. This price shall be full compensation for furnishing all materials and for all labor, equipment, tools and incidentals necessary to complete the investigation. Payment for electrical and/or utility structures that are determined to require an adjustment, abandonment and/or removal will be made under Sections 02101 and/or is outlined in Division 16 specifications.

B. Payment will be made under:

Item No.	Description	Unit
02753.1	Electrical and Utility Structure Investigation	Lump Sum

PART 5 - ATTACHMENTS – NOT USED

--------END OF SECTION 02753--------

SECTION 16101 - AIRFIELD ELECTRICAL DEMOLITION AND REMOVAL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. The General Provision of the contract, including the General Provisions for Construction Projects (2016), Special Provisions, and General Requirements of the Specifications, apply to the work specified in this section.

1.2 DESCRIPTION OF WORK

A. The airfield electrical work to be done under this contract shall include the furnishing of all supervision, labor, materials, tools, equipment, and incidentals necessary to remove all of the airfield electrical equipment both above-ground and underground and all other electrical work as described herein and shown on the drawings. This specification covers removal of NAVAID equipment, base cans, conduit, signage, foundations, cable, and all other electrical equipment as defined in the drawings.

B. Work shall be in accordance with current edition of Federal Aviation Administration (FAA) Advisory Circular (AC) No. 150-5370-10 (current edition), "Standards for Specifying Construction of Airports," as modified herein, other FAA Advisory Circulars and Specifications referred to herein, and other requirements as specified herein.

C. The electrical work shall comply with the latest adopted editions, codes and standards to this Contract as follows:

1. ANSI C2, National Electrical Safety Code
2. FAA Advisory Circulars
3. FAA Specifications including FAA-STD-019b, FAA-C-1217 and FAA-C-1391
4. NEC, National Electric Code (NFPA 70)
5. NECA, Standard for Installation
6. NEMA, Standard for Materials and Products
7. NFPA, No. 101, Life Safety Code
8. UL, Underwriters Laboratories

D. All work shall be performed in strict accordance with these contract specifications, drawings, and any instructions that may be furnished by the ENGINEER during execution of the work to aid in interpretations of said drawings and specifications.

E. All material furnished for this project shall be listed by Underwriters Laboratories wherever UL has a listing standard for that material.

1.3 RELATED WORK SPECIFIED ELSEWHERE (NOT USED)

1.4 REFERENCES (NOT USED)

1.5 SUBMITTALS (NOT USED)

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 VERIFICATION OF EXISTING ELECTRICAL EQUIPMENT

A. Contractor shall verify that any existing electrical equipment to be removed and demolished is not energized and has been properly locked-out and tagged-out at the source. Note; some of the equipment may be owned by the FAA and may require special coordination with FAA Technical Operations Support Services.

3.2 CONFLICTS BETWEEN DOCUMENTS

A. Prospective contractors shall, as part of their proposals, enumerate, identify and list conflicts that they discover to exist within the contract documents and/or between those documents and the rules, regulations, and standards.

3.3 TEMPORARY LIGHTING AND CIRCUITS

A. Contractor shall coordinate with Operations and Maintenance at the end of each daylight work shift to verify that all temporary airfield lighting circuits are operational. Contractor shall provide all labor and material for this work.

B. Contractor shall provide and maintain on hand sufficient equipment required to provide temporary lighting and circuit extensions. This includes, but is not limited to, light fixtures, transformers, bases, two-inch conduit, L-824 cable and L-823 connectors. These items will not be available from DKIIA Maintenance.

3.4 CONFIRMATION OF EXISTING CIRCUITING AND ROUTING

A. Prior to the installation of any material and equipment and within 30 days of the administrative notice to proceed date, the Contractor shall trace routing for each circuit and cable inside the project work area. This includes opening and pumping out existing handholes/manholes to ascertain size and number of conduits and cable routing. Contractor shall submit a shop drawing prior to any demolition that provides the following minimum information:

1. Butterflies of every existing handhole/manhole that shows the number and type of conduits.

2. Markups of existing area plans detailing the actual markings of circuits including FAA, power, airfield lighting, and control.

3. Contractor shall perform utility tracing to confirm that circuits believed to be de-energized are not operational.

3.5 ASBESTOS AND/OR TRANSITE PIPE/CONDUIT REMOVAL

A. Contractor shall assume that all existing conduit. pipe, or ductbank has asbestos and is Transite pipe and requires demolition and handling in accordance with Hawaii Department of Health Regulations.

3.6 OWNERSHIP OF REMOVED ELECTRICAL EQUIPMENT

A. All spoils, equipment, and material shall become the property of the Contractor and disposed off airport property in compliance with State of Hawaii guidelines unless specifically stated otherwise in the construction drawings as equipment to be reinstalled.

3.7 SALVAGEABLE ITEMS

A. Equipment, materials and components designated to be salvaged will remain the Department of Airport's property at the Airport designated salvage area. These items shall be carefully removed and shall be delivered to the Airport's maintenance yard and stockpiled in a neat orderly fashion as directed by the Engineer. If it is determined that through the Contractor's operations of removing and handling, these items are being damaged, the Engineer reserves the right to withhold payment from the Contractor for compensation of these items.

3.8 CABLE REMOVAL

A. All the existing cables to be removed shall become the property of the Contractor to be promptly removed from the airport property. Temporary storage of these items on airport property shall be subject to the approval of the Engineer.

3.9 CONDUIT, REMOVAL AND ABANDONMENT

A. Existing conduit shall be removed as shown on the Drawings, or as directed by the Engineer. Removed items shall become the property of the Contractor and shall be promptly removed from airport property.

3.10 Conduit designated to be abandoned in place shall be capped on each end as approved by the Engineer with existing cable to be removed. Where conduit comes to the surface, the conduit shall be cut back to minimum one (1) foot below ground, final grade, and capped.

A. Existing conduit to be removed inside of the pavement demolition limits shall be considered incidental to the civil pavement demolition work. Work shall be coordinated with the civil plans and specifications.

3.11 DUCTBANK, REMOVAL AND ABANDONMENT

A. Existing ductbank shall be removed as shown on the Drawings, or as directed by the Engineer. Removed items shall become the property of the Contractor and shall be properly removed and disposed off Airport property. At locations, defined in the construction drawings, the ductbank may contain asbestos cement (A-C) pipe (sometimes referred to as "transite").

B. Existing ductbank to be removed inside of the pavement demolition limits shall be considered incidental to the civil pavement demolition work. Work shall be coordinated with the civil plans and specifications.

3.12 REMOVAL OF EXISTING BASE CANS

A. Base Cans shall be removed as detailed on the construction drawings. Remove base cans prior to placement of new pavement and backfill with concrete in accordance with Section 02610, Concrete for Miscellaneous Structures up to grade of new subbase.

B. Existing base cans to be removed inside of the pavement demolition limits shall be considered incidental to the civil pavement demolition work. Work shall be coordinated with the civil plans and specifications.

3.13 REMOVAL AND SALVAGE OF EXISTING LIGHT FIXTURES AND/OR COVER PLATES

A. Prior to performing any demolition work, the Contractor shall perform a visual inspection in conjunction with the Airport to determine if any of the runway and taxiway edge light fixtures are missing, damaged, or have a burned-out lamp. This visual inspection shall be performed during the day and at night with the light fixtures powered on, and the Contractor shall provide the Engineer with a written document detailing the deficiencies found. If any of the light fixtures are damaged or lost during the construction project, the Contractor shall replace the damaged or lost light fixture with a new, equal or approved equal light fixture at the Contractor's own expense.

B. Light fixtures, isolation transformers, connectors and cable shall be removed as indicated on the drawings. L-868 heavy duty, ¾" thick cover plates shall be installed on all base cans.

C. Light Fixtures that require removal shall be salvaged and delivered to the Owner's Department of Maintenance at Airport. For these fixtures, the Contractor shall protect the leads by curling them and then taping them to the bottom side of the fixture housing. The fixture shall be placed inside a circular plastic tube that is the diameter (circumference) of the light and approximately 3" tall.

PART 4 - MEASUREMENT AND PAYMENT

4.1 DEMOLITION AND REMOVAL OF AIRPORT ELECTRICAL ITEMS

A. Demolition and Removal of Electrical Items shall be measured per lump sum. This work includes but not limited to the following:

1. This bid item covers removal of electrical items as detailed on E-100 series inclusive of light fixtures, wiring and light base interior electrical components.

2. Utility Detection, Survey, and Tracing of all conduits and cables. Including providing shop drawing that defines the existing routing. Included in this work is the opening and closing of the existing manholes/handholes required to trace the circuits regardless of the number of times contractor enters structure.

3. This bid item excludes removal of light bases and conduit inside of the pavement demolition limits. Pavement demolition limits are defined as any demolition of asphalt full strength pavement, asphalt shoulder, or concrete as shown on the civil drawings. Payment for the handling and disposal of asbestos piping and materials

shall be included in this bid item. Contractor shall assume all existing conduit or ductbank shown to be removed contains asbestos and requires removal.

B. The cost for the removal of light bases and conduit inside of the pavement demolition limits shall be bid under the appropriate civil bid item.

4.2 BASIS OF PAYMENT

A. Payment will be made under:

Item No.	Description	Unit
16101.1	Demolition & Removal of Airport Electrical Items	Lump Sum

PART 5 - ATTACHMENTS (NOT USED)

--------END OF SECTION 16101-------

SECTION 16128 - TEMPORARY AND PERMANENT MISCELLANEOUS AIRFIELD ELECTRICAL WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. The General Provision of the contract, including the General Provisions for Construction Projects (2016), Special Provisions, and General Requirements of the Specifications, apply to the work specified in this section.

1.2 DESCRIPTION OF WORK

A. This item consists of temporary airport lighting equipment furnished and installed in accordance with this specification and the applicable advisory circulars. This item includes the furnishing of all equipment, materials, services, and incidentals necessary for temporary operation of the airfield during construction and phasing to the satisfaction of the RPR.

1.3 RELATED WORK SPECIFIED ELSEWHERE (NOT USED)

1.4 REFERENCES (NOT USED)

1.5 SUBMITTALS (NOT USED)

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 GENERAL

A. Objects, surfaces and items including the underground utilities designated to remain shall be carefully avoided and left undisturbed. Any damage to these items shall be immediately corrected by the Contractor to the satisfaction of the Engineer.

3.2 EQUIPMENT

A. Equipment used in conjunction with this work shall be in first class working condition and shall be capable of removing the material in an efficient manner.

3.3 TEMPORARY AIRFIELD LIGHTING

A. Provide all cables, conduits, fixtures, and temporary CCR connections at the Airfield Lighting Vaults to provide temporary airfield lighting required to maintain the function of the airfield during all stages of reconstruction. This shall include all necessary splices at manholes, handholes and taxiway light bases to ensure that the circuits are operational at other areas of the airfield during the entire construction period. All temporary cable shall be removed from project work site at completion of each phase when temporary cable is no longer needed. Contractor shall not leave temporary cable in place.

3.4 TEMPORARY LED RUNWAY ELEVATED EDGE LIGHTS

A. Fixtures shall be LED, elevated and mounted on a frangible coupling attached to a surface mounted flange (base plate). The flange plate shall be mounted to a light fixture in accordance to manufacturers' recommendation and construction drawings. Fixtures shall be mounted to asphalt using four spikes. Contractor shall inspect each fixture at the beginning of each night and maintain/replace lights as required.

3.5 TEMPORARY LED TAXIWAY ELEVATED EDGE LIGHTS

A. Fixtures shall be LED, elevated and mounted on a frangible coupling attached to a surface mounted flange (base plate). The flange plate shall be mounted to a light fixture in accordance to manufacturers' recommendation and construction drawings. Fixtures shall be mounted to asphalt using four spikes. Contractor shall inspect each fixture at the beginning of each night and maintain/replace lights as required.

3.6 REROUTING NEW CIRCUIT CONFIGURATIONS AND OPENING BASE CANS, HANDHOLES, AND MANHOLES

A. Prior to start of the demolition work, the Contractor shall open all necessary base cans, handholes, and/or manholes to ascertain and provide the Engineer in writing a schematic wiring diagram showing the number of cables and circuits in existing light base configuration. This item includes pumping and removing the water that may be located inside the handholes and manholes. The Contractor shall assume that all handholes shown in the project area and layout drawings must be opened and pumped of water to ensure circuit continuity. Contractor shall provide a schematic diagram for all temporary cable and connections to be installed in each phase. Note; the diagram shall be submitted in the form of a shop drawing for the Engineer approval. Contractor shall provide clear documentation as to when the temporary cable shall be removed. No temporary cable shall be used as permanent cable unless directed and approved by the Engineer.

3.7 TEMPORARY CONDUIT

A. All temporary conduit shall either be (a) PVC Schedule 80 direct buried conduit a minimum of 8" underground or (b) above-ground rigid conduit (RGS). Conduit shall be strapped or secured to ground every 5' with sandbags at 5' intervals and red flags to delineate the location of the conduit. All temporary conduit shall be removed from the project work site at the completion of each phase when temporary conduit is no longer used.

3.8 OTHER ITEMS

A. Items to be removed not listed above shall be removed from airport property by the contractor unless otherwise directed by the Engineer. Any questionable items shall be brought to the Engineer's attention, which will direct the Contractor for final disposition of the item.

PART 4 - MEASUREMENT AND PAYMENT

4.1 METHOD OF MEASUREMENT

A. Temporary electrical work for construction phasing. Payment for Temporary Electrical Work for Construction Phasing will be paid for at the contract unit price per lump sum, complete in place, ready for operation, and accepted by the State Engineer. The price for this item includes all material and work required to temporarily configure airfield electrical to allow for circuit continuity and opening of Runway/Taxiway at the commissioning of each phase. This work includes:

1. Furnish and Install temporary light fixtures including base plates;
2. Cover and De-energize runway edge lights and modify the color code of runway edge lights as required;
3. Provide temporary jumpers and above-ground conduits, cables, connector kits;
4. Handhole cover plates and connection to existing circuits**;**
5. Above-ground steel plates and temporary signs; and
6. Covering of guidance signs as required.
7. All work required to relocate and install temporary runway distance remaining signs for each phase including cable, jumpers, and temporary connections.
8. Restoration of all electrical systems to original configuration and removal of temporary cable, conduit, lights, and base plates;
9. All other incidentals required to temporarily configure the airfield lighting and electrical systems.

Note; this bid covers all temporary electrical work during the project in all phases of work. There is no separate bid item for each phase of the work and all phases of work are covered under this bid item.

B. Permanent miscellaneous airport electrical work. Payment for Permanent Miscellaneous Airport Electrical Work will be paid for at the contract unit price per lump sum, complete in place, ready for operation, and accepted by the State Engineer. The price for this item includes all material and work required to permanently configure airfield electrical to allow for the opening of Runway/Taxiway. This work includes all permanent electrical work not covered under other bid items in all specifications but required by the construction drawings.

4.2 BASIS OF PAYMENT

A. Payment will be made under:

Item No.	Description	Unit
16128.1	Temporary Electrical Work for Construction Phasing	Lump Sum
16128.2	Permanent Miscellaneous Airport Electrical Work	Lump Sum

--------END OF SECTION 16128-------

3.2 FIELD TESTS

A. Distribution Conductors 600 Volt Class: Test all 600 volt class conductors, #1/0 and larger, to verify that no short circuits or accidental grounds exist. Make tests using an instrument which applies a voltage of approximately 500 volts to provide a direct reading in resistance.

B. Ground Rods: Test ground rods for ground resistance value before any wire is connected. Use a portable ground testing megger to test each ground or group of grounds. The instrument shall be equipped with a meter reading directly in ohms or fractions thereof to indicate the ground value of the ground electrode under test. Provide one copy of the megger manufacturer's directions for use of the ground megger indicating the method to be used.

C. Test Report: Provide three copies of each test report to the Engineer.

1. 600 volt cables (identify each cable and test result).

2. Grounding Electrodes and Systems (identify electrodes and systems, each test).

PART 4 - MEASUREMENT AND PAYMENT

4.1 METHOD OF MEASUREMENT

A. Underground duct banks and conduits shall be measured by the linear feet of duct bank and conduit including encasement, counterpoise wire, locator tape, trenching and backfill with designated material and, potholing and utility detection, rebar, duct spacers, inspection and testing, all measured in place, completed, and accepted. Separate measurement shall be made for the various types and sizes of conduit or ductbank and type of pavement where conduit is being installed. Bid item also includes all grounding associated with conduit or ductbank such as groundrod, counterpoise or guard wire, connections between ground rod and counterpoise, testing, and commissioning of grounding system.

B. Payment includes saw cutting, trenching, pavement removal, conduit, duct spacers, rebar, concrete encasement (type and location where specified), detectable warning tape, pull rope, turf and pavement restoration.

C. Accessing handholes/manholes for circuiting. The quantity of handholes or manholes requiring access for circuiting shall be incidental to the project with no separate payment. Contractor shall assume that all existing handhole/manholes shown on the drawings require access for circuiting as well as water removal and confined space permit for manholes. No separate payment will be made for entering an existing manhole/handhole multiple times.

4.2 BASIS OF PAYMENT

A. Underground duct banks and conduits installed complete in place. Payment will be made at the contract unit price, complete ready for operations and accepted as satisfactory by the Engineer. This price shall be full compensation for furnishing all materials and for all preparation and installation of these materials, and for all labor, equipment, tools and all incidentals necessary to complete this item.

B. Payment will be made under:

Item No.	Item	Unit
16301.1	Concrete Encased One 2” PVC Schedule 40 Duct	Linear Feet
16301.2	Concrete Encased Four 2” PVC Schedule 40 Ducts	Linear Feet

PART 5 - ATTACHMENTS (NOT USED)

--------END OF SECTION 16301--------

SECTION 16560 – AIRFIELD LIGHTING SYSTEM

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. The General Provision of the contract, including the General Provisions for Construction Projects (2016), Special Provisions, and General Requirements of the Specifications, apply to the work specified in this section.

1.2 DESCRIPTION OF WORK

A. Work in this Section includes, but is not limited to, the following items:

1. Taxiway light fixtures.

2. Miscellaneous work as shown on the drawings and specified herein.

B. Drawings: These specifications are accompanied by plans and diagrams. Contractors shall visit the project site prior to bidding, take note of the existing conditions, and carefully review the specifications. By submitting a proposal of the work included in this contract, the Contractor shall be deemed to have made such examination and to be familiar with and accept all conditions of the job site. Report any error, conflicts or omissions to the State Engineer at least three weeks before submission of bids for interpretation or clarification. If errors or omissions are not reported, the Contractor shall provide necessary work at no cost to the State to properly complete intent of the specifications.

1.3 RELATED WORK SPECIFIED ELSEWHERE

A. SECTION 16011 - GENERAL ELECTRICAL REQUIREMENTS applies to this section with additions and modifications specified herein.

1.4 REFERENCES

A. FAA Advisory Circular 150/5340-30J, Design and Installation Details for Airport Visual Aids.

B. FAA Advisory Circular 150/5345-7F, Specification for L-824 Underground Electrical Cable for Airport Lighting Circuits.

C. FAA Advisory Circular 150/5345-26E, Specification for L-823, Plug and Receptacle, Cable Connectors.

D. FAA Advisory Circular 150/5345-42K, Specification for Airport Light Bases, Transformer Housings, Junction Boxes and Accessories.

E. FAA Advisory Circular 150/5345-46E, Specification for Runway and Taxiway Light Fixtures.

F. FAA Advisory Circular 150/5345-47C, Isolation Transformers for Airport Lighting Systems.

1.5 CONTRACTOR QUALIFICATIONS

A. Special Contractor and Personnel Skills and Qualifications. Bidder shall submit the following information at the time of Bidding:

1. Contractor Qualifications: The Contractor shall have completed a minimum of three projects in the last ten years which include airfield lighting systems similar in size to this project. Provide a list of these projects and include the contact information (names and phone numbers of owner's/project representatives) to allow verification of participation on that project.

2. Personnel Qualifications: The airfield lighting system superintendent, who will be in charge of the airfield lighting system work for this project shall have a minimum of three years of airfield lighting system construction experience. The experience must be within the last ten years and similar to the type of work proposed. Submit proposed superintendent's name and experience record for acceptance. The airfield lighting system superintendent shall remain on the project for the duration of the airfield lighting system work, unless replaced by an individual with equal or more experience in airfield lighting system construction.

B. All prospective bidders shall provide with their bid, the documented qualifications and experience as indicated in 1.5 A.1 and 1.5 A.2 above. Failure to submit the required information or meet the minimum experience requirements will be considered as being sufficient grounds for the disqualification of a bidder and rejection of his proposal.

C. Submit qualifications and experience immediately prior to the bid opening, on similar jobs related to this project. Personnel who will be performing the work shall furnish evidence upon request, that they have installed, repaired or serviced equipment which is comparable to the equipment being installed in this project. Evidence shall be in a form which can be verified by the State (names, addresses and telephone numbers of former employers, customers, and/or training institution).

D. Falsification of personnel qualifications will be sufficient grounds for rejection of bid. Inability to perform the work in accordance with these specifications, utilization of unqualified personnel, or excessively high turnover of personnel assigned to this project shall constitute a major breach of this contract.

1.6 SUBMITTALS

A. Manufacturer's Data, Shop Drawings, field investigation plans and work plan:

1. Taxiway Light Fixtures.

2. Light Bases.

3. Isolation Transformers.

4. Cables and Connectors.

5. Field Investigation Plan.

6. Electrical Work Plan.

1.7 CONSTRUCTION REQUIREMENTS

A. The entire work shall be made in strict accordance with the latest rules and regulation of the National Board of Fire Underwriters, the currently adopted edition of the National Electrical Code, and the latest applicable FAA Advisory Circulars.

B. Prepare Electrical Field Investigation Plan that describes contractor's plan to verify existing taxiway lighting circuiting, so contractor can determine how they will keep taxiway lighting outside of a particular work phase in operation and prepare their Electrical Work Plan.

C. Prepare Electrical Work Plan that includes list of work to be performed, a schedule showing the work sequence, temporary taxiway circuit cable requirements. Electrical Work Plan shall be compatible with the construction schedule, construction phasing, progress schedules and progress reports.

PART 2 - PRODUCTS

2.1 GENERAL

A. All materials and equipment to be supplied for this project shall be new and shall be products of manufacturers regularly engaged in the manufacture of such products. All items shall essentially bear the label of Underwriter's Laboratories whenever standards have been established.

B. Materials shall also include all wire and cable connections, furnishing and installing of all necessary conduits and fittings, and all necessary mounting structures. It shall also include the testing of the installation and all incidentals necessary to place in operation as completed units to the satisfaction of the Engineer.

2.2 TAXIWAY LIGHT FIXTURES

A. Taxiway light fixtures shall be ETL-certified and conform to the requirements of FAA Advisory Circular 150/5345-46E, Specification for Runway and Taxiway Light Fixtures. Fixtures shall be provided in the quantity as shown on the drawings, complete with all necessary components, cables, connectors, hardware and accessories for a complete and operational system.

B. Elevated taxiway edge lights shall be Type L-861T LED fixtures, medium-intensity, omnidirectional, blue, utilizing a single LED in the light source. Light fixture shall operate on a 6.6A circuit at 60Hz using a L-830 10/15W isolation transformer. Light fixture shall be capable of being installed on existing circuits in addition to, or in replacement of, conventional incandescent or halogen lights without having to change any other element (CCR, primary and secondary cabling, series transformer, etc.).

2.3 LIGHT BASES

A. Light bases shall conform to the requirements of FAA Advisory Circular 150/5345-42K, Specification for Airport Light Bases, Transformer Housings, Junction Boxes and Accessories.

B. Light bases for elevated taxiway light fixtures and guidance signs shall be L-867, Class IIB, non-metallic, size B, 12” diameter, 24” deep. Provide drain hole in light bases.

C. Light bases for semi-flush taxiway light fixtures shall be L-868, Class IB, metallic, size B, 12” diameter, 24” deep. Provide drain hole in light bases.

2.4 ISOLATION TRANSFORMER

A. Isolation transformers shall conform to FAA Advisory Circular 150/5345-47A, style L-830. The primary shall have an insulation level voltage rating of 5,000 volts RMS and the secondary shall have a rating of 600 volts RMS. Isolation transformer shall be completely encapsulated in waterproof rubber and suitable for direct burial in soil conditions.

2.5 CABLES, WIRES AND CONNECTIONS

A. Airfield lighting cables shall conform to FAA Specification L-824, Advisory Circular 150/5345-7E, voltage rating of 5000 volts, #8 AWG stranded.

B. Cable connectors for airport lighting system shall conform to FAA Specification L-823, Advisory Circular 150/5345-26C, plug and receptacle type.

PART 3 - EXECUTION

3.1 INSTALLATION OF AIRFIELD LIGHTING SYSTEM

A. Installation shall be in accordance with the plans and specifications, manufacturer's recommendations and all applicable FAA Advisory Circulars. The existing airfield lighting system shall remain in operation during construction, and unauthorized interruptions will not be acceptable. Refer to Section 01010, DESCRIPTION OF WORK, Paragraph 1.08 OPERATION OF AIRPORT FACILITIES DURING CONSTRUCTION for additional airfield operation requirements.

3.2 FIELD TESTS

A. After the installation has been completed and the Engineer or the State representative has been given fifteen (15) working days advance notice of the proposed test, the Contractor shall perform all operating tests for approval and provide all labor, equipment and incidentals required for testing.

1. The equipment shall be demonstrated to operate in accordance with the requirements of these specifications for a period of not less than forty-five (45) days prior to final acceptance by the State.

2. Test shall be such that each item of control equipment will function not less than five times.

3. If the Engineer or the State representative discovers any of the following errors, the Contractor, at his own expense, shall go over all similar portions of the entire job, taking the necessary or directed remedial action.

(a) Impaired clearance.

(b) Improper finish.

(c) Improper adjustment.

(d) Improper operation

B. Progress Testing for Series Lighting Circuits: Conduct a megger test on each section of circuit or progressive combinations of sections as they are installed. Test each section or progressive combination of sections with a megohmmeter providing a voltage of approximately 1000 volts, a direct reading in resistance. Document all results. Eliminate faults found by these tests, and re-test before proceeding with the circuit installation.

C. Electrical Acceptance Tests: Perform acceptance tests for series and multiple airfield and heliport lighting circuits only on complete lighting circuits. Each series and multiple lighting circuit must receive a high voltage insulation test. Check that cable insulation resistance to ground is not less than 50 megohms per FAA-C-1391, Installation and Splicing of Underground Cable.

D. Low Voltage Continuity Tests: Test each series circuit for electrical continuity. Eliminate faults indicated by this test and perform retest before proceeding with the high-voltage insulation resistance test.

E. High-Voltage Insulation Resistance Tests: Subject each series lighting circuit to a high-voltage insulation resistance test by measurement of the insulation leakage current with a suitable high-voltage test instrument which has a steady, filtered direct current output voltage and limited current. High-voltage tester must include an accurate voltmeter and microammeter for reading voltage applied to the circuit and resultant insulation leakage current. Do not exceed voltage test values specified below.

1. Test Procedure: Disconnect both leads from regulator output terminals and support so that air gaps of at least 3 inches or as defined by FAA AC 150/5345-7F Table 1 exists between bare conductors and ground. Clean and dry cable sheaths for a distance of 1 foot from ends of cables and exposed insulation at ends of cables. Connect ends of both conductors of the circuit together and to high-voltage terminals of test equipment, and test voltage applied as specified in the following tabulation between conductors and ground for a period of 5 minutes.

Test Voltage, DC		
	First Test on New Circuits	Test on Existing Circuits
Medium Intensity Series Lighting Circuits (5,000 volt leads, 30/45 watt transformers)	6000	3000

When additions are made to existing circuits, test only new sections in accordance with "First Test on New Circuits" in table above. To ensure reliable operation, test complete circuit at reduced voltages indicated above

2. Leakage Current: Measure and record insulation leakage current for each circuit after a 1 minute application of the test voltage. If leakage current exceeds values

specified below, sectionalize the circuit and retest, and repair or replace defective parts. Leakage current limits include allowances for the normal number of connectors and splices for each circuit as follows:

(a) Three microamperes for each 1000 feet of cable.

(b) Two microamperes for each isolation transformer.

(c) If measured value of insulation leakage current exceeds calculated value, sectionalize the circuit and test as specified for each section. Repair or replace defective components until repeated tests indicate an acceptable value of leakage current for the entire circuit.

3. Resistance Values versus Cable Length: An alternate test procedure for circuit validation is to use a megohmeter. Use 5000V test for new circuits and 3000V test for existing circuits. If the minimum resistance values are not achieved then use the leakage current test indicated above.

Circuit Length in Feet Meters	Minimum Resistance to Ground (Megohms)
10,000	50
10,000-20,0003	40
>20,000	30

3.3 GUARANTEE AND CERTIFICATE

A. Any item of material, apparatus, equipment furnished and installed, or repaired by the Contractor showing defects in design, construction, quality or workmanship within one year from the date of final acceptance by the State shall be replaced with such new material, apparatus or parts as may be found necessary to make such defective portion of the complete system conform to the true intent and meaning of these specifications and/or the drawings. Such repairs or replacement required, including other work caused by these defects, shall be made by the Contractor or his surety at no cost to the State.

PART 4 - MEASUREMENT AND PAYMENT

4.1 METHOD OF MEASUREMENT

A. Salvage taxiway light and associated isolation transformer and provide blank cover plate shall be measured by each unit completed and accepted by the Engineer.

B. Salvage taxiway light and associated isolation transformer shall be measured by each unit completed and accepted by the Engineer.

C. Removal of No. 8 AWG, 5 kV, Taxiway Lighting Cables shall be measured by the number of linear feet measured and accepted by the Engineer.

D. Elevated Taxiway Edge Light Including Light Base and Isolation Transformer shall be measured by each unit completed and accepted by the Engineer.

E. No. 8 AWG, 5 kV, Taxiway Lighting Cables shall be measured by the number of linear feet measured in place, complete, ready for operation, and accepted as satisfactory by the Engineer.

F. Electrical Field Investigation Plan. Work for this item will not be measured for payment but will be paid for at the Contract Lump Sum Price.

G. Electrical Work Plan. Work for this item will not be measured for payment but will be paid for at the Contract Lump Sum Price.

4.2 BASIS OF PAYMENT

A. Salvage taxiway light and associated isolation transformer and provide blank cover plate. Payment for the quantity of salvaged light fixtures and transformers and provision of blank cover plates will be paid for at the contract unit price per each, complete in place, ready for operation, and accepted by the Engineer.

B. Salvage taxiway light and associated isolation transformer. Payment for the quantity of salvaged light fixtures and transformers will be paid for at the contract unit price per each, complete in place, ready for operation, and accepted by the Engineer.

C. Remove No. 8 AWG, 5 kV, Taxiway Lighting Cables. Payment will be made at the contract unit price for cable removed from conduit, ductbank, handhole, manhole, or base can, complete and accepted by the Engineer.

D. Elevated Taxiway Edge Light Including Light Base and Isolation Transformer. Payment for the quantity of light fixtures will be paid for at the contract unit price per each, complete in place, ready for operation, and accepted by the Engineer. The price for this bid item includes furnishing and installing but not limited to the following material and equipment to the full satisfaction of the Engineer: light fixture; isolation transformer, bolts, anti-seize, fixture identification tags (2 per light; one on the pavement and one inside the base can); all required connections, and all other incidentals, materials, and labor required to complete the installation as described in contract plan details.

E. No. 8 AWG, 5kV, L-824C primary cable. Payment will be made at the contract unit price for cable installed in conduit, ductbank, handhole, manhole, or base can, complete and accepted by the Engineer. This price shall be full compensation for furnishing all materials and for all preparation and installation of these materials, and for all labor, equipment, tools and all incidentals necessary to complete this item. Payment for cable includes circuit identification tags, connector kits, and testing. Included in the payment for airfield lighting cable is the cleaning of existing conduit, ductbank, handhole, manhole or base can for re-installation of cable.

F. Electrical Field Investigation Plan. Payment for the Electrical Field Investigation Plan will be paid for at the contract lump sum price, complete, ready for use, and accepted by the Engineer.

G. Electrical Work Plan. Payment for the Electrical Work Plan will be paid for at the contract lump sum price, complete, ready for use, and accepted by the Engineer.

Payment will be made under:

Item No.	Item	Unit
16560.1	Salvage Taxiway Light and Associated Isolation Transformer and Provide Blank Cover Plate.	Each
16560.2	Salvage Taxiway Light and Transformer	Each
16560.3	Remove No. 8 AWG, 5 kV, Taxiway Lighting Cables	Linear Feet
16560.4	Elevated Taxiway Edge Light Including Light Base and Isolation Transformer	Each
16560.5	No. 8 AWG, 5 kV, Taxiway Lighting Cables	Linear Feet
16560.6	Electrical Field Investigation Plan	Lump Sum
16560.7	Electrical Work Plan	Lump Sum

PART 5 - ATTACHMENTS (NOT USED)

--------END OF SECTION 16560--------