STRUCTURAL GENERAL NOTES

- 1. All materials shall conform to the drawings and specifications. Specifications shall be the Hawaii Standard Specifications for Road and Bridge Construction 2005.
- 2. The Structural Drawings and Special Provisions represent the finished structure. They do not indicate the method of construction. The Contractor shall provide all measures necessary to protect the structure during construction. Such measures shall include, but not be limited to, bracing, shoring for loads due to construction equipment, wind, seismic, etc. Observation visits to the site by the Engineer shall not include inspection of the above items.
- 3. Refer to Architectural Plans additional information including, but not limited to, relative location, slopes, dimensions, etc.
- 4. The Contractor shall be solely responsible for all excavation procedures including lagging, shoring and protection of adjacent property structures, utilities, etc.
- 5. The Contractor shall be solely responsible for coordinating the work of all trades and shall check all dimensions. All discrepancies shall be called to the attention of the Engineer and be resolved before proceeding with the work.
- 6. Notes and details on Drawings shall take precedence over General Notes and Typical Details. Any discrepancies between specifications and drawings shall be brought to the attention of the Engineer. For any discrepancies the more stringent requirement shall apply.
- 7. Shop Drawings required by Special Provisions shall be submitted to Engineer for review prior to fabrication. Copies of construction documents are not acceptable.
- 8. Construction materials shall be spread out if placed on roof. Load shall not exceed the design live load per square foot.
- 9. Design Criteria:
 - A. Codes 2006 International Building Code 2009 State Building Code
 - B. Design Live Loads = 16,000 lb Axle Load Pavement

- 10. Special Inspection Requirements:
 - A. Concrete Pavement Slab
- = Required

= Required

- B. Pavement Reinforcing Steel
- C. Sidewalk Concrete and Reinforcing Steel
- = Not Required
- D. Concrete Drains and Reinforcing Steel
- = Not Required

Special Inspection shall be provided by the State.

Contractor shall hire and pay for concrete testing services. See Special Provisions Section 601 for concrete testing requirements. Special Inspection shall not relieve the Contractor of his responsibilities to complete the Project in accordance with the Drawings and Special Provisions and to provide safety on site. Contractor shall notify Special Inspector and testing agency at least 3 (e.g. Friday to Monday) days in advance for work to be performed requiring Special Inspection. See Standard Specifications Subsection 105.11 for additional inspection information.

<u>CONCRETE</u>

- 1. For additional requirements not noted below, see Special Provisions.
- 2. All concrete unless otherwise noted shall be regular weight hard rock type (150#/cu. ft.). Coarse aggregate shall be from basalt.
- 3. Schedule of structural concrete 28-day strength and types:

Slab on Grade Miscellaneous

= 4,500 PSI = 3,000 PSI

- 4. Portland cement shall conform to ASTM C150, Type I or II.
- 5. Concrete mixes shall be designed by a qualified testing laboratory or Ready Mix Producer and shall be submitted to the Engineer for review.
- 6. Clear coverage of concrete over outer reinforcing bars shall be as noted in details.
- 7. All reinforcing bars, anchor bolts, drainage grate angle frame and other concrete inserts shall be well secured in position prior to placing concrete.
- 8. Curing compounds: See Special Provisions.
- 9. Concrete admixtures containing chloride or chloride salts shall not be used.
- 10. All roughened surfaces in concrete shall be made with a minimum amplitude of 1/4".

- 11. Contractor shall provide two-week schedules showing expected concrete pour locations and times.
- 12. Epoxy grout shall be provided as specified in the Standard Specifications Subsection 712.04(B).
- 13. Premolded joint filler shall be provided as specified in the Standard Specifications Subsection 705.01.

REINFORCING STEEL

- Reinforcing bars shall conform to ASTM A615, Grade 60 requirements.
- 2. Anchor bolts, dowels and other embedded items shall be securely tied in place before concrete is poured.
- 3. All reinforcing bar bends shall be made cold.

EARTHWORK

- Aggregate base course shall be provided as specified in the Standard Specifications Section 304 and Subsection 703.17.
- 2. The subgrade under the perimeter sidewalks around the existing buildings shall be moisture-conditioned to optimum moisture content, and kept at that moisture content till the aggregate base course and concrete is placed. If shrinkage cracks are found, the subgrade shall be reworked and re-moisture-conditioned.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-02-08R	2016	46	69

ABBREVIATIONS

Additional Addn Architectural Building Between Btwn

Construction Joint Clear

Column Concrete Conc Diameter Dwg(s) Drawing(s) Existing exist Expansion Joint Equal

EW Each Way Galv Galvanized Joint Maximum Max Millimeter

Minimum Min (N) New On Center Opening Open'g Reinf Reinforcing SOG Slab on Grade

Thk Thick Thk'd Thickened Typical Typ

Unless Otherwise Noted W/

LICENSED PROFESSIONAL NO. 5479-S

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

STRUCTURAL GENERAL NOTES

RENOVATION Project No. HWY-0-02-08R Morman K Magamme

EXPIRATION DATE OF THE LICENSE 4/30/2018 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Date: April, 2016 Scale: As Noted

MOTOR VEHICLE SAFETY OFFICE

SHEET No. S1 OF 69 SHEETS



