GENERAL NOTES

- The scope of work for this project includes clearing vegetation; site grading; demolition and removal of existing concrete channels; installation of new drainage culverts; installation of concrete baffle box, installation of hand placed rip rap; retrofit of existing drainage structures; installation and maintenance of permanent BMPs; hydro-mulching; installation and maintenance of temporary erosion control BMPs; and providing traffic control.
- 2. The Contractor's attention is directed to the following Specification Sections of the Standard Specifications: Subsection 104.11 Utilities and Services; Subsection 107.06 Contractor Duty Regarding Public Convenience; and Section 645 Work Zone Traffic Control.
- 3. The Contractor shall notify the Hawaii One Call Center (811 or 866-423-7287) no less than five (5) working days prior to excavation, on each or all locations, for locating underground facilities pursuant to HRS Section 269E-4.
- 4. Pursuant to Chapter 6E, HRS, in the event any historic resources, including cultural deposits or human skeletal remains, are uncovered during construction operations, the Contractor shall suspend work in the immediate vicinity of the find, protect the find from additional disturbance, and notify the Honolulu Police Department, the State Department of Land and Natural Resources Historic Preservation Division (692-8015), and the State Department of Transportation.
- 5. At the end of each day's work, the Contractor shall remove all equipment and other obstructions to permit free and safe passage of public traffic.
- 6. The existence and location of underground utilities, manholes, monuments, guardrail and structures as shown on the plans are from the latest available data, but the accuracy is not guaranteed. The encountering of other obstacles during the course of work is possible. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.
- 7. All dimensions and details shown on the drawings shall be checked and verified prior to the start of construction, and any discrepancies shall be immediately brought to the attention of the Engineer for clarification.
- 8. All existing utilities to remain in use, whether or not shown on the plans, shall be protected at all times by the Contractor during construction unless specified on the plans to be abandoned. Any damages to existing utilities shall be repaired and paid for by the Contractor.
- 9. Unless relocation is called for on the plans, existing utilities shall remain in service and in place. If relocation of existing utilities is required for the Contractor's convenience, interruption of service shall be kept to a minimum and shall be done at the Contractor's expense and only with the approval of the Engineer.
- 10. The Contractor shall provide for vehicle and pedestrian access to and from all existing public streets and driveways at all times.
- 11. Existing drainage system shall be functional at all times during construction. The Contractor shall furnish materials, equipment, labor, tools and incidentals necessary to maintain flow. This work shall be considered incidental to any culvert work or the various contract items and will not be paid for separately.

- 12. Existing facilities, guardrail, landscaping and/or pavement to remain which has been damaged by the Contractor shall be restored to its original condition at no cost to the State.
- 13. All regraded areas and all grassed areas damaged by construction activities shall be planted in accordance with Specification Section 619 Planting. Contractor shall restore to its original condition at no cost to the State.
- 14. When excavating in close proximity to walls, fences, and other improvements, the Contractor shall protect, support, secure, and take all precautions to prevent damaging these facilities and improvements.
- 15. No material or equipment shall be stockpiled or otherwise stored within highway right-of-way except at locations designated in writing and approved by the Engineer.
- 16. Contractor shall dispose of any removed material at an approved DOH waste management facility, as stated in the Contractor's BMP plan, at no extra cost to the State.
- 17. After the project is completed, the Contractor shall restore grades and groundcover within the project limits to a condition equal to or better than existing condition prior to construction.
- 18. All work specified in the contract but not listed separately in the proposal schedule shall be considered incidental to other various contract items and shall not be paid for separately.
- 19. The Contractor shall verify the presence of existing aerial and underground utilities which may conflict with construction activities and shall coordinate with the utility company for temporary relocation, as necessary. All costs associated with temporary relocations shall be borne by the Contractor.
- 20. Confined Space

For entry into a permit required confined space as defined in 29 CFR Part 1910.146(b), the Contractor shall be responsible for providing:

- I. All safety equipment required by the confined space regulations applicable to all parties other than the construction industry, to include, but not limited to, the following:
 - a. Full body harness for up to two personnel.
 - b. Lifeline and associated clips.

away).

- c. Ingress/egress and fall protection equipment.
- d. Two-way radio (walkie-talkies) if out of line-of-sight.
- e. Emergency (escape) respirator (10 minute duration). f. Cellular telephone to call for emergency assistance.
- g. Continuous gas detector (calibrated) to measure oxygen, hydrogen sulfide, carbon monoxide and flammables (capable of monitoring at a distance at least 20-feet
- h. Personal multi-gas detector to be carried by inspector. II. Continuous forced air ventilation adequate to provide safe
- entry conditions.

 III. One attendendant/rescue personnel topside (two, if conditions warrant it).

HAWAII HAW. 83G-01-17M 2017

FED. ROAD DIST. NO.

STATE

FISCAL SHEET YEAR NO.

SHEETS

48

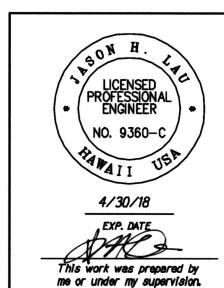
PROJ. NO.

ABBREVIATIONS

AC, ac	Asphalt Concrete	Lt.	Left
AĤ.	Aĥead	Max.	Maximum
ARS	Automatic Retractable	M.L.	Matchline
	Screen	Min.	Minimum
BK.	Back	NSBB	Nutrient Separating
₿,BL	Baseline		Baffle Box
BMP	Best Management	NTS	Not to Scale
	Practices	0.C.	On Center
Bott.	Bottom	0/H	Overhead
<u>C</u>	Centerline	0/5	Offset
<u> </u>	Chain Link	PC	Point of Curvature
Clr.	Clearance	PERM.	Permanent
Conc.	Concrete	PI	Point on Intersection
CRM	Concrete Rubble	PID	Project Identification
<i>C.</i>	Masonry	, 10	Number
Det.	Detail	POC	Point on Curvature
Dia.	Diameter	PT	Point of Tangency
EA	Each	R	Radius
ĒB	Eastbound	Rt.	Right
EC	Erosion Control	r/w	Right-of-Way
ECM	Erosion Control Mat	S	Slope
Elev	Elevation	SFM	Sewer Force Main
EQ	Equal	sl	Street Light
ep	Edge of Pavement	SLB	Street Light Box
es	Existing Edge of	Sta.	Station
	Shoulder	Std.	Standard
etw	Existing Edge of	ST. MON.	Street Monument
	Travel Way	sym.	Symbol
exist.	Existing	†	Telephone
ftg.	Footing	T/thk	Thick
gďi	Grateď Drain Inlet	TC	Traffic Control
<i>GFRP</i>	Glass Fiber Reinforced	TCP	Traffic Control Plan
	Polymer	Тур.	Typical
GRP	Grouted Rubble Paving	ÚĠ	Únderground
G.H.	Guy Wire	U.P.	Utility Pole
I.D.	Inside Diameter	W	Water
I.E./inv.	Invert Elevation	W	Width
L	Length		

LEGEND

	Property Line		Access Permitted
	Limits of Work		No Vehicular Access Permitted
	Centerline Existing Guardrail		No Access Permitted
	Temporary Fiber Roll		Limited Access as Noted on Plans
— ~	Runoff Direction	YYY	Top of Slope



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

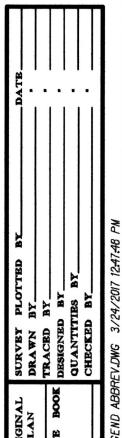
GENERAL NOTES, LEGEND
AND ABBREVIATIONS

KAWA WATERSHED STORM WATER

BEST MANAGEMENT PRACTICES ON OAHU, PHASE 1

Project No. 83G-01-17M
Scale: None Date: April 2017

SHEET No. N-01 OF 9 SHEETS



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