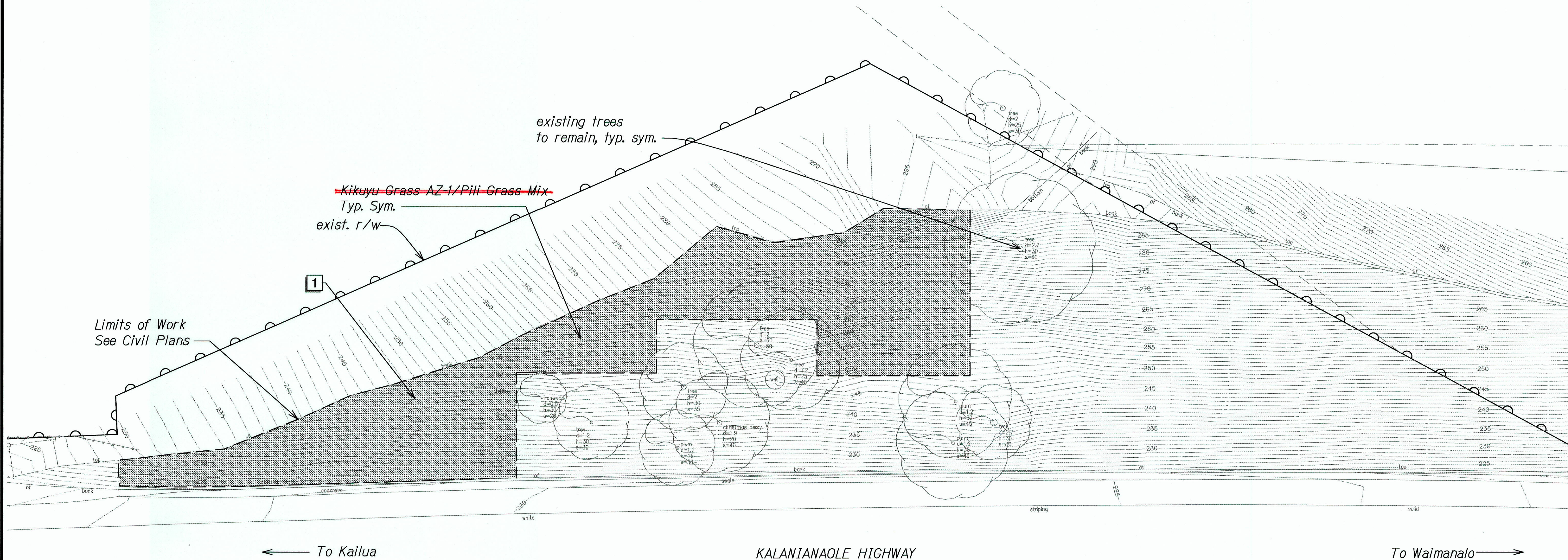
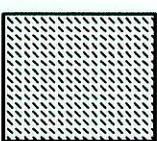



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOT SHEETS
HAWAII	HAW.	HWY-O-07-14M	2014	36	51



PLANT SCHEDULE PID 125

HYDROSEED	BOTANICAL NAME	COMMON NAME
	Pennisetum clandestinum Heteropogon contortus	Bermuda Kikuyu Grass AZ-1 Pili Grass
		Annual Rye

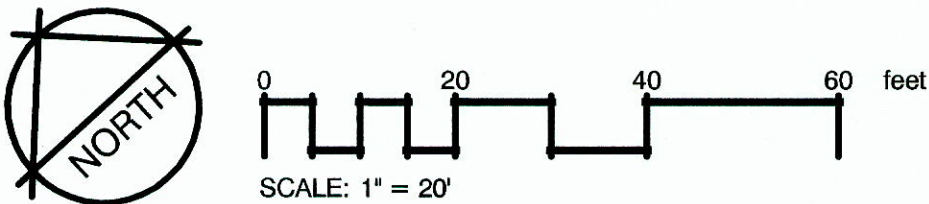
REFERENCE NOTES SCHEDULE PID 125


SYMBOL	DESCRIPTION
	Install erosion control matting per manufacturer's instructions and recommendations. See erosion control plans for details and exact limits.

- Notes:
- Contractor shall clear areas within the Limits of Work Only. Existing vegetation located outside the Limits of Work shall remain.
 - Existing trees shown are to remain and be protected throughout construction.
 - Notify the Engineer if trees with 3" caliper trunks or greater are discovered during clearing operations prior to removal. Contractor shall obtain the approval of the Engineer prior to removal of trees.

LANDSCAPE PLANTING PLAN PID 125

Scale: 1" = 20'-0"





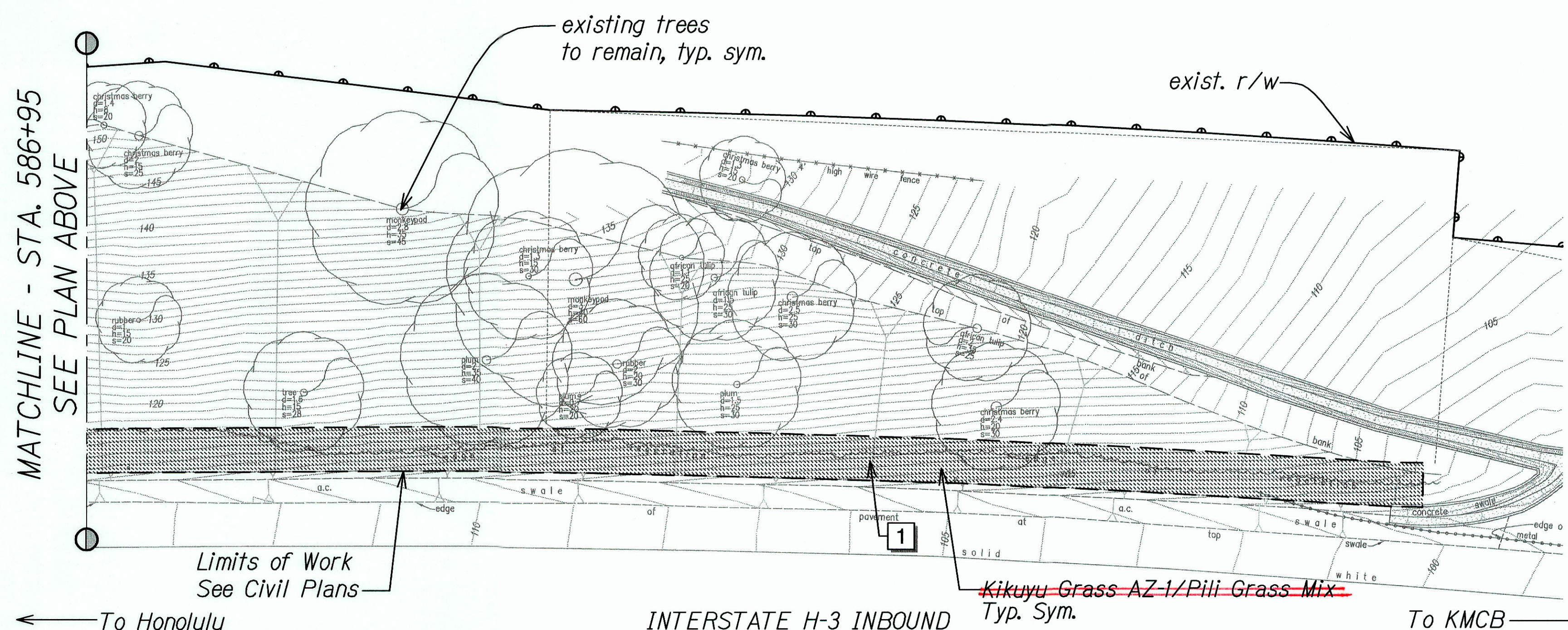
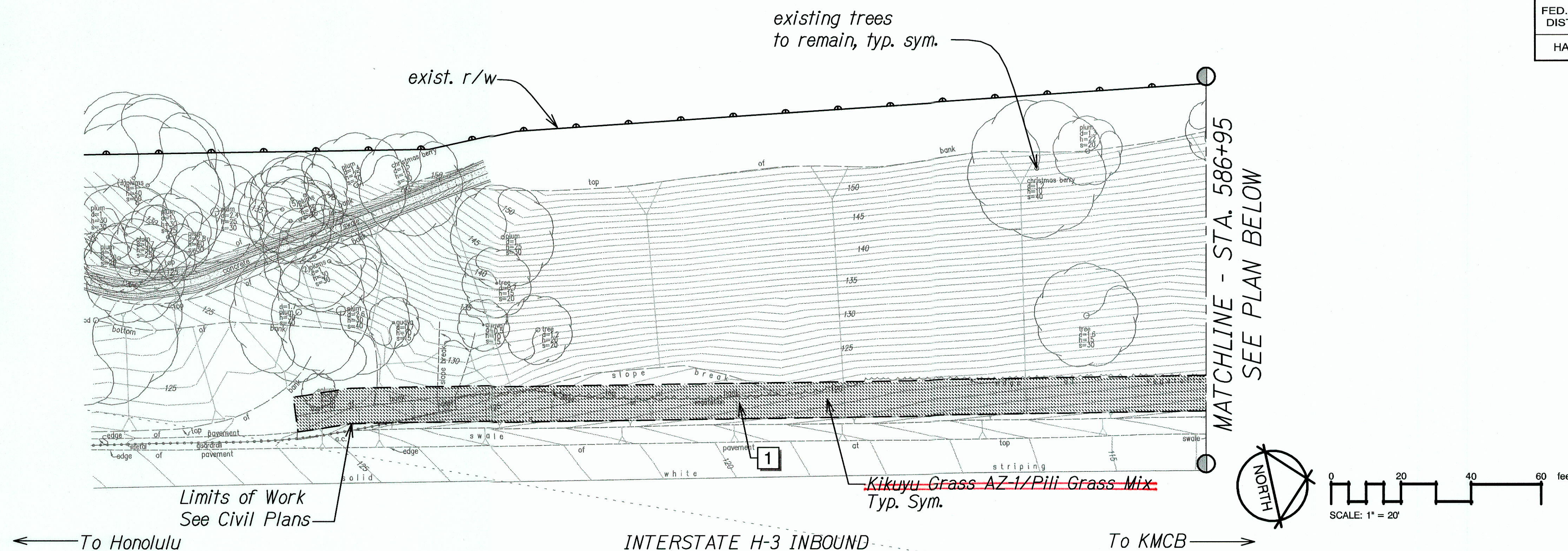
4/30/16
EXPIRATION DATE
This work was prepared by me or under my supervision.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

LANDSCAPE PLANTING PLAN
PID 125

KAWAINUI WATERSHED STORM WATER
BEST MANAGEMENT PRACTICES ON OAHU
Project No. HWY-O-07-14M
Scale: 1" = 20'-0" Date: April 2016

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-07-14M	2014	39	51



PLANT SCHEDULE PID 9003

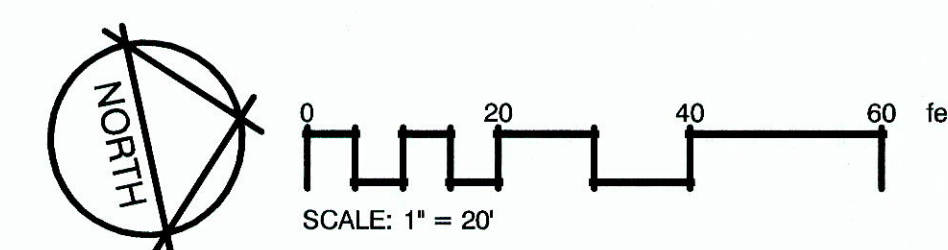
HYDROSEED	BOTANICAL NAME	COMMON NAME
	Pennisetum clandestinum	Bermuda Grass
	Heteropogon contortus	Annual Rye Grass

REFERENCE NOTES SCHEDULE PID 9003

SYMBOL	DESCRIPTION
1	Vegetated wall (see Civil plans)
	Erosion Control Matting

LANDSCAPE PLANTING PLAN PID 9003

Scale: 1" = 20'-0"



4/30/16
DATE

This work was prepared by me or under my supervision.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

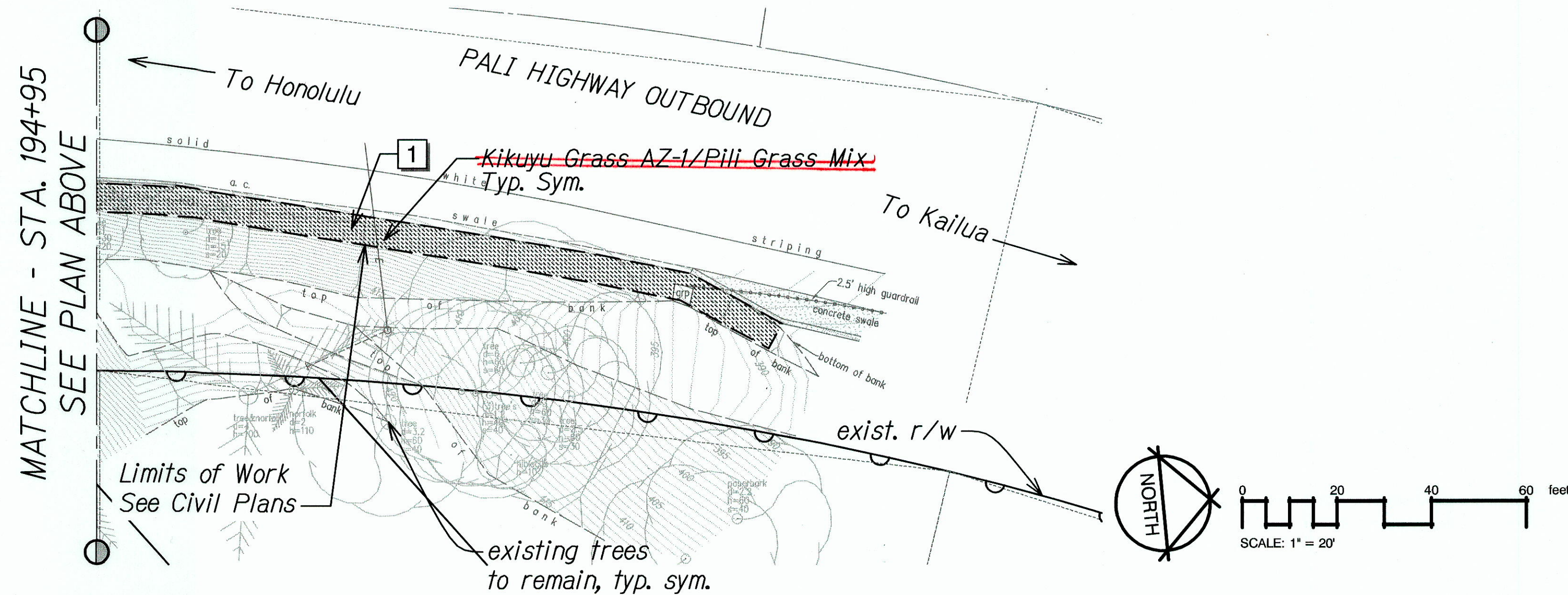
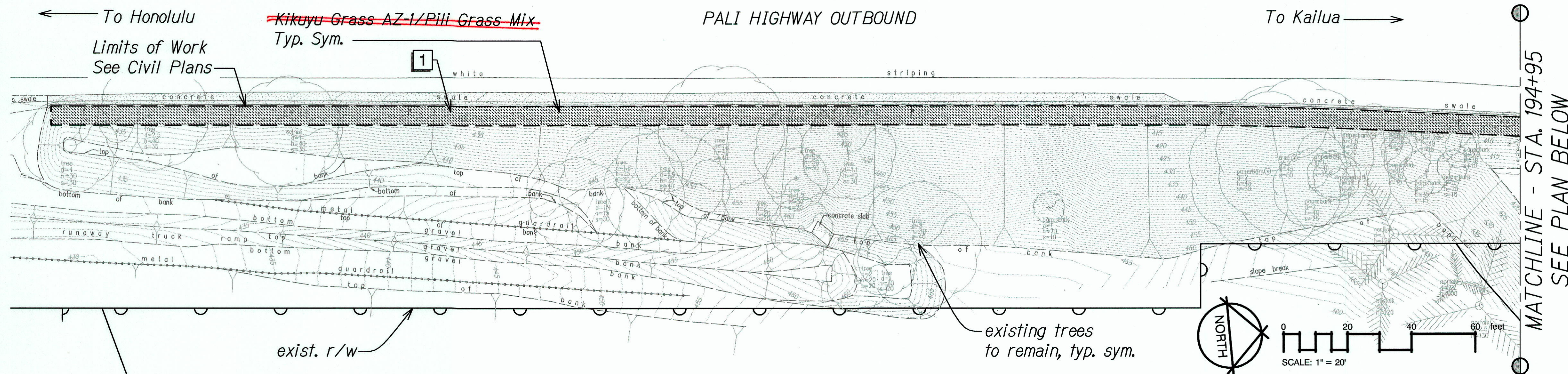
LANDSCAPE PLANTING PLAN
PID 9003

KAWAINUI WATERSHED STORM WATER
BEST MANAGEMENT PRACTICES ON OAHU
Project No. HWY-O-07-14M
Scale: 1" = 20'-0" Date: April 2014

SHEET No. LP-05 OF 9 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOT SHE
HAWAII	HAW.	HWY-O-07-14M	2014	40	5



PLANT SCHEDULE PID 473

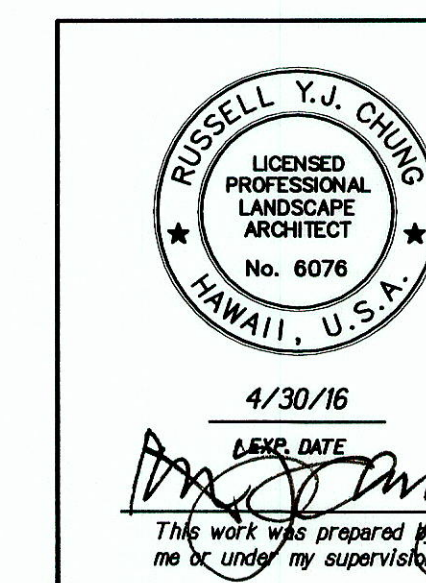
HYDROSEED	BOTANICAL NAME	COMMON NAME
	Pennisetum clandestinum	Bermuda
	Heteropogon contortus	Kikuyu
		Annual Rye Grass

REFERENCE NOTES SCHEDULE PID 473

SYMBOL	DESCRIPTION
1	Vegetated wall (see Civil plans)
	Erosion Control Matting

LANDSCAPE PLANTING PLAN PID 473

Scale: 1" = 20'-0"



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

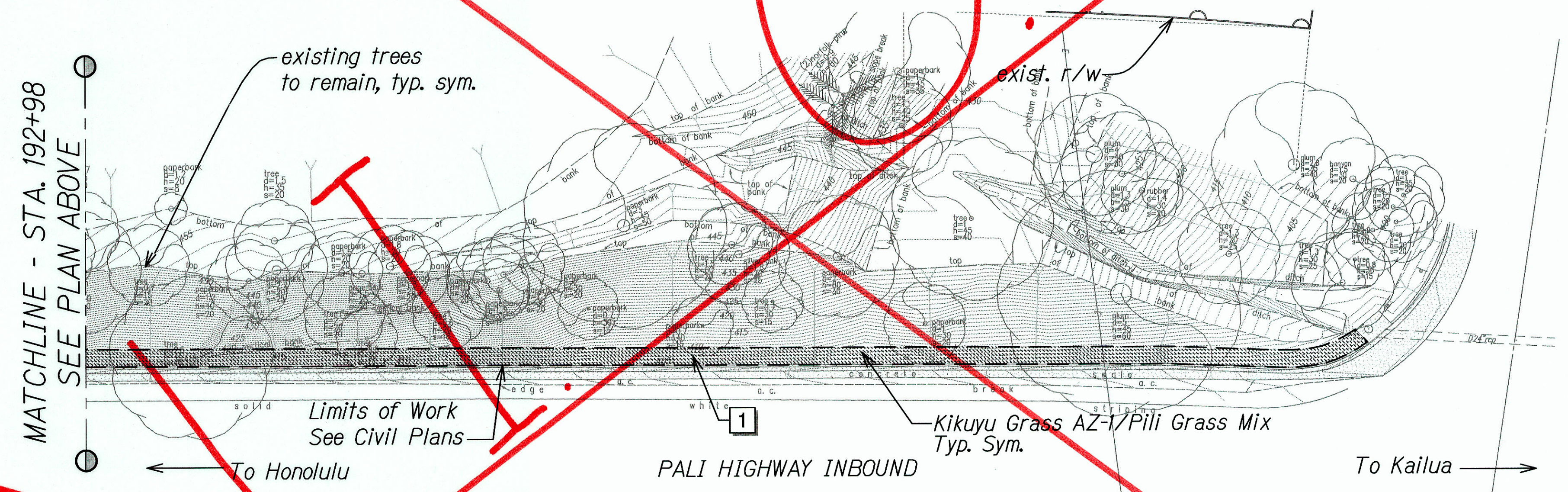
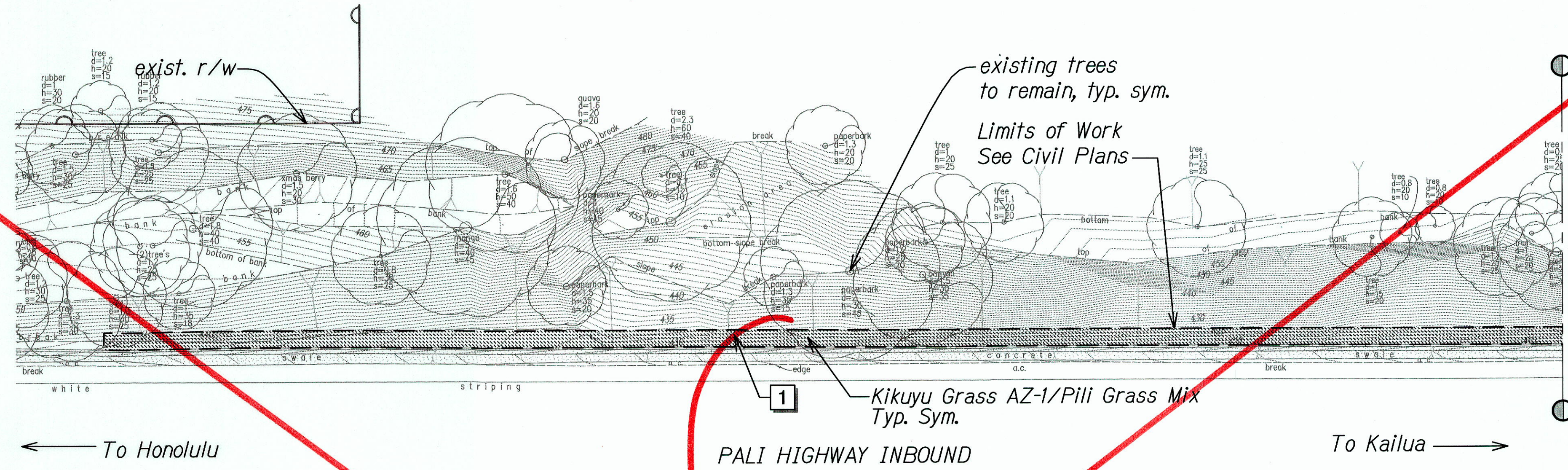
LANDSCAPE PLANTING PLAN PID 473

KAWAINUI WATERSHED STORM WATER
BEST MANAGEMENT PRACTICES ON OAHU
Project No. HWY-O-07-14M
Scale: 1" = 20'-0" Date: April 2016

SHEET No. LP-06 OF 9 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOT SHEETS
HAWAII	HAW.	HWY-O-07-14M	2014	41	57




PLANT SCHEDULE PID 474

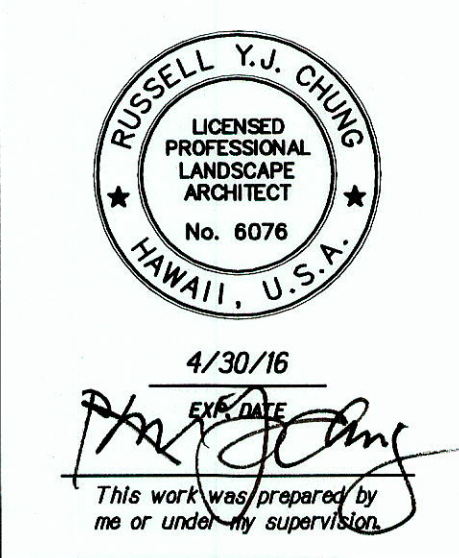
HYDROSEED	BOTANICAL NAME
	<i>Pennisetum clandestinum</i> <i>Heteropogon contortus</i>

COMMON NAME
Kikuyu Grass AZ-1 Pili Grass

REFERENCE NOTES SCHEDULE PID 474

SYMBOL	DESCRIPTION
	Vegetated wall (see Civil plans)

LANDSCAPE PLANTING PLAN PID 474 Scale: 1" = 20'-0"

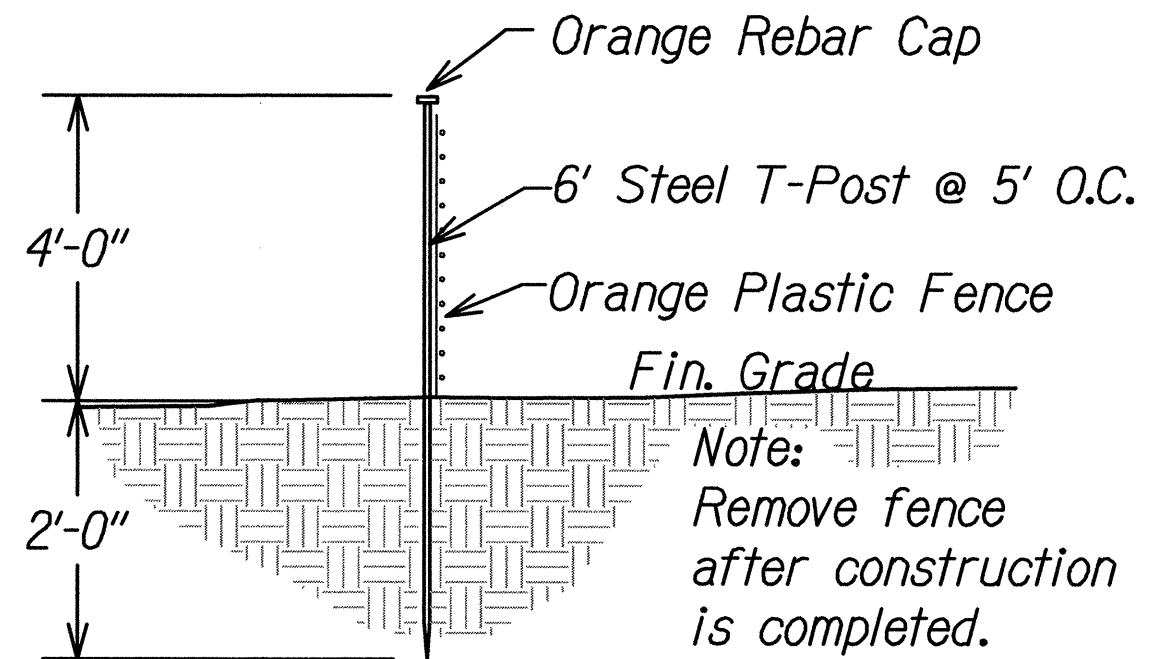


STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
LANDSCAPE PLANTING PLAN
PID 474
KAWAINUI WATERSHED STORM WATER
BEST MANAGEMENT PRACTICES ON OAHU
Project No. HWY-O-07-14M
Date: April 2016
Scale: 1" = 20'-0"

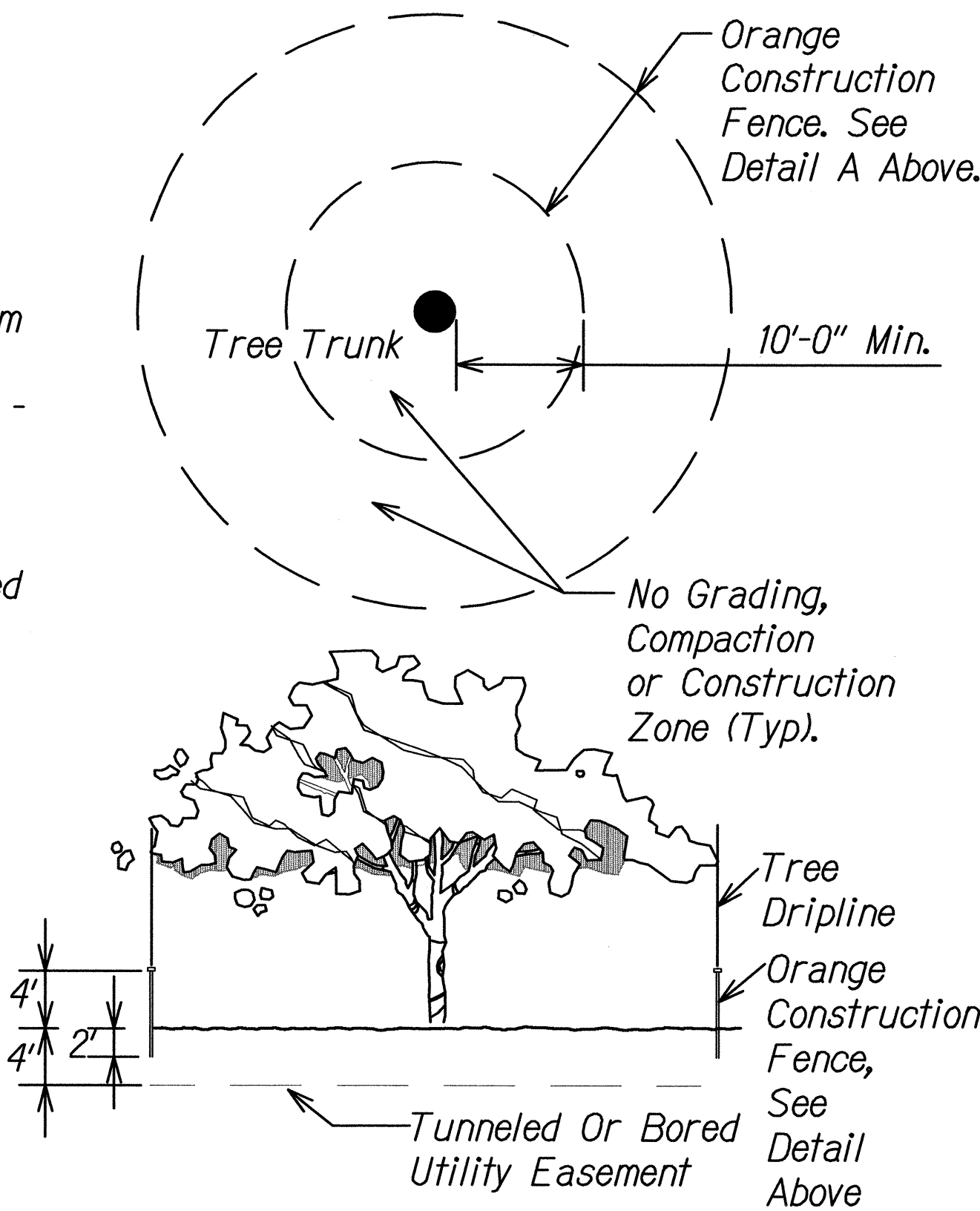
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-07-14M	2014	42	51

TREE PROTECTION ZONE:

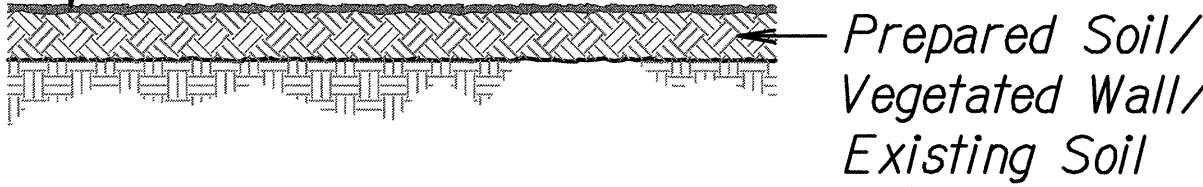
- All trees identified on the plans to be protected. All trees 24" caliper or greater (as measured at 4½ feet height) shall be protected. If trees other than those designated for removal are damaged beyond survival condition as determined by the Engineer, the Contractor shall remove such trees and replace with a tree of the same species and size and maintain for the duration of the construction or 12 months whichever is greater at no cost to the State.
- The recommended tree protection zone should be located at the outer drip line of the canopy of the tree. However, the minimum protection zone around a tree should be at least 10 feet from the external surface of the tree's trunk. For all palms, the minimum protection zone should be at least 10 feet from the external surface of the palm's trunk.
- All underground utilities and irrigation lines should be routed outside of the tree protection zone. If utilities must traverse the tree protection zone, they shall be tunneled or bored at a depth of 4 feet or greater within the tree protection zone.
- All protected trees shall be listed on the demolition, landscape, grading and utilities plans. If there is a discrepancy with all plans, Contractor shall contact Engineer immediately.
- Protective fences shall be erected around trees identified on plan to remain and/or trees with a trunk diameter greater than 24 inches (as measured at a height of 4 ½ feet.) Protective fence shall be 4 feet high orange plastic mesh or approved equivalent supported on steel T-post a minimum of 6 feet long. Protective fence shall surround tree at a minimum of 10 feet from tree trunk with steel T-post at a minimum of 5 feet on center. Fence shall be installed prior to any demolition work and shall remain in place until site work is completed. Signs shall be posted on all four sides to read "TREE PROTECTION ZONE [TPZ] - NO GRADE CHANGE, STORAGE OR EQUIPMENT PERMITTED WITHIN TPZ."
- For the duration of construction within the drip line of the trees to remain there must be:
 - No changes, alteration or disturbance to the grade by adding fill, excavating or scraping except as noted on plans;
 - No storage on construction materials or equipment;
 - No stockpiling of any construction materials or excavated materials;
 - No disposal of any liquids (e.g. concrete slurry, gas, oil, paint);
 - No vehicular traffic, equipment or excessive pedestrian traffic;
 - No attachment of any wires, ropes, lights or any other such attachment other than those of a protective nature to any tree to be preserved; and
 - No cleaning of equipment or material under the canopy of any tree or group of trees to be preserved
- Auger tunneling, not trenching, shall be used where possible for utility placement within the drip line of the tree. If trenching is necessary it shall be hand dug within the drip line of the tree.



DETAIL A - ORANGE CONSTRUCTION FENCE
NOT TO SCALE



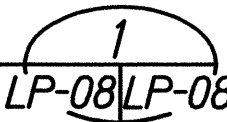
Hydro Seed/Hydro Sprig:
 Shall be specifically processed fiber containing no growth or germination inhibiting factors. It shall be such that after addition and agitation in the hydraulic equipment with seeds/sprigs, fertilizer, water, and other additives not detrimental to plant growth the fibers will form a homogeneous slurry when hydraulically sprayed on the soil or vegetated wall. The fibers shall form a blotter-like ground cover which readily absorbs water and allows infiltration. Complete coverage of the surface shall be attained.



HYDRO-SEED/SPRIG DETAIL 2
Scale: Not to Scale LP-08/LP-08

TREE PROTECTION

Scale: Not to Scale



4/30/16
 RYJ
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STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

**LANDSCAPE
 DETAILS**

KAWAINUI WATERSHED STORM WATER
 BEST MANAGEMENT PRACTICES ON OAHU
 Project No. HWY-O-07-14M
 Scale: As Shown Date: April 2014

SHEET No. LP-08 OF 9 SHEETS

