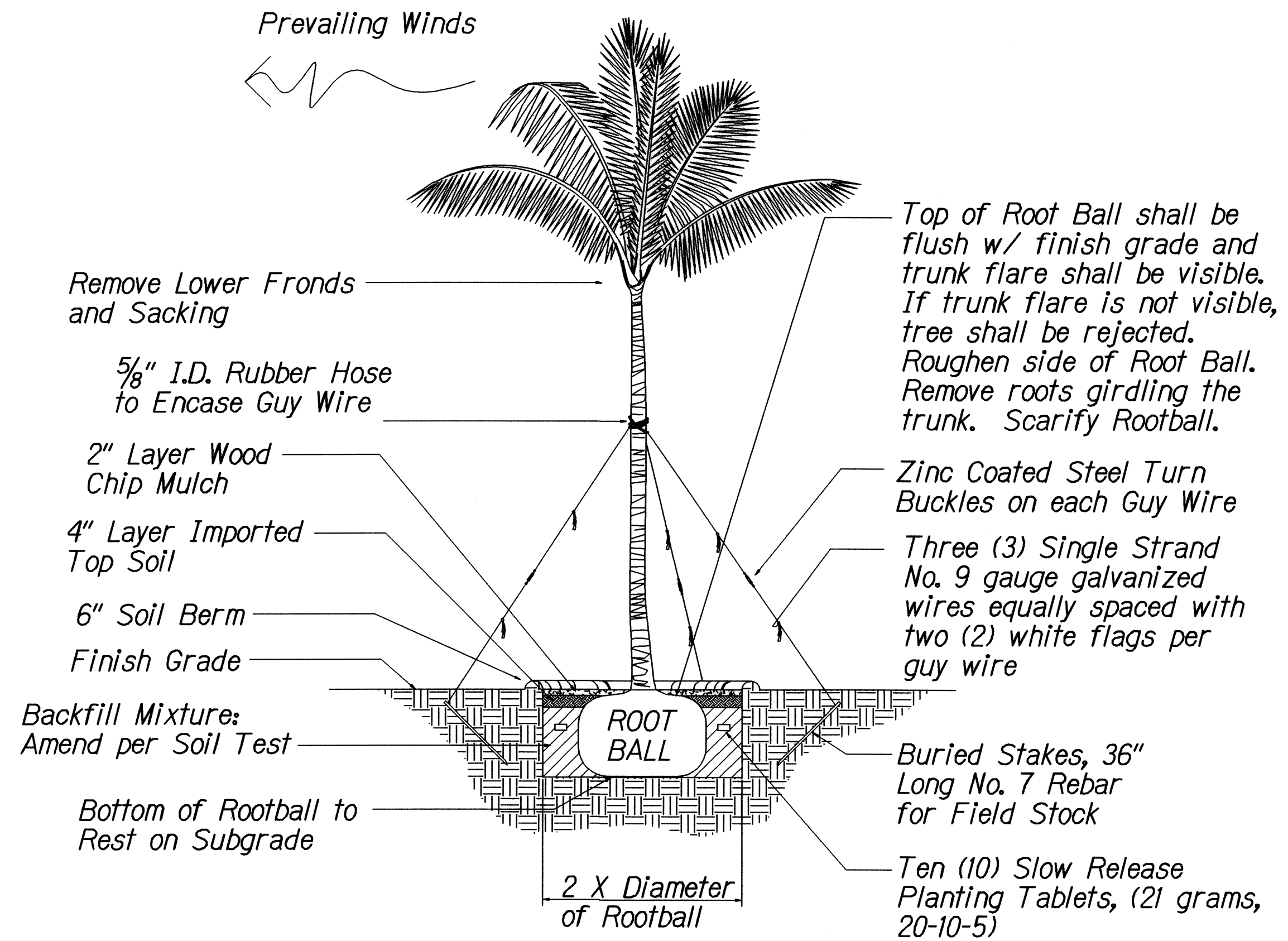


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	92A-02-09M	2009	17	18

PLANTING NOTES:

- Landscape Contractor shall field verify all plant quantities and dimensions prior to installation. Quantities shown on plant list are for reference only, verify actual quantities as shown on plan. If there is discrepancy, the planting plan shall take precedence.
- Landscape Contractor shall be responsible for location and protecting existing utilities.
- Prior to tree excavation, all planting locations shall be staked out by Contractor for approval by Engineer. Do not plant until ground has been prepared and free of stones greater than 1/2" diameter, pipes, debris, trash, stumps, shrubs; site is neat, orderly, and the Engineer accepts site for planting. Cleaning and Grubbing shall be considered an incidental expense to section 619 Planting.
- Notify Engineer of any discrepancies in plant locations or insufficient plant quantities due to difference in plans and actual field conditions.
- Notify Engineer 30 days prior to planting operations for approval of all plant material at place of growth. All plant material not approved by the Engineer will be subject to rejection.
- The Engineer will inspect plants at the place of growth and after the delivery to the project. Each tree shall be tagged by the engineer with a consecutively numbered plastic tamper-resistant and self-locking seal. Seals shall remain on tree and only be removed by the engineer at the completion of the plant establishment period. Trees delivered to the project without engineers seal will be rejected.
- Plants shall meet size indicated by minimum height and spread. Plants shall be straight and uniformly shaped, unless unique or special characteristics are specified, and shall be undamaged, sound, healthy, vigorous and free of disease and insect infestation. Plants not conforming to these requirements on delivery to the project and at the end of the plant establishment period will be rejected.
- Contractor shall be solely responsible for the complete removal and damages resulting from planting any plant species listed on the Hawaii Department of Agriculture 'Noxious weed rules' as defined in the statute, Hawaii Administrative Rules 4:68:1 or the 'Federal Noxious Weed List' as defined in Title 7 of the code of Federal Regulations (CFR), parts 360 and 361.
- All tree work must adhere to American National Standard Institute (or ANSI)-A300 tree care standards and ANSI-Z133 safety standards for tree work. Work shall be contracted to Arborists that has been certified in good standings as an ISA certified Arborist for at least 5 years to assure that tree work is performed properly and trees are not damaged by practices such as topping, flush cuts, over-thinning, or climbing with spikes. Contractor shall submit a copy of the ISA Arborist certification of good standing if 5 years to the Engineer minimum 7 days prior to tree pruning.
- For the duration of construction within the drip line of trees to remain there must be: no changes, alterations or disturbance to the grade by adding fill, excavating or scraping except as noted on plans; no storage of construction material or equipment; no stockpiling of any construction material or any excavated material no disposal of any liquids (e.g. concrete sleuth, 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 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 remain.
- If trees other than those specifically designated for removal are damaged beyond survival conditions as determined by engineer, the contractor shall remove such trees and replace the tree with a same specie and size and maintain for the duration of construction or 12 months whichever is greater at no cost to the state.
- Provide even four-inch layer of planting soil over all planting areas. Representative samples of soil from project site shall be submitted to the University of Hawaii Agricultural Extension Service or laboratory acceptable to the engineer for analysis of required soil amendments. Test results and fertilization schedule shall be presented to the engineer for review and acceptance before placing planting soil. Uniformly distribute fertilizer and amendments over planting areas as recommended by the soil analysis report. Rototill top four-inches of soil to evenly incorporate fertilizer and amendments. After completion of soil amendments, retest to meet soil analysis. Continue amending until test meets soil test recommendations. Provide copy of all soil tests to engineer. Soil testing and preparation of soil shall be considered incidental to the various contract items and will not be paid separately.

- Guy wires, flagging, stakes, windbreakers, etc. shall be maintained and replaced if necessary by the Contractor until the tree or shrub is able to stand by itself. The Contractor shall remove and dispose at the end of plant establishment period.
- Any planting that obstructs sight distance, signs or traffic lights shall be relocated or removed as determined by the Engineer.



Notes:

- Trunk must be protected from rope sling burns and abrasions during moving.
- Water heavily to ensure soil settles around roots.
- Tree shall be plumb, if there is leaning at the end of the plant establishment period, the tree shall be rejected.
- Protect heart and tip from damage and breakage during transporting and transplanting.

PALM PLANTING DETAIL

Not To Scale

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLANTING DETAILS

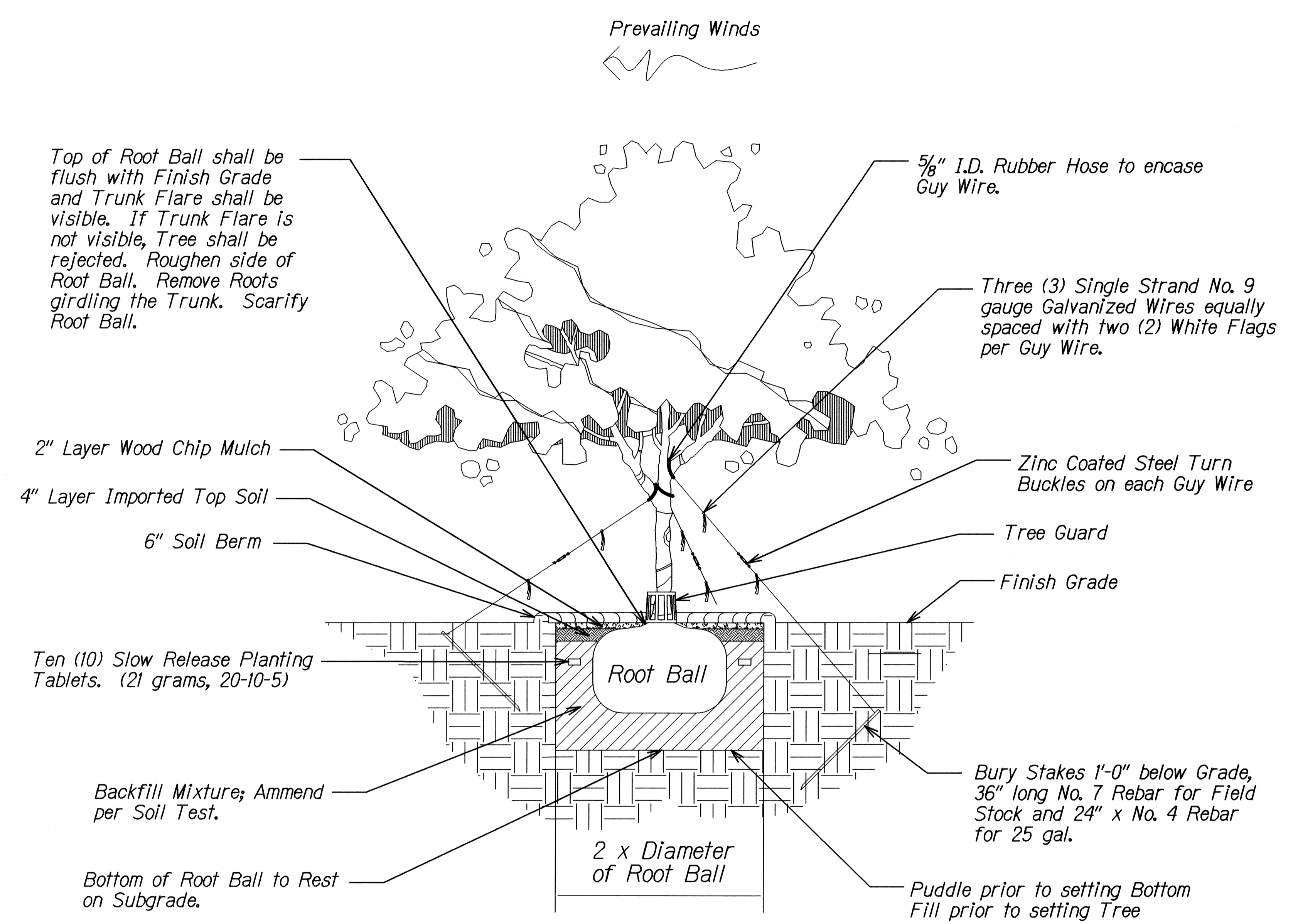
NIMITZ HIGHWAY
MEDIAN EROSION CONTROL
Sumner Street to Richards Street
Project No. 92A-02-09M

Not To Scale Date: April, 2009

SHEET No. 1 OF 2 SHEETS

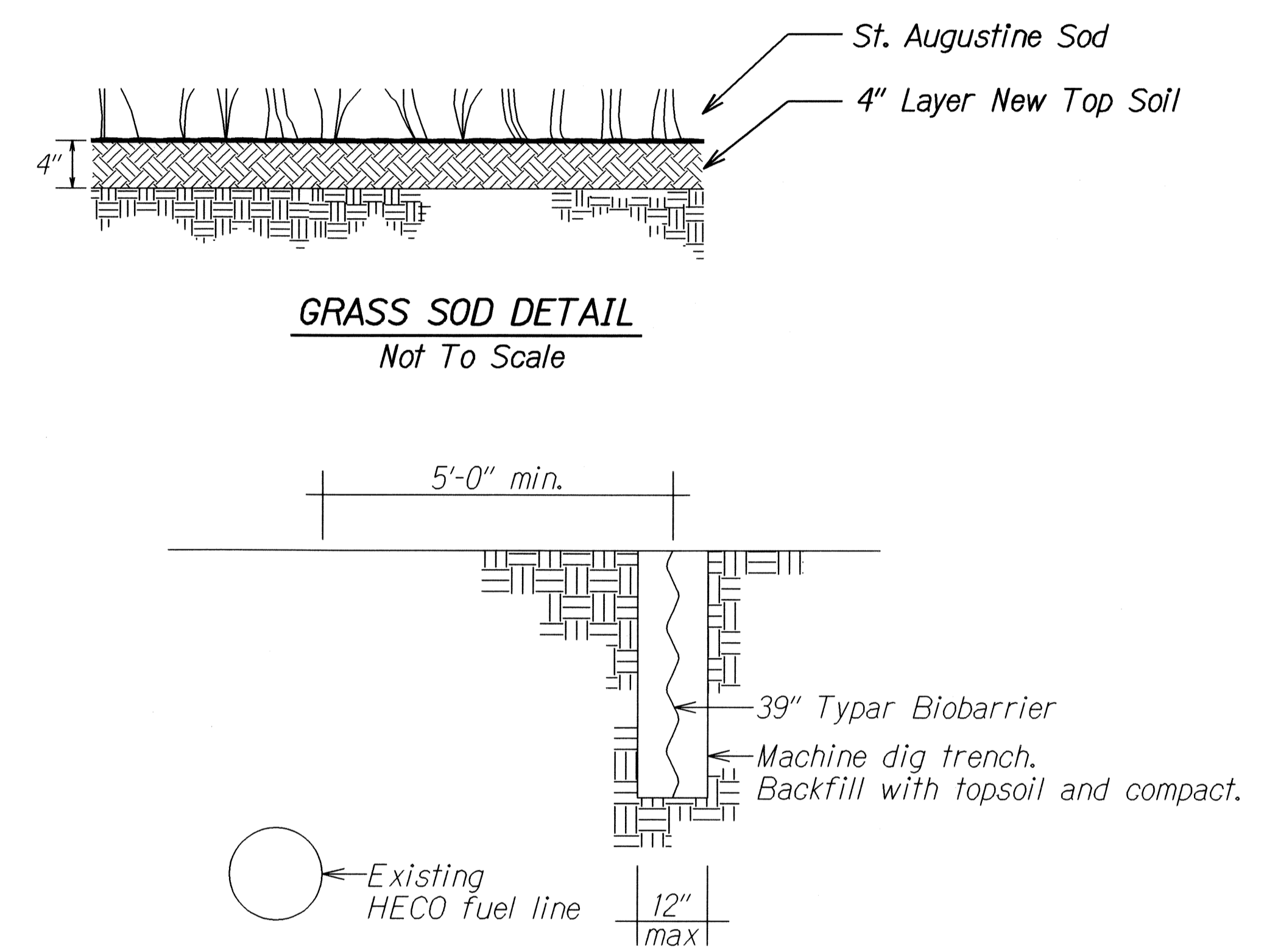
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
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QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE & NOTES
2	<i>Samanea saman</i>	Monkeypod Tree	6" Caliper, Field Specimen (F.S.)
5	<i>Cocos nucifera</i>	Coconut Palm	20 feet Brown trunk ht., F.S.
15,000 s.f.	<i>Stenotaphum secundatum</i>	St Augustine grass	Sod



Note:
Tree shall be plumb. If tree is leaning at the end of the plant establishment period, the tree shall be rejected.

FIELD STOCK TREE PLANTING DETAIL
Not To Scale



Note:
1. Nodules to face tree place top edge of Bio-Barrier at finish grade and secure w/manufacture provided pins. Seams shall have minimum 3" overlap. Refer to manufacturer instructions for bonding the seam. Do not allow gaps in fabric during installation or backfilling. Bio-Barrier should not be left exposed to surface water or sunlight for more than 12 hours since high temperatures and sunlight reduce effective life of product. Refer to product label and MSDS sheet for safety information.

2. Location of HECO fuel line shown on plans is approximate location. Exact location shall be determined via toning by HECO.

HECO ROOT BARRIER DETAIL
Not To Scale

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLANTING DETAILS

NIMITZ HIGHWAY
MEDIAN EROSION CONTROL
Summer Street to Richards Street
Project No. 92A-02-09M

Not To Scale Date: Apr, 2009

SHEET No. 2 OF 2 SHEETS