

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-098-1(011)	2012	44	64

SOIL PREPARATION NOTES:

1. Contractor shall utilize existing soil for the project. Finish grade of the completed project shall remain the same as existing grade. Preserve existing drainage patterns. Soil Preparation notes apply to all planting areas.
2. Do not screen existing soil.
3. Use locally available compost such as Hawaiian Earth Products compost.
4. Do not work the soil when air or soil is so moist that excessive compaction occurs or so dry that dust forms. Apply water if necessary to bring soil to optimal moisture content for tilling, planting and dust control.
5. Remove and dispose of plastics, glass, trash and stones greater than 2 inches diameter: as a result of soil preparation.
6. The contractor shall only perform soil preparation to the extent that can be completed by the end of work day. Any exposed soils at the end of the work day shall be covered with compost.

PHASE I

7. Prior to construction, uniformly spread two inches of compost over entire median to be planted.
8. Scarify the top 6 inches of existing soil.
9. Apply generous amounts of water to break soil clumps to between one inch and six inches in diameter

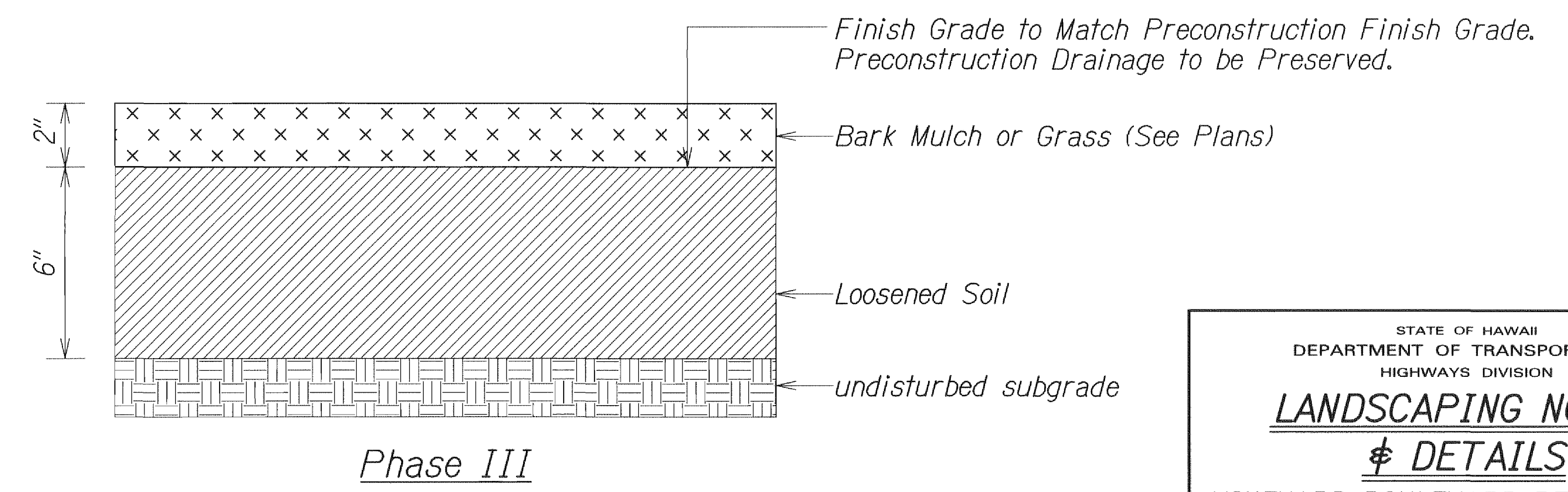
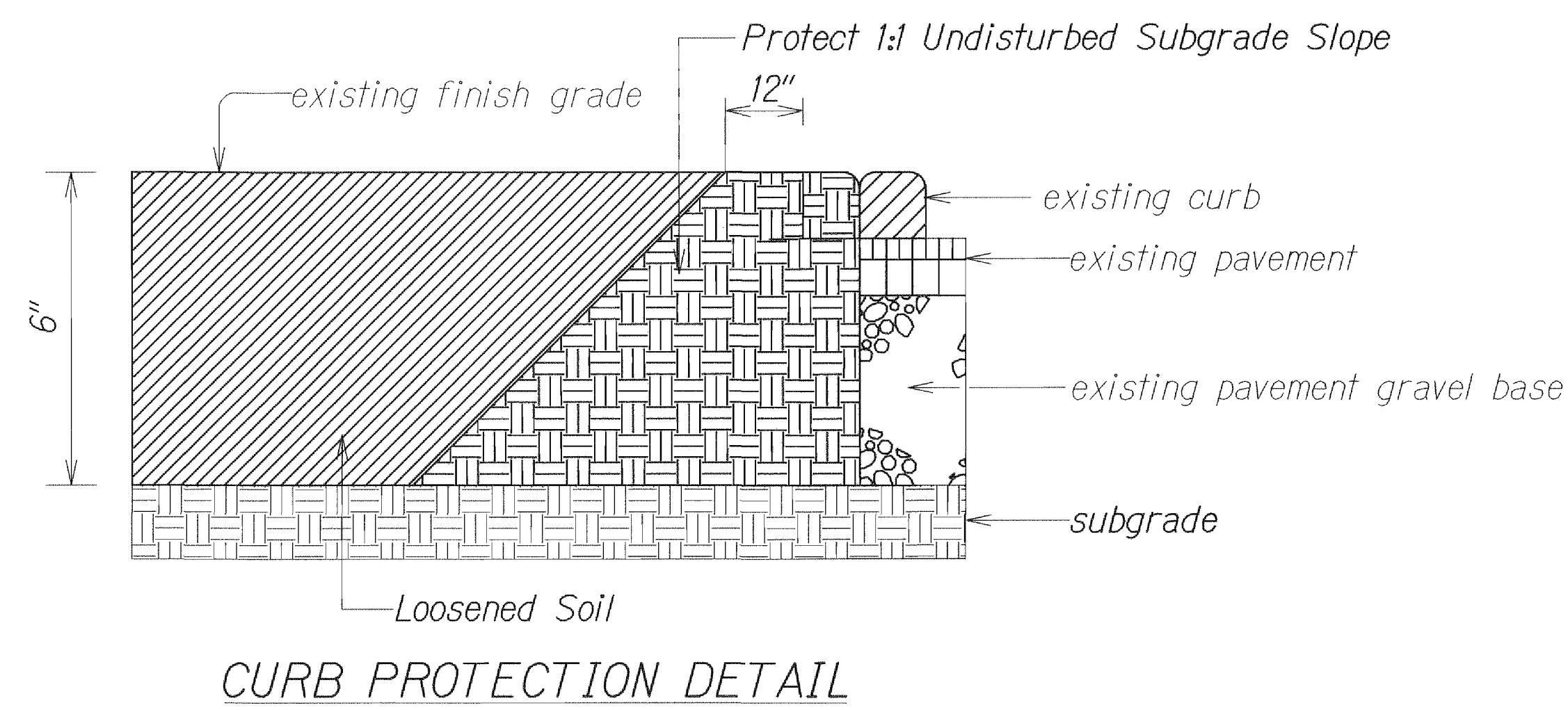
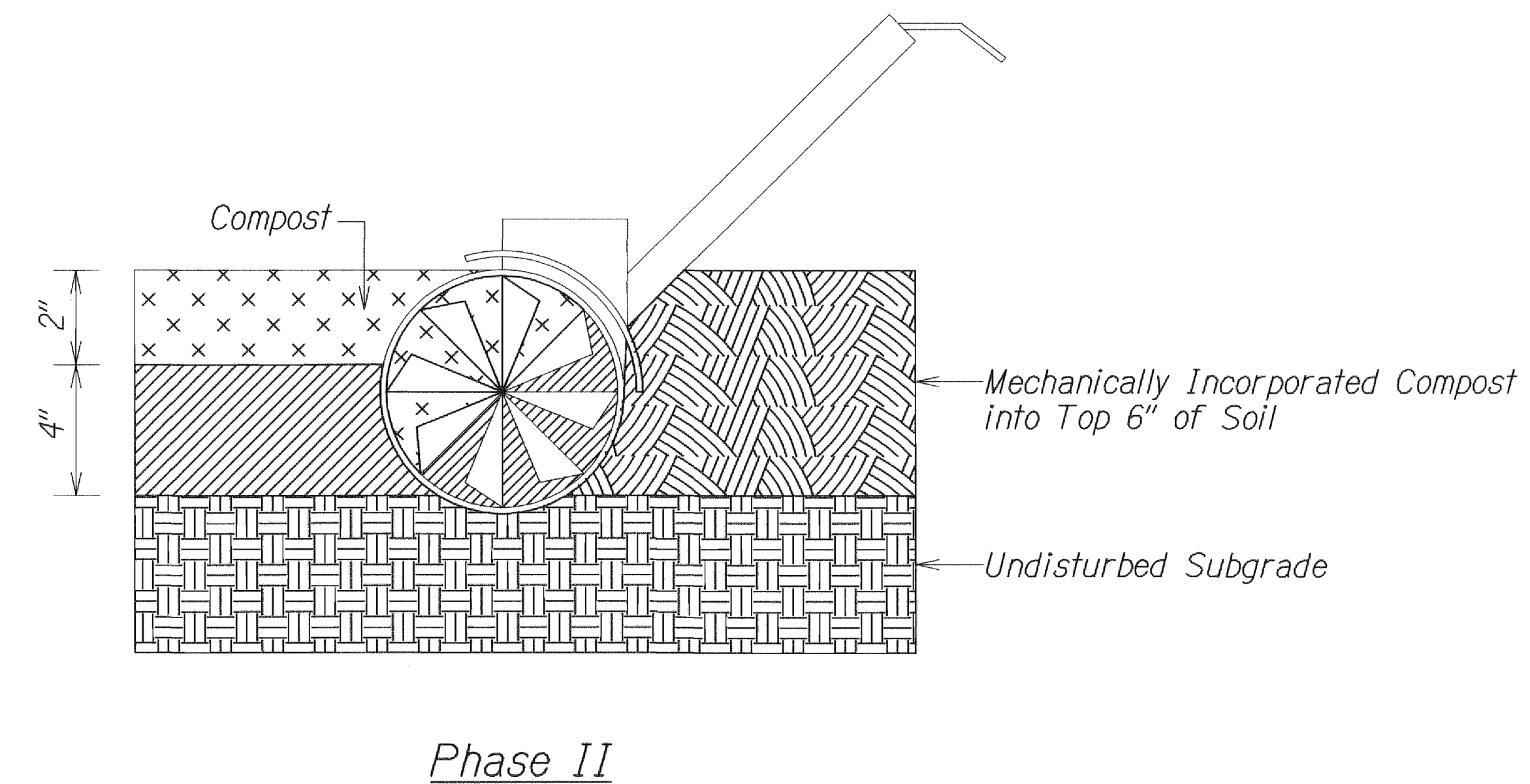
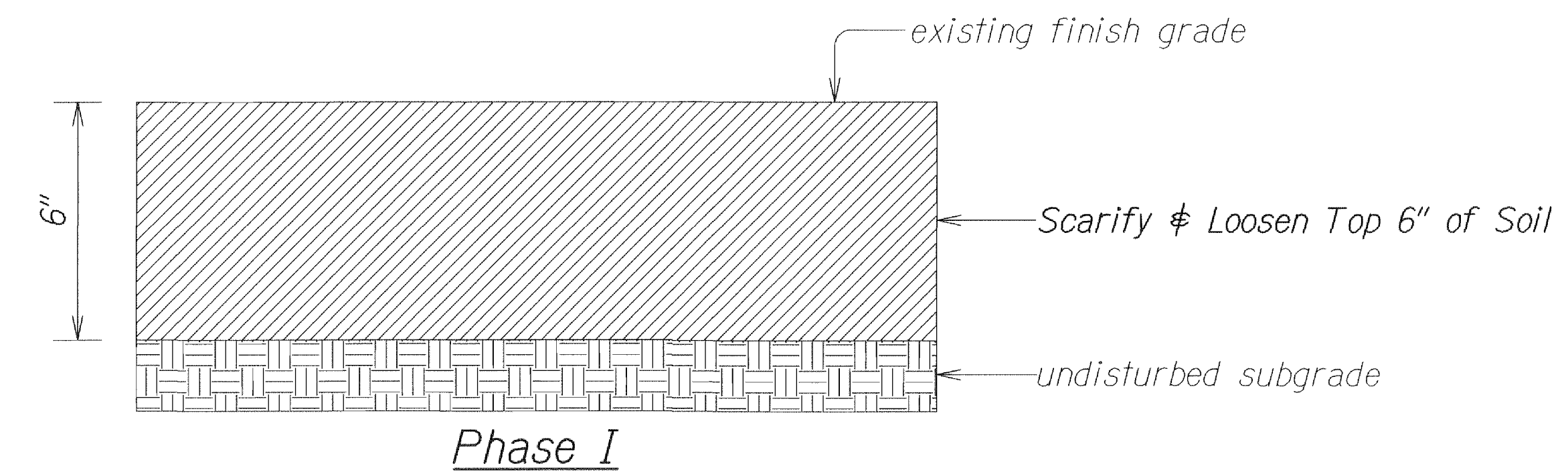
PHASE II

10. Apply 2 inches of compost and mechanically incorporate into the top 6 inches of soil. Afterwards do not allow vehicles or equipment on median.

PHASE III

11. Grade soil to a smooth and even finish without abrupt changes or pockets. Evenly apply 2 inches of bark mulch to planting bed areas.

SOIL PREPARATION PROCESS



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

LANDSCAPING NOTES
& DETAILS

VINEYARD BOULEVARD RESURFACING
Vicinity of Palama St. to End of H-1 On-and-Off Ramp
Federal-Aid Project No. STP-098-1(011)

Not to Scale Date: November, 2012

SHEET No. 1 OF 3 SHEETS

DESIGNED BY	DATE
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
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PLANTING NOTES

1. 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 a discrepancy, the planting plan shall take precedence.

2. Landscape Contractor shall be responsible for locating and protecting existing utilities.

3. Prior to shrub hole 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, site is neat, orderly, and the Engineer accepts site for planting.

4. Notify the Engineer of any discrepancies in plant locations or insufficient plant quantities due to difference in plans and actual field conditions.

5. 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 subject to rejection.

6. 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 trees 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.

7. 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.
8. The Contractor shall be solely responsible for the complete removal and damages resulting from the introduction of planting any plant species listed on the Hawaii Department of Agriculture "Noxious Weed Rules" as defined in the Statute, Hawaii Administrative Rules 4:66:1 or the 'Federal Noxious Weed List' as defined in Title 7 of the Code of Federal Regulations (CFR), Parts 360 and 361.

9. 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 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.

10. 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.
11. 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.

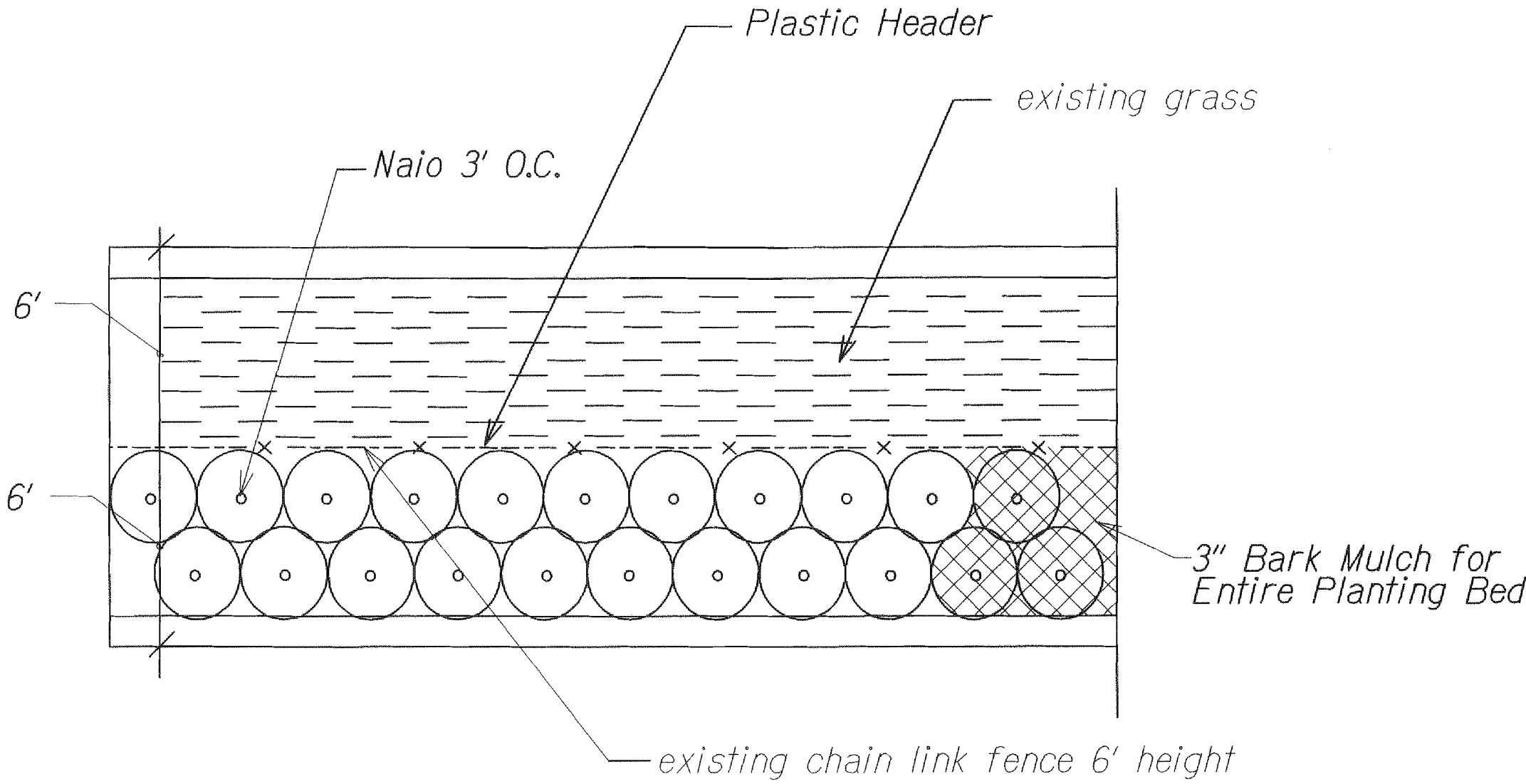
12. Representative samples of soil from project site shall be submitted to the University of Hawaii Agricultural Extension Service or laboratory acceptable to the Engineer for analysis of required soil amendments. Test results and fertilization schedule shall be presented to the Engineer for review and acceptance before placing planting soil. Uniformly distribute fertilizer and amendments over planting areas as recommended by the soil analysis report. Rotofill 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.

13. 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.

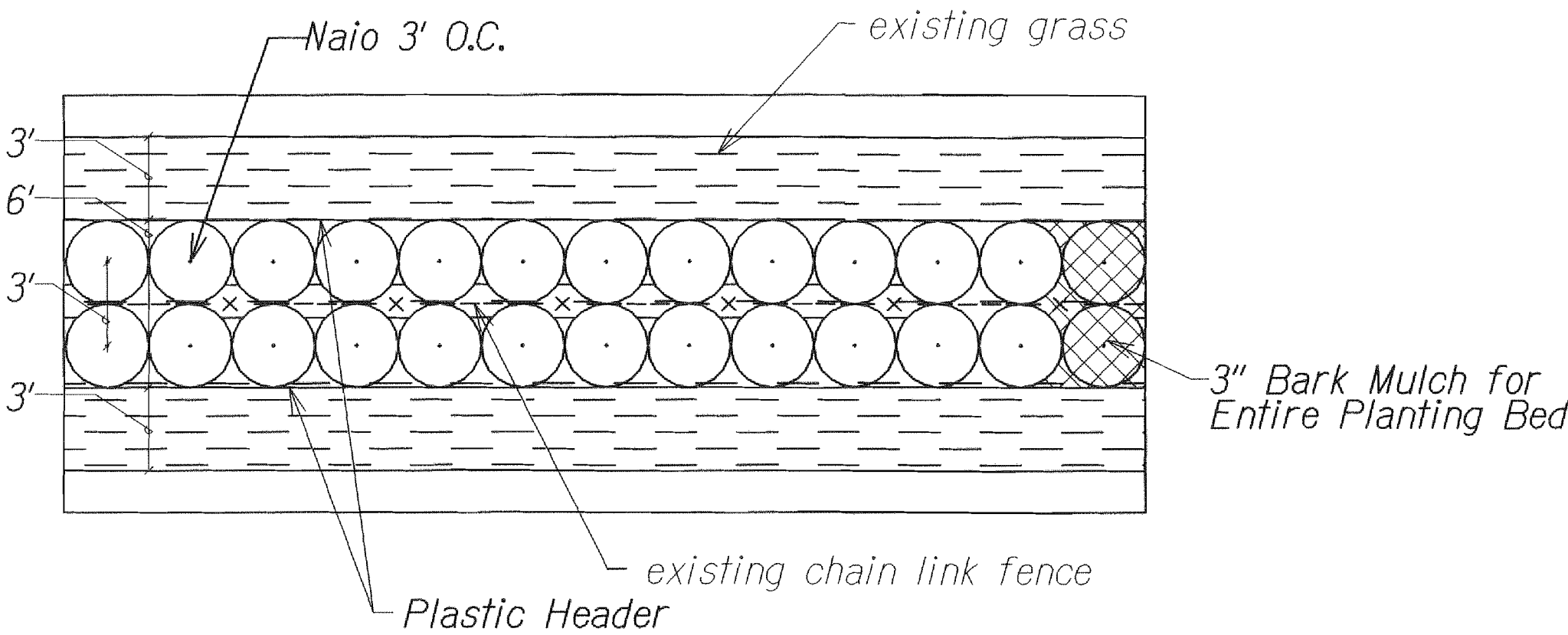
14. Any planting that obstructs sight distance, signs or traffic lights shall be relocated or removed as determined by the Engineer.

PLANT SCHEDULE

Quantity	Botanical Name	Common Name	Size	Notes
730	Myoporum sandwicense	Naio	3 Gallon	2 feet width, 2 feet height
18	Cassia nealiae	Rainbow Shower Tree	50 Gallon	3 - 4 inches caliper, 10 - 12 feet height
5,000	Plumbago zeylanica	Ilie'e	1 Gallon	0.5 foot width, 1 foot height



TYPICAL DETAIL 1



TYPICAL DETAIL 2

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SHEET No. 2 OF 3 SHEETS

