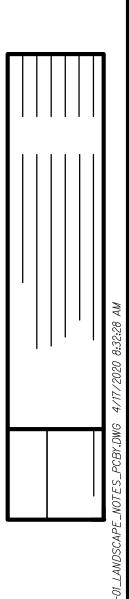
| <u>PL</u> | ANT NOTES:   |
|-----------|--|
| 1.        | Contractor shall field verify all plant quantities and dimens<br>of plant materials to be provided. In all cases, Contractor   |
| 2.        | Contractor shall be responsible for locating and protecting  |
| 3.        | Do not perform planting operations until ground has been p<br>for planting.  |
| 4.        | Notify Engineer of any discrepancies in plant locations.   |
| 5.        | The Contractor's submission of a bid shall constitute certif<br>quantity. Engineer shall inspect and approve plants at time<br>and shall be undamaged, sound, healthy, vigorous and free<br>these requirements on delivery to the project and at the en  |
| 6.        | Contractor shall be solely responsible for the complete rema<br>on the Hawaii Department of Agriculture 'Noxious Weed Rul<br>or the 'Federal Noxious Weed List' as defined in Title 7 of   |
| 7.        | All tree work must adhere to American National Standard I<br>safety standards for tree work. Work shall be contracted<br>Certified Arborist for at least 10 continuous years to assur<br>damaged by practices such as topping, flush cuts, over-thin<br>the ISA arborist certification of good standing of 10 years<br>The cost for arborist services shall be considered part of  |
| 8.        | Representative samples of soil from project site shall be supported by the second seco |
| 9.        | For the duration of construction within the drip line of tre<br>disturbance to the grade by adding fill, excavating or scrap<br>material or equipment; no stockpiling of any construction ma<br>concrete slurry, gas, oil, paint); no vehicular traffic, equipm<br>ropes, lights, or any other such attachment other than those<br>cleaning of equipment or material under the canopy of any   |
| 4.0       |  |



|  |  | FED. ROAD<br>DIST. NO. | STATE | PROJ. NO. | FISCAL<br>YEAR | SHEET<br>NO. | TOTAL<br>SHEETS |
|--|--|------------------------|-------|-----------|----------------|--------------|-----------------|

sions prior to installation. Contractor shall determine quantities shall install plant material on all areas affected by construction.

existing utilities.

prepared and site is neat, orderly, and the Engineer accepts site

ification of availability of plants of the required type, size, and ne of delivery and acceptance. Plants shall meet size indicated of disease and insect infestation. Plants not conforming to nd of the plant establishment period will be rejected.

noval and damages resulting from planting any plant species listed les' as defined in the statute, Hawaii Administrative Rules 4:68:1 the Code of Federal Regulations (CFR), parts 360 and 361.

Institute (or ANSI) - a300 Tree Care Standards and ANSI-z133 to arborists that have been certified in good standing as an ISA ire that tree work is performed properly and trees are not nning, or climbing with spikes. Contractor shall submit a copy of to the Engineer a minimum of 7 days prior to tree pruning. Specification Section 642 - Landscape Maintenance.

submitted to Crop Nutrient Solutions Inc., the University of Hawaii the Engineer for analysis of required soil amendments, ollect soil samples of existing soils inside the project limits for sist of a composite sample of 1 gallon of soil collected from a vidual site. Sample hole locations shall be spread evenly epresentation of the soil present on the site. Contractor shall intermix soils from different sites. The label for the composite ndividual project site from which it was taken. Samples shall bed by the "Methods of Soil Analysis" by the Soil Science Society shall be provided for each individual site. Soil analysis shall be 's" by the Soil Science Society of America. The soil analysis for rganic carbon, chemical analysis, moisture content, Cation ity, and soluble salts, sieve analysis per ASTM D422M, total phosphorus per EPA Method 365.3, and major cations (K+, Ca++, shall also include a summary of the findings and not limited to, types of amendment and fertilizers to be added, hedule for applying amendments and fertilizers at pre-planting, ns to correct soil deficiencies shall be specific to each individual ns for correcting soil deficiencies shall be limited to those which ed areas of all sites where tilling is not allowed. Test results er for review and acceptance before placing planting soil or amendments over planting areas as recommended by the soil by turning to depth of 18-inches and till top 6-inches of soil to steeper than 3H:1V, no tilling is required. Refer to Specification for soil analysis and site preparation.

ees to remain there must be: no changes, alterations or aping except as noted on plans; no storage of construction naterial or any excavated material no disposal of any liquids (e.g. ment or excessive pedestrian traffic, no attachment of any wires, se of protective nature to any tree to be preserved; and no tree or group of trees to remain.

10. Guy wires, flagging, stakes, windbreakers, etc. shall be maintained and replaced if necessary by the Contractor until acceptance by Engineer. The Contractor shall remove and dispose of these items at the end of plant establishment period.

- damage cause by the watering of plants.
- directed by the Engineer.
- Sections 641.03(D), 641.03(E) and 641.03(F).
- Section 642 Landscape Maintenance.

11. Provide water for all plant material for the duration of the project, including plant establishment period. Water trees, shrubs, ground cover and all grassed areas. Water for planting shall not cause erosion damage to the slopes. The Contractor shall be responsible for repairing any

12. Temporary irrigation shall be provided and installed by the Contractor for the duration of the project. Temporary irrigation system shall be considered incidental to Specification Section 641 -Hydro-Mulch Seeding. Refer to Specification Sections 641.03(C), 641.03(D), and 641.03(E). The Contractor shall be responsible for locating, determining, and establishing the water source and delivery method of the water to the project site. Contractor shall be responsible for obtaining and maintaining all necessary permits and agreements for the source of water for the irrigation system as well as ensuring water is delivered to the site for the duration of the project. Replace watering equipment that cause erosion or runoff. Water will be considered an incidental cost to the project. The Contractor shall provide and maintain all equipment required to deliver water to the project site. Contractor shall also be responsible for obtaining all necessary permits and agreements for the source of water for the temporary irrigation system. Contractor shall remove and dispose of temporary irrigation system components upon final acceptance or as

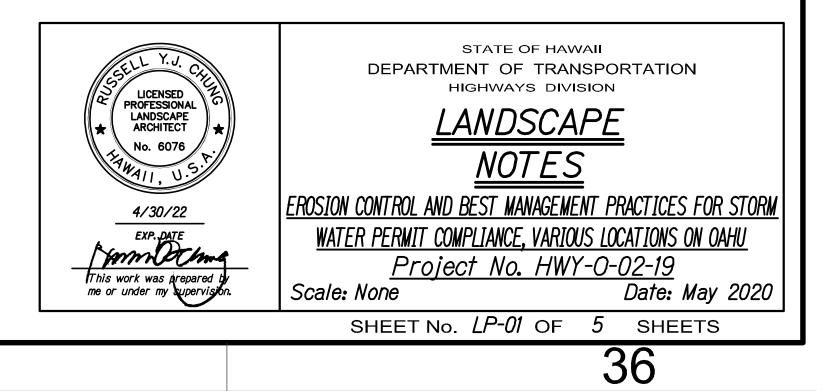
13. Contractor shall be responsible for weeding throughout the 9-month plant establishment period. All removed weeds shall be immediately placed in plastic bags to minimize the spread of weed seeds. Contractor shall keep all new planting areas at least 90 percent free of weeds and grass considered undesirable by the Engineer. Keeping new planting areas at least 90 percent free of weeds and grass considered undesirable by the Engineer is required as a condition of acceptance for the planting period, plant establishment period, and final acceptance. Refer to Specification

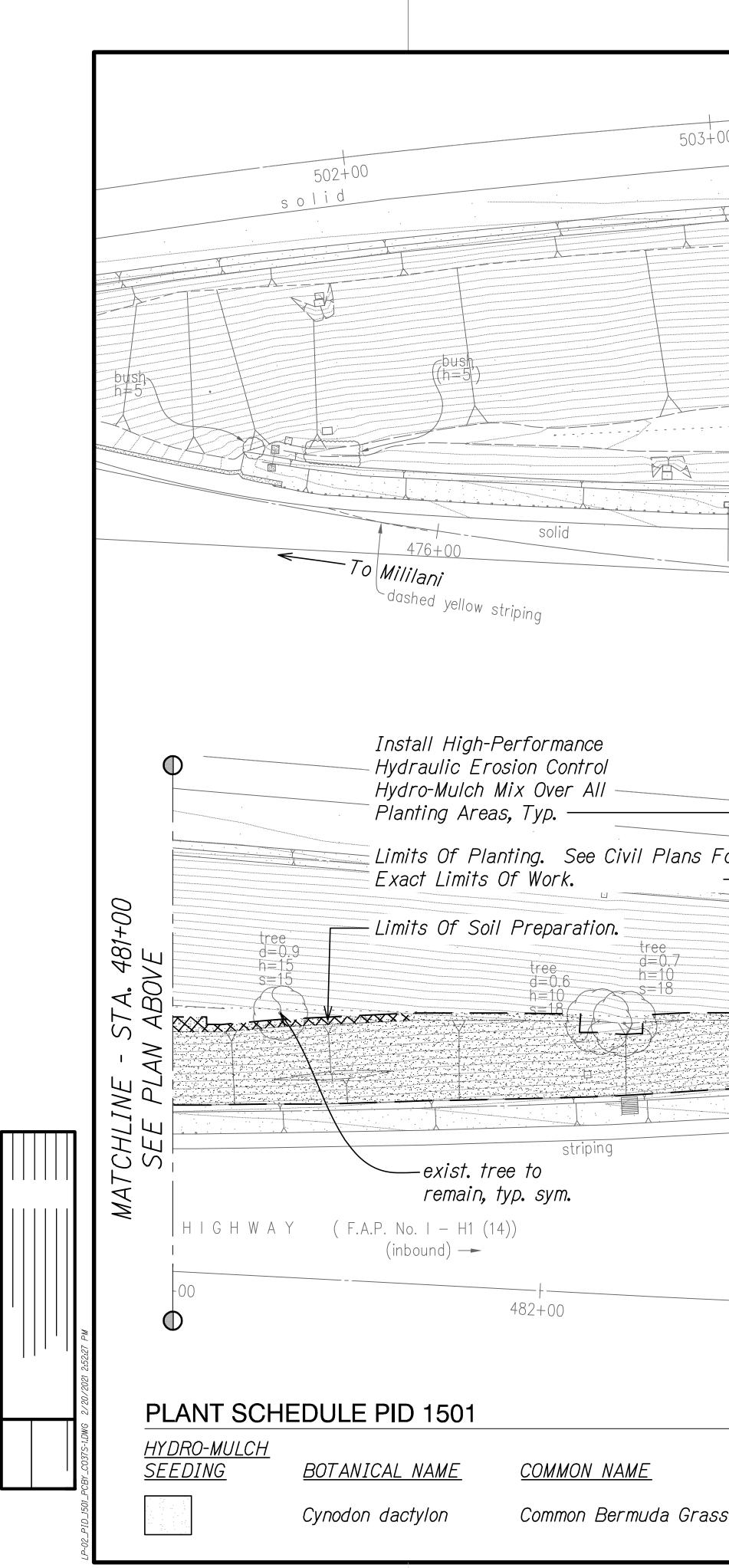
14. Tree roots greater than 2 inches in diameter shall not be disturbed. Cutting of trees roots larger than 2 inches in diameter must be approved by an ISA Certified Arborist with a minimum of 10 years of continuous licensure and experience, and, accepted by the Engineer. Contractor shall submit arborist's qualifications and a tree root assessment report to the Engineer for approval prior to cutting tree roots. Root pruning shall be done in conformance with ANSI a300 (Part 8) latest edition. Root pruning shall take place under the supervision of the approved arborist at all times. The cost for arborist services shall be considered part of Specification

15. The Contractor may procure plant material after Contract Award and prior to the agreed Notice To Proceed with approval of the Engineer. The Contractor shall present the list of plant material for procurement to the Engineer for review and acceptance before procuring plants. Plants not conforming to contract document requirements will be rejected.

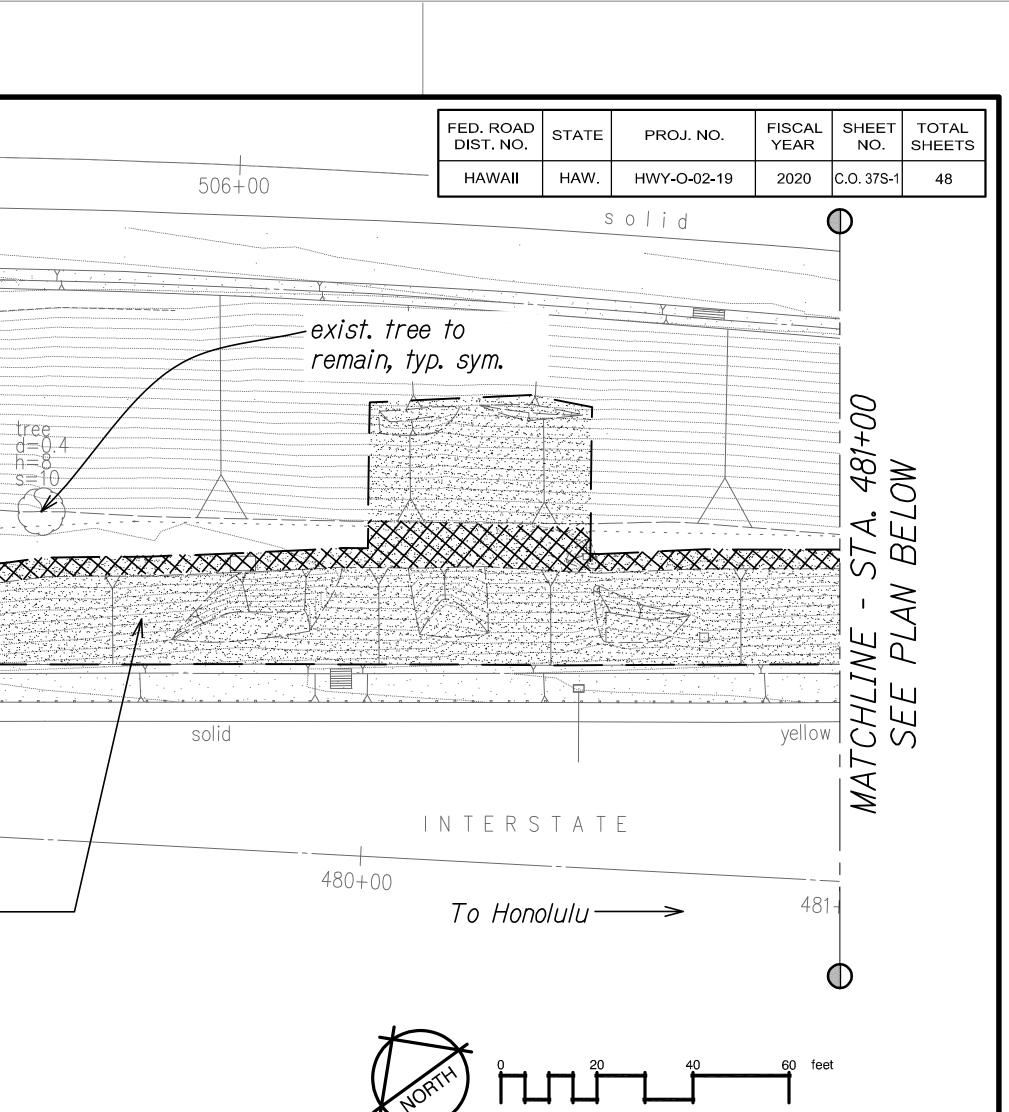
16. Any planting that obstructs sight distance, signs, or traffic lights shall be pruned, relocated, or removed as determined by the Engineer, at no expense to the State.

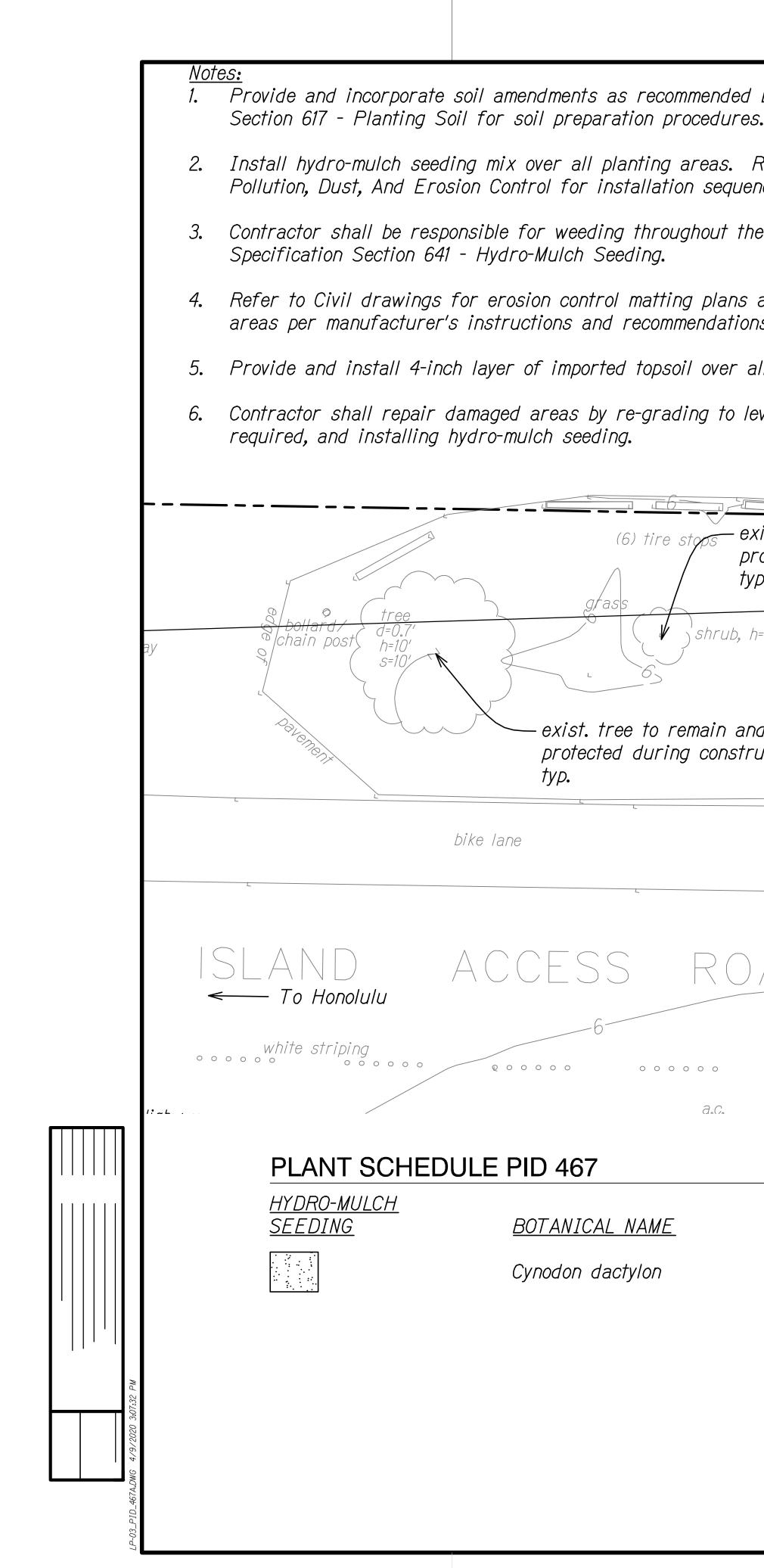
17. Unless specifically identified to remain, Contractor shall demolish and remove invasive and/or non-native trees and shrubs, within the project limits, with trunk caliper of less than 8-inches.





|                            | (outbound)  |                    |   | FEC  | D. ROAD STATE PRO L NO  | FISCAL SHEET TOTAL   |
|----------------------------|---|--------------------|---|--|---|--|
|                            | 504+00  | <br>505+00         | 50  |  | AWAII HAW. HWY-0-02-19  | YEAR         NO.         SHEETS           2020         C.O. 37S-1         48 |
| 00<br>yellow               | Install High-Performance                              |                    |   | )6+00 H  | s olid  | $\square$  |
|                            | Hydraulic Erosion Control<br>Hydro-Mulch Mix Over All | Υ                  | Y   |  |   |  |
|                            | Planting Areas, Typ.                                  |                    |   | exist. tree to   |   |  |
|                            | Limits Of Planting. See Civil Plans For               |                    |   | remain, typ. sy  |   |  |
|                            | Exact Limits Of Work.                                 |                    | tree  |  |   | 00+  |
|                            | Limits Of Soil Preparation.                           | •                  | h=8 $s=10$  |  |   | 481<br>WC  |
| ·                          |   |                    |   |  |   |  |
|                            |   |                    |   |  |   | $\sim$   |
|                            |   |                    |   |  |   |  |
|                            |   |                    |   |  |   |  |
| yellow                     | striping  |                    | soli  | id   |   |  |
| 477+00                     |   | I                  |   |  | ·   | MAT  |
|                            | 478+00<br>INTEDETATE 4                                |                    | 479+00  | – – – – – – – – – – – – – – – – – – –                          | ERSTATE   |  |
|                            |   | mon Berm<br>Sym. — | nuda Grass  | 480+00<br>Ta   | o Honolulu ——>  | 481-   |
|                            |   | 0,111              |   | 7 0  |   |  |
|                            |   |                    |   |  |   | $\mathbb{O}$   |
|                            |   |                    |   |  | 0 20 40   | 60 feet  |
|                            | 510+00  |                    |   | NORTH  | SCALE: 1" = 20'   |  |
| -or                        | striping  | Notes              | ·   |  |   |  |
|                            |   | 1. /               | -<br>Provide and incorporate soil amen<br>Specification Section 618 - Soil Pi             |  |   | report. Refer to   |
|                            |   |                    |   |  |   |  |
|                            |   | 1                  | Install high-performance hydraulic<br>Refer to Specification Section 209                  | 9 - Temporary Water I  | Pollution, Dust, And Ero  | ÷  |
|                            |   | Ì                  | installation sequence of erosion co   | ontrol matting, hydro-r  | mulch, and plantings.   |  |
|                            |   |                    | Contractor shall be responsible fo<br>Refer to Specification Section 641                  |  |   | blishment period.  |
| Y                          |   |                    | ·   | -  |   |  |
|                            |   |                    | Refer to Civil drawings for erosic<br>matting on disturbed areas per m                    |  |   |  |
|                            |   |                    |   |  |   |  |
| Common Beri<br>Typ. Sym. — | muda Grass  |                    |   |  |   |  |
|                            |   |                    |   |  | 2/19/21 Revised Matting   | and Planting Limits  |
|                            |   |                    | AS-BUILT DRAWINGS   |  | DATE REI  | /ISION   |
|                            | × 484+00  |                    | This certifies that the dimensions and details shown on this                              | SSELL Y.J. CHE   | STATE OF H.<br>DEPARTMENT OF TR.<br>HIGHWAYS D                  | ANSPORTATION   |
|                            |   |                    | sheet reflect the dimensions and details, and specifications as constructed in the field. | LICENSED<br>PROFESSIONAL<br>LANDSCAPE<br>ARCHITECT<br>No. €076 | LANDSCAPE PLA   |  |
|                            |   |                    | KAIKOR CONSTRUCTION COMPANY INC.  | No. 6076   | <u>PID 1</u>  |  |
| <u>CONT</u>                | LANDSCAPE PLANTING PLAN PI                            | <u>D 1501</u>      | Streegarth<br>DATE: 7/21/2022   | 4/30/22<br>EXP. DATE   | EROSION CONTROL AND BEST MANAGE<br>WATER PERMIT COMPLIANCE, VAR |  |
| ss Seed                    | Scale: 1" = 20'-0"                                    |                    |   | This work was prepared by me or under my supervision.          | <u>Project No. HV</u><br>Scale: 1" = 20'-0"                     |  |
|                            |   |                    |   |  | SHEET No. <i>LP-02</i> OF                                       | 5 SHEETS   |
|                            |   |                    | "AS-BUILT"  |  | C   | O. 37S-1   |





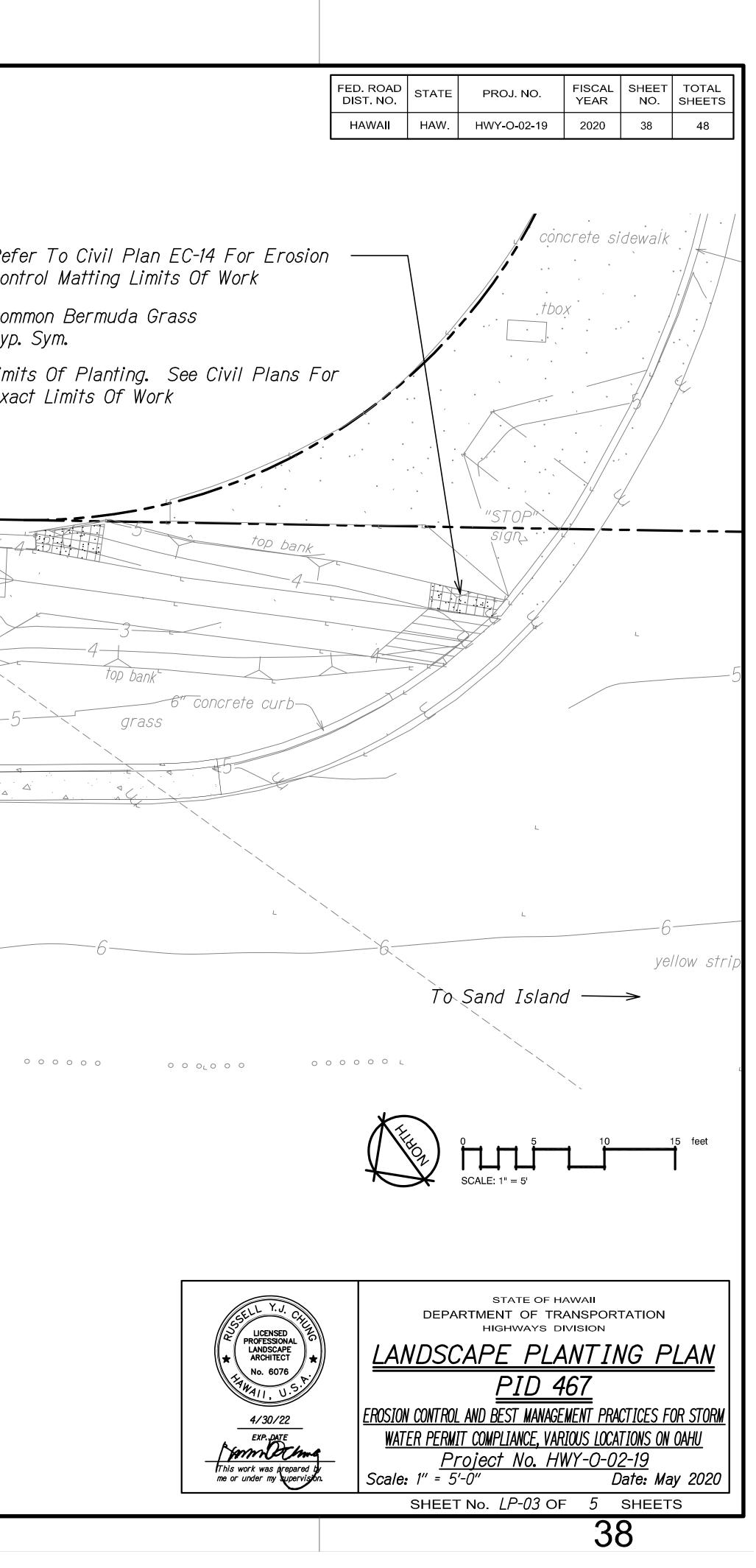
| COMMON NA   | ME COI                                   | <br>NT                |
|---|--|-----------------------|
| 00000L 00000  | 00000 L00000                             | 00000 00000           |
| AD<br>6   | 6  | 6                     |
|   | AND ISLAND AUCLOS AUAD                   |                       |
|   | SAND ISLAND ACCESS ROAD                  | 5                     |
| solid white striping  | 7  | smh                   |
|   |  |                       |
| nd be<br>conc.  | protected during constructio             |                       |
| ۲<br>۲<br>۲   | driveway<br>exist. shrub to remain and l | be                    |
| h=1.5'  |  |                       |
| xist. shrub to remain and be<br>rotected during construction,<br>'p.      | L<br>a.C.                                |                       |
|   |  | stlite                |
| evel condition, filling ruts and dep                                      | exist. r/w                               |                       |
| all new planting areas.   | processors with coil if                  | $\int Lin$            |
| ns.   |  | Co<br>Ty<br>Lin<br>Ex |
| and details. Install erosion contro                                       | ol matting on disturbed                  | Re<br>Co              |
| e 9-month plant establishment per   | iod. Refer to                            | Re                    |
| Refer to Specification Section 209<br>nce of erosion control matting, hyd |  |                       |
| by the soil analysis report. Refe<br>s.                                   | er to Specification                      |                       |
|   |  |                       |
|   |  |                       |

Common Bermuda Grass

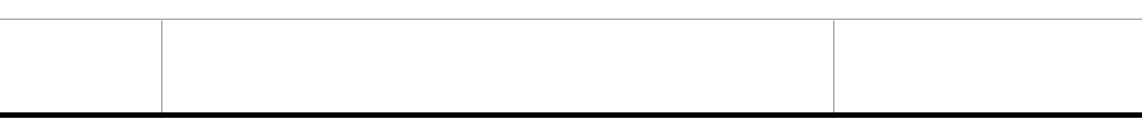
CONT

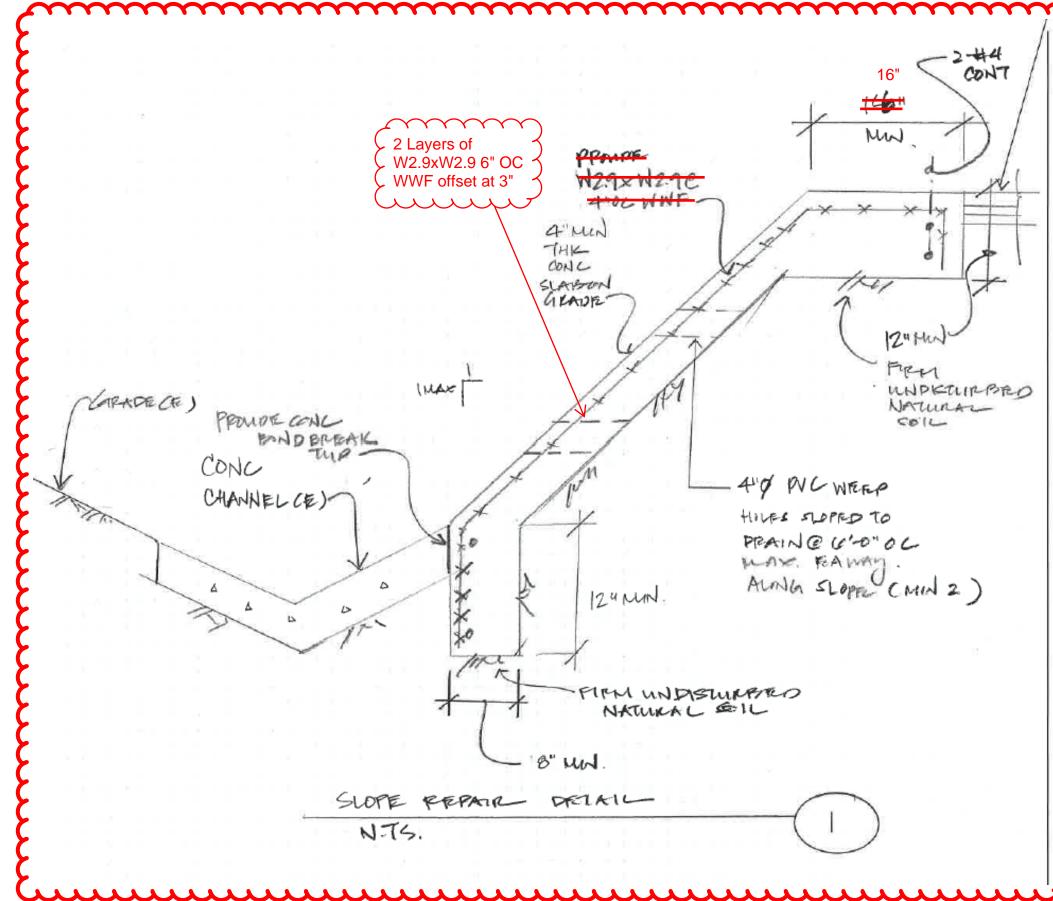
Seed

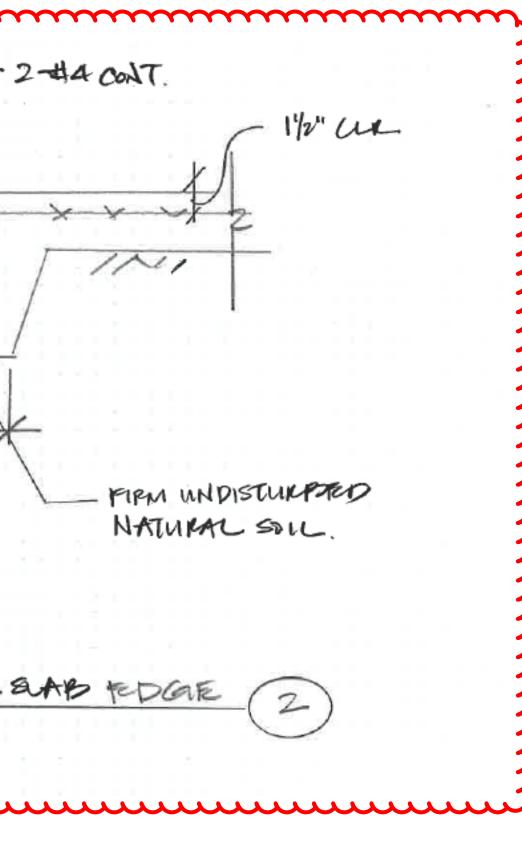
LANDSCAPE PLANTING PLAN PID 467 Scale: 1" = 5'-0"



*<u>Hydro-Mulch</u>* Mulch 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, Fertilizer, Water, Geobinders, And Other Additives Not Detrimental To Plant Growth, The Fibers Will Form A Homogeneous Slurry When Hydraulically Sprayed On The Soil. The Fibers Shall Form A Blotter-like Ground Cover Which Readily Absorbs Water And Allows Infiltration. Complete Coverage Of The Surface Shall Be Attained. Prepared Soil/ Existing Soil HYDRO-MULCHING DETAIL LP-04LP-04 Scale: Not to Scale GILADE-(A) ~ 4" Inun Run 111-3 8" Med SECTION @ CONCEARS FEDGE N.T.S. 







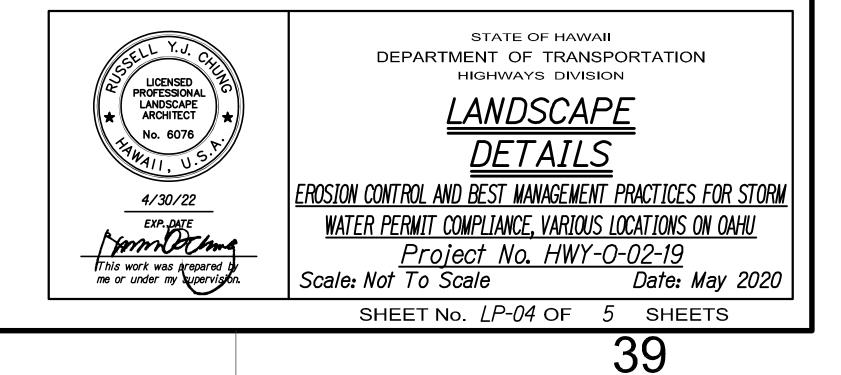
| 1 |                        |       |             | [              |              |                 |
|---|------------------------|-------|-------------|----------------|--------------|-----------------|
|   | FED. ROAD<br>DIST. NO. | STATE | PROJ. NO.   | FISCAL<br>YEAR | SHEET<br>NO. | TOTAL<br>SHEETS |
|   | HAWAII                 | HAW.  | HWY-O-02-19 | 2020           | 39           | 48              |

## AS-BUILT DRAWINGS

This certifies that the dimensions and details shown on this sheet reflect the dimensions and details, and specifications as constructed in the field.

KAIKOR CONSTRUCTION COMPANY INC.

Stweepark DATE: 7/21/2022



"AS-BUILT"

## PLANT SCHEDULE PID 1501

HYDRO-MULCH <u>SEEDING</u>

<u>QTY</u> 15,650 SF <del>14,310 SF</del>

<u>BOTANICAL</u>

Cynodon dad

## PLANT SCHEDULE PID 467

HYDRO-MULCH <u>SEEDING</u>

<u>QTY</u>

<u>BOTANICAL</u>

<del>53 SF</del>

Cynodon dactylon

|  | FED. ROAD<br>DIST. NO. | TATE PRO  | DJ. NO. | FISCAL<br>YEAR | SHEET<br>NO. | TOTAL<br>SHEETS |
|--|------------------------|-----------|---------|----------------|--------------|-----------------|
|  | HAWAII                 | HAW. HWY- | O-02-19 | 2020           | C.O. 40      | 48              |

| L NAME         | COMMON NAME          | <u>CONT</u> | <u>REMARI</u> |
|----------------|----------------------|-------------|---------------|
| actylon        | Common Bermuda Grass | Seed        | See Spe       |
|                |                      |             |               |
|                |                      |             |               |
|                |                      |             |               |
| <u>AL NAME</u> | <u>COMMON NAME</u>   | <u>CONT</u> | <u>REMARI</u> |
| actylon        | Common Bermuda Grass | Seed        | See Spe       |

RKS

Specs For Grass Seeding Rate

RKS

See Specs For Grass Seeding Rate

| AS-BUILT D  | RAWINGS         |
|---|-----------------|
| This certifies that the dimensions<br>sheet reflect the dimensions an<br>as constructed in the field. |                 |
| KAIKOR CONSTRUCTION   | COMPANY INC.    |
| Streeg and  | DATE: 7/21/2022 |

