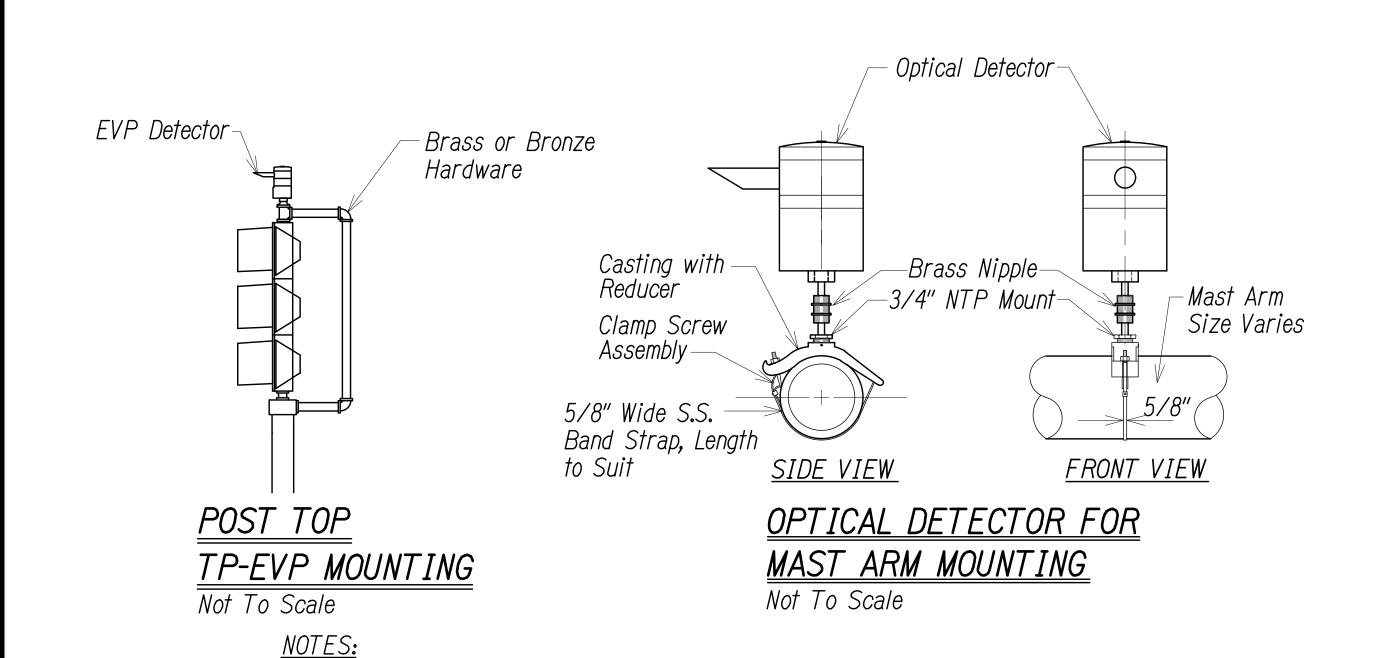


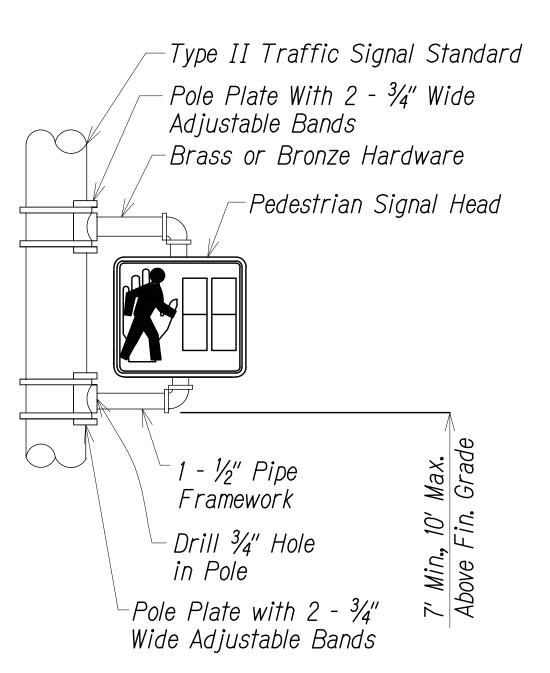
NOTES:

- 1. The pedestrian push button shall meet operational and reach requirements of the American with Disabilities Act Accessibility Guidelines (ADAAG):
 - a. Forward Reach. The maximum height for forward reach shall be 48".
 - b. Side Reach. The maximum height for side reach shall be 48".
 - Operation. Controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate controls shall be no greater 5 lbf.
- 2. There shall be a 30" x 48" level ground surface (2% max, cross slope, both directions) for a forward or side approach, as appropriate, to a pedestrian push button.
- 3. Refer to HDOT Standard Plans TE-32 for additional requiements.

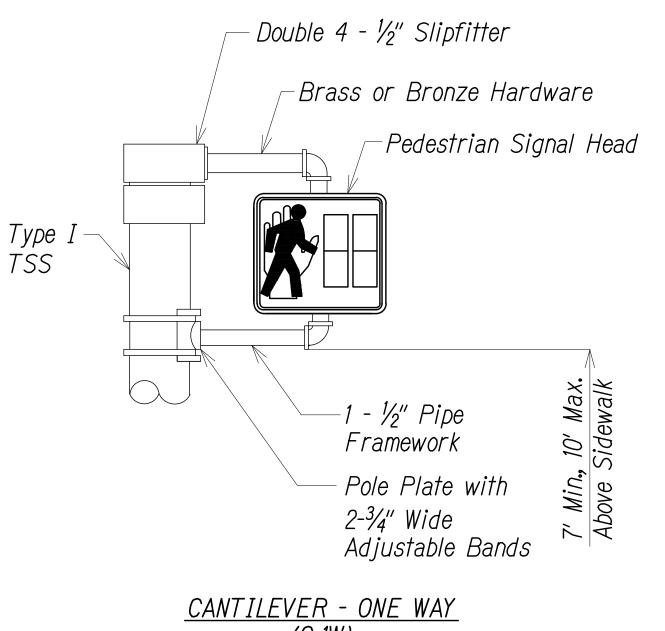
PEDESTRIAN PUSH BUTTON DETAILS

Not To Scale



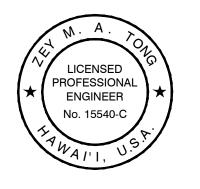


BRACKET MOUNT - ONE WAY (B-1W)



PEDESTRIAN SIGNAL MOUNTING

Not To Scale



DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL DETAILS - 1

STATE OF HAWAI'I

Kaumualii Highway Intersection Improvements at Waimea Canyon Drive Project No. 50B-01-14R

Scale: As Shown

Date: Feb 2021 SHEET No. 75-4 OF SHEETS

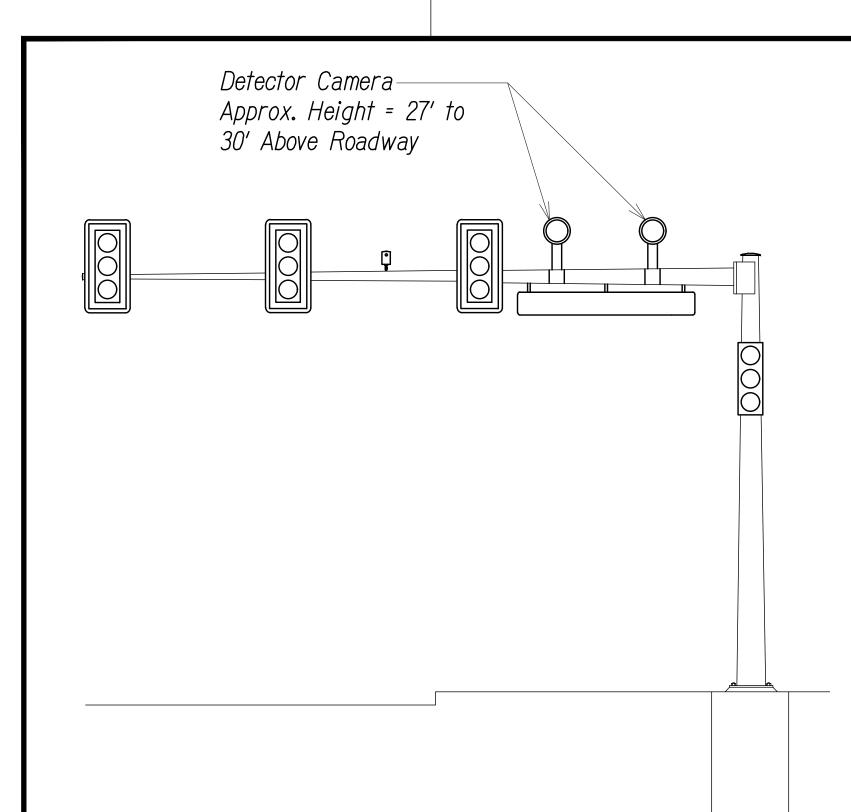


AB-0132-29", or approved equal, unless noted otherwise in the

approved equal, unless noted otherwise in the special provision.

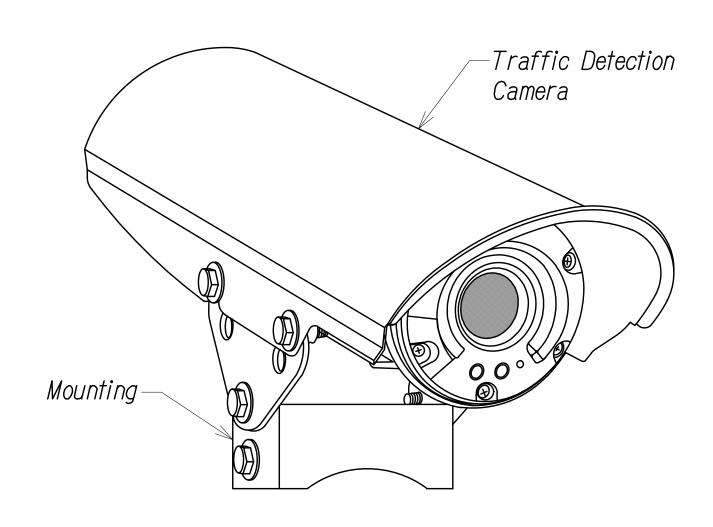
2. Support saddle assembly shall be "ASTRO MINIBRAC, special provision.

Optical detector shall be "Model 711 Preemption Detector" or



TYPICAL DETECTION CAMERA MOUNTING

Not To Scale



TRAFFIC DETECTION CAMERA DETAIL Not To Scale

NOTES:

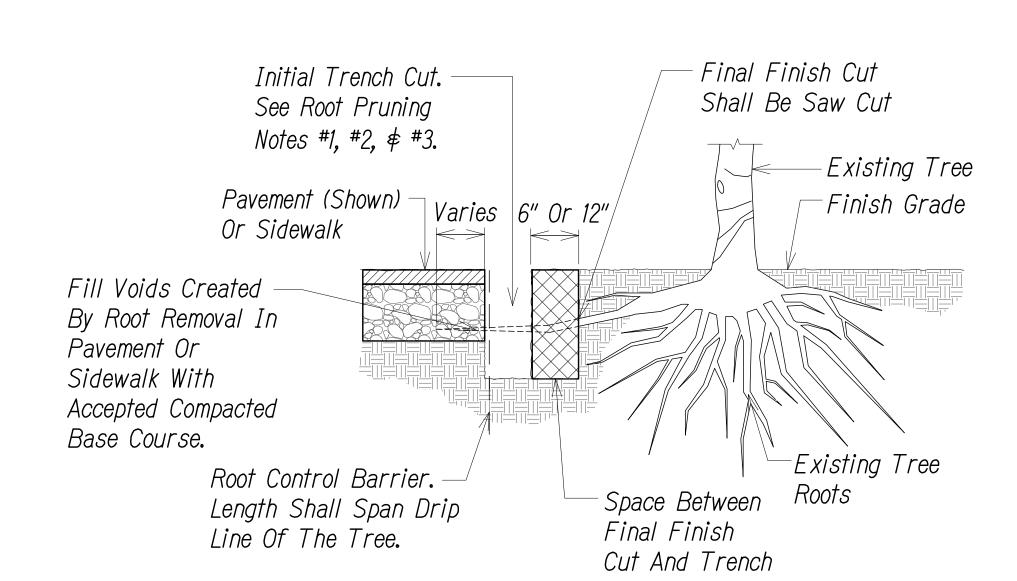
- Contractor to Hire Qualified Arborist. The Cost Of Hiring Qualified Arborist Shall Be Incidental To The Various Contract Items.
- All Work Be Done Under The Supervision Of Qualified Arborist.
- The Qualified Arborist And The Engineer To Determine The Amount Of The Tree Canopy Pruning After Root Pruning.
- Remove And Dispose Of Pruned Roots.

NOTES: The Qualified Arborist Shall Possess A Thorough Working Knowledge Of The American National Standard For Tree Care Operations: "Pruning, Trimming, Repairing, Maintaining And Removing Trees And Cutting Brush - Safety Requirements,

Ansi Z133.1" - Latest Edition And "Tree, Shrub And Other Woody Plant Maintenance - Standard Practices, Ansia300" - Latest Edition.

> <---To Traffic -New 4" Concrete Signals Sidewalk/Pad Front Door of New Controller Canbinet 24" (Typ.) <u>PLAN</u>

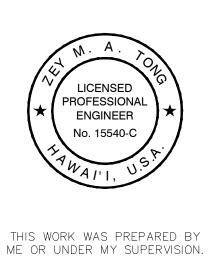
> > NEW CONCRETE PAD AT CONTROLLER CABINET Not To Scale



TYPICAL ROOT PRUNING DETAIL Not To Scale

ROOT PRUNING NOTES:

- Make Initial Trench Cuts 6" Beyond The Final Finish Cut When Using A Trencher.
- Make Initial Trench Cuts 12" Beyond The Final Finish Cuts And Avoid Ripping Roots When Using A Backhoe.
- Backfill Trench With Native Soil Dug From The Trench And Compact All Voids To Match Existing Finish Grade, And Seed, Sprig Or Sod With Grass As Specified.
- When Using Backhoe Equipment For Initial Cuts Use The Front Edge Of Bucket Parallel To The Tree Roots (transverse Direction To Radiating Roots) To Sever The Tree Roots To Avoid Ripping The Roots.
- Hand Excavate Around Roots To The Size Of Desired Rootball And Then Trim Off Protruding Roots By Hand Saw Or Chain Saw.
- All Final Finish Cuts Shall Be Made Using A Sharp Hand Saw Or Approved Root Pruning Equipment To Ensure Clean, Non-jagged Cuts.
- Work Shall Be Done Under The Direct Supervision Of A Qualified Arborist.
- The Qualified Arborist And The Engineer Shall Determine The Amount Of Tree Canopy That Shall Be Pruned After The Root Pruning.
- All Prune Roots And Branches Shall Be Removed And Disposed Of.
- When Excavating Roots, Do Not Damage Or Strip Outer Layer Of Root Tissue.



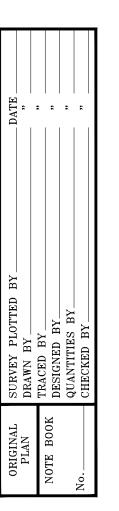
STATE OF HAWAI'I **DEPARTMENT OF TRANSPORTATION**

TRAFFIC SIGNAL DETAILS - 2

Kaumualii Highway Intersection Improvements at Waimea Canyon Drive Project No. 50B-01-14R

Scale: As Shown

Date: Feb 2021 SHEET No. 7S-5 OF 6SHEETS



FISCAL SHEET YEAR NO.

2021 26

PROJ. NO.

50B-01-14R

STATE

DIST. NO.