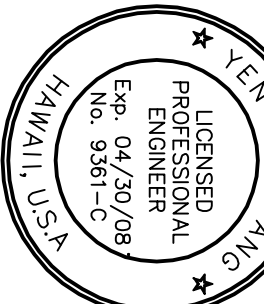


STANDARD TRAFFIC NOTES

1. All traffic signs and pavement markings shall conform to the latest edition of the MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, as amended, and applicable sections of Part V of the STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, dated September, 1984, and the HAWAII STANDARD SPECIFICATIONS FOR ROAD, BRIDGE CONSTRUCTION, 2005 EDITION, and as amended, unless otherwise specified on the plans, specifications, or the STANDARD TRAFFIC NOTES.
2. The Contractor shall install pavement or temporary pavement markers, striping and markings as required by Section(s) 629 and 755.05 of the HAWAII STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2005 EDITION, and as amended. The temporary striping must be installed as close as possible to the final location to ensure proper lane widths & safe flow of traffic. The Contractor shall coordinate and file special duty police officer(s) as needed to provide traffic control while working within the County Right Of Way.
3. The Contractor shall inform the Traffic Division at least six (6) working days prior to any work on pavement markings operations and/or sign installations to schedule review and approval of the striping and/or signing plans.
4. The approved striping plan shall be layout out using three-foot night or other approved methods applied.
5. All pavement markings that become inappropriate shall be removed by the Contractor at his own expense. Removal shall be by recondition or by other methods approved by the Engineer before the new pavement markings are applied. Excessive gouging of the pavement is not acceptable and shall be required of the Contractor's expense.
6. Pavement striping shall be with oil/yl based reflective thermoplastic Compound Pavement Marking as specified in Section(s) 629 and 755.05 of the Hawaii Standard Specifications for Road and Bridge Construction, 2005 EDITION, and as amended on all roadways. Contractor shall submit Certificate of Compliance certifying that the thermoplastic material to be used meet the current MASH10 M-249 and MASH10 M-249 specifications.
7. Heat applied pre-formed thermoplastic pavement marking tape with stable temperature indicators, or an equal or superior method approved by the Engineer, shall be used for crosswalks, stop lines, pavement arrows, splatbars and symbols in lieu of Thermoplastic Compound.
8. Reflectized raised pavement markers shall be the regular size markers with approximate dimensions of 4" by 4" by 0.7". The Contractor shall submit Certificate of Compliance certifying that the raised pavement markers to be used meets and/or exceeds the current State of Hawaii, Department of Transportation specifications.
9. All traffic signs & post shall meet the requirement of the County of Hawaii, Standard Detail T-1 EXCEPT THAT FLANGED CHANNEL POST AND OCTAGONAL POSTS WILL NOT BE ACCEPTABLE. Signs shall be on aluminum sheeting of 0.080-inch minimum thickness. Signposts shall be 2" square telescop tubing No. 20 F 12 or equivalent with 2 1/4" square telescop anchor post.
10. All traffic signs shall be completely retrofitted with Type III or Type IV High Intensity Retroreflective Sheeting Overhead Street Name signs shall be high intensity.
11. The 2 1/4" square anchor post for sign shall be driven into the ground, a/c pavement or concrete sidewalk in accordance with the plans. All damage surrounding area shall be repaired to its original condition or better. Before driving into concrete, a neat hole of approximately 3 inch diameter shall be drilled through the concrete prior to the installation of the anchor post. If driving into the concrete a/c, pipes or not possible without damage to the existing structure, the hole shall be 12" in diameter and 12" deep. The hole shall be drilled prior to the installation of the anchor post and then grouted with hot mix to match the existing a/c pavement, & concrete to match the existing concrete sidewalk.
12. Upon completion of the construction work, including but not limited to the final paving of the entire project area and off-site construction, the contractor shall re-stripe all pavement markings within the construction area and adjacent roadway pavements up to 300 feet beyond the construction limits in accordance with Item 6 of the current Standard Traffic Notes. The contractor shall maintain all temporary pavement markings, permanent markings and all traffic signs and posts until such a time the project is accepted by the County of Hawaii.
13. All traffic signs and posts, whether construction limits and adjacent areas that have been damaged, removed or severely affected by the construction work shall be replaced by the contractor according to item(s) 9, 10 and 11 of the current Standard Traffic Model of no cost to the county.
14. All dedicated streets must have Street Names which have been approved by resolution before acceptance of the street by County of Hawaii.
15. Install PRIVATE ROAD sign on private roadway. Sign shall be on 18" wide by 12" high aluminum plate with 4" block lettering on white reflectorized sheeting with border.
15. All signs & marking for private roadways shall be maintained by the private owners.

STREET LIGHT NOTES

1. No changes will be allowed without prior approval from Traffic Division.
2. All street light identification tag numbering for metal poles shall start with "1" and continue numerically for each street in the subdivision. All streetlight ID tag numbering for wooden poles shall be in accordance with HELCO's numbering system.
3. The contractor shall provide all necessary secondary circuit extensions to the nearest HELCO secondary.
4. If the streetlights are installed before HELCO installs their secondary, the contractor is responsible for coordination and informing HELCO of street light locations and pole contacts.
5. The contractor shall arrange and assume costs to energize streetlights and provide all necessary materials and labor for installation. Two weeks notice must be given for initial and re-inspections. Pursuant to section 2-5 of the Hawaii County Code, the Contractor shall pay for all costs associated with overtime inspections.
6. The contractor shall inscribe the month and year of installation of photoceles and lamps. All P.C.'s shall have the North index facing North.
7. All labor and materials shall be warranted for a minimum of one year from date of dedication to County.
8. Underground system---Contractor to remove all fuses after testing and given to Traffic Division.
9. Acceptable street light materials:
 - Luminaires, with PE receptacle and 120-220 volt HPF ballast.
 - 1) American Electric: SPX-55, SP2 90, SP2 135 & SP2 180 with polycarbonate semi-cutoff lens.
 - 2) PL & S: Model RW-55-1-120-BK-GY, RW-90-1-120-BK-RC, RW-180-1-120-BK-RC. **Contractor shall drill four (4) 3/8" drain holes on ballast cover. Spacing between lights 130' - 160'
 - 3) ALSQAPR: LPS fixtures: AL-08-55LPS-120-SXII-BK-RC, AL-08-90-LPS-120-SXIII-BK-RC, AL-08-180-LPS-120-SXIII-BK-RC, AL-08-180-LPS-120-SXIII-BK-RC-CP Spacing between lights 130' - 160'
 - Photoceles, completely solid state. Fall "ON".
 - 1) ALR SST PV
10. Aluminum Bolts:
 - 1) Extremely rusted vibration dampers minimum .188" wall thickness must be replaced by F.H.W.A. to be in compliance with the 2001 amended and adopted MASH10 specifications. 10 to 12 inch base bolt circle. Arm length shall be per plans.
 - 1) Lanthorn: 2708-4590614, 2208-4590614
 - 2) HAPCO: 878392-001, 878392-002, 878205-001, 878205-002, 73892-001, 73892-002, 73892-003.
11. Transformer Bases:
 - 1) Aluminum with 1.5-inch base bolt circle. Must be approved by F.H.W.A. to be in compliance with the 2001 amended and adopted MASH10 breakdown specifications.
 - 2) Lanthorn 08H-1519-17
 - 3) Aaron County 191-17
12. Wooden Poles:
 - 1) Class III--35 feet, Paint treated. Pole hole shall be termite treated before pole installation.
10. A scaled drawing of street light locations (prefer on one sheet) and details of fixture mounting, luminaires spec, arm length, identification tags, bolt circles, foundation, base, and pole if underground) shall be submitted to the Traffic Division after plan approval and before construction begins.
11. Shop drawings shall be submitted for approval by Traffic Division.
12. When streetlights are installed on roadways under State jurisdiction, the developer shall submit plans to the State D.O.T. for approval. Traffic Division will install streetlight on existing pole(s) with cost dependent on height of pole.
13. All overhead wiring street light fixtures shall be bonded to the neutral wire. All bonded street light fixtures shall have 2"x2" reflectorized green sticker placed at the base of wire opening on aluminum arm, signifying that streetlights are bonded.
14. All underground wiring streetlights shall be grounded to provide a maximum 25 OHMS to ground.
15. All work shall conform to the latest National Electrical Code.

STRIPING PLAN NOTES DATE: MAY 2007 REV. <input type="checkbox"/> REV. <input type="checkbox"/> REV. <input type="checkbox"/>	JOB NO. 06-025	SUBDIVISION IMPROVEMENT PLAN FOR: HELLSTERN SUBDIVISION PUUA-KAPOHO, PUNA, ISLAND OF HAWAII, HAWAII T.M.K: (3) 1-4-001 : 073	THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION, CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. SIGNATURE
DWG. NO. C-18 SHEET NO. OF	 Engineering Partners, Inc. Consulting Engineers P.O. Box 4159 Hilo, Hawaii 96720 Phone: (808) 933-7900 Fax: (808) 933-3533 epllc@lava.net		