TYPICAL SECTION - SALT LAKE BLVD. WITHIN CITY RIGHT-OF-WAY BETWEEN STA. 23+91.81 TO 27+82

SCALE : 1/4" = 1' - 0"Existing Std. C & C 4" thick Existing Conc. Sidewalk— Baseline ——— Conc. Sidewalk 24'-0" 16'-0" 38'-0" 10'-0" 6'-0" 6'-0" 9'-0" Shoulder Southbound Lanes Northbound Lanes 12"\_\_\_4" thick A.C. pav't. 9'-0" 7'-0"± Existing Special Conc.
Curb & Gutter State Mix No. V Existing 4 1/2" thick
A.C. Pav't. mix No. V Existing Conc. Curb— and Gutter Remove conc. curb & slab - Existing 4 1/2" thick A.C. Pav't. mix No. V Type 2D Curb — Saw cut exist A.C. pav't. & provide A.C. pav't. with (or topsoil & grassing) 1/4" per ft. Conc Curb 3/4" per smooth riding connection 2.0% (-)1/2" per f. 2.0% 5.0% (−)1/4" per ft. Backfill behind curb w/4" top soil & grassing, – 8" thick Aggregate Base Course (typ) demolish conc & provide 4" thick conc over -Existing 6" thick Aggregate Base Course (typ) Existing 6" thick Aggregate Base Course (typ) — – 12" thick Aggregate Subbase (typ) 6" thick select borrow, connect to existing grade at 1/4" per ft. slope. – Existing 12" thick Aggregate Subbase (typ) Existing 12" thick Aggregate Subbase (typ)

TYPICAL SECTION - KAHUAPAANI STREET (STATE RIGHT-OF-WAY) BETWEEN STA. 27+82 TO STA. 64+61.53

SCALE : 1/4" = 1' - 0"Edge of exist. A.C. Pavement East Bound Lanes 6'-0" Varies - See Plans Varies - See Plans Sidewalk At bottom of curb, provide a (8-0" where noted) 1% min longitudinal slope ----Saw cut exist A.C. pav't. & provide A.C. pav't. with -4" thick A.C. pav't. ---Conc. Curb smooth riding connection State Mix No. V 2.0% Extend exist. A.C. pav't. to new curb = 4" Thick Class B Conc. Sidewalk └─ Existing 6" thick Aggregate Base Course (typ) 8" thick Aggregate Base Course (typ) broom finish perpendicular to curb. Borrow — Existing 12" thick Aggregate Subbase (typ) 12" thick Aggregate Subbase (typ)

# TYPICAL HALF SECTION - SALT LAKE BLVD. WITHIN STATE RIGHT-OF-WAY

## BETWEEN STA. 27+82 TO 36+91.81

SCALE : 1/4" = 1' - 0"

### CONSTRUCTION NOTES

8. For Bench Mark, see Sheet 2.

- 1. Unless otherwise shown on the plans, all construction work shall be done in accordance with the "STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION". September 1984. as amended. and the "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION", Sept. 1986, of the Department of Public Works, City & County of Honolulu.
- 2. All existing utilities, whether or not shown on the plans, shall be protected at all times by the Contractor unless specified on the plans to be abandoned.
- 3. Wherever connections to existing utilities are shown on the plans, the Contractor shall expose the existing lines to verify their locations and depthsprior to excavation of the mains trenches. 4. Utilities shall be installed pursuant to the provisions of Ordinances 2875 and 3375 (underground utilities)
- 5. Street lights shall be installed in accordance with Ordinance 1638, as amended by Ordinances
- 1770, 2875, 3035 and 3375. 6. Street name signs shall be installed in accordance with the Standards of the Department of Transportation Services. In lieu of the standard embossed signs, reflectorized street name signs with sign brackets identical to that presently used by the Department of Transportation Services
- 7. The Contractor shall notify the Department of Public Works, Division of Engineering, Construction
- Branch, seven (7) days prior to commencement of construction.
- 9. Should any archaeological artifacts or findings, such as charcoal-filled fire pits, or human skeletal remains be discovered during construction, the applicant and/or Contractor shall stop work and notify the State Historic Sites Office, DLNR, for mitigative action.
- 10. Remove existing markings within the limits of work and provide new markings. New curbing and pavements shall include the removal of existing curbing and pavements as shown.
- 11. The underground pipes, cables or ductlines known to exist by the engineer from his search of records are indicated on the plans. The contractor shall verify the locations and depths of the facilities and exercise proper care in excavating in the area. Wherever conections of new utilities to existing utilities are shown on the plans, the contractor shall expose the existing lines at the proposed connections to verify their locations and depths prior to excavation for the new lines.

- 12. No Contractor shall perform any construction activity so as to cause falling rocks, soil or debris in any form to fall, slide, or flow onto adjoining properties, streets or natural watercourses. Should such violations occur, the costs incurred for any remedial action by the Chief Engineer shall be payable by the Contractor.
- 13. The Contractor shall be responsible for conformance with the applicable provisions of Chapter 55, Water Pollution Control, of Title 11, Administrative Rules of the State Department of Health.

### ELECTRICAL & MAINTENANCE SERVICES DIVISION NOTES:

system (phone: 527-5002).

- 1. The contractor shall notify the joint pole committee two (2) weeks in advance of any relocation
- of utility pole(s) that may be necessary. 2. The contractor shall notify the Electrical & Maintenance Services Division, Department of Transportation Services, three (3) working days prior to commencing work on the street lighting
- 3. The contractor shall notify the Electrical & Maintenance Services Division, Department of Transportation Services, three (3) working days prior to commencing work on the traffic signal system (phone: 527-5007).
- 4. The contractor shall notify the Electrical & Maintenance Services Division, Department of Transportation Services, three (3) working days prior to commencing work on the fiber optic system (phone: 527-5007).
- 5. The street lighting, traffic signal, and fiber optic systems shall be kept operational during construction. Any relocation or changeover required shall be approved by the Electrical & Maintenance Services Division, Department of Transportation Services, and performed and paid for by the Contractor.
- 6. The contractor shall be responsible for any damages to existing street lighting, traffic signal, and fiber optic facilities, including the traffic signal interconnect system, and any and all damages to these facilities shall be repaired by the contractor at his cost in accordance with the requirements of the City and County of Honolulu.

### NOTES FOR CONSTRUCTION WITHIN STATE RIGHT-OF-WAY

- 1. The Contractor shall obtain a construction permit from the State's Highway District Engineer at 727 Kakoi Street, Honolulu, Hawaii 96816 prior to commencement of work within State highway
- 2. Construction and restoration of all existing highway facilities within State right-of-way shall be done in accordance with all applicable sections of the current Standard Specifications for Road and Bridge Construction, and the Specifications for Installation of Miscellaneous Improvements Within State Highways, of the State Highways Division.
- 3. All lanes shall be open to traffic during the morning peak hours from 5:30 a.m. to 9:00 a.m., and during the afternoon peak hours from 3:30 p.m. to 6:00 p.m., and during off-work hours. Only one lane of traffic shall be closed at any other time.
- 4. The Contractor shall provide, install, and maintain all necessary signs, lights, flares, barricades, markers, cones, and other protective facilities and shall take all necessary precautions for the protection and for the convenience and safety of public traffic. All such protective facilities and precautions to be taken shall conform with the "Administrative Rules of Hawaii Governing the Use of Traffic Control Devices at Work Sites on or Adjacent to Public Streets and Highways" adopted by the Director of Transportation, and the current U.S. Federal Highway Administration "Manual on Uniform Traffic Control Devices for Streets and Highways, Part VI - Traffic Control for Highway Construction and Maintenance Operations". If lane closures are required during construction, a traffic control plan shall be incorporated into the construction plans and must be approved by the Division prior to the issuance of the permit.
- 5. The minimum pavement structure shall consist of:
- a. 4" asphalt concrete, 8" aggregate base course and 12" aggregate subbase, or 4" asphalt concrete and 8" asphalt concrete base course or asphalt concrete.
- b. 6" of Class "A" concrete reinforced with 6" x 6" 6/6 wire mesh on 12" aggregate subbase if deemed necessary by Engineer.
- 6. No material and/or equipment shall be stockpiled or otherwise stored within highway rights-ofway except at locations designated in writing and approved by the District Engineer. 7. Compaction tests shall be taken in accordance with the Specifications for Installation of
- Miscellaneous Improvements Within State Highways, as follows: a. Subbase: One (1) compaction test per lift. b. Base Course: One (1) compaction test per lift.
- 8. Prior to commencing trench excavation work, the Contractor shall take a profile along the new centerline of utility trench and that such information shall be used in the verification of restoring the roadway to its original condition. A copy of the profile shall be submitted to the District
- 9. The Contractor shall be required to provide adequate, safe, non-skid bridging material over the trench, including shoring, when trenching in pavement areas to handle all types of vehicular
- 10. Longitudinal drainage along the highway shall be maintained.
- 11. Pavement striping shall be done by Contractor.
- 12. Approval of permit construction plans shall be valid for a period of one year thereof from the date of notification of approval to the applicant. In the event construction does not commence within this one-year period, the applicant will be required to resubmit his construction plans for Division's review and approval.
- 13. All regulatory, guide and construction signs and barricades shall be of high intensity reflective sheetina.

TRAFFIC NOTES FOR WORK ON CITY & COUNTY STREETS 1. A permit shall be obtained from the Department of Transportation Services before

- work on any portion of a public street or highway may begin 2. The contractor shall provide, install and maintain all necessary signs and other protective facilities, which shall conform with the "Hawaii Administration Rules Governing the Use of Traffic Control Devices at Work Sites on or Adjacent to Public Streets and Highways" adopted by the Director of Transportation, and the current U.S. Federal Highway Administration's "Manual on Uniform Traffic Control Devices for Streets and Highways, Part VI - Traffic Controls for Street and Highway Construction and Maintenance Operations,"
- 3. Work on any City Streets area may be performed only between the hours of 8:30 A.M. to 3:30 P.M., unless otherwise permitted by the Department of Transportation Services.
- 4. During working hours, the Contractor shall provide two lanes for through traffic. On streets too narrow to make this practicable, the Contractor may work on one—half of the roadway, keeping the other half open to traffic and alternating the flow of traffic.
- 5. As required by the Department of Transportation Services, the Contractor shall provide off-duty Police Officers to control the flow of traffic.
- 6. Where pedestrian walkway exist, they shall be maintained in passable condition or other facilities for pedestrians shall be provided. Passage between walkways at intersections shall likewise be provided.
- 7. Driveways shall be kept open unless the owners of the property using these Rights—of—Way are otherwise provided for satisfactorily.
- 8. The Contractor shall reference, to the approval of the Department of Transportation Services, all existing traffic signs, posts and pavement markings prior to the commencement of construction. The Contractor shall replace or repair all traffic signs, posts and pavement markings disturbed by his activities. The Contractor shall notify the Department of Transportation Services at 523-4029 one (1) week prior to any work to be done on signs, posts and pavement markings.
- 9. No material and/or equipment shall be stockpiled or otherwise stored within street Rights—of—Way except at locations designated in writing and approved by the Department of Transportation

RE VISION DATE DESCRIPTION



THIS WORK WAS

PREPARED BY ME OR UNDER MY SUPERVISION

9-30-93

REGISTERED

ENGINEER

No. 1552-C

No. 4923-0

GRAY, HONG, BILLS & ASSOCIATES, INC.

CONSULTING ENGINEERS 119 MERCHANT ST SUITE 607

SALT LAKE BOULEVARD IMPROVEMENTS AT STADIUM MARKETPLACE UNDER THE PROVISIONS OF ORDINANCE NO. 2412, AS AMENDED T.M.K.: 9 - 9 - 02HALAWA, EWA, OAHU, HAWAII

GENERAL NOTES & TYPICAL SECTIONS

IGINE E R CHECKED BY CHIEF, TRAFFIC ENGINEERING DIVISION DEPT. OF TRANSPORTATION SERVICES (FOR CONSTRUCTION WITHIN CITY R-O-W ONLY)

CORD DRAWINGS

JOB NO. 2328-4