

DEPARTMENT OF DESIGN AND CONSTRUCTION
CITY AND COUNTY OF HONOLULU

650 SOUTH KING STREET, 11TH FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 768-8480 • Fax: (808) 768-4567
Web site: www.honolulu.gov

KIRK CALDWELL
MAYOR



CHRIS T. TAKASHIGE, P.E., CCM
DIRECTOR

MARK YONAMINE, P.E.
DEPUTY DIRECTOR

WW.CSE 14-003

February 19, 2014

The Honorable Ernest Y. Martin
Chair and Presiding Officer
and Members
Honolulu City Council
530 South King Street, Room 202
Honolulu, Hawaii 96813

RECEIVED
CITY CLERK
C & C OF HONOLULU
2014 MAR -4 AM 9:43

Dear Chair Martin and Councilmembers:

SUBJECT: Ala Moana Boulevard/Auahi Street Sewer Rehabilitation Phase 2

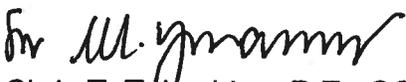
We respectfully request the City Council's approval of this resolution relating to the Ala Moana Boulevard/Auahi Street Sewer Rehabilitation Phase 2 project. The resolution would authorize the Wastewater Division Chief of the Department of Design and Construction, as designee of the Department's Director, to enter into an agreement with the State of Hawaii (State) to abandon in-place an existing 36-inch City sewer line within the State's Ala Moana Boulevard right-of-way.

We kindly request the City Council's assistance in processing this resolution. The alternative to abandoning the existing sewer line in-place is to remove the line in its entirety. Such an alternative is not only costly but would increase the time needed to complete the project. Therefore, the abandon-in-place method is the preferred alternative.

The Honorable Ernest Y. Martin
Chair and Presiding Officer
and Members
February 19, 2014
Page 2

If there are any questions, please feel free to contact me at 768-8480 or
Lynn Kurashima of my staff at 768-8759.

Very truly yours,


Chris T. Takashige, P.E., CCM
Director

APPROVED:



Ember Lee Shinn
Managing Director

Enclosures: (Resolution: Hard Copy and Microsoft Word File on CD)

cc: Department of the Corporation Counsel (w/enclosure – hard copy only)



RESOLUTION

AUTHORIZING THE DIRECTOR OF THE DEPARTMENT OF DESIGN AND CONSTRUCTION OF THE CITY & COUNTY OF HONOLULU, OR HIS DESIGNATED REPRESENTATIVE, TO EXECUTE A MEMORANDUM OF AGREEMENT WITH THE STATE OF HAWAII, DEPARTMENT OF TRANSPORTATION, RELATING TO THE ALA MOANA BOULEVARD/AUAHI STREET SEWER REHABILITATION PHASE 2 PROJECT.

WHEREAS, Chapter 1, Article 8, Revised Ordinances of Honolulu 1990, as amended, requires that any intergovernmental agreement or amendment thereto which places an obligation on the City or any department or agency thereof receive the consent and approval of the Council of the City and County of Honolulu; and

WHEREAS, the City and County of Honolulu (the "CITY") is seeking to abandon in-place an existing deteriorated 36-inch sewer line within Ala Moana Boulevard from Keawe Street to Ward Avenue as part of the Ala Moana Boulevard/Auahi Street Sewer Rehabilitation Phase 2 (the "CITY Project") and will be required to enter into a Memorandum of Agreement with the State of Hawaii in order to do so; and

WHEREAS, Ala Moana Boulevard is under the jurisdiction of the State of Hawaii by its Department of Transportation (the "DOT"); and

WHEREAS, the DOT requires execution of a Memorandum of Agreement prior to performing the work; now therefore

BE IT RESOLVED by the Council of the City and County of Honolulu that

(1) Pursuant to Chapter 1, Article 8 of the Revised Ordinances of Honolulu, the Council hereby consents and approves of the intergovernmental agreement between the State and the CITY;

(2) The Director of the Department of Design and Construction, or his designee, is authorized to execute the intergovernmental agreement with the State in substantially the form provided in the Memorandum of Agreement attached hereto as Exhibit "A" and by reference made a part of this Resolution; and

(3) The Director of the Department of Design and Construction, or his designee, is authorized to execute any incidental or related agreements, amendments and documents in furtherance of the above agreement so long as such agreements, amendments and documents do not incur additional obligations on the part of the CITY.



RESOLUTION

BE IT FINALLY RESOLVED that the Clerk is hereby directed to transmit a copy of this Resolution to the Director of the Department of Design and Construction, whose mailing address is 650 South King Street, 11th Floor, Honolulu, Hawaii 96813, and the Director of the State Department of Transportation, whose mailing address is 869 Punchbowl Street, Room 509, Honolulu, Hawaii 96813.

INTRODUCED BY:

DATE OF INTRODUCTION:

Honolulu, Hawaii

Councilmembers

EXHIBIT "A"

MEMORANDUM OF AGREEMENT

THIS Memorandum of Agreement (MOA), effective as of _____ 2014, by and between the STATE OF HAWAII, by its Director of Transportation (hereinafter referred to as the "State"), whose business and mailing address is 869 Punchbowl Street, Honolulu, Hawaii 96813, and the City and County of Honolulu, Department of Design and Construction, Wastewater Division, whose principal place of business and mailing address is 650 South King Street, 14th Floor, Honolulu, Hawaii 96813 (hereinafter referred to as the "CITY").

RECITALS:

WHEREAS, the State is the owner of those certain parcels of land upon which Ala Moana Boulevard, Project Number 92AB-01-92M (hereinafter referred to as the "Highway") is situated, designated as Tax Map Key Nos. (1) 2-1-055 and 056: Road (por.), and are more particularly shown on Exhibit "A" attached hereto and made a part hereof (hereinafter referred to as the "Property"); and

WHEREAS, the CITY desires to abandon portions of a 36 inch sewerline on, within, under and across the Property, as shown on Exhibit "B" attached hereto and incorporated herein by reference (hereafter the "Old Facilities"); and

WHEREAS, with the heightened awareness of environmental concerns related to and arising from abandoned pipelines and due to the increasing problem of unidentified, abandoned pipelines on State Property, the State has effected a Pipeline Removal Policy as of September 24, 2002, prohibiting the abandonment of pipelines and utilities' facilities on all State properties, including the highway right-of-ways; and

WHEREAS, the CITY desires a waiver to condition No. 6 of the DOT letter HWY-RM 3.88480, dated May 24, 2011, which in accordance with the State's Pipeline Removal Policy, stated "CITY shall not be allowed to abandon any existing sewer lines in the State right-of-way and must comply with DOT's PIPELINE REMOVAL POLICY. "; and

WHEREAS, the State is willing to allow the CITY to occupy or continue to occupy the Property for the Old Facilities, provided that the CITY enters into this Agreement for abandonment of the Old Facilities in the Property and further provided that the CITY fully complies with the terms and conditions set forth below,

NOW THEREFORE, in consideration of the mutual covenants and promises herein made, the parties do hereby agree as follows:

AGREEMENT:

1. Right to Abandon the Old Facilities. The CITY is allowed to abandon the Old Facilities as shown on Exhibit B, which consist of reinforced concrete pipes, on, within, under, over and across the Property, provided that the CITY shall:
 - a. Take any and all appropriate measures as required by the State in order for the City to abandon the Old Facilities. CITY must also submit plans for any such measures for review and approval by the State. Approvals for these plans must be obtained prior to or within one month of the effective date of this MOA.
 - b. Submit to the State prior to or within one month of the effective date of this MOA a report confirming the material composition of the Old Facilities being abandoned in place. The report must be done in compliance with Paragraph 2, below.
 - c. Provide to the State as-built plans showing the work performed on the Old Facilities within 90 days after the work has been completed.
2. Environmental Investigations and Assessments. The CITY, at its sole cost and expense, shall cause to be conducted such investigations and assessments of the Property to determine the presence of any hazardous substance on, in, or under the Property as may be directed by the State, in its sole discretion, or by any federal, state or county agency or authority. The extent and number of any environmental investigations and assessments, including all testing and analyses incident thereto, shall be determined by the State or the federal, state, or county agency or authority directing said investigations and assessments to be conducted. The CITY shall retain a competent, certified, and qualified person or entity that is satisfactory to the State to conduct said investigations, assessments, testing, and analysis incident thereto. The CITY shall cause said person or entity conducting those assessments, investigations, tests, and analyses to provide the State and/or governmental authority with the written results of all assessments, investigations, tests and analyses. Pursuant to this Agreement, the CITY may be required to have environmental assessments conducted as aforesaid, in order to determine the condition of the Property and the extent of remediation that may be required.
3. Disposal/Removal. If hazardous substances are found to be present, which hazardous substances were caused by the Old Facilities or use thereof, or by the CITY'S activities on the Property, the CITY shall cause such hazardous substances to be removed and transported from

the Property for disposal solely by duly licensed hazardous substance transporters to duly licensed facilities for final disposal as required by all applicable environmental laws. The CITY shall provide the State with copies of documentary proof including manifests, receipts, or bills of lading, which reflect that, said hazardous substances have been properly removed and disposed of in accordance with all environmental laws.

4. Remediation. In the event that any contamination by any hazardous substance(s) is determined to be present on the Property, which contamination was caused by the Old Facilities or use thereof, or by the CITY'S activities on the Property, the CITY shall, at its sole expense and cost, remediate the Property of any hazardous substance(s), and dispose/remove said hazardous substance(s) in accordance with paragraph 3 above. This duty to remediate includes strict compliance with all environmental laws, as well as any directives by the State to the CITY to remediate such hazardous substance(s). This duty to remediate shall include replacement of any materials, such as soils, so removed, with material that is satisfactory to the State and/or governmental authority, as the case may be.

5. Permits. The CITY shall obtain all applicable permits from the State and all other governmental agencies for any present and future maintenance, repair, removal or similar work for or related to the Old Facilities on, within, under, over, or across the Property prior to commencing any work.

6. Work Completion. Upon the completion of any work performed in, on, under, over or across the Property by the CITY, the CITY shall remove therefrom all equipment and unused or surplus materials, if any, and shall restore the Property and any other affected areas to a condition satisfactory to the State.

7. Repair. The CITY shall not damage, undermine or otherwise destroy any portion of State Property, including without limitation, any Highway facilities or improvements or any Property or facilities of other Highway tenants situated on or near the Property or any equipment or appurtenances relating thereto, including, but not limited to, sidewalks, storm drains, drainage systems, and underground utility systems. The CITY, shall, at its sole cost and expense, repair, restore and reconstruct any portion of the Property which may be damaged, undermined or destroyed by the presence of the Old Facilities, or any work done on the Old Facilities, including any and all affected facilities, improvements, equipment and appurtenances.

8. No Obstruction. The CITY shall not construct, replace, repair or maintain any landscaping or any other structure on any portion of the Old Facilities on, within, under, over or across the Property in such a manner as to: (a) unnecessarily obstruct traffic; (b) obstruct, in any way whatsoever, the sight lines and distances and view corridors along the Highway in accordance with

Hawaii Administrative Rules Chapter 105 of Title 19; (c) otherwise constitute a hazard to users of the Highway, as determined by the State; (d) unreasonably obstruct Highway operations; or (e) unreasonably obstruct operations of other Highway tenants.

9. Reservation of Rights. The State reserves unto itself the full use and enjoyment of the Property and the right to grant to others rights and privileges for any and all purposes affecting the Property, all without charge by and without the consent of the CITY, provided that such use by the State and/or third parties does not unreasonably interfere with the CITY'S rights to use the Property for the purposes covered by this Agreement. The CITY shall take steps necessary to ensure that the CITY'S use and occupancy of the Property does not cause any substantial interference with the State's existing operations in or near the Property.

10. State Work Within or Affecting the Property. If the State decides to perform work of any kind within, on, over, under, across, near, or affecting the Property, the State will coordinate such work with the CITY. The CITY shall cooperate with the State's performance of such work. The State will take appropriate protective measures to assure that such work does not unreasonably interfere with the Old Facilities.

11. Indemnity. The CITY shall at all times with respect to the Old Facilities and the Property use due care for public safety. It is strictly understood that the State shall in no way be held liable for any claims, damages, and causes of action or suits resulting from any acts or omissions of the CITY. The CITY shall hold harmless, indemnify and defend the State, its officers and employees from and against all claims, demands, liabilities, suits, actions, judgments, costs and expenses (including attorneys' fees) for loss, injury, death or damage, including, without limitation, claims for property damage, personal injury, or death of persons, to the extent that such damage, injury, loss or death is caused by an act or omission of the CITY connected with or related to the Old Facilities or the CITY'S use and occupancy of the Property hereunder. In addition to the CITY'S obligations under paragraph 11, the CITY shall require that contractors performing construction or other work for the CITY on the Old Facilities carry comprehensive general liability insurance with a combined minimum single limit of not less than \$1,000,000.00 for bodily injury and property damage per occurrence and name the State, its officers and employees as additional named insureds.

12. Assignment. The CITY'S right under this Agreement and in the Old Facilities shall not be sold, assigned, conveyed, leased, mortgaged, or otherwise transferred or disposed of, directly or by operation of law, except with the prior written consent of the State. In giving any such consent, the State need not release the CITY from any liabilities or obligations hereunder.

13. (RESERVED - See attached addendum regarding insurance)

14. Default.

a. Notice of default. If the CITY defaults on or otherwise fails to materially perform its obligations under this Agreement, the State will issue a written notice of default to the CITY by hand-delivery or first-class mail.

b. Time to cure defaults. Any and all defaults or material failures to perform contained in such notice of default must be resolved and remedied to the State's satisfaction within thirty (30) days of the date of the State's written notice to the CITY or such further time as may be authorized by the State in writing. In cases when, through no fault of the CITY, it is not possible to cure a default within 30 days of the State's notice of default, then the CITY'S obligations under this section shall be deemed satisfied if the CITY commences within 30 days of the notice of default efforts necessary to result in curing the default as soon as reasonably possible. The CITY'S failure to abandon the Old Facilities in substantial compliance with the plans and specifications approved by the State shall be deemed a default of this Agreement.

c. State remedies for failure to cure. If the CITY fails to cure said defaults or fails to perform within the required time period, the State itself may, but shall not be obligated to cure or remedy said defaults or failures to perform and charge any reasonable and necessary costs and expenses incurred in performing said cure or remedy to the CITY, who shall immediately pay said costs and expenses to the State upon receiving notice from the State. If the CITY fails to cure said defaults or fails to perform within the required time period, the State may terminate this Agreement and the CITY'S rights under this Agreement. If the CITY defaults or fails to perform as required under this Agreement, the CITY shall immediately remove the Old Facilities and restore the property to a condition acceptable to the State. The State, at its sole discretion, may grant in writing an extension of time for the removal of improvements if, through no fault of the CITY, it is not possible to remove the improvements immediately. The State shall be entitled to all other remedies available under this Agreement and by law, which remedies shall be cumulative and not exclusive.

15. Termination. If not otherwise terminated or cancelled, this Agreement may be cancelled in whole or in part at any time by the mutual written agreement of the parties hereto, or by the State in its sole discretion. This Agreement shall also be deemed terminated upon the CITY'S removal of the Old Facilities from the Property in compliance with this Agreement. Any termination or cancellation of this Agreement, in whole or in part, shall not relieve the CITY of its obligations to indemnify, defend and/or hold harmless the State pursuant to Paragraphs 11 (Indemnity) and 16 (Hazardous Materials) herein with respect to any such claims, demands, liabilities, suits, actions, judgments, costs and expenses for loss, injury, death or damage arising prior to such termination or cancellation of all or a portion of this Agreement.

16. Hazardous Materials.

a. State pre-approval required. The CITY shall not cause or permit the presence, escape, disposal, discharge or release of any hazardous materials except as permitted by law. The CITY shall not allow the storage or use of such materials in any manner not sanctioned by law for the storage and use of such materials. As used in this Paragraph 16, the "presence, escape, disposal, discharge or release of any hazardous materials" includes, but is not limited to, oil, fuel, PCB spillage or leakage, improper waste oil disposal, and pollution of any water attributable to the CITY'S: (1) operation and activities on or connected with the Property; or (2) use and occupancy of the Property.

b. The CITY'S best knowledge and belief. If any lender or governmental agency shall ever reasonably require testing to ascertain whether or not the CITY has caused or permitted the escape, disposal, discharge or release of hazardous materials, then the CITY shall be responsible for the sole costs thereof. In addition, the CITY shall execute affidavits, representations and the like from time to time at the State's request concerning the CITY'S best knowledge and belief regarding the presence of hazardous materials on, within or under the Property and/or the escape, disposal, discharge or release of hazardous materials therefrom.

c. The CITY'S indemnification. The CITY agrees to indemnify, defend, and hold harmless the State, its officers, agents and employees from any claims, demands, law suits, actions, judgments, liabilities, losses, damages, costs and expenses arising out of, connected with or related to: (1) the presence, escape, disposal, discharge or release of hazardous materials on, within, under or from the Property occurring while the CITY is in possession if and to the extent caused by The CITY, its employees, agents, or contractors; (2) The CITY'S performance of the CITY'S obligations under subparagraph 16.e. below; or (3) the CITY'S failure to comply with any environmental laws, including failure to obtain required permits. These covenants shall survive the expiration or earlier termination of this Agreement.

d. "Hazardous materials" definition. For the purpose of this Agreement "hazardous materials" shall mean any pollutant, toxic substance, hazardous waste, hazardous material, hazardous substance, petroleum product or oil as defined in or pursuant to the Resource Conservation and Recovery Act, the Comprehensive Environmental Response, Compensation, and Liability Act, and the Federal Clean Water Act, all as amended, or any other federal, state or local environmental law, regulation, ordinance, rule, or by-law, whether existing as of the date hereof, previously enforced, or subsequently enacted.

e. The CITY'S clean-up obligation. Upon termination of this Agreement, the CITY shall, at the CITY'S sole cost and expense, clean-up to levels satisfactory to the State of

Hawaii Department of Health ("DOH") and/or the United States Environmental Protection Agency ("EPA") any hazardous materials released onto the Property by the CITY its employees, agents or contractors. This section shall not be construed to require the CITY to clean up or respond to any hazardous materials pre-existing on the Property provided that the CITY, its employees, agents, or contractors were not responsible for the presence of said pre-existing hazardous materials on the Property or any hazardous materials not released by the CITY, its employees, agents or contractors.

f. Protection of waters. The CITY shall maintain and employ reasonable debris, pollution and contamination control measures, safeguards and techniques to prevent debris, pollution or contamination to ocean waters, streams or waterways resulting from the activities or operations of the CITY and the CITY'S employees, agents or contractors on, within, over, through, across, under or connected with the Property, and shall take immediate corrective action in the event of an unauthorized release of hazardous materials by the CITY, its employees, agents, or contractors, to immediately remove or correct the cause of such release, and shall immediately clean the Property and affected areas and surrounding waters of such pollutant or contaminant to levels satisfactory to the DOH and/or EPA, all at the CITY'S sole cost and expense. This section shall not be construed to require the CITY to clean up or respond to any hazardous materials pre-existing on the Property provided that the CITY, its employees, agents, or contractors were not responsible for the presence of said pre-existing hazardous materials on the Property or any hazardous materials not released by the CITY, its employees, agents or contractors.

17. Removal or relocation of Old Facilities. Notwithstanding the provisions of Section 264-33, Hawaii Revised Statutes, in consideration of the State allowing the CITY to abandon the Old Facilities in place, if due to construction, reconstruction or maintenance of the Property, the State performs work of any kind within, on, over, under, across, near, or affecting the Property, the CITY shall be responsible for the removal of all or any portion of the Old Facilities from the Property deemed necessary by the State, without cost and expense to the State.

18. Removal upon Termination. Upon any full or partial termination or cancellation of this Agreement, the CITY at its sole cost and expense, shall:

a. Remove and restore. At a time to be determined by the State in its sole discretion, the CITY shall remove any and all portions of the Old Facilities installed or constructed on, within, under, over or across the Property, and any improvements, equipment, facilities, components and appurtenances relating thereto, and reasonably restore that portion of the Property affected by the Old Facilities to as good a condition as existed prior to the commencement of this Agreement, to the satisfaction of the State, and if the CITY fails to do so, the CITY shall be solely responsible for all reasonable costs and expenses incurred by the State in completing and accomplishing such

restoration, including but not limited to, any costs the State incurs in removing and disposing of the Old Facilities;

b. Surviving Obligations. Such termination or cancellation shall not relieve the CITY of its obligations to indemnify, defend and hold harmless the State pursuant to Paragraphs 11 (Indemnity) and 16 (Hazardous Materials) herein with respect to any such claims, demands, liabilities, suits, actions, judgments, costs and expenses for loss, injury, death or damage arising prior to such termination or cancellation of all or a portion of this Agreement.

19. Compliance with Laws. The CITY, at all times during the term of this Agreement, shall secure all necessary permits and shall comply with all applicable requirements of the federal, state, and county authorities and shall observe all applicable federal, state and county laws, statutes, ordinances, rules and regulations, now in force or which may hereafter be in force, including, but not limited to, all laws and regulations applicable to the use of areas within the highway right-of-way or federal-aid highways.

20. State's Right to Act. In the event the CITY fails for any reason to comply with any of its duties under this Agreement or under any environmental laws within the time set for doing so, or within a reasonable time as determined by the State, the State shall have the right, but not the obligation, in its sole discretion, to perform those duties, or cause them to be performed. The CITY hereby grants access to the Property and the Old Facilities at all hours to the State, its agents and anyone designated by the State, in order to perform said acts and duties. Any cost, expense, or liability of any type that may be incurred by the State in performing said acts or duties shall be the sole responsibility of the CITY and the CITY hereby agrees to immediately pay to the State all of such costs and expenses incurred by the State in performing said acts or duties. This obligation shall extend to any costs and expenses incident to enforcement of the State's right to act, including litigation costs, attorneys' fees and the costs and fees for collection of said costs, expenses or liability.

21. Amendments. Neither this Agreement, nor any provision hereof, may be amended, discharged, or terminated orally, and any such amendments must be made by an instrument in writing, signed by the parties hereto.

22. Binding Effect. All provisions contained in this Agreement shall be binding upon and inure to the benefit of the respective parties, their successors and permitted assigns, and officers, agents, and employees or any person acting for and on their behalf.

23. Singular, Plural. All words used herein the singular number shall extend to and include the plural. All words used in any gender shall extend to and include all genders.

24. Headings. The headings and captions herein are for convenience of reference only and are not intended to fully describe, define or limit the provisions of this Agreement to which

they may pertain.

IN WITNESS WHEREOF, the undersigned have executed this Agreement the day and year first above written.

DEPARTMENT OF DESIGN AND CONSTRUCTION,
WASTEWATER DIVISION, CITY AND COUNTY OF
HONOLULU

By: _____
Name: _____
Title: _____

APPROVED AS TO FORM

By: _____
Name: _____
City and County of Honolulu
Deputy Corporation Counsel

STATE OF HAWAII

By: _____
Name: _____
Title: _____

APPROVED AS TO FORM:

By: _____
Name: _____
Deputy Attorney General

STATE OF HAWAII)
) SS.
CITY AND COUNTY OF HONOLULU)

On this _____ day of _____, 2014, before me appeared _____ the _____ of the CITY AND COUNTY OF HONOLULU, DEPARTMENT OF DESIGN AND CONSTRUCTION, WASTEWATER DIVISION, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that such person(s) executed the instrument as the free act and deed of such person.

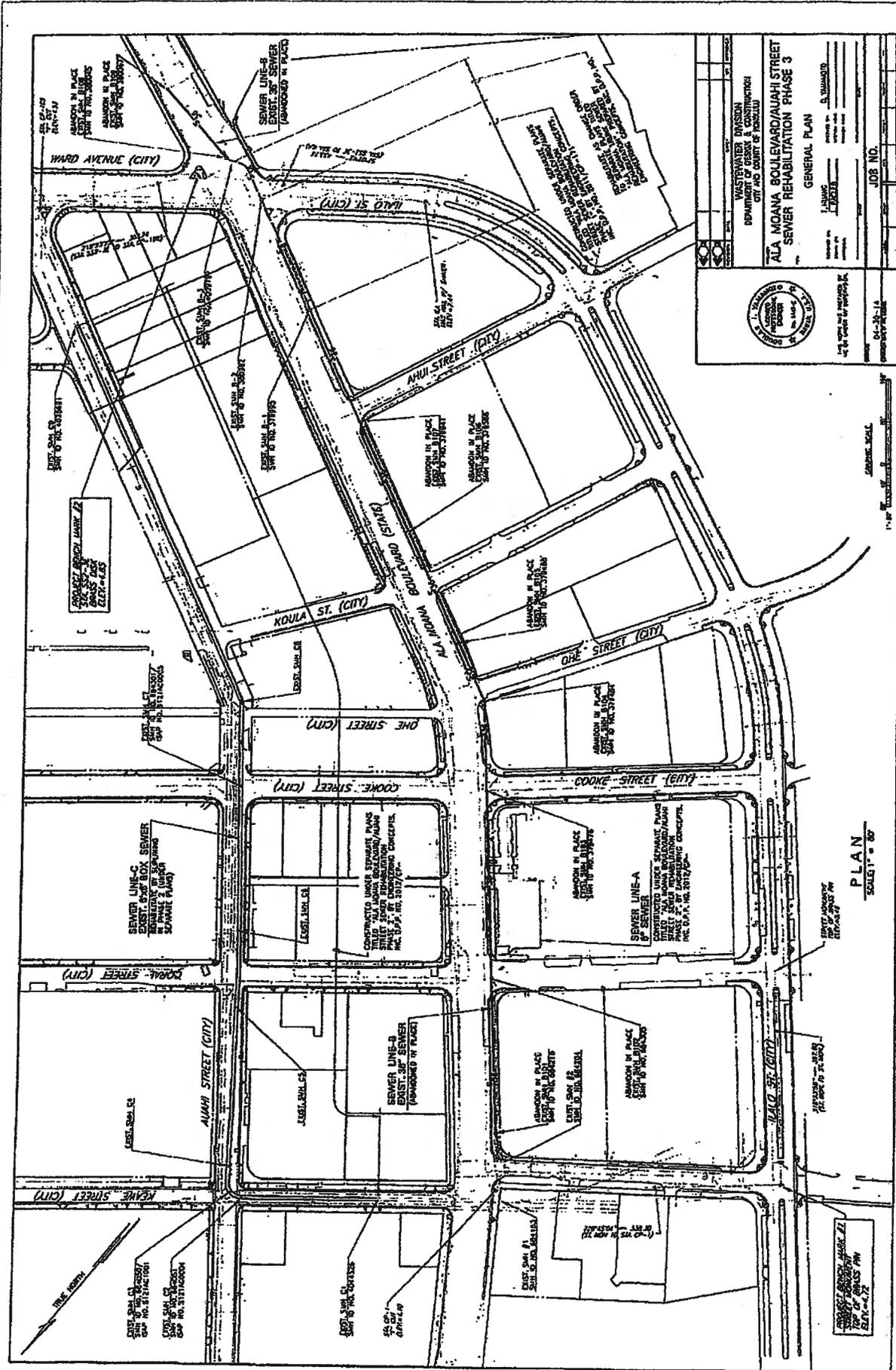
Notary Public, State of Hawaii
My Commission Expires: _____

ADDENDUM

This ADDENDUM is made a part of that Memorandum of Agreement, and provides as follows:

1. Paragraph 13, Insurance is deleted in its entirety and replaced as follows:

"CITY has elected to self-insure all liabilities arising out of its operations and activities on the Property which self-insurance shall be primary and non-contributory with any insurance policy maintained by the State. CITY shall provide a letter of self-insurance to the State upon execution of this Agreement."



WASTEWATER DIVISION
 DEPARTMENT OF ENGINEERING & CONSTRUCTION
 CITY AND COUNTY OF HAWAII

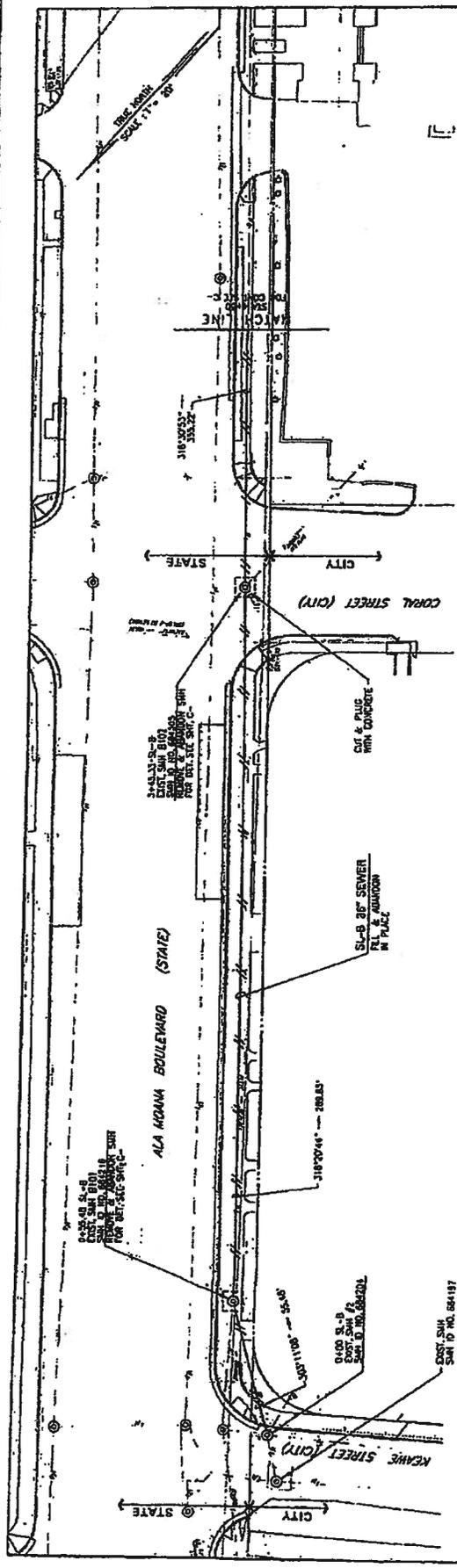
ALA MOANA BOULEVARD/AHAI STREET
 SEWER REHABILITATION PHASE 3

GENERAL PLAN

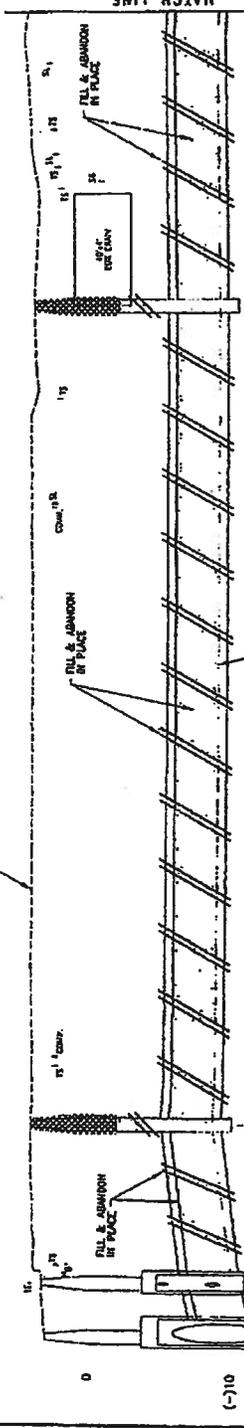
DATE: 11/11/11
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 APPROVED BY: [Name]

JOB NO. [Number]
 SHEET 2 OF 13

EXHIBIT B

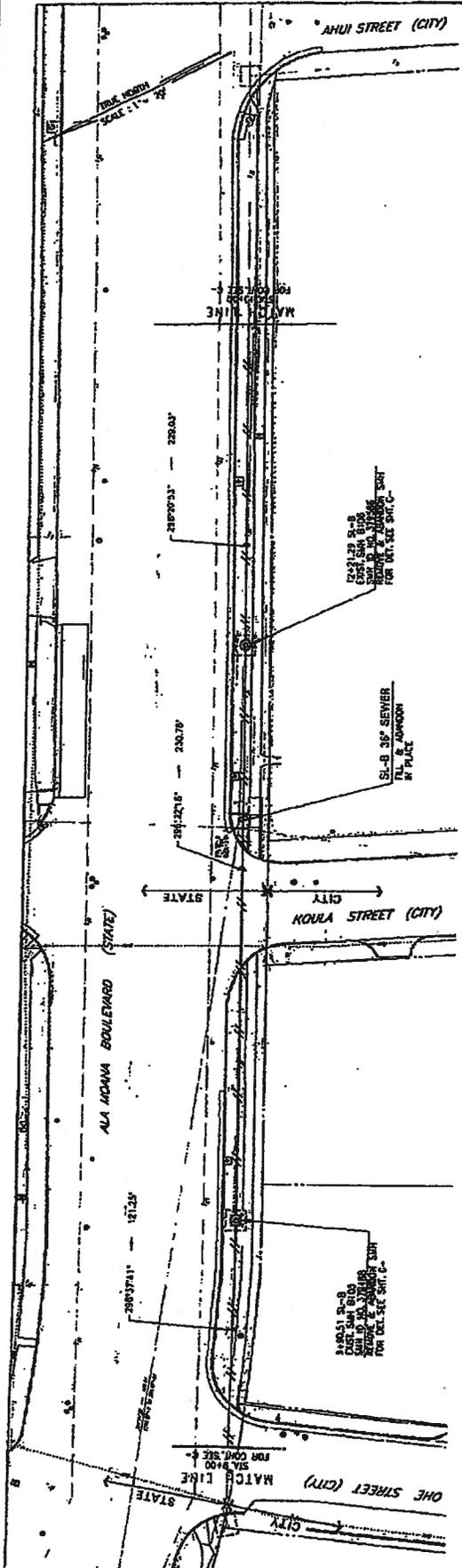


PLAN
SCALE: 1" = 20'

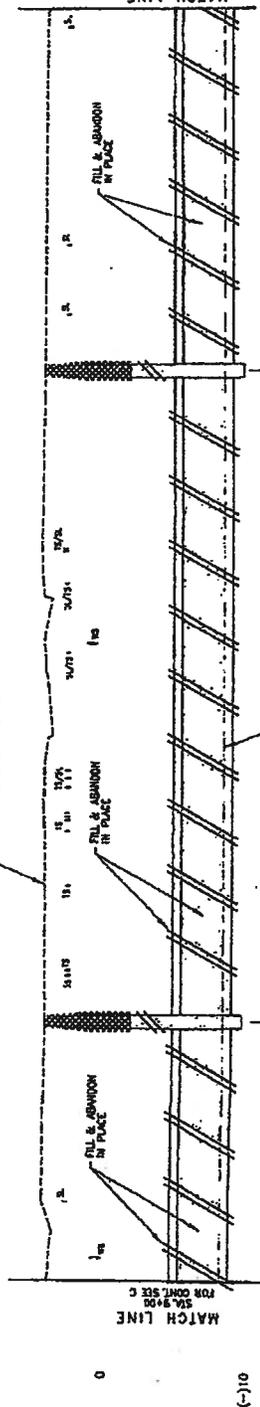


PROFILE
SCALE: VERT. 1" = 4'

WASTEWATER DIVISION DEPARTMENT OF WATER SUPPLY AND SEWERAGE ALA MOANA BOULEVARD/JAHI STREET SEWER REHABILITATION PHASE 3 PLAN & PROFILE SL-B (STA. 0+00 TO 4+50)	
DRAWN BY: J. M. HAWK CHECKED BY: J. M. HAWK DATE: 04-20-14	JOB NO.



PLAN
SCALE: 1" = 20'



PROFILE
SCALE: VERT. 1" = 5'

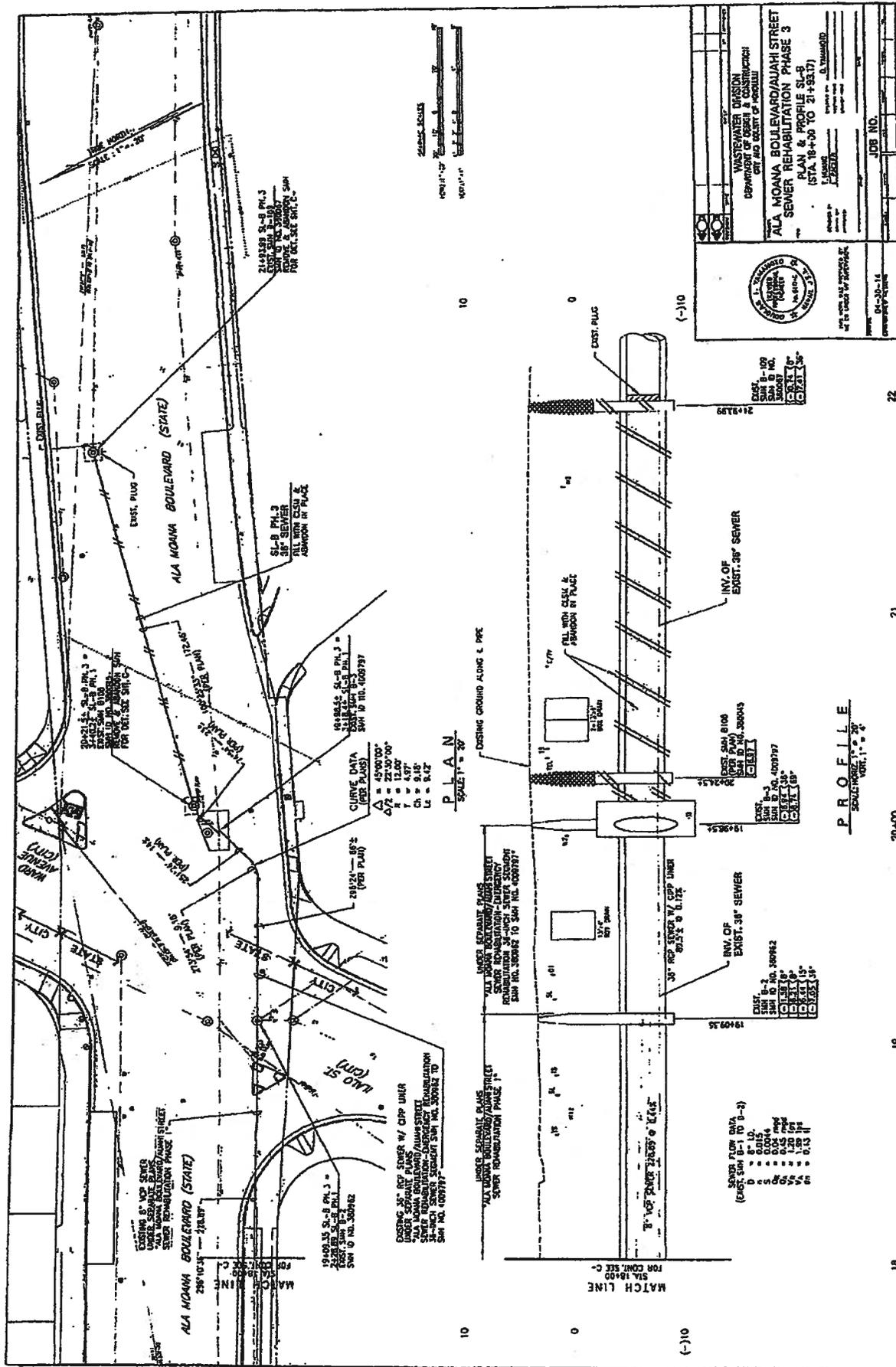
MASTERSHIP DIVISION
DEPARTMENT OF DESIGN & CONSTRUCTION
CITY AND COUNTY OF HONOLULU

ALA MOANA BOULEVARD/AHUI STREET
SEWER REHABILITATION PHASE 3
PLAN & PROFILE SL-B (STA. 9+00 TO 13+50)

DESIGNED BY: J. BRETHERTON
CHECKED BY: B. WILSON
DATE: 04-28-14

JOB NO. _____

SCALE: 1" = 20'



WASTEWATER DIVISION
 DEPARTMENT OF WATER & CONSTRUCTION
 CITY AND COUNTY OF HONOLULU
**ALA MOANA BOULEVARD/ALAHAI STREET
 SEWER REHABILITATION PHASE 3**
 PLAN & PROFILE SL-8
 (STA. 18+00 TO 21+83.17)
 PROJECT NO. 145800
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 DATE: 12/20/10
 JOB NO. [Number]

SCALE: 1" = 20'
 CURVE DATA (PER PLAN)
 $\Delta = 45^{\circ}00'00"$
 $RA = 120'00"$
 $LC = 120'00"$
 $CH = 9.48'$
 $LC = 8.42'$

UNDER SEWAGE PLANS
 ALA MOANA BOULEVARD/ALAHAI STREET
 SEWER REHABILITATION PHASE 3
 36" DIAM. SEWER TO STA. 18+00.00
 STA. NO. 400797

UNDER SEWAGE PLANS
 ALA MOANA BOULEVARD/ALAHAI STREET
 SEWER REHABILITATION PHASE 3
 36" DIAM. SEWER TO STA. 19+00.00
 STA. NO. 400797

UNDER SEWAGE PLANS
 ALA MOANA BOULEVARD/ALAHAI STREET
 SEWER REHABILITATION PHASE 3
 36" DIAM. SEWER TO STA. 20+00.00
 STA. NO. 400797

MATCH LINE
 FOR CON. SEE C-