STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ADDENDUM NO. 1

for

ALA MOANA BOULEVARD DRAINAGE REPAIR,
VICINITY OF QUEEN STREET TO VICINITY OF PIIKOI STREET
PROJECT NO. 92A-02-17M

The following is provided for information:

A. PRE-BID MEETING

Attached are the May 26, 2017 Pre-bid Meeting Minutes and Attendance Sheets.

B. LAST DAY TO SUBMIT QUESTIONS FOR BIDDING PURPOSES:

This is to clarify that questions can be submitted by close of business, Friday, June 2, 2017. See the attached Pre-bid Meeting Minutes for additional details.

C. DRAFT NOISE VARIANCE PERMIT:

Please see the attached draft noise variance permit application for this project. Please note that this is a draft noise variance permit application and is subject to change.

Please acknowledge receipt of this Addendum No. 1 by recording the date of its receipt in the space provided on page P-4 of the Proposal.

FORD N. FUCHIGAMI
Director of Transportation

PRE-BID MEETING MINUTES

Project: ALA MOANA BOULEVARD DRAINAGE REPAIR, VICINITY OF QUEEN STREET TO VICINITY OF PIIKOI STREET

Project No.: 92A-02-17M

Date/Time: May 26, 2017, 9 AM

Location: State of Hawaii Department of Transportation (HDOT), Highways Division, 601 Kamokila Blvd., Rm 577B, Kapolei, HI 96707

Attendees: See the attached Attendance List.

A. James Fu (HDOT Project Manager) opened the meeting at 9:01 AM and mentioned: "Anything said at this meeting is for clarification only, the bid documents shall govern over anything said today and discrepancies shall be clarified by addendum."

B. Open discussion to prospective bidders:

1. HDOT mentioned to all prospective bidders regarding Contract time:

   a. Pay attention to the Special Provision, Page P-1 in which the Completion Time says: "Seventy-Five (75) Calendar Days from the date indicated in the Notice to Proceed from the Department. See also Section 108.05(A) – Calculation of Contract Time."

   b. Section 108.05(A) says: "The Contractor can work during the period from November 16, 2017 to January 2, 2018 with the condition that no lane closures are allowed during this period. All contract requirements and provisions shall be applicable and in force from the date indicated in the Notice to Proceed from the Department to the closing of this contract".

2. HDOT mentioned that weekend work will be allowed during the weekends, Saturday through Monday morning on limited weekends as stated in the bid documents

3. Prospective bidder question: Will there be a date set up to do a site visit?

    a. HDOT will not provide a date for a site visit. Prospective bidders can visit the site on their own if they wish. HDOT reminded the prospective bidders that before they visit the site, they should conduct their own appropriate safety assessment and precautions. If they feel there are any unsafe conditions, contact HDOT.

    b. HDOT mentioned that the makai outlet of the box culvert is visible from the park. However, HDOT does not recommend entering the box culvert to view the slab soffit.

    c. HDOT mentioned that if prospective bidders visit the site and especially the roadway area, the prospective bidders should note that the HDOT is concerned about effects of this project to the motoring public. This is one of the reasons for the Nov. 16, 2017 to Jan. 2, 2018 time frame mentioned in the Special Provisions, page P-1 and Section 108.05(A). Post meeting note: HDOT is concerned about the effects of this project to NOT just the motoring public. HDOT is concerned for all possible effects from this project to ALL that may be affected (nearby residents, pedestrians, bicyclists, etc.) during the duration of this Contract.

4. HDOT mentioned that the condition of soffit of the box culvert is in very poor condition and top slab of the box culvert will need continuous temporary shoring support to allow traffic to move over the box culvert during construction.

5. HDOT mentioned that there are currently 210 to 215 jacks supporting the soffit of the top slab of the box culvert (within State right of way (ROW)). Approximate jack locations are as shown in the Contract plans. The Contractor may use these jacks during the project duration at his own risk.

6. HDOT mentioned that there are existing utilities in the median.

7. Noise Variance:

    a. HDOT mentioned that they have already submitted a noise variance application to the Department of Health (DOH) for this project, and it is pending approval.

    b. Prospective bidder question: will the draft noise variance application be available for review before bidding and are there work restrictions associated with the NV?
        I. HDOT will consult with our Administration regarding this request and will inform the bidders shortly.

    c. HDOT mentioned that noise generated from Contractor operations greater than 85 decibels will be allowed only from 9 AM to 6 PM. At all other times, noise generated from Contractor operations will be limited to less than 85 decibels, and restrictions on certain equipment with decibels of 85 decibels or more apply. This restriction applies to all Contractor equipment even if it is not on the list provided in the Noise Variance application.

8. Public Informational Meeting – HDOT mentioned that a Public Informational Meeting for the Noise Variance Application is tentatively scheduled for July 13, 2017 at Washington Middle School. HDOT is currently awaiting approval from Washington Middle School for use of their facilities.

9. What is the last day for contractors to submit questions?

    a. HDOT mentioned that they will provide this later. (Post meeting note: **Last day to submit questions for bidding purposes will be close of business, June 2, 2017**). Submit questions to James Fu, Project Manager, by phone at (808) 692-7611, by email at james.fu@hawaii.gov , or by facsimile at (808) 692-7617.

10. Prospective bidder question: because of proximity to water, are Section 404 and 401 permits needed?

    a. Per U.S. Army Corps of Engineers, the 404 Permit and Section 401 Water Quality Certification are not required for this project. However, Best Management Practices (BMP) as described in Specifications are required to be followed.

11. Right of Entry onto City and County of Honolulu ROW:

    a. HDOT mentioned that Right of Entry onto City & County of Honolulu (City) ROW has not been obtained. If the Contractor wants Right of Entry onto City property, the Contractor will need to contact and coordinate with the City directly. If the Contractor has problems obtaining Right of Entry from the City, contact HDOT.

12. Possible construction staging area(s) on City & County of Honolulu ROW:

    a. HDOT has not contacted the City regarding possible construction staging area(s) on City ROW. If the Contractor wants construction staging area(s) on City property, the Contractor will need to contact and coordinate with the City.

13. Two existing manholes are located on the mauka side of Ala Moana Boulevard and are outside of State ROW.

    a. Can the Contractor use these two manholes to access the box culvert?

    b. HDOT mentioned that if the Contractor wants to use these manholes to access the box culvert, the Contractor needs to make their own arrangements with the City and/or adjacent property owners for this access.

14. Prospective bidder question: if there are high water levels in the box culvert and if Contractor cannot install or maintain his BMP's, will HDOT provide time extensions?

    a. HDOT: The Contractor needs to consider the tides in their bids. The State will not likely allow time extensions.

15. Construction debris:

    a. HDOT reminded the Contractor that no construction debris should be enter the water during the Contractor's operations. The Contractor is reminded to implement the appropriate BMP's for this project.

C. Meeting was adjourned at 9:31 AM.

HIGHWAYS DIVISION
PRE-BID MEETING ATTENDANCE

SUBJECT: Ala Moana Boulevard Drainage Repair, Vicinity of Queen Street to Vicinity of Piikoi Street

PROJ. NO.: 92A-02-17M

DATE, TIME & PLACE: May 26, 2017, 9 AM, Kakuhihewa State Bldg, Room 577B (601 Kamokila Blvd, Kapolei)

NAME	COMPANY	PHONE	EMAIL
John Manuel	Abbe & Svoboda, Inc	808 682 4833	John.Manuel@abbeonline.com
David Lein	Abbe & Svoboda, Inc	682-4833	David.Lein@abbeonline.com
Kaori Umemoto	Makahiki Okawa Engrs	536-2626	kaoriumemoto@okawa.com
Brian Kung	MKE Associates LLC	488-7579	brian@mkellc.com
Logan Lee	MKE	488-7579	Logan@mkellc.com
Russ Miyahara	KSF	593-0933	russm@ksfinc.us
Stephanie Doan	WSP	745-4321	stephanie.doan@wsp.com
Larissa Sato	WSP	620-4705	Sato@planworld.com
Charles Lee	DOT	831-6700	
Brad	Triton Marine Constr	954-5030	bgordon@triton-marine.com
Glenn Koki	HDCC	754-6524	gkoki@hdcc.com
Justin Cadiz	HDCC	735-3274	jcadiz@hdcc.com
Norman Leong	WRSA	536-4495 ext 25	norman@wrsasolutions.com

Name	Company	Phone	Email
Brent Manaka	HDOT	630-7433 679-7162	brent.n.manaka@hawaii.gov
Bob [illegible]	SDOT		
Marc Simmons	Kiewit Infra. West. Co.	674-1088	marc.simmons@kiewit.com
Kimberly Okamura	HDOT	692-7613	Kimberly.m.okamura@hawaii.gov
James Fu	HDOT	692-7611	James.fu@hawaii.gov

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State of Hawaii
Department of Health
Indoor and Radiological Health (IRH) Branch
Noise Section
591 Ala Moana Boulevard, Room 133
Honolulu, Hawaii 96813
(808) 586-4700

APPLICATION FOR COMMUNITY NOISE VARIANCE

Refer to "Guide to Application for Community Noise Variance" for instructions. Submit attachments if necessary. Application form and attachments must be submitted in triplicate.

1. Applicant Identification

Company Name:	State Department of Transportation	Telephone:	
Authorized Individual:	Robert Shin	Telephone:	(808) 831-6700 ext 127
Title:	Urban Construction Engineer		
Mailing Address:	727 Kakoi Street Honolulu, HI 96819		

2. Type and purpose of activity

The proposed project, Ala Moana Boulevard Drainage Repair Vicinity of Queen Street to Vicinity of Piikoi Street, involves repairing a double box culvert under Route 92, Ala Moana Boulevard, in the Honolulu District. The scope of this specific project consists of repair work to replace the top slab of a concrete double box culvert, each side of which measures 14 feet wide by 8 feet tall, and reconstruction of the roadway pavement in the disturbed area of the culvert repair work.

The proposed construction consists of removing the roadway pavement down to the top of the culvert, demolishing and disposing of the top slab of the concrete box culvert, installing pre-cast planks that will serve as the new top of the culvert, and reconstructing the roadway pavement.

3. Location of activity

The proposed construction activity will occur along Route 92, Ala Moana Boulevard, in the Honolulu District. All improvements will occur within the State DOT rights-of-way. See Attachment 1 for details.

4. Time of activity

The requested noise variance hours for construction activities are as follows:

- Saturday 5:00 a.m. to Monday 7:00 a.m. for up to 6 occurrences:
    - HDOT will notify the Department of Health as soon as dates have been scheduled.
    - While it is anticipated that work covered by this Community Noise Variance can be completed in 3 weekends, from Saturday 5:00 a.m. to Monday 7:00 a.m., we are requesting up to 6 weekends due to the dynamic nature of construction, required environmental permits, and in case unforeseen circumstances are encountered.

5. Estimated duration of construction activity (Specify dates)

September 2017 to September 2018.

The actual construction of the project is anticipated to be completed in the early part of 2018 as shown in Attachment 2. HDOT will suspend work activities that require lane closures from mid-November 2017 through early January 2018. We are requesting a Community Noise Variance for the duration of a year due to the dynamic nature of construction, required environmental permits, and in case unforeseen circumstances are encountered.

6. Schedule of activity (Submit as attachment)

See Attachment 2.

7. Description of immediate impact area

Existing land use along the mauka side of Ala Moana Boulevard is mostly residential with commercial areas and along the makai side is Ala Moana Beach Park. Attachment 1 contains additional information. Within a 500' radius of the project area are the IBM Building, Ala Moana Beach Park, and residential towers fronting Ala Moana Boulevard as follows (approximate number of units has been included for each building):

- Hokua: 254
- Nauru Tower: 412
- 1350 Ala Moana: 354
- Koolani: 372
- Waihonua: 342
- Hawaiki Tower: 427

8. List of equipment to be utilized (attach list if necessary)

See Attachment 3.

9. Plans and procedures for the attenuation of noise emission emanating from the activity

Noise abatement measures will include:

- The Contractor will be required to maintain all equipment in good working order. All equipment with an exhaust of gas or air will be equipped with mufflers. Any equipment found to be in poor repair or not in compliance with applicable regulations of the State of Hawaii or the City and County of Honolulu shall be corrected prior to any use.
- Department of Transportation field personnel and the Contractor will monitor all equipment and construction activities on the job site to ensure the use of noise abatement measures. The Contractor will immediately correct any violations that occur.
- Instructional meetings will be held for construction crews and truck drivers to discuss noise abatement procedures, including the use of engine brakes, loading and unloading cargo, shouting, use of signal callers, and other practices as required.
- A job-site representative will be designated to whom immediate complaints can be forwarded for prompt response and who will have the general responsibility of monitoring quiet work procedures.
    - Project Manager: To be provided after Contractor selection
      Phone No.: To be provided after Contractor selection
      E-mail: To be provided after Contractor selection
- The Contractor will have a corrective action program in place that lays out steps and responsibilities to respond to complaints.

10. Identify specific provisions of statutes or rules for which the variance is requested (include specific sections)

The specified rules for which the variance is requested are:

- Hawaii Administrative Rules (HAR), Title 11, Chapter 46, Section 7-(j)-(1), which states "No permit shall allow any construction activities which emit noise...before 7 a.m. and after 6 p.m. of the same day, Monday thru Friday,"
- HAR, Title 11, Chapter 46, Section 7-(j)-(2), which states "No permit shall allow any construction activities which emit noise...before 9 a.m. and after 6 p.m., on Saturday."; and
- HAR, Title 11, Chapter 46, Section 7-(j)-(3), which states that "No permit shall allow any construction activities which emit noise...on Sundays and on Holidays."

11. Description of alternatives to the proposed activity

Alternatives to the proposed activity include either (1) no action, or (2) limit construction of the project to daytime hours only.

- Alternative 1 was eliminated from consideration because it fails to address the need to repair the severely deteriorated box culvert under Ala Moana Boulevard.
- Alternative 2 was also eliminated from consideration. Limiting construction to daytime hours would be more disruptive to traffic, resulting in prolonged traffic delays and

subsequent disruption to business operations. In 2016 traffic counts in this area indicated a commuter morning peak traffic volume of 3,147 vehicles per hour and a commuter afternoon peak traffic volume of 3,361 vehicles per hour. The installation of the precast concrete planks will require the closure of lanes of Ala Moana Boulevard. The ability to close multiple lanes from 5:00 a.m. on Saturday to 7:00 a.m. on Monday morning will minimize the impact to the public travelling in the Kakaako/Ala Moana/ Waikiki area. Performing the work only during daytime hours would also significantly lengthen the period of time required to complete the project, consequently increasing construction costs, and causing undue hardship on the motoring public.

12. Describe why the present or proposed activity cannot be altered to comply with applicable statutes or rules

Altering the proposed night and weekend work hours to daytime hours would be more disruptive to traffic, resulting in prolonged traffic delays and subsequent disruption to business operations. Performing the work during daytime hours would significantly lengthen the period of time required to complete the project, consequently increasing construction costs, and causing undue hardship on the motoring public.

13. Description of any adverse environmental effects which cannot be avoided

Resource agencies and the general public will be consulted regarding potential impacts, including noise, related to this proposed project.

No significant adverse environmental impacts are anticipated to be caused by construction of the proposed project. The potential for noise-related impacts is expected to be short-term and will last only for the duration of construction. Noise emissions from the proposed project will be bothersome to some, but will be temporary in nature and will not occur continuously along the project area for the duration of construction work.

14. Discuss the relationship between short-term (temporary) use of the environment, and the maintenance and enhancement of long-term productivity

The proposed night and weekend work is intended to minimize the disruption to daytime traffic flows and business activities. The increased daily working hours will also reduce the contract time, minimizing the potential for delays associated with construction. The installation of the precast concrete planks will require the closure of multiple traffic lanes from 5:00 a.m. on Saturday to 7:00 a.m. on Monday morning, but this will minimize the overall impact to the public travelling through this area. If this work is done only during daytime hours, major traffic delays would be expected along Ala Moana Boulevard. The areas surrounding the project site, including traffic through Kakaako, Ala Moana and Waikiki would experience significant delays.

The elevated noise emissions generated may be bothersome to some, but they will be temporary. The long-term benefits will serve the community and this construction approach will deliver those benefits in a manner that is efficient, beneficial to motorists that use the roadway, and considerate of residents in the project area.

Traffic along Ala Moana Boulevard is heavy during the day, especially during the morning and afternoon peak traffic periods. In 2016, traffic counts in this area indicated a commuter morning peak traffic volume of 3,147 vehicles per hour and a commuter afternoon peak traffic volume of

3,361 vehicles per hour. If traffic is impeded by the proposed project, vehicle emissions from idling engines and slow moving vehicles may increase. The motoring public will be inconvenienced with delays due to slow traffic movement from congestion.

15. Discuss any irreversible and irretrievable commitments of resources which would be involved in the proposed activity.

The activities involved with this work effort will consume energy, paving materials, and labor.

16. Discuss any possible impact from noise created by any proposed nighttime activity which may affect the immediate surrounding area

The surrounding businesses and residences along Ala Moana Boulevard may experience some temporary inconvenience due to noise generated by nighttime construction. The Contractor will limit the use of certain construction equipment during the hours requested to be covered by this variance to minimize the overall noise levels of the construction activities.

The installation of the precast planks will require the closure of multiple lanes for the safety of the work crews and to facilitate the placing of the planks with a large crane and the construction of the asphalt pavement. The construction requires a continuous closure of the roadway for a significant amount of time, which is the reason we are requesting this Community Noise Variance for the hours of 5:00 a.m. Saturday through 7:00 a.m. Monday. However, this nighttime work is anticipated to be completed over the course of up to 6 Saturday through Monday periods. If a noise variance were not granted for this work, the construction duration would have to be extended.

17. Discuss any plans or procedures for notification of people in the surrounding area of any planned nighttime activity

A Public Informational Meeting will be held to solicit input from the public on the proposed night and weekend work. The surrounding residents will be informed of the date and time of the public meeting. The public will have 30 days to submit written comments from the date of the public meeting.

The Ala Moana/Kakaako Neighborhood Board will be informed of the public meeting and will be invited to solicit comments on the proposed work from 5:00 a.m. Saturday morning through 7:00 a.m. Monday morning. The board will also be continuously updated during construction.

A message board will be located within the project limits to notify motorists of night work.

Residents in surrounding neighborhoods that may use the roadway and be impacted by the project will be given advance notice regarding the project plans. The Department of Health and the affected residents and businesses located within 500 feet of the project will be informed in advance of the start of night work and will be provided with the HDOT's website information and name and phone number of a contact person, as previously noted. The website will be regularly updated with times and locations of night work. Any complaints should be directed to the contact person for response.

18. Describe the purpose of the project as relating to public interest

The purpose of the proposed project is to repair the top slab of the concrete double box culvert, each side of which measures 14 feet wide by 8 feet tall, under Ala Moana Boulevard. The

project consists of removing the existing concrete top slab of the box culvert and replacing it with precast concrete panels. The roadway will repaved and restriped after completion of the repair.

The proposed project will replace the highly deteriorated box culvert top slab. In October of 2016 shoring was installed to support the deteriorated top slab of the box culvert. In February 2017, HDOT imposed a maximum loading of 25 tons and decreased the speed limit from 35 miles per hour to 25 miles per hour for vehicles travelling along Ala Moana Boulevard between Piikoi Street and Queen Street. In April of 2017 additional shoring was installed to prevent the culvert top slab from collapsing due to further deterioration. Replacing the top slab of the box culvert will ensure the safety of the general public travelling on Ala Moana Boulevard and keep open a vital communication and transportation link.

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CERTIFICATION OF INDIVIDUAL AUTHORIZED TO ACT FOR APPLICANT

I, Robert Shin, certify that I have

Print Name

knowledge of the facts herein set forth and that the same are true and correct to the best of my knowledge and belief.

Signature Robert Shin

Date 5-12-17

FOR DEPARTMENT OF HEALTH USE ONLY

Date received _____

Variance Appl. Number _____

Variance Docket Number _____

Fee Paid _____ Receipt No. _____

Date Issued _____ Exp. Date _____

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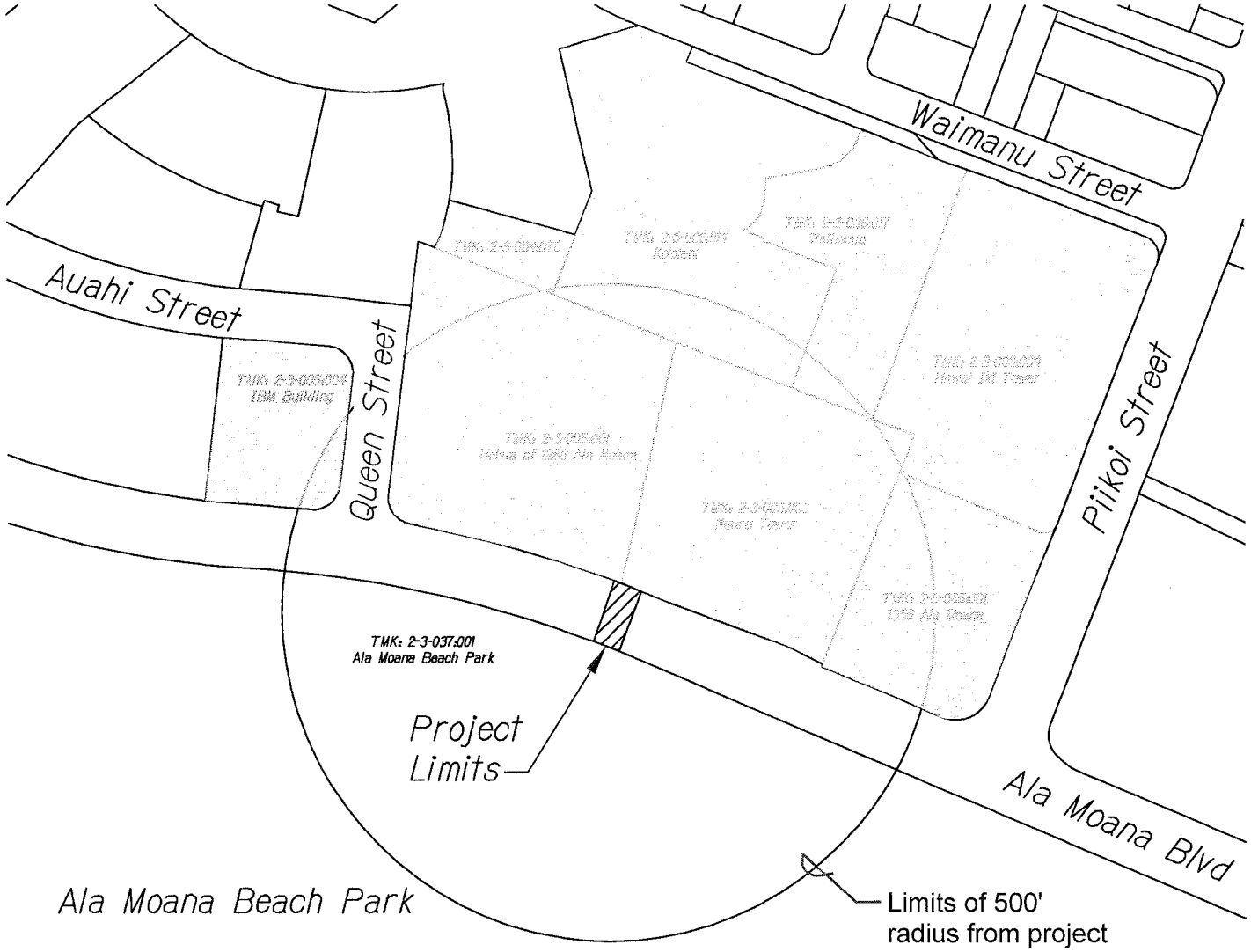
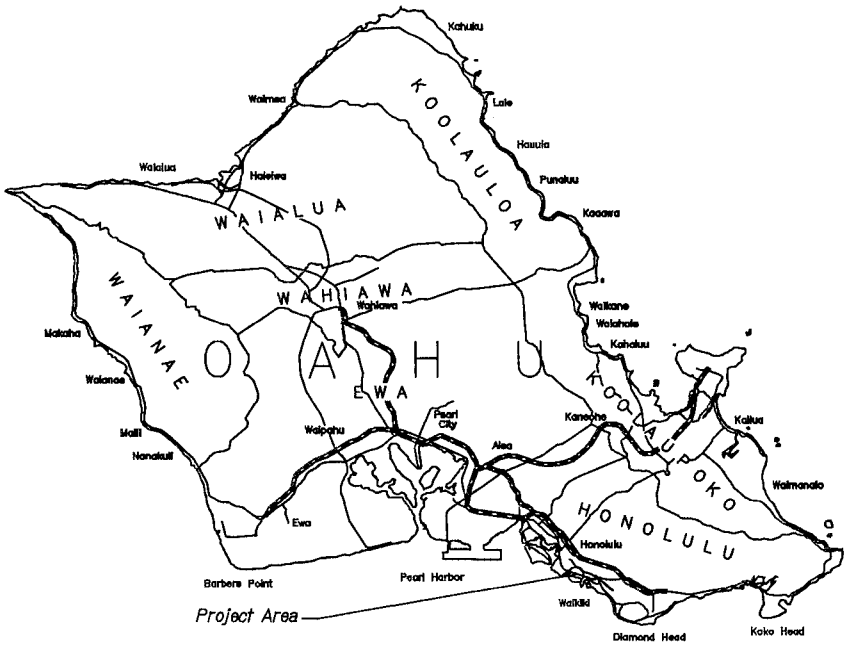
Attachment 1
Location Map
Land Use Map





Location Map

4 0 4 8
SCALE IN MILES

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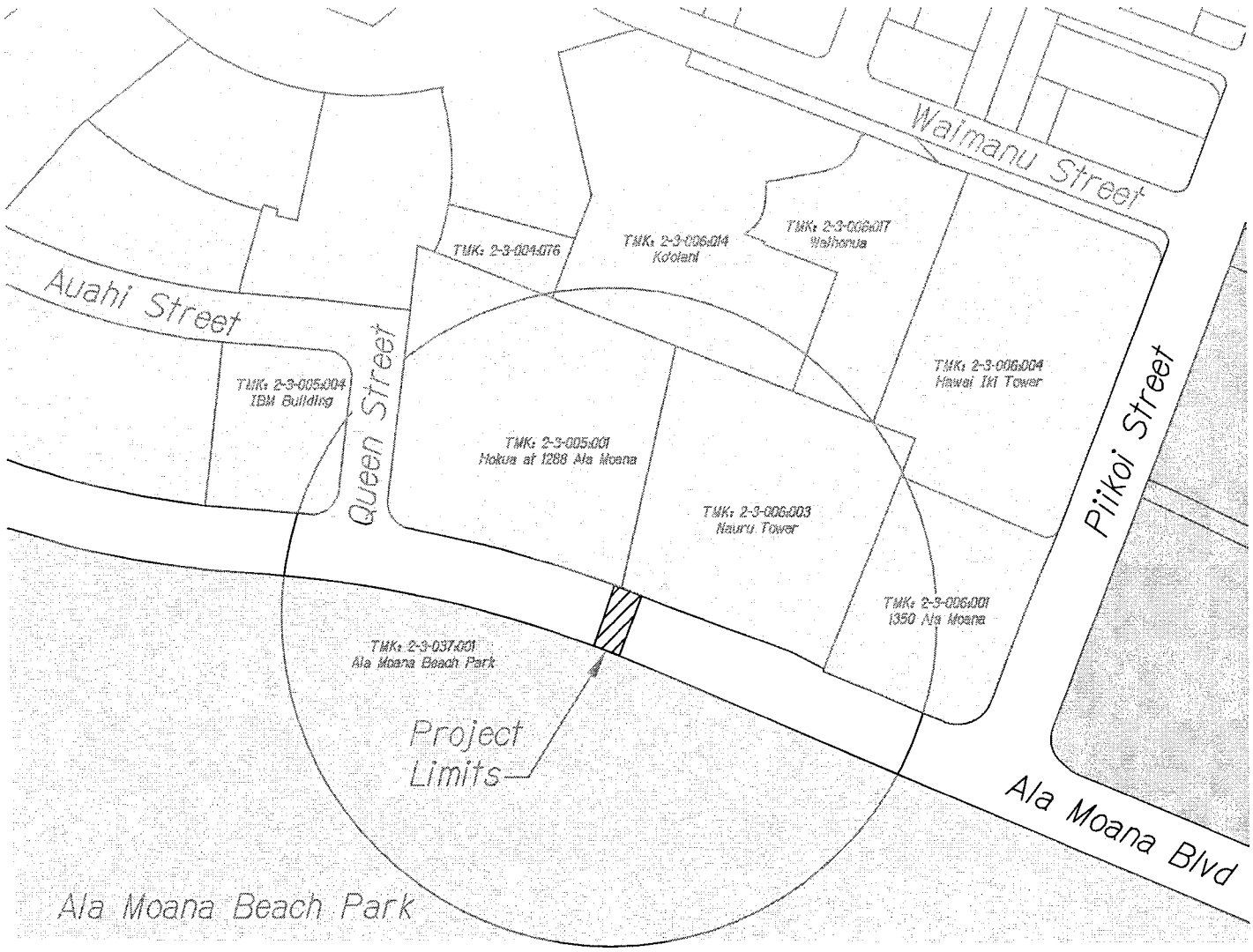
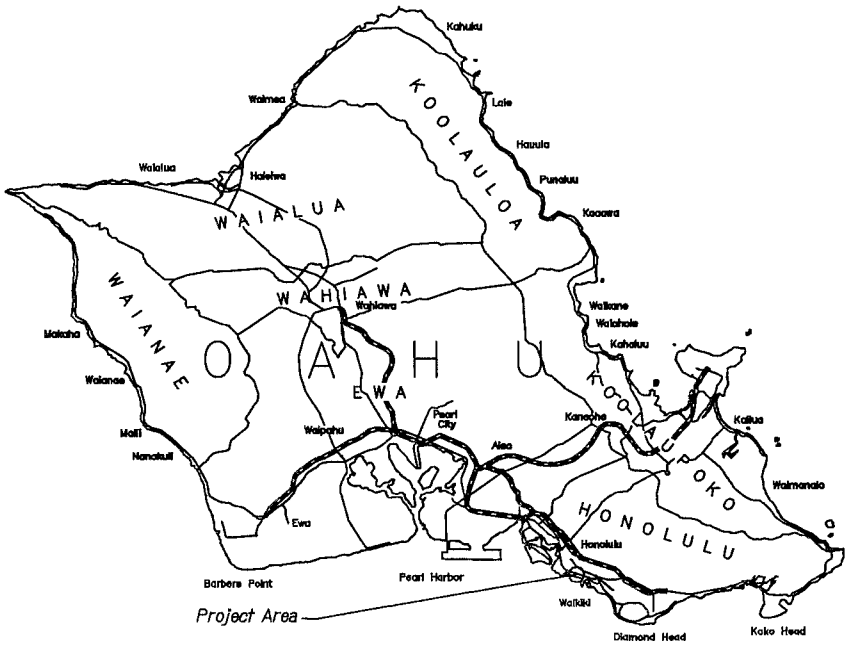
Attachment A1.1
Location Map

Ala Moana Boulevard Drainage Repair, Vicinity of Queen Street to Vicinity of Piikoi Street
Proj. No. 92A-02-17M





Location Map

4 0 4 8

SCALE IN MILES

Commercial

P-1 Park

Kakaako Commercial Development District

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Attachment A1.2
Land Use Map

Ala Moana Boulevard Drainage Repair, Vicinity of Queen Street to Vicinity of Piikoi Street
Proj. No. 92A-02-17M

Attachment 2
Schedule

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Attachment 2
Schedule of activity (Approximate)

Ala Moana Boulevard (Piikoi Street to Queen Street)

- September 1, 2017 – February 28, 2018: remove and dispose existing roadway pavement, demolish and dispose existing concrete culvert top slab, install concrete pre-cast planks, reconstruct pavement, restripe roadway.
    - Work requiring lane closures will be suspended from mid-November through early January.
- Weekend work is to occur beginning at 5:00 a.m. Saturday morning and continue until 7:00 a.m. Monday morning under this Community Noise Variance, for up to 6 occurrences. There will not be any work after 6:00 p.m. Monday through Friday, and no work on holidays.
    - While it is anticipated that work covered by this Community Noise Variance can be completed in 3 weekends, from Saturday 5:00 a.m. to Monday 7:00 a.m., we are requesting up to 6 weekends due to the dynamic nature of construction, required environmental permits, and in case unforeseen circumstances are encountered.

Sequence of Construction:

Day Work

1. Install BMPs for median work
2. Close East Bound/West Bound Median lanes for median work
3. Demolish grassed median for contraflow lane opening
4. Construct AC pavement in median for contraflow lane
5. Open lanes to traffic
6. Confirm box culvert measurements
7. Precast deck sections (off site)
8. Install Bracing of Box Culvert walls/ deck mauka Section
9. Install BMP's before commencing saw cutting

Weekend #1

10. Close Westbound (WB) (mauka) lanes to traffic
11. Saw cut walls at roof line all walls
12. Saw cut deck from above in sections to be removed all WB Lanes
13. Remove deck sections and vertical bracing
14. Place form for wall height adjustment
15. Place deck panels
16. Place reinforcing steel

17. Place forms for cast-in-place sections
18. Pour cast-in place sections, wall adjustment and topping
19. Cure
20. Open WB Lanes to traffic

Weekend #2

21. Close WB/East Bound (EB) (makai) median lanes to traffic
22. Install bracing of box culvert walls/ deck median section
23. Install BMPs before commencing saw cutting
24. Saw cut walls at roofline all walls
25. Saw cut deck from above in sections to be removed
26. Remove deck sections and vertical bracing
27. Place form for wall height adjustment
28. Place deck panels
29. Place reinforcing steel
30. Place forms for cast-in-place sections
31. Pour cast-in-place sections, wall adjustment and topping
32. Cure
33. Open WB/EB median lanes to traffic

Weekend #3

34. Close EB lanes
35. Install bracing of box culvert walls/deck makai section
36. Install BMPs before commencing saw cutting
37. Saw cut walls at roofline all walls
38. Saw cut deck from above in sections to be removed from all EB lanes
39. Remove deck sections and vertical bracing
40. Place form for wall height adjustment
41. Place deck panels
42. Place reinforcing steel
43. Place forms for cast-in-place sections
44. Pour cast-in-place sections, wall adjustment and topping
45. Cure
46. Open EB Lanes to traffic

Day Work

47. Restore median
48. Install asphalt/concrete tie-in
49. Restripe
50. Remove BMPs

Attachment 3
Equipment List

Attachment 3
List of Equipment that may be Utilized

Description	Decibels at 50 feet
Water Truck	75
Hydraulic Saw Cut Machine*	85
Diesel/Gas Saw Cut Machine*	85
Generator	81
Flood Lights	81
Chipping Guns	79
Circular Saws*	85
Hand Drills*	85
Core Drills*	98
Rotary Hammers*	88
Large Crane - 140 tons or greater	84
5-15 ton Forklift*	85
75 ton Tractor/Lowboy*	88
1/2 to 1 ton pickup trucks	75
10 ton boom truck	83
Backhoe with Hoeram*	90
Combination backhoe/Loader (Hoptoe)*	85
Roller Screed/Bidwell	74
Concrete Trucks	81
Concrete Vibrators	80
Curing Machines	76
Admix dispenser	81
Volumetric Mixer - Concrete*	85
AC Spreader*	89
8 ton Steel Drum Roller	80
10 ton Pnuematic Roller	75
175 CFM Air Compressor	80
Vacuum Cleaner*	85

***These pieces of equipment will only be used between 9 a.m. and 6 p.m.**

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Attachment 3 Equipment Schedule		
Time	**Description of Work**	**Equipment**
5 a.m. to 6 a.m.	Install Traffic Control	pickup trucks
6 a.m. to 8 a.m.	Prep BMP's and Equip.m.ent setup	pickup trucks
8 a.m. to 9 a.m.	Prep Lifting devices and position trucks	pickup trucks
9 a.m. to 11 a.m.	Lift old panels and prep forms and brackets	Crane, circular saws*, pneumatic drills* Rotohammers*, lowboy trucks, forklifts hoptoe*, boomtruck, generator core drill*,
11 a.m. to 3 p.m.	Set panels and install edgeforms, rebar and grade controls	Crane, circular saws*, pneumatic drills* Rotohammers*, lowboy trucks, forklifts hoptoe*, boomtruck,
3 p.m. to 6 p.m.	Pour concrete	Crane, water truck, screed, concrete trucks vibrator, admix dispenser, air compressor
6 p.m. to 8 p.m.	Strip edge forms, install cold mix	pickup trucks
8 p.m. to 4 a.m.	Cure concrete	none
4 a.m. to 5 a.m.	Temporary stripe roadway	none
5 a.m. to 6 a.m.	Reopen road	pickup trucks

***These pieces of equipment will only be used between 9 a.m. and 6 p.m.**