

Rockfall Impact Barrier General Notes

1. All work related to the rockfall impact barrier shall be performed in accordance with "Section 662 – Rockfall Impact Barriers" of the technical specifications.
2. Verify and check all dimensions and details on the contract documents and specifications for discrepancies. Discrepancies shall be brought to the attention of the engineer for clarification before proceeding with the work.
3. Work incidental to the contract and necessary to complete the project, although not specifically referred to in the contract documents, shall be furnished and performed by the contractor.
4. In performing all work, the contractor shall exercise due care and caution necessary to avoid damage to and impairment in the existing utility lines, any damage inflicted on existing utility lines or structures shall be immediately repaired or restored as directed by the engineer at the contractor's expense.
5. The contractor agrees that he/she will assume sole and complete responsibility for the job site and conditions during the course of construction of the project including safety of all persons and property. This requirement shall apply continuously and shall not be limited to normal working hours. The contractor shall indemnify and hold the State and the engineer harmless from any and all liability, real or alleged, in connection with the performance of the work on the project, except for liability arising out of the sole negligence of the State or the engineer.
6. The contractor shall be responsible for providing a safe working environment on the project site meeting all applicable Federal, State and Local requirements while executing the work contained in the contract documents.
7. All construction lines, grades, and survey monument stakeout, where required, shall be performed by a licensed surveyor.
8. The contractor shall conduct all tests as required in the contract documents or as requested by the engineer. The contractor shall be responsible for the expenses incurred in conducting the tests.
9. The contractor shall verify the location of all existing utility lines, whether shown on the plans or not, and shall be responsible for the repair or replacement of same in the event of damages resulting from the construction activities. The contractor shall coordinate his/her work with the respective utility companies or agencies.
10. All vegetation, excluding trees, shall be removed from within the designated clearing area for the rockfall impact barrier. Vegetation removed from the clearing operations shall be disposed of offsite.
11. The contractor shall make arrangements for utilities such as water, electricity, etc., required for the construction activities and all costs shall be borne by the contractor.
12. No construction equipment shall be parked within the road such that the equipment will obstruct the normal movement and sight distance of the motorists.
13. Wire ropes for the wire cable anchor (0.75–inch diameter wire rope) shall comply with or exceed Federal Specifications RR–W–410D. Galvanized wire rope shall have a black colored PVC coating that is bonded properly to the wire rope such that the PVC coating will not slip off the wire rope.

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14. The contractor shall anticipate variable ground conditions at the rockfall impact barrier foundations and anchor locations, variable ground conditions including rock, boulders, cobbles and soils be anticipated.
15. The contractor must adhere to time restrictions set forth in the Environmental Assessment.
- General Notes**
1. The scope of work for this project consists of installing a rockfall impact barrier along the mauka side of Hana Highway, Route 360.
2. The contractor is reminded of the requirements of subsection 108.01 – subletting of contract, which requires him to perform work amounting to not less than 30 percent of the total contract cost less deductible items. Non-compliance with this subsection may be grounds for rejection of bid.
3. The contractor's attention is directed to the following sections of the special provisions: subsection 107.13 – public convenience and safety; subsection 107.21 – contractor's responsibility for utility property and services; and section 645 – traffic control.
4. At the end of each day's work, the contractor shall remove all equipment and other obstructions to permit free and safe passage of public traffic.
5. The existence and location of underground utilities, manholes, monuments and structures as shown on the plans are from the latest available data but the accuracy is not guaranteed. The encountering of other obstacles during the course of work is possible. The contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.
6. Existing drainage system will be functional at all times during construction. The contractor is to furnish materials, equipment, labor, tools and incidentals necessary to maintain flow. This work shall be considered incidental to various contract items.
7. The contractor shall post construction signs before the first construction site and past the last construction site, if the sites are less than 1 mile apart. Where the distance between sites are greater than 1 mile, construction signs shall be posted at each of these sites. Signs shall be visible to all traveling vehicles.
8. The contractor shall verify load limitations of existing bridges on Hana Highway with the highways division's mauui district office prior to bidding. Load capacities of existing bridges shall not be exceeded during delivery of construction materials and equipment.
9. Azimuths and coordinates are referred to Government Survey Triangulation.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360AB-02-98	2008	3	16

LEGEND

Reconstruction Areas

Paving at Guardrail

New Pavement

Existing Electrical Line

Existing Joint Pole

Existing Power Pole

Existing Electric Manhole

Existing Telephone Line

Existing Telephone Pole

Existing Telephone Manhole

Existing 12" Water Line

New 12" Water Line

Existing Water Manhole

Adjusted Water MH Frame/Cover

Existing Water Air Valve

Adjusted Water Air Valve

Existing Water Valve Box

Adjusted Water Valve Box

Existing Water Meter

Adjusted Water Meter

Existing Fire Hydrant

Existing Sewer Line

Existing Sewer Manhole

Adjusted Sewer MH Frame/Cover

Existing Monument

Adjusted Monument

Existing 24" Drain Line

Existing 24" Drain Line

Existing Storm Drain Manhole

Adjusted Storm Drain MH Frame/Cover

Existing Grated Drop Inlet

Existing Catch Basin

Existing Traffic Sign

Existing Highway Lighting Standard

Existing Edge of Pavement

Existing Edge of Shoulder (Paved and Stabilized)

Right-of-Way

Single White Line

Double Yellow Line

Existing Fence

Grated Drop Inlet

Finish Grade Elevation

Existing Top of Bank

Existing Bottom of Bank

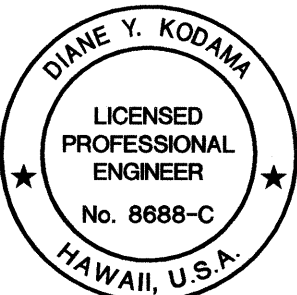
Finished Contour Elevation

Existing Contour Elevation

Headwall

GRP

Boring Location



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

[Signature]

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES & LEGEND

ROUTE 360 HANA HIGHWAY
ROCKFALL MITIGATION, PHASE 2
MILE POST 19.18 TO 19.52
Project No. 360AB-02-98

Scale: None Date: June 2008

SHEET No. 1 OF 1 SHEETS