

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | BR-0450(8)         | 2011        | C.O. 15   | 93           |

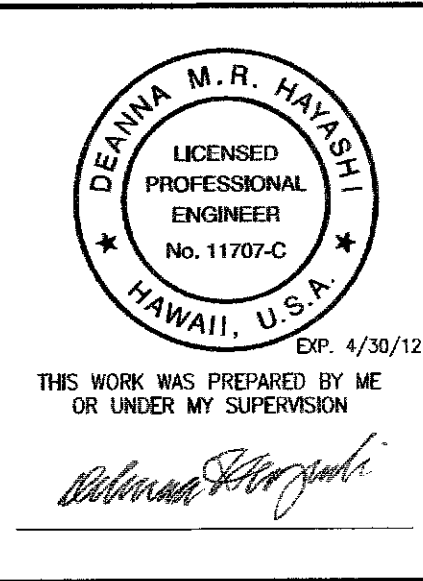
General Sequence of Work:

1. Install temporary erosion control measures including silt fence and dust screen. See Sheet C2.03
2. Clear and grub mauka and makai sides of bridge for access to work areas.
3. Contractor shall trim back trees along private dirt road (mauka side of Kamehameha V Highway) so MECO can install temporary overhead lines to private residence on mauka side of Highway. (Contractor shall coordinate this work with MECO personnel).
4. Install temporary utility poles and overhead lines along mauka side of bridge (Work to be performed by MECO, Hawaiian Telcom, and Oceanic Time Warner Cable.)  
Note: Contractor shall coordinate this work with the respective utility companies.
5. Remove existing utility poles and overhead lines. (Work to be performed by MECO, Hawaiian Telcom, and Oceanic Time Warner Cable.)  
Note: Contractor shall coordinate this work with the respective utility companies.
6. Construct temporary Detour Road (including installation of temporary culverts within stream channel) on the makai side of bridge.
7. Install traffic control signs and route traffic along temporary Detour Road on makai side of bridge.
8. Perform Phase 1 and Phase 2.
9. Re-route traffic to Kamehameha V Highway and across new bridge. The makai lane will need to be closed before completing installation of Drainlines "A" & "B"
10. Remove temporary Detour Road.
11. Perform Phase 3 and Phase 4.
12. Install permanent erosion control measures, and existing vegetation shall be restored.

PHASE 2 (East-Mauka Side): Continued

11. Remove existing A.C. pavement along Kamehameha V Highway.
12. Install fill along Highway.
13. Install new concrete approach slabs (west and east sides)
14. Install GRP behind mauka CRM walls (east and west sides), and behind constructed portions of makai CRM walls (east and west sides).
15. Install portions of water laterals not within the Detour Road
16. Install new pavement and striping along Highway.
17. Install new guardrails along Highway.
18. Remove temporary native material-filled bags along limits of work area.

|         |                 |
|---------|-----------------|
| 8/13/12 | REVISION        |
| DATE    | Moved Waterline |

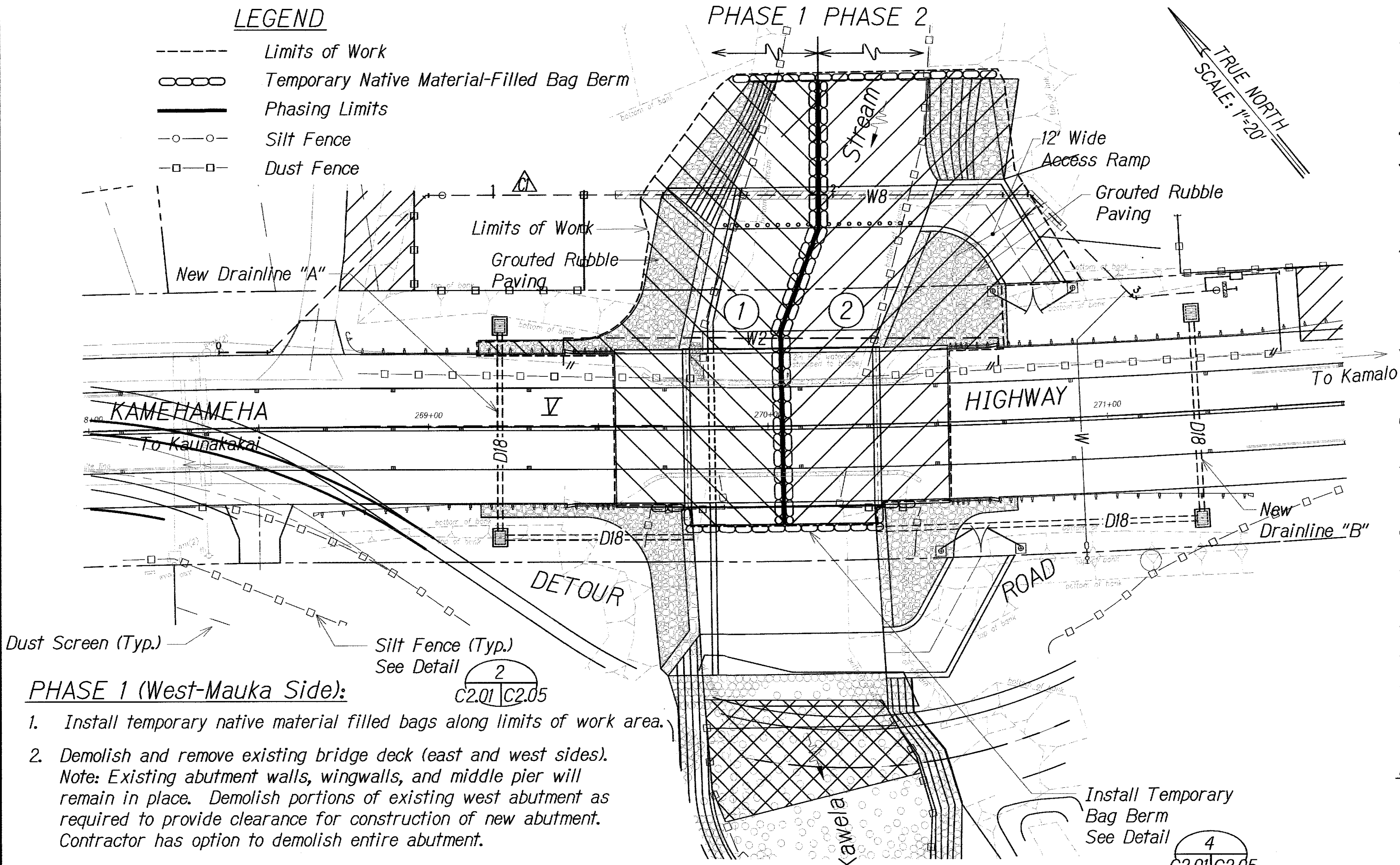


STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**PHASING PLAN**

**KAMEHAMEHA V HIGHWAY**  
**Kawela Bridge Replacement**  
**Federal Aid Project No. BR-0450(8)**

Scale: AS NOTED      Date: Oct. 2010



PHASE 1 (West-Mauka Side):

1. Install temporary native material filled bags along limits of work area.
2. Demolish and remove existing bridge deck (east and west sides).  
Note: Existing abutment walls, wingwalls, and middle pier will remain in place. Demolish portions of existing west abutment as required to provide clearance for construction of new abutment. Contractor has option to demolish entire abutment.
3. Perform grading work
4. Install new waterline and portion of Drainline "A" not within the Detour Road.
5. Construct new abutment wall and CRM wall (west side).  
Note: Do not backfill new abutment wall and CRM wall until specified stage during Phase 2.
6. Demolish remaining portions of existing abutment wall and wingwall (west side) if applicable.
7. Install new concrete channel lining & GRP along streambank (west side).
8. Remove temporary native material-filled bags along mauka and makai limits of work area.

PHASE 2 (East-Mauka Side):

1. Install temporary native material-filled bags along mauka and makai limits of work area.
2. Demolish portions of existing east abutment as required to provide clearance for construction of new abutment. Contractor has option to demolish entire abutment.
3. Perform grading work.

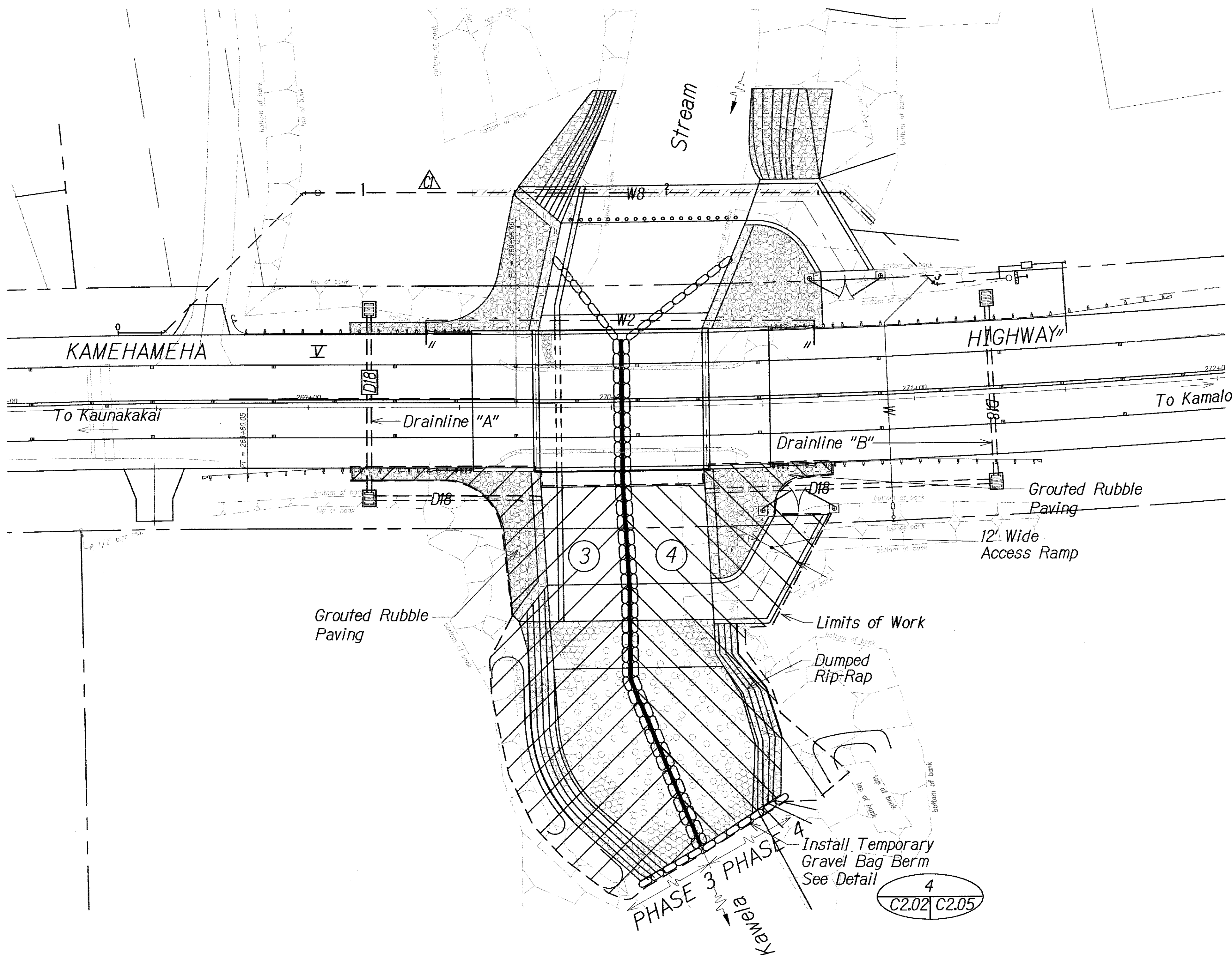
PHASING PLAN  
SCALE: 1" = 20'

PHASE 2 (East-Mauka Side): Continued

4. Install new water line and portion of Drainline "B" not within the Detour Road.
5. Construct new abutment wall and CRM wall, including concrete access ramp (east side).  
Note: Do not backfill new abutment wall and wingwall until later stage of Phase 2
6. Demolish remaining portions of existing abutment wall and wingwall (east side), including middle pier, if applicable.
7. Install new concrete channel lining & GRP along streambank (east side)
8. Install girders and construct new bridge deck, including concrete bridge railings.
9. Backfill behind west and east abutment walls. See Sht. S1.2 for additional backfill requirements.
10. Backfill behind mauka CRM walls (east and west sides), and constructed portions of makai CRM walls (east and west sides).



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### PHASE 3 (West-Makai Side):

1. Install temporary native material-filled bags along limits of work area.
2. Install remaining portions of new Drainline "A".
3. Construct new CRM wall (west side).
4. Install new concrete channel lining (west side)
5. Install backfill behind new CRM wall (west side)
6. Install boulder rip-rap within stream channel (west side).
7. Install grouted rubble paving along the top of new CRM wall.
8. Remove temporary native material-filled bags along mauka and makai limits of work area.

### PHASE 4 (East-Makai Side):

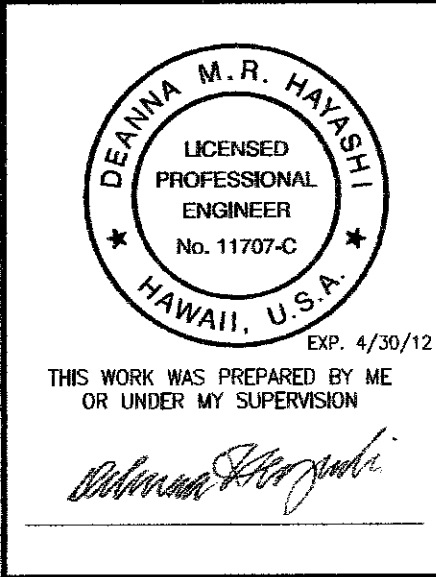
1. Install temporary native material-filled bags along mauka and makai limits of work area.
2. Install remaining portions of new Drainline "B".
3. Construct new CRM wall, including concrete access ramp (east side).
4. Install new concrete channel lining (east side)
5. Install backfill behind CRM wall
6. Install boulder rip-rap within stream channel (east side).
7. Install grouted rubble paving behind new CRM wall (east side).
8. Install remaining portions of new Water Laterals (east side).
9. Remove temporary native material-filled bags along limits of work area.

### PHASING PLAN

SCALE: 1" = 20'

### LEGEND

- Limits of Work
- Temporary Native Material-Filled Bag Berm
- Phasing Limits



|   |                   |
|---|-------------------|
| 8/13/12   | △ Moved Waterline |
| DATE  | REVISION          |
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION                    |                   |
| <b>PHASING PLAN</b>   |                   |
| KAMEHAMEHA V HIGHWAY<br>Kawela Bridge Replacement<br>Federal Aid Project No. BR-0450(8) |                   |
| Scale: AS NOTED   | Date: Oct. 2010   |
| SHEET No. C2.02 OF 93 SHEETS  |                   |