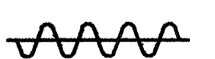
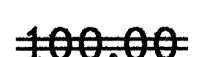


| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | FLH-011-2(23)      | 1992        | 3         | 22           |

GENERAL NOTES:

- The scope of work for this project consists of realigning and reconstructing existing roadway, widening existing pavement and shoulder, installing pavement markings, signs, centerline and reference survey monuments and striping.
- The Contractor's attention is directed to Subsection 107.13- Public Convenience and Safety, Section 645 - Traffic Control and Subsection 107.14 barricades and warning signs of the Standard Specifications and/or Special Provisions.
- 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. Stockpiling of materials within the right-of-way is not permitted.
- The existence and location of 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 the 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.
- The Contractor shall coordinate his operations with Hawaii Volcanoes National Park by contacting Mr. Dennis Footer, Maintenance Section at phone no. 967-7311.
- The Contractor shall remove and dispose of all existing raised pavement markers prior to the overlaying of Asphalt Concrete Pavement, Mix No. V. This work will not be paid for separately but shall be considered incidental to Asphalt Concrete Pavement, Mix No. V.
- The Contractor shall coordinate work with the U.S. Geological Survey if any benchmarks are to be relocated.
- Existing pavement section variable. Section indicated here is not intended to represent any specific location.
- Tack coat shall be incidental to Item No. 401.0500, Asphalt Concrete Mix No. V.
- Location of construction warning signs to be determined by the Engineer. Upon completion of this project the Contractor shall remove and deliver to the State Highways, Hilo baseyard.
- All saw cutting work and removal of existing A.C. pavement shall be considered incidental to roadway excavation.
- Contractor is responsible to provide mitigating measures for pavement dropoffs within the traveled way and shoulders of the highway and for open excavations adjacent to roadways. Contractor shall submit mitigating plan to the Engineer prior to construction. Contractor's attention is directed to Subsection 104.04 - Maintenance of Traffic.
- Aggregate base shoulders shall be surface treated with CRS-2 or approved equal.
- Cracks in existing A.C. Pavement shall be sealed with an approved bituminous material. See Section 649 in the Special Provisions.
- The exact locations and limits of reconstruction shall be determined in the field by the Engineer.
- Contractor is prohibited from disposing or placing any material other than a rock on the surface of all embankment.

LEGEND FOR AS-BUILT POSTINGS

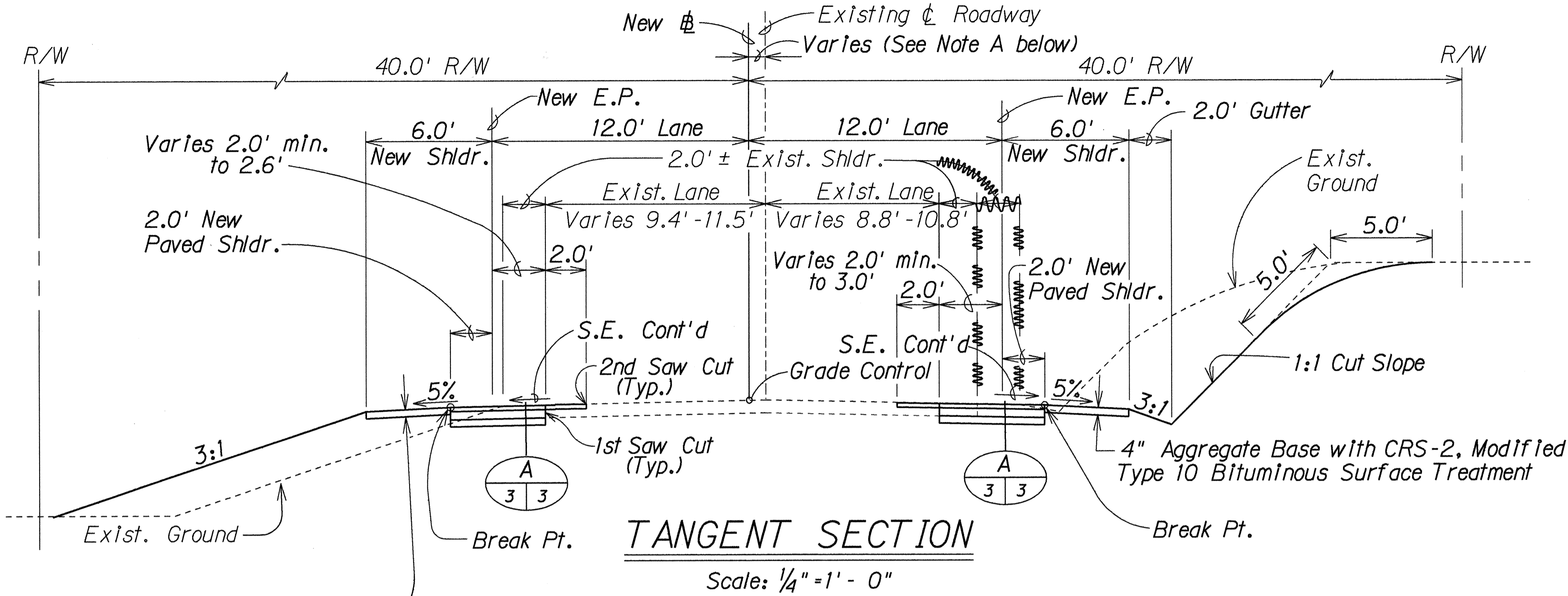
|   |                                     |
|---|-------------------------------------|
|  | Squiggly line for as-built deletion |
|  | Double line for as-built deletion   |
| Roadway   | Text for as-built posting           |

STATE OF HAWAII  
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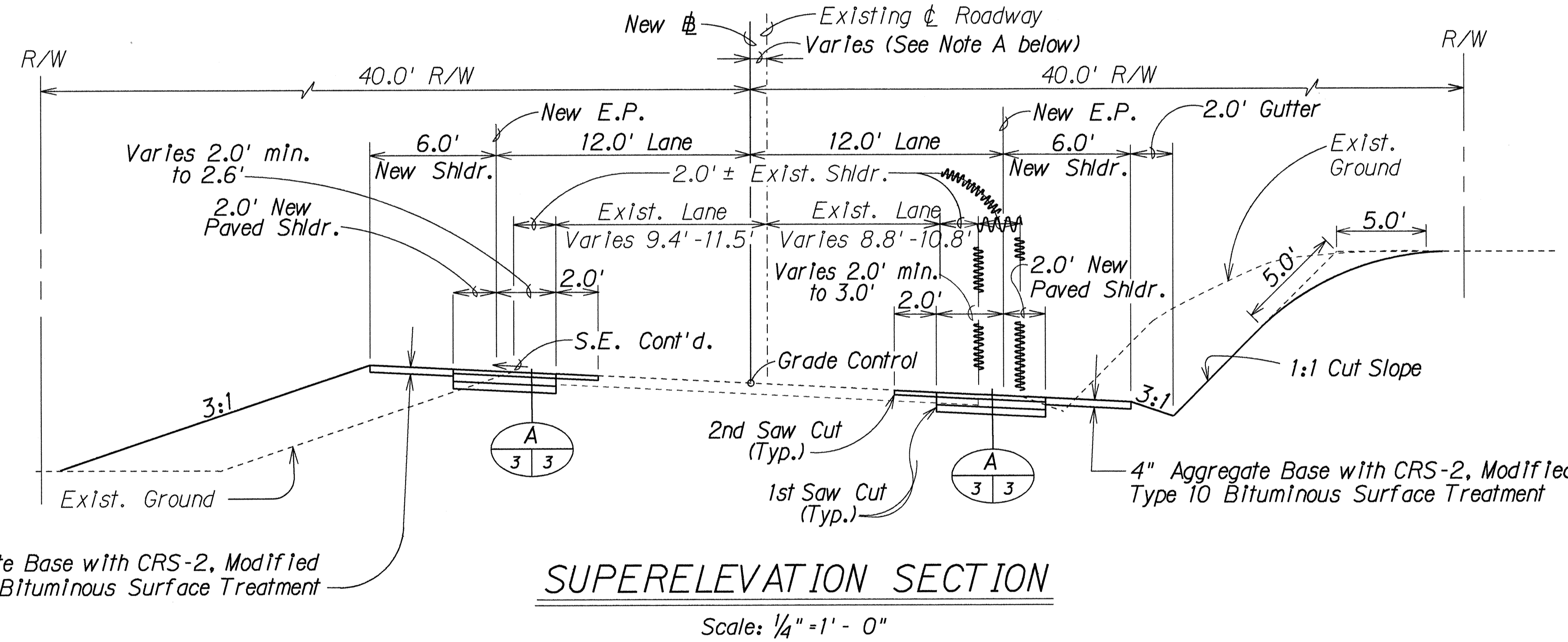
TYPICAL SECTIONS  
MAMALAHOA HIGHWAY WIDENING  
Hawaii Volcanoes National Park  
M.P. 35.9 to M.P. 37.0  
F.A. Proj. No. FLH-011-2(23)

Scale: As Shown  
Date: July, 1991

SHEET No. 1 OF 3 SHEETS



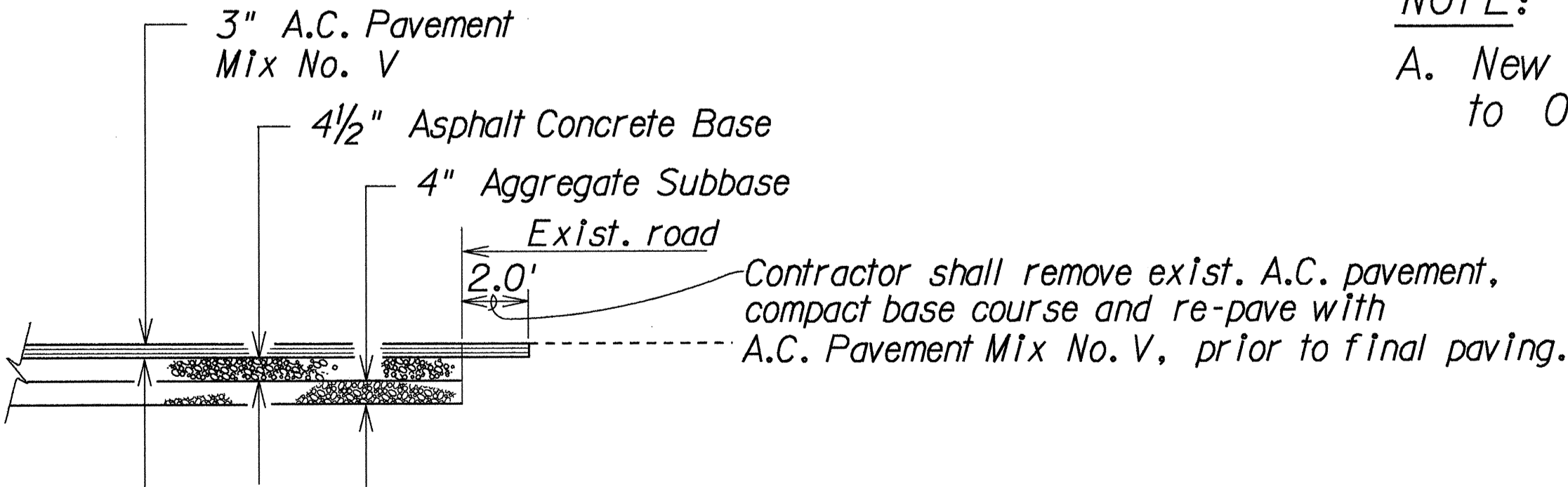
4" Aggregate Base with CRS-2, Modified Type 10 Bituminous Surface Treatment



4" Aggregate Base with CRS-2, Modified Type 10 Bituminous Surface Treatment

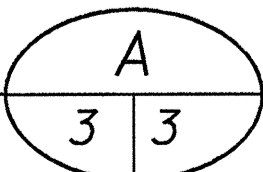
NOTE:

A. New Baseline varies from 0.8' right to 0.7' left of existing centerline.



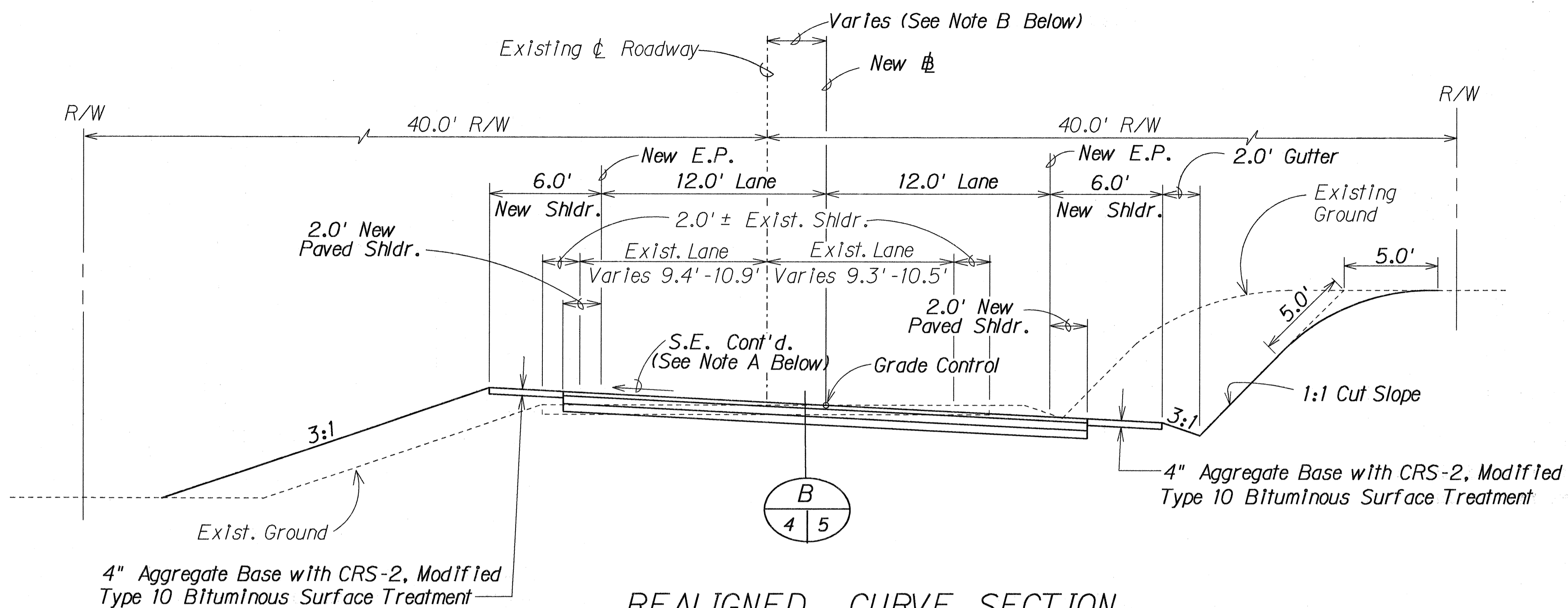
DETAIL

Not to Scale



|                   |      |
|-------------------|------|
| SURVEY PLOTTED BY | DATE |
| DRAWN BY          |      |
| CHECKED BY        |      |
| NOTES BOOK        |      |
| QUANTITY BY       |      |
| CHECKED BY        |      |
| No.               |      |

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|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | FLH-011-2(23)      | 1992        | 4         | 22           |

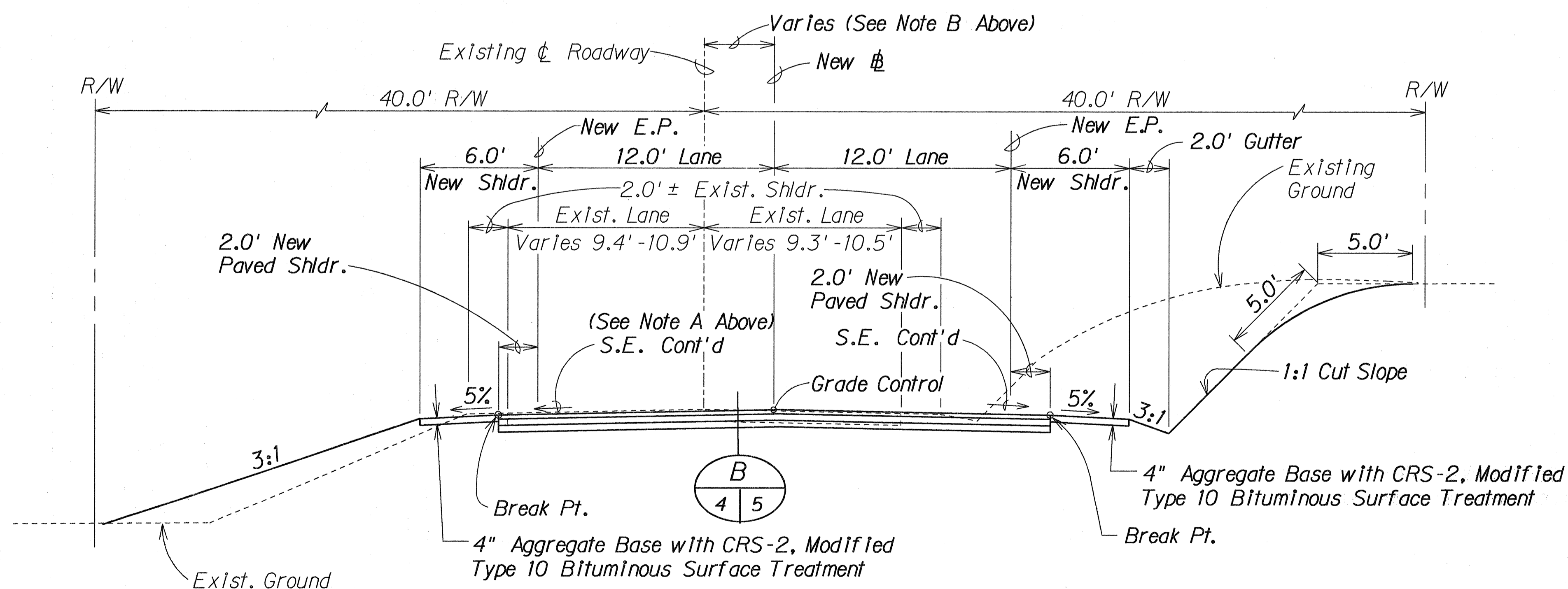


### REALIGNED CURVE SECTION

Scale:  $\frac{1}{4}" = 1' - 0"$

#### NOTE:

- Use superelevation rate for realigned curve and tangent section as shown on sheet nos. 12 & 13
- New Baseline varies from 5.8' right to 3.1' left of existing centerline.

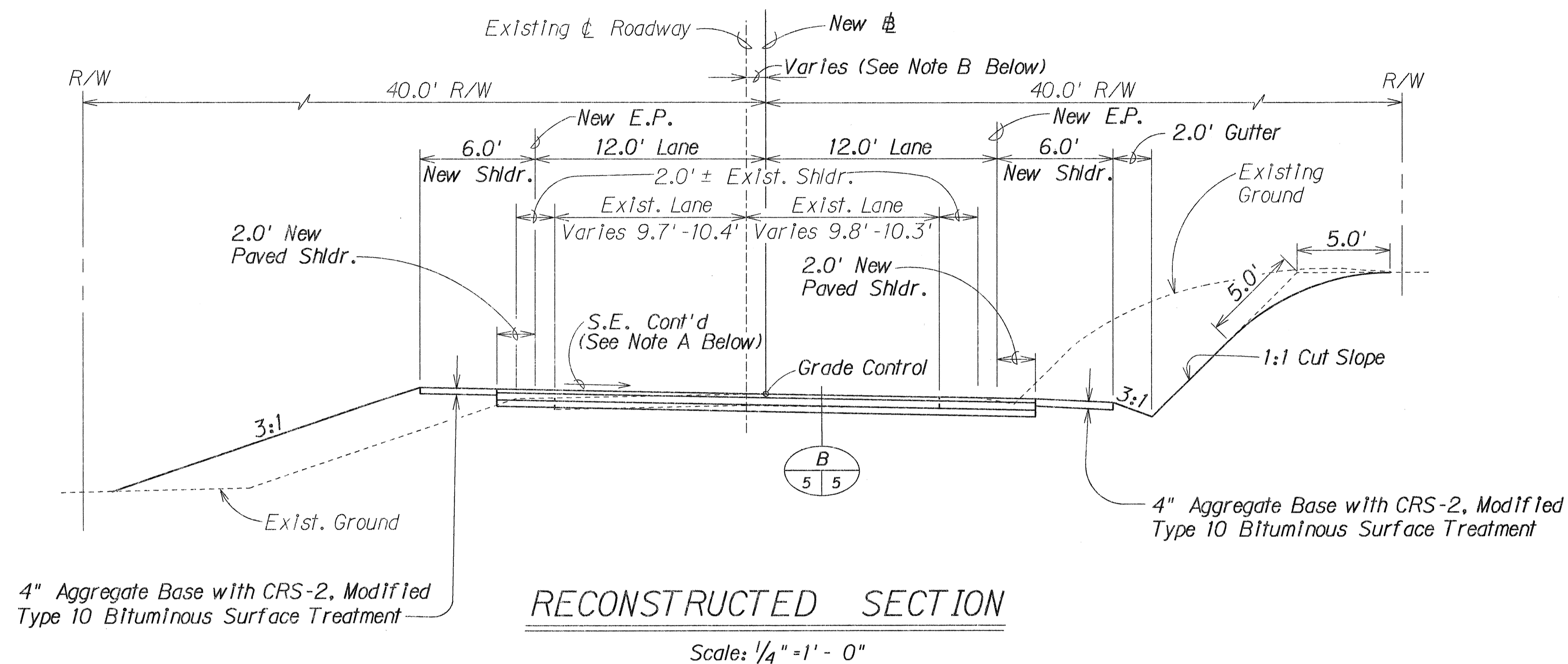


### REALIGNED TANGENT SECTION

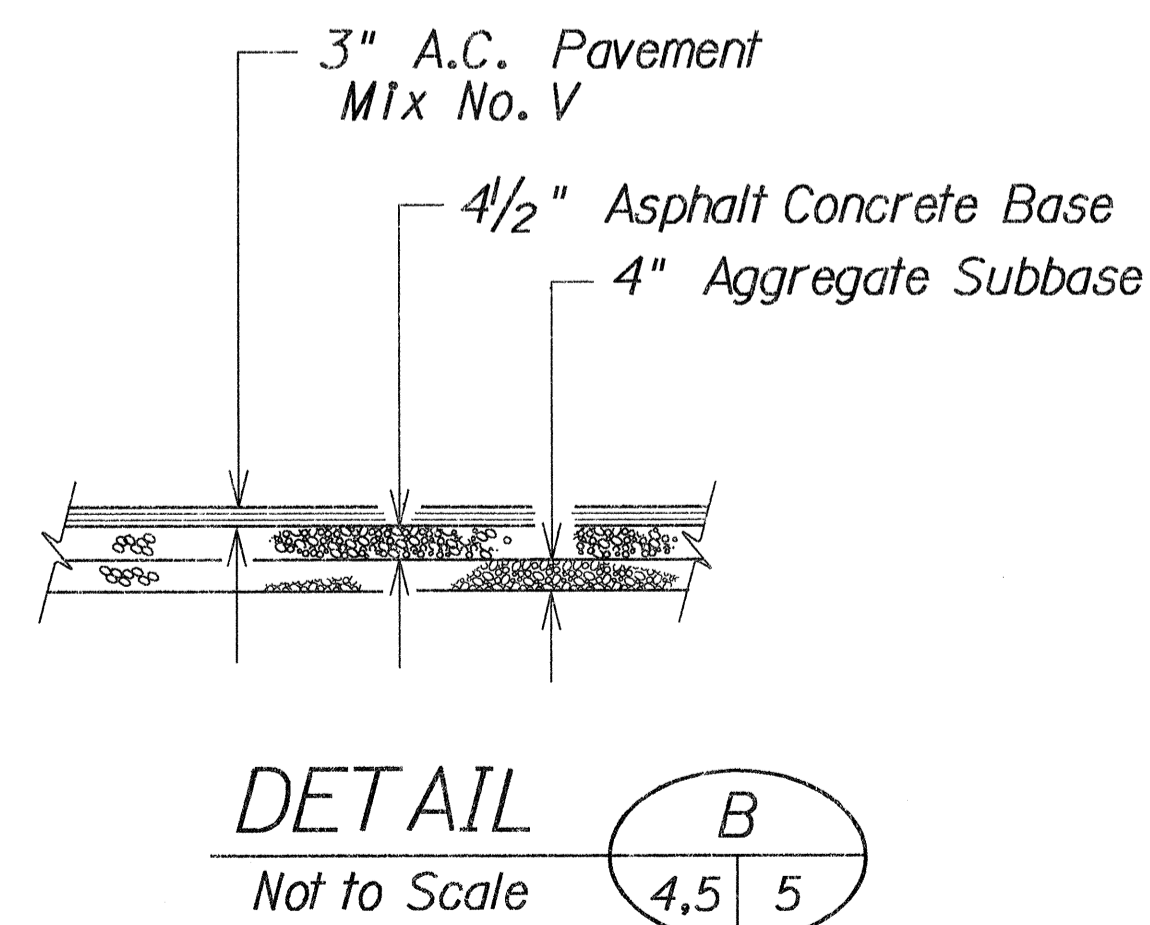
Scale:  $\frac{1}{4}" = 1' - 0"$

|  |
|--|
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION |
| <b>TYPICAL SECTIONS</b>  |
| <b>MAMALAHOA HIGHWAY WIDENING</b>                                    |
| <b>Hawaii Volcanoes National Park</b>                                |
| <b>M.P. 35.9 to M.P. 37.0</b>  |
| <b>F.A. Proj. No. FLH-011-2(23)</b>                                  |
| Scale: As Shown  |
| Date: July, 1991   |
| SHEET No. 2 OF 3 SHEETS  |

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | FLH-011-2(23)      | 1992        | 5         | 22           |



- NOTE:** A. Use superelevation rate for reconstructed curve and tangent section as shown on sheet nos. 12 & 13  
B. New Baseline varies from 0.6' right to 1.1' left of existing centerline.



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**TYPICAL SECTIONS**

**MAMALAHOA HIGHWAY WIDENING**  
**Hawaii Volcanoes National Park**  
**M.P. 35.9 to M.P. 37.0**  
**F.A. Proj. No. FLH-011-2(23)**

Scale: As Shown Date: July, 1991

SHEET No. 3 OF 3 SHEETS