



PUBLIC WORKS AGENCY

P.O. Box 1070 / 777 N. Colusa Street
Willows, CA 95988

Donald Rust, Director

Airports
Engineering
Flood Control
Roads & Bridges
Solid Waste
Surveyor

ADDENDUM 1

to

CONSTRUCTION ON COUNTY ROAD 67 BRIDGE REPLACEMENT AT BRANCH HOWARD SLOUGH

BRIDGE NO. 11C-0015, BRLO 5911 (048)

BRIDGE NO. 11C-0016, BRLO 5911 (047)

BRIDGE NO. 11C-0017, BRLO 5911 (049)

BRIDGE NO. 11C-0179, BRLO 5911 (050)

Bid Opening Date: 2:00 p.m. November 16, 2023

November 7, 2023

To All Bidders:

The Following is Addendum 1 to Contract Documents for the Four Bridge Replacement Projects On County Road 67 at Branch Howard Slough. Please acknowledge receipt of this addendum on your bid. The following text summarizes the changes to the Contract Documents.

REVISIONS – Revised pages marked “**Revised per Addendum 1**”

1. DEADLINE TO SUBMIT WRITTEN QUESTIONS

- The deadline to submit written questions and receive a response has been extended from 5:00 p.m. on Wednesday, November 8, 2023 to 2:00 p.m. on Thursday, November 9, 2023.

2. REQUIRED FEDERAL CONTRACT LANGUAGE

- CalTrans Exhibit 12-G, Dated May 2023 – formerly Pages 26-57
 - Updated CalTrans Exhibit 12-G, Dated October 2023
 - Now Pages 26-46
- FHWA 1273 – formerly Pages 39-49
 - Updated FHWA 1273 – Dated October 23, 2023
 - Now Pages 47-60

3. BID BOOK

- Page Numbers, formerly 59-89
 - Now Pages 62-91
- Proposal Form – formerly Pages 60-62
 - Revised formatting
 - Now Pages 63-64
- Bid Item List – formerly Pages 63-69
 - Revised Quantity Item # 118
 - Revised Quantity Item # 120
 - Revised Quantity Item # 164



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-
- Revised Quantity Item # 166
 - Statement Added to Note: “Contract award shall be made to the lowest “TOTAL BID” received.”
 - Now Pages 65-71
 - Clarification
 - Bid Submittal must include one (1) hard copy of revised page numbers 65-82 by the bid opening time and date listed on the Notice to Bidders in order to be considered responsive.
 - List of subcontractors, revised page number 72, is required with bid submittal.
 - CalTrans Exhibits 15-G, 15-H, 12-B, and 16-B, revised page numbers 83-91, must be submitted in quadruplicate, one (1) exhibit per bridge project. Exhibits may be submitted with the remainder of bid book at the time of bid opening. Or may be submitted in accordance with CalTrans Standard Specifications 2022 Section 2-1.33B(2)(b)(ii) - BID FORM SUBMITTAL and associated Table.

4. CONTRACT

- Contract cover page – formerly Pages 90-91
 - Revised formatting
 - Now Pages 92-93
- Bid Item List – formerly Pages 92-98
 - Note added – “Completed Bid Item List to be Inserted at award of Contract”
 - Now Pages 94-100

5. ATTACHMENTS TO ADDENDUM 1

- Revised Notice to Bidders/Special Provisions/Bid Book/Contract (changes as noted above)
- Foundation Report
- Hydroseed Specification

**COUNTY OF GLENN
PUBLIC WORKS AGENCY
SPECIAL PROVISIONS,
NOTICE TO BIDDERS,
AND
BID BOOK**

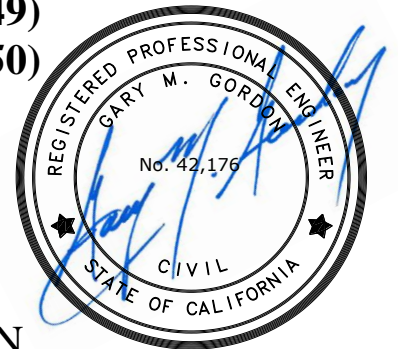
FOR

**CONSTRUCTION ON COUNTY ROAD 67
BRIDGE REPLACEMENT AT BRANCH HOWARD SLOUGH
BRIDGE NO. 11C-0015, BRLO 5911 (048)
BRIDGE NO. 11C-0016, BRLO 5911 (047)
BRIDGE NO. 11C-0017, BRLO 5911 (049)
BRIDGE NO. 11C-0179, BRLO 5911 (050)**

DATED: MAY 31, 2023

FOR USE IN CONNECTION WITH

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION



County Engineer 5-31-23

STANDARD SPECIFICATIONS DATED 2022,

STANDARD PLANS DATED 2022,

CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES,
CURRENT LABOR SURCHARGE AND EQUIPMENT RENTAL RATES,
AND

DEPARTMENT OF INDUSTRIAL RELATIONS
GENERAL PREVAILING WAGE RATES

BID OPENING: 2:00 pm Thursday, November 16, 2023

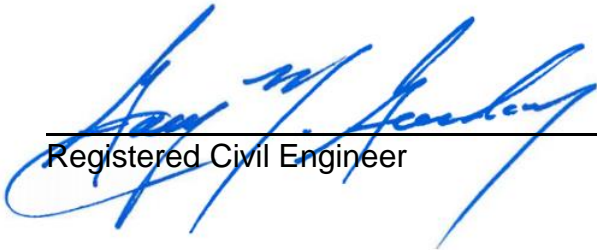
SPECIAL NOTICES

- See sections 2 and 3 for contractors' registration requirements.
- The schedules for the submittal of DBE forms have been revised. See section 2-1.33 for the submittal schedules.
- See section 2-1.04 for mandatory prebid meeting requirements.
- This project consists of four (4) federal aid bridge replacement projects. All required documentation, forms, and exhibits must be submitted for each federal aid project individually. See notice to bidders for project specific DBE goals.
- Maintain ingress/egress from agricultural field access point (39°25'13"N, 121°54'4"W) to either County Road Z or Aguas Frias Road at all times. Coordinate construction phasing of all projects to maintain access or provide alternative means of ingress/egress. If multiple bridges are under construction simultaneously, the Contractor shall coordinate sign placement with the Engineer.

Project No. BRLO 5911(048)
Project No. BRLO 5911(047)
Project No. BRLO 5911(049)
Project No. BRLO 5911(050)

The special provisions contained herein have been prepared by or under the direction of the following Registered Persons.

ROADWAY & STRUCTURES



Registered Civil Engineer

5-31-23



Table of Contents

| | |
|---|-----|
| NOTICE TO BIDDERS..... | 1 |
| ORGANIZATION | 8 |
| DIVISION I GENERAL PROVISIONS..... | 8 |
| 1 GENERAL..... | 8 |
| 2 BIDDING | 9 |
| 5 CONTROL OF WORK | 9 |
| 7 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC..... | 10 |
| 8 PROSECUTION AND PROGRESS..... | 11 |
| 9 PAYMENT..... | 12 |
| DIVISION II GENERAL CONSTRUCTION | 12 |
| 10 GENERAL | 12 |
| 12 TEMPORARY TRAFFIC CONTROL..... | 12 |
| 13 WATER POLLUTION CONTROL..... | 13 |
| 14 ENVIRONMENTAL STEWARDSHIP..... | 15 |
| DIVISION III EARTHWORK AND LANDSCAPE..... | 19 |
| 19 EARTHWORK | 19 |
| 21 EROSION CONTROL..... | 19 |
| DIVISION VI STRUCTURES..... | 20 |
| 47 EARTH RETAINING SYSTEMS | 20 |
| 49 PILING..... | 21 |
| 60 EXISTING STRUCTURES | 24 |
| DIVISION VIII MISCELLANEOUS CONSTRUCTION | 24 |
| 80 FENCES..... | 24 |
| DIVISION IX TRAFFIC CONTROL DEVICES..... | 24 |
| 83 RAILINGS AND BARRIERS | 24 |
| REQUIRED FEDERAL AID CONTRACT LANGUAGE..... | 25 |
| BID BOOK & CONTRACT | 61 |
| FEDERAL MINIMUM WAGE RATES..... | 104 |
| REGULATORY PERMITS AND ENVIRONMENTAL COMMITMENTS | 105 |

STANDARD PLANS LIST

The standard plan sheets applicable to this Contract include those listed below. The applicable revised standard plans (RSPs) listed below are included in the project plans.

ABBREVIATIONS, LINES, SYMBOLS, AND LEGEND

| | |
|------|---|
| A3A | Abbreviations (Sheet 1 of 3) |
| A3B | Abbreviations (Sheet 2 of 3) |
| A3C | Abbreviations (Sheet 3 of 3) |
| A10A | Legend - Lines and Symbols (Sheet 1 of 5) |
| A10B | Legend - Lines and Symbols (Sheet 2 of 5) |
| A10C | Legend - Lines and Symbols (Sheet 3 of 5) |
| A10D | Legend - Lines and Symbols (Sheet 4 of 5) |
| A10E | Legend - Lines and Symbols (Sheet 5 of 5) |

PAVEMENT MARKERS, TRAFFIC LINES, AND PAVEMENT MARKINGS

| | |
|----------|--|
| RSP A20A | Pavement Markers and Traffic Lines - Typical Details |
| A20B | Pavement Markers and Traffic Lines - Typical Details |

EXCAVATION AND BACKFILL

| | |
|------|--|
| A62A | Excavation and Backfill - Miscellaneous Details |
| A62C | Limits of Payment for Excavation and Backfill - Bridge |
| A73B | Markers |

MIDWEST GUARDRAIL SYSTEM - STANDARD RAILING SECTIONS

| | |
|-----------|---|
| A77L1 | Midwest Guardrail System - Standard Railing Section (Wood Post with Wood Block) |
| A77M1 | Midwest Guardrail System - Standard Hardware |
| RSP A77N1 | Midwest Guardrail System - Wood Post and Wood Block Details |
| RSP A77N3 | Midwest Guardrail System - Typical Line Post Embedment and Hinge Point Offset Details |
| RSP A77Q1 | Midwest Guardrail System - Typical Layouts for Structure Approach |
| RSP A77Q4 | Midwest Guardrail System - Typical Layouts for Structure Departure |

MIDWEST GUARDRAIL SYSTEM - END ANCHORAGE AND RAIL TENSIONING ASSEMBLY

| | |
|-------|--|
| A77S3 | Metal Railing Anchor Cable and Anchor Plate Details |
| | MIDWEST GUARDRAIL SYSTEM - CONNECTION DETAILS AND TRANSITION RAILING TO BRIDGE RAILINGS, ABUTMENTS AND WALLS |
| A77U1 | Midwest Guardrail System - Connections to Bridge Railings without Sidewalks Details No. 1 |
| A77U2 | Midwest Guardrail System - Connections to Bridge Railings without Sidewalks Details No. 2 |
| A77U4 | Midwest Guardrail System - Transition Railing (Type WB-31) |

FENCES

| | |
|------|---|
| A86 | Barbed Wire and Wire Mesh Fences |
| A86D | Barbed Wire and Wire Mesh Fence - Miscellaneous Details |

PAVEMENTS

| | |
|-----|---|
| P70 | Hot Mix Asphalt Paving (Longitudinal Tapered Notched Wedge Joint) |
| P76 | Pavement Edge Treatments - New Construction |

FLARED END SECTIONS

| | |
|------|------------------------------|
| D94B | Concrete Flared End Sections |
|------|------------------------------|

PIPE COUPLING AND JOINT DETAILS

D97H Reinforced Concrete Pipe or Non-Reinforced Concrete Pipe - Standard and Positive Joints

TEMPORARY WATER POLLUTION CONTROL

T51 Temporary Water Pollution Control Details (Temporary Silt Fence)
T53 Temporary Water Pollution Control Details (Temporary Cover)
T56 Temporary Water Pollution Control Details (Temporary Fiber Roll)
T58 Temporary Water Pollution Control Details (Temporary Construction Entrance)
T59 Temporary Water Pollution Control Details (Temporary Concrete Washout Facility)

BRIDGE DETAILS

B0-1 Bridge Details

JOINT SEALS

B6-21 Joint Seals (Maximum Movement Range = 2")

ROADSIDE SIGNS

RS1 Roadside Signs - Typical Installation Details No. 1
RS2 Roadside Signs - Wood Post - Typical Installation Details No. 2
RS4 Roadside Signs - Typical Installation Details No. 4

Notice to Bidders

NOTICE TO BIDDERS

**COUNTY OF GLENN
STATE OF CALIFORNIA
PUBLIC WORK AGENCY**

NOTICE IS HEREBY GIVEN THAT sealed bids will be received in the office of the Public Works Agency of the County of Glenn, P.O. Box 1070 / 777 North Colusa Street, Willows, California by 2:00 P.M., Thursday, November 16, 2023. Sealed bids will publicly opened and read aloud at 2:15 P.M., Thursday, November 16, 2023 in the Board of Supervisor's Conference Room at the Willows Memorial Hall located at 525 West Sycamore Street, Willows, California for:

- County of Glenn
Public Works Agency**
- Bridge Replacement at Branch Howard Slough at County Road 67
Bridge No. 11C-0015, BRLO 5911 (048)**
- Bridge Replacement at Branch Howard Slough at County Road 67
Bridge No. 11C-0016, BRLO 5911 (047)**
- Bridge Replacement at Branch Howard Slough at County Road 67
Bridge No. 11C-0017, BRLO 5911 (049)**
- Bridge Replacement at Branch Howard Slough at County Road 67
Bridge No. 11C-0179, BRLO 5911 (050)**

Any bid received after the time and date listed above will be returned unopened. Bids are required for the entire work described in accordance with the provisions of the contract documents on the proposal forms furnished therein, and in accordance with these Special Provisions and with the Standard Specifications and Standard Plans published by the State of California Department of Transportation (Caltrans), dated 2022.

The apparent low bidder shall submit a project-by-project breakdown of all lump sum items within five (5) working days of the bid opening.

DESCRIPTION OF WORK: The work to be done consists, in general, of demolition of the existing concrete bridge and roadway, construction of a new slab bridge supported on driven, precast/prestressed concrete piles, and reconstruction of the approach roadway.

Bids must be on a unit price basis.

Complete the work within 200 working days.

The Engineer's Estimate for this project is \$10,250,000

The DBE contract goals for these projects are:

- Br 11C-0015, BRLO 5911 (048): 18%
- Br 11C-0016, BRLO 5911 (047): 21%
- Br 11C-0017, BRLO 5911 (049): 17%
- Br 11C-0179, BRLO 5911 (050): 17%

Notice to Bidders

PRE-BID INFORMATION AND COMMUNICATIONS: A mandatory pre-bid meeting has been scheduled on Wednesday, November 1, 2023 at 10:00 a.m. in the Public Works Agency Conference Room located at 777 North Colusa Street, Willows, California. Bidders shall address any questions in writing to the County. The County will post the questions received, along with written responses, to the County website, [<https://www.countyofglenn.net/govt/bids>]. **It is the responsibility of the bidder to check the County website to review the questions and responses.** Except for questions that might render the award of this contract invalid, the County will not respond to any questions submitted after 5:00 p.m. on Wednesday, November 8, 2023. Any oral responses to questions are not binding on the County. Any communications relative to this project should be directed in writing to:

Donald Rust
Public Works Agency
777 North Colusa Street
Willows, CA 95988
engineer@countyofglenn.net

CONTRACT DOCUMENTS: Plans, specifications, proposal forms, regulatory permits, and reduced plans for bidding this project may be examined or obtained at the County of Glenn Public Works Agency, 777 North Colusa Street, Willows, California, 95988, until 5:00 P.M. weekdays or by calling (530) 934-6530. A nonrefundable charge of \$150 will be made for each set of specifications and half size plans. A non-refundable charge of \$75 will be made for each set of full size plans.

For an electronic version of this Bid Book, go to: [<https://www.countyofglenn.net/govt/bids>]. Bidders must submit bids on proposal forms purchased from the Public Works Agency or downloaded from this site.

UNFAIR ADVANTAGE: No contractor which has provided design services for a project shall be eligible to submit a proposal for the contract to construct the project or to subcontract for any portion of the work. The County reserves the right to determine eligibility on a case-by-case basis.

COMPLETION OF WORK: The Bidder is referred to Section 8, "Prosecution and Progress," of these Special Provisions which allows one hundred twenty-five (200) working days for completion of the work. Liquidated damages of four thousand eight hundred dollars (\$9,500) per calendar day will be assessed for each day of delay in completion of the work.

QUANTITY OF WORK: The quantities shown in the proposal forms are approximate only and given as a basis for the comparison of bids. The County of Glenn does not expressly or by implication assert that the actual amount of work will correspond herewith and reserves the right to increase or decrease the amount of any portion of the work or to omit portions of the work as may be deemed necessary.

BID SECURITY: All bids shall be accompanied by cash or a certified or cashier's check payable to the order of Glenn County Public Works Agency amounting to ten percent (10%) of the bid or a bond in said amount payable to the County as liquidated damages. Said amount shall be retained by, or said bond shall become payable to, the County if the bidder depositing same does not, within ten (10) working days after written notice that the contract has been awarded to it, enter into a contract with the County.

BONDS: The successful bidder shall furnish a payment bond and a performance bond, each in the amount of one hundred (100) percent of the contract price.

ADDENDUMS TO BID DOCUMENTS: The Engineer may issue addendums to the project plans and specifications as he deems necessary to modify the project documents prior to opening of bids. Addendums will be in writing and may modify the content of the project documents as well as the date

Notice to Bidders

that bids are accepted by the County. The County will post any issued addenda to the County website, [\[https://www.countyofglenn.net/govt/bids\]](https://www.countyofglenn.net/govt/bids). It is the responsibility of the bidder to check for any addenda.

LOCAL VENDORS: The County encourages bidders to consider using local vendors when putting together their proposals. Be advised that the inclusion or exclusion of local vendors will not be taken into consideration when the County reviews the submitted bid proposals.

CONTRACTOR LICENSE REQUIRED: The successful bidder, before contract award, shall possess a current Class A Contractor license. Contractor license shall be issued by the State of California Licensing Board. Failure of the bidder to obtain the required license before award of the contract shall constitute a failure to execute the contract and shall result in the forfeiture of the security of the bidder.

NON-DISCRIMINATION AND DISADVANTAGED BUSINESS ENTERPRISE (DBE): The contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

Take necessary and reasonable steps to ensure that DBEs have opportunity to participate in the contract (49 CFR 26).

Bidders are advised that Section 2, "Bidding," under subsection titled "Disadvantaged Business Enterprises (DBE)," and Section 8, "Prosecution and Progress," of these Special Provisions cover the DBE requirements.

WAGE RATES: Pursuant to Section 1773 of the Labor Code, the general prevailing wage rates in the County in which the work is to be done have been determined by the Director of the California Department of Industrial Relations. These wages are set forth in the General Prevailing Wage Rates for this project, available at the Glenn County Public Works Agency and available from the California Department of Industrial Relations' Internet web site at <http://www.dir.ca.gov>.

The Federal minimum wage rates for this project as predetermined by the United States Secretary of Labor are available at http://ppmoe.dot.ca.gov/des/oe/federal-wages/fed_wages.html. Addenda to modify the Federal minimum wage rates, if necessary, will be issued to holders of the contract documents. Future effective general prevailing wage rates which have been predetermined and are on file with the California Department of Industrial Relations are referenced but not printed in the general prevailing wage rates.

Attention is directed to the Federal minimum wage rate requirements in the Bid Book. If there is a difference between the minimum wage rates predetermined by the Secretary of Labor and the general prevailing wage rates determined by the Director of the California Department of Industrial Relations for similar classifications of labor, the Contractor and subcontractors shall pay not less than the higher wage rate. The County will not accept lower State wage rates not specifically included in the Federal minimum wage determinations. This includes "helper" (or other classifications based on hours of experience) or any other classification not appearing in the Federal wage determinations. Where Federal wage determinations do not contain the State wage rate determination otherwise available for use by the Contractor and subcontractors, the Contractor and subcontractors shall pay not less than the Federal minimum wage rate which most closely approximates the duties of the employees in question.

Notice to Bidders

DIR REGISTRATION AND NOTICE: To be qualified to bid on, be listed in a bid proposal or engage in the performance of any public work contract subject to Labor Code section 1720, contractors and subcontractors must be registered with the Department of Industrial Relations. Please see <http://www.dir.ca.gov/Public-Works/PublicWorks.html> for more information. No contract will be entered into without proof of the contractor’s and subcontractors’ current registration with the Department of Industrial Relations to perform public work. If awarded a contract, the bidder and its subcontractors, of any tier, shall maintain active registration with the Department of Industrial Relations for the duration of the project.

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. Each contractor and subcontractor must furnish certified payroll records to the Labor Commissioner at least monthly.

The County is required to provide notice to DIR of any public work contract subject to prevailing wages within five (5) days of the award.

BUY AMERICA REQUIREMENT: Attention is directed to the “Buy America” requirements of Title 23 United States Code, Section 313 and the regulations adopted pursuant thereto.

PAYMENT RETENTION: Upon the Contractor’s request, the County will make payment of funds withheld from progress payments, pursuant to the requirements of Public Contract Code section 22300 if the Contractor deposits, in escrow with the County Treasurer or with a bank acceptable to the County, securities eligible for the investment of State of California funds under Government Code section 16430 or bank or savings and loan certificates of deposit in accordance with the conditions of the Special Provisions.

AWARD OF CONTRACT: The award of the contract, if it is to be awarded, will be to the lowest responsive and responsible bidder whose proposal complies with all the requirements prescribed and who has met the goal for DBE participation or has demonstrated to the satisfaction of the County, good faith effort to do so. Such award, if made, will be made within thirty (30) days after the opening of the proposals, unless an extension is agreed to by the lowest responsible bidder. The award of the contract will be subject to the availability of funds. The County of Glenn reserves the right to reject any or all bids and to waive any irregularities in the bidding.

BID RIGGING: The U.S. Department of Transportation (DOT) provides a toll-free hotline to report bid-rigging activities. Use the hotline to report bid rigging, bidder collusion, and other fraudulent activities. The hotline number is (800) 424-9071. The service is available 24 hours 7 days a week and is confidential and anonymous. The hotline is part of the DOT’s effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General.

Donald Rust
Director of Public Works

Dated: _____

Published: _____

Second Publication Date: _____

Notice to Bidders

BID ITEM LIST

| Br 11C-0015, BRLO 5911 (048) | | | | |
|-------------------------------------|------------------|--|-----------------|-------------|
| ITEM NO. | ITEM CODE | DESCRIPTION | QUANTITY | UNIT |
| 1 | | Construction Staking | 1 | LS |
| 2 | 160110 | Temporary Fence (Type ESA) | 2,360 | LF |
| 3 | 070030 | Lead Compliance Plan | 1 | LS |
| 4 | 080050 | Progress Schedule (Critical Path Method) | 1 | LS |
| 5 | 130100 | Job Site Management | 1 | LS |
| 6 | 130200 | Prepare Water Pollution Control Program | 1 | LS |
| 7 | 130640 | Temporary Fiber Roll | 2,812 | LF |
| 8 | 130900 | Temporary Concrete Washout Facility | 1 | LS |
| 9 | 120090 | Construction Area Signs | 1 | LS |
| 10 | 120120 | Type III Barricade | 6 | EA |
| 11 | 131104 | Water Quality Monitoring Report | 12 | EA |
| 12 | 146001 | Contractor Supplied Biologist (Day) | 5 | DAY |
| 13 | 146003 | Natural Resource Protection plan | 1 | LS |
| 14 | 398001 | Remove Asphalt Concrete Pavement | 13,679 | SQFT |
| 15 | 820250 | Remove Roadside Sign | 4 | EA |
| 16 | 600097 | Bridge Removal | 1 | LS |
| 17 | 170103 | Clearing and Grubbing | 1 | LS |
| 18 | 190101 | Roadway Excavation | 2,042 | CY |
| 19 | 198010 | Imported Borrow | 53 | CY |
| 20 | 192020 | Structure Excavation (Type D) | 80 | CY |
| 21 (F) | 193003 | Structure Backfill (Bridge) | 53 | CY |
| 22 (F) | 204008 | Plant (Group H) | 12 | EA |
| 23 | 210430 | Erosion Control (Hydroseed) | 5,687 | SQFT |
| 24 | 220101 | Finishing Roadway | 1 | LS |
| 25 | 260203 | Class 2 Aggregate Base | 2,227 | CY |
| 26 | 390132 | Hot Mix Asphalt (Type A) | 820 | TON |

Notice to Bidders

| 27 | 397005 | Tack Coat | 2 | TON |
|-------------------------------------|-----------|--|----------|------|
| 28 | 490736 | Furnish Piling (Class 90) | 266 | LF |
| 29 | 490737 | Drive Pile (Class 90) | 10 | EA |
| 30 | 490738 | Furnish Piling (Class 140) | 3,062 | LF |
| 31 | 790739 | Drive Pile (Class 140) | 75 | EA |
| 32 (F) | 510053 | Structural Concrete, Bridge | 62 | CY |
| 33 (F) | 510054 | Structural Concrete, Bridge (Polymer Fiber) | 964 | CY |
| 34 | 519091 | Joint Seal (MR=1 1/2") | 72 | LF |
| 35 (F) | 520102 | Bar Reinforcing Steel (Bridge) | 222,000 | LB |
| 36 (F) | 048290 | California ST-75 Bridge Rail | 1,046 | LF |
| 37 | 839543 | Transition Railing (Type WB-31) | 4 | EA |
| 38 | 820134 | Object Marker (Type P) | 4 | EA |
| 39 | 839584 | Alternative In-Line Terminal System | 4 | EA |
| 40 | 198250 | Geosynthetic Reinforcement | 93 | SY |
| 41 | 840505 | 6" Thermoplastic Traffic Stripe | 2,360 | LF |
| 42 | 840529 | 6" Thermoplastic Traffic Stripe (BROKEN 36-12) | 1,180 | LF |
| 43 | 999990 | Mobilization | 1 | LS |
| Br 11C-0016, BRLO 5911 (047) | | | | |
| ITEM NO. | ITEM CODE | DESCRIPTION | QUANTITY | UNIT |
| 44 | | Construction Staking | 1 | LS |
| 45 | 160110 | Temporary Fence (Type ESA) | 2,010 | LF |
| 46 | 070030 | Lead Compliance Plan | 1 | LS |
| 47 | 080050 | Progress Schedule | 1 | LS |
| 48 | 130100 | Job Site Management | 1 | LS |
| 49 | 130200 | Prepare Water Pollution Control Program | 1 | LS |
| 50 | 130640 | Temporary Fiber Roll | 3,060 | LF |
| 51 | 130900 | Temporary Concrete Washout Facility | 1 | LS |
| 52 | 120090 | Construction Area Signs | 1 | LS |
| 53 | 120120 | Type III Barricade | 6 | EA |

Notice to Bidders

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|--------|--------|---|---------|------|
| 54 | 131104 | Water Quality Monitoring Report | 12 | EA |
| 55 | 146001 | Contractor Supplied Biologist (Day) | 5 | DAY |
| 56 | 146003 | Natural Resource Protection plan | 1 | LS |
| 57 | 398001 | Remove Asphalt Concrete Pavement | 14,811 | SQFT |
| 58 | 820250 | Remove Roadside Sign | 4 | EA |
| 59 | 141120 | Treated Wood Waste | 450 | LB |
| 60 | 600097 | Bridge Removal | 1 | LS |
| 61 | 170103 | Clearing and Grubbing | 1 | LS |
| 62 | 190101 | Roadway Excavation | 2,122 | CY |
| 63 | 198010 | Imported Borrow | 115 | CY |
| 64 (F) | 192020 | Structure Excavation (Type D) | 59 | CY |
| 65 (F) | 193003 | Structure Backfill (Bridge) | 56 | CY |
| 66 | 197040 | Earth Retaining Structure (Corrugated Steel Pipe) | 438 | SF |
| 67 | 210430 | Erosion Control (Hydroseed) | 7,969 | SQFT |
| 68 | 220101 | Finishing Roadway | 1 | LS |
| 69 | 260203 | Class 2 Aggregate Base | 2,521 | CY |
| 70 | 390132 | Hot Mix Asphalt (Type A) | 960 | TON |
| 71 | 397005 | Tack Coat | 2.00 | TON |
| 72 | 490736 | Furnish Piling (Class 90) | 266 | LF |
| 73 | 490737 | Drive Pile (Class 90) | 10 | EA |
| 74 | 490738 | Furnish Piling (Class 140) | 1,380 | LF |
| 75 | 790739 | Drive Pile (Class 140) | 35 | EA |
| 76 (F) | 510053 | Structural Concrete, Bridge | 67 | CY |
| 77 (F) | 510054 | Structural Concrete, Bridge (Polymer Fiber) | 404 | CY |
| 78 (F) | 520102 | Bar Reinforcing Steel (Bridge) | 104,000 | LB |
| 79 (F) | 048290 | California ST-75 Bridge Rail | 512.50 | LF |
| 80 | 839543 | Transition Railing (Type WB-31) | 4 | EA |
| 81 | 832007 | Midwest Guardrail System (Wood Post) | 87.50 | LF |
| 82 | 839576 | End Cap (Type A) | 1 | EA |
| 83 | 839581 | End Anchor Assembly (Type SFT) | 1 | EA |

Notice to Bidders

| 84 | 820134 | Object Marker (Type P) | 4 | EA |
|-------------------------------------|-----------|--|----------|------|
| 85 | 839584 | Alternative In-Line Terminal System | 3 | EA |
| 86 | 198250 | Geosynthetic Reinforcement | 125 | SY |
| 87 | 840505 | 6" Thermoplastic Traffic Stripe | 1,922 | LF |
| 88 | 840529 | 6" Thermoplastic Traffic Stripe (BROKEN 36-12) | 993 | LF |
| 89 | 999990 | Mobilization | 1 | LS |
| Br 11C-0017, BRLO 5911 (049) | | | | |
| ITEM NO. | ITEM CODE | DESCRIPTION | QUANTITY | UNIT |
| 90 | | Construction Staking | 1 | LS |
| 91 | 160110 | Temporary Fence (Type ESA) | 2,135 | LF |
| 92 | 070030 | Lead Compliance Plan | 1 | LS |
| 93 | 080050 | Progress Schedule | 1 | LS |
| 94 | 130100 | Job Site Management | 1 | LS |
| 95 | 130200 | Prepare Water Pollution Control Program | 1 | LS |
| 96 | 130640 | Temporary Fiber Roll | 3,822 | LF |
| 97 | 130900 | Temporary Concrete Washout Facility | 1 | LS |
| 98 | 120090 | Construction Area Signs | 1 | LS |
| 99 | 120120 | Type III Barricade | 6 | EA |
| 100 | 131104 | Water Quality Monitoring Report | 12 | EA |
| 101 | 146001 | Contractor Supplied Biologist (Day) | 5 | DAY |
| 102 | 146003 | Natural Resource Protection plan | 1 | LS |
| 103 | 398001 | Remove Asphalt Concrete Pavement | 17,108 | SQFT |
| 104 | 820250 | Remove Roadside Sign | 4 | EA |
| 105 | 710132 | Remove Culvert | 41 | LF |
| 106 | 600097 | Bridge Removal | 1 | LS |
| 107 | 170103 | Clearing and Grubbing | 1 | LS |
| 108 | 190101 | Roadway Excavation | 2,580 | CY |
| 109 | 198010 | Imported Borrow | 185 | CY |
| 110 (F) | 192020 | Structure Excavation (Type D) | 92 | CY |

Notice to Bidders

| | | | | |
|-------------------------------------|-------------|--|--------------------|------|
| 111 (F) | 193003 | Structure Backfill (Bridge) | 54 | CY |
| 112 | 204008 | Plant (Group H) | 1 | EA |
| 113 | 210430 | Erosion Control (Hydroseed) | 8,695 | SQFT |
| 114 | 220101 | Finishing Roadway | 1 | LS |
| 115 | 260203 | Class 2 Aggregate Base | 3,152 | CY |
| 116 | 390132 | Hot Mix Asphalt (Type A) | 1,175 | TON |
| 117 | 397005 | Tack Coat | 2 | TON |
| 118 | 490736 | Furnish Piling (Class 90) | 417 238 | LF |
| 119 | 490737 | Drive Pile (Class 90) | 10 | EA |
| 120 | 490738 | Furnish Piling (Class 140) | 728 610 | LF |
| 121 | 790739 | Drive Pile (Class 140) | 15 | EA |
| 122 (F) | 510053 | Structural Concrete, Bridge | 63 | CY |
| 123 (F) | 510054 | Structural Concrete, Bridge (Polymer Fiber) | 191 | CY |
| 124 (F) | 510502 | Minor Concrete (Minor Structure) | 8 | CY |
| 125 (F) | 520102 | Bar Reinforcing Steel (Bridge) | 54,200 | LB |
| 126 (F) | 048290 | California ST-75 Bridge Rail | 268 | LF |
| 127 | 650416 | 24" Reinforced Concrete Pipe (Class IV) | 69 | LF |
| 128 | 839543 | Transition Railing (Type WB-31) | 4 | EA |
| 129 | 820134 | Object Marker (Type P) | 4 | EA |
| 130 | 839584 | Alternative In-Line Terminal System | 4 | EA |
| 131 | 810111 A | Survey Monument [Reset] | 1 | EA |
| 132 | 198250 | Geosynthetic Reinforcement | 533 | SY |
| 133 | 840505 | 6" Thermoplastic Traffic Stripe | 1,939 | LF |
| 134 | 840529 | 6" Thermoplastic Traffic Stripe (BROKEN 36-12) | 1,033 | LF |
| 135 | 999990 | Mobilization | 1 | LS |
| Br 11C-0179, BRLO 5911 (050) | | | | |
| ITEM NO. | ITEM CODE | DESCRIPTION | QUANTITY | UNIT |
| 136 | | Construction Staking | 1 | LS |
| 137 | 160110 | Temporary Fence (Type ESA) | 1,775 | LF |

Notice to Bidders

| | | | | |
|---------|--------|---|--------------------|------|
| 138 | 070030 | Lead Compliance Plan | 1 | LS |
| 139 | 080050 | Progress Schedule | 1 | LS |
| 140 | 130100 | Job Site Management | 1 | LS |
| 141 | 130200 | Prepare Water Pollution Control Program | 1 | LS |
| 142 | 130640 | Temporary Fiber Roll | 3,506 | LF |
| 143 | 130900 | Temporary Concrete Washout Facility | 1 | LS |
| 144 | 120090 | Construction Area Signs | 1 | LS |
| 145 | 120120 | Type III Barricade | 2 | EA |
| 146 | 131104 | Water Quality Monitoring Report | 12 | EA |
| 147 | 146001 | Contractor Supplied Biologist (Day) | 5 | DAY |
| 148 | 146003 | Natural Resource Protection plan | 1 | LS |
| 149 | 398001 | Remove Asphalt Concrete Pavement | 15,149 | SQFT |
| 150 | 820250 | Remove Roadside Sign | 6 | EA |
| 151 | 141120 | Treated Wood Waste | 250 | LB |
| 152 | 710132 | Remove Culvert | 33 | LF |
| 153 | 600097 | Bridge Removal | 1 | LS |
| 154 | 170103 | Clearing and Grubbing | 1 | LS |
| 155 | 190101 | Roadway Excavation | 1,964 | CY |
| 156 | 198010 | Imported Borrow | 98 | CY |
| 157 (F) | 192020 | Structure Excavation (Type D) | 89 | CY |
| 158 (F) | 193003 | Structure Backfill (Bridge) | 51 | CY |
| 159 | 210430 | Erosion Control (Hydroseed) | 7,239 | SQFT |
| 160 | 220101 | Finishing Roadway | 1 | LS |
| 161 | 260203 | Class 2 Aggregate Base | 2,664 | CY |
| 162 | 390132 | Hot Mix Asphalt (Type A) | 943 | TON |
| 163 | 397005 | Tack Coat | 2.00 | TON |
| 164 | 490736 | Furnish Piling (Class 90) | 143 285 | LF |
| 165 | 490737 | Drive Pile (Class 90) | 10 | EA |
| 166 | 490738 | Furnish Piling (Class 140) | 369 238 | LF |
| 167 | 790739 | Drive Pile (Class 140) | 5 | EA |

Notice to Bidders

| | | | | |
|---------|--------|--|--------|----|
| 168 (F) | 510053 | Structural Concrete, Bridge | 64 | CY |
| 169 (F) | 510054 | Structural Concrete, Bridge (Polymer Fiber) | 73 | CY |
| 170 (F) | 520102 | Bar Reinforcing Steel (Bridge) | 27,200 | LB |
| 171 (F) | 048290 | California ST-75 Bridge Rail | 147 | LF |
| 172 | 650416 | 24" Reinforced Concrete Pipe (Class IV) | 42 | LF |
| 173 | 839543 | Transition Railing (Type WB-31) | 4 | EA |
| 174 | 820134 | Object Marker (Type P) | 4 | EA |
| 175 | 839584 | Alternative In-Line Terminal System | 4 | EA |
| 176 | 840505 | 6" Thermoplastic Traffic Stripe | 1,665 | LF |
| 177 | 840529 | 6" Thermoplastic Traffic Stripe (BROKEN 36-12) | 858 | LF |
| 178 | 999990 | Mobilization | 1 | LS |

Special Provisions

ORGANIZATION

Special provisions are under headings that correspond with the main-section headings of the *Standard Specifications*. A main-section heading is a heading shown in the table of contents of the *Standard Specifications*.

Each special provision begins with a revision clause that describes or introduces a revision to the *Standard Specifications*.

Any paragraph added or deleted by a revision clause does not change the paragraph numbering of the *Standard Specifications* for any other reference to a paragraph of the *Standard Specifications*.

^^

DIVISION I GENERAL PROVISIONS

1 GENERAL

Attention is directed to the provisions of Section 1, —General, of the Standard Specifications and these Special Provisions for the general rules of interpretation.

Add to Section 1-1.01, —General:

The work embraced herein shall be done in accordance with the Standard Specifications dated 2022, and the Standard Plans dated 2022, of the California Department of Transportation insofar as the same may apply and in accordance with the following Special Provisions.

In case of conflict between the Standard Specifications and these Special Provisions, the Special Provisions shall take precedence over and be used in lieu of such conflicting portions.

Revisions to the Standard Specifications set forth in these Special Provisions shall be considered as part of the Standard Specifications for the purposes set forth in Section 5-1.02, —“Contract Components,” of the Standard Specifications. Whenever either the phrase —Standard Specifications is revised or the term —Standard Specifications are revised is used in these Special Provisions, the indented text or table following the term shall be considered a revision to the Standard Specifications.

In case of conflict between such revisions and the Standard Specifications, the revisions shall take precedence over and be used in lieu of the conflicting portions.

Revise the following definitions in Section 1-1.07B, —Definitions to mean:

Necessary substitutions of the legal entities in the Standard Specifications and Standard Plans shall be hereafter noted. The intent and meaning of the terms in the proposal, contract and other contract documents shall be interpreted accordingly as follows:

ATTORNEY GENERAL – Shall mean the County Counsel of the County of Glenn.

BOARD OF SUPERVISORS – Shall mean the Board of Supervisors of the County of Glenn.

CONTRACT/CONTRACT DOCUMENTS – Shall mean the written and executed contract between the County of Glenn and the Contractor.

COUNTY - Shall mean the County of Glenn.

DEPARTMENT/DEPARTMENT OF TRANSPORTATION - Shall mean the County of Glenn.

DISTRICT - Shall mean the County of Glenn.

Special Provisions

DIRECTOR/DIRECTOR OF TRANSPORTATION - Shall mean the County of Glenn Public Works Agency Director or his authorized representative.

ENGINEER/OFFICE ENGINEER - Shall mean the County of Glenn Public Works Agency Director or his authorized representative.

MAY – “MAY” is permissive.

MUST - "MUST" is mandatory.

SHALL - “SHALL” is mandatory.

STANDARD PLANS - Shall mean the Standard Plans published by the State of California, Department of Transportation, dated 2022, and including Revised Standard Plans.

STANDARD SPECIFICATIONS - Shall mean the Standard Specifications published by the State of California, Department of Transportation, dated 2022, and including Revised Standard Specifications (RSS) and Standard Special Provisions (SSPs). Any reference therein to the State of California or a State agency, office or officer shall be interpreted to refer to the County or its corresponding agency, office or officer, or officer acting under this contract.

STATE - As used in the Standard Specifications and these Special Provisions, shall mean the County of Glenn.

Any additional information or documents referenced in the Standard Specifications and relating to this project, if available, may be obtained or examined at the County of Glenn Public Works Agency.

^^

2 BIDDING

Add between the 1st and 2nd paragraphs of section 2-1.06B:

The Department makes the following supplemental project information available:

Supplemental Project Information

| Means | Description |
|--|----------------------|
| Available as specified in the <i>Standard Specifications</i> | Electronic CAD Files |
| Included with the project plans | Logs of Test Borings |

^^

5 CONTROL OF WORK

Replace Section 5-1.24 with:

5-1.24 CONSTRUCTION SURVEYS

This work shall consist of furnishing and setting construction stakes and marks by the Contractor to establish the lines and grades required for the completion of the work as shown on the plans and as specified in the Standard Specifications and these special provisions.

Except as provided herein for establishment of horizontal and vertical control and right of way staking by the Engineer, all other specifications, which require the establishment of lines and grades by the Engineer shall not apply to this contract.

Special Provisions

Before starting any survey work, the Contractor shall submit in writing for approval by the Engineer, the proposed procedures, methods, equipment, and typical stake markings to be used. All procedures, methods, and typical stake markings shall be in accordance with Chapter 12, Construction Surveys, of the Department of Transportation publication entitled "Surveys Manual."

Construction staking shall be performed as necessary to control the work. Construction stakes and marks shall be furnished and set with accuracy adequate to assure that the completed work conforms to the lines, grades, and sections shown on the plans. Vertical alignment and the coordinates of centerlines and layout lines will be furnished to the Contractor for his use in performing the construction staking.

Survey data for the construction control surveys, horizontal and vertical, is shown on the plans and as described in Chapter 12 of Caltrans' "Surveys Manual." In the event the Contractor's operations destroy any of the survey control points, the Contractor shall replace such control points at his expense. The Contractor will not be allowed any adjustment in contract time for such replacement of survey control points.

All computations necessary to establish the exact position of the work from control points shall be made by the Contractor. All computations, survey notes, and other records necessary to accomplish the work shall be neat, legible, and accurate. Copies of such computations, notes, and other records shall be furnished to the Engineer prior to beginning work that requires their use.

Construction stakes shall be removed from the site of the work when no longer needed.

Upon completion of construction staking and prior to acceptance of the contract, all computations, survey notes, and other data used to accomplish the work shall be furnished to the Engineer and shall become the property of the State.

Construction staking will be paid for on the basis of a lump sum price.

The contract lump sum price paid for construction staking shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in performing construction staking, as shown on the plans, as specified in these special provisions, and as directed by the Engineer.

^^

7 LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

Replace Section 7-1.02K(6)(j)(iii) with:

7-1.02K(6)(j)(iii) Unregulated Earth Material Containing Lead

Section 7-1.02K(6)(j)(iii) includes specifications for handling, removing, and disposing of unregulated earth material containing lead. Management of this material exposes workers to health hazards that must be addressed in your lead compliance plan. This material contains average lead concentrations below 80 mg/kg total lead and below 5 mg/L soluble lead and is not regulated by DTSC as a hazardous substance or a hazardous waste. This material does not require disposal at a permitted landfill or solid waste disposal facility. The RWQCB has jurisdiction over reuse of this material at locations outside the job site limits.

Lead has not been detected on the project site.

Handle the material under all applicable laws, rules, and regulations, including those of the following agencies:

- 1. Cal/OSHA
- 2. CA RWQCB, Region5 – Central Valley
- 3. CA Department of Toxic Substances Control

If unregulated material is disposed of:

Special Provisions

- 1. Submit at least 15 days before disposal, the form titled "Agreement between a Contractor Working on State Facilities and a Real Property Owner for Disposing Construction-related Material Suitable for Use on Residential Zoned Property" which discloses the lead concentration of the material to the receiving property owner and obtains authorization for disposal on the property. Give a copy of the signed form to the property owner.
- 2. You are responsible for any additional sampling and analysis required by the receiving property owner.

If you choose to dispose of unregulated material at a commercial landfill:

- 1. Transport it to a Class III or Class II landfill appropriately permitted to receive the material
- 2. You are responsible for identifying the appropriately permitted landfill to receive the material and for all associated trucking and disposal costs, including any additional sampling and analysis required by the receiving landfill

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8 PROSECUTION AND PROGRESS

Replace section 8-1.04C with:

8-1.04C Delayed Start

Section 8-1.04B does not apply.

Start job site activities within 14 days after receiving notice that the Contract has been approved by the Attorney General or the attorney appointed and authorized to represent the Department.

Do not start job site activities until the Department authorizes or accepts your submittal for:

- 1. Contractor-supplied biologist
- 2. Biological resource information program
- 3. CPM baseline schedule
- 4. WPCP or SWPPP, whichever applies
- 5. Notification of DRA or DRB nominee and disclosure statement
- 6. Natural resource protection plan
- 7. Dewatering and discharge work plan

If the submittals for Contractor-supplied biologist and biological resource information program are authorized, you may enter the job site only to measure controlling field dimensions and locate utilities.

Do not start other job site activities until all the submittals from the above list are authorized or accepted and the following information is received by the Engineer:

- 1. Notice of Materials To Be Used form.
- 2. Written statement from the vendor that the order for the sign panels has been received and accepted by the vendor. The statement must show the dates that the materials will be shipped.

You may start job site activities before the 14th day after Contract approval if you:

- 1. Obtain specified authorization or acceptance for each submittal before the 14th day
- 2. Receive authorization to start

Submit a notice 72 hours before starting job site activities. If the project has more than 1 location of work, submit a separate notice for each location.

Special Provisions

^^

9 PAYMENT

Delete the sentence in Section 9-1.16F, “Retentions” and replace with:

The Department retains 5-percent from progress payments due to the Contractor for work performed.”

^^

DIVISION II GENERAL CONSTRUCTION

10 GENERAL

Replace section 10-1.03 with:

10-1.03 TIME CONSTRAINTS

No construction activity is allowed within the project limits from October 1 to May 1.

^^

12 TEMPORARY TRAFFIC CONTROL

Replace the table in the definition of *designated holidays* in section 12-4.02A(2) with:

Designated Holidays

| Holiday | Date observed |
|-----------------------|--------------------------|
| New Year's Day | January 1st |
| Washington's Birthday | 3rd Monday in February |
| Memorial Day | Last Monday in May |
| Independence Day | July 4th |
| Labor Day | 1st Monday in September |
| Veterans Day | November 11th |
| Thanksgiving Day | 4th Thursday in November |
| Christmas Day | December 25th |

Add to section 12-4.02A(2):

- special days:** Martin Luther King Jr. Day 3rd Monday in January
- Cesar Chavez Day March 31st
- Day after Thanksgiving
- Christmas Eve
- New Year's Eve

Special Provisions

Replace section 12-4.02C(3)(i) with:

12-4.02C(3)(i) Complete Connector Closure Hour Charts and Connector Lane Requirement Charts

Comply with the requirements for the complete closure on a conventional highway shown in the following chart:

| Chart No. L1 Complete Conventional Highway Closure Hours | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|----|----|----|----|----|----|----|----|----|-----------------------------|----|----|----|----|----|----|----|----|----|----------------|----|----|----|----|----|
| County: Glenn | | | | | | | | | | Route/Direction: CR67 EB/WB | | | | | | | | | | Post Mile: N/A | | | | | |
| Closure limits: Project Limits | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hour | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| Mon– Thu | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| Fri | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| Sat | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |
| Sun | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C | C |

Legend:

| | |
|---|--|
| 1 | Provide at least 1 connector lane open in the direction of travel. |
| 2 | Provide at least 2 adjacent connector lanes open in the direction of travel. |
| C | Road may be closed completely. |
| S | Shoulder closure is allowed (right/left). |
| N | No work is allowed. |
| | Work is allowed within the highway where a shoulder or lane closure is not required. |

REMARKS:

AA

13 WATER POLLUTION CONTROL

Add to the end of section 13-1.01A:

The specifications in section 13 for water quality monitoring apply to the following work activities whenever they occur in water:

1. When performing any in-water work.
2. During the entire duration of temporary surface water diversions.
3. In the event that the Project activities result in any materials reaching surface waters.
4. When any activities result in the creation of a visible plume in surface waters.

The receiving water for this project is Colusa Basin Drain.

Special Provisions

Replace 7th in the 1st sentence in the 1st paragraph of section 13-1.01C(4)(c) with:

1st (First)

Replace items 3.1 in the list in the 1st paragraph of section 13-1.01C(4)(c) with:

- 3.1. Include a unique identifier, date stamp, written description of photo details, and latitude/longitude (in decimal degrees) or map indicating location of photo. Successive photos should be taken from the same vantage point to compare pre/post construction conditions.

Replace the items in the list in the 3rd paragraph of section 13-1.01D(5)(b) with:

- 1. Establish locations for water quality sampling:
 - 1.1 Upstream of the effluent discharge point or location of in-water work out of the influence of the project
 - 1.2 At the effluent discharge point, including the location of in-water work
 - 1.3 Approximately 300 feet downstream of the work area
- 2. Take water quality samples to document background conditions for upstream, effluent, and downstream locations. Test for each water quality objective shown in the table titled "Water Quality Objectives."
- 3. Estimate water flow.

Add between the 4th and 5th paragraphs of section 13-1.01D(5)(b):

Test the receiving water under the test methods for the WQOs shown in the following table:

Water Quality Objectives

| Quality characteristic | Test method | Detection limit (min) | Requirement |
|---|---|-----------------------|--|
| Turbidity during activities for in-water work (NTU) | Field test with a calibrated portable instrument (Measured at downstream sampling location) | 1 | 15 above natural background |
| Turbidity during activities excluding in-water work (NTU) | Field test with a calibrated portable instrument (Measured at downstream sampling location) | 1 | 1. Where natural turbidity is less than 1 NTU, increases must not exceed 2 NTU. 2. Where natural turbidity is from 1 to 5 NTUs, increases must not exceed 1 NTU. 3. Where natural turbidity is from 5 to 50 NTUs, increases must not exceed 20 percent. 4. Where natural turbidity is from 50 to 100 NTUs, increases must not exceed 10 NTUs. 5. Where natural turbidity is greater than 100 NTUs, increases must not exceed 10 percent. |
| Settleable material (ml/L) | Observed | -- | Greater than 0.1 ml/L |

Add to the end of section 13-3.01A:

This project's risk level is 2.

Add between the 4th and 5th paragraphs of section 13-3.01C(2)(a):

The following RWQCBs will review the authorized SWPPP:

Special Provisions

1. Central Valley

Add between the 1st and 2nd paragraph of section 13-10.03E:

The fence must be Type 2.

^^

14 ENVIRONMENTAL STEWARDSHIP

Add to the end of section 14-1.02:

An Environmentally Sensitive Area (ESA) of Riparian habitat exists on this project.

Before starting job site activities, install temporary high visibility fence along the ESA boundary to protect the riparian habitat and mark its boundaries.

Limited access to the ESA is allowed for water sampling and release of encroaching wildlife. Notify the Engineer 2 business days or less before the planned entry date. Any other access to the ESA is prohibited.

Add to the 1st paragraph of section 14-6.03A:

This project is within or near habitat for the regulated species shown in the following table:

Regulated Species

| |
|-------------------------|
| Giant garter snake |
| Swainson's hawk |
| Western pond turtle |
| River lamprey |
| Hardhead |
| Sacramento splittail |
| Tricolored blackbird |
| Burrowing owl |
| Redhead |
| Black tern |
| Northern harrier |
| Yellow warbler |
| White-tailed kite |
| Yellow-breasted chat |
| Least bittern |
| Loggerhead shrike |
| Yellow-headed blackbird |
| Western bat |

This project includes the sensitive habitats shown in the following table:

Sensitive Habitats

| |
|-----------------------------|
| Riparian habitat |
| Waters of the United States |

Add to section 14-6.03A:

Species protection areas within the project limits are as specified in the following table:

Special Provisions

Species Protection Areas

| Identification name | Location |
|---------------------|-----------------------|
| Giant Garter Snake | Entire Project Limits |

Within entire project limits implement the following protection measures:

1. Wildlife exclusion fencing with one-way escape funnels shall be installed around the proposed project site to keep the snake out of the construction disturbance area.
2. All vegetation clearing and initial ground disturbance shall be monitored by a biologist holding a Recovery Permit for the snake.
3. Aquatic and upland snake habitat to be avoided shall be flagged and/or fenced until construction activities are complete.

Replace the list in the 2nd paragraph of section 14-6.03D(1) with:

1. Conduct preconstruction survey
2. Provide preconstruction environmental awareness training
3. Prepare natural resource protection plan

Add to section 14-6.03D(1):

Within 30 days before starting job site activities, submit protocols for species protection surveys. Use protocols required in the PLACs.

Survey the job site for regulated species and submit a preconstruction survey report within 15 days before starting work.

The preconstruction survey report must include one of the following:

1. Detailed observations and locations where regulated species were observed
2. Statement that no regulated species were observed

Prior to beginning work, a contractor supplied qualified biologist shall conduct an environmental awareness training program.

Replace section 14-6.03D(3) with:

14-6.03D(3) Biological Resource Information Program

Prepare and present a biological resource information program to familiarize personnel with regulated species and habitats, related laws and regulations, and species protection measures and protocols.

The biological resource information program must include:

1. Identification of the job site, ESAs, and species protection areas
2. Description of the regulated species and its general ecology
3. Description of habitats used by the regulated species and their locations
4. Requirements for protecting regulated species
5. Definition and consequences of take of regulated species
6. Response plan for encounters with the regulated species or a species that looks like one
7. Permit requirements for touching or moving a regulated species
8. Requirements for species protection
9. Description of avoidance and minimization measures
10. Handout materials about the regulated species, its habitats, and species protection measures

A Contractor-supplied biologist must develop the program and present the biological resource training.

Submit an outline of your program within 7 days after Contract approval. If the submittal is rejected, submit a revised outline within 7 days of receiving the rejection.

Allow 15 days for the Department's review of your outline of the program.

Special Provisions

Notify the Engineer at least 7 days before the 1st training session. Submit an attendance list with the printed and signed name of each attendee within 2 business days after each session. Submit a separate attendance list for each subsequent training session for new personnel.

Personnel who must complete biological resource training include laborers, tradesmen, material suppliers, equipment maintenance staff, supervisors, foremen, office staff, food vendors, and other workers who stay at the job site longer than 30 minutes.

The Department provides handout materials about the regulated species.

Distribute the handout to each attendee. Display and maintain the handout at all construction field offices and on all information boards.

Replace the 2nd paragraph of section 14-8.02 with:

Noise from job site activities must not exceed 86 dBA Lmax at 50 feet from the job site activity from 7:00 p.m. to 7:00 a.m. each day.

Add to section 14-8.02:

Replace *at least once a week* in the 2nd sentence of the 3rd paragraph of section 14-10.01 with: daily

Replace section 14-11.14 with:

14-11.14 TREATED WOOD WASTE

14-11.14A General

Section 14-11.14 applies if treated wood waste is shown on the Bid Item List.

Section 14-11.14 includes specifications for handling, storing, transporting, and disposing of treated wood waste. Manage treated wood waste under Health & Safety Code §25230 et seq.

Wood removed from guardrail and roadside sign is treated wood waste.

14-11.14B Submittals

Within 5 business days of disposing of treated wood waste, submit as an informational submittal a copy of each completed shipping record and weight receipt.

14-11.14C Training

Provide training to personnel who handle or may come in contact with treated wood waste. Training must include:

1. Requirements of 8 CA Code of Regs
2. Procedures for identifying and segregating treated wood waste
3. Safe handling practices
4. Requirements of Health & Safety Code §25230 et seq
5. Proper disposal methods

Maintain training records for 3 years after contract acceptance.

14-11.14D Storage of Treated Wood Waste

Store treated wood waste at the jobsite until transport to the CA permitted disposal site.

Until disposal, store treated wood waste using the following methods:

1. Raise the waste on blocks above a foreseeable run-on elevation and protect it from precipitation for no more than 90 days.
2. Place the waste on a containment surface or pad protected from run-on and precipitation for no more than 180 days.
3. Place the waste in water-resistant containers designed for shipping or solid waste collection for no more than 1 year.

Special Provisions

4. Place the waste in a storage building as defined in Health & Safety Code §25230 et seq.

Prevent unauthorized access to treated wood waste using a secure enclosure such as a locked chain-link-fenced area or a lockable shipping container located within the job site.

Resize and segregate treated wood waste at a location where debris including sawdust and chips can be contained. Collect and manage the debris as treated wood waste.

Identify treated wood waste and accumulation areas using water-resistant labels that comply with Health & Safety Code §25230 et seq. Labels must include:

1. The words *TREATED WOOD WASTE Do not burn or scavenge*
2. The words *Caltrans District* and the district number
3. The words *Construction Contract* and the contract number
4. District office address
5. Engineer's name, address, and telephone number
6. Contractor's contact name, address, and telephone number
7. Date placed in storage

14-11.14E Transport and Disposal of Treated Wood Waste

Dispose of treated wood waste within:

1. 90 days of generation if stored on blocks
2. 180 days of generation if stored on a containment surface or pad
3. 1 year of generation if stored in a water-resistant container or within 90 days after the container is full, whichever is shorter
4. 1 year of generation if stored in a storage building as defined in Health & Safety Code §25230 et seq

Before transporting treated wood waste, obtain agreement from the receiving facility that it will accept the waste. Protect shipments of the waste from loss and exposure to precipitation. For projects generating 10,000 lb or more of treated wood waste, request a generator's EPA Identification Number from the Engineer at least 5 business days before the 1st shipment. Each shipment must be accompanied by a shipping record such as a bill of lading or invoice that includes:

1. The words *Caltrans District* and the district number
2. The words *Construction Contract* and the contract number
3. District office address
4. Engineer's name, address, and telephone number
5. Contractor's name, contact person, and telephone number
6. Receiving facility's name and address
7. Description of the waste (e.g., treated wood waste with preservative type if known or unknown/mixture)
8. Project location
9. Estimated weight or volume of the shipment
10. Date accumulation begins
11. Date of transport
12. Name of transporter
13. Date of receipt by the treated wood waste facility
14. Weight of shipment measured by the receiving facility
15. Generator's US EPA Identification Number for projects generating 10,000 lb or more of treated wood waste

The shipping record must be 8-1/2 by 11 inches and a 4-part carbon or carbonless form to provide copies for the Engineer, transporter, and treated wood waste facility.

Transport treated wood waste directly to the CA permitted disposal site after leaving the jobsite. Do not mix treated wood waste from the job site with waste from any other generator.

Dispose of treated wood waste at one of the following:

Special Provisions

- 1. An approved California disposal site operating under a RWQCB permit that includes acceptance of treated wood waste
- 2. California disposal site operating under a DTSC permit that includes acceptance of treated wood waste

Treated wood waste may be disposed as a hazardous waste at any of the following Resource Conservation and Recovery Act (RCRA) Subtitle C disposal facilities:

- 1. US Ecology, Beatty, Nevada
- 2. US Ecology, Grandview, Idaho
- 3. Chemical Waste Management of the Northwest, Arlington, Oregon

^^

DIVISION III EARTHWORK AND LANDSCAPE

19 EARTHWORK

Replace the 2nd, 3rd, and 4th paragraphs of section 19-2.03B with:

Dispose of surplus material. Ensure enough material is available to complete the embankments before disposing of it.

Add to section 19-7.02A:

Obtaining imported borrow includes the following:

- 1. Constructing an access road as shown
- 2. Clearing and grubbing the material site
- 3. Selecting material within the source
- 4. Screening and wasting from 30 to 60 percent of the finer material
- 5. Washing materials so that the imported borrow complies with the sand equivalent requirements

^^

21 EROSION CONTROL

Replace section 21-3 with:

21-3 PERMANENT EROSION CONTROL ESTABLISHMENT WORK

21-3.01 GENERAL

21-3.01A Summary

Section 21-3 includes specifications for performing permanent erosion control establishment work.

Permanent erosion control establishment work consists of weekly inspections of the project site for deficiencies in erosion control features.

The permanent erosion control establishment period starts after permanent erosion control work has been completed.

The Engineer notifies you when the permanent erosion control establishment period starts and furnishes weekly statements regarding the number of working days credited to the permanent erosion control establishment period after the notification.

Special Provisions

47-7.01A Summary

Section 47-7 includes specifications for construction of earth retaining structure (corrugated steel pipe).

47-7.01B Definitions

ERS (CSP): earth retaining structure (corrugated steel pipe)

47-7.02 Materials

Structure excavation and backfill must comply with section 19-3.

Reinforced concrete must comply with section 51.

Treated wood must comply with section 57-2.

Corrugated Steel Pipe must comply with section 66-1.02E.

Permeable material must be Class 1, Type B, complying with section 68-2.02F.

Hardware must be commercial grade and galvanized under section 75.

Filter fabric must comply with section 96. Adhesive for bonding filter fabric to CSP must be commercial grade.

47-7.03 Construction

Place earth retaining structure (corrugated steel pipe) to the lines and grades as shown.

Concrete footings must be placed at least 48 hours before constructing the ERS (CSP). The structure backfill used in the construction of the ERS (CSP) must be accepted by the Engineer before concrete footings are placed.

Place permeable material to a maximum of 2 feet thick per layer. If you place sloped layers of permeable material to facilitate the work or to satisfy safety considerations, measure the vertical limit of each layer normal to the slope. Permeable material must be placed prior to metal beam guard rail post placement.

Place filter fabric as described and under the manufacturer's recommendations.

47-7.04 Payment

Earth retaining structure (corrugated steel pipe) are measured by the square foot of completed wall measured along the horizontal length and the vertical height from top of footing to top of wall.

49 PILING

Add to section 49-1.03:

Expect difficult pile installation due to the conditions shown in the following table:

| Pile location | | Conditions |
|---------------|------------------|--|
| Bridge no. | Support location | |
| 11C-0015 | All | Overhead power lines on north side of road |
| 11C-0016 | All | Overhead power lines on north side of road |
| 11C-0017 | All | Overhead power lines on north side of road |
| 11C-0179 | All | Overhead power lines on north side of road |

Add to section 49-2.01A(3)(a):

Before installing driven piles, submit a Pile and Driving Data Form for each pile type for each of the support locations shown in the following table:

Special Provisions

| Bridge no. | Pile type | Support location |
|------------|-----------|------------------|
| 11C-0015 | Class 90 | Abut-1 & Abut-17 |
| 11C-0015 | Class 140 | Bents 2-16 |
| 11C-0016 | Class 90 | Abut-1 & Abut-9 |
| 11C-0016 | Class 140 | Bents 2-8 |
| 11C-0017 | Class 90 | Abut-1 & Abut-5 |
| 11C-0017 | Class 140 | Bents 2-4 |
| 11C-0179 | Class 90 | Abut-1 & Abut-3 |
| 11C-0179 | Class 140 | Bent 2 |

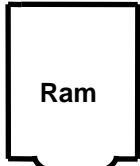


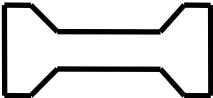


Add to section 49-2.01A(3)(b):

Special Provisions

CALIFORNIA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION LABORATORY

PILE AND DRIVING DATA FORM

Structure Name : _____ Contract No.: _____
 _____ Project: _____
 Structure No.: _____ Pile Driving Contractor or
 Dist./Co./Rte./Post Mi: _____ Subcontractor _____ (Pile Driven By)

| | | | | | | |
|---|---------------|---|--------|--------|-------------|-----------|
|  Ram | Hammer | Manufacturer: _____ Model: _____ Type: _____ Serial No.: _____ Min Rated Energy: _____ at _____ Length of Stroke _____ Fuel Setting _____ Max Rated Energy: _____ at _____ Length of Stroke _____ Fuel Setting _____ Ram Weight: _____ kips Modifications: _____ _____ _____ | | | | |
|  Anvil | | | | | | |
|  Capblock (Hammer Cushion) | | Material: _____ Thickness: _____ in Area: _____ in ² Modulus of Elasticity - E: _____ ksi Coefficient of Restitution - e: _____ | | | | |
|  Pile Cap | | <table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td>Helmet</td></tr> <tr><td>Bonnet</td></tr> <tr><td>Anvil Block</td></tr> <tr><td>Drivehead</td></tr> </table> Weight: _____ kips | Helmet | Bonnet | Anvil Block | Drivehead |
| Helmet | | | | | | |
| Bonnet | | | | | | |
| Anvil Block | | | | | | |
| Drivehead | | | | | | |
|  Pile Cushion | | Material: _____ Thickness: _____ in Area: _____ in ² Modulus of Elasticity - E: _____ ksi Coefficient of Restitution - e: _____ | | | | |
|  Pile | | Pile Type: _____ Length (In Leads): _____ ft Lb/ft.: _____ Taper: _____ Wall Thickness: _____ in Cross Sectional Area: _____ in ² Design Pile Capacity: _____ kips Description of Splice: _____ _____ Tip Treatment Description: _____ _____ | | | | |

DISTRIBUTE:

Translab,
Foundation Testing

Translab,
Geotechnical Design

Resident Engineer

Note: If mandrel or follower is used to drive the pile, attach separate manufacturer's detail sheet(s) including weight and dimensions.

Submitted By: _____

Date: _____ Phone No.: _____

REQUIRED FEDERAL AID CONTRACT LANGUAGE

EXHIBIT 12-G: REQUIRED FEDERAL-AID CONTRACT LANGUAGE
(For Local Assistance Construction Projects)

The following language must be incorporated into all Local Assistance Federal-aid construction contracts.
The following language, with minor edits, was taken from the Code of Federal Regulations.

MAINTAIN RECORDS AND SUBMIT REPORTS DOCUMENTING YOUR PERFORMANCE UNDER THIS SECTION

- 1. **DISADVANTAGED BUSINESS ENTERPRISES (DBE)** 2
 - A. **Nondiscrimination Statement**..... 3
 - B. **Contract Assurance**..... 3
 - C. **Prompt Progress Payment**..... 3
 - D. **Prompt Payment of Withheld Funds to Subcontractors** 3
 - E. **Termination and Replacement of DBE Subcontractors**..... 4
 - F. **Commitment and Utilization** 6
 - G. **Running Tally of Attainments**..... 7
 - H. **Commercially Useful Function** 7
 - I. **Use of Joint Checks**..... 8
- 2. **BID OPENING** 9
- 3. **BID RIGGING** 9
- 4. **CONTRACT AWARD** 9
- 5. **CONTRACTOR LICENSE**..... 9
- 6. **CHANGED CONDITIONS** 9
 - A. **Differing Site Conditions**..... 9
 - B. **Suspensions of Work Ordered by the Engineer**..... 9
 - C. **Significant Changes in the Character of Work** 10
- 7. **BEGINNING OF WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES**..... 10
- 8. **BUY AMERICA**..... 10
- 9. **QUALITY ASSURANCE** 11
- 10. **PROMPT PAYMENT** 12
- 11. **FORM FHWA-1273 REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONTRACTS** 12
- 12. **FEMALE AND MINORITY GOALS**..... 12
- 13. **TITLE VI ASSURANCES**..... 14
- 14. **FEDERAL TRAINEE PROGRAM** 19
- 15. **PROHIBITION OF CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE EQUIPMENT AND SERVICES** 20

1. DISADVANTAGED BUSINESS ENTERPRISES (DBE)

The contractor, subrecipient or subcontractor shall take necessary and reasonable steps to ensure that DBEs have opportunity to participate in the contract (49 CFR 26). To ensure equal participation of DBEs provided in 49 CFR 26.5, the Agency shows a contract goal for DBEs. The prime contractor shall make work available to DBEs and select work parts consistent with available DBE subcontractors and suppliers.

The prime contractor shall meet the DBE goal shown elsewhere in these special provisions or demonstrate that they made adequate Good Faith Efforts (GFE) to meet this goal. An adequate GFE means that the bidder must show that it took all necessary and reasonable steps to achieve a DBE goal that, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to meet the DBE goal.

If the DBE goal is not met, the contractor needs to complete and submit the DBE GFE documentation as described in Local Assistance Procedures Manual (LAPM) Chapter 9, Section 9.8 within 5 (five) days of bid opening.

It is the prime contractor's responsibility to verify that the DBE firm is certified as a DBE on the date of bid opening by using the California Unified Certification Program (CUCP) database and possesses the most specific available North American Industry Classification System (NAICS) codes and Work Code applicable to the type of work the firm will perform on the contract. Additionally, the prime contractor is responsible to document this verification by printing out the CUCP data for each DBE firm. A list of DBEs certified by the CUCP can be found at: <https://dot.ca.gov/programs/civil-rights/dbe-search>.

DBE participation will only count toward the California Department of Transportation's federally mandated statewide overall DBE goal if the DBE performs a commercially useful function under 49 CFR 26.55.

Credit for materials or supplies the prime contractor purchases from DBEs counts towards the goal in the following manner:

- 100 percent counts if the materials or supplies are obtained from a DBE manufacturer.
- 60 percent counts if the materials or supplies are obtained from a DBE regular dealer.
- Only fees, commissions, and charges for assistance in the procurement and delivery of materials or supplies count if obtained from a DBE that is neither a manufacturer nor regular dealer. 49 CFR 26.55 defines "manufacturer" and "regular dealer."

The prime contractor receives credit towards the goal if they employ a DBE trucking company that performs a commercially useful function as defined in 49 CFR 26.55(d) as follows:

- The DBE must be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there cannot be a contrived arrangement for the purpose of meeting DBE goals.
- The DBE must itself own and operate at least one fully licensed, insured, and operational truck used on the contract.
- The DBE receives credit for the total value of the transportation services it provides on the Contract using trucks it owns, insures, and operates using drivers it employs.
- The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the Contract.
- The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE that leases trucks equipped with drivers from a non-DBE is entitled to credit for the total value of transportation services provided by non-DBE leased trucks equipped with drivers not to exceed the value of transportation services on the contract provided by DBE-owned trucks or leased trucks with DBE employee drivers. Additional participation by non-DBE owned trucks equipped with drivers receives credit only for the fee or commission it receives as a result of the lease arrangement.
- The DBE may lease trucks without drivers from a non-DBE truck leasing company. If the DBE leases trucks from a non-DBE truck leasing company and uses its own employees as drivers, it is entitled to credit for the total value of these hauling services.

- A lease must indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE.

A. Nondiscrimination Statement

The contractor, subrecipient or subcontractor will never exclude any person from participation in, deny any person the benefits of, or otherwise discriminate against anyone in connection with the award and performance of any contract covered by 49 CFR 26 on the basis of race, color, sex, or national origin. In administering the Local Agency components of the DBE Program Plan, the contractor, subrecipient or subcontractor will not, directly, or through contractual or other arrangements, use criteria or methods of administration that have the effect of defeating or substantially impairing accomplishment of the objectives of the DBE Program Plan with respect to individuals of a particular race, color, sex, or national origin.

B. Contract Assurance

Under 49 CFR 26.13(b): The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR 26 in the award and administration of federal-aid contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.

C. Prompt Progress Payment

In accordance with California Business and Professions Code section 7108.5, the prime contractor or subcontractor shall pay to any subcontractor, not later than seven days after receipt of each progress payment, unless otherwise agreed to in writing, the respective amounts allowed the contractor on account of the work performed by the subcontractors, to the extent of each subcontractor's interest therein. In the event that there is a good faith dispute over all or any portion of the amount due on a progress payment from the prime contractor or subcontractor to a subcontractor, the prime contractor or subcontractor may withhold no more than 150 percent of the disputed amount. Any violation of this requirement shall constitute a cause for disciplinary action and shall subject the licensee to a penalty, payable to the subcontractor, of 2 percent of the amount due per month for every month that payment is not made.

In any action for the collection of funds wrongfully withheld, the prevailing party shall be entitled to his or her attorney's fees and costs. The sanctions authorized under this requirement shall be separate from, and in addition to, all other remedies, either civil, administrative, or criminal. This clause applies to both DBE and non-DBE subcontractors.

D. Prompt Payment of Withheld Funds to Subcontractors

The Agency may hold retainage from the prime contractor and shall make prompt and regular incremental acceptances of portions, as determined by the Agency, of the contract work, and pay retainage to the prime contractor based on these acceptances. The Agency shall designate one of the methods below in the contract to ensure prompt and full payment of any retainage kept by the prime contractor or subcontractor to a subcontractor. The Agency shall include either Method 1, Method 2, or Method 3 below and delete the other two.

Method 1: No retainage will be held by the Agency from progress payments due to the prime contractor. Prime contractors and subcontractors are prohibited from holding retainage from subcontractors. Any delay or postponement of payment may take place only for good cause and with the Agency's prior written approval. Any violation of these provisions shall subject the violating contractor or subcontractor to the penalties, sanctions, and other remedies specified in Section 7108.5 of the California Business and Professions Code and Section 10262 of the California Public Contract Code. This requirement shall not be construed to limit or impair any contractual, administrative or judicial remedies, otherwise available to the

contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the contractor, deficient subcontractor performance and/or noncompliance by a subcontractor. This clause applies to both DBE and non-DBE subcontractors.

Method 2: No retainage will be held by the Agency from progress payments due to the prime contractor. Any retainage kept by the prime contractor or by a subcontractor must be paid in full to the earning subcontractor within seven (7) days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment may take place only for good cause and with the Agency's prior written approval. Any violation of these provisions shall subject the violating contractor or subcontractor to the penalties, sanctions, and remedies specified in Section 7108.5 of the California Business and Professions Code and Section 10262 of the California Public Contract Code. This requirement shall not be construed to limit or impair any contractual, administrative or judicial remedies, otherwise available to the contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the contractor, deficient subcontractor performance and/or noncompliance by a subcontractor. This clause applies to both DBE and non-DBE subcontractors.

Method 3: The Agency shall hold retainage from the prime contractor and shall make prompt and regular incremental acceptances of portions, as determined by the Agency of the contract work and pay retainage to the prime contractor based on these acceptances. The prime contractor or subcontractor shall return all monies withheld in retention from all subcontractors within seven (7) days after receiving payment for work satisfactorily completed and accepted including incremental acceptances of portions of the contract work by the Agency. Any delay or postponement of payment may take place only for good cause and with the Agency's prior written approval. Any violation of these provisions shall subject the violating prime contractor or subcontractor to the penalties, sanctions, and other remedies specified in Section 7108.5 of the California Business and Professions Code and Section 10262 of the California Public Contract Code. This requirement shall not be construed to limit or impair any contractual, administrative or judicial remedies otherwise available to the contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the contractor; deficient subcontractor performance and/or noncompliance by a subcontractor. This clause applies to both DBE and non-DBE subcontractors.

Any violation of these provisions of Prompt Progress Payment and Prompt Payment of Withheld Funds to Subcontractors shall subject the violating prime contractor or subcontractor to the penalties, sanctions and other remedies specified therein. These requirements shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to the prime contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the prime contractor, deficient subcontract performance, or noncompliance by a subcontractor.

E. Termination and Replacement of DBE Subcontractors

The prime contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the contractor obtains the Agency's written consent. The prime contractor shall not terminate or replace a listed DBE for convenience and perform the work with their own forces or obtain materials from other sources without prior written authorization from the Agency. Unless the Agency's prior written consent is provided, the contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE on the Exhibit 15-G Construction Contract DBE Commitment form, included in the Bid.

Termination of DBE Subcontractors

After a contract with a specified DBE goal has been executed, termination of a DBE may be allowed for the following, but not limited to, justifiable reasons with prior written authorization from the Agency:

1. Listed DBE fails or refuses to execute a written contract based on plans and specifications for the project.
2. The Local Agency stipulated that a bond is a condition of executing the subcontract and the listed DBE fails to meet the Local Agency's bond requirements.
3. Work requires a contractor's license and listed DBE does not have a valid license under Contractors License Law, or is not properly registered with the California Department of Industrial Relations as a public works contractor.
4. Listed DBE fails or refuses to perform the work or furnish the listed materials (failing or refusing to

perform is not an allowable reason to remove a DBE if the failure or refusal is a result of bad faith or discrimination).

5. Listed DBE's work is unsatisfactory and not in compliance with the contract.
6. Listed DBE is ineligible to work on the project because of suspension or debarment.
7. Listed DBE becomes bankrupt or insolvent or exhibits credit unworthiness.
8. Listed DBE voluntarily withdraws with written notice from the Contract
9. Listed DBE is ineligible to receive credit for the type of work required.
10. Listed DBE owner dies or becomes disabled resulting in the inability to perform the work on the Contract.
11. The Agency determines other documented good cause.

To terminate a DBE or to terminate a portion of a DBE's work, the contractor must use the following procedures:

1. Send a written notice to the DBE of Contractor's intent to use other forces or material sources and include one or more justifiable reasons listed above. Simultaneously send a copy of this written notice to the Agency. The written notice to the DBE must request they provide any response within five (5) business days to both the Contractor and the Agency by either acknowledging their agreement or documenting their reasoning as to why the use of other forces or sources of materials should not occur.
2. If the DBE does not respond within 5 business days, Contractor may move forward with the request as if the DBE had agreed to Contractor's written notice.
3. Submit Contractor's DBE termination request by written letter to the Agency and include:
 - One or more above listed justifiable reasons along with supporting documentation.
 - Contractor's written notice to the DBE regarding the request, including proof of transmission and tracking documentation of Contractor's written notice
 - The DBE's response to Contractor's written notice, if received. If a written response was not provided, provide a statement to that effect.

The Agency shall respond in writing to Contractor's DBE termination request within 5 business days.

Replacement of DBE Subcontractors

After receiving the Agency's written authorization of DBE termination request, the Contractor must obtain the Agency's written agreement for DBE replacement. The Contractor must find or demonstrate GFEs to find qualified DBE replacement firms to perform the work to the extent needed to meet the DBE commitment.

The following procedures shall be followed to request authorization to replace a DBE firm:

1. Submit a request to replace a DBE with other forces or material sources in writing to the Agency which must include:
 - a. Description of remaining uncommitted work items made available for replacement DBE solicitation and participation.
 - b. The proposed DBE replacement firm's business information, the work they have agreed to perform, and the following:
 - Quote for bid item work and description of work to be performed
 - Proposed subcontract agreement and written confirmation of agreement to perform on the Contract
 - Revised Subcontracting Request form
 - Revised Exhibit 15-G: Construction Contract DBE Commitment
2. If Contractor has not identified a DBE replacement firm, submit documentation of the Contractor's GFEs

to use DBE replacement firms within 7 days of Agency's authorization to terminate the DBE. The Contractor may request the Agency's approval to extend this submittal period to a total of 14 days. Submit documentation of actions taken to find a DBE replacement firm, such as:

- Search results of certified DBEs available to perform the original DBE work identified and/or other work the Contractor had intended to self-perform, to the extent needed to meet the DBE commitment
- Solicitations of DBEs for performance of work identified
- Correspondence with interested DBEs that may have included contract details and requirements
- Negotiation efforts with DBEs that reflect why an agreement was not reached
- If a DBE's quote was rejected, provide Contractor's reasoning for the rejection, such as why the DBE was unqualified for the work, or why the price quote was unreasonable or excessive
- Copies of each DBE's and non-DBE's price quotes for work identified, as the Agency may contact the firms to verify solicitation efforts and determine if the DBE quotes are substantially higher
- Additional documentation that supports the GFE

The Agency shall respond in writing to the Contractor's DBE replacement request within five (5) business days. The Contractor must submit a revised Subcontracting Request form if the replacement plan is authorized by the Agency.

F. Commitment and Utilization

The Agency's DBE program must include a monitoring and enforcement mechanism to ensure that DBE commitments reconcile to DBE utilization.

The bidder shall complete and sign Exhibit 15-G: Construction Contract DBE Commitment included in the contract documents regardless of whether DBE participation is reported. The bidder shall provide written confirmation from each DBE that the DBE is participating in the Contract. LAPM Exhibit 9-I: DBE Confirmation or equivalent form and DBE's quote must be submitted. The written confirmation must be submitted no later than 4pm on the 5th day after bid opening. If a DBE is participating as a joint venture partner, the bidder shall submit a copy of the joint venture agreement.

If the DBE Commitment form, Exhibit 15-G, is not submitted with the bid, it must be completed and submitted by all bidders to the Agency within five (5) days of bid opening. If the bidder does not submit the DBE Commitment form within the specified time, the Agency will find the bidder's bid nonresponsive.

The prime contractor shall use each DBE subcontractor as listed on Exhibit 15-G: Construction Contract DBE Commitment unless they receive written authorization for a termination or replacement from the Agency.

The Agency shall request the prime contractor to:

1. Notify the Resident Engineer or Inspector of any changes to its anticipated DBE participation
2. Provide this notification before starting the affected work
3. Maintain records including:
 - Name and business address of each 1st-tier subcontractor
 - Name and business address of each DBE subcontractor, DBE vendor, and DBE trucking company, regardless of tier
 - Date of payment and total amount paid to each DBE (see Exhibit 9-F: Monthly Disadvantaged Business Enterprise Payment)

If the prime contractor is a DBE contractor, they shall include the date of work performed by their own forces and the corresponding value of the work.

Before the 15th of each month, the prime contractor shall submit a Monthly DBE Trucking Verification (LAPM Exhibit 16-Z1) form.

If a DBE is decertified before completing its work, the DBE must notify the prime contractor in writing of the decertification date. If a business becomes a certified DBE before completing its work, the business must notify the prime contractor in writing of the certification date. The prime contractor shall submit the notifications. Upon work completion, the prime contractor shall complete a Disadvantaged Business Enterprises (DBE) Certification Status Change, Exhibit 17-O, form and submit the form within 30 days of contract acceptance.

Upon work completion, the prime contractor shall complete Exhibit 17-F: Final Report – Utilization of Disadvantaged Business Enterprises (DBE), First-Tier Subcontractors and submit it within 90 days of contract acceptance. The Agency will withhold \$10,000 until the form is submitted. The Agency releases the withhold upon submission of the completed form.

G. Running Tally of Attainments

For projects awarded on or after March 1, 2020, but before September 1, 2023:

After submitting an invoice for reimbursement that includes a payment to a DBE, but no later than the 10th of the following month, the prime contractor/consultant must complete and email the Exhibit 9-F: Disadvantaged Business Enterprise Running Tally of Payments to business.support.unit@dot.ca.gov with a copy to local administering agencies.

For projects that are awarded on or after September 1, 2023:

Exhibit 9-F is no longer required. Instead, by the 15th of the month following the month of any payment(s), the prime contractor must now submit Exhibit 9-P to the Local Agency administering the contract. If the Contractor does not make any payments to subcontractors, supplier(s) and/or manufacturers they must report “no payments were made to subs this month” and write this visibly and legibly on Exhibit 9-P.

H. Commercially Useful Function

DBEs must perform a commercially useful function (CUF) under 49 CFR 26.55 when performing work or supplying materials listed on the DBE Commitment form. The DBE value of work will only count toward the DBE commitment if the DBE performs a CUF. A DBE performs a CUF when it is responsible for execution of the work on the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. If a DBE does not perform or exercise responsibility for at least 30% of the total cost of its contract with its own work force, or the DBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved, it will be presumed that the DBE is not performing a CUF. Additionally, the DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material and installing (where applicable), and paying for the material itself.

The Contractor must perform CUF evaluation for each DBE company working on a federal-aid contract, with or without a DBE goal. Perform a CUF evaluation at the beginning of the DBE's work, and continue to monitor the performance of CUF for the duration of the project.

The Contractor must provide written notification to the AGENCY at least 15 days in advance of each DBE's initial performance of work or supplying materials for the Contract. The notification must include the DBE's name, work the DBE will perform on the contract, and the location, date, and time of where their work will take place.

Within 10 (ten) days of a DBE initially performing work or supplying materials on the contract, the Contractor shall submit to the LPA the initial evaluation and validation of DBE performance of a CUF using the LAPM 9-J: Disadvantaged Business Enterprise Commercially Useful Function Evaluation. Include the following information with the submittal:

- Subcontract agreement with the DBE
- Purchase orders
- Bills of lading
- Invoices
- Proof of payment

The Contractor must monitor all DBE's performance of CUF by conducting quarterly evaluations and validations throughout their duration of work on the contract using the LAPM 9-J: DBE Commercially Useful Function Evaluation. The Contractor must submit to the AGENCY these quarterly evaluations and validations by the 5th of the month for the previous three (3) months of work.

The Contractor must notify the AGENCY immediately if the Contractor believes the DBE may not be performing a CUF.

The AGENCY will verify DBEs performance of CUF by reviewing the initial and quarterly submissions of LAPM 9-J: DBE Commercially Useful Function Evaluation, submitted supporting information, field observations, and through any additional AGENCY evaluations. The AGENCY must evaluate DBEs and their CUF performance throughout the duration of a Contract. The AGENCY will provide written notice to Contractor and DBE at least two (2) business days prior to any evaluation. The Contractor and DBE must participate in the evaluation. Upon completing the evaluation, the AGENCY must share the evaluation results with the Contractor and DBE. An evaluation could include items that must be remedied upon receipt. If the AGENCY determines the DBE is not performing a CUF the Contractor must suspend performance of the noncompliant work.

The Contractor and DBEs must submit any additional CUF related records and documents within five (5) business days of AGENCY's request such as:

- Proof of ownership or lease and rental agreements for equipment
- Tax records
- Employee rosters
- Certified payroll records
- Inventory rosters

Failure to submit required DBE Commercially Useful Function Evaluation forms or requested records and documents can result in withholding of payment for the value of work completed by the DBE.

If the Contractor and/or the AGENCY determine that a listed DBE is not performing a CUF in performance of their DBE committed work, immediately suspend performance of the noncompliant portion of the work. The AGENCY may deny payment for the noncompliant portion of the work. The AGENCY will ask the Contractor to submit a corrective action plan (CAP) to the AGENCY within five (5) days of the noncompliant CUF determination. The CAP must identify how the Contractor will correct the noncompliance findings for the remaining portion of the DBE's work. The AGENCY has five (5) days to review the CAP in conjunction with the prime contractor's review. The Contractor must implement the CAP within five (5) days of the AGENCY's approval. The AGENCY will then authorize the prior noncompliant portion of work for the DBE's committed work.

If corrective actions cannot be accomplished to ensure the DBE performs a CUF on the Contract, then the Contractor may have good cause to request termination of the DBE.

I. Use of Joint Checks

A joint check may be used between the Contractor or lower-tier subcontractor and a DBE subcontractor purchasing materials from a material supplier if the contractor obtains prior approval from the LPA for the proposed use of joint check upon submittal of the LAPM 9-K: DLA Disadvantaged Business Enterprises (DBE) Joint Check Agreement Request form.

To use a joint check, the following conditions must be met:

- All parties, including the Contractor, must agree to the use of a joint check
- Entity issuing the joint check acts solely to guarantee payment
- DBE must release the check to the material supplier
- LPA must authorize the request before implementation
- Any party to the agreement must provide requested documentation within 10 days of the LPA's request for the documentation
- Agreement to use a joint check must be short-term, not to exceed 1 year, allowing sufficient time needed to establish or increase a credit line with the material supplier

A request for a joint check agreement may be initiated by any party. If a joint check is used, the DBE remains responsible for all elements of 49 CFR 26.55(c)(1).

Failure to comply with the above requirements disqualifies DBE participation and results in no credit and no payment to the Contractor for DBE participation.

A joint check may not be used between the Contractor or subcontractor and a DBE regular dealer, bulk material supplier, manufacturer, wholesaler, broker, trucker, packager, manufacturer's representative, or other persons who arrange or expedite transactions.

2. BID OPENING

The Agency publicly opens and reads bids at the time and place shown on the Notice to Contractors.

3. BID RIGGING

The U.S. Department of Transportation (DOT) provides a toll-free hotline to report bid rigging activities. Use the hotline to report bid rigging, bidder collusion, and other fraudulent activities. The hotline number is (800) 424-9071. The service is available 24 hours 7 days a week and is confidential and anonymous. The hotline is part of the DOT's effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General.

4. CONTRACT AWARD

If the Agency awards the contract, the award is made to the lowest responsible and responsive bidder.

5. CONTRACTOR LICENSE

The Contractor must be properly licensed as a contractor from contract award through Contract acceptance (23 CFR 635.110).

6. CHANGED CONDITIONS

A. Differing Site Conditions

1. During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract, are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before the site is disturbed and before the affected work is performed.
2. Upon written notification, the engineer will investigate the conditions, and if it is determined that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding anticipated profits, will be made and the contract modified in writing accordingly. The engineer will notify the contractor of the determination whether or not an adjustment of the contract is warranted.
3. No contract adjustment which results in a benefit to the contractor will be allowed unless the contractor has provided the required written notice.
4. No contract adjustment will be allowed under this clause for any effects caused on unchanged work. *[This provision may be omitted by the Local Agency, at their option.]*

B. Suspensions of Work Ordered by the Engineer

1. If the performance of all or any portion of the work is suspended or delayed by the engineer in writing for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry) and the contractor believes that additional compensation and/or contract time is due as a result of such suspension or delay, the contractor shall submit to the engineer in writing a request for adjustment within 7 calendar days of receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment.
2. Upon receipt, the engineer will evaluate the contractor's request. If the engineer agrees that the cost and/or time required for the performance of the contract has increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the contractor, its suppliers, or subcontractors at any approved tier, and not caused by weather, the engineer will make an adjustment (excluding profit) and modify the contract in writing accordingly. The contractor will be notified of the engineer's determination whether or not an adjustment of the contract is warranted.

3. No contract adjustment will be allowed unless the contractor has submitted the request for adjustment within the time prescribed.
4. No contract adjustment will be allowed under this clause to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided or excluded under any other term or condition of this contract.

C. Significant Changes in the Character of Work

1. The engineer reserves the right to make, in writing, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project. Such changes in quantities and alterations shall not invalidate the contract nor release the surety, and the contractor agrees to perform the work as altered.
2. If the alterations or changes in quantities significantly change the character of the work under the contract, whether such alterations or changes are in themselves significant changes to the character of the work or by affecting other work cause such other work to become significantly different in character, an adjustment, excluding anticipated profit, will be made to the contract. The basis for the adjustment shall be agreed upon prior to the performance of the work. If a basis cannot be agreed upon, then an adjustment will be made either for or against the contractor in such amount as the engineer may determine to be fair and equitable.
3. If the alterations or changes in quantities do not significantly change the character of the work to be performed under the contract, the altered work will be paid for as provided elsewhere in the contract.
4. The term "significant change" shall be construed to apply only to the following circumstances:
 - When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction; or
 - When a major item of work, as defined elsewhere in the contract, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125 percent of original contract item quantity, or in case of a decrease below 75 percent, to the actual amount of work performed.

7. BEGINNING OF WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES

The Contractor shall begin work within 15 calendar days after the issuance of the Notice to Proceed.

This work shall be diligently prosecuted to completion before the expiration of 200 WORKING DAYS beginning on the fifteenth calendar day after the date shown on the Notice to Proceed.

The Contractor shall pay to the ~~City/County~~ Glenn the sum of \$ 9,500 per day, for each and every calendar days' delay in finishing the work in excess of the number of working days prescribed above.

8. BUY AMERICA

Buy America Requirements apply to steel and iron, manufactured products, and construction materials permanently incorporated into the project.

Steel and Iron Materials

All steel and iron materials must be melted and manufactured in the United States except:

1. Foreign pig iron and processed, pelletized, and reduced iron ore may be used in the domestic production of the steel and iron materials [60 Fed Reg 15478 (03/24/1995)];
2. If the total combined cost of the materials produced outside the United States does not exceed the greater of 0.1 percent of the total contract amount or \$2,500, materials produced outside the United States may be used if authorized.

Furnish steel and iron materials to be incorporated into the work with certificates of compliance and certified mill test reports. Mill test reports must indicate where the steel and iron were melted and manufactured. All melting and manufacturing processes for these materials, including an application of a coating, must occur in the United States. Coating includes all processes that protect or enhance the value of the material to which the coating is applied.

Manufactured Products

Iron and steel used in precast concrete manufactured products must meet the requirements of the above section (Steel and Iron Materials) regardless of the amount used. Iron and steel used in other manufactured products must meet the requirements of the above section (Steel and Iron Materials) if the weight of steel and iron components constitute 90 percent or more of the total weight of the manufactured product.

Construction Materials

Buy America requirements apply to the following construction materials that are or consist primarily of:

1. Non-ferrous metals
2. Plastic and polymer-based products such as:
 - 2.1 Polyvinylchloride
 - 2.2 Composite Building Materials
3. Glass
4. Fiber optic cable (including drop cable)
5. Optical fiber
6. Lumber
7. Engineered wood
8. Drywall

All manufacturing processes for these materials as defined in 2 CFR 184.6 must occur in the United States.

Where one or more of these construction materials have been combined by a manufacturer with other materials through a manufacturing process, Buy America requirements do not apply unless otherwise specified.

Furnish construction materials to be incorporated into the work with certificates of compliance with each project delivery. Manufacturer’s certificate of compliance must identify where the construction material was manufactured and attest specifically to Buy America compliance.

All manufacturing processes for these materials must occur in the United States.

Buy America requirements do not apply to the following:

1. Tools and construction equipment used in performing the work
2. Temporary work that is not incorporated into the finished project

Waivers

If Buy America waivers are granted, use the following language to include in the contract:

The following steel and iron products, manufactured products, or construction materials have received an approved Buy America waiver for this contract, and therefore, are not subject to Buy America requirements:

1. None
- ~~2. _____~~

9. QUALITY ASSURANCE

The Local Agency uses a Quality Assurance Program (QAP) to ensure a material is produced to comply with the Contract. The Local Agency may examine the records and reports of tests the prime contractor performs if they are available at the job site. Schedule work to allow time for QAP.

10. PROMPT PAYMENT

A. FROM THE AGENCY TO THE CONTRACTORS

The Local Agency shall make all project progress payment within 30 days after receipt of an undisputed and properly submitted payment request from the Contractor on a construction contract. If the Local Agency fails to pay promptly, the Local Agency shall pay interest to the Contractor, which accrues at the rate of 10 percent per annum on the principal amount of a money judgment remaining unsatisfied and pro-rated as necessary. Upon receipt of the payment request, the Local Agency shall act in accordance with both of the following:

1. The Local Agency shall review each payment request as soon as feasible after receipt to verify it is a proper payment request.
2. The Local Agency must return any payment request deemed improper by the Local Agency to the Contractor as soon as feasible, but not later than seven (7) days, after receipt. A request returned pursuant to this paragraph shall include documentation setting forth in writing the reasons why it is an improper payment request.

B. SUBMITTAL OF EXHIBIT 9-P

For projects awarded on or after September 1, 2023:

The Contractor must submit Exhibit 9-P to the Local Agency administering the contract by the 15th of the month following the month of any payment(s). If the Contractor does not make any payments to subcontractors, supplier(s) and/or manufacturers they must report "no payments were made to subs this month" and write this visibly and legibly on Exhibit 9-P.

The Local Agency must verify all Exhibit 9-P information, monitor compliance with prompt payment requirements for DBE and non-DBE firms, and address any shortfall to the DBE commitment and prompt payment issues until the end of the project. The Local Agency must email a copy of Exhibit 9-P to DBE.Forms@dot.ca.gov before the end of the month after receiving the Exhibit 9-P from the Contractor.

11. FORM FHWA-1273 REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONTRACTS

[Form FHWA-1273 must be physically inserted into the contract without modification, excluding ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS.]

*[The current version of Form FHWA-1273 is accessible at FHWA's website:
<https://www.fhwa.dot.gov/programadmin/contracts/1273/1273.pdf>]*

12. FEMALE AND MINORITY GOALS

To comply with Section II, "Nondiscrimination," of "Required Contract Provisions Federal-Aid Construction Contracts," the following are for female and minority utilization goals for Federal-aid construction contracts and subcontracts that exceed \$10,000:

The nationwide goal for female utilization is 6.9 percent.

The goals for minority utilization (45 Fed Reg 65984 (10/3/1980)) are as follows:

Contract

MINORITY UTILIZATION GOALS

| | Economic Area | Goal (Percent) |
|-----|---|----------------|
| 174 | Redding CA: Non-SMSA (Standard Metropolitan Statistical Area) Counties: CA Lassen; CA Modoc; CA Plumas; CA Shasta; CA Siskiyou; CA Tehama | 6.8 |
| 175 | Eureka, CA Non-SMSA Counties: CA Del Norte; CA Humboldt; CA Trinity | 6.6 |
| 176 | San Francisco-Oakland-San Jose, CA: SMSA Counties: 7120 Salinas-Seaside-Monterey, CA CA Monterey | 28.9 |
| | 7360 San Francisco-Oakland CA Alameda; CA Contra Costa; CA Marin; CA San Francisco; CA San Mateo | 25.6 |
| | 7400 San Jose, CA | 19.6 |
| | CA Santa Clara, CA 7485 Santa Cruz, CA | 14.9 |
| | CA Santa Cruz 7500 Santa Rosa | 9.1 |
| | CA Sonoma 8720 Vallejo-Fairfield-Napa, CA | 17.1 |
| | CA Napa; CA Solano Non-SMSA Counties: CA Lake; CA Mendocino; CA San Benito | 23.2 |
| 177 | Sacramento, CA: SMSA Counties: 6920 Sacramento, CA CA Placer; CA Sacramento; CA Yolo Non-SMSA Counties | 16.1 |
| | CA Butte; CA Colusa; CA El Dorado; CA Glenn; CA Nevada; CA Sierra; CA Sutter; CA Yuba | 14.3 |
| | Stockton-Modesto, CA: SMSA Counties: 5170 Modesto, CA CA Stanislaus | 12.3 |
| 178 | 8120 Stockton, CA CA San Joaquin | 24.3 |
| | Non-SMSA Counties CA Alpine; CA Amador; CA Calaveras; CA Mariposa; CA Merced; CA Tuolumne | 19.8 |
| 179 | Fresno-Bakersfield, CA SMSA Counties: 0680 Bakersfield, CA CA Kern | 19.1 |
| | 2840 Fresno, CA CA Fresno | 26.1 |
| | Non-SMSA Counties: CA Kings; CA Madera; CA Tulare | 23.6 |
| | | |

| | | | |
|-----|--|---|------|
| 180 | Los Angeles, CA: SMSA Counties: 0360 Anaheim-Santa Ana-Garden Grove, CA CA Orange | 11.9 | |
| | 4480 Los Angeles-Long Beach, CA CA Los Angeles | 28.3 | |
| | 6000 Oxnard-Simi Valley-Ventura, CA CA Ventura | 21.5 | |
| | 6780 Riverside-San Bernardino-Ontario, CA CA Riverside; CA San Bernardino | 19.0 | |
| | 7480 Santa Barbara-Santa Maria-Lompoc, CA CA Santa Barbara | 19.7 | |
| | Non-SMSA Counties CA Inyo; CA Mono; CA San Luis Obispo | 24.6 | |
| | 181 | San Diego, CA: SMSA Counties 7320 San Diego, CA CA San Diego | 16.9 |
| | | Non-SMSA Counties CA Imperial | 18.2 |

For the last full week of July during which work is performed under the contract, the prime contractor and each non material-supplier subcontractor with a subcontract of \$10,000 or more must complete Form FHWA PR-1391 (Appendix C to 23 CFR 230). Submit the forms by August 15.

13. TITLE VI ASSURANCES

[The U.S. Department of Transportation Order No. 1050.2A requires all federal-aid Department of Transportation contracts between an agency and a contractor to contain Appendix A and E.

Note: Appendix B only requires inclusion if the contract impacts deeds effecting or recording the transfer of real property, structures, or improvements thereon, or granting interest therein. Appendices C and D only require inclusion if the contract impacts deeds, licenses, leases, permits, or similar instruments entered into by the recipient.]

APPENDIX A

During the performance of this Agreement, the contractor, for itself, its assignees and successors in interest (hereinafter collectively referred to as CONTRACTOR) agrees as follows:

- a. Compliance with Regulations: CONTRACTOR shall comply with the regulations relative to nondiscrimination in federally assisted programs of the Department of Transportation, Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the REGULATIONS), which are herein incorporated by reference and made a part of this agreement.
- b. Nondiscrimination: CONTRACTOR, with regard to the work performed by it during the AGREEMENT, shall not discriminate on the grounds of race, color, sex, national origin, religion, age, or disability in the selection and retention of sub-applicants, including procurements of materials and leases of equipment. CONTRACTOR shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the agreement covers a program set forth in Appendix B of the Regulations.
- c. Solicitations for Sub-agreements, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by CONTRACTOR for work to be performed under a Sub- agreement, including procurements of materials or leases of equipment, each potential sub-applicant or supplier shall be notified by CONTRACTOR of the CONTRACTOR'S obligations under this Agreement and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.
- d. Information and Reports: CONTRACTOR shall provide all information and reports required by the

Regulations, or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the recipient or FHWA to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of CONTRACTOR is in the exclusive possession of another who fails or refuses to furnish this information, CONTRACTOR shall so certify to the recipient or FHWA as appropriate, and shall set forth what efforts CONTRACTOR has made to obtain the information.

- e. **Sanctions for Noncompliance:** In the event of CONTRACTOR's noncompliance with the nondiscrimination provisions of this agreement, the recipient shall impose such agreement sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:
 - i. withholding of payments to CONTRACTOR under the Agreement within a reasonable period of time, not to exceed 90 days; and/or
 - ii. cancellation, termination or suspension of the Agreement, in whole or in part.
- f. **Incorporation of Provisions:** CONTRACTOR shall include the provisions of paragraphs (1) through (6) in every sub-agreement, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto.

CONTRACTOR shall take such action with respect to any sub-agreement or procurement as the recipient or FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance, provided, however, that, in the event CONTRACTOR becomes involved in, or is threatened with, litigation with a sub-applicant or supplier as a result of such direction, CONTRACTOR may request the recipient enter into such litigation to protect the interests of the State, and, in addition, CONTRACTOR may request the United States to enter into such litigation to protect the interests of the United States.

APPENDIX B

CLAUSES FOR DEEDS TRANSFERRING UNITED STATES PROPERTY

The following clauses will be included in deeds effecting or recording the transfer of real property, structures, or improvements thereon, or granting interest therein from the United States pursuant to the provisions of Assurance 4:

NOW THEREFORE, the U.S. Department of Transportation as authorized by law and upon the condition that the recipient will accept title to the lands and maintain the project constructed thereon in accordance with Title 23 U.S.C., the regulations for the administration of the preceding statute, and the policies and procedures prescribed by the FHWA of the U.S. Department of Transportation in accordance and in compliance with all requirements imposed by Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation pertaining to and effectuating the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. § 2000d to 2000d-4), does hereby remise, release, quitclaim and convey unto the recipient all the right, title and interest of the U.S. Department of Transportation in and to said lands described in Exhibit A attached hereto and made a part hereof.

(HABENDUM CLAUSE)

TO HAVE AND TO HOLD said lands and interests therein unto the recipient and its successors forever, subject, however, to the covenants, conditions, restrictions and reservations herein contained as follows, which will remain in effect for the period during which the real property or structures are used for a purpose for which Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits and will be binding on the recipient, its successors and assigns. The recipient, in consideration of the conveyance of said lands and interest in lands, does hereby covenant and agree as a covenant running with the land for itself, its successors and assigns, that (1) no person will on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination with regard to any facility located wholly or in part on, over, or under such lands hereby conveyed [,] [and]* (2) that the recipient will use the lands and interests in lands and interest in lands so conveyed, in compliance with all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Effectuation of Title

VI of the Civil Rights Act of 1964, and as said Regulations and Acts may be amended[, and (3) that in the event of breach of any of the above-mentioned non-discrimination conditions, the Department will have a right to enter or re-enter said lands and facilities on said lands, and that above described land and facilities will thereon revert to and vest in and become the absolute property of the U.S. Department of Transportation and its assigns as such interest existed prior to this instruction].*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary in order to make clear the purpose of Title VI.)

APPENDIX C

**CLAUSES FOR TRANSFER OF REAL PROPERTY ACQUIRED OR IMPROVED UNDER THE
ACTIVITY, FACILITY, OR PROGRAM**

The following clauses will be included in deeds, licenses, leases, permits, or similar instruments entered into by the recipient pursuant to the provisions of Assurance 7(a):

A. The (grantee, lessee, permittee, etc. as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree [in the case of deeds and leases add "as a covenant running with the land"] that:

1. In the event facilities are constructed, maintained, or otherwise operated on the property described in this (deed, license, lease, permit, etc.) for a purpose for which a U.S. Department of Transportation activity, facility, or program is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee, lessee, permittee, etc.) will maintain and operate such facilities and services in compliance with all requirements imposed by the Acts and Regulations (as may be amended) such that no person on the grounds of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.

B. With respect to licenses, leases, permits, etc., in the event of breach of any of the above Non-discrimination covenants, the recipient will have the right to terminate the (lease, license, permit, etc.) and to enter, re-enter, and repossess said lands and facilities thereon, and hold the same as if the (lease, license, permit, etc.) had never been made or issued.*

C. With respect to a deed, in the event of breach of any of the above Non-discrimination covenants, the recipient will have the right to enter or re-enter the lands and facilities thereon, and the above described lands and facilities will there upon revert to and vest in and become the absolute property of the recipient and its assigns.*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

APPENDIX D

**CLAUSES FOR CONSTRUCTION/USE/ACCESS TO REAL PROPERTY ACQUIRED UNDER THE
ACTIVITY, FACILITY OR PROGRAM**

The following clauses will be included in deeds, licenses, permits, or similar instruments/agreements entered into by the recipient pursuant to the provisions of Assurance 7(b):

A. The (grantee, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, "as a covenant running with the land") that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishings of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits or, or otherwise be subjected to discrimination, (3) that the (grantee, licensee, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the Acts and Regulations, as amended, set forth in this Assurance.

B. With respect to (licenses, leases, permits, etc.) in the event of breach of any of the above of the above Non-discrimination covenants, the recipient will have the right to terminate the (license, permits, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same as if said (license, permit, etc., as appropriate) had never been made or issued.*

C. With respect to deeds, in the event of breach of any of the above Non-discrimination covenants, the recipient will there upon revert to and vest in and become the absolute property of the recipient and its assigns.

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

APPENDIX E

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities, including, but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), prohibits discrimination on the basis of sex;
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 U.S.C. § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such

programs or activities are Federally funded or not);

- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 – 12189) as implemented by Department of Transportation regulations 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

Federal Trainee Program Special Provisions
(to be used when applicable)

*
Br 11C-0015: BRLO 5911(048): 3
Br 11C-0016: BRLO 5911(047): 1
Br 11C-0017: BRLO 5911(049): 0
Br 11C-0179: BRLO 5911(050): 0

14. FEDERAL TRAINEE PROGRAM

For the Federal training program, the number of trainees or apprentices is *.

This section applies if a number of trainees or apprentices is shown on the Notice of Bidders.

As part of the prime contractor's equal opportunity affirmative action program, provide on-the-job training to develop full journeymen in the types of trades or job classifications involved.

The prime contractor has primary responsibility for meeting this training requirement.

If the prime contractor subcontracts a contract part, they shall determine how many trainees or apprentices are to be trained by the subcontractor. Include these training requirements in each subcontract.

Where feasible, 25 percent of apprentices or trainees in each occupation must be in their 1st year of apprenticeship or training.

Distribute the number of apprentices or trainees among the work classifications on the basis of the prime contractor's needs and the availability of journeymen in the various classifications within a reasonable recruitment area.

Before starting work, the prime contractor shall submit to the City/County of Glenn :

1. Number of apprentices or trainees to be trained for each classification
2. Training program to be used
3. Training starting date for each classification

The prime contractor shall obtain the City/County of Glenn approval for this submitted information before the prime contractor starts work. The City/County of Glenn credits the prime contractor for each apprentice or trainee the prime contractor employs on the job who is currently enrolled or becomes enrolled in an approved program.

The primary objective of this section is to train and upgrade minorities and women toward journeyman status. The prime contractor shall make every effort to enroll minority and women apprentices or trainees, such as conducting systematic and direct recruitment through public and private sources likely to yield minority and women apprentices or trainees, to the extent they are available within a reasonable recruitment area and show that they have made the efforts. In making these efforts, the prime contractor shall not discriminate against any applicant for training.

The prime contractor shall not employ as an apprentice or trainee an employee:

1. In any classification in which the employee has successfully completed a training course leading to journeyman status or in which the employee has been employed as a journeyman
2. Who is not registered in a program approved by the US Department of Labor, Bureau of Apprenticeship and Training

The prime contractor shall ask the employee if the employee has successfully completed a training course leading to journeyman status or has been employed as a journeyman. The prime contractor's records must show the employee's answers to the questions.

In the training program, the prime contractor shall establish the minimum length and training type for each classification. The City/County of Glenn and FHWA approves a program if one of the following is met:

1. It is calculated to:
 - Meet the equal employment opportunity responsibilities
 - Qualify the average apprentice or trainee for journeyman status in the classification involved by the end of the training period
2. It is registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, and it is administered in a way consistent with the equal employment responsibilities of Federal-aid highway construction contracts

The prime contractor shall obtain the State's approval for their training program before they start work involving the classification covered by the program.

The prime contractor shall provide training in the construction crafts, not in clerk-typist or secretarial-type positions. Training is allowed in lower-level management positions such as office engineers, estimators, and timekeepers if the training is oriented toward construction applications. Training is allowed in the laborer classification if significant and meaningful training is provided and approved by the division office. Off-site training is allowed if the training is an integral part of an approved training program and does not make up a significant part of the overall training.

The ~~City~~ County of Glenn reimburses the prime contractor 80 cents per hour of training given an employee on this contract under an approved training program:

1. For on-site training
2. For off-site training if the apprentice or trainee is currently employed on a Federal-aid project and prime contractor does at least one of the following:
 - a. Contribute to the cost of the training
 - b. Provide the instruction to the apprentice or trainee
 - c. Pay the apprentice's or trainee's wages during the off-site training period
3. If the prime contractor complies with this section.

Each apprentice or trainee must:

1. Begin training on the project as soon as feasible after the start of work involving the apprentice's or trainee's skill
2. Remain on the project as long as training opportunities exist in the apprentice's or trainee's work classification or until the apprentice or trainee has completed the training program

Furnish the apprentice or trainee a:

1. Copy of the training plan approved by the U.S. Department of Labor or a training plan for trainees approved by both Caltrans and FHWA
2. Certification showing the type and length of training satisfactorily completed

Maintain records and submit reports documenting contractor's performance under this section.

15. PROHIBITION OF CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE EQUIPMENT AND SERVICES

In response to significant national security concerns, the agency shall check the prohibited vendor list before making any telecommunications and video surveillance purchase because recipients and subrecipients of federal funds are prohibited from obligating or expending loan or grant funds to:

- Procure or obtain;
- Extend or renew a contract to procure or obtain; or
- Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

The prohibited vendors (and their subsidiaries or affiliates) are:

- Huawei Technologies Company;
- ZTE Corporation;
- Hytera Communications Corporation;
- Hangzhou Hikvision Digital Technology Company;
- Dahua Technology Company; and
- Subsidiaries or affiliates of the above-mentioned companies.

Contract

In implementing the prohibition, the agency administering loan, grant, or subsidy programs shall prioritize available funding and technical support to assist affected businesses, institutions and organizations as is reasonably necessary for those affected entities to transition from covered communications equipment and services, to procure replacement equipment and services, and to ensure that communications service to users and customers is sustained.

The contractors should furnish telecommunications and video surveillance equipment with a certificate of compliance. The certificate must state telecommunications and video surveillance equipment was not procured or obtained from manufacturers identified in the above list.

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

I. GENERAL

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work

Contract

1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

Contract

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

Contract

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act ([29 CFR part 3](#))), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act ([40 U.S.C. 3141\(2\)\(B\)](#)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in [29 CFR part 1](#), a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

Contract

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division

under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. *Fringe benefits not expressed as an hourly rate.*

Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph

Contract

2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its procurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901–3907](#).

3. Records and certified payrolls (29 CFR 5.5)

a. *Basic record requirements (1) Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) *Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) *Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(4) *Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. *Certified payroll requirements (1) Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting

agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) *Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <https://www.dol.gov/sites/dolgov/files/WHDLegacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) *Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in [29 CFR part 3](#); and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) *Use of Optional Form WH-347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

Contract

(5) *Signature.* The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification.* The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under [18 U.S.C. 1001](#) and [31 U.S.C. 3729](#).

(7) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents.* The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements.* If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under [29 CFR part 6](#) any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address

of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. *Apprentices* (1) *Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits.* Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio.* The allowable ratio of apprentices to journeymen on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates.* Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity.* The use of apprentices and journeymen under this part must be in conformity with

Contract

the equal employment opportunity requirements of Executive Order 11246, as amended, and [29 CFR part 30](#).

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, [18 U.S.C. 1001](#).

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#); or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#).

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or

Contract

mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its reprourement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901-3907](#).

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the

event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;

Contract

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and

health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

Contract

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

3. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contractor). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

Contract

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or

cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

Contract

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B)**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

BID BOOK & CONTRACT

COUNTY OF GLENN
PUBLIC WORKS AGENCY

BID
FOR

CONSTRUCTION ON COUNTY ROAD 67
BRIDGE REPLACEMENT AT BRANCH HOWARD SLOUGH
BRIDGE NO. 11C-0015, BRLO 5911 (048)
BRIDGE NO. 11C-0016, BRLO 5911 (047)
BRIDGE NO. 11C-0017, BRLO 5911 (049)
BRIDGE NO. 11C-0179, BRLO 5911 (050)

IN

GLENN COUNTY

Notice to bidders and Special Provisions dated: May 31, 2023
Project Plans approved: May 31, 2023
Standard Specifications dated: 2022
Standard Plans dated: 2022

Bid Opening Date: November 16, 2023

Bid Book

**(DO NOT DETACH)
PROPOSAL TO THE COUNTY OF GLENN
PUBLIC WORKS AGENCY
CONTRACT NO. - BRLO 5911 (047-050)**

NAME OF BIDDER _____

BUSINESS P.O. BOX _____

CITY, STATE, ZIP _____

BUSINESS STREET ADDRESS _____

(Please include even if P.O. Box used)

CITY, STATE, ZIP _____

TELEPHONE NO: AREA CODE () _____

FAX NO: AREA CODE () _____

CONTRACTOR LICENSE NO. _____

The work for which this proposal is submitted is for construction in conformance with the special provisions (including the payment of not less than the State general prevailing wage rates or Federal minimum wage rates), the project plans described below, including any addenda thereto, the contract annexed hereto, and also in conformance with Current California Department of Transportation Standard Plans, Standard Specifications, and the Labor Surcharge and Equipment Rental Rates in effect on the date the work is accomplished.

The special provisions for the work to be done are dated May 31, 2023 and are entitled:

**COUNTY OF GLENN
PUBLIC WORKS AGENCY
SPECIAL PROVISIONS, NOTICE TO BIDDERS, AND BID BOOK FOR**

*Construction on County Road 67
Bridge Replacement at Branch Howard Slough
Bridge No. 11C-0015, BRLO 5911 (048)
Bridge No. 11C-0016, BRLO 5911 (047)
Bridge No. 11C-0017, BRLO 5911 (049)
Bridge No. 11C-0179, BRLO 5911 (050)*

IN

Glenn County

The project plans for the work to be done were approved May 31, 2023 and are entitled:

**COUNTY OF GLENN
PUBLIC WORKS AGENCY
PROJECT PLANS FOR**
*Bridge Replacement at Branch Howard Slough at County Road 67
Bridge No. 11C-0015, BRLO 5911 (048)*
*Bridge Replacement at Branch Howard Slough at County Road 67
Bridge No. 11C-0016, BRLO 5911 (047)*
*Bridge Replacement at Branch Howard Slough at County Road 67
Bridge No. 11C-0017, BRLO 5911 (049)*
*Bridge Replacement at Branch Howard Slough at County Road 67
Bridge No. 11C-0179, BRLO 5911 (050)*

Bid Book

IN

Glenn County

Bids are to be submitted for the entire work. The amount of the bid for comparison purposes will be the total of all items. The bidder shall set forth for each unit basis item of work a unit price and a total for the item, and for each lump sum item a total for the item, all in clearly legible figures in the respective spaces provided for that purpose. In the case of unit basis items, the amount set forth under the "Item Total" column shall be the product of the unit price bid and the estimated quantity for the item.

In case of discrepancy between the unit price and the total set forth for a unit basis item, the unit price shall prevail, except as provided in (a) or (b), as follows:

- (a) If the amount set forth as a unit price is unreadable or otherwise unclear, or is omitted, or is the same as the amount of the entry in the item total column, then the amount set forth in the item total column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price;
- (b) (Decimal Errors) If the product of the entered unit price and the estimated quantity is exactly off by a factor of ten, one hundred, etc., or one-tenth, or one-hundredth, etc. from the entered total, the discrepancy will be resolved by using the entered unit price or item total, whichever most closely approximates percentage-wise the unit price or item total in the *COUNTY OF GLENN's* Final Estimate of cost.

If both the unit price and the item total are unreadable or otherwise unclear, or are omitted, the bid may be deemed irregular. Likewise if the item total for a lump sum item is unreadable or otherwise unclear, or is omitted, the bid may be deemed irregular unless the project being bid has only a single item and a clear, readable total bid is provided.

Symbols such as commas and dollar signs will be ignored and have no mathematical significance in establishing any unit price or item total or lump sums. Written unit prices, item totals and lump sums will be interpreted according to the number of digits and, if applicable, decimal placement. Cents symbols also have no significance in establishing any unit price or item total since all figures are assumed to be expressed in dollars and/or decimal fractions of a dollar. Bids on lump sum items shall be item totals only; if any unit price for a lump sum item is included in a bid and it differs from the item total, the items total shall prevail.

The foregoing provisions for the resolution of specific irregularities cannot be so comprehensive as to cover every omission, inconsistency, error or other irregularity which may occur in a bid. Any situation not specifically provided for will be determined in the discretion of the *COUNTY OF GLENN*, and that discretion will be exercised in the manner deemed by the *COUNTY OF GLENN* to best protect the public interest in the prompt and economical completion of the work. The decision of the *COUNTY OF GLENN* respecting the amount of a bid, or the existence or treatment of an irregularity in a bid, shall be final.

If this proposal shall be accepted and the undersigned shall fail to enter into the contract and furnish the 2 bonds in the sums required by the State Contract Act, with surety satisfactory to the *COUNTY OF GLENN*, within 8 days, not including Saturdays, Sundays and legal holidays, after the bidder has received notice from the *COUNTY OF GLENN* that the contract has been awarded, the *COUNTY OF GLENN* may, at its option, determine that the bidder has abandoned the contract, and thereupon this proposal and the acceptance thereof shall be null and void and the forfeiture of the security accompanying this proposal shall operate and the same shall be the property of the *COUNTY OF GLENN*.

The undersigned, as bidder, declares that the only persons or parties interested in this proposal as principals are those named herein; that this proposal is made without collusion with any other person, firm, or corporation; that he has carefully examined the location of the proposed work, the annexed proposed form of contract, and the plans therein referred to; and he proposes, and agrees if this proposal is accepted, that he will contract with the *COUNTY OF GLENN*, in the form of the copy of the contract annexed hereto, to provide all necessary machinery, tools, apparatus and other means of construction, and to do all the work and furnish all the materials specified in the contract, in the manner and time therein prescribed, and according to the requirements of the Engineer as therein set forth, and that he will take in full payment therefore the following prices, to wit:

Bid Book

BID ITEM LIST

| Br 11C-0015, BRLO 5911 (048) | | | | | | |
|------------------------------|-----------|--|----------|------|------------|------------|
| ITEM NO. | ITEM CODE | DESCRIPTION | QUANTITY | UNIT | UNIT PRICE | ITEM TOTAL |
| 1 | | Construction Staking | 1 | LS | | |
| 2 | 160110 | Temporary Fence (Type ESA) | 2,360 | LF | | |
| 3 | 070030 | Lead Compliance Plan | 1 | LS | | |
| 4 | 080050 | Progress Schedule (Critical Path Method) | 1 | LS | | |
| 5 | 130100 | Job Site Management | 1 | LS | | |
| 6 | 130200 | Prepare Water Pollution Control Program | 1 | LS | | |
| 7 | 130640 | Temporary Fiber Roll | 2,812 | LF | | |
| 8 | 130900 | Temporary Concrete Washout Facility | 1 | LS | | |
| 9 | 120090 | Construction Area Signs | 1 | LS | | |
| 10 | 120120 | Type III Barricade | 6 | EA | | |
| 11 | 131104 | Water Quality Monitoring Report | 12 | EA | | |
| 12 | 146001 | Contractor Supplied Biologist (Day) | 5 | DAY | | |
| 13 | 146003 | Natural Resource Protection plan | 1 | LS | | |
| 14 | 398001 | Remove Asphalt Concrete Pavement | 13,679 | SQFT | | |
| 15 | 820250 | Remove Roadside Sign | 4 | EA | | |
| 16 | 600097 | Bridge Removal | 1 | LS | | |
| 17 | 170103 | Clearing and Grubbing | 1 | LS | | |
| 18 | 190101 | Roadway Excavation | 2,042 | CY | | |
| 19 | 198010 | Imported Borrow | 53 | CY | | |
| 20 | 192020 | Structure Excavation (Type D) | 80 | CY | | |
| 21 (F) | 193003 | Structure Backfill (Bridge) | 53 | CY | | |
| 22 (F) | 204008 | Plant (Group H) | 12 | EA | | |
| 23 | 210430 | Erosion Control (Hydroseed) | 5,687 | SQFT | | |
| 24 | 220101 | Finishing Roadway | 1 | LS | | |
| 25 | 260203 | Class 2 Aggregate Base | 2,227 | CY | | |
| 26 | 390132 | Hot Mix Asphalt (Type A) | 820 | TON | | |
| 27 | 397005 | Tack Coat | 2 | TON | | |

Bid Book

| 28 | 490736 | Furnish Piling (Class 90) | 266 | LF | | |
|--|------------------|---|-----------------|-------------|-------------------|-------------------|
| 29 | 490737 | Drive Pile (Class 90) | 10 | EA | | |
| 30 | 490738 | Furnish Piling (Class 140) | 3,062 | LF | | |
| 31 | 790739 | Drive Pile (Class 140) | 75 | EA | | |
| 32 (F) | 510053 | Structural Concrete, Bridge | 62 | CY | | |
| 33 (F) | 510054 | Structural Concrete, Bridge (Polymer Fiber) | 964 | CY | | |
| 34 | 519091 | Joint Seal (MR=1 1/2") | 72 | LF | | |
| 35 (F) | 520102 | Bar Reinforcing Steel (Bridge) | 222,000 | LB | | |
| 36 (F) | 048290 | California ST-75 Bridge Rail | 1,046 | LF | | |
| 37 | 839543 | Transition Railing (Type WB-31) | 4 | EA | | |
| 38 | 820134 | Object Marker (Type P) | 4 | EA | | |
| 39 | 839584 | Alternative In-Line Terminal System | 4 | EA | | |
| 40 | 198250 | Geosynthetic Reinforcement | 93 | SY | | |
| 41 | 840505 | 6" Thermoplastic Traffic Stripe | 2,360 | LF | | |
| 42 | 840529 | 6" Thermoplastic Traffic Stripe (BROKEN 36-12) | 1,180 | LF | | |
| 43 | 999990 | Mobilization | 1 | LS | | |
| Subtotal Br 11C-0015, BRLO 5911 (048) | | | | | | |
| | | | | | | |
| Br 11C-0016, BRLO 5911 (047) | | | | | | |
| ITEM NO. | ITEM CODE | DESCRIPTION | QUANTITY | UNIT | UNIT PRICE | ITEM TOTAL |
| 44 | | Construction Staking | 1 | LS | | |
| 45 | 160110 | Temporary Fence (Type ESA) | 2,010 | LF | | |
| 46 | 070030 | Lead Compliance Plan | 1 | LS | | |
| 47 | 080050 | Progress Schedule | 1 | LS | | |
| 48 | 130100 | Job Site Management | 1 | LS | | |
| 49 | 130200 | Prepare Water Pollution Control Program | 1 | LS | | |
| 50 | 130640 | Temporary Fiber Roll | 3,060 | LF | | |
| 51 | 130900 | Temporary Concrete Washout Facility | 1 | LS | | |
| 52 | 120090 | Construction Area Signs | 1 | LS | | |
| 53 | 120120 | Type III Barricade | 6 | EA | | |
| 54 | 131104 | Water Quality Monitoring Report | 12 | EA | | |

Bid Book

| | | | | | | |
|--------|--------|---|---------|------|--|--|
| 55 | 146001 | Contractor Supplied Biologist (Day) | 5 | DAY | | |
| 56 | 146003 | Natural Resource Protection plan | 1 | LS | | |
| 57 | 398001 | Remove Asphalt Concrete Pavement | 14,811 | SQFT | | |
| 58 | 820250 | Remove Roadside Sign | 4 | EA | | |
| 59 | 141120 | Treated Wood Waste | 450 | LB | | |
| 60 | 600097 | Bridge Removal | 1 | LS | | |
| 61 | 170103 | Clearing and Grubbing | 1 | LS | | |
| 62 | 190101 | Roadway Excavation | 2,122 | CY | | |
| 63 | 198010 | Imported Borrow | 115 | CY | | |
| 64 (F) | 192020 | Structure Excavation (Type D) | 59 | CY | | |
| 65 (F) | 193003 | Structure Backfill (Bridge) | 56 | CY | | |
| 66 | 197040 | Earth Retaining Structure (Corrugated Steel Pipe) | 438 | SF | | |
| 67 | 210430 | Erosion Control (Hydroseed) | 7,969 | SQFT | | |
| 68 | 220101 | Finishing Roadway | 1 | LS | | |
| 69 | 260203 | Class 2 Aggregate Base | 2,521 | CY | | |
| 70 | 390132 | Hot Mix Asphalt (Type A) | 960 | TON | | |
| 71 | 397005 | Tack Coat | 2.00 | TON | | |
| 72 | 490736 | Furnish Piling (Class 90) | 266 | LF | | |
| 73 | 490737 | Drive Pile (Class 90) | 10 | EA | | |
| 74 | 490738 | Furnish Piling (Class 140) | 1,380 | LF | | |
| 75 | 790739 | Drive Pile (Class 140) | 35 | EA | | |
| 76 (F) | 510053 | Structural Concrete, Bridge | 67 | CY | | |
| 77 (F) | 510054 | Structural Concrete, Bridge (Polymer Fiber) | 404 | CY | | |
| 78 (F) | 520102 | Bar Reinforcing Steel (Bridge) | 104,000 | LB | | |
| 79 (F) | 048290 | California ST-75 Bridge Rail | 512.50 | LF | | |
| 80 | 839543 | Transition Railing (Type WB-31) | 4 | EA | | |
| 81 | 832007 | Midwest Guardrail System (Wood Post) | 87.50 | LF | | |
| 82 | 839576 | End Cap (Type A) | 1 | EA | | |
| 83 | 839581 | End Anchor Assembly (Type SFT) | 1 | EA | | |
| 84 | 820134 | Object Marker (Type P) | 4 | EA | | |
| 85 | 839584 | Alternative In-Line Terminal System | 3 | EA | | |

Bid Book

| 86 | 198250 | Geosynthetic Reinforcement | 125 | SY | | |
|--|------------------|---|-----------------|-------------|-------------------|-------------------|
| 87 | 840505 | 6" Thermoplastic Traffic Stripe | 1,922 | LF | | |
| 88 | 840529 | 6" Thermoplastic Traffic Stripe (BROKEN 36-12) | 993 | LF | | |
| 89 | 999990 | Mobilization | 1 | LS | | |
| Subtotal Br 11C-0016, BRLO 5911 (047) | | | | | | |
| | | | | | | |
| Br 11C-0017, BRLO 5911 (049) | | | | | | |
| ITEM NO. | ITEM CODE | DESCRIPTION | QUANTITY | UNIT | UNIT PRICE | ITEM TOTAL |
| 90 | | Construction Staking | 1 | LS | | |
| 91 | 160110 | Temporary Fence (Type ESA) | 2,135 | LF | | |
| 92 | 070030 | Lead Compliance Plan | 1 | LS | | |
| 93 | 080050 | Progress Schedule | 1 | LS | | |
| 94 | 130100 | Job Site Management | 1 | LS | | |
| 95 | 130200 | Prepare Water Pollution Control Program | 1 | LS | | |
| 96 | 130640 | Temporary Fiber Roll | 3,822 | LF | | |
| 97 | 130900 | Temporary Concrete Washout Facility | 1 | LS | | |
| 98 | 120090 | Construction Area Signs | 1 | LS | | |
| 99 | 120120 | Type III Barricade | 6 | EA | | |
| 100 | 131104 | Water Quality Monitoring Report | 12 | EA | | |
| 101 | 146001 | Contractor Supplied Biologist (Day) | 5 | DAY | | |
| 102 | 146003 | Natural Resource Protection plan | 1 | LS | | |
| 103 | 398001 | Remove Asphalt Concrete Pavement | 17,108 | SQFT | | |
| 104 | 820250 | Remove Roadside Sign | 4 | EA | | |
| 105 | 710132 | Remove Culvert | 41 | LF | | |
| 106 | 600097 | Bridge Removal | 1 | LS | | |
| 107 | 170103 | Clearing and Grubbing | 1 | LS | | |
| 108 | 190101 | Roadway Excavation | 2,580 | CY | | |
| 109 | 198010 | Imported Borrow | 185 | CY | | |
| 110 (F) | 192020 | Structure Excavation (Type D) | 92 | CY | | |
| 111 (F) | 193003 | Structure Backfill (Bridge) | 54 | CY | | |
| 112 | 204008 | Plant (Group H) | 1 | EA | | |

Bid Book

| 113 | 210430 | Erosion Control (Hydroseed) | 8,695 | SQFT | | |
|--|-------------|---|--------------------|------|------------|------------|
| 114 | 220101 | Finishing Roadway | 1 | LS | | |
| 115 | 260203 | Class 2 Aggregate Base | 3,152 | CY | | |
| 116 | 390132 | Hot Mix Asphalt (Type A) | 1,175 | TON | | |
| 117 | 397005 | Tack Coat | 2 | TON | | |
| 118 | 490736 | Furnish Piling (Class 90) | 447 238 | LF | | |
| 119 | 490737 | Drive Pile (Class 90) | 10 | EA | | |
| 120 | 490738 | Furnish Piling (Class 140) | 728 610 | LF | | |
| 121 | 790739 | Drive Pile (Class 140) | 15 | EA | | |
| 122 (F) | 510053 | Structural Concrete, Bridge | 63 | CY | | |
| 123 (F) | 510054 | Structural Concrete, Bridge (Polymer Fiber) | 191 | CY | | |
| 124 (F) | 510502 | Minor Concrete (Minor Structure) | 8 | CY | | |
| 125 (F) | 520102 | Bar Reinforcing Steel (Bridge) | 54,200 | LB | | |
| 126 (F) | 048290 | California ST-75 Bridge Rail | 268 | LF | | |
| 127 | 650416 | 24" Reinforced Concrete Pipe (Class IV) | 69 | LF | | |
| 128 | 839543 | Transition Railing (Type WB-31) | 4 | EA | | |
| 129 | 820134 | Object Marker (Type P) | 4 | EA | | |
| 130 | 839584 | Alternative In-Line Terminal System | 4 | EA | | |
| 131 | 810111 A | Survey Monument [Reset] | 1 | EA | | |
| 132 | 198250 | Geosynthetic Reinforcement | 533 | SY | | |
| 133 | 840505 | 6" Thermoplastic Traffic Stripe | 1,939 | LF | | |
| 134 | 840529 | 6" Thermoplastic Traffic Stripe (BROKEN 36-12) | 1,033 | LF | | |
| 135 | 999990 | Mobilization | 1 | LS | | |
| Subtotal Br 11C-0017, BRLO 5911 (049) | | | | | | |
| | | | | | | |
| Br 11C-0179, BRLO 5911 (050) | | | | | | |
| ITEM NO. | ITEM CODE | DESCRIPTION | QUANTITY | UNIT | UNIT PRICE | ITEM TOTAL |
| 136 | | Construction Staking | 1 | LS | | |
| 137 | 160110 | Temporary Fence (Type ESA) | 1,775 | LF | | |
| 138 | 070030 | Lead Compliance Plan | 1 | LS | | |
| 139 | 080050 | Progress Schedule | 1 | LS | | |

Bid Book

| | | | | | | |
|------------|--------|---|--------------------|------|--|--|
| 140 | 130100 | Job Site Management | 1 | LS | | |
| 141 | 130200 | Prepare Water Pollution Control Program | 1 | LS | | |
| 142 | 130640 | Temporary Fiber Roll | 3,506 | LF | | |
| 143 | 130900 | Temporary Concrete Washout Facility | 1 | LS | | |
| 144 | 120090 | Construction Area Signs | 1 | LS | | |
| 145 | 120120 | Type III Barricade | 2 | EA | | |
| 146 | 131104 | Water Quality Monitoring Report | 12 | EA | | |
| 147 | 146001 | Contractor Supplied Biologist (Day) | 5 | DAY | | |
| 148 | 146003 | Natural Resource Protection plan | 1 | LS | | |
| 149 | 398001 | Remove Asphalt Concrete Pavement | 15,149 | SQFT | | |
| 150 | 820250 | Remove Roadside Sign | 6 | EA | | |
| 151 | 141120 | Treated Wood Waste | 250 | LB | | |
| 152 | 710132 | Remove Culvert | 33 | LF | | |
| 153 | 600097 | Bridge Removal | 1 | LS | | |
| 154 | 170103 | Clearing and Grubbing | 1 | LS | | |
| 155 | 190101 | Roadway Excavation | 1,964 | CY | | |
| 156 | 198010 | Imported Borrow | 98 | CY | | |
| 157 (F) | 192020 | Structure Excavation (Type D) | 89 | CY | | |
| 158 (F) | 193003 | Structure Backfill (Bridge) | 51 | CY | | |
| 159 | 210430 | Erosion Control (Hydroseed) | 7,239 | SQFT | | |
| 160 | 220101 | Finishing Roadway | 1 | LS | | |
| 161 | 260203 | Class 2 Aggregate Base | 2,664 | CY | | |
| 162 | 390132 | Hot Mix Asphalt (Type A) | 943 | TON | | |
| 163 | 397005 | Tack Coat | 2.00 | TON | | |
| 164 | 490736 | Furnish Piling (Class 90) | 143 285 | LF | | |
| 165 | 490737 | Drive Pile (Class 90) | 10 | EA | | |
| 166 | 490738 | Furnish Piling (Class 140) | 369 238 | LF | | |
| 167 | 790739 | Drive Pile (Class 140) | 5 | EA | | |
| 168 (F) | 510053 | Structural Concrete, Bridge | 64 | CY | | |
| 169 (F) | 510054 | Structural Concrete, Bridge (Polymer Fiber) | 73 | CY | | |
| 170 (F) | 520102 | Bar Reinforcing Steel (Bridge) | 27,200 | LB | | |

Bid Book

| | | | | | | |
|--|--------|---|-------|----|--|--|
| 171 (F) | 048290 | California ST-75 Bridge Rail | 147 | LF | | |
| 172 | 650416 | 24" Reinforced Concrete Pipe (Class IV) | 42 | LF | | |
| 173 | 839543 | Transition Railing (Type WB-31) | 4 | EA | | |
| 174 | 820134 | Object Marker (Type P) | 4 | EA | | |
| 175 | 839584 | Alternative In-Line Terminal System | 4 | EA | | |
| 176 | 840505 | 6" Thermoplastic Traffic Stripe | 1,665 | LF | | |
| 177 | 840529 | 6" Thermoplastic Traffic Stripe (BROKEN 36-12) | 858 | LF | | |
| 178 | 999990 | Mobilization | 1 | LS | | |
| Subtotal Br 11C-0179, BRLO 5911 (050) | | | | | | |

TOTAL BID (ALL FOUR BRIDGES)

NOTE: "**TOTAL BID**" is only on the last page of the Bid Item List.

Contract award shall be made to the lowest "TOTAL BID" received.

Bid Book

The Bidder shall list the name and address, Contractor license number, and description of portion of work subcontracted of each subcontractor to whom the Bidder proposes to subcontract portions of the work, as required by the provisions of the Standard Specifications and of the special provisions.

LIST OF SUBCONTRACTORS

| Business Name and Location | California Contractor License Number | DIR Number | Description of Portion of Work | Bid Items Numbers | Percentage of Bid Item Subcontracted |
|----------------------------|--------------------------------------|------------|--------------------------------|-------------------|--------------------------------------|
| | | | | | |

(THE BIDDER'S EXECUTION ON THE SIGNATURE PORTION OF THIS PROPOSAL SHALL ALSO CONSTITUTE AN ENDORSEMENT AND EXECUTION OF THOSE CERTIFICATIONS WHICH ARE A PART OF THIS PROPOSAL)

EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

The bidder _____, proposed subcontractor _____, hereby certifies that he has _____, has not _____, participated in a previous contract or subcontract subject to the equal opportunity clauses, as required by Executive Orders 10925, 11114, or 11246, and that, where required, he has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b) (1)), and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally only contracts or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b) (1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

PUBLIC CONTRACT CODE

PUBLIC CONTRACT CODE SECTION 10285.1 STATEMENT

In conformance with Public Contract Code Section 10285.1 (Chapter 376, Stats. 1985), the bidder hereby declares under penalty of perjury under the laws of the State of California that the bidder has ____, has not ____ been convicted within the preceding three years of any offenses referred to in that section, including any charge of fraud, bribery, collusion, conspiracy, or any other act in violation of any state or Federal antitrust law in connection with the bidding upon, award of, or performance of, any public works contract, as defined in Public Contract Code Section 1101, with any public entity, as defined in Public Contract Code Section 1100, including the Regents of the University of California or the Trustees of the California State University. The term "bidder" is understood to include any partner, member, officer, director, responsible managing officer, or responsible managing employee thereof, as referred to in Section 10285.1.

Note: The bidder must place a checkmark after "has" or "has not" in one of the blank spaces provided. The above Statement is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Statement. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.



PUBLIC CONTRACT CODE SECTION 10162 QUESTIONNAIRE

In conformance with Public Contract Code Section 10162, the Bidder shall complete, under penalty of perjury, the following questionnaire:

Has the bidder, any officer of the bidder, or any employee of the bidder who has a proprietary interest in the bidder, ever been disqualified, removed, or otherwise prevented from bidding on, or completing a federal, state, or local government project because of a violation of law or a safety regulation?

Yes _____ No _____

If the answer is yes, explain the circumstances in the following space.

Bid Book

PUBLIC CONTRACT CODE 10232 STATEMENT

In conformance with Public Contract Code Section 10232, the Contractor, hereby states under penalty of perjury, that no more than one final unappealable finding of contempt of court by a federal court has been issued against the Contractor within the immediately preceding two-year period because of the Contractor's failure to comply with an order of a federal court which orders the Contractor to comply with an order of the National Labor Relations Board.

Note: The above Statement and Questionnaire are part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Statement and Questionnaire.
Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

Noncollusion Affidavit
(Title 23 United States Code Section 112 and
Public Contract Code Section 7106)

To the COUNTY of GLENN
PUBLIC WORKS AGENCY.

In conformance with Title 23 United States Code Section 112 and Public Contract Code 7106 the bidder declares that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Note: The above Non-collusion Affidavit is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Non-collusion Affidavit. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

DEBARMENT AND SUSPENSION CERTIFICATION

TITLE 49, CODE OF FEDERAL REGULATIONS, PART 29

The bidder, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, manager:

- is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal agency;
- has not been suspended, debarred, voluntarily excluded or determined ineligible by any Federal agency within the past 3 years;
- does not have a proposed debarment pending; and
- has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

If there are any exceptions to this certification, insert the exceptions in the following space.

Exceptions will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

Notes: Providing false information may result in criminal prosecution or administrative sanctions. The above certification is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Certification.

**NONLOBBYING CERTIFICATION
FOR FEDERAL-AID CONTRACTS**

The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in conformance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such subrecipients shall certify and disclose accordingly.

DISCLOSURE OF LOBBYING ACTIVITIES

COMPLETE THIS FORM TO DISCLOSE LOBBYING ACTIVITIES PURSUANT TO 31 U.S.C. 1352

| | | |
|---|--|---|
| <p>1. Type of Federal Action:</p> <p><input type="checkbox"/> a. contract <input type="checkbox"/> b. grant <input type="checkbox"/> c. cooperative agreement <input type="checkbox"/> d. loan <input type="checkbox"/> e. loan guarantee <input type="checkbox"/> f. loan insurance</p> | <p>2. Status of Federal Action:</p> <p><input type="checkbox"/> a. bid/offer/application <input type="checkbox"/> b. initial award <input type="checkbox"/> c. post-award</p> | <p>3. Report Type:</p> <p><input type="checkbox"/> a. initial <input type="checkbox"/> b. material change</p> <p style="text-align: right;">For Material Change Only: year _____ quarter _____ date of last report _____</p> |
| <p>4. Name and Address of Reporting Entity</p> <p><input type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier _____, if known</p> <p style="text-align: center;">Congressional District, if known</p> | <p>5. If Reporting Entity in No. 4 is Subawardee, Enter Name and Address of Prime:</p> <p style="text-align: center;">Congressional District, if known</p> | |
| <p>6. Federal Department/Agency:</p> | <p>7. Federal Program Name/Description:</p> <p style="text-align: right;">CFDA Number, if applicable _____</p> | |
| <p>8. Federal Action Number, if known:</p> | <p>9. Award Amount, if known:</p> | |
| <p>10. a. Name and Address of Lobby Entity (If individual, last name, first name, MI)</p> | <p>b. Individuals Performing Services (including address if different from No. 10a) (last name, first name, MI)</p> | |
| (attach Continuation Sheet(s) if necessary) | | |
| <p>11. Amount of Payment (check all that apply)</p> <p>\$ _____ <input type="checkbox"/> actual <input type="checkbox"/> planned</p> | <p>13. Type of Payment (check all that apply)</p> <p><input type="checkbox"/> a. retainer <input type="checkbox"/> b. one-time fee <input type="checkbox"/> c. commission <input type="checkbox"/> d. contingent fee <input type="checkbox"/> e. deferred <input type="checkbox"/> f. other, specify _____</p> | |
| <p>12. Form of Payment (check all that apply):</p> <p><input type="checkbox"/> a. cash <input type="checkbox"/> b. in-kind; specify: nature _____ value _____</p> | | |
| <p>14. Brief Description of Services Performed or to be performed and Date(s) of Service, including officer(s), employee(s), or member(s) contacted, for Payment Indicated in Item 11:</p> <p style="text-align: center;">(attach Continuation Sheet(s) if necessary)</p> | | |
| <p>15. Continuation Sheet(s) attached: Yes <input type="checkbox"/> No <input type="checkbox"/></p> | | |
| <p>16. Information requested through this form is authorized by Title 31 U.S.C. Section 1352. This disclosure of lobbying reliance was placed by the tier above when his transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to Congress semiannually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.</p> | | |
| | | <p>Signature: _____ Print Name: _____ Title: _____ Telephone No.: _____ Date: _____</p> |
| <p>Federal Use Only:</p> | | <p>Authorized for Local Reproduction Standard Form - LLL</p> |

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of covered Federal action or a material change to previous filing pursuant to title 31 U.S.C. section 1352. The filing of a form is required for such payment or agreement to make payment to lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress an officer or employee of Congress or an employee of a Member of Congress in connection with a covered Federal action. Attach a continuation sheet for additional information if the space on the form is inadequate. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence, the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a follow-up report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last, previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, state and zip code of the reporting entity. Include Congressional District if known. Check the appropriate classification of the reporting entity that designates if it is or expects to be a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the first tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in Item 4 checks "Subawardee" then enter the full name, address, city, state and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organization level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identification in item 1 (e.g., Request for Proposal (RFP) number, Invitation for Bid (IFB) number, grant announcement number, the contract grant. or loan award number, the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitments for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, state and zip code of the lobbying entity engaged by the reporting entity identified in item 4 to influenced the covered Federal action.
(b) Enter the full names of the individual(s) performing services and include full address if different from 10 (a). Enter Last Name, First Name and Middle Initial (MI).
11. Enter the amount of compensation paid or reasonably expected to be paid by the reporting entity (item 4) to the lobbying entity (item 10). Indicate whether the payment has been made (actual) or will be made (planned). Check all boxes that apply. If this is a material change report, enter the cumulative amount of payment made or planned to be made.
12. Check the appropriate box. Check all boxes that apply. If payment is made through an in-kind contribution, specify the nature and value of the in-kind payment.
13. Check the appropriate box. Check all boxes that apply. If other, specify nature.
14. Provide a specific and detailed description of the services that the lobbyist has performed or will be expected to perform and the date(s) of any services rendered. Include all preparatory and related activity not just time spent in actual contact with Federal officials. Identify the Federal officer(s) or employee(s) contacted or the officer(s) employee(s) or Member(s) of Congress that were contacted.
15. Check whether or not a continuation sheet(s) is attached.
16. The certifying official shall sign and date the form, print his/her name title and telephone number.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, D.C. 20503.

SF-LLL-Instructions Rev. 06-04-90«ENDIF»

Bid Book

Accompanying this proposal is _____

(NOTICE: INSERT THE WORDS "CASH(\$ _____)," "CASHIER'S CHECK,"
"CERTIFIED CHECK," OR "BIDDER'S BOND," AS THE CASE MAY BE.)

in amount equal to at least ten percent of the total of the bid.

The names of all persons interested in the foregoing proposal as principals are as follows:

IMPORTANT NOTICE: *If bidder or other interested person is a corporation, state legal name of corporation, also names of the president, secretary, treasurer, and manager thereof; if a copartnership, state true name of firm, also names of all individual copartners composing firm; if bidder or other interested person is an individual, state first and last names in full.*

Licensed in conformance with an act providing for the registration of Contractors,

License No. _____ Classification(s) _____

ADDENDA

This Proposal is submitted with respect to the changes to the contract included in addenda number/s

(Fill in addenda numbers if addenda have been received and insert, in this Proposal, any Engineer's Estimate sheets that were received as part of the addenda.)

By my signature on this proposal I certify, under penalty of perjury under the laws of the State of California, that the foregoing questionnaire and statements of Public Contract Code Sections 10162, 10232 and 10285.1 are true and correct and that the bidder has complied with the requirements of Section 8103 of the Fair Employment and Housing Commission Regulations (Chapter 5, Title 2 of the California Administrative Code). By my signature on this proposal I further certify, under penalty of perjury under the laws of the State of California and the United States of America, that the Noncollusion Affidavit required by Title 23 United States Code, Section 112 and Public Contract Code Section 7106; and the Title 49 Code of Federal Regulations, Part 29 Debarment and Suspension Certification are true and correct.

Date: _____



Signature and Title of Bidder

Business Address _____

Place of Business _____

Place of Residence _____

Bid Book

**COUNTY OF GLENN
PUBLIC WORKS AGENCY**

BIDDER'S BOND

We, _____
_____ as Principal, and

_____ as Surety are bound unto the County of Glenn, State of California, hereafter referred to as "Obligee", in the penal sum of ten percent (10%) of the total amount of the bid of the Principal submitted to the Obligee for the work described below, for the payment of which sum we bind ourselves, jointly and severally,

THE CONDITION OF THIS OBLIGATION IS SUCH, THAT:

WHEREAS, the Principal is submitted to the Obligee, for _____

(Copy here the exact description of work, including location as it appears on the proposal)

for which bids are to be opened at _____ on _____
(Insert place where bids will be opened) (Insert date of bid opening)

NOW, THEREFORE, if the Principal is awarded the contract and, within the time and manner required under the specifications, after the prescribed forms are presented to him for signature, enters into a written contract, in the prescribed form, in conformance with the bid, and files two bonds with the Obligee, one to guarantee faithful performance of the contract and the other to guarantee payment for labor and materials as provided by law, then this obligation shall be null and void; otherwise, it shall remain in full force.

In the event suit is brought upon this bond by the Obligee and judgment is recovered, the Surety shall pay all costs incurred by the Obligee in such suit, including a reasonable attorney's fee to be fixed by the court.

Dated: _____, 20 ____.

Principal

Surety
By _____
Attorney-in-fact

CERTIFICATE OF ACKNOWLEDGEMENT

State of California
County of Glenn SS

On this _____ day of _____ in the year 20 ____ before me
_____, personally appeared _____,
Attorney-in-fact

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to this instrument as the attorney-in-fact of _____, and acknowledged to me that he (she) subscribed the name of the said company thereto as surety, and his (her) own name as attorney-in-fact.

(SEAL)

Notary Public

Exhibit 15-G: Construction Contract DBE Commitment

1. Local Agency: _____ 2. Contract DBE Goal: _____
 3. Project Description: _____
 4. Project Location: _____
 5. Bidder's Name: _____ 6. Prime Certified DBE: 7. Bid Amount: _____
 8. Total Dollar Amount for **ALL** Subcontractors: _____ 9. Total Number of **ALL** Subcontractors: _____

| 10. Bid Item Number | 11. Description of Work, Service, or Materials Supplied | 12. NAICS or Work Category Codes | 13. DBE Certification Number | 14. DBE Contact Information (Must be certified on the date bids are opened) | 15. DBE Dollar Amount |
|---------------------|---|----------------------------------|------------------------------|---|-----------------------|
| | | | | | |
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| | | | | | |
| | | | | | |

| | | | | | |
|--|-------|--|-------|--------------------------|-------|
| Local Agency to Complete this Section upon Execution of Award | | 16. TOTAL CLAIMED DBE PARTICIPATION | | \$ 0.00 | |
| 22. Local Agency Contract Number: | _____ | IMPORTANT: Identify all DBE firms being claimed for credit, regardless of tier. Names of the First Tier DBE Subcontractors and their respective item(s) of work listed above must be consistent, where applicable with the names and items of the work in the "Subcontractor List" submitted with your bid. Written confirmation of each listed DBE is required. | | 0.00 % | |
| 23. Federal-Aid Project Number: | _____ | | | | |
| 24. Bid Opening Date: | _____ | | | | |
| 25. Contract Award Date: | _____ | | | | |
| 26. Award Amount: | _____ | Local Agency certifies that all DBE certifications are valid and information on this form is complete and accurate. | | | |
| 27. Local Agency Representative's Signature | _____ | 28. Date | _____ | 17. Preparer's Signature | _____ |
| 29. Local Agency Representative's Name | _____ | 30. Phone | _____ | 19. Preparer's Name | _____ |
| 31. Local Agency Representative's Title | _____ | | | 21. Preparer's Title | _____ |

- DISTRIBUTION: 1. Original – Local Agency
 2. Copy – Caltrans District Local Assistance Engineer (DLAE). Failure to submit to DLAE within 30 days of contract execution may result in de-obligation of federal funds on contract.
 3. Include additional copy with award package.

and

INSTRUCTIONS – CONSTRUCTION CONTRACT DBE COMMITMENT

CONTRACTOR SECTION

1. **Local Agency** - Enter the name of the local agency that is administering the contract.
2. **Contract DBE Goal** - Enter the contract DBE goal percentage as it appears on the project advertisement.
3. **Project Description** - Enter the project description as it appears on the project advertisement (Bridge Rehab, Seismic Rehab, Overlay, Widening, etc).
4. **Project Location** - Enter the project location(s) as it appears on the project advertisement.
5. **Bidder's Name** - Enter the contractor's firm name.
6. **Prime Certified DBE** - Check box if prime contractor is a certified DBE.
7. **Bid Amount** - Enter the total contract bid dollar amount for the prime contractor.
8. **Total Dollar Amount for ALL Subcontractors** – Enter the total dollar amount for all subcontracted contractors. SUM = (DBEs + all Non-DBEs). Do not include the prime contractor information in this count.
9. **Total number of ALL subcontractors** – Enter the total number of all subcontracted contractors. SUM = (DBEs + all Non-DBEs). Do not include the prime contractor information in this count.
10. **Bid Item Number** - Enter bid item number for work, services, or materials supplied to be provided.
11. **Description of Work, Services, or Materials Supplied** - Enter description of work, services, or materials to be provided. Indicate all work to be performed by DBEs including work performed by the prime contractor's own forces, if the prime is a DBE. If 100% of the item is not to be performed or furnished by the DBE, describe the exact portion to be performed or furnished by the DBE. See LAPM Chapter 9 to determine how to count the participation of DBE firms.
12. **NAICS or Work Category Codes** - Enter [NAICS or Work Category Codes from the California Unified Certification Program database](#).
13. **DBE Certification Number** - Enter the DBE's Certification Identification Number. All DBEs must be certified on the date bids are opened.
14. **DBE Contact Information** - Enter the name, address, and phone number of all DBE subcontracted contractors. Also, enter the prime contractor's name and phone number, if the prime is a DBE.
15. **DBE Dollar Amount** - Enter the subcontracted dollar amount of the work to be performed or service to be provided. Include the prime contractor if the prime is a DBE. See LAPM Chapter 9 for how to count full/partial participation.
16. **Total Claimed DBE Participation - %**: Enter the total dollar amounts entered in the "DBE Dollar Amount" column. %: Enter the total DBE participation claimed ("Total Claimed DBE Participation Dollars" divided by item "Bid Amount"). If the total % claimed is less than item "Contract DBE Goal," an adequately documented Good Faith Effort (GFE) is required (see Exhibit 15-H DBE Information - Good Faith Efforts of the LAPM).
17. **Preparer's Signature** - The person completing the DBE commitment form on behalf of the contractor's firm must sign their name.
18. **Date** - Enter the date the DBE commitment form is signed by the contractor's preparer.
19. **Preparer's Name** - Enter the name of the person preparing and signing the contractor's DBE commitment form.
20. **Phone** - Enter the area code and phone number of the person signing the contractor's DBE commitment form.
21. **Preparer's Title** - Enter the position/title of the person signing the contractor's DBE commitment form.

LOCAL AGENCY SECTION

22. **Local Agency Contract Number** - Enter the Local Agency contract number or identifier.
23. **Federal-Aid Project Number** - Enter the Federal-Aid Project Number(s).
24. **Bid Opening Date** - Enter the date contract bids were opened.
25. **Contract Award Date** - Enter the date the contract was executed.
26. **Award Amount** – Enter the contract award amount as stated in the executed contract.
27. **Local Agency Representative's Signature** - The person completing this section of the form for the Local Agency must sign their name to certify that the information in this and the Contractor Section of this form is complete and accurate.
28. **Date** - Enter the date the DBE commitment form is signed by the Local Agency Representative.
29. **Local Agency Representative's Name** - Enter the name of the Local Agency Representative certifying the contractor's DBE commitment form.
30. **Phone** - Enter the area code and phone number of the person signing the contractor's DBE commitment form.
31. **Local Agency Representative Title** - Enter the position/title of the Local Agency Representative certifying the contractor's DBE commitment form.

EXHIBIT 15-H: PROPOSER/CONTRACTOR GOOD FAITH EFFORTS

Cost Proposal Due Date _____ PE/CE

Federal-aid Project No(s). _____ Bid Opening Date _____ CON

The _____ established a Disadvantaged Business Enterprise (DBE) goal of _____ for this contract. The information provided herein shows the required good faith efforts to meet or exceed the DBE contract goal.

Proposers or bidders submit the following information to document their good faith efforts within five (5) calendar days from cost proposal due date or bid opening. Proposers and bidders are recommended to submit the following information even if the Exhibit 10-O1: Consultant Proposal DBE Commitments or Exhibit 15-G: Construction Contract DBE Commitment indicate that the proposer or bidder has met the DBE goal. This form protects the proposer's or bidder's eligibility for award of the contract if the administering agency determines that the bidder failed to meet the goal for various reasons, e.g., a DBE firm was not certified at bid opening, or the bidder made a mathematical error.

The following items are listed in the Section entitled "Submission of DBE Commitment" of the Special Provisions, **please attach additional sheets as needed:**

- A. The names and dates of each publication in which a request for DBE participation for this project was placed by the bidder (please attach copies of advertisements or proofs of publication):

| Publications | Dates of Advertisement |
|--------------|------------------------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

- B. The names and dates of written notices sent to certified DBEs soliciting bids for this project and the dates and methods used for following up initial solicitations to determine with certainty whether the DBEs were interested (please attach copies of solicitations, telephone records, fax confirmations, etc.):

| Names of DBEs Solicited | Date of Initial Solicitation | Follow Up Methods and Dates |
|-------------------------|------------------------------|-----------------------------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

- C. The items of work made available to DBE firms including those unbundled contract work items into economically feasible units to facilitate DBE participation. It is the bidder's responsibility to demonstrate that sufficient work to facilitate DBE participation in order to meet or exceed the DBE contract goal.

| Items of Work | Proposer or Bidder Normally Performs Item (Y/N) | Breakdown of Items | Amount (\$) | Percentage Of Contract |
|---------------|---|--------------------|-------------|------------------------|
| | Pick | | | |
| | Pick | | | |
| | Pick | | | |
| | Pick | | | |

- D. The names, addresses and phone numbers of rejected DBE firms, the reasons for the bidder's rejection of the DBEs, the firms selected for that work (please attach copies of quotes from the firms involved), and the price difference for each DBE if the selected firm is not a DBE:

Names, addresses and phone numbers of rejected DBEs and the reasons for the bidder's rejection of the DBEs:

Names, addresses and phone numbers of firms selected for the work above:

- E. Efforts (e.g. in advertisements and solicitations) made to assist interested DBEs in obtaining information related to the plans, specifications and requirements for the work which was provided to DBEs:

F. Efforts (e.g. in advertisements and solicitations) made to assist interested DBEs in obtaining bonding, lines of credit or insurance, necessary equipment, supplies, materials, or related assistance or services, excluding supplies and equipment the DBE subcontractor purchases or leases from the prime contractor or its affiliate:

G. The names of agencies, organizations or groups contacted to provide assistance in contacting, recruiting and using DBE firms (please attach copies of requests to agencies and any responses received, i.e., lists, Internet page download, etc.):

| Name of Agency/Organization | Method/Date of Contact | Results |
|-----------------------------|------------------------|---------|
| _____ | | |
| _____ | | |
| _____ | | |
| _____ | | |
| _____ | | |

H. Any additional data to support a demonstration of good faith efforts:

Exhibit 12-B: Bidder's List of Subcontractor (DBE and Non-DBE) - Part 1

As of March 1, 2015 Contractors (and sub-contractors) wishing to bid on public works contracts must be registered with the State Division of Industrial Relations and certified to bid on Public Works contracts. Please register at <https://www.dir.ca.gov/Public-Works/Contractor-Registration.html>. The local agency will verify registration of all contractors and subcontractors on public works projects at bid and thereafter annually to assure that yearly registration is maintained throughout the life of the project.

In accordance with Title 49, Section 26.11 of the Code of Federal Regulations, and Section 4104 of the Public Contract Code of the State of California, as amended, the following information is required for each sub-contractor who will perform work amounting to more than one half of one percent (0.5%) of the Total Base Bid or \$10,000 (whichever is greater).

| |
|-------------------------|
| FEDERAL PROJECT NUMBER: |
|-------------------------|

Photocopy this form for additional firms.

| Subcontractor Name & Location | Line Item & Description | Subcontract Amount | Percentage of Bid Item Subcontracted | Contractor License Number | DBE (Y/N) | DBE Cert Number | Annual Gross Receipts | |
|-------------------------------|-------------------------|--------------------|--------------------------------------|---------------------------|-----------|-----------------|-----------------------|----------------------|
| | | | | DIR Reg Number | | | < \$1 million | Age of Firm in years |
| NAME | | | | | | | < \$1 million | |
| | | | | | | | < \$5 million | |
| City, State | | | | | | | < \$10 million | |
| | | | | | | | < \$15 million | |
| | | | | | | | Age of Firm in years | |
| NAME | | | | | | | < \$1 million | |
| | | | | | | | < \$5 million | |
| City, State | | | | | | | < \$10 million | |
| | | | | | | | < \$15 million | |
| | | | | | | | Age of Firm in years | |
| NAME | | | | | | | < \$1 million | |
| | | | | | | | < \$5 million | |
| City, State | | | | | | | < \$10 million | |
| | | | | | | | < \$15 million | |
| | | | | | | | Age of Firm in years | |
| NAME | | | | | | | < \$1 million | |
| | | | | | | | < \$5 million | |
| City, State | | | | | | | < \$10 million | |
| | | | | | | | < \$15 million | |
| | | | | | | | Age of Firm in years | |
| NAME | | | | | | | < \$1 million | |
| | | | | | | | < \$5 million | |
| City, State | | | | | | | < \$10 million | |
| | | | | | | | < \$15 million | |
| | | | | | | | Age of Firm in years | |
| NAME | | | | | | | < \$1 million | |
| | | | | | | | < \$5 million | |
| City, State | | | | | | | < \$10 million | |
| | | | | | | | < \$15 million | |
| | | | | | | | Age of Firm in years | |
| NAME | | | | | | | < \$1 million | |
| | | | | | | | < \$5 million | |
| City, State | | | | | | | < \$10 million | |
| | | | | | | | < \$15 million | |
| | | | | | | | Age of Firm in years | |
| NAME | | | | | | | < \$1 million | |
| | | | | | | | < \$5 million | |
| City, State | | | | | | | < \$10 million | |
| | | | | | | | < \$15 million | |
| | | | | | | | Age of Firm in years | |

Distribution – Original: Local Agency File; Copy: DLAE w/Award Package

Exhibit 12-B: Bidder's List of Subcontractor (DBE and Non-DBE) - Part 2

In accordance with Title 49, Section 26 of the Code of Federal Regulations, the Bidder shall list all subcontractors who provided a quote or bid but **were not selected** to participate as a subcontractor on this project.

FEDERAL PROJECT NUMBER: _____

Photocopy this form for additional firms.

| Subcontractor Name & Location | Line Item & Description | Subcontract Amount | Percentage of Bid Item Subcontracted | Contractor License Number | DBE (Y/N) | DBE Cert Number | Annual Gross Receipts | |
|-------------------------------|-------------------------|--------------------|--------------------------------------|---------------------------|-----------|-----------------|-----------------------|---------------|
| | | | | DIR Reg Number | | | < \$1 million | < \$5 million |
| NAME | | | | | | | < \$1 million | |
| | | | | | | | < \$5 million | |
| | | | | | | | < \$10 million | |
| City, State | | | | | | | < \$15 million | |
| | | | | | | | Age of Firm in years | |
| NAME | | | | | | | < \$1 million | |
| | | | | | | | < \$5 million | |
| | | | | | | | < \$10 million | |
| City, State | | | | | | | < \$15 million | |
| | | | | | | | Age of Firm in years | |
| NAME | | | | | | | < \$1 million | |
| | | | | | | | < \$5 million | |
| | | | | | | | < \$10 million | |
| City, State | | | | | | | < \$15 million | |
| | | | | | | | Age of Firm in years | |
| NAME | | | | | | | < \$1 million | |
| | | | | | | | < \$5 million | |
| | | | | | | | < \$10 million | |
| City, State | | | | | | | < \$15 million | |
| | | | | | | | Age of Firm in years | |
| NAME | | | | | | | < \$1 million | |
| | | | | | | | < \$5 million | |
| | | | | | | | < \$10 million | |
| City, State | | | | | | | < \$15 million | |
| | | | | | | | Age of Firm in years | |
| NAME | | | | | | | < \$1 million | |
| | | | | | | | < \$5 million | |
| | | | | | | | < \$10 million | |
| City, State | | | | | | | < \$15 million | |
| | | | | | | | Age of Firm in years | |
| NAME | | | | | | | < \$1 million | |
| | | | | | | | < \$5 million | |
| | | | | | | | < \$10 million | |
| City, State | | | | | | | < \$15 million | |
| | | | | | | | Age of Firm in years | |
| NAME | | | | | | | < \$1 million | |
| | | | | | | | < \$5 million | |
| | | | | | | | < \$10 million | |
| City, State | | | | | | | < \$15 million | |
| | | | | | | | Age of Firm in years | |

Distribution – Original: Local Agency File; Copy: DLAE w/Award Package

| | | | | | | | |
|---|------------------------------------|---|------------------------------------|--|---------------------------------|---|-----------------------------------|
| CONTRACTOR NAME | | COUNTY | | ROUTE | | | |
| BUSINESS ADDRESS | | CONTRACT NUMBER | | FEDERAL-AID PROJECT NUMBER (from special provisions) | | | |
| CITY AND STATE | | ZIP CODE | | DESCRIBE WORK WHEN LESS THAN 100% OF WORK IS SUBCONTRACTED | | | |
| SUBCONTRACTORS (Name, Business Address, Phone) | CA STATE CONTRACTOR LICENSE NUMBER | PUBLIC WORKS CONTRACTOR REGISTRATION NUMBER | BID ITEM NUMBER(S) (1 per line) | PERCENTAGE OF BID ITEM SUBCONTRACTED | CHECK IF (See Categories Below) | | DOLLAR AMOUNT BASED ON BID AMOUNT |
| | | | | | 1 | 2 | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Categories: 1. Listed Under Fair Practices Act 2. Certified Disadvantaged Business Enterprise/Disabled Veteran Business Enterprise

- I certify that:
- The specifications for labor set forth in the contract apply to the subcontracted work.
 - If applicable (federal-aid projects only), Form FHWA-1273 has been inserted in the subcontracts and will be incorporated in any lower-tier subcontract.
 - Written contracts have been executed for the subcontracted work noted above.

CONTRACTOR'S SIGNATURE _____ DATE _____

This section is to be completed by the resident engineer.

- Total of bid items \$ _____
- Bid items previously subcontracted \$ _____
- Bid items subcontracted (this request) \$ _____
- Total of lines 2 and 3 \$ _____
- Maximum amount of work allowed to be subcontracted (multiply line 1 by %) _____
- Minimum amount prime contractor must perform with own forces (multiply line 1 by %) _____

APPROVED

RESIDENT ENGINEER'S SIGNATURE _____ DATE _____

Copy Distribution: Original - Contractor Copy - Resident Engineer

ADA Notice For individuals with sensory disabilities, this document is available in alternate formats. For alternate format information, contact the Forms Management Unit at (916) 445-1233, TTY 711, or write to Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

INSTRUCTIONS

All first-tier subcontractors must be included on a subcontracting request.

Before subcontracting work starts, the contractor will submit an original Form LAPM 16-B according to the *Standard Specifications*.

- Ensure all subcontractors are:
 1. Listed on the subcontractor list at the time of bid, per the Subletting and Subcontracting Fair Practice Act; OR
 2. All 1st tier subcontractors regardless of dollar value.

When an entire item is subcontracted, show the contractor's bid price.

When a portion of an item is subcontracted, describe the portion and show the percentage of the bid item and value.

- Compare line 5 to line 4. If line 5 is greater than line 4 the request can be approved.
- After approval, the resident engineer returns the original to the contractor and completes the remaining distribution as listed on the bottom of the form.
- Labor Compliance Officer to review subcontractor licensing and registration.
- Labor Compliance Officer completes PWC-100 form on California Department of Industrial Relations site for subcontractors that were not required to be listed at time of bid on the Subcontractor List form.

**THIS FORM IS NOT TO BE USED FOR SUBSTITUTIONS OF LISTED
SUBCONTRACTORS OR DISADVANTAGED BUSINESS ENTERPRISE.**

Contract

COUNTY OF GLENN

PUBLIC WORKS AGENCY

CONTRACT NO. ~~BRLO 5911 (048)~~ BRLO 5911 (047-50)

THIS AGREEMENT, made and concluded, in duplicate, _____, (DATE),
between the County of Glenn thereof, party of the first part, and

Contractor, party of the second part.

ARTICLE I.--WITNESSETH, That for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the said party of the first part, and under the conditions expressed in the 2 bonds, bearing even date with these presents, and hereunto annexed, the said party of the second part agrees with the said party of the first part, at his own proper cost and expense, to do all the work and furnish all the materials, except such as are mentioned in the specifications to be furnished by said party of the first part, necessary to construct and complete in a good, workmanlike and substantial manner and to the satisfaction of the County of Glenn, the work described in the special provisions and the project plans described below, including any addenda thereto. and also in conformance with current California Department of Transportation Standard Plans, the Standard Specifications, and the Labor Surcharge and Equipment Rental Rates in effect on the date the work is accomplished, which said special provisions, project plans, Standard Plans, Standard Specifications, and Labor Surcharge and Equipment Rental Rates are hereby specially referred to and by such reference made a part hereof.

The special provisions for the work to be done are dated May 31, 2023 and are entitled:

**COUNTY OF GLENN;
PUBLIC WORKS AGENCY
SPECIAL PROVISIONS, NOTICE TO BIDDERS, AND BID BOOK FOR**

*Construction on County Road 67
Bridge Replacement at Branch Howard Slough
Bridge No. 11C-0015, BRLO 5911 (048)
Bridge No. 11C-0016, BRLO 5911 (047)
Bridge No. 11C-0017, BRLO 5911 (049)
Bridge No. 11C-0179, BRLO 5911 (050)*

IN

GLENN COUNTY

The project plans for the work to be done were approved May 31, 2023 and are entitled:

**COUNTY OF GLENN;
PUBLIC WORKS AGENCY
PROJECT PLANS FOR**
*Bridge Replacement at Branch Howard Slough at County Road 67
Bridge No. 11C-0015, BRLO 5911 (048)
Bridge Replacement at Branch Howard Slough at County Road 67
Bridge No. 11C-0016, BRLO 5911 (047)
Bridge Replacement at Branch Howard Slough at County Road 67
Bridge No. 11C-0017, BRLO 5911 (049)
Bridge Replacement at Branch Howard Slough at County Road 67
Bridge No. 11C-0179, BRLO 5911 (050)*

Contract

IN

GLENN COUNTY

ARTICLE II.--The said party of the first part hereby promises and agrees with the said Contractor to employ, and does hereby employ, the said Contractor to provide the materials and to do the work according to the terms and conditions herein contained and referred to, for the prices hereinafter set forth, and hereby contracts to pay the same at the time, in the manner and upon the conditions herein set forth; and the said parties for themselves, their heirs, executors, administrators, successors and assigns, do hereby agree to the full performance of the covenants herein contained.

ARTICLE III.--The State general prevailing wage rates determined by the Director of Industrial Relations are hereby made a part of this contract. It is further expressly agreed by and between the parties hereto that should there be any conflict between the terms of this instrument and the bid or proposal of said Contractor, then this instrument shall control and nothing herein shall be considered as an acceptance of the said terms of said proposal conflicting herewith.

ARTICLE IV.--By my signature hereunder, as Contractor, I certify that I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for worker's compensation or to undertake self insurance in conformance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.

ARTICLE V.--And the said Contractor agrees to receive and accept the following prices as full compensation for furnishing all materials and for doing all the work contemplated and embraced in this agreement; also for all loss or damage, arising out of the nature of the work aforesaid, or from the action of the elements, or from any unforeseen difficulties or obstructions which may arise or be encountered in the prosecution of the work until its acceptance by the (*GLENN COUNTY, PUBLIC WORKS AGENCY*), and for all risks of every description connected with the work; also for all expenses incurred by or in consequence of the suspension or discontinuance of work and for well and faithfully completing the work, and the whole thereof, in the manner and according to the plans and specifications, and the requirements of the Engineer under them, to wit:

Contract

BID ITEM LIST

| Br 11C-0015, BRLO 5911 (048) | | | | | | |
|------------------------------|-----------|--|----------|------|------------|------------|
| ITEM NO. | ITEM CODE | DESCRIPTION | QUANTITY | UNIT | UNIT PRICE | ITEM TOTAL |
| 1 | | Construction Staking | 1 | LS | | |
| 2 | 160110 | Temporary Fence (Type ESA) | 2,360 | LF | | |
| 3 | 070030 | Lead Compliance Plan | 1 | LS | | |
| 4 | 080050 | Progress Schedule (Critical Path Method) | 1 | LS | | |
| 5 | 130100 | Job Site Management | 1 | LS | | |
| 6 | 130200 | Prepare Water Pollution Control Program | 1 | LS | | |
| 7 | 130640 | Temporary Fiber Optic Cable | 2,812 | LF | | |
| 8 | 130900 | Temporary Concrete Pad | 1 | LS | | |
| 9 | 120090 | Construction Area Signs | 1 | LS | | |
| 10 | 120120 | Type III Barricade | 6 | EA | | |
| 11 | 131104 | Water Quality Monitoring Report | 12 | EA | | |
| 12 | 146001 | Contractor Supplied Biologist (Day) | | DAY | | |
| 13 | 146003 | Natural Resource Protection plan | | LS | | |
| 14 | 398001 | Remove Asphalt Concrete Pavement | 13,679 | SQFT | | |
| 15 | 820250 | Remove Roadside Sign | 4 | | | |
| 16 | 600097 | Bridge Removal | 1 | LS | | |
| 17 | 170103 | Clearing and Grubbing | 1 | LS | | |
| 18 | 190101 | Roadway Excavation | 2,042 | CY | | |
| 19 | 198010 | Imported Borrow | 53 | CY | | |
| 20 | 192020 | Structure Excavation (Type D) | 80 | CY | | |
| 21 (F) | 193003 | Structure Backfill (Bridge) | 53 | CY | | |
| 22 (F) | 204008 | Plant (Group H) | 12 | EA | | |
| 23 | 210430 | Erosion Control (Hydroseed) | 5,687 | SQFT | | |
| 24 | 220101 | Finishing Roadway | 1 | LS | | |
| 25 | 260203 | Class 2 Aggregate Base | 2,227 | CY | | |
| 26 | 390132 | Hot Mix Asphalt (Type A) | 820 | TON | | |
| 27 | 397005 | Tack Coat | 2 | TON | | |

COMPLETED BID ITEM LIST TO BE INSERTED AT AWARD OF CONTRACT

Contract

| 28 | 490736 | Furnish Piling (Class 90) | 266 | LF | | |
|--|-----------|---|----------|-----|------------|------------|
| 29 | 490737 | Drive Pile (Class 90) | 10 | EA | | |
| 30 | 490738 | Furnish Piling (Class 140) | 3,062 | LF | | |
| 31 | 790739 | Drive Pile (Class 140) | 75 | EA | | |
| 32 (F) | 510053 | Structural Concrete, Bridge | 62 | CY | | |
| 33 (F) | 510054 | Structural Concrete, Bridge (Polymer Fiber) | 964 | CY | | |
| 34 | 519091 | Joint Seal (MR=1 1/2") | 72 | LF | | |
| 35 (F) | 520102 | Bar Reinforcing Steel (Bridge) | 222,000 | LB | | |
| 36 (F) | 048290 | California ST-75 L Rail | 1,046 | LF | | |
| 37 | 839543 | Transition Railing (Type 3-31) | 4 | EA | | |
| 38 | 820134 | Object Marker (Type P) | 4 | EA | | |
| 39 | 839584 | Alternative In-Line Terminal System | 4 | EA | | |
| 40 | 198250 | Geosynthetic Reinforcement | 93 | SY | | |
| 41 | 840505 | 6" Thermoplastic Traffic Stripe | 360 | LF | | |
| 42 | 840529 | 6" Thermoplastic Traffic Stripe (BROKEN 36-12) | | LF | | |
| 43 | 999990 | Mobilization | 1 | LS | | |
| Subtotal Br 11C-0015, BRLO 5911 (048) | | | | | | |
| | | | | | | |
| Br 11C-0016, BRLO 5911 (047) | | | | | | |
| ITEM NO. | ITEM CODE | DESCRIPTION | QUANTITY | UN. | UNIT PRICE | ITEM TOTAL |
| 44 | | Construction Staking | 1 | LS | | |
| 45 | 160110 | Temporary Fence (Type ESA) | 2,010 | LF | | |
| 46 | 070030 | Lead Compliance Plan | 1 | LS | | |
| 47 | 080050 | Progress Schedule | 1 | LS | | |
| 48 | 130100 | Job Site Management | 1 | LS | | |
| 49 | 130200 | Prepare Water Pollution Control Program | 1 | LS | | |
| 50 | 130640 | Temporary Fiber Roll | 3,060 | LF | | |
| 51 | 130900 | Temporary Concrete Washout Facility | 1 | LS | | |
| 52 | 120090 | Construction Area Signs | 1 | LS | | |
| 53 | 120120 | Type III Barricade | 6 | EA | | |
| 54 | 131104 | Water Quality Monitoring Report | 12 | EA | | |

COMPLETED BID ITEM LIST TO BE INSERTED AT AWARD OF CONTRACT

Contract

| | | | | | | |
|--------|--------|---|---------|------|--|--|
| 55 | 146001 | Contractor Supplied Biologist (Day) | 5 | DAY | | |
| 56 | 146003 | Natural Resource Protection plan | 1 | LS | | |
| 57 | 398001 | Remove Asphalt Concrete Pavement | 14,811 | SQFT | | |
| 58 | 820250 | Remove Roadside Sign | 4 | EA | | |
| 59 | 141120 | Treated Wood Waste | 450 | LB | | |
| 60 | 600097 | Bridge Removal | 1 | LS | | |
| 61 | 170103 | Clearing and Grubbing | 1 | LS | | |
| 62 | 190101 | Roadway Excavation | 2,122 | CY | | |
| 63 | 198010 | Imported Borrow | 115 | CY | | |
| 64 (F) | 192020 | Structure Excavation () | 59 | CY | | |
| 65 (F) | 193003 | Structure Backfill (Bridge, Earth Retaining Structure (Corrugated Steel Pipe) | 56 | CY | | |
| 66 | 197040 | Structure Backfill (Bridge, Earth Retaining Structure (Corrugated Steel Pipe) | 438 | SF | | |
| 67 | 210430 | Erosion Control (Hydroseed) | 7,969 | SQFT | | |
| 68 | 220101 | Finishing Roadway | 1 | LS | | |
| 69 | 260203 | Class 2 Aggregate Base | | CY | | |
| 70 | 390132 | Hot Mix Asphalt (Type A) | 96 | TON | | |
| 71 | 397005 | Tack Coat | 2.00 | TON | | |
| 72 | 490736 | Furnish Piling (Class 90) | 266 | | | |
| 73 | 490737 | Drive Pile (Class 90) | 10 | E | | |
| 74 | 490738 | Furnish Piling (Class 140) | 1,380 | LF | | |
| 75 | 790739 | Drive Pile (Class 140) | 35 | EA | | |
| 76 (F) | 510053 | Structural Concrete, Bridge | 67 | CY | | |
| 77 (F) | 510054 | Structural Concrete, Bridge (Polymer Fiber) | 404 | CY | | |
| 78 (F) | 520102 | Bar Reinforcing Steel (Bridge) | 104,000 | LB | | |
| 79 (F) | 048290 | California ST-75 Bridge Rail | 512.50 | LF | | |
| 80 | 839543 | Transition Railing (Type WB-31) | 4 | EA | | |
| 81 | 832007 | Midwest Guardrail System (Wood Post) | 87.50 | LF | | |
| 82 | 839576 | End Cap (Type A) | 1 | EA | | |
| 83 | 839581 | End Anchor Assembly (Type SFT) | 1 | EA | | |
| 84 | 820134 | Object Marker (Type P) | 4 | EA | | |
| 85 | 839584 | Alternative In-Line Terminal System | 3 | EA | | |

COMPLETED BID ITEM LIST TO BE INSERTED AT AWARD OF CONTRACT

Contract

| 86 | 198250 | Geosynthetic Reinforcement | 125 | SY | | |
|--|-----------|--|----------|------|------------|------------|
| 87 | 840505 | 6" Thermoplastic Traffic Stripe | 1,922 | LF | | |
| 88 | 840529 | 6" Thermoplastic Traffic Stripe (BROKEN 36-12) | 993 | LF | | |
| 89 | 999990 | Mobilization | 1 | LS | | |
| Subtotal Br 11C-0016, BRLO 5911 (047) | | | | | | |
| Br 11C-0017, BRLO 5911 (049) | | | | | | |
| ITEM NO. | ITEM CODE | DESCRIPTION | QUANTITY | UNIT | UNIT PRICE | ITEM TOTAL |
| 90 | | Construction S | 1 | LS | | |
| 91 | 160110 | Temporary Fence (1 SA) | 2,135 | LF | | |
| 92 | 070030 | Lead Compliance Plan | 1 | LS | | |
| 93 | 080050 | Progress Schedule | 1 | LS | | |
| 94 | 130100 | Job Site Management | 1 | LS | | |
| 95 | 130200 | Prepare Water Pollution Control Program | 1 | LS | | |
| 96 | 130640 | Temporary Fiber Roll | 22 | LF | | |
| 97 | 130900 | Temporary Concrete Washout Facility | | LS | | |
| 98 | 120090 | Construction Area Signs | 1 | LS | | |
| 99 | 120120 | Type III Barricade | 6 | EA | | |
| 100 | 131104 | Water Quality Monitoring Report | 12 | | | |
| 101 | 146001 | Contractor Supplied Biologist (Day) | 5 | DAY | | |
| 102 | 146003 | Natural Resource Protection plan | 1 | LS | | |
| 103 | 398001 | Remove Asphalt Concrete Pavement | 17,108 | SQFT | | |
| 104 | 820250 | Remove Roadside Sign | 4 | EA | | |
| 105 | 710132 | Remove Culvert | 41 | LF | | |
| 106 | 600097 | Bridge Removal | 1 | LS | | |
| 107 | 170103 | Clearing and Grubbing | 1 | LS | | |
| 108 | 190101 | Roadway Excavation | 2,580 | CY | | |
| 109 | 198010 | Imported Borrow | 185 | CY | | |
| 110 (F) | 192020 | Structure Excavation (Type D) | 92 | CY | | |
| 111 (F) | 193003 | Structure Backfill (Bridge) | 54 | CY | | |
| 112 | 204008 | Plant (Group H) | 1 | EA | | |

COMPLETED BID ITEM LIST TO BE INSERTED AT AWARD OF CONTRACT

Contract

| 113 | 210430 | Erosion Control (Hydroseed) | 8,695 | SQFT | | |
|--|-----------|--|----------|------|------------|------------|
| 114 | 220101 | Finishing Roadway | 1 | LS | | |
| 115 | 260203 | Class 2 Aggregate Base | 3,152 | CY | | |
| 116 | 390132 | Hot Mix Asphalt (Type A) | 1,175 | TON | | |
| 117 | 397005 | Tack Coat | 2 | TON | | |
| 118 | 490736 | Furnish Piling (Class 90) | 447 238 | LF | | |
| 119 | 490737 | Drive Pile (Class 90) | 10 | EA | | |
| 120 | 490738 | Furnish Piling (Class 140) | 728 610 | LF | | |
| 121 | 790739 | Drive Pile (Class 140) | 15 | EA | | |
| 122 (F) | 510053 | Structural Concrete, Bridge | 63 | CY | | |
| 123 (F) | 510054 | Structural Concrete, Bridge (Polymer Fiber) | 191 | CY | | |
| 124 (F) | 510502 | Minor Concrete (Minor Structure) | 8 | CY | | |
| 125 (F) | 520102 | Bar Reinforcing Steel (Bridge) | 54,200 | LB | | |
| 126 (F) | 048290 | California ST-75 Bridge Rail | 68 | LF | | |
| 127 | 650416 | 24" Reinforced Concrete Pipe (Class IV) | | LF | | |
| 128 | 839543 | Transition Railing (Type WB-31) | 4 | EA | | |
| 129 | 820134 | Object Marker (Type P) | 4 | EA | | |
| 130 | 839584 | Alternative In-Line Terminal System | 4 | | | |
| 131 | 810111 A | Survey Monument [Reset] | 1 | EA | | |
| 132 | 198250 | Geosynthetic Reinforcement | 533 | SY | | |
| 133 | 840505 | 6" Thermoplastic Traffic Stripe | 1,939 | LF | | |
| 134 | 840529 | 6" Thermoplastic Traffic Stripe (BROKEN 36-12) | 1,033 | LF | | |
| 135 | 999990 | Mobilization | 1 | LS | | |
| Subtotal Br 11C-0017, BRLO 5911 (049) | | | | | | |
| Br 11C-0179, BRLO 5911 (050) | | | | | | |
| ITEM NO. | ITEM CODE | DESCRIPTION | QUANTITY | UNIT | UNIT PRICE | ITEM TOTAL |
| 136 | | Construction Staking | 1 | LS | | |
| 137 | 160110 | Temporary Fence (Type ESA) | 1,775 | LF | | |
| 138 | 070030 | Lead Compliance Plan | 1 | LS | | |
| 139 | 080050 | Progress Schedule | 1 | LS | | |

Contract

| | | | | | | |
|---------|--------|---|---------|------|--|--|
| 140 | 130100 | Job Site Management | 1 | LS | | |
| 141 | 130200 | Prepare Water Pollution Control Program | 1 | LS | | |
| 142 | 130640 | Temporary Fiber Roll | 3,506 | LF | | |
| 143 | 130900 | Temporary Concrete Washout Facility | 1 | LS | | |
| 144 | 120090 | Construction Area Signs | 1 | LS | | |
| 145 | 120120 | Type III Barricade | 2 | EA | | |
| 146 | 131104 | Water Quality Monitoring Report | 12 | EA | | |
| 147 | 146001 | Contractor Supervised Biologist (Day) | 5 | DAY | | |
| 148 | 146003 | Natural Resource Protection plan | 1 | LS | | |
| 149 | 398001 | Remove Asphalt Concrete Pavement | 15,149 | SQFT | | |
| 150 | 820250 | Remove Roadside Sign | 6 | EA | | |
| 151 | 141120 | Treated Wood Waste | 250 | LB | | |
| 152 | 710132 | Remove Culvert | 33 | LF | | |
| 153 | 600097 | Bridge Removal | 1 | LS | | |
| 154 | 170103 | Clearing and Grubbing | | LS | | |
| 155 | 190101 | Roadway Excavation | 1,200 | CY | | |
| 156 | 198010 | Imported Borrow | 98 | CY | | |
| 157 (F) | 192020 | Structure Excavation (Type D) | 89 | CY | | |
| 158 (F) | 193003 | Structure Backfill (Bridge) | 51 | CY | | |
| 159 | 210430 | Erosion Control (Hydroseed) | 7,239 | SQFT | | |
| 160 | 220101 | Finishing Roadway | 1 | LS | | |
| 161 | 260203 | Class 2 Aggregate Base | 2,664 | CY | | |
| 162 | 390132 | Hot Mix Asphalt (Type A) | 943 | TON | | |
| 163 | 397005 | Tack Coat | 2.00 | TON | | |
| 164 | 490736 | Furnish Piling (Class 90) | 143 285 | LF | | |
| 165 | 490737 | Drive Pile (Class 90) | 10 | EA | | |
| 166 | 490738 | Furnish Piling (Class 140) | 369 238 | LF | | |
| 167 | 790739 | Drive Pile (Class 140) | 5 | EA | | |
| 168 (F) | 510053 | Structural Concrete, Bridge | 64 | CY | | |
| 169 (F) | 510054 | Structural Concrete, Bridge (Polymer Fiber) | 73 | CY | | |
| 170 (F) | 520102 | Bar Reinforcing Steel (Bridge) | 27,200 | LB | | |

COMPLETED BID ITEM LIST TO BE INSERTED AT AWARD OF CONTRACT

Contract

| | | | | | | |
|---|--------|---|-------|----|--|--|
| 171 (F) | 048290 | California ST-75 Bridge Rail | 147 | LF | | |
| 172 | 650416 | 24" Reinforced Concrete Pipe (Class IV) | 42 | LF | | |
| 173 | 839543 | Transition Railing (Type WB-31) | 4 | EA | | |
| 174 | 820134 | Object Marker (Type P) | 4 | EA | | |
| 175 | 839584 | Alternative In-Line Terminal System | 4 | EA | | |
| 176 | 840505 | 6" Thermoplastic Traffic Stripe | 1,665 | LF | | |
| 177 | 840529 | 6" Thermoplastic Traffic Stripe (BROKEN 36-12) | 858 | LF | | |
| 178 | 999990 | Mobilization | 1 | LS | | |
| Subtotal Br 11C-0179, O 5911 (050) | | | | | | |

TOTAL BID (ALL FOUR BRIDGES)

NOTE: "TOTAL BID" is only on the last page of the Bid Item List.
 Contract award shall be made to the lowest "TOTAL BID" received.

COMPLETED BID ITEM LIST TO BE INSERTED AT AWARD OF CONTRACT

Contract

IN WITNESS WHEREOF, The parties to these presents have here-unto set their hands the year and date first above written

**COUNTY OF GLENN
PUBLIC WORKS AGENCY**

By _____
Authorized Local Agency Representative

Contractor

By _____

Licensed in accordance with
an act providing for the
registration of contractors,

License No. _____

Federal Employer Identification

Number _____

Approved and certified as being in conformance with the requirements of the State Contract Act.

Attorney, County of Glenn

Approved Effective _____

Contract

COUNTY OF GLENN
PUBLIC WORKS AGENCY

SAMPLE PAYMENT BOND

(Section 3247, Civil Code)

WHEREAS, The County of Glenn, acting by and through the Public Works Agency, hereafter referred to as "Obligee", has awarded to Contractor _____, hereafter designated as the "Principal", a contract for the work described as follows:

AND WHEREAS, said Principal is required to furnish a bond in connection with said contract, to secure the payment of claims of laborers, mechanics, materialmen and other persons as provided by law.

NOW, THEREFORE, we the undersigned Principal and Surety are bound unto the Obligee in the sum of _____ dollars (\$ _____), for which payment, we bind ourselves, jointly and severally.

THE CONDITION OF THIS OBLIGATION IS SUCH,

That if said Principal or its subcontractors shall fail to pay any of the persons named in Civil Code Section 3181, or amounts due under the Unemployment Insurance Code with respect to work or labor performed by such claimant, or any amounts required to be deducted, withheld, and paid over to the Franchise Tax Board for the wages of employees of the Principal and his subcontractors pursuant to Section 18806 of the Revenue and Taxation Code, with respect to such work and labor, that the surety herein will pay for the same in an amount not exceeding the sum specified in this bond, otherwise the above obligation shall be void. In case suit is brought upon this bond, the surety will pay a reasonable attorney's fee to be fixed by the court. This bond shall inure to the benefit of any of the persons named in Civil Code Section 3181 as to give a right of action to such persons or their assigns in any suit brought upon this bond.

Dated: _____, 20 ____

Correspondence or claims relating to this bond should be sent to the surety at the following address:

Principal

Surety (SEAL)

By : Attorney-in-Fact

NOTE: Signatures of those executing for the surety must be properly acknowledged.

CERTIFICATE OF ACKNOWLEDGEMENT

State of California
County of Glenn SS

On this _____ day of _____ in the year 20 ____ before me _____, personally appeared _____, personally known to me (or proved to me

Attorney-in-fact

on the basis of satisfactory evidence) to be the person whose name is subscribed to this instrument as the attorney-in-fact of _____ and acknowledged to me that he/she subscribed the name of the said company thereto as surety, and his/her own name as attorney-in-fact.

(SEAL)

Notary Public

Contract

COUNTY OF GLENN
PUBLIC WORKS AGENCY

SAMPLE PERFORMANCE BOND

(To Accompany Contract)

Bond No. _____

WHEREAS, the County of Glenn, acting by and through the Public Works Agency, has awarded to Contractor _____, hereafter designated as the "Contractor", a contract for the work described as follows:

AND WHEREAS, the Contractor is required to furnish a bond in connection with said contract, guaranteeing the faithful performance thereof:

NOW, THEREFORE, we the undersigned Contractor and Surety are held firmly bound to the County of Glenn in the sum of \$ _____ dollars (\$ _____), to be paid to said County or its certain attorney, its successors and assigns: for which payment, well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors or assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH,

That if the above bound Contractor, its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the foregoing contract and any alteration thereof made as therein provided, on his or their part to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning, and shall indemnify and save harmless the County of Glenn, its officers and agents, as therein stipulated, then this obligation shall become and be null and void; otherwise it shall be and remain in full force and virtue.

IN WITNESS WHEREOF, We have hereunto set our hands and seals on this _____ day of _____, 20__.

Correspondence or claims relating to this bond should be sent to the surety at the following address:

Contractor

Name of Surety (SEAL)

By : Attorney-in-Fact

NOTE: Signatures of those executing for the surety must be properly acknowledged.

CERTIFICATE OF ACKNOWLEDGEMENT

State of California, County of Glenn SS

On this _____ day of _____ in the year 20 ____ before me _____, a notary public in and for the City / County of _____, personally appeared _____, known to me to be the person whose name is subscribed to this

Attorney-in-fact

instrument and known to me to be the attorney-in-fact of _____ and acknowledged to me that he/she subscribed the name of the said company thereto as surety, and his/her own name as attorney-in-fact.

(SEAL)

NOTARY PUBLIC

Contract

FEDERAL MINIMUM WAGE RATES

Refer to the DOL Homepage on the internet for the current rates at <https://sam.gov/content/wage-determinations> or contact your District Local Assistance Engineer for a hard copy.

FOUNDATION REPORT

Bridge Replacement County Road 67 Bridge Nos. 11C-0015, 11C-0016, 11C-0017 & 11C-0179 County of Glenn, California

| Dist | Co | Rte | PM | EA |
|------|-----|-----|----|----|
| 03 | GLE | 67 | | |



1515 South Sunkist Street, Suite E
Anaheim, CA 92806
Tel - (714) 634-3318
Fax - 714.634.3372

October 12, 2012
Project Nos. 100955-1004 to 100958-1004

Report Prepared By:
WILLDAN GEOTECHNICAL

Girish Agrawal

Girish Agrawal 10/12/12
Principal Engineer
C 53867, GE 2478 Exp. 12/31/13
Originator



Ross Khiabani

Ross Khiabani 10/12/12
Director of Geotechnical Services
C 37156, GE 2202 Exp. 6/30/14
Technical Reviewer

October 12, 2012

Willdan Project Nos. 100955-1004 to 100958-1004

Mr. Gary Gordon
Willdan Engineering
2400 Washington Avenue, Suite 101
Redding, California 96001-2839

Subject: Foundation Report
Bridge Replacement
County Road 67 Bridge Nos. 11C-0015, 11C-0016, 11C-0017 & 11C-0179
County of Glenn, California

Dear Mr. Gordon:

Willdan Geotechnical is pleased to submit this Foundation Report for the proposed County Road 67 Bridge Replacement project for bridge nos. 11C-0015, 11C-0016, 11C-0017 and 11C-0179. The four (4) subject bridges are located approximately 17 miles southeast of the City of Willows in Glenn County, California.

This report presents a summary of our geotechnical investigation for the project, foundation recommendations for the new bridges and associated improvements, and a discussion on construction considerations pertaining to geotechnical aspects of this project.

As requested by you, this report has been written per the requirements of the Caltrans "Foundation Report Preparation for Bridges," 2009 Edition. The Log of Test Borings associated with this report, included herein as Appendix A, has been developed to meet the requirements of the Caltrans "Soil and Rock Logging, Classification, and Presentation Manual," 2010 Edition.

It is a pleasure to be of service to you on this project. Should you have any questions regarding the contents of this report, or should you require additional information, please contact us.

Respectfully submitted,

WILLDAN GEOTECHNICAL

Girish Agrawal



Girish Agrawal JD, PhD, PE, GE
Principal Engineer
C 53867, GE 2478
Originator

Ross Khiabani

Ross Khiabani, PE, GE
President
C 37156, GE 2202
Technical Reviewer

Distribution: Addressee

TABLE OF CONTENTS

| <u>Section</u> | <u>Page</u> |
|--|-------------|
| 1.0 PROJECT APPROACH AND OBJECTIVES..... | 1 |
| 2.0 PROJECT DESCRIPTION AND SITE LOCATION | 1 |
| 3.0 REGIONAL GEOLOGY AND SITE SUBSURFACE CONDITIONS..... | 1 |
| 3.1 REGIONAL GEOLOGY | 1 |
| 3.2 FIELD INVESTIGATION AND LABORATORY TESTING..... | 7 |
| 3.3 SOIL PROFILE AND SUBSURFACE CONDITIONS | 10 |
| 3.4 GROUNDWATER | 13 |
| 4.0 AS-BUILT DATA | 15 |
| 5.0 SEISMICITY AND FAULTING..... | 16 |
| 5.1 CALTRANS SEISMIC DESIGN CRITERIA..... | 17 |
| 6.0 LIQUEFACTION | 17 |
| 7.0 SLOPE STABILITY..... | 19 |
| 8.0 SCOUR..... | 19 |
| 9.0 CORROSION..... | 19 |
| 10.0 FOUNDATION RECOMMENDATIONS..... | 21 |
| 10.1 SHALLOW FOOTINGS..... | 21 |
| 10.2 DRILLED PILES..... | 21 |
| 10.3 DRIVEN PILES | 21 |
| 10.3.1 PILE TIP ELEVATIONS TO ACHIEVE DESIRED AXIAL CAPACITIES | 22 |
| 10.3.2 PILE SETTLEMENT..... | 22 |
| 10.3.3 PILE SPACING..... | 23 |
| 10.3.4 PILE LATERAL CAPACITIES..... | 23 |
| 10.3.5 LATERAL LOAD RESISTANCE OF PILE CAP | 23 |
| 10.4 FOUNDATIONS FOR ABUTMENT WING WALLS & RETAINING WALLS | 24 |
| 10.5 LATERAL PRESSURE BEHIND ABUTMENTS..... | 24 |
| 10.6 LATERAL PRESSURE BEHIND WING WALLS/RETAINING WALLS..... | 24 |
| 11.0 APPROACH ROAD PAVEMENT | 26 |
| 11.1 PAVEMENT DESIGN..... | 26 |
| 11.2 PAVEMENT MATERIALS AND PLACEMENT..... | 26 |



TABLE OF CONTENTS (Cont'd)

| <u>Section</u> | <u>Page</u> |
|--|--------------------|
| 12.0 EARTHWORK RECOMMENDATIONS..... | 27 |
| 12.1 UTILITY TRENCH BEDDING AND BACKFILL..... | 28 |
| 13.0 CONSTRUCTION RECOMMENDATIONS | 29 |
| 14.0 LIMITATIONS..... | 30 |
| 15.0 REFERENCES..... | 31 |

| <u>List of Tables</u> | <u>Page</u> |
|--|--------------------|
| Table 1 Exploratory Boring & Sounding Information | 9 |
| Table 2 Idealized Soil Profile and Strength Parameters (Bridge No. 11C-0015) | 10 |
| Table 3 Idealized Soil Profile and Strength Parameters (Bridge No. 11C-0016) | 11 |
| Table 4 Idealized Soil Profile and Strength Parameters (Bridge No. 11C-0017) | 11 |
| Table 5 Idealized Soil Profile and Strength Parameters (Bridge No. 11C-0179) | 12 |
| Table 6 Existing Bridge Location and Structure Summary | 15 |
| Table 7 Major Faults Within 100 kms (≈62 miles) of the Project Site | 16 |
| Table 8 Summary of Seismic Information for Controlling Fault | 17 |
| Table 9 Soil Corrosion Test Summary | 20 |
| Table 10 Proposed Pile Data Table | 22 |
| Table 11 Summary of Lateral Load/Resistance Factors | 25 |
| Table 12 Recommended Approach Road Flexible Pavement Structural Sections (Design R-Value = 5) | 26 |

| <u>List of Figures</u> | |
|---|----|
| Figure 1 Site Location Map | 2 |
| Figure 2(a) Boring Location Plan | 3 |
| Figure 2(b) Boring Location Plan | 4 |
| Figure 2(c) Boring Location Plan | 5 |
| Figure 2(d) Boring Location Plan | 6 |
| Figure 3 Subsurface Profile along CR 67..... | 14 |
| Figure 4 Design Acceleration Response Spectra (ARS) | 18 |



TABLE OF CONTENTS (Cont'd)

| <u>Section</u> | <u>Page</u> |
|--------------------------|---|
| <u>Appendices</u> | |
| Appendix A | Log of Test Borings |
| Appendix B | Laboratory Test Results |
| Appendix C | Liquefaction Potential Assessment |
| Appendix D | Pile Vertical Load Capacity versus Depth Curves |
| Appendix E | Photographs of Existing County Road 67 Bridges Over Howard Slough on March 13 & 14, 2012 |



1.0 PROJECT APPROACH AND OBJECTIVES

This Foundation Report (FR) presents foundation recommendations for the proposed replacement of County Road 67 Bridge Nos. 11C-0015, 11C-0016, 11C-0017 & 11C-0179, in Glenn County, California. The report also summarizes the site subsurface conditions and discusses the site seismicity and liquefaction potential.

Foundation Recommendations have been developed using the current Caltrans Foundation Report Preparation for Bridges (Caltrans 2009a) and seismic design parameters based on Caltrans Seismic Design Criteria, Version 1.6 (2009b).

2.0 PROJECT DESCRIPTION AND SITE LOCATION

The four (4) bridges to be replaced along County Road 67 are located one after the other, with the mid-point of the group located approximately 17 miles southeast of the City of Willows. The latitude and longitude at said mid-point is 39.42016° N and 121.90038° W, respectively. The location of the project site is shown on Figure 1, Site Location Map. The vertical datum used to reference the elevations in this report and the associated drawings/figures is NAVD88 and the horizontal datum is NAD83.

The existing bridges vary in size and structure type. Available information about these bridges is summarized as Table 6 in Section 4, As-Built Data. Based on visual observations, the abutments and piers of all four (4) bridges appear to be founded on shallow footings.

The project entails construction of replacement bridges in the same locations as the existing bridges. It is anticipated that the crossing alignments will also remain unchanged. All four (4) of the proposed replacement bridges are two-lane structures. The preliminary pier and span configurations are shown on Figures 2(a) through 2(d), Boring Location Plan.

3.0 REGIONAL GEOLOGY AND SITE SUBSURFACE CONDITIONS

3.1 Regional Geology

The project site is located along the western margin of the Sacramento Valley, near the boundary of the Great Valley and Coast Ranges Geomorphic Province of California. The western margin of the Sacramento Valley in the site area is bound by Cretaceous Period (\approx 136 million to 65 million years before present) marine sedimentary rocks of the Coast Ranges Geomorphic Province. This



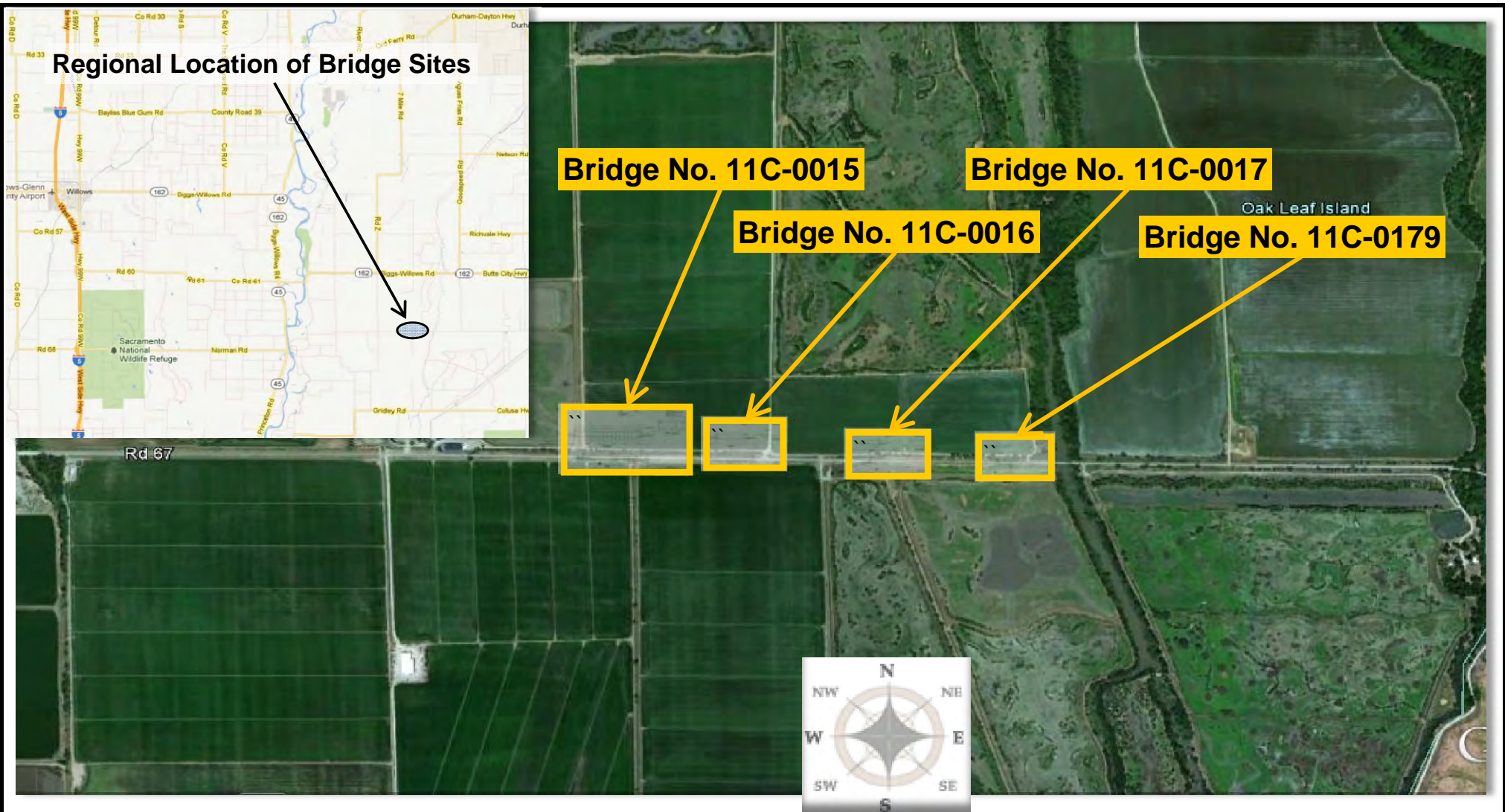


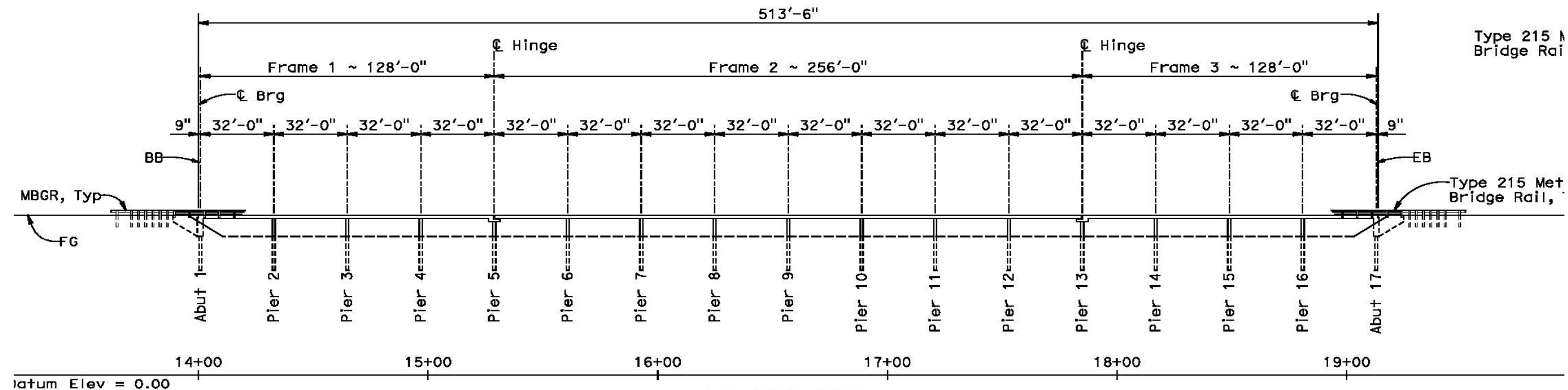
FIGURE 1. SITE LOCATION MAP

Bridge Replacement
Bridge Nos. 11C-0015, 11C-0016, 11C-0017 & 11C-0179
 Road 67, Glenn County, California

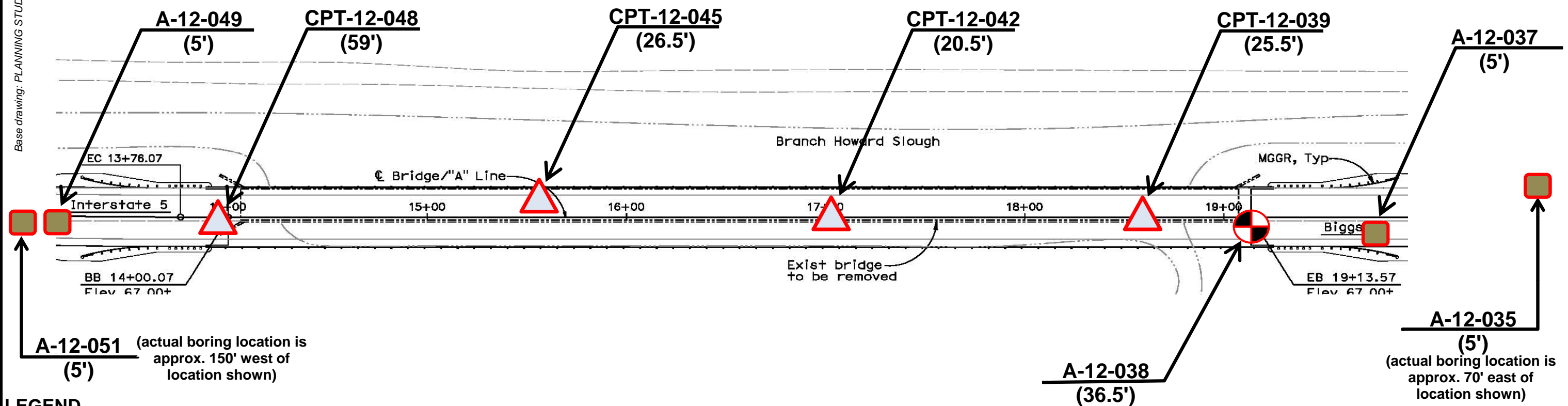


| | |
|-----------------|------------------------------|
| Drawn By: GA | Date: 14-Sep-2012 |
| Approved By: RK | Project Nos. 100955/56/57/58 |

Base drawing: PLANNING STUDY DRAWING PROVIDED BY WILLDAN ENGINEERING, DATED 2 March 2012



ELEVATION



LEGEND

- CPT Sounding -- No. & Depth
- HSA Boring -- No. & Depth
- Pavement Subgrade Bulk Sample -- No. & Depth



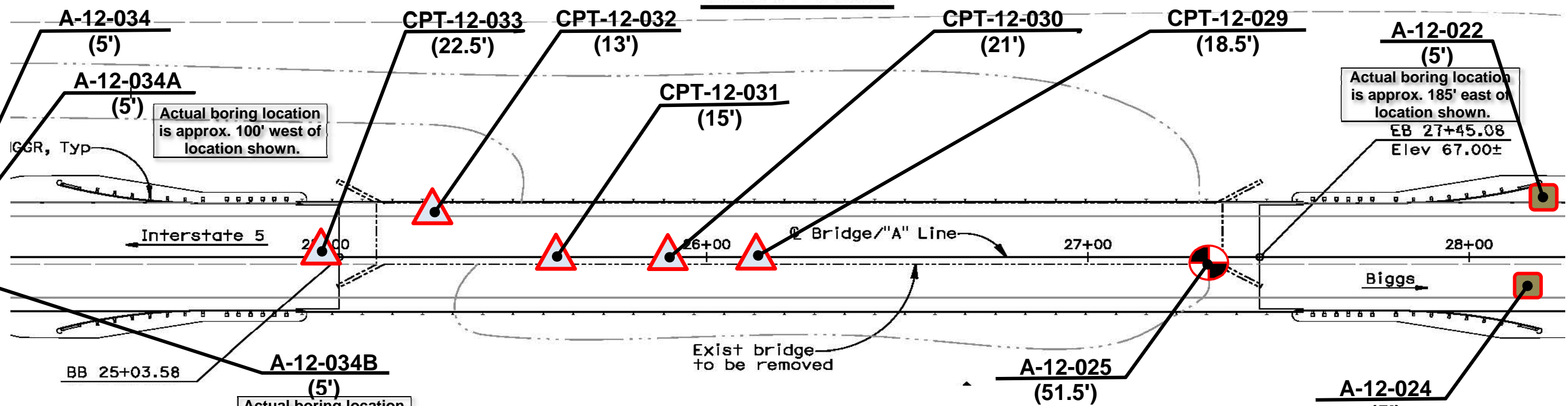
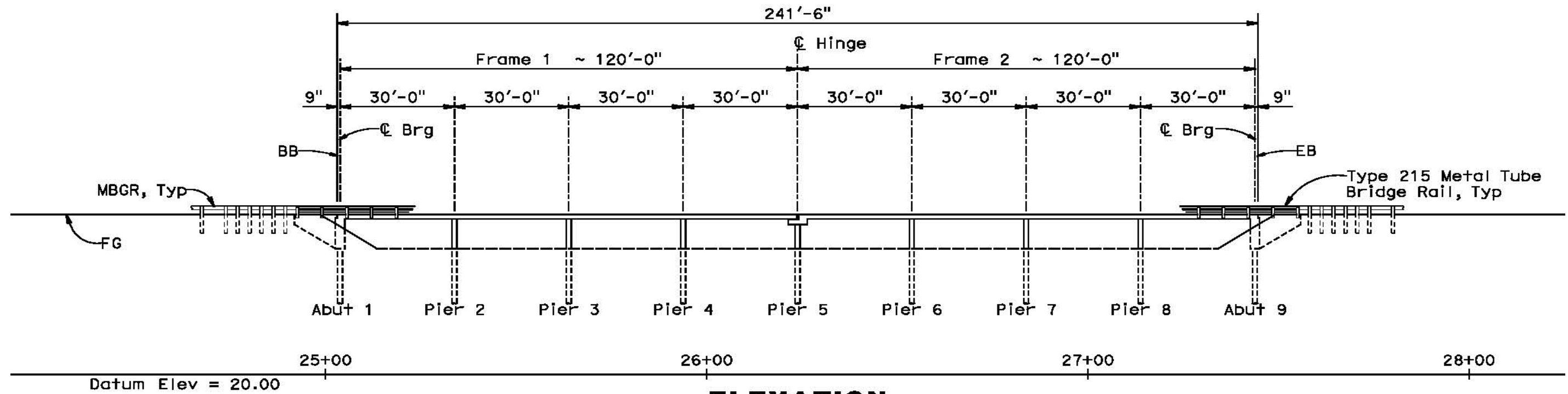
FIGURE 2(a). BORING LOCATION PLAN

Bridge Replacement
Bridge No. 11C-0015, Branch Howard Slough
 Road 67, Glenn County, California

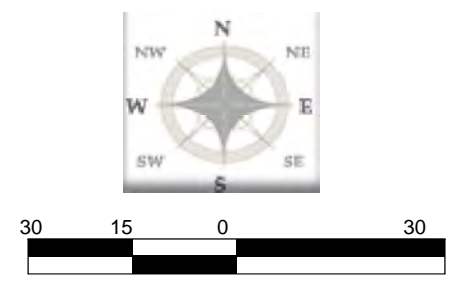


| | |
|-----------------|--------------------------|
| Drawn By: GA | Date: 12-Oct-2012 |
| Approved By: RK | Project No.: 100955-1004 |

Base drawing: PLANNING STUDY DRAWING PROVIDED BY WILLDAN ENGINEERING, DATED 2 March 2012

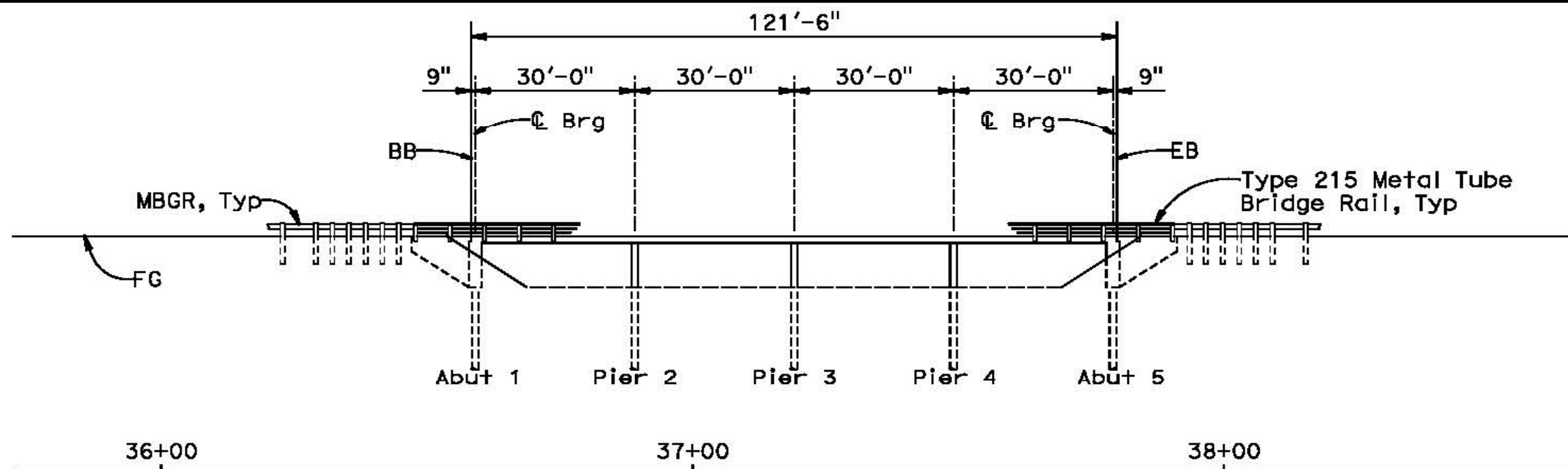


- LEGEND**
- CPT Sounding -- No. & Depth
 - HSA Boring -- No. & Depth
 - Pavement Subgrade Bulk Sample -- No. & Depth

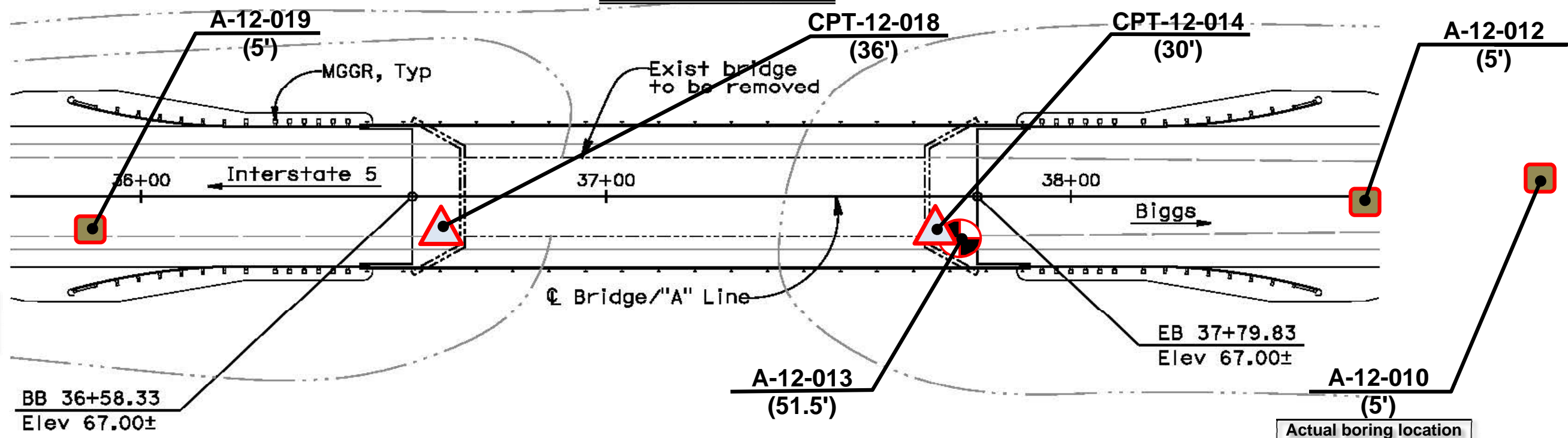


| | | |
|--|--------------------------|--|
| FIGURE 2(b). BORING LOCATION PLAN | | WILLDAN Geotechnical extending your reach |
| Bridge Replacement Bridge No. 11C-0016 Road 67, Glenn County, California | | |
| Drawn By: GA | Date: 12-Oct-2012 | |
| Approved By: RK | Project No.: 100956-1004 | |

Base drawing: PLANNING STUDY DRAWING PROVIDED BY WILLDAN ENGINEERING, DATED 2 March 2012



ELEVATION



LEGEND

- CPT Sounding -- No. & Depth
- HSA Boring -- No. & Depth
- Pavement Subgrade Bulk Sample -- No. & Depth



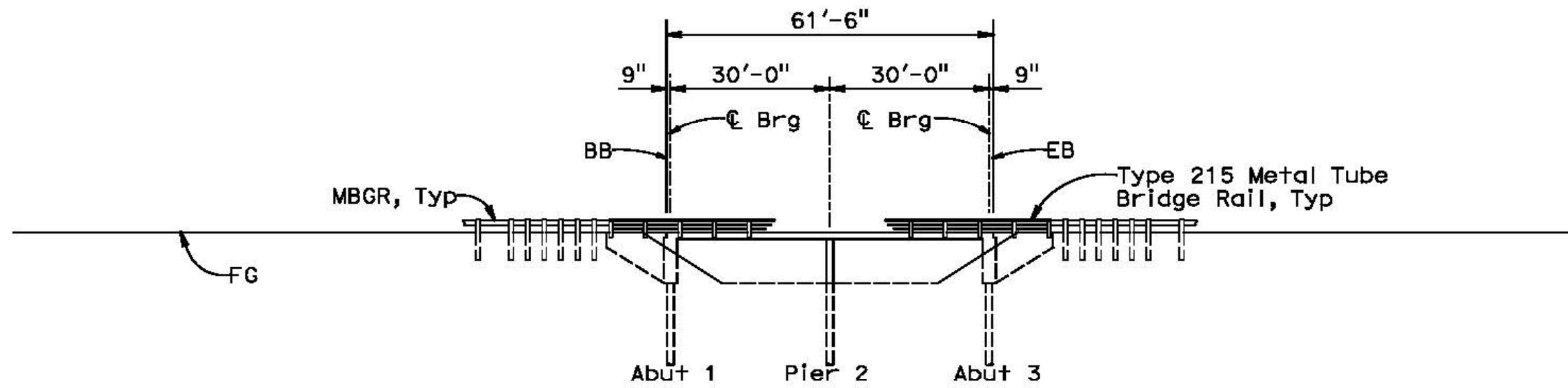
FIGURE 2(c). BORING LOCATION PLAN

Bridge Replacement
Bridge No. 11C-0017
 Road 67, Glenn County, California

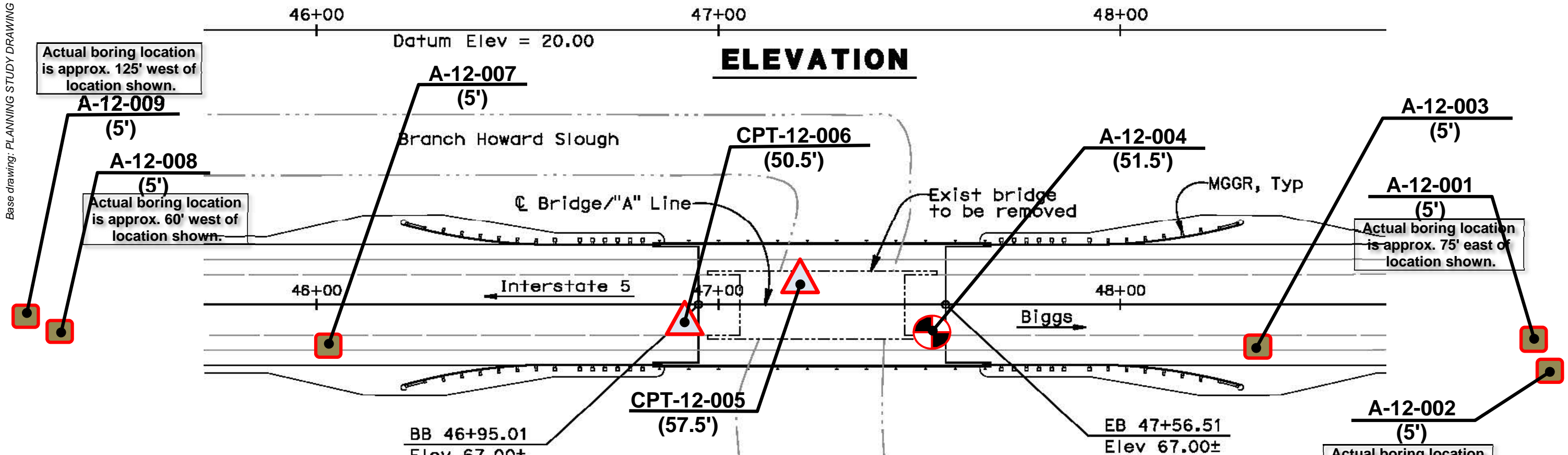


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|-----------------|--------------------------|
| Drawn By: GA | Date: 12-Oct-2012 |
| Approved By: RK | Project No.: 100957-1004 |

Base drawing: PLANNING STUDY DRAWING PROVIDED BY WILLDAN ENGINEERING, DATED 2 March 2012



ELEVATION



LEGEND




-  CPT Sounding -- No. & Depth
-  HSA Boring -- No. & Depth
-  Pavement Subgrade Bulk Sample -- No. & Depth



FIGURE 2(d). BORING LOCATION PLAN

Bridge Replacement
Bridge No. 11C-0179
 Road 67, Glenn County, California



| | |
|-----------------|--------------------------|
| Drawn By: GA | Date: 12-Oct-2012 |
| Approved By: RK | Project No.: 100958-1004 |

sedimentary unit consists generally of sandstone, siltstone, shale, and conglomerate that has been folded and uplifted into the northwest-southeast trending ridges that generally parallel the orientation of the Sacramento Valley. The rocks dip eastward and underlie much of the Sacramento Valley at depth. Immediately overlying the Cretaceous rock is an apron of poorly sorted fluvial (river) sediments derived from erosion and runoff from the Coast Ranges. The oldest of these nonmarine units is the Pliocene (about 7 million to 1.5 million years before present) Tehama Formation, which is composed of sandy silt and silty clay with some lenses of crossbedded sands and clayey gravels. The surface soil units are composed of a mix of silty clays, sands and silty/clayey sands with gravel. (See ICF Jones & Stokes, 2008 & Glenn County, 1993).

The subsurface stratigraphy seen in our borings and soundings, and described in Section 3.3 below, is broadly in accord with the above.

3.2 Field Investigation and Laboratory Testing

We drilled and sampled twenty-three (23) soil borings and pushed thirteen (13) Cone Penetrometer Test (CPT) soundings. Nineteen (19) of the soil borings were placed along the approach roadways and advanced to final depths of 5 feet below existing ground surface (bgs) to collect bulk samples of the roadway subgrade. Four (4) deeper soil borings were drilled at the approximate location of the eastern abutments of the planned replacement bridges. Three (3) of these borings were advanced to a depth of 51.5 feet bgs, and one (1) to 36.5 feet bgs. The thirteen (13) CPT soundings were placed at the approximate locations of other supports, and advanced to depths between 13 feet bgs and 59 feet bgs. Approximate boring and CPT locations are shown on Figure 2, Boring Location Plan. These locations were estimated by our personnel in the field using a measuring wheel and measuring from the limits of existing site features.

Prior to field exploration, a site visit was made to mark the boring locations and evaluate access conditions for drilling equipment. Underground Service Alert of Northern California and Nevada (USA North) was notified for clearance of underground utilities in the vicinity of the borings (Ticket Number 089282).

Borings were advanced using a truck-mounted rig equipped with 7-inch diameter hollow-stem augers. Relatively undisturbed and disturbed drive samples were collected at select depth intervals from each soil boring. Bulk samples were collected from auger cuttings obtained from



within the near-surface soils. Relatively undisturbed samples were collected by driving a three-inch outside diameter Modified California Sampler lined with brass rings, and disturbed samples were collected by driving a 1-³/₈-inch inside diameter Standard Penetration split-spoon sampler.

The samplers were driven into the underlying soil for intervals varying between 6 and 18 inches, with a 140-pound hammer falling 30 inches. The number of blows required to drive the sampler was recorded for each 6-inch penetration interval. The blow count for the final 12 inches, or for a lesser distance if the sampler could not be driven 12 inches, is shown on the Log of Test Borings in Appendix A. All soil samples were retained for possible laboratory testing. The number of blows required to drive the sampler the last 12 inches was used to estimate the in-situ relative density of granular soils, and to a lesser degree of accuracy, the consistency of cohesive soils.

Visual classification of the soils encountered in our exploratory borings was made in general accordance with the Unified Soil Classification System (ASTM D2487). A Log of Test Borings (LOTB) is included as Appendix A. Please note that soil classifications are per Appendix A of Caltrans “Soil and Rock Logging, Classification, and Presentation Manual” (Caltrans, 2010a).

CPT soundings were done by advancing an instrumented, 1.4-inch-diameter, cone-tipped cylindrical probe into the ground using hydraulic rams mounted in a 25-ton standard CPT rig. The CPT probe contained two strain-gauged load cells which measured the soil bearing resistance acting on the probe’s conical tip and the frictional resistance sensed along the cylindrical sleeve. All measurements were monitored continuously with depth, transmitted as electrical signals to a computerized data acquisition system mounted inside the rig, and recorded at 50-mm (2-inch) intervals. The CPT data was used to infer soil classification and engineering properties based on standard correlations. Graphical logs of the CPT soundings are also included in the LOTB in Appendix A.

Upon completion of the borings and CPT soundings, the boreholes and sounding holes were backfilled with soil cuttings to within approximately 5 feet of the surface, and then brought to grade with bentonite grout. The surface at each location was patched with cold-patch asphalt or Quik-Set concrete, as appropriate. Soil samples were delivered to Willdan’s laboratory for testing. The following Table 1 presents the boring and sounding locations, depths and other relevant information for all borings and soundings except for the shallow borings done to collect bulk samples of the approach roadway subgrade.



Table 1 - Exploratory Boring & Sounding Information

| Bridge No. | Number | Type | ⁽¹⁾ Stationing | Offset | ⁽¹⁾ Elevation at | | Date Conducted |
|------------|------------|--------------|---------------------------|--------|-----------------------------|------------|----------------|
| | | | | | Top of Hole (ft MSL) | Depth (ft) | |
| 11C-0179 | A-12-004 | HSA Boring | 47+53 | 8' RT | 73 | 51.5 | 03/30/2012 |
| | CPT-12-005 | CPT Sounding | 47+20 | 8' LT | 73 | 57.5 | 03/29/2012 |
| | CPT-12-006 | CPT Sounding | 46+92 | 4' RT | 73 | 50.5 | 03/27/2012 |
| 11C-0017 | A-12-013 | HSA Boring | 37+76 | 10' RT | 75 | 51.5 | 03/39/2012 |
| | CPT-12-014 | CPT Sounding | 37+71 | 6' RT | 75 | 30.0 | 03/27/2012 |
| | CPT-12-018 | CPT Sounding | 36+64 | 6' RT | 75 | 30.5 | 03/27/2012 |
| 11C-0016 | A-12-025 | HSA Boring | 27+32 | 2' RT | 74.5 | 51.5 | 03/29/2012 |
| | CPT-12-029 | CPT Sounding | 26+13 | 0' | 74.5 | 18.5 | 03/28/2012 |
| | CPT-12-030 | CPT Sounding | 25+90 | 0' | 74.5 | 21.0 | 03/28/2012 |
| | CPT-12-031 | CPT Sounding | 25+61 | 0' | 74.5 | 15.0 | 03/28/2012 |
| | CPT-12-032 | CPT Sounding | 25+28 | 14' LT | 74.5 | 13.0 | 03/28/2012 |
| | CPT-12-033 | CPT Sounding | 25+00 | 0' | 74.5 | 22.5 | 03/28/2012 |
| 11C-0015 | A-12-038 | HSA Boring | 19+14 | 5' RT | 76.0 | 36.5 | 04/02/2012 |
| | CPT-12-039 | CPT Sounding | 18+60 | 2' LT | 76.0 | 25.5 | 03/29/2012 |
| | CPT-12-042 | CPT Sounding | 17+03 | 2' LT | 76.0 | 20.5 | 03/29/2012 |
| | CPT-12-045 | CPT Sounding | 15+57 | 12' LT | 76.0 | 26.5 | 03/29/2012 |
| | CPT-12-048 | CPT Sounding | 13+95 | 0' | 76.0 | 50.0 | 03/28/2012 |

Notes: (1) The Stationing & Elevation is only for the purpose of this report and may not correspond to survey data.

Laboratory tests were performed on selected soil samples to evaluate their physical characteristics and engineering properties. Laboratory testing included determination of in-situ moisture and density, percent passing No.200 sieve, gradation, one-dimensional consolidation testing, and direct-shear and unconfined compressive strength determination. Tests were also conducted to determine the R-Value of the subgrade of the approach roadways, and corrosion potential of soils within the foundation zone.

Laboratory tests were conducted in general accordance with American Society for Testing of Materials (ASTM) Standards or California Test Methods, as applicable. The laboratory test



results are summarized in Table B-1 contained in Appendix B, Laboratory test results. Appendix B also has graphical plots of selected laboratory tests.

3.3 Soil Profile and Subsurface Conditions

The subsurface stratigraphy summarized in Tables 2 through 4 below has been interpreted based on our field observations of the material type, and data from field and laboratory testing.

Table 2 – Idealized Soil Profile and Strength Parameters (Bridge No. 11C-0015)

| Depth Range (feet below top of existing pavement) | Soil Layer Description | Total Unit Weight (pcf) | Design Strength Parameters | |
|--|--|-------------------------------|-------------------------------|--------------------------------|
| | | | Cohesion (psi) | Friction Angle (degrees) |
| <u>West Abutment</u> | | | | |
| 0' – 7' | <i>Assumed depth of pile cap</i> | | | |
| 7' – 11.5' | Stiff to V. Stiff, Silty CLAY | 115 | 18 | - |
| 11.5' – 18.5' | Stiff/V. Dense Clayey SAND | 120 | 35 | 42 |
| 18.5' – 57' | Stiff, Silty CLAY / Clayey SILT | 115 | 18 | - |
| > 57' | V. Dense Silty SAND | 125 | - | 40 |
| <u>Piers</u> | | | | |
| 0' – 8' | <i>Approximate depth to channel bottom</i> | | | |
| 8' – 15' | <i>Assumed scour depth</i> | | | |
| 15' – 20' | Stiff/V. Dense Clayey SAND | 120 | 35 | 42 |
| 20' – 23' | V. Dense Silty SAND | 125 | - | 40 |
| > 23' | V. Dense Gravelly SAND | 125 | - | 47 |
| <u>East Abutment</u> | | | | |
| 0' – 7' | <i>Assumed depth of pile cap</i> | | | |
| 7' – 9.5' | Stiff Silty CLAY | 120 | 24 | - |
| 9.5' – 13' | V. Stiff SILT | 120 | 14 | 24 |
| 13' – 17' | V. Dense Silty SAND | 125 | - | 40 |
| > 17' | V. Dense Gravelly SAND | 125 | - | 47 |



Table 3 – Idealized Soil Profile and Strength Parameters (Bridge No. 11C-0016)

| Depth Range (feet below top of existing pavement) | Soil Layer Description | Total Unit Weight (pcf) | Design Strength Parameters | |
|--|--|-------------------------------|-------------------------------|--------------------------------|
| | | | Cohesion (psi) | Friction Angle (degrees) |
| <u>West Abutment</u> | | | | |
| 0' – 7' | <i>Assumed depth of pile cap</i> | | | |
| 7' – 13' | Stiff to V. Stiff, Silty CLAY | 115 | 22 | - |
| 13' – 20.5' | Stiff/V. Dense Clayey SAND | 120 | 35 | 42 |
| 20.5' – 21.5' | Stiff, Silty CLAY / Clayey SILT | 115 | 28 | - |
| > 21.5' | Stiff/V. dense sandy SILT/silty SAND | 120 | 20 | 43 |
| <u>Piers</u> | | | | |
| 0' – 7' | <i>Approximate depth to channel bottom</i> | | | |
| 8' – 14' | <i>Assumed scour depth</i> | | | |
| 14' – 20' | Stiff/V. Dense Clayey SAND | 120 | 35 | 42 |
| 20' – 26' | V. Dense Gravelly SAND | 125 | - | 47 |
| > 26' | Stiff/V. dense sandy SILT/silty SAND | 120 | 20 | 43 |
| <u>East Abutment</u> | | | | |
| 0' – 7' | <i>Assumed depth of pile cap</i> | | | |
| 7' – 30' | Stiff to V. Stiff Silty CLAY | 120 | 24 | - |
| > 30' | V. Dense SAND & Silty SAND | 125 | - | 43 |

Table 4 – Idealized Soil Profile and Strength Parameters (Bridge No. 11C-0017)

| Depth Range (feet below top of existing pavement) | Soil Layer Description | Total Unit Weight (pcf) | Design Strength Parameters | |
|--|----------------------------------|-------------------------------|-------------------------------|--------------------------------|
| | | | Cohesion (psi) | Friction Angle (degrees) |
| <u>Abutments</u> | | | | |
| 0' – 7' | <i>Assumed depth of pile cap</i> | | | |
| 7' – 20' | Stiff to V. Stiff, Silty CLAY | 115 | 24 | - |
| 20' – 30' | Dense Silty SAND / Sandy SILT | 120 | - | 42 |
| > 30' | V. Dense Gravelly SAND | 125 | - | 47 |



| Piers | | | | |
|--------------|--|-----|----|----|
| 0' – 7' | <i>Approximate depth to channel bottom</i> | | | |
| 7' – 14' | <i>Assumed scour depth</i> | | | |
| 14' – 20' | Stiff to V. Stiff, Silty CLAY | 115 | 24 | - |
| 20' – 30' | Dense to V. Dense Silty SAND / Sandy SILT | 120 | - | 42 |
| > 30' | V. Dense Gravelly SAND | 125 | - | 47 |

Table 5 – Idealized Soil Profile and Strength Parameters (Bridge No. 11C-0179)

| Depth Range (feet below top of existing pavement) | Soil Layer Description | Total Unit Weight (pcf) | Design Strength Parameters | |
|--|--|-----------------------------------|-------------------------------|------------------------------------|
| | | | Cohesion (psi) | Friction Angle (degrees) |
| West Abutment | | | | |
| 0' – 7' | <i>Assumed depth of pile cap</i> | | | |
| 7' – 24' | Stiff to V. Stiff, Silty CLAY | 115 | 18 | - |
| 24' – 26' | Stiff/V. Dense Clayey SAND | 120 | 35 | 42 |
| > 26' | Stiff, Silty CLAY / Clayey SILT | 115 | 18 | - |
| Piers | | | | |
| 0' – 7' | <i>Approximate depth to channel bottom</i> | | | |
| 7' – 14' | <i>Assumed scour depth</i> | | | |
| 14' – 16' | Stiff to V. Stiff, Silty CLAY | 115 | 18 | - |
| 16' – 21' | Stiff/V. Dense Clayey SAND | 120 | 35 | 42 |
| 21' – 25' | Stiff, Silty CLAY / Clayey SILT | 115 | 18 | - |
| 25' – 29' | Stiff/V. Dense Clayey SAND | 120 | 35 | 42 |
| > 29' | V. Stiff Silty CLAY to CLAY | 120 | 26 | - |
| East Abutment | | | | |
| 0' – 7' | <i>Assumed depth of pile cap</i> | | | |
| 7' – 10' | Stiff Silty CLAY | 120 | 14 | - |
| 14' – 16' | Stiff to V. Stiff, Silty CLAY | 120 | 18 | - |



Figure 3 presents the interpreted subsurface profile for the entire length of the project (all four (4) bridges). Please note that the description above and the subsurface profile shown in Figure 3 is a generalized, and simplified description of soil conditions encountered at the site in the borings and CPT soundings advanced for this investigation. The subsurface conditions encountered at the site appear typical of those found in the geologic region of the site.

3.4 Groundwater

Based on groundwater level data available from the California Department of Water Resources (DWR, 2012) for three (3) monitoring points located within 2 miles of the site – DWR Well Nos. 18N01E17D001M, located immediately north of the site, DWR Well No. 18N01E15D002M, located approximately 1.5 miles east of the site, and DWR Well No. 18N01E05D001M, located approximately 1.5 miles north of the site – the depth to historic high groundwater is estimated to be at an elevation of approximately 68 feet MSL, corresponding to a depth of approximately 7 feet below the existing pavement surface along County Road 67 in the project area. Groundwater was encountered at depths between 15 and 21 feet bgs in the borings and soundings advanced for the present investigation between March 27 and April 2, 2012. Based on the available data, we have conservatively used a depth to groundwater of 6 feet bgs for foundation design.

Depth to groundwater can be expected to fluctuate both seasonally and from year to year. Fluctuations in the groundwater level may occur due to variations in precipitation, flow in nearby creeks, irrigation practices at the site and in the surrounding areas, climatic conditions, pumping from wells, and possibly as the result of other factors that were not evident at the time of our investigation. As such, water level observations at the time of the field investigation may vary from those encountered during the construction phase of the project. The evaluation of such factors is beyond the scope of this report. Long-term monitoring in observation wells, sealed from the influence of surface water, is often required to more accurately define the potential range of groundwater conditions on a site.



Figure 3 – INSERT FIG 3, SUBSURFACE PROFILE, HERE.



4.0 AS-BUILT DATA

The existing bridges vary in size and structure type. Available information about these bridges is summarized in Table 6 below. No As-Built Plans or other information was available to us at the time this report was written. As noted in section 2 above, based on visual observations, the abutments and piers for all bridges appear to be founded on shallow footings. Appendix E contains selected photographs of the existing bridges as they were on March 13 and 14, 2012.

Table 6 - Existing Bridge Location and Structure Summary

| | | | | |
|------------------------------|---|--|---------------------------------|---------------------------------|
| Name: | COUNTY ROAD #67 over BRANCH HOWARD SLOUGH | | | |
| Structure number: | 11C-0015 | 11C-0016 | 11C-0017 | 11C-0179 |
| Location: | 1.3 miles East of County Road Z | 1.7 miles East of County Road Z | 1.8 miles East of County Road Z | 1.9 miles East of County Road Z |
| Purpose: | Carries two-lane highway over waterway | | | |
| Route classification: | Minor Collector (Rural) | | | |
| Length of largest span: | 24.9 ft. [7.6 m] | 20.0 ft. [6.1 m] | 20.0 ft. [6.1 m] | 9.5 ft. [2.9 m] |
| Total length: | 501.0 ft. [152.7 m] | 222.1 ft. [67.7 m] | 101.1 ft. [30.8 m] | 41.0 ft. [12.5 m] |
| Roadway width between curbs: | 17.1 ft. [5.2 m] | 17.7 ft. [5.4 m] | 17.4 ft. [5.3 m] | 18.7 ft. [5.7 m] |
| Deck width edge-to-edge: | 19.0 ft. [5.8 m] | 18.0 ft. [5.5 m] | 18.0 ft. [5.5 m] | 20.0 ft. [6.1 m] |
| Owner: | County of Glenn | | | |
| Year built: | 1930 | 1950 | 1920 | 1950 |
| Historic significance: | Bridge is not eligible for the National Register of Historic Places | | | |
| Design load: | M 13.5 / H 15 | M 13.5 / H 15 | M 13.5 / H 15 | MS 18+Mod / HS 20+Mod |
| Number of main spans: | 20 | 11 | 5 | 4 |
| Main spans-material: | Steel | Steel | Steel | Concrete continuous |
| Main spans-design: | Stringer/Multi-beam or girder | Stringer/Multi-beam or girder | Stringer/Multi-beam or girder | Slab |
| Deck type: | Concrete Cast-in-Place | Concrete Cast-in-Place | Corrugated Steel | Concrete Cast-in-Place |
| Wearing surface: | Bituminous | Monolithic Concrete (concurrently placed with structural deck) | Bituminous | Bituminous |



5.0 SEISMICITY AND FAULTING

Glenn County is in a relatively inactive seismic area. During the past 100 years, the county has experienced only minor earthquakes within its boundaries and secondary impacts from earthquakes centered out of the area. (See ICF Jones & Stokes, 2008 & Glenn County, 1993). There are no Alquist-Priolo Special Studies Zones within the County. Such zones are delineated by the California Geological Survey pursuant to the Alquist-Priolo Earthquake Fault Zoning Act.¹ The site is also not traversed by any faults recognized by the Uniform Building Code as active. As such, the site is considered unlikely to experience surface fault rupture.

Although the site is not within a zone requiring special study, several active faults are located within 100 kms (≈ 62 miles) of the project site. A seismic event on one of these faults may subject the site to strong ground shaking. The replacement bridges should be designed accordingly. Table 7 below lists these faults with their approximate distance from the project site and the maximum moment magnitude that these faults are considered capable of generating.

Table 7. Major Faults Within 100 kms (≈62 miles) of the Project Site

| No. | Fault Name | Nearest Approach | | Maximum Moment Magnitude |
|-----|---|------------------------|-----------|--------------------------|
| | | Distance in km (miles) | Direction | |
| 1 | Great Valley fault 1 | 34.3 (2.9) | W | 6.7 |
| 2 | Bear Mountains fault zone (Swain Ravine fault zone section) | 36.9 (22.9) | E | 6.5 |
| 3 | Great Valley fault 3 | 49.5 (30.8) | SW | 6.9 |
| 4 | Bear Mountains fault zone (Spenceville fault section) | 58.0 (36.1) | SE | 6.5 |
| 5 | Dunnigan Hills fault | 61.8 (38.4) | S | 6.6 |
| 6 | Hunting Creek-Berryessa fault zone (Hunting Creek section) | 74.6 (46.4) | SW | 7.1 |
| 7 | Bartlett Springs fault system (Bartlett Springs section) | 79.8 (49.6) | WSW | 7.6 |
| 8 | Bear Mountains fault zone (Swain Ravine fault zone section) | 68.6 (42.6) | E-SE | 6.5 |
| 9 | Konocti Bay fault zone | 88.4 (55.0) | SW | 6.4 |
| 10 | Big Valley fault | 98.1 (61.0) | SW | 6.5 |
| 11 | Butt Creek fault zone | 99.8 (62.0) | NE | 6.8 |

Note: Fault information is from Caltrans ARS Online, V1.0.4 (2012).

¹ Fault rupture hazards are gauged by the youngest geologic layer a fault offsets. The hazard of surface fault rupture, with consequent damage to structures directly overlying the trace of an active fault, led to the enactment of the Alquist-Priolo Special Studies Zone Act (APSSZ) of 1972. Evidence of fault displaced sediments that are less than 11,000 years old is used as a yardstick to gauge the surface rupture potential of faults. The objective of fault investigations within an APSSZ is to locate the trace of the fault so that setbacks away from the fault can be prescribed.



According to current data from Caltrans, the controlling fault is the Great Valley Fault 1. Table 8 below summarizes the fault parameters.

Table 8 – Summary of Seismic Information for Controlling Fault

| Name | Fault Type | Dip | Deterministic PGA | Max'm Moment Magnitude |
|----------------------|------------|----------|----------------------|---------------------------|
| Great Valley fault 1 | Reverse | 15° West | 0.22 g | 6.7 |

5.1 Caltrans Seismic Design Criteria

Figure 4 shows the design Acceleration Response Spectrum (ARS), considering near-fault effects. The corrections for near-fault effects were done as per recommendations contained in Appendix B of Version 1.6 of the Caltrans Seismic Design Criteria (Caltrans, 2009b).

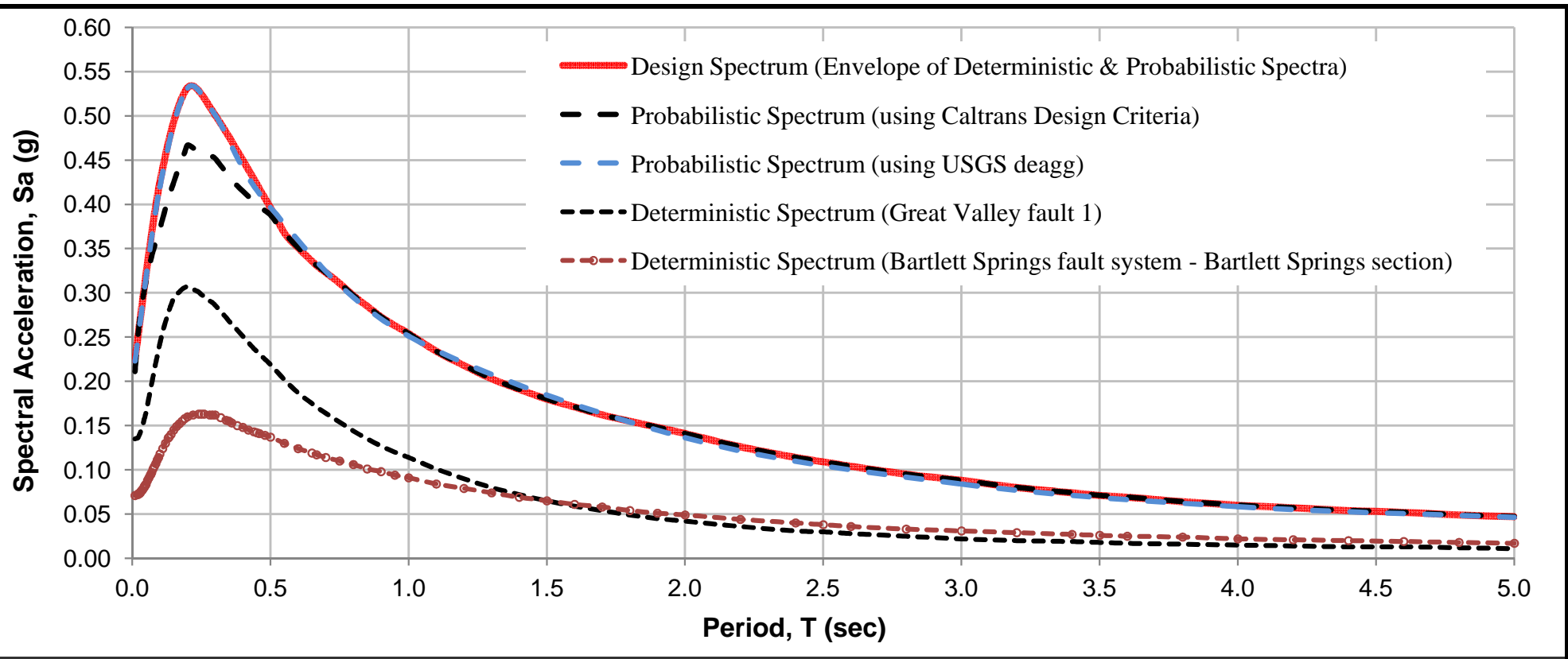
The design spectral acceleration values are the envelope of the deterministic spectrum obtained using version 1.0.4 of the Caltrans ARS Online tool (Caltrans, 2009c), and the probabilistic spectrum obtained using the probabilistic seismic hazard assessment program developed by the United States Geologic Survey (USGS, 2008a). We estimate a deaggregated moment magnitude of 6.7 for a return period of 949 years (5% Probability of exceedance in 50 years). The shear wave velocity used for analyses is 375 m/s, estimated based on the NEHRP classification (FEMA, 1994 & 1997) and the field test data collected during our subsurface investigation.


6.0 LIQUEFACTION

The potential for liquefaction is highest when groundwater levels are high, and loose, fine-grained, sandy soils occur at depths of less than 50 feet. Liquefaction is typically associated with an earthquake of high magnitude. Most areas of Glenn County are considered to be at a low risk of hazards from liquefaction (Fehr and Peers, 2009).


Although Glenn County is in a relatively inactive seismic area as discussed in Section 5 above, due to the presence of shallow groundwater and presence of thin layers of fine-grained sandy soils encountered at depths less than 50 feet, site specific liquefaction analyses were conducted using the design seismic parameters corresponding to an earthquake with a 975 year return period and a PGA of 0.22g.





| Design Curve | Design Criteria | Probability of Exceedence | Return period | Moment Magnitude | PGA, g |
|--|--|---------------------------|---------------|------------------|--------|
|  | Envelope of Deterministic & Probabilistic Spectra with Near-Fault Effect Included ^{1,2} | 10 percent in 100 years | 949 years | 6.6 | 0.22 |

Notes:
 1 - Based on Caltrans Seismic Design Criteria, Version 1.6, November 2010
 2 - Design Spectrum is controlled by probabilistic criteria. Probabilistic spectral accelerations for small periods are obtained using the United State Geologic Survey's (USGS) 2008 NSHMP PSHA Interactive Deaggregation website, at: <https://geohazards.usgs.gov/deaggint/2008/>

| | | |
|--|---|---|
| FIGURE 4. DESIGN ACCELERATION RESPONSE SPECTRUM Bridge Replacement Bridge Nos. 11C-0015, 11C-0016, 11C-0017 & 11C-0179 Road 67, Glenn County, California |  | |
| | Drawn By: GA | Date: 21-Sep-12 |
| | Approved By: RK | Project Nos. 100955-1004 to 100958-1004 |

Based on the results of our analyses, it is our professional opinion that the soils within the upper 50 feet of the subsurface are not susceptible to liquefaction under the design seismic scenario. Data from the four (4) deeper borings and the thirteen (13) CPT soundings advanced at the bridge abutment and pier locations was utilized for these analyses. Appendix C contains graphical plots of the associated data and results.

7.0 SLOPE STABILITY

The existing channel slopes will not be loaded by the footings of the proposed bridge. The bridge abutments must be engineered to have stable slopes, or be retained by properly designed wing walls and retaining walls.

8.0 SCOUR

No site-specific scour depth estimates were available at the time of writing this report. For the purpose of foundation design, we have assumed that the maximum scour depth is limited by the depth of the 6 to 7 feet layer of soft clays/organic soils and relatively loose silty clays/sands seen as the surface layer of the channel bottoms during our investigation, and we have taken the bottom of this soft/loose layer as representative of the maximum scour depth.

9.0 CORROSION

Seven (7) bulk samples collected from the subsurface within the abutment wall and footing zones of the four (4) proposed replacement bridges was tested for soluble sulfate and chloride content, and the pH and minimum resistivity were determined. The corrosivity test results are summarized in Table 9 below.

Caltrans considers a site corrosive to foundation elements if one or more of the following conditions exist for soil samples collected from within the foundation zone.

- Minimum resistivity is less than or equal to 1,000 ohm-cm (as an indicator only)
- Chloride concentration is greater than or equal to 500 parts per million (ppm)
- Sulfate concentration is greater than or equal to 2,000 ppm
- pH is 5.5 or less



Table 9 – Soil Corrosion Test Summary

| Boring Number | Sample Depth (ft) | Minimum Resistivity (Ohm-Cm) | pH | Chloride Content (ppm) | Sulfate Content (ppm) |
|------------------------|--------------------------|-------------------------------------|-----------|-------------------------------|------------------------------|
| A-12-004 (11C-0179) | 10 – 11 | 1,350 | 7.4 | 150 | 180 |
| | 45 – 46 | 1,500 | 7.4 | 180 | 420 |
| A-12-013 (11C-0017) | 10 – 11 | 2,000 | 7.8 | 180 | 435 |
| | 35 – 36 | 6,700 | 8.3 | 270 | 75 |
| A-12-025 (11C-0016) | 10 – 11 | 930 | 8.0 | 255 | 195 |
| | 35 – 36 | - | 7.9 | 210 | 450 |
| A-12-038 (11C-0015) | 15 – 16 | 5,350 | 7.9 | 240 | 105 |

Based on these guidelines, the laboratory test results indicate that the soils tested from within the foundation zones have low corrosivity in accordance with the Caltrans Corrosion Guidelines (Caltrans, 2003b). As such, from a corrosion resistance viewpoint, no special concrete mix for is required for bridge support elements in contact with the existing subgrade soils at the project site. Assuming a 50-year life-span, we recommend a minimum concrete cover of 2 inches over reinforcement for structural components in direct contact with the existing subgrade soils. Concrete cover should be increased to 3 inches or more for a 75-year life span.

The existing soils in the foundation zone have a low potential for corroding metal in contact with these soils. As a precaution, we suggest that if any underground pipe is installed, it have a minimum 16-gage wall thickness for a 50-year life span, and 13-gage or thicker for a 75-year life span. Using materials other than ferrous metals for underground piping may also be considered.

The above recommendations are based on discrete samples and on the broad criteria provided by Caltrans (2003b). We recommend that a corrosion specialist be consulted if a detailed corrosion evaluation of the on-site subgrade soils is desired.



10.0 FOUNDATION RECOMMENDATIONS

Various standard foundation types were considered for the proposed bridge structures – shallow foundations, cast-in-drilled-hole (CIDH) piles, and driven piles.

10.1 Shallow Footings

Shallow Footings for bridge support are considered unsuitable for this site because of the presence of a relatively shallow groundwater table, more than 10 feet of compressible clays above a depth of 30 feet below the channel bottom, and because of possible loss of support due to anticipated scour during high water flows. Deep foundations will allow for the bridge loads to be transferred to the more suitable, firmer soils at depth.

10.2 Drilled Piles

Drilled piles consisting of Caltrans cast-in-drilled-hole (CIDH), although a potentially feasible alternative for supporting the replacement bridges, are not recommended because of potential installation difficulties. The presence of relatively shallow groundwater and soil conditions consisting of stratified and layered fine- and coarse-grained alluvial soils could lead to potential caving problems during drilling. Temporary casings and or drilling fluid will likely be required during CIDH pile construction to help support sandy alluvial soils and minimize caving. Additionally, because the pile tips at all but bridge no. 11C-0017 will bear in stiff to very stiff fine-grained soils, predominantly sandy clays, and because the shallow groundwater will necessitate the wet method of construction, the pile tip bearing capacity cannot be considered per Caltrans recommendations. This will result in relatively large diameter piles.

10.3 Driven Piles

Driven pile foundations consisting of standard (Caltrans) precast concrete Class 70 piles with 70-ton design (service) loads are recommended as the most suitable foundation type for all four (4) proposed replacement bridges carrying County Road 67 over Howard Slough.

Based on preliminary information provided by the project structural engineers, 16-inch and 24-inch diameter standard (Caltrans) precast concrete Class 70 piles with 70-ton design (service) loads are the preferred pile type.



10.3.1 Pile Tip Elevations to Achieve Desired Axial Capacities

Based on the pile size information provided by the project structural engineers, and using site-specific subsurface soil parameters determined during the present investigation, installation depths were estimated for driven, precast concrete piles with a per pile allowable (service) compressive design load of 70 tons (140 kips).

Axial capacity calculations were performed in general accordance with procedures contained in Section 4.5, Driven Piles, of the current Caltrans Bridge Design Specifications (Caltrans, 2003a). Table 10 below summarizes the results of axial capacity analyses for driven piles. Plots of the allowable vertical capacity versus depth are included for reference as Figure D in Appendix D of this report.

Table 10 – Proposed Pile Data Table

| Bridge (Location) | Pile Type | Design Loading (kips) | Nominal Resistance | | Bottom of Footing Depth ^(b) (feet) | Design Tip Depth ^(c) (feet) | Specified Tip Depth (feet) |
|--|--------------|-----------------------------|-----------------------|----------------------------------|--|--|----------------------------------|
| | | | Compression (kips) | Tension ^(a) (kips) | | | |
| 11C-0015 & 11C-0016 (All Supports) | 16" ϕ | 140 | 280 | 90 | 9.0 | 31.0 ⁽¹⁾ | 31 |
| | 24" ϕ | 140 | 280 | 90 | 9.0 | 26.0 ⁽¹⁾ | 26 |
| 11C-0017 (All Supports) | 16" ϕ | 140 | 280 | 90 | 9.0 | 32.0 ⁽¹⁾ | 32 |
| | 24" ϕ | 140 | 280 | 90 | 9.0 | 22.0 ⁽¹⁾ | 22 |
| 11C-0179 (All Supports) | 16" ϕ | 140 | 280 | 90 | 9.0 | 38.0 ⁽¹⁾ | 38 |
| | 24" ϕ | 140 | 280 | 90 | 9.0 | 27.0 ⁽¹⁾ | 27 |

Notes: (a) The weight of the pile should be added to the tabulated tension capacity to get the in-service tension capacity.
 (b) Bottom of pile cap is assumed to be 9 feet below top of existing pavement/ground at both abutments and all piers.
 (c) Demand controlling Design Tip Depth is: (1) Compression, (2) Tension, (3) Lateral Loads, (4) Settlement.

10.3.2 Pile Settlement

For driven piles designed as recommended above, total settlement under twice the applied service load is estimated to be less than 1/2-inch. We do not anticipate the development of potential down-drag forces on the proposed piles from the settlement of surrounding soils.



10.3.3 Pile Spacing

Pile configuration should be selected based on the required design capacity for each abutment and pier location. We recommend that all piles at one support location be tied together within a rectangular pile cap with a footprint extending at least one pile diameter beyond the face of the outermost piles. We recommend that piles within a pile cap be installed with a center-to-center spacing of 3 times the nominal pile diameter. If pile cap size limitations are present, the center-to-center spacing may be reduced, but should be no less than 2.5 times the nominal pile diameter. Piles installed with a center-to center distance of less than 3 times the nominal pile diameter should be installed in an alternating sequence such that adjacent piles are driven alternately.

No compensation for pile group effects needs to be considered for vertical axial capacity as long as a minimum center to center spacing of 2.5 times the pile diameter is maintained between piles in a single row and between rows of piles.

To compensate for pile group effects on lateral capacity, the computed lateral capacity of individual piles must be reduced. A reduction factor of 0.88 is recommended for longitudinal loading as this loading will be perpendicular to the row of piles. Reduction factors of 0.68, 0.47 and 0.35 are recommended for the leading, second and third through last pile, respectively for transverse loading as this will act in a direction parallel to the row of piles.

10.3.4 Pile Lateral Capacities

Lateral load capacities may be computed using the pile size and length configurations recommended above, using the idealized soil profile strength parameters presented in Tables 2 through 4 in Section 3.3 above. We recommend that lateral load analyses be done using the computer program LPILE Plus ver. 5.0 (Ensoft, 2007), or equivalent. Non-linear analyses should be done to account for the cracked moment of inertia of the concrete. Since the piles will be installed on relatively level ground, and the face of the channel slope will be engineered at abutment locations, no sloping ground effects need be considered in pile lateral capacity analyses.

10.3.5 Lateral Load Resistance of Pile Cap

We recommend that pile caps be constructed such that they rest below the relatively loose/soft layer occurring in the upper 5 to 6 feet of the subsurface at the pier locations. The Passive earth



pressure forces developed next to the pile cap can be used to resist a portion of lateral loads transferred from the abutment or pier to the soil. Using a static earth pressure coefficient of 2.5 for passive loading conditions, and recognizing a shallow groundwater condition, a buoyant unit weight of 55 pcf is recommended for these lateral load capacity computations. Note that development of the full passive earth pressures indicated herein requires displacement of the pile cap thickness.

10.4 Foundations for Abutment Wing Walls & Retaining Walls

We recommend that wing walls be cantilevered for their full length, that is, the wing wall loading be carried by the abutment pile caps and the wing walls not bear on the soils adjacent to the abutments. If wing walls are to have their own foundations, they may be supported on shallow foundations. We understand that retaining walls may also be built beyond the wing walls to retain/support embankment fill that may be placed as part of access ramp construction. We recommend that such retaining walls also be supported on shallow footings.

Shallow footings for the abutment wing walls and for Caltrans Type I retaining walls up to 8 feet in height may be designed for an allowable bearing capacity of 3,000 psf, provided the footings are at least 12 inches wide, are founded at least 18 inches below the lowest adjacent grade, and rest on a minimum of 18 inches of properly prepared subgrade as recommended below. The allowable soil bearing capacity may be increased by 500 psf for each additional foot of embedment, and by 250 psf for every 6-inch increase in width, up to a maximum of 4,000 psf. The allowable bearing capacity includes both dead and live loads, and may be increased by one-third when designing for short duration wind or seismic forces.

10.5 Lateral Pressure behind Abutments

The ultimate passive pressure behind the abutment walls may be estimated using the recommendations of the Caltrans SDC (Caltrans, 2009b). A uniformly distributed, ultimate passive resistance can be calculated using Equation 7.44 from the SDC to resist movement at the abutment walls (Caltrans, 2009b). The maximum pressure should be limited to 4.0 ksf.

10.6 Lateral Pressure behind Wing Walls/Retaining Walls

Lateral earth pressures for the design of wing walls/retaining walls may be computed using the parameters in the following Table 11.



Table 11. Summary of Lateral Load/Resistance Factors

| Lateral Load/Resistance Conditions | Equivalent Fluid Pressure/ Lateral Resistance | |
|--|--|---------------|
| | Native Silty Clays | Granular Fill |
| Active Pressure | 35 pcf | 24 pcf |
| At-Rest Pressure | 55 pcf | 40 pcf |
| Passive Pressure | 400 pcf | 600 pcf |
| Adhesion (foundation element resting on native Silty Clays) | 750 psf | - |
| Friction Factor (foundation element resting on compacted granular fill) | - | 0.40 |

Note: A total unit weight of 120 pounds per cubic foot (pcf) was used in calculating the earth pressures.

Proper drainage should be designed behind the walls to allow for drained conditions in the backfill soils in order to prevent development of excessive hydrostatic pressures in accordance with Caltrans Standard Plan B-03. Drainage can be by a free-draining backfill material that meets the requirements for pervious backfill material behind the wall, for a thickness of 1 foot, in accordance with Caltrans Standard Specifications, Section 19-3 (Caltrans, 2010b) or by other appropriate means.

Earthquake loads in addition to the above active and at-rest earth pressures should be considered in the design of retaining walls. For the purposes of evaluating the earthquake loads on the site retaining walls, a peak ground acceleration (PGA) of 0.22 g was utilized. The retaining wall earthquake load analysis was performed using horizontal ground acceleration, K_h , equal to 0.11 g, that is, half of the PGA.

We determined the additional earthquake loads on the site retaining walls founded on shallow footings using a procedure by Seed and Whitman (1970) for walls that are free to rotate at the top. Based on our calculations, the retaining walls should be designed using an additional earthquake load equivalent to a fluid having a density of 10 pounds per cubic foot in addition to the earth pressures used previously. An inverted triangular pressure distribution may be assumed for the additional earthquake loads. The resultant force may be assumed to be acting at a height equivalent to 0.6H where H is the height of the wall.



Lateral Resistance of retaining walls founded on shallow footings may be derived from passive resistance along the vertical sides of the footings, friction acting at the base of the footing, or a combination of the two. Passive earth pressures presented in Table 11 above should be used. An ultimate coefficient of friction of 0.40 between the base of the footings and compacted granular fill can be used for sliding resistance using the dead-load forces. If the footings rest on native lean clays, an adhesion of 750 psf may be used between the base of the footings and the soils for sliding resistance using the dead-load forces.

11.0 APPROACH ROAD PAVEMENT

11.1 Pavement Design

Laboratory testing of eight (8) composited bulk samples, one each from the shallow borings done within the top 5 feet of the subsurface of the approach roadways on both sides of each of the four (4) subject bridges, indicates a minimum R-value of 5.

A flexible section consisting of Asphalt Concrete (AC) over Aggregate Base (AB), or a full-depth AC section may be used. A rigid pavement is not recommended when subgrade soils have a R value less than 10. The pavement sections listed in Table 12 below have been developed in accordance with the procedure presented in the Caltrans Highway Design Manual (Caltrans, 2008b) for a range of traffic index values.

**Table 12. Recommended Approach Road Flexible Pavement Structural Sections
 (Design R-Value = 5)**

| Traffic Index | AC over AB Section | Full-Depth AC Section ⁽¹⁾ |
|---------------|-------------------------|--------------------------------------|
| 8 | 4.75" AC over 18.25" AB | 10.5" AC over 6" AB |
| 10 | 6.25" AC over 23.5" AB | 13.5" AC over 6" AB |
| 12 | 7.50" AC over 28.50" AB | 17.0" AC over 6" AB |

Note: AC = Asphalt Concrete; AB = Aggregate Base

(1) A 6-inch-thick working table of AB is required for construction of full-depth AC pavements with a design life greater than 20 years.

11.2 Pavement Materials and Placement

The Aggregate Base (AB) shall be Caltrans Class 2 or Green Book Crushed Miscellaneous Base (CMB) for all pavement areas. The AB/CMB should be placed in loose lifts and compacted to a



minimum of 95 percent of the relative compaction in accordance with ASTM D1557. Prior to placement of AB/CMB, the subgrade soils should be properly prepared as recommended in Section 12, below.

Asphalt Concrete (AC) pavement shall be Caltrans Type A $\frac{3}{4}$ Max Medium, conforming to Section 39 of the Caltrans Standard Specifications.

Where asphalt pavement meets concrete or existing pavements, the concrete and/or asphalt should be sprayed with emulsion. Proper asphalt compaction next to concrete pavement, curbs, and existing pavement is important to provide a relative impermeable contact between the two materials.

12.0 EARTHWORK RECOMMENDATIONS

All earthwork and grading should be performed in accordance with the recommendations of this report, and, as appropriate, per applicable requirements of the provisions in Section 19, "Earthwork," of the Standard Specifications (Caltrans, 2010b) or per Section 301-1.2 of the Green Book.

Any uncontrolled fills or soils encountered in approach road areas or otherwise disturbed during construction and associated site clearing operations should be removed down to a minimum of 30 inches under the roadway pavement, and 24 inches elsewhere. In areas below finish subgrade, exposed subgrade soils can then be prepared to receive engineered fills. In areas that need to be cut to bring them to finish subgrade, if unsuitable soft soils are encountered at the finish subgrade level, additional excavation to remove the unsuitable materials to expose a firm and unyielding surface will be required. The final depth of any additional overexcavation, if needed, will have to be determined on the basis of in-grading observations and testing.

Once the over-excavation is complete, the exposed subgrade should be prepared to receive engineered fills. The overexcavated areas should be brought to footing bottom elevation by placing properly compacted fill. The backfill material should meet the backfill gradation requirements per Caltrans Standard Specification (Caltrans, 2010b). The overexcavated material may also be used as engineered fill provided it is clean and free of debris. Fill should be placed at a minimum relative compaction of 95 percent, at or close to its optimum moisture content.



In areas where shallow footings are to be constructed, all remedial grading and ground preparation should be performed prior to placing any footing concrete. The finish subgrade should be maintained moist at all time prior to footing construction. If there is a time lag between the end of grading and construction of footings, reprocessing of the exposed subgrade soil will be required in order to reestablish the specified level of compaction and soil moisture content.

It is recommended that Willdan Geotechnical observe the footing areas prior to placing of reinforcing steel or concrete in order to check that footings are founded on properly compacted soil.

In order to maintain adequate support for the foundations, footings located adjacent to utility trenches, including existing utility trenches, should be deepened as necessary so that their bearing surfaces are below an imaginary plane having an inclination of 1.5 horizontal to 1.0 vertical, extending upward from the bottom edge of the adjacent utility trench.

When the work is interrupted by heavy rains, fill operations shall not be resumed until the Geotechnical Engineer indicates that the moisture content, density and stability of previously placed fill are as specified. All soft or wet subgrade soil encountered during construction should be stabilized prior to the placement of new fill and further construction. If earthwork is performed during or soon after periods of precipitation or in late winter to early spring, the subgrade soils may be near their saturation level. Wet to saturated soils may become unstable or “pump” under dynamic loading such as equipment movement during grading and may not respond to densification techniques. Typical remedial measures include discing and aerating the soil during dry weather, or mixing the soil with dryer materials; or removing and replacing the soil with an approved fill material. The Geotechnical Engineer should be consulted prior to implementing remedial measures to observe the unstable subgrade conditions and provide appropriate recommendations.

12.1 Utility Trench Bedding and Backfill

Bedding materials consisting of sand, gravel, or crushed aggregate should be used to backfill around utility pipes to approximately 1 foot above the top of a pipe. Granular onsite soils present in a thin layer in the shallow subsurface may be used as bedding, provided they have a Sand Equivalent (SE) of 30 or greater. Prior to placing the pipes, the pipe trench subgrade should be observed by a representative of the project geotechnical engineer. If the exposed subgrade is



loose or unstable, the unsuitable subgrade soil must be excavated and replaced with bedding material. Bedding must be placed uniformly on each side of the pipe and mechanically compacted. Flooding or jetting to densify the bedding materials may be used for clean, granular backfill soils if the entire depth of the trench is above the water table. The fill should be placed in loose lifts not to exceed 8 inches, moisture-conditioned to at or near the optimum, and mechanically compacted to at least 90 percent relative compaction in accordance with ASTM D1557. Thinner lifts may be necessary to achieve the recommended level of compaction of the backfill due to equipment limitations.

Trenches in pavement areas should be capped with at least 12 inches of compacted, on-site soil similar to that of the adjoining subgrade. The upper 12 inches of trench backfill in areas to be paved should be compacted to at least 95 percent relative compaction. Special care should be taken in the control of utility trench backfilling in the pavement areas. Poor compaction may cause excessive settlement resulting in damage to the pavement structural section.

Where trenches exceed ten feet in depth from design finished grade, the percent relative compaction on cohesive soils may need to be increased to reduce the potential for trench backfill settlement. Should these conditions exist, compaction requirements should be reviewed by the Geotechnical Engineer as a part of the plan review process.

13.0 CONSTRUCTION RECOMMENDATIONS

During the excavations for the abutment foundations, temporary excavation with sidewalls of approximately 9 feet in height will be created. The sidewalls of the temporary excavation are expected to be in varying materials – stiff, cohesive soils at some locations, and medium dense granular soils in others. Based on the physical characteristics of these materials, we recommend that temporary shoring or other trench support must be used for the excavation. Laying back of excavation slopes may also be considered as an option by the construction contractor.

Other factors which should be considered with respect to trench wall stability include construction traffic and storage of materials on or near the tops of the slopes, construction scheduling, presence of nearby walls or structures, and weather conditions at the time of construction. All applicable requirements of the California Construction and General Industry Safety Orders, the Occupational Safety and Health Act of 1970, and the Construction Safety Act should also be followed.



14.0 LIMITATIONS

This report is based on the proposed project and geotechnical data as described herein. The materials encountered on the project site, described in other literature, and utilized in our laboratory investigation are believed representative of the project area, and the conclusions and recommendations contained in this report are presented on that basis. However, soil materials can vary in characteristics between points of exploration, both laterally and vertically, and those variations could affect the conclusions and recommendations contained herein. Any changes noted during construction should be brought to the attention of the Geotechnical Engineer so that any changes to these recommendations can be made as appropriate.

This report has been prepared consistent with the level of care being provided by other professionals providing similar services at the same locale and time period. The contents of this report are professional opinions and as such, are not to be considered a guarantee or warranty. This report should be reviewed and updated after a period of two years or if the project concept changes from that described herein.

The information contained herein has not been prepared for use by parties or projects other than those named or described herein. This report may not contain sufficient information for other parties or other purposes.



15.0 REFERENCES

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**APPENDIX A
LOG OF TEST BORINGS**

REFERENCE: CALTRANS SOIL & ROCK LOGGING, CLASSIFICATION, AND PRESENTATION MANUAL (JUNE 2010)

| | | | | | |
|------|--------|-------|--------------------------|----------|--------------|
| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No | TOTAL SHEETS |
| 03 | Glenn | CR 67 | NA | 1 | 4 |

| | | |
|---------------------------|------|----------|
| Girish Agrawal | | 10/23/12 |
| REGISTERED CIVIL ENGINEER | DATE | |

| | |
|----------------|---------------|
| Girish Agrawal | |
| No. C53867 | Exp. 12/31/13 |

PLANS APPROVAL DATE _____

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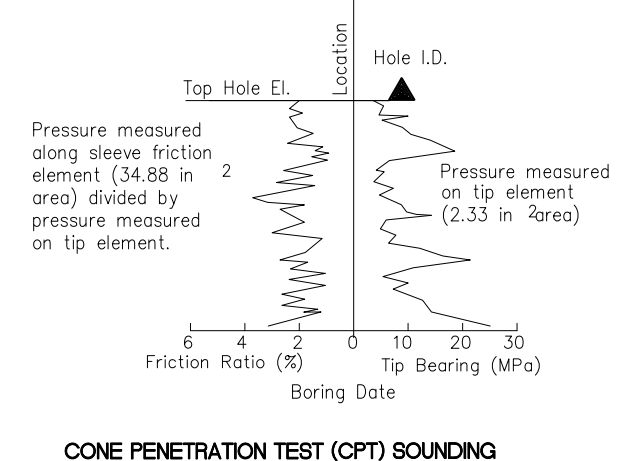
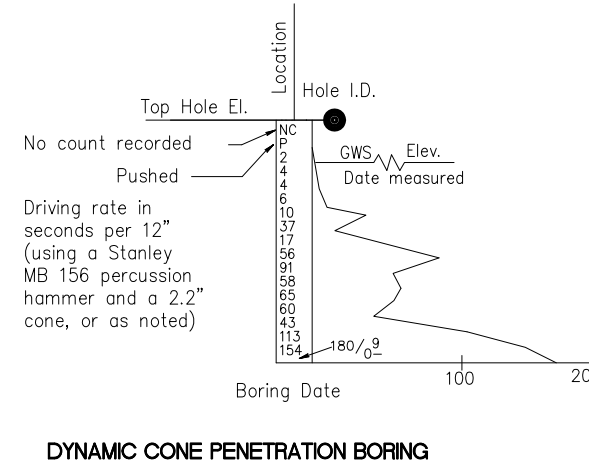
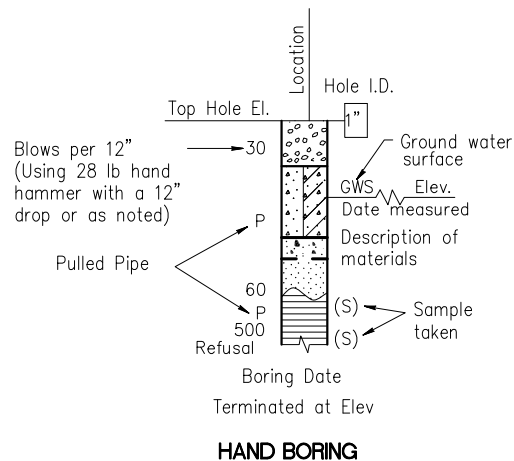
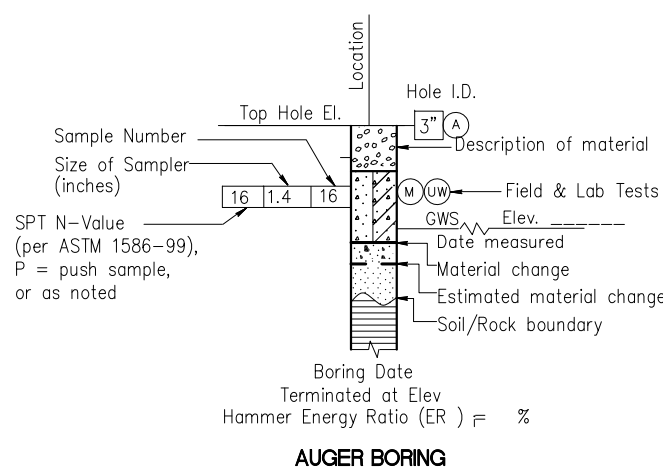
| CEMENTATION | |
|-------------|---|
| Description | Criteria |
| Weak | Crumbles or breaks with handling or little finger pressure. |
| Moderate | Crumbles or breaks with considerable finger pressure. |
| Strong | Will not crumble or break with finger pressure. |

| CONSISTENCY OF COHESIVE SOILS | | | | |
|-------------------------------|---------------------------------------|---------------------------------------|---------------------------|---|
| Description | Unconfined Compressive Strength (tsf) | Pocket Penetrometer Measurement (tsf) | Torvane Measurement (tsf) | Field Approximation |
| Very Soft | < 0.25 | < 0.25 | < 0.12 | Easily penetrated several inches by fist |
| Soft | 0.25 to 0.50 | 0.25 to 0.50 | 0.12 to 0.25 | Easily penetrated several inches by thumb |
| Medium Stiff | 0.50 to 1.0 | 0.50 to 1.0 | 0.25 to 0.50 | Penetrated several inches by thumb with moderate effort |
| Stiff | 1 to 2 | 1 to 2 | 0.50 to 1.0 | Readily indented by thumb but penetrated only with great effort |
| Very Stiff | 2 to 4 | 2 to 4 | 1.0 to 2.0 | Readily indented by thumbnail |
| Hard | > 4.0 | > 4.0 | > 2.0 | Indented by thumbnail with difficulty |

| BOREHOLE IDENTIFICATION | | |
|-------------------------|-----------|--|
| Symbol | Hole Type | Description |
| | A | Auger Boring |
| | R | Rotary drilled boring |
| | P | Rotary percussion boring (air) |
| | R | Rotary drilled diamond core |
| | HD | Hand driven (1-inch soil tube) |
| | HA | Hand Auger |
| | D | Dynamic Cone Penetration Boring |
| | CPT | Cone Penetration Test (ASTM D 5778-95) |
| | O | Other |

Note: Size in inches.

| PLASTICITY OF FINE-GRAINED SOILS | |
|----------------------------------|--|
| Description | Criteria |
| Nonplastic | A 1/8-inch thread cannot be rolled at any water content. |
| Low | The thread can barely be rolled and the lump cannot be formed when drier than the plastic limit. |
| Medium | The thread is easy to roll and not much time is required to reach the plastic limit. The thread cannot be rerolled after reaching the plastic limit. The lump crumbles when drier than the plastic limit. |
| High | It takes considerable time rolling and kneading to reach the plastic limit. The thread can be rerolled several times after reaching the plastic limit. The lump can be formed without crumbling when drier than the plastic limit. |



| | | | | | | | |
|-----------------------------|--|------------------------------|--|--|---|-----------------------|--|
| ENGINEERING SERVICES | | GEOTECHNICAL SERVICES | | STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION | DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN WILLDAN GEOTECHNICAL | BRIDGE NO. 11C0015 | SOIL LEGEND LOG OF TEST BORINGS |
| PREPARED BY: | | PREPARED BY: SM | | | | POST MILE NA | |
| CHECKED BY: | | CHECKED BY: GA | | CU EA | | REVISION DATES | SHEET 1 OF 4 |

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS: 0 1 2 3

DISREGARD PRINTS BEARING EARLIER REVISION DATES

FILE => \$REQUEST

REFERENCE: CALTRANS SOIL & ROCK LOGGING, CLASSIFICATION, AND PRESENTATION MANUAL (JUNE 2010)

| DIST | COUNTY | ROUTE | KILOMETER POST TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|------|--------|-------|------------------------------|----------|--------------|
| 03 | Glenn | CR 67 | NA | 2 | 4 |

Girish Agrawal
REGISTERED CIVIL ENGINEER
DATE 10/23/12

PLANS APPROVAL DATE

No. C53867
Exp. 12/31/13
CIVIL
STATE OF CALIFORNIA

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| GROUP SYMBOLS AND NAMES | | | |
|-------------------------|--|----------------|--|
| Graphic/Symbol | Group Names | Graphic/Symbol | Group Names |
| | Well-graded GRAVEL Well-graded GRAVEL with SAND | | CL Lean CLAY Lean CLAY with SAND Lean CLAY with GRAVEL SANDY lean CLAY SANDY lean CLAY with GRAVEL GRAVELLY lean CLAY GRAVELLY lean CLAY with SAND |
| | Poorly graded GRAVEL Poorly graded GRAVEL with SAND | | |
| | Well-graded GRAVEL with SILT Well-graded GRAVEL with SILT and SAND | | CL-ML SILTY CLAY SILTY CLAY with SAND SILTY CLAY with GRAVEL SANDY SILTY CLAY SANDY SILTY CLAY with GRAVEL GRAVELLY SILTY CLAY GRAVELLY SILTY CLAY with SAND |
| | Well-graded GRAVEL with CLAY (or SILTY CLAY) Well-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND) | | |
| | Poorly graded GRAVEL with SILT Poorly graded GRAVEL with SILT and SAND | | ML SILT SILT with SAND SILT with GRAVEL SANDY SILT SANDY SILT with GRAVEL GRAVELLY SILT GRAVELLY SILT with SAND |
| | Poorly graded GRAVEL with CLAY (or SILTY CLAY) Poorly graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND) | | |
| | SILTY GRAVEL SILTY GRAVEL with SAND | | OL ORGANIC lean CLAY ORGANIC lean CLAY with SAND ORGANIC lean CLAY with GRAVEL SANDY ORGANIC lean CLAY SANDY ORGANIC lean CLAY with GRAVEL GRAVELLY ORGANIC lean CLAY GRAVELLY ORGANIC lean CLAY with SAND |
| | CLAYEY GRAVEL CLAYEY GRAVEL with SAND | | |
| | SILTY, CLAYEY GRAVEL SILTY, CLAYEY GRAVEL with SAND | | OL ORGANIC SILT ORGANIC SILT with SAND ORGANIC SILT with GRAVEL SANDY ORGANIC SILT SANDY ORGANIC SILT with GRAVEL GRAVELLY ORGANIC SILT GRAVELLY ORGANIC SILT with SAND |
| | Well-graded SAND Well-graded SAND with GRAVEL | | |
| | Poorly graded SAND Poorly graded SAND with GRAVEL | | CH Fat CLAY Fat CLAY with SAND Fat CLAY with GRAVEL SANDY fat CLAY SANDY fat CLAY with GRAVEL GRAVELLY fat CLAY GRAVELLY fat CLAY with SAND |
| | Well-graded SAND with SILT Well-graded SAND with SILT and GRAVEL | | |
| | Well-graded SAND with CLAY (or SILTY CLAY) Well-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL) | | MH Elastic SILT Elastic SILT with SAND Elastic SILT with GRAVEL SANDY elastic SILT SANDY elastic SILT with GRAVEL GRAVELLY elastic SILT GRAVELLY elastic SILT with SAND |
| | Poorly graded SAND with SILT Poorly graded SAND with SILT and GRAVEL | | |
| | Poorly graded SAND with CLAY (or SILTY CLAY) Poorly graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL) | | OH ORGANIC fat CLAY ORGANIC fat CLAY with SAND ORGANIC fat CLAY with GRAVEL SANDY ORGANIC fat CLAY SANDY ORGANIC fat CLAY with GRAVEL GRAVELLY ORGANIC fat CLAY GRAVELLY ORGANIC fat CLAY with SAND |
| | SILTY SAND SILTY SAND with GRAVEL | | |
| | CLAYEY SAND CLAYEY SAND with GRAVEL | | OH ORGANIC elastic SILT ORGANIC elastic SILT with SAND ORGANIC elastic SILT with GRAVEL SANDY ORGANIC elastic SILT SANDY ORGANIC elastic SILT with GRAVEL GRAVELLY ORGANIC elastic SILT GRAVELLY ORGANIC elastic SILT with SAND |
| | SILTY, CLAYEY SAND SILTY, CLAYEY SAND with GRAVEL | | |
| | PEAT | | OL/OH ORGANIC SOIL ORGANIC SOIL with SAND ORGANIC SOIL with GRAVEL SANDY ORGANIC SOIL SANDY ORGANIC SOIL with GRAVEL GRAVELLY ORGANIC SOIL GRAVELLY ORGANIC SOIL with SAND |
| | COBBLES COBBLES and BOULDERS BOULDERS | | |

| FIELD AND LABORATORY TESTING | |
|------------------------------|--|
| (C) | Consolidation (ASTM D 2435) |
| (CL) | Collapse Potential (ASTM D 5333) |
| (CP) | Compaction Curve (CTM 216) |
| (CR) | Corrosivity Testing (CTM 643, CTM 422, CTM 417) |
| (CU) | Consolidated Undrained Triaxial (ASTM D 4767) |
| (DS) | Direct Shear (ASTM D 3080) |
| (EI) | Expansion Index (ASTM D 4829) |
| (M) | Moisture Content (ASTM D 2216) |
| (OC) | Organic Content-% (ASTM D 2974) |
| (P) | Permeability (CTM 220) |
| (PA) | Particle Size Analysis (ASTM D 422) |
| (PI) | Plasticity Index (AASHTO T 90) Liquid Limit (AASHTO T 89) |
| (PL) | Point Load Index (ASTM D 5731) |
| (PM) | Pressure Meter |
| (W) | Passing # 200 (ASTM D 1140-00) |
| (R) | R-Value (CTM 301) |
| (SE) | Sand Equivalent (CTM 217) |
| (SG) | Specific Gravity (AASHTO T 100) |
| (SL) | Shrinkage Limit (ASTM D 427) |
| (SW) | Swell Potential (ASTM D 4546) |
| (TV) | Pocket Torvane |
| (UC) | Unconfined Compression-Soil (ASTM D 2166) Unconfined Compression-Rock (ASTM D 2938) |
| (UU) | Unconsolidated Undrained Triaxial (ASTM D 2850) |
| (UW) | Unit Weight (ASTM D 4767) |
| (VS) | Vane Shear (AASHTO T 223) |

| APPARENT DENSITY OF COHESIONLESS SOILS | |
|--|---|
| Description | SPT N ₆₀ (Blows / 12 inches) |
| Very loose | 0 - 4 |
| Loose | 5 - 10 |
| Medium Dense | 11 - 30 |
| Dense | 31 - 50 |
| Very Dense | > 50 |

| MOISTURE | |
|-------------|---|
| Description | Criteria |
| Dry | Absence of moisture, dusty, dry to the touch |
| Moist | Damp but no visible water |
| Wet | Visible free water, usually soil is below water table |

| PERCENT OR PROPORTION OF SOILS | |
|--------------------------------|--|
| Description | Criteria |
| Trace | Particles are present but estimated to be less than 5% |
| Few | 5 to 10% |
| Little | 15 to 25% |
| Some | 30 to 45% |
| Mostly | 50 to 100% |

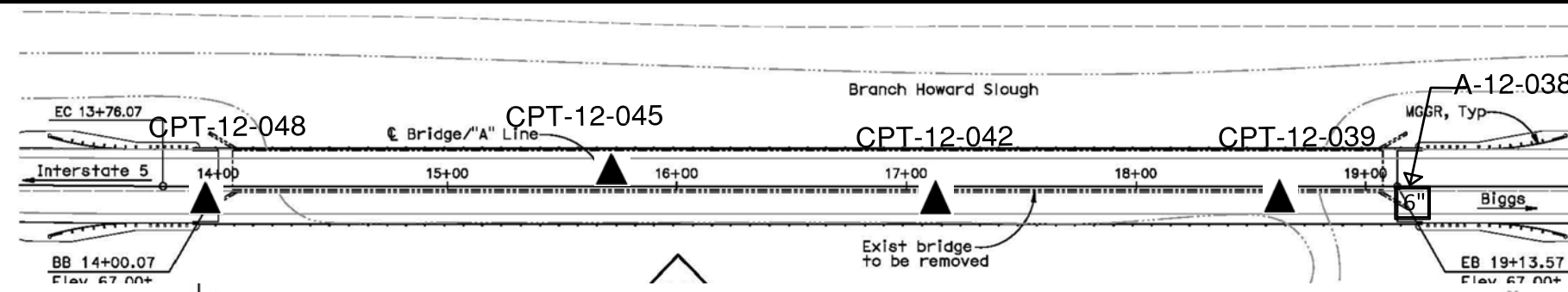
| PARTICLE SIZE | | |
|---------------|-----------|-------------------|
| Description | Size | |
| Boulder | > 12" | |
| Cobble | 3" to 12" | |
| Gravel | Coarse | 3/4" to 3" |
| | Fine | No. 4 to 3/4" |
| Sand | Coarse | No. 10 to No. 4 |
| | Medium | No. 40 to No. 10 |
| | Fine | No. 200 to No. 40 |

| | | | | | | | | | | | | | |
|--|--|---|--|---|--|--|--|---|--|--|--|--------------|--|
| ENGINEERING SERVICES PREPARED BY: _____ CHECKED BY: _____ | | GEOTECHNICAL SERVICES PREPARED BY: SM CHECKED BY: GA | | STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION | | DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN WILLDAN GEOTECHNICAL | | BRIDGE NO. 11C0015 POST MILE NA | | SOIL LEGEND LOG OF TEST BORINGS | | | |
| GS LOTB SOIL LEGEND | | ORIGINAL SCALE IN INCHES FOR REDUCED PLANS | | 0 1 2 3 | | CU EA | | DISREGARD PRINTS BEARING EARLIER REVISION DATES | | REVISION DATES | | SHEET 2 OF 4 | |

DATE PLOTTED => \$TIME USERNAME => \$USER

BENCH MARK

DH3659 Survey Disk in Concrete Wing Wall at the South East Corner of Bridge 11C-0017 along Rd H, ELEV. 74.90
 Horizontal Datum is NAD83
 Vertical Datum is NAVD88

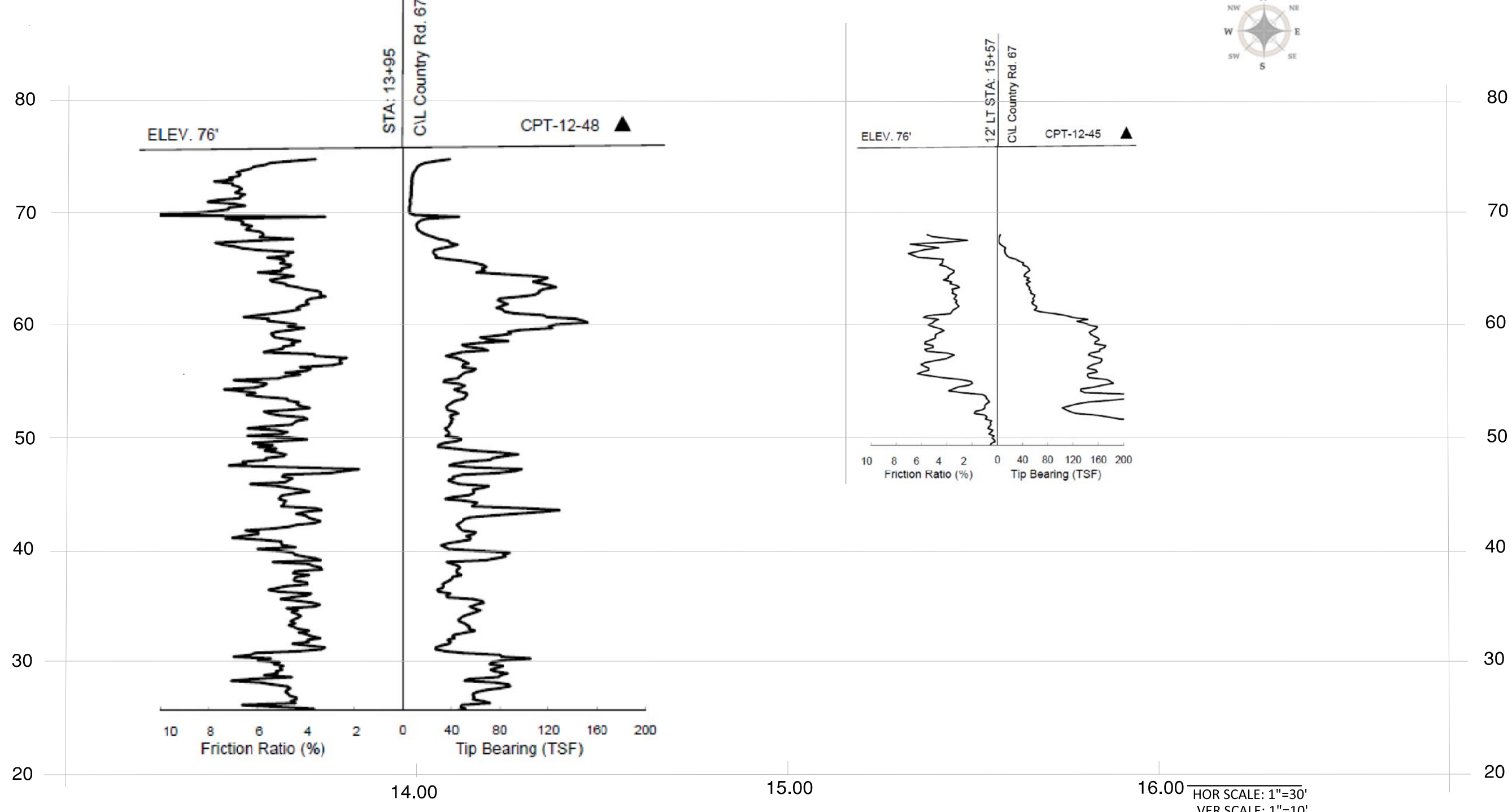


| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|------|--------|-------|--------------------------|----------|--------------|
| 03 | Glenn | CR 67 | NA | 3 | 4 |

| | |
|---------------------------|----------|
| Girish Agrawal | 10/24/12 |
| REGISTERED CIVIL ENGINEER | DATE |

PLANS APPROVAL DATE

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HOR SCALE: 1"=30'
 VER SCALE: 1"=10'

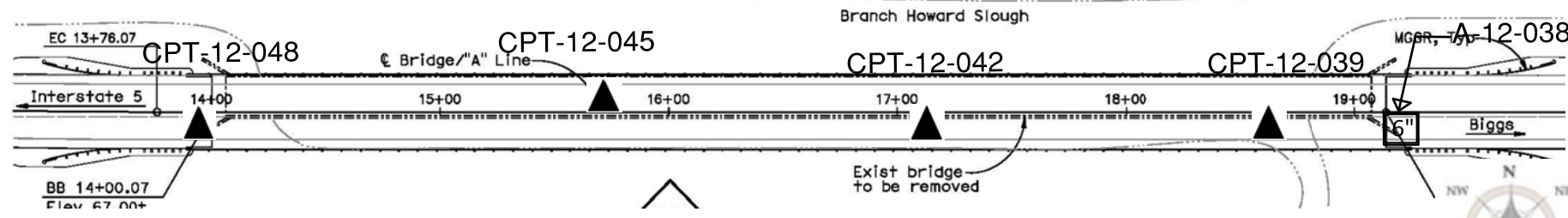
| | | | | | | | | | | | |
|-------------------------------------|--|--|--|----------------------------|--|----------------------------------|--|---|--|--|--|
| ENGINEERING SERVICES | | GEOTECHNICAL SERVICES | | STATE OF CALIFORNIA | | DIVISION OF ENGINEERING SERVICES | | BRIDGE NO. | | Bridge Replacement, Road 67 (Bridge No. 11C0015) | |
| FUNCTIONAL SUPERVISOR | | DRAWN BY: SM | | FIELD INVESTIGATION BY: BK | | STRUCTURE DESIGN | | 11C0015 | | LOG OF TEST BORINGS | |
| NAME: | | CHECKED BY: GA | | CU | | WILLDAN GEOTECHNICAL | | POST MILES | | NA | |
| OGS CIVIL LOG OF TEST BORINGS SHEET | | ORIGINAL SCALE IN INCHES FOR REDUCED PLANS | | 0 1 2 3 | | EA | | DISREGARD PRINTS BEARING EARLIER REVISION DATES | | REVISION DATES | |
| | | | | | | | | | | SHEET 3 OF 4 | |

DATE PLOTTED => \$DATE USERNAME => \$USER TIME PLOTTED => \$TIME

BENCH MARK

DH3659 Survey Disk in Concrete Wing Wall at the South East Corner of Bridge 11C-0017 along Rd H, ELEV. 74.90
 Horizontal Datum is NAD83
 Vertical Datum is NAVD88

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|------|--------|-------|--------------------------|----------|--------------|
| 03 | Glenn | CR 67 | NA | 4 | 4 |

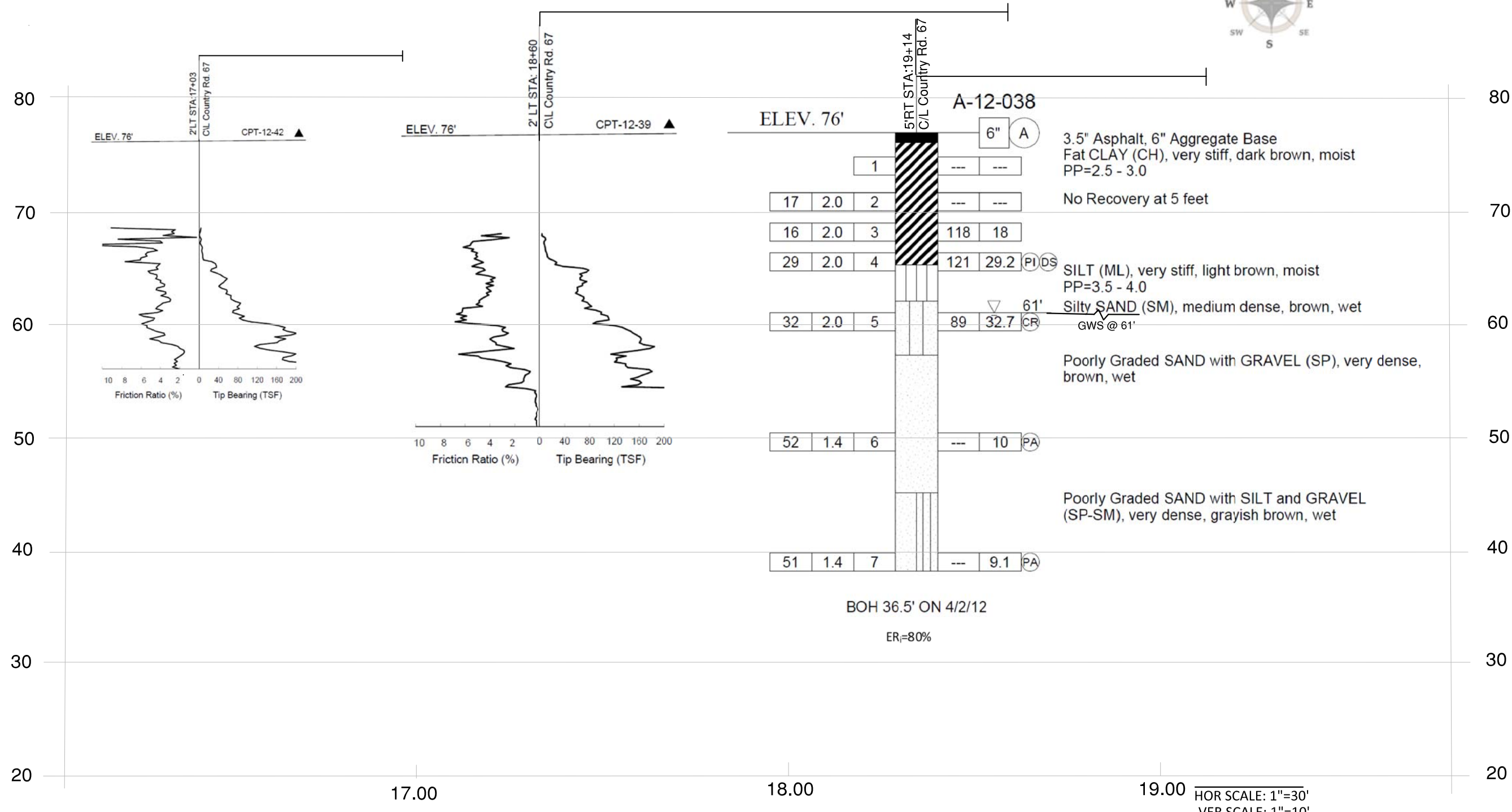


Girish Agrawal
 REGISTERED CIVIL ENGINEER
 10/24/12
 DATE

PLANS APPROVAL DATE

No. C53867
 Exp. 12/31/13
 CIVIL
 STATE OF CALIFORNIA

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| | | | | | | | | | | | |
|-------------------------------------|--|--|--|------------------------------|--|----------------------------------|--|--|--|---------------------|--|
| ENGINEERING SERVICES | | GEOTECHNICAL SERVICES | | STATE OF CALIFORNIA | | DIVISION OF ENGINEERING SERVICES | | BRIDGE NO. | | 11C0015 | |
| FUNCTIONAL SUPERVISOR | | DRAWN BY: SM | | DEPARTMENT OF TRANSPORTATION | | STRUCTURE DESIGN | | POST MILES | | NA | |
| NAME: | | CHECKED BY: GA | | BK | | WILLDAN GEOTECHINCAL | | BRIDGE REPLACEMENT, ROAD 67 (BRIDGE NO. 11C0015) | | LOG OF TEST BORINGS | |
| OGS CIVIL LOG OF TEST BORINGS SHEET | | ORIGINAL SCALE IN INCHES FOR REDUCED PLANS | | 0 1 2 3 | | CU EA | | DISREGARD PRINTS BEARING EARLIER REVISION DATES | | REVISION DATES | |
| | | | | | | | | | | SHEET 4 OF 4 | |

DATE PLOTTED => \$TIME USERNAME => \$USER

REFERENCE: CALTRANS SOIL & ROCK LOGGING, CLASSIFICATION, AND PRESENTATION MANUAL (JUNE 2010)

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|------|--------|-------|--------------------------|----------|--------------|
| 03 | Glenn | CR 67 | NA | 1 | 4 |

| | |
|---------------------------|----------|
| Girish Agrawal | 10/23/12 |
| REGISTERED CIVIL ENGINEER | DATE |

| | |
|----------------|------------|
| Girish Agrawal | No. C53867 |
| Exp. 12/31/13 | CIVIL |

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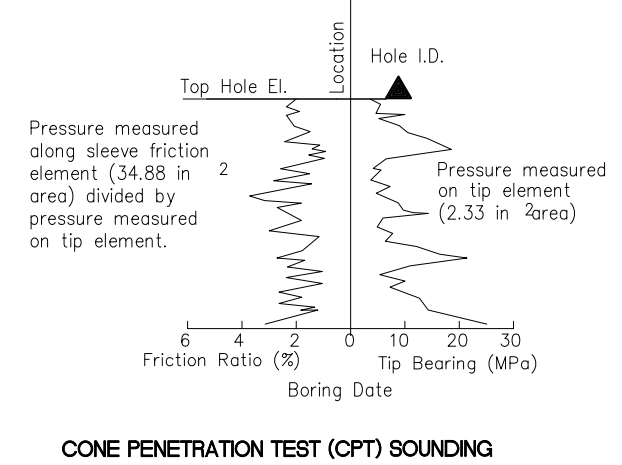
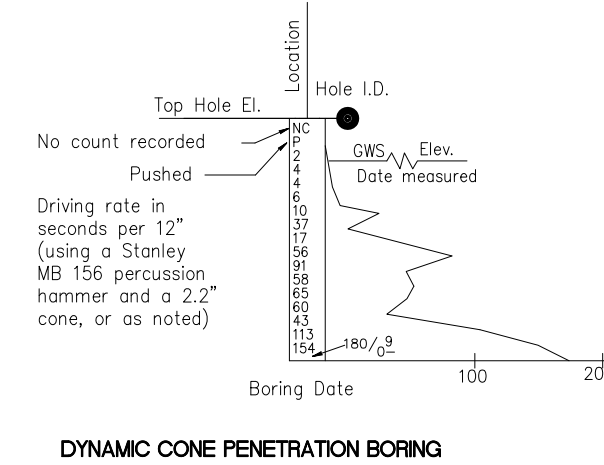
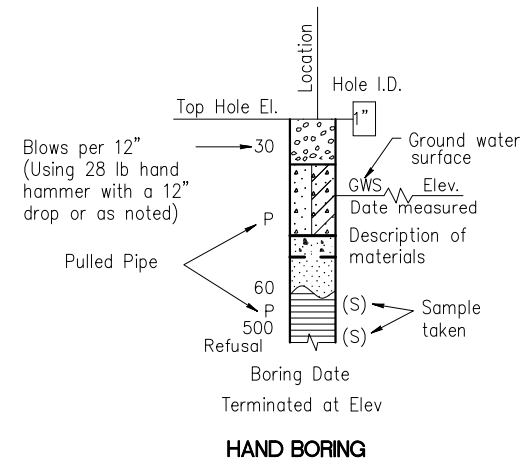
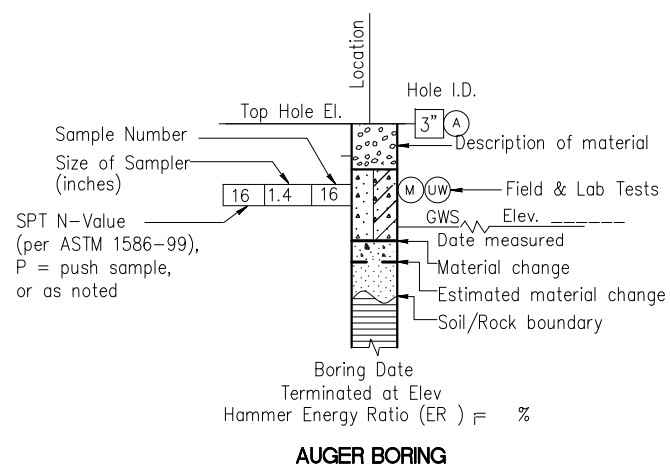
| CEMENTATION | |
|-------------|---|
| Description | Criteria |
| Weak | Crumbles or breaks with handling or little finger pressure. |
| Moderate | Crumbles or breaks with considerable finger pressure. |
| Strong | Will not crumble or break with finger pressure. |

| CONSISTENCY OF COHESIVE SOILS | | | | |
|-------------------------------|---------------------------------------|---------------------------------------|---------------------------|---|
| Description | Unconfined Compressive Strength (tsf) | Pocket Penetrometer Measurement (tsf) | Torvane Measurement (tsf) | Field Approximation |
| Very Soft | < 0.25 | < 0.25 | < 0.12 | Easily penetrated several inches by fist |
| Soft | 0.25 to 0.50 | 0.25 to 0.50 | 0.12 to 0.25 | Easily penetrated several inches by thumb |
| Medium Stiff | 0.50 to 1.0 | 0.50 to 1.0 | 0.25 to 0.50 | Penetrated several inches by thumb with moderate effort |
| Stiff | 1 to 2 | 1 to 2 | 0.50 to 1.0 | Readily indented by thumb but penetrated only with great effort |
| Very Stiff | 2 to 4 | 2 to 4 | 1.0 to 2.0 | Readily indented by thumbnail |
| Hard | > 4.0 | > 4.0 | > 2.0 | Indented by thumbnail with difficulty |

| BOREHOLE IDENTIFICATION | | |
|-------------------------|-----------|--|
| Symbol | Hole Type | Description |
| | A | Auger Boring |
| | R | Rotary drilled boring |
| | P | Rotary percussion boring (air) |
| | R | Rotary drilled diamond core |
| | HD | Hand driven (1-inch soil tube) |
| | HA | Hand Auger |
| | D | Dynamic Cone Penetration Boring |
| | CPT | Cone Penetration Test (ASTM D 5778-95) |
| | O | Other |

Note: Size in inches.

| PLASTICITY OF FINE-GRAINED SOILS | |
|----------------------------------|--|
| Description | Criteria |
| Nonplastic | A 1/8-inch thread cannot be rolled at any water content. |
| Low | The thread can barely be rolled and the lump cannot be formed when drier than the plastic limit. |
| Medium | The thread is easy to roll and not much time is required to reach the plastic limit. The thread cannot be rerolled after reaching the plastic limit. The lump crumbles when drier than the plastic limit. |
| High | It takes considerable time rolling and kneading to reach the plastic limit. The thread can be rerolled several times after reaching the plastic limit. The lump can be formed without crumbling when drier than the plastic limit. |



| | | | | | | | |
|-----------------------------|--|------------------------------|--|---|--|-----------------------|--------------------|
| ENGINEERING SERVICES | | GEOTECHNICAL SERVICES | | STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION | DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN WILLDAN GEOTECHNICAL | BRIDGE NO. 11C0016 | SOIL LEGEND |
| PREPARED BY: | | PREPARED BY: SM | | | | POST MILE NA | |
| CHECKED BY: | | CHECKED BY: GA | | DISREGARD PRINTS BEARING EARLIER REVISION DATES | | REVISION DATES | SHEET 1 OF 4 |

GS 101B SOIL LEGEND ORIGINAL SCALE IN INCHES FOR REDUCED PLANS CU EA FILE => \$REQUEST

DATE PLOTTED => \$TIME USERNAME => \$USER

REFERENCE: CALTRANS SOIL & ROCK LOGGING, CLASSIFICATION, AND PRESENTATION MANUAL (JUNE 2010)

| | | | | | |
|------|--------|-------|------------------------------|----------|--------------|
| DIST | COUNTY | ROUTE | KILOMETER POST TOTAL PROJECT | SHEET No | TOTAL SHEETS |
| 03 | Glenn | CR 67 | NA | 2 | 4 |

10/23/12
 DATE
 GIRISH AGRAWAL
 REGISTERED CIVIL ENGINEER
 No. C53867
 Exp. 12/31/13
 CIVIL
 STATE OF CALIFORNIA

PLANS APPROVAL DATE _____

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| GROUP SYMBOLS AND NAMES | | | |
|-------------------------|--|----------------|--|
| Graphic/Symbol | Group Names | Graphic/Symbol | Group Names |
| | Well-graded GRAVEL Well-graded GRAVEL with SAND | | Lean CLAY Lean CLAY with SAND Lean CLAY with GRAVEL SANDY lean CLAY SANDY lean CLAY with GRAVEL GRAVELLY lean CLAY GRAVELLY lean CLAY with SAND |
| | Poorly graded GRAVEL Poorly graded GRAVEL with SAND | | |
| | Well-graded GRAVEL with SILT Well-graded GRAVEL with SILT and SAND | | SILTY CLAY SILTY CLAY with SAND SILTY CLAY with GRAVEL SANDY SILTY CLAY SANDY SILTY CLAY with GRAVEL GRAVELLY SILTY CLAY GRAVELLY SILTY CLAY with SAND |
| | Well-graded GRAVEL with CLAY (or SILTY CLAY) Well-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND) | | |
| | Poorly graded GRAVEL with SILT Poorly graded GRAVEL with SILT and SAND | | SILT SILT with SAND SILT with GRAVEL SANDY SILT SANDY SILT with GRAVEL GRAVELLY SILT GRAVELLY SILT with SAND |
| | Poorly graded GRAVEL with CLAY (or SILTY CLAY) Poorly graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND) | | |
| | SILTY GRAVEL SILTY GRAVEL with SAND | | ORGANIC lean CLAY ORGANIC lean CLAY with SAND ORGANIC lean CLAY with GRAVEL SANDY ORGANIC lean CLAY SANDY ORGANIC lean CLAY with GRAVEL GRAVELLY ORGANIC lean CLAY GRAVELLY ORGANIC lean CLAY with SAND |
| | CLAYEY GRAVEL CLAYEY GRAVEL with SAND | | |
| | SILTY, CLAYEY GRAVEL SILTY, CLAYEY GRAVEL with SAND | | ORGANIC SILT ORGANIC SILT with SAND ORGANIC SILT with GRAVEL SANDY ORGANIC SILT SANDY ORGANIC SILT with GRAVEL GRAVELLY ORGANIC SILT GRAVELLY ORGANIC SILT with SAND |
| | Well-graded SAND Well-graded SAND with GRAVEL | | |
| | Poorly graded SAND Poorly graded SAND with GRAVEL | | Fat CLAY Fat CLAY with SAND Fat CLAY with GRAVEL SANDY fat CLAY SANDY fat CLAY with GRAVEL GRAVELLY fat CLAY GRAVELLY fat CLAY with SAND |
| | Well-graded SAND with SILT Well-graded SAND with SILT and GRAVEL | | |
| | Well-graded SAND with CLAY (or SILTY CLAY) Well-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL) | | Elastic SILT Elastic SILT with SAND Elastic SILT with GRAVEL SANDY elastic SILT SANDY elastic SILT with GRAVEL GRAVELLY elastic SILT GRAVELLY elastic SILT with SAND |
| | Poorly graded SAND with SILT Poorly graded SAND with SILT and GRAVEL | | |
| | Poorly graded SAND with CLAY (or SILTY CLAY) Poorly graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL) | | ORGANIC fat CLAY ORGANIC fat CLAY with SAND ORGANIC fat CLAY with GRAVEL SANDY ORGANIC fat CLAY SANDY ORGANIC fat CLAY with GRAVEL GRAVELLY ORGANIC fat CLAY GRAVELLY ORGANIC fat CLAY with SAND |
| | SILTY SAND SILTY SAND with GRAVEL | | |
| | CLAYEY SAND CLAYEY SAND with GRAVEL | | ORGANIC elastic SILT ORGANIC elastic SILT with SAND ORGANIC elastic SILT with GRAVEL SANDY ORGANIC elastic SILT SANDY ORGANIC elastic SILT with GRAVEL GRAVELLY ORGANIC elastic SILT GRAVELLY ORGANIC elastic SILT with SAND |
| | SILTY, CLAYEY SAND SILTY, CLAYEY SAND with GRAVEL | | |
| | PEAT | | ORGANIC SOIL ORGANIC SOIL with SAND ORGANIC SOIL with GRAVEL SANDY ORGANIC SOIL SANDY ORGANIC SOIL with GRAVEL GRAVELLY ORGANIC SOIL GRAVELLY ORGANIC SOIL with SAND |
| | COBBLES COBBLES and BOULDERS BOULDERS | | |

| FIELD AND LABORATORY TESTING | |
|------------------------------|--|
| (C) | Consolidation (ASTM D 2435) |
| (CL) | Collapse Potential (ASTM D 5333) |
| (CP) | Compaction Curve (CTM 216) |
| (CR) | Corrosivity Testing (CTM 643, CTM 422, CTM 417) |
| (CU) | Consolidated Undrained Triaxial (ASTM D 4767) |
| (DS) | Direct Shear (ASTM D 3080) |
| (EI) | Expansion Index (ASTM D 4829) |
| (M) | Moisture Content (ASTM D 2216) |
| (OC) | Organic Content-% (ASTM D 2974) |
| (P) | Permeability (CTM 220) |
| (PA) | Particle Size Analysis (ASTM D 422) |
| (PI) | Plasticity Index (AASHTO T 90) Liquid Limit (AASHTO T 89) |
| (PL) | Point Load Index (ASTM D 5731) |
| (PM) | Pressure Meter |
| (W) | Passing # 200 (ASTM D 1140-00) |
| (R) | R-Value (CTM 301) |
| (SE) | Sand Equivalent (CTM 217) |
| (SG) | Specific Gravity (AASHTO T 100) |
| (SL) | Shrinkage Limit (ASTM D 427) |
| (SW) | Swell Potential (ASTM D 4546) |
| (TV) | Pocket Torvane |
| (UC) | Unconfined Compression-Soil (ASTM D 2166) Unconfined Compression-Rock (ASTM D 2938) |
| (UU) | Unconsolidated Undrained Triaxial (ASTM D 2850) |
| (UW) | Unit Weight (ASTM D 4767) |
| (VS) | Vane Shear (AASHTO T 223) |

| APPARENT DENSITY OF COHESIONLESS SOILS | |
|--|---|
| Description | SPT N ₆₀ (Blows / 12 inches) |
| Very loose | 0 - 4 |
| Loose | 5 - 10 |
| Medium Dense | 11 - 30 |
| Dense | 31 - 50 |
| Very Dense | > 50 |

| MOISTURE | |
|-------------|---|
| Description | Criteria |
| Dry | Absence of moisture, dusty, dry to the touch |
| Moist | Damp but no visible water |
| Wet | Visible free water, usually soil is below water table |

| PERCENT OR PROPORTION OF SOILS | |
|--------------------------------|--|
| Description | Criteria |
| Trace | Particles are present but estimated to be less than 5% |
| Few | 5 to 10% |
| Little | 15 to 25% |
| Some | 30 to 45% |
| Mostly | 50 to 100% |

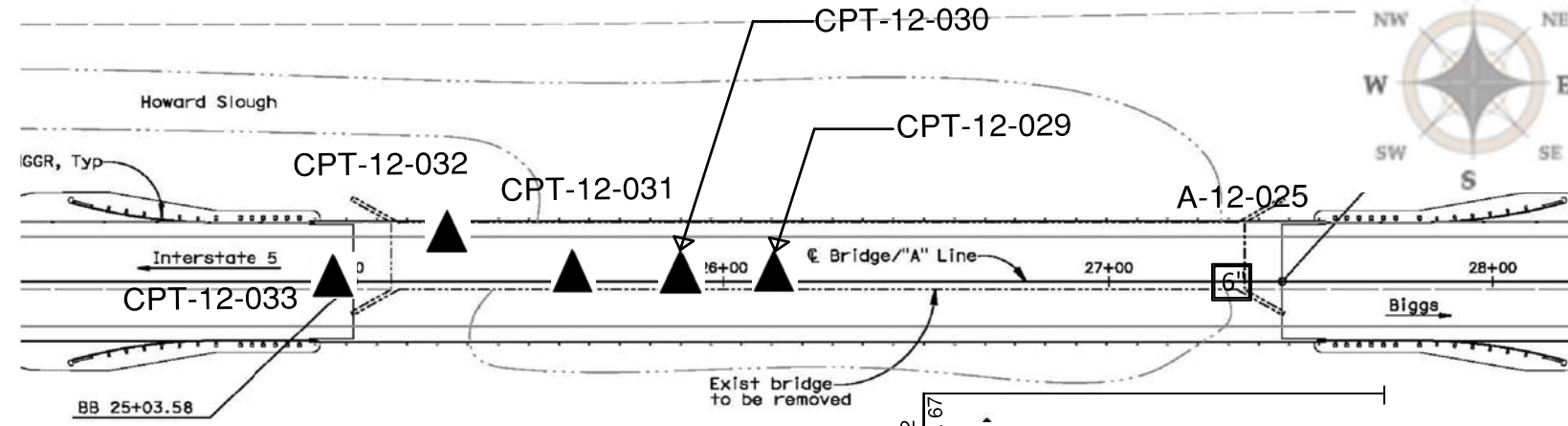
| PARTICLE SIZE | | |
|---------------|-----------|-------------------|
| Description | Size | |
| Boulder | > 12" | |
| Cobble | 3" to 12" | |
| Gravel | Coarse | 3/4" to 3" |
| | Fine | No. 4 to 3/4" |
| Sand | Coarse | No. 10 to No. 4 |
| | Medium | No. 40 to No. 10 |
| | Fine | No. 200 to No. 40 |

| | | | | | | | | | | | | | |
|--|--|---|--|---|--|--|--|---|--|--|--|--------------|--|
| ENGINEERING SERVICES PREPARED BY: _____ CHECKED BY: _____ | | GEOTECHNICAL SERVICES PREPARED BY: SM CHECKED BY: GA | | STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION | | DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN WILLDAN GEOTECHNICAL | | BRIDGE NO. 11C0016 POST MILE NA | | SOIL LEGEND LOG OF TEST BORINGS | | | |
| GS 10TB SOIL LEGEND | | ORIGINAL SCALE IN INCHES FOR REDUCED PLANS | | 0 1 2 3 | | CU EA | | DISREGARD PRINTS BEARING EARLIER REVISION DATES | | REVISION DATES | | SHEET 2 OF 4 | |

DATE PLOTTED => \$TIME USERNAME => \$USER

BENCH MARK

DH3659 Survey Disk in Concrete Wing Wall at the South East Corner of Bridge 11C-0017 along Rd H, ELEV. 74.90
 Horizontal Datum is NAD83
 Vertical Datum is NAVD88

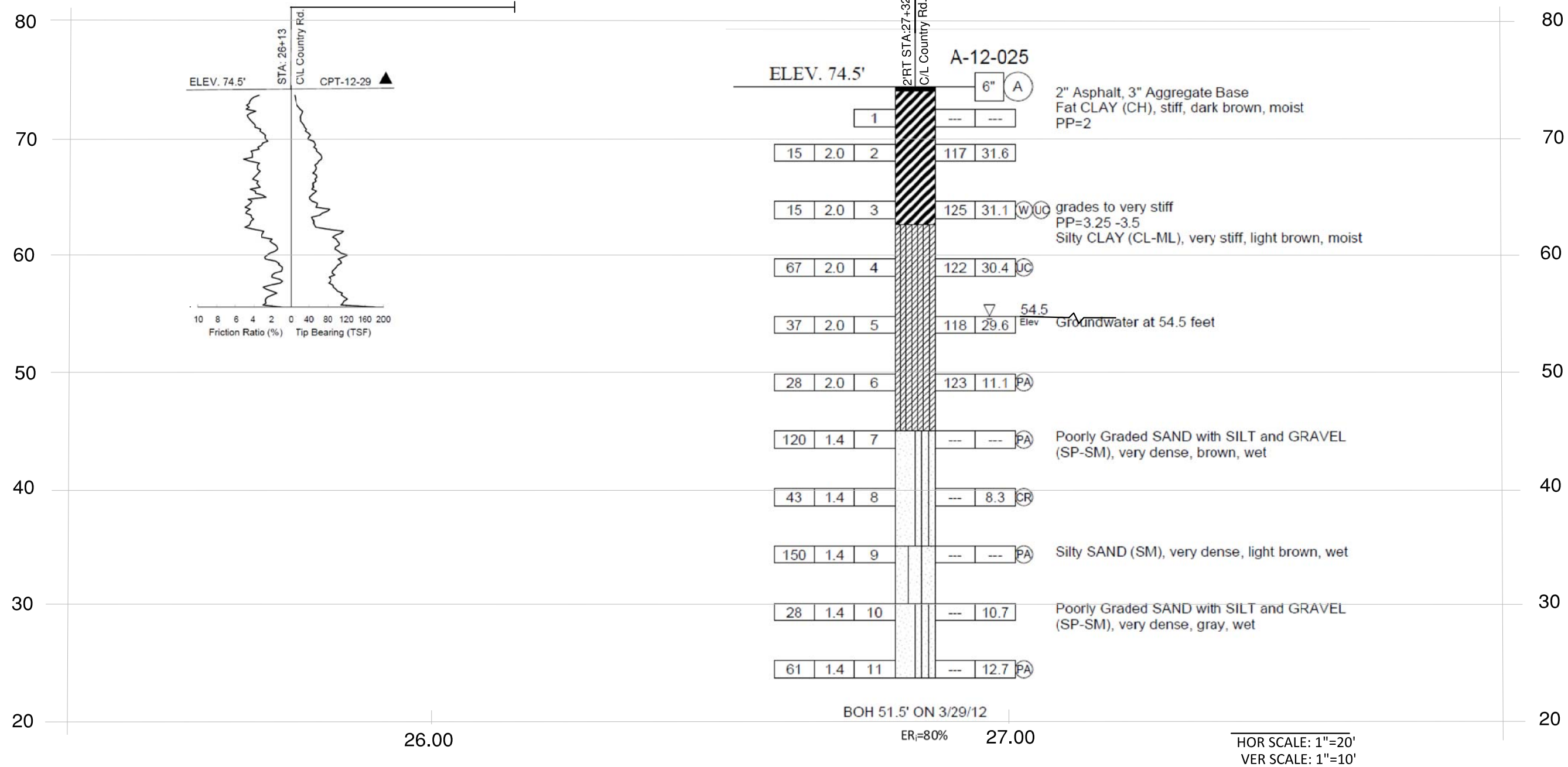


| | | | | | |
|------|--------|-------|--------------------------|----------|--------------|
| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No | TOTAL SHEETS |
| 03 | Glenn | CR 67 | NA | 4 | 4 |

Girish Agrawal 10/23/12
 REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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| | | | | | | | | | | | |
|-------------------------------------|--|--|--|------------------------------|--|----------------------------------|--|------------|--|--|--|
| ENGINEERING SERVICES | | GEOTECHNICAL SERVICES | | STATE OF CALIFORNIA | | DIVISION OF ENGINEERING SERVICES | | BRIDGE NO. | | Bridge Replacement, Road 67 (Bridge No. 11C0016) | |
| FUNCTIONAL SUPERVISOR | | DRAWN BY: SM | | DEPARTMENT OF TRANSPORTATION | | STRUCTURE DESIGN | | 11C0016 | | LOG OF TEST BORINGS | |
| NAME: | | CHECKED BY: GA | | FIELD INVESTIGATION BY: BK | | WILLDAN GEOTECHNICAL | | POST MILES | | REVISION DATES | |
| OGS CIVIL LOG OF TEST BORINGS SHEET | | ORIGINAL SCALE IN INCHES FOR REDUCED PLANS | | 0 1 2 3 | | CU EA | | NA | | SHEET 4 OF 4 | |

TIME PLOTTED => \$TIME
 DATE PLOTTED => \$DATE
 USERNAME => \$USER

REFERENCE: CALTRANS SOIL & ROCK LOGGING, CLASSIFICATION, AND PRESENTATION MANUAL (JUNE 2010)

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|------|--------|-------|--------------------------|----------|--------------|
| 03 | Glenn | CR 67 | NA | 1 | 3 |

Girish Agrawal
REGISTERED CIVIL ENGINEER
DATE 10/23/12

No. C53867
Exp. 12/31/13
CIVIL

PLANS APPROVAL DATE _____

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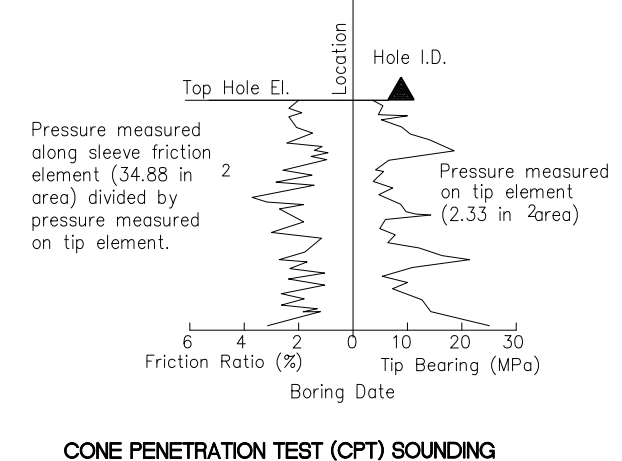
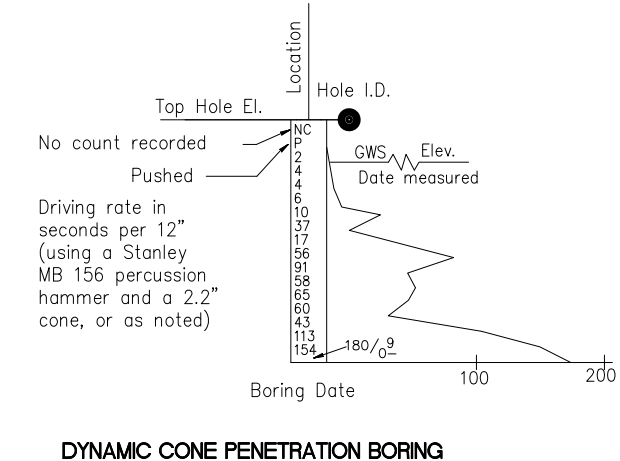
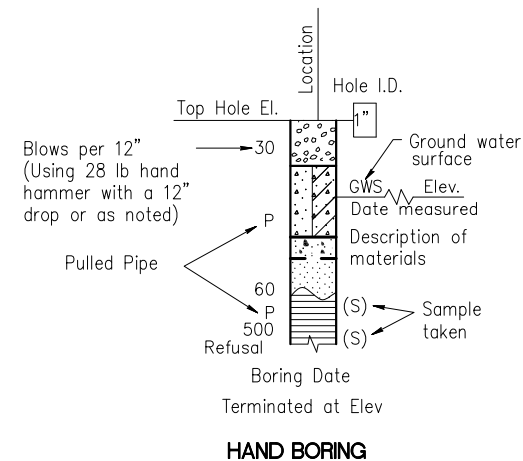
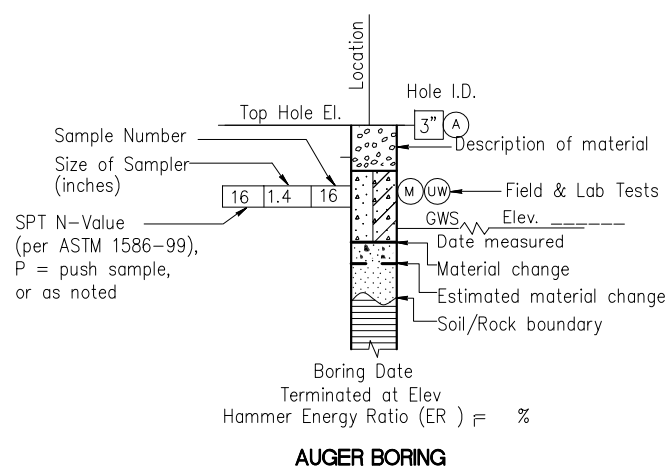
| CEMENTATION | |
|-------------|---|
| Description | Criteria |
| Weak | Crumbles or breaks with handling or little finger pressure. |
| Moderate | Crumbles or breaks with considerable finger pressure. |
| Strong | Will not crumble or break with finger pressure. |

| CONSISTENCY OF COHESIVE SOILS | | | | |
|-------------------------------|---------------------------------------|---------------------------------------|---------------------------|---|
| Description | Unconfined Compressive Strength (tsf) | Pocket Penetrometer Measurement (tsf) | Torvane Measurement (tsf) | Field Approximation |
| Very Soft | < 0.25 | < 0.25 | < 0.12 | Easily penetrated several inches by fist |
| Soft | 0.25 to 0.50 | 0.25 to 0.50 | 0.12 to 0.25 | Easily penetrated several inches by thumb |
| Medium Stiff | 0.50 to 1.0 | 0.50 to 1.0 | 0.25 to 0.50 | Penetrated several inches by thumb with moderate effort |
| Stiff | 1 to 2 | 1 to 2 | 0.50 to 1.0 | Readily indented by thumb but penetrated only with great effort |
| Very Stiff | 2 to 4 | 2 to 4 | 1.0 to 2.0 | Readily indented by thumbnail |
| Hard | > 4.0 | > 4.0 | > 2.0 | Indented by thumbnail with difficulty |

| BOREHOLE IDENTIFICATION | | |
|-------------------------|-----------|--|
| Symbol | Hole Type | Description |
| | A | Auger Boring |
| | R | Rotary drilled boring |
| | P | Rotary percussion boring (air) |
| | R | Rotary drilled diamond core |
| | HD | Hand driven (1-inch soil tube) |
| | HA | Hand Auger |
| | D | Dynamic Cone Penetration Boring |
| | CPT | Cone Penetration Test (ASTM D 5778-95) |
| | O | Other |

Note: Size in inches.

| PLASTICITY OF FINE-GRAINED SOILS | |
|----------------------------------|--|
| Description | Criteria |
| Nonplastic | A 1/8-inch thread cannot be rolled at any water content. |
| Low | The thread can barely be rolled and the lump cannot be formed when drier than the plastic limit. |
| Medium | The thread is easy to roll and not much time is required to reach the plastic limit. The thread cannot be rerolled after reaching the plastic limit. The lump crumbles when drier than the plastic limit. |
| High | It takes considerable time rolling and kneading to reach the plastic limit. The thread can be rerolled several times after reaching the plastic limit. The lump can be formed without crumbling when drier than the plastic limit. |



| | | | | | | | |
|-----------------------------|--|------------------------------|--|--|---|---|--|
| ENGINEERING SERVICES | | GEOTECHNICAL SERVICES | | STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION | DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN WILLDAN GEOTECHNICAL | BRIDGE NO. 11C0017 | SOIL LEGEND LOG OF TEST BORINGS |
| PREPARED BY: | | PREPARED BY: SM | | | | POST MILE NA | |
| CHECKED BY: | | CHECKED BY: GA | | ORIGINAL SCALE IN INCHES FOR REDUCED PLANS | | DISREGARD PRINTS BEARING EARLIER REVISION DATES | REVISION DATES |
| GS LOTB SOIL LEGEND | | | | CU EA | | FILE => \$REQUEST | SHEET 1 OF 3 |

DATE PLOTTED => \$TIME USERNAME => \$USER

| DIST | COUNTY | ROUTE | KILOMETER TOTAL PROJECT | POST TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|------|--------|-------|-------------------------|--------------------|----------|--------------|
| 03 | Glenn | CR 67 | NA | NA | 2 | 3 |

10/23/12
 DATE
 GIRISH AGRAWAL
 REGISTERED CIVIL ENGINEER
 No. C53867
 Exp. 12/31/13
 CIVIL
 STATE OF CALIFORNIA

PLANS APPROVAL DATE _____

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

| GROUP SYMBOLS AND NAMES | | | |
|-------------------------|--|----------------|--|
| Graphic/Symbol | Group Names | Graphic/Symbol | Group Names |
| | Well-graded GRAVEL Well-graded GRAVEL with SAND | | CL Lean CLAY Lean CLAY with SAND Lean CLAY with GRAVEL SANDY lean CLAY SANDY lean CLAY with GRAVEL GRAVELLY lean CLAY GRAVELLY lean CLAY with SAND |
| | Poorly graded GRAVEL Poorly graded GRAVEL with SAND | | |
| | Well-graded GRAVEL with SILT Well-graded GRAVEL with SILT and SAND | | CL-ML SILTY CLAY SILTY CLAY with SAND SILTY CLAY with GRAVEL SANDY SILTY CLAY SANDY SILTY CLAY with GRAVEL GRAVELLY SILTY CLAY GRAVELLY SILTY CLAY with SAND |
| | Well-graded GRAVEL with CLAY (or SILTY CLAY) Well-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND) | | |
| | Poorly graded GRAVEL with SILT Poorly graded GRAVEL with SILT and SAND | | ML SILT SILT with SAND SILT with GRAVEL SANDY SILT SANDY SILT with GRAVEL GRAVELLY SILT GRAVELLY SILT with SAND |
| | Poorly graded GRAVEL with CLAY (or SILTY CLAY) Poorly graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND) | | |
| | SILTY GRAVEL SILTY GRAVEL with SAND | | OL ORGANIC lean CLAY ORGANIC lean CLAY with SAND ORGANIC lean CLAY with GRAVEL SANDY ORGANIC lean CLAY SANDY ORGANIC lean CLAY with GRAVEL GRAVELLY ORGANIC lean CLAY GRAVELLY ORGANIC lean CLAY with SAND |
| | CLAYEY GRAVEL CLAYEY GRAVEL with SAND | | |
| | SILTY, CLAYEY GRAVEL SILTY, CLAYEY GRAVEL with SAND | | OL ORGANIC SILT ORGANIC SILT with SAND ORGANIC SILT with GRAVEL SANDY ORGANIC SILT SANDY ORGANIC SILT with GRAVEL GRAVELLY ORGANIC SILT GRAVELLY ORGANIC SILT with SAND |
| | Well-graded SAND Well-graded SAND with GRAVEL | | |
| | Poorly graded SAND Poorly graded SAND with GRAVEL | | CH Fat CLAY Fat CLAY with SAND Fat CLAY with GRAVEL SANDY fat CLAY SANDY fat CLAY with GRAVEL GRAVELLY fat CLAY GRAVELLY fat CLAY with SAND |
| | Well-graded SAND with SILT Well-graded SAND with SILT and GRAVEL | | |
| | Well-graded SAND with CLAY (or SILTY CLAY) Well-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL) | | MH Elastic SILT Elastic SILT with SAND Elastic SILT with GRAVEL SANDY elastic SILT SANDY elastic SILT with GRAVEL GRAVELLY elastic SILT GRAVELLY elastic SILT with SAND |
| | Poorly graded SAND with SILT Poorly graded SAND with SILT and GRAVEL | | |
| | Poorly graded SAND with CLAY (or SILTY CLAY) Poorly graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL) | | OH ORGANIC fat CLAY ORGANIC fat CLAY with SAND ORGANIC fat CLAY with GRAVEL SANDY ORGANIC fat CLAY SANDY ORGANIC fat CLAY with GRAVEL GRAVELLY ORGANIC fat CLAY GRAVELLY ORGANIC fat CLAY with SAND |
| | SILTY SAND SILTY SAND with GRAVEL | | |
| | CLAYEY SAND CLAYEY SAND with GRAVEL | | OH ORGANIC elastic SILT ORGANIC elastic SILT with SAND ORGANIC elastic SILT with GRAVEL SANDY ORGANIC elastic SILT SANDY ORGANIC elastic SILT with GRAVEL GRAVELLY ORGANIC elastic SILT GRAVELLY ORGANIC elastic SILT with SAND |
| | SILTY, CLAYEY SAND SILTY, CLAYEY SAND with GRAVEL | | |
| | PEAT | | OL/OH ORGANIC SOIL ORGANIC SOIL with SAND ORGANIC SOIL with GRAVEL SANDY ORGANIC SOIL SANDY ORGANIC SOIL with GRAVEL GRAVELLY ORGANIC SOIL GRAVELLY ORGANIC SOIL with SAND |
| | COBBLES COBBLES and BOULDERS BOULDERS | | |

| FIELD AND LABORATORY TESTING | |
|------------------------------|--|
| (C) | Consolidation (ASTM D 2435) |
| (CL) | Collapse Potential (ASTM D 5333) |
| (CP) | Compaction Curve (CTM 216) |
| (CR) | Corrosivity Testing (CTM 643, CTM 422, CTM 417) |
| (CU) | Consolidated Undrained Triaxial (ASTM D 4767) |
| (DS) | Direct Shear (ASTM D 3080) |
| (EI) | Expansion Index (ASTM D 4829) |
| (M) | Moisture Content (ASTM D 2216) |
| (OC) | Organic Content-% (ASTM D 2974) |
| (P) | Permeability (CTM 220) |
| (PA) | Particle Size Analysis (ASTM D 422) |
| (PI) | Plasticity Index (AASHTO T 90) Liquid Limit (AASHTO T 89) |
| (PL) | Point Load Index (ASTM D 5731) |
| (PM) | Pressure Meter |
| (W) | Passing # 200 (ASTM D 1140-00) |
| (R) | R-Value (CTM 301) |
| (SE) | Sand Equivalent (CTM 217) |
| (SG) | Specific Gravity (AASHTO T 100) |
| (SL) | Shrinkage Limit (ASTM D 427) |
| (SW) | Swell Potential (ASTM D 4546) |
| (TV) | Pocket Torvane |
| (UC) | Unconfined Compression-Soil (ASTM D 2166) Unconfined Compression-Rock (ASTM D 2938) |
| (UU) | Unconsolidated Undrained Triaxial (ASTM D 2850) |
| (UW) | Unit Weight (ASTM D 4767) |
| (VS) | Vane Shear (AASHTO T 223) |

| APPARENT DENSITY OF COHESIONLESS SOILS | |
|--|---|
| Description | SPT N ₆₀ (Blows / 12 inches) |
| Very loose | 0 - 4 |
| Loose | 5 - 10 |
| Medium Dense | 11 - 30 |
| Dense | 31 - 50 |
| Very Dense | > 50 |

| MOISTURE | |
|-------------|---|
| Description | Criteria |
| Dry | Absence of moisture, dusty, dry to the touch |
| Moist | Damp but no visible water |
| Wet | Visible free water, usually soil is below water table |

| PERCENT OR PROPORTION OF SOILS | |
|--------------------------------|--|
| Description | Criteria |
| Trace | Particles are present but estimated to be less than 5% |
| Few | 5 to 10% |
| Little | 15 to 25% |
| Some | 30 to 45% |
| Mostly | 50 to 100% |

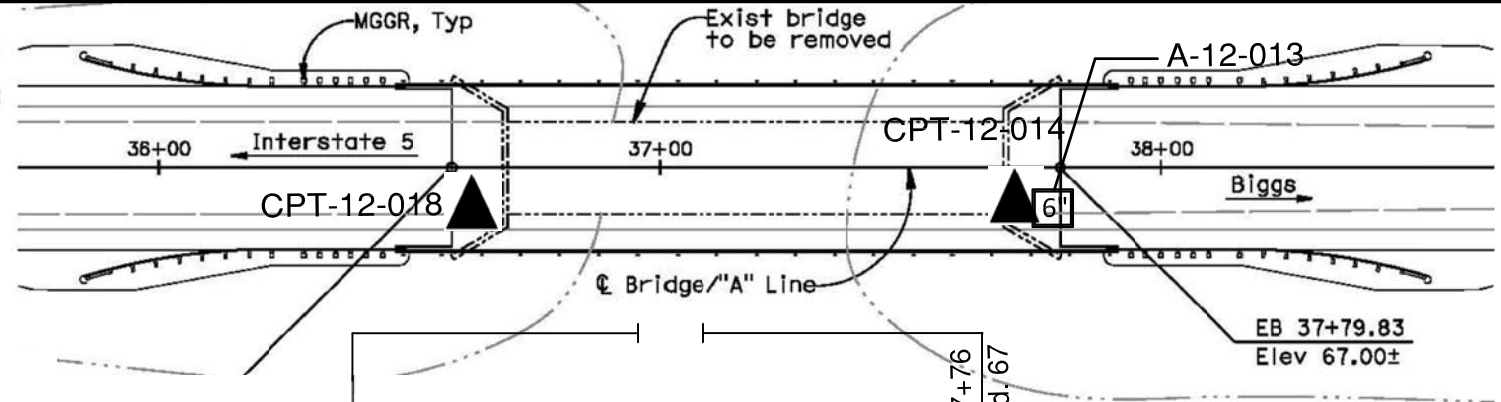
| PARTICLE SIZE | | |
|---------------|-----------|-------------------|
| Description | Size | |
| Boulder | > 12" | |
| Cobble | 3" to 12" | |
| Gravel | Coarse | 3/4" to 3" |
| | Fine | No. 4 to 3/4" |
| Sand | Coarse | No. 10 to No. 4 |
| | Medium | No. 40 to No. 10 |
| | Fine | No. 200 to No. 40 |

| | | | | | | | | | | | |
|--|--|---|--|---|--|--|--|---|--|--|--|
| ENGINEERING SERVICES PREPARED BY: _____ CHECKED BY: _____ | | GEOTECHNICAL SERVICES PREPARED BY: SM CHECKED BY: CA | | STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION | | DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN WILLDAN GEOTECHNICAL | | BRIDGE NO. 11C0017 POST MILE _____ _____NA_____ | | SOIL LEGEND LOG OF TEST BORINGS | |
| ORIGINAL SCALE IN INCHES FOR REDUCED PLANS | | | | CU EA _____ | | DISREGARD PRINTS BEARING EARLIER REVISION DATES | | REVISION DATES | | SHEET 2 OF 3 | |

DATE PLOTTED => \$TIME USERNAME => \$USER

BENCH MARK

DH3659 Survey Disk in Concrete Wing Wall at the South East Corner of Bridge 11C-0017 along Rd H, ELEV. 74.90
 Horizontal Datum is NAD83
 Vertical Datum is NAVD88

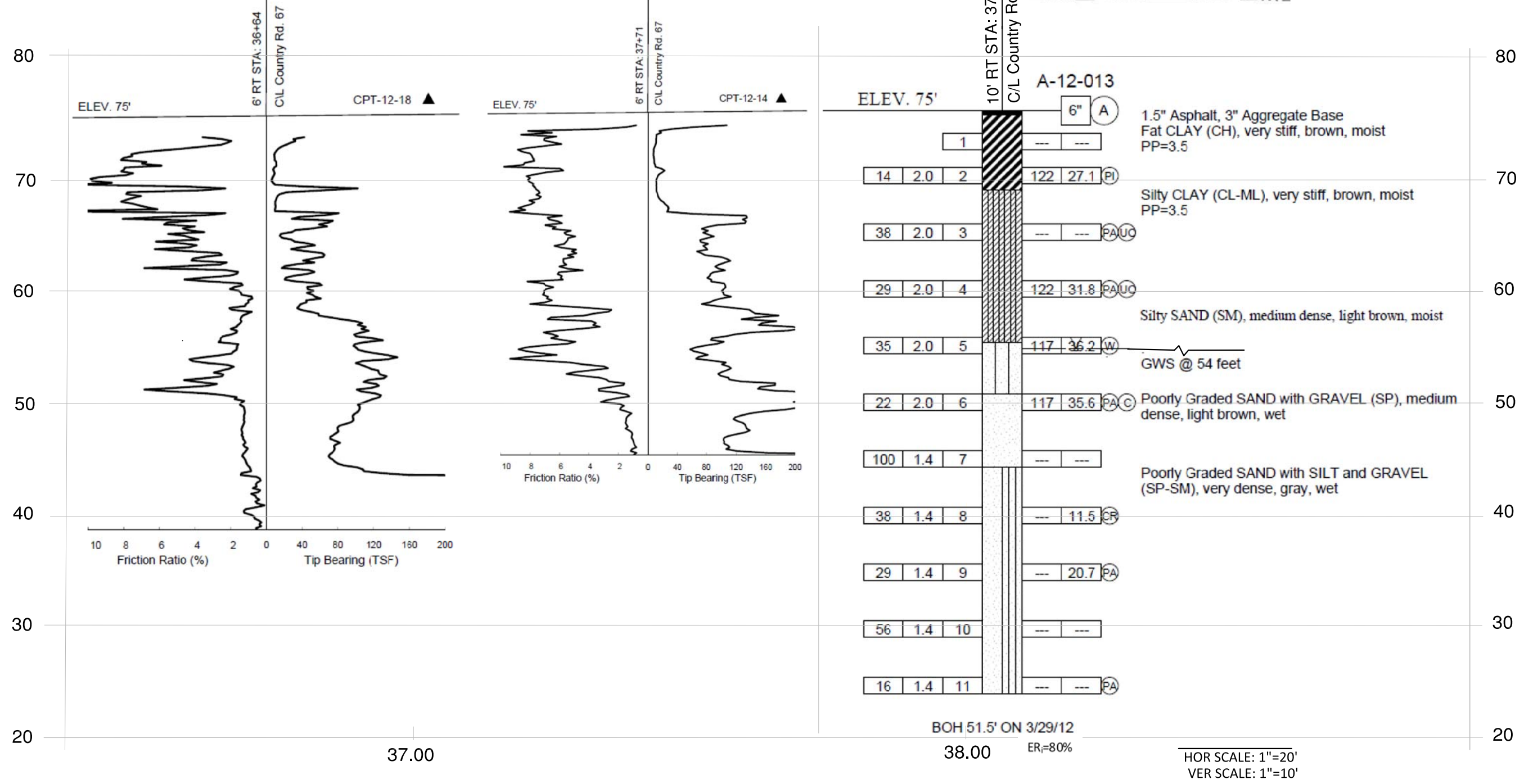


| | | | | | |
|------|--------|-------|--------------------------|----------|--------------|
| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No | TOTAL SHEETS |
| 03 | Glenn | CR 67 | NA | 3 | 3 |

Girish Agrawal 10/23/12
 REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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| | | | | | |
|--|--------------------------------|---|--|---|--|
| ENGINEERING SERVICES | GEOTECHNICAL SERVICES | STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION | DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN WILLDAN GEOTECHINCAL | BRIDGE NO. 11C0017 | Bridge Replacement, Road 67 (Bridge No. 11C0017) |
| FUNCTIONAL SUPERVISOR | DRAWN BY: SM CHECKED BY: GA | FIELD INVESTIGATION BY: BK | | POST MILES NA | LOG OF TEST BORINGS |
| ORIGINAL SCALE IN INCHES FOR REDUCED PLANS | | | CU EA | DISREGARD PRINTS BEARING EARLIER REVISION DATES | SHEET 3 OF 3 |

DATE PLOTTED => \$DATE USERNAME => \$USER TIME PLOTTED => \$TIME

REFERENCE: CALTRANS SOIL & ROCK LOGGING, CLASSIFICATION, AND PRESENTATION MANUAL (JUNE 2010)

| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|------|--------|-------|--------------------------|----------|--------------|
| 03 | Glenn | CR 67 | NA | 1 | 3 |

Girish Agrawal
REGISTERED CIVIL ENGINEER
10/23/12
DATE

Girish Agrawal
No. C53867
Exp. 12/31/13
CIVIL

PLANS APPROVAL DATE _____

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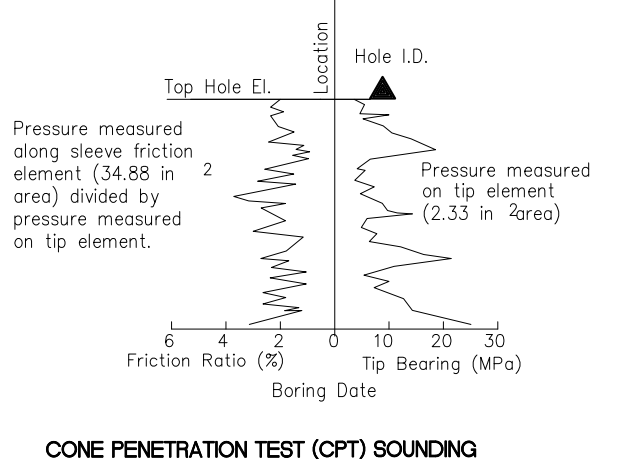
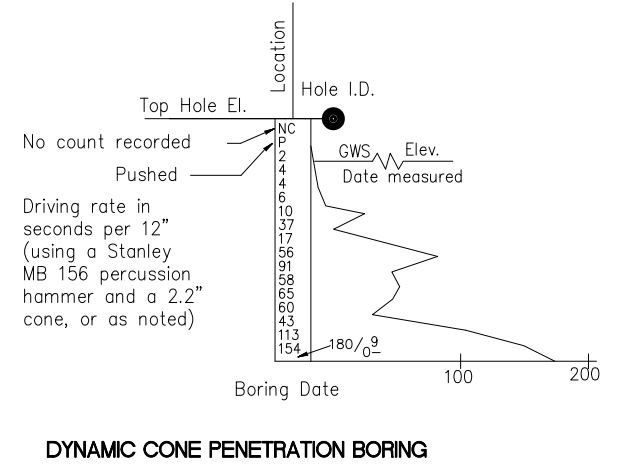
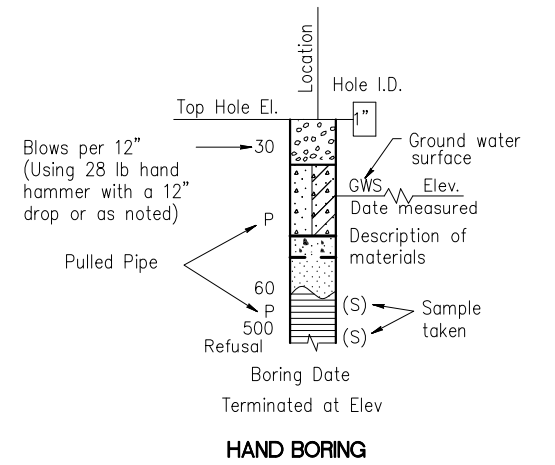
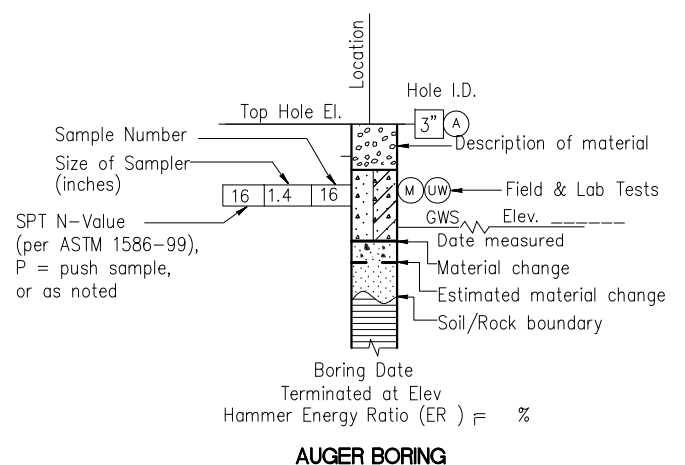
| CEMENTATION | |
|-------------|---|
| Description | Criteria |
| Weak | Crumbles or breaks with handling or little finger pressure. |
| Moderate | Crumbles or breaks with considerable finger pressure. |
| Strong | Will not crumble or break with finger pressure. |

| CONSISTENCY OF COHESIVE SOILS | | | | |
|-------------------------------|---------------------------------------|---------------------------------------|---------------------------|---|
| Description | Unconfined Compressive Strength (tsf) | Pocket Penetrometer Measurement (tsf) | Torvane Measurement (tsf) | Field Approximation |
| Very Soft | < 0.25 | < 0.25 | < 0.12 | Easily penetrated several inches by fist |
| Soft | 0.25 to 0.50 | 0.25 to 0.50 | 0.12 to 0.25 | Easily penetrated several inches by thumb |
| Medium Stiff | 0.50 to 1.0 | 0.50 to 1.0 | 0.25 to 0.50 | Penetrated several inches by thumb with moderate effort |
| Stiff | 1 to 2 | 1 to 2 | 0.50 to 1.0 | Readily indented by thumb but penetrated only with great effort |
| Very Stiff | 2 to 4 | 2 to 4 | 1.0 to 2.0 | Readily indented by thumbnail |
| Hard | > 4.0 | > 4.0 | > 2.0 | Indented by thumbnail with difficulty |

| BOREHOLE IDENTIFICATION | | |
|-------------------------|-----------|--|
| Symbol | Hole Type | Description |
| | A | Auger Boring |
| | R | Rotary drilled boring |
| | P | Rotary percussion boring (air) |
| | R | Rotary drilled diamond core |
| | HD | Hand driven (1-inch soil tube) |
| | HA | Hand Auger |
| | D | Dynamic Cone Penetration Boring |
| | CPT | Cone Penetration Test (ASTM D 5778-95) |
| | O | Other |

Note: Size in inches.

| PLASTICITY OF FINE-GRAINED SOILS | |
|----------------------------------|--|
| Description | Criteria |
| Nonplastic | A 1/8-inch thread cannot be rolled at any water content. |
| Low | The thread can barely be rolled and the lump cannot be formed when drier than the plastic limit. |
| Medium | The thread is easy to roll and not much time is required to reach the plastic limit. The thread cannot be rerolled after reaching the plastic limit. The lump crumbles when drier than the plastic limit. |
| High | It takes considerable time rolling and kneading to reach the plastic limit. The thread can be rerolled several times after reaching the plastic limit. The lump can be formed without crumbling when drier than the plastic limit. |



| | | | | | | | |
|-----------------------------|--|------------------------------|--|---|--|-----------------------|--------------------|
| ENGINEERING SERVICES | | GEOTECHNICAL SERVICES | | STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION | DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN WILLDAN GEOTECHNICAL | BRIDGE NO. 11C0179 | SOIL LEGEND |
| PREPARED BY: | | PREPARED BY: SM | | | | POST MILE NA | |
| CHECKED BY: | | CHECKED BY: GA | | REVISION DATES | | SHEET 1 OF 3 | |

GS LOTB SOIL LEGEND ORIGINAL SCALE IN INCHES FOR REDUCED PLANS CU EA FILE => \$REQUEST

DATE PLOTTED => \$TIME USERNAME => \$USER

REFERENCE: CALTRANS SOIL & ROCK LOGGING, CLASSIFICATION, AND PRESENTATION MANUAL (JUNE 2010)

| DIST | COUNTY | ROUTE | KILOMETER POST TOTAL PROJECT | SHEET No | TOTAL SHEETS |
|------|--------|-------|------------------------------|----------|--------------|
| 03 | Glenn | CR 67 | NA | 2 | 3 |

Girish Agrawal
REGISTERED CIVIL ENGINEER
DATE 10/23/12

PLANS APPROVAL DATE

No. C53867
Exp. 12/31/13
CIVIL
STATE OF CALIFORNIA

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| GROUP SYMBOLS AND NAMES | | | |
|-------------------------|--|----------------|--|
| Graphic/Symbol | Group Names | Graphic/Symbol | Group Names |
| | Well-graded GRAVEL Well-graded GRAVEL with SAND | | Lean CLAY Lean CLAY with SAND Lean CLAY with GRAVEL SANDY lean CLAY SANDY lean CLAY with GRAVEL GRAVELLY lean CLAY GRAVELLY lean CLAY with SAND |
| | Poorly graded GRAVEL Poorly graded GRAVEL with SAND | | |
| | Well-graded GRAVEL with SILT Well-graded GRAVEL with SILT and SAND | | SILTY CLAY SILTY CLAY with SAND SILTY CLAY with GRAVEL SANDY SILTY CLAY SANDY SILTY CLAY with GRAVEL GRAVELLY SILTY CLAY GRAVELLY SILTY CLAY with SAND |
| | Well-graded GRAVEL with CLAY (or SILTY CLAY) Well-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND) | | |
| | Poorly graded GRAVEL with SILT Poorly graded GRAVEL with SILT and SAND | | SILT SILT with SAND SILT with GRAVEL SANDY SILT SANDY SILT with GRAVEL GRAVELLY SILT GRAVELLY SILT with SAND |
| | Poorly graded GRAVEL with CLAY (or SILTY CLAY) Poorly graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND) | | |
| | SILTY GRAVEL SILTY GRAVEL with SAND | | ORGANIC lean CLAY ORGANIC lean CLAY with SAND ORGANIC lean CLAY with GRAVEL SANDY ORGANIC lean CLAY SANDY ORGANIC lean CLAY with GRAVEL GRAVELLY ORGANIC lean CLAY GRAVELLY ORGANIC lean CLAY with SAND |
| | CLAYEY GRAVEL CLAYEY GRAVEL with SAND | | |
| | SILTY, CLAYEY GRAVEL SILTY, CLAYEY GRAVEL with SAND | | ORGANIC SILT ORGANIC SILT with SAND ORGANIC SILT with GRAVEL SANDY ORGANIC SILT SANDY ORGANIC SILT with GRAVEL GRAVELLY ORGANIC SILT GRAVELLY ORGANIC SILT with SAND |
| | Well-graded SAND Well-graded SAND with GRAVEL | | |
| | Poorly graded SAND Poorly graded SAND with GRAVEL | | Fat CLAY Fat CLAY with SAND Fat CLAY with GRAVEL SANDY fat CLAY SANDY fat CLAY with GRAVEL GRAVELLY fat CLAY GRAVELLY fat CLAY with SAND |
| | Well-graded SAND with SILT Well-graded SAND with SILT and GRAVEL | | |
| | Well-graded SAND with CLAY (or SILTY CLAY) Well-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL) | | Elastic SILT Elastic SILT with SAND Elastic SILT with GRAVEL SANDY elastic SILT SANDY elastic SILT with GRAVEL GRAVELLY elastic SILT GRAVELLY elastic SILT with SAND |
| | Poorly graded SAND with SILT Poorly graded SAND with SILT and GRAVEL | | |
| | Poorly graded SAND with CLAY (or SILTY CLAY) Poorly graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL) | | ORGANIC fat CLAY ORGANIC fat CLAY with SAND ORGANIC fat CLAY with GRAVEL SANDY ORGANIC fat CLAY SANDY ORGANIC fat CLAY with GRAVEL GRAVELLY ORGANIC fat CLAY GRAVELLY ORGANIC fat CLAY with SAND |
| | SILTY SAND SILTY SAND with GRAVEL | | |
| | CLAYEY SAND CLAYEY SAND with GRAVEL | | ORGANIC elastic SILT ORGANIC elastic SILT with SAND ORGANIC elastic SILT with GRAVEL SANDY ORGANIC elastic SILT SANDY ORGANIC elastic SILT with GRAVEL GRAVELLY ORGANIC elastic SILT GRAVELLY ORGANIC elastic SILT with SAND |
| | SILTY, CLAYEY SAND SILTY, CLAYEY SAND with GRAVEL | | |
| | PEAT | | ORGANIC SOIL ORGANIC SOIL with SAND ORGANIC SOIL with GRAVEL SANDY ORGANIC SOIL SANDY ORGANIC SOIL with GRAVEL GRAVELLY ORGANIC SOIL GRAVELLY ORGANIC SOIL with SAND |
| | COBBLES COBBLES and BOULDERS BOULDERS | | |

| FIELD AND LABORATORY TESTING | |
|------------------------------|--|
| (C) | Consolidation (ASTM D 2435) |
| (CL) | Collapse Potential (ASTM D 5333) |
| (CP) | Compaction Curve (CTM 216) |
| (CR) | Corrosivity Testing (CTM 643, CTM 422, CTM 417) |
| (CU) | Consolidated Undrained Triaxial (ASTM D 4767) |
| (DS) | Direct Shear (ASTM D 3080) |
| (EI) | Expansion Index (ASTM D 4829) |
| (M) | Moisture Content (ASTM D 2216) |
| (OC) | Organic Content-% (ASTM D 2974) |
| (P) | Permeability (CTM 220) |
| (PA) | Particle Size Analysis (ASTM D 422) |
| (PI) | Plasticity Index (AASHTO T 90) Liquid Limit (AASHTO T 89) |
| (PL) | Point Load Index (ASTM D 5731) |
| (PM) | Pressure Meter |
| (W) | Passing # 200 (ASTM D 1140-00) |
| (R) | R-Value (CTM 301) |
| (SE) | Sand Equivalent (CTM 217) |
| (SG) | Specific Gravity (AASHTO T 100) |
| (SL) | Shrinkage Limit (ASTM D 427) |
| (SW) | Swell Potential (ASTM D 4546) |
| (TV) | Pocket Torvane |
| (UC) | Unconfined Compression-Soil (ASTM D 2166) Unconfined Compression-Rock (ASTM D 2938) |
| (UU) | Unconsolidated Undrained Triaxial (ASTM D 2850) |
| (UW) | Unit Weight (ASTM D 4767) |
| (VS) | Vane Shear (AASHTO T 223) |

| APPARENT DENSITY OF COHESIONLESS SOILS | |
|--|---|
| Description | SPT N ₆₀ (Blows / 12 inches) |
| Very loose | 0 - 4 |
| Loose | 5 - 10 |
| Medium Dense | 11 - 30 |
| Dense | 31 - 50 |
| Very Dense | > 50 |

| MOISTURE | |
|-------------|---|
| Description | Criteria |
| Dry | Absence of moisture, dusty, dry to the touch |
| Moist | Damp but no visible water |
| Wet | Visible free water, usually soil is below water table |

| PERCENT OR PROPORTION OF SOILS | |
|--------------------------------|--|
| Description | Criteria |
| Trace | Particles are present but estimated to be less than 5% |
| Few | 5 to 10% |
| Little | 15 to 25% |
| Some | 30 to 45% |
| Mostly | 50 to 100% |

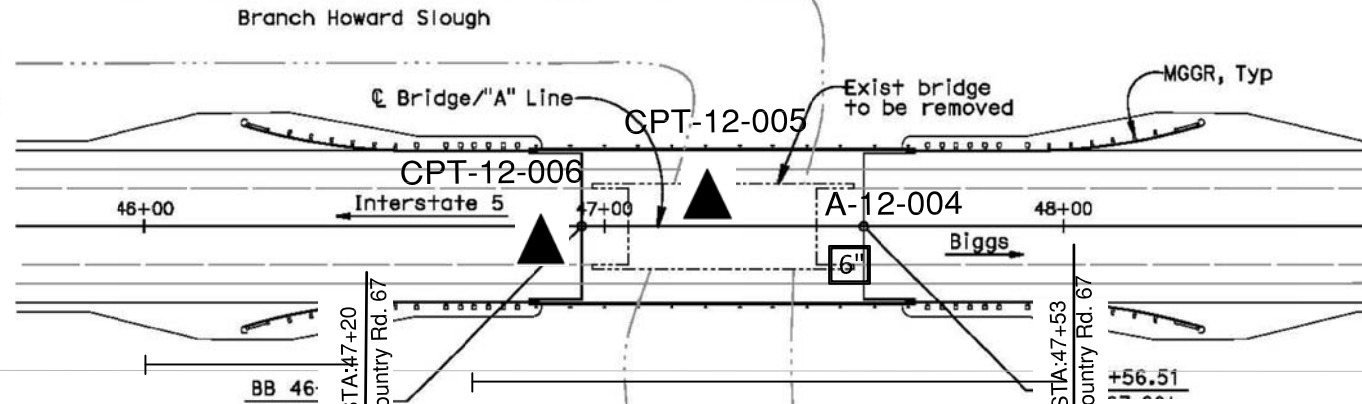
| PARTICLE SIZE | | |
|---------------|-----------|-------------------|
| Description | Size | |
| Boulder | > 12" | |
| Cobble | 3" to 12" | |
| Gravel | Coarse | 3/4" to 3" |
| | Fine | No. 4 to 3/4" |
| Sand | Coarse | No. 10 to No. 4 |
| | Medium | No. 40 to No. 10 |
| | Fine | No. 200 to No. 40 |

| | | | | | | | | | | | | | |
|--|--|---|--|---|--|--|--|---|--|--|--|--------------|--|
| ENGINEERING SERVICES PREPARED BY: _____ CHECKED BY: _____ | | GEOTECHNICAL SERVICES PREPARED BY: SM CHECKED BY: GA | | STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION | | DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN WILLDAN GEOTECHNICAL | | BRIDGE NO. 11C0179 POST MILE ____NA____ | | SOIL LEGEND LOG OF TEST BORINGS | | | |
| GS LOTB SOIL LEGEND | | ORIGINAL SCALE IN INCHES FOR REDUCED PLANS | | 0 1 2 3 | | CU EA | | DISREGARD PRINTS BEARING EARLIER REVISION DATES | | REVISION DATES | | SHEET 2 OF 3 | |

DATE PLOTTED => \$TIME USERNAME => \$USER

BENCH MARK

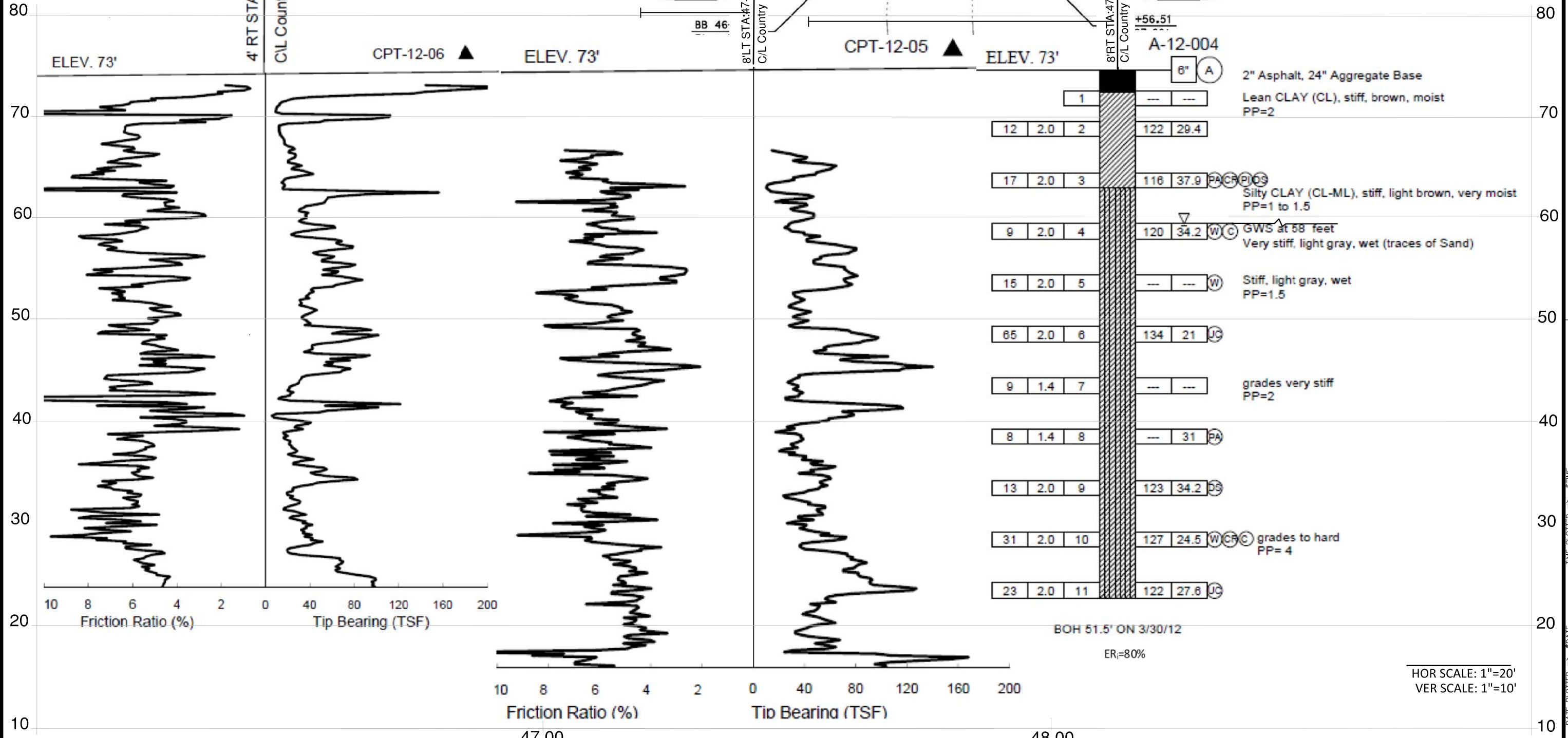
DH3659 Survey Disk in Concrete Wing Wall at the South East Corner of Bridge 11C-0017 along Rd H, ELEV. 74.90
 Horizontal Datum is NAD83
 Vertical Datum is NAVD88



| | | | | | |
|------|--------|-------|--------------------------|----------|--------------|
| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No | TOTAL SHEETS |
| 03 | Glenn | CR 67 | NA | 3 | 3 |

| | | |
|---------------------------|------|----------|
| Girish Agrawal | | 10/29/12 |
| REGISTERED CIVIL ENGINEER | DATE | |
| PLANS APPROVAL DATE | | |

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



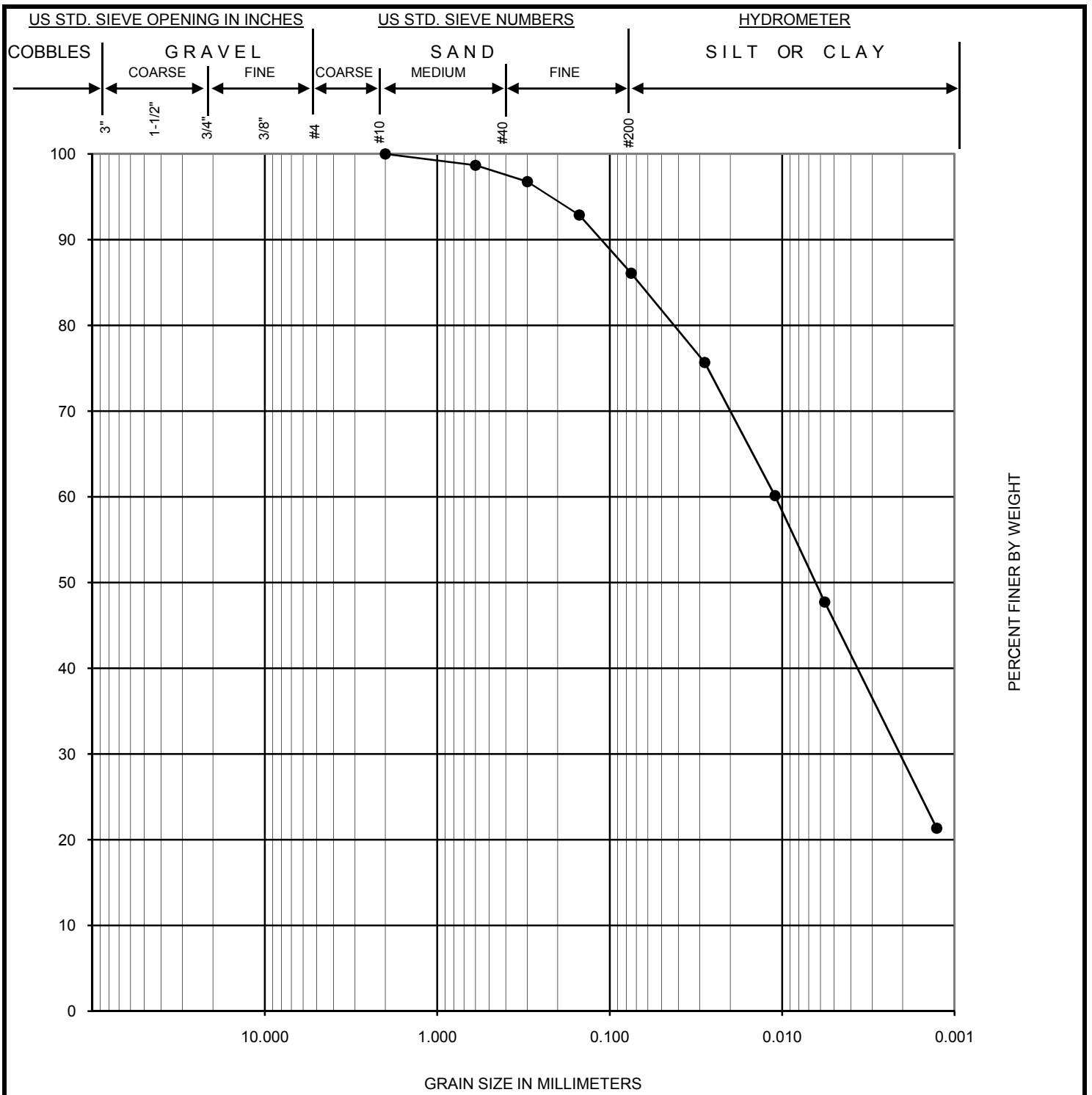
| | | | | | | | | | | | |
|-------------------------------------|--|--|--|------------------------------|--|----------------------------------|--|---|--|--|--|
| ENGINEERING SERVICES | | GEOTECHNICAL SERVICES | | STATE OF CALIFORNIA | | DIVISION OF ENGINEERING SERVICES | | BRIDGE NO. 11C0179 | | Bridge Replacement, Road 67 (Bridge No. 11C0179) | |
| FUNCTIONAL SUPERVISOR | | DRAWN BY: SM | | DEPARTMENT OF TRANSPORTATION | | STRUCTURE DESIGN | | POST MILES | | LOG OF TEST BORINGS | |
| NAME: | | CHECKED BY: GA | | FIELD INVESTIGATION BY: BK | | WILLDAN GEOTECHNICAL | | NA | | REVISION DATES | |
| OGS CIVIL LOG OF TEST BORINGS SHEET | | ORIGINAL SCALE IN INCHES FOR REDUCED PLANS | | 0 1 2 3 | | CU EA | | DISREGARD PRINTS BEARING EARLIER REVISION DATES | | SHEET 3 OF 3 | |

**APPENDIX B
LABORATORY TEST RESULTS**

TABLE B-1 -- SUMMARY OF LABORATORY TEST RESULTS
Bridge Replacement, County Road 67 Bridge Nos.11C-0015, 11C-0016, 11C-0017 & 11C-0179, Project Nos. 100955-1004 to 100958-1004

| Bridge No. | Boring No. | Depth (ft) | USCS Soil Description | Gradation (ASTM D422) (% Gravel + Sand + Fines) | Atterberg Limits (ASTM D4318) | | R-Value (CT-301) | Unconfined Compressive Strength q _u (tsf) | Direct Shear (ASTM D3080 / CT-236) | | | | Consolidation (ASTM D2435) | | | Corrosivity (CT-412, 417, 643) | | | |
|------------|------------|---|--|---|----------------------------------|---------------------|---------------------|--|--|----------------|------------|----------------|-------------------------------|----------------|----------------|-----------------------------------|------------------------------|-------------------------------|------------------------------------|
| | | | | | Liquid Limit | Plasticity Index | | | Peak | | Ultimate | | P _c (ksf) | C _c | C _r | pH | Soluble Sulfates (ppm) | Soluble Chlorides (ppm) | Minimum Resistivity (ohm-cm) |
| | | | | | | | | | c (psf) | φ (degrees) | c (psf) | φ (degrees) | | | | | | | |
| | A-12-001 | 2 to 5 | Silty CLAY (CL) | | | | | | | | | | | | | | | | |
| | A-12-002 | 2 to 5 | Silty CLAY (CL) | | | | <5 | | | | | | | | | | | | |
| | A-12-003 | 2 to 5 | Silty CLAY (CL) | | | | | | | | | | | | | | | | |
| 11C-0179 | | 10.5 | Lean CLAY(CL) | --:14:86 | | | | | | | | | | 7.4 | 180 | 150 | 1350 | | |
| | | 11.0 | Lean CLAY(CL) | | 42 | 20 | | | 270 | 33 | 370 | 25 | | | | | | | |
| | | 15.5 | Silty CLAY (CL/ML) | --:--:80 | | | | | | | | | | | | | | | |
| | | 16.0 | Silty CLAY (CL/ML) | | | | | | | | | | 2.1 | 0.53 | 0.029 | | | | |
| | | 21.0 | Silty CLAY (CL/ML) | --:--:54 | | | | | | | | | | | | | | | |
| | | 26.0 | Silty CLAY (CL/ML) | | | | | 7.4 | | | | | | | | | | | |
| | | 35.0 | Silty CLAY (CL/ML) | 0:12:88 | | | | | | | | | | | | | | | |
| | | 40.5 | Silty CLAY (CL/ML) | | | | | | 260 | 28 | 300 | 22 | | | | | | | |
| | | 41.0 | Silty CLAY (CL/ML) | | | | | | | | | | | | | | | | |
| | | 45.5 | Silty CLAY (CL/ML) | | | | | | | | | | 4.2 | 0.069 | 0.002 | 7.4 | 420 | 180 | 1500 |
| | | 50.5 | Silty CLAY (CL/ML) | --:--:96 | | | | | | | | | | | | | | | |
| | | 50.5 | Silty CLAY (CL/ML) | | | | | 5.5 | | | | | | | | | | | |
| | A-12-007 | 2 to 5 | Silty CLAY (CL) | | | | | | | | | | | | | | | | |
| | A-12-008 | 2 to 5 | Silty CLAY (CL) | | | | <5 | | | | | | | | | | | | |
| | A-12-009 | 2 to 5 | Silty CLAY (CL) | | | | | | | | | | | | | | | | |
| | A-12-010 | 1 to 3 | Silty CLAY (CL) | | | | <5 | | | | | | | | | | | | |
| | A-12-012 | 1 to 4 | Silty CLAY (CL) | | | | | | | | | | | | | | | | |
| 11C-0017 | | 5.5 | Fat CLAY (CH) | | 62 | 44 | | | | | | | | | | | | | |
| | | 6.0 | Fat CLAY (CH) | | | | | | | | | | | | | | | | |
| | | 10.5 | Silty CLAY(CL/ML) | 0:27:73 | | | | 6.4 | | | | | | | 7.8 | 435 | 180 | 2000 | |
| | | 11.0 | Silty CLAY(CL/ML) | | | | | | | | | | | | | | | | |
| | | 15.5 | Silty CLAY(CL/ML) | 0:28:72 | | | | | | | | | | | | | | | |
| | | 16.0 | Silty CLAY(CL/ML) | | | | | 2.9 | | | | | | | | | | | |
| | | 20.5 | Silty SAND (SM) | --:--:42 | | | | | | | | | | | | | | | |
| | | 25.5 | Silty SAND (SM) | --:81:19 | | | | | | | | | 5.6 | 0.058 | 0.006 | | | | |
| | | 35.0 | Poorly Graded SAND with SILT and GRAVEL (SP-SM) | | | | | | | | | | | | 8.3 | 75 | 270 | 6700 | |
| | | 40.0 | Poorly Graded SAND with SILT and GRAVEL (SP-SM) | 25:66:9 | | | | | | | | | | | | | | | |
| | 50.0 | Poorly Graded SAND with SILT and GRAVEL (SP-SM) | 15:81:4 | | | | | | | | | | | | | | | | |
| | A-12-019 | 1 to 4 | Silty CLAY with Gravel (CL) | | | | <5 | | | | | | | | | | | | |
| | A-12-021 | 1 to 4 | Silty CLAY with Gravel (CL) | | | | | | | | | | | | | | | | |
| | A-12-022 | 1 to 4 | Silty CLAY with Gravel (CL) | | | | <5 | | | | | | | | | | | | |
| | A-12-024 | 1 to 4 | Silty CLAY with Gravel (CL) | | | | | | | | | | | | | | | | |
| 11C-0016 | | 6.0 | Fat CLAY (CH) | | | | | | | | | | | | | | | | |
| | | 10.5 | Fat CLAY (CH) | --:--:92 | | | | 3 | | | | | | 8 | 195 | 255 | 930 | | |
| | | 11.0 | Fat CLAY (CH) | | 50 | 31 | | | | | | | | | | | | | |
| | | 15.5 | Sandy CLAY (CL) | | | | | | | | | | | | | | | | |
| | | 16.0 | Sandy CLAY (CL) | | | | | 5.8 | | | | | | | | | | | |
| | | 25.5 | Sandy SILT/Sandy CLAY (ML/CL) | 0:41:59 | | | | | | | | | | | | | | | |
| | | 30.0 | Poorly Graded SAND with GRAVEL (SP) | 48:45:7 | | | | | | | | | | | | | | | |
| | | 35.0 | Poorly Graded SAND with GRAVEL (SP) | | | | | | | | | | | | 7.9 | 450 | 210 | -- | |
| | 40.0 | Silty SAND (SM) | 0:97:3 | | | | | | | | | | | | | | | | |
| | 50.0 | Poorly Graded SAND with SILT and GRAVEL (SP-SM) | 21:72:7 | | | | | | | | | | | | | | | | |
| | A-12-034 | 1 to 5 | Silty CLAY (CL) | | | | | | | | | | | | | | | | |
| | A-12-034A | 2 to 5 | Silty CLAY (CL) | | | | <5 | | | | | | | | | | | | |
| | A-12-034B | 1 to 5 | Silty CLAY (CL) | | | | | | | | | | | | | | | | |
| | A-12-035 | 1 to 4 | Silty CLAY with Trace of Gravel (CL) | | | | <5 | | | | | | | | | | | | |
| | A-12-037 | 1 to 3 | Silty CLAY with Trace of Gravel (CL) | | | | | | | | | | | | | | | | |
| 11C-0015 | | 8.0 | Sandy CLAY (CL) | | | | | | | | | | | | | | | | |
| | | 10.5 | Fat CLAY (CH) | | 56 | 35 | | | 350 | 26 | 220 | 23 | | | | | | | |
| | | 11.0 | Fat CLAY (CH) | | | | | | | | | | 2.7 | 0.019 | 0.005 | | | | |
| | | 15.5 | Silty SAND (SM) | | | | | | | | | | | | 7.9 | 105 | 240 | 5350 | |
| | | 16.0 | Silty SAND (SM) | | | | | | | | | | | | | | | | |
| | | 25.0 | Poorly Graded SAND with Gravel (SP) | 40:55:5 | | | | | | | | | | | | | | | |
| | | 35.0 | Poorly Graded SAND with Silt and Gravel (SP-SM)) | 27:69:4 | | | | | | | | | | | | | | | |
| | A-12-049 | 1 to 4 | Silty CLAY with Trace of Gravel (CL) | | | | | | | | | | | | | | | | |
| | A-12-051 | 0 to 3 | Silty CLAY with Trace of Gravel (CL) | | | | 12 | | | | | | | | | | | | |





| SAMPLE NO. | DEPTH | SYMBOL | CLASSIFICATION | NAT.W% | LL | PL | PI |
|------------|-------|--------|---------------------|--------|----|----|----|
| B-4 | 10.5' | CL | LT. BROWN LEAN CLAY | | | | |

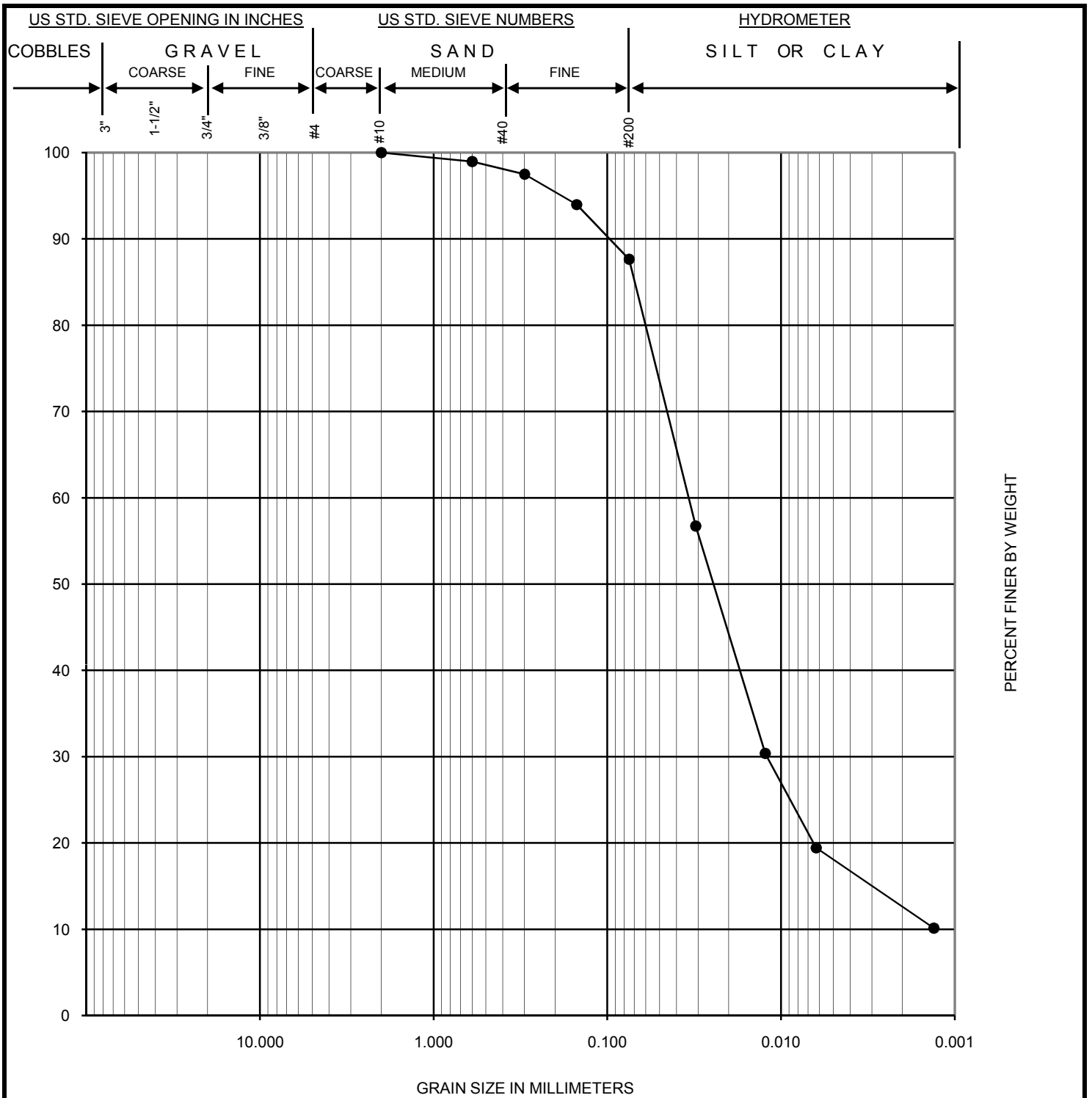
FIGURE B-1: GRAIN SIZE ANALYSIS



Bridge No. 11C-0179, Rd 67

Project No. 100958-1004

Date: 4/10/2012



| SAMPLE NO. | DEPTH | SYMBOL | CLASSIFICATION | NAT.W% | LL | PL | PI |
|------------|-------|--------|--------------------------------|--------|----|----|----|
| B-4 | 35' | CL/ML | BROWN SANDY CLAY TO SANDY SILT | | | | |

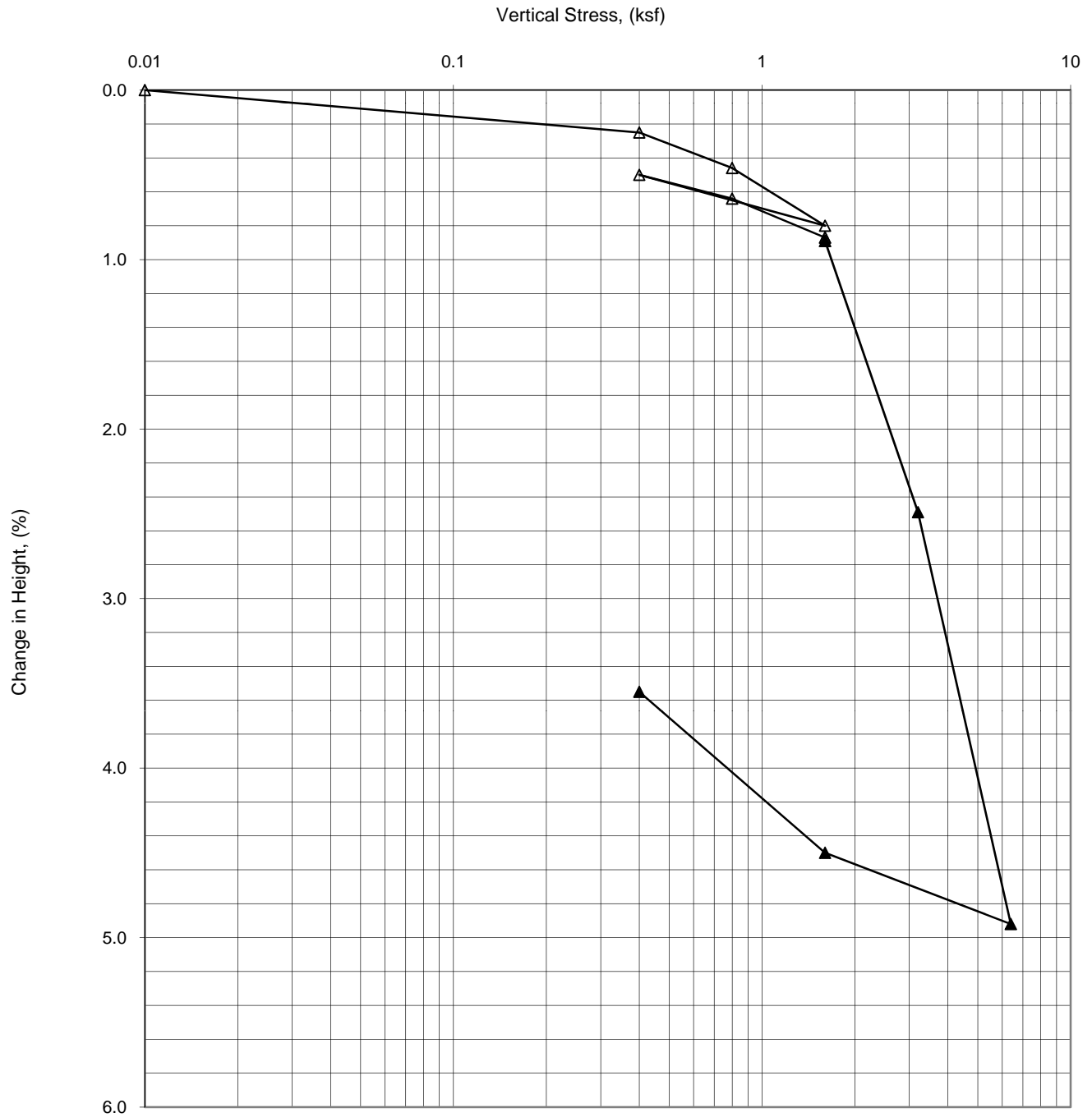
FIGURE B-2: GRAIN SIZE ANALYSIS



Bridge No. 11C-0179, Rd 67

Project No. 100958-1004

Date: 4/10/2012



Boring No. : B-4 Sample No. / Depth : R-6 @ 16' Liquid Limit -
 Sample Descriptions / Classification : LT. BROWN SANDY SILT (ML) Plastic Limit -
 Sp. Gravity : 2.68 (Assumed) Compression Index, C_c 0.053 Swell Index, C_s 0.029

| Specimen Height (inches) | Moisture Content (%) | Dry Density (pcf) | Saturation (%) | Void Ratio |
|--------------------------|----------------------|-------------------|----------------|------------|
| Initial | 20.3 | 96.2 | 73.6 | 0.739 |
| Final | 24.9 | 99.7 | 98.5 | 0.677 |

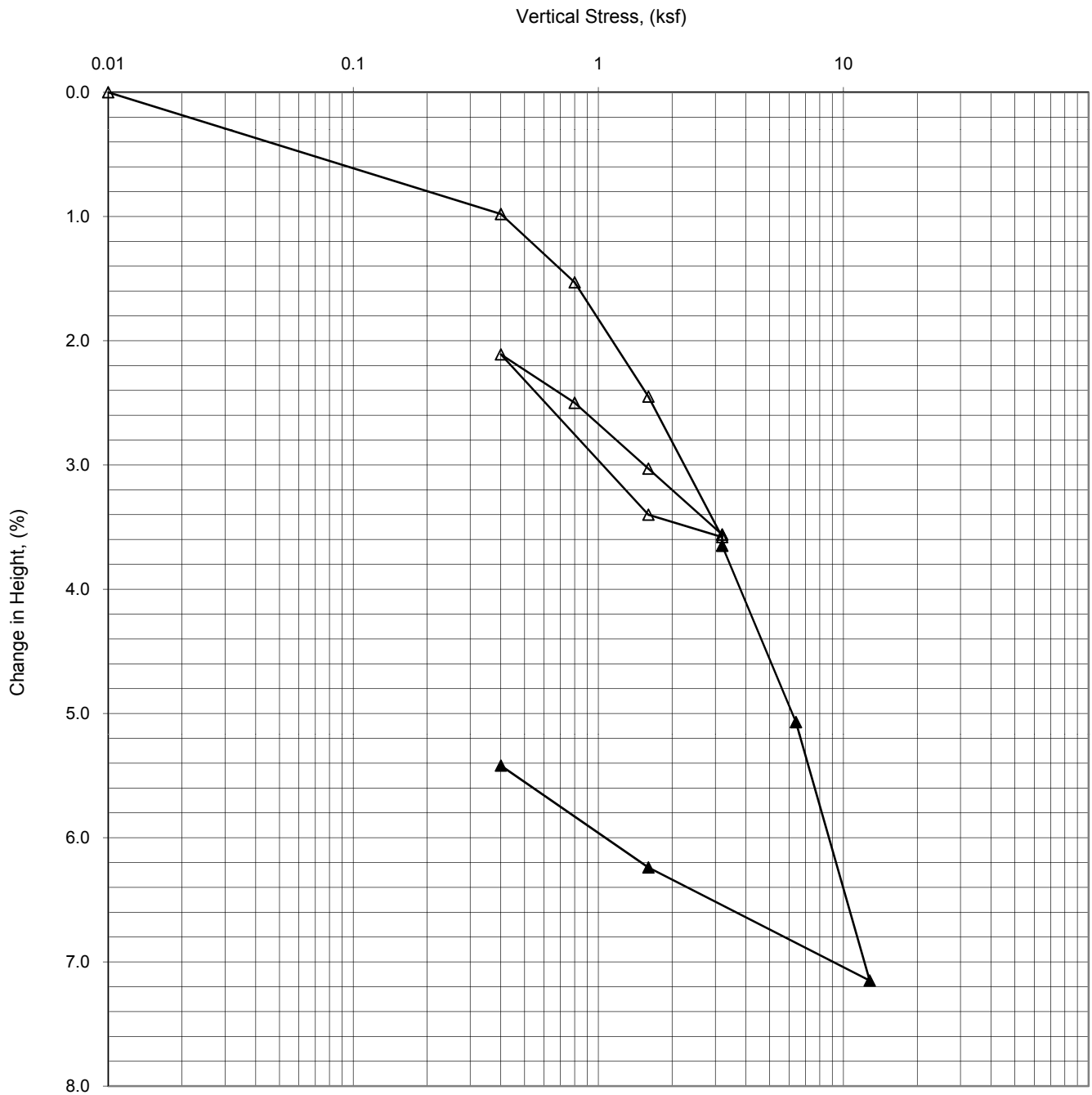
FIGURE B-5: Consolidation Test
(ASTM D2435)



Bridge No. 11C-179, Rd, 67

Project No. 100958-1004

Date: 4/10/2012



Project No. : 100958-1004 Project Name: CR67- BR.#11C179
 Boring No. : B-4 Sample No. / Depth : R-15 @ 45.5' Liquid Limit -
 Sample Descriptions / Classification : BROWN. SANDY CLAY/ SANDY SILT (CL/ML) Plastic Limit -
 Sp. Gravity : 2.68 (Assumed) Compression Index, C_c 0.069 Swell Index, C_s 0.002

| Specimen Height (inches) | Moisture Content (%) | Dry Density (pcf) | Saturation (%) | Void Ratio |
|--------------------------|----------------------|-------------------|----------------|------------|
| Initial | 30.0 | 94.1 | 103.5 | 0.777 |
| Final | 27.9 | 99.5 | 109.7 | 0.681 |

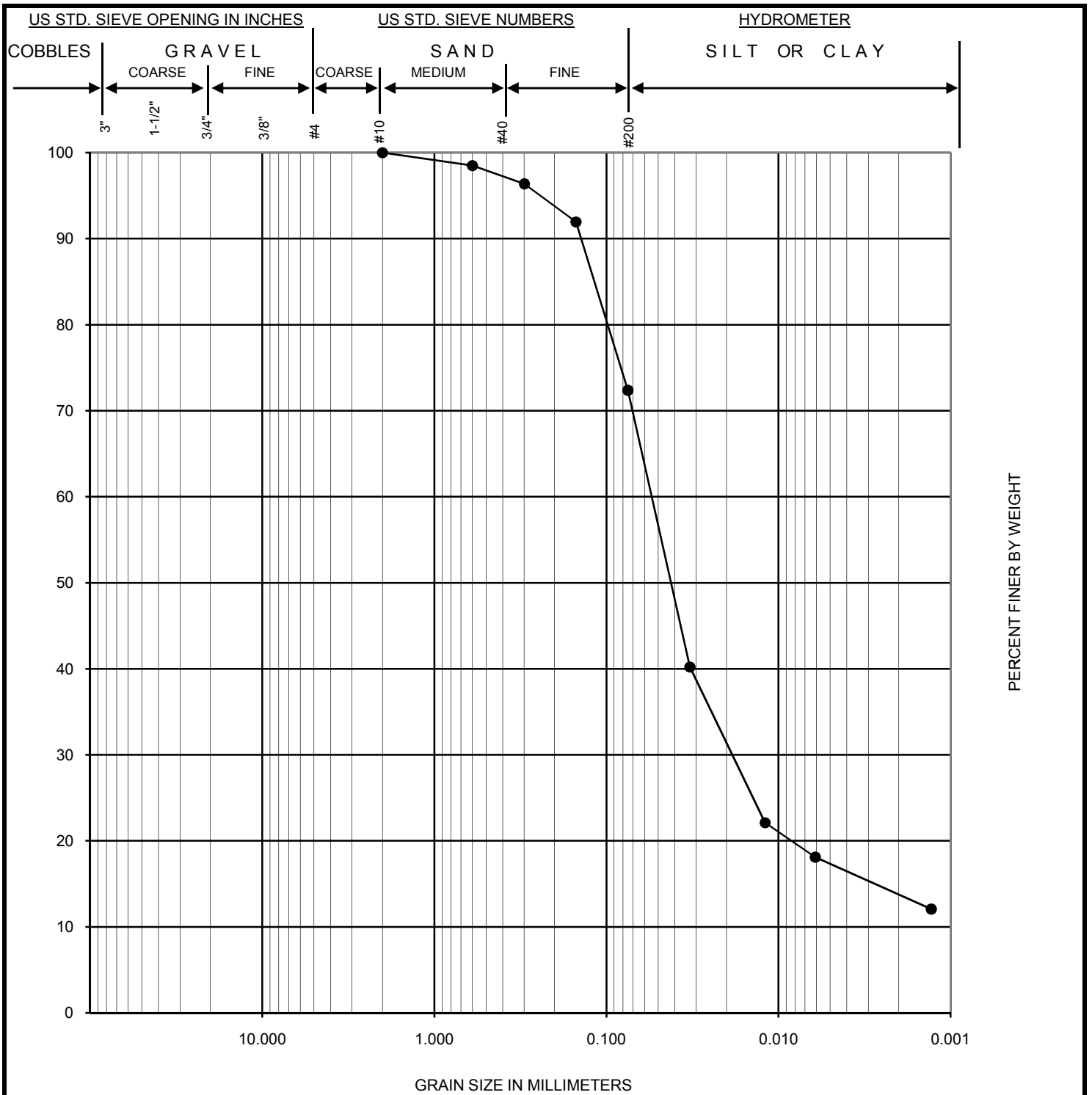
FIGURE B-6: Consolidation Test
(ASTM D2435)



Bridge No. 11C-179, Rd, 67

Project No. 100958-1004

Date: 4/10/2012



| SAMPLE NO. | DEPTH | SYMBOL | CLASSIFICATION | NAT.W% | LL | PL | PI |
|------------|-------|--------|--------------------------------|--------|----|----|----|
| B-13 | 15.5' | CL/ML | BROWN SANDY CLAY TO SANDY SILT | | | | |

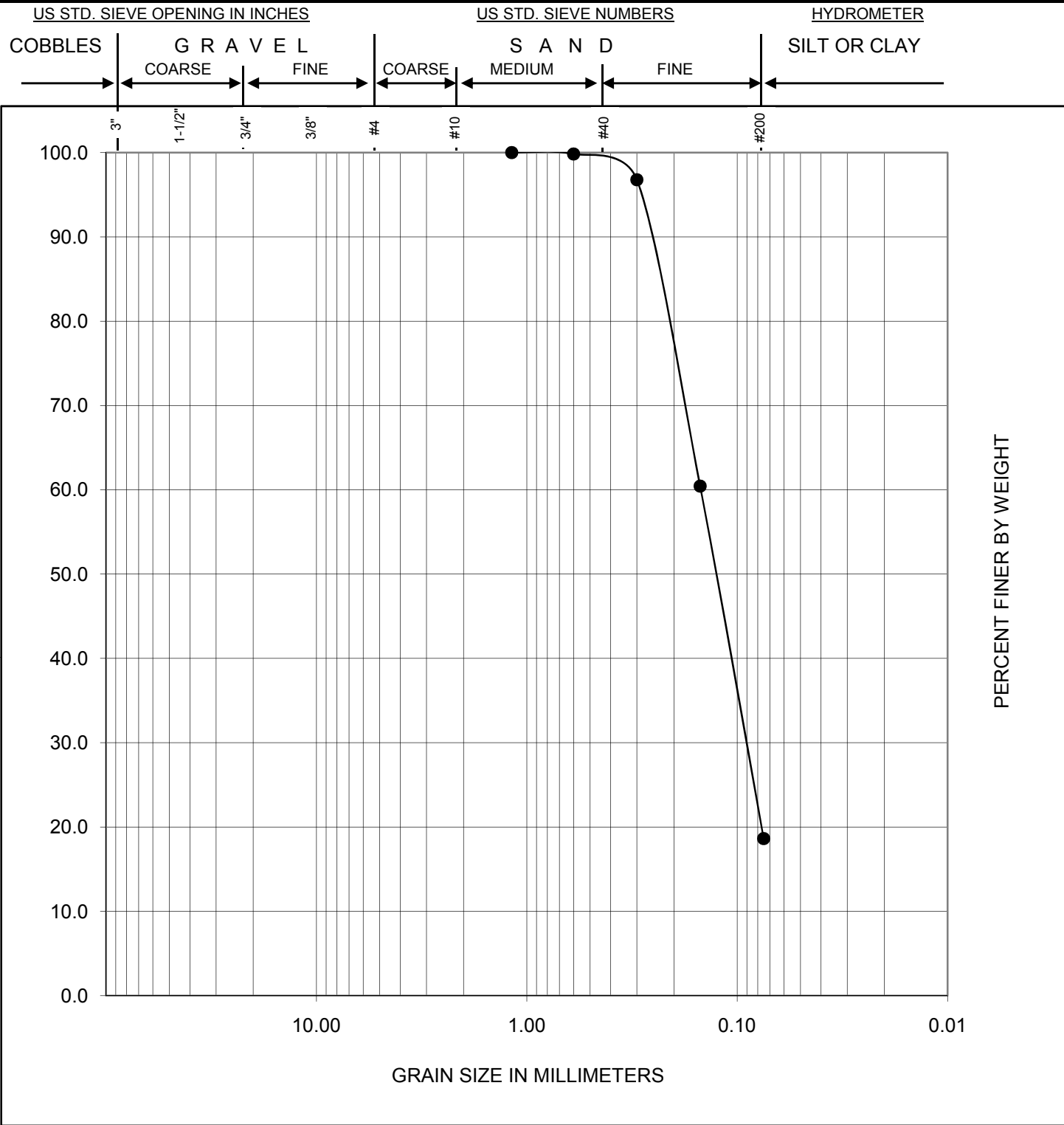
FIGURE B-7: GRAIN SIZE ANALYSIS



Bridge No. 11C-0017, Rd 67

Project No. 100957-1004

Date: 4/10/2012



| SAMPLE NO. | DEPTH | SYMBOL | CLASSIFICATION | NAT.W% | LL | PL | PI |
|------------|-----------|--------|--------------------------------------|--------|----|----|----|
| B-13 | 25.5'-26' | SP | BROWN POORLY GRADED SAND WITH GRAVEL | | - | - | - |

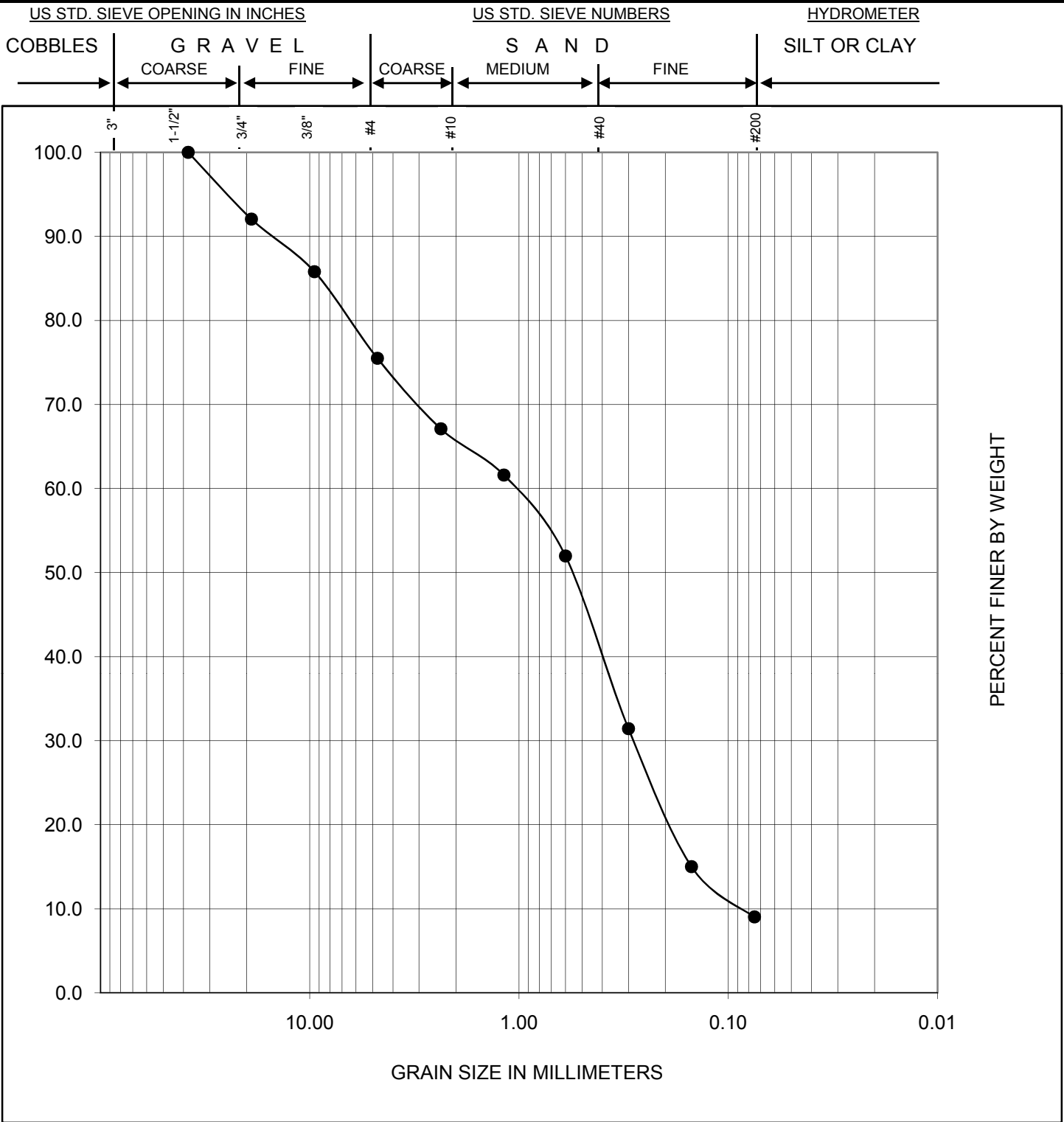
FIGURE B-8: GRAIN SIZE ANALYSIS



Bridge No. 11C-0017, Rd 67

Project No. 100957-1004

Date: 4/10/2012



PROJECT NUMBER : 100957-1004

PROJECT NAME : CR67 - BR.#11C0017

| SAMPLE NO. | DEPTH | SYMBOL | CLASSIFICATION | NAT.W% | LL | PL | PI |
|------------|-------|--------|---|--------|----|----|----|
| B-13 | 40' | SP-SM | BROWN POORLY GRADED SAND WITH SILT & GRAVEL | | - | - | - |

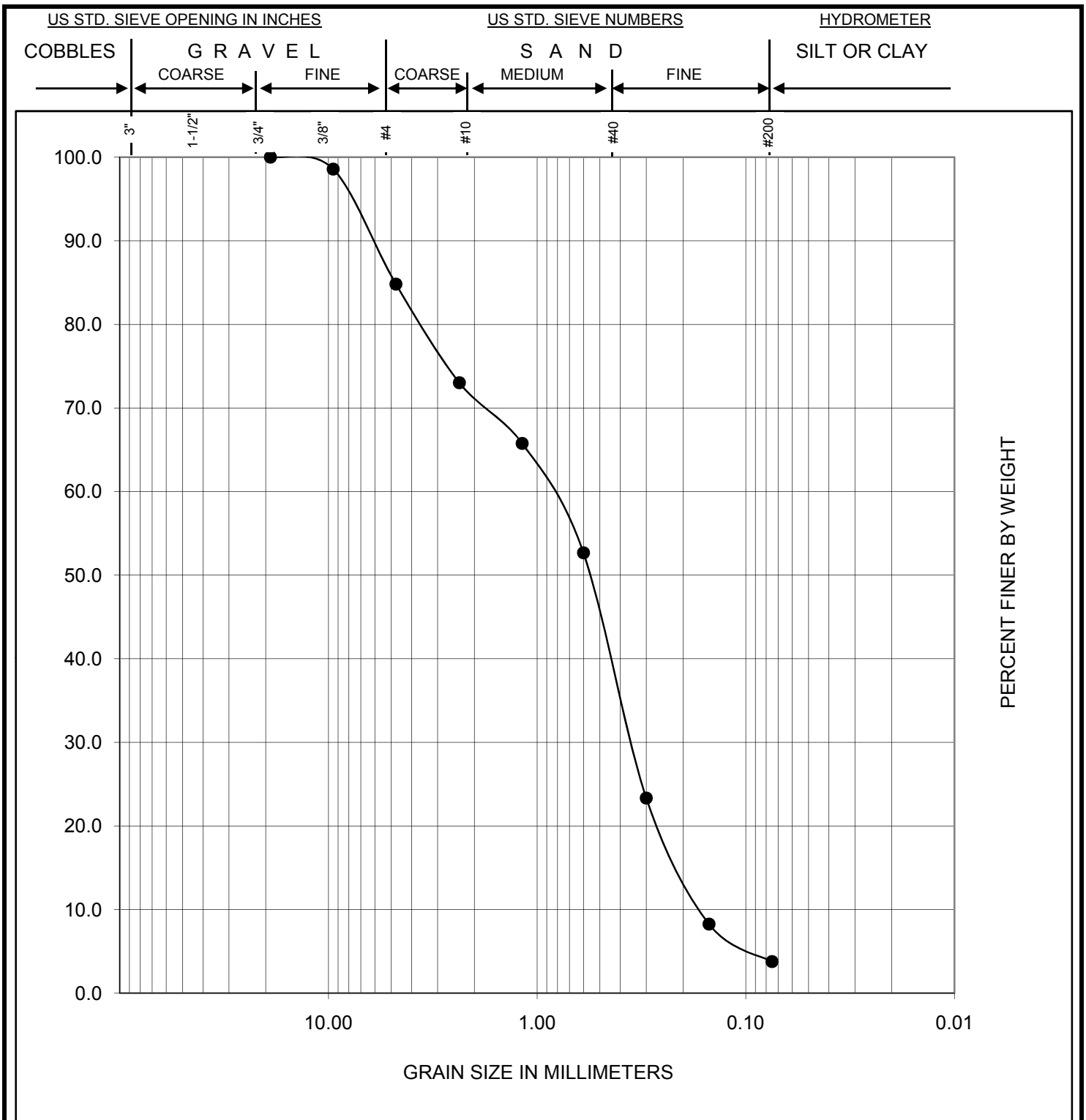
FIGURE B-9: GRAIN SIZE ANALYSIS



Bridge No. 11C-0017, Rd 67

Project No. 100957-1004

Date: 4/10/2012



| SAMPLE NO. | DEPTH | SYMBOL | CLASSIFICATION | NAT.W% | LL | PL | PI |
|------------|-------|--------|--------------------------------------|--------|----|----|----|
| B-13 | 50' | SP | BROWN POORLY GRADED SAND WITH GRAVEL | | - | - | - |

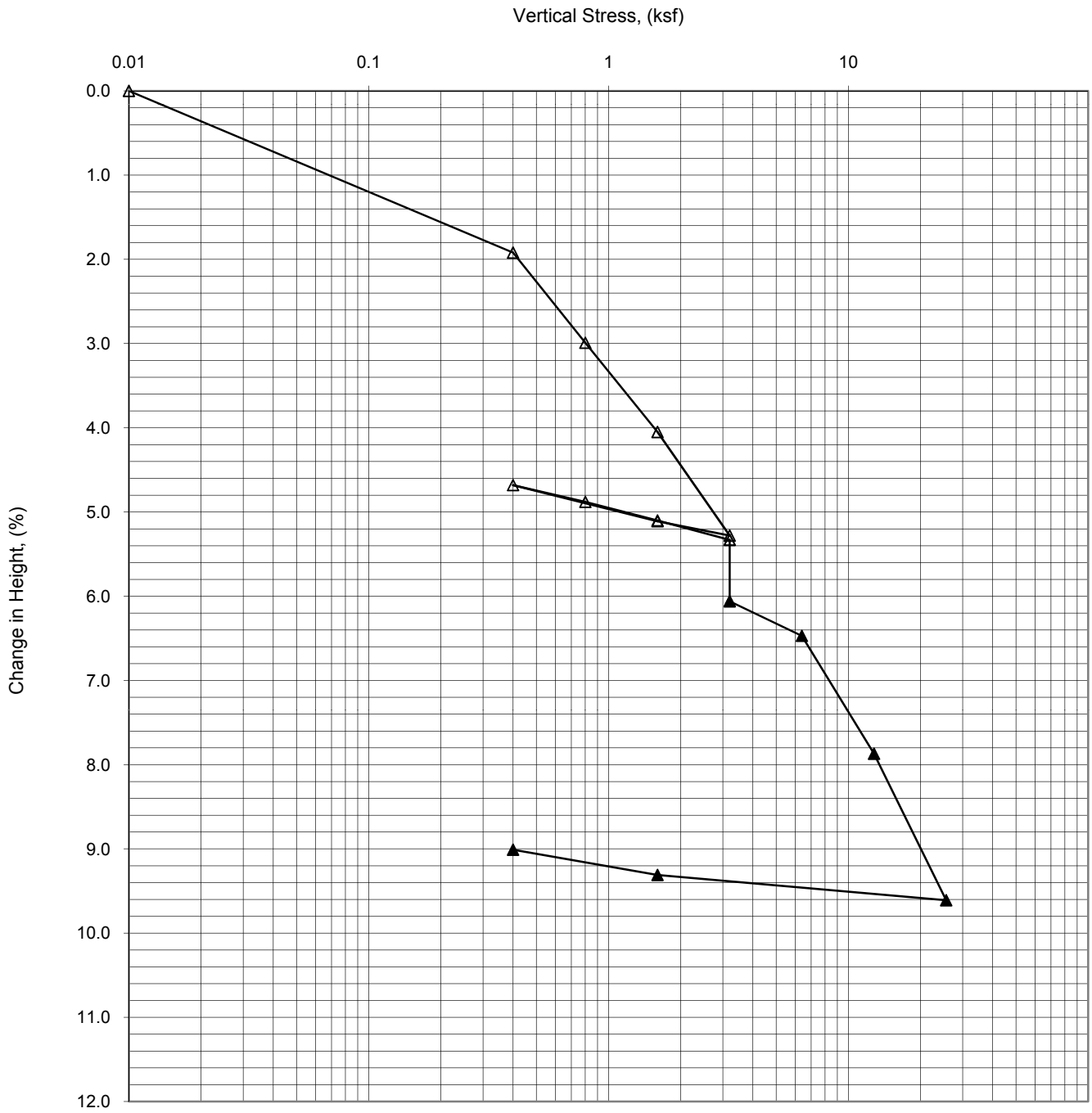
FIGURE B-10:GRAIN SIZE ANALYSIS



Bridge No. 11C-0017, Rd 67

Project No. 100957-1004

Date: 4/10/2012



Boring No. : B-13 Sample No. / Depth : R-9 @ 25.5' Liquid Limit _____
 Sample Descriptions / Classification : LT. BROWN POORLY GRADED SAND WITH GRAVEL (SP) Plastic Limit _____
 Sp. Gravity : 2.68 (Assumed) Compression Index, C_c : 0.058 Swell Index, C_s : 0.006

| Specimen Height (inches) | Moisture Content (%) | Dry Density (pcf) | Saturation (%) | Void Ratio |
|--------------------------|----------------------|-------------------|----------------|------------|
| Initial | 37.8 | 84.5 | 103.5 | 0.980 |
| Final | 32.9 | 92.8 | 110.0 | 0.802 |

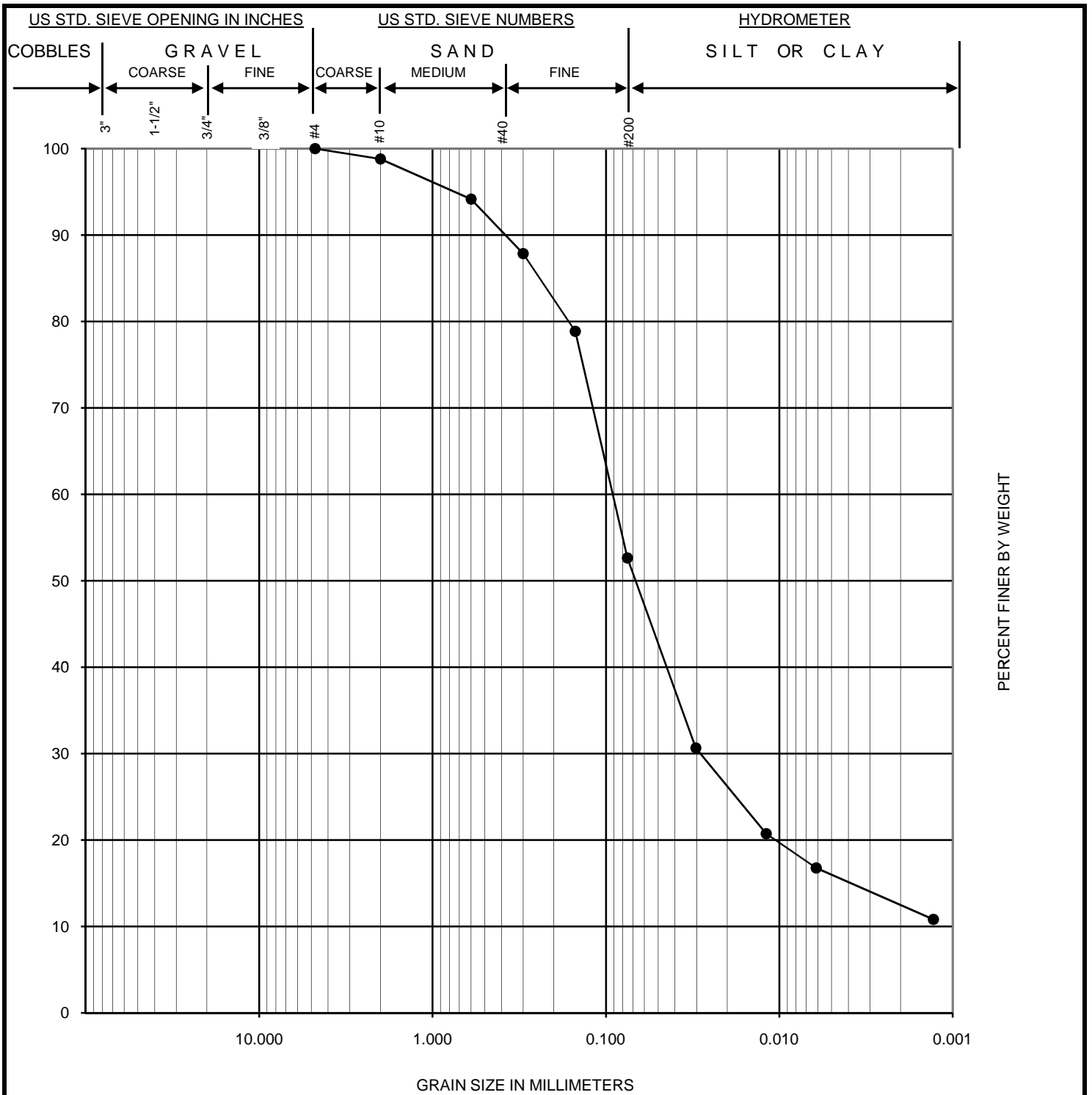
FIGURE B-13: CONSOLIDATION TEST
(ASTM D2435)



Bridge No. 11C-0017, Rd, 67

Project No. 100957-1004

Date: 4/10/2012



| SAMPLE NO. | DEPTH | SYMBOL | CLASSIFICATION | NAT.W% | LL | PL | PI |
|------------|-------|--------|--------------------------|--------|----|----|----|
| B-25 | 15.5' | CL/ML | LT. BROWN LEAN CLAY/SILT | | | | |

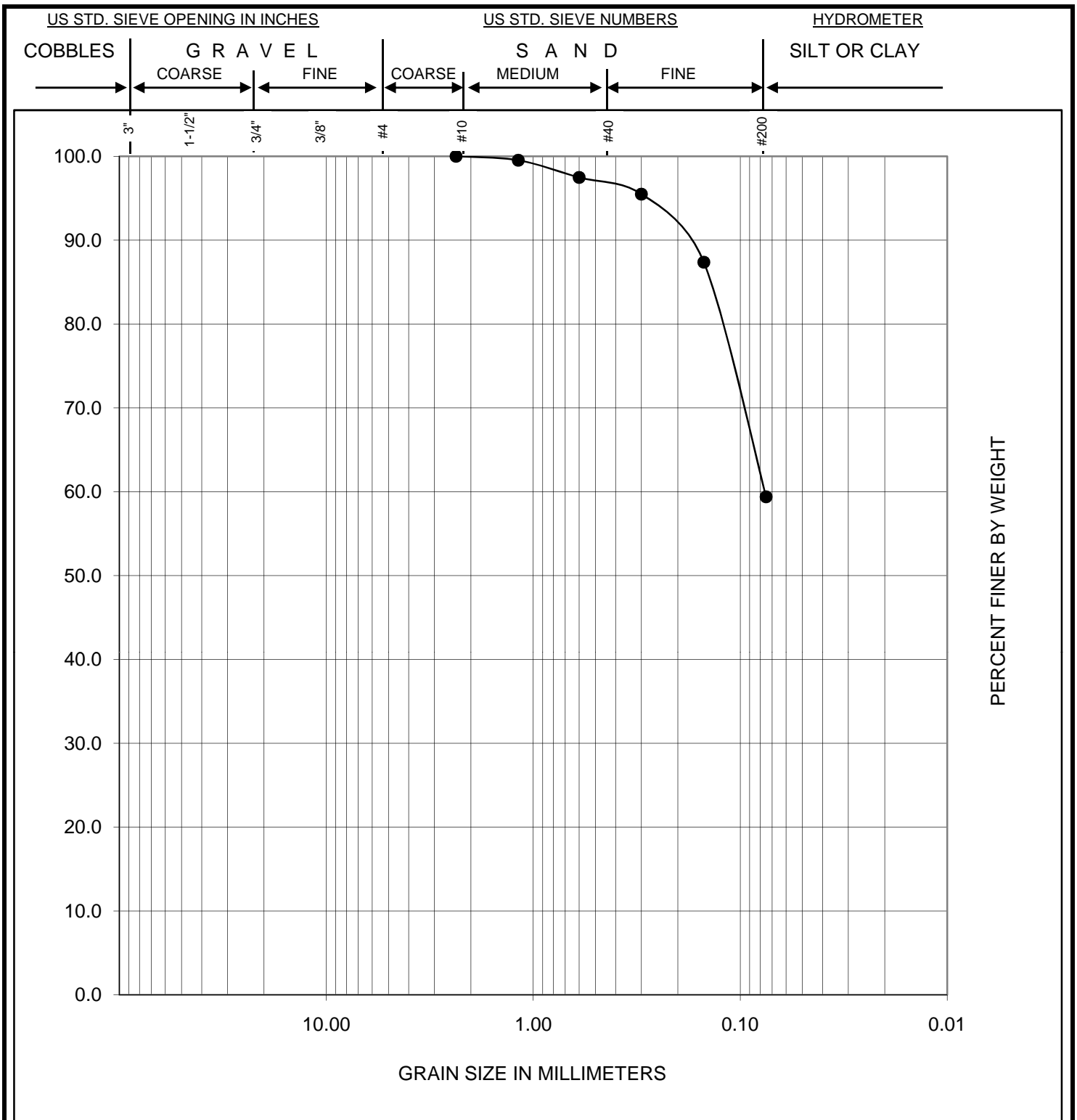
FIGURE B-14:GRAIN SIZE ANALYSIS



Bridge No. 11C-0016, Rd 67

Project No. 100956-1004

Date: 4/10/2012



| SAMPLE NO. | DEPTH | SYMBOL | CLASSIFICATION | NAT.W% | LL | PL | PI |
|------------|-------|--------|--------------------------|--------|----|----|----|
| B-25 | 25' | CL/ML | LT. BROWN LEAN CLAY/SILT | | - | - | - |

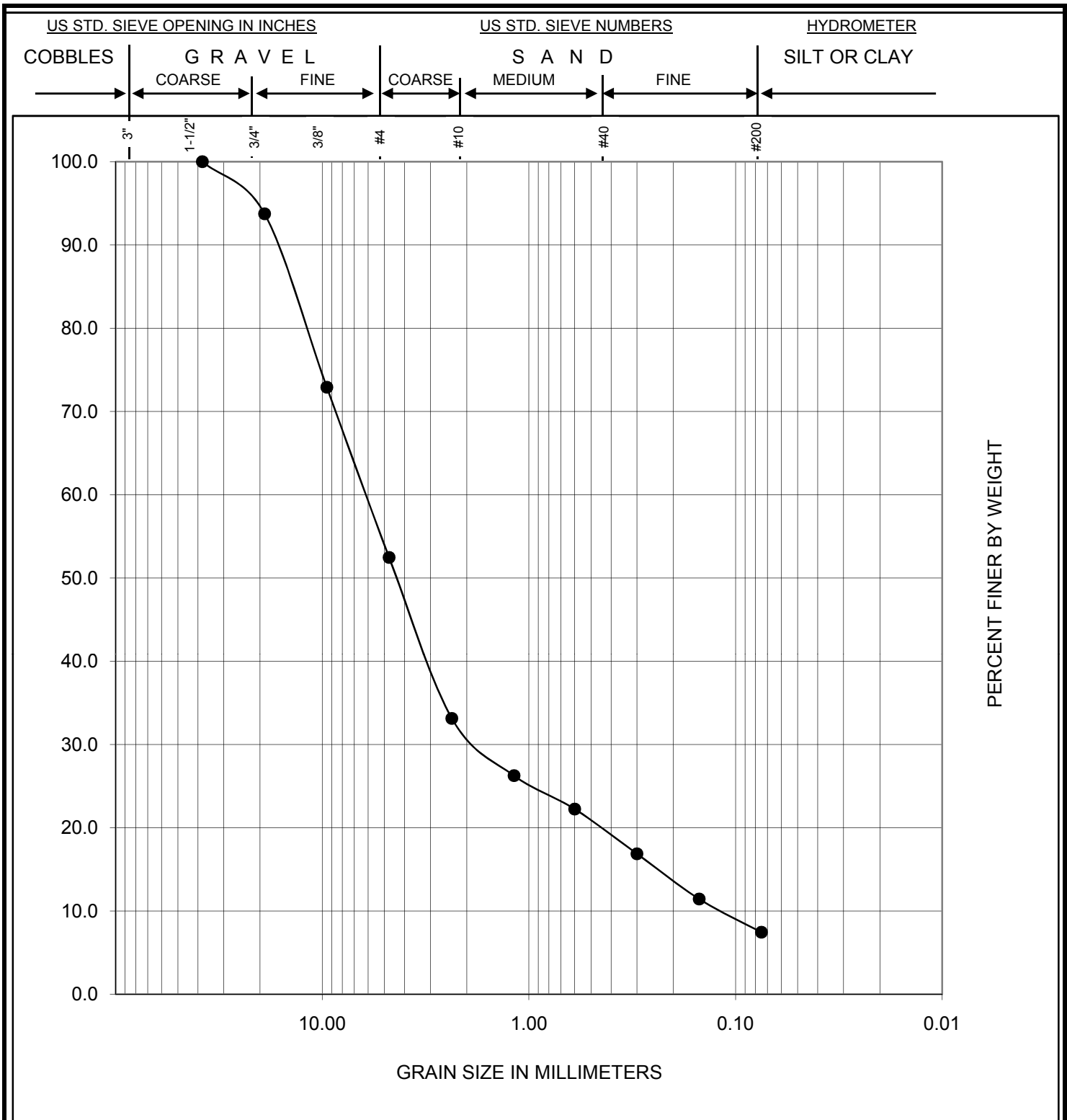
FIGURE B-15: GRAIN SIZE ANALYSIS



Bridge No. 11C-0016, Rd 67

Project No. 100956-1004

Date: 4/10/2012



| SAMPLE NO. | DEPTH | SYMBOL | CLASSIFICATION | NAT.W% | LL | PL | PI |
|------------|-------|--------|---|--------|----|----|----|
| B-25 | 30' | SP-SM | BROWN POORLY GRADED SAND WITH SILT & GRAVEL | | - | - | - |

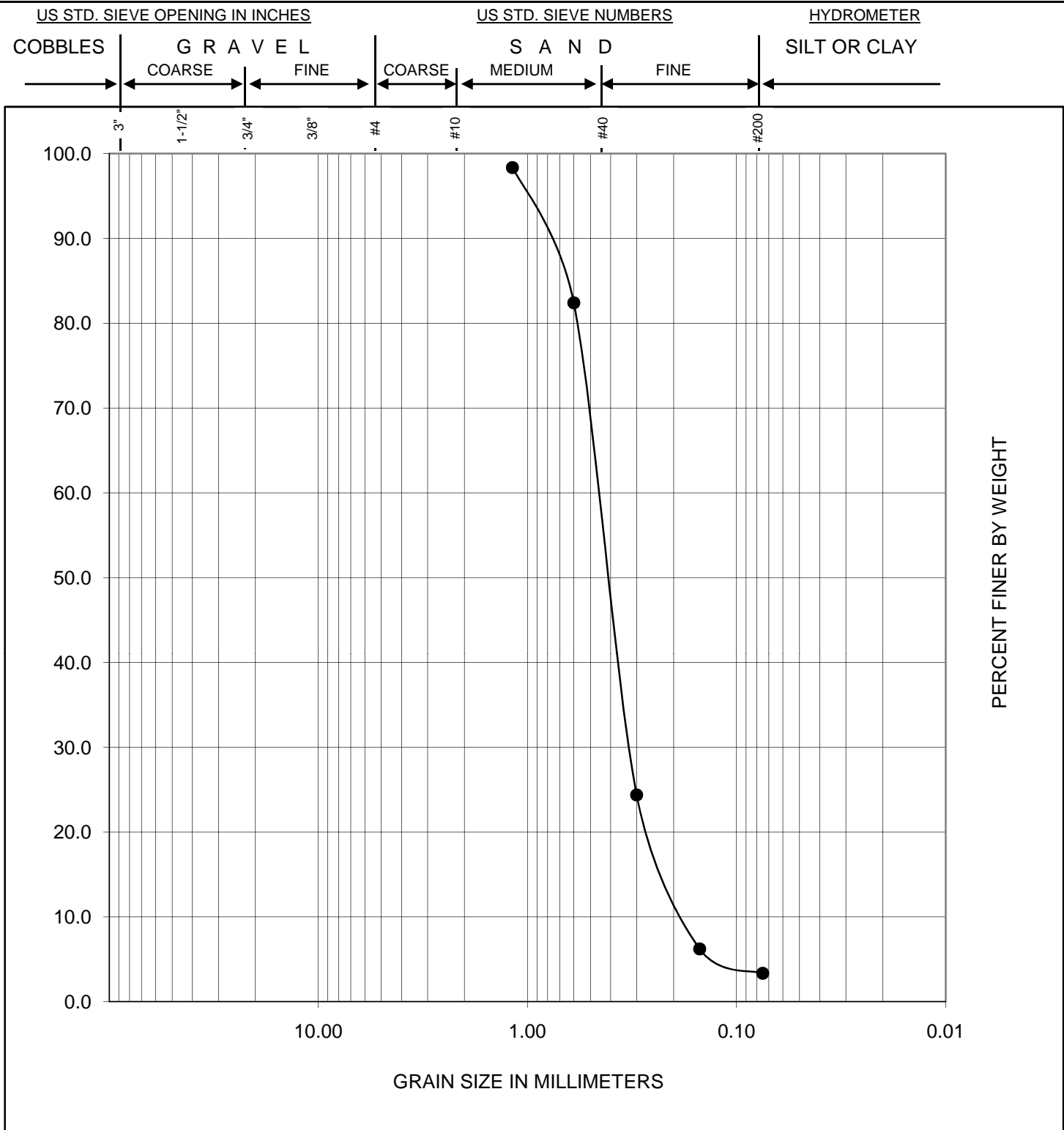
FIGURE B-16: GRAIN SIZE ANALYSIS



Bridge No. 11C-0016, Rd 67

Project No. 100956-1004

Date: 4/10/2012



| BORING NO. | DEPTH | SYMBOL | CLASSIFICATION | NAT.W% | LL | PL | PI |
|------------|-------|--------|------------------------------|--------|----|----|----|
| B-25 | 40' | SP | LT. BROWN POORLY GRADED SAND | | - | - | - |

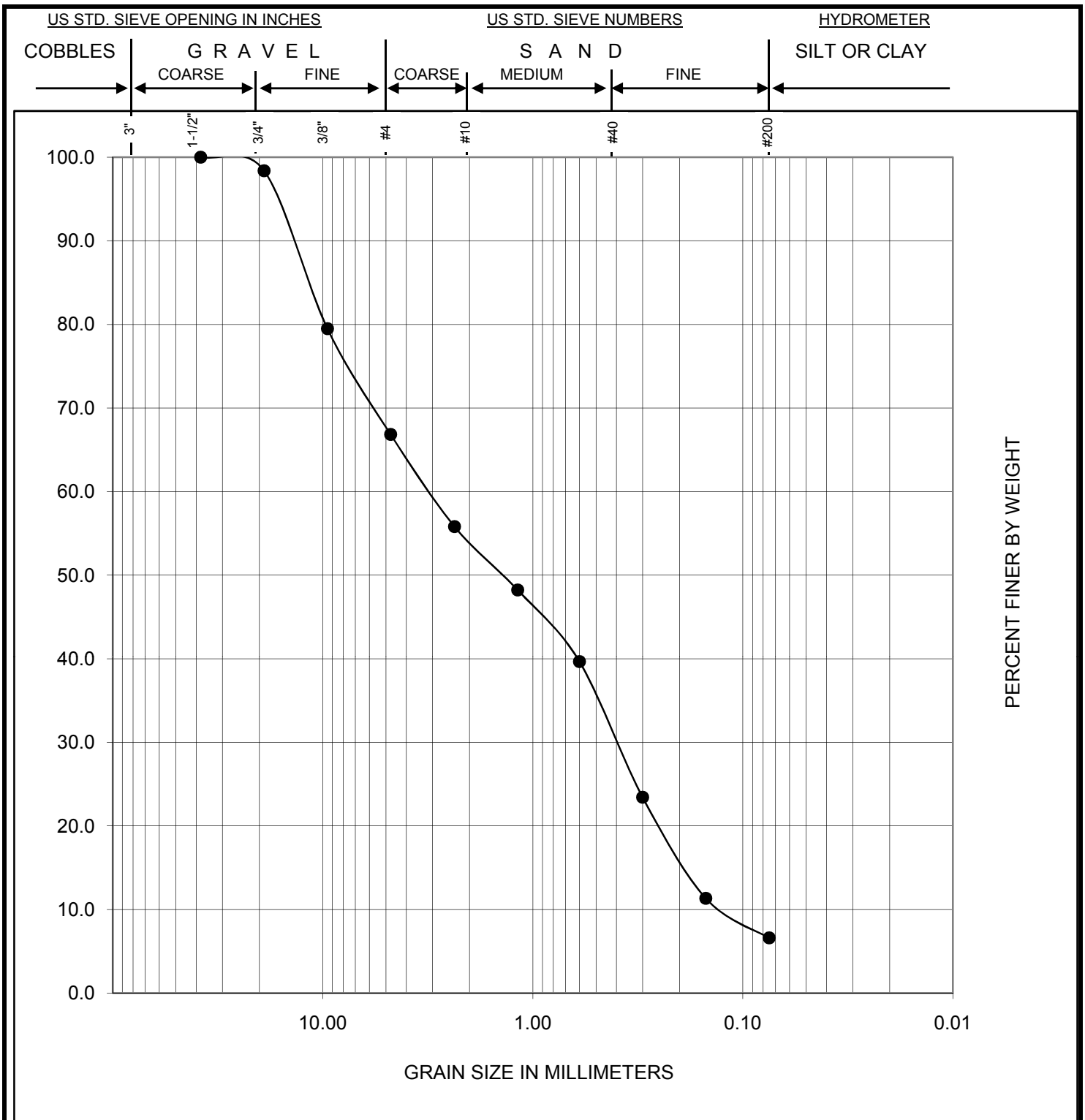
Figure B-17: GRAIN SIZE ANALYSIS



Bridge No. 11C-0016, Rd 67

Project No. 100956-1004

Date: 4/10/2012



| SAMPLE NO. | DEPTH | SYMBOL | CLASSIFICATION | NAT.W% | LL | PL | PI |
|------------|-------|--------|---|--------|----|----|----|
| B-25 | 50' | SP-SM | BROWN POORLY GRADED SAND WITH SILT & GRAVEL | | - | - | - |

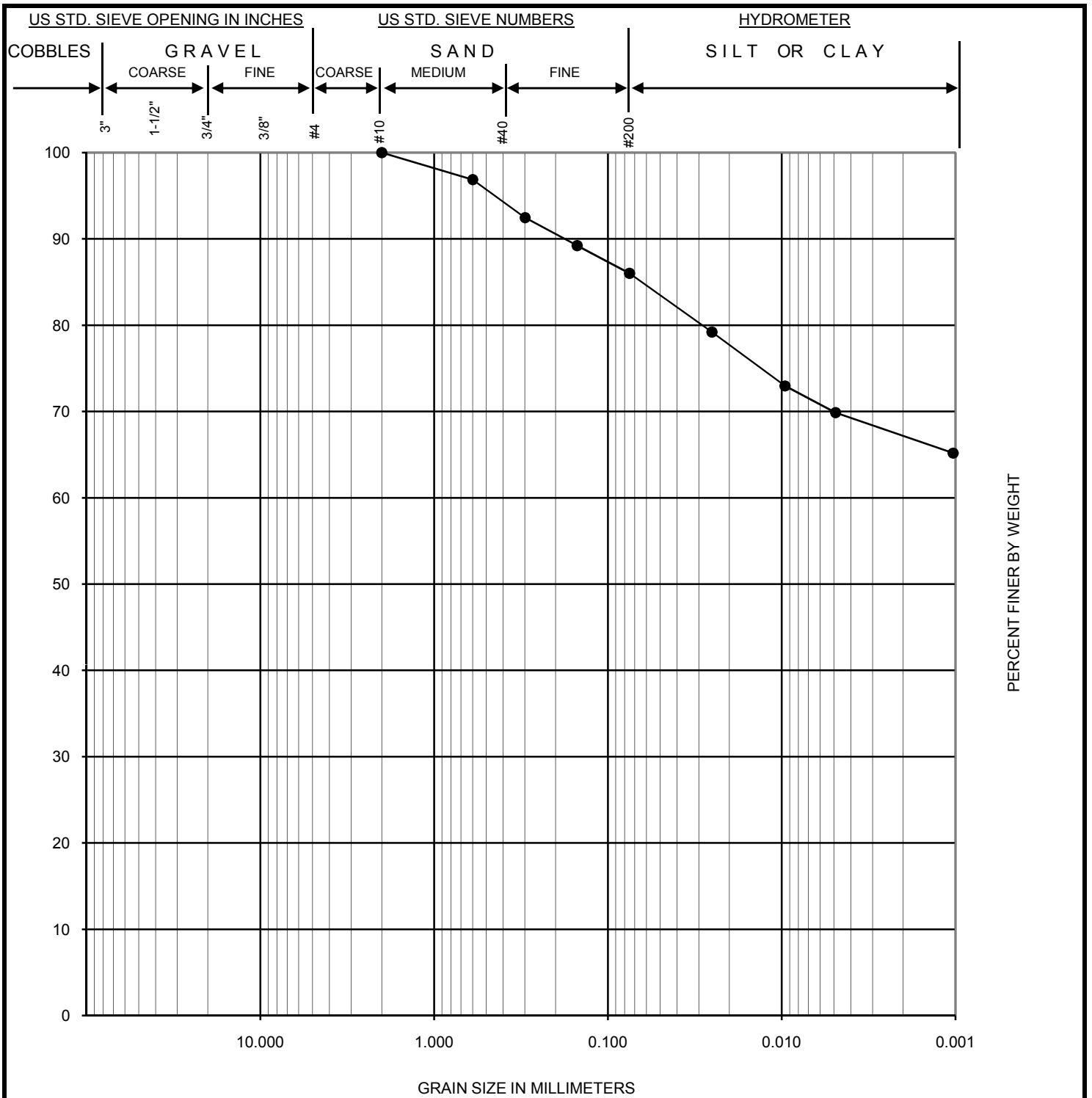
FIGURE B-18: GRAIN SIZE ANALYSIS



Bridge No. 11C-0016, Rd 67

Project No. 100956-1004

Date: 4/10/2012



| SAMPLE NO. | DEPTH | SYMBOL | CLASSIFICATION | NAT.W% | LL | PL | PI |
|------------|-------|--------|---------------------|--------|----|----|----|
| B-38 | 8' | CH | DARK BROWN FAT CLAY | | | | |

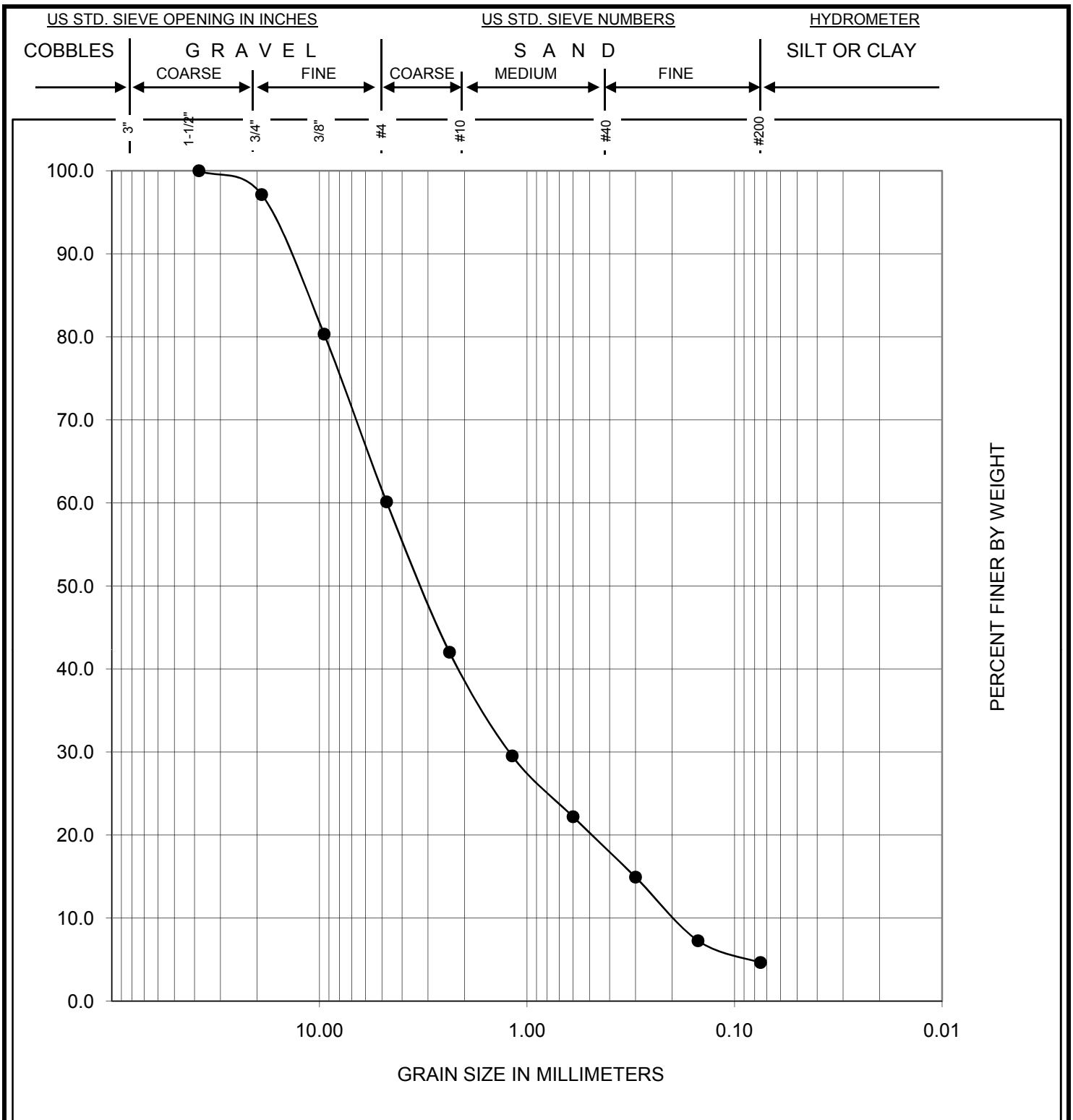
FIGURE B-21: GRAIN SIZE ANALYSIS



Bridge No. 11C-0015, Rd 67

Project No. 100955-1004

Date: 4/10/2012



| SAMPLE NO. | DEPTH | SYMBOL | CLASSIFICATION | NAT.W% | LL | PL | PI |
|------------|-------|--------|------------------------------------|--------|----|----|----|
| B-38 | 25' | SW | BROWN WELL GRADED SAND WITH GRAVEL | | - | - | - |

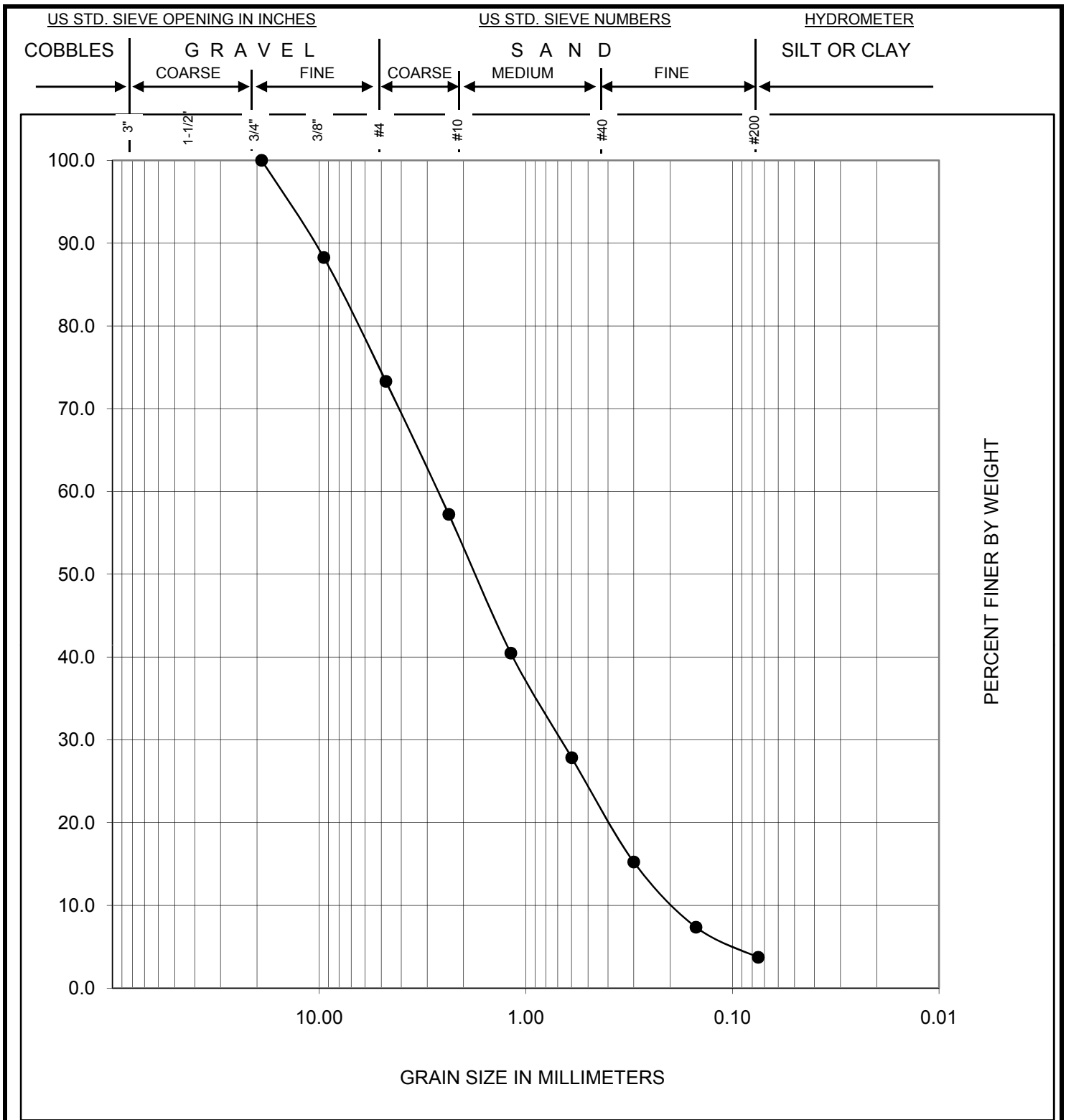
FIGURE B-22: GRAIN SIZE ANALYSIS



Bridge No. 11C-0015, Rd 67

Project No. 100955-1004

Date: 4/10/2012



| SAMPLE NO. | DEPTH | SYMBOL | CLASSIFICATION | NAT.W% | LL | PL | PI |
|------------|-------|--------|---|--------|----|----|----|
| B-38 | 35' | SP | GRAYISH BROWN POORLY GRADED SAND WITH SILT & GRAVEL | | - | - | - |

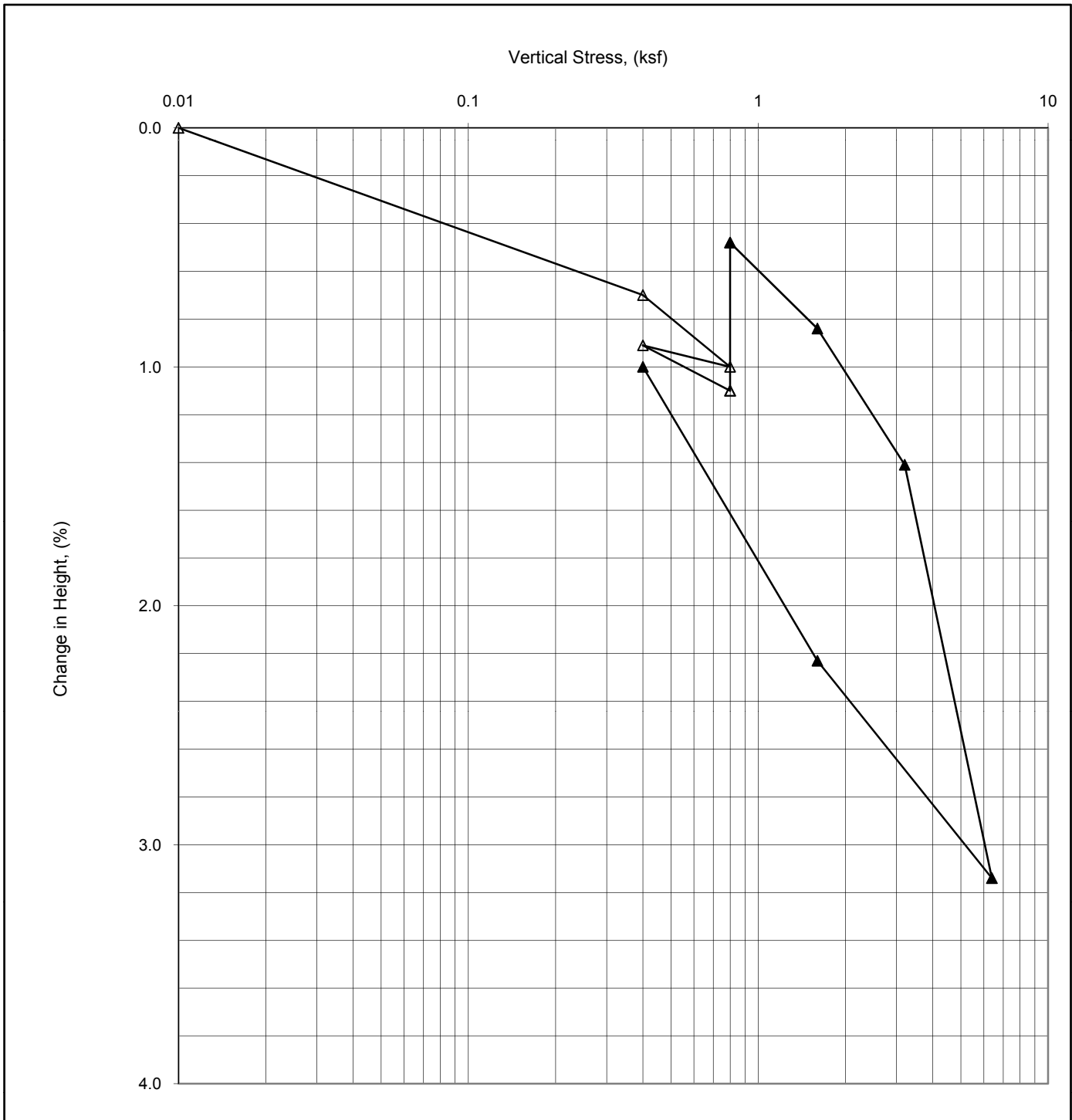
FIGURE B-23: GRAIN SIZE ANALYSIS



Bridge No. 11C-0015, Rd 67

Project No. 100955-1004

Date: 4/10/2012



Boring No. : B-38 Sample No. / Depth : R-4 @ 11' Liquid Limit -
 Sample Descriptions / Classification : GRAYISH BROWN SILTY CLAY (CL/CH) Plastic Limit -
 Sp. Gravity : 2.68 (Assumed) Compression Index, C_c 0.019 Swell Index, C_s 0.005

| | Specimen Height (inches) | Moisture Content (%) | Dry Density (pcf) | Saturation (%) | Void Ratio |
|---------|--------------------------|----------------------|-------------------|----------------|------------|
| Initial | 1.0000 | 25.7 | 97.9 | 97.2 | 0.707 |
| Final | 0.9900 | 26.2 | 98.9 | 101.5 | 0.691 |

FIGURE B-24: Consolidation Test
(ASTM D2435)

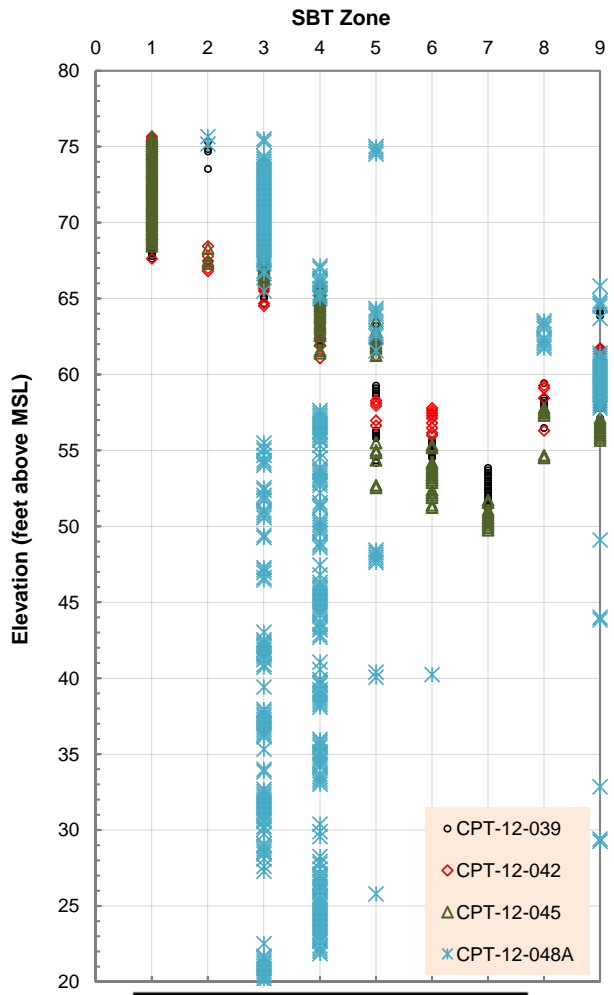


Bridge No. 11C-0015, Rd, 67

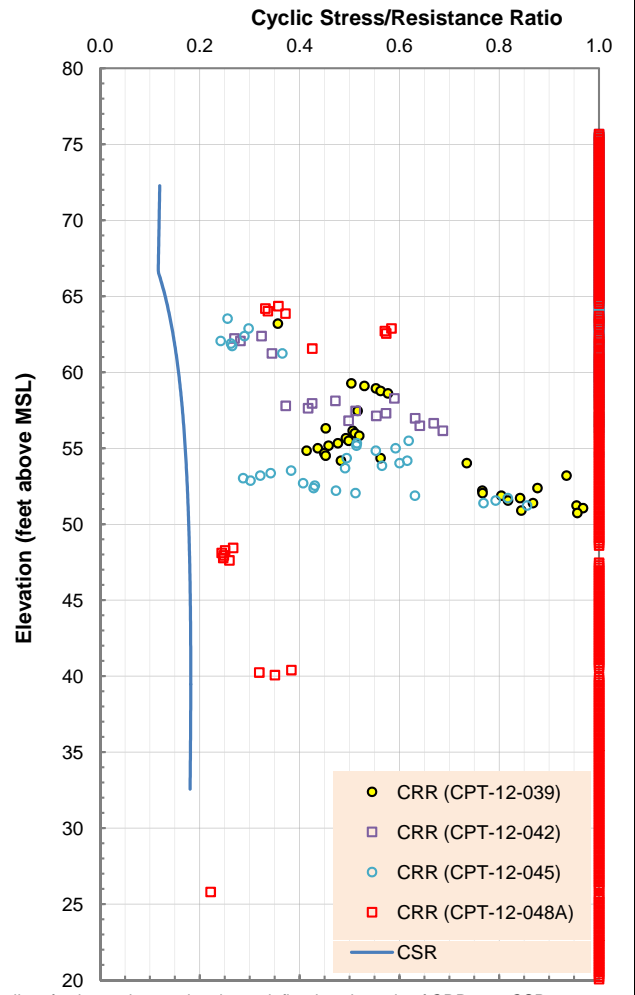
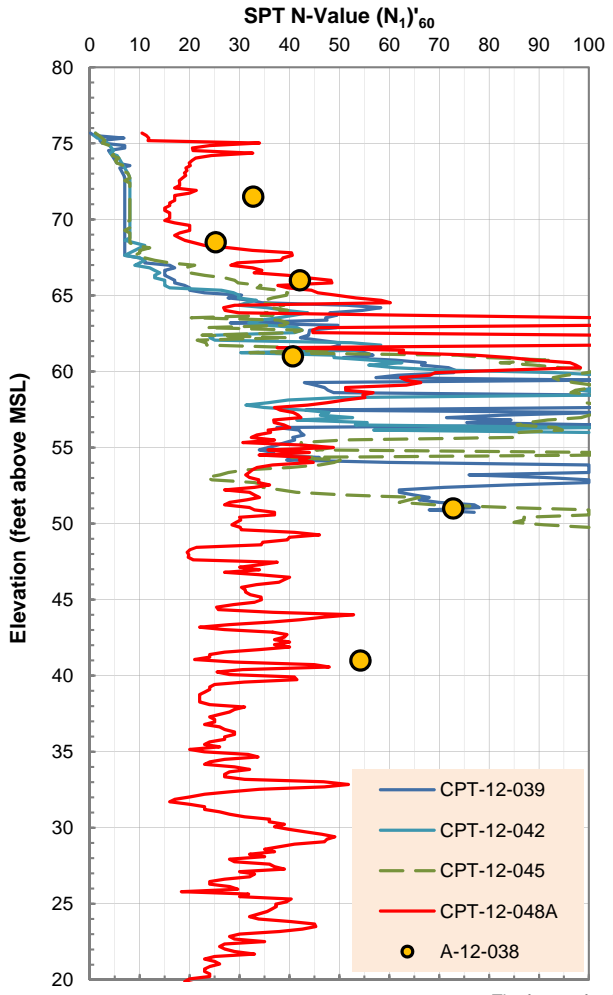
Project No. 100955-1004

Date: 4/10/2012

**APPENDIX C
LIQUEFACTION POTENTIAL ASSESSMENT**

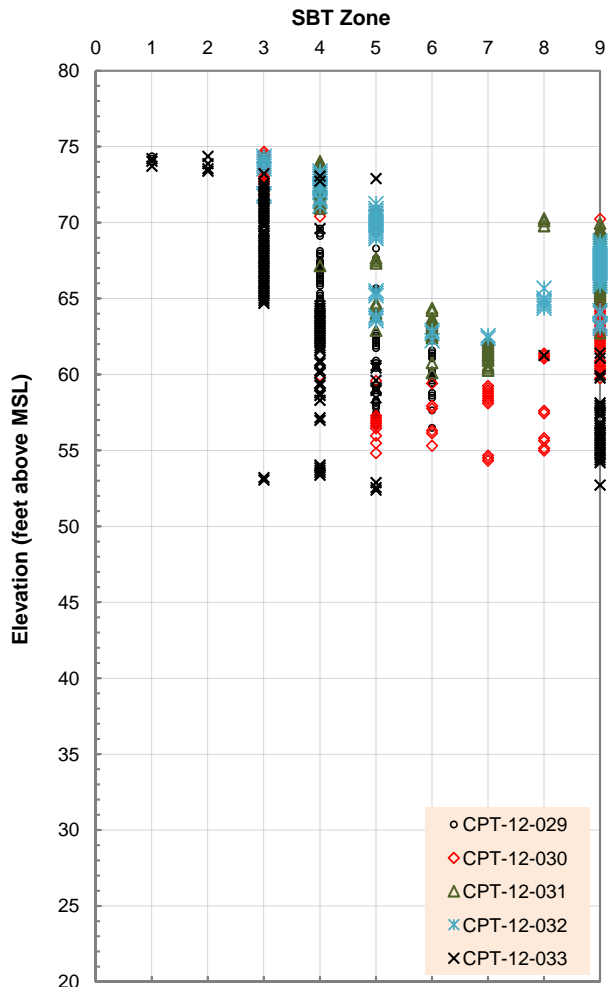


| Soil Behavior Type | SBT Zone No. | USCS Equiv. |
|---|--------------|-------------|
| Sensitive, Fine Grained | 1 | ML/CL |
| Organic Soils - Peats | 2 | OL/OH |
| Clays - Clay to Silty Clay | 3 | CL |
| Silt Mixtures - Clayey Silt to Silty Clay | 4 | ML |
| Sand Mixtures - Silty Sand to Sandy Silt | 5 | SM |
| Sands - Clean Sand to Silty Sand | 6 | SP/SW |
| Gravelly Sand to Sand | 7 | GP-GW-SP/SW |
| *Very Stiff Sand to Clayey Sand | 8 | SC |
| *Very Stiff Fine Grained | 9 | CL/ML |

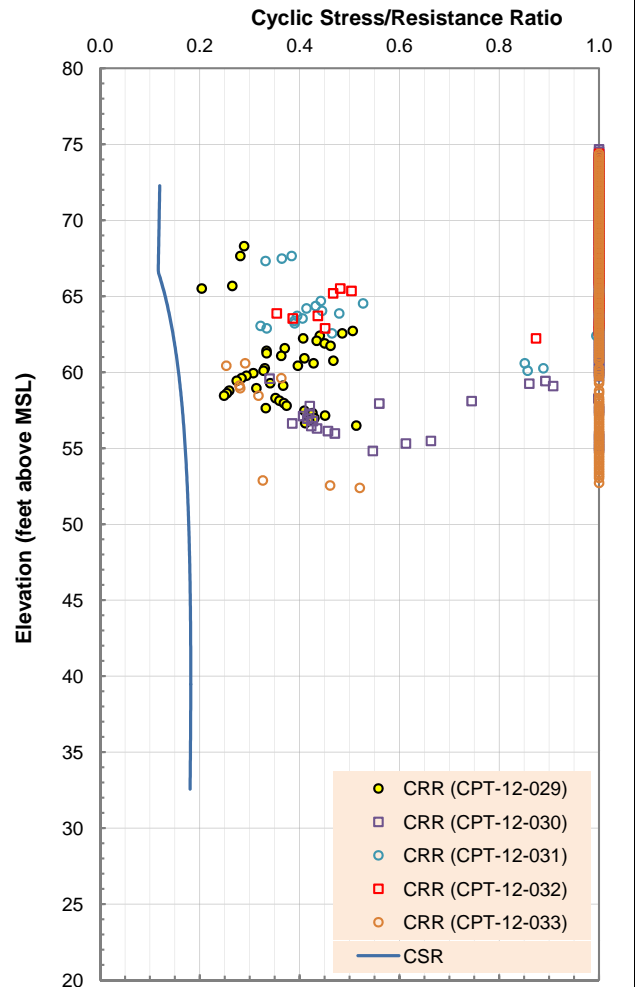
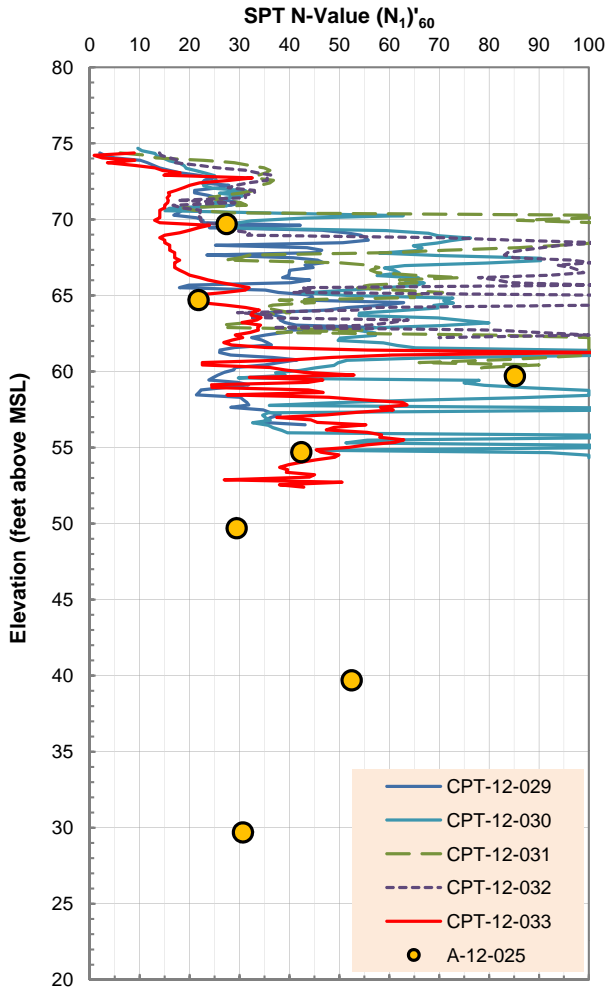


The factor of safety for liquefaction resistance has been defined as the ratio of CRR over CSR, where:
 CRR is the cyclic resistance ratio, that is, the stress ratio that needs to be exceeded for liquefaction to occur (this is the Available Resistance),
 and
 CSR is the cyclic stress ratio Induced by the anticipated earthquake ground motions at the site.

| | | | |
|--|--|--|-------------------------|
| FIGURE C-1. LIQUEFACTION POTENTIAL ASSESSMENT (All Supports) | | WILLDAN Geotechnical extending your reach | |
| Bridge Replacement County Road 67 Bridge No. 11C-0015 Glenn County, California | | Drawn By: GA | Date: 12-Oct-12 |
| | | Approved By: RK | Project No. 100955-1004 |

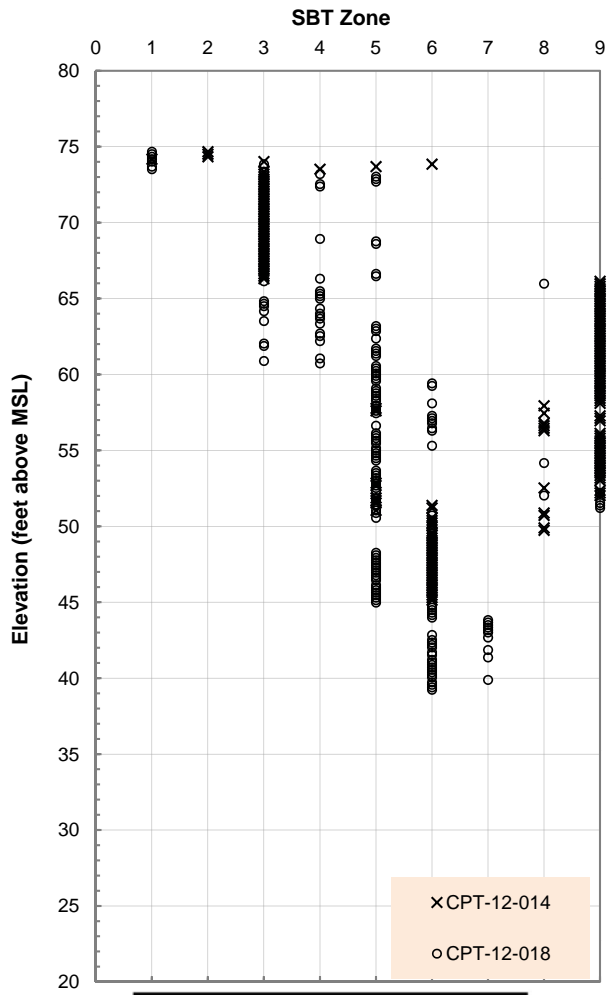


| Soil Behavior Type | SBT Zone No. | USCS Equiv. |
|---|--------------|-------------|
| Sensitive, Fine Grained | 1 | ML/CL |
| Organic Soils - Peats | 2 | OL/OH |
| Clays - Clay to Silty Clay | 3 | CL |
| Silt Mixtures - Clayey Silt to Silty Clay | 4 | ML |
| Sand Mixtures - Silty Sand to Sandy Silt | 5 | SM |
| Sands - Clean Sand to Silty Sand | 6 | SP/SW |
| Gravelly Sand to Sand | 7 | GP-GW-SP/SW |
| *Very Stiff Sand to Clayey Sand | 8 | SC |
| *Very Stiff Fine Grained | 9 | CL/ML |

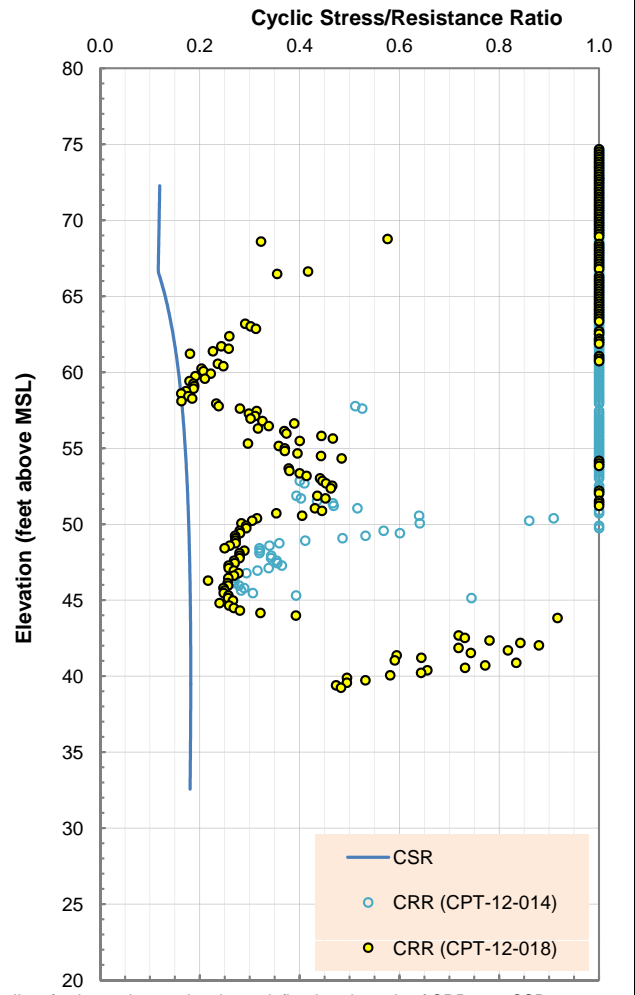
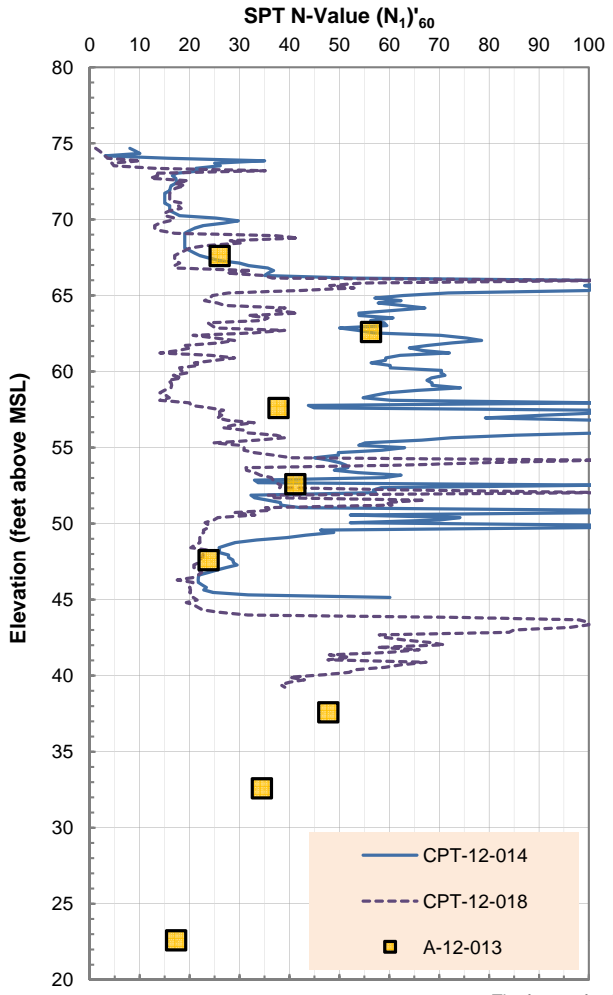


The factor of safety for liquefaction resistance has been defined as the ratio of CRR over CSR, where:
 CRR is the cyclic resistance ratio, that is, the stress ratio that needs to be exceeded for liquefaction to occur (this is the Available Resistance),
 and
 CSR is the cyclic stress ratio Induced by the anticipated earthquake ground motions at the site.

| | | | |
|--|--|--|-------------------------|
| FIGURE C-2. LIQUEFACTION POTENTIAL ASSESSMENT (All Supports) | | WILLDAN Geotechnical <i>extending your reach</i> | |
| Bridge Replacement County Road 67 Bridge No. 11C-0016 Glenn County, California | | Drawn By: GA | Date: 12-Oct-12 |
| | | Approved By: RK | Project No. 100956-1004 |

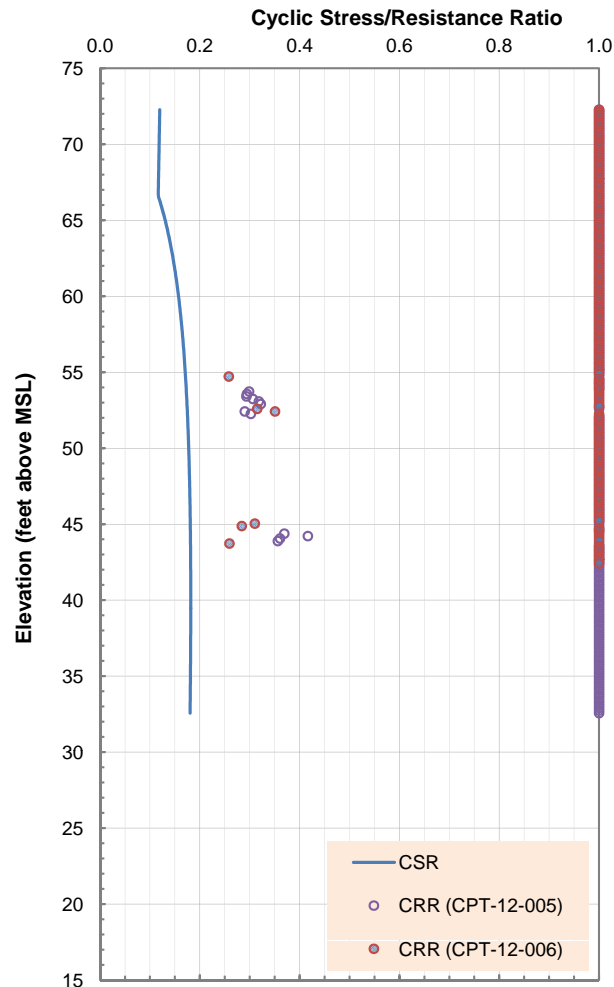
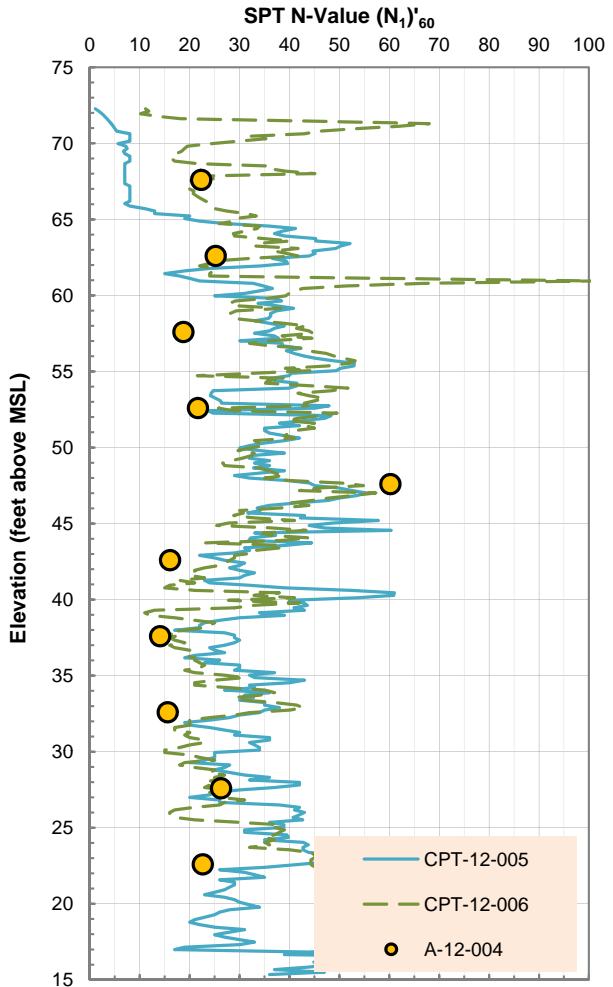
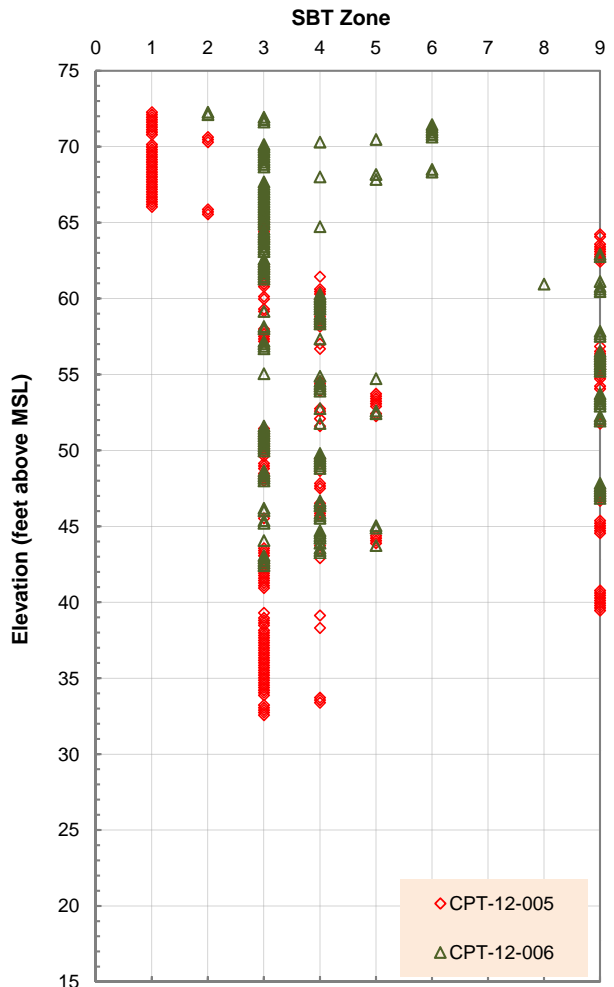


| Soil Behavior Type | SBT Zone No. | USCS Equiv. |
|---|--------------|-------------|
| Sensitive, Fine Grained | 1 | ML/CL |
| Organic Soils - Peats | 2 | OL/OH |
| Clays - Clay to Silty Clay | 3 | CL |
| Silt Mixtures - Clayey Silt to Silty Clay | 4 | ML |
| Sand Mixtures - Silty Sand to Sandy Silt | 5 | SM |
| Sands - Clean Sand to Silty Sand | 6 | SP/SW |
| Gravelly Sand to Sand | 7 | GP-GW-SP/SW |
| *Very Stiff Sand to Clayey Sand | 8 | SC |
| *Very Stiff Fine Grained | 9 | CL/ML |



The factor of safety for liquefaction resistance has been defined as the ratio of CRR over CSR, where:
 CRR is the cyclic resistance ratio, that is, the stress ratio that needs to be exceeded for liquefaction to occur (this is the Available Resistance),
 and
 CSR is the cyclic stress ratio Induced by the anticipated earthquake ground motions at the site.

| | | | |
|---|--|--|-------------------------|
| FIGURE C-3. LIQUEFACTION POTENTIAL ASSESSMENT (All Supports) | | WILLDAN Geotechnical <i>extending your reach</i> | |
| Bridge Replacement County Road 67 Bridge Nos. 11C-0017 Glenn County, California | | Drawn By: GA | Date: 12-Oct-12 |
| | | Approved By: RK | Project No. 100957-1004 |



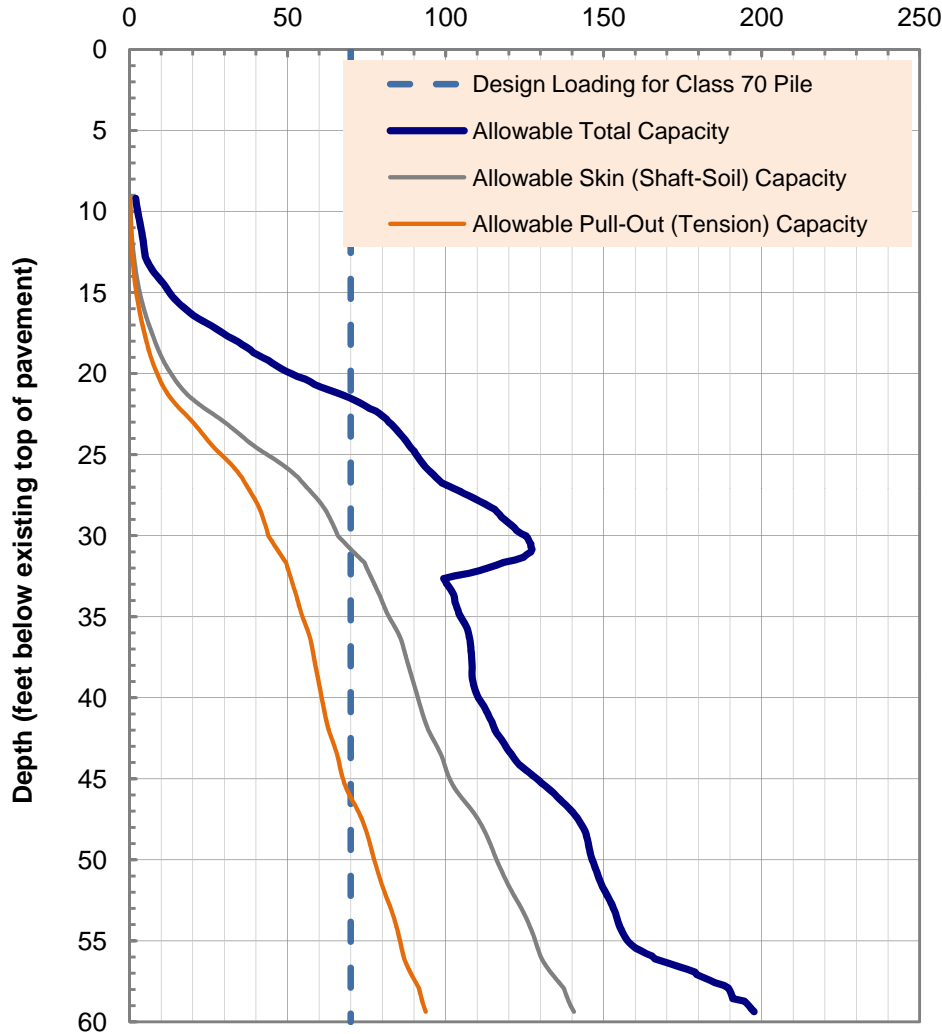
| Soil Behavior Type | SBT Zone No. | USCS Equiv. |
|---|--------------|-------------|
| Sensitive, Fine Grained | 1 | ML/CL |
| Organic Soils - Peats | 2 | OL/OH |
| Clays - Clay to Silty Clay | 3 | CL |
| Silt Mixtures - Clayey Silt to Silty Clay | 4 | ML |
| Sand Mixtures - Silty Sand to Sandy Silt | 5 | SM |
| Sands - Clean Sand to Silty Sand | 6 | SP/SW |
| Gravelly Sand to Sand | 7 | GP-GW-SP/SW |
| *Very Stiff Sand to Clayey Sand | 8 | SC |
| *Very Stiff Fine Grained | 9 | CL/ML |

The factor of safety for liquefaction resistance has been defined as the ratio of CRR over CSR, where:
 CRR is the cyclic resistance ratio, that is, the stress ratio that needs to be exceeded for liquefaction to occur (this is the Available Resistance),
 and
 CSR is the cyclic stress ratio Induced by the anticipated earthquake ground motions at the site.

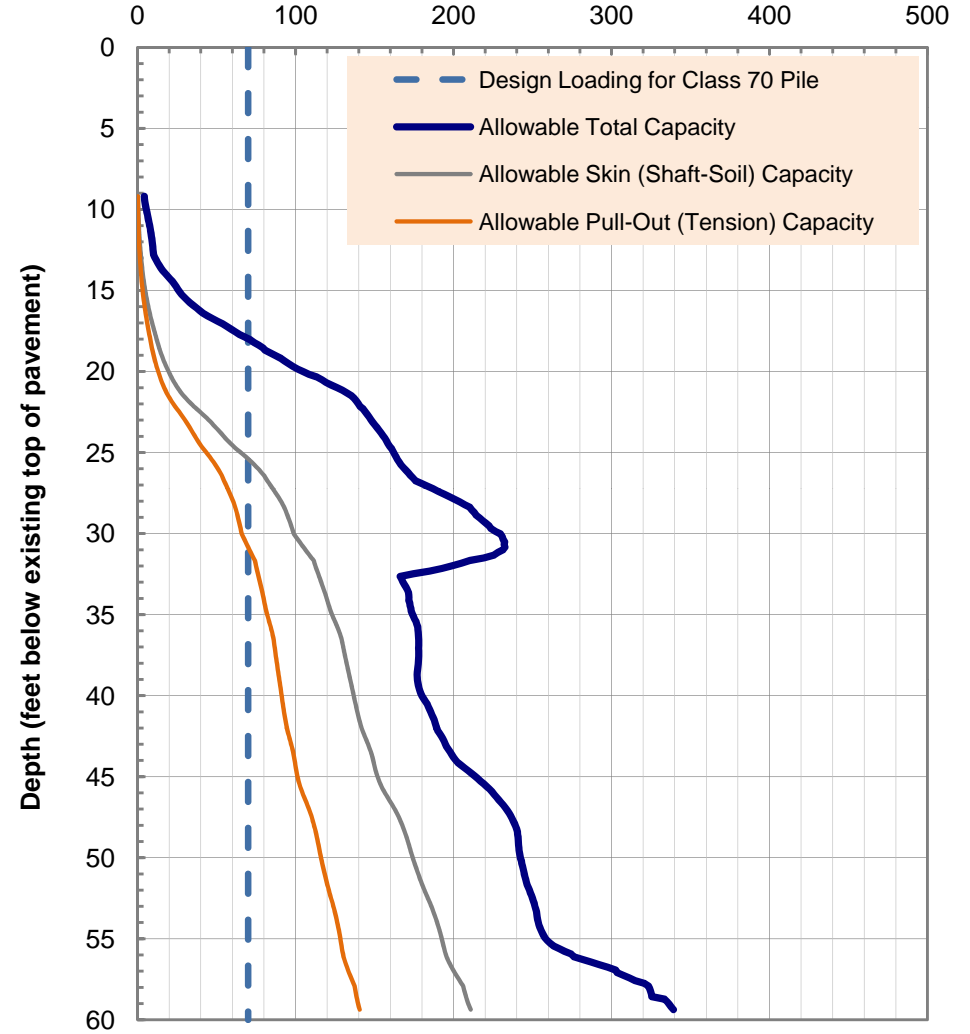
| | | | |
|---|--|--|-------------------------|
| FIGURE C-4. LIQUEFACTION POTENTIAL ASSESSMENT (All Supports) | | WILLDAN Geotechnical extending your reach | |
| Bridge Replacement County Road 67 Bridge Nos. 11C-0179 Glenn County, California | | Drawn By: GA | Date: 12-Oct-12 |
| | | Approved By: RK | Project No. 100958-1004 |

**APPENDIX D
PILE VERTICAL LOAD CAPACITY VERSUS DEPTH CURVES**

**Allowable Vertical Capacity (tons)
16-inch-diameter Driven Pile**



**Allowable Vertical Capacity (tons)
24-inch-diameter Driven Pile**



**FIGURE D-1. PILE VERTICAL LOAD CAPACITY
(ALL SUPPORTS)**



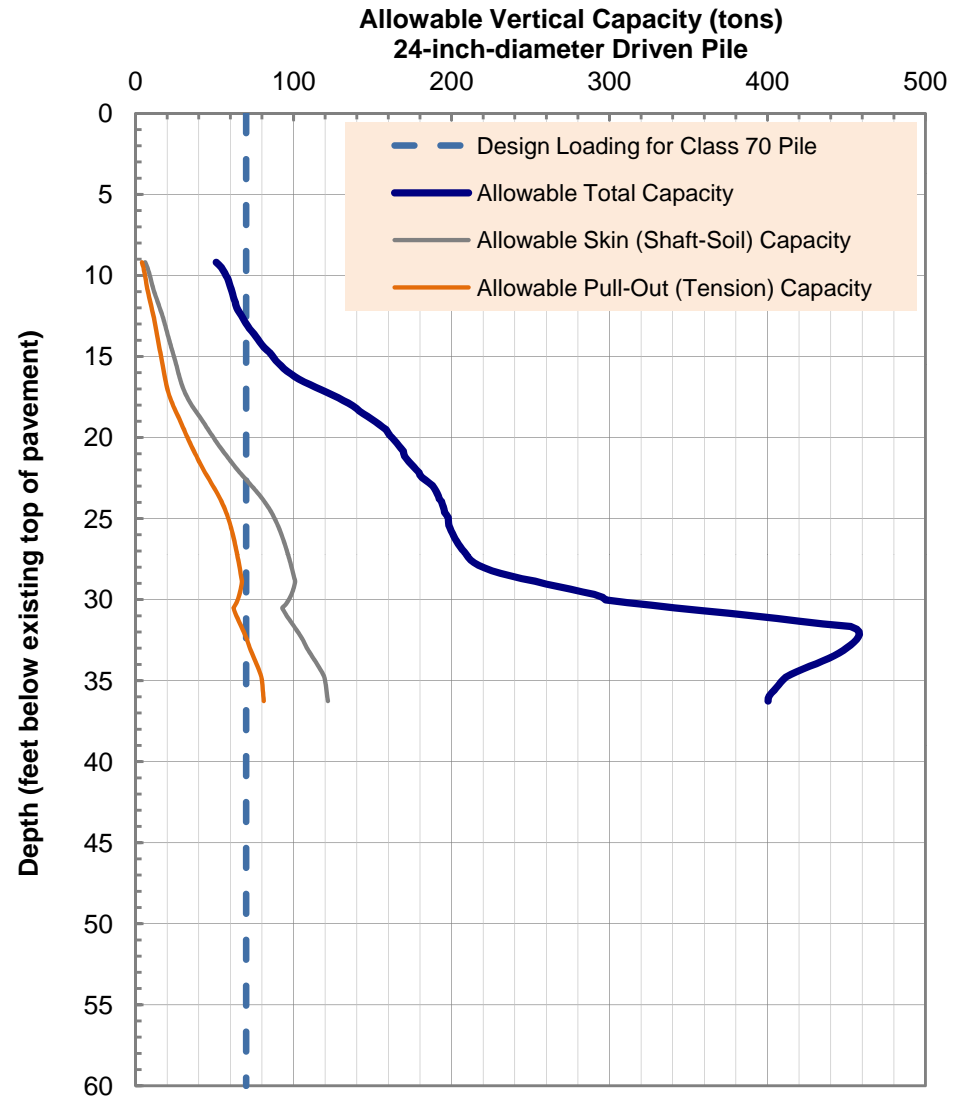
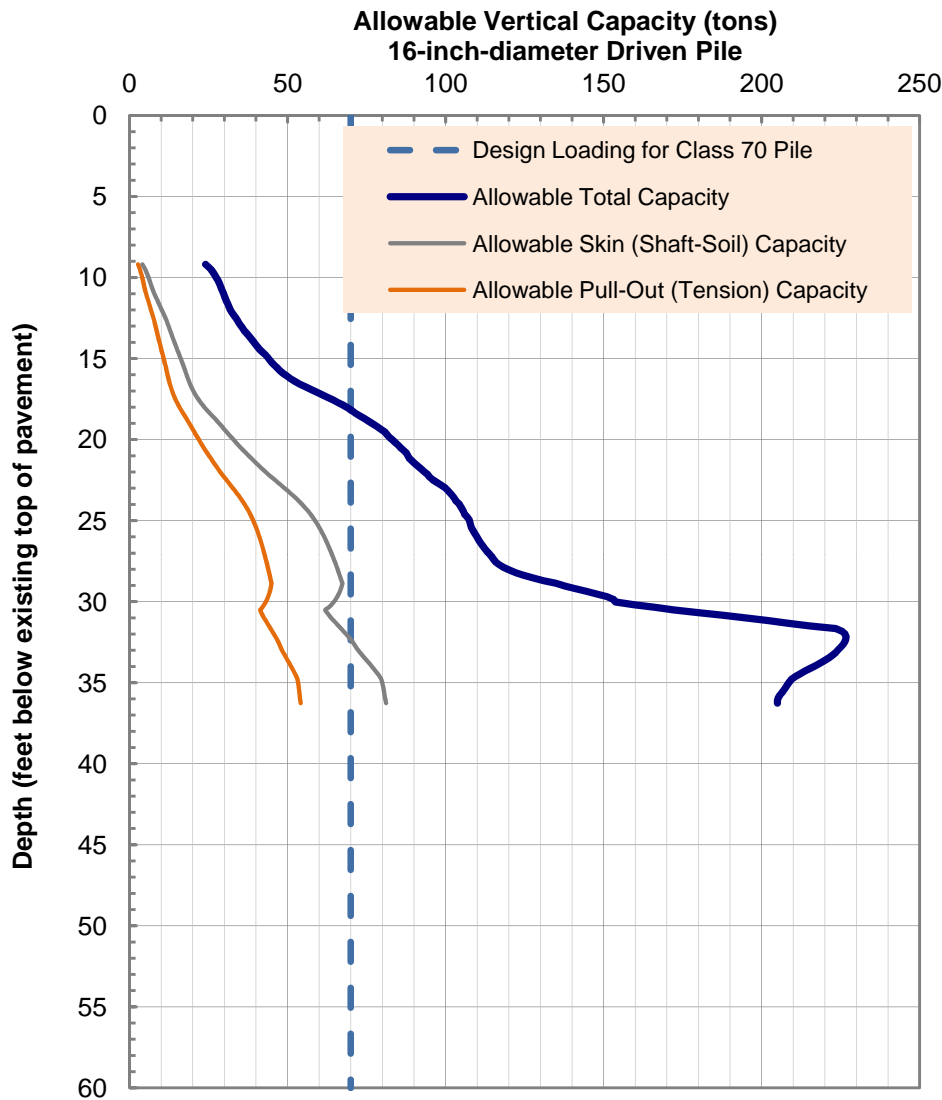
**Bridge Replacement
County Road 67 Bridge Nos. 11C-0015 & 11C-0016
Glenn County, California**

Drawn By: GA

Date: 12-Oct-12

Approved By: RK

Project No. 100955-1004



**FIGURE D-2. PILE VERTICAL LOAD CAPACITY
(ALL SUPPORTS)**



Bridge Replacement, County Road 67 Bridge No. 11C-0017
Glenn County, California

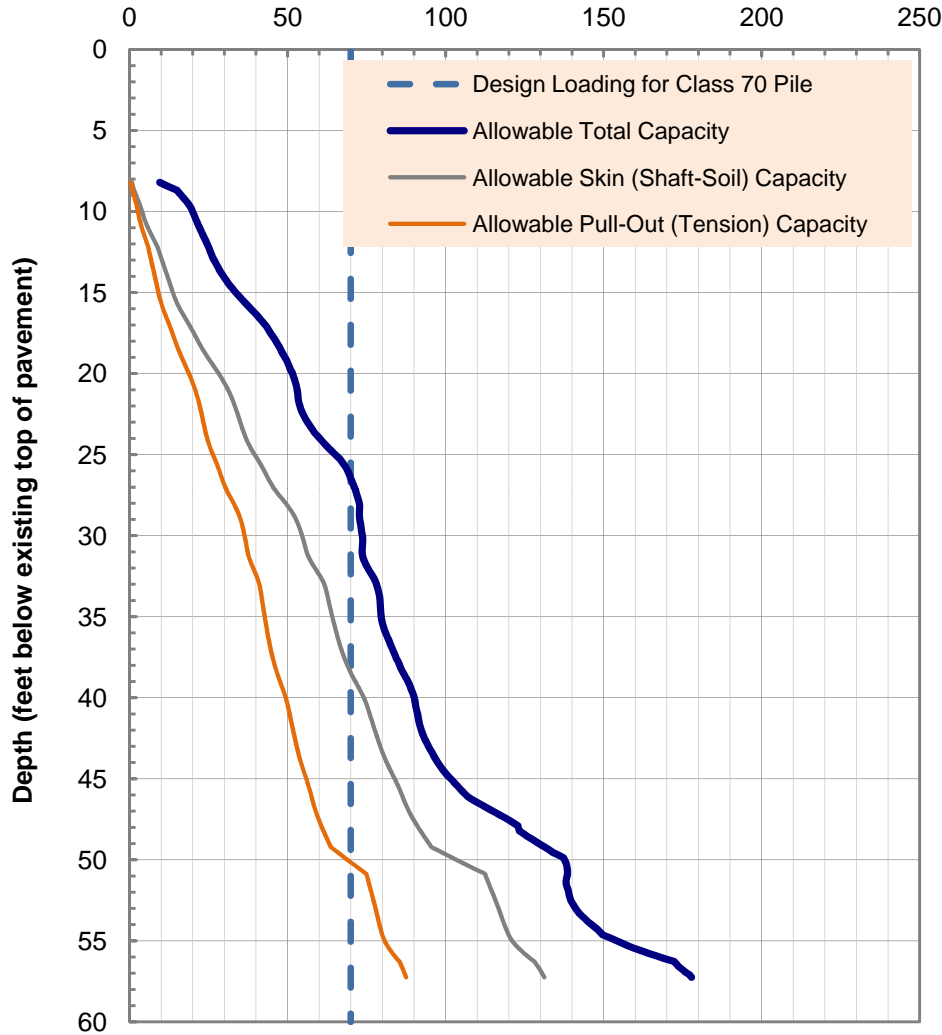
Drawn By: GA

Date: 12-Oct-12

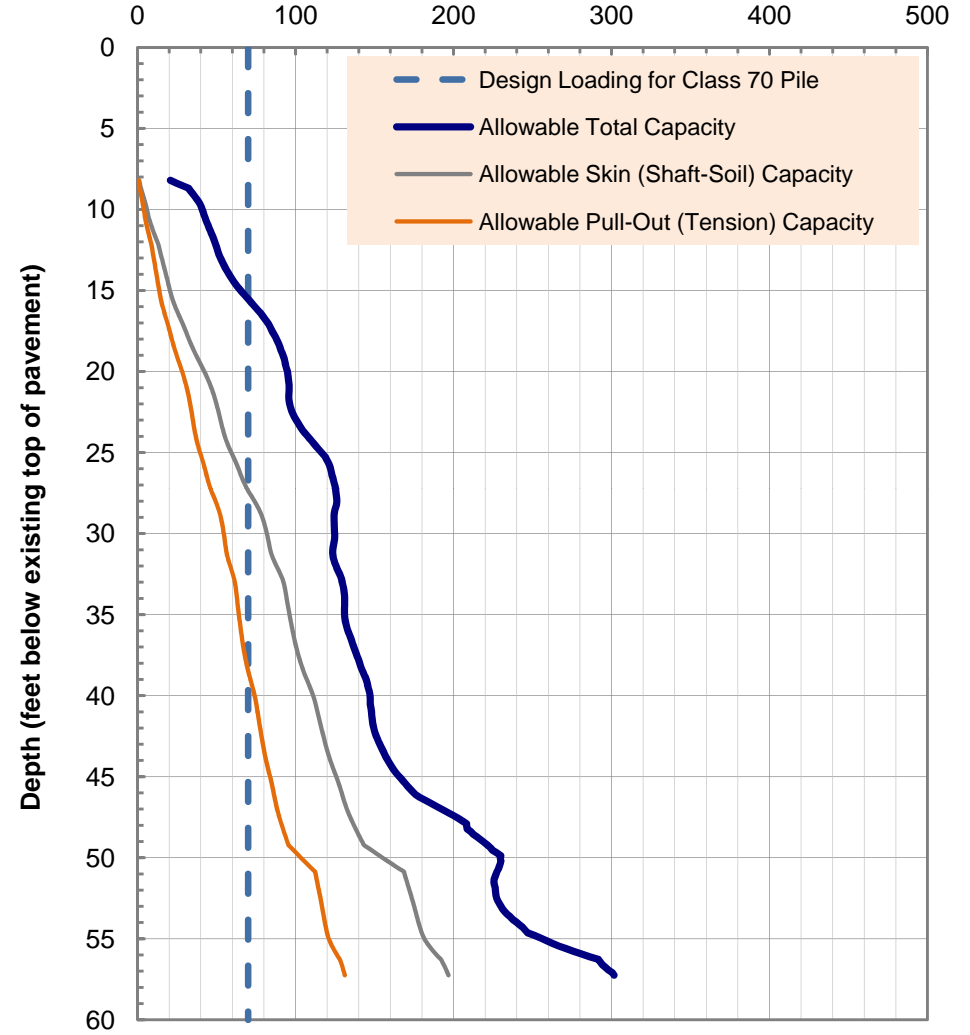
Approved By: RK

Project No. 100957-1004

**Allowable Vertical Capacity (tons)
16-inch-diameter Driven Pile**



**Allowable Vertical Capacity (tons)
24-inch-diameter Driven Pile**



**FIGURE D-3. PILE VERTICAL LOAD CAPACITY
(ALL SUPPORTS)**



Bridge Replacement, County Road 67 Bridge No. 11C-0179
Glenn County, California

Drawn By: GA

Date: 12-Oct-12

Approved By: RK

Project No. 100958-1004

**APPENDIX E
PHOTOGRAPHS OF EXISTING COUNTY ROAD 67 BRIDGES
OVER HOWARD SLOUGH ON MARCH 13 & 14, 2012**



1. Looking West along South Side of Bridge No. 11C-0015



2. Southeast Corner of Bridge No. 11C-0015



3. Looking East along South Side of Bridge No. 11C-0016



4. Looking East along North Side of Bridge No. 11C-0016



5. Looking West along South Side of Bridge No. 11C-0017



6. Looking West along North Side of Bridge No. 11C-0017



7. Looking West from Southeast Corner of Bridge No. 11C-0016



8. Looking West along South Side of Bridge No. 11C-0179



9. Looking West along North Side of Bridge No. 11C-0179



10. Looking East along North Side of Bridge No. 11C-0179

Hydroseed Spec County Road 67 Bridge Replacement Project

10-1.24 EROSION CONTROL (HYDROSEED)

GENERAL

Summary

This work includes removing and disposing of weeds and applying erosion control materials including seed, fiber, and commercial fertilizer to erosion control (Hydroseed) areas shown on the plans.

Comply with Section 20-3, "Erosion Control," of the Standard Specifications.

If notified by the Engineer that an area is ready to receive erosion control materials, start erosion control (Hydroseed) work within 5 business days of the Engineer's notification to perform the work.

The Engineer will designate the ground location of all erosion control (Hydroseed) areas in increments of one acre or smaller by directing the placing of stakes or other suitable markers. Furnish all tools, labor, materials, and transportation required to adequately indicate the various erosion control (Hydroseed) locations.

MATERIALS

Seed

Seed not required to be labeled under the California Food and Agricultural Code must be tested for purity and germination by a seed laboratory certified by the Association of Official Seed Analysts or by a seed technologist certified by the Society of Commercial Seed Technologists. Measure and mix individual seed species in the presence of the Engineer.

Seed must contain at most 1.0 percent total weed seed by weight.

Deliver seed to the job site in unopened separate containers with the seed tag attached. Containers without a seed tag attached are not accepted. The Engineer takes a sample of approximately one ounce or 0.25 cup of seed for each seed lot greater than 2 pounds.

Seed must comply with the following:

| Seed | | |
|--|----------------------------------|---|
| <i>Botanical Name</i> (Common Name) | Percent Germination (Minimum) | Pounds Pure Live Seed Per Acre (Slope Measurement) |
| <i>Danthonia californica</i> California oatgrass | 70 | 13 |
| <i>Nasella pulchra</i> Purple needlegrass | 65 | 13 |
| <i>Festuca californica</i> California fescue | 70 | 13 |
| <i>Eschscholtzia californica</i> California poppy | 80 | 13 |
| | Total | 52 |

Applicable when numbers below are shown after a *Botanical Name*/(Common Name) above:

¹Seed produced in California only.

Seed Sampling Supplies

At the time of seed sampling, provide the Engineer a glassine lined bag and custody seal tag for each seed lot sample.

Organic Fertilizer

110110 ## ktn

Must be a pelleted or granular form and must be one of the following:

| Organic Fertilizer | | |
|-----------------------------|--|---|
| Products | Guaranteed Chemical Analysis (N-P-K) (%) | Company |
| Biosol Mix® - Granular | 7-2-3 | Rocky Mountains Bioproducts Edwards, CO |
| Fertil-Fibers™ | 6-4-1 | Quattro Environmental Coronado, CA |
| Sustane® | 5-2-4 | Natural Fertilizer of America Cannon Falls, MN |
| Approved Equal ¹ | (N) 5 to 7 (P) 1 to 5 (K) 2 to 10 | |

¹Approved equal must be within the ranges shown for N-P-K. The cumulative (N) release rate must be no more than 70 percent the first 70 days after incubation (86° F) with 100 percent at 350 days or more.

Fiber

Fiber must be a combination of Wood, Cellulose, or Alternate.

Fiber must comply with the following:

1. Free from lead paint, printing ink, varnish, petroleum products, seed germination inhibitors, or chlorine bleach
2. Free from synthetic or plastic materials
3. At most 7 percent ash

Wood Fiber must comply with the following:

1. Long strand, whole wood fibers, thermo-mechanically processed from clean, whole wood chips
2. Not made from sawdust, cardboard, paper, or paper byproducts
3. At least 25 percent of fibers 3/8 inch long
4. At least 40 percent held on a No. 25 sieve

Cellulose Fiber must comply with the following:

1. Made from natural or recycled pulp fiber, such as wood chips, sawdust, newsprint, chipboard, corrugated cardboard, or a combination of these materials

Alternate Fiber must comply with the following:

1. Long strand, whole natural fibers made from clean straw, cotton, corn, or other natural feed stock
2. At least 25 percent of fibers 3/8 inch long
3. At least 40 percent held on a No. 25 sieve

Coloring Agent

Use a biodegradable, nontoxic coloring agent free from copper, mercury, and arsenic.

CONSTRUCTION

Site Preparation

Immediately prior to applying seed to erosion control (Hydroseed) areas, trash and debris and weeds must be removed.

Removed weeds must be disposed of in conformance with the provisions in Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.

Application

Apply erosion control (Hydroseed) materials in separate applications in the following sequence:

1. Apply the following mixture with hydroseeding equipment at the rates indicated within 60 minutes after the seed has been added to the mixture:

| Material | Pounds Per Acre (Slope Measurement) |
|-----------------------|--|
| Seed | 52 |
| Fiber | 1070 |
| Commercial Fertilizer | 2000 |

2. Apply the following mixture with hydro-seeding equipment at the corresponding rates:

| Material | Pounds Per Acre (Slope Measurement) |
|-----------------------|--|
| Fiber | 1070 |
| Commercial Fertilizer | 2000 |

Seed may be dry applied at the total rate specified in the preceding table for small areas not accessible by the hydro-seeding equipment, when approved in writing by the Engineer. Dry applied seed must be incorporated into the soil a maximum depth of 1/4 inch by raking or dragging.

The Engineer may change the rates of erosion control (Hydroseed) materials to meet field conditions.

For any area where erosion control (Hydroseed) materials are to be applied, the application of all erosion control (Hydroseed) materials to be applied to that area must be completed within 72 hours from when the first materials were applied.

MEASUREMENT AND PAYMENT

Erosion control (Hydroseed) will be measured by the square foot. The area will be calculated on the basis of actual or computed slope measurements.

The contract price paid per square foot for erosion control (Hydroseed) includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in erosion control (Hydroseed) complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.