

Department of  
Community Development  
Lori A. Moss, Director



**Divisions**  
Administrative Services  
Building Permits & Inspection  
Code Enforcement  
County Engineering  
Economic Development & Marketing  
Planning & Environmental Review

April 8, 2014

APPLICANT:

James/Jacquelyn Anderson  
9809 Mira Del Rio  
Sacramento, CA 95827

ARCHITECT/ENGINEER:

John Youngdahl, P.E.  
Youngdahl Consulting Group  
1234 Glenhaven Court  
El Dorado Hills, CA 95762

OWNER:

James/Jacquelyn Anderson  
9809 Mira Del Rio  
Sacramento, CA 95827

Dear Sir/Madam:

**Subject: Development plan review for Temporary Erosion Control Measures Consisting of Soil Nail Anchors and Wire Mesh**  
**ASSESSOR'S PARCEL NO.: 075-0440-016**  
**Control No.: PLNP2014-00047**  
**Reason for Review: Development Plan Review for Single Family Accessory Use in the Parkway Combining (PC) zone, pursuant to SZC 235-37**  
**Location: 9809 Mira Del Rio, Sacramento, CA**

**The Department of Community Development hereby APPROVES the attached plans (Exhibits "1" General Notes, "2" Location Map, "3" Typical Cross Section, "4" Soil Nail Detail). Following is background information on the request:**

The interim solution of meshing and nails is an immediate measure to be implemented. The engineer believes an immediate solution is needed in order to protect existing patios and decking from being destroyed. Staff has viewed the site and believes that such meshing and nails would be unobtrusive and minimally visible from the river. Section 235-34 of the Parkway Combining Zone provides that erosion control devices such as gabions, wire mattresses and wire mesh are acceptable when vegetative measures alone are insufficient.

The American River Parkway Advisory Committee voted 5-2 on February 21, 2014, to approve the interim measure with a secondary motion to create a sub-committee of Parks and Planning staff and members of the ARPAC to understand the project and follow the conditional use process.

The Recreation and Park Commission approved the interim measure to prevent bluff erosion on February 27, 2014, on a unanimous vote. The Commission recognized the interim solution of meshing and nails would provide some stability while the property owner processes a conditional use permit for the "Shot-Crete" application. The Parkway Corridor Combining Zone has limitations on the use of certain erosion control devices and the Planning and Environmental Review Division will review the owner's application for a Conditional Use Permit for the use of "Shot-Crete", and will bring a recommendation regarding the Conditional Use Permit back to the American River Parkway Advisory Committee and the Recreation and

**Anderson Development Plan Approval**

Control PLNP2014-00047

Parcel APN 075-0440-016

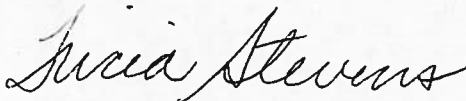
Park Commission for comment and approval, if findings of consistency with the Parkway Combining Zone are made.

Building permits may be issued on the basis of this letter and the approved development plans. This Planning and Environmental Review Division review is for the purpose of confirming Zoning Code requirements and conformance to requirements set forth in past public hearing that specifically concerned this property. It does not cover any aspect of Uniform Building Code compliance. Please check with the Building Permits and Inspection Division to determine if these improvements require a building permit.

This decision may be appealed to the Board of Zoning Appeals within ten (10) days of the date of approval.

Your project was reviewed by Tricia Stevens, Principal Planner. If you have any questions, please contact me at 874-2926.

Sincerely,



Tricia Stevens  
Principal Planner

cc: Jeff Leatherman

# *Slope Erosion Control Details*

## *9809 Mira Del Rio*

### *Sacramento, California*

Sheet Index

1. Cover Sheet
2. General Notes
3. Location Maps
4. Typical Cross-Section and Elevation Detail
5. Self-Drilling SuperNail® Detail

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**Sheet Revision**

Date:	By:
01-02-14	JDP

Revised Sheets 2, 4 and 5

<b>Cover Sheet</b>	
Project:	9809 Mira Del Rio
Date:	January 2, 2014
Drawn By:	JDP
Checked By:	

Project No./Code:	—
Sheet No.:	1



**GeoStabilization International**  
 1809 S Street Ste. 101-203  
 Sacramento, CA 95811  
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 www.geostabilization.com

The intent of this temporary erosion control project is to prevent further weathering, slabbing and erosion of the top nominal 15 vertical feet of the existing bluff face. Based on the location and type of erosion that has been experienced at the project site, geibon baskets, grading or traditional retaining wall methods (cantilever, MSE, heavy concrete block) would require significant excavation and disruption to the bluff face and surrounding area. The least distributive and most esthetically pleasing technique currently available to halt bluff slabbing, weathering and erosion is soil nails and sculpted / stained shotcrete. This project is designed with soil nail anchors to secure the mesh to the bluff face.

The existing condition of the top of the bluff face, as noted in the River Bluff Area Engineering Geologic Study prepared by Youngdahl Consulting Group, Inc. dated December 2003, suggests that the bluff is composed of a cemented silt with fine sand (ML) or possibly silt with trace clay (SM). The report describes the slope stability of the bluff as follows: "The existing slopes of the project site were observed to have adequate vegetation on the slope face, appropriate drainage away from the slope face, and no apparent tension cracks or slump blocks in the slope face or at the head of the slope. Although the vertical standing portion of the slope at the top of the bluff north of the house area appears to have been stable for a considerable amount of time, it is probable that a gradient of 40 to 60 degrees (typical of Bluff Erosion Zone 4) is a more long-term stable condition." Due to the relative stability of the existing bluff, a structural slope stability analysis was not determined to be necessary and as such the soil nails and mesh shall not be considered a "retaining" structure but rather a temporary erosion control measure.

**Construction Sequence/Work Schedule:**

- The owner or its contractor will clear, excavate, haul off excavated material and provide access to the top of the proposed erosion control area.
- GSI will provide and install the specified soil nails and surface treatment per the construction documents.

**Size and Spacing of Nails:**

- GSI will mark the locations of the proposed soil nails with survey marking paint.
- The Soil Nails will be injected with grout. The grout will be a Type I, II, or III Portland Cement. The water/cement ratio will be 0.40 to 0.60. No additional aggregate or admixtures will be added to the grout.

**Bearing Plate Placement:**

- 8" x 6" x 3/8" Steel Bearing Plates will be placed over the nails and attached with a hex nut to the nail to secure the wire mesh to the soil surface. If the soil nails extend beyond the hex nuts, they will be trimmed using a gas powered demolition saw.

- GSI Employee Certifications:**
- ACI Shotcrete Nozzleman Certification
  - 10-hour Occupational Safety and Health Training Course in Construction Safety & Health
  - American Red Cross Standard First Aid Training
  - American Red Cross Bloodborne Pathogens Training: PDT
  - Erosion Control Supervisor Training

**House Keeping:**

- The site will be organized and clear of any trash or debris. All trash will be placed in a proper container and removed at the end of each work day.

**Safety:**

- All safety plans for lifting, hearing, dust control, PPE etc. are in place and will be followed accordingly. PPE will include safety vest, steel toed shoes, hard hat, safety glasses, and gloves.

**Grout Mix Design:**

Water/Cement Ratio ( 0.5 - 0.6 )

Material	Weight	Volume
Cement	2061 lbs	10.6 Cubic Feet
Water	1030.5 lbs	16.5 Cubic Feet
Total		1 Cubic Yard

(Per 94# Bag of Cement)

Material	Weight	Volume
Cement	94 lbs	0.48 Cubic Feet
Water	47 lbs	0.75 Cubic Feet
Total Volume		1.23 Cubic Feet

**Sheet Revision**

Date:	By:
01-02-14	JDP

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**General Notes**

Project: 9809 Mira Del Rio  
 Drawn By: JDP  
 Checked By: January 2, 2014

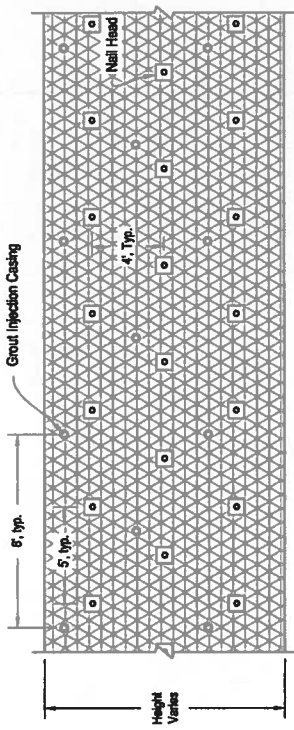
Project No./Code: —

Sheet No.: 2



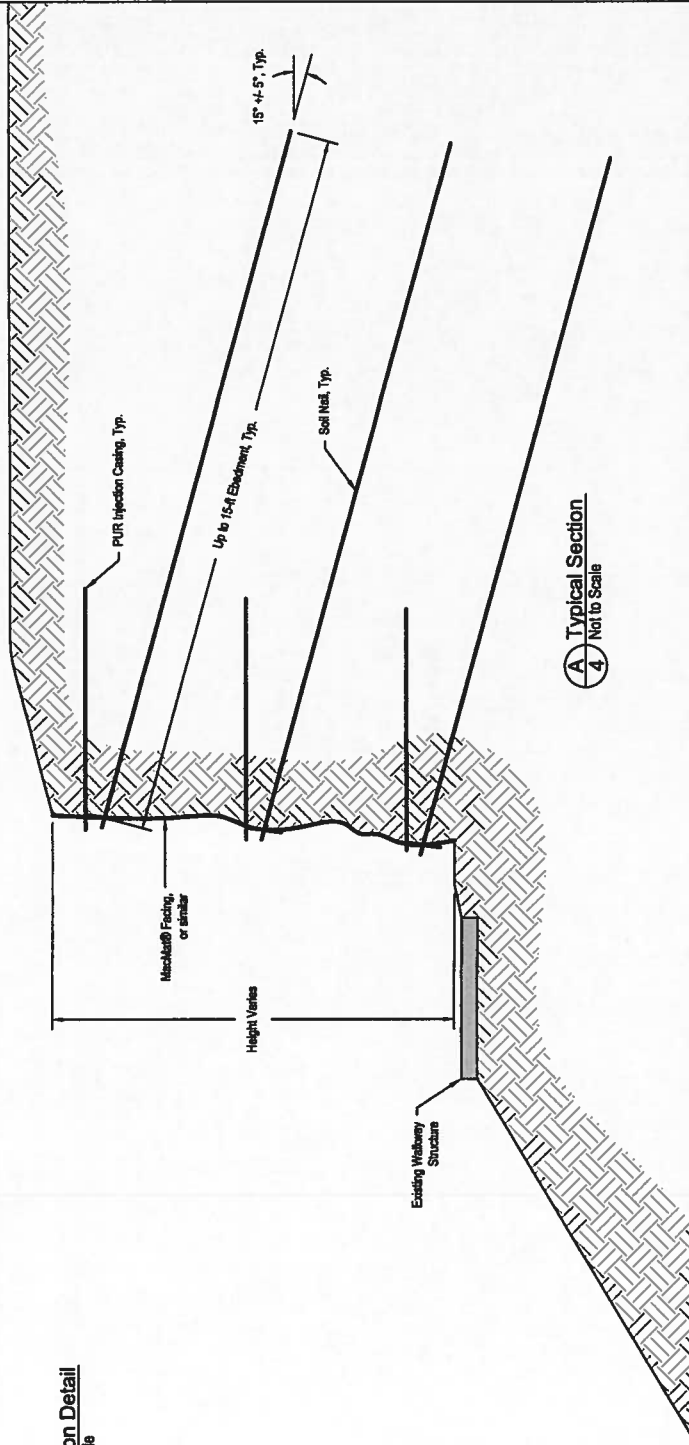
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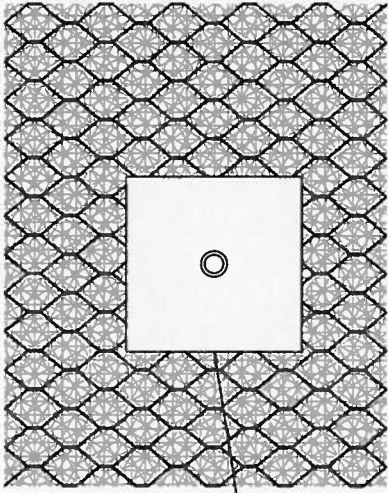
**B**  
4  
Elevation Detail  
Not to Scale

Note: 25' L.F. of Stabilization As Shown



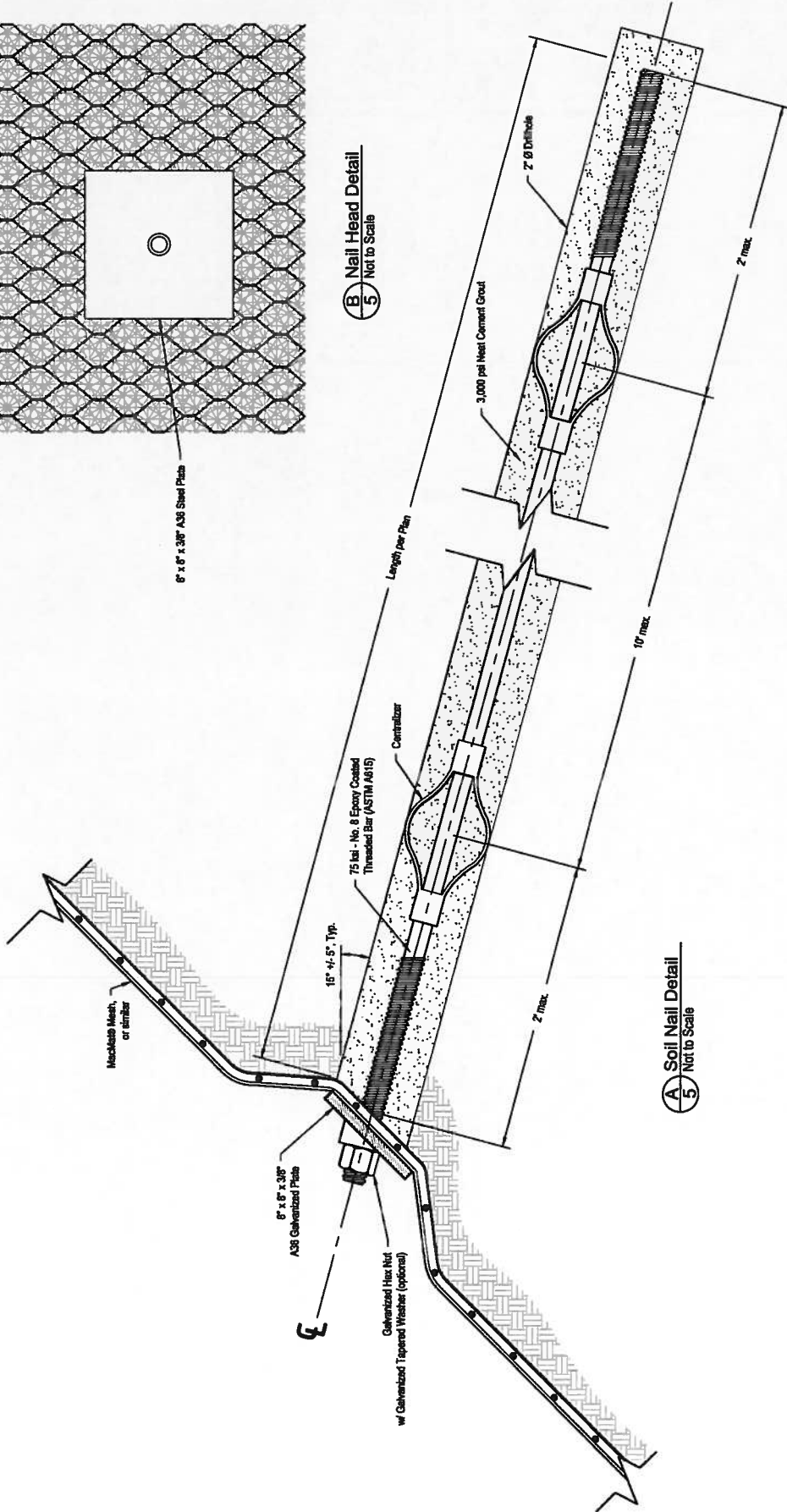
**A**  
4  
Typical Section  
Not to Scale

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6' x 6' x .308' A36 Steel Plate

**B**  
5  
Nail Head Detail  
Not to Scale



**A**  
5  
Soil Nail Detail  
Not to Scale

Sheet Revision

Date:	By:
01-02-14	JDP
	Replaced Shotcrete with Macklet Mesh

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Soil Nail Detail

Project No./Code: \_\_\_\_\_

Project:	9809 Mira Del Rio
Drawn By:	JDP
Checked By:	
Sheet No.:	5



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