Addendum No. 1

State of California
DEPARTMENT OF TRANSPORTATION

COPY FOR
DEPT. Geot
ATTN. BL

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: MR. JERRY MA
District Office Chief
Office of Design Alameda I

Date: April 25, 2006

Attention: Amando Vito

File: 4-Ala 880 KP 43.6/45.5
04-165421
High St. Viaduct
Sign Structures

From: BETTY LEE
Associate M & R Engineer
Office of Geotechnical Design – West
Geotechnical Services
Division of Engineering Services

WAJAHAT NYAZ
Senior Transportation Engineer
Office of Geotechnical Design – West
Geotechnical Services
Division of Engineering Services

Subject: Addendum to Geotechnical Design Report-Overhead Sign A, revised

This is in response to your e-mail request of March 16, 2006, to evaluate a proposed change in pile dimension for Overhead Sign A.

The original plans proposed a Post Type V for Sign A. According to Caltrans Standard Plans (July 2004), the pile diameter used for Post Type V is 1372 mm. The Geotechnical Design Report's analysis was based on these dimensions.

We have now re-evaluated the newly proposed dimensions: Post Type VII for Sign A. According to Caltrans Standard Plans (July 2004), the pile diameter used for Post Type VII is 1524 mm. Our analysis shows that these dimensions are still adequate.

If you have any questions, please call Betty Lee at (510) 286-4825 or Wajahat Nyaz at (510) 622-1777.

c: WNyaz, TPokrywka, , BLee, Daily File, Route File

BLee/mm

Addendum No. 2

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

COPY FOR
DEPT. Geot
ATTN. B Lee

Memorandum

Flex your power!
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To: MR. JERRY MA
District Office Chief
Office of Design –Alameda I

Date: April 26, 2006

Attention: Amando Vito

File : 4-Ala-880 KP 43.6/45.5
4-165421
High St.

From: BETTY LEE
Associate M & R Engineer
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Geotechnical Services
Division of Engineering Services

WAJAHAT NYAZ
Senior Transportation Engineer
Office of Geotechnical Design – West
Geotechnical Services
Division of Engineering Services

Subject: Addendum to Geotechnical Design Report - Retaining Walls #6A, 6B

This is in response to your request of April 3, 2006 to evaluate two newly proposed Retaining Walls #6A, 6B, located adjacent to the Home Depot parking lot on East 8th St. (8 meters left of the E8 Line from Sta. 21+72 to 22+70). Retaining Walls #6A, 6B are proposed as Standard Caltrans Retaining Wall Type 5, fill walls, maximum height = 1.2m.

Subsurface Conditions

Since Retaining Walls #6A, 6B are proposed after the geotechnical investigation was completed, no soil borings were specifically done for this wall. Subsurface conditions were inferred from the nearest borings, P7, P4, and P3, and are discussed in Section 7.4.1 of the Geotechnical Design Report.

Bearing Capacity

Using a safety factor of 3, the allowable foundation bearing capacity is approximately 676 kPa (14,120 psf). This allowable foundation bearing capacity is greater than that specified in the Caltrans Standard Plans (dated July 2004) of 80 kPa (1670 psf).

Settlement

Since no consolidation data was available, settlement analysis was not performed. However, based on nearby soil data, we do not expect settlement to be significant.

Addendum NO. 3

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Memorandum

Alaja
A. Zepeda

Flex your power!
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To: MR. JERRY MA
District Office Chief
Office of Design –Alameda I

Date: August 7, 2006

Attention: Paul Snyder

File : 4-Ala-880 KP 43.6/45.5
4-165421
High St.

From: BETTY LEE
Associate M & R Engineer
Office of Geotechnical Design – West
Geotechnical Services
Division of Engineering Services

WAJAHAT NYAZ
Senior Transportation Engineer
Office of Geotechnical Design – West
Geotechnical Services
Division of Engineering Services

Subject: Addendum to Geotechnical Design Report - Retaining Walls #7A, 7B

Office of Design now proposes Retaining Walls #7A, 7B at the same location as the previously proposed Retaining Wall #5 in the Geotechnical Design Report (Oakport Street, "O" Line, Station 11+16.7 to 13+30). These walls will be Standard Caltrans Type 5 walls, and with a height of 1.2 m maximum.

Our recommendation will be the same as stated in the Geotechnical Design Report (December 2005). The soft foundation soil should be excavated to at least Elevation 1 m, as shown on the attached Figure. In order to avoid construction easement, the ground improvement may cease at approximately the State Right-of-Way line.

If you have any questions, please call Betty Lee at (510) 286-4825 or Wajahat Nyaz at (510) 622-1777.

c: WNyaz, TPokrywka, BLee, AZepeda, Daily File, Route File, Translab File

BLee/mm

Global Stability

It is our opinion that global stability of this wall will be adequate.

Based on our analysis, Standard Caltrans Retaining Wall Type 5 is adequate for these walls.

If you have any questions, please call Betty Lee at (510) 286-4825 or Wajahat Nyaz at (510) 622-1777.

c: WNyaz, TPokrywka, BLee, Daily File, Route File

BLee/mm

Addendum No. 4

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Memorandum

Flex your power!
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To: MR. JERRY MA
District Office Chief
Office of Design –Alameda I

Date: October 27, 2006

Attention: Albert Zepeda

File: 4-Ala-880 KP 43.6/45.5
4-165421
High St.

From: BETTY LEE BL
Associate M & R Engineer
Office of Geotechnical Design – West
Geotechnical Services
Division of Engineering Services

WAJAHAT NYAZ WN
Senior Transportation Engineer
Office of Geotechnical Design – West
Geotechnical Services
Division of Engineering Services

Subject: Addendum to Geotechnical Design Report -New Retaining Wall #5

This is in response to your request of October 11, 2006 to evaluate the newly proposed Retaining Walls #5, located 6.95 m Rt. "NF Line" Sta. 9+93.2 to Sta. 10+13.9. Retaining Wall #5 is proposed as a Standard Caltrans Retaining Wall Type 1A, cut wall, maximum height = 1.57 m.

Subsurface Conditions

Since Retaining Walls #5 is proposed after the geotechnical investigation was completed, no soil borings were specifically done for this wall. Subsurface conditions were inferred from the nearest borings, M3, B5, and B3, and are discussed in Section 7.4.1 of the Geotechnical Design Report.

Bearing Capacity

Using a Safety Factor of 3, the allowable foundation bearing capacity is approximately 156.5 kPa (3268 psf). This allowable foundation bearing capacity is greater than that specified in the Caltrans Standard Plans (dated May 2006) of 95.7 kPa (2000 psf).

Settlement

Since no consolidation data was available, settlement analysis was not performed. However, based on nearby soil data, we do not expect settlement to be significant.

Global Stability

It is our opinion that global stability of this wall will be adequate.

Based on our analysis, Standard Caltrans Retaining Wall Type 1A is adequate for this wall.

Subsurface Drainage

Materials Section should be consulted regarding providing adequate subsurface drainage for the adjacent pavement in the cut area.

If you have any questions, please call Betty Lee at (510) 286-4825 or Wajahat Nyaz at (510) 622-1777.

c: WNyaz, TPokrywka, BLee, Daily File, Route File

BLee/mm

Addendum No. 5

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Memorandum

Flex your power!
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To: MR. JERRY MA
District Office Chief
Office of Design –Alameda I

Date: November 21, 2006

Attention: Albert Zepeda

File : 4-Ala-880 KP 43.6/45.5
4-165421
High St.

From: BETTY LEE BL
Associate M & R Engineer
Office of Geotechnical Design – West
Geotechnical Services
Division of Engineering Services

WAJAHAT NYAZ
Senior Transportation Engineer
Office of Geotechnical Design – West
Geotechnical Services
Division of Engineering Services

Subject: Addendum to Geotechnical Design Report - Retaining Walls #7A, 7B (2nd Addendum)

Subsequent to the submittal of the Geotechnical Design Report and its first addendum, Office of Design informs us of some construction staging difficulties regarding the sub-excavation of foundations soils under the proposed Retaining Walls #7A and 7B.

Per our conversation with Albert Zepeda, Senior Engineer of Office of Design, the area from "O" Line Sta. 11+20 to Sta. 13+30 will only require embankment fill of less than or equal to 1 m. In light of the relatively low embankment height, it is our opinion that the elimination of the sub-excavation requirement within these limits will not cause significant settlement.

If you have any questions, please call Betty Lee at (510) 286-4825 or Wajahat Nyaz at (510) 622-1777.

c: WNyaz, TPokrywka, BLee, AZepeda, Daily File, Route File

BLee/mm

Addendum No. 6

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Memorandum

Flex your power!
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To: MR. JERRY MA
District Office Chief
Office of Design Alameda I

Date: May 2, 2007

Attention: Albert Zepeda

File: 4-Ala 880 KP 43.6/45.5
04-165421
High St. Viaduct
Sign Structure

From: BETTY LEE BL
Associate Material & Research Engineer
Office of Geotechnical Design – West
Geotechnical Services
Division of Engineering Services

WAJAHAT NYAZ WN
Chief, Branch C
Office of Geotechnical Design – West
Geotechnical Services
Division of Engineering Services

Subject: Addendum to Geotechnical Design Report - Overhead Sign H

We have completed the review of the proposed Caltrans Standard Overhead Sign H (Post type VIII) at Sta. "C1" 5+00 based on the loading combinations provided by Structural Engineer, Joel Magana.

The unfactored loadings provided were: axial load=103.2 kN, shear force = 83.2 kN, and bending moment = 740.4 kN.

Based on the above loadings, the pile settlement is approximately 2.54 cm.

Our analyses also show that the pile head lateral deflections do not exceed the 12.7 mm (0.5 inch) acceptable criteria. We are enclosing the results of the LPILE analyses (both static and cyclic loadings) that show the shear and bending moments induced in the piles. Please forward these to the Structural Engineer to check for the structural adequacy of the proposed piles.

If you have any questions, please call Betty Lee at (510) 286-4825 or Wajahat Nyaz at (510) 622-1777.

c: WNyaz, TPokrywka, , BLee, Daily File, Route File, Translab File

BLee/mm

Addendum No. 7

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Memorandum

Flex your power!
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To: MR. DOUGLAS DUNRUD
Branch Chief
Office of Structural Design- South 1

Date: November 20, 2007

Attention: Javad Massoomi

File: 4-Ala 880 KP 43.6/45.5
04-165421
High St. Viaduct
Soil Nail Wall

From: BETTY LEE
Associate Material & Research Engineer
Office of Geotechnical Design – West
Geotechnical Services
Division of Engineering Services

WAJAHAT NYAZ WN
Chief, Branch C
Office of Geotechnical Design – West
Geotechnical Services
Division of Engineering Services

Subject: Addendum to Geotechnical Design Report, Soil Nail Wall (Retaining Wall #3) – High Street Seismic Retrofit Project

This memorandum is an addendum to the project Geotechnical Design Report (GDR) dated December 2005 for the subject project. This addendum is issued to reflect changes to the GDR and project plans for compliance with the latest soil nail SSP. Based on the review of the GDR and Retaining Wall #3 plans, we recommend the following:

1) Include sixteen (8% of total number of production nail) proof nail at locations shown in the attached nail layout sheet.

2) Design pullout resistance should be shown on the plans in lieu of bond strength. Design pullout resistance = 23.11 kN/m.

3) Wall zone limits should be included in the SSP. See Table below for the recommended Wall Zones and their limits:

Wall Test Zone	Beginning Sta.	End Sta.	Upper Elev. (m)	Lower Elev. (m)
1	12+43	12+70	8.0	3.0
2	12+70	12+90	8.25	4.5
3	12+90	13+09	8.43	5.7

4) The Plans should not show the soil nail hole diameter.

5) Soil nail lengths should be shown on the nail layout plan.

6) The soil parameters on the Plans should be consistent with soil parameters listed in the Geotechnical Design Report (GDR). See Table 4 on page 14 of the GDR for the recommended soil parameters.

7) The detailed Typical Section Plans (Sheet 3) should show the drainage weepholes.

If you have any questions, please call Betty Lee at (510) 286-4825 or Wajahat Nyaz at (510) 622-1777.

c: WNyaz, TPokrywka, , BLee, AZepeda, Daily File, Route File, Translab File

BLee/mm