

**GEOTECHNICAL INVESTIGATION  
NEW MODULAR CLASSROOM BUILDING AT  
THE PHOENIX HIGH SCHOOL SITE  
AND STADIUM CONCESSION BUILDING  
SANTA TERESA HIGH SCHOOL CAMPUS  
6150 SNELL AVENUE  
SAN JOSE, CALIFORNIA**

**for**

**East Side Union High School District  
Attn: Linda da Silva  
830 N. Capitol Avenue  
San Jose, California 95133**

**by**

**Cleary Consultants, Inc.  
900 N. San Antonio Road  
Los Altos, California 94022**

**December 2015**

**CEG**  
**CLEARY CONSULTANTS, INC.**  
Geotechnical Engineers and Geologists

Christophe A. Ciechanowski, President, GE  
Grant F. Foster, Vice-President, GE  
J. Michael Cleary, Principal, CEG, GE

December 9, 2015  
Project No. 978.17H  
Ser. 4943

East Side Union High School District  
Attn: Ms. Linda da Silva  
830 North Capitol Avenue  
San Jose, CA 95133-1398


**RE: GEOTECHNICAL INVESTIGATION  
NEW MODULAR CLASSROOM BUILDING AT THE PHOENIX HIGH  
SCHOOL SITE AND STADIUM CONCESSION BUILDING  
SANTA TERESA HIGH SCHOOL CAMPUS  
6150 SNELL AVENUE  
SAN JOSE, CALIFORNIA**

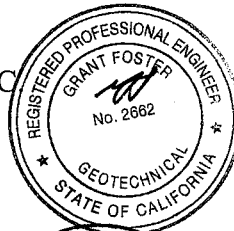
Dear Ms. da Silva:

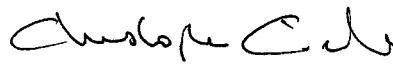
As authorized, we have performed a geotechnical and geohazard investigation for the planned new modular classroom building project at the Phoenix High School site and the new stadium concession building on the Santa Teresa High School Campus in San Jose, California. The accompanying report presents the results of our field investigation, laboratory testing and engineering analyses. The site subsurface conditions are discussed, and recommendations for the soil and foundation engineering aspects of the project design are presented. The recommendations presented in this report are contingent upon our review of the grading and foundation plans and observation/testing of the earthwork and foundation installation phases of the construction.

Please refer to the text of the report for detailed findings and recommendations. If you have any questions concerning the report, please call.

Very truly yours,  
CLEARY CONSULTANTS, INC.

  
Grant Foster  
Geotechnical Engineer 2662




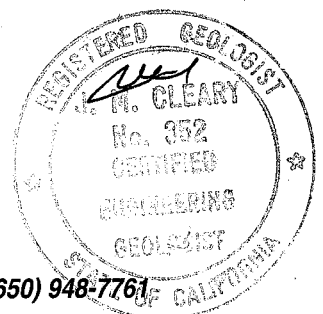
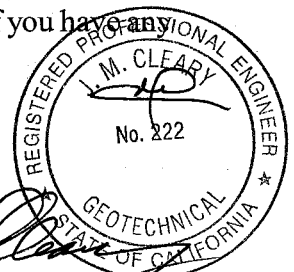
  
Chris Ciechanowski  
Geotechnical Engineer 2584  
GF/JMC/CC:cm



Copies: Addressee (1)

Gilbane Construction Company (email) Attn: Alex Morrison

  
J. Michael Cleary  
Engineering Geologist 352  
Geotechnical Engineer 222



## TABLE OF CONTENTS

	<u>Page No.</u>
Letter of Transmittal	
<b>INTRODUCTION</b> .....	1
<b>SCOPE</b> .....	2
A. Geotechnical Investigation .....	2
B. Geologic and Seismic Hazards Assessment.....	3
<b>METHOD OF INVESTIGATION</b> .....	4
<b>SITE CONDITIONS</b> .....	5
A. Surface.....	5
B. Subsurface .....	6
C. Groundwater .....	7
<b>GEOLOGY AND SEISMICITY</b> .....	7
<b>GEOLOGIC AND SEISMIC HAZARDS EVALUATION</b> .....	11
A. Fault Offset Hazards.....	11
B. Ground Shaking Hazards.....	11
1. Strong Ground Shaking.....	11
2. Soil Liquefaction.....	12
3. Soil Densification.....	13
4. Other Seismic Hazards.....	14
C. Flooding.....	14
<b>CONCLUSIONS AND RECOMMENDATIONS</b> .....	15
A. Earthwork .....	16
1. Clearing and Site Preparation.....	16
2. Moisture Conditioning and Recompaction of Surface Soils .....	17
3. Fill Placement and Compaction.....	18
4. Trench Backfill .....	18
5. Surface Drainage.....	19
6. Construction Observation.....	19
B. Modular Classroom and Concession Building Foundations .....	20
C. Seismic Design Parameters.....	21
D. Slabs-on-Grade.....	22
E. Flexible Pavements .....	23
F. Soil Corrosivity .....	25
<b>PLAN REVIEW AND CONSTRUCTION OBSERVATION</b> .....	26
<b>LIST OF REFERENCES</b>	

## TABLES

	<u>Page No.</u>
<b>TABLE 1 - Summary of Significant Earthquake Faults Capable of Generating Strong Ground Shaking at the new Classroom and Concession Building sites, Santa Teresa High School .....</b>	10
<b>TABLE 2 – Recommended Flexible Pavement Sections .....</b>	24
<b>TABLE 3 - Correlation Between Resistivity and Corrosion Potential .....</b>	25

## DRAWINGS

	<u>Drawing No.</u>
<b>SITE VICINITY MAP .....</b>	1
<b>LOCAL GEOLOGIC MAP.....</b>	2
<b>REGIONAL EARTHQUAKE EPICENTER MAP .....</b>	3
<b>SITE PLAN-CLASSROOM BUILDING.....</b>	4
<b>SITE PLAN-CONCESSION BUILDING.....</b>	5
<b>KEY TO EXPLORATORY BORING LOGS .....</b>	6
<b>SUMMARY OF FIELD SAMPLING PROCEDURES.....</b>	7
<b>LABORATORY TESTING PROCEDURES .....</b>	8-9
<b>LOGS OF EXPLORATORY BORINGS ONE THROUGH FIVE.....</b>	10-18
<b>PLASTICITY CHART .....</b>	19
<b>R-VALUE TEST RESULTS .....</b>	20-21
<b>CORROSIVITY TEST SUMMARY.....</b>	22
<b>APPENDIX A – Santa Teresa High School New Classroom and Concession Building, Liquefaction and Dry Settlement Analyses and Calculations, EB-1 and EB-4, Drilled October 26, 2015</b>	

## **INTRODUCTION**

This report presents the results of our geotechnical investigation for the planned new modular classroom building project at the Phoenix High School site and the new concession building at the stadium on the Santa Teresa High School Campus in San Jose, California. The approximate location of the project site is shown on the Site Vicinity Map, Drawing 1. The purpose of this investigation was to explore the soil and foundation conditions in the general location of the planned new building projects and develop recommendations for the geotechnical engineering aspects of the project design. Our investigation has also included an analysis of potential geologic hazards associated with the sites.

As shown of the site plan provided to us by Gilbane December 2, 2015, the new classroom building project will include the construction of a one-story modular building (45 foot by 45 foot) in the parking lot/basketball court at the Phoenix High School site and a new concession building (25 foot by 35 foot) on the southeast corner of the stadium/track. The project will also include installation of associated underground utilities.

Our firm has provided geotechnical investigations and construction observation and testing services for the following projects at Santa Teresa High school:

- Sports Facility Improvements (2004)
- Multi-Purpose Classroom Building (2009)
- Swimming Pool Facility (2014 – construction pending)

## **SCOPE**

As outlined in our proposal agreement dated September 29, 2015, the scope of our services for this investigation has included:

### **A. Geotechnical Investigation**

1. Several reconnaissances of the site by our staff and review of relevant published and unpublished geologic literature and maps.
2. A subsurface investigation including the drilling and sampling of five (5) borings in the general area of the planned new buildings.
3. Engineering analysis of the field and laboratory data.
4. Preparation of this geotechnical investigation and geologic and seismic hazards assessment report for use in the project design and construction. The report includes findings and recommendations for the following:
  - a. Geologic and seismic setting of the site and surrounding area, including research and review of available geologic/seismic reports and maps.
  - b. 2013 CBC seismic design criteria.
  - c. Site preparation including fill placement and grading.
  - d. New building foundation type, and applicable soil and foundation engineering design criteria.

- e. Estimated foundation settlements.
- f. Support of interior and exterior concrete slabs-on-grade (including subgrade/pad preparation).
- g. Treatment of expansive soils.
- h. Backfilling and compaction of utility trenches.
- i. Flexible pavements.
- j. Any other unusual design or construction conditions encountered in the investigation.

**B. Geologic and Seismic Hazards Assessment**

The Geologic and Seismic Hazards Assessment portion of our report for the project consists of the following:

1. Discussion of geologic and seismic conditions and data on the nature of the site and potential earthquake damage including:
  - a. Regional geology and seismic conditions and historical information on the seismicity of the local and regional area.
  - b. Location of known active and potentially active faults near the site, as well as nearby inactive faults.

2. Earthquake ground motion acceleration design parameters and geologic site classification in accordance with the 2013 California Building Code study requirements.
3. Potential site impacts related to faulting, liquefaction, lateral spreading, ground cracking, seismic settlement and differential compaction, landsliding, flooding, and dam failure inundation with recommended mitigation measures, where appropriate.

This report has been prepared for the specific use of the East Side Union High School District and its consultants in accordance with generally accepted geotechnical engineering principles and practices. No other warranty, either expressed or implied, is made. In the event that any substantial changes in the nature of the project are planned, the conclusions and recommendations of this report shall not be considered valid unless such changes are reviewed and the conclusions of this report modified or verified in writing. Any use or reliance of this report or the information herein by a third party shall be at such party's sole risk.

It should also be recognized that changes in the site conditions may occur with the passage of time due to environmental processes and/or acts of man, and that changes in building codes, the state of the practice or new information may require modifications in the recommendations presented herein. Accordingly, neither the client, nor any other party should rely on the information or conclusions contained in this report after three years from its date of issuance without the express written consent of Cleary Consultants, Inc.

### **METHOD OF INVESTIGATION**

A site reconnaissance and the subsurface investigation were performed on October 25, 2015, using a truck-mounted hollow-stem auger drill rig. Five exploratory borings were drilled under



the guidance of our staff engineering geologist, Dustin Lettenberger to a maximum depth of 45.0 feet at the locations shown on Drawings 4 and 5. A key describing the soil classification system and soil consistency terms used in this report is presented on Drawing 6 and the soil sampling procedures are described in Drawing 7. Logs of the borings are presented on Drawings 10 through 18.

The borings were located in the field by pacing/tape measurements and interpolation of the features shown on the site plan provided us. These locations should be considered accurate only to the degree implied by the method used.

Samples of the soil materials from the borings were returned to our laboratory for classification and testing. The results of moisture content, dry density, percent finer than No. 4 and No. 200 sieves, plasticity index and free swell testing are shown on the boring logs. The laboratory testing procedures followed during this investigation are summarized on Drawings 8 and 9.

Drawing 19, Plasticity Chart, present additional data on the plasticity index testing. Drawings 20 and 21 present the results of R-Value testing performed on an untreated and a chemically treated sample of the upper soils. The results of soil corrosivity testing performed on a composite sample of the surficial soils collected from the borings are presented on Drawing 22.

A list of references consulted during the investigation is included at the end of the text.

## **SITE CONDITIONS**

### **A. Surface**

The planned modular classroom building site is located within an existing relatively level asphalt paved basketball court and adjacent parking lot, on the southwest side of the main campus.

The planned concession building site is located in an existing relatively level asphalt paved area at the southeast corner of the track/stadium, on the east side of the main campus. The site is bordered by a grass softball field to the south and grass playfield to the east.

Small trees are located north of the modular classroom building site and south of the concession building site.

The average elevation of the campus is approximately 166 feet M.S.L. The overall regional topographic gradient is approximately 0.2 percent to the west on the property.

## **B. Subsurface**

The exploratory borings at the two sites generally encountered stiff to very stiff sandy clay and silty clay to the maximum depth explored of 45 feet. EB-1 and EB- encountered a layer of loose to medium dense clayey sand in the upper one and one-half feet. EB-4 encountered a layer of dense gravelly silty sand from approximately 32 feet to 42 feet.

The upper sandy clay and silty clay soils encountered in EB-1 through EB-5 are considered to have a moderate to high expansion potential based on their plasticity characteristics (Plasticity Indices = 27 to 40 percent) and the free swell test data (Free Swells of 35 to 80 percent).

The attached boring logs and related information depict subsurface conditions only at the specific locations shown on Drawing 4 and on the particular date designated on the logs. Soil conditions at other locations may differ from conditions occurring at these boring locations. Also, the passage of time may result in a change of soil conditions at these boring locations due to environmental changes.

### C. Groundwater

Groundwater was encountered in EB-4 during drilling at a depth of approximately 37 feet; groundwater was not encountered in the other borings drilled for this investigation. It should be noted that the borings were only open for a period of a few hours and this may not have been sufficiently long to establish the stabilized water table conditions. It should also be noted that fluctuations of localized perched groundwater and the regional groundwater level can occur due to such factors as variations in rainfall, temperature, runoff, irrigation, and other factors not evident at the time our measurements were made and reported herein.

The historically high groundwater level in the site vicinity has been mapped at a depth of approximately 10 feet below the ground surface on Seismic Hazard Report 097, Plate 1.2, "Depth to Historically High Groundwater" for the Santa Teresa Hills Quadrangle. We have therefore conservatively assumed a groundwater depth of 10 feet for liquefaction analysis.

## GEOLOGY AND SEISMICITY

The school site is located at the south end of the Santa Clara Valley, a broad, sediment filled basin bordered on the east by the Diablo Range and on the west by the Santa Cruz Mountain Range. Structurally, the Santa Clara Valley has formed as a result of tectonic downwarping controlled by three northwest trending active fault zones: the San Andreas fault on the southwest and the Hayward and Calaveras faults on the northeast. The site is shown to be underlain by alluvial fan deposits (Qa) as indicated on published geologic mapping of this area (Dibblee, 2005) as shown on Drawing 2, Local Geologic Map.

The San Francisco Bay Area is recognized by geologists and seismologists as one of the most active seismic regions in the United States. The three major fault zones which pass through the Bay Area in a northwest direction have produced approximately a dozen earthquakes per century

strong enough to cause structural damage. The faults causing these earthquakes are part of the San Andreas fault system, a major rift in the earth's crust that extends for at least 450 miles along the California Coast and includes the Calaveras, Northern San Andreas, and Hayward-Rodgers Creek faults. The site is located approximately 9.0 miles southwest of the Calaveras fault, 9.6 miles northeast of the San Andreas fault, and 15.2 miles southwest of the Hayward fault, respectively. In addition, the site is located about 1.8 miles northeast of the potentially active Monte Vista-Shannon fault.

Since the early 1800's, major earthquakes have been recorded along the San Andreas, Hayward and Calaveras fault zones (Topozoda et al, 2000). In 1861, an earthquake having a Richter magnitude of approximately 6.5 was reported on the Calaveras fault. The presumed epicenter of this earthquake was located approximately 36 miles northwest of the site. In 1984, an earthquake having a Richter magnitude of approximately 6.1 was reported on the Calaveras fault near Mt. Hamilton. The epicenter of this earthquake was located approximately 10 miles northeast of the site. In 1868, an earthquake having an estimated Richter magnitude of 7.0 was recorded along the Hayward fault. This earthquake opened fissures at random locations along the fault, from San Pablo to Mission San Jose. The presumed epicenter of the 1868 earthquake is located approximately 35 miles northwest of the site. The San Francisco Earthquake of 1906 had a Richter magnitude of approximately 8.3 and the epicenter of this earthquake (Topozoda et al, 2000) was located approximately 49 miles northwest of the site; also, the San Andreas fault produced earthquakes having approximate magnitudes of 7.0 and 6.6 in 1838 and 1865, the presumed epicenters of which are located about 18 miles northwest and 5 miles southwest of the site.

An earthquake with Richter magnitude 5.4 experienced on the Concord fault in 1955 had its epicenter approximately 52 miles northwest of the site. Another damaging earthquake with Richter magnitude 5.3 occurred in 1957 on the San Andreas fault in Daly City, causing approximately one million dollars in damage. The epicenter of this earthquake was about 49 miles northwest of the site. Two earthquakes in 1980, along traces of the Greenville fault, had

their epicenters approximately 41 miles northeast of the site. These 1980 earthquakes had Richter magnitudes of 5.5 and 5.8. In addition, numerous earthquakes of magnitudes 4.0 or greater have been recorded throughout the Bay Area along the San Andreas, Hayward and Calaveras faults.

On October 17, 1989, the Loma Prieta earthquake, which had its epicenter 14 miles southwest of the school site and a Moment Magnitude of 6.9, produced widespread damage through the Bay Area. Damage in the San Jose area was relatively light, however, with a shaking intensity of Modified Mercalli Intensity VII (damage negligible in buildings of good design and construction) and recorded peak horizontal accelerations in the range of 0.11 to 0.13g. Most of the liquefaction-related damage caused by this earthquake occurred in areas of shallow water table (10 feet or less) underlain by unconsolidated fill and loose soil deposits, such as the Marina District of San Francisco, the westerly portion of Oakland, and downtown Santa Cruz.

On August 24, 2014, a Magnitude 6.0 earthquake occurred in the vicinity of the West Napa fault near American Canyon in Napa County; this earthquake, which had its epicenter approximately 73 miles northwest of the site, caused extensive damage in south Napa County.

The distances between the site and the capable segments of the above faults, as well as other significant faults within a radius of 60 miles from the site, was determined using the USGS Earthquake Hazards Program 2008 USGS National Seismic Hazard Maps – Fault Parameters, as presented below in Table 1:

**TABLE 1 - Summary of Significant Earthquake Faults Capable of Generating Strong Ground Shaking at the new Classroom and Concession Building sites, Santa Teresa High School** <sup>(1),(2)</sup>

<b>Earthquake Generating Fault</b>	<b>Approximate Distance and Direction to Generating Fault (miles)</b>	<b>Maximum Earthquake (Moment Magnitude)</b>
Monte Vista - Shannon	1.8 SW	6.5
Calaveras CN+CC+CS	9.0 NE	7.0
Northern San Andreas SAO+SAN+SAP+SAS	9.6 SW	8.1
Zayante-Vergeles	12.9 SW	7.0
Hayward -Rodgers Creek RC+HN+HS	15.2 NE	7.3
Greenville Connected	24.1 NE	7.0
Monterey Bay-Tularcitos	27.1 SW	7.3
San Gregorio Connected	27.1 SW	7.5
Ortogonalita	30.2 SE	7.1
Quien Sabe	33.3 SE	6.6
Mount Diablo Thrust	34.1 NE	6.7
Great Valley 7	36.4 NE	6.9
Rinconada	38.8 SW	7.5
Green Valley Connected	46.8 NE	7.0

<sup>(1)</sup> USGS Earthquake Hazards Program 2008 USGS National Seismic Hazard Maps – Fault Parameters, December 2, 2015

<sup>(2)</sup> Site Latitude: 37.2350°N; Site Longitude: 121.8279°W

The historical seismicity of the greater San Francisco Bay Area and surrounding region is presented on Drawing 3, Regional Earthquake Epicenter Map.

Similar to most of the San Francisco Bay Area, it is reasonable to assume that the new modular classroom and concession buildings will be subjected to a moderate to severe earthquake from one of the above-mentioned faults during their lifetime. During such an earthquake, strong ground shaking is likely to occur at the sites.

## **GEOLOGIC AND SEISMIC HAZARDS EVALUATION**

### **A. Fault Offset Hazards**

Based on our site reconnaissance, field exploration and review of existing geologic information, we conclude that there are no known active or potentially active faults crossing the school sites.

The sites are not located within an Alquist-Priolo Earthquake Fault Zone as defined by the State of California or in a fault hazard zone of the City of San Jose or Santa Clara County. Based on the above, it is our opinion that the hazard resulting from surface rupture or fault offset at the sites is low.

### **B. Ground Shaking Hazards**

#### **1. Strong Ground Shaking**

Strong ground shaking is likely to occur during the lifetime of the planned new buildings as a result of movement along one or more of the regional active faults discussed above. The new buildings will need to be designed and constructed in accordance with current standards of earthquake-resistant construction.

Ground shaking during an earthquake could cause furnishings which are not rigidly attached (such as bookshelves and file cabinets) to undergo movement with respect to the building. Design measures that minimize such potential movement and also minimize the adverse effects of such movement where they cannot be prevented should be utilized.

## 2. Soil Liquefaction

Liquefaction is a phenomenon in which saturated cohesionless soils lose strength during strong shaking and experience horizontal and vertical movements. Soils that are most susceptible to liquefaction are clean, loose, saturated, uniformly graded, fine-grained clay-free sands and silts that lie within 50 feet of the ground surface.

Our investigation found that the planned new building sites are predominantly underlain by stiff to very stiff sandy clay and silty clay (with fines contents of 72 percent to 100 percent) to the maximum depth explored of 45 feet. EB-1 and EB-4 were analyzed for potential liquefaction-induced settlement using the LiquefyPro computer program (Version 5.0) and a factor of safety (FOS) of 1.3 per CGS Special Publication 117A. The assumed groundwater depth used in the analysis was 10 feet (historic high level). One-inch blowcounts were recorded in the sand layers encountered during drilling in intervals where gravels were observed, however, gravel interference was not indicated.

LiquefyPro evaluates liquefaction potential and calculates the settlement of saturated and unsaturated deposits due to seismic loads using SPT blowcount, total unit weight, fines content, peak horizontal acceleration and earthquake moment magnitude data. The program is based on the most recent publications of the NCEER Workshop and SP117 Implementation.

The fine grained sandy clay and silty clay layers were further analyzed for liquefaction susceptibility using criteria from Bray, J.D. and Sancio, R.B. in their 2006 paper "Assessment of the Liquefaction Susceptibility of Fine Grained Soils". This study found that fine grained soils with a plasticity index of 12 or more and a water content to liquid limit ratio of less than 0.8 are not susceptible to liquefaction. Based on these criteria, the sandy clay and silty clay layers encountered at the site were not found to be susceptible to liquefaction.



Based on the results of our analysis, theoretical liquefaction-induced settlement of up to one-quarter inch total could occur at the sites, with one-eighth inch predicted differential settlement over a distance of 50 feet, using the calculated peak ground acceleration ( $PGA_M = 0.735$ ) for the sites as specified in Item 20 of CGS Note 48 (2013), and the Tokimatsu and Seed calculation method with magnitude scaling correction. The results and supporting data for the liquefaction analysis are included in Appendix A of this report.

The sites are mapped within an area of regional liquefaction potential (State of California Seismic Hazard Zones Map, Santa Teresa Hills Quadrangle, August 14, 2003). However, based on the above information, we conclude that the likelihood that the planned improvements will be damaged by earthquake-induced soil liquefaction is very low.

### 3. **Soil Densification**

The recognized procedures for evaluation of seismically-induced settlement in dry sandy soils (Tokimatsu and Seed, 1987; Pradel, 1998) are considered most applicable to non-cohesive loose clean sands with less than 5 percent fines (Day, 2002). The silty clay layers encountered at the site are not considered to be susceptible to soil densification due to their predominantly high fines content, however, these layers including the gravelly clayey sand layer encountered in EB-1 were analyzed for potential soil densification.

The analysis indicates that the theoretical seismically-induced settlement is nil at the sites.

Based on the above information, we conclude that the likelihood that the new buildings and improvements will be damaged by earthquake-induced soil densification is remote.

#### 4. Other Seismic Hazards

We have also considered the possibility of other seismically induced hazards at the sites including lateral spreading in the direction of a free-face. The Canoas Creek Channel is located approximately 150 feet south of the classroom site and 100 feet south of the concession building site. The unlined channel is about ten feet deep with approximately 2:1 (horizontal to vertical) side slopes. Due to the stiff to very stiff consistency and high fines content (72 to 100 percent) of the silty clay and sandy clay layers encountered to a depth of 45 feet in EB-1 and EB-4, it is our opinion that any lateral displacement associated with the creek during a seismic event would most likely result in localized sloughing along the creek banks rather than areal movement.

Ground cracking may be caused by any of the phenomena discussed above. Since there is a low potential for liquefaction, soil densification and lateral spreading of the soils underlying the sites, it is also considered unlikely that significant ground cracking will occur. Also, the potential for landsliding at the sites is very low due to their essentially level states.

#### C. Flooding

Fema Flood Insurance Mapping (2009) indicates the Santa Teresa High School campus to be within Zone D, "areas in which flood hazards are undetermined, but possible". The Base Flood Elevation (BFE) is not provided as the site is not located in Flood Hazard Zone A or E. The southern side of the campus bordered by Canoas Creek Channel is indicated as Zone A, an area of "special flood hazard areas subject to inundation by the one percent annual chance flood."

The 2003 Flood Inundation Maps prepared by the Santa Clara Valley Water District for Anderson Reservoir, located southeast of the school in the Diablo Range, indicate that the sites, similar to much of San Jose, is within the "fair weather" and "IDF" (catastrophic failure of the reservoir when filled to capacity, combined with a large storm inflow) inundation events. The likelihood of such an event, however, is considered very low.

Based on the Santa Clara County Water District Maps (dated January 1996), the school is mapped within the inundation zone resulting from catastrophic failure of Calero Dam, located southeast of the site. However, the likelihood of such an event is also very low.

Santa Clara County Water District Inundation Maps for the Guadalupe Dam (dated September 1973), the Coyote Percolation Pond (dated March 1974) and Almaden Dam (dated September 1973) indicate that site lies outside the mapped inundation zones of these three dams.

### **CONCLUSIONS AND RECOMMENDATIONS**

Based on the findings of our investigation, we judge that there are no geologic hazards or constraints which would preclude the construction of the proposed new modular classroom building and concession building projects at the Santa Teresa High School campus. From a soil and foundation engineering standpoint, we also conclude that the improvements can be constructed as planned provided the recommendations of this report are incorporated into the design and construction of the project.

The primary geotechnical constraint at the site is the moderately to highly expansive near-surface silty clay soil, which could undergo significant shrink-swell movement as a result of changes in the soil moisture content. Therefore, it will be necessary to properly moisture condition (to at least two percent above optimum) and recompact the upper 12 inches of surface soils beneath slabs, and support the new structures on deepened spread footings which obtain support below

the zone of seasonal moisture change in the stiff to very stiff clay and/or in properly compacted engineered fill. The proposed slabs-on-grade will also need to be supported on a cushion of imported, non-expansive material, such as Class 2 aggregate base, to minimize slab movements due to long-term moisture fluctuations; and it will also be necessary to keep the soils underlying the cushion in a moist state prior to placing the non-expansive materials.

Our analysis indicates that the potential total seismically-induced dry soil settlement at the site is negligible and the maximum theoretical liquefaction-induced settlement is approximately one-quarter inch, with one-eighth inch theoretical differential settlement over a 50 foot span. The new buildings should be designed to accommodate potential movements of this magnitude.

The recommendations presented in the remainder of this report are contingent on our review of the earthwork and foundation plans for the project and our observation of the grading, foundation installation, concrete slab and pavement installation phases of the construction.

## **A. Earthwork**

### **1. Stripping and Site Preparation**

Existing pavements, underground utilities, curbs, underground obstructions and other site improvements (not designated to remain) within areas to be graded should be removed to their full depth and extent and hauled from the site. Any pre-existing fills encountered within these areas should be removed to their full depth and extent.

The new construction areas should then be stripped to a sufficient depth to remove all pavements, debris-laden soils, surface vegetation and organic rich topsoil.

Holes resulting from the removal of underground obstructions (such as abandoned utilities) or pre-existing fills that extend below the planned finished grade should be cleared of loose soil and debris, moisture conditioned and recompact, and backfilled with suitable material compacted to the requirements discussed below for engineered fill (see Section 3, Fill Placement and Compaction).

## **2. Moisture Conditioning and Recompaction of Surface Soils**

After the new construction areas have been properly prepared and required excavations have been made, the surface soils in new building, pavement and sidewalk areas, including any areas to be filled, should be properly moisture conditioned and recompact. This work should consist of ripping the upper 12 inches, thoroughly moisture conditioning the soils to at least two percent above optimum moisture content, and compacting them to at least 90 percent relative compaction as determined by ASTM Test Designation D1557. Compaction should be performed using appropriately sized compaction equipment such as a self-propelled sheepsfoot compactor. Any required additional fill then can be placed after the surface soils have been scarified, moisture conditioned, and recompact. The moisture conditioned soils should not be allowed to dry out prior to placing new fill.

Any unstable or pumping subgrade areas should be chemically treated, or subexcavated, plugged with baserock and overlain with a stabilizing fabric such as Mirafi 600X. Fabric installation should be performed in accordance with the manufacturer's recommendations. The method and extent of any required stabilization work should be evaluated by our representative.

### 3. **Fill Placement and Compaction**

Existing soils having an organic content of less than three percent by volume and which are free of construction debris can be used as fill. Fill material should not, however, contain rocks or lumps greater than six inches in greatest dimension with not more than 15 percent larger than 2.5 inches. Any imported fill required to raise grades in the building, sidewalk and pavement areas should be predominantly granular with a maximum plasticity index of 15.

Engineered fill should be compacted to at least 90 percent relative compaction as determined by ASTM Test Designation D1557. Fill material should be spread and compacted in lifts not exceeding eight inches in uncompacted thickness. The moisture content of both on-site and imported soils utilized as fill should be adjusted at least two percent above their optimum moisture content.

In order to achieve satisfactory compaction in the subgrade and fill soils, it may be necessary to adjust the soil moisture content at the time of soil reworking. This may require that water be added and thoroughly mixed into any soils which are too dry or that scarification and aeration be performed in any soils which are too wet. The subgrade will require rescarification and recompaction if it is allowed to dry out and crack prior to placing the required non-expansive material section.

### 4. **Trench Backfill**

The presently available subsurface information indicates that the required utility trenches can be excavated with conventional backhoe equipment. Any trenches deeper than five feet should be properly braced or sloped in accordance with the current requirements of CAL-OSHA or the local governmental agency, whichever is more stringent.

Utility trenches should be backfilled with engineered fill placed in lifts not exceeding eight inches in uncompacted thickness, except thicker lifts may be used with the approval of the soil engineer provided satisfactory compaction is achieved. If on-site soils are used, the materials should be compacted to at least 85 percent relative compaction by mechanical means only. Imported sand also can be used for backfilling trenches provided it is compacted to at least 90 percent relative compaction. In slab and pavement areas, the trench backfill should be compacted to at least 90 percent relative compaction for on-site soils, and 95 percent where imported clean sand backfill is used.

Water jetting of the trench backfill as a means to achieve the required compaction should not be permitted.

#### **5. Surface Drainage**

Positive surface gradients of at least two percent on porous surfaces and one percent on paved surfaces should be maintained away from the buildings and other planned improvements so that water does not pond in the vicinity of the foundations. Any collected runoff should be carried away from the improvements and discharged into approved drainage facilities or onto hardscape surfaces which drain toward collection basins or surface collectors.

#### **6. Construction Observation**

Grading and other earthwork-related operations should be observed and tested by our representative for conformance with the project plans/specifications and our recommendations. This work includes site preparation, selection of satisfactory fill materials, and placement and compaction of the subgrades and fills. Sufficient notification prior to commencement of earthwork is essential to make certain that the work will be properly observed.

**B. Modular and Concession Building Foundations**

After the site has been properly prepared and graded, the new building loads can be supported on deepened continuous and isolated spread footings which bear in the undisturbed stiff silty clay soils encountered at the site or in properly engineered fill.

Footings should be founded at least 30 inches below lowest adjacent finished grade and embedded at least 18 inches into the supporting subgrade soil. Continuous footings should have a minimum width of 18 inches and isolated footings should be at least 24 inches square. Footings located adjacent to utility trenches should have their bearing surfaces below an imaginary 1.5:1 (horizontal to vertical) plane projected upward from the edge of the bottom of the trench. Care should be taken to keep the footings moist by spraying lightly prior to the concrete pour.

At the above depths, building footings can be designed for an allowable bearing pressure of 2000 psf due to dead loads with a one-third increase for dead plus live loads (2667 psf) and a 50 percent increase for total design loads (3000 psf) including wind and seismic. All continuous footings should be provided with at least two number four reinforcement bars top and bottom, to provide structural continuity and to permit spanning of local irregularities.

Our firm should observe the footing bottoms prior to placing reinforcing steel and concrete. Loose soil encountered in the footing bottoms should be removed and replaced as engineered fill, or alternatively, densified by mechanical means (jumping wacker). Any backfill placed beneath the foundations should be compacted to at least 90 percent relative compaction as determined by field density testing.

Lateral loads may be resisted by friction between the foundation bottoms and the supporting subgrade. A friction coefficient of 0.25 is considered applicable. As an alternative, an equivalent



fluid pressure of 250 pcf starting one-half foot below the ground surface can be taken against the sides of footings poured neat.

Utility sleeves and any utility trenches through or beneath the perimeter foundations of the building should be plugged to minimize moisture infiltration beneath the structure. The annular space between the utility pipe and the "sleeve" should be filled with a flexible, waterproof compound manufactured to permanently adhere to both the sleeve material and the particular type of pipe being used in order to reduce both the potential for water seeping beneath the building, as well as for the pipe to be broken at this location during seismic shaking.

Settlements under the anticipated loads are expected to be within tolerable limits for the proposed construction.

### **C. Seismic Design Parameters**

Seismic design values for the project were determined using the online USGS Seismic Design Maps Tool (ASCE 7-10), and the subsurface information obtained from the exploratory borings which was used for determining the site classification. Based on the results, a site-specific seismic hazard analysis is not required (per CBC 2013 Section 1613A.3.5) for the building locations (Site Class D), as  $S_1 < 0.75$  and the sites are assigned to Seismic Design Category D.

Using Latitude (37.2350 °N) and Longitude (121.8279 °W) and the site classification as input, the computer application provides mapped acceleration parameters, site coefficients and design spectral acceleration parameters for both "short" (0.2 seconds) and long period (1-second) durations as detailed in the 2013 CBC.

Based on the results of our investigation, the tables provided in Section 1613A.3.3 and 1613A.3.5 of the 2013 CBC, and our analysis using the USGS Seismic Design Maps Tool

(ASCE 7-10), the following seismic design parameters can be used in lateral force analyses for the sites:

Site Class D - Stiff Soil Profile with Standard Penetration Test Values of 15 to 50 blows/foot

Site Coefficient  $F_a = 1.0$

Site Coefficient  $F_v = 1.5$

Mapped Spectral Acceleration Values;  $S_S = 1.912$ ,  $S_1 = 0.653$

Spectral Response Accelerations;  $S_{MS} = 1.912$ ,  $S_{M1} = 0.979$

Design Spectral Response Accelerations;  $S_{DS} = 1.275$ ,  $S_{D1} = 0.653$

#### **D. Slabs-on-Grade**

Slab-on-grade construction will be used for building and exterior slabs. Interior slabs should be underlain by at least 18 inches of imported virgin Class 2 aggregate baserock placed on the prepared subgrade soil and provided with a capillary moisture break section, as subsequently discussed. Exterior concrete flatwork should be underlain by 12 inches (minimum) of Class 2 aggregate baserock placed on the prepared subgrade soil.

Reinforcement of slabs should be provided in accordance with their anticipated use and loading, but as a minimum, slabs should be reinforced with No. 3 bars at 18 inches on center, both ways, or No. 4 bars at 24 inches on center, both ways. Concrete slabs should have a maximum control joint spacing (sawcut or tooled) of 10 feet in both directions. Control joint patterns should address potentially weak slab areas near cutouts or corners of the slab. We do not recommend that exterior concrete paving be "hinged" off interior slabs, i.e. exterior slabs should be constructed independently of building slabs.

Prior to final construction of slabs, the subgrade should be proof rolled to provide a smooth, firm non-yielding surface. The Class 2 aggregate baserock should be compacted to at least 90 percent relative compaction.

In building areas where floor wetness would be undesirable, slabs should be underlain by a capillary moisture break section consisting of a minimum 15 mil vapor retarder of permeance less than or equal to 0.01 perms (as tested by ASTM E1249) placed over six inches of 3/4-inch clean, free draining crushed rock. Care should be taken to prevent wear, punctures and/or tearing of the membrane during the construction phase (such as could result from the placement of rebar) subsequent to its installation; any tears or punctures should be tightly sealed. The six inches of 3/4-inch crushed rock can be used in lieu of the upper six inches of the imported Class 2 baserock recommended under building slabs.

All drainrock, baserock and imported material placed beneath interior slabs or within the building pad should be virgin "non-recycled" material.

Prior to final construction of slabs, the subgrade should be proof rolled to provide a smooth, firm non-yielding surface. The moisture content of the compacted subgrade should be maintained at least two percent above optimum moisture prior to placing baserock materials. The subgrade will require rescarification and recompaction if it is allowed to dry out and crack prior to placing the required non-expansive material section.

#### **E. Flexible Pavements**

Laboratory testing performed on a sample of the near-surface soils obtained an R-Value of less than five, which would require a relatively thick Class 2 aggregate baserock and asphaltic concrete section to support the anticipated traffic loads at the site. The required thickness of the pavement section can be reduced by chemically-treating the pavement subgrade to a depth of 12 inches with five percent Quicklime Plus (50% Lime/50% Portland cement) which is indicated to provide an R-Value of 73 based on laboratory testing.

Utilizing the preceding untreated and treated R-Values, and assumed Traffic Indices of 4.5 and 6.0 for automobile parking and driveway and bus/fire truck traffic lanes, respectively, and Procedure 301-F of the California Department of Transportation, our analysis indicates the following minimum alternative flexible pavement sections can be used for this project:

**Table 2 - Recommended Flexible Pavement Sections**

<b>Traffic Condition</b>	<b>Asphaltic Concrete (inches)</b>	<b>Class 2 Aggregate Base (inches)</b>	<b>Quicklime Subgrade Treatment (inches)*</b>	<b>Total Thickness (inches)</b>
<b>Auto Parking (T.I. = 4.5)</b>				
<b>Untreated</b>	<b>3.0</b>	<b>8.0</b>	<b>--</b>	<b>11.0</b>
<b>Chemically Treated*</b>	<b>2.0</b>	<b>4.0</b>	<b>12.0</b>	<b>18.0</b>
<b>Bus/Fire Lane, Driveways (T.I. = 6.0)</b>				
<b>Untreated</b>	<b>4.0</b>	<b>12.0</b>	<b>--</b>	<b>16.0</b>
<b>Chemically Treated*</b>	<b>3.0</b>	<b>8.0</b>	<b>12.0</b>	<b>23.0</b>

\*5% Quicklime Plus (50% quicklime/50% Portland cement)

The upper six inches of subgrade and the Class 2 aggregate baserock section should be compacted to at least 95 percent relative compaction. Any fill required below the upper six inches of subgrade should be compacted to at least 90 percent.

The subgrade should be statically rolled with a heavy, smooth drum roller to provide a smooth firm surface. Any unstable or pumping subgrade areas should be chemically treated as described above, or subexcavated, plugged with baserock and overlain with a stabilizing fabric such as Mirafi 600X. Fabric installation should be performed in accordance with the manufacturer's recommendations. The method and extent of any required stabilization work should be evaluated by our representative.

AC hardscape pavements should consist of at least two inches of asphaltic concrete over a minimum of six inches of compacted Class 2 aggregate baserock.

Class 2 aggregate base should have an R-Value of at least 78 and conform to the requirements of Section 26, State of California "CALTRANS" Standard Specifications, latest edition. The aggregate base material should be placed in thin lifts in a manner to prevent segregation, and should be uniformly moisture conditioned and compacted to at least 95 percent relative compaction to provide a smooth, unyielding surface.

The asphaltic concrete should conform to and be placed in accordance with the requirements of Section 39 in the State of California CALTRANS Standard Specifications, latest edition.

**F. Soil Corrosivity**

Laboratory resistivity, pH, chloride and sulfate testing was performed on a composite soil sample obtained from the upper five feet of the borings during our geotechnical investigation for this project. The testing was performed by Cooper Testing Laboratory for the purpose of evaluating the soils' corrosion potential for use in the design of underground utilities and embedded concrete on this project.

In summary, the test results indicated a minimum resistivity of 1,820 ohm-cm, a pH of 8.0, a chloride content of seven ppm, and water soluble sulfate content of 217 ppm. Soils with chloride contents of less than 500 ppm and sulfate contents of less than 1500 ppm are considered to be of "low" corrosivity. However, based on the resistivity testing, the soils are considered "moderately corrosive".

Table 3 below shows the general correlation between resistivity and corrosion potential.

**Table 3 - Correlation Between Resistivity  
and Corrosion Potential (C)**

<b>Soil Resistivity (ohm-cm)</b>	<b>Soil Classification</b>
Below 500	Very Corrosive
500 to 1,000	Corrosive
1,000 to 2,000	Moderately Corrosive
2,000 to 10,000	Mildly Corrosive
Above 10,000	Progressively Less Corrosive

(C) National Association of Corrosion Engineers.

This condition combined with the slightly alkaline soil condition encountered at the site could result in reduced life span of steel culverts for this project. Thicker gauge pipelines would have greater life spans. For example, the life spans for 18, 16 and 14 gauge steel culverts with a soil resistivity of 1,313 ohm-cm and a pH of 7.6 are estimated to be roughly 32, 41 and 51 years, respectively (California Division of Highways, 1993).

For the purposes of design of concrete in contact with the soil, there are no restrictions on types of cementitious materials to be used, based on the pH and sulfate testing.

**PLAN REVIEW AND CONSTRUCTION OBSERVATION**

We should be provided the opportunity to review the foundation and grading plans and the specifications for the project when they are available. We should also be retained to provide soil engineering observation and testing services during the grading and foundation installation phases of the project. This will provide the opportunity for correlation of the soil conditions found in our investigation with those actually encountered in the field, and thus permit any necessary modifications in our recommendations resulting from changes in anticipated conditions.

\*\*\*\*\*

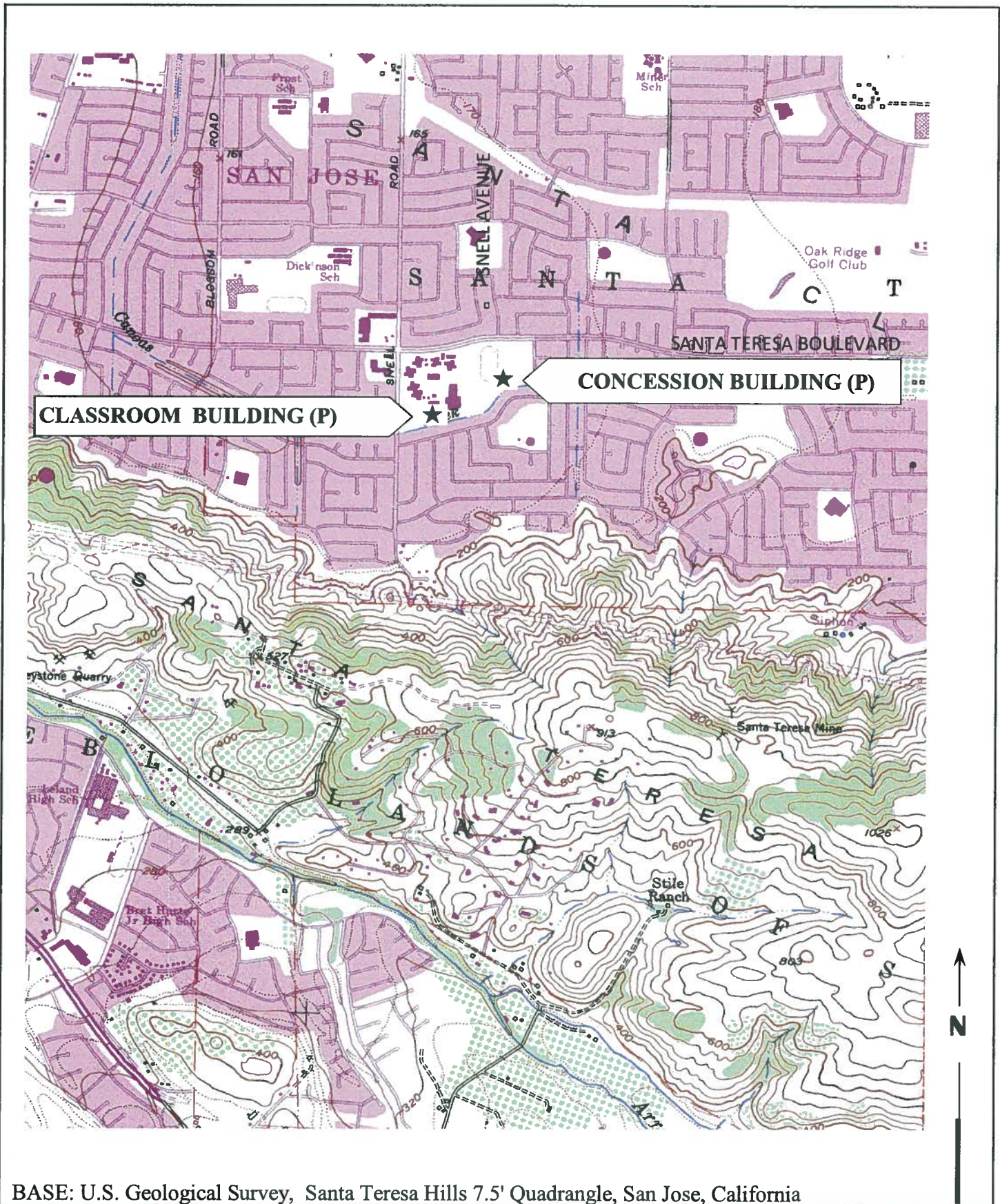
## **LIST OF REFERENCES**

- ASCE 7-10, Minimum Design Loads for Buildings and Other Structures.
- California Building Code, 2013.
- California Division of Mines and Geology, 1997, Guidelines for Evaluating and Mitigating Seismic Hazards in California Special Publication 117.
- California Geological Survey, 2008, Guidelines for Evaluating and Mitigating Seismic Hazards in California Special Publication 117A.
- CGS Note 48 (October 2013), Checklist for the Review of Engineering Geology and Seismology Reports for California Public Schools, Hospitals and Essential Services Buildings.
- Cleary Consultants, Inc., Geotechnical Investigation for the Sports Facility Improvements, Santa Teresa High School, January 12, 2004.
- \_\_\_\_\_, Geotechnical Investigation for the Multi-Purpose Classroom Building, Santa Teresa High School, September 4, 2009.
- \_\_\_\_\_, Geotechnical Investigation for The New Swimming Pool Facility, Santa Teresa High School, January 17, 2014.
- Committee on Earthquake Engineering, Housner Chen, 1985, Liquefaction of Soils During Earthquakes, National Research Council, National Academy Press.
- Day, R.W., Geotechnical Earthquake Engineering Handbook, 2002, Mc Graw-Hall.
- Federal Emergency Management Agency, Flood Insurance Rate Map, May 18, 2009, Panel 402 of 830.
- Ishihara, Kenji, 1985, "Stability of Natural Deposits During Earthquakes," Proceedings of the 11<sup>th</sup> International Conference on Soil Mechanics and Foundation Engineering, San Francisco, CA, Volume 1, p. 321-376, August.
- Jennings, C.W., and Bryant, W.A., 2010, Fault Activity map of California: California Geologic Survey Geologic Data Map No. 6. map scale 1:750,000.
- Pradel, Daniel, Procedure to Evaluate Earthquake-Induced Settlements in Dry Sandy Soils, Journal of Geotechnical and Geoenvironmental Engineering, ASCE, April 1998, P364 - 368.
- Rogers, T.H., and Williams, J.W., 1974, Potential Seismic Hazards in Santa Clara County, California: California Division of Mines and Geology, Special Report 107.

## **LIST OF REFERENCES, CONTINUED**

- San Jose, City of, 1983, Fault Hazard Map, Santa Teresa Hills Quadrangle.
- Santa Clara Valley Water District, 1996, Dam Failure Flood Inundation Maps.
- Santa Clara Valley Water District, 2003, Anderson Dam Flood Inundation Maps.
- Santa Clara County Geologic Hazard Zones Map, October 26, 2012.
- Schmidt, Kevin M., et. al., 1995, Breaks in Pavement and Pipes as Indicators of Range-Front Faulting Resulting from the 1989 Loma Prieta Earthquake Near the Southwest Margin of the Santa Clara Valley, California, U.S. Geological Survey OFR 95-820.
- Seed, H. Bolton, and Idriss, I.M., 1982, Ground Motions and Soil Liquefaction During Earthquakes, EERI Monograph.
- State of California, 2003, Seismic Hazard Zone Report for the Santa Teresa Hills 7½' Quadrangle, Santa Clara Co., CA, Seismic Hazards Zone Report 097.
- Tokimatsu, K. and Seed, H.B., Evaluation of Settlements in Sands Due to Earthquake Shaking, Journal of Geotechnical Engineering Division, ASCE, August 1987, Volume 113, pages 861 - 878.
- Topozada, T. et al, 2000, Epicenters of and Areas Damaged by M>5 California Earthquakes, 1800-1999, CDMG Map Sheet 49.
- U.S. Geological Survey, 2008 National Seismic Hazard Maps - Fault Parameters online program, [http://geohazards.usgs.gov/cfusion/hazfaults\\_search/hf\\_search\\_main.cfm](http://geohazards.usgs.gov/cfusion/hazfaults_search/hf_search_main.cfm).
- U.S. Geological Survey, Santa Teresa Hills, Quadrangle Map, 1:24,000.
- U.S. Geological Survey, Seismic Design Ground Motion Tool.
- Youd, T.L., 1997, Updates in the Simplified Procedure: An Overview of NCEER Workshop in Salt Lake City on Liquefaction Resistance of Soils, Third Seismic Short Course on Evaluation and Mitigation of Earthquake Induced Liquefaction Hazards, San Francisco, CA.





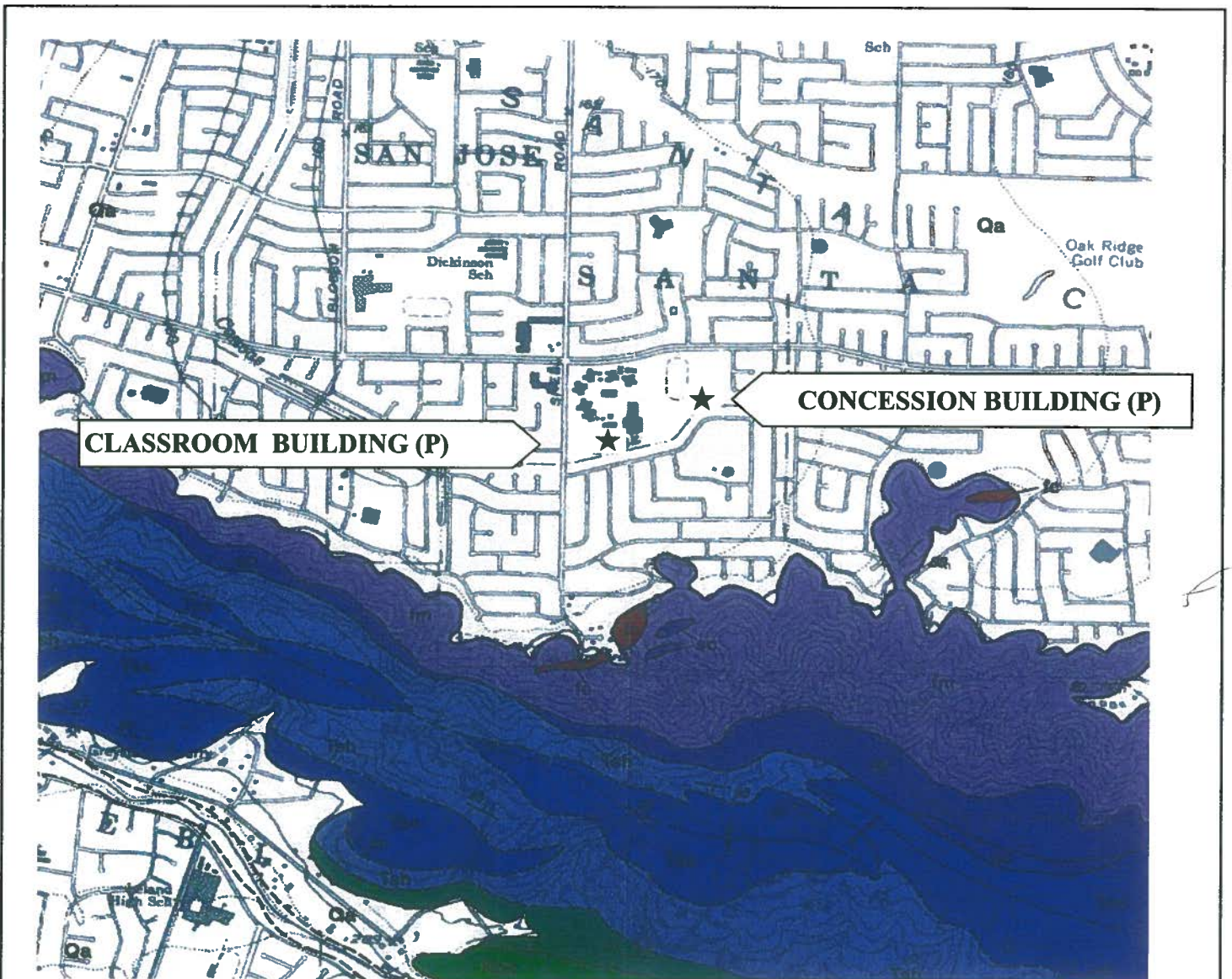
BASE: U.S. Geological Survey, Santa Teresa Hills 7.5' Quadrangle, San Jose, California

**SITE VICINITY MAP**

**CEC**  
**CLEARY CONSULTANTS, INC.**  
*Geotechnical Engineers and Geologists*

**NEW CLASSROOM AND CONCESSION BUILDINGS**  
 Santa Teresa High School  
 San Jose, California

APPROVED BY	SCALE	PROJECT NO.	DATE	DRAWING NO.
GF	1" = 2000'	978.17H	December 2015	1



**EXPLANATION**

- Qa** Alluvial Fan Deposits
- Tss** Unnamed Sandstone
- Tsh** Unnamed Clay Shale
- Kps** Panoche Formation Sandstone
- sp/sc** Coast Range Serpentinite
- fm** Franciscan Melange
- fc** Franciscan Chert

20 / Strike and Dip of Bedding



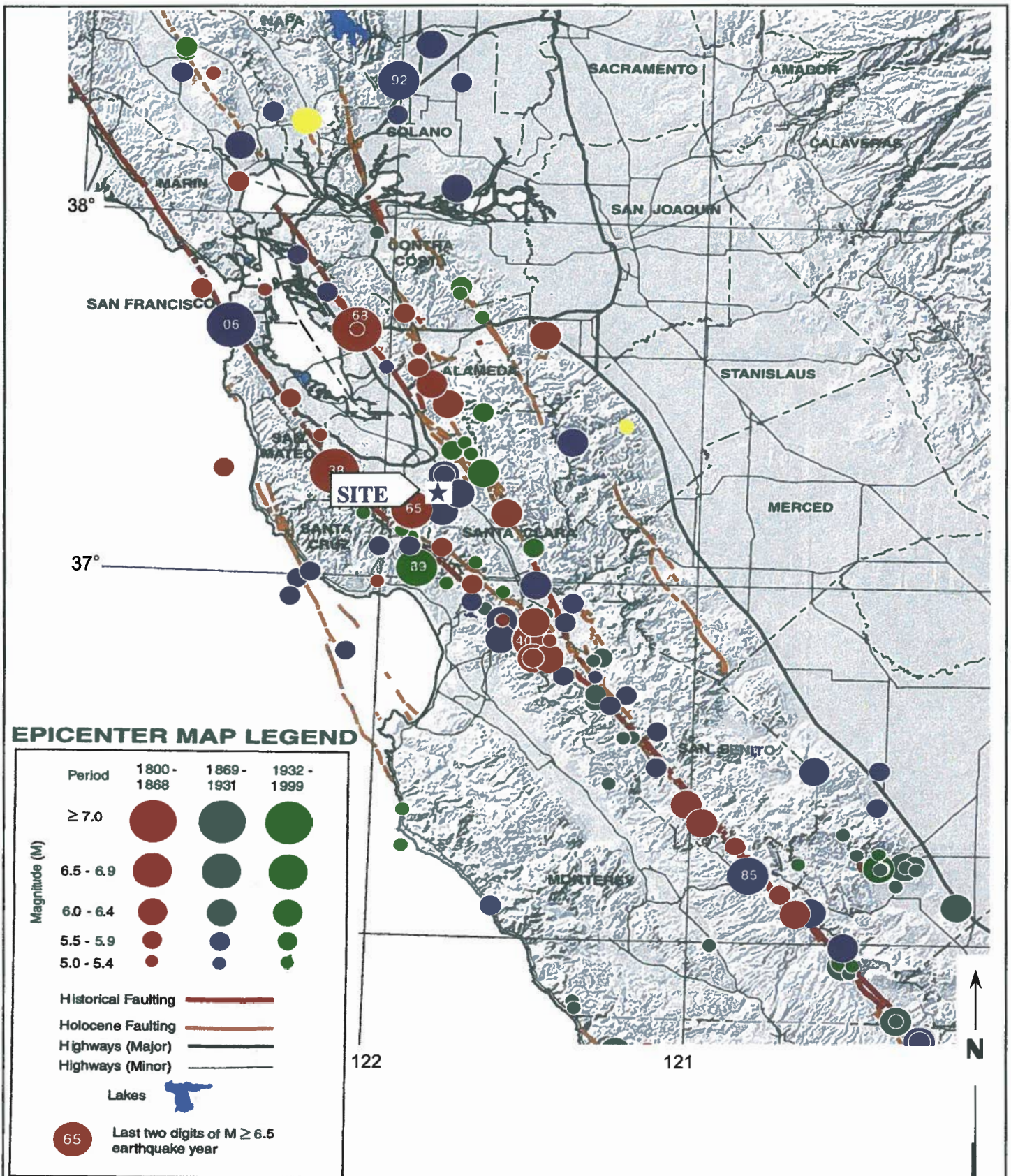
BASE: Thomas Dibblee, Jr., Geologic Map of the Santa Teresa Hills Quadrangle, 2005

**LOCAL GEOLOGIC MAP**

**CC**  
**CLEARY CONSULTANTS, INC.**  
*Geotechnical Engineers and Geologists*

**NEW CLASSROOM AND CONCESSION BUILDINGS**  
 Santa Teresa High School  
 San Jose, California

APPROVED BY	SCALE	PROJECT NO.	DATE	DRAWING NO.
GF	1" = 2000'	978.17H	December 2015	2



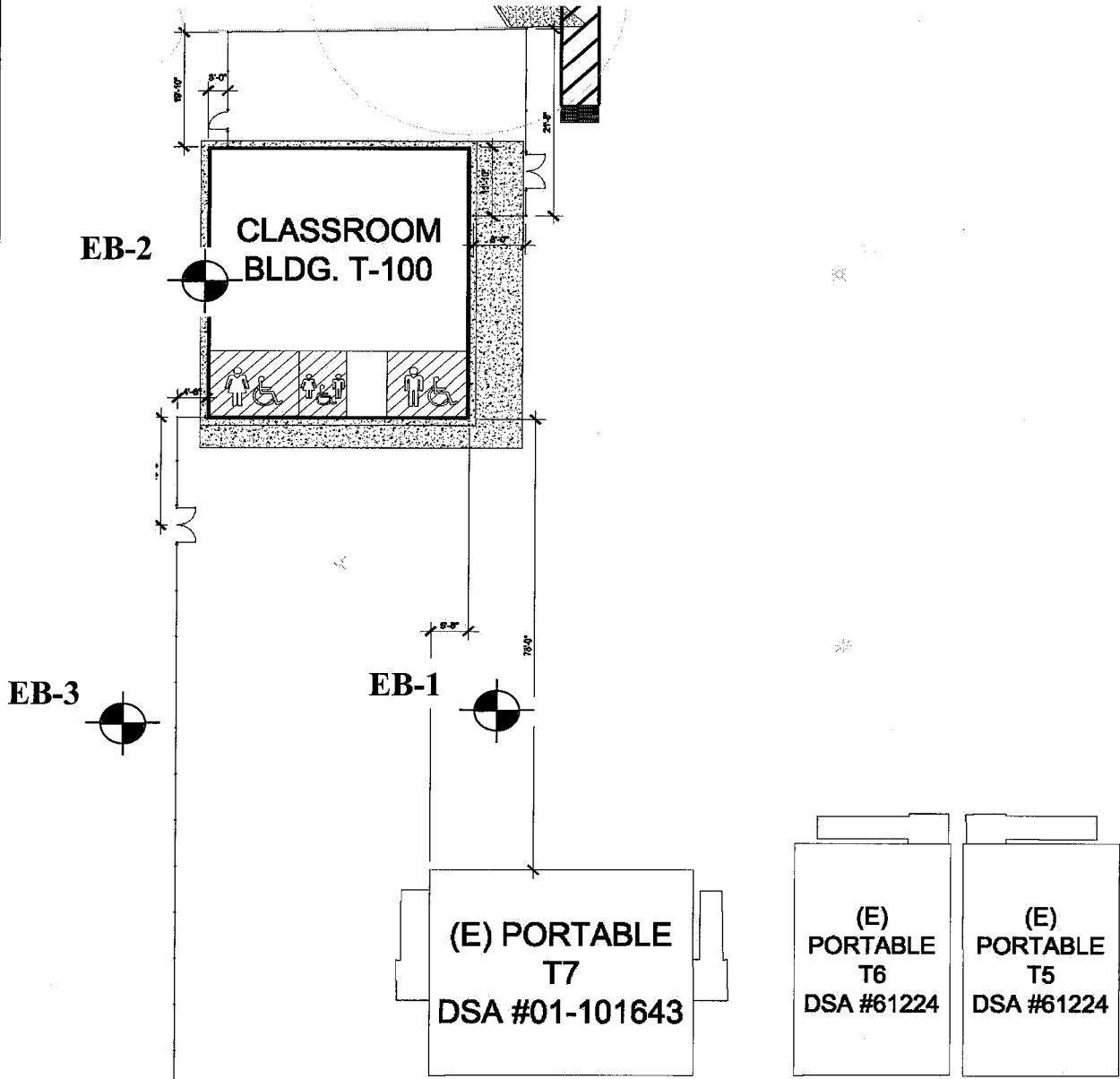
BASE: CDMG Map Sheet 49; Topozada et al, 2000. Magnitude 5.0 and Greater Earthquakes Plotted Through 1999; Subsequent Earthquakes through August 2014 plotted in yellow.

**REGIONAL EARTHQUAKE EPICENTER MAP**


**CEI**  
**CLEARY CONSULTANTS, INC.**  
 Geotechnical Engineers and Geologists

**NEW CLASSROOM AND CONCESSION BUILDINGS**  
 Santa Teresa High School  
 San Jose, California

APPROVED BY	SCALE	PROJECT NO.	DATE	DRAWING NO.
GF/CC	1" = 25 miles ±	978.17H	December 2015	3



**EXPLANATION**

**EB-1**  Approximate Location of Exploratory Boring



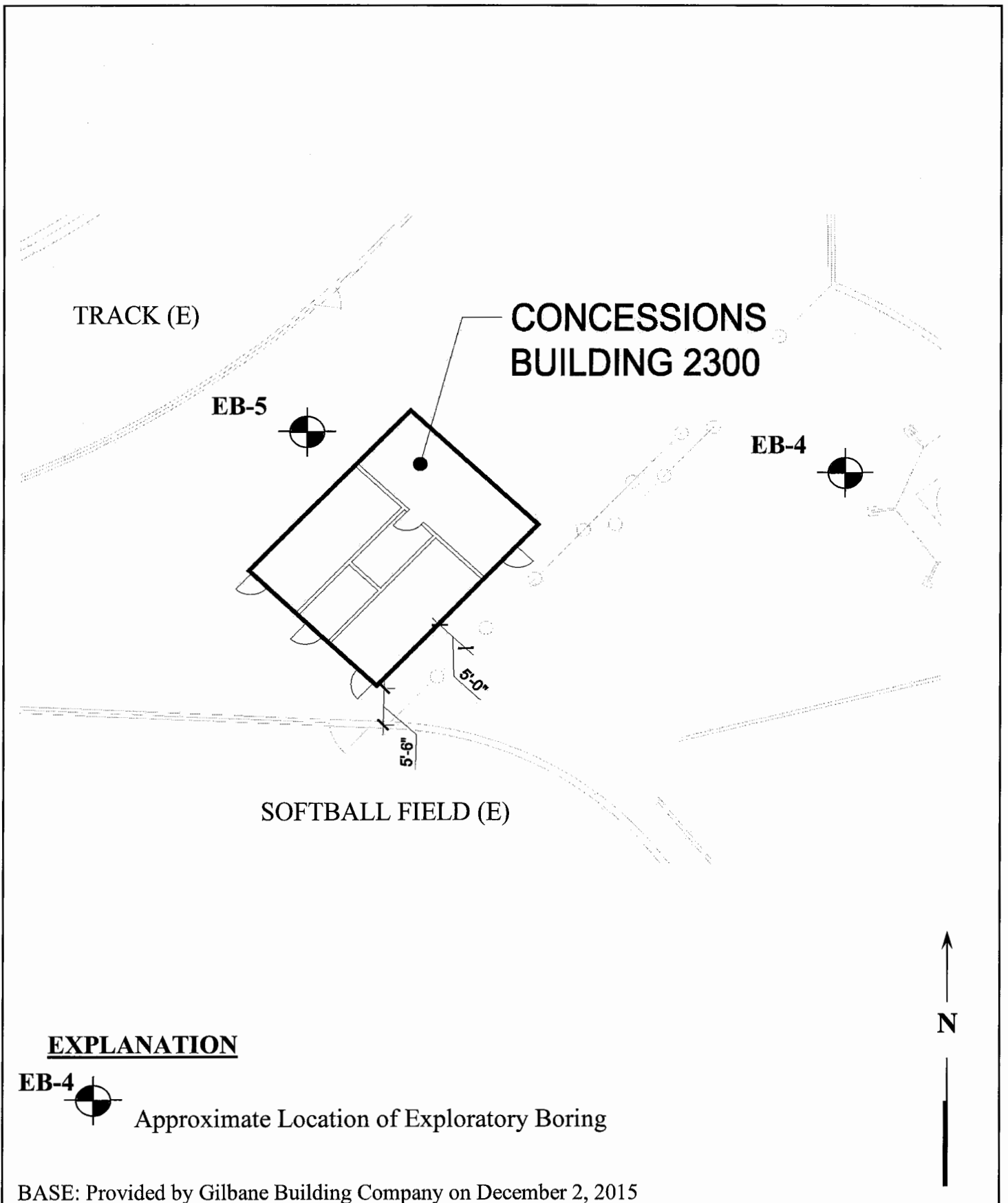
BASE: Provided by Gilbane Building Company on December 2, 2015

**SITE PLAN - CLASSROOM BUILDING**


**CC**  
**CLEARY CONSULTANTS, INC.**  
*Geotechnical Engineers and Geologists*

NEW CLASSROOM AND CONCESSION BUILDINGS  
 Santa Teresa High School  
 San Jose, California

APPROVED BY	SCALE	PROJECT NO.	DATE	DRAWING NO.
GF	1" = 30' ±	978.17H	December 2015	4




**EXPLANATION**

**EB-4**  Approximate Location of Exploratory Boring

BASE: Provided by Gilbane Building Company on December 2, 2015

**SITE PLAN - CONCESSION BUILDING**

 <b>CLEARY CONSULTANTS, INC.</b> <i>Geotechnical Engineers and Geologists</i>		<b>NEW CLASSROOM AND CONCESSION BUILDINGS</b> Santa Teresa High School San Jose, California			
		<b>APPROVED BY</b>	<b>SCALE</b>	<b>PROJECT NO.</b>	<b>DATE</b>
GF		1" = 20' ±	978.17H	December 2015	5

PRIMARY DIVISIONS			GROUP SYMBOL	SECONDARY DIVISION
COARSE GRAINED SOILS MORE THAN HALF OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVELS  MORE THAN HALF OF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE	CLEAN GRAVELS (LESS THAN 5% FINES)	GW	Well graded gravels, gravel-sand mixtures, little or no fines
			GP	Poorly graded gravels or gravel-sand mixtures, little or no fines
		GRAVEL WITH FINES	GM	Silty gravels, gravel-sand-silt mixtures, non-plastic fines
			GC	Clayey gravels, gravel-sand-clay mixtures, plastic fines
	SANDS  MORE THAN HALF OF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE	CLEAN SANDS (LESS THAN 5% FINES)	SW	Well graded sands, gravelly sands, little or no fines
			SP	Poorly graded sands or gravelly sands, little or no fines
		SANDS WITH FINES	SM	Silty sands, sand-silt mixtures, non-plastic fines
			SC	Clayey sands, sand-clay mixtures, plastic fines
FINE GRAINED SOILS MORE THAN HALF OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS  LIQUID LIMIT IS LESS THAN 50%		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL	Organic silts and organic silty clays of low plasticity
	SILTS AND CLAYS  LIQUID LIMIT IS GREATER THAN 50%		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
			CH	Inorganic clays of high plasticity, fat clays
			OH	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS			Pt	Peat and other highly organic soils

### UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D-2487)

U.S. STANDARD SERIES SIEVE

CLEAR SQUARE SIEVE OPENINGS

200

40

10

4

3/4"

3"

12"

SILTS AND CLAYS	SAND			GRAVEL		COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE		

### GRAIN SIZES

SANDS AND GRAVELS	BLOWS/FOOT
VERY LOOSE	0 - 4
LOOSE	4 - 10
MEDIUM DENSE	10 - 30
DENSE	30 - 50
VERY DENSE	OVER 50

SILTS AND CLAYS	STRENGTH ☆	BLOWS/FOOT ✧
VERY SOFT	0 - 1/4	0 - 2
SOFT	1/4 - 1/2	2 - 4
FIRM	1/2 - 1	4 - 8
STIFF	1 - 2	8 - 16
VERY STIFF	2 - 4	16 - 32
HARD	OVER 4	OVER 32

RELATIVE DENSITY

CONSISTENCY

✧ Number of blows of 140 pound hammer falling 30 inches to drive a 2 inch O.D. (1-3/8 inch I.D.) split barrel (ASTM D-1586).

☆ Unconfined compressive strength in tons/sq.ft. as determined by laboratory testing or approximated by the standard penetration test (ASTM D-1586), pocket penetrometer, torvane, or visual observation.



**CLEARY CONSULTANTS, INC.**  
Geotechnical Engineers and Geologists

### KEY TO EXPLORATORY BORING LOGS

NEW CLASSROOM AND CONCESSION BUILDINGS  
Santa Teresa High School  
San Jose, California

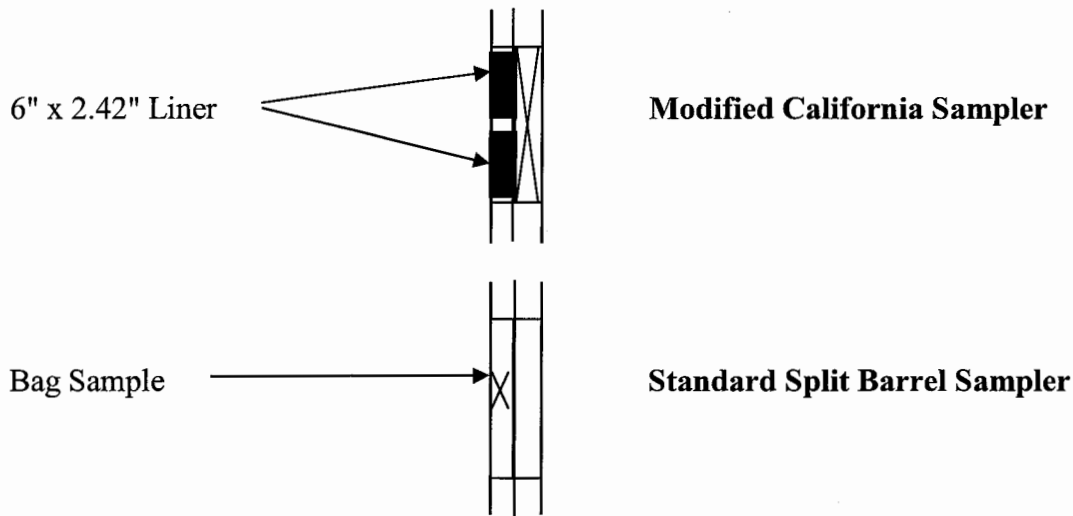
PROJECT NO.	DATE	DRAWING NO.
978.17H	December 2015	6

## FIELD SAMPLING PROCEDURES

The soils encountered in the borings were continuously logged in the field by our representative and described in accordance with the Unified Soil Classification System (ASTM D-2487).

Representative soil samples were obtained from the borings at selected depths appropriate to the soil investigation. All samples were returned to our laboratory for classification and testing.

In accordance with the ASTM D1586 procedure, the standard penetration resistance was obtained by dropping a 140 pound hammer through a 30-inch free fall. The 2-inch O.D. Standard split barrel sampler was driven 18 inches or to practical refusal and the number of blows were recorded for each 6-inch penetration interval. The blows per foot recorded on the boring logs represent the accumulated number of blows, or N-value, required to drive the penetration sampler the final 12 inches. In addition, 3.0 inch O.D. x 2.42 inch I.D. drive samples were obtained using a Modified California Sampler and 140 pound hammer. Blow counts for the Modified California Sampler were converted to standard penetration resistance by multiplying by 0.6. The sample type is shown on the boring logs in accordance with the designation below.



Where obtained, the shear strength of the soil samples using either Torvane (TV) or Pocket Penetrometer (PP) devices is shown on the boring logs in the far right hand column.



**CLEARY CONSULTANTS, INC.**  
*Geotechnical Engineers and Geologists*

### SUMMARY OF FIELD SAMPLING PROCEDURES

NEW CLASSROOM AND CONCESSION BUILDINGS

Santa Teresa High School

San Jose, California

**PROJECT NO.**

**DATE**

**DRAWING NO.**

978.17H

December 2015

7

## **LABORATORY TESTING PROCEDURES**

The laboratory testing program was directed toward a quantitative and qualitative evaluation of the physical and mechanical properties of the soils underlying the site.

The natural water content was determined on 76 samples of the materials recovered from the borings in accordance with the ASTM D2216 Test Procedure. These water contents are recorded on the boring logs at the appropriate sample depths.

Dry density determinations were performed on 65 samples to measure the unit weight of the subsurface soils in accordance with the ASTM D2937 Test Procedure. The results of these tests are shown on the boring logs at the appropriate sample depths.

Atterberg Limit determinations were performed on eight samples of the subsurface soils in accordance with the ASTM D4318 Test Procedure to determine the ranges of water contents over which the materials exhibited plasticity. The Atterberg Limits are used to classify the soil in accordance with the Unified Soil Classification System and to evaluate the soil's expansion potential. The results of these tests are presented on Drawing 19 and on the boring logs at the appropriate sample depths.

The percent soil fraction passing the #4 sieve and #200 sieves was determined on five and 16 samples, respectively, of the subsurface soils in accordance with the ASTM D1140 Test Procedure to aid in the classification of the soils. The results of these tests are shown on the boring logs at the appropriate sample depths.

Free swell tests were performed on 14 samples of the soil materials to evaluate the swelling potential of the soil. The free swell tests were performed by slowly pouring 10 ml of air dried soil passing the No. 40 sieve into a 100 ml graduated cylinder filled with approximately 90 ml of distilled water. The suspension was stirred repeatedly to ensure thorough wetting of the soil specimen. The graduated cylinder was then filled with distilled water to the 100 ml mark and allowed to settle until equilibrium was reached (approximately 24 hours). The free swell volume of the soil was then noted. The percent free swell was calculated by subtracting the initial soil volume from the free swell volume, dividing the difference by the initial volume, and multiplying the result by 100 percent. The results of these tests are presented on the boring logs.

R-Value tests were performed by Cooper Testing Laboratory on representative samples of untreated, and five percent Quicklime Plus (50% Lime/50% Portland cement) treated samples of the subgrade soils to provide data for the pavement design. The tests were performed in accordance with California Test Method 301-F and indicated an R-Value of less than five and 73, respectively, for untreated and chemically treated samples, at an exudation pressure of 300 pounds per square inch. The results of the tests are presented on Drawings 21 and 22.

**DRAWING NO. 8**




## **LABORATORY TESTING PROCEDURES CONTINUED**

Corrosion testing was performed on a composite sample of the surficial soil materials from the upper five feet of the exploratory borings. Testing included resistivity, pH, chloride and sulfate testing performed in accordance with ASTM G57, ASTM G51, Caltrans 422(modified) and Caltrans 417(modified), respectively. The results of these tests are presented on Drawing 22 and are discussed in Section E. Soil Corrosivity.

**DRAWING NO. 9**

EQUIPMENT		8" Diameter Hollow Stem Auger*		ELEVATION		---		LOGGED BY		DL		
DEPTH TO GROUNDWATER		Not Enc.		DEPTH TO BEDROCK		Not Enc.		DATE DRILLED		10/26/2015		
DESCRIPTION AND CLASSIFICATION												
DESCRIPTION AND REMARKS				COLOR	CONSIST.	SOIL TYPE	DEPTH (feet)	SAMPLER	PENETRATION RESISTANCE (BLOWS/FT)	WATER CONTENT (%)	DRY DENSITY (PCF)	SHEAR STRENGTH (KSF)
2.5" AC Over 3" AB GRAVELLY CLAYEY SAND, moist, fine grained sand, fine subangular to subrounded gravel up to 1/4" diameter				Dark Yellowish Brown	Medium Dense	SC	1		12	13	110	PP=3.5
SILTY CLAY, moist, fine grained sand				Yellowish Brown to Gray	Very Stiff	CH	2		21	29	95	PP=3.5
@1.5': Liquid Limit = 64% Plasticity Index = 38% Finer than #4 = 78% Finer than #200 = 55% Free Swell = 80%							3		25	29		
@3.0': Liquid Limit = 69% Plasticity Index = 40% Finer than #200 = 98% Free Swell = 60%				Dark Gray	Stiff		4		15	30	76	PP=3.0
							5		30	30	90	PP=3.0
							6		14	28		
							7					
				Grayish Brown to Yellowish Brown			8					
							9		8	29	92	PP=2.5
@9.5': Finer than #200 = 100%							10		28	28	93	PP=2.5
							11					
							12					
				Olive Brown			13					
							14		11	29	88	
							15		32	32	81	
							16					
SANDY CLAY, moist, fine grained sand, iron staining				Olive Brown to Yellowish Brown	Stiff	CL	17					
@19.5': Liquid Limit = 40% Plasticity Index = 18% Finer than #200 = 72% Free Swell = 10%							18					
* Drilled with a B56 Truck Mounted Rig PP = Pocket Penetrometer							19		8	29	94	
							20		28	28	90	

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL


 <b>CLEARY CONSULTANTS, INC.</b> <i>Geotechnical Engineers and Geologists</i>		<b>LOG OF EXPLORATORY BORING NO. 1</b>		
		NEW CLASSROOM AND CONCESSION BUILDINGS Santa Teresa High School San Jose, California		
<b>APPROVED BY</b>	<b>SCALE</b>	<b>PROJECT NO.</b>	<b>DATE</b>	<b>DRAWING NO.</b>
GF	---	978.17H	December 2015	10

EQUIPMENT	8" Diameter Hollow Stem Auger*	ELEVATION	---	LOGGED BY	DL
DEPTH TO GROUNDWATER	Not Enc.	DEPTH TO BEDROCK	Not Enc.	DATE DRILLED	10/26/2015

DESCRIPTION AND CLASSIFICATION					DEPTH (feet)	SAMPLER	PENETRATION RESISTANCE (BLOWS/FT)	WATER CONTENT (%)	DRY DENSITY (PCF)	SHEAR STRENGTH (KSF)			
DESCRIPTION AND REMARKS	COLOR	CONSIST.	SOIL TYPE										
SANDY CLAY, moist, continued ....	Olive Brown to Yellowish Brown	Stiff	CL	21									
				22									
				23									
				24									
				25					10	37	85		
				26						36	81		
				27	----- Dark Gray								
				28									
				29									
				30					13	25	106		
				31						21	107		
				32	-----								
				33	Olive Gray to Yellowish Brown								
				34							22	105	
				35					15	25	101		
				36						23	99		
				37	-----								
				38	Dark Grayish Brown								
				39									
				40					14	27	73		
						33	90						

@34.5': Finer than #200 = 92%  
Free Swell = 20%

\* Drilled with a B56 Truck Mounted Rig


THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL					
 <b>CLEARY CONSULTANTS, INC.</b> <i>Geotechnical Engineers and Geologists</i>			<b>LOG OF EXPLORATORY BORING NO. 1</b> NEW CLASSROOM AND CONCESSION BUILDINGS Santa Teresa High School San Jose, California		
			<b>APPROVED BY</b>	<b>SCALE</b>	<b>PROJECT NO.</b>
GF	---	978.17H	December 2015	11	

EQUIPMENT	8" Diameter Hollow Stem Auger*	ELEVATION	---	LOGGED BY	DL
DEPTH TO GROUNDWATER	Not Enc.	DEPTH TO BEDROCK	Not Enc.	DATE DRILLED	10/26/2015

DESCRIPTION AND CLASSIFICATION				DEPTH (feet)	SAMPLER	PENETRATION RESISTANCE (BLOWS/FT)	WATER CONTENT (%)	DRY DENSITY (PCF)	SHEAR STRENGTH (KSF)
DESCRIPTION AND REMARKS	COLOR	CONSIST.	SOIL TYPE						
SANDY CLAY, very moist, continued ....  @44.5': Finer than #4 = 85% Finer than #200 = 73% Free Swell = 45%	Dark Grayish Brown	Stiff	CL	41					
				42					
				43					
				44		15	22	104	
				45			29	96	
Bottom of Boring = 45.0'				46					
				47					
				48					
				49					
				50					
				51					
				52					
				53					
				54					
				55					
				56					
				57					
				58					
				59					
				60					

\* Drilled with a B56 Truck Mounted Rig

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL

 <b>CLEARY CONSULTANTS, INC.</b> <i>Geotechnical Engineers and Geologists</i>		<b>LOG OF EXPLORATORY BORING NO. 1</b> NEW CLASSROOM AND CONCESSION BUILDINGS Santa Teresa High School San Jose, California		
		<b>APPROVED BY</b>	<b>SCALE</b>	<b>PROJECT NO.</b>
GF	---	978.17H	December 2015	<b>DRAWING NO.</b> 12

EQUIPMENT		8" Diameter Hollow Stem Auger*		ELEVATION		---		LOGGED BY		DL		
DEPTH TO GROUNDWATER		Not Enc.		DEPTH TO BEDROCK		Not Enc.		DATE DRILLED		10/26/2015		
DESCRIPTION AND CLASSIFICATION												
DESCRIPTION AND REMARKS				COLOR	CONSIST.	SOIL TYPE	DEPTH (feet)	SAMPLER	PENETRATION RESISTANCE (BLOWS/FT)	WATER CONTENT (%)	DRY DENSITY (PCF)	SHEAR STRENGTH (KSF)
2.5" AC Over 3" AB CLAYEY SAND, slightly moist, fine grained sand, subangular to subrounded gravel up to 1/4" diameter				Yellowish to Grayish Brown	Loose	SC	1					
SILTY CLAY, slightly moist, fine grained sand @1.5': Liquid Limit = 58% Plasticity Index = 27% Finer than #200 = 97% Free Swell = 35%				Brownish Gray	Very Stiff	CH	2		7	11	118	PP > 4.5
							3	X	16	27		
							4					
							5		32	27	90	PP > 4.5
							6	X	19	26		
							7					
SANDY TO SILTY CLAY, moist  @9.5': Liquid Limit = 49% Plasticity Index = 24% Finer than #200 = 99% Free Swell = 35%				Grayish Brown	Stiff	CL	8					
							9					
							10		8	32	87	PP = 1.75
							11					
							12					
				----- Yellowish to Grayish Brown			13					
							14					
							15		8	33	88	
							16					
							17					
							18					
							19					
* Drilled with a B56 Truck Mounted Rig PP = Pocket Penetrometer Bottom of Boring = 20.0'							20		14	31	91	
							20			31	89	

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL											
<b>CLEARY CONSULTANTS, INC.</b> <i>Geotechnical Engineers and Geologists</i>				<b>LOG OF EXPLORATORY BORING NO. 2</b> NEW CLASSROOM AND CONCESSION BUILDINGS Santa Teresa High School San Jose, California							
				<b>APPROVED BY</b>	<b>SCALE</b>	<b>PROJECT NO.</b>	<b>DATE</b>	<b>DRAWING NO.</b>			
GF	---	978.17H	December 2015	13							


EQUIPMENT	8" Diameter Hollow Stem Auger*	ELEVATION	---	LOGGED BY	DL
DEPTH TO GROUNDWATER	Not Enc.	DEPTH TO BEDROCK	Not Enc.	DATE DRILLED	10/26/2015

DESCRIPTION AND CLASSIFICATION				DEPTH (feet)	SAMPLER	PENETRATION RESISTANCE (BLOWS/FT)	WATER CONTENT (%)	DRY DENSITY (PCF)	SHEAR STRENGTH (KSF)												
DESCRIPTION AND REMARKS	COLOR	CONSIST.	SOIL TYPE																		
2.5" AC Over 2" AB SILTY CLAY, moist, fine grained sand, fine subangular gravel @1.5': Liquid Limit = 63% Plasticity Index = 34% Finer than #200 = 97% Free Swell = 55%  @3.0': very moist  @4.5': increased silt content	Dark Grayish Brown	Stiff	CH	1		12	11	114	PP > 4.5												
				2							33	89									
				3										16	32						
				4													11	71			
				5																33	87
				6																	
7																					
				8																	
				9																	
				10																	
				11																	
				12																	
				13																	
				14																	
				15																	
				16																	
				17																	
				18																	
				19																	
				20																	

Bottom of Boring = 6.5

\* Drilled with a B56 Truck Mounted Rig  
PP = Pocket Penetrometer

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL


 <b>CLEARY CONSULTANTS, INC.</b> <i>Geotechnical Engineers and Geologists</i>	<b>LOG OF EXPLORATORY BORING NO. 3</b> NEW CLASSROOM AND CONCESSION BUILDINGS Santa Teresa High School San Jose, California			
	<b>APPROVED BY</b>	<b>SCALE</b>	<b>PROJECT NO.</b>	<b>DATE</b>

GF	---	978.17H	December 2015	14
----	-----	---------	---------------	----

EQUIPMENT	8" Diameter Hollow Stem Auger*	ELEVATION	---	LOGGED BY	DL
DEPTH TO GROUNDWATER	37.0' ±	DEPTH TO BEDROCK	Not Enc.	DATE DRILLED	10/26/2015

DESCRIPTION AND CLASSIFICATION				DEPTH (feet)	SAMPLER	PENETRATION RESISTANCE (BLOWS/FT)	WATER CONTENT (%)	DRY DENSITY (PCF)	SHEAR STRENGTH (KSF)	
DESCRIPTION AND REMARKS	COLOR	CONSIST.	SOIL TYPE							
2.5" AC Over 3" AB SILTY CLAY, moist, trace fine grained sand, subangular to subrounded gravel up to 1/8" diameter @1.5': Liquid Limit = 66% Plasticity Index = 34% Finer than #200 = 92% Free Swell = 60%  @9.5': Finer than #200 = 96% Free Swell = 0%  @14.5': very moist	Dark Grayish Brown	Stiff	CH-CL	1		8	35	90	PP=3.0	
	2					13	41	73		
	3					15	26			
		Grayish Brown			4		13	27	30	PP > 4.5
	5					13	27	89		
	6					13	27			
		Dark Gray	Firm		7					
					8					
					9		5	26	94	PP=1.75
							5	30	91	
					10					
					11					
					12					
					13					
					14		5	31	90	
				15			34	84		
				16						
SILTY CLAY, moist, trace fine grained sand  @19.5': Finer than #200 = 99% Free Swell = 20% * Drilled with a B56 Truck Mounted Rig PP = Pocket Penetrometer	Dark Yellowish Brown to Olive Brown	Stiff	CL	17						
				18						
				19					18	88
				20					27	94
				20					10	32

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL

 <b>CLEARY CONSULTANTS, INC.</b> <i>Geotechnical Engineers and Geologists</i>		<b>LOG OF EXPLORATORY BORING NO. 4</b> NEW CLASSROOM AND CONCESSION BUILDINGS Santa Teresa High School San Jose, California		
		APPROVED BY	SCALE	PROJECT NO.
GF	---	978.17H	December 2015	15

EQUIPMENT	8" Diameter Hollow Stem Auger*	ELEVATION	---	LOGGED BY	DL
DEPTH TO GROUNDWATER	37.0' ±	DEPTH TO BEDROCK	Not Enc.	DATE DRILLED	10/26/2015

DESCRIPTION AND CLASSIFICATION				DEPTH (feet)	SAMPLER	PENETRATION RESISTANCE (BLOWS/FT)	WATER CONTENT (%)	DRY DENSITY (PCF)	SHEAR STRENGTH (KSF)
DESCRIPTION AND REMARKS	COLOR	CONSIST.	SOIL TYPE						
SILTY CLAY, moist, continued ....           @29.5': Finer than #200 = 97% Free Swell = 40%	Dark Yellowish Brown to Olive Brown           ----- Dark Gray	Stiff	CL	21		10	26	96	
				22					
				23					
				24					
				25					
				26					
				27					
				28					
				29					
				30					
				31					
				GRAVELLY SILTY SAND, moist, fine grained sand, subangular to subrounded gravel up to 3/4" diameter, iron staining           @34.5': Finer than #4 = 59% Finer than #200 = 4%					
33									
34									
35									
36									
37									
38									
39									
40									
40									
* Drilled with a B56 Truck Mounted Rig Water level as encountered during drilling Water level as measured after drilling PP = Pocket Penetrometer				39					
				40					

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL

<b>CLEARY CONSULTANTS, INC.</b> Geotechnical Engineers and Geologists	<b>LOG OF EXPLORATORY BORING NO. 4</b> NEW CLASSROOM AND CONCESSION BUILDINGS Santa Teresa High School San Jose, California			
	APPROVED BY	SCALE	PROJECT NO.	DATE


GF	---	978.17H	December 2015	16
----	-----	---------	---------------	----



EQUIPMENT	8" Diameter Hollow Stem Auger*	ELEVATION	---	LOGGED BY	DL
DEPTH TO GROUNDWATER	37.0' ±	DEPTH TO BEDROCK	Not Enc.	DATE DRILLED	10/26/2015

DESCRIPTION AND CLASSIFICATION				DEPTH (feet)	SAMPLER	PENETRATION RESISTANCE (BLOWS/FT)	WATER CONTENT (%)	DRY DENSITY (PCF)	SHEAR STRENGTH (KSF)
DESCRIPTION AND REMARKS	COLOR	CONSIST.	SOIL TYPE						
GRAVELLY SILTY SAND, moist, continued ....	Dark Grayish Brown	Dense	SP- SM	41					
SANDY CLAY, very moist, fine grained sand	Olive Brown	Very Stiff	CL	42					
				43					
@44.0': Finer than #4 = 100% Finer than #200 = 62% Free Swell = 5%				44		23	25	104	
				45		28	28	99	
Bottom of Boring = 45.0'				46					
				47					
				48					
				49					
				50					
				51					
				52					
				53					
				54					
				55					
				56					
				57					
				58					
				59					
				60					

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL


 <b>CLEARY CONSULTANTS, INC.</b> <i>Geotechnical Engineers and Geologists</i>		<b>LOG OF EXPLORATORY BORING NO. 4</b> NEW CLASSROOM AND CONCESSION BUILDINGS Santa Teresa High School San Jose, California			
		APPROVED BY	SCALE	PROJECT NO.	DATE
GF		---	978.17H	December 2015	17

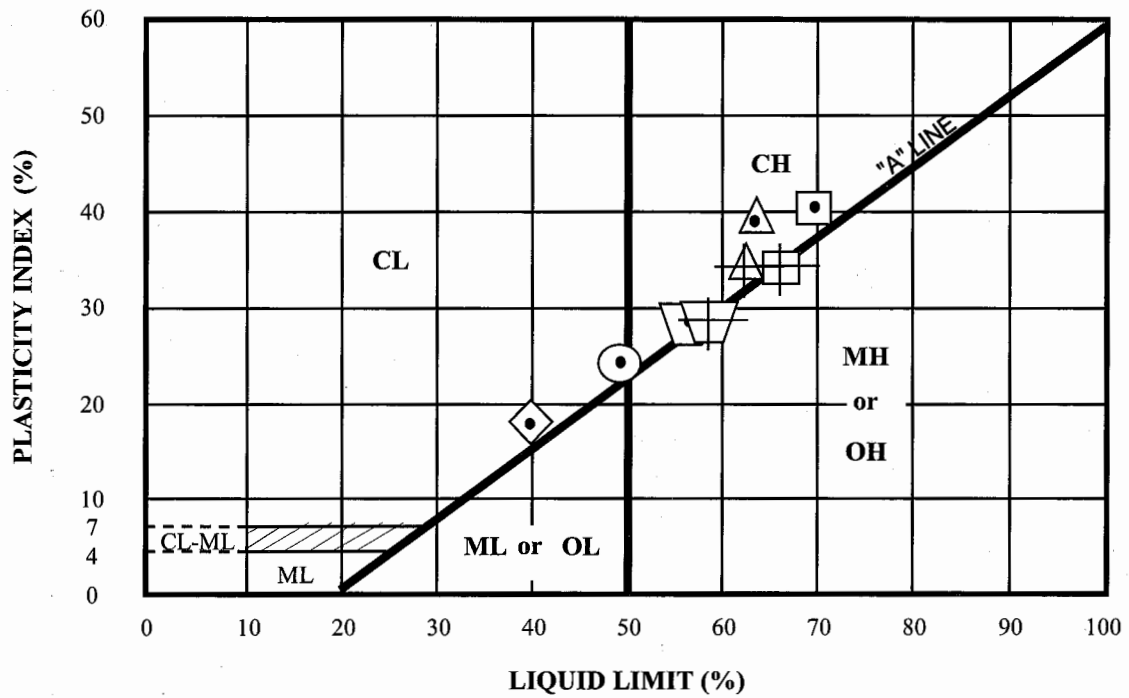
EQUIPMENT	8" Diameter Hollow Stem Auger*	ELEVATION	---	LOGGED BY	DL
DEPTH TO GROUNDWATER	Not Enc.	DEPTH TO BEDROCK	Not Enc.	DATE DRILLED	10/26/2015

DESCRIPTION AND CLASSIFICATION						DEPTH (feet)	SAMPLER	PENETRATION RESISTANCE (BLOWS/FT)	WATER CONTENT (%)	DRY DENSITY (PCF)	SHEAR STRENGTH (KSF)
DESCRIPTION AND REMARKS	COLOR	CONSIST.	SOIL TYPE								
3" AC Over 3" AB SANDY TO SILTY CLAY, moist, subangular to subrounded gravels up 1/4" diameter @1.0': Liquid Limit = 58% Plasticity Index = 29% Finer than #4 = 89% Finer than #200 = 76% Free Swell = 50%	Dark Grayish Brown	Stiff	CH	1							
			CL	2		9	31	82	PP=3.5		
		Stiff		3		14	32	82			
SILTY CLAY, moist, iron staining	Dark Gray			4							
				5		11	35	80	PP=2.5		
				6		9	29	90			
				7							
	Yellowish Brown to Olive Brown	Firm		8							
				9		5	28	100	PP=1.25		
				10			28	93			
				11							
	Yellowish Brown to Grayish Brown	Stiff		12							
				13							
				14		8	30	91			
				15			33	88			
				16							
	Dark Grayish Brown			17							
				18							
				19							
				20		10	28	92			
							27	84			

\* Drilled with a B56 Truck Mounted Rig  
PP = Pocket Penetrometer  
Bottom of Boring = 20.0'

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL

 <b>CLEARY CONSULTANTS, INC.</b> <i>Geotechnical Engineers and Geologists</i>		<b>LOG OF EXPLORATORY BORING NO. 5</b> NEW CLASSROOM AND CONCESSION BUILDINGS Santa Teresa High School San Jose, California		
		<b>APPROVED BY</b>	<b>SCALE</b>	<b>PROJECT NO.</b>
GF	---	978.17H	December 2015	18



KEY SYMBOL	BORING NO.	SAMPLE DEPTH (feet)	NATURAL WATER CONTENT %	LIQUID LIMIT %	PLASTICITY INDEX %	PASSING NO. 200 SIEVE %	LIQUIDITY INDEX	UNIFIED SOIL CLASSIFICATION SYMBOL
	1	1.5	21	64	38	55	-0.1	CH
	1	3.0	29	69	40	98	0.0	CH
	1	19.5	28	40	18	72	0.3	CL
	2	1.5	31	58	27	97	0.0	CH
	2	9.5	31	49	24	99	0.3	CL
	3	1.5	33	63	34	97	0.1	CH
	4	1.5	41	66	34	92	0.3	CH
	5	1.0	31	58	29	76	0.1	CH

**CC**  
**CLEARY CONSULTANTS, INC.**  
*Geotechnical Engineers and Geologists*

**PLASTICITY CHART**  
 NEW CLASSROOM AND CONCESSION BUILDING  
 Santa Teresa High School  
 San Jose, California

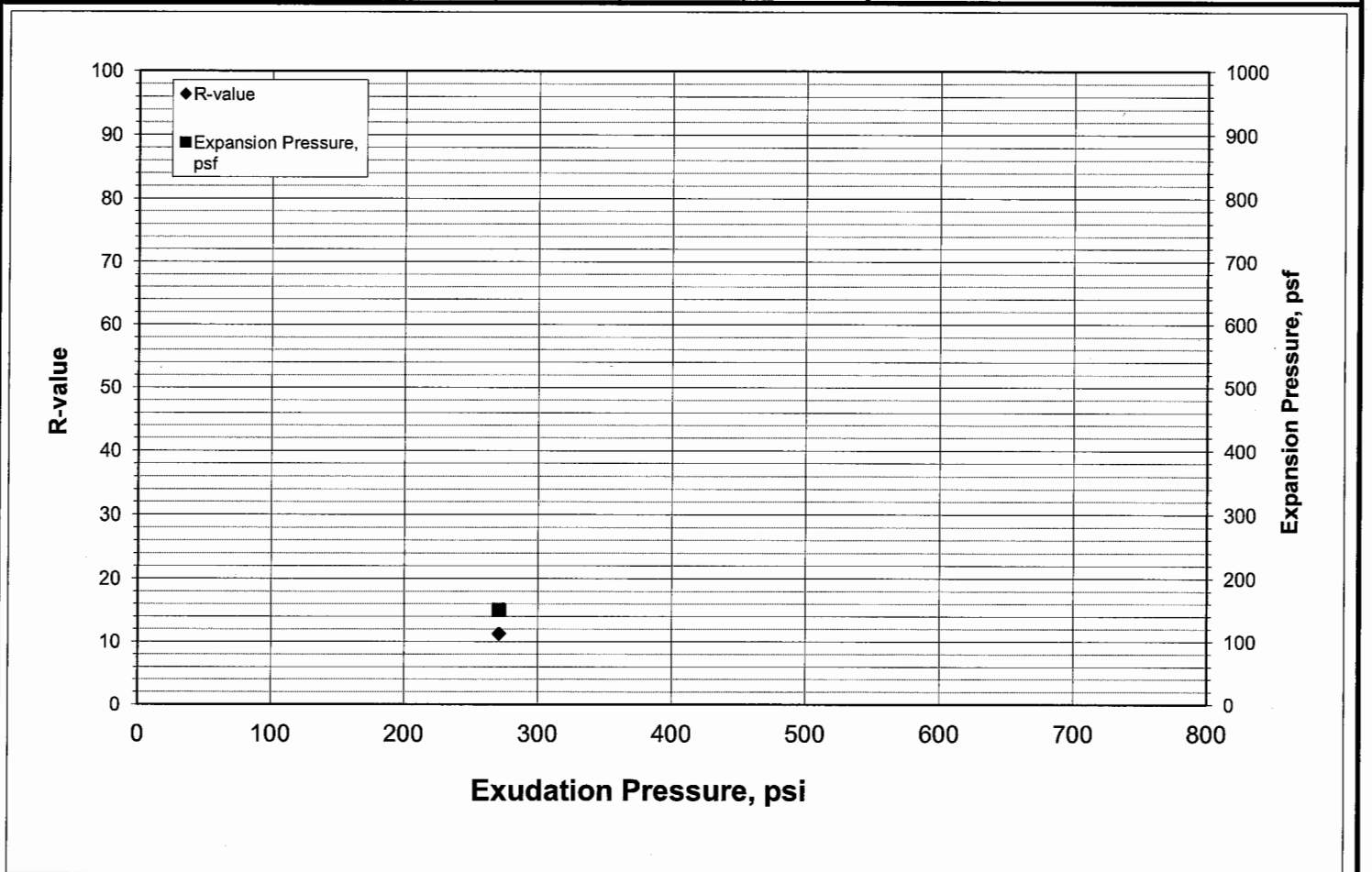
<b>PROJECT NO.</b>	<b>DATE</b>	<b>DRAWING NO.</b>
978.17H	December 2015	19



# R-value Test Report (Caltrans 301)

Job No.:	018-829	Date:	11/13/15	Initial Moisture,	15.3%
Client:	Cleary Consultants	Tested	MD	R-value by Stabilometer	<5
Project:	New Classroom Building Poenix HS - 978.17H	Reduced	RU	Expansion Pressure	psf
Sample	EB 1,3 @ 0.5-5.0'	Checked	DC		
Soil Type: Very Dark Grayish Brown CLAY w/ Sand					

Specimen Number	A	B	C	D	Remarks:
Exudation Pressure, psi	271				Soil extruded from the mold giving a false exudation pressure. Per Caltrans, the R-Value test was terminated and an R-Value of less then 5 was reported.
Prepared Weight, grams	1200				
Final Water Added, grams/cc	82				
Weight of Soil & Mold, grams	3039				
Weight of Mold, grams	2102				
Height After Compaction, in.	2.32				
Moisture Content, %	23.2				
Dry Density, pcf	99.3				
Expansion Pressure, psf	150.5				
Stabilometer @ 1000					
Stabilometer @ 2000	136				
Turns Displacement	3.23				
R-value	11				

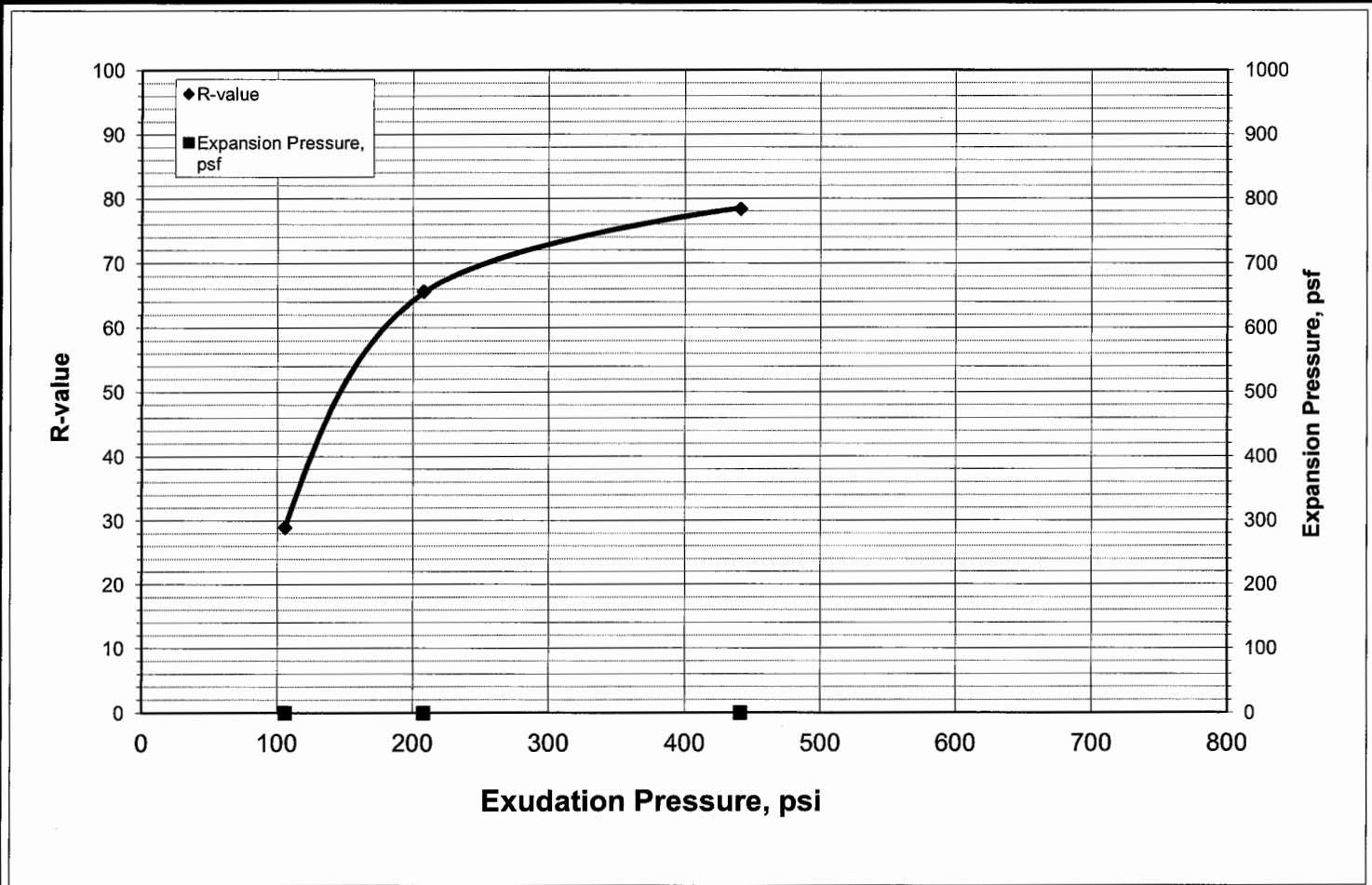




# R-value Test Report (Caltrans 301)

Job No.:	018-829	Date:	11/13/15	Initial Moisture,	25.6%
Client:	Cleary Consultants	Tested	MD	R-value by Stabilometer	73
Project:	New Classroom Building at Phoenix HS - 978.17H	Reduced	RU	Expansion Pressure	0 psf
Sample	EB 1,3 @ 0.5-5.0	Checked	DC		
Soil Type: Very Dark Grayish Brown CLAY w/ Sand (+2.5% Portland Cement + 2.5% HiCal Quicklime)					

Specimen Number	A	B	C	D	Remarks:
Exudation Pressure, psi	106	208	441		
Prepared Weight, grams	1200	1200	1200		
Final Water Added, grams/cc	553	0	-20		
Weight of Soil & Mold, grams	19	2971	3041		
Weight of Mold, grams	2077	2098	2077		
Height After Compaction, in.	2.5	2.3	2.46		
Moisture Content, %	83.5	25.6	23.5		
Dry Density, pcf	-135.9	91.5	96.1		
Expansion Pressure, psf	0.0	0.0	0.0		
Stabilometer @ 1000					
Stabilometer @ 2000	114	50	32		
Turns Displacement	2.48	2.4	2.68		
R-value	29	66	78		





### Corrosivity Tests Summary

CTL # 018-829  
 Client: Cleary Consultants

Date: \_\_\_\_\_ Tested By: PJ  
 Project: New Classroom Building at Phoenix HS

Checked: PJ  
 Proj. No: 978.17H

Remarks:

Sample Location or ID			Resistivity @ 15.5 °C (Ohm-cm)			Chloride mg/kg	Sulfate		pH	ORP (Redox)		Sulfide Qualitative by Lead Acetate Paper	Moisture At Test %	Soil Visual Description
			As Rec.	Min	Sat.		Dry Wt.	Dry Wt.		Dry Wt.	E <sub>H</sub> (mv)			
Boring	Sample, No.	Depth, ft.	ASTM G57	Cal 643	ASTM G57	ASTM D4327	ASTM D4327	ASTM D4327	ASTM G51	ASTM G200	Temp °C	ASTM D2216		
EB 1,3	-	0.5-5.0	-	-	1,820	7	217	0.0217	8.0	533	18	-	15.5	Olive Gray Sandy CLAY

**APPENDIX A**

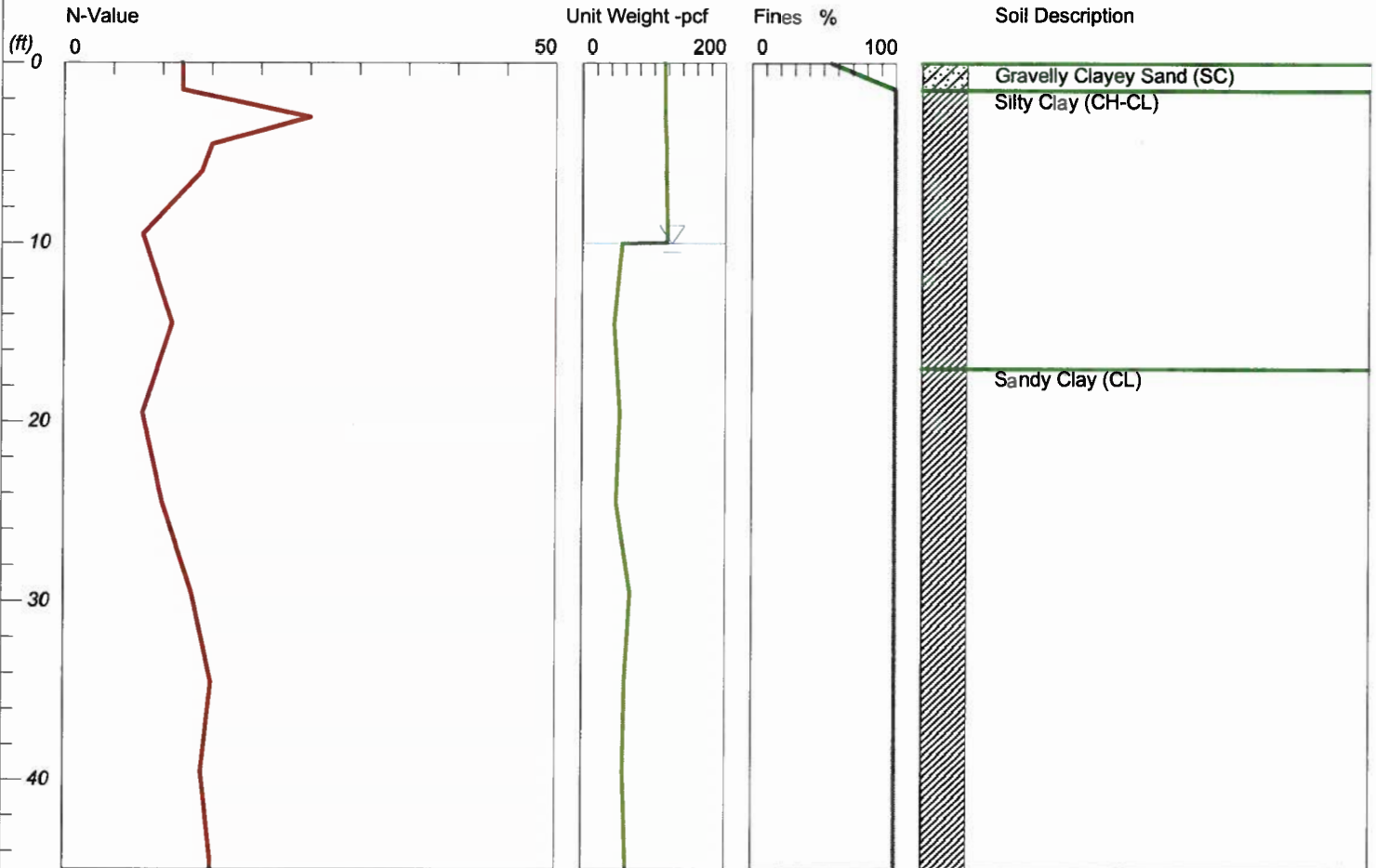
Santa Teresa High School New Classroom and Concession Building,  
Liquefaction and Dry Settlement Analyses and Calculations,  
EB-1 and EB-4, Drilled October 26, 2015

# LIQUEFACTION ANALYSIS

## Santa Teresa HS Classroom and Concession Buildings

Hole No.=EB-1 Water Depth=10 ft

Magnitude=8.5  
Acceleration=0.735g



LiquefyPro CivilTech Software USA www.civiltech.com

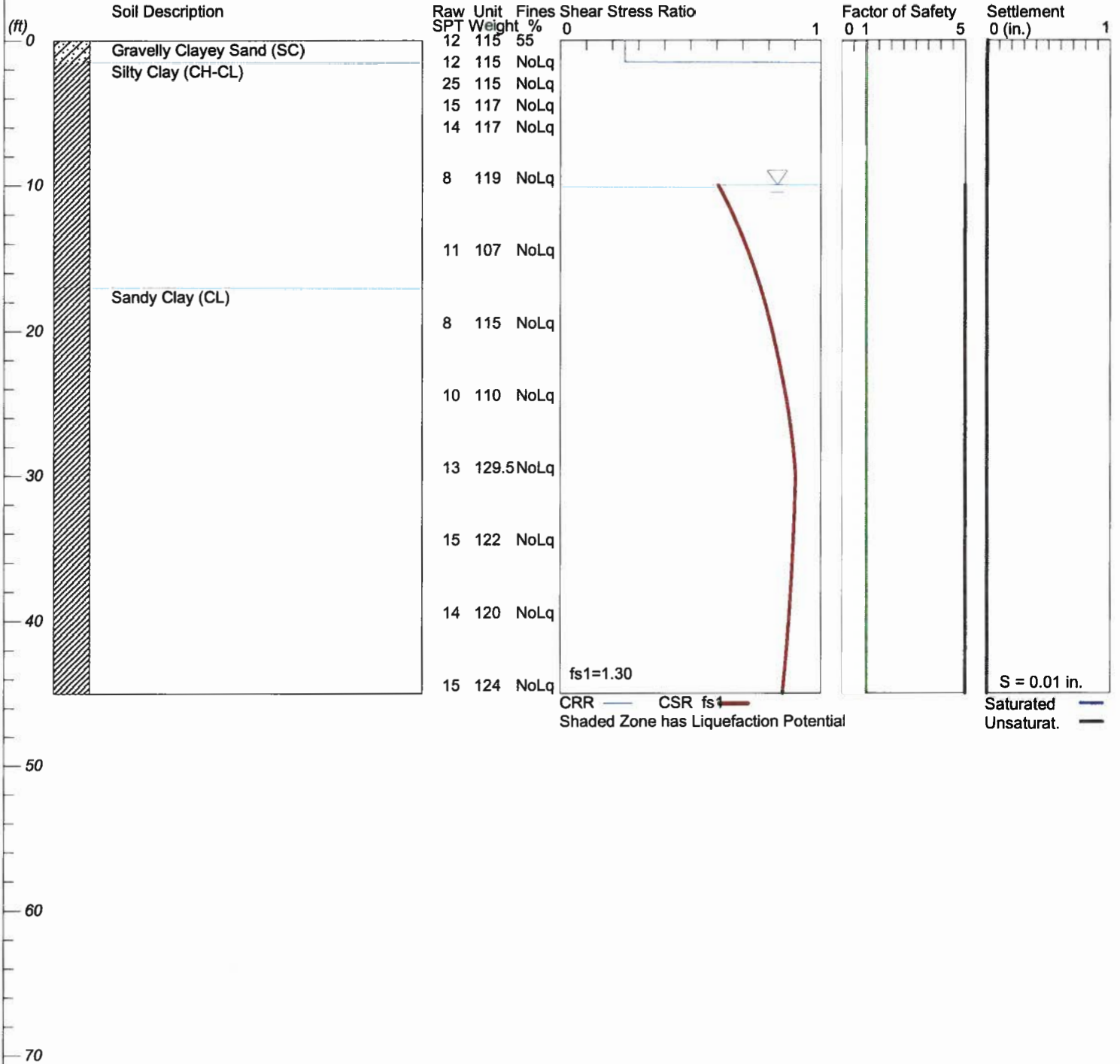


# LIQUEFACTION ANALYSIS

## Santa Teresa HS Classroom and Concession Buildings

Hole No.=EB-1 Water Depth=10 ft

Magnitude=8.5  
Acceleration=0.735g



LiquefyPro CivilTech Software USA www.civiltech.com

Santa Teresa HS Class Concession EB1.sum

\*\*\*\*\*  
\*\*\*\*\*

LIQUEFACTION ANALYSIS SUMMARY

Copyright by CivilTech Software  
www.civiltechsoftware.com

\*\*\*\*\*  
\*\*\*\*\*

Font: Courier New, Regular, Size 8 is recommended for this report.  
Licensed to , 12/4/2015 2:09:36 PM

Input File Name: C:\Grant Roughs\Liquefy Pro Data Files\Santa Teresa HS  
Class Concession EB1.liq

Title: Santa Teresa HS Classroom and Concession Buildings  
Subtitle:

Surface Elev.=  
Hole No.=EB-1  
Depth of Hole= 45.00 ft  
Water Table during Earthquake= 10.00 ft  
Water Table during In-Situ Testing= 10.00 ft  
Max. Acceleration= 0.74 g  
Earthquake Magnitude= 8.50

Input Data:

Surface Elev.=  
Hole No.=EB-1  
Depth of Hole=45.00 ft  
Water Table during Earthquake= 10.00 ft  
Water Table during In-Situ Testing= 10.00 ft  
Max. Acceleration=0.74 g  
Earthquake Magnitude=8.50  
No-Liquefiable Soils: CL, OL are Non-Liq. Soil

1. SPT or BPT Calculation.
2. Settlement Analysis Method: Tokimatsu, M-correction
3. Fines Correction for Liquefaction: Idriss/Seed
4. Fine Correction for Settlement: During Liquefaction\*
5. Settlement Calculation in: All zones\*
6. Hammer Energy Ratio,
7. Borehole Diameter,
8. Sampling Method,
9. User request factor of safety (apply to CSR) , User= 1.3  
Plot one CSR curve (fs1=User)
10. Use Curve Smoothing: Yes\*

Ce = 1.25  
Cb= 1  
Cs= 1

In-Situ Test Data:

Depth ft	SPT	gamma pcf	Fines %
0.00	12.00	115.00	55.00
1.50	12.00	115.00	NoLiq
3.00	25.00	115.00	NoLiq
4.50	15.00	117.00	NoLiq
6.00	14.00	117.00	NoLiq
9.50	8.00	119.00	NoLiq
14.50	11.00	107.00	NoLiq
19.50	8.00	115.00	NoLiq
24.50	10.00	110.00	NoLiq

Santa Teresa HS Class Concession EB1.sum

29.50	13.00	129.50	NoLiq
34.50	15.00	122.00	NoLiq
39.50	14.00	120.00	NoLiq
44.50	15.00	124.00	NoLiq

Output Results:

Settlement of Saturated sands=0.00 in.  
 Settlement of Unsaturated Sands=0.01 in.  
 Total Settlement of Saturated and Unsaturated Sands=0.01 in.  
 Differential Settlement=0.003 to 0.004 in.

Depth ft	CRRm	CSRfs	F.S.	S_sat. in.	S_dry in.	S_all in.
0.00	0.25	0.62	5.00	0.00	0.01	0.01
0.05	0.25	0.62	5.00	0.00	0.01	0.01
0.10	0.25	0.62	5.00	0.00	0.01	0.01
0.15	0.25	0.62	5.00	0.00	0.01	0.01
0.20	0.25	0.62	5.00	0.00	0.01	0.01
0.25	0.25	0.62	5.00	0.00	0.01	0.01
0.30	0.25	0.62	5.00	0.00	0.01	0.01
0.35	0.25	0.62	5.00	0.00	0.01	0.01
0.40	0.25	0.62	5.00	0.00	0.01	0.01
0.45	0.25	0.62	5.00	0.00	0.00	0.00
0.50	0.25	0.62	5.00	0.00	0.00	0.00
0.55	0.25	0.62	5.00	0.00	0.00	0.00
0.60	0.25	0.62	5.00	0.00	0.00	0.00
0.65	0.25	0.62	5.00	0.00	0.00	0.00
0.70	0.25	0.62	5.00	0.00	0.00	0.00
0.75	0.25	0.62	5.00	0.00	0.00	0.00
0.80	0.25	0.62	5.00	0.00	0.00	0.00
0.85	0.25	0.62	5.00	0.00	0.00	0.00
0.90	0.25	0.62	5.00	0.00	0.00	0.00
0.95	0.25	0.62	5.00	0.00	0.00	0.00
1.00	0.25	0.62	5.00	0.00	0.00	0.00
1.05	0.25	0.62	5.00	0.00	0.00	0.00
1.10	0.25	0.62	5.00	0.00	0.00	0.00
1.15	0.25	0.62	5.00	0.00	0.00	0.00
1.20	0.25	0.62	5.00	0.00	0.00	0.00
1.25	0.25	0.62	5.00	0.00	0.00	0.00
1.30	0.25	0.62	5.00	0.00	0.00	0.00
1.35	0.25	0.62	5.00	0.00	0.00	0.00
1.40	0.25	0.62	5.00	0.00	0.00	0.00
1.45	0.25	0.62	5.00	0.00	0.00	0.00
1.50	0.25	0.62	5.00	0.00	0.00	0.00
1.55	2.00	0.62	5.00	0.00	0.00	0.00
1.60	2.00	0.62	5.00	0.00	0.00	0.00
1.65	2.00	0.62	5.00	0.00	0.00	0.00
1.70	2.00	0.62	5.00	0.00	0.00	0.00
1.75	2.00	0.62	5.00	0.00	0.00	0.00
1.80	2.00	0.62	5.00	0.00	0.00	0.00
1.85	2.00	0.62	5.00	0.00	0.00	0.00
1.90	2.00	0.62	5.00	0.00	0.00	0.00
1.95	2.00	0.62	5.00	0.00	0.00	0.00
2.00	2.00	0.62	5.00	0.00	0.00	0.00
2.05	2.00	0.62	5.00	0.00	0.00	0.00
2.10	2.00	0.62	5.00	0.00	0.00	0.00
2.15	2.00	0.62	5.00	0.00	0.00	0.00
2.20	2.00	0.62	5.00	0.00	0.00	0.00
2.25	2.00	0.62	5.00	0.00	0.00	0.00
2.30	2.00	0.62	5.00	0.00	0.00	0.00
2.35	2.00	0.62	5.00	0.00	0.00	0.00

Santa Teresa HS Class Concession EB1.sum

2.40	2.00	0.62	5.00	0.00	0.00	0.00
2.45	2.00	0.62	5.00	0.00	0.00	0.00
2.50	2.00	0.62	5.00	0.00	0.00	0.00
2.55	2.00	0.62	5.00	0.00	0.00	0.00
2.60	2.00	0.62	5.00	0.00	0.00	0.00
2.65	2.00	0.62	5.00	0.00	0.00	0.00
2.70	2.00	0.62	5.00	0.00	0.00	0.00
2.75	2.00	0.62	5.00	0.00	0.00	0.00
2.80	2.00	0.62	5.00	0.00	0.00	0.00
2.85	2.00	0.62	5.00	0.00	0.00	0.00
2.90	2.00	0.62	5.00	0.00	0.00	0.00
2.95	2.00	0.62	5.00	0.00	0.00	0.00
3.00	2.00	0.62	5.00	0.00	0.00	0.00
3.05	2.00	0.62	5.00	0.00	0.00	0.00
3.10	2.00	0.62	5.00	0.00	0.00	0.00
3.15	2.00	0.62	5.00	0.00	0.00	0.00
3.20	2.00	0.62	5.00	0.00	0.00	0.00
3.25	2.00	0.62	5.00	0.00	0.00	0.00
3.30	2.00	0.62	5.00	0.00	0.00	0.00
3.35	2.00	0.62	5.00	0.00	0.00	0.00
3.40	2.00	0.62	5.00	0.00	0.00	0.00
3.45	2.00	0.62	5.00	0.00	0.00	0.00
3.50	2.00	0.62	5.00	0.00	0.00	0.00
3.55	2.00	0.62	5.00	0.00	0.00	0.00
3.60	2.00	0.62	5.00	0.00	0.00	0.00
3.65	2.00	0.62	5.00	0.00	0.00	0.00
3.70	2.00	0.62	5.00	0.00	0.00	0.00
3.75	2.00	0.62	5.00	0.00	0.00	0.00
3.80	2.00	0.62	5.00	0.00	0.00	0.00
3.85	2.00	0.62	5.00	0.00	0.00	0.00
3.90	2.00	0.62	5.00	0.00	0.00	0.00
3.95	2.00	0.62	5.00	0.00	0.00	0.00
4.00	2.00	0.62	5.00	0.00	0.00	0.00
4.05	2.00	0.62	5.00	0.00	0.00	0.00
4.10	2.00	0.62	5.00	0.00	0.00	0.00
4.15	2.00	0.62	5.00	0.00	0.00	0.00
4.20	2.00	0.61	5.00	0.00	0.00	0.00
4.25	2.00	0.61	5.00	0.00	0.00	0.00
4.30	2.00	0.61	5.00	0.00	0.00	0.00
4.35	2.00	0.61	5.00	0.00	0.00	0.00
4.40	2.00	0.61	5.00	0.00	0.00	0.00
4.45	2.00	0.61	5.00	0.00	0.00	0.00
4.50	2.00	0.61	5.00	0.00	0.00	0.00
4.55	2.00	0.61	5.00	0.00	0.00	0.00
4.60	2.00	0.61	5.00	0.00	0.00	0.00
4.65	2.00	0.61	5.00	0.00	0.00	0.00
4.70	2.00	0.61	5.00	0.00	0.00	0.00
4.75	2.00	0.61	5.00	0.00	0.00	0.00
4.80	2.00	0.61	5.00	0.00	0.00	0.00
4.85	2.00	0.61	5.00	0.00	0.00	0.00
4.90	2.00	0.61	5.00	0.00	0.00	0.00
4.95	2.00	0.61	5.00	0.00	0.00	0.00
5.00	2.00	0.61	5.00	0.00	0.00	0.00
5.05	2.00	0.61	5.00	0.00	0.00	0.00
5.10	2.00	0.61	5.00	0.00	0.00	0.00
5.15	2.00	0.61	5.00	0.00	0.00	0.00
5.20	2.00	0.61	5.00	0.00	0.00	0.00
5.25	2.00	0.61	5.00	0.00	0.00	0.00
5.30	2.00	0.61	5.00	0.00	0.00	0.00
5.35	2.00	0.61	5.00	0.00	0.00	0.00
5.40	2.00	0.61	5.00	0.00	0.00	0.00
5.45	2.00	0.61	5.00	0.00	0.00	0.00
5.50	2.00	0.61	5.00	0.00	0.00	0.00

Santa Teresa HS Class Concession EB1.sum

5.55	2.00	0.61	5.00	0.00	0.00	0.00
5.60	2.00	0.61	5.00	0.00	0.00	0.00
5.65	2.00	0.61	5.00	0.00	0.00	0.00
5.70	2.00	0.61	5.00	0.00	0.00	0.00
5.75	2.00	0.61	5.00	0.00	0.00	0.00
5.80	2.00	0.61	5.00	0.00	0.00	0.00
5.85	2.00	0.61	5.00	0.00	0.00	0.00
5.90	2.00	0.61	5.00	0.00	0.00	0.00
5.95	2.00	0.61	5.00	0.00	0.00	0.00
6.00	2.00	0.61	5.00	0.00	0.00	0.00
6.05	2.00	0.61	5.00	0.00	0.00	0.00
6.10	2.00	0.61	5.00	0.00	0.00	0.00
6.15	2.00	0.61	5.00	0.00	0.00	0.00
6.20	2.00	0.61	5.00	0.00	0.00	0.00
6.25	2.00	0.61	5.00	0.00	0.00	0.00
6.30	2.00	0.61	5.00	0.00	0.00	0.00
6.35	2.00	0.61	5.00	0.00	0.00	0.00
6.40	2.00	0.61	5.00	0.00	0.00	0.00
6.45	2.00	0.61	5.00	0.00	0.00	0.00
6.50	2.00	0.61	5.00	0.00	0.00	0.00
6.55	2.00	0.61	5.00	0.00	0.00	0.00
6.60	2.00	0.61	5.00	0.00	0.00	0.00
6.65	2.00	0.61	5.00	0.00	0.00	0.00
6.70	2.00	0.61	5.00	0.00	0.00	0.00
6.75	2.00	0.61	5.00	0.00	0.00	0.00
6.80	2.00	0.61	5.00	0.00	0.00	0.00
6.85	2.00	0.61	5.00	0.00	0.00	0.00
6.90	2.00	0.61	5.00	0.00	0.00	0.00
6.95	2.00	0.61	5.00	0.00	0.00	0.00
7.00	2.00	0.61	5.00	0.00	0.00	0.00
7.05	2.00	0.61	5.00	0.00	0.00	0.00
7.10	2.00	0.61	5.00	0.00	0.00	0.00
7.15	2.00	0.61	5.00	0.00	0.00	0.00
7.20	2.00	0.61	5.00	0.00	0.00	0.00
7.25	2.00	0.61	5.00	0.00	0.00	0.00
7.30	2.00	0.61	5.00	0.00	0.00	0.00
7.35	2.00	0.61	5.00	0.00	0.00	0.00
7.40	2.00	0.61	5.00	0.00	0.00	0.00
7.45	2.00	0.61	5.00	0.00	0.00	0.00
7.50	2.00	0.61	5.00	0.00	0.00	0.00
7.55	2.00	0.61	5.00	0.00	0.00	0.00
7.60	2.00	0.61	5.00	0.00	0.00	0.00
7.65	2.00	0.61	5.00	0.00	0.00	0.00
7.70	2.00	0.61	5.00	0.00	0.00	0.00
7.75	2.00	0.61	5.00	0.00	0.00	0.00
7.80	2.00	0.61	5.00	0.00	0.00	0.00
7.85	2.00	0.61	5.00	0.00	0.00	0.00
7.90	2.00	0.61	5.00	0.00	0.00	0.00
7.95	2.00	0.61	5.00	0.00	0.00	0.00
8.00	2.00	0.61	5.00	0.00	0.00	0.00
8.05	2.00	0.61	5.00	0.00	0.00	0.00
8.10	2.00	0.61	5.00	0.00	0.00	0.00
8.15	2.00	0.61	5.00	0.00	0.00	0.00
8.20	2.00	0.61	5.00	0.00	0.00	0.00
8.25	2.00	0.61	5.00	0.00	0.00	0.00
8.30	2.00	0.61	5.00	0.00	0.00	0.00
8.35	2.00	0.61	5.00	0.00	0.00	0.00
8.40	2.00	0.61	5.00	0.00	0.00	0.00
8.45	2.00	0.61	5.00	0.00	0.00	0.00
8.50	2.00	0.61	5.00	0.00	0.00	0.00
8.55	2.00	0.61	5.00	0.00	0.00	0.00
8.60	2.00	0.61	5.00	0.00	0.00	0.00
8.65	2.00	0.61	5.00	0.00	0.00	0.00

Santa Teresa HS Class Concession EB1.sum

8.70	2.00	0.61	5.00	0.00	0.00	0.00
8.75	2.00	0.61	5.00	0.00	0.00	0.00
8.80	2.00	0.61	5.00	0.00	0.00	0.00
8.85	2.00	0.61	5.00	0.00	0.00	0.00
8.90	2.00	0.61	5.00	0.00	0.00	0.00
8.95	2.00	0.61	5.00	0.00	0.00	0.00
9.00	2.00	0.61	5.00	0.00	0.00	0.00
9.05	2.00	0.61	5.00	0.00	0.00	0.00
9.10	2.00	0.61	5.00	0.00	0.00	0.00
9.15	2.00	0.61	5.00	0.00	0.00	0.00
9.20	2.00	0.61	5.00	0.00	0.00	0.00
9.25	2.00	0.61	5.00	0.00	0.00	0.00
9.30	2.00	0.61	5.00	0.00	0.00	0.00
9.35	2.00	0.61	5.00	0.00	0.00	0.00
9.40	2.00	0.61	5.00	0.00	0.00	0.00
9.45	2.00	0.61	5.00	0.00	0.00	0.00
9.50	2.00	0.61	5.00	0.00	0.00	0.00
9.55	2.00	0.61	5.00	0.00	0.00	0.00
9.60	2.00	0.61	5.00	0.00	0.00	0.00
9.65	2.00	0.61	5.00	0.00	0.00	0.00
9.70	2.00	0.61	5.00	0.00	0.00	0.00
9.75	2.00	0.61	5.00	0.00	0.00	0.00
9.80	2.00	0.61	5.00	0.00	0.00	0.00
9.85	2.00	0.61	5.00	0.00	0.00	0.00
9.90	2.00	0.61	5.00	0.00	0.00	0.00
9.95	2.00	0.61	5.00	0.00	0.00	0.00
10.00	2.00	0.61	5.00	0.00	0.00	0.00
10.05	2.00	0.61	5.00	0.00	0.00	0.00
10.10	2.00	0.61	5.00	0.00	0.00	0.00
10.15	2.00	0.61	5.00	0.00	0.00	0.00
10.20	2.00	0.61	5.00	0.00	0.00	0.00
10.25	2.00	0.61	5.00	0.00	0.00	0.00
10.30	2.00	0.62	5.00	0.00	0.00	0.00
10.35	2.00	0.62	5.00	0.00	0.00	0.00
10.40	2.00	0.62	5.00	0.00	0.00	0.00
10.45	2.00	0.62	5.00	0.00	0.00	0.00
10.50	2.00	0.62	5.00	0.00	0.00	0.00
10.55	2.00	0.62	5.00	0.00	0.00	0.00
10.60	2.00	0.62	5.00	0.00	0.00	0.00
10.65	2.00	0.63	5.00	0.00	0.00	0.00
10.70	2.00	0.63	5.00	0.00	0.00	0.00
10.75	2.00	0.63	5.00	0.00	0.00	0.00
10.80	2.00	0.63	5.00	0.00	0.00	0.00
10.85	2.00	0.63	5.00	0.00	0.00	0.00
10.90	2.00	0.63	5.00	0.00	0.00	0.00
10.95	2.00	0.63	5.00	0.00	0.00	0.00
11.00	2.00	0.64	5.00	0.00	0.00	0.00
11.05	2.00	0.64	5.00	0.00	0.00	0.00
11.10	2.00	0.64	5.00	0.00	0.00	0.00
11.15	2.00	0.64	5.00	0.00	0.00	0.00
11.20	2.00	0.64	5.00	0.00	0.00	0.00
11.25	2.00	0.64	5.00	0.00	0.00	0.00
11.30	2.00	0.64	5.00	0.00	0.00	0.00
11.35	2.00	0.65	5.00	0.00	0.00	0.00
11.40	2.00	0.65	5.00	0.00	0.00	0.00
11.45	2.00	0.65	5.00	0.00	0.00	0.00
11.50	2.00	0.65	5.00	0.00	0.00	0.00
11.55	2.00	0.65	5.00	0.00	0.00	0.00
11.60	2.00	0.65	5.00	0.00	0.00	0.00
11.65	2.00	0.65	5.00	0.00	0.00	0.00
11.70	2.00	0.66	5.00	0.00	0.00	0.00
11.75	2.00	0.66	5.00	0.00	0.00	0.00
11.80	2.00	0.66	5.00	0.00	0.00	0.00

		Santa Teresa HS	Class	Concession	EB1.sum	
11.85	2.00	0.66	5.00	0.00	0.00	0.00
11.90	2.00	0.66	5.00	0.00	0.00	0.00
11.95	2.00	0.66	5.00	0.00	0.00	0.00
12.00	2.00	0.66	5.00	0.00	0.00	0.00
12.05	2.00	0.66	5.00	0.00	0.00	0.00
12.10	2.00	0.67	5.00	0.00	0.00	0.00
12.15	2.00	0.67	5.00	0.00	0.00	0.00
12.20	2.00	0.67	5.00	0.00	0.00	0.00
12.25	2.00	0.67	5.00	0.00	0.00	0.00
12.30	2.00	0.67	5.00	0.00	0.00	0.00
12.35	2.00	0.67	5.00	0.00	0.00	0.00
12.40	2.00	0.67	5.00	0.00	0.00	0.00
12.45	2.00	0.67	5.00	0.00	0.00	0.00
12.50	2.00	0.68	5.00	0.00	0.00	0.00
12.55	2.00	0.68	5.00	0.00	0.00	0.00
12.60	2.00	0.68	5.00	0.00	0.00	0.00
12.65	2.00	0.68	5.00	0.00	0.00	0.00
12.70	2.00	0.68	5.00	0.00	0.00	0.00
12.75	2.00	0.68	5.00	0.00	0.00	0.00
12.80	2.00	0.68	5.00	0.00	0.00	0.00
12.85	2.00	0.68	5.00	0.00	0.00	0.00
12.90	2.00	0.69	5.00	0.00	0.00	0.00
12.95	2.00	0.69	5.00	0.00	0.00	0.00
13.00	2.00	0.69	5.00	0.00	0.00	0.00
13.05	2.00	0.69	5.00	0.00	0.00	0.00
13.10	2.00	0.69	5.00	0.00	0.00	0.00
13.15	2.00	0.69	5.00	0.00	0.00	0.00
13.20	2.00	0.69	5.00	0.00	0.00	0.00
13.25	2.00	0.69	5.00	0.00	0.00	0.00
13.30	2.00	0.69	5.00	0.00	0.00	0.00
13.35	2.00	0.70	5.00	0.00	0.00	0.00
13.40	2.00	0.70	5.00	0.00	0.00	0.00
13.45	2.00	0.70	5.00	0.00	0.00	0.00
13.50	2.00	0.70	5.00	0.00	0.00	0.00
13.55	2.00	0.70	5.00	0.00	0.00	0.00
13.60	2.00	0.70	5.00	0.00	0.00	0.00
13.65	2.00	0.70	5.00	0.00	0.00	0.00
13.70	2.00	0.70	5.00	0.00	0.00	0.00
13.75	2.00	0.70	5.00	0.00	0.00	0.00
13.80	2.00	0.71	5.00	0.00	0.00	0.00
13.85	2.00	0.71	5.00	0.00	0.00	0.00
13.90	2.00	0.71	5.00	0.00	0.00	0.00
13.95	2.00	0.71	5.00	0.00	0.00	0.00
14.00	2.00	0.71	5.00	0.00	0.00	0.00
14.05	2.00	0.71	5.00	0.00	0.00	0.00
14.10	2.00	0.71	5.00	0.00	0.00	0.00
14.15	2.00	0.71	5.00	0.00	0.00	0.00
14.20	2.00	0.71	5.00	0.00	0.00	0.00
14.25	2.00	0.72	5.00	0.00	0.00	0.00
14.30	2.00	0.72	5.00	0.00	0.00	0.00
14.35	2.00	0.72	5.00	0.00	0.00	0.00
14.40	2.00	0.72	5.00	0.00	0.00	0.00
14.45	2.00	0.72	5.00	0.00	0.00	0.00
14.50	2.00	0.72	5.00	0.00	0.00	0.00
14.55	2.00	0.72	5.00	0.00	0.00	0.00
14.60	2.00	0.72	5.00	0.00	0.00	0.00
14.65	2.00	0.72	5.00	0.00	0.00	0.00
14.70	2.00	0.73	5.00	0.00	0.00	0.00
14.75	2.00	0.73	5.00	0.00	0.00	0.00
14.80	2.00	0.73	5.00	0.00	0.00	0.00
14.85	2.00	0.73	5.00	0.00	0.00	0.00
14.90	2.00	0.73	5.00	0.00	0.00	0.00
14.95	2.00	0.73	5.00	0.00	0.00	0.00

Santa Teresa HS Class Concession EB1.sum

15.00	2.00	0.73	5.00	0.00	0.00	0.00
15.05	2.00	0.73	5.00	0.00	0.00	0.00
15.10	2.00	0.73	5.00	0.00	0.00	0.00
15.15	2.00	0.73	5.00	0.00	0.00	0.00
15.20	2.00	0.74	5.00	0.00	0.00	0.00
15.25	2.00	0.74	5.00	0.00	0.00	0.00
15.30	2.00	0.74	5.00	0.00	0.00	0.00
15.35	2.00	0.74	5.00	0.00	0.00	0.00
15.40	2.00	0.74	5.00	0.00	0.00	0.00
15.45	2.00	0.74	5.00	0.00	0.00	0.00
15.50	2.00	0.74	5.00	0.00	0.00	0.00
15.55	2.00	0.74	5.00	0.00	0.00	0.00
15.60	2.00	0.74	5.00	0.00	0.00	0.00
15.65	2.00	0.74	5.00	0.00	0.00	0.00
15.70	2.00	0.75	5.00	0.00	0.00	0.00
15.75	2.00	0.75	5.00	0.00	0.00	0.00
15.80	2.00	0.75	5.00	0.00	0.00	0.00
15.85	2.00	0.75	5.00	0.00	0.00	0.00
15.90	2.00	0.75	5.00	0.00	0.00	0.00
15.95	2.00	0.75	5.00	0.00	0.00	0.00
16.00	2.00	0.75	5.00	0.00	0.00	0.00
16.05	2.00	0.75	5.00	0.00	0.00	0.00
16.10	2.00	0.75	5.00	0.00	0.00	0.00
16.15	2.00	0.75	5.00	0.00	0.00	0.00
16.20	2.00	0.75	5.00	0.00	0.00	0.00
16.25	2.00	0.76	5.00	0.00	0.00	0.00
16.30	2.00	0.76	5.00	0.00	0.00	0.00
16.35	2.00	0.76	5.00	0.00	0.00	0.00
16.40	2.00	0.76	5.00	0.00	0.00	0.00
16.45	2.00	0.76	5.00	0.00	0.00	0.00
16.50	2.00	0.76	5.00	0.00	0.00	0.00
16.55	2.00	0.76	5.00	0.00	0.00	0.00
16.60	2.00	0.76	5.00	0.00	0.00	0.00
16.65	2.00	0.76	5.00	0.00	0.00	0.00
16.70	2.00	0.76	5.00	0.00	0.00	0.00
16.75	2.00	0.76	5.00	0.00	0.00	0.00
16.80	2.00	0.77	5.00	0.00	0.00	0.00
16.85	2.00	0.77	5.00	0.00	0.00	0.00
16.90	2.00	0.77	5.00	0.00	0.00	0.00
16.95	2.00	0.77	5.00	0.00	0.00	0.00
17.00	2.00	0.77	5.00	0.00	0.00	0.00
17.05	2.00	0.77	5.00	0.00	0.00	0.00
17.10	2.00	0.77	5.00	0.00	0.00	0.00
17.15	2.00	0.77	5.00	0.00	0.00	0.00
17.20	2.00	0.77	5.00	0.00	0.00	0.00
17.25	2.00	0.77	5.00	0.00	0.00	0.00
17.30	2.00	0.77	5.00	0.00	0.00	0.00
17.35	2.00	0.78	5.00	0.00	0.00	0.00
17.40	2.00	0.78	5.00	0.00	0.00	0.00
17.45	2.00	0.78	5.00	0.00	0.00	0.00
17.50	2.00	0.78	5.00	0.00	0.00	0.00
17.55	2.00	0.78	5.00	0.00	0.00	0.00
17.60	2.00	0.78	5.00	0.00	0.00	0.00
17.65	2.00	0.78	5.00	0.00	0.00	0.00
17.70	2.00	0.78	5.00	0.00	0.00	0.00
17.75	2.00	0.78	5.00	0.00	0.00	0.00
17.80	2.00	0.78	5.00	0.00	0.00	0.00
17.85	2.00	0.78	5.00	0.00	0.00	0.00
17.90	2.00	0.78	5.00	0.00	0.00	0.00
17.95	2.00	0.78	5.00	0.00	0.00	0.00
18.00	2.00	0.79	5.00	0.00	0.00	0.00
18.05	2.00	0.79	5.00	0.00	0.00	0.00
18.10	2.00	0.79	5.00	0.00	0.00	0.00



Santa Teresa HS Class Concession EB1.sum

18.15	2.00	0.79	5.00	0.00	0.00	0.00
18.20	2.00	0.79	5.00	0.00	0.00	0.00
18.25	2.00	0.79	5.00	0.00	0.00	0.00
18.30	2.00	0.79	5.00	0.00	0.00	0.00
18.35	2.00	0.79	5.00	0.00	0.00	0.00
18.40	2.00	0.79	5.00	0.00	0.00	0.00
18.45	2.00	0.79	5.00	0.00	0.00	0.00
18.50	2.00	0.79	5.00	0.00	0.00	0.00
18.55	2.00	0.79	5.00	0.00	0.00	0.00
18.60	2.00	0.79	5.00	0.00	0.00	0.00
18.65	2.00	0.80	5.00	0.00	0.00	0.00
18.70	2.00	0.80	5.00	0.00	0.00	0.00
18.75	2.00	0.80	5.00	0.00	0.00	0.00
18.80	2.00	0.80	5.00	0.00	0.00	0.00
18.85	2.00	0.80	5.00	0.00	0.00	0.00
18.90	2.00	0.80	5.00	0.00	0.00	0.00
18.95	2.00	0.80	5.00	0.00	0.00	0.00
19.00	2.00	0.80	5.00	0.00	0.00	0.00
19.05	2.00	0.80	5.00	0.00	0.00	0.00
19.10	2.00	0.80	5.00	0.00	0.00	0.00
19.15	2.00	0.80	5.00	0.00	0.00	0.00
19.20	2.00	0.80	5.00	0.00	0.00	0.00
19.25	2.00	0.80	5.00	0.00	0.00	0.00
19.30	2.00	0.81	5.00	0.00	0.00	0.00
19.35	2.00	0.81	5.00	0.00	0.00	0.00
19.40	2.00	0.81	5.00	0.00	0.00	0.00
19.45	2.00	0.81	5.00	0.00	0.00	0.00
19.50	2.00	0.81	5.00	0.00	0.00	0.00
19.55	2.00	0.81	5.00	0.00	0.00	0.00
19.60	2.00	0.81	5.00	0.00	0.00	0.00
19.65	2.00	0.81	5.00	0.00	0.00	0.00
19.70	2.00	0.81	5.00	0.00	0.00	0.00
19.75	2.00	0.81	5.00	0.00	0.00	0.00
19.80	2.00	0.81	5.00	0.00	0.00	0.00
19.85	2.00	0.81	5.00	0.00	0.00	0.00
19.90	2.00	0.81	5.00	0.00	0.00	0.00
19.95	2.00	0.81	5.00	0.00	0.00	0.00
20.00	2.00	0.81	5.00	0.00	0.00	0.00
20.05	2.00	0.82	5.00	0.00	0.00	0.00
20.10	2.00	0.82	5.00	0.00	0.00	0.00
20.15	2.00	0.82	5.00	0.00	0.00	0.00
20.20	2.00	0.82	5.00	0.00	0.00	0.00
20.25	2.00	0.82	5.00	0.00	0.00	0.00
20.30	2.00	0.82	5.00	0.00	0.00	0.00
20.35	2.00	0.82	5.00	0.00	0.00	0.00
20.40	2.00	0.82	5.00	0.00	0.00	0.00
20.45	2.00	0.82	5.00	0.00	0.00	0.00
20.50	2.00	0.82	5.00	0.00	0.00	0.00
20.55	2.00	0.82	5.00	0.00	0.00	0.00
20.60	2.00	0.82	5.00	0.00	0.00	0.00
20.65	2.00	0.82	5.00	0.00	0.00	0.00
20.70	2.00	0.82	5.00	0.00	0.00	0.00
20.75	2.00	0.82	5.00	0.00	0.00	0.00
20.80	2.00	0.82	5.00	0.00	0.00	0.00
20.85	2.00	0.83	5.00	0.00	0.00	0.00
20.90	2.00	0.83	5.00	0.00	0.00	0.00
20.95	2.00	0.83	5.00	0.00	0.00	0.00
21.00	2.00	0.83	5.00	0.00	0.00	0.00
21.05	2.00	0.83	5.00	0.00	0.00	0.00
21.10	2.00	0.83	5.00	0.00	0.00	0.00
21.15	2.00	0.83	5.00	0.00	0.00	0.00
21.20	2.00	0.83	5.00	0.00	0.00	0.00
21.25	2.00	0.83	5.00	0.00	0.00	0.00

Santa Teresa HS Class Concession EB1.sum

21.30	2.00	0.83	5.00	0.00	0.00	0.00
21.35	2.00	0.83	5.00	0.00	0.00	0.00
21.40	2.00	0.83	5.00	0.00	0.00	0.00
21.45	2.00	0.83	5.00	0.00	0.00	0.00
21.50	2.00	0.83	5.00	0.00	0.00	0.00
21.55	2.00	0.83	5.00	0.00	0.00	0.00
21.60	2.00	0.83	5.00	0.00	0.00	0.00
21.65	2.00	0.84	5.00	0.00	0.00	0.00
21.70	2.00	0.84	5.00	0.00	0.00	0.00
21.75	2.00	0.84	5.00	0.00	0.00	0.00
21.80	2.00	0.84	5.00	0.00	0.00	0.00
21.85	2.00	0.84	5.00	0.00	0.00	0.00
21.90	2.00	0.84	5.00	0.00	0.00	0.00
21.95	2.00	0.84	5.00	0.00	0.00	0.00
22.00	2.00	0.84	5.00	0.00	0.00	0.00
22.05	2.00	0.84	5.00	0.00	0.00	0.00
22.10	2.00	0.84	5.00	0.00	0.00	0.00
22.15	2.00	0.84	5.00	0.00	0.00	0.00
22.20	2.00	0.84	5.00	0.00	0.00	0.00
22.25	2.00	0.84	5.00	0.00	0.00	0.00
22.30	2.00	0.84	5.00	0.00	0.00	0.00
22.35	2.00	0.84	5.00	0.00	0.00	0.00
22.40	2.00	0.84	5.00	0.00	0.00	0.00
22.45	2.00	0.84	5.00	0.00	0.00	0.00
22.50	2.00	0.85	5.00	0.00	0.00	0.00
22.55	2.00	0.85	5.00	0.00	0.00	0.00
22.60	2.00	0.85	5.00	0.00	0.00	0.00
22.65	2.00	0.85	5.00	0.00	0.00	0.00
22.70	2.00	0.85	5.00	0.00	0.00	0.00
22.75	2.00	0.85	5.00	0.00	0.00	0.00
22.80	2.00	0.85	5.00	0.00	0.00	0.00
22.85	2.00	0.85	5.00	0.00	0.00	0.00
22.90	2.00	0.85	5.00	0.00	0.00	0.00
22.95	2.00	0.85	5.00	0.00	0.00	0.00
23.00	2.00	0.85	5.00	0.00	0.00	0.00
23.05	2.00	0.85	5.00	0.00	0.00	0.00
23.10	2.00	0.85	5.00	0.00	0.00	0.00
23.15	2.00	0.85	5.00	0.00	0.00	0.00
23.20	2.00	0.85	5.00	0.00	0.00	0.00
23.25	2.00	0.85	5.00	0.00	0.00	0.00
23.30	2.00	0.85	5.00	0.00	0.00	0.00
23.35	2.00	0.85	5.00	0.00	0.00	0.00
23.40	2.00	0.86	5.00	0.00	0.00	0.00
23.45	2.00	0.86	5.00	0.00	0.00	0.00
23.50	2.00	0.86	5.00	0.00	0.00	0.00
23.55	2.00	0.86	5.00	0.00	0.00	0.00
23.60	2.00	0.86	5.00	0.00	0.00	0.00
23.65	2.00	0.86	5.00	0.00	0.00	0.00
23.70	2.00	0.86	5.00	0.00	0.00	0.00
23.75	2.00	0.86	5.00	0.00	0.00	0.00
23.80	2.00	0.86	5.00	0.00	0.00	0.00
23.85	2.00	0.86	5.00	0.00	0.00	0.00
23.90	2.00	0.86	5.00	0.00	0.00	0.00
23.95	2.00	0.86	5.00	0.00	0.00	0.00
24.00	2.00	0.86	5.00	0.00	0.00	0.00
24.05	2.00	0.86	5.00	0.00	0.00	0.00
24.10	2.00	0.86	5.00	0.00	0.00	0.00
24.15	2.00	0.86	5.00	0.00	0.00	0.00
24.20	2.00	0.86	5.00	0.00	0.00	0.00
24.25	2.00	0.86	5.00	0.00	0.00	0.00
24.30	2.00	0.86	5.00	0.00	0.00	0.00
24.35	2.00	0.87	5.00	0.00	0.00	0.00
24.40	2.00	0.87	5.00	0.00	0.00	0.00

Santa Teresa HS Class Concession EB1.sum

24.45	2.00	0.87	5.00	0.00	0.00	0.00
24.50	2.00	0.87	5.00	0.00	0.00	0.00
24.55	2.00	0.87	5.00	0.00	0.00	0.00
24.60	2.00	0.87	5.00	0.00	0.00	0.00
24.65	2.00	0.87	5.00	0.00	0.00	0.00
24.70	2.00	0.87	5.00	0.00	0.00	0.00
24.75	2.00	0.87	5.00	0.00	0.00	0.00
24.80	2.00	0.87	5.00	0.00	0.00	0.00
24.85	2.00	0.87	5.00	0.00	0.00	0.00
24.90	2.00	0.87	5.00	0.00	0.00	0.00
24.95	2.00	0.87	5.00	0.00	0.00	0.00
25.00	2.00	0.87	5.00	0.00	0.00	0.00
25.05	2.00	0.87	5.00	0.00	0.00	0.00
25.10	2.00	0.87	5.00	0.00	0.00	0.00
25.15	2.00	0.87	5.00	0.00	0.00	0.00
25.20	2.00	0.87	5.00	0.00	0.00	0.00
25.25	2.00	0.87	5.00	0.00	0.00	0.00
25.30	2.00	0.87	5.00	0.00	0.00	0.00
25.35	2.00	0.87	5.00	0.00	0.00	0.00
25.40	2.00	0.88	5.00	0.00	0.00	0.00
25.45	2.00	0.88	5.00	0.00	0.00	0.00
25.50	2.00	0.88	5.00	0.00	0.00	0.00
25.55	2.00	0.88	5.00	0.00	0.00	0.00
25.60	2.00	0.88	5.00	0.00	0.00	0.00
25.65	2.00	0.88	5.00	0.00	0.00	0.00
25.70	2.00	0.88	5.00	0.00	0.00	0.00
25.75	2.00	0.88	5.00	0.00	0.00	0.00
25.80	2.00	0.88	5.00	0.00	0.00	0.00
25.85	2.00	0.88	5.00	0.00	0.00	0.00
25.90	2.00	0.88	5.00	0.00	0.00	0.00
25.95	2.00	0.88	5.00	0.00	0.00	0.00
26.00	2.00	0.88	5.00	0.00	0.00	0.00
26.05	2.00	0.88	5.00	0.00	0.00	0.00
26.10	2.00	0.88	5.00	0.00	0.00	0.00
26.15	2.00	0.88	5.00	0.00	0.00	0.00
26.20	2.00	0.88	5.00	0.00	0.00	0.00
26.25	2.00	0.88	5.00	0.00	0.00	0.00
26.30	2.00	0.88	5.00	0.00	0.00	0.00
26.35	2.00	0.88	5.00	0.00	0.00	0.00
26.40	2.00	0.88	5.00	0.00	0.00	0.00
26.45	2.00	0.88	5.00	0.00	0.00	0.00
26.50	2.00	0.88	5.00	0.00	0.00	0.00
26.55	2.00	0.88	5.00	0.00	0.00	0.00
26.60	2.00	0.89	5.00	0.00	0.00	0.00
26.65	2.00	0.89	5.00	0.00	0.00	0.00
26.70	2.00	0.89	5.00	0.00	0.00	0.00
26.75	2.00	0.89	5.00	0.00	0.00	0.00
26.80	2.00	0.89	5.00	0.00	0.00	0.00
26.85	2.00	0.89	5.00	0.00	0.00	0.00
26.90	2.00	0.89	5.00	0.00	0.00	0.00
26.95	2.00	0.89	5.00	0.00	0.00	0.00
27.00	2.00	0.89	5.00	0.00	0.00	0.00
27.05	2.00	0.89	5.00	0.00	0.00	0.00
27.10	2.00	0.89	5.00	0.00	0.00	0.00
27.15	2.00	0.89	5.00	0.00	0.00	0.00
27.20	2.00	0.89	5.00	0.00	0.00	0.00
27.25	2.00	0.89	5.00	0.00	0.00	0.00
27.30	2.00	0.89	5.00	0.00	0.00	0.00
27.35	2.00	0.89	5.00	0.00	0.00	0.00
27.40	2.00	0.89	5.00	0.00	0.00	0.00
27.45	2.00	0.89	5.00	0.00	0.00	0.00
27.50	2.00	0.89	5.00	0.00	0.00	0.00
27.55	2.00	0.89	5.00	0.00	0.00	0.00

Santa Teresa HS Class Concession EB1.sum

27.60	2.00	0.89	5.00	0.00	0.00	0.00
27.65	2.00	0.89	5.00	0.00	0.00	0.00
27.70	2.00	0.89	5.00	0.00	0.00	0.00
27.75	2.00	0.89	5.00	0.00	0.00	0.00
27.80	2.00	0.89	5.00	0.00	0.00	0.00
27.85	2.00	0.89	5.00	0.00	0.00	0.00
27.90	2.00	0.89	5.00	0.00	0.00	0.00
27.95	2.00	0.89	5.00	0.00	0.00	0.00
28.00	2.00	0.89	5.00	0.00	0.00	0.00
28.05	2.00	0.89	5.00	0.00	0.00	0.00
28.10	2.00	0.90	5.00	0.00	0.00	0.00
28.15	2.00	0.90	5.00	0.00	0.00	0.00
28.20	2.00	0.90	5.00	0.00	0.00	0.00
28.25	2.00	0.90	5.00	0.00	0.00	0.00
28.30	2.00	0.90	5.00	0.00	0.00	0.00
28.35	2.00	0.90	5.00	0.00	0.00	0.00
28.40	2.00	0.90	5.00	0.00	0.00	0.00
28.45	2.00	0.90	5.00	0.00	0.00	0.00
28.50	2.00	0.90	5.00	0.00	0.00	0.00
28.55	2.00	0.90	5.00	0.00	0.00	0.00
28.60	2.00	0.90	5.00	0.00	0.00	0.00
28.65	2.00	0.90	5.00	0.00	0.00	0.00
28.70	2.00	0.90	5.00	0.00	0.00	0.00
28.75	2.00	0.90	5.00	0.00	0.00	0.00
28.80	2.00	0.90	5.00	0.00	0.00	0.00
28.85	2.00	0.90	5.00	0.00	0.00	0.00
28.90	2.00	0.90	5.00	0.00	0.00	0.00
28.95	2.00	0.90	5.00	0.00	0.00	0.00
29.00	2.00	0.90	5.00	0.00	0.00	0.00
29.05	2.00	0.90	5.00	0.00	0.00	0.00
29.10	2.00	0.90	5.00	0.00	0.00	0.00
29.15	2.00	0.90	5.00	0.00	0.00	0.00
29.20	2.00	0.90	5.00	0.00	0.00	0.00
29.25	2.00	0.90	5.00	0.00	0.00	0.00
29.30	2.00	0.90	5.00	0.00	0.00	0.00
29.35	2.00	0.90	5.00	0.00	0.00	0.00
29.40	2.00	0.90	5.00	0.00	0.00	0.00
29.45	2.00	0.90	5.00	0.00	0.00	0.00
29.50	2.00	0.90	5.00	0.00	0.00	0.00
29.55	2.00	0.90	5.00	0.00	0.00	0.00
29.60	2.00	0.90	5.00	0.00	0.00	0.00
29.65	2.00	0.90	5.00	0.00	0.00	0.00
29.70	2.00	0.90	5.00	0.00	0.00	0.00
29.75	2.00	0.90	5.00	0.00	0.00	0.00
29.80	2.00	0.90	5.00	0.00	0.00	0.00
29.85	2.00	0.90	5.00	0.00	0.00	0.00
29.90	2.00	0.90	5.00	0.00	0.00	0.00
29.95	2.00	0.90	5.00	0.00	0.00	0.00
30.00	2.00	0.90	5.00	0.00	0.00	0.00
30.05	2.00	0.90	5.00	0.00	0.00	0.00
30.10	2.00	0.90	5.00	0.00	0.00	0.00
30.15	2.00	0.90	5.00	0.00	0.00	0.00
30.20	2.00	0.90	5.00	0.00	0.00	0.00
30.25	2.00	0.90	5.00	0.00	0.00	0.00
30.30	2.00	0.90	5.00	0.00	0.00	0.00
30.35	2.00	0.90	5.00	0.00	0.00	0.00
30.40	2.00	0.90	5.00	0.00	0.00	0.00
30.45	2.00	0.90	5.00	0.00	0.00	0.00
30.50	2.00	0.90	5.00	0.00	0.00	0.00
30.55	2.00	0.90	5.00	0.00	0.00	0.00
30.60	2.00	0.90	5.00	0.00	0.00	0.00
30.65	2.00	0.90	5.00	0.00	0.00	0.00
30.70	2.00	0.90	5.00	0.00	0.00	0.00

Santa Teresa HS Class Concession EB1.sum

30.75	2.00	0.90	5.00	0.00	0.00	0.00
30.80	2.00	0.90	5.00	0.00	0.00	0.00
30.85	2.00	0.90	5.00	0.00	0.00	0.00
30.90	2.00	0.90	5.00	0.00	0.00	0.00
30.95	2.00	0.90	5.00	0.00	0.00	0.00
31.00	2.00	0.90	5.00	0.00	0.00	0.00
31.05	2.00	0.90	5.00	0.00	0.00	0.00
31.10	2.00	0.90	5.00	0.00	0.00	0.00
31.15	2.00	0.90	5.00	0.00	0.00	0.00
31.20	2.00	0.90	5.00	0.00	0.00	0.00
31.25	2.00	0.90	5.00	0.00	0.00	0.00
31.30	2.00	0.90	5.00	0.00	0.00	0.00
31.35	2.00	0.90	5.00	0.00	0.00	0.00
31.40	2.00	0.90	5.00	0.00	0.00	0.00
31.45	2.00	0.90	5.00	0.00	0.00	0.00
31.50	2.00	0.90	5.00	0.00	0.00	0.00
31.55	2.00	0.90	5.00	0.00	0.00	0.00
31.60	2.00	0.90	5.00	0.00	0.00	0.00
31.65	2.00	0.90	5.00	0.00	0.00	0.00
31.70	2.00	0.90	5.00	0.00	0.00	0.00
31.75	2.00	0.90	5.00	0.00	0.00	0.00
31.80	2.00	0.90	5.00	0.00	0.00	0.00
31.85	2.00	0.90	5.00	0.00	0.00	0.00
31.90	2.00	0.90	5.00	0.00	0.00	0.00
31.95	2.00	0.90	5.00	0.00	0.00	0.00
32.00	2.00	0.90	5.00	0.00	0.00	0.00
32.05	2.00	0.90	5.00	0.00	0.00	0.00
32.10	2.00	0.90	5.00	0.00	0.00	0.00
32.15	2.00	0.90	5.00	0.00	0.00	0.00
32.20	2.00	0.90	5.00	0.00	0.00	0.00
32.25	2.00	0.90	5.00	0.00	0.00	0.00
32.30	2.00	0.90	5.00	0.00	0.00	0.00
32.35	2.00	0.90	5.00	0.00	0.00	0.00
32.40	2.00	0.90	5.00	0.00	0.00	0.00
32.45	2.00	0.90	5.00	0.00	0.00	0.00
32.50	2.00	0.90	5.00	0.00	0.00	0.00
32.55	2.00	0.90	5.00	0.00	0.00	0.00
32.60	2.00	0.90	5.00	0.00	0.00	0.00
32.65	2.00	0.90	5.00	0.00	0.00	0.00
32.70	2.00	0.90	5.00	0.00	0.00	0.00
32.75	2.00	0.90	5.00	0.00	0.00	0.00
32.80	2.00	0.90	5.00	0.00	0.00	0.00
32.85	2.00	0.90	5.00	0.00	0.00	0.00
32.90	2.00	0.90	5.00	0.00	0.00	0.00
32.95	2.00	0.90	5.00	0.00	0.00	0.00
33.00	2.00	0.90	5.00	0.00	0.00	0.00
33.05	2.00	0.90	5.00	0.00	0.00	0.00
33.10	2.00	0.90	5.00	0.00	0.00	0.00
33.15	2.00	0.90	5.00	0.00	0.00	0.00
33.20	2.00	0.90	5.00	0.00	0.00	0.00
33.25	2.00	0.90	5.00	0.00	0.00	0.00
33.30	2.00	0.90	5.00	0.00	0.00	0.00
33.35	2.00	0.90	5.00	0.00	0.00	0.00
33.40	2.00	0.90	5.00	0.00	0.00	0.00
33.45	2.00	0.90	5.00	0.00	0.00	0.00
33.50	2.00	0.90	5.00	0.00	0.00	0.00
33.55	2.00	0.90	5.00	0.00	0.00	0.00
33.60	2.00	0.90	5.00	0.00	0.00	0.00
33.65	2.00	0.90	5.00	0.00	0.00	0.00
33.70	2.00	0.90	5.00	0.00	0.00	0.00
33.75	2.00	0.90	5.00	0.00	0.00	0.00
33.80	2.00	0.90	5.00	0.00	0.00	0.00
33.85	2.00	0.90	5.00	0.00	0.00	0.00

Santa Teresa HS Class Concession EB1.sum

33.90	2.00	0.90	5.00	0.00	0.00	0.00
33.95	2.00	0.90	5.00	0.00	0.00	0.00
34.00	2.00	0.90	5.00	0.00	0.00	0.00
34.05	2.00	0.90	5.00	0.00	0.00	0.00
34.10	2.00	0.90	5.00	0.00	0.00	0.00
34.15	2.00	0.90	5.00	0.00	0.00	0.00
34.20	2.00	0.90	5.00	0.00	0.00	0.00
34.25	2.00	0.90	5.00	0.00	0.00	0.00
34.30	2.00	0.90	5.00	0.00	0.00	0.00
34.35	2.00	0.90	5.00	0.00	0.00	0.00
34.40	2.00	0.90	5.00	0.00	0.00	0.00
34.45	2.00	0.90	5.00	0.00	0.00	0.00
34.50	2.00	0.90	5.00	0.00	0.00	0.00
34.55	2.00	0.90	5.00	0.00	0.00	0.00
34.60	2.00	0.90	5.00	0.00	0.00	0.00
34.65	2.00	0.90	5.00	0.00	0.00	0.00
34.70	2.00	0.90	5.00	0.00	0.00	0.00
34.75	2.00	0.89	5.00	0.00	0.00	0.00
34.80	2.00	0.89	5.00	0.00	0.00	0.00
34.85	2.00	0.89	5.00	0.00	0.00	0.00
34.90	2.00	0.89	5.00	0.00	0.00	0.00
34.95	2.00	0.89	5.00	0.00	0.00	0.00
35.00	2.00	0.89	5.00	0.00	0.00	0.00
35.05	2.00	0.89	5.00	0.00	0.00	0.00
35.10	2.00	0.89	5.00	0.00	0.00	0.00
35.15	2.00	0.89	5.00	0.00	0.00	0.00
35.20	2.00	0.89	5.00	0.00	0.00	0.00
35.25	2.00	0.89	5.00	0.00	0.00	0.00
35.30	2.00	0.89	5.00	0.00	0.00	0.00
35.35	2.00	0.89	5.00	0.00	0.00	0.00
35.40	2.00	0.89	5.00	0.00	0.00	0.00
35.45	2.00	0.89	5.00	0.00	0.00	0.00
35.50	2.00	0.89	5.00	0.00	0.00	0.00
35.55	2.00	0.89	5.00	0.00	0.00	0.00
35.60	2.00	0.89	5.00	0.00	0.00	0.00
35.65	2.00	0.89	5.00	0.00	0.00	0.00
35.70	2.00	0.89	5.00	0.00	0.00	0.00
35.75	2.00	0.89	5.00	0.00	0.00	0.00
35.80	2.00	0.89	5.00	0.00	0.00	0.00
35.85	2.00	0.89	5.00	0.00	0.00	0.00
35.90	2.00	0.89	5.00	0.00	0.00	0.00
35.95	2.00	0.89	5.00	0.00	0.00	0.00
36.00	2.00	0.89	5.00	0.00	0.00	0.00
36.05	2.00	0.89	5.00	0.00	0.00	0.00
36.10	2.00	0.89	5.00	0.00	0.00	0.00
36.15	2.00	0.89	5.00	0.00	0.00	0.00
36.20	2.00	0.89	5.00	0.00	0.00	0.00
36.25	2.00	0.89	5.00	0.00	0.00	0.00
36.30	2.00	0.89	5.00	0.00	0.00	0.00
36.35	2.00	0.89	5.00	0.00	0.00	0.00
36.40	2.00	0.89	5.00	0.00	0.00	0.00
36.45	2.00	0.89	5.00	0.00	0.00	0.00
36.50	2.00	0.89	5.00	0.00	0.00	0.00
36.55	2.00	0.89	5.00	0.00	0.00	0.00
36.60	2.00	0.89	5.00	0.00	0.00	0.00
36.65	2.00	0.89	5.00	0.00	0.00	0.00
36.70	2.00	0.89	5.00	0.00	0.00	0.00
36.75	2.00	0.89	5.00	0.00	0.00	0.00
36.80	2.00	0.89	5.00	0.00	0.00	0.00
36.85	2.00	0.89	5.00	0.00	0.00	0.00
36.90	2.00	0.89	5.00	0.00	0.00	0.00
36.95	2.00	0.89	5.00	0.00	0.00	0.00
37.00	2.00	0.89	5.00	0.00	0.00	0.00

Santa Teresa HS Class Concession EB1.sum						
37.05	2.00	0.89	5.00	0.00	0.00	0.00
37.10	2.00	0.89	5.00	0.00	0.00	0.00
37.15	2.00	0.89	5.00	0.00	0.00	0.00
37.20	2.00	0.89	5.00	0.00	0.00	0.00
37.25	2.00	0.89	5.00	0.00	0.00	0.00
37.30	2.00	0.89	5.00	0.00	0.00	0.00
37.35	2.00	0.89	5.00	0.00	0.00	0.00
37.40	2.00	0.89	5.00	0.00	0.00	0.00
37.45	2.00	0.89	5.00	0.00	0.00	0.00
37.50	2.00	0.89	5.00	0.00	0.00	0.00
37.55	2.00	0.89	5.00	0.00	0.00	0.00
37.60	2.00	0.89	5.00	0.00	0.00	0.00
37.65	2.00	0.89	5.00	0.00	0.00	0.00
37.70	2.00	0.89	5.00	0.00	0.00	0.00
37.75	2.00	0.89	5.00	0.00	0.00	0.00
37.80	2.00	0.89	5.00	0.00	0.00	0.00
37.85	2.00	0.89	5.00	0.00	0.00	0.00
37.90	2.00	0.89	5.00	0.00	0.00	0.00
37.95	2.00	0.89	5.00	0.00	0.00	0.00
38.00	2.00	0.89	5.00	0.00	0.00	0.00
38.05	2.00	0.89	5.00	0.00	0.00	0.00
38.10	2.00	0.88	5.00	0.00	0.00	0.00
38.15	2.00	0.88	5.00	0.00	0.00	0.00
38.20	2.00	0.88	5.00	0.00	0.00	0.00
38.25	2.00	0.88	5.00	0.00	0.00	0.00
38.30	2.00	0.88	5.00	0.00	0.00	0.00
38.35	2.00	0.88	5.00	0.00	0.00	0.00
38.40	2.00	0.88	5.00	0.00	0.00	0.00
38.45	2.00	0.88	5.00	0.00	0.00	0.00
38.50	2.00	0.88	5.00	0.00	0.00	0.00
38.55	2.00	0.88	5.00	0.00	0.00	0.00
38.60	2.00	0.88	5.00	0.00	0.00	0.00
38.65	2.00	0.88	5.00	0.00	0.00	0.00
38.70	2.00	0.88	5.00	0.00	0.00	0.00
38.75	2.00	0.88	5.00	0.00	0.00	0.00
38.80	2.00	0.88	5.00	0.00	0.00	0.00
38.85	2.00	0.88	5.00	0.00	0.00	0.00
38.90	2.00	0.88	5.00	0.00	0.00	0.00
38.95	2.00	0.88	5.00	0.00	0.00	0.00
39.00	2.00	0.88	5.00	0.00	0.00	0.00
39.05	2.00	0.88	5.00	0.00	0.00	0.00
39.10	2.00	0.88	5.00	0.00	0.00	0.00
39.15	2.00	0.88	5.00	0.00	0.00	0.00
39.20	2.00	0.88	5.00	0.00	0.00	0.00
39.25	2.00	0.88	5.00	0.00	0.00	0.00
39.30	2.00	0.88	5.00	0.00	0.00	0.00
39.35	2.00	0.88	5.00	0.00	0.00	0.00
39.40	2.00	0.88	5.00	0.00	0.00	0.00
39.45	2.00	0.88	5.00	0.00	0.00	0.00
39.50	2.00	0.88	5.00	0.00	0.00	0.00
39.55	2.00	0.88	5.00	0.00	0.00	0.00
39.60	2.00	0.88	5.00	0.00	0.00	0.00
39.65	2.00	0.88	5.00	0.00	0.00	0.00
39.70	2.00	0.88	5.00	0.00	0.00	0.00
39.75	2.00	0.88	5.00	0.00	0.00	0.00
39.80	2.00	0.88	5.00	0.00	0.00	0.00
39.85	2.00	0.88	5.00	0.00	0.00	0.00
39.90	2.00	0.88	5.00	0.00	0.00	0.00
39.95	2.00	0.88	5.00	0.00	0.00	0.00
40.00	2.00	0.88	5.00	0.00	0.00	0.00
40.05	2.00	0.88	5.00	0.00	0.00	0.00
40.10	2.00	0.88	5.00	0.00	0.00	0.00
40.15	2.00	0.88	5.00	0.00	0.00	0.00

Santa Teresa HS Class Concession EB1.sum

40.20	2.00	0.88	5.00	0.00	0.00	0.00
40.25	2.00	0.88	5.00	0.00	0.00	0.00
40.30	2.00	0.88	5.00	0.00	0.00	0.00
40.35	2.00	0.88	5.00	0.00	0.00	0.00
40.40	2.00	0.88	5.00	0.00	0.00	0.00
40.45	2.00	0.88	5.00	0.00	0.00	0.00
40.50	2.00	0.88	5.00	0.00	0.00	0.00
40.55	2.00	0.88	5.00	0.00	0.00	0.00
40.60	2.00	0.88	5.00	0.00	0.00	0.00
40.65	2.00	0.88	5.00	0.00	0.00	0.00
40.70	2.00	0.88	5.00	0.00	0.00	0.00
40.75	2.00	0.87	5.00	0.00	0.00	0.00
40.80	2.00	0.87	5.00	0.00	0.00	0.00
40.85	2.00	0.87	5.00	0.00	0.00	0.00
40.90	2.00	0.87	5.00	0.00	0.00	0.00
40.95	2.00	0.87	5.00	0.00	0.00	0.00
41.00	2.00	0.87	5.00	0.00	0.00	0.00
41.05	2.00	0.87	5.00	0.00	0.00	0.00
41.10	2.00	0.87	5.00	0.00	0.00	0.00
41.15	2.00	0.87	5.00	0.00	0.00	0.00
41.20	2.00	0.87	5.00	0.00	0.00	0.00
41.25	2.00	0.87	5.00	0.00	0.00	0.00
41.30	2.00	0.87	5.00	0.00	0.00	0.00
41.35	2.00	0.87	5.00	0.00	0.00	0.00
41.40	2.00	0.87	5.00	0.00	0.00	0.00
41.45	2.00	0.87	5.00	0.00	0.00	0.00
41.50	2.00	0.87	5.00	0.00	0.00	0.00
41.55	2.00	0.87	5.00	0.00	0.00	0.00
41.60	2.00	0.87	5.00	0.00	0.00	0.00
41.65	2.00	0.87	5.00	0.00	0.00	0.00
41.70	2.00	0.87	5.00	0.00	0.00	0.00
41.75	2.00	0.87	5.00	0.00	0.00	0.00
41.80	2.00	0.87	5.00	0.00	0.00	0.00
41.85	2.00	0.87	5.00	0.00	0.00	0.00
41.90	2.00	0.87	5.00	0.00	0.00	0.00
41.95	2.00	0.87	5.00	0.00	0.00	0.00
42.00	2.00	0.87	5.00	0.00	0.00	0.00
42.05	2.00	0.87	5.00	0.00	0.00	0.00
42.10	2.00	0.87	5.00	0.00	0.00	0.00
42.15	2.00	0.87	5.00	0.00	0.00	0.00
42.20	2.00	0.87	5.00	0.00	0.00	0.00
42.25	2.00	0.87	5.00	0.00	0.00	0.00
42.30	2.00	0.87	5.00	0.00	0.00	0.00
42.35	2.00	0.87	5.00	0.00	0.00	0.00
42.40	2.00	0.87	5.00	0.00	0.00	0.00
42.45	2.00	0.87	5.00	0.00	0.00	0.00
42.50	2.00	0.87	5.00	0.00	0.00	0.00
42.55	2.00	0.87	5.00	0.00	0.00	0.00
42.60	2.00	0.87	5.00	0.00	0.00	0.00
42.65	2.00	0.87	5.00	0.00	0.00	0.00
42.70	2.00	0.87	5.00	0.00	0.00	0.00
42.75	2.00	0.87	5.00	0.00	0.00	0.00
42.80	2.00	0.87	5.00	0.00	0.00	0.00
42.85	2.00	0.87	5.00	0.00	0.00	0.00
42.90	2.00	0.87	5.00	0.00	0.00	0.00
42.95	2.00	0.86	5.00	0.00	0.00	0.00
43.00	2.00	0.86	5.00	0.00	0.00	0.00
43.05	2.00	0.86	5.00	0.00	0.00	0.00
43.10	2.00	0.86	5.00	0.00	0.00	0.00
43.15	2.00	0.86	5.00	0.00	0.00	0.00
43.20	2.00	0.86	5.00	0.00	0.00	0.00
43.25	2.00	0.86	5.00	0.00	0.00	0.00
43.30	2.00	0.86	5.00	0.00	0.00	0.00



Santa Teresa HS Class Concession EB1.sum						
43.35	2.00	0.86	5.00	0.00	0.00	0.00
43.40	2.00	0.86	5.00	0.00	0.00	0.00
43.45	2.00	0.86	5.00	0.00	0.00	0.00
43.50	2.00	0.86	5.00	0.00	0.00	0.00
43.55	2.00	0.86	5.00	0.00	0.00	0.00
43.60	2.00	0.86	5.00	0.00	0.00	0.00
43.65	2.00	0.86	5.00	0.00	0.00	0.00
43.70	2.00	0.86	5.00	0.00	0.00	0.00
43.75	2.00	0.86	5.00	0.00	0.00	0.00
43.80	2.00	0.86	5.00	0.00	0.00	0.00
43.85	2.00	0.86	5.00	0.00	0.00	0.00
43.90	2.00	0.86	5.00	0.00	0.00	0.00
43.95	2.00	0.86	5.00	0.00	0.00	0.00
44.00	2.00	0.86	5.00	0.00	0.00	0.00
44.05	2.00	0.86	5.00	0.00	0.00	0.00
44.10	2.00	0.86	5.00	0.00	0.00	0.00
44.15	2.00	0.86	5.00	0.00	0.00	0.00
44.20	2.00	0.86	5.00	0.00	0.00	0.00
44.25	2.00	0.86	5.00	0.00	0.00	0.00
44.30	2.00	0.86	5.00	0.00	0.00	0.00
44.35	2.00	0.86	5.00	0.00	0.00	0.00
44.40	2.00	0.86	5.00	0.00	0.00	0.00
44.45	2.00	0.86	5.00	0.00	0.00	0.00
44.50	2.00	0.86	5.00	0.00	0.00	0.00
44.55	2.00	0.86	5.00	0.00	0.00	0.00
44.60	2.00	0.86	5.00	0.00	0.00	0.00
44.65	2.00	0.86	5.00	0.00	0.00	0.00
44.70	2.00	0.86	5.00	0.00	0.00	0.00
44.75	2.00	0.86	5.00	0.00	0.00	0.00
44.80	2.00	0.86	5.00	0.00	0.00	0.00
44.85	2.00	0.85	5.00	0.00	0.00	0.00
44.90	2.00	0.85	5.00	0.00	0.00	0.00
44.95	2.00	0.85	5.00	0.00	0.00	0.00
45.00	2.00	0.85	5.00	0.00	0.00	0.00

\* F.S.<1, Liquefaction Potential Zone  
(F.S. is limited to 5, CRR is limited to 2, CSR is limited to 2)

Units: Unit: qc, fs, Stress or Pressure = atm (1.0581tsf); Unit weight = pcf; Depth = ft; Settlement = in.

---

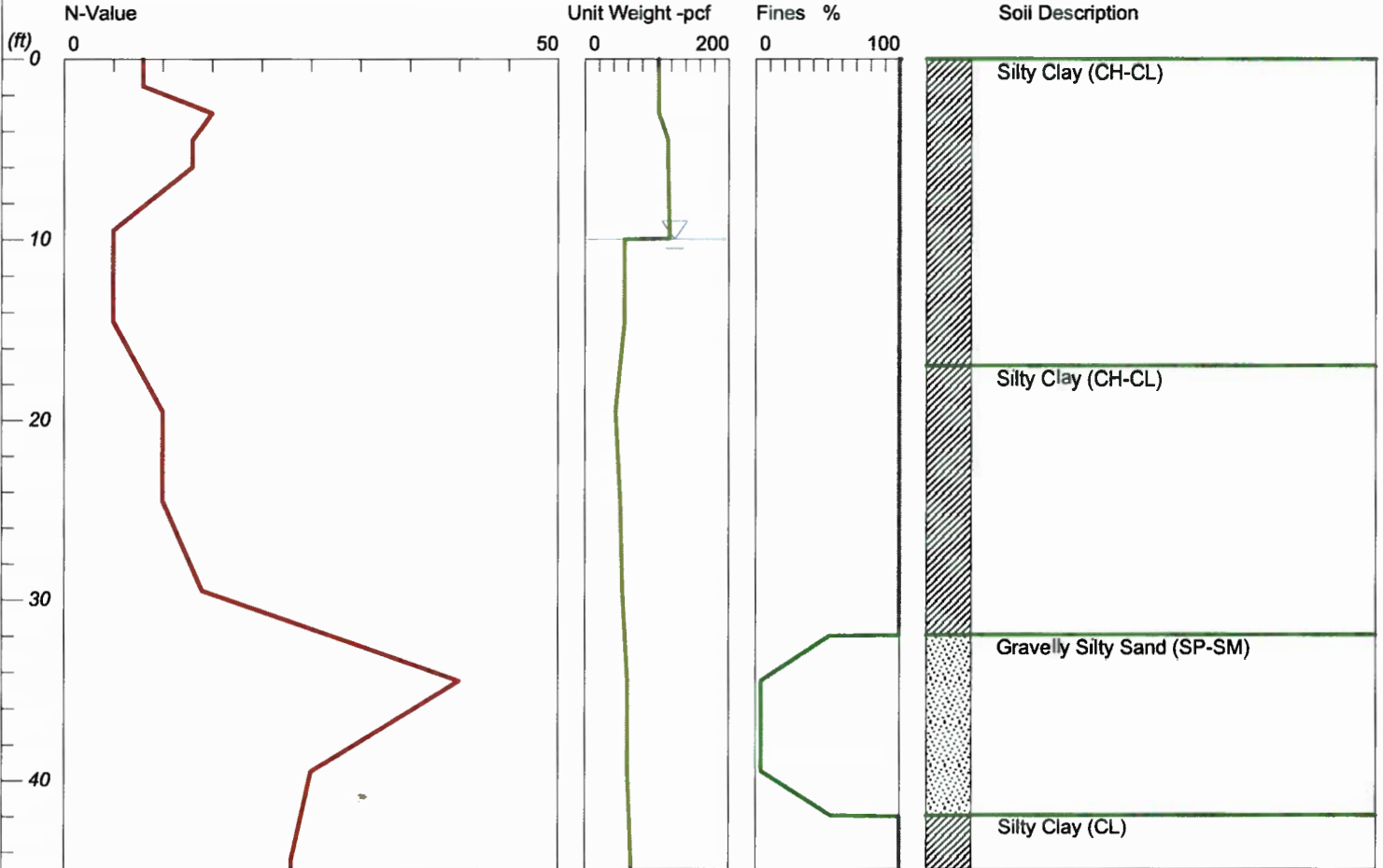
1 atm (atmosphere) = 1 tsf (ton/ft2)
CRRm                   Cyclic resistance ratio from soils
CSRsf                   Cyclic stress ratio induced by a given earthquake (with user
request factor of safety)
F.S.                    Factor of Safety against liquefaction, F.S.=CRRm/CSRsf
S_sat                   Settlement from saturated sands
S_dry                   Settlement from Unsaturated Sands
S_all                   Total Settlement from Saturated and Unsaturated Sands
NoLiq                   No-Liquefy Soils

# LIQUEFACTION ANALYSIS

## Santa Teresa HS Classroom and Concession Buildings

Hole No.=EB-4 Water Depth=10 ft

Magnitude=8.5  
Acceleration=0.735g



SPT or BPT test

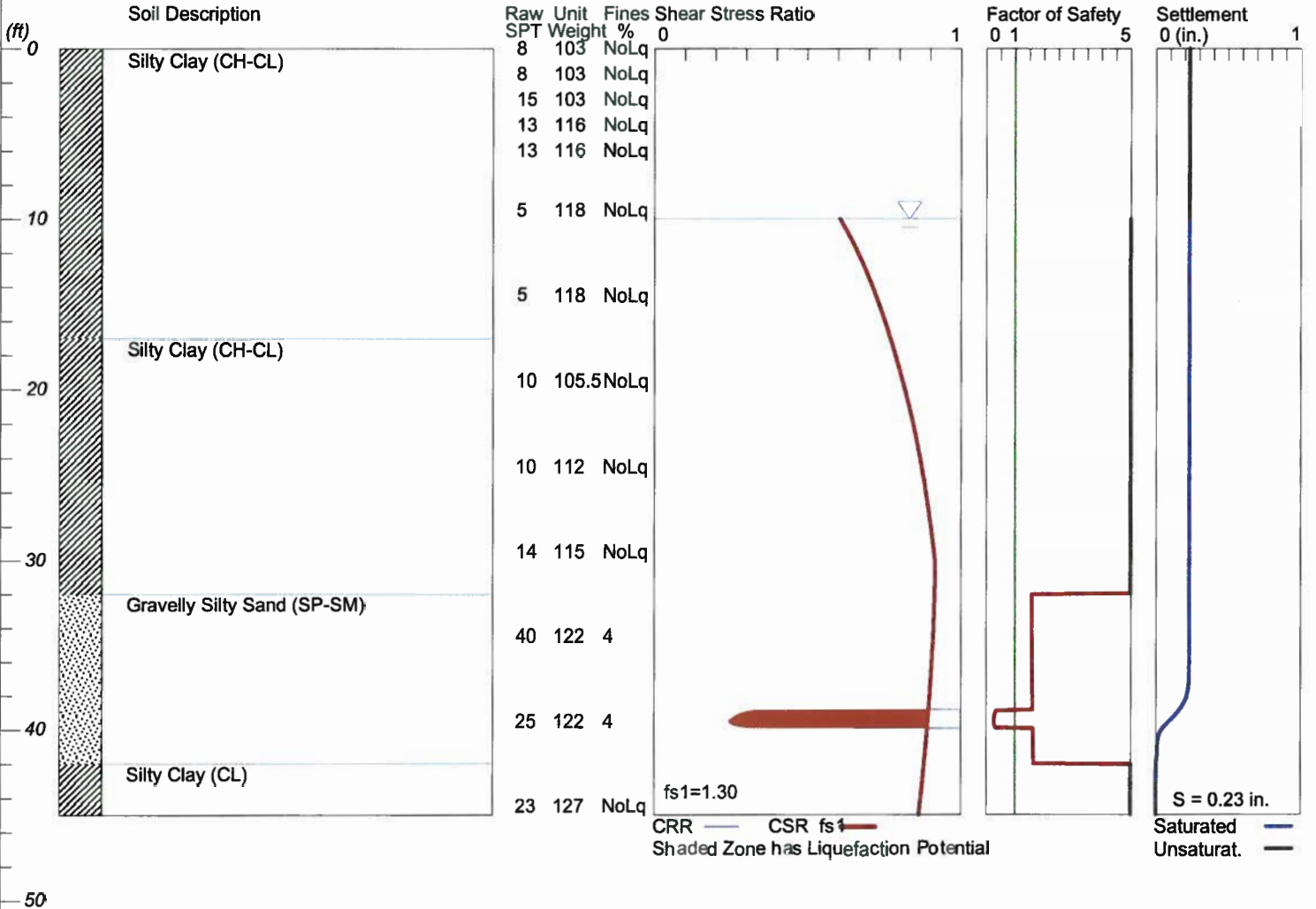
LiquefyPro CivilTech Software USA www.civiltech.com

# LIQUEFACTION ANALYSIS

## Santa Teresa HS Classroom and Concession Buildings

Hole No.=EB-4 Water Depth=10 ft

Magnitude=8.5  
Acceleration=0.735g



LiquefyPro CivilTech Software USA www.civiltech.com

Santa Teresa HS Class Concession EB4.sum

\*\*\*\*\*  
\*\*\*\*\*

LIQUEFACTION ANALYSIS SUMMARY

Copyright by CivilTech Software  
www.civiltechsoftware.com

\*\*\*\*\*  
\*\*\*\*\*

Font: Courier New, Regular, Size 8 is recommended for this report.  
Licensed to , 12/4/2015 2:16:39 PM

Input File Name: C:\Grant Roughs\Liquefy Pro Data Files\Santa Teresa HS  
Class Concession EB4.liq

Title: Santa Teresa HS Classroom and Concession Buildings  
Subtitle:

Surface Elev.=  
Hole No.=EB-4  
Depth of Hole= 45.00 ft  
Water Table during Earthquake= 10.00 ft  
Water Table during In-Situ Testing= 10.00 ft  
Max. Acceleration= 0.74 g  
Earthquake Magnitude= 8.50

Input Data:

Surface Elev.=  
Hole No.=EB-4  
Depth of Hole=45.00 ft  
Water Table during Earthquake= 10.00 ft  
Water Table during In-Situ Testing= 10.00 ft  
Max. Acceleration=0.74 g  
Earthquake Magnitude=8.50  
No-Liquefiable Soils: CL, OL are Non-Liq. Soil

1. SPT or BPT Calculation.
2. Settlement Analysis Method: Tokimatsu, M-correction
3. Fines Correction for Liquefaction: Idriss/Seed
4. Fine Correction for Settlement: During Liquefaction\*
5. Settlement Calculation in: All zones\*
6. Hammer Energy Ratio,
7. Borehole Diameter,
8. Sampling Method,
9. User request factor of safety (apply to CSR) , User= 1.3  
Plot one CSR curve (fs1=User)
10. Use Curve Smoothing: Yes\*

Ce = 1.25  
Cb= 1  
Cs= 1

In-Situ Test Data:

Depth ft	SPT	gamma pcf	Fines %
0.00	8.00	103.00	NoLiq
1.50	8.00	103.00	NoLiq
3.00	15.00	103.00	NoLiq
4.50	13.00	116.00	NoLiq
6.00	13.00	116.00	NoLiq
9.50	5.00	118.00	NoLiq
14.50	5.00	118.00	NoLiq
19.50	10.00	105.50	NoLiq
24.50	10.00	112.00	NoLiq

Santa Teresa HS Class Concession EB4.sum

29.50	14.00	115.00	NoLiq
34.50	40.00	122.00	4.00
39.50	25.00	122.00	4.00
44.50	23.00	127.00	NoLiq

Output Results:

Settlement of saturated sands=0.23 in.  
 Settlement of Unsaturated Sands=0.00 in.  
 Total Settlement of Saturated and Unsaturated Sands=0.23 in.  
 Differential Settlement=0.116 to 0.153 in.

Depth ft	CRRm	CSRfs	F.S.	S_sat. in.	S_dry in.	S_all in.
0.00	2.00	0.62	5.00	0.23	0.00	0.23
0.05	2.00	0.62	5.00	0.23	0.00	0.23
0.10	2.00	0.62	5.00	0.23	0.00	0.23
0.15	2.00	0.62	5.00	0.23	0.00	0.23
0.20	2.00	0.62	5.00	0.23	0.00	0.23
0.25	2.00	0.62	5.00	0.23	0.00	0.23
0.30	2.00	0.62	5.00	0.23	0.00	0.23
0.35	2.00	0.62	5.00	0.23	0.00	0.23
0.40	2.00	0.62	5.00	0.23	0.00	0.23
0.45	2.00	0.62	5.00	0.23	0.00	0.23
0.50	2.00	0.62	5.00	0.23	0.00	0.23
0.55	2.00	0.62	5.00	0.23	0.00	0.23
0.60	2.00	0.62	5.00	0.23	0.00	0.23
0.65	2.00	0.62	5.00	0.23	0.00	0.23
0.70	2.00	0.62	5.00	0.23	0.00	0.23
0.75	2.00	0.62	5.00	0.23	0.00	0.23
0.80	2.00	0.62	5.00	0.23	0.00	0.23
0.85	2.00	0.62	5.00	0.23	0.00	0.23
0.90	2.00	0.62	5.00	0.23	0.00	0.23
0.95	2.00	0.62	5.00	0.23	0.00	0.23
1.00	2.00	0.62	5.00	0.23	0.00	0.23
1.05	2.00	0.62	5.00	0.23	0.00	0.23
1.10	2.00	0.62	5.00	0.23	0.00	0.23
1.15	2.00	0.62	5.00	0.23	0.00	0.23
1.20	2.00	0.62	5.00	0.23	0.00	0.23
1.25	2.00	0.62	5.00	0.23	0.00	0.23
1.30	2.00	0.62	5.00	0.23	0.00	0.23
1.35	2.00	0.62	5.00	0.23	0.00	0.23
1.40	2.00	0.62	5.00	0.23	0.00	0.23
1.45	2.00	0.62	5.00	0.23	0.00	0.23
1.50	2.00	0.62	5.00	0.23	0.00	0.23
1.55	2.00	0.62	5.00	0.23	0.00	0.23
1.60	2.00	0.62	5.00	0.23	0.00	0.23
1.65	2.00	0.62	5.00	0.23	0.00	0.23
1.70	2.00	0.62	5.00	0.23	0.00	0.23
1.75	2.00	0.62	5.00	0.23	0.00	0.23
1.80	2.00	0.62	5.00	0.23	0.00	0.23
1.85	2.00	0.62	5.00	0.23	0.00	0.23
1.90	2.00	0.62	5.00	0.23	0.00	0.23
1.95	2.00	0.62	5.00	0.23	0.00	0.23
2.00	2.00	0.62	5.00	0.23	0.00	0.23
2.05	2.00	0.62	5.00	0.23	0.00	0.23
2.10	2.00	0.62	5.00	0.23	0.00	0.23
2.15	2.00	0.62	5.00	0.23	0.00	0.23
2.20	2.00	0.62	5.00	0.23	0.00	0.23
2.25	2.00	0.62	5.00	0.23	0.00	0.23
2.30	2.00	0.62	5.00	0.23	0.00	0.23
2.35	2.00	0.62	5.00	0.23	0.00	0.23

Santa Teresa HS Class Concession EB4.sum

2.40	2.00	0.62	5.00	0.23	0.00	0.23
2.45	2.00	0.62	5.00	0.23	0.00	0.23
2.50	2.00	0.62	5.00	0.23	0.00	0.23
2.55	2.00	0.62	5.00	0.23	0.00	0.23
2.60	2.00	0.62	5.00	0.23	0.00	0.23
2.65	2.00	0.62	5.00	0.23	0.00	0.23
2.70	2.00	0.62	5.00	0.23	0.00	0.23
2.75	2.00	0.62	5.00	0.23	0.00	0.23
2.80	2.00	0.62	5.00	0.23	0.00	0.23
2.85	2.00	0.62	5.00	0.23	0.00	0.23
2.90	2.00	0.62	5.00	0.23	0.00	0.23
2.95	2.00	0.62	5.00	0.23	0.00	0.23
3.00	2.00	0.62	5.00	0.23	0.00	0.23
3.05	2.00	0.62	5.00	0.23	0.00	0.23
3.10	2.00	0.62	5.00	0.23	0.00	0.23
3.15	2.00	0.62	5.00	0.23	0.00	0.23
3.20	2.00	0.62	5.00	0.23	0.00	0.23
3.25	2.00	0.62	5.00	0.23	0.00	0.23
3.30	2.00	0.62	5.00	0.23	0.00	0.23
3.35	2.00	0.62	5.00	0.23	0.00	0.23
3.40	2.00	0.62	5.00	0.23	0.00	0.23
3.45	2.00	0.62	5.00	0.23	0.00	0.23
3.50	2.00	0.62	5.00	0.23	0.00	0.23
3.55	2.00	0.62	5.00	0.23	0.00	0.23
3.60	2.00	0.62	5.00	0.23	0.00	0.23
3.65	2.00	0.62	5.00	0.23	0.00	0.23
3.70	2.00	0.62	5.00	0.23	0.00	0.23
3.75	2.00	0.62	5.00	0.23	0.00	0.23
3.80	2.00	0.62	5.00	0.23	0.00	0.23
3.85	2.00	0.62	5.00	0.23	0.00	0.23
3.90	2.00	0.62	5.00	0.23	0.00	0.23
3.95	2.00	0.62	5.00	0.23	0.00	0.23
4.00	2.00	0.62	5.00	0.23	0.00	0.23
4.05	2.00	0.62	5.00	0.23	0.00	0.23
4.10	2.00	0.62	5.00	0.23	0.00	0.23
4.15	2.00	0.62	5.00	0.23	0.00	0.23
4.20	2.00	0.61	5.00	0.23	0.00	0.23
4.25	2.00	0.61	5.00	0.23	0.00	0.23
4.30	2.00	0.61	5.00	0.23	0.00	0.23
4.35	2.00	0.61	5.00	0.23	0.00	0.23
4.40	2.00	0.61	5.00	0.23	0.00	0.23
4.45	2.00	0.61	5.00	0.23	0.00	0.23
4.50	2.00	0.61	5.00	0.23	0.00	0.23
4.55	2.00	0.61	5.00	0.23	0.00	0.23
4.60	2.00	0.61	5.00	0.23	0.00	0.23
4.65	2.00	0.61	5.00	0.23	0.00	0.23
4.70	2.00	0.61	5.00	0.23	0.00	0.23
4.75	2.00	0.61	5.00	0.23	0.00	0.23
4.80	2.00	0.61	5.00	0.23	0.00	0.23
4.85	2.00	0.61	5.00	0.23	0.00	0.23
4.90	2.00	0.61	5.00	0.23	0.00	0.23
4.95	2.00	0.61	5.00	0.23	0.00	0.23
5.00	2.00	0.61	5.00	0.23	0.00	0.23
5.05	2.00	0.61	5.00	0.23	0.00	0.23
5.10	2.00	0.61	5.00	0.23	0.00	0.23
5.15	2.00	0.61	5.00	0.23	0.00	0.23
5.20	2.00	0.61	5.00	0.23	0.00	0.23
5.25	2.00	0.61	5.00	0.23	0.00	0.23
5.30	2.00	0.61	5.00	0.23	0.00	0.23
5.35	2.00	0.61	5.00	0.23	0.00	0.23
5.40	2.00	0.61	5.00	0.23	0.00	0.23
5.45	2.00	0.61	5.00	0.23	0.00	0.23
5.50	2.00	0.61	5.00	0.23	0.00	0.23

Santa Teresa HS Class Concession EB4.sum

5.55	2.00	0.61	5.00	0.23	0.00	0.23
5.60	2.00	0.61	5.00	0.23	0.00	0.23
5.65	2.00	0.61	5.00	0.23	0.00	0.23
5.70	2.00	0.61	5.00	0.23	0.00	0.23
5.75	2.00	0.61	5.00	0.23	0.00	0.23
5.80	2.00	0.61	5.00	0.23	0.00	0.23
5.85	2.00	0.61	5.00	0.23	0.00	0.23
5.90	2.00	0.61	5.00	0.23	0.00	0.23
5.95	2.00	0.61	5.00	0.23	0.00	0.23
6.00	2.00	0.61	5.00	0.23	0.00	0.23
6.05	2.00	0.61	5.00	0.23	0.00	0.23
6.10	2.00	0.61	5.00	0.23	0.00	0.23
6.15	2.00	0.61	5.00	0.23	0.00	0.23
6.20	2.00	0.61	5.00	0.23	0.00	0.23
6.25	2.00	0.61	5.00	0.23	0.00	0.23
6.30	2.00	0.61	5.00	0.23	0.00	0.23
6.35	2.00	0.61	5.00	0.23	0.00	0.23
6.40	2.00	0.61	5.00	0.23	0.00	0.23
6.45	2.00	0.61	5.00	0.23	0.00	0.23
6.50	2.00	0.61	5.00	0.23	0.00	0.23
6.55	2.00	0.61	5.00	0.23	0.00	0.23
6.60	2.00	0.61	5.00	0.23	0.00	0.23
6.65	2.00	0.61	5.00	0.23	0.00	0.23
6.70	2.00	0.61	5.00	0.23	0.00	0.23
6.75	2.00	0.61	5.00	0.23	0.00	0.23
6.80	2.00	0.61	5.00	0.23	0.00	0.23
6.85	2.00	0.61	5.00	0.23	0.00	0.23
6.90	2.00	0.61	5.00	0.23	0.00	0.23
6.95	2.00	0.61	5.00	0.23	0.00	0.23
7.00	2.00	0.61	5.00	0.23	0.00	0.23
7.05	2.00	0.61	5.00	0.23	0.00	0.23
7.10	2.00	0.61	5.00	0.23	0.00	0.23
7.15	2.00	0.61	5.00	0.23	0.00	0.23
7.20	2.00	0.61	5.00	0.23	0.00	0.23
7.25	2.00	0.61	5.00	0.23	0.00	0.23
7.30	2.00	0.61	5.00	0.23	0.00	0.23
7.35	2.00	0.61	5.00	0.23	0.00	0.23
7.40	2.00	0.61	5.00	0.23	0.00	0.23
7.45	2.00	0.61	5.00	0.23	0.00	0.23
7.50	2.00	0.61	5.00	0.23	0.00	0.23
7.55	2.00	0.61	5.00	0.23	0.00	0.23
7.60	2.00	0.61	5.00	0.23	0.00	0.23
7.65	2.00	0.61	5.00	0.23	0.00	0.23
7.70	2.00	0.61	5.00	0.23	0.00	0.23
7.75	2.00	0.61	5.00	0.23	0.00	0.23
7.80	2.00	0.61	5.00	0.23	0.00	0.23
7.85	2.00	0.61	5.00	0.23	0.00	0.23
7.90	2.00	0.61	5.00	0.23	0.00	0.23
7.95	2.00	0.61	5.00	0.23	0.00	0.23
8.00	2.00	0.61	5.00	0.23	0.00	0.23
8.05	2.00	0.61	5.00	0.23	0.00	0.23
8.10	2.00	0.61	5.00	0.23	0.00	0.23
8.15	2.00	0.61	5.00	0.23	0.00	0.23
8.20	2.00	0.61	5.00	0.23	0.00	0.23
8.25	2.00	0.61	5.00	0.23	0.00	0.23
8.30	2.00	0.61	5.00	0.23	0.00	0.23
8.35	2.00	0.61	5.00	0.23	0.00	0.23
8.40	2.00	0.61	5.00	0.23	0.00	0.23
8.45	2.00	0.61	5.00	0.23	0.00	0.23
8.50	2.00	0.61	5.00	0.23	0.00	0.23
8.55	2.00	0.61	5.00	0.23	0.00	0.23
8.60	2.00	0.61	5.00	0.23	0.00	0.23
8.65	2.00	0.61	5.00	0.23	0.00	0.23

Santa Teresa HS Class Concession EB4.sum

8.70	2.00	0.61	5.00	0.23	0.00	0.23
8.75	2.00	0.61	5.00	0.23	0.00	0.23
8.80	2.00	0.61	5.00	0.23	0.00	0.23
8.85	2.00	0.61	5.00	0.23	0.00	0.23
8.90	2.00	0.61	5.00	0.23	0.00	0.23
8.95	2.00	0.61	5.00	0.23	0.00	0.23
9.00	2.00	0.61	5.00	0.23	0.00	0.23
9.05	2.00	0.61	5.00	0.23	0.00	0.23
9.10	2.00	0.61	5.00	0.23	0.00	0.23
9.15	2.00	0.61	5.00	0.23	0.00	0.23
9.20	2.00	0.61	5.00	0.23	0.00	0.23
9.25	2.00	0.61	5.00	0.23	0.00	0.23
9.30	2.00	0.61	5.00	0.23	0.00	0.23
9.35	2.00	0.61	5.00	0.23	0.00	0.23
9.40	2.00	0.61	5.00	0.23	0.00	0.23
9.45	2.00	0.61	5.00	0.23	0.00	0.23
9.50	2.00	0.61	5.00	0.23	0.00	0.23
9.55	2.00	0.61	5.00	0.23	0.00	0.23
9.60	2.00	0.61	5.00	0.23	0.00	0.23
9.65	2.00	0.61	5.00	0.23	0.00	0.23
9.70	2.00	0.61	5.00	0.23	0.00	0.23
9.75	2.00	0.61	5.00	0.23	0.00	0.23
9.80	2.00	0.61	5.00	0.23	0.00	0.23
9.85	2.00	0.61	5.00	0.23	0.00	0.23
9.90	2.00	0.61	5.00	0.23	0.00	0.23
9.95	2.00	0.61	5.00	0.23	0.00	0.23
10.00	2.00	0.61	5.00	0.23	0.00	0.23
10.05	2.00	0.61	5.00	0.23	0.00	0.23
10.10	2.00	0.61	5.00	0.23	0.00	0.23
10.15	2.00	0.61	5.00	0.23	0.00	0.23
10.20	2.00	0.61	5.00	0.23	0.00	0.23
10.25	2.00	0.61	5.00	0.23	0.00	0.23
10.30	2.00	0.62	5.00	0.23	0.00	0.23
10.35	2.00	0.62	5.00	0.23	0.00	0.23
10.40	2.00	0.62	5.00	0.23	0.00	0.23
10.45	2.00	0.62	5.00	0.23	0.00	0.23
10.50	2.00	0.62	5.00	0.23	0.00	0.23
10.55	2.00	0.62	5.00	0.23	0.00	0.23
10.60	2.00	0.63	5.00	0.23	0.00	0.23
10.65	2.00	0.63	5.00	0.23	0.00	0.23
10.70	2.00	0.63	5.00	0.23	0.00	0.23
10.75	2.00	0.63	5.00	0.23	0.00	0.23
10.80	2.00	0.63	5.00	0.23	0.00	0.23
10.85	2.00	0.63	5.00	0.23	0.00	0.23
10.90	2.00	0.63	5.00	0.23	0.00	0.23
10.95	2.00	0.64	5.00	0.23	0.00	0.23
11.00	2.00	0.64	5.00	0.23	0.00	0.23
11.05	2.00	0.64	5.00	0.23	0.00	0.23
11.10	2.00	0.64	5.00	0.23	0.00	0.23
11.15	2.00	0.64	5.00	0.23	0.00	0.23
11.20	2.00	0.64	5.00	0.23	0.00	0.23
11.25	2.00	0.64	5.00	0.23	0.00	0.23
11.30	2.00	0.65	5.00	0.23	0.00	0.23
11.35	2.00	0.65	5.00	0.23	0.00	0.23
11.40	2.00	0.65	5.00	0.23	0.00	0.23
11.45	2.00	0.65	5.00	0.23	0.00	0.23
11.50	2.00	0.65	5.00	0.23	0.00	0.23
11.55	2.00	0.65	5.00	0.23	0.00	0.23
11.60	2.00	0.65	5.00	0.23	0.00	0.23
11.65	2.00	0.66	5.00	0.23	0.00	0.23
11.70	2.00	0.66	5.00	0.23	0.00	0.23
11.75	2.00	0.66	5.00	0.23	0.00	0.23
11.80	2.00	0.66	5.00	0.23	0.00	0.23



Santa Teresa HS Class Concession EB4.sum						
11.85	2.00	0.66	5.00	0.23	0.00	0.23
11.90	2.00	0.66	5.00	0.23	0.00	0.23
11.95	2.00	0.66	5.00	0.23	0.00	0.23
12.00	2.00	0.67	5.00	0.23	0.00	0.23
12.05	2.00	0.67	5.00	0.23	0.00	0.23
12.10	2.00	0.67	5.00	0.23	0.00	0.23
12.15	2.00	0.67	5.00	0.23	0.00	0.23
12.20	2.00	0.67	5.00	0.23	0.00	0.23
12.25	2.00	0.67	5.00	0.23	0.00	0.23
12.30	2.00	0.67	5.00	0.23	0.00	0.23
12.35	2.00	0.67	5.00	0.23	0.00	0.23
12.40	2.00	0.68	5.00	0.23	0.00	0.23
12.45	2.00	0.68	5.00	0.23	0.00	0.23
12.50	2.00	0.68	5.00	0.23	0.00	0.23
12.55	2.00	0.68	5.00	0.23	0.00	0.23
12.60	2.00	0.68	5.00	0.23	0.00	0.23
12.65	2.00	0.68	5.00	0.23	0.00	0.23
12.70	2.00	0.68	5.00	0.23	0.00	0.23
12.75	2.00	0.68	5.00	0.23	0.00	0.23
12.80	2.00	0.69	5.00	0.23	0.00	0.23
12.85	2.00	0.69	5.00	0.23	0.00	0.23
12.90	2.00	0.69	5.00	0.23	0.00	0.23
12.95	2.00	0.69	5.00	0.23	0.00	0.23
13.00	2.00	0.69	5.00	0.23	0.00	0.23
13.05	2.00	0.69	5.00	0.23	0.00	0.23
13.10	2.00	0.69	5.00	0.23	0.00	0.23
13.15	2.00	0.69	5.00	0.23	0.00	0.23
13.20	2.00	0.69	5.00	0.23	0.00	0.23
13.25	2.00	0.70	5.00	0.23	0.00	0.23
13.30	2.00	0.70	5.00	0.23	0.00	0.23
13.35	2.00	0.70	5.00	0.23	0.00	0.23
13.40	2.00	0.70	5.00	0.23	0.00	0.23
13.45	2.00	0.70	5.00	0.23	0.00	0.23
13.50	2.00	0.70	5.00	0.23	0.00	0.23
13.55	2.00	0.70	5.00	0.23	0.00	0.23
13.60	2.00	0.70	5.00	0.23	0.00	0.23
13.65	2.00	0.71	5.00	0.23	0.00	0.23
13.70	2.00	0.71	5.00	0.23	0.00	0.23
13.75	2.00	0.71	5.00	0.23	0.00	0.23
13.80	2.00	0.71	5.00	0.23	0.00	0.23
13.85	2.00	0.71	5.00	0.23	0.00	0.23
13.90	2.00	0.71	5.00	0.23	0.00	0.23
13.95	2.00	0.71	5.00	0.23	0.00	0.23
14.00	2.00	0.71	5.00	0.23	0.00	0.23
14.05	2.00	0.71	5.00	0.23	0.00	0.23
14.10	2.00	0.72	5.00	0.23	0.00	0.23
14.15	2.00	0.72	5.00	0.23	0.00	0.23
14.20	2.00	0.72	5.00	0.23	0.00	0.23
14.25	2.00	0.72	5.00	0.23	0.00	0.23
14.30	2.00	0.72	5.00	0.23	0.00	0.23
14.35	2.00	0.72	5.00	0.23	0.00	0.23
14.40	2.00	0.72	5.00	0.23	0.00	0.23
14.45	2.00	0.72	5.00	0.23	0.00	0.23
14.50	2.00	0.72	5.00	0.23	0.00	0.23
14.55	2.00	0.72	5.00	0.23	0.00	0.23
14.60	2.00	0.73	5.00	0.23	0.00	0.23
14.65	2.00	0.73	5.00	0.23	0.00	0.23
14.70	2.00	0.73	5.00	0.23	0.00	0.23
14.75	2.00	0.73	5.00	0.23	0.00	0.23
14.80	2.00	0.73	5.00	0.23	0.00	0.23
14.85	2.00	0.73	5.00	0.23	0.00	0.23
14.90	2.00	0.73	5.00	0.23	0.00	0.23
14.95	2.00	0.73	5.00	0.23	0.00	0.23

Santa Teresa HS Class Concession EB4.sum

15.00	2.00	0.73	5.00	0.23	0.00	0.23
15.05	2.00	0.73	5.00	0.23	0.00	0.23
15.10	2.00	0.74	5.00	0.23	0.00	0.23
15.15	2.00	0.74	5.00	0.23	0.00	0.23
15.20	2.00	0.74	5.00	0.23	0.00	0.23
15.25	2.00	0.74	5.00	0.23	0.00	0.23
15.30	2.00	0.74	5.00	0.23	0.00	0.23
15.35	2.00	0.74	5.00	0.23	0.00	0.23
15.40	2.00	0.74	5.00	0.23	0.00	0.23
15.45	2.00	0.74	5.00	0.23	0.00	0.23
15.50	2.00	0.74	5.00	0.23	0.00	0.23
15.55	2.00	0.74	5.00	0.23	0.00	0.23
15.60	2.00	0.75	5.00	0.23	0.00	0.23
15.65	2.00	0.75	5.00	0.23	0.00	0.23
15.70	2.00	0.75	5.00	0.23	0.00	0.23
15.75	2.00	0.75	5.00	0.23	0.00	0.23
15.80	2.00	0.75	5.00	0.23	0.00	0.23
15.85	2.00	0.75	5.00	0.23	0.00	0.23
15.90	2.00	0.75	5.00	0.23	0.00	0.23
15.95	2.00	0.75	5.00	0.23	0.00	0.23
16.00	2.00	0.75	5.00	0.23	0.00	0.23
16.05	2.00	0.75	5.00	0.23	0.00	0.23
16.10	2.00	0.75	5.00	0.23	0.00	0.23
16.15	2.00	0.76	5.00	0.23	0.00	0.23
16.20	2.00	0.76	5.00	0.23	0.00	0.23
16.25	2.00	0.76	5.00	0.23	0.00	0.23
16.30	2.00	0.76	5.00	0.23	0.00	0.23
16.35	2.00	0.76	5.00	0.23	0.00	0.23
16.40	2.00	0.76	5.00	0.23	0.00	0.23
16.45	2.00	0.76	5.00	0.23	0.00	0.23
16.50	2.00	0.76	5.00	0.23	0.00	0.23
16.55	2.00	0.76	5.00	0.23	0.00	0.23
16.60	2.00	0.76	5.00	0.23	0.00	0.23
16.65	2.00	0.76	5.00	0.23	0.00	0.23
16.70	2.00	0.77	5.00	0.23	0.00	0.23
16.75	2.00	0.77	5.00	0.23	0.00	0.23
16.80	2.00	0.77	5.00	0.23	0.00	0.23
16.85	2.00	0.77	5.00	0.23	0.00	0.23
16.90	2.00	0.77	5.00	0.23	0.00	0.23
16.95	2.00	0.77	5.00	0.23	0.00	0.23
17.00	2.00	0.77	5.00	0.23	0.00	0.23
17.05	2.00	0.77	5.00	0.23	0.00	0.23
17.10	2.00	0.77	5.00	0.23	0.00	0.23
17.15	2.00	0.77	5.00	0.23	0.00	0.23
17.20	2.00	0.77	5.00	0.23	0.00	0.23
17.25	2.00	0.77	5.00	0.23	0.00	0.23
17.30	2.00	0.78	5.00	0.23	0.00	0.23
17.35	2.00	0.78	5.00	0.23	0.00	0.23
17.40	2.00	0.78	5.00	0.23	0.00	0.23
17.45	2.00	0.78	5.00	0.23	0.00	0.23
17.50	2.00	0.78	5.00	0.23	0.00	0.23
17.55	2.00	0.78	5.00	0.23	0.00	0.23
17.60	2.00	0.78	5.00	0.23	0.00	0.23
17.65	2.00	0.78	5.00	0.23	0.00	0.23
17.70	2.00	0.78	5.00	0.23	0.00	0.23
17.75	2.00	0.78	5.00	0.23	0.00	0.23
17.80	2.00	0.78	5.00	0.23	0.00	0.23
17.85	2.00	0.78	5.00	0.23	0.00	0.23
17.90	2.00	0.79	5.00	0.23	0.00	0.23
17.95	2.00	0.79	5.00	0.23	0.00	0.23
18.00	2.00	0.79	5.00	0.23	0.00	0.23
18.05	2.00	0.79	5.00	0.23	0.00	0.23
18.10	2.00	0.79	5.00	0.23	0.00	0.23

Santa Teresa HS Class Concession EB4.sum

18.15	2.00	0.79	5.00	0.23	0.00	0.23
18.20	2.00	0.79	5.00	0.23	0.00	0.23
18.25	2.00	0.79	5.00	0.23	0.00	0.23
18.30	2.00	0.79	5.00	0.23	0.00	0.23
18.35	2.00	0.79	5.00	0.23	0.00	0.23
18.40	2.00	0.79	5.00	0.23	0.00	0.23
18.45	2.00	0.79	5.00	0.23	0.00	0.23
18.50	2.00	0.80	5.00	0.23	0.00	0.23
18.55	2.00	0.80	5.00	0.23	0.00	0.23
18.60	2.00	0.80	5.00	0.23	0.00	0.23
18.65	2.00	0.80	5.00	0.23	0.00	0.23
18.70	2.00	0.80	5.00	0.23	0.00	0.23
18.75	2.00	0.80	5.00	0.23	0.00	0.23
18.80	2.00	0.80	5.00	0.23	0.00	0.23
18.85	2.00	0.80	5.00	0.23	0.00	0.23
18.90	2.00	0.80	5.00	0.23	0.00	0.23
18.95	2.00	0.80	5.00	0.23	0.00	0.23
19.00	2.00	0.80	5.00	0.23	0.00	0.23
19.05	2.00	0.80	5.00	0.23	0.00	0.23
19.10	2.00	0.80	5.00	0.23	0.00	0.23
19.15	2.00	0.81	5.00	0.23	0.00	0.23
19.20	2.00	0.81	5.00	0.23	0.00	0.23
19.25	2.00	0.81	5.00	0.23	0.00	0.23
19.30	2.00	0.81	5.00	0.23	0.00	0.23
19.35	2.00	0.81	5.00	0.23	0.00	0.23
19.40	2.00	0.81	5.00	0.23	0.00	0.23
19.45	2.00	0.81	5.00	0.23	0.00	0.23
19.50	2.00	0.81	5.00	0.23	0.00	0.23
19.55	2.00	0.81	5.00	0.23	0.00	0.23
19.60	2.00	0.81	5.00	0.23	0.00	0.23
19.65	2.00	0.81	5.00	0.23	0.00	0.23
19.70	2.00	0.81	5.00	0.23	0.00	0.23
19.75	2.00	0.81	5.00	0.23	0.00	0.23
19.80	2.00	0.82	5.00	0.23	0.00	0.23
19.85	2.00	0.82	5.00	0.23	0.00	0.23
19.90	2.00	0.82	5.00	0.23	0.00	0.23
19.95	2.00	0.82	5.00	0.23	0.00	0.23
20.00	2.00	0.82	5.00	0.23	0.00	0.23
20.05	2.00	0.82	5.00	0.23	0.00	0.23
20.10	2.00	0.82	5.00	0.23	0.00	0.23
20.15	2.00	0.82	5.00	0.23	0.00	0.23
20.20	2.00	0.82	5.00	0.23	0.00	0.23
20.25	2.00	0.82	5.00	0.23	0.00	0.23
20.30	2.00	0.82	5.00	0.23	0.00	0.23
20.35	2.00	0.82	5.00	0.23	0.00	0.23
20.40	2.00	0.82	5.00	0.23	0.00	0.23
20.45	2.00	0.82	5.00	0.23	0.00	0.23
20.50	2.00	0.83	5.00	0.23	0.00	0.23
20.55	2.00	0.83	5.00	0.23	0.00	0.23
20.60	2.00	0.83	5.00	0.23	0.00	0.23
20.65	2.00	0.83	5.00	0.23	0.00	0.23
20.70	2.00	0.83	5.00	0.23	0.00	0.23
20.75	2.00	0.83	5.00	0.23	0.00	0.23
20.80	2.00	0.83	5.00	0.23	0.00	0.23
20.85	2.00	0.83	5.00	0.23	0.00	0.23
20.90	2.00	0.83	5.00	0.23	0.00	0.23
20.95	2.00	0.83	5.00	0.23	0.00	0.23
21.00	2.00	0.83	5.00	0.23	0.00	0.23
21.05	2.00	0.83	5.00	0.23	0.00	0.23
21.10	2.00	0.83	5.00	0.23	0.00	0.23
21.15	2.00	0.83	5.00	0.23	0.00	0.23
21.20	2.00	0.83	5.00	0.23	0.00	0.23
21.25	2.00	0.84	5.00	0.23	0.00	0.23

Santa Teresa HS Class Concession EB4.sum

21.30	2.00	0.84	5.00	0.23	0.00	0.23
21.35	2.00	0.84	5.00	0.23	0.00	0.23
21.40	2.00	0.84	5.00	0.23	0.00	0.23
21.45	2.00	0.84	5.00	0.23	0.00	0.23
21.50	2.00	0.84	5.00	0.23	0.00	0.23
21.55	2.00	0.84	5.00	0.23	0.00	0.23
21.60	2.00	0.84	5.00	0.23	0.00	0.23
21.65	2.00	0.84	5.00	0.23	0.00	0.23
21.70	2.00	0.84	5.00	0.23	0.00	0.23
21.75	2.00	0.84	5.00	0.23	0.00	0.23
21.80	2.00	0.84	5.00	0.23	0.00	0.23
21.85	2.00	0.84	5.00	0.23	0.00	0.23
21.90	2.00	0.84	5.00	0.23	0.00	0.23
21.95	2.00	0.84	5.00	0.23	0.00	0.23
22.00	2.00	0.85	5.00	0.23	0.00	0.23
22.05	2.00	0.85	5.00	0.23	0.00	0.23
22.10	2.00	0.85	5.00	0.23	0.00	0.23
22.15	2.00	0.85	5.00	0.23	0.00	0.23
22.20	2.00	0.85	5.00	0.23	0.00	0.23
22.25	2.00	0.85	5.00	0.23	0.00	0.23
22.30	2.00	0.85	5.00	0.23	0.00	0.23
22.35	2.00	0.85	5.00	0.23	0.00	0.23
22.40	2.00	0.85	5.00	0.23	0.00	0.23
22.45	2.00	0.85	5.00	0.23	0.00	0.23
22.50	2.00	0.85	5.00	0.23	0.00	0.23
22.55	2.00	0.85	5.00	0.23	0.00	0.23
22.60	2.00	0.85	5.00	0.23	0.00	0.23
22.65	2.00	0.85	5.00	0.23	0.00	0.23
22.70	2.00	0.85	5.00	0.23	0.00	0.23
22.75	2.00	0.85	5.00	0.23	0.00	0.23
22.80	2.00	0.85	5.00	0.23	0.00	0.23
22.85	2.00	0.86	5.00	0.23	0.00	0.23
22.90	2.00	0.86	5.00	0.23	0.00	0.23
22.95	2.00	0.86	5.00	0.23	0.00	0.23
23.00	2.00	0.86	5.00	0.23	0.00	0.23
23.05	2.00	0.86	5.00	0.23	0.00	0.23
23.10	2.00	0.86	5.00	0.23	0.00	0.23
23.15	2.00	0.86	5.00	0.23	0.00	0.23
23.20	2.00	0.86	5.00	0.23	0.00	0.23
23.25	2.00	0.86	5.00	0.23	0.00	0.23
23.30	2.00	0.86	5.00	0.23	0.00	0.23
23.35	2.00	0.86	5.00	0.23	0.00	0.23
23.40	2.00	0.86	5.00	0.23	0.00	0.23
23.45	2.00	0.86	5.00	0.23	0.00	0.23
23.50	2.00	0.86	5.00	0.23	0.00	0.23
23.55	2.00	0.86	5.00	0.23	0.00	0.23
23.60	2.00	0.86	5.00	0.23	0.00	0.23
23.65	2.00	0.86	5.00	0.23	0.00	0.23
23.70	2.00	0.86	5.00	0.23	0.00	0.23
23.75	2.00	0.87	5.00	0.23	0.00	0.23
23.80	2.00	0.87	5.00	0.23	0.00	0.23
23.85	2.00	0.87	5.00	0.23	0.00	0.23
23.90	2.00	0.87	5.00	0.23	0.00	0.23
23.95	2.00	0.87	5.00	0.23	0.00	0.23
24.00	2.00	0.87	5.00	0.23	0.00	0.23
24.05	2.00	0.87	5.00	0.23	0.00	0.23
24.10	2.00	0.87	5.00	0.23	0.00	0.23
24.15	2.00	0.87	5.00	0.23	0.00	0.23
24.20	2.00	0.87	5.00	0.23	0.00	0.23
24.25	2.00	0.87	5.00	0.23	0.00	0.23
24.30	2.00	0.87	5.00	0.23	0.00	0.23
24.35	2.00	0.87	5.00	0.23	0.00	0.23
24.40	2.00	0.87	5.00	0.23	0.00	0.23

Santa Teresa HS Class Concession EB4.sum

24.45	2.00	0.87	5.00	0.23	0.00	0.23
24.50	2.00	0.87	5.00	0.23	0.00	0.23
24.55	2.00	0.87	5.00	0.23	0.00	0.23
24.60	2.00	0.87	5.00	0.23	0.00	0.23
24.65	2.00	0.87	5.00	0.23	0.00	0.23
24.70	2.00	0.87	5.00	0.23	0.00	0.23
24.75	2.00	0.88	5.00	0.23	0.00	0.23
24.80	2.00	0.88	5.00	0.23	0.00	0.23
24.85	2.00	0.88	5.00	0.23	0.00	0.23
24.90	2.00	0.88	5.00	0.23	0.00	0.23
24.95	2.00	0.88	5.00	0.23	0.00	0.23
25.00	2.00	0.88	5.00	0.23	0.00	0.23
25.05	2.00	0.88	5.00	0.23	0.00	0.23
25.10	2.00	0.88	5.00	0.23	0.00	0.23
25.15	2.00	0.88	5.00	0.23	0.00	0.23
25.20	2.00	0.88	5.00	0.23	0.00	0.23
25.25	2.00	0.88	5.00	0.23	0.00	0.23
25.30	2.00	0.88	5.00	0.23	0.00	0.23
25.35	2.00	0.88	5.00	0.23	0.00	0.23
25.40	2.00	0.88	5.00	0.23	0.00	0.23
25.45	2.00	0.88	5.00	0.23	0.00	0.23
25.50	2.00	0.88	5.00	0.23	0.00	0.23
25.55	2.00	0.88	5.00	0.23	0.00	0.23
25.60	2.00	0.88	5.00	0.23	0.00	0.23
25.65	2.00	0.88	5.00	0.23	0.00	0.23
25.70	2.00	0.88	5.00	0.23	0.00	0.23
25.75	2.00	0.88	5.00	0.23	0.00	0.23
25.80	2.00	0.89	5.00	0.23	0.00	0.23
25.85	2.00	0.89	5.00	0.23	0.00	0.23
25.90	2.00	0.89	5.00	0.23	0.00	0.23
25.95	2.00	0.89	5.00	0.23	0.00	0.23
26.00	2.00	0.89	5.00	0.23	0.00	0.23
26.05	2.00	0.89	5.00	0.23	0.00	0.23
26.10	2.00	0.89	5.00	0.23	0.00	0.23
26.15	2.00	0.89	5.00	0.23	0.00	0.23
26.20	2.00	0.89	5.00	0.23	0.00	0.23
26.25	2.00	0.89	5.00	0.23	0.00	0.23
26.30	2.00	0.89	5.00	0.23	0.00	0.23
26.35	2.00	0.89	5.00	0.23	0.00	0.23
26.40	2.00	0.89	5.00	0.23	0.00	0.23
26.45	2.00	0.89	5.00	0.23	0.00	0.23
26.50	2.00	0.89	5.00	0.23	0.00	0.23
26.55	2.00	0.89	5.00	0.23	0.00	0.23
26.60	2.00	0.89	5.00	0.23	0.00	0.23
26.65	2.00	0.89	5.00	0.23	0.00	0.23
26.70	2.00	0.89	5.00	0.23	0.00	0.23
26.75	2.00	0.89	5.00	0.23	0.00	0.23
26.80	2.00	0.89	5.00	0.23	0.00	0.23
26.85	2.00	0.89	5.00	0.23	0.00	0.23
26.90	2.00	0.89	5.00	0.23	0.00	0.23
26.95	2.00	0.89	5.00	0.23	0.00	0.23
27.00	2.00	0.90	5.00	0.23	0.00	0.23
27.05	2.00	0.90	5.00	0.23	0.00	0.23
27.10	2.00	0.90	5.00	0.23	0.00	0.23
27.15	2.00	0.90	5.00	0.23	0.00	0.23
27.20	2.00	0.90	5.00	0.23	0.00	0.23
27.25	2.00	0.90	5.00	0.23	0.00	0.23
27.30	2.00	0.90	5.00	0.23	0.00	0.23
27.35	2.00	0.90	5.00	0.23	0.00	0.23
27.40	2.00	0.90	5.00	0.23	0.00	0.23
27.45	2.00	0.90	5.00	0.23	0.00	0.23
27.50	2.00	0.90	5.00	0.23	0.00	0.23
27.55	2.00	0.90	5.00	0.23	0.00	0.23

Santa Teresa HS Class Concession EB4.sum

27.60	2.00	0.90	5.00	0.23	0.00	0.23
27.65	2.00	0.90	5.00	0.23	0.00	0.23
27.70	2.00	0.90	5.00	0.23	0.00	0.23
27.75	2.00	0.90	5.00	0.23	0.00	0.23
27.80	2.00	0.90	5.00	0.23	0.00	0.23
27.85	2.00	0.90	5.00	0.23	0.00	0.23
27.90	2.00	0.90	5.00	0.23	0.00	0.23
27.95	2.00	0.90	5.00	0.23	0.00	0.23
28.00	2.00	0.90	5.00	0.23	0.00	0.23
28.05	2.00	0.90	5.00	0.23	0.00	0.23
28.10	2.00	0.90	5.00	0.23	0.00	0.23
28.15	2.00	0.90	5.00	0.23	0.00	0.23
28.20	2.00	0.90	5.00	0.23	0.00	0.23
28.25	2.00	0.90	5.00	0.23	0.00	0.23
28.30	2.00	0.91	5.00	0.23	0.00	0.23
28.35	2.00	0.91	5.00	0.23	0.00	0.23
28.40	2.00	0.91	5.00	0.23	0.00	0.23
28.45	2.00	0.91	5.00	0.23	0.00	0.23
28.50	2.00	0.91	5.00	0.23	0.00	0.23
28.55	2.00	0.91	5.00	0.23	0.00	0.23
28.60	2.00	0.91	5.00	0.23	0.00	0.23
28.65	2.00	0.91	5.00	0.23	0.00	0.23
28.70	2.00	0.91	5.00	0.23	0.00	0.23
28.75	2.00	0.91	5.00	0.23	0.00	0.23
28.80	2.00	0.91	5.00	0.23	0.00	0.23
28.85	2.00	0.91	5.00	0.23	0.00	0.23
28.90	2.00	0.91	5.00	0.23	0.00	0.23
28.95	2.00	0.91	5.00	0.23	0.00	0.23
29.00	2.00	0.91	5.00	0.23	0.00	0.23
29.05	2.00	0.91	5.00	0.23	0.00	0.23
29.10	2.00	0.91	5.00	0.23	0.00	0.23
29.15	2.00	0.91	5.00	0.23	0.00	0.23
29.20	2.00	0.91	5.00	0.23	0.00	0.23
29.25	2.00	0.91	5.00	0.23	0.00	0.23
29.30	2.00	0.91	5.00	0.23	0.00	0.23
29.35	2.00	0.91	5.00	0.23	0.00	0.23
29.40	2.00	0.91	5.00	0.23	0.00	0.23
29.45	2.00	0.91	5.00	0.23	0.00	0.23
29.50	2.00	0.91	5.00	0.23	0.00	0.23
29.55	2.00	0.91	5.00	0.23	0.00	0.23
29.60	2.00	0.91	5.00	0.23	0.00	0.23
29.65	2.00	0.91	5.00	0.23	0.00	0.23
29.70	2.00	0.91	5.00	0.23	0.00	0.23
29.75	2.00	0.92	5.00	0.23	0.00	0.23
29.80	2.00	0.92	5.00	0.23	0.00	0.23
29.85	2.00	0.92	5.00	0.23	0.00	0.23
29.90	2.00	0.92	5.00	0.23	0.00	0.23
29.95	2.00	0.92	5.00	0.23	0.00	0.23
30.00	2.00	0.92	5.00	0.23	0.00	0.23
30.05	2.00	0.92	5.00	0.23	0.00	0.23
30.10	2.00	0.92	5.00	0.23	0.00	0.23
30.15	2.00	0.92	5.00	0.23	0.00	0.23
30.20	2.00	0.92	5.00	0.23	0.00	0.23
30.25	2.00	0.92	5.00	0.23	0.00	0.23
30.30	2.00	0.92	5.00	0.23	0.00	0.23
30.35	2.00	0.92	5.00	0.23	0.00	0.23
30.40	2.00	0.92	5.00	0.23	0.00	0.23
30.45	2.00	0.92	5.00	0.23	0.00	0.23
30.50	2.00	0.92	5.00	0.23	0.00	0.23
30.55	2.00	0.92	5.00	0.23	0.00	0.23
30.60	2.00	0.92	5.00	0.23	0.00	0.23
30.65	2.00	0.92	5.00	0.23	0.00	0.23
30.70	2.00	0.92	5.00	0.23	0.00	0.23

Santa Teresa HS Class Concession EB4.sum

30.75	2.00	0.92	5.00	0.23	0.00	0.23
30.80	2.00	0.92	5.00	0.23	0.00	0.23
30.85	2.00	0.92	5.00	0.23	0.00	0.23
30.90	2.00	0.92	5.00	0.23	0.00	0.23
30.95	2.00	0.92	5.00	0.23	0.00	0.23
31.00	2.00	0.92	5.00	0.23	0.00	0.23
31.05	2.00	0.92	5.00	0.23	0.00	0.23
31.10	2.00	0.92	5.00	0.23	0.00	0.23
31.15	2.00	0.92	5.00	0.23	0.00	0.23
31.20	2.00	0.92	5.00	0.23	0.00	0.23
31.25	2.00	0.92	5.00	0.23	0.00	0.23
31.30	2.00	0.92	5.00	0.23	0.00	0.23
31.35	2.00	0.92	5.00	0.23	0.00	0.23
31.40	2.00	0.92	5.00	0.23	0.00	0.23
31.45	2.00	0.92	5.00	0.23	0.00	0.23
31.50	2.00	0.92	5.00	0.23	0.00	0.23
31.55	2.00	0.92	5.00	0.23	0.00	0.23
31.60	2.00	0.92	5.00	0.23	0.00	0.23
31.65	2.00	0.92	5.00	0.23	0.00	0.23
31.70	2.00	0.92	5.00	0.23	0.00	0.23
31.75	2.00	0.92	5.00	0.23	0.00	0.23
31.80	2.00	0.92	5.00	0.23	0.00	0.23
31.85	2.00	0.92	5.00	0.23	0.00	0.23
31.90	2.00	0.92	5.00	0.23	0.00	0.23
31.95	2.00	0.92	5.00	0.23	0.00	0.23
32.00	2.00	0.92	5.00	0.23	0.00	0.23
32.05	1.45	0.92	1.58	0.23	0.00	0.23
32.10	1.45	0.92	1.58	0.23	0.00	0.23
32.15	1.45	0.92	1.58	0.23	0.00	0.23
32.20	1.45	0.92	1.58	0.23	0.00	0.23
32.25	1.45	0.92	1.58	0.23	0.00	0.23
32.30	1.45	0.92	1.59	0.23	0.00	0.23
32.35	1.45	0.92	1.59	0.23	0.00	0.23
32.40	1.45	0.92	1.59	0.23	0.00	0.23
32.45	1.45	0.92	1.59	0.23	0.00	0.23
32.50	1.45	0.92	1.59	0.23	0.00	0.23
32.55	1.45	0.92	1.59	0.23	0.00	0.23
32.60	1.45	0.92	1.59	0.23	0.00	0.23
32.65	1.45	0.92	1.59	0.23	0.00	0.23
32.70	1.45	0.91	1.59	0.23	0.00	0.23
32.75	1.45	0.91	1.59	0.23	0.00	0.23
32.80	1.45	0.91	1.59	0.23	0.00	0.23
32.85	1.45	0.91	1.59	0.23	0.00	0.23
32.90	1.45	0.91	1.59	0.23	0.00	0.23
32.95	1.45	0.91	1.59	0.23	0.00	0.23
33.00	1.45	0.91	1.59	0.23	0.00	0.23
33.05	1.45	0.91	1.59	0.23	0.00	0.23
33.10	1.45	0.91	1.59	0.23	0.00	0.23
33.15	1.45	0.91	1.59	0.23	0.00	0.23
33.20	1.45	0.91	1.59	0.23	0.00	0.23
33.25	1.45	0.91	1.59	0.23	0.00	0.23
33.30	1.45	0.91	1.59	0.23	0.00	0.23
33.35	1.45	0.91	1.59	0.23	0.00	0.23
33.40	1.45	0.91	1.59	0.23	0.00	0.23
33.45	1.45	0.91	1.59	0.23	0.00	0.23
33.50	1.45	0.91	1.59	0.23	0.00	0.23
33.55	1.45	0.91	1.59	0.23	0.00	0.23
33.60	1.45	0.91	1.59	0.23	0.00	0.23
33.65	1.45	0.91	1.59	0.23	0.00	0.23
33.70	1.45	0.91	1.59	0.23	0.00	0.23
33.75	1.45	0.91	1.59	0.23	0.00	0.23
33.80	1.45	0.91	1.59	0.23	0.00	0.23
33.85	1.45	0.91	1.59	0.23	0.00	0.23

Santa Teresa HS Class Concession EB4.sum

33.90	1.45	0.91	1.59	0.23	0.00	0.23
33.95	1.45	0.91	1.59	0.23	0.00	0.23
34.00	1.45	0.91	1.59	0.23	0.00	0.23
34.05	1.45	0.91	1.59	0.23	0.00	0.23
34.10	1.45	0.91	1.59	0.23	0.00	0.23
34.15	1.45	0.91	1.59	0.23	0.00	0.23
34.20	1.45	0.91	1.59	0.23	0.00	0.23
34.25	1.45	0.91	1.59	0.23	0.00	0.23
34.30	1.45	0.91	1.59	0.23	0.00	0.23
34.35	1.45	0.91	1.59	0.23	0.00	0.23
34.40	1.45	0.91	1.59	0.23	0.00	0.23
34.45	1.45	0.91	1.59	0.23	0.00	0.23
34.50	1.45	0.91	1.59	0.23	0.00	0.23
34.55	1.45	0.91	1.59	0.23	0.00	0.23
34.60	1.45	0.91	1.59	0.23	0.00	0.23
34.65	1.45	0.91	1.59	0.23	0.00	0.23
34.70	1.45	0.91	1.59	0.23	0.00	0.23
34.75	1.45	0.91	1.59	0.23	0.00	0.23
34.80	1.45	0.91	1.59	0.23	0.00	0.23
34.85	1.45	0.91	1.59	0.23	0.00	0.23
34.90	1.45	0.91	1.59	0.23	0.00	0.23
34.95	1.45	0.91	1.59	0.23	0.00	0.23
35.00	1.45	0.91	1.60	0.23	0.00	0.23
35.05	1.45	0.91	1.60	0.23	0.00	0.23
35.10	1.45	0.91	1.60	0.23	0.00	0.23
35.15	1.45	0.91	1.60	0.23	0.00	0.23
35.20	1.45	0.91	1.60	0.23	0.00	0.23
35.25	1.45	0.91	1.60	0.23	0.00	0.23
35.30	1.45	0.91	1.60	0.23	0.00	0.23
35.35	1.45	0.91	1.60	0.23	0.00	0.23
35.40	1.45	0.91	1.60	0.23	0.00	0.23
35.45	1.45	0.91	1.60	0.23	0.00	0.23
35.50	1.45	0.91	1.60	0.23	0.00	0.23
35.55	1.45	0.91	1.60	0.23	0.00	0.23
35.60	1.45	0.91	1.60	0.23	0.00	0.23
35.65	1.45	0.91	1.60	0.23	0.00	0.23
35.70	1.45	0.91	1.60	0.23	0.00	0.23
35.75	1.45	0.91	1.60	0.23	0.00	0.23
35.80	1.45	0.91	1.60	0.23	0.00	0.23
35.85	1.45	0.91	1.60	0.23	0.00	0.23
35.90	1.45	0.91	1.60	0.23	0.00	0.23
35.95	1.45	0.91	1.60	0.23	0.00	0.23
36.00	1.45	0.91	1.60	0.23	0.00	0.23
36.05	1.45	0.91	1.60	0.23	0.00	0.23
36.10	1.45	0.91	1.60	0.23	0.00	0.23
36.15	1.45	0.91	1.60	0.23	0.00	0.23
36.20	1.45	0.91	1.60	0.23	0.00	0.23
36.25	1.45	0.91	1.60	0.23	0.00	0.23
36.30	1.45	0.91	1.60	0.23	0.00	0.23
36.35	1.45	0.91	1.60	0.23	0.00	0.23
36.40	1.45	0.91	1.60	0.23	0.00	0.23
36.45	1.45	0.91	1.60	0.23	0.00	0.23
36.50	1.45	0.91	1.60	0.23	0.00	0.23
36.55	1.45	0.90	1.60	0.23	0.00	0.23
36.60	1.45	0.90	1.60	0.23	0.00	0.23
36.65	1.45	0.90	1.60	0.23	0.00	0.23
36.70	1.45	0.90	1.60	0.23	0.00	0.23
36.75	1.45	0.90	1.60	0.23	0.00	0.23
36.80	1.45	0.90	1.61	0.23	0.00	0.23
36.85	1.45	0.90	1.61	0.23	0.00	0.23
36.90	1.45	0.90	1.61	0.23	0.00	0.23
36.95	1.45	0.90	1.61	0.23	0.00	0.23
37.00	1.45	0.90	1.61	0.23	0.00	0.23



Santa Teresa HS Class Concession EB4.sum

37.05	1.45	0.90	1.61	0.23	0.00	0.23
37.10	1.45	0.90	1.61	0.23	0.00	0.23
37.15	1.45	0.90	1.61	0.23	0.00	0.23
37.20	1.45	0.90	1.61	0.23	0.00	0.23
37.25	1.45	0.90	1.61	0.23	0.00	0.23
37.30	1.45	0.90	1.61	0.23	0.00	0.23
37.35	1.45	0.90	1.61	0.23	0.00	0.23
37.40	1.45	0.90	1.61	0.23	0.00	0.23
37.45	1.45	0.90	1.61	0.23	0.00	0.23
37.50	1.45	0.90	1.61	0.23	0.00	0.23
37.55	1.45	0.90	1.61	0.23	0.00	0.23
37.60	1.45	0.90	1.61	0.22	0.00	0.22
37.65	1.45	0.90	1.61	0.22	0.00	0.22
37.70	1.45	0.90	1.61	0.22	0.00	0.22
37.75	1.45	0.90	1.61	0.22	0.00	0.22
37.80	1.45	0.90	1.61	0.22	0.00	0.22
37.85	1.45	0.90	1.61	0.22	0.00	0.22
37.90	1.45	0.90	1.61	0.22	0.00	0.22
37.95	1.45	0.90	1.61	0.22	0.00	0.22
38.00	1.45	0.90	1.61	0.22	0.00	0.22
38.05	1.45	0.90	1.61	0.21	0.00	0.21
38.10	1.45	0.90	1.61	0.21	0.00	0.21
38.15	1.45	0.90	1.61	0.21	0.00	0.21
38.20	1.45	0.90	1.61	0.21	0.00	0.21
38.25	1.45	0.90	1.61	0.21	0.00	0.21
38.30	1.45	0.90	1.62	0.20	0.00	0.20
38.35	1.45	0.90	1.62	0.20	0.00	0.20
38.40	1.45	0.90	1.62	0.20	0.00	0.20
38.45	1.45	0.90	1.62	0.20	0.00	0.20
38.50	1.45	0.90	1.62	0.19	0.00	0.19
38.55	1.45	0.90	1.62	0.19	0.00	0.19
38.60	1.45	0.90	1.62	0.19	0.00	0.19
38.65	1.45	0.90	1.62	0.18	0.00	0.18
38.70	1.45	0.90	1.62	0.18	0.00	0.18
38.75	1.45	0.90	1.62	0.17	0.00	0.17
38.80	1.45	0.90	1.62	0.17	0.00	0.17
38.85	1.45	0.90	1.62	0.17	0.00	0.17
38.90	0.33	0.90	0.37*	0.16	0.00	0.16
38.95	0.31	0.90	0.35*	0.16	0.00	0.16
39.00	0.30	0.90	0.33*	0.15	0.00	0.15
39.05	0.29	0.90	0.32*	0.15	0.00	0.15
39.10	0.28	0.90	0.31*	0.14	0.00	0.14
39.15	0.27	0.89	0.31*	0.14	0.00	0.14
39.20	0.27	0.89	0.30*	0.13	0.00	0.13
39.25	0.26	0.89	0.29*	0.13	0.00	0.13
39.30	0.26	0.89	0.29*	0.12	0.00	0.12
39.35	0.26	0.89	0.29*	0.12	0.00	0.12
39.40	0.25	0.89	0.28*	0.11	0.00	0.11
39.45	0.25	0.89	0.28*	0.10	0.00	0.10
39.50	0.24	0.89	0.27*	0.10	0.00	0.10
39.55	0.24	0.89	0.27*	0.09	0.00	0.09
39.60	0.25	0.89	0.28*	0.09	0.00	0.09
39.65	0.25	0.89	0.28*	0.08	0.00	0.08
39.70	0.25	0.89	0.28*	0.07	0.00	0.07
39.75	0.26	0.89	0.29*	0.07	0.00	0.07
39.80	0.27	0.89	0.30*	0.06	0.00	0.06
39.85	0.28	0.89	0.32*	0.06	0.00	0.06
39.90	0.31	0.89	0.35*	0.05	0.00	0.05
39.95	1.45	0.89	1.63	0.05	0.00	0.05
40.00	1.45	0.89	1.63	0.04	0.00	0.04
40.05	1.45	0.89	1.63	0.04	0.00	0.04
40.10	1.45	0.89	1.63	0.04	0.00	0.04
40.15	1.45	0.89	1.63	0.03	0.00	0.03

Santa Teresa HS Class Concession EB4.sum

40.20	1.45	0.89	1.63	0.03	0.00	0.03
40.25	1.45	0.89	1.63	0.03	0.00	0.03
40.30	1.45	0.89	1.63	0.02	0.00	0.02
40.35	1.45	0.89	1.63	0.02	0.00	0.02
40.40	1.45	0.89	1.63	0.02	0.00	0.02
40.45	1.45	0.89	1.63	0.02	0.00	0.02
40.50	1.45	0.89	1.63	0.02	0.00	0.02
40.55	1.45	0.89	1.63	0.02	0.00	0.02
40.60	1.45	0.89	1.63	0.02	0.00	0.02
40.65	1.45	0.89	1.63	0.01	0.00	0.01
40.70	1.45	0.89	1.63	0.01	0.00	0.01
40.75	1.45	0.89	1.63	0.01	0.00	0.01
40.80	1.45	0.89	1.64	0.01	0.00	0.01
40.85	1.45	0.89	1.64	0.01	0.00	0.01
40.90	1.45	0.89	1.64	0.01	0.00	0.01
40.95	1.45	0.89	1.64	0.01	0.00	0.01
41.00	1.45	0.89	1.64	0.01	0.00	0.01
41.05	1.45	0.89	1.64	0.01	0.00	0.01
41.10	1.45	0.89	1.64	0.01	0.00	0.01
41.15	1.45	0.89	1.64	0.01	0.00	0.01
41.20	1.45	0.89	1.64	0.01	0.00	0.01
41.25	1.45	0.89	1.64	0.01	0.00	0.01
41.30	1.45	0.89	1.64	0.01	0.00	0.01
41.35	1.45	0.88	1.64	0.01	0.00	0.01
41.40	1.45	0.88	1.64	0.01	0.00	0.01
41.45	1.45	0.88	1.64	0.01	0.00	0.01
41.50	1.45	0.88	1.64	0.01	0.00	0.01
41.55	1.45	0.88	1.64	0.01	0.00	0.01
41.60	1.45	0.88	1.64	0.01	0.00	0.01
41.65	1.45	0.88	1.64	0.01	0.00	0.01
41.70	1.45	0.88	1.64	0.00	0.00	0.00
41.75	1.45	0.88	1.64	0.00	0.00	0.00
41.80	1.45	0.88	1.64	0.00	0.00	0.00
41.85	1.45	0.88	1.64	0.00	0.00	0.00
41.90	1.45	0.88	1.65	0.00	0.00	0.00
41.95	1.45	0.88	1.65	0.00	0.00	0.00
42.00	1.45	0.88	1.65	0.00	0.00	0.00
42.05	2.00	0.88	5.00	0.00	0.00	0.00
42.10	2.00	0.88	5.00	0.00	0.00	0.00
42.15	2.00	0.88	5.00	0.00	0.00	0.00
42.20	2.00	0.88	5.00	0.00	0.00	0.00
42.25	2.00	0.88	5.00	0.00	0.00	0.00
42.30	2.00	0.88	5.00	0.00	0.00	0.00
42.35	2.00	0.88	5.00	0.00	0.00	0.00
42.40	2.00	0.88	5.00	0.00	0.00	0.00
42.45	2.00	0.88	5.00	0.00	0.00	0.00
42.50	2.00	0.88	5.00	0.00	0.00	0.00
42.55	2.00	0.88	5.00	0.00	0.00	0.00
42.60	2.00	0.88	5.00	0.00	0.00	0.00
42.65	2.00	0.88	5.00	0.00	0.00	0.00
42.70	2.00	0.88	5.00	0.00	0.00	0.00
42.75	2.00	0.88	5.00	0.00	0.00	0.00
42.80	2.00	0.88	5.00	0.00	0.00	0.00
42.85	2.00	0.88	5.00	0.00	0.00	0.00
42.90	2.00	0.88	5.00	0.00	0.00	0.00
42.95	2.00	0.88	5.00	0.00	0.00	0.00
43.00	2.00	0.88	5.00	0.00	0.00	0.00
43.05	2.00	0.88	5.00	0.00	0.00	0.00
43.10	2.00	0.88	5.00	0.00	0.00	0.00
43.15	2.00	0.88	5.00	0.00	0.00	0.00
43.20	2.00	0.88	5.00	0.00	0.00	0.00
43.25	2.00	0.87	5.00	0.00	0.00	0.00
43.30	2.00	0.87	5.00	0.00	0.00	0.00

Santa Teresa HS Class Concession EB4.sum

43.35	2.00	0.87	5.00	0.00	0.00	0.00
43.40	2.00	0.87	5.00	0.00	0.00	0.00
43.45	2.00	0.87	5.00	0.00	0.00	0.00
43.50	2.00	0.87	5.00	0.00	0.00	0.00
43.55	2.00	0.87	5.00	0.00	0.00	0.00
43.60	2.00	0.87	5.00	0.00	0.00	0.00
43.65	2.00	0.87	5.00	0.00	0.00	0.00
43.70	2.00	0.87	5.00	0.00	0.00	0.00
43.75	2.00	0.87	5.00	0.00	0.00	0.00
43.80	2.00	0.87	5.00	0.00	0.00	0.00
43.85	2.00	0.87	5.00	0.00	0.00	0.00
43.90	2.00	0.87	5.00	0.00	0.00	0.00
43.95	2.00	0.87	5.00	0.00	0.00	0.00
44.00	2.00	0.87	5.00	0.00	0.00	0.00
44.05	2.00	0.87	5.00	0.00	0.00	0.00
44.10	2.00	0.87	5.00	0.00	0.00	0.00
44.15	2.00	0.87	5.00	0.00	0.00	0.00
44.20	2.00	0.87	5.00	0.00	0.00	0.00
44.25	2.00	0.87	5.00	0.00	0.00	0.00
44.30	2.00	0.87	5.00	0.00	0.00	0.00
44.35	2.00	0.87	5.00	0.00	0.00	0.00
44.40	2.00	0.87	5.00	0.00	0.00	0.00
44.45	2.00	0.87	5.00	0.00	0.00	0.00
44.50	2.00	0.87	5.00	0.00	0.00	0.00
44.55	2.00	0.87	5.00	0.00	0.00	0.00
44.60	2.00	0.87	5.00	0.00	0.00	0.00
44.65	2.00	0.87	5.00	0.00	0.00	0.00
44.70	2.00	0.87	5.00	0.00	0.00	0.00
44.75	2.00	0.87	5.00	0.00	0.00	0.00
44.80	2.00	0.87	5.00	0.00	0.00	0.00
44.85	2.00	0.87	5.00	0.00	0.00	0.00
44.90	2.00	0.87	5.00	0.00	0.00	0.00
44.95	2.00	0.86	5.00	0.00	0.00	0.00
45.00	2.00	0.86	5.00	0.00	0.00	0.00

\* F.S.<1, Liquefaction Potential Zone  
(F.S. is limited to 5, CRR is limited to 2, CSR is limited to 2)

Units: Unit: qc, fs, Stress or Pressure = atm (1.0581tsf); Unit weight = pcf; Depth = ft; Settlement = in.

---

1 atm (atmosphere) = 1 tsf (ton/ft <sup>2</sup> )	
CRRm	Cyclic resistance ratio from soils
CSRsf	Cyclic stress ratio induced by a given earthquake (with user
request factor of safety)	
F.S.	Factor of safety against liquefaction, F.S.=CRRm/CSRsf
S_sat	Settlement from saturated sands
S_dry	Settlement from Unsaturated Sands
S_all	Total Settlement from Saturated and Unsaturated Sands
NoLiq	No-Liquefy soils