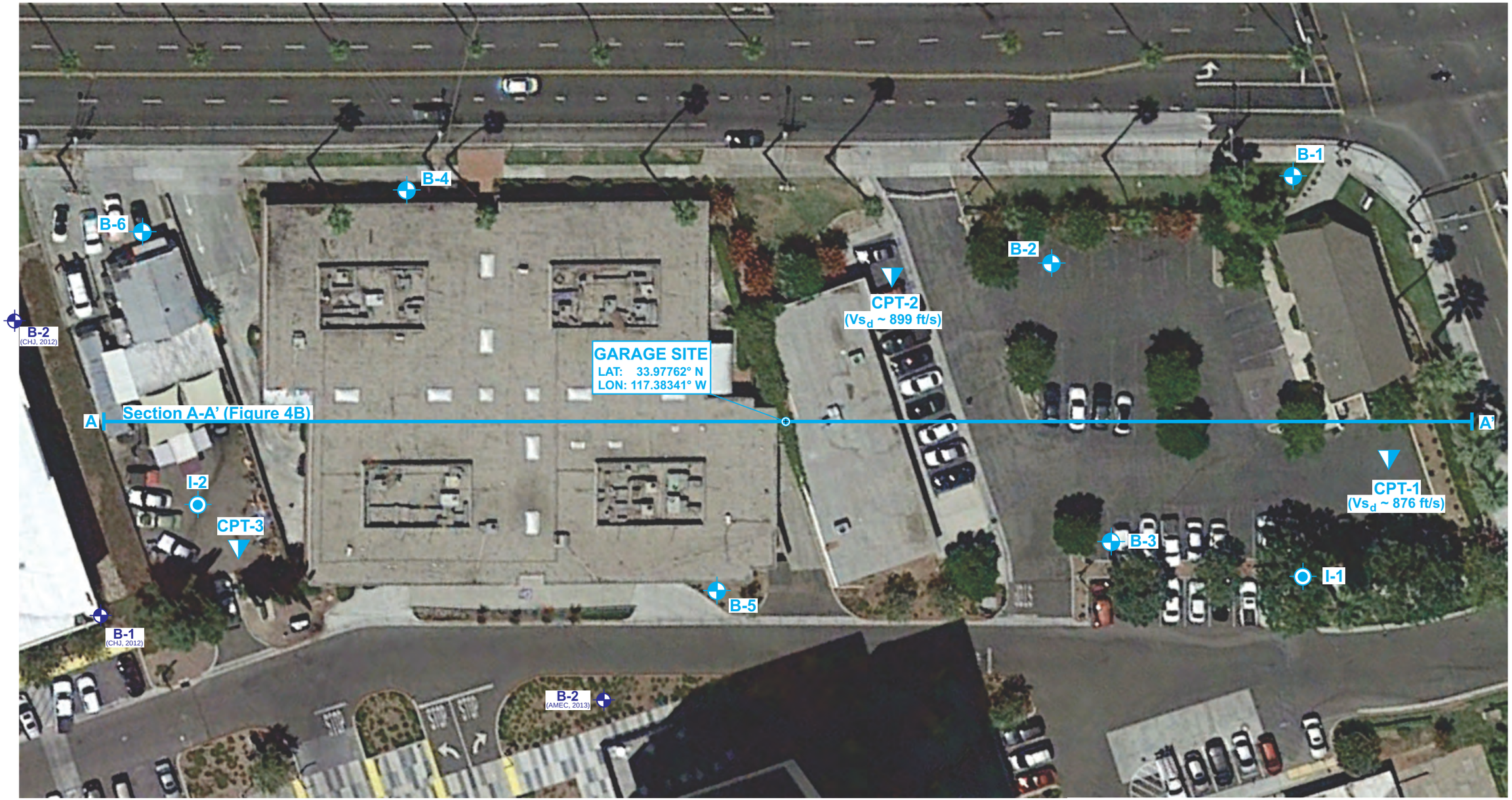

EXPLANATION:

B-10	⊕	Approximate locations of the 10 exploratory borings completed for this investigation (Group Delta, 2024). Prior explorations in **dark blue**.
CPT-5	▼	Approximate locations of the 5 cone penetration test (CPT) soundings completed for this geotechnical investigation (Group Delta, 2024).
I-6	⊕	Two borehole percolation tests were performed at each of the six test locations to aid in civil BMP storm water design (Group Delta, 2024).

NO SCALE

GROUP DELTA

GROUP DELTA CONSULTANTS, INC.
ENGINEERS AND GEOLOGISTS
9245 ACTIVITY ROAD, SUITE 103
SAN DIEGO, CA 92126 (858) 536-1000

PROJECT NAME
Riverside Community Hospital
HCA Design and Construction

PROJECT NUMBER
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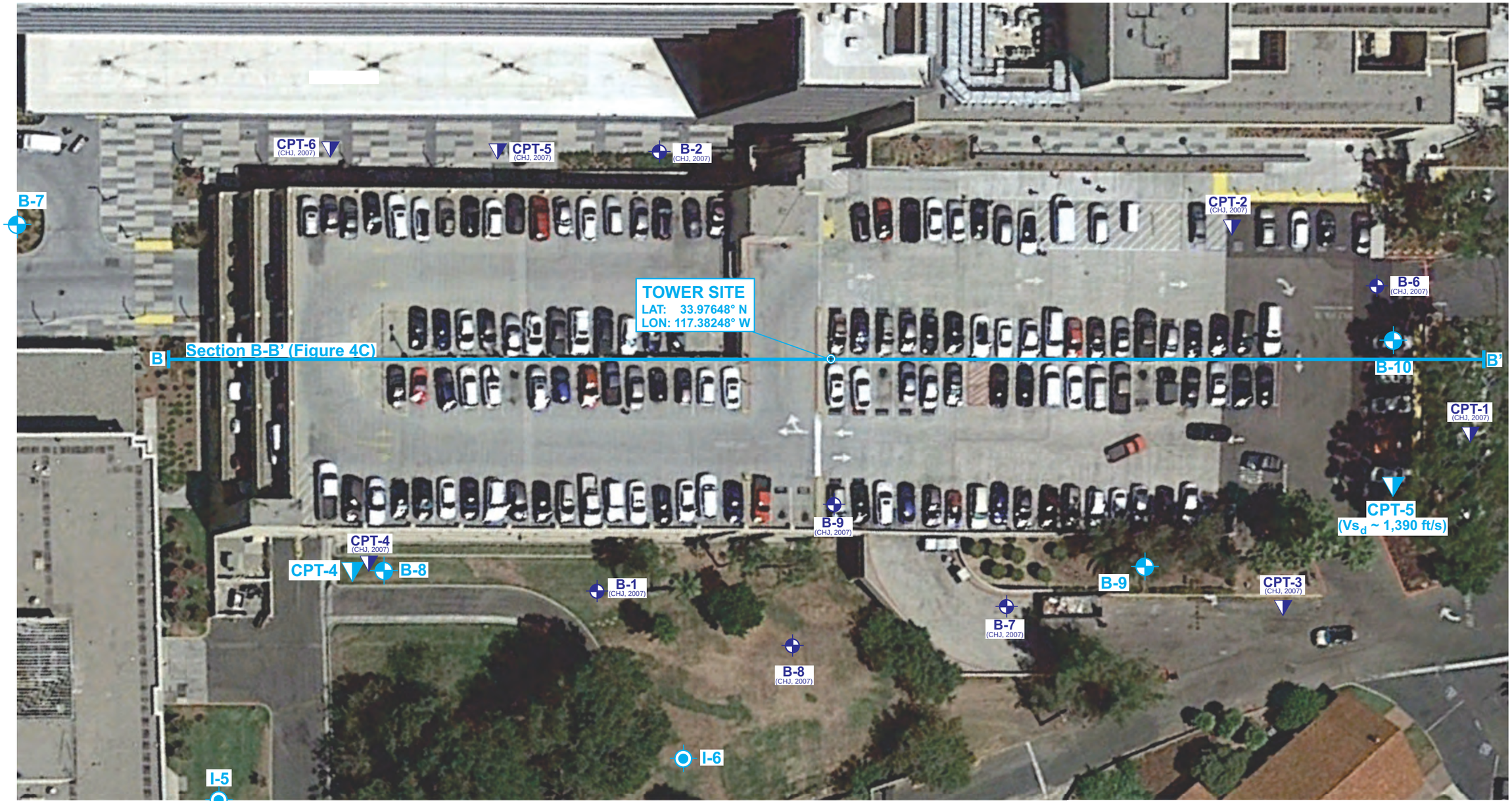
24-0011

FIGURE NUMBER
3B

EXPLORATION PLAN
(GARAGE SITE)



EXPLANATION:

B-10 Approximate locations of the 10 exploratory borings completed for this investigation (Group Delta, 2024). Prior explorations in **dark blue**.

CPT-5 Approximate locations of the 5 cone penetration tests (CPT) completed for this investigation (Group Delta, 2024). Prior soundings in **dark blue**.

I-6 Two borehole percolation tests were performed at each of the six test locations to aid in civil BMP storm water design (Group Delta, 2024).

N

NO SCALE

GROUP DELTA

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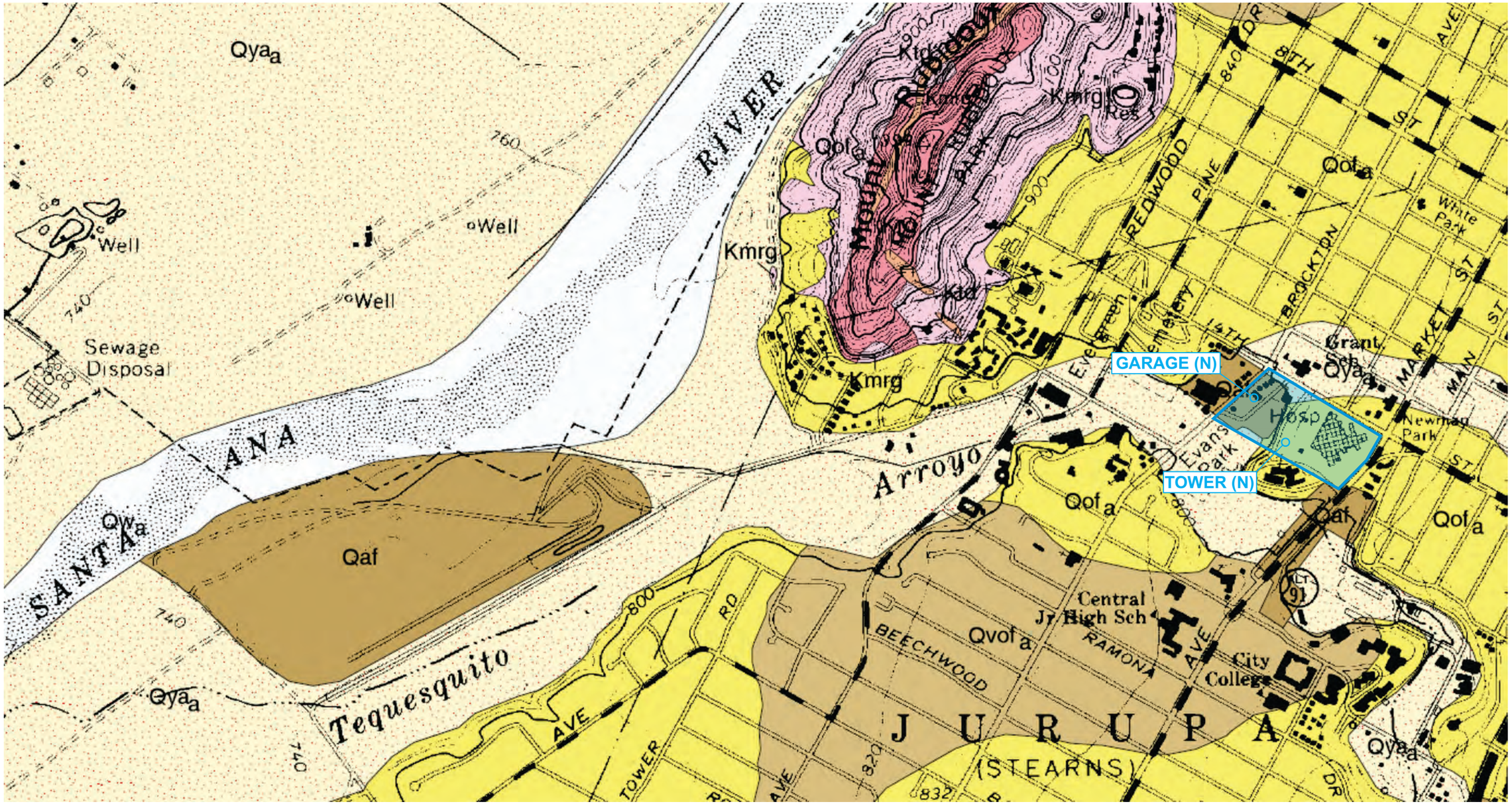
3C

EXPLORATION PLAN
(TOWER SITE)



EXPLANATION:

Qaf — **Artificial fill (Holocene):** Mostly silty sand, clayey sand and sandy silt placed in previous grading operations.

Qya — **Young Alluvium (Holocene):** Unconsolidated alluvium consisting of fine to coarse grained sand and lesser gravel and silt.

Qof — **Old Alluvium (Pleistocene):** Slightly indurated, sandy alluvial fan deposits associated with the Santa Ana River system.

REFERENCE: Morton and Cox (2002). *Geologic Map of the Riverside West 7.5' Quadrant, Riverside, California.*

N

NO SCALE

GROUP DELTA

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PROJECT NAME
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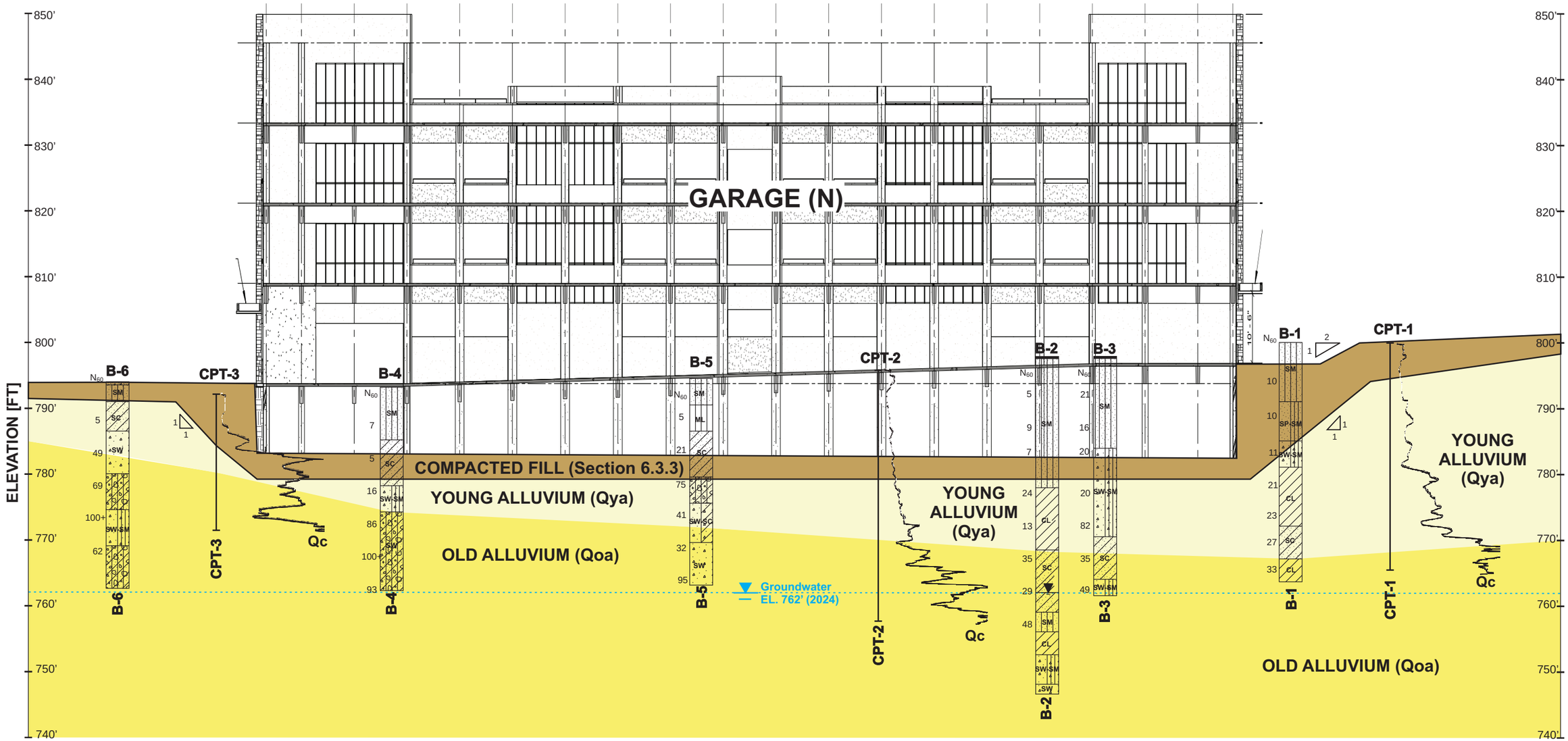
4A

LOCAL GEOLOGIC MAP



EXPLANATION:

Qaf — **Artificial fill (Holocene):** Mostly silty sand, clayey sand and sandy silt placed in previous grading operations.

Qya — **Young Alluvium (Holocene):** Unconsolidated alluvium consisting of fine to coarse grained sand and lesser gravel and silt.

Qof — **Old Alluvium (Pleistocene):** Slightly indurated, sandy alluvial fan deposits associated with the Santa Ana River system.

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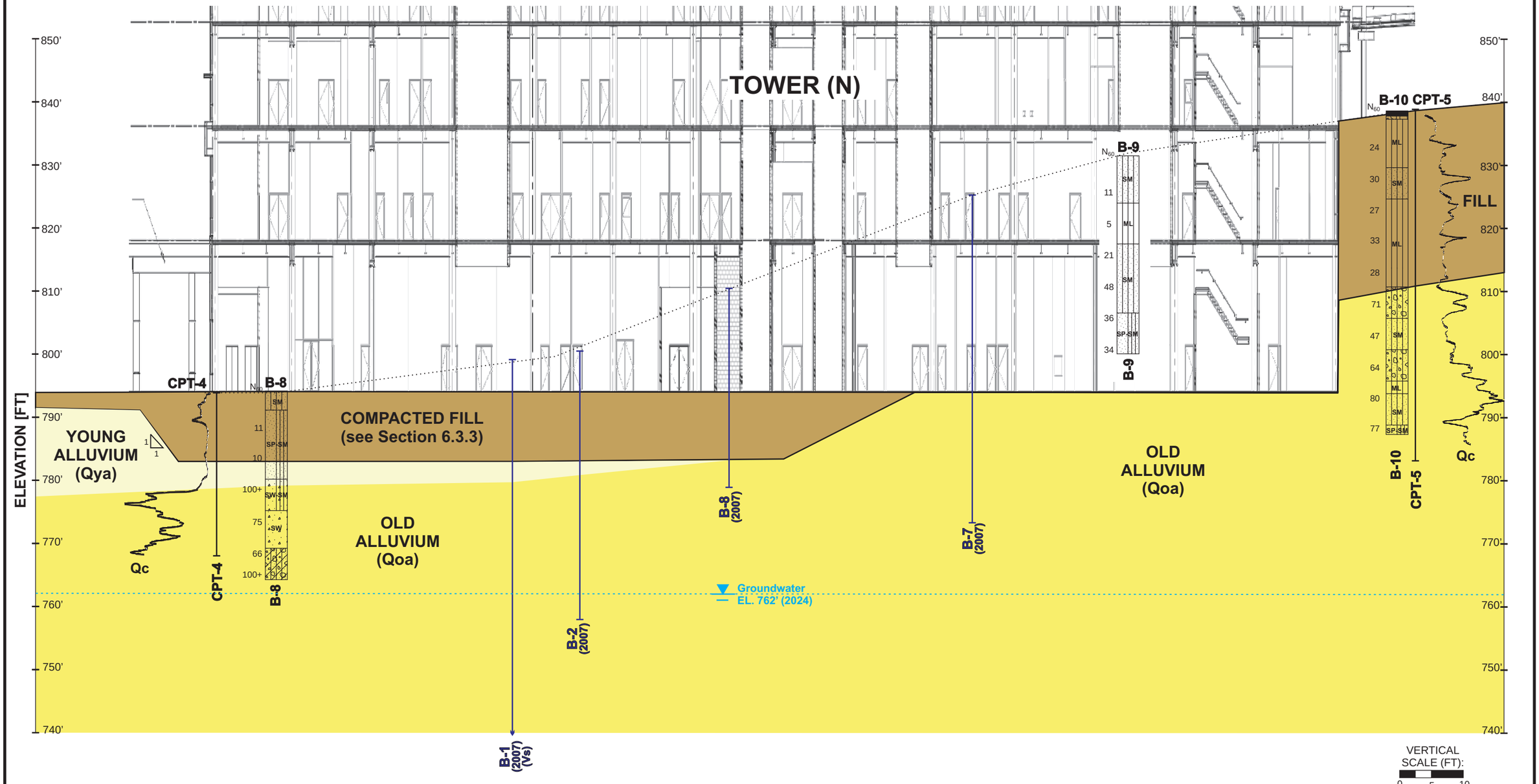
FIGURE NUMBER: 4B

CROSS SECTION A-A'
(GARAGE SITE)



VERTICAL SCALE (FT):
0 5 10

EXPLANATION:

Qaf — Artificial fill (Holocene): Mostly silty sand, clayey sand and sandy silt placed in previous grading operations.

Qya — Young Alluvium (Holocene): Unconsolidated alluvium consisting of fine to coarse grained sand and lesser gravel and silt.

Qof — Old Alluvium (Pleistocene): Slightly indurated, sandy alluvial fan deposits associated with the Santa Ana River system.

GROUP DELTA

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FIGURE NUMBER: 4C

CROSS SECTION B-B'
(TOWER SITE)

HISTORICAL SEISMICITY

>M6 EQ

>M6-M5

>M5-M4

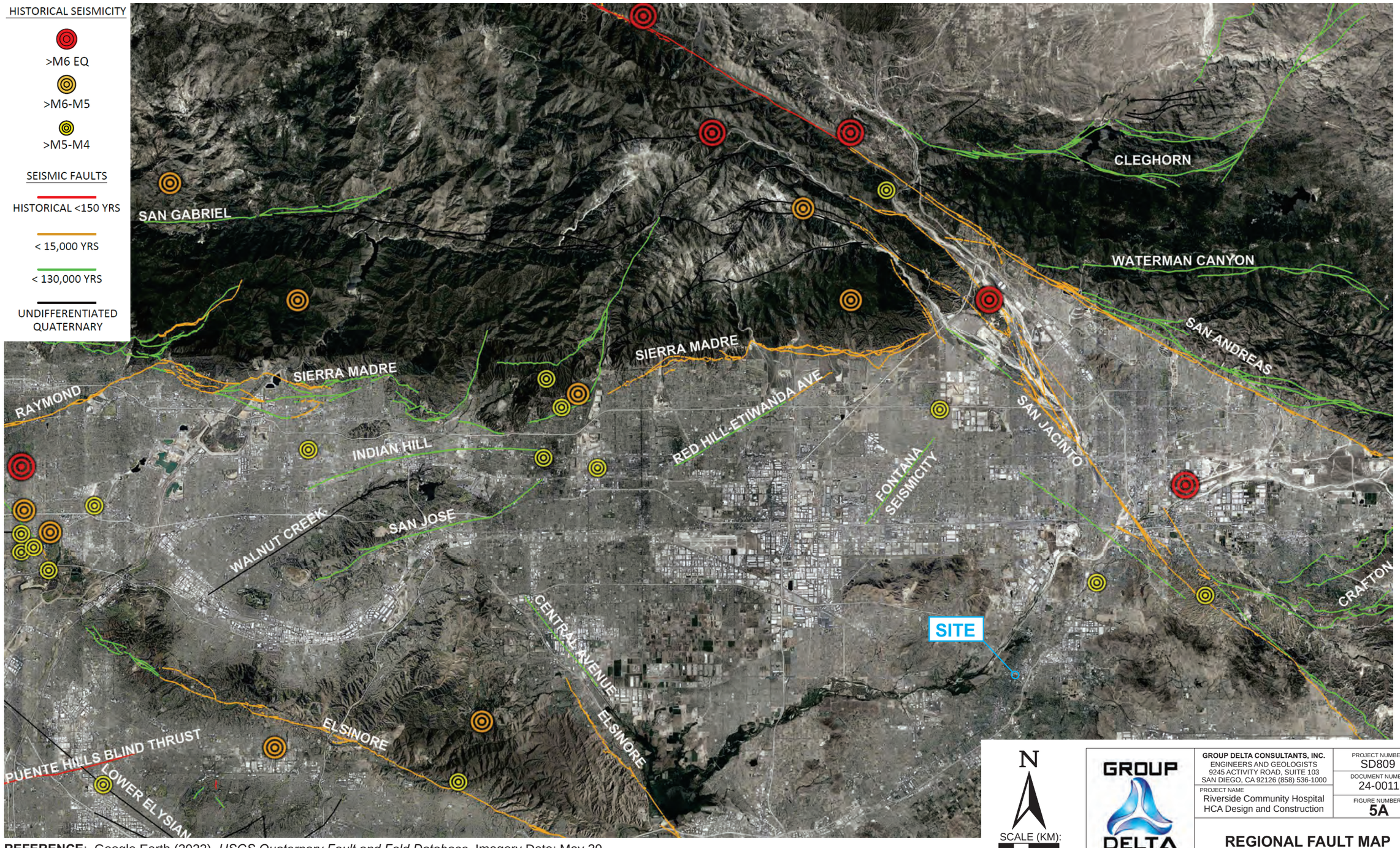
SEISMIC FAULTS

HISTORICAL <150 YRS

< 15,000 YRS

< 130,000 YRS

UNDIFFERENTIATED QUATERNARY



REFERENCE: Google Earth (2022). *USGS Quaternary Fault and Fold Database,* Imagery Date: May 30.

N

SCALE (KM): 0 2 4

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FIGURE NUMBER
5A

REGIONAL FAULT MAP

EXPLANATION:

FEMA 100-Year Flood Zone AE:
The approximate limits of the FEMA 100-year flood within the Tequesquito Arroyo are shown in blue.

FEMA 100-Year Flood Elevations;
The approximate elevations of the 100-year flood within the Tequesquito Arroyo is also shown [MSL].

N

NO SCALE

Reference: FEMA (2021). *FEMA's National Flood Hazard Layer (NFHL) Viewer,* Map 06065C0710G, https://hazards-fema.maps.arcgis.com/apps/webappviewer.

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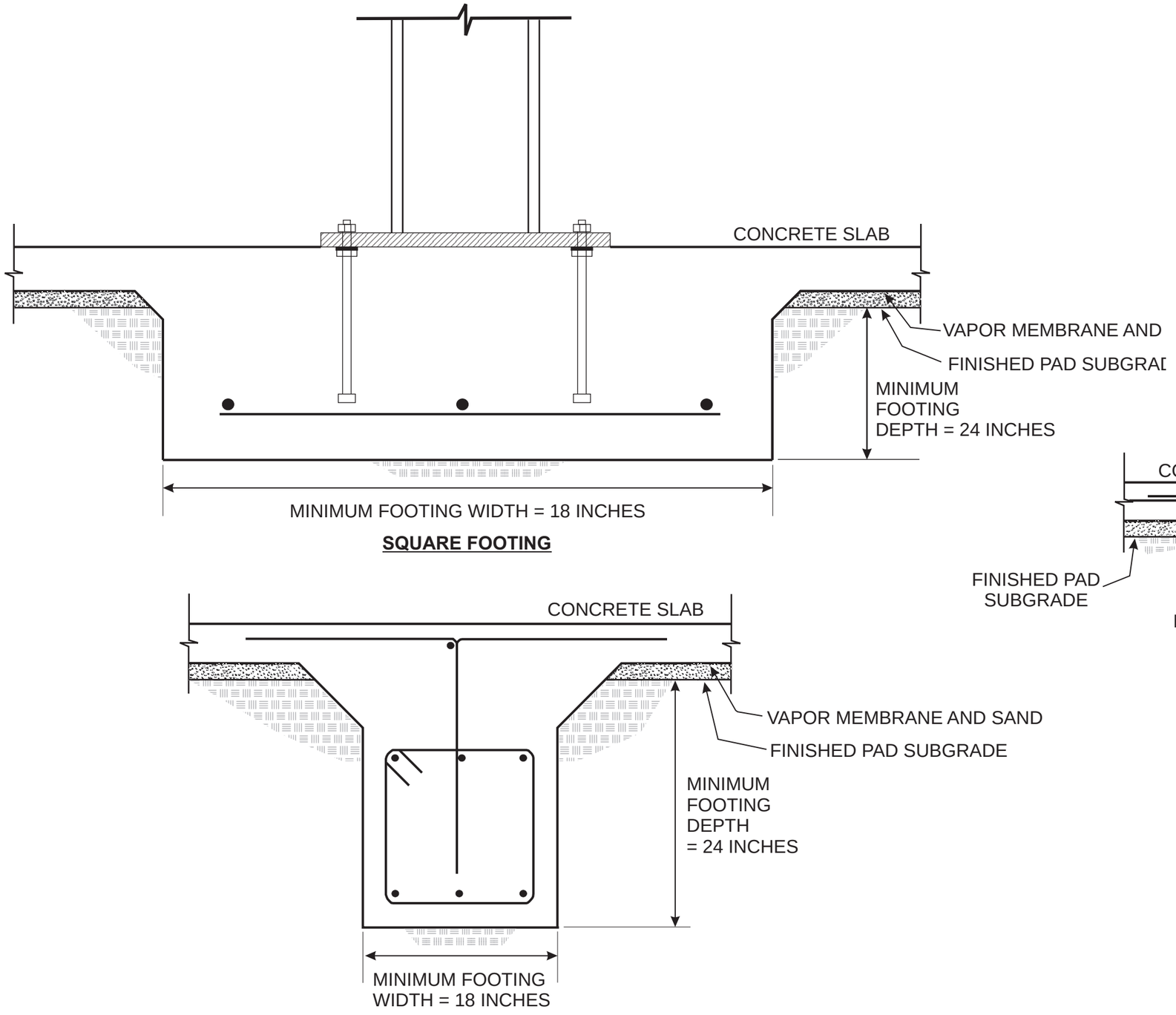
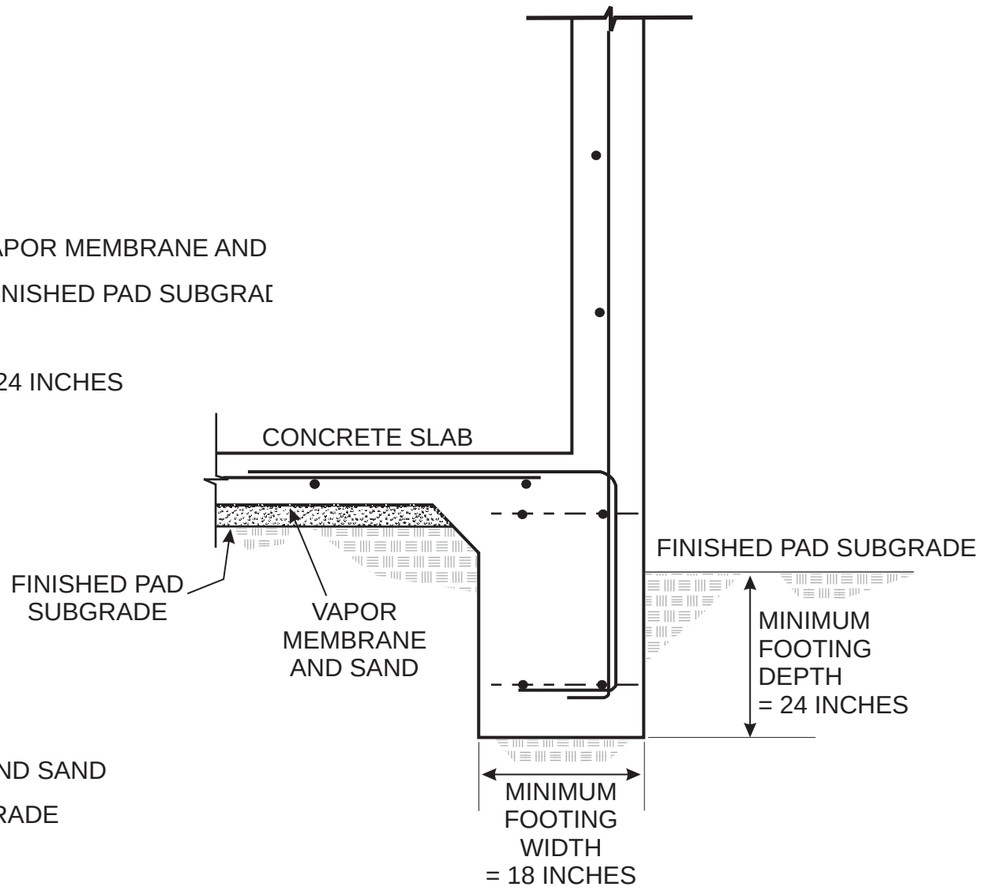
FIGURE NUMBER
5B

FEMA FLOOD MAP



SQUARE FOOTING

INTERIOR CONTINUOUS FOOTING



EXTERIOR CONTINUOUS FOOTING

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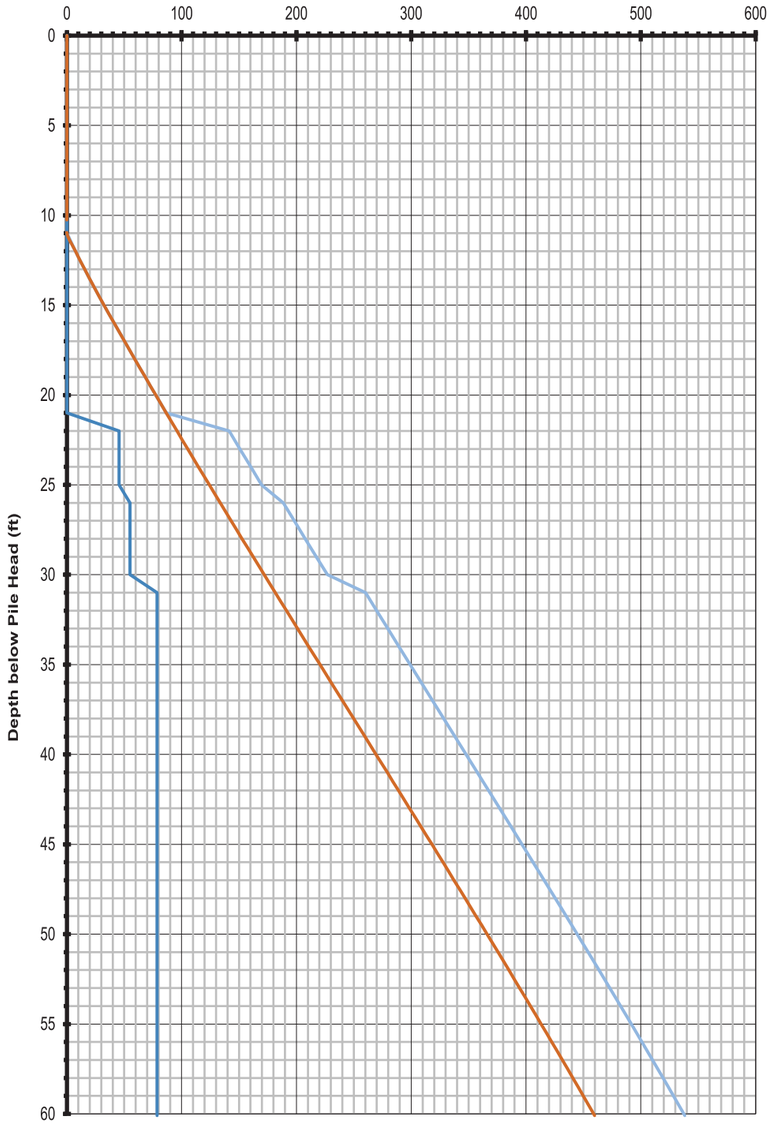
DOCUMENT NUMBER
24-0011

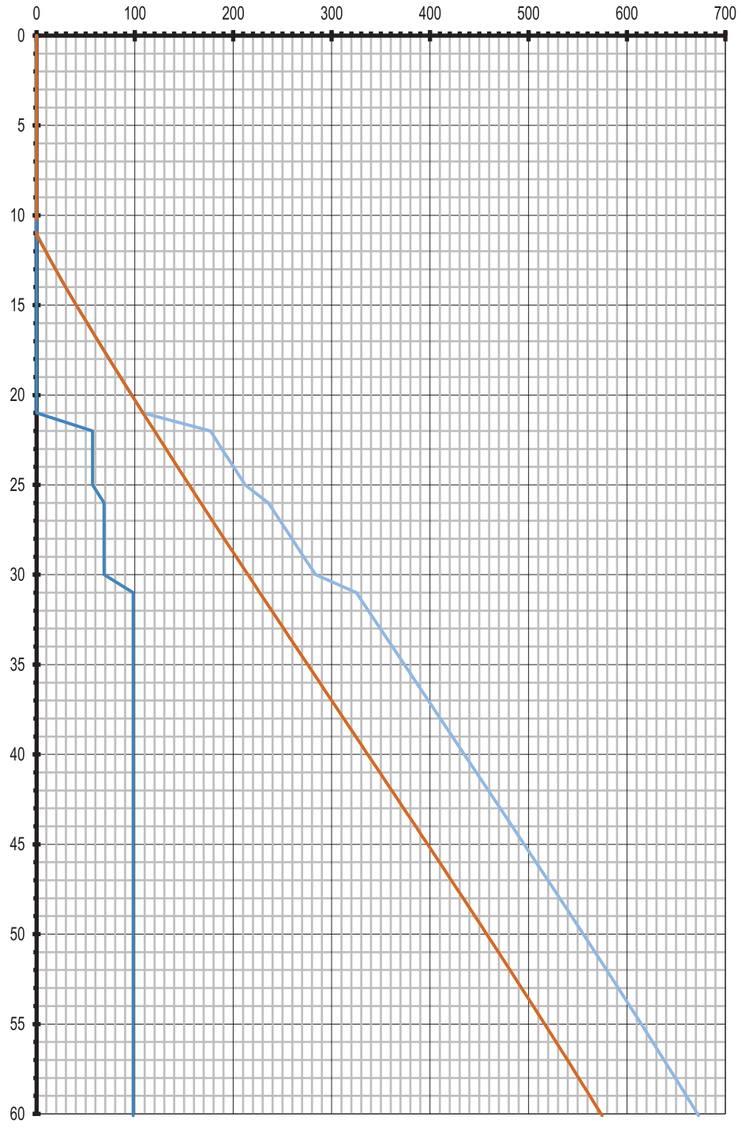
FIGURE NUMBER
6

SHALLOW FOUNDATIONS

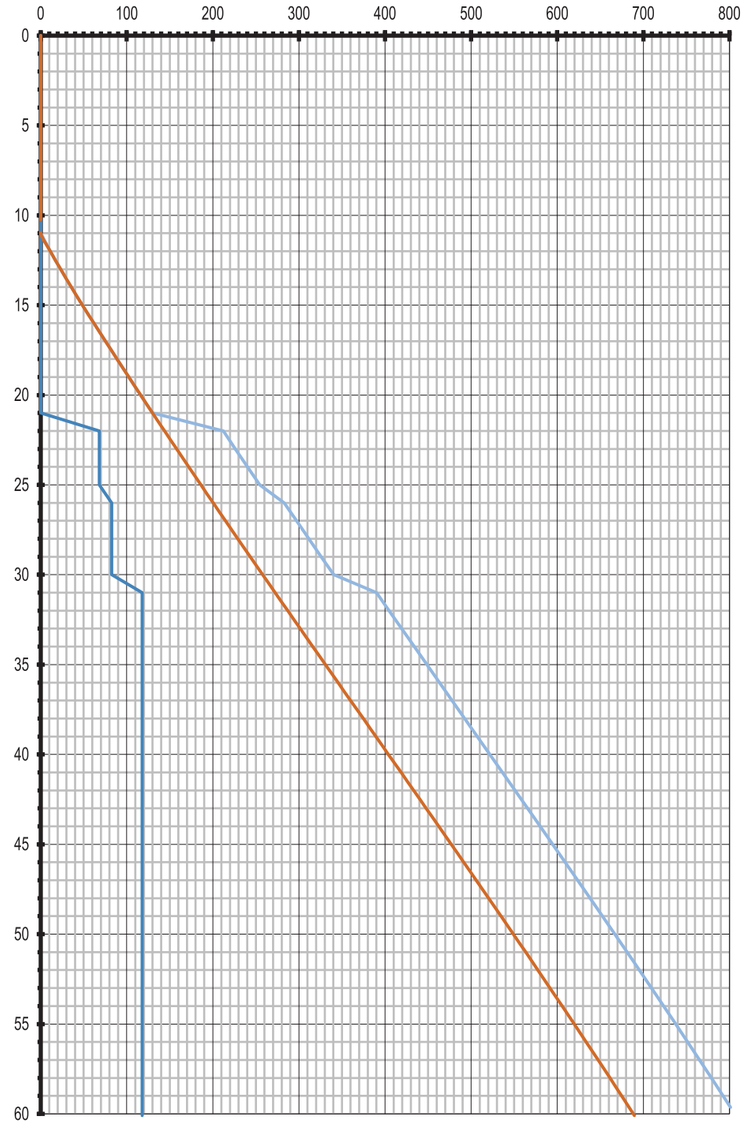
FACTORED CAPACITY [KIPS] (24-INCH DIAMETER PILE)



FACTORED CAPACITY [KIPS] (30-INCH DIAMETER PILE)



FACTORED CAPACITY [KIPS] (36-INCH DIAMETER PILE)



NOTES:

1) CIDH pile excavations will need stabilization using drilling slurry and casing.

2) All piles should be embedded at least 10-feet into dense Old Alluvium.

Total Factored Resistance (LRFD)

Factored End Bearing (0.5)

Factored Skin Friction (0.7)

GROUP DELTA

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SAN DIEGO, CA 92126 (858) 536-1000

PROJECT NAME
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HCA Design and Construction

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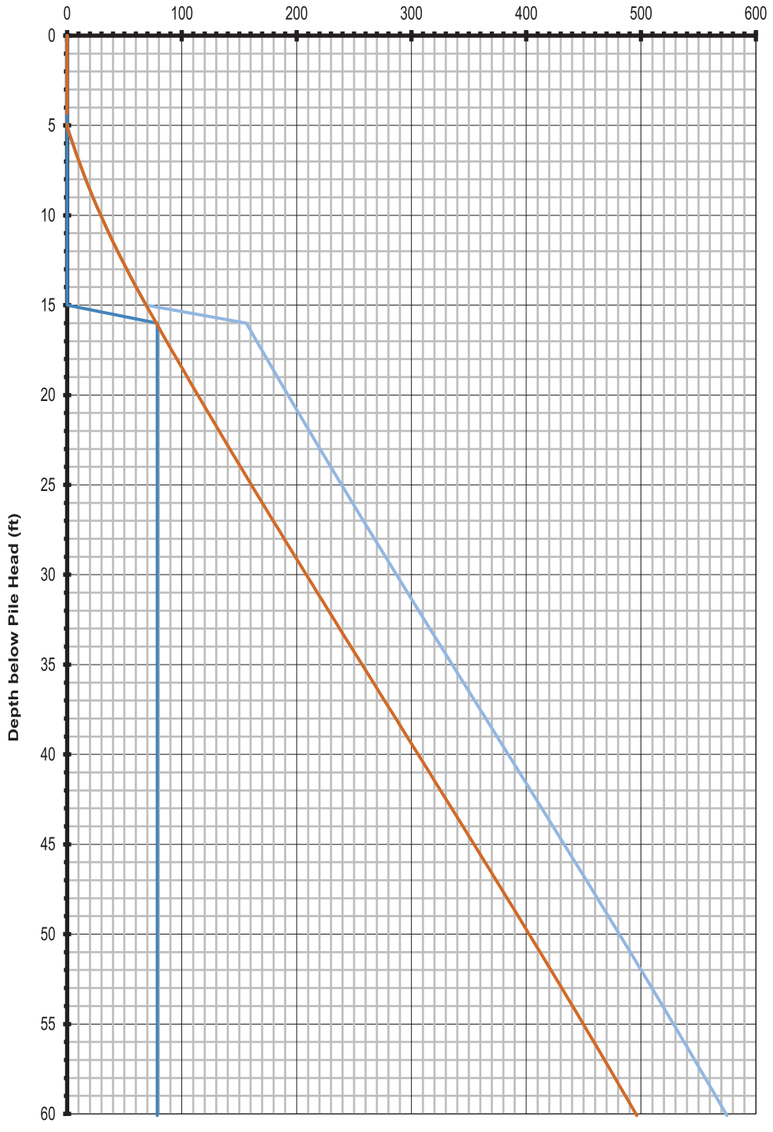
24-0011

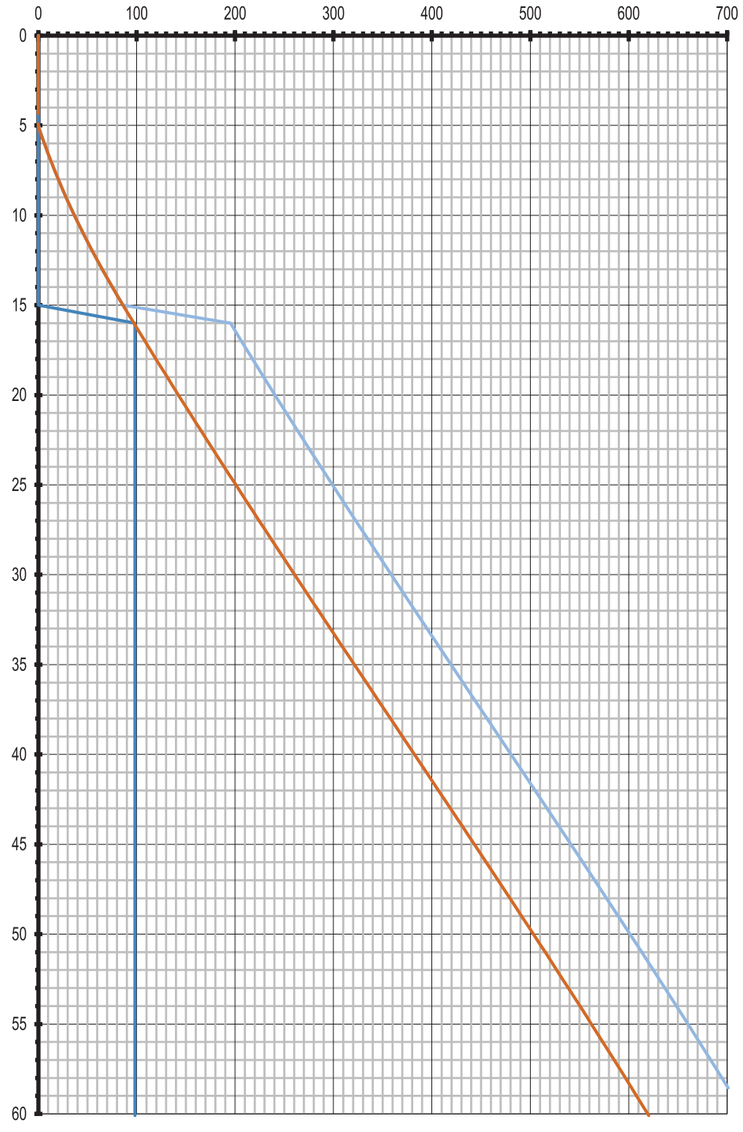
FIGURE NUMBER
7A

AXIAL PILE CAPACITY (GARAGE SITE - NORTH)

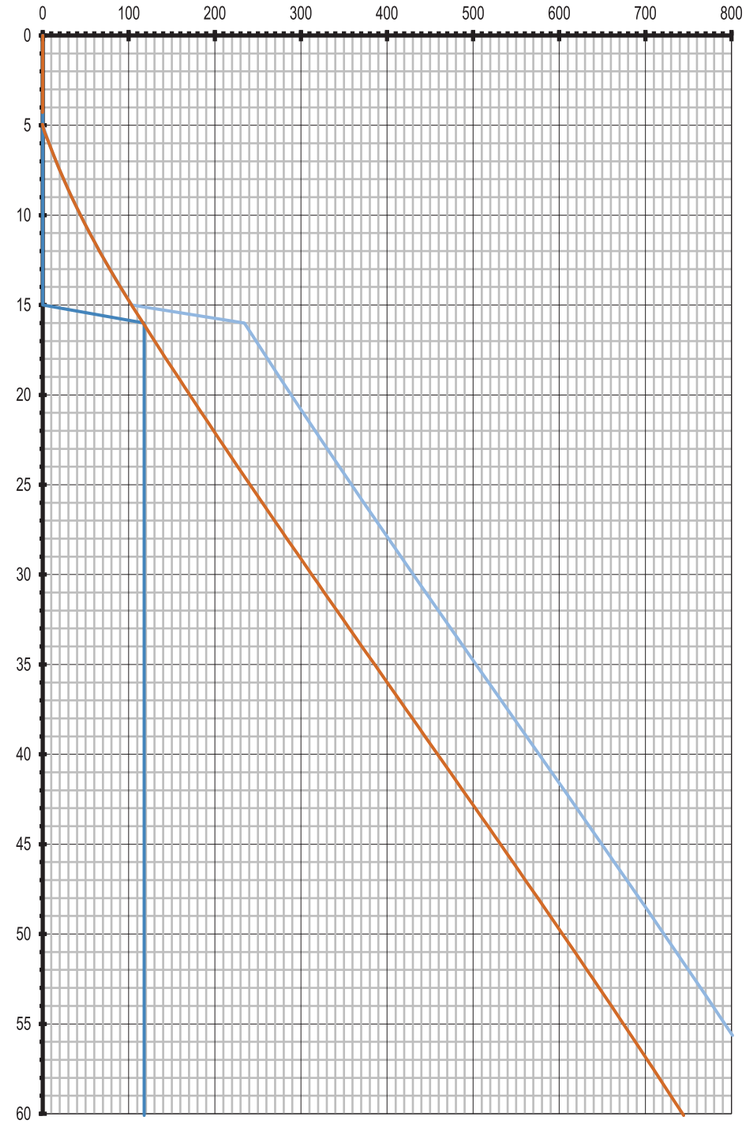
FACTORED CAPACITY [KIPS] (24-INCH DIAMETER PILE)



FACTORED CAPACITY [KIPS] (30-INCH DIAMETER PILE)



FACTORED CAPACITY [KIPS] (36-INCH DIAMETER PILE)



NOTES:

1) CIDH pile excavations will need stabilization using drilling slurry and casing.

2) All piles should be embedded at least 10-feet into dense Old Alluvium.

Total Factored Resistance (LRFD)

Factored End Bearing (0.5)

Factored Skin Friction (0.7)

GROUP DELTA

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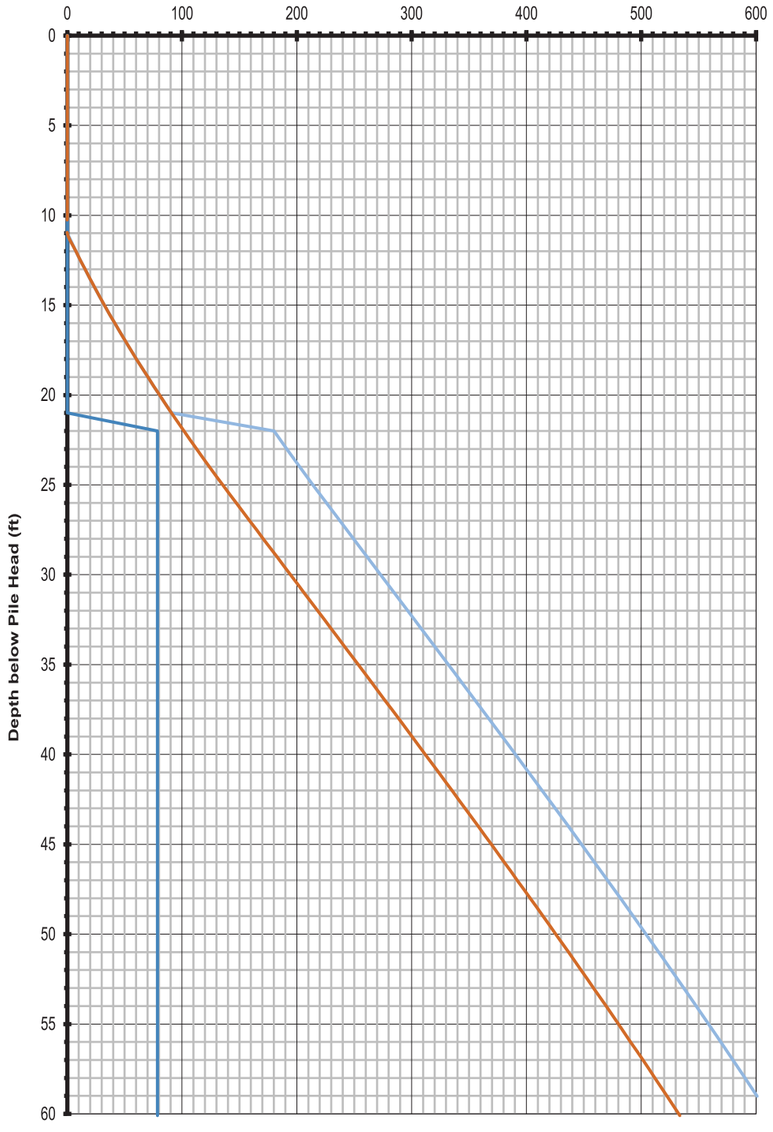
24-0011

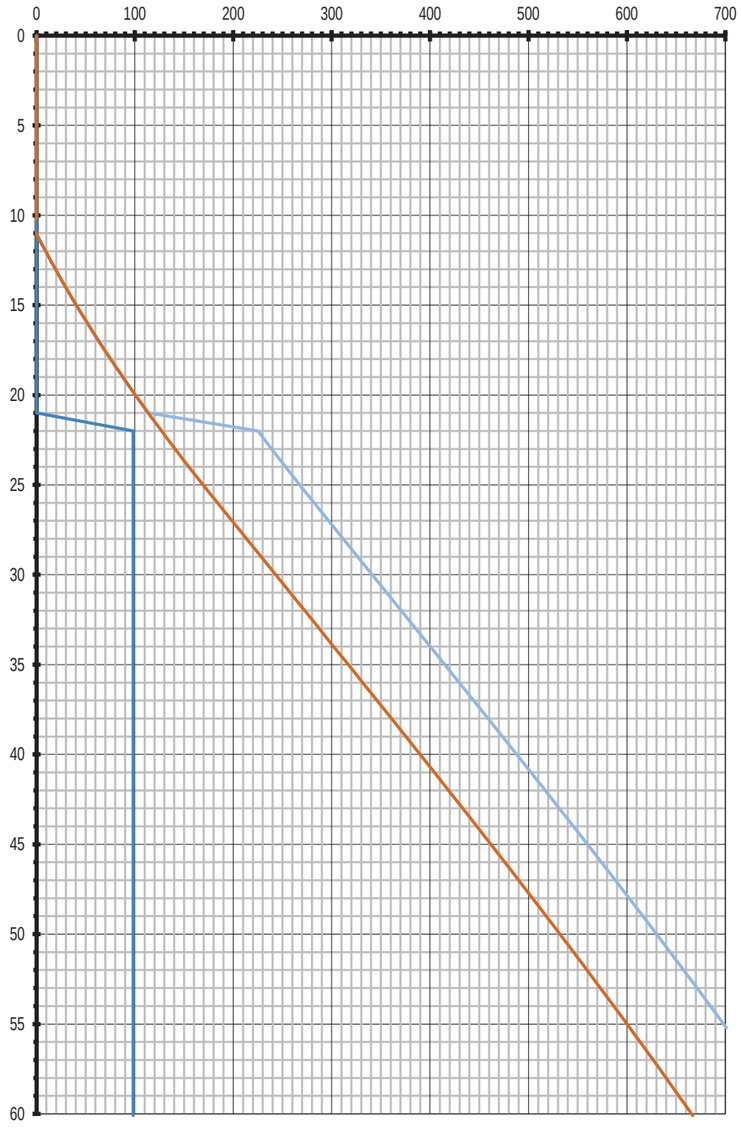
FIGURE NUMBER
7B

AXIAL PILE CAPACITY (GARAGE SITE - SOUTH)

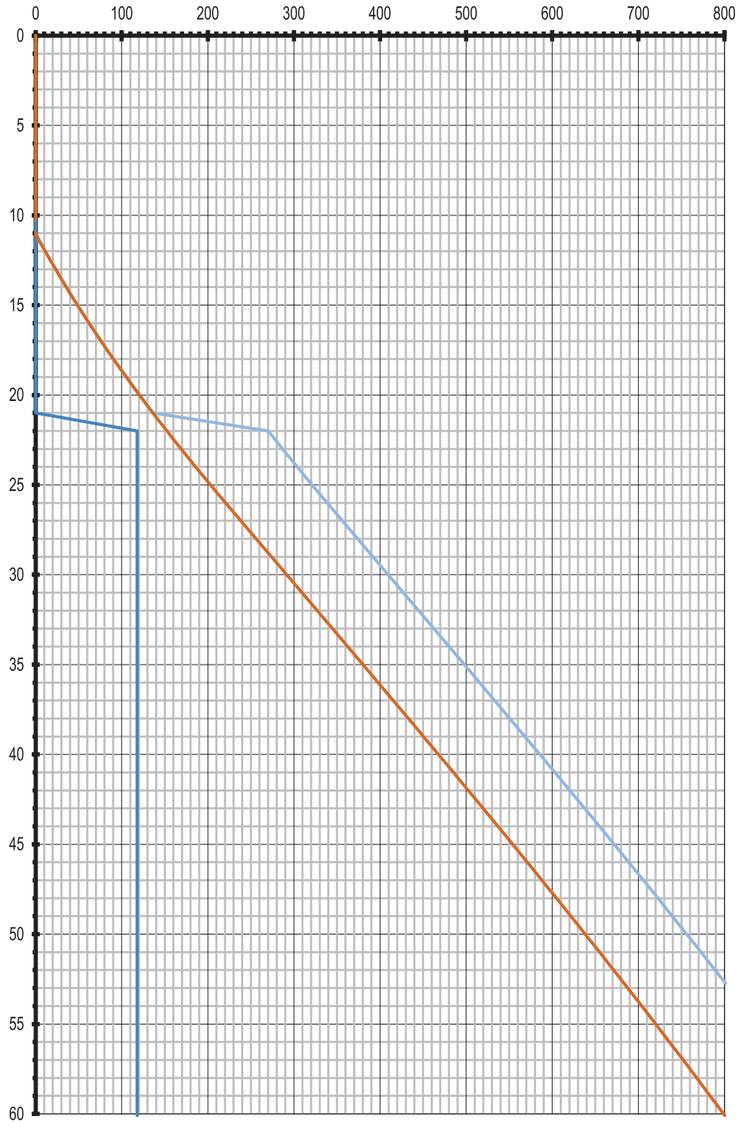
FACTORED CAPACITY [KIPS]
(24-INCH DIAMETER PILE)



FACTORED CAPACITY [KIPS]
(30-INCH DIAMETER PILE)



FACTORED CAPACITY [KIPS]
(36-INCH DIAMETER PILE)



NOTES:

1) CIDH pile excavations will need stabilization using drilling slurry and casing.

2) All piles should be embedded at least 10-feet into dense Old Alluvium.

Total Factored Resistance (LRFD)

Factored End Bearing (0.5)

Factored Skin Friction (0.7)

GROUP DELTA

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PROJECT NAME
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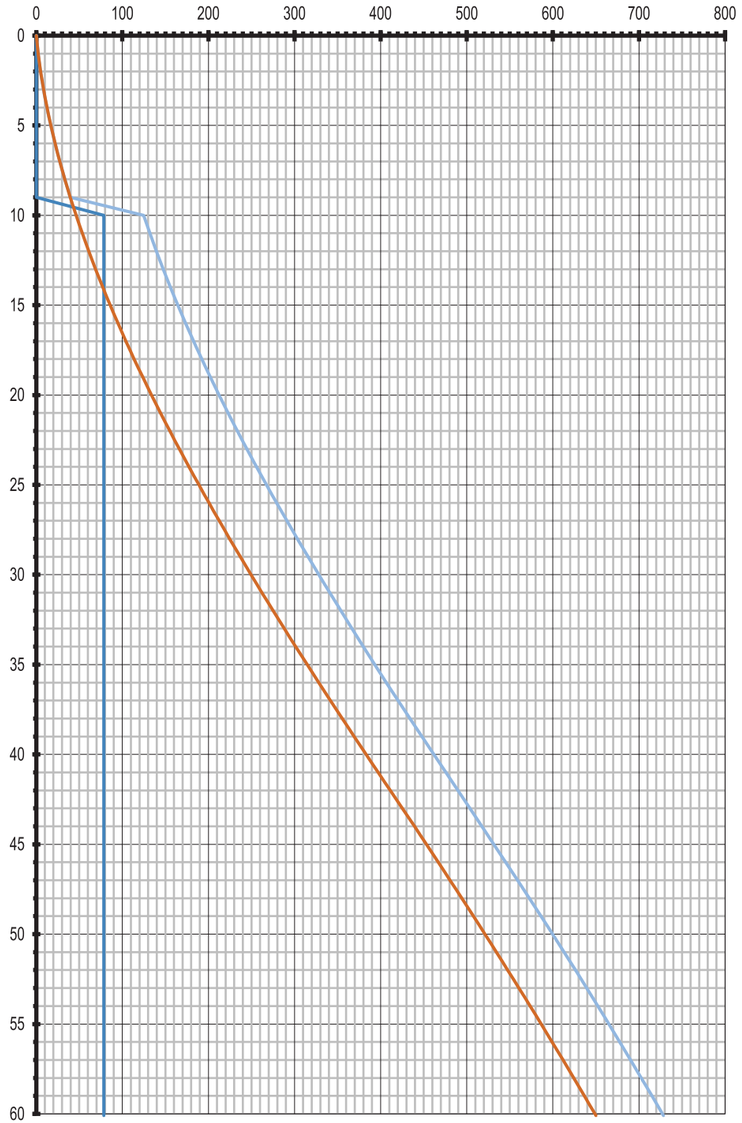
DOCUMENT NUMBER
24-0011

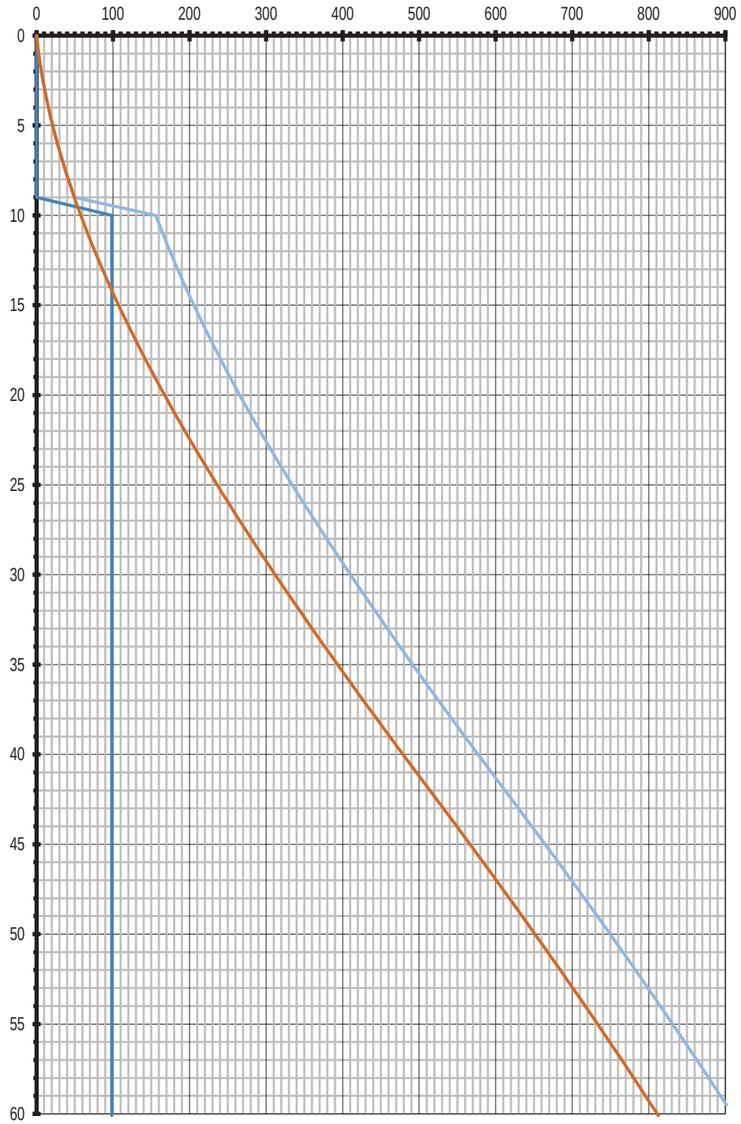
FIGURE NUMBER
7C

AXIAL PILE CAPACITY
(TOWER SITE - WEST)

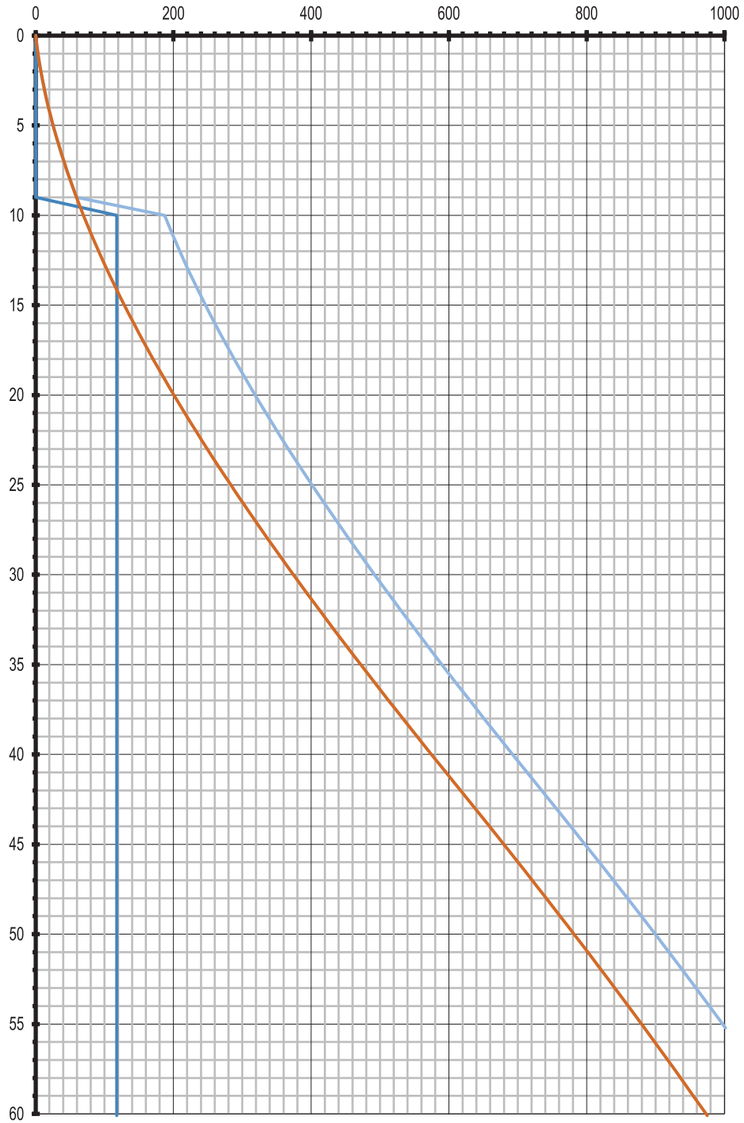
FACTORED CAPACITY [KIPS] (24-INCH DIAMETER PILE)



FACTORED CAPACITY [KIPS] (30-INCH DIAMETER PILE)



FACTORED CAPACITY [KIPS] (36-INCH DIAMETER PILE)



NOTES:

1) CIDH pile excavations will need stabilization using drilling slurry and casing.

2) All piles should be embedded at least 10-feet into dense Old Alluvium.

Total Factored Resistance (LRFD) — Factored End Bearing (0.5) — Factored Skin Friction (0.7)

GROUP DELTA

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PROJECT NUMBER
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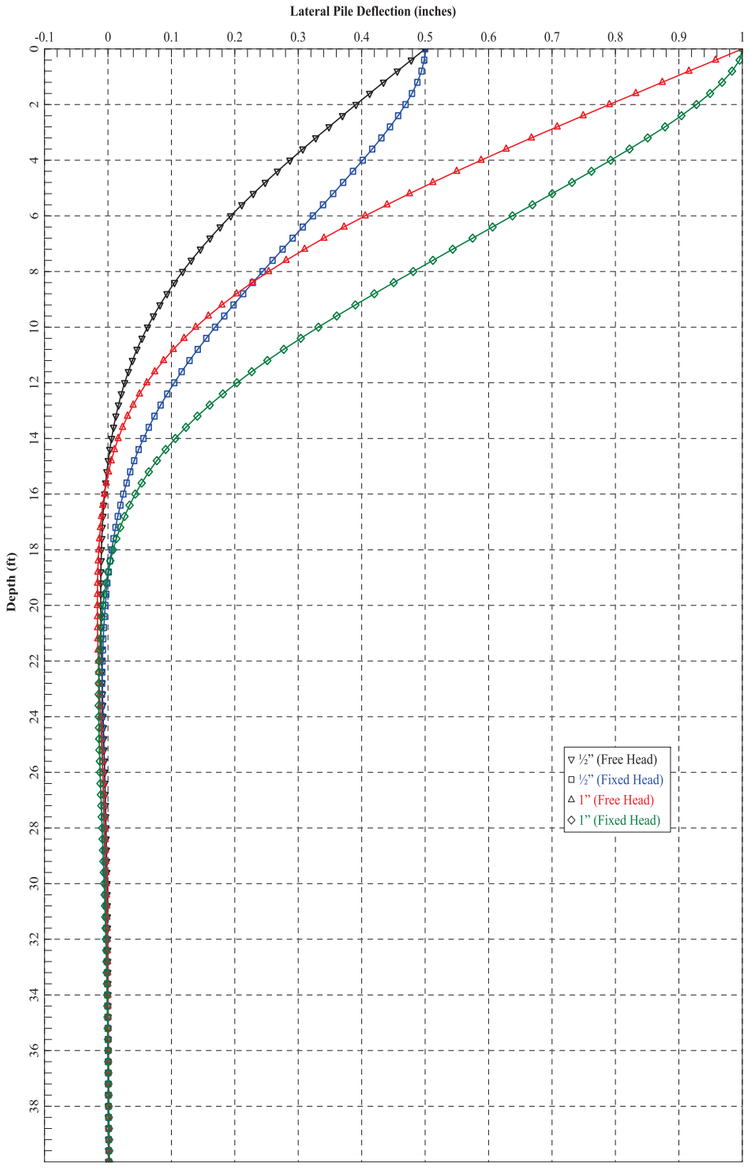
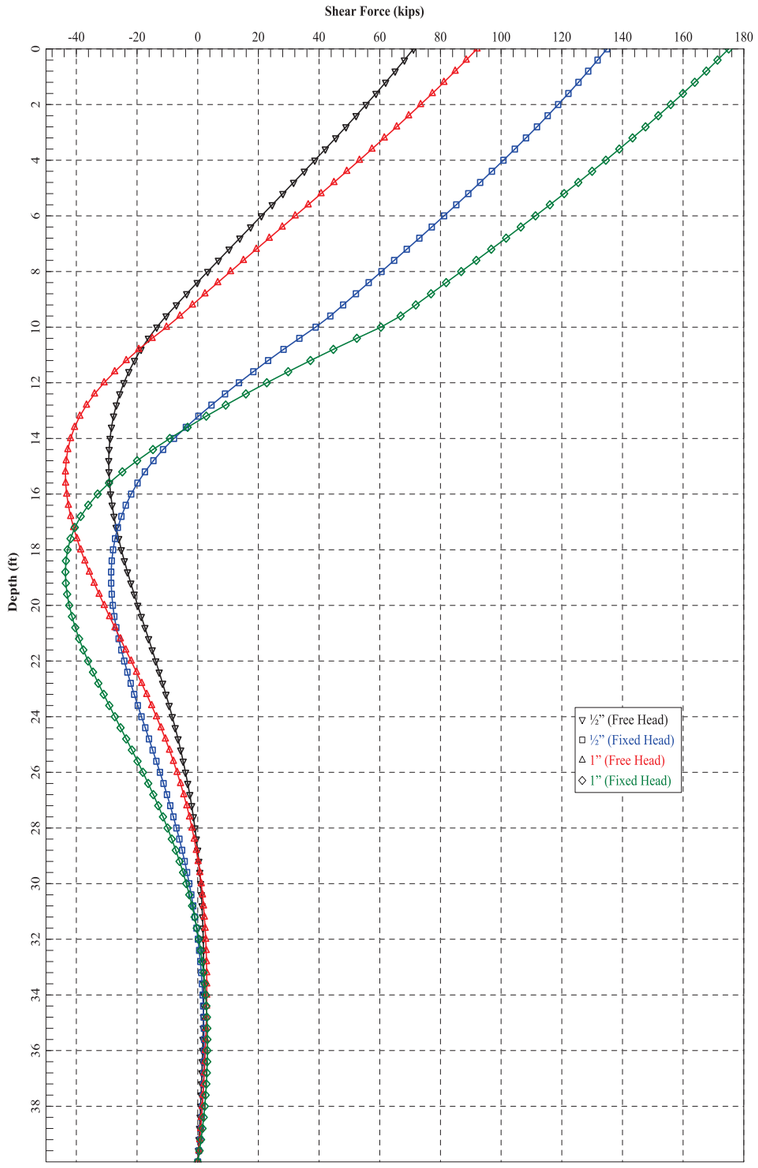
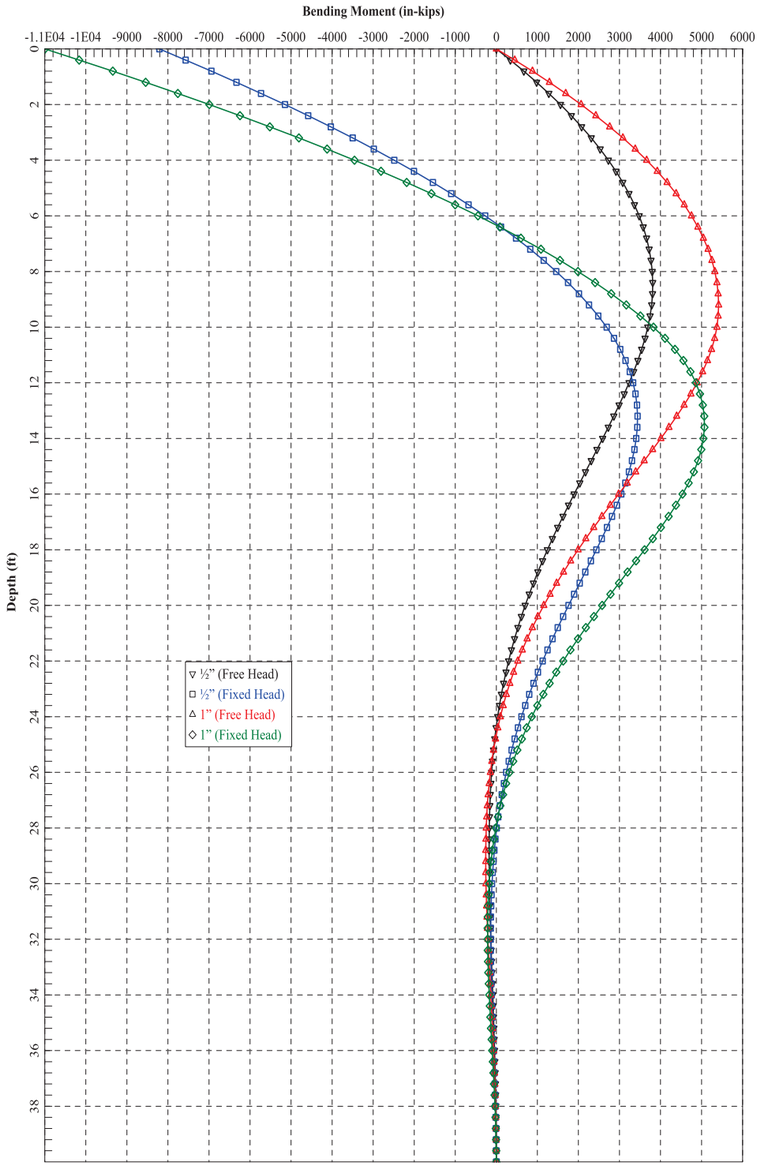
DOCUMENT NUMBER
24-0011

FIGURE NUMBER
7D

AXIAL PILE CAPACITY (TOWER SITE - EAST)







NOTES:

1) The approximate lateral response of a single 30-inch diameter, 40-foot long pile is shown in the deflection, shear and moment diagrams provided above.

2) The analyses assume at least 10-foot embedment into dense Old Alluvium, with 4,000 psi concrete strength and (6) No. 14 transverse bars (Grade 60).

GROUP DELTA

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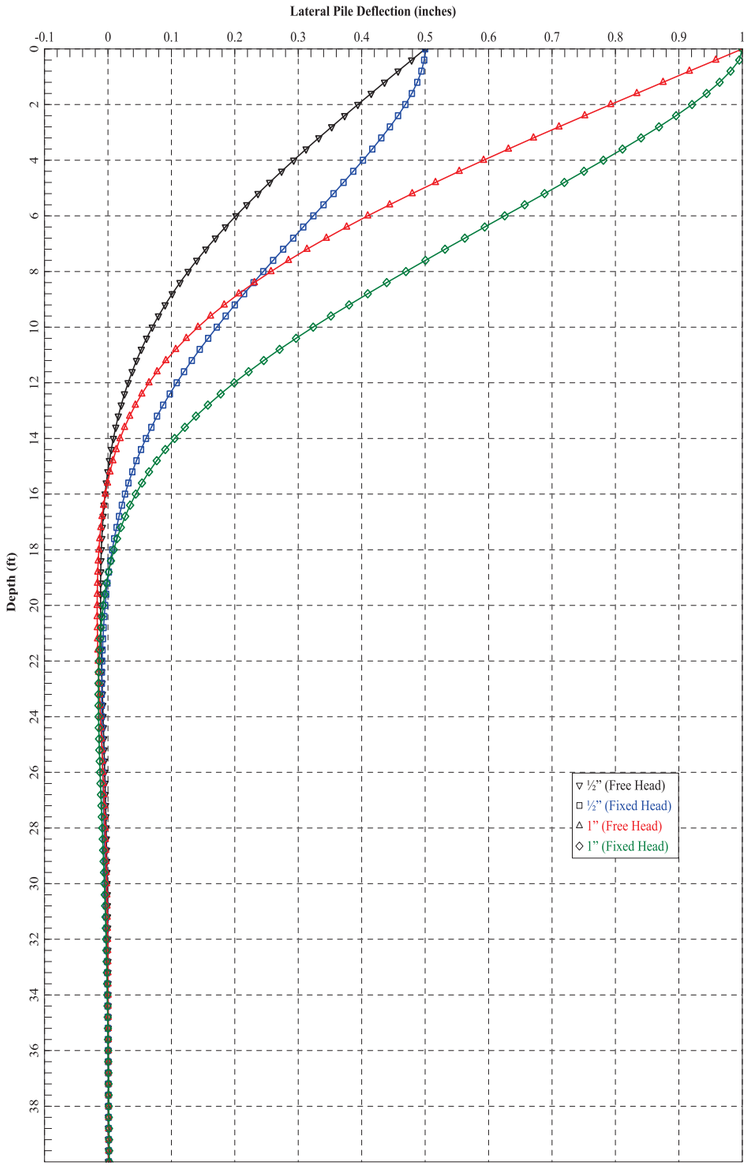
HCA Design and Construction

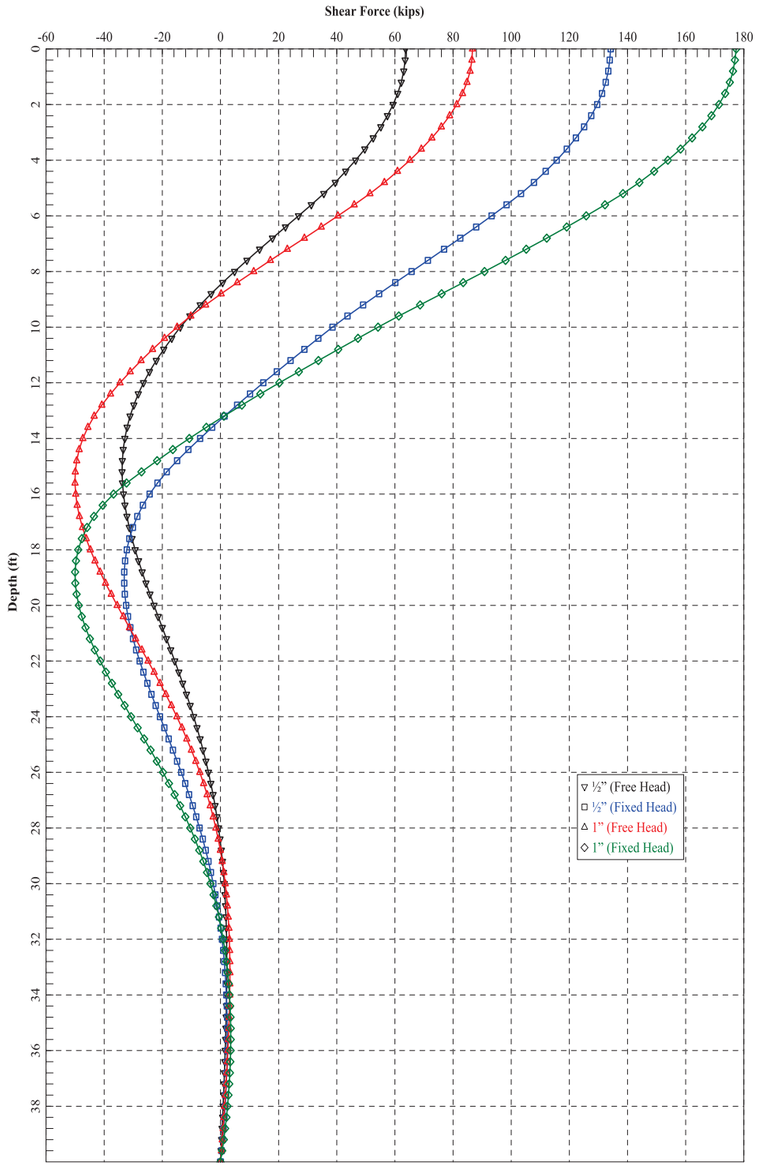
PROJECT NUMBER
SD809

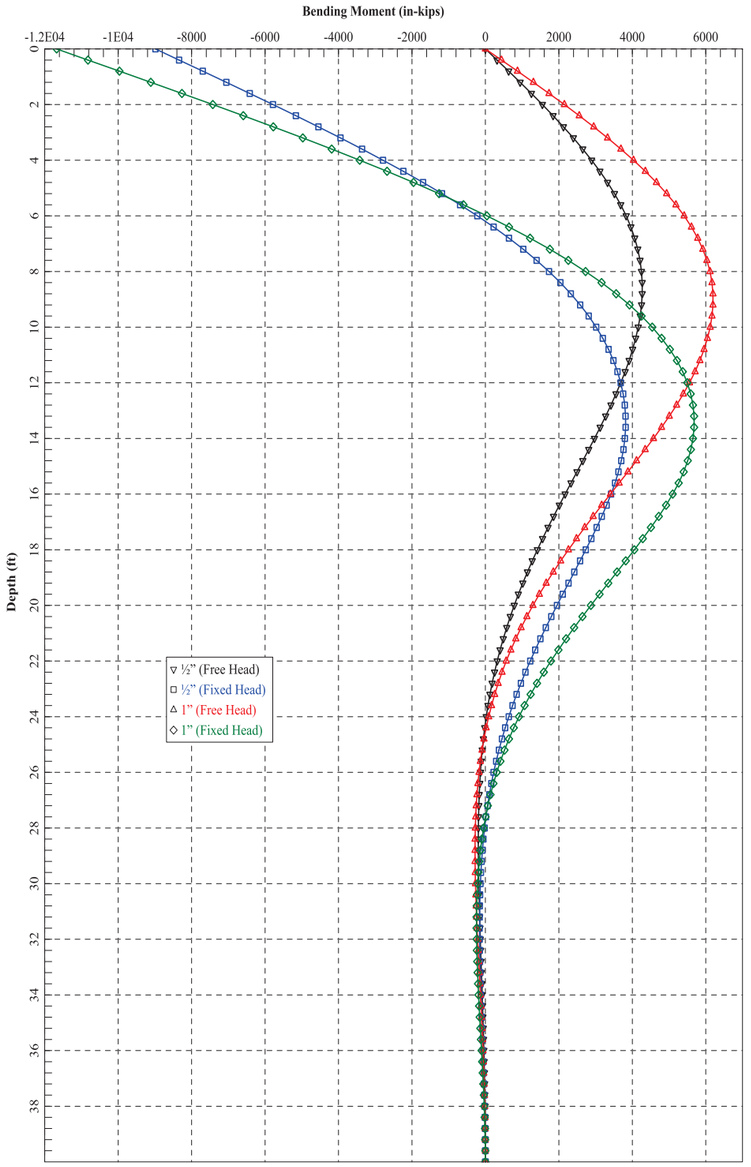
DOCUMENT NUMBER
24-0011

FIGURE NUMBER
8A

LATERAL PILE CAPACITY
(GARAGE SITE - NORTH)







NOTES:

1) The approximate lateral response of a single 30-inch diameter, 40-foot long pile is shown in the deflection, shear and moment diagrams provided above.

2) The analyses assume at least 10-foot embedment into dense Old Alluvium, with 4,000 psi concrete strength and (6) No. 14 transverse bars (Grade 60).

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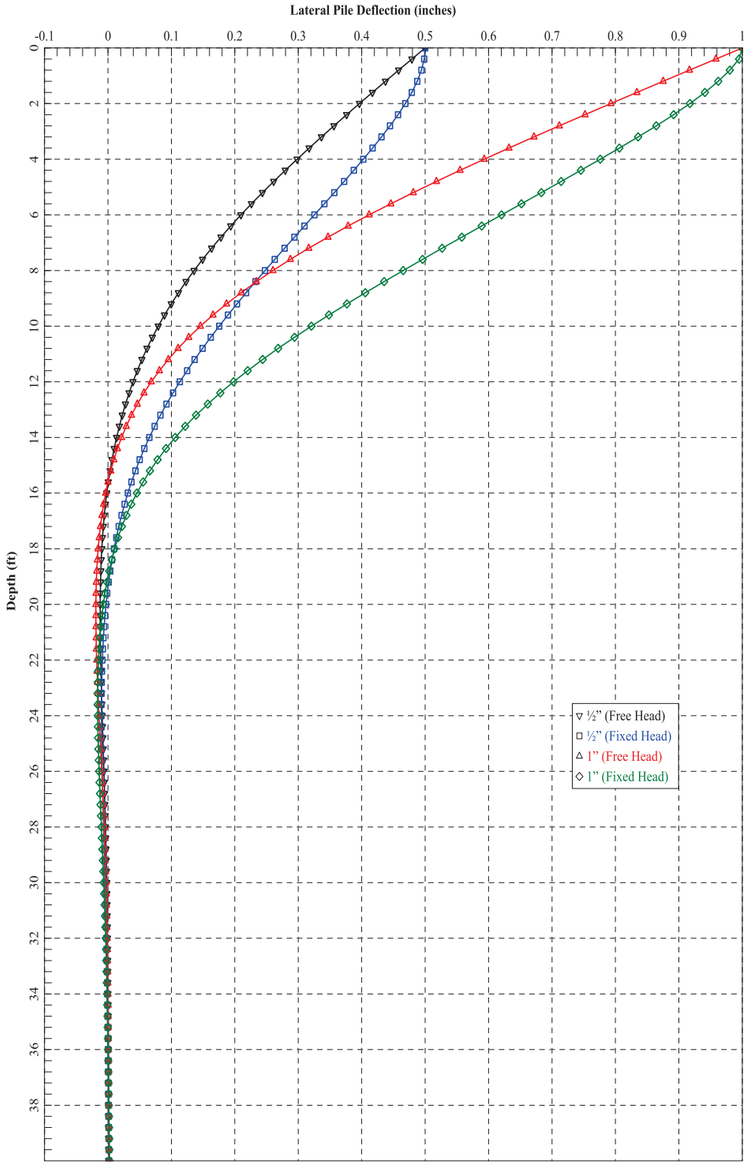
HCA Design and Construction

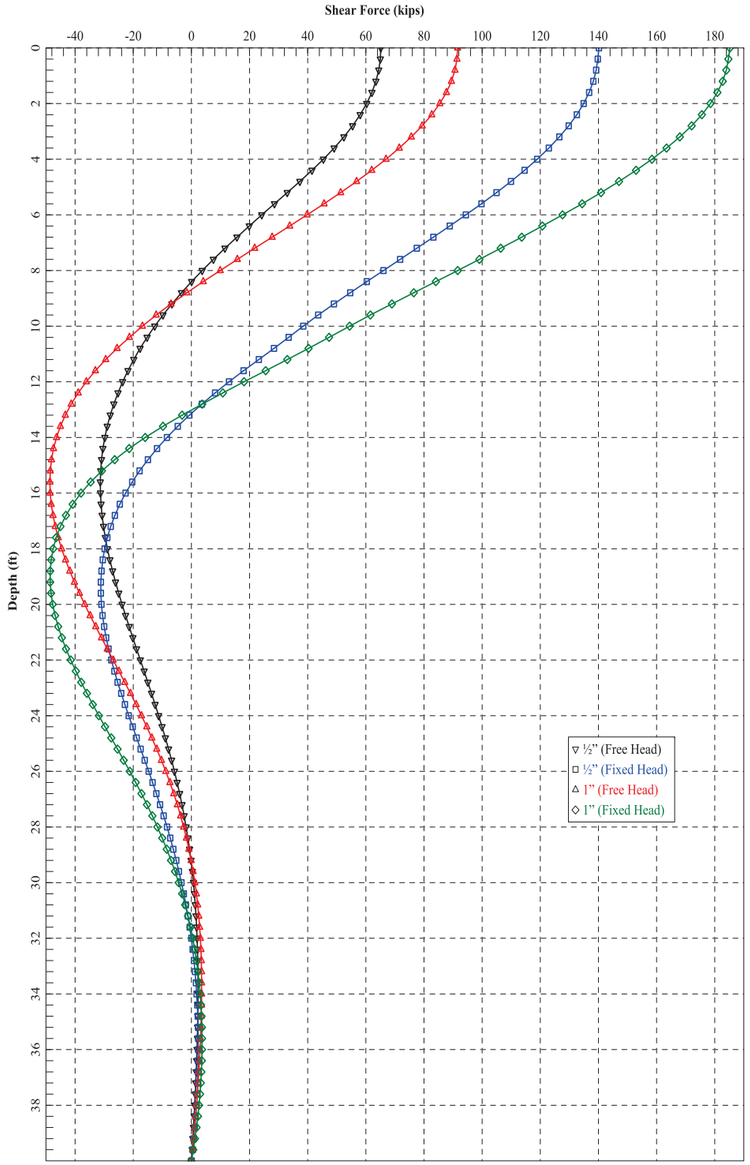
PROJECT NUMBER
SD809

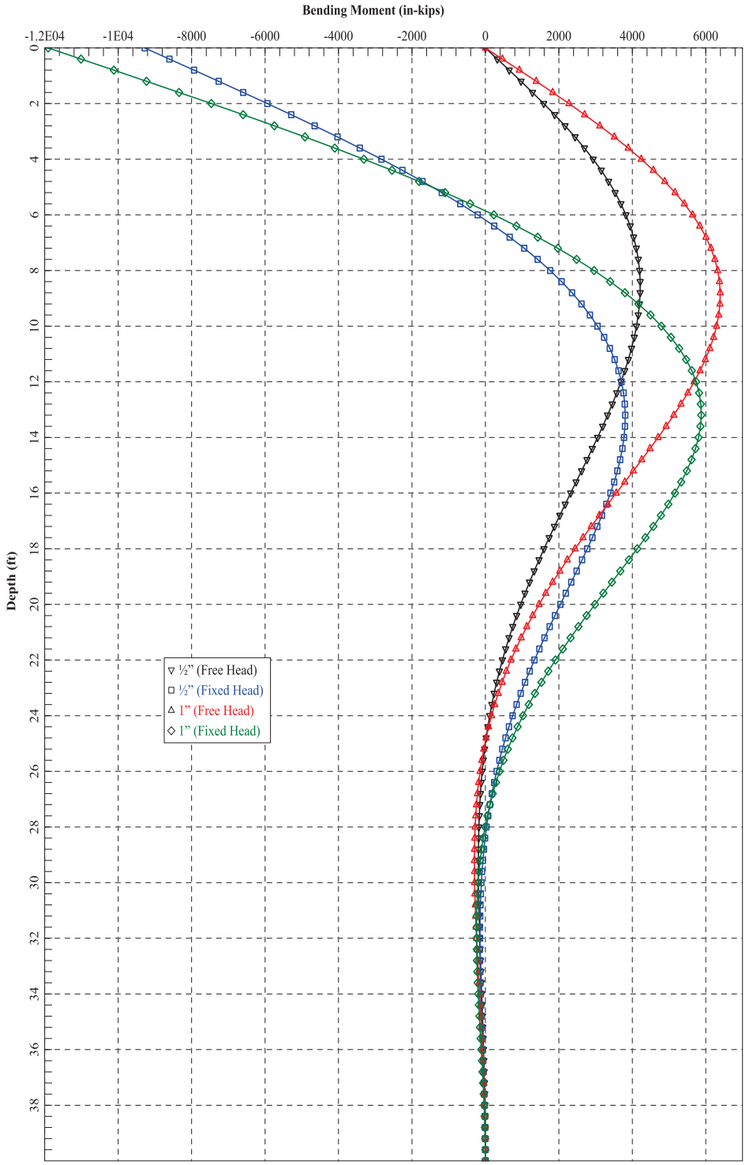
DOCUMENT NUMBER
24-0011

FIGURE NUMBER
8B

LATERAL PILE CAPACITY
(GARAGE SITE - SOUTH)







NOTES:

1) The approximate lateral response of a single 30-inch diameter, 40-foot long pile is shown in the deflection, shear and moment diagrams provided above.

2) The analyses assume at least 10-foot embedment into dense Old Alluvium, with 4,000 psi concrete strength and (6) No. 14 transverse bars (Grade 60).

GROUP DELTA

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HCA Design and Construction

PROJECT NUMBER
SD809

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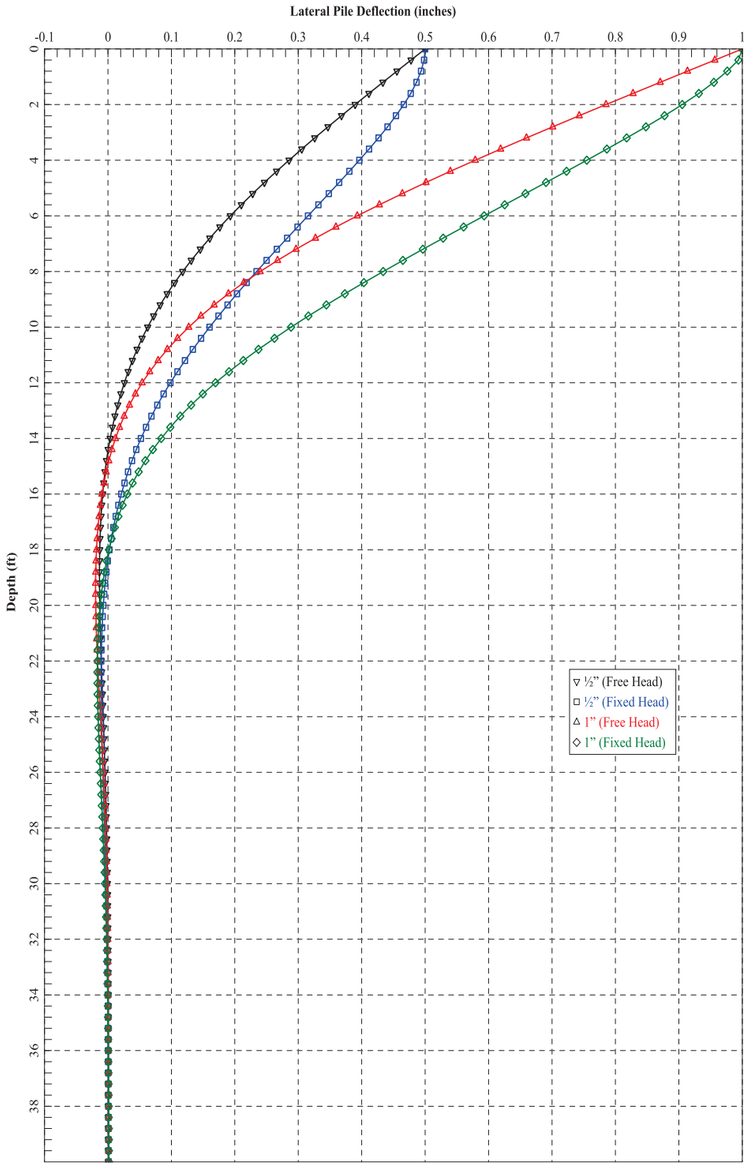
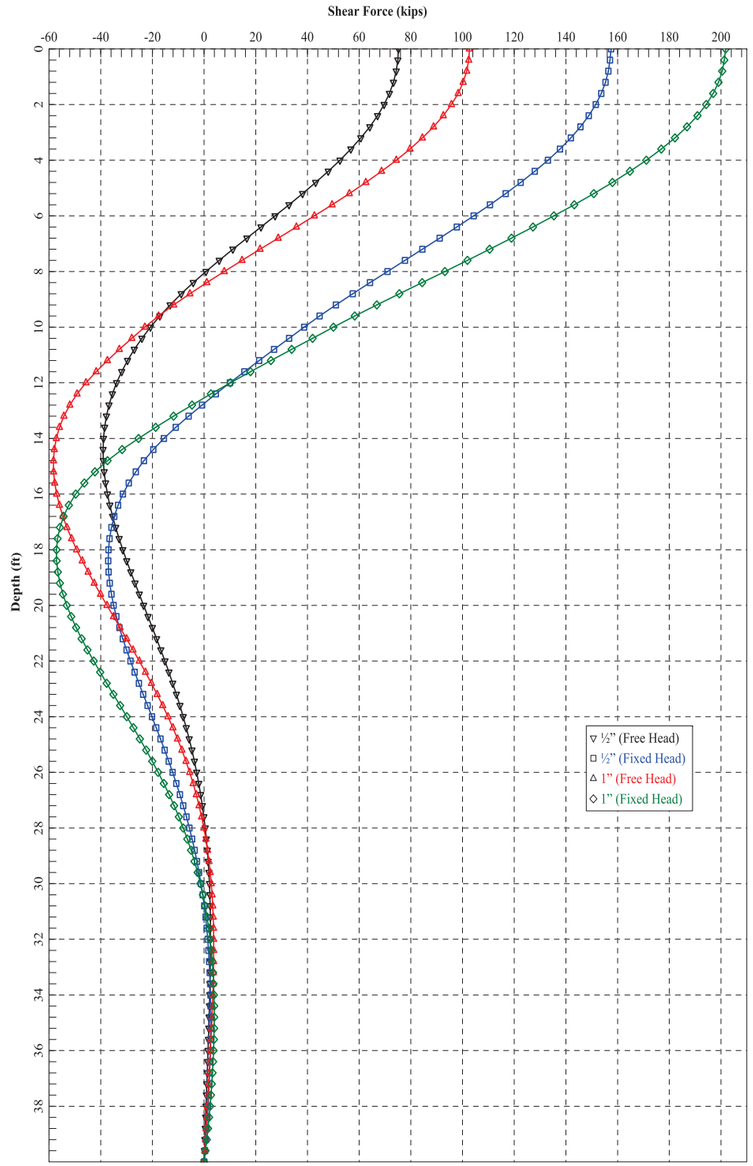
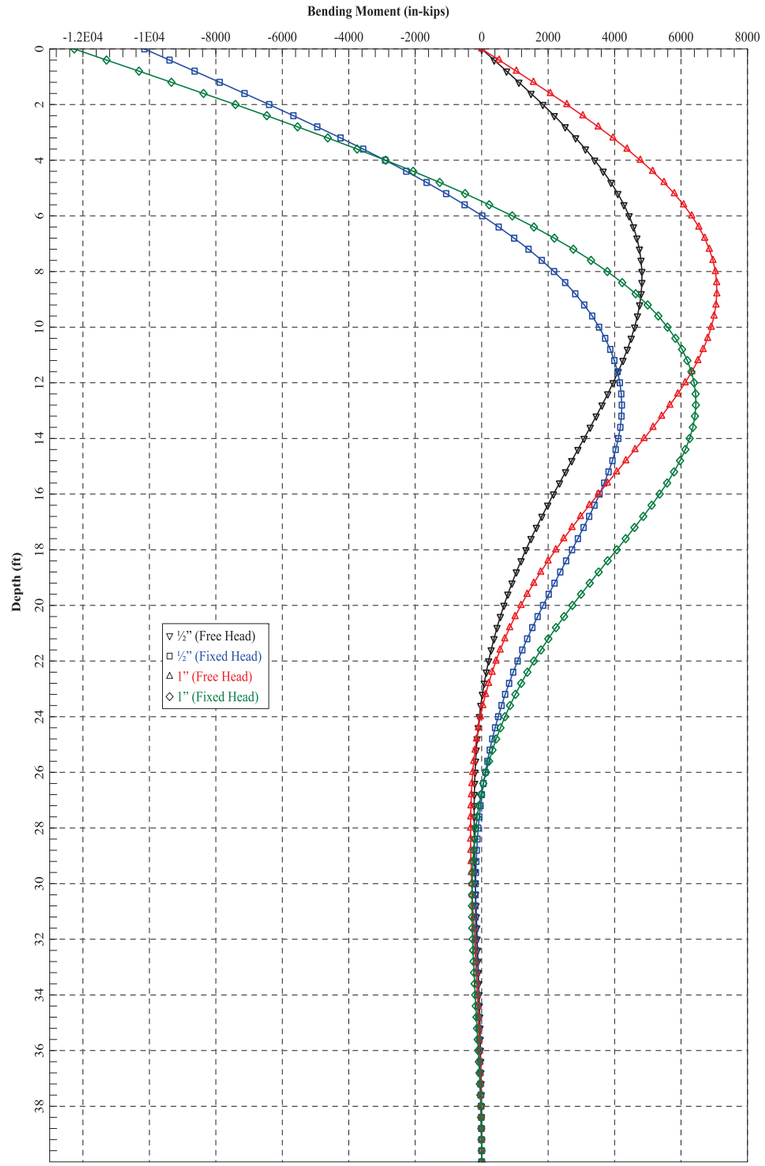
FIGURE NUMBER
8C

LATERAL PILE CAPACITY
(TOWER SITE - WEST)







NOTES:

1) The approximate lateral response of a single 30-inch diameter, 40-foot long pile is shown in the deflection, shear and moment diagrams provided above.

2) These analyses assume the eastern Tower piles are completely embedded within dense Old Alluvium, with a pile cut-off below Elevation 810 feet (MSL).

GROUP DELTA

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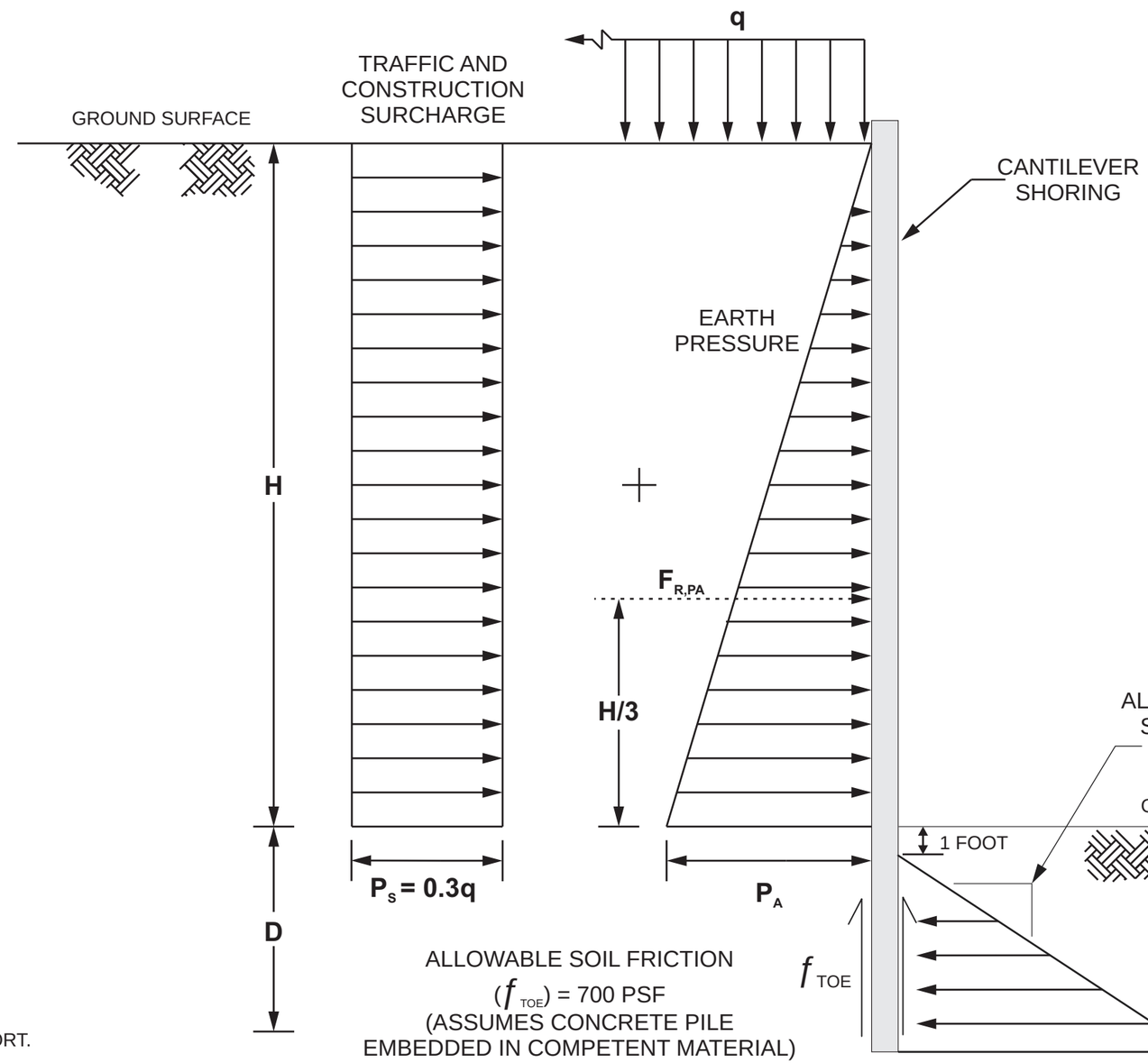
24-0011

PROJECT NAME
Riverside Community Hospital
HCA Design and Construction

FIGURE NUMBER
8D

LATERAL PILE CAPACITY
(TOWER SITE - EAST)



NOTES:

1. ACTIVE LATERAL EARTH PRESSURE, PA
   -WITH LEVEL BACKFILL: P_A = 35 PCF
   -WITH 2:1 SLOPING BACKFILL: P_A = 55 PCF
2. ASSUMES NO HYDROSTATIC PRESSURE.
3. H IS MEASURED IN FEET.
4. FIGURE SHOULD BE USED WITH GEOTECHNICAL REPORT.
5. FOR PRELIMINARY DESIGN.
6. SURCHARGES FROM CONSTRUCTION EQUIPMENT, EXCAVATED SOIL, CONSTRUCTION MATERIALS, TRAFFIC LOADING OR OTHER UNIFORM LOADING (q) ABOVE THE WALL SHOULD BE CALCULATED USING THE SURCHARGE LATERAL EARTH PRESSURE, P_S. POINT LOADS OR OTHER SURCHARGES CAN BE EVALUATED UPON REQUEST.

ALLOWABLE SOIL FRICTION
(f_{TOE}) = 700 PSF
(ASSUMES CONCRETE PILE
EMBEDDED IN COMPETENT MATERIAL)

TOTAL ALLOWABLE PASSIVE RESISTANCE
PER SOLDIER PILE =
UNIT ALLOWABLE PASSIVE RESISTANCE
X
TWICE THE CONCRETED
SOLDIER PILE WIDTH

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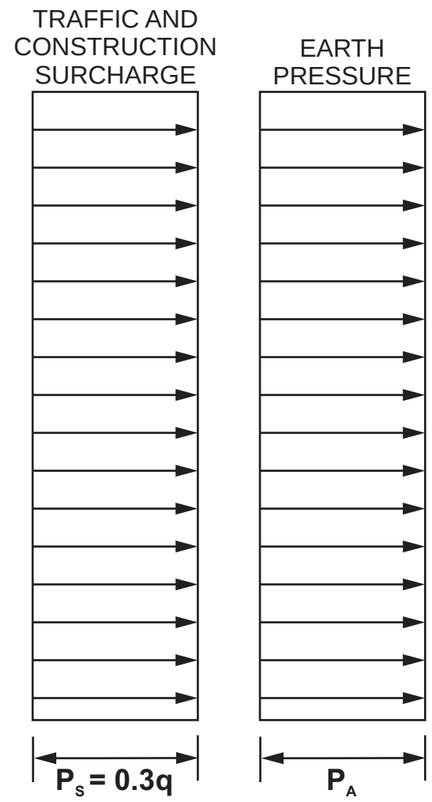
PROJECT NAME
Riverside Community Hospital
HCA Design and Construction

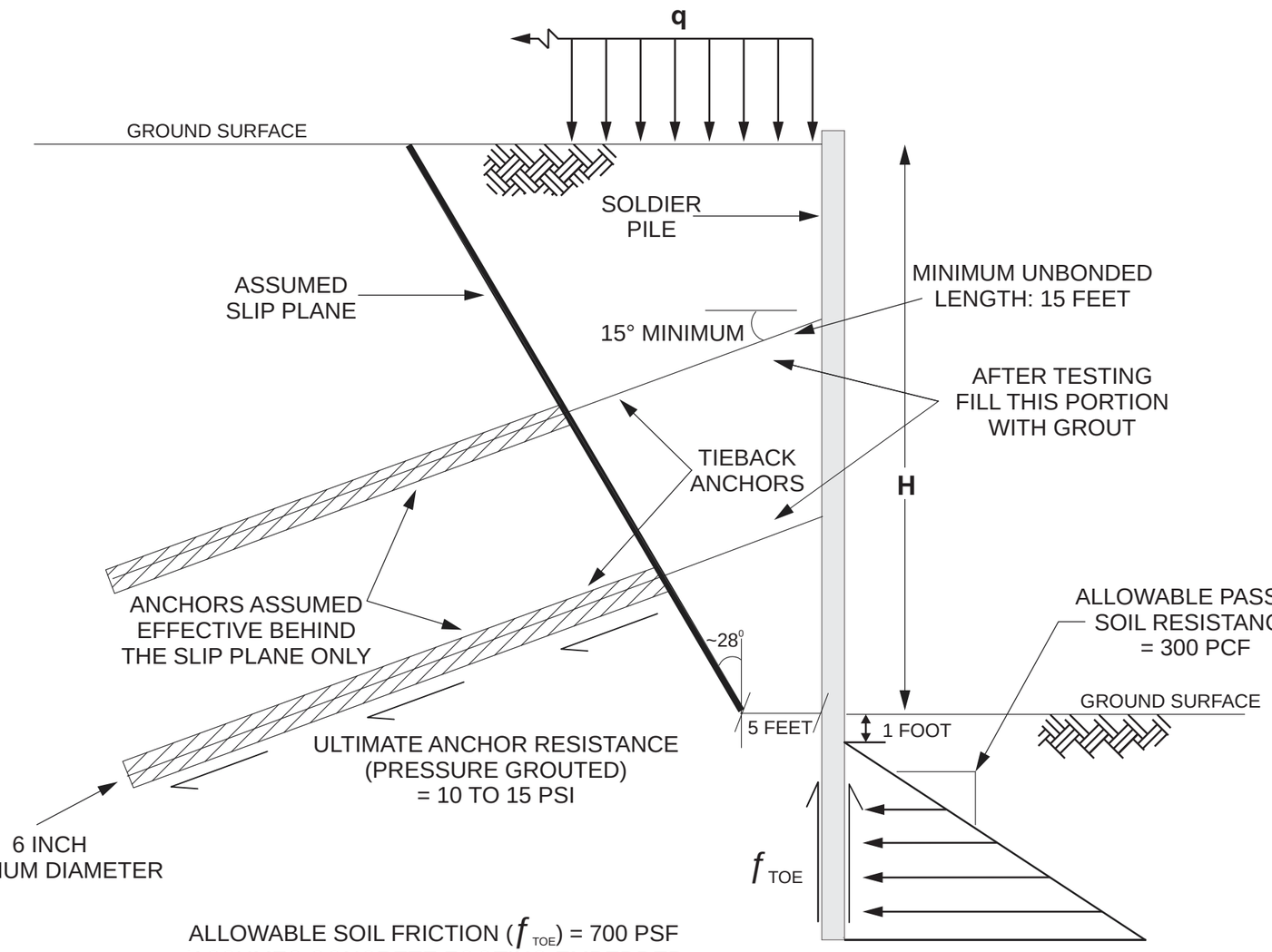
PROJECT NUMBER
SD809

DOCUMENT NUMBER
24-0011

FIGURE NUMBER
9A

LATERAL EARTH PRESSURES
FOR CANTILEVER SHORING





NOTES:

1. ACTIVE LATERAL EARTH PRESSURE, PA
   -WITH LEVEL BACKFILL: $P_A = 21H$
   -WITH 2:1 SLOPING BACKFILL: $P_A = 35H$
2. ASSUMES NO HYDROSTATIC PRESSURE.
3. VALUES ASSUME SHORED MATERIAL IS GRANULAR ON-SITE SOIL AS DESCRIBED IN THE REPORT OF GEOTECHNICAL INVESTIGATION.
4. H IS MEASURED IN FEET.
5. FIGURE SHOULD BE USED WITH GEOTECHNICAL REPORT.
6. FOR PRELIMINARY DESIGN.
7. SURCHARGES FROM CONSTRUCTION EQUIPMENT, EXCAVATED SOIL, CONSTRUCTION MATERIALS, TRAFFIC LOADING OR OTHER UNIFORM LOADING (q) ABOVE THE WALL SHOULD BE CALCULATED USING THE SURCHARGE LATERAL EARTH PRESSURE, P_S. POINT LOADS OR OTHER SURCHARGES CAN BE EVALUATED UPON REQUEST.

ALLOWABLE SOIL FRICTION (f_{TOE}) = 700 PSF
(ASSUMES CONCRETE FOOTING EMBEDDED IN COMPETENT MATERIAL)

TOTAL ALLOWABLE PASSIVE RESISTANCE PER SOLDIER PILE =
UNIT ALLOWABLE PASSIVE RESISTANCE
X
TWICE THE CONCRETED SOLDIER PILE WIDTH

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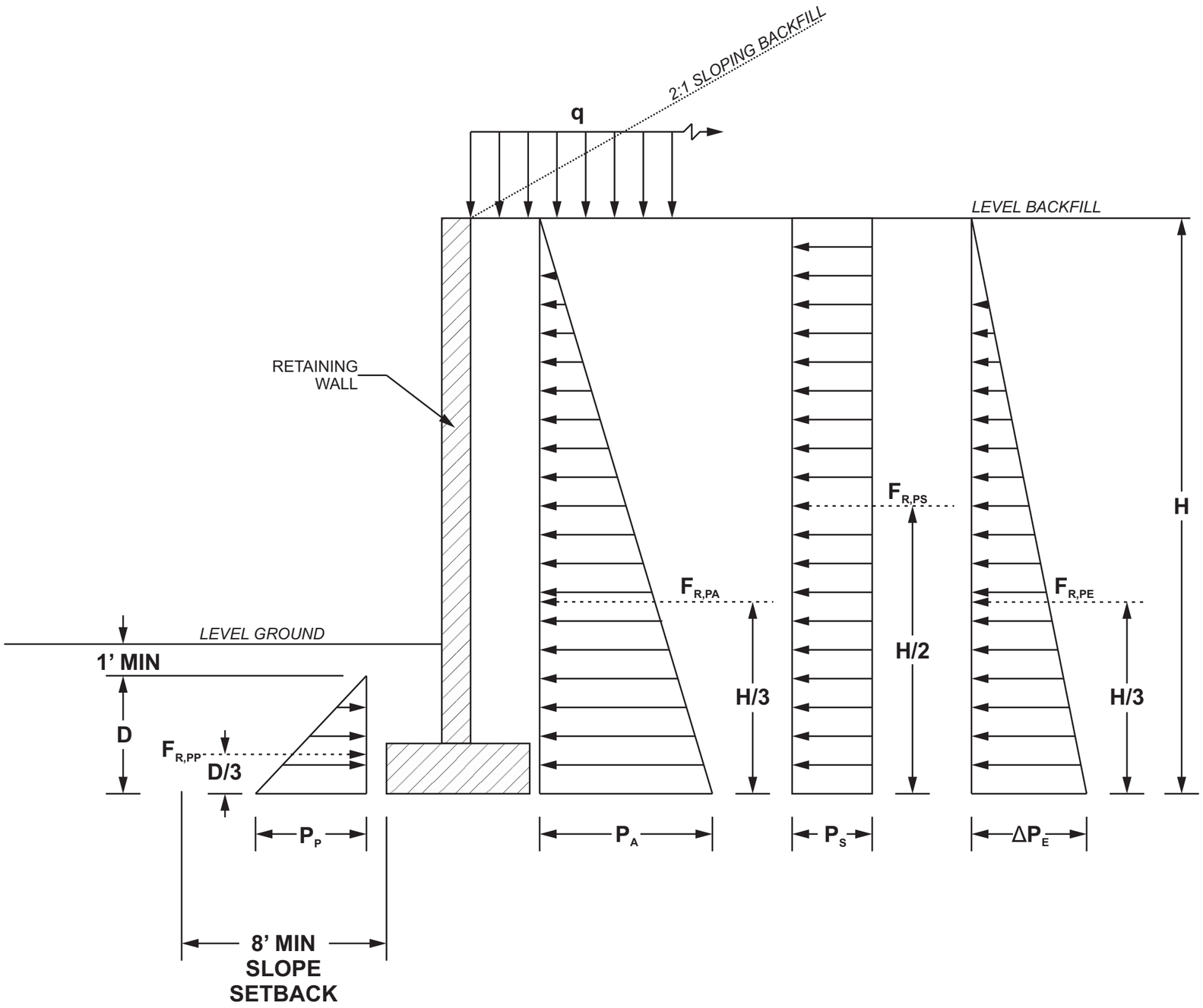
DOCUMENT NUMBER
24-0011

FIGURE NUMBER
9B

LATERAL EARTH PRESSURES
FOR BRACED OR ANCHORED SHORING



NOTES:

1. PASSIVE PRESSURES MAY BE INCREASED BY ⅓ DURING SEISMIC LOADING. THE UPPER 12 INCHES OF MATERIAL NOT PROTECTED BY CONCRETE SLABS OR PAVEMENTS SHOULD NOT BE INCLUDED IN THE ESTIMATION OF PASSIVE RESISTANCE.
2. ASSUMES NO HYDROSTATIC PRESSURE. A WALL BACK DRAIN SHOULD BE INSTALLED AS RECOMMENDED IN THE *WALL DRAINAGE DETAIL* FIGURE.
3. SURCHARGES FROM CONSTRUCTION EQUIPMENT, EXCAVATED SOIL, TRAFFIC LOADING OR OTHER UNIFORM LOADING ABOVE THE WALL SHOULD BE CALCULATED USING THE SURCHARGE LATERAL EARTH PRESSURE, P_S. POINT LOADS OR OTHER SURCHARGES CAN BE EVALUATED UPON REQUEST.
4. SEISMIC INCREMENT LATERAL EARTH PRESSURE (ΔP_E) IS BASED ON A DESIGN-LEVEL PEAK GROUND ACCELERATION OF 0.41g. SEISMIC INCREMENT SHOULD BE APPLIED TO WALLS SIX FEET OR GREATER IN HEIGHT.
5. 'H' AND 'D' ARE MEASURED IN FEET.
6. PRESSURES ASSUME GRANULAR AND NON-EXPANSIVE SOIL MATERIALS COMPACTED AS RECOMMENDED IN THE GEOTECHNICAL REPORT.

LATERAL EARTH PRESSURES

LATERAL EARTH PRESSURE TYPE	EQUIVALENT FLUID PRESSURE (PCF)	
ACTIVE, P_A	LEVEL BACKFILL	2:1 SLOPING BACKFILL
COMPACTED FILL	35	55
SEISMIC INCREMENT, ΔP_E*	23	
PASSIVE, P_P**	300	
SURCHARGE, P_S	0.3q	

*SEISMIC PRESSURE, $P_{AE} = P_A + \Delta P_E$
**PASSIVE RESISTANCE VERSUS DISPLACEMENT CURVES CAN BE PROVIDED UPON REQUEST.

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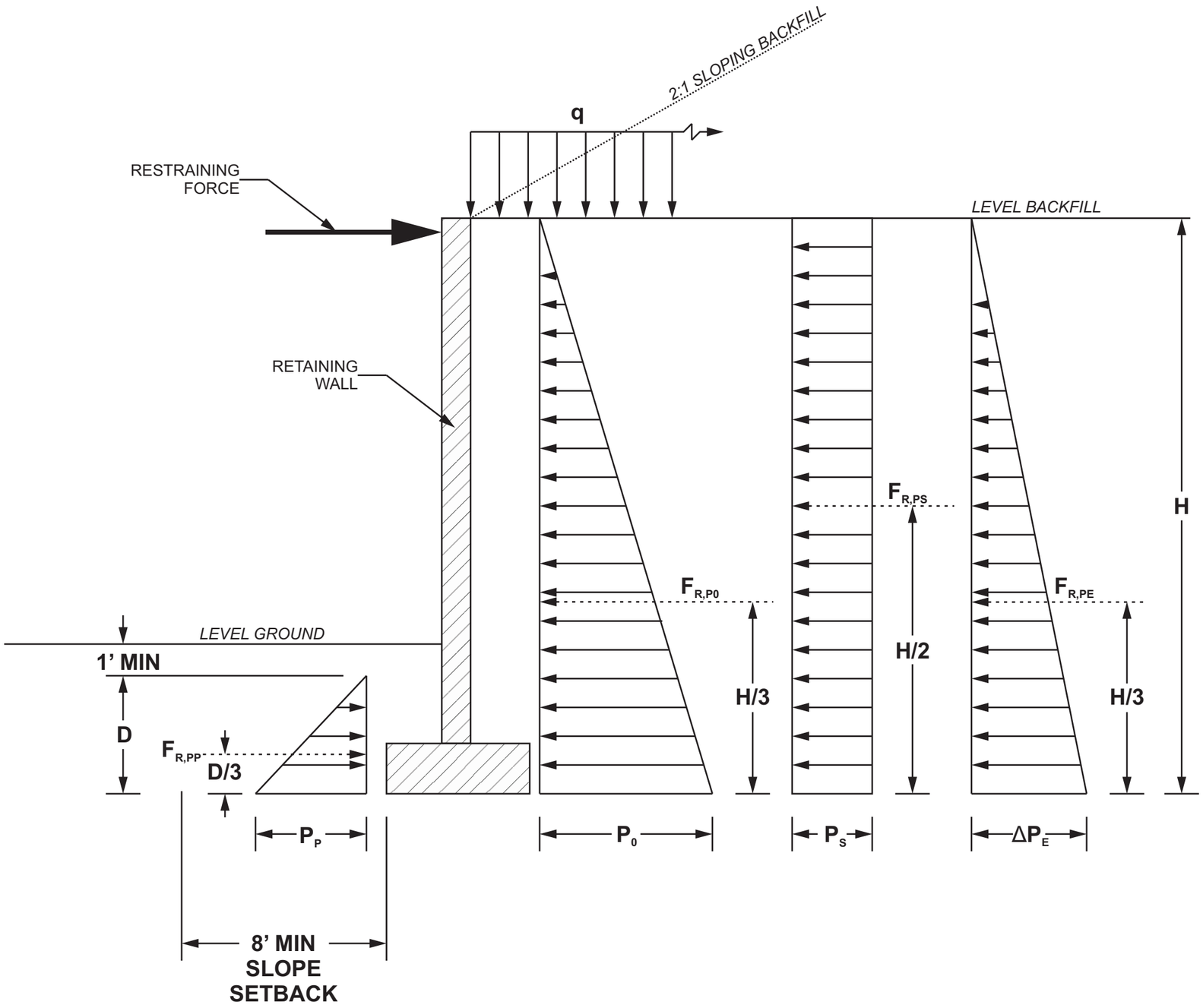
PROJECT NUMBER
SD809

DOCUMENT NUMBER
24-0011

FIGURE NUMBER
9C

LATERAL EARTH PRESSURES
FOR YIELDING RETAINING WALLS



NOTES:

1. PASSIVE PRESSURES MAY BE INCREASED BY ⅓ DURING SEISMIC LOADING. THE UPPER 12 INCHES OF MATERIAL NOT PROTECTED BY CONCRETE SLABS OR PAVEMENTS SHOULD NOT BE INCLUDED IN THE ESTIMATION OF PASSIVE RESISTANCE.
2. ASSUMES NO HYDROSTATIC PRESSURE. A WALL BACK DRAIN SHOULD BE INSTALLED AS RECOMMENDED IN THE *WALL DRAINAGE DETAIL* FIGURE.
3. SURCHARGES FROM CONSTRUCTION EQUIPMENT, EXCAVATED SOIL, TRAFFIC LOADING OR OTHER UNIFORM LOADING ABOVE THE WALL SHOULD BE CALCULATED USING THE SURCHARGE LATERAL EARTH PRESSURE, P_S. POINT LOADS OR OTHER SURCHARGES CAN BE EVALUATED UPON REQUEST.
4. SEISMIC INCREMENT LATERAL EARTH PRESSURE (ΔP_E) IS BASED ON A DESIGN-LEVEL PEAK GROUND ACCELERATION OF 0.41g. SEISMIC INCREMENT SHOULD BE APPLIED TO WALLS SIX FEET OR GREATER IN HEIGHT.
5. 'H' AND 'D' ARE MEASURED IN FEET.
6. PRESSURES ASSUME GRANULAR AND NON-EXPANSIVE SOIL MATERIALS COMPACTED AS RECOMMENDED IN THE GEOTECHNICAL REPORT.

LATERAL EARTH PRESSURES

LATERAL EARTH PRESSURE TYPE	EQUIVALENT FLUID PRESSURE (PCF)	
AT-REST, P_O	LEVEL BACKFILL	2:1 SLOPING BACKFILL
COMPACTED FILL	60	90
SEISMIC INCREMENT, ΔP_E*	(SEE FIGURE 9C)	
PASSIVE, P_P**	300	
SURCHARGE, P_S	0.5q	

*SEISMIC PRESSURE, $P_{AE} = P_A + \Delta P_E$ (SEE FIGURE 9C)
**PASSIVE RESISTANCE VERSUS DISPLACEMENT CURVES CAN BE PROVIDED UPON REQUEST.

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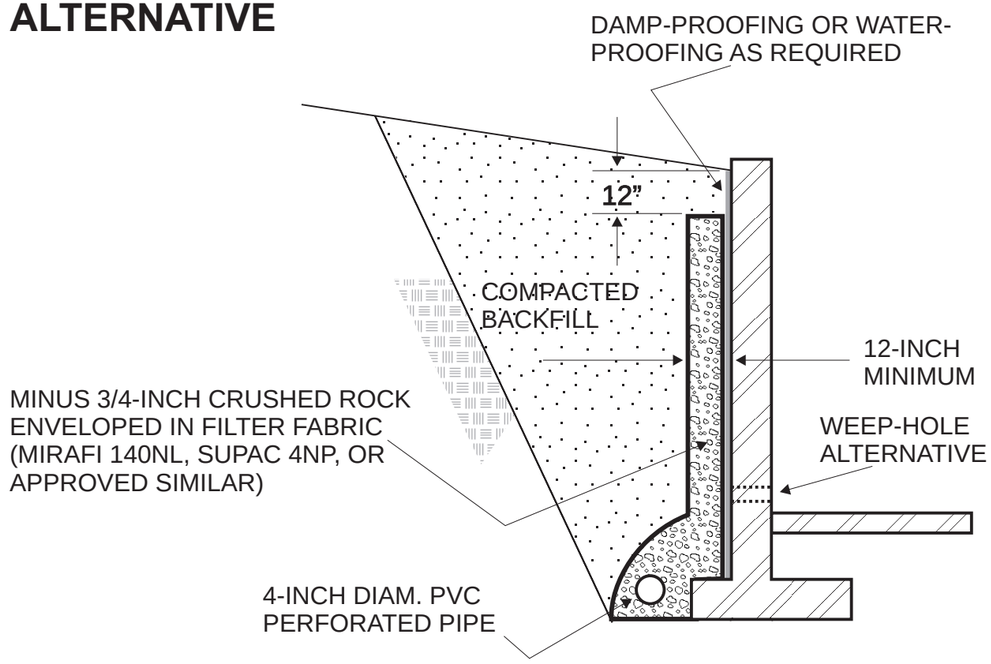
PROJECT NUMBER
SD809

DOCUMENT NUMBER
24-0011

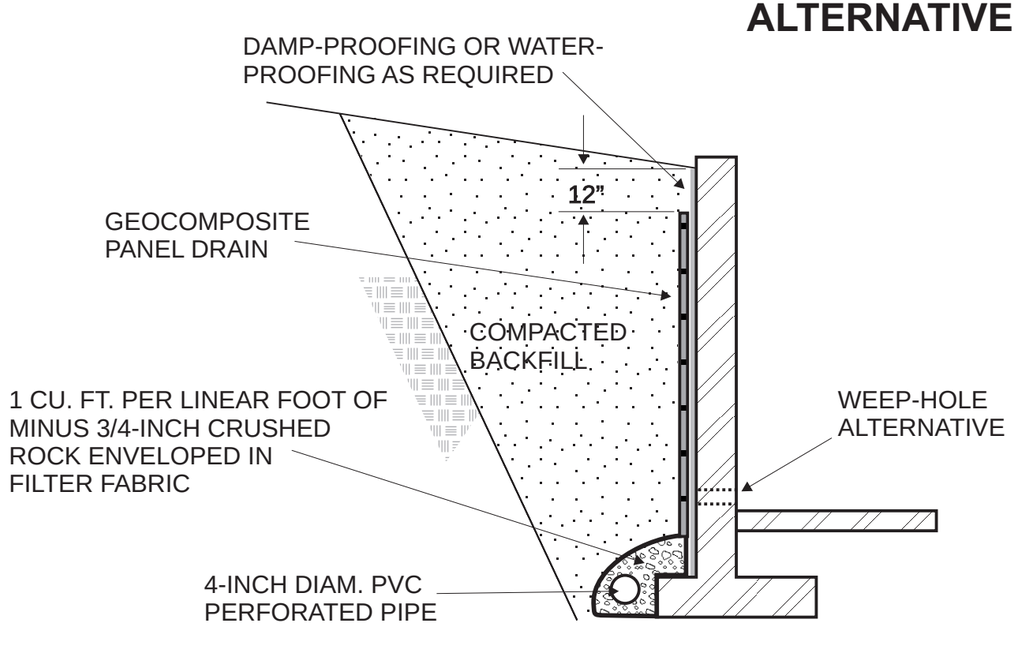
FIGURE NUMBER
9D

LATERAL EARTH PRESSURES
FOR BRACED RETAINING WALLS

ROCK AND FABRIC ALTERNATIVE



PANEL DRAIN ALTERNATIVE



NOTES

1) Perforated pipe should outlet through a solid pipe to a free gravity outfall. Perforated pipe and outlet pipe should have a fall of at least 1%.

2) As an alternative to the perforated pipe and outlet, weep-holes may be constructed. Weep-holes should be at least 2 inches in diameter, spaced no greater than 8 feet, and be located just above grade at the bottom of wall.

3) Filter fabric should consist of Mirafi 140N, Supac 5NP, Amoco 4599, or similar approved fabric. Filter fabric should be overlapped at least 6-inches.

4) Geocomposite panel drain should consist of Miradrain 6000, J-DRain 400, Supac DS-15, or approved similar product.

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PROJECT NAME
Riverside Community Hospital
HCA Design and Construction

PROJECT NUMBER
SD809

DOCUMENT NUMBER
24-0011

FIGURE NUMBER
9E

WALL DRAINAGE DETAILS

APPENDIX A
FIELD EXPLORATION

APPENDIX A

FIELD EXPLORATION

The field exploration program included a geologic reconnaissance of the site, the advancement of 5 cone penetrometer test (CPT) soundings, the drilling of 10 exploratory borings, and borehole percolation testing at 12 locations. The subsurface explorations and field infiltration tests were completed between March 22nd and April 5th, 2024. The CPT soundings were advanced by Kehoe Testing and Engineering. The exploratory borings were advanced by Yellow Jacket Drilling. The infiltration tests were completed by Group Delta personnel using a hand auger. The exploration locations are shown on the Exploration Plans, Figures 3A to 3C. The CPT data and interpreted soil profiles are presented in Figures A-1 to A-5. Boring Records are provided in Figures A-6 to A-15. The field infiltration test results are discussed in the text of this report and presented in detail in the figures of Appendix D. The subsurface explorations are summarized in the table below.

Exploration ID	Exploration Date	Latitude	Longitude	Ground Surface Elevation [FT]	Exploration Depth [FT]	Figure No.
CPT-1	03/22/24	33.977986°	-117.382803°	800	34.0	A-1
CPT-2	03/22/24	33.977770°	-117.383393°	796	37.5	A-2
CPT-3	03/22/24	33.977144°	-117.383833°	793	20.7	A-3
CPT-4	03/22/24	33.976485°	-117.383034°	794	25.0	A-4
CPT-5	03/22/24	33.976042°	-117.381919°	839	54.7	A-5
B-01	04/04/24	33.978130°	-117.383124°	800	36½	A-6
B-02	04/01/24	33.977907°	-117.383271°	798	51½	A-7
B-03	04/02/24	33.977754°	-117.382979°	798	36½	A-8
B-04	04/04/24	33.977536°	-117.383915°	794	31	A-9
B-05	04/04/24	33.977440°	-117.383294°	796	31½	A-10
B-06	04/03/24	33.977308°	-117.384145°	794	31½	A-11
B-07	04/04/24	33.976992°	-117.383266°	794	28	A-12
B-08	04/01/24	33.976503°	-117.383073°	794	30	A-13
B-09	04/05/24	33.976063°	-117.382178°	832	31½	A-14
B-10	04/02/24	33.976190°	-117.381820°	838	51½	A-15

The 10 CPT soundings were advanced by Kehoe Testing and Engineering in general accordance with ASTM D5778 using a 30-ton truck mounted rig with a 15 cm^2 cone. Integrated electronic circuitry was used to measure the tip resistance (Qc) and skin friction (Fs) at one-inch intervals while the CPT was advanced into the soil using hydraulic down pressure. Note that each of the CPT soundings was pushed to practical refusal, as indicated by a CPT tip resistance in excess of 700 tons per square foot (TSF). A piezometer located behind the cone tip also measured transient pore pressure (u). The CPT data was used to characterize the soil profile are based on normalized cone resistance and friction ratio interpretations (Robertson, 2010). The first figure for each CPT sounding presents both the raw CPT data and the interpreted soil profile (Figures A-1a to A-5a). The raw CPT data is also shown in more detail in the following Figures A-1b to A-5b for each CPT sounding.

APPENDIX A

FIELD EXPLORATION (Continued)

At the location of soundings CPT-1, CPT-2 and CPT-5, shear wave velocity measurements were collected at 5-foot depth intervals using an air actuated hammer located inside the front jack of the rig. The interval shear wave data measured in each of these three CPT soundings is attached immediately after the interpreted soil parameters. The average shear wave velocity measured within the upper 34 to 35 feet (Vs_d) at the location of CPT-1 and CPT-2 was 876 to 899 ft/s. If we assume a uniform shear wave velocity of 1,940 ft/s for the Old Alluvium below that depth based on the lower bound of the shear wave velocity measurements conducted by others, the average shear wave velocity for the upper 100 feet of the soil profile (Vs_{30}) for the Garage site would be about 1,390 ft/s (CHJ, 2007). This correlates to a 2022 CBC Site Class C for the proposed Garage site.

The average shear wave velocity measured within the upper 55 feet (Vs_d) of the compacted fill and Old Alluvium along the east end of Tower Site in CPT-5 was 1,390 ft/s. If we again assume a shear wave velocity of 1,940 ft/s for the Old Alluvium below that depth, the average shear wave velocity for the upper 100 feet of the soil profile (Vs_{30}) at the east end of the Tower site is estimated at 1,600 ft/s (CHJ, 2007). This also corresponds to a 2022 CBC Site Class C for the proposed Tower site.

The exploratory borings were advanced by Yellow Jacket Drilling using their CME 75 limited access track mounted rig, and their CME 85 truck mounted rig. Disturbed soil samples were collected from the exploratory borings using a 2-inch outside diameter Standard Penetration Test (SPT) sampler. Less disturbed samples were collected using a 3-inch outside diameter ring lined sampler (a modified California sampler). Automatic hammers with calibrated Energy Transfer Ratios (ETR) ranging from approximately 74 to 80 percent were used to collect all of the drive samples. For each sample, the number of blows needed to drive the sampler 12 inches was recorded on the logs. The field blow counts (N) were normalized to approximate a standard 60 percent ETR as shown on the logs (N_{60}). Bulk samples were also collected from the explorations at selected intervals.

The field exploration locations were determined by visually estimating, pacing and taping distances from landmarks shown on the Exploration Plans, Figures 3A to 3C. The locations shown should not be considered more accurate than is implied by the method of measurement used and the scale of the map. The lines designating the interface between differing soil materials on the logs may be abrupt or gradational. Further, soil conditions at locations between the excavations may be substantially different from those at the specific locations we explored. It should be noted that the passage of time may also result in changes in the soil conditions reported in the logs.

Logs for several previous field explorations completed by others are also included in Appendix A1 for reference. These logs include Borings B-1, B-2, B-6, B-7, B-8 and B-9 as well as CPT-1 to CPT-6 at the proposed Tower site (CHJ, 2008). Borings B-1 and B-2 are also included from a previous investigation for the MOB located along the southern edge of the Garage site (CHJ, 2012). The approximate locations of the relevant previous explorations are shown in Figures 3B and 3C.

SOIL IDENTIFICATION AND DESCRIPTION SEQUENCE

Sequence	Identification Components	Refer to Section		Required	Optional
		Field	Lab		
1	Group Name	2.5.2	3.2.2	●	○
2	Group Symbol	2.5.2	3.2.2	●	
	Description Components				
3	Consistency of Cohesive Soil	2.5.3	3.2.3	●	
4	Apparent Density of Cohesionless Soil	2.5.4		●	
5	Color	2.5.5		●	
6	Moisture	2.5.6		●	
	Percent of Proportion of Soil	2.5.7	3.2.4	●	●
7	Particle Size	2.5.8	2.5.8	●	●
	Particle Angularity	2.5.9			○
	Particle Shape	2.5.10			○
8	Plasticity (for fine-grained soil)	2.5.11	3.2.5		○
9	Dry Strength (for fine-grained soil)	2.5.12			○
10	Dilatency (for fine-grained soil)	2.5.13			○
11	Toughness (for fine-grained soil)	2.5.14			○
12	Structure	2.5.15			○
13	Cementation	2.5.16		●	
14	Percent of Cobbles and Boulders	2.5.17		●	
	Description of Cobbles and Boulders	2.5.18		●	
15	Consistency Field Test Result	2.5.3		●	
16	Additional Comments	2.5.19			○

Minimum Required Sequence:

USCS Group Name (Group Symbol); Consistency or Density; Color; Moisture; Percent of Proportion of Soil; Particle Size; Plasticity (optional).

● = optional for non-Caltrans projects

Where applicable:

Cementation; % cobbles & boulders;
Description of cobbles & boulders;
Consistency field test result

EXPLORATION IDENTIFICATION

Explorations are identified using the following convention

H-YY-NNN

Where:

H: Exploration type code

YY: 2-digit year (where utilized)

NNN: Exploration number

Hole Type Code and Description

Hole Type Code	Description
A	Auger Boring (Hollow or solid stem bucket)
BA	Bucket Auger
CPT	Cone Penetration Test
D	Driven (dynamic cone penetrometer)
HA	Hand Auger
HD	Hand driven (1-inch soil tube)
O	Other (note on LOTB)
P	Rotary Percussion Boring (AIr)
R	Rotary drilled boring (Conventional)
RC	Rotary core (self-cased wire-line, continuosly sampled)
RW	Rotary cored (self cased wire-line, not continuosly sampled)
TP	Test Pit

Description Sequence Examples:

SANDY lean CLAY (CL); very stiff; yellowish brown; moist; mostly fines; some SAND, from fine to medium; few gravels; medium plasticity; PP=2,75.

Well-graded SAND with SILT and GRAVEL and COBBLES (SW-SM); dense; brown; moist; mostly SAND, from fine to coarse; some fine GRAVEL; few fines; weak cementation; 10% GRANITE COBBLES; 3 to 6 inches; hard, subrounded.

Clayey SAND (SC) medium dense, light brown; wet; mostly fine sand; little fines; low plasticity.

REFERENCE: Caltrans Soil and Rock Logging, Classification, and Presentation Manual (2010).

GROUP DELTA

EXPLORATION RECORD
LEGEND #1

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GROUP SYMBOLS AND NAMES

Graphic/Symbol	Group Names	Graphic/Symbol	Group Names
GW	Well-graded GRAVEL Well-graded GRAVEL with SAND	CL	Lean CLAY Lean CLAY with SAND Lean CLAY with GRAVEL SANDY lean CLAY SANDY lean CLAY with GRAVEL GRAVELLY lean CLAY GRAVELLY lean CLAY with SAND
GP	Poorly graded GRAVEL Poorly graded GRAVEL with SAND		
GW-GM	Well-graded GRAVEL with SILT Well-graded GRAVEL with SILT and SAND	CL-ML	SILTY CLAY SILTY CLAY with SAND SILTY CLAY with GRAVEL SANDY SILTY CLAY SANDY SILTY CLAY with GRAVEL GRAVELLY SILTY CLAY GRAVELLY SILTY CLAY with SAND
GW-GC	Well-graded GRAVEL with CLAY (or SILTY CLAY) Well-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)		
GP-GM	Poorly graded GRAVEL with SILT Poorly graded GRAVEL with SILT and SAND	ML	SILT SILT with SAND SILT with GRAVEL SANDY SILT SANDY SILT with GRAVEL GRAVELLY SILT GRAVELLY SILT with SAND
GP-GC	Poorly graded GRAVEL with CLAY (or SILTY CLAY) Poorly graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)		
GM	SILTY GRAVEL SILTY GRAVEL with SAND	OL	ORGANIC lean CLAY ORGANIC lean CLAY with SAND ORGANIC lean CLAY with GRAVEL SANDY ORGANIC lean CLAY SANDY ORGANIC lean CLAY with GRAVEL GRAVELLY ORGANIC lean CLAY GRAVELLY ORGANIC lean CLAY with SAND
GC	CLAYEY GRAVEL CLAYEY GRAVEL with SAND		
GC-GM	SILTY, CLAYEY GRAVEL SILTY, CLAYEY GRAVEL with SAND	OL	ORGANIC SILT ORGANIC SILT with SAND ORGANIC SILT with GRAVEL SANDY ORGANIC SILT SANDY ORGANIC SILT with GRAVEL GRAVELLY ORGANIC SILT GRAVELLY ORGANIC SILT with SAND
SW	Well-graded SAND Well-graded SAND with GRAVEL		
SP	Poorly graded SAND Poorly graded SAND with GRAVEL	CH	Fat CLAY Fat CLAY with SAND Fat CLAY with GRAVEL SANDY fat CLAY SANDY fat CLAY with GRAVEL GRAVELLY fat CLAY GRAVELLY fat CLAY with SAND
SW-SM	Well-graded SAND with SILT Well-graded SAND with SILT and GRAVEL		
SW-SC	Well-graded SAND with CLAY (or SILTY CLAY) Well-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)	MH	Elastic SILT Elastic SILT with SAND Elastic SILT with GRAVEL SANDY elastic SILT SANDY elastic SILT with GRAVEL GRAVELLY elastic SILT GRAVELLY elastic SILT with SAND
SP-SM	Poorly graded SAND with SILT Poorly graded SAND with SILT and GRAVEL		
SP-SC	Poorly graded SAND with CLAY (or SILTY CLAY) Poorly graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)	OH	ORGANIC fat CLAY ORGANIC fat CLAY with SAND ORGANIC fat CLAY with GRAVEL SANDY ORGANIC fat CLAY SANDY ORGANIC fat CLAY with GRAVEL GRAVELLY ORGANIC fat CLAY GRAVELLY ORGANIC fat CLAY with SAND
SM	SILTY SAND SILTY SAND with GRAVEL		
SC	CLAYEY SAND CLAYEY SAND with GRAVEL	OH	ORGANIC elastic SILT ORGANIC elastic SILT with SAND ORGANIC elastic SILT with GRAVEL SANDY elastic ELASTIC SILT SANDY ORGANIC elastic SILT with GRAVEL GRAVELLY ORGANIC elastic SILT GRAVELLY ORGANIC elastic SILT with SAND
SC-SM	SILTY, CLAYEY SAND SILTY, CLAYEY SAND with GRAVEL		
PT	PEAT	OL/OH	ORGANIC SOIL ORGANIC SOIL with SAND ORGANIC SOIL with GRAVEL SANDY ORGANIC SOIL SANDY ORGANIC SOIL with GRAVEL GRAVELLY ORGANIC SOIL GRAVELLY ORGANIC SOIL with SAND
	COBBLES COBBLES AND BOULDERS BOULDERS		

FIELD AND LABORATORY TESTING

C	Consolidation (ASTM D 2435)
CL	Collapse Potential (ASTM D 4546)
CP	Compaction Curve (CTM 216)
CR	Corrosion, Sulfates, Chlorides (CTM 643; CTM 417; CTM 422)
CU	Consolidated Undrained Triaxial (ASTM D 4767)
DS	Direct Shear (ASTM D 3080)
EI	Expansion Index (ASTM D 4829)
M	Moisture Content (ASTM D 2216)
OC	Organic Content (ASTM D 2974)
P	Permeability (CTM 220)
PA	Particle Size Analysis (ASTM D 6913, ASTM D 7928)
PI	Liquid Limit, Plastic Limit, Plasticity Index (AASHTO T 89, AASHTO T 90)
PL	Point Load Index (ASTM D 5731)
PM	Pressure Meter
R	R-Value (CTM 301)
SE	Sand Equivalent (CTM 217)
SG	Specific Gravity (AASHTO T 100)
SL	Shrinkage Limit (ASTM D 427)
SW	Swell Potential (ASTM D 4546)
UC	Unconfined Compression - Soil (ASTM D 2166) Unconfined Compression - Rock (ASTM D 2938)
UU	Unconsolidated Undrained Triaxial (ASTM D 2850)
UW	Unit Weight (ASTM D 2937)
WA	Percent passing the No. 200 Sieve (ASTM D 1140)

SAMPLER GRAPHIC SYMBOLS

- Standard Penetration Test (SPT)
- Modified California Sampler (2.4" ID, 3" OD)
- Shelby Tube
- Piston Sampler
- NX Rock Core
- HQ Rock Core
- Bulk Sampler
- Other (see remarks)

DRILLING METHOD SYMBOLS

- Auger Drilling
- Rotary Drilling
- Dynamic Cone or Hand Driven
- Diamond Core

WATER LEVEL SYMBOLS

- Static Water Level Reading

Term	Definition	Symbol
Unit Change	Change in geoilogic unit	———
Material Change Within Unit	Change of soil classification within geologic unit	— — — — —

REFERENCE: Caltrans Soil and Rock Logging, Classification, and Presentation Manual (2010).

GROUP DELTA

EXPLORATION RECORD
LEGEND #2

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CONSISTENCY OF COHESIVE SOILS

Description	Shear Strength (tsf)	Pocket Penetrometer , PP Measurement (tsf)	Torvane, TV, Measurement (tsf)	Vane Shear, VS, Measurement (tsf)
Very Soft	Less than 0.12	Less than 0.25	Less than 0.12	Less than 0.12
Soft	0.12 - 0.25	0.25 - 0.5	0.12 - 0.25	0.12 - 0.25
Medium Stiff	0.25 - 0.5	0.5 - 1	0.25 - 0.5	0.25 - 0.5
Stiff	0.5 - 1	1 - 2	0.5 - 1	0.5 - 1
Very Stiff	1 - 2	2 - 4	1 - 2	1 - 2
Hard	Greater than 2	Greater than 4	Greater than 2	Greater than 2

APPARENT DENSITY OF COHESIONLESS SOILS

Description	SPT N_{60} (blows / 12 inches)
Very Loose	0 - 4
Loose	5 - 9
Medium Dense	10 - 29
Dense	30 -50
Very Dense	Greater than 50

PERCENT OR PROPORTION OF SOILS

Description	Criteria
Trace	Particles are present but estimated to be less than 5%
Few	5 - 10%
Little	15 - 25%
Some	30 - 45%
Mostly	50 - 100%

CEMENTATION

Description	Criteria
Weak	Crumbles or breaks with handling or little finger pressure
Moderate	Crumbles or breaks with considerable finger pressure
Strong	Will not crumble or break with finger pressure

MOISTURE

Description	Criteria
Dry	No discernable moisture
Moist	Moisture present but no free water
Wet	Visible free water

CONSISTENCY OF COHESIVE SOILS*

Description	SPT N_{60} (blows / 12 inches)
Very Soft	0 - 1
Soft	2 - 3
Medium Stiff	4 - 7
Stiff	8 - 14
Very Stiff	15 - 30
Hard	Greater than 30

* Ref: Peck, Hansen, and Thornburn, 1974, "Foundation Engineering," Second Edition.

Note: Only to be used (with caution) when pocket penetrometer or other data on undrained shear strength are unavailable. Not allowed by Caltrans Soil and Rock Logging and Classification Manual, 2010.

PARTICLE SIZE

Description		Size (in)
Boulder		Greater than 12
Cobble		3 - 12
Gravel	Coarse	3/4 - 3
	Fine	1/5 - 3/4
Sand	Coarse	1/16 -1/5
	Medium	1/64 - 1/16
	Fine	1/300 - 1/64
Silt and Clay		Less than 1/300

PLASTICITY

Description	Criteria
Nonplastic	A 1/8-in. thread cannot be rolled at any water content
Low	The thread can barely be rolled and the lump cannot be formed when drier than the plastic limit
Medium	The thread is easy to roll and not much time is required to reach the plastic limit. The thread cannot be rerolled after reaching the plastic limit. The lump crumbles when drier than the plastic limit
High	It takes considerable time rolling and kneading to reach the plastic limit. The thread can be rerolled several times after reaching the plastic limit. The lump can be formed without crumbling when drier than the plastic limit.

REFERENCE: Caltrans Soil and Rock Logging, Classification, and Presentation Manual (2010), with the exception of consistency of cohesive soils vs. N_{60}.

GROUP DELTA

EXPLORATION RECORD
LEGEND #3

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PLOTTED DATE: 6/28/2023 2:51:20 PM SAVED BY: brendaa

LEGEND OF ROCK MATERIALS


Igneous Rock


Sedimentary Rock


Metamorphic Rock

BEDDING SPACING

Description	Thickness / Spacing
Massive	Greater than 10ft
Very Thickly Bedded	3 ft - 10 ft
Thickly Bedded	1 ft - 3 ft
Moderately Bedded	4 in - 1 ft
Thinly Bedded	1 in - 4 in
Very Thinly Bedded	1/4 in - 1 in
Laminated	Less than 1/4 in

WEATHERING DESCRIPTORS FOR INTACT ROCK

Diagnostic Features						
Description	Chemical Weathering - Discoloration - Oxidation		Mechanical Weathering and Grain Boundary Conditions	Texture and Leaching		General Characteristics
	Body of Rock	Fracture Surfaces		Texture	Leaching	
Fresh	No discoloration, no oxidized	No discoloration or oxidation	No separation, intact (tight)	No change	No leaching	Hammer rings when crystalline rocks are struck
Slightly Weathered	Discoloration or oxidation is limited to surface of, or short distance from, fractures; some feldspar crystals are dull	Minor to complete discoloration or oxidation of most surfaces	No visible separation, intact (tight)	Preserved	Minor leaching of some soluble minerals	Hammer does not ring when rock is struck. Body of rock not weakened
Moderately Weathered	Discoloration or oxidation extends from fractures usually throughout; Fe-Mg minerals are "rusty"; feldspar crystals are "cloudy"	All fracture surfaces are discolored or oxidized	Partial separation of boundaries visible	Generally Preserved	Soluble minerals may be mostly leached	Hammer does not ring when rock is struck. Body of rock is slightly weakened
Intensely Weathered	Discoloration or oxidation throughout; all feldspars and Fe-Mg minerals are altered to clay to some extent; or chemical alteration produces in situ disaggregation, grain boundary conditions	All fracture surfaces are discolored or oxidized; surfaces friable	Partial separation, rock is friablr; in semi-arid conditions, granitics are disaggregated	Texture altered by chemical disintegration (hydration, argillation)	Leaching of soluble minerals may be complete	Dull sound when struck with hammer; usually can be broken with moderate to heavy manual pressure or by light hammer blow without reference to planes of weakness such as incipient or hairline fractures of veinlets. Rock is significantly weakened.
Decomposed	Discolored of oxidized throughout, but resistant minerals such as quartz may be unaltered; all feldspars and Fe-Mg minerals are completely altered to clay		Complete separation of grain boundaries (disaggregated)	Resembles a soil; partial or complete remnant rock structure may be preserved; leaching of soluble minerals usually complete		Can be granulated by hand. Resistant minerals such as quartz may be present as "stringers" or "dikes"

PERCENT CORE RECOVERY (REC)

$$\frac{\Sigma \text{ LENGTH OF THE RECOVERED CORE PIECES (IN.)}}{\text{TOTAL LENGTH OF CORE RUN (IN.)}} \times 100$$

PERCENT CORE RECOVERY (REC)

$$\frac{\Sigma \text{ LENGTH OF THE INTACT CORE PIECES} \geq 4 \text{ IN.}}{\text{TOTAL LENGTH OF CORE RUN (IN.)}} \times 100$$

RQD* INDICATES SOUNDNESS CRITERIA NOT MET

ROCK HARDNESS

Description	Criteria
Extremely Hard	Cannot be scratched with a pocketknife or sharp pick. Can only be chipped with repeated heavy hammer blows,
Very Hard	Cannot be scratched with a pocketknife or sharp pick. Breaks with repeated heavy hammer blows.
Hard	Can be scratched with a pocketknife or sharp pick with difficulty (heavy pressure). Breaks with heavy hammer blows.
Moderately Hard	Can be scratched with a pocketknife or sharp pick with light or moderate pressure. Breaks with moderate hammer blows.
Moderately Soft	Can be grooved 1/16 in. deep with a pocketknife or sharp pick with moderate or heavy pressure. Breaks with light hammer blow or heavy manual pressure.
Soft	Can be grooved or gouged easily with a pocketknife or sharp pick with light pressure, can be scratched with fingernail. Breaks with light moderate manual pressure.
Very Soft	Can be readily indented, grooved or gouged with fingernail, or carved with a pocketknife. Breaks with light manual pressure.

FRACTURE DENSITY

Description	Observed Fracture Density
Unfractured	No fractures
Very Slightly Fractured	Core lengths greater than 3 ft
Slightly Fractured	Core lengths mostly from 1 to 3 ft
Moderately Fractured	Core lengths mostly 4 in. to 1 ft.
Intensely Fractured	Core lengths mostly from 1 to 4 in.
Very Intensely Fractured	Mostly chips and fragments.

REFERENCE: Caltrans Soil and Rock Logging, Classification, and Presentation Manual (2010).

GROUP DELTA

EXPLORATION RECORD
LEGEND #4

FILE PATH: N:\Drafting\Boring Records Legend\Boring Records Legend.dwg
PLOTTED DATE: 6/28/2023 2:55:27 PM SAVED BY: brendaa

Group Delta Consultants
9245 Activity Road, Suite 103
San Diego, California 92126
www.GroupDelta.com

CPT-1

Project: Riverside Community Hospital
Location: 4468 Brockton Avenue, Riverside, California 92501

Total depth: 33.99 ft, Date: 3/22/2024
Surface Elevation: 800.00 ft

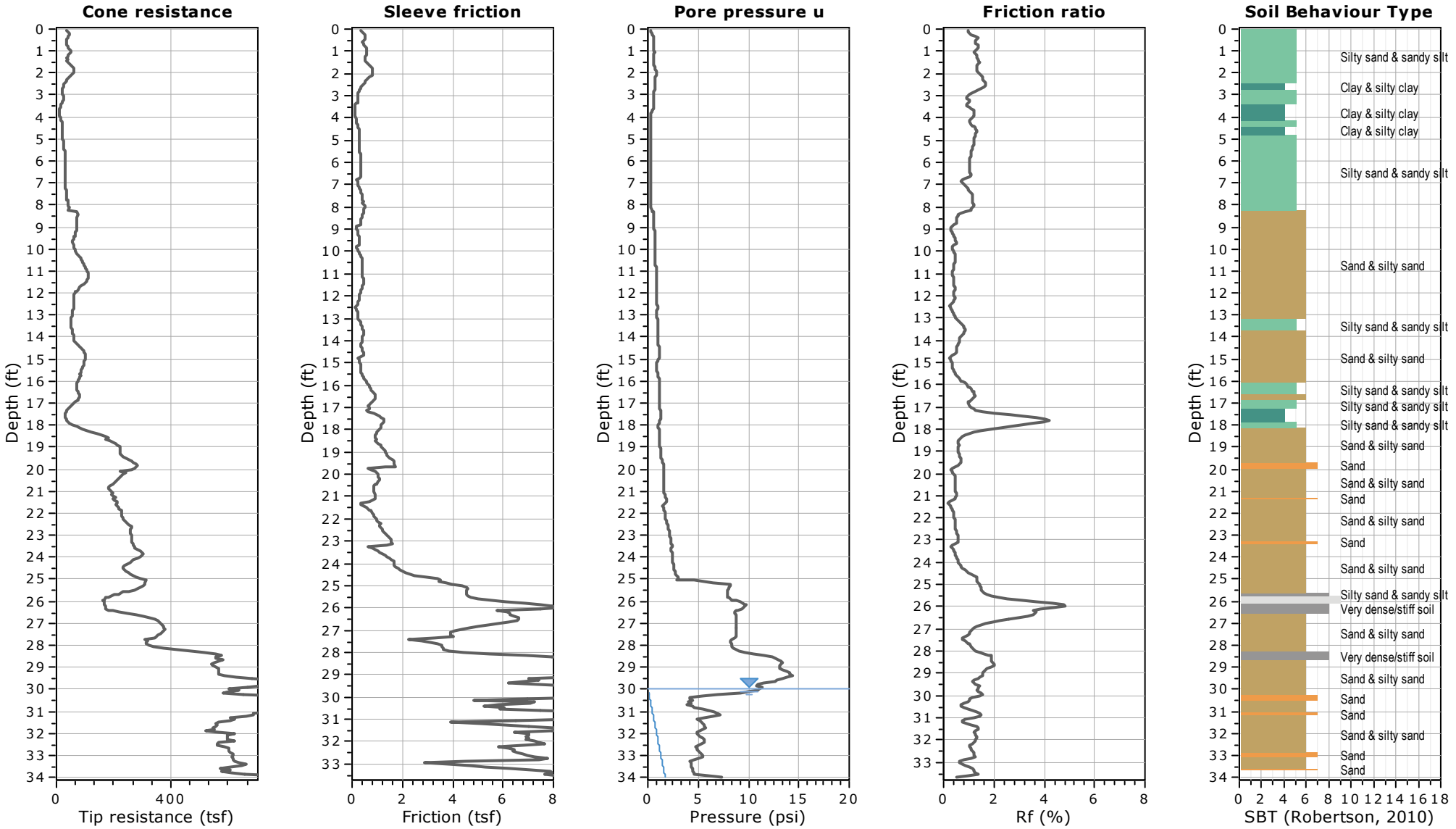
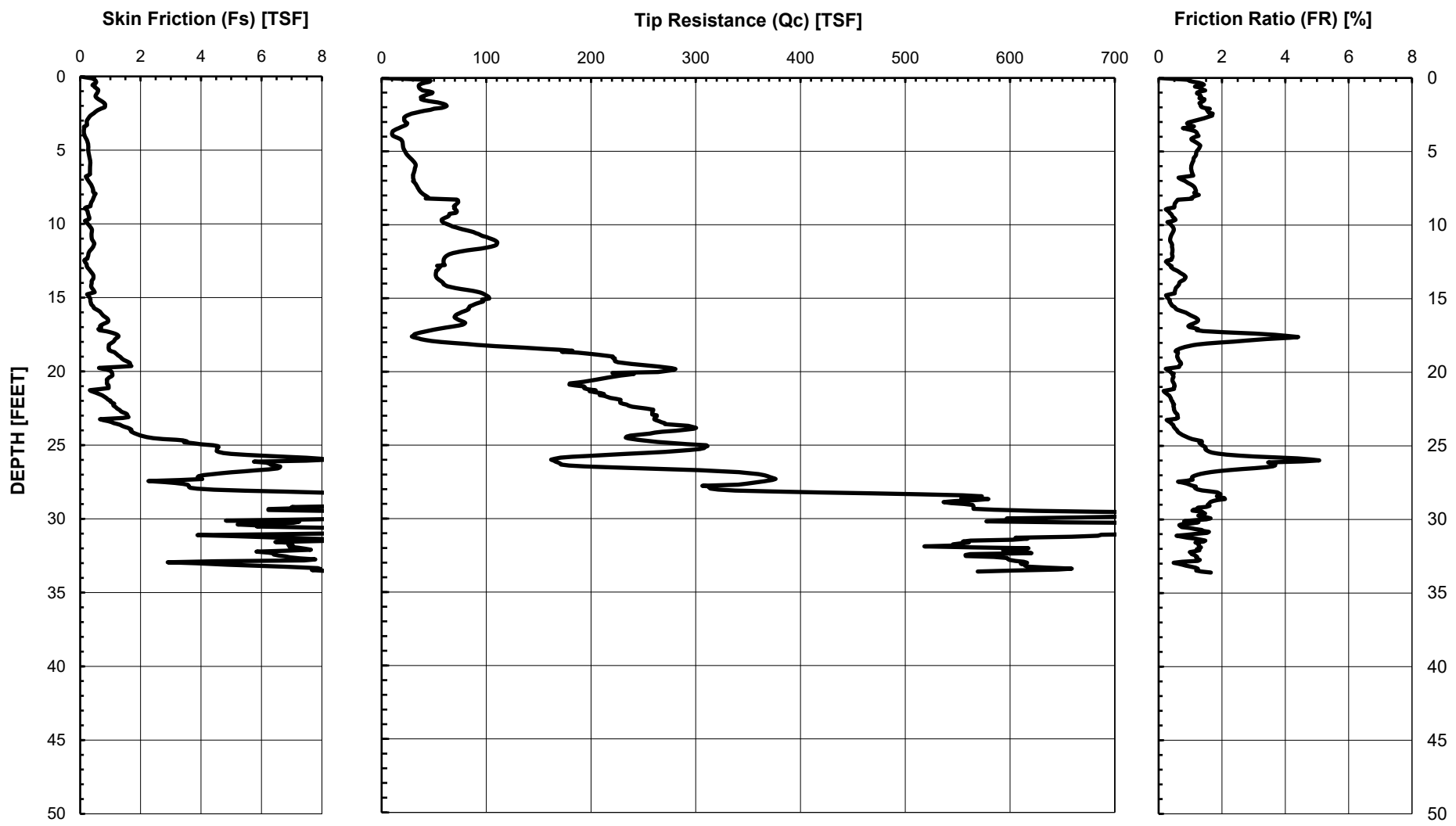


FIGURE A-1a



GROUP DELTA

CONE PENETOMETER DATA (CPT-1)

Document No. 24-0011
Project No. SD809
FIGURE A-1b

Group Delta Consultants
9245 Activity Road, Suite 103
San Diego, California 92126
www.GroupDelta.com

CPT-2

Project: Riverside Community Hospital
Location: 4468 Brockton Avenue, Riverside, California 92501

Total depth: 37.54 ft, Date: 3/22/2024
Surface Elevation: 796.00 ft

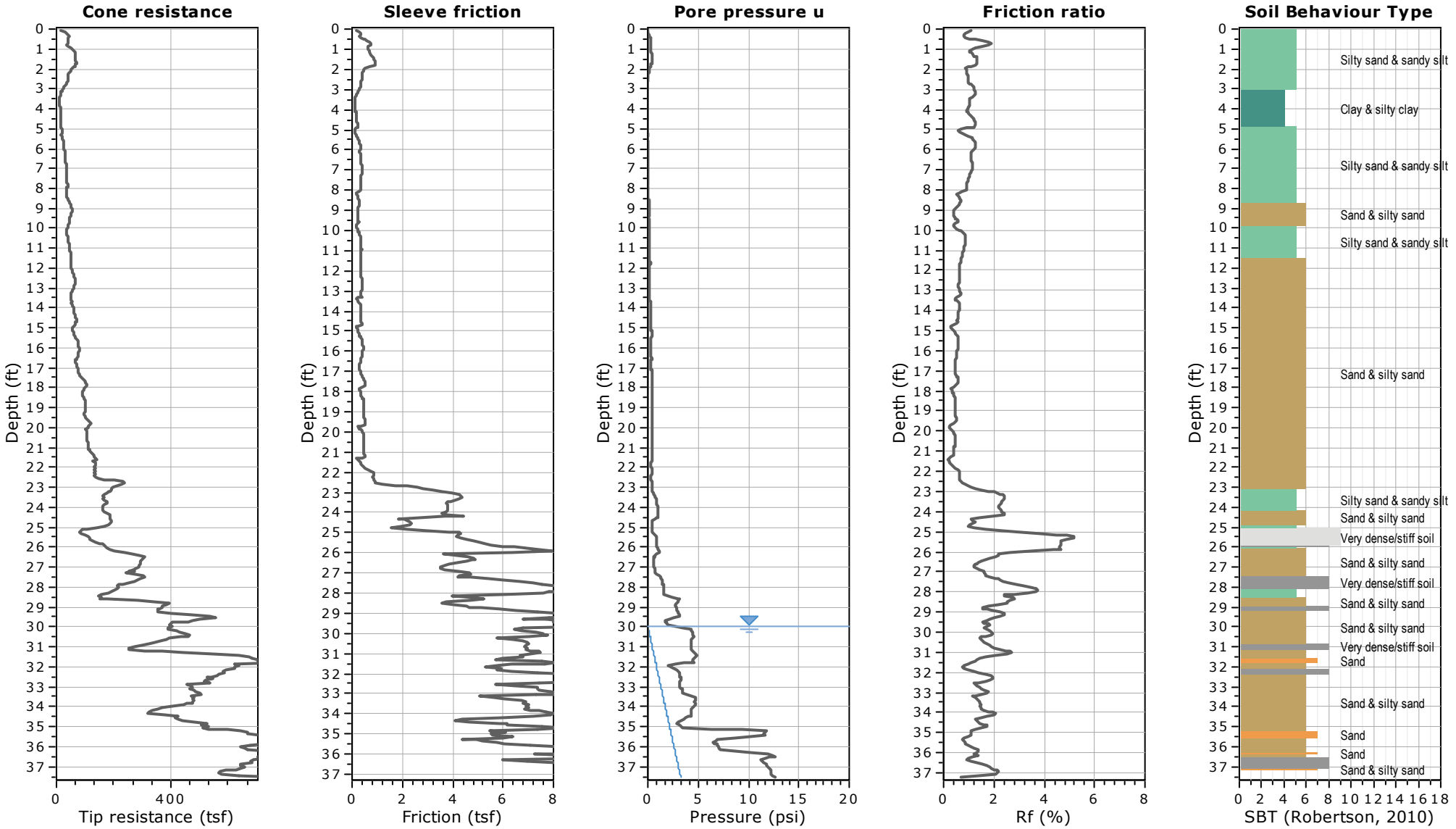
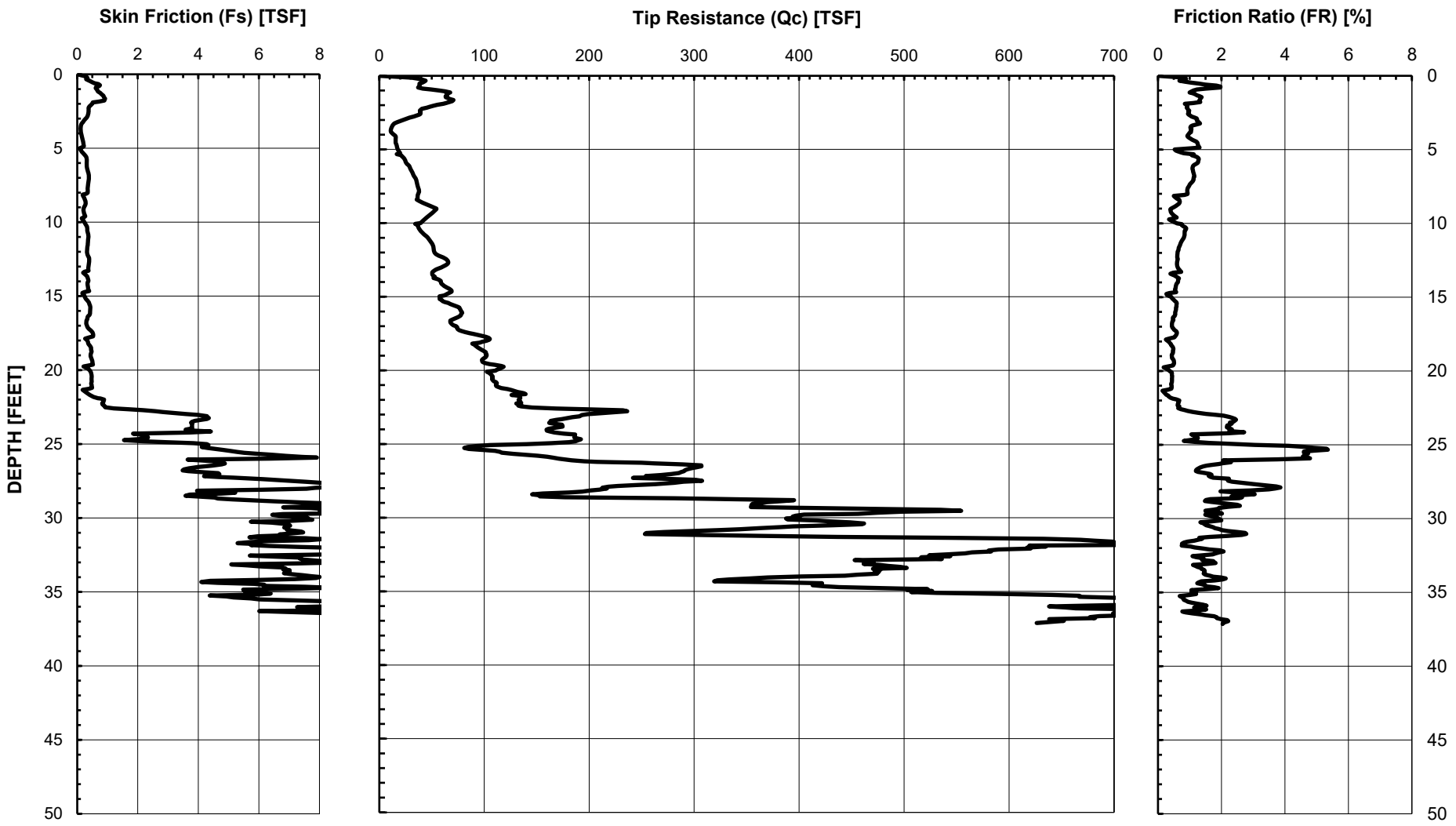


FIGURE A-2a



GROUP DELTA

CONE PENETOMETER DATA (CPT-2)

Document No. 24-0011
Project No. SD809
FIGURE A-2b

Group Delta Consultants
9245 Activity Road, Suite 103
San Diego, California 92126
www.GroupDelta.com

CPT-3

Project: Riverside Community Hospital
Location: 4468 Brockton Avenue, Riverside, California 92501

Total depth: 20.67 ft, Date: 3/22/2024
Surface Elevation: 793.00 ft

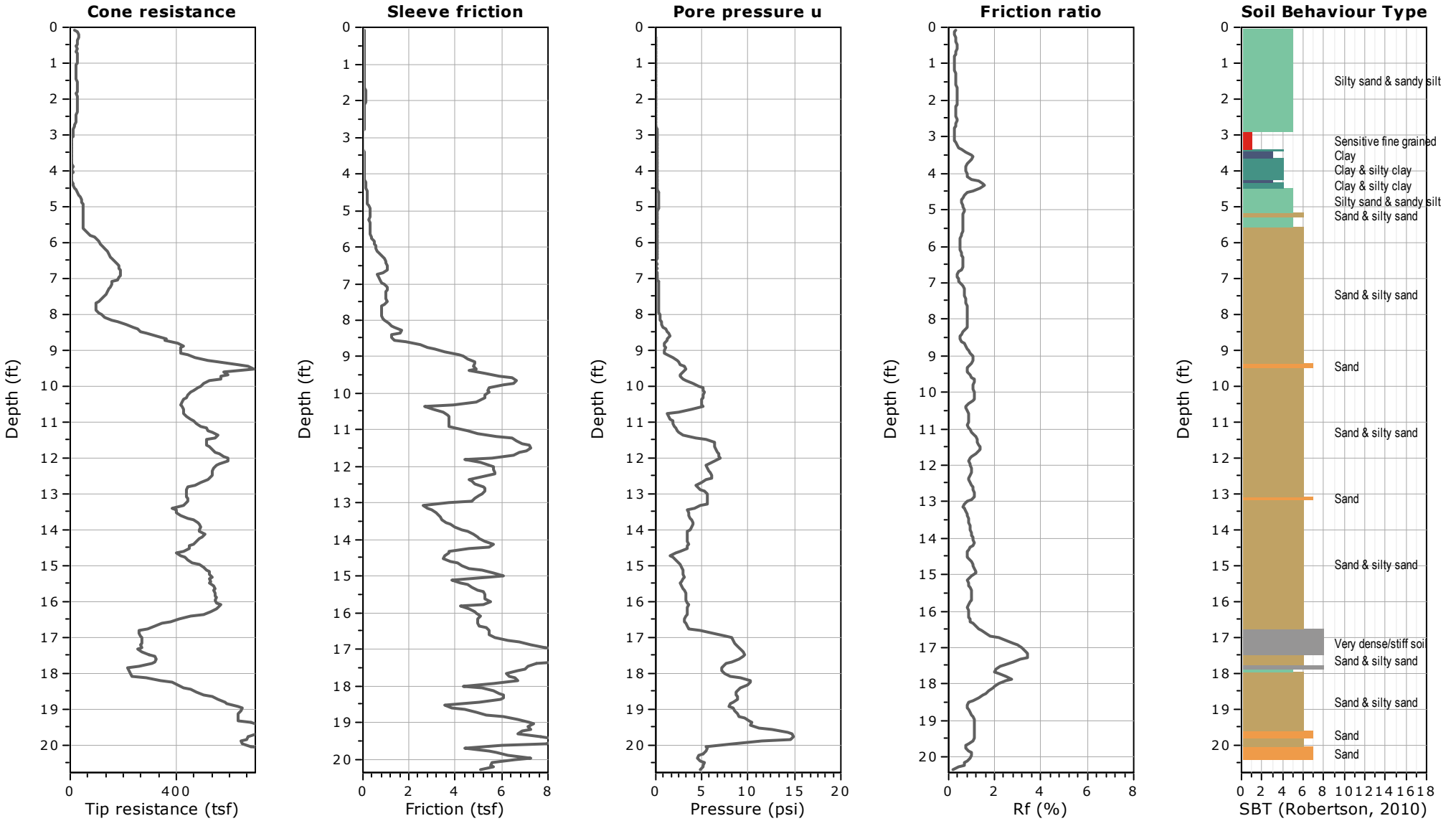
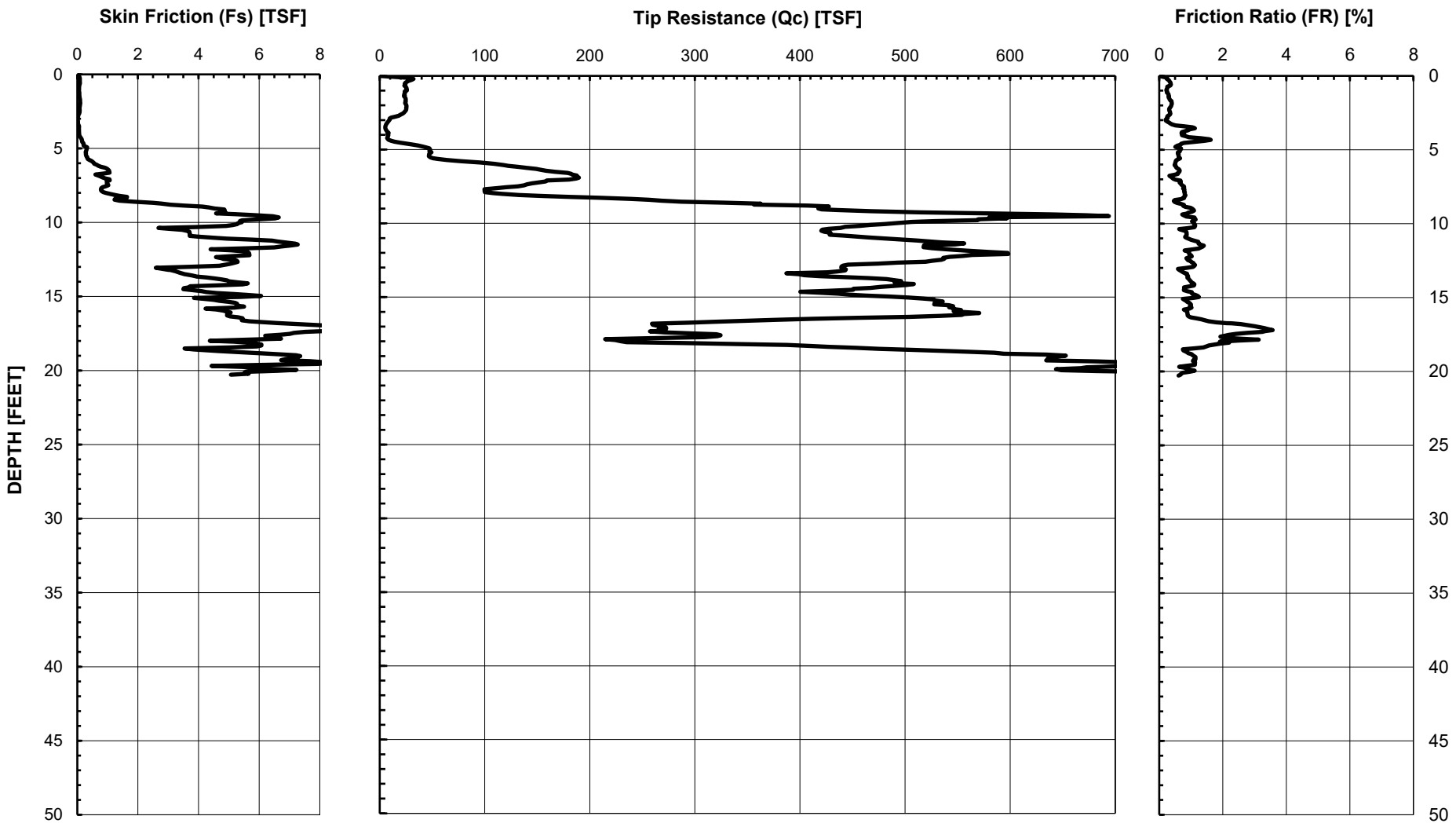


FIGURE A-3a



GROUP DELTA

CONE PENETOMETER DATA (CPT-3)

Document No. 24-0011
Project No. SD809
FIGURE A-3b

Group Delta Consultants
9245 Activity Road, Suite 103
San Diego, California 92126
www.GroupDelta.com

CPT-4

Project: Riverside Community Hospital
Location: 4468 Brockton Avenue, Riverside, California 92501

Total depth: 25.01 ft, Date: 3/22/2024
Surface Elevation: 794.00 ft

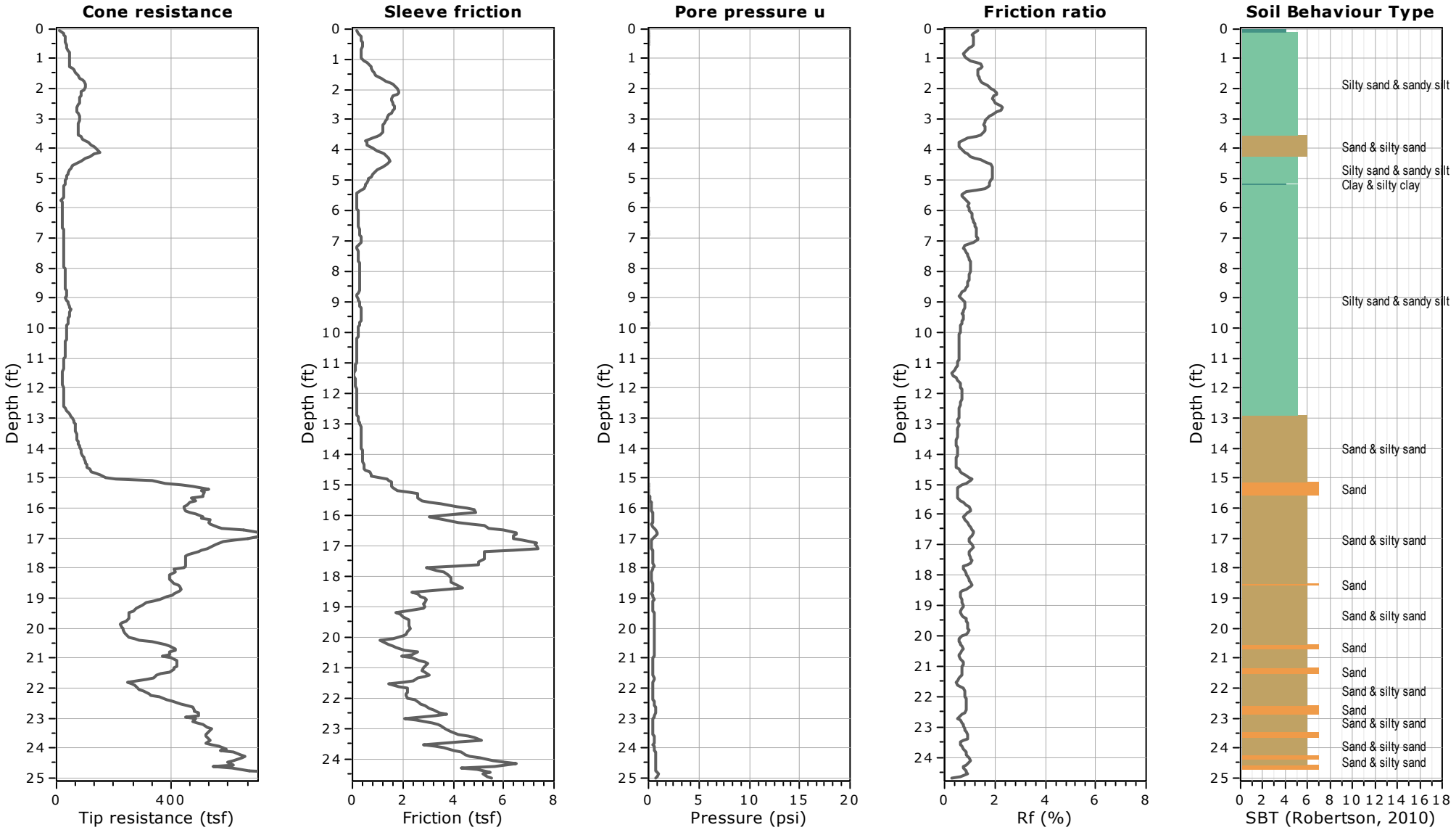
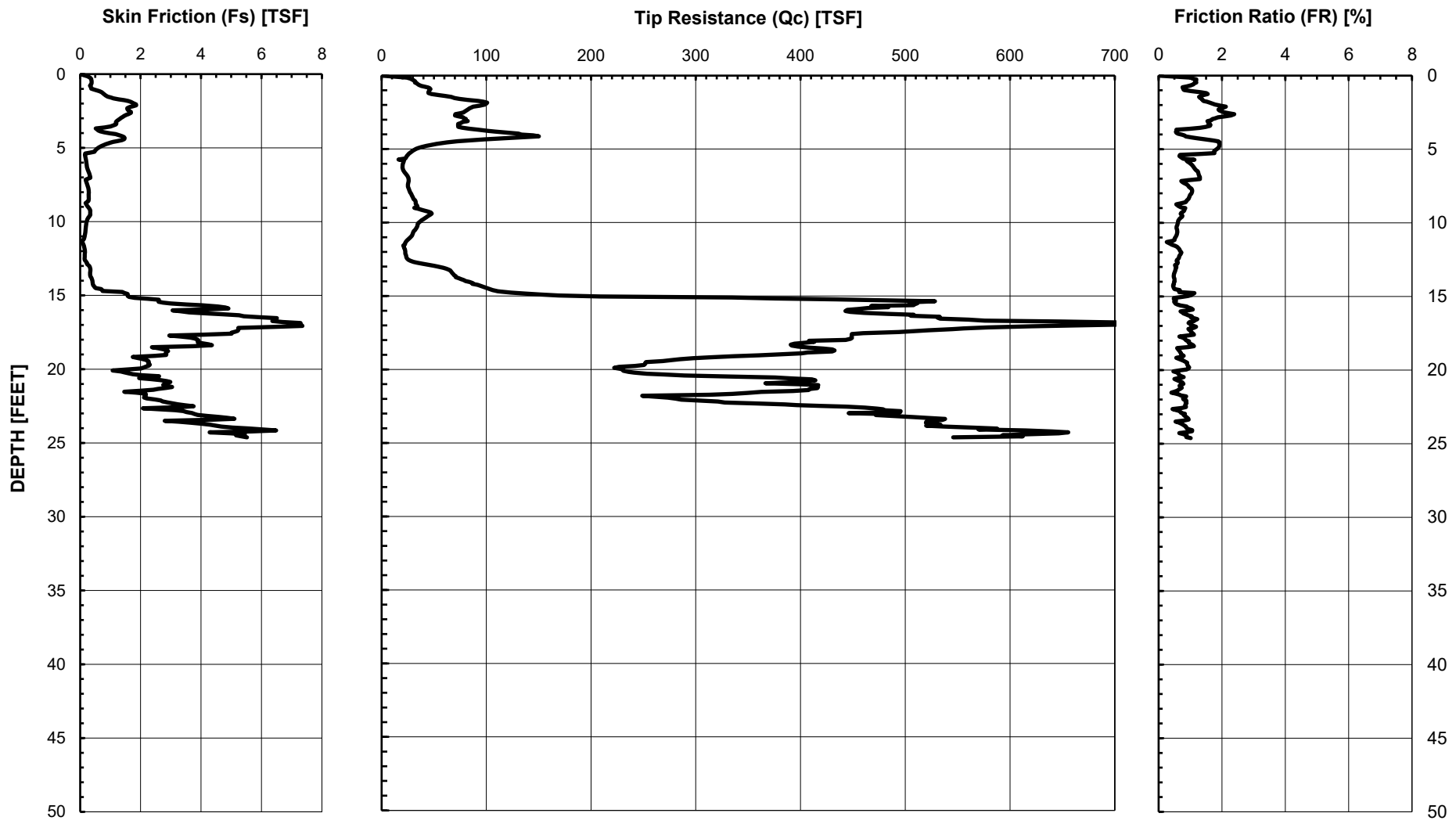


FIGURE A-4a



GROUP DELTA

CONE PENETOMETER DATA (CPT-4)

Document No. 24-0011
Project No. SD809
FIGURE A-4b

Group Delta Consultants
9245 Activity Road, Suite 103
San Diego, California 92126
www.GroupDelta.com

CPT-5

Project: Riverside Community Hospital
Location: 4468 Brockton Avenue, Riverside, California 92501

Total depth: 54.73 ft, Date: 3/22/2024
Surface Elevation: 839.00 ft

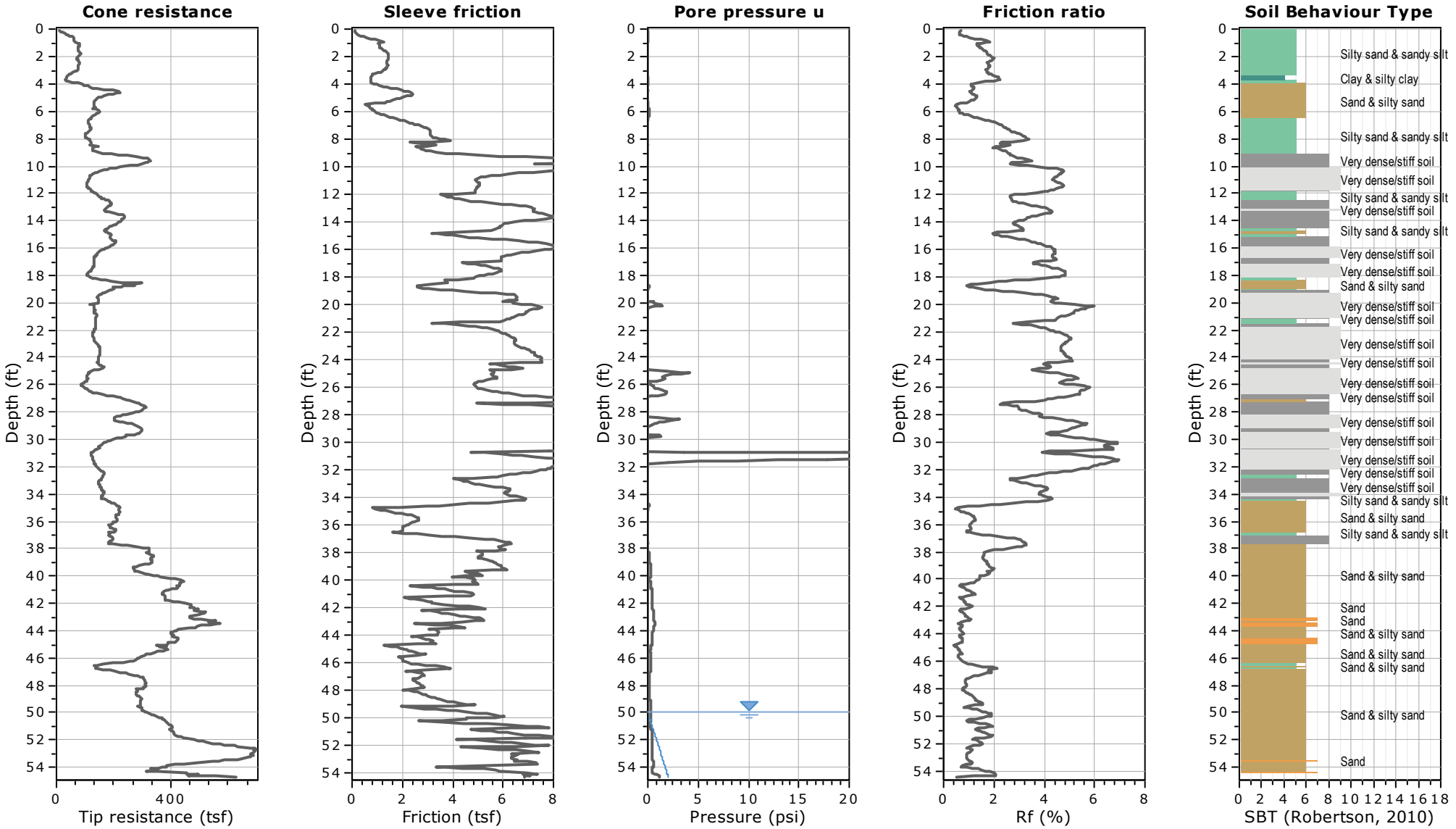
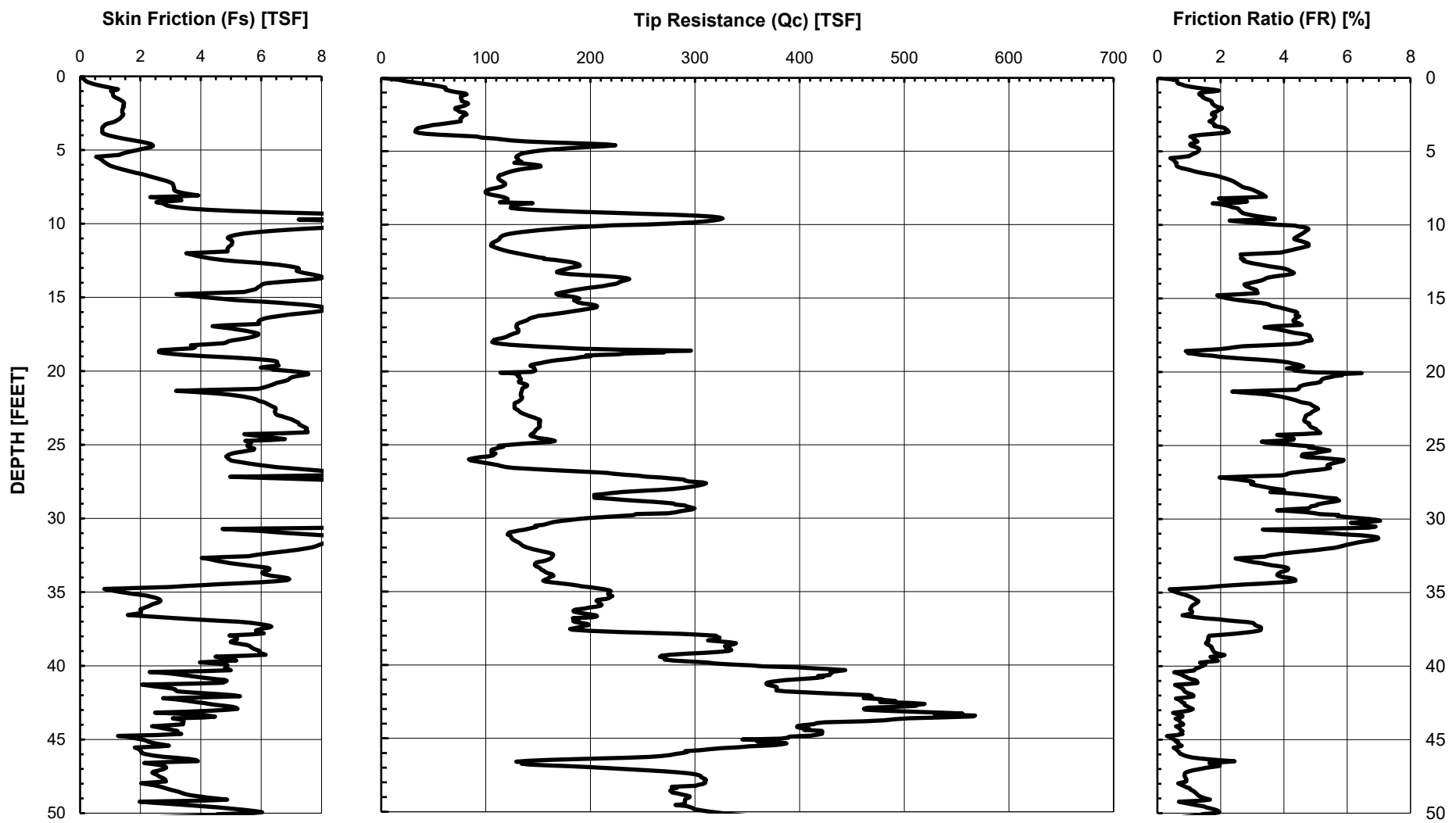


FIGURE A-5a



GROUP DELTA

CONE PENETOMETER DATA (CPT-5)

Document No. 24-0011
Project No. SD809
FIGURE A-5b

Group Delta Consultants
Riverside Community Hospital
Riverside, CA

CPT Shear Wave Measurements

Location	Tip Depth (ft)	Geophone Depth (ft)	Travel Distance (ft)	S-Wave Arrival (msec)	S-Wave Velocity from Surface (ft/sec)	Interval S-Wave Velocity (ft/sec)
CPT-1	5.02	4.02	4.49	5.86	766	
	10.04	9.04	9.26	13.64	679	613
	15.03	14.03	14.17	20.74	683	692
	20.01	19.01	19.11	27.28	701	756
	25.03	24.03	24.11	31.36	769	1225
	30.02	29.02	29.09	35.44	821	1220
	33.92	32.92	32.98	37.44	881	1946
CPT-2	5.02	4.02	4.49	4.24	1059	
	10.01	9.01	9.23	13.50	684	512
	15.03	14.03	14.17	19.80	716	785
	20.01	19.01	19.11	26.12	732	782
	25.03	24.03	24.11	32.00	754	850
	30.02	29.02	29.09	35.22	826	1545
	35.01	34.01	34.07	37.78	902	1945
CPT-5	5.02	4.02	4.49	2.46	1825	
	10.01	9.01	9.23	5.94	1554	1362
	15.06	14.06	14.20	8.96	1585	1646
	20.05	19.05	19.15	13.04	1469	1214
	25.03	24.03	24.11	16.26	1483	1540
	30.02	29.02	29.09	20.44	1423	1190
	35.01	34.01	34.07	24.28	1403	1297
	39.99	38.99	39.04	26.98	1447	1842
	45.01	44.01	44.06	31.46	1400	1119
	50.03	49.03	49.07	35.20	1394	1341
	54.69	53.69	53.73	38.74	1387	1315

Shear Wave Source Offset - 2 ft

S-Wave Velocity from Surface = Travel Distance/S-Wave Arrival
Interval S-Wave Velocity = (Travel Dist2-Travel Dist1)/(Time2-Time1)

BORING RECORD

PROJECT NAME	PROJECT NUMBER	BORING
Riverside Community Hospital	SD809	**B-01**

SITE LOCATION	START	FINISH	SHEET NO.
Proposed Parking Garage and Tower Sites	4/4/2024	4/4/2024	1 of 2

DRILLING COMPANY	DRILLING METHOD	LOGGED BY	CHECKED BY
Yellow Jacket Drilling	Hollow Stem Auger	JWJ	MAF

DRILLING EQUIPMENT	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GROUNDWATER (ft)
CME 75 Limited Access Rig #142	8	36.5	800	▼ / *na*

SAMPLING METHOD
Hammer: 140 lbs., Drop: 30 in. (Automatic)

NOTES
ETR ~ 74%, N_{60} ~ 74/60 * N ~ 1.23 * N

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	OTHER TESTS	DEPTH (feet)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
			B-1						PA			**FILL:** SILTY SAND (SM); loose to medium dense; dark yellowish brown (10YR 4/4); moist; mostly fine to medium SAND; some fines; trace GRAVEL; nonplastic. (1% Gravel; 60% Sand; 39% Fines)
5	795		S-2	2 4 4	8	10				5		**YOUNG ALLUVIUM:** SILTY SAND (SM); medium dense; dark yellowish brown (10YR 4/4); moist; mostly fine to medium SAND; some fines; trace GRAVEL; nonplastic.
10	790		R-3	3 5 7	12	10	9.9	107		10		POORLY-GRADED SAND WITH SILT (SP-SM); medium dense; dark yellowish brown (10YR 4/6); moist; mostly fine to medium SAND; little fines; trace GRAVEL; nonplastic; micaceous.
15	785		S-4	3 4 5	9	11				15		WELL-GRADED SAND WITH SILT (SW-SM); medium dense; light yellowish brown (10YR 6/4) to dark yellowish brown (10YR 4/6); moist; mostly fine to coarse SAND; few fines; trace GRAVEL; nonplastic; micaceous.
20	780		R-5	7 11 15	26	21	22.4	102	PA PI C	20		LEAN CLAY (CL); very stiff; yellowish brown (10YR 4/6); moist; mostly fines; little fine SAND; low plasticity. (0% Gravel; 11% Sand; 89% Fines) (LL~37; PL~19; PI~18)

GDC_LOG_BORING_MMX_SOIL_SD SD809 LOGS.GPJ GDCLOG.GDT 4/19/24

GROUP DELTA CONSULTANTS, INC.
9245 Activity Road, Suite 103
San Diego, California 92126

THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED.

FIGURE
A-6 a

BORING RECORD

PROJECT NAME	PROJECT NUMBER	BORING
Riverside Community Hospital	SD809	**B-01**

SITE LOCATION	START	FINISH	SHEET NO.
Proposed Parking Garage and Tower Sites	4/4/2024	4/4/2024	2 of 2

DRILLING COMPANY	DRILLING METHOD	LOGGED BY	CHECKED BY
Yellow Jacket Drilling	Hollow Stem Auger	JWJ	MAF

DRILLING EQUIPMENT	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GROUNDWATER (ft)
CME 75 Limited Access Rig #142	8	36.5	800	▼ / *na*

SAMPLING METHOD
Hammer: 140 lbs., Drop: 30 in. (Automatic)

NOTES
ETR ~ 74%, N_{60} ~ 74/60 * N ~ 1.23 * N

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	OTHER TESTS	DEPTH (feet)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
			S-6	5 9 10	19	23						**YOUNG ALLUVIUM:** SANDY LEAN CLAY (CL); very stiff; yellowish brown (10YR 5/6); moist; mostly fines; little fine SAND; low plasticity. PP~2 TSF
30	770		R-7	8 13 20	33	27	16.0	117		30		CLAYEY SAND (SC); medium dense; yellowish brown (10YR 5/4); moist; mostly fine to coarse SAND; some fines; low plasticity.
35	765		S-8	3 9 18	27	33				35		**OLD ALLUVIUM:** SANDY LEAN CLAY (CL); hard; yellowish brown (10YR 4/6); moist; mostly fines; some fine to medium SAND; low plasticity; micaceous.
												Total Depth: 36½ Feet Groundwater Not Encountered
40	760									40		
45	755									45		

GDC_LOG_BORING_MMX_SOIL_SD SD809 LOGS.GPJ GDCLOG.GDT 4/19/24

GROUP DELTA CONSULTANTS, INC.
9245 Activity Road, Suite 103
San Diego, California 92126

THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED.

FIGURE
A-6 b

BORING RECORD

PROJECT NAME	PROJECT NUMBER	BORING
Riverside Community Hospital	SD809	**B-02**

SITE LOCATION	START	FINISH	SHEET NO.
Proposed Parking Garage and Tower Sites	4/1/2024	4/1/2024	1 of 3

DRILLING COMPANY	DRILLING METHOD	LOGGED BY	CHECKED BY
Yellow Jacket Drilling	Hollow Stem Auger	JWJ	MAF

DRILLING EQUIPMENT	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GROUNDWATER (ft)
CME 85 Truck Mounted Rig #120	8	51.5	798	▼ 36.0 / *762.0*

SAMPLING METHOD
Hammer: 140 lbs., Drop: 30 in. (Automatic)

NOTES
ETR ~ 80%, N_{60} ~ 80/60 * N ~ 1.33 * N

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	OTHER TESTS	DEPTH (feet)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
												PAVEMENT: 2-inches Asphalt Concrete.
	795		B-1									**FILL:** SILTY SAND (SM); loose to medium dense; dark yellowish brown (10YR 4/4); moist; mostly fine to medium SAND; some fines; trace fine GRAVEL; nonplastic; micaceous.
5			S-2	1 2 2	4	5				5		**YOUNG ALLUVIUM:** SILTY SAND (SM); loose; dark yellowish brown (10YR 4/6); moist; mostly fine to medium SAND; little fines; trace fine GRAVEL; nonplastic.
	790											
10			R-3	2 5 5	10	9	3.2	109	PA DS	10		(3% Gravel; 83% Sand; 14% Fines)
	785											
15			S-4	1 2 3	5	7				15		
	780											
20			R-5	4 12 15	27	24	22.6	106	PA PI C	20		LEAN CLAY (CL); hard; dark yellowish brown (10YR 4/4); moist; mostly fines; trace fine SAND; medium plasticity. (0% Gravel; 3% Sand; 97% Fines) (LL~46; PL~22; PI~24)
	775											

GROUP DELTA CONSULTANTS, INC.
9245 Activity Road, Suite 103
San Diego, California 92126

THIS SUMMARY APPLIES ONLY AT THE LOCATION OF THIS BORING AND AT THE TIME OF DRILLING. SUBSURFACE CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THIS LOCATION WITH THE PASSAGE OF TIME. THE DATA PRESENTED IS A SIMPLIFICATION OF THE ACTUAL CONDITIONS ENCOUNTERED.

FIGURE
A-7 a

GDC_LOG_BORING_MMX_SOIL_SD SD809 LOGS.GPJ GDCLOG.GDT 4/19/24

BORING RECORD

PROJECT NAME	PROJECT NUMBER	BORING
Riverside Community Hospital	SD809	**B-02**

SITE LOCATION	START	FINISH	SHEET NO.
Proposed Parking Garage and Tower Sites	4/1/2024	4/1/2024	2 of 3

DRILLING COMPANY	DRILLING METHOD	LOGGED BY	CHECKED BY
Yellow Jacket Drilling	Hollow Stem Auger	JWJ	MAF

DRILLING EQUIPMENT	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GROUNDWATER (ft)
CME 85 Truck Mounted Rig #120	8	51.5	798	▼ 36.0 / *762.0*

SAMPLING METHOD
Hammer: 140 lbs., Drop: 30 in. (Automatic)

NOTES
ETR ~ 80%, N_{60} ~ 80/60 * N ~ 1.33 * N

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	OTHER TESTS	DESCRIPTION AND CLASSIFICATION
			S-6	4 4 6	10	13				**YOUNG ALLUVIUM:** SANDY LEAN CLAY (CL); very stiff; dark yellowish brown (10YR 3/6); moist; mostly fines; little fine SAND; medium plasticity. PP ~ 3 TSF
	770									
30			R-7	8 17 22	39	35	11.0	123		**OLD ALLUVIUM:** CLAYEY SAND (SC); dense; dark yellowish brown (10YR 4/4); moist; mostly fine to coarse SAND; some fines; trace GRAVEL; medium plasticity.
	765									
35			S-8	4 8 14	22	29				CLAYEY SAND (SC); medium dense to dense; dark yellowish brown (10YR 4/4); saturated; mostly fine to coarse SAND; some fines; trace GRAVEL; medium plasticity.
	760									
40			R-9	15 24 30	54	48	12.6	119		SILTY SAND (SM); dense; dark yellowish brown (10YR 4/6); saturated; mostly fine to medium SAND; some fines; trace fine GRAVEL; nonplastic.
	755									SANDY LEAN CLAY (CL); stiff; dark yellowish brown (10YR 3/6); saturated; mostly fines; little fine SAND; medium plasticity.
45			R-10			---				WELL-GRADED SAND WITH SILT (SW-SM); dense; very pale brown (10YR 8/4) to brownish yellow (10YR 6/6), saturated; mostly fine to coarse SAND; few GRAVEL; trace fines; nonplastic; micaceous. Samples highly disturbed by rapid groundwater flow into the bottom of the hollow-stem auger.
	750									

GDC_LOG_BORING_MMX_SOIL_SD SD809 LOGS.GPJ GDCLOG.GDT 4/19/24

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FIGURE
A-7 b

BORING RECORD

PROJECT NAME	PROJECT NUMBER	BORING
Riverside Community Hospital	SD809	**B-02**

SITE LOCATION	START	FINISH	SHEET NO.
Proposed Parking Garage and Tower Sites	4/1/2024	4/1/2024	3 of 3

DRILLING COMPANY	DRILLING METHOD	LOGGED BY	CHECKED BY
Yellow Jacket Drilling	Hollow Stem Auger	JWJ	MAF

DRILLING EQUIPMENT	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GROUNDWATER (ft)
CME 85 Truck Mounted Rig #120	8	51.5	798	▼ 36.0 / *762.0*

SAMPLING METHOD
Hammer: 140 lbs., Drop: 30 in. (Automatic)

NOTES
ETR ~ 80%, N_{60} ~ 80/60 * N ~ 1.33 * N

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	OTHER TESTS	DEPTH (feet)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
			S-11			---						**OLD ALLUVIUM:** WELL-GRADED SAND (SW); dense; light yellowish brown (10YR 6/4); saturated; mostly fine to medium SAND; few fines; nonplastic.
	745											Total Depth: 51½ Feet Groundwater Depth: 36 Feet Groundwater initially observed at 46 feet when the bottom of the borehole heaved.
55										55		
	740											
60										60		
	735											
65										65		
	730											
70										70		
	725											

GDC_LOG_BORING_MMX_SOIL_SD SD809 LOGS.GPJ GDCLOG.GDT 4/19/24

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FIGURE
A-7 c

BORING RECORD

PROJECT NAME	PROJECT NUMBER	BORING
Riverside Community Hospital	SD809	**B-03**

SITE LOCATION	START	FINISH	SHEET NO.
Proposed Parking Garage and Tower Sites	4/2/2024	4/2/2024	1 of 2

DRILLING COMPANY	DRILLING METHOD	LOGGED BY	CHECKED BY
Yellow Jacket Drilling	Hollow Stem Auger	JWJ	MAF

DRILLING EQUIPMENT	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GROUNDWATER (ft)
CME 75 Limited Access Rig #142	8	36.5	798	▼ / *na*

SAMPLING METHOD
Hammer: 140 lbs., Drop: 30 in. (Automatic)

NOTES
ETR ~ 80%, N_{60} ~ 80/60 * N ~ 1.33 * N

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	OTHER TESTS	DEPTH (feet)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
												PAVEMENT: 2-inches Asphalt Concrete.
	795		B-1						PA EI CR			**FILL:** SILTY SAND (SM); loose to medium dense; yellowish brown (10YR 5/6); moist; mostly fine to medium SAND; some fines; trace GRAVEL; nonplastic; micaceous. (4% Gravel; 49% Sand; 47% Fines)
5			R-2	6 11 13	24	21	3.1	104		5		
	790											**YOUNG ALLUVIUM:** SILTY SAND (SM); medium dense; yellowish brown (10YR 5/6); moist; mostly fine to coarse SAND; little fines; nonplastic.
10			S-3	4 6 6	12	16				10		
	785											
15			R-4	5 11 12	23	20	4.2	106		15		WELL-GRADED SAND WITH SILT (SW-SM); medium dense; very pale brown (10 YR 7/4) to yellowish brown (10YR 5/6); moist; mostly fine to coarse SAND; few fines; trace GRAVEL; nonplastic; micaceous.
	780											
20			S-5	6 8 7	15	20				20		Few GRAVEL.
	775											

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FIGURE
A-8 a

BORING RECORD

PROJECT NAME	PROJECT NUMBER	BORING
Riverside Community Hospital	SD809	**B-03**

SITE LOCATION	START	FINISH	SHEET NO.
Proposed Parking Garage and Tower Sites	4/2/2024	4/2/2024	2 of 2

DRILLING COMPANY	DRILLING METHOD	LOGGED BY	CHECKED BY
Yellow Jacket Drilling	Hollow Stem Auger	JWJ	MAF

DRILLING EQUIPMENT	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GROUNDWATER (ft)
CME 75 Limited Access Rig #142	8	36.5	798	▼ / *na*

SAMPLING METHOD
Hammer: 140 lbs., Drop: 30 in. (Automatic)

NOTES
ETR ~ 80%, N_{60} ~ 80/60 * N ~ 1.33 * N

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	OTHER TESTS	DEPTH (feet)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
			R-6	11 30 40	70	62	6.2	114				**OLD ALLUVIUM:** WELL-GRADED SAND WITH SILT (SW-SM); very dense; very pale brown (10YR 7/3) to dark yellowish brown (10YR 4/6); moist; mostly fine to coarse SAND; few fines; nonplastic; micaceous.
	770											CLAYEY SAND (SC); dense; dark yellowish brown (10YR 4/6); moist; mostly fine to medium SAND; some fines; trace GRAVEL; low plasticity; micaceous.
30			S-7	7 12 14	26	35				30		
	765											
35			R-8	11 19 36	55	49	11.6	122		35		WELL-GRADED SAND WITH SILT (SW-SM); dense; yellowish brown (10YR 5/6); moist; mostly fine to coarse SAND; little fines; trace GRAVEL; nonplastic; micaceous
	760											Total Depth: 36½ Feet Groundwater Not Encountered
40										40		
	755											
45										45		
	750											

GDC_LOG_BORING_MMX_SOIL_SD SD809 LOGS.GPJ GDCLOG.GDT 4/19/24

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FIGURE
A-8 b

BORING RECORD

PROJECT NAME	PROJECT NUMBER	BORING
Riverside Community Hospital	SD809	**B-04**

SITE LOCATION	START	FINISH	SHEET NO.
Proposed Parking Garage and Tower Sites	4/4/2024	4/4/2024	1 of 2

DRILLING COMPANY	DRILLING METHOD	LOGGED BY	CHECKED BY
Yellow Jacket Drilling	Hollow Stem Auger	JWJ	MAF

DRILLING EQUIPMENT	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GROUNDWATER (ft)
CME 75 Limited Access Rig #142	8	31	794	▼ / *na*

SAMPLING METHOD
Hammer: 140 lbs., Drop: 30 in. (Automatic)

NOTES
ETR ~ 74%, N_{60} ~ 74/60 * N ~ 1.23 * N

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	OTHER TESTS	DEPTH (feet)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
			B-1									**FILL:** SILTY SAND (SM); loose to medium dense; dark yellowish brown (10YR 4/4); moist; mostly fine to coarse SAND; some fines; nonplastic.
	790											**YOUNG ALLUVIUM:** SILTY SAND (SM); loose; yellowish brown (10YR 5/6); moist; mostly fine to medium SAND; some fines; nonplastic.
5			R-2	3 4 4	8	7	9.4	112	PA DS	5		(0% Gravel; 65% Sand; 35% Fines)
	785											CLAYEY SAND (SC); loose; dark yellowish brown (10YR 4/4); moist; mostly fine to medium SAND; some fines; nonplastic.
10			S-3	2 2 2	4	5				10		
	780											
15			R-4	5 9 11	20	16	2.6	111		15		WELL-GRADED SAND WITH SILT (SW-SM); medium dense; yellowish brown (10YR 5/6); moist; mostly fine to medium SAND; few fines; trace fine GRAVEL; nonplastic.
	775											
20			S-5	14 27 43	70	86				20		**OLD ALLUVIUM:** WELL-GRADED SAND WITH GRAVEL (SW); very dense; strong brown (7.5YR 5/8); moist; mostly fine SAND; little GRAVEL; few fines; nonplastic; micaceous.
	770											

GDC_LOG_BORING_MMX_SOIL_SD SD809 LOGS.GPJ GDCLOG.GDT 4/19/24

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FIGURE
A-9 a

BORING RECORD

PROJECT NAME	PROJECT NUMBER	BORING
Riverside Community Hospital	SD809	**B-04**

SITE LOCATION	START	FINISH	SHEET NO.
Proposed Parking Garage and Tower Sites	4/4/2024	4/4/2024	2 of 2

DRILLING COMPANY	DRILLING METHOD	LOGGED BY	CHECKED BY
Yellow Jacket Drilling	Hollow Stem Auger	JWJ	MAF

DRILLING EQUIPMENT	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GROUNDWATER (ft)
CME 75 Limited Access Rig #142	8	31	794	▼ / *na*

SAMPLING METHOD
Hammer: 140 lbs., Drop: 30 in. (Automatic)

NOTES
ETR ~ 74%, N_{60} ~ 74/60 * N ~ 1.23 * N

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	OTHER TESTS	DEPTH (feet)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
			R-6	40 50 (4")	100+	100+						**OLD ALLUVIUM:** WELL-GRADED SAND WITH GRAVEL (SW); very dense; strong brown (7.5YR 5/8); moist; mostly fine SAND; little GRAVEL; few fines; nonplastic; micaceous.
	765											
30			S-7	16 50	76	93				30		
												Total Depth: 31 Feet Groundwater Not Encountered
	760											
35										35		
	755											
40										40		
	750											
45										45		
	745											

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FIGURE
A-9 b

BORING RECORD

PROJECT NAME	PROJECT NUMBER	BORING
Riverside Community Hospital	SD809	**B-05**

SITE LOCATION	START	FINISH	SHEET NO.
Proposed Parking Garage and Tower Sites	4/4/2024	4/4/2024	1 of 2

DRILLING COMPANY	DRILLING METHOD	LOGGED BY	CHECKED BY
Yellow Jacket Drilling	Hollow Stem Auger	JWJ	MAF

DRILLING EQUIPMENT	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GROUNDWATER (ft)
CME 75 Limited Access Rig #142	8	31.5	796	▼ / *na*

SAMPLING METHOD
Hammer: 140 lbs., Drop: 30 in. (Automatic)

NOTES
ETR ~ 74%, N_{60} ~ 74/60 * N ~ 1.23 * N

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	OTHER TESTS	DESCRIPTION AND CLASSIFICATION
0	795		B-1							**FILL:** SILTY SAND (SM); loose to medium dense; dark yellowish brown (10YR 4/4); moist; mostly fine to medium SAND; some fines; nonplastic. Contains trash and demolition debris.
5	790		R-2	1 2 4	6	5	12.6	106	PA	**YOUNG ALLUVIUM:** SANDY SILT (ML); loose; dark yellowish brown (10YR 4/6); moist; mostly fines; some fine to medium SAND; nonplastic; micaceous. (0% Gravel; 33% Sand; 67% Fines)
10	785		S-3	6 7 10	17	21				CLAYEY SAND (SC); medium dense; dark yellowish brown (10YR 4/4); moist; mostly fine to medium SAND; some fines; low plasticity; micaceous.
15	780		R-4	10 32 60	92	75	6.5	127		**OLD ALLUVIUM:** CLAYEY SAND WITH GRAVEL (SC); very dense; yellowish brown (10YR 5/6); moist; mostly fine to coarse SAND; some fines; little GRAVEL; nonplastic; micaceous.
20	775		S-5	10 13 20	33	41				WELL-GRADED SAND WITH CLAY (SW-SC); dense; very pale brown (10YR 8/4) to yellowish brown (10YR 5/8); moist; mostly fine to coarse SAND; little fines; few GRAVEL; nonplastic; micaceous.

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FIGURE
A-10 a

BORING RECORD

PROJECT NAME	PROJECT NUMBER	BORING
Riverside Community Hospital	SD809	**B-05**

SITE LOCATION	START	FINISH	SHEET NO.
Proposed Parking Garage and Tower Sites	4/4/2024	4/4/2024	2 of 2

DRILLING COMPANY	DRILLING METHOD	LOGGED BY	CHECKED BY
Yellow Jacket Drilling	Hollow Stem Auger	JWJ	MAF

DRILLING EQUIPMENT	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GROUNDWATER (ft)
CME 75 Limited Access Rig #142	8	31.5	796	▼ / *na*

SAMPLING METHOD
Hammer: 140 lbs., Drop: 30 in. (Automatic)

NOTES
ETR ~ 74%, N_{60} ~ 74/60 * N ~ 1.23 * N

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	OTHER TESTS	DEPTH (feet)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
	770		R-6	9 17 22	39	32	13.5	109				**OLD ALLUVIUM:** WELL-GRADED SAND WITH GRAVEL (SW); dense; very pale brown (10YR 8/2) to yellowish brown (10YR 5/4); moist; mostly fine to medium SAND; some GRAVEL; few fines; nonplastic; micaceous.
30	765		S-7	10 27 50	77	95				30		Very pale brown (10YR 8/3) to light yellowish brown (10YR 6/4); very dense.
												Total Depth: 31½ Feet Groundwater Not Encountered
35	760									35		
40	755									40		
45	750									45		

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FIGURE
A-10 b

BORING RECORD

PROJECT NAME	PROJECT NUMBER	BORING
Riverside Community Hospital	SD809	**B-06**

SITE LOCATION	START	FINISH	SHEET NO.
Proposed Parking Garage and Tower Sites	4/3/2024	4/4/2024	1 of 2

DRILLING COMPANY	DRILLING METHOD	LOGGED BY	CHECKED BY
Yellow Jacket Drilling	Hollow Stem Auger	JWJ	MAF

DRILLING EQUIPMENT	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GROUNDWATER (ft)
CME 75 Limited Access Rig #142	8	31.5	794	▼ / *na*

SAMPLING METHOD
Hammer: 140 lbs., Drop: 30 in. (Automatic)

NOTES
ETR ~ 74%, N_{60} ~ 74/60 * N ~ 1.23 * N

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	OTHER TESTS	DEPTH (feet)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
												PAVEMENT: 4-inches Portland Cement Concrete.
			B-1						PA EI CR R			**FILL:** SILTY SAND (SM); loose to medium dense; dark yellowish brown (10YR 3/6); moist; mostly fines; some fine to medium SAND; nonplastic; micaceous.
	790											**YOUNG ALLUVIUM:** CLAYEY SAND (SC); loose; dark yellowish brown (10YR 4/4); moist; mostly fine to medium SAND; some fines; low plasticity. Sample has the odor of decaying vegetation.
5			S-2	2 2 2	4	5				5		(0% Gravel; 55% Sand; 45% Fines)
	785											WELL-GRADED SAND (SW); dense; very pale brown (10YR 8/4) to yellowish brown (10YR 5/6); moist; mostly fine to coarse SAND; little GRAVEL; trace fines; nonplastic.
10			R-3	10 24 36	60	49	13.1	114		10		
	780											
15			S-4	12 26 30	56	69				15		**OLD ALLUVIUM:** SILTY SAND WITH GRAVEL (SM); very dense; yellowish brown (10YR 5/6); moist; mostly fine to medium SAND; some fines; little GRAVEL; nonplastic.
			B-5									
	775											
20			R-6	26 50 (5")	100+	100+				20		WELL-GRADED SAND WITH SILT (SW-SM); very dense; very pale brown (10YR 8/3) to brownish yellow (10YR 6/8); moist; mostly fine to coarse SAND; few fines; few GRAVEL; nonplastic; micaceous.
	770											

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FIGURE
A-11 a

GDC_LOG_BORING_MMX_SOIL_SD SD809 LOGS.GPJ GDCLOG.GDT 4/19/24

BORING RECORD

PROJECT NAME	PROJECT NUMBER	BORING
Riverside Community Hospital	SD809	**B-06**

SITE LOCATION	START	FINISH	SHEET NO.
Proposed Parking Garage and Tower Sites	4/3/2024	4/4/2024	2 of 2

DRILLING COMPANY	DRILLING METHOD	LOGGED BY	CHECKED BY
Yellow Jacket Drilling	Hollow Stem Auger	JWJ	MAF

DRILLING EQUIPMENT	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GROUNDWATER (ft)
CME 75 Limited Access Rig #142	8	31.5	794	▼ / *na*

SAMPLING METHOD
Hammer: 140 lbs., Drop: 30 in. (Automatic)

NOTES
ETR ~ 74%, N_{60} ~ 74/60 * N ~ 1.23 * N

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	OTHER TESTS	DEPTH (feet)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
			S-7	7 25 25	50	62						**OLD ALLUVIUM:** SILTY SAND WITH GRAVEL (SM); very dense; yellowish brown (10YR 5/6); moist; mostly fine to medium SAND; some fines; little GRAVEL; nonplastic.
			B-8									
	765											
30										30		
												Total Depth: 31½ Feet Groundwater Not Encountered
	760											
35										35		
	755											
40										40		
	750											
45										45		
	745											

GDC_LOG_BORING_MMX_SOIL_SD SD809 LOGS.GPJ GDCLOG.GDT 4/19/24

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FIGURE
A-11 b

BORING RECORD

PROJECT NAME	PROJECT NUMBER	BORING
Riverside Community Hospital	SD809	**B-07**

SITE LOCATION	START	FINISH	SHEET NO.
Proposed Parking Garage and Tower Sites	4/4/2024	4/4/2024	1 of 2

DRILLING COMPANY	DRILLING METHOD	LOGGED BY	CHECKED BY
Yellow Jacket Drilling	Hollow Stem Auger	JWJ	MAF

DRILLING EQUIPMENT	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GROUNDWATER (ft)
CME 75 Limited Access Rig #142	8	28	794	▼ / *na*

SAMPLING METHOD
Hammer: 140 lbs., Drop: 30 in. (Automatic)

NOTES
ETR ~ 74%, N_{60} ~ 74/60 * N ~ 1.23 * N

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	OTHER TESTS	DEPTH (feet)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
			B-1									**FILL:** CLAYEY SAND (SC); loose to medium dense; dark yellowish brown (10YR 3/6); moist to wet; mostly fine to medium SAND; some fines; little GRAVEL; low plasticity.
	790											**YOUNG ALLUVIUM:** SILTY SAND (SM); loose to medium dense; yellowish brown (10YR 4/6); moist; mostly fine SAND; some fines; micaceous; nonplastic.
5			S-2	2 3 5	8	10				5		
	785											SANDY SILT (ML); loose; dark yellowish brown (10YR 4/6); moist; mostly fines; some fine to medium SAND; trace GRAVEL; nonplastic; micaceous. (1% Gravel; 39% Sand; 60% Fines)
10			R-3	2 4 5	9	7	15.7	113	PA	10		
	780											WELL-GRADED SAND WITH SILT (SW-SM); medium dense; very pale brown (10YR 7/3) to yellowish brown (10YR 5/6); moist; mostly fine to coarse SAND; trace fines; trace GRAVEL; nonplastic.
15			S-4	3 7 15	22	27				15		
	775											**OLD ALLUVIUM:** WELL-GRADED SAND (SW); very dense; very pale brown (10YR 8/3) to brownish yellow (10YR 6/8); moist; mostly fine to coarse SAND; few GRAVEL; trace fines; nonplastic; micaceous.
20			R-5	16 34 50	84	69	5.6	116		20		
	770											

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FIGURE
A-12 a

BORING RECORD

PROJECT NAME	PROJECT NUMBER	BORING
Riverside Community Hospital	SD809	**B-07**

SITE LOCATION	START	FINISH	SHEET NO.
Proposed Parking Garage and Tower Sites	4/4/2024	4/4/2024	2 of 2

DRILLING COMPANY	DRILLING METHOD	LOGGED BY	CHECKED BY
Yellow Jacket Drilling	Hollow Stem Auger	JWJ	MAF

DRILLING EQUIPMENT	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GROUNDWATER (ft)
CME 75 Limited Access Rig #142	8	28	794	▼ / *na*

SAMPLING METHOD
Hammer: 140 lbs., Drop: 30 in. (Automatic)

NOTES
ETR ~ 74%, N_{60} ~ 74/60 * N ~ 1.23 * N

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	OTHER TESTS	DEPTH (feet)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
		X	S-6	21 29 20	49	60						**OLD ALLUVIUM:** WELL-GRADED SAND (SW); very dense; very pale brown (10YR 8/3) to brownish yellow (10YR 6/8); moist; mostly fine to coarse SAND; few GRAVEL; trace fines; nonplastic; micaceous.
												Total Depth: 28 Feet Groundwater Not Encountered
30	765									30		
35	760									35		
40	755									40		
45	750									45		
	745											

GROUP DELTA CONSULTANTS, INC.
9245 Activity Road, Suite 103
San Diego, California 92126

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FIGURE
A-12 b

BORING RECORD

PROJECT NAME	PROJECT NUMBER	BORING
Riverside Community Hospital	SD809	**B-08**

SITE LOCATION	START	FINISH	SHEET NO.
Proposed Parking Garage and Tower Sites	4/1/2024	4/1/2024	1 of 2

DRILLING COMPANY	DRILLING METHOD	LOGGED BY	CHECKED BY
Yellow Jacket Drilling	Hollow Stem Auger	JWJ	MAF

DRILLING EQUIPMENT	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GROUNDWATER (ft)
CME 75 Limited Access Rig #142	8	30	794	▼ / *na*

SAMPLING METHOD
Hammer: 140 lbs., Drop: 30 in. (Automatic)

NOTES
ETR ~ 80%, N_{60} ~ 80/60 * N ~ 1.33 * N

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	OTHER TESTS	DEPTH (feet)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
			B-1						PA EI CR R			**FILL:** SILTY SAND (SM); loose to medium dense; brown (10YR 4/3); moist; mostly fine to coarse SAND; some fines; little GRAVEL; nonplastic; micaceous. (14% Gravel; 44% Sand; 42% Fines)
	790											
5			S-2	2 4 4	8	11				5		**YOUNG ALLUVIUM:** POORLY-GRADED SAND WITH SILT (SP-SM); medium dense; yellowish brown (10YR 5/6); moist; mostly fine to medium SAND; few fines; trace GRAVEL; nonplastic; micaceous.
	785											
10			R-3	3 4 7	11	10	7.2	116		10		
	780											
15			S-4	19 50 (5")	79	100+				15		**OLD ALLUVIUM:** WELL-GRADED SAND WITH SILT (SW-SM); very dense; very pale brown (10YR 8/4) to yellowish brown (10YR 5/6); moist; mostly fine to coarse SAND; few fines; trace GRAVEL; nonplastic; micaceous.
	775											
20			R-5	15 35 50	85	75	5.3	107		20		WELL-GRADED SAND (SW); very dense; very pale brown (10YR 8/4) to yellowish brown (10YR 5/6); moist; mostly fine to coarse SAND; little GRAVEL; trace fines; nonplastic; micaceous.
	770											

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FIGURE
A-13 a

GDC_LOG_BORING_MMX_SOIL_SD SD809 LOGS.GPJ GDCLOG.GDT 4/19/24

BORING RECORD

PROJECT NAME	PROJECT NUMBER	BORING
Riverside Community Hospital	SD809	**B-08**

SITE LOCATION	START	FINISH	SHEET NO.
Proposed Parking Garage and Tower Sites	4/1/2024	4/1/2024	2 of 2

DRILLING COMPANY	DRILLING METHOD	LOGGED BY	CHECKED BY
Yellow Jacket Drilling	Hollow Stem Auger	JWJ	MAF

DRILLING EQUIPMENT	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GROUNDWATER (ft)
CME 75 Limited Access Rig #142	8	30	794	▼ / *na*

SAMPLING METHOD
Hammer: 140 lbs., Drop: 30 in. (Automatic)

NOTES
ETR ~ 80%, N_{60} ~ 80/60 * N ~ 1.33 * N

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	OTHER TESTS	DEPTH (feet)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
			R-6	24 50	74	66	3.2	112				**OLD ALLUVIUM:** WELL-GRADED GRAVEL WITH SAND (GW); very dense; white (10YR 8/8) to very pale brown (10YR 7/4); moist; mostly GRAVEL; some fine to coarse SAND; trace fines; nonplastic.
	765		S-7	22 50 (5")	82	100+						
30										30		Total Depth: 30 Feet Groundwater Not Encountered
	760											
35										35		
	755											
40										40		
	750											
45										45		
	745											

GDC_LOG_BORING_MMX_SOIL_SD SD809 LOGS.GPJ GDCLOG.GDT 4/19/24

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FIGURE
A-13 b

BORING RECORD

PROJECT NAME	PROJECT NUMBER	BORING
Riverside Community Hospital	SD809	**B-09**

SITE LOCATION	START	FINISH	SHEET NO.
Proposed Parking Garage and Tower Sites	4/5/2024	4/5/2024	1 of 2

DRILLING COMPANY	DRILLING METHOD	LOGGED BY	CHECKED BY
Yellow Jacket Drilling	Hollow Stem Auger	JWJ	MAF

DRILLING EQUIPMENT	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GROUNDWATER (ft)
CME 75 Limited Access Rig #142	8	31.5	832	▼ / *na*

SAMPLING METHOD
Hammer: 140 lbs., Drop: 30 in. (Automatic)

NOTES
ETR ~ 74%, N_{60} ~ 74/60 * N ~ 1.23 * N

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	OTHER TESTS	DEPTH (feet)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
	830		B-1									**FILL:** SILTY SAND (SM); loose to medium dense; dark yellowish brown (10YR 4/4); moist; mostly fine to medium SAND; some fines; trace GRAVEL and COBBLE; nonplastic. Some tree roots.
5			R-2	4 7 7	14	11	10.1	113		5		**YOUNG ALLUVIUM:** SILTY SAND (SM); medium dense; dark yellowish brown (10YR 4/4); moist; mostly fine to medium SAND; some fines; trace GRAVEL and COBBLE; nonplastic
	825											
10			S-3	2 2 2	4	5			PA	10		SANDY SILT (ML); loose; strong brown (10YR 5/6); moist; mostly fines; some fine SAND; micaceous; nonplastic. (0% Gravel; 31% Sand; 69% Fines)
	820											
15			R-4	11 12 14	26	21	6.5	101		15		SILTY SAND (SM); medium dense; strong brown (10YR 5/6); moist; mostly fines; little fine SAND; nonplastic.
	815											
20			S-5	9 13 26	39	48				20		**OLD ALLUVIUM:** SILTY SAND (SM); dense; dark yellowish brown (10YR 4/4); moist; mostly fine to medium SAND; some fines; nonplastic.
	810											

GDC_LOG_BORING_MMX_SOIL_SD SD809 LOGS.GPJ GDCLOG.GDT 4/19/24

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FIGURE
A-14 a

BORING RECORD

PROJECT NAME	PROJECT NUMBER	BORING
Riverside Community Hospital	SD809	**B-09**

SITE LOCATION	START	FINISH	SHEET NO.
Proposed Parking Garage and Tower Sites	4/5/2024	4/5/2024	2 of 2

DRILLING COMPANY	DRILLING METHOD	LOGGED BY	CHECKED BY
Yellow Jacket Drilling	Hollow Stem Auger	JWJ	MAF

DRILLING EQUIPMENT	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GROUNDWATER (ft)
CME 75 Limited Access Rig #142	8	31.5	832	▼ / *na*

SAMPLING METHOD
Hammer: 140 lbs., Drop: 30 in. (Automatic)

NOTES
ETR ~ 74%, N_{60} ~ 74/60 * N ~ 1.23 * N

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	OTHER TESTS	DEPTH (feet)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
			R-6	8 14 22	36	30	2.5	114				**OLD ALLUVIUM:** POORLY-GRADED SAND WITH SILT (SP-SM); dense; brownish yellow (10YR 6/8); moist; mostly fine to medium SAND; little GRAVEL; few fines; nonplastic.
	805											
30			S-7	7 12 16	28	34				30		Grades from very pale brown (10YR 7/4) to yellowish brown (10YR 5/6); micaeous; trace GRAVEL.
	800											Total Depth: 31½ Feet Groundwater Not Encountered
35										35		
	795											
40										40		
	790											
45										45		
	785											

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FIGURE
A-14 b

GDC_LOG_BORING_MMX_SOIL_SD SD809 LOGS.GPJ GDCLOG.GDT 4/19/24

BORING RECORD

PROJECT NAME	PROJECT NUMBER	BORING
Riverside Community Hospital	SD809	**B-10**

SITE LOCATION	START	FINISH	SHEET NO.
Proposed Parking Garage and Tower Sites	4/2/2024	4/2/2024	1 of 3

DRILLING COMPANY	DRILLING METHOD	LOGGED BY	CHECKED BY
Yellow Jacket Drilling	Hollow Stem Auger	JWJ	MAF

DRILLING EQUIPMENT	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GROUNDWATER (ft)
CME 85 Truck Mounted Rig #120	8	51.5	838	▼ / *na*

SAMPLING METHOD
Hammer: 140 lbs., Drop: 30 in. (Automatic)

NOTES
ETR ~ 80%, N_{60} ~ 80/60 * N ~ 1.33 * N

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	OTHER TESTS	DEPTH (feet)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
										0		**PAVEMENT:** 8-inches of Asphalt Concrete over 6-inches of Aggregate Base.
	835		B-1						PA EI CR			**FILL:** SANDY SILT (ML); medium dense; yellowish brown (10YR 5/6); moist; mostly fines; some fine to medium SAND; low plasticity; micaceous. (0% Gravel; 33% Sand; 67% Fines)
5			S-2	8 9 9	18	24				5		
	830											
10			R-3	8 14 20	34	30	5.8	99	DS	10		SILTY SAND (SM); dense; yellowish brown (10YR 5/6); moist; mostly fine to medium SAND; some fines; low plasticity; micaceous.
	825											
15			S-4	8 9 11	20	27				15		SANDY SILT (ML); medium dense to dense; brownish yellow (10YR 6/8); moist; mostly fines; little fine to medium SAND; low plasticity; micaceous.
	820											
20			R-5	7 13 24	37	33	11.2	99	DS	20		
	815											

GDC_LOG_BORING_MMX_SOIL_SD SD809 LOGS.GPJ GDCLOG.GDT 4/19/24

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FIGURE
A-15 a

BORING RECORD

PROJECT NAME	PROJECT NUMBER	BORING
Riverside Community Hospital	SD809	**B-10**

SITE LOCATION	START	FINISH	SHEET NO.
Proposed Parking Garage and Tower Sites	4/2/2024	4/2/2024	2 of 3

DRILLING COMPANY	DRILLING METHOD	LOGGED BY	CHECKED BY
Yellow Jacket Drilling	Hollow Stem Auger	JWJ	MAF

DRILLING EQUIPMENT	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GROUNDWATER (ft)
CME 85 Truck Mounted Rig #120	8	51.5	838	▼ / *na*

SAMPLING METHOD
Hammer: 140 lbs., Drop: 30 in. (Automatic)

NOTES
ETR ~ 80%, N_{60} ~ 80/60 * N ~ 1.33 * N

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	OTHER TESTS	DEPTH (feet)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
			S-6	5 9 12	21	28						**FILL:** SANDY SILT (ML); medium dense; light yellowish brown (10YR 4/4); moist; mostly fines; little fine SAND; nonplastic.
	810											
30			R-7	7 30 50	80	71	7.5	113		30		**OLD ALLUVIUM:** SILTY SAND WITH GRAVEL (SM); very dense; strong brown (7.5YR 5/8); moist; mostly fine SAND; some fines; little GRAVEL; nonplastic; micaceous.
	805											
35			S-8	8 17 18	35	47				35		SILTY SAND (SM); very dense; strong brown (7.5YR 5/8); moist; mostly fine SAND; some fines; few GRAVEL; nonplastic; micaceous.
	800											
40			R-9	15 30 42	72	64	5.6	115		40		SILTY SAND WITH GRAVEL (SM); very dense; strong brown (7.5YR 5/8); moist; mostly fine SAND; some fines; little GRAVEL; nonplastic; micaceous.
	795											SANDY SILT (ML); medium dense; light yellowish brown (10YR 4/4); moist; mostly fines; little fine SAND; nonplastic; mildly cemented.
45			S-10	10 27 33	60	80				45		SILTY SAND (SM); very dense; very pale brown (10YR 7/4) to brownish yellow (10YR 6/6), moist; mostly fine to medium SAND; some fines; few GRAVEL; nonplastic; micaceous.
	790											

GDC_LOG_BORING_MMX_SOIL_SD SD809 LOGS.GPJ GDCLOG.GDT 4/19/24

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FIGURE
A-15 b

BORING RECORD

PROJECT NAME	PROJECT NUMBER	BORING
Riverside Community Hospital	SD809	**B-10**

SITE LOCATION	START	FINISH	SHEET NO.
Proposed Parking Garage and Tower Sites	4/2/2024	4/2/2024	3 of 3

DRILLING COMPANY	DRILLING METHOD	LOGGED BY	CHECKED BY
Yellow Jacket Drilling	Hollow Stem Auger	JWJ	MAF

DRILLING EQUIPMENT	BORING DIA. (in)	TOTAL DEPTH (ft)	GROUND ELEV (ft)	DEPTH/*ELEV.* GROUNDWATER (ft)
CME 85 Truck Mounted Rig #120	8	51.5	838	▼ / *na*

SAMPLING METHOD
Hammer: 140 lbs., Drop: 30 in. (Automatic)

NOTES
ETR ~ 80%, N_{60} ~ 80/60 * N ~ 1.33 * N

DEPTH (feet)	ELEVATION (feet)	SAMPLE TYPE	SAMPLE NO.	PENETRATION RESISTANCE (BLOWS / 6 IN)	BLOW/FT "N"	N_{60}	MOISTURE (%)	DRY DENSITY (pcf)	OTHER TESTS	DEPTH (feet)	GRAPHIC LOG	DESCRIPTION AND CLASSIFICATION
			R-11	17 27 50	87	77	2.0	---				**OLD ALLUVIUM:** POORLY-GRADED SAND WITH SILT (SP-SM); very dense; very pale brown (10YR 8/3) to light yellowish brown (10YR 6/4); moist; mostly fine to medium SAND; few fines; few GRAVEL; nonplastic.
	785											Total Depth: 51½ Feet Groundwater Not Encountered
55										55		
	780											
60										60		
	775											
65										65		
	770											
70										70		
	765											

GDC_LOG_BORING_MMX_SOIL_SD SD809 LOGS.GPJ GDCLOG.GDT 4/19/24

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FIGURE
A-15 c

APPENDIX A1
PREVIOUS EXPLORATIONS (2007 to 2013)

EXPLORATORY BORING NO. 1

Date Drilled: 12/20/07 | Client: Riverside Community Hospital

Equipment: CME 75 Track Rig | Driving Weight / Drop: 140 lbs./ 30 in.

Surface Elevation(ft): 799.0 | Logged by: VJR | Measured Depth to Water(ft): 39.0

DEPTH (ft)	GRAPHIC LOG	VISUAL CLASSIFICATION	REMARKS	SAMPLES DRIVE	SAMPLES BULK	BLOWS/6 IN.	FIELD MOISTURE (%)	DRY UNIT WT. (pcf)	LAB/FIELD TESTS
		(SM) Silty Sand, fine to coarse with gravel to 1", brown	Fill				14.8		
				X		8 14 19	13.4	120	Ring
		(ML) Sandy Silt, fine with medium, light brown	Native						SA
5				X		3 4 5	6.7	101	Ring, Consol.
10				X		4 7 9	11.5	120	Ring, DS
		(SP-SM) Sand, medium to coarse wtih fine and silt, brown					2.3		
15				X		7 12 18	2.3	114	Ring
		(SW-SM) Sand with silt, fine to coarse with clay and gravel to 3", brown					5.3		SA
20				X		38 50/5"	3.6	117	Ring
25				X		40 50/5"	4.1	105	Ring, DS
30				X		50/4"	3.5	104	Ring
		(SP) Sand, medium to coarse with fine, gravel and cobbles to 4", brown							

BORING LOG - NO EQUIV & BLOW PER 6 IN 07881-3.GPJ CHJ.GDT 1/18/08

C.H.J.

PROPOSED HOSPITAL EXPANSION AND PARKING GARAGE
RIVERSIDE, CALIFORNIA

Job No. 07881-3

Enclosure B-1a