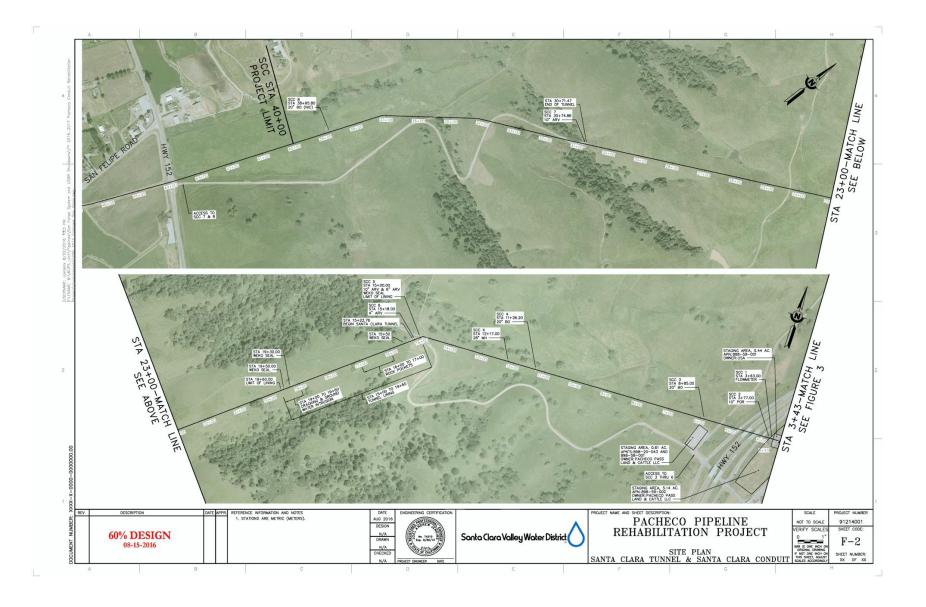
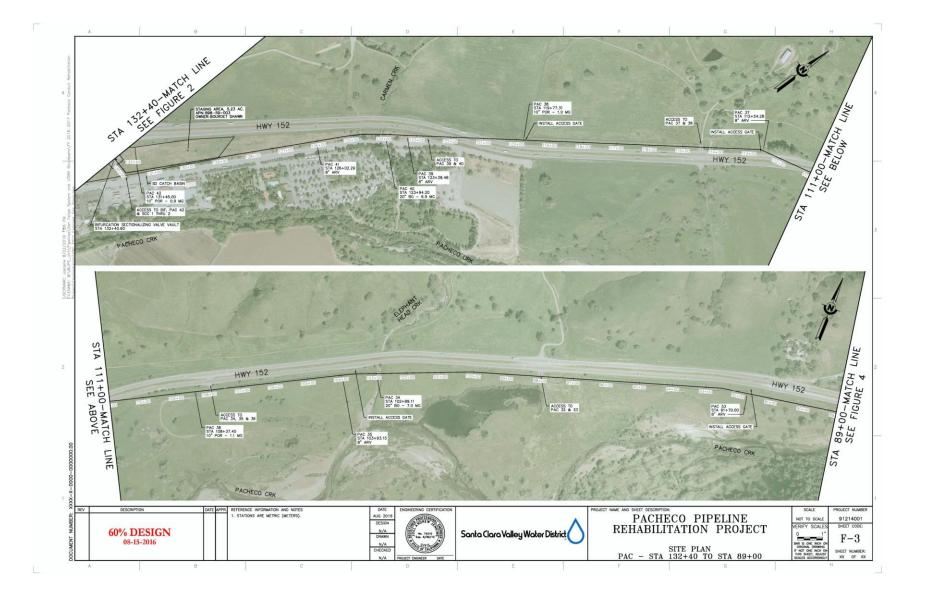
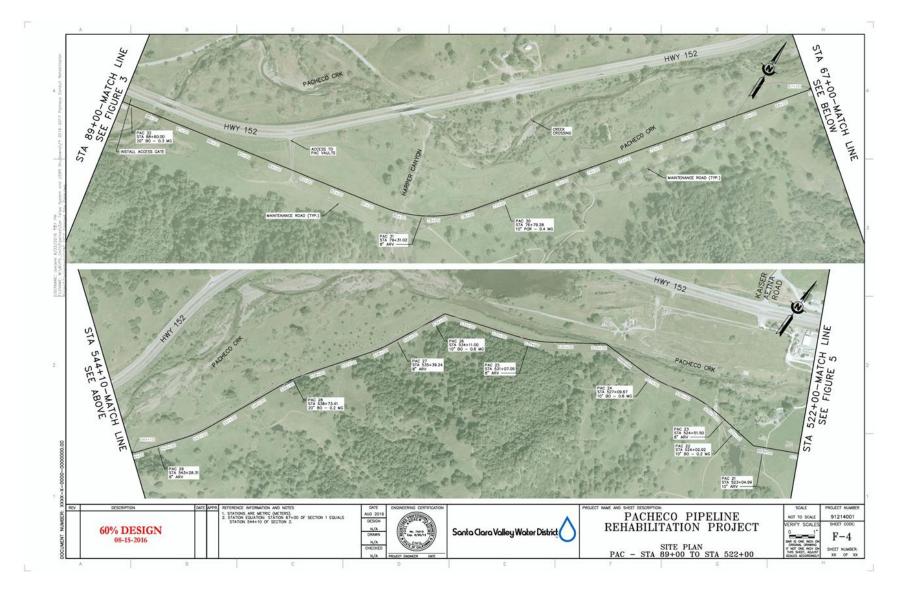
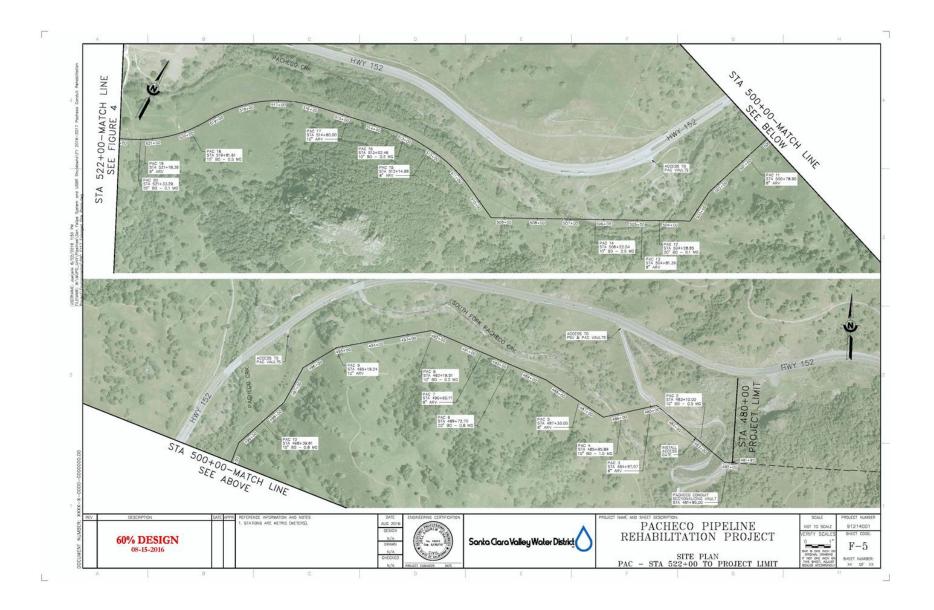
Appendix A: Detailed Proposed Action Area Maps, Including Directions









District Vault ID	Directions
Pacheco Tunnel Outlet/Pacheco Sectionalizing Valve (PSV) Lat: N 37° 02′ 33.0″ Long: W 121° 16′20.3″	2200' Southeast of PAC#3 on the access road connecting these two vaults. The PSV is at the end of the access road on the side of the hill. This facility serves as an entry point into the Pacheco Tunnel.
PAC #2 (Sta 483+10) Lat: N 37° 02' 34.9" Long: W 121° 16'23.7"	900' Southeast of PAC#3, on the access road connecting these two vaults.
PAC #3 (Sta 484+97) Lat: N 37° 02′ 38.1″ Long: W 121° 16′29.8″	Enter the access gate off the shoulder on E-bound HWY 152 that is 7.75 miles east of the Casa De Fruta Exit on the Pacheco Pass Hwy (152). Proceed 800' southeast on the access road. PAC #3 is off the west side of the access road. [Use the same access gate for access to sites PSV thru PAC#11.]
PAC #4 (Sta 485+85) Lat: N 37° 02′ 37.3″ Long: W 121° 16′33.3″	1150' Southwest of PAC#3. At PAC#3, proceed 700' west down the access road. Make a left turn and proceed 450' southeast to PAC#4. PAC #4 is off the east side of the access road.
PAC #5 (Sta 487+33) Lat: N 37° 02′ 38.2″ Long: W 121° 16′38.6″	525' Northwest of PAC#4. At PAC#3, proceed 225' west through the Pacheco Creek. Make a right turn onto the access road and proceed 300' Northwest to PAC#5. PAC#5 is off the east side of the access road.
PAC #6 (Sta 489+72) Lat: N 37° 02′ 41.5″ Long: W 121° 16′47.2″	750' Northwest of PAC#5 on the access road connecting these two vaults. PAC#6 is 50' off the west side of the access road on the side of the hill.
PAC #7 (Sta 490+60) Lat: N 37° 02′ 42.4″ Long: W 121° 16′50.6″	300' Northwest of PAC#6 on the access road connecting these two vaults. PAC#7 is 50' off the West side of the access road on the side of the hill.
PAC #8 (Sta 492+19) Lat: N 37° 02′ 44.2″ Long: W 121° 16′56.7″	500' Northwest of PAC#7 on the access road connecting these two vaults. PAC#7 is 50' off the North side of the access road.
PAC #9 (Sta 495+19) Lat: N 37° 02′ 42.1″ Long: W 121° 17′08.4″	725' Southwest of PAC#8 on the access road and then continue 275' Southwest onto a dirt road going uphill to PAC#9.
PAC #10 (Sta 498+39) Lat: N 37° 02′ 34.6″ Long: W 121° 17′16.9″	1050' Southwest of PAC#9 on the access road. PAC#10 is 50' off the East side of the access road.
PAC #11 (Sta 500+78) Lat: N 37° 02′ 28.0″ Long: W 121° 17′21.5″	800' Southwest of PAC#10 on the access road. PAC#11 is 200' off the East side of the access road on the top of a hill.

District Vault ID	Directions
PAC #12 (Sta 504+28) Lat: N 37° 02′ 18.4″ Long: W 121° 17′27.1″	175' Northeast of PAC#13. Go 100' Northeast on the dirt access road. Proceed off of the dirt road and continue 75' onto the grass leading up to PAC#12.
PAC #13 (Sta 504+81) Lat: N 37° 02' 17.7" Long: W 121° 17'29.0"	500' Northeast of PAC#14 on the dirt access road connecting these two vaults. PAC#13 is off the East side of the access road.
PAC #14 (Sta 506+22) Lat: N 37° 02′ 15.5″ Long: W 121° 17′34.0″	Enter the access gate off the shoulder on E-bound HWY 152 that is 6.6 miles east of the Casa De Fruta Exit on the Pacheco Pass Hwy (152). Go 875' southwest on the access road. Take a <u>left</u> at the fork in the road and proceed 100' Southeast on the dirt road. [Use the same access gate for access to sites PAC#12 thru PAC#21.]
PAC #15 (Sta 512+14) Lat: N 37° 02' 13.8" Long: W 121° 17'55.8"	Enter the access gate off the shoulder on E-bound HWY 152 that is 6.6 miles east of the Casa De Fruta Exit on the Pacheco Pass Hwy (152). Go 875' southwest on the access road. Take a <u>right</u> at the fork in the road and go 250' Southwest going through the Pacheco Creek. Take another right at the fork in the road and proceed 2000' Southwest on the access road. PAC#15 is 80' off the south side of the access road on the side of the hill. [Use the same access gate for access to sites PAC#12 thru PAC#21.]
PAC #16 (Sta 513+02) Lat: N 37° 02' 13.8" Long: W 121° 17'59.4"	300' West of PAC#15 on the access road connecting these two vaults. PAC#16 is 80' off the South side of the access road on the side of the hill.
PAC #17 (Sta 514+80) Lat: N 37° 02′ 12.7″ Long: W 121° 18′06.5″	625' West of PAC#16. Go 450' West on the access road. Proceed off the road and continue uphill 175' Southwest to PAC#17.
PAC #18 (Sta 519+81) Lat: N 37° 02' 04.2" Long: W 121° 18'22.7"	2500' West & then Southwest of PAC#16 on the access road. PAC#18 is off the North side of the access road.
PAC #19 (Sta 521+18) Lat: N 37° 02' 01.2" Long: W 121° 18'26.7"	500' Southwest of PAC#18 on the access road. PAC#19 is on the North side of the access road.
PAC #20 (Sta 521+33) Lat: N 37° 02′ 01.0″ Long: W 121° 18′27.3″	50' Southwest of PAC#19 on the access road. PAC#20 is on the North side of the access road.
PAC #21 (Sta 523+04) Lat: N 37° 01' 58.5" Long: W 121° 18'33.5"	550' Southwest of PAC#20 on the access road. PAC#21 is on the North side of the access road.
PAC #22 (Sta 524+02) Lat: N 37° 01' 58.4" Long: W 121° 18'37.4"	NA – Work to be performed by District Staff.

District Vault ID	Directions
PAC #23 (Sta 524+51) Lat: N 37° 01′ 58.5″ Long: W 121° 18′39.3″	850' East of PAC#24 on the access road. PAC#23 is on the North side of the access road on the top of a hill.
PAC #24 (Sta 527+09) Lat: N 37° 01′ 57.7″ Long: W 121° 18′49.6″	1300' Northeast & then East of PAC#25 on the access road. PAC#24 is on the North side of the access road.
PAC #25 (Sta 531+07) Lat: N 37° 01′ 53.7″ Long: W 121° 19′04.1″	950' Northeast of PAC#26 on the access road. PAC#25 is on the North side of the access road.
PAC #26 (Sta 534+11) Lat: N 37° 01′ 49.7″ Long: W 121° 19′15.1″	425' Northeast of PAC#27 on the access road. PAC#26 is on the West side of the access road.
PAC #27 (Sta 535+39) Lat: N 37° 01′ 46.0″ Long: W 121° 19′17.2″	1100' Northeast of PAC#28 on the access road. PAC#27 is on the East side of the access road.
PAC #28 (Sta 538+73) Lat: N 37° 01′ 37.0″ Long: W 121° 19′24.7″	1500' Northeast of PAC#29 on the access road. PAC#28 is on the West side of the access road.
PAC #29 (Sta 543+28) Lat: N 37° 01' 24.0" Long: W 121° 19'33.3"	Enter the access gate off the shoulder on E-bound HWY 152 that is 3.5 miles east of the Casa De Fruta Exit on the Pacheco Pass Hwy (152). Go 1200' Southeast on the access road going through the Pacheco Creek. Take a left at the fork in the road and proceed 2850' Northeast on the access road. PAC#29 is off the East side of the access road. [Use the same access gate for access to sites PAC#22 thru PAC#31.]
PAC #30 (Sta 76+79) Lat: N 37° 00′ 56.5″ Long: W 121° 19′59.2″	Enter the access gate off the shoulder on E-bound HWY 152 that is 3.5 miles east of the Casa De Fruta Exit on the Pacheco Pass Hwy (152). Go 1000' Southeast on the access road going through the Pacheco Creek. Go 650' Southwest off of the access road and drive over the grass to reach PAC#30. [Use the same access gate for access to sites PAC#22 thru PAC#31.]
PAC #31 (Sta 79+31) Lat: N 37° 00′ 50.8″ Long: W 121° 20′06.2″	800' Southwest of PAC#30 on the access road. Continue to drive over the grass to reach PAC #31
PAC #32 (Sta 88+60) Lat: N 37° 00' 44.2" Long: W 121° 20'43.2"	1000' East of PAC #33. Drive over the grass to reach PAC #32. It is just before Elephant Head Creek.

District Vault ID	Directions
PAC #33 (Sta 91+70) Lat: N 37° 00′ 42.3″ Long: W 121° 20′55.2″	Enter the access gate off the shoulder on E-bound HWY 152 that is 2.25 miles east of the Casa De Fruta Exit on the Pacheco Pass Hwy (152). Proceed 2000' east off of the access road and drive over the grass to reach PAC#33. [Use the same access gate for access to sites PAC#32 thru PAC#33.]
PAC #34 (Sta 102+89) Lat: N 37° 00' 30.0" Long: W 121° 21'37.7"	1800' Northeast of PAC #36. Proceed off of the access road and drive over the grass to reach PAC #34.
PAC #35 (Sta 103+93) Lat: N 37° 00' 28.6" Long: W 121° 21'41.5"	1450' Northeast of PAC #36. Proceed off of the access road and drive over the grass to reach PAC #36.
PAC #36 (Sta 108+37) Lat: N 37° 00′ 21.5″ Long: W 121° 21′57.2″	Enter the access gate off the shoulder on E-bound HWY 152 that is 1.65 miles east of the Casa De Fruta Exit on the Pacheco Pass Hwy (152). Proceed 250' on the access road. PAC #36 is located 50' off the access road. [Use the same access gate for access to sites PAC#34 thru PAC#36.]
PAC #37 (Sta 112+54) Lat: N 37° 00′ 14.9″ Long: W 121° 21′11.8″	1.35 Mile East of the Casa De Fruta Exit on the Pacheco Pass Hwy (152). PAC #37 is located off the shoulder on the W-bound side of HWY 152.
PAC #38 (Sta 119+77) Lat: N 36° 59′ 56.6″ Long: W 121° 22′30.2″	0.9 Mile East of the Casa De Fruta Exit on the Pacheco Pass Hwy (152). PAC #38 is located off the shoulder on the W-bound HWY 152.
PAC #39 (Sta 123+28) Lat: N 36° 59′ 47.7″ Long: W 121° 22′39.0″	Off the Casa De Fruta Exit on Pacheco Pass Hwy (152). Go east and then go 3575' North on Casa De Fruta Parkway. PAC#39 is on the west side of the road
PAC #40 (Sta 123+94) Lat: N 36° 59′ 46.1″ Long: W 121° 22′40.6″	Off the Casa De Fruta Exit on Pacheco Pass Hwy (152). Go east and then go 3350' North on Casa De Fruta Parkway. PAC#40 is on the west side of the road.
PAC #41 (Sta 126+02) Lat: N 36° 59′ 40.3″ Long: W 121° 22′44.9″	Off the Casa De Fruta Exit on Pacheco Pass Hwy (152). Go east and then go 2700' North on Casa De Fruta Parkway. PAC#41 is on the west side of the road.
PAC #42 (Sta 131+45) Lat: N 36° 59' 24.5" Long: W 121° 22'54.8"	Off the Casa De Fruta Exit on Pacheco Pass Hwy (152). Go east and then go 950' North on Casa De Fruta Parkway. PAC#42 is on the west side of the road.
Bifurcation (BIF) Structure (Sta 132+40) Lat: N 36° 59' 23.3" Long: W 121° 22'57.8"	Off the Casa De Fruta Exit on Pacheco Pass Hwy (152). Go east and then go 800' North on Casa De Fruta Parkway. Turn left onto access road. BIF is at the end of the access road.

District Vault ID	Directions
SCC #1 (Sta 3+63) Lat: N 36° 59′ 23.2″ Long: W 121° 22′58.8″	Off the Casa De Fruta Exit on Pacheco Pass Hwy (152). Go east and then go 800' North on Casa De Fruta Parkway. Turn left onto access road. SCC#1 is at the end of the access road.
SCC #2 (Sta 3+77) Lat: N 36° 59' 23.3" Long: W 121° 22'59.0"	Off the Casa De Fruta Exit on Pacheco Pass Hwy (152). Go east and then go 800' North on Casa De Fruta Parkway. Turn left onto access road. SCC#2 is at the end of the access road.
SCC #3 (Sta 5+85) Lat: N ~36° 59′ 23.0″ Long: W ~121° 22′82.0″	Off the Casa De Fruta Exit on Pacheco Pass Hwy (152). Go west and proceed 1050' up access road. Go thru another access gate and head north 500' on access road. SCC#3 is 1250' Southeast off the Access Road
SCC #4 (Sta 11+26) Lat: N 36° 59' 22.0" Long: W 121° 23'29.4"	Off the Casa De Fruta Exit on Pacheco Pass Hwy (152). Go west and proceed 1050' up access road. Go thru another access gate and head north 200' on access road. SCC#4 is 1250' West off the Access Road
SCC #5 (Sta 15+00) Lat: N 36° 59' 21.0" Long: W 121° 23'45.1"	Off the Casa De Fruta Exit on Pacheco Pass Hwy (152). Go west and proceed 0.9 miles up access road. SCC#5 is the blockhouse at the end of the access road.
SCC #6 (Sta 15+18) Lat: N 36° 59′ 20.9″ Long: W 121° 23′45.2″	Same as SCC#5. It is the raised concrete vault located behind SCC#5. This vault serves as an entry point into the Santa Clara Tunnel.
SCC #7 (Sta 30+74) Lat: N 36° 58′ 48.6″ Long: W 121° 24′33.1″	3200' Northeast of SCC#8 on the access road. SCC#7 is at the end of the access road. This vault serves as an entry point into the Santa Clara Tunnel.
SCC #8 (Sta 38+95) Lat: N 36° 58' 29.0" Long: W 121° 24'53.9"	Enter the access gate located 600' East of the San Felipe Rd. (Dunne Ln.) & W-bound Pacheco Pass Hwy (152W). Proceed 1800' North on the access road. SCC#8 is 450' West off the Access Road in the field. [Use the same access gate for access to SCC#7]