



## **HORIZONTAL DIRECTIONAL DRILL (HDD) & GUIDED AUGER BORE (GAB)**

### **PROJECT HISTORY REPORT**

1. Edgewood, Washington – HDD – 1500' of 12" – Infrasource Services, LLC. – Completed December 2024
2. Pendelton, Oregon – HDD – 1300' of 8" – Blue Sky Construction – Completed December 2024
3. White City, Oregon – GAB – 100' of 48" – Central Pipeline – Completed December 2024
4. Sanger, California – Hammer Bore – 40' of 8" – Pacific Gas and Electric – Completed November 2024
5. Napa, California – GAB – 91' of 26" – Pacific Gas and Electric – Completed October 2024
6. Sumner, Washington – HDD – 1800' of 24" – Potelco Inc. – Completed October 2024
7. Petaluma, California – 12" Hammer Extraction – Barnard Pipeline – Completed October 2024
8. Newfoundland, Canada – HDD – Beach Approach – (5 Total) – Ranging from 4500' – 5000' – Completed October 2024
9. Chico, California – HDD – Approximately 736' of 12" – Pacific Gas and Electric – Completed August 2024
10. Eureka, California - HDD – 750' of 6" – Barnard Pipeline – Completed August 2024
11. Crocket (Eckley Pier), California – HDD – 800' of 8' – Primoris Services Corporation – Completed July 2024
12. Bend, Oregon – 703' and 1427' of 6" – Michels Corporation – Completed February 2024
13. Redding, California – HDD – 800' of 4" – Pacific Gas and Electric – Completed January 2024
14. Oroville, California – HDD – Multiple Electrical Conduit Packages – Underground Construction Company – Completed December 2023
15. Paradise, California – HDD – Multiple Electrical Conduit Packages - MGE Underground – Completed November 2023
16. Petaluma, California – HDD – 1375' 16" Steel – Pacific Gas and Electric via Barnard Pipeline – Completed – November 2023
17. Redmond, Washington – HDD – 2000' (2) 6" and (2) 4" Electrical Conduit Bundles – Puget Sound Energy via Potelco Inc. – Completed October 2023
18. Lodi, California (R-1846) – GAB – 196' 6" Steel - Pacific Gas and Electric – Completed October 2023
19. Oakland, California – 511' 14" HDPE – LTEC – Leo Tidwell Excavating – Completed September 2023
20. Fife, Washington – 600' 16" Steel – Puget Sound Energy via InfraSource Services, LLC – Completed September 2023
21. Meridian, California – 1189' 4" under the Sacramento River – Pacific Gas and Electric via Snelson Companies – Completed August 2023

22. Aberdeen, Washington – 1846' – 680' - 1047' all 8" HDDs 40GPM Groundwater with 200' elevation difference from entry to exit locations – Puget Sound Energy via InfraSource Services, LLC – Completed May 2023
23. Rio Vista, California – 3700' 16" under the Sacramento River with negative elevation intersect bore – Pacific Gas and Electric via Primoris Services (ARB) – Completed July 2023
24. Florida, USA – HDD Beach Approach – Completed September 2023
25. Umatilla, Oregon – HDD – 1280' 14" Steel – Team Fishel - Completed June 2023
26. Loleta, California – HDD – 1100' 4" Steel – Pacific Gas and Electric via Barnard Pipeline – Completed May 2023
27. Middletown, California – GAB – 180' 24" Steel – Pacific Gas and Electric - Completed April 2023
28. Caldwell, Idaho – GAB – 155' 24" and 95' 30" – Granite Excavation – Completed February 2023
29. King County, Washington – HDD – 1131' 4" HDD - Puget Sound Energy via InfraSource Services, LLC - Completed January 2023
30. Kirkland, Washington – HDD – 738' and 769 8" HDDs - Puget Sound Energy via InfraSource Services, LLC - Completed November 2022
31. Gig Harbor, Washington – Burnham Drive HDD – 753' 8" HDD - Puget Sound Energy via InfraSource Services, LLC - Completed October 2022
32. Cannon Beach, Oregon – GAB – 100' 4" – Northwest Natural Gas Company via InfraSource Services, LLC - Completed October 2022
33. Gig Harbor, Washington – SR16 HDD – 746' 6" HDD - Puget Sound Energy via InfraSource Services, LLC - Completed October 2022
34. Turlock, California – HDD 1100' 10" – Pacific Gas and Electric via Snelson Companies – Completed September 2022
35. Renton, Washington – I-405 GAB – 260' 36" - Puget Sound Energy via InfraSource Services, LLC - Completed September 2022
36. Sumner, Washington – Intersect HDD – 2773' 20" HDD - Puget Sound Energy via InfraSource Services, LLC - Completed September 2022
37. Salem, Oregon – HDD – 920' 8" – Northwest Natural Gas Company via Michels Pipeline – Completed August 2022
38. West Sacramento, California – HDD – 2475' of 12" – Level 3 Communications Completed July 2022
39. Yakima, Washington – HDD – Multiple bores 625' & 1,145' of 8" – Cascade Natural Gas Completed July 2022
40. New Cuyama, California – HDD – 700' of 8" – SoCal Gas Completed June 2022
41. North Highlands, California – GAB – 235' of 12" – Pacific Gas & Electric Completed May 2022

42. Boardman, Oregon – HDD – 800' of 16" – Windwave Communications  
Completed April 2022
43. St. Helena, California – GAB – Multiple bores 80', 80', 140' & 255' of 8" – Pacific Gas & Electric  
Completed April 2022
44. Poway, California – GAB – 130' of 16" – San Diego Gas & Electric  
Completed January 2022
45. Arlington, Washington – HDD – 2,800' of 6" – Cascade Natural Gas  
Completed December 2021
46. Junction City, Oregon – HDD – 1,270' of 12" – Kinder Morgan  
Completed December 2021
47. Brentwood, California – HDD – 2,036' of 24" – Pacific Gas and Electric  
Completed November 2021
48. Merced, California – GAB – 85' of 6" – Pacific Gas and Electric  
Completed October 2021
49. Eureka, California – GAB – 260' of 4" – Pacific Gas and Electric  
Completed July 2021
50. Fresno, California – GAB – 200' of 18" – Kinder Morgan  
Completed July 2021
51. Chowchilla, California – GAB – 227' of 12" – Pacific Gas and Electric  
Completed April 2021
52. Patterson, California – HDD – 7,215' of 24" – Pacific Gas and Electric  
Completed February 2021
53. Bakersfield, California – GAB – 240' of 12" – Pacific Gas and Electric  
Completed February 2021
54. Bakersfield, California – GAB – 280' of 12" – Pacific Gas and Electric  
Completed January 2021
55. Reedsport, Oregon - HDD - 4,340' of 5.5" - Zayo Group  
Completed December 2020
56. Florence, Oregon - HDD - 2,005' of 5.5" - Zayo Group  
Completed December 2020
57. Clackamas, Oregon - HDD - 1,400' of 12" - NW Natural  
Completed October 2020
58. Kelso, Washington - HDD - 800' of 4" - Cascade Natural Gas  
Completed October 2020
59. Kalama, Washington - HDD - 2,400' of 4" - Cascade Natural Gas  
Completed October 2020

60. Sandy, Oregon - HDD - 10,500' of 8" - Multiple Bores (14 Total) - NW Natural  
Completed September 2020
61. Hillsboro, Oregon - HDD - 1,400' of 8" - NW Natural  
Completed September 2020
62. Ukiah, California - HDD - 800' of 8" - Pacific Gas and Electric  
Completed August 2020
63. Chandler, Oklahoma - HDD - 3,750' of 24" - Plains All American  
Completed July 2020
64. Lodi, California - HDD - 1,011' of 4" - Pacific Gas and Electric  
Completed July 2020
65. Chino, California - HDD - 1,600' of 36" - So Cal Gas  
Completed April 2020
66. Santa Margarita, California - HDD - 620' & 700' of 10" - So Cal Gas  
Completed April 2020
67. Santa Margarita, California - GAB - 160' of 16" - So Cal Gas  
Completed April 2020
68. Bakersfield, California - HDD - 200' of 12" - So Cal Gas  
Completed February 2020
69. California - HDD - Beach Approach - Approximately 4,000'  
Completed January 2020
70. San Luis Obispo, California - GAB - 40' of 10" - So Cal Gas  
Completed January 2020
71. Fort Lupton, Colorado - HDD - Multiple Bores (15 total) Ranging From 444' to 1,185' of 4"  
Completed December 2019
72. Enumclaw, Washington - HDD - 1,525' of 6" - City of Enumclaw  
Completed December 2019
73. Salinas, California – HDD – 1,206' of 12" – Pacific Gas and Electric  
Completed October 2019
74. Pueblo, Colorado – HDD – 1,332' of 4" – Xcel Energy  
Completed October 2019
75. American Canyon, California – GAB – 160' & 350' of 24" – Pacific Gas and Electric  
Completed August 2019
76. Santa Margarita, California – HDD – 1,391' of 16" – So Cal Gas  
Completed August 2019
77. Wasco, California – HDD – 1,848' & 2,661' of 8" - California Rail Builders  
Completed August 2019

78. Willows, California – GAB – 130' of 4" – Pacific Gas and Electric  
Completed June 2019
79. Hawaii – HDD – Beach Approach (6 total) – Ranging from 3,000' to 6,500'  
June 2018 - May 2019
80. Victorville, California – HDD – 1,234' & 1,365' of 10" - Pacific Gas and Electric  
Completed February 2019
81. California – HDD – Beach Approach – 4,000'  
Completed February 2019
82. Fremont, California – HDD – 4,800' of 36" - Pacific Gas and Electric  
Completed December 2018
83. Brighton, Colorado – HDD – 880' of 8" – Xcel Energy  
Completed November 2018
84. Aurora, Colorado – HDD – 1,100' of 20" – Xcel Energy  
Completed October 2018
85. Thornton, California – HDD – 3,000' of 24" – Pacific Gas and Electric  
Completed October 2018
86. Thornton, California – GAB – 1,455' of 24" – Pacific Gas and Electric  
Completed October 2018
87. San Mateo, California – HDD – 2,400' of 24" - Pacific Gas and Electric  
Completed August 2018
88. San Mateo, California – HDD – 1,800' & 2,900' of 16" - Verizon  
Completed August 2018
89. Puerto Rico – HDD – Beach Approach – 2,500'  
Completed August 2018
90. Oregon – HDD – Beach Approach (2 total) – 5,500'  
Completed July 2018
91. Burnsville-Black Dog, Minnesota – GAB – 150' of 16" – Xcel Energy  
Completed March 2018
92. Barstow-Kramer Junction, California – GAB – 130' of 34" – Pacific Gas and Electric  
Completed February 2018
93. Pueblo West, Colorado – HDD – 2,400' of 6" – Xcel Energy  
Completed January 2018
94. Camas, Washington – HDD – 605' of 6" – NW Natural  
Completed November 2017
95. Tracy, California – GAB – 150' of 20 – 380' of 36" – Shell  
Completed October 2017
96. La Grande, Oregon – HDD – 1,300' of 6" – Avista Utilities  
Completed September 2017

97. Tacoma, Washington – HDD – 13,000' of 16" – Puget Sound Energy  
Completed September 2017
98. Turlock, California – HDD – 800' of 12" – Pacific Gas and Electric  
Completed September 2017
99. Sacramento, California – HDD – 2,450' of 30" – Pacific Gas and Electric  
Completed August 2017
100. Richland-Kennewick, Washington – HDD – 3,790' of 6" – Cascade Natural Gas  
Completed – August 2017
101. The Dalles, Oregon – HDD – 677' of 6" – NW Natural Gas  
Completed April 2017
102. Buttonwillow, California – HDD – 305' of 12" – SoCal Gas  
Completed January 2017
103. Knappa, Oregon – HDD – 1,065' of 10" – NW Natural  
Completed October 2016
104. Sonoma, California – HDD – 800' of 6" – Pacific Gas and Electric  
Completed September 2016
105. Lemoore, California – HDD – 5,740' of 16" – SoCal Gas  
Completed 2016
106. Lemoore, California – GAB – 116' of 16" – SoCal Gas  
Completed 2016
107. Bakersfield, California – GAB – 1,054' of 12" – SoCal Gas  
Completed 2016
108. Santa Clarita, California – HDD – 1900' of 14" – Plains Pipeline  
Completed February 2016 – Various Sandstone Layers
109. Castaic, California – HDD – 2,148' of 14" – Plains Pipeline  
Completed February 2016 – Various Sandstone Layers
110. Larkspur, California – HDD – 700' of 30" HDPE – City of Larkspur  
Completed September 2015 - Fat Clay
111. Elk Grove, California – HDD – 3600' of 24" – Pacific Gas and Electric  
Completed January 2015 - Soft\Fat Clay
112. Elk Grove, California – HDD – 2300' of 24" – Pacific Gas and Electric  
Completed December 2014 - Soft\Fat Clay
113. Vacaville, California – HDD – 1708' of 42" – Pacific Gas and Electric  
Completed November 2014 – Fat Clay under Wetland with Intersect
114. Roseville, California – HDD – 3300' of 16" – Pacific Gas and Electric  
Completed September of 2014

115. Roseville, California – HDD – 3600' of 16" – Pacific Gas and Electric  
Completed October of 2014
116. Albany, Oregon – HDD – 3200' of 30" HDPE – City of Albany  
October 2012 – Solid Rock under Willamette and Calapooia River
117. Corvallis\Monmouth, Oregon – HDD – 1200',3400',4200',5200' of 12" – NW Natural Gas  
Completed May 2012 - Fat Clay under City of Monmouth
118. Sunnyvale, California – HDD – 950' of 24" – Pacific Gas and Electric  
Completed July 2012 Fat Clay – Bay Mud
119. Sunnyvale, California – HDD – 2800' of 24" – Pacific Gas and Electric  
Completed August 2012 – Fat Clay – Bay Mud
120. Monmouth, Oregon – HDD – 4300' of 12" – NW Natural Gas  
Completed April 2012 – Fat Clay under Environmentally Sensitive Farmland
121. Fresno, California – HDD – 2000' of 24" – Pacific Gas and Electric  
Completed November 2012
122. Medford, Oregon – HDD – 2800' 12" – Avista Utilities  
Completed November 2010 – Sandstone Intersect under Larson Creek
123. Grants Pass, Oregon – HDD – 3000' 6" HDPE – Avista Utilities  
Completed November 2010 – Sandstone\Cobble under the Rogue River
124. Cranberry Township, Pennsylvania – HDD  
3000' of 12" – Charles Machine Works / Ditch Witch  
Completed February 2012 – Fractured Rock
125. Avon, Colorado 2800' of 16" – HDD – Xcel Energy  
Completed December 2011 – Cemented Cobble – Emergency Bore