
APPENDIX J
Construction Photos



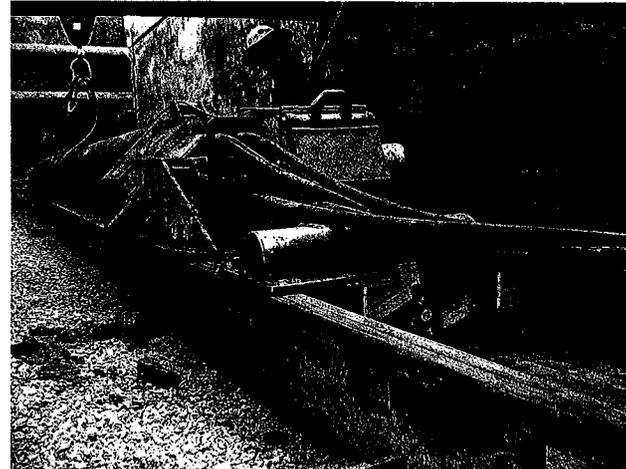
06-Dec-04 (Photo No. 4)
Jobsite before jack and bore construction starts on W. 10th Street, center of street. Started survey staking and layout of 20-inch DIP and Bore pit.



10-Dec-04 (Photo No. 21)
Setting the shoring boxes into location on East half of bore pit and installing lockpins to lock shoring boxes together.



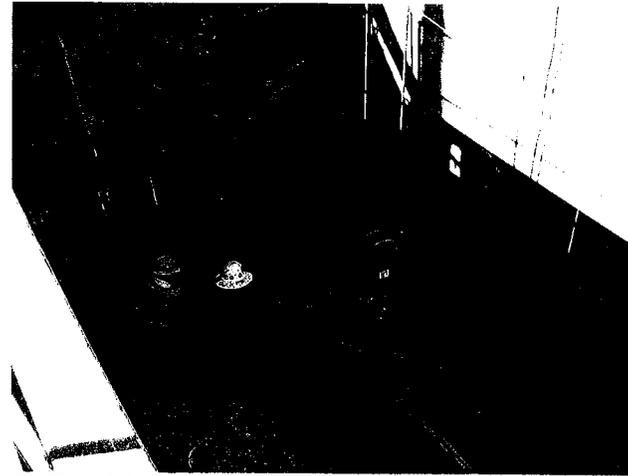
13-Dec-04 (Photo No. 25)
Fine grading the gravel on the bottom of the bore pit for working surface for bore equipment.



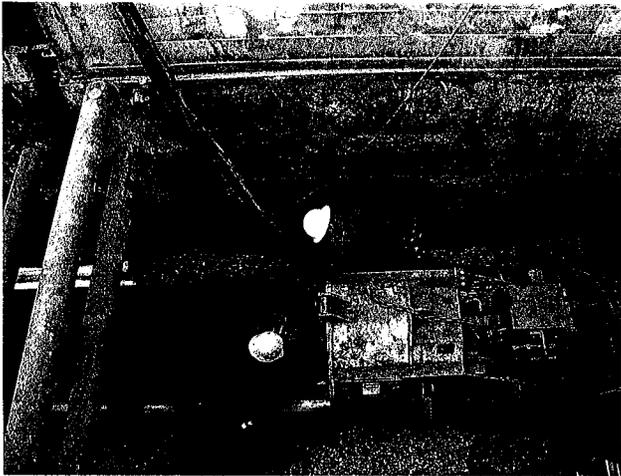
21-Dec-04 (Photo No. 35)
Continuing to set the auger and steel casing in place to connect to the Jack and Bore equipment at W. 10th Street bore pit.



21-Dec-04 (Photo No. 37)
Cutting heads of both the 36-inch steel casing and the 32-inch auger before the jack and bore operation starts at W. 10th Street.



21-Dec-04 (Photo No. 38)
Making the final line up to the bore location with the auger and steel casing before jack and bore operation starts at W. 10th Street.



22-Dec-04 (Photo No. 46)
Connecting the auger inside the 36-inch steel casing to the jack and bore rig at W. 10th Street.



23-Dec-04 (Photo No. 48)
Welding the two steel casings into one casing at W. 10th Street bore pit.



28-Dec-04 (Photo No. 56)
Starting to remove the auger after jacking and boring a joint of 36-inch casing under I-215 at W. 10th Street.



30-Dec-04 (Photo No. 59)
Setting survey markers on the BNSF Railroad tracks before the jack and bore operation bores under the Railroad property.



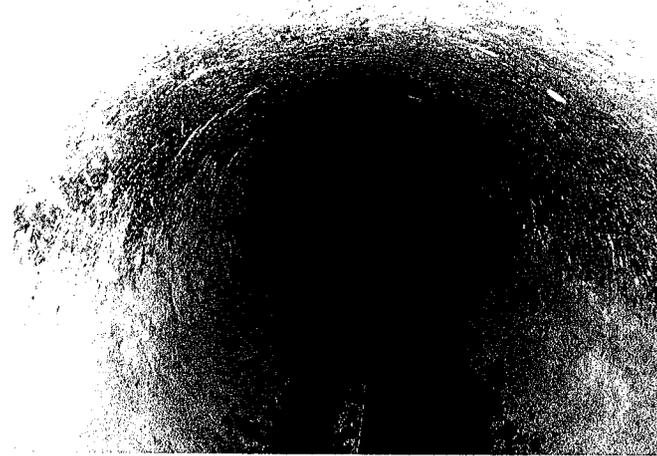
12-Jan-05 (Photo No. 63)
Continuing to pump storm water out of the bottom of the bore pit at W. 10th Street.



15-Jan-05 (Photo No. 65)
Continuing to clean 36-inch casing, removing saturated soils and water with hand buckets in the W. 10th Street bore pit.



17-Jan-05 (Photo No. 66)
Started to pressure grout the outside edge of the 36-inch steel casing starting at the receiving pit working to the W. 10th Street bore pit.



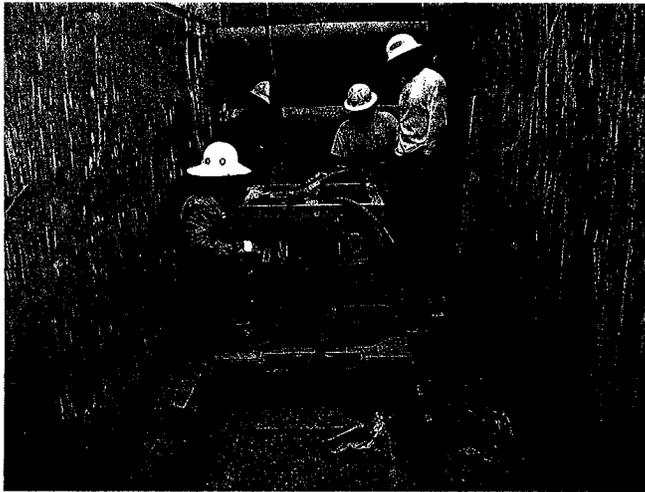
17-Jan-05 (Photo No. 69)
Inside casing continuing to pressure grout the outside edge of the 36-inch casing in the W. 10th Street bore pit.



19-Jan-05 (Photo No. 71)
Shoring was removed from the bore pit and backfilled and compacted with imported base material at W. 10th Street.



25-Jan-05 (Photo No. 76)
Continuing to level and weld the 20-foot joints of 36-inch steel casing in the trench line at W. 10th Street.



31-Jan-05 (Photo No. 81)
Continuing to push the 20-inch DIP carrier pipe with jacking equipment in the 36-inch casing in jacking pit at W. 10th Street.



31-Jan-05 (Photo No. 82)
20-inch DIP carrier pipe male end in the 36-inch steel casing in the jacking pit at W. 10th Street.



05-Feb-05 (Photo No. 94)
Performed the pressure test and chlorinating of the 20-inch DIP carrier pipe at the receiving pit at N. I Street and W. 10th Street.



06-Apr-05 (Photo No. 102)
Jack and bore completed site, bore pit location at W. 10th Street.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY - REGION IX
75 HAWTHORNE STREET SAN FRANCISCO, CALIFORNIA 94105
CONTRACT NO. 68 - W98 - 225

MUSCOY OPERABLE UNIT REMADAL DESIGN
WA NO. 014 - RDRD. 09JS

I - 215 AND BNSF UNDERCROSSING
SAN BERNARDINO, CALIFORNIA

URS CORP. PROJECT NO. 18600069

PHOTO LOG - JOBSITE

I - 215 and BNSF Undercrossing
6-Dec-04
Station No. 0+00
Looking North
Photo No. 1 CD No.1

Jobsite before Jack and Bore construction starts on N. Temple Street, West side of street curb line.

I - 215 and BNSF Undercrossing
6-Dec-04
Station No. 0+00
Looking North
Photo No. 2 CD No.1

Jobsite before Jack and Bore construction starts on N. Temple Street, center of street.

I - 215 and BNSF UnderCrossing
6-Dec-04
Station No. 0+00
Looking West
Photo No. 3 CD No.1

Jobsite before Jack and Bore construction starts on W. 10TH Street, North side of street curb line.

I-215 and BNSF UnderCrossing
6-Dec-04
Station No. 148+70
Looking West
Photo No. 4 CD No.1

Jobsite before Jack and Bore construction starts on W. 10TH Street, center of street started survey staking and layout of 20 inch DIP and Bore pit.

I - 215 and BNSF Undercrossing
6-Dec-04
Station No. 149+00
Looking East
Photo No. 5 CD No.1

Jobsite before Jack and Bore construction starts on W. 10TH Street, center of street survey staking and layout of 20 inch DIP transmission pipeline.

PHOTO LOG - JOBSITE CONTINUED

I - 215 and BNSF Undercrossing
6-Dec-04
Station No. 148+25
Looking East
Photo No. 6 CD No.1

Jobsite before Jack and Bore construction starts on W. 10TH Street, South side of street curb line, continue surey staking East.

I - 215 and BNSF Undercrossing
6-Dec-04
Station No. 0+00
Looking South
Photo No. 7 CD No.1

Jobsite before Jack and Bore construction starts on N. I Street along BNSF property fence on West side of curb line.

I - 215 and BNSF Undercrossing
6-Dec-04
Station No. 0+00
Looking South
Photo No. 8 CD No.1

Jobsite before Jack and Bore construction starts on N. I Street East side of street curb line.

I - 215 and BNSF Undercrossing
6-Dec-04
Station No. 0+00
Looking East
Photo No. 9 CD No.1

Jobsite before Jack and Bore construction starts at the intersection of N. I Street and W. 10TH Street.

I - 215 and BNSF Undercrossing
6-Dec-04
Station No. 0+00
Looking East
Photo No. 10 CD No.1

Jobsite before Jack and Bore construction starts at the intersection of N. I Street and W. 10TH Street South side curb line.

I - 215 and BNSF Undercrossing
6-Dec-04
Station No. 0+00
Looking West
Photo No. 11 CD No.1

Jobsite before Jack and Bore construction starts at the intersection of N. I Street and W. 10TH Street South side curb line.

I - 215 and BNSF Undercrossing
7-Dec-04
Station No. 148+35
Looking West
Photo No. 12 CD No.1

Started to pot hole for the existing utilities on W. 10TH Street before the excavation of the Bore pit.

PHOTO LOG - JOBSITE CONTINUED

I - 215 and BNSF Undercrossing
7-Dec-04
Station No. 148+75
Looking West
Photo No. 13 CD No.1

Continued to pot hole for existing utilities on W. 10TH Street before 20 inch DIP open cut excavation.

I - 215 and BNSF Undercrossing
8-Dec-04
Station No. 148+25
Looking North
Photo No. 14 CD No.1

Started to remove existing asphalt pavement From Bore pit area at the intersection of W. 10TH Street and N. Temple Street.

I - 215 and BNSF Undercrossing
8-Dec-04
Station No. 148+25
Looking North
Photo No. 15 CD No.1

Continuing to remove existing asphalt pavement around the existing monitoring well at the intersection of W. 10TH Street and N. Temple Street.

I - 215 and BNSF Undercrossing
9-Dec-04
Station No. 148+12
Looking North
Photo No. 16 CD No.1

Starting to excavate the Bore pit at the West side of pit and excavating to the East located at the intersection of W. 10TH Street and N. Temple Street.

I - 215 and BNSF Undercrossing
9-Dec-04
Station No. 148+15
Looking West
Photo No. 17 CD No.1

Removing existing asphalt pavement from around the existing monitoring well located in the Southwest corner of the Bore pit at W. 10TH Street and N. Temple Street.

I - 215 and BNSF Undercrossing
9-Dec-04
Station No. 148+30
Looking East
Photo No. 18 CD No.1

Loading Dump trucks with cut soils from the Bore pit using track excavator located on W. 10TH Street.

I - 215 and BNSF Undercrossing
9-Dec-04
Station No. 148+20
Looking West
Photo No. 19 CD No.1

West half of Bore pit with shoring boxes installed in the excavation at the intersection of W. TH Street and N. temple Street.

PHOTO LOG - JOBSITE CONTINUED

I - 215 and BNSF Undercrossing
9-Dec-04
Station No. 148+35
Looking Northwest
Photo No. 20 CD No.1

Continuing to set shoring boxes in the East half of the Bore pit excavation at the intersection of W. 10TH Street and N. Temple Street.

I - 215 and BNSF Undercrossing
10-Dec-04
Station No. 148+35
Looking East
Photo No. 21 CD No.2

Setting the shoring boxes into location on East half of Bore pit and installing lockpins to lock shoring boxes to each other.

I - 215 and BNSF Undercrossing
10-Dec-04
Station No. 148+25
Looking East
Photo No. 22 CD No.2

Continuing to set shoring boxes into location and started to grade and level the Bore pit subgrade.

I - 215 and BNSF Undercrossing
13-Dec-04
Station No. 148+20
Looking Southwest
Photo No. 23 CD No.2

Setting concrete K rails around the Bore pit and chainlink construction fence.

I - 215 and BNSF Undercrossing
13-Dec-04
Station No. 148+22
Looking West
Photo No. 24 CD No.2

Completed the adjustment of shoring boxes and then completed backfilling on the out side of the shoring boxes and the Bore pit excavation.

I - 215 and BNSF Undercrossing
13-Dec-04
Station No. 148+30
Looking East
Photo No. 25 CD No.2

Fine grading the gravel on the bottom of the Bore pit for working surface for Bore equipment.

I - 215 and BNSF Undercrossing
13-Dec-04
Station No. 148+30
Looking Northeast
Photo No. 26 CD No.2

Installing the safety hand rails around the top of the Bore pit shoring.

PHOTO LOG - JOBSITE CONTINUED

I - 215 and BNSF Undercrossing 20-Dec-04 Station No. 150+00 Looking West Photo No. 27 CD No.2	Starting to mobilize the Bore equipment to the jobsite on W. 10TH Street.
I - 215 and BNSF Undercrossing 20-Dec-04 Station No. 149+00 Looking West Photo No. 28 CD No.2	Unloading the 36 inch steel casing and auger at jobsite for the Jack and Bore operation on W. 10TH Street.
I - 215 and BNSF Undercrossing 20-Dec-04 Station No. 148+50 Looking West Photo No. 29 CD No.2	Contractor starting to mobilize drilling equipment into the Bore pit at W. 10TH Street.
I - 215 and BNSF Undercrossing 20-Dec-04 Station No. 148+28 Looking East Photo No. 30 CD No.2	Starting to set up the Jack and Bore Equipment on the bottom of the Bore pit at W. 10TH Street.
I - 215 and BNSF Undercrossing 20-Dec-04 Station No. 0+00 Looking Southeast Photo No. 31 CD No.2	Welding the cutting head on the first 36 inch joint of casing for Jacking operation at the W. 10TH Street Bore pit.
I - 215 and BNSF Undercrossing 21-Dec-04 Station No. 148+25 Looking West Photo No. 32 CD No.2	Onsite CALOSHA construction safety meeting and equipment inspection before the Jack and Bore operation starts at W. 10TH Street.
I - 215 and BNSF Undercrossing 21-Dec-04 Station No. 0+00 Looking Southwest Photo No. 33 CD No.2	Onsite traffic control around the Bore Pit at the intersection of W. 10TH Street and N. Temple Street.

PHOTO LOG - JOBSITE CONTINUED

I - 215 and BNSF Undercrossing
21-Dec-04
Station No. 148+28
Looking West
Photo No. 34 CD No.2

Setting 36 inch steel casing and auger in place for the connection to the Jack and Bore equipment at the W. 10TH Street Bore pit.

I - 215 and BNSF Undercrossing
21-Dec-04
Station No. 148+30
Looking Northwest
Photo No. 35 CD No.2

Continuing to set the auger and steel casing in place to connect to the Jack and Bore equipment at W. 10TH Street Bore pit.

I - 215 and BNSF Undercrossing
21-Dec-04
Station No. 148+20
Looking Northeast
Photo No. 36 CD No.2

Continuing to level and line up a 20 foot joint of 36 inch steel casing and auger to the Jack and Bore rig at W.10TH Street Bore pit.

I - 215 and BNSF Undercrossing
21-Dec-04
Station No. 148+15
Looking North
Photo No. 37 CD No.2

Cutting heads of both the 36 inch steel casing and the 32 inch auger before the Jack and Bore operation starts at W. 10TH Street.

I - 215 and BNSF Undercrossing
21-Dec-04
Station No. 148+16
Looking Northwest
Photo No. 38 CD No.2

Making the final line up to the Bore location with the auger and steel casing before Jack and Bore operation starts at W. 10TH Street Bore pit.

I - 215 and BNSF Undercrossing
21-Dec-04
Station No. 148+20
Looking Northeast
Photo No. 39 CD No.2

Using truck crane to hold the steel casing in place at the Bore location to start Jack and Bore operations at W. 10TH Street.

I - 215 and BNSF Undercrossing
22-Dec-04
Station No. 148+18
Looking West
Photo No. 40 CD No.2

Checking the alignment of the casing after Jacking the First joint of 36 inch steel casing at W. 10TH Street Bore pit.

PHOTO LOG - JOBSITE CONTINUED

I - 215 and BNSF Undercrossing
22-Dec-04
Station No. 148+15
Looking West
Photo No. 41 CD No.2

Looking inside the first joint of 36 inch steel casing with the auger removed for alignment inspection at W. 10TH Street Bore pit.

I - 215 and BNSF Undercrossing
22-Dec-04
Station No. 148+25
Looking East
Photo No. 42 CD No.2

Continuing to check the casing alignment measurements with plumb bob. Continuing to supply air into the steel casing during inspection period at W. 10TH Street Bore pit.

I - 215 and BNSF Undercrossing
22-Dec-04
Station No. 148+40
Looking West
Photo No. 43 CD No.2

Cutting extra steel casing to add additional steel to the 36 inch casing cutting head to correct the casing alignment before Jacking additional joints of casing.

I - 215 and BNSF Undercrossing
22-Dec-04
Station No. 0+00
Looking Southwest
Photo No. 44 CD No.2

Pulled out auger from Jacked casing for inspection of casing alignment at W. 10TH Street Bore pit.

I - 215 and BNSF Undercrossing
22-Dec-04
Station No. 148+20
Looking North
Photo No. 45 CD No.2

Reinstalled the auger in the first casing joint and placing the second joint of casing for connection at W. 10TH Street Bore pit.

I - 215 and BNSF Undercrossing
22-Dec-04
Station No. 148+30
Looking North
Photo No. 46 CD No.2

Connecting the auger inside the 36 inch steel casing to the Jack and Bore rig at W. 10TH Street.

I - 215 and BNSF Undercrossing
23-Dec-04
Station No. 148+20
Looking Northwest
Photo No. 47 CD No.2

Started the welding the second joint of steel casing to the first Jacked joint of casing at W. 10TH Street Bore pit.

PHOTO LOG - JOBSITE CONTINUED

I - 215 and BNSF Undercrossing
23-Dec-04
Station No. 148+20
Looking North
Photo No. 48 CD No.2

Continuing to weld the two Steel casing
into one casing at W. 10TH Street Bore pit.

I - 215 and BNSF Undercrossing
28-Dec-04
Station No. 148+25
Looking East
Photo No. 49 CD No.2

Starting to set one more joint of steel 36 inch
casing in place for the Jack and Bore
operation at W. 10TH Street Bore pit.

I - 215 and BNSF Undercrossing
28-Dec-04
Station No. 148+20
Looking East
Photo No. 50 CD No.2

Continuing to set one more joint of steel
casing in place for the Jack and Bore
operation at W. 10TH Street Bore pit.

I - 215 and BNSF Undercrossing
28-Dec-04
Station No. 148+35
Looking North
Photo No. 51 CD No.2

Alignment of auger and the 36 inch steel
casing into the Jack and Bore rig at
W. 10TH Street bore pit.

I - 215 and BNSF Undercrossing
28-Dec-04
Station No. 148+35
Looking West
Photo No. 52 CD No.2

Started removing the cut soils from the Jack
and Bore rig auger using a clamshell bucket
from the Crane truck at W. 10TH Street Bore
pit.

I - 215 and BNSF Undercrossing
28-Dec-04
Station No. 148+36
Looking West
Photo No. 53 CD No.2

Continuing to remove cut soils from the Bore
pit with clamshell bucket at W. 10TH Street.

I - 215 and BNSF Undercrossing
28-Dec-04
Station No. 148+38
Looking West
Photo No. 54 CD No.2

Continuing to remove cut soils from the
Jack and Bore operation at W. 10TH Street
Bore pit.

PHOTO LOG - JOBSITE CONTINUED

I - 215 and BNSF Undercrossing
28-Dec-04
Station No. 148+25
Looking West
Photo No. 55 CD No.2

Continuing to Jack and Bore the 36 inch casing under the I - 215 freeway at W. 10TH Street.

I - 215 and BNSF Undercrossing
28-Dec-04
Station No. 148+30
Looking East
Photo No. 56 CD No.2

Starting to remove the auger after Jacking and Boring a joint of 36 inch steel casing under the I - 215 freeway at W. 10TH Street.

I - 215 and BNSF Undercrossing
28-Dec-04
Station No. 148+25
Looking West
Photo No. 57 CD No.2

After the auger was removed from the casing the 36 inch steel casing was then inspected and Bore alignment was checked using air blower to vent the casing at Bore pit.

I - 215 and BNSF Undercrossing
29-Dec-04
Station No. 0+00
Looking South
Photo No. 58 CD No.2

Unloading the 20 inch DIP carrier pipe materials on the jobsite at N. Temple Street and N. H Street.

I - 215 and BNSF Undercrossing
30-Dec-04
Station No. 146+00
Looking North
Photo No. 59 CD No.2

Setting survey markers on the BNSF Railroad tracks before the Jack and Bore operation bores under the Railroad property.

I - 215 and BNSF Undercrossing
30-Dec-04
Station No. 148+40
Looking Northeast
Photo No. 60 CD No.2

Loading Dump truck with cut soils from the Boring operation using a Crane truck with clamshell bucket at W. 10TH Street Bore pit.

I - 215 and BNSF Undercrossing
30-Dec-04
Station No. 148+38
Looking Northeast
Photo No. 61 CD No.2

Continuing to remove cut soils from Boring operation with clamshell bucket using Crane truck loading Dump truck at W.10TH Street Bore pit.

PHOTO LOG - JOBSITE CONTINUED

I - 215 and BNSF Undercrossing
12-Jan-05
Station No. 145+60
Looking North
Photo No. 62 CD No.3

Clearing storm water damage out of the receiving pit at the corner of N. I Street and W. 10TH Street.

I - 215 and BNSF Undercrossing
12-Jan-05
Station No. 148+30
Looking West
Photo No. 63 CD No.3

Continuing to pump storm water out of the bottom of the Bore pit at W. 10TH Street.

I - 215 and BNSF Undercrossing
14-Jan-05
Station No. 145+60
Looking North
Photo No. 64 CD No.3

Vacuum truck being used to help remove storm water and saturated soils from the 36 inch steel casing and receiving pit at N. I Street and W. 10TH Street.

I - 215 and BNSF Undercrossing
15-Jan-05
Station No. 148+25
Looking West
Photo No. 65 CD No.3

Continuing to Clean 36 inch casing removing Saturated soils and water with hand buckets in the Bore pit at W. 10TH Street.

I - 215 and BNSF Undercrossing
17-Jan-05
Station No. 148+25
Looking West
Photo No. 66 CD No.3

Started to pressure grout the outside edge of the 36 inch steel casing starting at the receiving pit working to the Bore pit at W. 10TH Street.

I - 215 and BNSF Undercrossing
17-Jan-05
Station No. 148+35
Looking East
Photo No. 67 CD No.3

Continuing to remove grout hose from the 36 inch steel casing during the pressure grouting operation in the Bore pit at W. 10TH Street.

I - 215 and BNSF Undercrossing
17-Jan-05
Station No. 148+35
Looking Northeast
Photo No. 68 CD No.3

Continuing the pressure grouting of the outside edge of the 36 inch steel casing in the Bore pit at W. 10TH Street.

PHOTO LOG - JOBSITE CONTINUED

- I - 215 and BNSF Undercrossing
17-Jan-05
Station No. 148+15
Looking West
Photo No. 69 CD No.3
Inside casing continuing to pressure grout the outside edge of the 36 inch casing in Bore pit at W. 10TH Street.
- I - 215 and BNSF Undercrossing
18-Jan-05
Station No. 148+38
Looking Northwest
Photo No. 70 CD No.3
Started to cleanout and remove wet soils from the bottom of the Bore pit and start compacting the bottom of Bore pit subgrade at W. 10TH Street.
- I - 215 and BNSF Undercrossing
19-Jan-05
Station No. 148+25
Looking South
Photo No. 71 CD No.3
Shoring was removed from the Bore pit and and backfilled and compacted with imported base material at W. 10YH Street.
- I - 215 and BNSF Undercrossing
19-Jan-05
Station No. 148+28
Looking South
Photo No. 72 CD No.3
Continuing to backfill and compact imported base material in the Bore pit location at W. 10TH Street.
- I - 215 and BNSF Undercrossing
21-Jan-05
Station No. 148+55
Looking West
Photo No. 73 CD No.3
Exavating the 36 inch steel casing trench on W. 10TH Street in East direction, shoring trench and using exavator for placement of 36 inch steel casing.
- I - 215 and BNSF Undercrossing
21-Jan-05
Station No. 148+75
Looking South
Photo No. 74 CD No.3
Continuing to excavate 36 inch casing trench line on W. 10TH Street, repairing existing sewer laterals during operations.
- I - 215 and BNSF Undercrossing
25-Jan-05
Station No. 149+00
Looking West
Photo No. 75 CD No.3
Continuing to shore the excavated trench during the 36 inch steel casing installation at W. 10TH Street.

PHOTO LOG - JOBSITE CONTINUED

I - 215 and BNSF Undercrossing
25-Jan-05
Station No. 149+05
Looking East
Photo No. 76 CD No.3

Continuing to level and weld the 20 foot joints of 36 inch steel casing in trench line at W. 10TH Street.

I - 215 and BNSF Undercrossing
25-Jan-05
Station No. 149+00
Looking East
Photo No. 77 CD No.3

Continuing to use both the Crane truck and the track excavator to hold the 36 inch steel casing in place during installation at W. 10TH Street.

I - 215 and BNSF Undercrossing
26-Jan-05
Station No. 149+50
Looking West
Photo No. 78 CD No.3

Excavating and removing the existing 20 inch DIP transmission line at W. 10TH Street.

I - 215 and BNSF Undercrossing
27-Jan-05
Station No. 149+25
Looking West
Photo No. 79 CD No.3

Bacfilling and compacting the 36 inch steel casing trench and repairing the existing sewer laterals in the trench line at W. 10TH Street.

I - 215 and BNSF Undercrossing
31-Jan-05
Station No. 149+75
Looking West
Photo No. 80 CD No.3

Starting to install the 20 inch DIP carrier pipe in the 36 inch steel casing in the Jacking pit at W. 10TH Street.

I - 215 and BNSF Undercrossing
31-Jan-05
Station No. 149+75
Looking West
Photo No. 81 CD No.3

Continuing to push the 20 inch DIP carrier pipe with Jacking equipment in the 36 inch casing in Jacking pit at W. 10TH Street.

I - 215 and BNSF Undercrossing
31-Jan-05
Station No. 149+75
Looking West
Photo No. 82 CD No.3

20 inch DIP carrier pipe male end in first in the 36 inch steel casing in the Jacking pit at W. 10TH Street.

PHOTO LOG - JOBSITE CONTINUED

I - 215 and BNSF Undercrossing
31-Jan-05
Station No. 149+75
Looking Southwest
Photo No. 83 CD No.3

20 inch DIP carrier pipe with bolted on spacers in the 36 inch steel casing in the Jacking pit at W. 10TH Street.

I - 215 and BNSF Undercrossing
2-Feb-05
Station No. 149+75
Looking Northwest
Photo No. 84 CD No.3

Removing the Jacking Equipment from the Jacking pit using a Crane truck At W. 10TH Street.

I - 215 and BNSF Undercrossing
3-Feb-05
Station No. 150+00
Looking Northwest
Photo No. 85 CD No.3

Removing the final joint of the existing 20 inch DIP transmission line to excavate for the completion of the 36 inch steel casing installation at W. 10TH Street.

I - 215 and BNSF Undercrossing
3-Feb-05
Station No. 145+50
Looking East
Photo No. 86 CD No.3

Starting to backfill and compact the bottom of the receiving pit with imported base material at W. 10TH Street and N. I Street.

I - 215 and BNSF Undercrossing
3-Feb-05
Station No. 150+10
Looking Notheast
Photo No. 87 CD No.3

Continuing to install the final section of 20 inch carrier pipe and 36 inch steel casing in trench line at W. 10TH Street.

I - 215 and BNSF Undercrossing
3-Feb-05
Station No. 150+10
Looking Northwest
Photo No. 88 CD No.3

Setting the final section of 20 inch carrier pipe and 36 inch steel casing in pipe trench with track excavator at W.10TH Street.

I - 215 and BNSF Undercrossing
3-Feb-05
Station No. 150+20
Looking West
Photo No. 89 CD No.3

Closing in the ends of the 36 inch steel casing with bricks and mortar around the 20 inch carrier DIP in Jacking pit at W. 10TH Street.

PHOTO LOG - JOBSITE CONTINUED

- I - 215 and BNSF Undercrossing
4-Feb-05
Station No. 150+20
Looking Southwest
Photo No. 90 CD No.3
- Installing a 20 inch DI plug on both ends of the 20 inch DIP carrier pipe for pressure testing and chlorinating of pipe line at W. 10TH Street.
- I - 215 and BNSF Undercrossing
4-Feb-05
Station No. 150+10
Looking West
Photo No. 91 CD No.3
- Backfilling and compacting the final joint of the 36 inch steel casing and jacking pit at W. 10TH Street.
- I - 215 and BNSF Undercrossing
4-Feb-05
Station No. 145+55
Looking West
Photo No. 92 CD No.3
- Installed the 20 inch DI 22.5 deg. Bend at the West end of the 20 inch carrier pipe in the receiving pit at N. I Street and W. 10TH Street.
- I - 215 and BNSF Undercrossing
4-Feb-05
Station No. 145+30
Looking West
Photo No. 93 CD No.3
- Installed the 2 inch test piping in 20 inch DI plug at receiving pit for pressure testing and chlorinating the carrier pipeline at N. I Street and W. 10TH Street.
- I - 215 and BNSF Undercrossing
5-Feb-05
Station No. 145+30
Looking East
Photo No. 94 CD No.3
- Preformed the pressure test and chlorinating of the 20 inch DIP carrier pipe at the receiving pit at N.I Street and W. 10TH Street.
- I - 215 and BNSF Undercrossing
9-Feb-05
Station No. 150+05
Looking East
Photo No. 95 CD No.3
- Installing the 20 inch DIP carrier pipe tie-in to the existing transmission 20 inch DIP at W. 10TH Street.
- I - 215 and BNSF Undercrossing
9-Feb-05
Station No. 145+30
Looking Northwest
Photo No. 96 CD No.3
- Installing the concrete slurry mix into the 36 inch Jack and Bore casing by pumping the slurry inside the casing from the West side to the East side of the casing at N.I St.

PHOTO LOG - JOBSITE CONTINUED

I - 215 and BNSF Undercrossing
10-Feb-05
Station No. 149+50
Looking East
Photo No. 97 CD No.3

Placement of class II base material after cutting subgrade section with backhoe in trench line on W. 10TH Street.

I - 215 and BNSF Undercrossing
2-Mar-05
Station No. 150+00
Looking West
Photo No. 98 CD No.4

Cleaning out the valve stem casings after grinding the asphalt base coarse in trench line for asphalt overlay cap at W. 10TH Street.

I - 215 and BNSF Undercrossing
2-Mar-05
Station.No. 150+05
Looking West
Photo No. 99 CD No.4

Using asphalt machine to place the asphalt trench overlay cap at W. 10TH Street.

I - 215 and BNSF Undercrossing
6-Apr-05
Station No. 145+25
Looking East
Photo No. 100 CD No.4

Jack and Bore completed site receiving pit location at N. I Street and W. 10TH Street.

I - 215 and BNSF Undercrossing
6-Apr-05
Station No. 148+35
Looking North
Photo No. 101 CD No.4

Jack and Bore completed site Bore pit location at the intersection of N. Temple Street and W.10TH Street.

I - 215 and BNSF Undercrossing
6-Apr-05
Station No. 148+20
Looking East
Photo No. 102 CD No.4

Jack and Bore completed site Bore pit location at W. 10TH Street.

I - 215 and BNSF Undercrossing
6-Apr-05
Station No. 150+08
Looking West
Photo No. 103 CD No.4

Jack and Bore completed site pipe trench line and tie-in location at W. 10TH Street.